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

# CERTIFICATION TEST REPORT

**FOR**

**CDMA/1xEVDO Rel 0 /EVDO Rev. A with Bluetooth Phone**

**MODEL NUMBER: P120EWW**

**FCC ID: O8F-PIXE**

**IC: 39Ø5A-PIXE**

**REPORT NUMBER: 08U12821-2, REVISION A**

**ISSUE DATE: OCTOBER 15, 2009**

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

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NVLAP LAB CODE 200065-0

Revision History

| Rev. | Issue Date | Revisions | Revised By |
|---|---|---|---|
| -- | 09/29/09 | Initial Issue | T. Chan |
| A | 10/15/09 | Added 20dB Bandwidth In Sections 7.11 & 7.21, and Removed MPE Section | T. Chan |

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# 1. ATTESTATION OF TEST RESULTS

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

**EUT DESCRIPTION:** CDMA/1xEVDO Rel 0 /EVDO Rev. A with Bluetooth Phone

**MODEL:** P120EWW

**SERIAL NUMBER:** Conducted (PD1CS8N91947), Radiated (PD1CS8N92028)

**DATE TESTED:** SEPTEMBER 28-30, 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. Measurement Uncertainties were not taken into account and are published for informational purposes only. 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. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.
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Approved & Released For CCS By:

THU CHAN
EMC MANAGER
COMPLIANCE CERTIFICATION SERVICES

Tested By:

CHIN PANG
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. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)

36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

## 4.3. MEASUREMENT UNCERTAINTY

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

| PARAMETER | UNCERTAINTY |
|---|---|
| Conducted Disturbance, 0.15 to 30 MHz | 3.52 dB |
| Radiated Disturbance, 30 to 1000 MHz | 4.94 dB |

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

# 5. EQUIPMENT UNDER TEST

## 5.1. DESCRIPTION OF EUT

The EUT is a CDMA/1xEVDO Rel 0 /EVDO Rev. A with 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 | 157-10130-00 |
| 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 source #1 (Cell Origin Japan)<br>Type: Rechargeable Li-ion Polymer<br>Rating: 3.7Vdc, 1150mAh (minimum) | Palm | 157-10119-00 |
| Battery source #2 (Cell Origin Korea)<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 | 180-10647-00 |

## 5.2. MAXIMUM OUTPUT POWER

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

| Frequency Range (MHz) | Mode | Output Power (dBm) | Output Power (mW) |
|---|---|---|---|
| 2402 - 2480 | GFSK | 2.57 | 1.81 |
| 2402 - 2480 | 8PSK | 3.06 | 2.02 |

## 5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes a PCB integrated antenna, with a maximum gain of 1 dBi.

## 5.4. SOFTWARE AND FIRMWARE

The EUT driver software installed during testing was Palm WebOS.

The test utility software used during testing was Build 816, BT MAC: 00:1D:FE:7A:15:D2.

## 5.5. WORST-CASE CONFIGURATION AND MODE

The worst-case channel is determined as the channel with the highest output power.

For the fundamental investigation, since the EUT is a portable device that has three orientations; therefore X, Y and Z orientations have been investigated, also with AC/DC adapter, and inductive charging dock position, and the worst case was found to be at Z orientation with AC/DC adapter.

For the radiated emissions below 1GHz and AC line conducted tests, both worst configurations were tested as EUT with AC/DC adapter and EUT with inductive charging dock.

## 5.6. DESCRIPTION OF TEST SETUP

**SUPPORT EQUIPMENT**

| PERIPHERAL SUPPORT EQUIPMENT LIST | | | | |
|---|---|---|---|---|
| **Description** | **Manufacturer** | **Model** | **Serial Number** | **FCC ID** |
| AC Adaptor | PALM | 157-10130-00 | N/A | DOC |
| Earphone | PALM | NA | N/A | DOC |

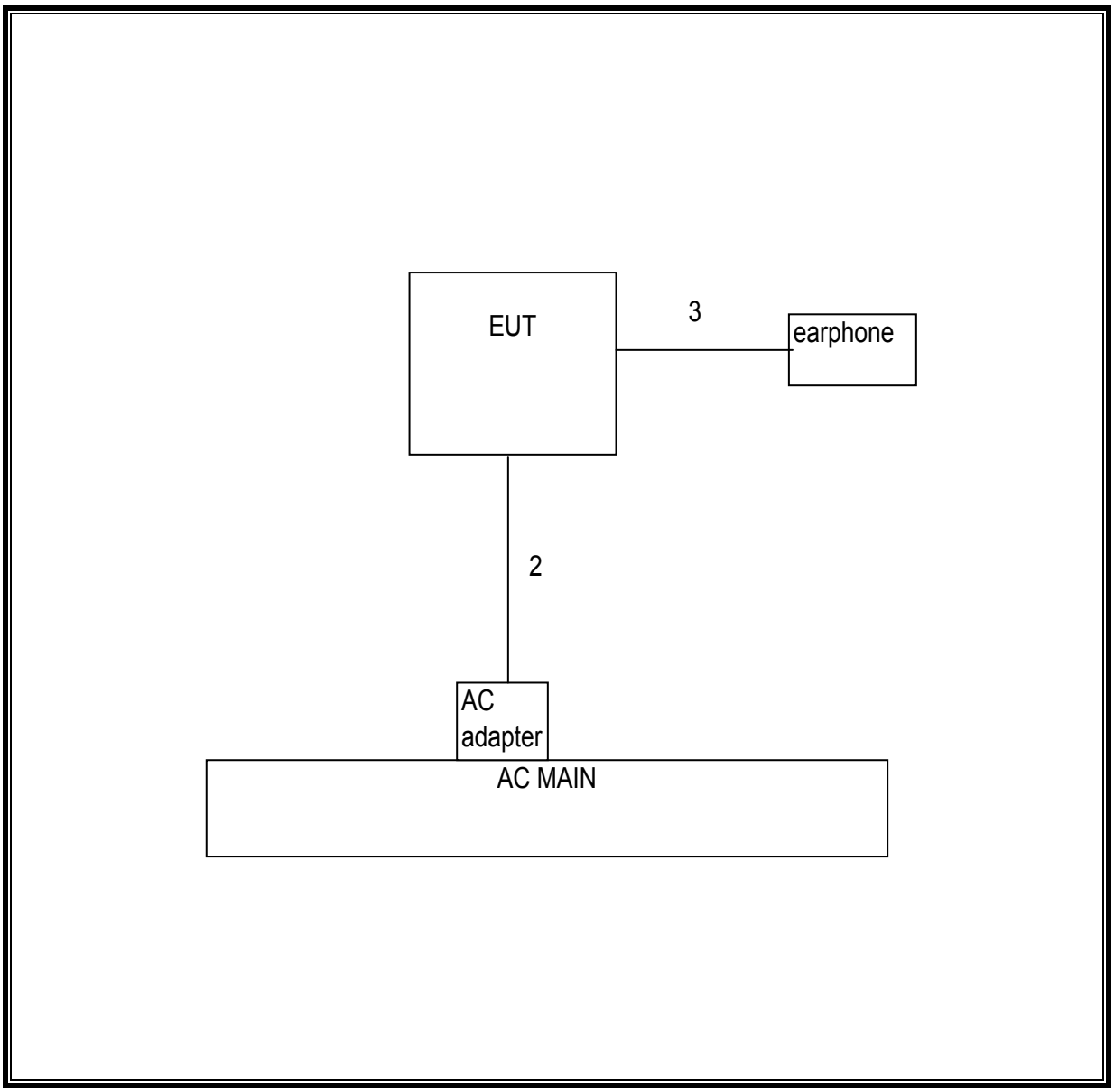
**I/O CABLES**

| I/O CABLE LIST | | | | | | |
|---|---|---|---|---|---|---|
| **Cable No.** | **Port** | **# of Identica Ports** | **Connector Type** | **Cable Type** | **Cable Length** | **Remarks** |
| 1 | AC | 1 | USB | Un-shielded | 1.5m | N/A |
| 2 | DC | 1 | DC | Un-shielded | 1.5m | N/A |
| 3 | Ear phone | 1 | jack | Un-shielded | 1.2m | N/A |

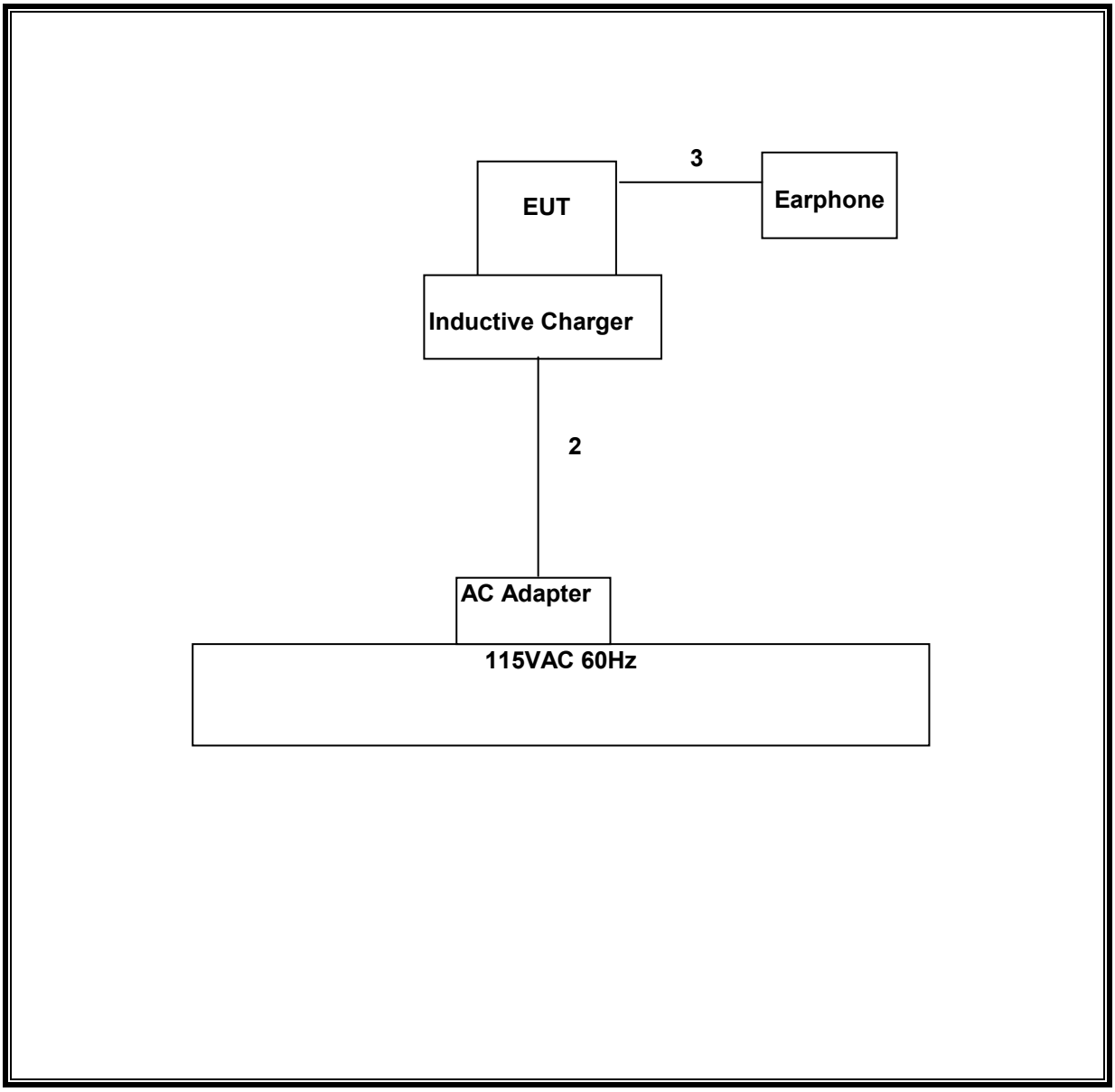
**TEST SETUP**

The EUT is a stand alone unit. Test software exercised the radio card.

**SETUP DIAGRAM FOR TESTS**



**SETUP DIAGRAM FOR EUT WITH INDUCTIVE CHARGING DOCK**



# 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** |
| Spectrum Analyzer, 26.5 GHz | Agilent / HP | E4440A | C01161 | 12/09/10 |
| Preamplifier, 26.5 GHz | Agilent / HP | 8449B | C01063 | 02/04/10 |
| Antenna, Bilog, 2 GHz | Sunol Sciences | JB1 | C01016 | 01/14/10 |
| Preamplifier, 1300 MHz | Agilent / HP | 8447D | C00778 | 12/16/09 |
| Antenna, Horn, 18 GHz | EMCO | 3115 | C00783 | 01/29/10 |
| EMI Test Receiver, 30 MHz | R & S | ESHS 20 | N02396 | 05/06/11 |
| LISN, 30 MHz | FCC | LISN-50/250-25-2 | N02625 | 10/29/09 |
| Peak Power Meter | Boonton | 4541 | C01189 | 01/15/10 |
| Peak Power Sensor | Boonton | 57318 | NA | 02/02/10 |
| Reject Filter, 2.4-2.5 GHz | Micro-Tronics | BRM50702 | N02685 | CNR |

# 7. ANTENNA PORT TEST RESULTS

## 7.1. BLUETOOTH GFSK MODE IN THE 2.4 GHz BAND

### 7.1.1. 20 dB AND 99% BANDWIDTH

**LIMITS**

None; for reporting purposes only.

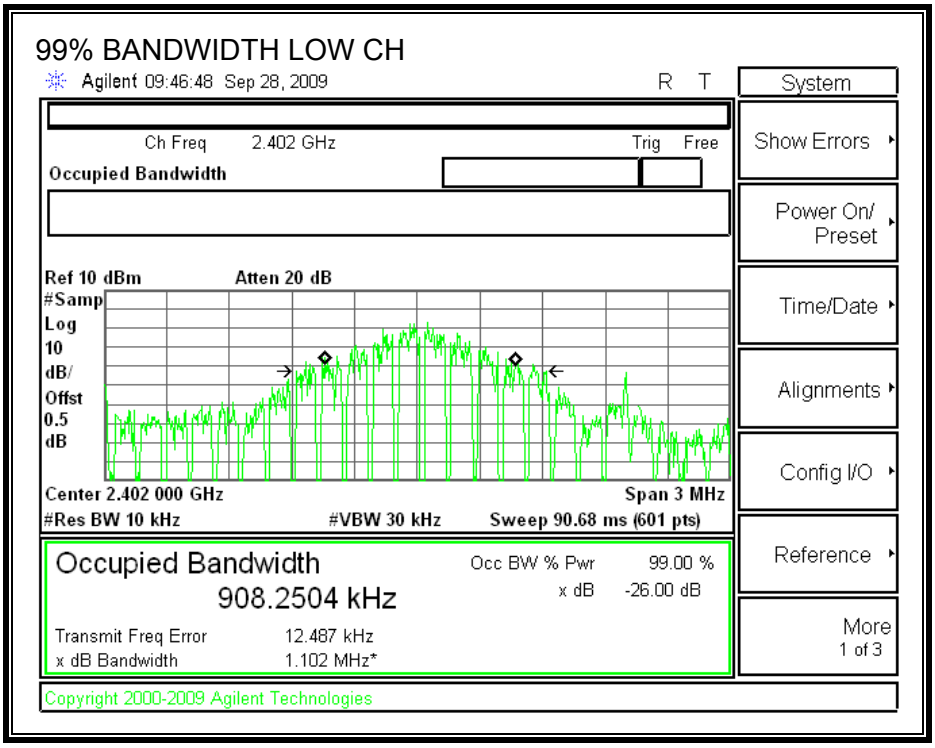
**TEST PROCEDURE**

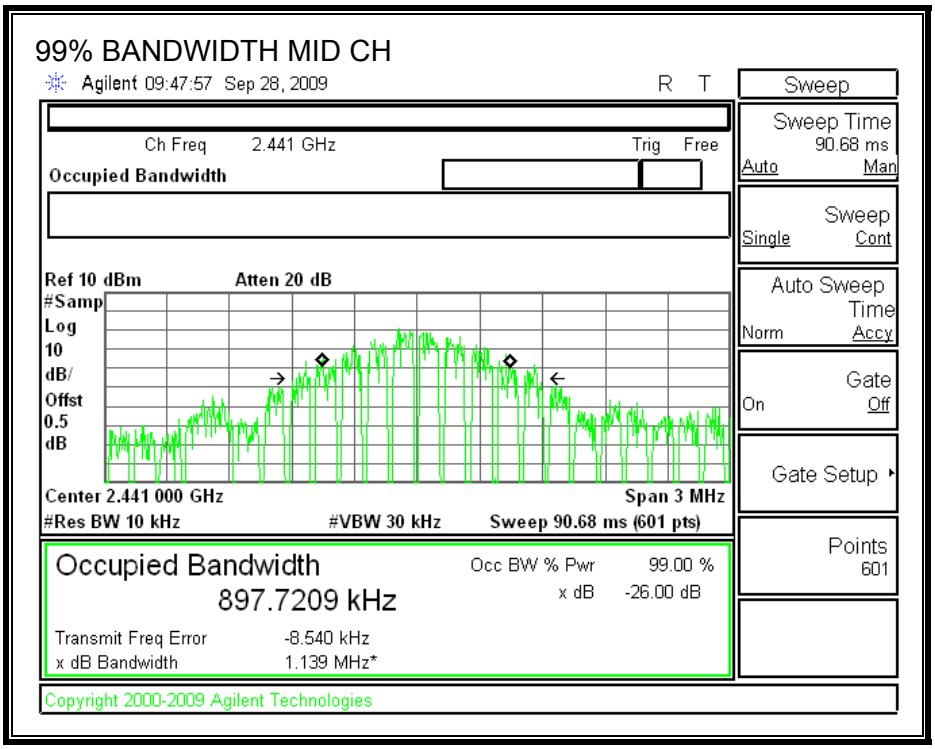
The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

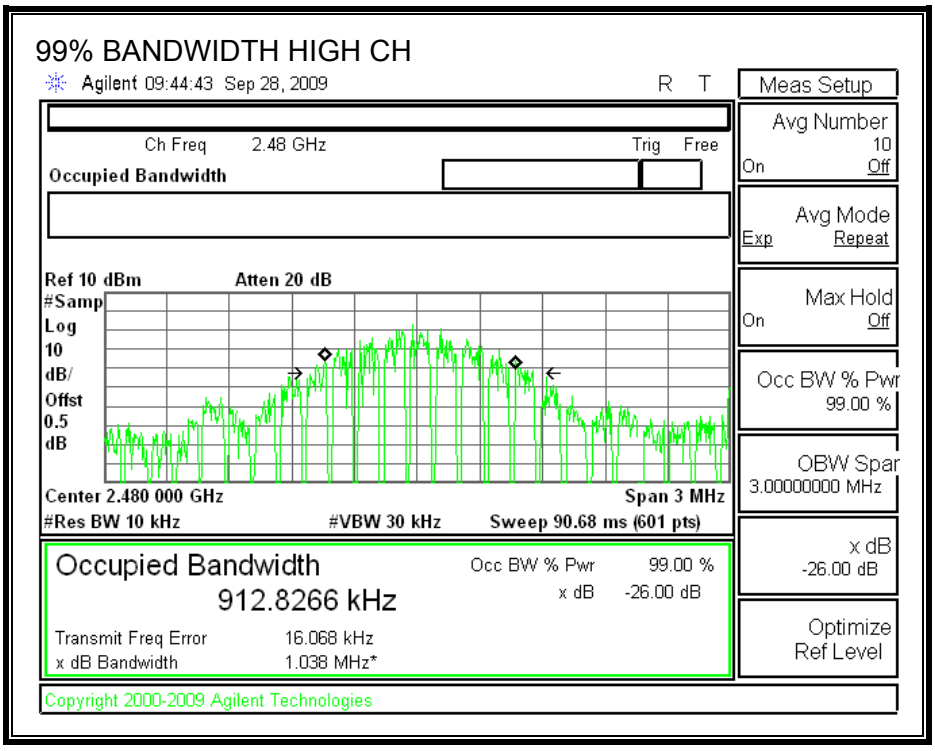
**RESULTS**

| Channel | Frequency (MHz) | 99% Bandwidth (KHz) | 20dB Bandwidth (KHz) |
|---|---|---|---|
| Low | 2402 | 908.2504 | 940 |
| Middle | 2441 | 897.7209 | 943 |
| High | 2480 | 912.8266 | 940 |

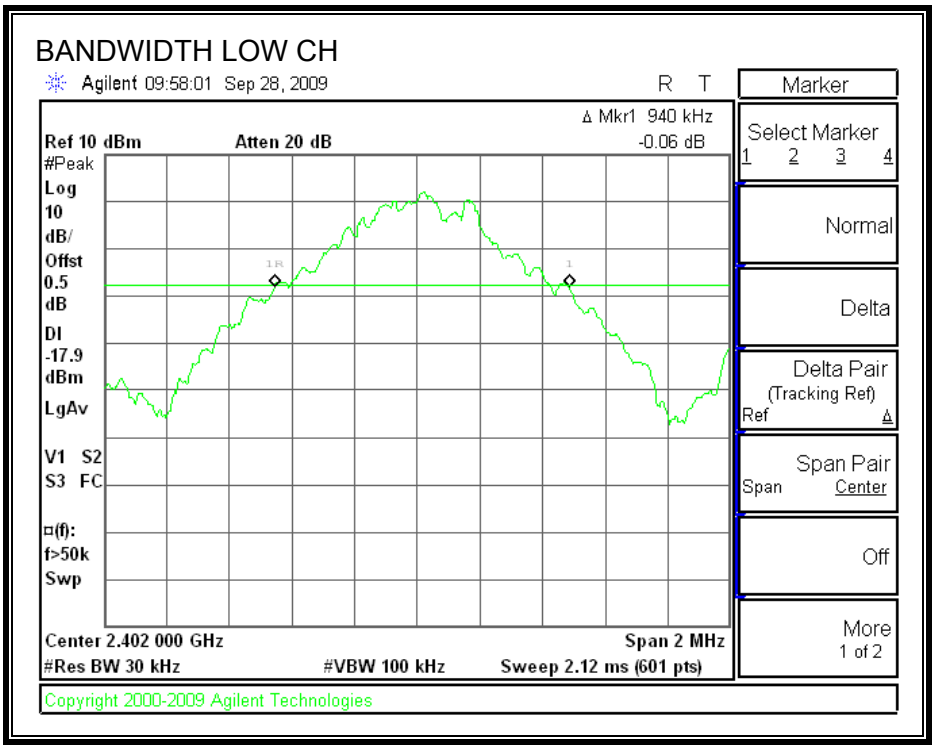
**99% BANDWIDTH**

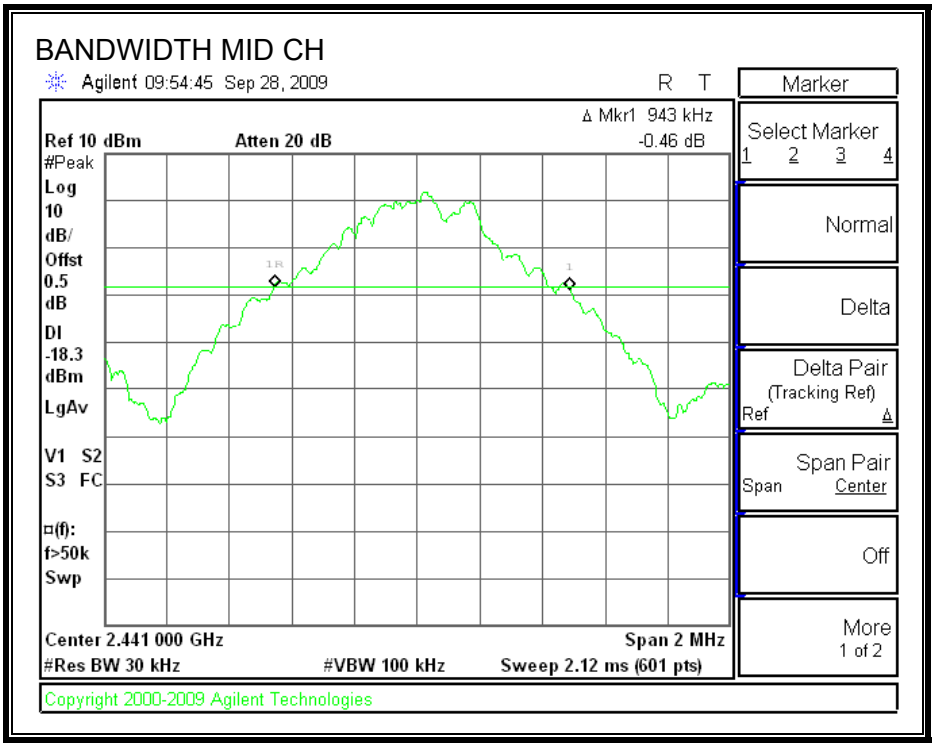


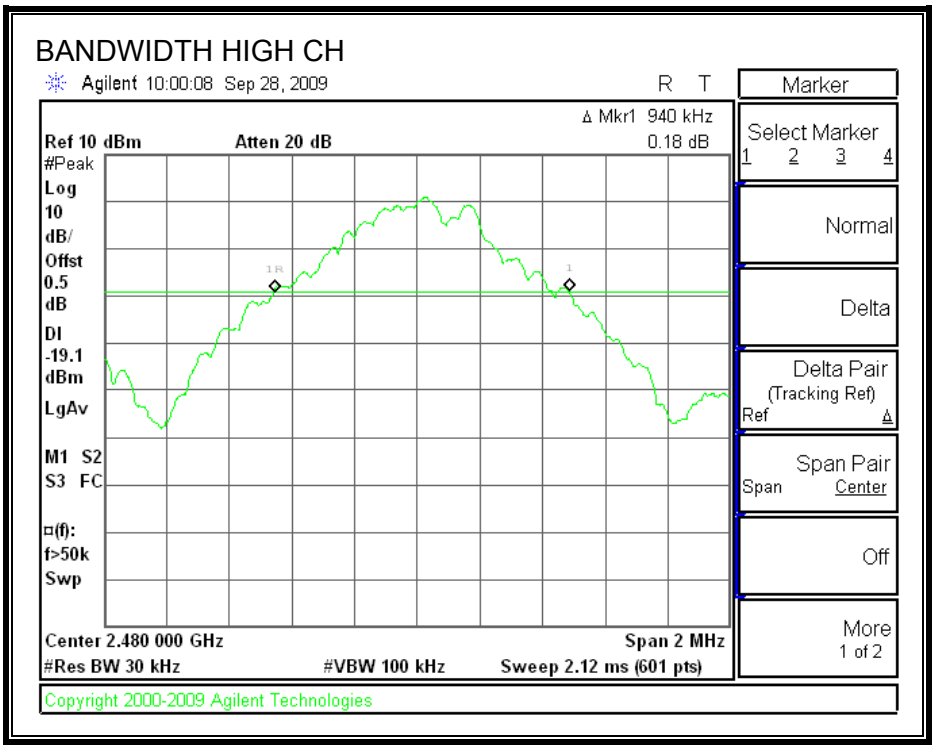





**20 dB BANDWIDTH**







## 7.1.2. HOPPING FREQUENCY SEPARATION

**LIMIT**

FCC §15.247 (a) (1)

IC RSS-210 A8.1 (b)

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hoping channel, whichever is greater.

