



MET Laboratories, Inc. *Safety Certification - EMI - Telecom Environmental Simulation*

914 WEST PATAPSCO AVENUE • BALTIMORE, MARYLAND 21230-3432 • PHONE (410) 354-3300 • FAX (410) 354-3313
33439 WESTERN AVENUE • UNION CITY, CALIFORNIA 94587 • PHONE (510) 489-6300 • FAX (510) 489-6372
3162 BELICK STREET • SANTA CLARA, CALIFORNIA 95054 • PHONE (408) 748-3585 • FAX (510) 489-6372
13501 MCCALLEN PASS • AUSTIN, TX 78753 • PHONE (512) 287-2500 • FAX (512) 287-2513

December 9, 2016

Amimon
26 Zarhin St., 7th Floor
Ra'anana, Israel, 4366250

Dear Gabi Nocham,

Enclosed is the EMC Wireless test report for compliance testing of the Amimon, Amimon, Eagle / AMN36254 as tested to the requirements of Title 47 of the CFR, Ch. 1 (10-1-06 ed.), Title 47 of the CFR, Part 15.407, Subpart E (UNII 1).

Thank you for using the services of MET Laboratories, Inc. If you have any questions regarding these results or if MET can be of further service to you, please feel free to contact me.

Sincerely yours,
MET LABORATORIES, INC.

Jennifer Warnell
Documentation Department

Reference: (\Amimon\ EMC89071-FCC407 UNII 1)

Certificates and reports shall not be reproduced except in full, without the written permission of MET Laboratories, Inc.



MET Laboratories, Inc. *Safety Certification - EMI - Telecom Environmental Simulation*

914 WEST PATAPSCO AVENUE • BALTIMORE, MARYLAND 21230-3432 • PHONE (410) 354-3300 • FAX (410) 354-3313

33439 WESTERN AVENUE • UNION CITY, CALIFORNIA 94587 • PHONE (510) 489-6300 • FAX (510) 489-6372

3162 BELICK STREET • SANTA CLARA, CALIFORNIA 95054 • PHONE (408) 748-3585 • FAX (510) 489-6372

13501 MCCALLEN PASS • AUSTIN, TX 78753 • PHONE (512) 287-2500 • FAX (512) 287-2513

Electromagnetic Compatibility Criteria Class II Permissive Change Test Report

for the

**Amimon
Model Amimon, Eagle / AMN36254**

Tested under
The FCC Certification Rules
contained in
Title 47 of the CFR
15.407 Subpart E

MET Report: EMC89071-FCC407 UNII 1

December 9, 2016

Prepared For:

**Amimon
26 Zarhin St., 7th Floor
Ra'anana, Israel, 4366250**

Prepared By:
MET Laboratories, Inc.
914 West Patapsco Avenue
Baltimore, MD 21230

Electromagnetic Compatibility Criteria Class II Permissive Change Test Report

for the

Amimon
Model Amimon, Eagle / AMN36254

Tested under
The FCC Certification Rules
contained in
Title 47 of the CFR
15.407 Subpart E



Hadid Jones, Project Engineer
Electromagnetic Compatibility Lab



Jennifer Warnell
Documentation Department

Engineering Statement: The measurements shown in this report were made in accordance with the procedures indicated, and the emissions from this equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them. It is further stated that upon the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements of Parts 15B, 15.407, of the FCC Rules under normal use and maintenance.



Asad Bajwa,
Director, Electromagnetic Compatibility Lab

Report Status Sheet

Revision	Report Date	Reason for Revision
Ø	December 9, 2016	Initial Issue.

Table of Contents

I.	Executive Summary	1
	A. Purpose of Test	2
	B. Executive Summary	2
II.	Equipment Configuration	3
	A. Overview.....	4
	B. References.....	5
	C. Test Site	5
	D. Description of Test Sample.....	5
	E. Equipment Configuration.....	6
	F. Support Equipment	6
	G. Ports and Cabling Information.....	7
	H. Mode of Operation.....	7
	I. Method of Monitoring EUT Operation	7
	J. Modifications	8
	a) Modifications to EUT	8
	b) Modifications to Test Standard	8
	K. Disposition of EUT	8
III.	Electromagnetic Compatibility Criteria for Intentional Radiators.....	9
	§15.407(a)(1) Maximum Conducted Output Power	10
IV.	Test Equipment	16
V.	Certification & User's Manual Information	18
	A. Certification Information	19
	B. Label and User's Manual Information	23

List of Tables

Table 1. Executive Summary of EMC Part 15.407 Compliance Testing	2
Table 2. EUT Summary.....	4
Table 3. References	5
Table 4. Equipment Configuration	6
Table 5. Support Equipment.....	6
Table 6. Ports and Cabling Information	7
Table 7. Conducted Output Power, 2 dBi.....	11
Table 8. Conducted Output Power, 5 dBi.....	11
Table 9. Test Equipment List	17

List of Figures

Figure 1. Block Diagram of Test Configuration.....	6
--	---

List of Photographs

No table of figures entries found.

