Flom Test Labs
EMI, EMC, RF Testing Experts Since 1963
toll-free: (866) 311-3268
fax: (480) 926-3598
http://www.flomlabs.com
info@flomlabs.com

Date: April 30, 2007

Federal Communications Commission
Via: Electronic Filing

Attention: Authorization & Evaluation Division

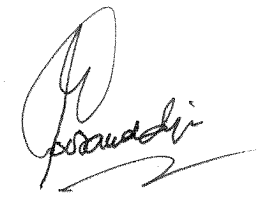
Applicant: Privaris, Inc.
Equipment: PLUS ID 90
FCC ID: THX-CPID01
FCC Rules: 15.247

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,



Hoosamuddin S. Bandukwala, Lab Director

enclosure(s)
cc: Applicant
HSB/je

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

Applicant: Privaris, Inc.

FCC ID: THX-CPID01

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 F.T.L. Inc.

A. Testimonial & Statement of Certification

B. Statement of Qualifications

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Transmitter Certification

of

FCC ID: THX-CPID01
Model: PLUS ID 90

to

Federal Communications Commission

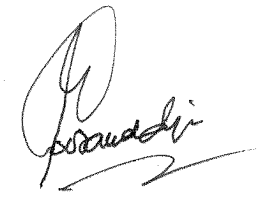
Rule Part(s) 15.247

Date Of Report: April 30, 2007
Date of Revised Report: July 19, 2007

On the Behalf of the Applicant: Privaris, Inc.

At the Request of: Privaris, Inc.
11208 Waples Mill Road, Suite 103
Fairfax, VA 22030

Attention of: Michael Cherniawski
434-244-4207; fax: 434-293-4033
E-mail: mcherniawski@privaris.com



Supervised By: Hoosamuddin S. Bandukwala, Lab Director

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.

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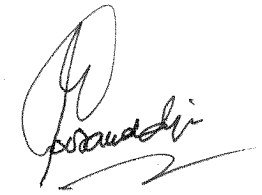
Testimonial And Statement Of Certification

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.



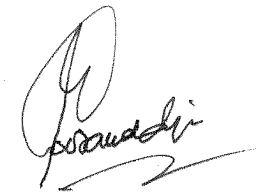
Certifying Engineer: Hoosamuddin S. Bandukwala, Lab Director

Flom Test Labs
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:

a) **Test Report**

b) Laboratory: (FCC: 31040/SIT) (Canada: IC 2044)	Flom Test Lab, Inc. 3356 N. San Marcos Place, Suite 107 Chandler, AZ 85225
c) Report Number:	d0720019
d) Client:	Privaris, Inc. 11208 Waples Mill Road, Suite 103 Fairfax, VA 22030
e) Identification: Description:	PLUS ID 90 FCC ID: THX-CPID01
f) EUT Condition:	Not required unless specified in individual tests.
g) Report Date: EUT Received:	April 30, 2007
h, j, k):	As indicated in individual tests.
i) Sampling method:	No sampling procedure used.
l) Uncertainty:	In accordance with FTL internal quality manual.
m) Supervised by:	 Hoosamuddin S. Bandukwala, Lab Director
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: Privaris, Inc.
11208 Waples Mill Road, Suite 103
Fairfax, VA 22030

(c)(2): **FCC ID**: THX-CPID01

Model Number: PLUS ID 90

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

Please See Attached Exhibits

(c)(4): **Type of Emission**: DTS

(c)(5): **FREQUENCY RANGE, MHz**: 2405 to 2480

(c)(6): **Power Rating, W**: 25 µW

____ Switchable ____ Variable __X__ N/A

(c)(7): **Maximum Power Rating, W**: 250 mW

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

The unit was tested with a surface mount chip antenna with a gain of 0.5 dBi.

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 2400-2483.5 MHz (spread spectrum)

Standard Test Conditions and Engineering Practices

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

In accordance with ANSI C63.4-2004, 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.

Prior to testing, the EUT was tuned up in accordance with the manufacturer's alignment procedures. All external gain controls were maintained at the position of maximum and/or optimum gain throughout the testing.

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

A2LA

"A2LA has accredited Flom Test Labs, Inc. 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
CERT NO: 2152-01

Test Results Summary

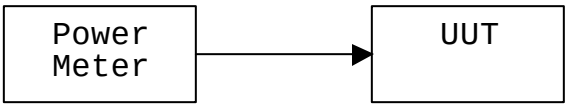
Specification	Test Name	Pass, Fail, N/A	Comments
15.247(b)	Peak Output Power	Pass	
15.247(d)	Conducted Spurious Emissions	Pass	
15.247(d), 15.209(a), 15.205	Radiated Spurious Emissions	Pass	
15.247(d), 15.209(a), 15.205	Emissions At Band Edges	Pass	
15.247(a)(2)	Occupied Bandwidth	Pass	
15.247(e)	Transmitter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

Name of Test: Peak Output Power
Specification: 15.247(b)
Test Equipment Utilized i00228, i00317

Test Procedure

The UUT was connected directly to a power meter with the correct duty cycle factor (0.7%) input. The peak readings were taken and the result was then compared to the limit.

Test Setup



Transmitter Peak Output Power

Tuned Frequency MHz	Recorded Measurement	Specification Limit	Result
2402	20 µW	250 mW	Pass
2441	19 µW	250 mW	Pass
2481	18 µW	250 mW	Pass

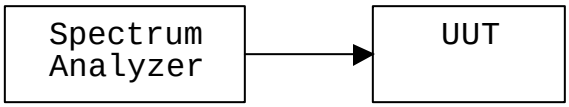
Name of Test: Conducted Spurious Emissions

Specification: 15.247(d)
Spec. Limit -20 dBC
Test Equipment Utilized i00029, i00329

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. Only detectable spurious emissions were recorded and plotted. Subtracting the reference level from the highest measured spurious emission detected derives the final value dBc. Only the worst case is recorded in the Conducted Spurious Emissions Summary Test Table.