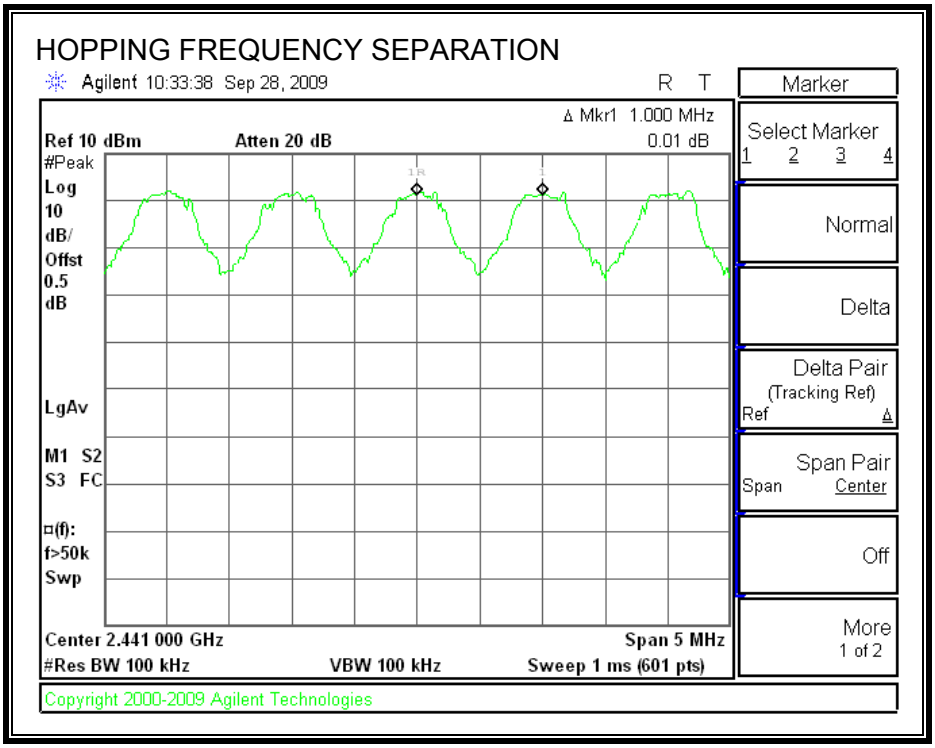
Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

**TEST PROCEDURE**

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

**RESULTS**

**HOPPING FREQUENCY SEPARATION**



### 7.1.3. NUMBER OF HOPPING CHANNELS

**LIMIT**

FCC §15.247 (a) (1) (iii)

IC RSS-210 A8.1 (d)

Frequency hopping systems in the 2400 – 2483.5 MHz band shall use at least 15 non-overlapping channels.

**TEST PROCEDURE**

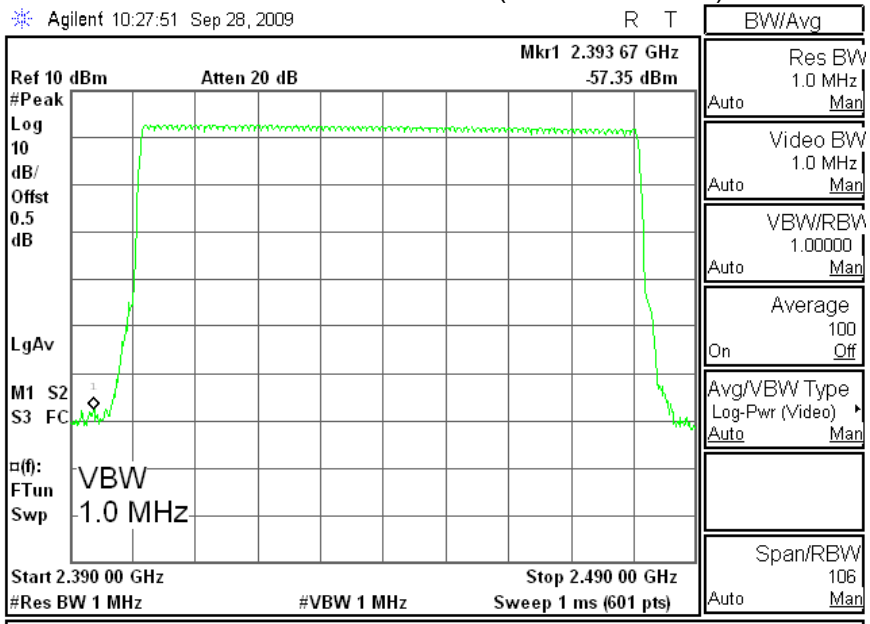
The transmitter output is connected to a spectrum analyzer. The span is set to cover the entire authorized band, in either a single sweep or in multiple contiguous sweeps. The RBW is set to a maximum of 1 % of the span. The analyzer is set to Max Hold.

**RESULTS**

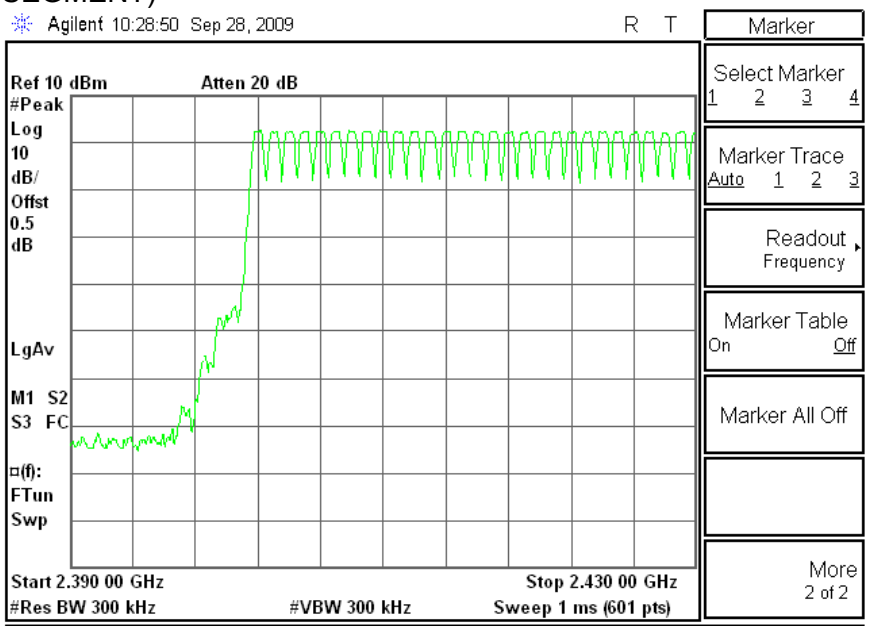
79 Channels observed.

**NUMBER OF HOPPING CHANNELS**

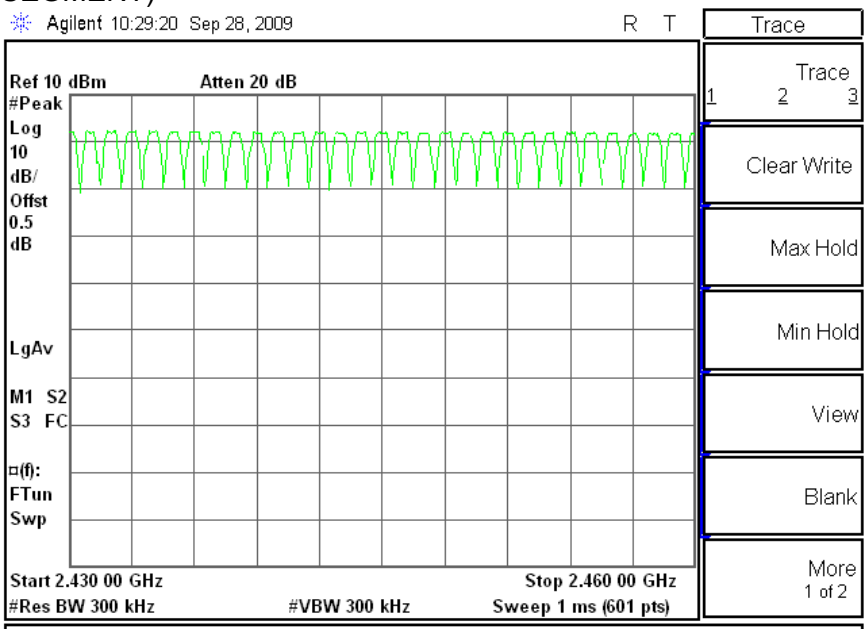
NUMBER OF HOPPING CHANNELS (100 MHZ SPAN)



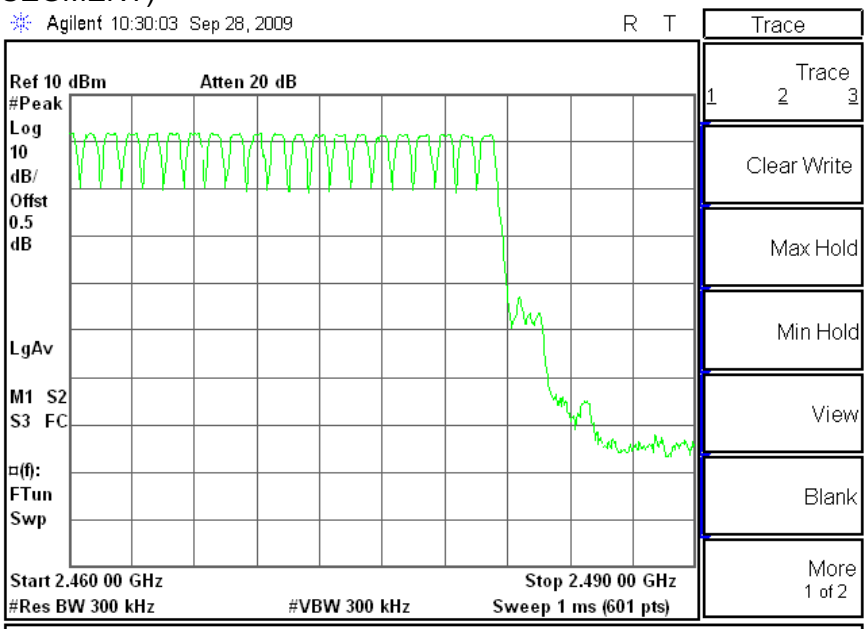

NUMBER OF HOPPING CHANNELS (30 MHZ SPAN, FIRST SEGMENT)



NUMBER OF HOPPING CHANNELS (30 MHZ SPAN, SECOND SEGMENT)




NUMBER OF HOPPING CHANNELS (30 MHZ SPAN, THIRD SEGMENT)



## 7.1.4. AVERAGE TIME OF OCCUPANCY

**LIMIT**

FCC §15.247 (a) (1) (iii)

IC RSS-210 A8.1 (d)

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

**TEST PROCEDURE**

The transmitter output is connected to a spectrum analyzer. The span is set to 0 Hz, centered on a single, selected hopping channel. The width of a single pulse is measured in a fast scan. The number of pulses is measured in a 3.16 second scan, to enable resolution of each occurrence.

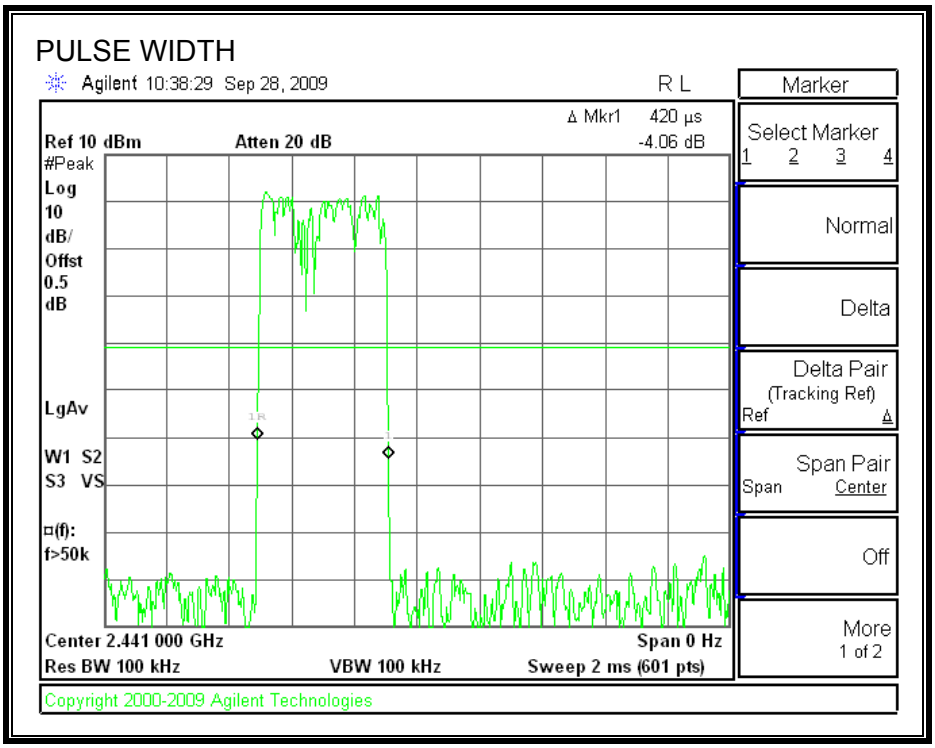
The average time of occupancy in the specified 31.6 second period (79 channels * 0.4 s) is equal to 10 * (# of pulses in 3.16 s) * pulse width.

**RESULTS**

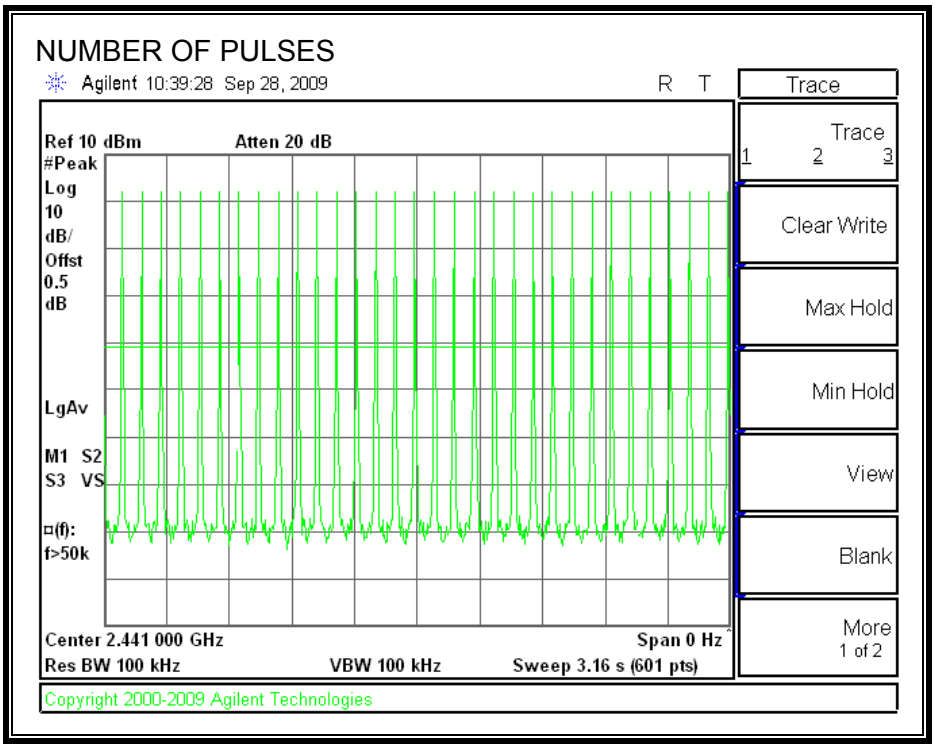
| DH Packet | Pulse Width (msec) | Number of Pulses in 3.16 seconds | Average Time of (sec) | Limit (sec) | Margin (sec) |
|---|---|---|---|---|---|
| DH1 | 0.42 | 32 | 0.134 | 0.4 | 0.266 |
| DH3 | 1.675 | 16 | 0.268 | 0.4 | 0.132 |
| DH5 | 2.933 | 10 | 0.293 | 0.4 | 0.107 |

**DH1**

**PULSE WIDTH**

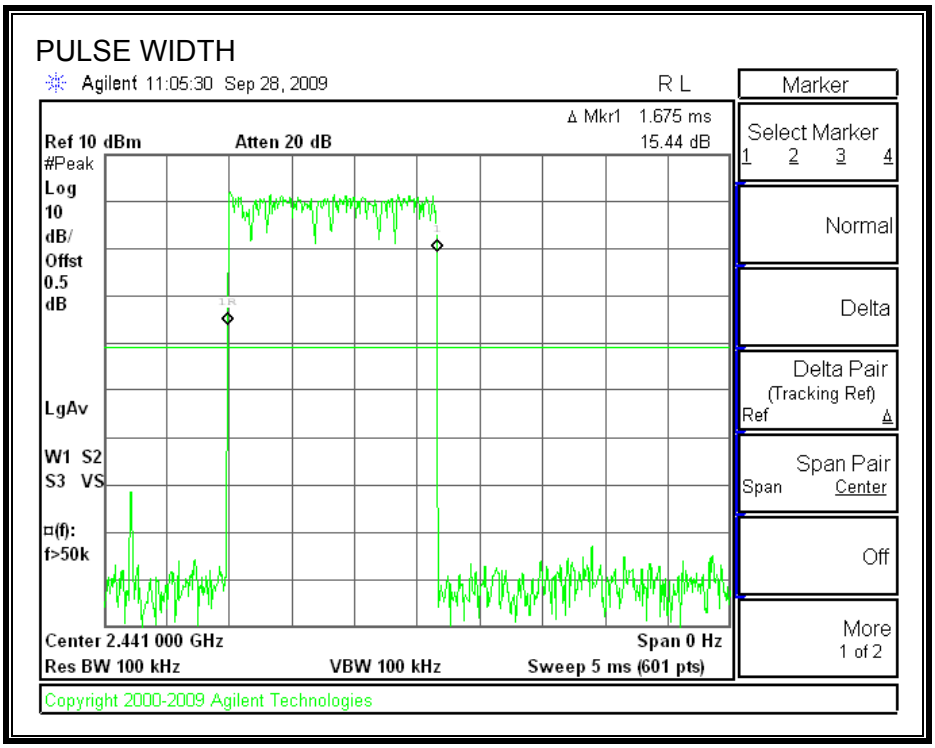



**NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD**

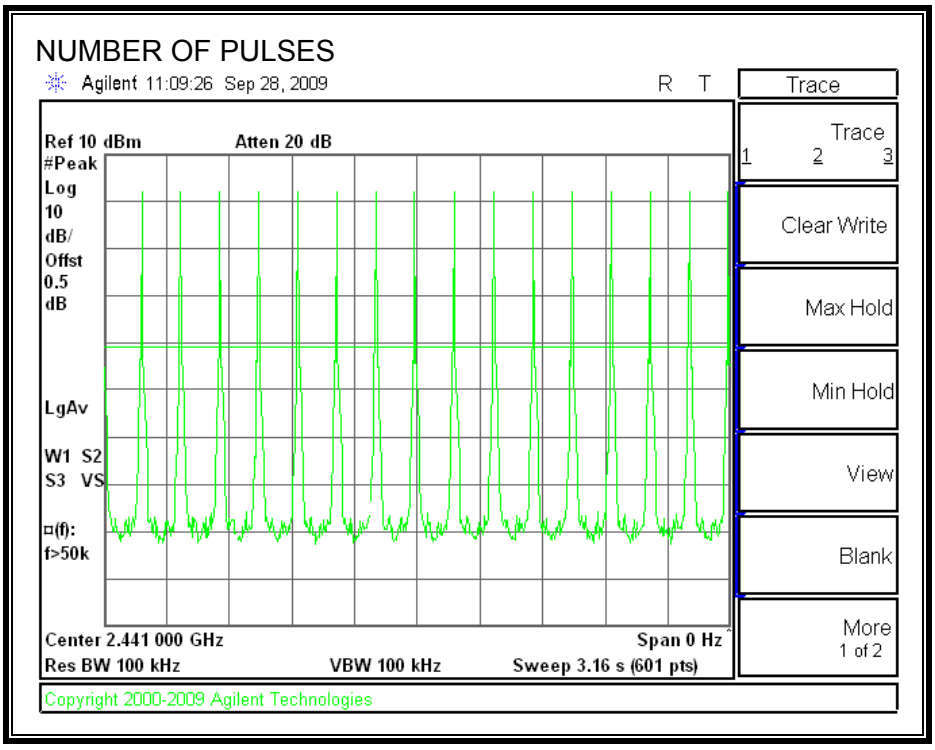


**DH3**

**PULSE WIDTH**

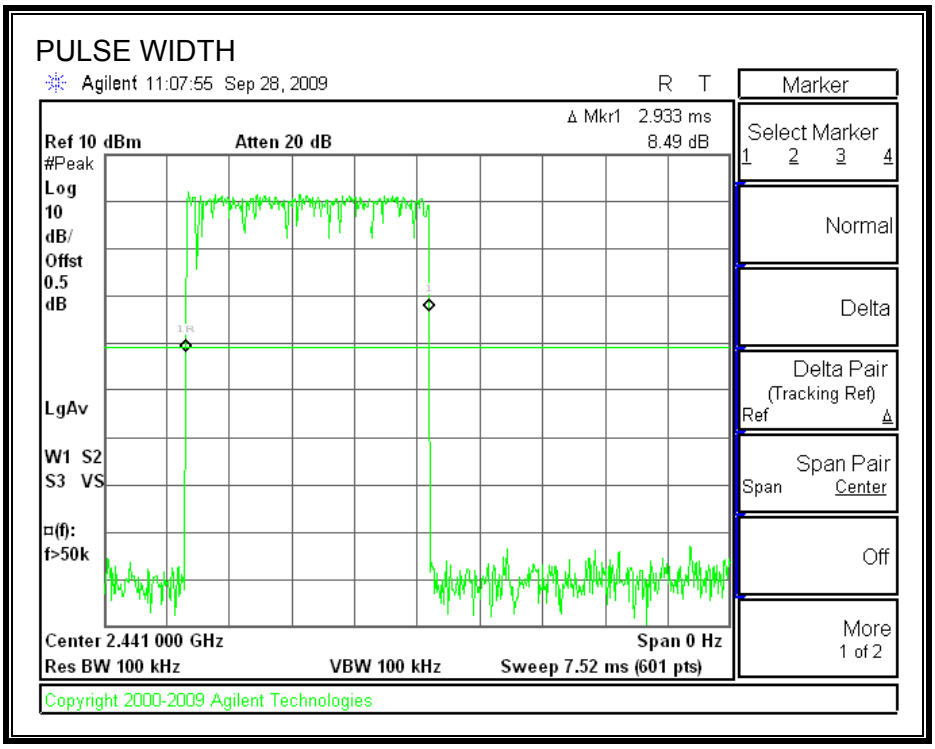



**NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD**

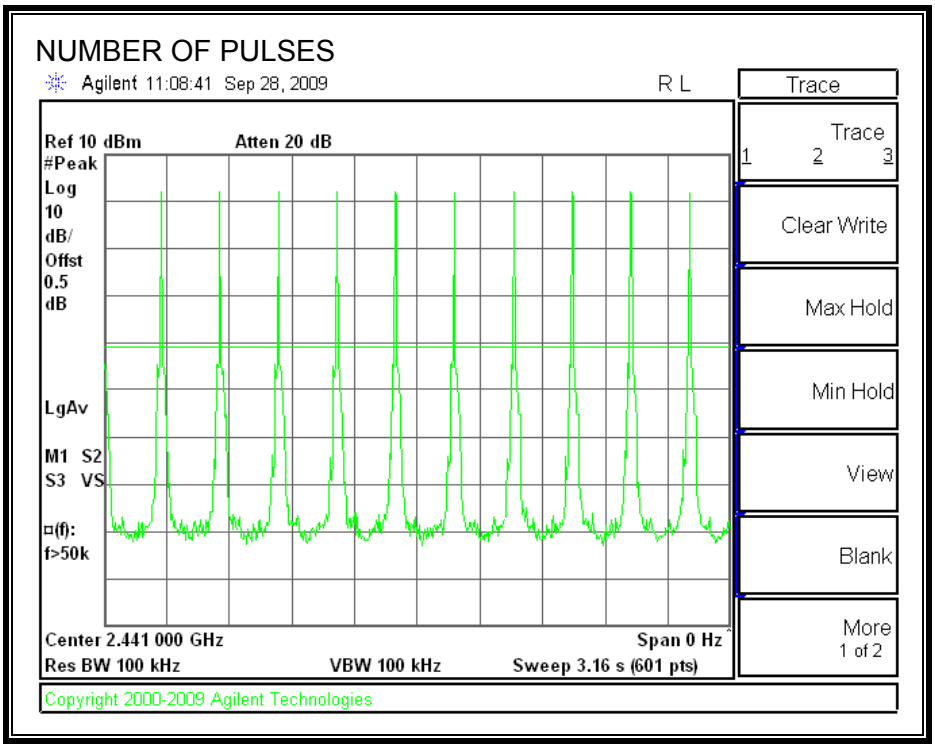


**DH5**

**PULSE WIDTH**




**NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD**



## 7.1.5. 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.

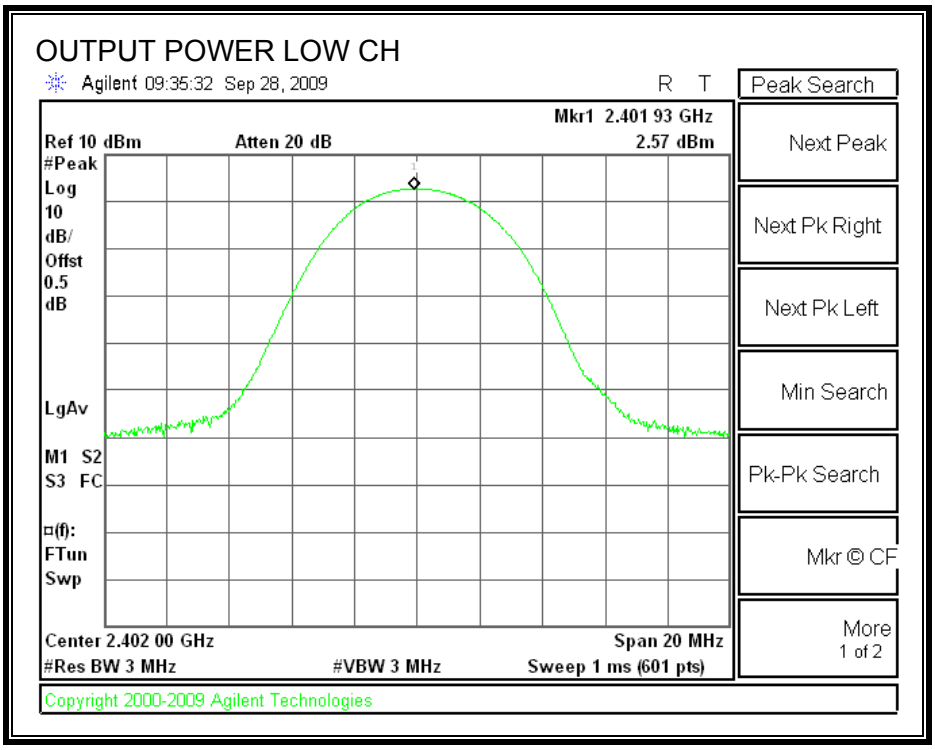
**TEST PROCEDURE**

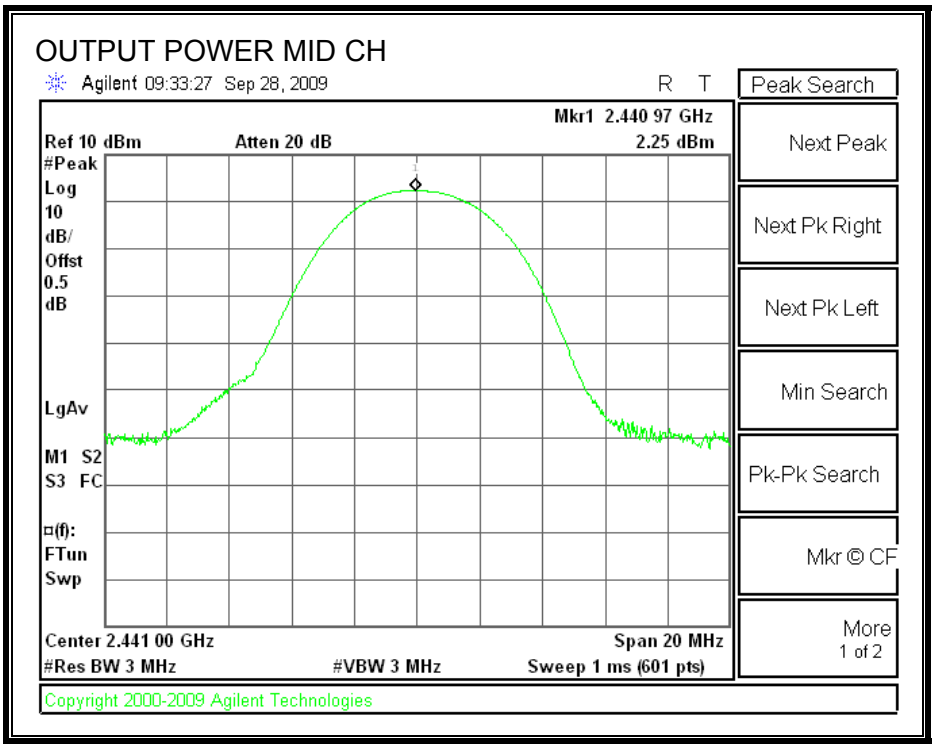
The transmitter output is connected to a spectrum analyzer the analyzer bandwidth is set to a value greater than the 20 dB bandwidth of the EUT.