List of Plots

Plot 1. Conducted Output Power, 5180 MHz, 2 dBi Max	12
Plot 2. Conducted Output Power, 5200 MHz, 2 dBi Max	12
Plot 3. Conducted Output Power, 5220 MHz, 2 dBi Max	12
Plot 4. Conducted Output Power, 5240 MHz, 2 dBi Max	13
Plot 5. Conducted Output Power, 5190 MHz, 2 dBi Max	13
Plot 6. Conducted Output Power, 5230 MHz, 2 dBi Max	13
Plot 7. Conducted Output Power, 5180 MHz, 5 dBi Max	14
Plot 8. Conducted Output Power, 5200 MHz, 5 dBi Max	14
Plot 9. Conducted Output Power, 5220 MHz, 5 dBi Max	14
Plot 10. Conducted Output Power, 5240 MHz, 5 dBi Max	15
Plot 11. Conducted Output Power, 5190 MHz, 5 dBi Max	15
Plot 12. Conducted Output Power, 5230 MHz, 5 dBi Max	15

List of Terms and Abbreviations

AC	Alternating Current
ACF	Antenna Correction Factor
Cal	Calibration
<i>d</i>	Measurement Distance
dB	Decibels
dBμA	Decibels above one microamp
dBμV	Decibels above one microvolt
dBμA/m	Decibels above one microamp per meter
dBμV/m	Decibels above one microvolt per meter
DC	Direct Current
E	Electric Field
DSL	Digital Subscriber Line
ESD	Electrostatic Discharge
EUT	Equipment Under Test
<i>f</i>	Frequency
FCC	Federal Communications Commission
GRP	Ground Reference Plane
H	Magnetic Field
HCP	Horizontal Coupling Plane
Hz	Hertz
IEC	International Electrotechnical Commission
kHz	Kilohertz
kPa	Kilopascal
kV	Kilovolt
LISN	Line Impedance Stabilization Network
MHz	Megahertz
μH	Microhenry
μ	Microfarad
μs	Microseconds
PRF	Pulse Repetition Frequency
RF	Radio Frequency
RMS	Root-Mean-Square
TWT	Traveling Wave Tube
V/m	Volts per meter
VCP	Vertical Coupling Plane

I. Executive Summary

A. Purpose of Test

An EMC evaluation was performed to determine compliance of the Amimon Amimon, Eagle / AMN36254, with the requirements of Part 15, §15.407. All references are to the most current version of Title 47 of the Code of Federal Regulations in effect. In accordance with §2.1033, the following data is presented in support of the Certification of the Amimon, Eagle / AMN36254. Amimon should retain a copy of this document which should be kept on file for at least two years after the manufacturing of the Amimon, Eagle / AMN36254, has been **permanently** discontinued.

B. Executive Summary

The following tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15, §15.407, in accordance with Amimon, purchase order number 16000197. All tests were conducted using measurement procedure ANSI C63.4-2014.

FCC Reference	Description	Results
§15.407 (a)(1)	Maximum Conducted Output Power	Compliant

Table 1. Executive Summary of EMC Part 15.407 Compliance Testing



II. Equipment Configuration

A. Overview

MET Laboratories, Inc. was contracted by Amimon to perform testing on the Amimon, Eagle / AMN36254, under Amimon's purchase order number 16000197.

This document describes the test setups, test methods, required test equipment, and the test limit criteria used to perform compliance testing of the Amimon Amimon, Eagle / AMN36254.

The results obtained relate only to the item(s) tested.

Model(s) Tested:	Amimon, Eagle / AMN36254		
Model(s) Covered:	Amimon, Eagle / AMN36254		
EUT Specifications:	Primary Power: 7-17VDC (12VDC nom)		
	FCC ID: VQSAMN36254		
	Type of Modulations:	BPSK, OFDM	
	Equipment Code:	NII	
	Max. RF Output Power:		
	EUT Frequency Ranges:		
Analysis:	The results obtained relate only to the item(s) tested.		
Environmental Test Conditions:	Temperature: 15-35° C		
	Relative Humidity: 30-60%		
	Barometric Pressure: 860-1060 mbar		
Type of Filing:	CIIPC		
Evaluated by:	Hadid Jones		
Report Date(s):	December 9, 2016		

Table 2. EUT Summary

B. References

CFR 47, Part 15, Subpart E	Unlicensed National Information Infrastructure Devices (UNII)
ANSI C63.4:2014	Methods and Measurements of Radio-Noise Emissions from Low-Voltage Electrical And Electronic Equipment in the Range of 9 kHz to 40 GHz
ISO/IEC 17025:2005	General Requirements for the Competence of Testing and Calibration Laboratories
ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices
789033 D02 General UNII Test Procedures New Rules v01r03	Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E

Table 3. References

C. Test Site

All testing was performed at MET Laboratories, Inc., 914 West Patapsco Avenue, Baltimore, MD 21230. All equipment used in making physical determinations is accurate and bears recent traceability to the National Institute of Standards and Technology.