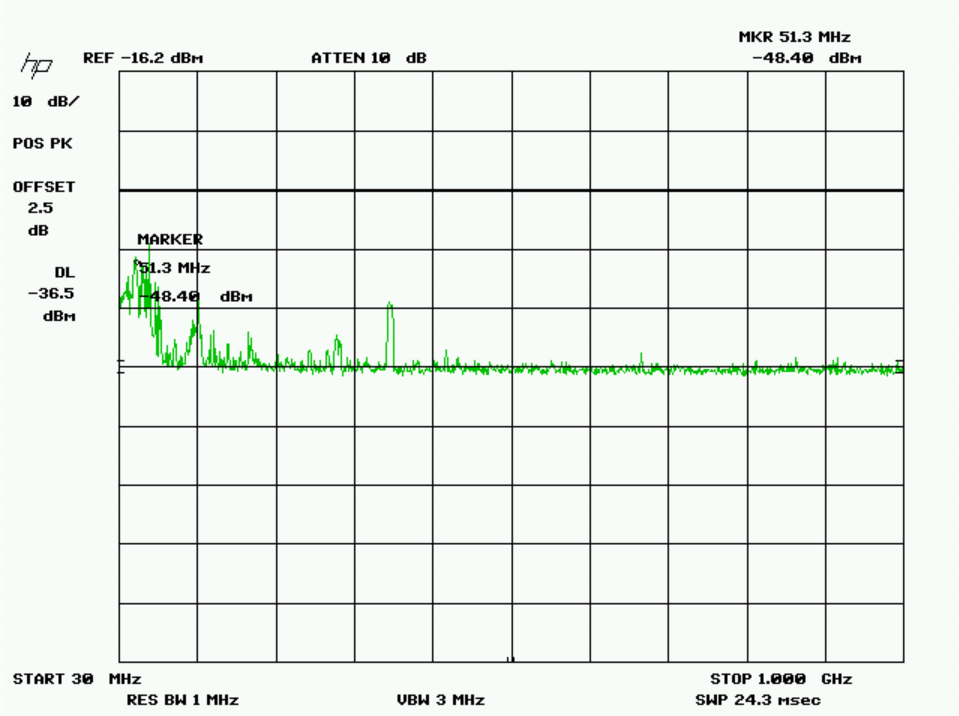
Test Setup

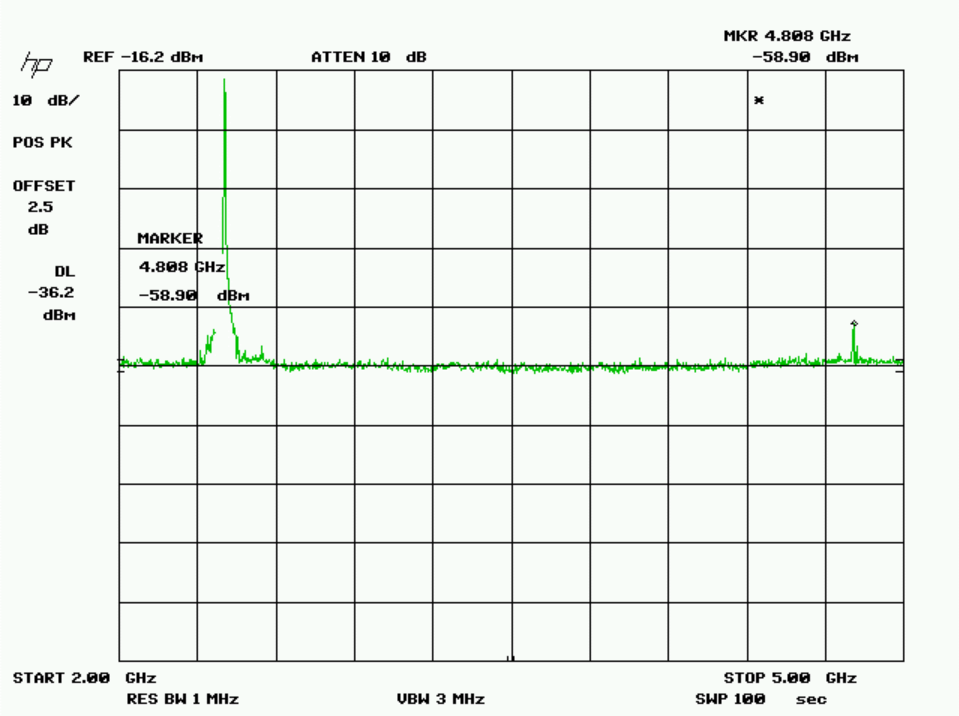


Conducted Spurious Emissions Summary Test Table

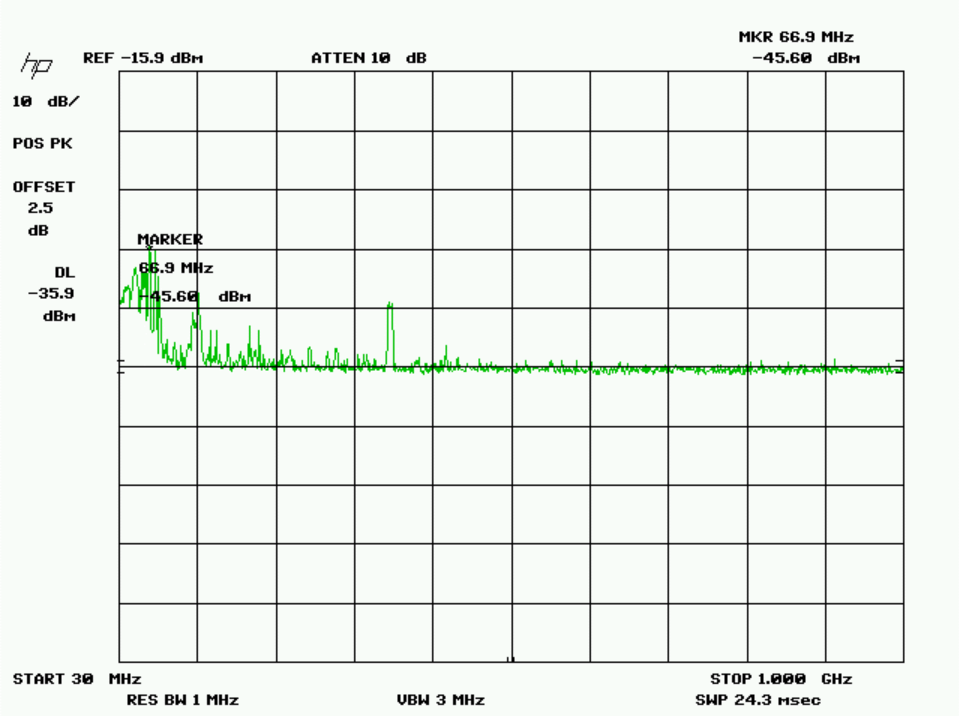
Tuned Frequency MHz	Emission Frequency MHz	Recorded Measurement	Reference Level	Corrected Measurement	Specification Limit	Result
2405	51.3	-48.4 dBm	-16.2 dBm	-32.2 dBc	-20 dBc	Pass
2440	66.9	-45.6 dBm	-15.9 dBm	-29.7 dBc	-20 dBc	Pass
2480	50.4	-48.4 dBm	-15.6 dBm	-34.8 dBc	-20 dBc	Pass

