**FCC CFR47 PART 15 SUBPART C**
**INDUSTRY CANADA RSS-210 ISSUE 7**

# CERTIFICATION TEST REPORT

**FOR**

**CDMA/1x EVDO Rel 0 / EVDO Rev. A with 802.11b/g and Bluetooth Phone**

**MODEL NUMBER: P100EWW**

**FCC ID: O8F-CASC**

**IC: 3905A-CASC**

**REPORT NUMBER: 08U12316-2C**

**ISSUE DATE: APRIL 29, 2009**

*Prepared for*
**PALM**
**950 MAUDE AVENUE**
**SUNNYVALE, CA 94085, U.S.A.**

*Prepared by*
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NVLAP LAB CODE 200065-0

Revision History

| Rev. | Issue Date | Revisions | Revised By |
|---|---|---|---|
| -- | 02/20/09 | Initial Issue | T. Chan |
| B | 03/23/09 | Revised EUT Description | T.Chu |
| C | 04/29/09 | Updated accessories model number, updated test configurations | D. Chang |

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# 1. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** PALM
950 MAUDE AVENUE
SUUNYVALE, CA. 94085, UNITED STATES

**EUT DESCRIPTION:** CDMA/1x EVDO Rel 0 / EVDO Rev. A with 802.11 b/g and Bluetooth Phone

**MODEL:** P100EWW

**SERIAL NUMBER:** Conducted: CD2-7229, Radiated: CD2-7235

**DATE TESTED:** FEBRUARY 03-20, 2009

| APPLICABLE STANDARDS | |
|---|---|
| **STANDARD** | **TEST RESULTS** |
| CFR 47 Part 15 Subpart C | Pass |
| INDUSTRY CANADA RSS-210 Issue 7 Annex 8 | Pass |
| INDUSTRY CANADA RSS-GEN Issue 2 | Pass |

Compliance Certification Services, Inc. (CCS) tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by CCS based on interpretations and/or observations of test results. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

**Note**: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by CCS and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by CCS will constitute fraud and shall nullify the document. No part of this report may be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any government agency.

Approved & Released For CCS By:

THU CHAN
EMC MANAGER
COMPLIANCE CERTIFICATION SERVICES

Tested By:

DEVIN CHANG
EMC ENGINEER
COMPLIANCE CERTIFICATION SERVICES

# 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4-2003, FCC CFR 47 Part 2, FCC CFR 47 Part 15, RSS-GEN Issue 2, and RSS-210 Issue 7, Annex 8

# 3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA.

CCS is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at http://ts.nist.gov/Standards/scopes/2000650.htm.

# 4. CALIBRATION AND UNCERTAINTY

## 4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

## 4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

| PARAMETER | UNCERTAINTY |
|---|---|
| Power Line Conducted Emission | +/- 2.3 dB |
| Radiated Emission | +/- 3.4 dB |

Uncertainty figures are valid to a confidence level of 95%.

# 5. EQUIPMENT UNDER TEST

## 5.1. DESCRIPTION OF EUT

CDMA/1x EVDO Rel 0 / EVDO Rev. A with 802.11b/g and Bluetooth Phone.

**GENERAL INFORMATION**

| | |
|---|---|
| Power Requirements | 100-240 VAC / 50-60 Hz |
| List of frequencies generated or used by the EUT | 600MHz |

**ACCESSORIES**

The EUT was constructed and using the following accessories:

| Accessories Description | Manufacturer/ Trademark | Part Number |
|---|---|---|
| AC Power Adapter source #1<br>Input Rating: 100–240 Vac, 50/60Hz, 0.2A<br>Output Rating: 5Vdc, 1000mA | Palm | 157-10108-00/157-10114-00 |
| AC Power Adapter source #2<br>Input Rating: 100–240 Vac, 50/60Hz, 0.2A<br>Output Rating: 5Vdc, 1000mA | Palm | 157-10124-00 |
| Inductive Charging Dock<br>Input Rating: 5Vdc, 1000mA | Palm | 157-10123-00 |
| Battery<br>Type: Rechargeable Li-ion Polymer<br>Rating: 3.7Vdc, 1150mAh (minimum) | Palm | 157-10119-00 |
| Wired Stereo Headset | Palm | 180-10632-00 |
| USB cable | Palm | 180-10646-00 |

## 5.2. TEST CONFIGURATIONS

The following configurations were investigated during testing:

**AC Power Adapter Source #1 Part Number: 157-10108-00 / 157-10114-00**

| Configuration | Description | Mode |
|---|---|---|
| 1 | EUT(Standard backcover) powered by AC adapter | Charging |
| 2 | EUT(Inductive backcover) powered by AC adapter | Charging |
| 3 | EUT(Inductive backcover) powered by Inductive Charging Dock. Note: Inductive charging dock connected to AC adapter. | Charging |

**AC Power Adapter Source #2 Part Number: 157-10124-00**

| Configuration | Description | Mode |
|---|---|---|
| 4 | EUT(Standard backcover) powered by AC adapter | Charging |
| 5 | EUT(Inductive backcover) powered by AC adapter | Charging |
| 6 | EUT (Inductive backcover) powered by Inductive Charging Dock. Note: Inductive Charging Dock connected to AC adapter. | Charging |

| Configuration | Description | Mode |
|---|---|---|
| 7 | EUT(Standard backcover) powered by PC through USB cable | Charging |
| 8 | EUT(Inductive backcover) powered by PC through USB cable | Charging |

## 5.3. MAXIMUM OUTPUT POWER

The transmitter has a maximum peak conducted output power as follows:

| Frequency Range (MHz) | Mode | Output Power (dBm) | Output Power (mW) |
|---|---|---|---|
| 2412 - 2462 | 802.11b | 15.81 | 38.11 |
| 2412 - 2462 | 802.11g | 17.50 | 56.23 |
| 2402 - 2480 | GFSK | 2.89 | 1.95 |
| 2402 - 2480 | 8PSK | 1.59 | 1.44 |

## 5.4. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes a Stamped Metal Monopole antenna, with a maximum gain of 0.38 dBi.

802.11bg and Bluetooth transmitters share a common antenna.

## 5.5. SOFTWARE AND FIRMWARE

The test utility software used during testing was DVT-test-ROM.

## 5.6. WORST-CASE CONFIGURATION AND MODE

The worst-case channel is determined as the channel with the AC Power Adapter Source #1 Part Number: 157-10108-00 / 157-10114-00 and Configuration 1: EUT (Standard backcover) powered by AC adapter

The EUT is a portable device that has three orientations; therefore X, Y and Z orientations have been investigated. The worst case was found to be Y orientation.

## 5.7. DESCRIPTION OF TEST SETUP

**SUPPORT EQUIPMENT**

**PERIPHERAL SUPPORT EQUIPMENT LIST**

| Description | Manufacturer | Model | Serial Number |
|---|---|---|---|
| AC Power Adapter source #1 | Palm | 157-10108-00/157-10114-00 | K904P08220296 |
| AC Power Adapter source #2 | Palm | 157-10124-00 | NA |
| EarPhone | Palm | 180-10632-00 | NA |
| Inductive Charging Dock | Palm | 157-10123-00 | NA |
| | | | |

**I/O CABLES**

**I/O CABLE LIST**

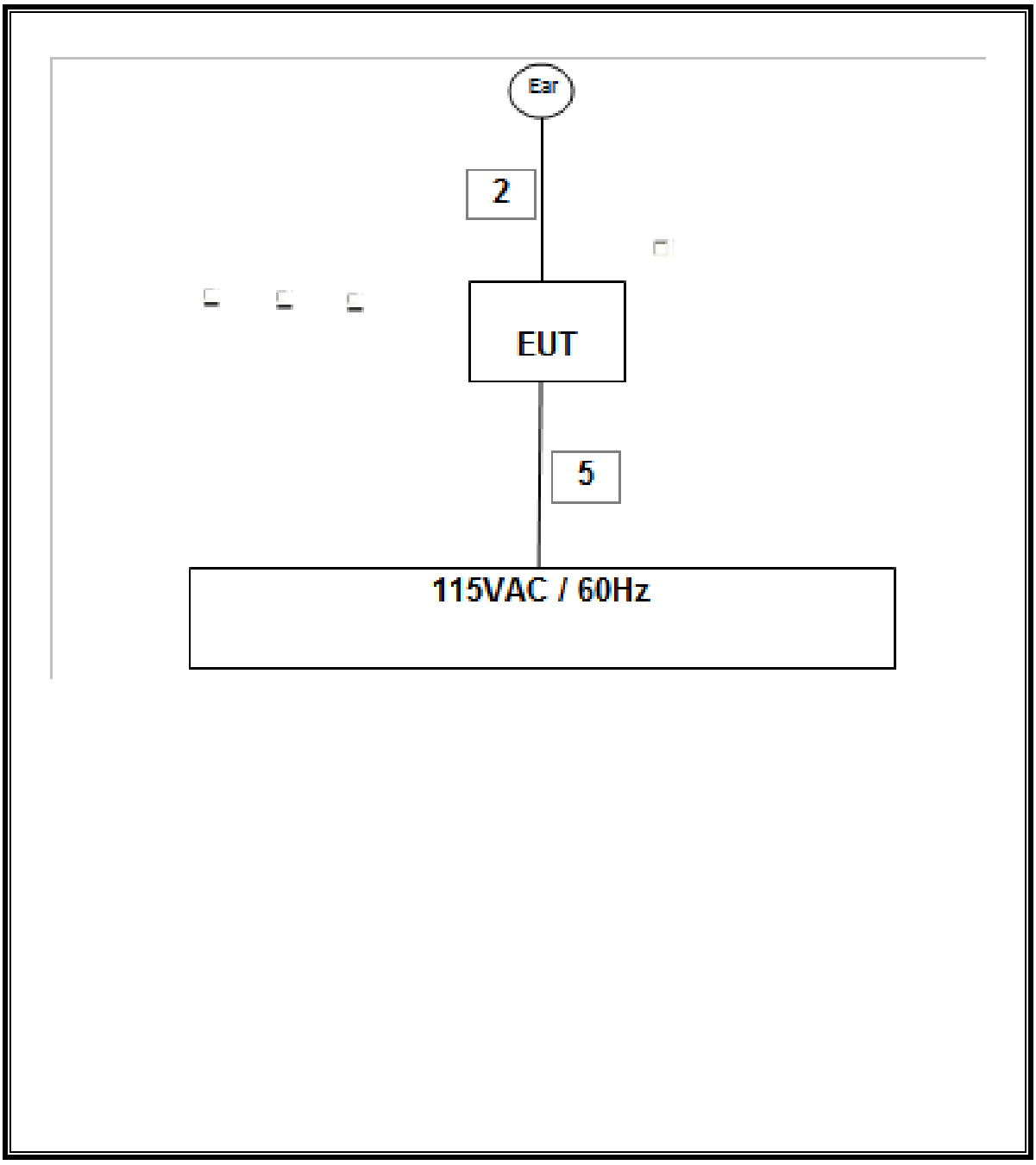
| Cable No. | Port | # of Identica Ports | Connector Type | Cable Type | Cable Length | Remarks |
|---|---|---|---|---|---|---|
| 1 | Link | 1 | USB | Un-shielded | 1.5m | N/A |
| 2 | Ear phone | 1 | jack | Un-shielded | 1.2m | N/A |
| 3 | DC | 1 | DC | Unshielded | 1.8 m | N/A |
| 4 | AC | 1 | AC | Unshielded | 0.9 m | N/A |
| 5 | AC | 1 | USB | Un-shielded | 1.5m | N/A |
| | | | | | | |

**TEST SETUP**

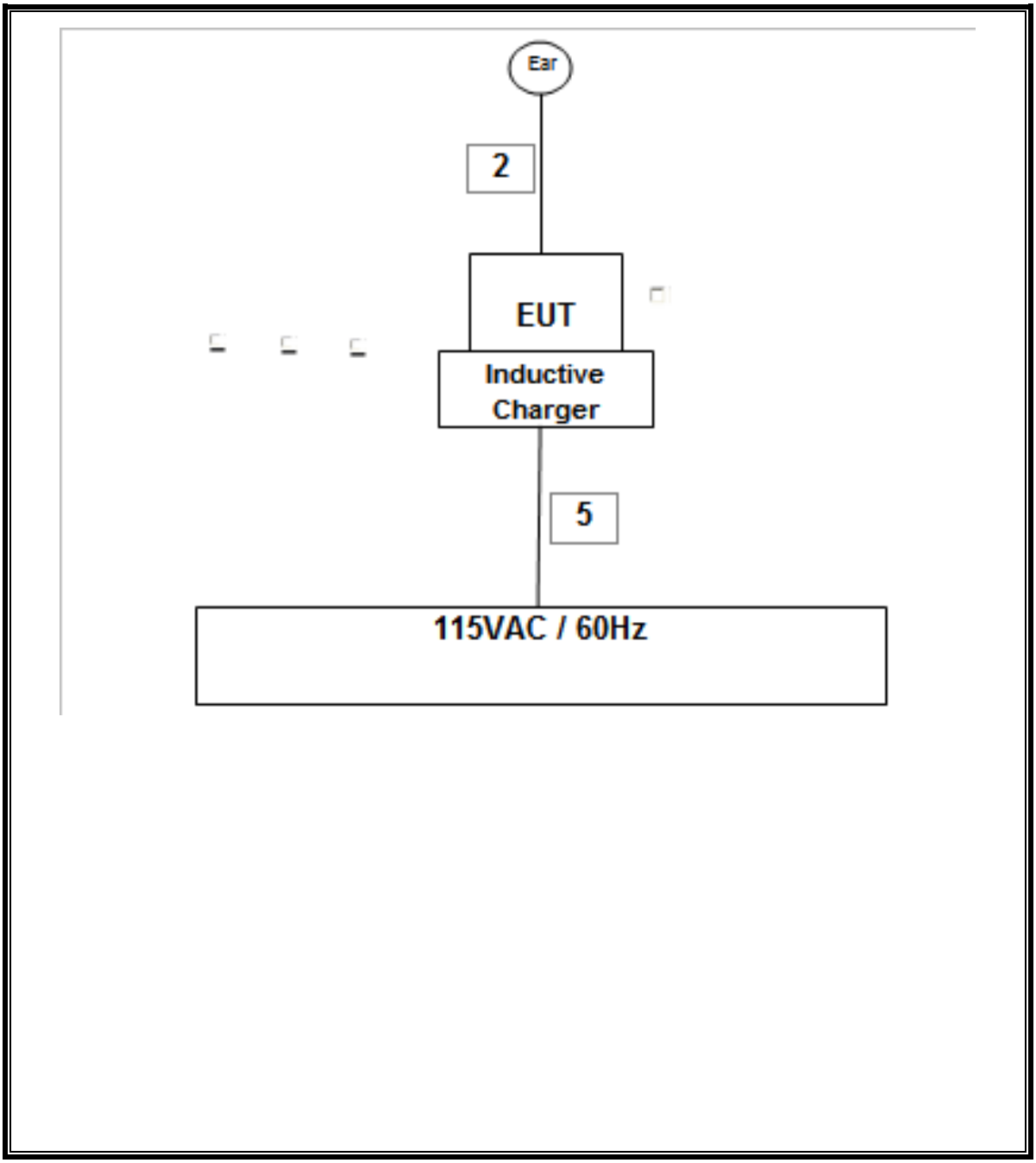
The EUT is installed in a host device during the tests. Test software exercised the radio card.

**TEST SETUP DIAGRAM**

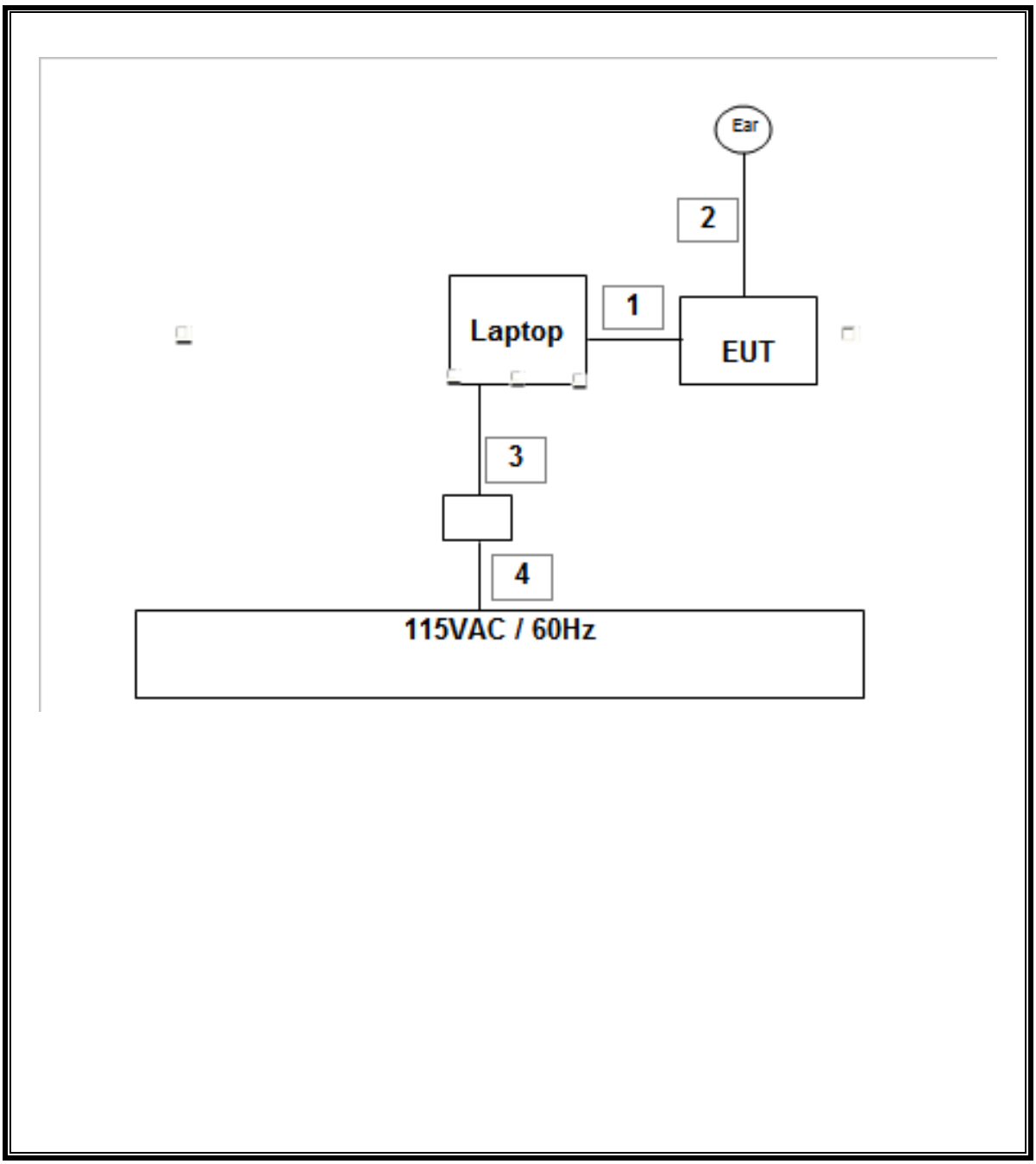
**Configuration 1 & 4: EUT (Standard backcover) powered by AC adapter &**
**Configuration 2 & 5: EUT (Inductive backcover) powered by AC adapter**



**Configuration 3 & 6: EUT (Inductive backcover) powered by Inductive Charging Dock**
**Note: Inductive Charging Dock connected to AC adapter**



**Configuration 7: EUT (Standard backcover) powered by PC through USB cable**
**Configuration 8: EUT (Inductive backcover) powered by PC through USB cable**



# 6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

| TEST EQUIPMENT LIST | | | | |
|---|---|---|---|---|
| Description | Manufacturer | Model | Asset | Cal Due |
| Antenna, Horn, 18 GHz | EMCO | 3115 | C00945 | 04/22/09 |
| Preamplifier, 26.5 GHz | Agilent / HP | 8449B | C01063 | 11/27/09 |
| Antenna, Bilog, 2 GHz | Sunol Sciences | JB1 | C01011 | 02/14/10 |
| Spectrum Analyzer, 44 GHz | Agilent / HP | E4446A | C01069 | 10/08/09 |
| Preamp, 1000MHz | Sonoma | 310N | N02891 | 03/31/09 |
| RF Filter Section, 2.9 GHz | Agilent / HP | 85420E | C00958 | 09/19/09 |
| EMI Receiver, 2.9 GHz | Agilent / HP | 8542E | C00957 | 09/19/09 |
| Antenna, Horn, 26.5 GHz | ARA | MWH-1826/B | C00980 | 09/29/09 |
| Power Meter | Agilent / HP | 437B | N02778 | 08/04/10 |
| Power Sensor, 18 GHz | Agilent / HP | 8481A | N02782 | 10/22/09 |
| EMI Test Receiver, 30 MHz | R & S | ESHS 20 | N02396 | 08/06/09 |
| LISN, 30 MHz | FCC | LISN-50/250-25-2 | N02625 | 10/29/09 |
| 2.4 GHz High Pass Filter | Micro Tronics | BRC13192 | N02683 | CNR |
| Highpass Filter, 4.0 GHz | Micro-Tronics | HPM13351 | N02708 | CNR |

# 7. ANTENNA PORT TEST RESULTS

## 7.1. 802.11b MODE IN THE 2.4 GHz BAND

### 7.1.1. 6 dB BANDWIDTH

**LIMITS**

FCC §15.247 (a) (2)

IC RSS-210 A8.2 (a)

The minimum 6 dB bandwidth shall be at least 500 kHz.

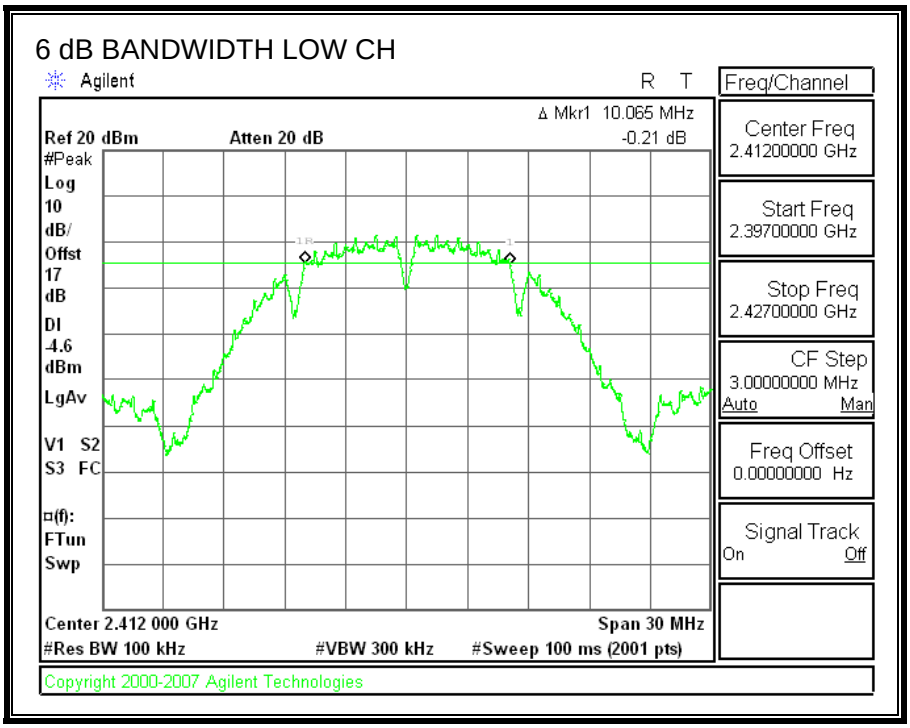
**TEST PROCEDURE**

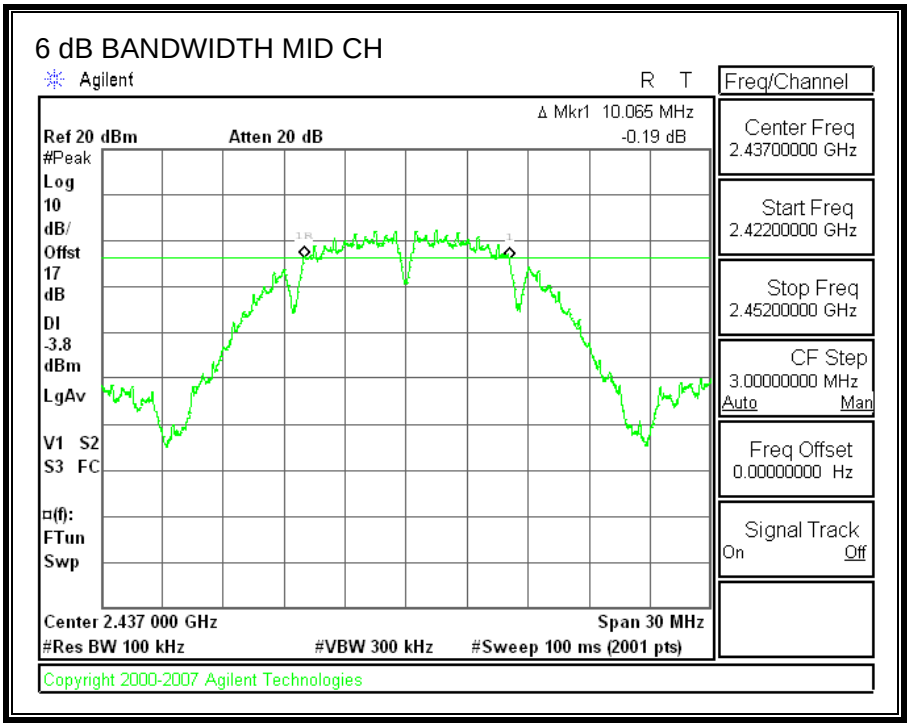
The transmitter output is connected to a spectrum analyzer. The RBW is set to 100 kHz and the VBW is set to 300 kHz. The sweep time is coupled.

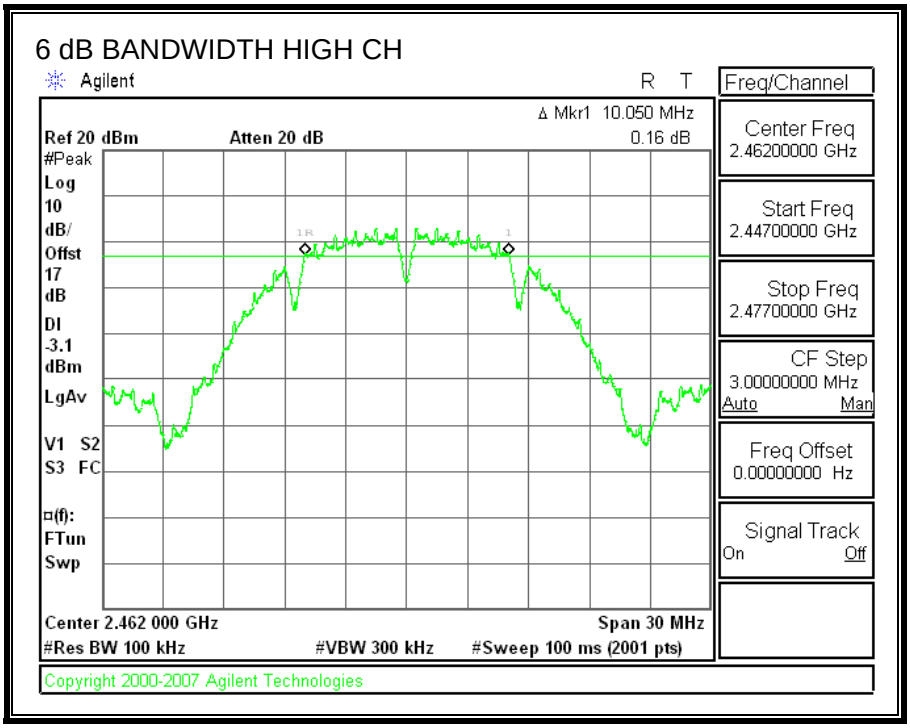
**RESULTS**

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Low | 2412 | 10.065 | 0.5 |
| Middle | 2437 | 10.065 | 0.5 |
| High | 2462 | 10.05 | 0.5 |

**6 dB BANDWIDTH**





### 7.1.2. 99% BANDWIDTH

**LIMITS**

None; for reporting purposes only.

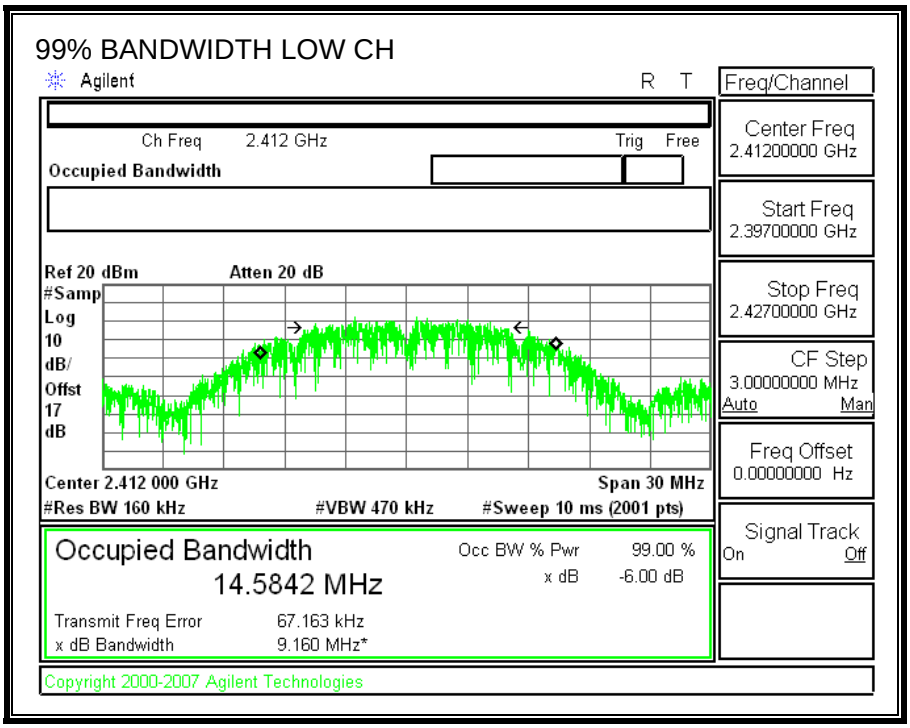
**TEST PROCEDURE**

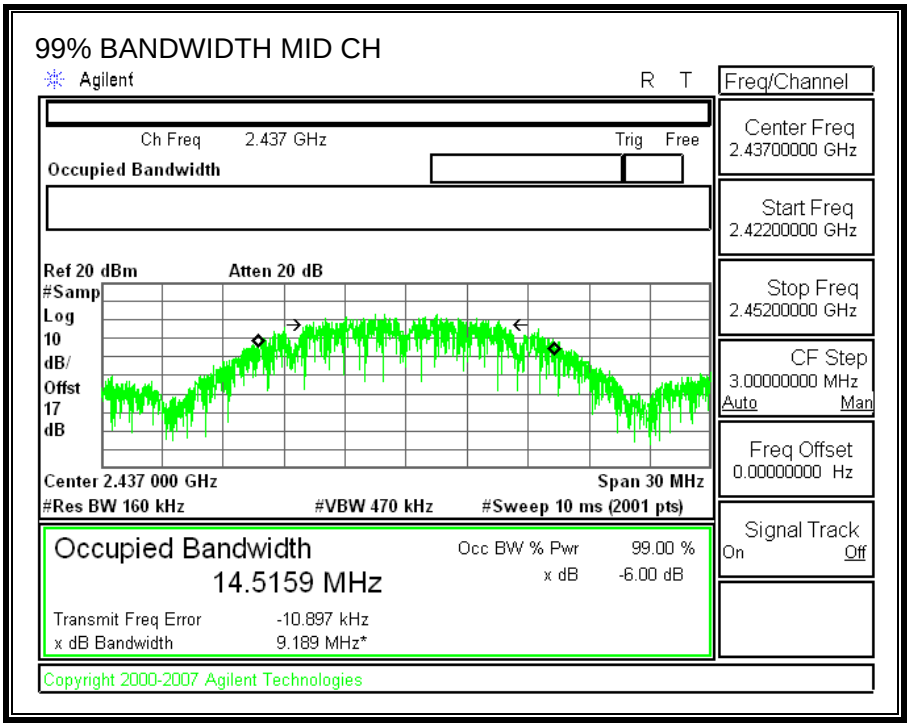
The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

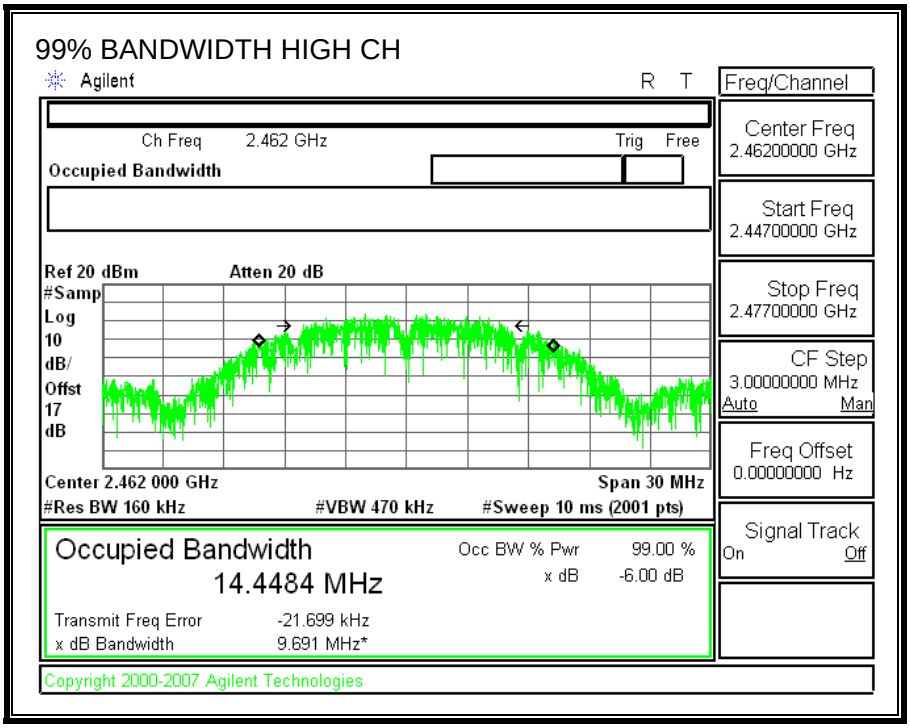
**RESULTS**

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Low | 2412 | 14.5842 |
| Middle | 2437 | 14.5159 |
| High | 2462 | 14.4484 |

**99% BANDWIDTH**





### 7.1.3. OUTPUT POWER

**LIMITS**

FCC §15.247 (b)

IC RSS-210 A8.4

The maximum antenna gain is less than or equal to 6 dBi, therefore the limit is 30 dBm.

**TEST PROCEDURE**

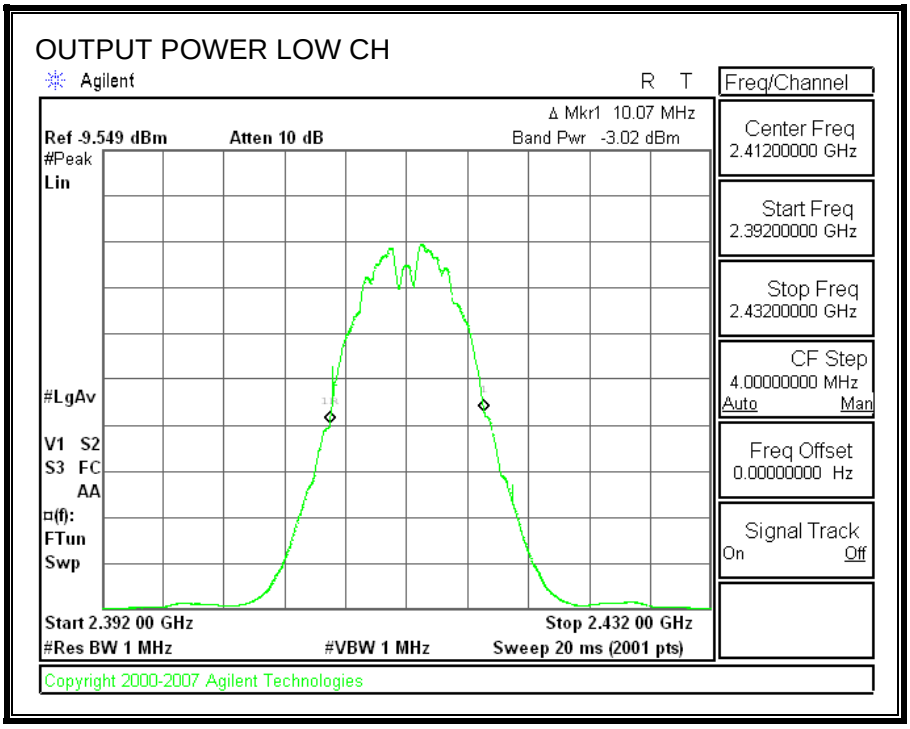
Peak power is measured using the Channel bandwidth Alternative peak output power procedure specified in "TCB Training for Devices covered under Scopes A1 - A4" by Joe Dichoso, May 2003.

**RESULTS**

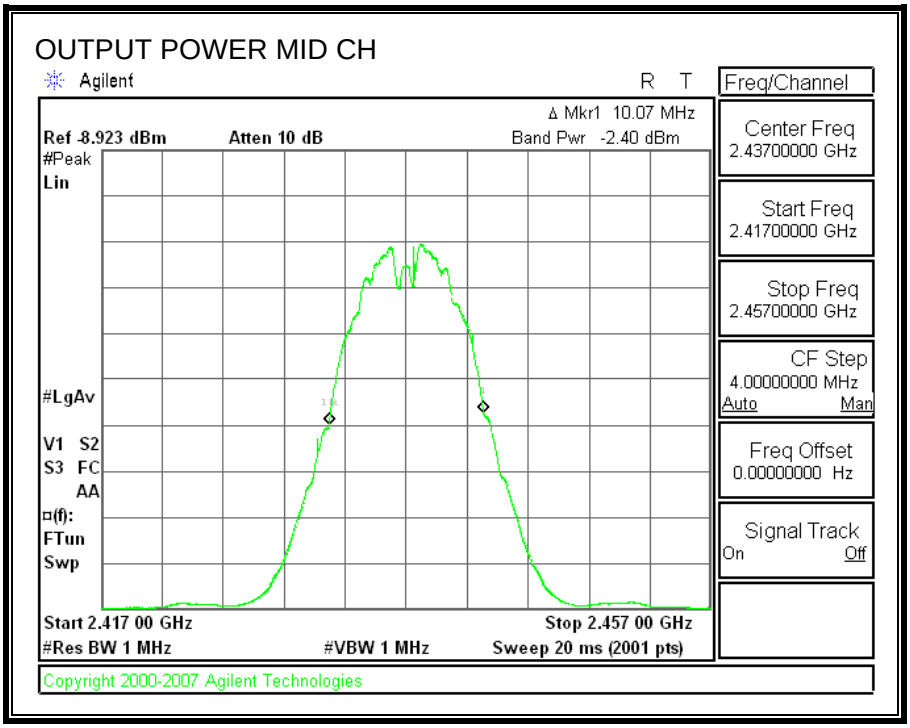
| Channel | Frequency (MHz) | Spectrum Analyzer Reading (dBm) | Attenuator and Cable Offset (dB) | Output Power (dBm) | Limit (dBm) | Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 2412 | -3.02 | 17 | 13.98 | 30 | -16.02 |
| Middle | 2437 | -2.4 | 17 | 14.60 | 30 | -15.40 |
| High | 2462 | -1.19 | 17 | 15.81 | 30 | -14.19 |

**OUTPUT POWER**

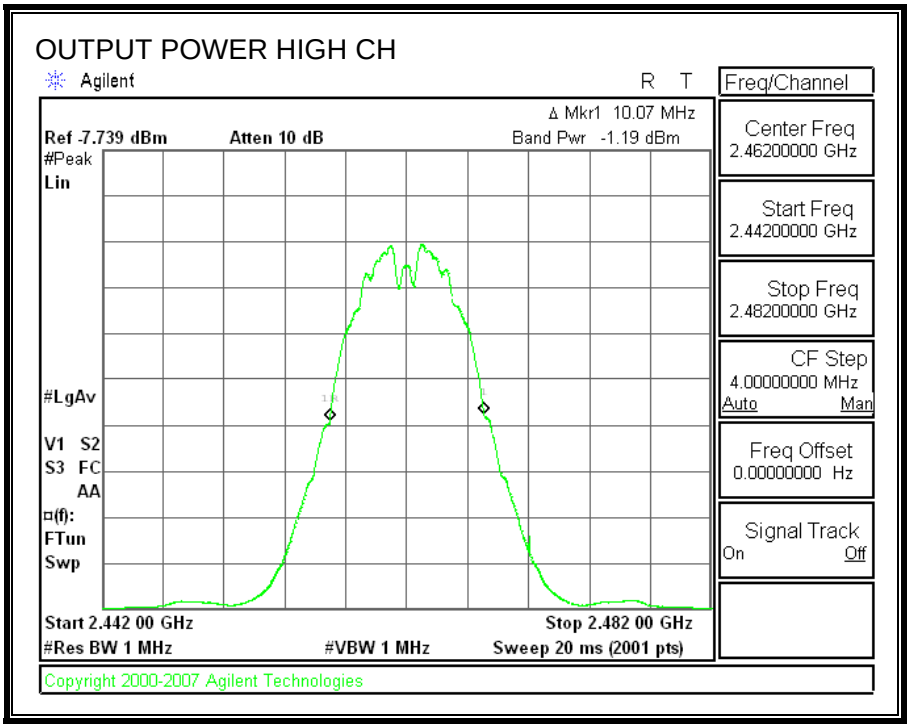
OUTPUT POWER LOW CH




OUTPUT POWER MID CH



OUTPUT POWER HIGH CH



### 7.1.4. AVERAGE POWER

**LIMITS**

None; for reporting purposes only.

