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: September 28, 2009

Federal Communications Commission
Via: Electronic Filing

Attention: Authorization & Evaluation Division

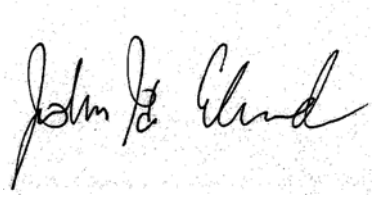
Applicant: Blackboard, Inc.
Equipment: MF4100
FCC ID: TMEMF4100X004
FCC Rules: 15.247

Gentlemen:

On behalf of the Applicant, enclosed please find Application Form 731, Engineering Test Report and all pertinent documentation, the whole for approval of the referenced equipment as shown.

We trust the same is in order. Should you need any further information, kindly contact the writer who is authorized to act as agent.

Sincerely yours,



John Erhard: Engineering Manager

List Of Exhibits

(FCC **Certification** (Transmitters) - Revised 9/28/98)

Applicant: Blackboard, Inc.

FCC ID: TMEMF4100X004

By Applicant:

1. Letter Of Authorization

2. Identification Drawings
   - __ Id Label
   - __ Location Info
   - __ Attestation Statement(S)
   - __ Location of Compliance Statement

3. Documentation: 2.1033(B)
   - (3) User Manual(S)
   - (4) Operational Description
   - (5) Block Diagram
   - (5) Schematic Diagram
   - (7) External Photographs
   - Internal Photographs
   - Parts List
   - Active Devices

By Compliance Testing

A. Testimonial & Statement of Certification

B. Statement of Qualifications

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Test Report

for

FCC ID: TMEMF4100X004

Model: MF4100

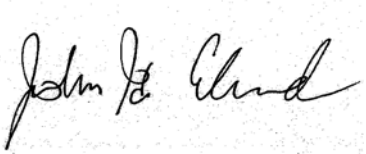
to

Federal Communications Commission

Rule Part(s) 15.247

Date Of Report: September 28, 2009

On the Behalf of the Applicant:	Blackboard, Inc. 22601 North 19th Ave, Suite 200 Phoenix, AZ 85027
Attention of:	Tom Kuestersteffen 623-476-1263 email: tkuestersteffen@blackboard.com and/or Tim Mattson 623-476-1400



Supervised By: John Erhard: Engineering Manager

Test Report Revision History

Revision	Date	Revised By	Reason for revision
1.0	September 28, 2009	J Erhard	Original Document

The applicant has been cautioned as to the following:

15.21 Information to User.

The users 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

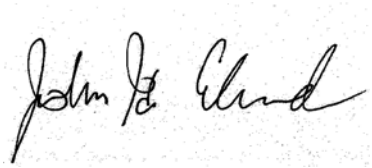
This is to certify that:

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 are true and correct.



Certifying Engineer: John Erhard: Engineering Manager

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

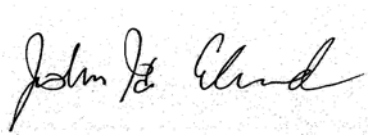
Table Of Contents

Required information per ISO 17025-2005, paragraph 5.10.2:

a) **Test Report**

b) Laboratory: (FCC: 31040/SIT) (Canada: IC 2044A-1)	Compliance Testing 3356 N. San Marcos Place, Suite 107 Chandler, AZ 85225
c) Report Number:	d0990015
d) Client:	Blackboard, Inc.
e) Identification:	MF4100
Description:	13.56 MHz/802.11 Transmitter
f) EUT Condition:	Not required unless specified in individual tests.
g) Report Date:	September 28, 2009
h, j, k):	As indicated in individual tests.
i) Sampling method:	No sampling procedure used.
l) Uncertainty:	In accordance with Compliance Testing internal quality manual.

m) Supervised by:



John Erhard: Engineering Manager

n) Results:	The results presented in this report relate only to the item tested.
o) Reproduction:	This report must not be reproduced, except in full, without written permission from this laboratory.

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
(c)(1):

Name and Address of Applicant: Blackboard, Inc.

(c)(2): **FCC ID**: TMEMF4100X004

Model Number: MF4100

(c)(3): **Instruction Manual(s)**:

Please See Attached Exhibits

(c)(4): **Type of Emission**: QPSK, 16 QAM

(c)(5): **FREQUENCY RANGE, MHz**: 2417 - 2462

(c)(6): **Power Rating, W**: 0.167

____ Switchable ____ Variable _X_ N/A

(c)(7): **Maximum Power Rating, W**: 1

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

Subpart 2.1033 (continued)

(c)(8): **Circuit Diagram/Circuit Description**:

Including description of circuitry & devices provided for determining and stabilizing frequency, for suppression of spurious radiation, for limiting modulation and limiting power.

Please See Attached Exhibits

(c)(9): **Label Information**:

Please See Attached Exhibits

(c)(10): **Photographs**:

Please See Attached Exhibits

(c)(11): **Digital Modulation Description**:

___ Attached Exhibits
_X_ N/A

(c)(12): **Test And Measurement Data**:

Follows

Sub-part 2.1033(b): **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 C63.4-2003, FCC DTS Guide March 23, 2005, 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.

A2LA

"A2LA has accredited Compliance Testing 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

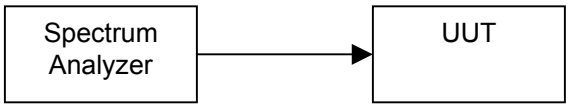
Specification	Test Name	Pass, Fail, N/A	Comments
15.247(b)	Peak Output Power	Pass	
15.247(d)	Conducted Spurious Emissions	Pass	
15.247(d), 15.209(a), 15.205	Radiated Spurious Emissions	Pass	
15.247(d), 15.209(a), 15.205	Emissions At Band Edges	Pass	
15.247(a)(2)	Occupied Bandwidth	Pass	
15.247(e)	Transmitter Power Spectral Density	Pass	
15.207	A/C Powerline Conducted Emissions	Pass	

Name of Test: Peak Output Power
Specification: 15.247(b) **Engineer: J. Erhard**
Test Equipment Utilized i00331 **Test Date: 9/24/2009**

Test Procedure

The UUT was connected directly to a spectrum analyzer and the peak readings were taken in all modulation types. The power was integrated over the 20-dB bandwidth to provide correct values. The results were then compared to the limit.

Test Setup



QPSK Transmitter Peak Output Power

Tuned Frequency MHz	Recorded Measurement (dBm)	20 dB BW Integration (dB)	Corrected Value (dBm)	Limit	Result
2417	-2.86	20.21	17.35	1 W	Pass
2437	-0.556	20.00	19.444	1 W	Pass
2462	2.059	20.17	22.229	1 W	Pass

16 QAM Transmitter Peak Output Power

Tuned Frequency MHz	Recorded Measurement (dBm)	20 dB BW Integration (dB)	Corrected Value (dBm)	Limit	Result
2417	-11.54	22.17	10.63	1 W	Pass
2437	-9.268	21.79	12.522	1 W	Pass
2462	-5.576	22.17	16.594	1 W	Pass

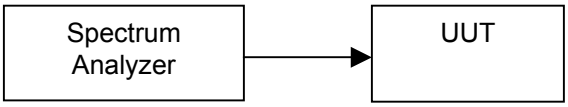
Name of Test: Conducted Spurious Emissions
Specification: 15.247(d) **Engineer: J. Erhard**
Test Equipment Utilized i00331 **Test Date: 9/24/2009**

Test Procedure

The UUT was connected directly to a spectrum analyzer to verify that the UUT met the requirements for spurious emissions. The reference level was offset for the peak power output with the resolution bandwidth set for 1 MHz. The frequency range from 30 MHz to the 10th harmonic of the fundamental transmitter was observed. The recorded spurious measurement is subtracted from the measured power to provide the corrected level dBc

Only 16-QAM was reported, as it is the worst case.

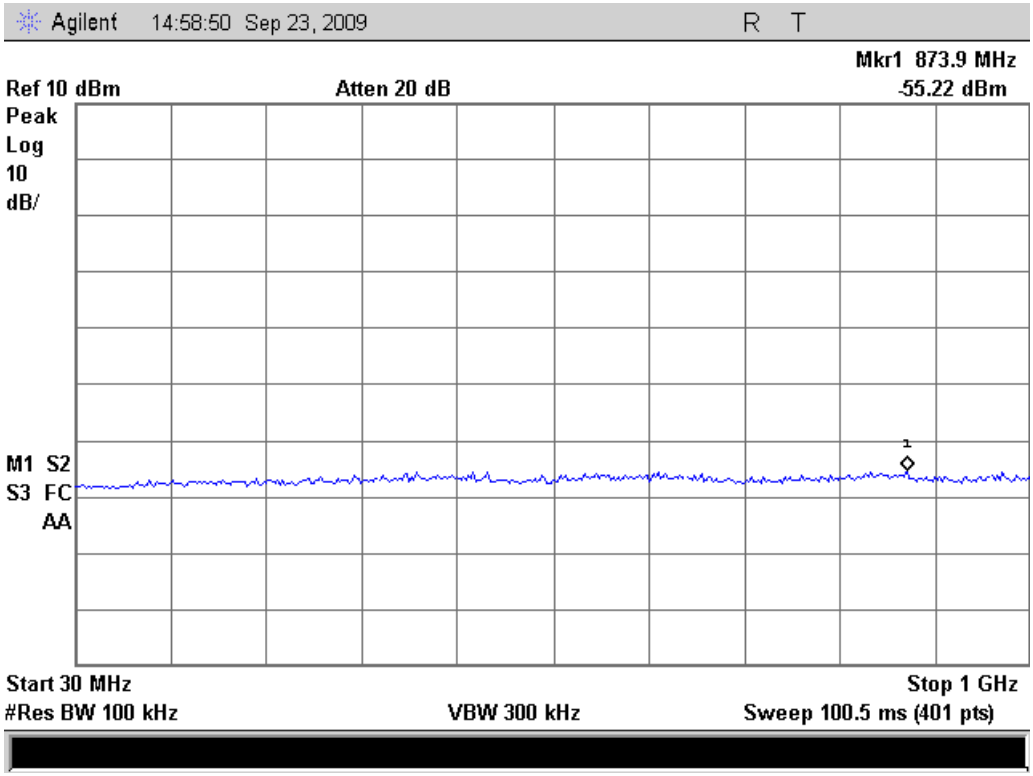
Test Setup

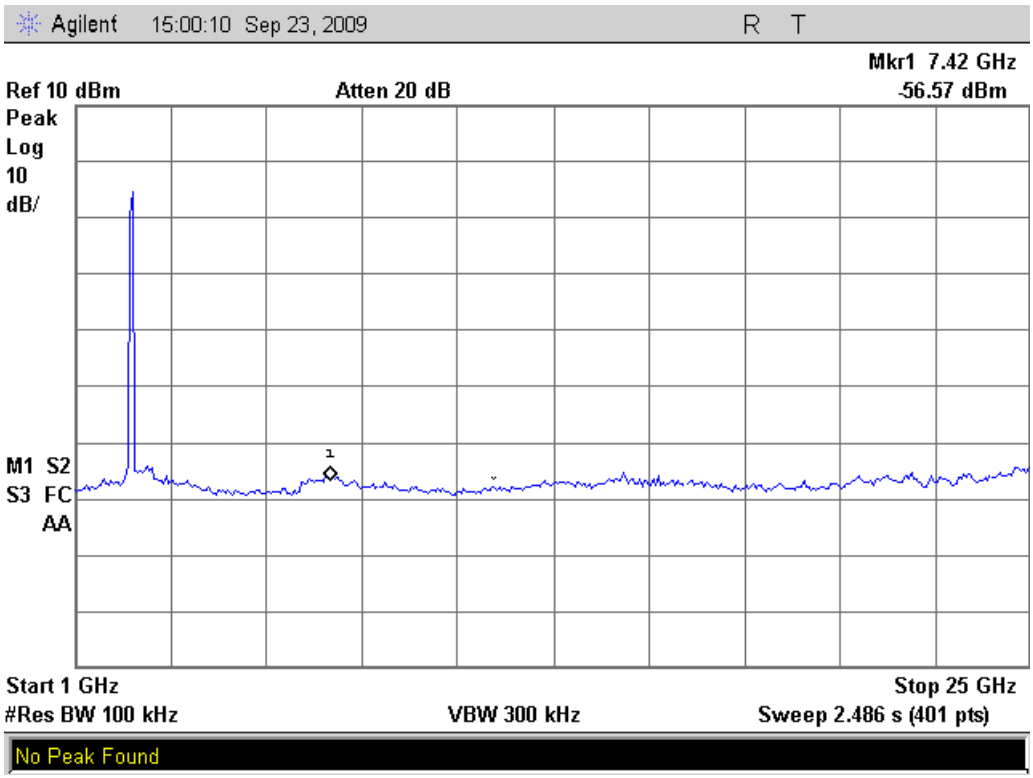


Conducted Spurious Emissions Summary Test Table

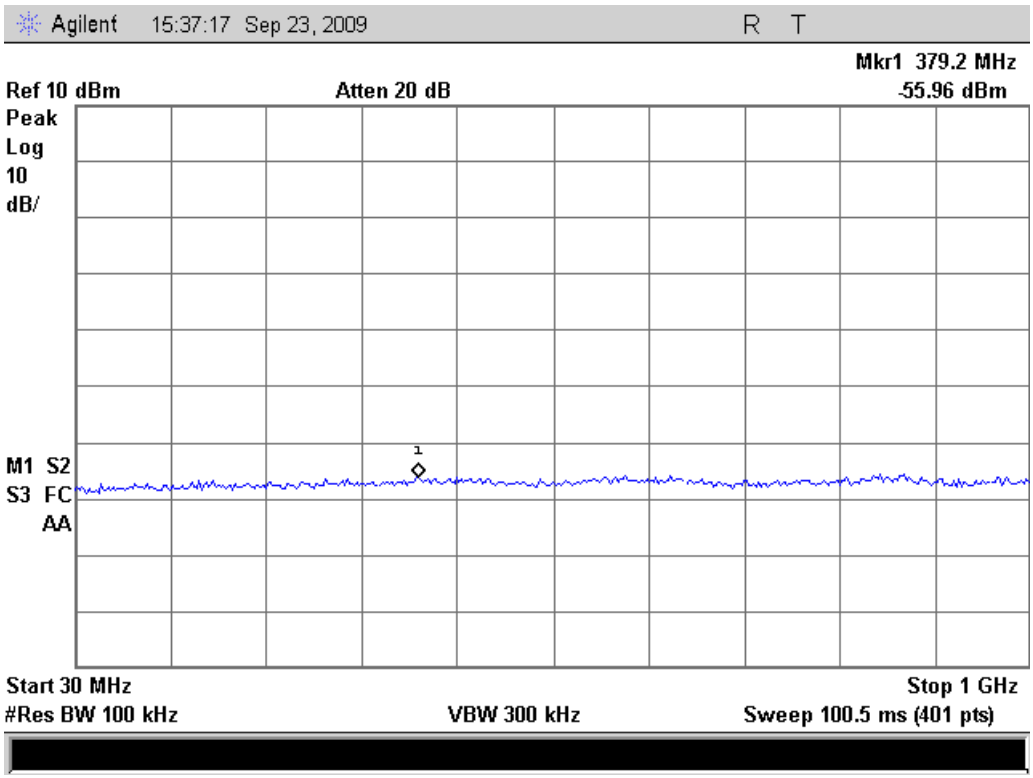
Tuned Frequency MHz	Emission Frequency MHz	Recorded Measurement (dBm)	Measured Power (dBm)	Corrected Measurement (dBc)	Specification Limit	Result
2417	873.9	-55.22	-11.54	-43.68	-20 dBc	Pass
2437	7180	-47.7	-9.26	-38.44	-20 dBc	Pass
2462	22540	-57.46	-5.57	-51.88	-20 dBc	Pass

