Company: Actiontec Electronics Inc.

Test of: WCB5200
To: FCC CFR 47 Part 15 Subpart E 15.407 (non-DFS)

Report No.: ATEC15-U8 Rev A

CONDUCTED, RADIATED, DFS TEST REPORT

CONDUCTED, RADIATED, DFS TEST REPORT

FROM

Test of: Actiontec Electronics Inc. WCB5200
to

To: FCC CFR 47 Part 15 Subpart E 15.407 (non-DFS)

Test Report Serial No.: ATEC15-U8 Rev A

Note: this report is one of a set of reports that together address the requirements for FCC 15.247 and FCC 15.407 compliance

Report Number	Test Report Type
ATEC15-U2	FCC CFR 47 Part 15 Subpart B Test Report
ATEC15-U5	FCC CFR 47 Part 15 Subpart 15.247 Test Report
ATEC15-U8	FCC CFR 47 Part 15 Subpart 15.407 (non-DFS) Test Report

This report supersedes: NONE

Applicant: Actiontec Electronics Inc.
760 N Mary Avenue
Sunnyvale, California 94085
USA

Product Function: 11ac Wireless Network Extender

Issue Date: 7th March 2016

This Test Report is Issued Under the Authority of:

MiCOM Labs, Inc.
575 Boulder Court
Pleasanton California 94566
USA
Phone: +1 (925) 462-0304
Fax: +1 (925) 462-0306
www.micomlabs.com

ACCREDITED
TESTING CERT #2381.01

MiCOM Labs is an ISO 17025 Accredited Testing Laboratory

Table of Contents

1. ACCREDITATION, LISTINGS & RECOGNITION

1.1. Testing Accreditation

MiCOM Labs, Inc. is an accredited Electrical testing laboratory per the international standard ISO/IEC 17025:2005. The company is accredited by the American Association for Laboratory Accreditation (A2LA) www.a2la.org test laboratory number 2381.01. MiCOM Labs test schedule is available at the following URL; http://www.a2la.org/scopepdf/2381-01.pdf

ilac-MRA A2LA

Accredited Laboratory

A2LA has accredited

MICOM LABS

Pleasanton, CA

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009*).

Presented this 4th day of February 2016.

Senior Director of Quality & Communications
For the Accreditation Council
Certificate Number 2381.01
Valid to November 30, 2017

For the tests or types of tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.

1.2. Recognition

MiCOM Labs, Inc has widely recognized wireless testing capabilities. Our international recognition includes Conformity Assessment Body designation by APEC MRA countries. MiCOM Labs test reports are accepted globally.

Country	Recognition Body	Status	Phase	Identification No.
USA	Federal Communications Commission (FCC)	TCB	-	US0159 Listing #: 102167
Canada	Industry Canada (IC)	FCB	APEC MRA 2	US0159 Listing #: 4143A-2 4143A-3
Japan	MIC (Ministry of Internal Affairs and Communication)	CAB	APEC MRA 2	RCB 210
	VCCI	--	--	A-0012
Europe	European Commission	NB	EU MRA	NB 2280
Australia	Australian Communications and Media Authority (ACMA)	CAB	APEC MRA 1	US0159
Hong Kong	Office of the Telecommunication Authority (OFTA)	CAB	APEC MRA 1	
Korea	Ministry of Information and Communication Radio Research Laboratory (RRL)	CAB	APEC MRA 1	
Singapore	Infocomm Development Authority (IDA)	CAB	APEC MRA 1	
Taiwan	National Communications Commission (NCC) Bureau of Standards, Metrology and Inspection (BSMI)	CAB	APEC MRA 1	
Vietnam	Ministry of Communication (MIC)	CAB	APEC MRA 1	

EU MRA – European Union Mutual Recognition Agreement.
NB – Notified Body
APEC MRA – Asia Pacific Economic Community Mutual Recognition Agreement. Recognition agreement under which test lab is accredited to regulatory standards of the APEC member countries.

Phase I - recognition for product testing
Phase II – recognition for both product testing and certification

1.3. Product Certification

MiCOM Labs, Inc. is an accredited Product Certification Body per the international standard ISO/IEC 17065:2012. The company is accredited by the American Association for Laboratory Accreditation (A2LA) www.a2la.org test laboratory number 2381.02. MiCOM Labs test schedule is available at the following URL; http://www.a2la.org/scopepdf/2381-02.pdf

Accredited Product Certification Body

A2LA has accredited

MICOM LABS

Pleasanton, CA

This product certification body is accredited in accordance with the recognized International Standard ISO/IEC 17065:2012 *Requirements for bodies certifying products, processes and services*. This accreditation demonstrates technical competence for a defined scope and the operation of a management system.

Presented this 4th day of February 2016.

Senior Director of Quality & Communications
For the Accreditation Council
Certificate Number 2381.02
Valid to November 30, 2017

For the product certification schemes to which this accreditation applies, please refer to the organization's Product Certification Scope of Accreditation.

United States of America – Telecommunication Certification Body (TCB)
Industry Canada – Certification Body, CAB Identifier – US0159
Europe – Notified Body (NB), NB Identifier - 2280
Japan – Recognized Certification Body (RCB), RCB Identifier - 210

2. DOCUMENT HISTORY

Document History		
Revision	Date	Comments
Draft	26th February 2016	
Rev A	7th March 2016	Initial Release

In the above table the latest report revision will replace all earlier versions.

3. TEST RESULT CERTIFICATE

Manufacturer:	Actiontec Electronics Inc. 760 N Mary Avenue Sunnyvale California 94085 USA	**Tested By:**	MiCOM Labs, Inc. 575 Boulder Court Pleasanton California 94566 USA
Model:	WCB5200	**Telephone:**	+1 925 462 0304
Type Of Equipment:	11ac Wireless Network Extender	**Fax:**	+1 925 462 0306
S/N's:	SC4E5510300022		
Test Date(s):	10th – 18th February 2016	**Website:**	www.micomlabs.com

STANDARD(S)	TEST RESULTS
FCC CFR 47 Part 15 Subpart E 15.407	EQUIPMENT COMPLIES

MiCOM Labs, Inc. tested the equipment mentioned in accordance with the requirements set forth in the above standards. Test results indicate that the equipment tested is capable of demonstrating compliance with the requirements as documented within this report.

Notes:

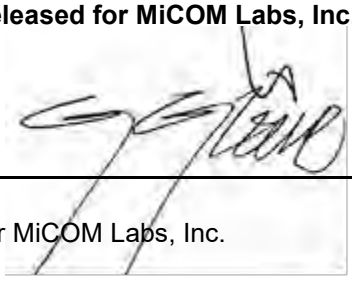
1. This document reports conditions under which testing was conducted and the results of testing performed.

2. Details of test methods used have been recorded and kept on file by the laboratory.

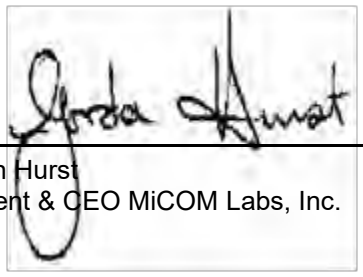
3. Test results apply only to the item(s) tested.

A2LA ACCREDITED
TESTING CERT #2381.01

Approved & Released for MiCOM Labs, Inc. by:



Graeme Grieve
Quality Manager MiCOM Labs, Inc.



Gordon Hurst
President & CEO MiCOM Labs, Inc.

4. REFERENCES AND MEASUREMENT UNCERTAINTY

4.1. Normative References

REF.	PUBLICATION	YEAR	TITLE
I	KDB 662911	Oct 31 2013	Guidance for measurement of output emission of devices that employ single transmitter with multiple outputs or systems with multiple transmitters operating simultaneously in the same frequency band
II	KDB 905462 D07 v01	10th June 2015	Test guidance to demonstrate compliance for U-NII devices subject to DFS requirements.
III	KDB 926956 DO1 v01r02	17th October 2014	U-NII Device Transition Plan
IV	KDB 789033 D02 v01	6th June 2014	General UNII Test Procedures New Rules V01
V	A2LA	June 2015	R105 - Requirement's When Making Reference to A2LA Accreditation Status
VI	ANSI C63.10	2013	American National Standard for Testing Unlicensed Wireless Devices
VII	ANSI C63.4	2009	American National Standards for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz
VIII	CISPR 22	2008	Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement
IX	ETSI TR 100 028	2001-12	Parts 1 and 2 Electromagnetic compatibility and Radio Spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics
X	FCC 06-96	Jun 3 2006	Memorandum Opinion and Order
XI	FCC 47 CFR Part 15.407	2014	Radio Frequency Devices; Subpart E –Unlicensed National Information Infrastructure Devices
XII	ICES-003	Issue 5 2012	Spectrum Management and Telecommunications; Interference-Causing Equipment Standard. Information Technology Equipment (ITE) – Limits and methods of measurement.
XIII	M 3003	Edition 3 Nov. 2012	Expression of Uncertainty and Confidence in Measurements
XIV	RSS-247 Issue 1	May 2015	Digital Transmission Systems (DTSs), Frequency Hopping System (FHSs) and Licence-Exempt Local Area Network (LE-LEN) Devices
XV	RSS-Gen Issue 4	November 2014	General Requirements and Information for the Certification of Radiocommunication Equipment
XVI	KDB 644545 D03 v01	August 14th 2014	Guidance for IEEE 802.11ac New Rules
XVII	FCC 47 CFR Part 2.1033	2014	FCC requirements and rules regarding photographs and test setup diagrams.

4.2. Test and Uncertainty Procedure

Conducted and radiated emission measurements were conducted in accordance with American National Standards Institute ANSI C63.4, listed in the Normative References section of this report.

Measurement uncertainty figures are calculated in accordance with ETSI TR 100 028 Parts 1 and 2.

Measurement uncertainties stated are based on a standard uncertainty multiplied by a coverage factor k = 2, providing a level of confidence of approximately 95 % in accordance with UKAS document M 3003 listed in the Normative References section of this report.

5. PRODUCT DETAILS AND TEST CONFIGURATIONS

5.1. Technical Details

Details	Description
Purpose:	Test of the Actiontec Electronics Inc. WCB5200 to FCC CFR 47 Part 15 Subpart C 15.407 (UNII) non-DFS bands. Radio Frequency Devices; Subpart E Unlicensed National Information Infrastructure Devices
Applicant:	Actiontec Electronics Inc. 760 N Mary Avenue, Sunnyvale California 94085 USA
Manufacturer:	Actiontec Electronics Inc.
Laboratory performing the tests:	MiCOM Labs, Inc. 575 Boulder Court, Pleasanton California 94566 USA
Test report reference number:	ATEC15-U8 Draft (Non-DFS)
Date EUT received:	3rd February 2016
Standard(s) applied:	FCC CFR 47 Part 15 Subpart E 15.407
Dates of test (from - to):	10th – 18th February 2016
No of Units Tested:	1
Type of Equipment:	Wireless Network Extender
Product Family Name:	Actiontec
Model(s):	WCB5200
Location for use:	Indoor
Declared Frequency Range(s):	5150 - 5250 MHz; 5725 - 5850 MHz;
Type of Modulation:	OFDM
EUT Modes of Operation:	802.11a; 802.11ac-80; 802.11n HT-20; 802.11n HT-40;
Declared Nominal Output Power (Ave):	+30 dBm
Transmit/Receive Operation:	Transceiver - Half Duplex
Rated Input Voltage and Current:	AC/ DC adaptor (adaptor sold with unit) 12Vdc
Operating Temperature Range:	Declared Range 0.0°C to 40.0°C
ITU Emission Designator:	802.11a: 16M8D1D 802.11ac-80: 76M3D1D 802.11n HT-20: 18M0D1D 802.11n HT-40: 37M0D1D
Equipment Dimensions:	63.5mm x 146.1mm x 203.2mm / 2.5" x 5.8" x 8.0" (W x D x H)
Weight:	0.75 pounds
Hardware Rev:	AM2
Software Rev:	v2.2.100.3bd
Primary function of equipment:	Wireless Network Extender
Secondary function of equipment:	None Provided

5.2. Scope Of Test Program

Actiontec Electronics Inc. WCB5200

The scope of the test program was to test the Actiontec Electronics Inc. WCB5200, 11ac Wireless Network Extender configurations in the frequency ranges 5150 - 5250 MHz; 5725 - 5850 MHz for compliance against the following specification:

FCC CFR 47 Part 15 Subpart E 15.407
Radio Frequency Devices; Subpart E – Unlicensed National Information Infrastructure Devices

Actiontec Electronics Inc. WCB5200

5.3. Equipment Model(s) and Serial Number(s)

Type	Description	Manufacturer	Model	Serial no.	Delivery Date
EUT	Wireless Network Extender	WCB5200	WCB5200	#ATEC15-2	8th February 2016
EUT	Wireless Network Extender	WCB5200	WCB5200	#ATEC15-1	5th February 2016

5.4. Antenna Details

Type	Manufacturer	Model	Family	Gain (dBi)	BF Gain	Dir BW	X-Pol	Frequency Band (MHz)
integral	Galtronics	Custom pcb	Dipole	4.1	-	360	-	5150 – 5250 5725 - 5850
integral	Galtronics	Custom pcb	Dipole	3.8	-	360	-	5150 – 5250 5725 - 5850
BF Gain - Beamforming Gain Dir BW - Directional BeamWidth X-Pol - Cross Polarization								

5.5. Cabling and I/O Ports

Port Type	Max Cable Length	# Of Ports	Screened	Conn Type	Data Type
Ethernet	100m	2	N	RJ-45	Packet Data

5.6. Test Configurations

Results for the following configurations are provided in this report:

Operational Mode(s) (802.11a/b/g/n/ac)	Data Rate with Highest Power MBit/s	Channel Frequency (MHz)		
		Low	Mid	High
5150 - 5250 MHz				
802.11a	6.00	5180.00	5200.00	5240.00
802.11ac-80	29.30	5210.00	--	--
802.11n HT-20	6.50	5180.00	5200.00	5240.00
802.11n HT-40	13.50	5190.00	--	5230.00
5725 - 5850 MHz				
802.11a	6.00	5745.00	5785.00	5825.00
802.11ac-80	29.30	--	--	5775.00
802.11n HT-20	6.50	5745.00	5785.00	5825.00
802.11n HT-40	13.50	5755.00	--	5795.00

5.7. Equipment Modifications

The following modifications were required to bring the equipment into compliance:
1. NONE

5.8. Deviations from the Test Standard

The following deviations from the test standard were required in order to complete the test program:
1. NONE

6. TEST SUMMARY

List of Measurements

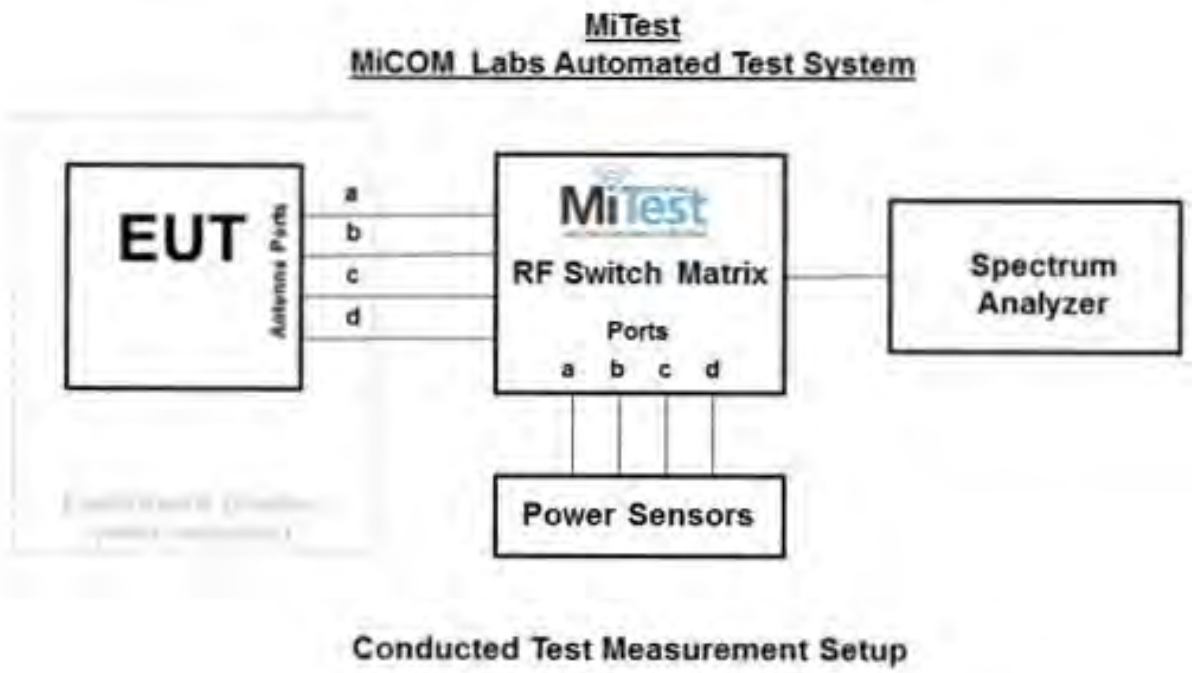
Test Header	Result	Data Link
(a) Peak Transmit Power	Complies	View Data
(a) 26 dB & 99% Bandwidth	Complies	View Data
(a)(5) Power Spectral Density	Complies	View Data
(h)(2) Dynamic Frequency Selection (DFS) (no requirement non-DFS bands only required)	--	--
(b)(2) Radiated	Complies	--
i).. Restricted Band Emissions	Complies	View Data
ii).. Restricted Band-Edge Emissions	Complies	View Data
iv).. Digital Emissions	Complies*	--
15.207 AC Wireline Emissions (0.15 - 30 MHz)	Complies*	--

* Results for those parameters are presented in MiCOM Labs Part 15B test report ATEC15-U2

7. TEST EQUIPMENT CONFIGURATION(S)

7.1. Conducted

Conducted RF Emission Test Set-up(s)
The following tests were performed using the conducted test set-up shown in the diagram below.
1. Peak Transmit Power
2. 26 dB & 99% Bandwidth
3. Power Spectral Density



Conducted Test Measurement Setup

A full system calibration was performed on the test station and any resulting system losses (or gains) were taken into account in the production of all final measurement data.

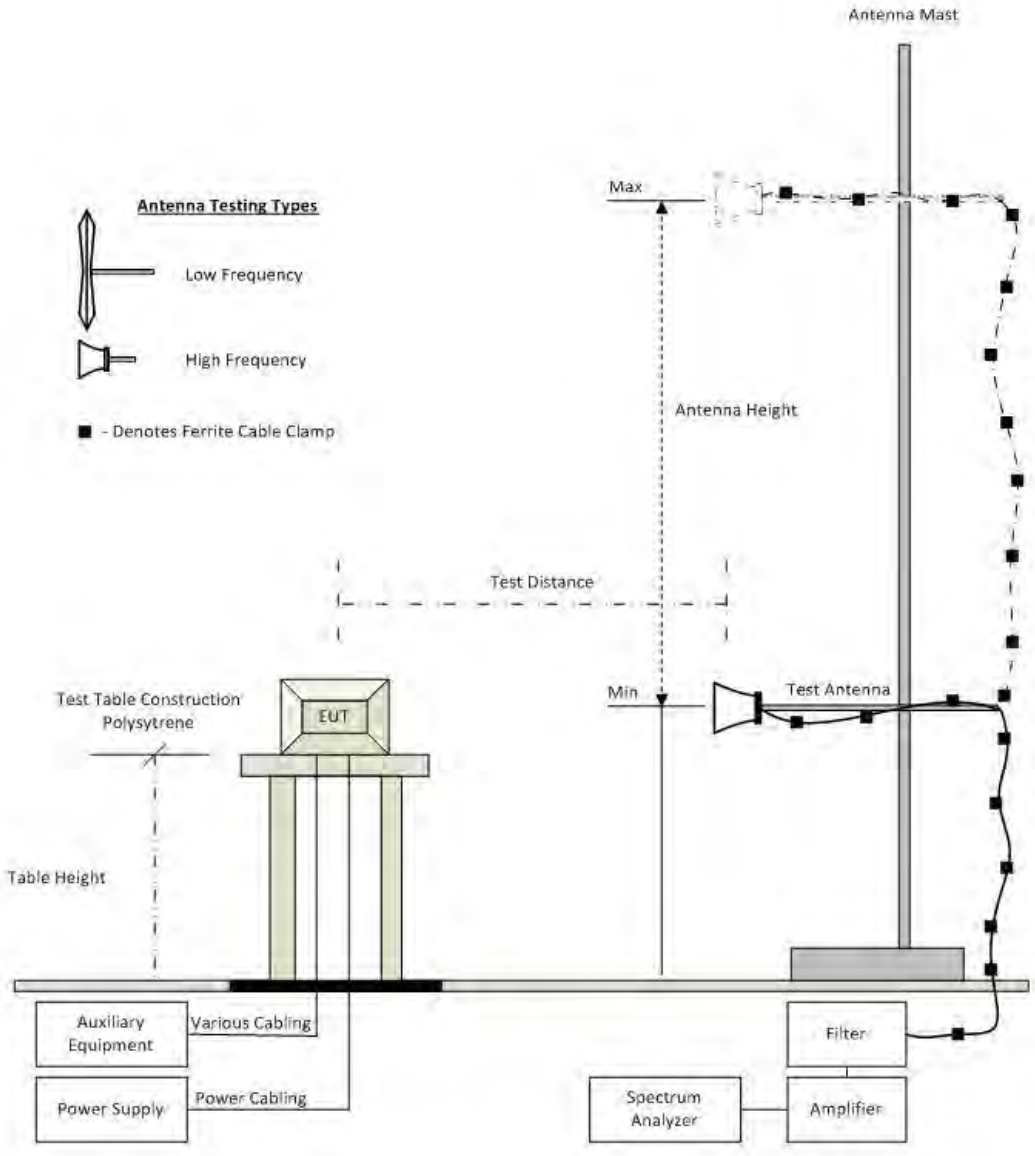
Asset#	Description	Manufacturer	Model#	Serial#	Calibration Due Date
158	Barometer/Thermometer	Control Company	4196	E2846	01 Dec 2016
248	Resistance Thermometer	Thermotronics	GR2105-02	9340 #1	21 Oct 2016
287	Rohde & Schwarz 40 GHz Receiver	Rhode & Schwarz	ESIB40	100201	27 Aug 2016
376	USB 10MHz - 18GHz Average Power Sensor	Agilent	U2000A	MY51440005	23 Oct 2016
378	Rohde & Schwarz 40 GHz Receiver with Generator	Rhode & Schwarz	ESIB40	100107/040	04 Aug 2016
381	4x4 RF Switch Box	MiCOM Labs	MiTest RF Switch Box	MIC002	18 Jun 2016
419	Laptop with Labview Software	Lenova	W520	TS02	Not Required
420	USB to GPIB Interface	National Instruments	GPIB-USB HS	1346738	Not Required
435	USB Wideband Power Sensor	Boonton	55006	8730	31 Jul 2016
440	USB Wideband Power Sensor	Boonton	55006	9178	25 Sep 2016
441	USB Wideband Power Sensor	Boonton	55006	9179	25 Sep 2016
442	USB Wideband Power Sensor	Boonton	55006	9181	25 Sep 2016
RF#2 GPIB#1	GPIB cable to Power Supply	HP	GPIB	None	Not Required
RF#2 SMA#1	EUT to Mitest box port 1	Flexco	SMA Cable port1	None	18 Jun 2016
RF#2 SMA#2	EUT to Mitest box port 2	Flexco	SMA Cable port2	None	18 Jun 2016
RF#2 SMA#3	EUT to Mitest box port 3	Flexco	SMA Cable port3	None	18 Jun 2016
RF#2 SMA#4	EUT to Mitest box port 4	Flexco	SMA Cable port4	None	18 Jun 2016
RF#2 SMA#SA	Mitest box to SA	Flexco	SMA Cable SA	None	18 Jun 2016
RF#2 USB#1	USB Cable to Mitest Box	Dynex	USB Cable	None	Not Required

7.2. Radiated Spurious Emission Test Set-up > 1 GHz

The following tests were performed using the radiated test set-up shown in the diagram below.

10.7 Radiated Spurious Emissions (1 – 10 GHz)
10.8 Radiated Digital Emissions (0.03 – 1 GHz)

Radiated Emission Measurement Setup



Radiated Emission Test Setup

Asset#	Description	Manufacturer	Model#	Serial#	Calibration Due Date
158	Barometer/Thermometer	Control Company	4196	E2846	01 Dec 2016
170	Video System Controller for Semi Anechoic Chamber	Panasonic	WV-CY101	04R08507	Not Required
287	Rohde & Schwarz 40 GHz Receiver	Rhode & Schwarz	ESIB40	100201	27 Aug 2016
397	Amp 10 - 2500MHz	MiCOM Labs	Amp 10 - 2500 MHz	NA	24 Feb 2016
399	ETS 1-18 GHz Horn Antenna	ETS	3117	00154575	18 Oct 2016
406	Amplifier for Radiated Emissions	MiCOM Labs	40dB 1 to 18GHz Amp	0406	28 May 2016
410	Desktop Computer	Dell	Inspiron 620	WS38	Not Required
411	Mast/Turntable Controller	Sunol Sciences	SC98V	060199-1D	Not Required
412	USB to GPIB Interface	National Instruments	GPIB-USB HS	11B8DC2	Not Required
413	Mast Controller	Sunol Science	TWR95-4	030801-3	Not Required
415	Turntable Controller	Sunol Sciences	Turntable Controller	None	Not Required
447	Rad Emissions Test Software	MiCOM	Rad Emissions Test Software Version 1.0.73	447	Not Required
462	Schwarzbeck cable from Antenna to Amplifier.	Schwarzbeck	AK 9513	462	25 Feb 2016
463	Schwarzbeck cable from Amplifier to Bulkhead.	Schwarzbeck	AK 9513	463	25 Feb 2016
464	Schwarzbeck cable from Bulkhead to Receiver	Schwarzbeck	AK 9513	464	25 Feb 2016
480	Cable - Bulkhead to Amp	SRC Haverhill	157-157-3050360	480	11 Aug 2016
481	Cable - Bulkhead to Receiver	SRC Haverhill	151-151-3050787	481	11 Aug 2016
482	Cable - Amp to Antenna	SRC Haverhill	157-157-3051574	482	11 Aug 2016

8. MEASUREMENT AND PRESENTATION OF TEST DATA

The measurement and graphical data presented in this test report was generated automatically using state-of-the-art technology creating an easy to read report structure. Numerical measurement data is separated from supporting graphical data (plots) through hyperlinks. Numerical measurement data can be reviewed without scrolling through numerous graphical pages to arrive at the next data matrix.

Plots have been relegated into the Appendix 'Graphical Data'.

Test and report automation was performed by MiTest. MiTest is an automated test system developed by MiCOM Labs. MiTest is the first cloud based modular test system enabling end-to-end automation of regulatory compliance testing for conducted RF testing.

The MiCOM Labs "MiTest" Automated Test System" (Patent Pending)

9. TEST RESULTS

9.1. Peak Transmit Power

Conducted Test Conditions for Maximum Conducted Output Power			
Standard:	FCC CFR 47:15.407	**Ambient Temp. (ºC):**	24.0 - 27.5
Test Heading:	Maximum Conducted Output Power	**Rel. Humidity (%):**	32 - 45
Standard Section(s):	15.407 (a)	**Pressure (mBars):**	999 - 1001
Reference Document(s):	See Normative References		

Test Procedure for Maximum Conducted Output Power Measurement
Method PM (Measurement using an RF average power meter). KDB 789033 defines a methodology using an average wideband power meter. Measurements were made while the EUT was operating in a continuous transmission mode (100% duty cycle) at the appropriate center frequency. All operational modes and frequency bands were measured independently and the resultant calculated. Where the device operated with multiple antenna ports i.e. MIMO device, each port was measured and reported separately. A summation (Σ) of each antenna port output power is provided which includes any offset due to Duty Cycle Correction Factor (DCCF). Testing was performed under ambient conditions at nominal voltage.

Test configuration and setup used for the measurement was per the Conducted Test Set-up section specified in this document.
Supporting Information
Calculated Power = A + G + Y+ 10 log (1/x) dBm

A = Total Power [$10*\text{Log10}\ (10^{a/10} + 10^{b/10} + 10^{c/10} + 10^{d/10})$]
G = Antenna Gain
Y = Beamforming Gain
x = Duty Cycle (average power measurements only)

Limits Maximum Conducted Output Power

Operating Frequency Band 5150-5250 MHz

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. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. 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. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(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. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. 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.

(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. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. 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. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(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. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. 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.

Operating Frequency Band 5250-5350 and 5470 – 5725 MHz

15. 407 (a)(2)
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. 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.

Operating Frequency Band 5725 – 5850 MHz

15. 407 (a)(3)
For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. 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. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

Equipment Configuration for Peak Transmit Power

Variant:	802.11a	**Duty Cycle (%):**	99.0
Data Rate:	6.00 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power + DCCF (+0.04 dB) (dBm) Port(s)				Calculated Total Power	Minimum 26 dB Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5180.0	21.08	22.79	--	--	25.03	--	30.00	-4.97	56/63
5200.0	21.11	23.38	--	--	25.41	--	30.00	-4.59	58/63
5240.0	22.06	23.98	--	--	26.14	--	30.00	-3.86	58/63

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-01 MEASURING RF OUTPUT POWER
Measurement Uncertainty:	±1.33 dB

DCCF - Duty Cycle Correction Factor

Equipment Configuration for Peak Transmit Power

Variant:	802.11ac-80	**Duty Cycle (%):**	99.0
Data Rate:	29.30 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power + DCCF (+0.04 dB) (dBm) Port(s)				Calculated Total Power	Minimum 26 dB Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5210.0	22.19	22.21	--	--	25.21	--	30.00	-4.79	56/63

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-01 MEASURING RF OUTPUT POWER
Measurement Uncertainty:	±1.33 dB

DCCF - Duty Cycle Correction Factor

Equipment Configuration for Peak Transmit Power

Variant:	802.11n HT-20	**Duty Cycle (%):**	99.0
Data Rate:	6.50 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power + DCCF (+0.04 dB) (dBm) Port(s)				Calculated Total Power	Minimum 26 dB Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5180.0	21.63	22.56	--	--	25.13	--	30.00	-4.87	56/63
5200.0	22.56	22.67	--	--	25.63	--	30.00	-4.37	56/63
5240.0	23.11	23.36	--	--	26.25	--	30.00	-3.75	56/63

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-01 MEASURING RF OUTPUT POWER
Measurement Uncertainty:	±1.33 dB

DCCF - Duty Cycle Correction Factor

Equipment Configuration for Peak Transmit Power

Variant:	802.11n HT-40	**Duty Cycle (%):**	99.0
Data Rate:	13.50 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power + DCCF (+0.04 dB) (dBm) Port(s)				Calculated Total Power	Minimum 26 dB Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5190.0	21.28	21.93	--	--	24.63	--	30.00	-5.37	56/63
5230.0	22.21	22.83	--	--	25.55	--	30.00	-4.45	56/63

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-01 MEASURING RF OUTPUT POWER
Measurement Uncertainty:	±1.33 dB

DCCF - Duty Cycle Correction Factor

Equipment Configuration for Peak Transmit Power

Variant:	802.11a	**Duty Cycle (%):**	99.0
Data Rate:	6.00 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power + DCCF (+0.04 dB) (dBm) Port(s)				Calculated Total Power	Minimum 26 dB Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5745.0	22.67	22.83	--	--	25.76	--	30.00	-4.24	59/59
5785.0	22.23	22.76	--	--	25.52	--	30.00	-4.48	59/59
5825.0	22.05	22.97	--	--	25.55	--	30.00	-4.45	59/59

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-01 MEASURING RF OUTPUT POWER
Measurement Uncertainty:	±1.33 dB

DCCF - Duty Cycle Correction Factor

Equipment Configuration for Peak Transmit Power

Variant:	802.11ac-80	**Duty Cycle (%):**	99.0
Data Rate:	29.30 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power + DCCF (+0.04 dB) (dBm) Port(s)				Calculated Total Power	Minimum 26 dB Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5775.0	22.38	22.24	--	--	25.32	--	30.00	-4.68	56/61

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-01 MEASURING RF OUTPUT POWER
Measurement Uncertainty:	±1.33 dB

DCCF - Duty Cycle Correction Factor

Equipment Configuration for Peak Transmit Power

Variant:	802.11n HT-20	**Duty Cycle (%):**	99.0
Data Rate:	6.50 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power + DCCF (+0.04 dB) (dBm) Port(s)				Calculated Total Power	Minimum 26 dB Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5745.0	23.46	23.22	--	--	26.36	--	30.00	-3.64	56/61
5785.0	23.01	23.18	--	--	26.11	--	30.00	-3.89	56/61
5825.0	23.71	23.06	--	--	26.41	--	30.00	-3.59	56/61

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-01 MEASURING RF OUTPUT POWER
Measurement Uncertainty:	±1.33 dB

DCCF - Duty Cycle Correction Factor

Equipment Configuration for Peak Transmit Power

Variant:	802.11n HT-40	**Duty Cycle (%):**	99.0
Data Rate:	13.50 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power + DCCF (+0.04 dB) (dBm) Port(s)				Calculated Total Power	Minimum 26 dB Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5755.0	23.07	23.57	--	--	26.34	--	30.00	-3.66	56/61
5795.0	22.91	22.35	--	--	25.65	--	30.00	-4.35	56/61

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-01 MEASURING RF OUTPUT POWER
Measurement Uncertainty:	±1.33 dB

DCCF - Duty Cycle Correction Factor

9.2. 26 dB & 99% Bandwidth

Conducted Test Conditions for 26 dB and 99% Bandwidth			
Standard:	FCC CFR 47:15.407	**Ambient Temp. (ºC):**	24.0 - 27.5
Test Heading:	26 dB and 99 % Bandwidth	**Rel. Humidity (%):**	32 - 45
Standard Section(s):	15.407 (a)	**Pressure (mBars):**	999 - 1001
Reference Document(s):	See Normative References		

Test Procedure for 26 dB and 99% Bandwidth Measurement
The bandwidth at 26 dB and 99 % is measured with a spectrum analyzer connected to the antenna terminal, while EUT is operating in transmission mode at the appropriate center frequency. The Resolution Bandwidth was set to approximately 1% of the emission bandwidth.
Testing was performed under ambient conditions at nominal voltage. Where the device operated with multiple antenna ports i.e. MIMO device, each port was measured and reported.

Test configuration and setup used for the measurement was per the Conducted Test Set-up section specified in this document.

Equipment Configuration for 26 dB & 99% Occupied Bandwidth			
Variant:	802.11a	**Duty Cycle (%):**	99.0
Data Rate:	6.00 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 26 dB Bandwidth (MHz) Port(s)				26 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5180.0	20.621	21.323	--	--	21.323	20.621		
5200.0	21.042	23.567	--	--	23.567	21.042		
5240.0	21.182	24.689	--	--	24.689	21.182		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5180.0	16.693	16.834	--	--	16.834	16.693		
5200.0	16.693	16.834	--	--	16.834	16.693		
5240.0	16.693	16.834	--	--	16.834	16.693		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

Equipment Configuration for 26 dB & 99% Occupied Bandwidth			
Variant:	802.11ac-80	**Duty Cycle (%):**	99.0
Data Rate:	29.30 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 26 dB Bandwidth (MHz) Port(s)				26 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5210.0	83.607	83.607	--	--	83.607	83.607		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5210.0	76.313	76.313	--	--	76.313	76.313		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

Equipment Configuration for 26 dB & 99% Occupied Bandwidth			
Variant:	802.11n HT-20	**Duty Cycle (%):**	99.0
Data Rate:	6.50 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 26 dB Bandwidth (MHz) Port(s)				26 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5180.0	21.743	22.164	--	--	22.164	21.743		
5200.0	21.884	21.884	--	--	21.884	21.884		
5240.0	21.884	22.585	--	--	22.585	21.884		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5180.0	17.816	17.956	--	--	17.956	17.816		
5200.0	17.956	17.956	--	--	17.956	17.956		
5240.0	17.956	17.956	--	--	17.956	17.956		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

Equipment Configuration for 26 dB & 99% Occupied Bandwidth

Variant:	802.11n HT-40	**Duty Cycle (%):**	99.0
Data Rate:	13.50 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 26 dB Bandwidth (MHz) Port(s)				26 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5190.0	44.048	51.343	--	--	51.343	44.048		
5230.0	44.048	44.048	--	--	44.048	44.048		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5190.0	36.754	37.034	--	--	37.034	36.754		
5230.0	37.034	37.034	--	--	37.034	37.034		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

Equipment Configuration for 26 dB & 99% Occupied Bandwidth			
Variant:	802.11a	**Duty Cycle (%):**	99.0
Data Rate:	6.00 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 26 dB Bandwidth (MHz) Port(s)				26 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5745.0	20.762	21.182	--	--	21.182	20.762		
5785.0	21.182	23.567	--	--	23.567	21.182		
5825.0	21.182	23.848	--	--	23.848	21.182		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5745.0	16.693	16.834	--	--	16.834	16.693		
5785.0	16.693	16.834	--	--	16.834	16.693		
5825.0	16.693	16.834	--	--	16.834	16.693		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

Equipment Configuration for 26 dB & 99% Occupied Bandwidth			
Variant:	802.11ac-80	**Duty Cycle (%):**	99.0
Data Rate:	29.30 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 26 dB Bandwidth (MHz) Port(s)				26 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5775.0	83.607	84.168	--	--	84.168	83.607		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5775.0	75.752	75.752	--	--	75.752	75.752		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

Equipment Configuration for 26 dB & 99% Occupied Bandwidth			
Variant:	802.11n HT-20	**Duty Cycle (%):**	99.0
Data Rate:	6.50 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 26 dB Bandwidth (MHz) Port(s)				26 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5745.0	22.164	22.164	--	--	22.164	22.164		
5785.0	21.884	22.305	--	--	22.305	21.884		
5825.0	23.427	22.866	--	--	23.427	22.866		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5745.0	17.956	17.956	--	--	17.956	17.956		
5785.0	17.816	17.956	--	--	17.956	17.816		
5825.0	17.956	17.956	--	--	17.956	17.956		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

Equipment Configuration for 26 dB & 99% Occupied Bandwidth			
Variant:	802.11n HT-40	**Duty Cycle (%):**	99.0
Data Rate:	13.50 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 26 dB Bandwidth (MHz) Port(s)				26 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5755.0	44.048	51.062	--	--	51.062	44.048		
5795.0	44.329	44.329	--	--	44.329	44.329		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5755.0	37.034	37.034	--	--	37.034	37.034		
5795.0	37.034	37.034	--	--	37.034	37.034		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

9.3. Power Spectral Density

Conducted Test Conditions for Power Spectral Density			
Standard:	FCC CFR 47:15.407	**Ambient Temp. (ºC):**	24.0 - 27.5
Test Heading:	Power Spectral Density	**Rel. Humidity (%):**	32 - 45
Standard Section(s):	15.407 (a)	**Pressure (mBars):**	999 - 1001
Reference Document(s):	See Normative References		

Test Procedure for Power Spectral Density
The in-band power spectral density was measured using the test technique specified in KDB 789033. A 1 MHz measurement bandwidth was implemented for the analyzer sweep. Once the sweep is complete the analyzer trace data is downloaded and used for post processing purposes.
Where the device operated with multiple antenna ports i.e. MIMO device, each port was measured separately. The Peak Power Spectral Density is the highest level found across the emission bandwidth. With multiple antenna port measurements the numerical analyzer data from each port is summed (å) and a link to this additional graphic is provided.

Test configuration and setup used for the measurement was per the Conducted Test Set-up section specified in this document.

Measure and sum the spectra across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The individual spectra are then summed mathematically in linear power units. Unlike in-band power measurements, in which the sum involves a single measured value (output power) from each output, measurements for compliance with PSD limits involve summing entire spectra across corresponding frequency bins on the various outputs. Consistency is maintained for any device with multiple transmitter outputs to be certain the individual outputs are all aligned with the same span and same number of points. In this instance, the linear power spectrum value within the first spectral bin of output 0 is summed with that in the first spectral bin of output 1, and the first spectral bin of output 2, and so on up to the Nth output to obtain the true value for the first frequency bin of the summed spectrum. The summed spectrum value for each frequency bin is computed in this fashion. These summed spectral values were post processed and the resulting numerical and graphical data presented.

NOTE: It may be observed that spectrum in some plots break the limit line however this in itself does NOT constitute a failure. In all cases a spectrum summation plot is provided in order to prove compliance. A failure occurs only after the summation of all spectrum plots have been summed and are found to be greater than the limit line.

Supporting Information
Calculated Power = A + 10 log (1/x) dBm
A = Total Power Spectral Density [10*Log10 ($10^{a/10} + 10^{b/10} + 10^{c/10} + 10^{d/10}$)]
x = Duty Cycle

Limits Power Spectral Density

Operating Frequency Band 5150-5250 MHz

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. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. 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. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(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. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. 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.

(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. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. 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. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(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. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. 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.

Operating Frequency Band 5250-5350 and 5470 – 5725 MHz

15. 407 (a)(2)
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. 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.

Operating Frequency Band 5725 – 5850 MHz

15. 407 (a)(3)
For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. 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. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

NOTE: The WCB5200 11ac Wireless Network Extender has two antenna ports operating on different polarizations. As a result, each polarization is compared against the full limit. The measurements are delivered in two separate tables Chain A and Chain B.

Equipment Configuration for Power Spectral Density			
Variant:	802.11a	**Duty Cycle (%):**	99.0
Data Rate:	6.00 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/MHz)				Amplitude Summation + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/MHz	dBm/MHz	dB
5180.0	11.067	--	--	--	11.111	17.0	-5.9
5200.0	11.795	--	--	--	11.839	17.0	-5.2
5240.0	12.295	--	--	--	12.339	17.0	-4.7

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Equipment Configuration for Power Spectral Density			
Variant:	802.11a	**Duty Cycle (%):**	99.0
Data Rate:	6.00 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/MHz)				Amplitude Summation + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/MHz	dBm/MHz	dB
5180.0	--	10.740	--	--	10.784	17.0	-6.2
5200.0	--	11.011	--	--	11.055	17.0	-5.9
5240.0	--	12.176	--	--	12.220	17.0	-4.8

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

Equipment Configuration for Power Spectral Density			
Variant:	802.11ac-80	**Duty Cycle (%):**	99.0
Data Rate:	29.30 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/MHz)				Amplitude Summation + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/MHz	dBm/MHz	dB
5210.0	6.382	--	--	--	8.669	17.0	-8.3

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Equipment Configuration for Power Spectral Density			
Variant:	802.11ac-80	**Duty Cycle (%):**	99.0
Data Rate:	29.30 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/MHz)				Amplitude Summation + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/MHz	dBm/MHz	dB
5210.0	--	5.760	--	--	5.804	17.0	-11.2

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

Equipment Configuration for Power Spectral Density			
Variant:	802.11n HT-20	**Duty Cycle (%):**	99.0
Data Rate:	6.50 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/MHz)				Amplitude Summation + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/MHz	dBm/MHz	dB
5180.0	10.173	--	--	--	10.217	17.0	-6.8
5200.0	10.813	--	--	--	10.857	17.0	-6.1
5240.0	11.409	--	--	--	11.453	17.0	-5.5

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Equipment Configuration for Power Spectral Density			
Variant:	802.11n HT-20	**Duty Cycle (%):**	99.0
Data Rate:	6.50 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/MHz)				Amplitude Summation + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/MHz	dBm/MHz	dB
5180.0	--	10.454	--	--	10.498	17.0	-6.5
5200.0	--	10.984	--	--	11.028	17.0	-6.0
5240.0	--	11.469	--	--	11.513	17.0	-5.5

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

Equipment Configuration for Power Spectral Density			
Variant:	802.11n HT-40	**Duty Cycle (%):**	99.0
Data Rate:	13.50 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/MHz)				Amplitude Summation + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/MHz	dBm/MHz	dB
5190.0	6.319	--	--	--	6.363	17.0	-10.6
5230.0	7.796	--	--	--	7.840	17.0	-9.2

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Equipment Configuration for Power Spectral Density			
Variant:	802.11n HT-40	**Duty Cycle (%):**	99.0
Data Rate:	13.50 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/MHz)				Amplitude Summation + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/MHz	dBm/MHz	dB
5190.0	--	7.267	--	--	7.311	17.0	-9.7
5230.0	--	8.333	--	--	8.377	17.0	-8.6

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

Equipment Configuration for Power Spectral Density			
Variant:	802.11a	**Duty Cycle (%):**	99.0
Data Rate:	6.00 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Amplitude Summation + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/500 KHz	dBm/500 KHz	dB
5745.0	10.605	--	--	--	10.649	30.0	-19.4
5785.0	10.056	--	--	--	10.100	30.0	-19.9
5825.0	10.386	--	--	--	10.430	30.0	-19.6

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Equipment Configuration for Power Spectral Density			
Variant:	802.11a	**Duty Cycle (%):**	99.0
Data Rate:	6.00 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Amplitude Summation + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/500 KHz	dBm/500 KHz	dB
5745.0	--	8.594	--	--	8.638	30.0	-21.4
5785.0	--	7.884	--	--	7.928	30.0	-22.1
5825.0	--	7.686	--	--	7.730	30.0	-22.3

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

Equipment Configuration for Power Spectral Density			
Variant:	802.11ac-80	**Duty Cycle (%):**	99.0
Data Rate:	29.30 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Amplitude Summation + DCCF (+0.04 dB)	Limit	Margin
MHz	**a**	**b**	**c**	**d**	**dBm/500 KHz**	**dBm/500 KHz**	**dB**
5775.0	2.559	--	--	--	2.603	30.0	-27.4

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Equipment Configuration for Power Spectral Density			
Variant:	802.11ac-80	**Duty Cycle (%):**	99.0
Data Rate:	29.30 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Amplitude Summation + DCCF (+0.04 dB)	Limit	Margin
MHz	**a**	**b**	**c**	**d**	**dBm/500 KHz**	**dBm/500 KHz**	**dB**
5775.0	--	2.225	--	--	2.269	30.0	-27.7

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

Equipment Configuration for Power Spectral Density			
Variant:	802.11n HT-20	**Duty Cycle (%):**	99.0
Data Rate:	6.50 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Amplitude Summation + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/500 KHz	dBm/500 KHz	dB
5745.0	8.762	--	--	--	8.806	30.0	-21.2
5785.0	8.769	--	--	--	8.813	30.0	-21.2
5825.0	8.811	--	--	--	8.855	30.0	-21.1

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Equipment Configuration for Power Spectral Density			
Variant:	802.11n HT-20	**Duty Cycle (%):**	99.0
Data Rate:	6.50 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Amplitude Summation + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/500 KHz	dBm/500 KHz	dB
5745.0	--	9.293	--	--	9.337	30.0	-20.7
5785.0	--	8.715	--	--	8.759	30.0	-21.2
5825.0	--	8.643	--	--	8.687	30.0	-21.3

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

Equipment Configuration for Power Spectral Density			
Variant:	802.11n HT-40	**Duty Cycle (%):**	99.0
Data Rate:	13.50 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Amplitude Summation + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/500 KHz	dBm/500 KHz	dB
5755.0	5.287	--	--	--	5.331	30.0	-24.7
5795.0	4.921	--	--	--	4.965	30.0	-25.0

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Equipment Configuration for Power Spectral Density			
Variant:	802.11n HT-40	**Duty Cycle (%):**	99.0
Data Rate:	13.50 MBit/s	**Antenna Gain (dBi):**	3.80
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	CC
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Amplitude Summation + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/500 KHz	dBm/500 KHz	dB
5755.0	--	4.812	--	--	4.856	30.0	-25.1
5795.0	--	4.322	--	--	4.366	30.0	-25.6

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

9.4. Radiated

Radiated Test Conditions for Radiated Spurious and Band-Edge Emissions			
Standard:	FCC CFR 47:15.407	**Ambient Temp. (ºC):**	20.0 - 24.5
Test Heading:	Radiated Spurious and Band-Edge Emissions	**Rel. Humidity (%):**	32 - 45
Standard Section(s):	15.407 (b), 15.205, 15.209	**Pressure (mBars):**	999 - 1001
Reference Document(s):	See Normative References		

Test Procedure for Radiated Spurious and Band-Edge Emissions
Radiated emissions for restricted bands above 1 GHz are measured in the anechoic chamber at a 3-meter distance on every azimuth in both horizontal and vertical polarities. The emissions are recorded and maximized as a function of azimuth by rotation through 360° with a spectrum analyzer in peak hold mode. Depending on the frequency band spanned a notch filter and waveguide filter was used to remove the fundamental frequency. The highest emissions relative to the limit are listed for each frequency spanned. Measurements on any restricted band frequency or frequencies above 1 GHz are based on the use of measurement instrumentation employing peak and average detectors. All measurements were performed using a resolution bandwidth of 1 MHz.

Test configuration and setup for Undesirable Measurement were per the Radiated Test Set-up specified in this document.

15.407 (b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(4) For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of −17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of −27 dBm/MHz.

(5) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

(6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.

(7) The provisions of §15.205 apply to intentional radiators operating under this section.

(8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.

Limits for Restricted Bands (15.205, 15.209)
Peak emission: 74 dBuV/m
Average emission: 54 dBuV/m

Field Strength Calculation
The field strength is calculated by adding the Antenna Factor and Cable Loss, and subtracting Amplifier Gain from the measured reading. All factors are included in the reported data.
FS = R + AF + CORR - FO

where:
FS = Field Strength
R = Measured Spectrum analyzer Input Amplitude
AF = Antenna Factor
CORR = Correction Factor = CL – AG + NFL
CL = Cable Loss
AG = Amplifier Gain
FO = Distance Falloff Factor
NFL = Notch Filter Loss or Waveguide Loss

Example:
The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength (dBµV/m);

$$E = \frac{1000000 \times \sqrt{30P}}{3}$$ µV/m

where P is the EIRP in Watts

Therefore: -27 dBm/MHz equates to 68.23 dBuV/m

Conversion between dBmV/m (or dBmV) and mV/m (or mV) are as follows:
Level (dBmV/m) = 20 * Log (level (mV/m))

40 dBmV/m = 100 mV/m
48 dBmV/m = 250 mV/m

Restricted Bands of Operation (15.205)
(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

Frequency Band			
MHz	**MHz**	**MHz**	**GHz**
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5

12.57675-12.57725	322-335.4	3600-4400	Above 38.6
13.36-13.41			

(b) Except as provided in paragraphs (d) and (e) of this section, the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in §15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in §15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in §15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in §15.35 apply to these measurements.

(c) Except as provided in paragraphs (d) and (e) of this section, regardless of the field strength limits specified elsewhere in this subpart, the provisions of this section apply to emissions from any intentional radiator.

(d) The following devices are exempt from the requirements of this section:

(1) Swept frequency field disturbance sensors operating between 1.705 and 37 MHz provided their emissions only sweep through the bands listed in paragraph (a) of this section, the sweep is never stopped with the fundamental emission within the bands listed in paragraph (a) of this section, and the fundamental emission is outside of the bands listed in paragraph (a) of this section more than 99% of the time the device is actively transmitting, without compensation for duty cycle.

(2) Transmitters used to detect buried electronic markers at 101.4 kHz which are employed by telephone companies.

(3) Cable locating equipment operated pursuant to §15.213.

(4) Any equipment operated under the provisions of §15.253, 15.255, and 15.256 in the frequency band 75-85 GHz, or §15.257 of this part.

(5) Biomedical telemetry devices operating under the provisions of §15.242 of this part are not subject to the restricted band 608-614 MHz but are subject to compliance within the other restricted bands.

(6) Transmitters operating under the provisions of subparts D or F of this part.

(7) Devices operated pursuant to §15.225 are exempt from complying with this section for the 13.36-13.41 MHz band only.

(8) Devices operated in the 24.075-24.175 GHz band under §15.245 are exempt from complying with the requirements of this section for the 48.15-48.35 GHz and 72.225-72.525 GHz bands only, and shall not exceed the limits specified in §15.245(b).

(9) Devices operated in the 24.0-24.25 GHz band under §15.249 are exempt from complying with the requirements of this section for the 48.0-48.5 GHz and 72.0-72.75 GHz bands only, and shall not exceed the limits specified in §15.249(a).

(e) Harmonic emissions appearing in the restricted bands above 17.7 GHz from field disturbance sensors operating under the provisions of §15.245 shall not exceed the limits specified in §15.245(b).

9.4.1. Restricted Band Emissions

Equipment Configuration for Radiated Spurious - Restricted Band Emissions			
Antenna:	Galtronics	**Variant:**	802.11a
Antenna Gain (dBi):	3.80	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	100
Channel Frequency (MHz):	5180.00	**Data Rate:**	6.00 MBit/s
Power Setting:	56/63	**Tested By:**	JMH

Test Measurement Results

Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
#1	5185.61	70.56	3.68	-11.49	62.75	Fundamental	Vertical	151	0	--	--	
#2	9647.73	51.24	5.29	-6.08	50.45	Peak (NRB)	Horizontal	151	0	--	--	Pass
#3	10356.32	54.52	5.54	-5.28	54.78	Peak (NRB)	Horizontal	151	20	--	--	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	Galtronics	**Variant:**	802.11a
Antenna Gain (dBi):	3.80	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	100
Channel Frequency (MHz):	5200.00	**Data Rate:**	6.00 MBit/s
Power Setting:	58/63	**Tested By:**	JMH

Test Measurement Results

Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
#1	5201.64	72.82	3.66	-11.46	65.02	Fundamental	Vertical	101	50	--	--	
#2	9647.92	51.60	5.29	-6.08	50.81	Peak (NRB)	Horizontal	101	0	--	--	Pass
#3	10401.33	56.98	5.41	-5.03	57.36	Peak (NRB)	Vertical	101	0	--	--	Pass
Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.												

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	Galtronics	**Variant:**	802.11a
Antenna Gain (dBi):	3.80	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	100
Channel Frequency (MHz):	5240.00	**Data Rate:**	6.00 MBit/s
Power Setting:	58/63	**Tested By:**	JMH

Test Measurement Results

Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
#1	5227.06	76.15	3.65	-11.39	68.41	Fundamental	Vertical	151	1	--	--	
#2	9647.90	51.58	5.29	-6.08	50.79	Peak (NRB)	Horizontal	151	1	--	--	Pass
#3	10441.80	58.62	5.69	-4.74	59.57	Peak (NRB)	Vertical	151	1	--	--	Pass
Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.												

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	Galtronics	**Variant:**	802.11a
Antenna Gain (dBi):	3.80	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	100
Channel Frequency (MHz):	5745.00	**Data Rate:**	6.00 MBit/s
Power Setting:	59/59	**Tested By:**	JMH

Test Measurement Results

Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
#1	5738.04	55.63	3.82	-10.67	48.78	Fundamental	Horizontal	151	90	--	--	
#2	9647.90	52.01	5.29	-6.08	51.22	Peak (NRB)	Horizontal	151	90	--	--	Pass
#3	11492.55	47.34	5.44	-4.84	47.94	Max Avg	Vertical	143	60	54.0	-6.1	Pass
#4	11492.55	61.25	5.44	-4.84	61.85	Max Peak	Vertical	143	60	74.0	-12.2	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	Galtronics	**Variant:**	802.11a
Antenna Gain (dBi):	3.80	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	100
Channel Frequency (MHz):	5785.00	**Data Rate:**	6.00 MBit/s
Power Setting:	59/59	**Tested By:**	JMH

Test Measurement Results

Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
#1	5792.55	59.13	3.78	-10.40	52.51	Fundamental	Vertical	151	108	--	--	
#2	9647.66	52.18	5.29	-6.08	51.39	Peak (NRB)	Horizontal	151	108	--	--	Pass
#3	11571.70	46.11	5.42	-4.63	46.90	Max Avg	Horizontal	160	54	54.0	-7.1	Pass
#4	11571.70	59.88	5.42	-4.63	60.67	Max Peak	Horizontal	160	54	74.0	-13.3	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	Galtronics	**Variant:**	802.11a
Antenna Gain (dBi):	3.80	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	100
Channel Frequency (MHz):	5825.00	**Data Rate:**	6.00 MBit/s
Power Setting:	59/59	**Tested By:**	JMH

Test Measurement Results

Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
#1	5828.30	58.90	3.84	-10.24	52.50	Fundamental	Horizontal	101	0	--	--	
#2	9647.82	52.14	5.29	-6.08	51.35	Peak (NRB)	Horizontal	151	50	--	--	Pass
#3	11652.67	46.32	5.49	-4.46	47.35	Max Avg	Vertical	148	65	54.0	-6.7	Pass
#4	11652.67	60.32	5.49	-4.46	61.35	Max Peak	Vertical	148	65	74.0	-12.7	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

9.4.2. Restricted Band-Edge Emissions

RESULTS SUMMARY FOR RADIATED BAND-EDGE EMISSIONS

5150 - 5250 MHz

Galtronics Custom pcb		Band-Edge Freq	Limit 74.0dBµV/m	Limit 54.0dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
802.11a	5180.00	5150.00	59.88	48.32	58/63
802.11ac-80	5210.00	5150.00	66.41	52.94	61/61
802.11n HT-20	5180.00	5150.00	58.77	46.21	58/63
802.11n HT-40	5190.00	5150.00	67.71	53.54	57/57

5725 - 5850 MHz: 5725 MHz Band-Edge

Galtronics Custom pcb		Band-Edge Freq	Limit 68.2dBµV/m	Limit 78.2dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
802.11a	5745.00	5725.00	55.14	57.89	59/59
802.11ac-80	5775.00	5725.00	57.87	58.52	56/61
802.11n HT-20	5745.00	5725.00	55.14	57.19	56/61
802.11n HT-40	5755.00	5725.00	56.80	78.23	56/61

5725 - 5850 MHz: 5850 MHz Band-Edge

Galtronics Custom pcb		Band-Edge Freq	Limit 78.2dBµV/m	Limit 68.2dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
802.11a	5825.00	5850.00	56.76	55.96	59/59
802.11ac-80	5775.00	5850.00	56.38	55.99	56/61
802.11n HT-20	5825.00	5850.00	56.36	55.51	56/61
802.11n HT-40	5795.00	5850.00	55.50	55.51	56/61

Click on the links to view the data.

Equipment Configuration for Restricted Lower Band-Edge Emissions

Antenna:	Galtronics Custom pcb	**Variant:**	802.11a
Antenna Gain (dBi):	3.80	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	100
Channel Frequency (MHz):	5180.00	**Data Rate:**	6.00 MBit/s
Power Setting:	58/63	**Tested By:**	JMH

Test Measurement Results

Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
#1	5100.50	10.61	3.58	34.13	48.32	Max Avg	Vertical	187	11	54.0	-5.7	Pass
#2	5150.00	22.10	3.67	34.11	59.88	Max Peak	Vertical	187	11	74.0	-14.1	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

Equipment Configuration for Restricted Lower Band-Edge Emissions

Antenna:	Galtronics Custom pcb	**Variant:**	802.11ac-80
Antenna Gain (dBi):	3.80	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	100
Channel Frequency (MHz):	5210.00	**Data Rate:**	29.30 MBit/s
Power Setting:	61/61	**Tested By:**	JMH

Test Measurement Results

Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
#1	5140.88	15.12	3.70	34.12	52.94	Max Avg	Vertical	187	11	54.0	-1.1	Pass
#2	5143.49	28.59	3.70	34.12	66.41	Max Peak	Vertical	187	11	74.0	-7.6	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

Equipment Configuration for Restricted Lower Band-Edge Emissions

Antenna:	Galtronics Custom pcb	**Variant:**	802.11n HT-20
Antenna Gain (dBi):	3.80	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	100
Channel Frequency (MHz):	5180.00	**Data Rate:**	6.50 MBit/s
Power Setting:	58/63	**Tested By:**	JMH

Test Measurement Results

Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
#1	5100.50	8.50	3.58	34.13	46.21	Max Avg	Vertical	187	11	54.0	-7.8	Pass
#2	5147.39	20.98	3.68	34.11	58.77	Max Peak	Vertical	187	11	74.0	-15.2	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

Equipment Configuration for Restricted Lower Band-Edge Emissions

Antenna:	Galtronics Custom pcb	**Variant:**	802.11n HT-40
Antenna Gain (dBi):	3.80	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	100
Channel Frequency (MHz):	5190.00	**Data Rate:**	13.50 MBit/s
Power Setting:	57/57	**Tested By:**	JMH

Test Measurement Results

Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
#1	5150.00	15.76	3.67	34.11	53.54	Max Avg	Vertical	187	11	54.0	-0.5	Pass
#2	5150.00	29.93	3.67	34.11	67.71	Max Peak	Vertical	187	11	74.0	-6.3	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	Galtronics Custom pcb	**Variant:**	802.11a
Antenna Gain (dBi):	3.80	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	100
Channel Frequency (MHz):	5745.00	**Data Rate:**	6.00 MBit/s
Power Setting:	59/59	**Tested By:**	JMH

Test Measurement Results

Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
#1	5715.00	16.99	3.81	34.34	55.14	Marker	Vertical	154	21	68.2	-13.1	Pass
#2	5725.00	19.75	3.79	34.35	57.89	Marker	Vertical	154	21	78.2	-20.3	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	Galtronics Custom pcb	**Variant:**	802.11ac-80
Antenna Gain (dBi):	3.80	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	100
Channel Frequency (MHz):	5775.00	**Data Rate:**	29.30 MBit/s
Power Setting:	56/61	**Tested By:**	JMH

Test Measurement Results

Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
#1	5715.00	19.72	3.81	34.34	57.87	Marker	Vertical	154	21	68.2	-10.4	Pass
#2	5721.61	20.37	3.80	34.35	58.52	Marker	Vertical	154	21	78.2	-19.7	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.												