**TEST PROCEDURE**

The transmitter output is connected to a power meter.

**RESULTS**

The cable assembly insertion loss of 17 dB (including 10 dB pad and 7 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

| Channel | Frequency (MHz) | Power (dBm) |
|---|---|---|
| Low | 2412 | 12.37 |
| Middle | 2437 | 13.13 |
| High | 2462 | 13.90 |

## 7.1.5. POWER SPECTRAL DENSITY

**LIMITS**

FCC §15.247 (e)

IC RSS-210 A8.2 (b)

The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

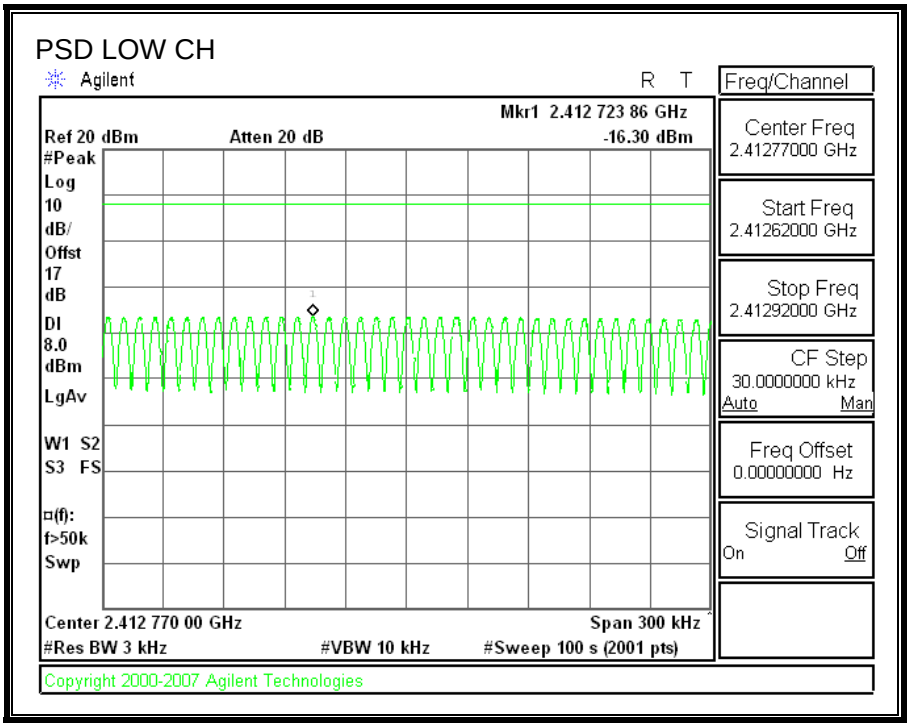
**TEST PROCEDURE**

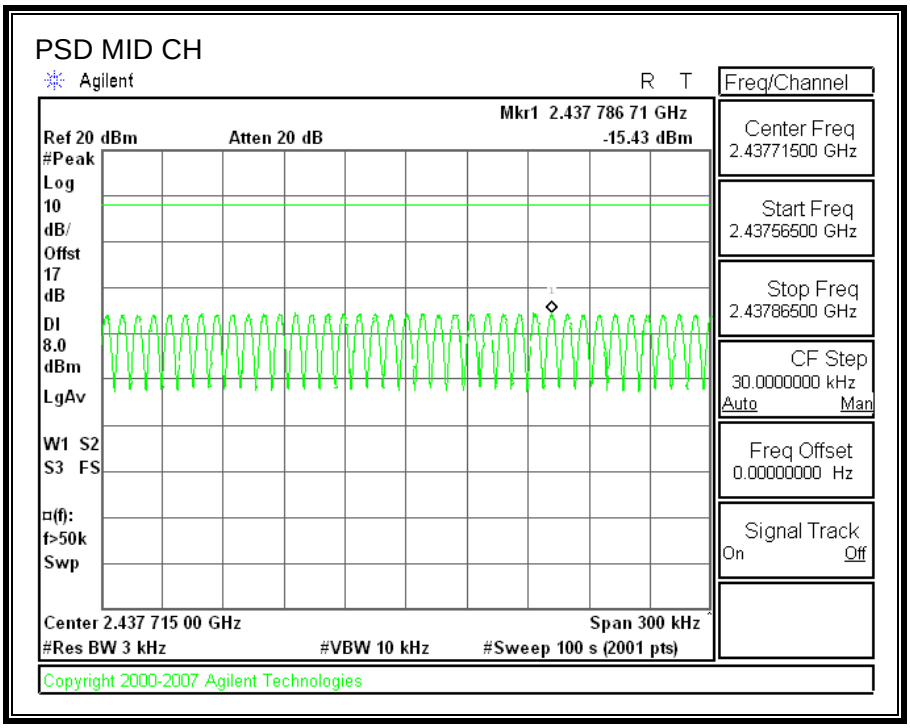
Output power was measured based on the use of a peak measurement, therefore the power spectral density was measured using PSD Option 1 in accordance with FCC document "Measurement of Digital Transmission Systems Operating under Section 15.247", March 23, 2005.

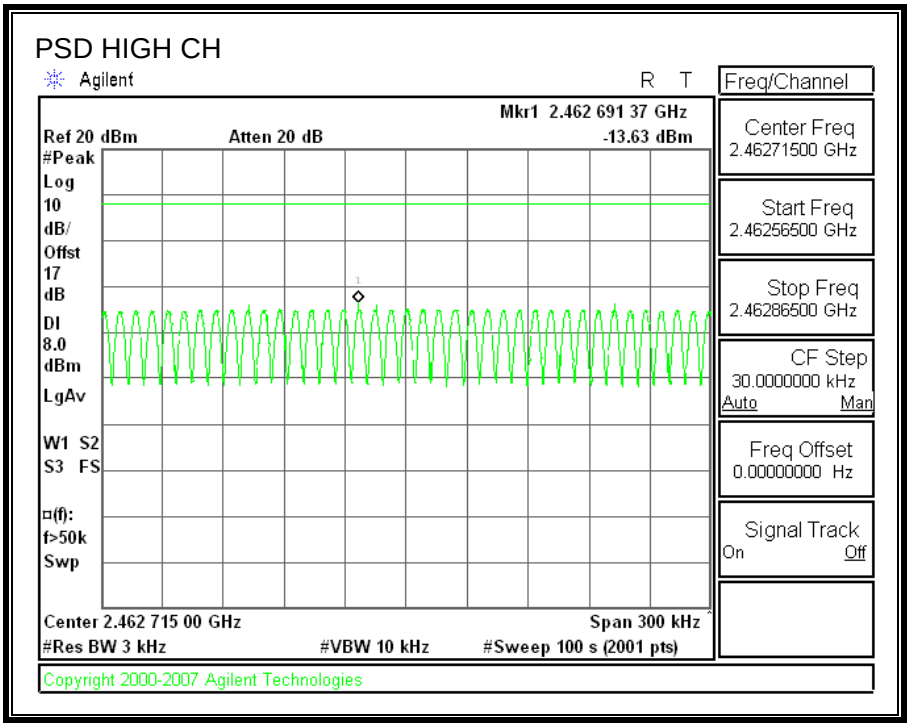
**RESULTS**

| Channel | Frequency (MHz) | PPSD (dBm) | Limit (dBm) | Margin (dB) |
|---|---|---|---|---|
| Low | 2412 | -16.30 | 8 | -24.30 |
| Middle | 2437 | -15.43 | 8 | -23.43 |
| High | 2462 | -13.63 | 8 | -21.63 |

**POWER SPECTRAL DENSITY**





## 7.1.6. CONDUCTED SPURIOUS EMISSIONS

**LIMITS**

FCC §15.247 (d)

IC RSS-210 A8.5

Output power was measured based on the use of a peak measurement, therefore the required attenuation is 20 dB.

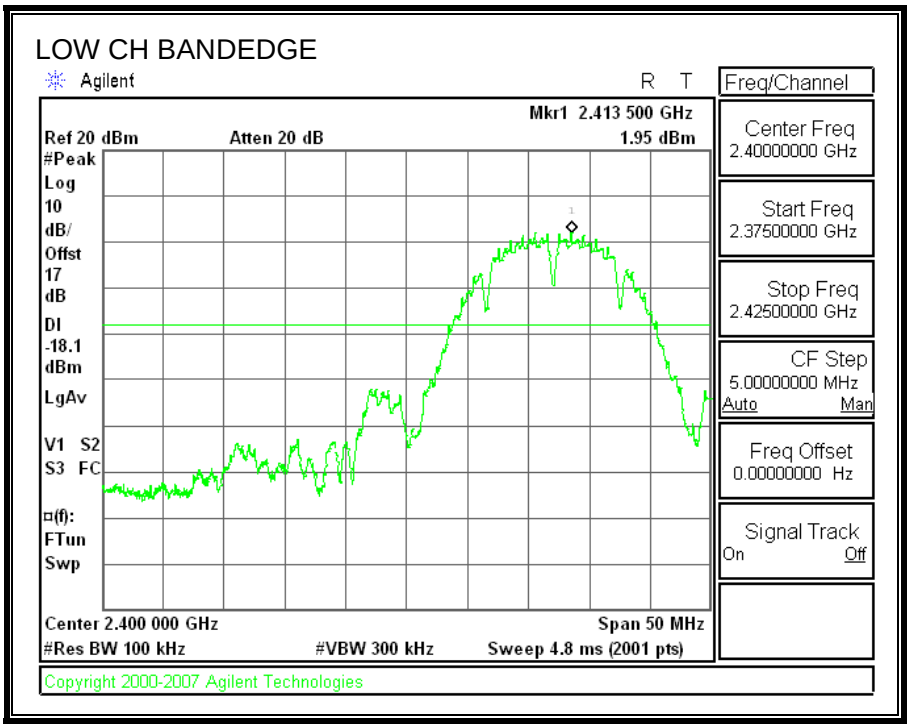
**TEST PROCEDURE**

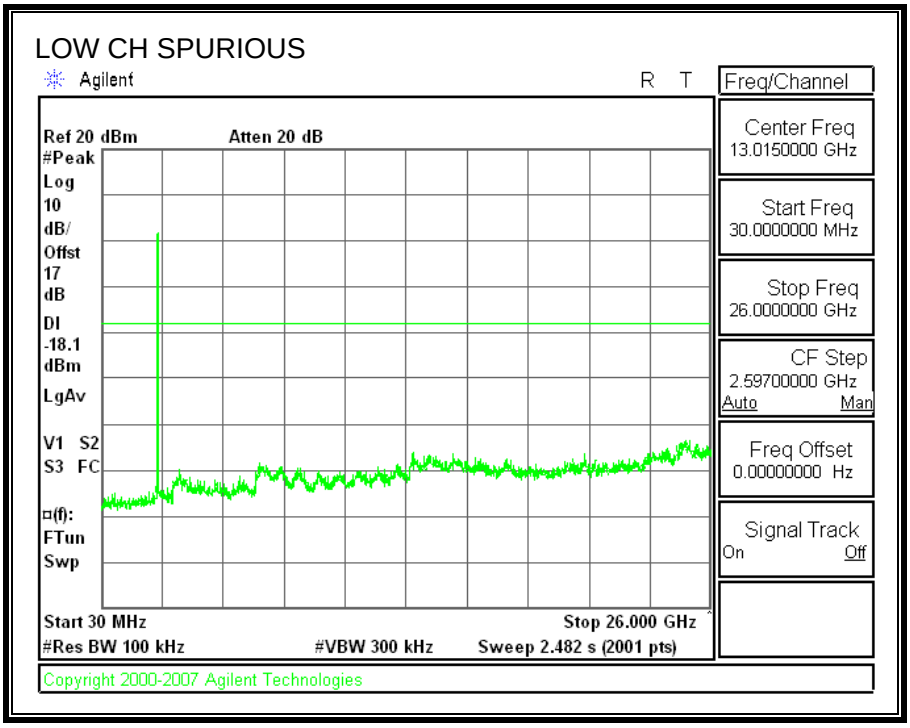
The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

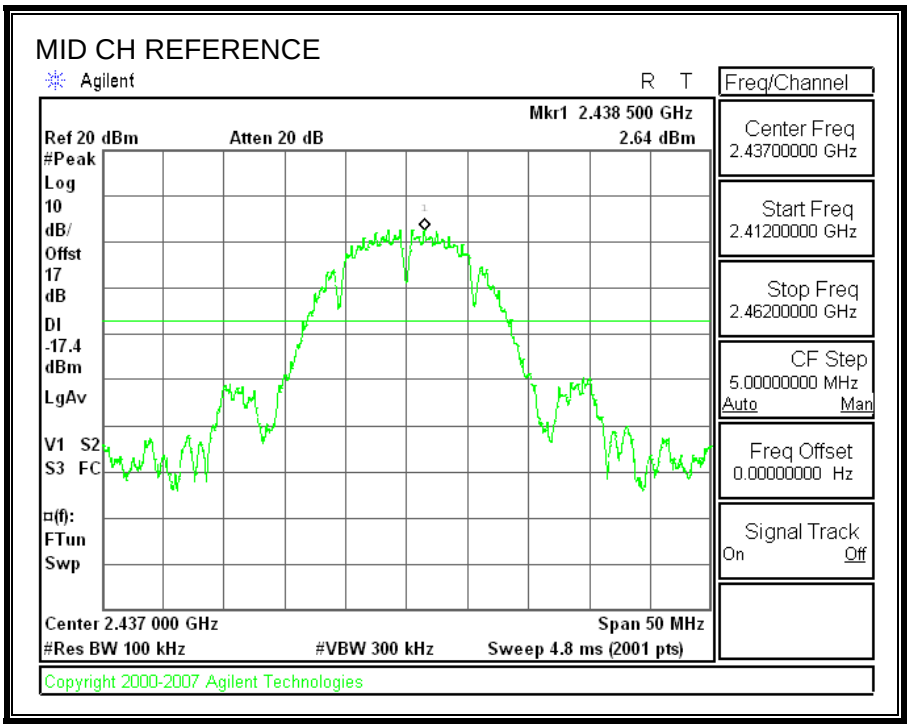
**RESULTS**

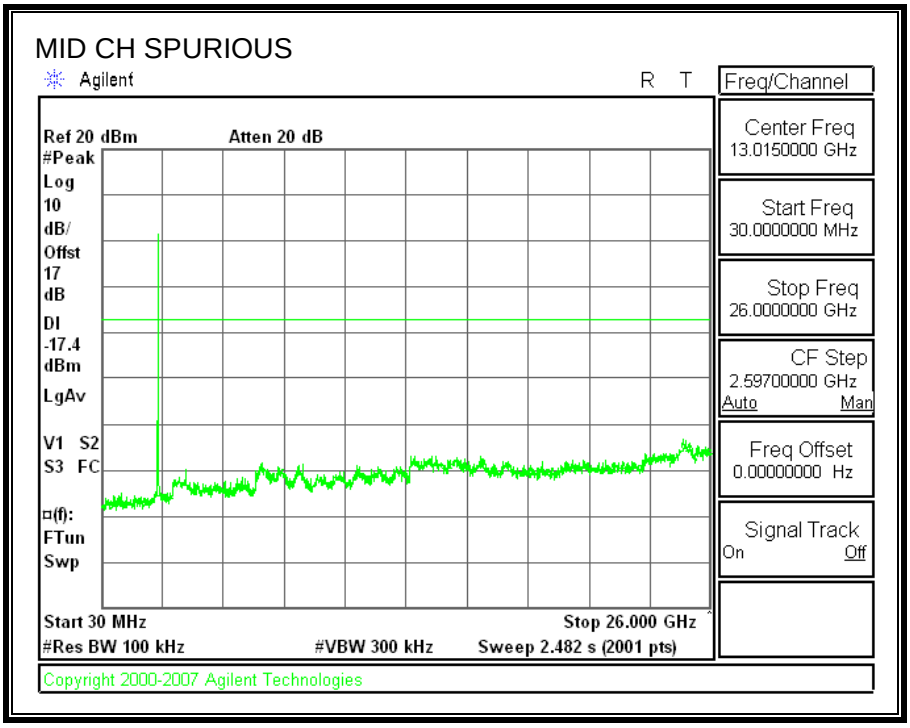
**SPURIOUS EMISSIONS, LOW CHANNEL**



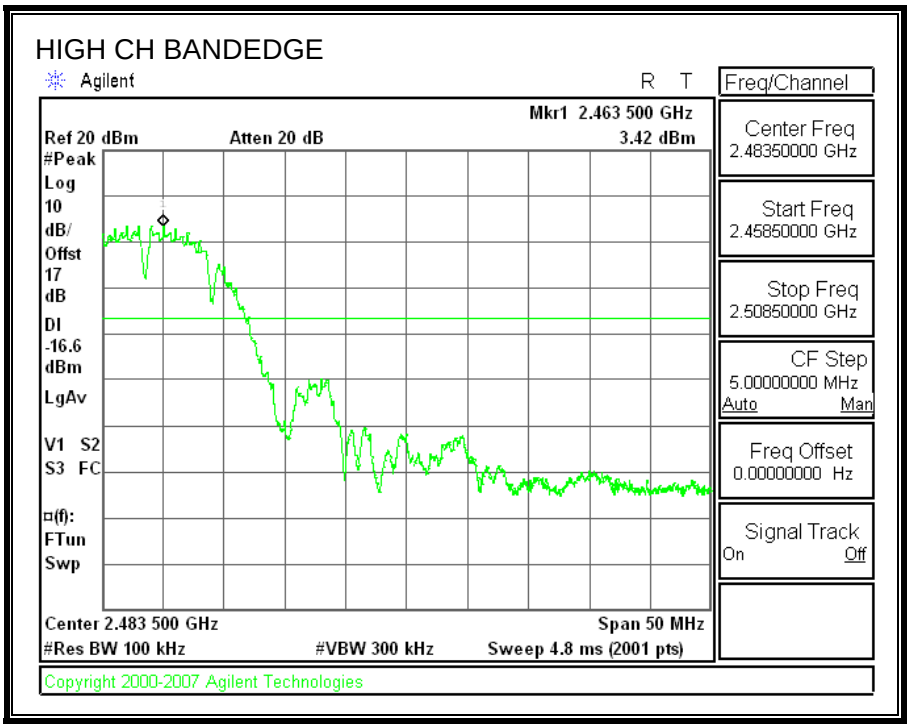



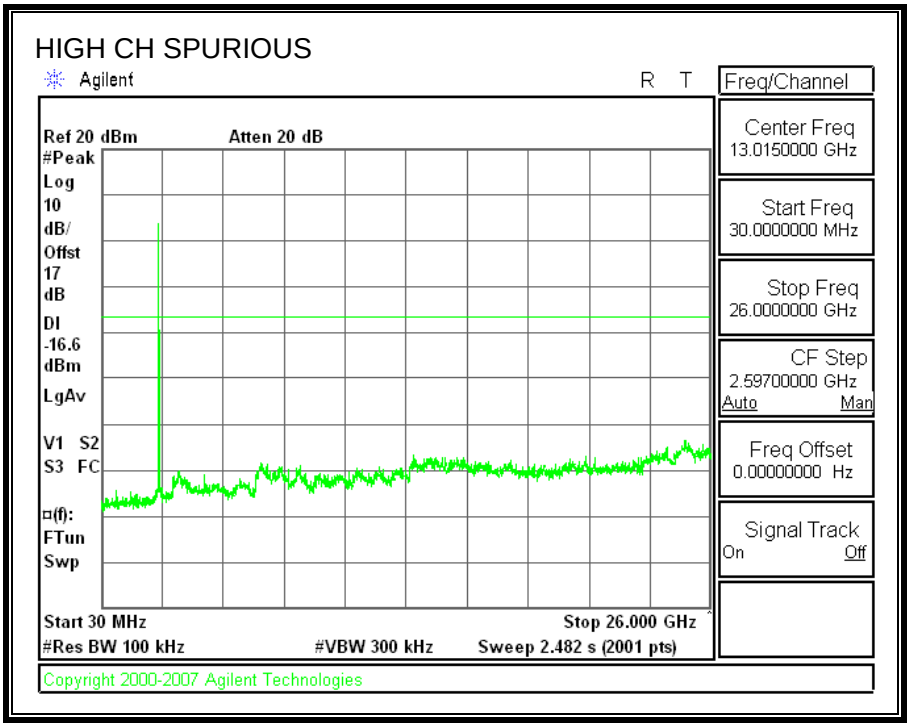
**SPURIOUS EMISSIONS, MID CHANNEL**



**SPURIOUS EMISSIONS, HIGH CHANNEL**



## 7.2. 802.11g MODE IN THE 2.4 GHz BAND

### 7.2.1. 6 dB BANDWIDTH

**LIMITS**

FCC §15.247 (a) (2)

IC RSS-210 A8.2 (a)

The minimum 6 dB bandwidth shall be at least 500 kHz.

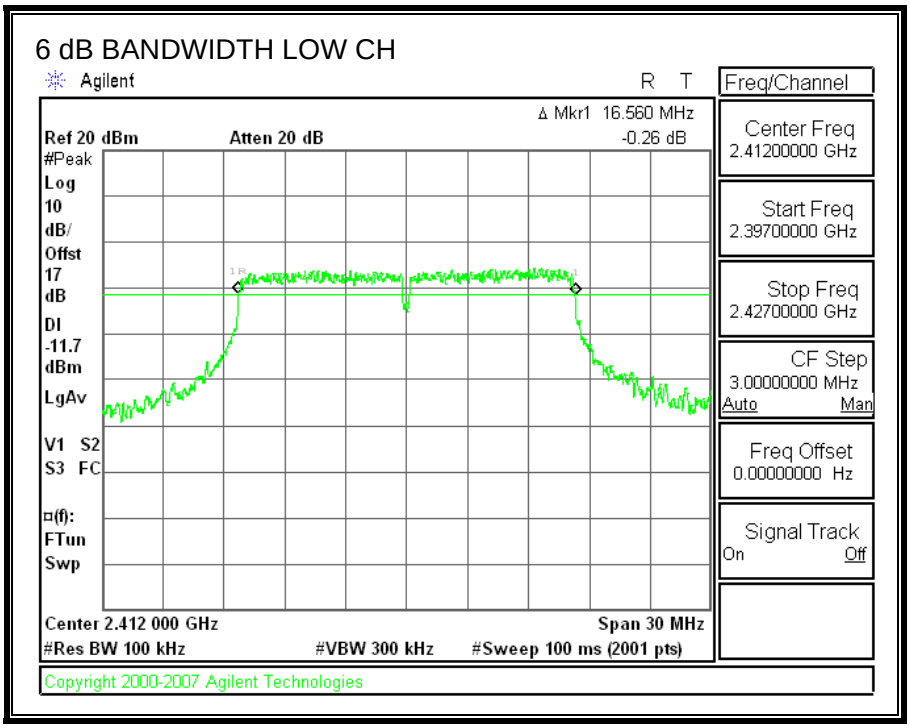
**TEST PROCEDURE**

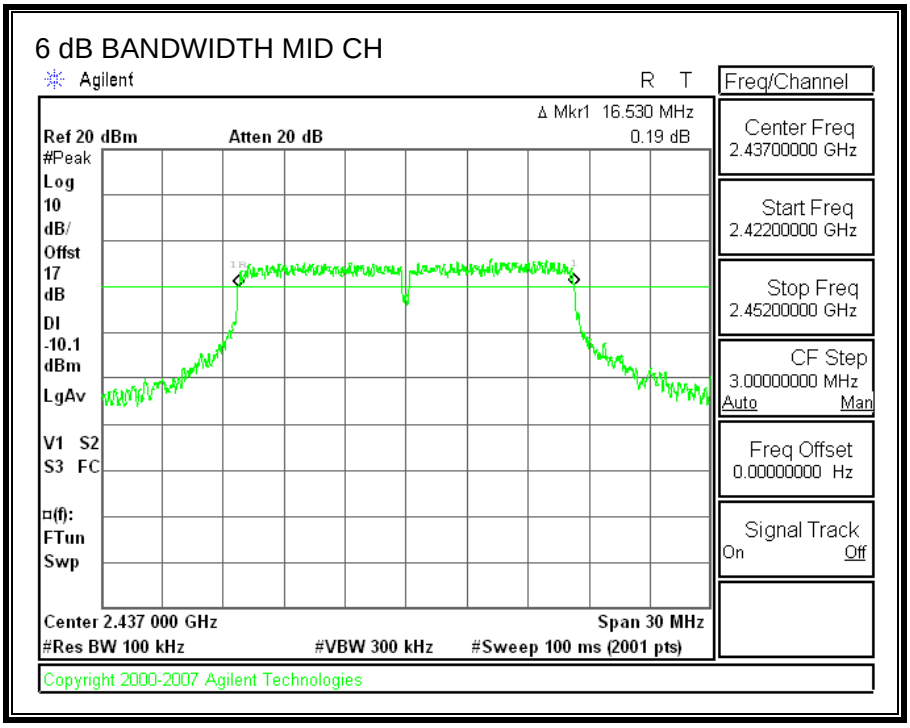
The transmitter output is connected to a spectrum analyzer. The RBW is set to 100 kHz and the VBW is set to 300 kHz. The sweep time is coupled.

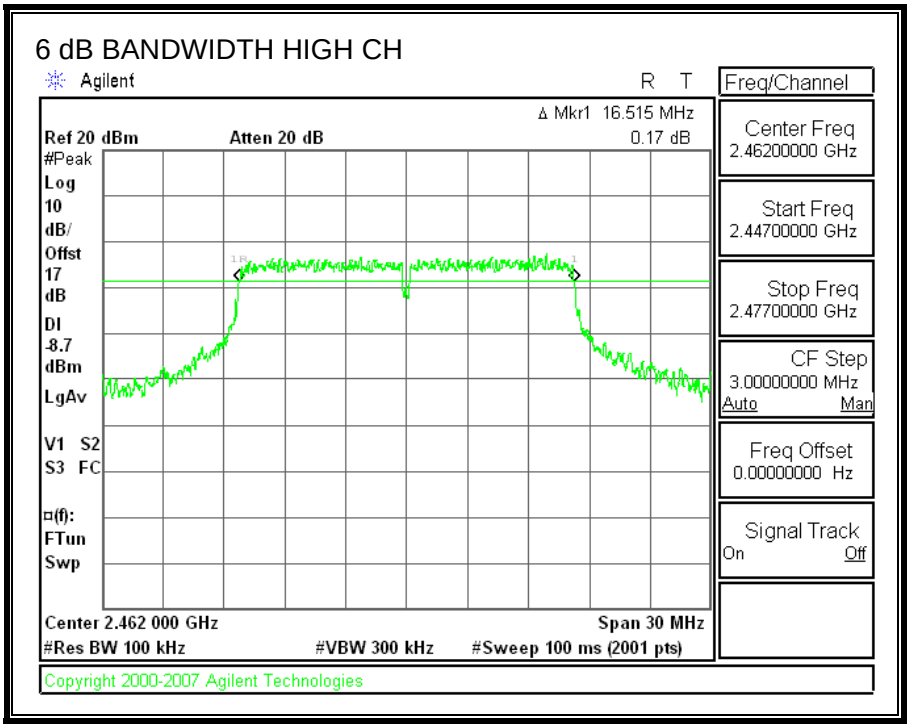
**RESULTS**

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Low | 2412 | 16.56 | 0.5 |
| Middle | 2437 | 16.53 | 0.5 |
| High | 2462 | 16.52 | 0.5 |

**6 dB BANDWIDTH**





### 7.2.2. 99% BANDWIDTH

**LIMITS**

None; for reporting purposes only.

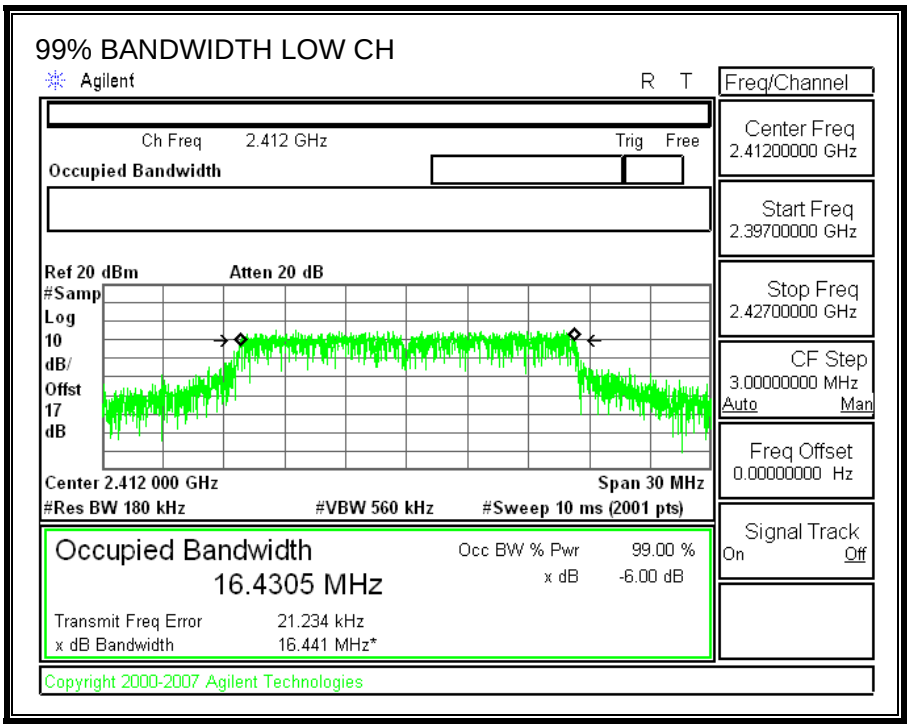
**TEST PROCEDURE**

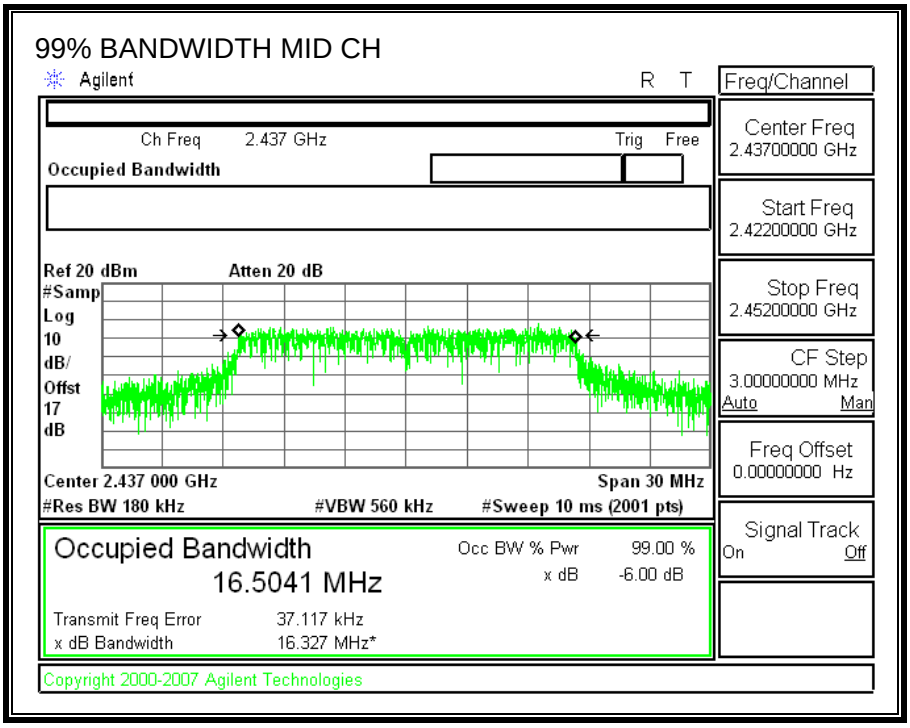
The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

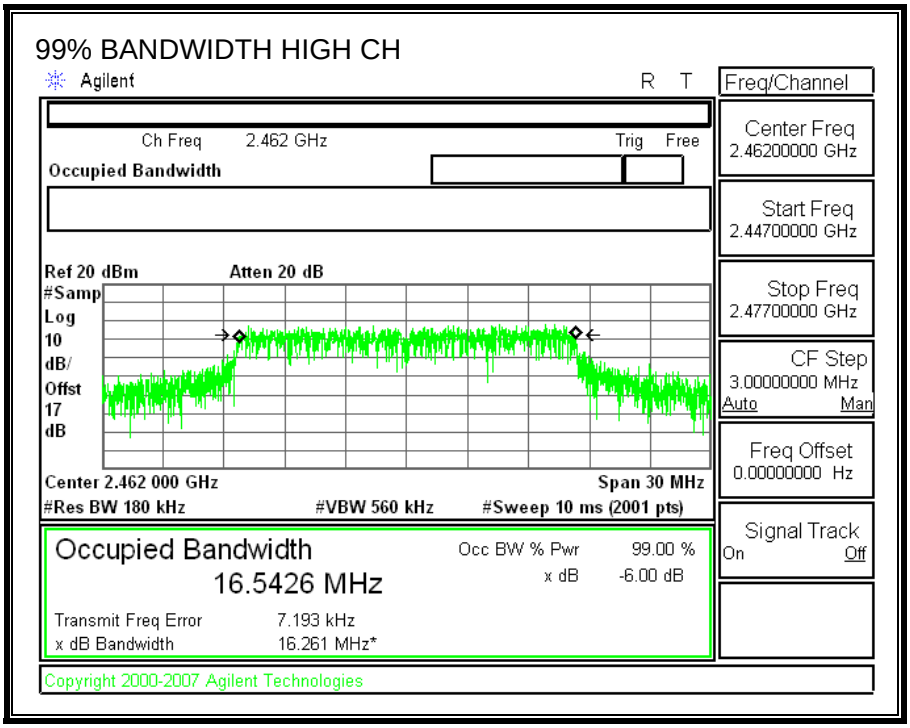
**RESULTS**

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Low | 2412 | 16.4305 |
| Middle | 2437 | 16.5041 |
| High | 2462 | 16.5426 |

**99% BANDWIDTH**





### 7.2.3. OUTPUT POWER

**LIMITS**

FCC §15.247 (b)

IC RSS-210 A8.4

The maximum antenna gain is less than or equal to 6 dBi, therefore the limit is 30 dBm.

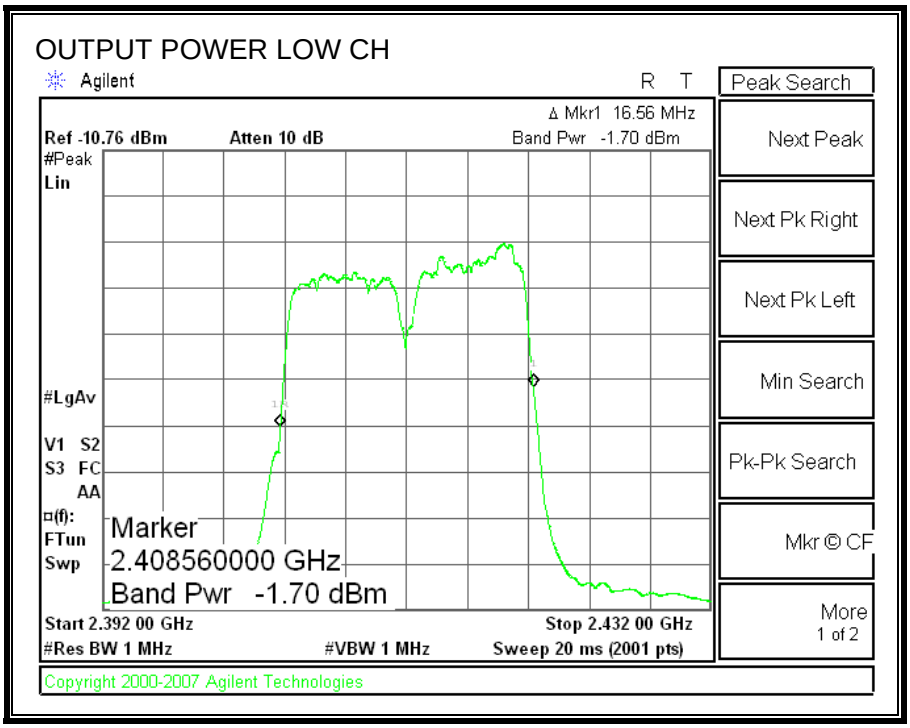
**TEST PROCEDURE**

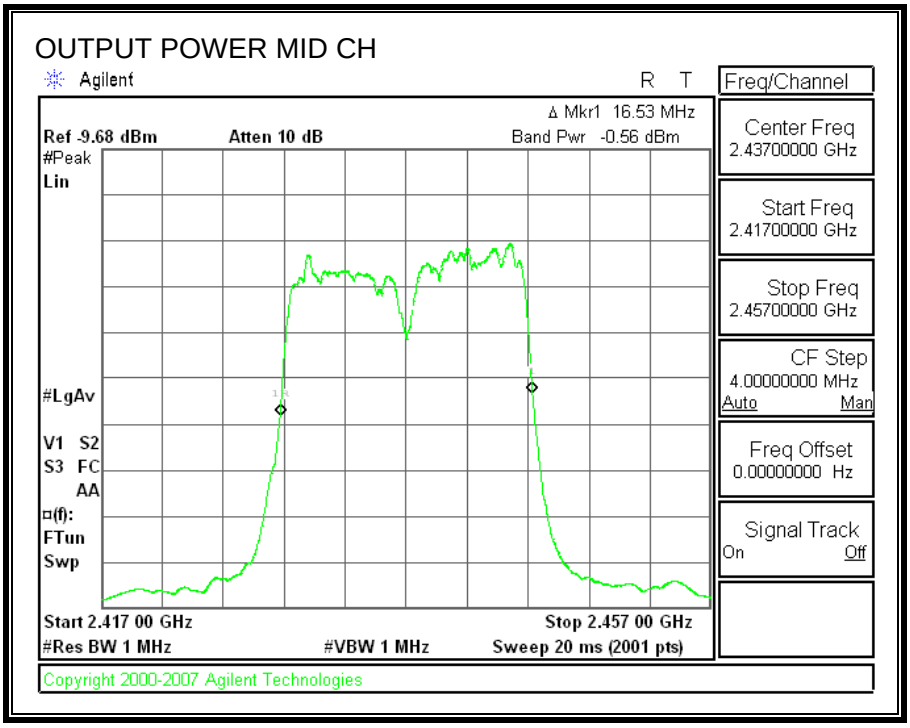
Peak power is measured using the Channel bandwidth Alternative peak output power procedure specified in "TCB Training for Devices covered under Scopes A1 - A4" by Joe Dichoso, May 2003.