Radiated Emissions measurements were performed in a 3 meter semi-anechoic chamber (equivalent to an Open Area Test Site). In accordance with §2.948(a)(3), a complete site description is contained at MET Laboratories.

D. Description of Test Sample

The Amimon Eagle / AMN36254, Equipment Under Test (EUT), is a video sink module designed to be the receiver end of the WHDI downstream. The AMN36354 receives wireless downstream transmission, demodulates it and regenerates the video, audio and control content transmitted by the WHDI source.

The receiver works at the 5GHz unlicensed band.

The channel bandwidth can be operated at 40MHz, and 20 MHz modes.

The AMN36354 board has 5 receiving channels (Multiple-In), and single transmitting channel (Single-Out).

The AMN36354 is a DFS Master device. It is equipped with all features and characteristics required to fully provide CAC and ISM requirements for Radar-Detection.

The AMN36354 board is designed to be integrated with any custom-designed end-product, to form a complete product with standard video output and wireless capabilities.

The AMN36354 board is an independent module, fully performing the wireless functionality of the WHDI video link.

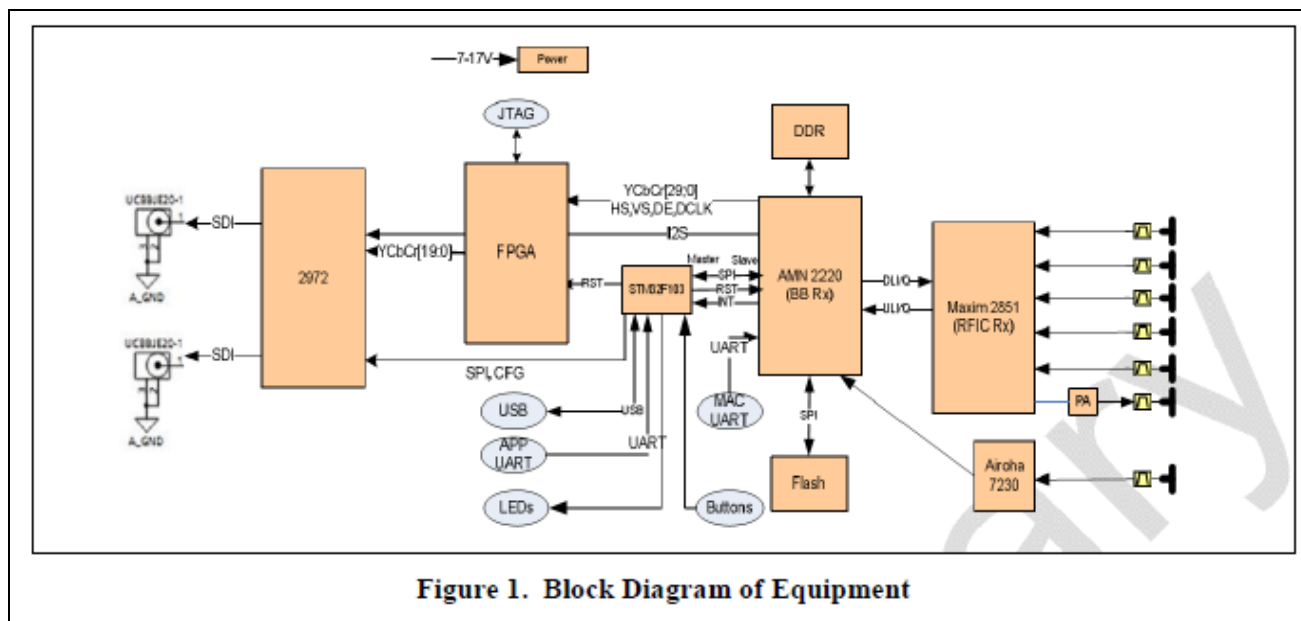


Figure 1. Block Diagram of Test Configuration

E. Equipment Configuration

The EUT was set up as outlined in Figure 1, Block Diagram of Test Setup. All cards, racks, etc., incorporated as part of the EUT is included in the following list.

Name / Description	Model Number	Part Number	Serial Number	Revision
Eagle	AMN36254	--	--	--

Table 4. Equipment Configuration

F. Support Equipment

Support equipment necessary for the operation and testing of the EUT is included in the following list.

