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

2/18/2025

HP Inc.
1501 Old Page Mill Rd.
Palo Alto, CA 94304-1126
USA

Dear Samah Othman,

Enclosed is the EMC Wireless test report for compliance testing of the HP Inc. Model PATX-STX-32R as tested to the requirements of FCC 15.407 and RSS-247 Issue 3 for Intentional Radiators.

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

Sincerely yours,
EUROFINS MET LABS

Nancy LaBrecque
Documentation Department

Reference: WIRA133332 – FCC407_RSS247 5GHz WiFi_R2

5GHz UNII Band WiFi Test Report
for the

HP Inc.
PATX-STX-32R

Tested under
FCC 15.407 and RSS-247 Issue 3
For Intentional Radiators

Bryan Taylor, Wireless Team Lead
Electromagnetic Compatibility Lab

Nancy LaBrecque
Documentation Department

Engineering Statement: The measurements shown in this report were made in accordance with the procedures indicated, and the emissions from this equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them. It is further stated that upon the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements of the FCC Rules Part 15.247 under normal use and maintenance.

Matthew Hinojosa
EMC Manager, Austin Electromagnetic Compatibility Lab

Report Status Sheet

Revision	Report Date	Reason for Revision
∅	11/8/2024	Initial Issue.
1	1/21/2025	Reviewer comments
2	2/18/2025	Fixed Typos

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List of Terms and Abbreviations

AC	**A**lternating **C**urrent
ACF	**A**ntenna **C**orrection **F**actor
Cal	**Cal**ibration
d	**M**easurement **D**istance
dB	**D**eci**b**els
dBµA	**D**eci**b**els above one **micro**amp
dBµV	**D**eci**b**els above one **micro**volt
dBµA/m	**D**eci**b**els above one **micro**amp **per m**eter
dBµV/m	**D**eci**b**els above one **micro**volt **per m**eter
DC	**D**irect **C**urrent
E	**E**lectric Field
DSL	**D**igital **S**ubscriber **L**ine
ESD	**E**lectro**s**tatic **D**ischarge
EUT	**E**quipment **U**nder **T**est
f	**F**requency
FCC	**F**ederal **C**ommunications **C**ommission
GRP	**G**round **R**eference **P**lane
H	Magnetic Field
HCP	**H**orizontal **C**oupling **P**lane
Hz	**H**er**z**
IEC	**I**nternational **E**lectrotechnical **C**ommission
kHz	**K**ilo**h**er**z**
kPa	**K**ilo**pa**scal
kV	**K**ilo**v**olt
LISN	**L**ine **I**mpedance **S**tabilization **N**etwork
MHz	**M**ega**h**ertz
µH	**Micro**henry
µ	**Micro**farad
µs	**Micros**econds
PRF	**P**ulse **R**epetition **F**requency
RF	**R**adio **F**requency
RMS	**R**oot-**M**ean-**S**quare
TWT	**T**raveling **W**ave **T**ube
V/m	**V**olts **per m**eter
VCP	**V**ertical **C**oupling **P**lane

I. Executive Summary

A. Purpose of Test

An EMC evaluation was performed to determine compliance of the HP Inc. Model PATX-STX-32R, with the requirements of FCC 15.407 and RSS-247 Issue 3. HP Inc. should retain a copy of this document which should be kept on file for at least two years after the manufacturing of the Model PATX-STX-32R, has been **permanently** discontinued.

B. Executive Summary

The following tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with FCC 15.407 and RSS-247 Issue 3, in accordance with HP Inc. purchase order number 9100374440. All tests were conducted using measurement procedures ANSI C63.4-2014 and ANSI C63.10-2013.

FCC Reference	Description	Results
§15.203	Antenna Requirement	Compliant
§15.407(b)(9)	Conducted Emission Limits	Compliant
§15.403(i)	26dB Occupied Bandwidth	Compliant
§15.407 (a)	Maximum Conducted Output Power	Compliant
§15.407 (a)	Maximum Power Spectral Density	Compliant
§15.407 (b)	Undesirable Emissions	Compliant
§15.407(g)	Frequency Stability	Compliant

Table 1. Executive Summary of FCC Part 15.407 ComplianceTesting

ISED Reference	Description	Results
RSS-Gen (8.7)	Conducted Emission Limits	Compliant
RSS-Gen (6.7)	99% Occupied Bandwidth	Compliant
RSS-247 (6.2)	26dB Occupied Bandwidth	Compliant
RSS-247 (6.2)	Maximum Conducted Output Power	Compliant
RSS-247 (6.2)	Effective Isotropic Radiated Power	Compliant
RSS-247 (6.2)	Maximum Power Spectral Density	Compliant
RSS-247 (6.2)	EIRP Spectral Density	Compliant
RSS-247 (6.2)	Undesirable Emissions	Compliant
RSS-247 (6.2)	Transmissions in the 5600 – 5650MHz Band	Compliant
RSS-247 (6.2)	Frequency Stability	Compliant

Table 2. Executive Summary of ISED ComplianceTesting

II. Equipment Configuration

A. Overview

Eurofins MET Labs was contracted by HP Inc. to perform testing on the Model PATX-STX-32R, under HP Inc.'s purchase order number 9100374440.

This document describes the test setups, test methods, required test equipment, and the test limit criteria used to perform compliance testing of the HP Inc. Model PATX-STX-32R.

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

Product Marketing Name Tested:	Poly Studio X32	
Product Marketing Name Included by Similarity:	Poly Studio V32 (Note: this is a software depopulated version of the Poly Studio X32)	
Model Number Tested:	PATX-STX-32R	
FCCID:	M72-STX32R	
ICID:	1849C-STX32R	
EUT Specifications:	Primary Power: 100 – 230VAC	
	Frequency Range: 50Hz / 60Hz	
	Type of Modulations:	OFDM
	Equipment Code:	NII
	Antenna Gain[1]:	3.73dBi (Antenna Path 1) 3.83dBi (Antenna Path 2) Directional Gain = $10\log[(10^{3.73/20} + 10^{3.83/20})^2 / 2] = 6.79$dBi Note: the array gain was calculated per KDB 662911 D01 Section F.2.d.(i) for correlated signals with unequal antenna gains.
	EUT Frequency Ranges:	U-NII-1: 5150 – 5250 MHz
		U-NII-2A: 5250 – 5350 MHz
		U-NII-2C: 5470 – 5725 MHz
		U-NII-3: 5725 – 5850 MHz
	Maximum Conducted Output Power:	U-NII-1: 14.45dBm
		U-NII-2A: 14.99dBm
		U-NII-2C: 16.41dBm
		U-NII-3: 14.46dBm
Analysis:	The results obtained relate only to the item(s) tested.	
Environmental Test Conditions:	Temperature: 15-35° C	
	Relative Humidity: 30-60%	
	Barometric Pressure: 860-1060 mbar	
Type of Filing:	Original	
Evaluated by:	Bryan Taylor	
Report Date(s):	2/18/2025	

Figure 1. EUT Summary Table

[1] The antenna gain information was provided by HP Inc. at the time of testing.

Description	Model Number	Part Number	Serial Number	Rev #
POE injector Delta	ADH-65AR F	N.A.	MEQD4710028	N.A.
Poly Studio X32 (conducted radio system)	PATX-STX-32R	2201-88325-001	8Y243585D826G1	N.A.
Poly Studio X32 (Radiated radio system)	PATX-STX-32R	2201-88325-001	8Y243585D826G1	N.A.

Figure 2. EUT List

B. References

CFR 47, Part 15, Subpart E	Unlicensed National Information Infrastructure Devices (UNII)
RSS-247: Issue 3	Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices
RSS-Gen: Issue 5	General Requirements for Compliance of Radio Apparatus
ANSI C63.4:2014	Methods and Measurements of Radio-Noise Emissions from Low-Voltage Electrical And Electronic Equipment in the Range of 9 kHz to 40 GHz
ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices
ISO/IEC 17025:2005	General Requirements for the Competence of Testing and Calibration Laboratories
ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices
789033 D02 General UNII Test Procedures New Rules v02	Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E

Table 3. References

C. Test Site

All testing was performed at Eurofins MET Labs, Inc., 13501 McCallen Pass, Austin TX 78753. All equipment used in making physical determinations is accurate and bears recent traceability to the National Institute of Standards and Technology.

Radiated Emissions measurements were performed in a 10 meter semi-anechoic chamber (equivalent to an Open Area Test Site). In accordance with §2.948(a)(3), a complete site description is contained at Eurofins MET Labs.

ISED Lab Info:
CAB Identifier: US0004
Company Number: 2043D

FCC Lab Info:
Designation Number: US1127

D. Measurement Uncertainty

E. Test Method	F. Typical Expanded Uncertainty	G. K	H. Confidence Level
Occupied Bandwidth Measurements	±4.52 Hz	2	95%
Conducted Power Measurements	±2.74 dB	2	95%
Power Spectral Density Measurements	±2.74 dB	2	95%
Conducted Spurious Emissions	±2.80 dB	2	95%
Conducted Emissions (Mains)	±2.97 dB	2	95%
Radiated Spurious Emissions (9kHz – 1GHz)	±2.95 dB	2	95%
Radiated Spurious Emissions (1GHz - 40GHz)	±3.54 dB	2	95%

Table 4. Uncertainty Calculations Summary

I. Description of Test Sample

The HP Inc. model PATX-STX-32R (marketed as Poly Studio X32), is a video conferencing bar designed to act as a Video endpoint over LAN network. The device is powered by either direct POE from the local network OR via a supplied POE Midspan injector. The top-level model the PATX-STX-32R contains 2.4GHz / 5GHz Wi-Fi (6) and Bluetooth radio interfaces.

Figure 3. Block Diagram of Test Configuration

J. Equipment Configuration

The EUT was set up as outlined in Figure 3. The laptop computer was used to send test commands to force the transmitters to operate in the appropriate test mode.

K. Support Equipment

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

Name/Description	Manufacturer	Model Number	Customer Supplied Calibration Data
4k Monitors	hp	1B9T0AA	N/A
4k Monitors	hp	1B9T0AA	N/A
4KMonitor	LG	24UD58-B	N/A
BT Remote	Poly/ Remotec	BW7640UN	N/A
USB keyboard	hp	KU-0316	N/A
USB mouse	hp	672652-001	N/A
Laptop for content and pings	Dell	XPS 14	N/A
Router Cisco gigabit router	Cisco	RN042G	N/A
WIFI access point Cisco AIR Lap	Cisco	1142N-A-K9	N/A
Poly Studio X30	Poly	P018	N/A

Table 5. Support Equipment

L. Ports and Cabling Information

Port Name on EUT	Cable Description or reason for no cable	Qty	Length as tested (m)	Max Length (m)	Shielded? (Y/N)	Termination Box ID & Port Name
HDMI cable	HDMI		6FT		Yes	4k Monitor
LAN cable	Cat 6				Yes	To POE Injector
HDMI cables	HDMI		6FT		No	4k Monitor
HDMI cables	HDMI		6FT		No	Laptop

Table 6. Ports and Cabling Information

M. Mode of Operation

The support laptop provided a direct means of controlling transmitter parameters. Unless otherwise stated or shown, all tests were performed at worst-case modulation and data rates on the following channels.

Transmit Band	Operating Mode	Worst Case Transmission Bandwidth	Channel Numbers Tested	Channel Frequencies Tested	Test Tool Power Setting
U-NII-1	802.11a	20MHz	36 / 40 / 48	5180MHz / 5200MHz / 5240MHz	10.5dBm
	802.11n	20MHz	36 / 40 / 48	5180MHz / 5200MHz / 5240MHz	10.5dBm
	802.11n (40)	40MHz	38 / 46	5190MHz / 5230MHz	10.5dBm
	802.11ac	80MHz	42	5210MHz	10.5dBm
	802.11ax	80MHz	42	5210MHz	10.5dBm
U-NII-2A	802.11a	20MHz	52 / 56 / 64	5260MHz / 5280MHz / 5320MHz	10.5dBm
	802.11n	20MHz	52 / 56 / 64	5260MHz / 5280MHz / 5320MHz	10.5dBm
	802.11n (40)	40MHz	54 / 62	5270MHz / 5310MHz	10.5dBm
	802.11ac	80MHz	58	5290MHz	10.5dBm
	802.11ax	80MHz	58	5290MHz	10.5dBm
U-NII-2A	802.11a	20MHz	100 / 120 / 144	5500MHz / 5600MHz / 5720MHz	10.5dBm
	802.11n	20MHz	100 / 120 / 144	5500MHz / 5600MHz / 5720MHz	10.5dBm
	802.11n (40)	40MHz	102 / 118 / 142	5510MHz / 5590MHz / 5710MHz	10.5dBm
	802.11ac	80MHz	106 / 122 / 138	5230MHz / 5610MHz / 5690MHz	10.5dBm
	802.11ax	80MHz	106 / 122 / 138	5230MHz / 5610MHz / 5690MHz	10.5dBm
U-NII-3	802.11a	20MHz	149 / 157 / 165	5745MHz / 5785MHz / 5825MHz	10.5dBm
	802.11n	20MHz	149 / 157 / 165	5745MHz / 5785MHz / 5825MHz	10.5dBm
	802.11n (40)	40MHz	151 / 159	5755MHz / 5780MHz	10.5dBm
	802.11ac	80MHz	155	5775MHz	10.5dBm
	802.11ax	80MHz	155	5775MHz	10.5dBm
Test Tool Name: WiFI_BT_DEBUG TOOL_v0.0.1.6					

Table 7. Test Channels Utilized

N. Method of Monitoring EUT Operation

A spectrum analyzer was used to confirm proper transmitter operation.

O. Modifications

a) Modifications to EUT

No modifications were made to the EUT.

b) Modifications to Test Standard

No modifications were made to the test standard.

P. Disposition of EUT

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

III. Electromagnetic Compatibility Criteria for Intentional Radiators

Electromagnetic Compatibility Criteria for Intentional Radiators

§ 15.203 Antenna Requirement

Test Requirement: **§ 15.203:** An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

The structure and application of the EUT were analyzed to determine compliance with Section 15.203 of the Rules. Section 15.203 states that the subject device must meet at least one of the following criteria:

a.) Antenna must be permanently attached to the unit.

b.) Antenna must use a unique type of connector to attach to the EUT.

c.) Unit must be professionally installed. Installer shall be responsible for verifying that the correct antenna is employed with the unit.

Results: The EUT as tested is compliant the criteria of §15.203. The antenna is not accessible by the end user.

Test Engineer(s): Bryan Taylor

Test Date(s): 9/24/2024

Electromagnetic Compatibility Criteria for Intentional Radiators

§ 15.407(b)(6) Conducted Emissions

Test Requirement(s): **§ 15.407 (b)(6):** Any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.

§ 15.207 (a): For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30MHz, shall not exceed the limits in the following table, as measured using a 50 μH/50 Ω line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency range (MHz)	§ 15.207(a), Conducted Limit (dBμV)	
	Quasi-Peak	Average
0.15- 0.5	66 – 56	56 - 46
0.5 - 5	56	46
5 - 30	60	50

Table 8. Conducted Limits for Intentional Radiators from FCC Part 15 § 15.207(a)

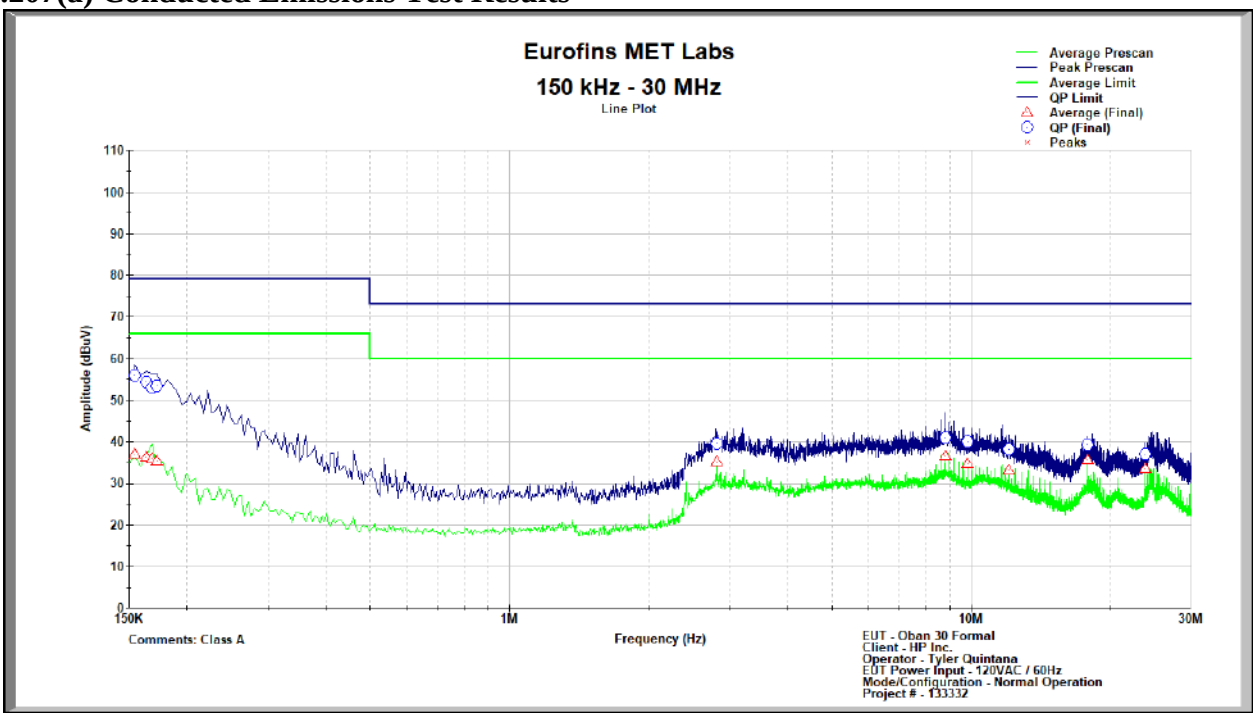
Test Procedure: The EUT was placed on a non-metallic table above a ground plane. The EUT was situated such that the back of the EUT was 0.4 m from one wall of the vertical ground plane, and the remaining sides of the EUT were no closer than 0.8 m from any other conductive surface. The EUT was powered from a 50 Ω/50 μH Line Impedance Stabilization Network (LISN). The EMC receiver scanned the frequency range from 150 kHz to 30 MHz. Conducted Emissions measurements were made in accordance with *ANSI C63.4-2014 "Methods and Measurements of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9kHz to 40 GHz"*. Scans were performed with the transmitter on.

Test Results: The EUT was compliant with requirements of this section.

Test Engineer(s): Tyler Quintana

Test Date(s): 9/17/2024

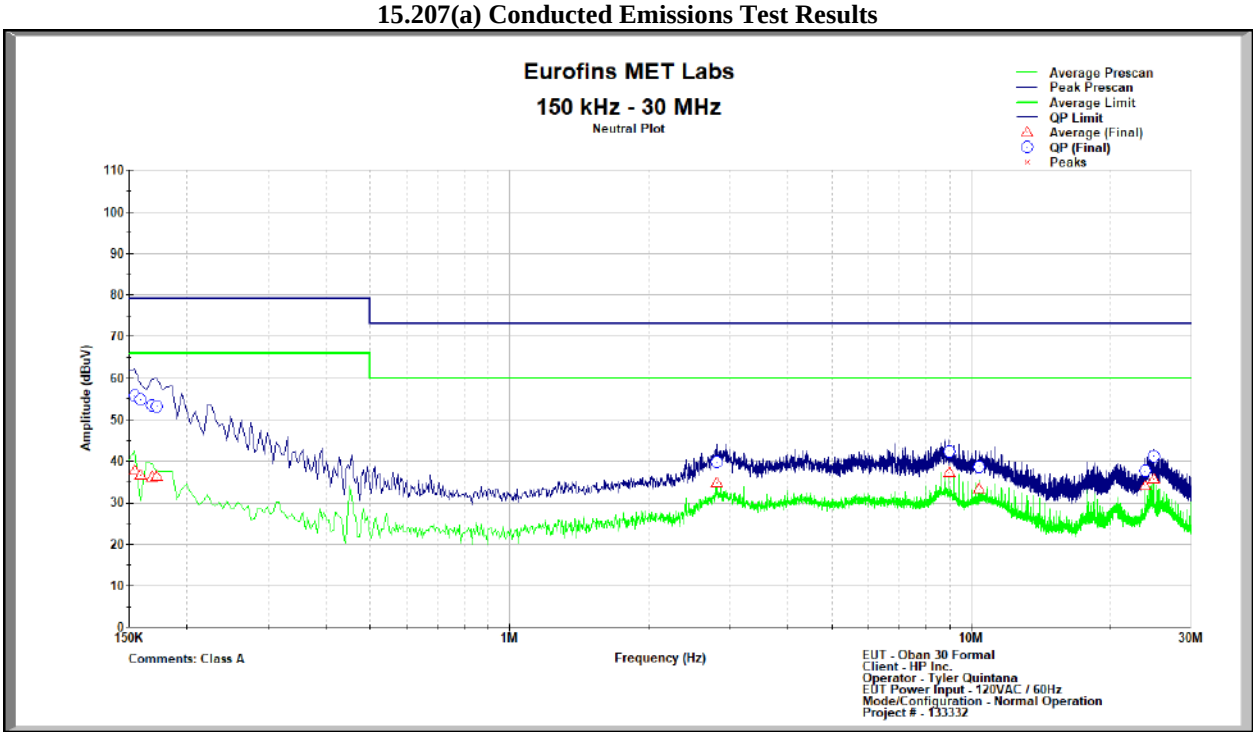
15.207(a) Conducted Emissions Test Results



Frequency (MHz)	Quasi-Peak (dBµV/m)	Quasi-Peak Limit (dBµV/m)	Quasi-Peak Margin (dB)	Average (dBµV/m)	Average Limit (dBµV/m)	Average Margin (dB)
0.154	55.882	79.000	23.118	37.082	66.000	28.918
0.164	54.373	79.000	24.627	36.371	66.000	29.629
0.168	53.000	79.000	26.000	35.822	66.000	30.178
0.172	53.499	79.000	25.501	35.482	66.000	30.518
2.814	39.605	73.000	33.395	35.160	60.000	24.840
8.789	41.051	73.000	31.949	36.520	60.000	23.480
9.807	39.931	73.000	33.069	34.648	60.000	25.352
12.057	38.242	73.000	34.758	33.017	60.000	26.983
17.896	39.289	73.000	33.711	35.630	60.000	24.370
23.862	37.069	73.000	35.931	33.594	60.000	26.406

Figure 4. Conducted Emissions, 15.207(a), Phase, Test Results

15.207(a) Conducted Emissions Test Results



Frequency (MHz)	Quasi-Peak (dBµV/m)	Quasi-Peak Limit (dBµV/m)	Quasi-Peak Margin (dB)	Average (dBµV/m)	Average Limit (dBµV/m)	Average Margin (dB)
0.154	55.859	79.000	23.141	37.693	66.000	28.307
0.159	54.899	79.000	24.101	36.603	66.000	29.397
0.168	53.356	79.000	25.644	36.136	66.000	29.864
0.172	53.130	79.000	25.870	36.225	66.000	29.775
2.814	39.791	73.000	33.209	34.691	60.000	25.309
8.991	42.292	73.000	30.708	37.220	60.000	22.780
10.424	38.655	73.000	34.345	33.278	60.000	26.722
23.862	37.620	73.000	35.380	33.973	60.000	26.027
24.930	41.299	73.000	31.701	35.624	60.000	24.376

Figure 5. Conducted Emissions, 15.207(a), Neutral, Test Results

Electromagnetic Compatibility Criteria for Intentional Radiators

§ 15. 407 26dB Bandwidth

Test Requirements: For purposes of this subpart the emission bandwidth shall be determined by measuring the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, that are 26 dB down relative to the maximum level of the modulated carrier. Determination of the emissions bandwidth is based on the use of measurement instrumentation employing a peak detector function with an instrument resolution bandwidth approximately equal to 1.0 percent of the emission bandwidth of the device under measurement.