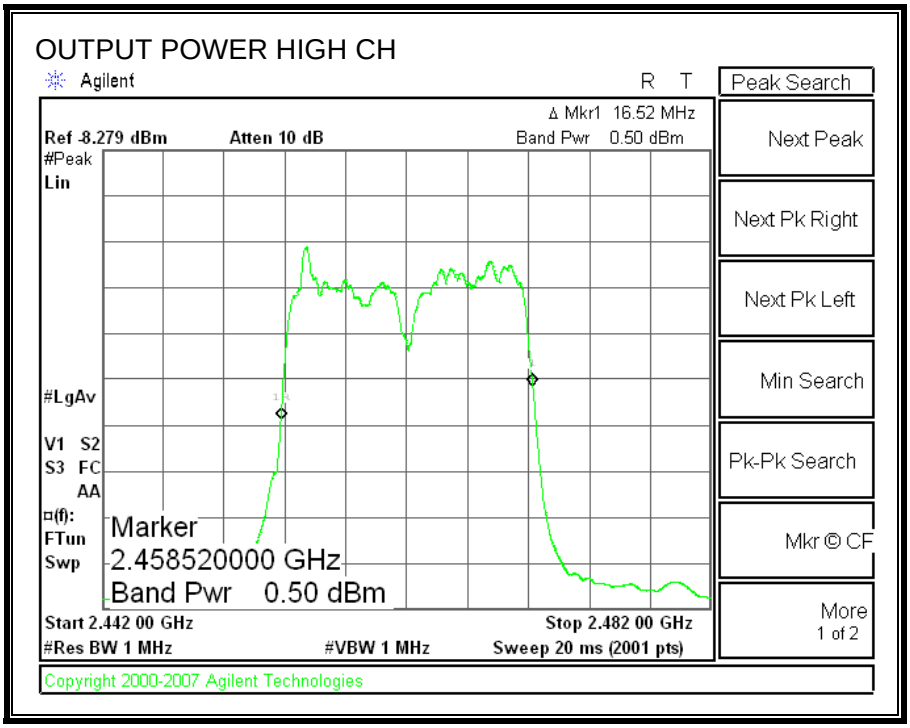
**RESULTS**

| Channel | Frequency (MHz) | Spectrum Analyzer Reading (dBm) | Attenuator and Cable Offset (dB) | Output Power (dBm) | Limit (dBm) | Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 2412 | -1.7 | 17 | 15.30 | 30 | -14.70 |
| Middle | 2437 | -0.56 | 17 | 16.44 | 30 | -13.56 |
| High | 2462 | 0.5 | 17 | 17.50 | 30 | -12.50 |

**OUTPUT POWER**





## 7.2.4. AVERAGE POWER

**LIMITS**

None; for reporting purposes only.

**TEST PROCEDURE**

The transmitter output is connected to a power meter.

**RESULTS**

The cable assembly insertion loss of 17 dB (including 10 dB pad and 7 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

| Channel | Frequency (MHz) | Power (dBm) |
|---|---|---|
| Low | 2412 | 9.02 |
| Middle | 2437 | 9.80 |
| High | 2462 | 10.92 |

## 7.2.5. POWER SPECTRAL DENSITY

**LIMITS**

FCC §15.247 (e)

IC RSS-210 A8.2 (b)

The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

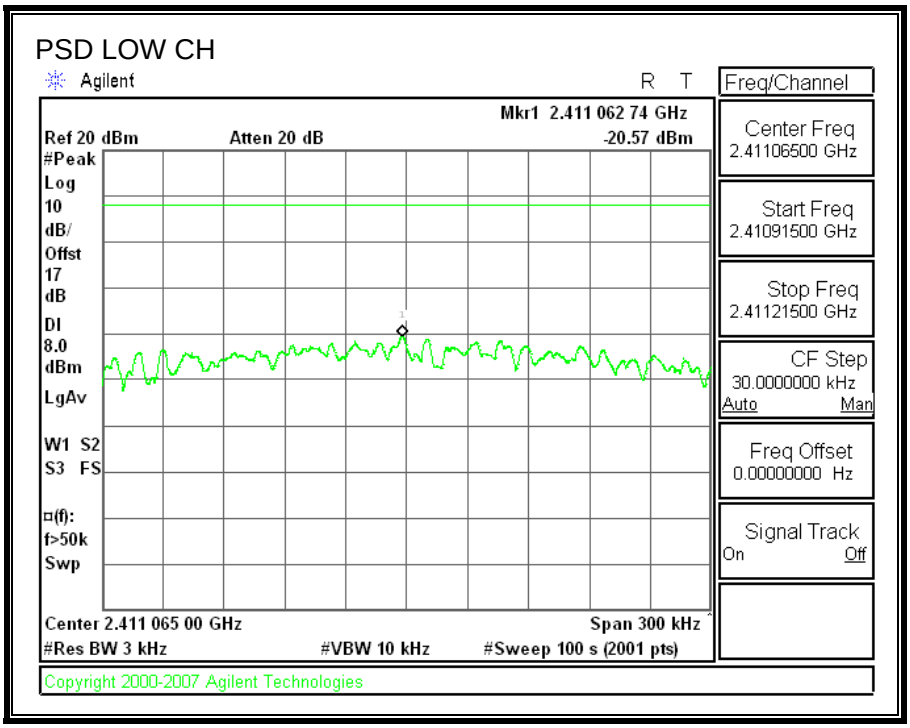
**TEST PROCEDURE**

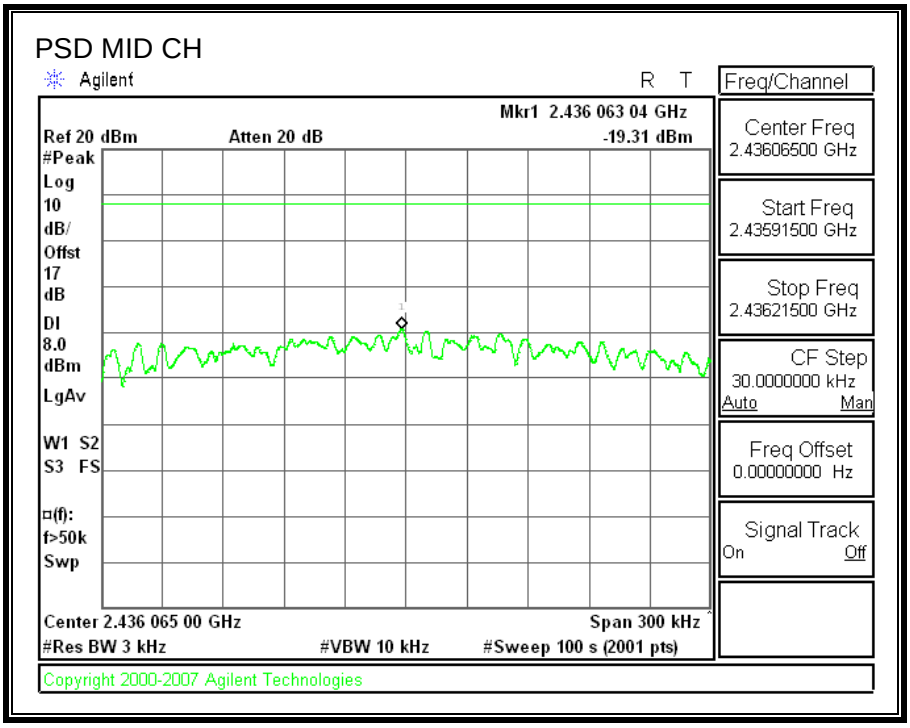
Output power was measured based on the use of a peak measurement, therefore the power spectral density was measured using PSD Option 1 in accordance with FCC document "Measurement of Digital Transmission Systems Operating under Section 15.247", March 23, 2005.

**RESULTS**

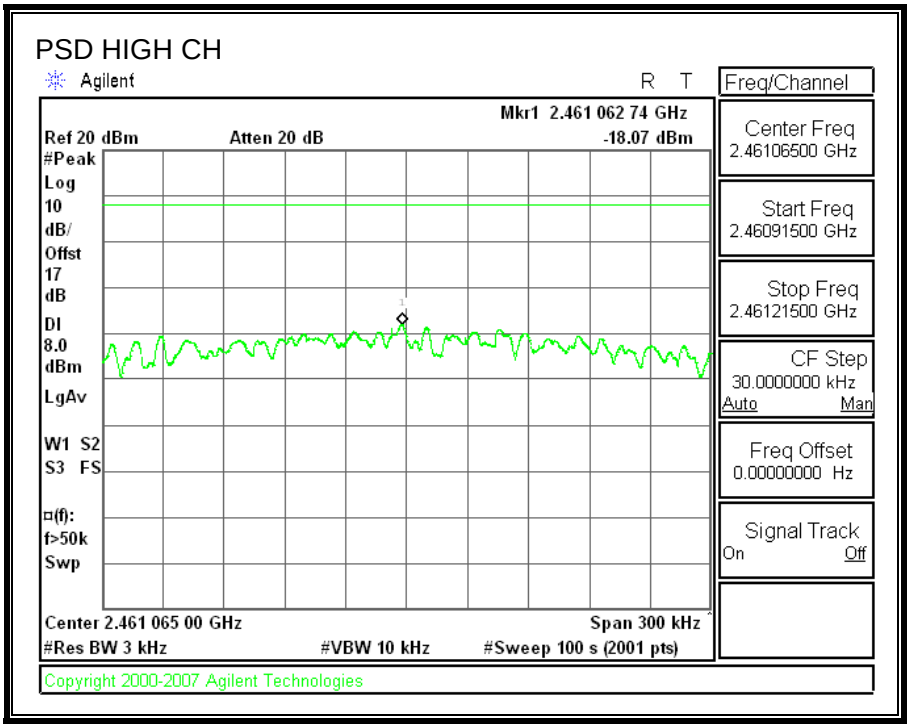
| Channel | Frequency (MHz) | PPSD (dBm) | Limit (dBm) | Margin (dB) |
|---|---|---|---|---|
| Low | 2412 | -20.57 | 8 | -28.57 |
| Middle | 2437 | -19.31 | 8 | -27.31 |
| High | 2462 | -18.07 | 8 | -26.07 |

**POWER SPECTRAL DENSITY**



PSD HIGH CH



## 7.2.6. CONDUCTED SPURIOUS EMISSIONS

**LIMITS**

FCC §15.247 (d)

IC RSS-210 A8.5

Output power was measured based on the use of a peak measurement, therefore the required attenuation is 20 dB.

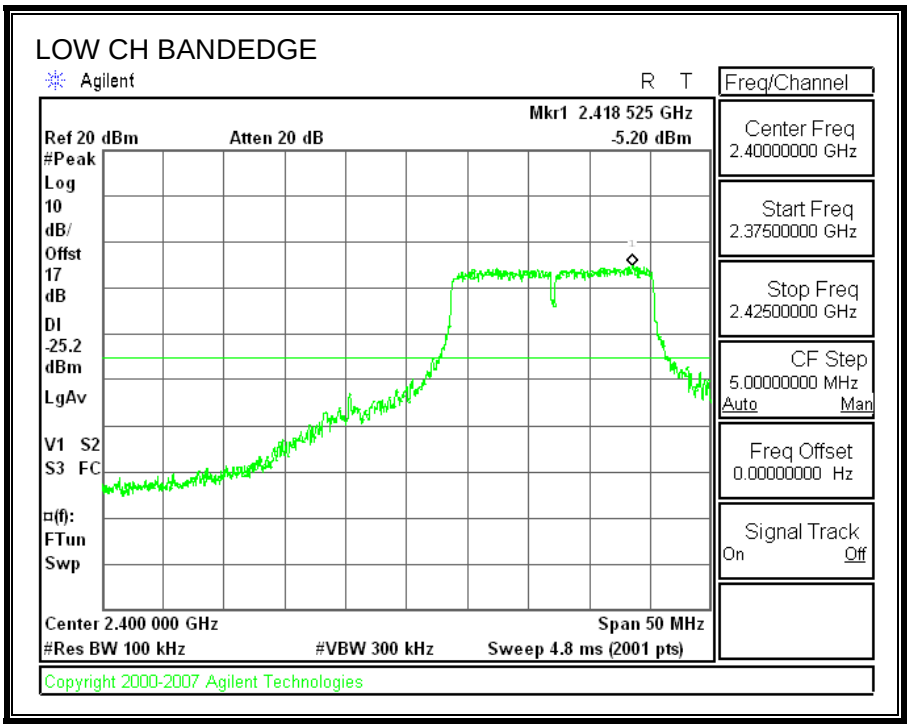
**TEST PROCEDURE**

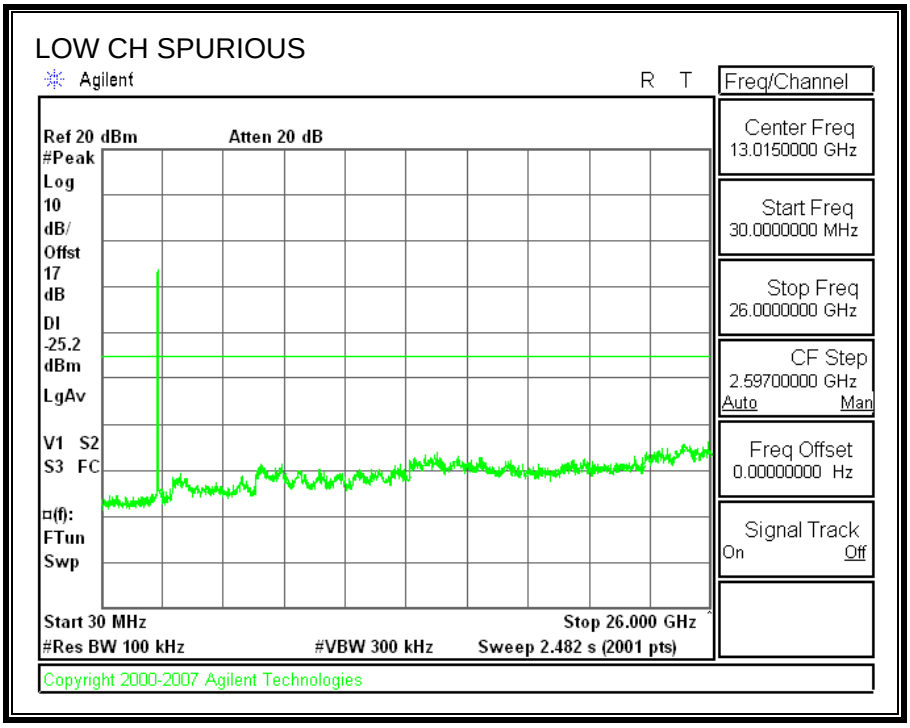
The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

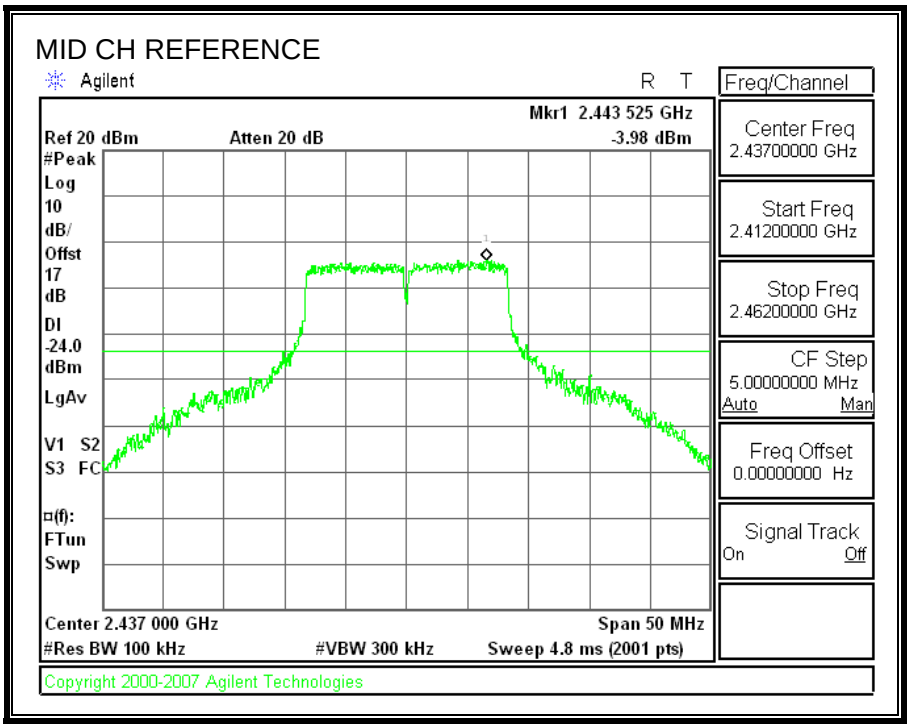
**RESULTS**

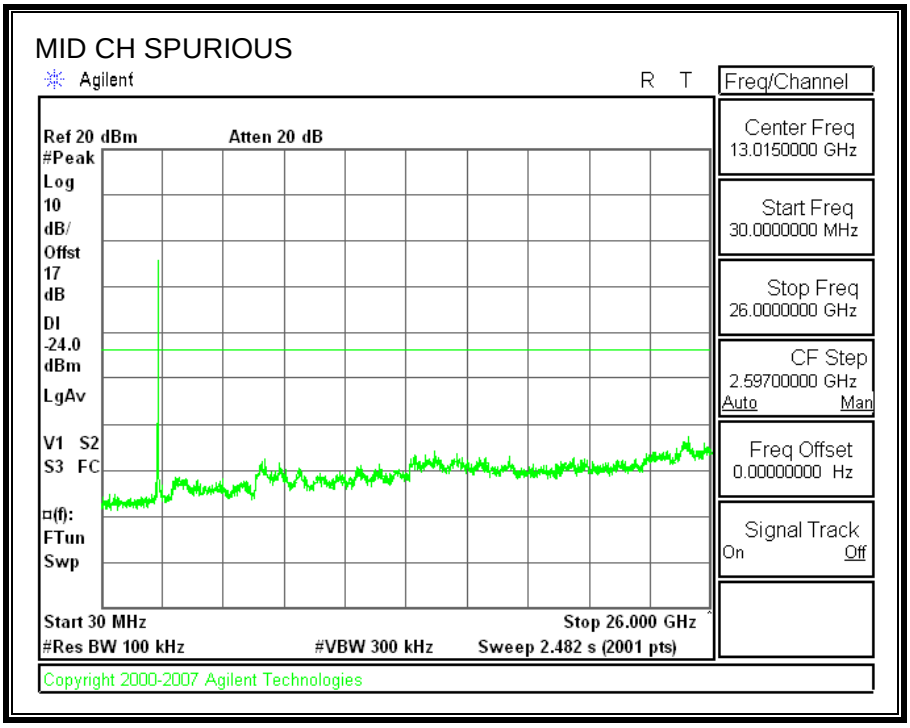
**SPURIOUS EMISSIONS, LOW CHANNEL**



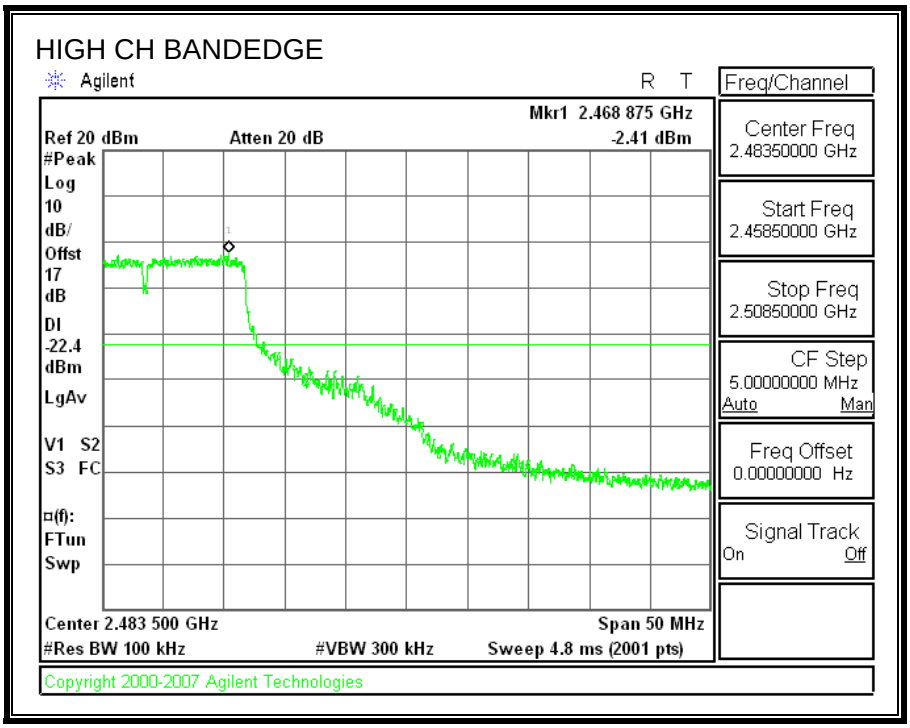



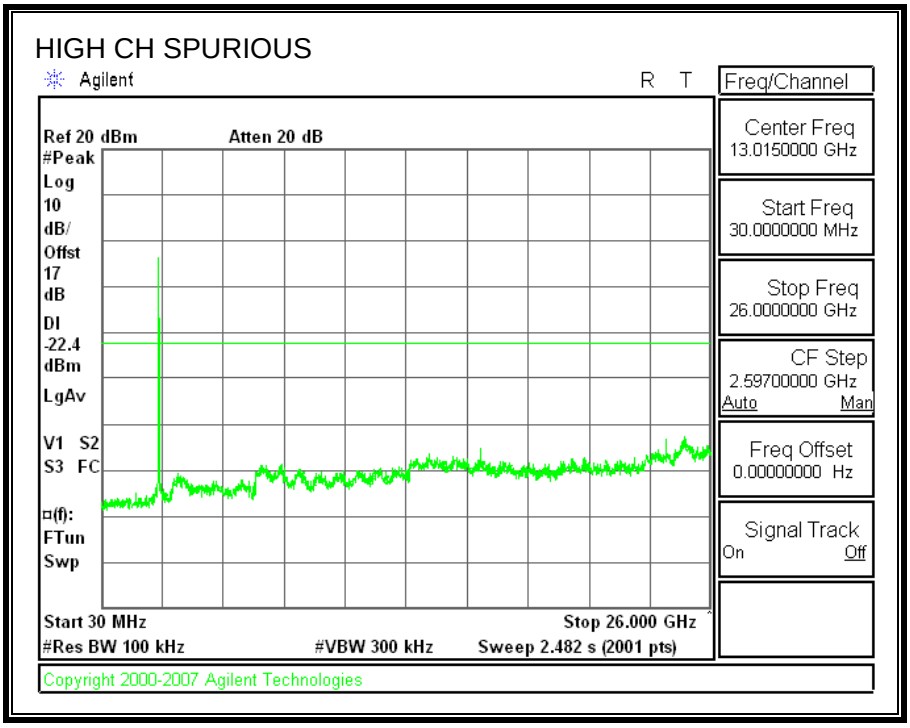
**SPURIOUS EMISSIONS, MID CHANNEL**



**SPURIOUS EMISSIONS, HIGH CHANNEL**



# 7.3. BULETOOTH GFSK MODE IN THE 2.4 GHz BAND

## 7.3.1. 99% BANDWIDTH

**LIMITS**

None; for reporting purposes only.

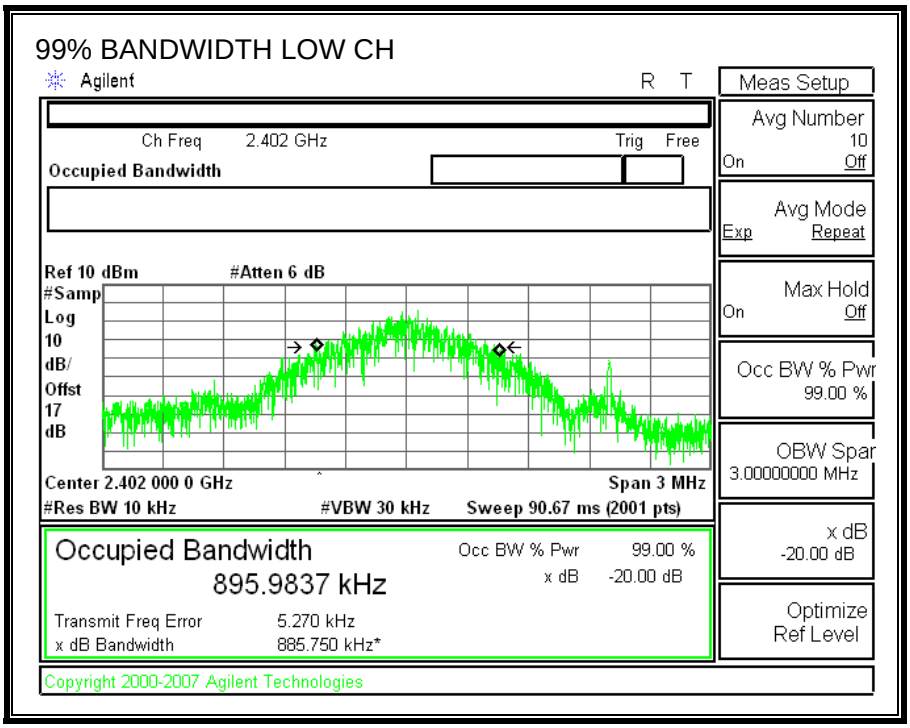
**TEST PROCEDURE**

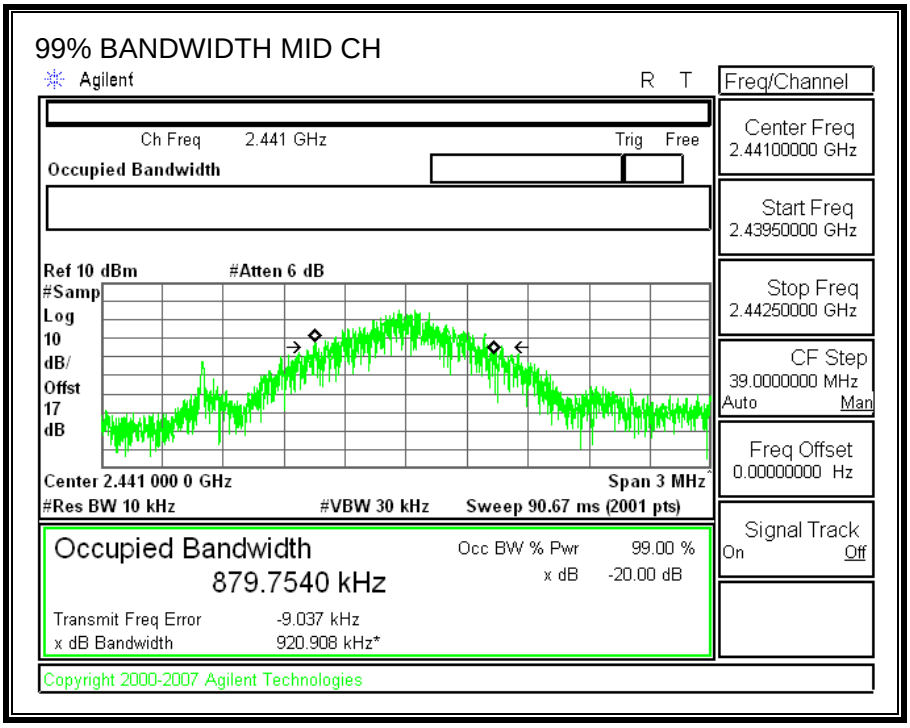
The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

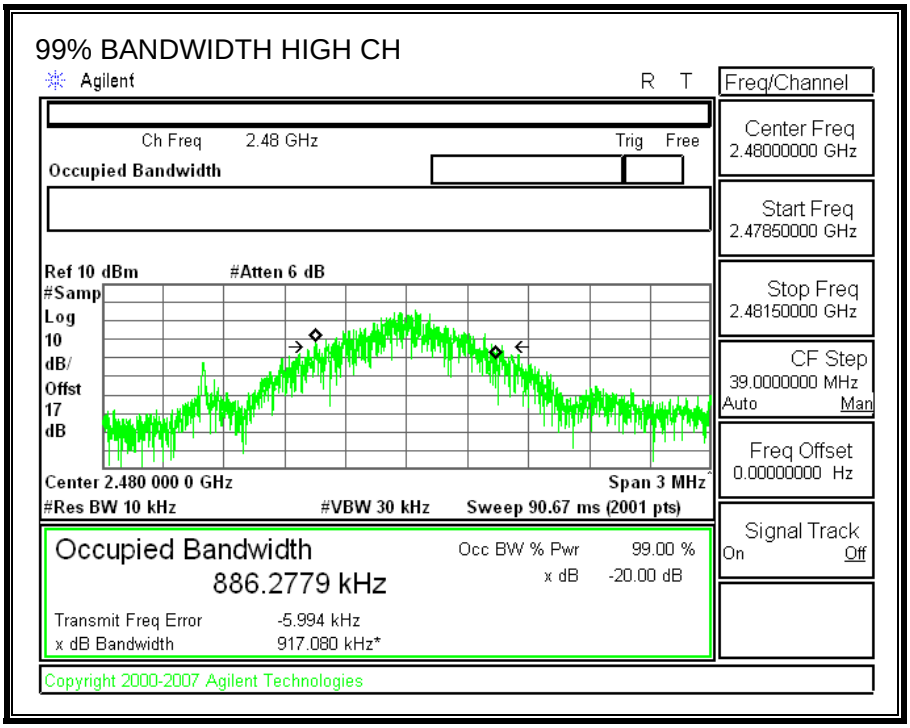
**RESULTS**

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Low | 2402 | 0.896 |
| Middle | 2441 | 0.880 |
| High | 2480 | 0.886 |

**99% BANDWIDTH**





## 7.3.2. OUTPUT POWER

**LIMITS**

FCC §15.247 (b)

IC RSS-210 A8.4

The maximum antenna gain is less than or equal to 6 dBi, therefore the limit is 30 dBm.

**TEST PROCEDURE**

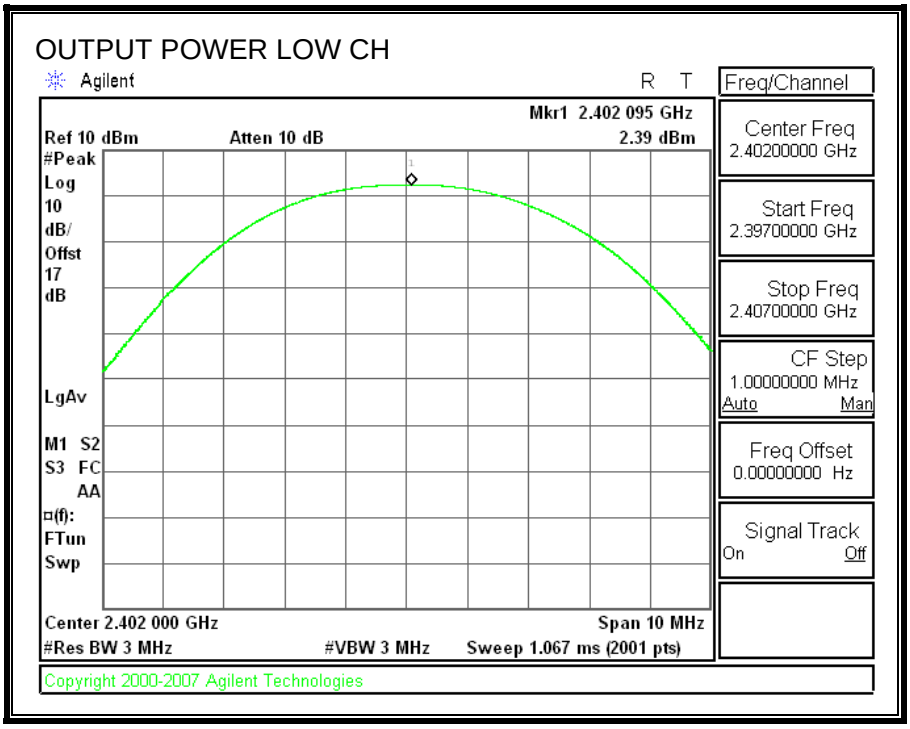
Peak power is measured using the Channel bandwidth Alternative peak output power procedure specified in "TCB Training for Devices covered under Scopes A1 - A4" by Joe Dichoso, May 2003.

**RESULTS**

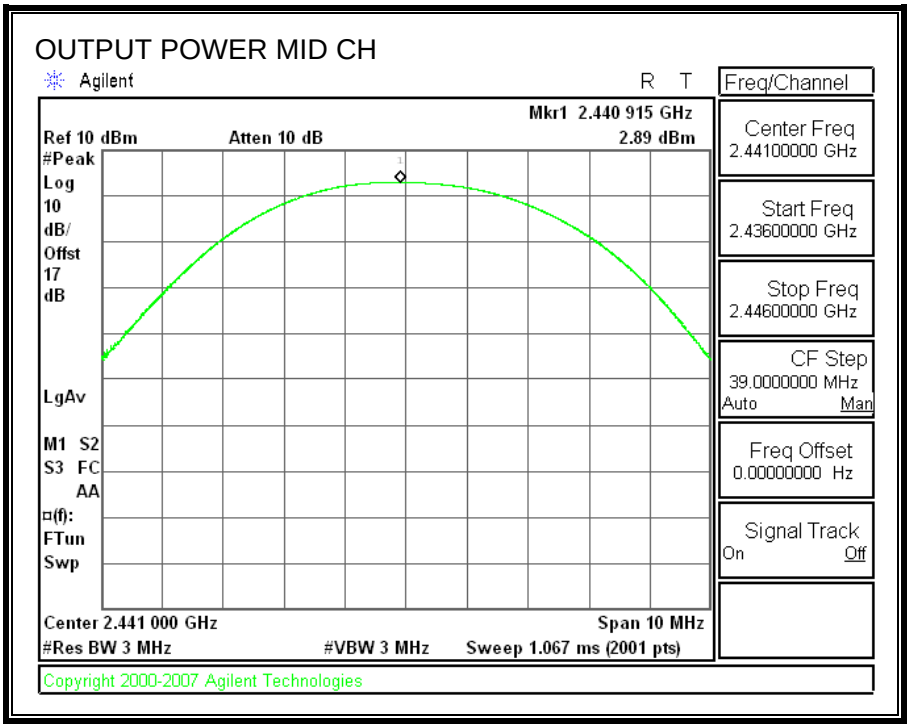
| Channel | Frequency (MHz) | Spectrum Analyzer Reading (dBm) | Limit (dBm) | Margin (dB) |
|---|---|---|---|---|
| Low | 2402 | 2.39 | 30 | -27.61 |
| Middle | 2441 | 2.89 | 30 | -27.11 |
| High | 2480 | 2.76 | 30 | -27.24 |

**OUTPUT POWER**

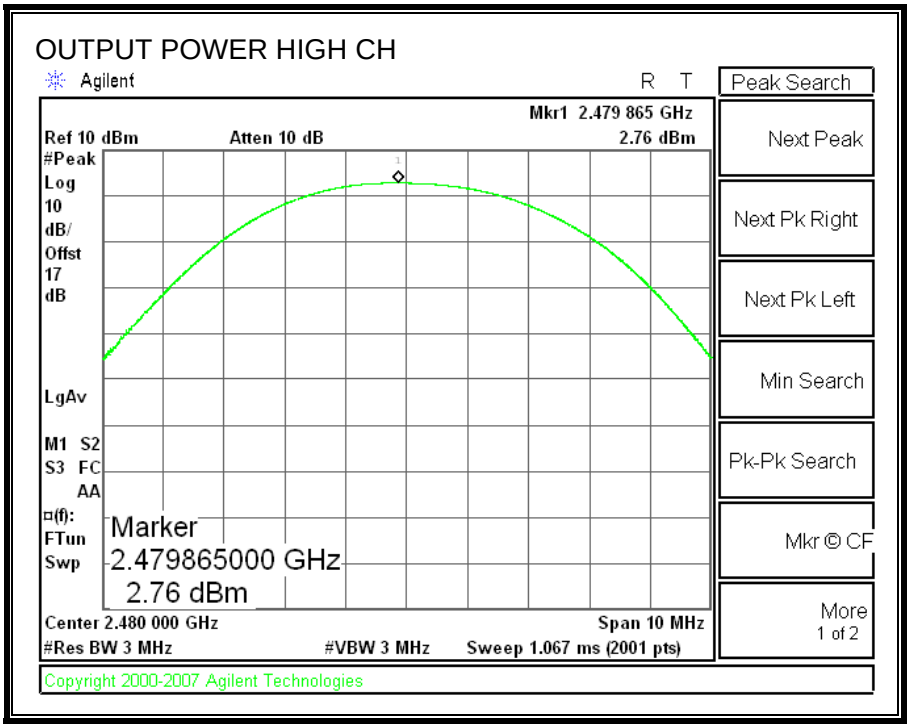
OUTPUT POWER LOW CH




OUTPUT POWER MID CH



OUTPUT POWER HIGH CH



### 7.3.3. AVERAGE POWER

**LIMITS**

None; for reporting purposes only.

**TEST PROCEDURE**

The transmitter output is connected to a power meter.