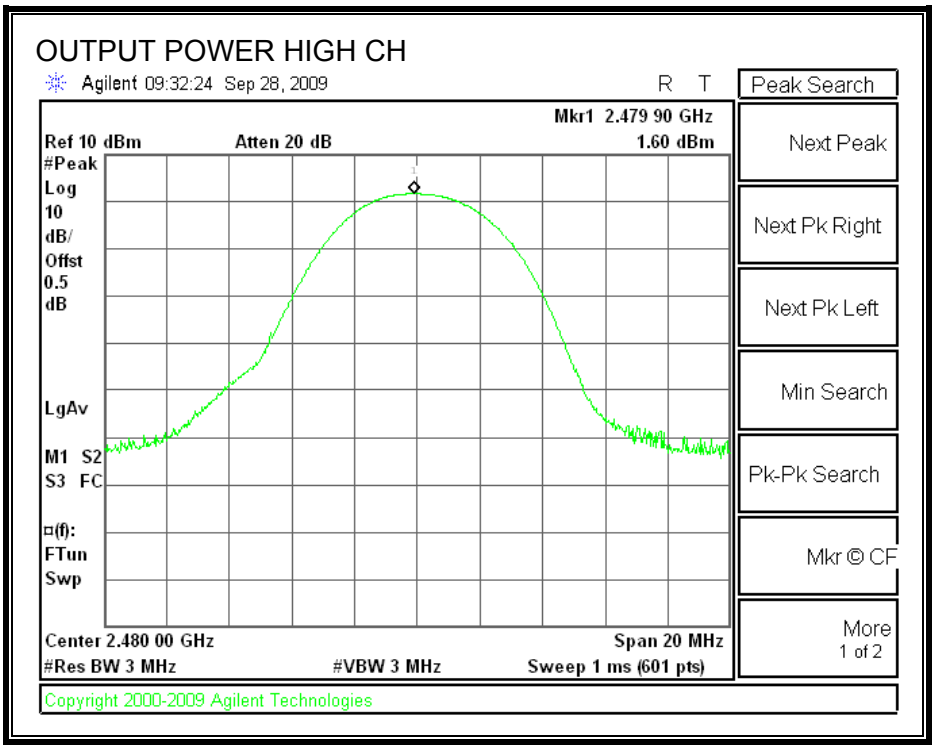
**RESULTS**

| Channel | Frequency (MHz) | Spectrum Analyzer Reading (dBm) | Limit (dBm) | Margin (dB) |
|---|---|---|---|---|
| Low | 2402 | 2.57 | 30 | -27.43 |
| Middle | 2441 | 2.25 | 30 | -27.75 |
| High | 2480 | 1.6 | 30 | -28.40 |

**OUTPUT POWER**





## 7.1.6. 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 0.5 dB was entered as an offset in the power meter to allow for direct reading of power.

| Channel | Frequency (MHz) | Power (dBm) |
|---|---|---|
| Low | 2402 | 2.41 |
| Middle | 2441 | 2.19 |
| High | 2480 | 1.56 |

## 7.1.7. 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.

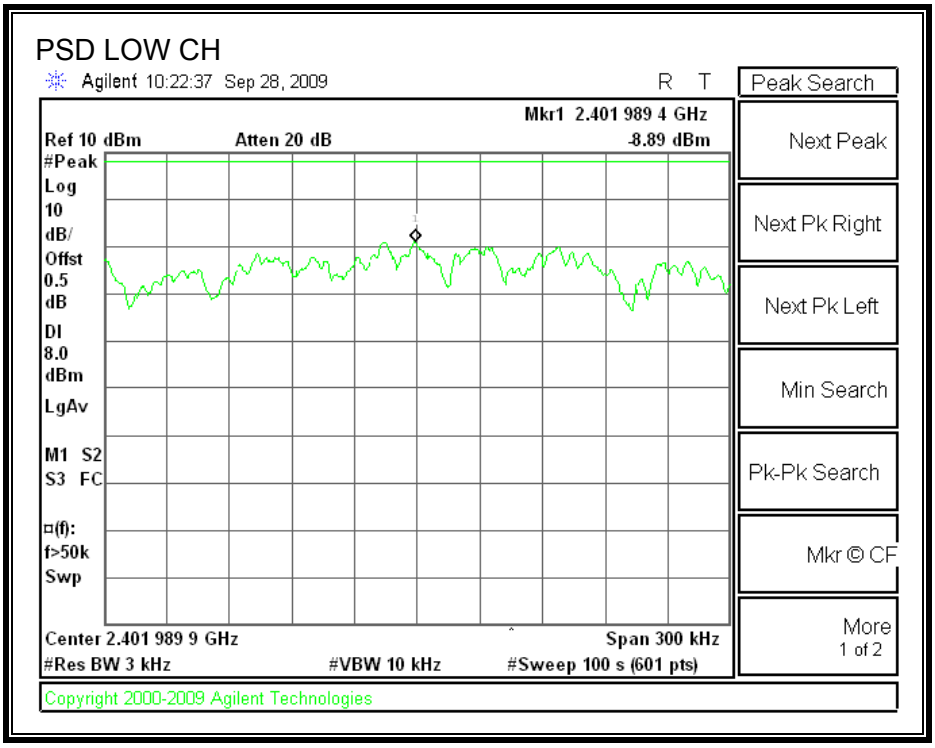
**TEST PROCEDURE**

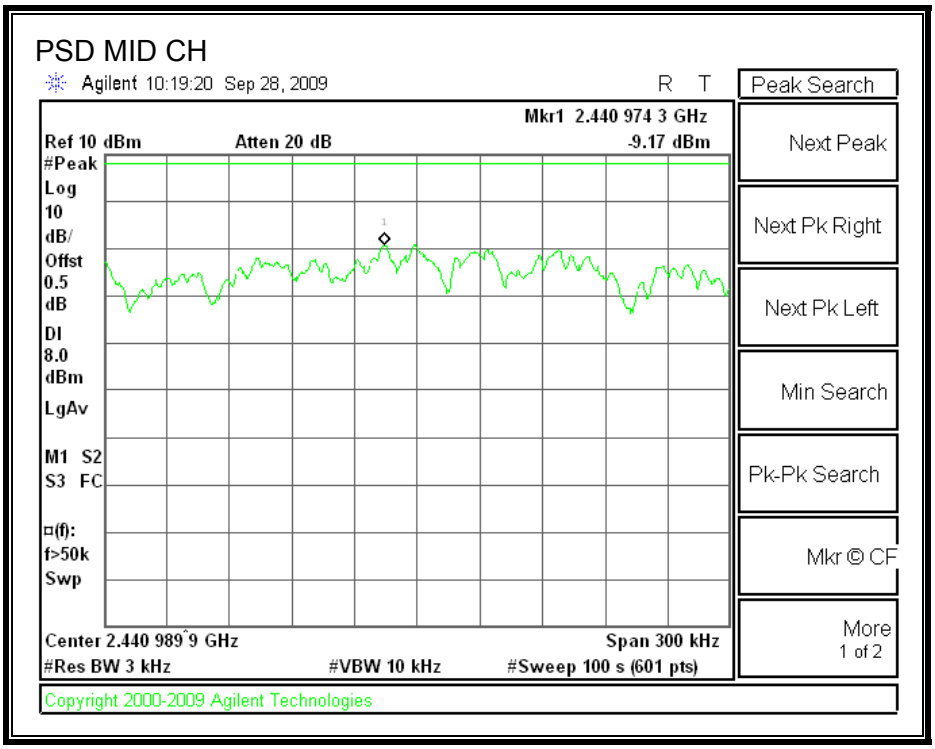
Output power was measured based on the use of a peak measurement, therefore the power spectral density was measured using PSD Option 1 in accordance with FCC document "Measurement of Digital Transmission Systems Operating under Section 15.247", March 23, 2005.

**RESULTS**

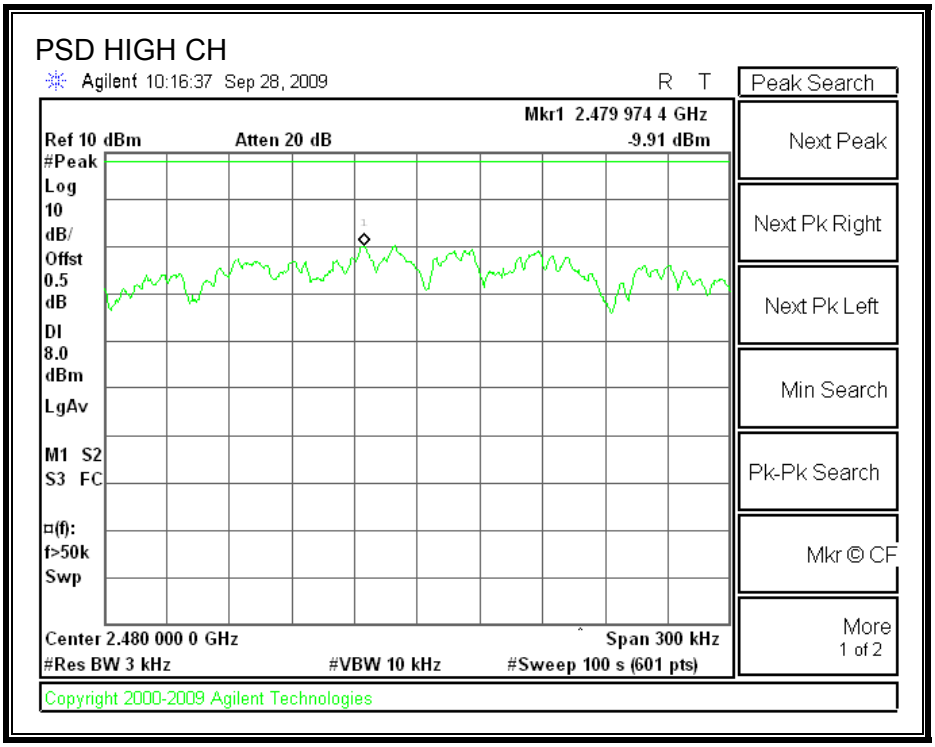
| Channel | Frequency (MHz) | PPSD (dBm) | Limit (dBm) | Margin (dB) |
|---|---|---|---|---|
| Low | 2402 | -8.89 | 8 | -16.89 |
| Middle | 2441 | -9.17 | 8 | -17.17 |
| High | 2480 | -9.91 | 8 | -17.91 |

**POWER SPECTRAL DENSITY**



PSD HIGH CH



## 7.1.8. 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.

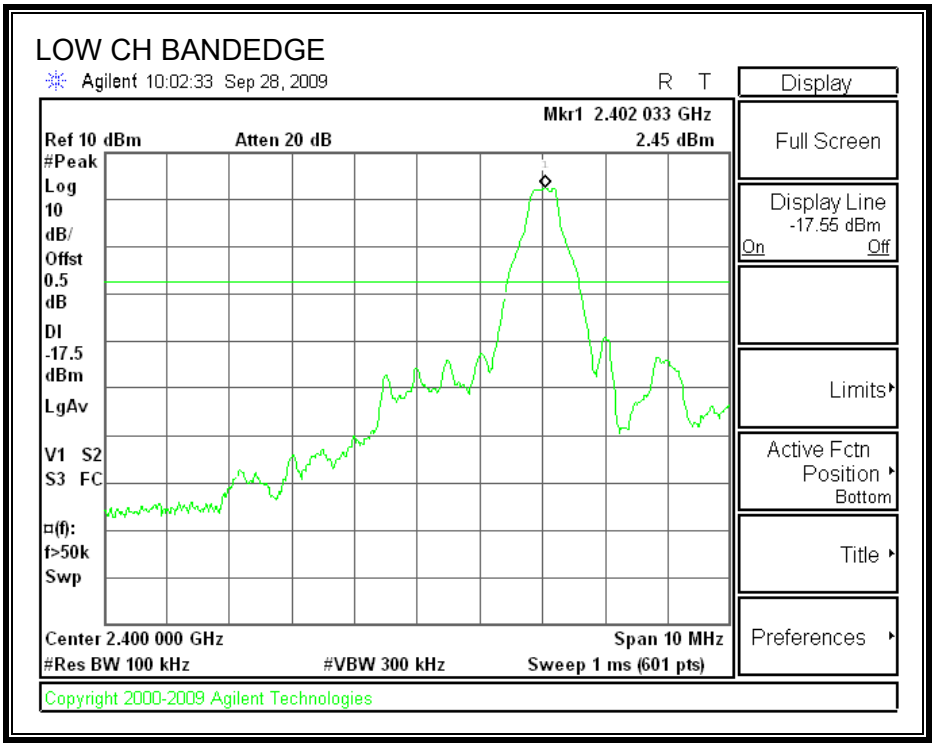
**TEST PROCEDURE**

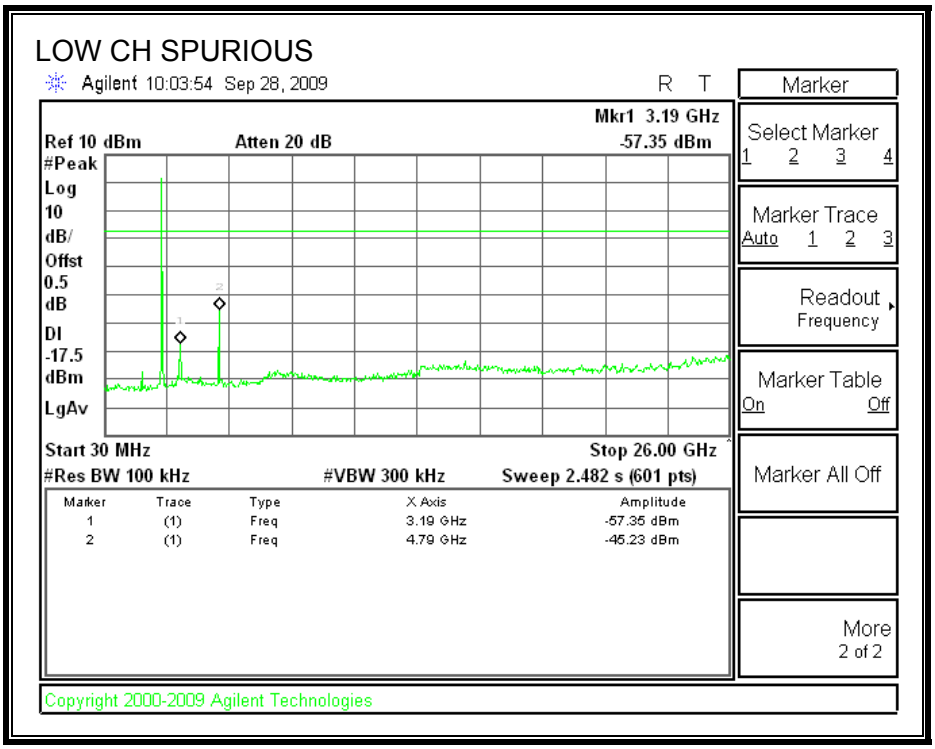
The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

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

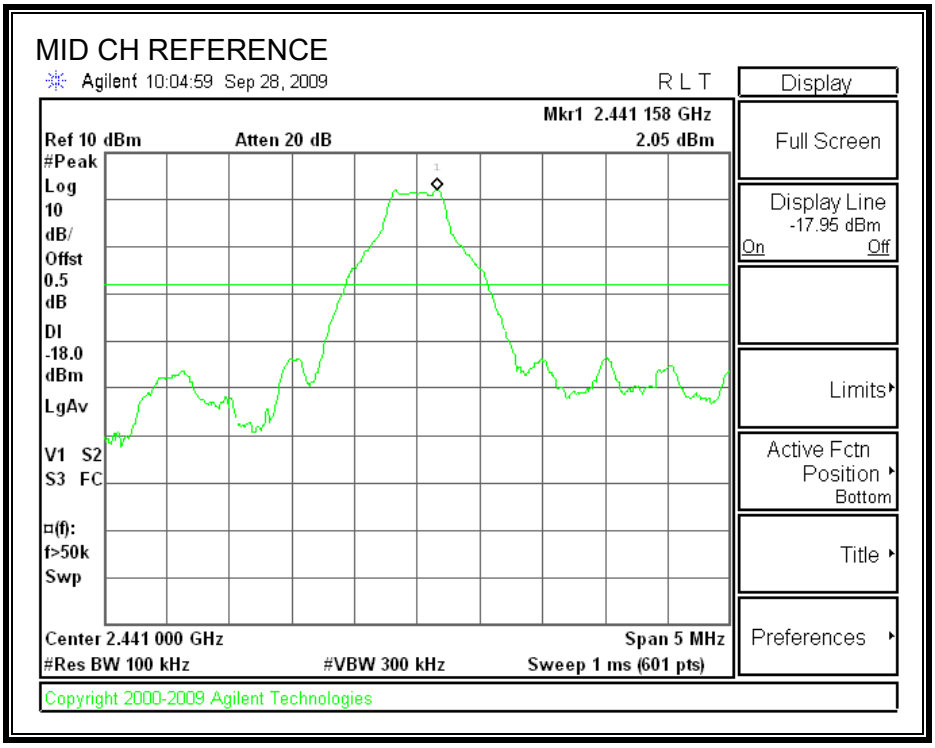
**RESULTS**

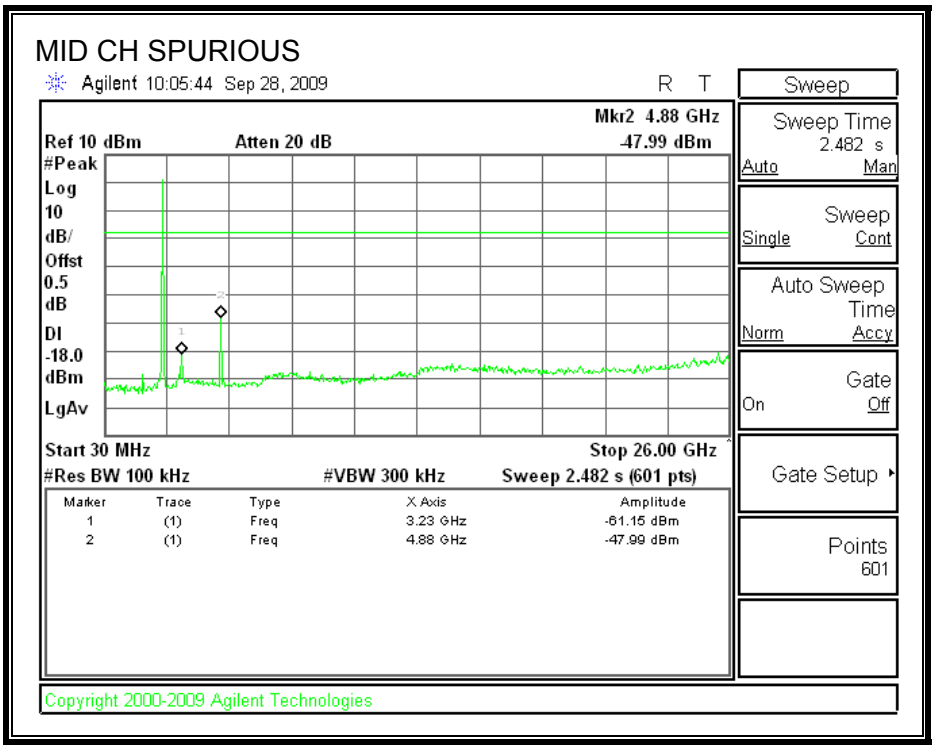
**SPURIOUS EMISSIONS, LOW CHANNEL**



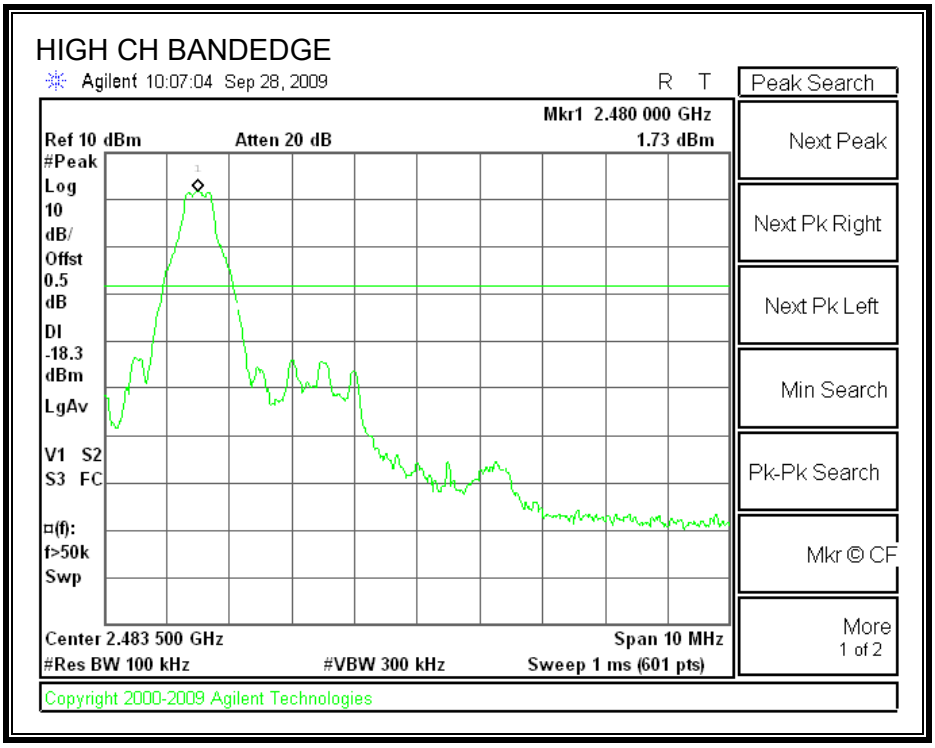



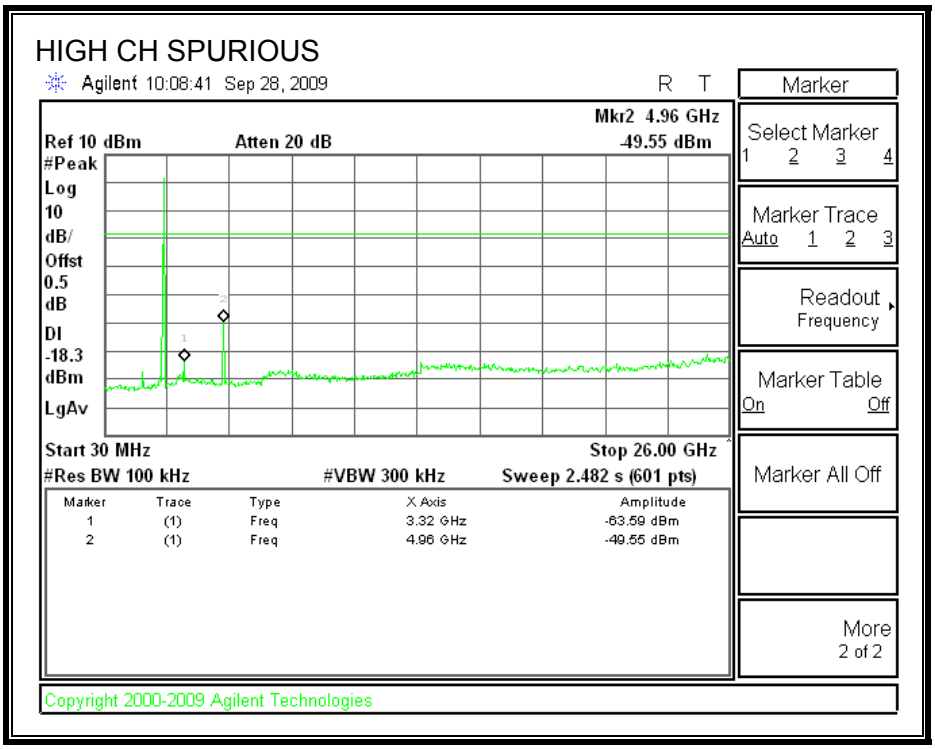
**SPURIOUS EMISSIONS, MID CHANNEL**



**SPURIOUS EMISSIONS, HIGH CHANNEL**



# 7.2. BLUETOOTH 8PSK MODE IN THE 2.4 GHz BAND

## 7.2.1. 20 dB AND 99% BANDWIDTH

**LIMITS**

None; for reporting purposes only.