Test Procedure: The transmitter was set to low, mid, and high operating frequencies at the highest output power and connected to the spectrum analyzer. The bandwidth of the fundamental frequency was measured with the spectrum analyzer using a RBW approximately equal to 1% of the total emission bandwidth, VBW > RBW. The 26 dB Bandwidth was measured and recorded.

Test Results The 26 dB Bandwidth was compliant with the requirements of this section. The worst-case tabular data for each UNII band is shown below. Due to the large number of individual plots for each measurement, they are contained in a separate appendix.

Test Engineer(s): Bryan Taylor

Test Date(s): 9/20/2024

U-NII SubBand 1 and 2A OBW	Port 1 (-26dB) (MHz)	Port 1 (99%) (MHz)	Port 2 (-26dB) (MHz)	Port 2 (99%) (MHz)
U-NII-1_5180MHz_Low Ch_36_20MHz BW_a-mode	19.354	16.632	19.465	16.596
U-NII-1_5200MHz_ mid Ch_40_20MHz BW_a-mode	19.336	16.617	19.329	16.663
U-NII-1_5240MHz_high Ch_48_20MHz BW_a-mode	19.141	16.589	19.477	16.579
U-NII-1_5180MHz_Low Ch_36_20MHz BW_n-mode	20.208	17.715	20.215	17.658
U-NII-1_5200MHz_ mid Ch_40_20MHz BW_n-mode	19.996	17.800	20.172	17.741
U-NII-1_5240MHz_high Ch_48_20MHz BW_n-mode	20.579	17.669	20.088	17.675
U-NII-1_5190MHz_Low Ch_38_40MHz BW_n-mode	40.018	36.197	40.134	36.099
U-NII-1_5230MHz_high Ch_46_40MHz BW_n-mode	40.176	36.231	40.385	36.352
U-NII-1_5210MHz_ mid Ch_42_80MHz BW_ac-mode	82.807	75.700	83.282	75.754
U-NII-1_5210MHz_mid Ch_42_80MHz BW_ax-mode	84.377	77.457	83.997	77.484
U-NII-2A_5260MHz_low Ch_52_20MHz BW_a-mode	19.246	16.633	19.522	16.572
U-NII-2A_5300MHz_mid Ch_60_20MHz BW_a-mode	19.600	16.640	19.392	16.586
U-NII-2A_5320MHz_High Ch_64_20MHz BW_a-mode	19.118	16.604	19.520	16.593
U-NII-2A_5260MHz_low Ch_52_20MHz BW_n-mode	20.108	17.723	20.029	17.781
U-NII-2A_5300MHz_mid Ch_60_20MHz BW_n-mode	20.269	17.643	20.155	17.683
U-NII-2A_5320MHz_High Ch_64_20MHz BW_n-mode	20.141	17.634	20.367	17.751
U-NII-2A_5270MHz_low Ch_54_40MHz BW_n-mode	40.208	36.416	40.288	36.191
U-NII-2A_5310MHz_High Ch_62_40MHz BW_n-mode	40.357	36.186	40.065	36.094
U-NII-2A_5290MHz_Mid Ch_58_80MHz BW_ac-mode	83.604	75.664	83.264	75.635
U-NII-2A_5290MHz_Mid Ch_58_80MHz BW_ax-mode	83.952	77.531	84.160	77.374

Table 9. Occupied Bandwidth, Test Results (UNII-1 and UNII 2A)

U-NII SubBand 2C OBW	Port 1 (-26dB) (MHz)	Port 1 (99%) (MHz)	Port 2 (-26dB) (MHz)	Port 2 (99%) (MHz)
U-NII-2C_5500MHz_Low Ch_100_20MHz BW_a-mode	22.43	16.67	21.63	16.58
U-NII-2C_5600MHz_Mid Ch_120_20MHz BW_a-mode	21.89	16.67	21.63	16.58
U-NII-2C_5720MHz_High Ch_144_20MHz BW_a-mode	21.71	16.71	21.65	16.67
U-NII-2C_5500MHz_Low Ch_100_20MHz BW_n-mode	22.31	17.79	22.06	17.86
U-NII-2C_5600MHz_Mid Ch_120_20MHz BW_n-mode	22.12	17.79	22.17	17.75
U-NII-2C_5720MHz_High Ch_144_20MHz BW_n-mode	22.19	17.76	22.19	17.86
U-NII-2C_5510MHz_Low Ch_102_40MHz BW_n-mode	44.42	36.23	44.17	36.29
U-NII-2C_5590MHz_Mid Ch_118_40MHz BW_n-mode	44.16	36.37	44.40	36.28
U-NII-2C_5710MHz_High Ch_142_40MHz BW_n-mode	44.42	36.31	44.38	36.45
U-NII-2C_5530MHz_Low Ch_106_80MHz BW_ac-mode	89.74	76.11	90.18	76.15
U-NII-2C_5610MHz_Mid Ch_122_80MHz BW_ac-mode	90.13	76.22	90.75	76.01
U-NII-2C_5690MHz_High Ch_138_80MHz BW_ac-mode	90.00	75.93	90.64	75.75
U-NII-2C_5530MHz_Low Ch_106_80MHz BW_ax-mode	90.12	77.94	90.53	77.76
U-NII-2C_5610MHz_Mid Ch_122_80MHz BW_ax-mode	90.59	77.88	90.32	77.70
U-NII-2C_5690MHz_High Ch_138_80MHz BW_ax-mode	90.94	77.97	90.49	77.67

Table 10. Occupied Bandwidth, Test Results (UNII-2C)

U-NII SubBand 3 OBW	Port 1 (-6dB) (MHz)	Port 1 (99%) (MHz)	Port 1 (-26dB) (MHz)	Port 2 (-6dB) (MHz)	Port 2 (99%) (MHz)	Port 2 (-26dB) (MHz)
U-NII-3_5745MHz_Low Ch_149_20MHz BW_a-mode	15.823	16.458	19.068	16.368	16.529	18.879
U-NII-3_5785MHz_Mid Ch_157_20MHz BW_a-mode	16.337	16.435	19.181	16.135	16.500	18.732
U-NII-3_5825MHz_High Ch_165_20MHz BW_a-mode	16.148	16.498	19.599	16.136	16.479	18.866
U-NII-3_5745MHz_Low Ch_149_20MHz BW_n-mode	24.004	17.789	25.099	17.253	17.714	24.992
U-NII-3_5785MHz_Mid Ch_157_20MHz BW_n-mode	17.245	17.700	25.272	17.637	17.767	25.228
U-NII-3_5825MHz_High Ch_165_20MHz BW_n-mode	23.988	17.758	25.222	23.929	17.648	25.349
U-NII-3_5755MHz_Low Ch_151_40MHz BW_n-mode	48.171	36.226	50.267	48.064	36.268	50.325
U-NII-3_5795MHz_High Ch_159_40MHz BW_n-mode	48.358	36.209	50.224	36.105	36.222	49.910
U-NII-3_5775MHz_Mid Ch_155_80MHz BW_ac-mode	98.208	76.483	102.189	70.002	75.798	101.916
U-NII-3_5775MHz_Mid Ch_155_80MHz BW_ax-mode	99.169	77.828	102.767	77.150	75.797	102.339

Table 11. Occupied Bandwidth, Test Results (UNII-3)

Electromagnetic Compatibility Criteria for Intentional Radiators

§15. 407(a) Maximum Conducted Output Power

Test Requirements:

§15.407(a)(1)(iv): For 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.

§15.407(a)(2): For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

§15.407(a)(3)(i): For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

Test Procedure:

The EUT was connected to a spectrum analyzer. Measurements were taken with the EUT set to transmit continuously on its low, mid, and high channels. Its power was measured according to measurement method SA-1, as described in ANSI C63.10. the maximum conducted power across all ports was calculated via the following formula:

Max Conducted Output Power, combined = 10 * log (10^(Port 1dBm/10) + 10^(Port2dBm))

Test Results:

The EUT as tested is compliant with the requirements of this section. The worst-case tabular data for each UNII band is shown below. Due to the large number of individual plots for each measurement, they are contained in a separate appendix.

Straddle channels which have transmissions that extend from U-NII-2C into the U-NII-3 band are presented in the U-NII-3 data table.

Test Engineer(s): Bryan Taylor

Test Date(s): 9/20/2024

Transmit Mode	Port 1 (dBm)	Port 2 (dBm)	Limit (dBm)	Port 1 Margin (dB)	Port 2 Margin (dB)
U-NII-1_5180MHz_Low Ch_36_20MHz BW_a-mode	8.66	13.13	23.97	15.31	10.84
U-NII-1_5200MHz_ mid Ch_40_20MHz BW_a-mode	8.38	12.62	23.97	15.59	11.35
U-NII-1_5240MHz_high Ch_48_20MHz BW_a-mode	8.78	12.29	23.97	15.19	11.68
U-NII-2A_5260MHz_low Ch_52_20MHz BW_a-mode	9.54	12.72	23.97	14.43	11.25
U-NII-2A_5280MHz_mid Ch_56_20MHz BW_a-mode	9.80	13.43	23.97	14.17	10.54
U-NII-2A_5320MHz_High Ch_64_20MHz BW_a-mode	8.97	12.44	23.97	15.00	11.53
U-NII-2C_5500MHz_Low Ch_100_20MHz BW_a-mode	13.03	13.69	23.97	10.94	10.28
U-NII-2C_5600MHz_Mid Ch_120_20MHz BW_a-mode	12.62	12.01	23.97	11.35	11.96
U-NII-2C_5720MHz_High Ch_144_20MHz BW_a-mode	10.57	10.65	23.97	13.40	13.32
U-NII-3_5745MHz_Low Ch_149_20MHz BW_a-mode	11.03	10.47	30.00	18.97	19.53
U-NII-3_5785MHz_Mid Ch_157_20MHz BW_a-mode	11.57	9.74	30.00	18.43	20.26
U-NII-3_5825MHz_High Ch_165_20MHz BW_a-mode	12.86	9.33	30.00	17.14	20.67

Table 12. Conducted Output Power, Test Results (SISO Modes)

U-NII SubBand 1 and 2A FCC PWR	Port 1 (dBm)	Port 2 (dBm)	Sum (dBm)	Limit (dBm)	Margin (dB)
U-NII-1_5180MHz_Low Ch_36_20MHz BW_n-mode	8.63	12.98	14.34	23.19	8.85
U-NII-1_5200MHz_ mid Ch_40_20MHz BW_n-mode	8.23	12.47	13.86	23.19	9.33
U-NII-1_5240MHz_high Ch_48_20MHz BW_n-mode	8.60	12.27	13.82	23.19	9.37
U-NII-1_5190MHz_Low Ch_38_40MHz BW_n-mode	8.58	12.82	14.21	23.19	8.98
U-NII-1_5230MHz_high Ch_46_40MHz BW_n-mode	8.55	12.55	14.01	23.19	9.18
U-NII-1_5210MHz_ mid Ch_42_80MHz BW_ac-mode	8.75	12.78	14.23	23.19	8.96
U-NII-1_5210MHz_mid Ch_42_80MHz BW_ax-mode	8.97	12.51	14.10	23.19	9.09
U-NII-2A_5260MHz_low Ch_52_20MHz BW_n-mode	9.19	12.58	14.22	23.19	8.97
U-NII-2A_5280MHz_mid Ch_56_20MHz BW_n-mode	9.65	13.23	14.81	23.19	8.38
U-NII-2A_5320MHz_High Ch_64_20MHz BW_n-mode	9.01	12.56	14.15	23.19	9.04
U-NII-2A_5270MHz_low Ch_54_40MHz BW_n-mode	9.66	13.38	14.92	23.19	8.27
U-NII-2A_5310MHz_High Ch_62_40MHz BW_n-mode	9.30	12.97	14.52	23.19	8.67
U-NII-2A_5290MHz_Mid Ch_58_80MHz BW_ac-mode	8.66	13.13	14.45	23.19	8.74
U-NII-2A_5290MHz_Mid Ch_58_80MHz BW_ax-mode	8.38	12.62	14.01	23.19	9.18

Table 13. Conducted Output Power, Test Results (MIMO Modes, UNII-1 and 2A)

U-NII SubBand 2C FCC PWR	Port 1 (dBm)	Port 2 (dBm)	Sum (dBm)	Limit (dBm)	Margin (dB)
U-NII-2C_5500MHz_Low Ch_100_20MHz BW_n-mode	12.76	13.56	16.19	23.19	7.00
U-NII-2C_5600MHz_Mid Ch_120_20MHz BW_n-mode	12.47	12.24	15.37	23.19	7.82
U-NII-2C_5720MHz_High Ch_144_20MHz BW_n-mode	10.38	10.40	13.40	23.19	9.79
U-NII-2C_5510MHz_Low Ch_102_40MHz BW_n-mode	12.92	13.83	16.41	23.19	6.78
U-NII-2C_5590MHz_Mid Ch_118_40MHz BW_n-mode	12.81	12.55	15.69	23.19	7.50
U-NII-2C_5710MHz_High Ch_142_40MHz BW_n-mode	10.53	10.53	13.54	23.19	9.65
U-NII-2C_5530MHz_Low Ch_106_80MHz BW_ac-mode	12.85	13.47	16.18	23.19	7.01
U-NII-2C_5610MHz_Mid Ch_122_80MHz BW_ac-mode	12.64	12.24	15.45	23.19	7.74
U-NII-2C_5690MHz_High Ch_138_80MHz BW_ac-mode	10.82	10.87	13.86	23.19	9.33
U-NII-2C_5530MHz_Low Ch_106_80MHz BW_ax-mode	12.89	13.54	16.23	23.19	6.96
U-NII-2C_5610MHz_Mid Ch_122_80MHz BW_ax-mode	12.71	12.34	15.54	23.19	7.65
U-NII-2C_5690MHz_High Ch_138_80MHz BW_ax-mode	10.89	10.85	13.88	23.19	9.31

Table 14. Conducted Output Power, Test Results (MIMO Modes, UNII-2C)

U-NII SubBand 3 PWR	Port 1 (dBm)	Port 2 (dBm)	Sum (dBm)	Limit (dBm)	Margin (dB)
U-NII-3_5745MHz_Low Ch_149_20MHz BW_n-mode	10.77	10.18	13.50	29.19	15.69
U-NII-3_5785MHz_Mid Ch_157_20MHz BW_n-mode	11.33	9.40	13.48	29.19	15.71
U-NII-3_5825MHz_High Ch_165_20MHz BW_n-mode	12.67	9.10	14.25	29.19	14.94
U-NII-3_5755MHz_Low Ch_151_40MHz BW_n-mode	11.28	10.34	13.85	29.19	15.34
U-NII-3_5795MHz_High Ch_159_40MHz BW_n-mode	11.84	9.46	13.82	29.19	15.37
U-NII-3_5775MHz_Mid Ch_155_80MHz BW_ac-mode	11.84	10.05	14.05	29.19	15.14
U-NII-3_5775MHz_Mid Ch_155_80MHz BW_ax-mode	11.84	10.14	14.08	29.19	15.11
Straddle Ch_ U-NII-2C_5720MHz_High Ch_144_20MHz BW_a-mode	3.12	3.20	6.17	29.19	23.02
Straddle Ch_ U-NII-2C_5720MHz_High Ch_144_20MHz BW_n-mode	3.29	3.29	6.30	29.19	22.89
Straddle Ch_ U-NII-2C_5710MHz_High Ch_142_40MHz BW_n-mode	-1.14	-1.13	1.87	29.19	27.32
Straddle Ch_ U-NII-2C_5690MHz_High Ch_138_80MHz BW_ac-mode	-4.55	-4.69	-1.61	29.19	30.8
Straddle Ch_ U-NII-2C_5690MHz_High Ch_138_80MHz BW_ax-mode	-3.67	-3.76	-0.70	29.19	29.89

Table 15. Conducted Output Power, Test Results (MIMO Modes, UNII-3)

Electromagnetic Compatibility Criteria for Intentional Radiators

RSS-247 (6) Effective Isotropic Radiated Power (EIRP)

Test Requirements:

§6.2.1.1 (5150 – 5250MHz): For other devices, 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.

§6.2.2.1 (5250 – 5350MHz): Devices, other than devices installed in vehicles, shall comply with the following:

- 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.

§6.2.3.1 (5470 – 5600MHz and 5650 – 5725MHz): 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.

Test Procedure:

The maximum sum conducted output power (across all transmit ports) was added to the antenna gain to arrive at the EIRP. The antenna gain used was the worst case directional gain calculated per KDB 662911 D01 for two equal gain antennas with correlated signals; 6.79dBi in this case.

Test Results:

The EUT as tested is compliant with the requirements of this section. The worst-case tabular data for each UNII band is shown below. Due to the large number of individual plots for each measurement, they are contained in a separate appendix.

Straddle channels which have transmissions that extend from U-NII-2C into the U-NII-3 band are presented in the U-NII-3 data table.

Test Engineer(s): Bryan Taylor

Test Date(s): 9/20/2024

U-NII SubBand 1 and 2A FCC PWR	Conducted Power Sum (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
U-NII-1_5180MHz_Low Ch_36_20MHz BW_a-mode	14.45	6.79	21.24	23	1.76
U-NII-1_5200MHz_ mid Ch_40_20MHz BW_a-mode	14.01	6.79	20.8	23	2.2
U-NII-1_5240MHz_high Ch_48_20MHz BW_a-mode	13.89	6.79	20.68	23	2.32
U-NII-1_5180MHz_Low Ch_36_20MHz BW_n-mode	14.34	6.79	21.13	23	1.87
U-NII-1_5200MHz_ mid Ch_40_20MHz BW_n-mode	13.86	6.79	20.65	23	2.35
U-NII-1_5240MHz_high Ch_48_20MHz BW_n-mode	13.82	6.79	20.61	23	2.39
U-NII-1_5190MHz_Low Ch_38_40MHz BW_n-mode	14.21	6.79	21	23	2
U-NII-1_5230MHz_high Ch_46_40MHz BW_n-mode	14.01	6.79	20.8	23	2.2
U-NII-1_5210MHz_ mid Ch_42_80MHz BW_ac-mode	14.23	6.79	21.02	23	1.98
U-NII-1_5210MHz_mid Ch_42_80MHz BW_ax-mode	14.10	6.79	20.89	30	9.11
U-NII-2A_5260MHz_low Ch_52_20MHz BW_a-mode	14.42	6.79	21.21	30	8.79
U-NII-2A_5280MHz_mid Ch_56_20MHz BW_a-mode	14.99	6.79	21.78	30	8.22
U-NII-2A_5320MHz_High Ch_64_20MHz BW_a-mode	14.05	6.79	20.84	30	9.16
U-NII-2A_5260MHz_low Ch_52_20MHz BW_n-mode	14.22	6.79	21.01	30	8.99
U-NII-2A_5280MHz_mid Ch_56_20MHz BW_n-mode	14.81	6.79	21.6	30	8.4
U-NII-2A_5320MHz_High Ch_64_20MHz BW_n-mode	14.15	6.79	20.94	30	9.06
U-NII-2A_5270MHz_low Ch_54_40MHz BW_n-mode	14.92	6.79	21.71	30	8.29
U-NII-2A_5310MHz_High Ch_62_40MHz BW_n-mode	14.52	6.79	21.31	30	8.69
U-NII-2A_5290MHz_Mid Ch_58_80MHz BW_ac-mode	14.45	6.79	21.24	23	1.76
U-NII-2A_5290MHz_Mid Ch_58_80MHz BW_ax-mode	14.01	6.79	20.8	23	2.2

Table 16. EIRP, Test Results (UNII-1 and 2A)

U-NII SubBand 2C FCC PWR	Conducted Power Sum (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
U-NII-2C_5500MHz_Low Ch_100_20MHz BW_a-mode	16.38	6.79	23.17	30	6.83
U-NII-2C_5600MHz_Mid Ch_120_20MHz BW_a-mode	15.33	6.79	22.12	30	7.88
U-NII-2C_5720MHz_High Ch_144_20MHz BW_a-mode	13.62	6.79	20.41	30	9.59
U-NII-2C_5500MHz_Low Ch_100_20MHz BW_n-mode	16.19	6.79	22.98	30	7.02
U-NII-2C_5600MHz_Mid Ch_120_20MHz BW_n-mode	15.37	6.79	22.16	30	7.84
U-NII-2C_5720MHz_High Ch_144_20MHz BW_n-mode	13.40	6.79	20.19	30	9.81
U-NII-2C_5510MHz_Low Ch_102_40MHz BW_n-mode	16.41	6.79	23.2	30	6.8
U-NII-2C_5590MHz_Mid Ch_118_40MHz BW_n-mode	15.69	6.79	22.48	30	7.52
U-NII-2C_5710MHz_High Ch_142_40MHz BW_n-mode	13.54	6.79	20.33	30	9.67
U-NII-2C_5530MHz_Low Ch_106_80MHz BW_ac-mode	16.18	6.79	22.97	30	7.03
U-NII-2C_5610MHz_Mid Ch_122_80MHz BW_ac-mode	15.45	6.79	22.24	30	7.76
U-NII-2C_5690MHz_High Ch_138_80MHz BW_ac-mode	13.86	6.79	20.65	30	9.35
U-NII-2C_5530MHz_Low Ch_106_80MHz BW_ax-mode	16.23	6.79	23.02	30	6.98
U-NII-2C_5610MHz_Mid Ch_122_80MHz BW_ax-mode	15.54	6.79	22.33	30	7.67
U-NII-2C_5690MHz_High Ch_138_80MHz BW_ax-mode	13.88	6.79	20.67	30	9.33

Table 17. EIRP, Test Results (UNII-2C)

U-NII SubBand 3 PWR	Conducted Power Sum (dBm)	Directional Array Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
U-NII-3_5745MHz_Low Ch_149_20MHz BW_a-mode	13.77	6.79	20.56	30	9.44
U-NII-3_5785MHz_Mid Ch_157_20MHz BW_a-mode	13.76	6.79	20.55	30	9.45
U-NII-3_5825MHz_High Ch_165_20MHz BW_a-mode	14.46	6.79	21.25	30	8.75
U-NII-3_5745MHz_Low Ch_149_20MHz BW_n-mode	13.50	6.79	20.29	30	9.71
U-NII-3_5785MHz_Mid Ch_157_20MHz BW_n-mode	13.48	6.79	20.27	30	9.73
U-NII-3_5825MHz_High Ch_165_20MHz BW_n-mode	14.25	6.79	21.04	30	8.96
U-NII-3_5755MHz_Low Ch_151_40MHz BW_n-mode	13.85	6.79	20.64	30	9.36
U-NII-3_5795MHz_High Ch_159_40MHz BW_n-mode	13.82	6.79	20.61	30	9.39
U-NII-3_5775MHz_Mid Ch_155_80MHz BW_ac-mode	14.05	6.79	20.84	30	9.16
U-NII-3_5775MHz_Mid Ch_155_80MHz BW_ax-mode	14.08	6.79	20.87	30	9.13
Straddle Ch_ U-NII-2C_5720MHz_High Ch_144_20MHz BW_a-mode	6.17	6.79	12.96	30	17.04
Straddle Ch_ U-NII-2C_5720MHz_High Ch_144_20MHz BW_n-mode	6.30	6.79	13.09	30	16.91
Straddle Ch_ U-NII-2C_5710MHz_High Ch_142_40MHz BW_n-mode	1.87	6.79	8.66	30	21.34
Straddle Ch_ U-NII-2C_5690MHz_High Ch_138_80MHz BW_ac-mode	-1.61	6.79	5.18	30	24.82
Straddle Ch_ U-NII-2C_5690MHz_High Ch_138_80MHz BW_ax-mode	-0.70	6.79	6.09	30	23.91

Table 18. EIRP, Test Results (UNII-3)

Electromagnetic Compatibility Criteria for Intentional Radiators

§15.407(a)(1) Maximum Power Spectral Density

Test Requirements:

§15.407(a)(1)(iv): For 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.

