FCC CFR47 PART 15 SUBPART E
INDUSTRY CANADA RSS-247 ISSUE 1

CERTIFICATION TEST REPORT

FOR

BT, BLE and 802.11 a/b/g/n RADIO MODULE

MODEL NUMBER: CONAPPWM

FCC ID: MHI-CONAPPWM
IC ID: 3681C-CONAPPWM

REPORT NUMBER: 16U22930-E4V2

ISSUE DATE: 9/1/2016

Prepared for
CARD ACCESS INC.
11778 SOUTH ELECTION RD. #260
DRAPER, UT 84020, USA

Prepared by
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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	4/4/2016	Initial Issue	C. VERGONIO
V2	09/01/16	Updated Section 5.5.	C. VERGONIO

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: CARD ACCESS INC.
11778 SOUTH ELECTION RD. #260
DRAPER, UT 84020, USA

EUT DESCRIPTION: BT, BLE and 802.11 a/b/g/n RADIO MODULE

MODEL: CONAPPWM

SERIAL NUMBER: 427258, 427299, 427300

DATE TESTED: March 2-24, 2016

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 Part 15 Subpart E	Pass
INDUSTRY CANADA RSS-247 Issue 1	Pass
INDUSTRY CANADA RSS-GEN Issue 4	Pass

UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Verification Services Inc. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, ANSI C63.10-2013, RSS-GEN Issue 4, RSS-247 Issue 1.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA.

The test sites and measurement facilities used to collect data are located at 47173 and 47266 Benicia Street, Fremont, California, USA. Line conducted emissions are measured only at the 47173 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

47173 Benicia Street	47266 Benicia Street
☐ Chamber A	☐ Chamber D
☒ Chamber B	☐ Chamber E
☒ Chamber C	☐ Chamber F
	☐ Chamber G
	☐ Chamber H

The above test sites and facilities are covered under FCC Test Firm Registration # 208313.

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0.

Chambers A through H are covered under Industry Canada company address code 2324B with site numbers 2324B -1 through 2324B-8, respectively.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)
36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Conducted Disturbance, 9KHz to 0.15 MHz	3.84 dB
Conducted Disturbance, 0.15 to 30 MHz	3.65 dB
Radiated Disturbance, 9KHz to 30 MHz	3.15 dB
Radiated Disturbance, 30 to 1000 MHz	5.36 dB
Radiated Disturbance,1000 to 18000 MHz	4.32 dB
Radiated Disturbance,18000 to 26000 MHz	4.45 dB
Radiated Disturbance,26000 to 40000 MHz	5.24 dB

Uncertainty figures are valid to a confidence level of 95%.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a BT, BLE and 802.11 a/b/g/n RADIO MODULE.

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum conducted output power as follows:

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
5180 - 5240	802.11a	20.05	101.16
5180 - 5240	802.11n HT20	20.05	101.16
5190 - 5230	802.11n HT40	20.07	101.62
5260 - 5320	802.11a	20.09	102.09
5260 - 5320	802.11n HT20	20.08	101.86
5270 - 5310	802.11n HT40	20.10	102.33
5500 - 5700	802.11a	19.82	95.94
5500 - 5700	802.11n HT20	19.73	93.97
5510 - 5670	802.11n HT40	20.05	101.16
5745 - 5825	802.11a	20.20	104.71
5745-5825	802.11n HT20	20.06	101.39
5755-5795	802.11n HT40	15.94	39.26

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes a PIFA antenna, with a maximum gain of -2dBi.

5.4. SOFTWARE AND FIRMWARE

The firmware installed in the EUT during testing was BusyBox, rev.1.19.4 <2016-02-18 14:39:10 MST> built-In Shell (ash).

The test utility software used during testing was Tera Term, rev 4.8.3(SVN#5602)

5.5. WORST-CASE CONFIGURATION AND MODE

Below 1GHz Radiated emission and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

The fundamental of the EUT was investigated in three orthogonal orientations X,Y,Z, it was determined that Y orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in Y orientation.

Worst-case data rates as provided by the client were:
Based on the baseline scan, the worst-case data rates were:

802.11a mode: 6 Mbps
802.11n HT20mode: MCS0
802.11n HT40mode: MCS0

Radiated emissions for EUT with antenna was performed and passed; therefore, antenna port spurious was not performed.

5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
AC Adapter	TRIAD	WSU120-0700	N/A	N/A
Laptop	Lenovo	T430	PB-05HPL	N/A
Laptop AC Adapter	Lenovo	ADLX90NLT2A	11S45N0707Z1ZL7436RDM2	N/A

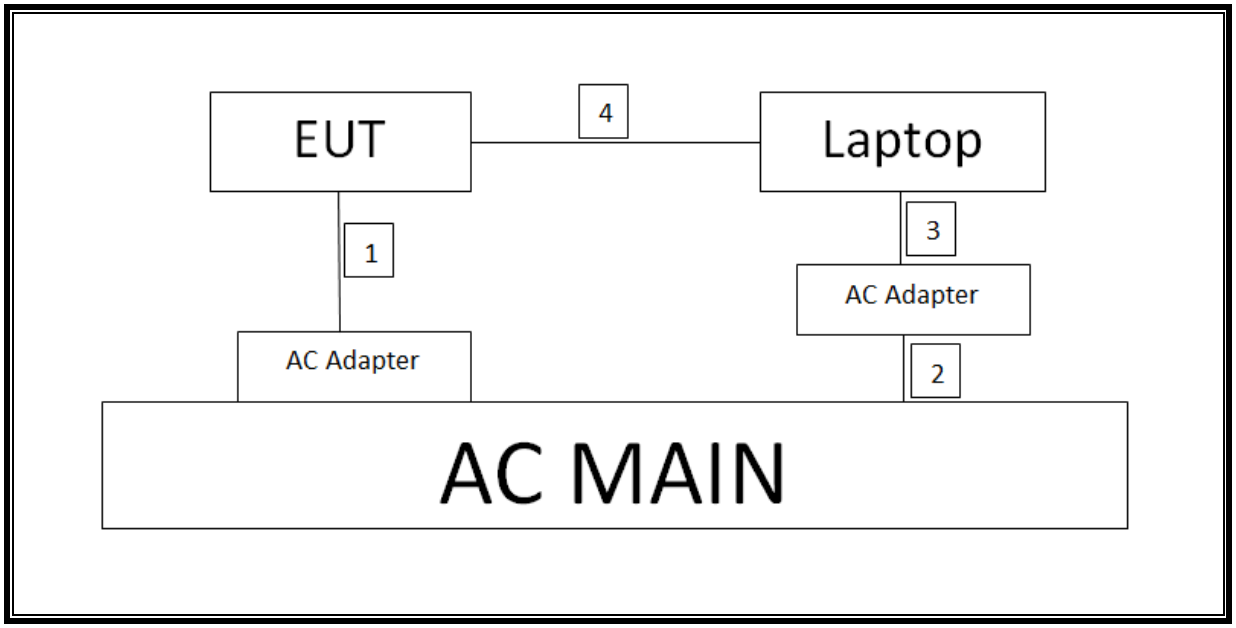
I/O CABLES

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC/DC	1	US115V/12V	Unshielded	1	
2	AC	1	US115V	Unshielded	1	
3	DC	1	20Vdc	Unshielded	1.5	Ferrite on Laptop end
4	Com	1	USB/Serial	Unshielded	1.5	

TEST SETUP

The EUT is stand-alone unit during the tests; test software exercised the radio card via USB-Serial cable.

SETUP DIAGRAM FOR TESTS



Note: For radiated testing, the unit was test stand alone with AC adapter

6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

Test Equipment List				
Description	**Manufacturer**	**Model**	**T Number**	**Cal Due**
Amplifier, 1-18GHz	Miteq	AFS42-00101800-25-S-42	493	03/09/17
Amplifier, 1-18GHz	Miteq	AFS42-00101800-25-S-42	1165	07/20/16
Amplifier, 1-8GHz, 35 dB	Miteq	AMF-4D-01000800-30-29P	1156	03/09/17
Amplifier, 1-8GHz, 35 dB	Miteq	AMF-4D-01000800-30-29P	1172	07/20/16
Antenna, Biconolog, 30MHz-1 GHz	Sunol Sciences	JB1	122	01/29/17
Antenna, Horn, 18GHz	ETS Lindgren	3117	344	02/22/17
Antenna, Horn, 18GHz	ETS Lindgren	3117	345	02/22/17
Antenna, Horn, 18GHz	ETS Lindgren	3117	346	02/22/17
Antenna, Horn, 26.5 GHz	ARA	MWH-1826/B	447	05/12/16
ESR7 EMI Test Receiver 7GHz	Rohde & Schwarz	ESR	1436	12/19/16
High Pass Filter 3GHz	Micro-Tronics	HPS17543	485	03/09/17
High Pass Filter 3GHz	Micro-Tronics	HPS17543	486	07/20/16
High Pass Filter 6GHz	Micro-Tronics	HPS17542	483	03/09/17
High Pass Filter 6GHz	Micro-Tronics	HPS17542	484	07/20/16
LISN, 30 MHz	FCC	FCC-LISN-50/250-25-2	1310	09/16/17
Low Pass Filter 5GHz	Micro-Tronics	LPS17541	482	03/09/17
Low Pass Filter 5GHz	Micro-Tronics	LPS17541	481	07/20/16
Peak / Average Power Sensor	Keysight	N1921A	750	09/17/16
Peak Power Meter	Agilent / HP	N1911A	1268	07/06/17
RF Preamplifier, 1GHz - 18GHz	Miteq	NSP4000-SP2	88	04/07/16
RF Preamplifier, 1GHz - 26.5GHz	HP	8449B	404	06/29/16
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	99	06/10/16
Spectrum Analyzer, PXA, 3 Hz to 44 GHz	Keysight	N9030A	PRE0126762	03/09/17
Spectrum Analyzer, PXA, 3 Hz to 44 GHz	Keysight	N9030A	PRE0126777	12/21/16
Spectrum Analyzer, PXA, 3 Hz to 44 GHz	Keysight	N9030A	907	01/06/17
Spectrum Analyzer, PXA, 3 Hz to 44 GHz	Keysight	N9030A	1210	01/07/17

Test Software List			
Description	Manufacturer	Model	Version
Radiated Software	UL	UL EMC	Ver 9.5, June 24, 2015
Conducted Software	UL	UL EMC	Ver 9.5, May 26, 2015
Antenna Port Software	UL	UL RF	Ver 4.2, Feb 2, 2016

7. MEASUREMENT METHODS

On Time and Duty Cycle: KDB 789033 D02 v01r01, Section B.

6 dB Emission BW: KDB 789033 D02 v01r01, Section C.

26 dB Emission BW: KDB 789033 D02 v01r01, Section C.

99% Occupied BW: KDB 789033 D02 v01r01, Section D.

Conducted Output Power: KDB 789033 D02 v01r01, Section E.3.b (Method PM-G), and KDB 662911 D01 v02r01.

Power Spectral Density: KDB 789033 D02 v01r01, Section F, and KDB 662911 D01 v02r01.

Unwanted emissions in restricted bands: KDB 789033 D02 v01r01, Sections G.3, G.4, G.5, and G.6.

Unwanted emissions in non-restricted bands: KDB 789033 D02 v01r01, Sections G.3, G.4, and G.5.

AC Power Line Conducted Emissions: ANSI C63.10-2013, Section 6.2.

8. SUMMARY TABLE

FCC Part Section	RSS Section	Test Description	Test Limit	Test Condition	Test Result
§15.407 (a)	RSS-247	Occupied Band width (26dB)	N/A	Conducted	Pass
§15.407	RSS-247 6.2.4	6dB Band width (5.8Ghz)	>500KHz		Pass
§15.407 (a)(1)	RSS-247 6.2	TX Cond. Power5.15-5.25	<24dBm (FCC) / <23 dBm or <10+10Log(99% BW) (IC)		Pass
§15.407 (a)(2)	RSS-247 6.2	TX Cond. Power 5.25-5.35 & 5.47-5.725	<24dBm or <11+10log (OBW) (FCC) / <24 dBm or <11+10Log(99% BW) (IC)		Pass
§15.407 (a)(3)	RSS-247 6.2.4	TX Cond. Power 5.725-5.825	<30dBm		Pass
§15.407 (a)(1)	RSS-247 6.2	PSD (5.15-5.25)	<11dBm/MHz (FCC) <10 dBm/MHz EIRP (IC)		Pass
§15.407 (a)(2)	RSS-247 6.2	PSD (5.3,5.5GHz)	<11dBm/MHz		Pass
§15.407 (a)(3)	RSS-247 6.2.4	PSD (5.8GHz)	<30dBm per 500kHz		Pass
§15.207 (a)	RSS-GEN 8.8	AC Power Line conducted emissions	Section 10		Pass
§15.407 (b) & 15.209	RSS-GEN 8.9/7	Radiated Spurious Emission	<54dBuV/m	Radiated	Pass
§15.407 (h)(2)	RSS-247 6.3	Dynamic Frequency Selection	N/A	Radiated / Condcuted	Pass

9. ANTENNA PORT TEST RESULTS

9.1. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

PROCEDURE

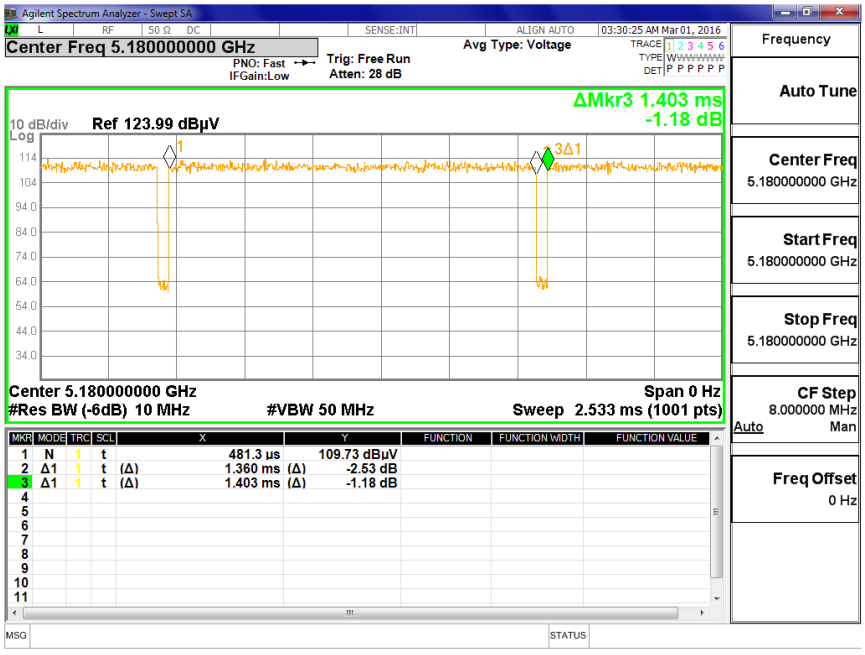
KDB 789033 Zero-Span Spectrum Analyzer Method.

ON TIME AND DUTY CYCLE RESULTS

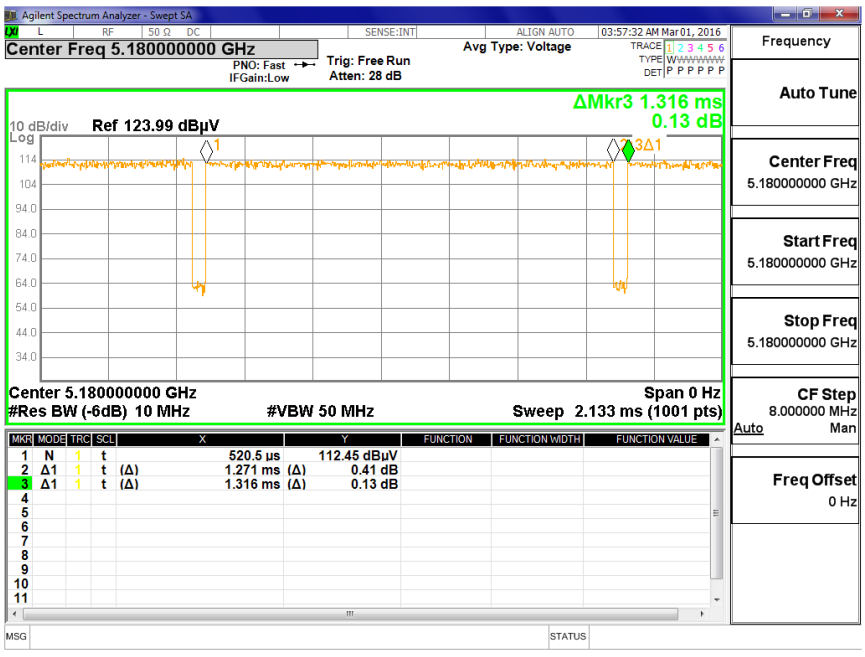
Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
802.11a 1TX	1.360	1.403	0.969	96.94%	0.14	0.735
802.11n HT20 1TX	1.271	1.316	0.966	96.58%	0.15	0.787
802.11n HT40 1TX	0.632	0.664	0.952	95.18%	0.21	1.582

DUTY CYCLE PLOTS

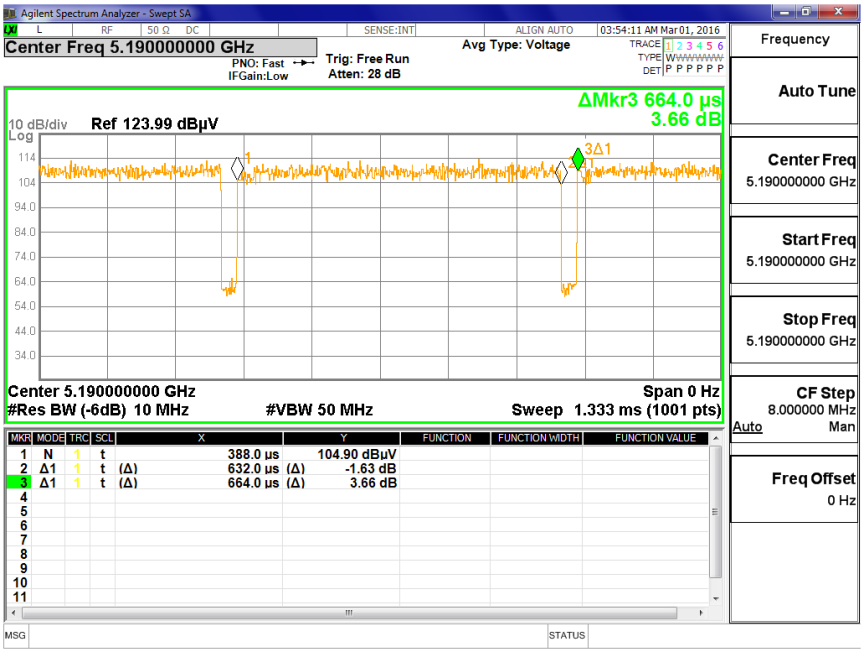
DUTY CYCLE 802.11a 1TX MODE



DUTY CYCLE 802.11n HT20 1TX MODE



DUTY CYCLE 802.11n HT40 1TX MODE



9.2. 802.11a MODE IN THE 5.2 GHz BAND

9.2.1. 26 dB BANDWIDTH

LIMITS

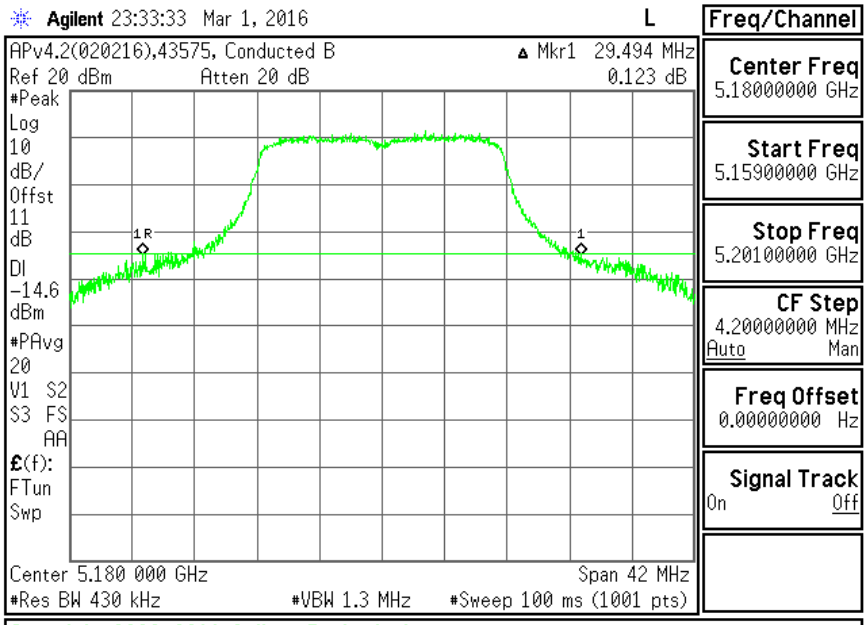
None; for reporting purposes only.

RESULTS

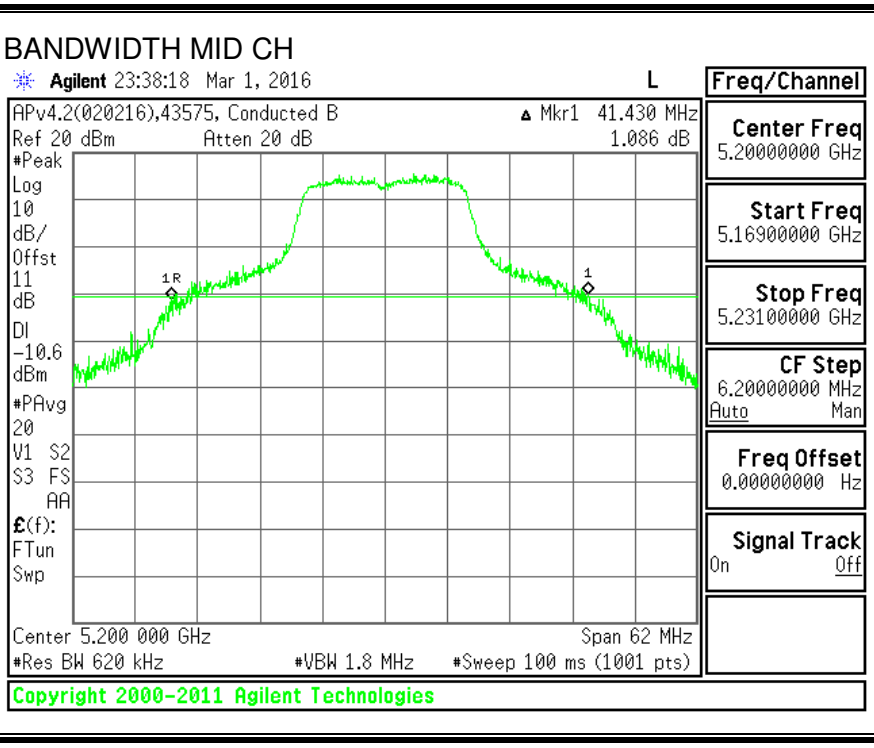
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5180	29.4940
Mid	5200	41.4300
High	5240	41.1060

26 dB BANDWIDTH

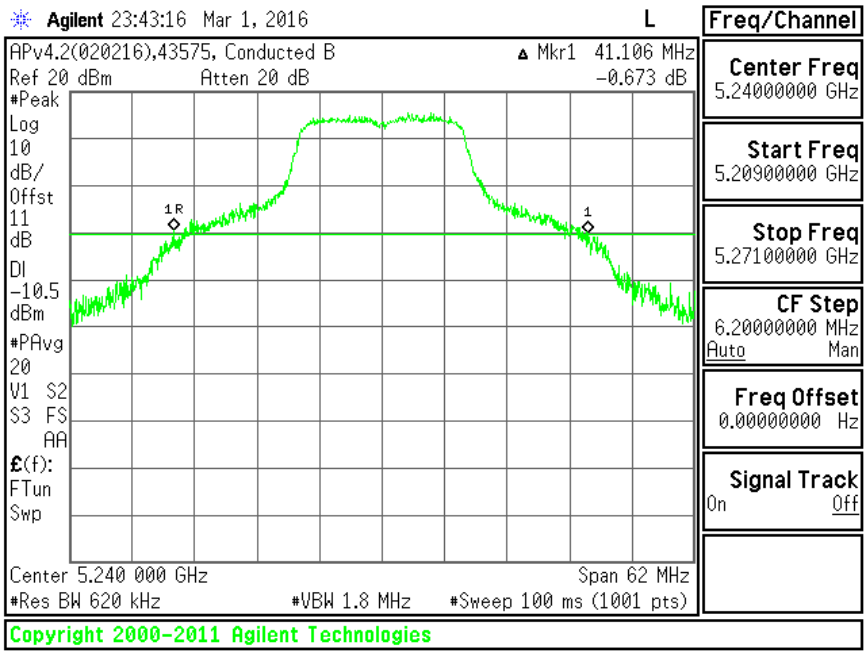
BANDWIDTH LOW CH



BANDWIDTH MID CH



BANDWIDTH HIGH CH



9.2.2. 99% BANDWIDTH

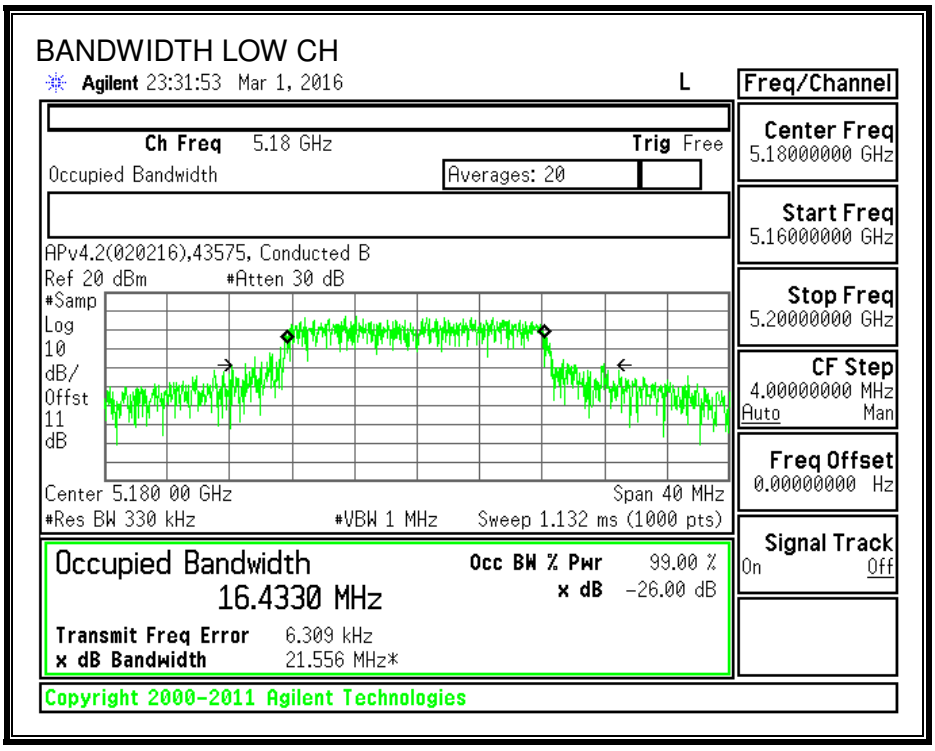
LIMITS

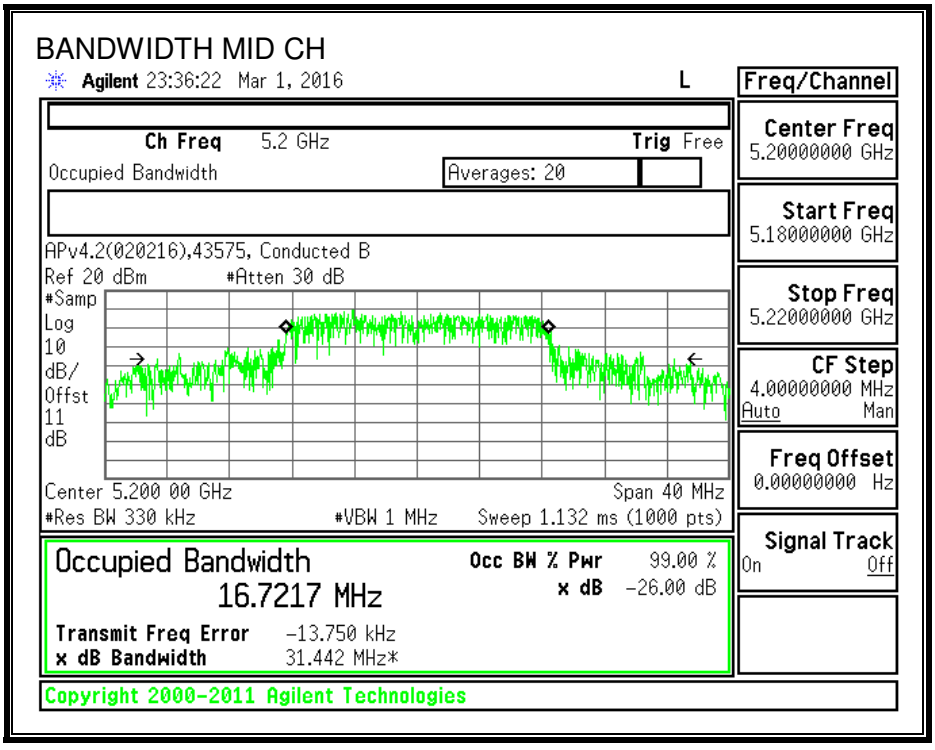
None; for reporting purposes only.

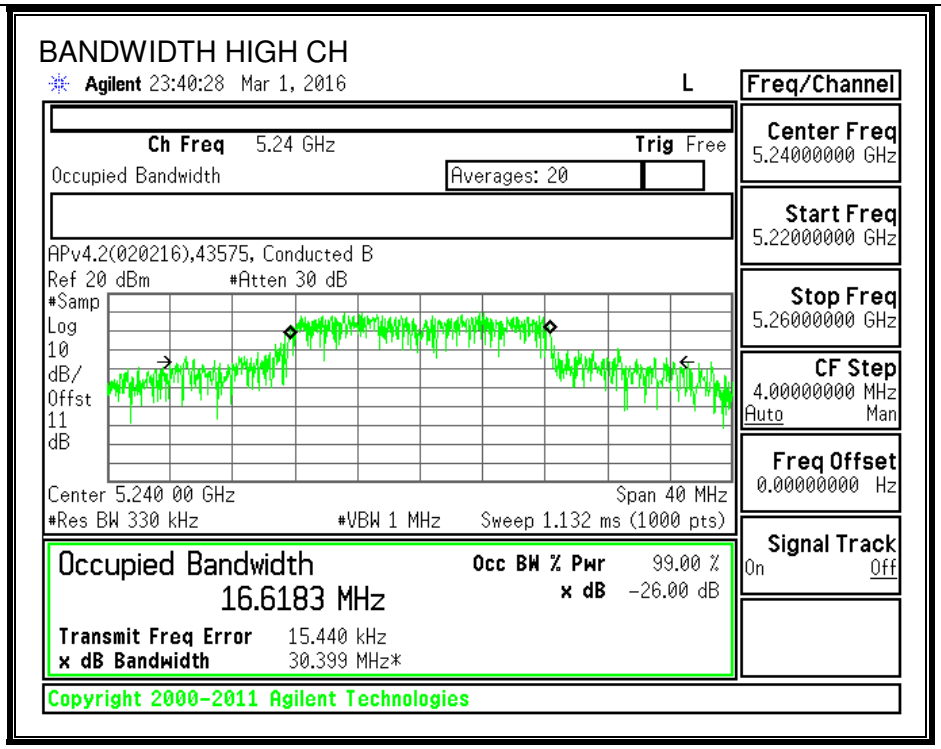
RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5180	16.4330
Mid	5200	16.7217
High	5240	16.6183

99% BANDWIDTH







9.2.3. OUTPUT POWER AND PSD

LIMITS

FCC §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. 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.

IC RSS-247

Band 5.15-5.25 GHz

The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 $\log_{10}$B, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5180	-2.00	-2.00	24.00	10.00
Mid	5200	-2.00	-2.00	24.00	10.00
High	5240	-2.00	-2.00	24.00	10.00

Duty Cycle CF (dB)	0.14	Included in Calculations of Corr'd PSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	17.53	17.53	24.00	-6.47
Mid	5200	20.05	20.05	24.00	-3.95
High	5240	20.02	20.02	24.00	-3.98

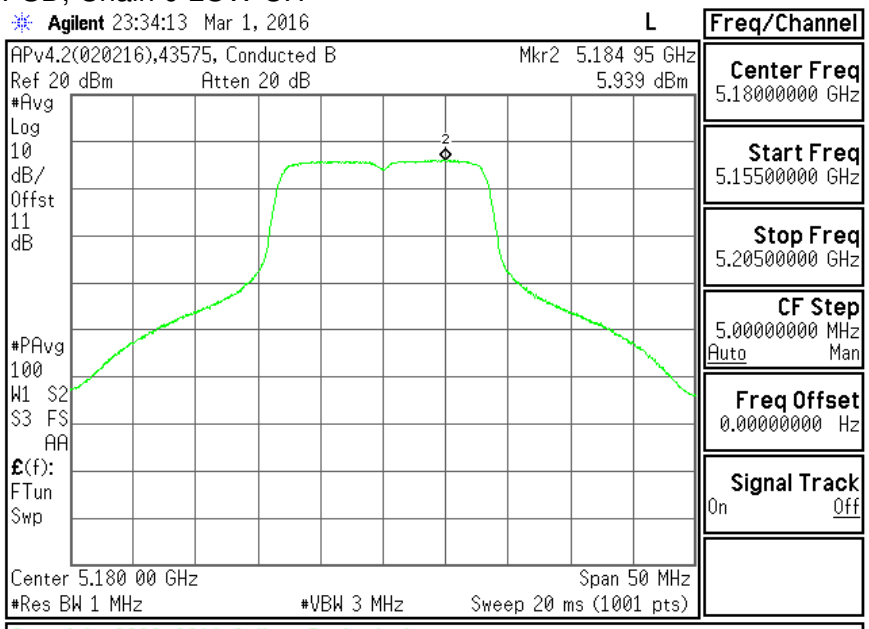
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5180	5.939	6.079	10.00	-3.92
Mid	5200	8.392	8.532	10.00	-1.47
High	5240	8.580	8.720	10.00	-1.28

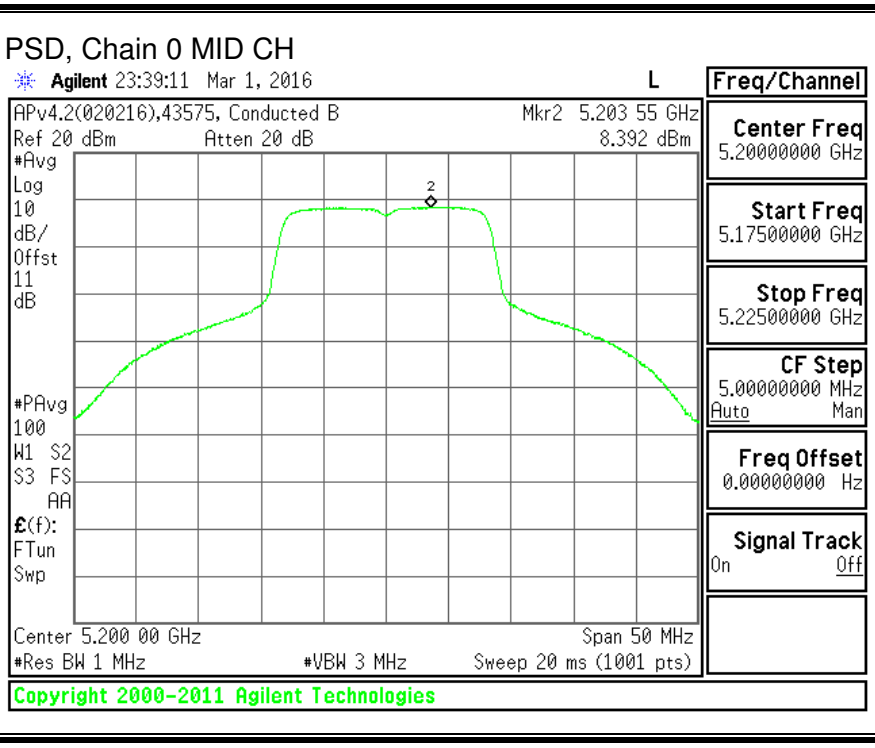
Note: the power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

PSD, Chain 0

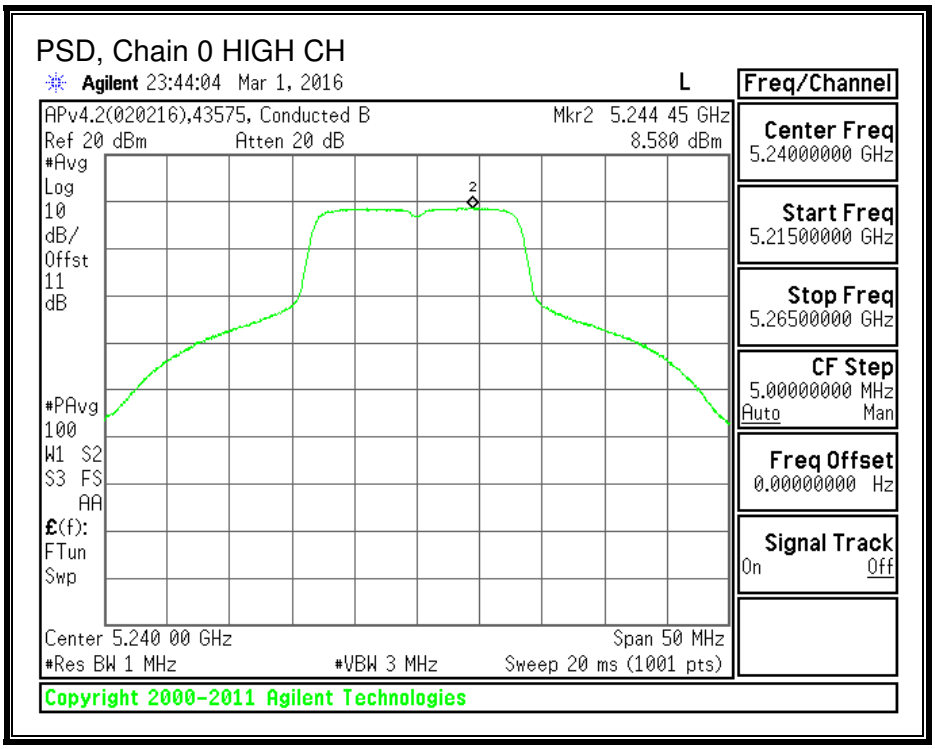
PSD, Chain 0 LOW CH



PSD, Chain 0 MID CH



PSD, Chain 0 HIGH CH



9.3. 802.11n HT20 MODE IN THE 5.2 GHz BAND

9.3.1. 26 dB BANDWIDTH

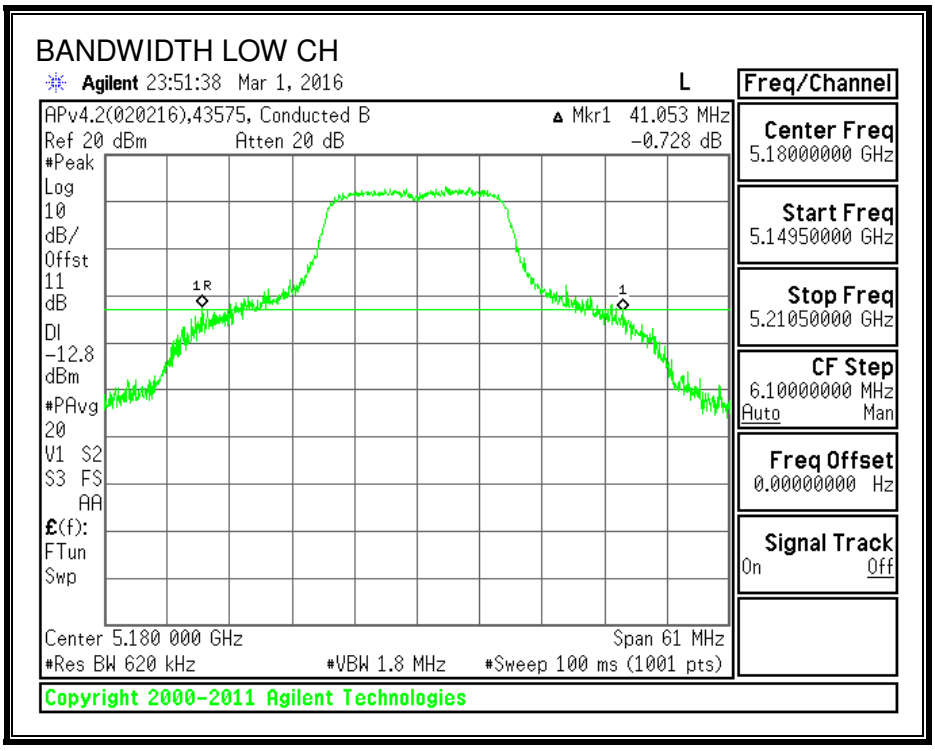
LIMITS

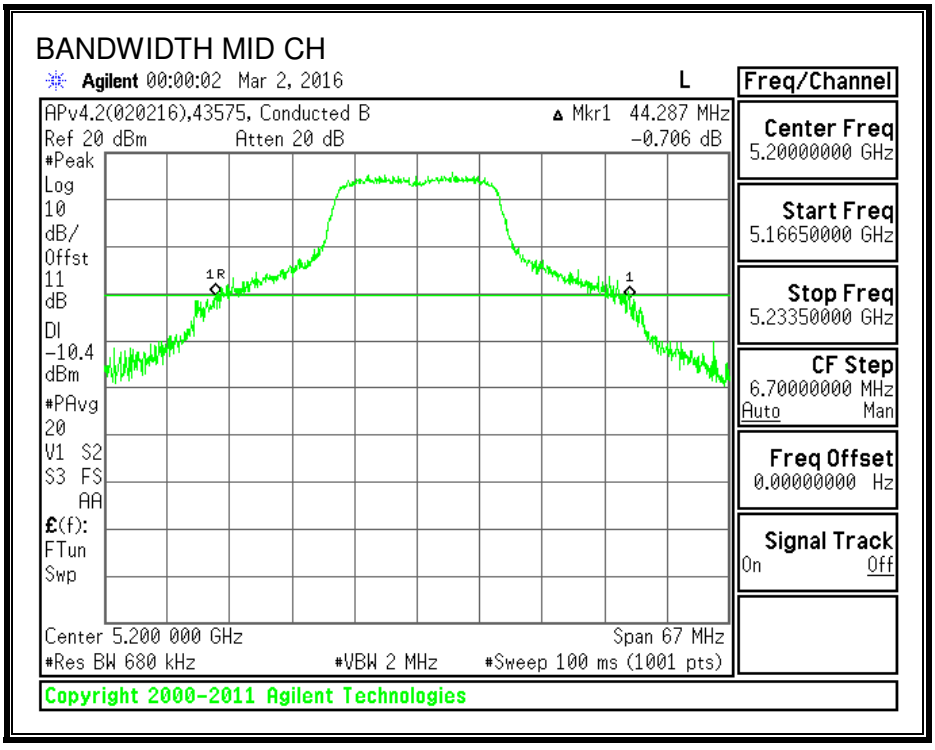
None; for reporting purposes only.