Ref. ID	Name / Description	Manufacturer	Model Number
--	PC laptop	Amimon	AMN043PCB
--	Debug board (MAC)	Amimon	AMN043PCB
--	USB-to-Serial converter (MAC)	ATEN	UC-232A
--	USB-to-Serial converter (APP)	ATEN	UC-232A
--	SDI to HDMI converter	CYPRESS	CLUX-SDI2SHC
--	12V power supply	Switching power supply	S075AQ12000600
--	HDMI cable	standard	standard

Table 5. Support Equipment

G. Ports and Cabling Information

Ref. ID	Port Name on EUT	Cable Description	Qty.	Length (m)	Shielded (Y/N)	Termination Point
J1	POWER SUPPLY	--	--	--	--	--
J16	SDI out #1	--	--	--	--	--
J15	SDI out #2	--	--	--	--	--
J21	JTAG	--	--	--	--	--
J20	MAC UART	--	--	--	--	--
--	APP UART	--	--	--	--	--
--	USB	--	--	--	--	--
J4, J6, J8, J11, J10	RF SMA	--	--	--	--	--
J3, J5, J7, J13, J9	RF UFL	--	--	--	--	--

Table 6. Ports and Cabling Information

H. Mode of Operation

The AMN36254 board can be set into Test mode, simulating continuous normal operating mode. This mode is enabled by simple GUI provided by AMIMON's 'AppCom' Tool. The tool enables setting the EUT to Transmit or Receive modes. It controls the center channel frequency, the operating channel bandwidth, and the TX channel power.

I. Method of Monitoring EUT Operation

Slow blinking (on-off once during 1sec) blue LED indicates that board is functioning.
Fast blinking (on-off 3-4 times during 1sec) same LED, means that the board is out of calibration.
When this LED is not blinking this means that the board has a certain problem.
Using the SW tool to configure the board, when configuration ended successfully a clear green indication appears, while a red bad indication appears when the desired configuration fails.

J. Modifications

a) Modifications to EUT

No modifications were made to the EUT.

b) Modifications to Test Standard

No modifications were made to the test standard.

K. Disposition of EUT

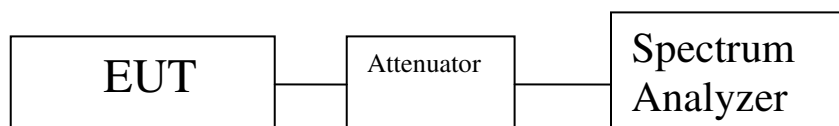
The test sample including all support equipment submitted to the Electro-Magnetic Compatibility Lab for testing was returned to Amimon upon completion of testing.

III. Electromagnetic Compatibility Criteria for Intentional Radiators

Electromagnetic Compatibility Criteria for Intentional Radiators

§15.407(a)(1) Maximum Conducted Output Power

Test Requirements:	<p>§15.407(a)(1)(i): For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.</p> <p>§15.407(a)(1)(ii): For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.</p> <p>§15.407(a)(1)(iii): For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi.</p> <p>§15.407(a)(1)(iv): For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.</p>
Test Procedure:	The EUT was connected to a spectrum analyzer through a cable and attenuator. Measurements were taken with the EUT set to transmit continuously on its low, mid, and high channels. Its power was measured according to measurement method SA-1, as described in 789033 D02 General UNII Test Procedures v01r03.
Test Results:	The EUT as tested is compliant with the requirements of this section.
Test Engineer(s):	Hadid Jones
Test Date(s):	11/07/16

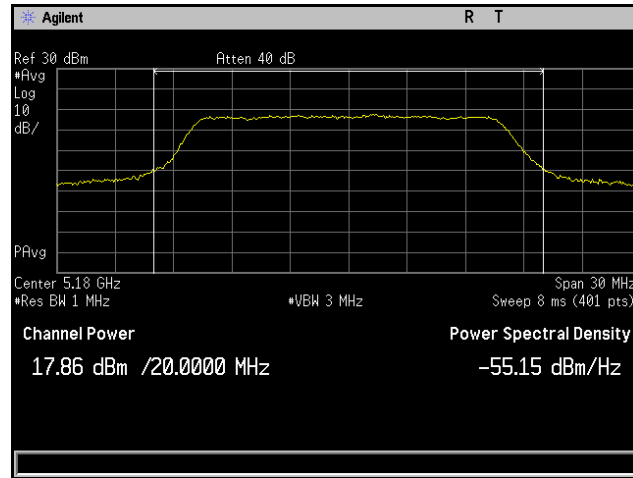


Frequency (MHz)	Bandwidth	Power (dBm)	Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
5180	20MHz	17.86	2	21	-1.14
5200	20MHz	18.22	2	21	-0.78
5240	20Mhz	17.37	2	21	-1.63
5190	40Mhz	18.04	2	21	-0.96
5230	40Mhz	18.32	2	21	-0.68