§15.407(a)(2): For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

§15.407(a)(3)(i): For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

Test Procedure:

The EUT was connected to a spectrum analyzer. Measurements were taken with the EUT set to transmit continuously on its low, mid, and high channels. Its power was measured according KDB 789033 D02 General UNII Test Procedures v02.

Test Results:

The EUT as tested is compliant with the requirements of this section. The worst-case tabular data for each UNII band is shown below. Due to the large number of individual plots for each measurement, they are contained in a separate appendix.

Straddle channels which have transmissions that extend from U-NII-2C into the U-NII-3 band are presented in the U-NII-3 data table.

Test Engineer(s): Bryan Taylor

Test Date(s): 9/20/2024

U-NII SubBand 1 and 2A FCC SD	Port 1 (dBm)	Port 2 (dBm)	Sum (dBm)	Limit (dBm)	Margin (dB)
U-NII-1_5180MHz_Low Ch_36_20MHz BW_a-mode	-2.50	-1.16	1.23	10.19	8.96
U-NII-1_5200MHz_ mid Ch_40_20MHz BW_a-mode	-2.65	-1.50	0.97	10.19	9.22
U-NII-1_5240MHz_high Ch_48_20MHz BW_a-mode	-2.23	-1.70	1.06	10.19	9.13
U-NII-1_5180MHz_Low Ch_36_20MHz BW_n-mode	-2.73	-1.48	0.95	10.19	9.24
U-NII-1_5200MHz_ mid Ch_40_20MHz BW_n-mode	-3.01	-1.83	0.63	10.19	9.56
U-NII-1_5240MHz_high Ch_48_20MHz BW_n-mode	-2.74	-1.85	0.74	10.19	9.45
U-NII-1_5190MHz_Low Ch_38_40MHz BW_n-mode	-5.77	-1.33	0.00	10.19	10.19
U-NII-1_5230MHz_high Ch_46_40MHz BW_n-mode	-5.90	-1.85	-0.41	10.19	10.60
U-NII-1_5210MHz_ mid Ch_42_80MHz BW_ac-mode	-8.88	-4.94	-3.46	10.19	13.65
U-NII-1_5210MHz_mid Ch_42_80MHz BW_ax-mode	-5.90	-4.61	-2.20	10.19	12.39
U-NII-2A_5260MHz_low Ch_52_20MHz BW_a-mode	-1.91	1.61	3.21	10.19	6.98
U-NII-2A_5280MHz_mid Ch_56_20MHz BW_a-mode	-1.55	1.45	3.22	10.19	6.97
U-NII-2A_5320MHz_High Ch_64_20MHz BW_a-mode	-1.31	2.38	3.93	10.19	6.26
U-NII-2A_5260MHz_low Ch_52_20MHz BW_n-mode	-2.40	0.99	2.63	10.19	7.56
U-NII-2A_5280MHz_mid Ch_56_20MHz BW_n-mode	-2.23	1.21	2.83	10.19	7.36
U-NII-2A_5320MHz_High Ch_64_20MHz BW_n-mode	-1.62	1.94	3.52	10.19	6.67
U-NII-2A_5270MHz_low Ch_54_40MHz BW_n-mode	-5.52	-1.80	-0.27	10.19	10.46
U-NII-2A_5310MHz_High Ch_62_40MHz BW_n-mode	-4.74	-0.89	0.61	10.19	9.58
U-NII-2A_5290MHz_Mid Ch_58_80MHz BW_ac-mode	-8.18	-4.63	-3.05	10.19	13.24
U-NII-2A_5290MHz_Mid Ch_58_80MHz BW_ax-mode	-4.74	-4.67	-1.70	10.19	11.89

Table 19. Power Spectral Density, Test Results (UNII-1 and 2A)

U-NII SubBand 2C FCC SD	Port 1 (dBm)	Port 2 (dBm)	Sum (dBm)	Limit (dBm)	Margin (dB)
U-NII-2C_5500MHz_Low Ch_100_20MHz BW_a-mode	2.43	2.65	5.55	10.19	4.64
U-NII-2C_5600MHz_Mid Ch_120_20MHz BW_a-mode	1.60	1.48	4.55	10.19	5.64
U-NII-2C_5720MHz_High Ch_144_20MHz BW_a-mode	-0.32	-0.05	2.83	10.19	7.36
U-NII-2C_5500MHz_Low Ch_100_20MHz BW_n-mode	1.52	2.23	4.90	10.19	5.29
U-NII-2C_5600MHz_Mid Ch_120_20MHz BW_n-mode	1.14	0.86	4.01	10.19	6.18
U-NII-2C_5720MHz_High Ch_144_20MHz BW_n-mode	-0.91	-0.97	2.07	10.19	8.12
U-NII-2C_5510MHz_Low Ch_102_40MHz BW_n-mode	-1.28	-0.63	2.07	10.19	8.12
U-NII-2C_5590MHz_Mid Ch_118_40MHz BW_n-mode	-1.58	-1.97	1.24	10.19	8.95
U-NII-2C_5710MHz_High Ch_142_40MHz BW_n-mode	-3.87	-3.85	-0.85	10.19	11.04
U-NII-2C_5530MHz_Low Ch_106_80MHz BW_ac-mode	-4.69	-4.08	-1.36	10.19	11.55
U-NII-2C_5610MHz_Mid Ch_122_80MHz BW_ac-mode	-4.83	-5.09	-1.95	10.19	12.14
U-NII-2C_5690MHz_High Ch_138_80MHz BW_ac-mode	-6.76	-6.73	-3.73	10.19	13.92
U-NII-2C_5530MHz_Low Ch_106_80MHz BW_ax-mode	-4.71	-4.01	-1.34	10.19	11.53
U-NII-2C_5610MHz_Mid Ch_122_80MHz BW_ax-mode	-4.70	-5.21	-1.94	10.19	12.13
U-NII-2C_5690MHz_High Ch_138_80MHz BW_ax-mode	-6.34	-6.65	-3.48	10.19	13.67

Table 20. Power Spectral Density, Test Results (UNII-2C)

U-NII SubBand 3 SD	Port 1 (dBm)	Port 2 (dBm)	Sum (dBm)	Limit (dBm)	Margin dB
U-NII-3_5745MHz_Low Ch_149_20MHz BW_a-mode	-2.56	-3.12	0.18	29.19	29.01
U-NII-3_5785MHz_Mid Ch_157_20MHz BW_a-mode	-1.86	-4.04	0.20	29.19	28.99
U-NII-3_5825MHz_High Ch_165_20MHz BW_a-mode	-0.79	-4.11	0.87	29.19	28.32
U-NII-3_5745MHz_Low Ch_149_20MHz BW_n-mode	-2.86	-3.59	-0.20	29.19	29.39
U-NII-3_5785MHz_Mid Ch_157_20MHz BW_n-mode	-2.65	-4.66	-0.53	29.19	29.72
U-NII-3_5825MHz_High Ch_165_20MHz BW_n-mode	-1.13	-5.01	0.36	29.19	28.83
U-NII-3_5755MHz_Low Ch_151_40MHz BW_n-mode	-5.54	-6.51	-2.99	29.19	32.18
U-NII-3_5795MHz_High Ch_159_40MHz BW_n-mode	-5.22	-7.48	-3.20	29.19	32.39
U-NII-3_5775MHz_Mid Ch_155_80MHz BW_ac-mode	-8.72	-10.29	-6.43	29.19	35.62
U-NII-3_5775MHz_Mid Ch_155_80MHz BW_ax-mode	-8.62	-10.36	-6.39	29.19	35.58
Straddle Ch_ U-NII-2C_5720MHz_High Ch_144_20MHz BW_a-mode	-0.32	-0.05	2.83	29.19	26.36
Straddle Ch_ U-NII-2C_5720MHz_High Ch_144_20MHz BW_n-mode	-0.91	-0.97	2.07	29.19	27.12
Straddle Ch_ U-NII-2C_5710MHz_High Ch_142_40MHz BW_n-mode	-3.87	-3.85	-0.85	29.19	30.04
Straddle Ch_ U-NII-2C_5690MHz_High Ch_138_80MHz BW_ac-mode	-6.76	-6.73	-3.73	29.19	32.92
Straddle Ch_ U-NII-2C_5690MHz_High Ch_138_80MHz BW_ax-mode	-6.34	-6.65	-3.48	29.19	32.67

*The straddle channel results shown are the PSD measurements from the UNII-2C band which were measured with a 1MHz RBW. The actual PSD results for just the portion of the signal extending into the UNII-3 band would be lower (and pass with a higher margin) than the values shown in this table since they would be measured with a 500kHz RBW and compared to a higher limit (30dBm/500kHz for UNII-3 vs 11dBm/MHz for UNII-2C).

Table 21. Power Spectral Density, Test Results (UNII-3)

Electromagnetic Compatibility Criteria for Intentional Radiators

RSS-247 (6) EIRP Spectral Density

Test Requirements: **§6.2.1.1 (5150 – 5250MHz):** For other devices, 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.

Test Procedure: The maximum summed conducted power spectral density (across all transmit ports) was added to the antenna gain to arrive at the EIRP spectral density. The antenna gain used was the worst case directional gain calculated per KDB 662911 D01 for two equal gain antennas with correlated signals; 6.79dBi in this case.

Test Results: The EUT as tested is compliant with the requirements of this section. The worst-case tabular data is shown below. Due to the large number of individual plots for each measurement, they are contained in a separate appendix.

RSS-247 does not contain ***EIRP*** spectral density limits for the 5.25-5.35GHz, 5.47-5.725GHz, and 5.725-5.850GHz bands. Therefore only EIRP spectral density for the 5.150 – 5.250GHz band is reported.

Test Engineer(s): Bryan Taylor

Test Date(s): 9/20/2024

U-NII SubBand 1	Conducted Power Spectral Density Sum (dBm)	Antenna Gain (dBi)	EIRP Spectral Density (dBm)	Limit (dBm)	Margin dB
U-NII-1_5180MHz_Low Ch_36_20MHz BW_a-mode	1.23	6.79	8.02	10	1.98
U-NII-1_5200MHz_ mid Ch_40_20MHz BW_a-mode	0.97	6.79	7.76	10	2.24
U-NII-1_5240MHz_high Ch_48_20MHz BW_a-mode	1.06	6.79	7.85	10	2.15
U-NII-1_5180MHz_Low Ch_36_20MHz BW_n-mode	0.95	6.79	7.74	10	2.26
U-NII-1_5200MHz_ mid Ch_40_20MHz BW_n-mode	0.63	6.79	7.42	10	2.58
U-NII-1_5240MHz_high Ch_48_20MHz BW_n-mode	0.74	6.79	7.53	10	2.47
U-NII-1_5190MHz_Low Ch_38_40MHz BW_n-mode	0.00	6.79	6.79	10	3.21
U-NII-1_5230MHz_high Ch_46_40MHz BW_n-mode	-0.41	6.79	6.38	10	3.62
U-NII-1_5210MHz_ mid Ch_42_80MHz BW_ac-mode	-3.46	6.79	3.33	10	6.67
U-NII-1_5210MHz_mid Ch_42_80MHz BW_ax-mode	-2.20	6.79	4.59	10	5.41

Table 22. EIRP Spectral Density, Test Results (UNII-1)

Electromagnetic Compatibility Criteria for Intentional Radiators

§15.407(b)(1 – 4, 9, 10) Undesirable Emissions

Test Requirements:

§ 15.407(b)(1): For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz.

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

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

§ 15.407(b)(4): For transmitters operating solely in the 5.725-5.850 GHz band:

All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge

§ 15.407(b)(9): Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in Section 15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in Section 15.207.

§ 15.407(b)(10): The provisions of Section 15.205 of this part apply to intentional radiators operating under this section.

Test Procedure:

Unwanted emission measurements were performed per ANSI C63.10: 2013 Section 12.7. Measurements for unwanted emissions in the restricted bands were performed via a direct connection to the antenna ports per 12.7.2 using peak and average detection.

Additionally, the cabinet emissions measurements were performed in a 10m semi-anechoic chamber. The EUT was placed on a non-conducting table on a turntable in a chamber. The turntable was rotated 360 degrees, the EUT was oriented through its three orthogonal axes, and the receive antenna height was varied in order to maximize emissions. The -27dBm/MHz limit was converted to field strength using the formula shown in ANSI C63.27 Section 12.7.2

E[dBuV/m] = EIRP[dBm} + 95.2 (for a measurement distance of 3m)

Test Results:

The EUT was compliant with the requirements of this section. The worst-case tabular data for each UNII band is shown below. Due to the large number of individual plots for each measurement, they are contained in a separate appendix.

Test Engineer(s): Bryan Taylor, Sergio Gutierrez

Test Date(s): 9/20/204 – 9/28/2024

TX Port	TX Mode	Ch.	Freq. (GHz)	Avg Amplitude (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dBuV/m)	Peak Amplitude (dBuV/m)	Peak Limit (dBuV/m)	Peak Margin (dBuV/m)	Result
1	802.11a	36	5.081	25.12	54	28.88	36.54	74	37.46	Pass
2	802.11a	36	5.150	31.95	54	22.05	43.49	74	30.51	Pass
1	802.11n	36	5.150	26.28	54	27.72	36.85	74	37.15	Pass
2	802.11n	36	5.150	30.59	54	23.41	41.29	74	32.71	Pass
1	802.11n(40)	38	5.150	33.15	54	20.85	46.57	74	27.43	Pass
2	802.11n(40)	38	5.149	44.06	54	9.94	55.49	74	18.51	Pass
1	802.11ac (80)	42	5.149	36.39	54	17.61	48.7	74	25.3	Pass
2	802.11ac (80)	42	5.147	48.18	54	5.82	59.88	74	14.12	Pass
1	802.11ax (80)	42	5.147	35.58	54	18.42	48.84	74	25.16	Pass
2	802.11ax (80)	42	5.149	47.82	54	6.18	58.94	74	15.06	Pass

Table 23. UNII-1 Worst Case Restricted Band Edge Emissions

TX Port	TX Mode	Ch.	Freq. (GHz)	Avg Amplitude (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dBuV/m)	Peak Amplitude (dBuV/m)	Peak Limit (dBuV/m)	Peak Margin (dBuV/m)	Result
1	802.11ax (80)	58	5.35	36.60	54	17.4	49.88	74	24.12	Pass
2	802.11ax (80)	58	5.35	46.91	54	7.09	60.3	74	13.7	Pass
1	802.11ac (80)	58	5.35	37.63	54	16.37	49.07	74	24.93	Pass
2	802.11ac (80)	58	5.35	47.76	54	6.24	58.03	74	15.97	Pass
1	802.11n(40)	62	5.35	34.51	54	19.49	45.59	74	28.41	Pass
2	802.11n(40)	62	5.35	45.10	54	8.9	59.37	74	14.63	Pass
1	802.11n	64	5.35	27.35	54	26.65	35.11	74	38.89	Pass
2	802.11n	64	5.35	30.30	54	23.7	39.09	74	34.91	Pass
1	802.11a	64	5.35	27.22	54	26.78	39.22	74	34.78	Pass
2	802.11a	64	5.35	32.38	54	21.62	42.58	74	31.42	Pass

Table 24. UNII-2A Worst Case Restricted Band Edge Emissions

TX Port	TX Mode	Ch.	Freq. (GHz)	Avg Amplitude (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dBuV/m)	Peak Amplitude (dBuV/m)	Peak Limit (dBuV/m)	Peak Margin (dB)	Result
1	802.11a	100	5.402	30.04	54	23.96	41.18	74	32.82	Pass
2	802.11a	100	5.407	29.72	54	24.28	40.39	74	33.61	Pass
1	802.11n	100	5.407	30.60	54	23.4	41.42	74	32.58	Pass
2	802.11n	100	5.405	29.78	54	24.22	41.45	74	32.55	Pass
1	802.11n (40)	102	5.457	41.12	54	12.88	56.68	74	17.32	Pass
2	802.11n (40)	102	5.460	38.33	54	15.67	53.02	74	20.98	Pass
1	802.11ac (80)	106	5.458	49.44	54	4.56	66.08	74	7.92	Pass
2	802.11ac (80)	106	5.459	43.70	54	10.3	59.59	74	14.41	Pass
1	802.11ax (80)	106	5.459	50.27	54	3.73	65.96	74	8.04	Pass
2	802.11ax (80)	106	5.459	43.78	54	10.22	62.15	74	11.85	Pass

Table 25. UNII-2C Worst Case Restricted Band Edge Emissions

Note: There are no restricted bands of operation adjacent to UNII-3 band.

Worst Case Cabinet Radiation

Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. BW [kHz]	Result
0.099	39.15	107.71	68.56	11.33	V	129.4	1	0.200	Pass
0.102	39.54	107.45	67.91	11.28	H	177.3	1	0.200	Pass
0.108	40.35	106.96	66.62	11.35	H	45	1	0.200	Pass
0.108	39.92	106.93	67.02	11.36	V	17.2	1	0.200	Pass

Figure 6. Worst Case Cabinet Radiation, Below 30MHz (UNII-1)

Frequency [MHz]	QPK Level [dBµV/m]	QPK Limit [dBµV/m]	QPK Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. BW [kHz]	Result
113.310	17.17	43.52	26.36	-7.52	V	281	1.11	120.000	Pass
120.000	20.48	43.52	23.04	-6.37	H	272.2	3.89	120.000	Pass
120.000	29.46	43.52	14.06	-6.77	V	275.4	1.14	120.000	Pass
128.520	13.08	43.52	30.44	-6.80	V	199	1.55	120.000	Pass
248.610	17.53	46.02	28.49	-7.48	V	76	1.4	120.000	Pass
256.050	11.21	46.02	34.81	-7.66	H	215.7	3.65	120.000	Pass

Figure 7. Worst Case Cabinet Radiation, Below 1GHz (UNII-1)

Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Result
2,269.500	38.18	74.00	35.82	24.90	54.00	29.10	-2.83	V	99.9	1.5	Pass
3,877.000	42.73	74.00	31.27	29.54	54.00	24.46	-1.74	V	340.4	1.56	Pass
7,395.500	45.90	74.00	28.10	31.99	54.00	22.01	-2.48	V	257.6	3.5	Pass
8,421.000	44.01	74.00	29.99	31.15	54.00	22.85	-3.44	V	156.5	2.98	Pass
15,961.500	49.42	74.00	24.58	36.45	54.00	17.55	-0.81	H	229.4	3.49	Pass
19,334.438	52.39	74.00	21.61	40.80	54.00	13.20	12.43	H	134.8	1.49	Pass
20,859.313	51.95	74.00	22.05	40.25	54.00	13.75	12.46	H	280.4	3.91	Pass
20,860.000	53.06	74.00	20.94	43.66	54.00	10.34	12.46	V	222.4	3.31	Pass
23,836.188	51.19	74.00	22.81	39.42	54.00	14.58	14.48	V	360.4	2.5	Pass

Figure 8. Worst Case Cabinet Radiation, Above 1GHz (UNII-1)

Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. BW [kHz]	Result
0.090	40.66	108.48	67.82	11.74	H	345.1	1	0.200	Pass
0.098	42.86	107.77	64.91	11.36	V	82.9	1	0.200	Pass
0.104	40.89	107.27	66.38	11.31	V	180.2	1	0.200	Pass
0.106	39.18	107.08	67.90	11.34	H	231.3	1	0.200	Pass

Figure 9. Worst Case Cabinet Radiation, Below 30MHz (UNII-2A)

Frequency [MHz]	QPK Level [dBµV/m]	QPK Limit [dBµV/m]	QPK Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. BW [kHz]	Result
74.910	22.59	40.00	17.41	-12.22	V	114.7	1.95	120.000	Pass
120.000	29.69	43.52	13.83	-6.77	V	274.3	0.99	120.000	Pass
120.030	20.18	43.52	23.34	-6.37	H	258.5	3.91	120.000	Pass
121.770	12.09	43.52	31.43	-6.51	V	136.5	1.52	120.000	Pass
246.630	19.42	46.02	26.60	-7.44	V	94.4	0.99	120.000	Pass
332.340	17.43	46.02	28.59	-4.70	H	3.5	2.79	120.000	Pass