RESULTS

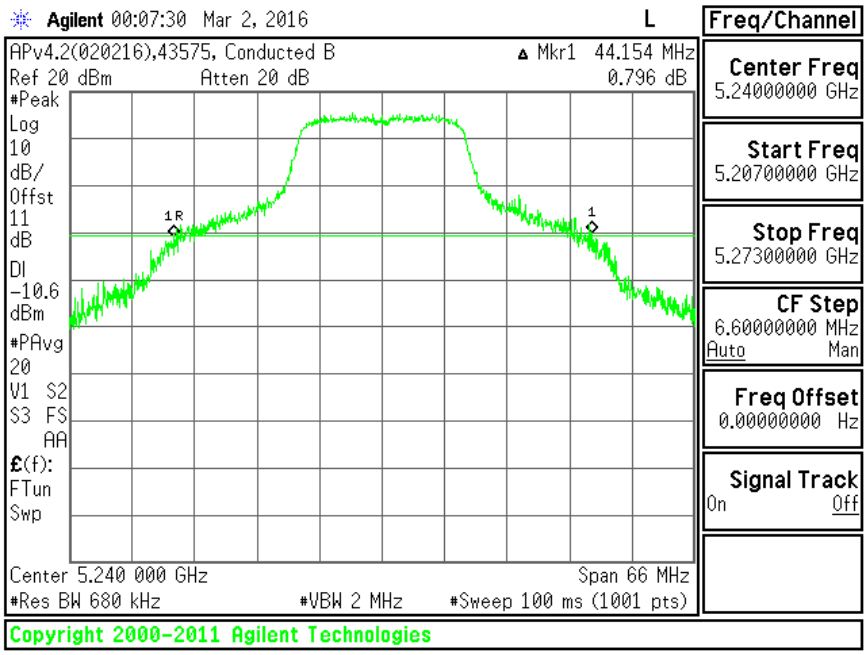
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5180	41.0530
Mid	5200	44.2870
High	5240	44.1540

26 dB BANDWIDTH





BANDWIDTH HIGH CH



9.3.2. 99% BANDWIDTH

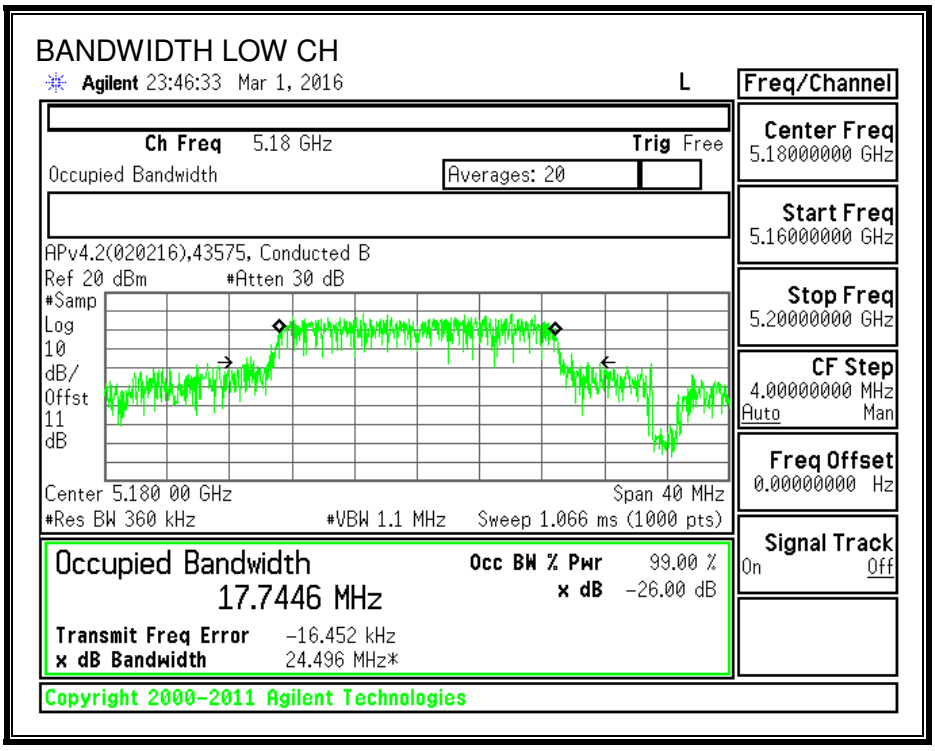
LIMITS

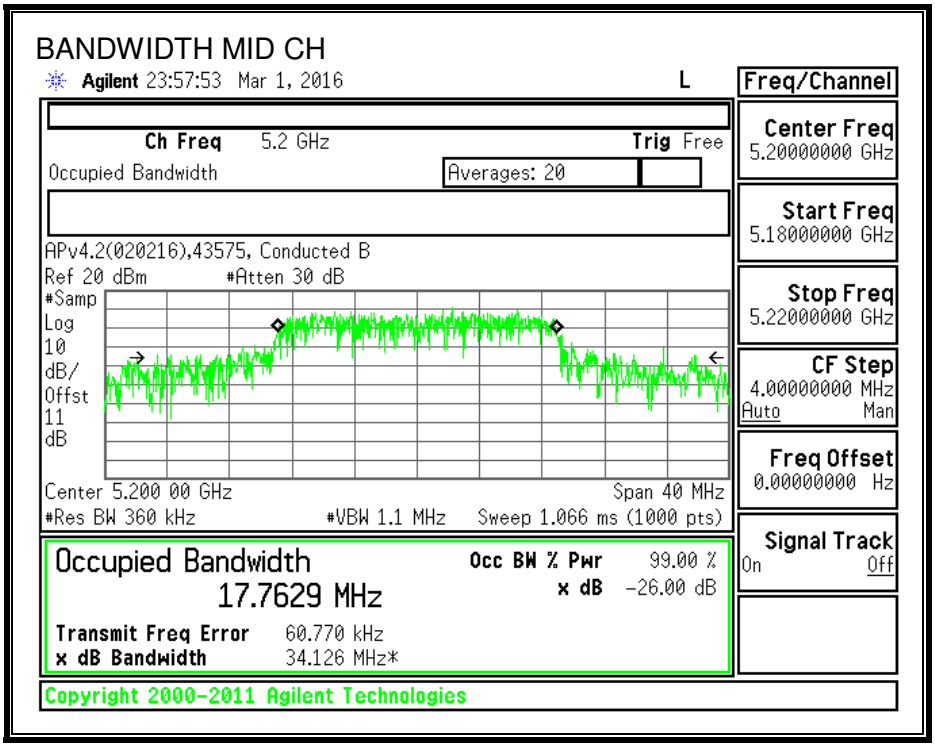
None; for reporting purposes only.

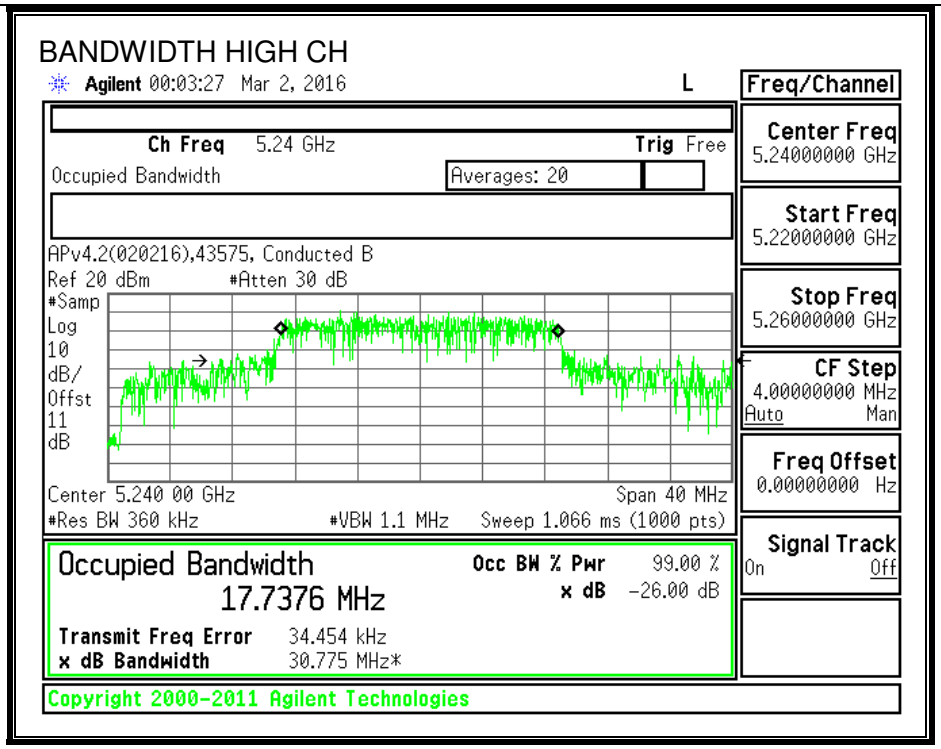
RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5180	17.7446
Mid	5200	17.7629
High	5240	17.7376

99% BANDWIDTH







9.3.3. OUTPUT POWER AND PSD

LIMITS

FCC §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. 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.

IC RSS-247

Band 5.15-5.25 GHz

The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 $\log_{10}$B, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5180	-2.00	-2.00	24.00	10.00
Mid	5200	-2.00	-2.00	24.00	10.00
High	5240	-2.00	-2.00	24.00	10.00

Duty Cycle CF (dB)	0.15	Included in Calculations of Corr'd PSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	18.79	18.79	24.00	-5.21
Mid	5200	20.02	20.02	24.00	-3.98
High	5240	20.05	20.05	24.00	-3.95

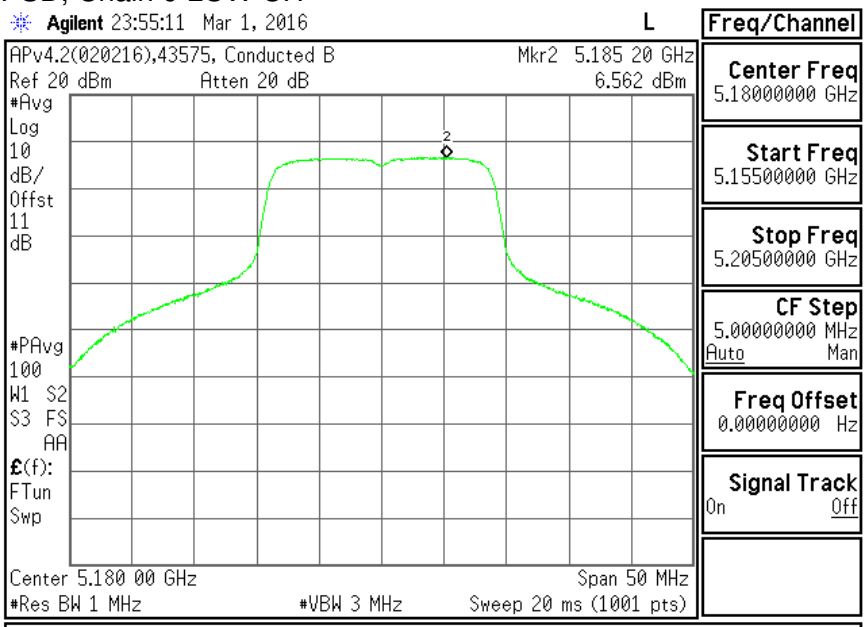
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5180	6.562	6.712	10.00	-3.29
Mid	5200	8.243	8.393	10.00	-1.61
High	5240	8.137	8.287	10.00	-1.71

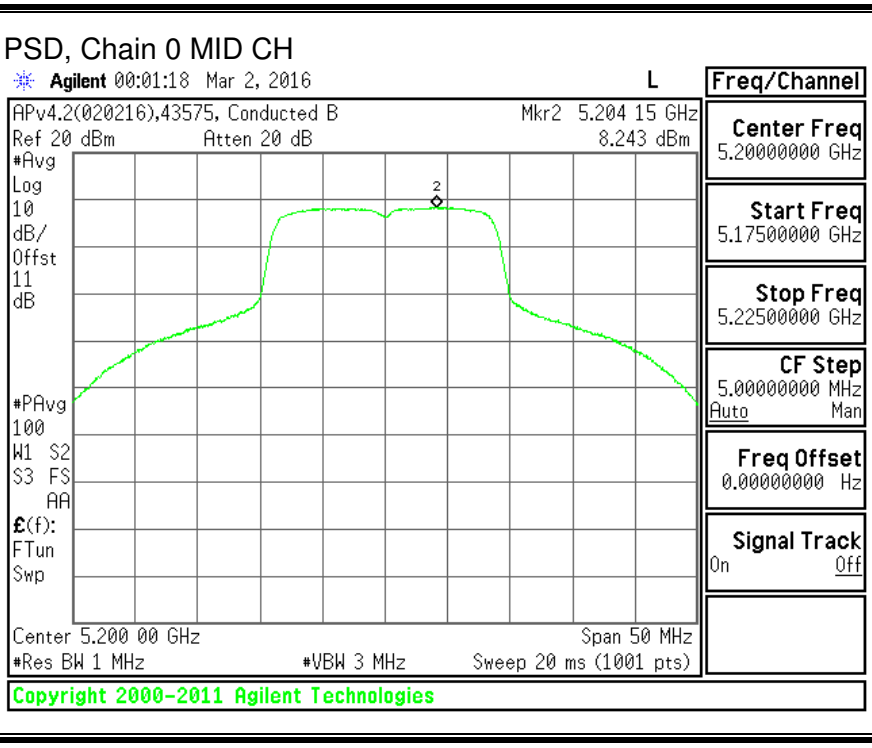
Note: the power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

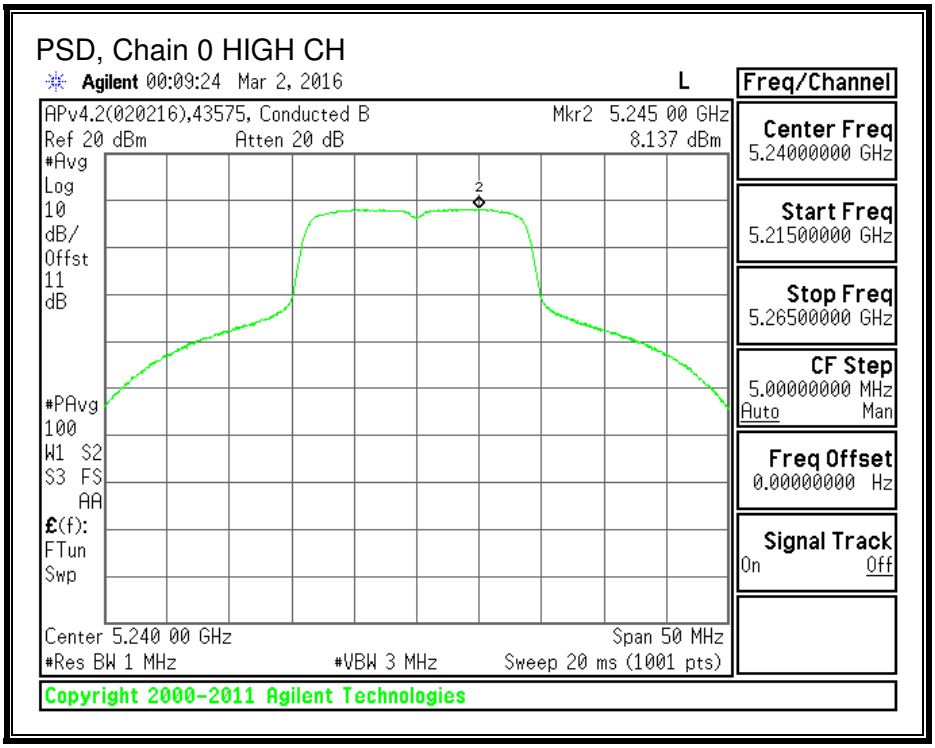
PSD, Chain 0

PSD, Chain 0 LOW CH



PSD, Chain 0 MID CH





9.4. 802.11n HT40 MODE IN THE 5.2 GHz BAND

9.4.1. 26 dB BANDWIDTH

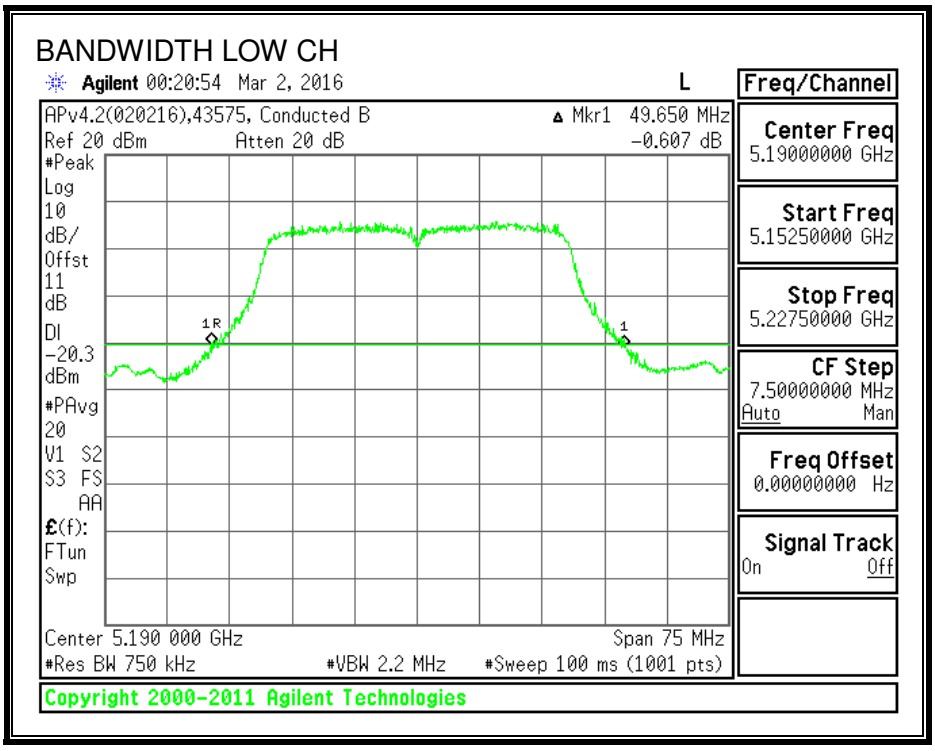
LIMITS

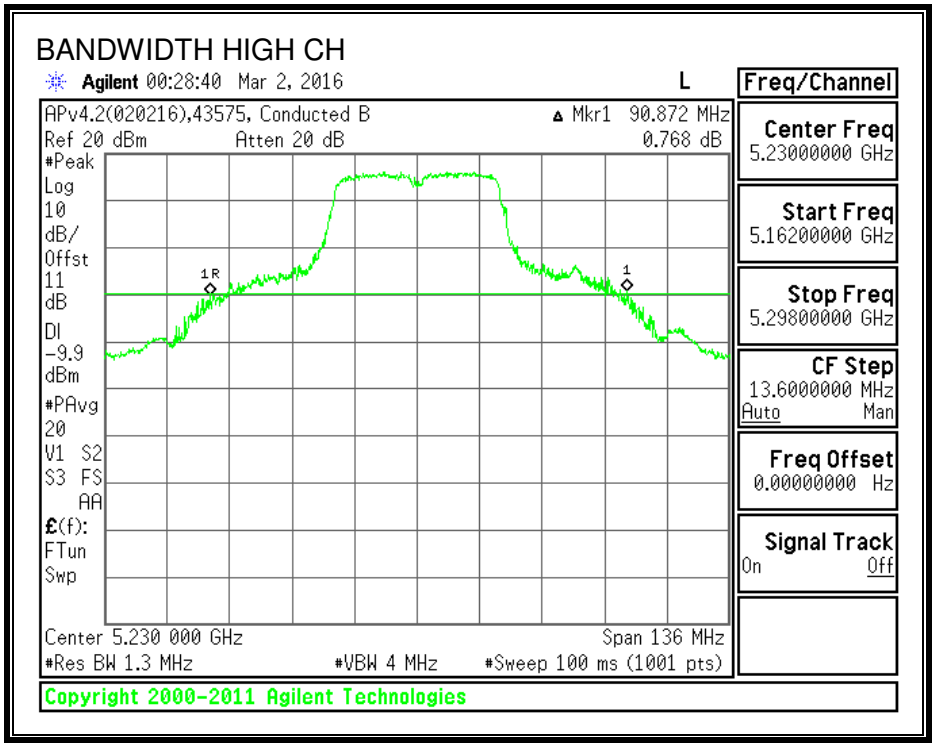
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5190	49.6500
High	5230	90.8720

26 dB BANDWIDTH





9.4.2. 99% BANDWIDTH

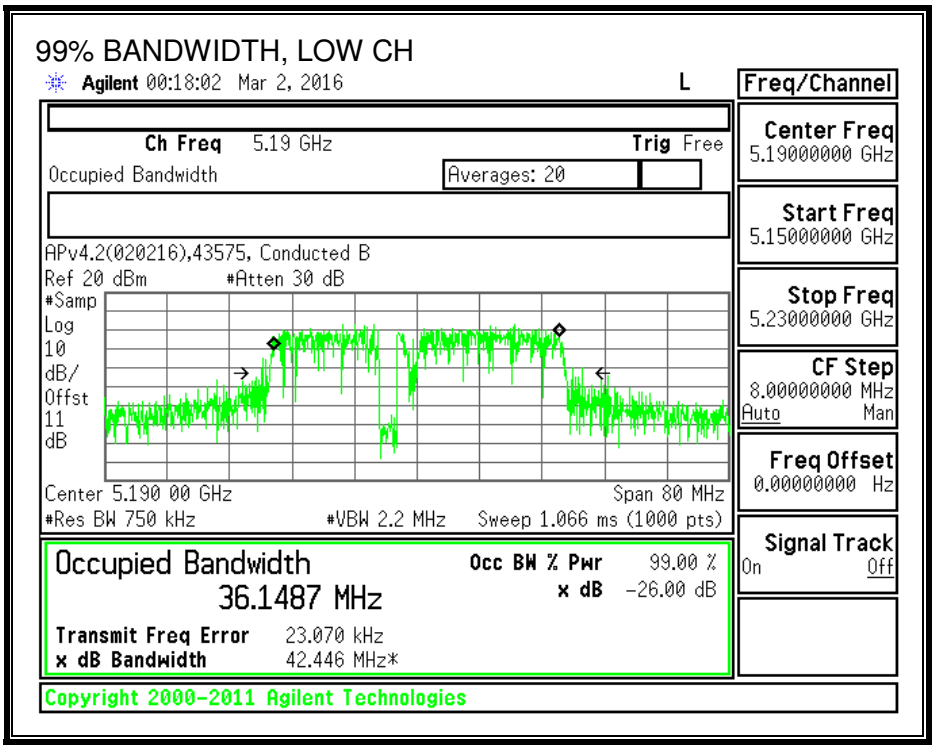
LIMITS

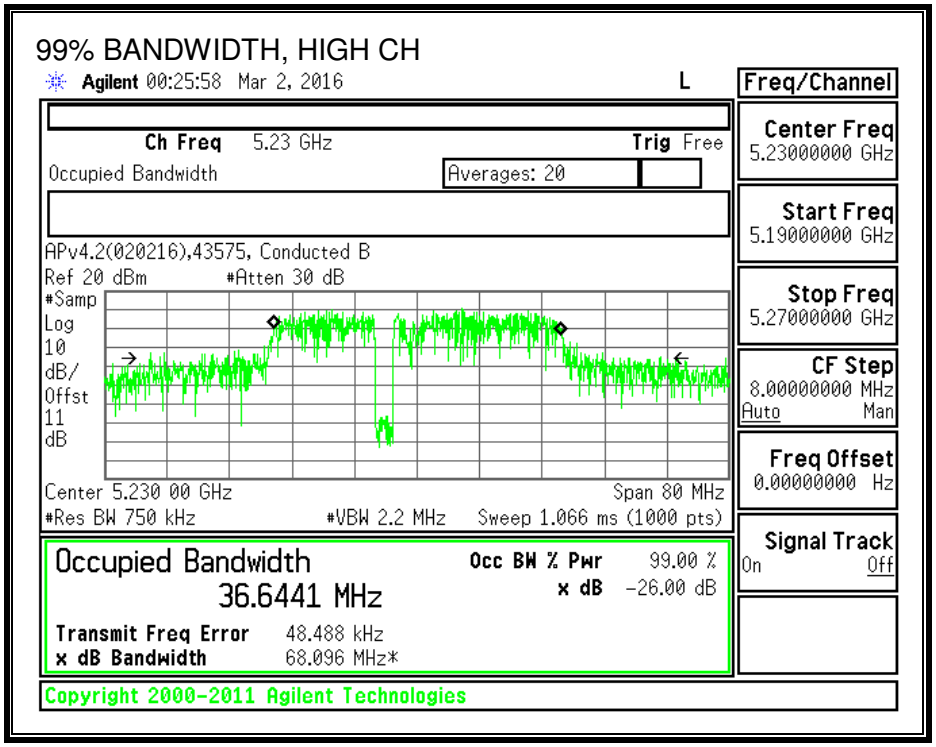
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5190	36.1487
High	5230	36.6441

99% BANDWIDTH





9.4.3. OUTPUT POWER AND PSD

LIMITS

FCC §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. 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.

IC RSS-247

Band 5.15-5.25 GHz
The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 $\log_{10}$B, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5190	-2.00	-2.00	24.00	10.00
High	5230	-2.00	-2.00	24.00	10.00

Duty Cycle CF (dB)	0.21	Included in Calculations of Corr'd PSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	13.23	13.23	24.00	-10.77
High	5230	20.07	20.07	24.00	-3.93

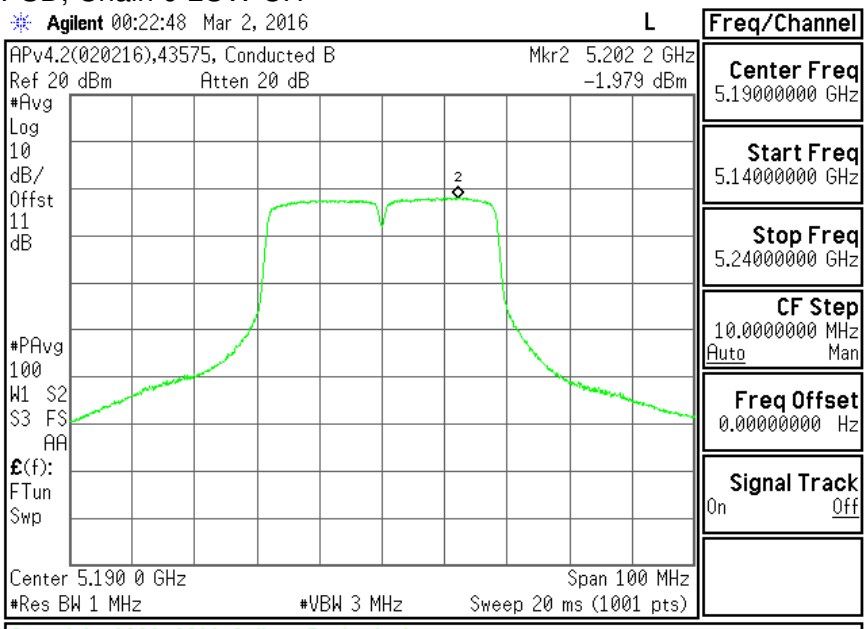
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5190	-1.979	-1.769	10.00	-11.77
High	5230	5.250	5.460	10.00	-4.54

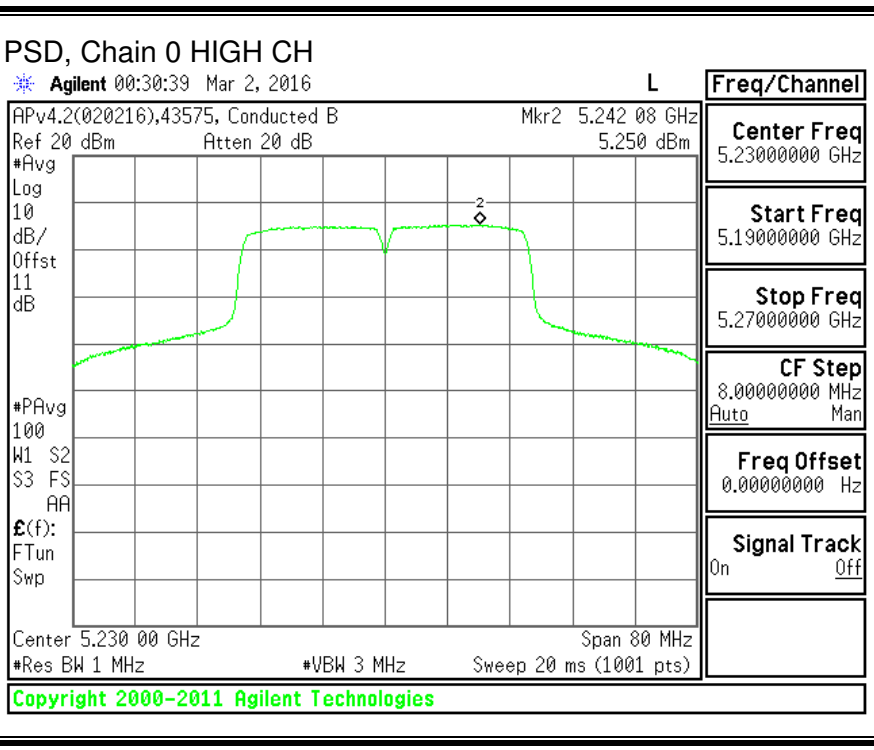
Note: the power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

PSD, Chain 0

PSD, Chain 0 LOW CH



PSD, Chain 0 HIGH CH



9.5. 802.11a MODE IN THE 5.3 GHz BAND

9.5.1. 26 dB BANDWIDTH

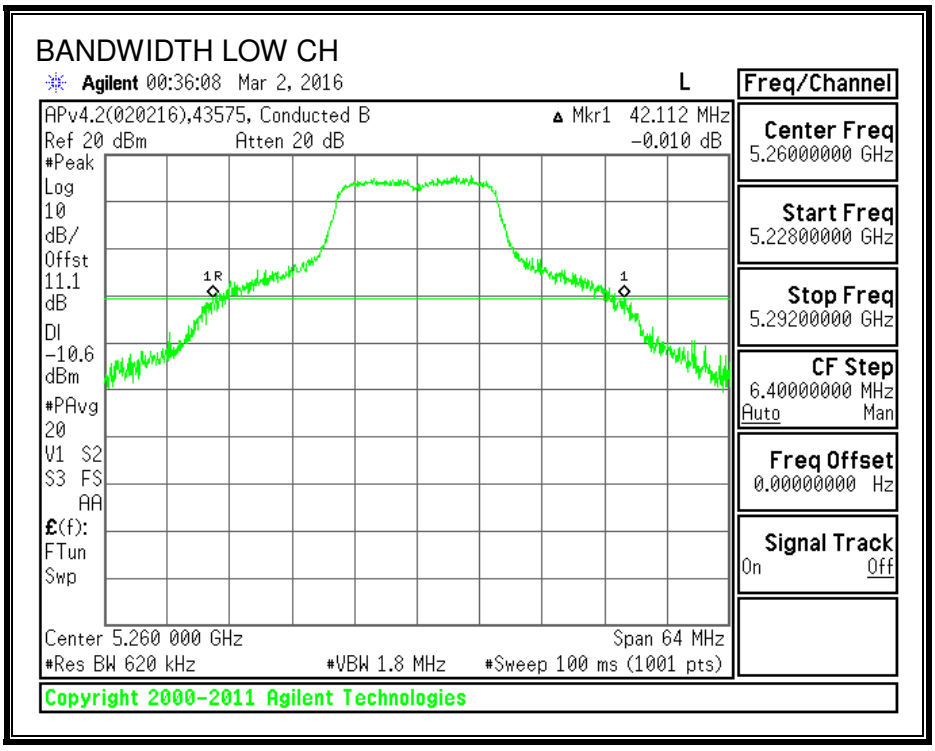
LIMITS

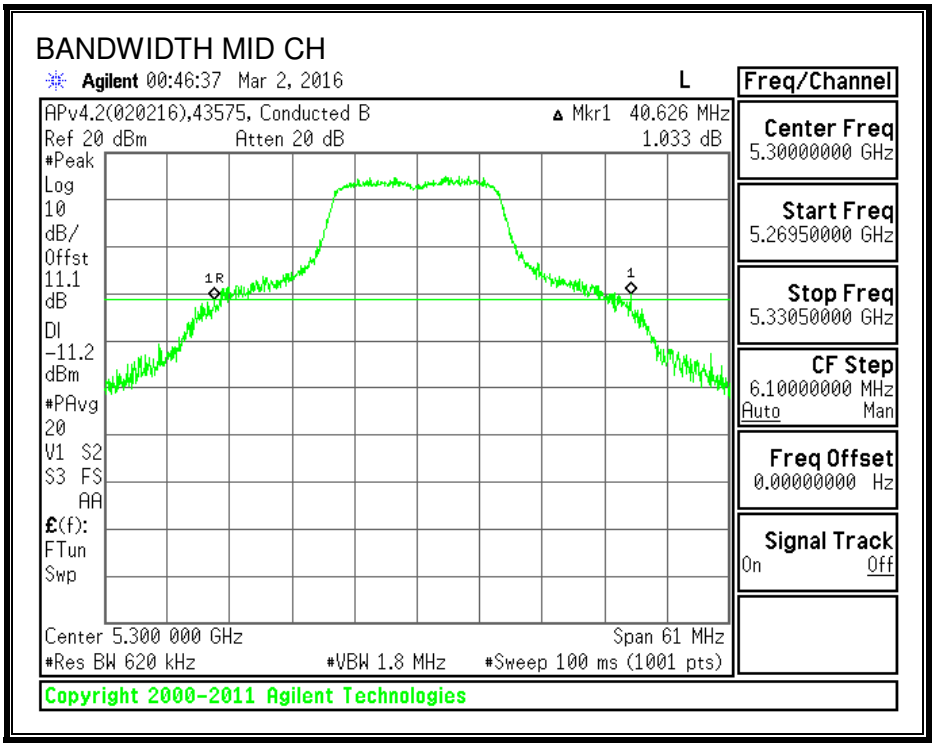
None; for reporting purposes only.

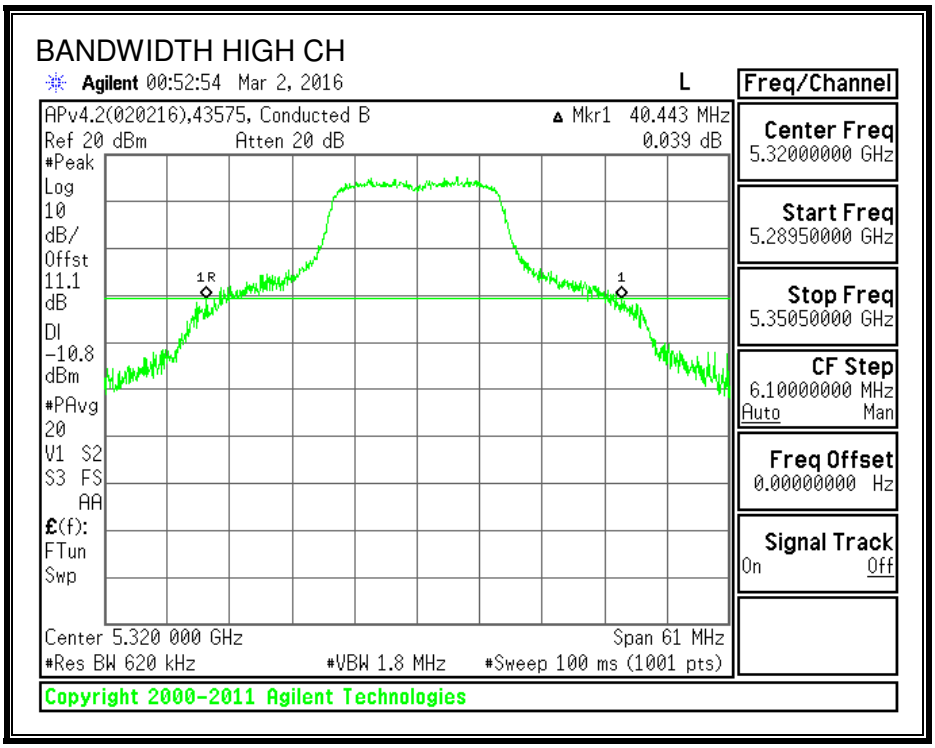
RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5260	42.1120
Mid	5300	40.6260
High	5320	40.4430

26 dB BANDWIDTH







9.5.2. 99% BANDWIDTH

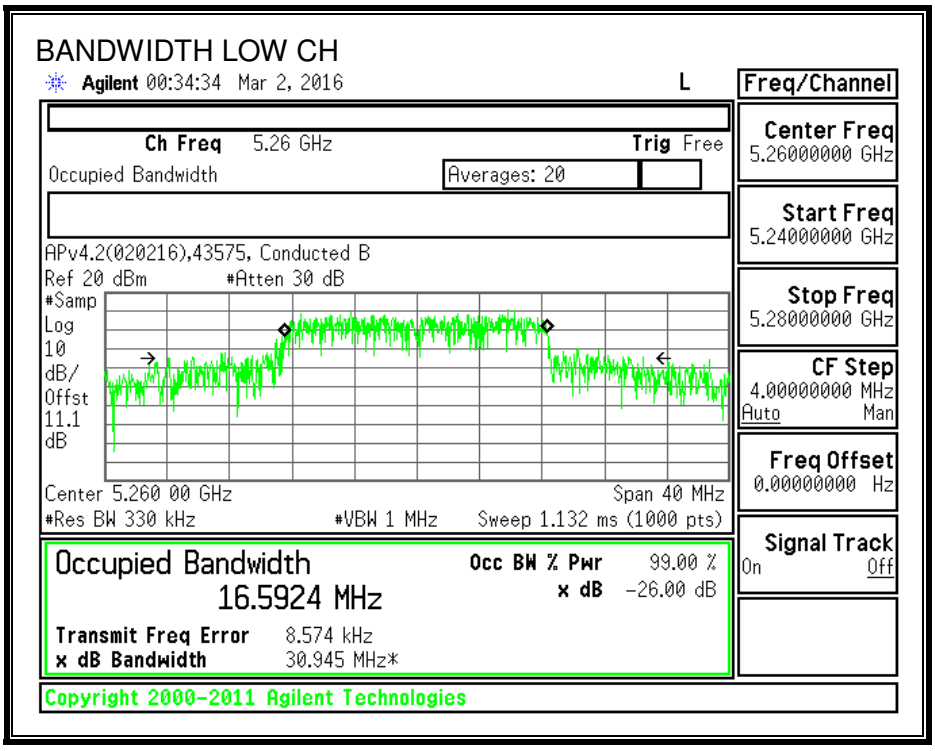
LIMITS

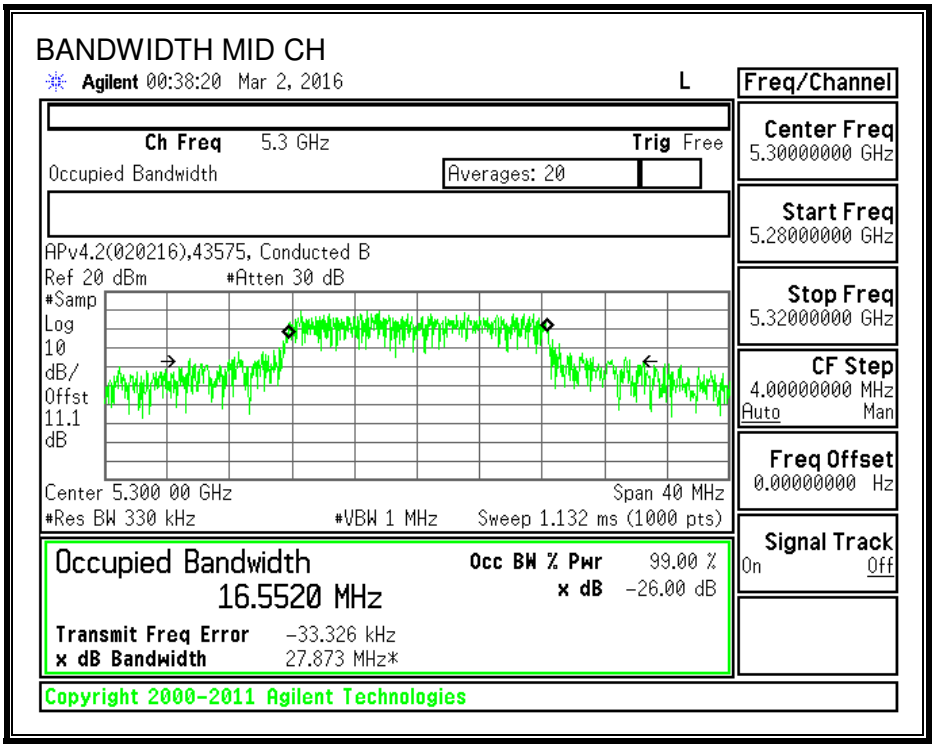
None; for reporting purposes only.