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	Galtronics Custom pcb	**Variant:**	802.11n HT-20
Antenna Gain (dBi):	3.80	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	100
Channel Frequency (MHz):	5745.00	**Data Rate:**	6.50 MBit/s
Power Setting:	56/61	**Tested By:**	JMH

Test Measurement Results

Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
#1	5715.00	16.99	3.81	34.34	55.14	Marker	Vertical	154	21	68.2	-13.1	Pass
#2	5725.00	19.05	3.79	34.35	57.19	Marker	Vertical	154	21	78.2	-21.0	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	Galtronics Custom pcb	**Variant:**	802.11n HT-40
Antenna Gain (dBi):	3.80	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	100
Channel Frequency (MHz):	5755.00	**Data Rate:**	13.50 MBit/s
Power Setting:	56/61	**Tested By:**	JMH

Test Measurement Results

Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
#1	5715.00	18.65	3.81	34.34	56.80	Marker	Vertical	154	21	68.2	-11.4	Pass
#2	5725.00	19.75	3.79	34.35	57.89	Marker	Vertical	154	21	78.2	-20.3	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	Galtronics Custom pcb	**Variant:**	802.11a
Antenna Gain (dBi):	3.80	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	100
Channel Frequency (MHz):	5825.00	**Data Rate:**	6.00 MBit/s
Power Setting:	59/59	**Tested By:**	JMH

Test Measurement Results

Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
#1	5850.00	18.32	3.81	34.63	56.76	Marker	Vertical	158	114	78.2	-21.5	Pass
#3	5860.00	17.45	3.86	34.65	55.96	Marker	Vertical	158	114	78.2	-22.3	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.												

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	Galtronics Custom pcb	**Variant:**	802.11ac-80
Antenna Gain (dBi):	3.80	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	100
Channel Frequency (MHz):	5775.00	**Data Rate:**	29.30 MBit/s
Power Setting:	56/61	**Tested By:**	JMH

Test Measurement Results

Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
#2	5857.15	17.89	3.84	34.65	56.38	Marker	Vertical	158	114	78.2	-21.9	Pass
#3	5874.94	17.49	3.80	34.70	55.99	Marker	Vertical	158	114	68.2	-12.2	Pass
#1	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	Galtronics Custom pcb	**Variant:**	802.11n HT-20
Antenna Gain (dBi):	3.80	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	100
Channel Frequency (MHz):	5825.00	**Data Rate:**	6.50 MBit/s
Power Setting:	56/61	**Tested By:**	JMH

Test Measurement Results

Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
#1	5850.00	17.92	3.81	34.63	56.36	Marker	Vertical	158	114	78.2	-21.9	Pass
#3	5860.00	17.00	3.86	34.65	55.51	Marker	Vertical	158	114	78.2	-22.7	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.												

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	Galtronics Custom pcb	**Variant:**	802.11n HT-40
Antenna Gain (dBi):	3.80	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	100
Channel Frequency (MHz):	5795.00	**Data Rate:**	13.50 MBit/s
Power Setting:	56/61	**Tested By:**	JMH

Test Measurement Results

Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
#2	5855.47	17.03	3.83	34.64	55.50	Marker	Vertical	158	114	78.2	-22.7	Pass
#3	5860.00	17.00	3.86	34.65	55.51	Marker	Vertical	158	114	78.2	-22.7	Pass
#1	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.												

9.4.3. Digital Emissions

Results for Digital Emissions (0.03 – 1 GHz) are presented in MiCOM Labs FCC Part 15B test report ATEC15-U2.

9.5. AC Wireline Emissions

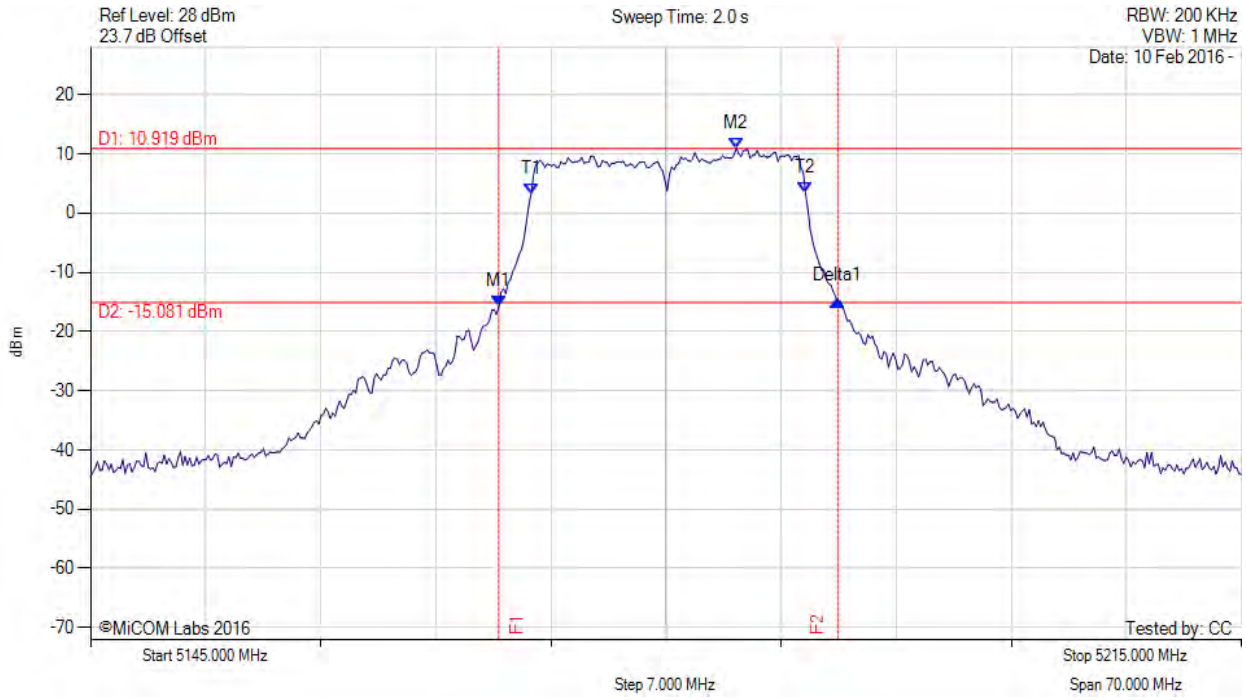
Results for AC Wireline Emissions (0.15 – 30 MHz) are presented in MiCOM Labs FCC Part 15B test report ATEC15-U2.

A. APPENDIX - GRAPHICAL IMAGES

A.1. 26 dB & 99% Bandwidth

26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5180.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

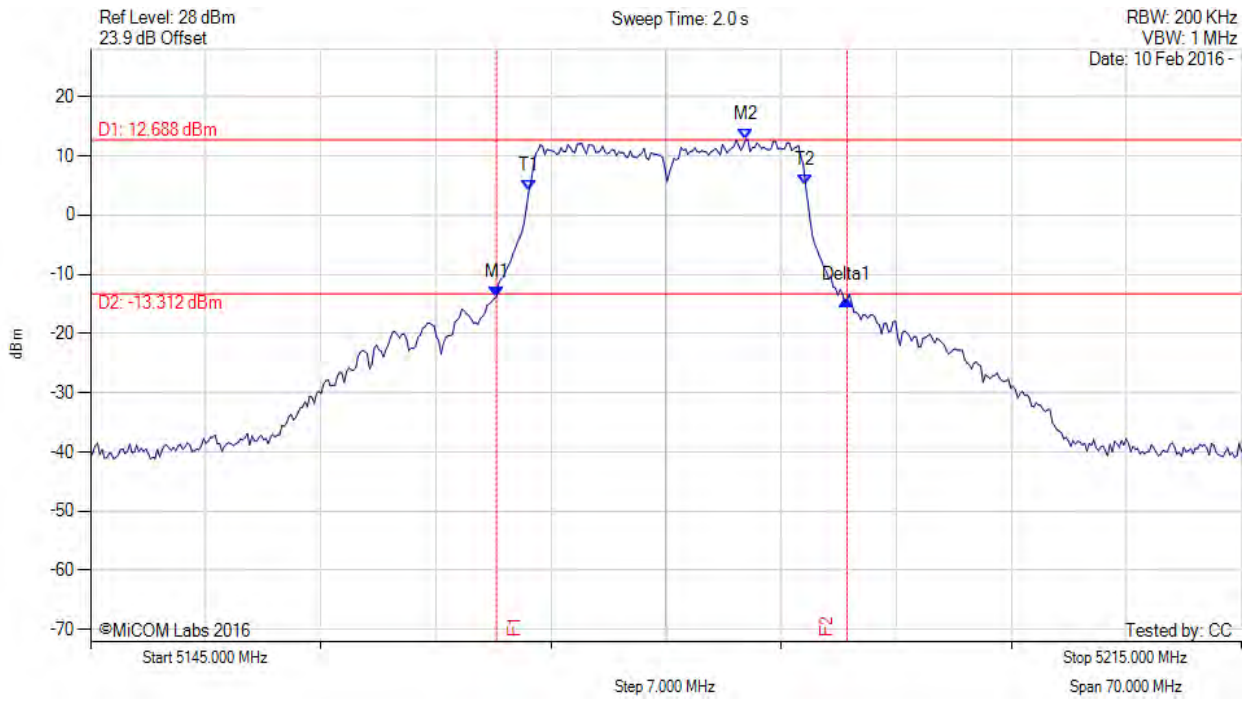


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5169.830 MHz : -15.821 dBm M2 : 5184.279 MHz : 10.919 dBm Delta1 : 20.621 MHz : 0.950 dB T1 : 5171.794 MHz : 3.264 dBm T2 : 5188.487 MHz : 3.416 dBm OBW : 16.693 MHz	Measured 26 dB Bandwidth: 20.621 MHz Measured 99% Bandwidth: 16.693 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5180.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5169.689 MHz : -13.859 dBm M2 : 5184.840 MHz : 12.688 dBm Delta1 : 21.323 MHz : -0.480 dB T1 : 5171.653 MHz : 4.032 dBm T2 : 5188.487 MHz : 5.082 dBm OBW : 16.834 MHz	Measured 26 dB Bandwidth: 21.323 MHz Measured 99% Bandwidth: 16.834 MHz

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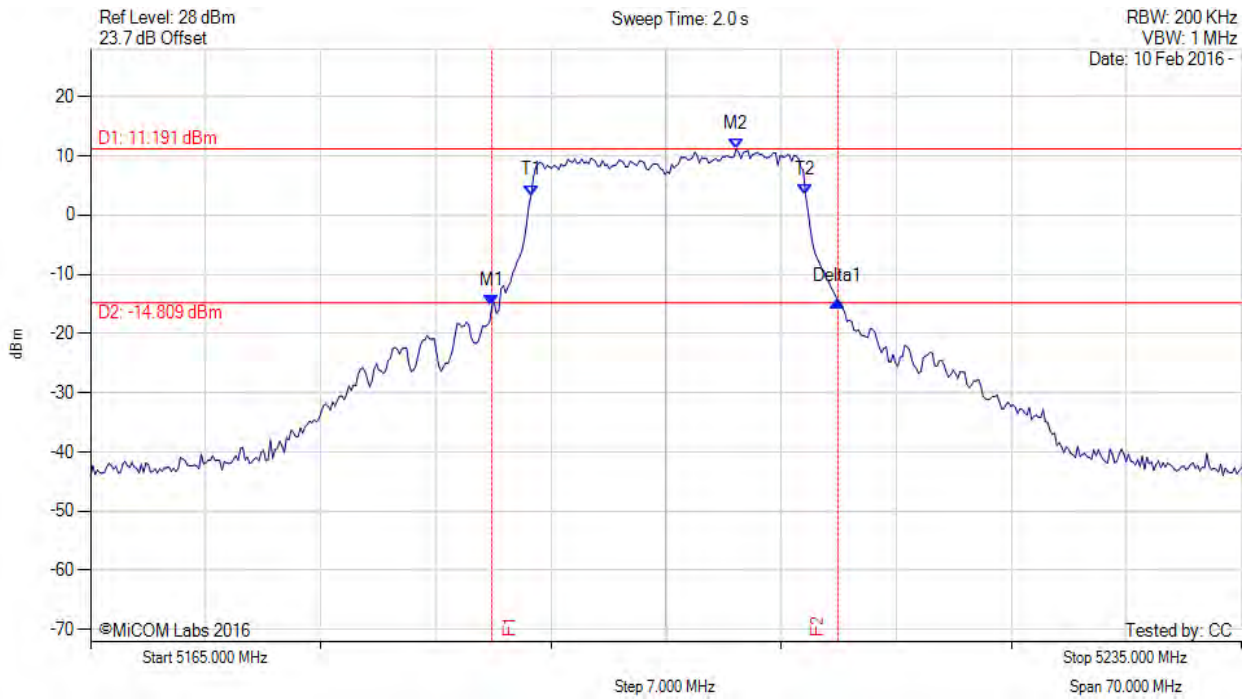
26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5200.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

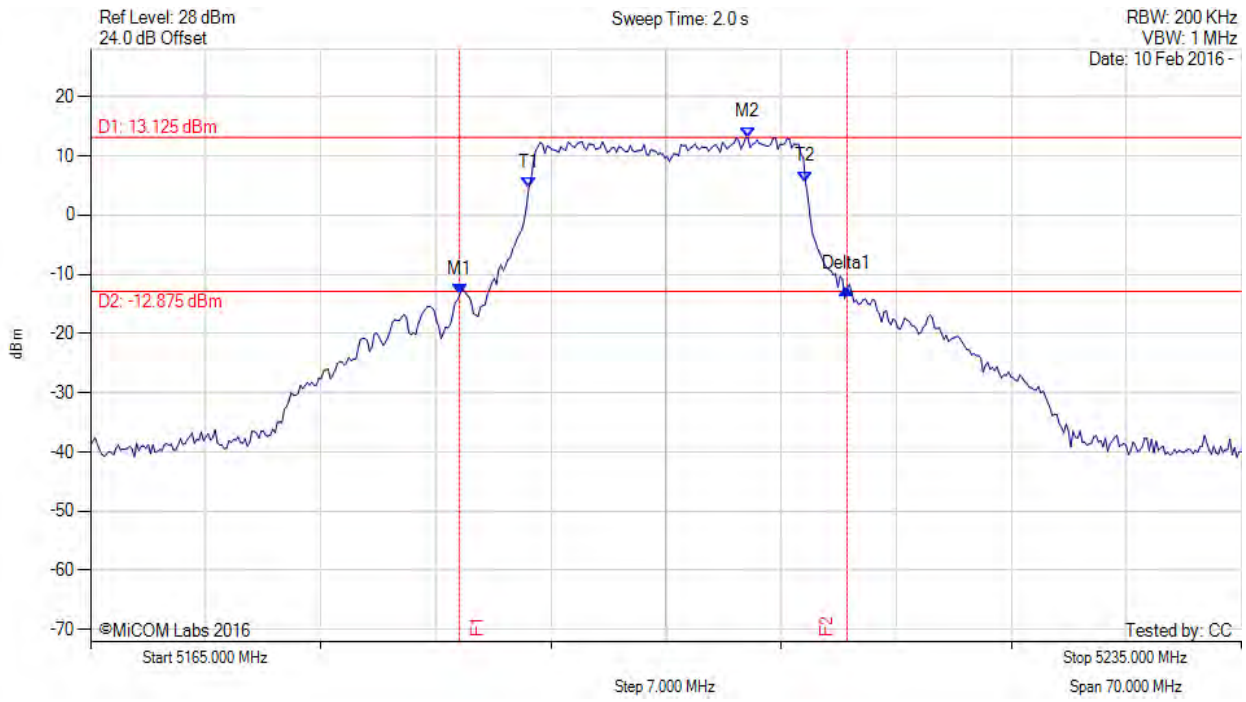


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5189.409 MHz : -15.347 dBm M2 : 5204.279 MHz : 11.191 dBm Delta1 : 21.042 MHz : 0.769 dB T1 : 5191.794 MHz : 3.304 dBm T2 : 5208.487 MHz : 3.479 dBm OBW : 16.693 MHz	Measured 26 dB Bandwidth: 21.042 MHz Measured 99% Bandwidth: 16.693 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5200.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5187.445 MHz : -13.484 dBm M2 : 5204.980 MHz : 13.125 dBm Delta1 : 23.567 MHz : 1.031 dB T1 : 5191.653 MHz : 4.583 dBm T2 : 5208.487 MHz : 5.659 dBm OBW : 16.834 MHz	Measured 26 dB Bandwidth: 23.567 MHz Measured 99% Bandwidth: 16.834 MHz

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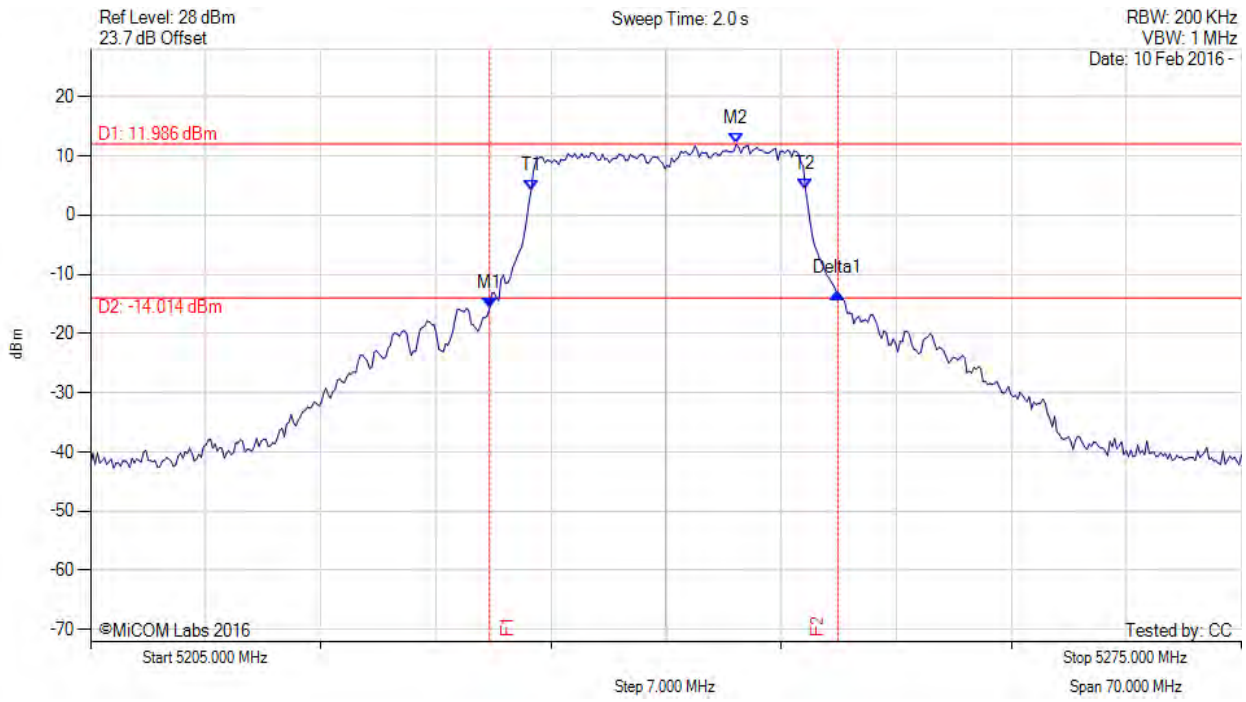
26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5240.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

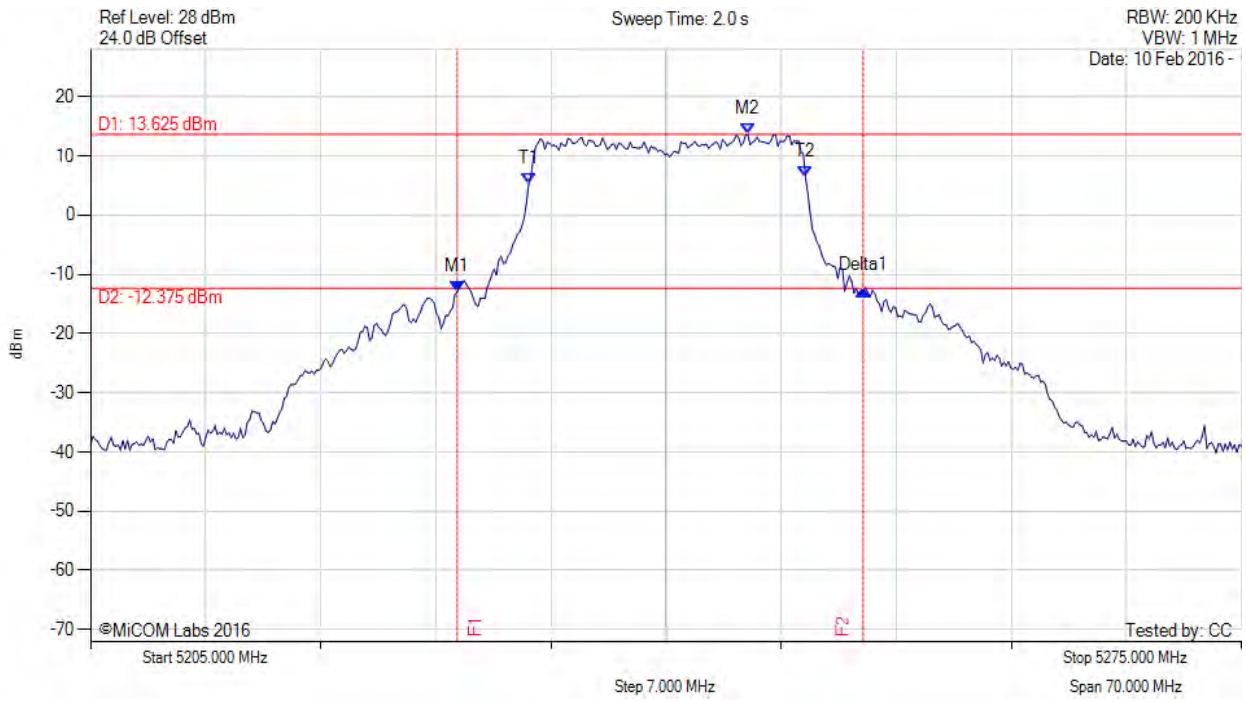


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5229.269 MHz : -15.685 dBm M2 : 5244.279 MHz : 11.986 dBm Delta1 : 21.182 MHz : 2.528 dB T1 : 5231.794 MHz : 4.138 dBm T2 : 5248.487 MHz : 4.307 dBm OBW : 16.693 MHz	Measured 26 dB Bandwidth: 21.182 MHz Measured 99% Bandwidth: 16.693 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5240.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

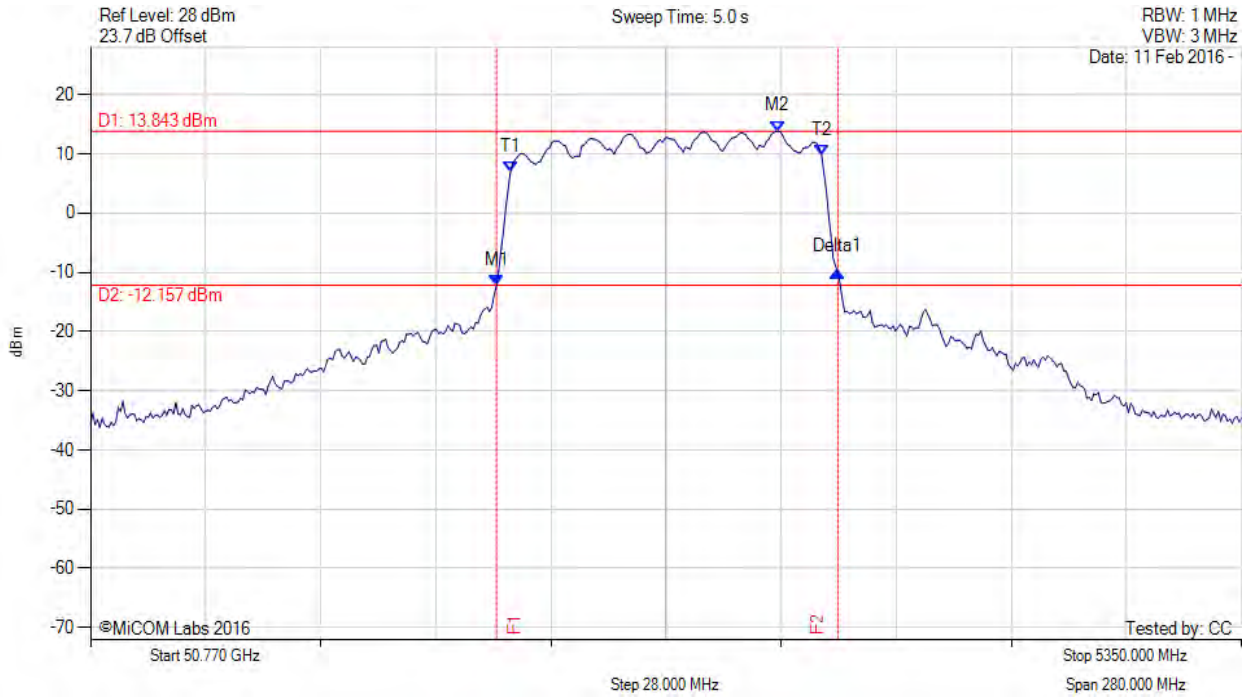


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5227.305 MHz : -12.968 dBm M2 : 5244.980 MHz : 13.625 dBm Delta1 : 24.689 MHz : 0.321 dB T1 : 5231.653 MHz : 5.232 dBm T2 : 5248.487 MHz : 6.434 dBm OBW : 16.834 MHz	Measured 26 dB Bandwidth: 24.689 MHz Measured 99% Bandwidth: 16.834 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11ac-80, Channel: 5210.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

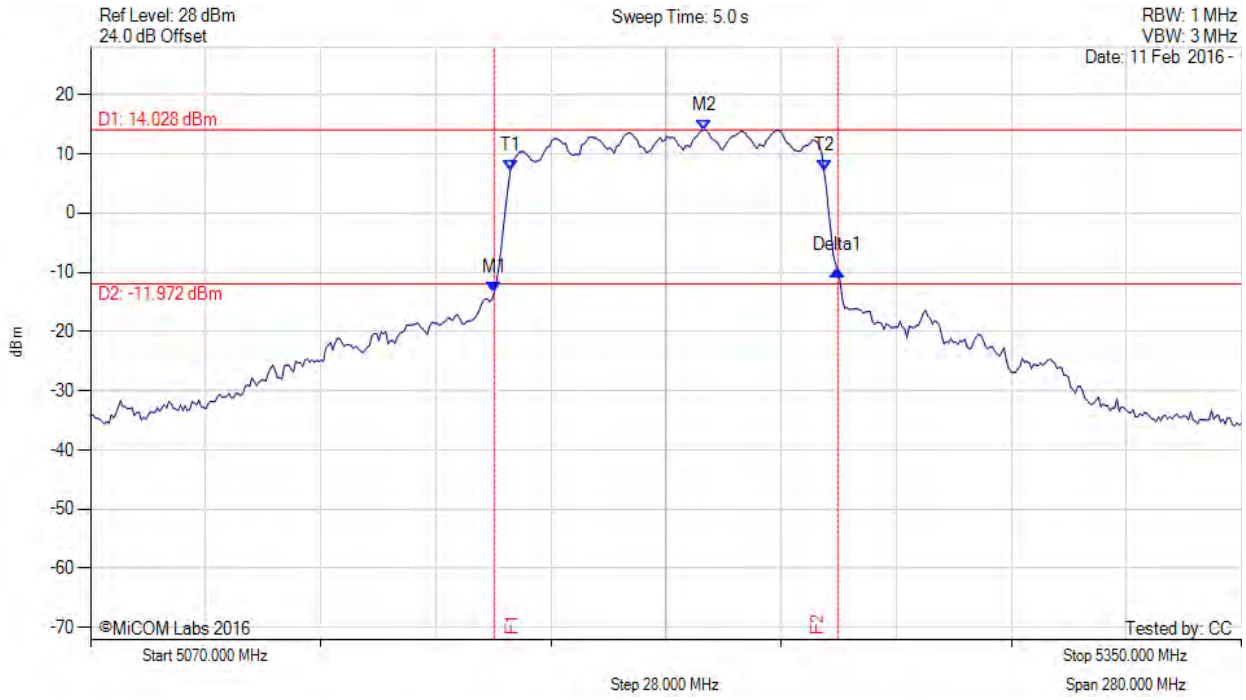


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5168.758 MHz : -12.321 dBm M2 : 5237.214 MHz : 13.843 dBm Delta1 : 83.046 MHz : 2.351 dB T1 : 5172.124 MHz : 6.845 dBm T2 : 5247.876 MHz : 9.798 dBm OBW : 75.752 MHz	Channel Frequency: 5210.00 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11ac-80, Channel: 5210.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

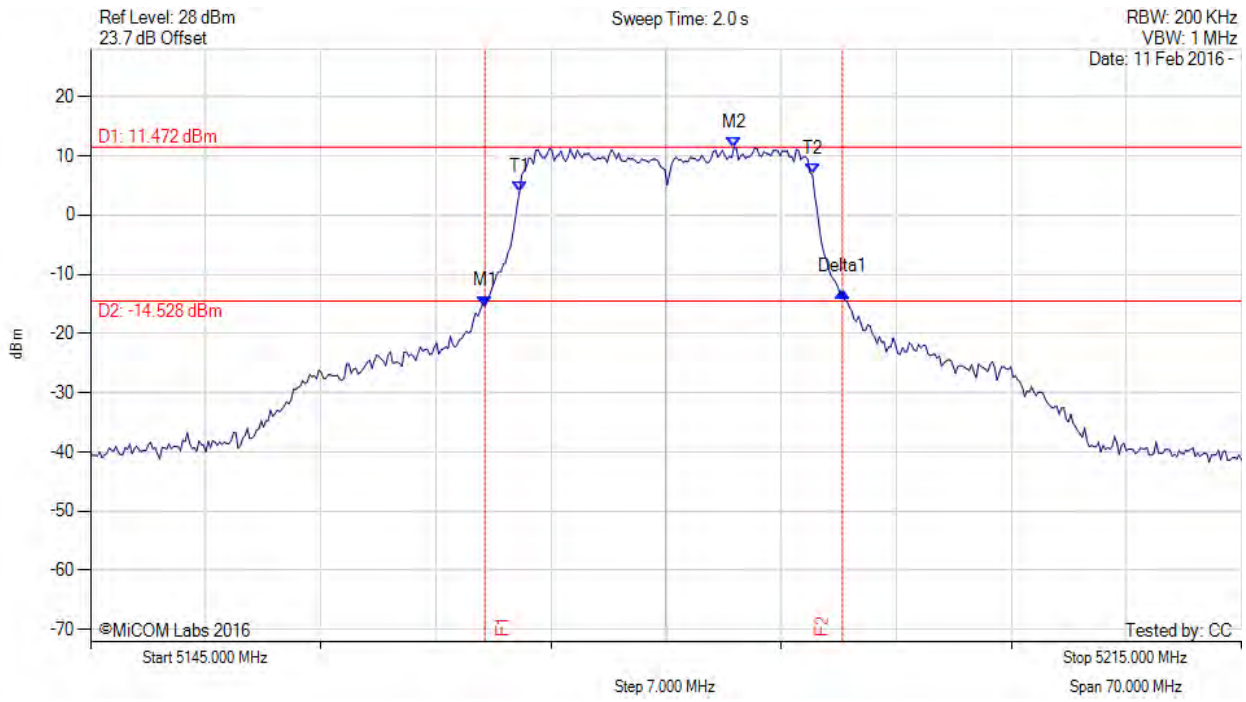


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	ERROR!!! MULTIPLE TEST RESULTS MATCHES...	Measured 26 dB Bandwidth: 83.607 MHz Measured 99% Bandwidth: 76.313 MHz ERROR!!! MULTIPLE TEST RESULTS MATCHES...

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5180.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

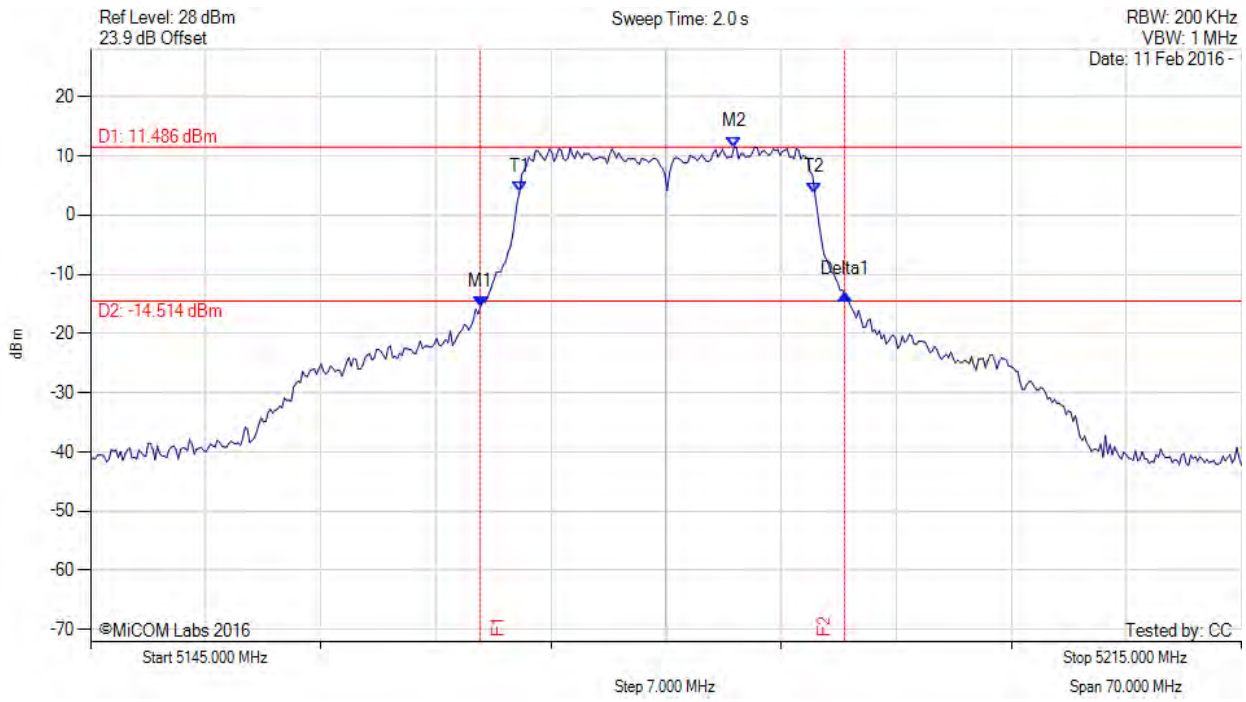


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5168.988 MHz : -15.368 dBm M2 : 5184.138 MHz : 11.472 dBm Delta1 : 21.743 MHz : 2.343 dB T1 : 5171.092 MHz : 3.961 dBm T2 : 5188.908 MHz : 6.841 dBm OBW : 17.816 MHz	Measured 26 dB Bandwidth: 21.743 MHz Measured 99% Bandwidth: 17.816 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5180.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

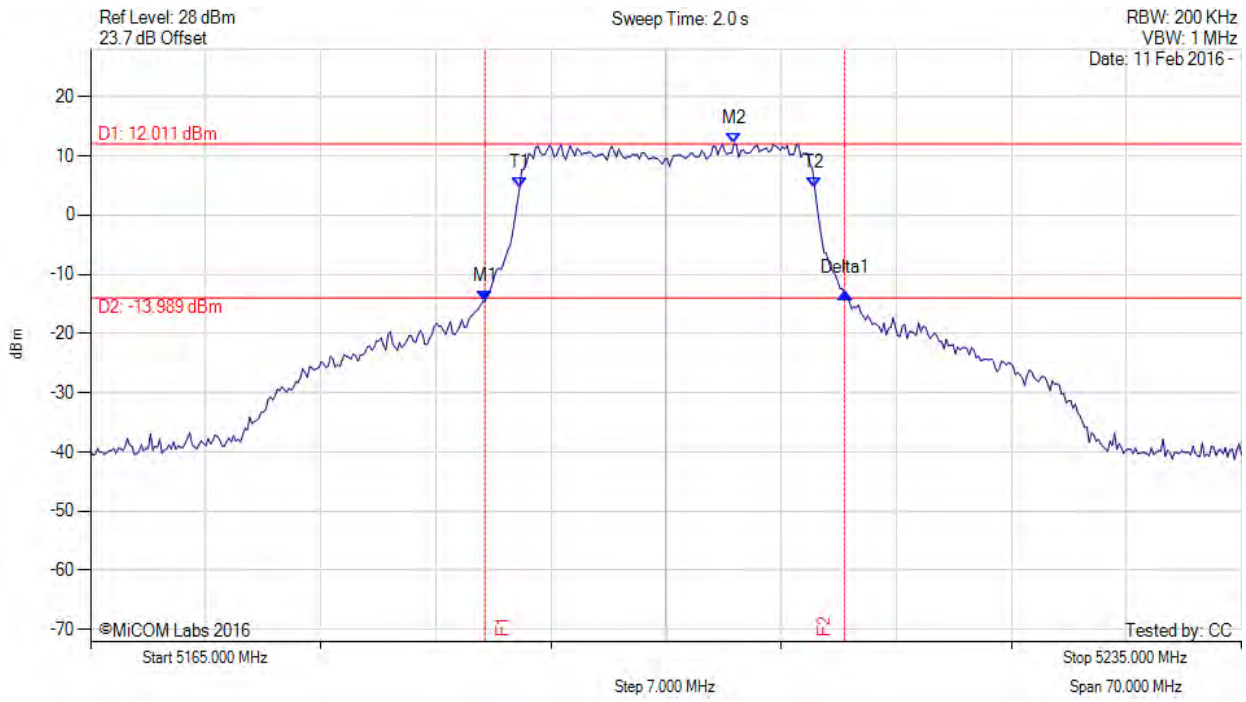


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5168.707 MHz : -15.540 dBm M2 : 5184.138 MHz : 11.486 dBm Delta1 : 22.164 MHz : 2.058 dB T1 : 5171.092 MHz : 3.900 dBm T2 : 5189.048 MHz : 3.794 dBm OBW : 17.956 MHz	Measured 26 dB Bandwidth: 22.164 MHz Measured 99% Bandwidth: 17.956 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5200.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

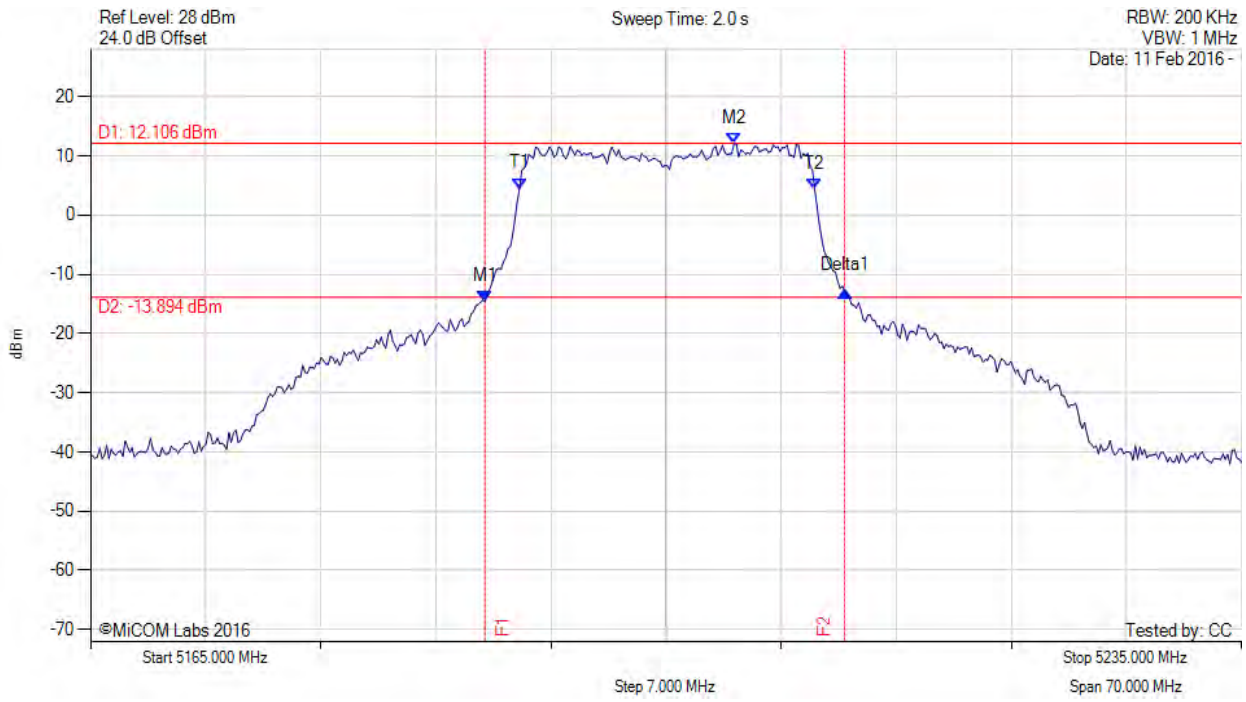


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5188.988 MHz : -14.522 dBm M2 : 5204.138 MHz : 12.011 dBm Delta1 : 21.884 MHz : 1.287 dB T1 : 5191.092 MHz : 4.510 dBm T2 : 5209.048 MHz : 4.577 dBm OBW : 17.956 MHz	Measured 26 dB Bandwidth: 21.884 MHz Measured 99% Bandwidth: 17.956 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5200.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

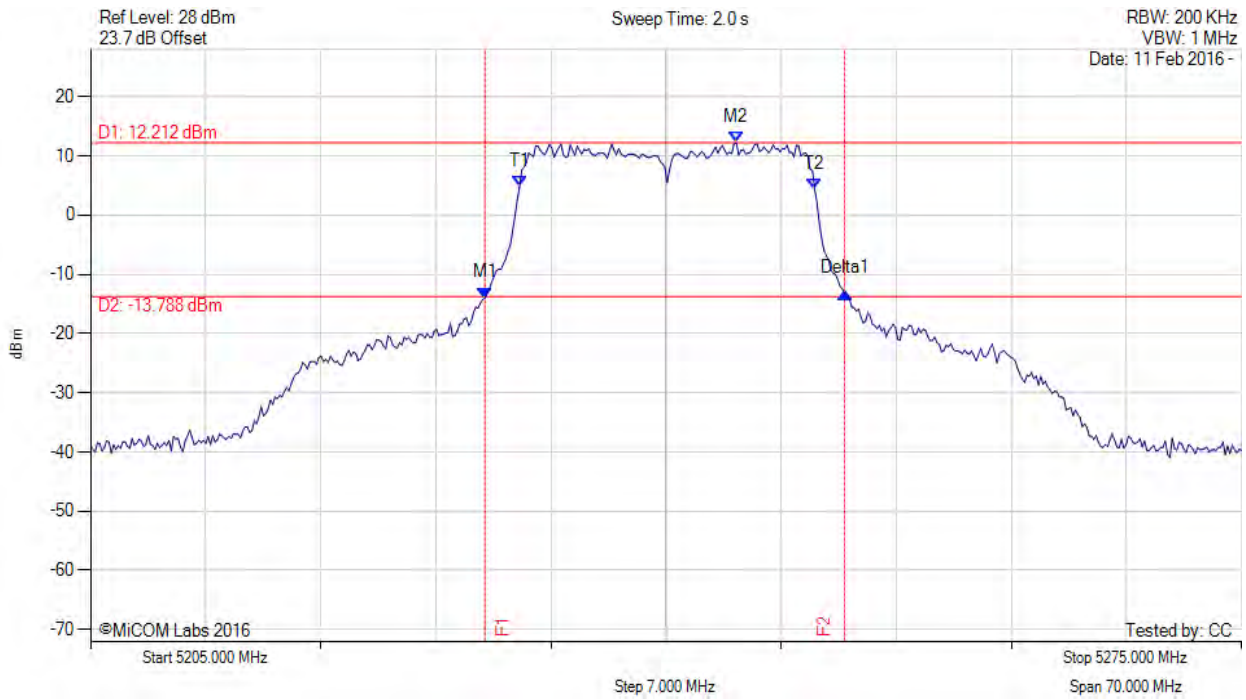


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5188.988 MHz : -14.495 dBm M2 : 5204.138 MHz : 12.106 dBm Delta1 : 21.884 MHz : 1.676 dB T1 : 5191.092 MHz : 4.476 dBm T2 : 5209.048 MHz : 4.392 dBm OBW : 17.956 MHz	Measured 26 dB Bandwidth: 21.884 MHz Measured 99% Bandwidth: 17.956 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5240.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

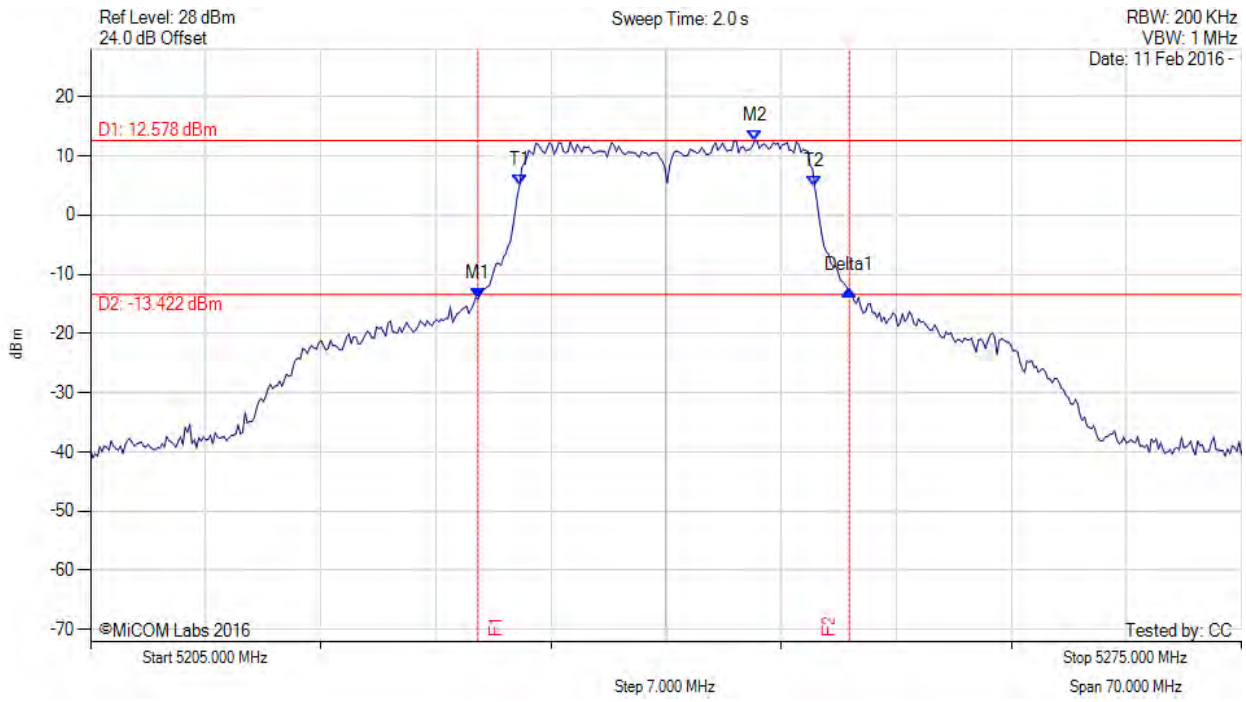


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5228.988 MHz : -13.989 dBm M2 : 5244.279 MHz : 12.212 dBm Delta1 : 21.884 MHz : 0.781 dB T1 : 5231.092 MHz : 4.793 dBm T2 : 5249.048 MHz : 4.352 dBm OBW : 17.956 MHz	Measured 26 dB Bandwidth: 21.884 MHz Measured 99% Bandwidth: 17.956 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5240.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

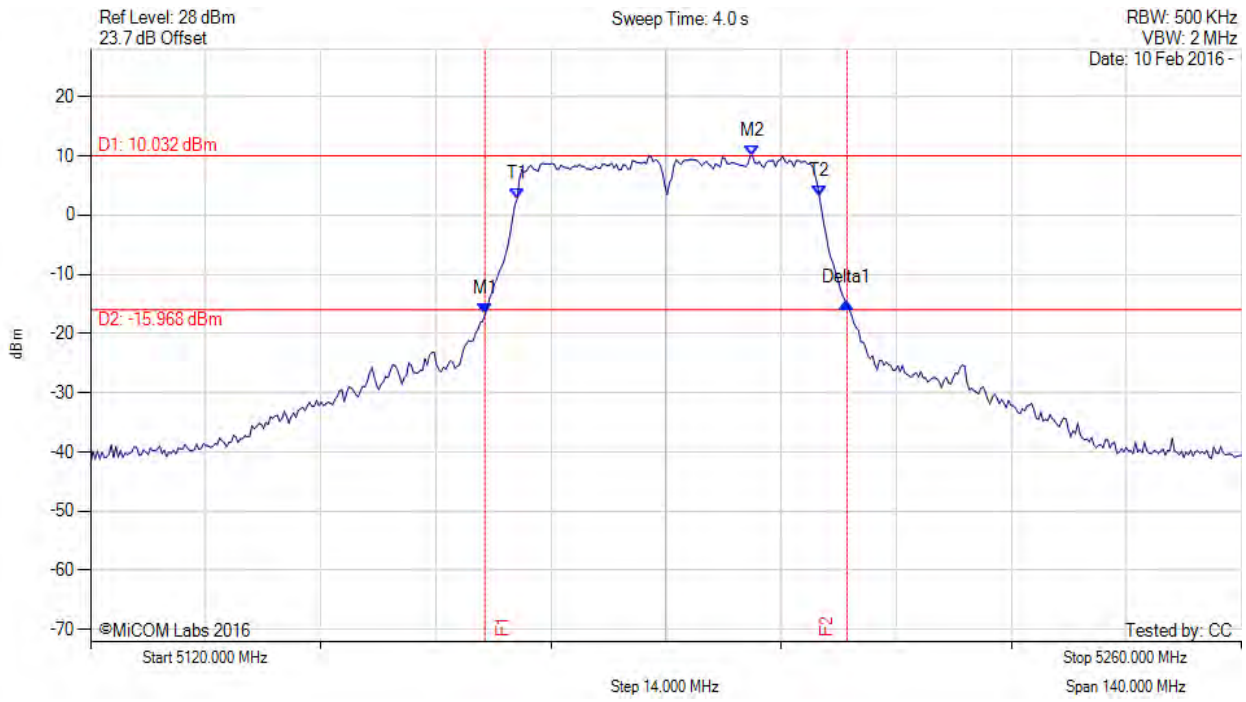


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5228.567 MHz : -14.176 dBm M2 : 5245.401 MHz : 12.578 dBm Delta1 : 22.585 MHz : 1.554 dB T1 : 5231.092 MHz : 5.041 dBm T2 : 5249.048 MHz : 4.840 dBm OBW : 17.956 MHz	Measured 26 dB Bandwidth: 22.585 MHz Measured 99% Bandwidth: 17.956 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5190.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

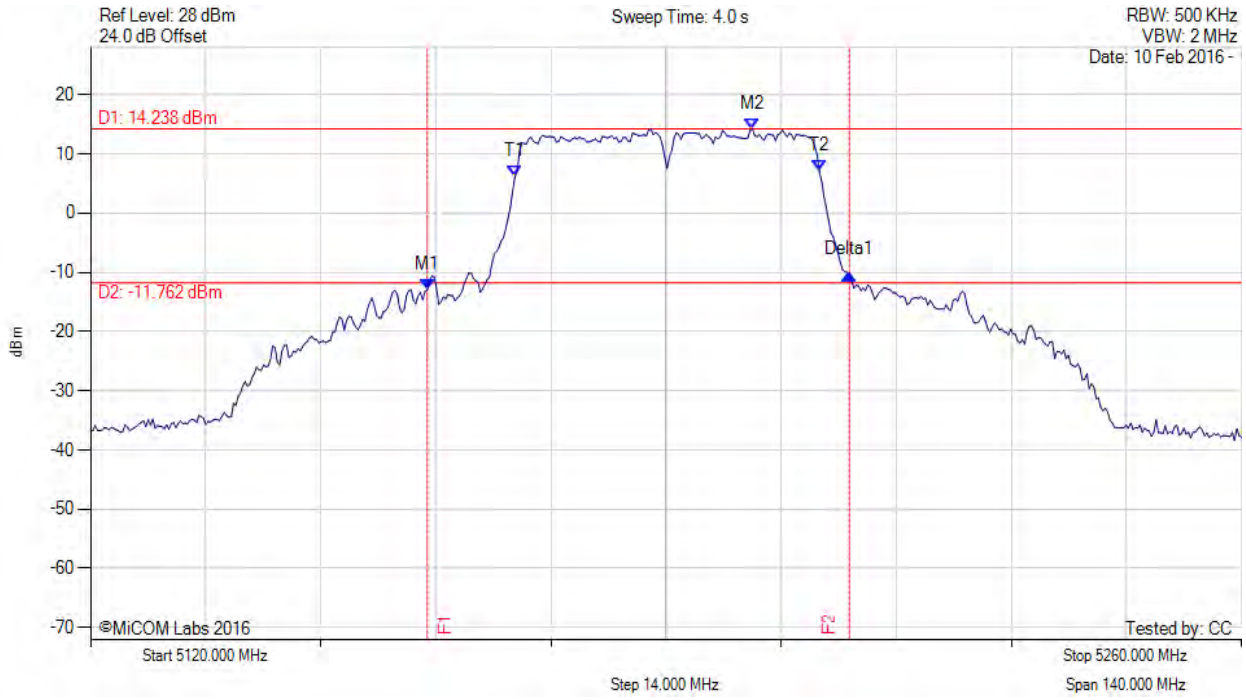


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5167.976 MHz : -16.759 dBm M2 : 5200.521 MHz : 10.032 dBm Delta1 : 44.048 MHz : 1.952 dB T1 : 5171.904 MHz : 2.828 dBm T2 : 5208.657 MHz : 3.178 dBm OBW : 36.754 MHz	Measured 26 dB Bandwidth: 44.048 MHz Measured 99% Bandwidth: 36.754 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5190.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

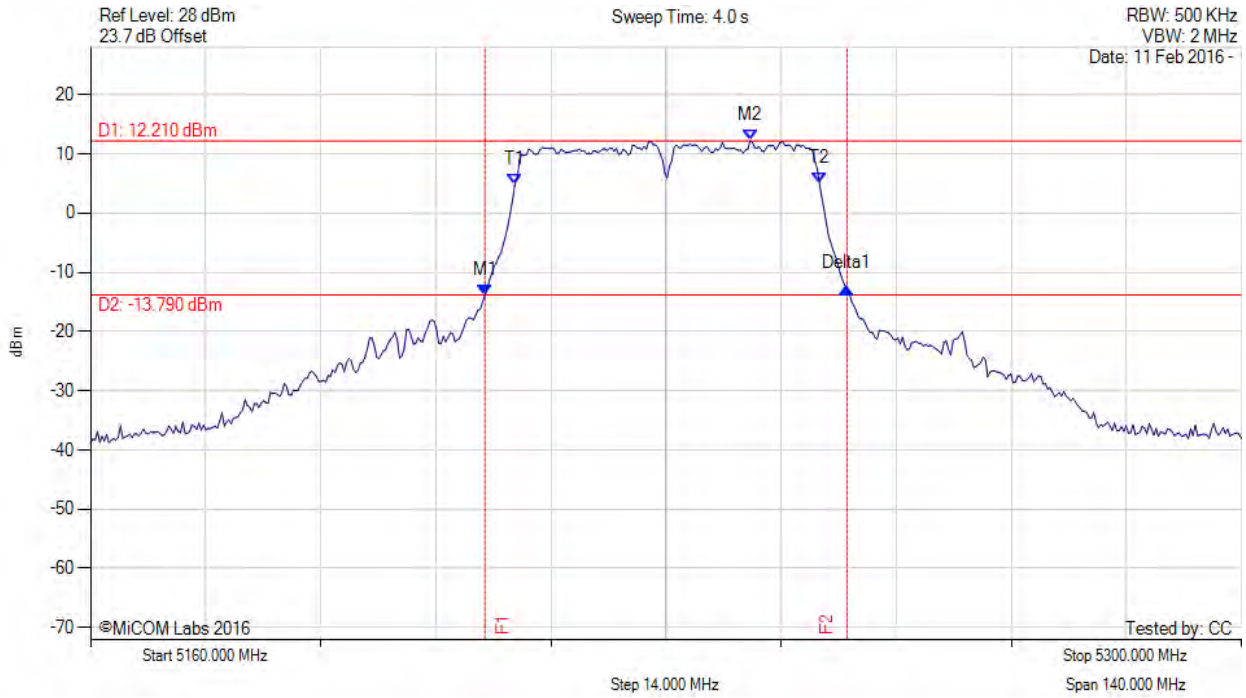


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5160.962 MHz : -12.952 dBm M2 : 5200.521 MHz : 14.238 dBm Delta1 : 51.343 MHz : 2.660 dB T1 : 5171.623 MHz : 6.139 dBm T2 : 5208.657 MHz : 7.077 dBm OBW : 37.034 MHz	Measured 26 dB Bandwidth: 51.343 MHz Measured 99% Bandwidth: 37.034 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5230.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

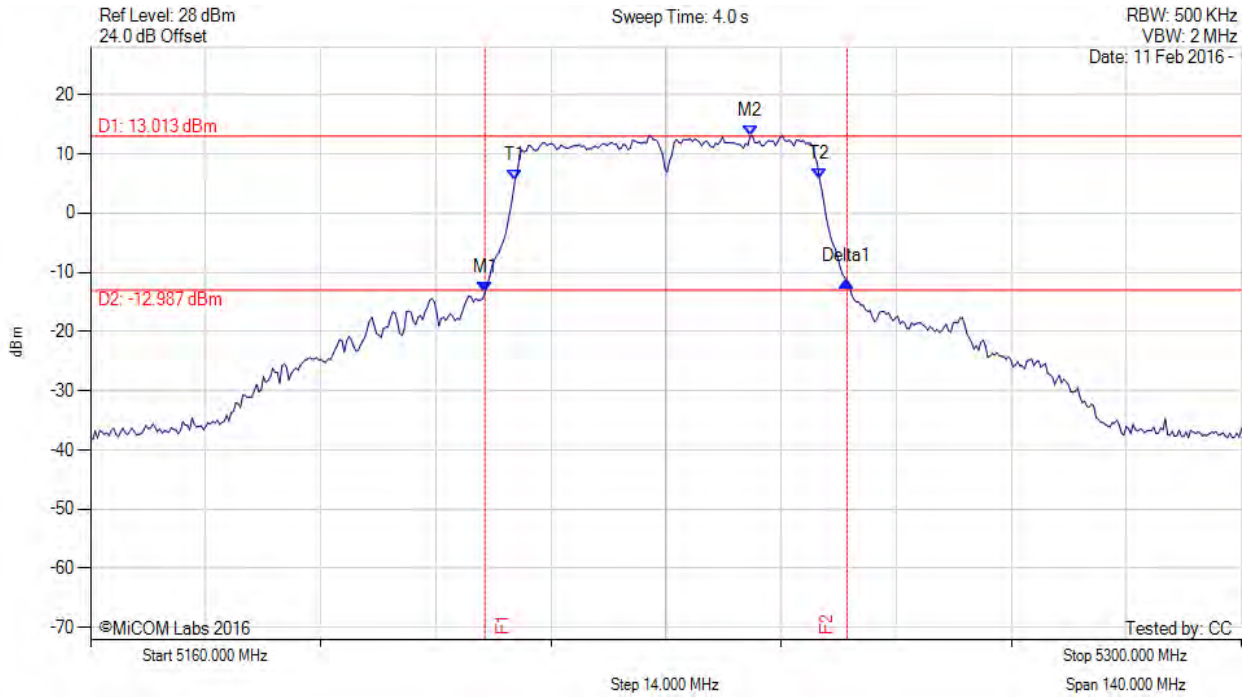


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5207.976 MHz : -13.879 dBm M2 : 5240.240 MHz : 12.210 dBm Delta1 : 44.048 MHz : 1.100 dB T1 : 5211.623 MHz : 4.886 dBm T2 : 5248.657 MHz : 5.126 dBm OBW : 37.034 MHz	Measured 26 dB Bandwidth: 44.048 MHz Measured 99% Bandwidth: 37.034 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5230.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

