**Compliance Testing, LLC**
**Previously Flom Test Lab**
*RF, EMC and Safety Testing Experts Since 1963*
toll-free: (866) 311-3268
fax: (480) 926-3598
http://www.ComplianceTesting.com
info@ComplianceTesting.com

| | |
|---|---|
| Date: | December 17, 2010 |
| Applicant: | Bug Labs, Inc<br>598 Broadway<br>4th Floor<br>New York, NY 10012 |
| Attention of: | Matt Peddicord, Director of Operations<br>Ph: (212) 792-6357<br>Fax: (212) 792-6358<br>E-mail: matt.peddicord@buglabs.net |
| Equipment: | BUG Y.T. |
| FCC ID: | W3J-BUGYT |
| FCC Rules: | 15.247 |

Enclosed please find your copy of the Engineering Test Report for which you are subject to the restrictions as listed on the attached summary.
This report may not be reproduced, except in full, without written permission from Compliance Testing, LLC. Please retain a copy of this report for your archival purposes.

Once a Telecommunication Certification Body (TCB) issues a Grant, the Federal Communication Commission (FCC) has 30 days to review the application and request added information. It is your decision whether or not to market the equipment subject to a possible recall before the end of the 30 days.

If your equipment is still retained by us, it will be returned to you 30 days after approval is achieved.
Our invoice for services has been directed to your Accounts Payable Department.

For any additional information please contact us.

Sincerely,

Compliance Testing

**Compliance Testing, LLC**
**Previously Flom Test Lab**
*RF, EMC and Safety Testing Experts Since 1963*
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# Test Report

for

**FCC ID:** W3J-BUGYT

**Model:** BUG Y.T.

to

**Federal Communications Commission**

Rule Part(s) 15.247

**Date of Report:** December 17, 2010

**On the Behalf of the Applicant**:
Bug Labs, Inc
598 Broadway
4th Floor
New York, NY 10012

**Attention of:**
Matt Peddicord, Director of Operations
Ph: (212) 792-6357
Fax: (212) 792-6358
E-mail: matt.peddicord@buglabs.net

By
Compliance Testing, LLC
3356 N. San Marcos Place, Suite 107
Chandler, Arizona 85225-7176
(866) 311-3268 phone, (480) 926-3598 fax

# Test Report Revision History

| Revision | Date | Revised By | Reason for revision |
|---|---|---|---|
| 1.0 | December 17, 2010 | J. Erhard | Original Document |
| 2.0 | January 13, 2011 | K. Springer | Revised Model Info per Customer request |
| 3.0 | January 21, 2011 | J. Erhard | Edit Frequency list on OCC BW tables |
| | | | |

**The applicant has been cautioned as to the following:**

15.21 Information to User

The user's manual or instruction manual for an intentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

15.27(a) Special Accessories

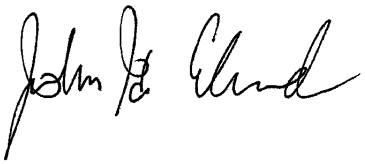
Equipment marketed to a consumer must be capable of complying with the necessary regulations in the configuration in which the equipment is marketed. Where special accessories, such as shielded cables and/or special connectors are required to enable an unintentional or intentional radiator to comply with the emission limits in this part, the equipment must be marketed with, i.e. shipped and sold with, those special accessories. However, in lieu of shipping or packaging the special accessories with the unintentional or intentional radiator, the responsible party may employ other methods of ensuring that the special accessories are provided to the consumer, without additional charge.

Information detailing any alternative method used to supply the special accessories for a grant of equipment authorization or retained in the verification records, as appropriate. The party responsible for the equipment, as detailed in § 2.909 of this chapter, shall ensure that these special accessories are provided with the equipment. The instruction manual for such devices shall include appropriate instructions on the first page of text concerned with the installation of the device that these special accessories must be used with the device. It is the responsibility of the user to use the needed special accessories supplied with the equipment.

# Testimonial and Statement of Certification

**This is to certify that**:

1. **That** the application was prepared either by, or under the direct supervision of, the undersigned.
2. **That** the technical data supplied with the application was taken under my direction and supervision.
3. **That** the data was obtained on representative units, randomly selected.
4. **That**, to the best of my knowledge and belief, the facts set forth in the application and accompanying technical data is true and correct.



Certifying Engineer: John Erhard: Engineering Manager

# Table of Contents

## List of General Information Required For Certification

In Accordance with FCC Rules and Regulations, Volume II, Part 2 and to 15.247

**Sub-Part 2.1033**

(b)(1):

| | |
|---|---|
| **Name and Address of Applicant:** | Bug Labs, Inc.<br>598 Broadway 4th Floor<br>New York, NY 10012 |
| (b)(2): | |
| **FCC ID**: | W3J-BUGYT |
| **Model Number**: | BUG Y.T. |
| (b)(3): | |
| **Instruction Manual(s)**: | Please See Exhibits |
| (b)(4): | |
| **Theory of Operation**: | Please See Exhibits |
| (b)(5): | |
| **Block Diagram**: | Please See Exhibits |
| (b)(6): | |
| T**est Report**: | Contained Herein |
| (b)(7): | |
| **Test Setup Photos:** | Please See Exhibits |

15.203: **Antenna Requirement**:

| | |
|---|---|
| X | The antenna is permanently attached to the EUT |
| | The antenna uses a unique coupling |
| | The EUT must be professionally installed |
| | The antenna requirement does not apply |

## Test and Measurement Data

All tests and measurement data shown were performed in accordance with FCC Rules and Regulations, Volume II; Part 2 and the following individual Parts: 15.247 Operation within bands 902-928, 2400-2483.5, 5725-5850 MHz

## Standard Test Conditions and Engineering Practices

Except as noted herein, the following conditions and procedures were observed during the testing:

In accordance with ANSI C63.10-2009 and unless otherwise indicated in the specific measurement results, the ambient temperature of the actual EUT was maintained within the range of 10° to 40°C (50° to 104 °F) unless the particular equipment requirements specify testing over a different temperature range. Also, unless otherwise indicated, the humidity levels were in the range of 10% to 90% relative humidity.

Measurement results, unless otherwise noted, are worst-case measurements.

| Environmental Conditions | | |
|---|---|---|
| **Temperature** | **Humidity** | **Pressure** |
| 78 degrees Fahrenheit | 25% | 30.5 inches of mercury |

## A2LA

"A2LA has accredited Compliance Testing, LLC in Chandler, AZ for technical competence in the field of Electrical testing. The accreditation covers the specific tests and types of tests listed on the agreed scope of accreditation. This laboratory meets the requirements of ISO 17025:2005 'General Requirements for the Competence of Testing and Calibration Laboratories' and any additional program requirements in the identified field of testing."

Please refer to www.a2la.org for current scope of accreditation.

Certificate number: 2152.01

ACCREDITED
TESTING CERT# 2152.01

**FCC OATS Reg. #933597**

**IC O.A.T.S. Number: 2044A-1**

## Test Results Summary

| Specification | Test Name | Pass, Fail, N/A | Comments |
|---|---|---|---|
| 15.247(a) | Number of Hopping Channels | Pass | FHSS Only |
| 15.247(a) | Channel Spacing | Pass | FHSS Only |
| 15.247(a) | Dwell Time | Pass | FHSS Only |
| 15.247(b) | Peak Output Power | Pass | |
| 15.247(d) | Conducted Spurious Emissions | Pass | |
| 15.247(d), 15.209(a), 15.205 | Radiated Spurious Emissions | Pass | |
| 15.247(d), 15.209(a), 15.205 | Emissions At Band Edges | Pass | |
| 15.247(a)(2) | Occupied Bandwidth | Pass | |
| 15.247(e) | Transmitter Power Spectral Density | Pass | DTS Only |
| 15.207 | A/C Powerline Conducted Emissions | Pass | |
| RSS-GEN6(b) | Receiver Spurious Emissions | Pass | |

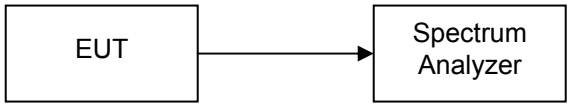
**Name of Test**: Number of Hopping Channels
**Specification**: 15.247(a) **Engineer: J. Erhard**
**Test Equipment Utilized**: i00379 **Test Date: 12/15/2010**

## Test Procedure

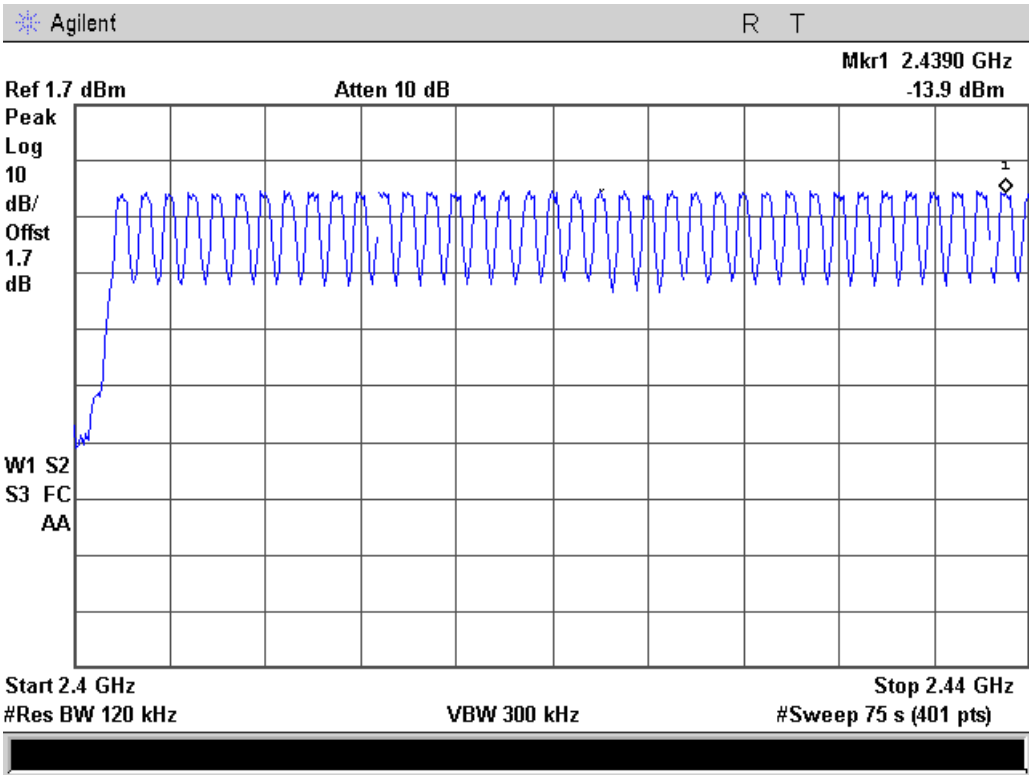
The EUT was connected directly to a spectrum analyzer and the total number of hopping channels was measured. A marker was placed at 2390 MHz as a reference and two plots were captured allowing the total number of channels to be counted.

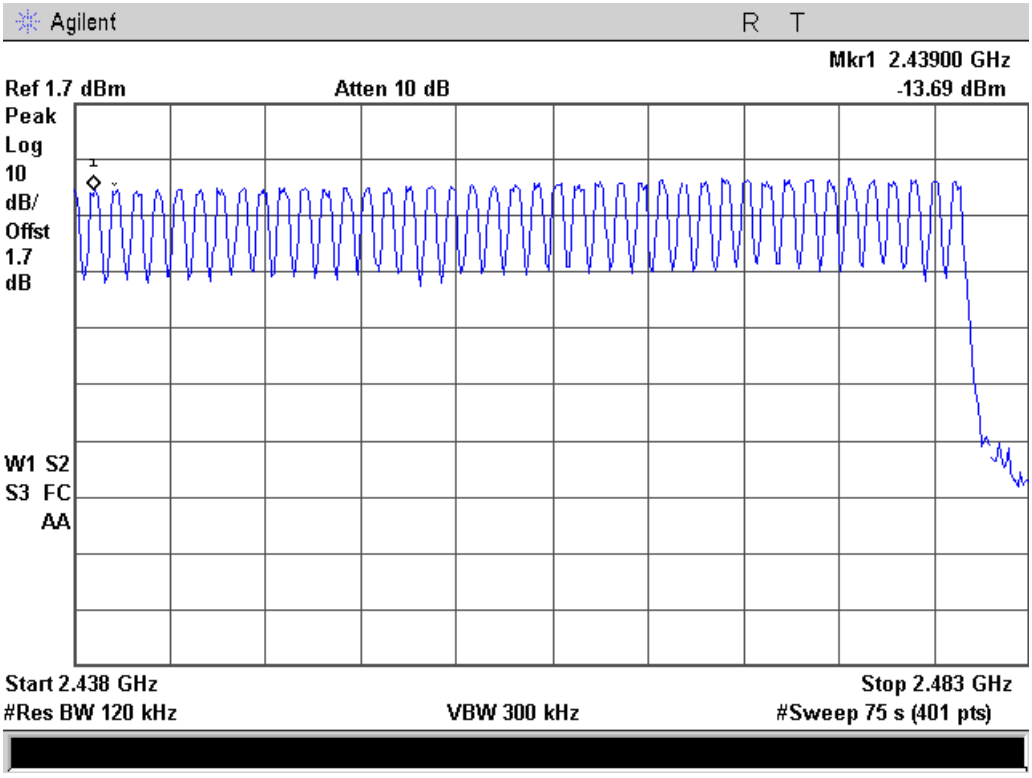
**Total channel count - 79**

## Test Setup



## Channel Spacing Test Results



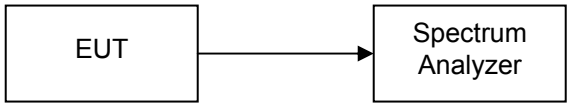
**Name of Test**: Channel Spacing
**Specification**: 15.247(a)
**Test Equipment Utilized**: i00379

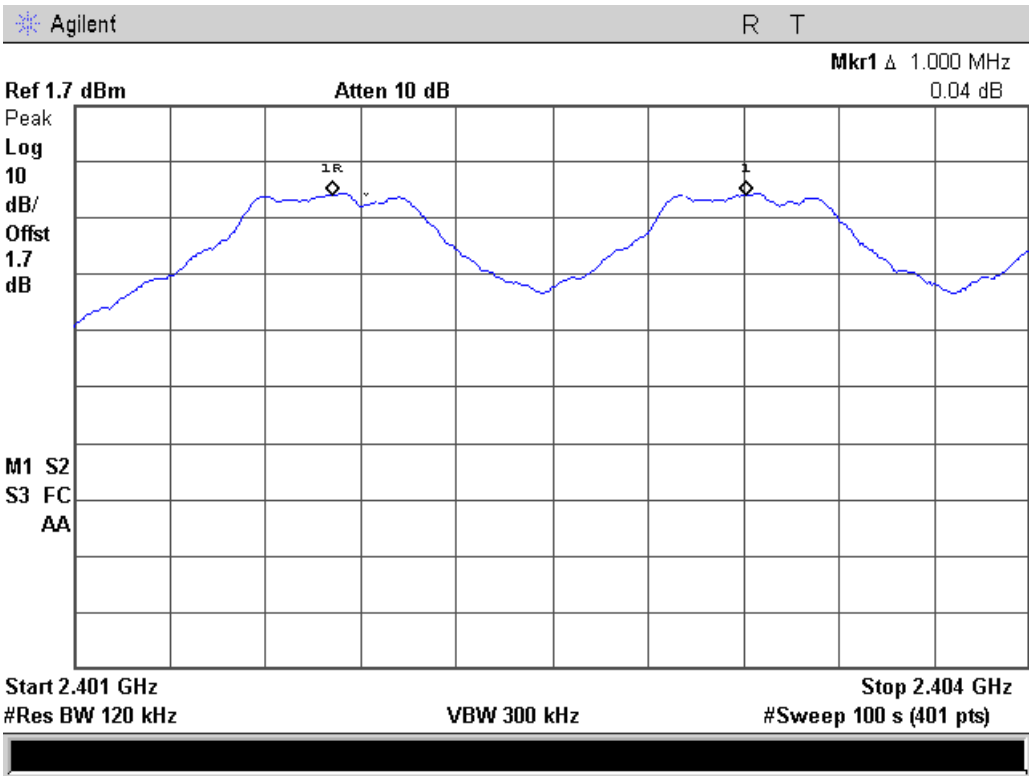
**Engineer: J. Erhard**
**Test Date: 12/15/2010**

## Test Procedure

The EUT was connected directly to a spectrum analyzer and the channel spacing was measured.