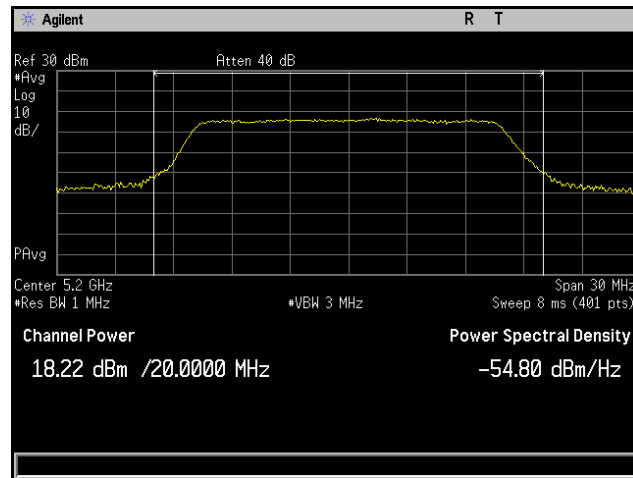
Table 7. Conducted Output Power, 2 dBi antenna

Frequency (MHz)	Bandwidth	Power (dBm)	Antenna Gain (dBi)	Limit (dBm)	Margin (dB)
5180	20MHz	15.34	5	21	-0.66
5200	20MHz	15.31	5	21	-0.69
5240	20Mhz	15.26	5	21	-0.74
5190	40Mhz	15.39	5	21	-0.61
5230	40Mhz	15.34	5	21	-0.66

Table 8. Conducted Output Power, 5 dBi antenna

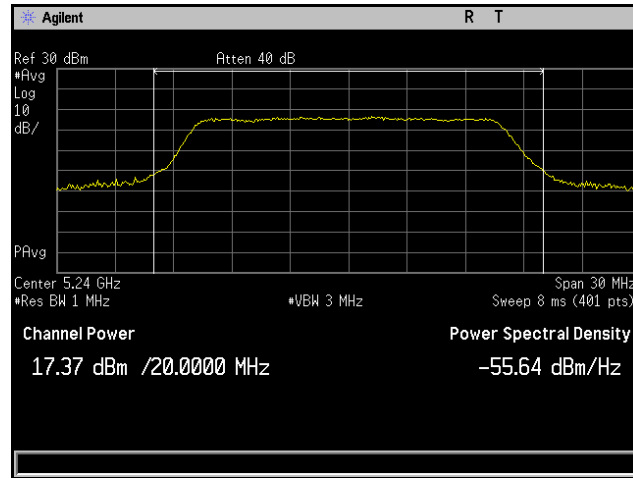


Plot 1. Conducted Output Power, 5180 MHz, 2 dBi Max

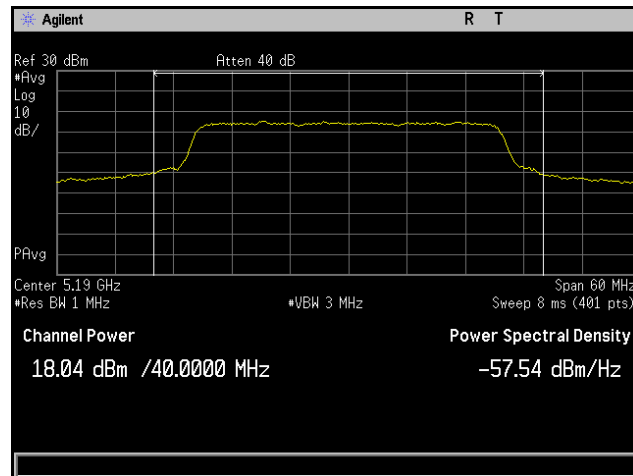


Plot 2. Conducted Output Power, 5200 MHz, 2 dBi Max

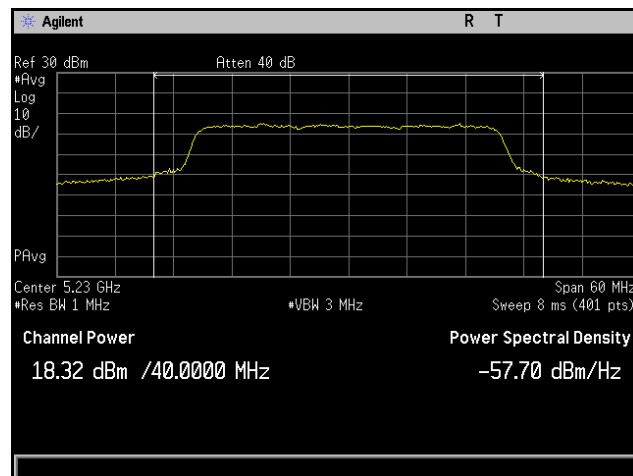
Plot 3. Conducted Output Power, 5220 MHz, 2 dBi Max