**RESULTS**

The cable assembly insertion loss of 16.8 dB (including 10 dB pad and 6.8 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

| Channel | Frequency (MHz) | Power (dBm) |
|---|---|---|
| Low | 2402 | 0.75 |
| Middle | 2441 | 1.61 |
| High | 2480 | 1.32 |

## 7.3.4. POWER SPECTRAL DENSITY

**LIMITS**

FCC §15.247 (e)

IC RSS-210 A8.2 (b)

The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

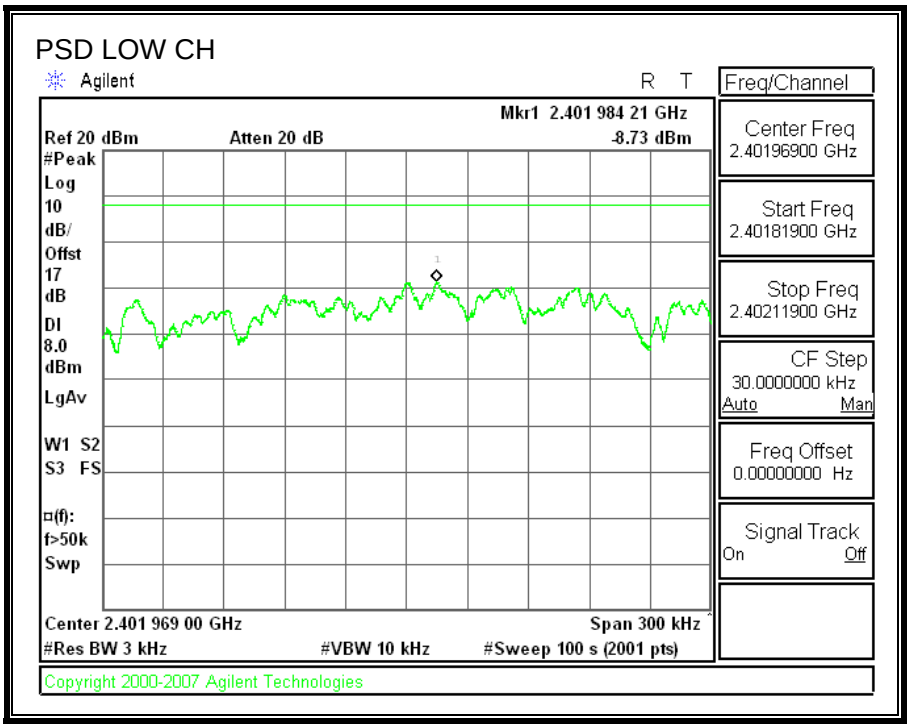
**TEST PROCEDURE**

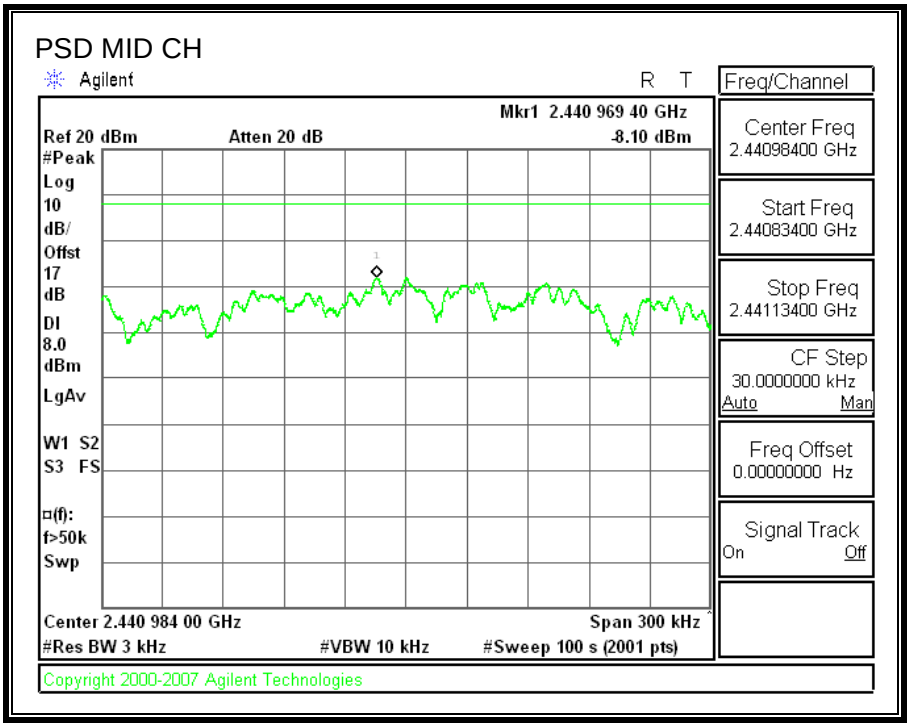
Output power was measured based on the use of a peak measurement, therefore the power spectral density was measured using PSD Option 1 in accordance with FCC document "Measurement of Digital Transmission Systems Operating under Section 15.247", March 23, 2005.

**RESULTS**

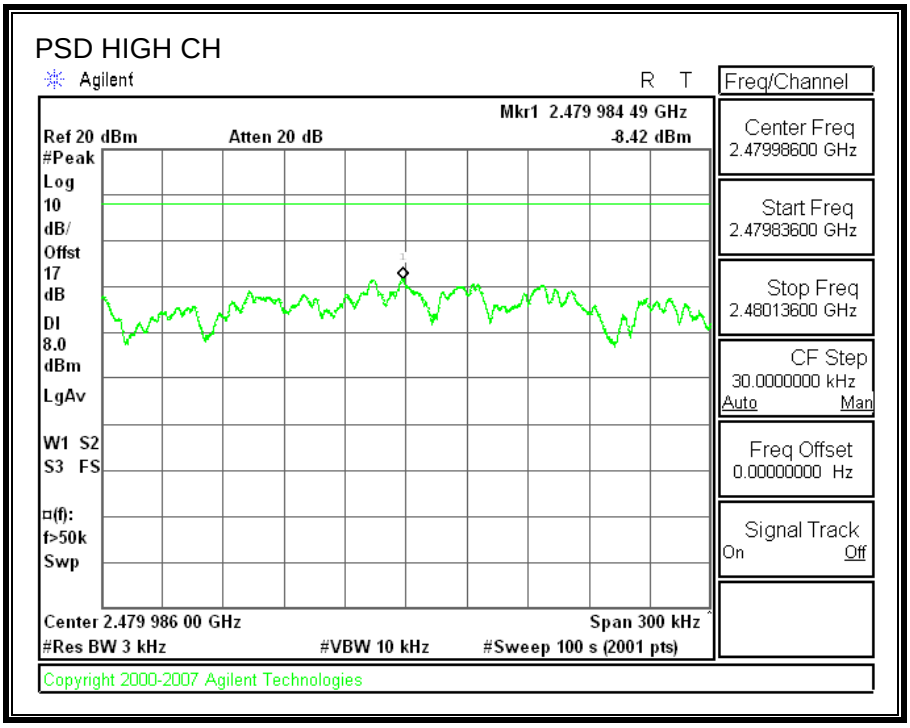
| Channel | Frequency (MHz) | PPSD (dBm) | Limit (dBm) | Margin (dB) |
|---|---|---|---|---|
| Low | 2402 | -8.73 | 8 | -16.73 |
| Middle | 2441 | -8.10 | 8 | -16.10 |
| High | 2480 | -8.42 | 8 | -16.42 |

**POWER SPECTRAL DENSITY**



PSD HIGH CH



## 7.3.5. CONDUCTED SPURIOUS EMISSIONS

**LIMITS**

FCC §15.247 (d)

IC RSS-210 A8.5

Output power was measured based on the use of a peak measurement, therefore the required attenuation is 20 dB.

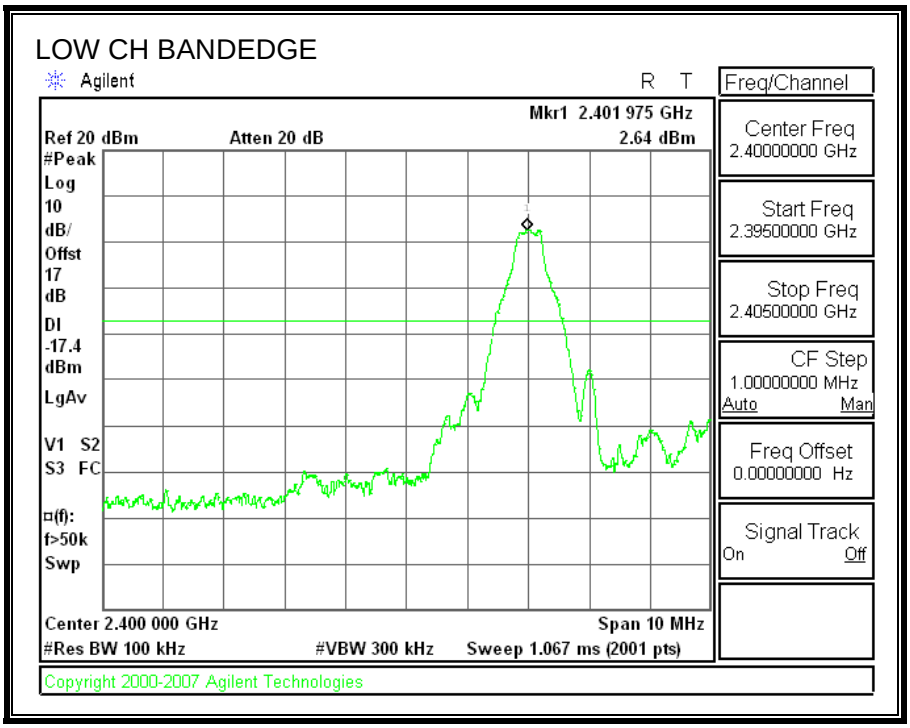
**TEST PROCEDURE**

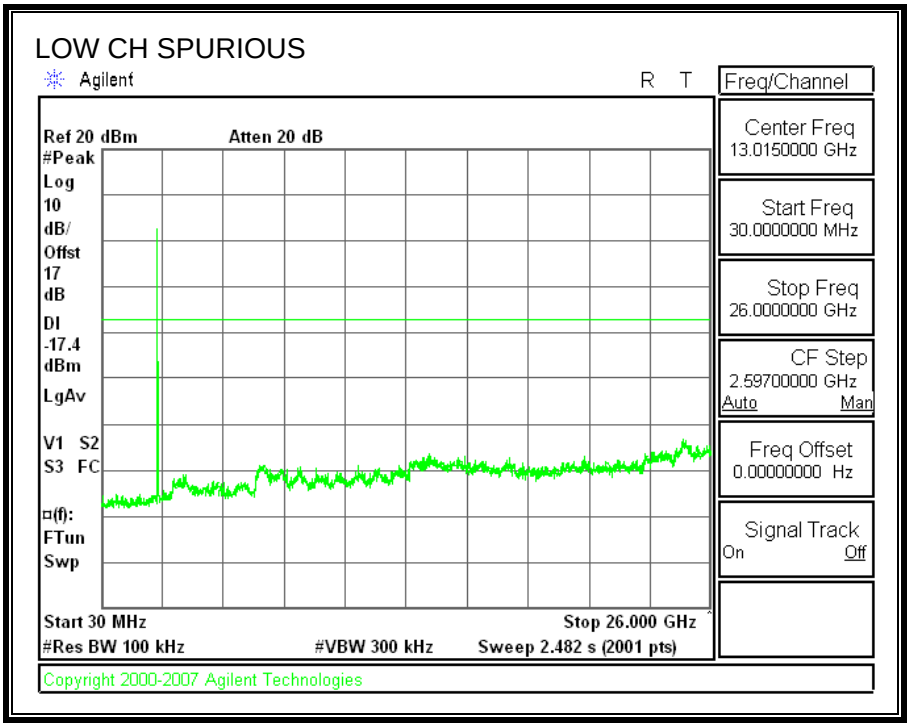
The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

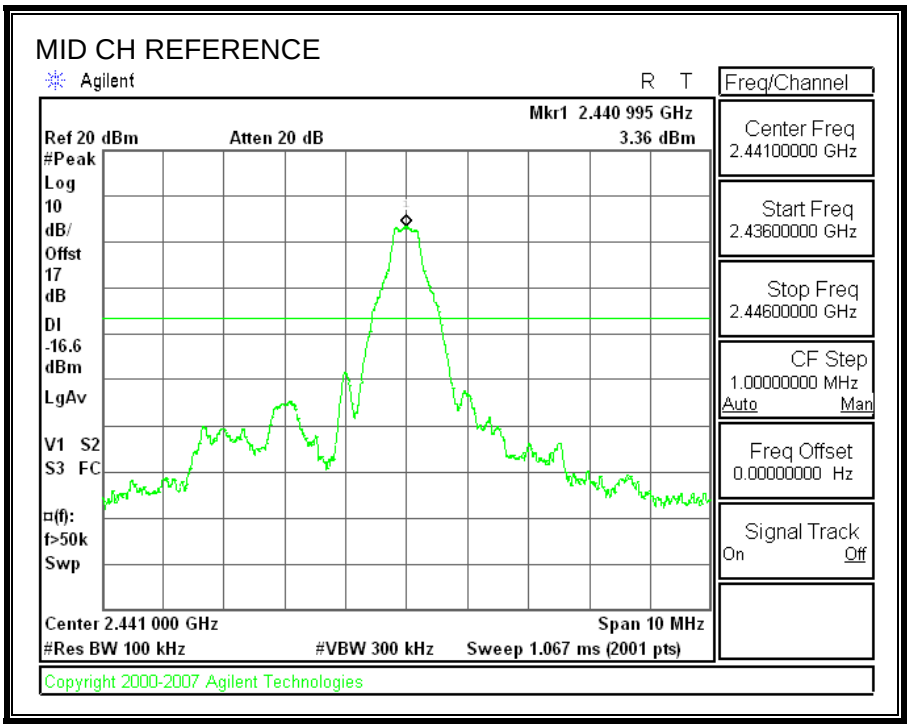
**RESULTS**

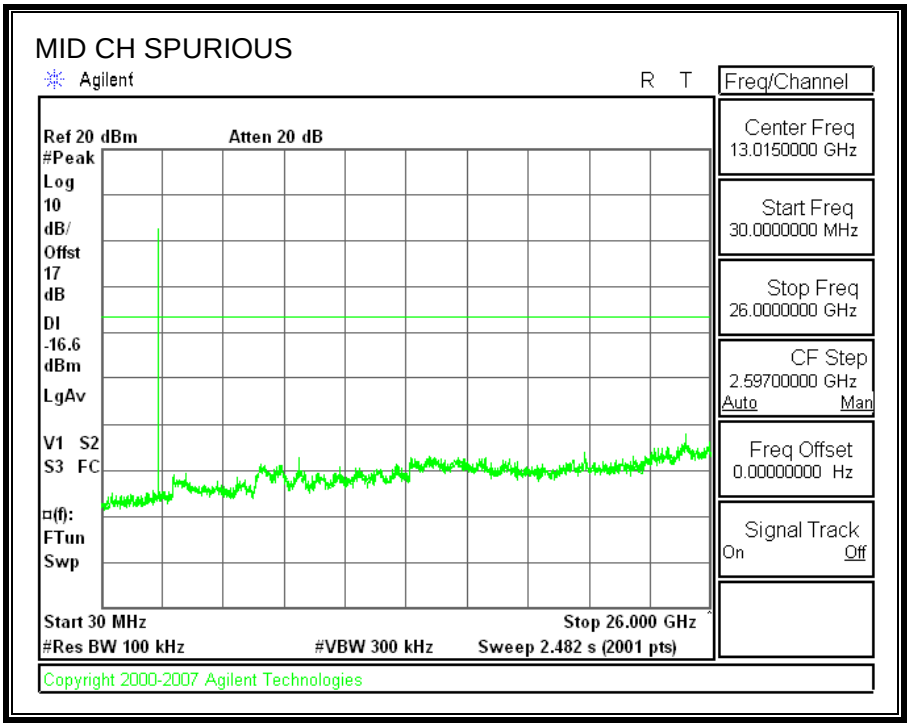
**SPURIOUS EMISSIONS, LOW CHANNEL**



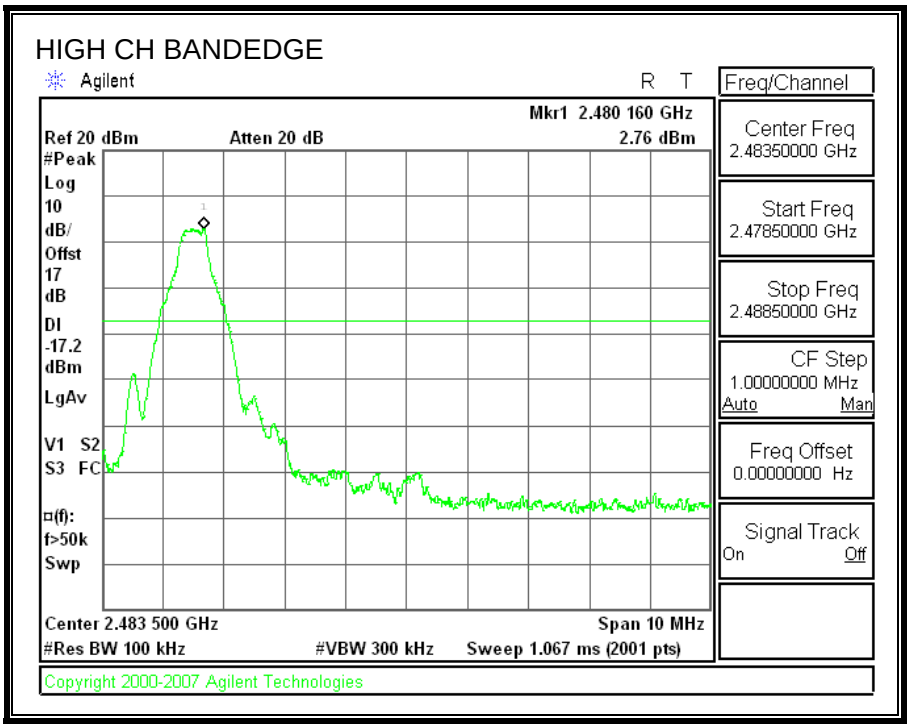



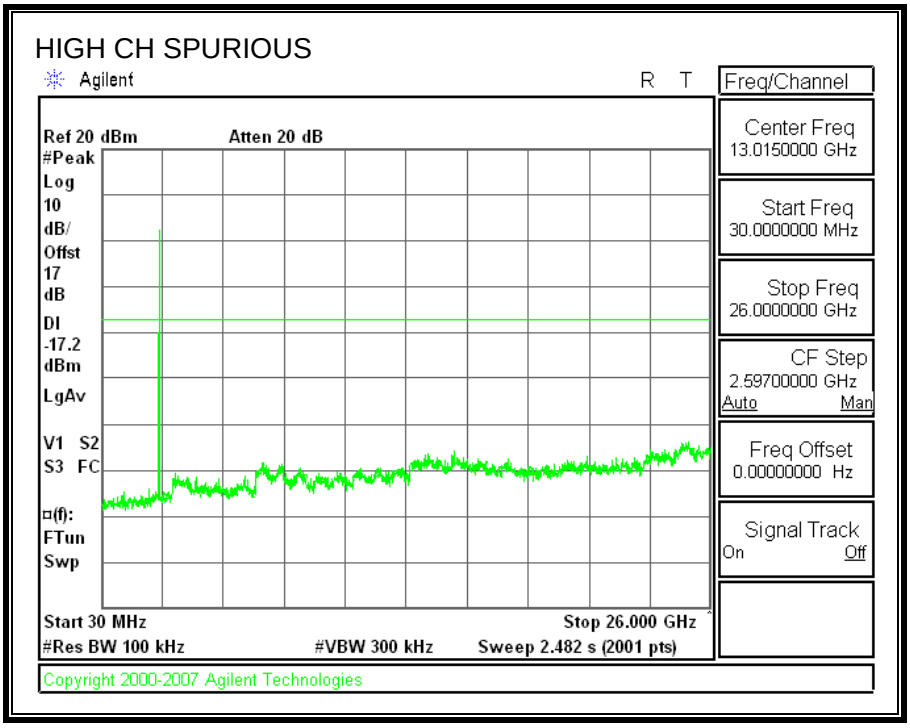
**SPURIOUS EMISSIONS, MID CHANNEL**



**SPURIOUS EMISSIONS, HIGH CHANNEL**



# 7.4. BULETOOTH 8PSK MODE IN THE 2.4 GHz BAND

## 7.4.1. 99% BANDWIDTH

**LIMITS**

None; for reporting purposes only.

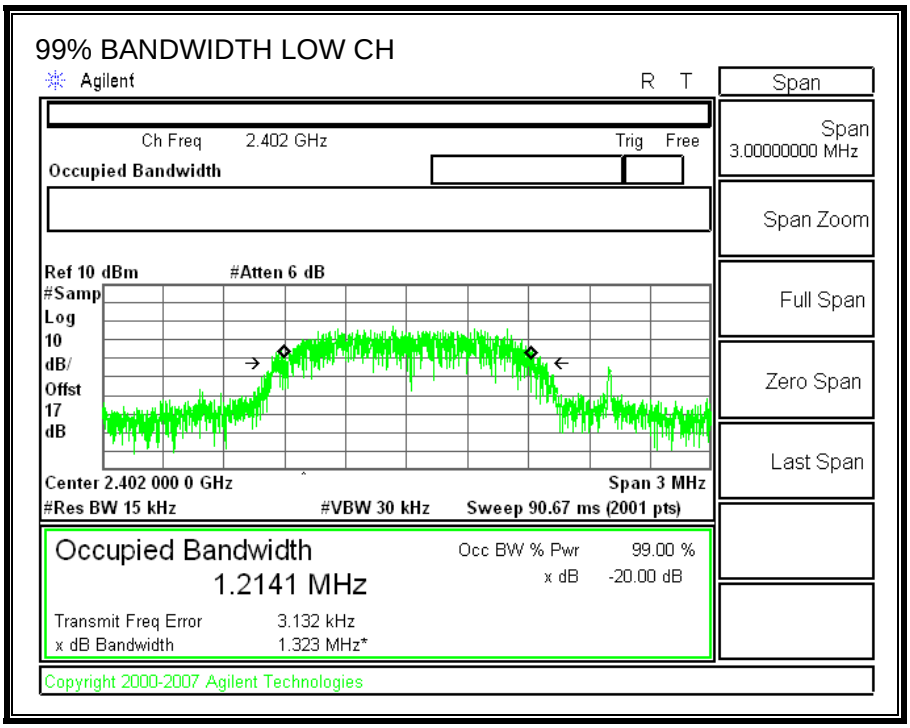
**TEST PROCEDURE**

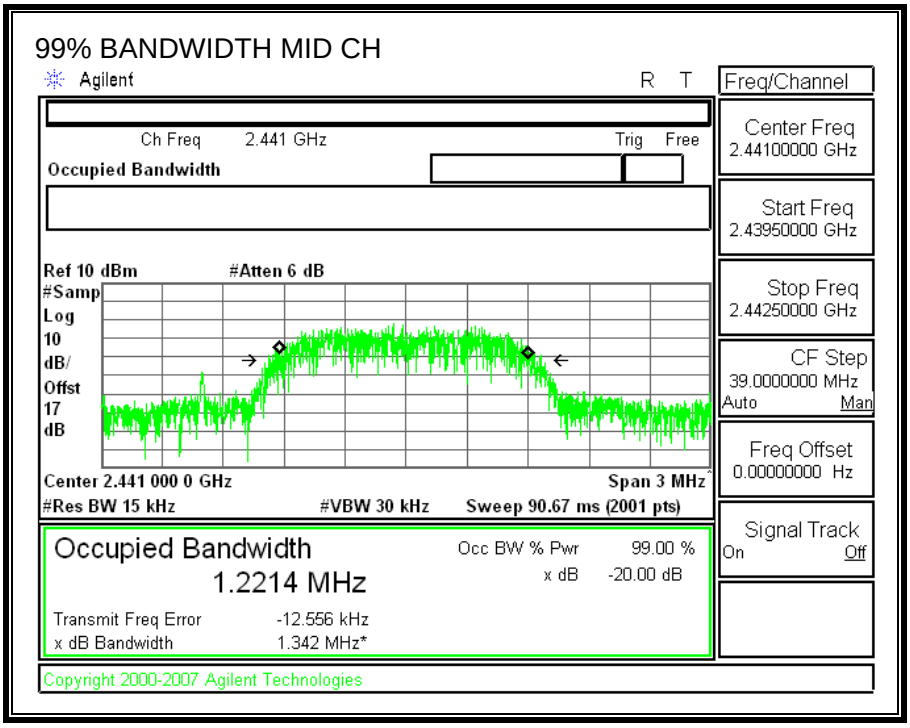
The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

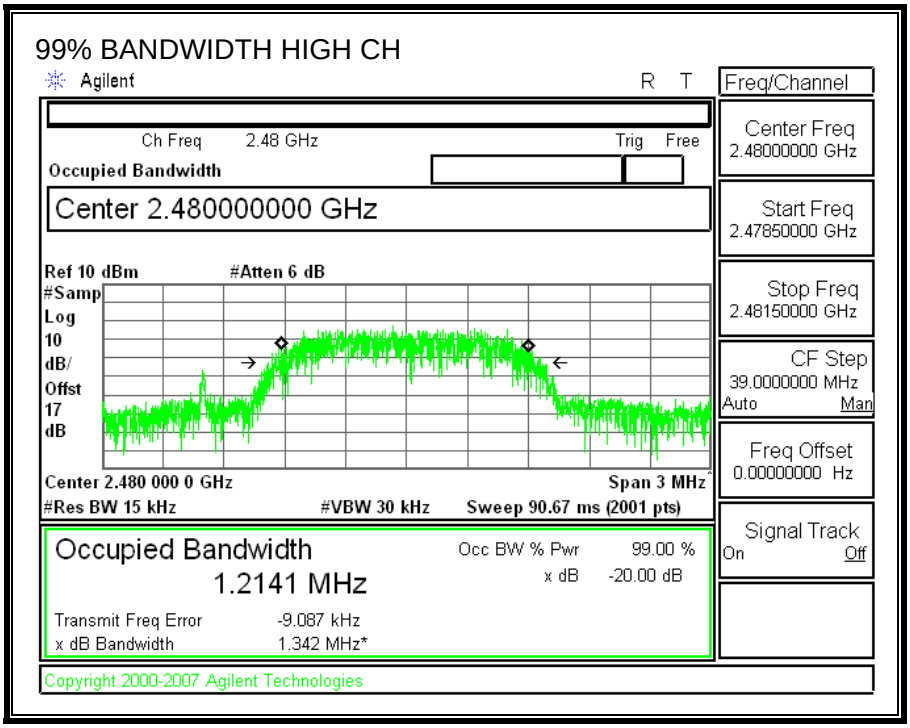
**RESULTS**

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Low | 2402 | 1.2141 |
| Middle | 2441 | 1.2214 |
| High | 2480 | 1.2141 |

**99% BANDWIDTH**





## 7.4.2. OUTPUT POWER

**LIMITS**

FCC §15.247 (b)

IC RSS-210 A8.4

The maximum antenna gain is less than or equal to 6 dBi, therefore the limit is 30 dBm.

**TEST PROCEDURE**

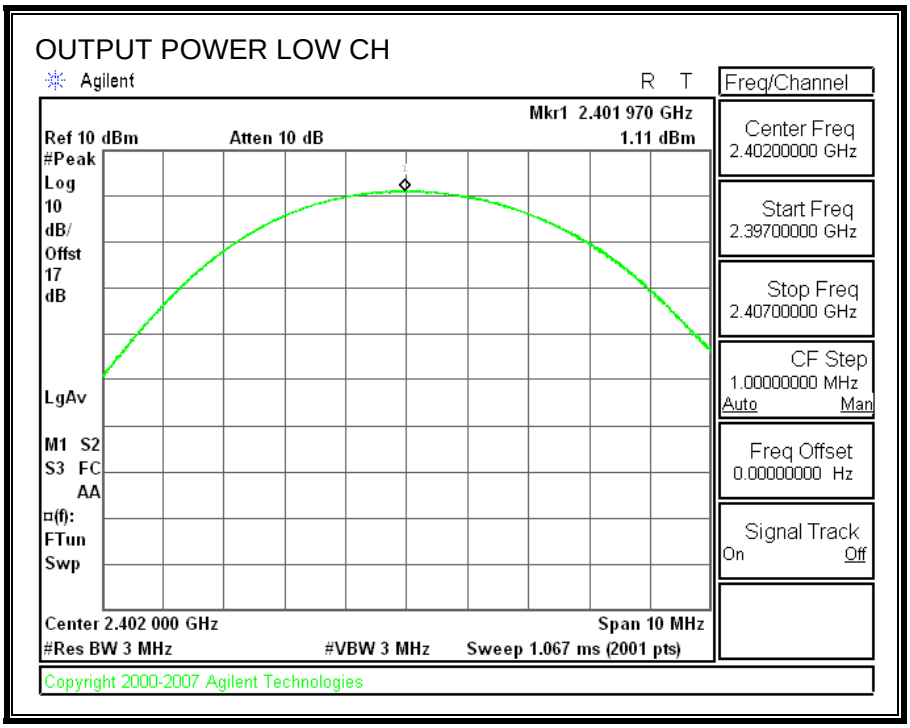
Peak power is measured using the Channel bandwidth Alternative peak output power procedure specified in "TCB Training for Devices covered under Scopes A1 - A4" by Joe Dichoso, May 2003.

**RESULTS**

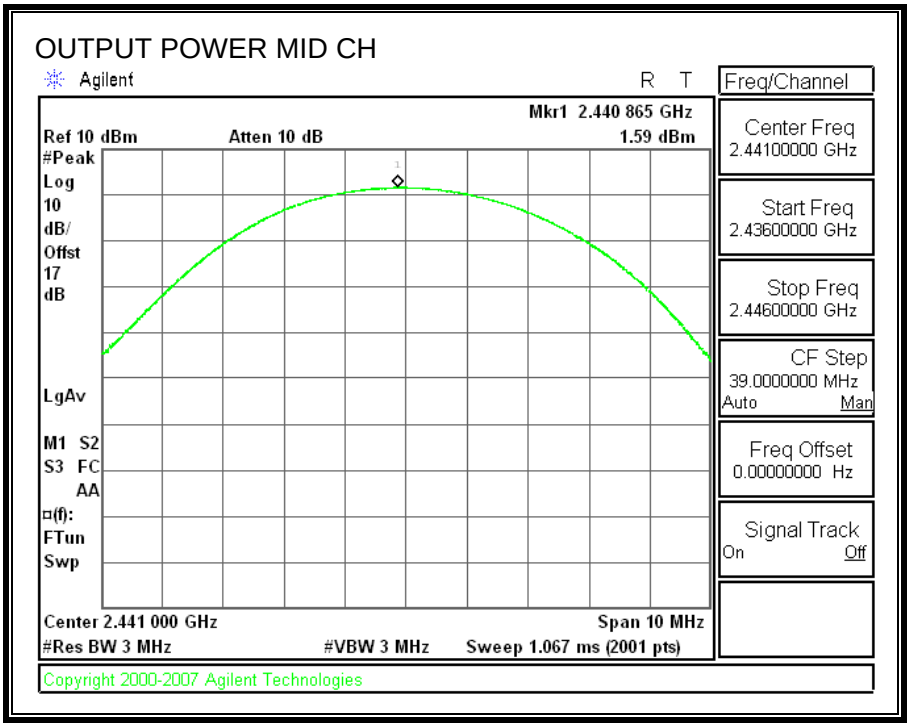
| Channel | Frequency (MHz) | Spectrum Analyzer Reading (dBm) | Limit (dBm) | Margin (dB) |
|---|---|---|---|---|
| Low | 2402 | 1.11 | 21 | -19.89 |
| Middle | 2441 | 1.59 | 21 | -19.41 |
| High | 2480 | 1.39 | 21 | -19.61 |

**OUTPUT POWER**

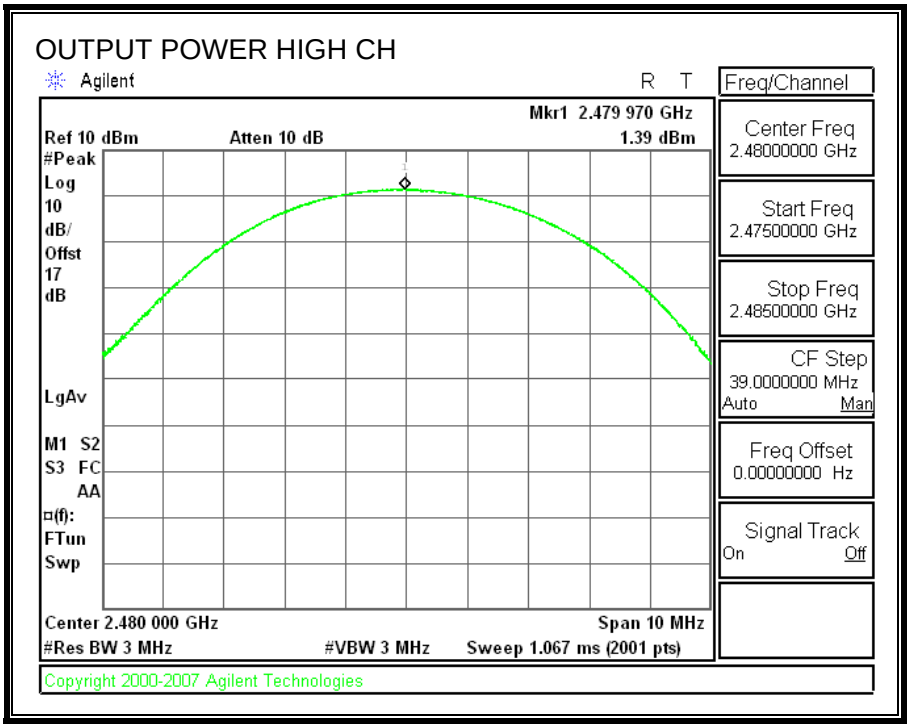
OUTPUT POWER LOW CH




OUTPUT POWER MID CH



OUTPUT POWER HIGH CH



### 7.4.3. AVERAGE POWER

**LIMITS**

None; for reporting purposes only.

**TEST PROCEDURE**

The transmitter output is connected to a power meter.

**RESULTS**

The cable assembly insertion loss of 16.8 dB (including 10 dB pad and 6.8 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

| Channel | Frequency (MHz) | Power (dBm) |
|---|---|---|
| Low | 2402 | -2.93 |
| Middle | 2441 | -2.03 |
| High | 2480 | -2.32 |

## 7.4.4. POWER SPECTRAL DENSITY

**LIMITS**

FCC §15.247 (e)

IC RSS-210 A8.2 (b)

The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

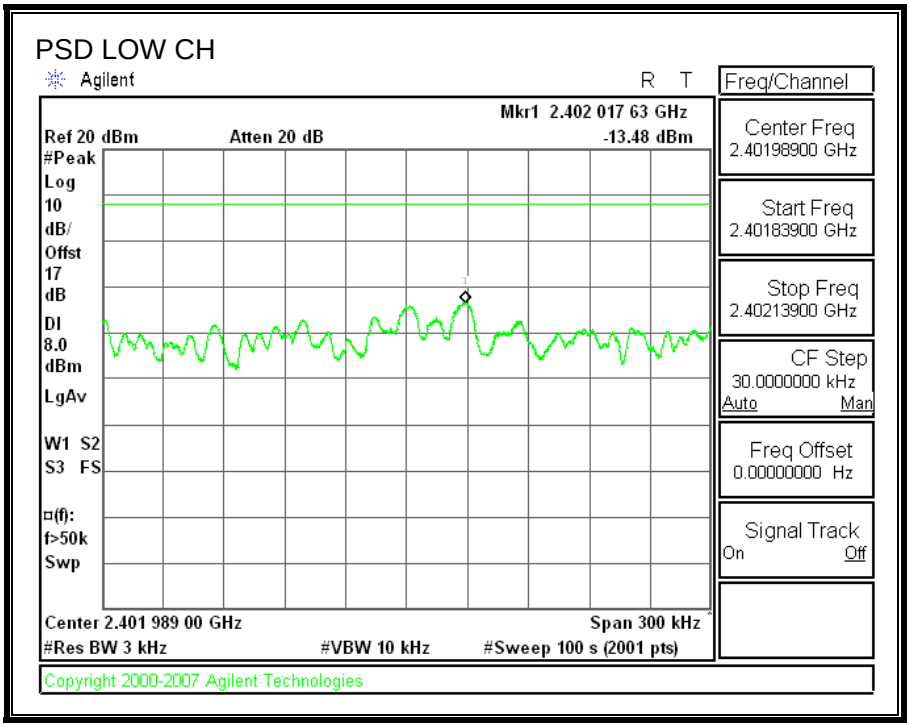
**TEST PROCEDURE**

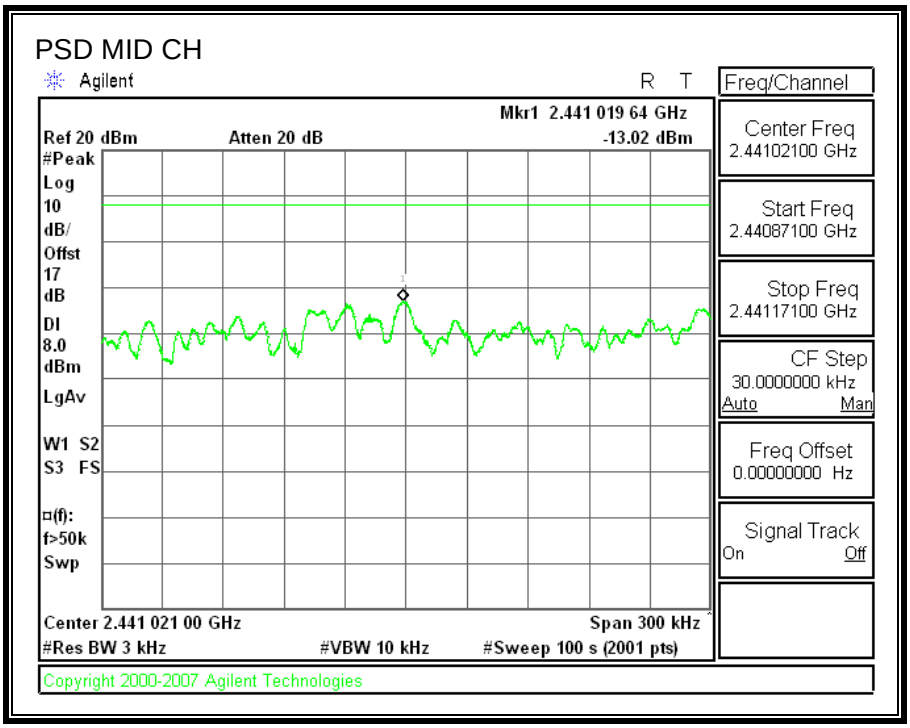
Output power was measured based on the use of a peak measurement, therefore the power spectral density was measured using PSD Option 1 in accordance with FCC document "Measurement of Digital Transmission Systems Operating under Section 15.247", March 23, 2005.

**RESULTS**

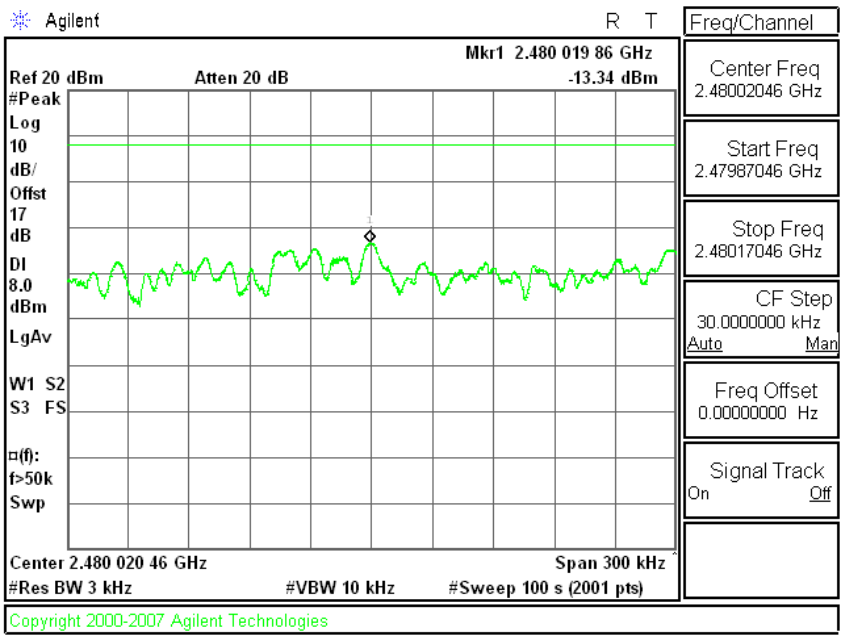
| Channel | Frequency (MHz) | PPSD (dBm) | Limit (dBm) | Margin (dB) |
|---|---|---|---|---|
| Low | 2402 | -13.48 | 8 | -21.48 |
| Middle | 2441 | -13.02 | 8 | -21.02 |
| High | 2480 | -13.34 | 8 | -21.34 |

**POWER SPECTRAL DENSITY**



PSD HIGH CH



## 7.4.5. CONDUCTED SPURIOUS EMISSIONS

**LIMITS**

FCC §15.247 (d)

IC RSS-210 A8.5

Output power was measured based on the use of a peak measurement, therefore the required attenuation is 20 dB.