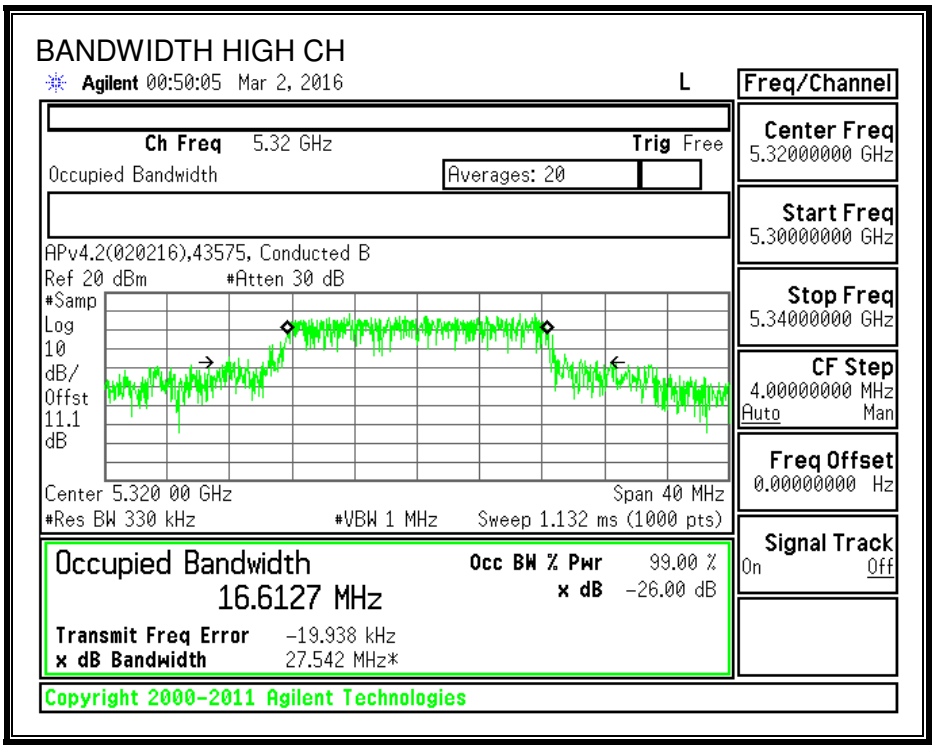
RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5260	16.5924
Mid	5300	16.5520
High	5320	16.6127

99% BANDWIDTH







9.5.3. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (2)

For the band 5.25–5.35 GHz, the maximum conducted output power over the frequency band 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 MHz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

IC RSS-247

Band 5.25-5.35 GHz
The maximum conducted output power shall not exceed 250 mW or 11 + 10 $\log_{10}$B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 $\log_{10}$B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5260	42.112	-2.00	24.00	10.00
Mid	5300	40.626	-2.00	24.00	10.00
High	5320	40.443	-2.00	24.00	10.00

Duty Cycle CF (dB)	0.14	Included in Calculations of Corr'd PSD

Output Power Results

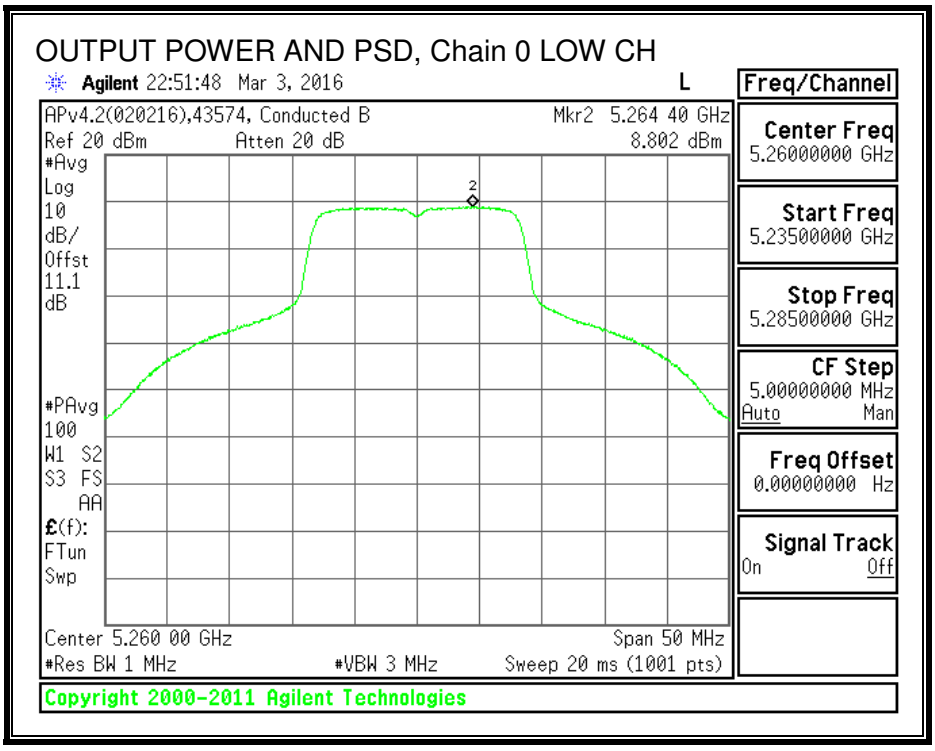
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	20.05	20.05	24.00	-3.95
Mid	5300	20.09	20.09	24.00	-3.91
High	5320	19.48	19.48	24.00	-4.52

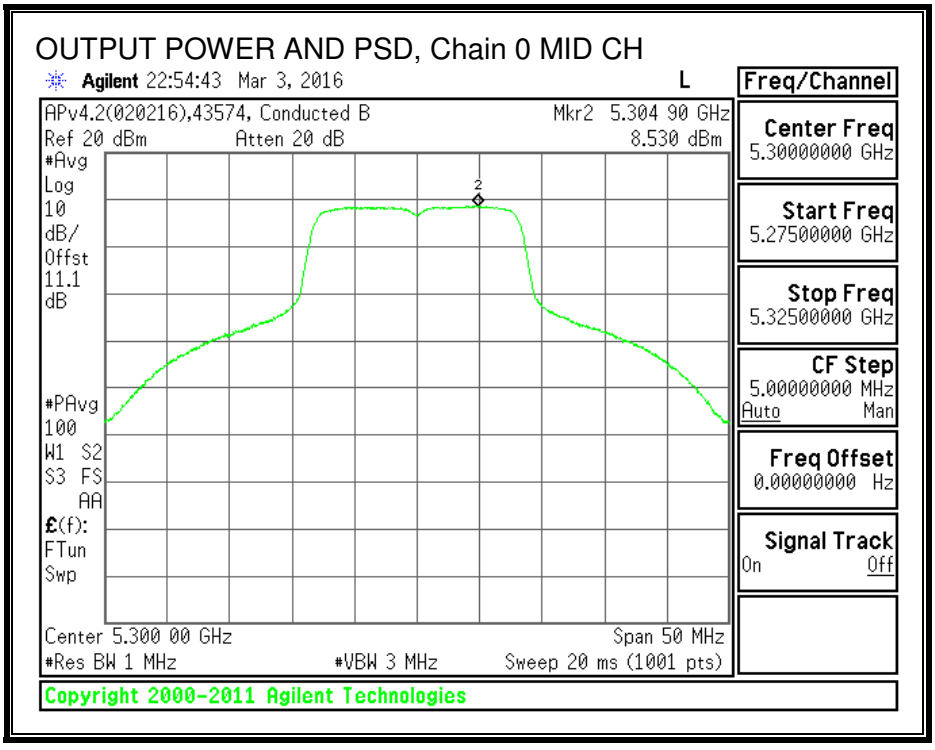
PSD Results

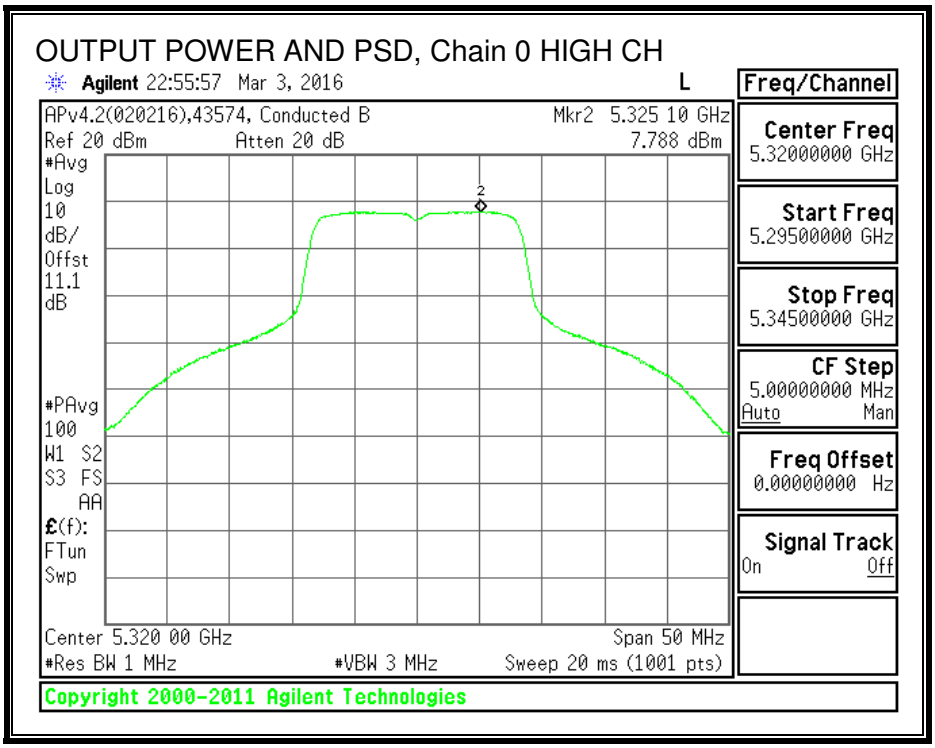
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5260	8.802	8.942	10.00	-1.06
Mid	5300	8.530	8.670	10.00	-1.33
High	5320	7.788	7.928	10.00	-2.07

Note: the power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

OUTPUT POWER AND PSD, Chain 0







9.6. 802.11n HT20 MODE IN THE 5.3 GHz BAND

9.6.1. 26 dB BANDWIDTH

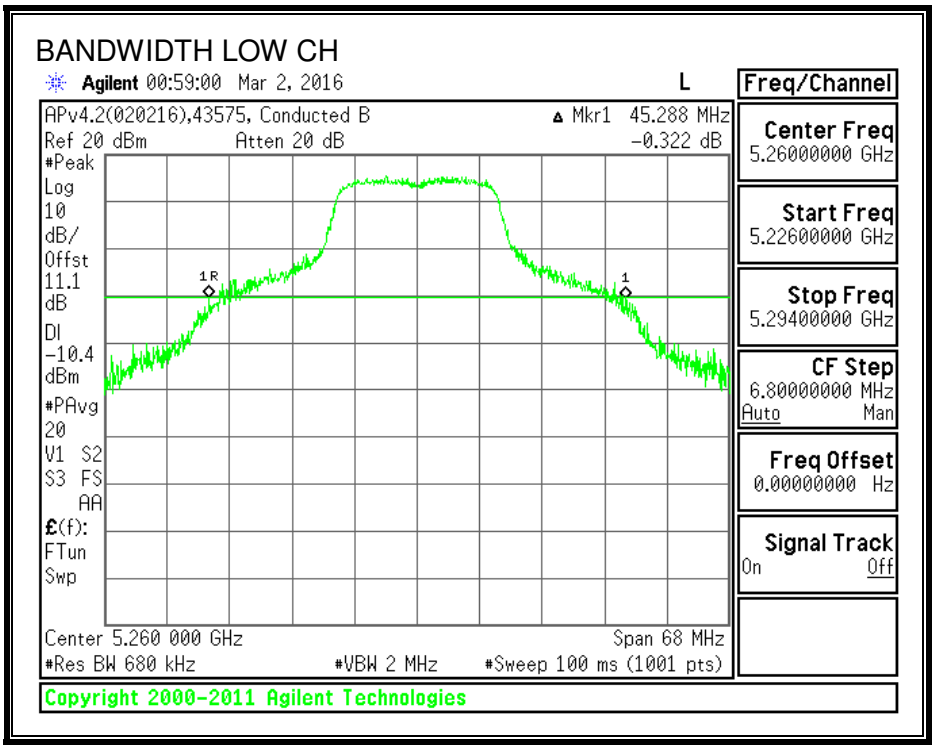
LIMITS

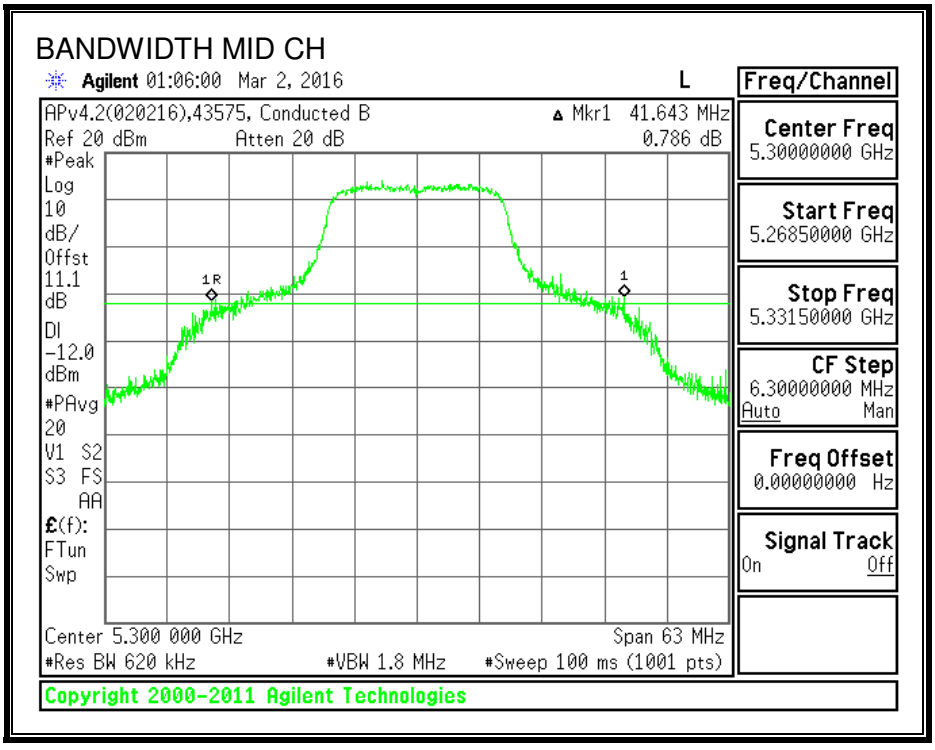
None; for reporting purposes only.

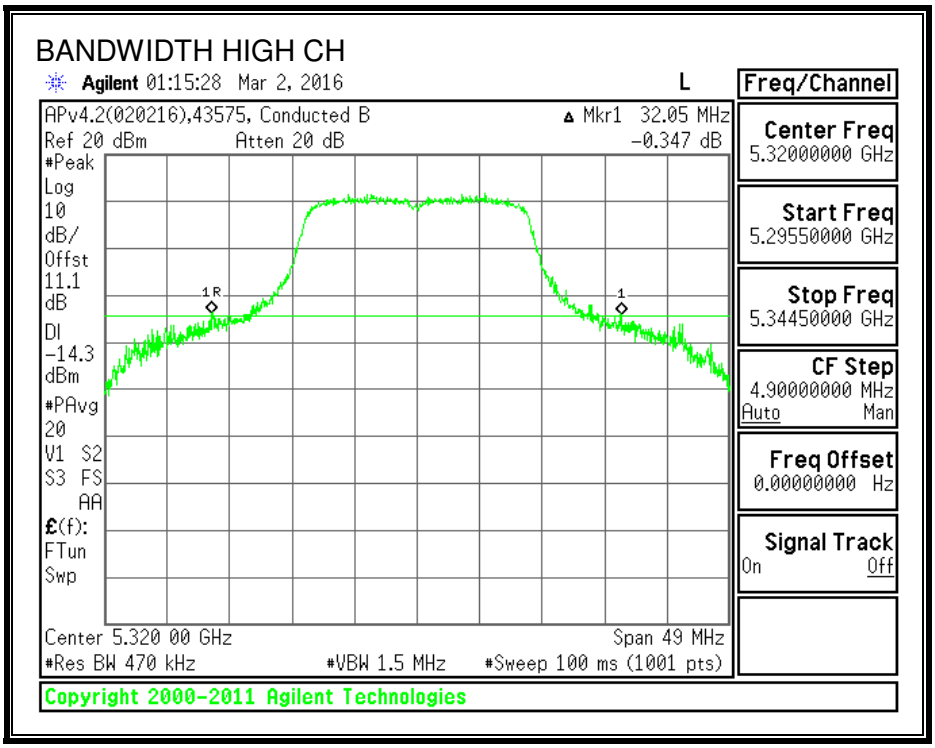
RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5260	45.2880
Mid	5300	41.6430
High	5320	32.0500

26 dB BANDWIDTH







9.6.2. 99% BANDWIDTH

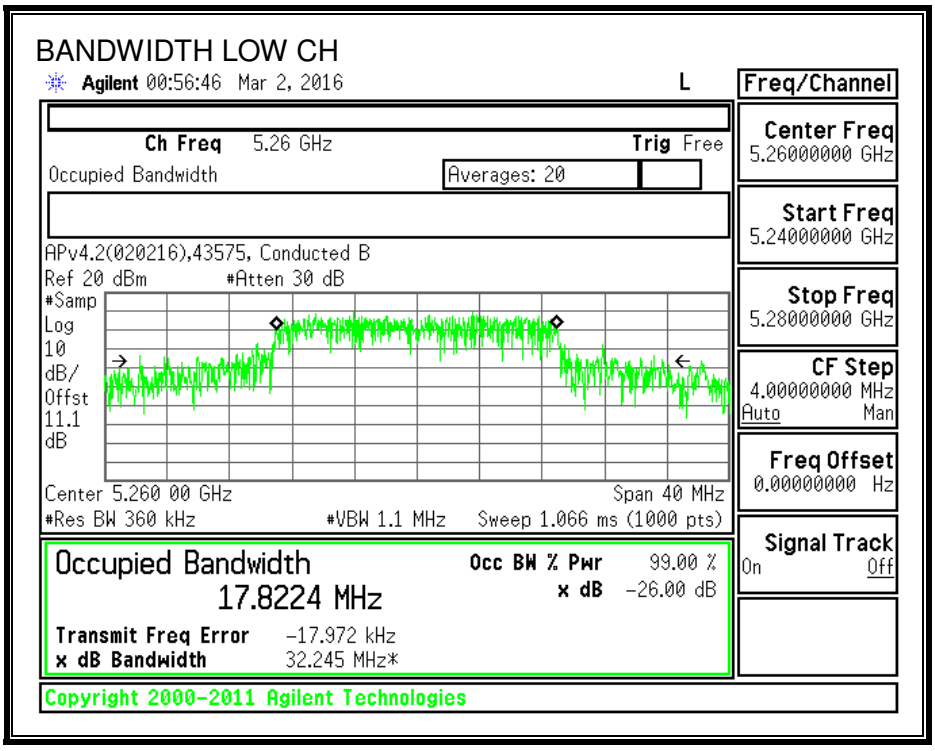
LIMITS

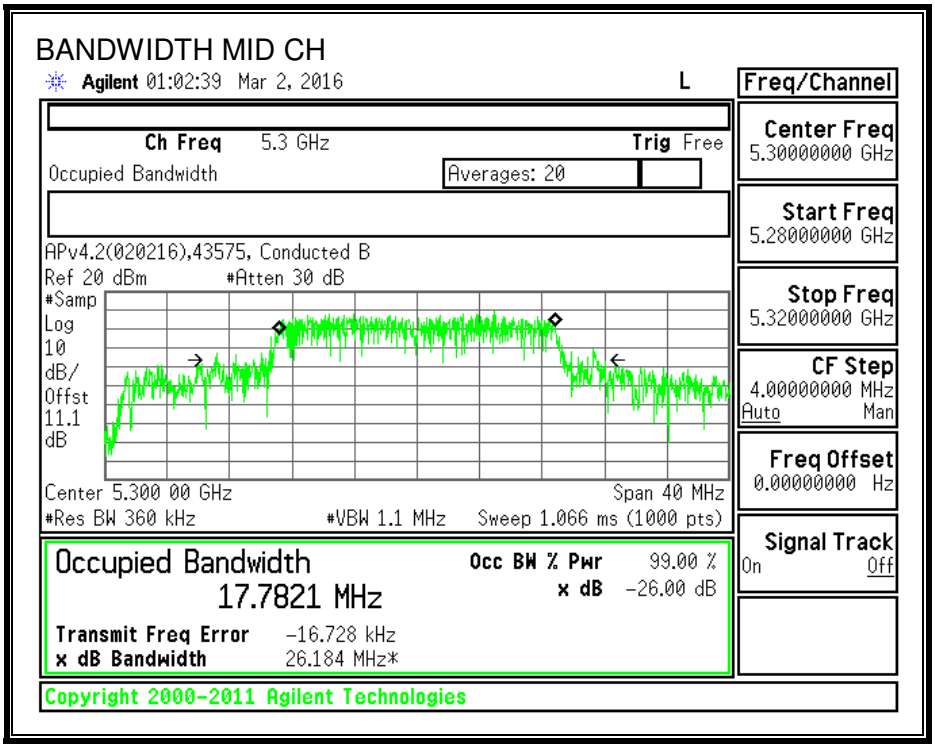
None; for reporting purposes only.

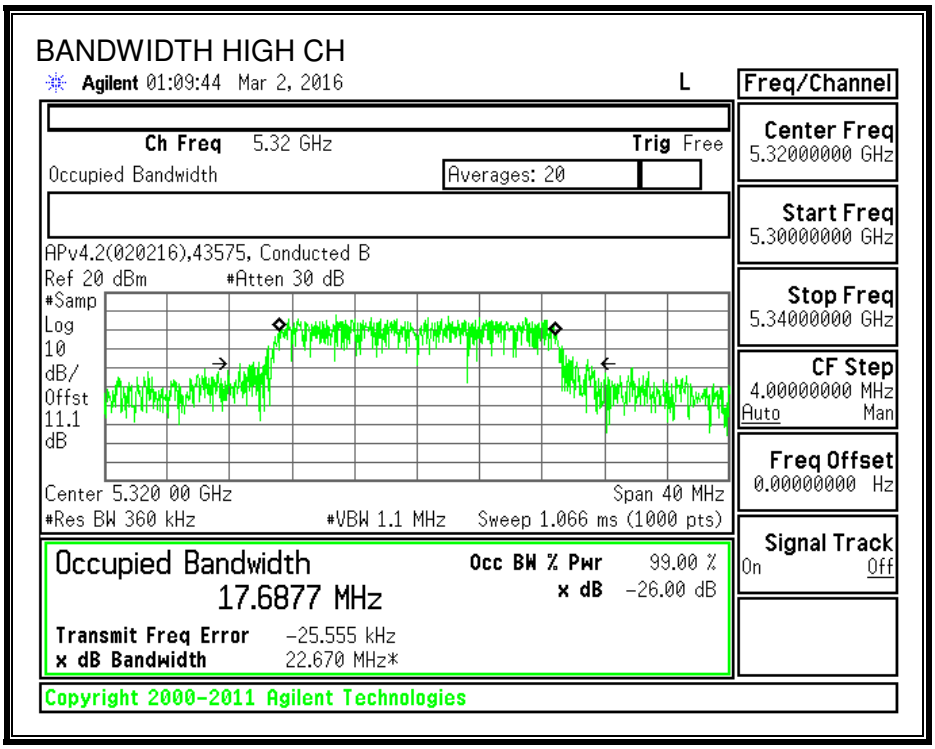
RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5260	17.8224
Mid	5300	17.7821
High	5320	17.6877

99% BANDWIDTH







9.6.3. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (2)

For the band 5.25–5.35 GHz, the maximum conducted output power over the frequency band 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 MHz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

IC RSS-247

Band 5.25-5.35 GHz
The maximum conducted output power shall not exceed 250 mW or 11 + 10 $\log_{10}$B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 $\log_{10}$B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5260	45.288	-2.00	24.00	10.00
Mid	5300	41.643	-2.00	24.00	10.00
High	5320	32.050	-2.00	24.00	10.00

Duty Cycle CF (dB)	0.15	Included in Calculations of Corr'd PSD

Output Power Results

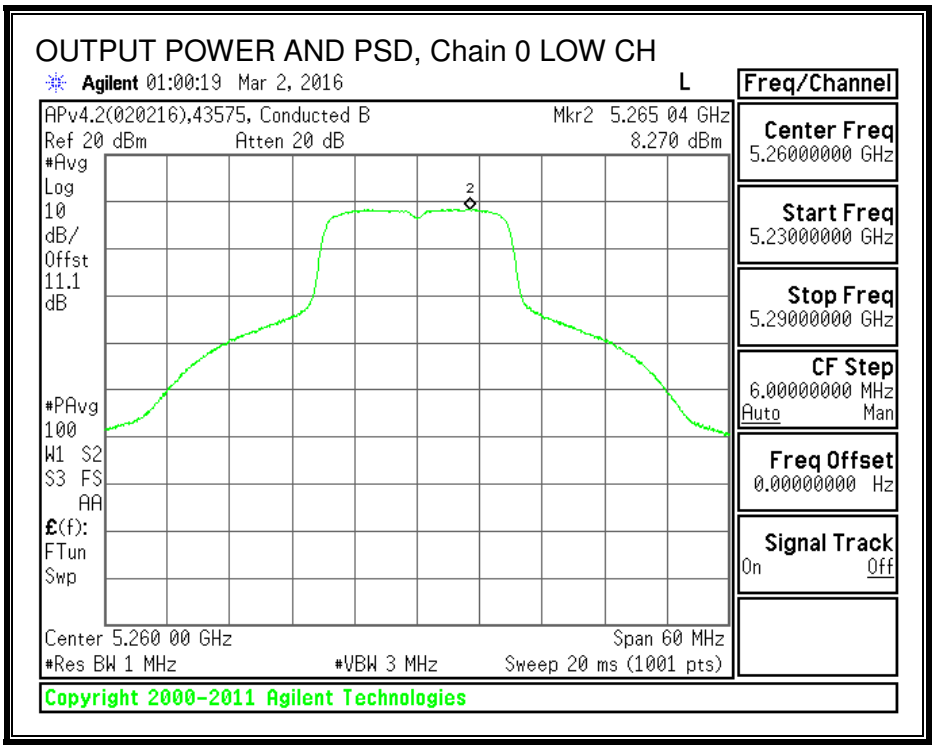
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	20.08	20.08	24.00	-3.92
Mid	5300	19.69	19.69	24.00	-4.31
High	5320	18.51	18.51	24.00	-5.49

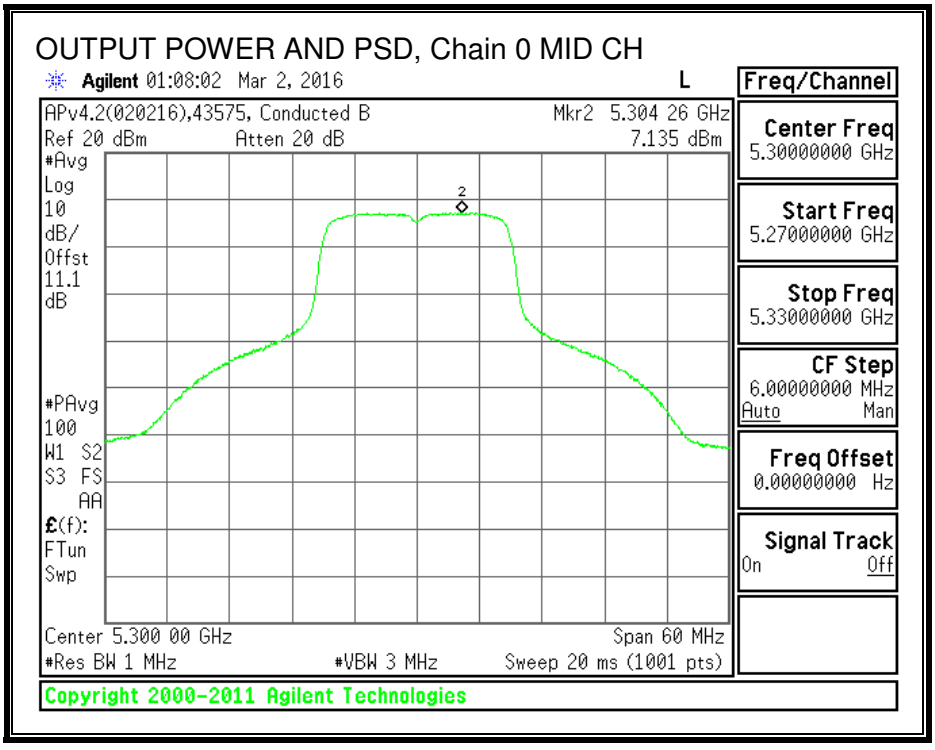
PSD Results

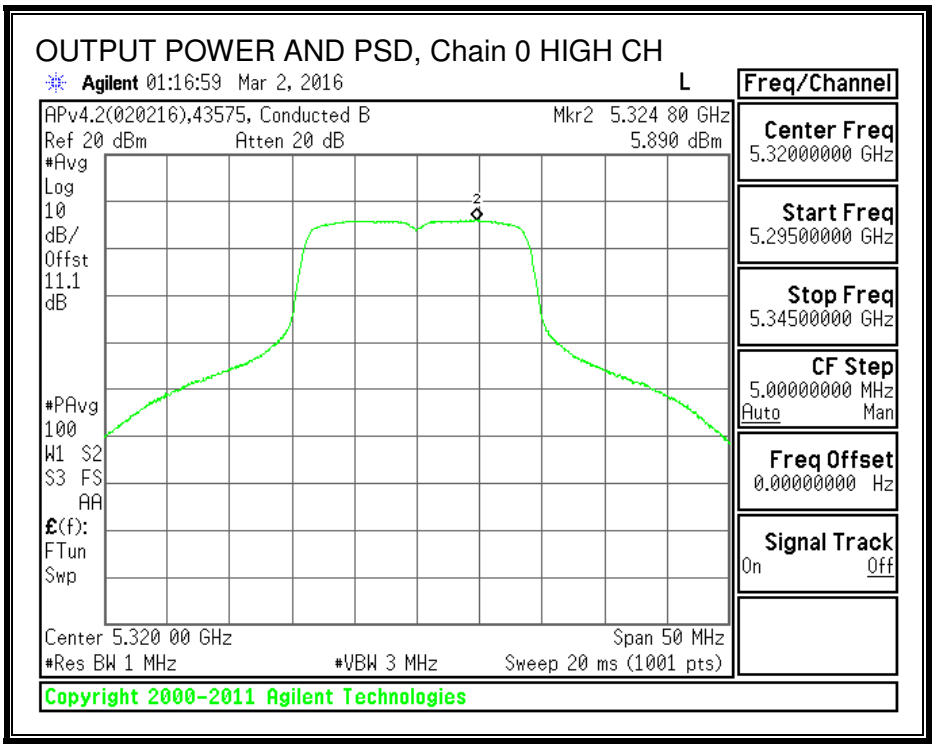
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5260	8.27	8.42	10.00	-1.58
Mid	5300	7.14	7.29	10.00	-2.72
High	5320	5.89	6.04	10.00	-3.96

Note: the power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

OUTPUT POWER AND PSD, Chain 0







9.7. 802.11n HT40 MODE IN THE 5.3 GHz BAND

9.7.1. 26 dB BANDWIDTH

LIMITS

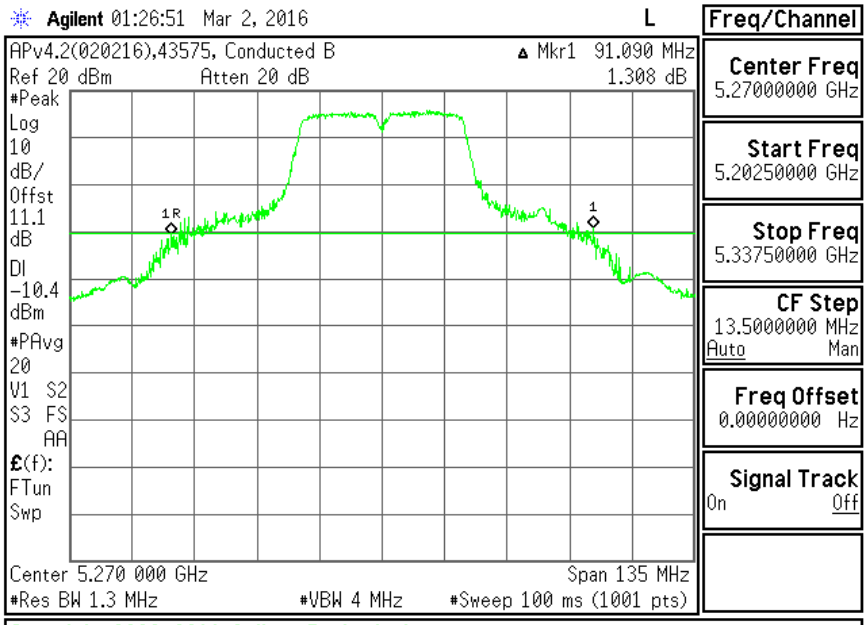
None; for reporting purposes only.

RESULTS

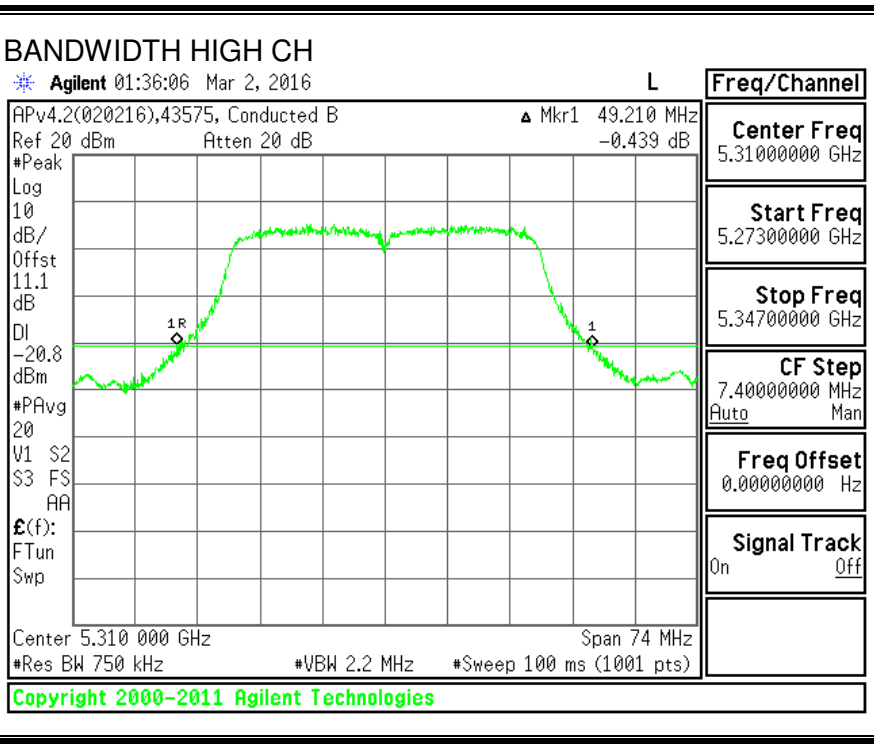
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5270	91.0900
High	5310	49.2100

26 dB BANDWIDTH

BANDWIDTH LOW CH



BANDWIDTH HIGH CH



9.7.2. 99% BANDWIDTH

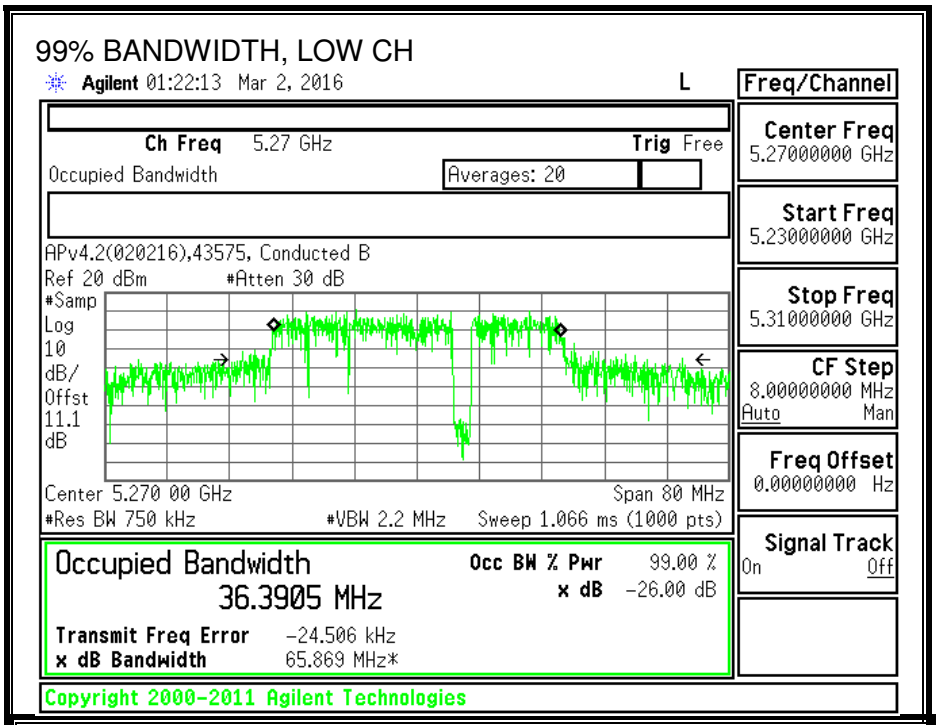
LIMITS

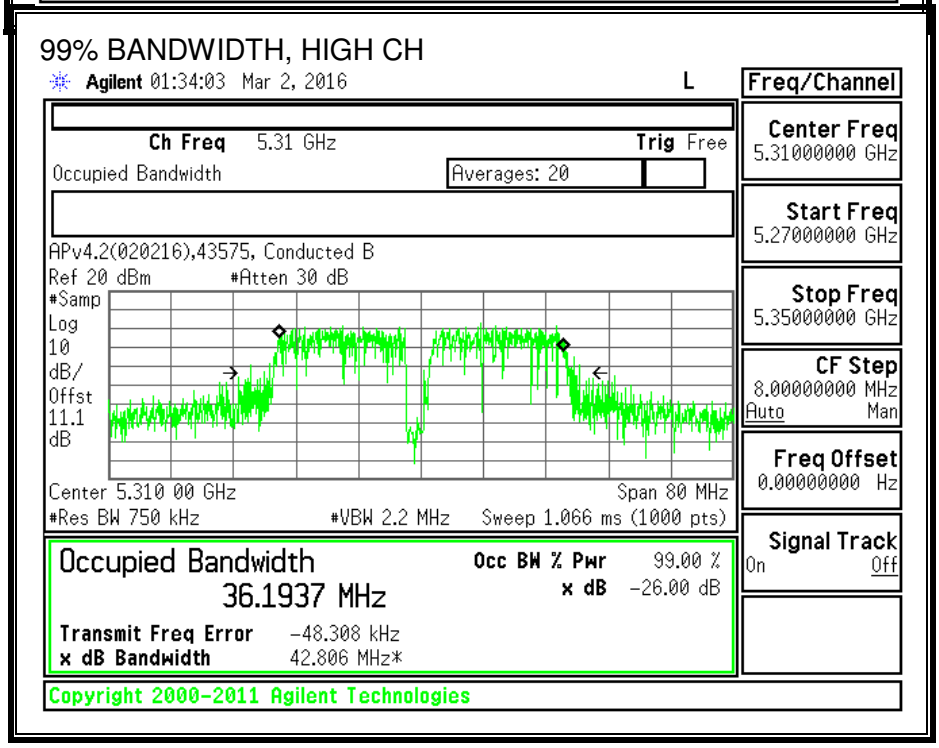
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5270	36.3905
High	5310	36.1937

99% BANDWIDTH





9.7.3. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (2)

For the band 5.25–5.35 GHz, the maximum conducted output power over the frequency band 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 MHz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

IC RSS-247

Band 5.25-5.35 GHz
The maximum conducted output power shall not exceed 250 mW or 11 + 10 $\log_{10}$B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 $\log_{10}$B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5270	91.090	-2.00	24.00	10.00
High	5310	49.210	-2.00	24.00	10.00

Duty Cycle CF (dB)	0.21	Included in Calculations of Corr'd PSD

Output Power Results

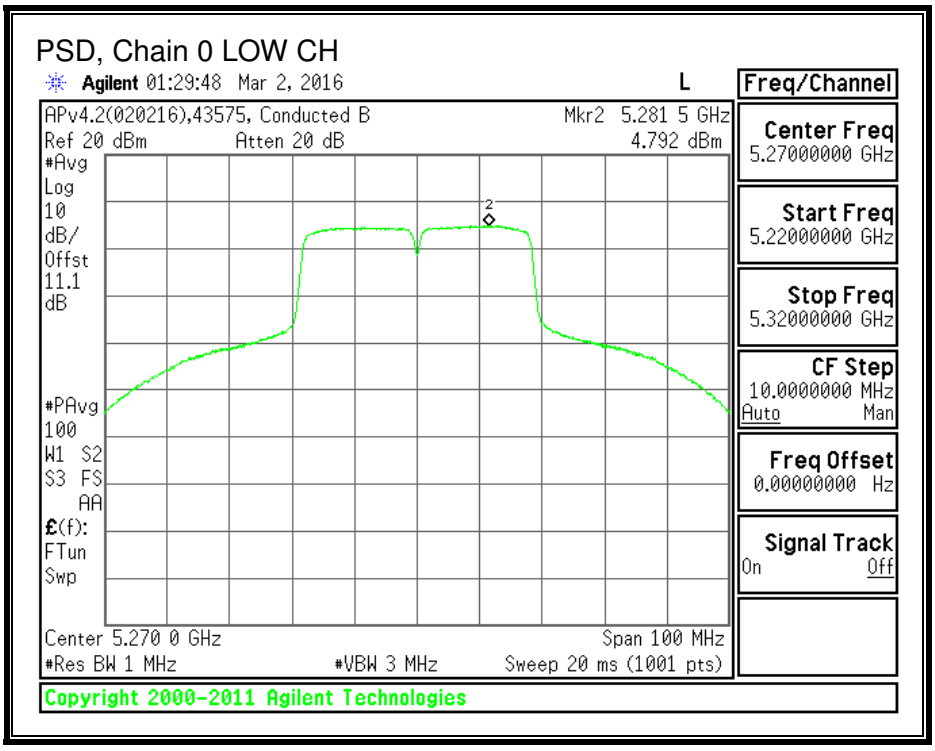
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	20.10	20.10	24.00	-3.90
High	5310	12.91	12.91	24.00	-11.09

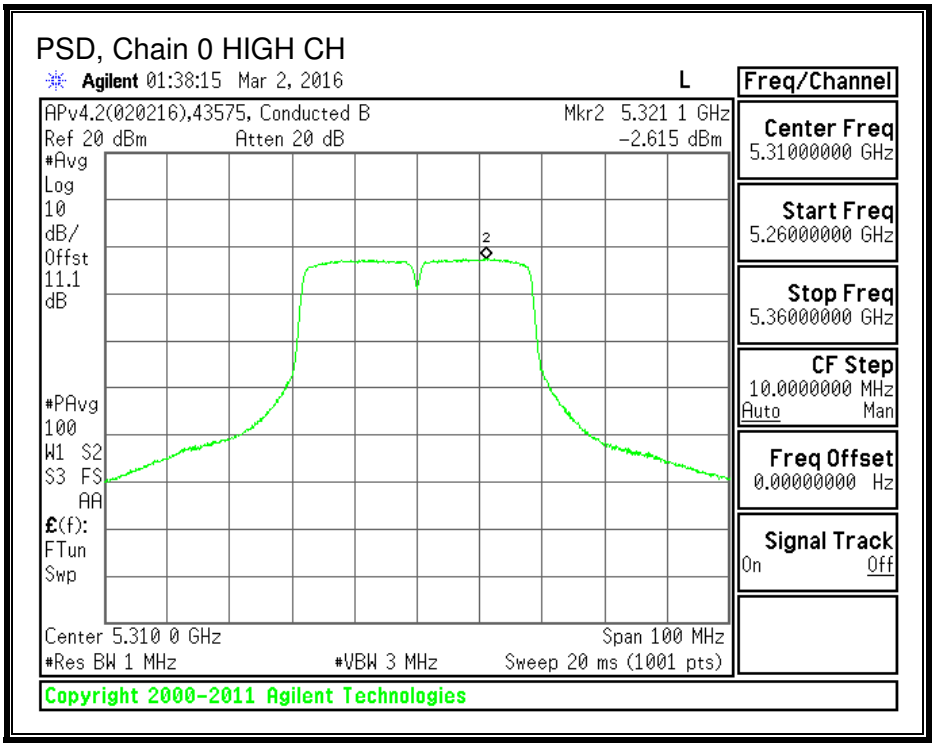
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5270	4.792	5.002	10.00	-5.00
High	5310	-2.615	-2.405	10.00	-12.41

Note: the power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

PSD, Chain 0





9.8. 802.11a MODE IN THE 5.6 GHz BAND

9.8.1. 26 dB BANDWIDTH

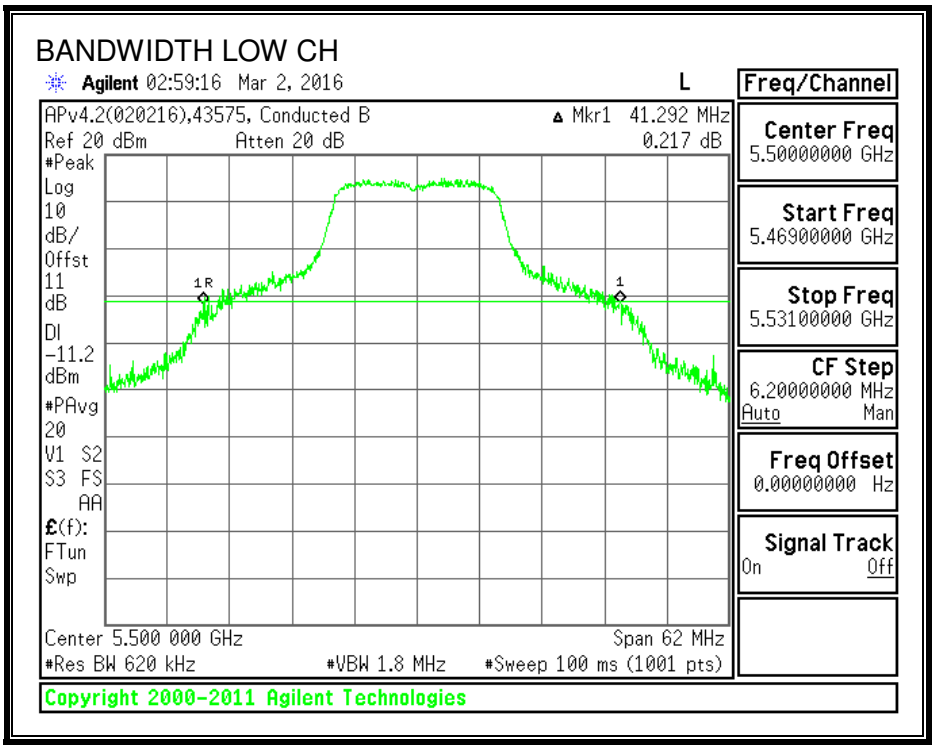
LIMITS

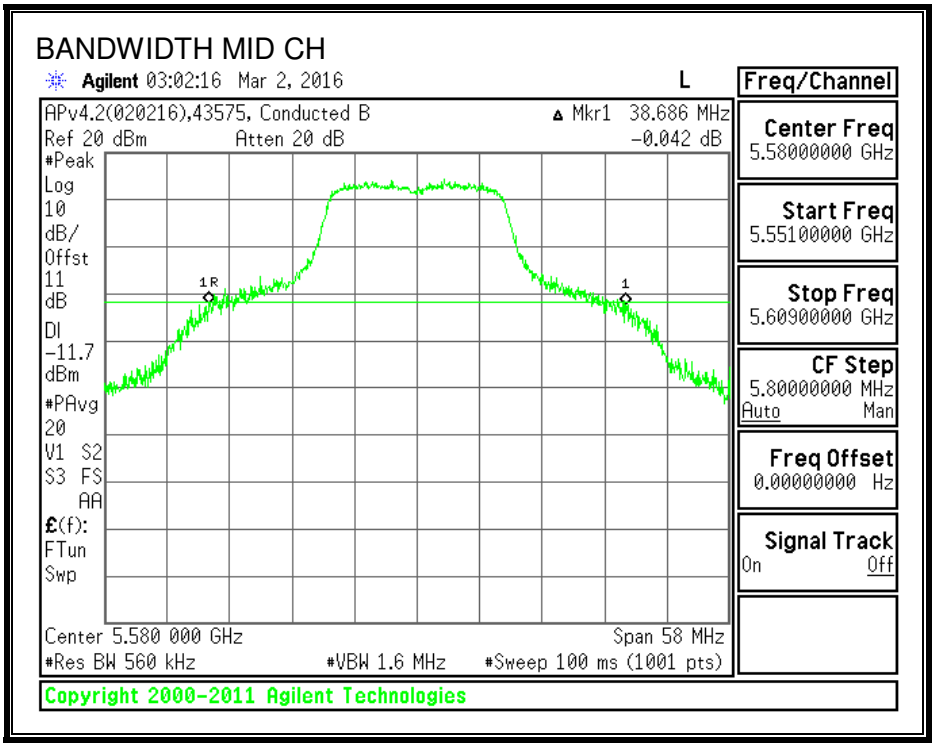
None; for reporting purposes only.