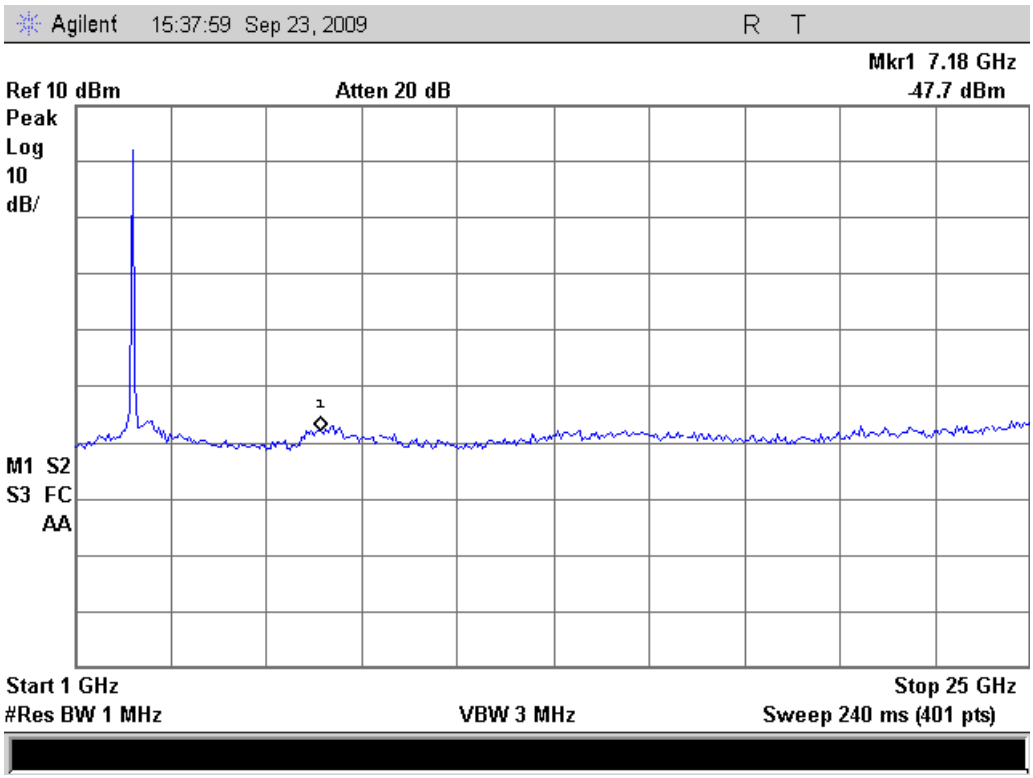
Conducted Spurious Emissions 2417 MHz



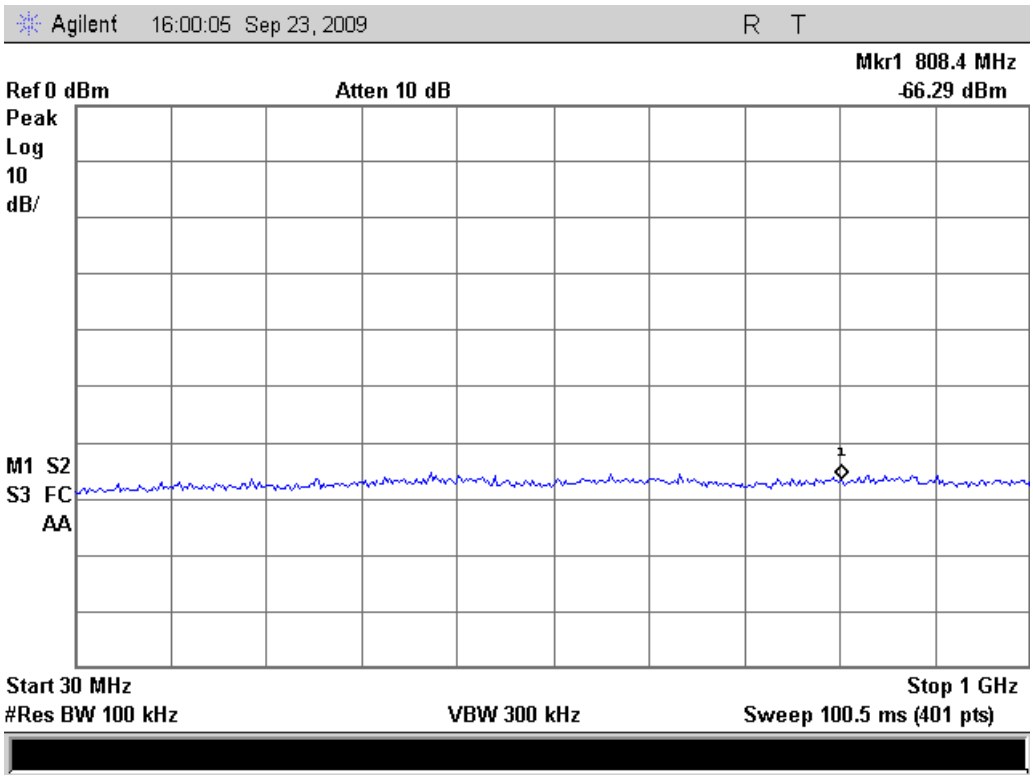


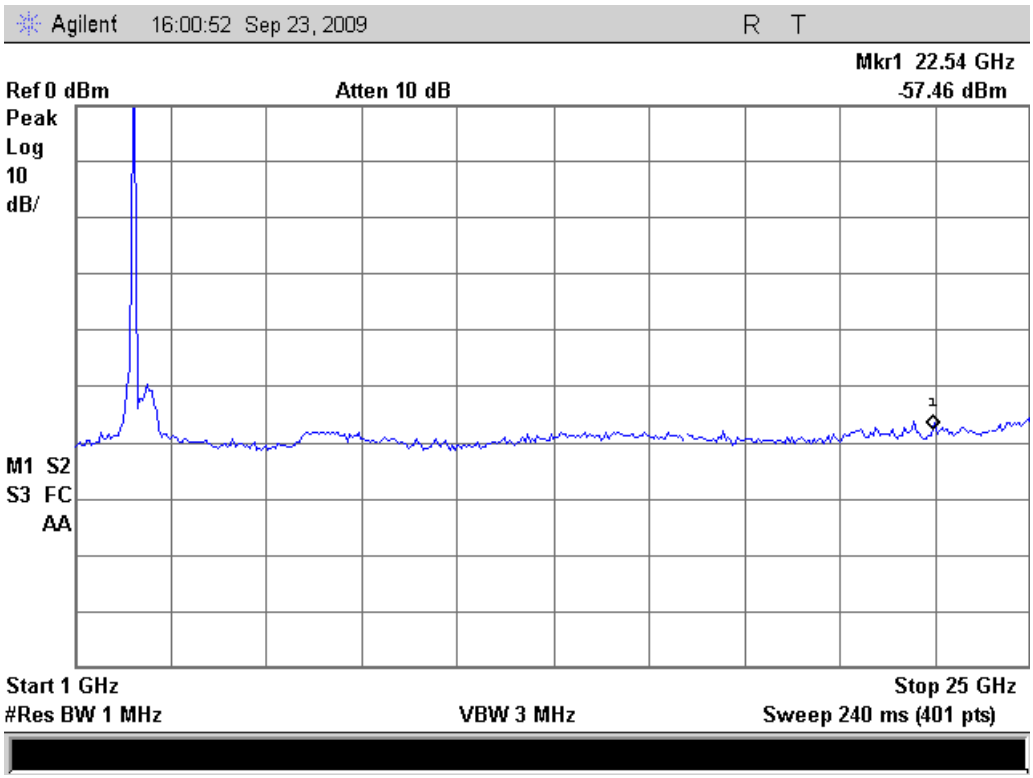
Conducted Spurious Emissions 2437 MHz





Conducted Spurious Emissions 2462 MHz





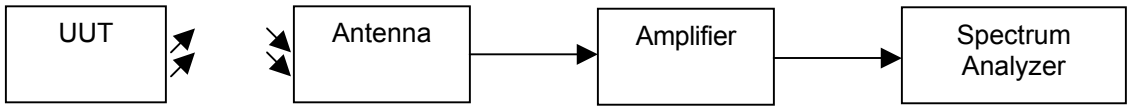
Name of Test: Radiated Spurious Emissions
Specification: 15.247(d), 15.209(a), 15.205 **Engineer: J. Erhard**
Test Equipment Utilized i00103, i00331 **Test Date: 9/24/2009**

Test Procedure

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

Only 16-QAM is reported as it is the worst case.

Test Setup



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

16-QAM 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
2417	4837	62.63	74.0	50.92	54.0	Pass
2417	7251	58.32	74.0	48.85	54.0	Pass
2437	4874	57.59	74.0	47.59	54.0	Pass
2437	7311	54.61	74.0	46.53	54.0	Pass
2462	2924	53.98	74.0	47.09	54.0	Pass
2462	7386	56.55	74.0	50.40	54.0	Pass

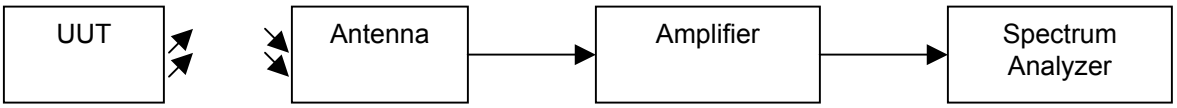
No other emissions were detectable. All emissions were greater than –20 dBc.

Name of Test: Emissions At Band Edges
Specification: 15.247(d), 15.209(a), 15.205 **Engineer: J. Erhard**
Test Equipment Utilized i00103, i00331 **Test Date: 9/24/2009**

Test Procedure

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

Test Setup



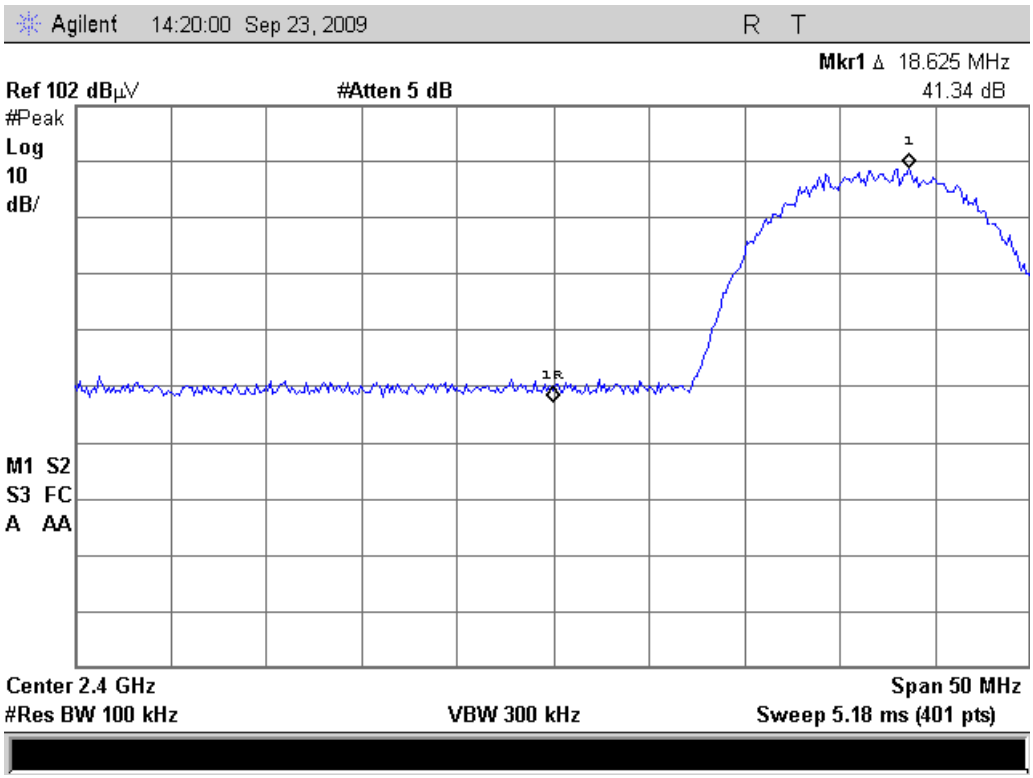
QPSK Band Edge Emissions Summary

Tuned Freq (MHz)	Emission Freq (MHz)	Monitored Level (dBc)	Detector	Limit	Result
2417	2400	-41.34	Peak	-20 dBc	Pass
2462	2483.5	-35.21	Peak	-20 dBc	Pass

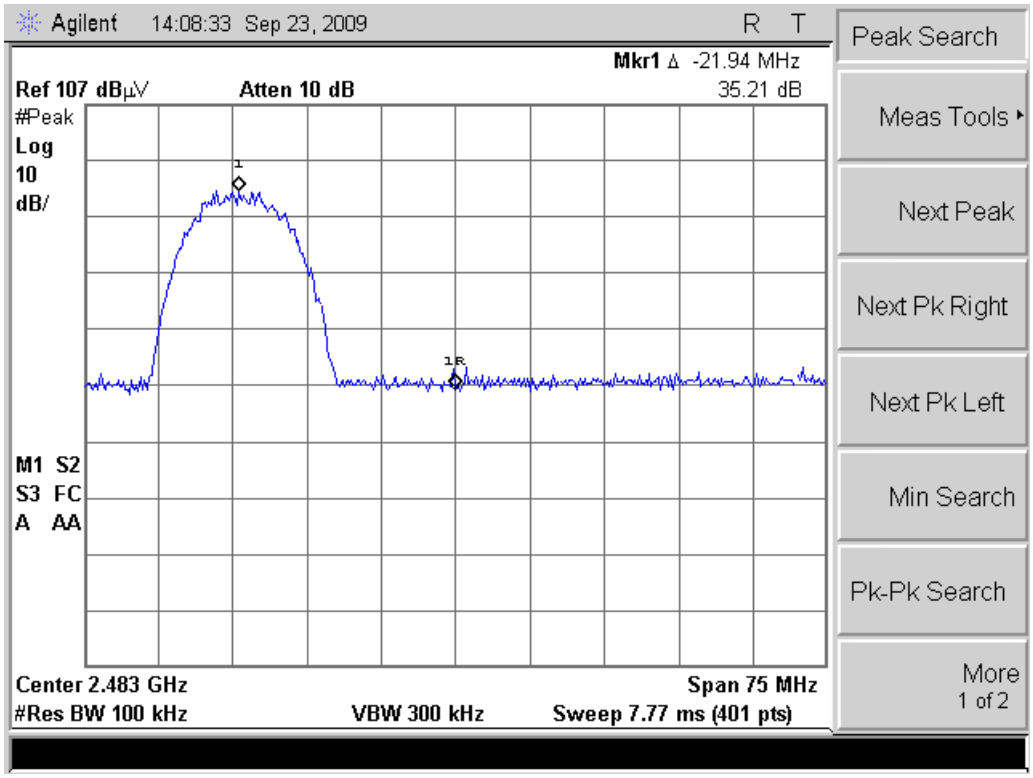
QPSK Restricted Band Emissions Summary

Tuned Freq (MHz)	Emission Freq (MHz)	Monitored Level (dBuV/m)	Detector	Limit (dBuV/m)	Result
2417	2390	60.28	Peak	74	Pass
2462	2390	63.22	Peak	74	Pass
2417	2483.5	47.26	Average	54	Pass
2462	2483.5	48.96	Average	54	Pass