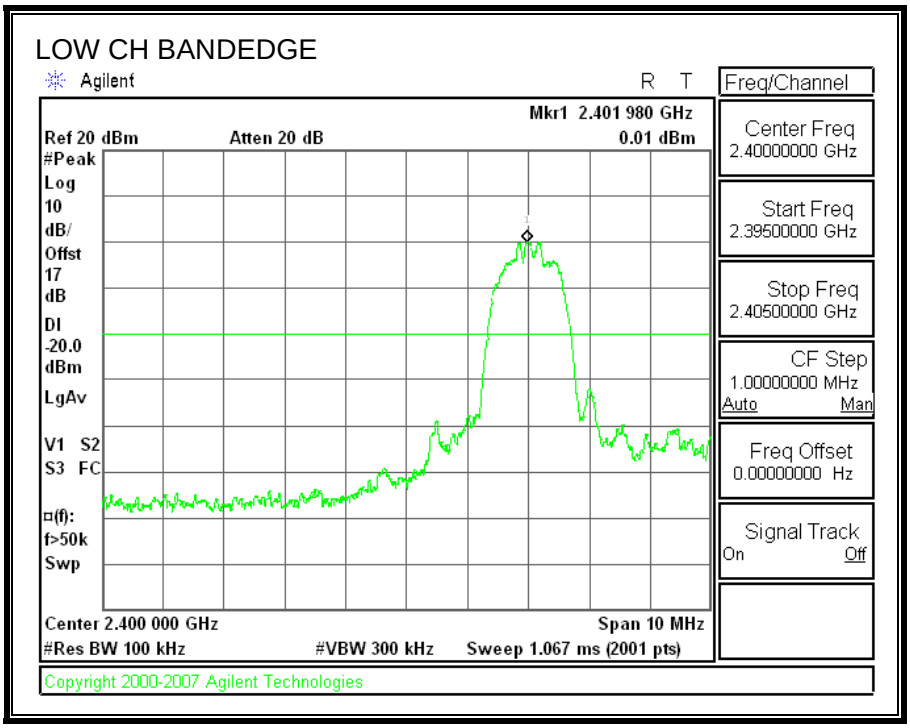
**TEST PROCEDURE**

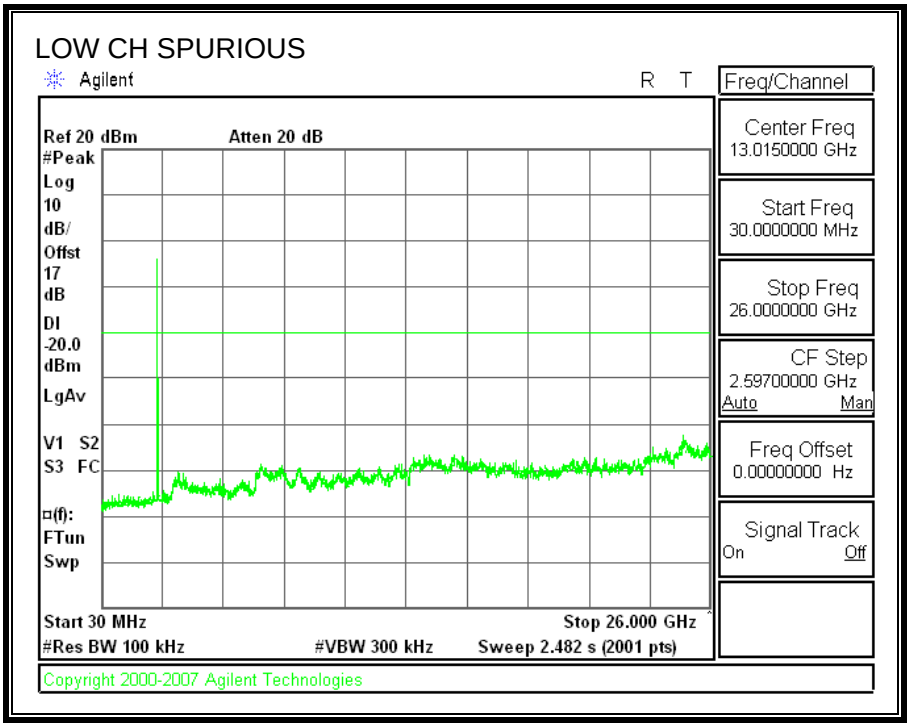
The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

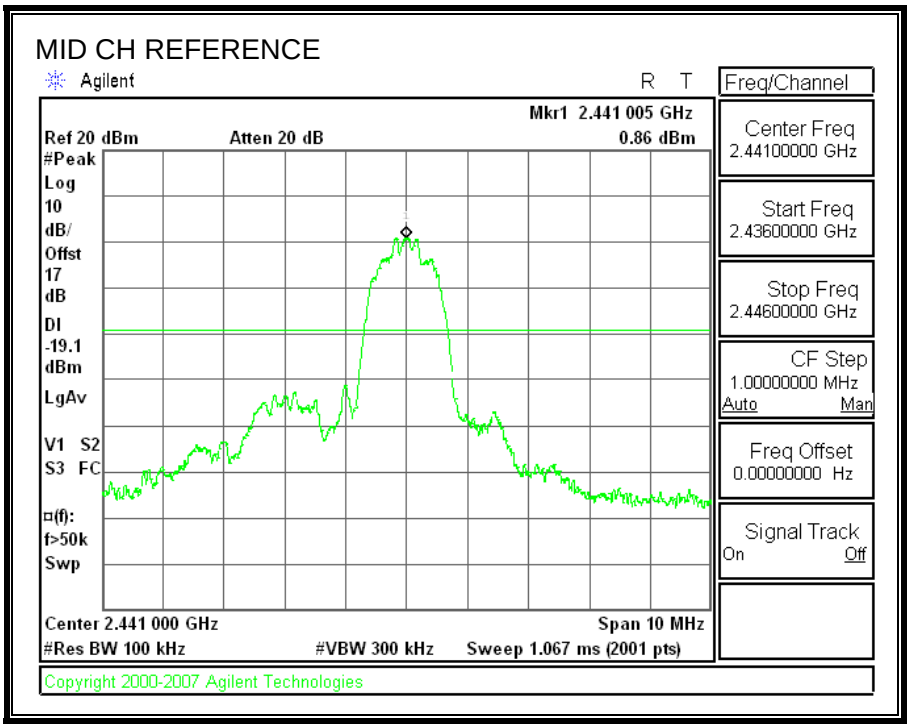
**RESULTS**

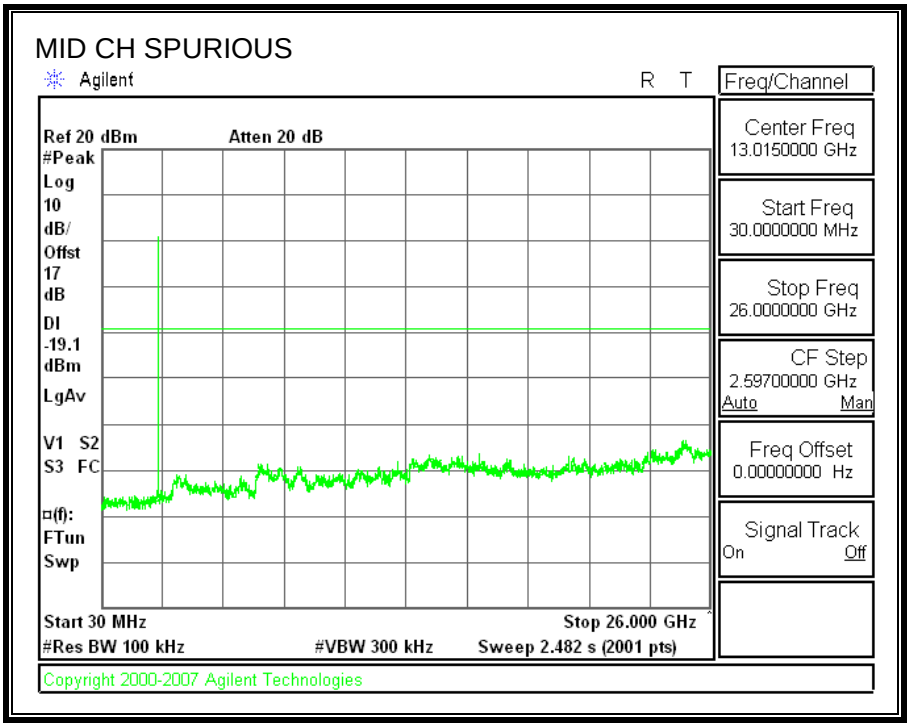
**SPURIOUS EMISSIONS, LOW CHANNEL**



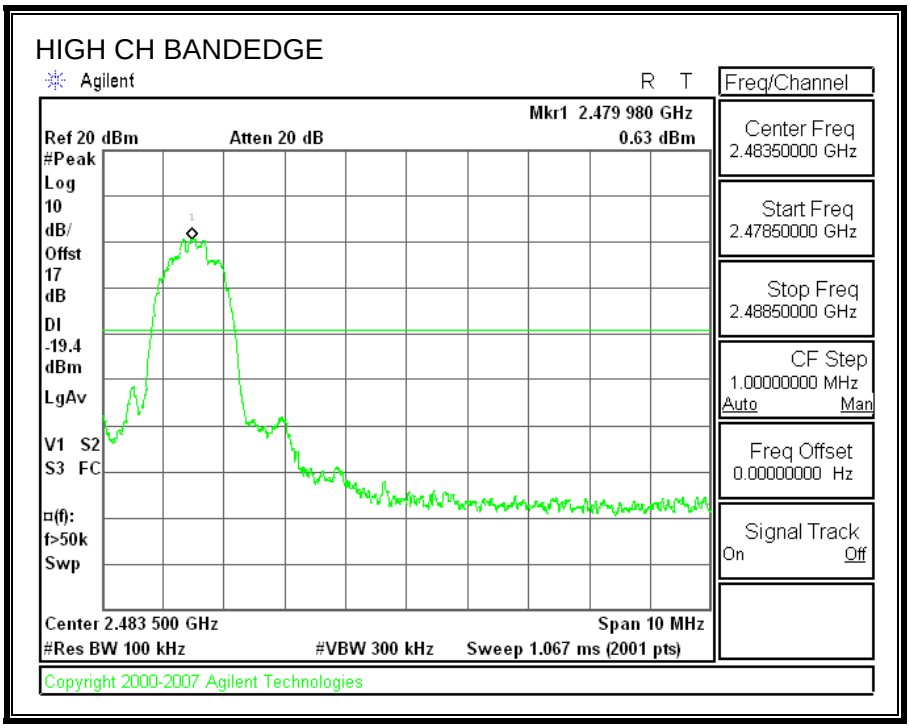



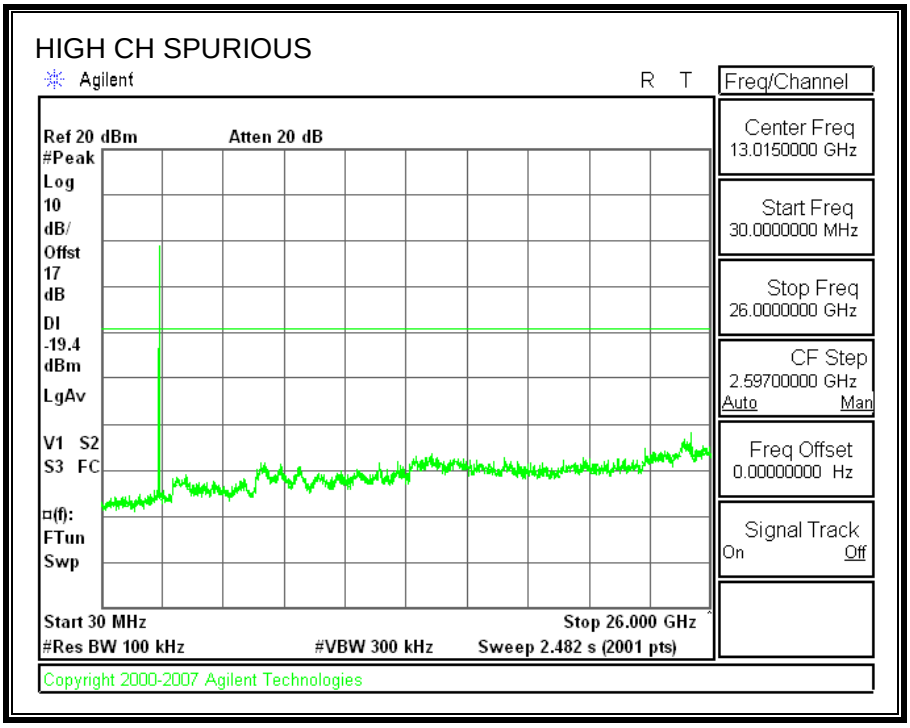
**SPURIOUS EMISSIONS, MID CHANNEL**



**SPURIOUS EMISSIONS, HIGH CHANNEL**



# 7.5. CO-LOCATED TRANSMITTER RADIATED EMISSIONS (WORST CASE)

## 7.5.1. CONDUCTED SPURIOUS EMISSIONS

**LIMITS**

FCC §15.247 (d)

IC RSS-210 A8.5

Output power was measured based on the use of a peak measurement, therefore the required attenuation is 20 dB.

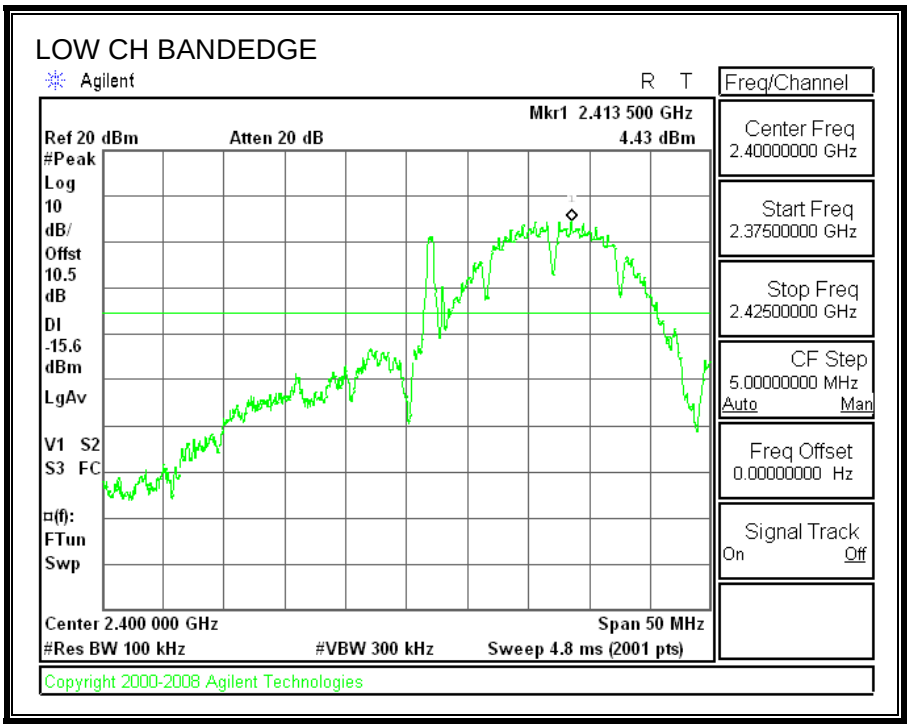
**TEST PROCEDURE**

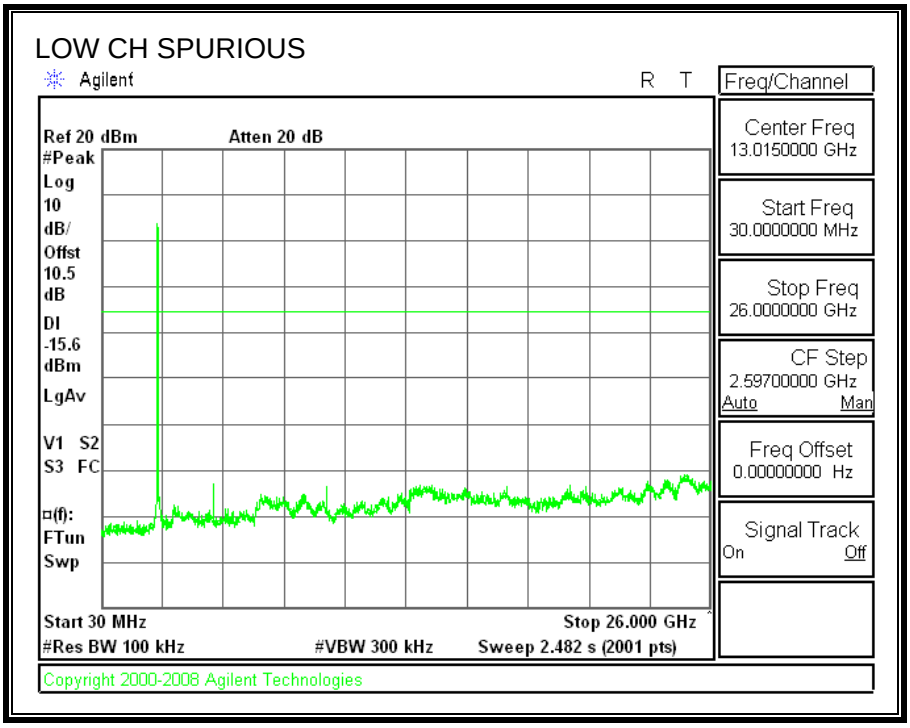
The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

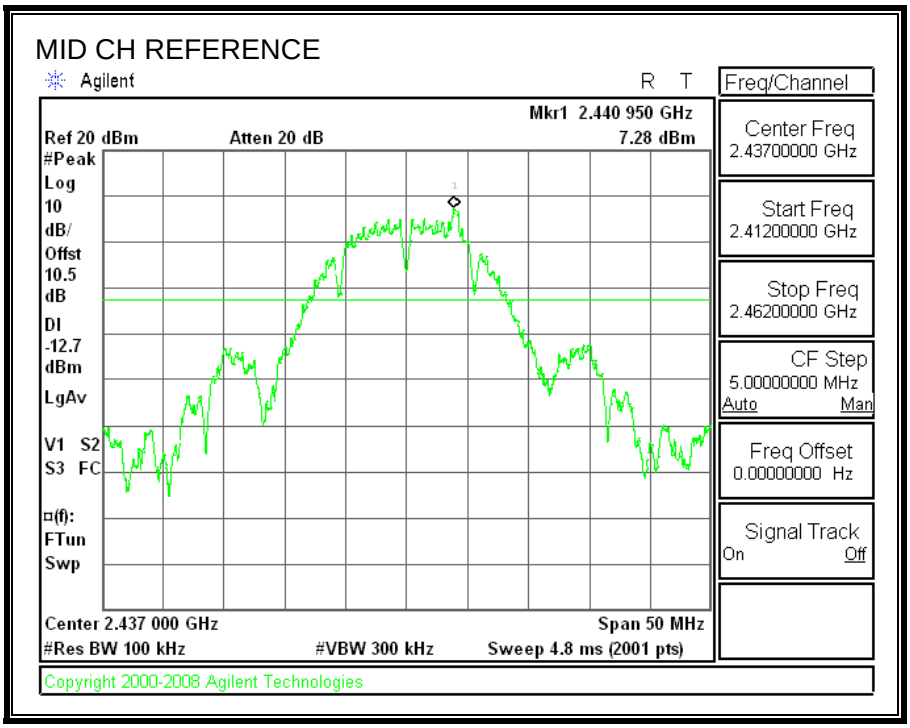
**RESULTS**

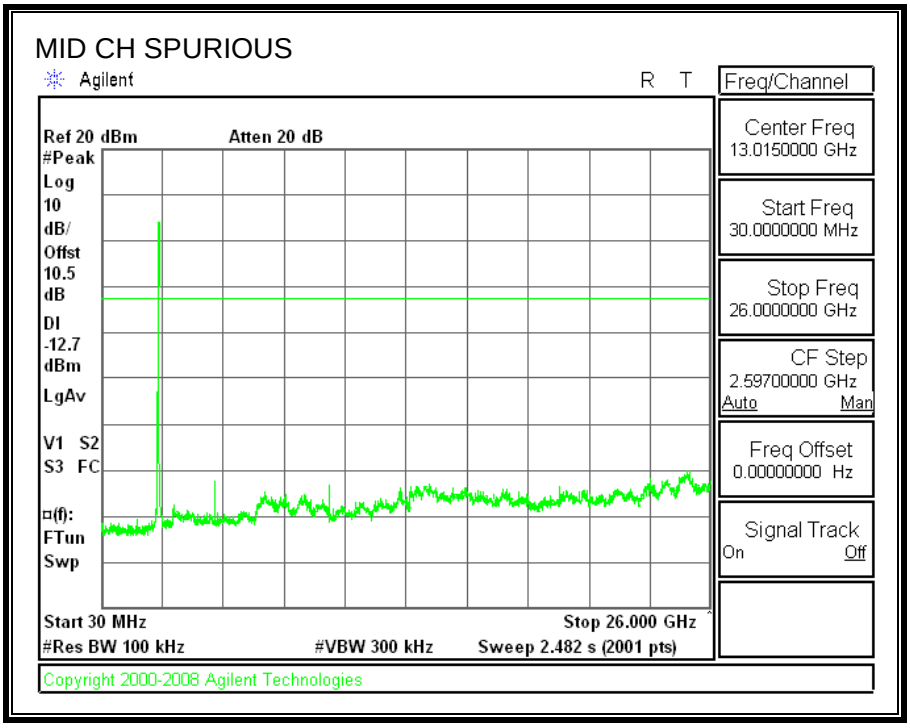
**SPURIOUS EMISSIONS, LOW CHANNEL**



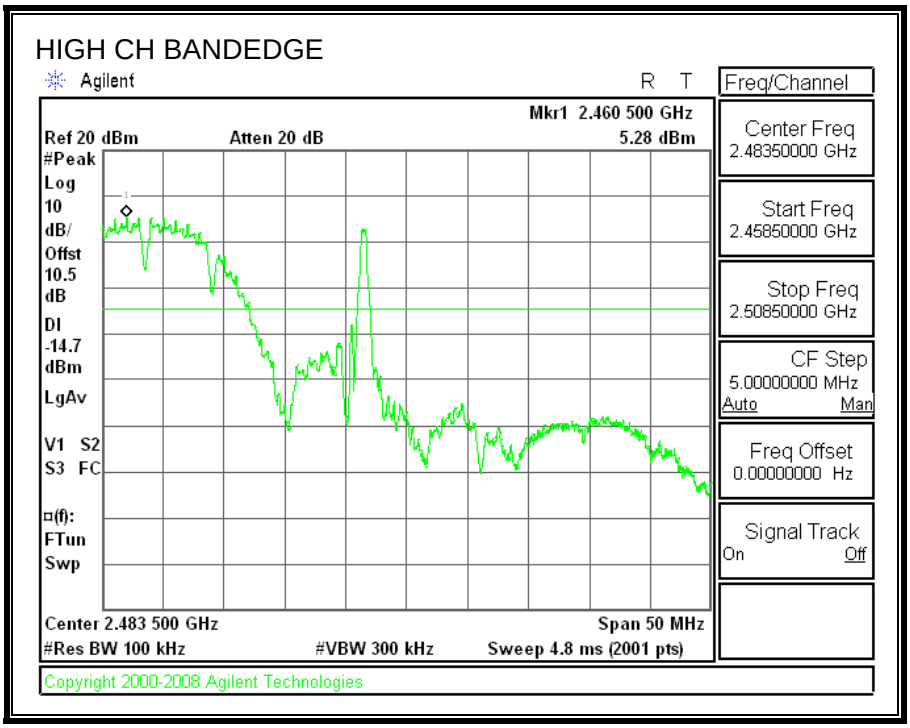



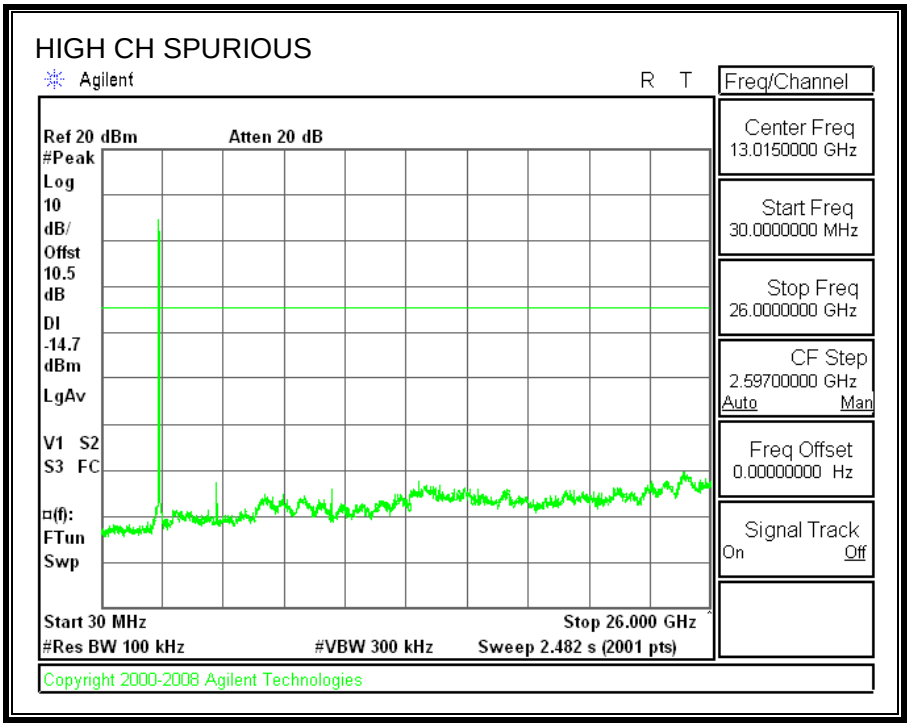
**SPURIOUS EMISSIONS, MID CHANNEL**



**SPURIOUS EMISSIONS, HIGH CHANNEL**



# 8. RADIATED TEST RESULTS

## 8.1. LIMITS AND PROCEDURE

**LIMITS**

FCC §15.205 and §15.209

IC RSS-210 Clause 2.6 (Transmitter)

IC RSS-GEN Clause 6 (Receiver)

| Frequency Range (MHz) | Field Strength Limit (uV/m) at 3 m | Field Strength Limit (dBuV/m) at 3 m |
|---|---|---|
| 30 - 88 | 100 | 40 |
| 88 - 216 | 150 | 43.5 |
| 216 - 960 | 200 | 46 |
| Above 960 | 500 | 54 |

**TEST PROCEDURE**

The EUT is placed on a non-conducting table 80 cm above the ground plane. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.4. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 2.4 GHz band.

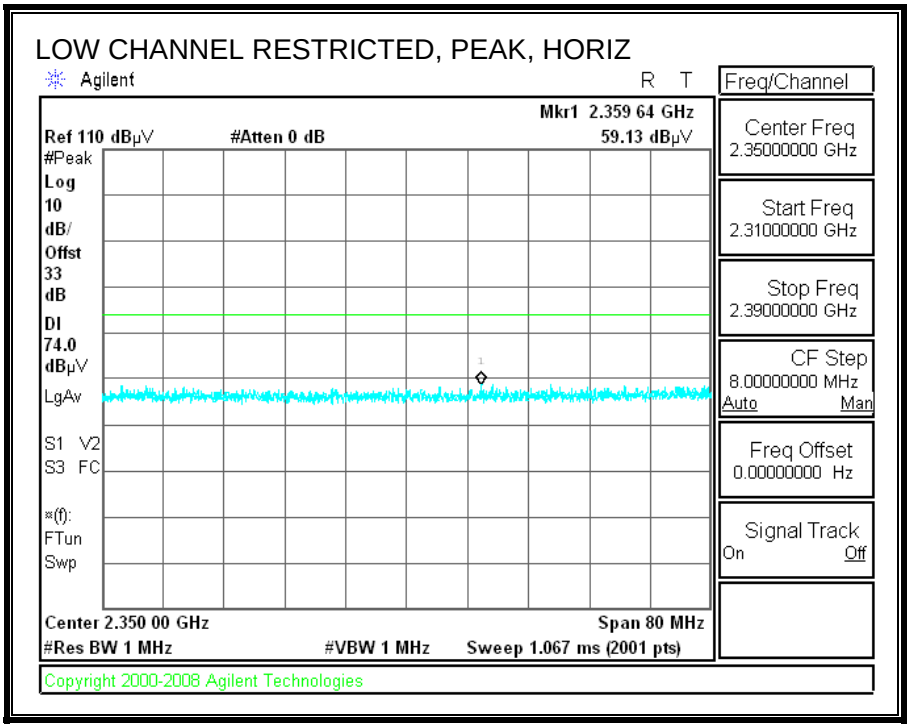
The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each appplicable band.

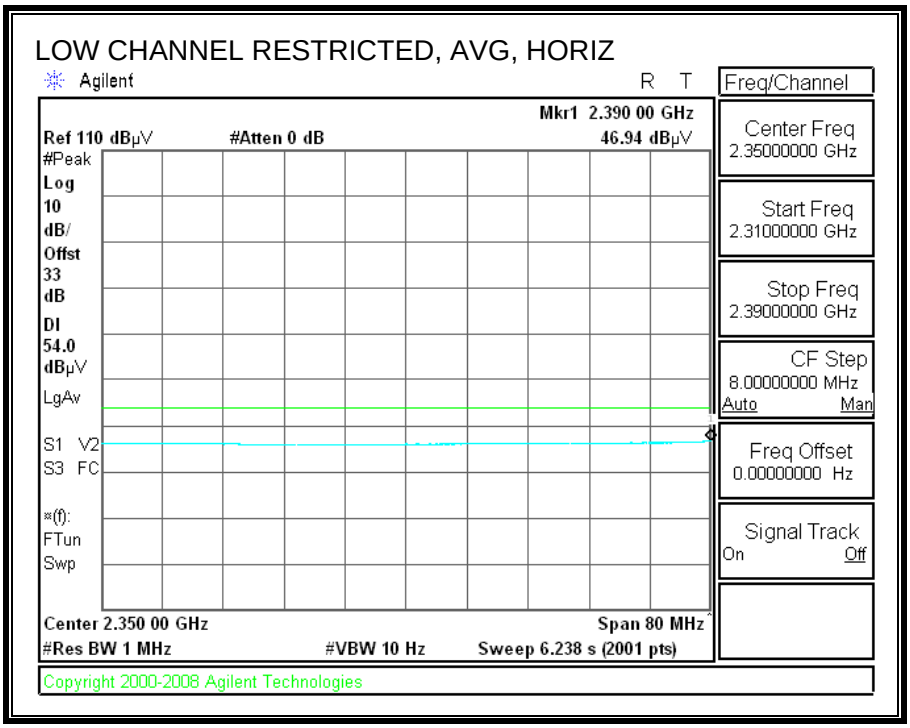
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

## 8.2. TRANSMITTER ABOVE 1 GHz

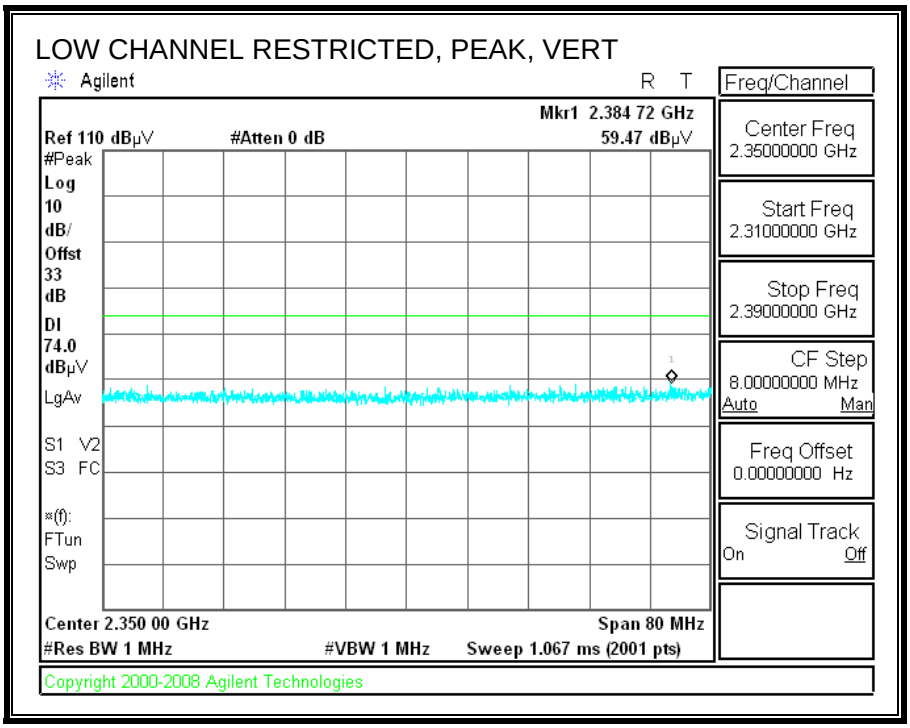
### 8.2.1. TRANSMITTER ABOVE 1 GHz FOR 802.11b MODE

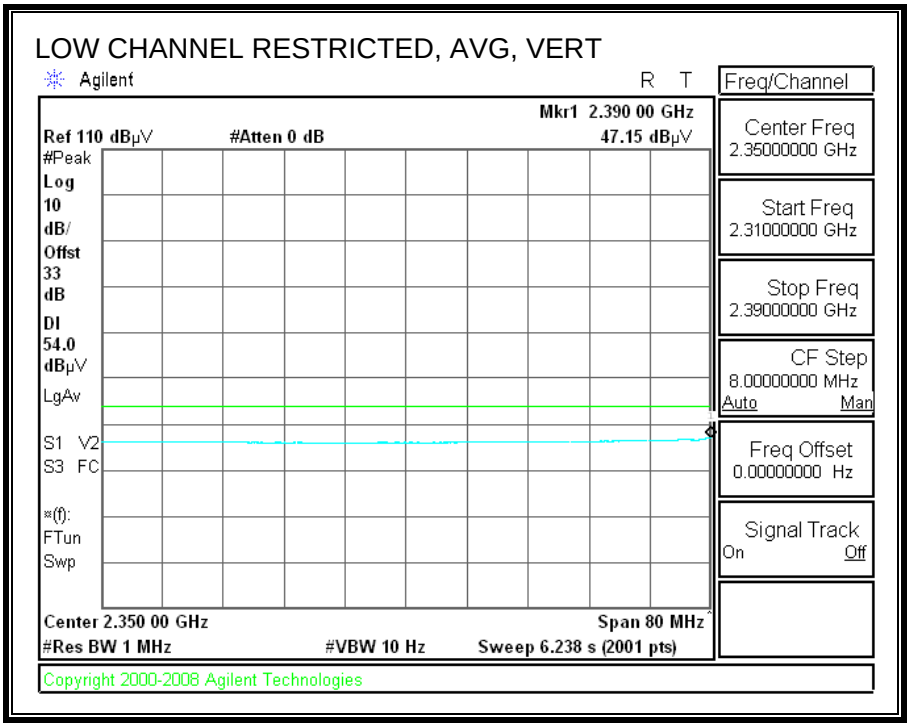
**RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)**



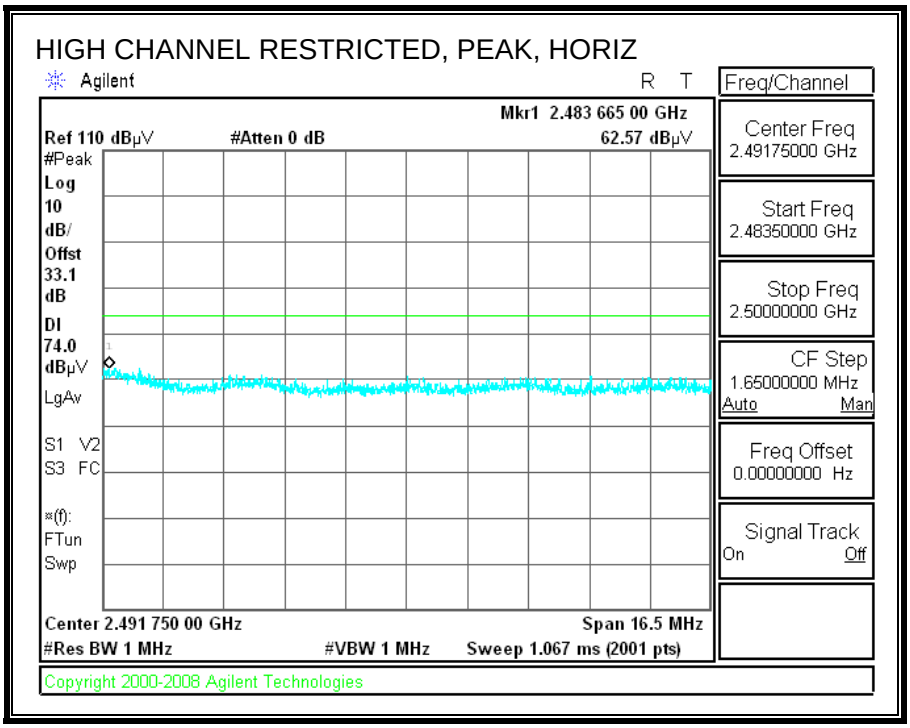



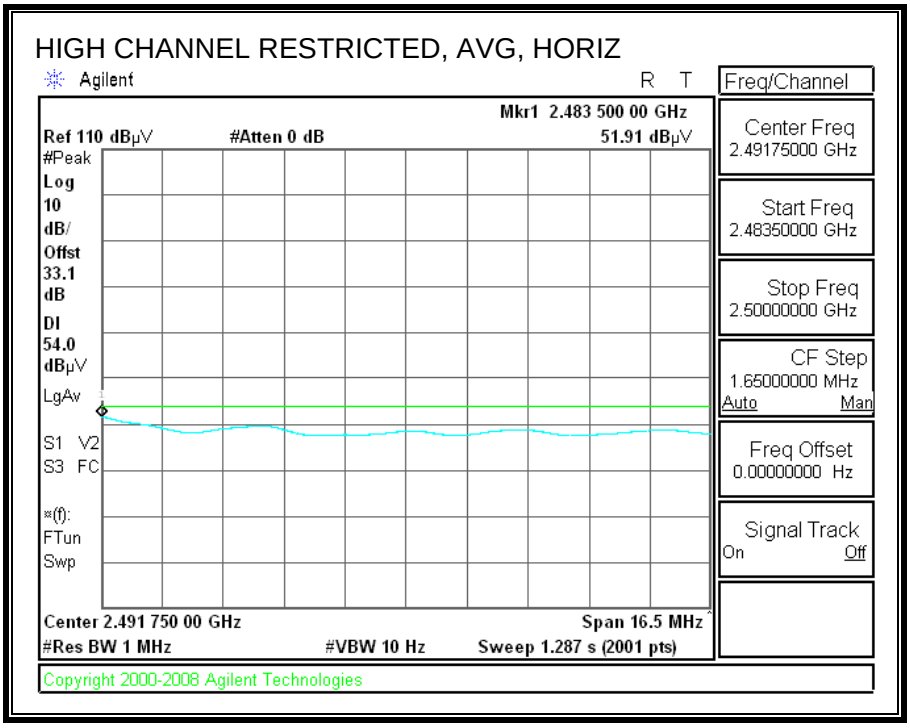
**RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)**