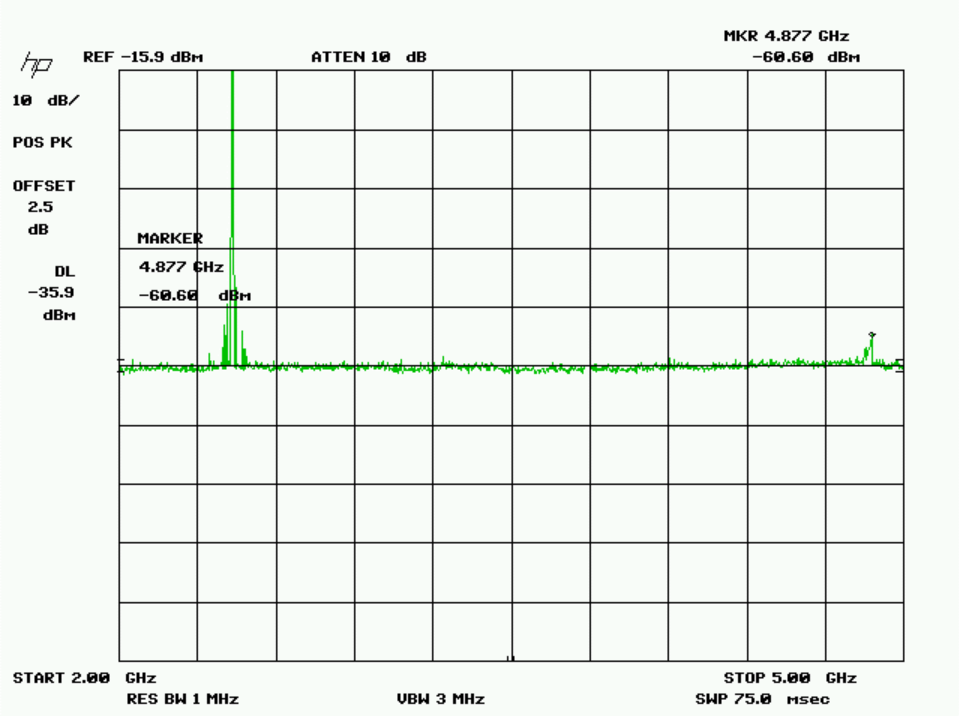
Conducted Spurious Emissions 2405 MHz



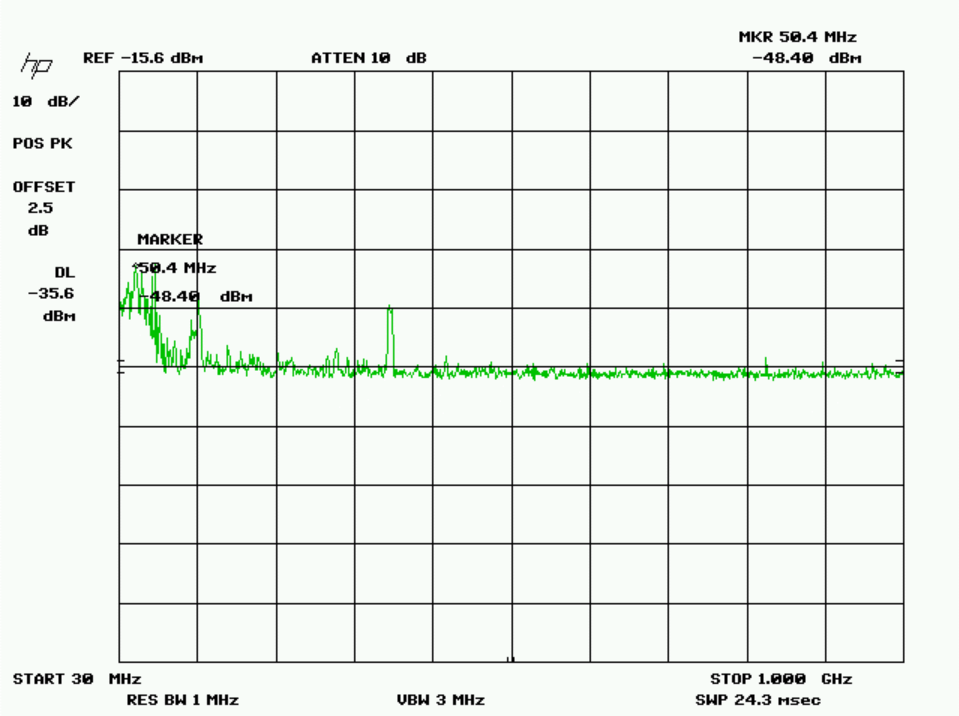


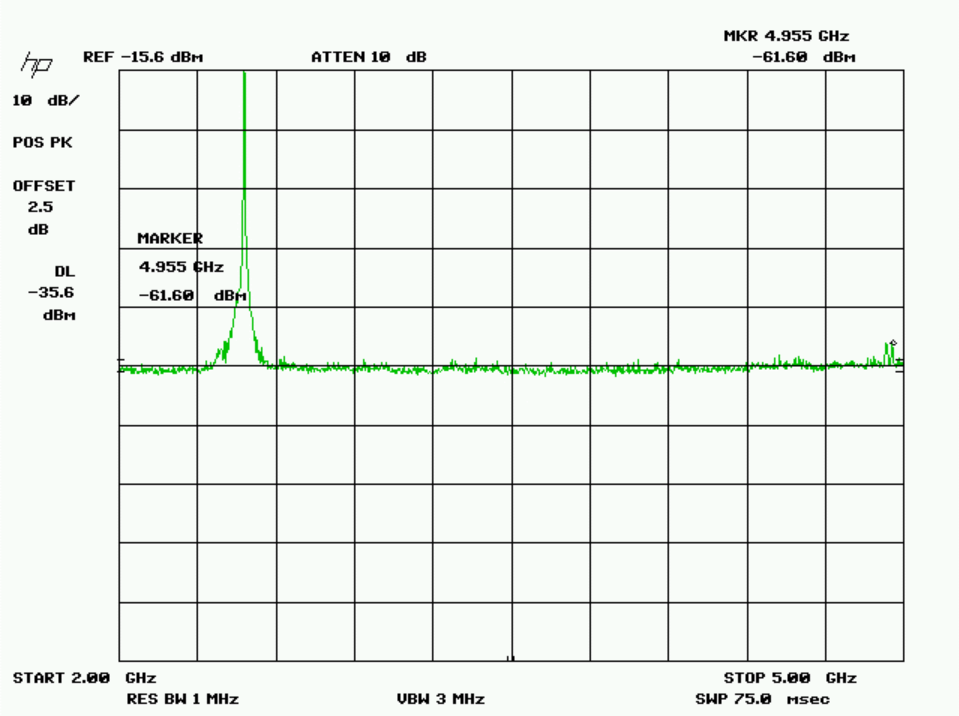
Conducted Spurious Emissions 2440 MHz





Conducted Spurious Emissions 2480 MHz



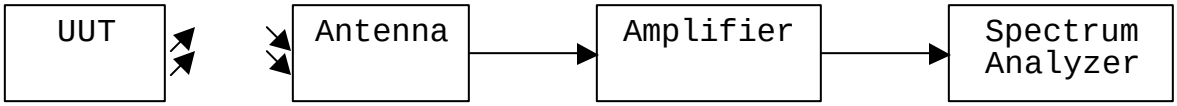


Name of Test: Radiated Spurious Emissions
Specification: 15.247(c), 15.209(a), 15.205
Spec. Limit -20 dBC and for restricted band 54 dBuV average and 74 dBuV peak
Test Equipment Utilized i00029, i00033, i00088, i00089, i00103

Test Procedure

The UUT was tested in an Open Area Test Site (OATS) set 3m from the receiving transducer. A spectrum analyzer was used to verify that the UUT met the requirements for Radiated Spurious Emissions. The frequency range from 30 MHz to the 10th harmonic of the fundamental transmitter was observed.

Test Setup



Radiated Spurious Emissions 2402 MHz

Tuned Freq (MHz)	Emission Freq (MHz)	Monitored Level (dBuV/m)	Correction Factor (dB)	Corrected Value (dBuV/m)	Limit (dBuV/m)	Result
2405	39.155	-3.0	15.8	12.8	54	Pass
2405	275.655	3.8	19.0	22.7	54	Pass
2405	350.035	6.0	19.6	25.6	54	Pass
2405	352.232	9.8	19.6	29.4	54	Pass