## Test Setup



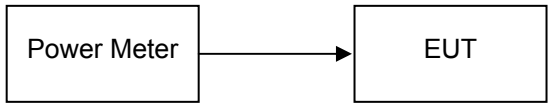
**Name of Test**: Dwell Time
**Specification**: 15.247(a)
**Test Equipment Utilized**: i00379

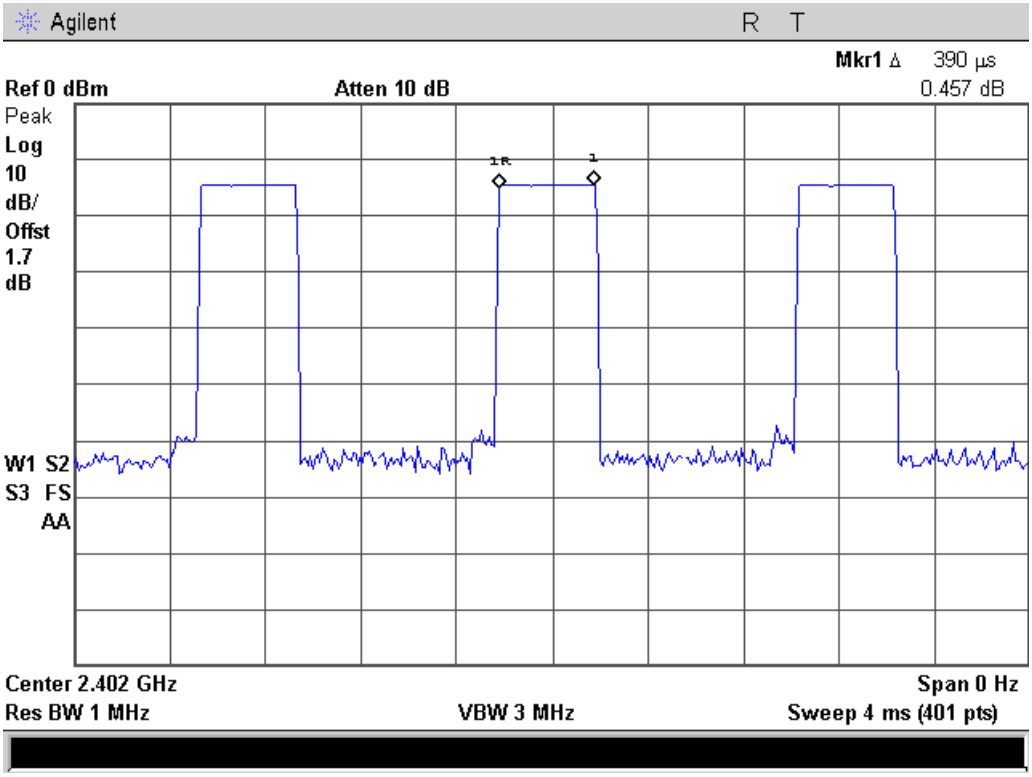
**Engineer: J. Erhard**
**Test Date: 12/14/2010**

## Test Procedure

The EUT was connected directly to a spectrum analyzer and the dwell time was measured.

## Test Setup



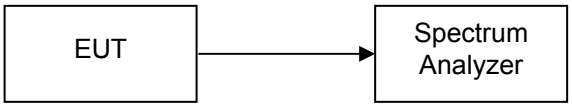



**Name of Test**: Peak Output Power
**Specification**: 15.247(b) **Engineer: J. Erhard**
**Test Equipment Utilized**: i00379 **Test Date: 12/10/2010**

**Test Procedure**

The EUT was connected directly to a power meter input.
The peak readings were taken and the result was then compared to the limit.

**Test Setup**




**DTS Transmitter Peak Output Power**

| Tuned Frequency MHz | Recorded Measurement dBm | Recorded Measurement Watts | Specification Limit | Result |
|---|---|---|---|---|
| 2412 | -7.14 | 0.00019 | 1 W | Pass |
| 2437 | -8.29 | 0.00015 | 1 W | Pass |
| 2462 | -7.67 | 0.00017 | 1 W | Pass |

**FHSS Transmitter Peak Output Power**

| Tuned Frequency MHz | Recorded Measurement dBm | Recorded Measurement Watts | Specification Limit | Result |
|---|---|---|---|---|
| 2402 | -15.94 | 0.000025 | 1 W | Pass |
| 2439 | -15.92 | 0.000026 | 1 W | Pass |
| 2480 | -14.51 | 0.000035 | 1 W | Pass |

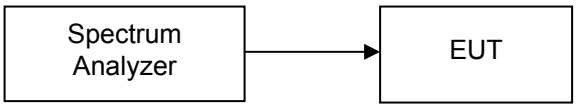
**Name of Test**: Conducted Spurious Emissions
**Specification**: 15.247(d) **Engineer: J. Erhard**
**Test Equipment Utilized**: i00379 **Test Date: 12/14/2010**

## Test Procedure

The EUT was connected directly to a spectrum analyzer to verify that the EUT met the requirements for spurious emissions. The frequency range from 30 MHz to the 10th harmonic of the fundamental transmitter was observed. Only detectable spurious emissions were recorded and plotted.

Only the worst case for each frequency and transmission type is recorded in the Conducted Spurious Emissions Summary Test Table.

## Test Setup



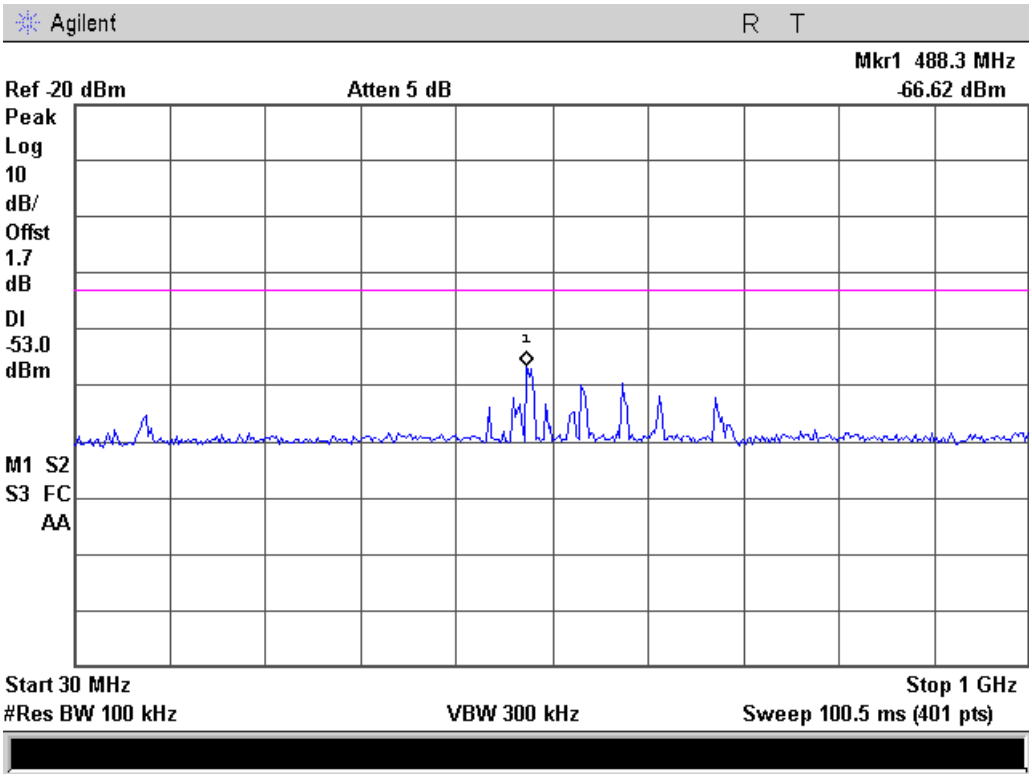

## DTS Conducted Spurious Emissions Summary Test Table

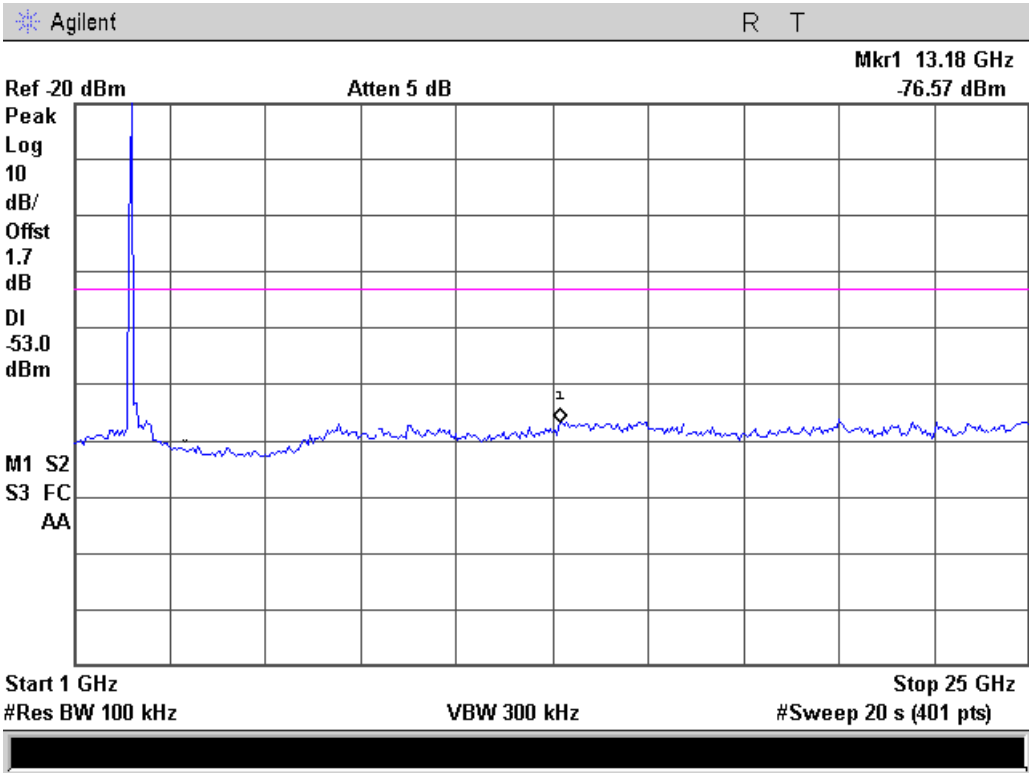
| Tuned Frequency MHz | Emission Frequency MHz | Recorded Measurement dBm | Result |
|---|---|---|---|
| 2412 | 488.3 | -66.62 | Pass |
| 2437 | 488.3 | -66.57 | Pass |
| 2462 | 493.2 | -68.23 | Pass |

## FHSS Conducted Spurious Emissions Summary Test Table

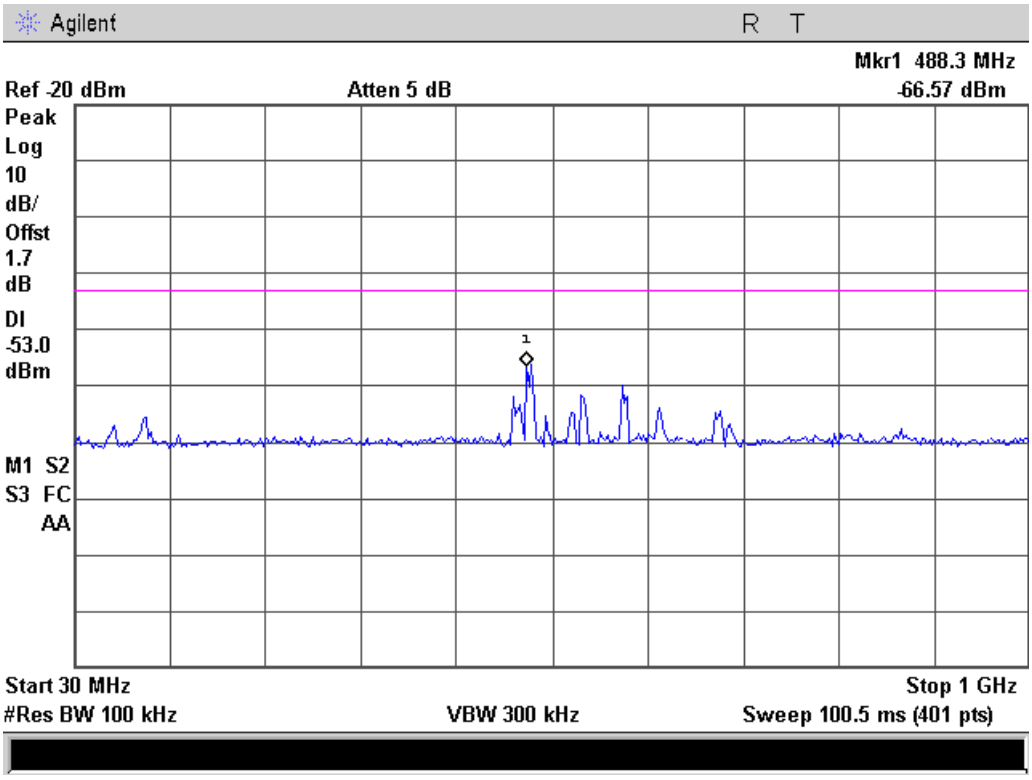
| Tuned Frequency MHz | Emission Frequency MHz | Recorded Measurement dBm | Result |
|---|---|---|---|
| 2402 | 490.8 | -65.60 | Pass |
| 2439 | 493.2 | -66.14 | Pass |
| 2480 | 490.8 | -66.74 | Pass |

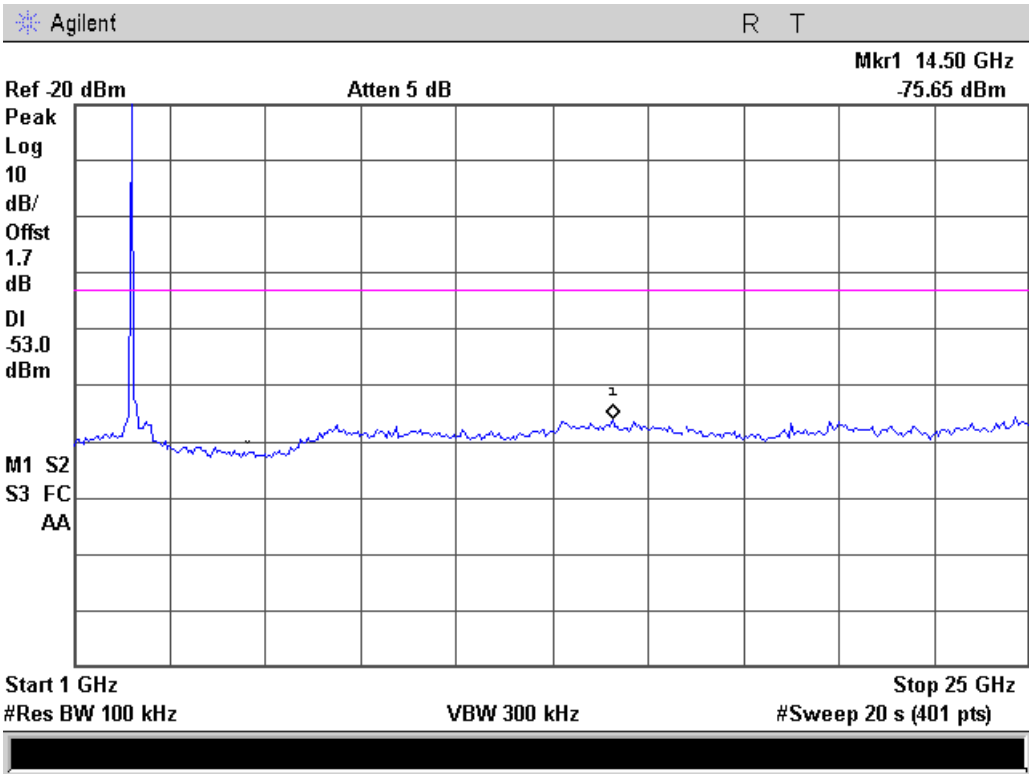
## DTS Conducted Spurious Emissions 2412 MHz