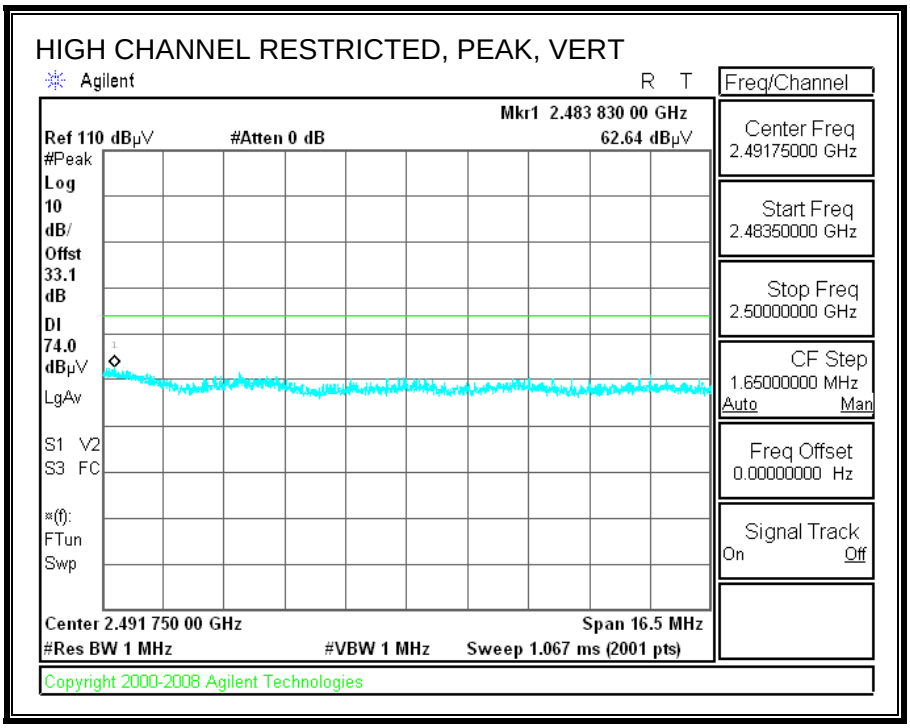



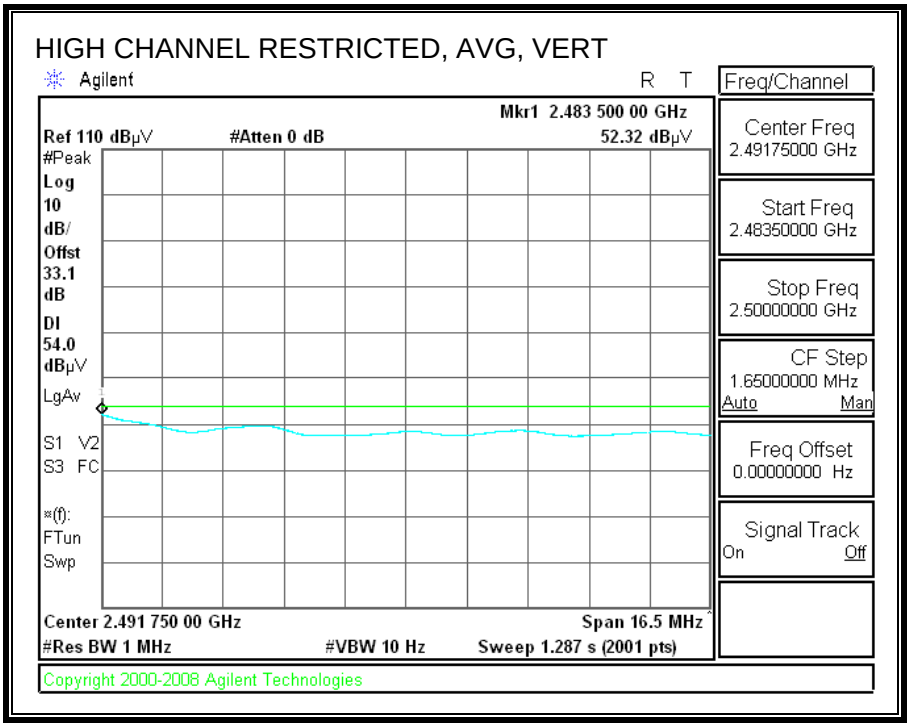
**RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)**



**RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)**



## HARMONICS AND SPURIOUS EMISSIONS

**High Frequency Measurement**
**Compliance Certification Services, Fremont 5m Chamber**

**Test Engr:** Devin Chang
**Date:** 02/08/09
**Project #:** 08U12316
**Company:** Palm
**EUT Description:** EUT only
**Mode Oper:** WLAN_b mode_Tx mode

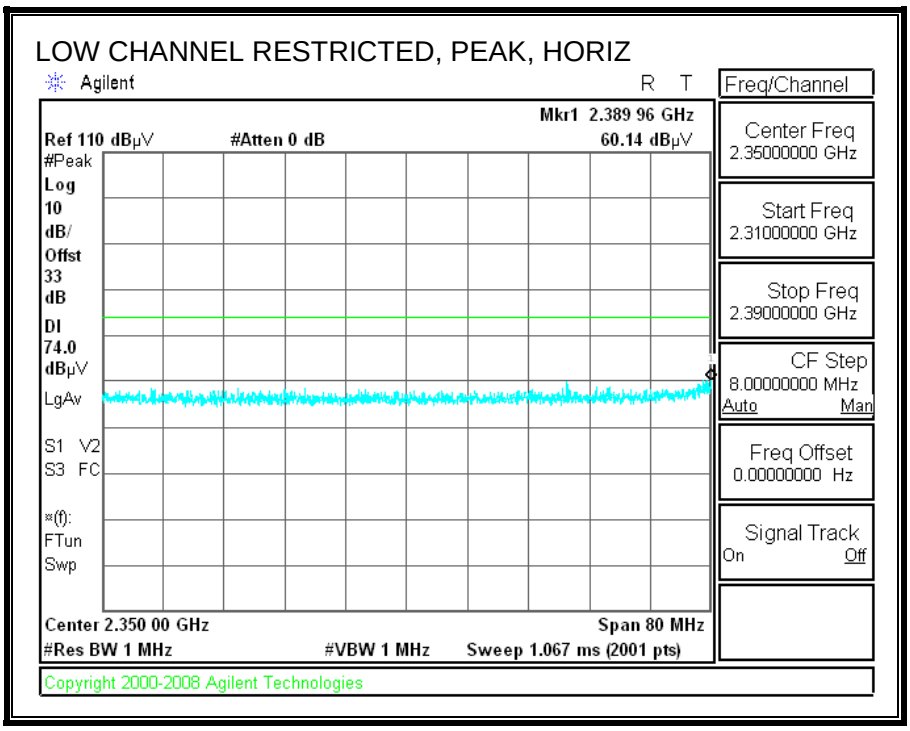
| | | | | |
|---|---|---|---|---|
| f | Measurement Frequency | Amp | Preamp Gain | Average Field Strength Limit |
| Dist | Distance to Antenna | D Corr | Distance Correct to 3 meters | Peak Field Strength Limit |
| Read | Analyzer Reading | Avg | Average Field Strength @ 3 m | Margin vs. Average Limit |
| AF | Antenna Factor | Peak | Calculated Peak Field Strength | Margin vs. Peak Limit |
| CL | Cable Loss | HPF | High Pass Filter | |

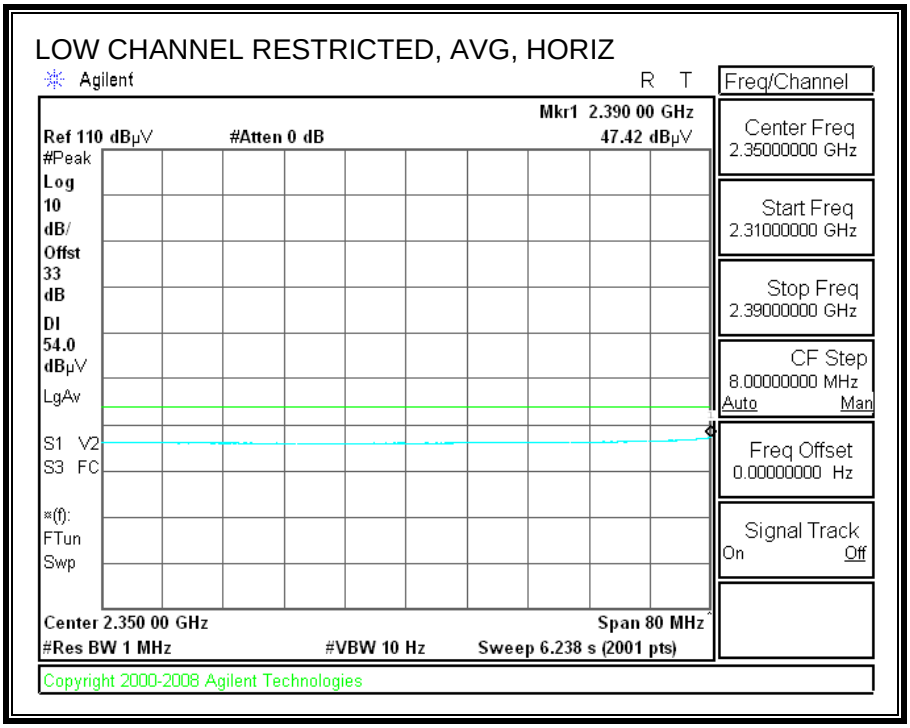
| f GHz | Dist (m) | Read dBuV | AF dB/m | CL dB | Amp dB | D Corr dB | Fltr dB | Corr. dBuV/m | Limit dBuV/m | Margin dB | Ant. Pol. V/H | Det. P/A/QP | Ant.High cm | Table Angle Degree | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2412MHz | | | | | | | | | | | | | | | |
| 4.824 | 3.0 | 38.3 | 33.7 | 5.8 | -34.8 | 0.0 | 0.0 | 43.0 | 74.0 | -31.0 | V | P | 197.9 | 189.3 | |
| 4.824 | 3.0 | 25.8 | 33.7 | 5.8 | -34.8 | 0.0 | 0.0 | 30.5 | 54.0 | -23.5 | V | A | 197.9 | 189.3 | |
| 4.824 | 3.0 | 38.4 | 33.7 | 5.8 | -34.8 | 0.0 | 0.0 | 43.0 | 74.0 | -31.0 | H | P | 119.6 | 28.3 | |
| 4.824 | 3.0 | 25.9 | 33.7 | 5.8 | -34.8 | 0.0 | 0.0 | 30.6 | 54.0 | -23.5 | H | A | 119.6 | 28.3 | |
| 2437MHz | | | | | | | | | | | | | | | |
| 4.874 | 3.0 | 38.0 | 33.7 | 5.8 | -34.9 | 0.0 | 0.0 | 42.7 | 74.0 | -31.3 | V | P | 192.4 | 261.3 | |
| 4.874 | 3.0 | 25.6 | 33.7 | 5.8 | -34.9 | 0.0 | 0.0 | 30.3 | 54.0 | -23.7 | V | A | 192.4 | 261.3 | |
| 7.311 | 3.0 | 37.3 | 36.7 | 7.3 | -34.7 | 0.0 | 0.0 | 46.6 | 74.0 | -27.4 | V | P | 108.2 | 59.9 | |
| 7.311 | 3.0 | 24.5 | 36.7 | 7.3 | -34.7 | 0.0 | 0.0 | 33.8 | 54.0 | -20.2 | V | A | 108.2 | 59.9 | |
| 4.874 | 3.0 | 40.4 | 33.7 | 5.8 | -34.9 | 0.0 | 0.0 | 45.2 | 74.0 | -28.8 | H | P | 119.5 | 132.9 | |
| 4.874 | 3.0 | 27.9 | 33.7 | 5.8 | -34.9 | 0.0 | 0.0 | 32.7 | 54.0 | -21.3 | H | A | 119.5 | 132.9 | |
| 7.311 | 3.0 | 36.6 | 36.7 | 7.3 | -34.7 | 0.0 | 0.0 | 45.9 | 74.0 | -28.1 | H | P | 136.2 | 214.7 | |
| 7.311 | 3.0 | 24.5 | 36.7 | 7.3 | -34.7 | 0.0 | 0.0 | 33.8 | 54.0 | -20.2 | H | A | 136.2 | 214.7 | |
| 2462MHz | | | | | | | | | | | | | | | |
| 4.924 | 3.0 | 39.0 | 33.8 | 5.9 | -34.9 | 0.0 | 0.0 | 43.8 | 74.0 | -30.2 | V | P | 102.0 | 185.5 | |
| 4.924 | 3.0 | 26.8 | 33.8 | 5.9 | -34.9 | 0.0 | 0.0 | 31.6 | 54.0 | -22.4 | V | A | 102.0 | 185.5 | |
| 7.386 | 3.0 | 37.2 | 36.8 | 7.3 | -34.6 | 0.0 | 0.0 | 46.6 | 74.0 | -27.4 | V | P | 101.4 | 262.2 | |
| 7.386 | 3.0 | 24.8 | 36.8 | 7.3 | -34.6 | 0.0 | 0.0 | 34.3 | 54.0 | -19.7 | V | A | 101.4 | 262.2 | |
| 4.924 | 3.0 | 40.9 | 33.8 | 5.9 | -34.9 | 0.0 | 0.0 | 45.7 | 74.0 | -28.3 | H | P | 103.3 | 141.0 | |
| 4.924 | 3.0 | 28.7 | 33.8 | 5.9 | -34.9 | 0.0 | 0.0 | 33.5 | 54.0 | -20.5 | H | A | 103.3 | 141.0 | |
| 7.386 | 3.0 | 37.5 | 36.8 | 7.3 | -34.6 | 0.0 | 0.0 | 46.9 | 74.0 | -27.1 | H | P | 154.3 | 162.8 | |
| 7.386 | 3.0 | 24.8 | 36.8 | 7.3 | -34.6 | 0.0 | 0.0 | 34.3 | 54.0 | -19.7 | H | A | 154.3 | 162.8 | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

**Rev. 4.1.2.7**
**Note: No other emissions were detected above the system noise floor.**

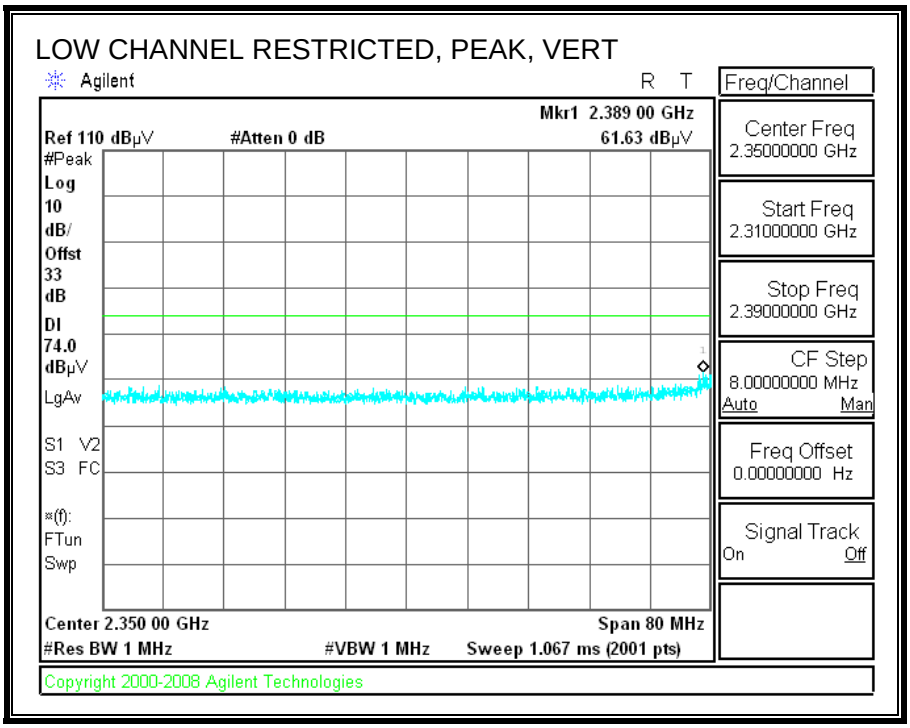
## 8.2.2. TRANSMITTER ABOVE 1 GHz FOR 802.11g MODE

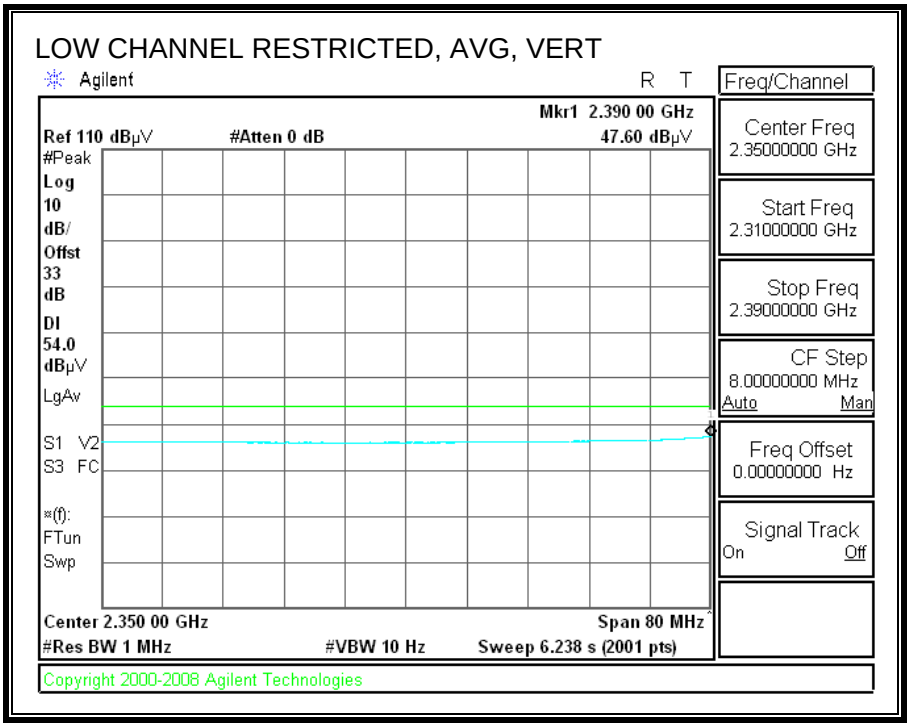
**RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)**



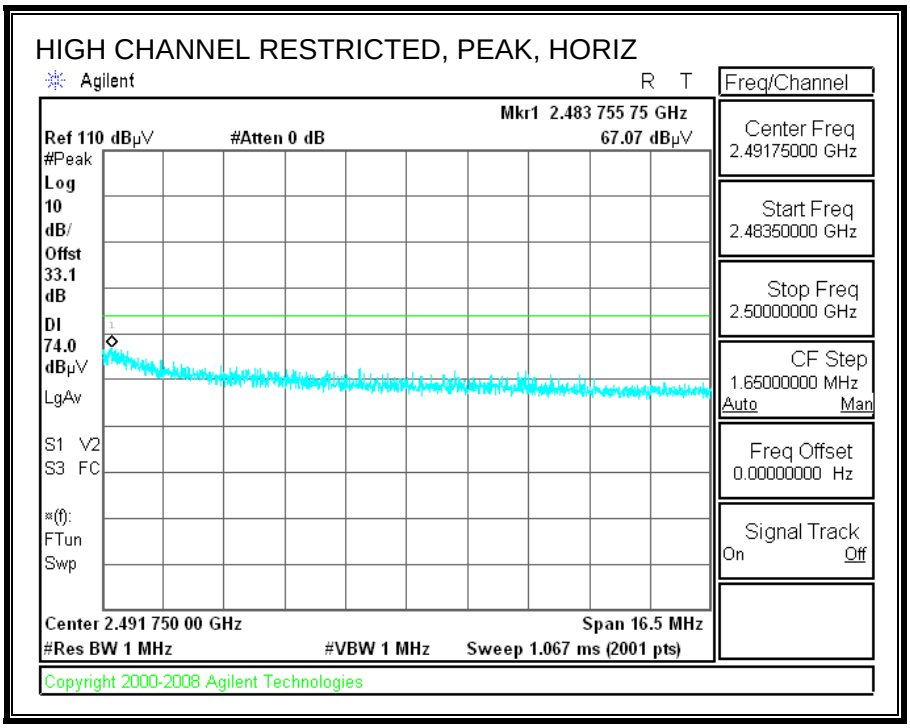



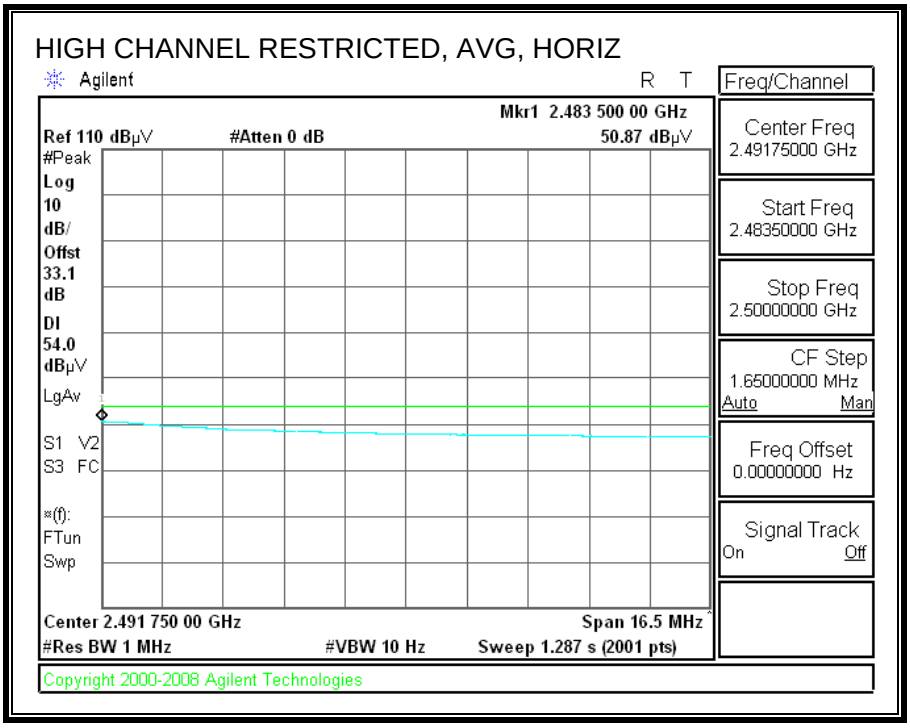
**RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)**



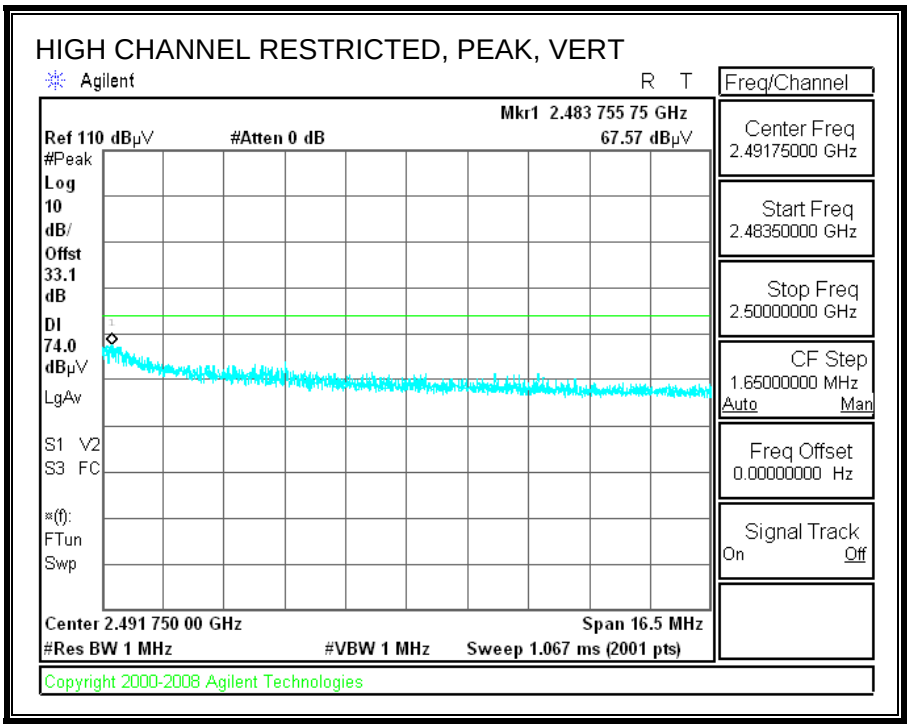



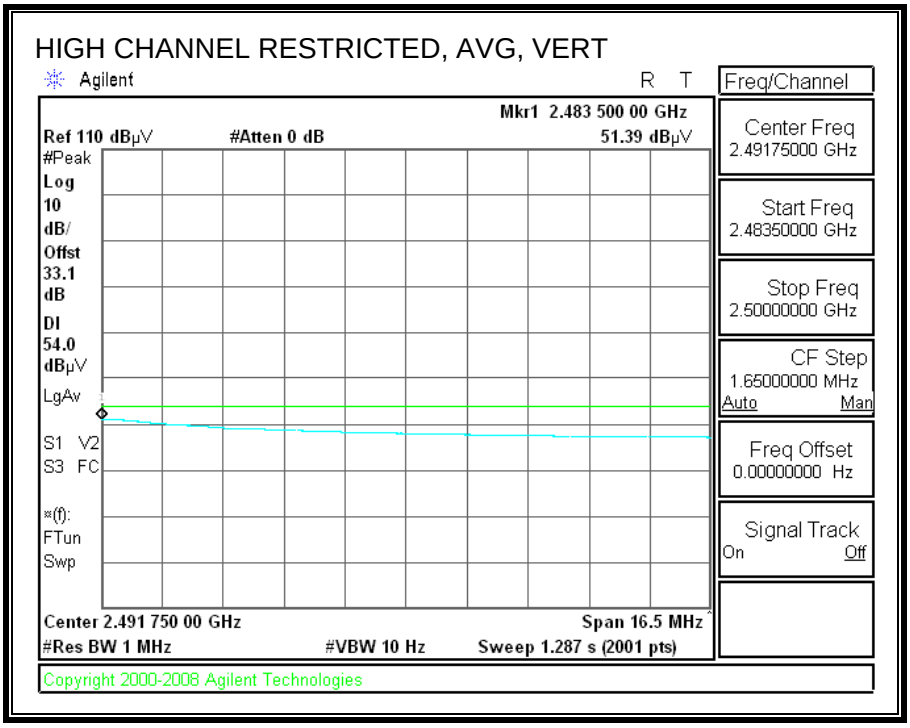
**RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)**



**RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)**



## HARMONICS AND SPURIOUS EMISSIONS

**High Frequency Measurement**
**Compliance Certification Services, Fremont 5m Chamber**

**Test Engr:** Devin Chang
**Date:** 02/08/09
**Project #:** 08U12316
**Company:** Palm
**EUT Description:** EUT only
**Mode Oper:** WLAN_g mode_Tx mode

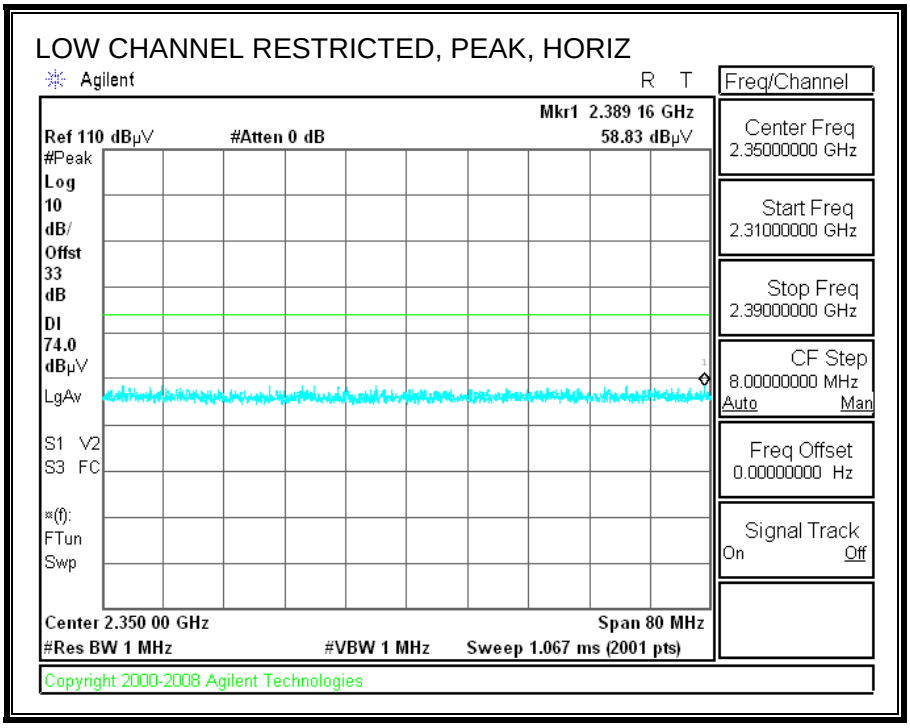
| | | | | |
|---|---|---|---|---|
| f | Measurement Frequency | Amp | Preamp Gain | Average Field Strength Limit |
| Dist | Distance to Antenna | D Corr | Distance Correct to 3 meters | Peak Field Strength Limit |
| Read | Analyzer Reading | Avg | Average Field Strength @ 3 m | Margin vs. Average Limit |
| AF | Antenna Factor | Peak | Calculated Peak Field Strength | Margin vs. Peak Limit |
| CL | Cable Loss | HPF | High Pass Filter | |

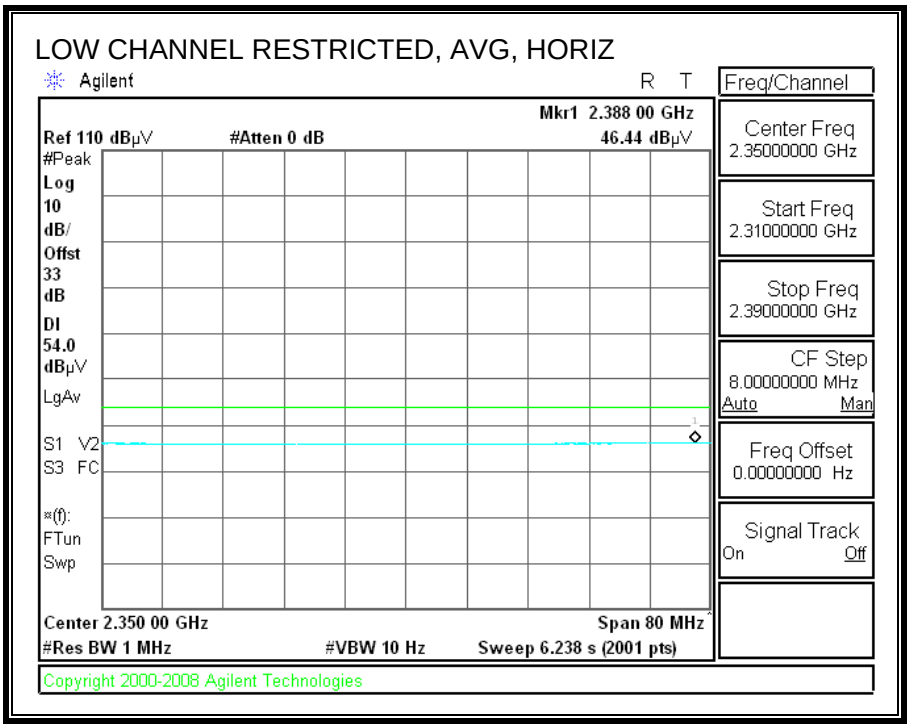
| f GHz | Dist (m) | Read dBuV | AF dB/m | CL dB | Amp dB | D Corr dB | Fltr dB | Corr. dBuV/m | Limit dBuV/m | Margin dB | Ant. Pol. V/H | Det. P/A/QP | Ant.High cm | Table Angle Degree | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2412MHz | | | | | | | | | | | | | | | |
| 4.824 | 3.0 | 42.4 | 33.7 | 5.8 | -34.8 | 0.0 | 0.0 | 47.1 | 74.0 | -26.9 | V | P | 100.0 | 180.9 | |
| 4.824 | 3.0 | 36.9 | 33.7 | 5.8 | -34.8 | 0.0 | 0.0 | 41.6 | 54.0 | -12.4 | V | A | 100.0 | 180.9 | |
| 4.824 | 3.0 | 44.4 | 33.7 | 5.8 | -34.8 | 0.0 | 0.0 | 49.0 | 74.0 | -25.0 | H | P | 122.0 | 136.0 | |
| 4.824 | 3.0 | 41.3 | 33.7 | 5.8 | -34.8 | 0.0 | 0.0 | 46.0 | 54.0 | -8.0 | H | A | 122.0 | 136.0 | |
| 2437MHz | | | | | | | | | | | | | | | |
| 4.874 | 3.0 | 44.0 | 33.7 | 5.8 | -34.9 | 0.0 | 0.0 | 48.7 | 74.0 | -25.3 | V | P | 100.0 | 180.6 | |
| 4.874 | 3.0 | 39.5 | 33.7 | 5.8 | -34.9 | 0.0 | 0.0 | 44.2 | 54.0 | -9.8 | V | A | 100.0 | 180.6 | |
| 7.311 | 3.0 | 38.1 | 36.7 | 7.3 | -34.7 | 0.0 | 0.0 | 47.4 | 74.0 | -26.6 | V | P | 155.8 | 215.4 | |
| 7.311 | 3.0 | 24.5 | 36.7 | 7.3 | -34.7 | 0.0 | 0.0 | 33.8 | 54.0 | -20.2 | V | A | 155.8 | 215.4 | |
| 4.874 | 3.0 | 47.3 | 33.7 | 5.8 | -34.9 | 0.0 | 0.0 | 52.0 | 74.0 | -22.0 | H | P | 119.8 | 138.3 | |
| 4.874 | 3.0 | 44.8 | 33.7 | 5.8 | -34.9 | 0.0 | 0.0 | 49.5 | 54.0 | -4.5 | H | A | 119.8 | 138.3 | |
| 7.311 | 3.0 | 36.9 | 36.7 | 7.3 | -34.7 | 0.0 | 0.0 | 46.2 | 74.0 | -27.8 | H | P | 176.4 | 96.8 | |
| 7.311 | 3.0 | 24.5 | 36.7 | 7.3 | -34.7 | 0.0 | 0.0 | 33.9 | 54.0 | -20.1 | H | A | 176.4 | 96.8 | |
| 2480MHz | | | | | | | | | | | | | | | |
| 4.924 | 3.0 | 44.8 | 33.8 | 5.9 | -34.9 | 0.0 | 0.0 | 49.6 | 74.0 | -24.4 | V | P | 108.3 | 179.7 | |
| 4.924 | 3.0 | 40.8 | 33.8 | 5.9 | -34.9 | 0.0 | 0.0 | 45.6 | 54.0 | -8.4 | V | A | 108.3 | 179.7 | |
| 7.386 | 3.0 | 36.9 | 36.8 | 7.3 | -34.6 | 0.0 | 0.0 | 46.3 | 74.0 | -27.7 | V | P | 125.8 | 178.5 | |
| 7.386 | 3.0 | 24.9 | 36.8 | 7.3 | -34.6 | 0.0 | 0.0 | 34.3 | 54.0 | -19.7 | V | A | 125.8 | 178.5 | |
| 4.924 | 3.0 | 48.4 | 33.8 | 5.9 | -34.9 | 0.0 | 0.0 | 53.1 | 74.0 | -20.9 | H | P | 123.9 | 137.8 | |
| 4.924 | 3.0 | 46.0 | 33.8 | 5.9 | -34.9 | 0.0 | 0.0 | 50.8 | 54.0 | -3.2 | H | A | 123.9 | 137.8 | |
| 7.386 | 3.0 | 37.1 | 36.8 | 7.3 | -34.6 | 0.0 | 0.0 | 46.5 | 74.0 | -27.5 | H | P | 117.6 | 96.5 | |
| 7.386 | 3.0 | 24.9 | 36.8 | 7.3 | -34.6 | 0.0 | 0.0 | 34.3 | 54.0 | -19.7 | H | A | 117.6 | 96.5 | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

**Rev. 4.1.2.7**
**Note: No other emissions were detected above the system noise floor.**

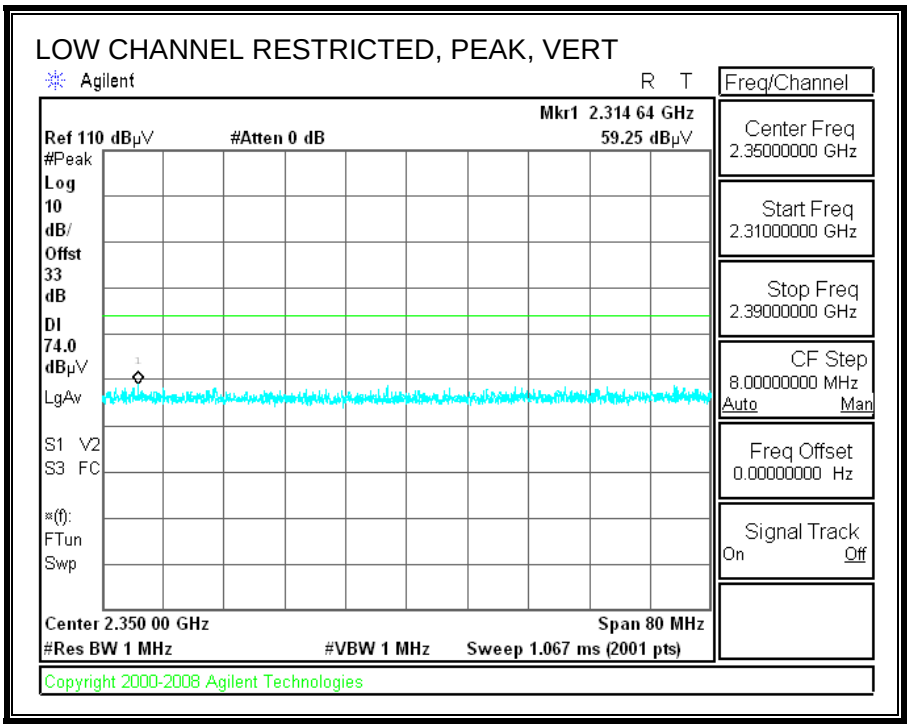
## 8.2.3. TRANSMITTER ABOVE 1 GHz FOR BLUETOOTH GFSK MODE

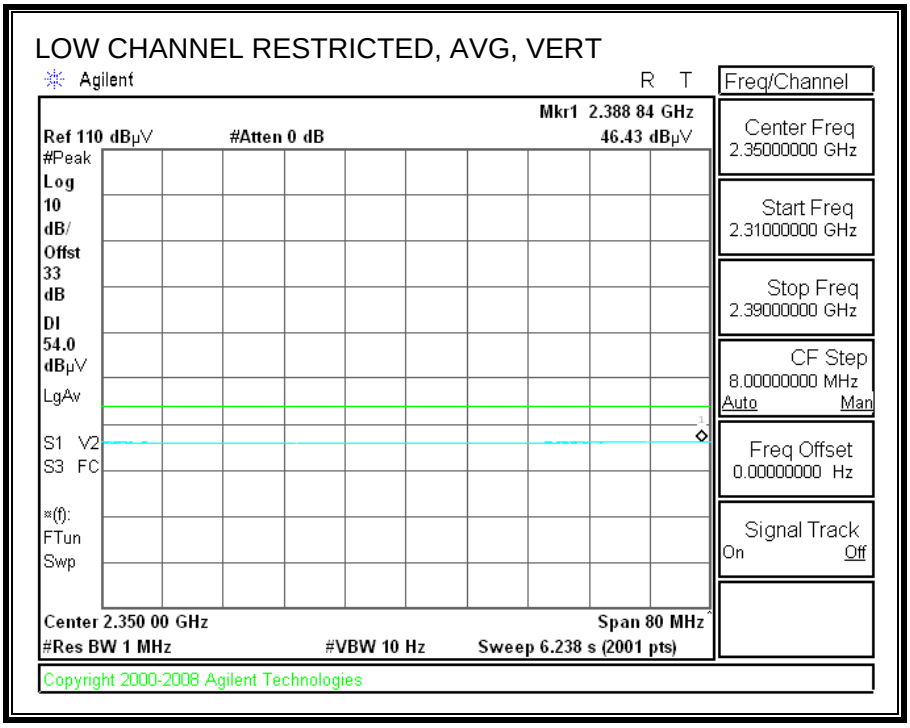
**RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)**