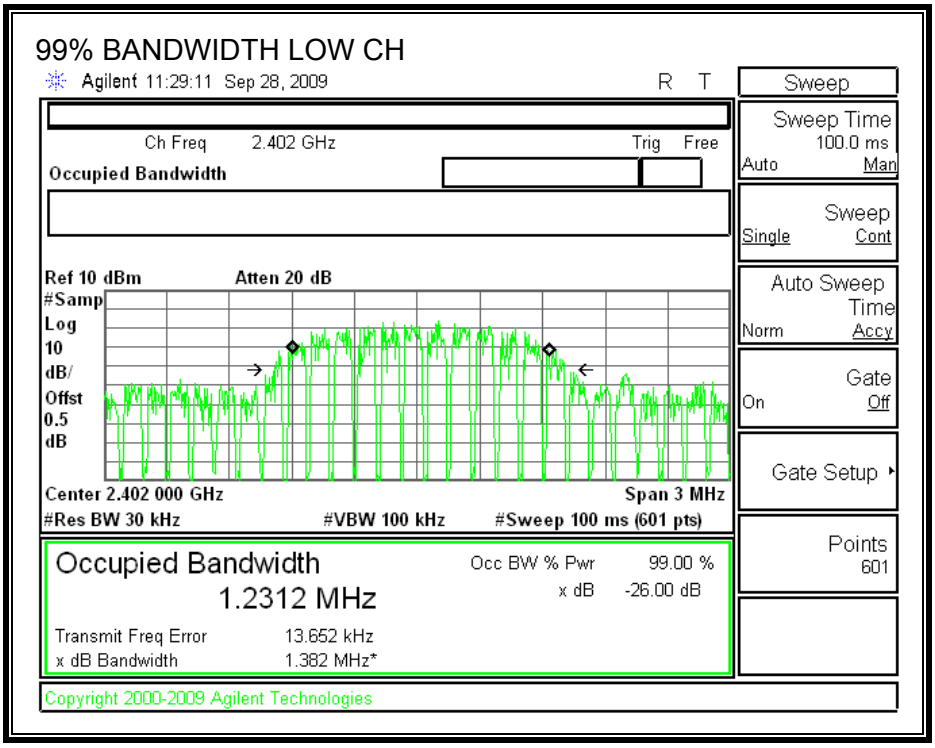
**TEST PROCEDURE**

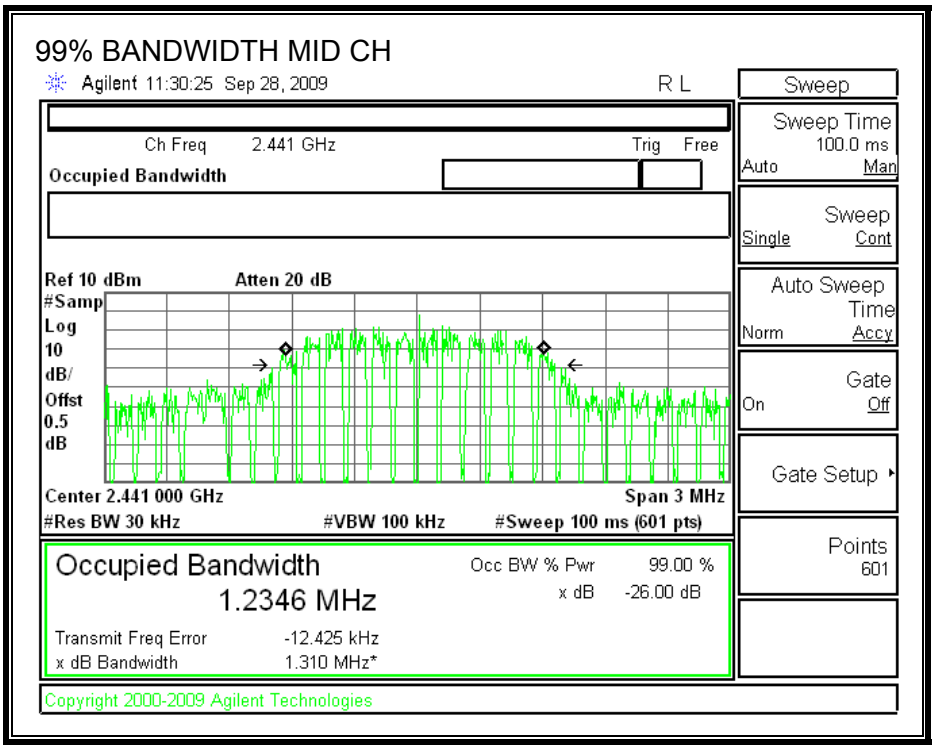
The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

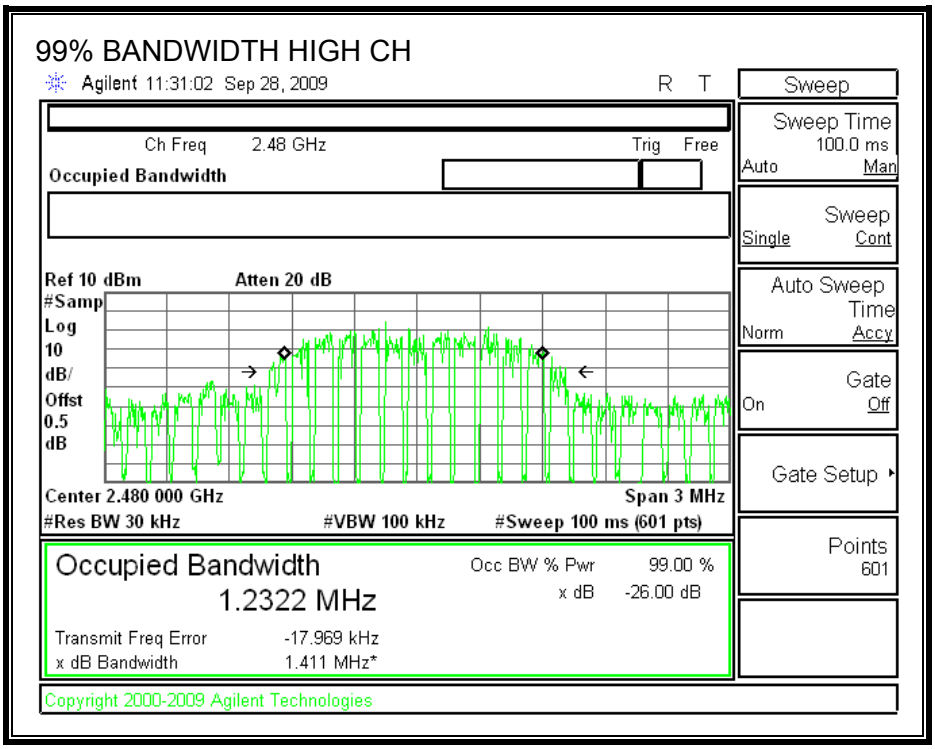
**RESULTS**

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) | 20dB Bandwidth (MHz) |
|---|---|---|---|
| Low | 2402 | 1.2312 | 1.290 |
| Middle | 2441 | 1.2346 | 1.290 |
| High | 2480 | 1.2322 | 1.283 |

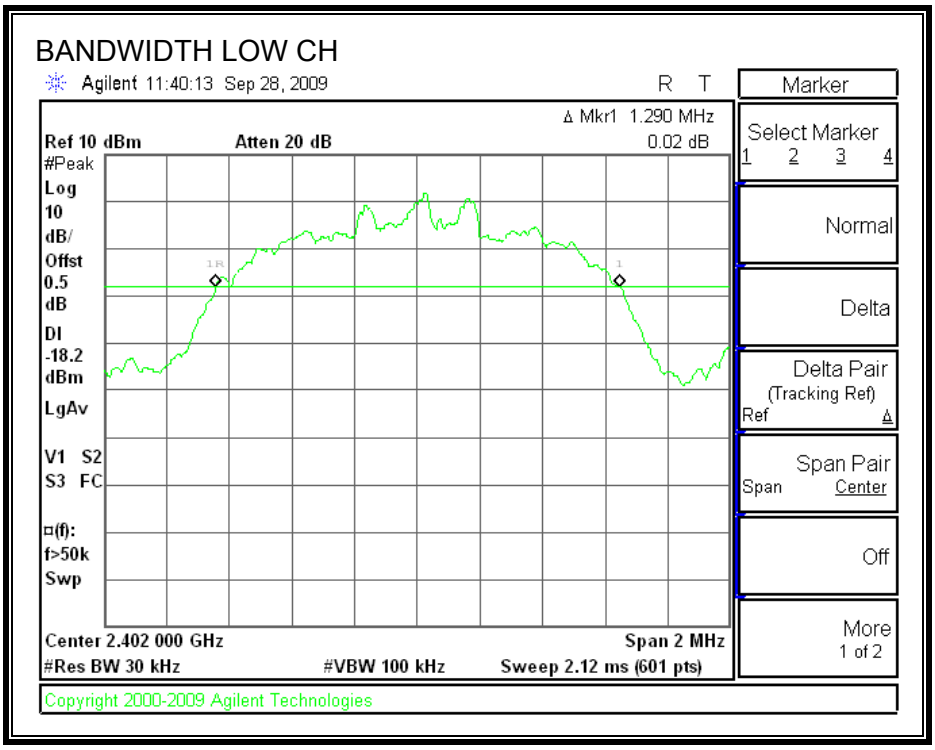
**99% BANDWIDTH**

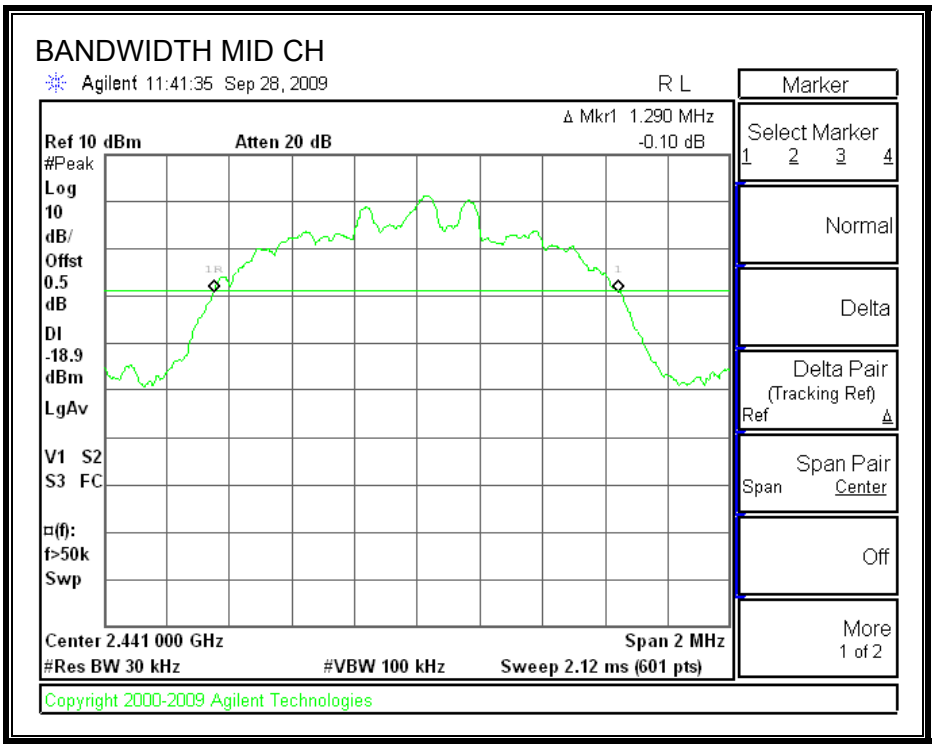


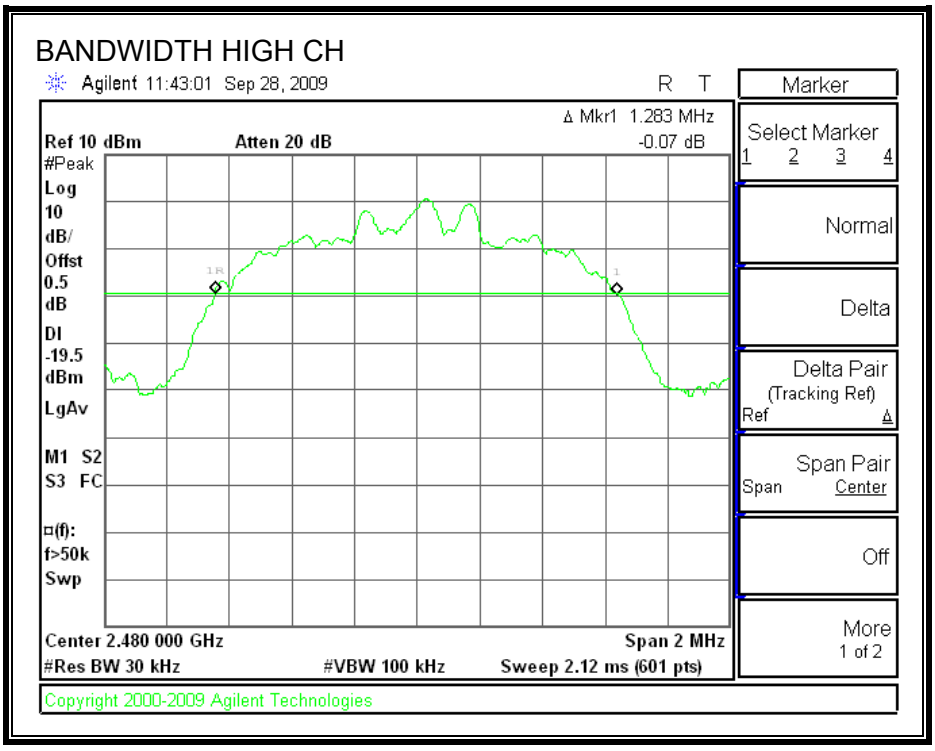





**20 dB BANDWIDTH**





## 7.2.2. HOPPING FREQUENCY SEPARATION

**LIMIT**

FCC §15.247 (a) (1)

IC RSS-210 A8.1 (b)

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hoping channel, whichever is greater.

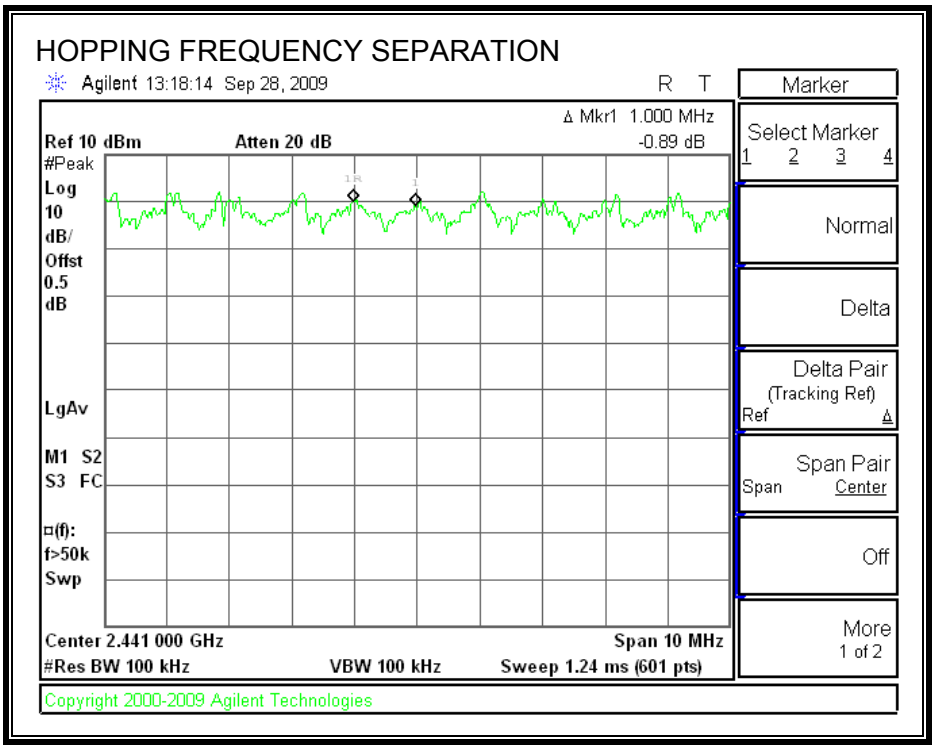
Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

**TEST PROCEDURE**

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

**RESULTS**

**HOPPING FREQUENCY SEPARATION**



## 7.2.3. NUMBER OF HOPPING CHANNELS

**LIMIT**

FCC §15.247 (a) (1) (iii)

IC RSS-210 A8.1 (d)

Frequency hopping systems in the 2400 – 2483.5 MHz band shall use at least 15 non-overlapping channels.

**TEST PROCEDURE**

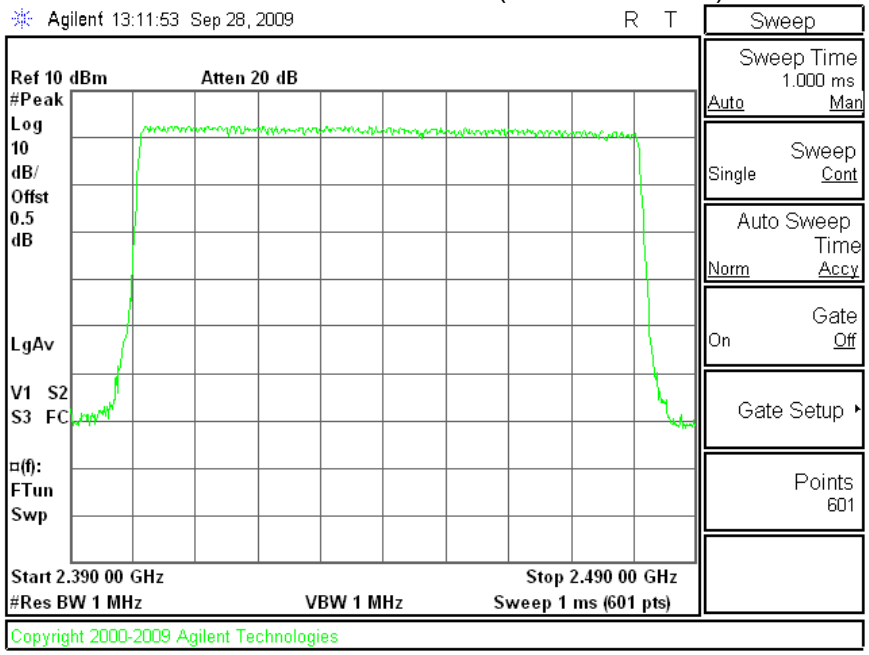
The transmitter output is connected to a spectrum analyzer. The span is set to cover the entire authorized band, in either a single sweep or in multiple contiguous sweeps. The RBW is set to a maximum of 1 % of the span. The analyzer is set to Max Hold.

**RESULTS**

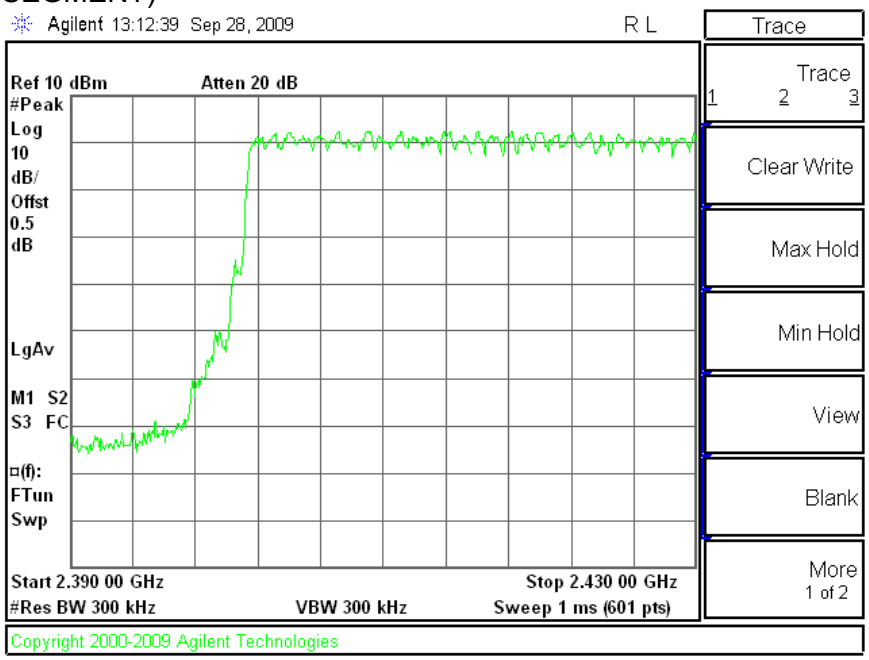
79 Channels observed.

**NUMBER OF HOPPING CHANNELS**

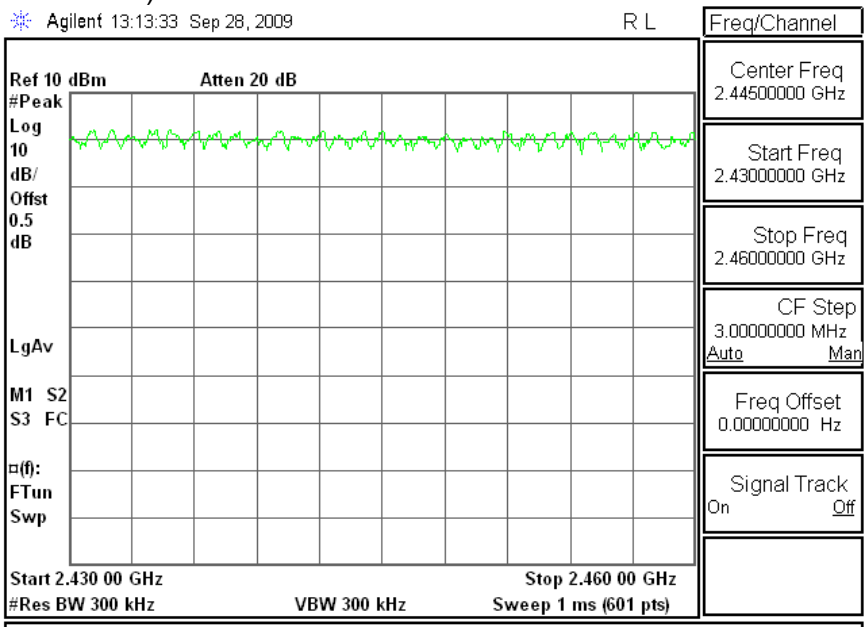
NUMBER OF HOPPING CHANNELS (100 MHZ SPAN)



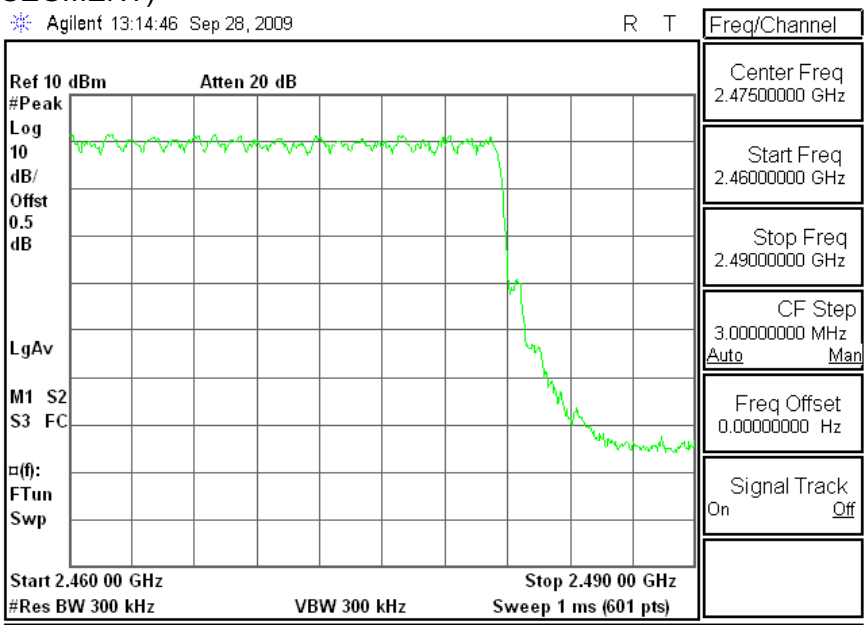

NUMBER OF HOPPING CHANNELS (30 MHZ SPAN, FIRST SEGMENT)



NUMBER OF HOPPING CHANNELS (30 MHZ SPAN, SECOND SEGMENT)




NUMBER OF HOPPING CHANNELS (30 MHZ SPAN, THIRD SEGMENT)



## 7.2.4. AVERAGE TIME OF OCCUPANCY

**LIMIT**

FCC §15.247 (a) (1) (iii)

IC RSS-210 A8.1 (d)

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

**TEST PROCEDURE**

The transmitter output is connected to a spectrum analyzer. The span is set to 0 Hz, centered on a single, selected hopping channel. The width of a single pulse is measured in a fast scan. The number of pulses is measured in a 3.16 second scan, to enable resolution of each occurrence.

The average time of occupancy in the specified 31.6 second period (79 channels * 0.4 s) is equal to 10 * (# of pulses in 3.16 s) * pulse width.

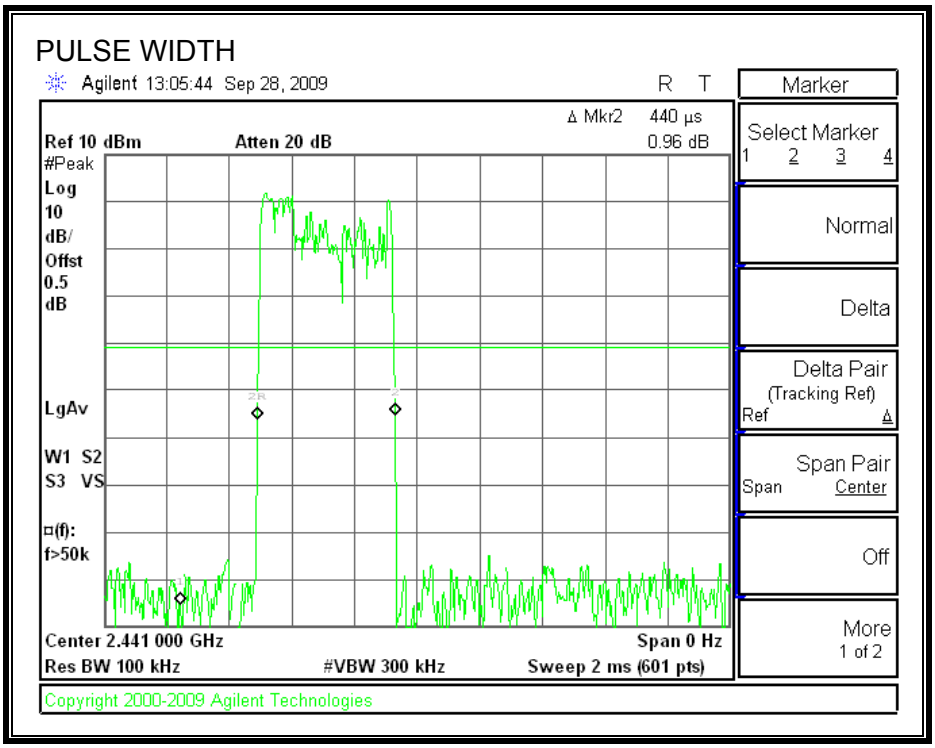
**RESULTS**

8PSK Mode

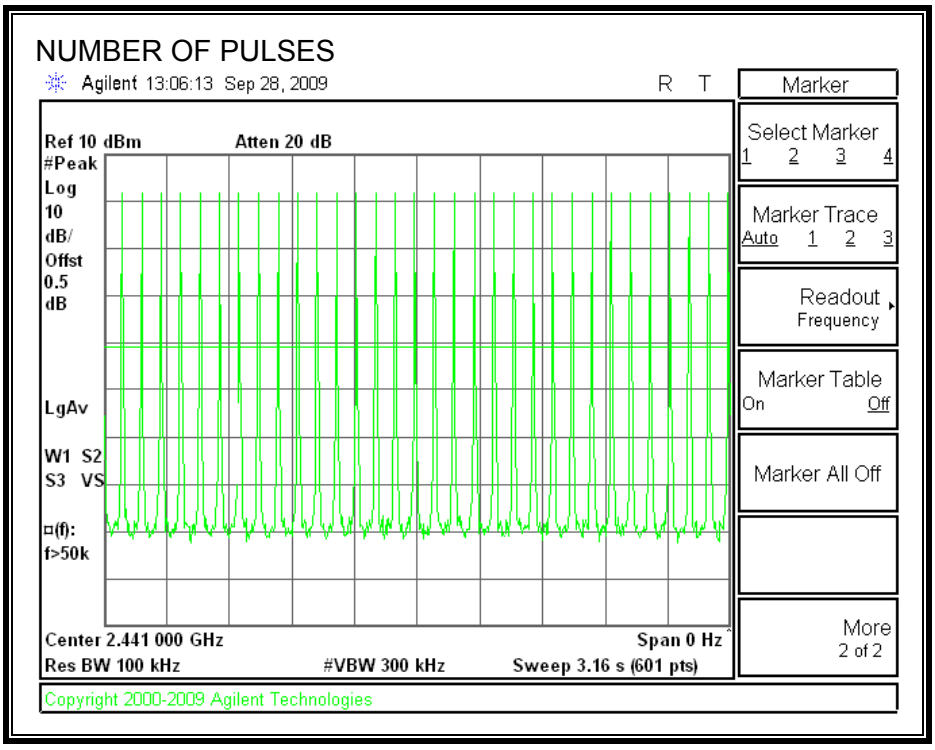
| DH Packet | Pulse Width (msec) | Number of Pulses in 3.16 seconds | Average Time of Occupancy (sec) | Limit (sec) | Margin (sec) |
|---|---|---|---|---|---|
| DH1 | 0.44 | 32 | 0.141 | 0.4 | 0.259 |
| DH3 | 1.683 | 16 | 0.269 | 0.4 | 0.131 |
| DH5 | 2.94 | 10 | 0.294 | 0.4 | 0.106 |