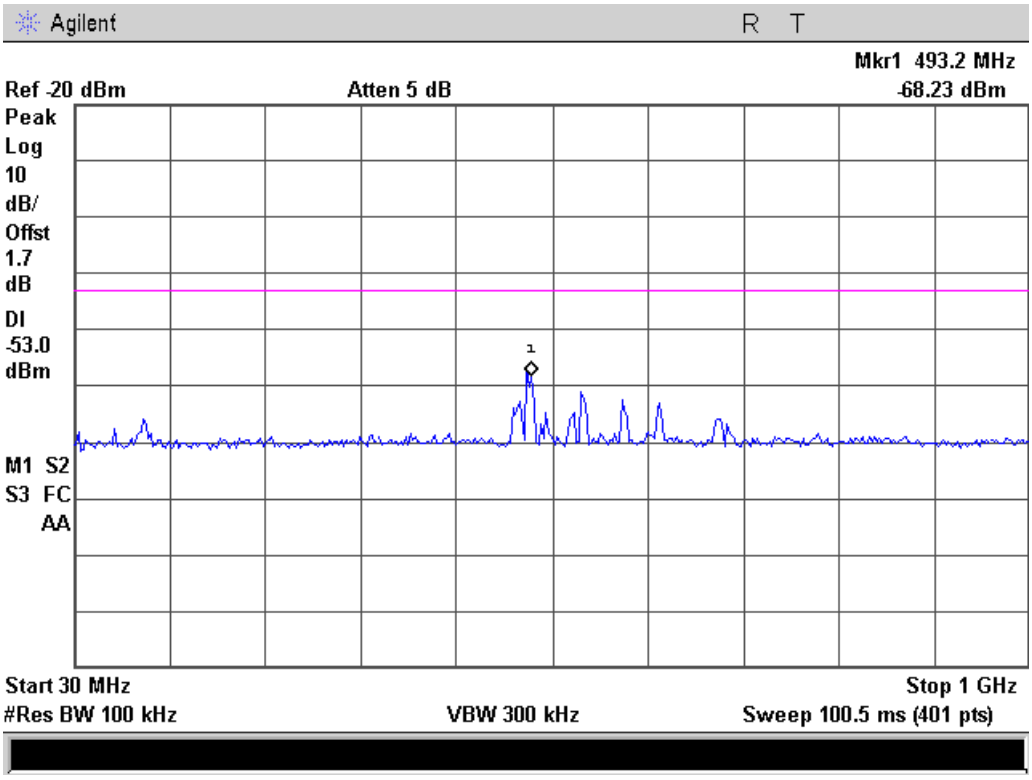



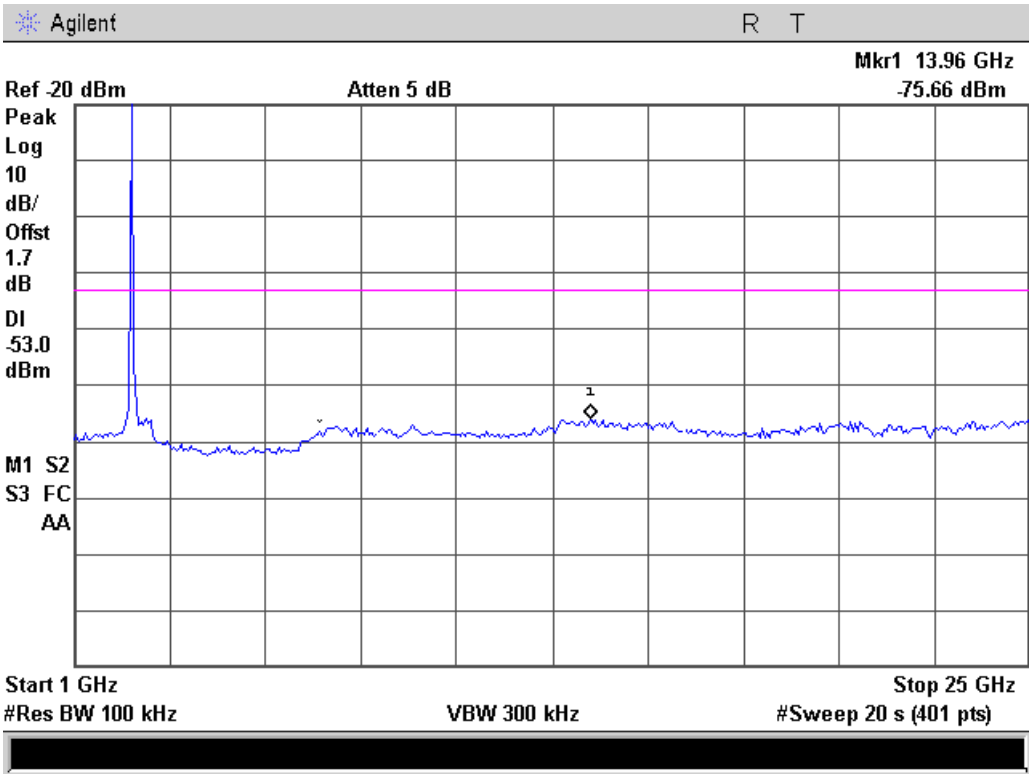
## DTS Conducted Spurious Emissions 2437 MHz



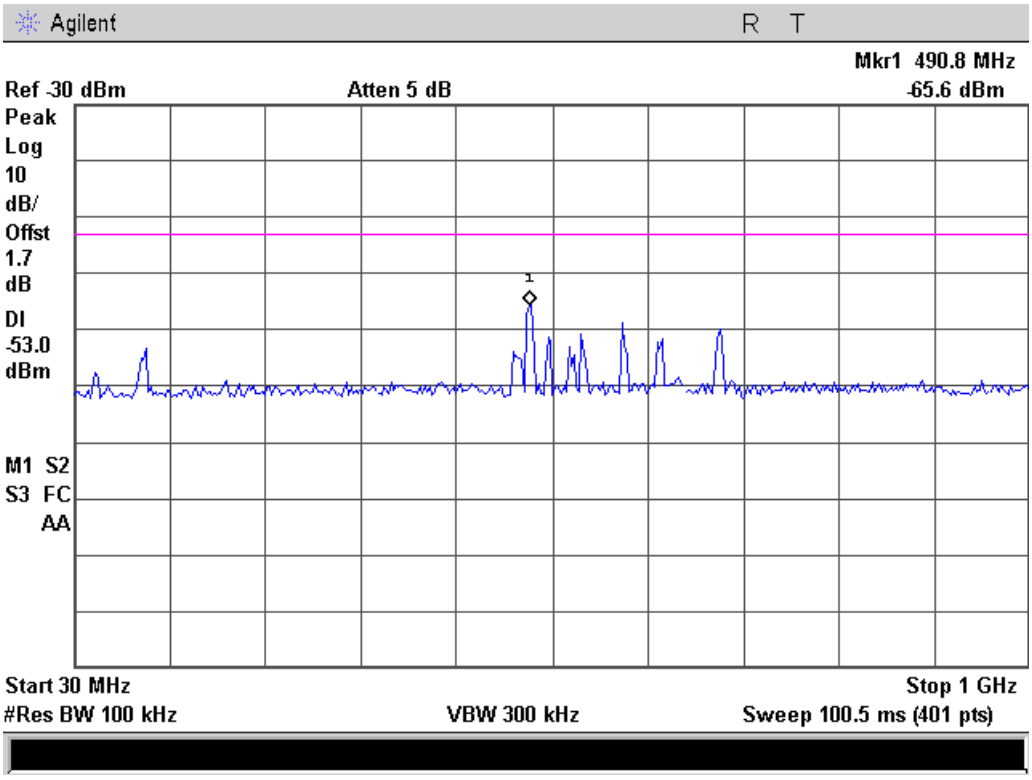



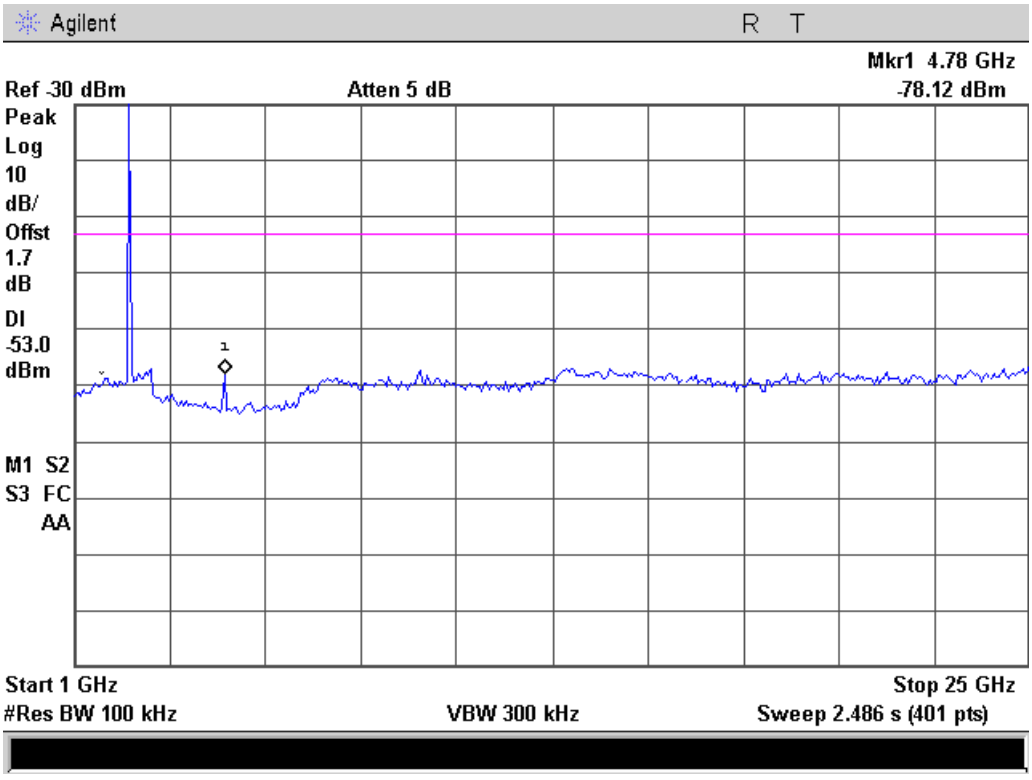
## DTS Conducted Spurious Emissions 2462 MHz



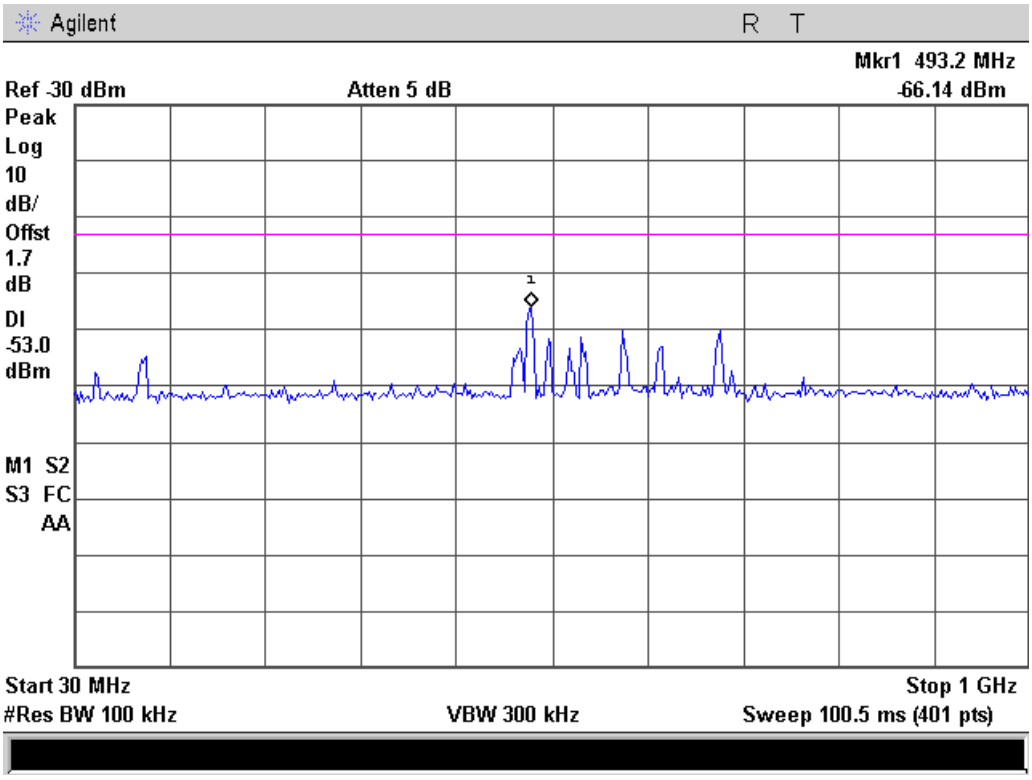



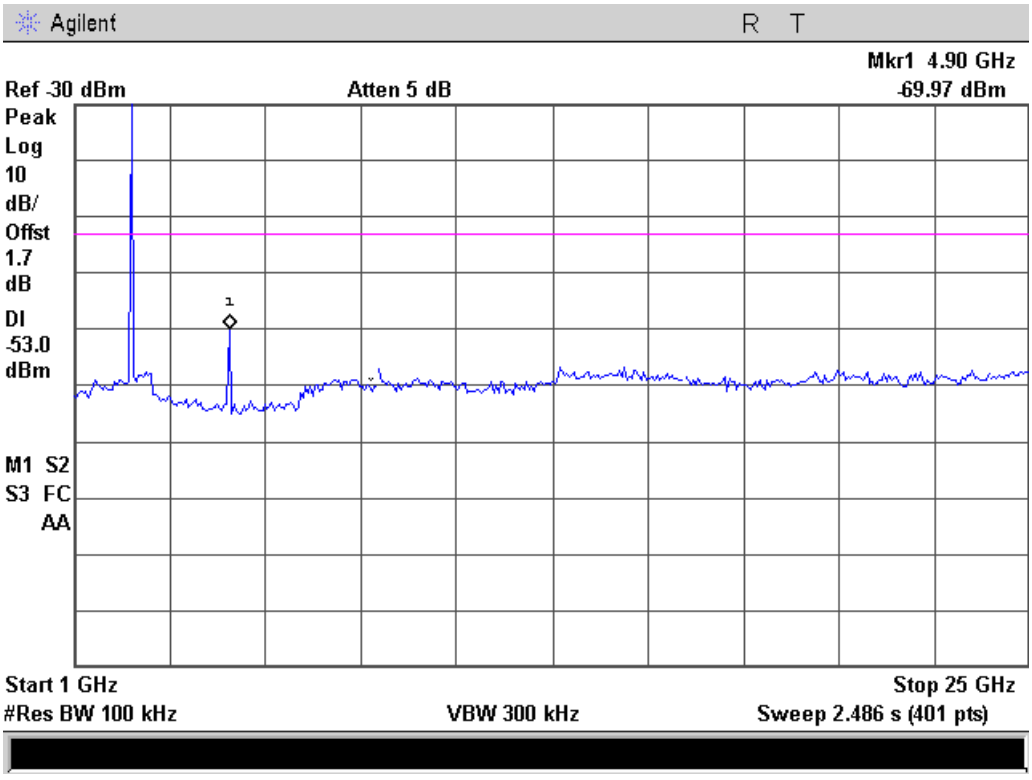
## FHSS Conducted Spurious Emissions 2402 MHz