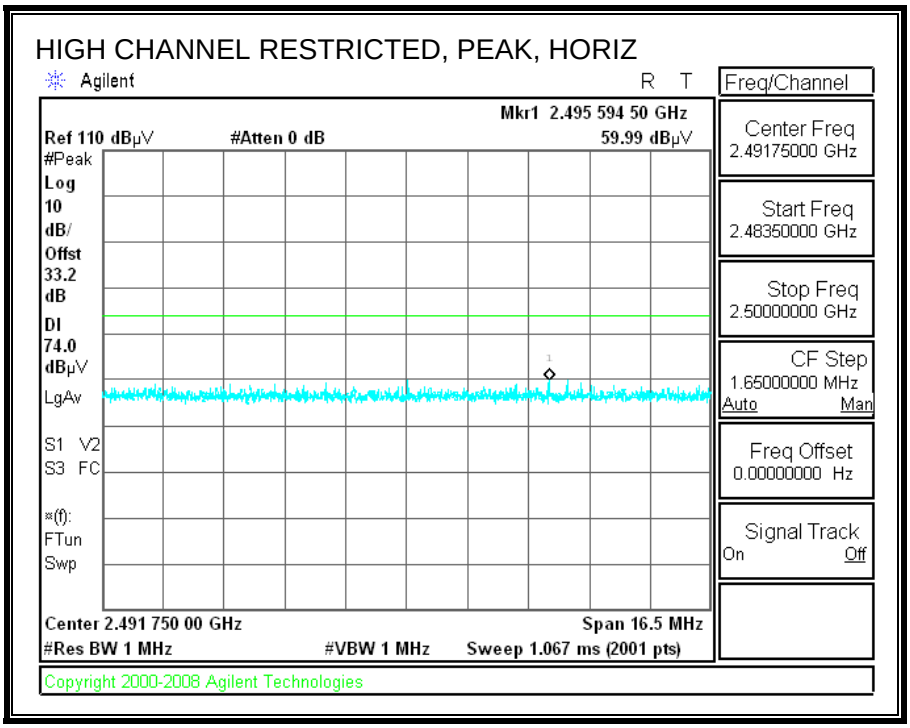



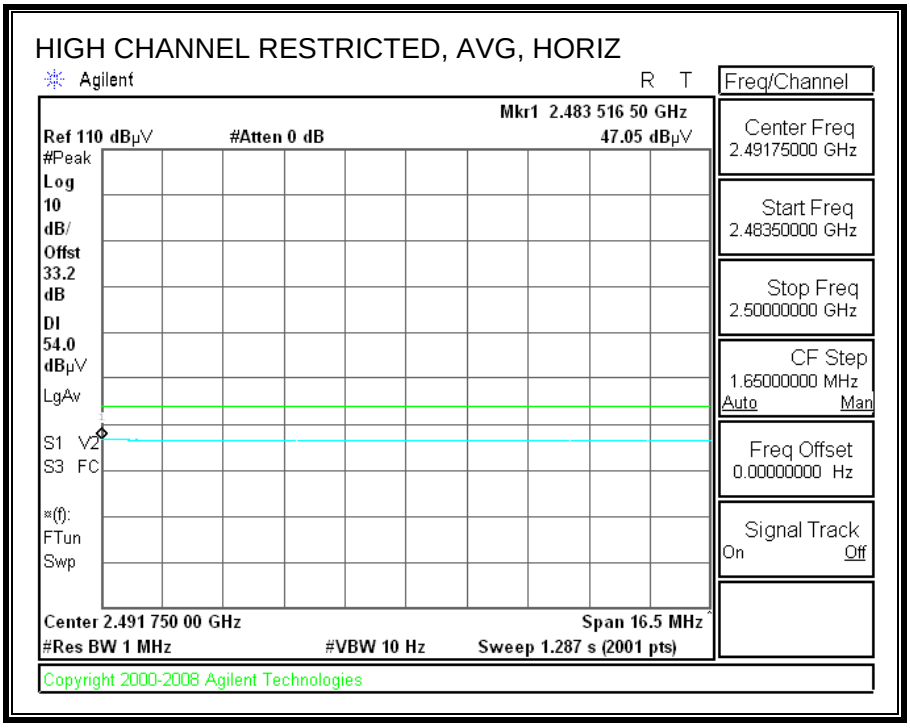
**RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)**



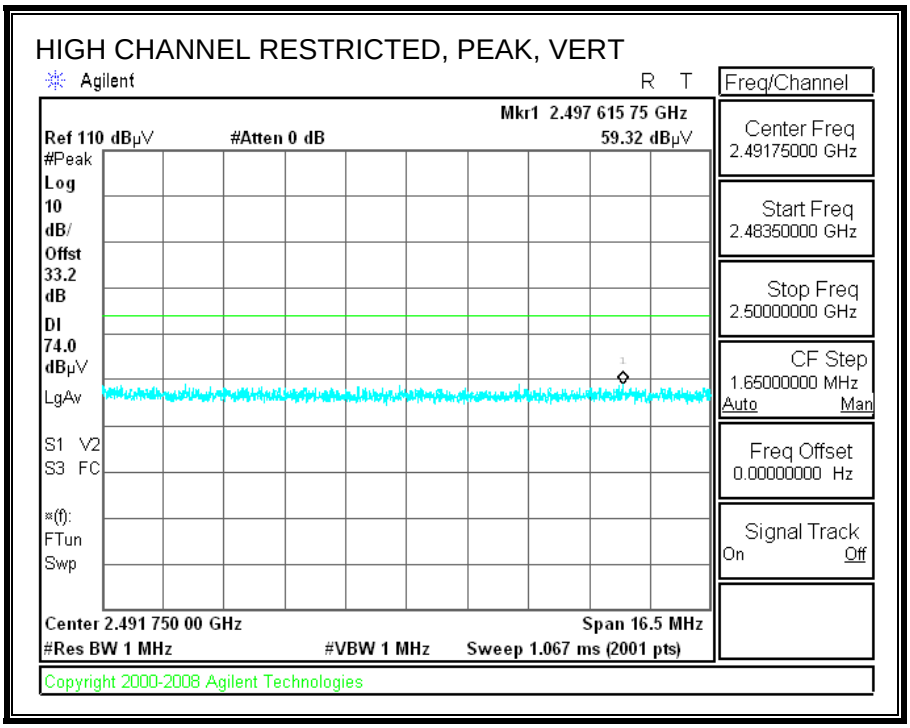



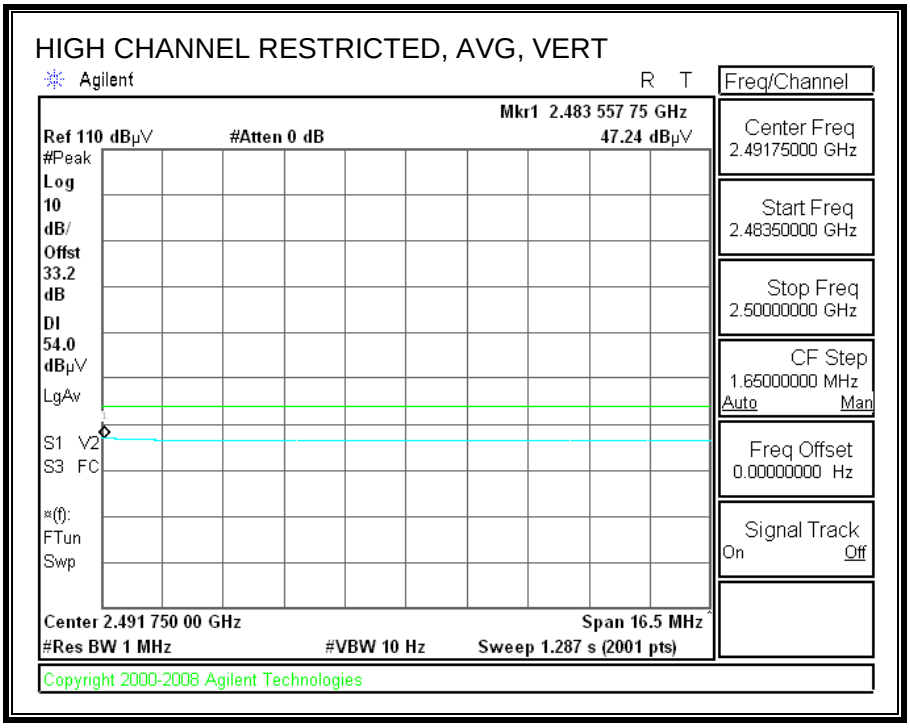
**RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)**



**RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)**



## HARMONICS AND SPURIOUS EMISSIONS

**High Frequency Measurement**
**Compliance Certification Services, Fremont 5m Chamber**

**Test Engr:** Devin Chang
**Date:** 02/08/09
**Project #:** 08U12316
**Company:** Palm
**EUT Description:** EUT only
**Mode Oper:** Buletooth GFSK_Tx mode

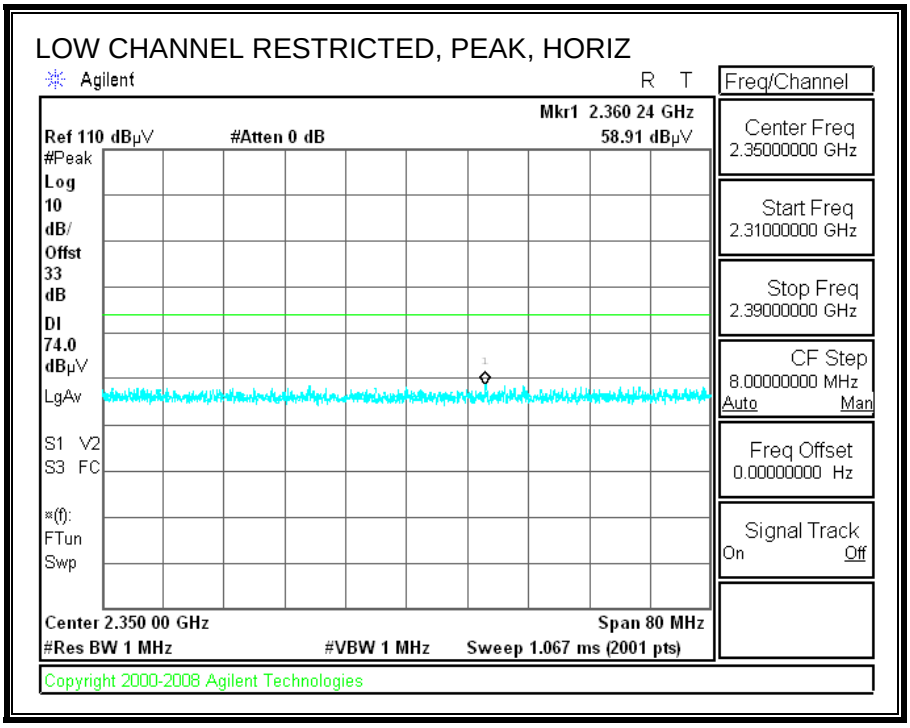
| | | | | | |
|---|---|---|---|---|---|
| | f | Measurement Frequency | Amp | Preamp Gain | Average Field Strength Limit |
| | Dist | Distance to Antenna | D Corr | Distance Correct to 3 meters | Peak Field Strength Limit |
| | Read | Analyzer Reading | Avg | Average Field Strength @ 3 m | Margin vs. Average Limit |
| | AF | Antenna Factor | Peak | Calculated Peak Field Strength | Margin vs. Peak Limit |
| | CL | Cable Loss | HPF | High Pass Filter | |

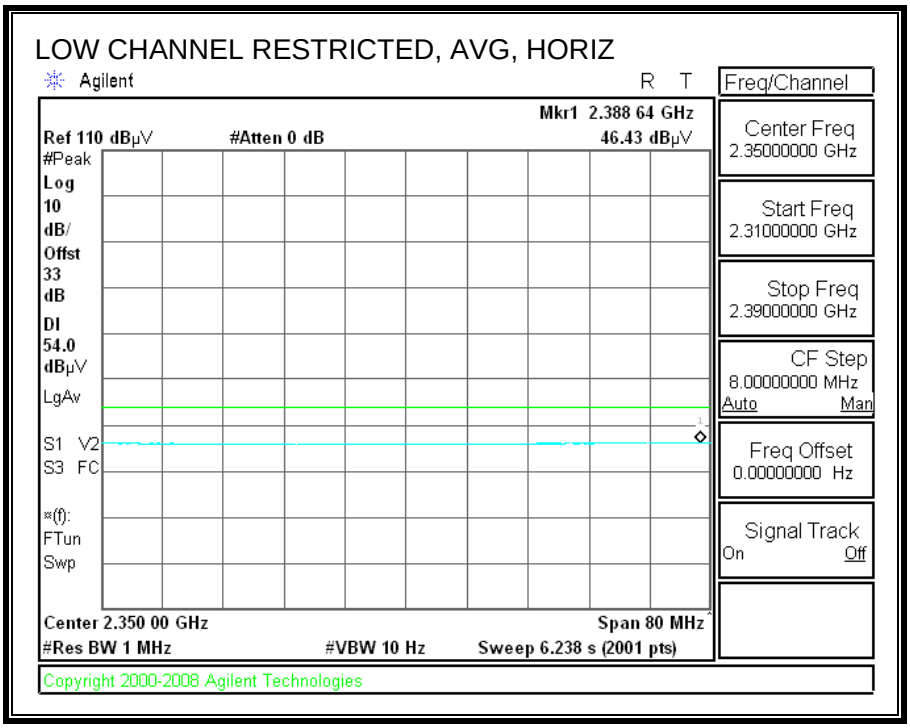
| f GHz | Dist (m) | Read dBuV | AF dB/m | CL dB | Amp dB | D Corr dB | Fltr dB | Corr. dBuV/m | Limit dBuV/m | Margin dB | Ant. Pol. V/H | Det. P/A/QP | Ant.High cm | Table Angle Degree | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2402MHz | | | | | | | | | | | | | | | |
| 4.804 | 3.0 | 38.7 | 33.7 | 5.8 | -34.8 | 0.0 | 0.0 | 43.3 | 74.0 | -30.7 | V | P | 163.7 | 54.3 | |
| 4.804 | 3.0 | 26.0 | 33.7 | 5.8 | -34.8 | 0.0 | 0.0 | 30.6 | 54.0 | -23.4 | V | A | 163.7 | 54.3 | |
| 4.804 | 3.0 | 38.9 | 33.7 | 5.8 | -34.8 | 0.0 | 0.0 | 43.5 | 74.0 | -30.5 | H | P | 123.0 | 316.9 | |
| 4.804 | 3.0 | 26.7 | 33.7 | 5.8 | -34.8 | 0.0 | 0.0 | 31.4 | 54.0 | -22.6 | H | A | 123.0 | 316.9 | |
| 2441MHz | | | | | | | | | | | | | | | |
| 4.882 | 3.0 | 38.6 | 33.7 | 5.8 | -34.9 | 0.0 | 0.0 | 43.4 | 74.0 | -30.6 | V | P | 150.5 | 208.1 | |
| 4.882 | 3.0 | 25.5 | 33.7 | 5.8 | -34.9 | 0.0 | 0.0 | 30.3 | 54.0 | -23.7 | V | A | 150.5 | 208.1 | |
| 7.323 | 3.0 | 37.4 | 36.7 | 7.3 | -34.7 | 0.0 | 0.0 | 46.7 | 74.0 | -27.3 | V | P | 104.1 | 260.9 | |
| 7.323 | 3.0 | 24.2 | 36.7 | 7.3 | -34.7 | 0.0 | 0.0 | 33.6 | 54.0 | -20.4 | V | A | 104.1 | 260.9 | |
| 4.882 | 3.0 | 38.1 | 33.7 | 5.8 | -34.9 | 0.0 | 0.0 | 42.8 | 74.0 | -31.2 | H | P | 197.9 | 174.2 | |
| 4.882 | 3.0 | 25.6 | 33.7 | 5.8 | -34.9 | 0.0 | 0.0 | 30.4 | 54.0 | -23.6 | H | A | 197.9 | 174.2 | |
| 7.323 | 3.0 | 36.7 | 36.7 | 7.3 | -34.7 | 0.0 | 0.0 | 46.0 | 74.0 | -28.0 | H | P | 100.9 | 100.2 | |
| 7.323 | 3.0 | 24.3 | 36.7 | 7.3 | -34.7 | 0.0 | 0.0 | 33.6 | 54.0 | -20.4 | H | A | 100.9 | 100.2 | |
| 2480MHz | | | | | | | | | | | | | | | |
| 4.960 | 3.0 | 38.6 | 33.8 | 5.9 | -34.9 | 0.0 | 0.0 | 43.5 | 74.0 | -30.5 | V | P | 165.6 | 265.2 | |
| 4.960 | 3.0 | 25.4 | 33.8 | 5.9 | -34.9 | 0.0 | 0.0 | 30.2 | 54.0 | -23.8 | V | A | 165.6 | 265.2 | |
| 7.440 | 3.0 | 37.8 | 36.8 | 7.3 | -34.6 | 0.0 | 0.0 | 47.4 | 74.0 | -26.6 | V | P | 168.8 | 89.4 | |
| 7.440 | 3.0 | 24.9 | 36.8 | 7.3 | -34.6 | 0.0 | 0.0 | 34.4 | 54.0 | -19.6 | V | A | 168.8 | 89.4 | |
| 4.960 | 3.0 | 38.6 | 33.8 | 5.9 | -34.9 | 0.0 | 0.0 | 43.4 | 74.0 | -30.6 | H | P | 100.8 | 349.7 | |
| 4.960 | 3.0 | 25.3 | 33.8 | 5.9 | -34.9 | 0.0 | 0.0 | 30.2 | 54.0 | -23.8 | H | A | 100.8 | 349.7 | |
| 7.440 | 3.0 | 37.0 | 36.8 | 7.3 | -34.6 | 0.0 | 0.0 | 46.5 | 74.0 | -27.5 | H | P | 151.9 | 169.0 | |
| 7.440 | 3.0 | 24.9 | 36.8 | 7.3 | -34.6 | 0.0 | 0.0 | 34.4 | 54.0 | -19.6 | H | A | 151.9 | 169.0 | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

**Rev. 4.1.2.7**
**Note: No other emissions were detected above the system noise floor.**

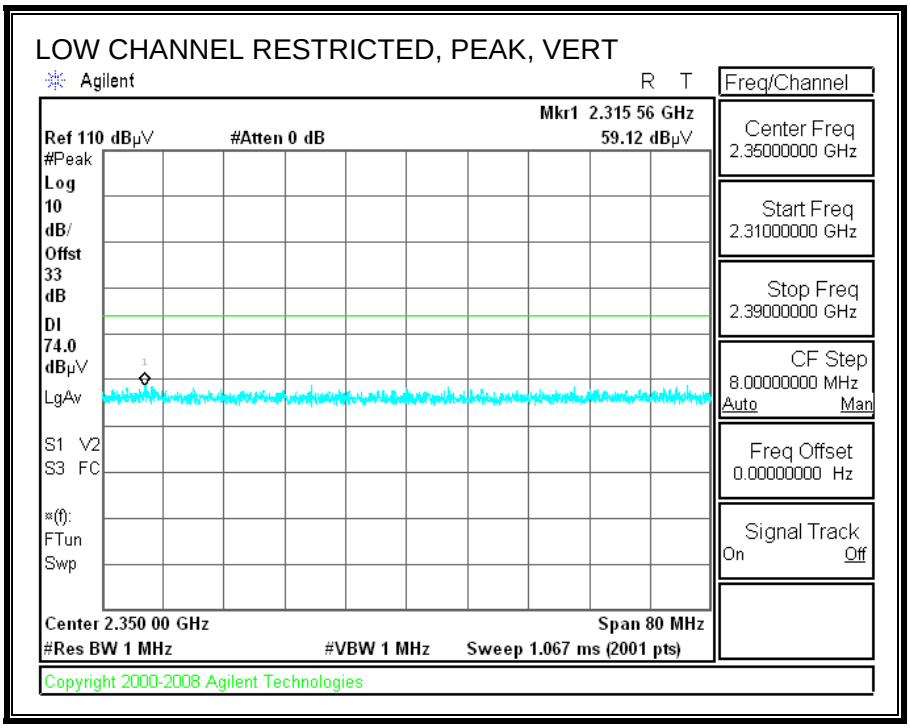
## 8.2.4. TRANSMITTER ABOVE 1 GHz FOR BLUETOOTH 8PSK MODE

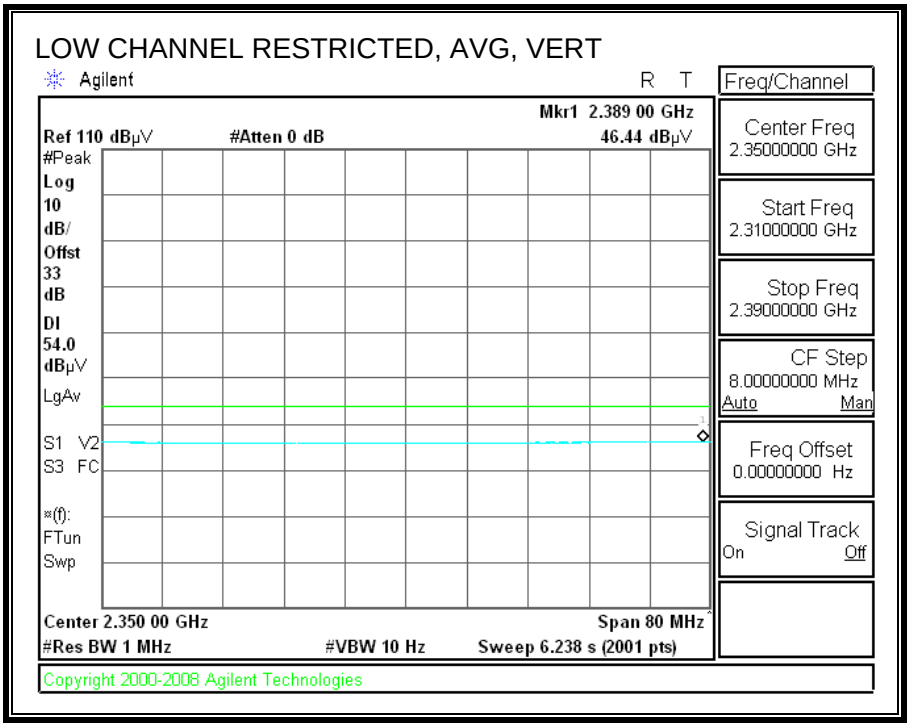
**RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)**



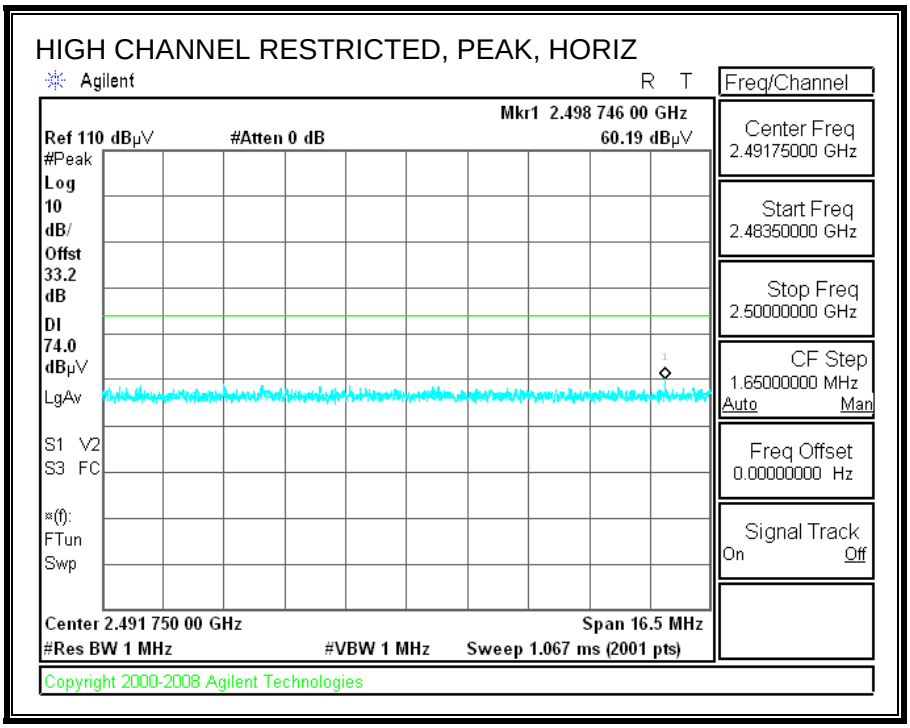



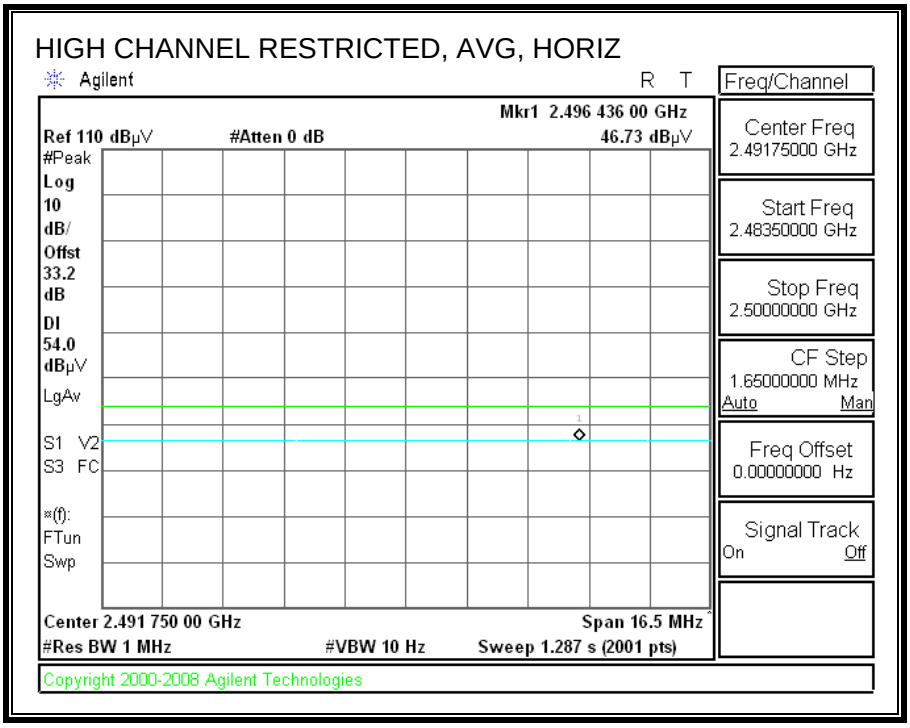
**RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)**



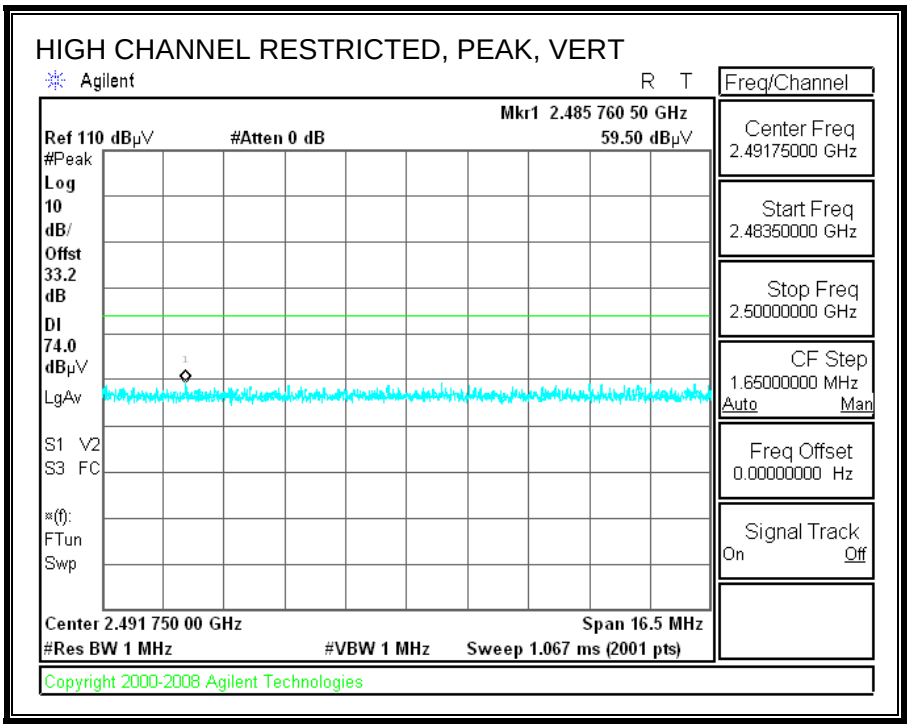



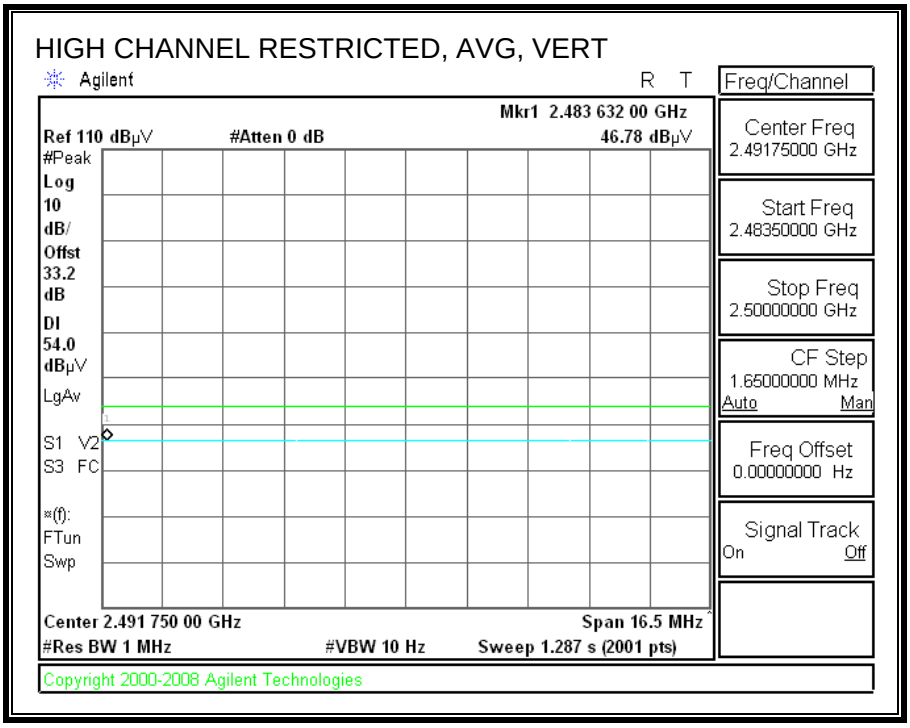
**RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)**



**RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)**



## HARMONICS AND SPURIOUS EMISSIONS

**High Frequency Measurement**
**Compliance Certification Services, Fremont 5m Chamber**

**Test Engr:** Devin Chang
**Date:** 02/08/09
**Project #:** 08U12316
**Company:** Palm
**EUT Description:** EUT only
**Mode Oper:** Buletooth 8PSK_Tx mode

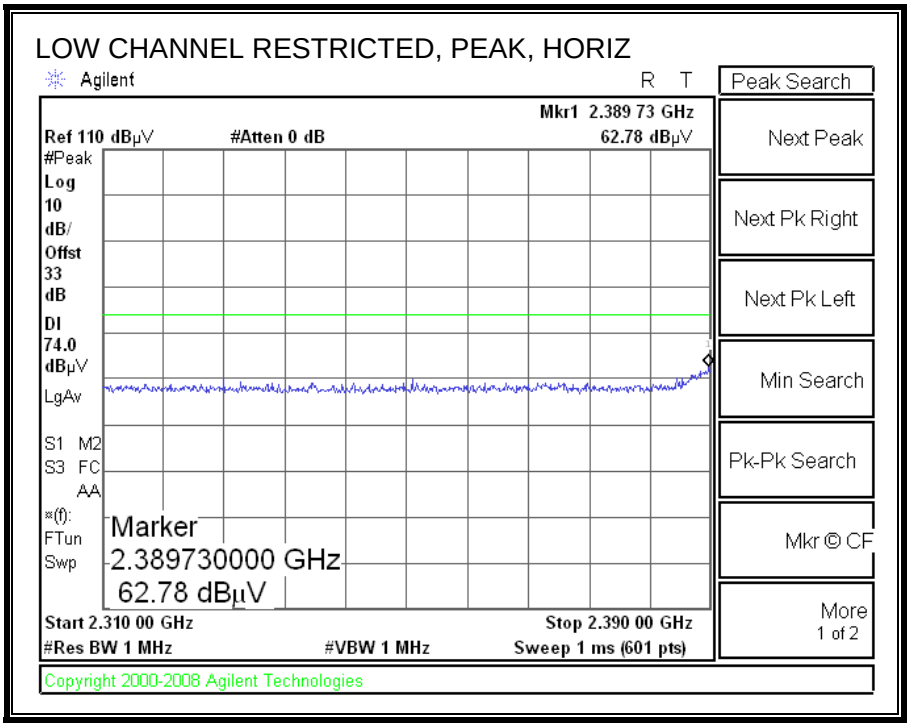
| | | | | | |
|---|---|---|---|---|---|
| | f | Measurement Frequency | Amp | Preamp Gain | Average Field Strength Limit |
| | Dist | Distance to Antenna | D Corr | Distance Correct to 3 meters | Peak Field Strength Limit |
| | Read | Analyzer Reading | Avg | Average Field Strength @ 3 m | Margin vs. Average Limit |
| | AF | Antenna Factor | Peak | Calculated Peak Field Strength | Margin vs. Peak Limit |
| | CL | Cable Loss | HPF | High Pass Filter | |

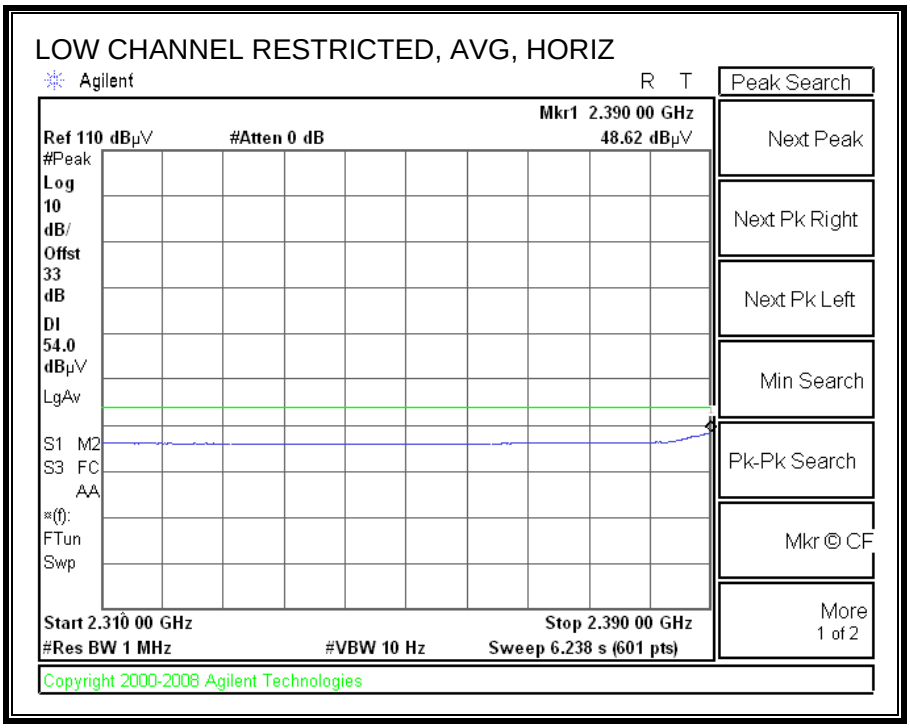
| f GHz | Dist (m) | Read dBuV | AF dB/m | CL dB | Amp dB | D Corr dB | Fltr dB | Corr. dBuV/m | Limit dBuV/m | Margin dB | Ant. Pol. V/H | Det. P/A/QP | Ant.High cm | Table Angle Degree | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2402MHz | | | | | | | | | | | | | | | |
| 4.804 | 3.0 | 39.4 | 33.7 | 5.8 | -34.8 | 0.0 | 0.0 | 44.0 | 74.0 | -30.0 | V | P | 199.7 | 287.2 | |
| 4.804 | 3.0 | 26.3 | 33.7 | 5.8 | -34.8 | 0.0 | 0.0 | 30.9 | 54.0 | -23.1 | V | A | 199.7 | 287.2 | |
| 4.804 | 3.0 | 39.4 | 33.7 | 5.8 | -34.8 | 0.0 | 0.0 | 44.1 | 74.0 | -29.9 | H | P | 125.8 | 255.8 | |
| 4.804 | 3.0 | 26.2 | 33.7 | 5.8 | -34.8 | 0.0 | 0.0 | 30.9 | 54.0 | -23.1 | H | A | 125.8 | 255.8 | |
| 2441MHz | | | | | | | | | | | | | | | |
| 4.882 | 3.0 | 38.7 | 33.7 | 5.8 | -34.9 | 0.0 | 0.0 | 43.4 | 74.0 | -30.6 | V | P | 100.0 | 228.2 | |
| 4.882 | 3.0 | 25.7 | 33.7 | 5.8 | -34.9 | 0.0 | 0.0 | 30.5 | 54.0 | -23.5 | V | A | 100.0 | 228.2 | |
| 7.323 | 3.0 | 37.5 | 36.7 | 7.3 | -34.7 | 0.0 | 0.0 | 46.8 | 74.0 | -27.2 | V | P | 198.3 | 118.6 | |
| 7.323 | 3.0 | 24.5 | 36.7 | 7.3 | -34.7 | 0.0 | 0.0 | 33.8 | 54.0 | -20.2 | V | A | 198.3 | 118.6 | |
| 4.882 | 3.0 | 38.8 | 33.7 | 5.8 | -34.9 | 0.0 | 0.0 | 43.5 | 74.0 | -30.5 | H | P | 194.7 | 5.7 | |
| 4.882 | 3.0 | 25.6 | 33.7 | 5.8 | -34.9 | 0.0 | 0.0 | 30.4 | 54.0 | -23.6 | H | A | 194.7 | 5.7 | |
| 7.323 | 3.0 | 37.5 | 36.7 | 7.3 | -34.7 | 0.0 | 0.0 | 46.9 | 74.0 | -27.1 | H | P | 197.5 | 204.6 | |
| 7.323 | 3.0 | 24.4 | 36.7 | 7.3 | -34.7 | 0.0 | 0.0 | 33.8 | 54.0 | -20.2 | H | A | 197.5 | 204.6 | |
| 2480MHz | | | | | | | | | | | | | | | |
| 4.960 | 3.0 | 38.1 | 33.8 | 5.9 | -34.9 | 0.0 | 0.0 | 43.0 | 74.0 | -31.0 | V | P | 154.8 | 306.0 | |
| 4.960 | 3.0 | 25.4 | 33.8 | 5.9 | -34.9 | 0.0 | 0.0 | 30.2 | 54.0 | -23.8 | V | A | 154.8 | 306.0 | |
| 7.440 | 3.0 | 38.1 | 36.8 | 7.3 | -34.6 | 0.0 | 0.0 | 47.6 | 74.0 | -26.4 | V | P | 186.1 | 313.2 | |
| 7.440 | 3.0 | 25.1 | 36.8 | 7.3 | -34.6 | 0.0 | 0.0 | 34.6 | 54.0 | -19.4 | V | A | 186.1 | 313.2 | |
| 4.960 | 3.0 | 38.2 | 33.8 | 5.9 | -34.9 | 0.0 | 0.0 | 43.0 | 74.0 | -31.0 | H | P | 181.4 | 221.5 | |
| 4.960 | 3.0 | 25.3 | 33.8 | 5.9 | -34.9 | 0.0 | 0.0 | 30.2 | 54.0 | -23.8 | H | A | 181.4 | 221.5 | |
| 7.440 | 3.0 | 38.5 | 36.8 | 7.3 | -34.6 | 0.0 | 0.0 | 48.0 | 74.0 | -26.0 | H | P | 164.7 | 281.9 | |
| 7.440 | 3.0 | 25.1 | 36.8 | 7.3 | -34.6 | 0.0 | 0.0 | 34.6 | 54.0 | -19.4 | H | A | 164.7 | 281.9 | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