QPSK Band Edge 2400 MHz

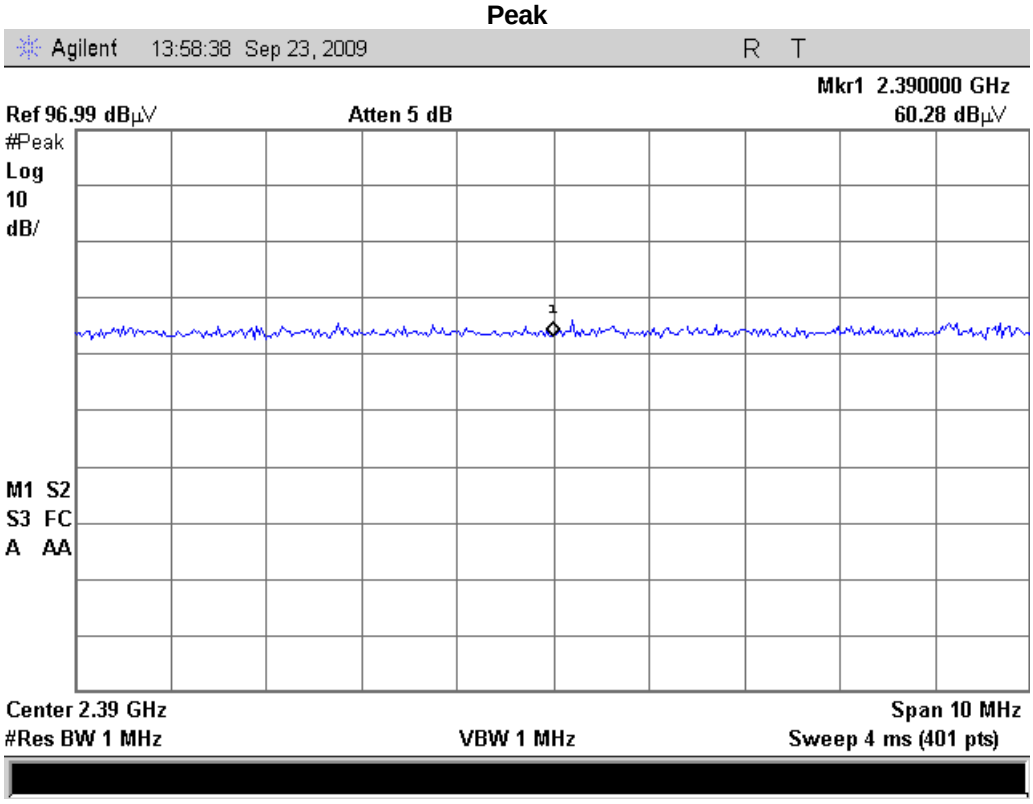


QPSK Band Edge 2483.5 MHz

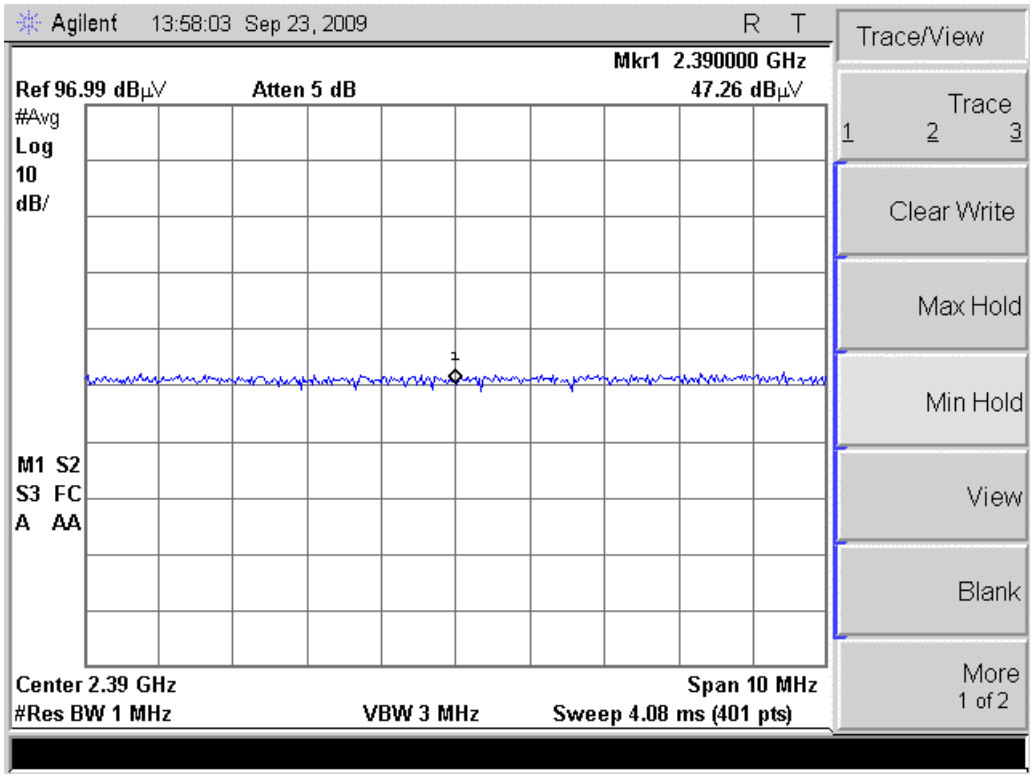


QPSK Restricted Band 2390 MHz

Peak

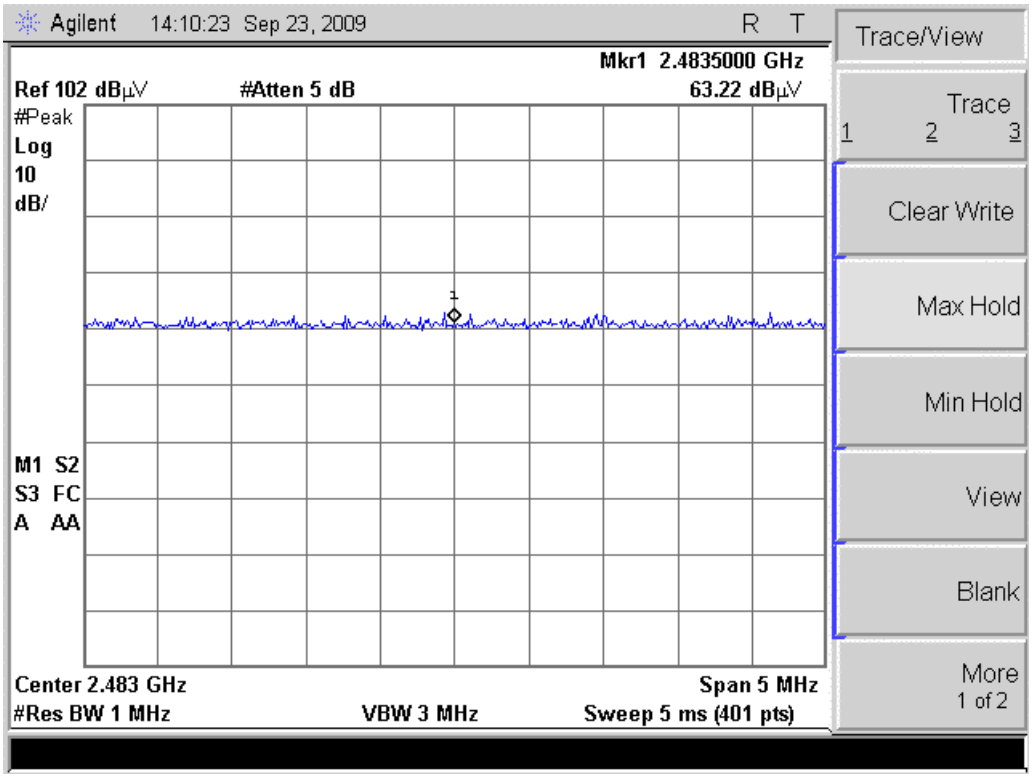


Average

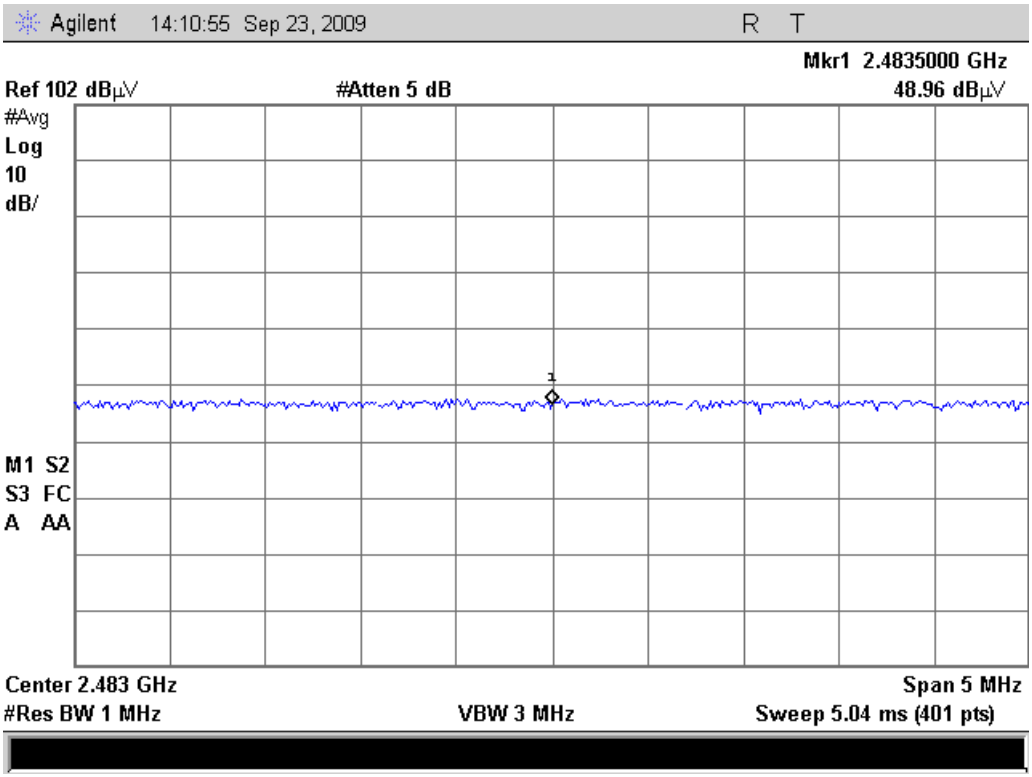


QPSK Restricted Band 2483.5 MHz

Peak



Average



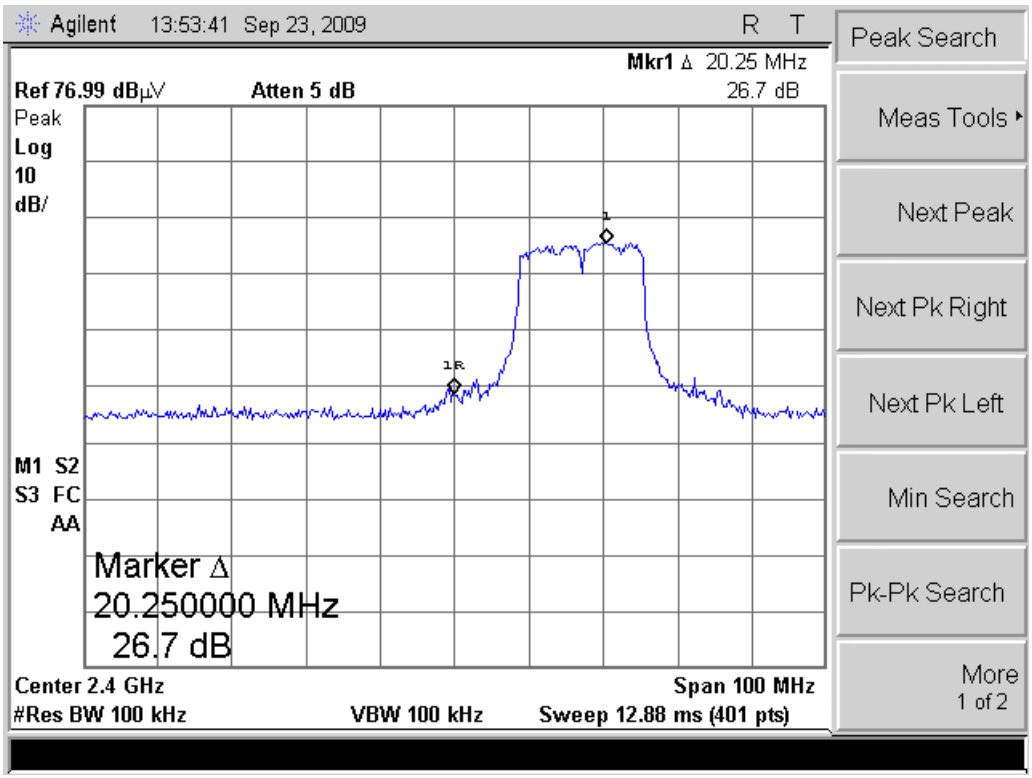
16-QAM Band Edge Emissions Summary

Tuned Freq (MHz)	Emission Freq (MHz)	Monitored Level (dBc)	Detector	Limit	Result
2417	2400	-26.70	Peak	-20 dBc	Pass
2462	2483.5	-28.73	Peak	-20 dBc	Pass

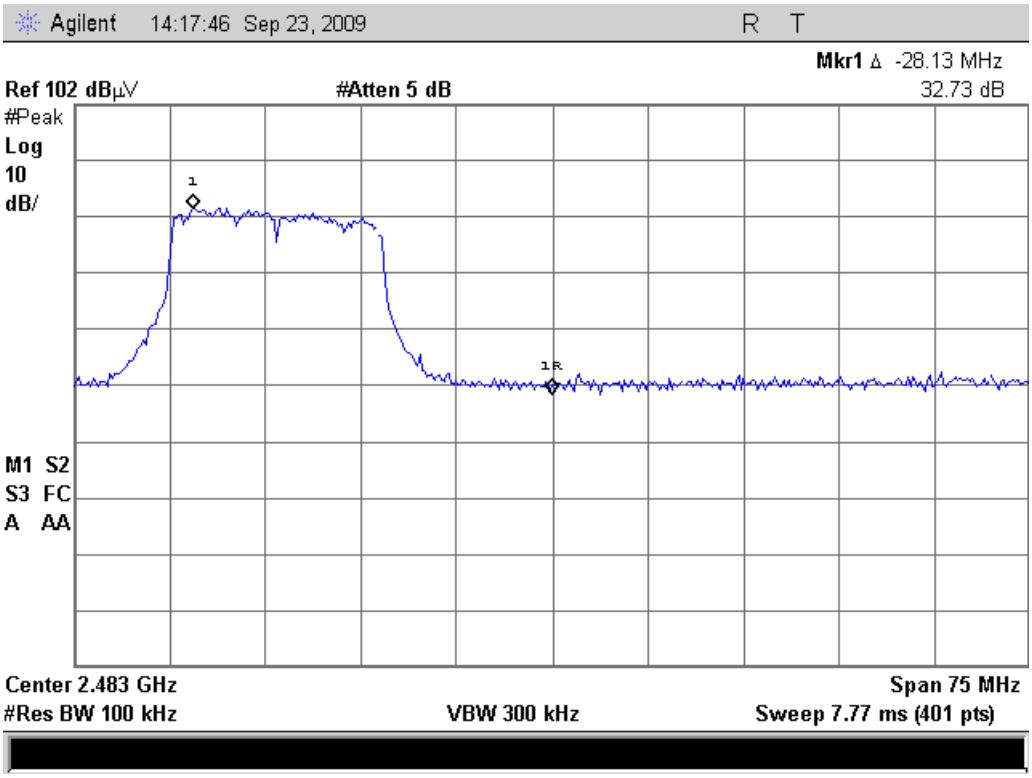
16-QAM Restricted Band Emissions Summary