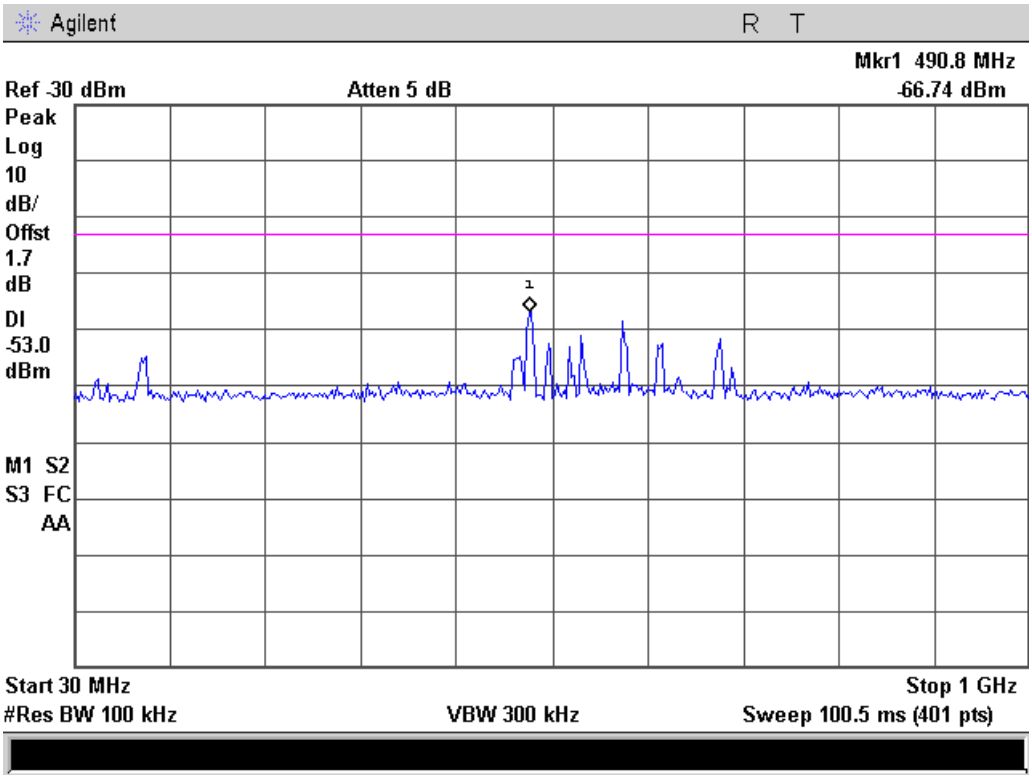



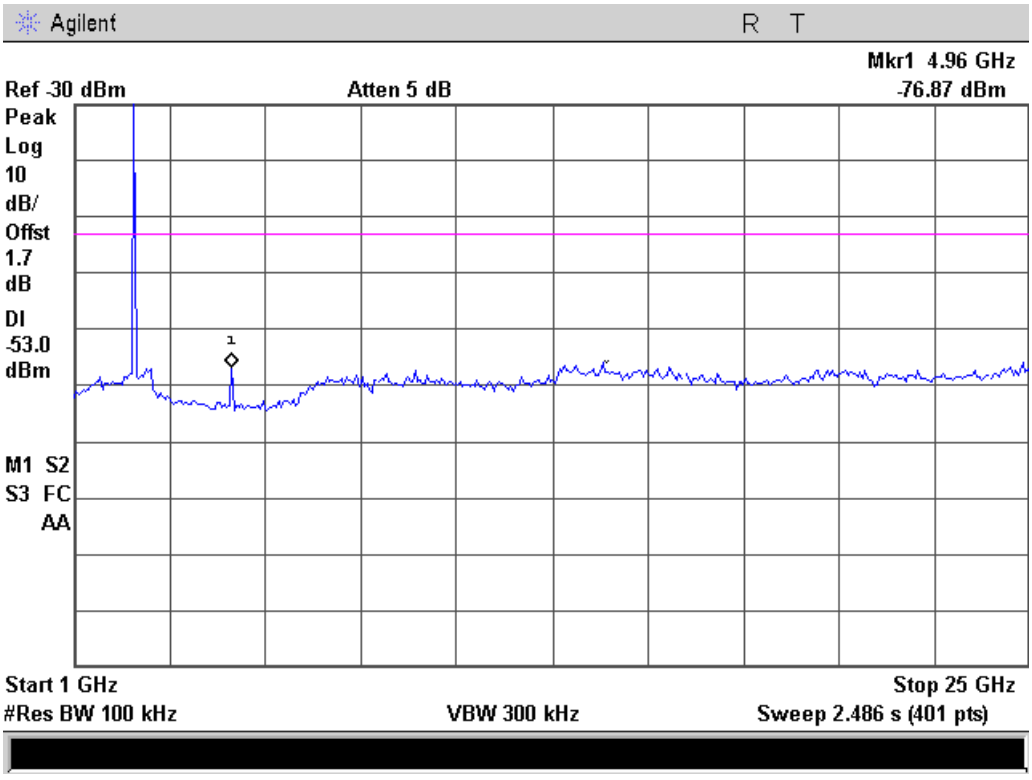
## FHSS Conducted Spurious Emissions 2439 MHz



## FHSS Conducted Spurious Emissions 2480 MHz



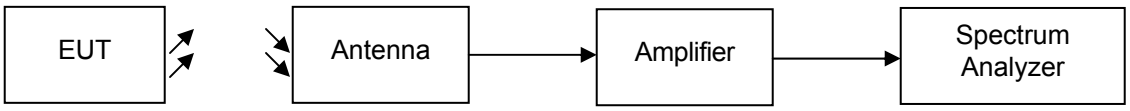



**Name of Test**: Radiated Spurious Emissions
**Specification**: 15.247(d), 15.209(a), 15.205 **Engineer: J. Erhard**
**Test Equipment Utilized**: i00028, i00103, i00379 **Test Date: 12/1/2010**

**Test Procedure**

The EUT was tested in a semi-anechoic chamber set 3m from the receiving antenna. A spectrum analyzer was used to verify that the EUT met the requirements for Radiated Spurious Emissions. The antenna correction factors, cable loss, and the amplifier gain were input into the spectrum analyzer as correction factors to ensure accurate readings. The spectrum for each tuned frequency was examined to the 10th harmonic.

**Test Setup**




| Detector Settings | RBW | VBW |
|---|---|---|
| Peak | 1 MHz | 3 MHz |
| Average | 1 MHz | 3 MHz |

**DTS Radiated Spurious Emissions**

| Tuned Freq (MHz) | Emission Freq (MHz) | Peak Monitored Level (dBuV/m) | Peak Limit (dBuV/m) | Average Monitored Level (dBuV/m) | Average Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|
| 2412 | 4828 | 52.74 | 74.0 | 41.16 | 54.0 | Pass |
| 2412 | 7236 | 55.24 | 74.0 | 44.87 | 54.0 | Pass |
| 2412 | 9648 | 60.74 | 74.0 | 50.21 | 54.0 | Pass |
| 2437 | 4874 | 51.06 | 74.0 | 41.02 | 54.0 | Pass |
| 2437 | 4311 | 63.62 | 74.0 | 44.50 | 54.0 | Pass |
| 2437 | 9748 | 61.20 | 74.0 | 50.42 | 54.0 | Pass |
| 2462 | 4924 | 49.87 | 74.0 | 40.41 | 54.0 | Pass |
| 2462 | 7386 | 54.16 | 74.0 | 45.36 | 54.0 | Pass |
| 2462 | 9848 | 59.38 | 74.0 | 50.68 | 54.0 | Pass |

**FHSS Radiated Spurious Emissions**

| Tuned Freq (MHz) | Emission Freq (MHz) | Peak Monitored Level (dBuV/m) | Peak Limit (dBuV/m) | Average Monitored Level (dBuV/m) | Average Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|
| 2402 | 4804 | 50.0 | 74.0 | 43.49 | 54.0 | Pass |
| 2402 | 7206 | 53.28 | 74.0 | 46.23 | 54.0 | Pass |
| 2402 | 9608 | 60.09 | 74.0 | 50.08 | 54.0 | Pass |
| 2439 | 4878 | 46.89 | 74.0 | 40.53 | 54.0 | Pass |
| 2439 | 7317 | 48.75 | 74.0 | 45.77 | 54.0 | Pass |
| 2439 | 9756 | 57.67 | 74.0 | 51.66 | 54.0 | Pass |
| 2480 | 4960 | 42.26 | 74.0 | 41.28 | 54.0 | Pass |
| 2480 | 7440 | 49.89 | 74.0 | 46.29 | 54.0 | Pass |
| 2480 | 9920 | 58.48 | 74.0 | 49.22 | 54.0 | Pass |

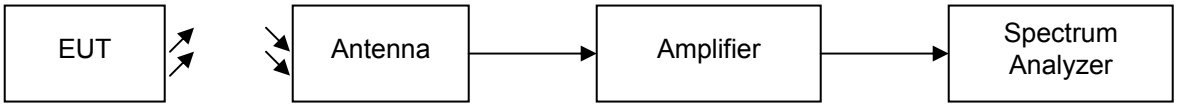
No other emissions were detectable.

**Name of Test**: Emissions At Band Edges
**Specification**: 15.247(d), 15.209(a), 15.205 **Engineer: J. Erhard**
**Test Equipment Utilized**: i00028, i00103, i00379 **Test Date: 112/1/2010**

**Test Procedure**

The EUT was tested in a semi-anechoic chamber set 3m from the receiving transducer. A spectrum analyzer was used to verify that the EUT met the requirements for band edge with both peak and average measurements. The antenna correction factors, cable loss, and the amplifier gain were input into the spectrum analyzer as correction factors to ensure accurate readings.

**Test Setup**




**DTS Band Edge Emissions Summary**

| Tuned Freq (MHz) | Emission Freq (MHz) | Monitored Level (dBc) | Detector | Limit | Result |
|---|---|---|---|---|---|
| 2412 | 2400 | -41.51 | Peak | -20 dBc | Pass |
| 2462 | 2483.5 | -39.99 | Peak | -20 dBc | Pass |

**DTS Restricted Band Emissions Summary**

| Tuned Freq (MHz) | Emission Freq (MHz) | Monitored Level (dBuV/m) | Detector | Limit (dBuV/m) | Result |
|---|---|---|---|---|---|
| 2412 | 2375.825 | 46.05 | Peak | 74 | Pass |
| 2412 | 2363.225 | 38.74 | Average | 54 | Pass |
| 2462 | 2507.750 | 50.61 | Peak | 74 | Pass |
| 2462 | 2522.250 | 43.03 | Average | 54 | Pass |

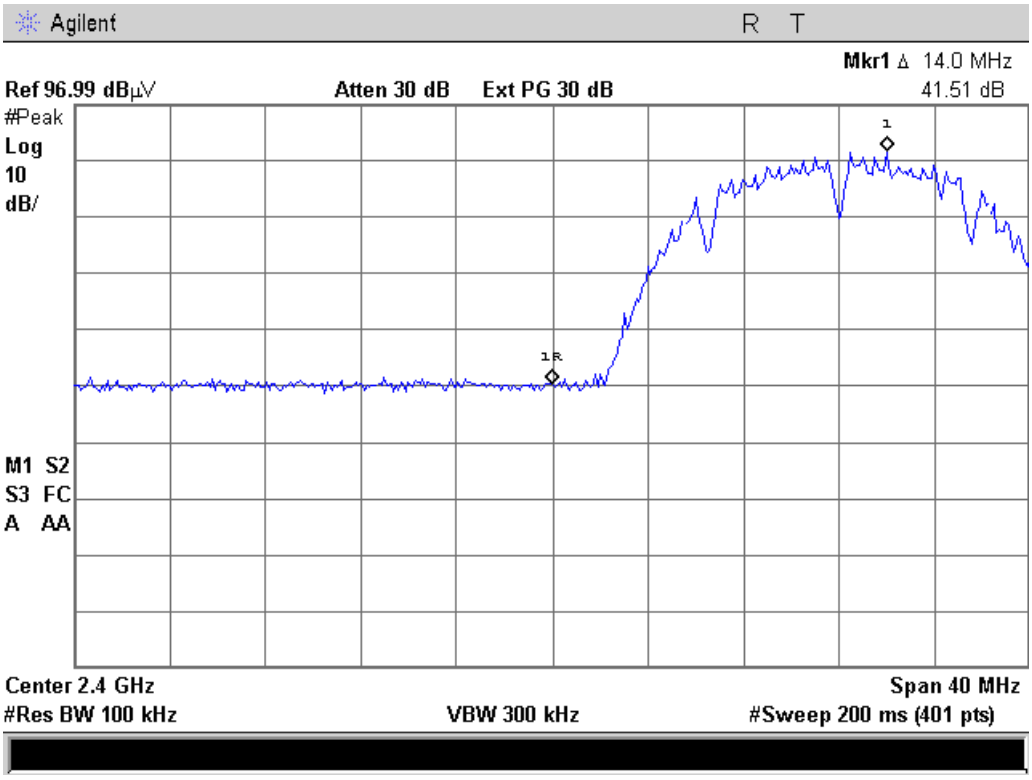
**FHSS Band Edge Emissions Summary**

| Tuned Freq (MHz) | Emission Freq (MHz) | Monitored Level (dBc) | Detector | Limit | Result |
|---|---|---|---|---|---|
| 2402 | 2400 | -41.06 | Peak | -20 dBc | Pass |
| 2480 | 2483.5 | -43.35 | Peak | -20 dBc | Pass |

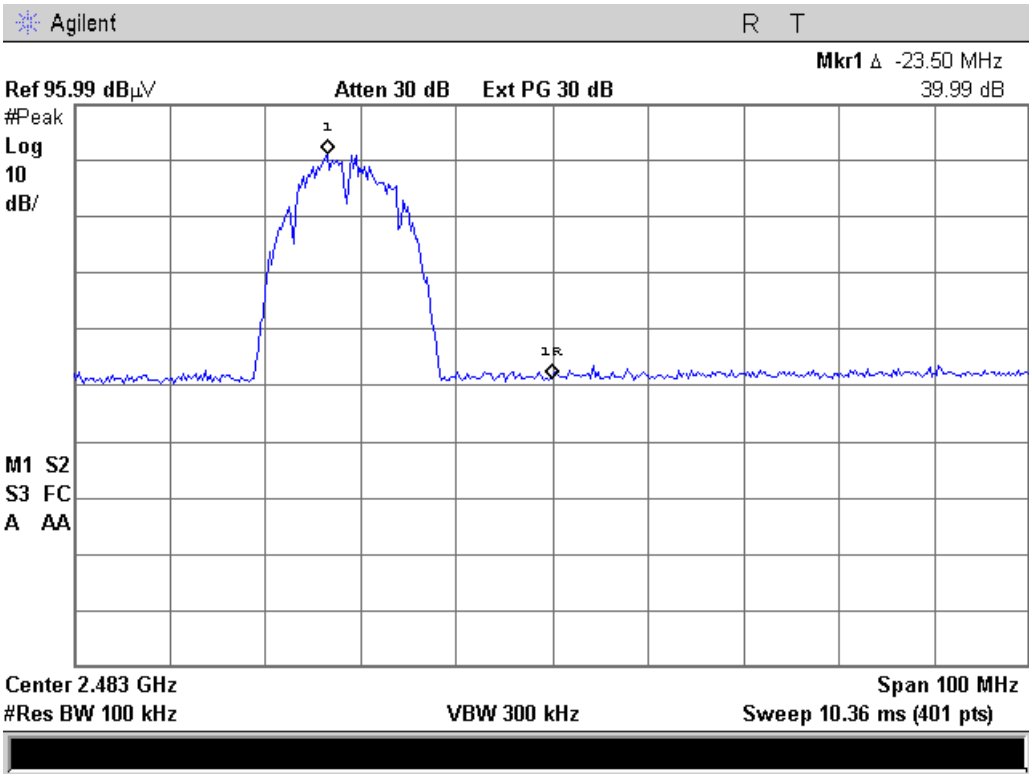
**FHSS Restricted Band Emissions Summary**

| Tuned Freq (MHz) | Emission Freq (MHz) | Monitored Level (dBuV/m) | Detector | Limit (dBuV/m) | Result |
|---|---|---|---|---|---|
| 2402 | 2340.725 | 45.15 | Peak | 74 | Pass |
| 2402 | 2376.275 | 37.31 | Average | 54 | Pass |
| 2480 | 2501.180 | 54.90 | Peak | 74 | Pass |
| 2480 | 2483.500 | 48.83 | Average | 54 | Pass |