**Rev. 4.1.2.7**
**Note: No other emissions were detected above the system noise floor.**

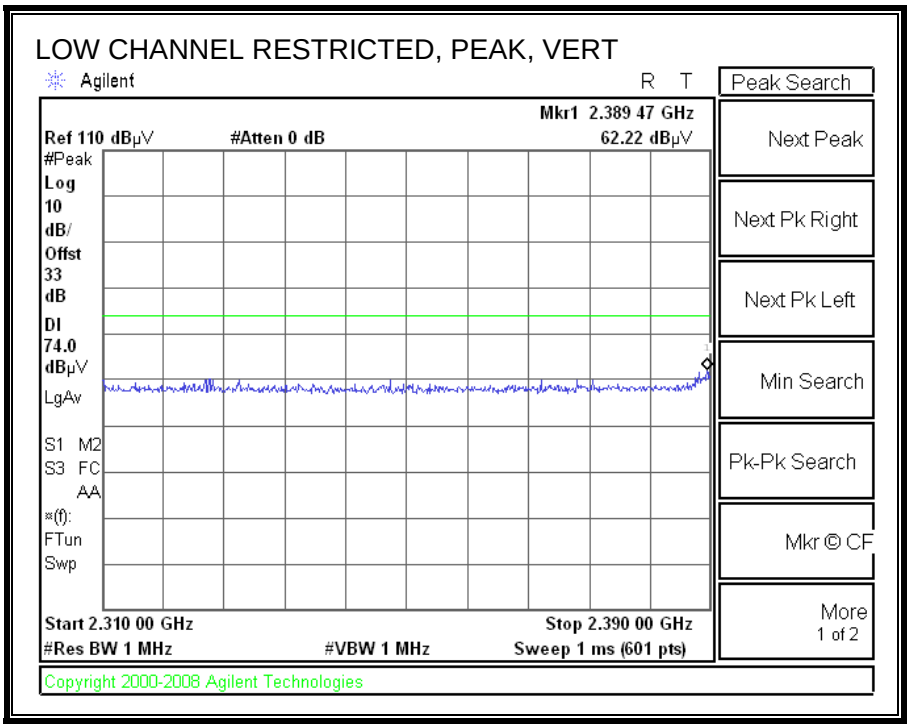
## 8.2.5. CO-LOCATED TRANSMITTER RADIATED EMISSIONS (WORST CASE)

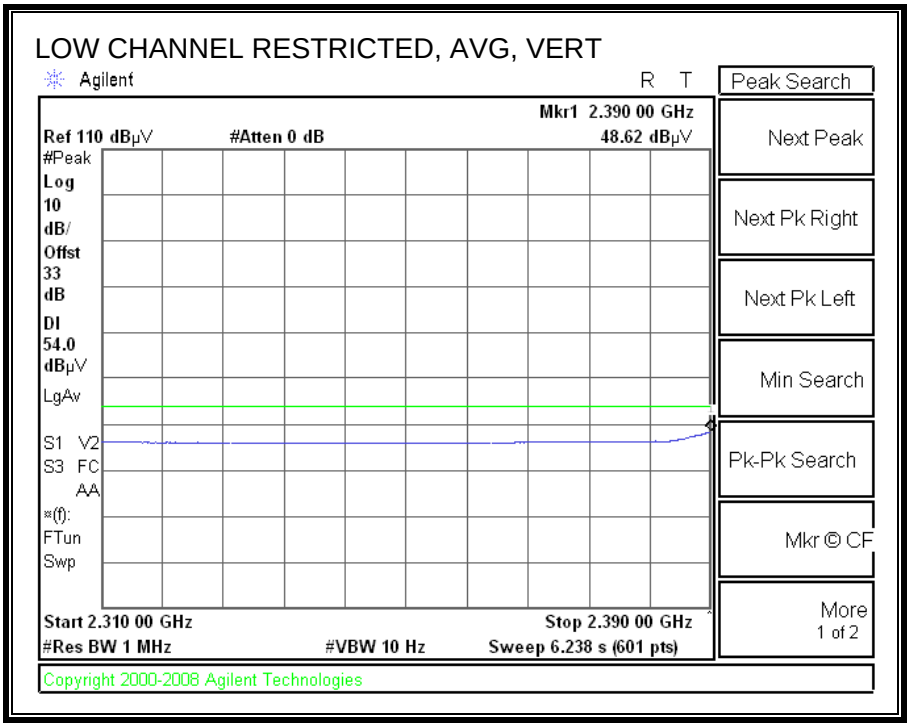
**RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)**



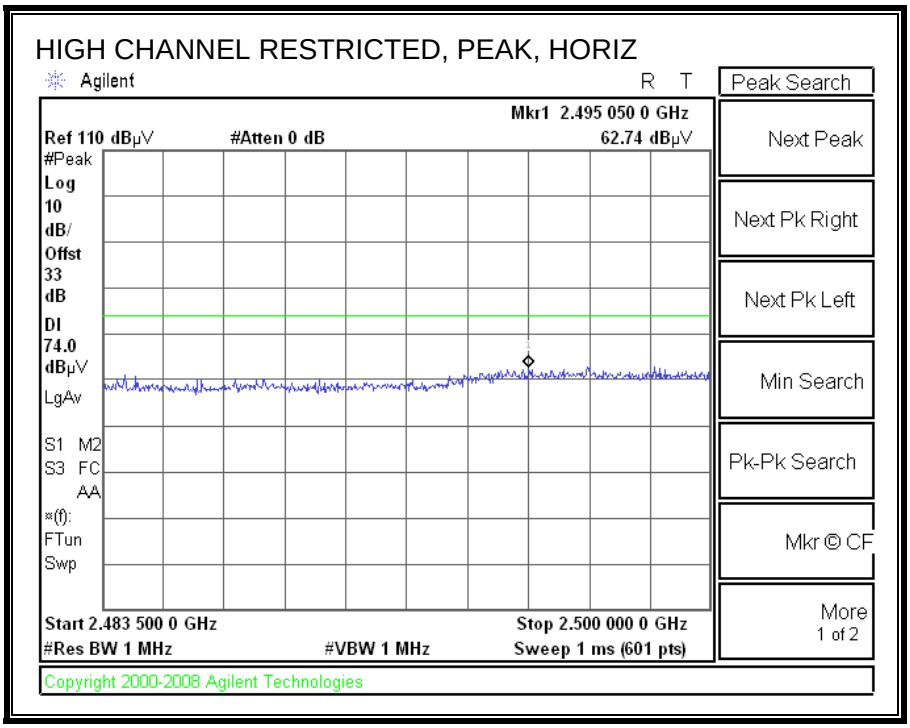



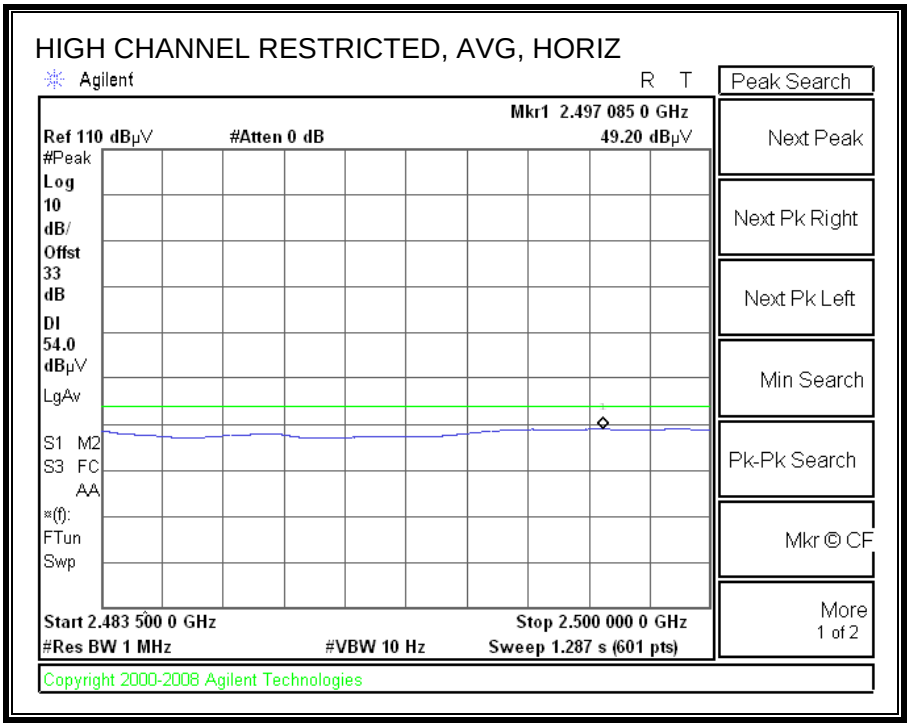
**RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)**



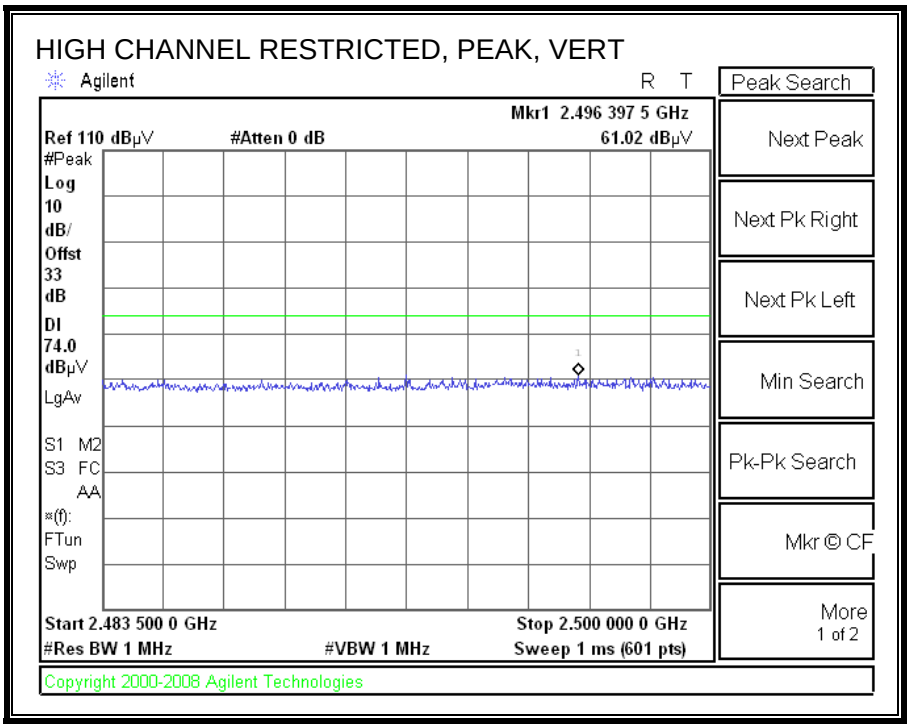



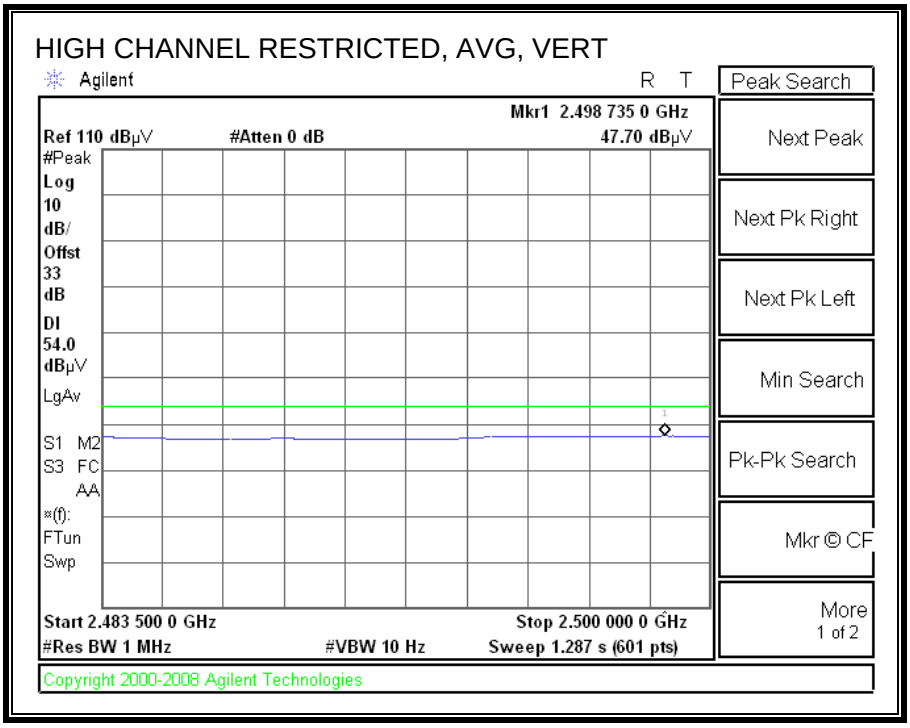
**RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)**



**RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)**



## HARMONICS AND SPURIOUS EMISSIONS

**High Frequency Measurement**
**Compliance Certification Services, Fremont 5m Chamber**

**Company: Palm**
**Project #: 08U12312**
**Date: 2/19/2009**
**Test Engineer: Chin Pang**
**Configuration: EUT with earphone**
**Mode: b mode, WiFi and BT Co-location**

**Test Equipment:**

| Horn 1-18GHz | Pre-amplifer 1-26GHz | Pre-amplifer 26-40GHz | Horn > 18GHz |
|---|---|---|---|
| T59; S/N: 3245 @3m | T145 Agilent 3008A005 | | |

Hi Frequency Cables

| 3' cable 22807700 | 12' cable 22807600 | 20' cable 22807500 | HPF | Reject Filter |
|---|---|---|---|---|
| 3' cable 22807700 | 12' cable 22807600 | 20' cable 22807500 | | R_001 |

**Peak Measurements**
RBW=VBW=1MHz
**Average Measurements**
RBW=1MHz ; VBW=10Hz

| f GHz | Dist (m) | Read Pk dBuV | Read Avg. dBuV | AF dB/m | CL dB | Amp dB | D Corr dB | Fltr dB | Peak dBuV/m | Avg dBuV/m | Pk Lim dBuV/m | Avg Lim dBuV/m | Pk Mar dB | Avg Mar dB | Notes (V/H) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High Ch | | | | | | | | | | | | | | | |
| 4.924 | 3.0 | 46.4 | 34.0 | 34.0 | 5.9 | -34.9 | 0.0 | 0.0 | 51.4 | 39.0 | 74 | 54 | -22.6 | -15.0 | V |
| 7.386 | 3.0 | 43.7 | 32.0 | 36.6 | 7.3 | -34.6 | 0.0 | 0.0 | 52.9 | 41.2 | 74 | 54 | -21.1 | -12.8 | V |
| 4.924 | 3.0 | 49.0 | 35.6 | 34.0 | 5.9 | -34.9 | 0.0 | 0.0 | 54.0 | 40.6 | 74 | 54 | -20.0 | -13.4 | H |
| 7.386 | 3.0 | 45.6 | 33.5 | 36.6 | 7.3 | -34.6 | 0.0 | 0.0 | 54.8 | 42.7 | 74 | 54 | -19.2 | -11.3 | H |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

Rev. 11.10.08

| | | | | | |
|---|---|---|---|---|---|
| f | Measurement Frequency | Amp | Preamp Gain | Avg Lim | Average Field Strength Limit |
| Dist | Distance to Antenna | D Corr | Distance Correct to 3 meters | Pk Lim | Peak Field Strength Limit |
| Read | Analyzer Reading | Avg | Average Field Strength @ 3 m | Avg Mar | Margin vs. Average Limit |
| AF | Antenna Factor | Peak | Calculated Peak Field Strength | Pk Mar | Margin vs. Peak Limit |
| CL | Cable Loss | HPF | High Pass Filter | | |

## 8.3. RECEIVER ABOVE 1 GHz

### 8.3.1. RECEIVER ABOVE 1 GHz FOR WLAN IN THE B MODE

Note: No other emissions were detected above the system noise floor.

### 8.3.2. RECEIVER ABOVE 1 GHz FOR WLAN IN THE G MODE

Note: No other emissions were detected above the system noise floor.

## 8.3.3. RECEIVER ABOVE 1 GHz FOR BLUETOOTH IN THE GFSK

**High Frequency Measurement**
**Compliance Certification Services, Fremont 5m Chamber**

**Test Engr:** **Devin Chang**
**Date:** **02/09/09**
**Project #:** **08U12316**
**Company:** **Palm**
**EUT Description:** **EUT only**
**Mode Oper:** **BT_GFSK_Rx mode**

| | | | | |
|---|---|---|---|---|
| f | Measurement Frequency | Amp | Preamp Gain | Average Field Strength Limit |
| Dist | Distance to Antenna | D Corr | Distance Correct to 3 meters | Peak Field Strength Limit |
| Read | Analyzer Reading | Avg | Average Field Strength @ 3 m | Margin vs. Average Limit |
| AF | Antenna Factor | Peak | Calculated Peak Field Strength | Margin vs. Peak Limit |
| CL | Cable Loss | HPF | High Pass Filter | |

| f GHz | Dist (m) | Read dBuV | AF dB/m | CL dB | Amp dB | D Corr dB | Fltr dB | Corr. dBuV/m | Limit dBuV/m | Margin dB | Ant. Pol. V/H | Det. P/A/QP | Ant.High cm | Table Angle Degree | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2402MHz | | | | | | | | | | | | | | | |
| 2.404 | 3.0 | 44.9 | 29.3 | 3.8 | -35.1 | 0.0 | 0.0 | 43.0 | 74.0 | -31.0 | V | P | 101.9 | 30.5 | |
| 2.404 | 3.0 | 38.7 | 29.3 | 3.8 | -35.1 | 0.0 | 0.0 | 36.8 | 54.0 | -17.2 | V | A | 101.9 | 30.5 | |
| 2.404 | 3.0 | 46.0 | 29.3 | 3.8 | -35.1 | 0.0 | 0.0 | 44.1 | 74.0 | -29.9 | H | P | 148.5 | 113.1 | |
| 2.404 | 3.0 | 41.6 | 29.3 | 3.8 | -35.1 | 0.0 | 0.0 | 39.7 | 54.0 | -14.3 | H | A | 148.5 | 113.1 | |
| 2441MHz | | | | | | | | | | | | | | | |
| 2.440 | 3.0 | 45.3 | 29.4 | 3.9 | -35.1 | 0.0 | 0.0 | 43.5 | 74.0 | -30.5 | V | P | 101.8 | 6.9 | |
| 2.440 | 3.0 | 39.9 | 29.4 | 3.9 | -35.1 | 0.0 | 0.0 | 38.1 | 54.0 | -15.9 | V | A | 101.8 | 6.9 | |
| 2.440 | 3.0 | 46.7 | 29.4 | 3.9 | -35.1 | 0.0 | 0.0 | 44.9 | 74.0 | -29.1 | H | P | 142.3 | 113.9 | |
| 2.440 | 3.0 | 42.4 | 29.4 | 3.9 | -35.1 | 0.0 | 0.0 | 40.6 | 54.0 | -13.4 | H | A | 142.3 | 113.9 | |
| 2480MHz | | | | | | | | | | | | | | | |
| 2.479 | 3.0 | 46.4 | 29.5 | 3.9 | -35.1 | 0.0 | 0.0 | 44.7 | 74.0 | -29.3 | V | P | 103.4 | 225.1 | |
| 2.479 | 3.0 | 40.7 | 29.5 | 3.9 | -35.1 | 0.0 | 0.0 | 39.0 | 54.0 | -15.0 | V | A | 103.4 | 225.1 | |
| 2.479 | 3.0 | 47.4 | 29.5 | 3.9 | -35.1 | 0.0 | 0.0 | 45.7 | 74.0 | -28.3 | H | P | 138.7 | 80.0 | |
| 2.479 | 3.0 | 42.5 | 29.5 | 3.9 | -35.1 | 0.0 | 0.0 | 40.8 | 54.0 | -13.2 | H | A | 138.7 | 80.0 | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

**Rev. 4.1.2.7**
**Note: No other emissions were detected above the system noise floor.**

## 8.3.4. RECEIVER ABOVE 1 GHz FOR BLUETOOTH IN THE 8PSK

**High Frequency Measurement**
**Compliance Certification Services, Fremont 5m Chamber**

**Test Engr:** **Devin Chang**
**Date:** **02/09/09**
**Project #:** **08U12316**
**Company:** **Palm**
**EUT Description:** **EUT only**
**Mode Oper:** **BT_8PSK_Rx mode**

| | | | | |
|---|---|---|---|---|
| f | Measurement Frequency | Amp | Preamp Gain | Average Field Strength Limit |
| Dist | Distance to Antenna | D Corr | Distance Correct to 3 meters | Peak Field Strength Limit |
| Read | Analyzer Reading | Avg | Average Field Strength @ 3 m | Margin vs. Average Limit |
| AF | Antenna Factor | Peak | Calculated Peak Field Strength | Margin vs. Peak Limit |
| CL | Cable Loss | HPF | High Pass Filter | |

| f GHz | Dist (m) | Read dBuV | AF dB/m | CL dB | Amp dB | D Corr dB | Fltr dB | Corr. dBuV/m | Limit dBuV/m | Margin dB | Ant. Pol. V/H | Det. P/A/QP | Ant.High cm | Table Angle Degree | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2402MHz | | | | | | | | | | | | | | | |
| 2.404 | 3.0 | 44.8 | 29.3 | 3.8 | -35.1 | 0.0 | 0.0 | 42.9 | 74.0 | -31.1 | V | P | 102.7 | 30.4 | |
| 2.404 | 3.0 | 38.8 | 29.3 | 3.8 | -35.1 | 0.0 | 0.0 | 36.8 | 54.0 | -17.2 | V | A | 102.7 | 30.4 | |
| 2.404 | 3.0 | 46.4 | 29.3 | 3.8 | -35.1 | 0.0 | 0.0 | 44.5 | 74.0 | -29.5 | H | P | 147.4 | 113.8 | |
| 2.404 | 3.0 | 41.5 | 29.3 | 3.8 | -35.1 | 0.0 | 0.0 | 39.6 | 54.0 | -14.4 | H | A | 147.4 | 113.8 | |
| 2441MHz | | | | | | | | | | | | | | | |
| 2.440 | 3.0 | 45.2 | 29.4 | 3.9 | -35.1 | 0.0 | 0.0 | 43.3 | 74.0 | -30.7 | V | P | 100.0 | 7.0 | |
| 2.440 | 3.0 | 39.6 | 29.4 | 3.9 | -35.1 | 0.0 | 0.0 | 37.8 | 54.0 | -16.2 | V | A | 100.0 | 7.0 | |
| 2.440 | 3.0 | 46.9 | 29.4 | 3.9 | -35.1 | 0.0 | 0.0 | 45.1 | 74.0 | -28.9 | H | P | 141.9 | 112.5 | |
| 2.440 | 3.0 | 42.1 | 29.4 | 3.9 | -35.1 | 0.0 | 0.0 | 40.3 | 54.0 | -13.7 | H | A | 141.9 | 112.5 | |
| 2480MHz | | | | | | | | | | | | | | | |
| 2.479 | 3.0 | 46.1 | 29.5 | 3.9 | -35.1 | 0.0 | 0.0 | 44.4 | 74.0 | -29.6 | V | P | 125.7 | 226.2 | |
| 2.479 | 3.0 | 40.6 | 29.5 | 3.9 | -35.1 | 0.0 | 0.0 | 38.9 | 54.0 | -15.1 | V | A | 125.7 | 226.2 | |
| 2.479 | 3.0 | 46.4 | 29.5 | 3.9 | -35.1 | 0.0 | 0.0 | 44.7 | 74.0 | -29.3 | H | P | 167.0 | 332.4 | |
| 2.479 | 3.0 | 41.5 | 29.5 | 3.9 | -35.1 | 0.0 | 0.0 | 39.8 | 54.0 | -14.2 | H | A | 167.0 | 332.4 | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

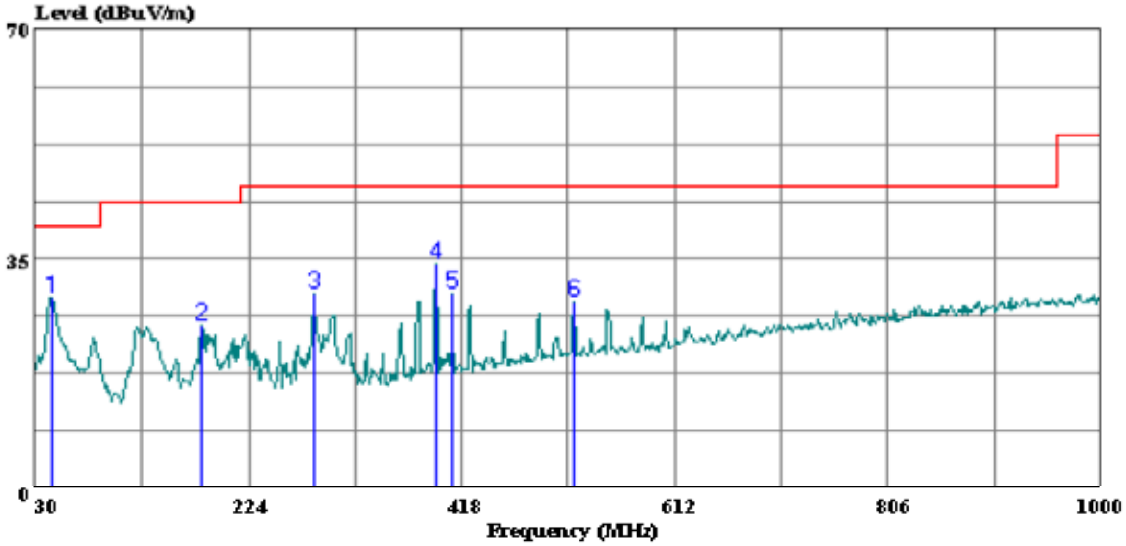
**Rev. 4.1.2.7**
**Note: No other emissions were detected above the system noise floor.**

## 8.4. WORST-CASE BELOW 1 GHz

**SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)**

Compliance Certification Services
47173 Benicia Street
Fremont, CA 94538
Tel: (510) 771-1000
Fax: (510) 661-0888

Data#: 14 File#: 08U12316.EMI Date: 02-04-2009 Time: 13:54:28




Trace: 13 Ref Trace:

Condition: FCC CLASS-B HORIZONTAL
Test Operator:: Devin Chang
Project #: : 08U12316
Company: : Palm
Configuration:: EUT with AC Adapter
Mode: : Normal Mode
Target: : FCC Class B

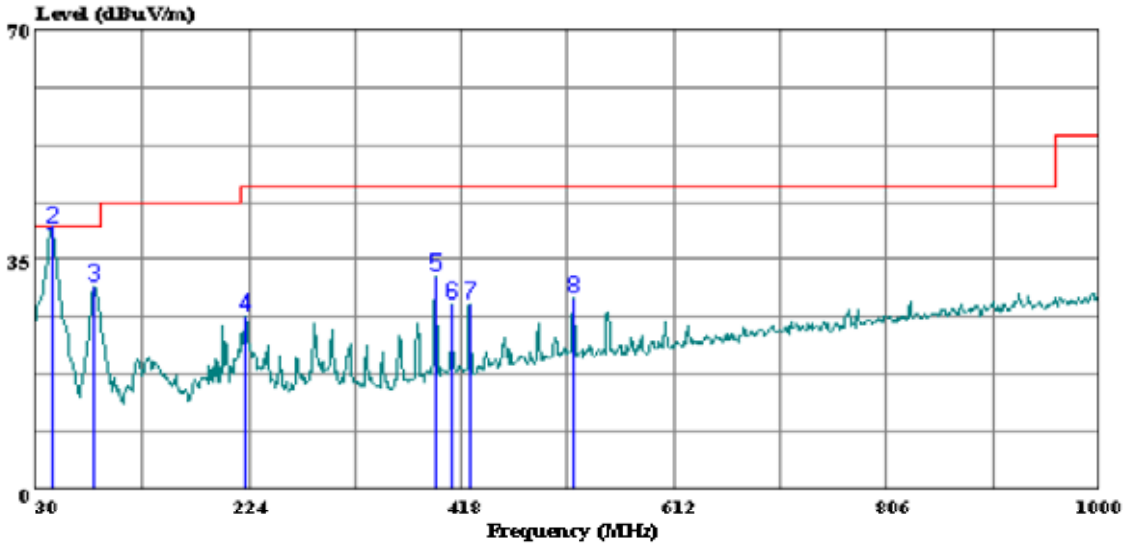
Page: 1

| | Freq | Read Level | Factor | Level | Limit Line | Over Limit | Remark |
|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | |
| 1 | 44.550 | 50.67 | -21.59 | 29.08 | 40.00 | -10.92 | Peak |
| 2 | 180.350 | 43.50 | -18.64 | 24.86 | 43.50 | -18.64 | Peak |
| 3 | 283.170 | 46.00 | -16.26 | 29.74 | 46.00 | -16.26 | Peak |
| 4 | 393.750 | 47.00 | -12.81 | 34.19 | 46.00 | -11.81 | Peak |
| 5 | 409.270 | 42.00 | -12.38 | 29.62 | 46.00 | -16.38 | Peak |
| 6 | 519.850 | 38.00 | -9.56 | 28.44 | 46.00 | -17.56 | Peak |

**SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)**

Compliance Certification Services
47173 Benicia Street
Fremont, CA 94538
Tel: (510) 771-1000
Fax: (510) 661-0888

Data#: 12 File#: 08U12316.EMI Date: 02-04-2009 Time: 13:43:23




Trace: 9 Ref Trace:

Condition: FCC CLASS-B VERTICAL
Test Operator:: Devin Chang
Project #: : 08U12316
Company: : Palm
Configuration:: EUT with AC Adapter
Mode: : Normal Mode
Target: : FCC Class B

Page: 1

| | Freq | Read Level | Factor | Level | Limit Line | Over Limit | Remark |
|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | |
| 1 | 44.550 | 57.32 | -20.69 | 36.63 | 40.00 | -3.37 | QP |
| 2 | 44.550 | 61.17 | -21.59 | 39.58 | 40.00 | -0.42 | Peak |
| 3 | 83.350 | 54.50 | -23.62 | 30.88 | 40.00 | -9.12 | Peak |
| 4 | 220.120 | 44.00 | -17.62 | 26.38 | 46.00 | -19.62 | Peak |
| 5 | 393.750 | 45.17 | -12.81 | 32.36 | 46.00 | -13.64 | Peak |
| 6 | 409.270 | 40.67 | -12.38 | 28.29 | 46.00 | -17.71 | Peak |
| 7 | 425.760 | 40.17 | -11.90 | 28.27 | 46.00 | -17.73 | Peak |
| 8 | 519.850 | 38.50 | -9.56 | 28.94 | 46.00 | -17.06 | Peak |

# 9. AC POWER LINE CONDUCTED EMISSIONS

**LIMITS**

FCC §15.207 (a)

RSS-Gen 7.2.2

| Frequency of Emission (MHz) | Conducted Limit (dBuV) | |
|---|---|---|
| | Quasi-peak | Average |
| 0.15-0.5 | 66 to 56 * | 56 to 46 * |
| 0.5-5 | 56 | 46 |
| 5-30 | 60 | 50 |

* Decreases with the logarithm of the frequency.

**TEST PROCEDURE**

ANSI C63.4

**RESULTS**

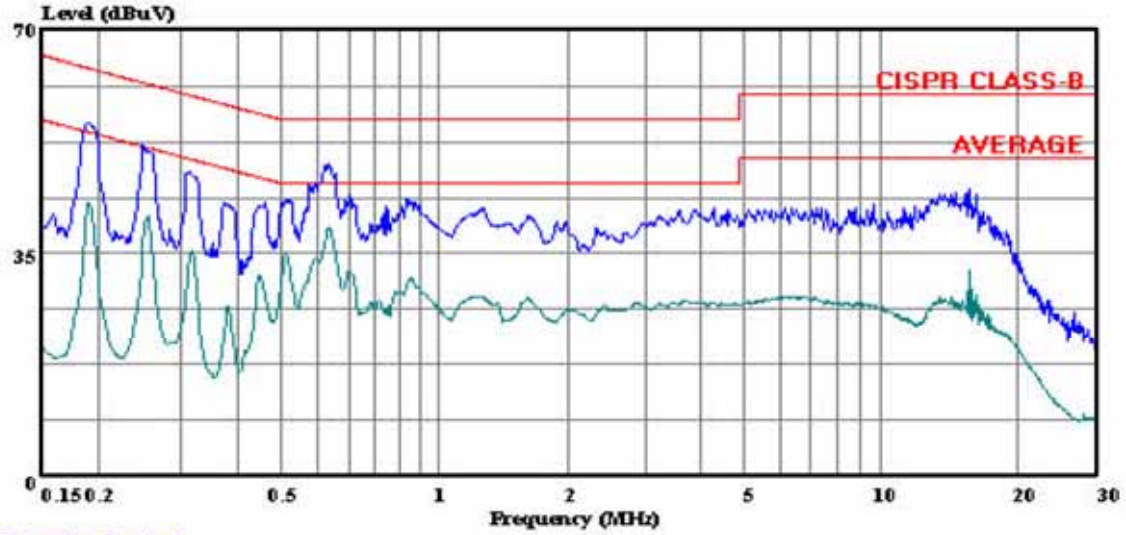
**6 WORST EMISSIONS**

| CONDUCTED EMISSIONS DATA (115VAC 60Hz) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Freq.** | **Reading** | | | **Closs** | **Limit** | **FCC_B** | **Margin** | | **Remark** |
| **(MHz)** | **PK (dBuV)** | **QP (dBuV)** | **AV (dBuV)** | **(dB)** | **QP** | **AV** | **QP (dB)** | **AV (dB)** | **L1 / L2** |
| 0.19 | 55.51 | -- | 42.98 | 0.00 | 64.08 | 54.08 | -8.57 | -11.10 | L1 |
| 0.63 | 49.12 | -- | 39.01 | 0.00 | 56.00 | 46.00 | -6.88 | -6.99 | L1 |
| 15.89 | 45.19 | -- | 32.29 | 0.00 | 60.00 | 50.00 | -14.81 | -17.71 | L1 |
| 0.19 | 47.17 | -- | 33.56 | 0.00 | 64.08 | 54.08 | -16.91 | -20.52 | L2 |
| 0.63 | 45.14 | -- | 30.49 | 0.00 | 56.00 | 46.00 | -10.86 | -15.51 | L2 |
| 15.97 | 48.74 | -- | 35.07 | 0.00 | 60.00 | 50.00 | -11.26 | -14.93 | L2 |
| 6 Worst Data | | | | | | | | | |

**LINE 1 RESULTS**

Compliance Certification Services
47173 Benicia Street
Fremont, CA 94538
Tel: (510) 771-1000
Fax: (510) 661-0888

Data#: 7 File#: 08U12316.EMI Date: 02-05-2009 Time: 10:03:45




(Line Conduction)

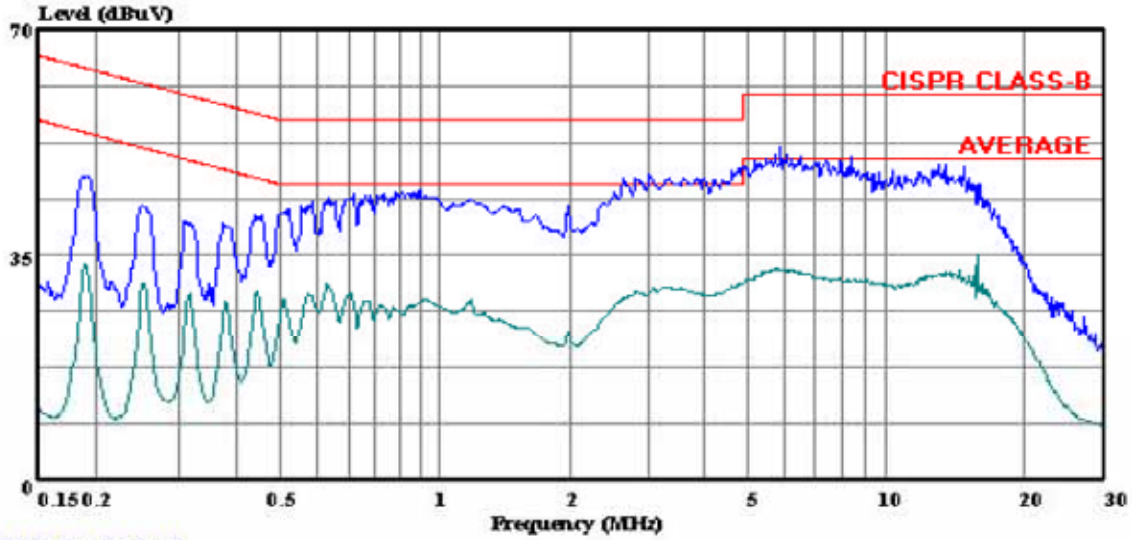
Trace: 5 Ref Trace:

Condition: CISPR CLASS-B
Test Operator:: Devin Chang
Project #: : 08U12316
Company: : Palm
Configuration:: EUT(Standard backcover) powered by AC adapter
Mode: : Normal(AC Adapter P/N:157-10108-00 / 157-10114-00)
Target: : FCC Class B
Voltage: : 115VAC / 60Hz
: L1: Peak (Blue), Average (Green)

**LINE 2 RESULTS**

Compliance Certification Services
47173 Benicia Street
Fremont, CA 94538
Tel: (510) 771-1000
Fax: (510) 661-0888

Data#: 14 File#: 08U12316.EMI Date: 02-05-2009 Time: 10:31:16




(Line Conduction)

Trace: 12 Ref Trace:

Condition: CISPR CLASS-B
Test Operator:: Devin Chang
Project #: : 08U12316
Company: : Palm
Configuration:: EUT(Standard backcover) powered by AC adapter
Mode: : Normal(AC Adapter P/N:157-10108-00 / 157-10114-00)
Target: : FCC Class B
Voltage: : 115VAC / 60Hz
: L2: Peak (Blue), Average (Green)