2405	775.067	2.1	26.9	29.0	54	Pass
2405	925.090	3.1	29.8	33.0	54	Pass

Radiated Spurious Emissions 2441 MHz

Tuned Freq (MHz)	Emission Freq (MHz)	Monitored Level (dBuV/m)	Correction Factor (dB)	Corrected Value (dBuV/m)	Limit (dBuV/m)	Result
2440	39.155	-3.0	15.8	12.8	54	Pass
2440	275.655	3.8	19.0	22.7	54	Pass
2440	350.035	6.0	19.6	25.6	54	Pass
2440	352.232	9.8	19.6	29.4	54	Pass
2440	775.067	2.1	26.9	29.0	54	Pass
2440	925.090	3.1	29.8	33.0	54	Pass

Radiated Spurious Emissions 2481 MHz

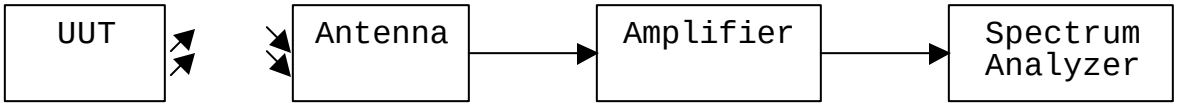
Tuned Freq (MHz)	Emission Freq (MHz)	Monitored Level (dBuV/m)	Correction Factor (dB)	Corrected Value (dBuV/m)	Limit (dBuV/m)	Result
2480	39.155	-3.0	15.8	12.8	54	Pass
2480	275.655	3.8	19.0	22.7	54	Pass
2480	350.035	6.0	19.6	25.6	54	Pass
2480	352.232	9.8	19.6	29.4	54	Pass
2480	775.067	2.1	26.9	29.0	54	Pass
2480	925.090	3.1	29.8	33.0	54	Pass

Name of Test: Emissions At Band Edges
Specification: 15.247(c), 15.209(a), 15.205
Limit -20 dBC and for restricted band 54 dBuV average and 74 dBuV peak
Test Equipment Utilized i00028, i00271, i00290

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.