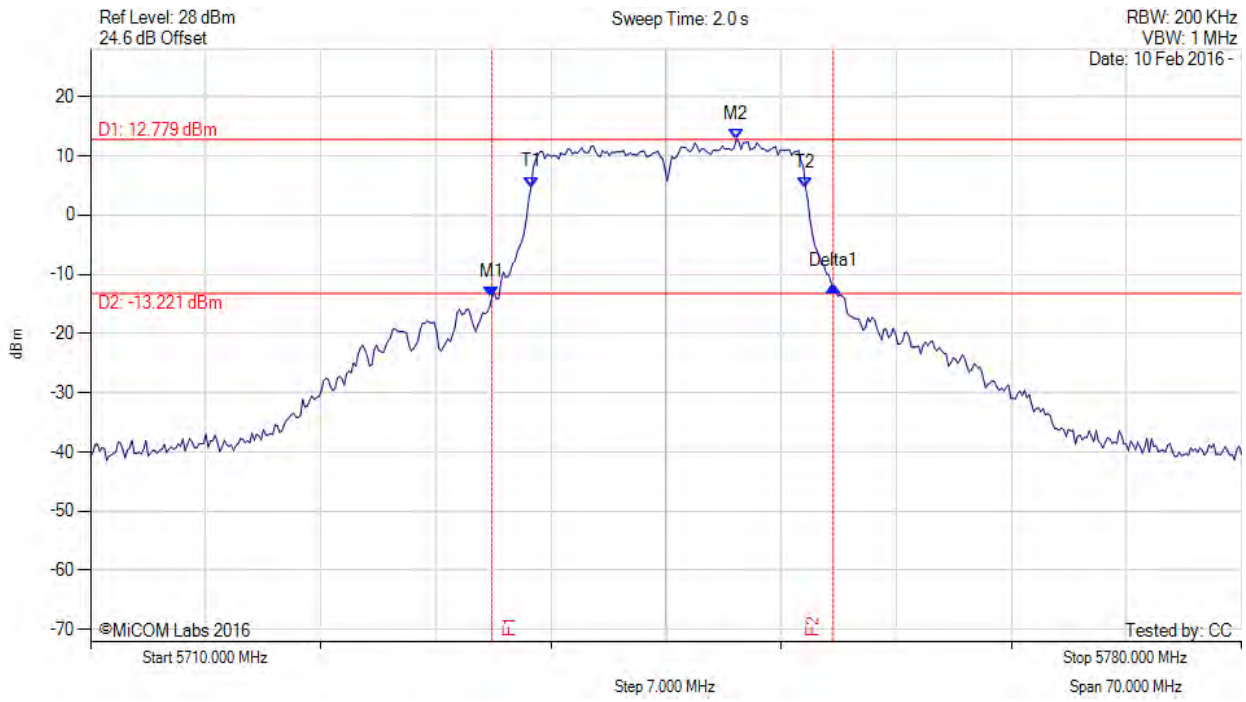


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5207.976 MHz : -13.444 dBm M2 : 5240.240 MHz : 13.013 dBm Delta1 : 44.048 MHz : 1.989 dB T1 : 5211.623 MHz : 5.547 dBm T2 : 5248.657 MHz : 5.834 dBm OBW : 37.034 MHz	Measured 26 dB Bandwidth: 44.048 MHz Measured 99% Bandwidth: 37.034 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5745.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5734.409 MHz : -13.848 dBm M2 : 5749.279 MHz : 12.779 dBm Delta1 : 20.762 MHz : 1.769 dB T1 : 5736.794 MHz : 4.712 dBm T2 : 5753.487 MHz : 4.699 dBm OBW : 16.693 MHz	Measured 26 dB Bandwidth: 20.762 MHz Measured 99% Bandwidth: 16.693 MHz

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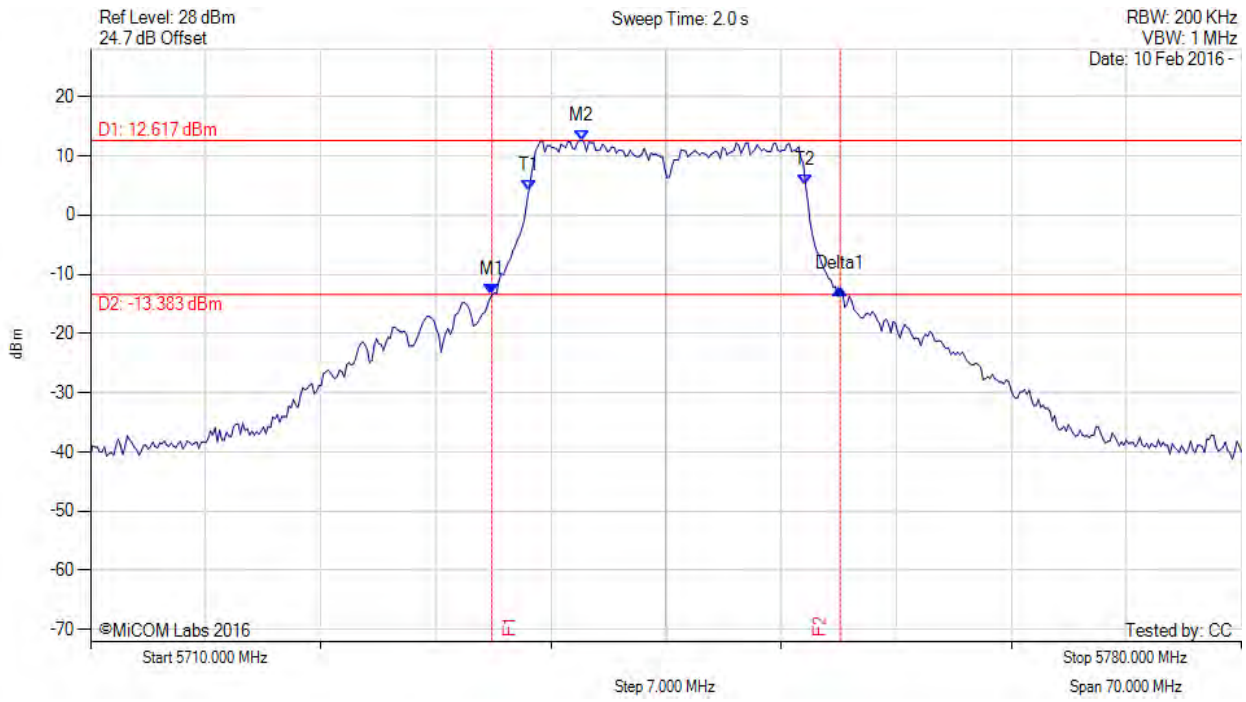
26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5745.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

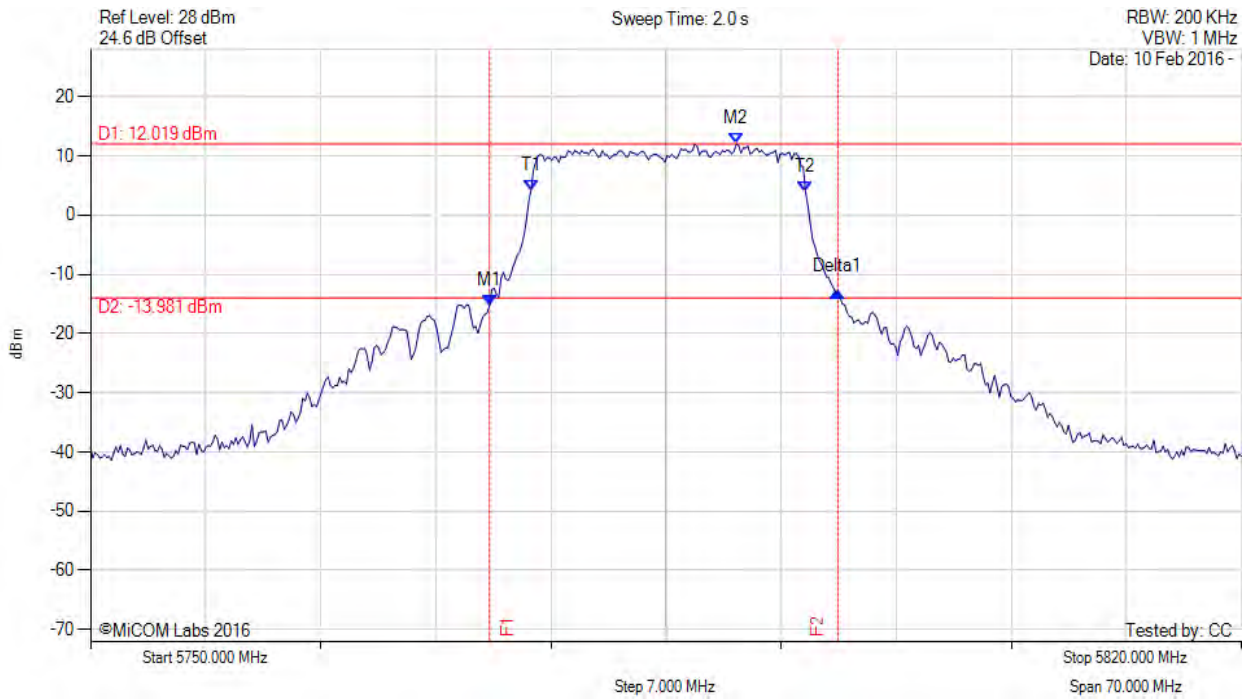


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5734.409 MHz : -13.456 dBm M2 : 5739.880 MHz : 12.617 dBm Delta1 : 21.182 MHz : 0.982 dB T1 : 5736.653 MHz : 4.181 dBm T2 : 5753.487 MHz : 5.155 dBm OBW : 16.834 MHz	Measured 26 dB Bandwidth: 21.182 MHz Measured 99% Bandwidth: 16.834 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5785.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

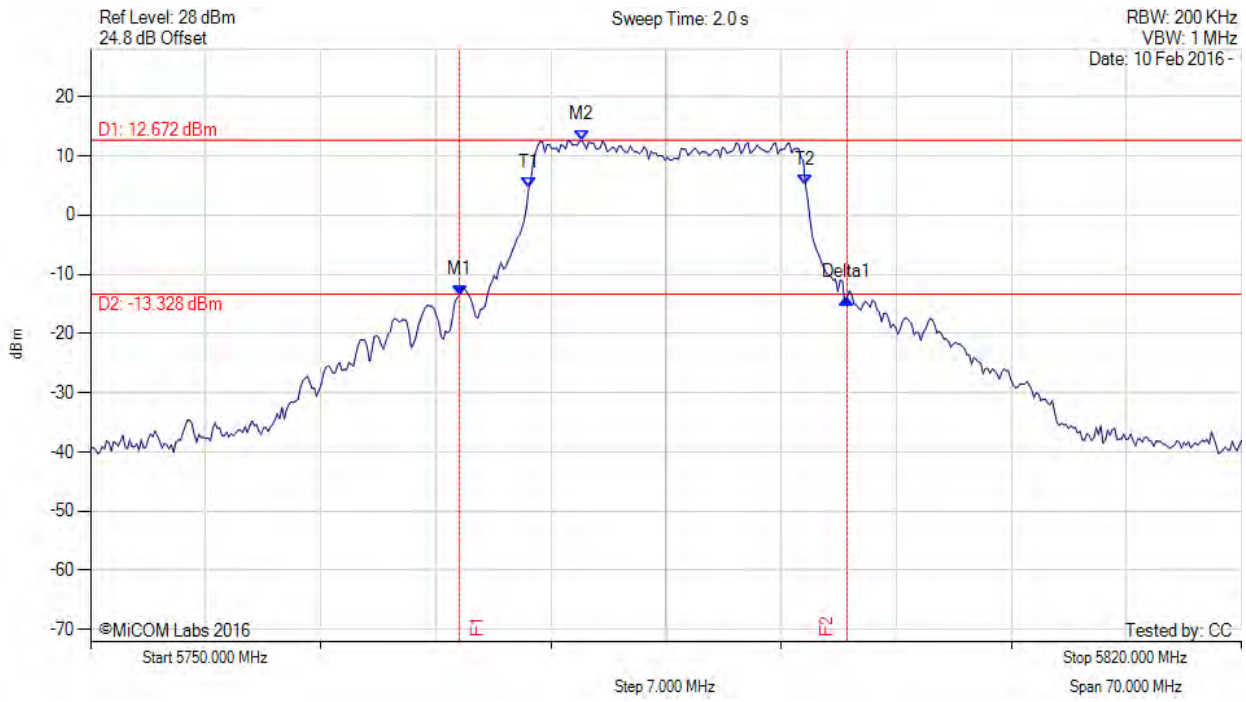


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5774.269 MHz : -15.209 dBm M2 : 5789.279 MHz : 12.019 dBm Delta1 : 21.182 MHz : 2.205 dB T1 : 5776.794 MHz : 4.217 dBm T2 : 5793.487 MHz : 3.992 dBm OBW : 16.693 MHz	Measured 26 dB Bandwidth: 21.182 MHz Measured 99% Bandwidth: 16.693 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5785.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

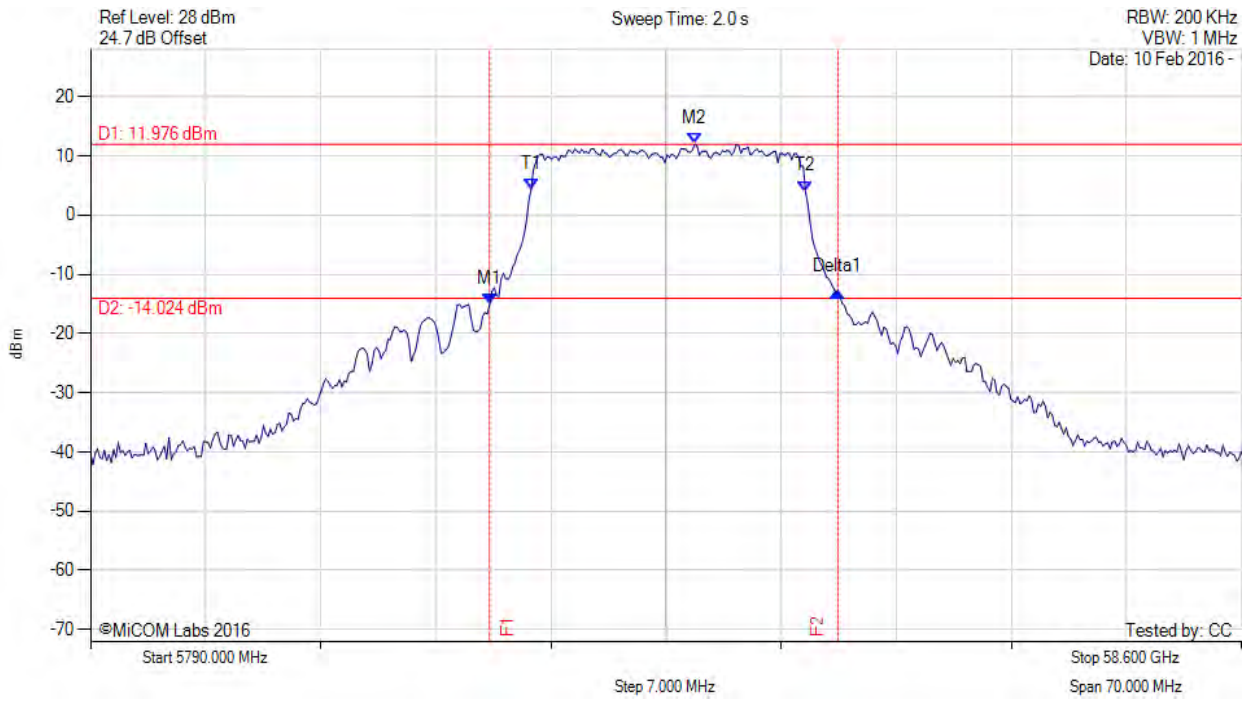


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5772.445 MHz : -13.523 dBm M2 : 5779.880 MHz : 12.672 dBm Delta1 : 23.567 MHz : -0.462 dB T1 : 5776.653 MHz : 4.543 dBm T2 : 5793.487 MHz : 5.094 dBm OBW : 16.834 MHz	Measured 26 dB Bandwidth: 23.567 MHz Measured 99% Bandwidth: 16.834 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5825.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5814.269 MHz : -15.111 dBm M2 : 5826.754 MHz : 11.976 dBm Delta1 : 21.182 MHz : 2.107 dB T1 : 5816.794 MHz : 4.264 dBm T2 : 5833.487 MHz : 4.028 dBm OBW : 16.693 MHz	Measured 26 dB Bandwidth: 21.182 MHz Measured 99% Bandwidth: 16.693 MHz

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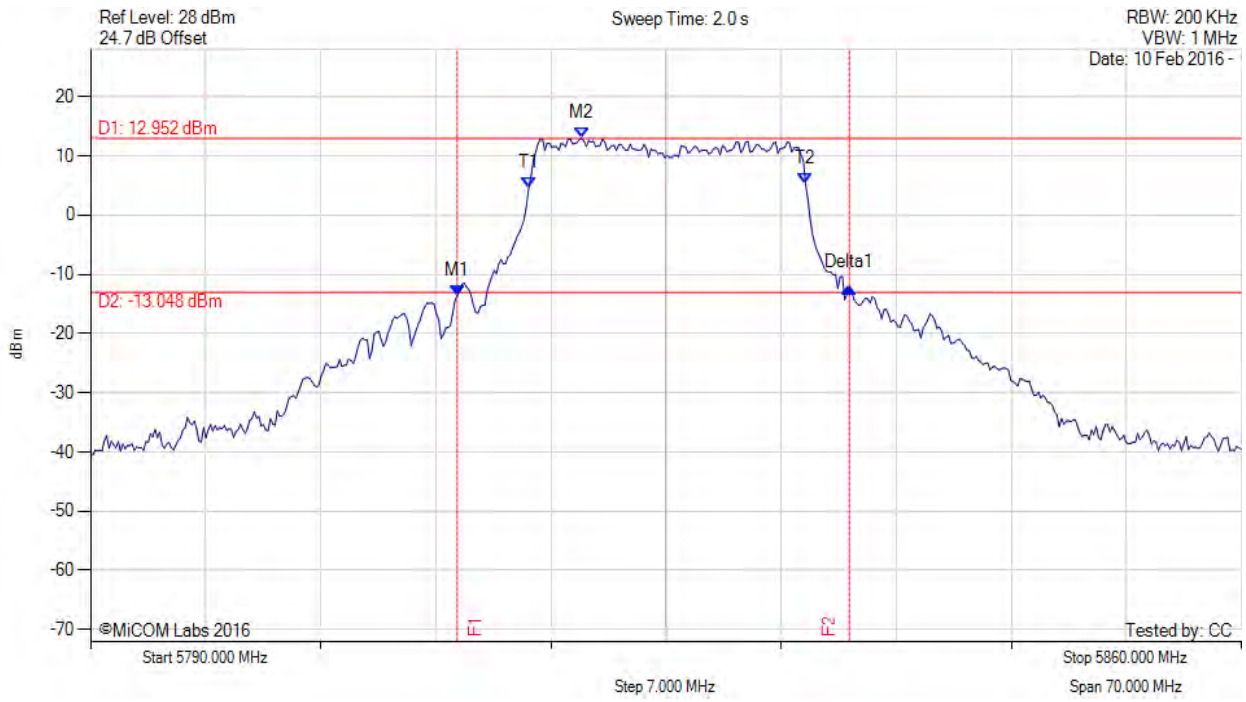
26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5825.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

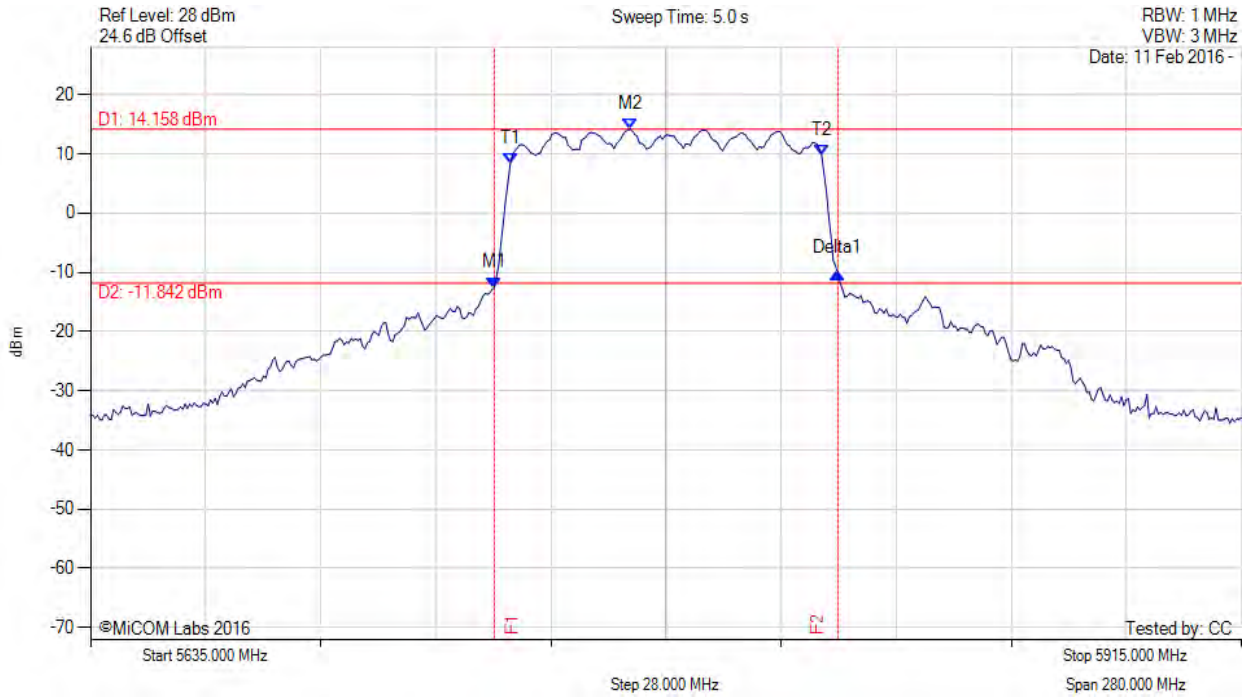


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5812.305 MHz : -13.539 dBm M2 : 5819.880 MHz : 12.952 dBm Delta1 : 23.848 MHz : 1.348 dB T1 : 5816.653 MHz : 4.649 dBm T2 : 5833.487 MHz : 5.285 dBm OBW : 16.834 MHz	Measured 26 dB Bandwidth: 23.848 MHz Measured 99% Bandwidth: 16.834 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11ac-80, Channel: 5775.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

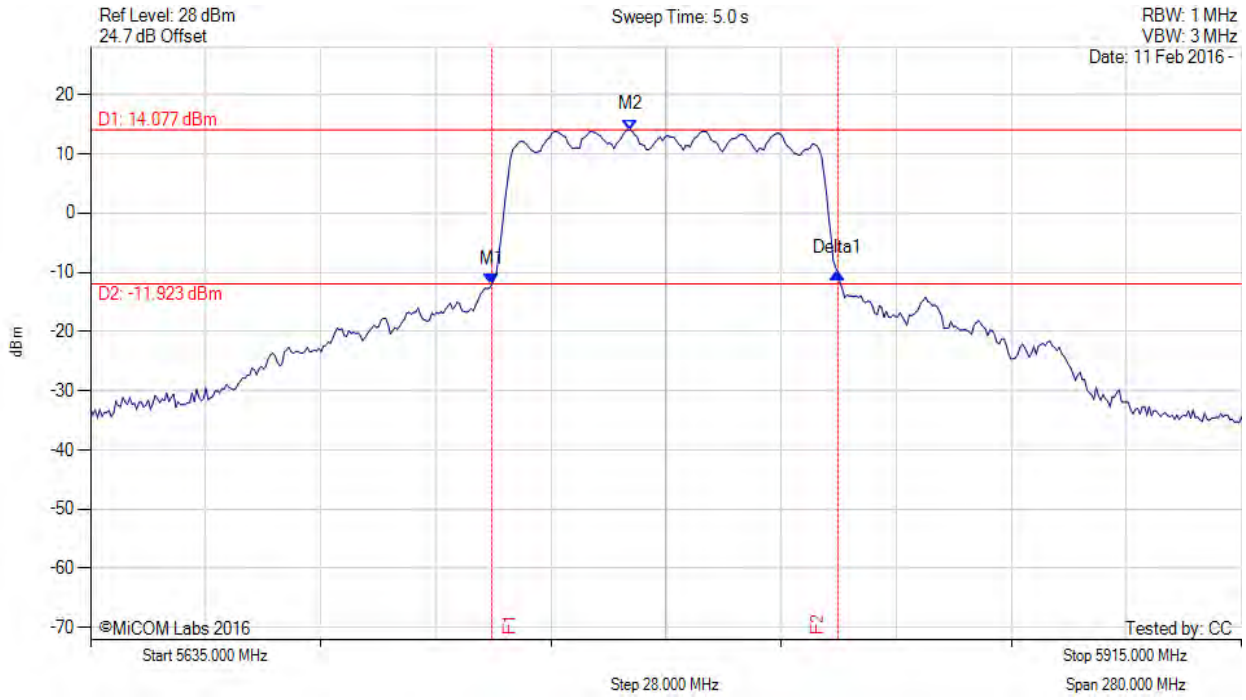


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5733.196 MHz : -12.571 dBm M2 : 5766.303 MHz : 14.158 dBm Delta1 : 83.607 MHz : 2.483 dB T1 : 5737.124 MHz : 8.356 dBm T2 : 5812.876 MHz : 9.706 dBm OBW : 75.752 MHz	Measured 26 dB Bandwidth: 83.607 MHz Measured 99% Bandwidth: 75.752 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11ac-80, Channel: 5775.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

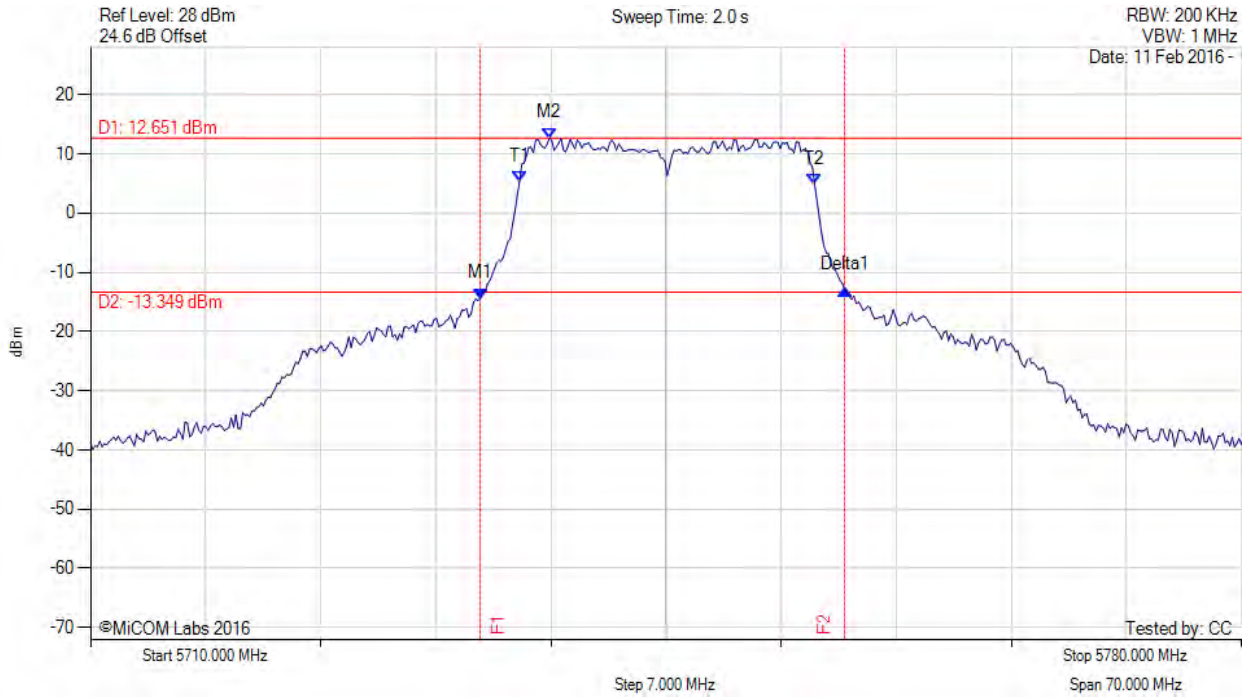


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5732.635 MHz : -12.000 dBm M2 : 5766.303 MHz : 14.077 dBm Delta1 : 84.168 MHz : 1.928 dB T1 : 0 Hz : 500.000 dBm T2 : 0 Hz : 500.000 dBm OBW : 75.752 MHz	Measured 26 dB Bandwidth: 84.168 MHz Measured 99% Bandwidth: 75.752 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5745.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5733.707 MHz : -14.434 dBm M2 : 5737.916 MHz : 12.651 dBm Delta1 : 22.164 MHz : 1.491 dB T1 : 5736.092 MHz : 5.324 dBm T2 : 5754.048 MHz : 4.832 dBm OBW : 17.956 MHz	Measured 26 dB Bandwidth: 22.164 MHz Measured 99% Bandwidth: 17.956 MHz

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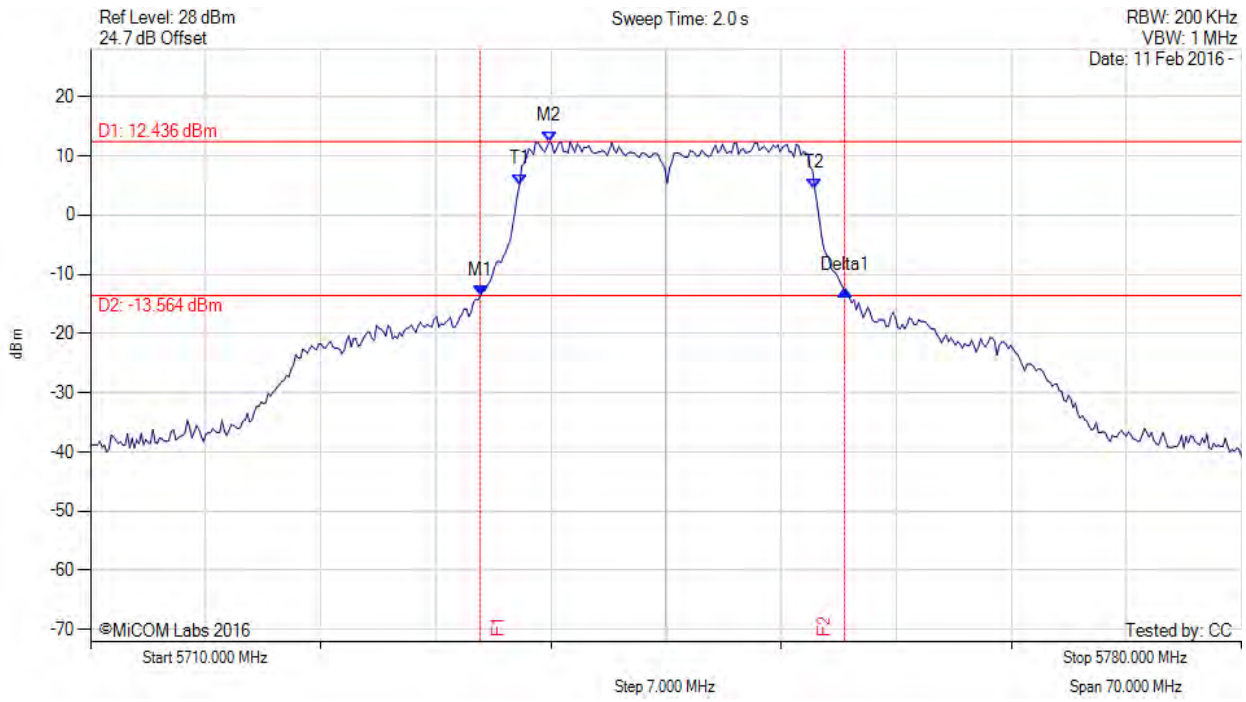
26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5745.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5733.707 MHz : -13.604 dBm M2 : 5737.916 MHz : 12.436 dBm Delta1 : 22.164 MHz : 0.850 dB T1 : 5736.092 MHz : 5.194 dBm T2 : 5754.048 MHz : 4.494 dBm OBW : 17.956 MHz	Measured 26 dB Bandwidth: 22.164 MHz Measured 99% Bandwidth: 17.956 MHz

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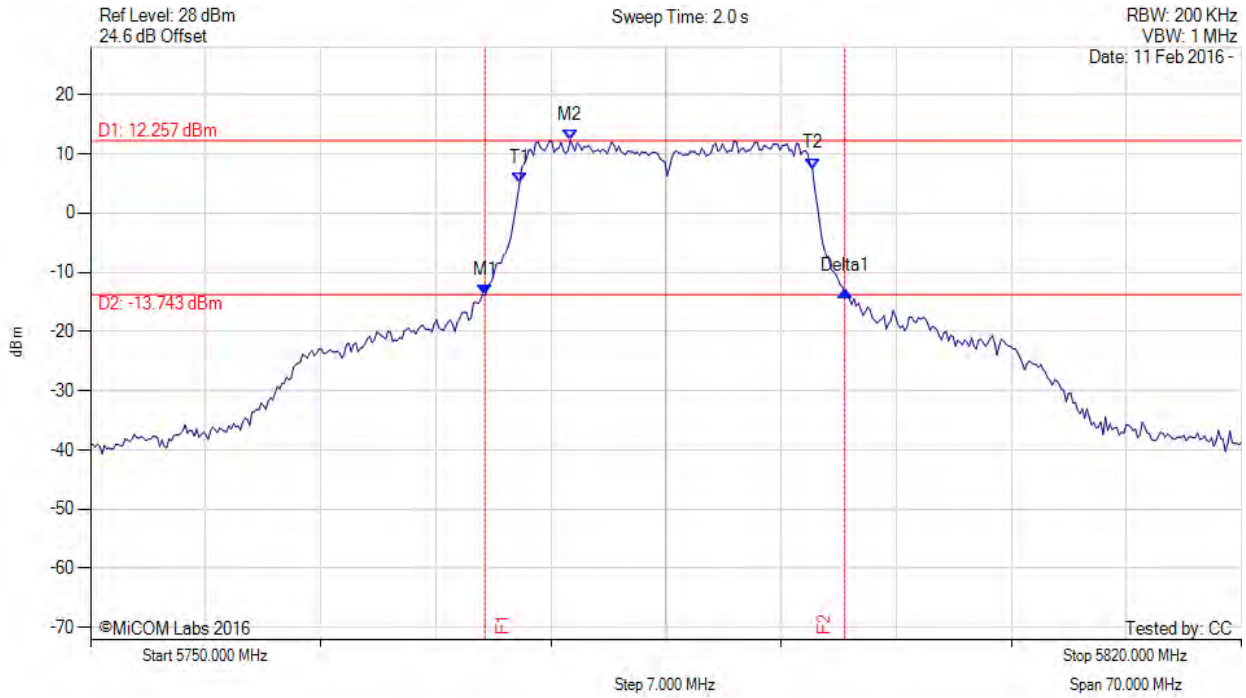
26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5785.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5773.988 MHz : -13.877 dBm M2 : 5779.178 MHz : 12.257 dBm Delta1 : 21.884 MHz : 0.687 dB T1 : 5776.092 MHz : 5.070 dBm T2 : 5793.908 MHz : 7.532 dBm OBW : 17.816 MHz	Measured 26 dB Bandwidth: 21.884 MHz Measured 99% Bandwidth: 17.816 MHz

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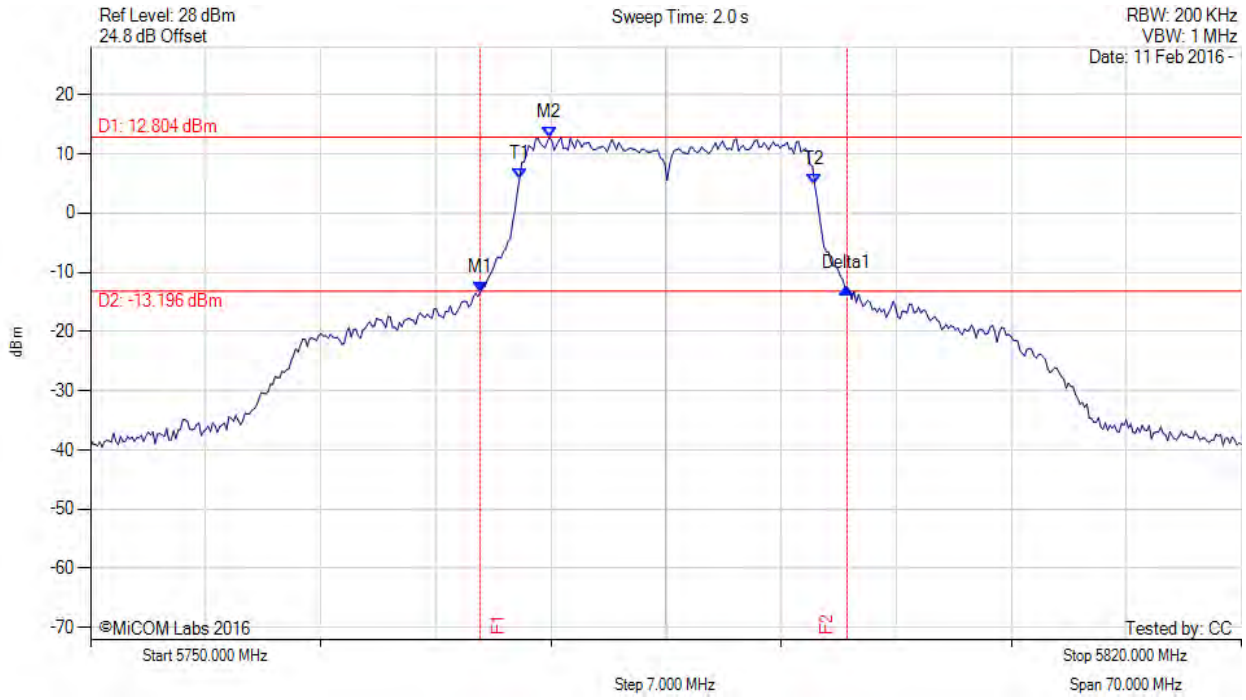
26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5785.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5773.707 MHz : -13.320 dBm M2 : 5777.916 MHz : 12.804 dBm Delta1 : 22.305 MHz : 0.716 dB T1 : 5776.092 MHz : 5.824 dBm T2 : 5794.048 MHz : 4.773 dBm OBW : 17.956 MHz	Measured 26 dB Bandwidth: 22.305 MHz Measured 99% Bandwidth: 17.956 MHz

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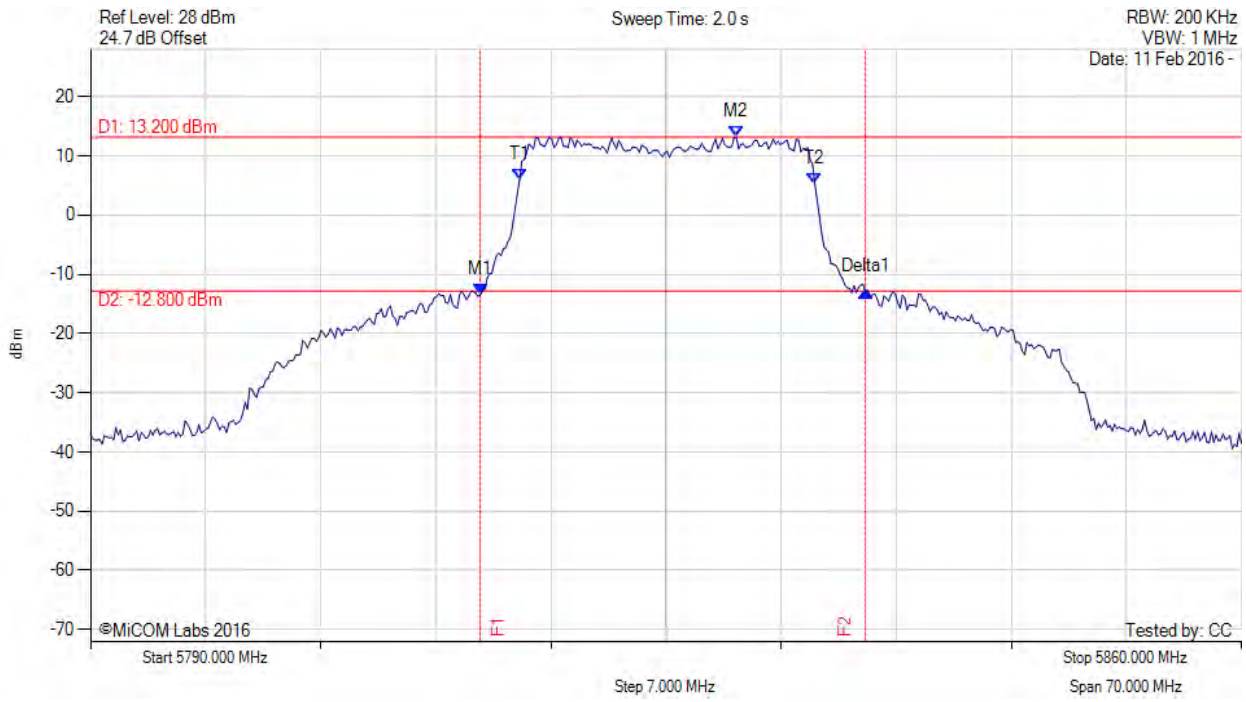
26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5825.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5813.707 MHz : -13.466 dBm M2 : 5829.279 MHz : 13.200 dBm Delta1 : 23.427 MHz : 0.567 dB T1 : 5816.092 MHz : 5.946 dBm T2 : 5834.048 MHz : 5.350 dBm OBW : 17.956 MHz	Measured 26 dB Bandwidth: 23.427 MHz Measured 99% Bandwidth: 17.956 MHz

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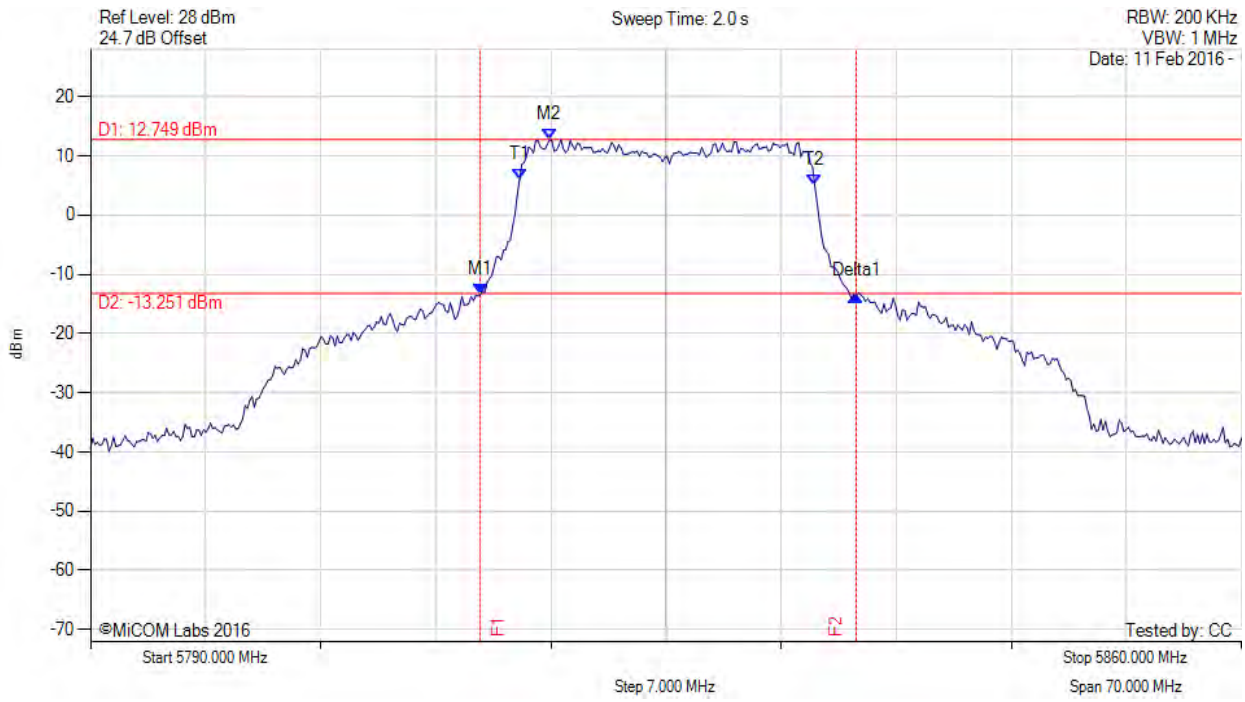
26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5825.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5813.707 MHz : -13.442 dBm M2 : 5817.916 MHz : 12.749 dBm Delta1 : 22.866 MHz : -0.270 dB T1 : 5816.092 MHz : 5.952 dBm T2 : 5834.048 MHz : 5.011 dBm OBW : 17.956 MHz	Measured 26 dB Bandwidth: 22.866 MHz Measured 99% Bandwidth: 17.956 MHz

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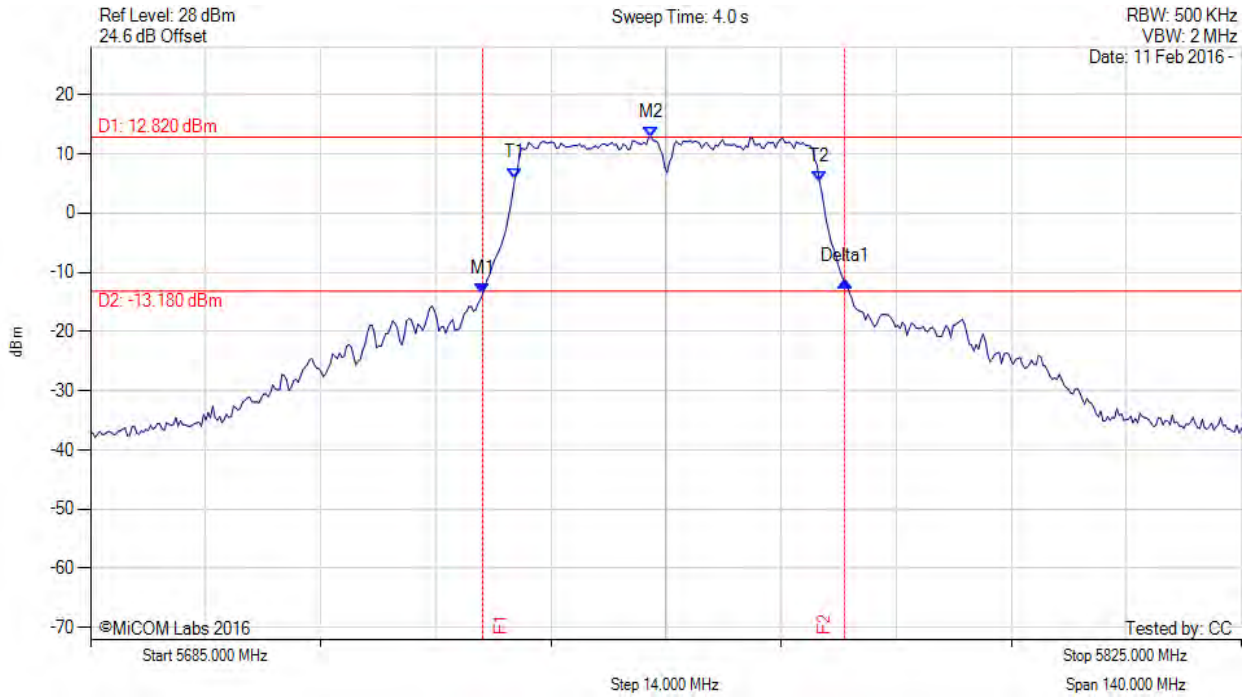
26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5755.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

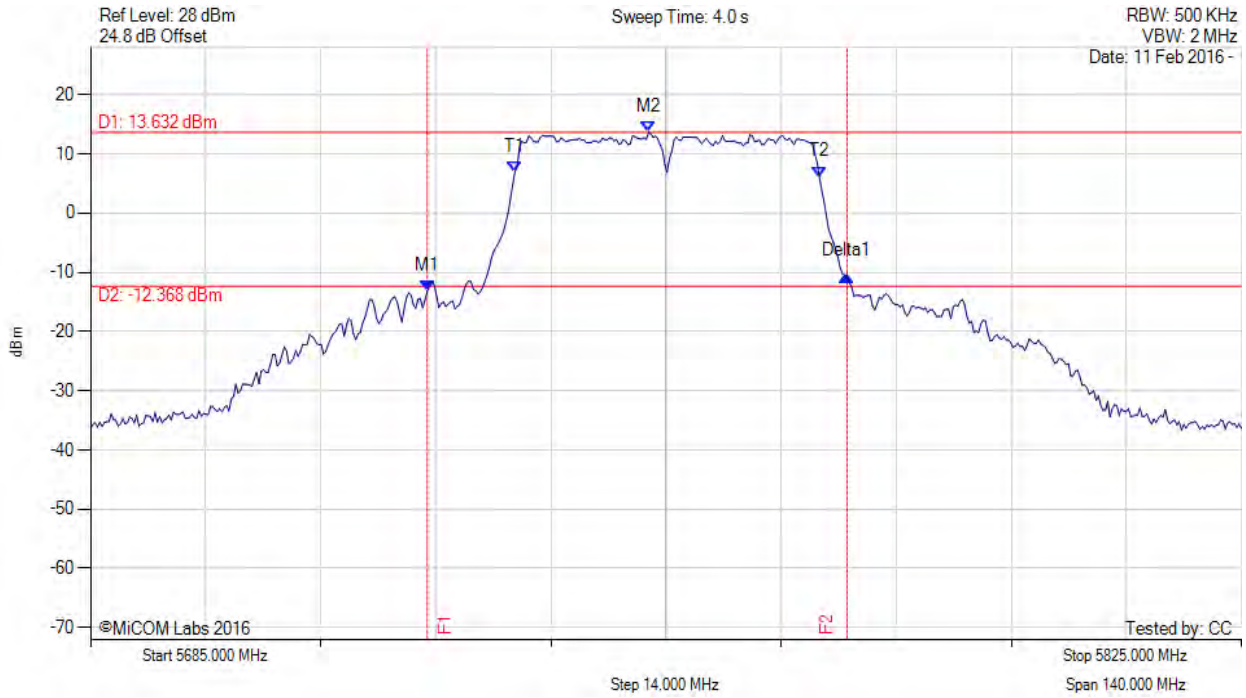


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5732.695 MHz : -13.655 dBm M2 : 5753.176 MHz : 12.820 dBm Delta1 : 44.048 MHz : 2.099 dB T1 : 5736.623 MHz : 5.881 dBm T2 : 5773.657 MHz : 5.368 dBm OBW : 37.034 MHz	Measured 26 dB Bandwidth: 44.048 MHz Measured 99% Bandwidth: 37.034 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5755.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

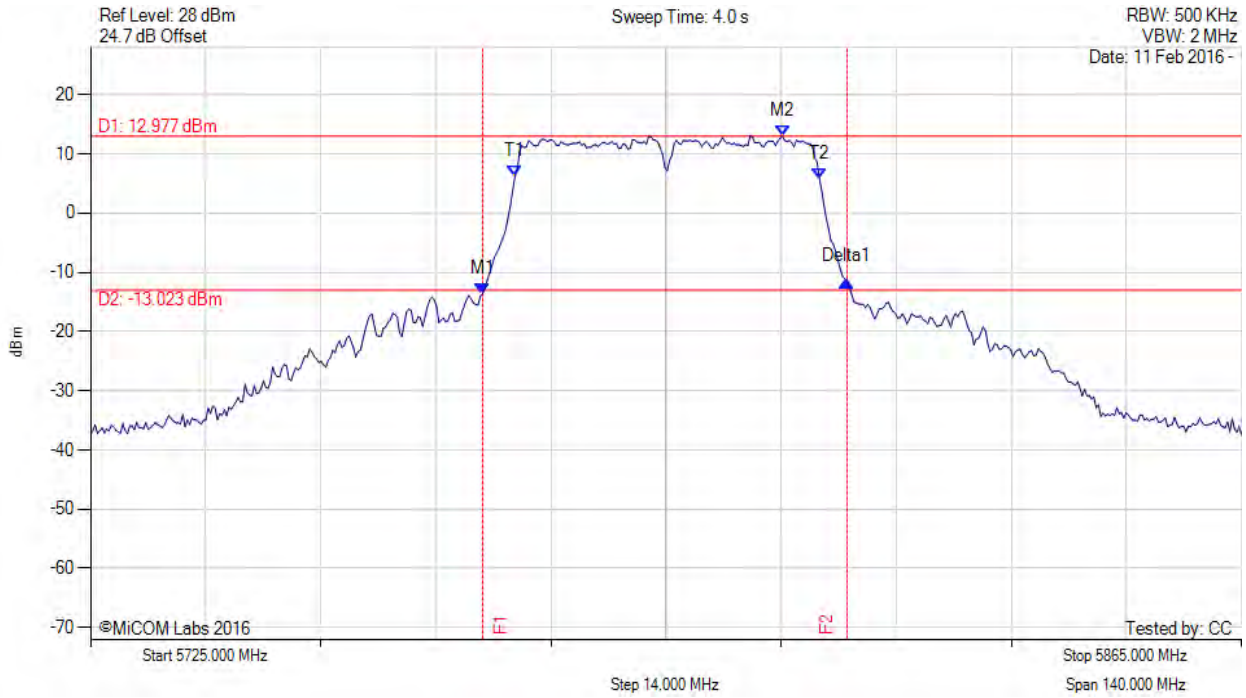


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5725.962 MHz : -13.200 dBm M2 : 5752.896 MHz : 13.632 dBm Delta1 : 51.062 MHz : 2.512 dB T1 : 5736.623 MHz : 6.985 dBm T2 : 5773.657 MHz : 6.107 dBm OBW : 37.034 MHz	Measured 26 dB Bandwidth: 51.062 MHz Measured 99% Bandwidth: 37.034 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5795.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

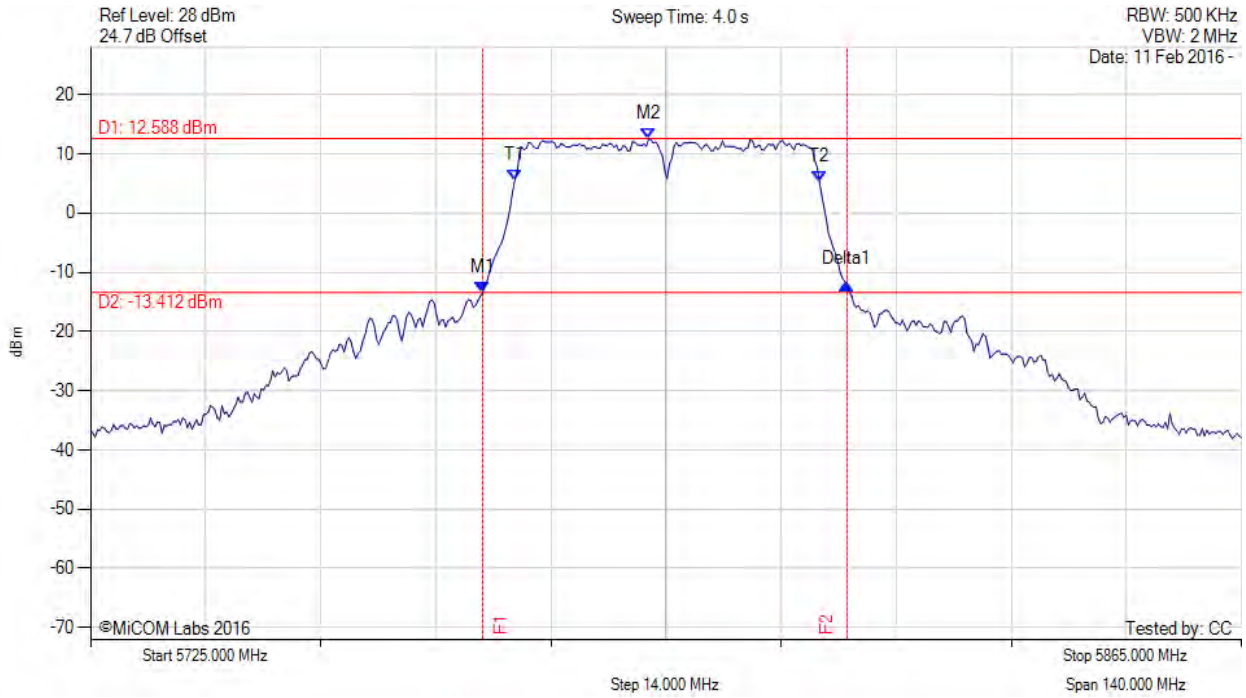


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5772.695 MHz : -13.574 dBm M2 : 5809.168 MHz : 12.977 dBm Delta1 : 44.329 MHz : 2.115 dB T1 : 5776.623 MHz : 6.229 dBm T2 : 5813.657 MHz : 5.816 dBm OBW : 37.034 MHz	Measured 26 dB Bandwidth: 44.329 MHz Measured 99% Bandwidth: 37.034 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5795.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



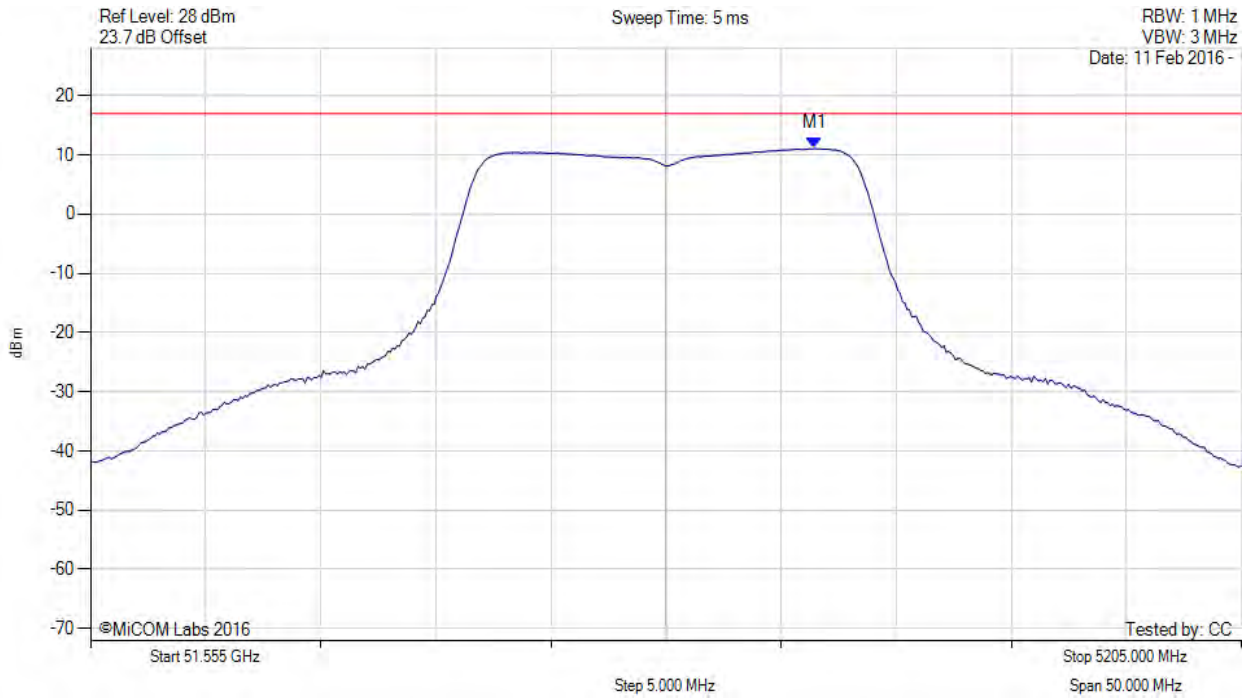
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5772.695 MHz : -13.429 dBm M2 : 5792.896 MHz : 12.588 dBm Delta1 : 44.329 MHz : 1.460 dB T1 : 5776.623 MHz : 5.627 dBm T2 : 5813.657 MHz : 5.350 dBm OBW : 37.034 MHz	Measured 26 dB Bandwidth: 44.329 MHz Measured 99% Bandwidth: 37.034 MHz

back to matrix

A.2. Power Spectral Density

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5180.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