**DH1**

**PULSE WIDTH**

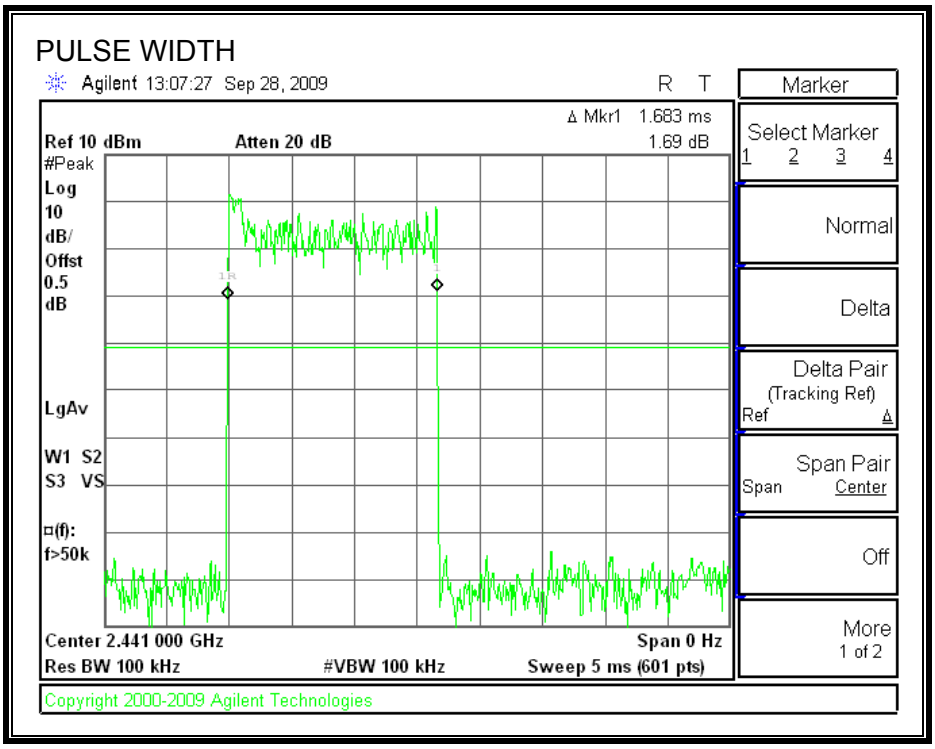



**NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD**

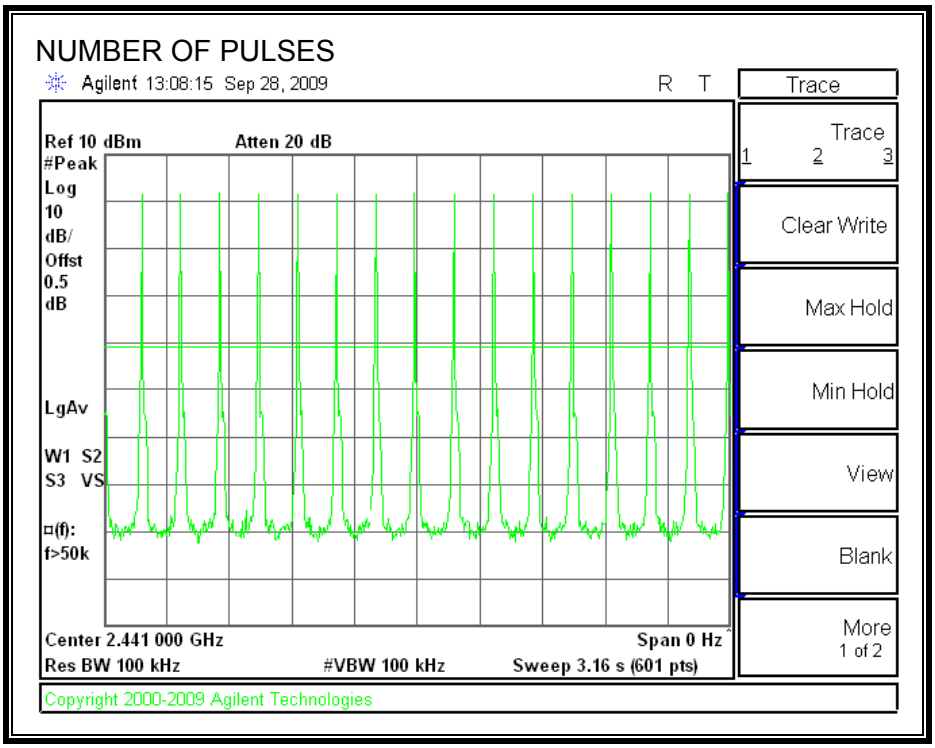


**DH3**

**PULSE WIDTH**

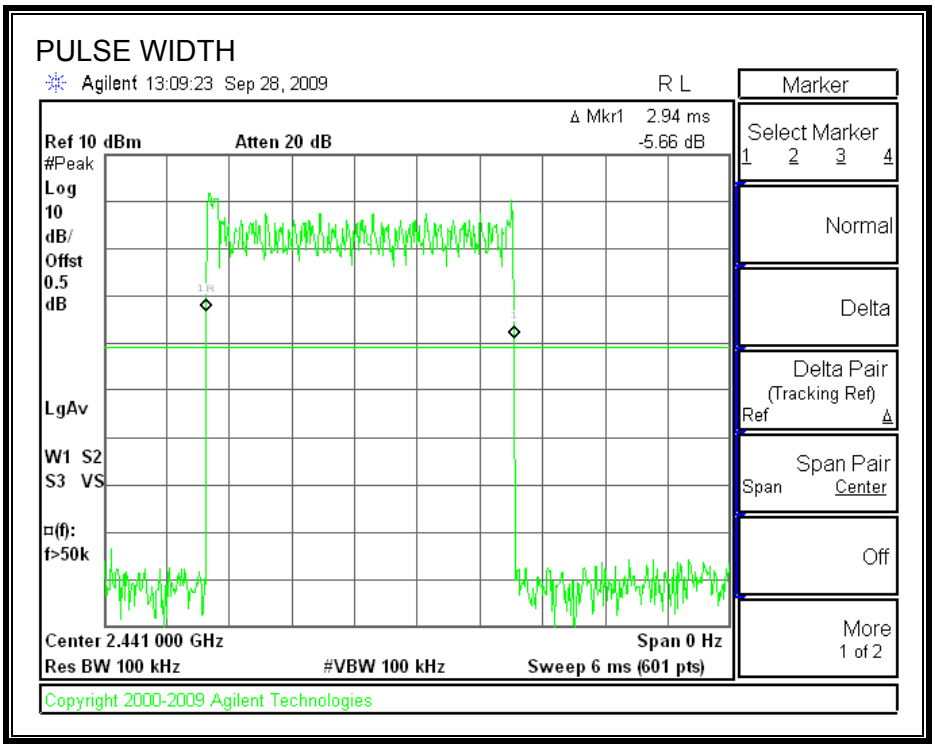



**NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD**

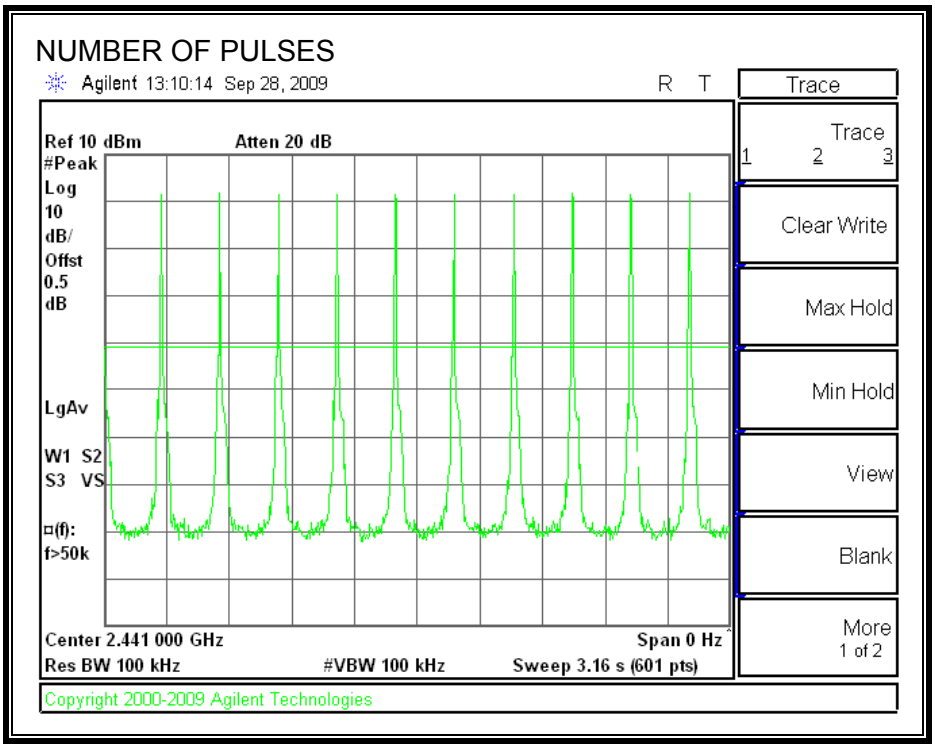


**DH5**

**PULSE WIDTH**




**NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD**



## 7.2.5. 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.

Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

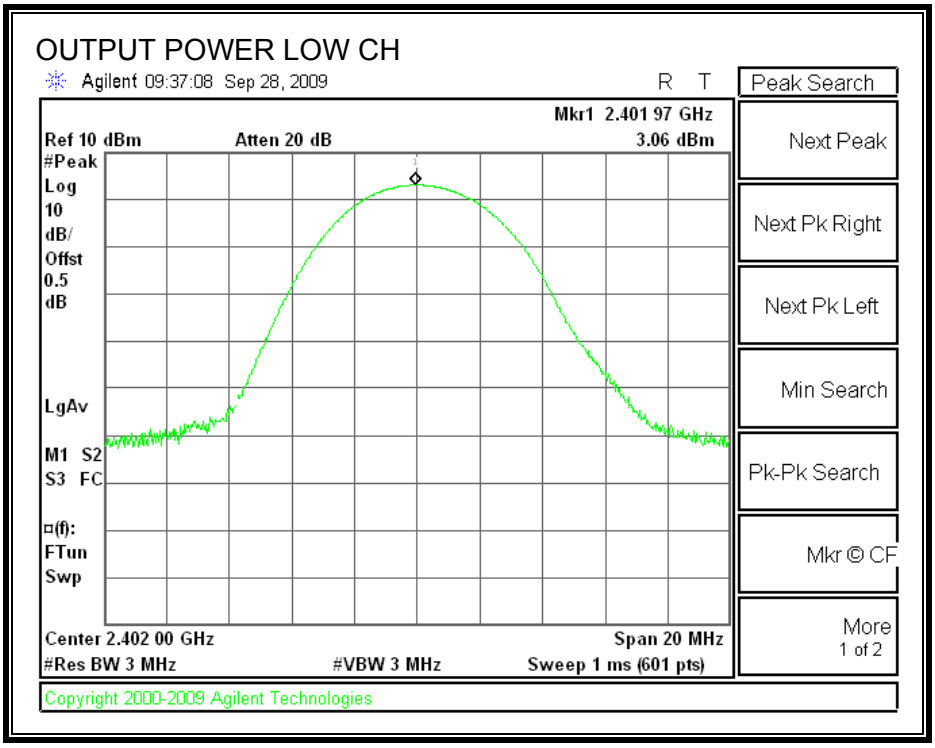
**TEST PROCEDURE**

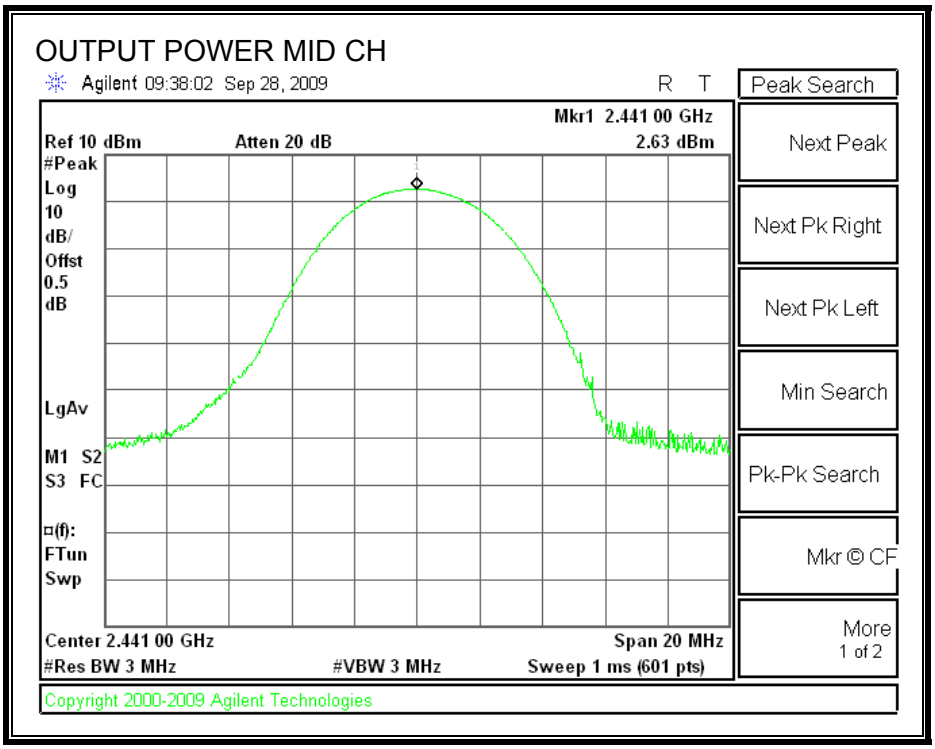
The transmitter output is connected to a spectrum analyzer the analyzer bandwidth is set to a value greater than the 20 dB bandwidth of the EUT.

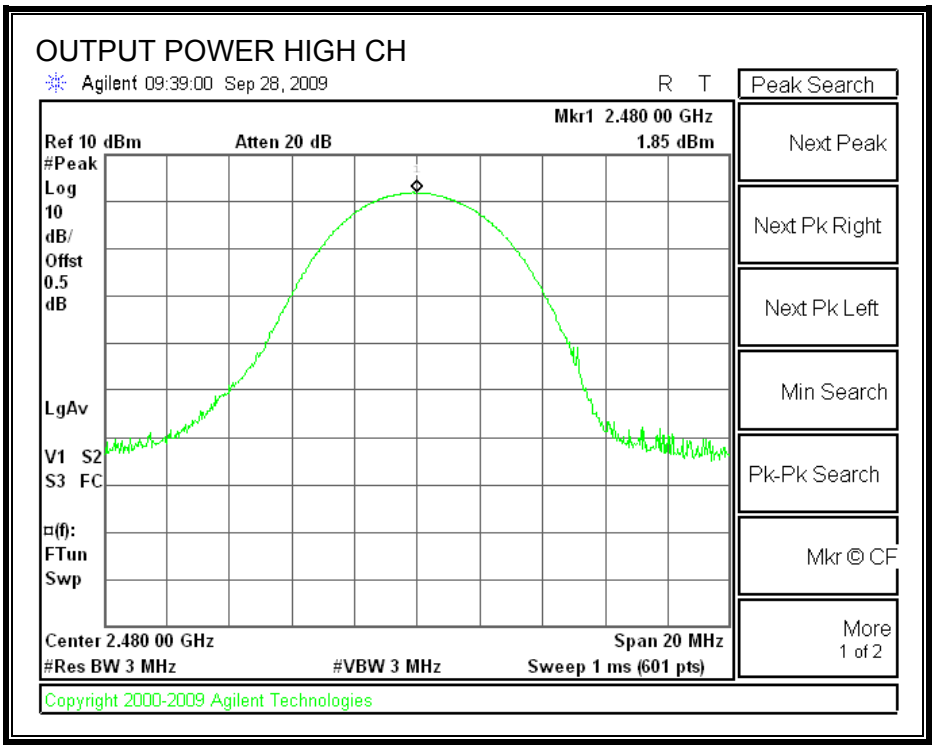
**RESULTS**

| Channel | Frequency (MHz) | Spectrum Analyzer Reading (dBm) | Limit (dBm) | Margin (dB) |
|---|---|---|---|---|
| Low | 2402 | 3.06 | 21 | -17.91 |
| Middle | 2441 | 2.63 | 21 | -18.34 |
| High | 2480 | 1.85 | 21 | -19.12 |

**OUTPUT POWER**





## 7.2.6. 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 0.5 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 | 0.94 |
| Middle | 2441 | 0.62 |
| High | 2480 | -0.25 |

## 7.2.7. 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.

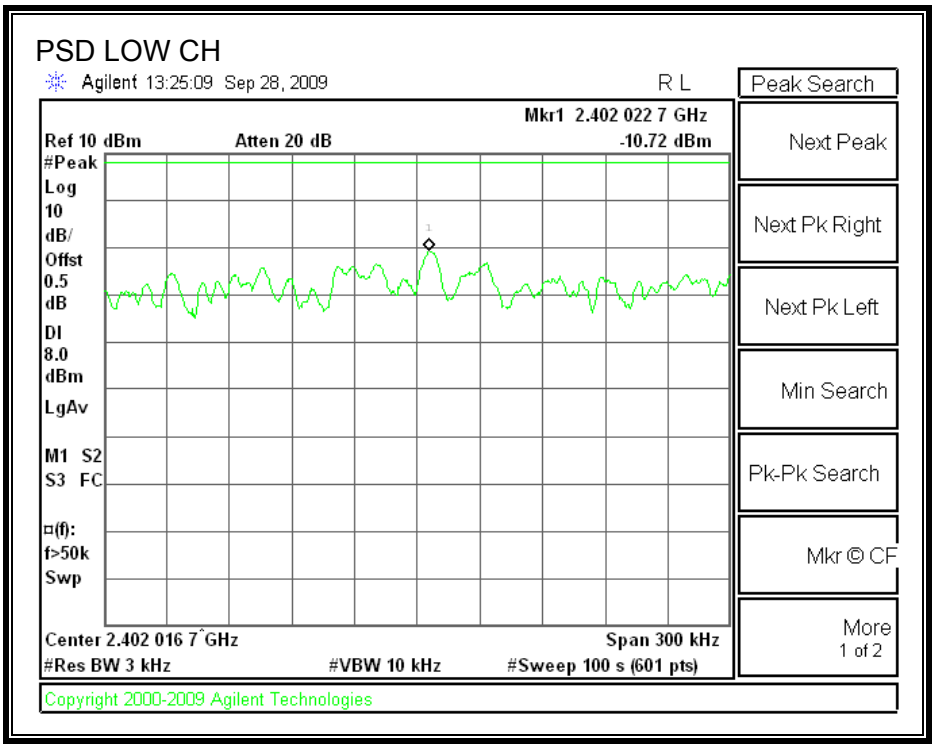
**TEST PROCEDURE**

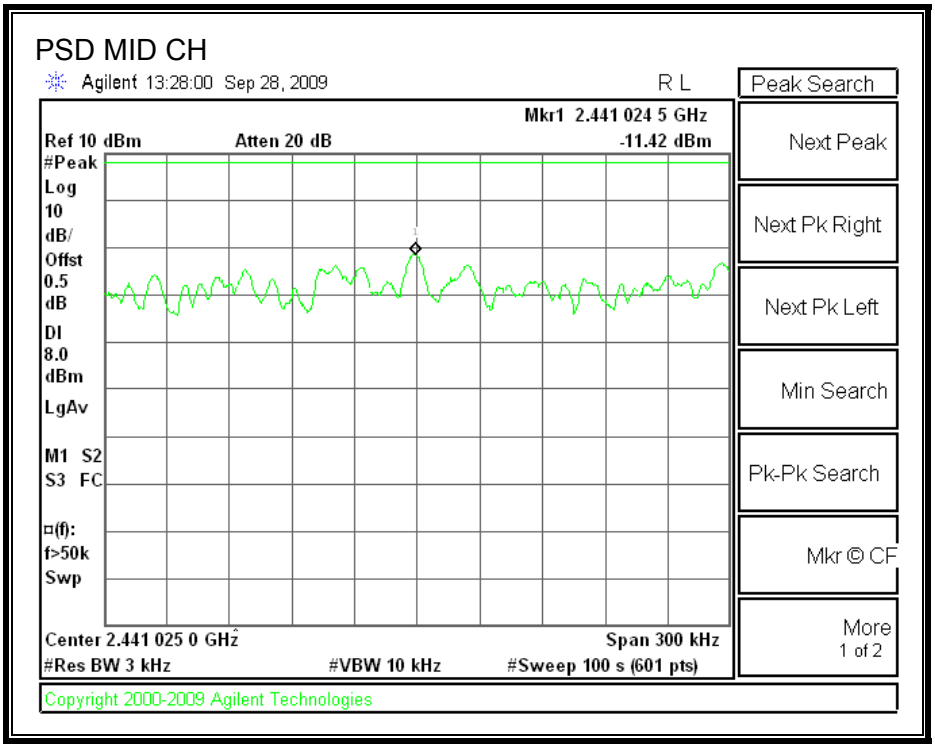
Output power was measured based on the use of a peak measurement, therefore the power spectral density was measured using PSD Option 1 in accordance with FCC document "Measurement of Digital Transmission Systems Operating under Section 15.247", March 23, 2005.

**RESULTS**

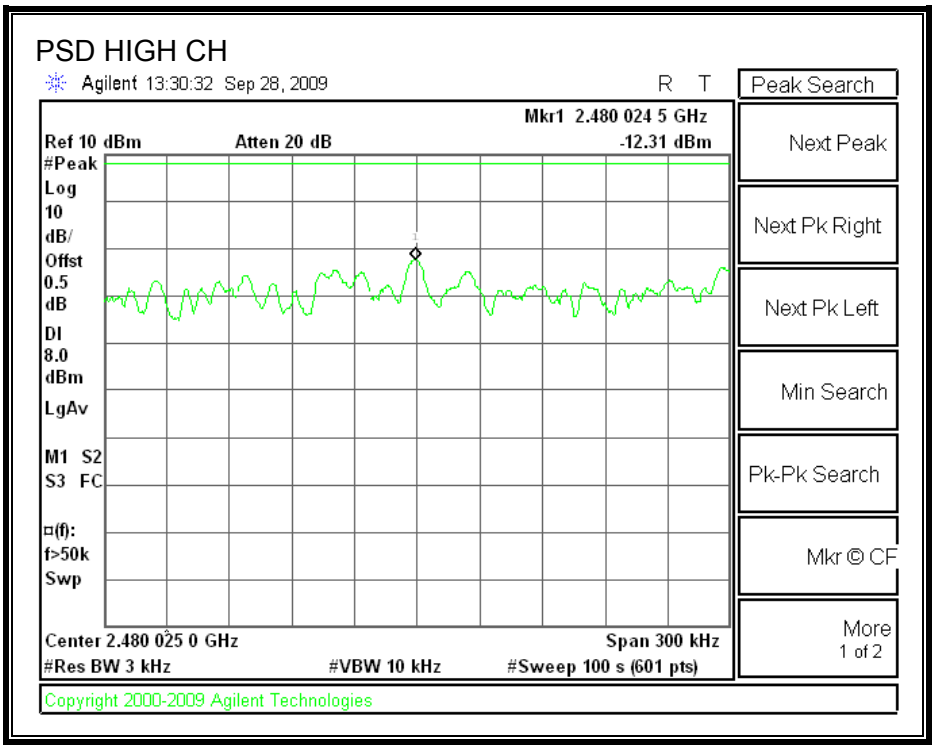
| Channel | Frequency (MHz) | PPSD (dBm) | Limit (dBm) | Margin (dB) |
|---|---|---|---|---|
| Low | 2402 | -10.72 | 8 | -18.72 |
| Middle | 2441 | -11.42 | 8 | -19.42 |
| High | 2480 | -12.31 | 8 | -20.31 |

**POWER SPECTRAL DENSITY**



PSD HIGH CH



## 7.2.8. 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.

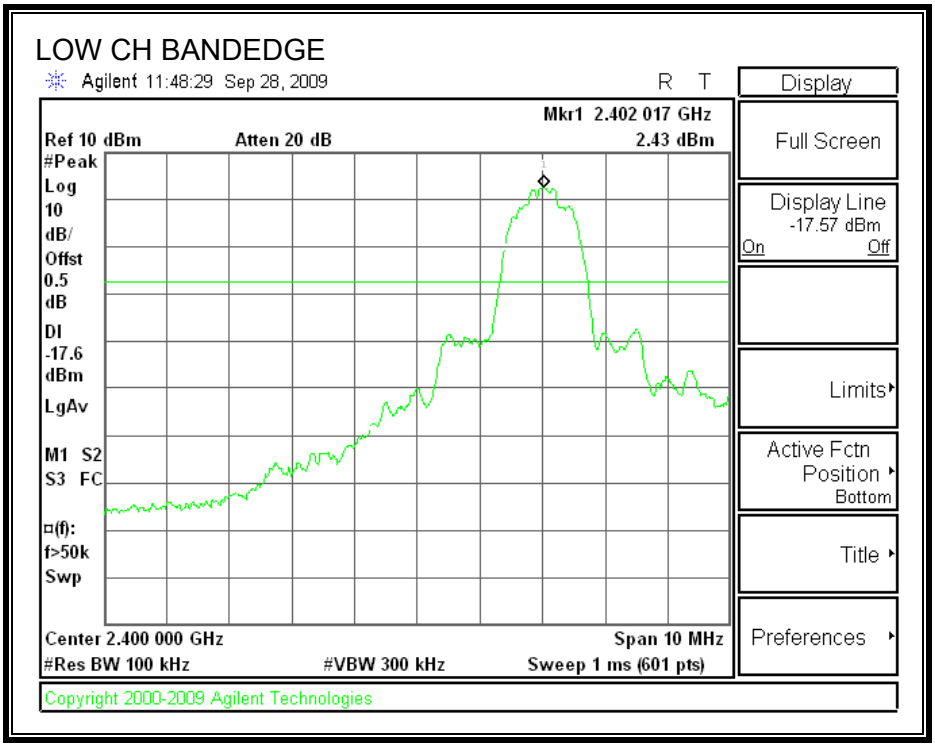
**TEST PROCEDURE**

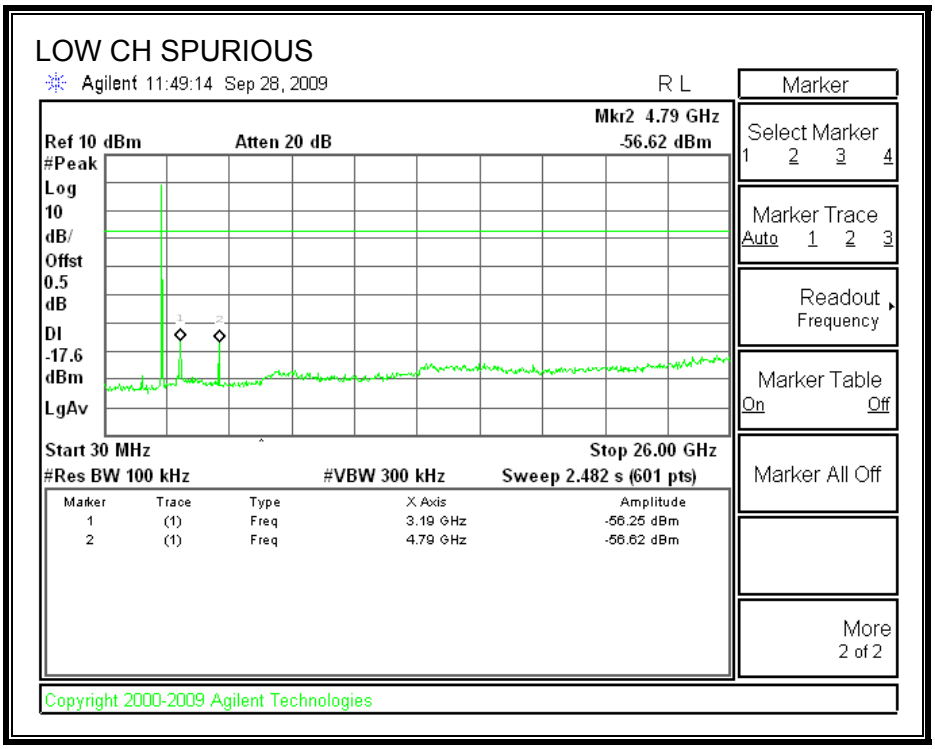
The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