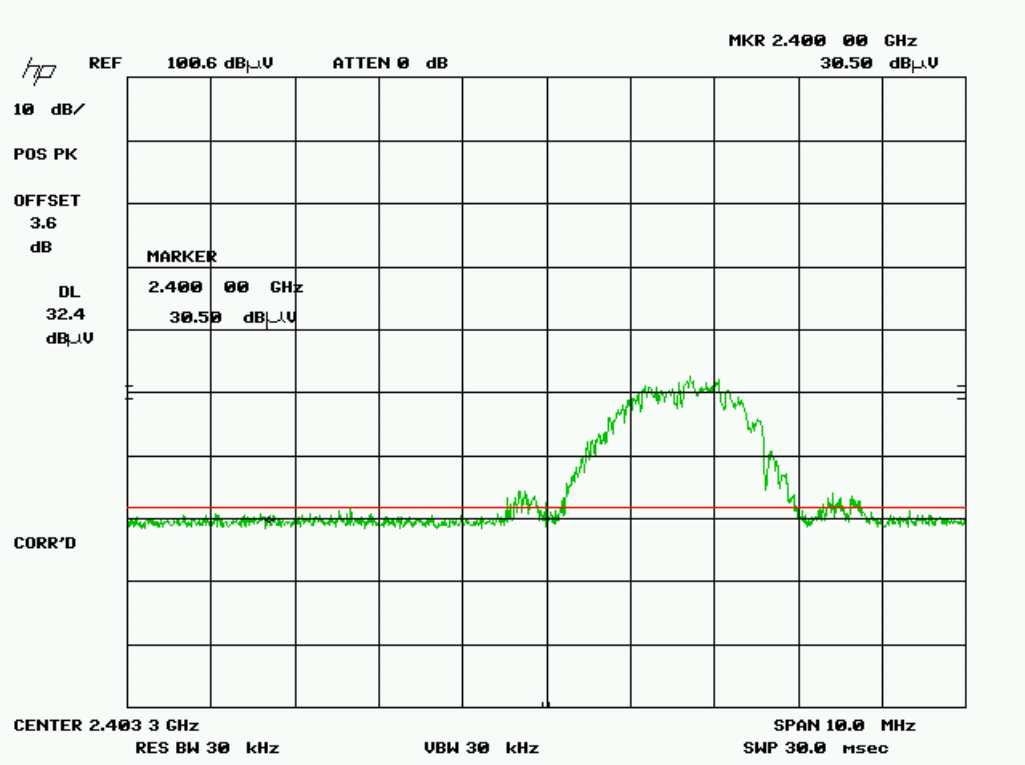
Test Setup



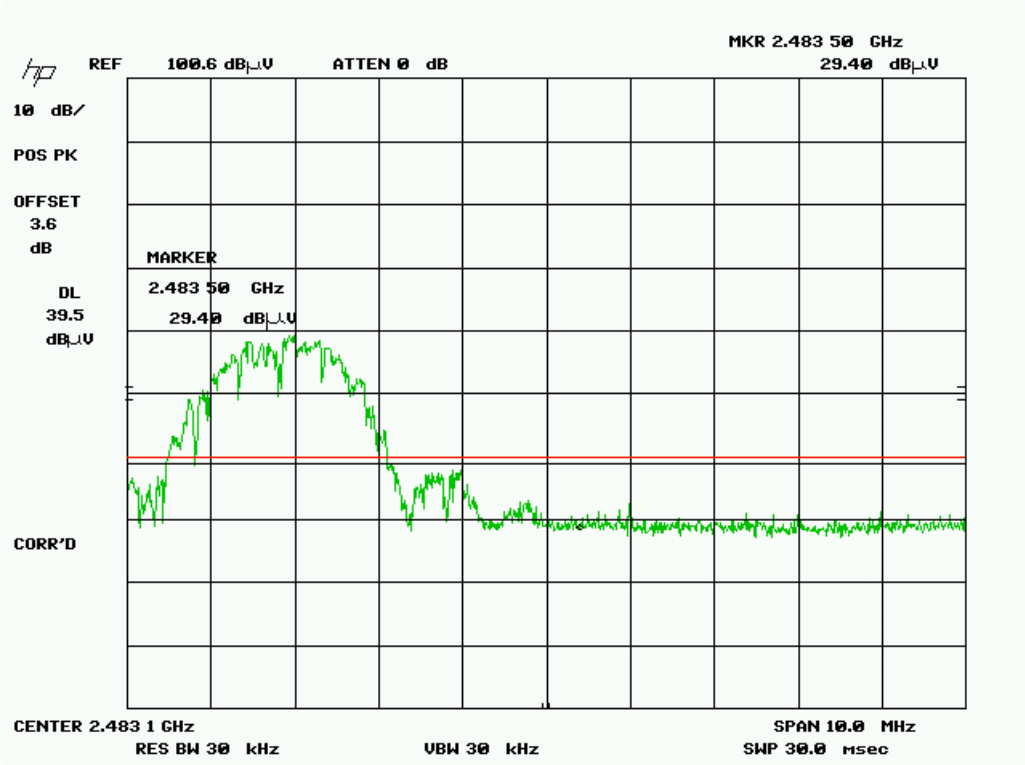
Band Edge / Restricted Band Emissions Summary

Tuned Freq (MHz)	Emission Freq (MHz)	Monitored Level (dBuV/m)	Detector	Limit (dBuV/m)	Result
2405	2400.0	30.5	Peak	74	Pass
2480	2483.5	29.4	Peak	74	Pass

Band Edge Peak 2402 MHz



Band Edge Peak 2480 MHz

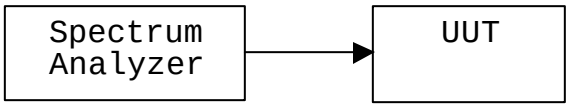


Name of Test: Occupied Bandwidth
Specification: 15.247(a)(2)
Limit BW = 500 KHz
Test Equipment Utilized i00329

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 bandwidth measured to verify the bandwidth met the specification.