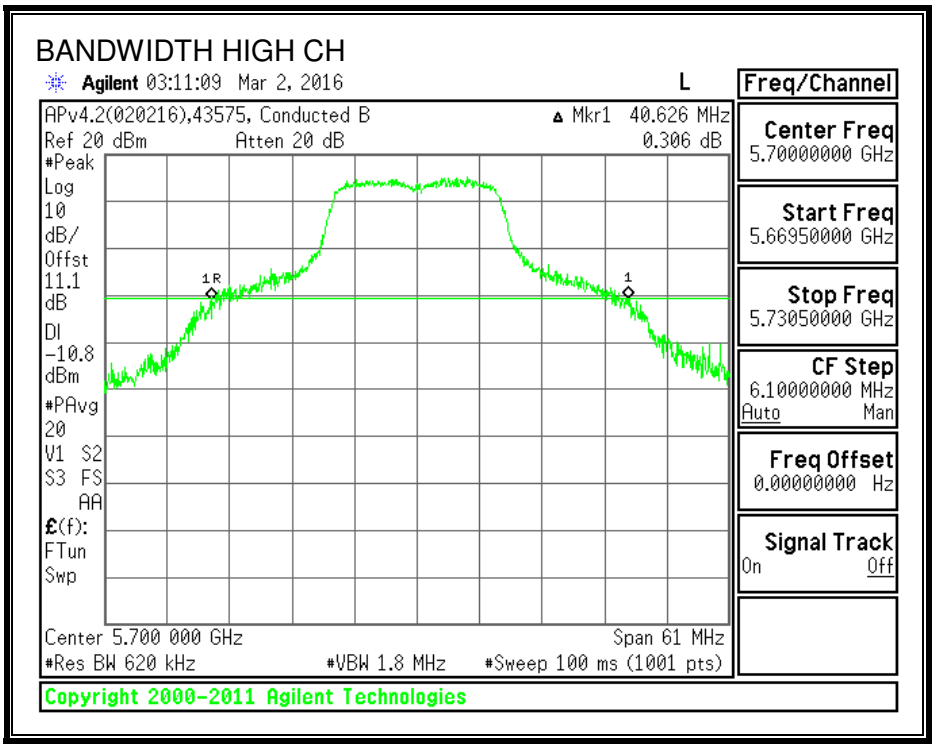
RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5500	41.2920
Mid	5580	38.6860
High	5700	40.6260

26 dB BANDWIDTH







9.8.2. 99% BANDWIDTH

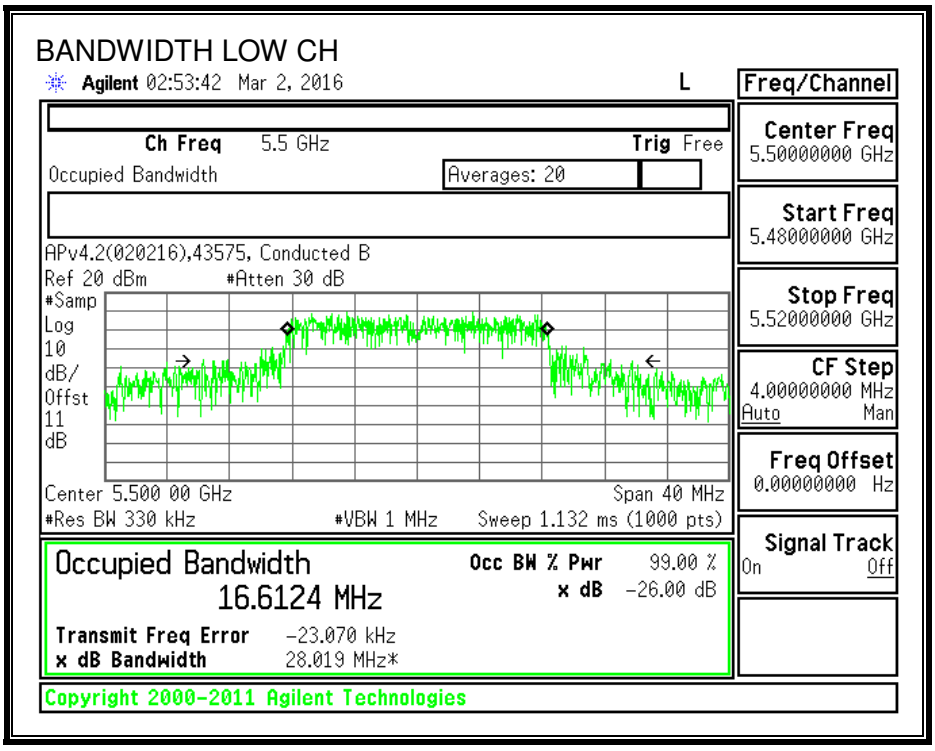
LIMITS

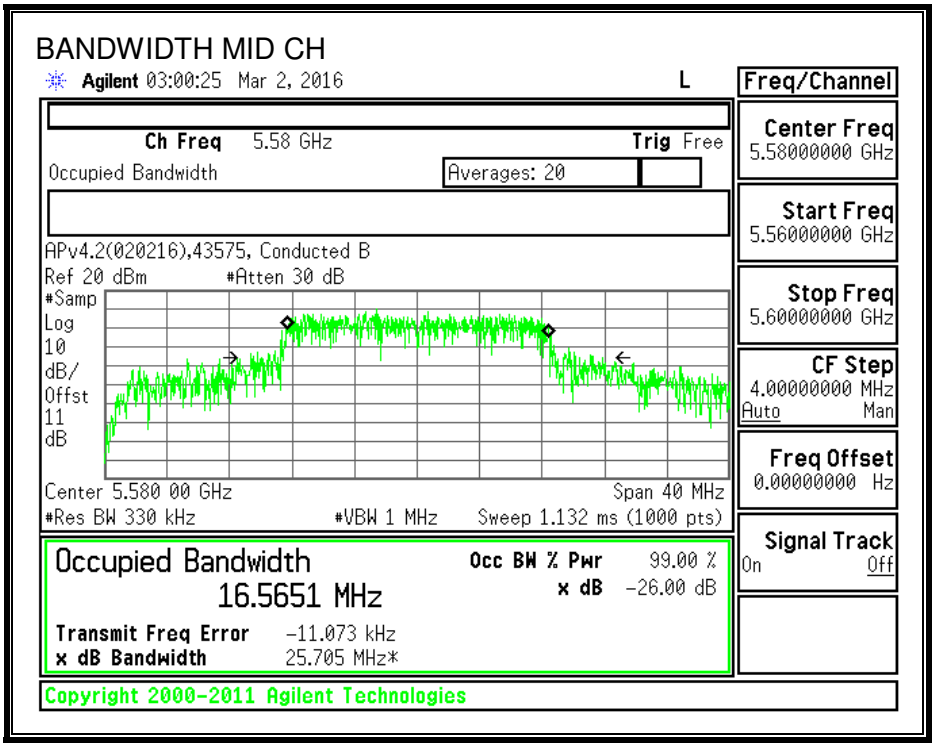
None; for reporting purposes only.

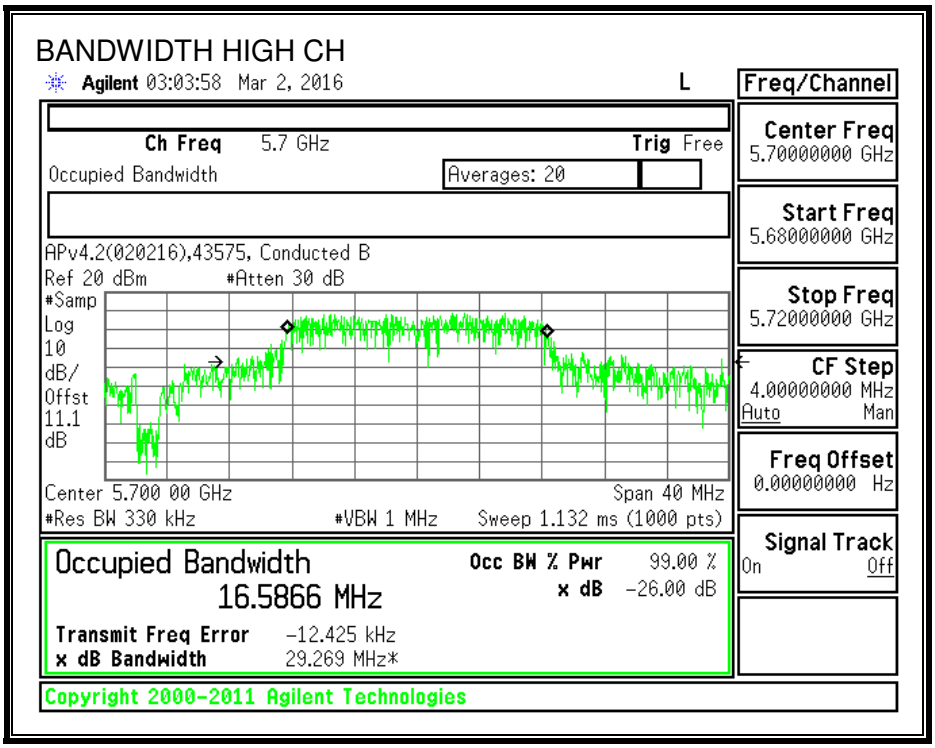
RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5500	16.6124
Mid	5580	16.5651
High	5700	16.5866

99% BANDWIDTH







9.8.3. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (2)

For the band 5.47–5.725 GHz, the maximum conducted output power over the frequency band 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 MHz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

IC RSS-247

Bands 5.47-5.6 GHz and 5.65-5.725 GHz
The maximum conducted output power shall not exceed 250 mW or 11 + 10 $\log_{10}$B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 $\log_{10}$B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5500	41.292	-2.00	24.00	10.00
Mid	5600	38.686	-2.00	24.00	10.00
High	5700	40.626	-2.00	24.00	10.00

Duty Cycle CF (dB)	0.14	Included in Calculations of Corr'd PSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	12.75	12.75	24.00	-11.25
Mid	5600	19.82	19.82	24.00	-4.18
High	5700	17.20	17.20	24.00	-6.80

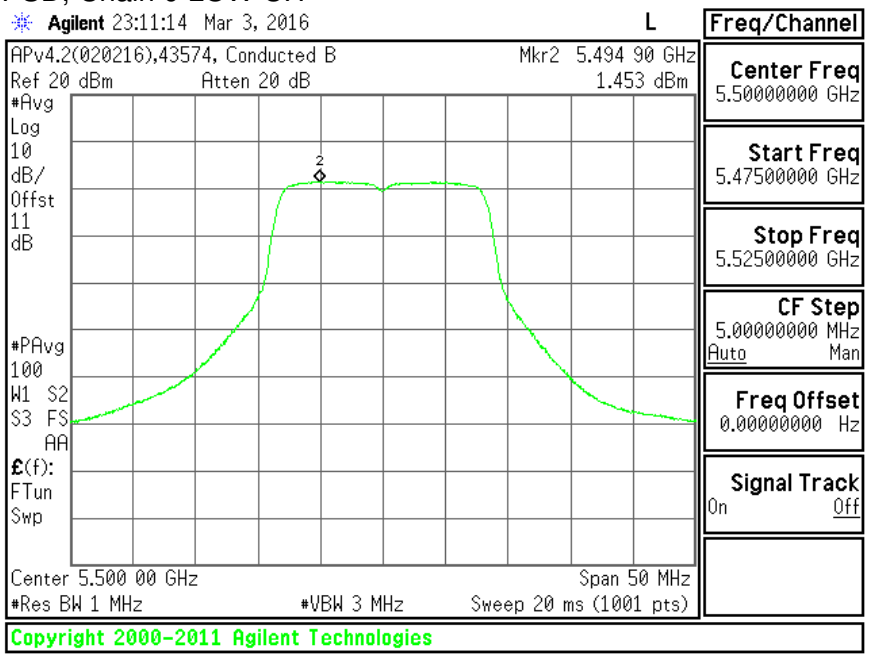
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5500	1.453	1.593	10.00	-8.41
Mid	5600	8.073	8.213	10.00	-1.79
High	5700	5.830	5.970	10.00	-4.03

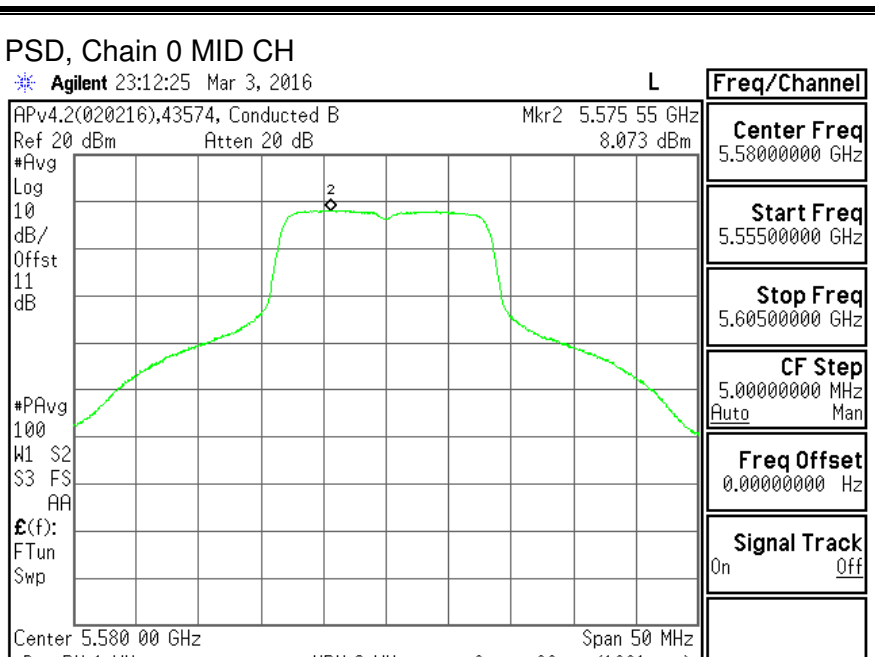
Note: the power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

PSD, Chain 0

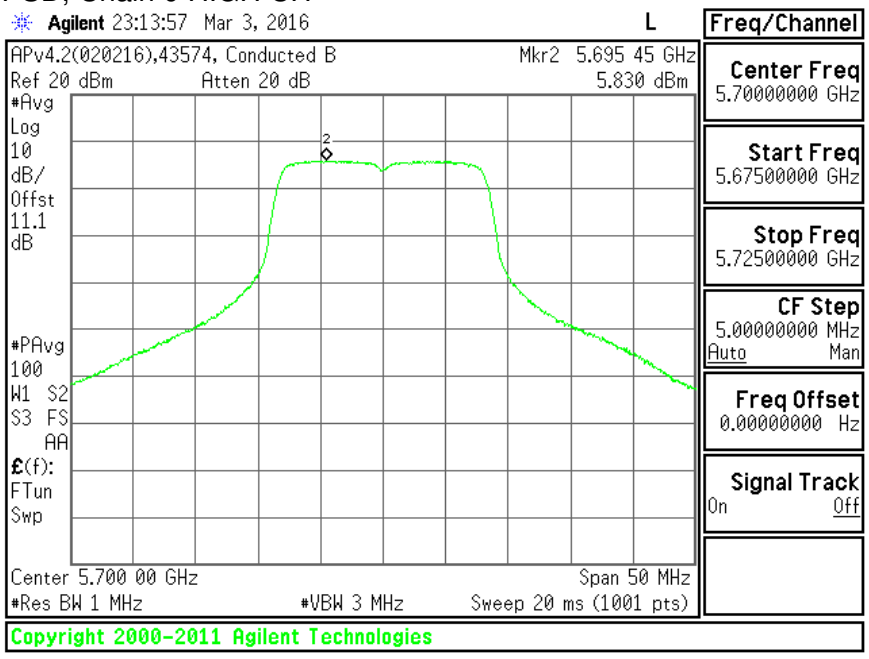
PSD, Chain 0 LOW CH



PSD, Chain 0 MID CH



PSD, Chain 0 HIGH CH



9.9. 802.11n HT20 MODE IN THE 5.6 GHz BAND

9.9.1. 26 dB BANDWIDTH

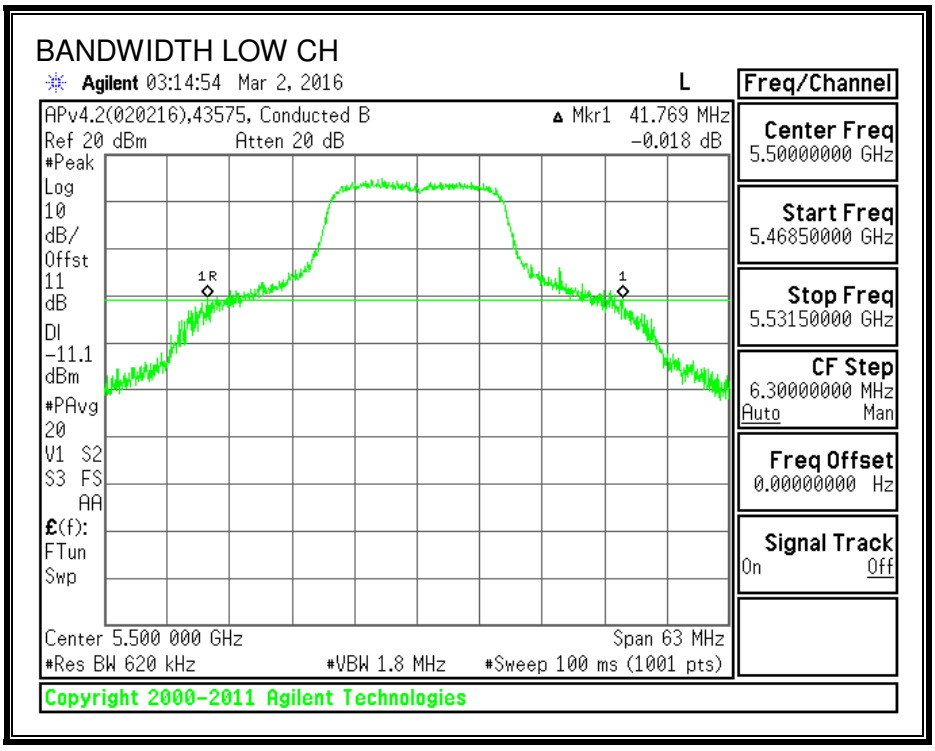
LIMITS

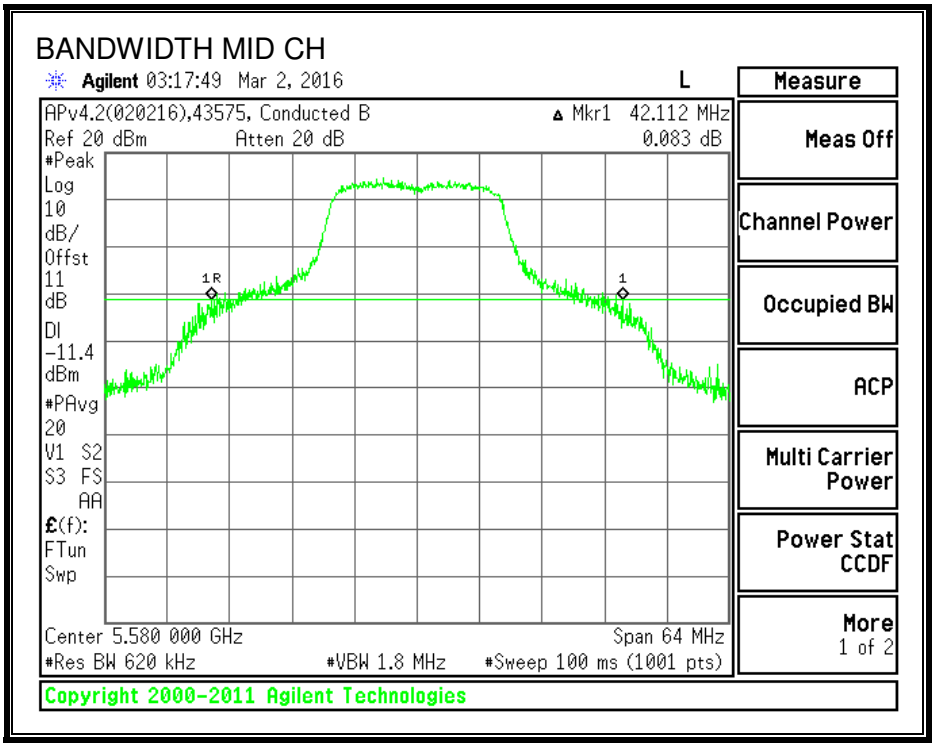
None; for reporting purposes only.

RESULTS

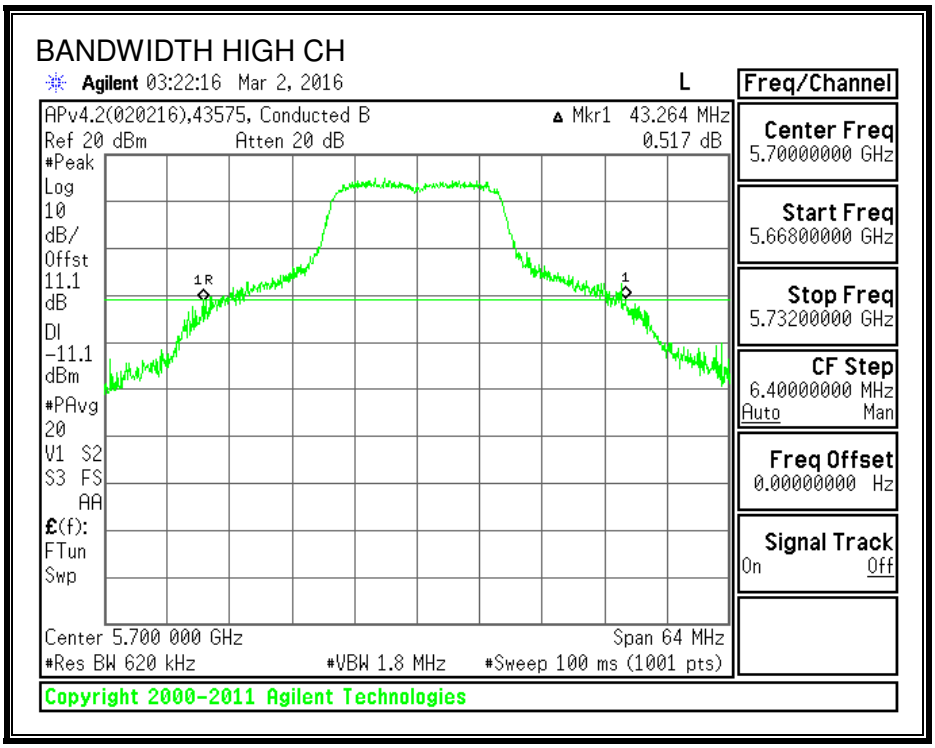
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5500	41.7690
Mid	5580	42.1120
High	5700	43.2640

26 dB BANDWIDTH





BANDWIDTH HIGH CH



9.9.2. 99% BANDWIDTH

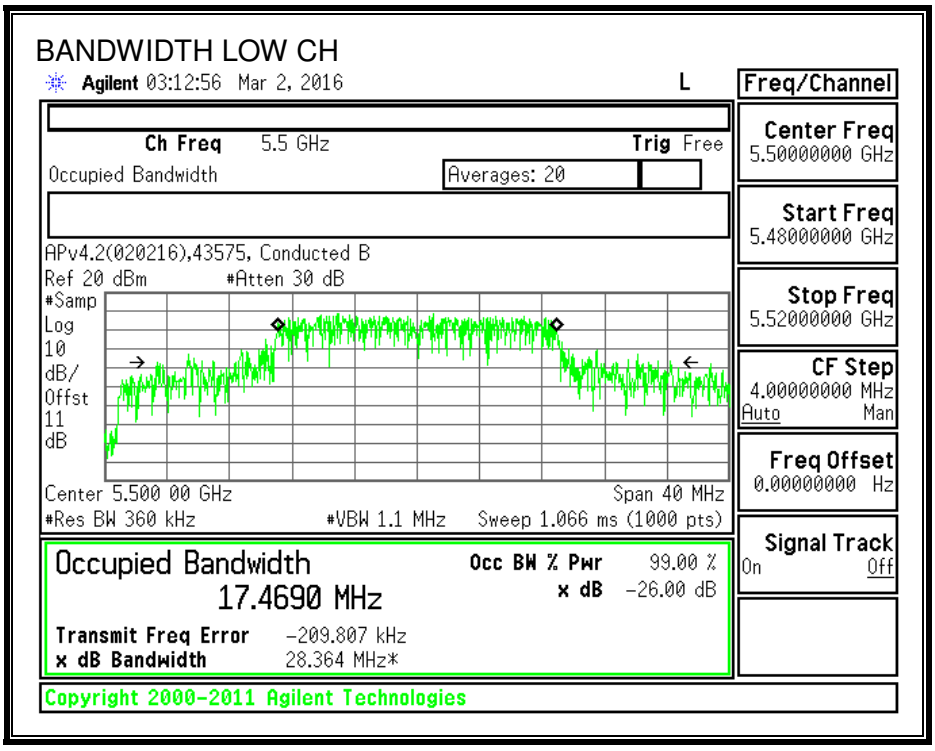
LIMITS

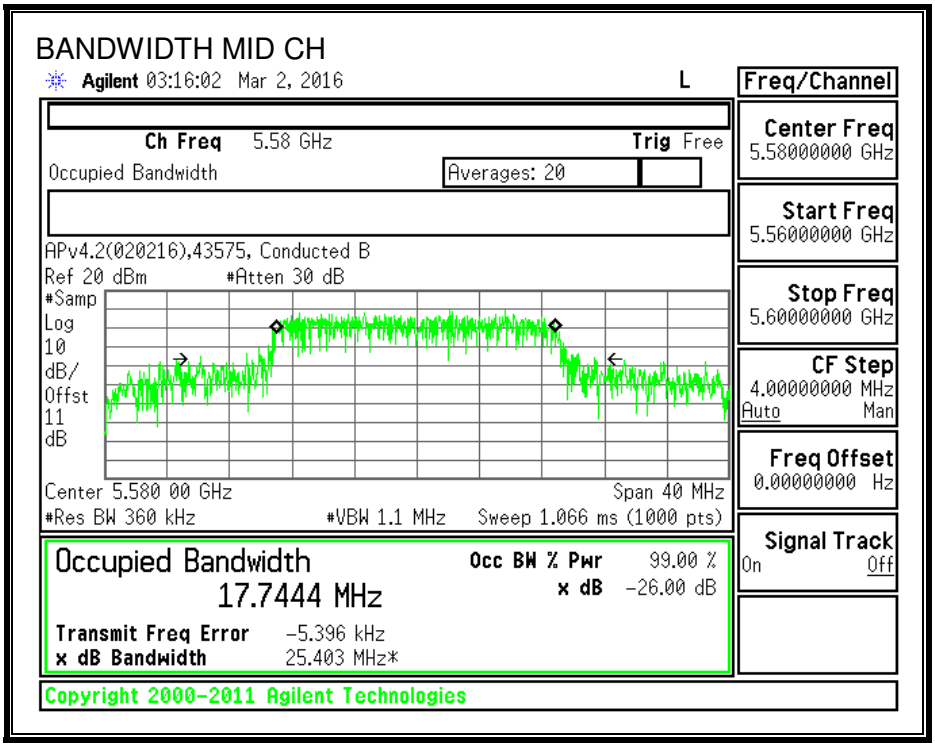
None; for reporting purposes only.

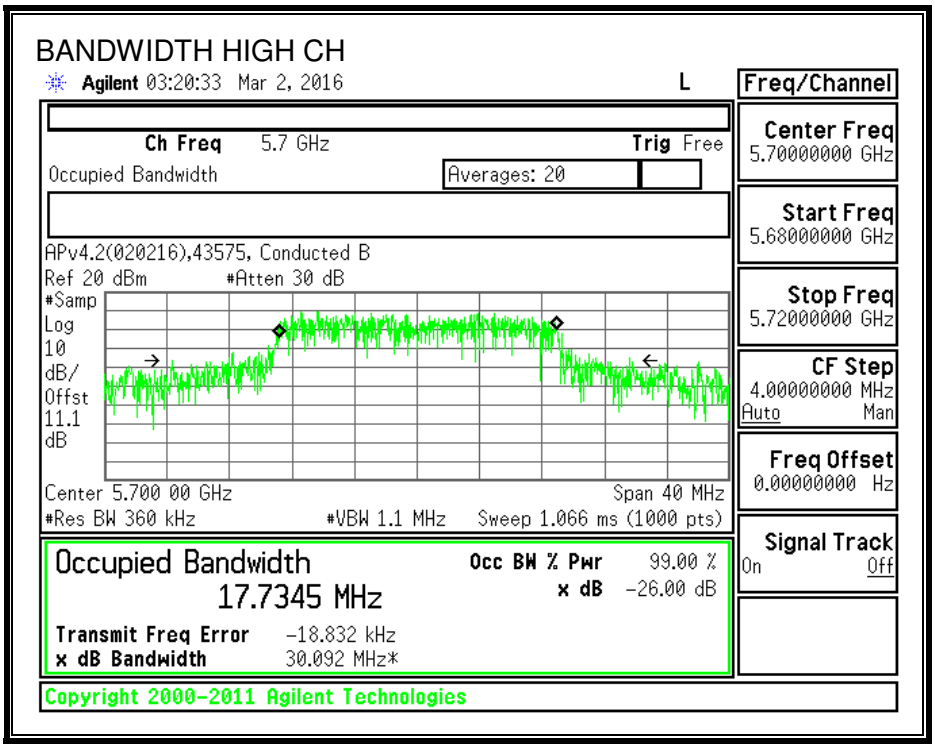
RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5500	17.4690
Mid	5580	17.7444
High	5700	17.7345

99% BANDWIDTH







9.9.3. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (2)

For the band 5.47–5.725 GHz, the maximum conducted output power over the frequency band 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 MHz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

IC RSS-247

Bands 5.47-5.6 GHz and 5.65-5.725 GHz
The maximum conducted output power shall not exceed 250 mW or 11 + 10 $\log_{10}$B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 $\log_{10}$B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5500	41.769	-2.00	24.00	10.00
Mid	5600	42.112	-2.00	24.00	10.00
High	5700	43.264	-2.00	24.00	10.00

Duty Cycle CF (dB)	0.15	Included in Calculations of Corr'd PSD

Output Power Results

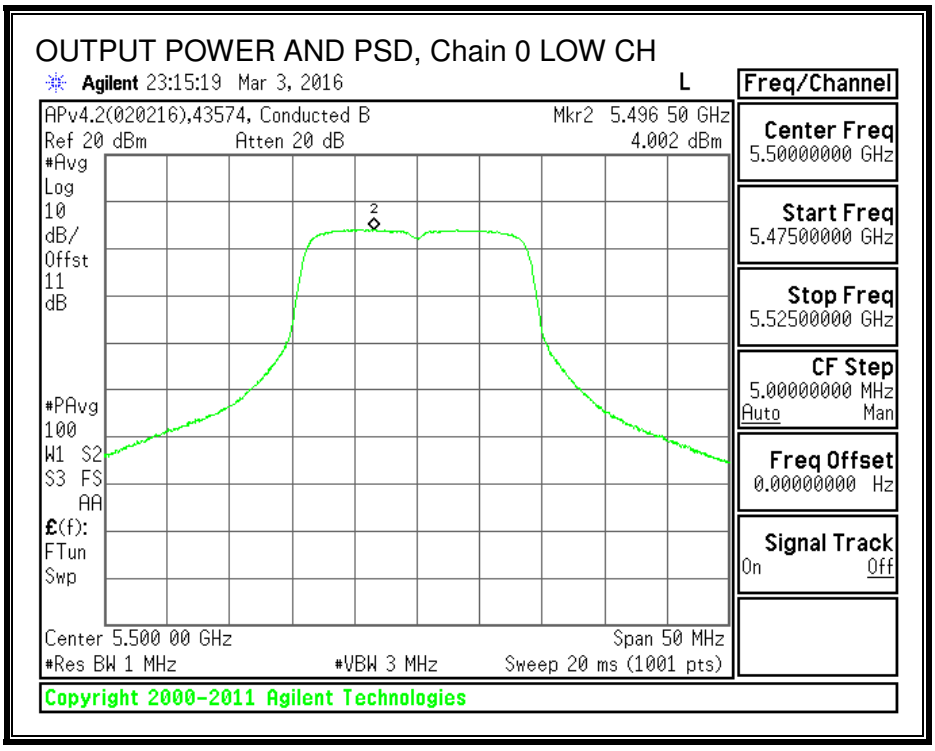
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	15.67	15.67	24.00	-8.33
Mid	5600	19.73	19.73	24.00	-4.27
High	5700	16.73	16.73	24.00	-7.27

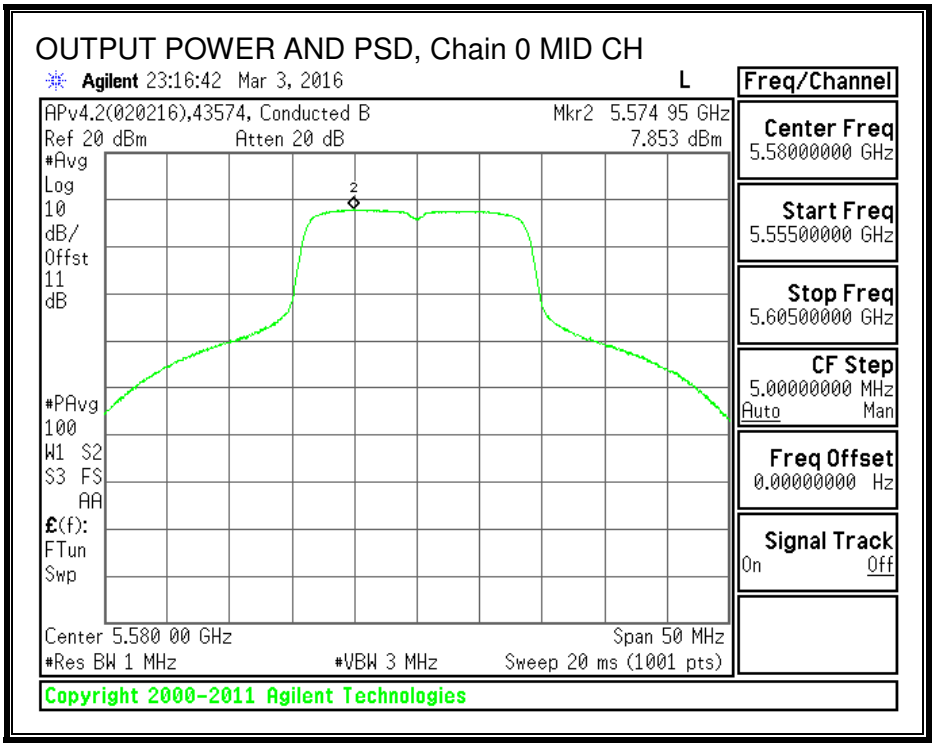
PSD Results

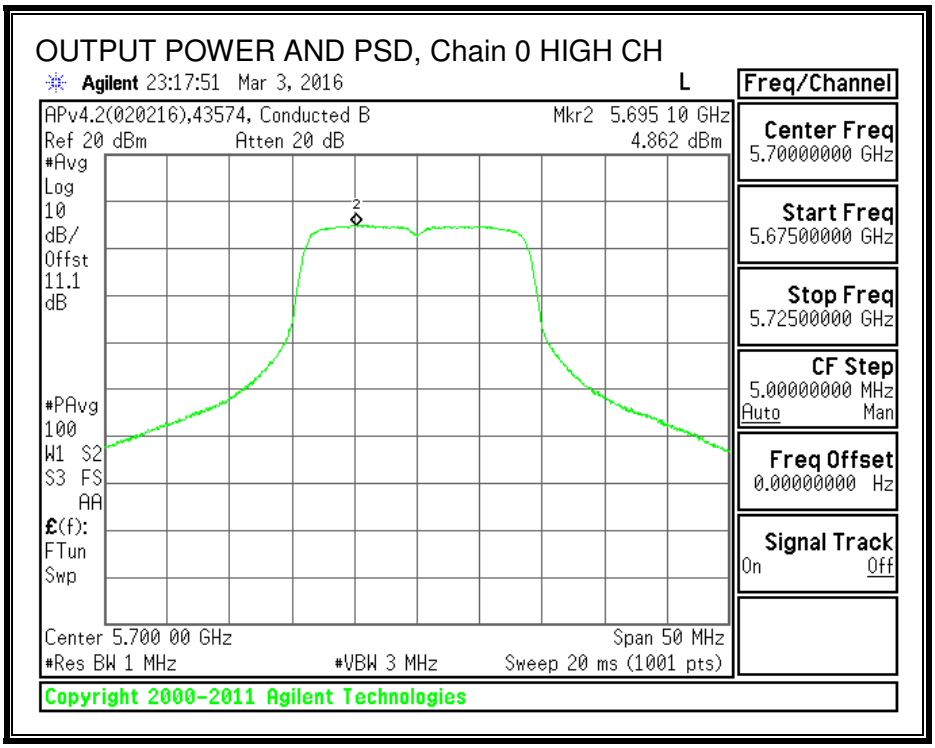
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5500	4.002	4.152	10.00	-5.85
Mid	5600	7.853	8.003	10.00	-2.00
High	5700	4.862	5.012	10.00	-4.99

Note: the power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

OUTPUT POWER AND PSD, Chain 0







9.10. 802.11n HT40 MODE IN THE 5.6 GHz BAND

9.10.1. 26 dB BANDWIDTH

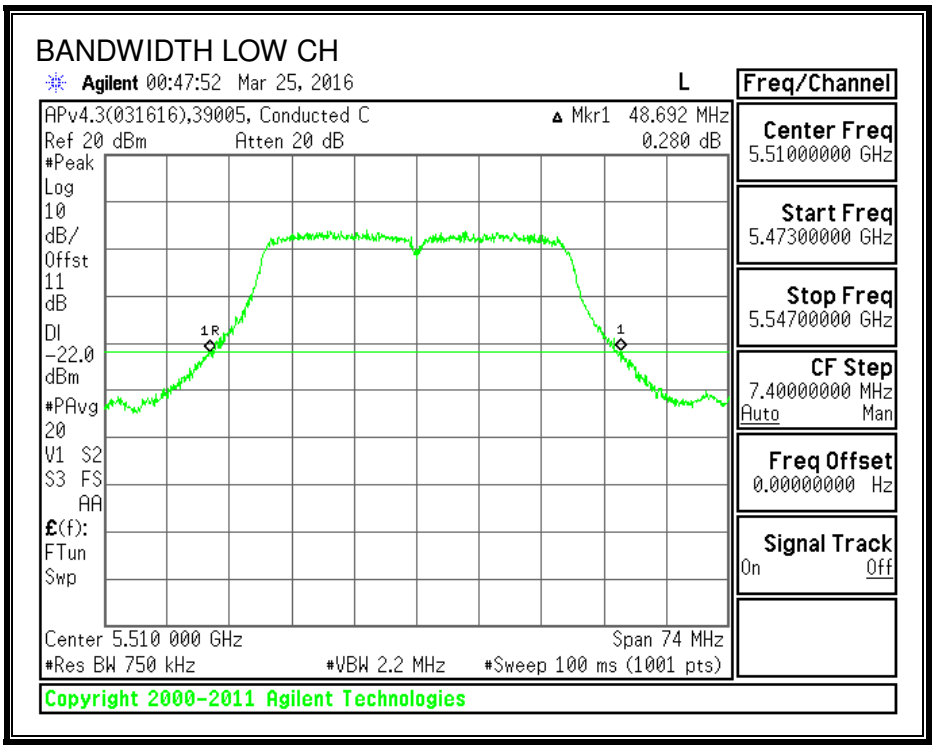
LIMITS

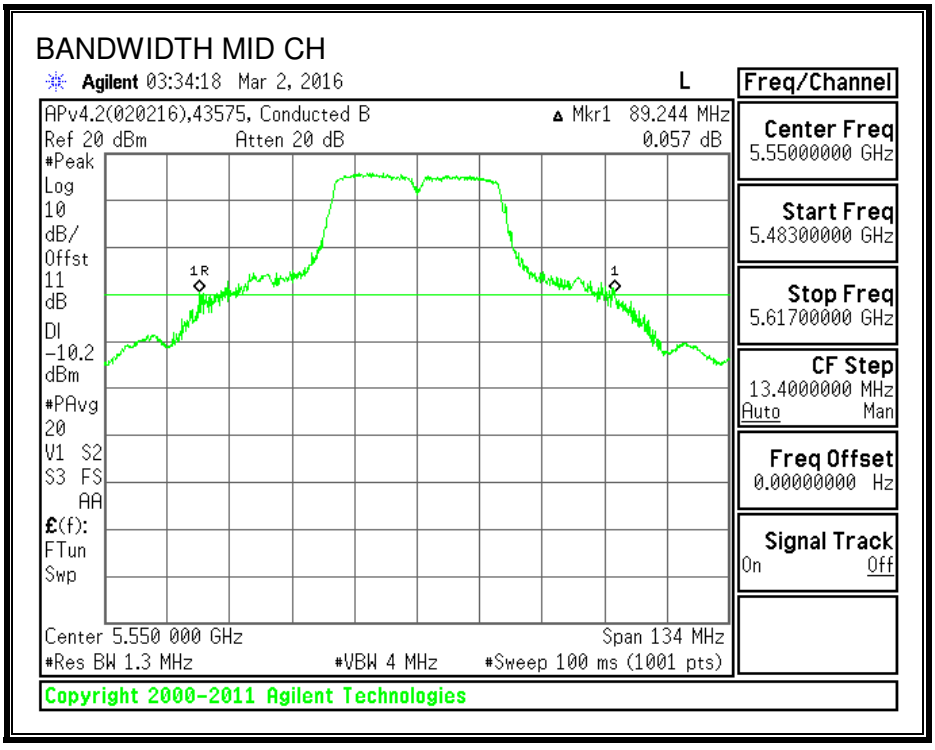
None; for reporting purposes only.

RESULTS

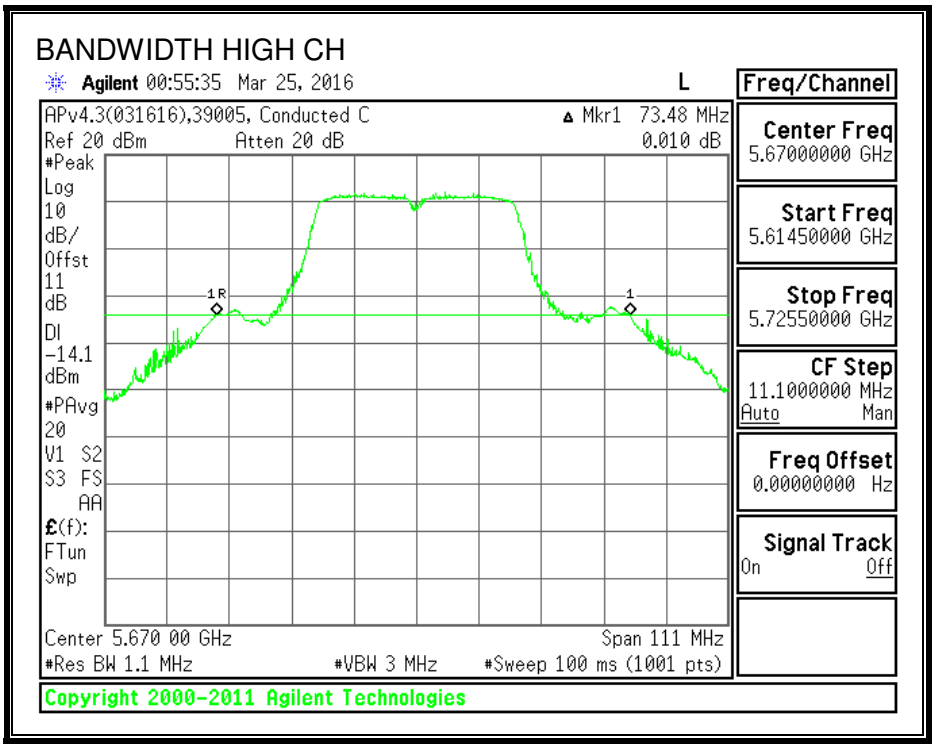
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5510	48.6920
Mid	5550	89.2440
High	5670	73.4800

26 dB BANDWIDTH





BANDWIDTH HIGH CH



9.10.2. 99% BANDWIDTH

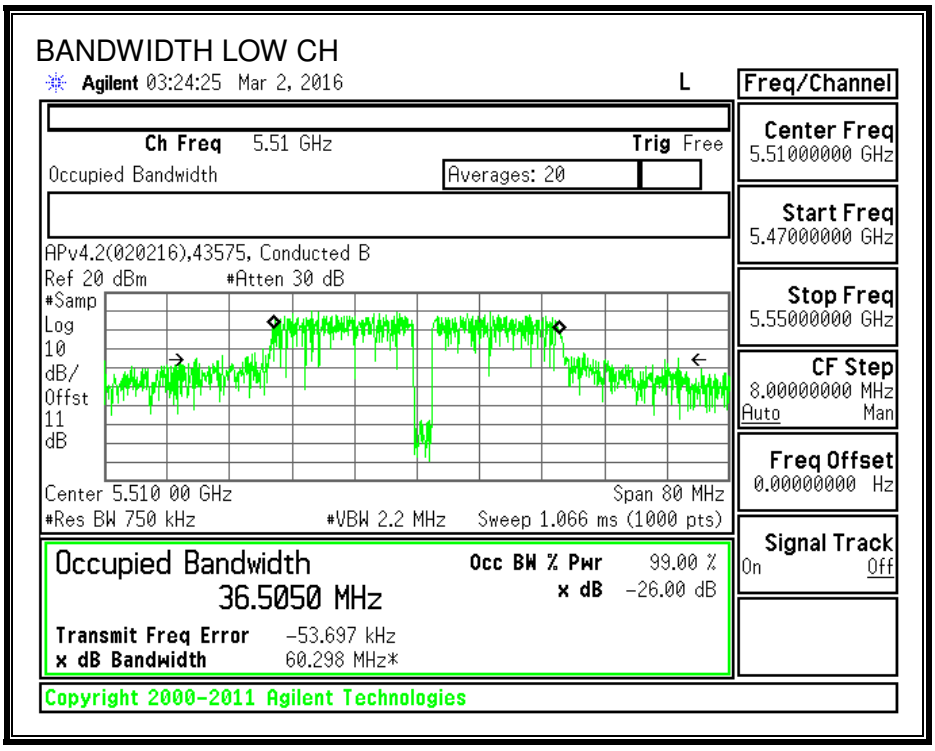
LIMITS

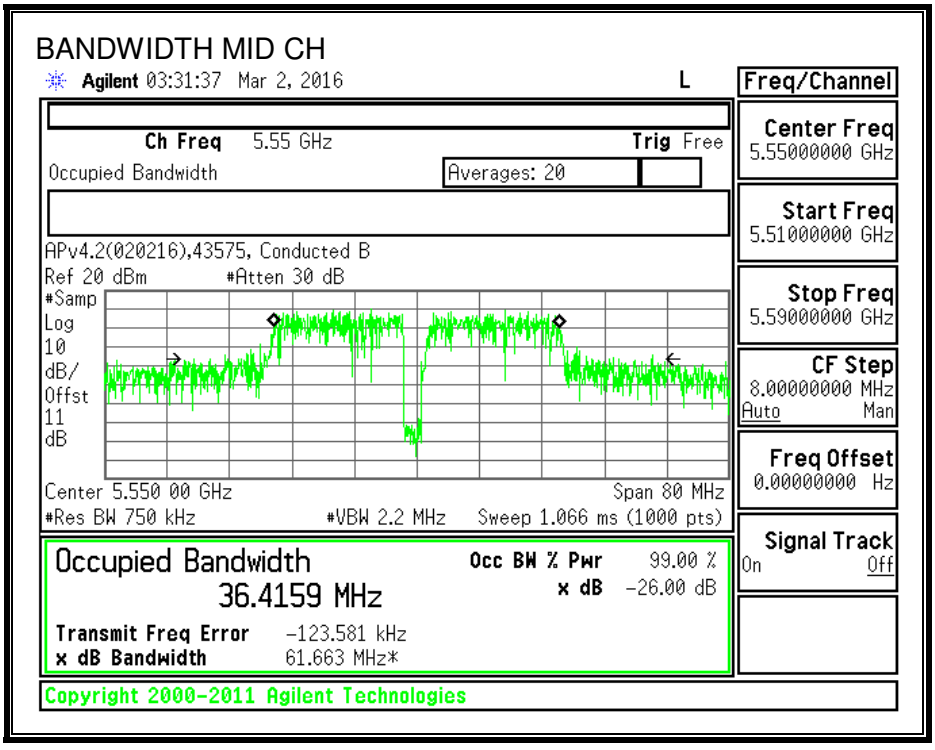
None; for reporting purposes only.