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

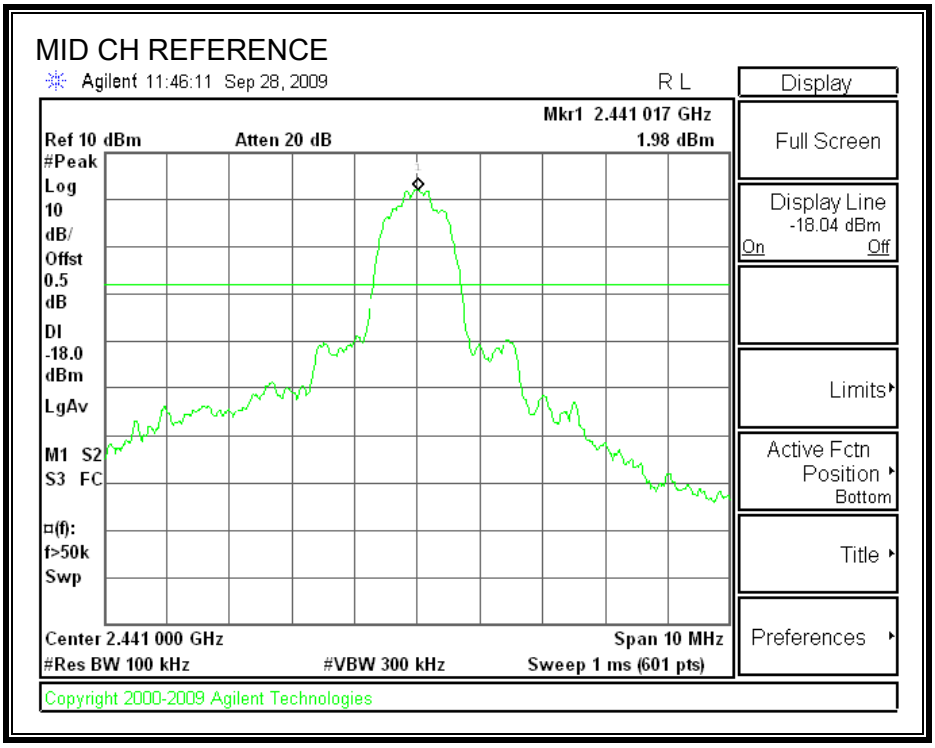
**RESULTS**

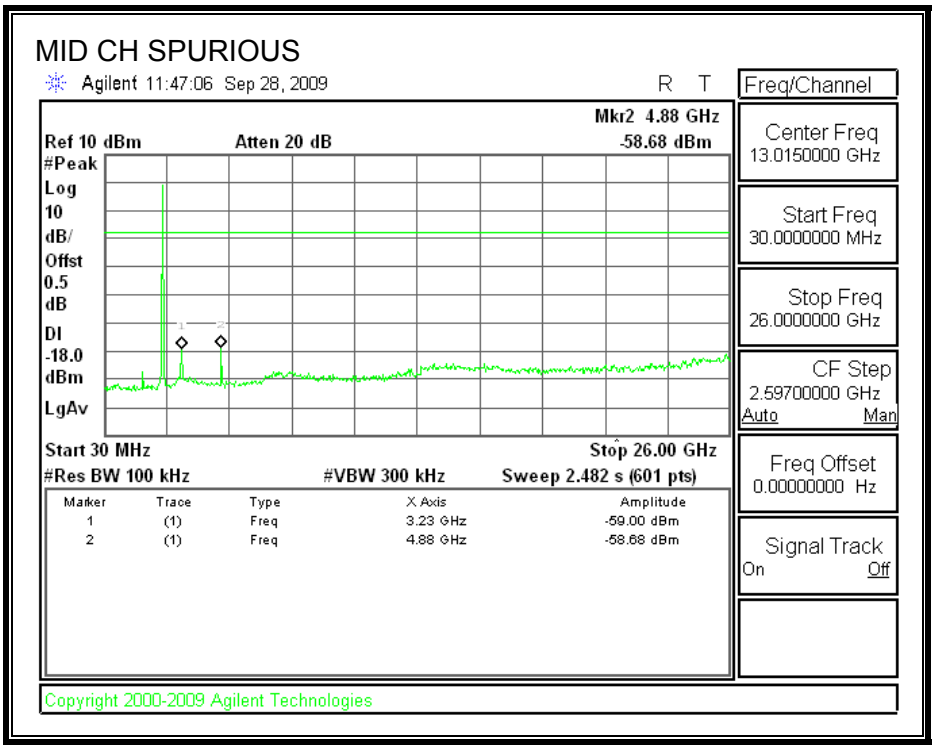
**SPURIOUS EMISSIONS, LOW CHANNEL**



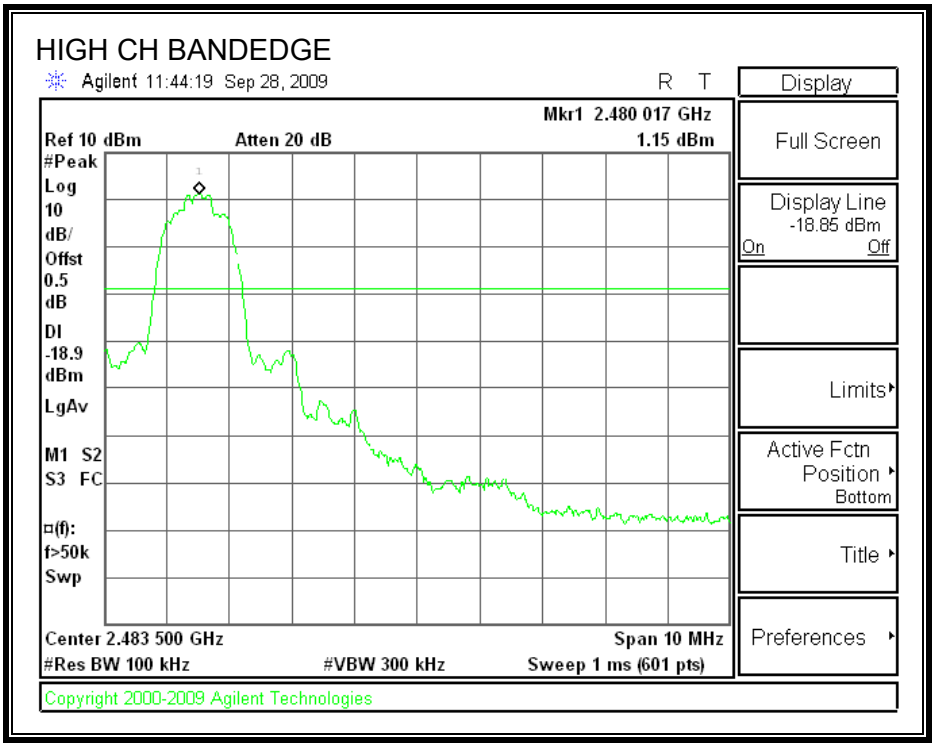



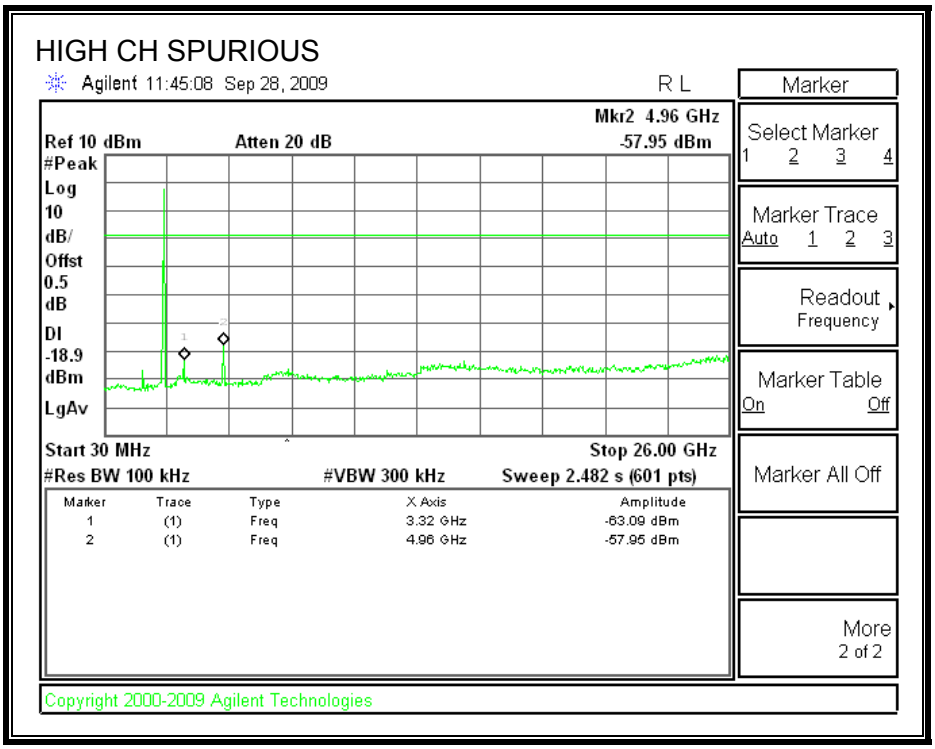
**SPURIOUS EMISSIONS, MID CHANNEL**



**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.

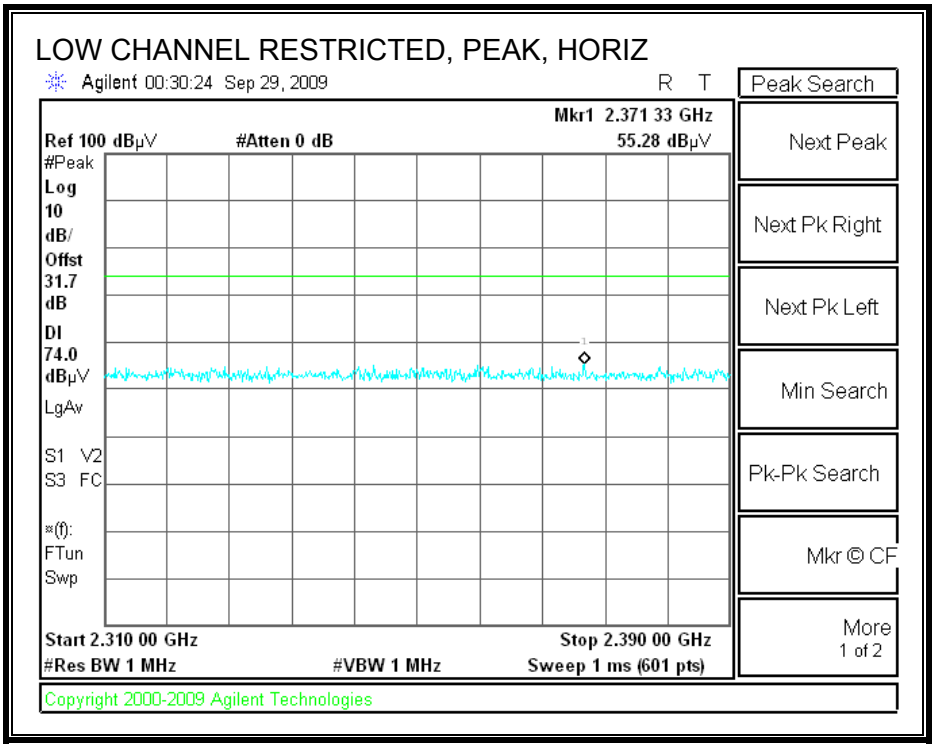
The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each appplicable band.

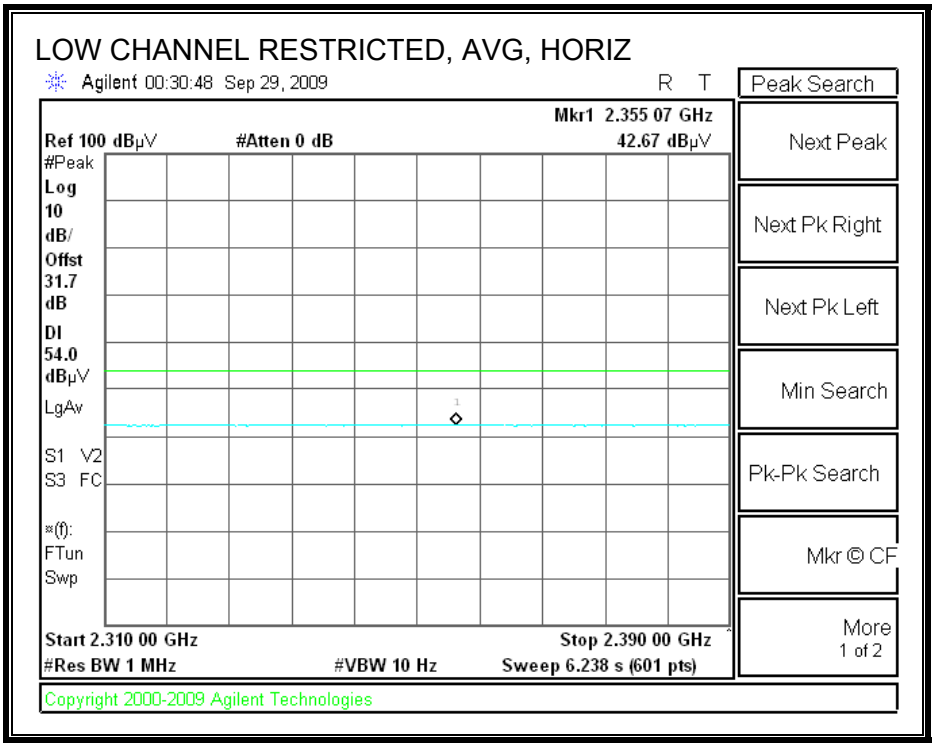
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

# 8.2. TRANSMITTER ABOVE 1 GHz

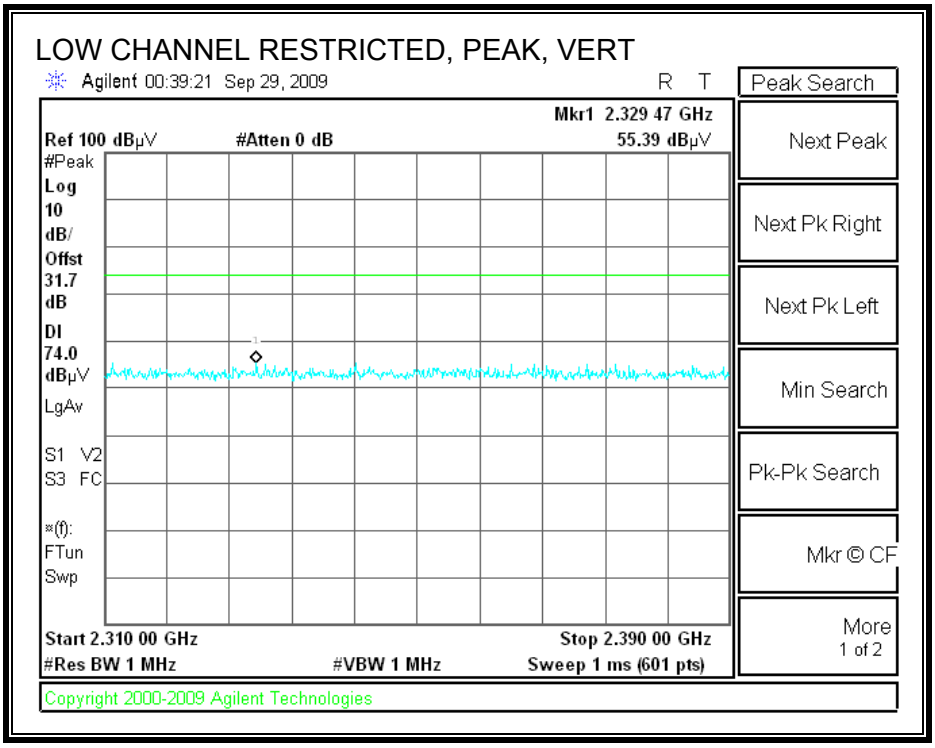
## 8.2.1. TRANSMITTER ABOVE 1 GHz FOR BLUETOOTH GFSK MODE

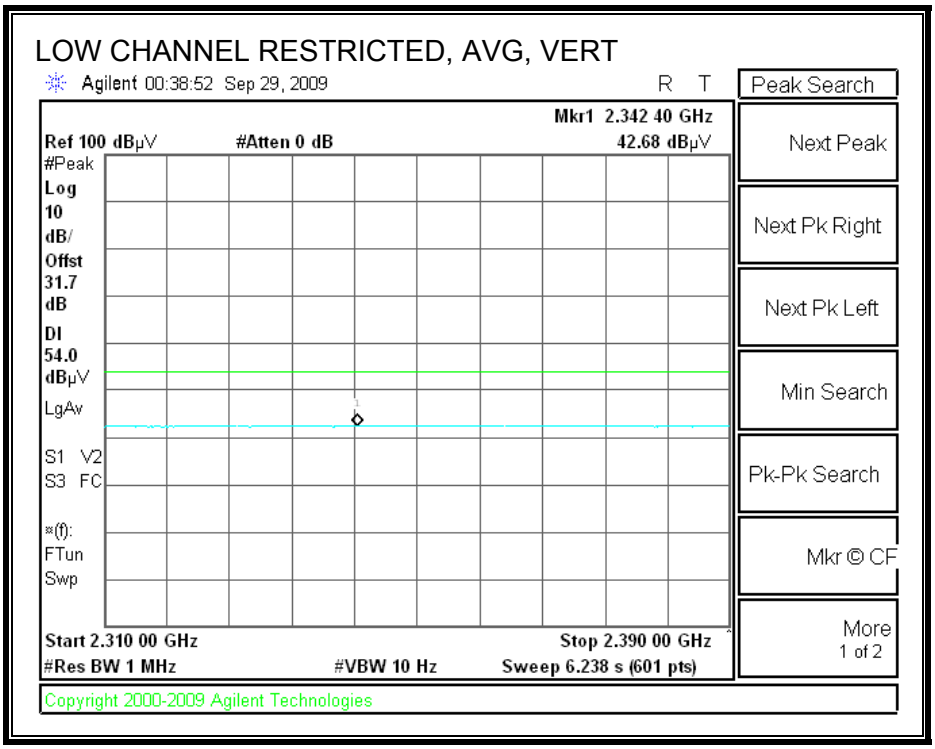
**RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)**



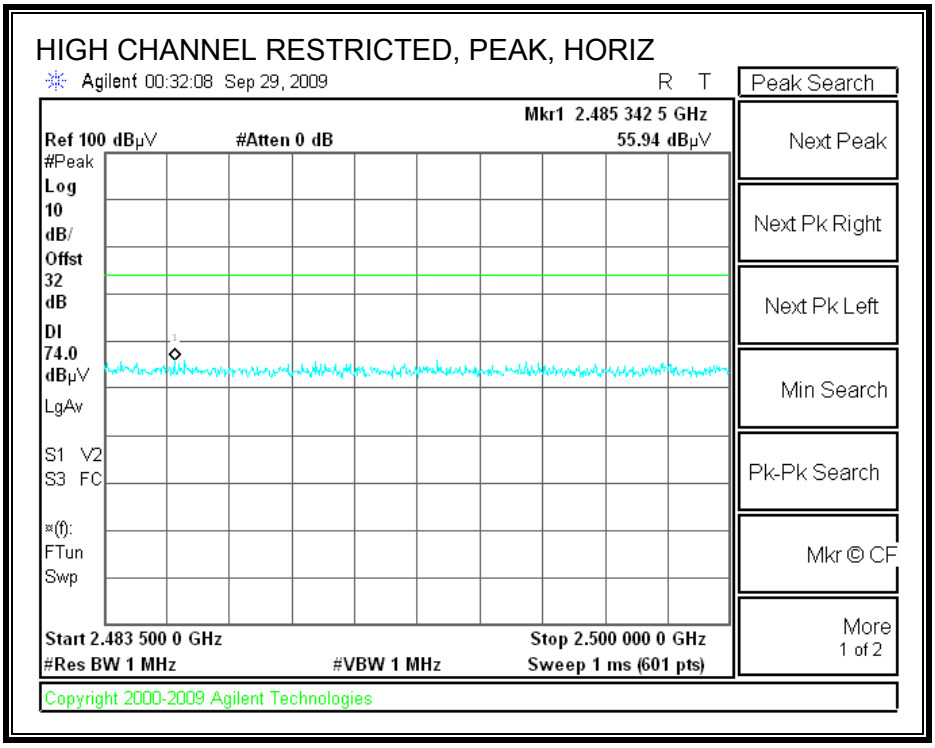



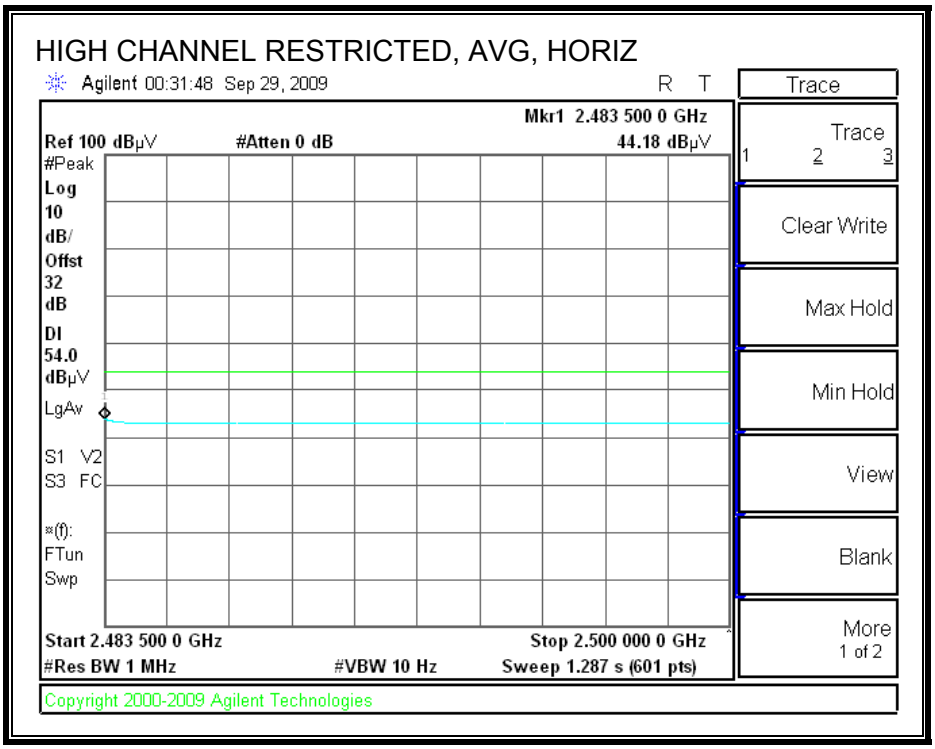
**RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)**



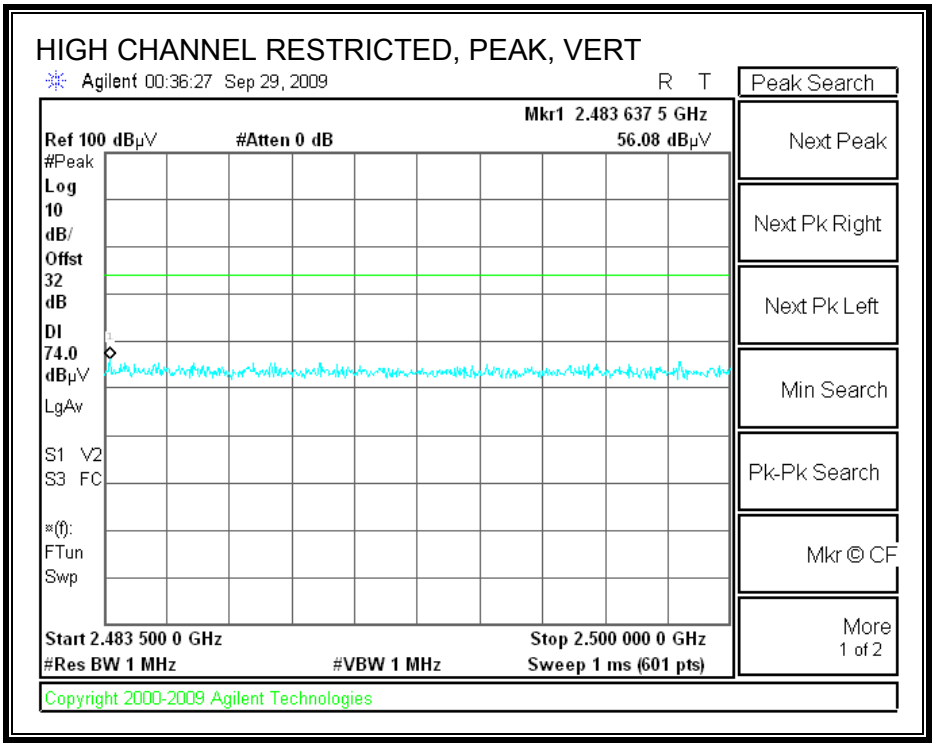



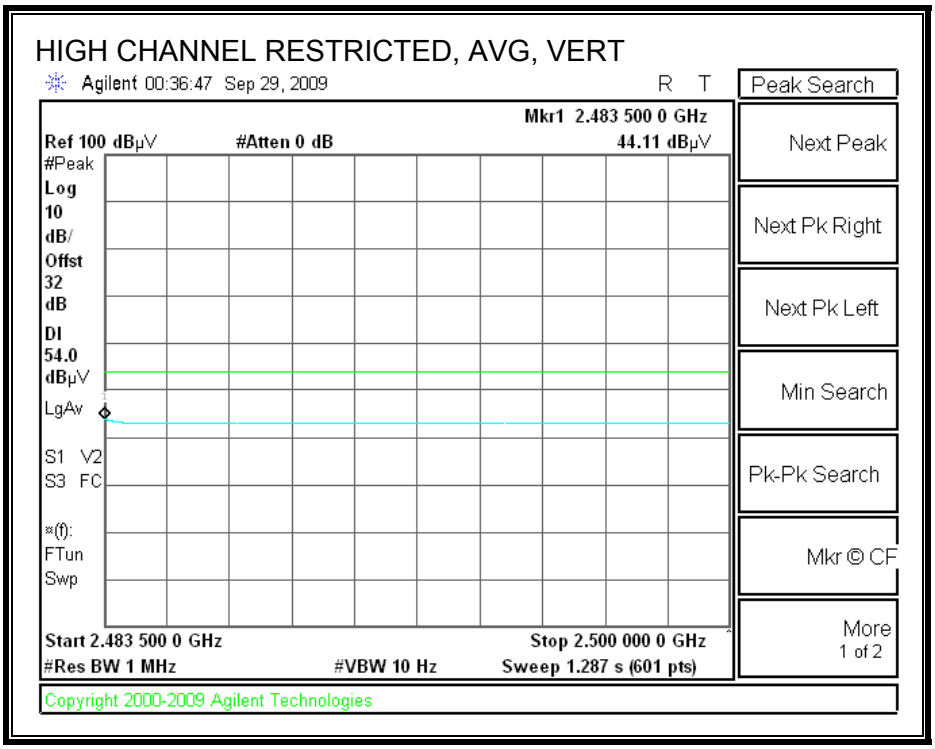
**RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)**



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



## HARMONICS AND SPURIOUS EMISSIONS

High Frequency Measurement
Compliance Certification Services, Fremont 5m Chamber

Company: Palm
Project #: 09U12821
Date: 9/29/2009
Test Engineer: Chin Pang
Configuration: EUT/AC Adapter/Earphone
Mode: TX, GFSK

Test Equipment:

| Horn 1-18GHz | Pre-amplifer 1-26GHz | Pre-amplifer 26-40GHz | Horn > 18GHz | Limit |
|---|---|---|---|---|
| T59; S/N: 3245 @3m | T145 Agilent 3008A0056 | | | FCC 15.205 |