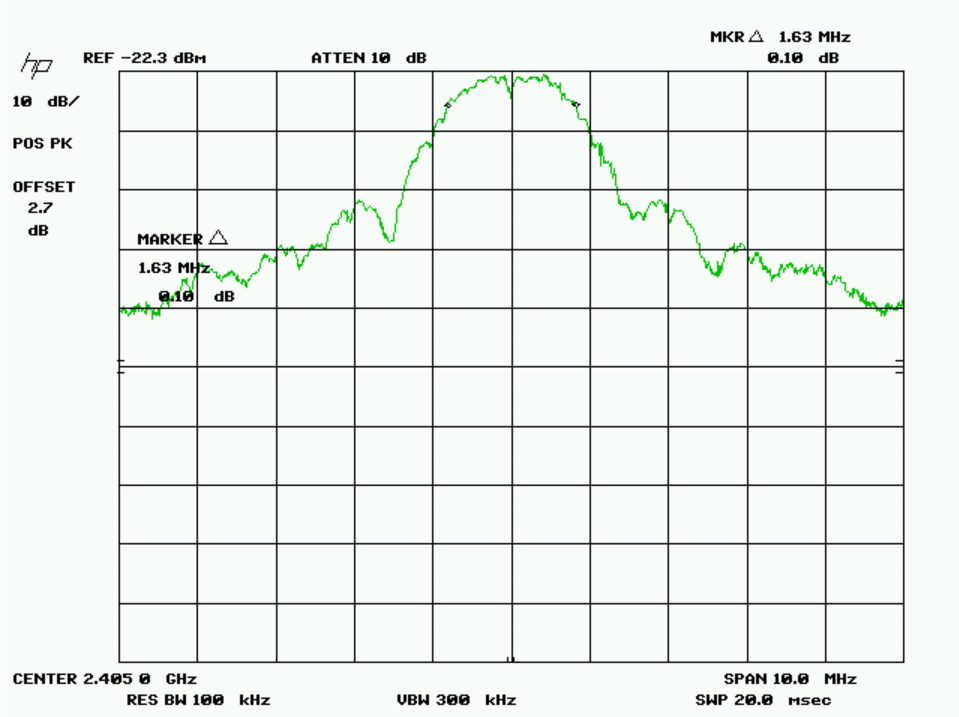
Test Setup



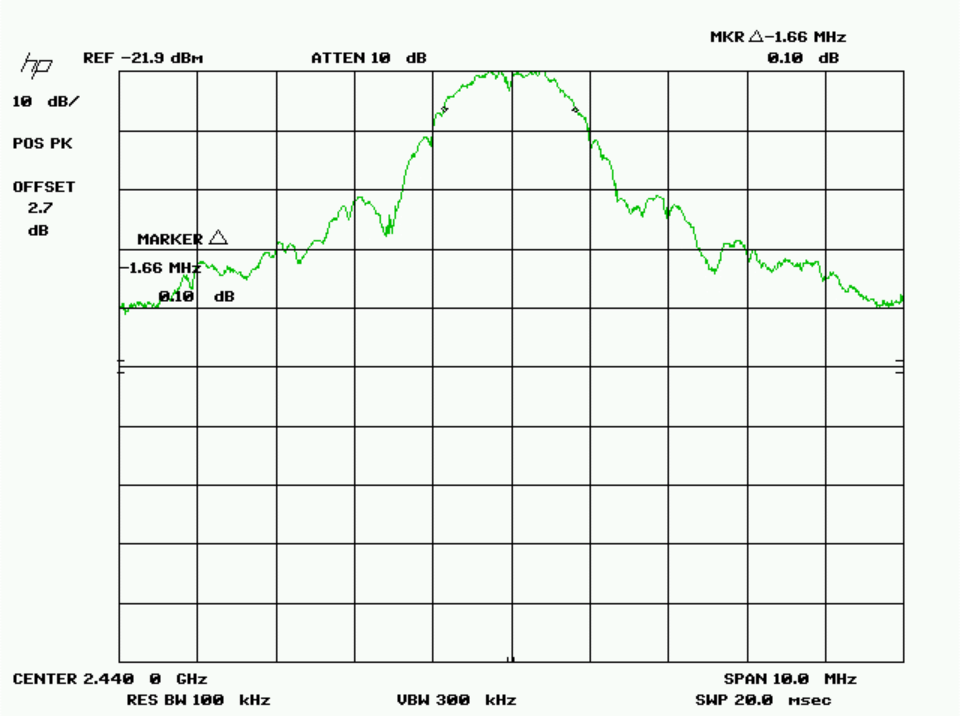
Occupied Bandwidth Summary

Frequency MHz	Recorded Measurement	Specification Limit	Result
2402	1.63 MHz	= 500 KHz	Pass
2441	1.66 MHz	= 500 KHz	Pass
2481	1.62 MHz	= 500 KHz	Pass