Tuned Freq (MHz)	Emission Freq (MHz)	Monitored Level (dBuV/m)	Detector	Limit (dBuV/m)	Result
2417	2390	61.40	Peak	74	Pass
2462	2390	62.66	Peak	74	Pass
2417	2483.5	47.48	Average	54	Pass
2462	2483.5	49.07	Average	54	Pass

16-QAM Band Edge 2400 MHz

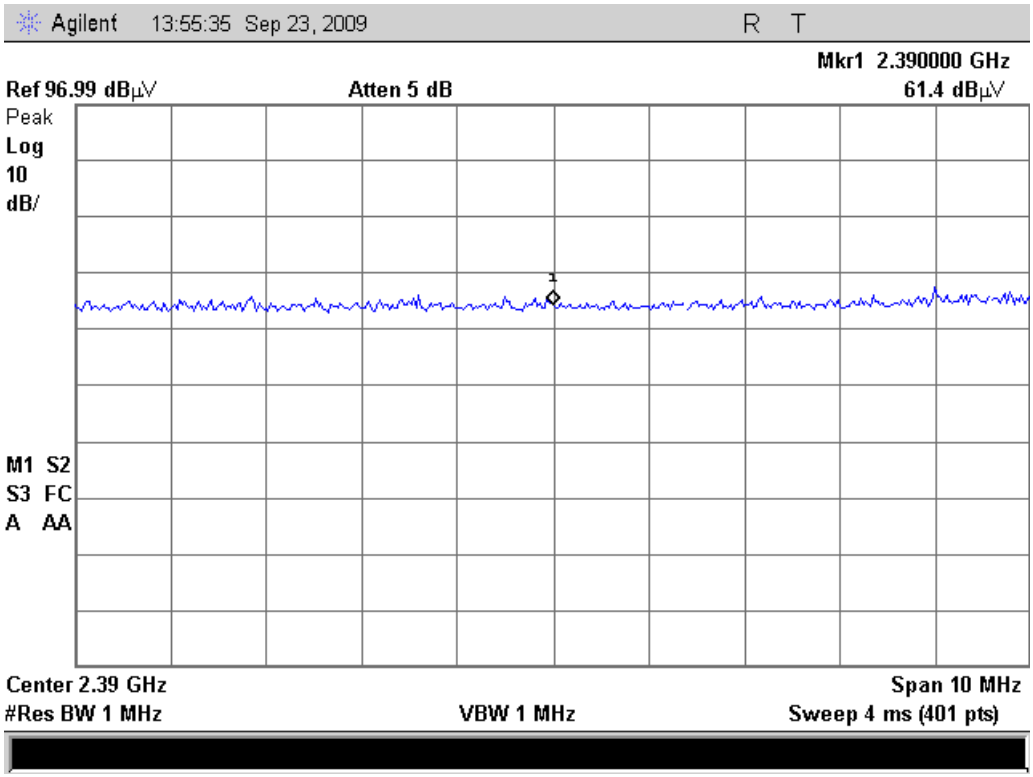


16-QAM Band Edge 2483.5 MHz

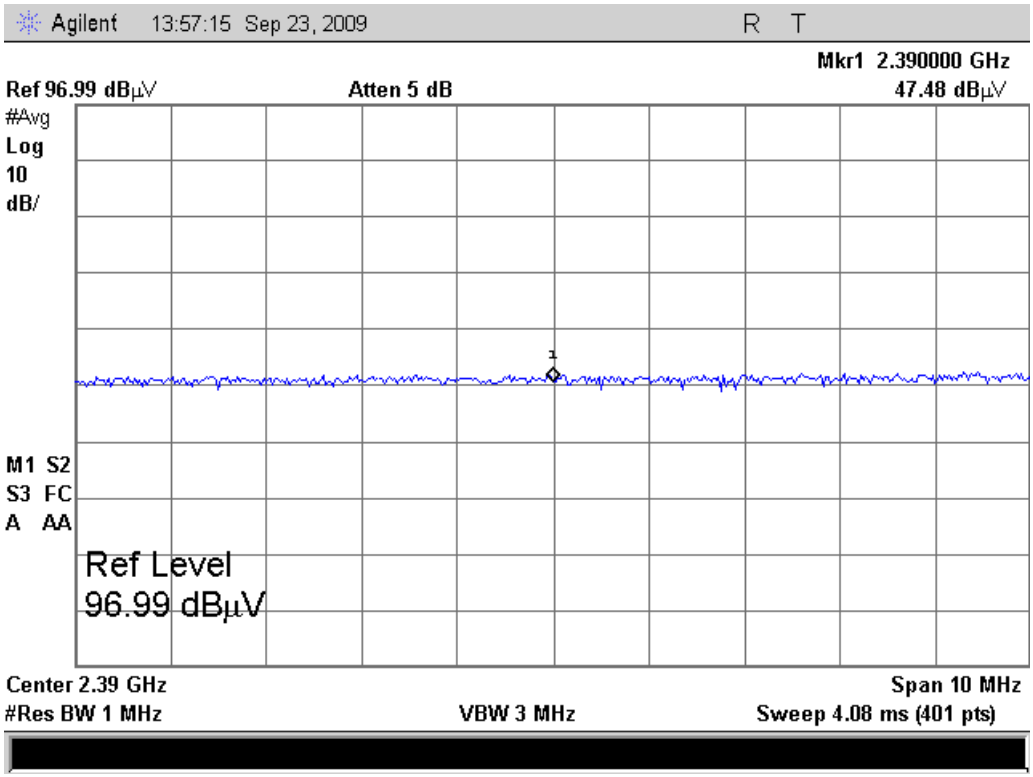


16-QAM Restricted Band 2390 MHz

Peak

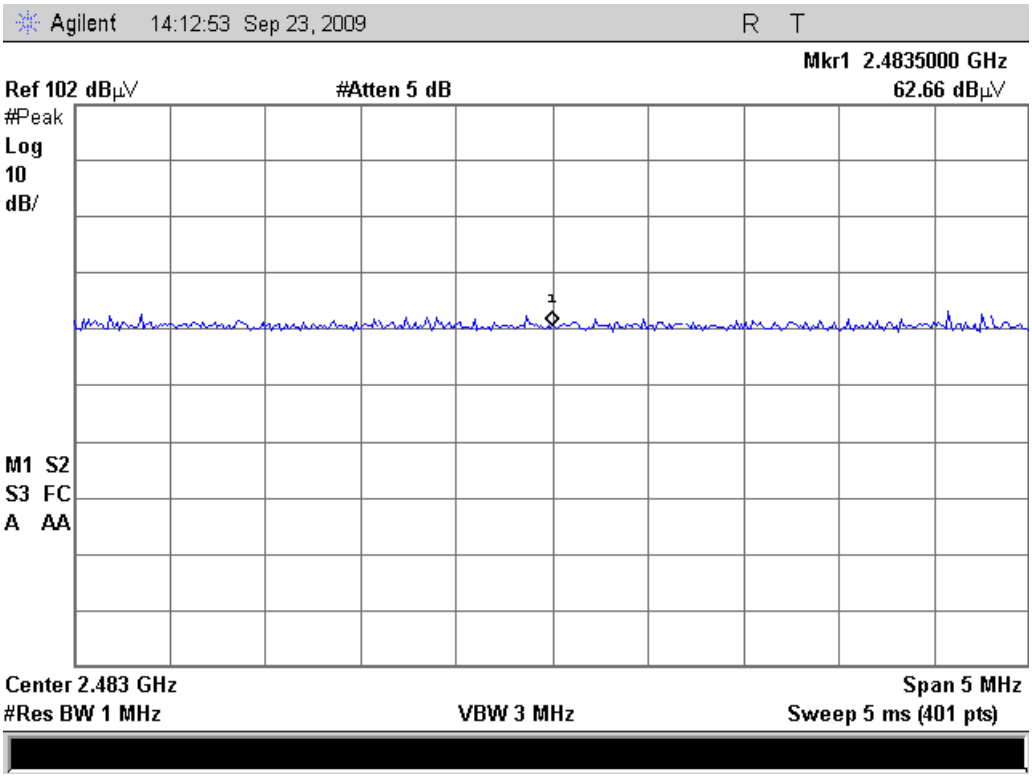


Average

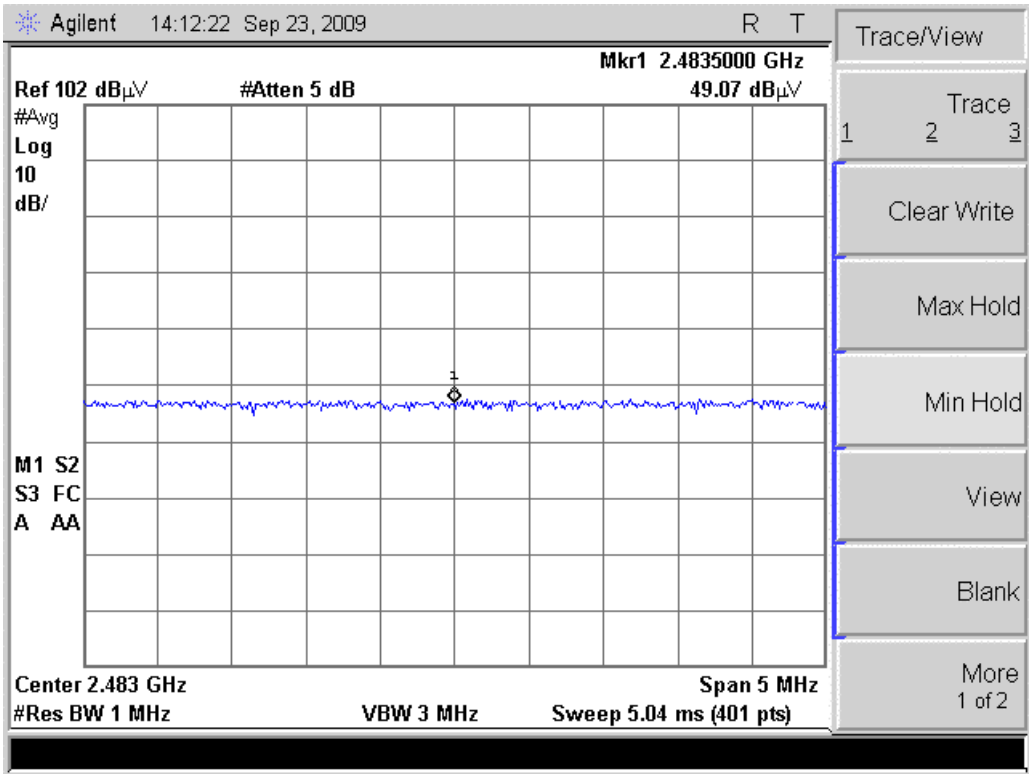


16-QAM Restricted Band 2483.5 MHz

Peak



Average

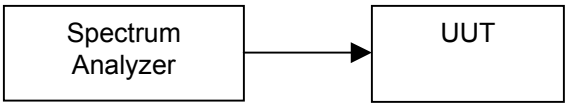


Name of Test: Occupied Bandwidth
Specification: 15.247(a)(2) **Engineer: J. Erhard**
Test Equipment Utilized i00331 **Test Date: 9/24/2009**

Test Procedure

The UUT 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



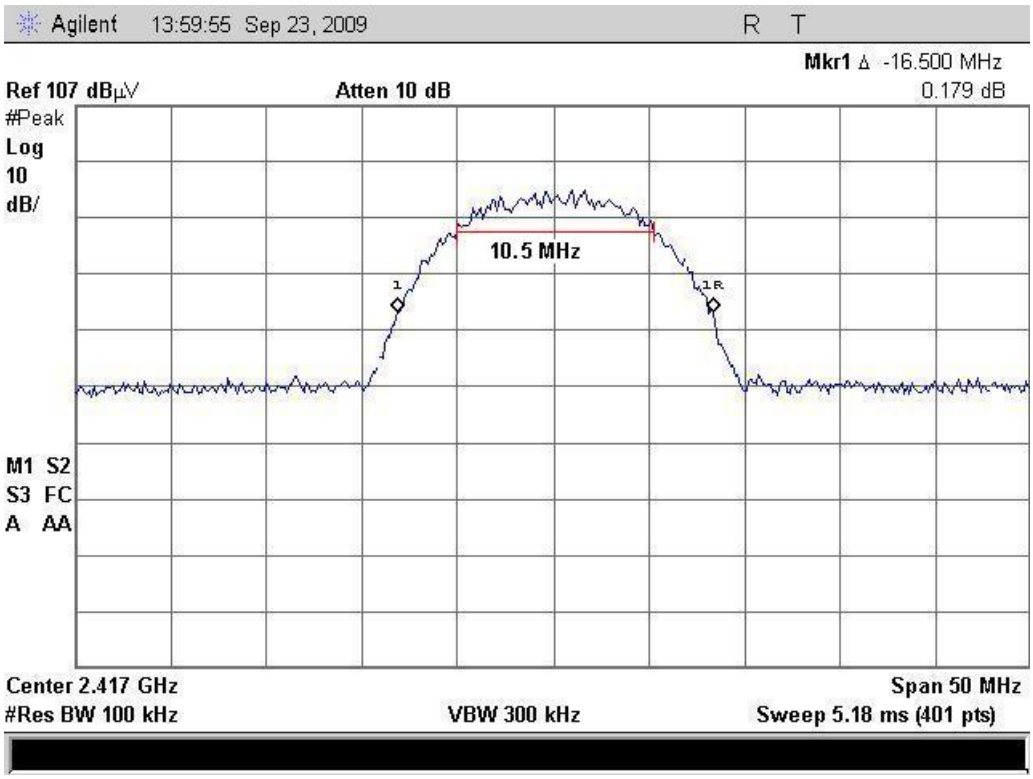
QPSK Occupied Bandwidth Summary

Frequency MHz	Recorded Measurement	Specification Limit	Result
2417	10.5 MHz	≥ 500 KHz	Pass
2437	10.0 MHz	≥ 500 KHz	Pass
2462	10.4 MHz	≥ 500 KHz	Pass