Figure 10. Worst Case Cabinet Radiation, Below 1GHz (UNII-2A)

Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB] Error! Bookmark not defined.	Polarization	Azimuth [deg]	Antenna Height [m]	Result
2,235.000	37.96	74.00	36.04	24.71	54.00	29.29	-2.77	V	145.7	1.94	Pass
2,490.000	38.18	74.00	35.82	25.08	54.00	28.92	-2.37	V	12.7	2.49	Pass
7,397.000	44.82	74.00	29.18	31.99	54.00	22.01	-2.48	V	228.1	2.84	Pass
8,329.000	44.28	74.00	29.72	30.92	54.00	23.08	-3.81	V	252.3	3.3	Pass
11,604.500	45.30	74.00	28.70	32.57	54.00	21.43	-1.33	V	137.9	3.18	Pass
15,961.000	49.34	74.00	24.66	36.24	54.00	17.76	-0.80	V	117.9	3.03	Pass
18,736.313	52.27	74.00	21.73	40.58	54.00	13.42	13.01	V	62.1	3.57	Pass
20,568.500	50.52	74.00	23.48	39.28	54.00	14.72	12.32	H	162.9	3.44	Pass
20,859.313	51.51	74.00	22.49	39.89	54.00	14.11	12.46	H	296.1	3.91	Pass
20,859.313	53.12	74.00	20.88	41.95	54.00	12.05	12.46	V	63.7	3.32	Pass

Figure 11. Worst Case Cabinet Radiation, Above 1GHz (UNII-2A)

Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. BW [kHz]	Result
0.095	37.49	108.10	70.61	11.53	H	131	1	0.200	Pass
0.096	38.75	107.93	69.18	11.46	V	71.6	1	0.200	Pass
0.105	38.06	107.16	69.10	11.33	H	135.9	1	0.200	Pass
0.107	39.50	107.00	67.50	11.35	H	165.2	1	0.200	Pass

Figure 12. Worst Case Cabinet Radiation, Below 30MHz (UNII-2C)

Frequency [MHz]	QPK Level [dBµV/m]	QPK Limit [dBµV/m]	QPK Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. BW [kHz]	Result
75.090	23.45	40.00	16.55	-12.23	V	98	1.71	120.000	Pass
120.000	20.05	43.52	23.47	-6.37	H	250.3	3.75	120.000	Pass
120.000	29.40	43.52	14.12	-6.77	V	224.8	0.99	120.000	Pass
126.870	12.06	43.52	31.46	-6.52	V	210.8	1.26	120.000	Pass
246.630	19.36	46.02	26.66	-7.44	V	83.1	1.05	120.000	Pass
329.070	18.80	46.02	27.22	-4.73	H	28.5	2.44	120.000	Pass

Figure 13. Worst Case Cabinet Radiation, Below 1GHz (UNII-2C)

Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB] Error! Bookmark not defined.	Polarization	Azimuth [deg]	Antenna Height [m]	Result
2,734.500	59.77	74.00	14.23	27.27	54.00	26.73	-2.73	H	138.1	1.8	Pass
2,735.000	62.13	74.00	11.87	28.33	54.00	25.67	-2.74	V	186	3.22	Pass
3,890.000	43.11	74.00	30.89	29.71	54.00	24.29	-1.61	V	202.9	1.51	Pass
11,156.000	44.58	74.00	29.42	31.59	54.00	22.41	-1.99	V	146.7	1.41	Pass
11,160.000	45.62	74.00	28.38	32.23	54.00	21.77	-1.99	H	192.8	1.13	Pass
19,382.563	52.26	74.00	21.74	40.57	54.00	13.43	12.36	H	68.4	3.69	Pass
20,859.313	52.16	74.00	21.84	40.89	54.00	13.11	12.46	H	270.8	3.79	Pass
20,860.000	55.06	74.00	18.94	47.21	54.00	6.79	12.46	V	85.6	2.19	Pass
22,673.625	51.21	74.00	22.79	39.37	54.00	14.63	13.91	V	82.3	1.88	Pass

Figure 14. Worst Case Cabinet Radiation, Above 1GHz (UNII-2C)

Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. BW [kHz]	Result
0.092	41.31	108.37	67.06	11.67	H	49.8	1	0.200	Pass
0.103	38.59	107.38	68.79	11.29	H	108.2	1	0.200	Pass
0.108	40.00	106.97	66.97	11.35	H	75	1	0.200	Pass
0.108	40.28	106.92	66.64	11.36	V	161.2	1	0.200	Pass

Figure 15. Worst Case Cabinet Radiation, Below 30MHz (UNII-3)

Frequency [MHz]	QPK Level [dBµV/m]	QPK Limit [dBµV/m]	QPK Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. BW [kHz]	Result
75.000	23.61	40.00	16.39	-12.22	V	104.5	2.06	120.000	Pass
109.080	21.99	43.52	21.53	-8.15	V	18.4	1.16	120.000	Pass
120.000	29.20	43.52	14.32	-6.77	V	226	1.24	120.000	Pass
125.730	12.45	43.52	31.07	-6.30	V	118.8	2.05	120.000	Pass
248.100	15.11	46.02	30.91	-7.68	H	7.4	4	120.000	Pass
248.550	18.56	46.02	27.46	-7.48	V	104.6	1.11	120.000	Pass

Figure 16. Worst Case Cabinet Radiation, Below 1GHz (UNII-3)

Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB] Error! Bookmark not defined.	Polarization	Azimuth [deg]	Antenna Height [m]	Result
3,892.000	43.19	74.00	30.81	29.90	54.00	24.10	-1.63	H	260.2	1.1	Pass
7,342.000	46.16	74.00	27.84	32.69	54.00	21.31	-2.68	V	17.6	2.44	Pass
11,650.000	58.91	74.00	15.09	46.53	54.00	7.47	-1.16	H	179.2	1.54	Pass
11,650.500	56.01	74.00	17.99	42.33	54.00	11.67	-1.15	V	248.8	2.8	Pass
19,335.125	52.18	74.00	21.82	40.84	54.00	13.16	12.43	V	121.2	1.28	Pass
19,645.188	51.88	74.00	22.12	39.99	54.00	14.01	12.32	H	111	1.5	Pass
20,859.313	53.44	74.00	20.56	42.67	54.00	11.33	12.46	H	275.1	3.44	Pass
31,490.813	54.25	74.00	19.75	42.76	54.00	11.24	16.74	V	228.1	4	Pass

Figure 17. Worst Case Cabinet Radiation, Above 1GHz (UNII-3)

Electromagnetic Compatibility Criteria for Intentional Radiators

§ 15.407(g) Frequency Stability

Test Requirements: Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

Test Results: The EUT was compliant with the requirements of this section. TX emission is maintained within the band of operation under all conditions of normal operation.

IV. Test Equipment

Test Equipment

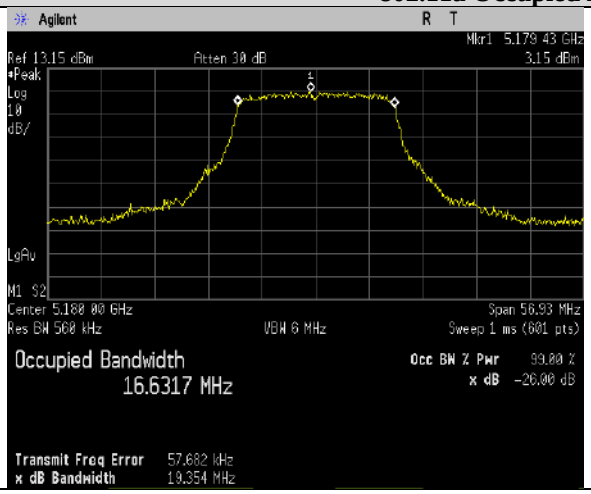
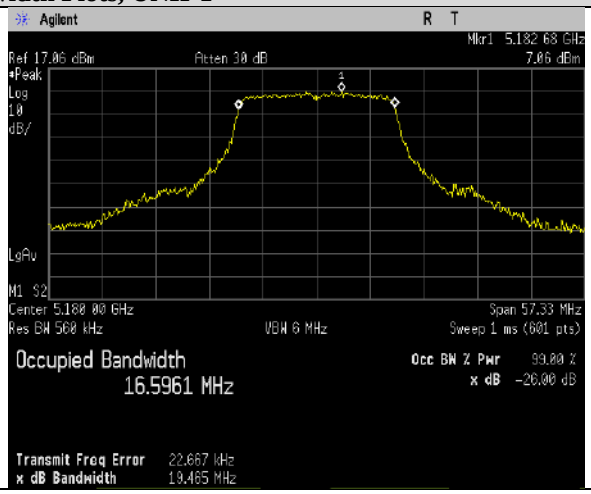
Calibrated test equipment utilized during testing was maintained in a current state of calibration per the requirements of ISO/IEC 17025:2017.

MET Asset #	Description	Manufacturer	Model	Last Cal Date	Cal Due Date
MY46180897	Spectrum Analyzer	Keysight	E4448A	08/28/2024	08/28/2025
1A1065	Receiver	Rohde & Schwarz	ESCI	08/20/2024	08/20/2025
1A1250	Receiver	Rohde & Schwarz	ESW44	04/08/2024	04/08/2025
1A1176	Active Loop Antenna (9KHz-30MHz)	ETS-Lindgren	6502	08/22/2024	08/22/2026
1A1147	Bi-Log Antenna	Suno Sciences Corp	JB3	04/06/2023	04/06/2025
1A1047	Horn Antenna	ETS - Lindgren	3117	06/26/2024	06/26/2025
1A1161	Horn Antenna (18GHz – 40GHz)	ETS Lindgren	3116C	08/01/2024	08/01/2026
1A1177	Pulse Limiter	Rohde & Schwarz	ESH3Z2	12/14/2023	12/14/2024
1A1122	LISN	TESEQ	NNB 51	09/21/2023	09/21/2024
1A1149	DC Milliohm Meter	GW Instek	GOM-802	09/24/2023	09/24/2024
1A1099	Generator	Com-Power	CGO-51000	See Note	
1A1088	Preamplifier	Rohde & Schwarz	TS-PR1	See Note	
1A1044	Generator	Com-Power	CG-520	See Note	
1A1073	Multi Device Controller	ETS	2090	See Note	
1A1074	System Controller	Panasonic	WV-CU101	See Note	
1A1080	Multi-Device	ETS	2090	See Note	
1A1180	Preamplifier	Miteq	AMF-7D-01001800-22-10P	See Note	

Table 26. Test Equipment List

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

I. Occupied Bandwidth Plots

802.11a Occupied Bandwidth Plots, UNII-1	
	
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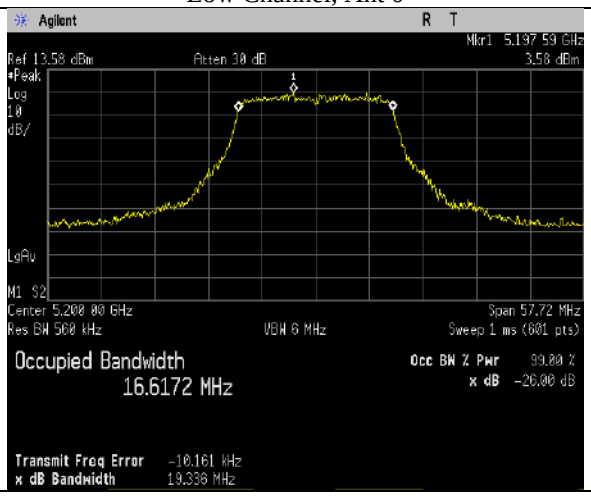
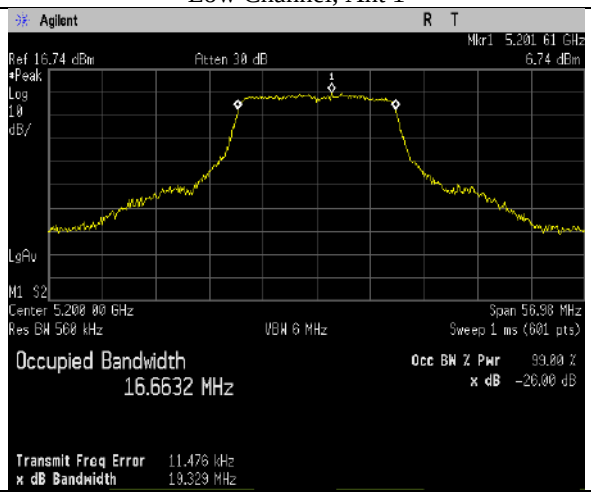
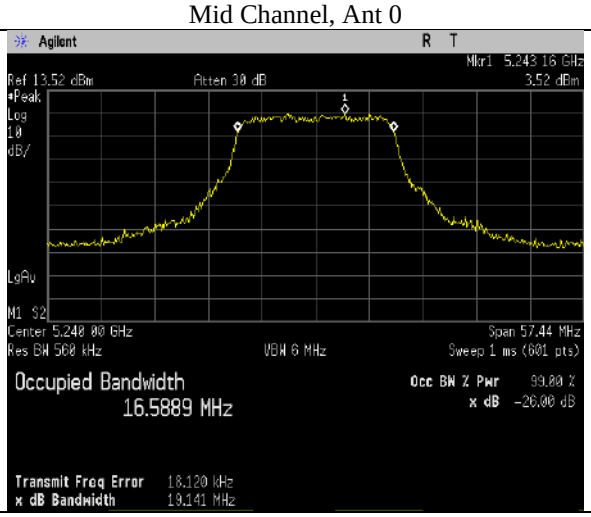
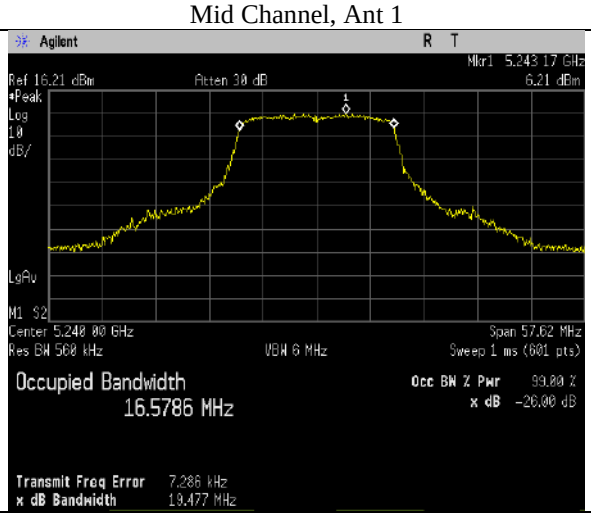
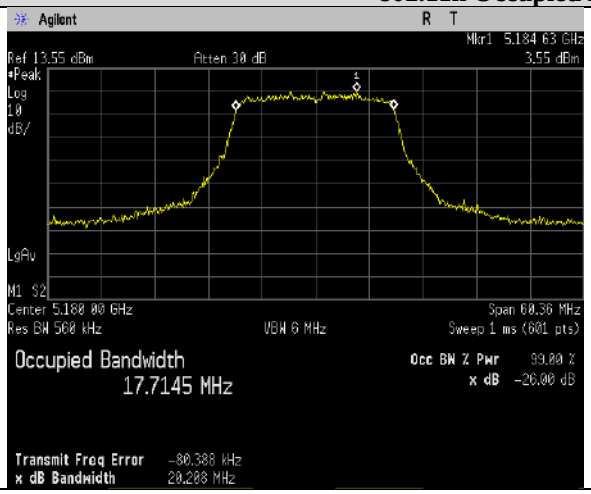
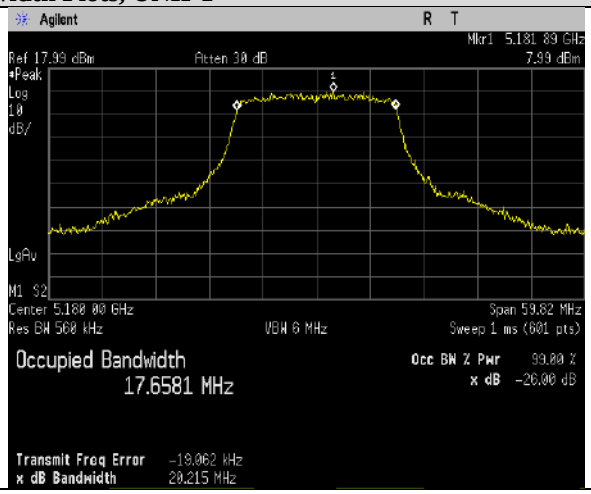
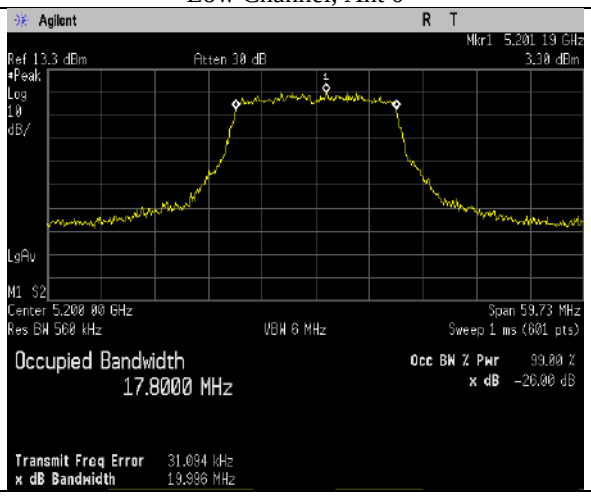
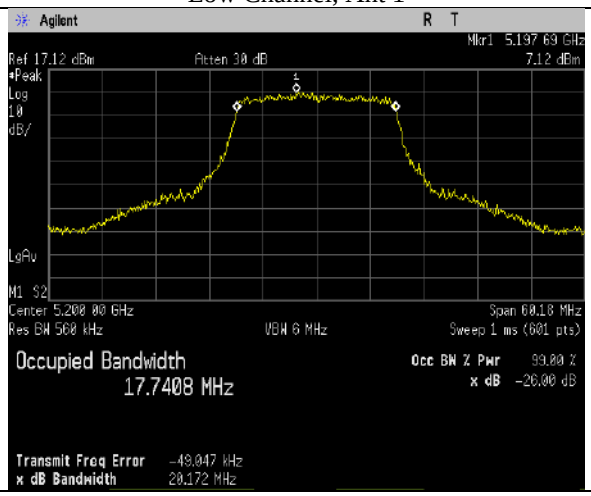
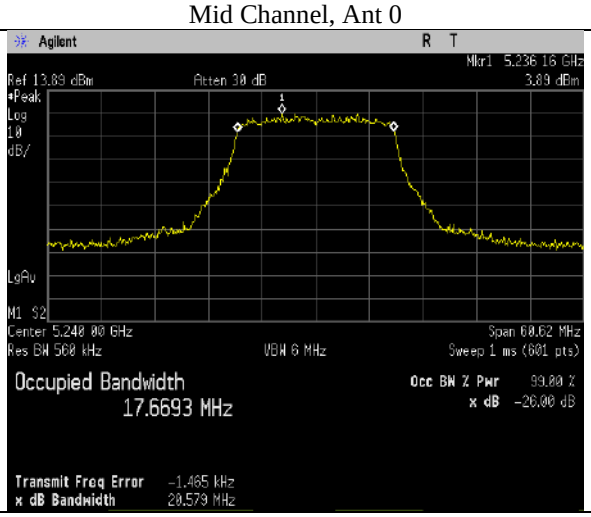
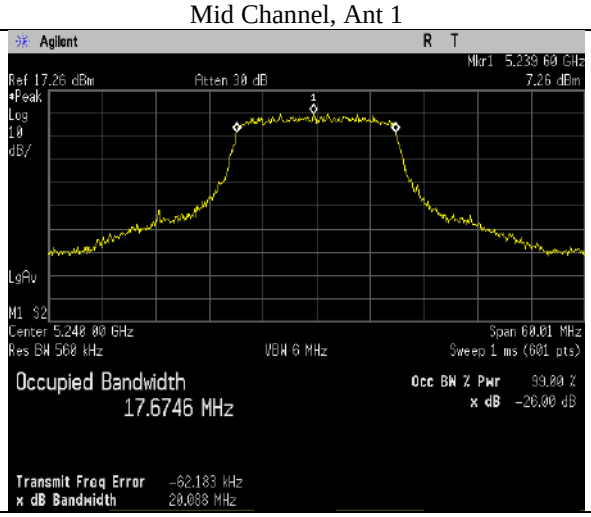
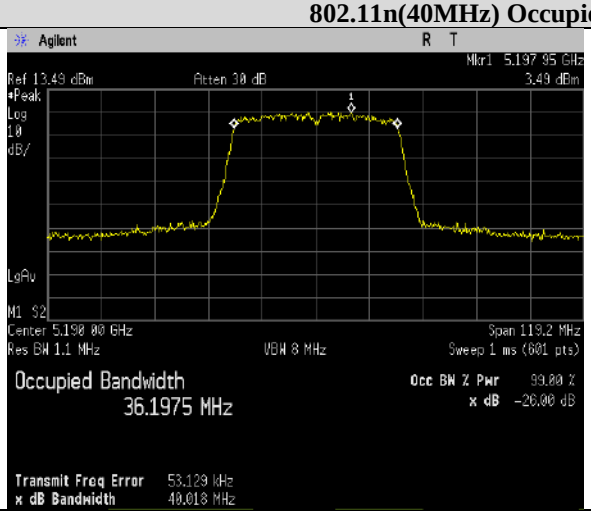
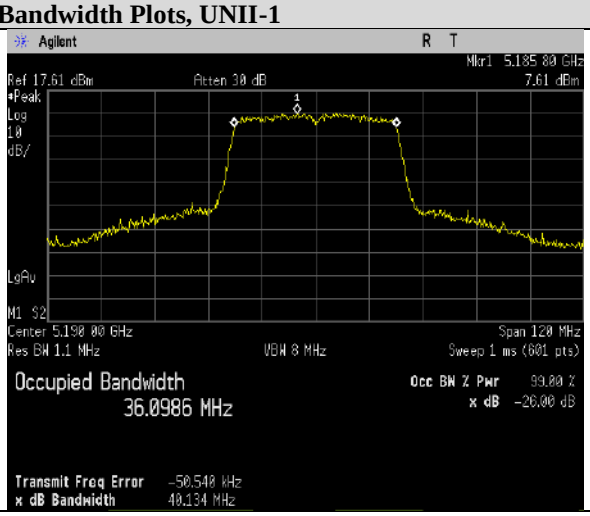
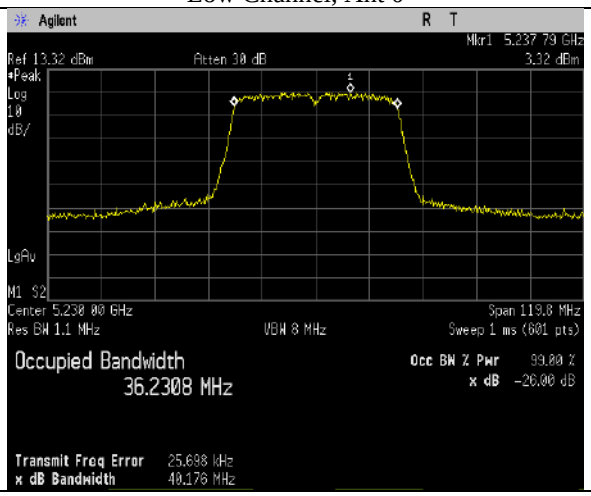
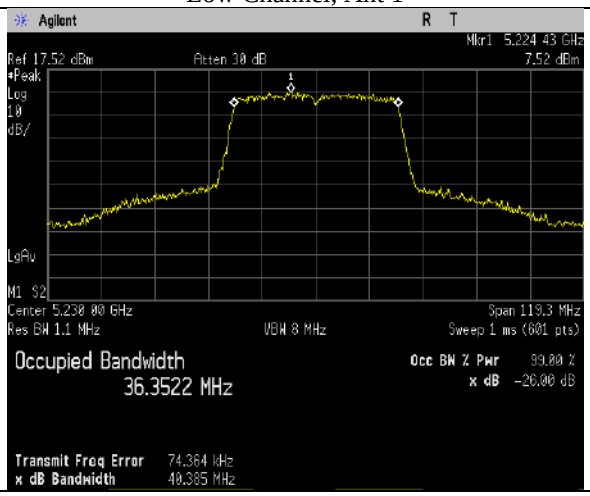
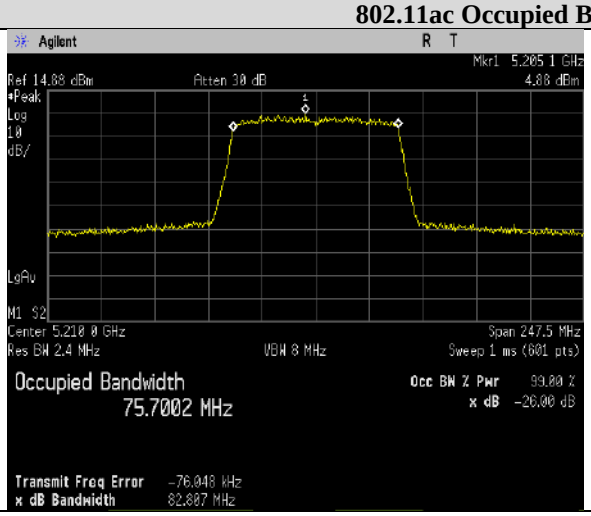
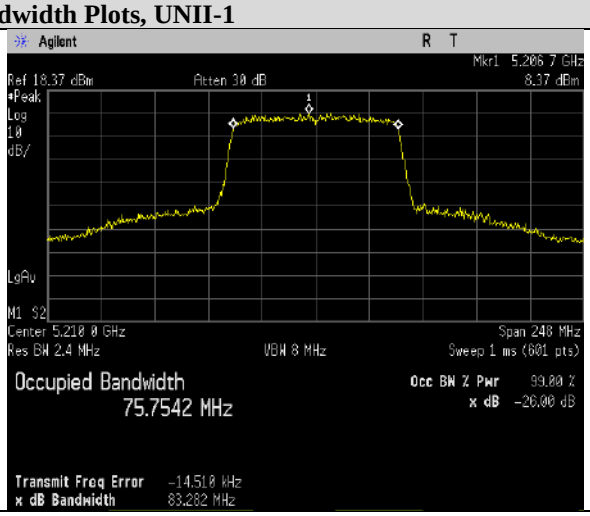
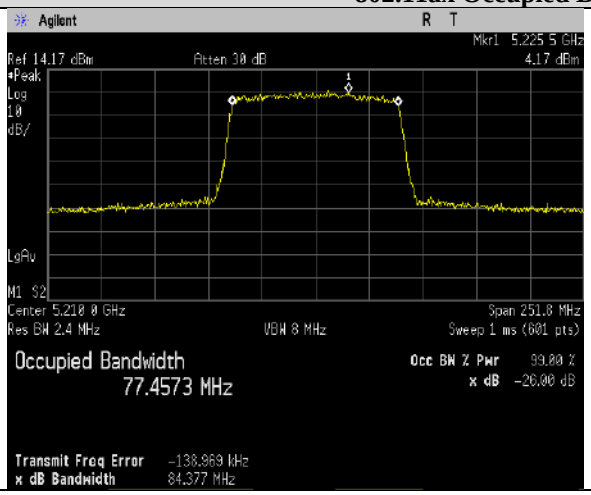
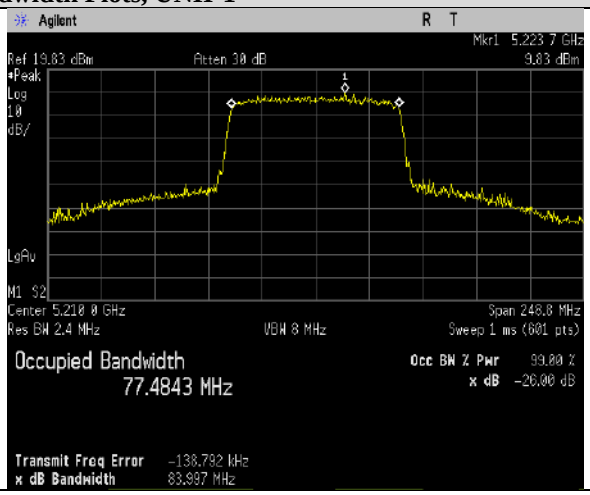
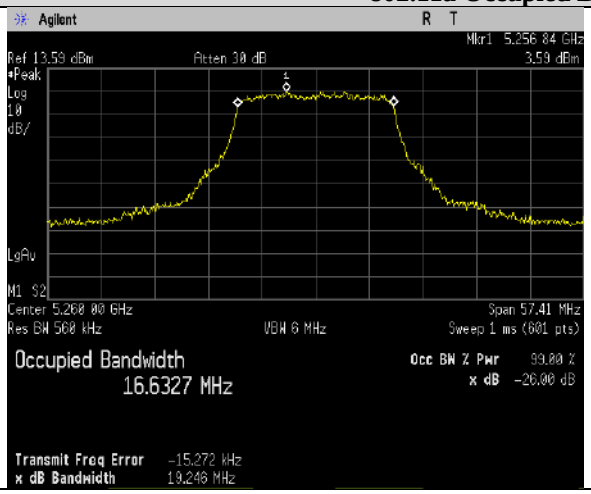
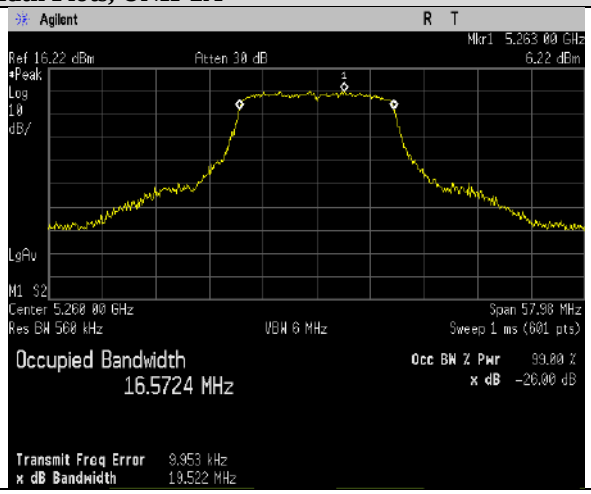
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