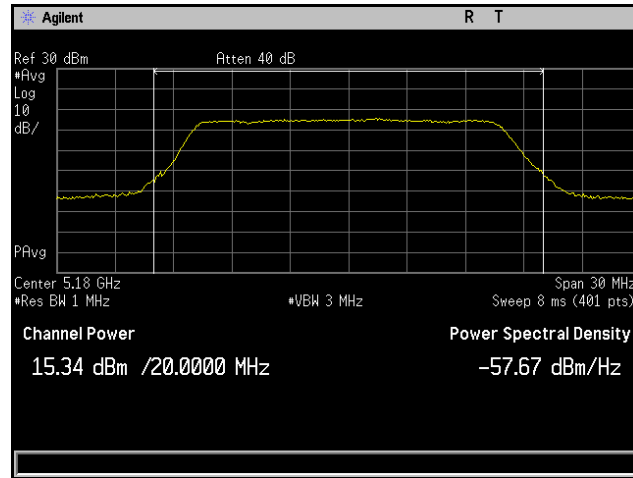
Plot 4. Conducted Output Power, 5240 MHz, 2 dBi Max



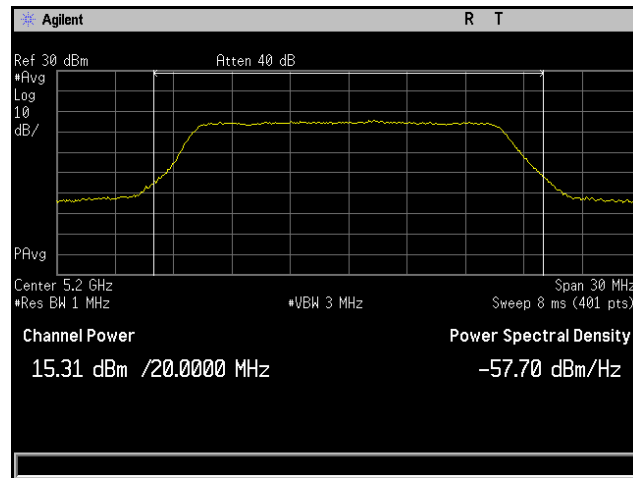
Plot 5. Conducted Output Power, 5190 MHz, 2 dBi Max



Plot 6. Conducted Output Power, 5230 MHz, 2 dBi Max

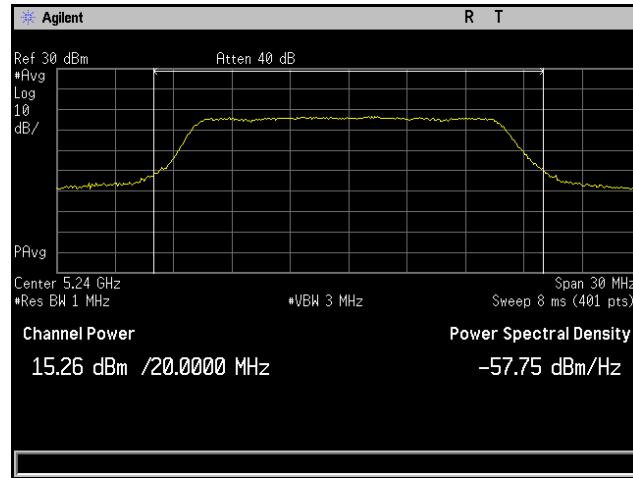


Plot 7. Conducted Output Power, 5180 MHz, 5 dBi Max

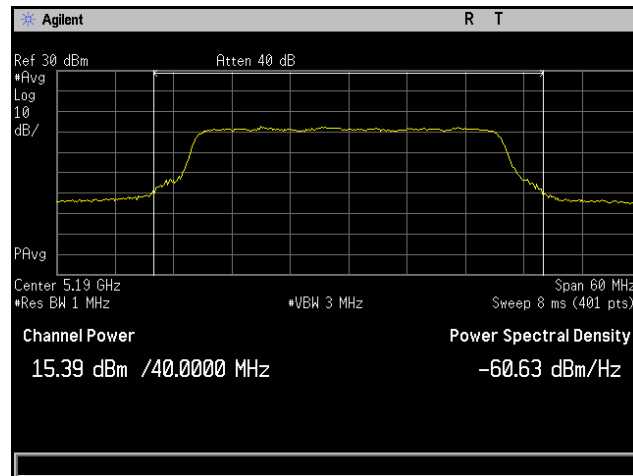


Plot 8. Conducted Output Power, 5200 MHz, 5 dBi Max

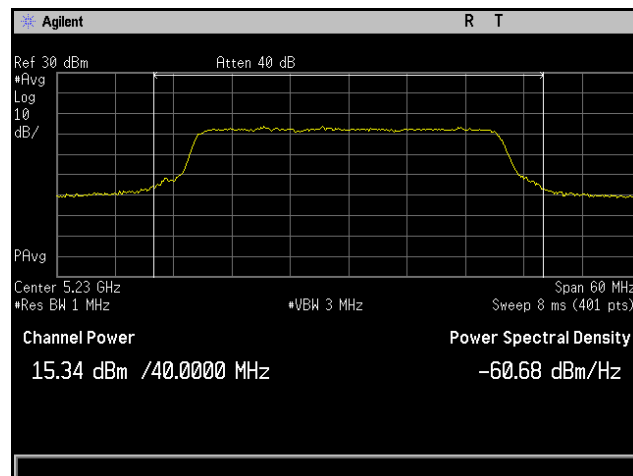
Plot 9. Conducted Output Power, 5220 MHz, 5 dBi Max