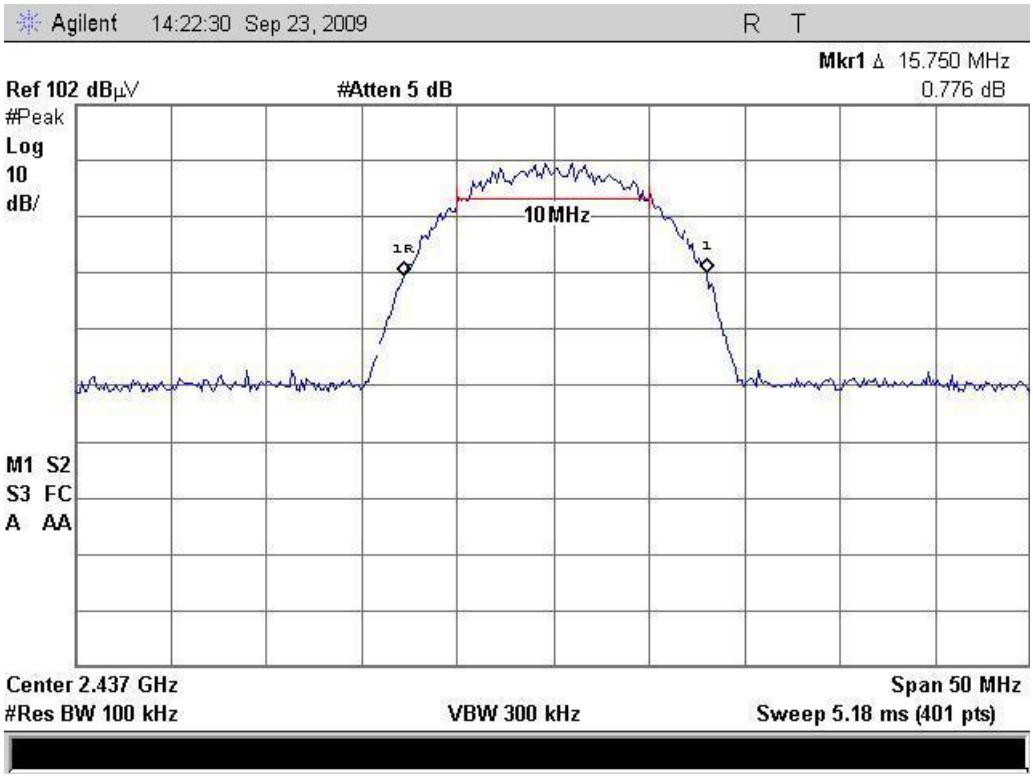
QPSK 99% Bandwidth Summary

Frequency MHz	Recorded Measurement	Result
2417	18.0 MHz	Pass
2437	18.125 MHz	Pass
2462	18.0 MHz	Pass

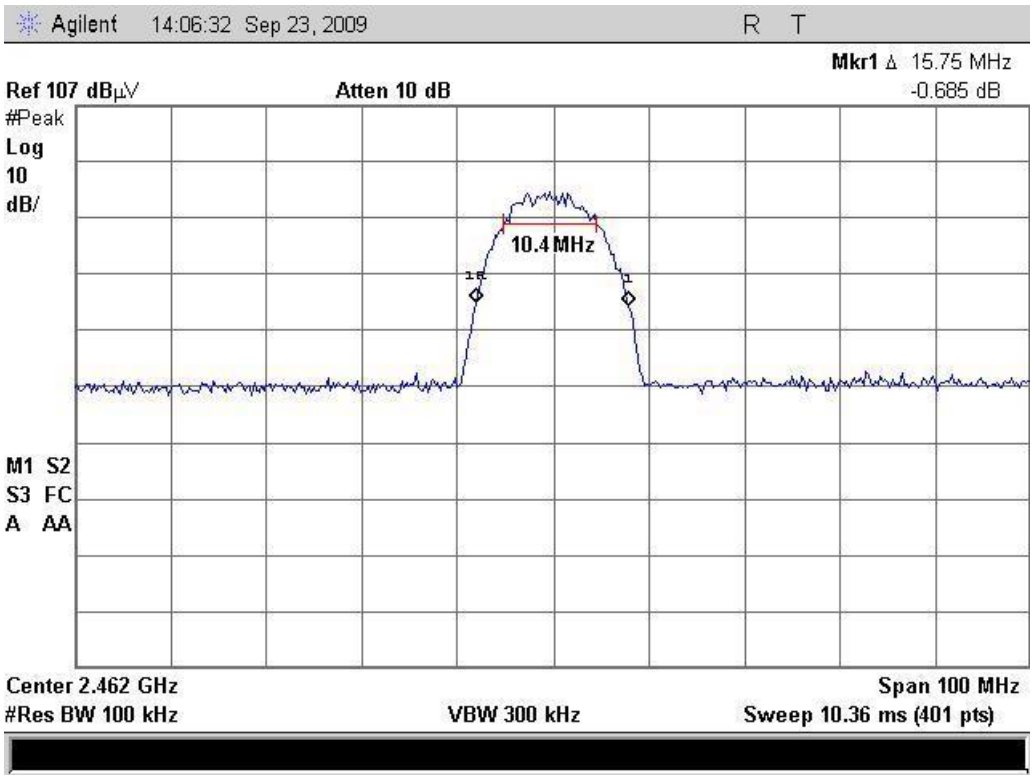
QPSK 6dB Bandwidth 2417 MHz



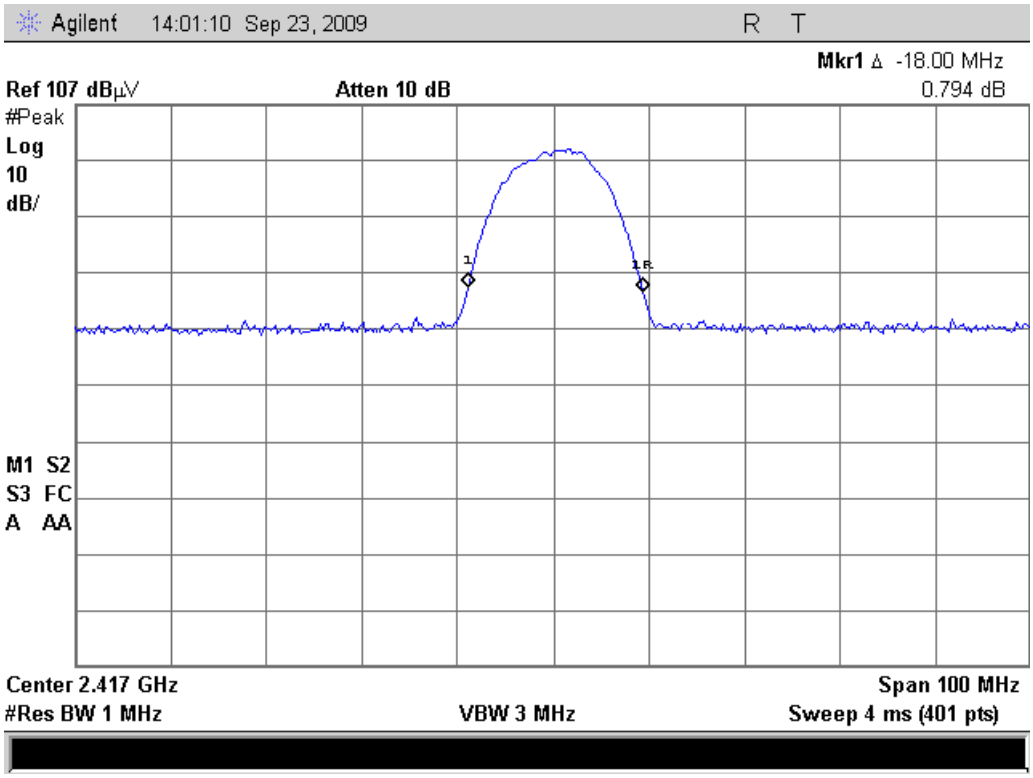
QPSK 6dB Bandwidth 2437 MHz



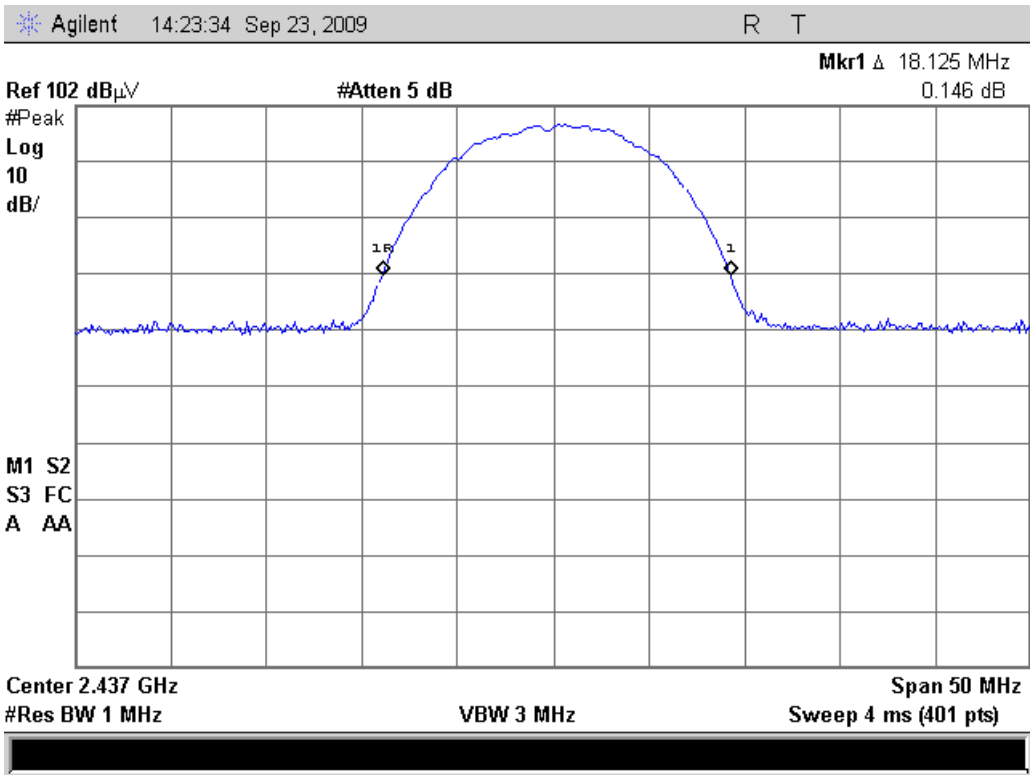
QPSK 6dB Bandwidth 2432 MHz



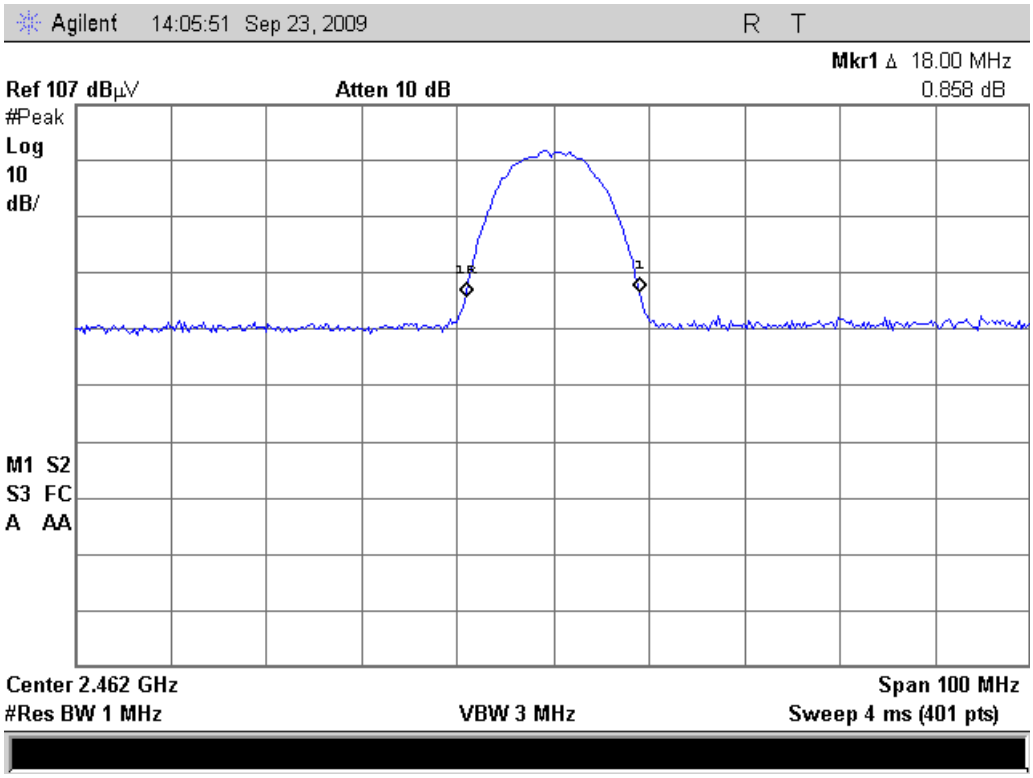
QPSK 99% Bandwidth 2417 MHz



QPSK 99% Bandwidth 2437 MHz



QPSK 99% Bandwidth 2462 MHz



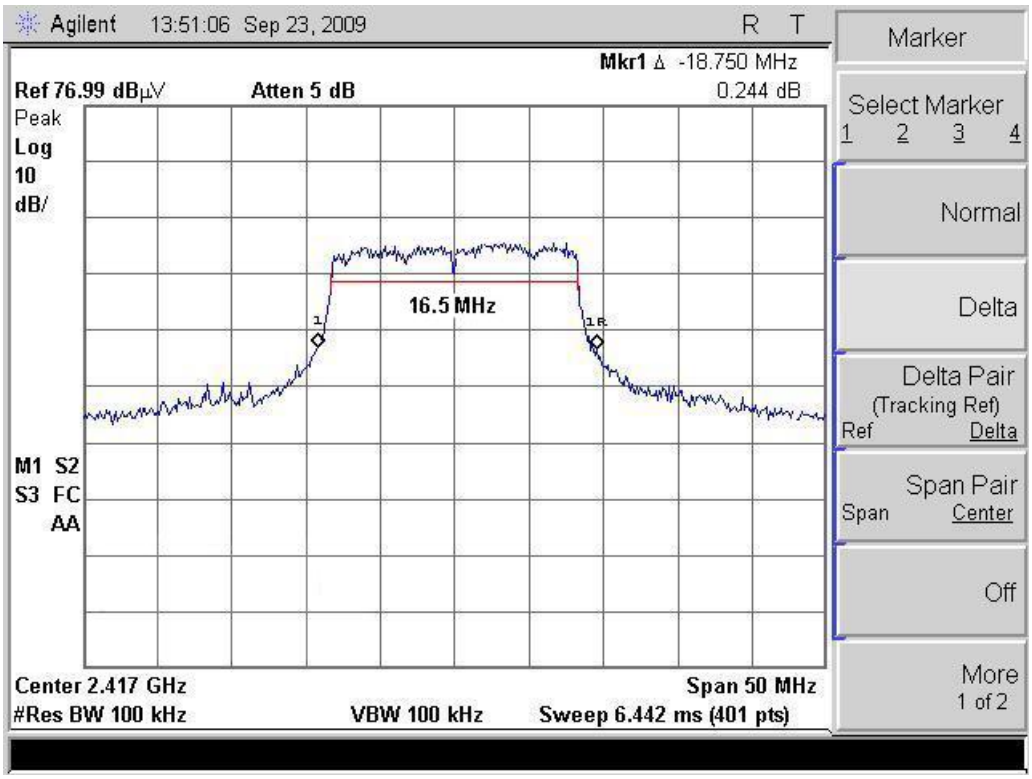
16-QAM Occupied Bandwidth Summary

Frequency MHz	Recorded Measurement	Specification Limit	Result
2417	16.5 MHz	≥ 500 KHz	Pass
2437	15.125 MHz	≥ 500 KHz	Pass
2462	16.5 MHz	≥ 500 KHz	Pass