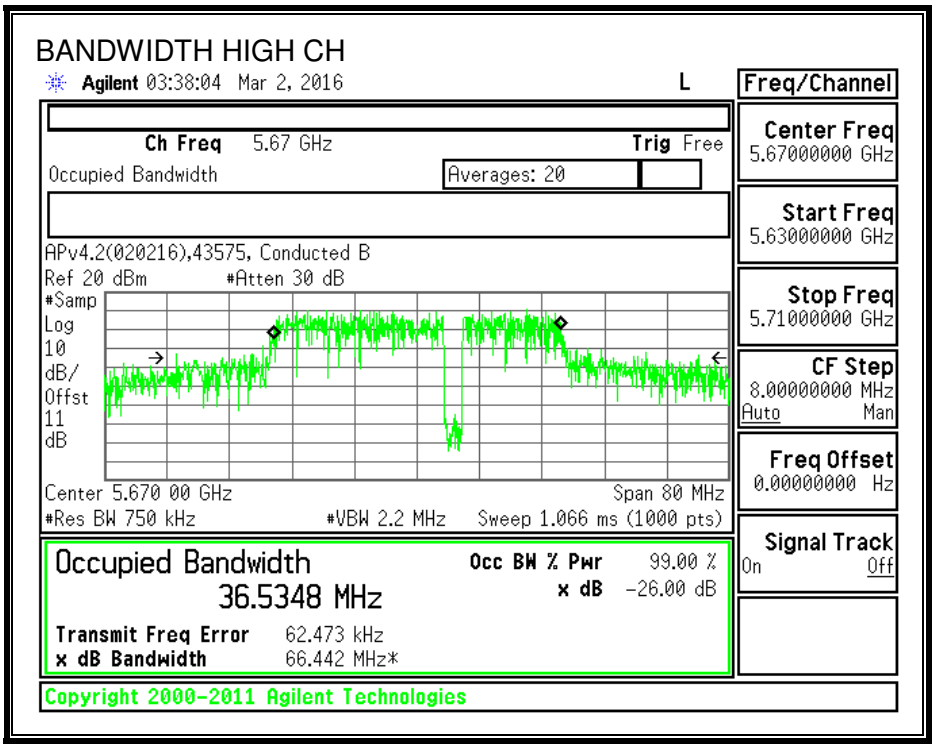
RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5510	36.5050
Mid	5550	36.4159
High	5670	36.5348

99% BANDWIDTH







9.10.3. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (2)

For the band 5.47–5.725 GHz, the maximum conducted output power over the frequency band 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 MHz. In addition, the peak power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

IC RSS-247

Bands 5.47-5.6 GHz and 5.65-5.725 GHz
The maximum conducted output power shall not exceed 250 mW or 11 + 10 $\log_{10}$B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 $\log_{10}$B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5510	48.692	-2.00	24.00	10.00
Mid	5590	89.244	-2.00	24.00	10.00
High	5670	73.480	-2.00	24.00	10.00

Duty Cycle CF (dB)	0.21	Included in Calculations of Corr'd PSD

Output Power Results

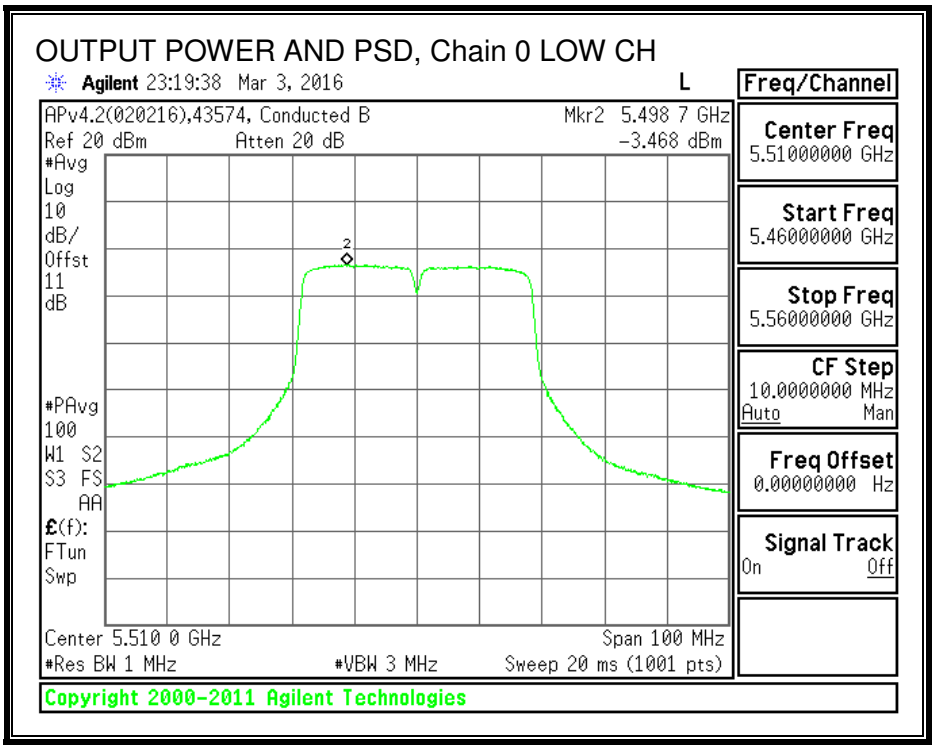
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	11.28	11.28	24.00	-12.72
Mid	5550	20.05	20.05	24.00	-3.95
High	5670	16.63	16.63	24.00	-7.37

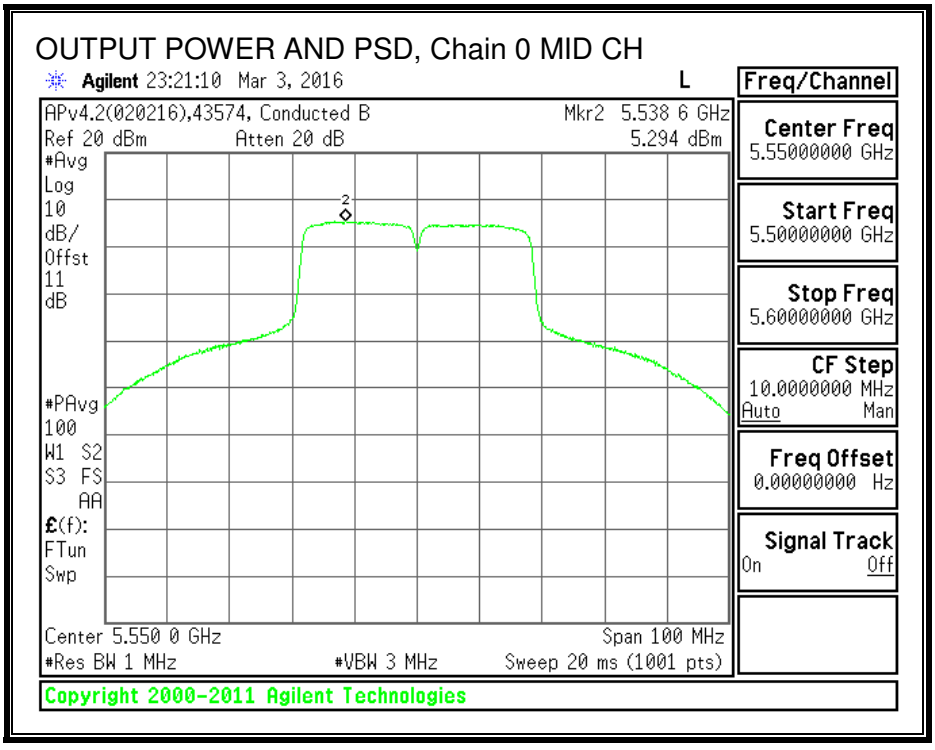
PSD Results

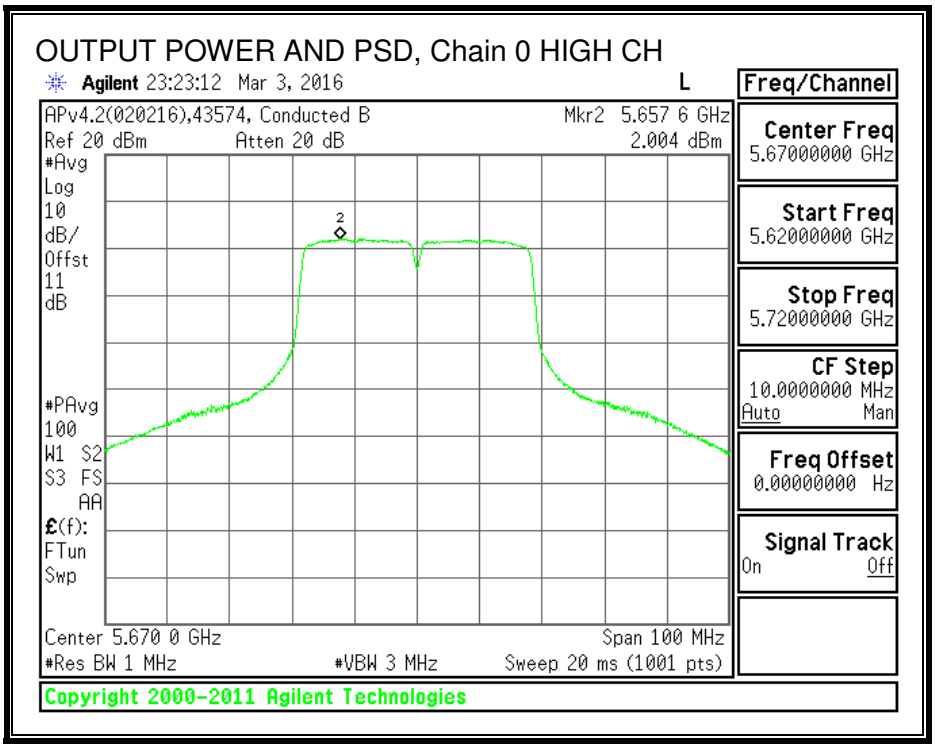
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5510	-3.468	-3.258	10.00	-13.26
Mid	5550	5.294	5.504	10.00	-4.50
High	5670	2.004	2.214	10.00	-7.79

Note: the power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

OUTPUT POWER AND PSD, Chain 0







9.11. 802.11a MODE IN THE 5.8 GHz BAND

9.11.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407

RSS-247 6.2.4

The minimum 6 dB bandwidth shall be at least 500 kHz.

TEST PROCEDURE

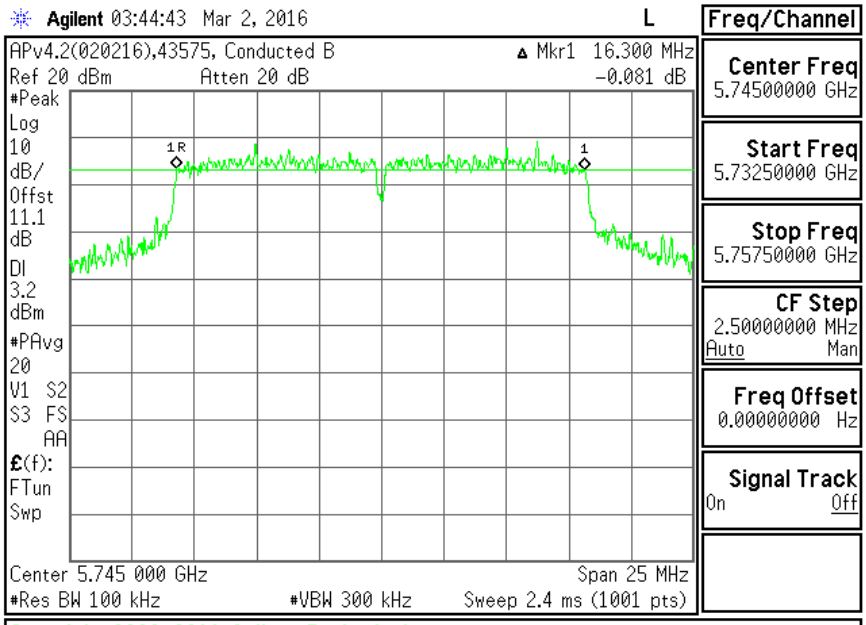
Reference to 789033 D02 General UNII Test Procedures New Rules v01: The transmitter output is connected to a spectrum analyzer with the RBW set to100KHz, the VBW >= 3 x RBW, peak detector and max hold.

RESULTS

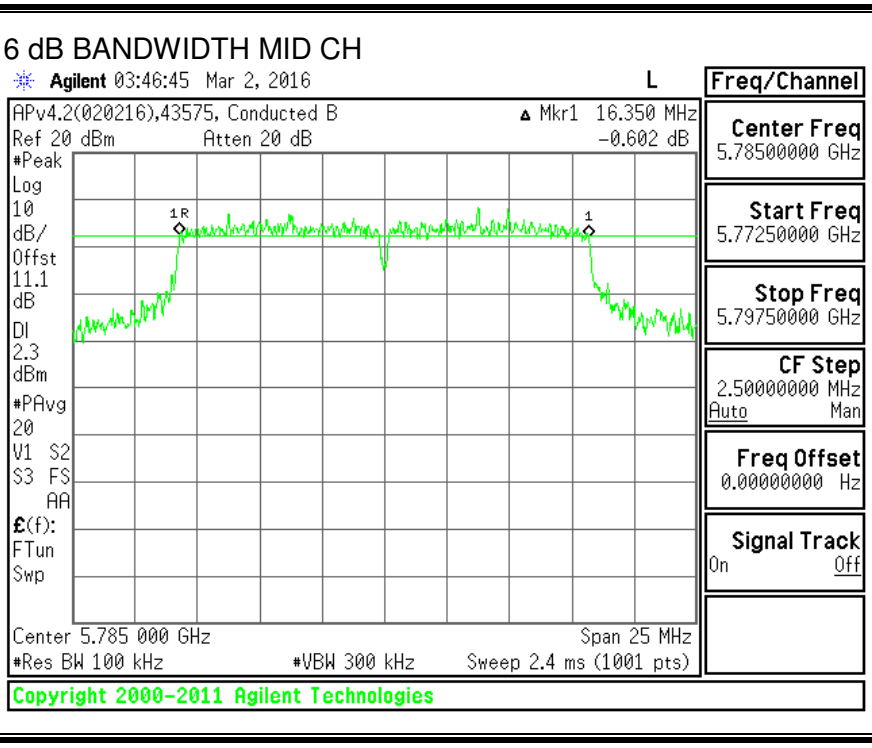
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	16.3000	0.5
Mid	5785	16.3500	0.5
High	5825	16.3000	0.5

6 dB BANDWIDTH

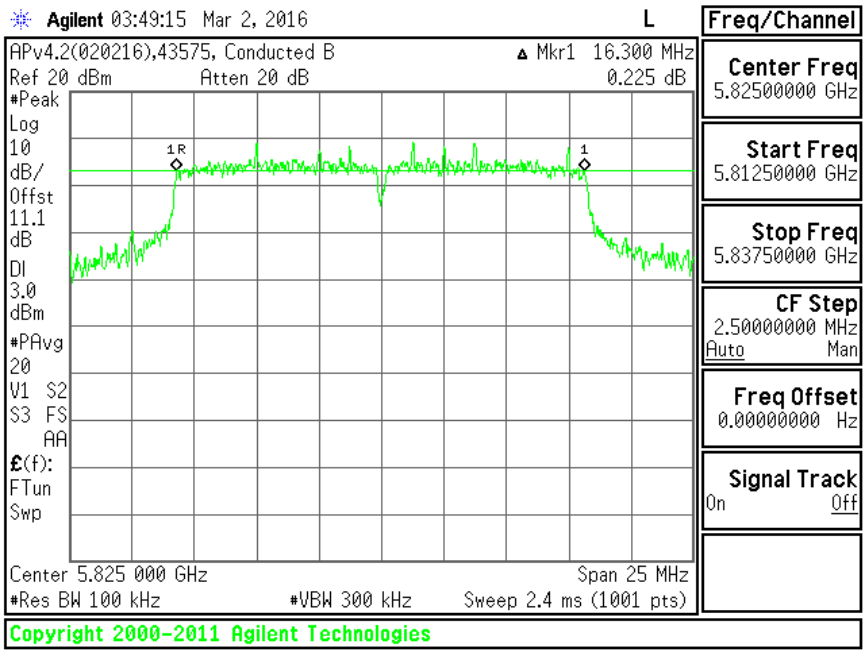
6 dB BANDWIDTH LOW CH



6 dB BANDWIDTH MID CH



6 dB BANDWIDTH HIGH CH



9.11.2. 99% BANDWIDTH

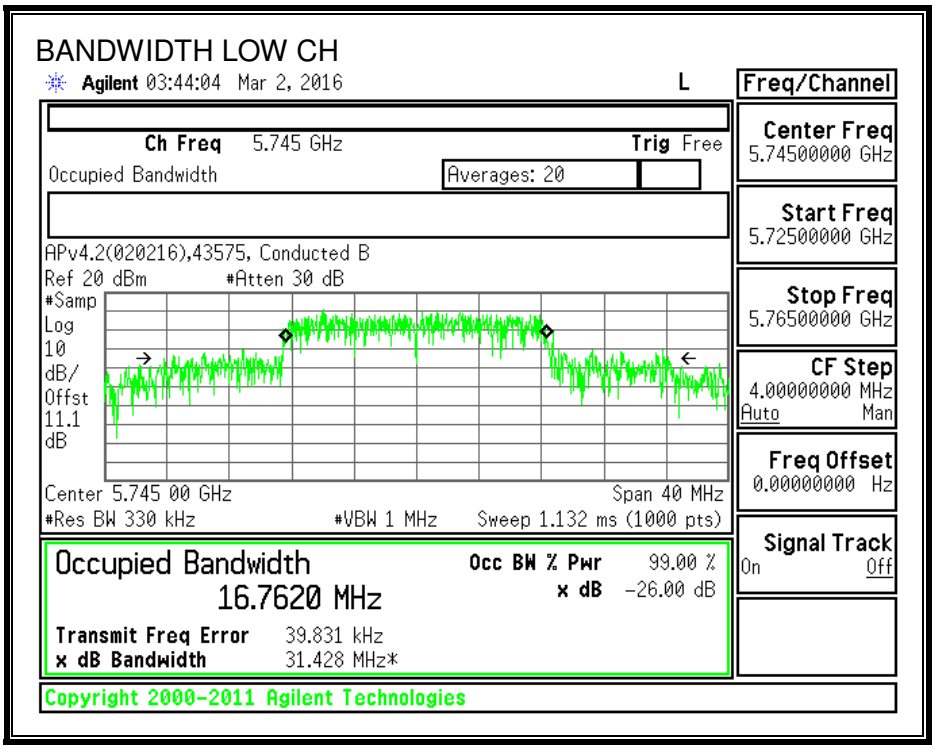
LIMITS

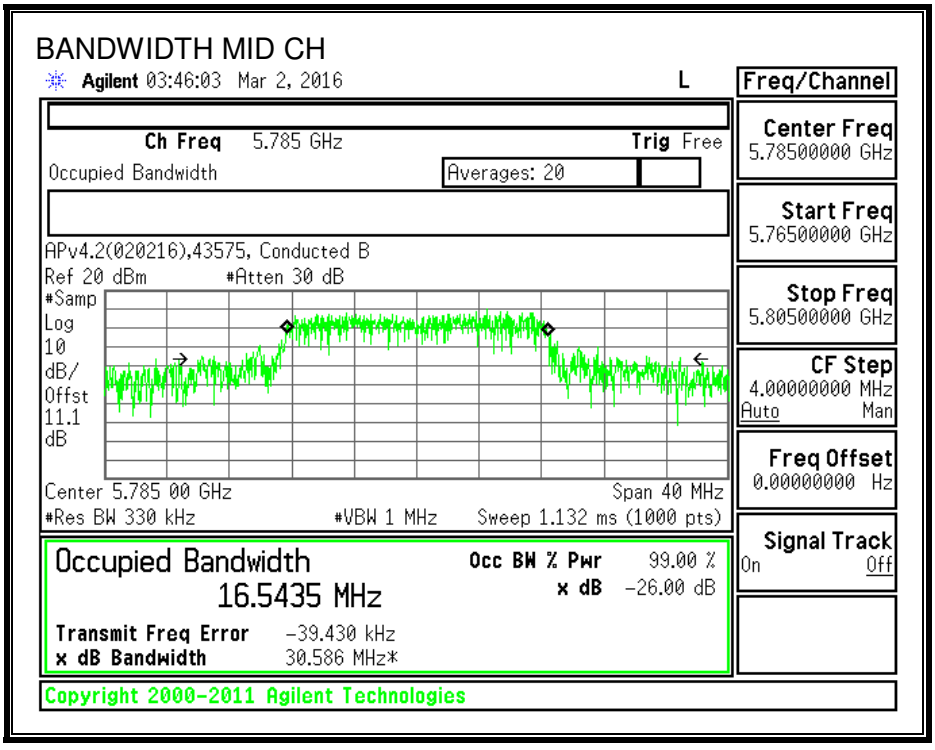
None; for reporting purposes only.

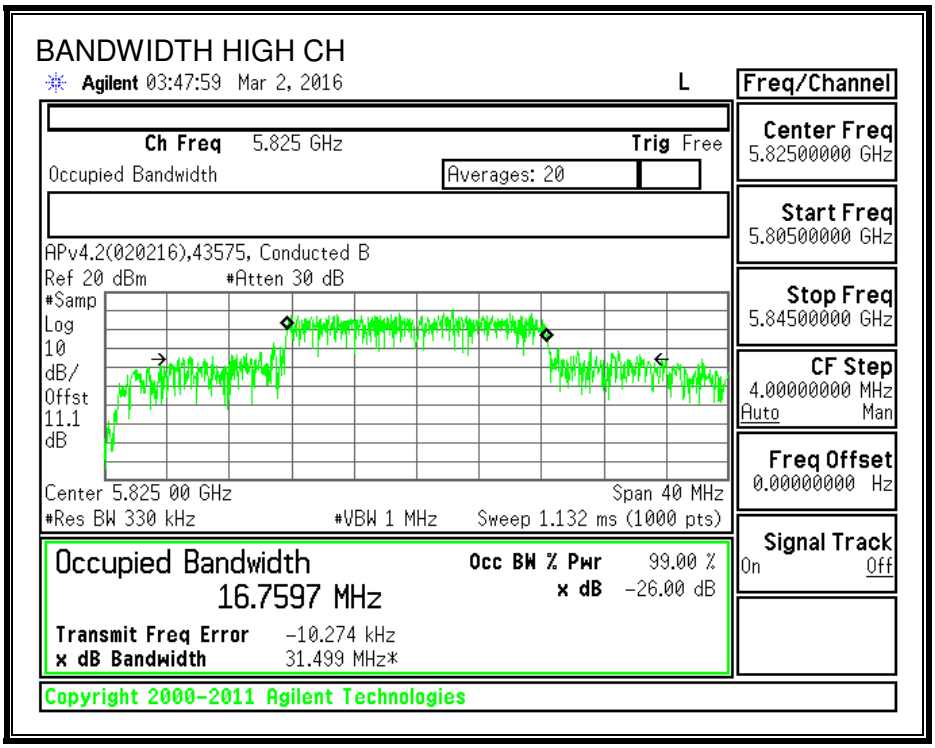
RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5745	16.7620
Mid	5785	16.5435
High	5825	16.7597

99% BANDWIDTH







9.11.3. OUTPUT POWER

LIMITS

FCC §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.

IC RSS-247

Band 5.725-5.85 GHz
The maximum conducted output power shall not exceed 1 W. The 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 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 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.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)
Low	5745	-2.00	30.00
Mid	5785	-2.00	30.00
High	5825	-2.00	30.00

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	17.42	17.42	30.00	-12.58
Mid	5785	20.20	20.20	30.00	-9.80
High	5825	17.04	17.04	30.00	-12.96

Note: the power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

9.11.4. Maximum Power Spectral Density (PSD)

LIMITS

FCC §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.

IC RSS-247

Band 5.725-5.85 GHz
The maximum conducted output power shall not exceed 1 W. The 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 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 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.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5745	-2.00	30.00
Mid	5785	-2.00	30.00
High	5825	-2.00	30.00

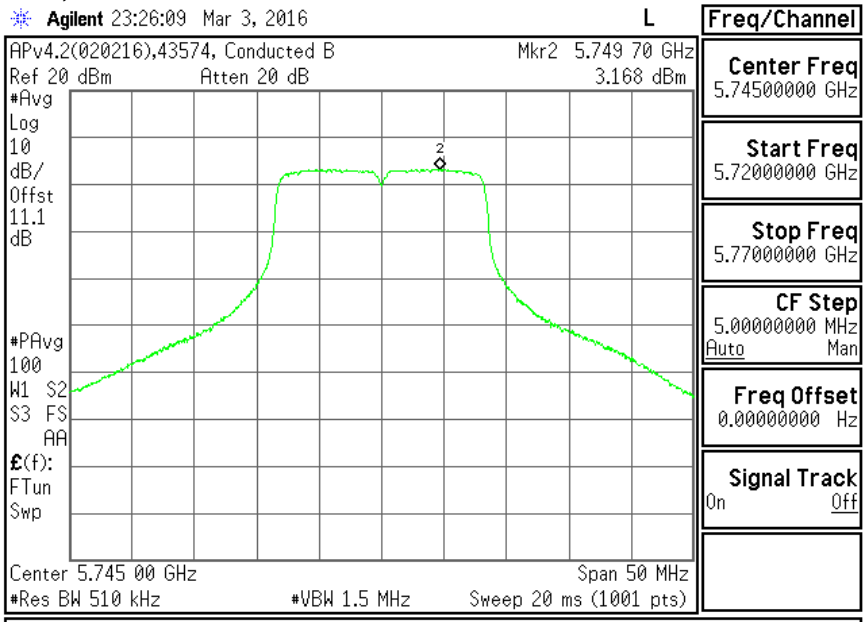
Duty Cycle CF (dB)	0.13	**Included in Calculations of Corr'd PSD**

PSD Results

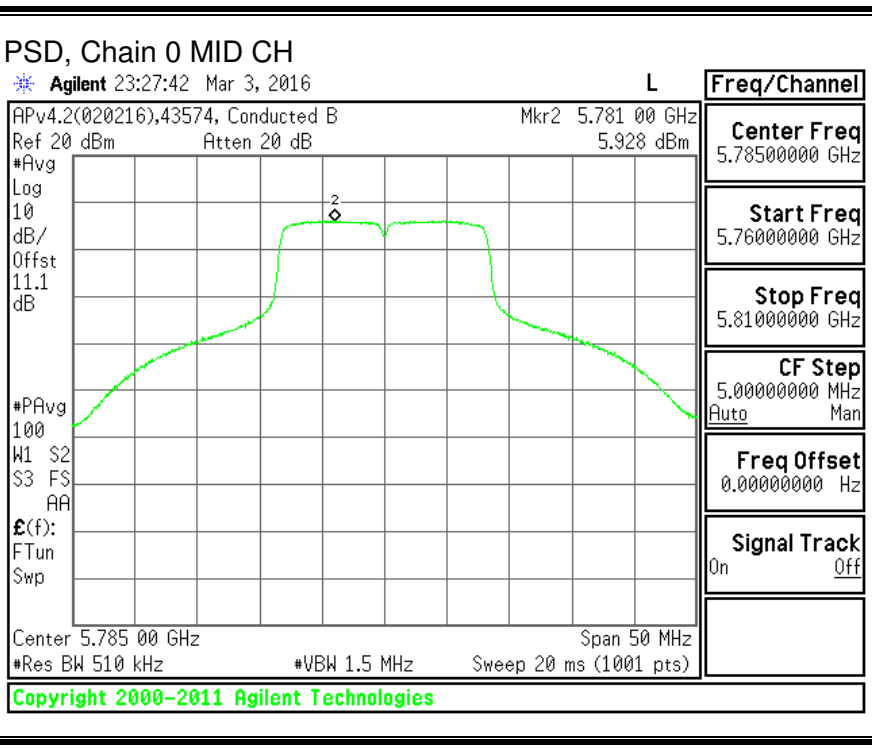
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5745	3.168	3.298	30.00	-26.70
Mid	5785	5.928	6.058	30.00	-23.94
High	5825	2.925	3.055	30.00	-26.95

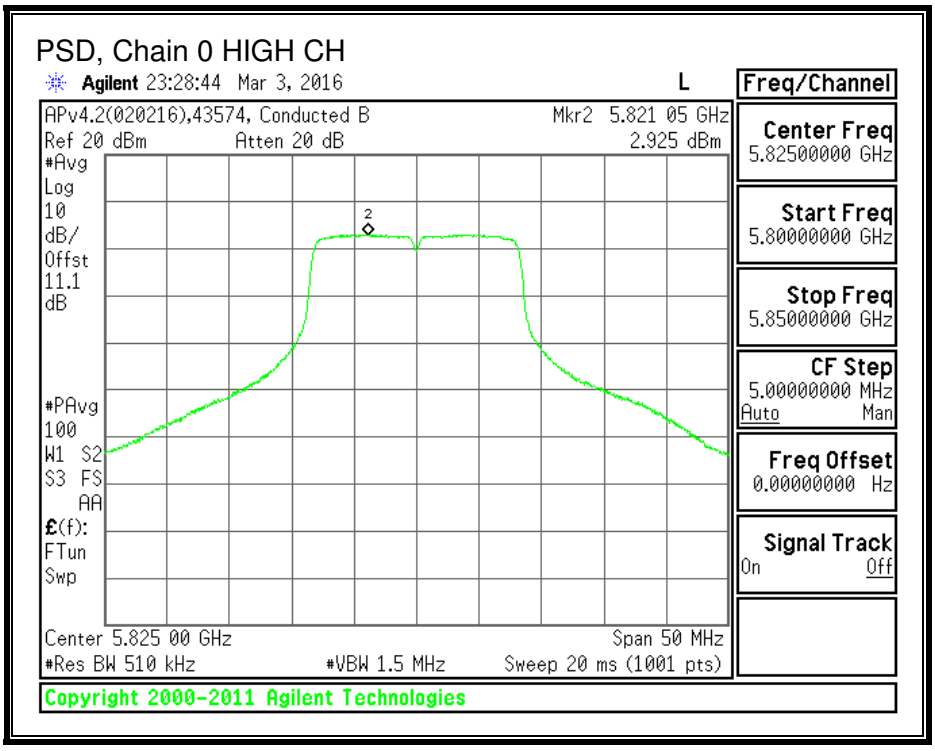
PSD, Chain 0

PSD, Chain 0 LOW CH



PSD, Chain 0 MID CH





9.12. 802.11n HT20 MODE IN THE 5.8 GHz BAND

9.12.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407

RSS-247 6.2.4

The minimum 6 dB bandwidth shall be at least 500 kHz.

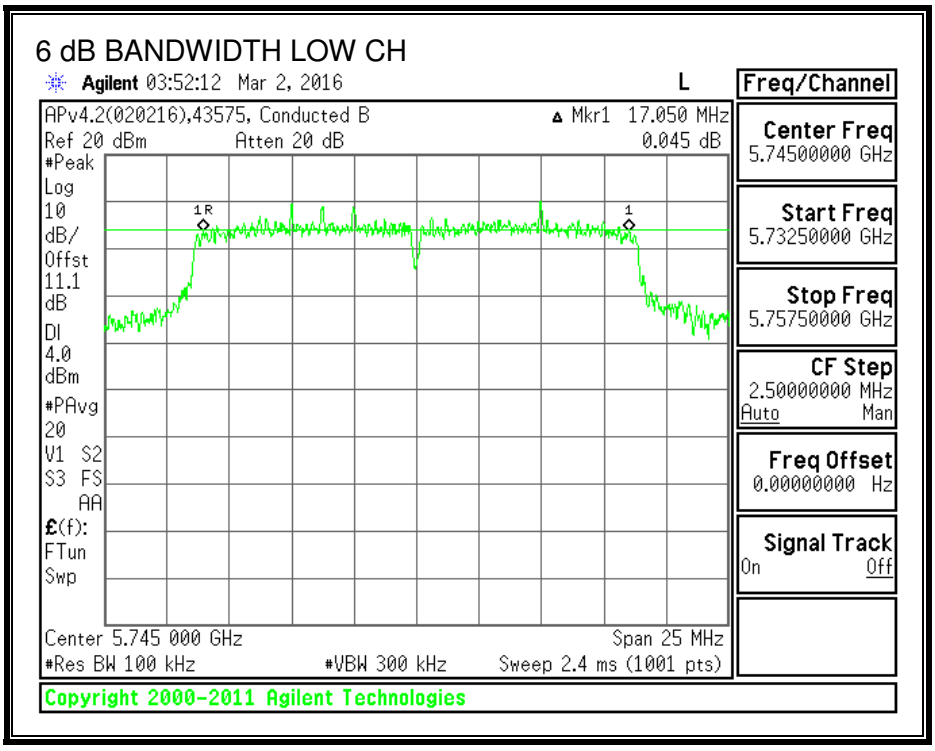
TEST PROCEDURE

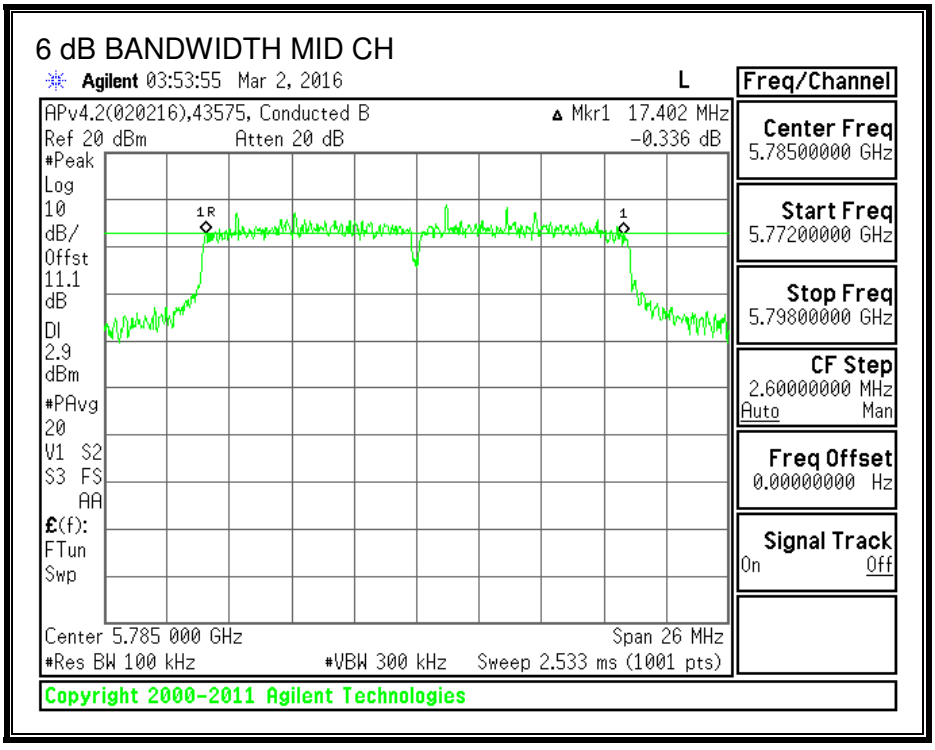
Reference to 789033 D02 General UNII Test Procedures New Rules v01: The transmitter output is connected to a spectrum analyzer with the RBW set to100KHz, the VBW >= 3 x RBW, peak detector and max hold.

RESULTS

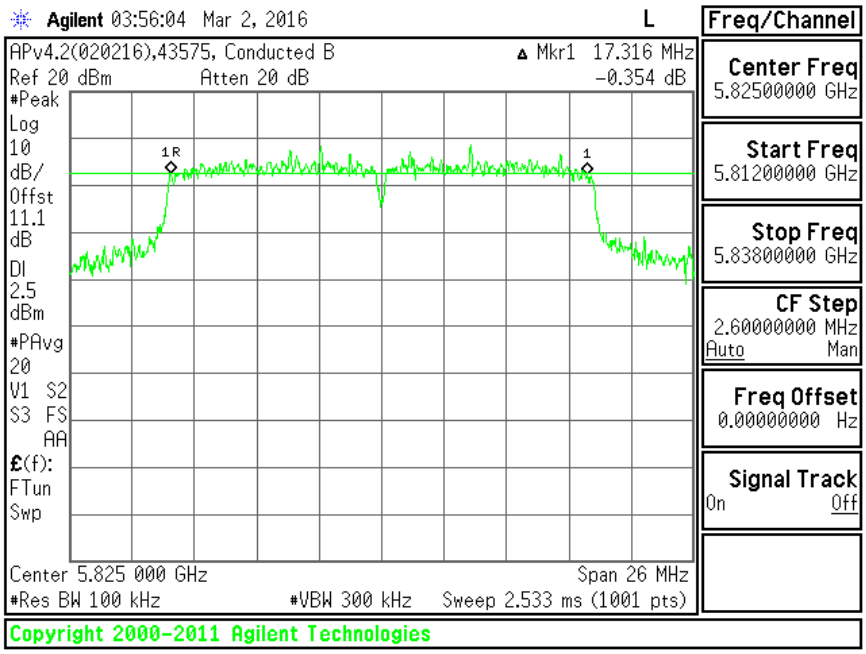
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	17.0500	0.5
Mid	5785	17.4020	0.5
High	5825	17.3160	0.5

6 dB BANDWIDTH





6 dB BANDWIDTH MID CH



9.12.2. 99% BANDWIDTH

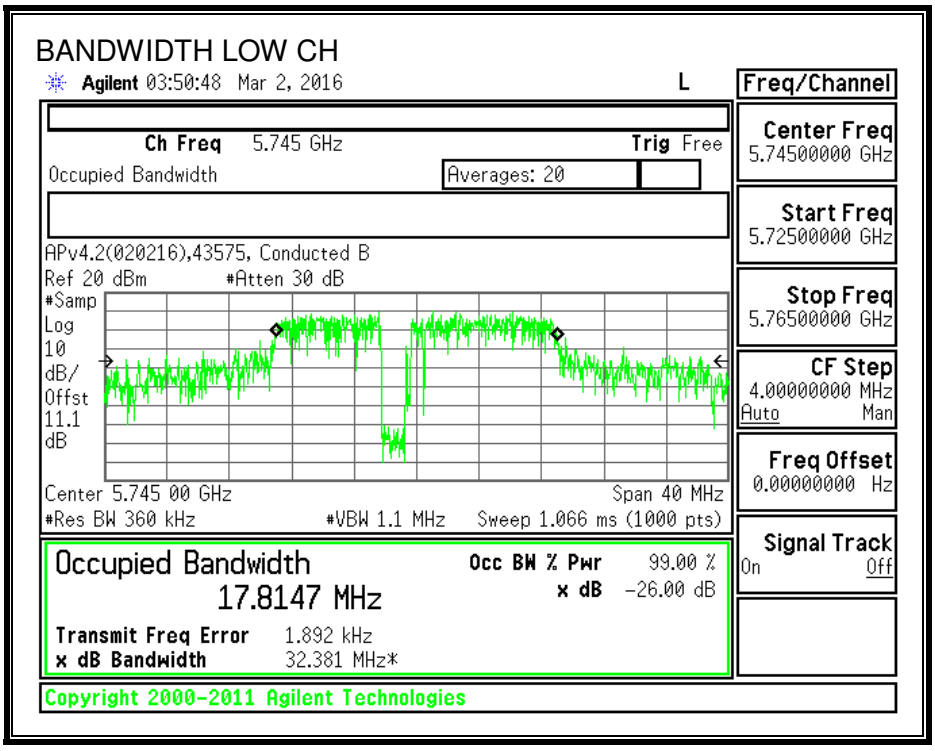
LIMITS

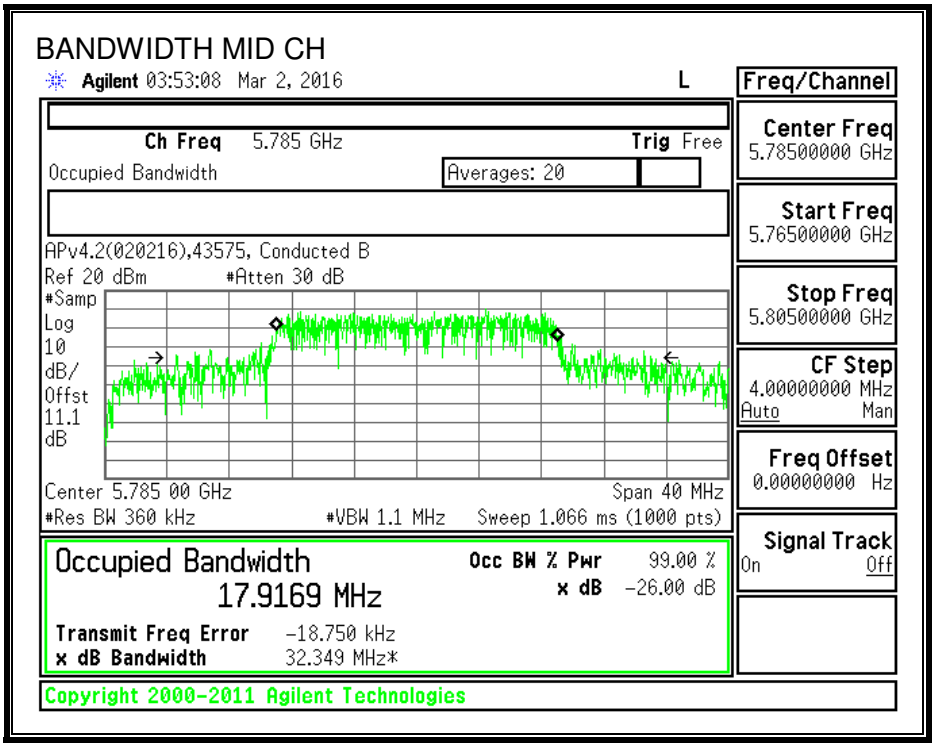
None; for reporting purposes only.

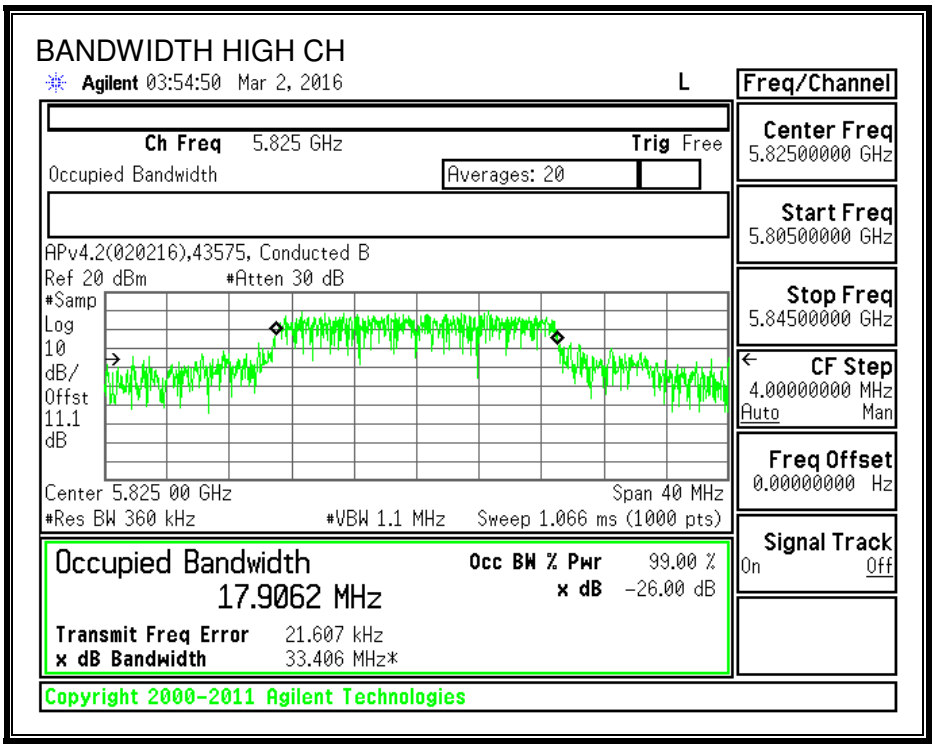
RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5745	17.8147
Mid	5785	17.9169
High	5825	17.9062

99% BANDWIDTH







9.12.3. OUTPUT POWER

LIMITS

FCC §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.