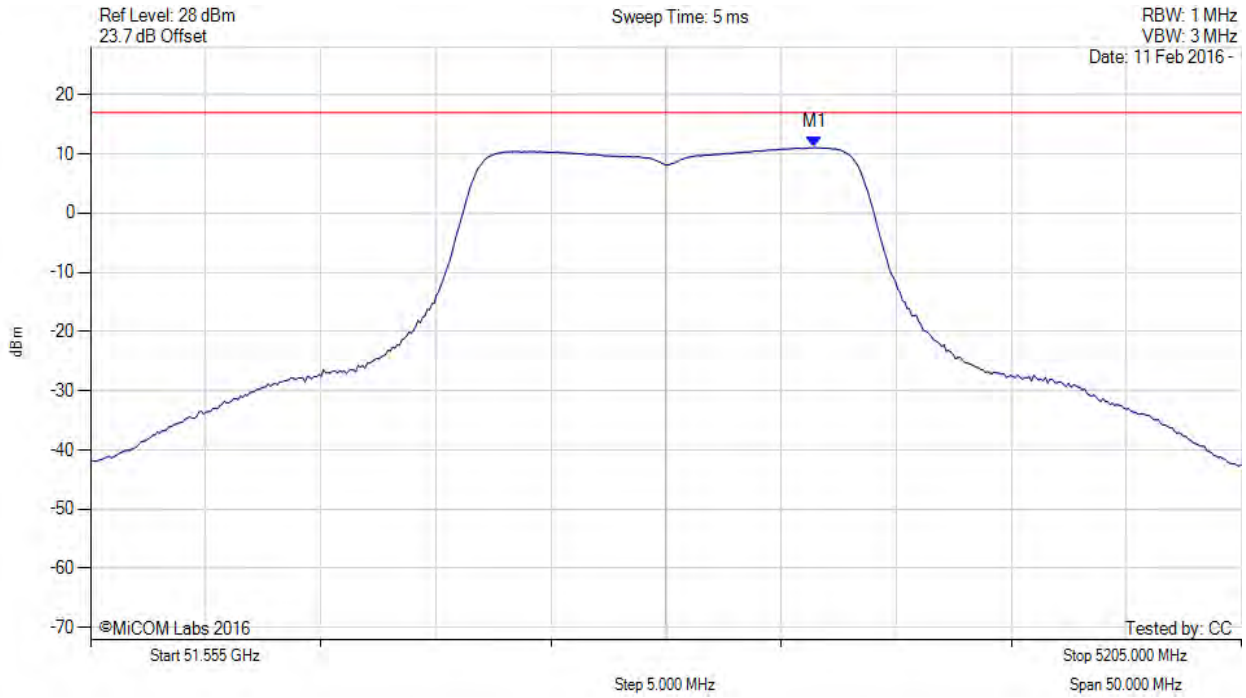


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5186.463 MHz : 11.067 dBm	Limit: ≤ 17.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5180.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

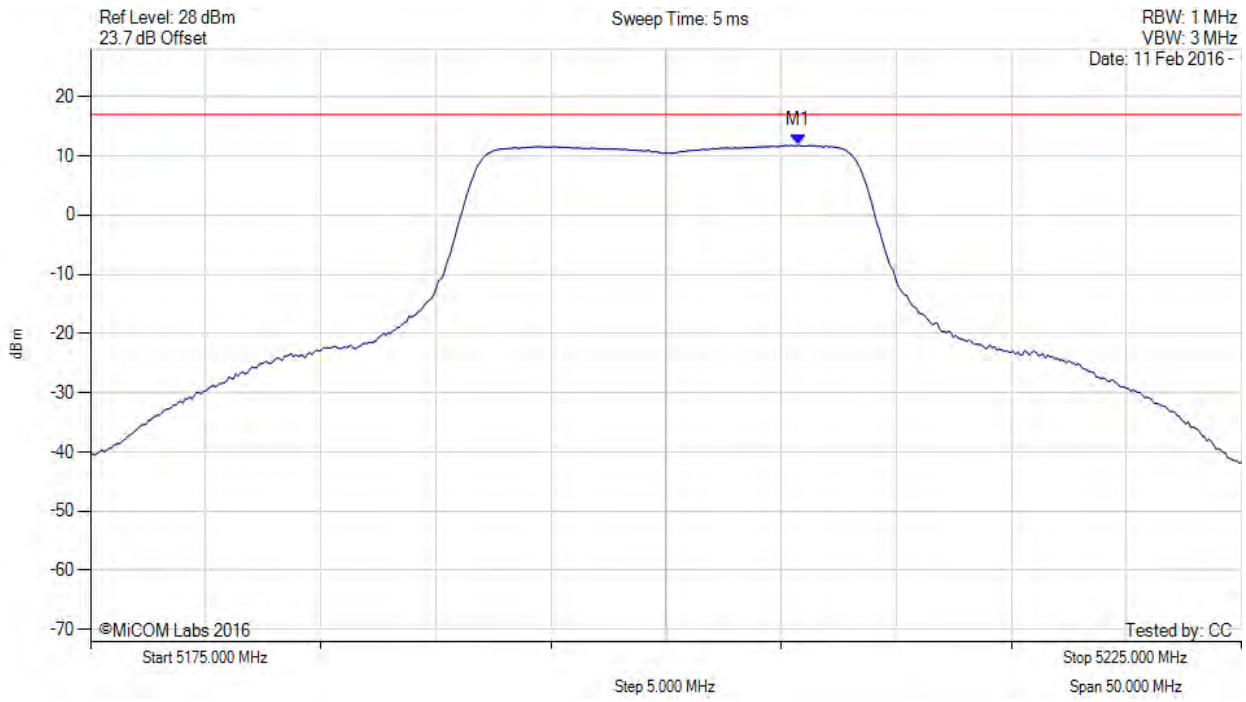


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5186.500 MHz : 11.067 dBm M1 + DCCF : 5186.500 MHz : 11.111 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 17.0 dBm Margin: -5.9 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5200.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

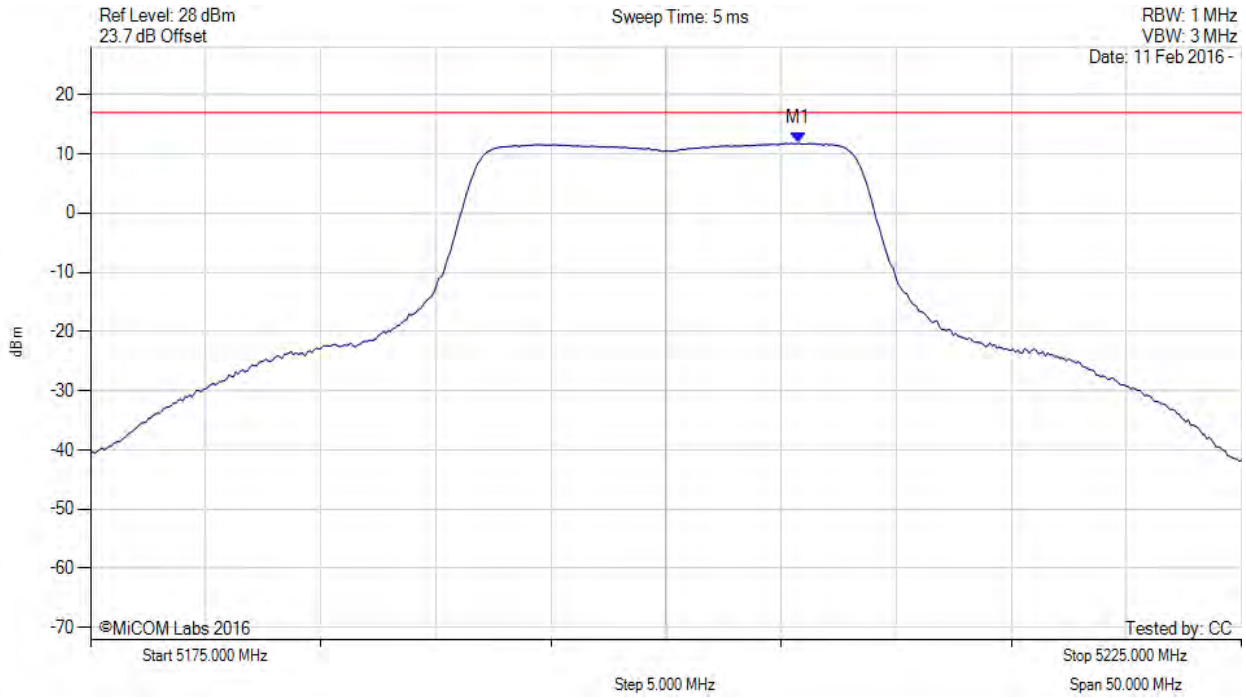


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5205.762 MHz : 11.795 dBm	Limit: ≤ 17.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5200.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

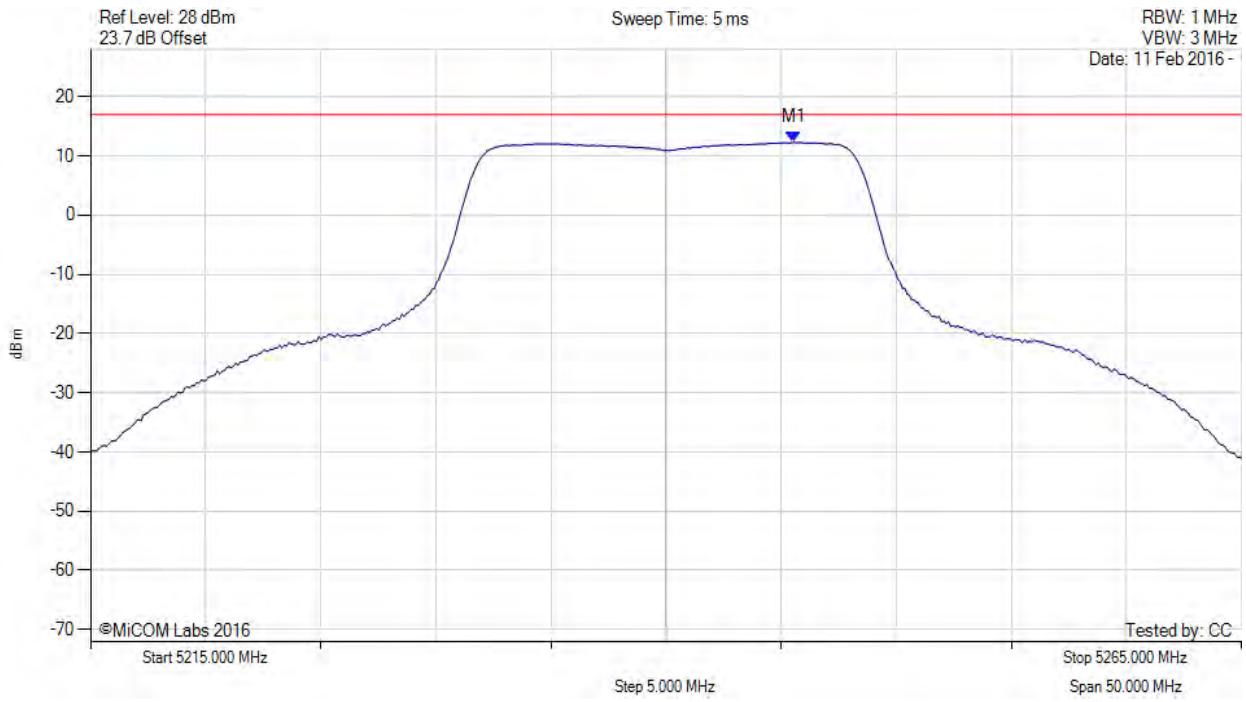


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5205.800 MHz : 11.795 dBm M1 + DCCF : 5205.800 MHz : 11.839 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 17.0 dBm Margin: -5.2 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5240.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

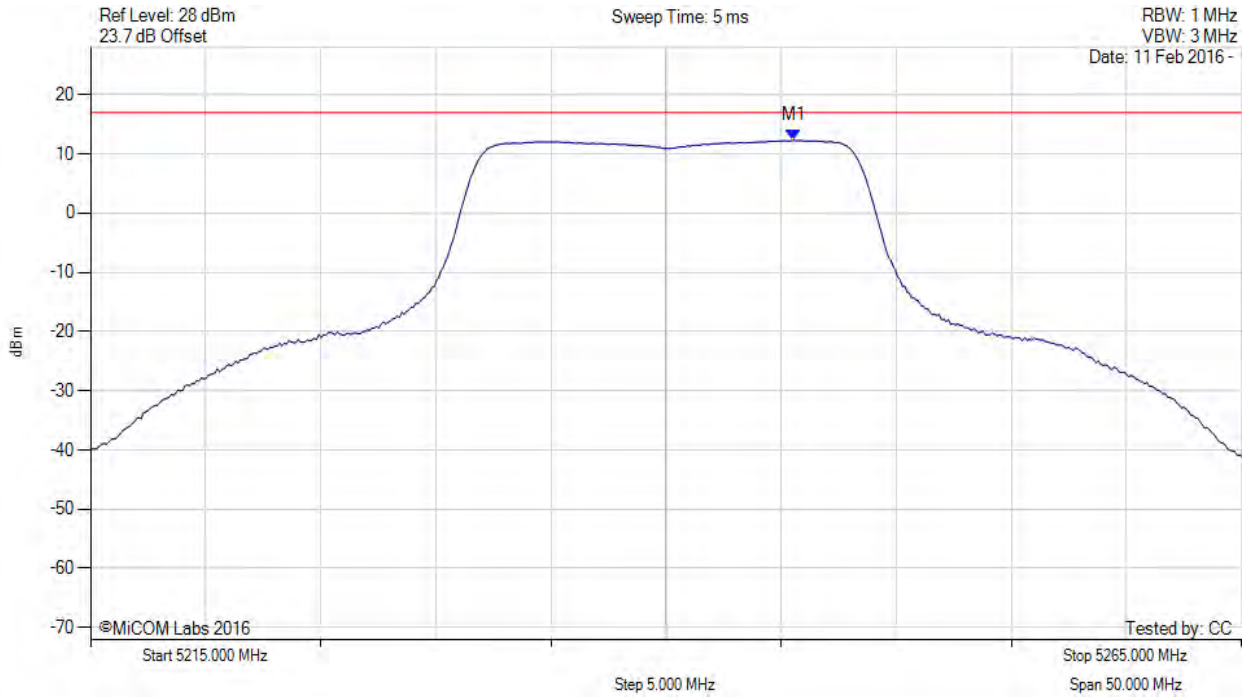


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5245.561 MHz : 12.295 dBm	Limit: ≤ 17.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5240.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

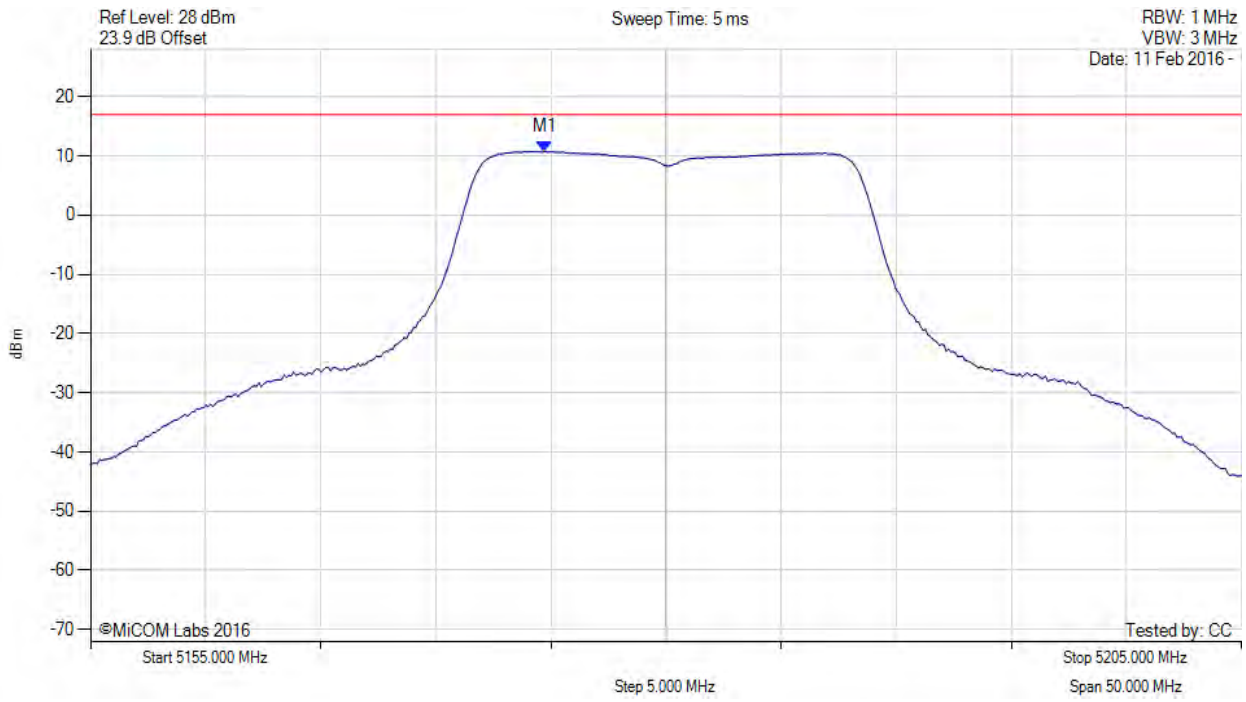


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5245.600 MHz : 12.295 dBm M1 + DCCF : 5245.600 MHz : 12.339 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 17.0 dBm Margin: -4.7 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5180.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

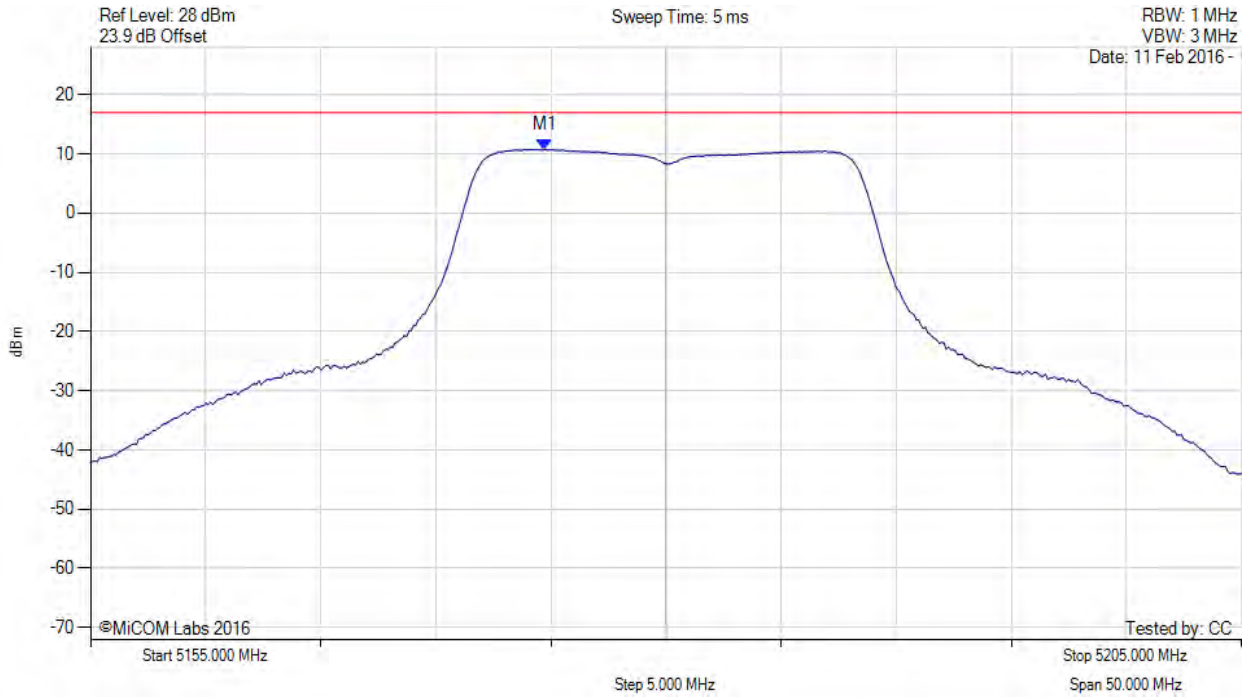


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5174.739 MHz : 10.740 dBm	Limit: ≤ 17.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5180.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

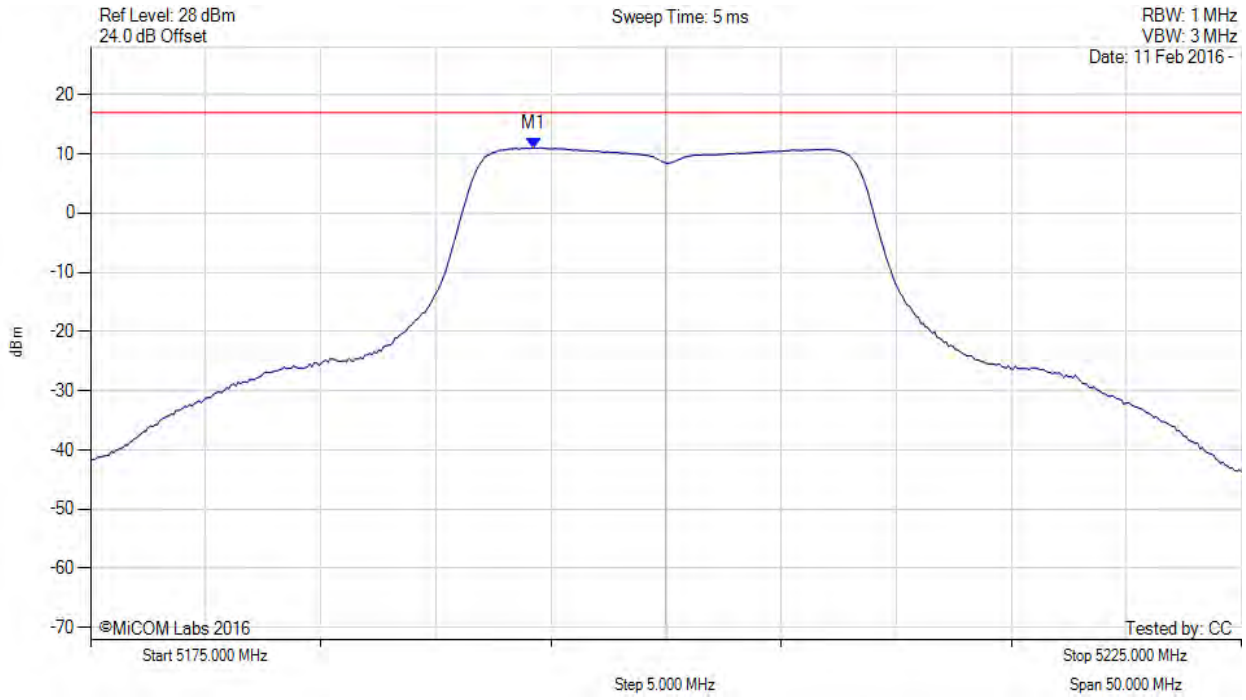


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5174.700 MHz : 10.740 dBm M1 + DCCF : 5174.700 MHz : 10.784 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 17.0 dBm Margin: -6.2 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5200.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

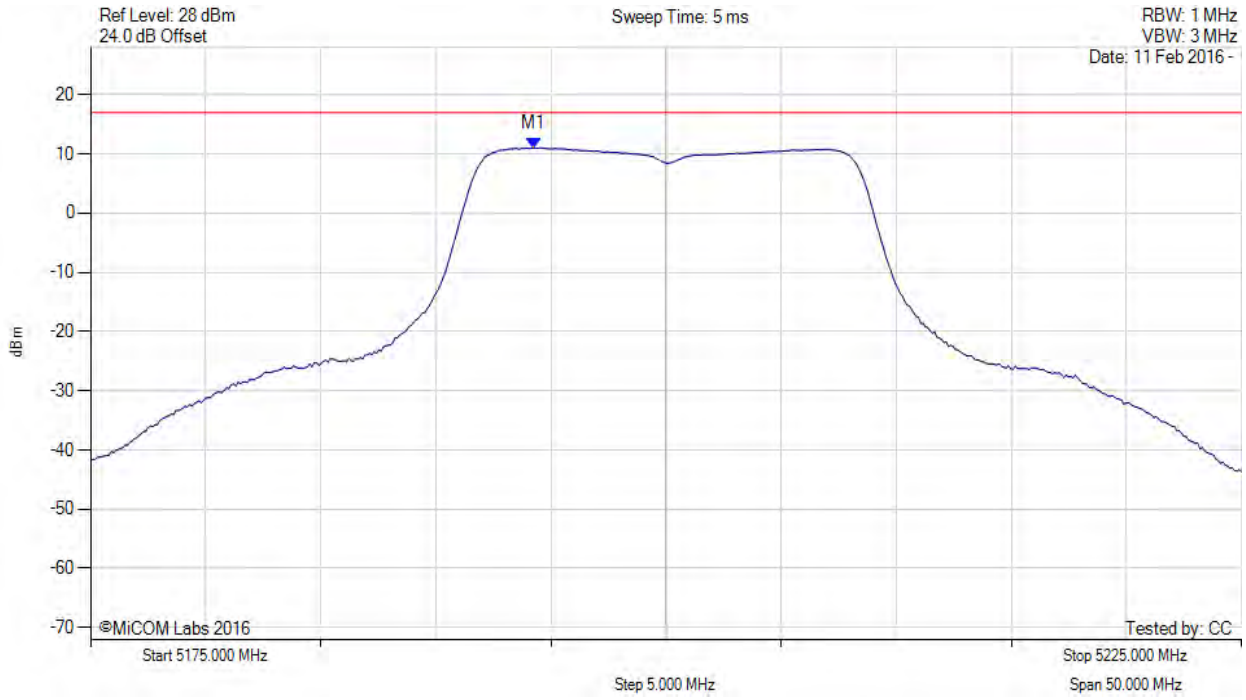


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5194.238 MHz : 11.011 dBm	Channel Frequency: 5200.00 MHz

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5200.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

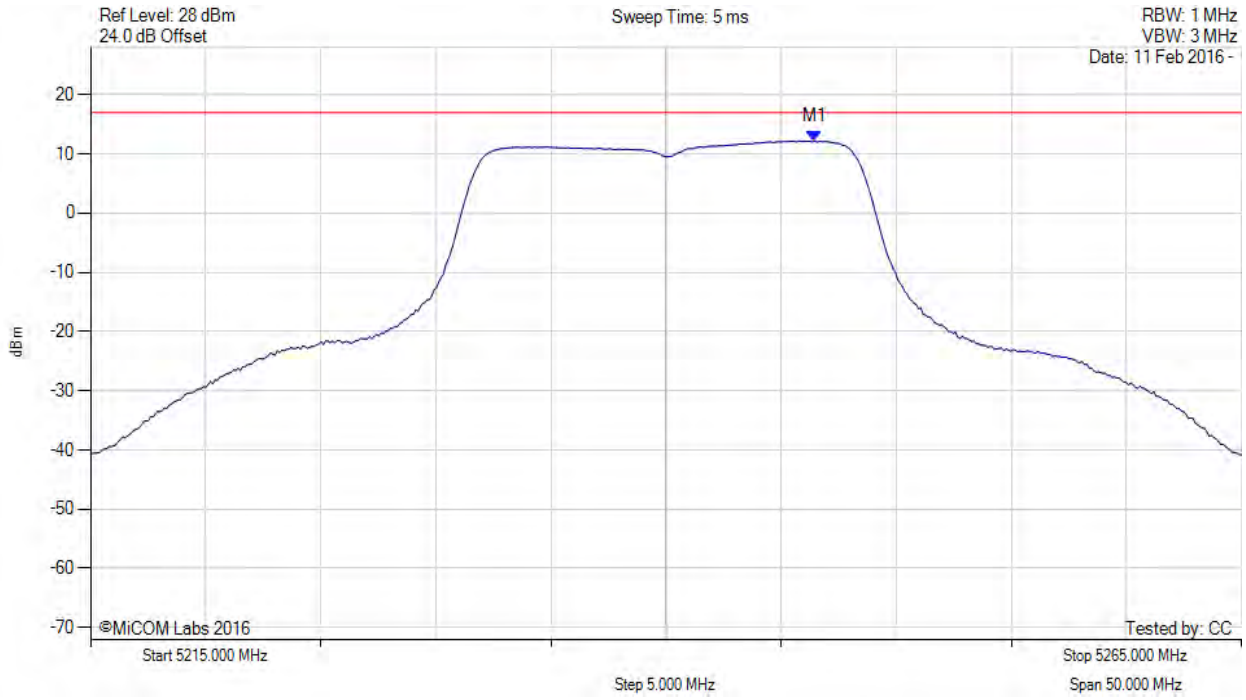


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5194.200 MHz : 11.011 dBm M1 + DCCF : 5194.200 MHz : 11.055 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 17.0 dBm Margin: -5.9 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5240.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

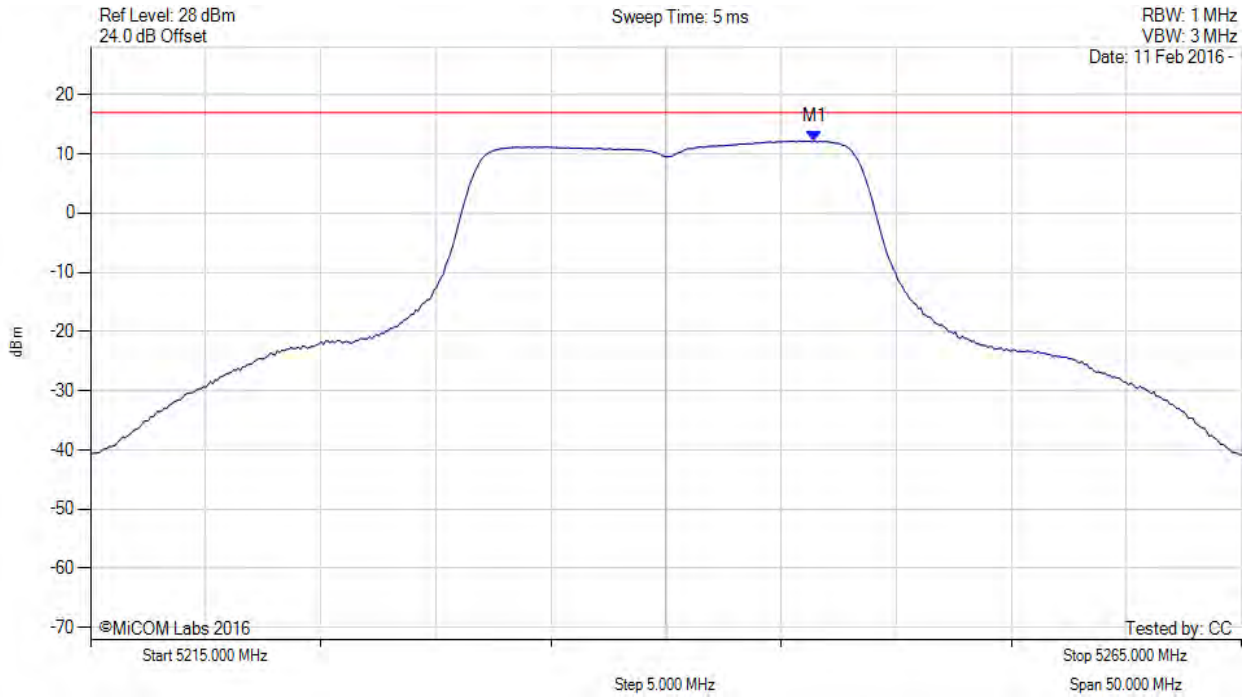


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5246.463 MHz : 12.176 dBm	Limit: ≤ 17.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5240.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

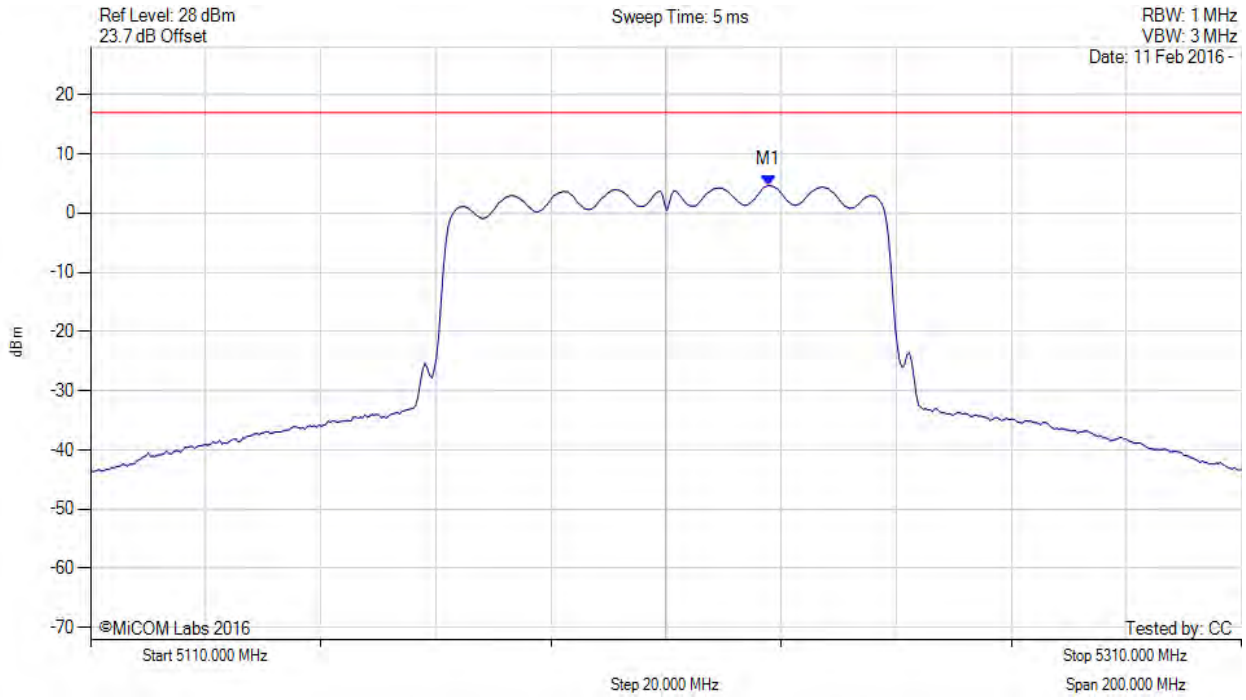


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5246.500 MHz : 12.176 dBm M1 + DCCF : 5246.500 MHz : 12.220 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 17.0 dBm Margin: -4.8 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11ac-80, Channel: 5210.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

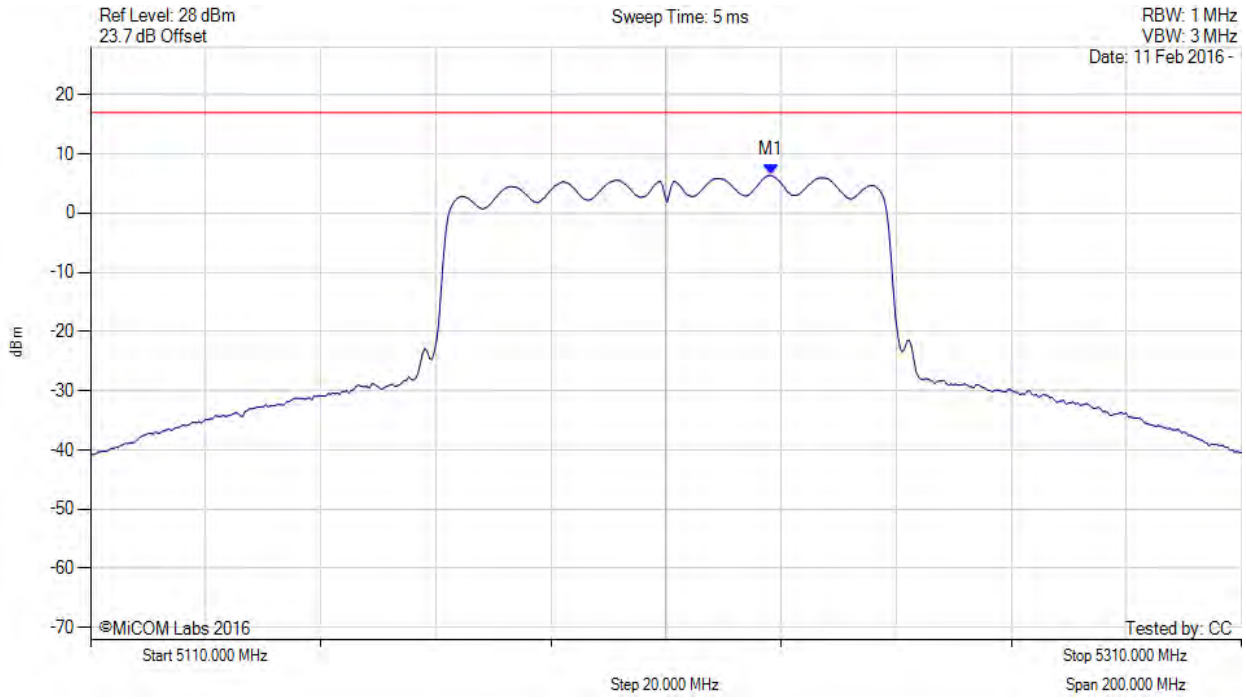


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5227.836 MHz : 4.715 dBm	Channel Frequency: 5210.00 MHz

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11ac-80, Channel: 5210.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

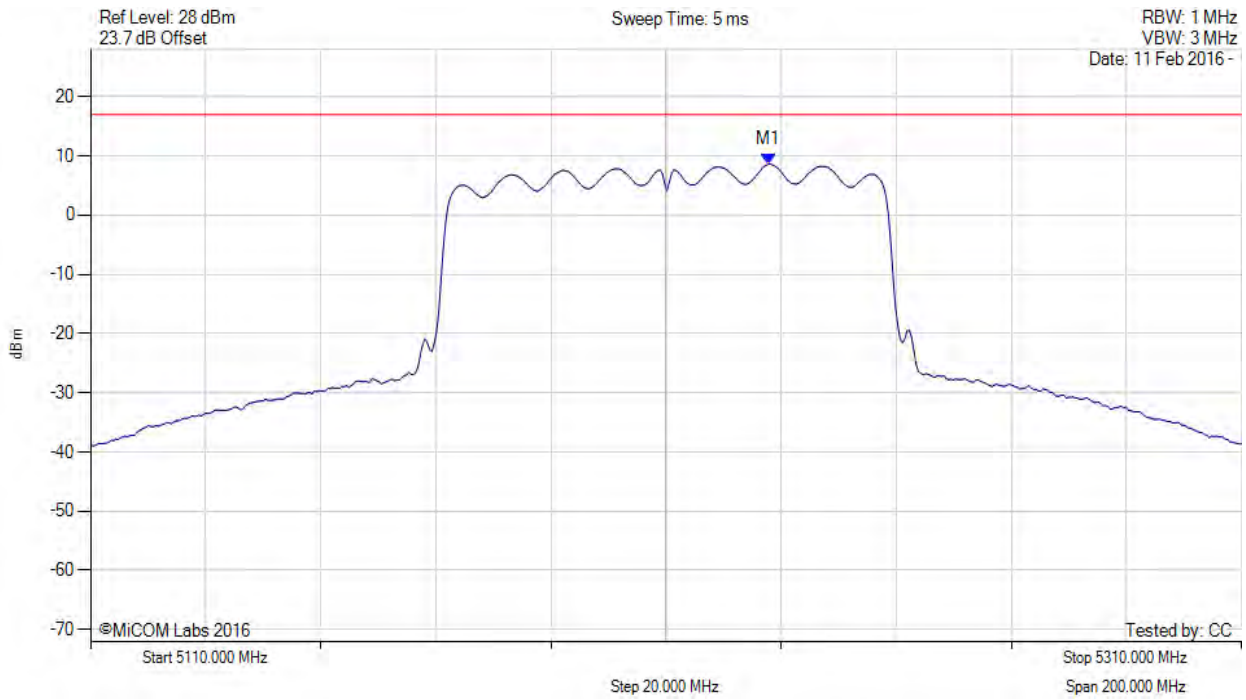


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5228.236 MHz : 6.382 dBm	Limit: ≤ 17.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11ac-80, Channel: 5210.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

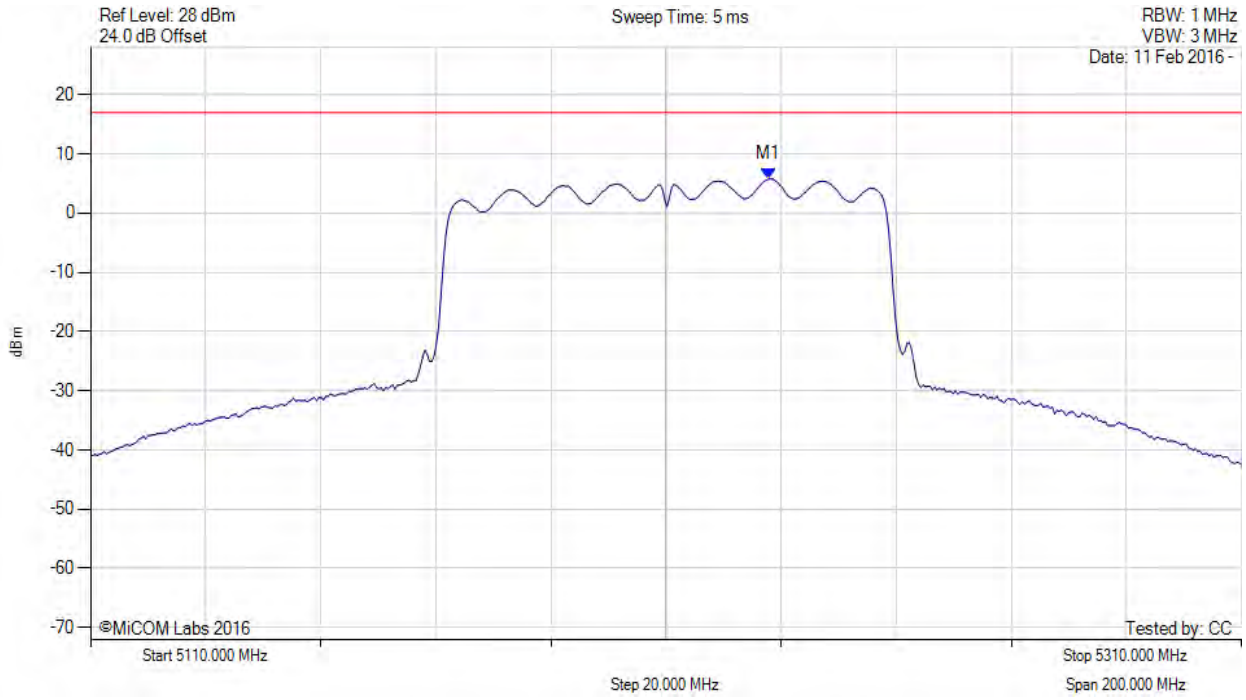


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5227.800 MHz : 8.625 dBm M1 + DCCF : 5227.800 MHz : 8.669 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 17.0 dBm Margin: -8.3 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11ac-80, Channel: 5210.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

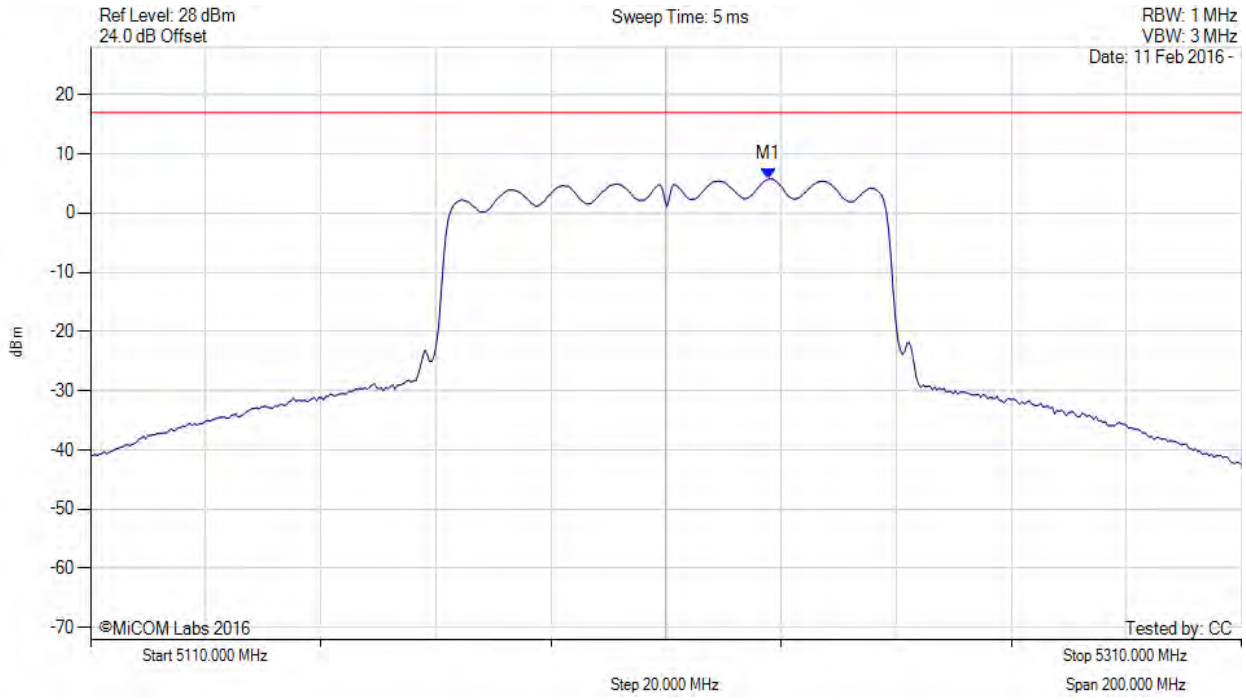


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5227.836 MHz : 5.760 dBm	Limit: ≤ 17.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11ac-80, Channel: 5210.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

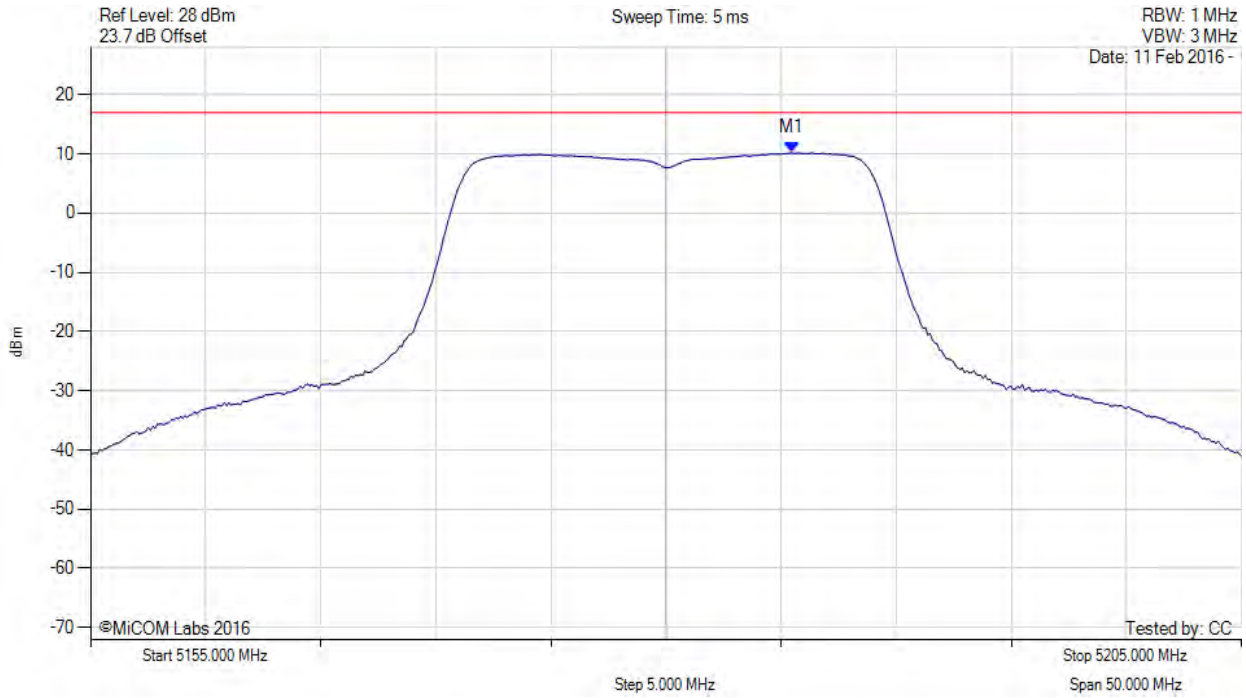


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5227.800 MHz : 5.760 dBm M1 + DCCF : 5227.800 MHz : 5.804 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 17.0 dBm Margin: -11.2 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5180.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

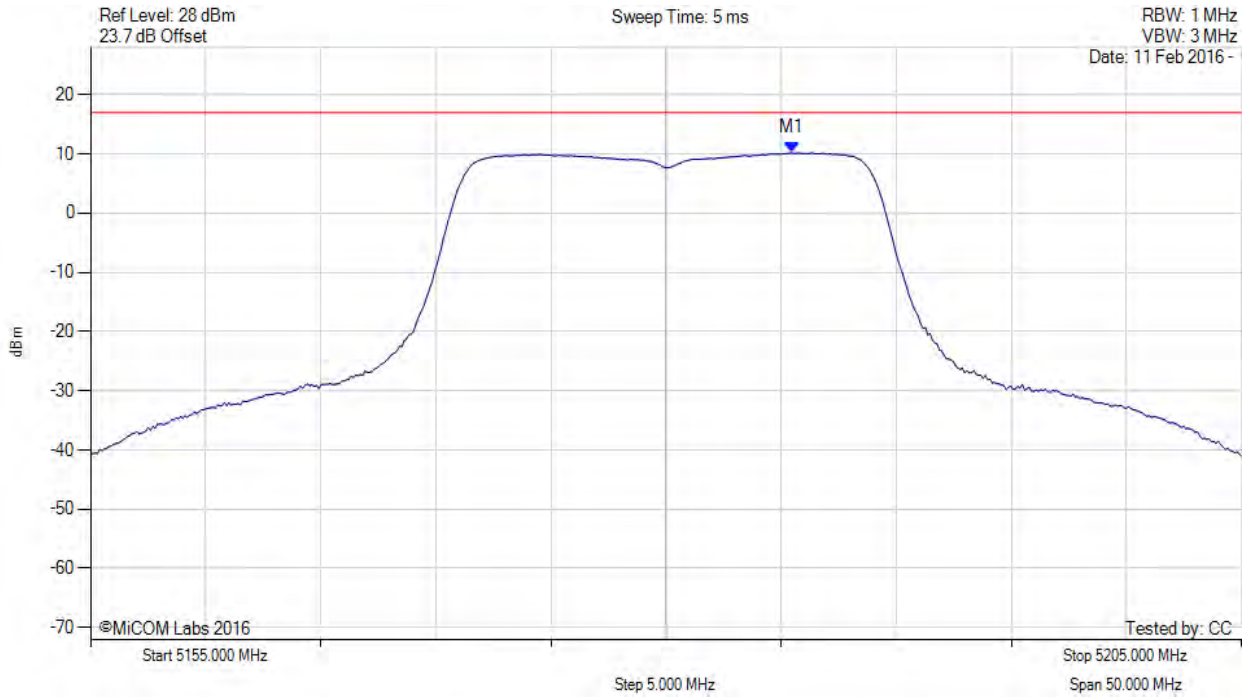


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5185.461 MHz : 10.173 dBm	Limit: ≤ 17.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5180.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

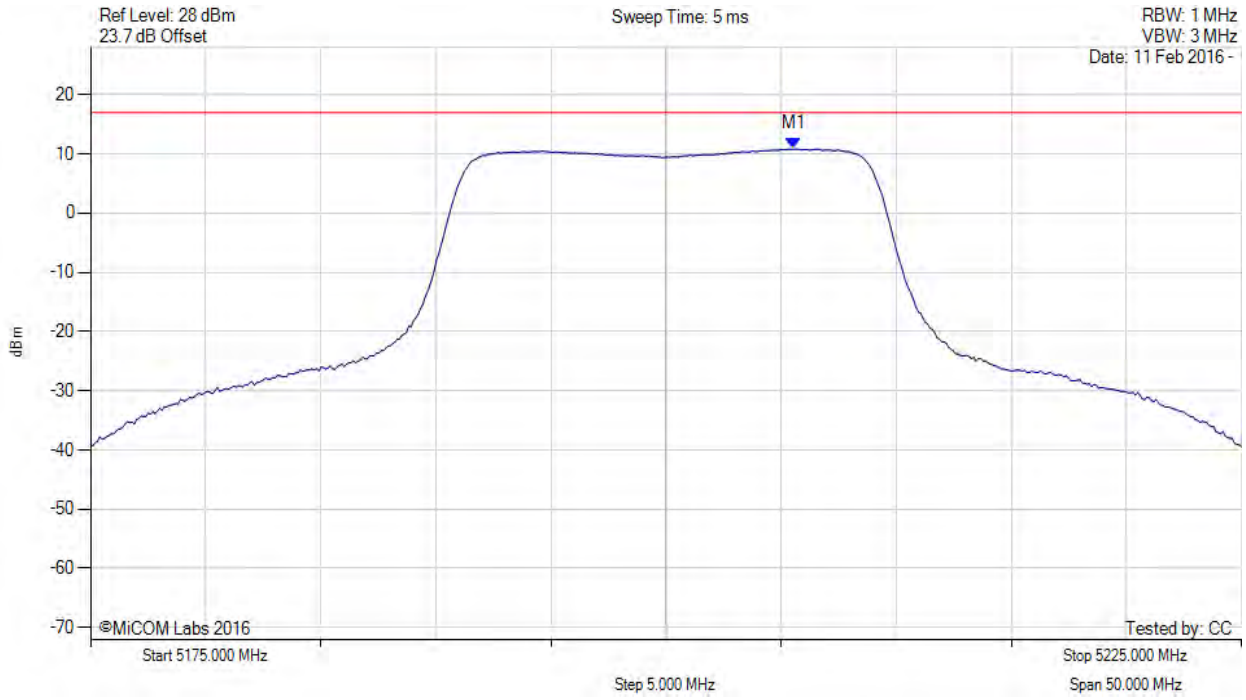


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5185.500 MHz : 10.173 dBm M1 + DCCF : 5185.500 MHz : 10.217 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 17.0 dBm Margin: -6.8 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5200.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

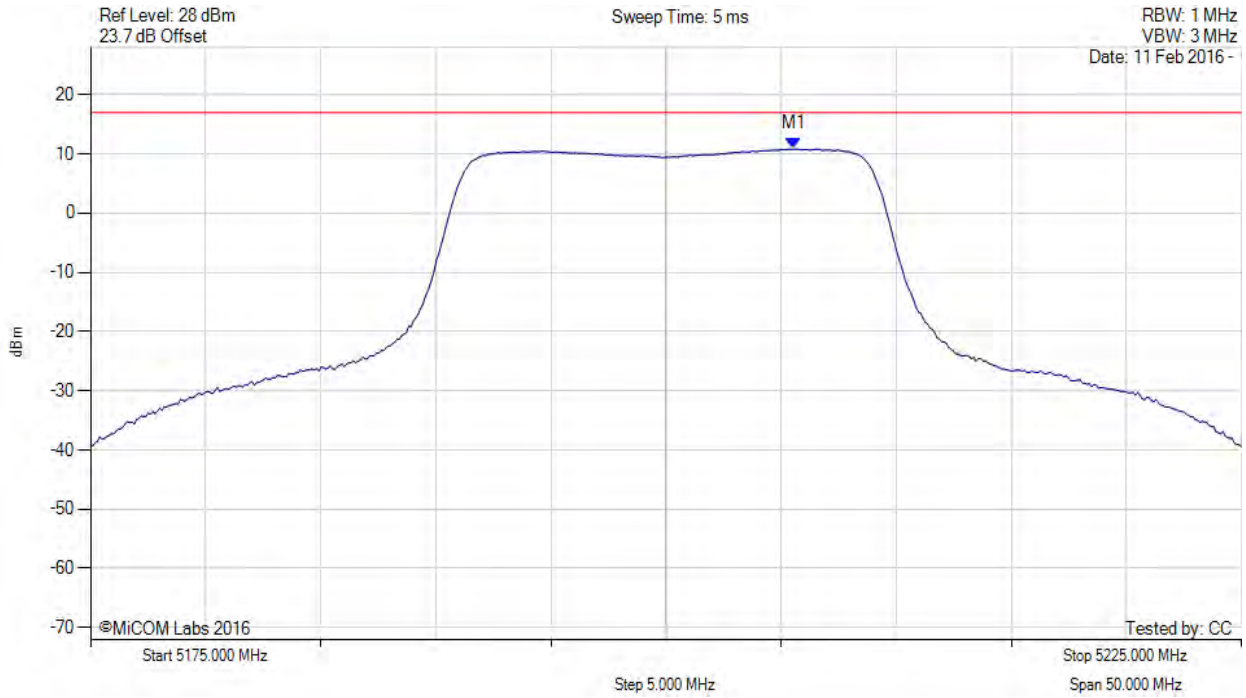


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5205.561 MHz : 10.813 dBm	Limit: ≤ 17.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5200.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

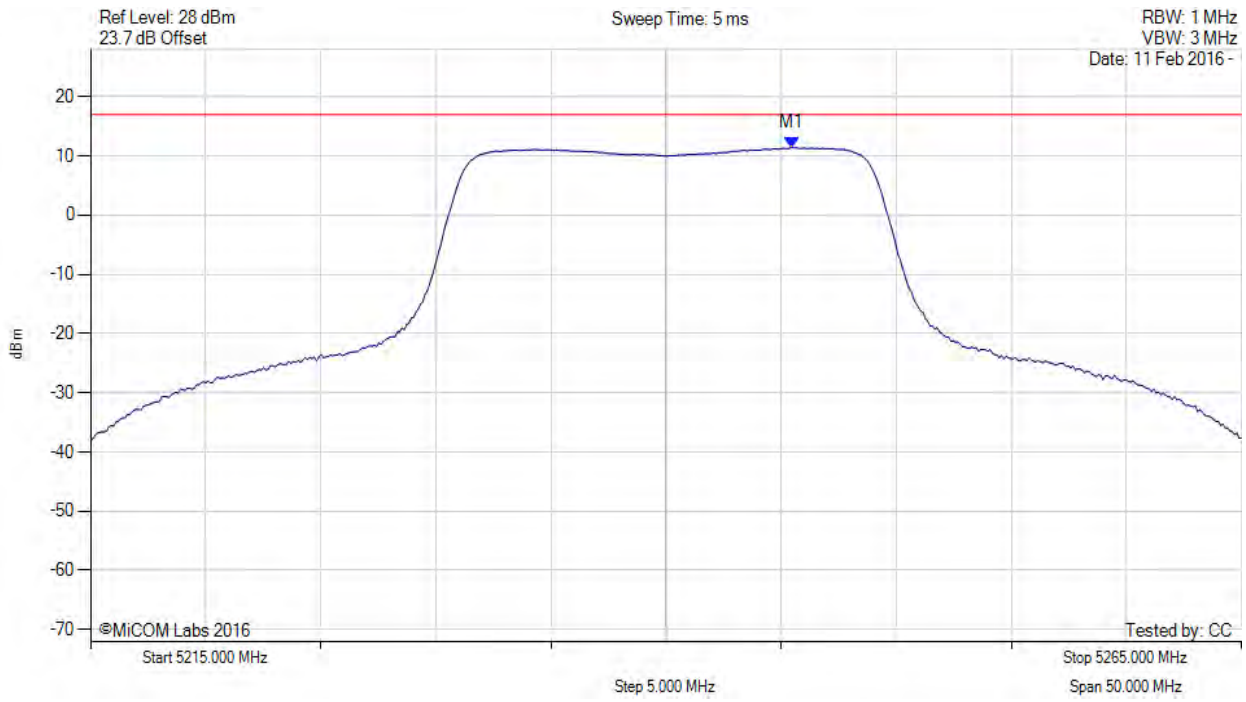


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5205.600 MHz : 10.813 dBm M1 + DCCF : 5205.600 MHz : 10.857 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 17.0 dBm Margin: -6.1 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5240.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

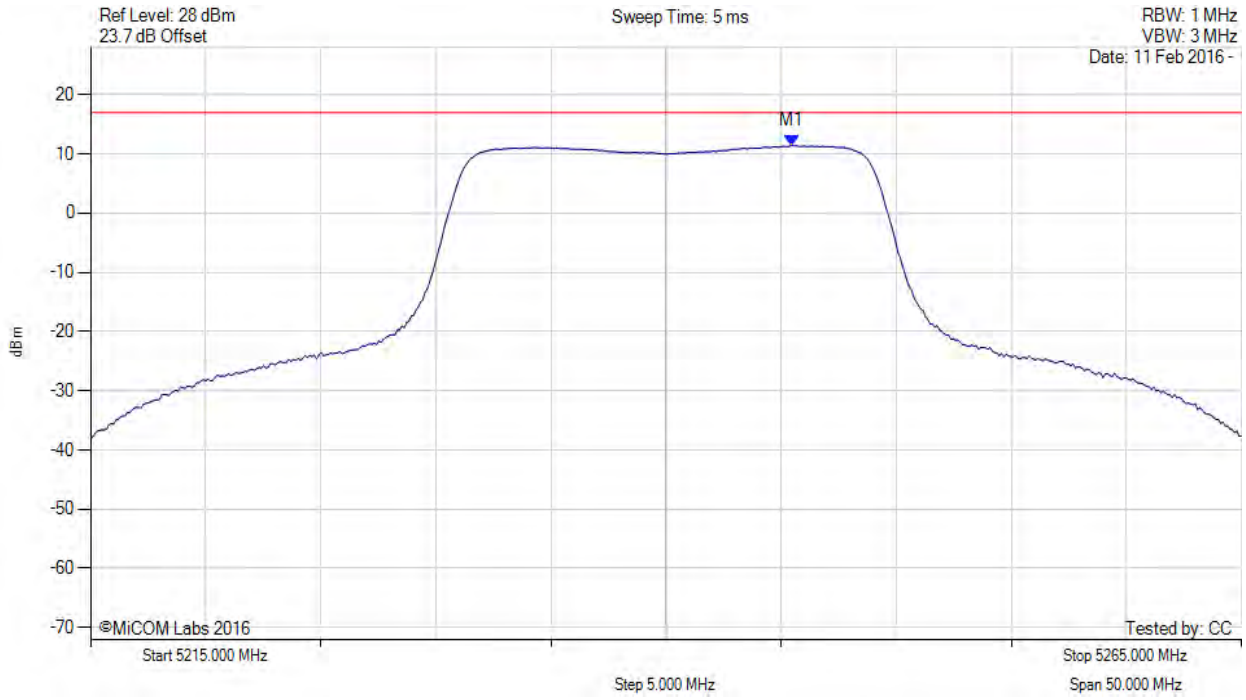


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5245.461 MHz : 11.409 dBm	Limit: ≤ 17.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5240.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