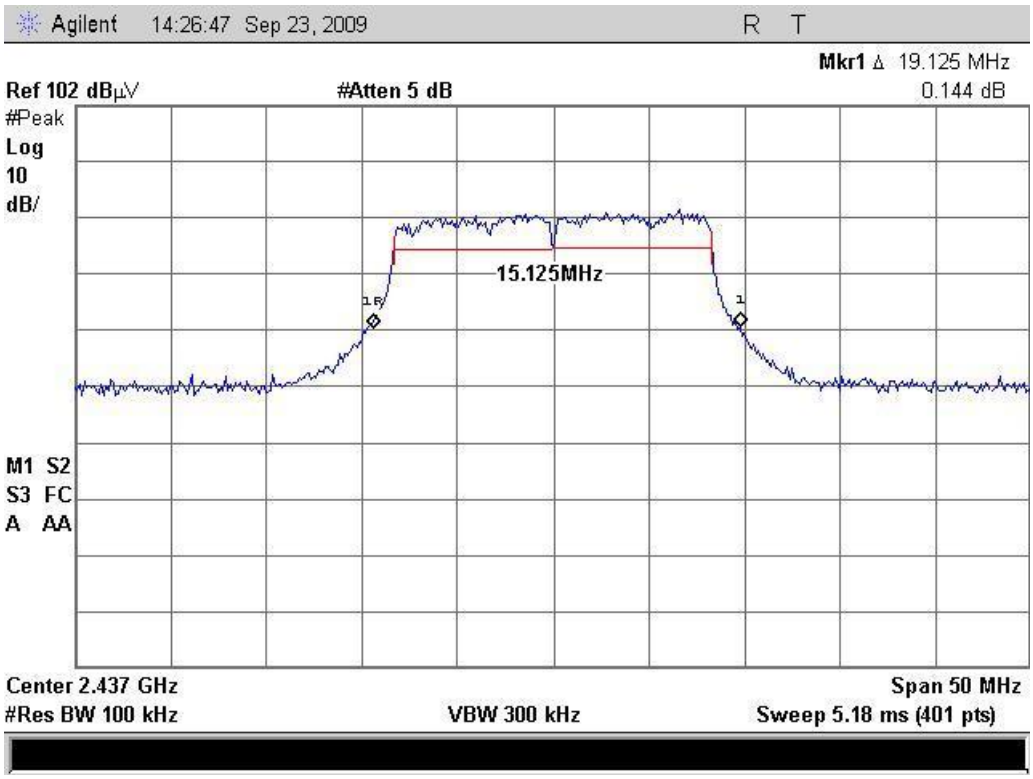
16-QAM 99% Bandwidth Summary

Frequency MHz	Recorded Measurement	Result
2417	22.0 MHz	Pass
2437	25.0 MHz	Pass
2462	24.750 MHz	Pass

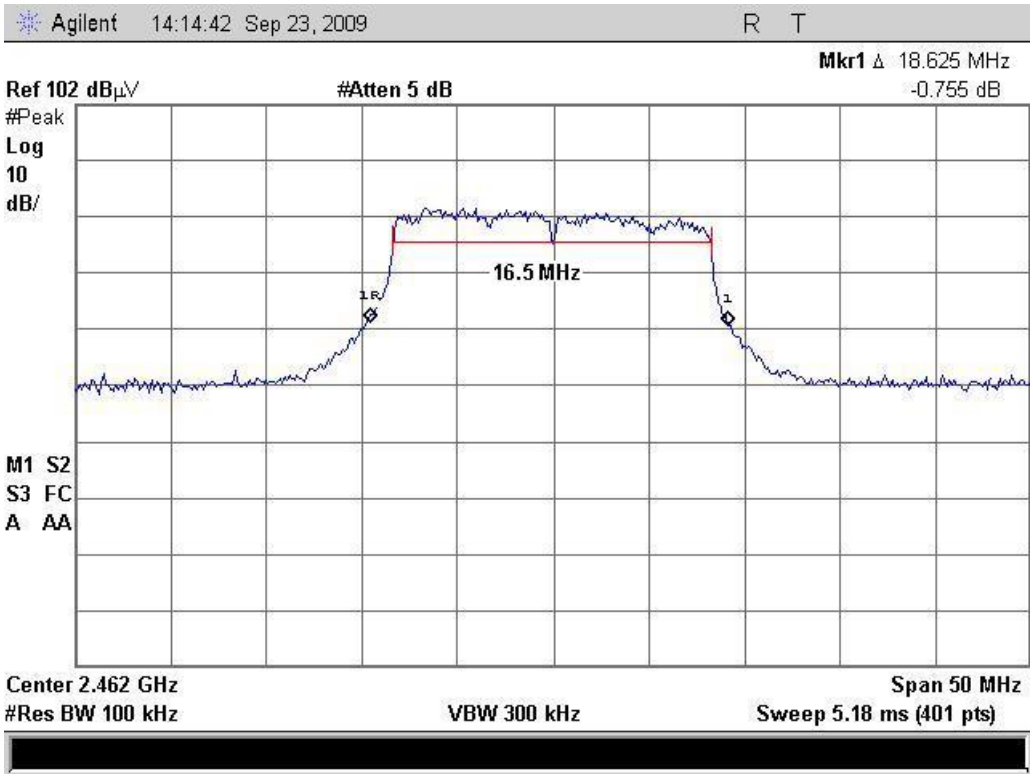
16-QAM 6dB Bandwidth 2417 MHz



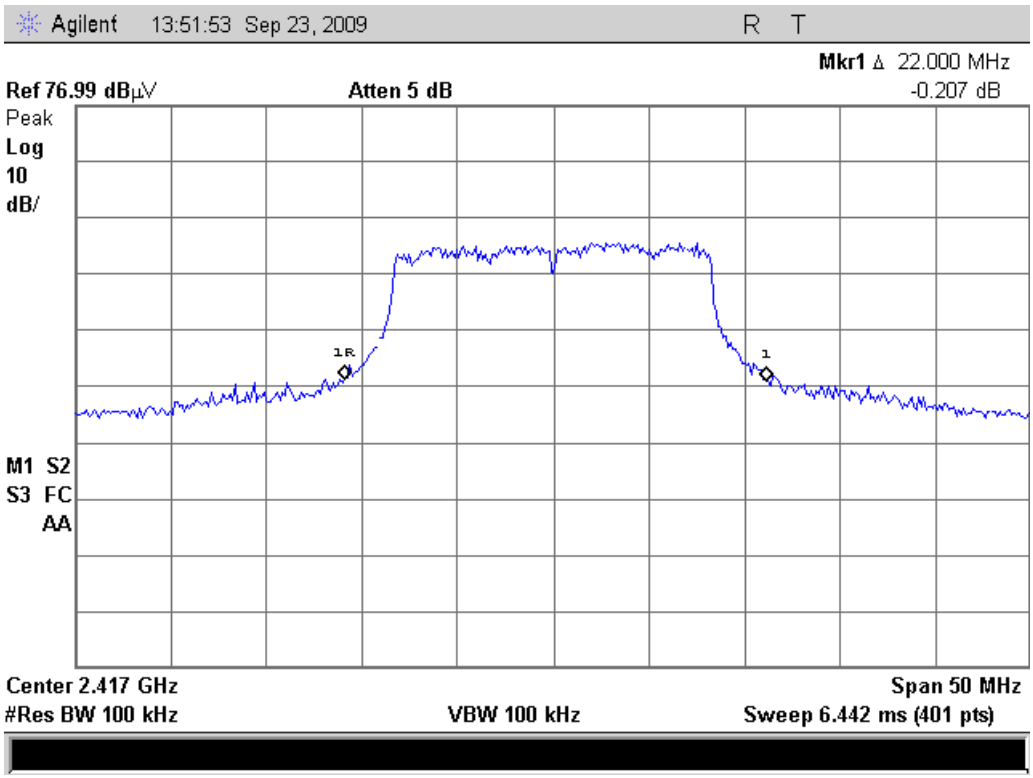
16-QAM 6dB Bandwidth 2437 MHz



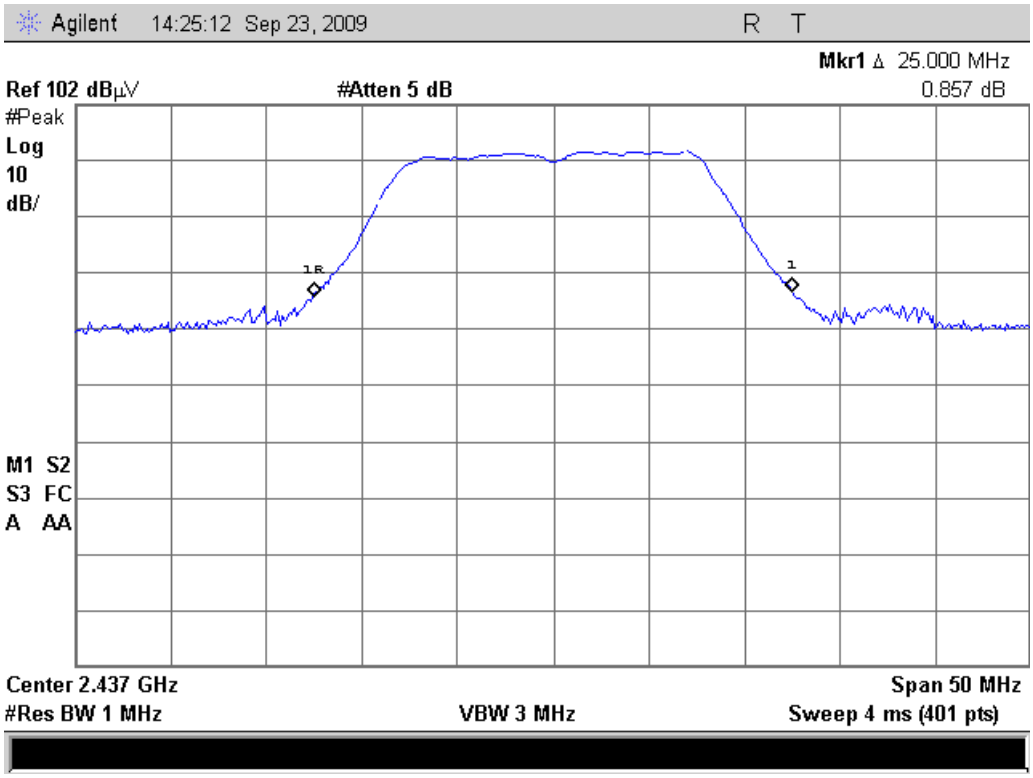
16-QAM 6dB Bandwidth 2432 MHz



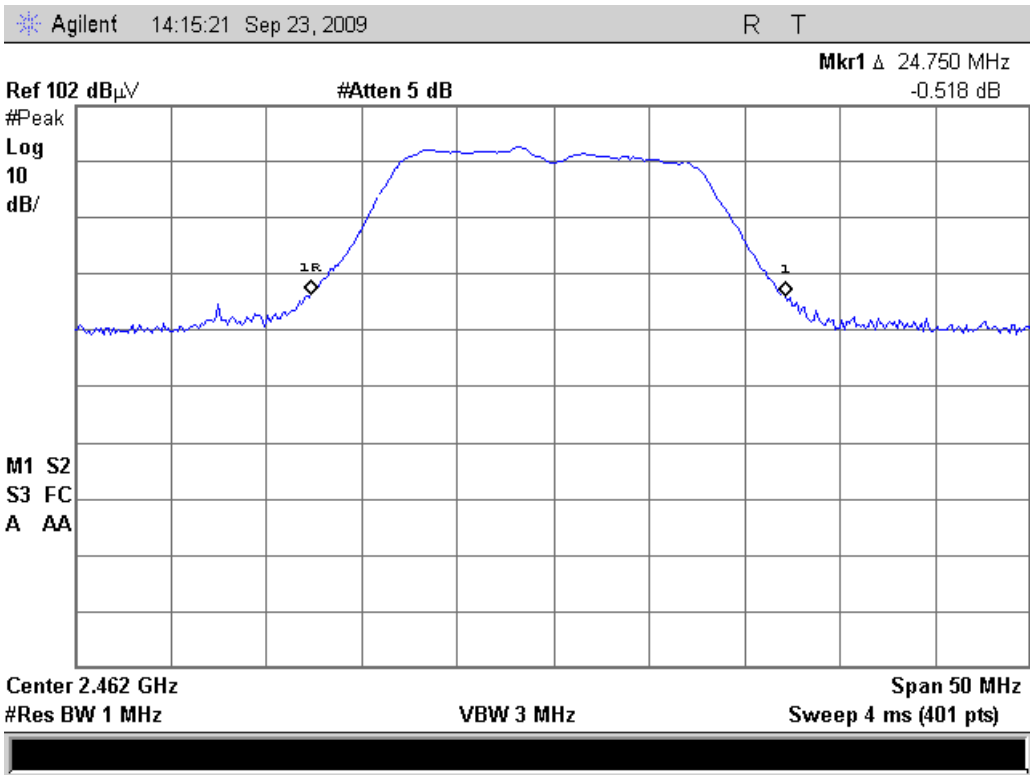
16-QAM 99% Bandwidth 2417 MHz



16-QAM 99% Bandwidth 2437 MHz



16-QAM 99% Bandwidth 2432 MHz

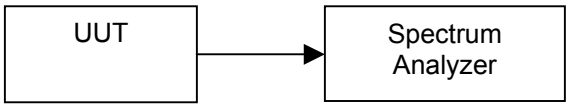


Name of Test: Transmitter Power Spectral Density (PSD)
Specification: 15.247(e) **Engineer: J. Erhard**
Test Equipment Utilized i00331 **Test Date: 9/24/2009**

Test Procedure

The UUT 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.