Plot 10. Conducted Output Power, 5240 MHz, 5 dBi Max



Plot 11. Conducted Output Power, 5190 MHz, 5 dBi Max



Plot 12. Conducted Output Power, 5230 MHz, 5 dBi Max



IV. Test Equipment

Test Equipment

Calibrated test equipment utilized during testing was maintained in a current state of calibration per the requirements of ISO/IEC 17025:2005.

MET Asset #	Equipment	Manufacturer	Model	Last Cal Date	Cal Due Date
1T8818	Specturm Analyzer	Agilent	E4407B	12-16-2015	12-16-2016

Table 9. Test Equipment List

Note: Functionally tested equipment is verified using calibrated instrumentation at the time of testing.

V. Certification & User's Manual Information

Certification & User's Manual Information

L. Certification Information

The following is extracted from Title 47 of the Code of Federal Regulations, Part 2, Subpart I — Marketing of Radio frequency devices:

§ 2.801 Radio-frequency device defined.

As used in this part, a radio-frequency device is any device which in its operation is capable of Emitting radio-frequency energy by radiation, conduction, or other means. Radio- frequency devices include, but are not limited to:

- (a) The various types of radio communication transmitting devices described throughout this chapter.
- (b) *The incidental, unintentional and intentional radiators defined in Part 15 of this chapter.*
- (c) The industrial, scientific, and medical equipment described in Part 18 of this chapter.
- (d) Any part or component thereof which in use emits radio-frequency energy by radiation, conduction, or other means.

§ 2.803 Marketing of radio frequency devices prior to equipment authorization.

- (a) Except as provided elsewhere in this chapter, no person shall sell or lease, or offer for sale or lease (including advertising for sale or lease), or import, ship or distribute for the purpose of selling or leasing or offering for sale or lease, any radio frequency device unless:
 - (1) In the case of a device subject to certification, such device has been authorized by the Commission in accordance with the rules in this chapter and is properly identified and labeled as required by §2.925 and other relevant sections in this chapter; or
 - (2) In the case of a device that is not required to have a grant of equipment authorization issued by the Commission, but which must comply with the specified technical standards prior to use, such device also complies with all applicable administrative (including verification of the equipment or authorization under a Declaration of Conformity, where required), technical, labeling and identification requirements specified in this chapter.
- (d) Notwithstanding the provisions of paragraph (a) of this section, the offer for sale solely to business, commercial, industrial, scientific or medical users (but not an offer for sale to other parties or to end users located in a residential environment) of a radio frequency device that is in the conceptual, developmental, design or pre-production stage is permitted prior to equipment authorization or, for devices not subject to the equipment authorization requirements, prior to a determination of compliance with the applicable technical requirements *provided* that the prospective buyer is advised in writing at the time of the offer for sale that the equipment is subject to the FCC rules and that the equipment will comply with the appropriate rules before delivery to the buyer or to centers of distribution.

- (e)(1) Notwithstanding the provisions of paragraph (a) of this section, prior to equipment authorization or determination of compliance with the applicable technical requirements any radio frequency device may be operated, but not marketed, for the following purposes and under the following conditions:
- (i) *Compliance testing;*
 - (ii) Demonstrations at a trade show provided the notice contained in paragraph (c) of this section is displayed in a conspicuous location on, or immediately adjacent to, the device;
 - (iii) Demonstrations at an exhibition conducted at a business, commercial, industrial, scientific or medical location, but excluding locations in a residential environment, provided the notice contained in paragraphs (c) or (d) of this section, as appropriate, is displayed in a conspicuous location on, or immediately adjacent to, the device;
 - (iv) Evaluation of product performance and determination of customer acceptability, provided such operation takes place at the manufacturer's facilities during developmental, design or pre-production states; or
 - (v) Evaluation of product performance and determination of customer acceptability where customer acceptability of a radio frequency device cannot be determined at the manufacturer's facilities because of size or unique capability of the device, provided the device is operated at a business, commercial, industrial, scientific or medical user's site, but not at a residential site, during the development, design or pre-production stages.
- (e)(2) For the purpose of paragraphs (e)(1)(iv) and (e)(1)(v) of this section, the term *manufacturer's facilities* includes the facilities of the party responsible for compliance with the regulations and the manufacturer's premises, as well as the facilities of other entities working under the authorization of the responsible party in connection with the development and manufacture, but not the marketing, of the equipment.
- (f) For radio frequency devices subject to verification and sold solely to business, commercial, industrial, scientific and medical users (excluding products sold to other parties or for operation in a residential environment), parties responsible for verification of the devices shall have the option of ensuring compliance with the applicable technical specifications of this chapter at each end user's location after installation, provided that the purchase or lease agreement includes a proviso that such a determination of compliance be made and is the responsibility of the party responsible for verification of the equipment.