802.11n Occupied Bandwidth Plots, UNII-1	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

802.11n(40MHz) Occupied Bandwidth Plots, UNII-1	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

802.11ac Occupied Bandwidth Plots, UNII-1	
	
Mid Channel, Ant 0	Mid Channel, Ant 1

802.11ax Occupied Bandwidth Plots, UNII-1	
	
Mid Channel, Ant 0	Mid Channel, Ant 1

802.11a Occupied Bandwidth Plots, UNII-2A	
	
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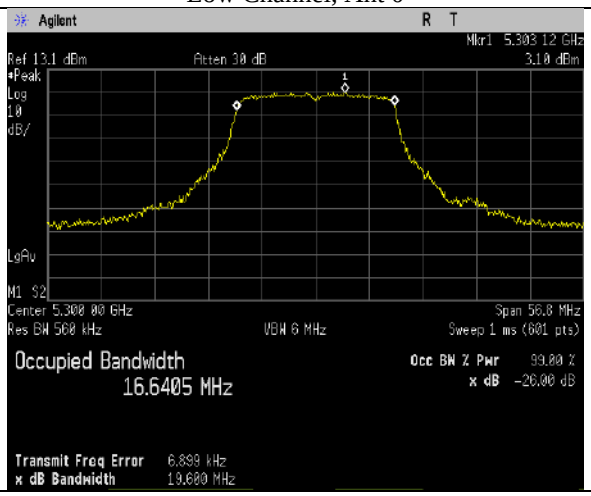	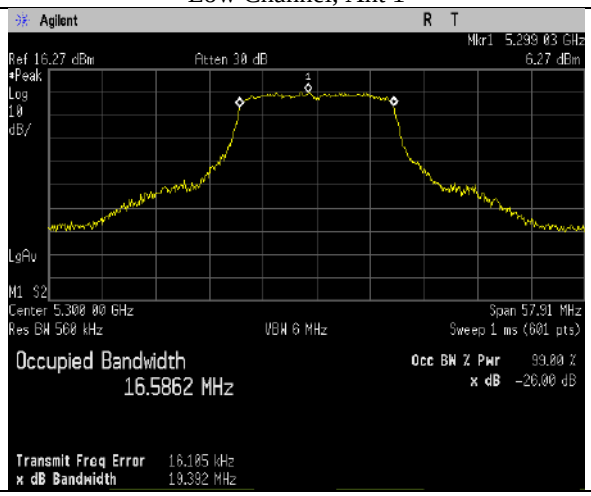
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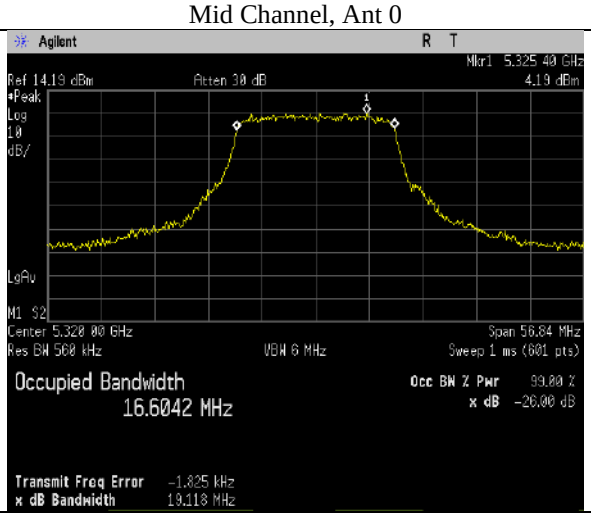	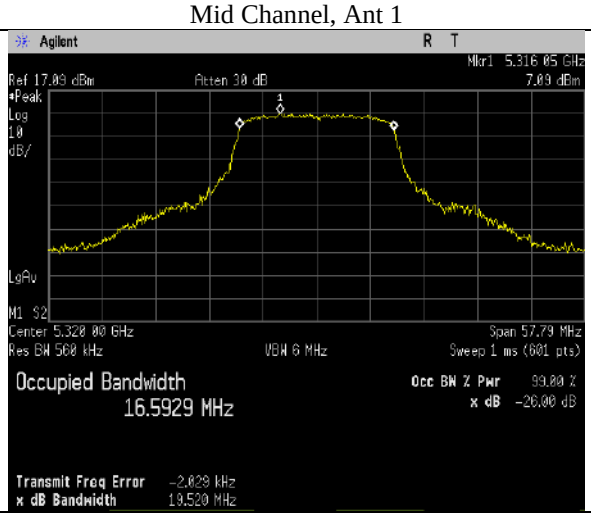
High Channel, Ant 0	High Channel, Ant 1

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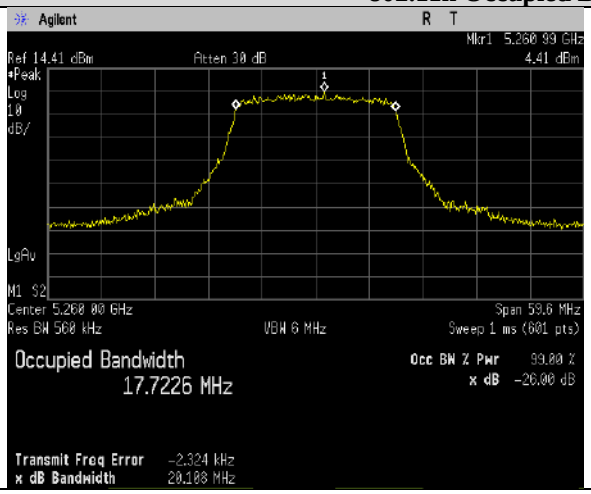	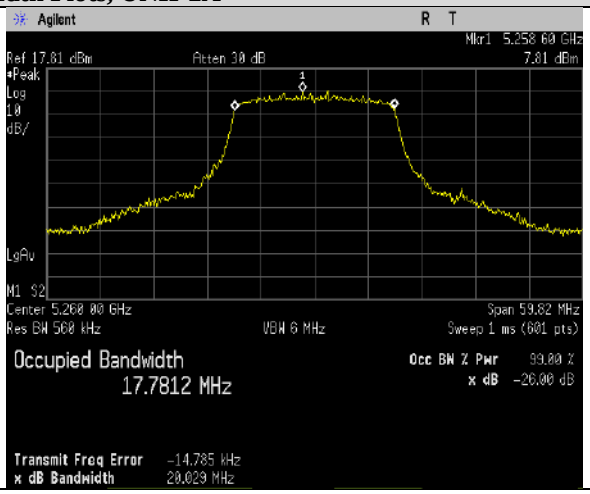
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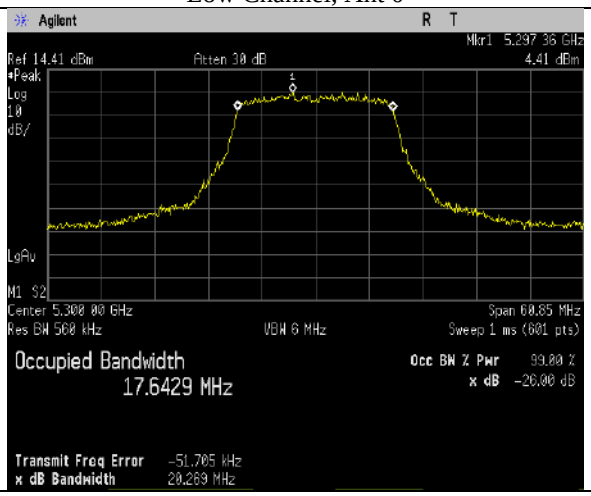	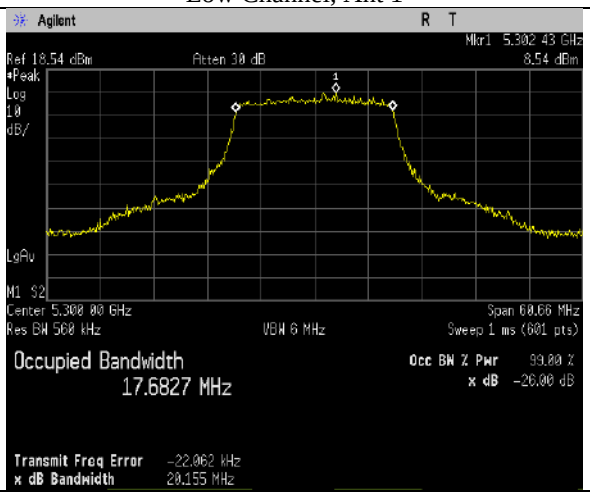
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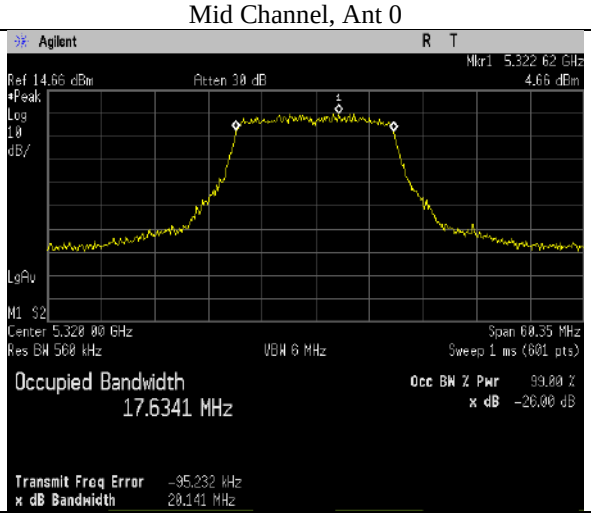
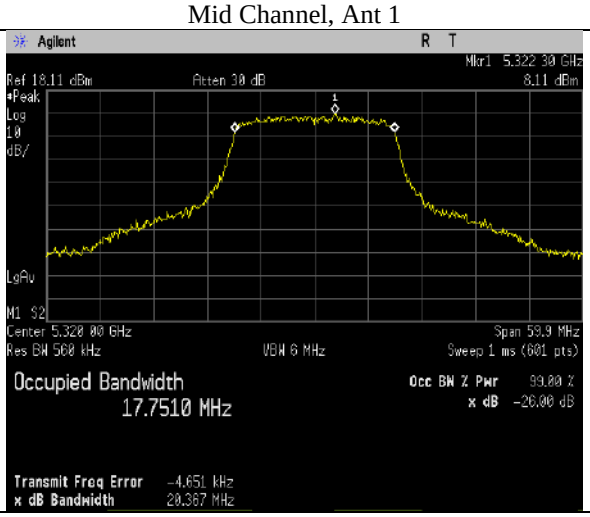
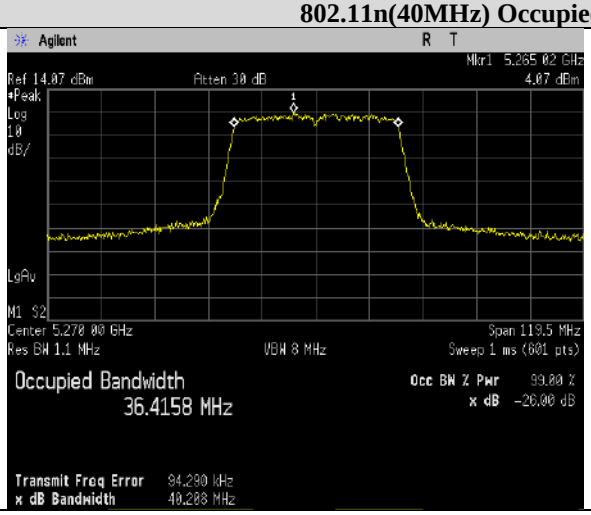
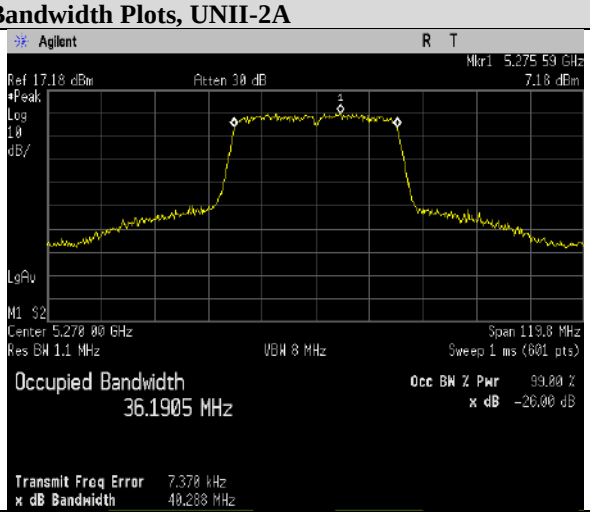
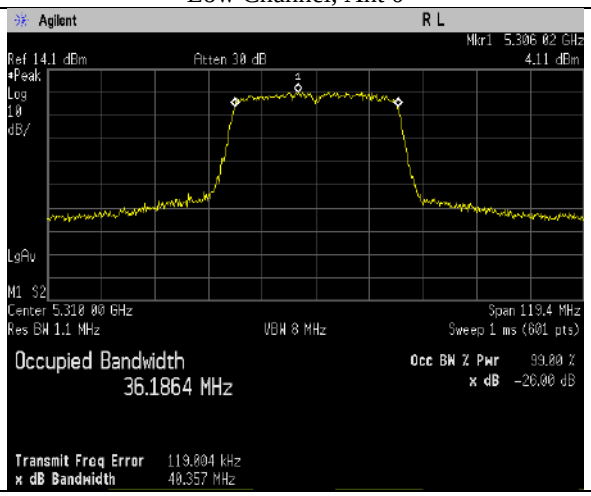
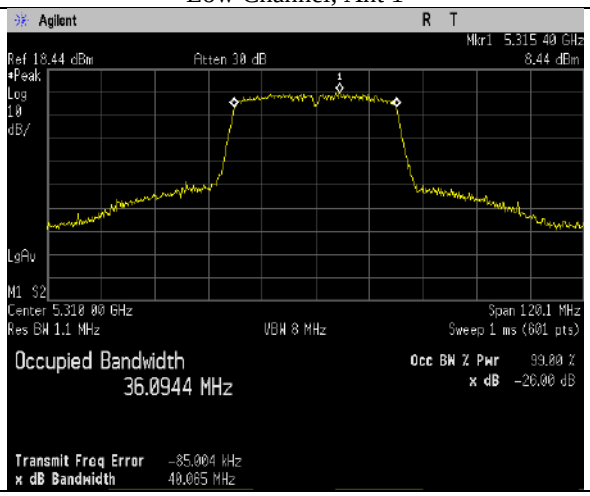
	
High Channel, Ant 0	High Channel, Ant 1

802.11n(40MHz) Occupied Bandwidth Plots, UNII-2A	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