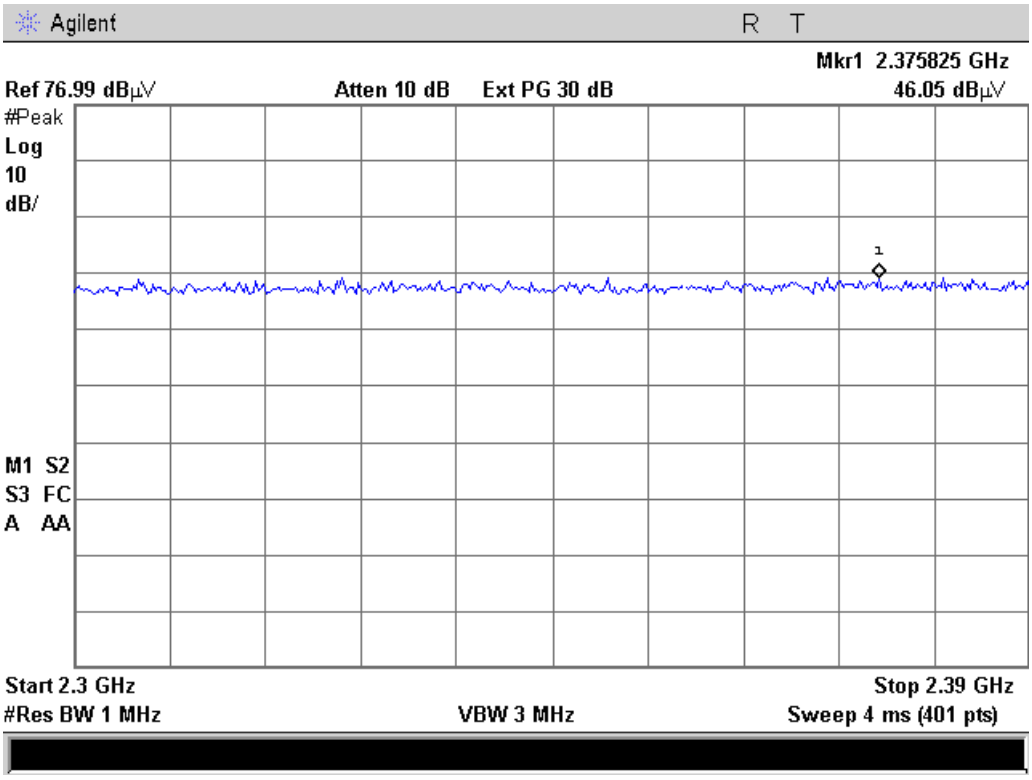
**DTS Band Edge 2400 MHz**

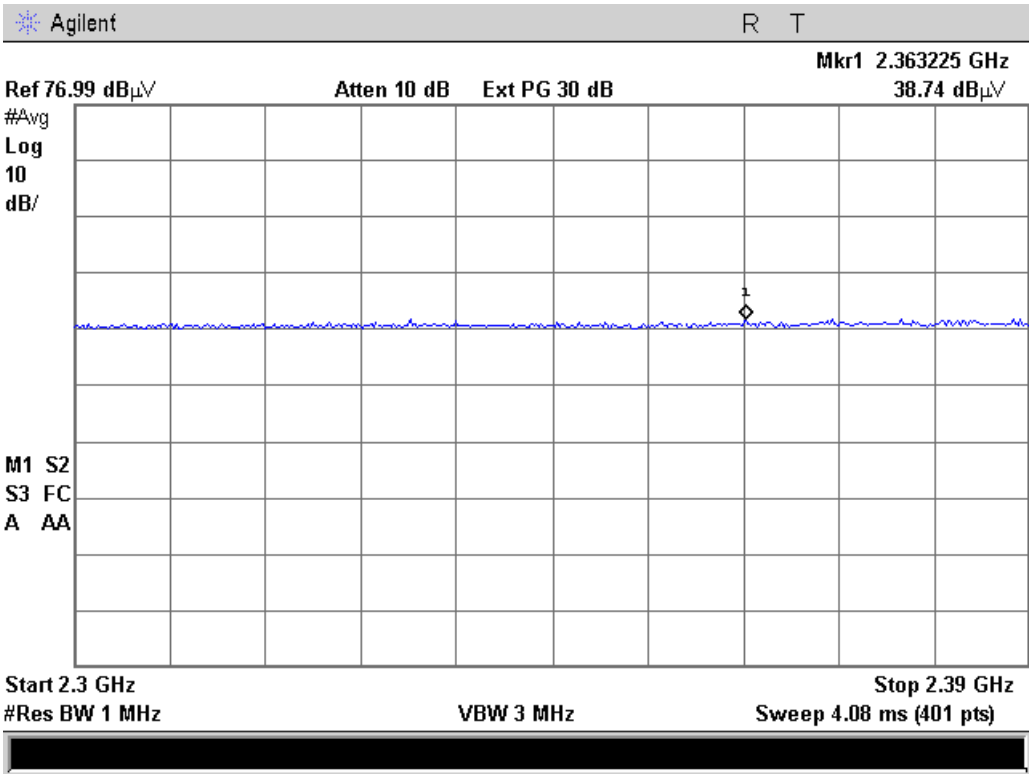



**DTS Band Edge 2483.5 MHz**

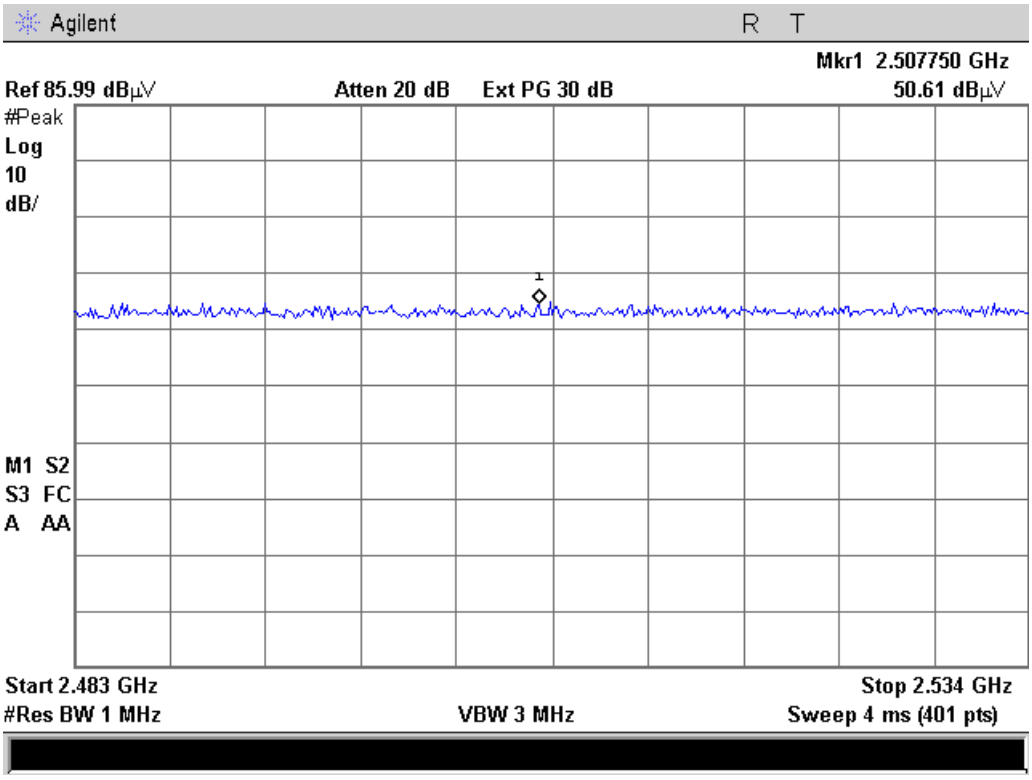


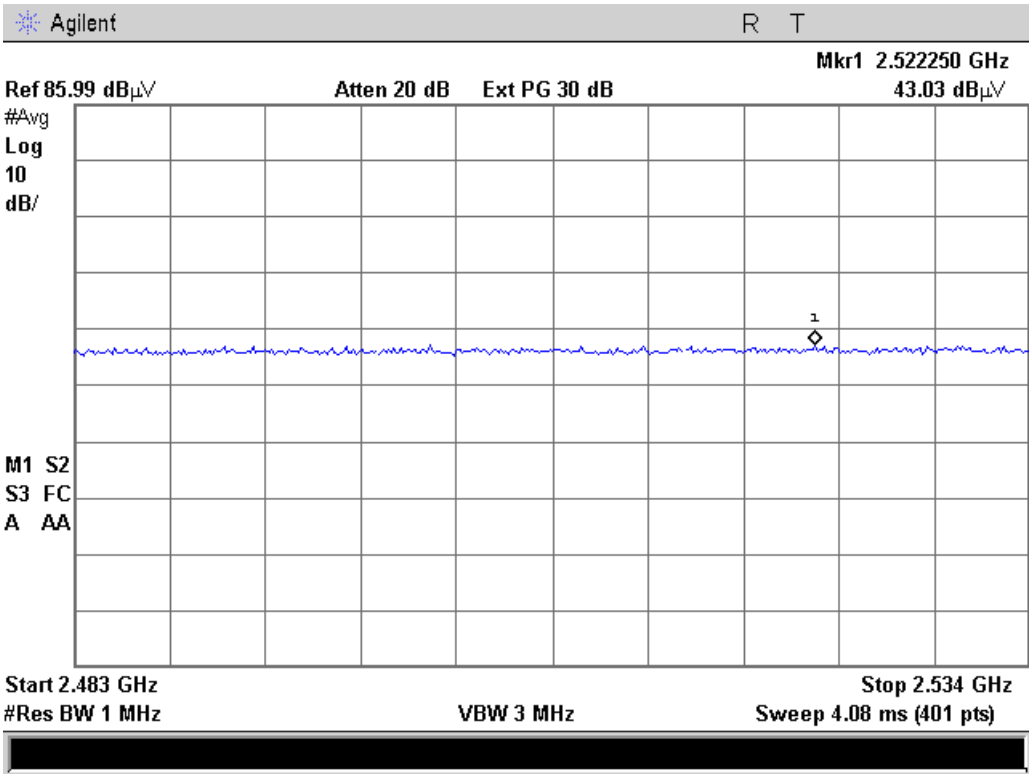
## DTS Restricted Band 2390 MHz



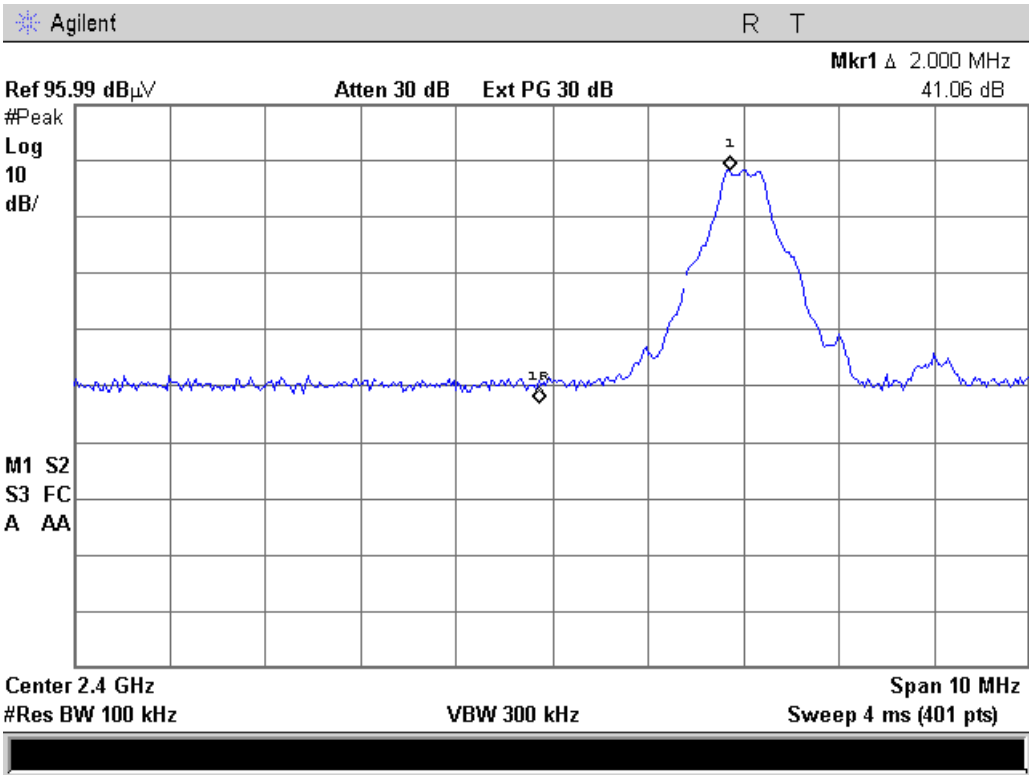



## DTS Restricted Band 2483.5 MHz

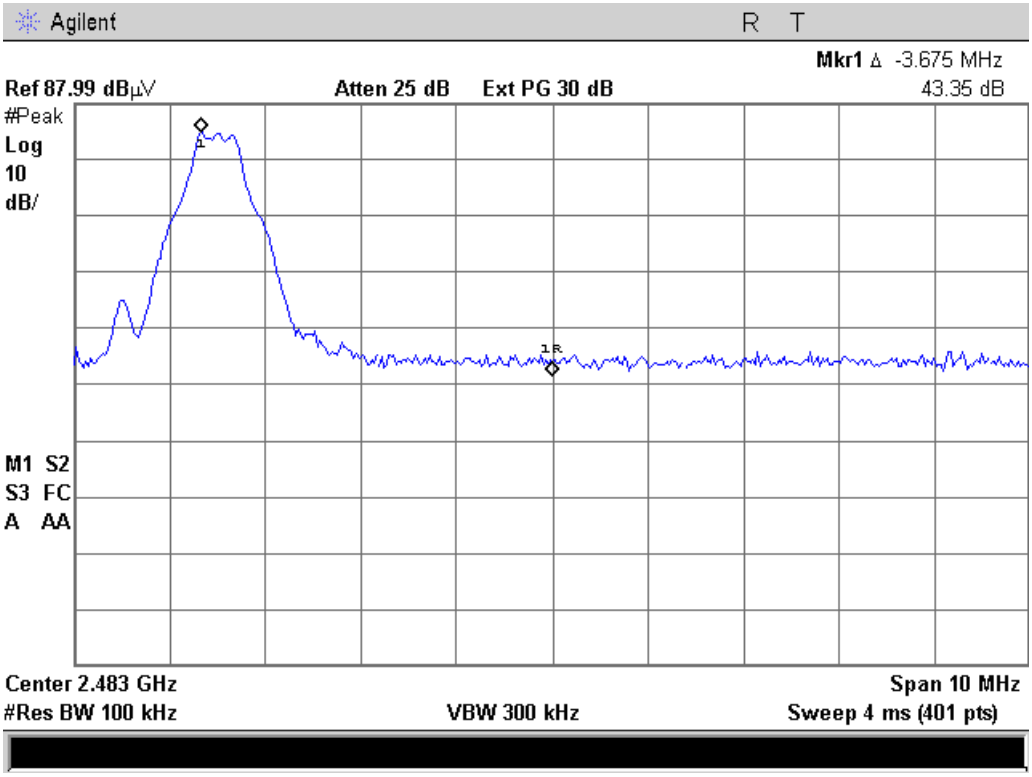


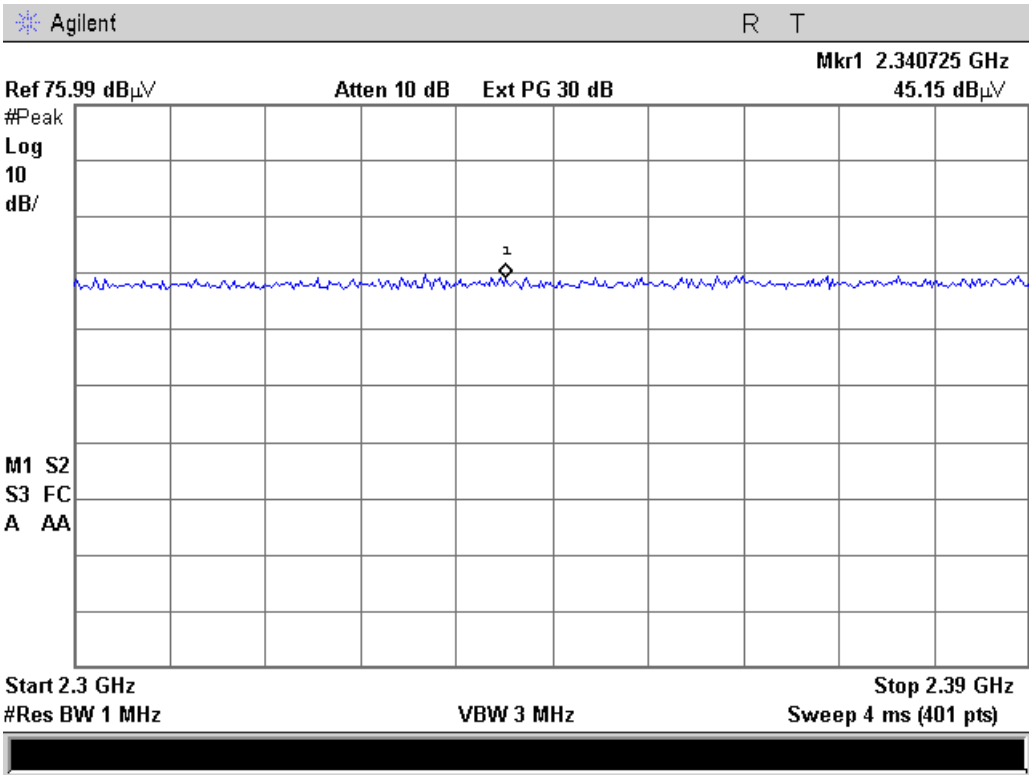
**FHSS Band Edge 2400 MHz**

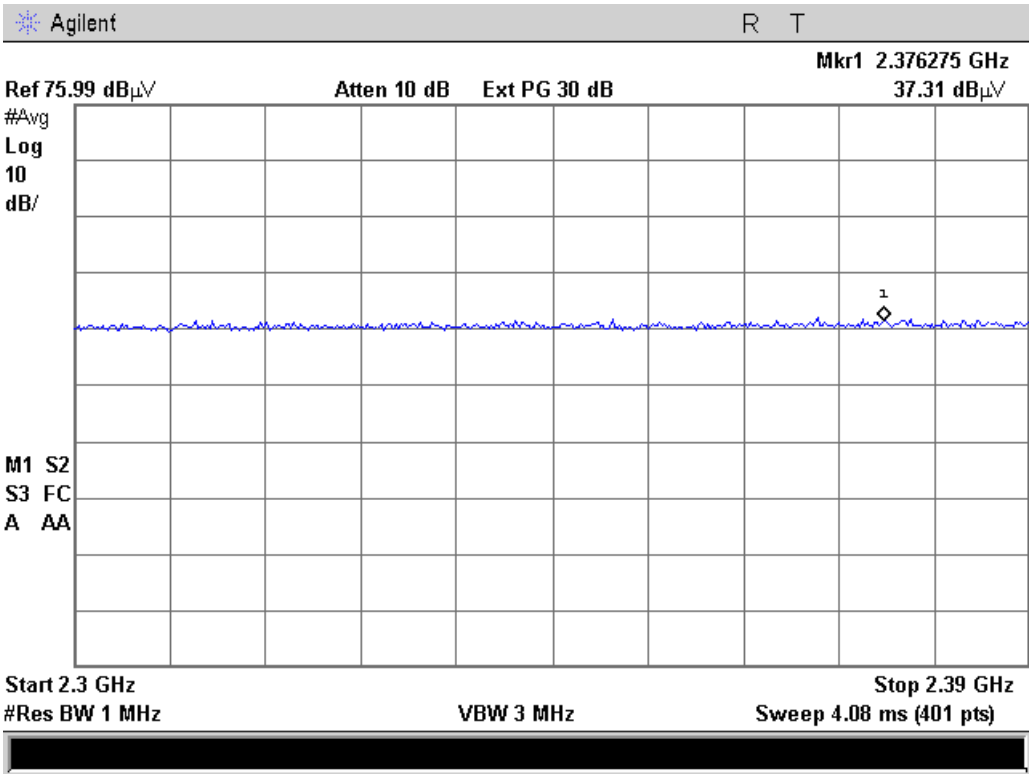



**FHSS Band Edge 2483.5 MHz**

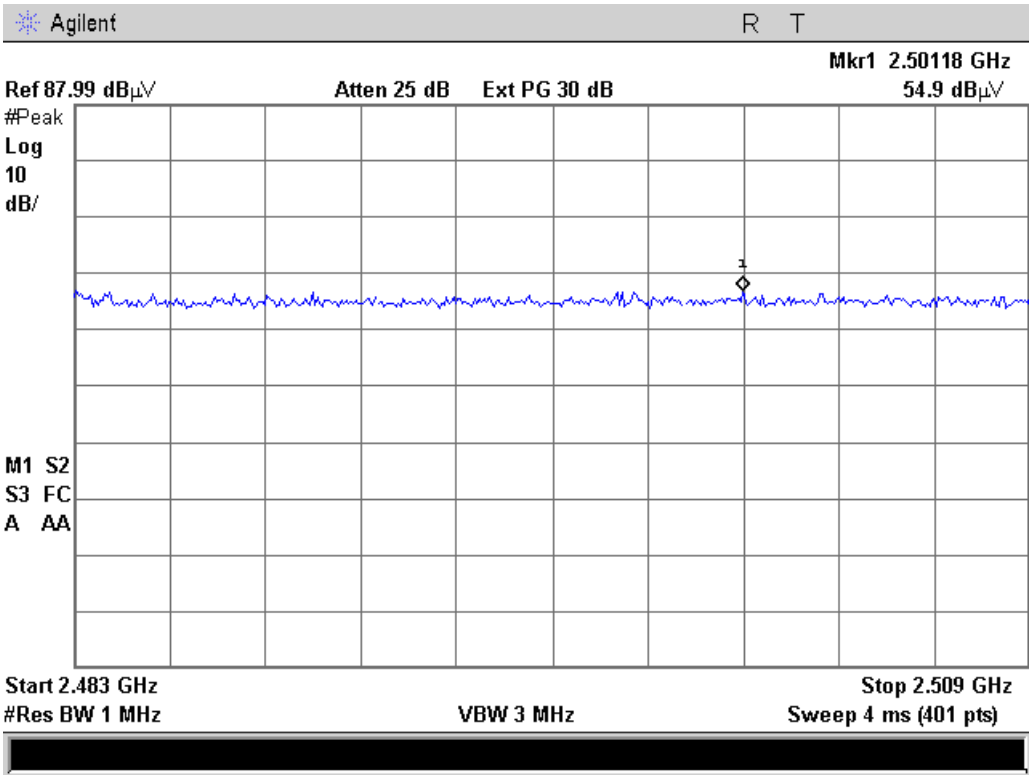


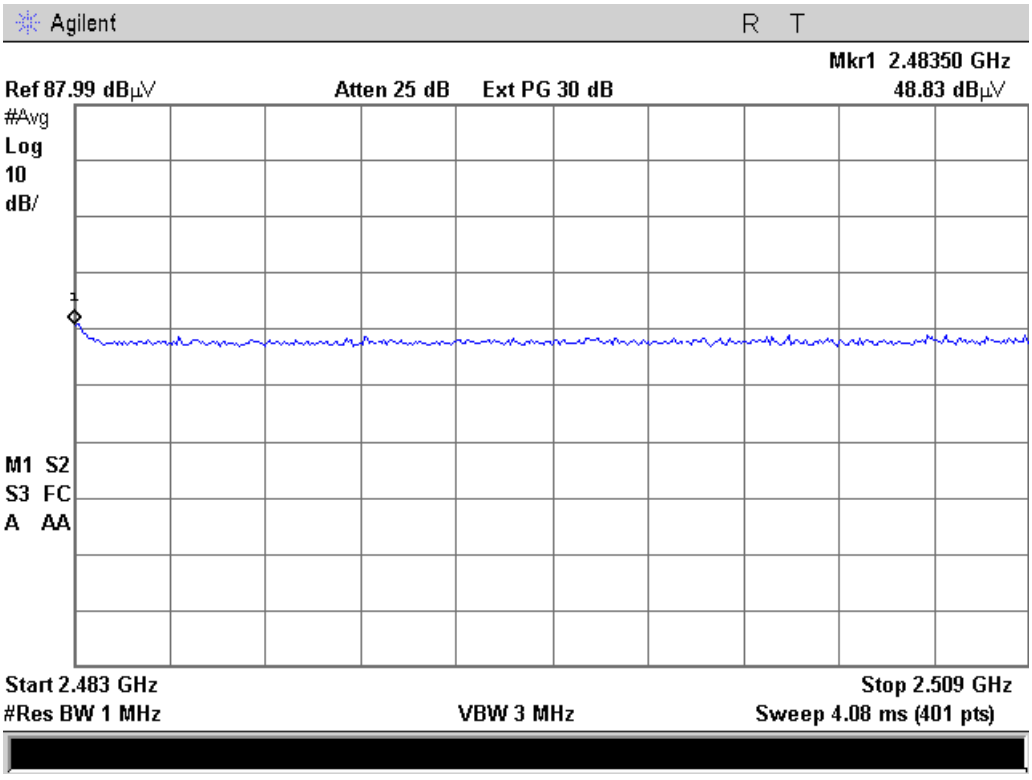
## FHSS Restricted Band 2390 MHz



## FHSS Restricted Band 2483.5 MHz



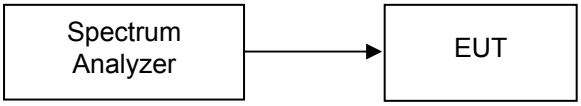



**Name of Test**: Occupied Bandwidth
**Specification**: 15.247(a)(2) **Engineer: J. Erhard**
**Test Equipment Utilized**: i00379 **Test Date: 12/1/2010**

**Test Procedure**

The EUT was connected directly to a spectrum analyzer. The Span was set wide enough to capture the entire transmit spectrum and the resolution bandwidth was set to at least 1% of the span. The analyzer was set to max hold and when the entire spectrum was captured the 6dB and 99% bandwidths were measured to verify the bandwidth met the specification.