IC RSS-247

Band 5.725-5.85 GHz
The maximum conducted output power shall not exceed 1 W. The 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 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 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.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)
Low	5745	-2.00	30.00
Mid	5785	-2.00	30.00
High	5825	-2.00	30.00

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	15.56	15.56	30.00	-14.44
Mid	5785	20.06	20.06	30.00	-9.94
High	5825	17.03	17.03	30.00	-12.97

Note: the power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

9.12.4. Maximum Power Spectral Density (PSD)

LIMITS

FCC §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.

IC RSS-247

Band 5.725-5.85 GHz
The maximum conducted output power shall not exceed 1 W. The 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 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 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.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5745	-2.00	30.00
Mid	5785	-2.00	30.00
High	5825	-2.00	30.00

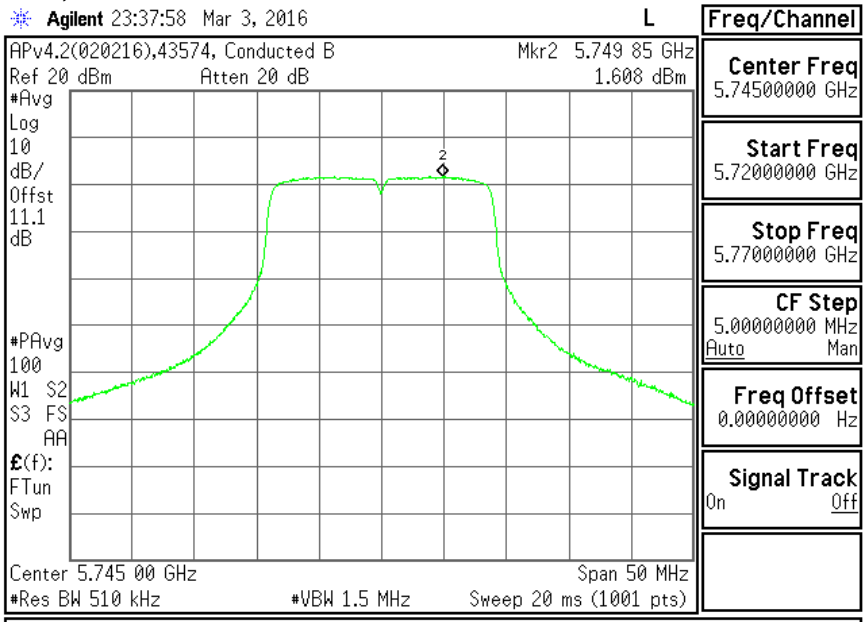
Duty Cycle CF (dB)	0.15	**Included in Calculations of Corr'd PSD**

PSD Results

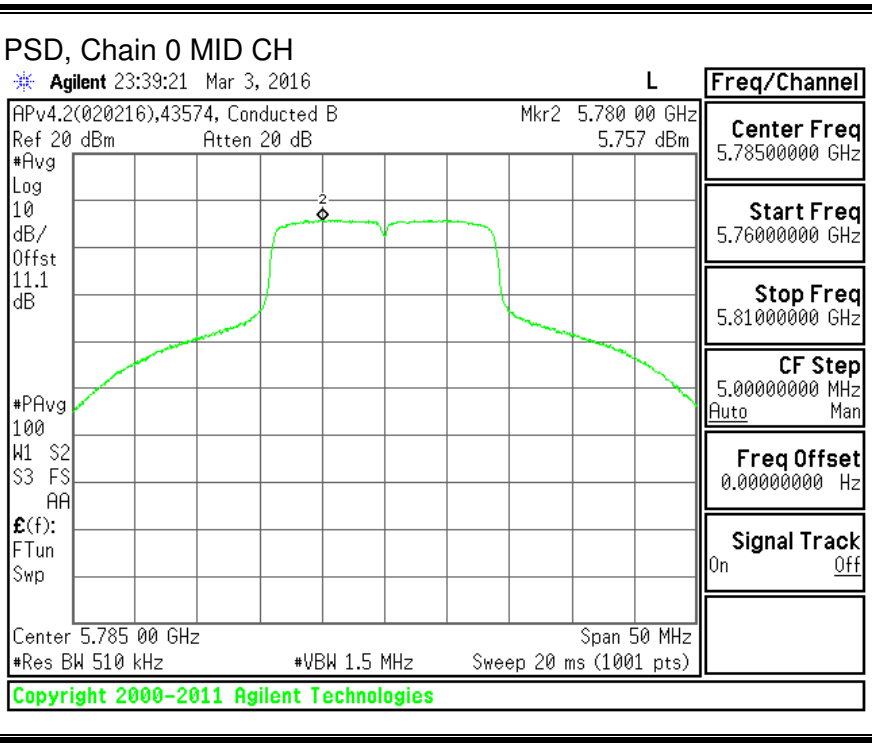
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5745	1.608	1.758	30.00	-28.24
Mid	5785	5.757	5.907	30.00	-24.09
High	5825	2.751	2.901	30.00	-27.10

PSD, Chain 0

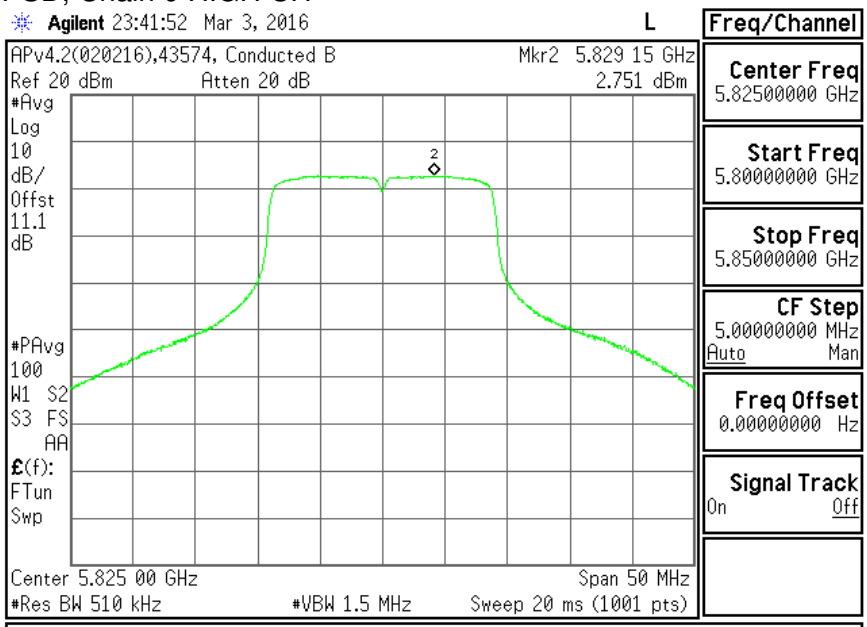
PSD, Chain 0 LOW CH



PSD, Chain 0 MID CH



PSD, Chain 0 HIGH CH



9.13. 802.11n HT40 MODE IN THE 5.8 GHz BAND

9.13.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407

RSS-247 6.2.4

The minimum 6 dB bandwidth shall be at least 500 kHz.

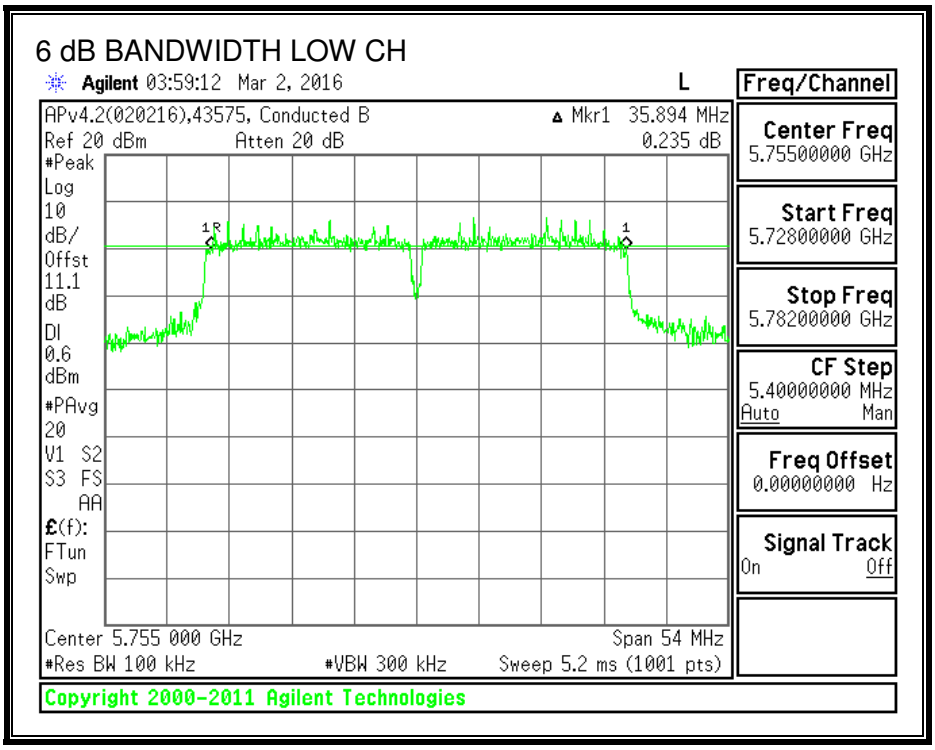
TEST PROCEDURE

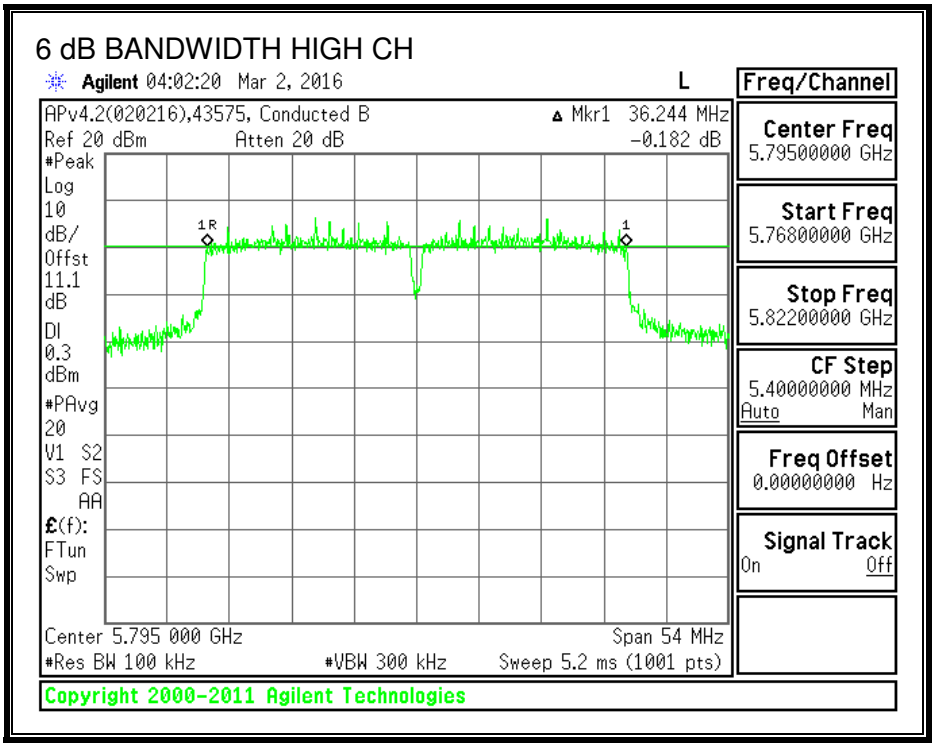
Reference to 789033 D02 General UNII Test Procedures New Rules v01: The transmitter output is connected to a spectrum analyzer with the RBW set to100KHz, the VBW >= 3 x RBW, peak detector and max hold.

RESULTS

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	35.8940	0.5
High	5795	36.2440	0.5

6 dB BANDWIDTH





9.13.2. 99% BANDWIDTH

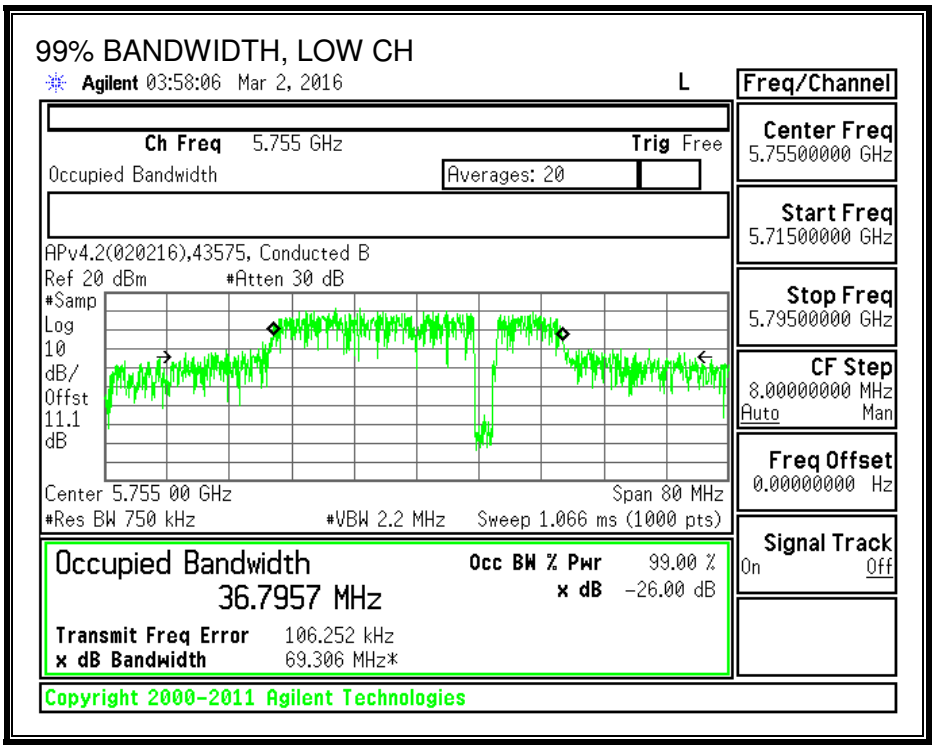
LIMITS

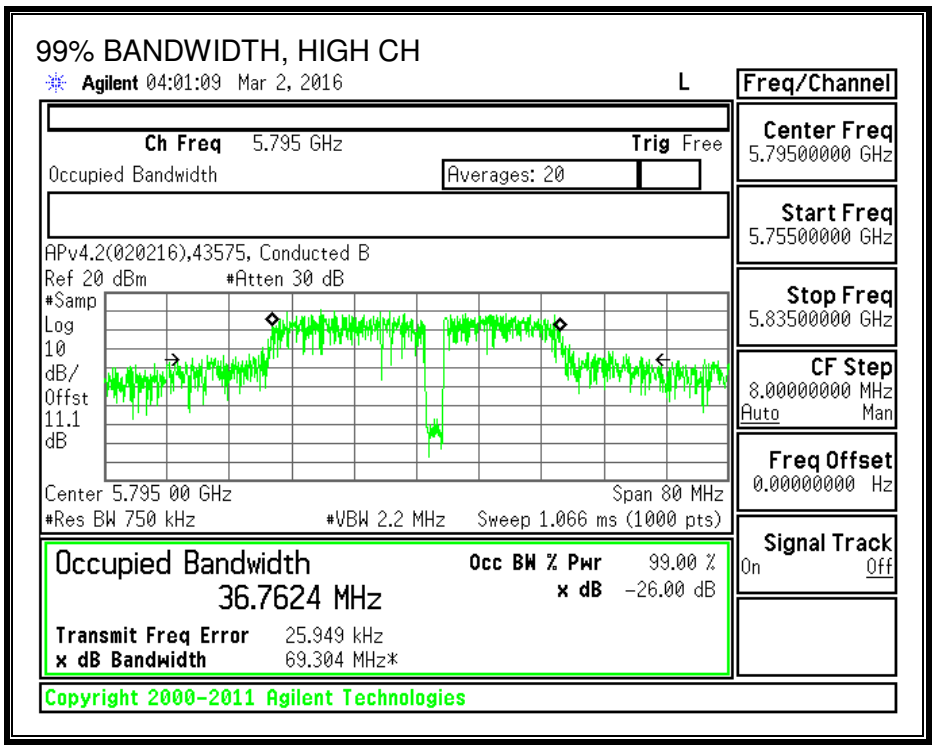
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5755	36.7957
High	5795	36.7624

99% BANDWIDTH





9.13.3. OUTPUT POWER

LIMITS

FCC §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.

IC RSS-247

Band 5.725-5.85 GHz
The maximum conducted output power shall not exceed 1 W. The 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 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 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.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Low	5755	-2.00	30.00
High	5795	-2.00	30.00

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5755	12.05	12.05	30.00	-17.95
High	5795	15.94	15.94	30.00	-14.06

Note: the power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

9.13.4. Maximum Power Spectral Density (PSD)

LIMITS

FCC §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.

IC RSS-247

Band 5.725-5.85 GHz
The maximum conducted output power shall not exceed 1 W. The 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 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 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.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5755	-2.00	30.00
High	5795	-2.00	30.00

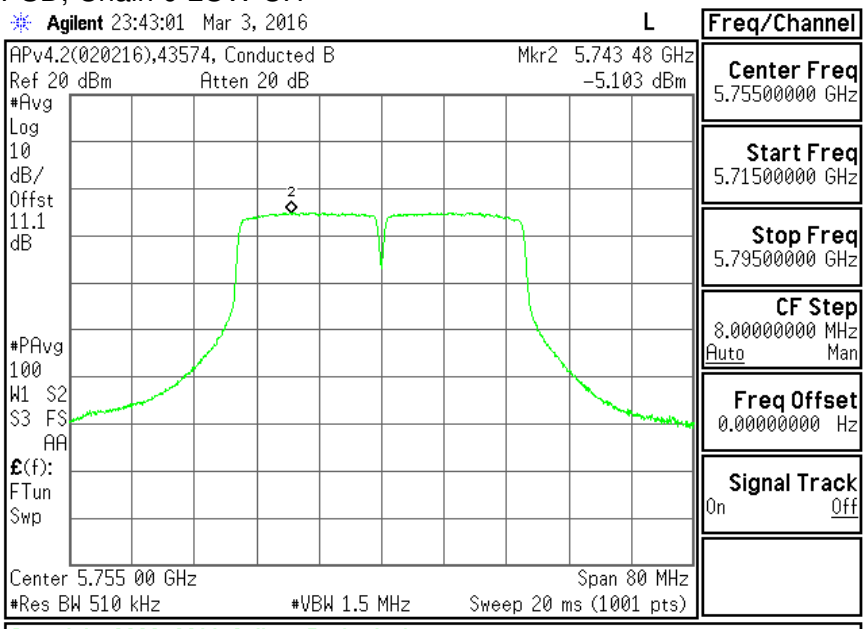
Duty Cycle CF (dB)	0.21	Included in Calculations of Corr'd PSD

PSD Results

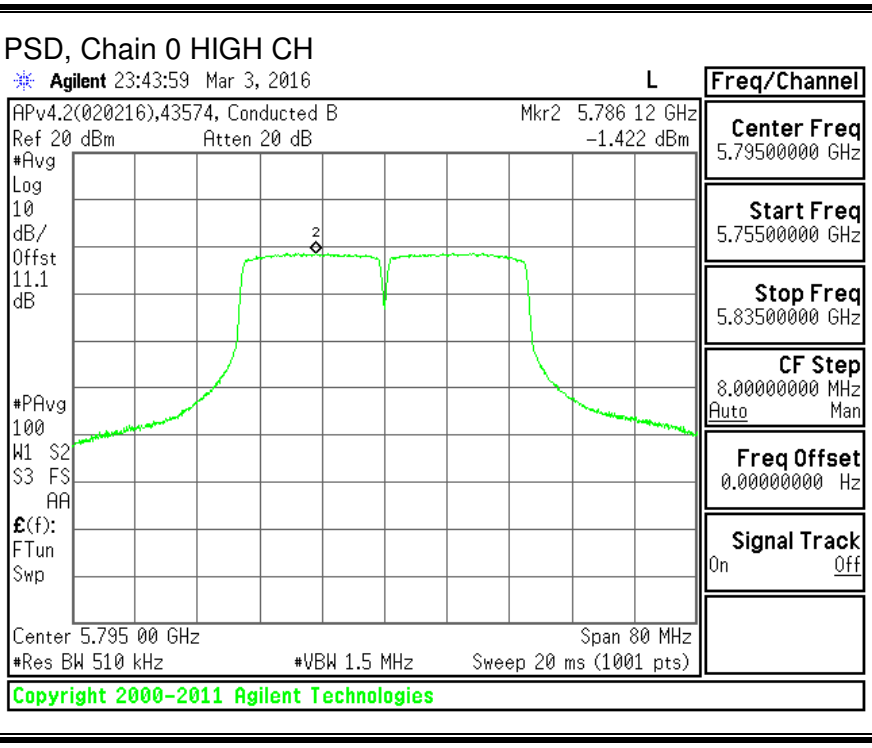
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5755	-5.103	-4.893	30.00	-34.89
High	5795	-1.422	-1.212	30.00	-31.21

PSD, Chain 0

PSD, Chain 0 LOW CH



PSD, Chain 0 HIGH CH



10. RADIATED TEST RESULTS

10.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

IC RSS-GEN Clause 8.9 (Transmitter)

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1GHz and 150cm for above 1GHz. The antenna to EUT distance is 3 meters.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

Reference to KDB 789033 UNII part G) 6) d) Method AD:
For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and add duty cycle factor to the reading offset for average measurements.

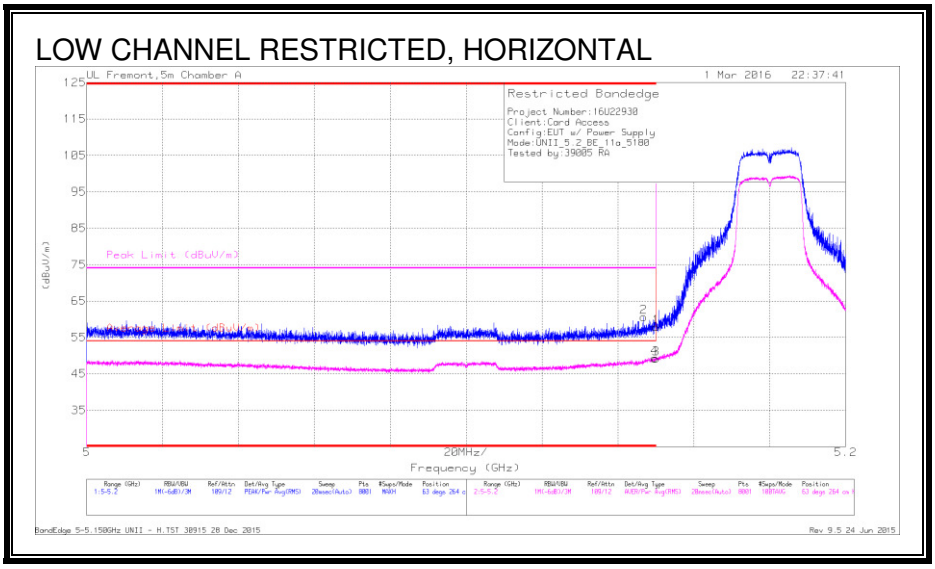
The spectrum from 1GHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

10.2. TRANSMITTER ABOVE 1 GHz

10.3. TX ABOVE 1 GHz 802.11a MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)



Trace Markers

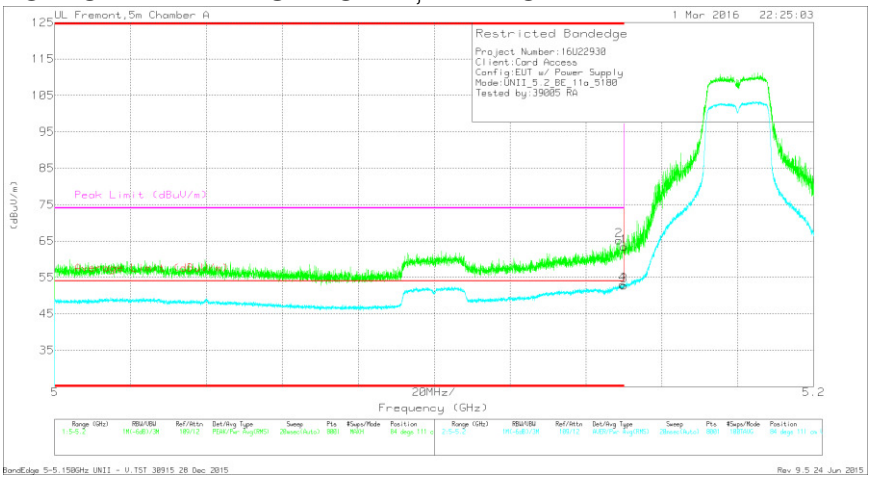
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.147	46.34	Pk	34.2	-20	0	60.54	-	-	74	-13.46	63	264	H
1	* 5.15	43.77	Pk	34.2	-20.1	0	57.87	-	-	74	-16.13	63	264	H
3	* 5.15	34.94	RMS	34.2	-20.1	.14	49.18	54	-4.82	-	-	63	264	H
4	* 5.15	34.99	RMS	34.2	-20	.14	49.33	54	-4.67	-	-	63	264	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

LOW CHANNEL RESTRICTED, VERTICAL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.149	51.01	Pk	34.2	-20	0	65.21	-	-	74	-8.79	84	111	V
1	* 5.15	49.34	Pk	34.2	-20.1	0	63.44	-	-	74	-10.56	84	111	V
3	* 5.15	38.48	RMS	34.2	-20.1	.14	52.72	54	-1.28	-	-	84	111	V
4	* 5.15	38.68	RMS	34.2	-20	.14	53.02	54	-.98	-	-	84	111	V

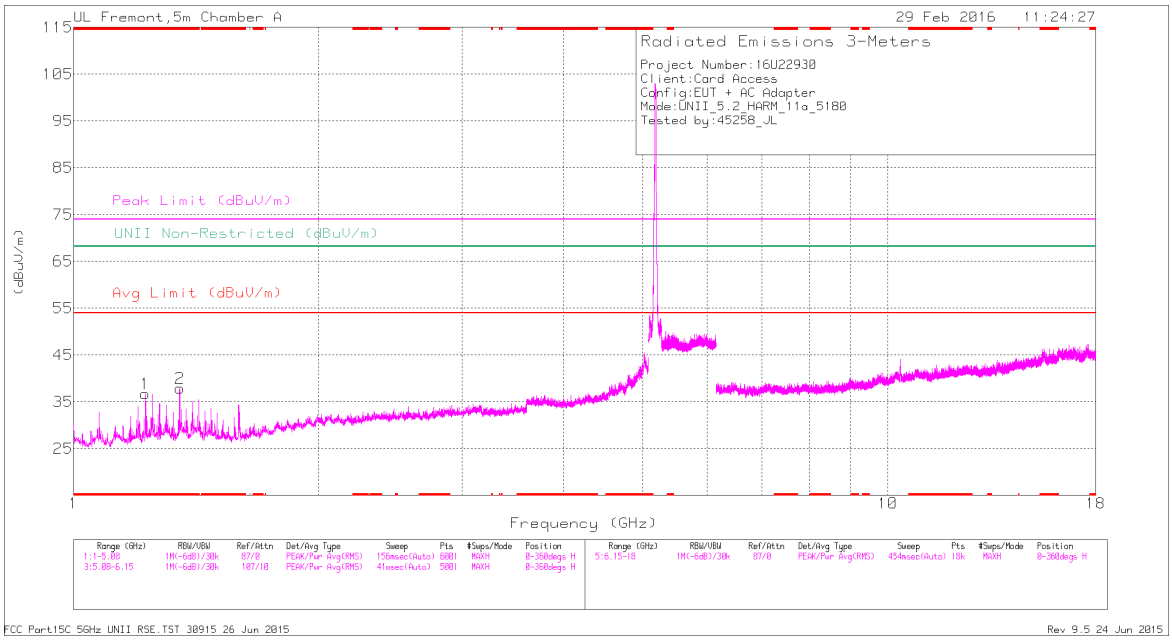
* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

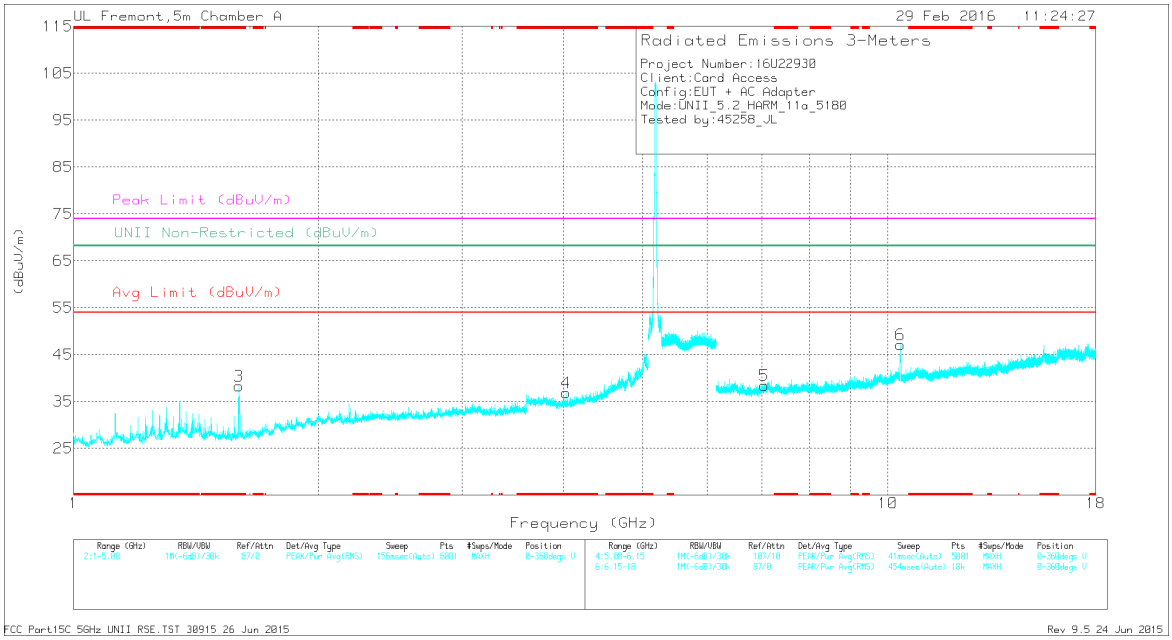
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.225	44.61	Pk	28.2	-36.1	0	36.71	-	-	74	-37.29	-	-	0-360	101	H
2	* 1.35	44.56	Pk	28.7	-35.3	0	37.96	-	-	74	-36.04	-	-	0-360	201	H
3	* 1.597	45.95	Pk	27.9	-35.5	0	38.35	-	-	74	-35.65	-	-	0-360	100	V
4	* 4.023	34.72	Pk	33.3	-31.2	0	36.82	-	-	74	-37.18	-	-	0-360	200	V
6	10.362	32.8	Pk	37.4	-23.1	0	47.1	-	-	-	-	68.2	-21.1	0-360	100	V
5	7.049	29.14	Pk	35.6	-26.3	0	38.44	-	-	-	-	68.2	-29.76	0-360	200	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

Radiated Emissions

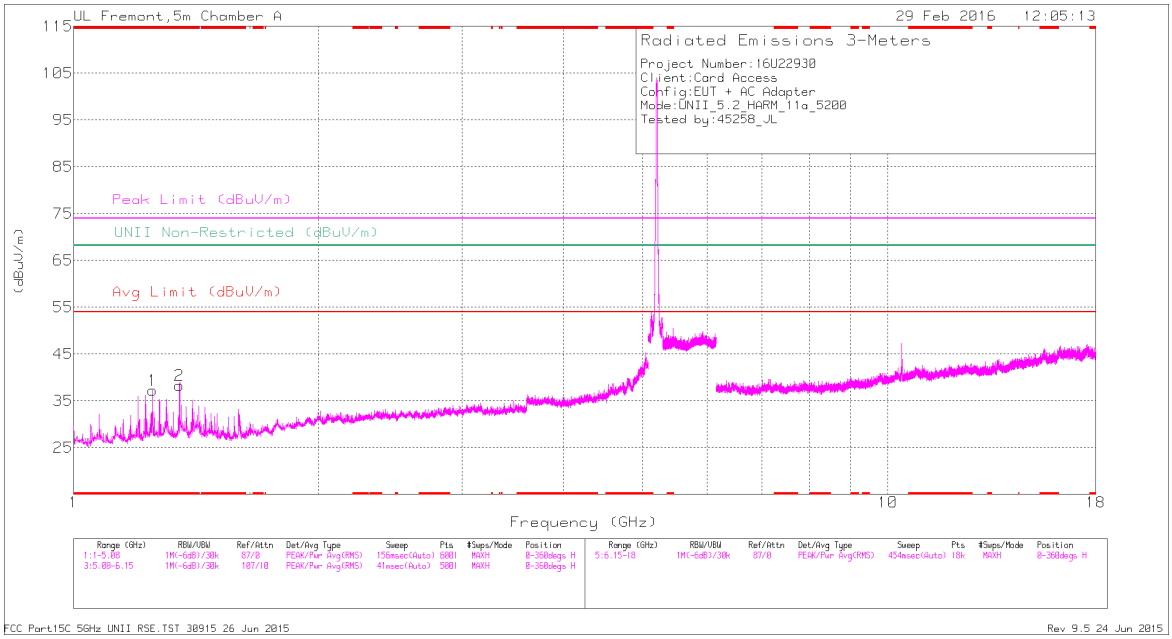
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.225	50.35	PK-U	28.2	-36.1	0	42.45	-	-	74	-31.55	-	-	45	102	H
* 1.225	44.26	ADR	28.2	-36.1	.14	36.50	54	-17.50	-	-	-	-	45	102	H
* 1.35	45.11	PK-U	28.7	-35.3	0	38.51	-	-	74	-35.49	-	-	65	130	H
* 1.35	34.99	ADR	28.7	-35.3	.14	28.53	54	-25.47	-	-	-	-	65	130	H
* 1.597	51.62	PK-U	27.9	-35.5	0	44.02	-	-	74	-29.98	-	-	156	192	V
* 1.597	33.4	ADR	27.9	-35.5	.14	25.94	54	-28.06	-	-	-	-	156	192	V
* 4.022	41.07	PK-U	33.3	-31.1	0	43.27	-	-	74	-30.73	-	-	263	145	V
* 4.025	29.76	ADR	33.3	-31.2	.14	32	54	-22	-	-	-	-	263	145	V
7.048	37.72	PK-U	35.6	-26.4	0	46.92	-	-	-	-	68.2	-21.28	210	100	V
10.36	40.04	PK-U	37.4	-23.1	0	54.34	-	-	-	-	68.2	-13.86	251	136	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

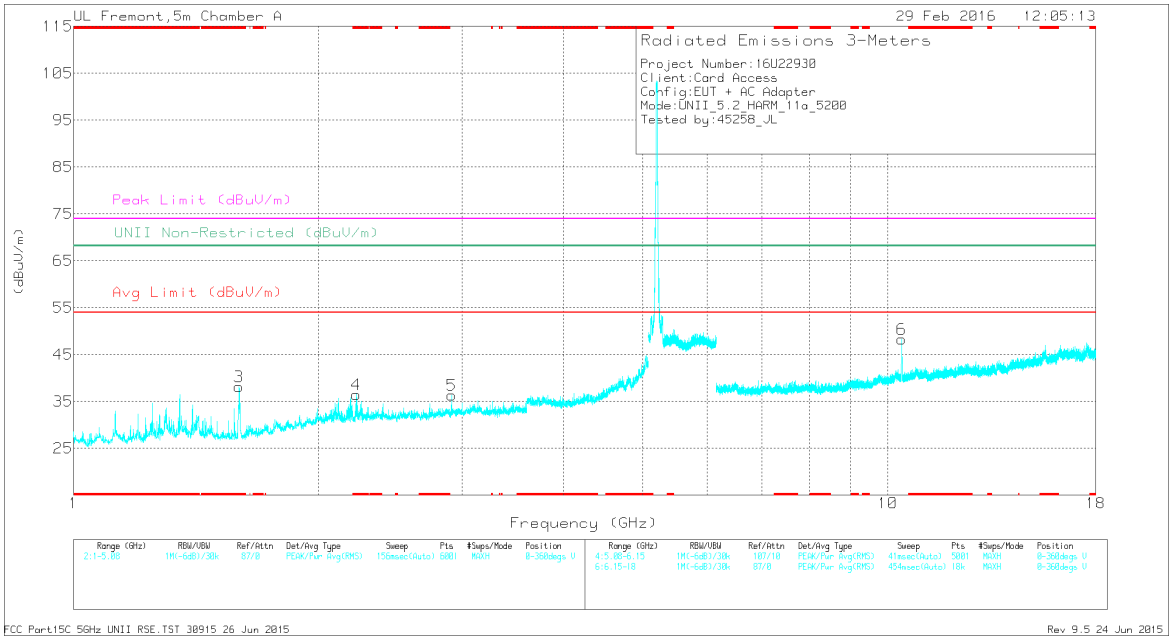
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	44.87	Pk	28.4	-36	0	37.27	-	-	74	-36.73	-	-	0-360	100	H
2	* 1.35	44.95	Pk	28.7	-35.3	0	38.35	-	-	74	-35.65	-	-	0-360	201	H
3	* 1.596	45.81	Pk	27.9	-35.5	0	38.21	-	-	74	-35.79	-	-	0-360	100	V
4	* 2.224	40.05	Pk	31.4	-35	0	36.45	-	-	74	-37.55	-	-	0-360	200	V
5	2.915	37.1	Pk	32.7	-33.5	0	36.3	-	-	-	-	68.2	-31.9	0-360	100	V
6	10.401	33.96	Pk	37.4	-23.1	0	48.26	-	-	-	-	68.2	-19.94	0-360	100	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

Radiated Emissions

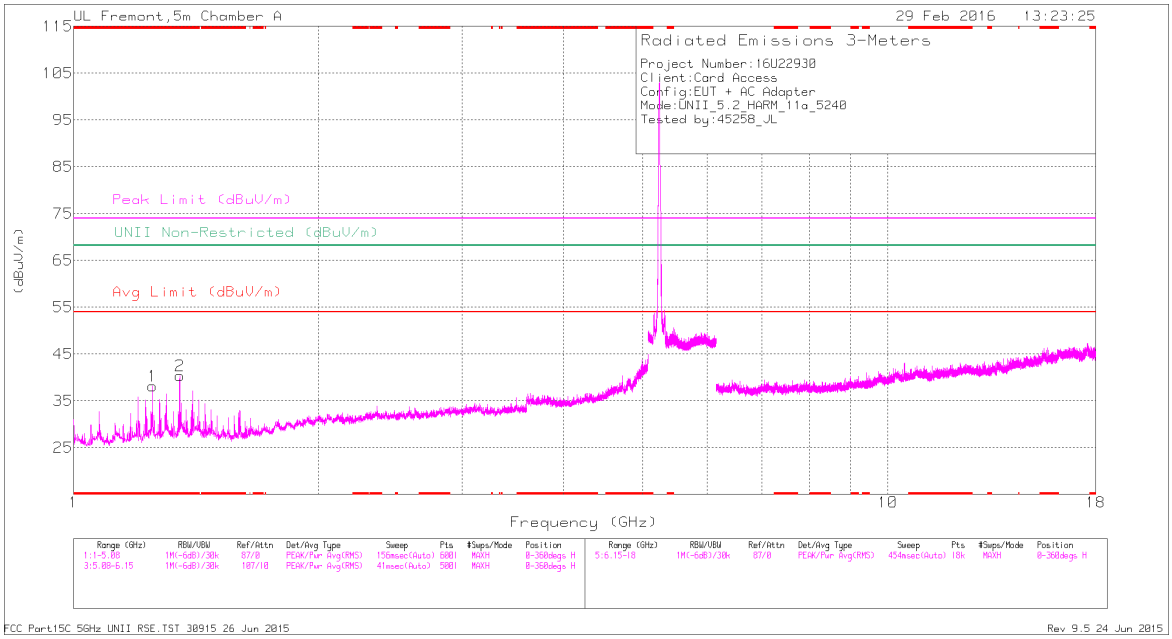
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.25	49.95	PK-U	28.4	-36	0	42.35	-	-	74	-31.65	-	-	176	180	H
* 1.25	43.42	ADR	28.4	-36	.14	35.96	54	-18.04	-	-	-	-	176	180	H
* 1.35	44.87	PK-U	28.7	-35.3	0	38.27	-	-	74	-35.73	-	-	105	220	H
* 1.35	35.15	ADR	28.7	-35.3	.14	28.69	54	-25.31	-	-	-	-	105	220	H
* 1.595	49.2	PK-U	27.9	-35.5	0	41.6	-	-	74	-32.4	-	-	122	114	V
* 1.596	33	ADR	27.9	-35.5	.14	25.54	54	-28.46	-	-	-	-	122	114	V
* 2.225	45.02	PK-U	31.4	-35	0	41.42	-	-	74	-32.58	-	-	296	173	V
* 2.224	31.97	ADR	31.4	-35	.14	28.51	54	-25.49	-	-	-	-	296	173	V
2.914	43.15	PK-U	32.7	-33.5	0	42.35	-	-	-	-	68.2	-25.85	177	112	V
10.399	44.02	PK-U	37.4	-23.1	0	58.32	-	-	-	-	68.2	-9.88	294	126	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

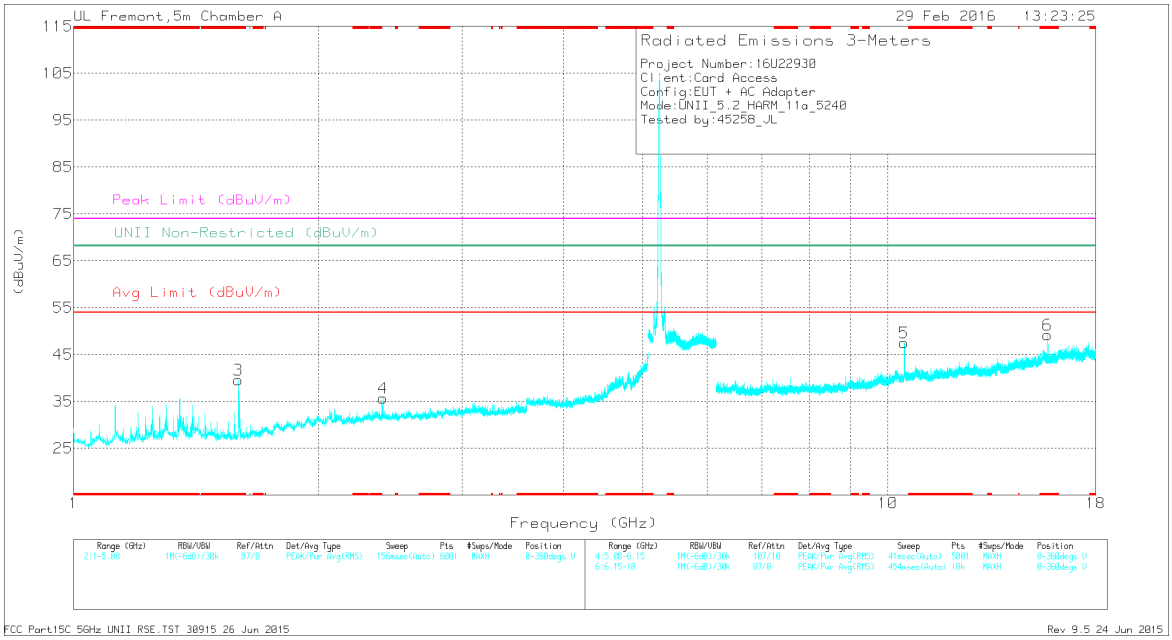
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	45.8	Pk	28.4	-36	0	38.2	-	-	74	-35.8	-	-	0-360	100	H
2	* 1.35	47.02	Pk	28.7	-35.3	0	40.42	-	-	74	-33.58	-	-	0-360	201	H
3	* 1.594	47.17	Pk	27.9	-35.5	0	39.57	-	-	74	-34.43	-	-	0-360	200	V
6	* 15.712	31.84	Pk	40.4	-23	0	49.24	-	-	74	-24.76	-	-	0-360	100	V
4	2.397	37.77	Pk	32	-34.1	0	35.67	-	-	-	-	68.2	-32.53	0-360	200	V
5	10.476	33.36	Pk	37.5	-23.3	0	47.56	-	-	-	-	68.2	-20.64	0-360	100	V