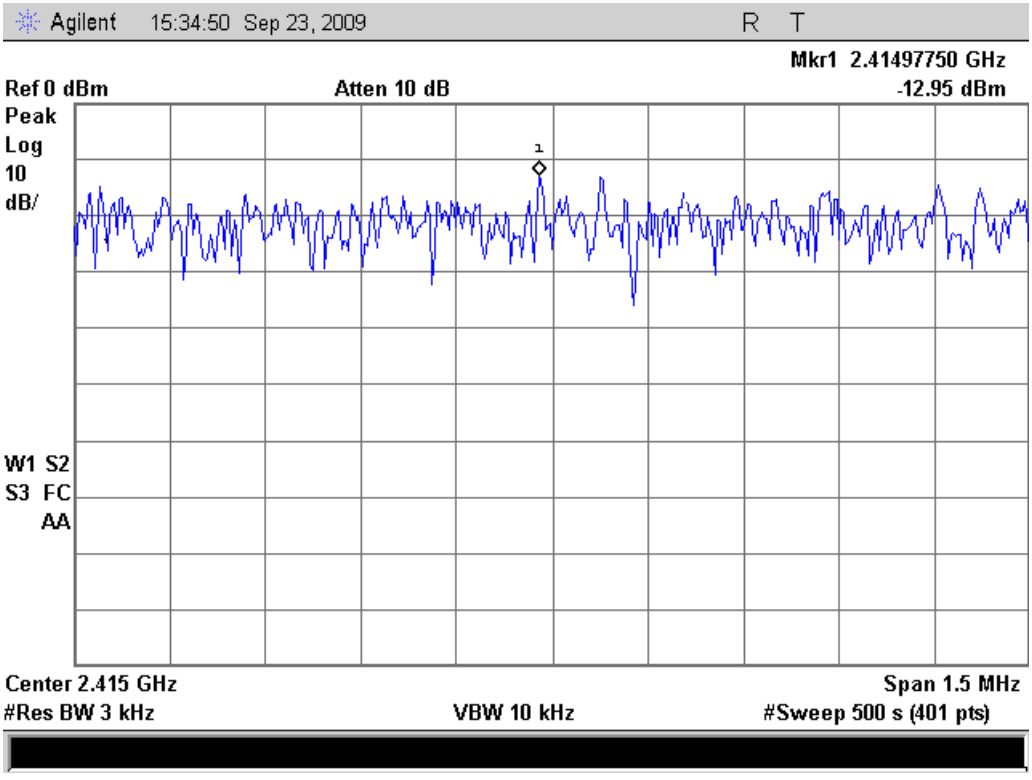
Test Setup



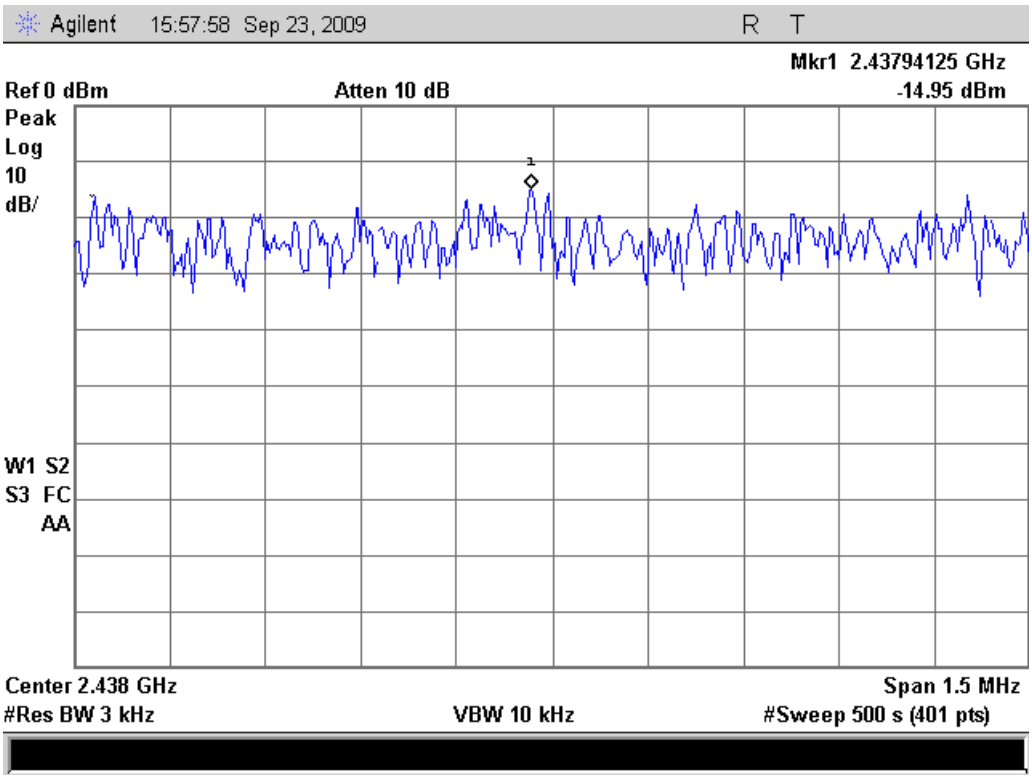
QPSK PSD Summary

Frequency MHz	Recorded Measurement	Specification Limit	Result
2417	-12.95	8 dBm	Pass
2437	-14.95	8 dBm	Pass
2462	-18.24	8 dBm	Pass

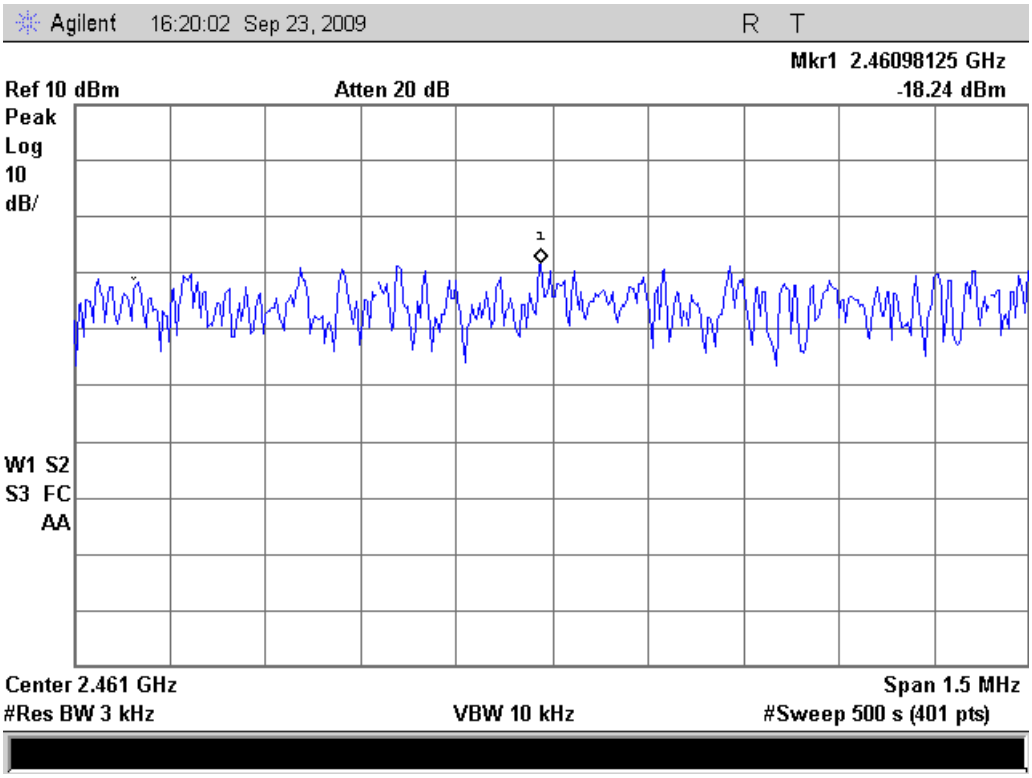
PSD 2417 MHz



PSD 2437 MHz



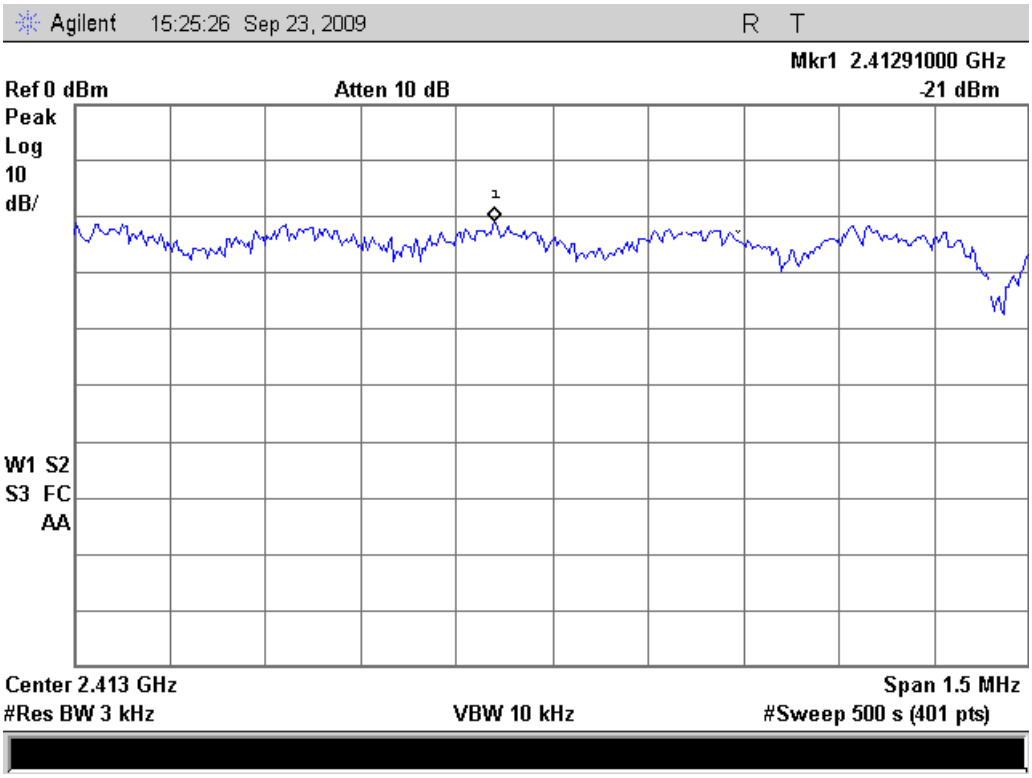
PSD 2462 MHz



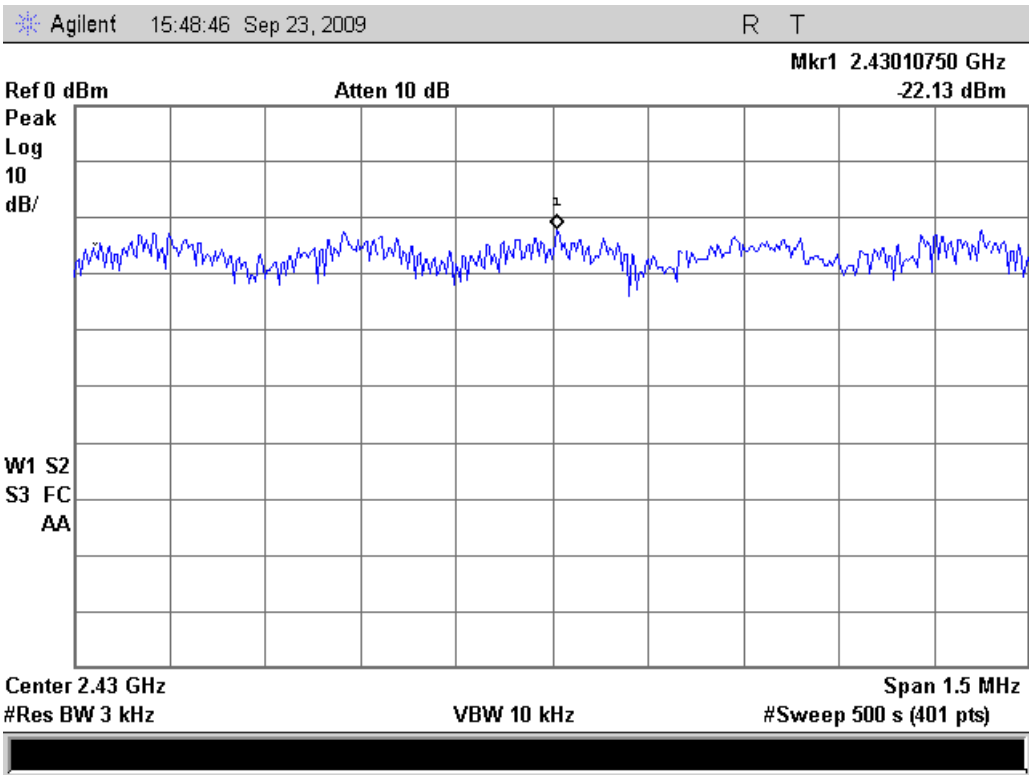
16-QAM PSD Summary

Frequency MHz	Recorded Measurement	Specification Limit	Result
2417	-21.00	8 dBm	Pass
2437	-22.13	8 dBm	Pass
2462	-24.50	8 dBm	Pass

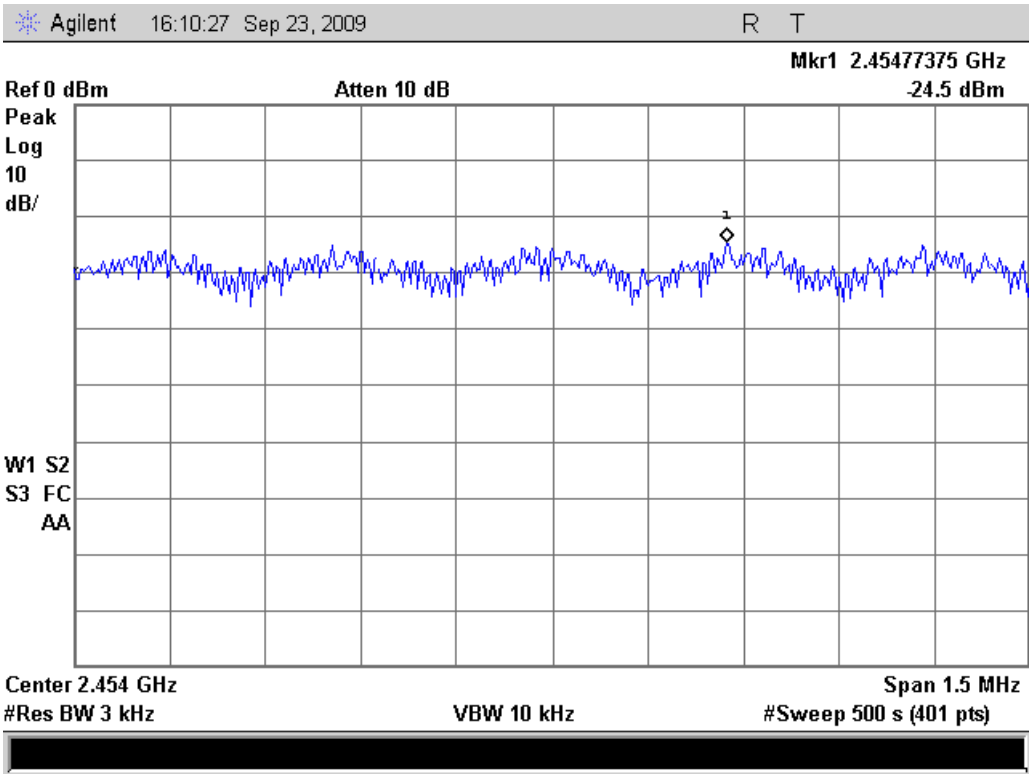
PSD 2417 MHz



PSD 2437 MHz



PSD 2462 MHz

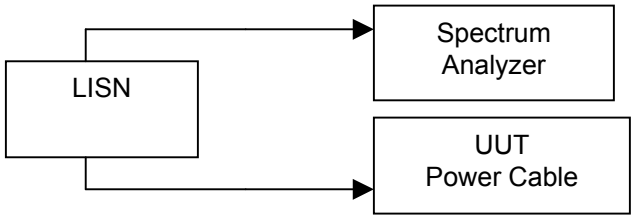


Name of Test: A/C Powerline Conducted Emissions
Specification: 15.207 **Engineer: J. Erhard**
Test Equipment Utilized i00033, i00270 **Test Date: 9/24/2009**

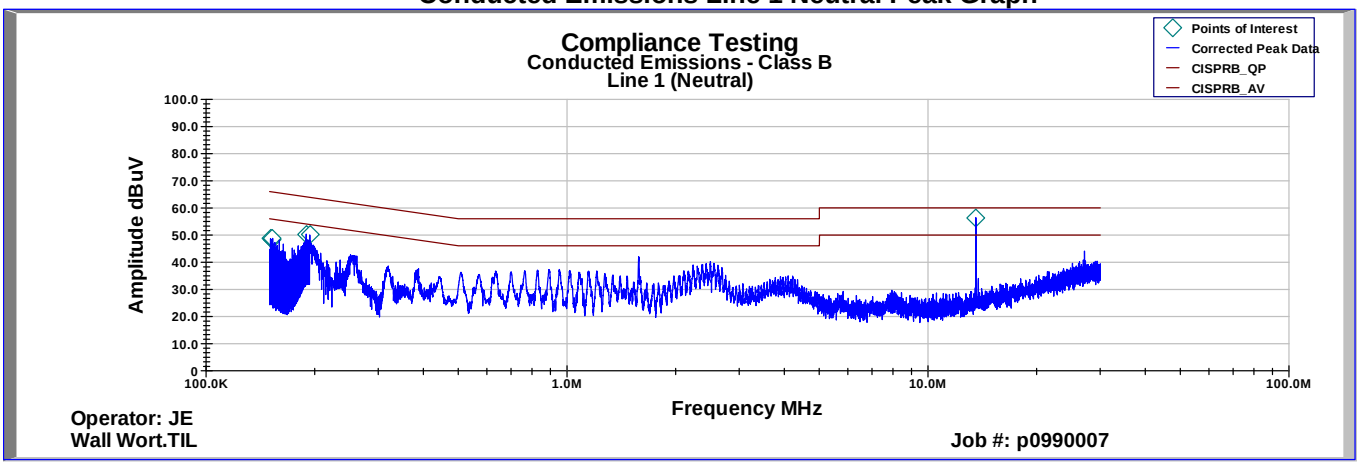
Test Procedure

The UUT 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.