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

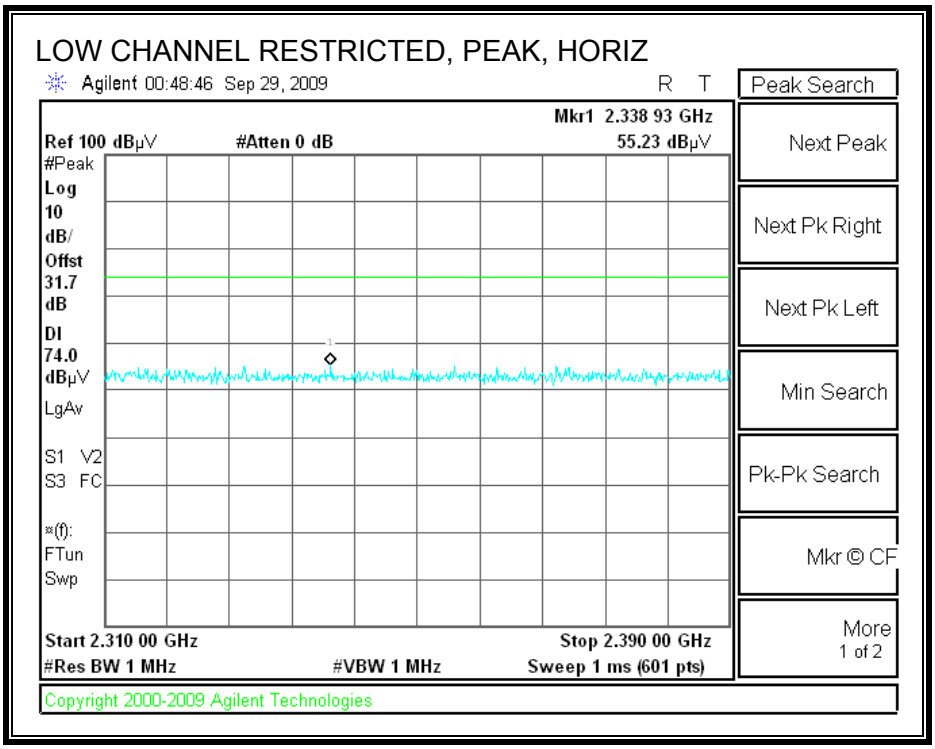
| f GHz | Dist (m) | Read Pk dBuV | Read Avg. dBuV | AF dB/m | CL dB | Amp dB | D Corr dB | Fltr dB | Peak dBuV/m | Avg dBuV/m | Pk Lim dBuV/m | Avg Lim dBuV/m | Pk Mar dB | Avg Mar dB | Notes (V/H) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Low Ch, 2402MHz** | | | | | | | | | | | | | | | |
| 4.804 | 3.0 | 41.5 | 30.0 | 32.8 | 5.8 | -34.8 | 0.0 | 0.0 | 45.2 | 33.7 | 74 | 54 | -28.8 | -20.3 | H |
| 4.804 | 3.0 | 42.4 | 34.0 | 32.8 | 5.8 | -34.8 | 0.0 | 0.0 | 46.1 | 37.7 | 74 | 54 | -27.9 | -16.3 | V |
| **Mid Ch, 2441MHz** | | | | | | | | | | | | | | | |
| 4.882 | 3.0 | 40.7 | 28.6 | 32.8 | 5.8 | -34.9 | 0.0 | 0.0 | 44.5 | 32.4 | 74 | 54 | -29.5 | -21.6 | H |
| 7.323 | 3.0 | 41.3 | 28.0 | 35.2 | 7.3 | -34.7 | 0.0 | 0.0 | 49.1 | 35.8 | 74 | 54 | -24.9 | -18.2 | H |
| 4.882 | 3.0 | 40.5 | 29.0 | 32.8 | 5.8 | -34.9 | 0.0 | 0.0 | 44.3 | 32.8 | 74 | 54 | -29.7 | -21.2 | V |
| 7.323 | 3.0 | 41.0 | 28.0 | 35.2 | 7.3 | -34.7 | 0.0 | 0.0 | 48.8 | 35.8 | 74 | 54 | -25.2 | -18.2 | V |
| **High Ch, 2480Mhz** | | | | | | | | | | | | | | | |
| 4.960 | 3.0 | 39.0 | 27.5 | 32.9 | 5.9 | -34.9 | 0.0 | 0.0 | 42.9 | 31.4 | 74 | 54 | -31.1 | -22.6 | H |
| 7.440 | 3.0 | 40.8 | 28.0 | 35.4 | 7.3 | -34.6 | 0.0 | 0.0 | 48.9 | 36.1 | 74 | 54 | -25.1 | -17.9 | H |
| 4.960 | 3.0 | 40.0 | 28.5 | 32.9 | 5.9 | -34.9 | 0.0 | 0.0 | 43.9 | 32.4 | 74 | 54 | -30.1 | -21.6 | V |
| 7.440 | 3.0 | 41.0 | 28.0 | 35.4 | 7.3 | -34.6 | 0.0 | 0.0 | 49.1 | 36.1 | 74 | 54 | -24.9 | -17.9 | V |

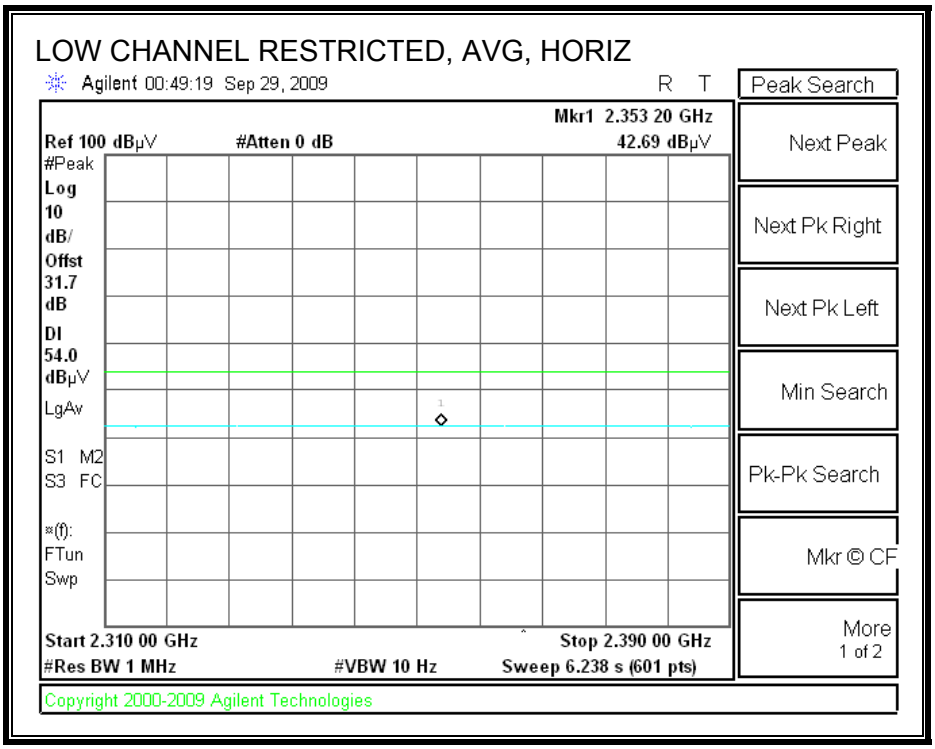
Rev. 11.10.08
**Note: No other emissions were detected above the system noise floor.**

| | | | | | |
|---|---|---|---|---|---|
| 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 | | |

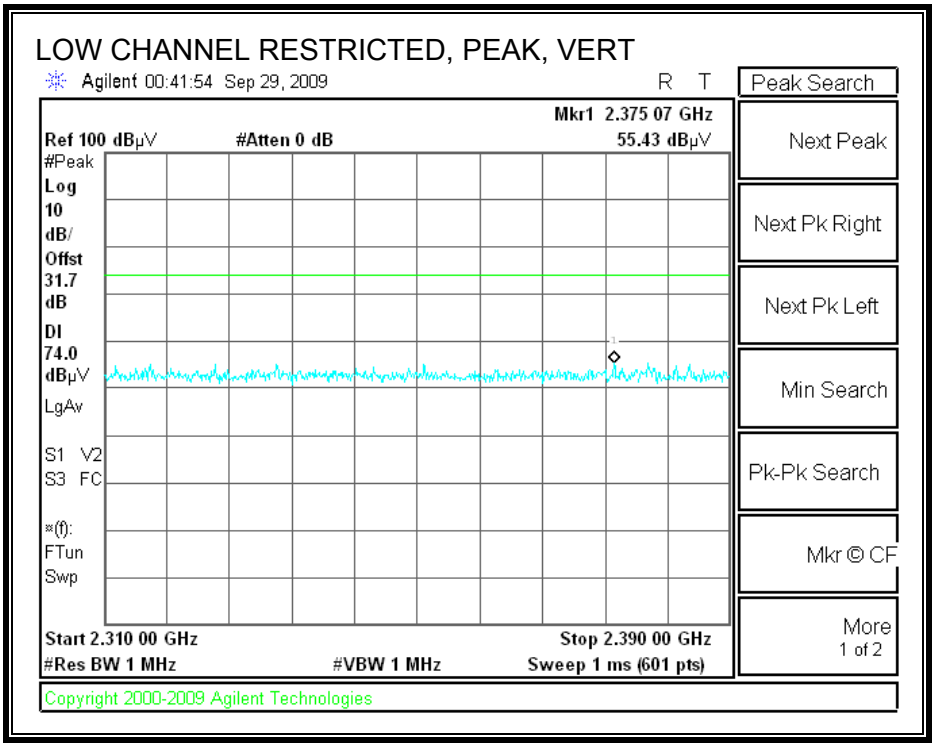
## 8.2.2. TRANSMITTER ABOVE 1 GHz FOR BLUETOOTH 8PSK MODE

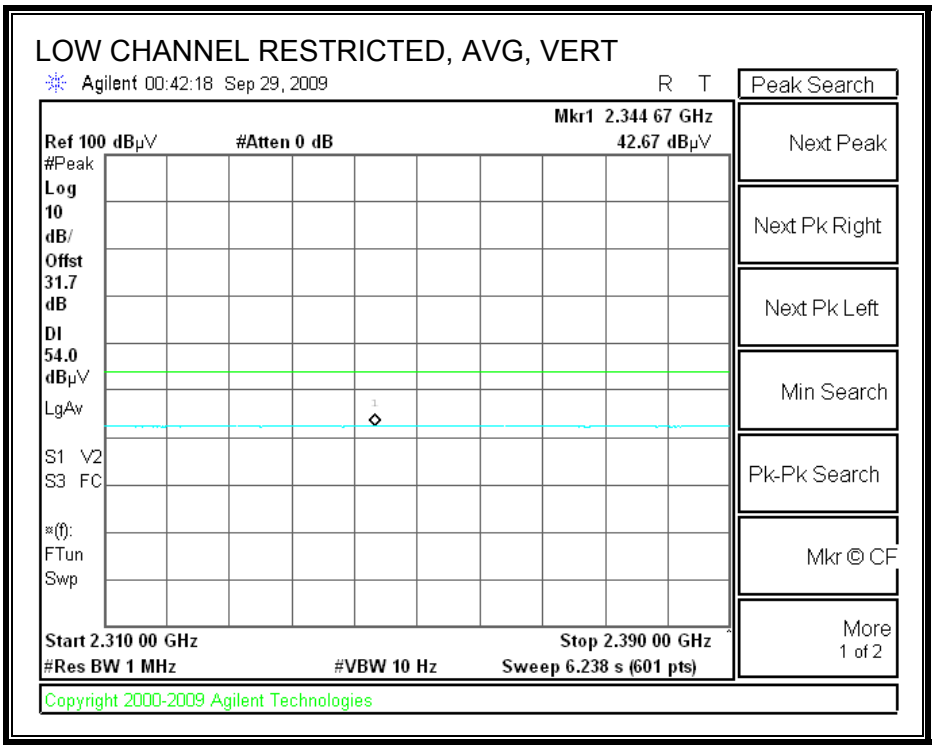
**RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)**



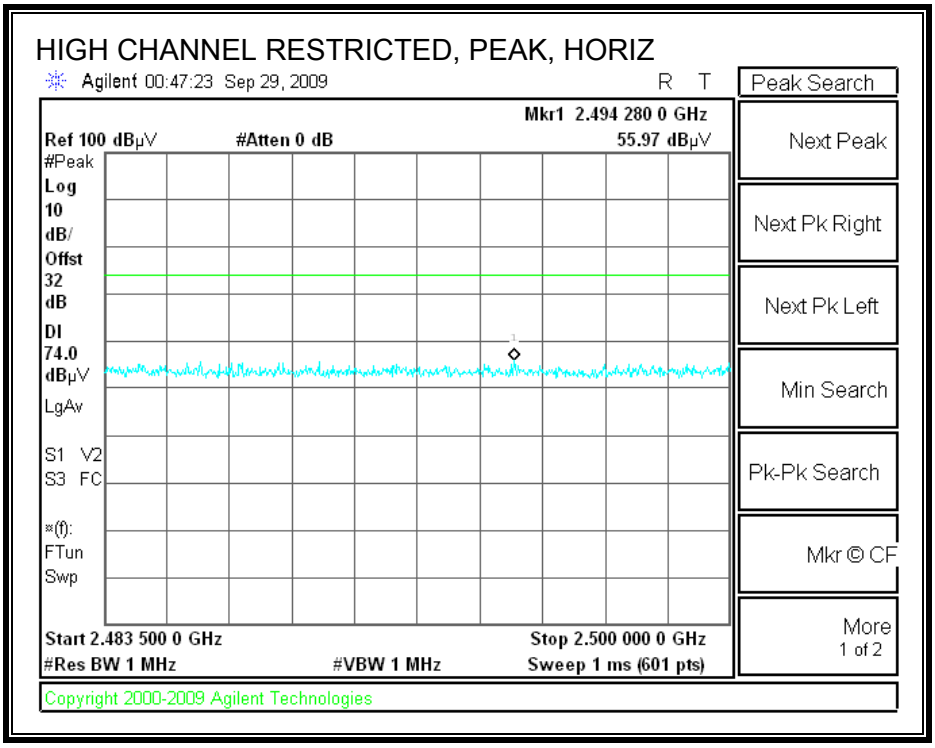



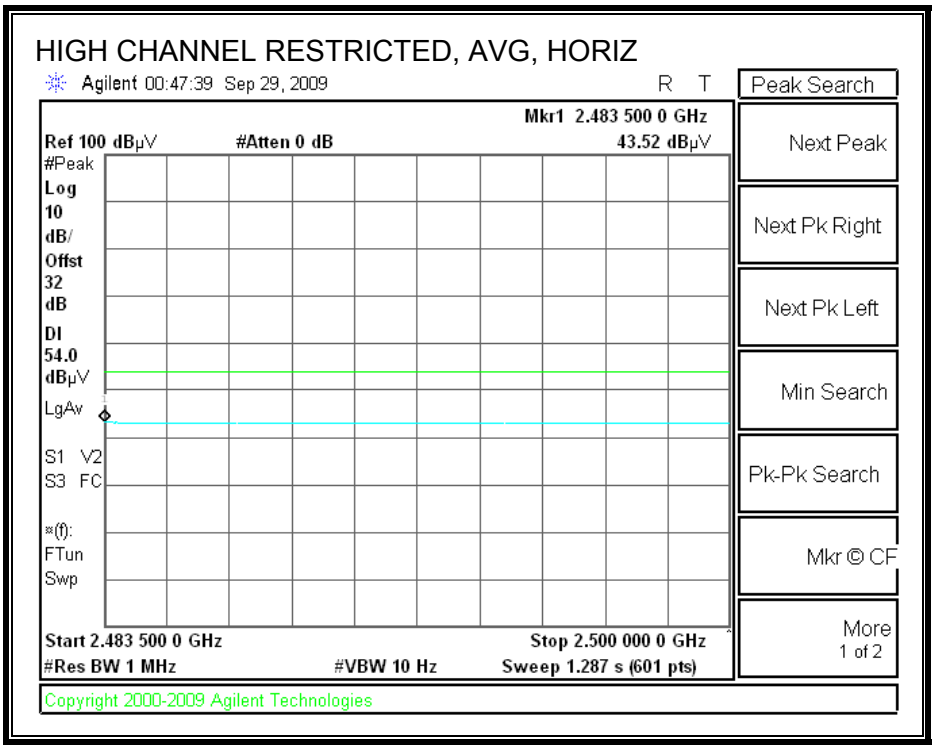
**RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)**



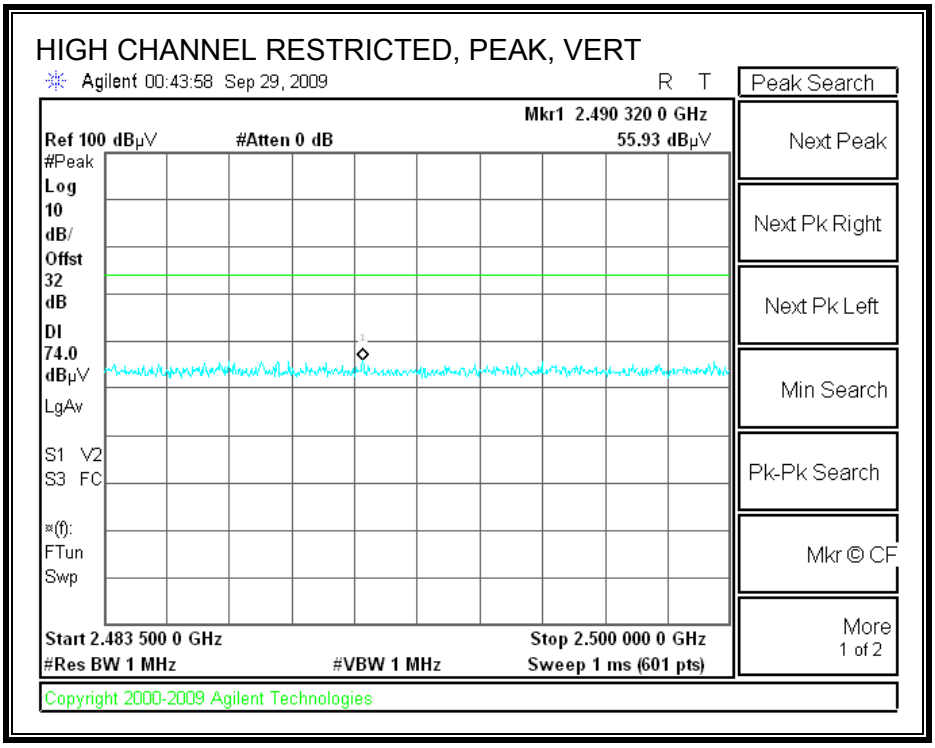



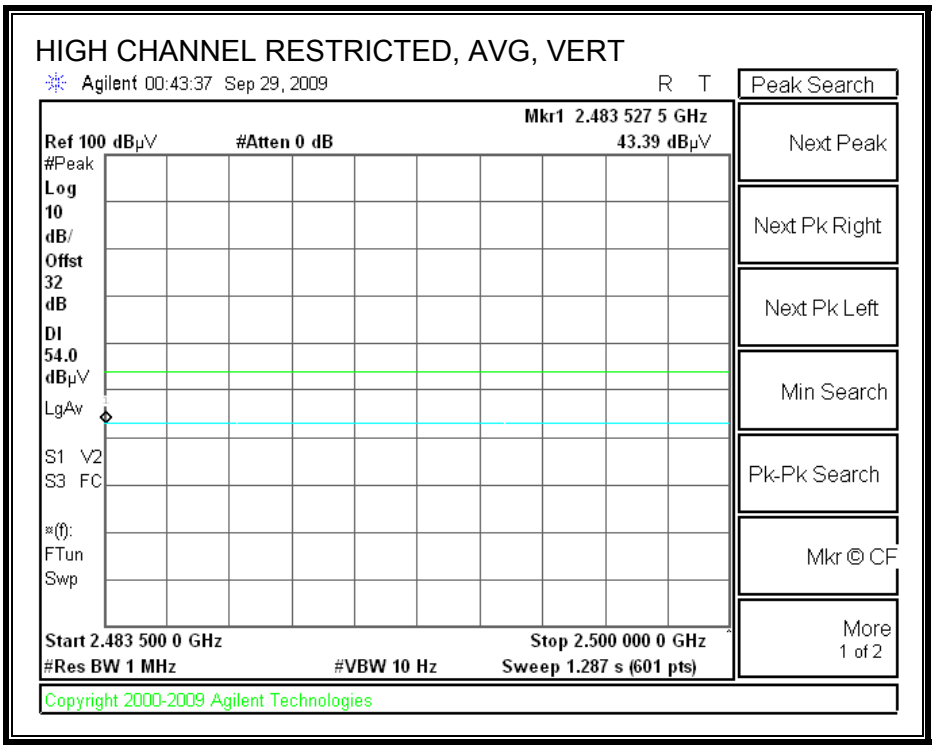
**RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)**



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



## HARMONICS AND SPURIOUS EMISSIONS

High Frequency Measurement
Compliance Certification Services, Fremont 5m Chamber

Company: Palm
Project #: 09U12821
Date: 9/29/2009
Test Engineer: Chin Pang
Configuration: EUT/AC Adapter/Earphone
Mode: TX, 8PSK

Test Equipment:

| Horn 1-18GHz | Pre-amplifer 1-26GHz | Pre-amplifer 26-40GHz | Horn > 18GHz | Limit |
|---|---|---|---|---|
| T59; S/N: 3245 @3m | T145 Agilent 3008A0056 | | | FCC 15.205 |

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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Low Ch, 2402MHz** | | | | | | | | | | | | | | | |
| 4.804 | 3.0 | 40.0 | 27.7 | 32.8 | 5.8 | -34.8 | 0.0 | 0.0 | 43.7 | 31.4 | 74 | 54 | -30.3 | -22.6 | H |
| 4.804 | 3.0 | 41.0 | 28.0 | 32.8 | 5.8 | -34.8 | 0.0 | 0.0 | 44.7 | 31.7 | 74 | 54 | -29.3 | -22.3 | V |
| **Mid Ch, 2441MHz** | | | | | | | | | | | | | | | |
| 4.882 | 3.0 | 40.3 | 28.0 | 32.8 | 5.8 | -34.9 | 0.0 | 0.0 | 44.1 | 31.8 | 74 | 54 | -29.9 | -22.2 | H |
| 7.323 | 3.0 | 41.0 | 27.8 | 35.2 | 7.3 | -34.7 | 0.0 | 0.0 | 48.8 | 35.6 | 74 | 54 | -25.2 | -18.4 | H |
| 4.882 | 3.0 | 40.0 | 28.1 | 32.8 | 5.8 | -34.9 | 0.0 | 0.0 | 43.8 | 31.9 | 74 | 54 | -30.2 | -22.1 | V |
| 7.323 | 3.0 | 40.6 | 27.3 | 35.2 | 7.3 | -34.7 | 0.0 | 0.0 | 48.4 | 35.1 | 74 | 54 | -25.6 | -18.9 | V |
| **High Ch, 2480Mhz** | | | | | | | | | | | | | | | |
| 4.960 | 3.0 | 40.0 | 27.5 | 32.9 | 5.9 | -34.9 | 0.0 | 0.0 | 43.9 | 31.4 | 74 | 54 | -30.1 | -22.6 | H |
| 7.440 | 3.0 | 41.0 | 27.8 | 35.4 | 7.3 | -34.6 | 0.0 | 0.0 | 49.1 | 35.9 | 74 | 54 | -24.9 | -18.1 | H |
| 4.960 | 3.0 | 39.3 | 27.0 | 32.9 | 5.9 | -34.9 | 0.0 | 0.0 | 43.2 | 30.9 | 74 | 54 | -30.8 | -23.1 | V |
| 7.440 | 3.0 | 40.7 | 27.8 | 35.4 | 7.3 | -34.6 | 0.0 | 0.0 | 48.8 | 35.9 | 74 | 54 | -25.2 | -18.1 | V |

Rev. 11.10.08
**Note: No other emissions were detected above the system noise floor.**

| | | | | | |
|---|---|---|---|---|---|
| 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 | | |

## 8.2.3. RECEIVER ABOVE 1 GHz FOR BLUETOOTH ( WORST CASE)

High Frequency Measurement
Compliance Certification Services, Fremont 5m Chamber

Company: Palm
Project #: 09U12821
Date: 9/29/2009
Test Engineer: Chin Pang
Configuration: EUT/AC Adapter/Earphone
Mode: RX ( Worst Case)

Test Equipment:

| Horn 1-18GHz | Pre-amplifer 1-26GHz | Pre-amplifer 26-40GHz | Horn > 18GHz | Limit |
|---|---|---|---|---|
| T73; S/N: 6717 @3m | T144 Miteq 3008A00931 | | | FCC 15.209 |

Hi Frequency Cables

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

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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.440 | 3.0 | 46.5 | 40.1 | 28.3 | 3.9 | -37.5 | 0.0 | 0.0 | 41.2 | 34.8 | 74 | 54 | -32.8 | -19.2 | H |
| 3.875 | 3.0 | 45.0 | 39.5 | 32.0 | 5.1 | -36.7 | 0.0 | 0.0 | 45.3 | 39.8 | 74 | 54 | -28.7 | -14.2 | H |
| 2.440 | 3.0 | 45.0 | 34.6 | 28.3 | 3.9 | -37.5 | 0.0 | 0.0 | 39.7 | 29.3 | 74 | 54 | -34.3 | -24.7 | V |
| 3.875 | 3.0 | 43.5 | 36.2 | 32.0 | 5.1 | -36.7 | 0.0 | 0.0 | 43.8 | 36.5 | 74 | 54 | -30.2 | -17.5 | V |

Rev. 11.10.08
**Note: No other emissions were detected above the system noise floor.**

| | | | | | |
|---|---|---|---|---|---|
| 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. WORST-CASE BELOW 1 GHz

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

**EUT WITH AC/DC ADAPTER**

**30-1000MHz Frequency Measurement**
**Compliance Certification Services, Fremont 5m Chamber**

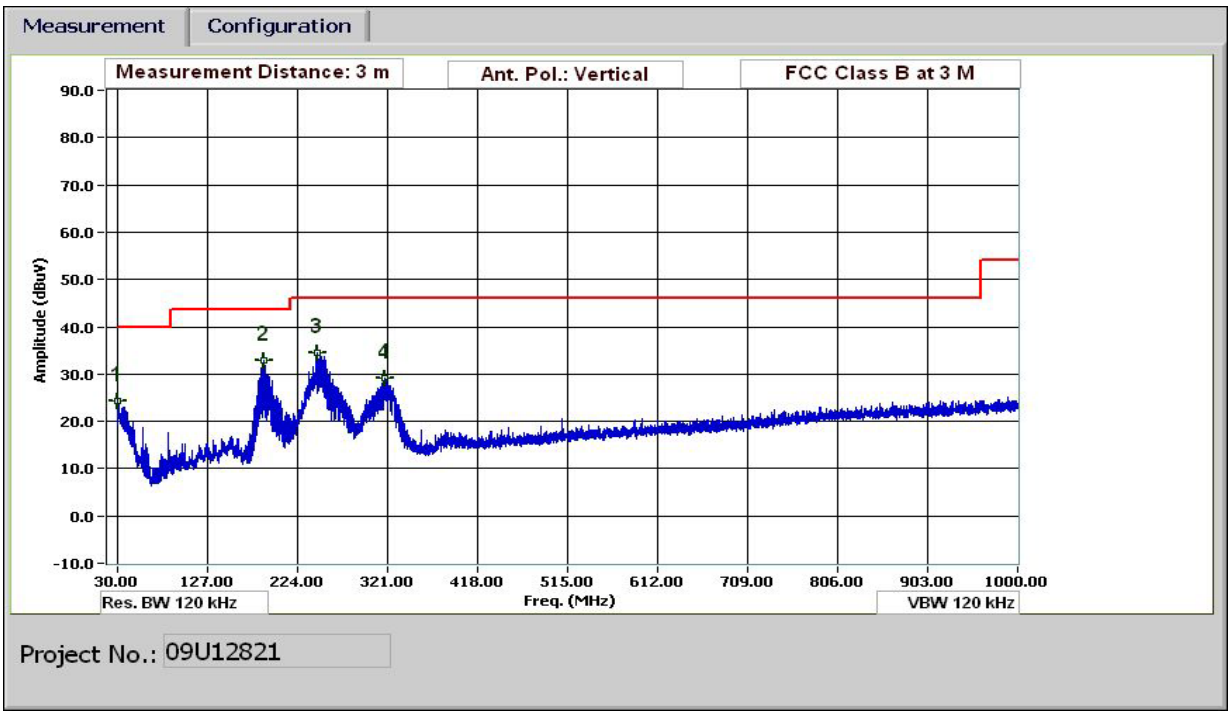
**Test Engr:** Chin Pang
**Date:** 09/29/09
**Project #:** 09U12821
**Company:** Palm
**EUT Description:** CDMA-EVDO with Bluetooth smartphone
**EUT Configuration:** EUT with AC/DC Adapter
**EUT M/N:** P120EWW
**Test Target:** FCC Class B
**Mode Oper:** TX, BT

| | | | | | |
|---|---|---|---|---|---|
| f | Measurement Frequency | Amp | Preamp Gain | Margin | Margin vs. Limit |
| Dist | Distance to Antenna | D Corr | Distance Correct to 3 meters | | |
| Read | Analyzer Reading | Filter | Filter Insert Loss | | |
| AF | Antenna Factor | Corr. | Calculated Field Strength | | |
| CL | Cable Loss | Limit | Field Strength Limit | | |