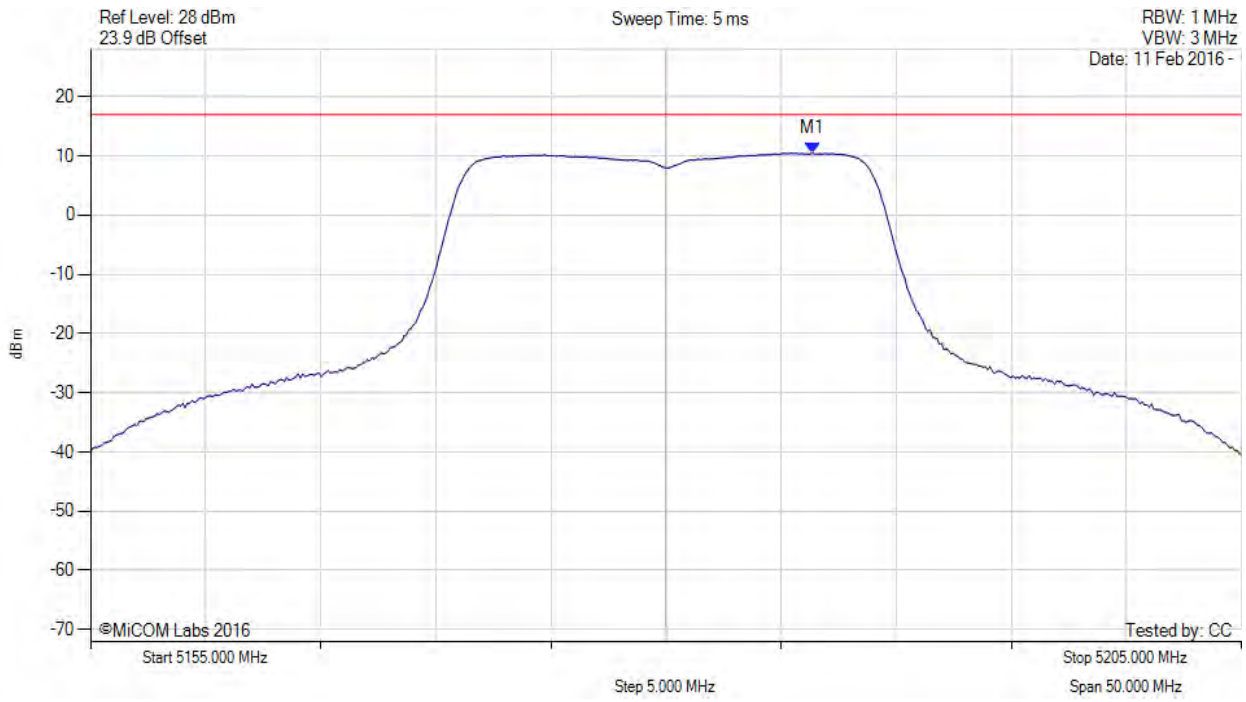


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5245.500 MHz : 11.409 dBm M1 + DCCF : 5245.500 MHz : 11.453 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 17.0 dBm Margin: -5.5 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5180.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

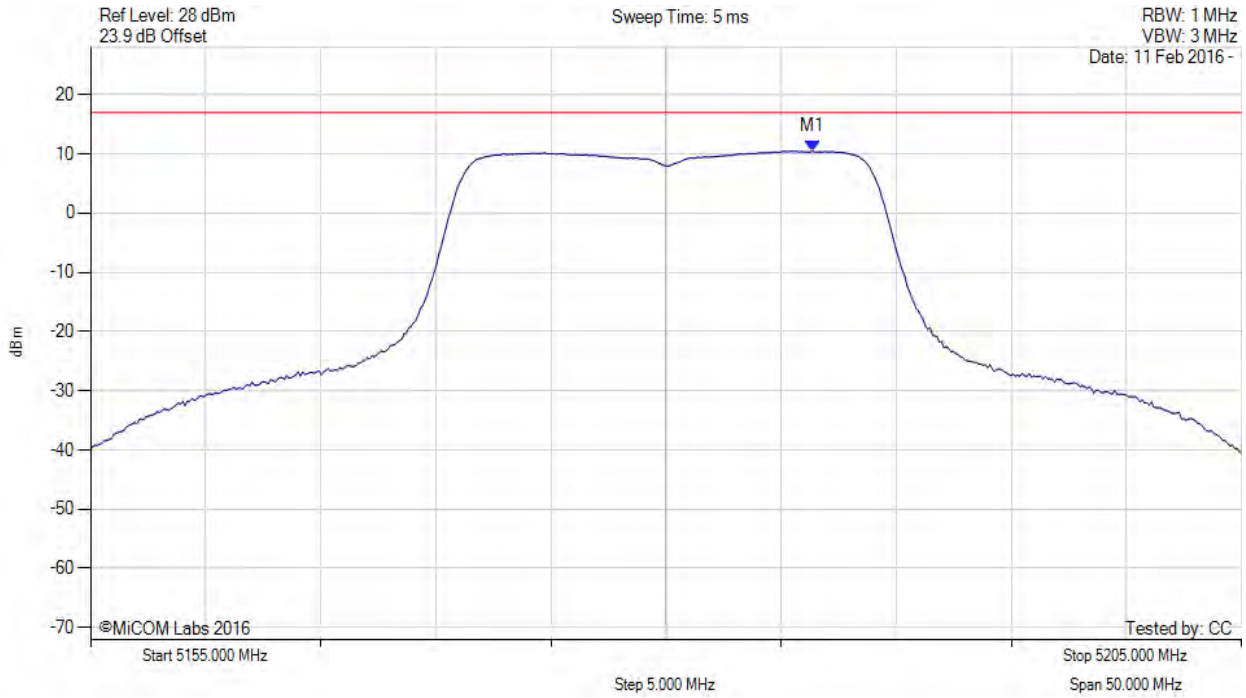


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5186.363 MHz : 10.454 dBm	Limit: ≤ 17.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5180.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

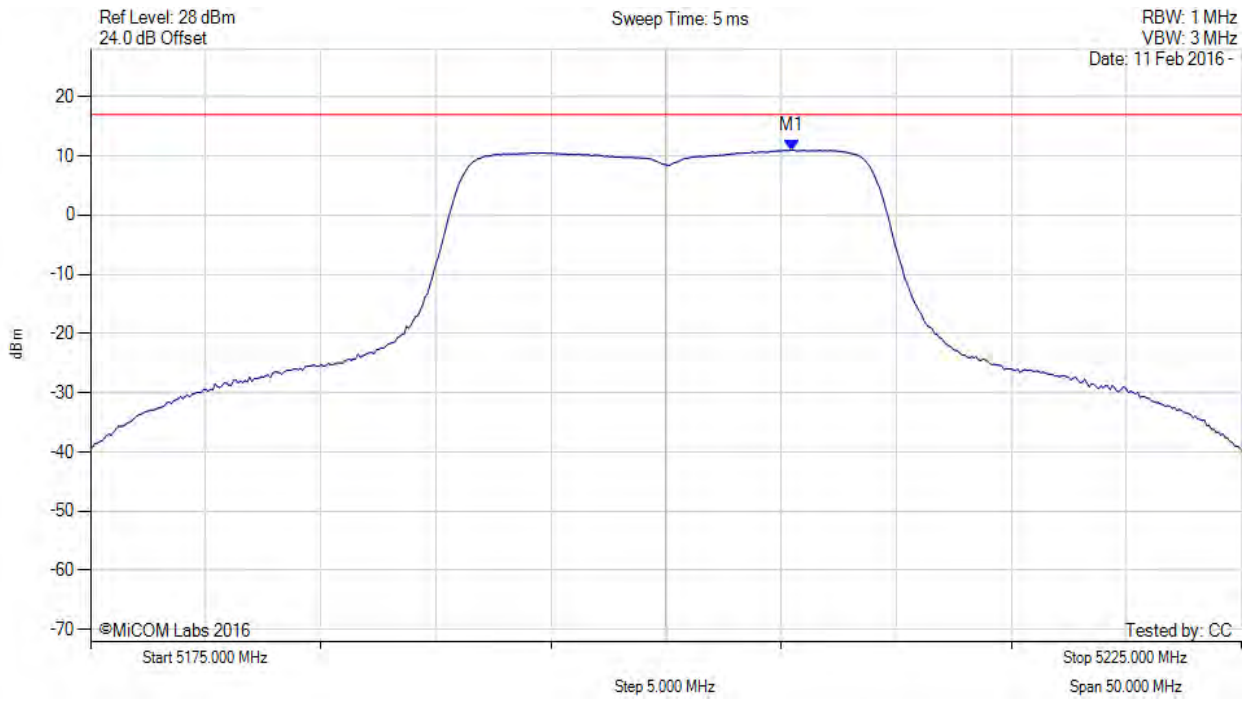


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5186.400 MHz : 10.454 dBm M1 + DCCF : 5186.400 MHz : 10.498 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 17.0 dBm Margin: -6.5 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5200.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

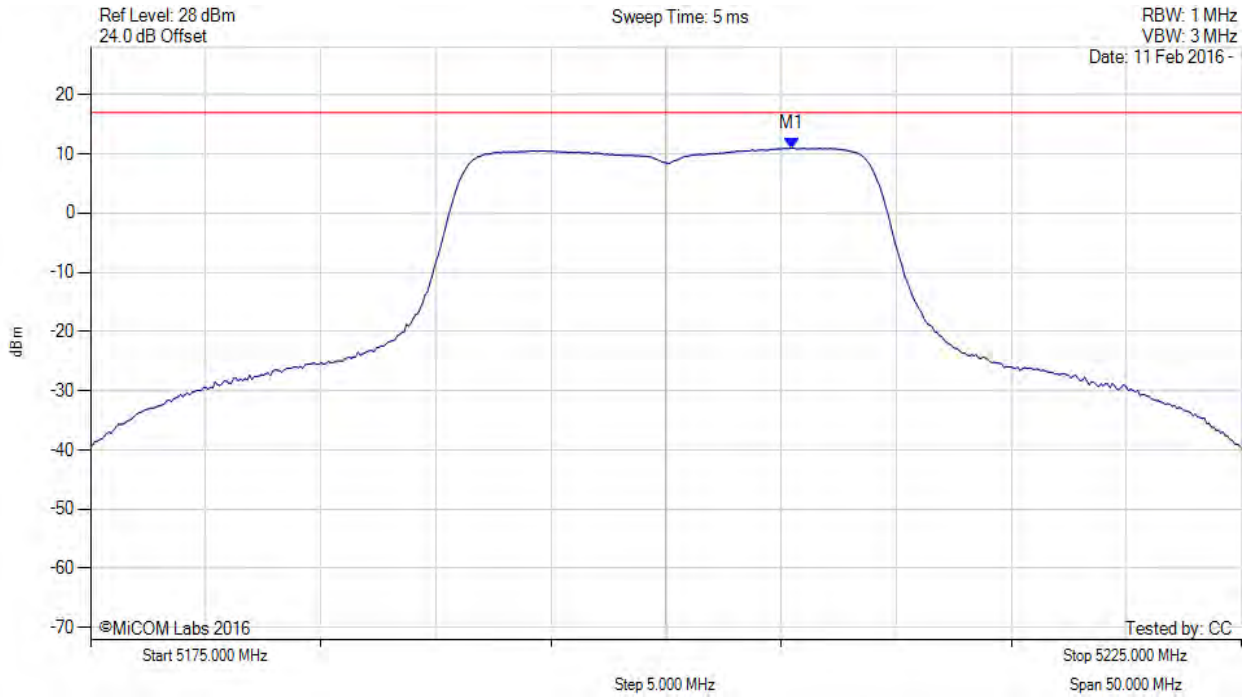


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5205.461 MHz : 10.984 dBm	Channel Frequency: 5200.00 MHz

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5200.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

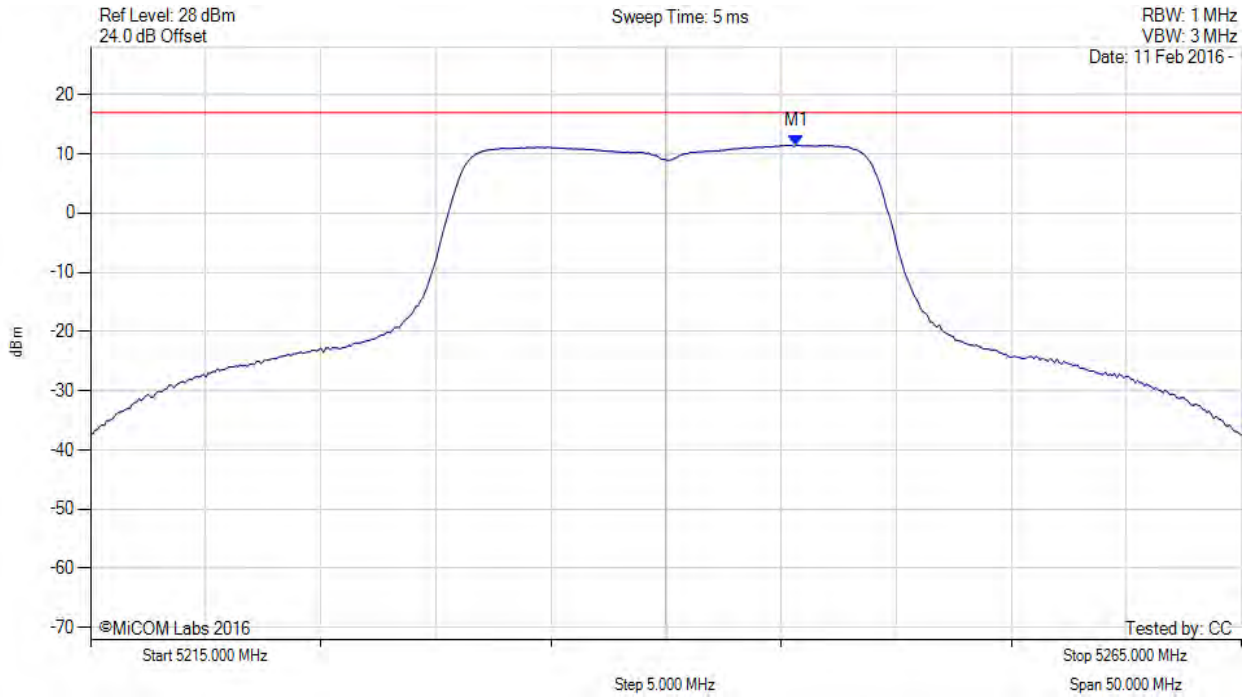


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5205.500 MHz : 10.984 dBm M1 + DCCF : 5205.500 MHz : 11.028 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 17.0 dBm Margin: -6.0 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5240.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

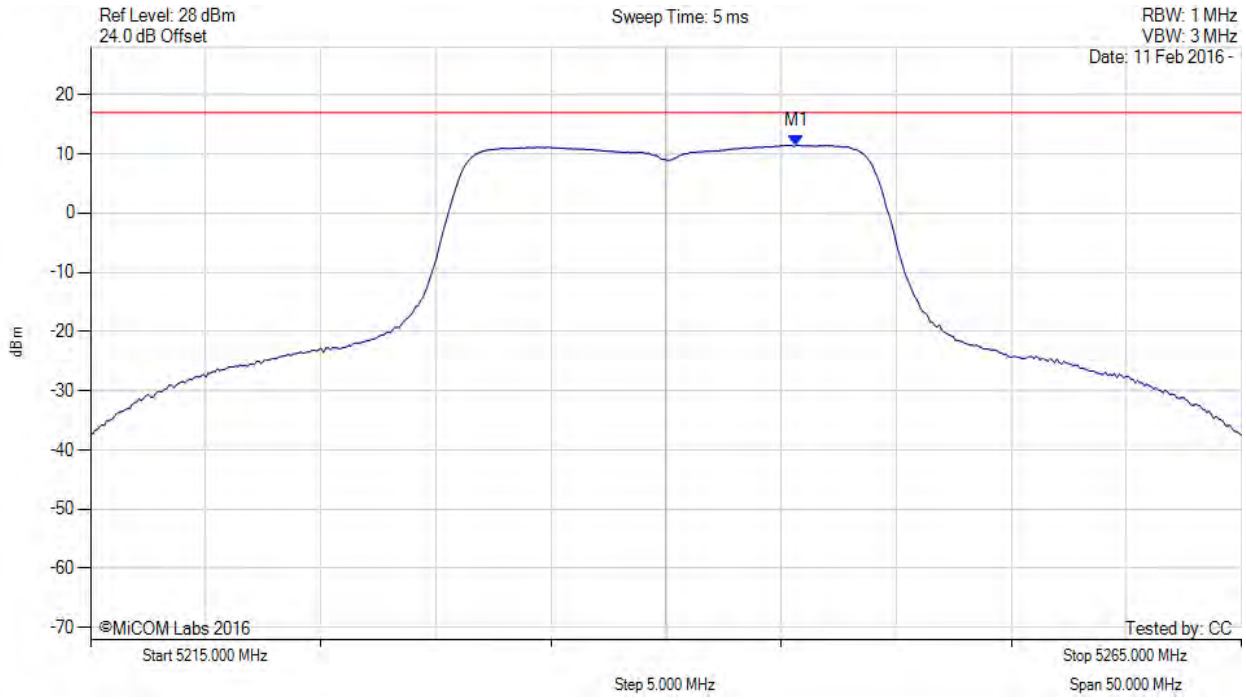


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5245.661 MHz : 11.469 dBm	Limit: ≤ 17.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5240.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

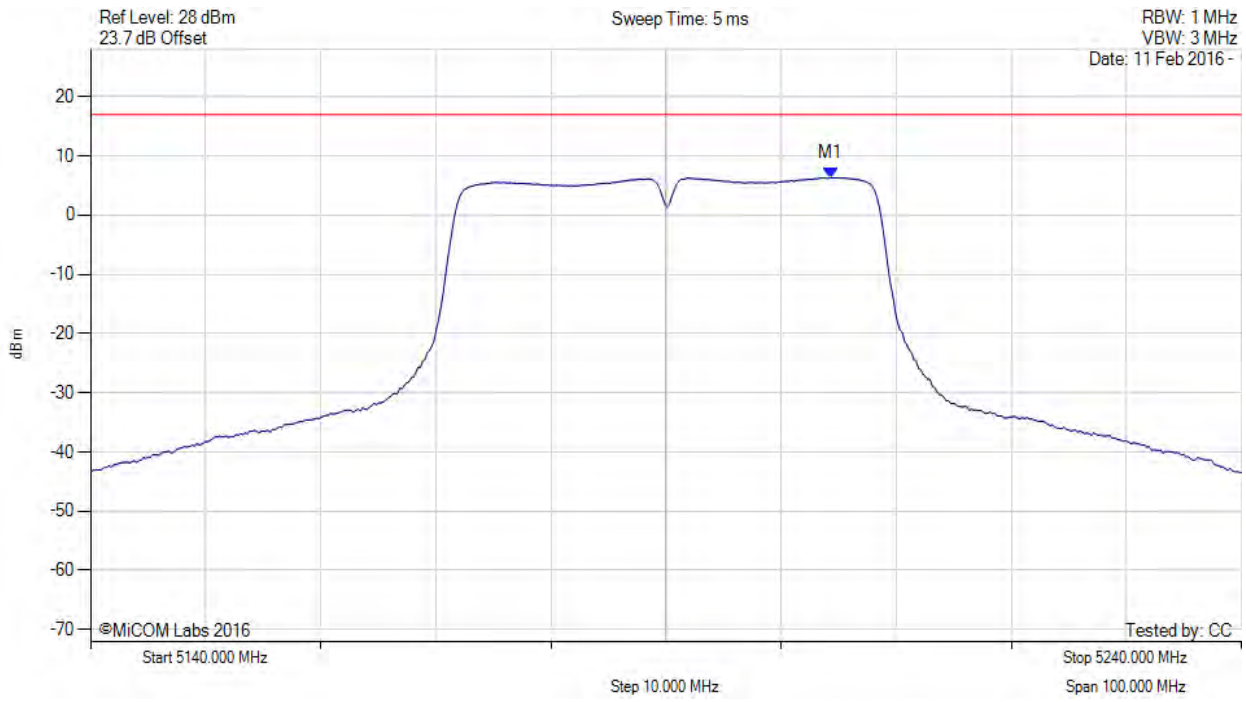


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5245.700 MHz : 11.469 dBm M1 + DCCF : 5245.700 MHz : 11.513 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 17.0 dBm Margin: -5.5 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5190.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

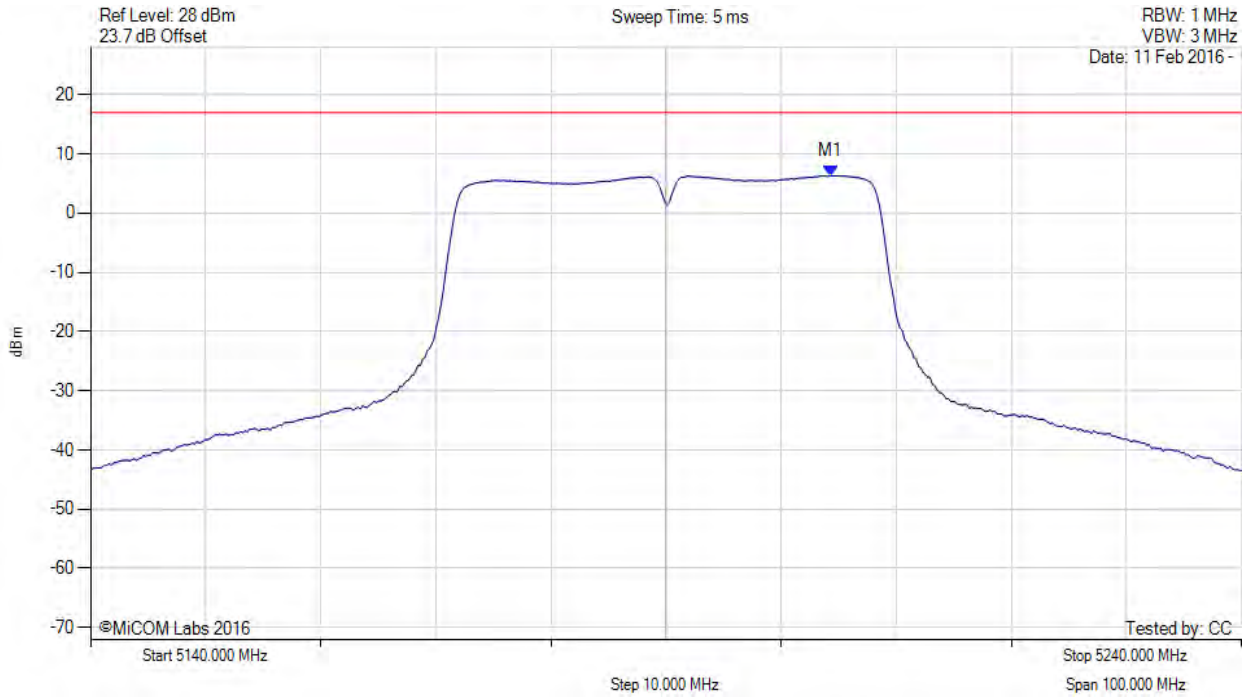


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5204.329 MHz : 6.319 dBm	Limit: ≤ 17.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5190.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

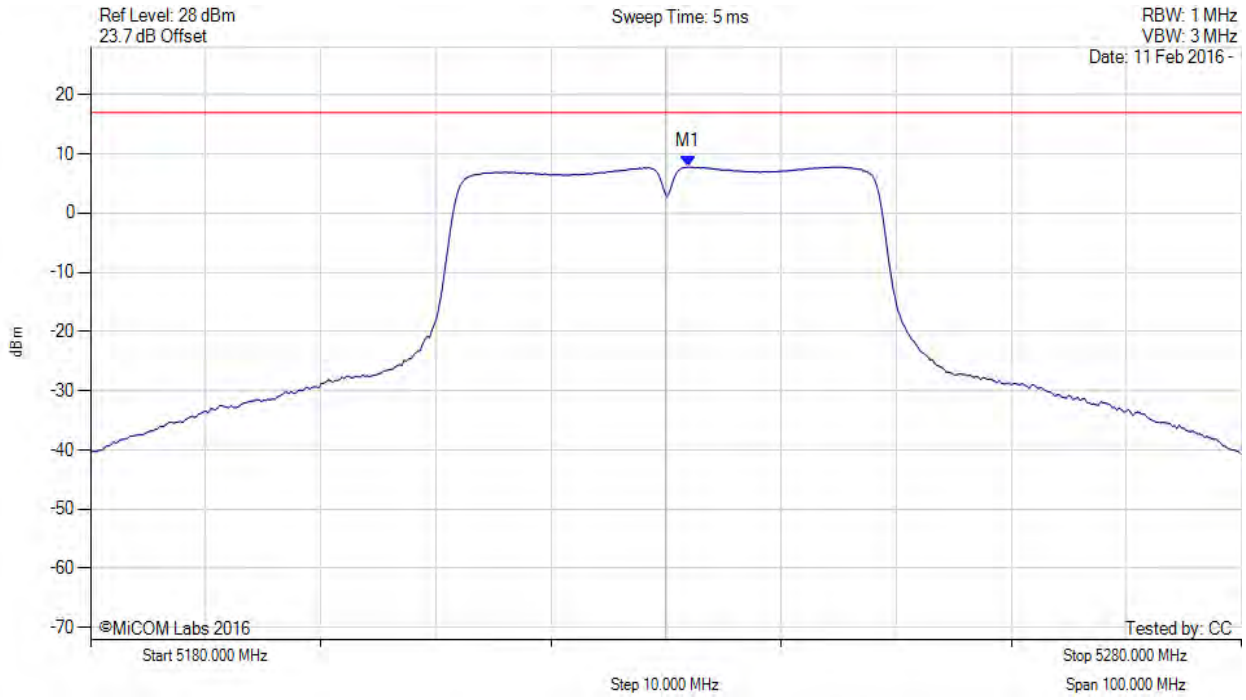


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5204.300 MHz : 6.319 dBm M1 + DCCF : 5204.300 MHz : 6.363 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 17.0 dBm Margin: -10.6 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5230.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

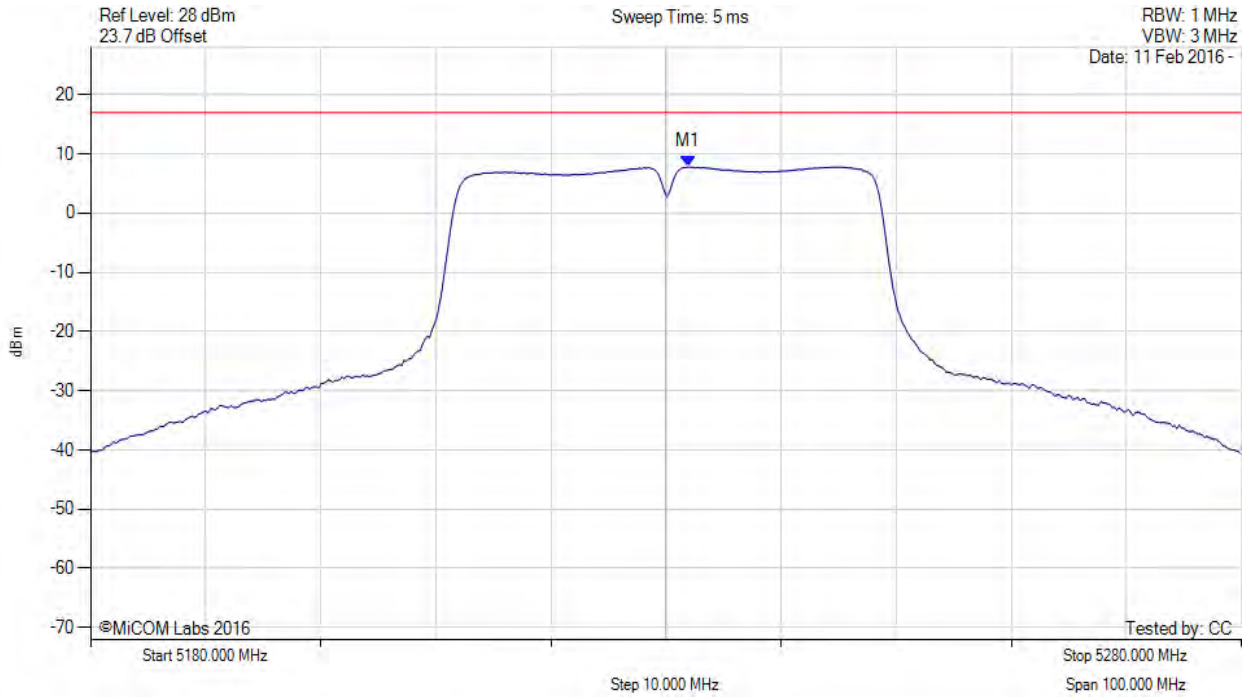


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5231.904 MHz : 7.796 dBm	Limit: ≤ 17.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5230.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

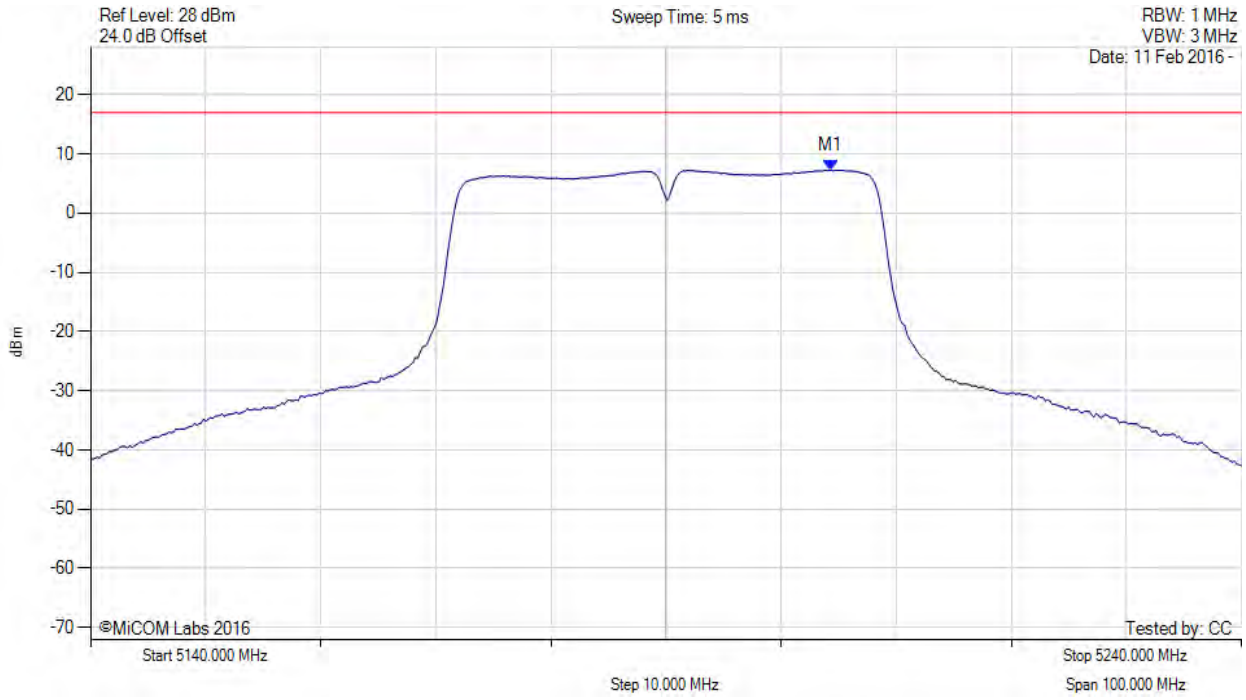


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5231.900 MHz : 7.796 dBm M1 + DCCF : 5231.900 MHz : 7.840 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 17.0 dBm Margin: -9.2 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5190.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

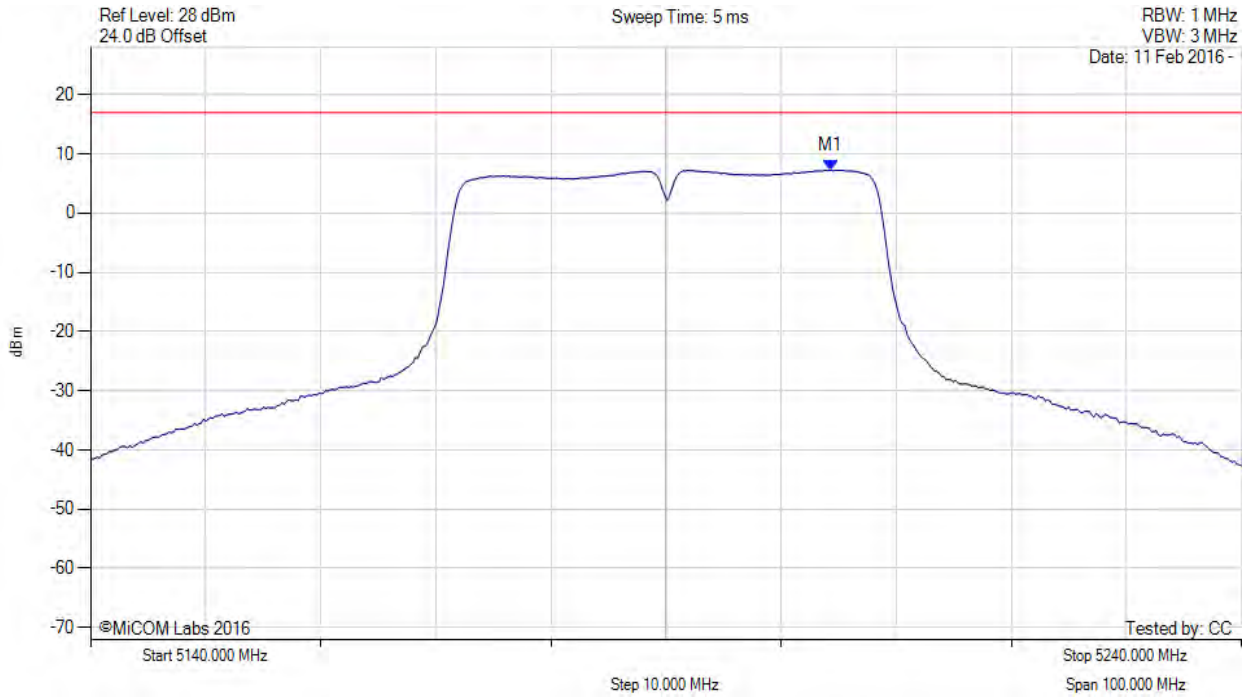


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5204.329 MHz : 7.267 dBm	Limit: ≤ 17.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5190.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

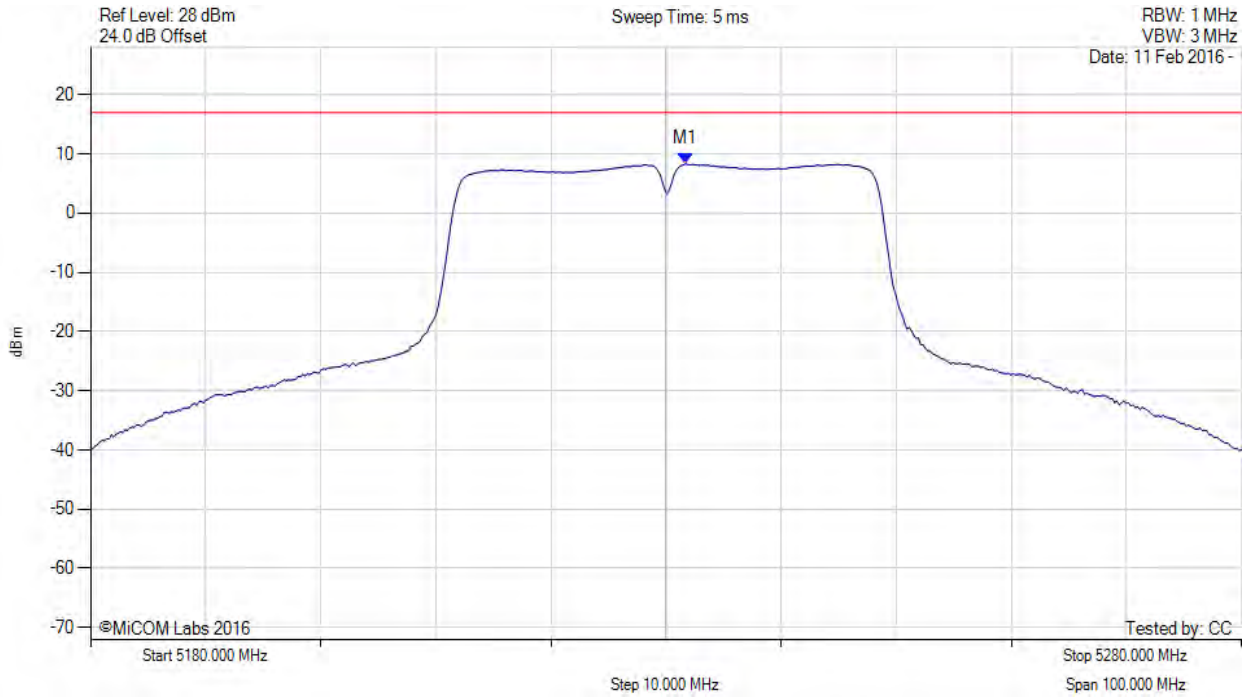


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5204.300 MHz : 7.267 dBm M1 + DCCF : 5204.300 MHz : 7.311 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 17.0 dBm Margin: -9.7 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5230.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

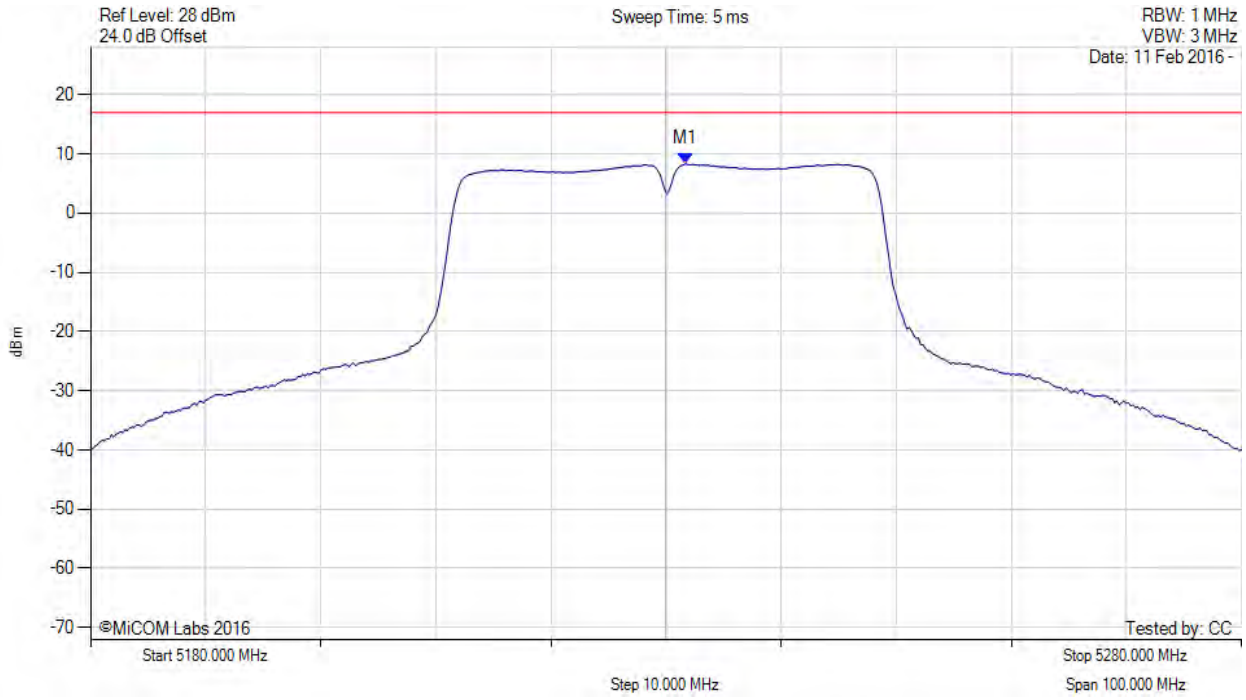


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5231.703 MHz : 8.333 dBm	Limit: ≤ 17.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5230.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

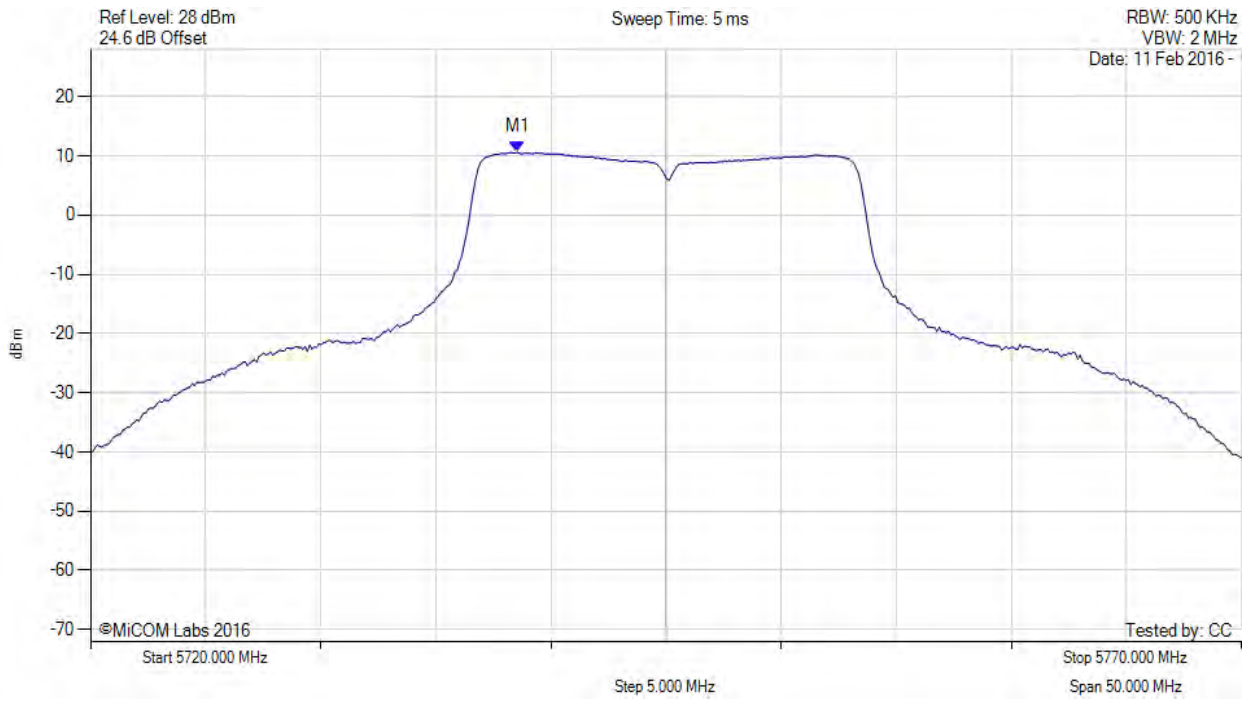


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5231.700 MHz : 8.333 dBm M1 + DCCF : 5231.700 MHz : 8.377 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 17.0 dBm Margin: -8.6 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5745.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

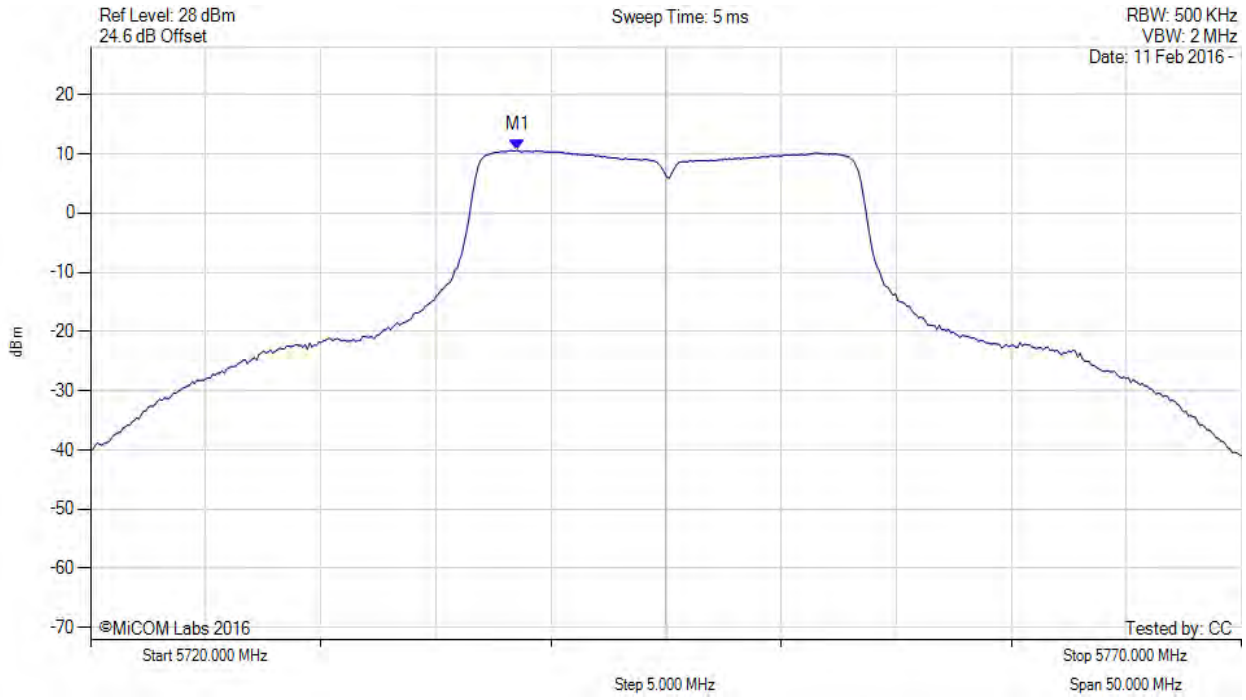


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5738.537 MHz : 10.605 dBm	Limit: ≤ 30.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5745.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

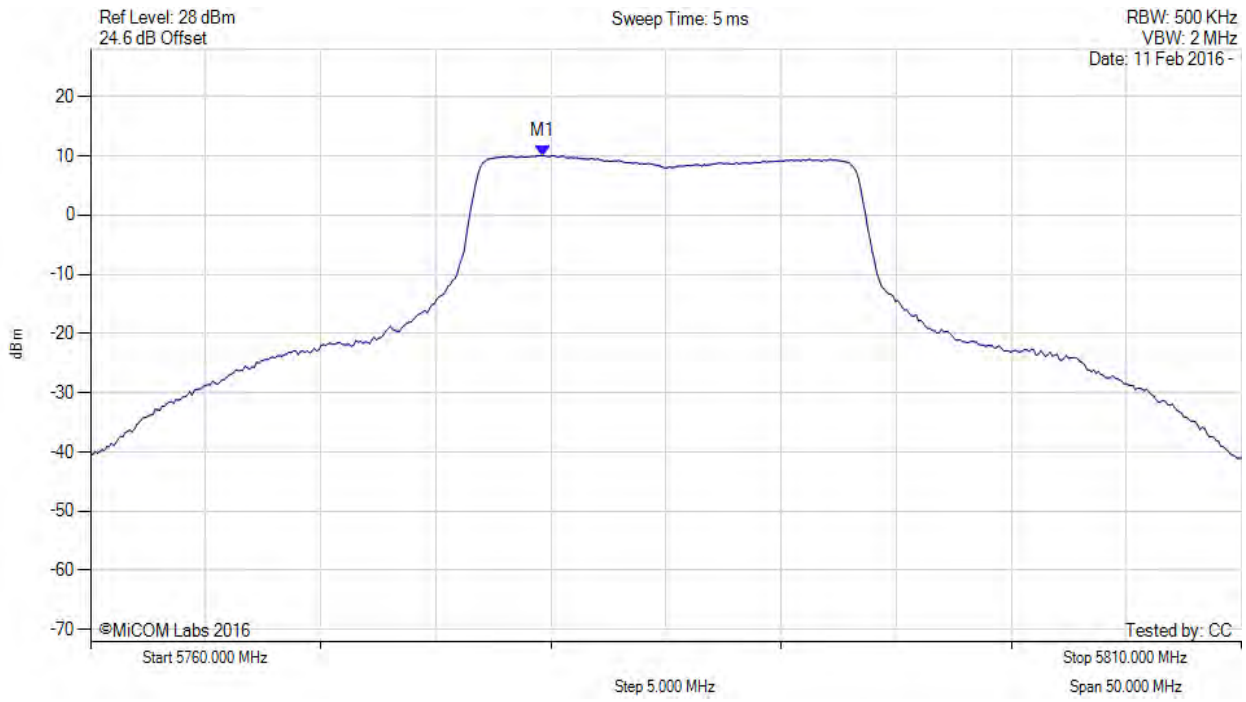


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5738.500 MHz : 10.605 dBm M1 + DCCF : 5738.500 MHz : 10.649 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 30.0 dBm Margin: -19.4 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5785.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

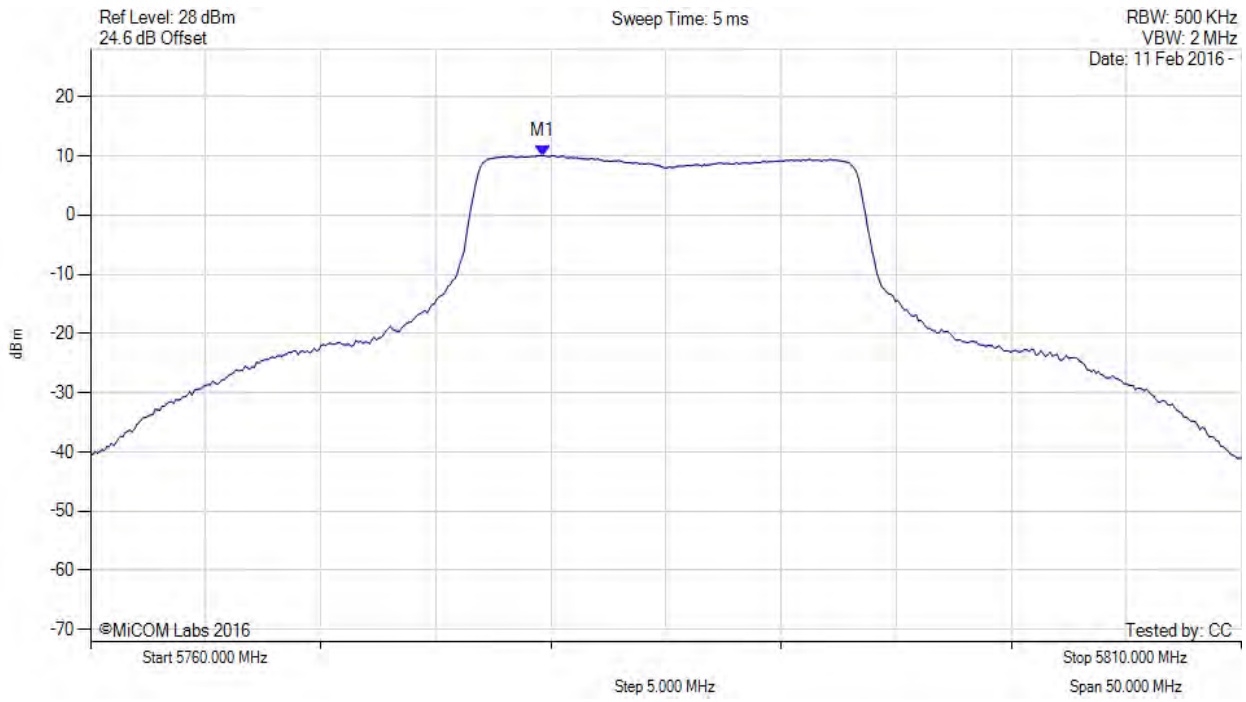


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5779.639 MHz : 10.056 dBm	Limit: ≤ 30.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5785.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

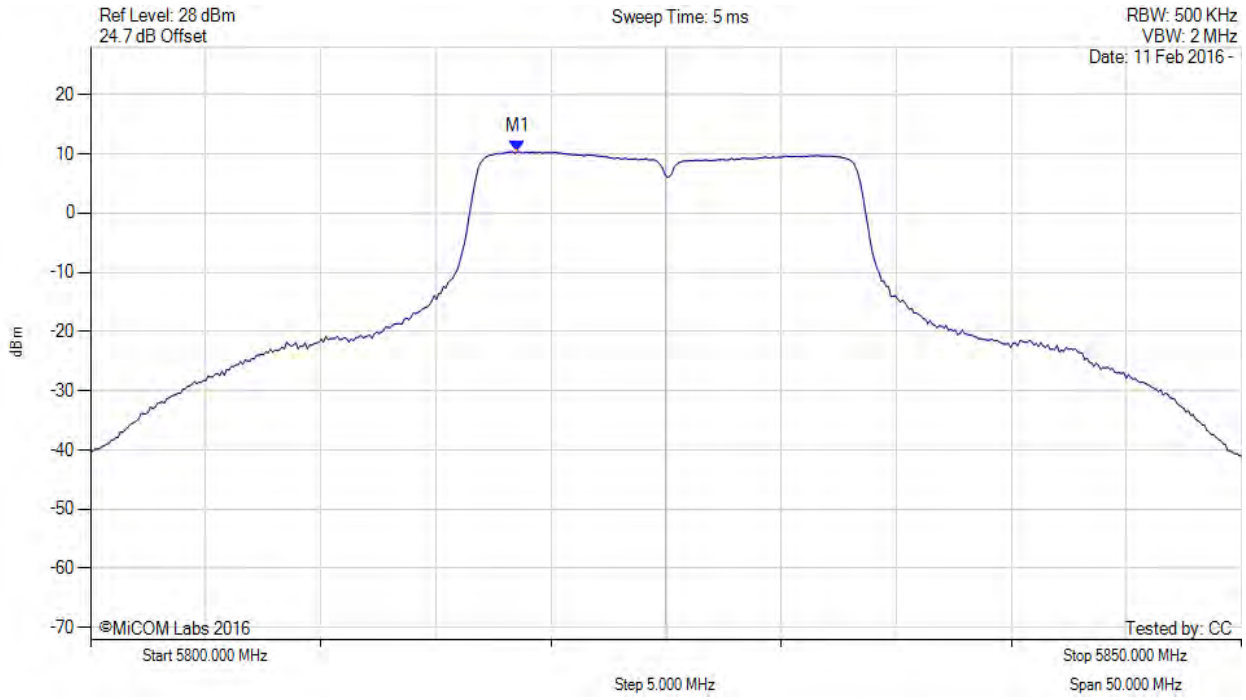


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5779.600 MHz : 10.056 dBm M1 + DCCF : 5779.600 MHz : 10.100 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 30.0 dBm Margin: -19.9 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5825.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

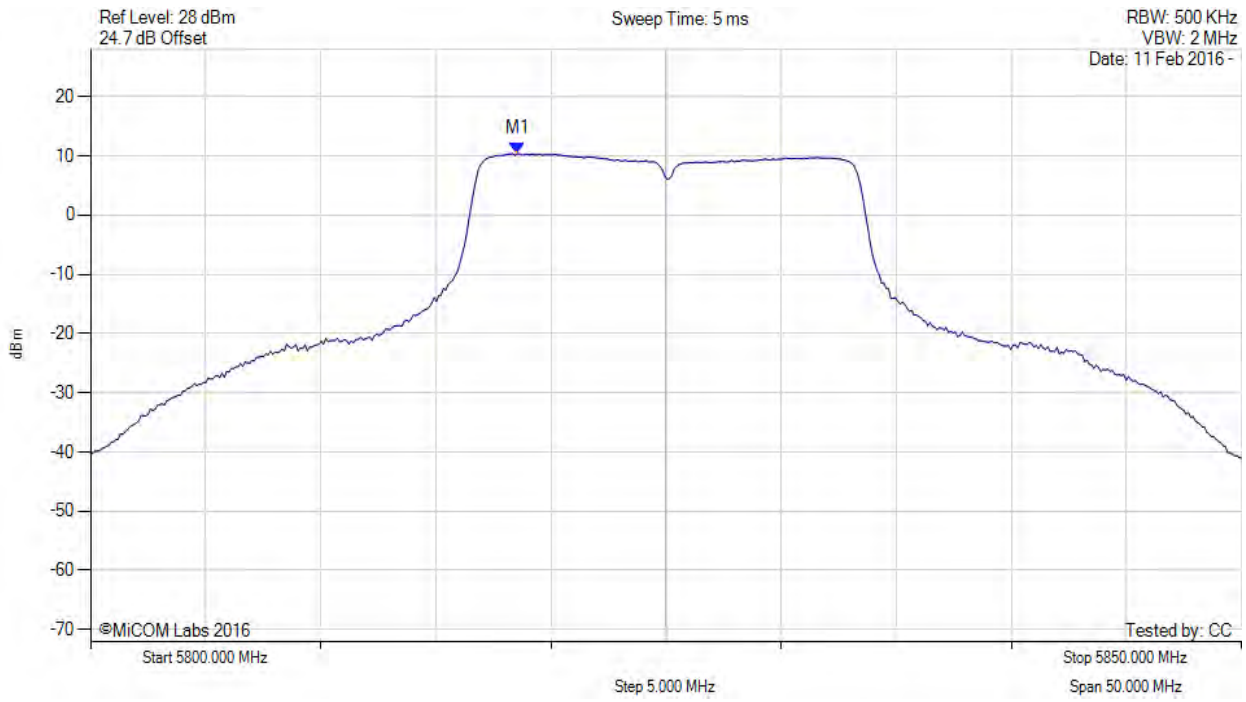


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5818.537 MHz : 10.386 dBm	Limit: ≤ 30.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5825.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

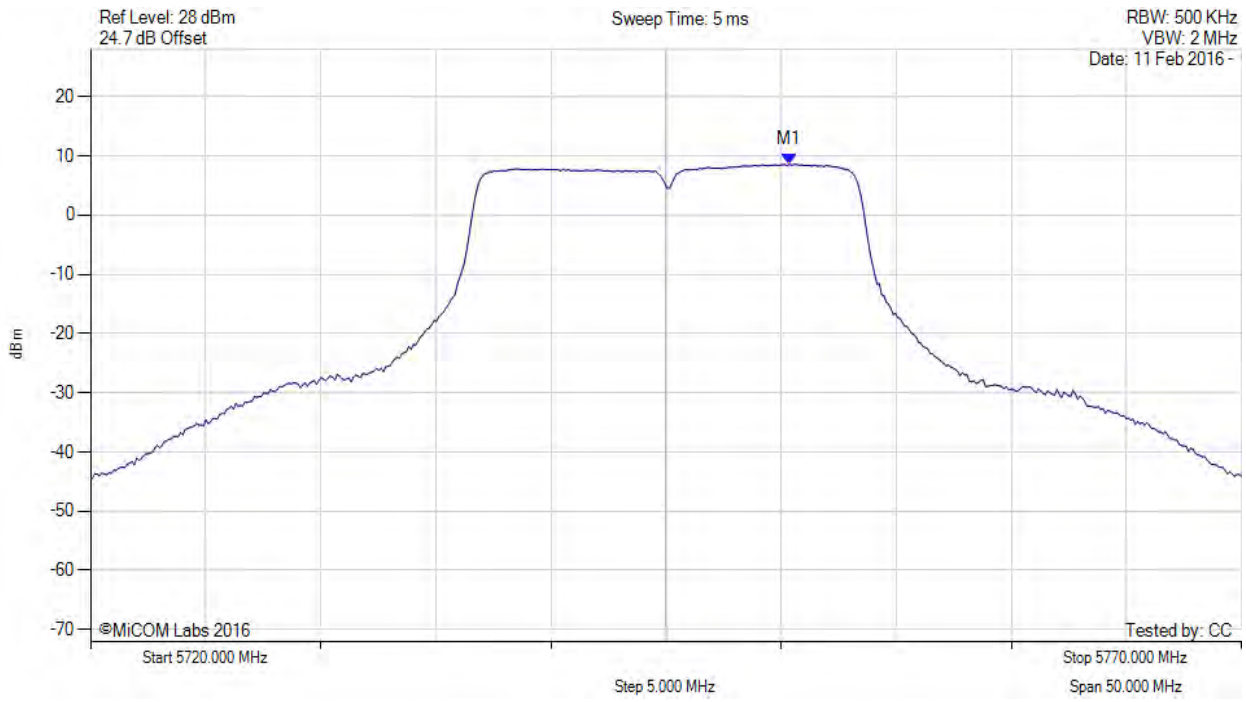


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5818.500 MHz : 10.386 dBm M1 + DCCF : 5818.500 MHz : 10.430 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 30.0 dBm Margin: -19.6 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5745.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