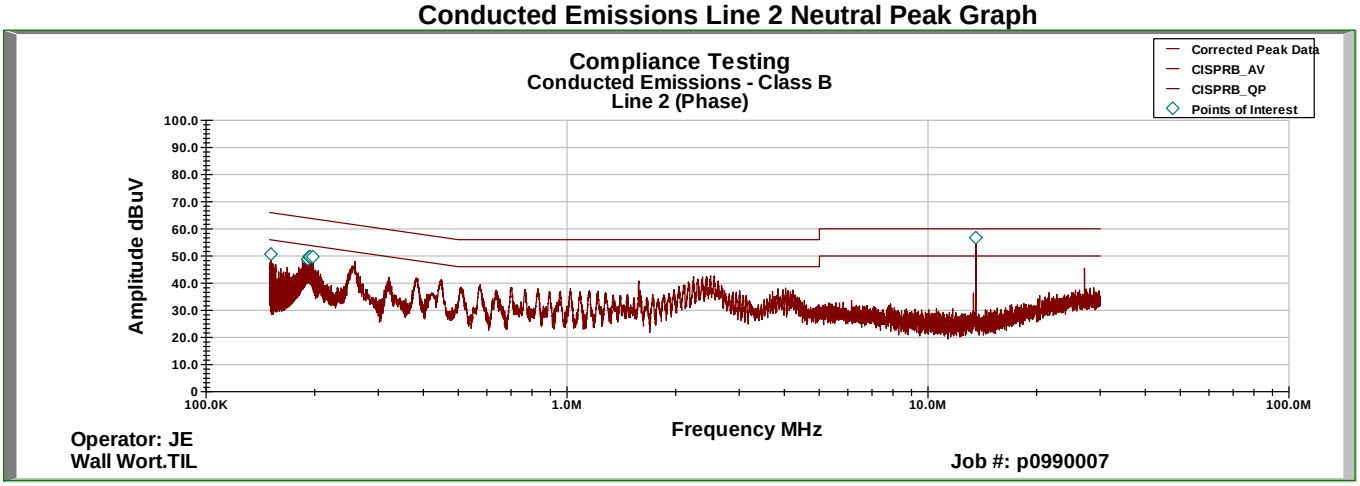
Test Setup



AC Adapter Power option
Conducted Emissions Line 1 Neutral Peak Graph



Conducted Emissions Line 2 Neutral Peak Graph



Line 1 Neutral AVG Detector

Frequency (MHz)	Uncorrected Data (dBuV)	LISN Corr Fact (dB)	Cable Loss (dB)	Attenuator (dB)	Final L1	Limit	AVG Margin (dB)
13.559 MHz	35.99	0.00	0.692	10.000	46.682	50.000	-3.318
192.97 KHz	18.15	0.20	0.011	10.000	28.361	54.772	-26.411
187.53 KHz	16.77	0.20	0.004	10.000	26.971	54.928	-27.957
150.95 KHz	14.12	0.29	0.041	10.000	24.454	55.973	-31.518
150.65 KHz	14.34	0.29	0.041	10.000	24.671	55.982	-31.310
150.33 KHz	14.32	0.30	0.038	10.000	24.654	55.991	-31.336

Line 2 Phase AVG Detector

Frequency (MHz)	Uncorrected Data (dBuV)	LISN Corr Fact (dB)	Cable Loss (dB)	Attenuator (dB)	Final L2	Limit	AVG Margin (dB)
13.56 MHz	34.63	0.00	0.691	10.000	45.321	50.000	-4.679
194.48 KHz	21.16	0.20	0.011	10.000	31.371	54.729	-23.358
193.01 KHz	21.53	0.20	0.011	10.000	31.741	54.771	-23.030
192.25 KHz	21.24	0.20	0.012	10.000	31.452	54.793	-23.341
190.51 KHz	21.13	0.20	0.008	10.000	31.341	54.843	-23.501
151.83 KHz	15.41	0.28	0.041	10.000	25.730	55.948	-30.218

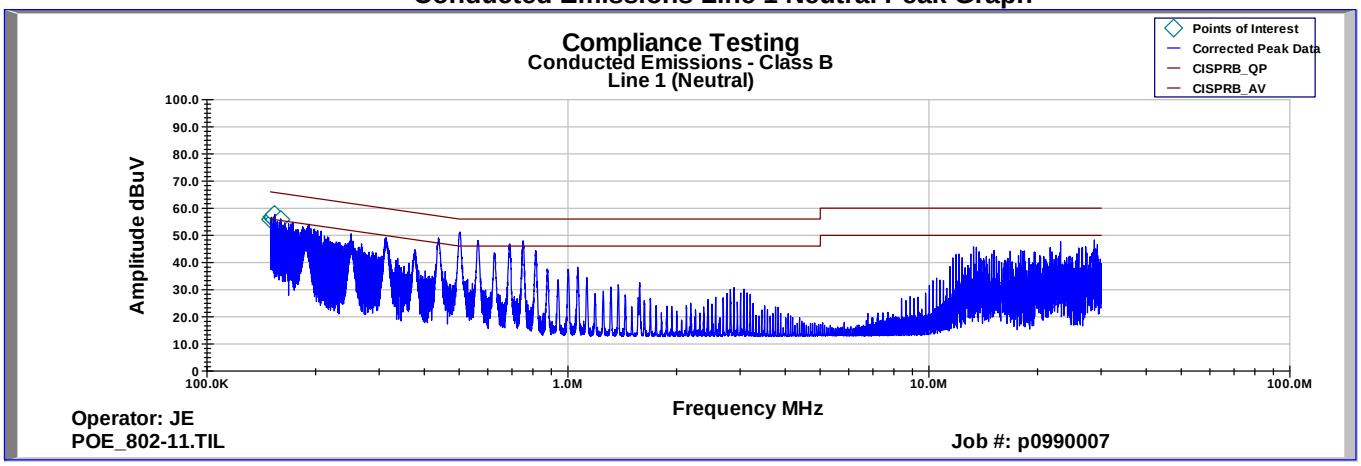
Line 1 Neutral QP Detector

Frequency (MHz)	Uncorrected Data (dBuV)	LISN Corr Fact (dB)	Cable Loss (dB)	Attenuator (dB)	Final L1	Limit	QP Margin (dB)
13.559 MHz	45.280	0.000	0.692	10.000	55.972	60.000	-4.028
192.97 KHz	35.150	0.200	0.011	10.000	45.361	64.772	-19.411
187.53 KHz	34.310	0.200	0.004	10.000	44.514	64.928	-20.414
150.95 KHz	31.940	0.291	0.041	10.000	42.271	65.973	-23.702
150.65 KHz	32.010	0.294	0.041	10.000	42.344	65.982	-23.637
150.33 KHz	32.000	0.297	0.038	10.000	42.334	65.991	-23.656

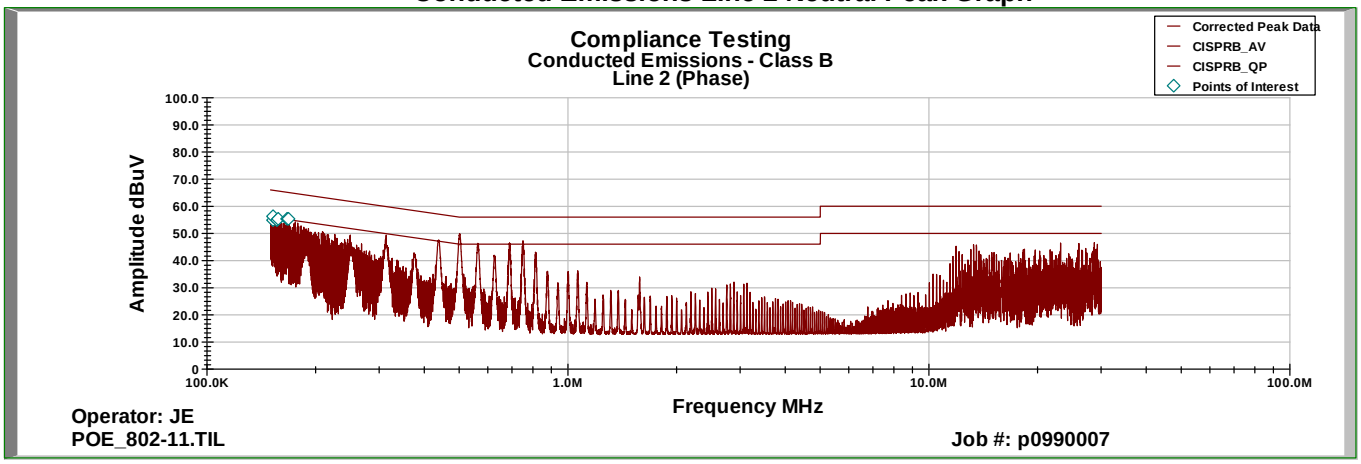
Line 2 Phase QP Detector

Frequency (MHz)	Uncorrected Data (dBuV)	LISN Corr Fact (dB)	Cable Loss (dB)	Attenuator (dB)	Final L2	Limit	QP Margin (dB)
13.56 MHz	44.46	0.00	0.691	10.000	55.151	60.000	-4.849
194.48 KHz	35.26	0.20	0.011	10.000	45.471	64.729	-19.258
193.01 KHz	35.15	0.20	0.011	10.000	45.361	64.771	-19.410
192.25 KHz	35.71	0.20	0.012	10.000	45.922	64.793	-18.871
190.51 KHz	35.69	0.20	0.008	10.000	45.898	64.843	-18.945
151.83 KHz	32.04	0.28	0.041	10.000	42.363	65.948	-23.585

Power Over Ethernet Option
Conducted Emissions Line 1 Neutral Peak Graph



Conducted Emissions Line 2 Neutral Peak Graph



Line 1 Neutral AVG Detector

Frequency (MHz)	Uncorrected Data (dBuV)	LISN Corr Fact (dB)	Cable Loss (dB)	Attenuator (dB)	Final L1	Limit	AVG Margin (dB)
158.55 KHz	16.30	0.21	0.036	10.000	26.554	55.756	-29.202
152.43 KHz	15.84	0.28	0.042	10.000	26.161	55.931	-29.769
151.42 KHz	15.85	0.29	0.045	10.000	26.184	55.959	-29.776
150.69 KHz	15.47	0.29	0.040	10.000	25.803	55.980	-30.177
150.66 KHz	15.71	0.29	0.040	10.000	26.047	55.981	-29.934
150.61 KHz	15.57	0.29	0.042	10.000	25.909	55.983	-30.074

Line 2 Phase AVG Detector

Frequency (MHz)	Uncorrected Data (dBuV)	LISN Corr Fact (dB)	Cable Loss (dB)	Attenuator (dB)	Final L2	Limit	AVG Margin (dB)
164.64 KHz	13.25	0.20	0.029	10.000	23.482	55.582	-32.100
156.25 KHz	17.32	0.24	0.039	10.000	27.600	55.821	-28.222
152.81 KHz	15.82	0.27	0.036	10.000	26.128	55.920	-29.792
152.05 KHz	15.95	0.28	0.046	10.000	26.272	55.941	-29.670
150.21 KHz	15.13	0.30	0.040	10.000	25.465	55.994	-30.529
150.16 KHz	15.15	0.30	0.043	10.000	25.495	55.995	-30.501

Line 1 Neutral QP Detector

Frequency (MHz)	Uncorrected Data (dBuV)	LISN Corr Fact (dB)	Cable Loss (dB)	Attenuator (dB)	Final L1	Limit	QP Margin (dB)
158.55 KHz	37.180	0.214	0.036	10.000	47.430	65.756	-18.325
152.43 KHz	38.220	0.276	0.042	10.000	48.538	65.931	-17.393
151.42 KHz	44.130	0.286	0.045	10.000	54.460	65.959	-11.499
150.69 KHz	38.270	0.293	0.040	10.000	48.603	65.980	-17.377
150.66 KHz	38.340	0.293	0.040	10.000	48.674	65.981	-17.307
150.61 KHz	38.430	0.294	0.042	10.000	48.766	65.983	-17.217

Line 2 Phase QP Detector

Frequency (MHz)	Uncorrected Data (dBuV)	LISN Corr Fact (dB)	Cable Loss (dB)	Attenuator (dB)	Final L2	Limit	QP Margin (dB)
164.64 KHz	36.79	0.20	0.029	10.000	47.019	65.582	-18.563
156.25 KHz	37.38	0.24	0.039	10.000	47.657	65.821	-18.165
152.81 KHz	37.91	0.27	0.036	10.000	48.218	65.920	-17.702
152.05 KHz	38.34	0.28	0.046	10.000	48.665	65.941	-17.276
150.21 KHz	38.50	0.30	0.040	10.000	48.838	65.994	-17.156
150.16 KHz	37.73	0.30	0.043	10.000	48.071	65.995	-17.924

Test Equipment Utilized

Description	MFG	Model Number	FTL Asset Number	Last Cal Date	Cal Due Date
Spectrum Analyzer	HP	8546A	i00033	10/14//08	10/14/09
Horn Antenna	EMCO	3115	i00103	11/28/08	11/28/10
LISN	FCC	FCC-LISN-50-32-2-01	i00270	9/17/08	9/17/10
Spectrum Analyzer	Agilent	E4407B	i00331	11/03/09	11/03/09

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