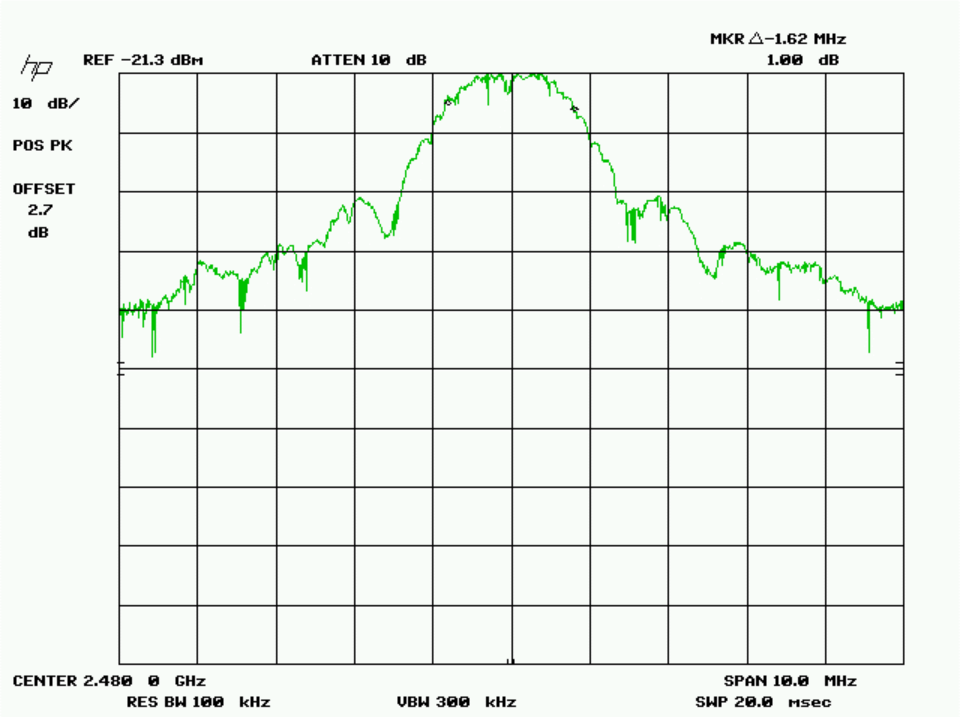
Occupied Bandwidth 2405 MHz



Occupied Bandwidth 2440 MHz



Occupied Bandwidth 2480 MHz

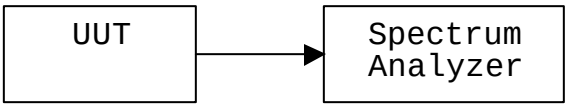


Name of Test: Transmitter Power Spectral Density (PSD)
Specification: 15.247(d)
Limit 8 dBm in any 3 kHz Bandwidth
Test Equipment Utilized i00329

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.

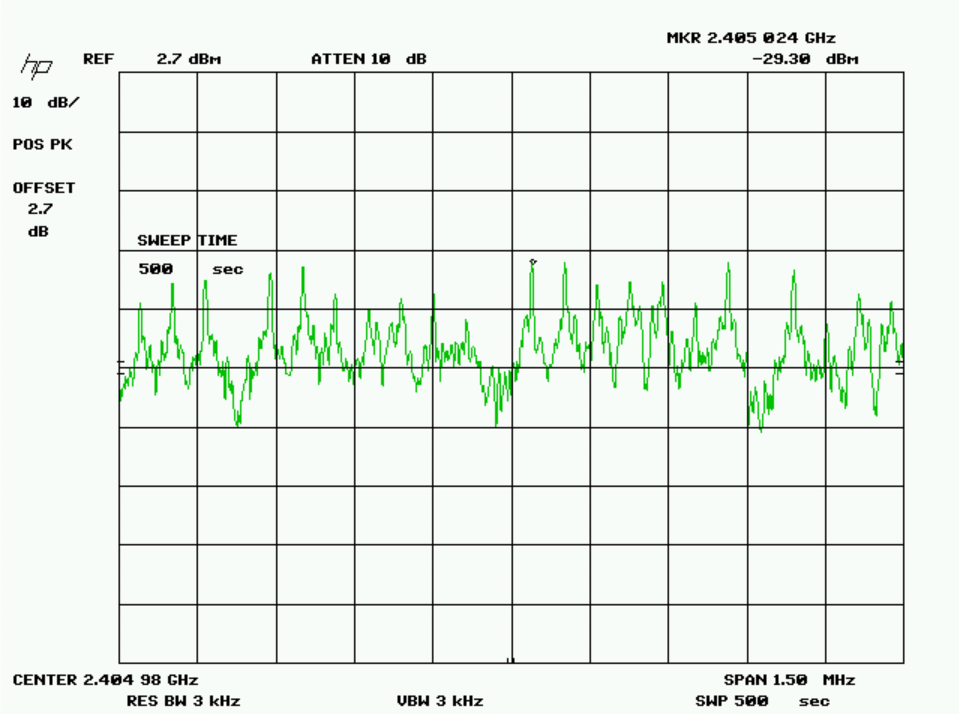
Test Setup



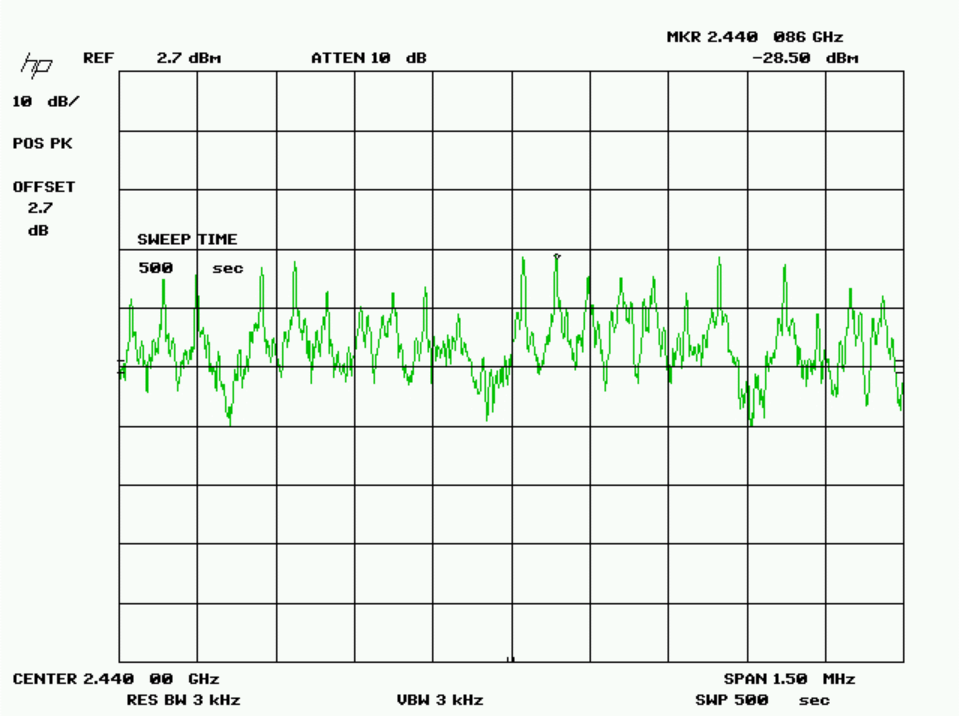
PSD Summary

Frequency MHz	Recorded Measurement	Specification Limit	Result
2402	-29.3 dBm	8 dBm	Pass
2441	-28.5 dBm	8 dBm	Pass
2481	-27.6 dBm	8 dBm	Pass