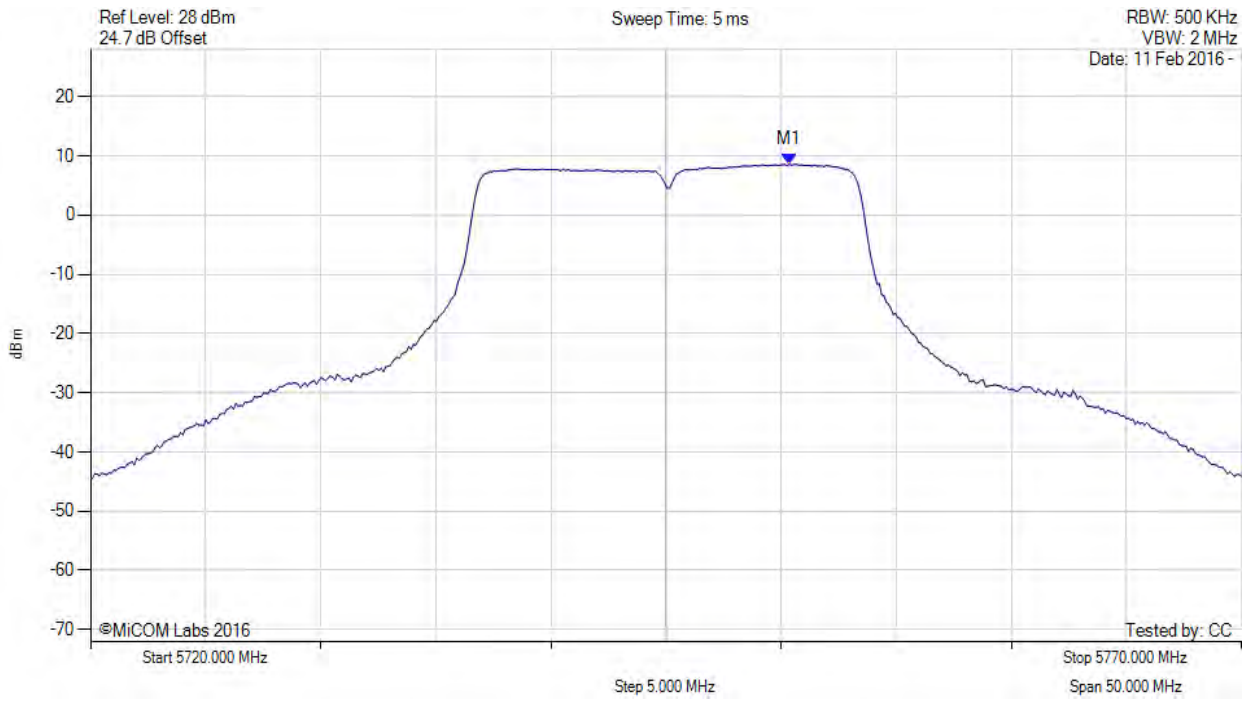


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5750.361 MHz : 8.594 dBm	Limit: ≤ 30.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5745.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

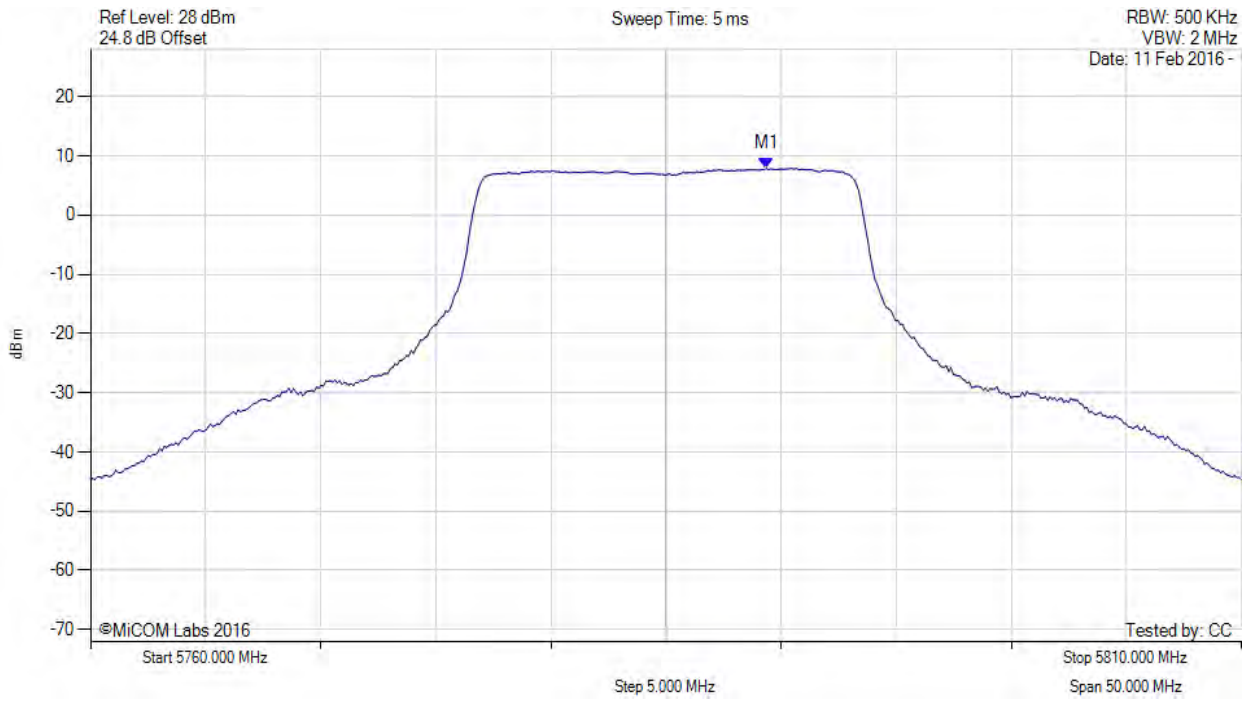


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5750.400 MHz : 8.594 dBm M1 + DCCF : 5750.400 MHz : 8.638 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 30.0 dBm Margin: -21.4 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5785.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

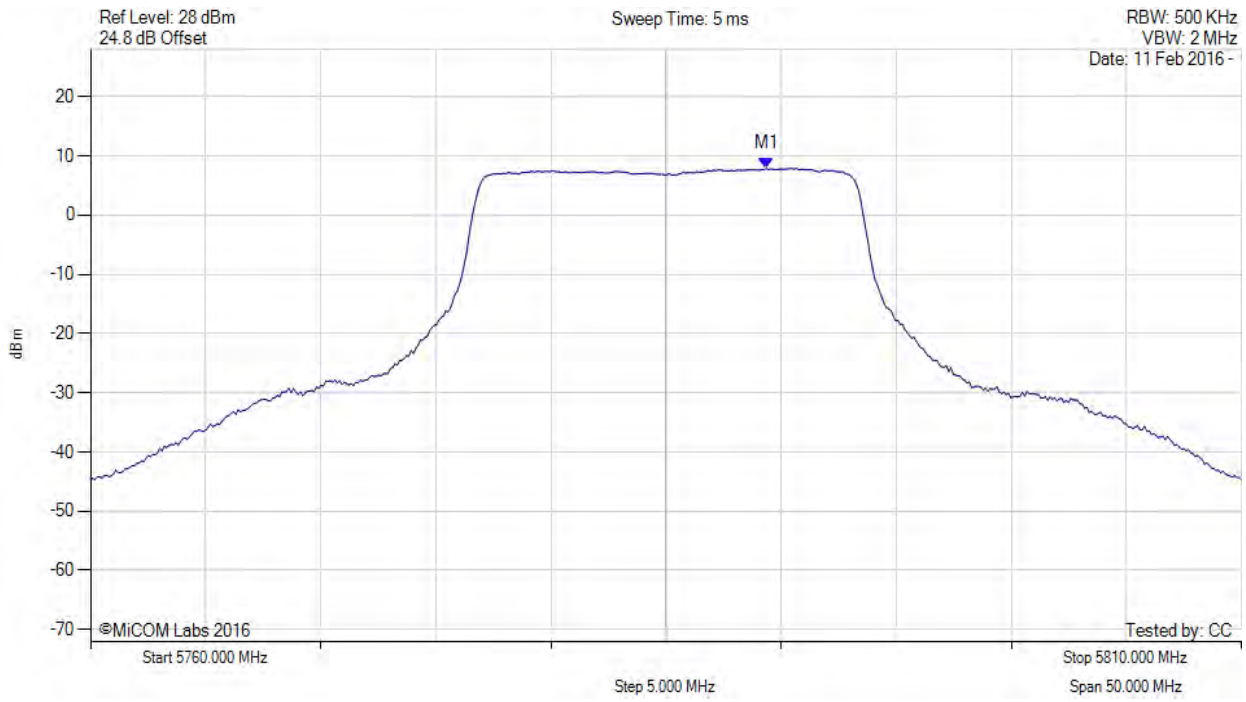


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5789.359 MHz : 7.884 dBm	Channel Frequency: 5785.00 MHz

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5785.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

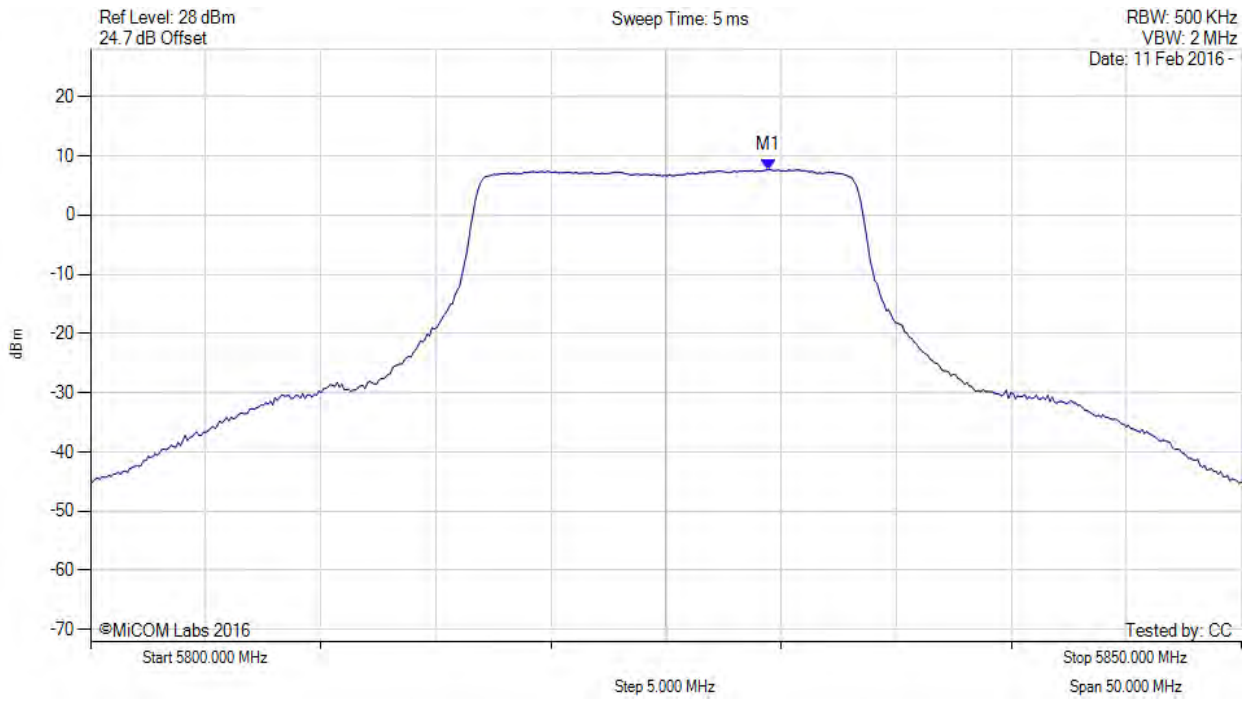


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5789.400 MHz : 7.884 dBm M1 + DCCF : 5789.400 MHz : 7.928 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 30.0 dBm Margin: -22.1 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5825.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

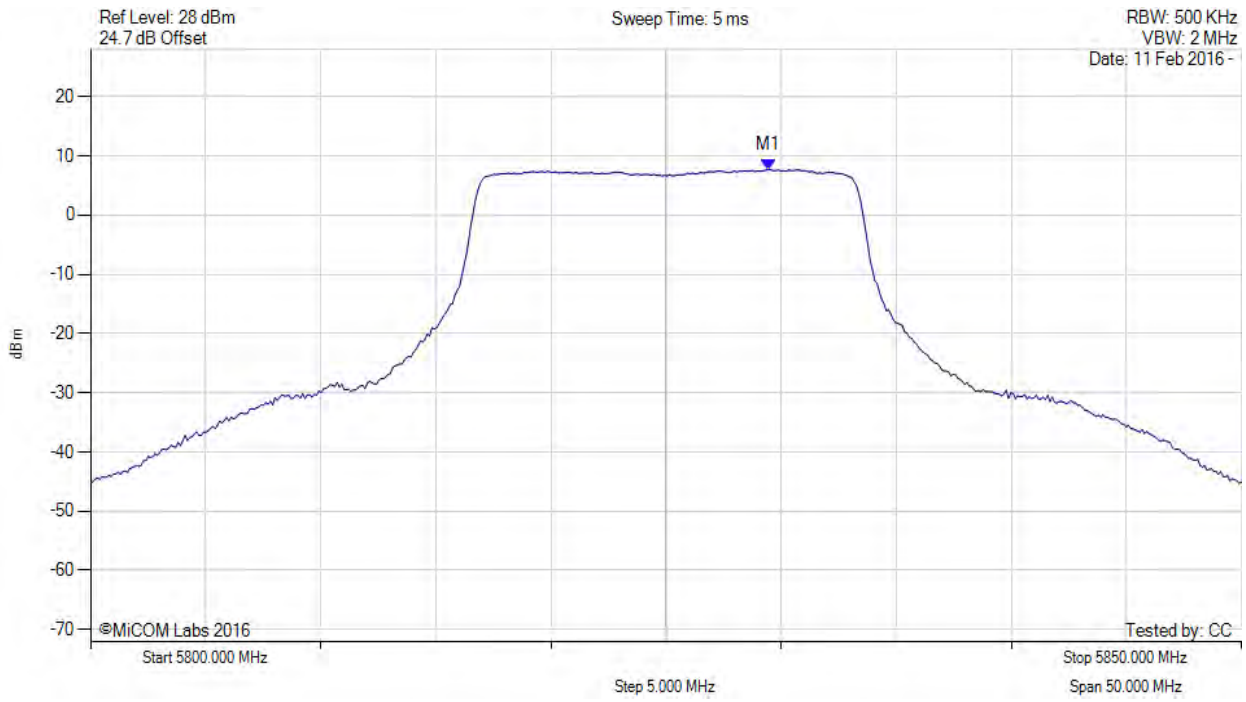


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5829.459 MHz : 7.686 dBm	Limit: ≤ 30.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5825.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

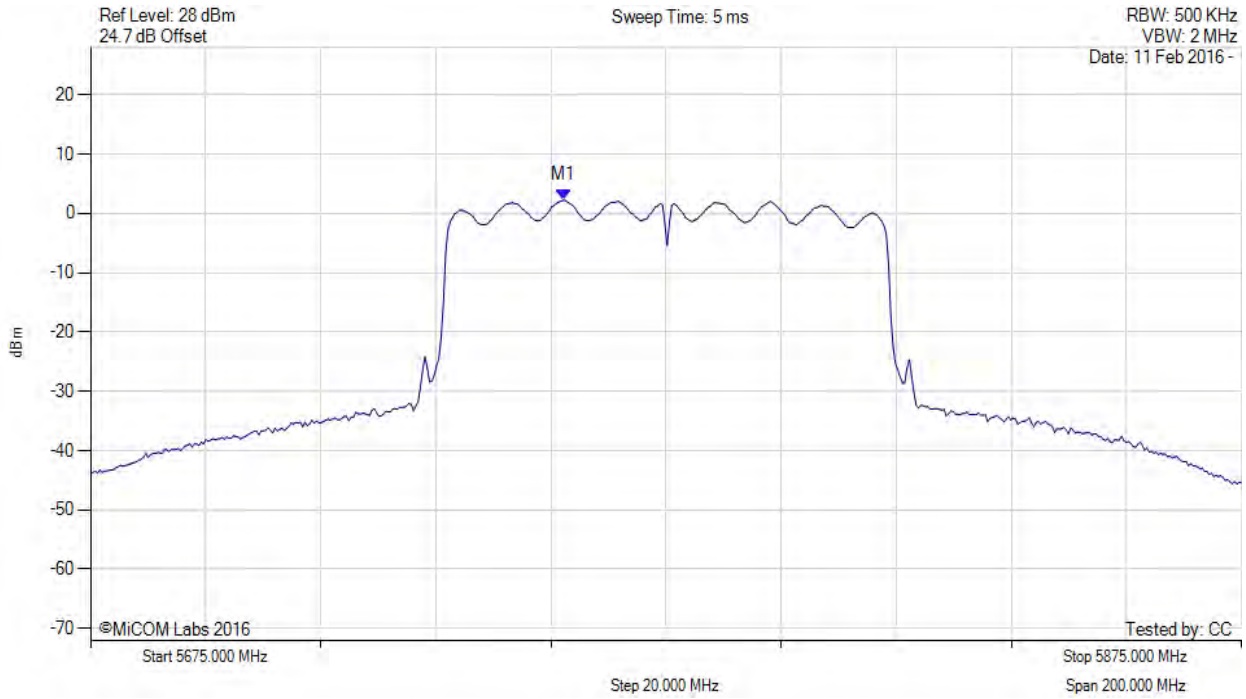


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5829.500 MHz : 7.686 dBm M1 + DCCF : 5829.500 MHz : 7.730 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 30.0 dBm Margin: -22.3 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11ac-80, Channel: 5775.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

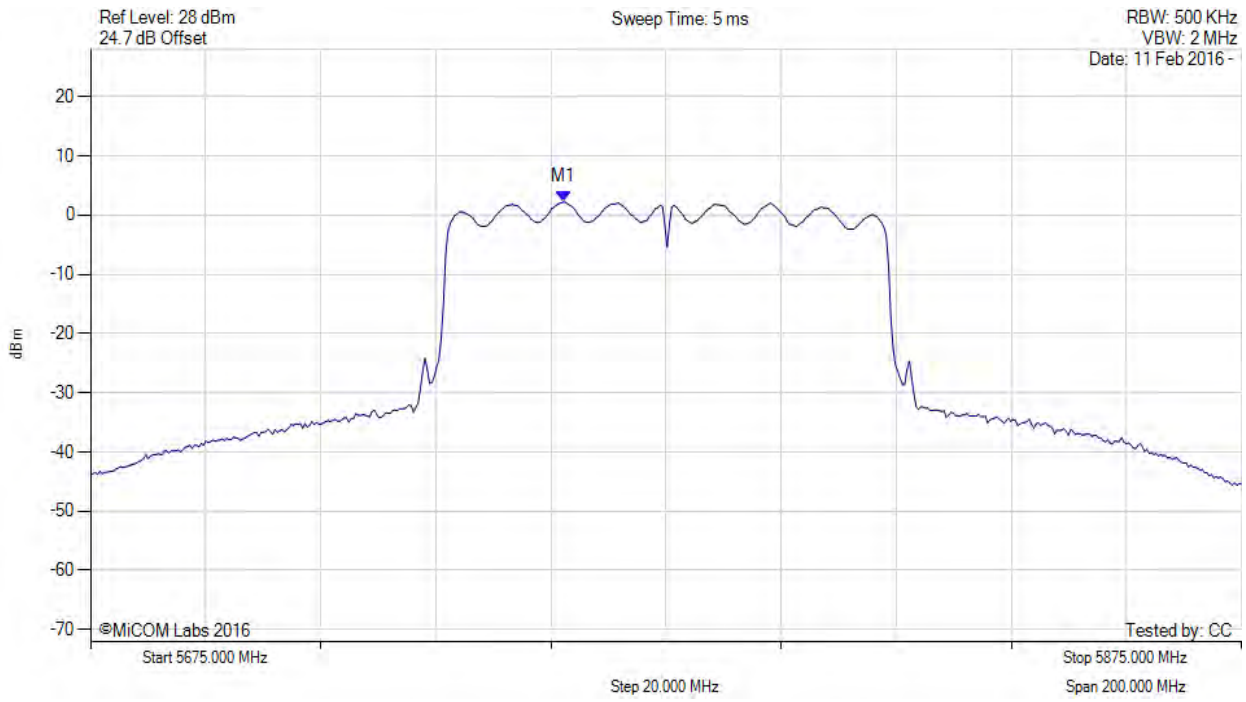


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5757.164 MHz : 2.225 dBm	Limit: ≤ 30.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11ac-80, Channel: 5775.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

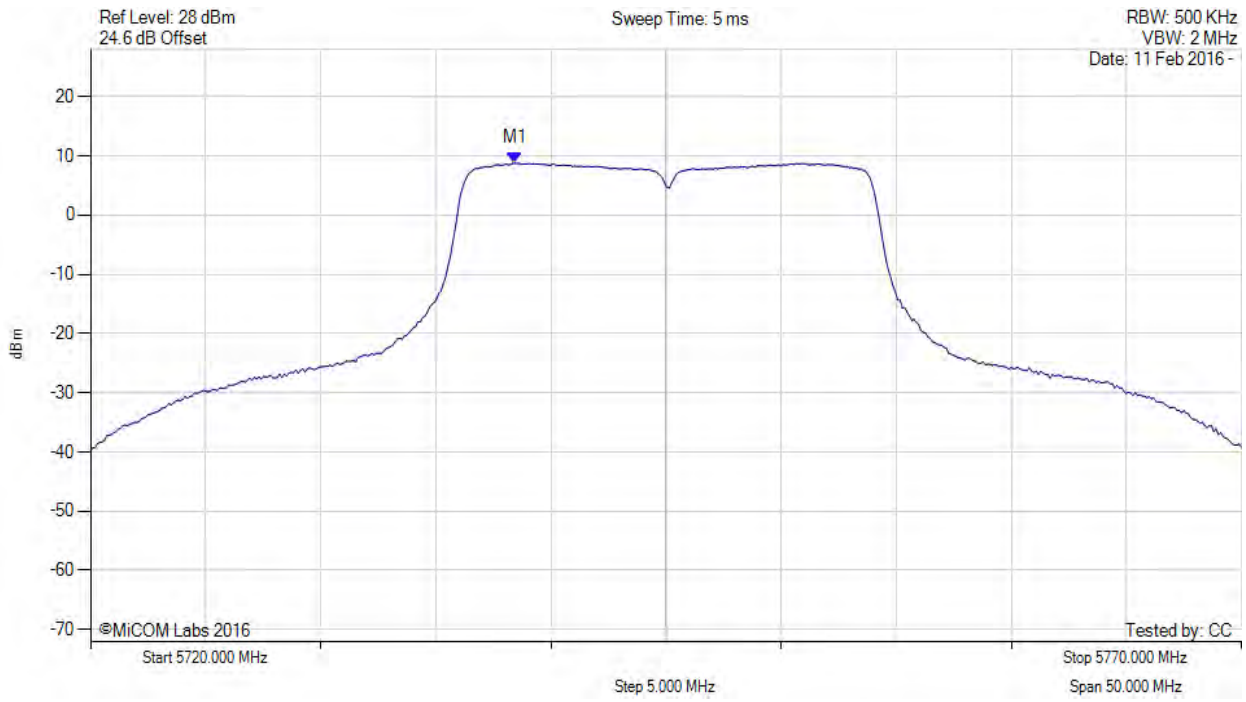


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5757.200 MHz : 2.225 dBm M1 + DCCF : 5757.200 MHz : 2.269 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 30.0 dBm Margin: -27.7 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5745.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

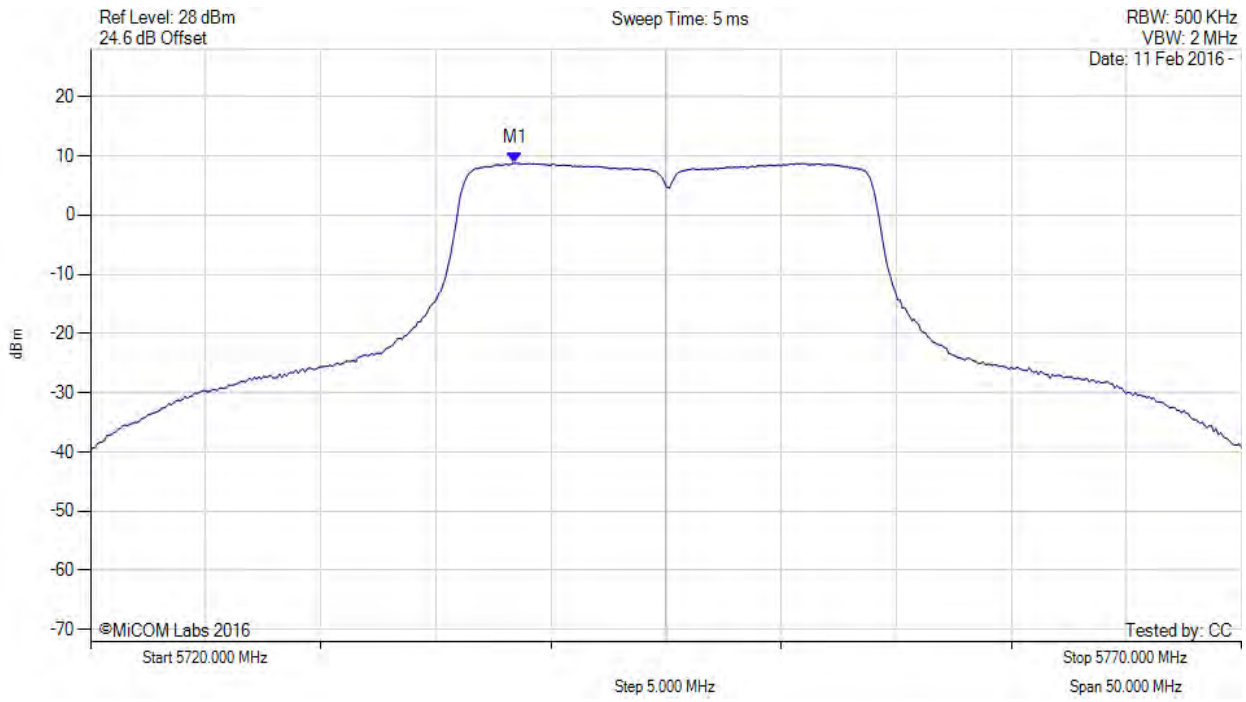


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5738.437 MHz : 8.762 dBm	Limit: ≤ 30.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5745.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

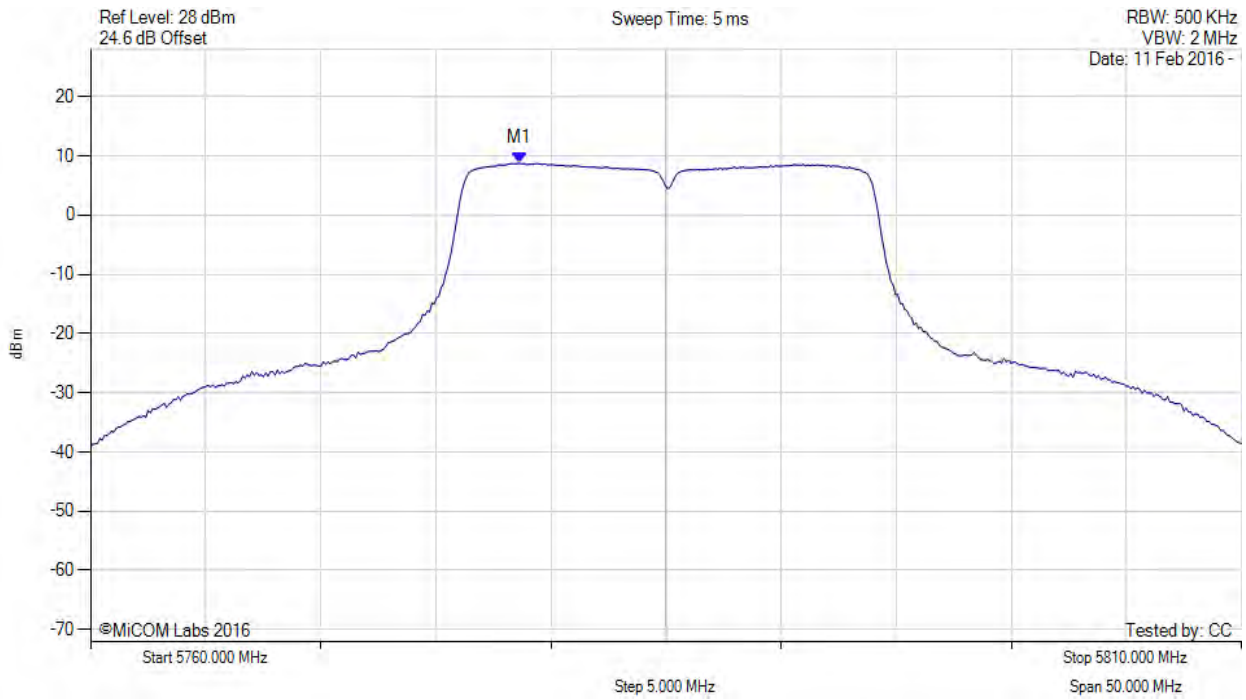


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5738.400 MHz : 8.762 dBm M1 + DCCF : 5738.400 MHz : 8.806 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 30.0 dBm Margin: -21.2 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5785.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

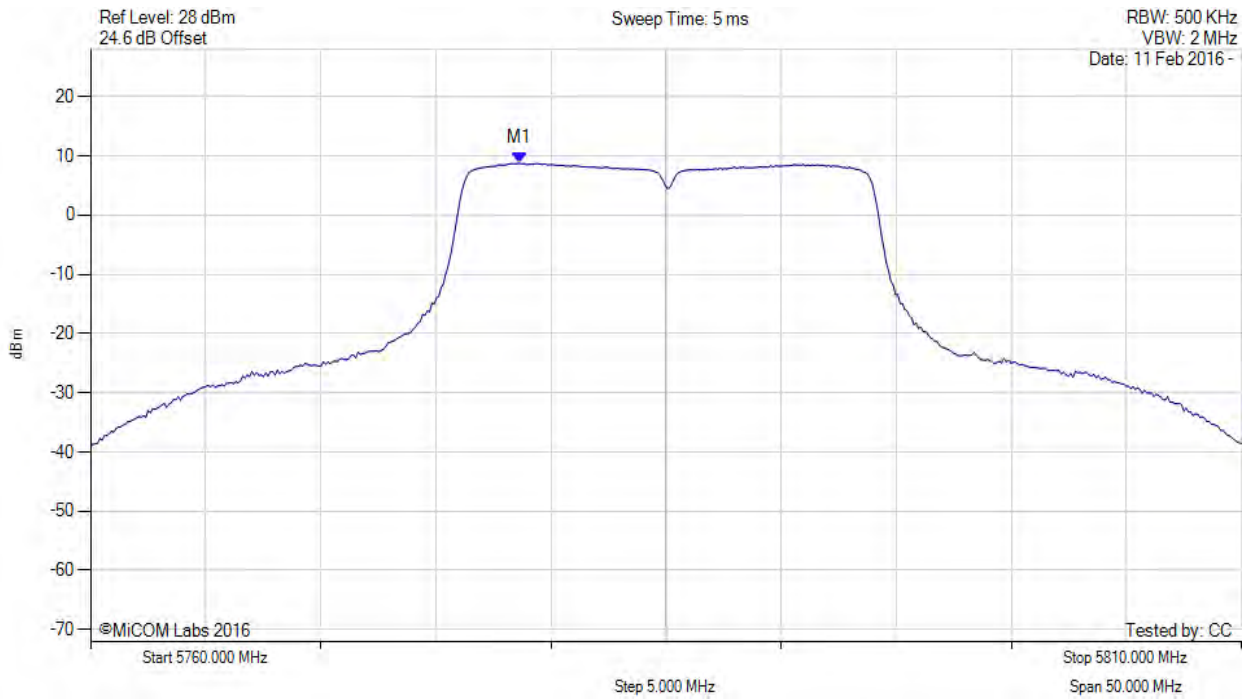


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5778.637 MHz : 8.769 dBm	Limit: ≤ 30.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5785.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

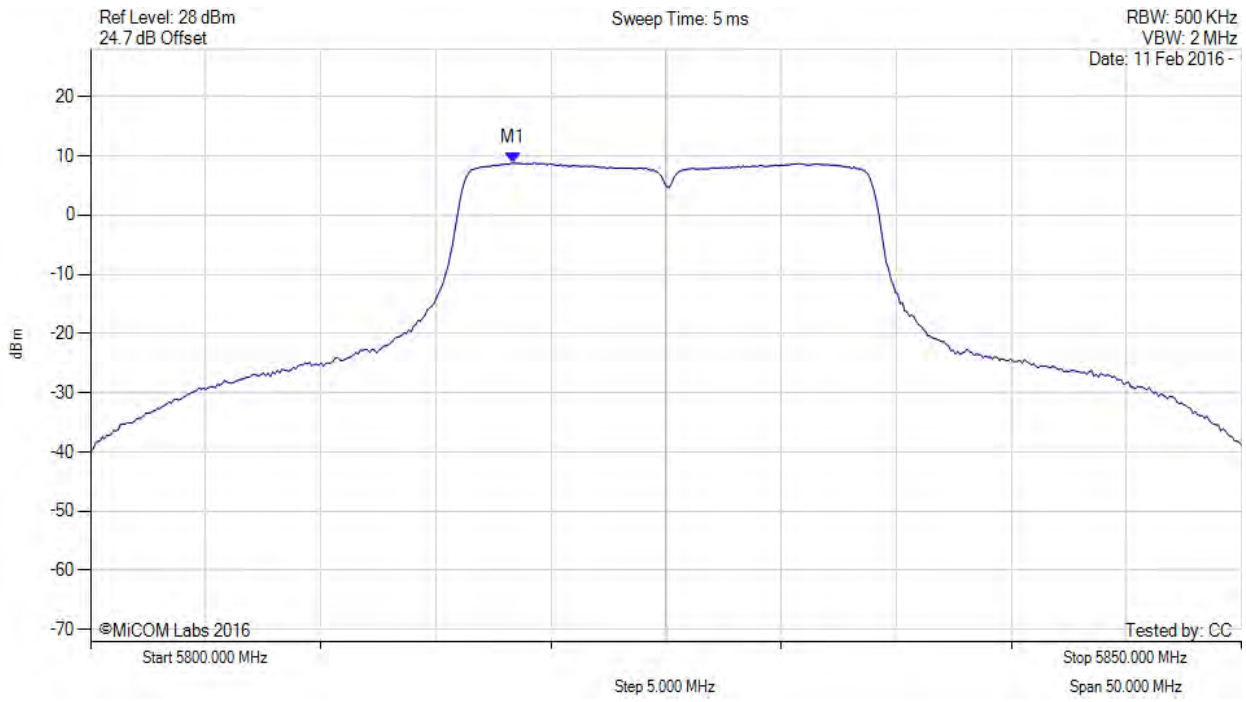


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5778.600 MHz : 8.769 dBm M1 + DCCF : 5778.600 MHz : 8.813 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 30.0 dBm Margin: -21.2 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5825.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

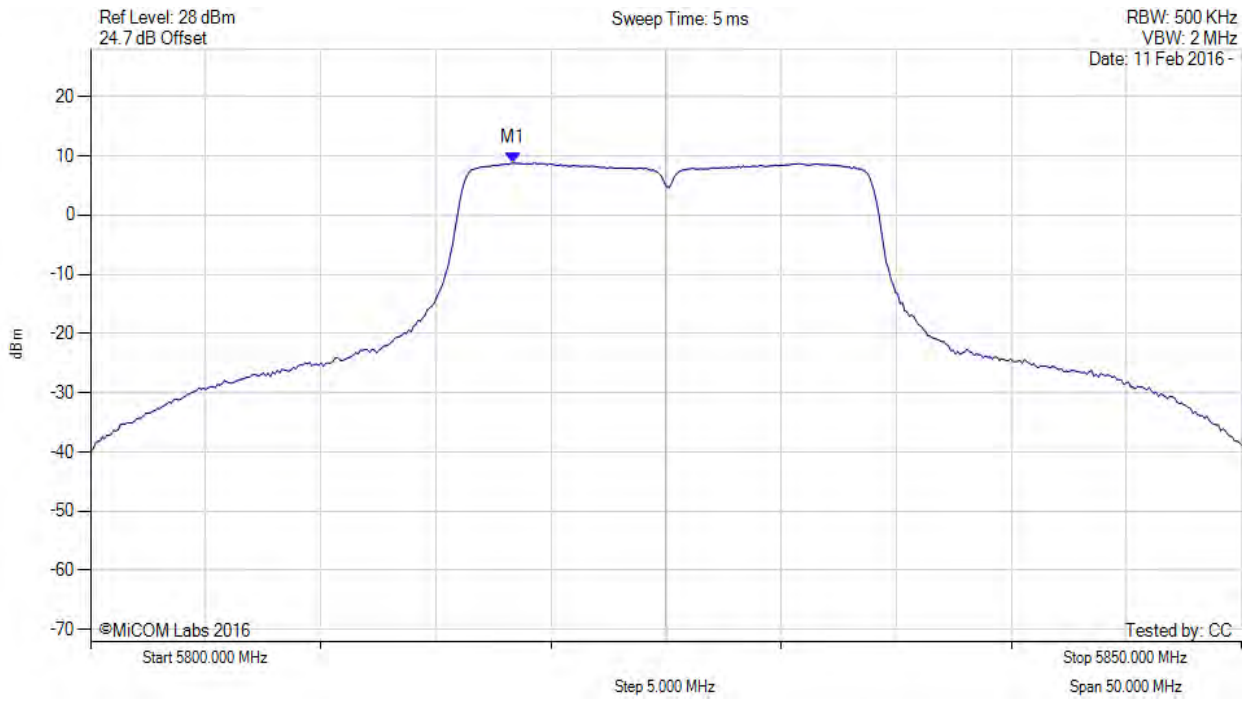


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5818.337 MHz : 8.811 dBm	Limit: ≤ 30.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5825.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

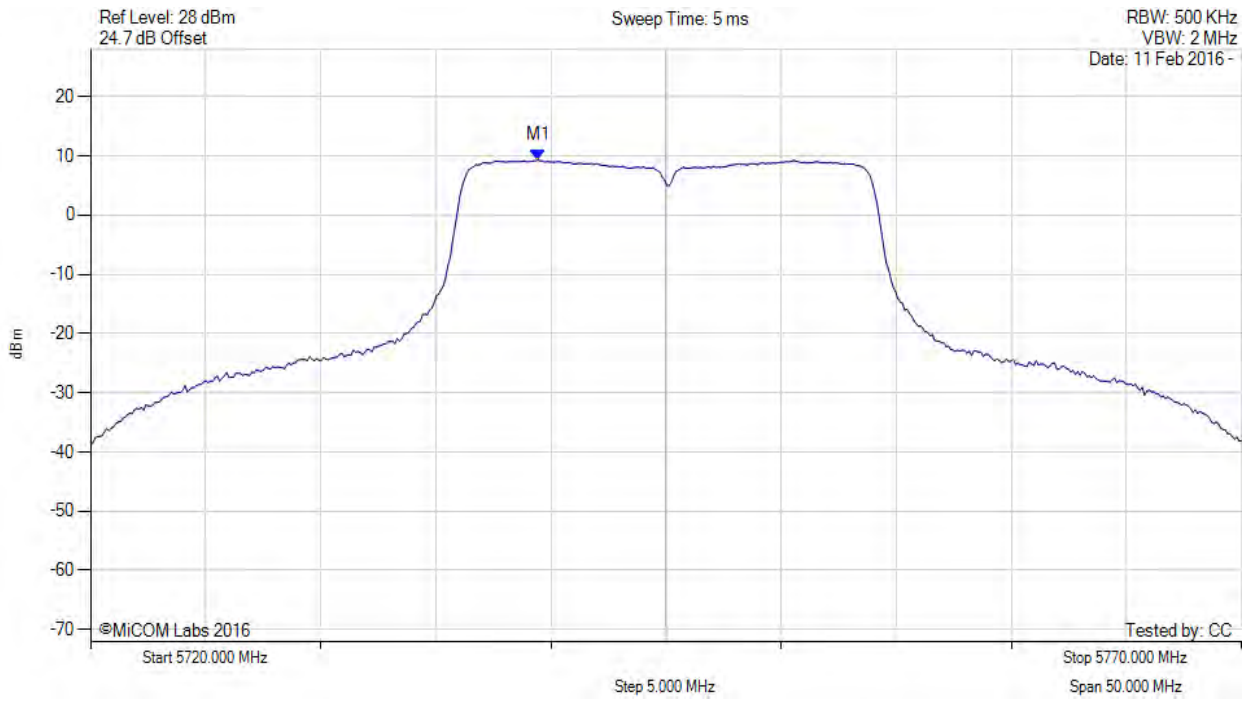


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5818.300 MHz : 8.811 dBm M1 + DCCF : 5818.300 MHz : 8.855 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 30.0 dBm Margin: -21.1 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5745.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

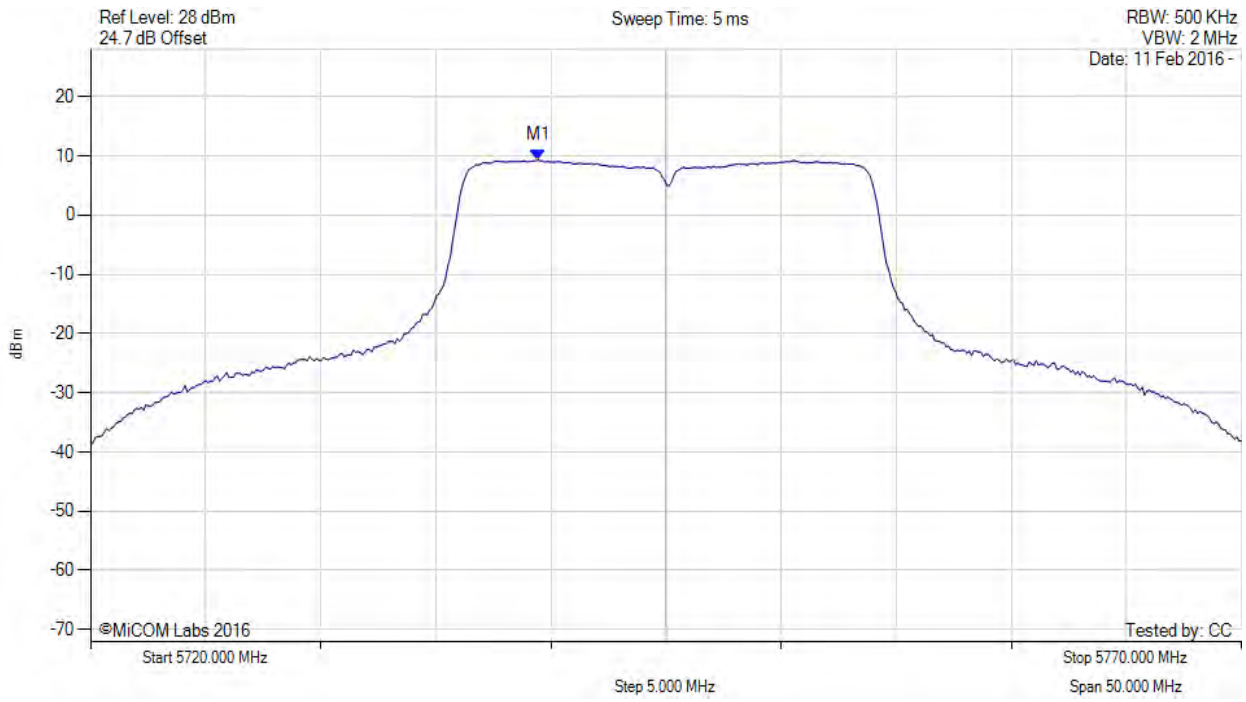


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5739.439 MHz : 9.293 dBm	Limit: ≤ 30.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5745.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

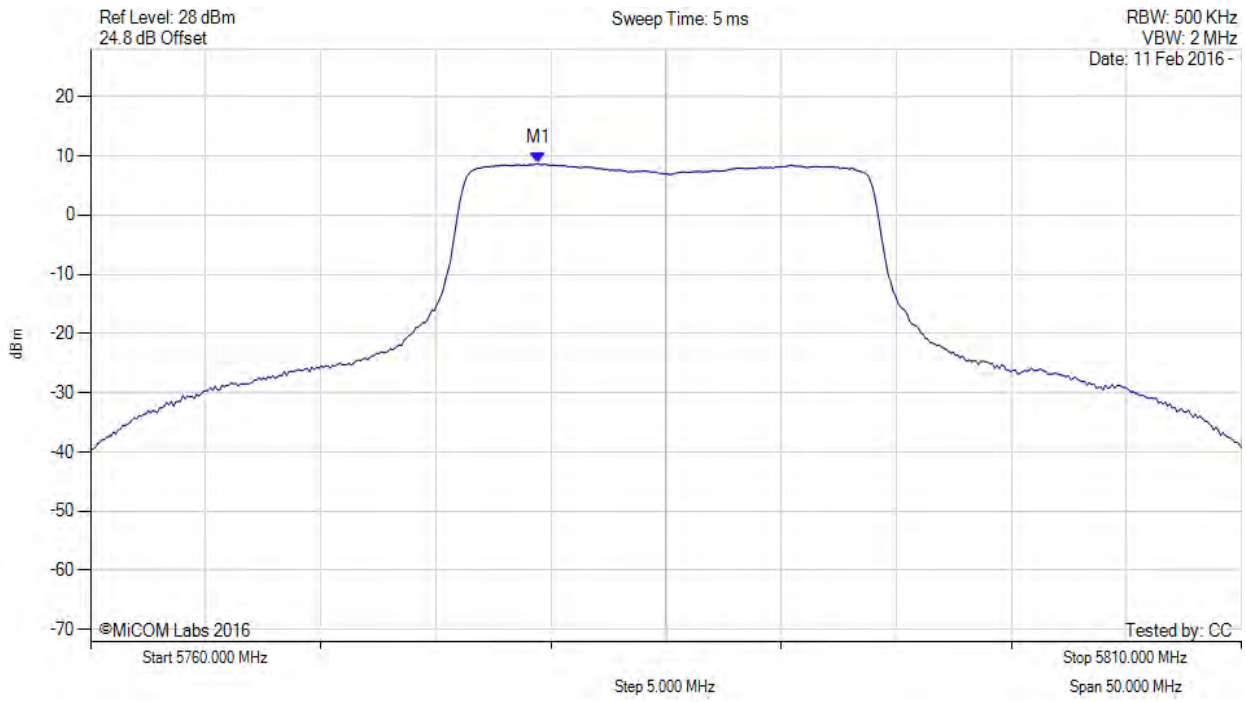


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5739.400 MHz : 9.293 dBm M1 + DCCF : 5739.400 MHz : 9.337 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 30.0 dBm Margin: -20.7 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5785.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

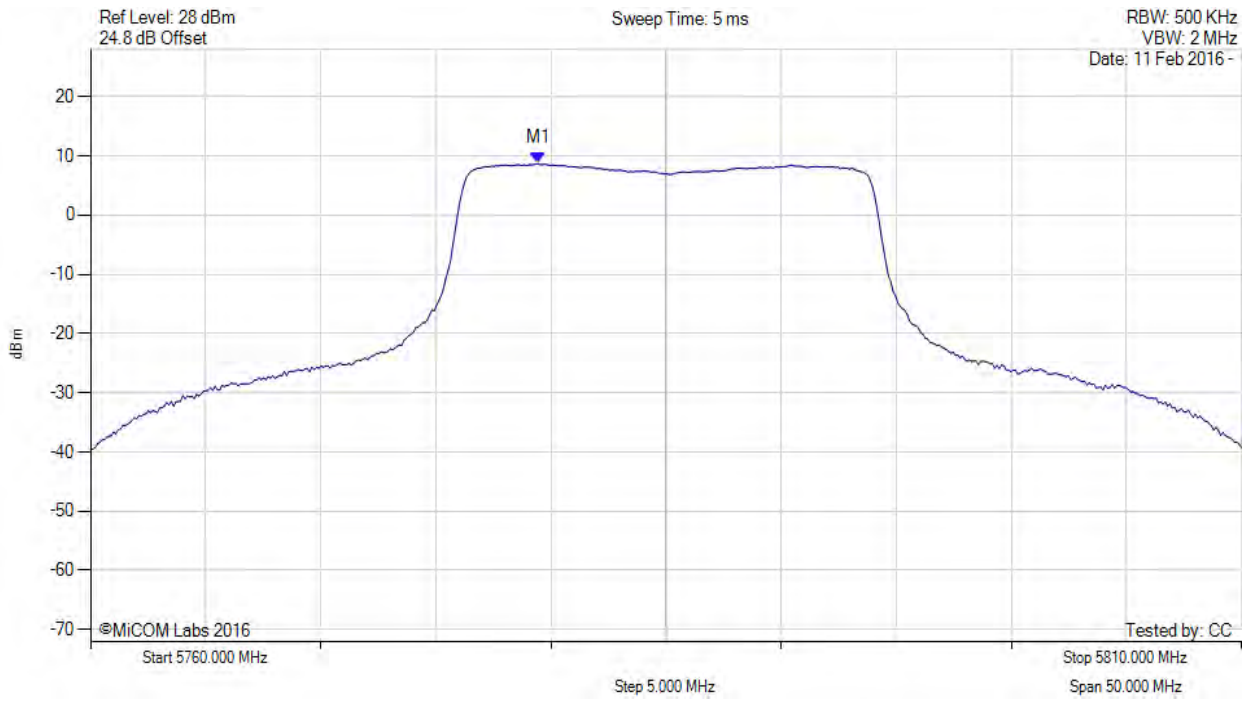


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5779.439 MHz : 8.715 dBm	Channel Frequency: 5785.00 MHz

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5785.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

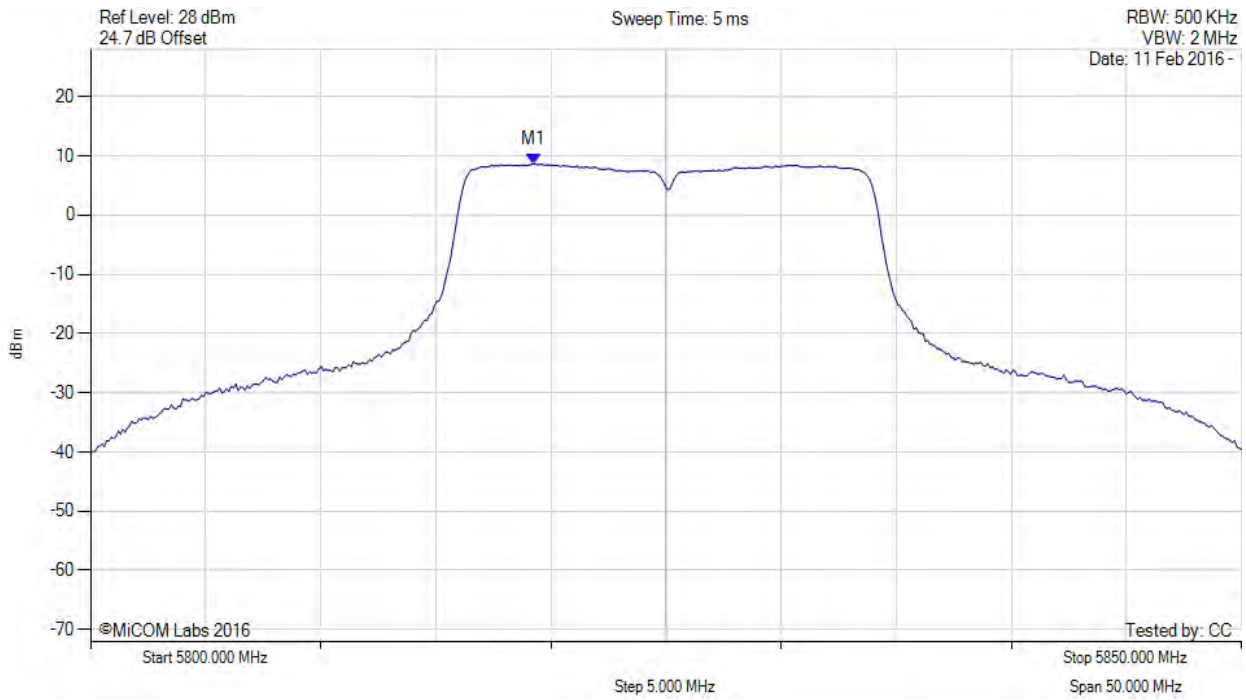


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5779.400 MHz : 8.715 dBm M1 + DCCF : 5779.400 MHz : 8.759 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 30.0 dBm Margin: -21.2 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5825.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

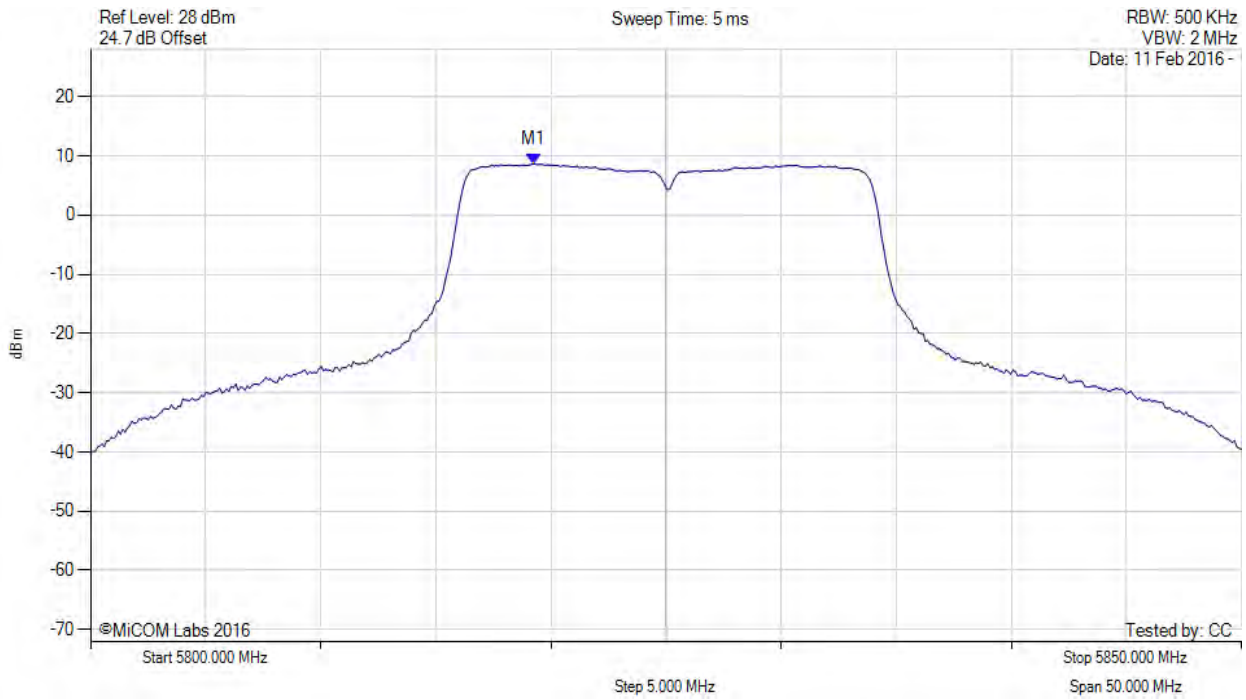


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5819.238 MHz : 8.643 dBm	Limit: ≤ 30.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5825.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

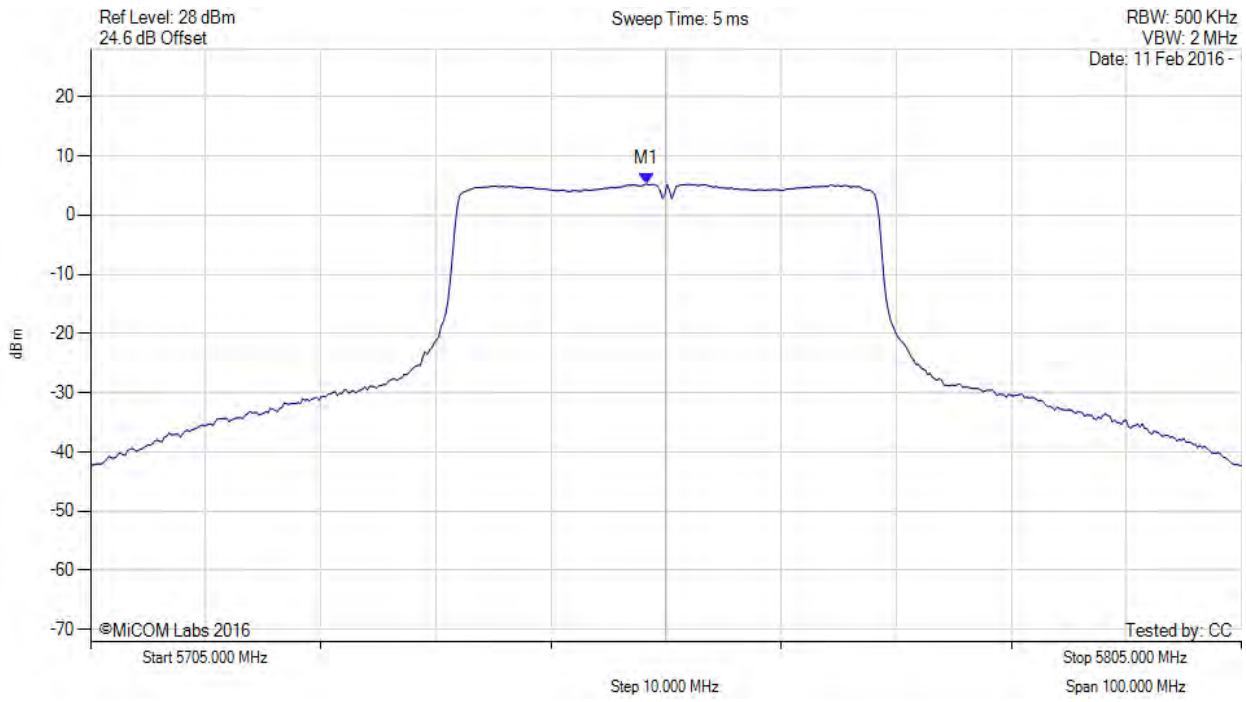


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5819.200 MHz : 8.643 dBm M1 + DCCF : 5819.200 MHz : 8.687 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 30.0 dBm Margin: -21.3 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5755.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

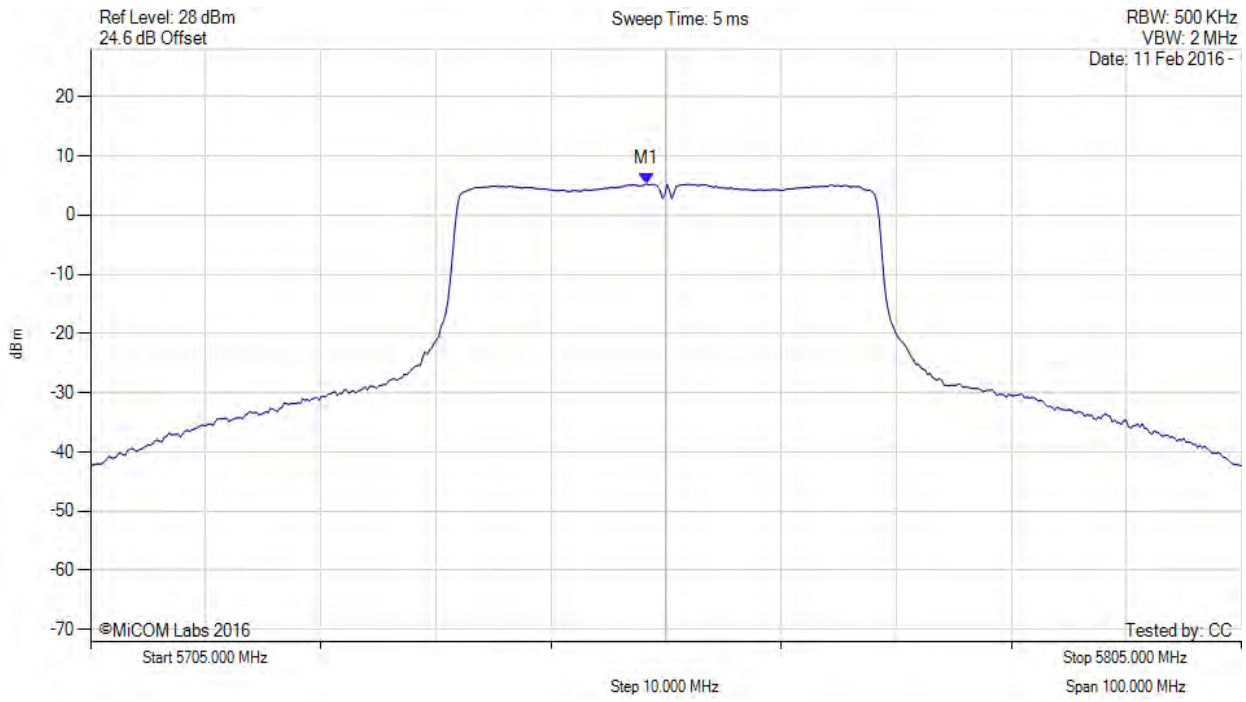


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5753.297 MHz : 5.287 dBm	Limit: ≤ 30.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5755.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