* - indicates frequency in CFR47 PT 15 / IC RSS-Restricted Band

Pk - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.25	50.31	PK-U	28.4	-36	0	42.71	-	-	74	-31.29	-	-	170	189	H
* 1.25	44.23	ADR	28.4	-36	.14	36.77	54	-17.23	-	-	-	-	170	189	H
* 1.35	51.46	PK-U	28.7	-35.3	0	44.86	-	-	74	-29.14	-	-	180	213	H
* 1.35	45.66	ADR	28.7	-35.3	.14	39.2	54	-14.8	-	-	-	-	180	213	H
* 1.593	44.96	PK-U	27.9	-35.5	0	37.36	-	-	74	-36.64	-	-	219	168	V
* 1.595	33.61	ADR	27.9	-35.5	.14	26.15	54	-27.85	-	-	-	-	219	168	V
* 15.713	38.24	PK-U	40.4	-23	0	55.64	-	-	74	-18.36	-	-	275	100	V
* 15.714	26.14	ADR	40.4	-23	.14	43.68	54	-10.32	-	-	-	-	275	100	V
2.396	47.46	PK-U	32	-34.1	0	45.36	-	-	-	-	68.2	-22.84	145	250	V
10.477	34.33	PK-U	37.5	-23.3	0	48.53	-	-	-	-	68.2	-19.67	69	177	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

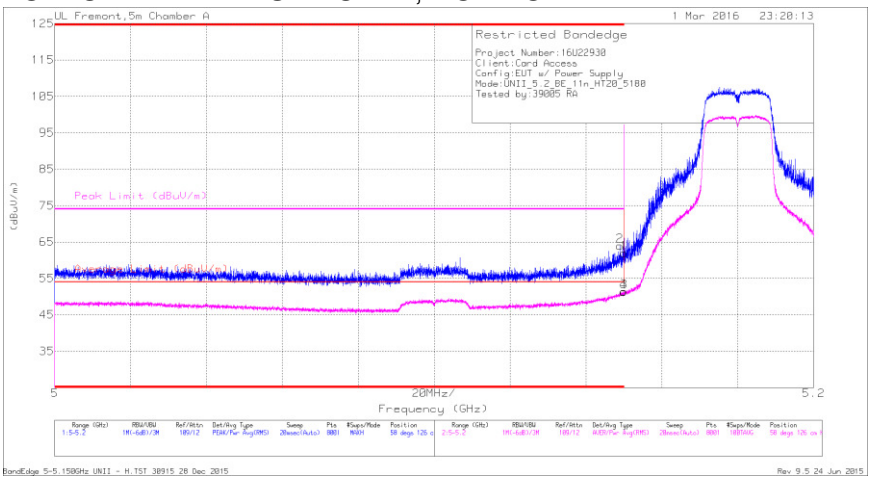
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.4. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, HORIZONTAL



Trace Markers

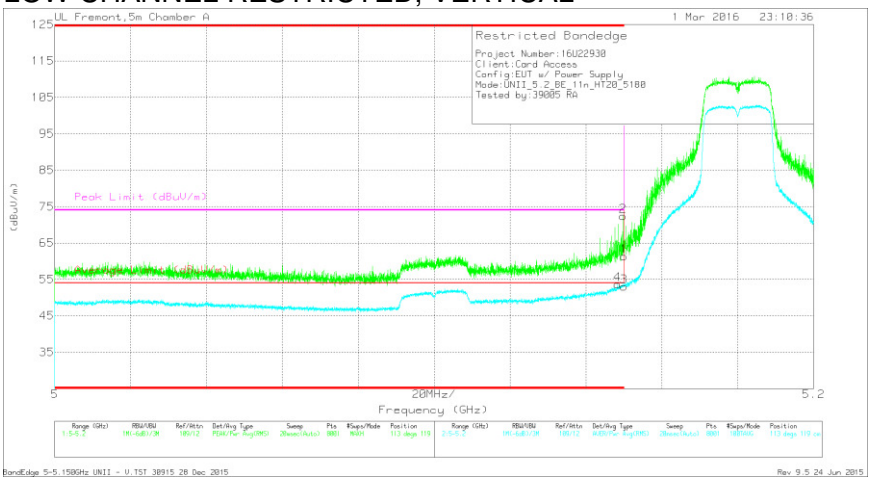
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.149	49.8	Pk	34.2	-20	0	64	-	-	74	-10	58	126	H
1	* 5.15	47.91	Pk	34.2	-20.1	0	62.01	-	-	74	-11.99	58	126	H
3	* 5.15	37.13	RMS	34.2	-20.1	.15	51.38	54	-2.62	-	-	58	126	H
4	* 5.15	37.09	RMS	34.2	-20.1	.15	51.34	54	-2.66	-	-	58	126	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

LOW CHANNEL RESTRICTED, VERTICAL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 5.148	39.26	RMS	34.2	-20	.15	53.61	54	-.39	-	-	113	119	V
1	* 5.15	47.19	Pk	34.2	-20.1	0	61.29	-	-	74	-12.71	113	119	V
2	* 5.15	58.24	Pk	34.2	-20.1	0	72.34	-	-	74	-1.66	113	119	V
3	* 5.15	38.79	RMS	34.2	-20.1	.15	53.04	54	-.96	-	-	113	119	V

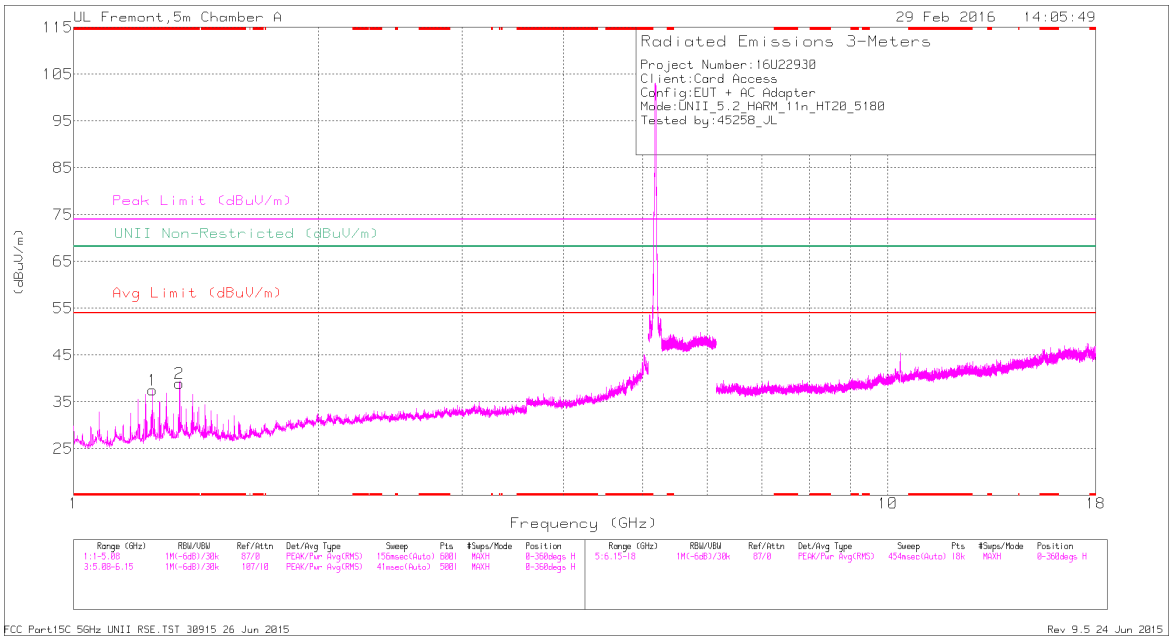
* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

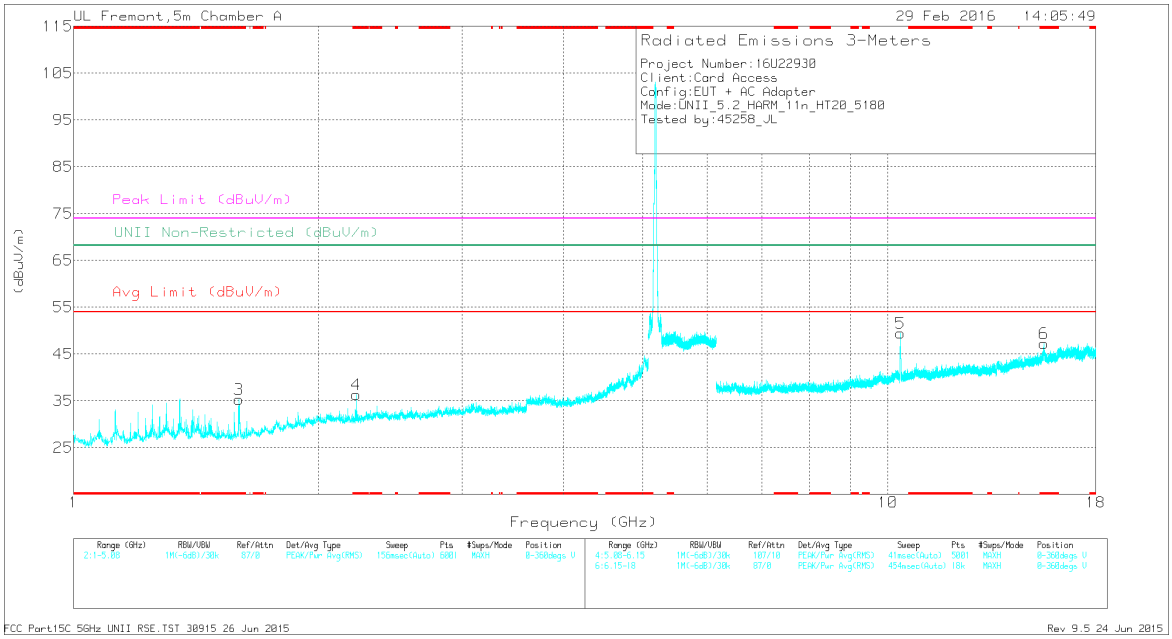
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	45.16	Pk	28.4	-36	0	37.56	-	-	74	-36.44	-	-	0-360	100	H
2	* 1.35	45.59	Pk	28.7	-35.3	0	38.99	-	-	74	-35.01	-	-	0-360	201	H
3	* 1.596	42.92	Pk	27.9	-35.5	0	35.32	-	-	74	-38.68	-	-	0-360	100	V
4	* 2.225	40	Pk	31.4	-35	0	36.4	-	-	74	-37.6	-	-	0-360	200	V
6	* 15.546	28.04	Pk	40.3	-21.1	0	47.24	-	-	74	-26.76	-	-	0-360	100	V
5	10.36	35.13	Pk	37.4	-23.1	0	49.43	-	-	-	-	68.2	-18.77	0-360	100	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

Radiated Emissions

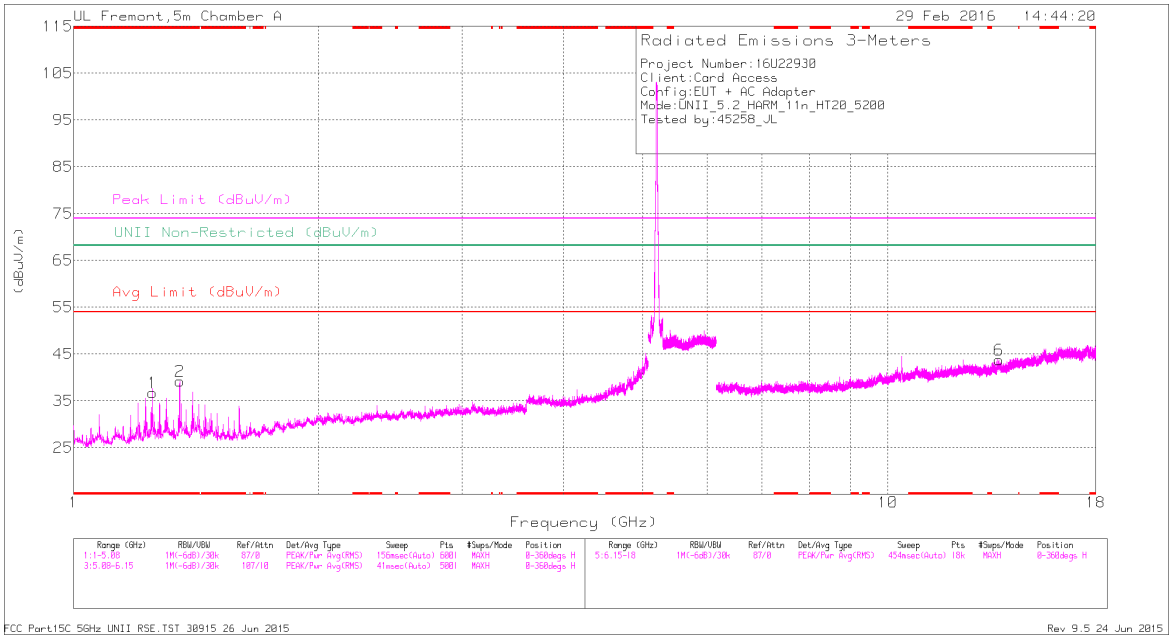
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.25	50.37	PK-U	28.4	-36	0	42.77	-	-	74	-31.23	-	-	177	182	H
* 1.25	43.97	ADR	28.4	-36	.15	36.52	54	-17.48	-	-	-	-	177	182	H
* 1.35	48.03	PK-U	28.7	-35.3	0	41.43	-	-	74	-32.57	-	-	150	169	H
* 1.35	40.98	ADR	28.7	-35.3	.15	34.53	54	-19.47	-	-	-	-	150	169	H
* 1.596	53.96	PK-U	27.9	-35.5	0	46.36	-	-	74	-27.64	-	-	186	206	V
* 1.597	34.54	ADR	27.9	-35.5	.15	27.09	54	-26.91	-	-	-	-	186	206	V
* 2.225	45.52	PK-U	31.4	-35	0	41.92	-	-	74	-32.08	-	-	203	117	V
* 2.226	31.97	ADR	31.5	-35	.15	28.62	54	-25.38	-	-	-	-	203	117	V
* 15.544	36.35	PK-U	40.3	-21.1	0	55.55	-	-	74	-18.45	-	-	211	133	V
* 15.544	24.79	ADR	40.3	-21.1	.15	44.14	54	-9.86	-	-	-	-	211	133	V
10.36	42.43	PK-U	37.4	-23.1	0	56.73	-	-	-	-	68.2	-11.47	223	102	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

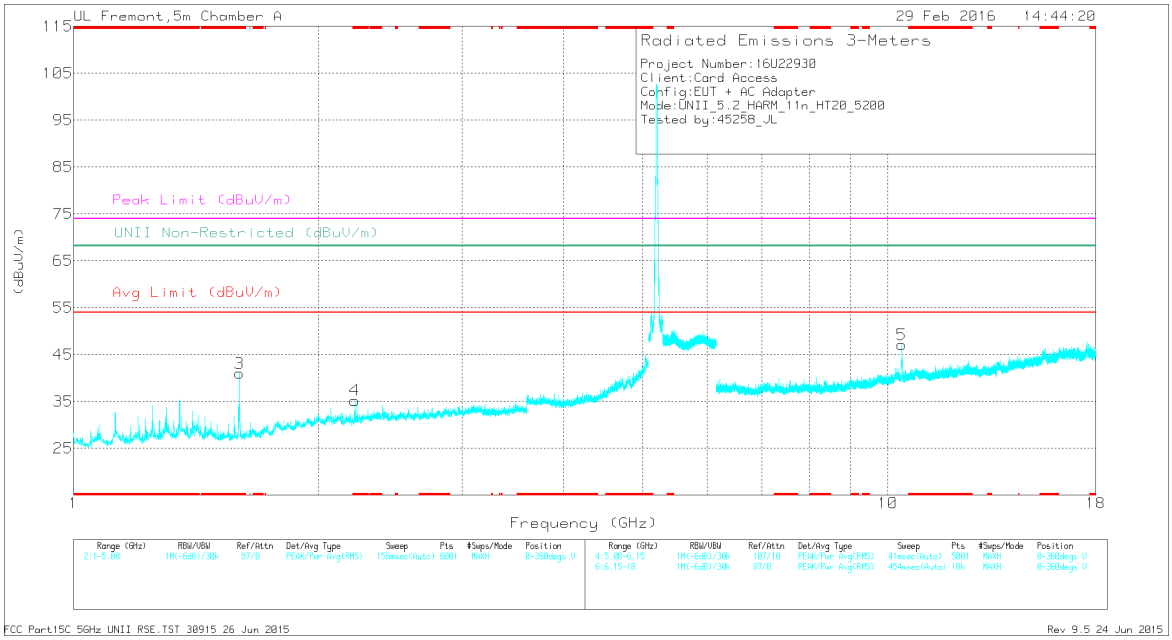
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	44.4	Pk	28.4	-36	0	36.8	-	-	74	-37.2	-	-	0-360	201	H
2	* 1.35	45.76	Pk	28.7	-35.3	0	39.16	-	-	74	-34.84	-	-	0-360	201	H
3	* 1.598	48.67	Pk	27.9	-35.5	0	41.07	-	-	74	-32.93	-	-	0-360	200	V
4	* 2.214	38.75	Pk	31.4	-34.9	0	35.25	-	-	74	-38.75	-	-	0-360	100	V
5	10.397	32.87	Pk	37.4	-23.2	0	47.07	-	-	-	-	68.2	-21.13	0-360	100	V
6	13.685	27.46	Pk	38.8	-22.5	0	43.76	-	-	-	-	68.2	-24.44	0-360	201	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

Radiated Emissions

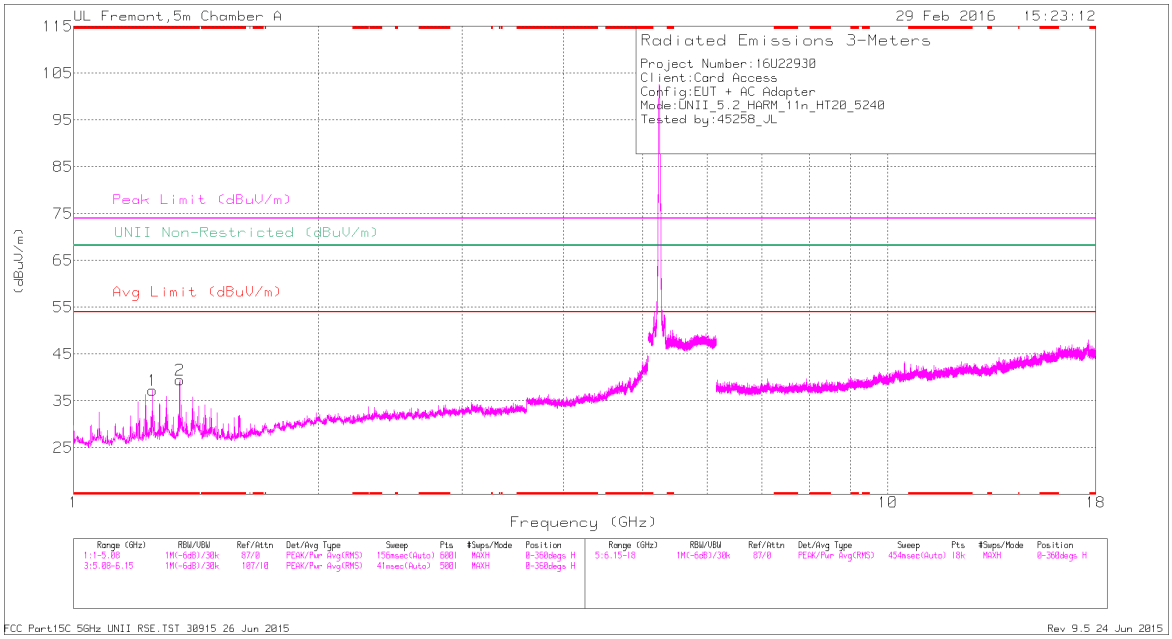
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.25	50.58	PK-U	28.4	-36	0	42.98	-	-	74	-31.02	-	-	53	134	H
* 1.25	44.75	ADR	28.4	-36	.15	37.3	54	-16.7	-	-	-	-	53	134	H
* 1.35	47.08	PK-U	28.7	-35.3	0	40.48	-	-	74	-33.52	-	-	69	152	H
* 1.35	38.48	ADR	28.7	-35.3	.15	32.03	54	-21.97	-	-	-	-	69	152	H
* 1.599	46.06	PK-U	27.9	-35.5	0	38.46	-	-	74	-35.54	-	-	124	198	V
* 1.6	35.69	ADR	27.9	-35.5	.15	28.24	54	-25.76	-	-	-	-	124	198	V
* 2.215	44.97	PK-U	31.4	-34.9	0	41.47	-	-	74	-32.53	-	-	181	119	V
* 2.216	31.77	ADR	31.4	-34.9	.15	28.42	54	-25.58	-	-	-	-	181	119	V
10.398	35.78	PK-U	37.4	-23.2	0	49.98	-	-	-	-	68.2	-18.22	310	172	V
13.687	34.88	PK-U	38.8	-22.5	0	51.18	-	-	-	-	68.2	-17.02	295	182	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

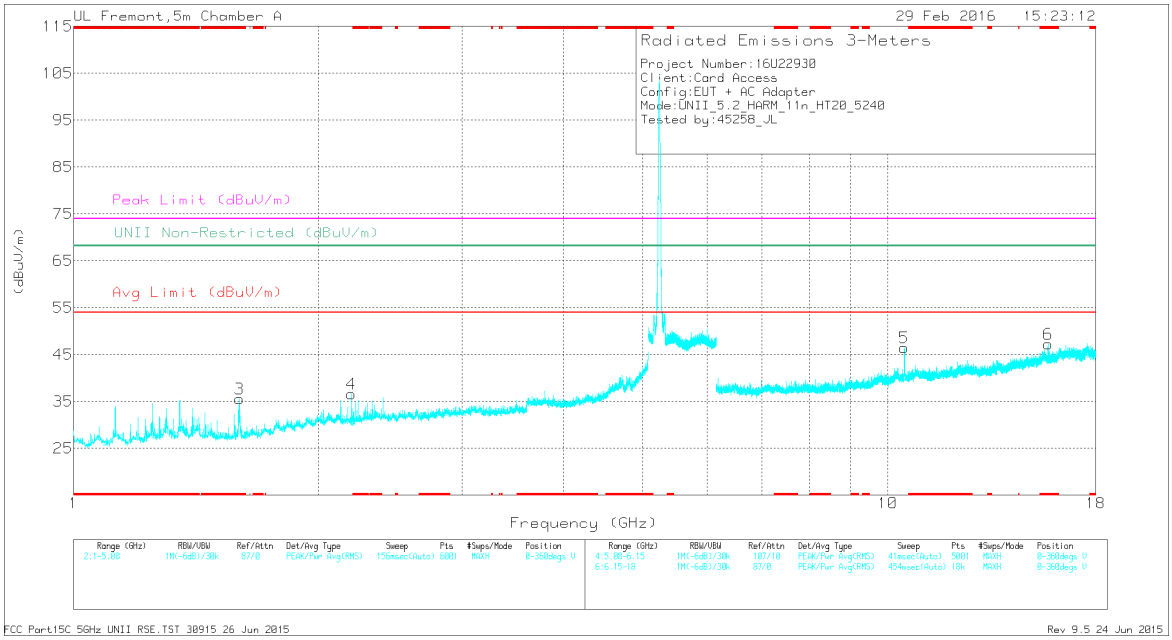
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	44.83	Pk	28.4	-36	0	37.23	-	-	74	-36.77	-	-	0-360	100	H
2	* 1.35	46.07	Pk	28.7	-35.3	0	39.47	-	-	74	-34.53	-	-	0-360	201	H
3	* 1.598	43.12	Pk	27.9	-35.5	0	35.52	-	-	74	-38.48	-	-	0-360	100	V
6	* 15.724	29.84	Pk	40.4	-23	0	47.24	-	-	74	-26.76	-	-	0-360	100	V
4	2.195	40.13	Pk	31.3	-34.8	0	36.63	-	-	-	-	68.2	-31.57	0-360	200	V
5	10.476	32.25	Pk	37.5	-23.3	0	46.45	-	-	-	-	68.2	-21.75	0-360	100	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.25	50.28	PK-U	28.4	-36	0	42.68	-	-	74	-31.32	-	-	48	137	H
* 1.25	44.51	ADR	28.4	-36	.15	37.06	54	-16.94	-	-	-	-	48	137	H
* 1.35	46.63	PK-U	28.7	-35.3	0	40.03	-	-	74	-33.97	-	-	69	153	H
* 1.35	38.07	ADR	28.7	-35.3	.15	31.62	54	-22.38	-	-	-	-	69	153	H
* 1.597	48.35	PK-U	27.9	-35.5	0	40.75	-	-	74	-33.25	-	-	272	119	V
* 1.597	32.78	ADR	27.9	-35.5	.15	25.33	54	-28.67	-	-	-	-	272	119	V
* 15.723	35.4	PK-U	40.4	-23	0	52.8	-	-	74	-21.2	-	-	186	158	V
* 15.725	24.46	ADR	40.4	-23	.15	42.01	54	-11.99	-	-	-	-	186	158	V
2.196	48.01	PK-U	31.3	-34.8	0	44.51	-	-	-	-	68.2	-23.69	305	182	V
10.476	35.91	PK-U	37.5	-23.3	0	50.11	-	-	-	-	68.2	-18.09	253	202	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

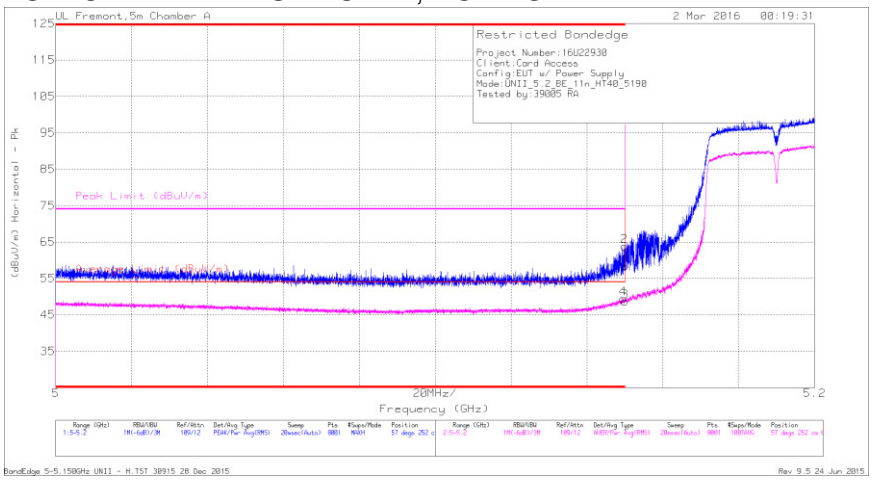
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.5. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, HORIZONTAL



Trace Markers

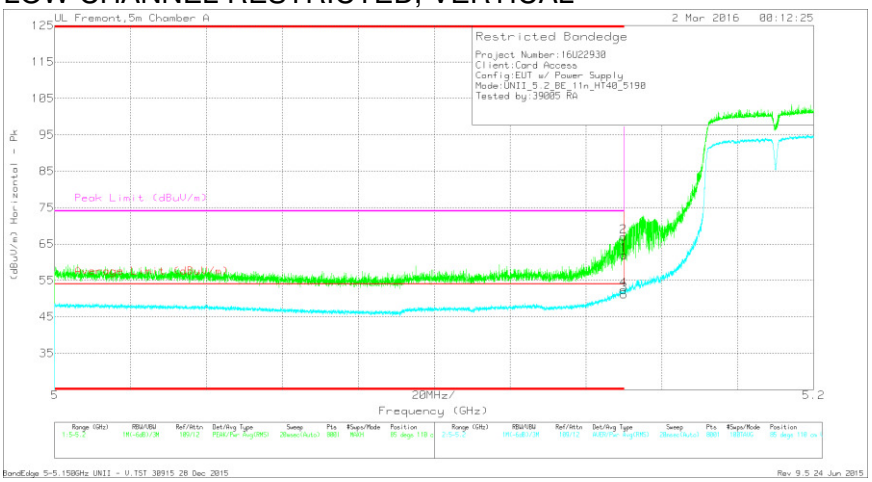
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	44.25	Pk	34.2	-20.1	0	58.35	-	-	74	-15.65	57	252	H
2	* 5.15	49.75	Pk	34.2	-20.1	0	63.85	-	-	74	-10.15	57	252	H
3	* 5.15	34.32	RMS	34.2	-20.1	.21	48.63	54	-5.37	-	-	57	252	H
4	* 5.15	35.03	RMS	34.2	-20	.21	49.44	54	-4.56	-	-	57	252	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

LOW CHANNEL RESTRICTED, VERTICAL



Trace Markers

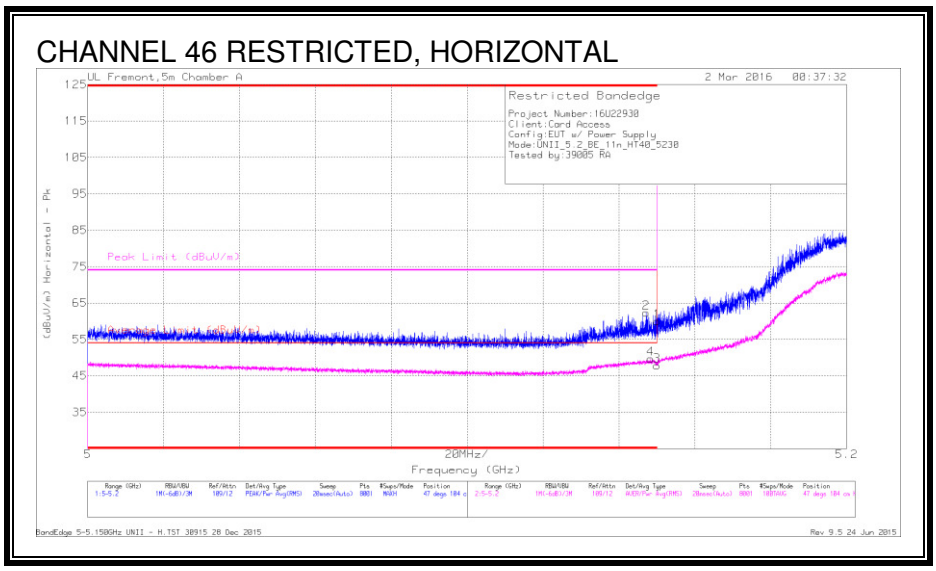
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	47.91	Pk	34.2	-20.1	0	62.01	-	-	74	-11.99	85	110	V
2	* 5.15	52.92	Pk	34.2	-20.1	0	67.02	-	-	74	-6.98	85	110	V
3	* 5.15	36.88	RMS	34.2	-20.1	.21	51.19	54	-2.81	-	-	85	110	V
4	* 5.15	38.04	RMS	34.2	-20.1	.21	52.35	54	-1.65	-	-	85	110	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

RESTRICTED BANDEDGE (CHANNEL 46)



Trace Markers

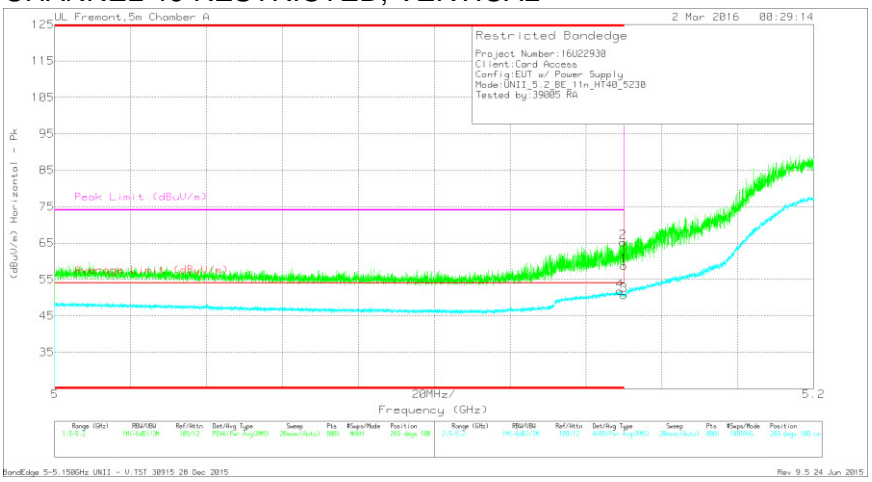
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.147	48.1	Pk	34.2	-20	0	62.3	-	-	74	-11.7	47	104	H
4	* 5.148	35.21	RMS	34.2	-20	.21	49.62	54	-4.38	-	-	47	104	H
1	* 5.15	45.84	Pk	34.2	-20.1	0	59.94	-	-	74	-14.06	47	104	H
3	* 5.15	33.52	RMS	34.2	-20.1	.21	47.83	54	-6.17	-	-	47	104	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

CHANNEL 46 RESTRICTED, VERTICAL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 5.149	37.41	RMS	34.2	-20	.21	51.82	54	-2.18	-	-	269	100	V
1	* 5.15	44.59	Pk	34.2	-20.1	0	58.69	-	-	74	-15.31	269	100	V
2	* 5.15	51.15	Pk	34.2	-20.1	0	65.25	-	-	74	-8.75	269	100	V
3	* 5.15	36.38	RMS	34.2	-20.1	.21	50.69	54	-3.31	-	-	269	100	V

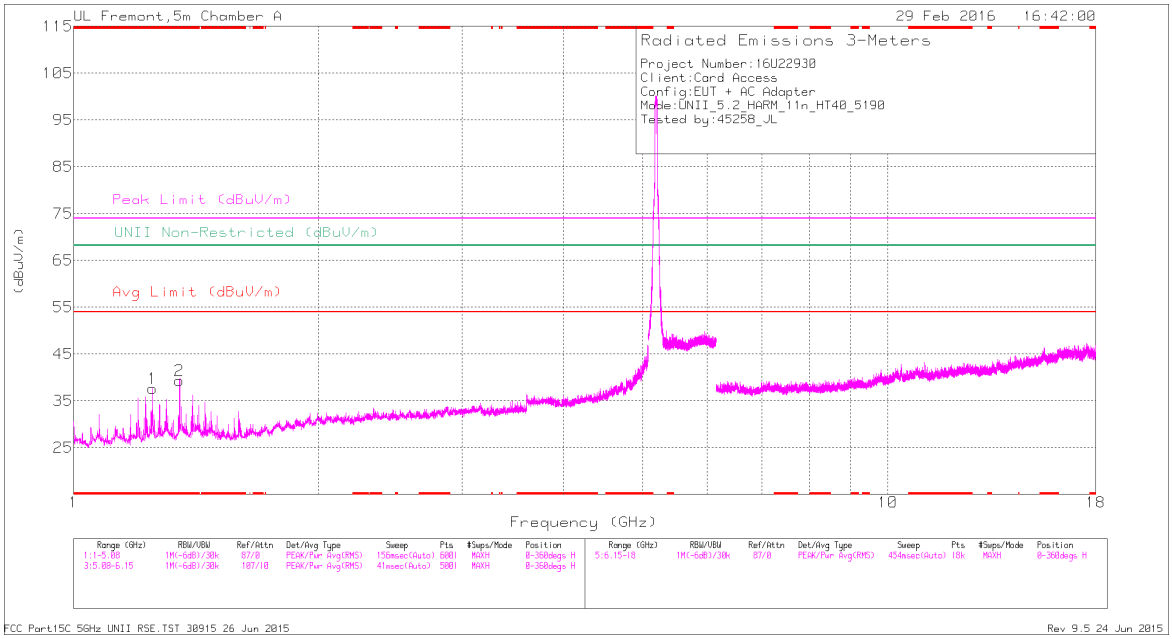
* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

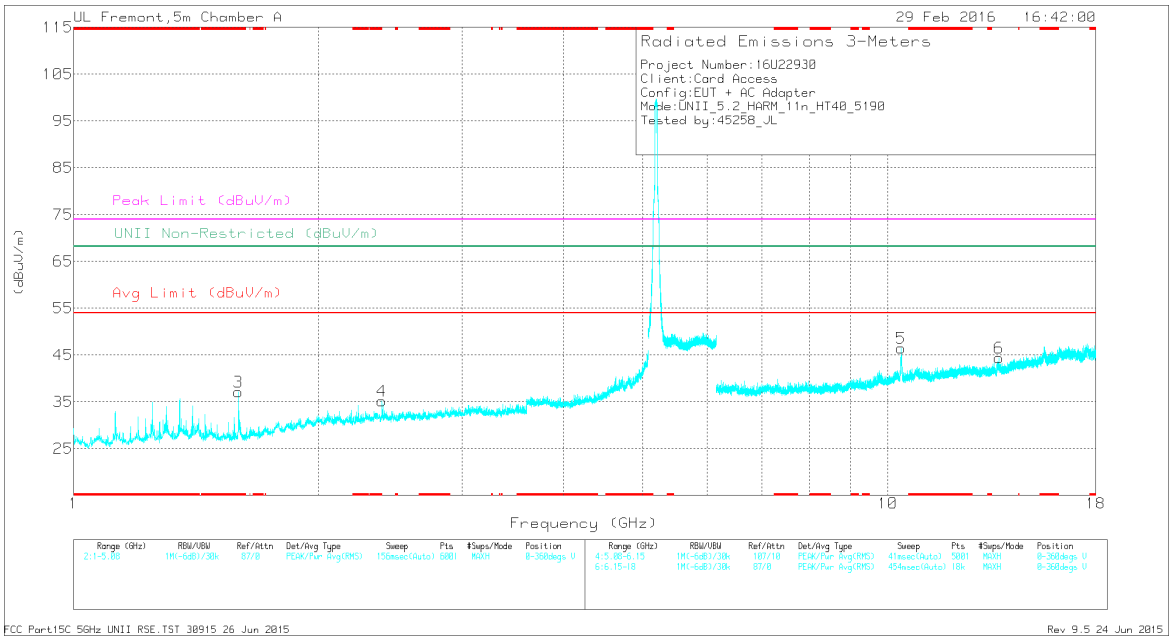
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	45.29	Pk	28.4	-36	0	37.69	-	-	74	-36.31	-	-	0-360	100	H
2	* 1.35	45.97	Pk	28.7	-35.3	0	39.37	-	-	74	-34.63	-	-	0-360	201	H
3	* 1.594	44.72	Pk	27.9	-35.5	0	37.12	-	-	74	-36.88	-	-	0-360	100	V
4	2.391	37.13	Pk	32	-34	0	35.13	-	-	-	-	68.2	-33.07	0-360	200	V
5	10.381	32.25	Pk	37.4	-23.2	0	46.45	-	-	-	-	68.2	-21.75	0-360	100	V
6	13.695	28.13	Pk	38.7	-22.4	0	44.43	-	-	-	-	68.2	-23.77	0-360	100	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

Radiated Emissions

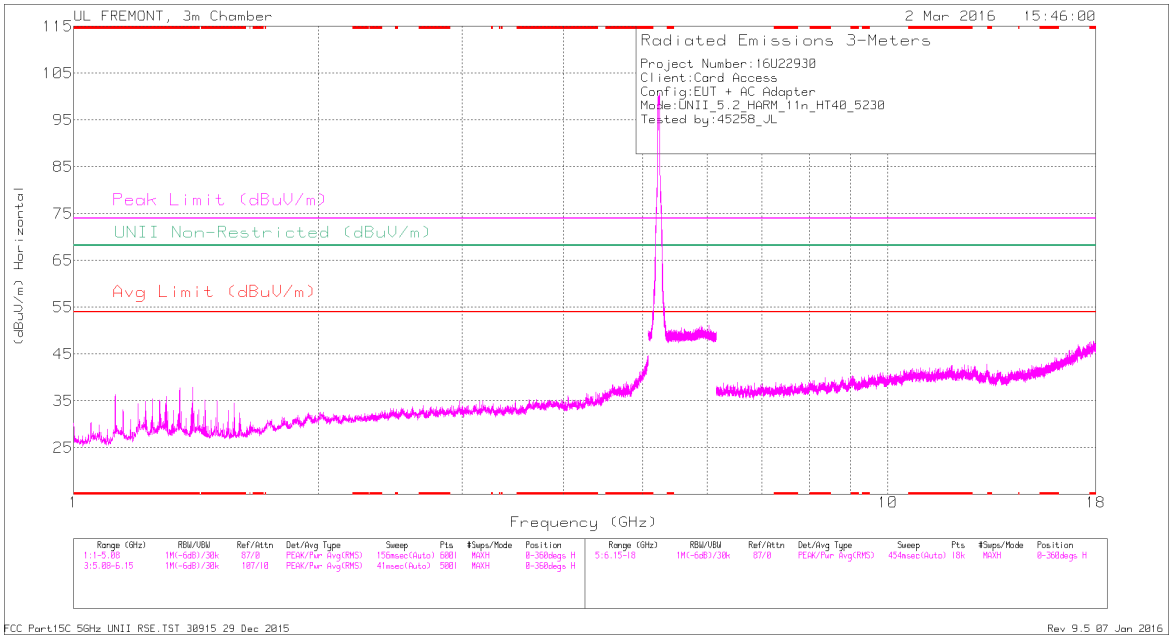
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.25	50.62	PK-U	28.4	-36	0	43.02	-	-	74	-30.98	-	-	50	130	H
* 1.25	45.52	ADR	28.4	-36	.21	38.13	54	-15.87	-	-	-	-	50	130	H
* 1.35	46.72	PK-U	28.7	-35.3	0	40.12	-	-	74	-33.88	-	-	45	140	H
* 1.35	39.16	ADR	28.7	-35.3	.21	32.77	54	-21.23	-	-	-	-	45	140	H
* 1.592	44.26	PK-U	27.9	-35.5	0	36.66	-	-	74	-37.34	-	-	88	166	V
* 1.595	32.93	ADR	27.9	-35.5	.21	25.54	54	-28.46	-	-	-	-	88	166	V
2.392	43.17	PK-U	32	-34	0	41.17	-	-	-	-	68.2	-27.03	135	202	V
10.382	34.66	PK-U	37.4	-23.2	0	48.86	-	-	-	-	68.2	-19.34	179	181	V
13.695	34.72	PK-U	38.7	-22.4	0	51.02	-	-	-	-	68.2	-17.18	115	179	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

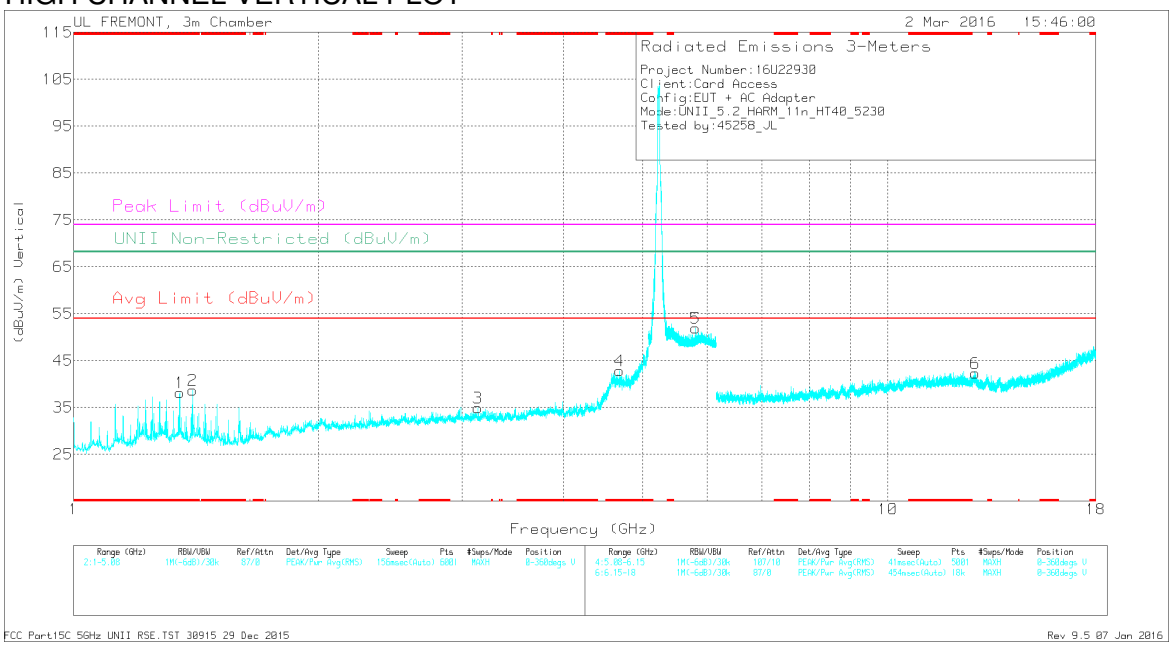
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.35	41.63	Pk	29.3	-32.8	0	38.13	-	-	74	-35.87	-	-	0-360	200	V
2	* 1.4	42.43	Pk	28.6	-32.3	0	38.73	-	-	74	-35.27	-	-	0-360	200	V
4	* 4.68	38.25	Pk	34	-29.4	0	42.85	-	-	74	-31.15	-	-	0-360	100	V
3	3.137	33.18	Pk	32.7	-30.9	0	34.98	-	-	-	-	68.2	-33.22	0-360	200	V
5	5.801	36.99	Pk	34.9	-19.9	0	51.99	-	-	-	-	68.2	-16.21	0-360	100	V
6	12.804	26.23	Pk	39.1	-23	0	42.33	-	-	-	-	68.2	-25.87	0-360	100	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.35	44.07	PK-U	29.3	-32.8	0	40.57	-	-	74	-33.43	-	-	70	103	V
* 1.35	36.7	ADR	29.3	-32.8	.21	33.41	54	-20.59	-	-	-	-	70	103	V
* 1.4	43.82	PK-U	28.6	-32.3	0	40.12	-	-	74	-33.88	-	-	61	105	V
* 1.4	37.06	ADR	28.6	-32.3	.21	33.57	54	-20.43	-	-	-	-	61	105	V
* 4.68	39.69	PK-U	34	-29.4	0	44.29	-	-	74	-29.71	-	-	173	280	V
* 4.68	28.81	ADR	34	-29.4	.21	33.62	54	-20.38	-	-	-	-	173	280	V
3.138	38.84	PK-U	32.7	-30.9	0	40.64	-	-	-	-	68.2	-27.56	128	224	V
5.802	41.33	PK-U	34.9	-19.9	0	56.33	-	-	-	-	68.2	-11.87	0	280	V
12.803	31.23	PK-U	39.1	-22.9	0	47.43	-	-	-	-	68.2	-20.77	21	310	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