Certification & User's Manual Information

The following is extracted from Title 47 of the Code of Federal Regulations, Part 2, Subpart J — Equipment Authorization Procedures:

§ 2.901 Basis and Purpose

- (a) In order to carry out its responsibilities under the Communications Act and the various treaties and international regulations, and in order to promote efficient use of the radio spectrum, the Commission has developed technical standards for radio frequency equipment and parts or components thereof. The technical standards applicable to individual types of equipment are found in that part of the rules governing the service wherein the equipment is to be operated.¹ *In addition to the technical standards provided, the rules governing the service may require that such equipment be verified by the manufacturer or importer, be authorized under a Declaration of Conformity, or receive an equipment authorization from the Commission by one of the following procedures: certification or registration.*
- (b) The following sections describe the verification procedure, the procedure for a Declaration of Conformity, and the procedures to be followed in obtaining certification from the Commission and the conditions attendant to such a grant.

§ 2.907 Certification.

- (a) Certification is an equipment authorization issued by the Commission, based on representation and test data submitted by the applicant.
- (b) Certification attaches to all units subsequently marketed by the grantee which are identical (see Section 2.908) to the sample tested except for permissive changes or other variations authorized by the Commission pursuant to Section 2.1043.

¹ In this case, the equipment is subject to the rules of Part 15. More specifically, the equipment falls under Subpart B (of Part 15), which deals with unintentional radiators.

Certification & User's Manual Information

§ 2.948 Description of measurement facilities.

- (a) Each party making measurements of equipment that is subject to an equipment authorization under Part 15 or Part 18 of this chapter, regardless of whether the measurements are filed with the Commission or kept on file by the party responsible for compliance of equipment marketed within the U.S. or its possessions, shall compile a description of the measurement facilities employed.
 - (1) If the measured equipment is subject to the verification procedure, the description of the measurement facilities shall be retained by the party responsible for verification of the equipment.
 - (i) *If the equipment is verified through measurements performed by an independent laboratory, it is acceptable for the party responsible for verification of the equipment to rely upon the description of the measurement facilities retained by or placed on file with the Commission by that laboratory. In this situation, the party responsible for the verification of the equipment is not required to retain a duplicate copy of the description of the measurement facilities.*
 - (ii) If the equipment is verified based on measurements performed at the installation site of the equipment, no specific site calibration data is required. It is acceptable to retain the description of the measurement facilities at the site at which the measurements were performed.
 - (2) If the equipment is to be authorized by the Commission under the certification procedure, the description of the measurement facilities shall be filed with the Commission's Laboratory in Columbia, Maryland. The data describing the measurement facilities need only be filed once but must be updated as changes are made to the measurement facilities or as otherwise described in this section. At least every three years, the organization responsible for filing the data with the Commission shall certify that the data on file is current.

Certification & User's Manual Information

Label and User's Manual Information

The following is extracted from Title 47 of the Code of Federal Regulations, Part 15, Subpart A — General:

§ 15.19 Labeling requirements.

(a) *In addition to the requirements in Part 2 of this chapter, a device subject to certification or verification shall be labeled as follows:*

- (1) Receivers associated with the operation of a licensed radio service, e.g., FM broadcast under Part 73 of this chapter, land mobile operation under Part 90, etc., shall bear the following statement in a conspicuous location on the device:

This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

- (2) A stand-alone cable input selector switch, shall bear the following statement in a conspicuous location on the device:

This device is verified to comply with Part 15 of the FCC Rules for use with cable television service.

- (3) All other devices shall bear the following statement in a conspicuous location on the device:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

- (4) Where a device is constructed in two or more sections connected by wires and marketed together, the statement specified under paragraph (a) of this section is required to be affixed only to the main control unit.

- (5) When the device is so small or for such use that it is not practicable to place the statement specified under paragraph (a) of this section on it, the information required by this paragraph shall be placed in a prominent location in the instruction manual or pamphlet supplied to the user or, alternatively, shall be placed on the container in which the device is marketed. However, the FCC identifier or the unique identifier, as appropriate, must be displayed on the device.

§ 15.21 Information to user.

The users manual or instruction manual for an intentional or unintentional 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.

Verification & User's Manual Information

The following is extracted from Title 47 of the Code of Federal Regulations, Part 15, Subpart B — Unintentional Radiators:

§ 15.105 Information to the user.

- (a) For a Class A digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at own expense.

- (b) For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.