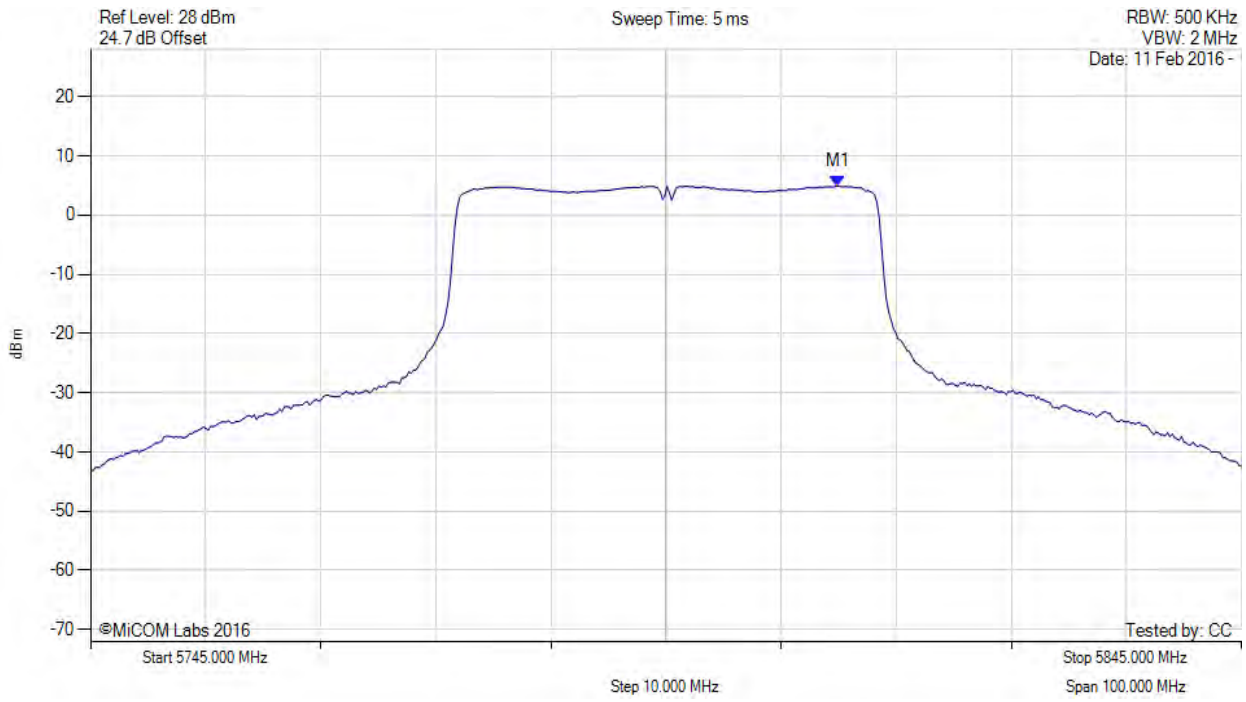


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5753.300 MHz : 5.287 dBm M1 + DCCF : 5753.300 MHz : 5.331 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 30.0 dBm Margin: -24.7 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5795.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc

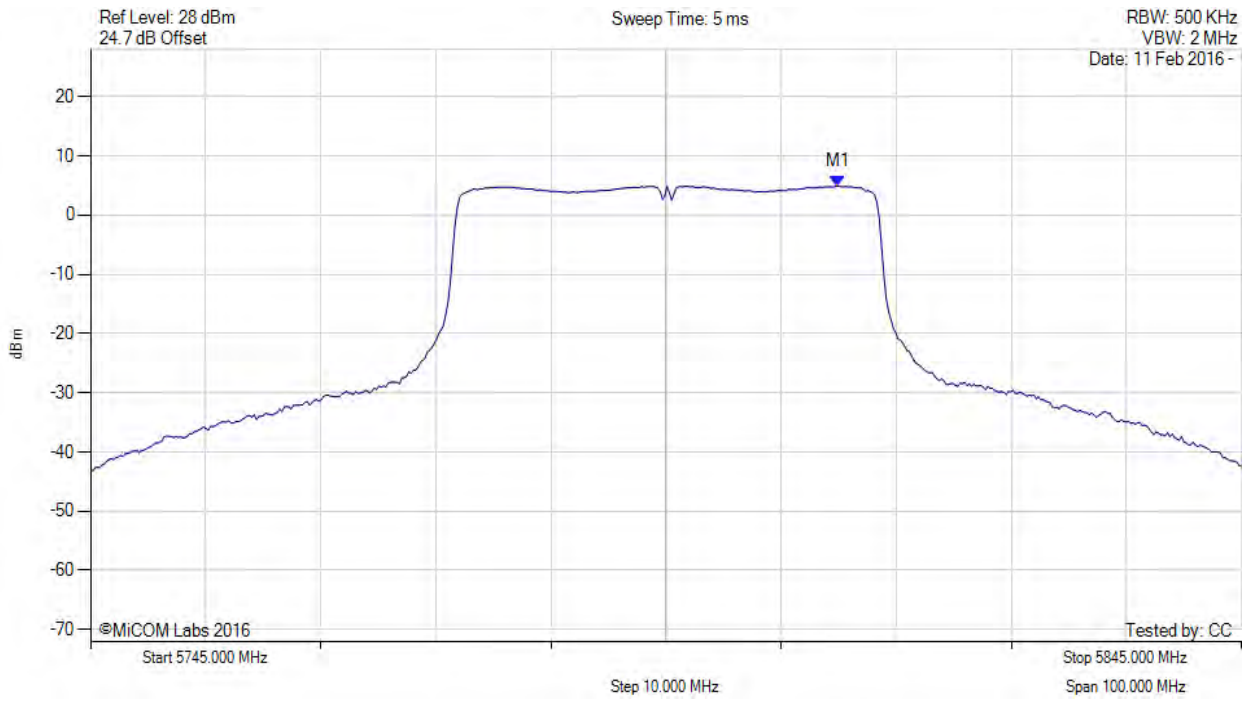


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5809.930 MHz : 4.921 dBm	Limit: ≤ 30.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5795.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

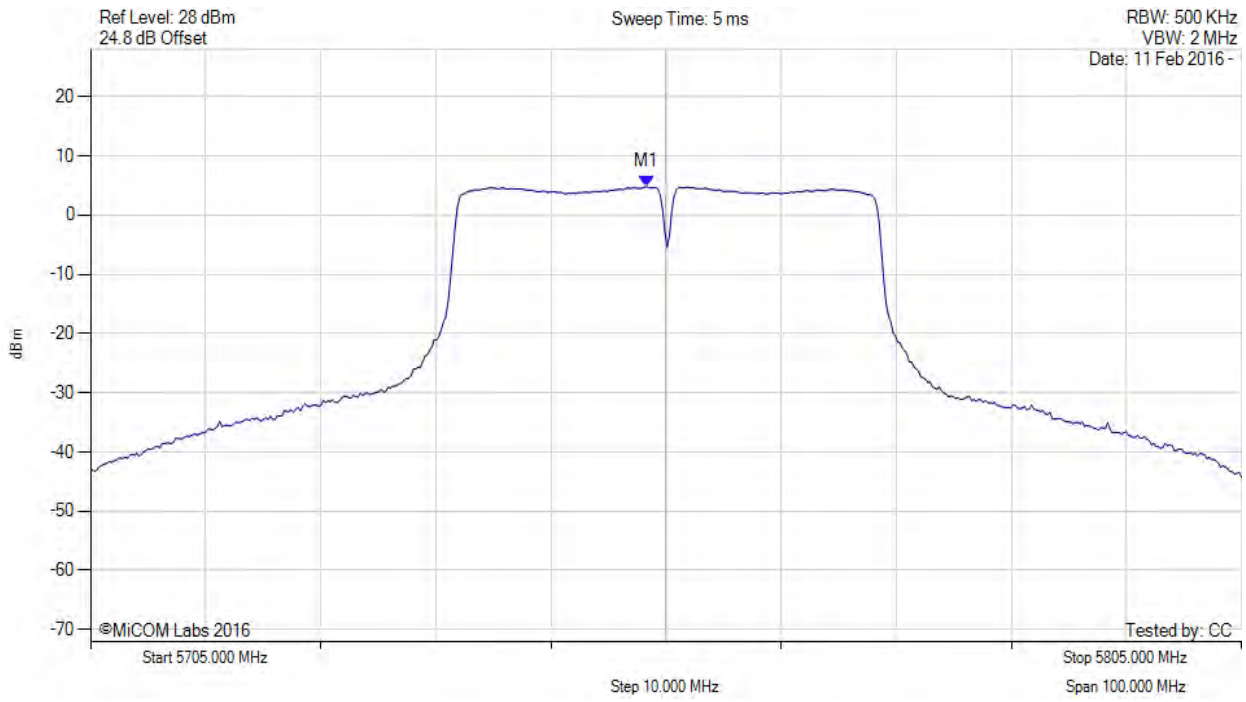


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5809.900 MHz : 4.921 dBm M1 + DCCF : 5809.900 MHz : 4.965 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 30.0 dBm Margin: -25.0 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5755.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

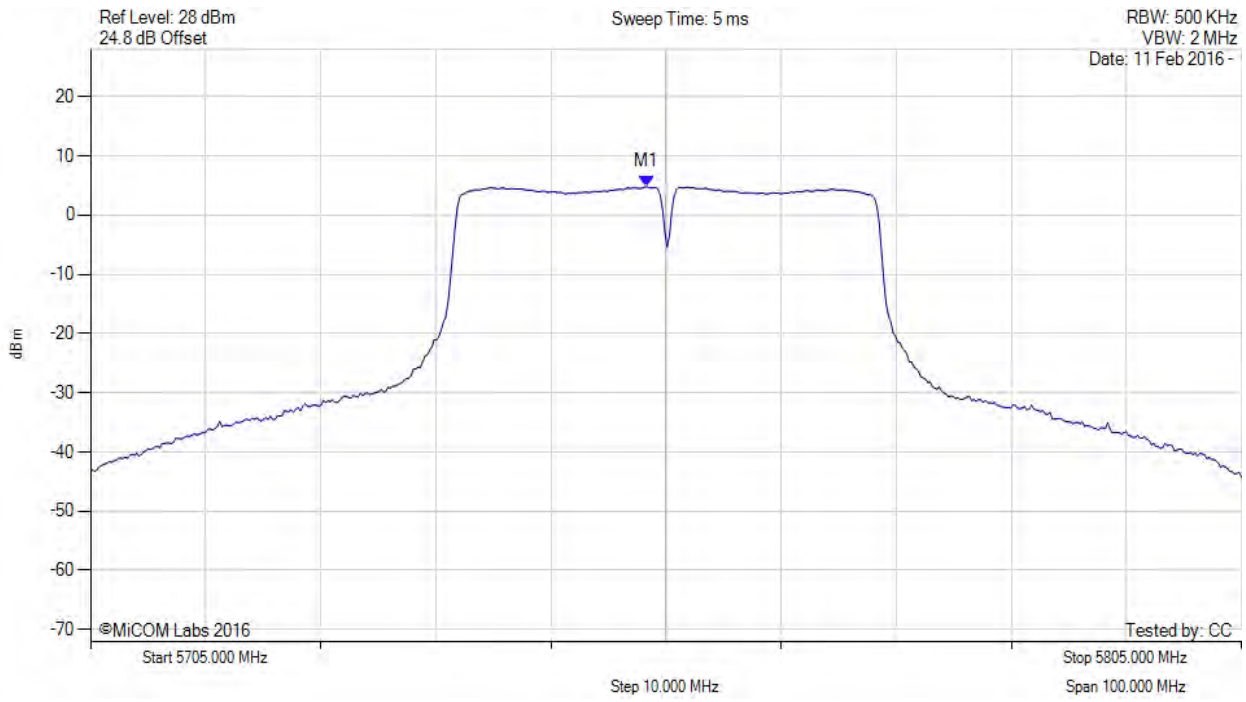


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5753.297 MHz : 4.812 dBm	Limit: ≤ 30.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5755.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

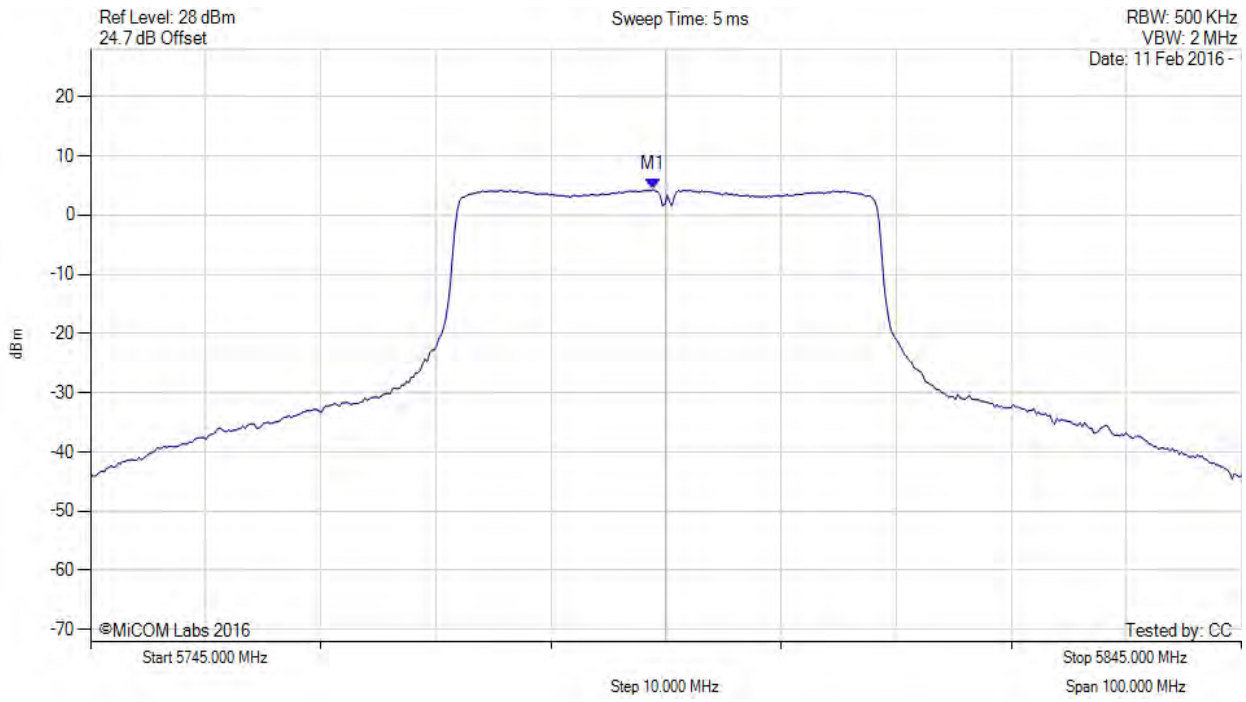


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5753.300 MHz : 4.812 dBm M1 + DCCF : 5753.300 MHz : 4.856 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 30.0 dBm Margin: -25.1 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5795.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc

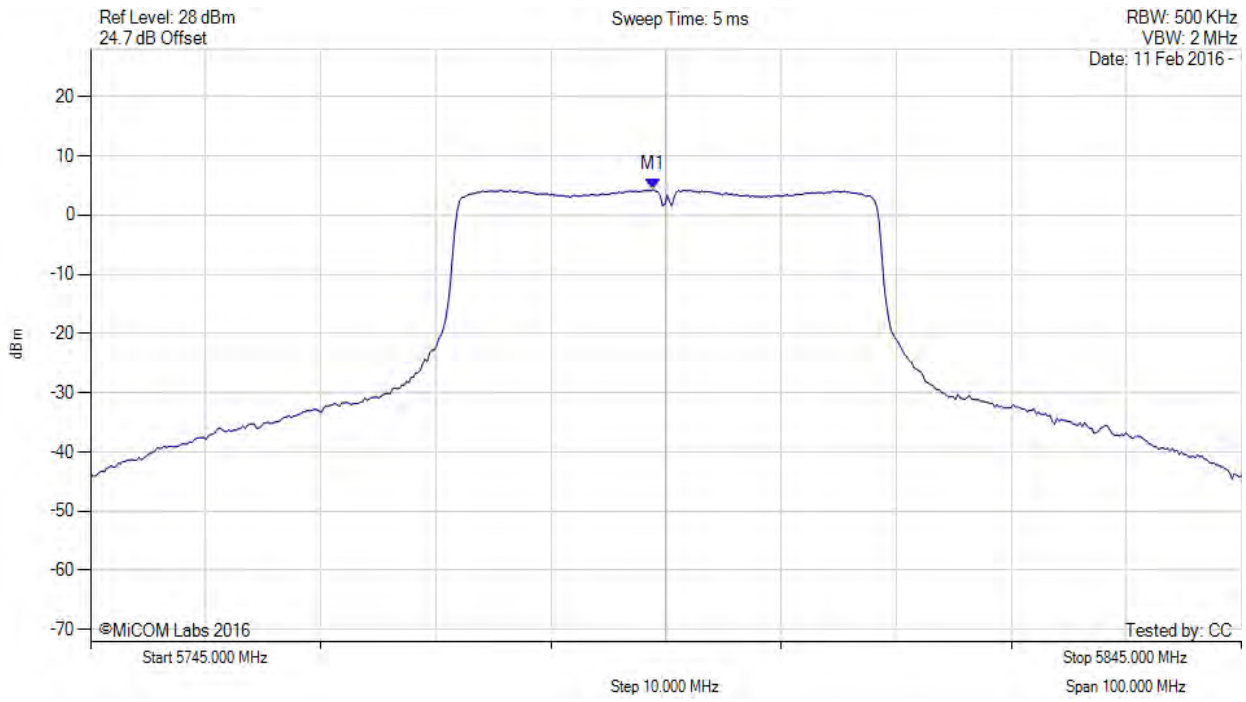


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5793.898 MHz : 4.322 dBm	Limit: ≤ 30.000 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5795.00 MHz, SUM, Temp: Ambient, Voltage: 12 Vdc

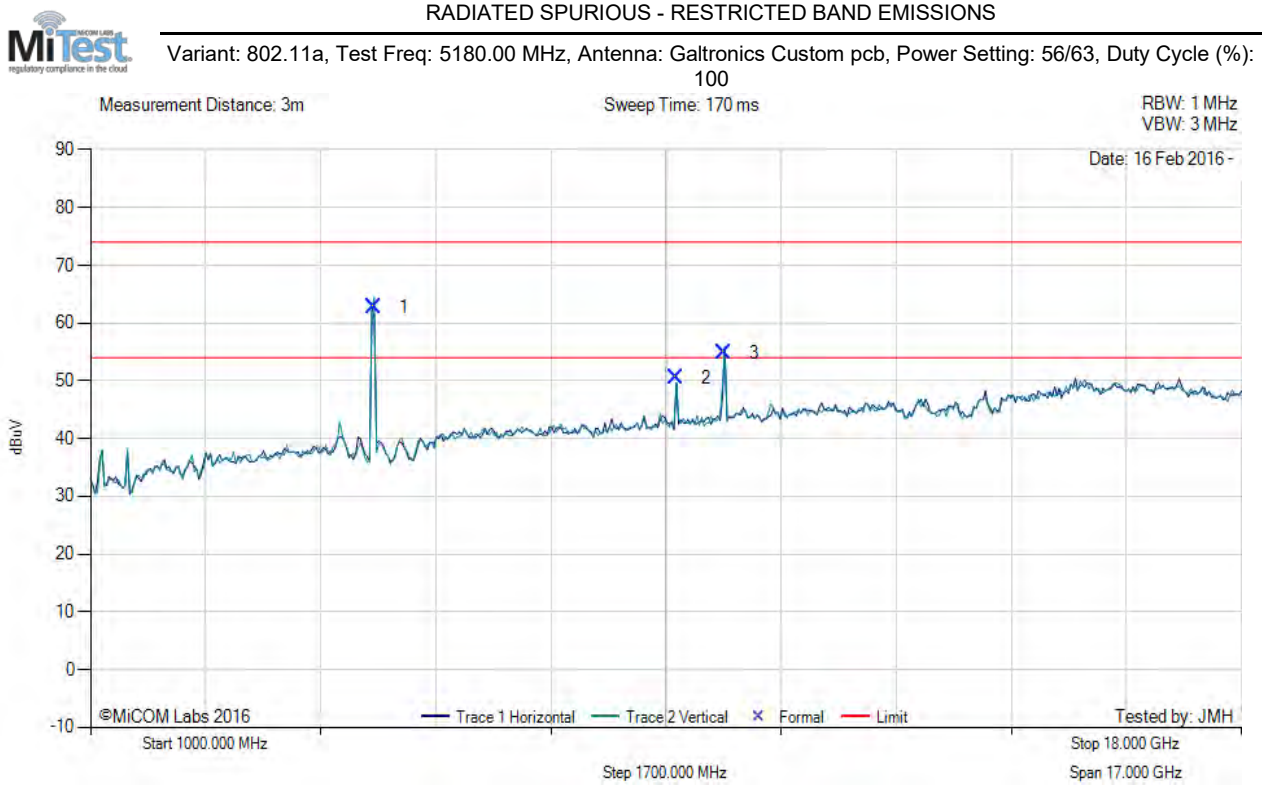


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5793.900 MHz : 4.322 dBm M1 + DCCF : 5793.900 MHz : 4.366 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 30.0 dBm Margin: -25.6 dB

back to matrix

A.3. Radiated

A.3.1. Restricted Band Emissions



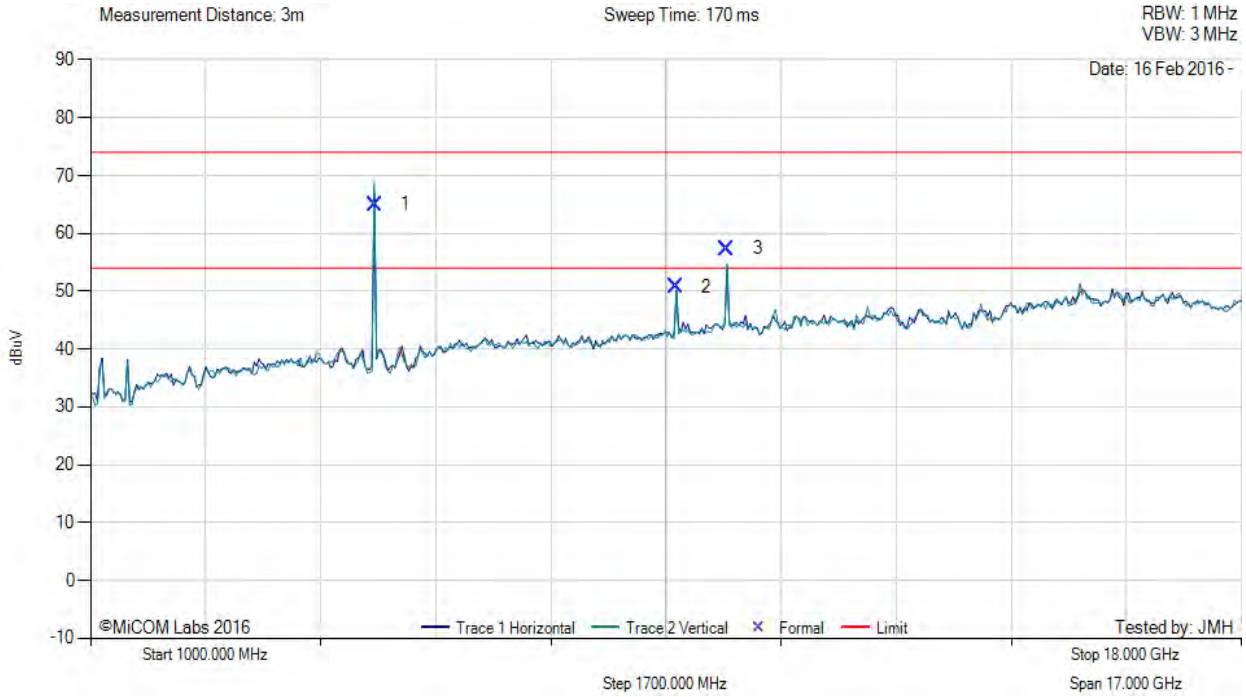
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5185.61	70.56	3.68	-11.49	62.75	Fundamental	Vertical	151	0	--	--	
2	9647.73	51.24	5.29	-6.08	50.45	Peak (NRB)	Horizontal	151	0	--	--	Pass
3	10356.32	54.52	5.54	-5.28	54.78	Peak (NRB)	Horizontal	151	20	--	--	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5200.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 58/63, Duty Cycle (%): 100



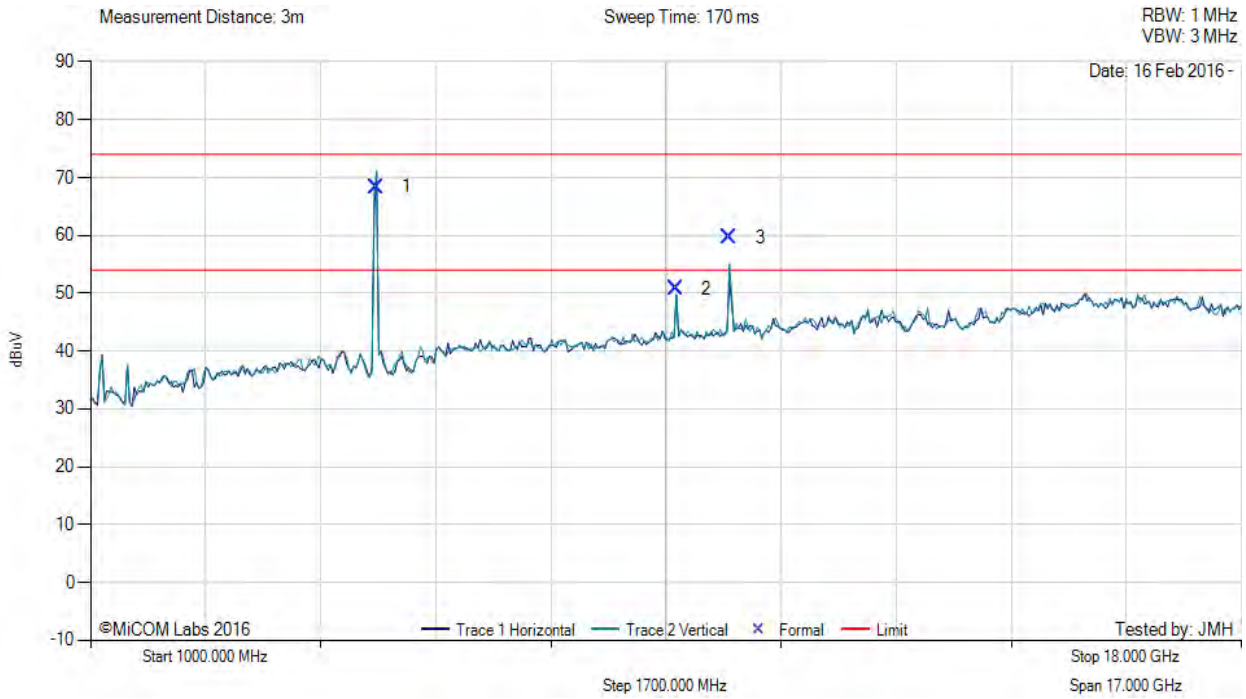
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5201.64	72.82	3.66	-11.46	65.02	Fundamental	Vertical	101	50	--	--	
2	9647.92	51.60	5.29	-6.08	50.81	Peak (NRB)	Horizontal	101	0	--	--	Pass
3	10401.33	56.98	5.41	-5.03	57.36	Peak (NRB)	Vertical	101	0	--	--	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5240.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 58/63, Duty Cycle (%): 100



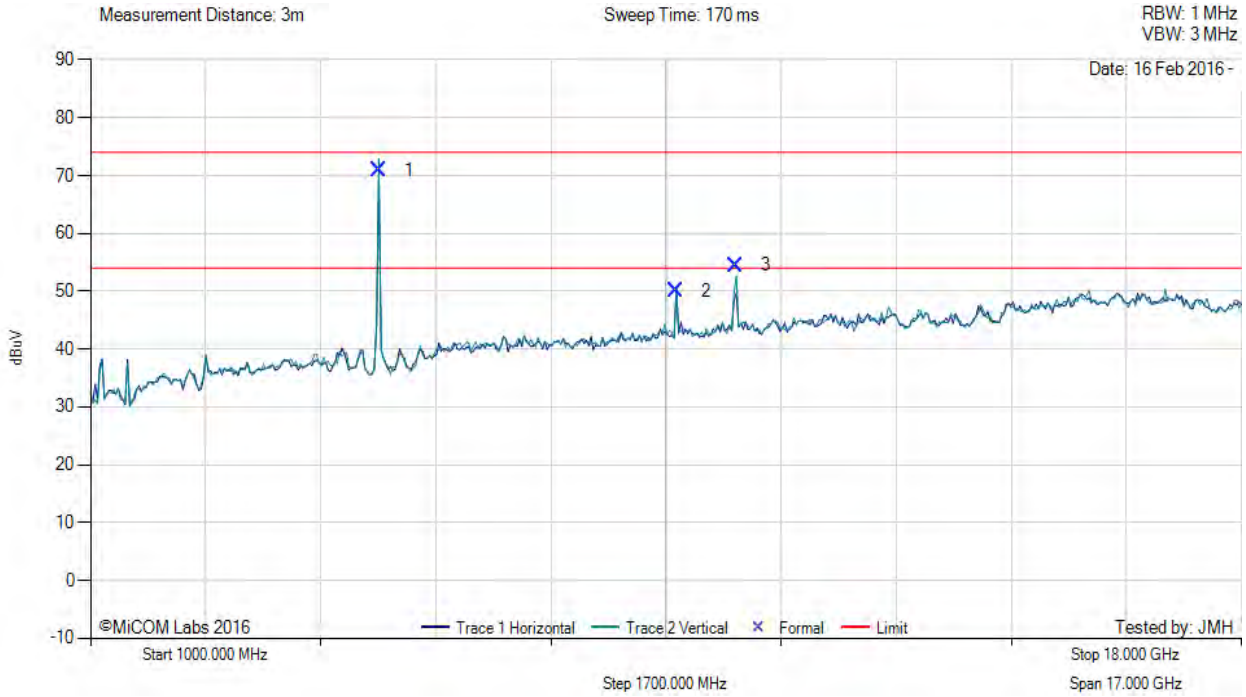
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5227.06	76.15	3.65	-11.39	68.41	Fundamental	Vertical	151	1	--	--	
2	9647.90	51.58	5.29	-6.08	50.79	Peak (NRB)	Horizontal	151	1	--	--	Pass
3	10441.80	58.62	5.69	-4.74	59.57	Peak (NRB)	Vertical	151	1	--	--	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5260.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 46/54, Duty Cycle (%): 100



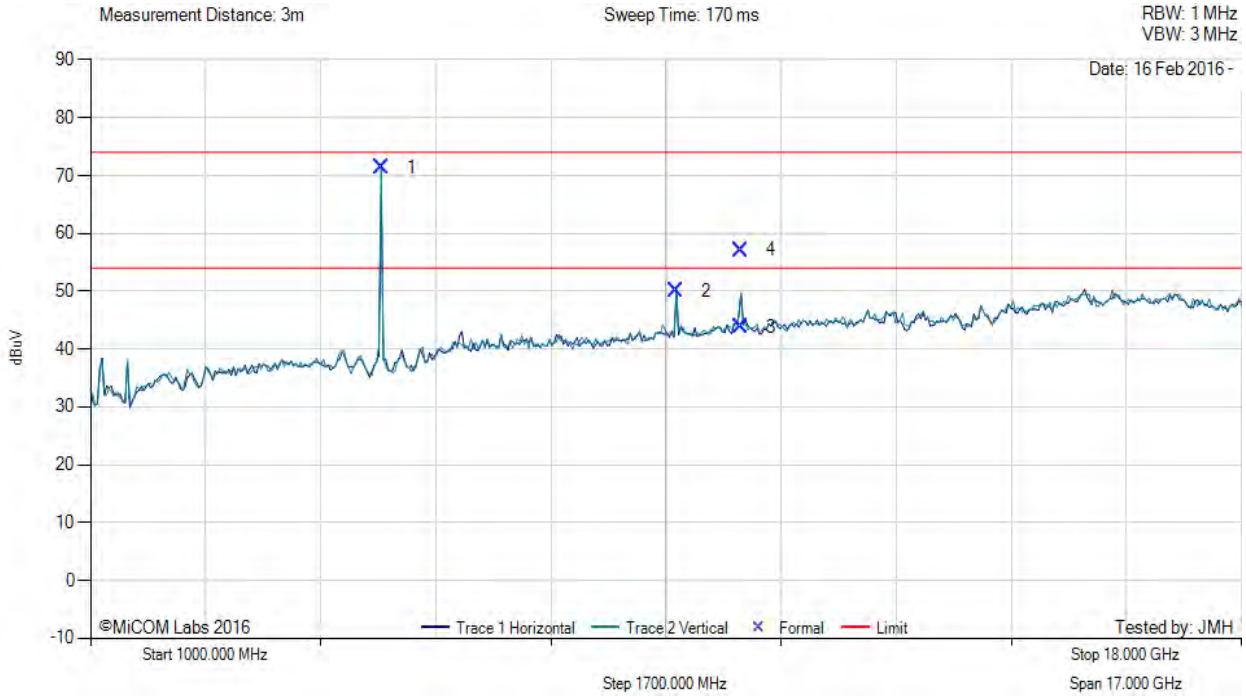
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5264.65	78.52	3.67	-11.27	70.92	Fundamental	Vertical	101	0	--	--	
2	9647.82	50.85	5.29	-6.08	50.06	Peak (NRB)	Horizontal	101	0	--	--	Pass
3	10520.20	53.29	5.43	-4.21	54.51	Peak (NRB)	Vertical	101	0	--	--	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5300.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 42/55, Duty Cycle (%): 100



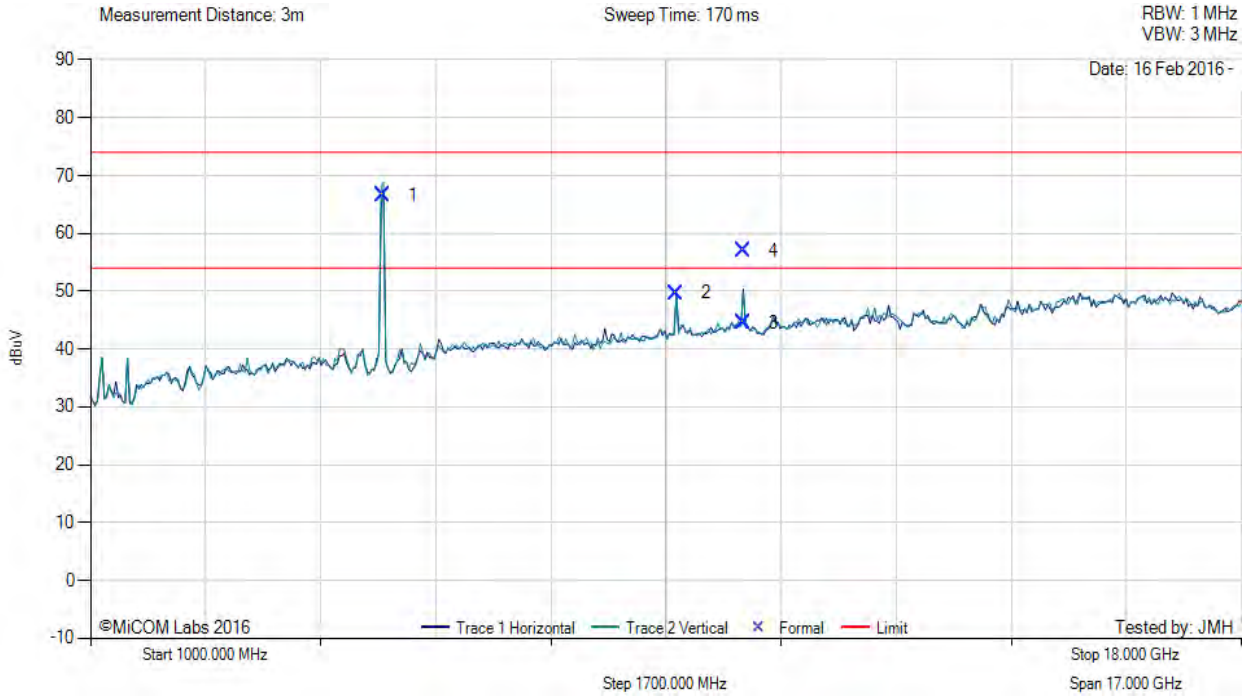
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5294.55	78.74	3.78	-11.12	71.40	Fundamental	Vertical	101	0	--	--	
2	9647.66	50.86	5.29	-6.08	50.07	Peak (NRB)	Horizontal	151	0	--	--	Pass
3	10601.48	42.17	5.58	-3.93	43.82	Max Avg	Horizontal	158	41	54.0	-10.2	Pass
4	10601.48	55.48	5.58	-3.93	57.13	Max Peak	Horizontal	158	41	74.0	-16.9	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5320.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 42/55, Duty Cycle (%): 100



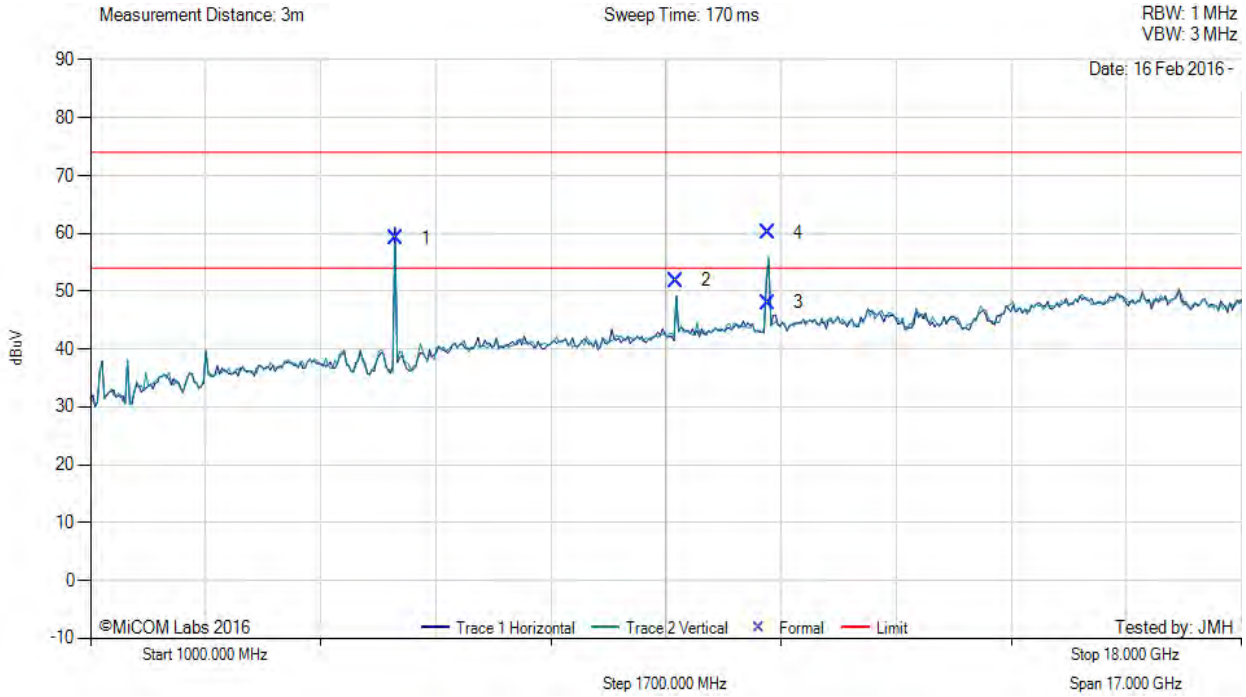
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5316.75	73.93	3.76	-11.07	66.62	Fundamental	Vertical	101	0	--	--	
2	9647.74	50.44	5.29	-6.08	49.65	Peak (NRB)	Horizontal	151	0	--	--	Pass
3	10640.52	43.09	5.39	-3.89	44.59	Max Avg	Horizontal	147	43	54.0	-9.4	Pass
4	10640.52	55.44	5.39	-3.89	56.94	Max Peak	Horizontal	147	43	74.0	-17.1	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5500.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 49/55, Duty Cycle (%): 100



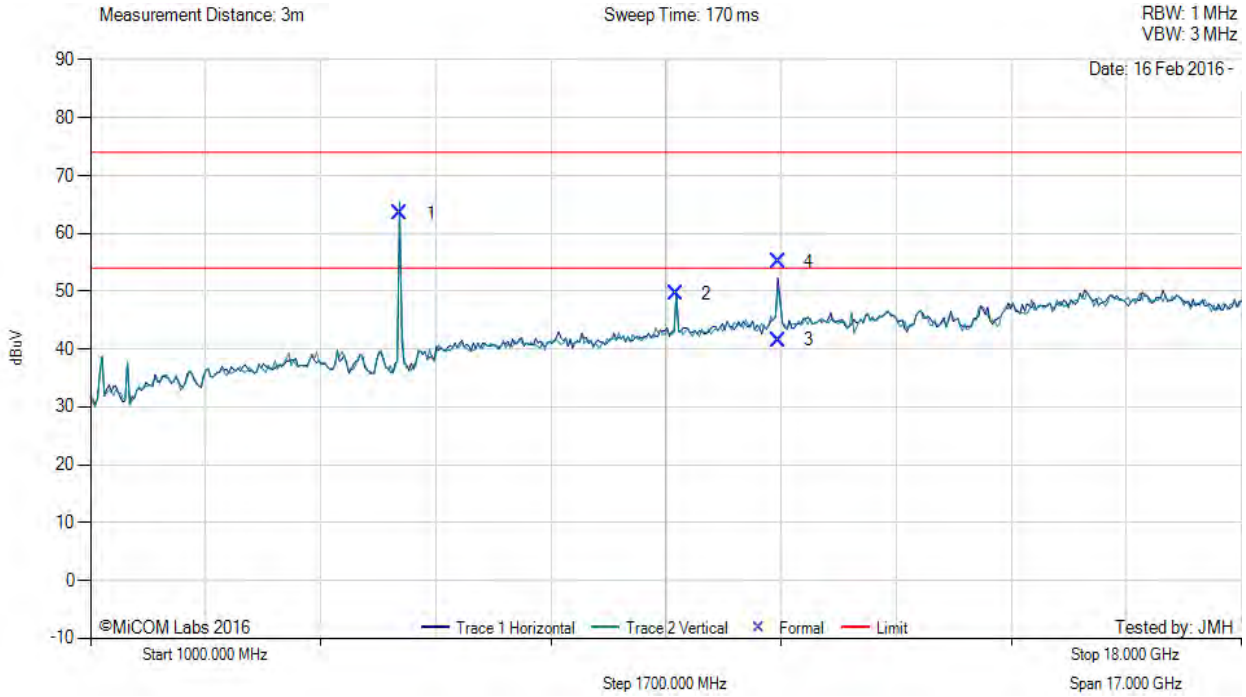
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5501.68	66.59	3.75	-11.17	59.17	Fundamental	Horizontal	151	104	--	--	
2	9647.75	52.66	5.29	-6.08	51.87	Peak (NRB)	Horizontal	151	104	--	--	Pass
3	11000.24	46.64	5.59	-4.24	47.99	Max Avg	Vertical	168	36	54.0	-6.0	Pass
4	11000.24	58.70	5.59	-4.24	60.05	Max Peak	Vertical	168	36	74.0	-14.0	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5580.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 49/51, Duty Cycle (%): 100



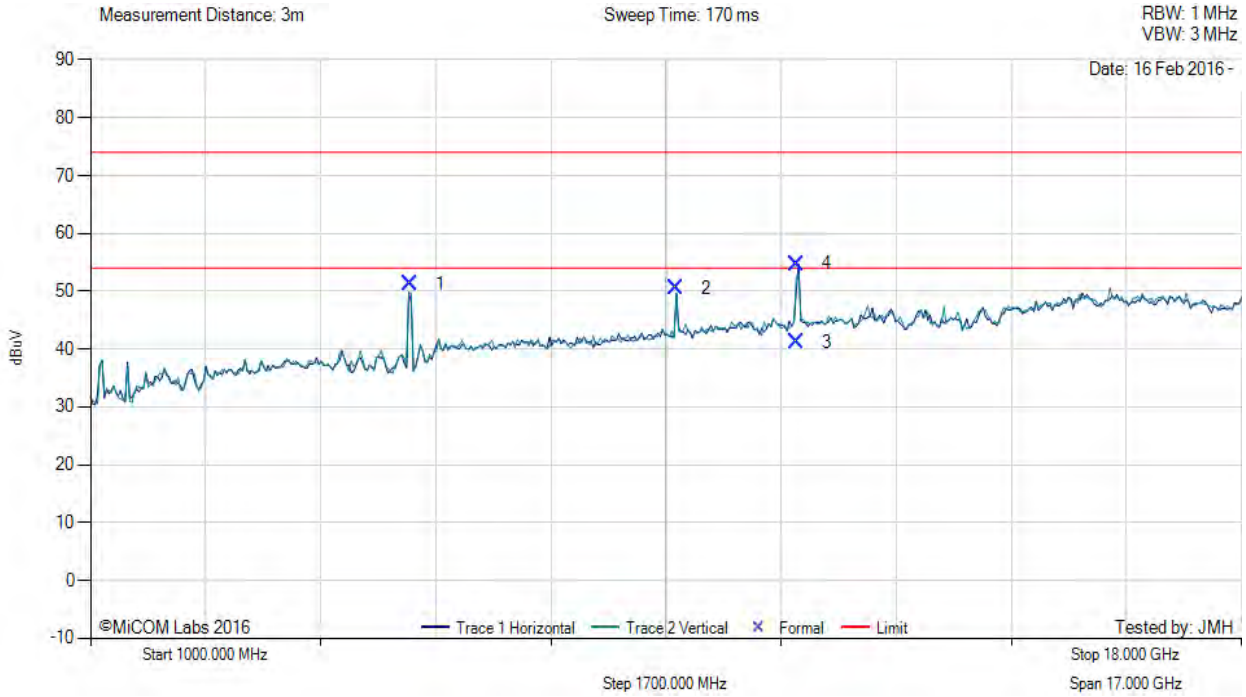
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5575.67	70.79	3.81	-11.21	63.39	Fundamental	Vertical	101	0	--	--	
2	9647.82	50.41	5.29	-6.08	49.62	Peak (NRB)	Horizontal	101	0	--	--	Pass
3	11155.55	39.61	5.96	-4.05	41.52	Max Avg	Horizontal	107	13	54.0	-12.5	Pass
4	11155.55	53.14	5.96	-4.05	55.05	Max Peak	Horizontal	107	13	74.0	-19.0	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5720.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 51/51, Duty Cycle (%): 100



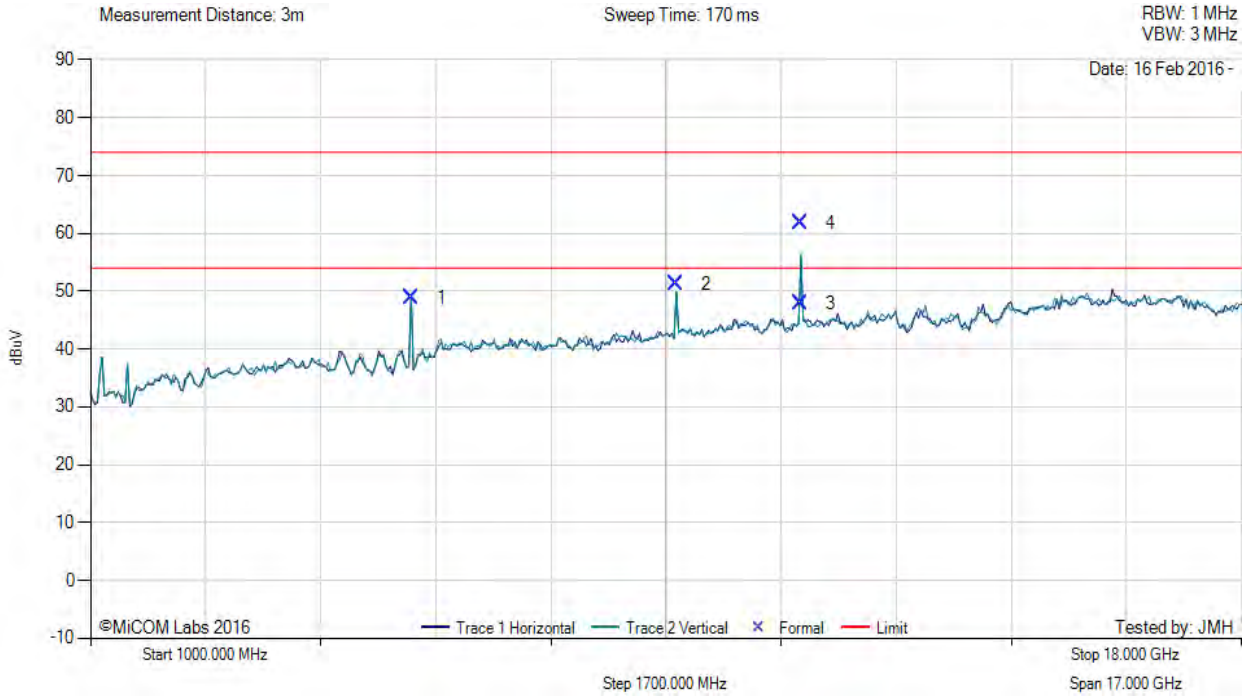
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5717.03	58.19	3.81	-10.75	51.25	Fundamental	Vertical	151	90	--	--	
2	9647.71	51.25	5.29	-6.08	50.46	Peak (NRB)	Horizontal	151	90	--	--	Pass
3	11433.99	40.69	5.41	-4.92	41.18	Max Avg	Horizontal	152	293	54.0	-12.8	Pass
4	11433.99	54.22	5.41	-4.92	54.71	Max Peak	Horizontal	152	293	74.0	-19.3	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5745.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 59/59, Duty Cycle (%): 100



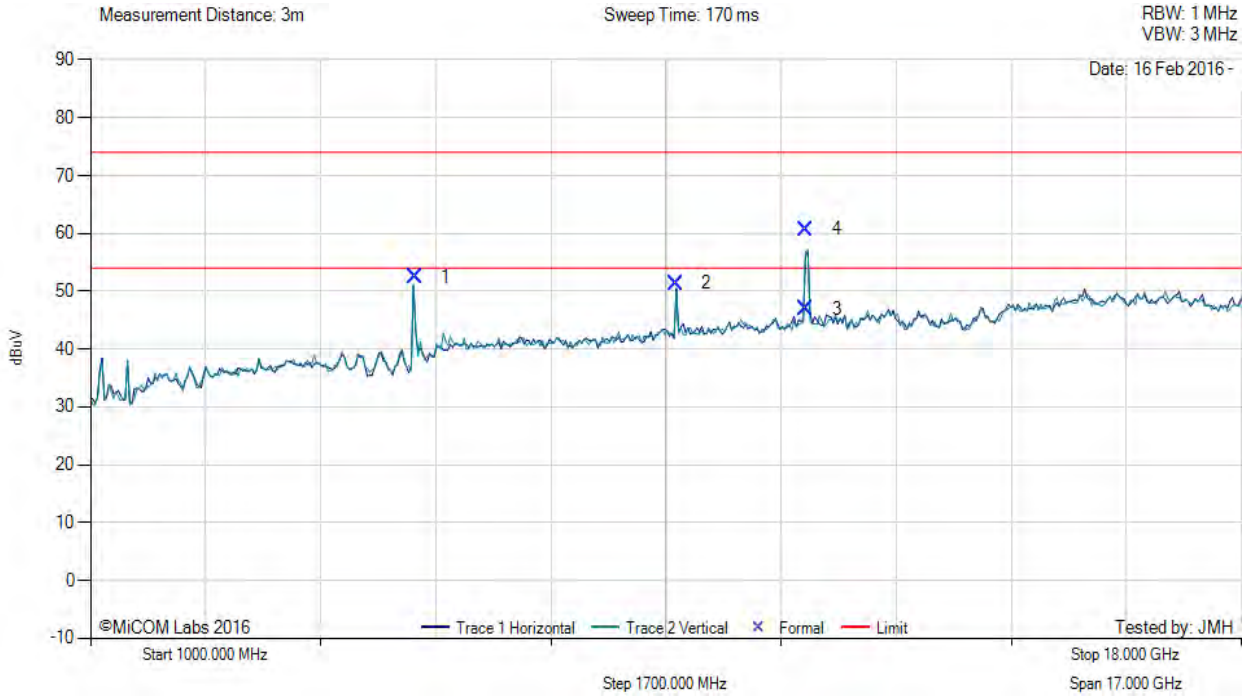
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5738.04	55.63	3.82	-10.67	48.78	Fundamental	Horizontal	151	90	--	--	
2	9647.90	52.01	5.29	-6.08	51.22	Peak (NRB)	Horizontal	151	90	--	--	Pass
3	11492.55	47.34	5.44	-4.84	47.94	Max Avg	Vertical	143	60	54.0	-6.1	Pass
4	11492.55	61.25	5.44	-4.84	61.85	Max Peak	Vertical	143	60	74.0	-12.2	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5785.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 59/59, Duty Cycle (%): 100



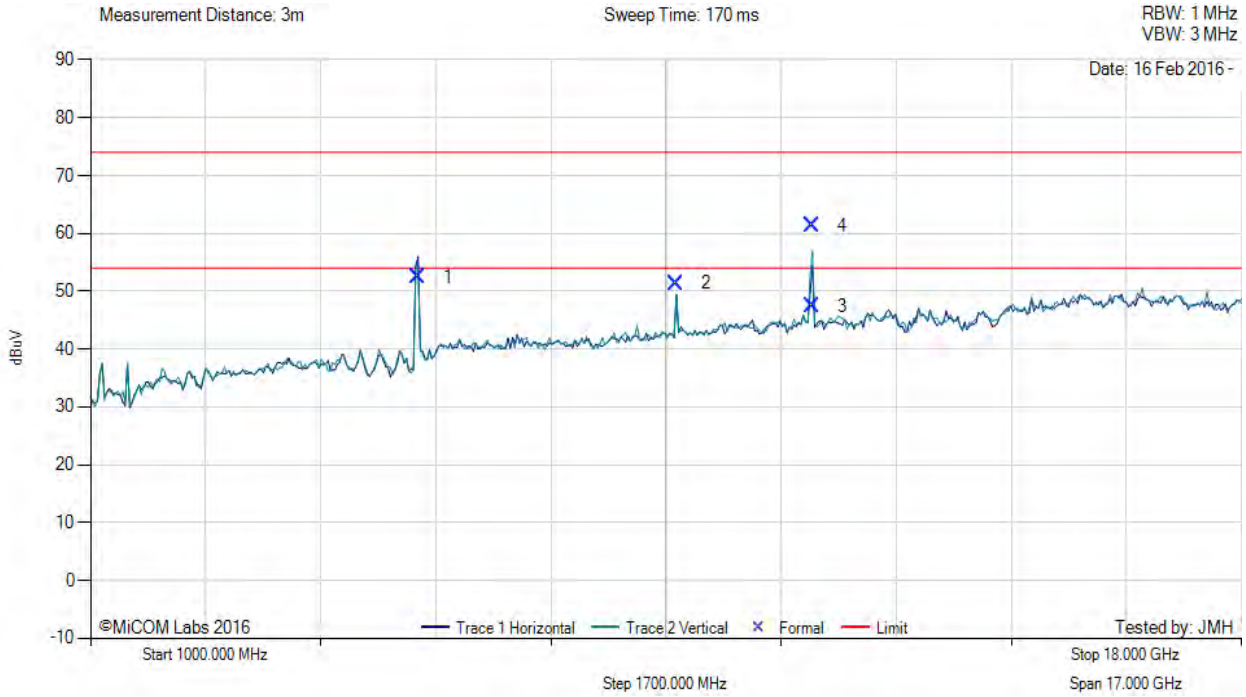
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5792.55	59.13	3.78	-10.40	52.51	Fundamental	Vertical	151	108	--	--	
2	9647.66	52.18	5.29	-6.08	51.39	Peak (NRB)	Horizontal	151	108	--	--	Pass
3	11571.70	46.11	5.42	-4.63	46.90	Max Avg	Horizontal	160	54	54.0	-7.1	Pass
4	11571.70	59.88	5.42	-4.63	60.67	Max Peak	Horizontal	160	54	74.0	-13.3	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5825.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 59/59, Duty Cycle (%): 100

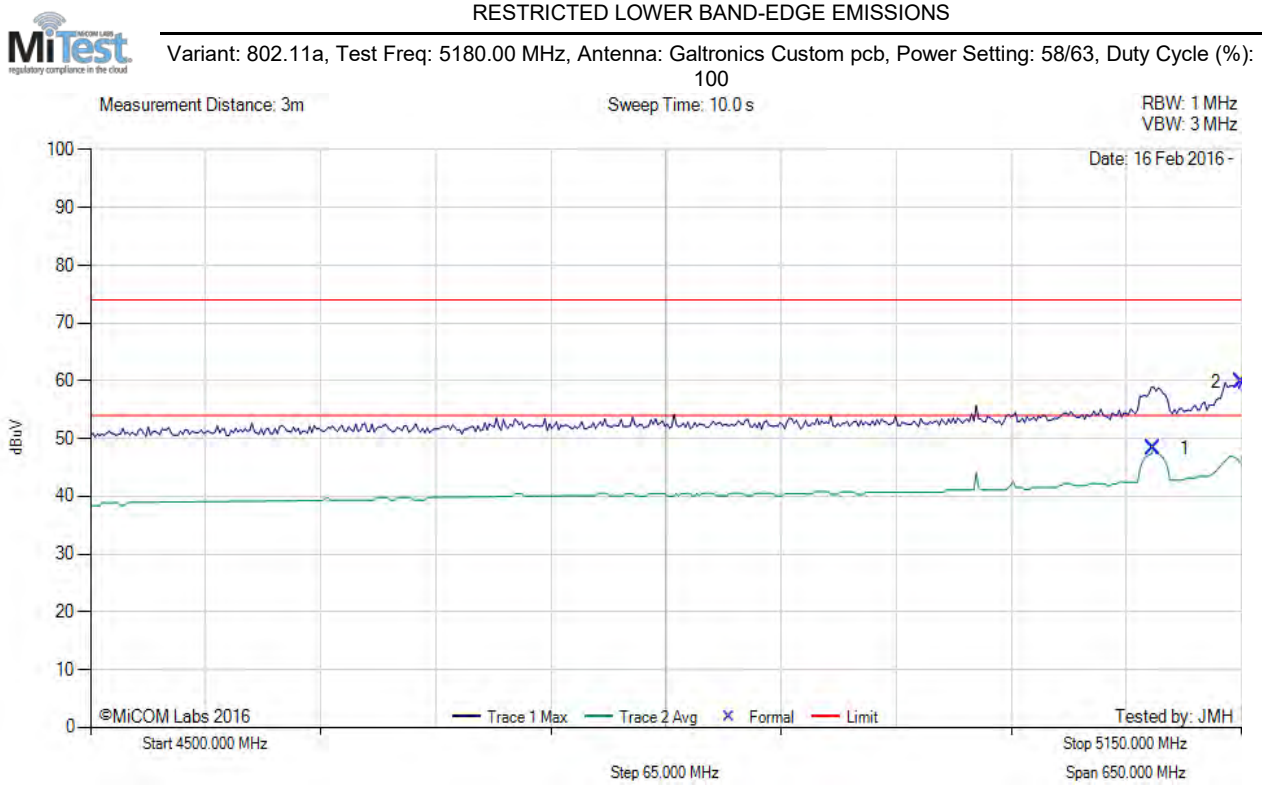


Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5828.30	58.90	3.84	-10.24	52.50	Fundamental	Horizontal	101	0	--	--	
2	9647.82	52.14	5.29	-6.08	51.35	Peak (NRB)	Horizontal	151	50	--	--	Pass
3	11652.67	46.32	5.49	-4.46	47.35	Max Avg	Vertical	148	65	54.0	-6.7	Pass
4	11652.67	60.32	5.49	-4.46	61.35	Max Peak	Vertical	148	65	74.0	-12.7	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

A.3.2. Restricted Band-Edge Emissions



Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5100.50	10.61	3.58	34.13	48.32	Max Avg	Vertical	187	11	54.0	-5.7	Pass
2	5150.00	22.10	3.67	34.11	59.88	Max Peak	Vertical	187	11	74.0	-14.1	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