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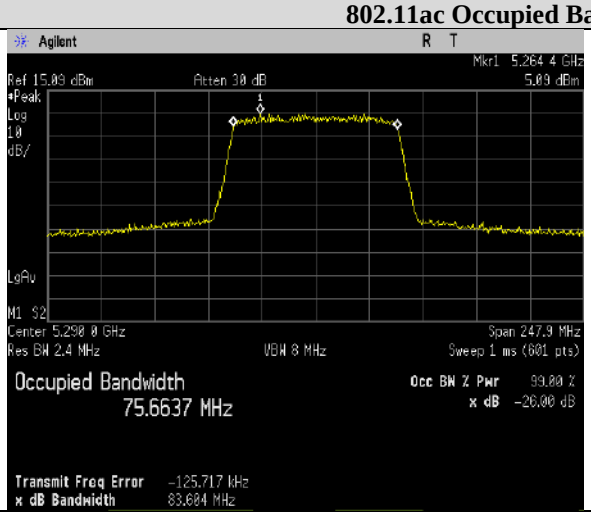	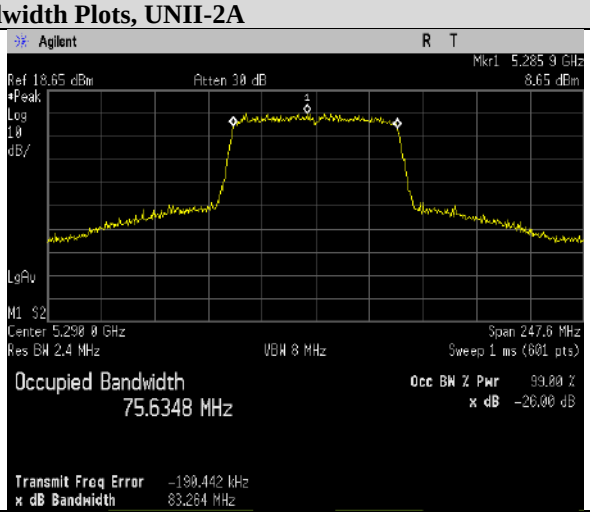
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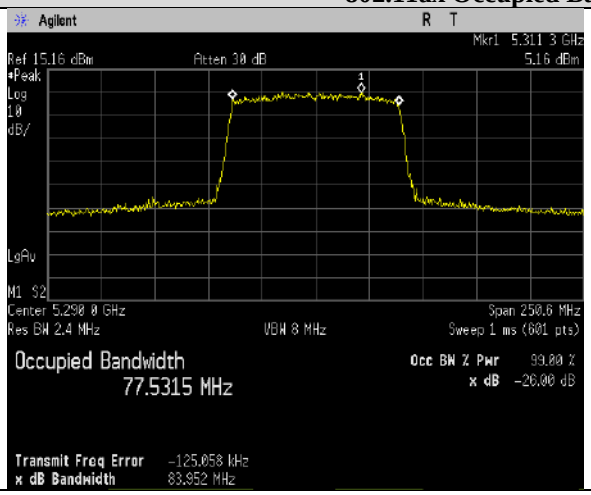
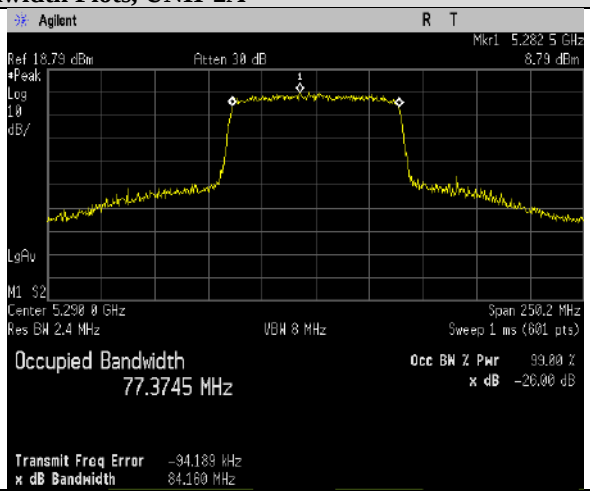
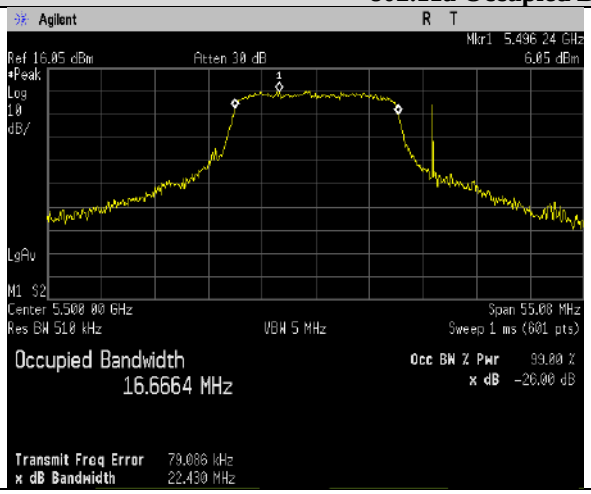
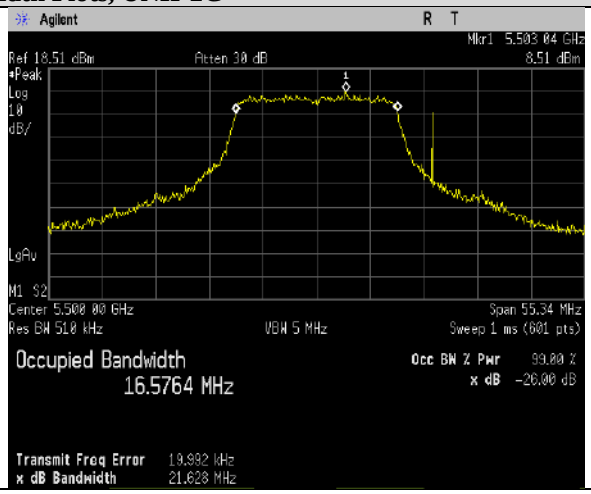
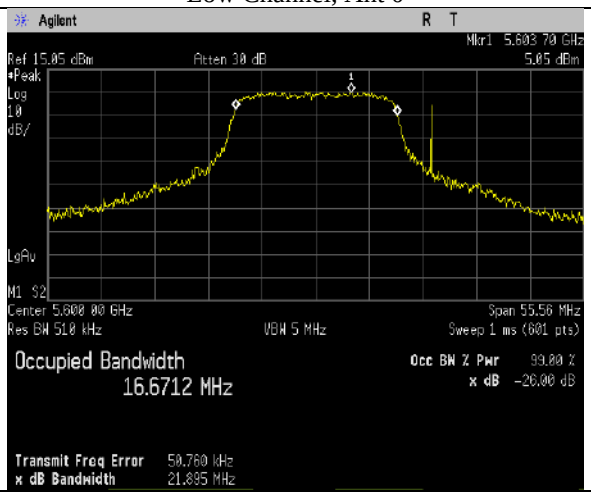
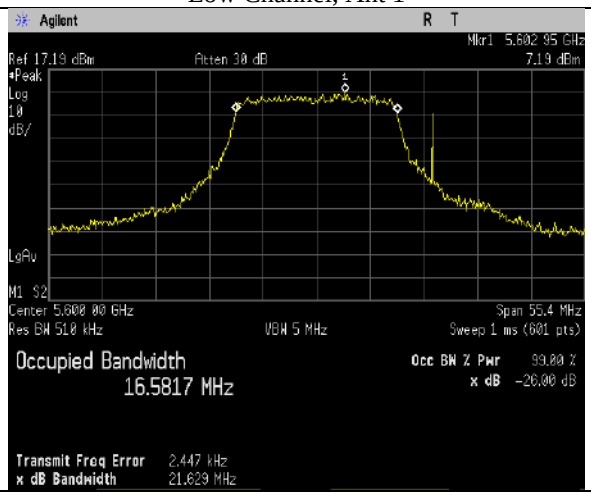
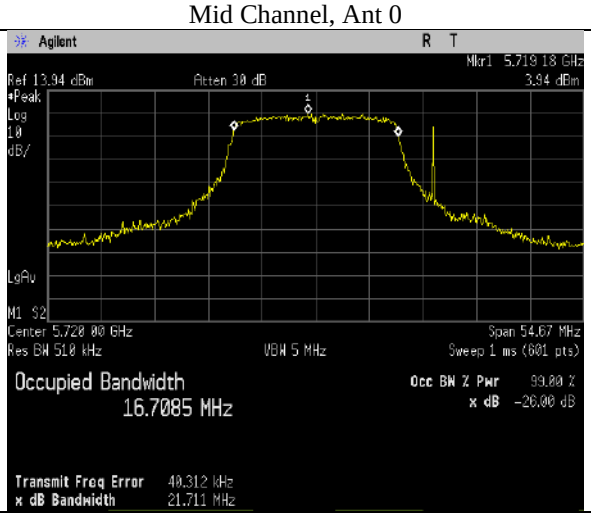
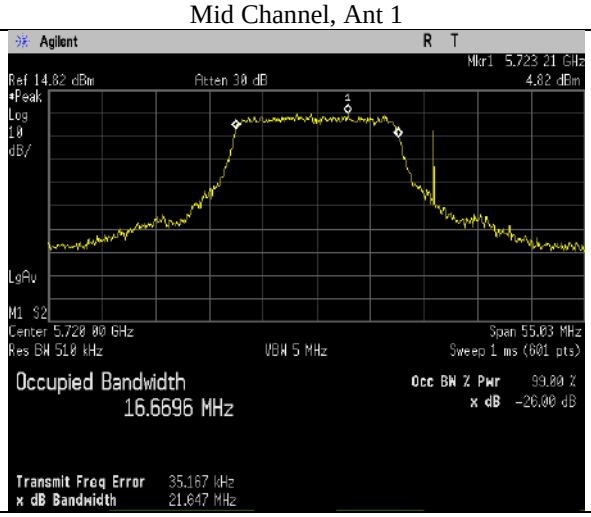
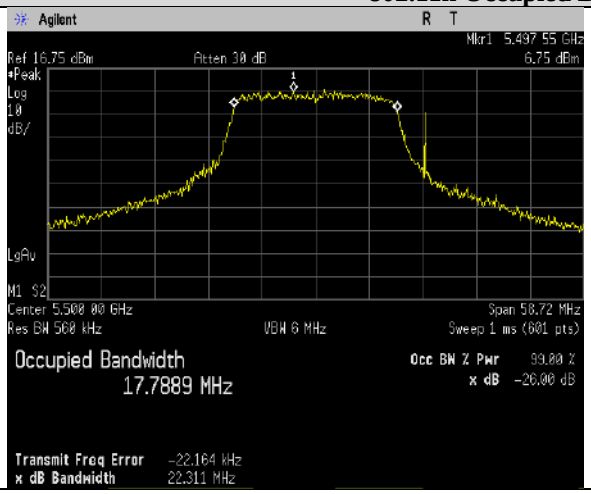
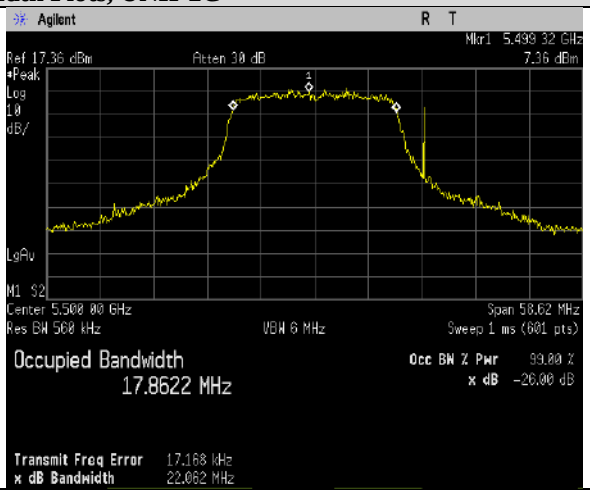
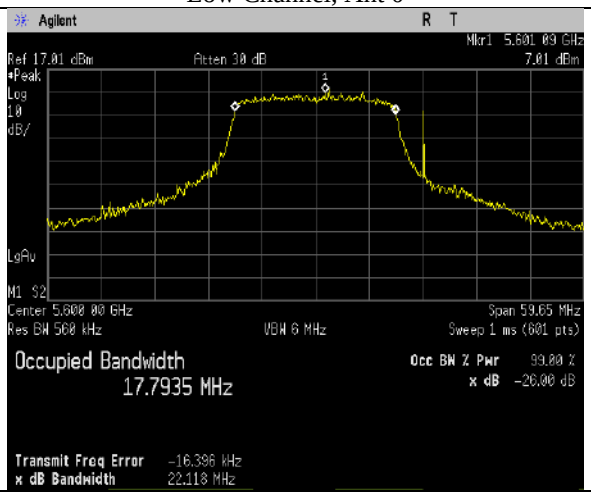
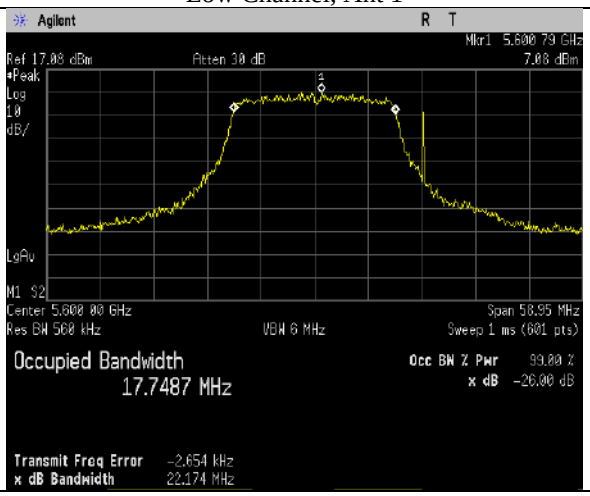
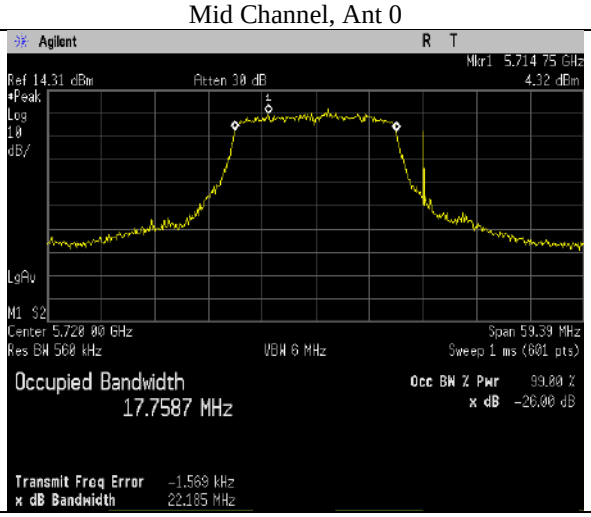
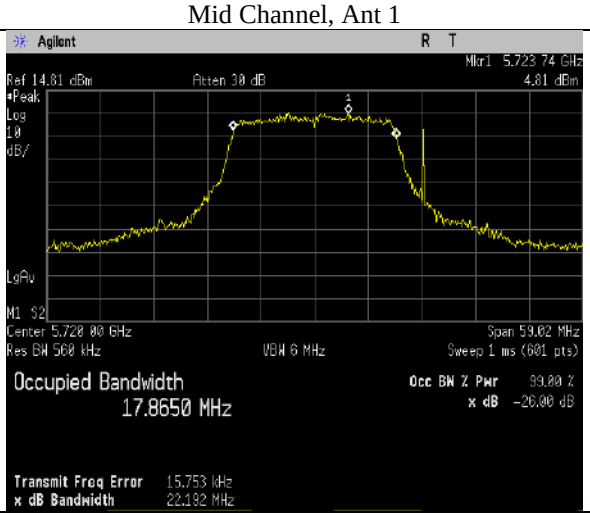
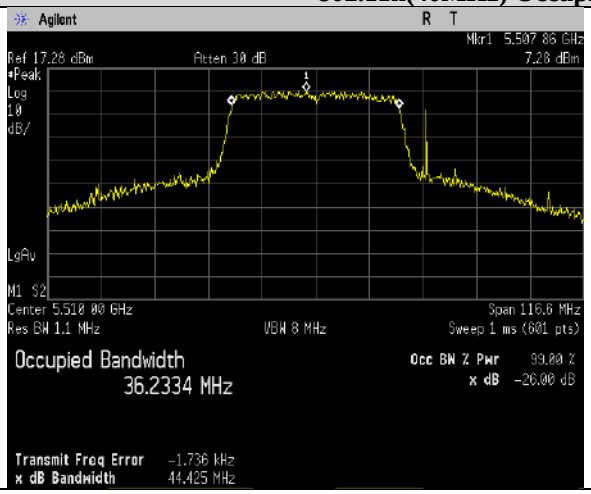
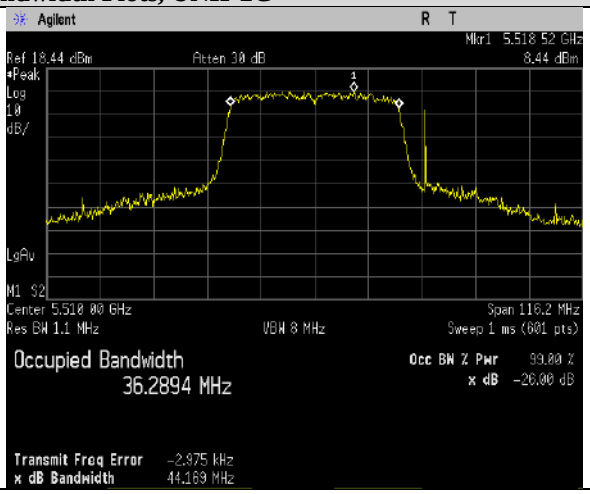
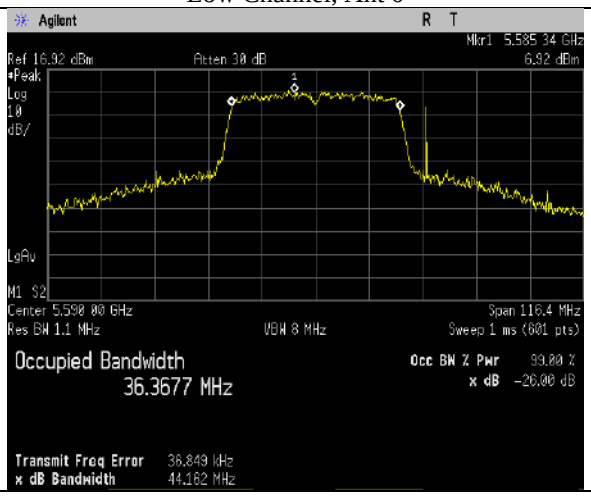
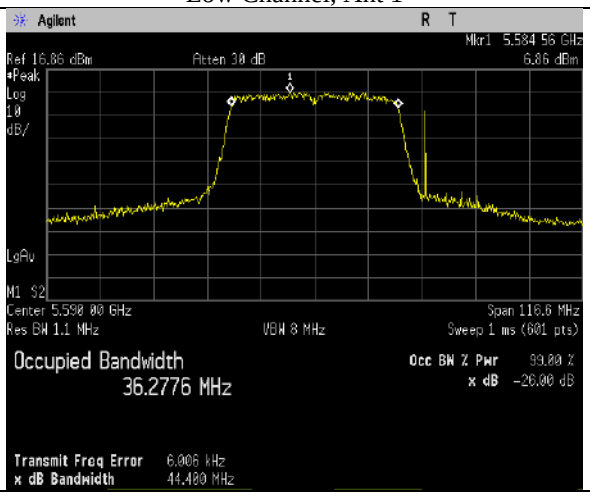
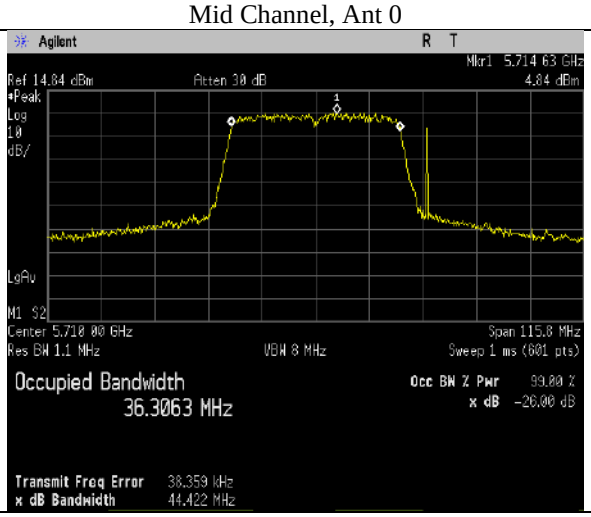
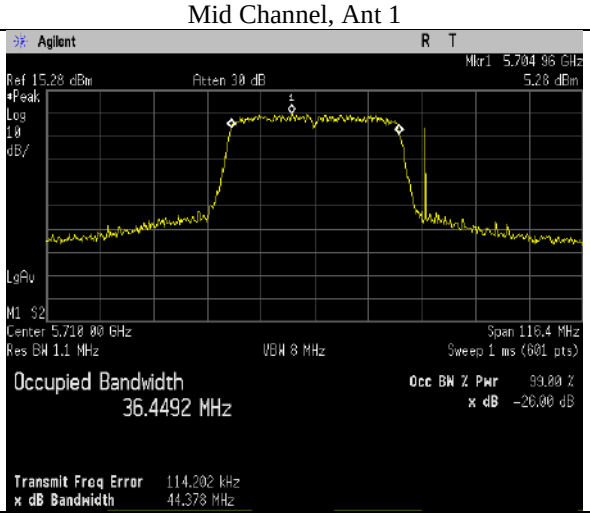
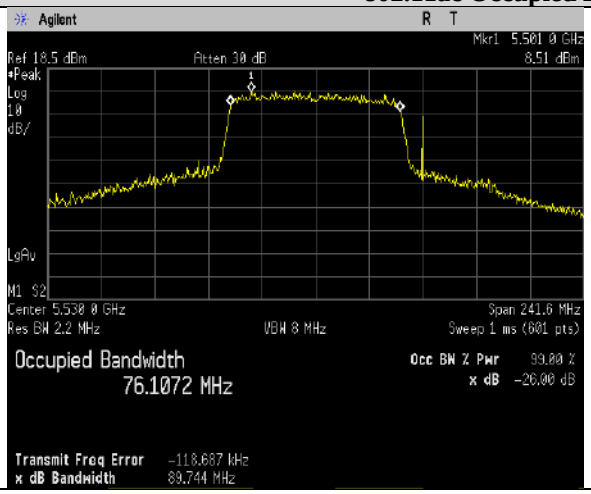
	