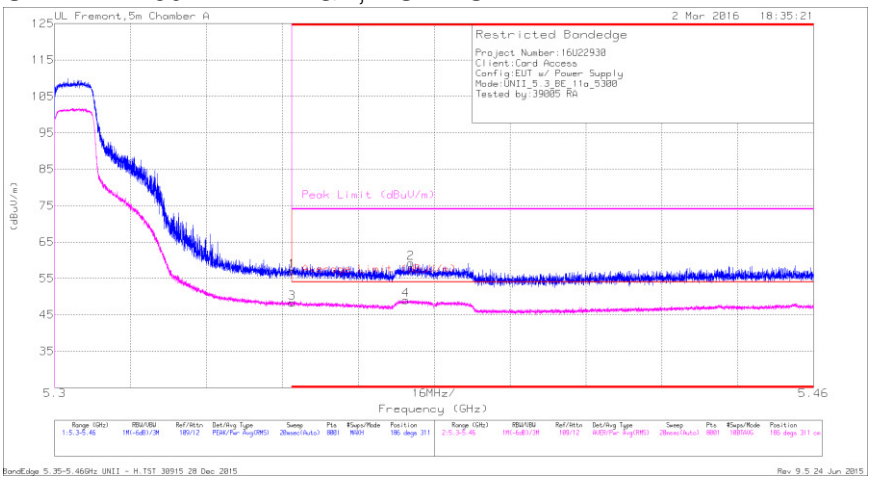
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.6. TX ABOVE 1 GHz 802.11a MODE IN THE 5.3 GHz BAND

AUTHORIZED BANDEDGE (CHANNEL 60)

CHANNEL 60 BANDEDGE, HORIZONTAL



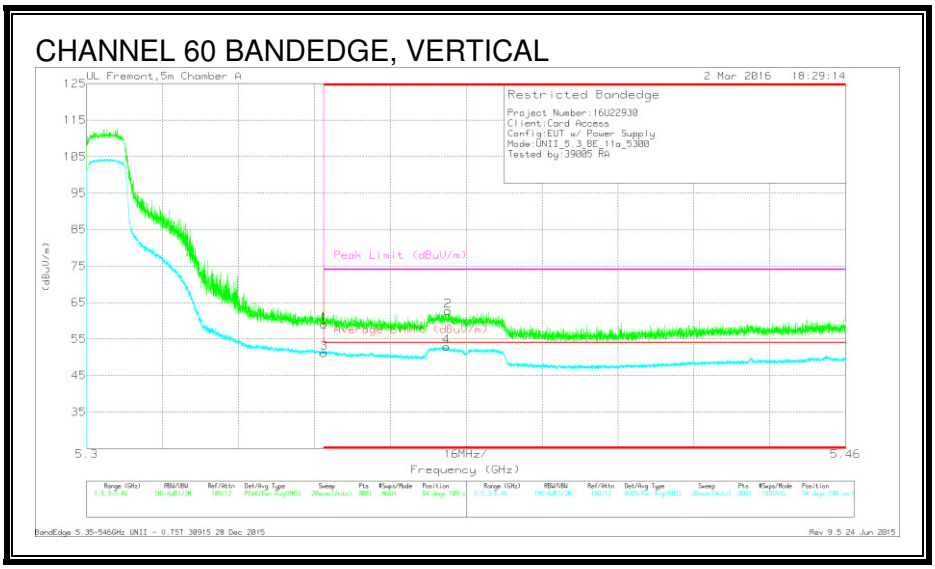
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	42.51	Pk	34.8	-20.3	0	57.01	-	-	74	-16.99	186	311	H
2	* 5.375	44.76	Pk	34.8	-20.3	0	59.26	-	-	74	-14.74	186	311	H
3	* 5.35	33.62	RMS	34.8	-20.3	.14	48.26	54	-5.74	-	-	186	311	H
4	* 5.374	34.43	RMS	34.8	-20.3	.14	49.07	54	-4.93	-	-	186	311	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection



Trace Markers

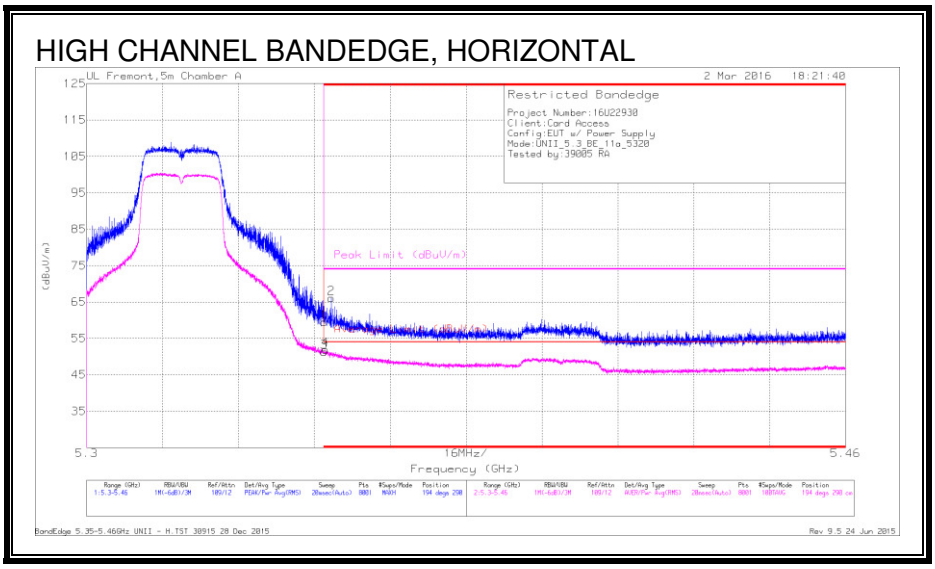
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	44.52	Pk	34.8	-20.3	0	59.02	-	-	74	-14.98	94	100	V
2	* 5.376	48.16	Pk	34.8	-20.3	0	62.66	-	-	74	-11.34	94	100	V
3	* 5.35	36.48	RMS	34.8	-20.3	.14	51.12	54	-2.88	-	-	94	100	V
4	* 5.376	38.23	RMS	34.8	-20.3	.14	52.87	54	-1.13	-	-	94	100	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)



Trace Markers

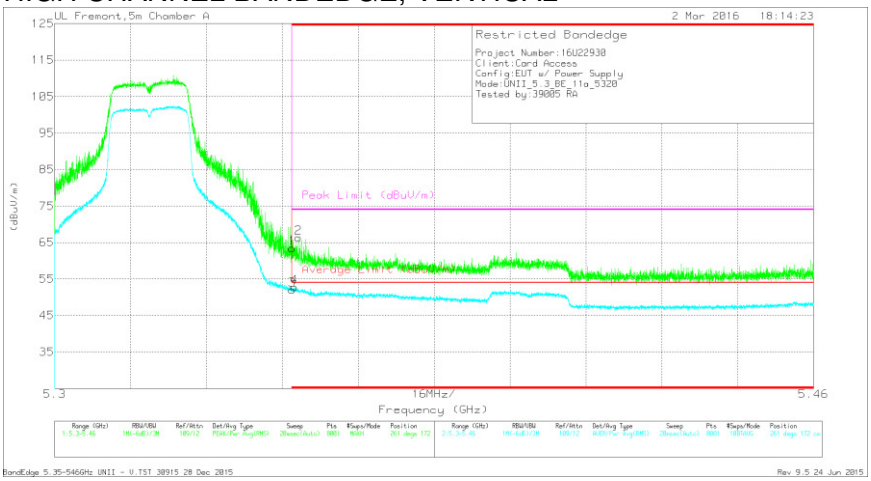
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	44.93	Pk	34.8	-20.3	0	59.43	-	-	74	-14.57	194	290	H
2	* 5.352	51.52	Pk	34.8	-20.3	0	66.02	-	-	74	-7.98	194	290	H
3	* 5.35	36.6	RMS	34.8	-20.3	.14	51.24	54	-2.76	-	-	194	290	H
4	* 5.35	37.22	RMS	34.8	-20.3	.14	51.86	54	-2.14	-	-	194	290	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

HIGH CHANNEL BANDEDGE, VERTICAL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	48.91	Pk	34.8	-20.3	0	63.41	-	-	74	-10.59	261	172	V
2	* 5.351	51.79	Pk	34.8	-20.3	0	66.29	-	-	74	-7.71	261	172	V
3	* 5.35	37.39	RMS	34.8	-20.3	.14	52.03	54	-1.97	-	-	261	172	V
4	* 5.351	38.13	RMS	34.8	-20.3	.14	52.77	54	-1.23	-	-	261	172	V

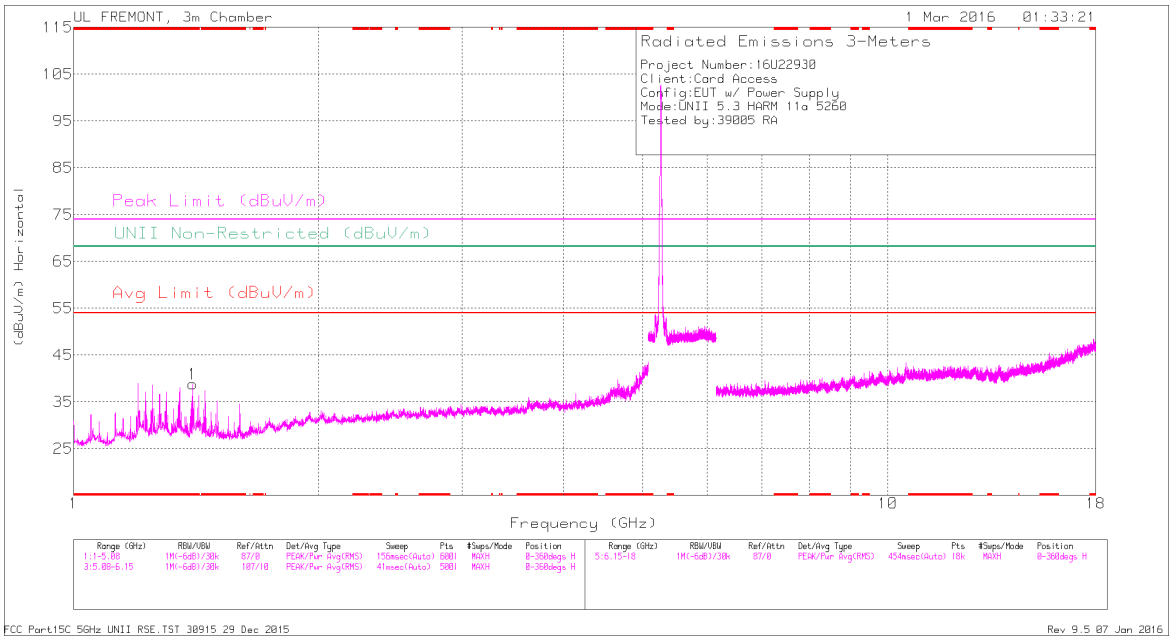
* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

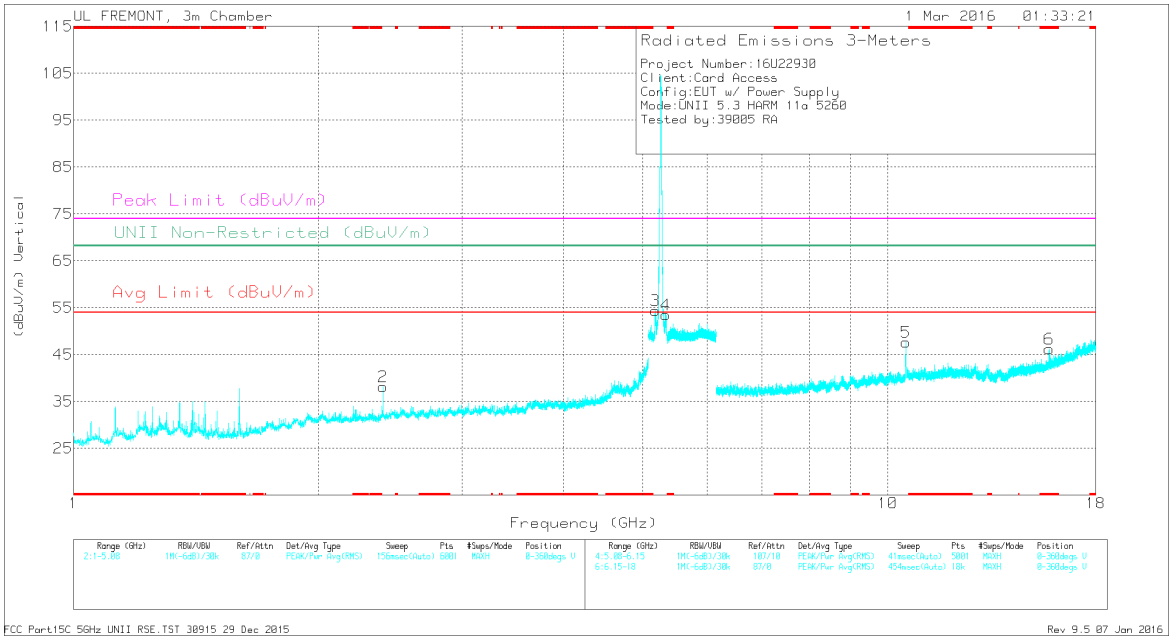
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.4	42.49	Pk	28.6	-32.3	0	38.79	-	-	74	-35.21	-	-	0-360	100	H
6	* 15.778	28.33	Pk	40.3	-22.4	0	46.23	-	-	74	-27.77	-	-	0-360	100	V
2	2.399	38.05	Pk	32	-31.9	0	38.15	-	-	-	-	68.2	-30.05	0-360	200	V
3	5.185	40.51	Pk	34.3	-20.4	0	54.41	-	-	-	-	68.2	-13.79	0-360	100	V
4	5.339	39.1	Pk	34.5	-20.1	0	53.5	-	-	-	-	68.2	-14.7	0-360	200	V
5	10.52	32.84	Pk	37.5	-22.7	0	47.64	-	-	-	-	68.2	-20.56	0-360	100	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

Radiated Emissions

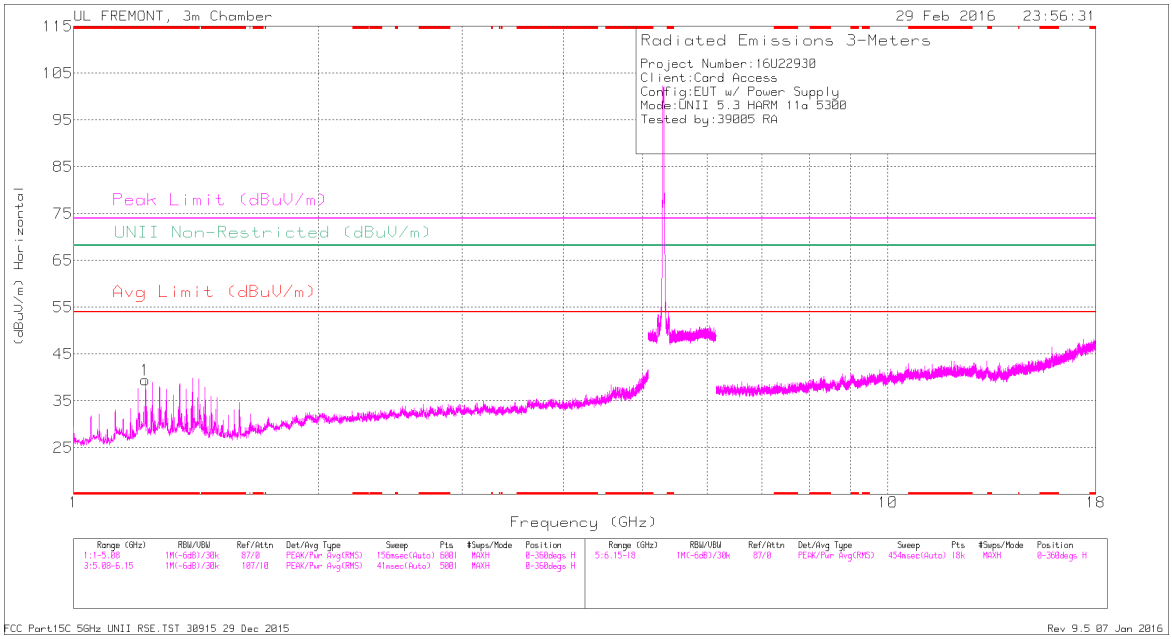
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.4	47.86	PK-U	28.6	-32.3	0	44.16	-	-	74	-29.84	-	-	93	292	H
* 1.4	42.57	ADR	28.6	-32.3	.14	39.01	54	-14.99	-	-	-	-	93	292	H
* 15.782	36.82	PK-U	40.3	-22.4	0	54.72	-	-	74	-19.28	-	-	179	102	V
* 15.783	24.38	ADR	40.3	-22.4	.14	42.42	54	-11.60	-	-	-	-	179	102	V
2.399	44.59	PK-U	32	-31.9	0	44.69	-	-	-	-	68.2	-23.51	38	266	V
5.186	49.36	PK-U	34.3	-20.4	0	63.26	-	-	-	-	68.2	-4.94	160	206	V
5.337	47.13	PK-U	34.5	-20.1	0	61.53	-	-	-	-	68.2	-6.67	153	200	V
10.518	39.75	PK-U	37.5	-22.7	0	54.55	-	-	-	-	68.2	-13.65	302	122	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

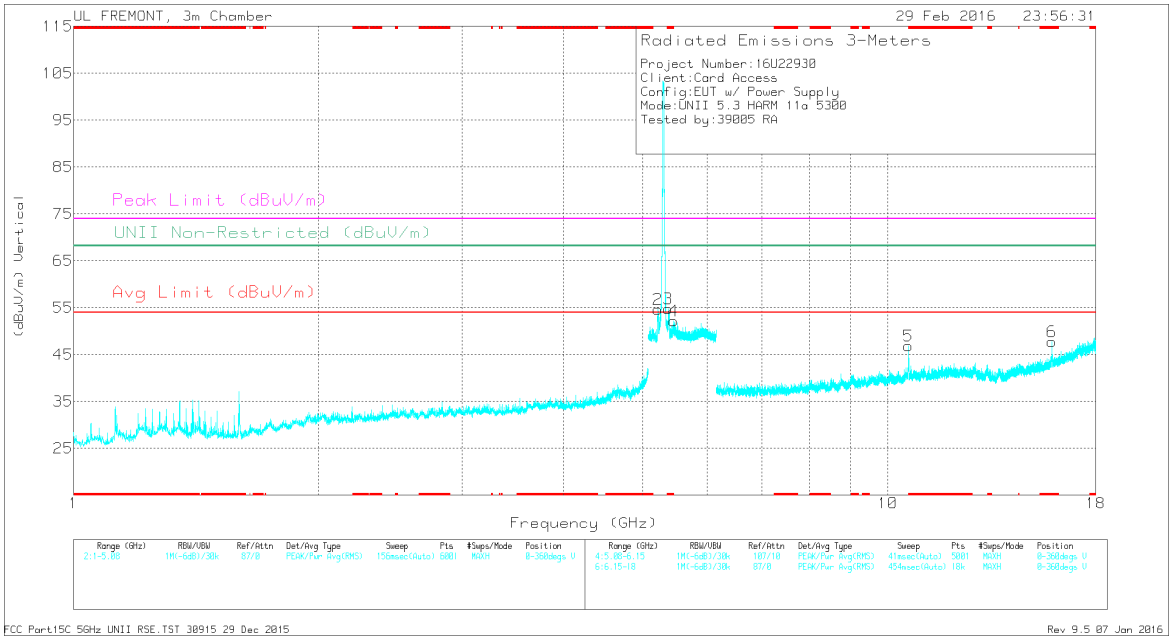
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.225	42.92	Pk	29.2	-32.6	0	39.52	-	-	74	-34.48	-	-	0-360	100	H
3	* 5.375	40.15	Pk	34.6	-20	0	54.75	-	-	74	-19.25	-	-	0-360	100	V
4	* 5.453	37.53	Pk	34.6	-19.9	0	52.23	-	-	74	-21.77	-	-	0-360	200	V
5	* 10.601	32.01	Pk	37.6	-22.8	0	46.81	-	-	74	-27.19	-	-	0-360	100	V
6	* 15.895	29.15	Pk	40.3	-21.7	0	47.75	-	-	74	-26.25	-	-	0-360	100	V
2	5.221	40.79	Pk	34.3	-20.4	0	54.69	-	-	-	-	68.2	-13.51	0-360	100	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

Radiated Emissions

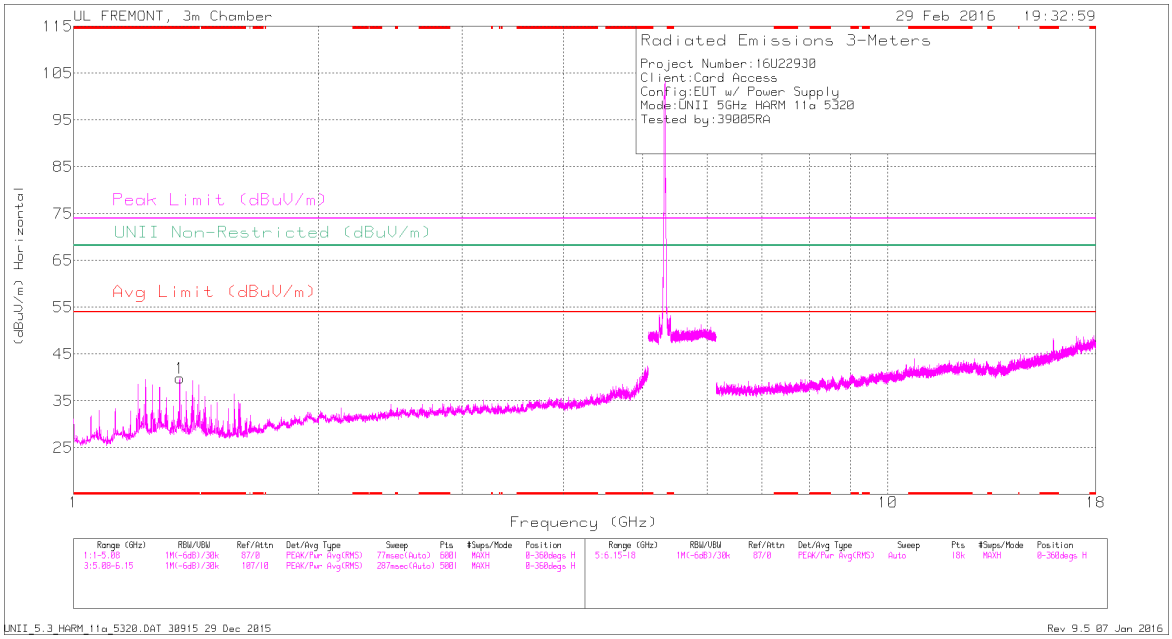
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.225	47.04	PK-U	29.2	-32.6	0	43.64	-	-	74	-30.36	-	-	111	104	H
* 1.225	41.97	ADR	29.2	-32.6	.14	38.71	54	-15.29	-	-	-	-	111	104	H
* 5.457	43.91	PK-U	34.6	-19.9	0	58.61	-	-	74	-15.39	-	-	199	200	V
* 5.456	32.41	ADR	34.6	-19.9	.14	47.25	54	-6.75	-	-	-	-	199	200	V
* 5.378	47.2	PK-U	34.6	-20	0	61.8	-	-	74	-12.2	-	-	166	183	V
* 5.377	36.25	ADR	34.6	-20	.14	50.99	54	-3.01	-	-	-	-	166	183	V
* 15.898	37.87	PK-U	40.3	-21.7	0	56.47	-	-	74	-17.53	-	-	338	102	V
* 15.899	25	ADR	40.3	-21.7	.14	43.74	54	-10.26	-	-	-	-	338	102	V
5.218	48.69	PK-U	34.3	-20.4	0	62.59	-	-	-	-	68.2	-5.61	173	100	V
*10.601	37.67	PK-U	37.6	-22.7	0	52.57	-	-	74	-21.43	-	-	3	297	V
*10.601	24.98	ADR	37.6	-22.7	.14	40.02	54	-13.98	-	-	-	-	3	297	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

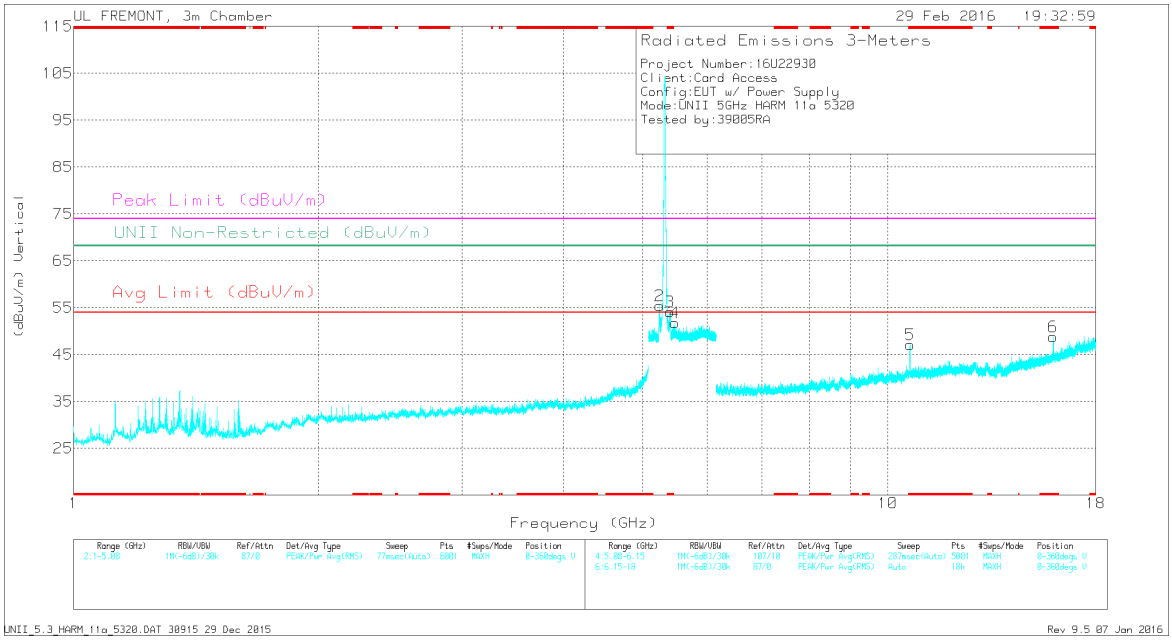
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.35	43.35	Pk	29.3	-32.8	0	39.85	-	-	74	-34.15	-	-	0-360	200	H
3	* 5.399	39.51	Pk	34.6	-20	0	54.11	-	-	74	-19.89	-	-	0-360	100	V
5	* 10.649	32.39	Pk	37.7	-23	0	47.09	-	-	74	-26.91	-	-	0-360	100	V
6	* 15.96	30.37	Pk	40.3	-21.8	0	48.87	-	-	74	-25.13	-	-	0-360	100	V
2	5.246	41.39	Pk	34.4	-20.4	0	55.39	-	-	-	-	68.2	-12.81	0-360	200	V
4	5.473	37.13	Pk	34.6	-19.9	0	51.83	-	-	-	-	68.2	-16.37	0-360	200	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.35	48.68	PK-U	29.3	-32.8	0	45.18	-	-	74	-28.82	-	-	101	316	H
* 1.35	43.32	ADR	29.3	-32.8	.14	39.96	54	-14.04	-	-	-	-	101	316	H
** 5.398	46.48	PK-U	34.6	-20	0	61.08	-	-	74	-12.92	-	-	159	202	V
** 5.398	35.15	ADR	34.6	-20	.14	49.89	54	-4.11	-	-	-	-	159	202	V
* 10.64	35.61	PK-U	37.7	-22.9	0	50.41	-	-	74	-23.59	-	-	312	197	V
* 10.641	23.52	ADR	37.7	-22.9	.14	38.46	54	-15.54	-	-	-	-	312	197	V
* 15.96	36.79	PK-U	40.3	-21.8	0	55.29	-	-	74	-18.71	-	-	328	314	V
* 15.96	24.37	ADR	40.3	-21.8	.14	43.01	54	-10.99	-	-	-	-	328	314	V
5.242	48.91	PK-U	34.4	-20.4	0	62.91	-	-	-	-	68.2	-5.29	149	200	V
5.473	44.45	PK-U	34.6	-19.9	0	59.15	-	-	-	-	68.2	-9.05	168	221	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

** - indicates frequency covered by Bandedge

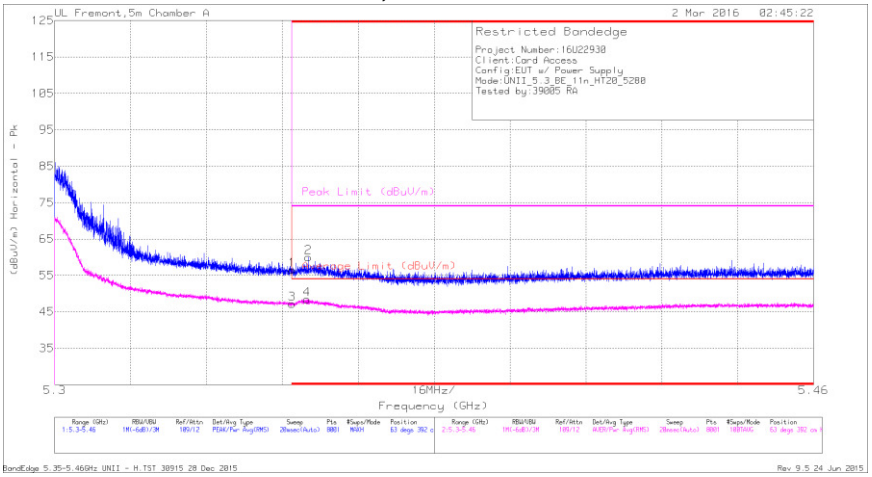
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.7. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.3 GHz BAND

RESTRICTED BANDEDGE (CHANNEL 56)

CHANNEL 56 RESTRICTED, HORIZONTAL



Trace Markers

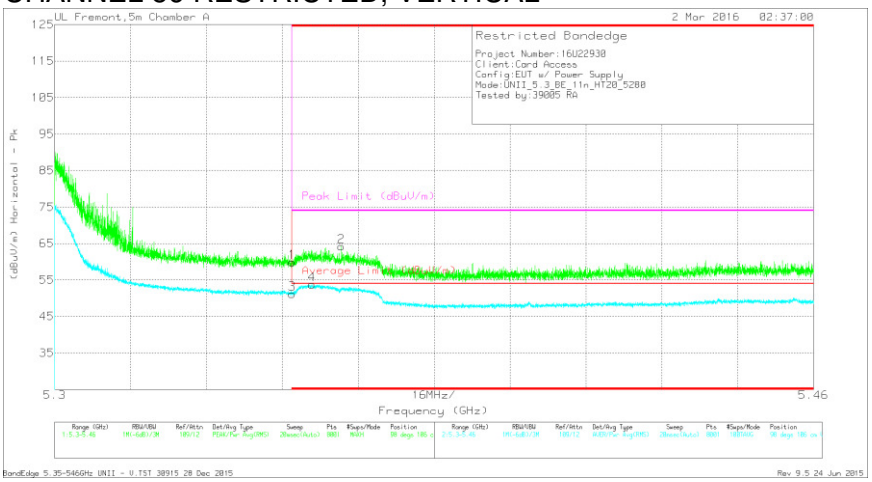
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	42.16	Pk	34.6	-20.3	0	56.46	-	-	74	-17.54	63	392	H
3	* 5.35	32.79	RMS	34.6	-20.3	.15	47.24	54	-6.76	-	-	63	392	H
4	* 5.353	33.93	RMS	34.6	-20.3	.15	48.38	54	-5.62	-	-	63	392	H
2	* 5.354	45.62	Pk	34.6	-20.3	0	59.92	-	-	74	-14.08	63	392	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

CHANNEL 56 RESTRICTED, VERTICAL



Trace Markers

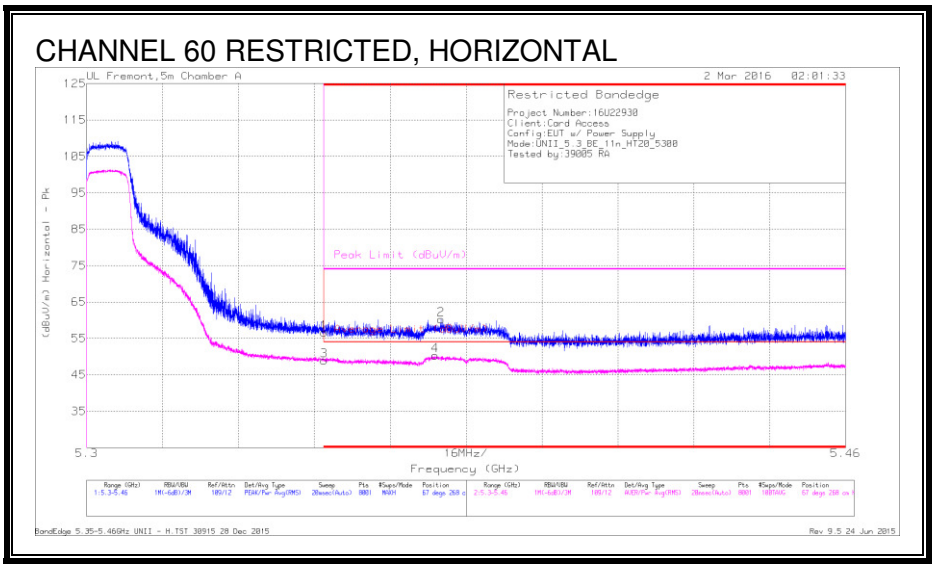
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	45.61	Pk	34.6	-20.3	0	59.91	-	-	74	-14.09	98	106	V
3	* 5.35	36.77	RMS	34.6	-20.3	.15	51.22	54	-2.78	-	-	98	106	V
4	* 5.354	39.31	RMS	34.6	-20.3	.15	53.76	54	-.24	-	-	98	106	V
2	* 5.36	49.86	Pk	34.6	-20.3	0	64.16	-	-	74	-9.84	98	106	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

RESTRICTED BANDEDGE (CHANNEL 60)



Trace Markers

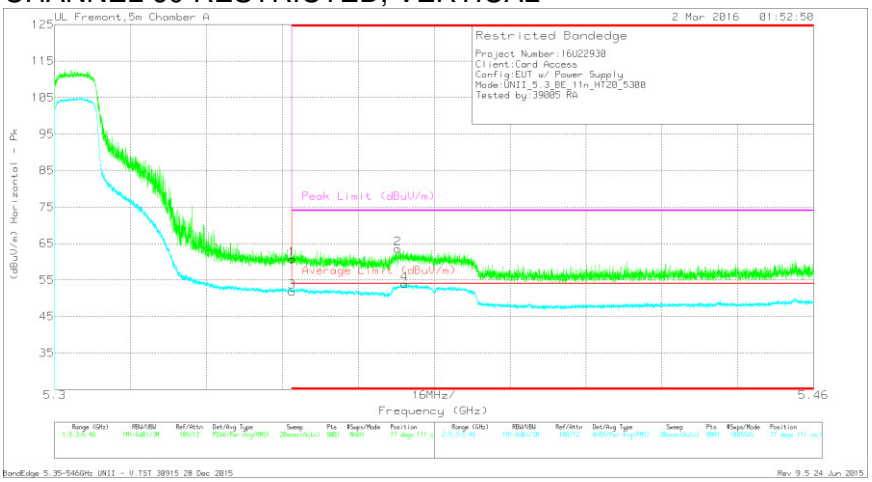
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	42.27	Pk	34.6	-20.3	0	56.57	-	-	74	-17.43	67	268	H
3	* 5.35	34.52	RMS	34.6	-20.3	.15	48.97	54	-5.03	-	-	67	268	H
4	* 5.373	35.9	RMS	34.6	-20.3	.15	50.35	54	-3.65	-	-	67	268	H
2	* 5.375	45.9	Pk	34.6	-20.3	0	60.2	-	-	74	-13.8	67	268	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

CHANNEL 60 RESTRICTED, VERTICAL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	46.42	Pk	34.6	-20.3	0	60.72	-	-	74	-13.28	77	111	V
3	* 5.35	37.38	RMS	34.6	-20.3	.15	51.83	54	-2.17	-	-	77	111	V
2	* 5.372	49.22	Pk	34.6	-20.3	0	63.52	-	-	74	-10.48	77	111	V
4	* 5.374	39.41	RMS	34.6	-20.3	.15	53.86	54	-.14	-	-	77	111	V

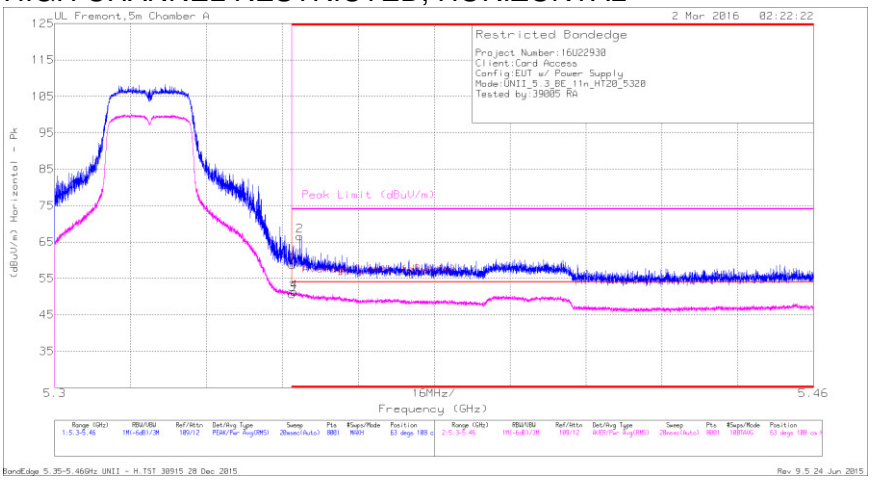
* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

RESTRICTED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL RESTRICTED, HORIZONTAL



Trace Markers

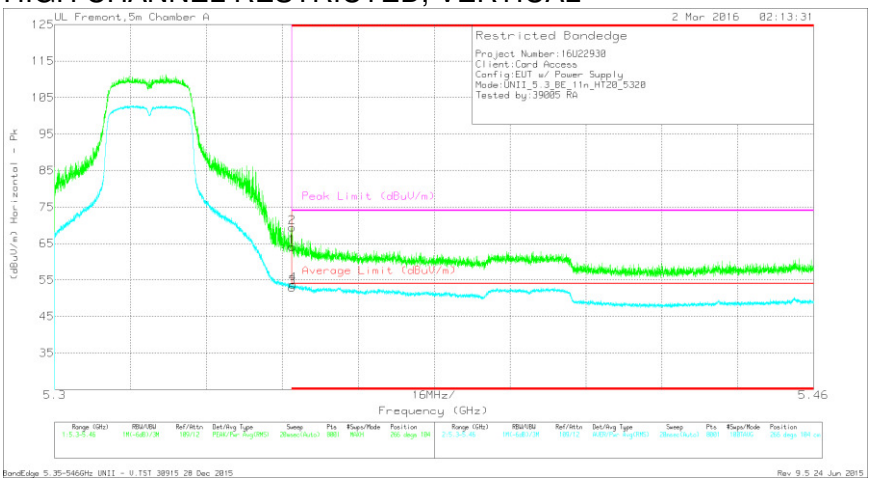
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	44.41	Pk	34.6	-20.3	0	58.71	-	-	74	-15.29	63	108	H
3	* 5.35	36.17	RMS	34.6	-20.3	.15	50.62	54	-3.38	-	-	63	108	H
4	* 5.351	36.78	RMS	34.6	-20.3	.15	51.23	54	-2.77	-	-	63	108	H
2	* 5.352	52.32	Pk	34.6	-20.3	0	66.62	-	-	74	-7.38	63	108	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

HIGH CHANNEL RESTRICTED, VERTICAL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	49.77	Pk	34.6	-20.3	0	64.07	-	-	74	-9.93	266	104	V
2	* 5.35	55.07	Pk	34.6	-20.3	0	69.37	-	-	74	-4.63	266	104	V
3	* 5.35	38.46	RMS	34.6	-20.3	.15	52.91	54	-1.09	-	-	266	104	V
4	* 5.35	39.3	RMS	34.6	-20.3	.15	53.75	54	-.25	-	-	266	104	V

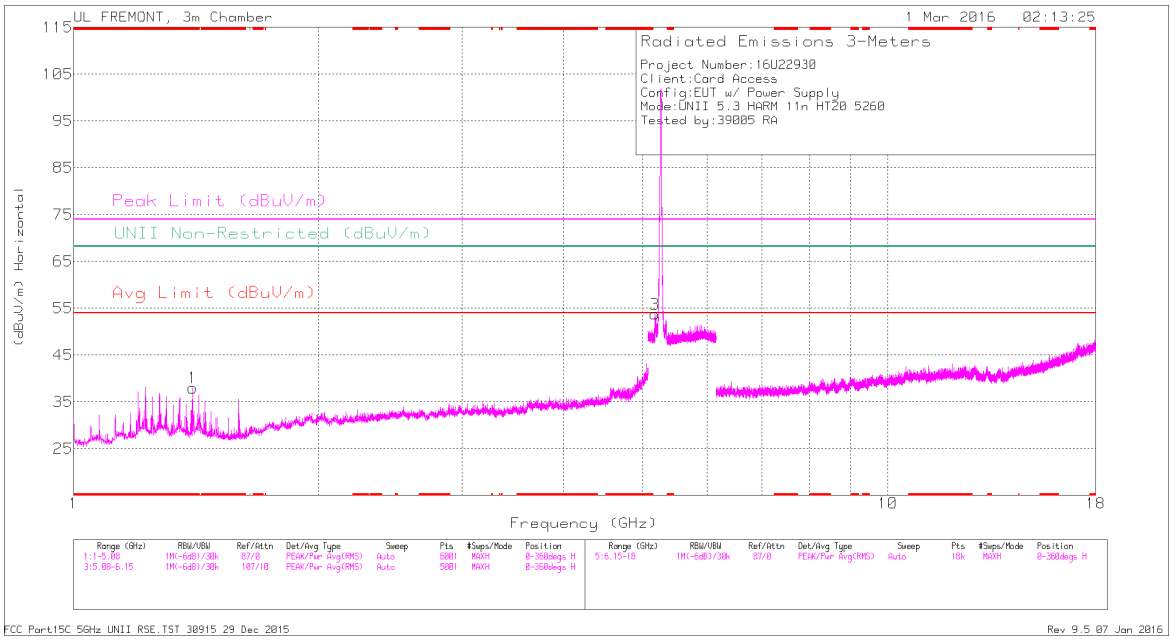
* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band

Pk - Peak detector

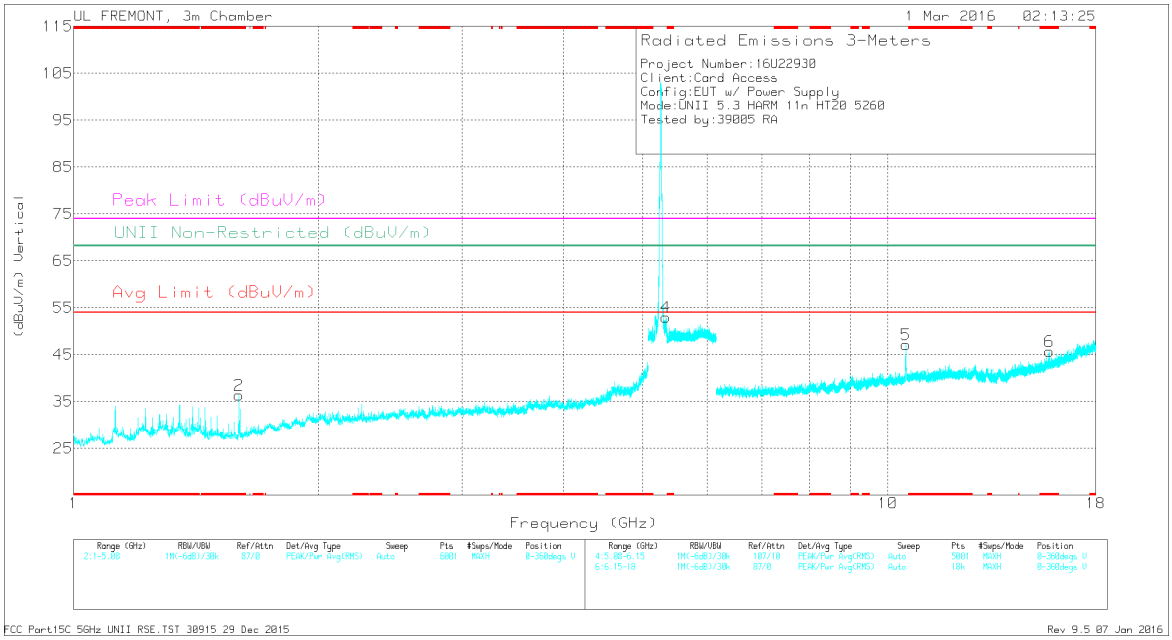
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.