**Test Setup**




**DTS Occupied Bandwidth Summary**

| Frequency MHz | Recorded Measurement | Specification Limit | Result |
|---|---|---|---|
| 2412 | 9.0 MHz | ≥ 500 KHz | Pass |
| 2437 | 9.75 MHz | ≥ 500 KHz | Pass |
| 2462 | 9.0 MHz | ≥ 500 KHz | Pass |

**DTS 99% Bandwidth Summary**

| Frequency MHz | Recorded Measurement | Result |
|---|---|---|
| 2412 | 15.75 MHz | Pass |
| 2437 | 15.75 MHz | Pass |
| 2462 | 15.625 MHz | Pass |

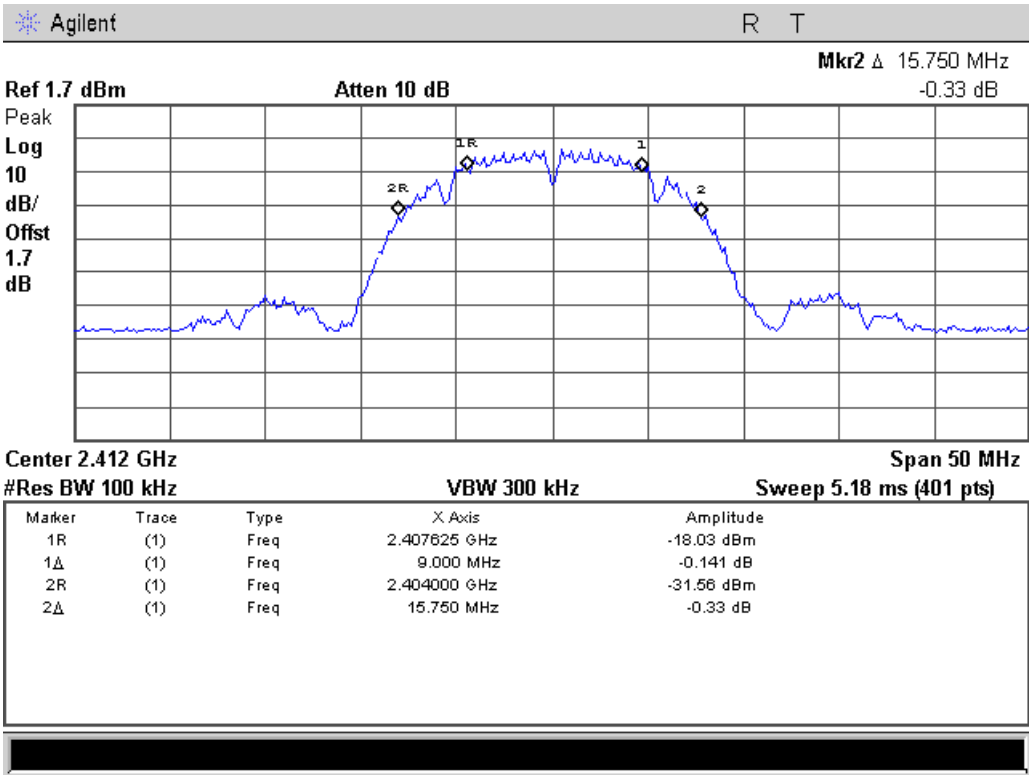
**FHSS Occupied Bandwidth Summary**

| Frequency MHz | Recorded Measurement | Specification Limit | Result |
|---|---|---|---|
| 2402 | 550 KHz | ≥ 500 KHz | Pass |
| 2439 | 550 KHz | ≥ 500 KHz | Pass |
| 2480 | 550 KHz | ≥ 500 KHz | Pass |

**FHSS 99% Bandwidth Summary**

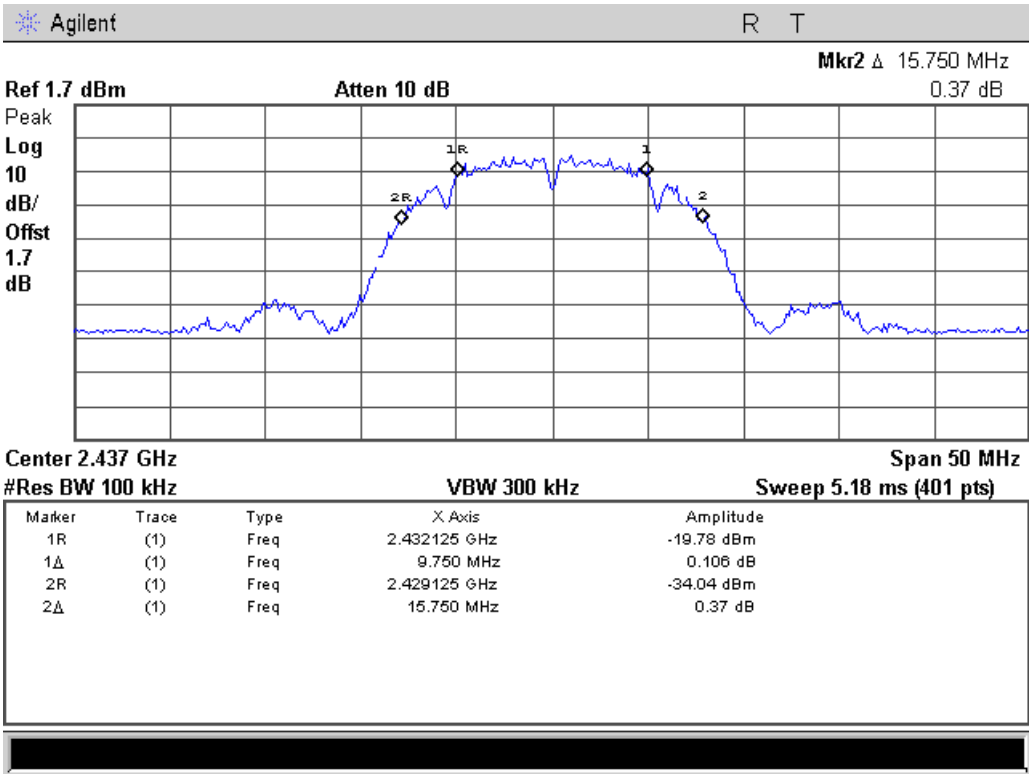
| Frequency MHz | Recorded Measurement | Result |
|---|---|---|
| 2402 | 1.25 MHz | Pass |
| 2439 | 1.2 MHz | Pass |
| 2480 | 1.25 MHz | Pass |

## DTS Bandwidth 2412 MHz



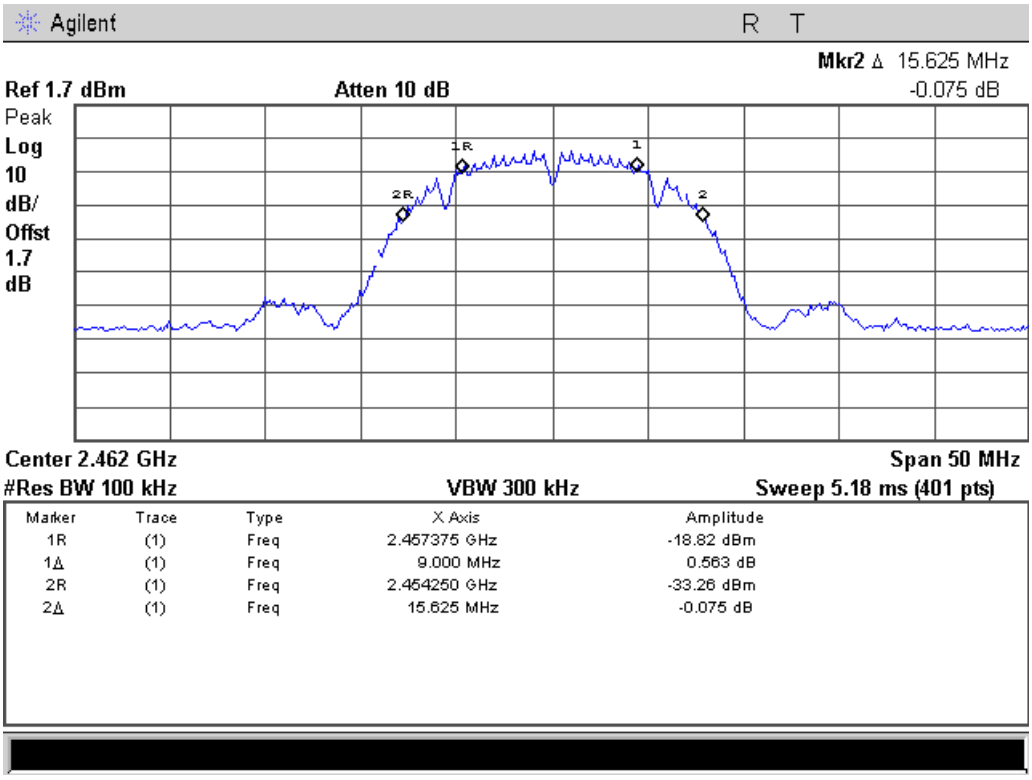

| Marker | Trace | Type | X Axis | Amplitude |
|---|---|---|---|---|
| 1R | (1) | Freq | 2.407625 GHz | -18.03 dBm |
| 1Δ | (1) | Freq | 9.000 MHz | -0.141 dB |
| 2R | (1) | Freq | 2.404000 GHz | -31.56 dBm |
| 2Δ | (1) | Freq | 15.750 MHz | -0.33 dB |