Mid Channel, Ant 0	Mid Channel, Ant 1

802.11a Occupied Bandwidth Plots, UNII-2C	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

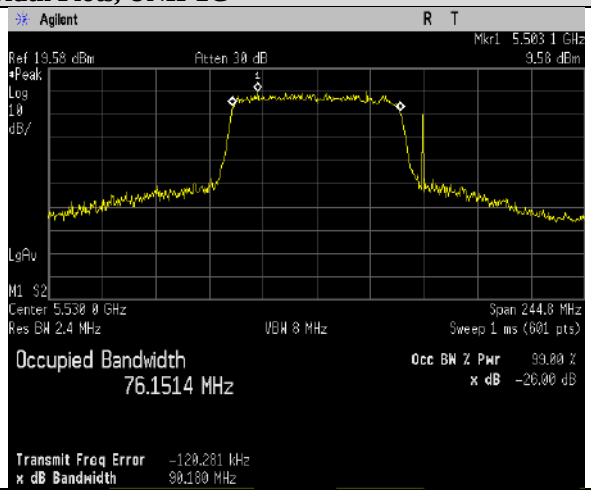
802.11n Occupied Bandwidth Plots, UNII-2C	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

802.11n(40MHz) Occupied Bandwidth Plots, UNII-2C	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

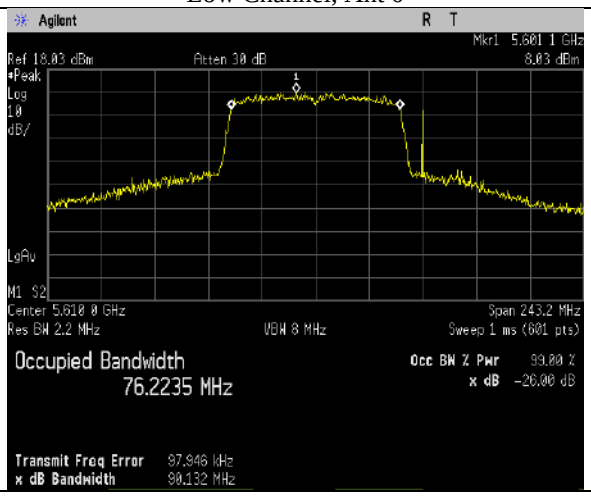
802.11ac Occupied Bandwidth Plots, UNII-2C



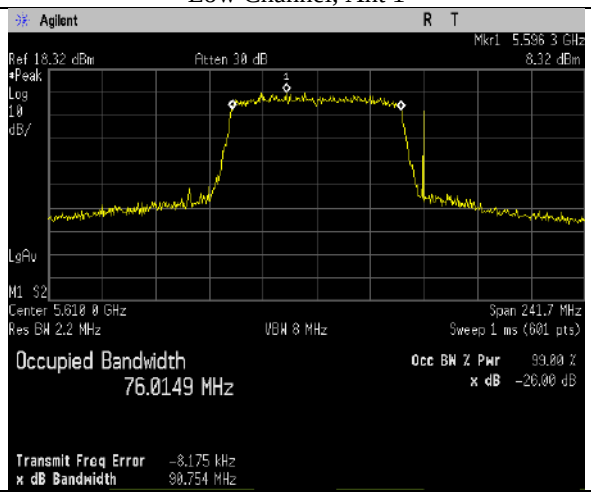
Low Channel, Ant 0



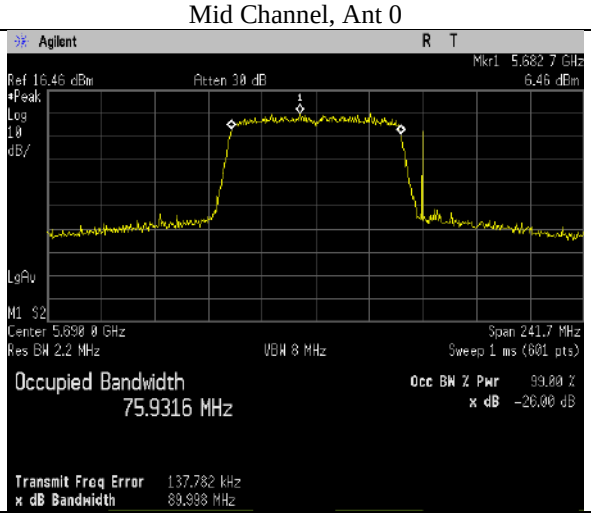
Low Channel, Ant 1



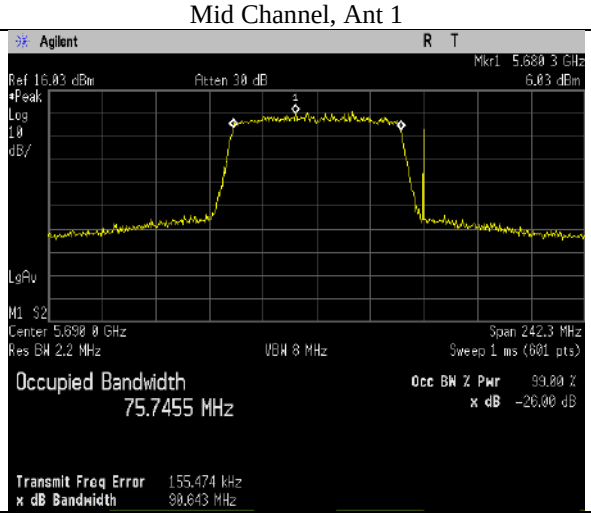
Mid Channel, Ant 0



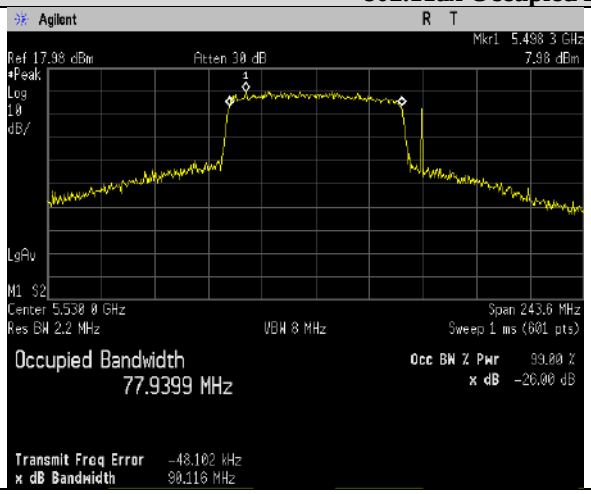
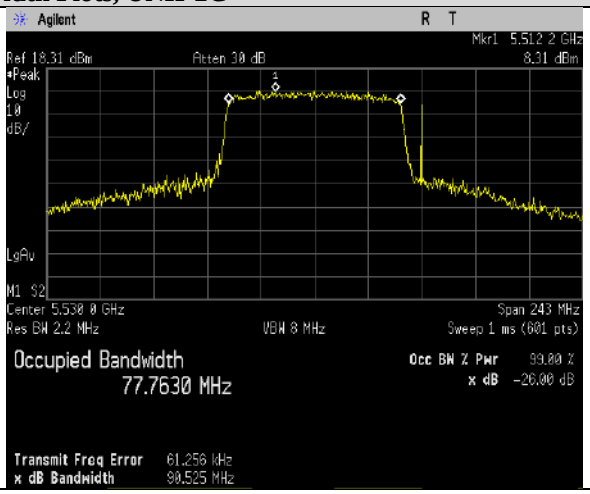
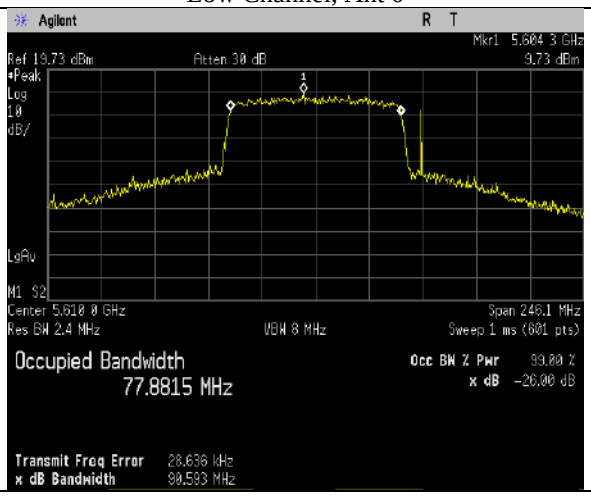
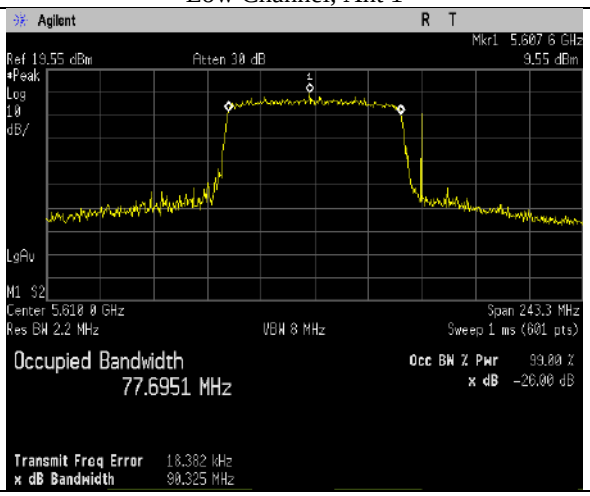
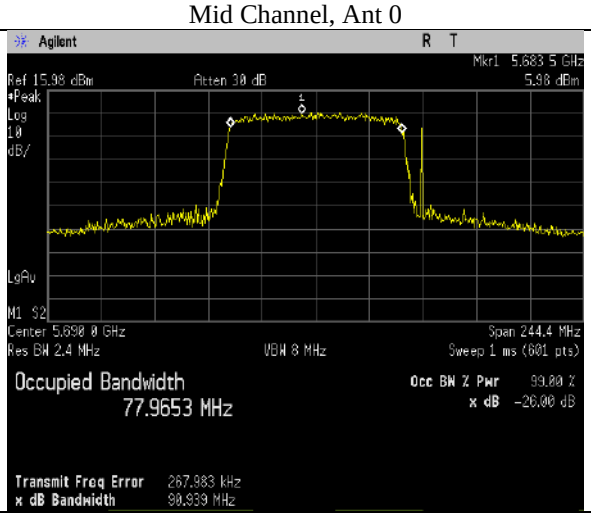
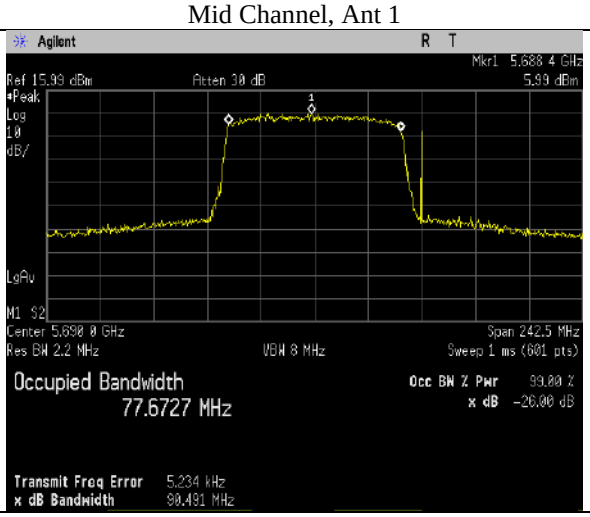
Mid Channel, Ant 1

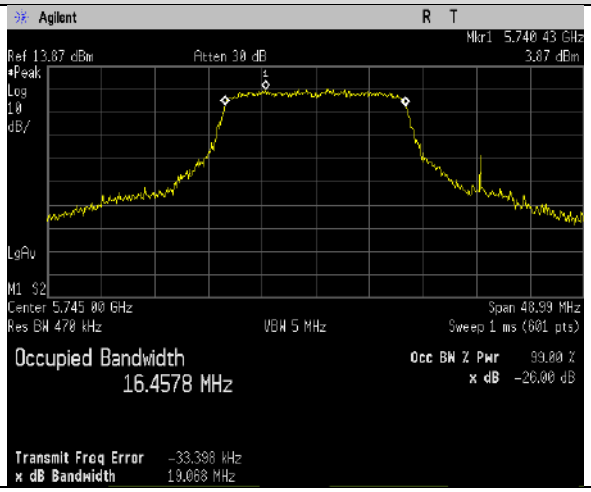
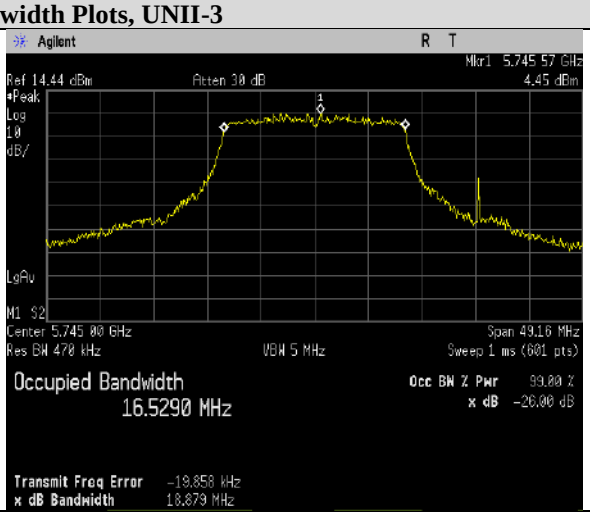
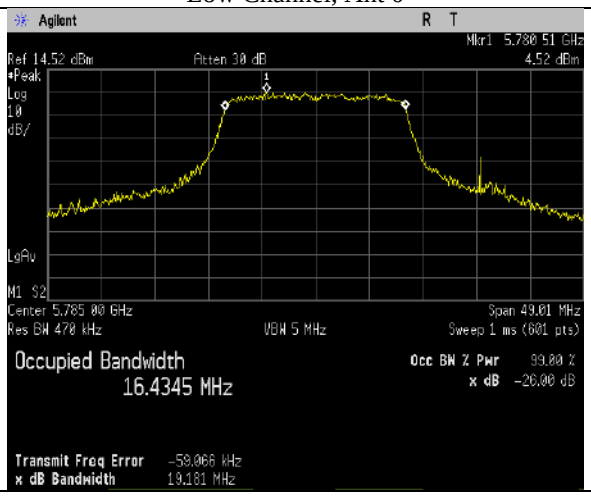
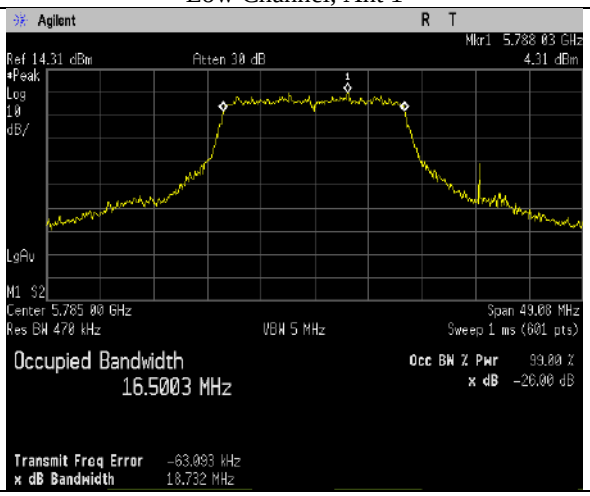
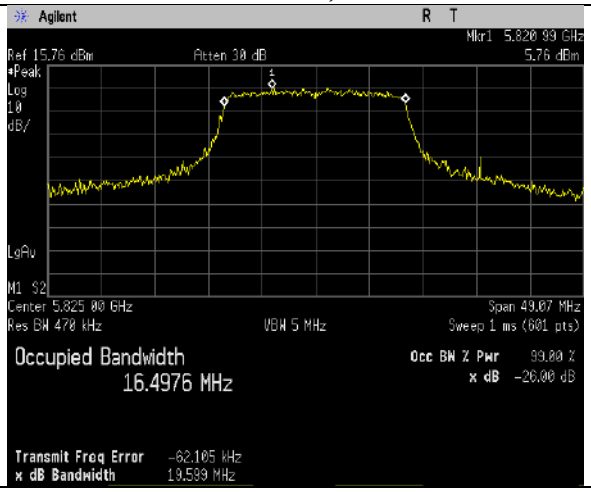
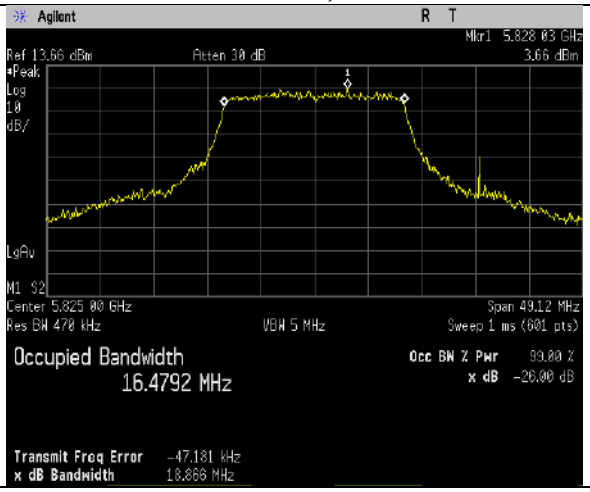


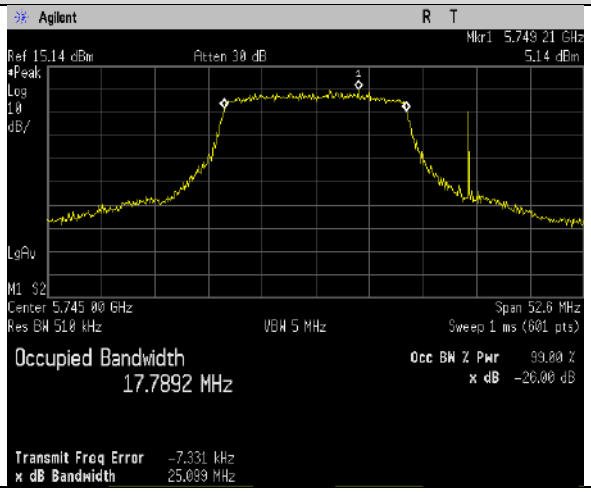
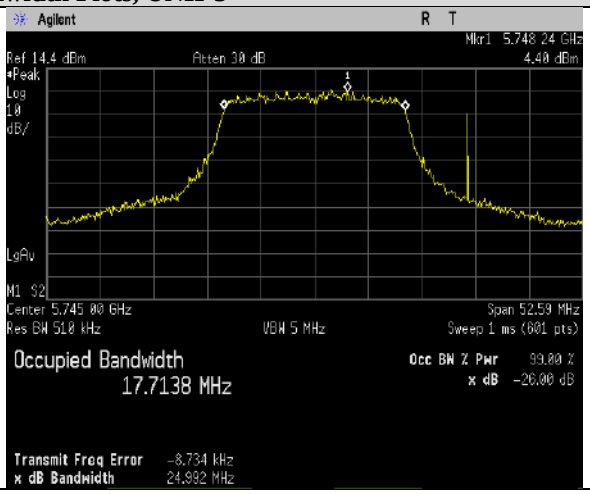
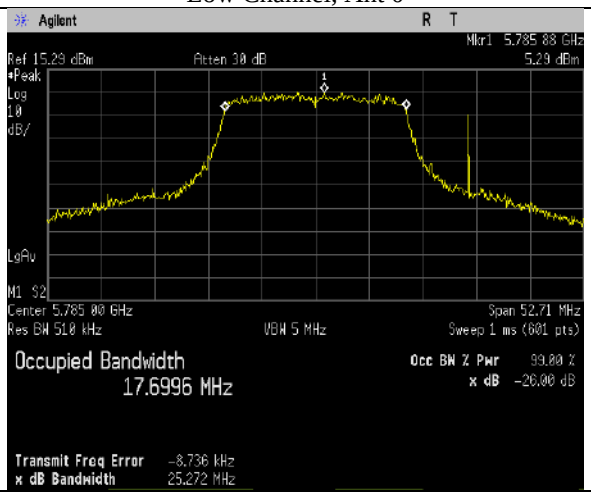
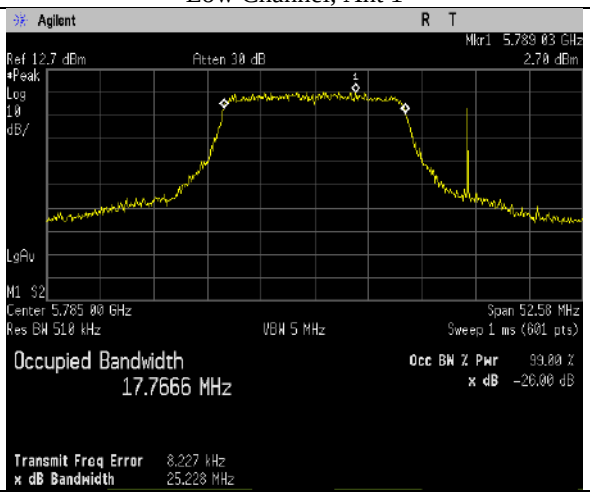
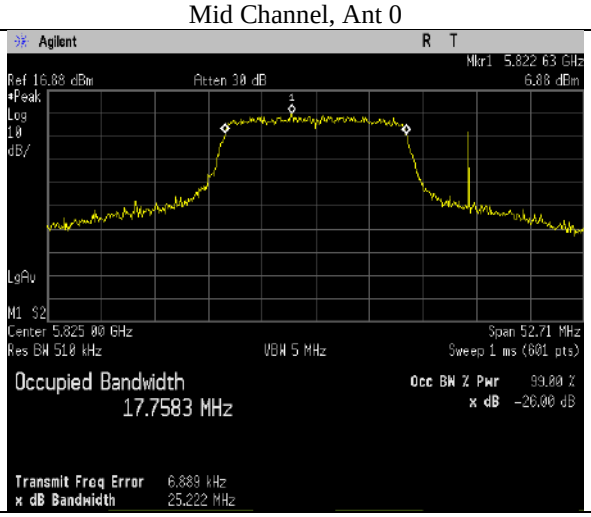
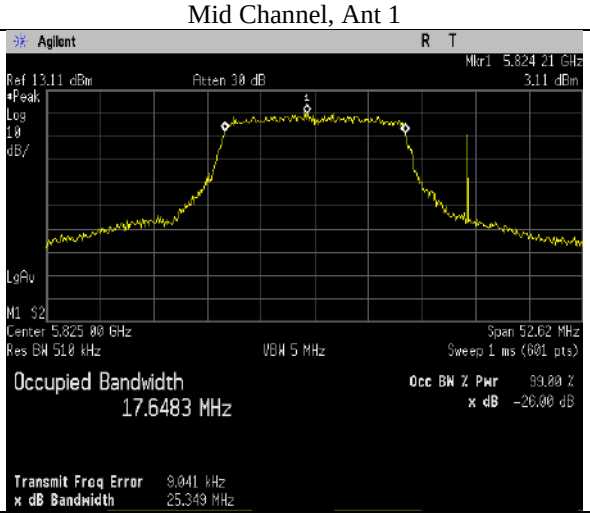
High Channel, Ant 0