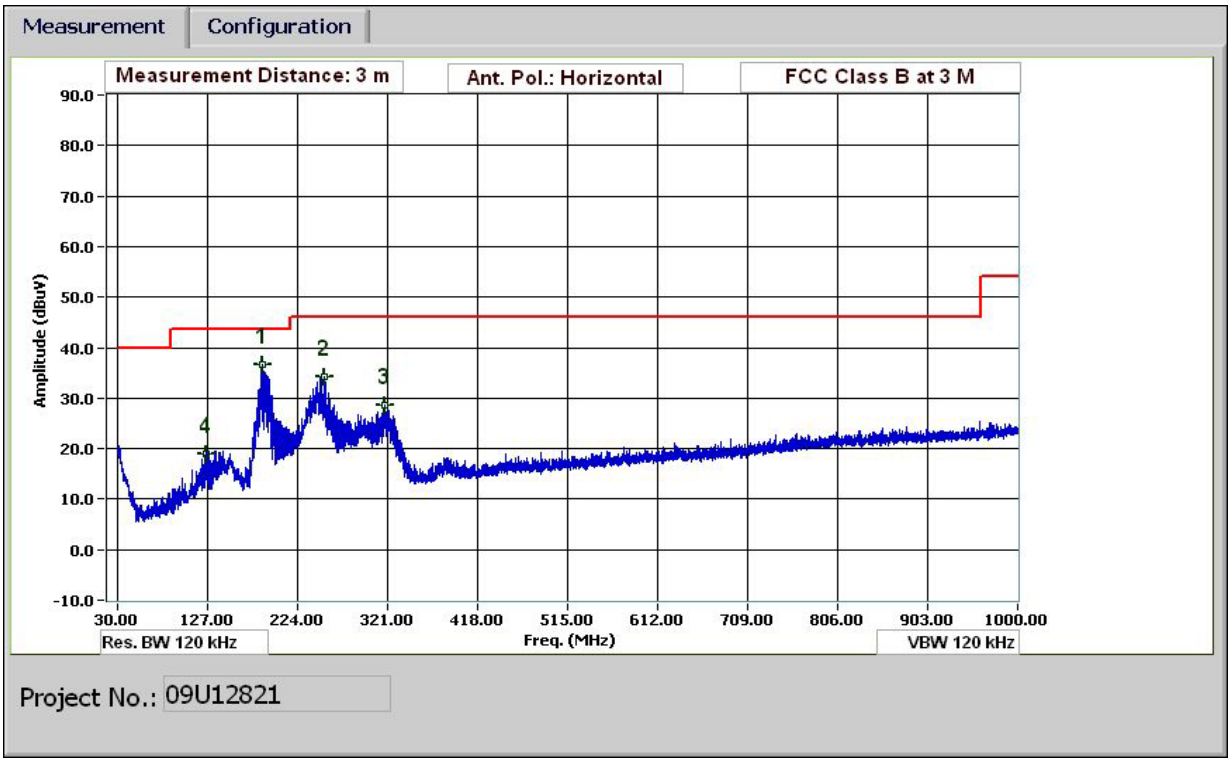
| f MHz | Dist (m) | Read dBuV | AF dB/m | CL dB | Amp dB | D Corr dB | Filter dB | Corr. dBuV/m | Limit dBuV/m | Margin dB | Ant. Pol. V/H | Det. P/A/QP | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| vert | | | | | | | | | | | | | |
| 30.720 | 3.0 | 33.6 | 20.0 | 0.5 | 29.7 | 0.0 | 0.0 | 24.4 | 40.0 | -15.6 | V | EP | |
| 187.086 | 3.0 | 49.5 | 11.1 | 1.2 | 29.0 | 0.0 | 0.0 | 32.8 | 43.5 | -10.7 | V | EP | |
| 245.529 | 3.0 | 50.0 | 11.8 | 1.4 | 28.8 | 0.0 | 0.0 | 34.5 | 46.0 | -11.5 | V | EP | |
| 317.892 | 3.0 | 42.7 | 13.6 | 1.6 | 28.9 | 0.0 | 0.0 | 29.1 | 46.0 | -16.9 | V | EP | |
| 126.124 | 3.0 | 33.6 | 13.8 | 1.0 | 29.4 | 0.0 | 0.0 | 19.0 | 43.5 | -24.5 | H | EP | |
| 186.846 | 3.0 | 53.3 | 11.1 | 1.2 | 29.0 | 0.0 | 0.0 | 36.6 | 43.5 | -6.9 | H | EP | |
| 252.489 | 3.0 | 49.8 | 11.9 | 1.4 | 28.8 | 0.0 | 0.0 | 34.3 | 46.0 | -11.7 | H | EP | |
| 318.372 | 3.0 | 42.3 | 13.6 | 1.7 | 28.9 | 0.0 | 0.0 | 28.6 | 46.0 | -17.4 | H | EP | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

Rev. 1.27.09

**SPURIOUS EMISSIONS 30 TO 1000, VERTICAL)**




**SPURIOUS EMISSIONS 30 TO 1000, HORIZONTAL**



## EUT WITH INDUCTIVE CHARGING DOCK

**30-1000MHz Frequency Measurement**
**Compliance Certification Services, Fremont 5m Chamber**

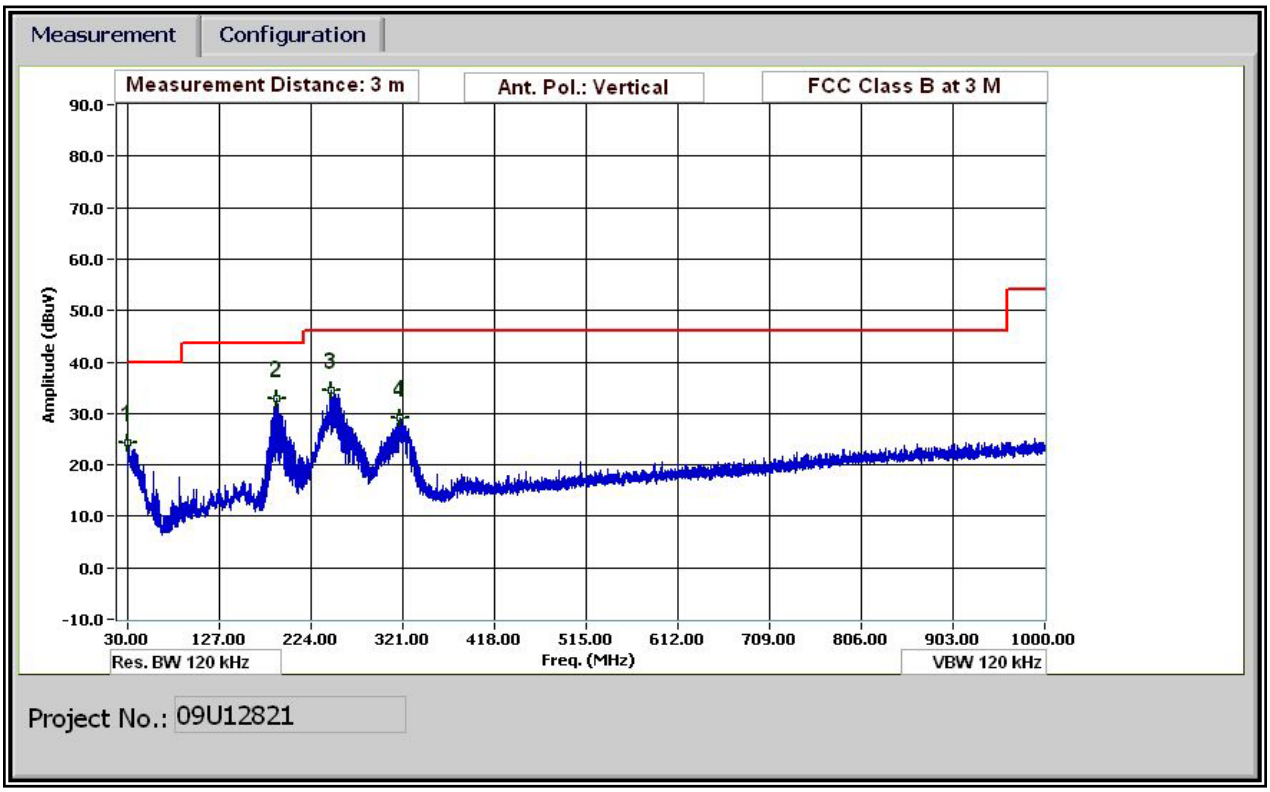
**Test Engr:** Chin Pang
**Date:** 09/30/09
**Project #:** 09U12821
**Company:** Palm
**EUT Description:** CDMA-EVDO with BT Smartphone
**Configuration:** EUT with Inductive Charging Dock
**EUT M/N:** P120EWW
**Test Target:** FCC Class B
**Mode Oper:** TX ( worst Case)

| | | | | | |
|---|---|---|---|---|---|
| f | Measurement Frequency | Amp | Preamp Gain | Margin | Margin vs. Limit |
| Dist | Distance to Antenna | D Corr | Distance Correct to 3 meters | | |
| Read | Analyzer Reading | Filter | Filter Insert Loss | | |
| AF | Antenna Factor | Corr. | Calculated Field Strength | | |
| CL | Cable Loss | Limit | Field Strength Limit | | |

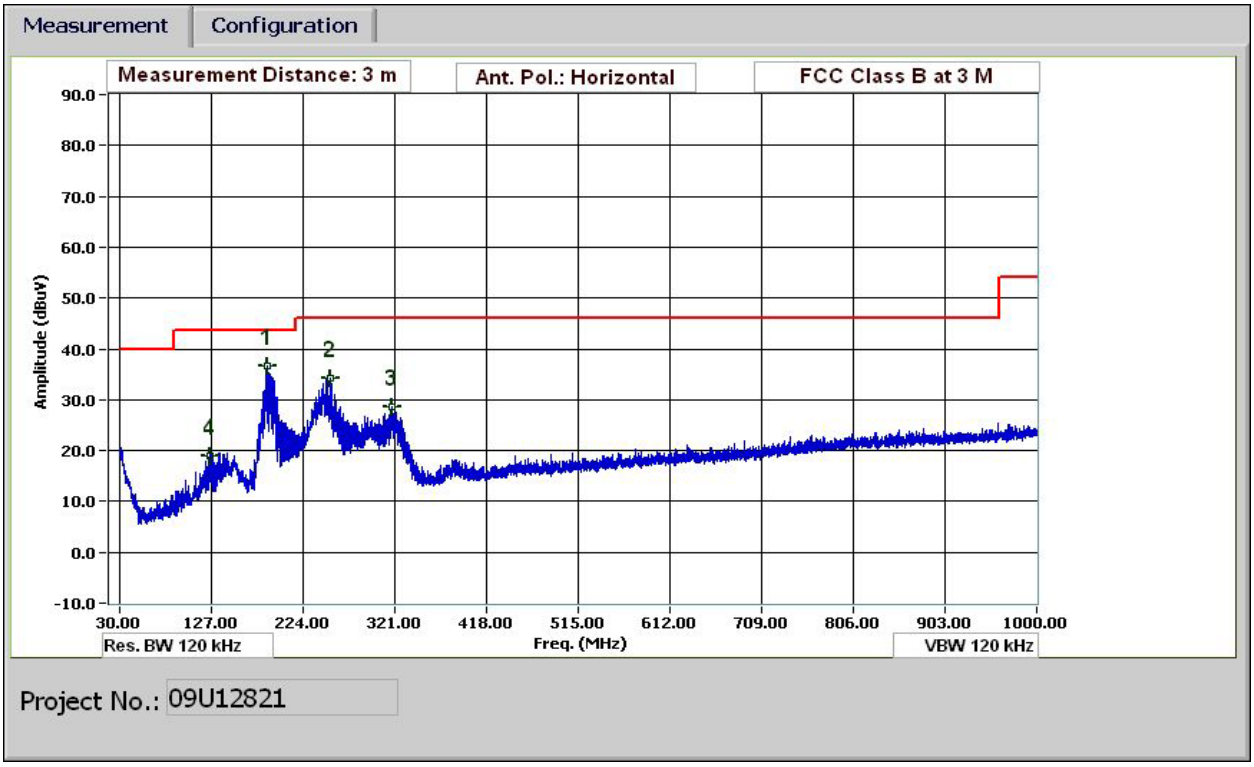
| f MHz | Dist (m) | Read dBuV | AF dB/m | CL dB | Amp dB | D Corr dB | Filter dB | Corr. dBuV/m | Limit dBuV/m | Margin dB | Ant. Pol. V/H | Det. P/A/QP | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 185.166 | 3.0 | 44.9 | 11.1 | 1.2 | 29.0 | 0.0 | 0.0 | 28.2 | 43.5 | -15.3 | H | EP | |
| 249.729 | 3.0 | 42.7 | 11.8 | 1.4 | 28.8 | 0.0 | 0.0 | 27.1 | 46.0 | -18.9 | H | EP | |
| 320.052 | 3.0 | 51.4 | 13.6 | 1.7 | 28.9 | 0.0 | 0.0 | 37.8 | 46.0 | -8.2 | H | EP | |
| 614.424 | 3.0 | 34.9 | 18.4 | 2.4 | 29.6 | 0.0 | 0.0 | 26.1 | 46.0 | -19.9 | H | EP | |
| 41.640 | 3.0 | 39.4 | 13.1 | 0.6 | 29.6 | 0.0 | 0.0 | 23.4 | 40.0 | -16.6 | V | EP | |
| 185.766 | 3.0 | 44.0 | 11.1 | 1.2 | 29.0 | 0.0 | 0.0 | 27.3 | 43.5 | -16.2 | V | EP | |
| 249.849 | 3.0 | 48.5 | 11.8 | 1.4 | 28.8 | 0.0 | 0.0 | 33.0 | 46.0 | -13.0 | V | EP | |
| 318.372 | 3.0 | 43.1 | 13.6 | 1.7 | 28.9 | 0.0 | 0.0 | 29.4 | 46.0 | -16.6 | V | EP | |

**Rev. 1.27.09**
**Note: No other emissions were detected above the system noise floor.**

**SPURIOUS EMISSIONS 30 TO 1000, VERTICAL)**




**SPURIOUS EMISSIONS 30 TO 1000, HORIZONTAL**



## 8.4. 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**

**EUT WITH AC/DC ADAPTER**

**6 WORST EMISSIONS**

| CONDUCTED EMISSIONS DATA (115VAC 60Hz) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Freq. | Reading | | | Closs | Limit | EN_B | Margin | | Remark |
| (MHz) | PK (dBuV) | QP (dBuV) | AV (dBuV) | (dB) | QP | AV | QP (dB) | AV (dB) | L1 / L2 |
| 0.21 | 59.18 | -- | 44.35 | 0.00 | 63.13 | 53.13 | -3.95 | -8.78 | L1 |
| 0.42 | 51.88 | -- | 38.16 | 0.00 | 57.47 | 47.47 | -5.59 | -9.31 | L1 |
| 1.03 | 45.41 | -- | 24.89 | 0.00 | 56.00 | 46.00 | -10.59 | -21.11 | L1 |
| 0.21 | 54.92 | -- | 45.12 | 0.00 | 63.05 | 53.05 | -8.13 | -7.93 | L2 |
| 0.42 | 49.20 | -- | 42.19 | 0.00 | 57.47 | 47.47 | -8.27 | -5.28 | L2 |
| 1.03 | 48.67 | -- | 26.51 | 0.00 | 56.00 | 46.00 | -7.33 | -19.49 | L2 |
| 6 Worst Data | | | | | | | | | |

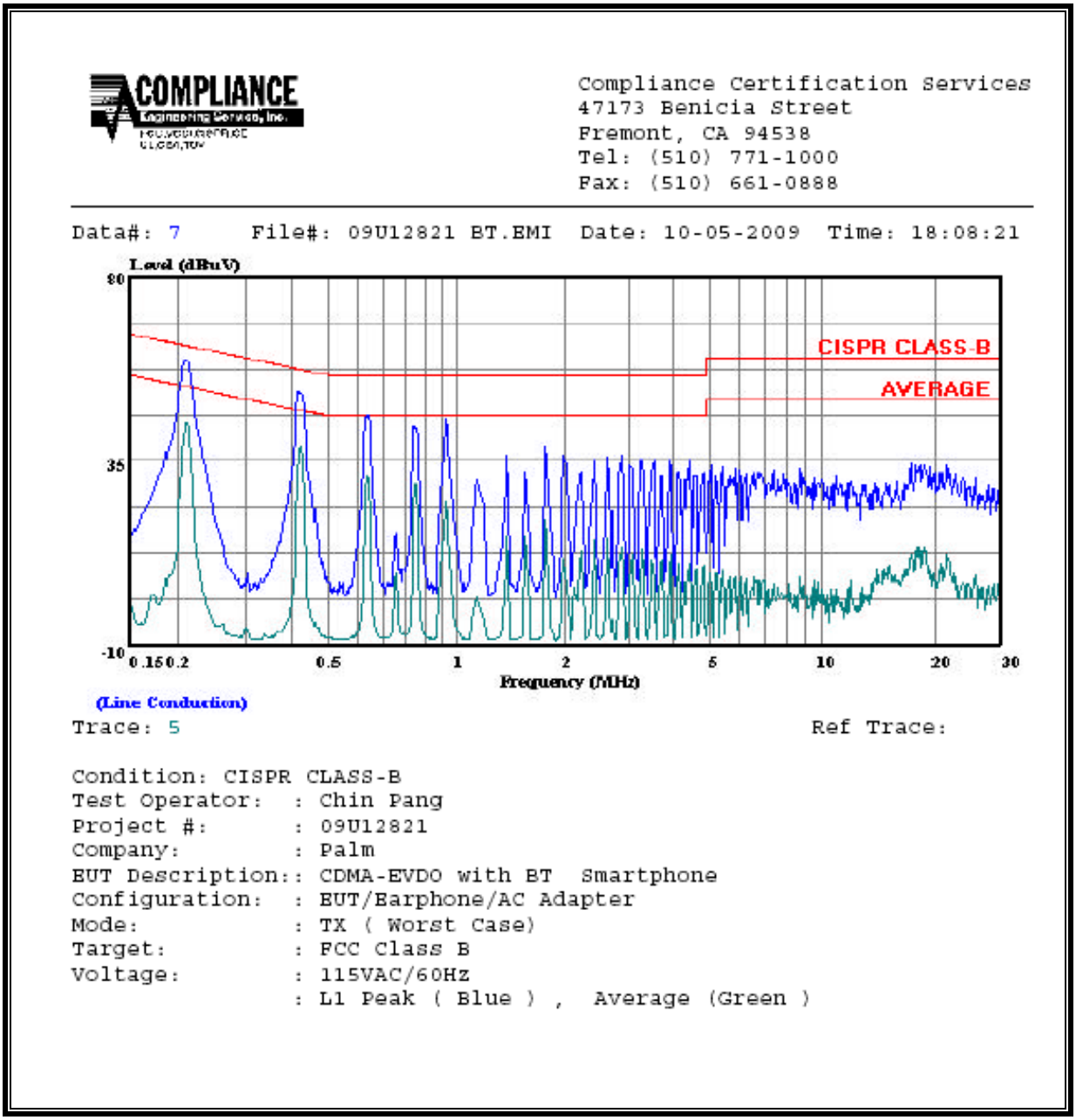
**EUT WITH INDUCTIVE CHARGING DOCK**

**6 WORST EMISSIONS**

| CONDUCTED EMISSIONS DATA (115VAC 60Hz) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Freq. | Reading | | | Closs | Limit | EN_B | Margin | | Remark |
| (MHz) | PK (dBuV) | QP (dBuV) | AV (dBuV) | (dB) | QP | AV | QP (dB) | AV (dB) | L1 / L2 |
| 0.20 | 55.12 | -- | 43.94 | 0.00 | 63.82 | 53.82 | -8.70 | -9.88 | L1 |
| 0.40 | 50.32 | -- | 41.35 | 0.00 | 57.81 | 47.81 | -7.49 | -6.46 | L1 |
| 0.97 | 49.60 | -- | 35.64 | 0.00 | 56.00 | 46.00 | -6.40 | -10.36 | L1 |
| 0.20 | 54.42 | -- | 46.62 | 0.00 | 63.82 | 53.82 | -9.40 | -7.20 | L2 |
| 0.39 | 51.69 | -- | 44.84 | 0.00 | 58.04 | 48.04 | -6.35 | -3.20 | L2 |
| 0.98 | 52.56 | -- | 39.81 | 0.00 | 56.00 | 46.00 | -3.44 | -6.19 | L2 |
| 6 Worst Data | | | | | | | | | |

**EUT WITH AC/DC ADAPTER**

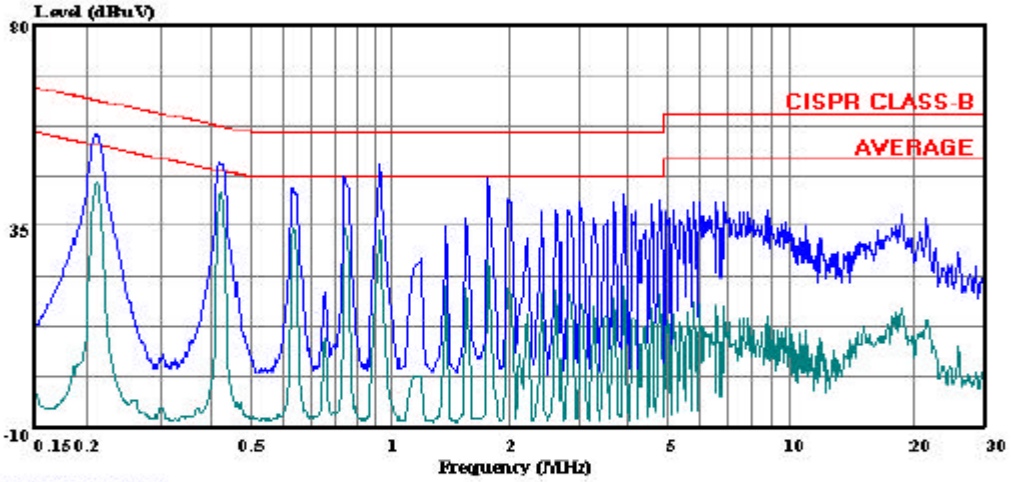
**LINE 1 RESULTS**



**LINE 2 RESULTS**

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

Data#: 14 File#: 09U12821 BT.EMI Date: 10-05-2009 Time: 18:13:41




(Line Conduction)

Trace: 12 Ref Trace:

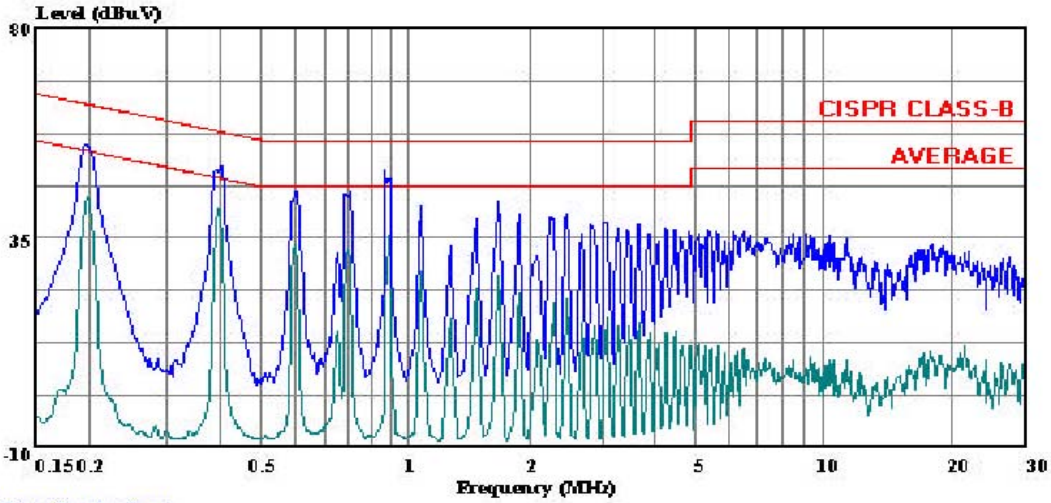
Condition: CISPR CLASS-B
Test Operator: : Chin Pang
Project #: : 09U12821
Company: : Palm
EUT Description:: CDMA-EVDO with BT Smartphone
Configuration: : EUT/Earphone/AC Adapter
Mode: : TX ( Worst Case)
Target: : FCC Class B
Voltage: : 115VAC/60Hz
: L2: Peak ( Blue ) , Average (Green )

**EUT WITH INDUCTIVE CHARGING DOCK**

**LINE 1 RESULTS**

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

Data#: 21 File#: 09U12821_FCCB.EMIDate: 09-30-2009 Time: 10:51:23




(Line Conduction)

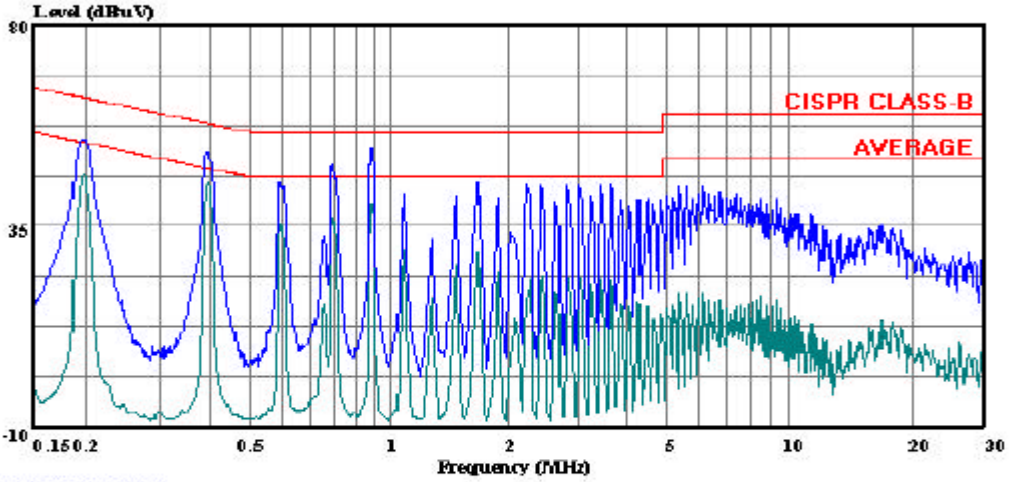
Trace: 19 Ref Trace:

Condition: CISPR CLASS-B
Test Operator: : Chin Pang
Project #: : 09U12821
Company: : Palm
EUT Description:: CDMA-EVDO with BT Smartphone
Configuration: : EUT ( Inductive backcover) powered by
: AC adapter
Mode: : TX ( Worst Case)
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#: 28 File#: 09U12821 FCCB.EMIDate: 09-30-2009 Time: 11:00:29




(Line Conduction)

Trace: 26 Ref Trace:

Condition: CISPR CLASS-B
Test Operator: : Chin Pang
Project #: : 09U12821
Company: : Palm
EUT Description:: CDMA-EVDO with BT Smartphone
Configuration: : EUT ( Inductive backcover) powered by
: AC adapter
Mode: : TX ( Worst Case)
Target: : FCC Class B
Voltage: : 115VAC/60Hz
: L2: Peak ( Blue ) , Average (Green )