## DTS Bandwidth 2437 MHz

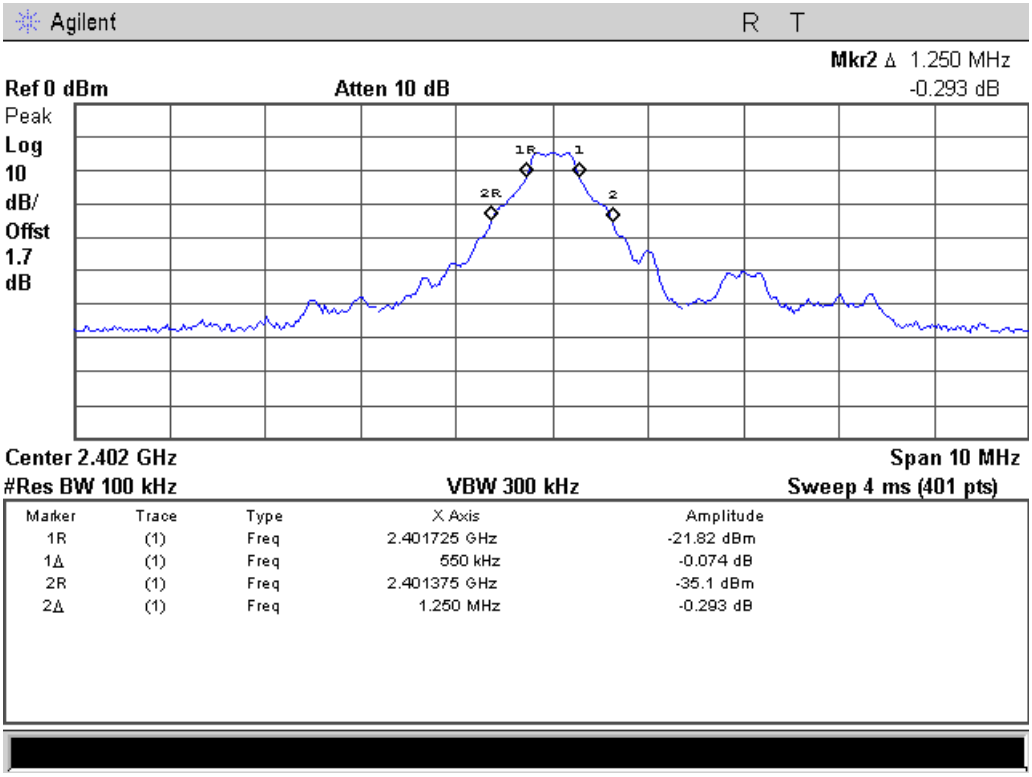



| Marker | Trace | Type | X Axis | Amplitude |
|---|---|---|---|---|
| 1R | (1) | Freq | 2.432125 GHz | -19.78 dBm |
| 1Δ | (1) | Freq | 9.750 MHz | 0.106 dB |
| 2R | (1) | Freq | 2.429125 GHz | -34.04 dBm |
| 2Δ | (1) | Freq | 15.750 MHz | 0.37 dB |

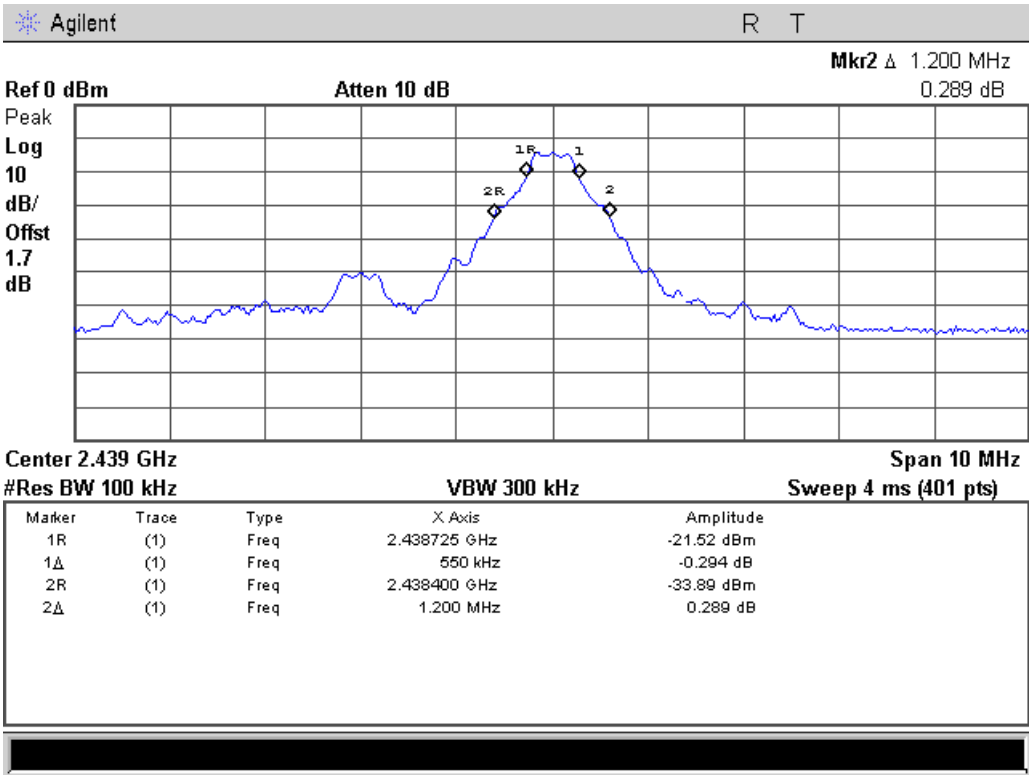
## DTS Bandwidth 2462 MHz



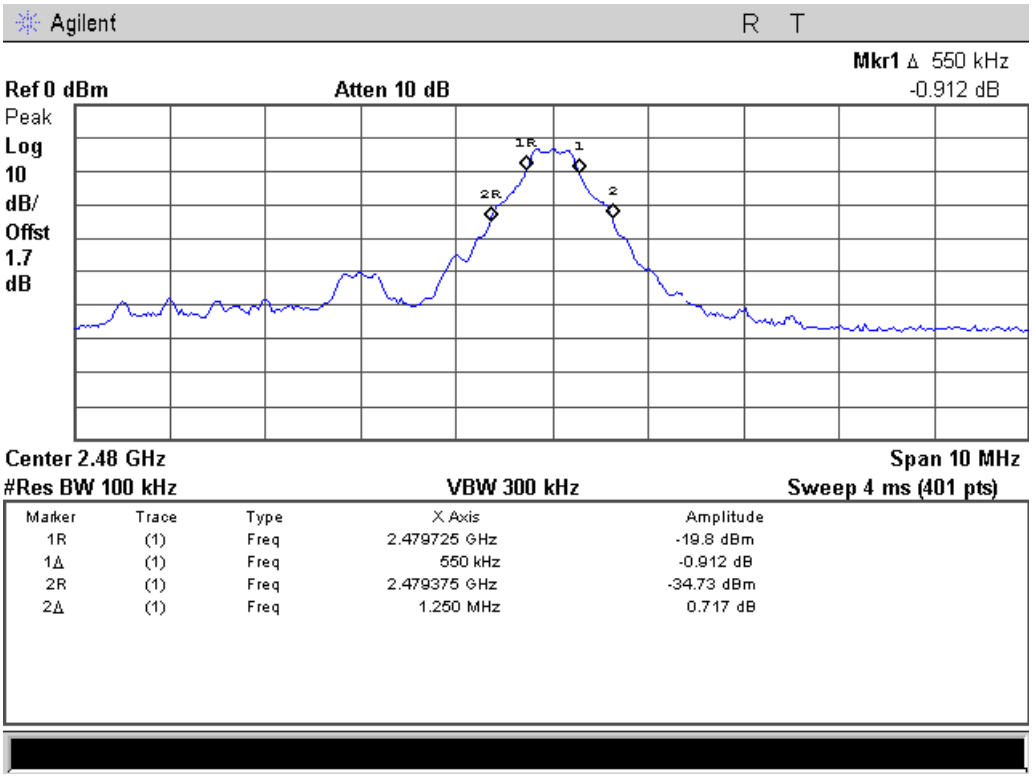

## FHSS Bandwidth 2402 MHz



## FHSS Bandwidth 2439 MHz




## FHSS Bandwidth 2480 MHz

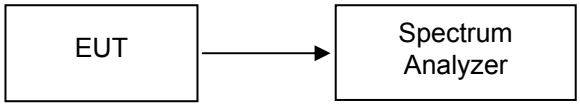


**Name of Test**: Transmitter Power Spectral Density (PSD)
**Specification**: 15.247(e) **Engineer: J. Erhard**
**Test Equipment Utilized**: i00379 **Test Date: 12/10/2010**

## Test Procedure

The EUT was connected directly to a spectrum analyzer. The Span was set to 1.5 MHz and the resolution bandwidth was set to 3 KHz. The analyzer was set for a sweep time of 500 seconds. When the entire spectrum was captured the marker peak function of the analyzer was utilized to verify the PSD met the specification.

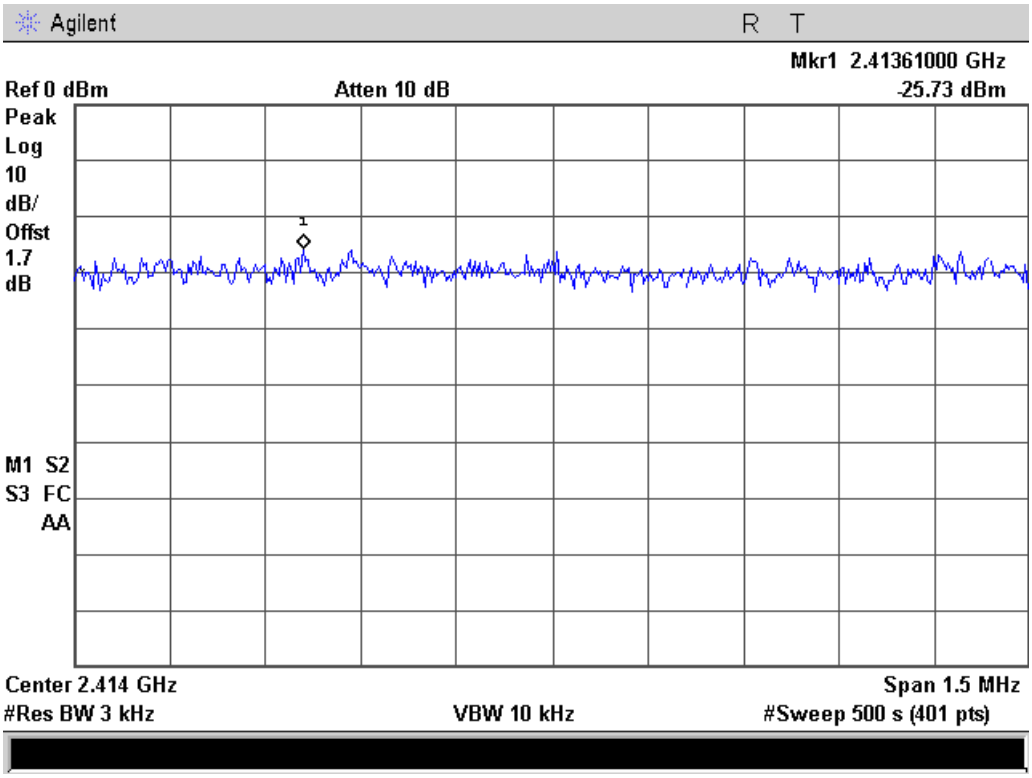
## Test Setup



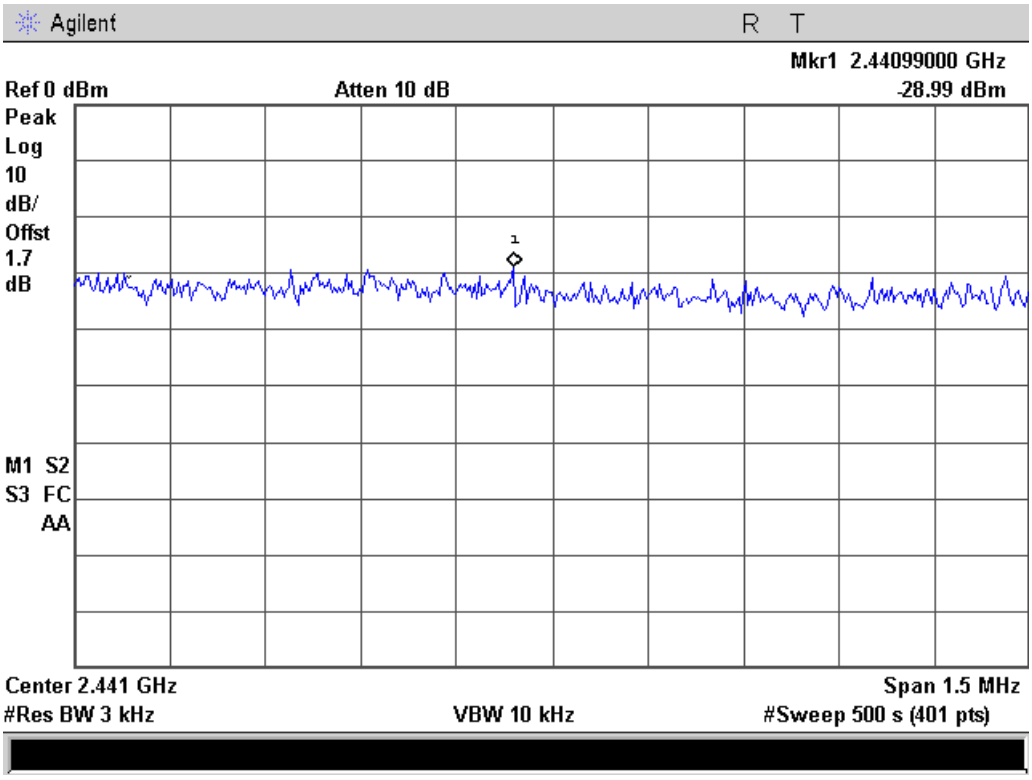

## DTS PSD Summary

| Frequency MHz | Recorded Measurement | Specification Limit | Result |
|---|---|---|---|
| 2412 | -25.73 dBm | 8 dBm | Pass |
| 2437 | -28.99 dBm | 8 dBm | Pass |
| 2462 | -27.41 dBm | 8 dBm | Pass |