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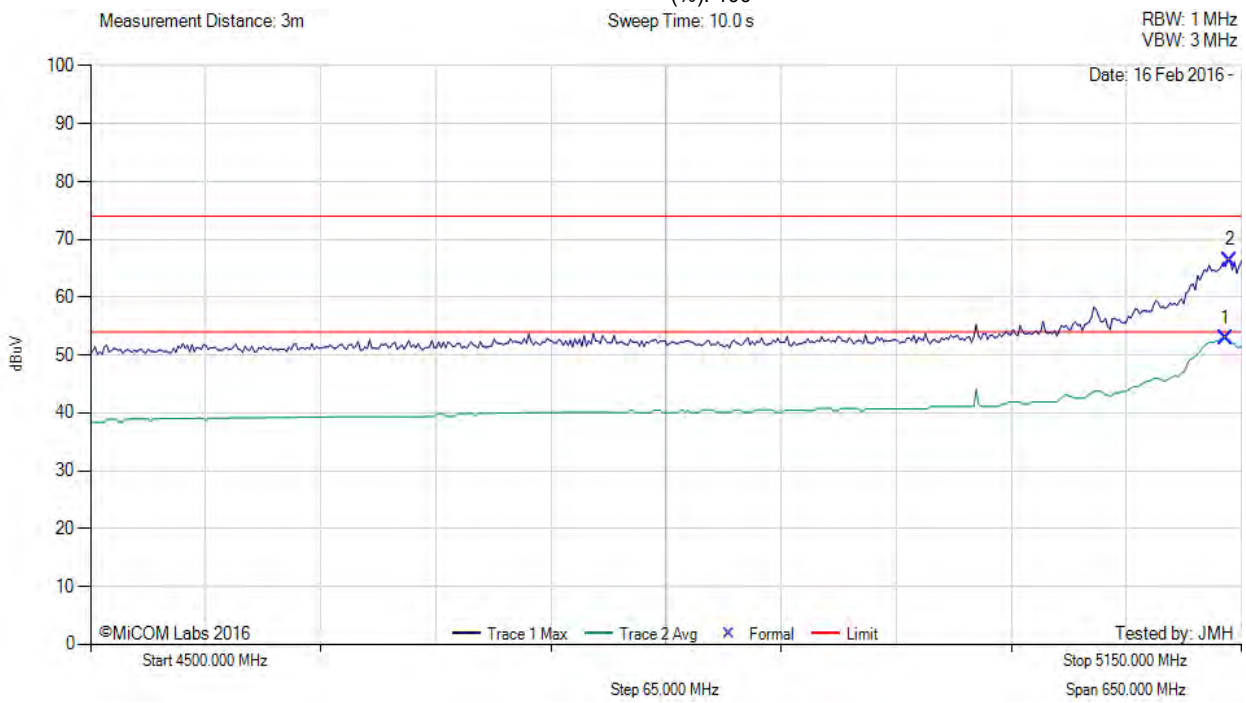
RESTRICTED LOWER BAND-EDGE EMISSIONS

Variant: 802.11ac-80, Test Freq: 5210.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 61/61, Duty Cycle (%): 100



Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5140.88	15.12	3.70	34.12	52.94	Max Avg	Vertical	187	11	54.0	-1.1	Pass
2	5143.49	28.59	3.70	34.12	66.41	Max Peak	Vertical	187	11	74.0	-7.6	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

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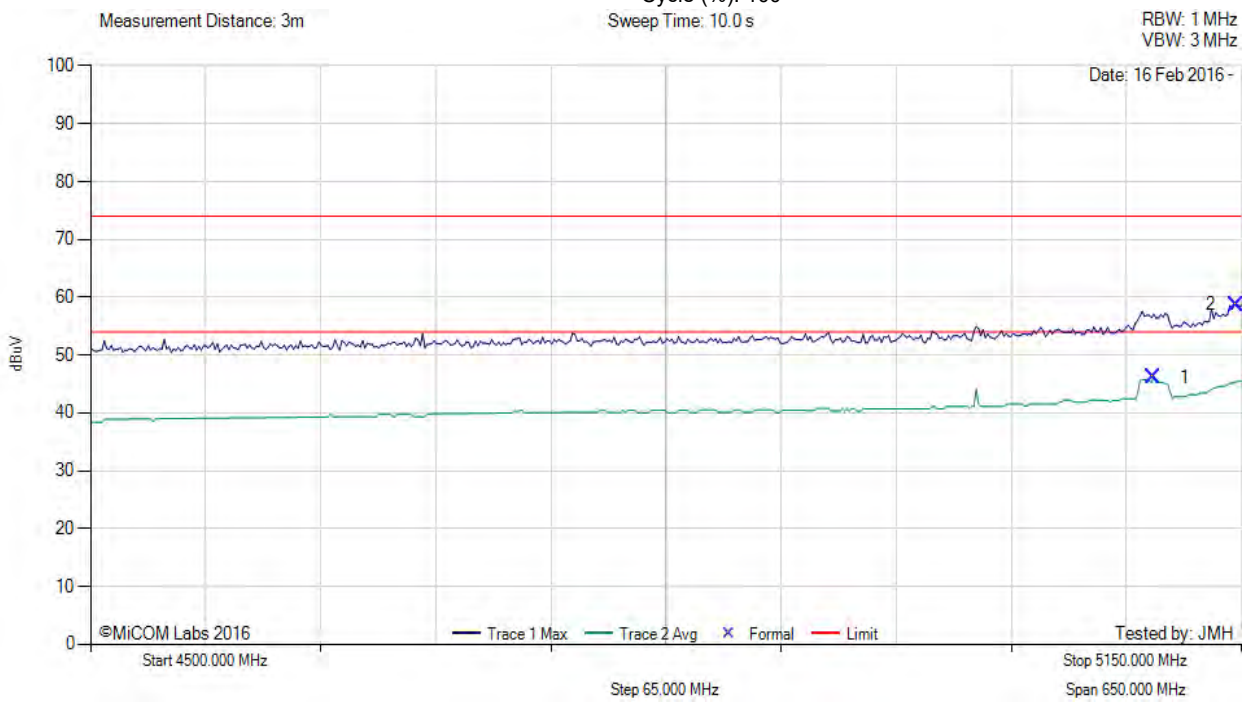
RESTRICTED LOWER BAND-EDGE EMISSIONS

Variant: 802.11n HT-20, Test Freq: 5180.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 58/63, Duty Cycle (%): 100



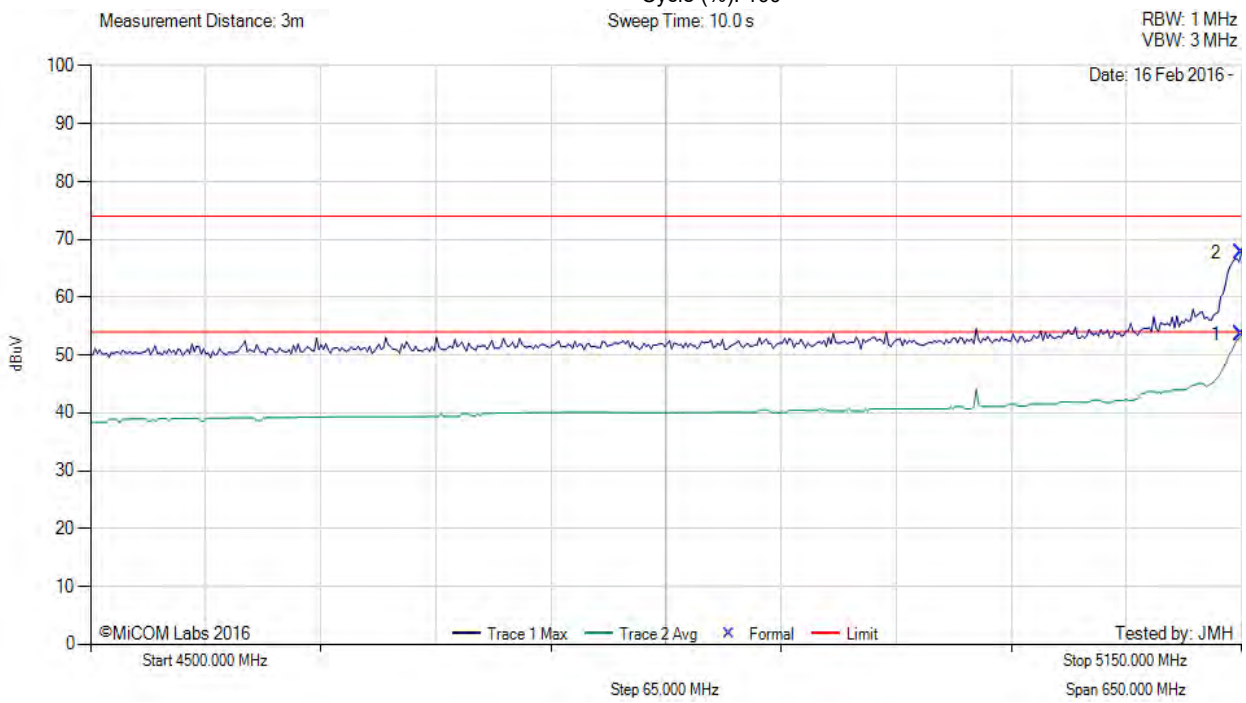
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5100.50	8.50	3.58	34.13	46.21	Max Avg	Vertical	187	11	54.0	-7.8	Pass
2	5147.39	20.98	3.68	34.11	58.77	Max Peak	Vertical	187	11	74.0	-15.2	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

RESTRICTED LOWER BAND-EDGE EMISSIONS

Variant: 802.11n HT-40, Test Freq: 5190.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 57/57, Duty Cycle (%): 100



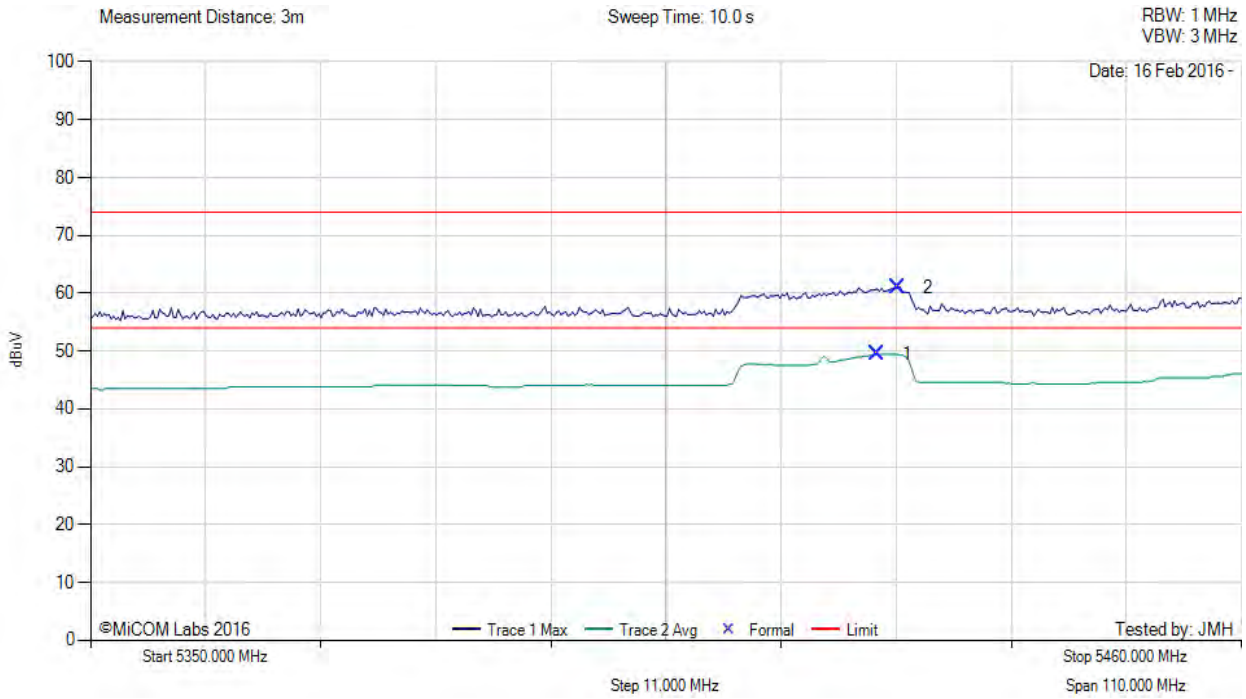
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5150.00	15.76	3.67	34.11	53.54	Max Avg	Vertical	187	11	54.0	-0.5	Pass
2	5150.00	29.93	3.67	34.11	67.71	Max Peak	Vertical	187	11	74.0	-6.3	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

RESTRICTED LOWER BAND-EDGE EMISSIONS

Variant: 802.11a, Test Freq: 5500.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 49/55, Duty Cycle (%): 100



Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5425.17	11.35	3.77	34.34	49.46	Max Avg	Vertical	192	371	54.0	-4.5	Pass
2	5427.15	22.96	3.76	34.34	61.06	Max Peak	Vertical	192	371	74.0	-12.9	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

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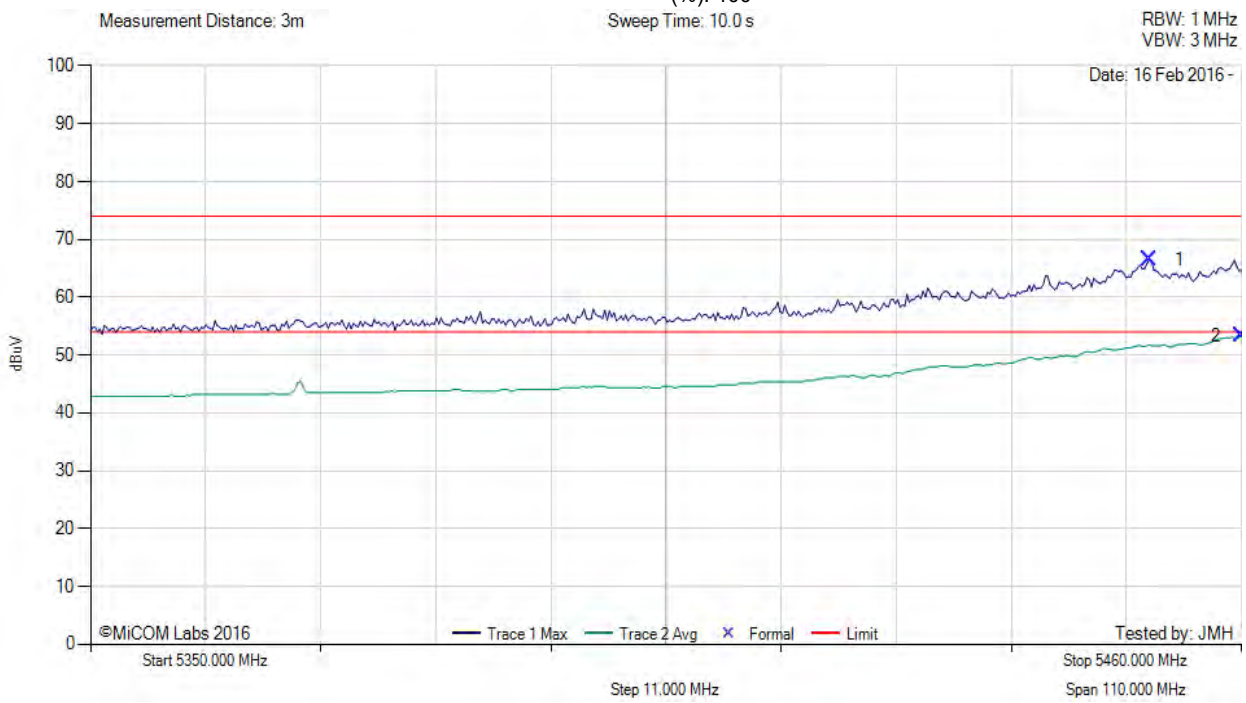
RESTRICTED LOWER BAND-EDGE EMISSIONS

Variant: 802.11ac-80, Test Freq: 5530.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 46/50, Duty Cycle (%): 100



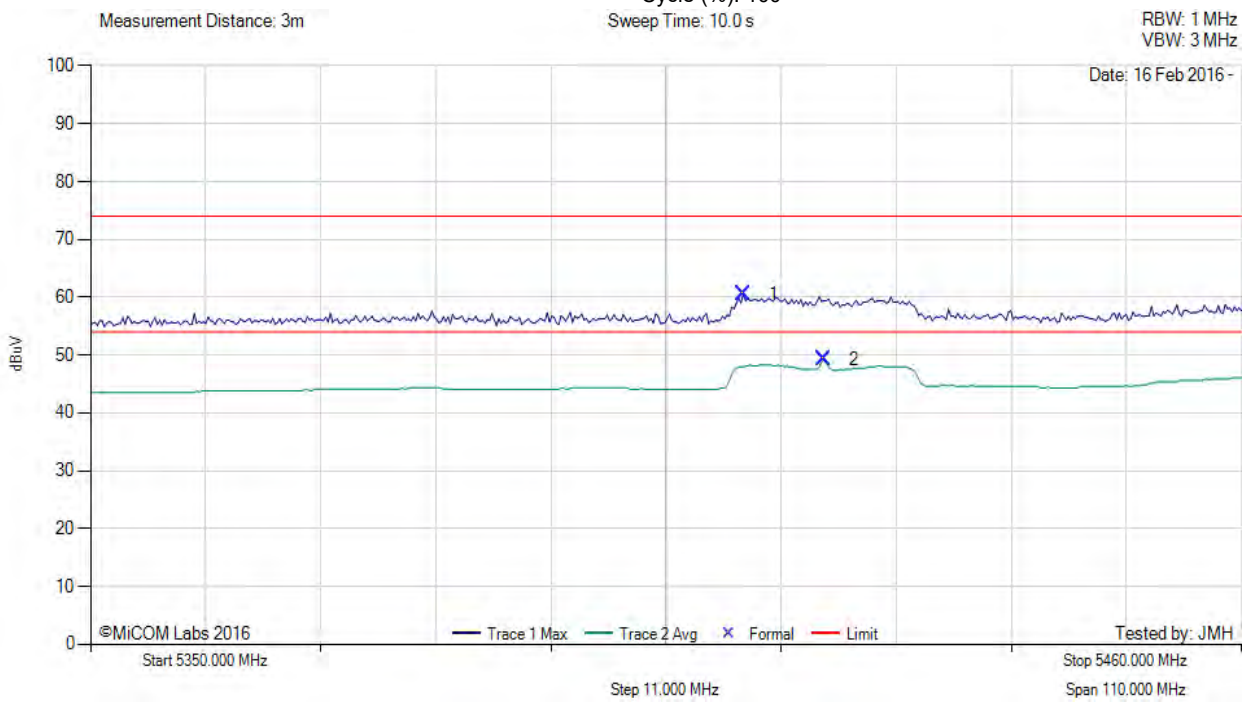
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5451.18	28.39	3.78	34.30	66.47	Max Peak	Vertical	192	371	74.0	-7.5	Pass
2	5460.00	15.30	3.79	34.31	53.40	Max Avg	Vertical	192	371	54.0	-0.6	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

RESTRICTED LOWER BAND-EDGE EMISSIONS

Variant: 802.11n HT-20, Test Freq: 5500.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 48/52, Duty Cycle (%): 100



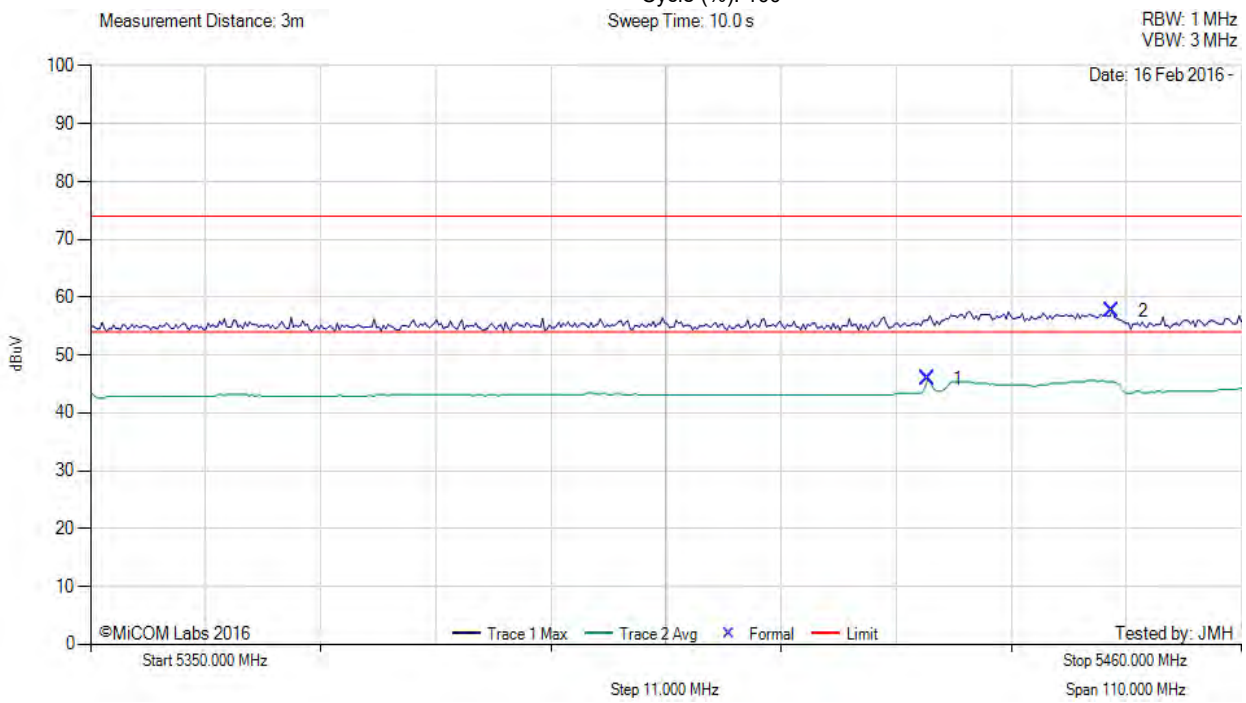
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5412.38	22.46	3.70	34.36	60.52	Max Peak	Vertical	192	371	74.0	-13.5	Pass
2	5420.10	11.21	3.74	34.35	49.30	Max Avg	Vertical	192	371	54.0	-4.7	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

RESTRICTED LOWER BAND-EDGE EMISSIONS

Variant: 802.11n HT-40, Test Freq: 5510.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 46/50, Duty Cycle (%): 100



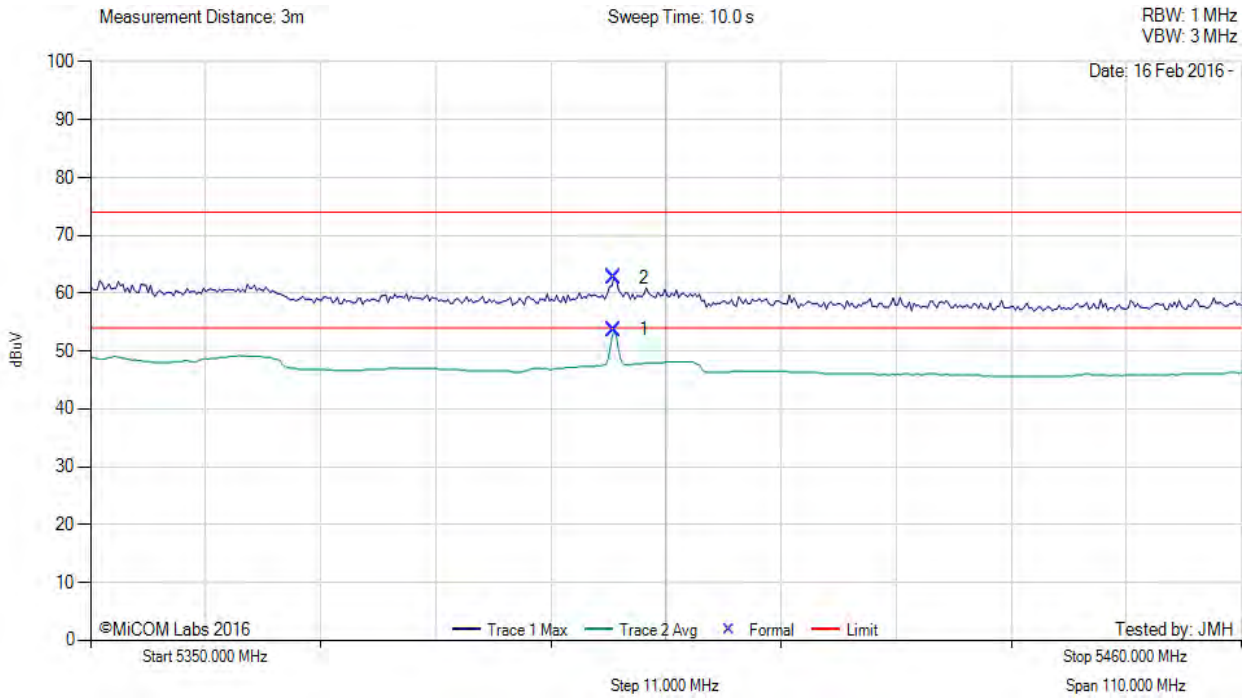
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5430.02	7.78	3.75	34.33	45.86	Max Avg	Vertical	192	371	54.0	-8.1	Pass
2	5447.66	19.59	3.77	34.30	57.66	Max Peak	Vertical	192	371	74.0	-16.3	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

RESTRICTED UPPER BAND-EDGE EMISSIONS

Variant: 802.11a, Test Freq: 5320.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 42/55, Duty Cycle (%): 100



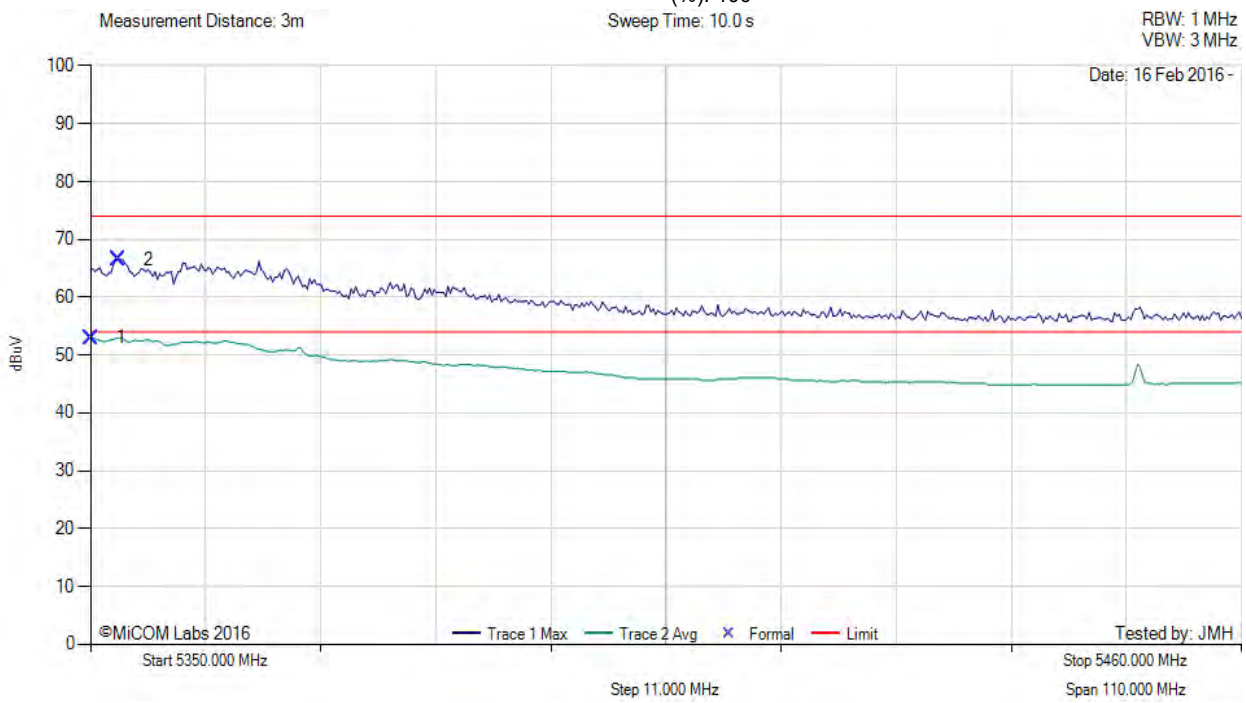
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5400.04	15.62	3.70	34.38	53.70	Max Avg	Vertical	190	12	54.0	-0.3	Pass
2	5400.04	24.67	3.70	34.38	62.75	Max Peak	Vertical	190	12	74.0	-11.3	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

RESTRICTED UPPER BAND-EDGE EMISSIONS

Variant: 802.11ac-80, Test Freq: 5290.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 38/44, Duty Cycle (%): 100



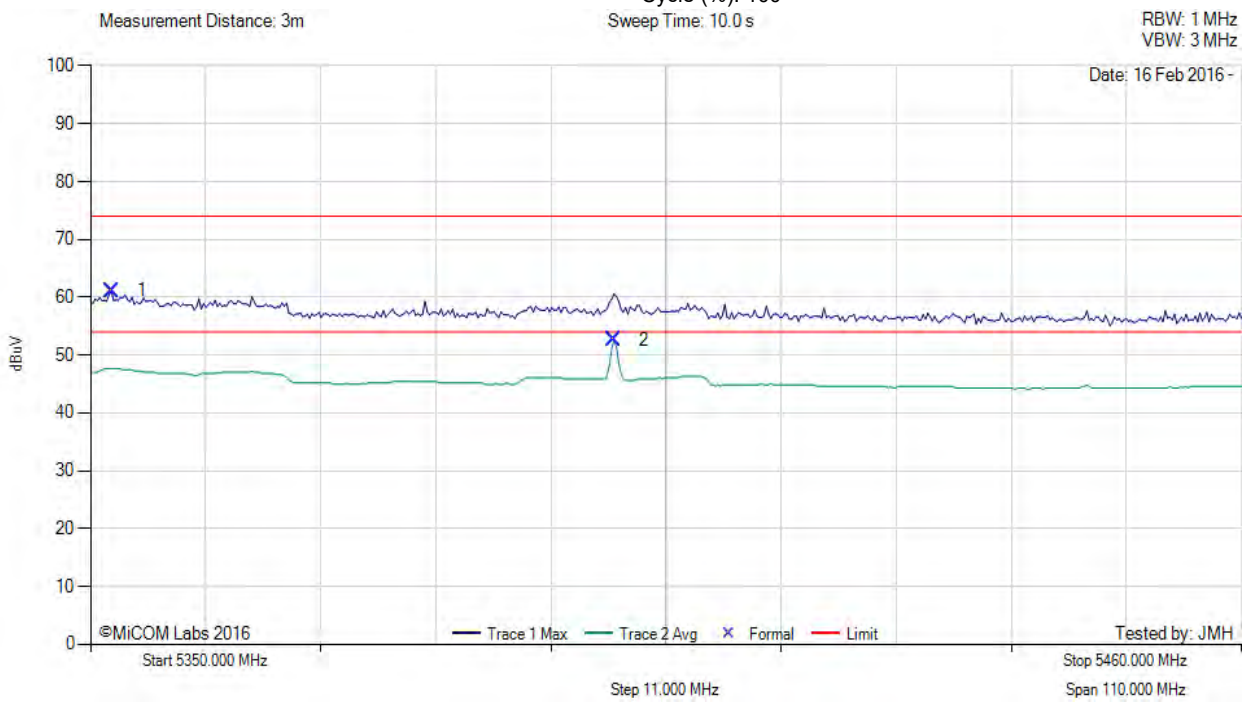
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5350.00	14.77	3.70	34.51	52.98	Max Avg	Vertical	190	12	54.0	-1.0	Pass
2	5352.65	28.36	3.71	34.50	66.57	Max Peak	Vertical	190	12	74.0	-7.4	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

RESTRICTED UPPER BAND-EDGE EMISSIONS

Variant: 802.11n HT-20, Test Freq: 5320.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 42/51, Duty Cycle (%): 100



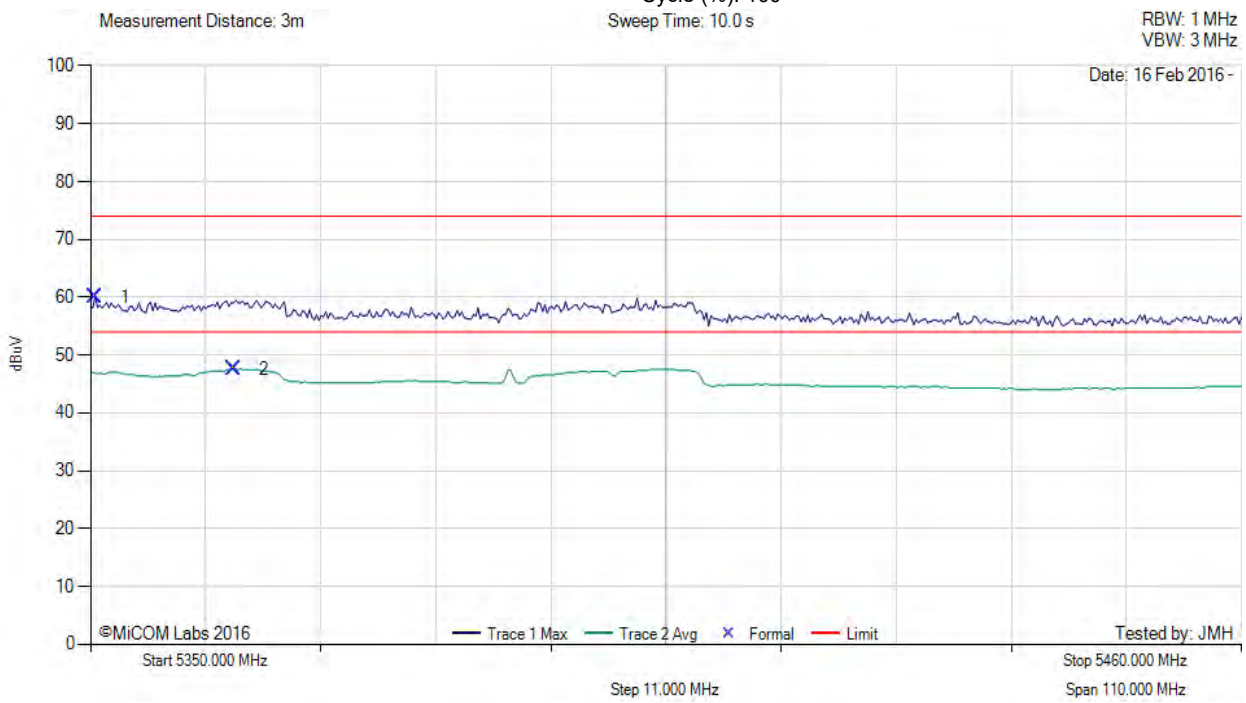
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5351.98	22.90	3.71	34.51	61.12	Max Peak	Vertical	190	12	74.0	-12.9	Pass
2	5400.04	14.50	3.70	34.38	52.58	Max Avg	Vertical	190	12	54.0	-1.4	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

RESTRICTED UPPER BAND-EDGE EMISSIONS

Variant: 802.11n HT-40, Test Freq: 5310.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 46/50, Duty Cycle (%): 100



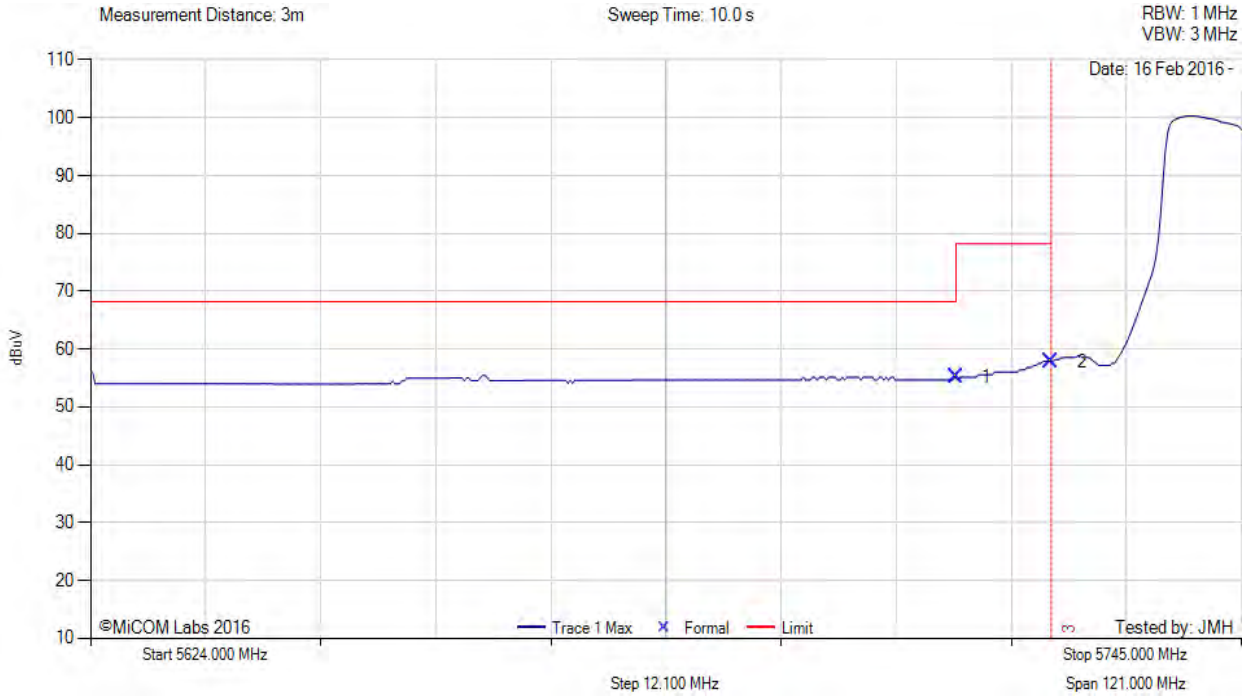
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5350.44	21.91	3.70	34.51	60.12	Max Peak	Vertical	190	12	74.0	-13.9	Pass
2	5363.67	9.48	3.70	34.48	47.66	Max Avg	Vertical	190	12	54.0	-6.3	Pass

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

5725 MHz RADIATED BAND-EDGE EMISSIONS

Variant: 802.11a, Test Freq: 5745.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 59/59, Duty Cycle (%): 100



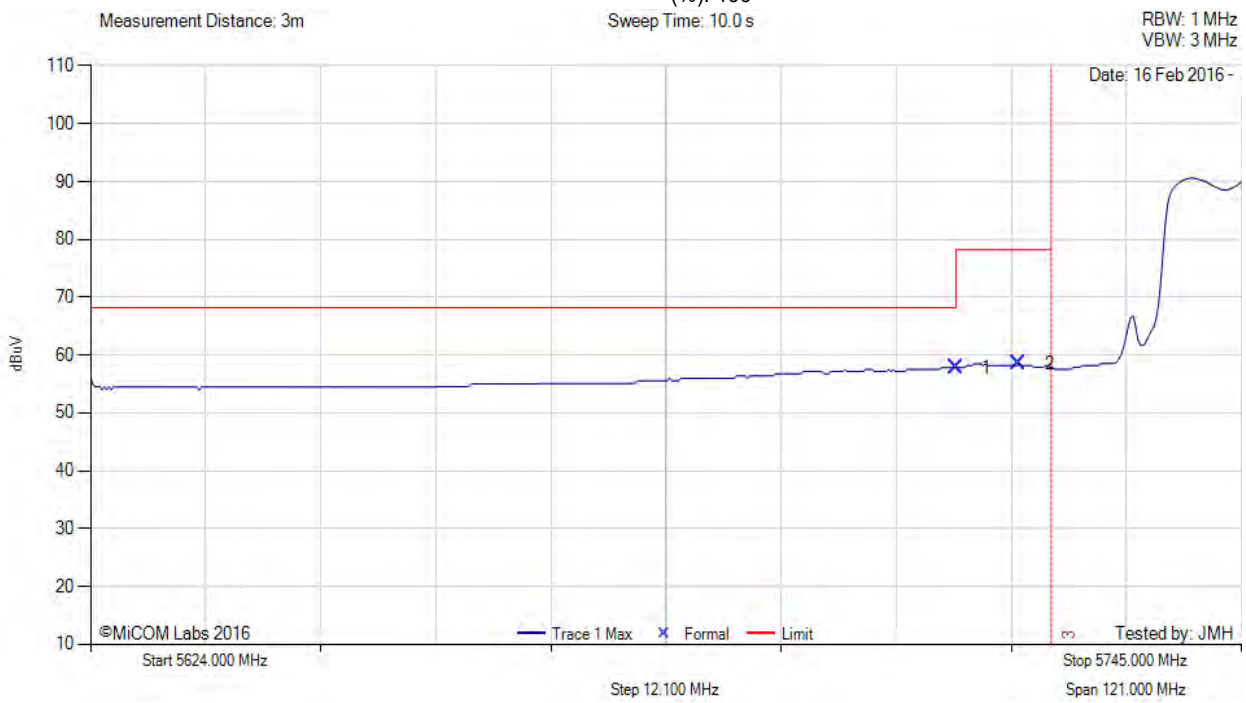
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5715.00	16.99	3.81	34.34	55.14	Marker	Vertical	154	21	68.2	-13.1	Pass
2	5725.00	19.75	3.79	34.35	57.89	Marker	Vertical	154	21	78.2	-20.3	Pass
3	5725.00	--	--	--	--	Frequency Line 1	--	--	--	--	--	--

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

5725 MHz RADIATED BAND-EDGE EMISSIONS

Variant: 802.11ac-80, Test Freq: 5775.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 56/61, Duty Cycle (%): 100



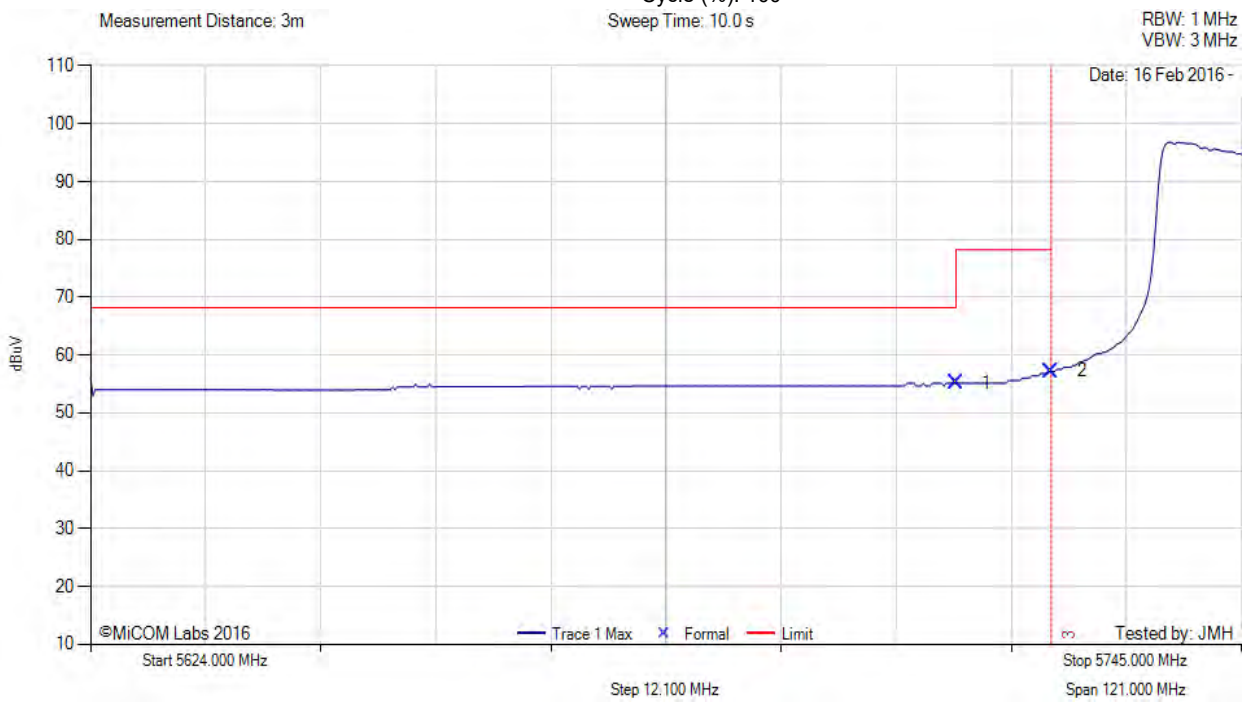
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5715.00	19.72	3.81	34.34	57.87	Marker	Vertical	154	21	68.2	-10.4	Pass
2	5721.61	20.37	3.80	34.35	58.52	Marker	Vertical	154	21	78.2	-19.7	Pass
3	5725.00	--	--	--	--	Frequency Line 1	--	--	--	--	--	--

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

5725 MHz RADIATED BAND-EDGE EMISSIONS

Variant: 802.11n HT-20, Test Freq: 5745.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 56/61, Duty Cycle (%): 100



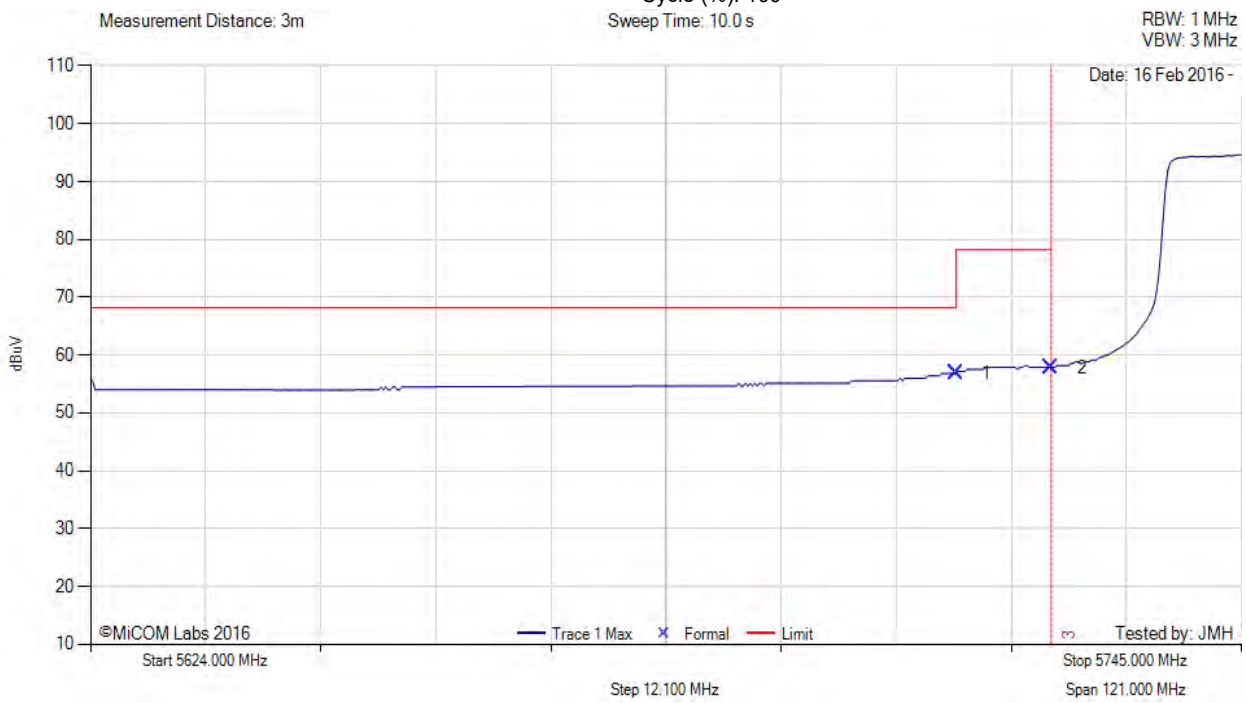
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5715.00	16.99	3.81	34.34	55.14	Marker	Vertical	154	21	68.2	-13.1	Pass
2	5725.00	19.05	3.79	34.35	57.19	Marker	Vertical	154	21	78.2	-21.0	Pass
3	5725.00	--	--	--	--	Frequency Line 1	--	--	--	--	--	--

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

5725 MHz RADIATED BAND-EDGE EMISSIONS

Variant: 802.11n HT-40, Test Freq: 5755.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 56/61, Duty Cycle (%): 100



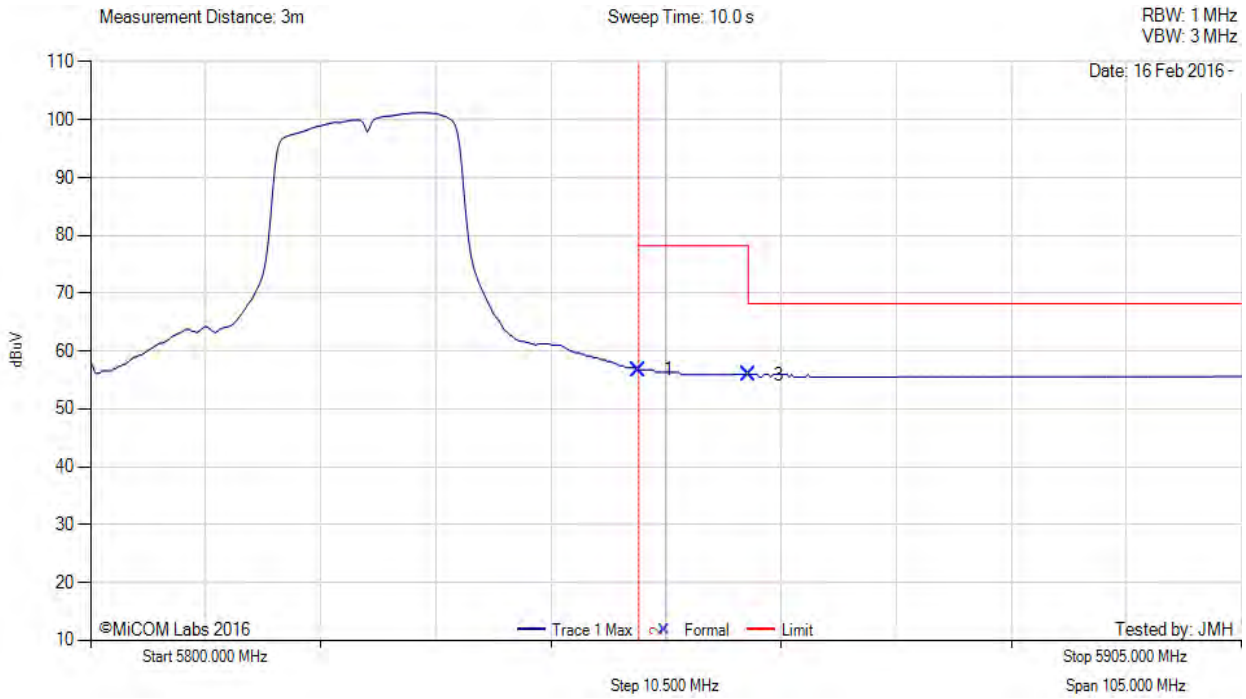
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5715.00	18.65	3.81	34.34	56.80	Marker	Vertical	154	21	68.2	-11.4	Pass
2	5725.00	19.75	3.79	34.35	57.89	Marker	Vertical	154	21	78.2	-20.3	Pass
3	5725.00	--	--	--	--	Frequency Line 1	--	--	--	--	--	--

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

5850 MHz RADIATED BAND-EDGE EMISSIONS

Variant: 802.11a, Test Freq: 5825.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 59/59, Duty Cycle (%): 100



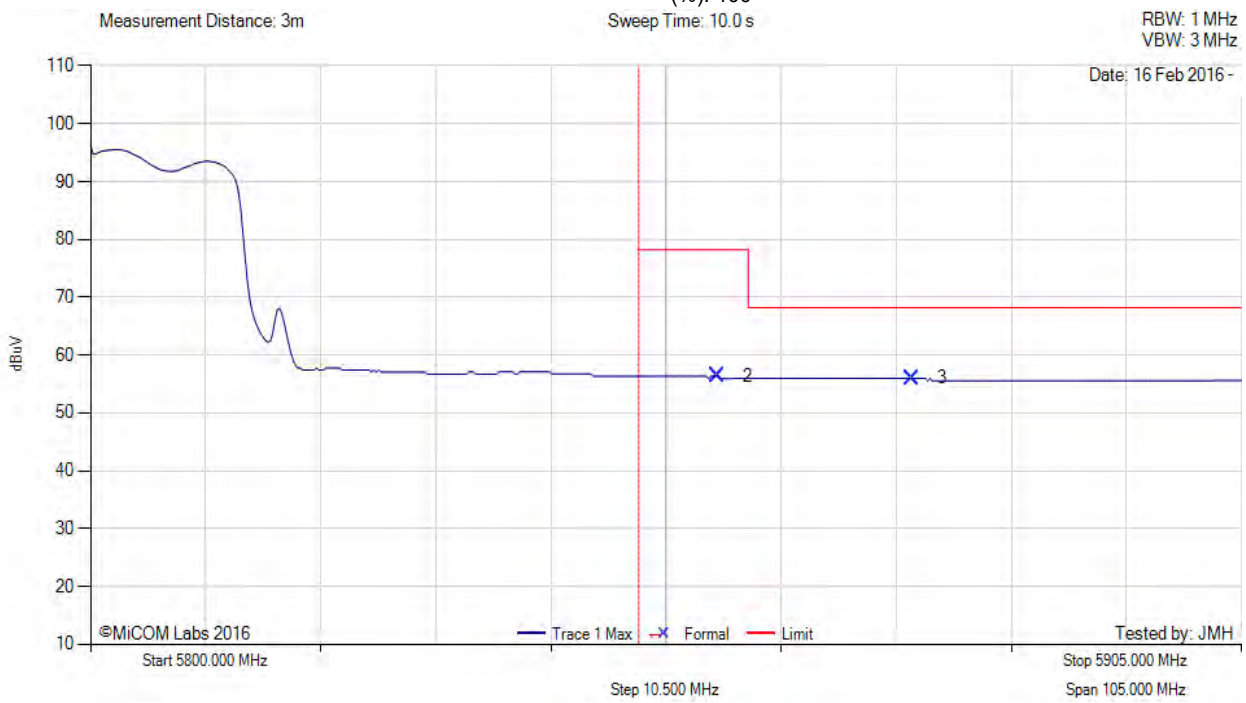
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5850.00	18.32	3.81	34.63	56.76	Marker	Vertical	158	114	78.2	-21.5	Pass
3	5860.00	17.45	3.86	34.65	55.96	Marker	Vertical	158	114	78.2	-22.3	Pass
2	5850.00	--	--	--	--	Frequency Line 1	--	--	--	--	--	--

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

5850 MHz RADIATED BAND-EDGE EMISSIONS

Variant: 802.11ac-80, Test Freq: 5775.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 56/61, Duty Cycle (%): 100



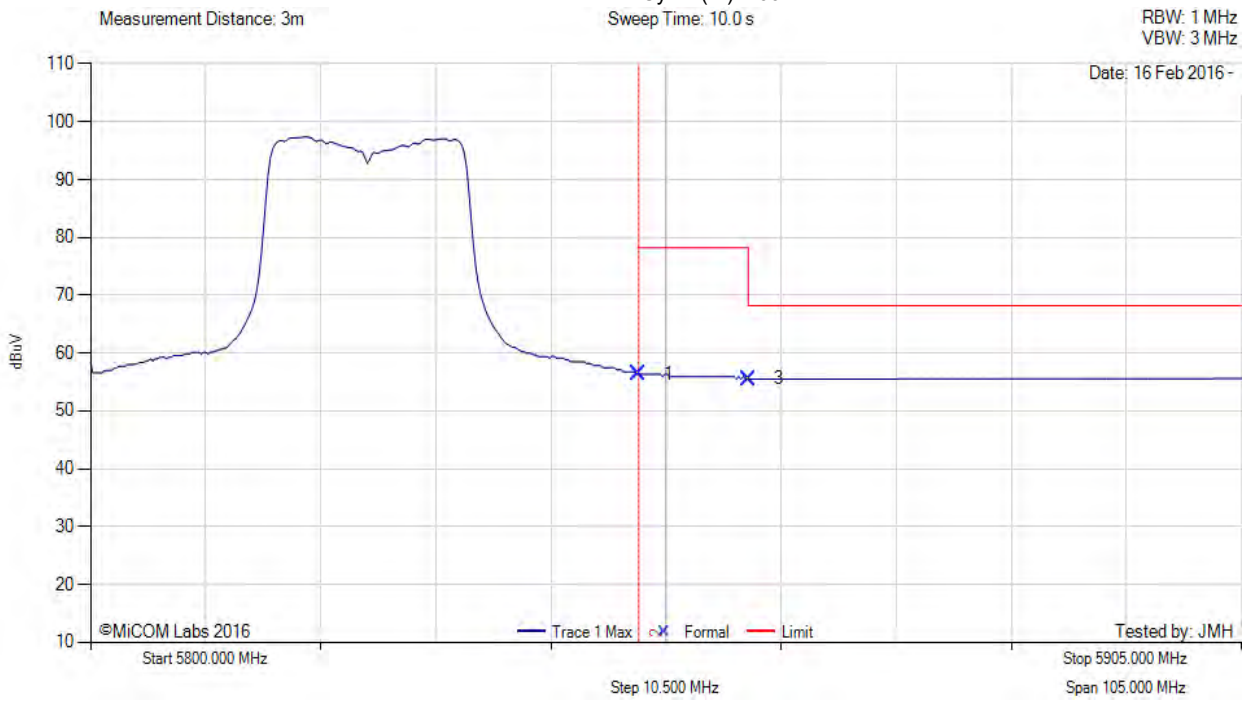
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
2	5857.15	17.89	3.84	34.65	56.38	Marker	Vertical	158	114	78.2	-21.9	Pass
3	5874.94	17.49	3.80	34.70	55.99	Marker	Vertical	158	114	68.2	-12.2	Pass
1	5850.00	--	--	--	--	Frequency Line 1	--	--	--	--	--	--

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

5850 MHz RADIATED BAND-EDGE EMISSIONS

Variant: 802.11n HT-20, Test Freq: 5825.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 56/61, Duty Cycle (%): 100



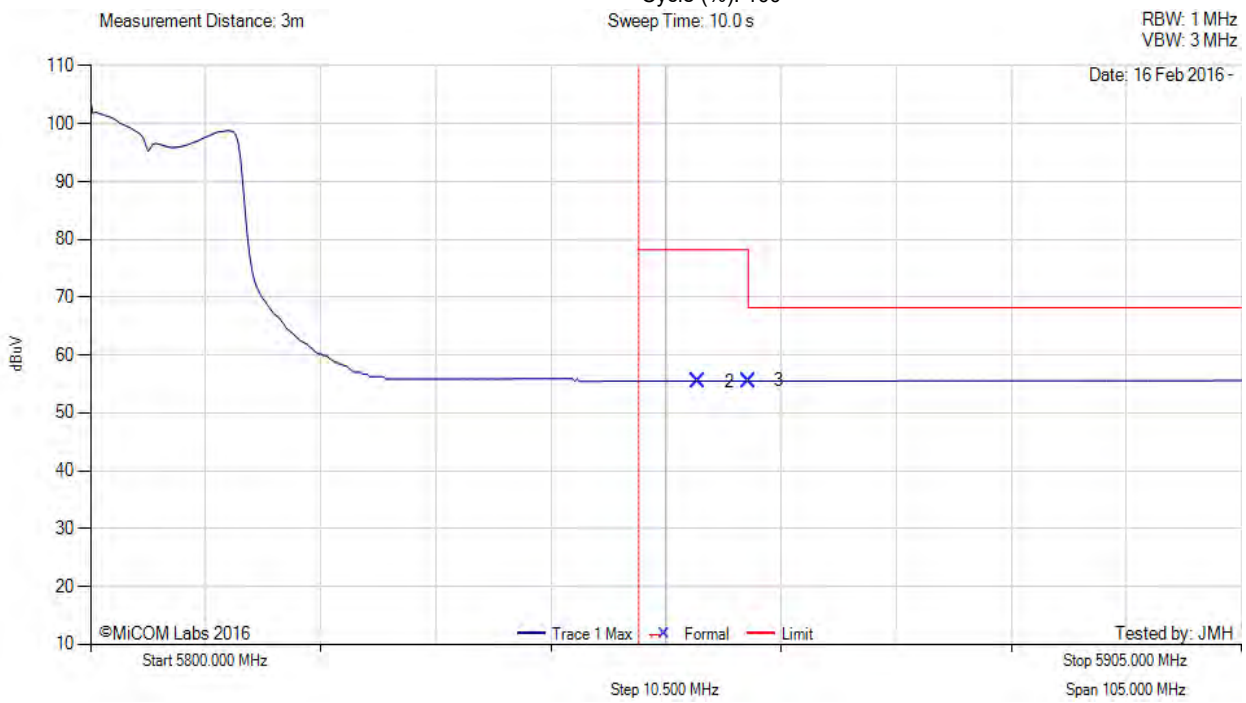
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	5850.00	17.92	3.81	34.63	56.36	Marker	Vertical	158	114	78.2	-21.9	Pass
3	5860.00	17.00	3.86	34.65	55.51	Marker	Vertical	158	114	78.2	-22.7	Pass
2	5850.00	--	--	--	--	Frequency Line 1	--	--	--	--	--	--

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

5850 MHz RADIATED BAND-EDGE EMISSIONS

Variant: 802.11n HT-40, Test Freq: 5795.00 MHz, Antenna: Galtronics Custom pcb, Power Setting: 56/61, Duty Cycle (%): 100



Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
2	5855.47	17.03	3.83	34.64	55.50	Marker	Vertical	158	114	78.2	-22.7	Pass
3	5860.00	17.00	3.86	34.65	55.51	Marker	Vertical	158	114	78.2	-22.7	Pass
1	5850.00	--	--	--	--	Frequency Line 1	--	--	--	--	--	--

Test Notes: EUT on 150cm table powered by AC/DC PS. Connected to laptop inside chamber via USB to serial converter.

back to matrix

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