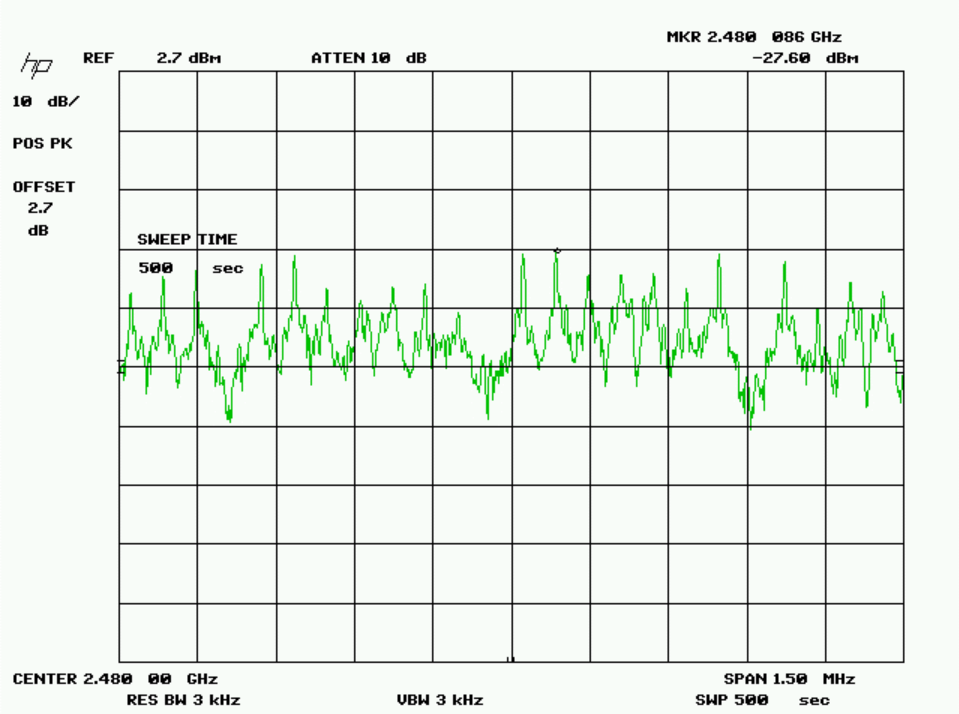
PSD 2405 MHz



PSD 2440 MHz



PSD 2480 MHz

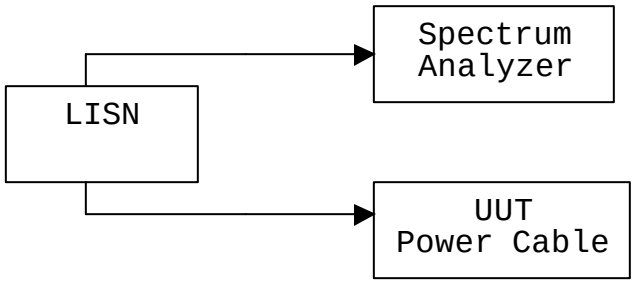


Name of Test: A/C Powerline Conducted Emissions
Specification: 15.207
Test Equipment Utilized i00033, i00270

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



L1 – Phase Test Results

Emission Frequency	Monitored Level (dBuV/m)	LISN Factor (dB)	Cable Correction Factor	Attenuation (dB)	Corrected Level (dBuV/m)	Limit (dBuV/m)	Result
176.52 kHz	29.11	0.2	0.03	10	39.34	66	Pass
1.577 MHz	19.28	0	0.19	10	29.47	60	Pass
7.174 MHz	31.56	0	0.45	10	42.02	60	Pass
7.230 MHz	32.43	0	0.45	10	42.88	60	Pass
7.286 MHz	33.04	0	0.46	10	43.50	60	Pass
7.343 MHz	32.49	0	0.46	10	42.94	60	Pass
7.794 MHz	28.56	0	0.47	10	39.03	60	Pass
7.853 MHz	29.83	0	0.47	10	40.30	60	Pass
7.907 MHz	30.00	0	0.47	10	40.46	60	Pass
7.964 MHz	29.25	0	0.47	10	39.72	60	Pass

L2 - Neutral Test Results

Emission Frequency	Monitored Level (dBuV/m)	LISN Factor (dB)	Cable Correction Factor	Attenuation (dB)	Corrected Level (dBuV/m)	Limit (dBuV/m)	Result
7.117 MHz	30.72	0	0.45	10	41.18	60	Pass
7.174 MHz	31.55	0	0.45	10	42.00	60	Pass
7.230 MHz	32.64	0	0.45	10	43.10	60	Pass
7.286 MHz	33.36	0	0.46	10	43.81	60	Pass
7.342 MHz	32.83	0	0.46	10	43.29	60	Pass
7.399 MHz	30.34	0	0.46	10	40.80	60	Pass
7.794 MHz	28.45	0	0.47	10	38.91	60	Pass
7.852 MHz	30.11	0	0.47	10	40.57	60	Pass
7.908 MHz	30.14	0	0.47	10	40.61	60	Pass
7.966 MHz	28.74	0	0.47	10	39.21	60	Pass

Test Equipment Utilized

Description	MFG	Model Number	FTL Asset Number	Last Cal Date	Cal Due Date
RF Pre-Amplifier	HP	8449	i00028	1/23/07	1/23/09
Spectrum Analyzer	HP	8563E	i00029	1/26/06	1/26/07
Spectrum Analyzer	HP	85462A	i00033	11/03/06	11/03/07
Bi-conical Antenna	EMCO	3109B	i00088	10/14/05	10/14/07
Log Periodic Antenna	Aprel	2001	i00089	10/20/05	10/20/07
Horn Antenna	EMCO	3115	i00103	9/5/06	9/5/07
Power Sensor	HP	E4418B	i00228	8/1/06	8/1/07
LISN	FCC	FCC-LISN-50-32-2-01	i00270	10/25/05	10/25/07
Horn Antenna	ARA	DRG-1181A	i00271	2/1/04	2/1/07
Spectrum Analyzer	HP	8566B	i00290	6/16/06	6/16/07
Power Meter	HP	8481A	i00317	10/1/06	10/1/07
Spectrum Analyzer	HP	8566B	i00329	4/16/07	4/16/08
Test PC	Dell	Dimension 2400	SN/0932RY	N/A	N/A

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. All tests were performed with the UUT connected to the Test PC utilizing a USB 2.0 connection.

END OF TEST REPORT