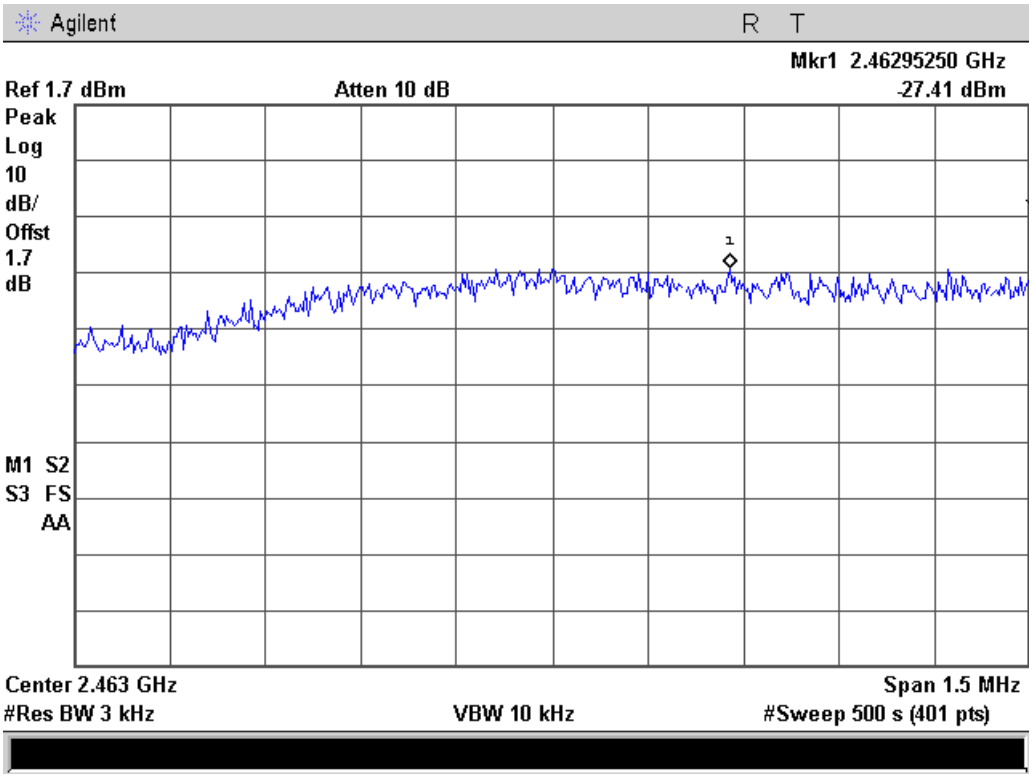
## PSD 2412 MHz



**PSD 2437 MHz**




**PSD 2462 MHz**

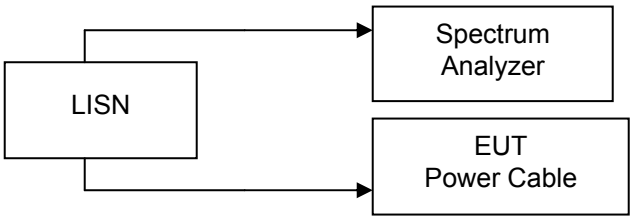


**Name of Test**: A/C Powerline Conducted Emissions
**Specification**: 15.207 **Engineer: J. Erhard**
**Test Equipment Utilized**: i00270, i00379 **Test Date: 12/16/2010**

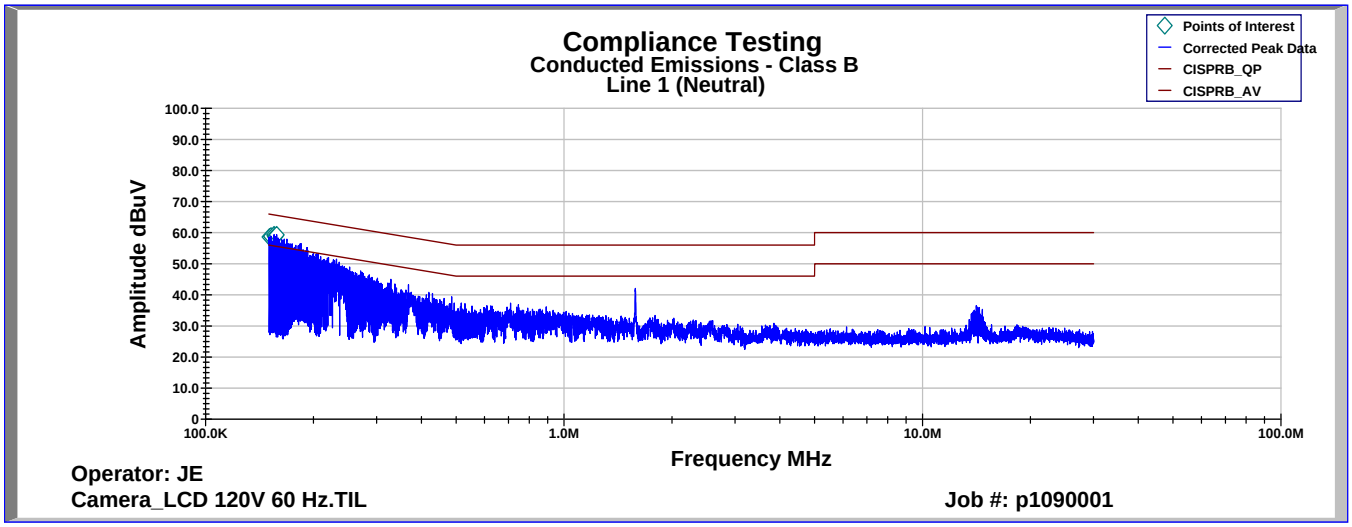
## Test Procedure

The EUT power cable connected to a LISN and the monitored output of the LISN was connected directly to a spectrum analyzer. The conducted emissions from 150 kHz to 30 MHz were monitored and compared to the specification limits. The average measurements were the worst-case and are recorded in the tables below.

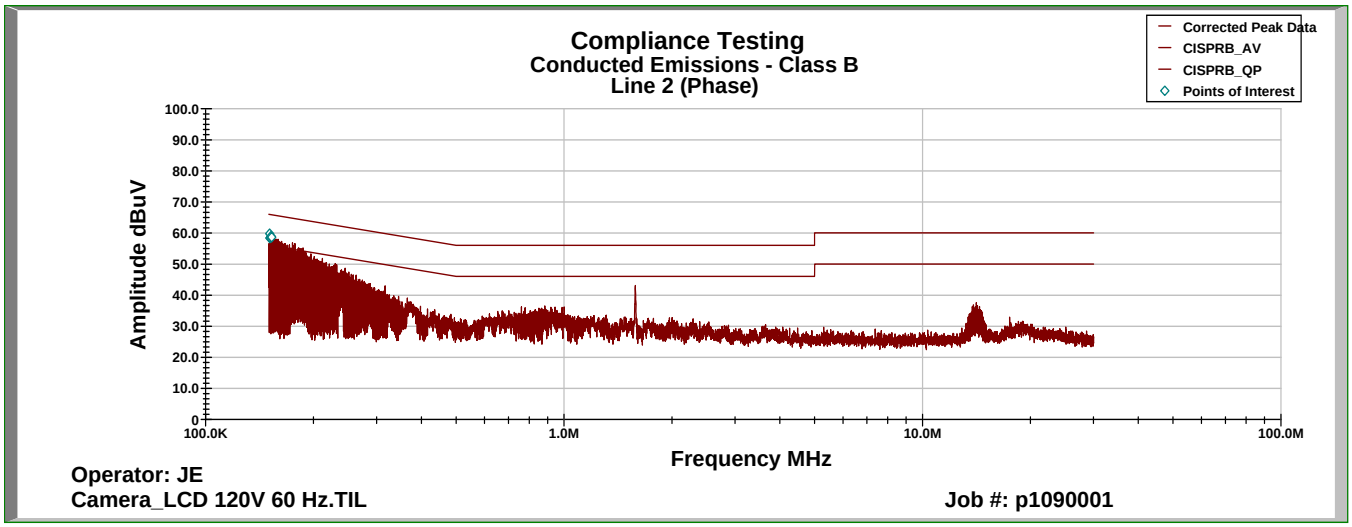
## Test Setup




## Line 1




## Line 2



**Line 1 Average Test Results**

| Emission Frequency | Monitored Level (dBuV/m) | LISN Factor (dB) | Attenuation (dB) | Corrected Level (dBuV/m) | Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|
| 156.57 KHz | 23.89 | 0.268 | 10 | 34.167 | 55.812 | Pass |
| 153.4 KHz | 25.45 | 0.308 | 10 | 35.749 | 55.903 | Pass |
| 150.83 KHz | 28.18 | 0.332 | 10 | 38.517 | 55.976 | Pass |
| 150.74 KHz | 28.02 | 0.329 | 10 | 38.354 | 55.979 | Pass |
| 150.16 KHz | 28.95 | 0.343 | 10 | 39.292 | 55.995 | Pass |
| 150.07 KHz | 29.14 | 0.343 | 10 | 39.479 | 55.998 | Pass |

**Line 2 Average Test Results**

| Emission Frequency | Monitored Level (dBuV/m) | LISN Factor (dB) | Attenuation (dB) | Corrected Level (dBuV/m) | Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|
| 154.95 KHz | 24.36 | 0.287 | 10 | 35 | 55.859 | Pass |
| 153.21 KHz | 24.76 | 0.309 | 10 | 35 | 55.908 | Pass |
| 152.67 KHz | 25.64 | 0.31 | 10 | 36 | 55.924 | Pass |
| 151.16 KHz | 27.78 | 0.332 | 10 | 38 | 55.967 | Pass |
| 150.15 KHz | 28.53 | 0.343 | 10 | 39 | 55.996 | Pass |
| 150.14 KHz | 28.11 | 0.343 | 10 | 38 | 55.996 | Pass |

**Line 1 Quasi-peak Test Results**

| Emission Frequency | Monitored Level (dBuV/m) | LISN Factor (dB) | Attenuation (dB) | Corrected Level (dBuV/m) | Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|
| 156.57 KHz | 40.82 | 0.272 | 10 | 51.09 | 66 | Pass |
| 153.4 KHz | 41.24 | 0.304 | 10 | 51.55 | 66 | Pass |
| 150.83 KHz | 41.74 | 0.334 | 10 | 52.08 | 66 | Pass |
| 150.74 KHz | 41.69 | 0.332 | 10 | 52.02 | 66 | Pass |
| 150.16 KHz | 41.87 | 0.341 | 10 | 52.21 | 66 | Pass |
| 150.07 KHz | 41.92 | 0.342 | 10 | 52.26 | 66 | Pass |

**Line 2 Quasi-peak Test Results**

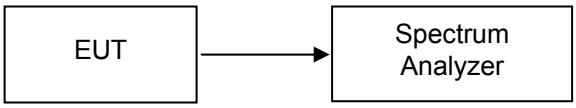
| Emission Frequency | Monitored Level (dBuV/m) | LISN Factor (dB) | Attenuation (dB) | Corrected Level (dBuV/m) | Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|
| 154.95 KHz | 40.53 | 0.287 | 10 | 50.82 | 65.86 | Pass |
| 153.21 KHz | 40.82 | 0.309 | 10 | 51.12 | 65.91 | Pass |
| 152.67 KHz | 40.78 | 0.31 | 10 | 51.1 | 65.92 | Pass |
| 151.16 KHz | 41.01 | 0.332 | 10 | 51.34 | 65.97 | Pass |
| 150.15 KHz | 41.32 | 0.343 | 10 | 51.66 | 66 | Pass |
| 150.14 KHz | 41.27 | 0.343 | 10 | 51.61 | 66 | Pass |

**Name of Test**: Receiver Spurious Emissions
**Specification**: RSS-GEN 6(b) **Engineer: J. Erhard**
**Test Equipment Utilized**: i00379 **Test Date: 12/10/2010**

## Test Procedure

The EUT was connected directly to a spectrum analyzer. The receiver spurious emissions were measured from 30 MHz to greater than 3 times the highest tunable frequency.

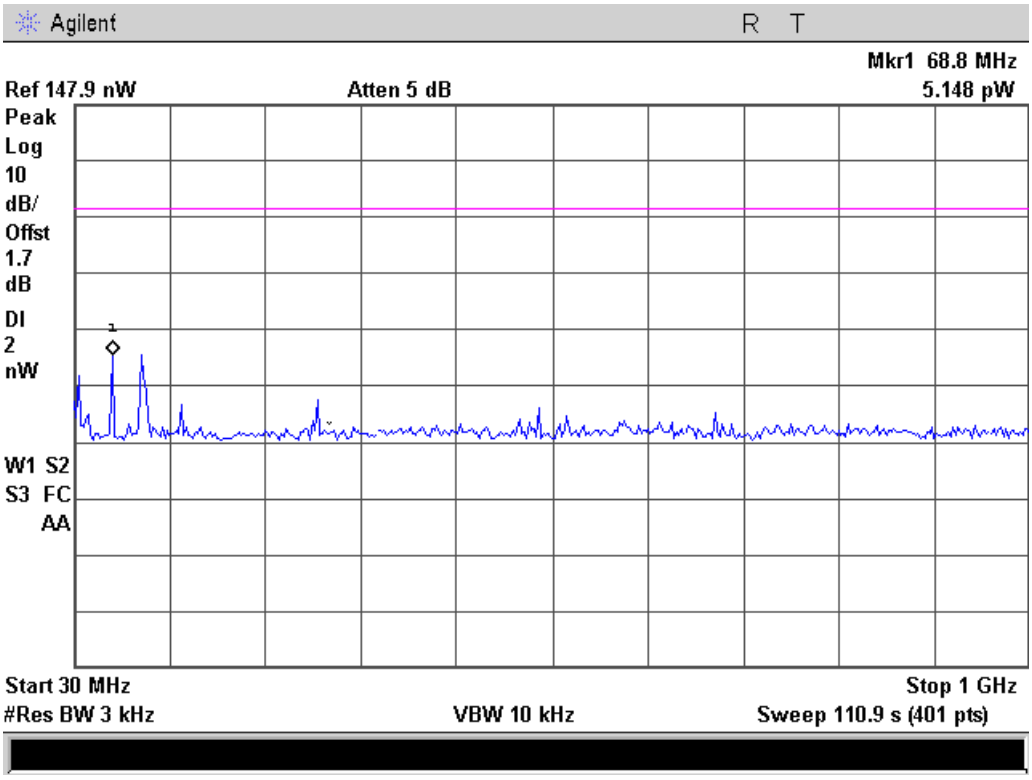
## Test Setup



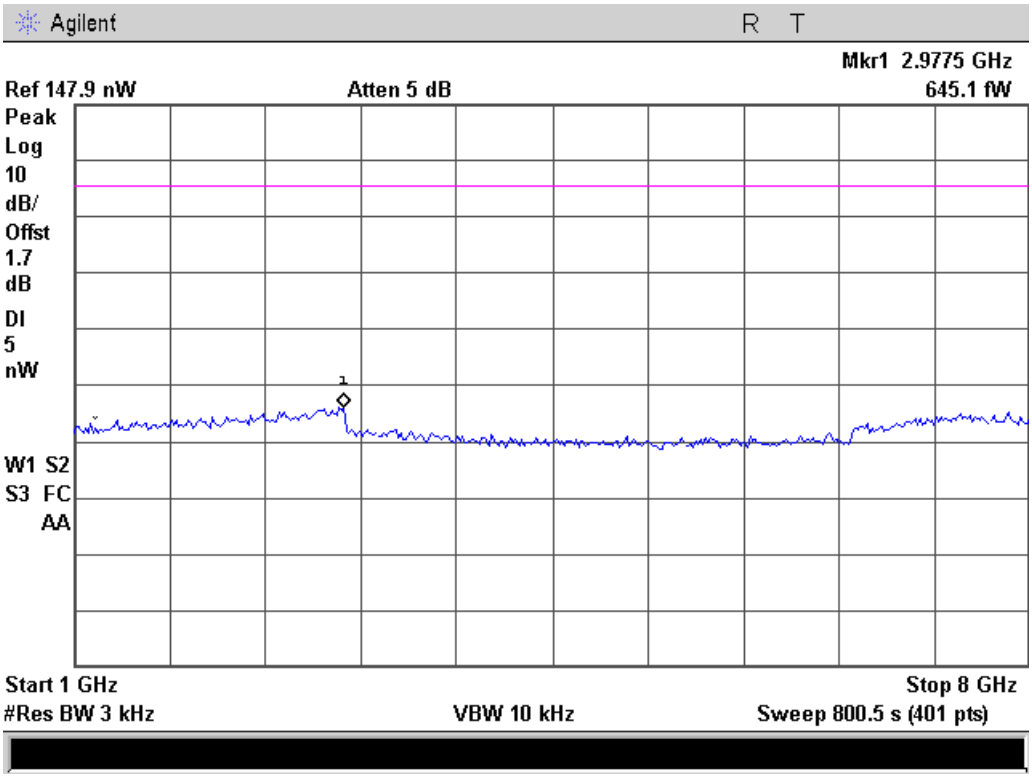

## Receiver Spurious Emissions Summary

| Frequency Range MHz | Recorded Measurement | Specification Limit | Result |
|---|---|---|---|
| 30 - 1000 | 5.148 pW | 2 nW | Pass |
| 1000 - 8000 | 645.1 fW | 5 nW | Pass |

**Receiver Spurious Emissions 30 MHz – 1 GHz**




**Receiver Spurious Emissions 1 GHz – 8 GHz**



## Test Equipment Utilized

| Description | MFG | Model Number | CT Asset No. | Last Cal Date | Cal Due Date |
|---|---|---|---|---|---|
| RF Pre-Amplifier | HP | 8449A | i00028 | 9/17/2010 | 9/17/2011 |
| Horn Antenna | EMCO | 3115 | i00103 | 11/5/2010 | 11/5/2012 |
| LISN | FCC | FCC-LISN-50-32-2-01 | i00270 | 9/30/2010 | 9/30/2012 |
| EMC Analyzer | Agilent | E7405A | i00379 | 11/22/2010 | 11/22/2011 |

In addition to the above listed equipment standard RF connectors and cables were utilized in the testing of the described equipment. Prior to testing these components were tested to verify proper operation.

END OF TEST REPORT