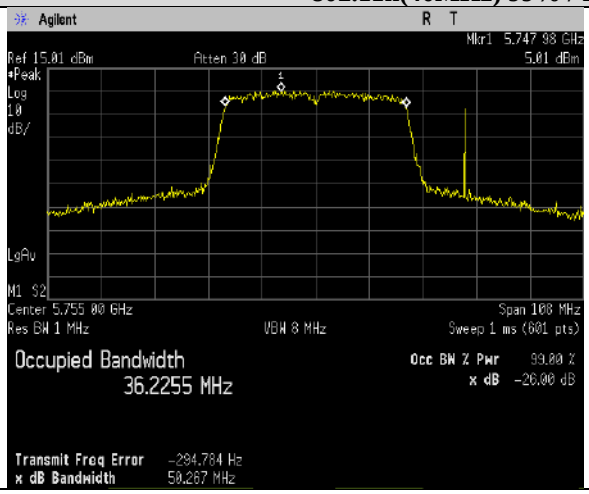
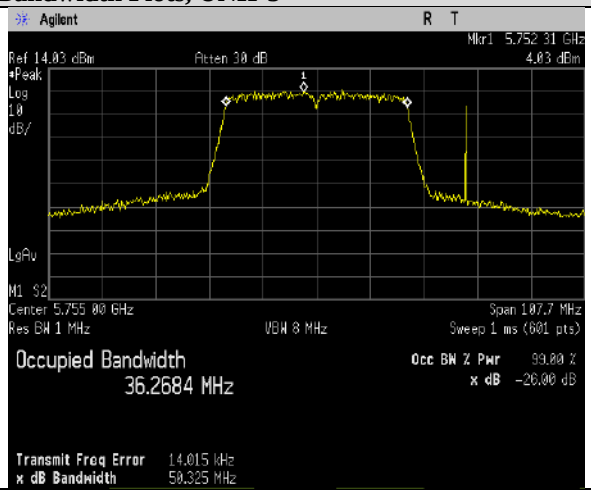
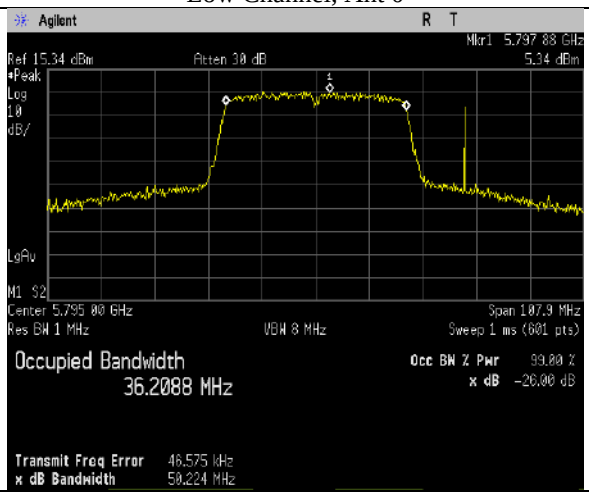
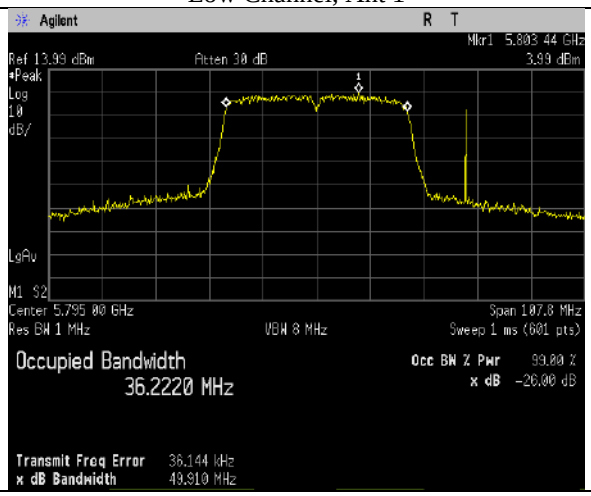


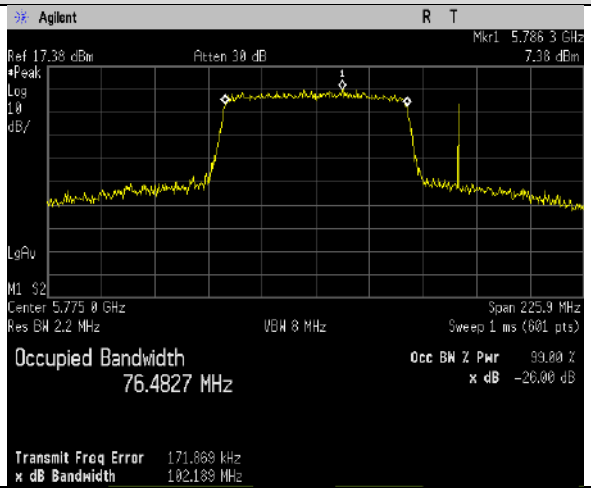
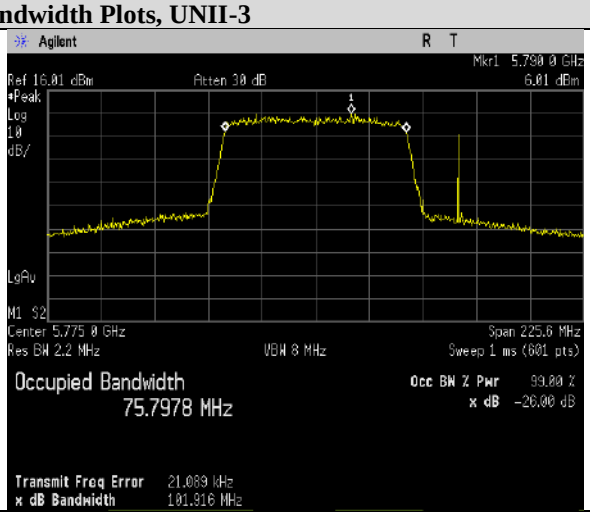
High Channel, Ant 1

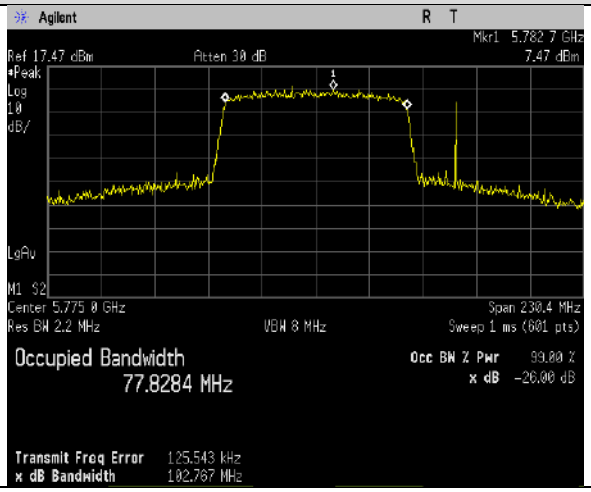
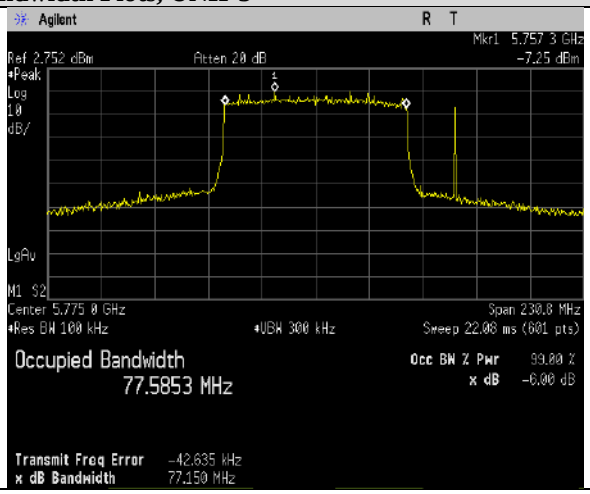
802.11ax Occupied Bandwidth Plots, UNII-2C	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

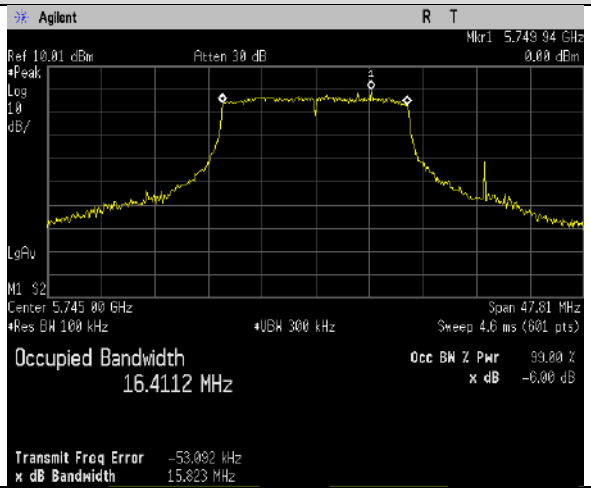
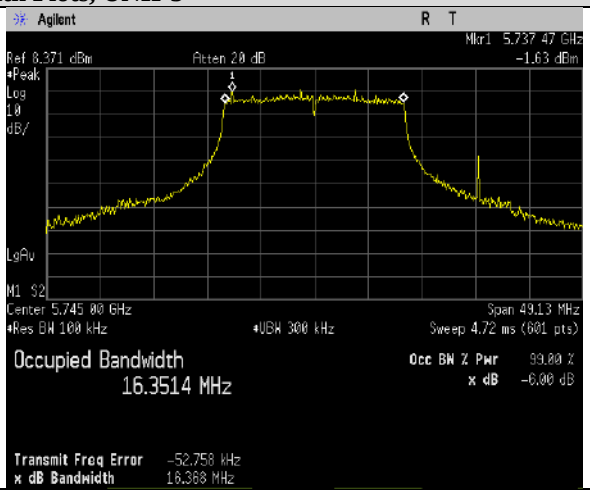
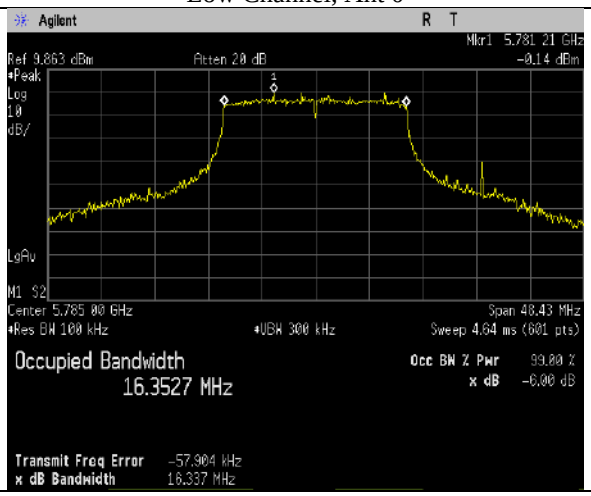
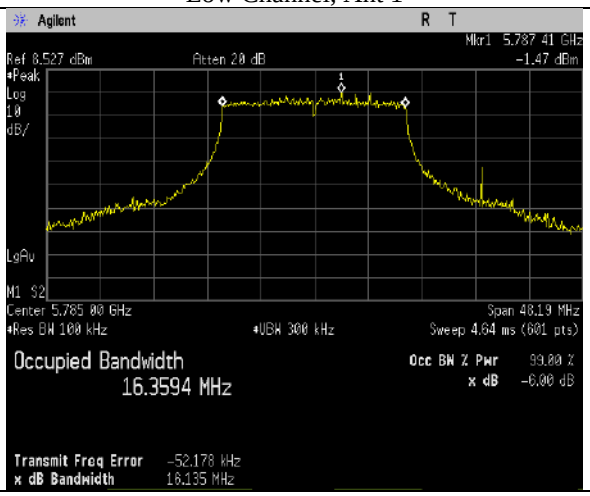
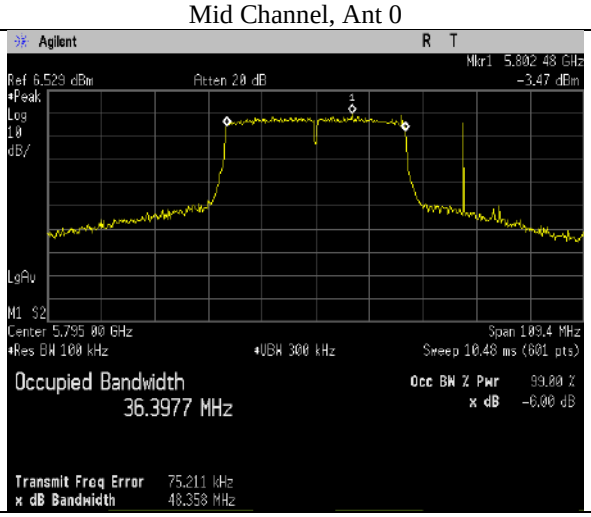
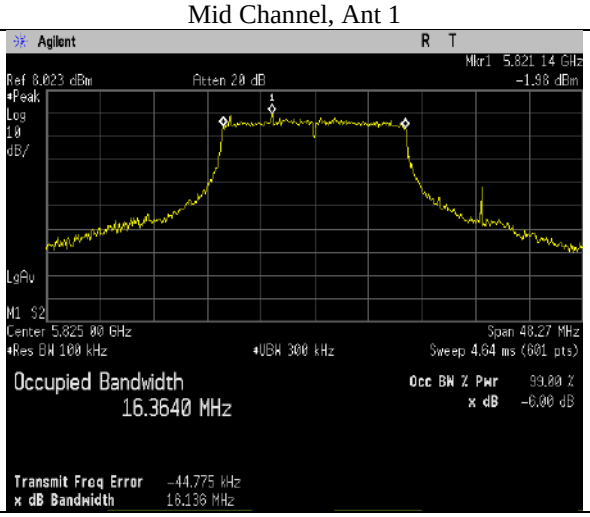
802.11a 99% / 26dB Bandwidth Plots, UNII-3	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

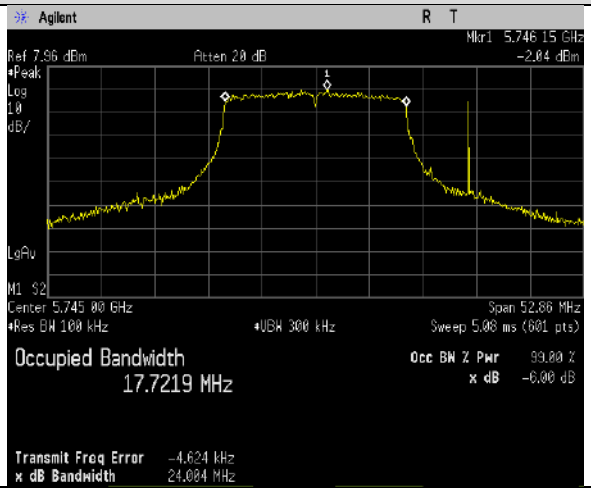
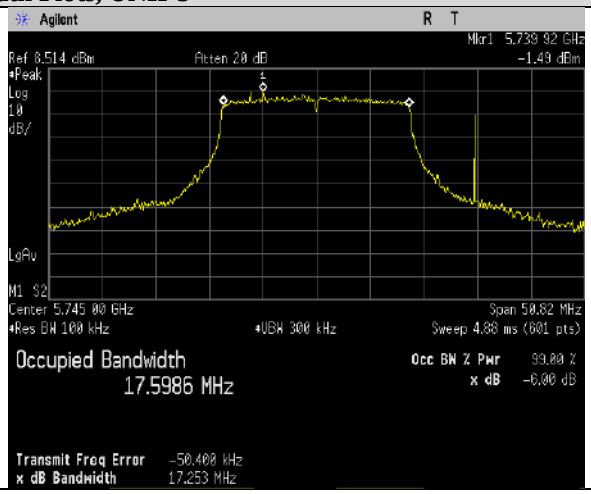
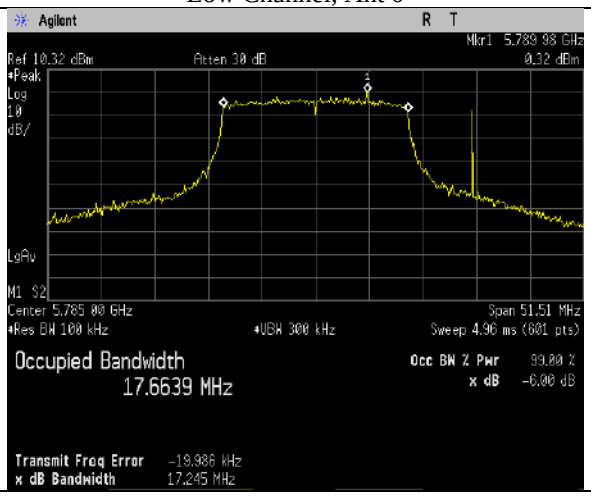
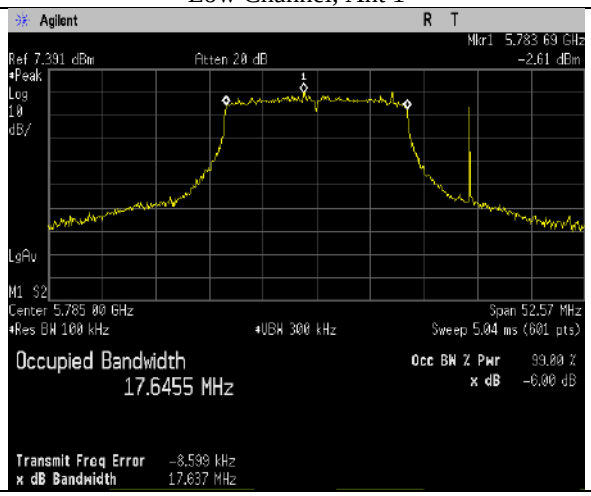
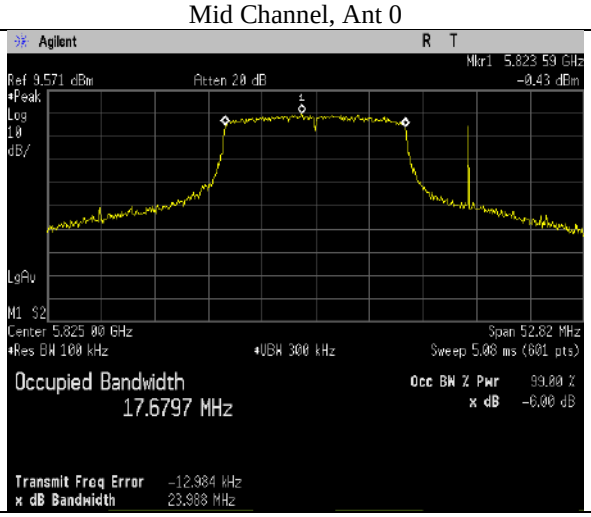
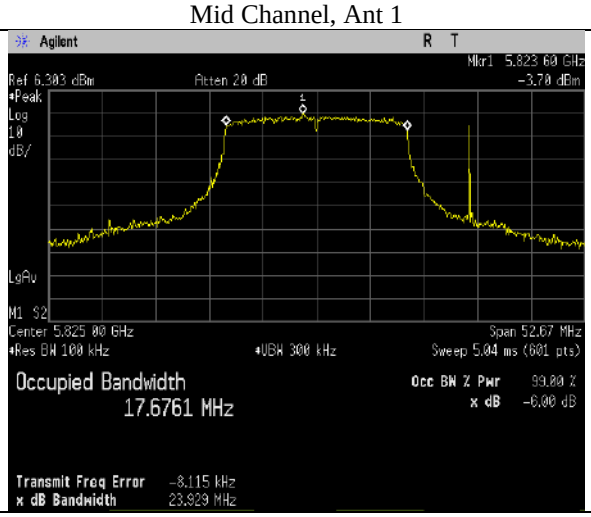
802.11n 99% / 26dB Bandwidth Plots, UNII-3	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

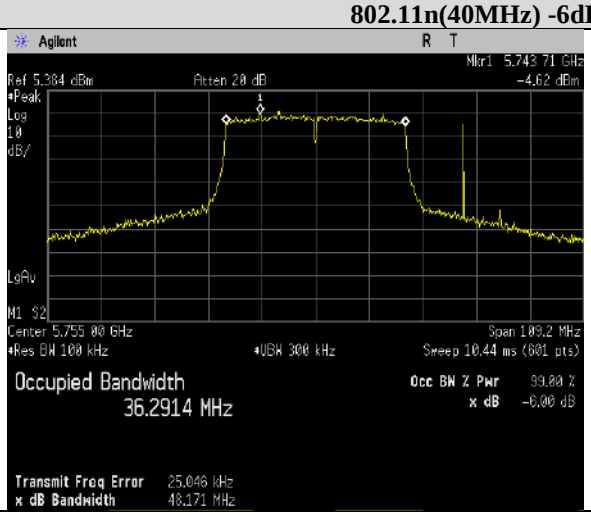
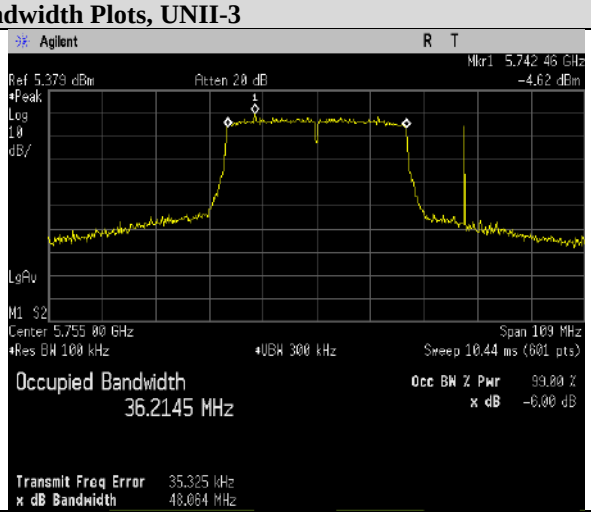
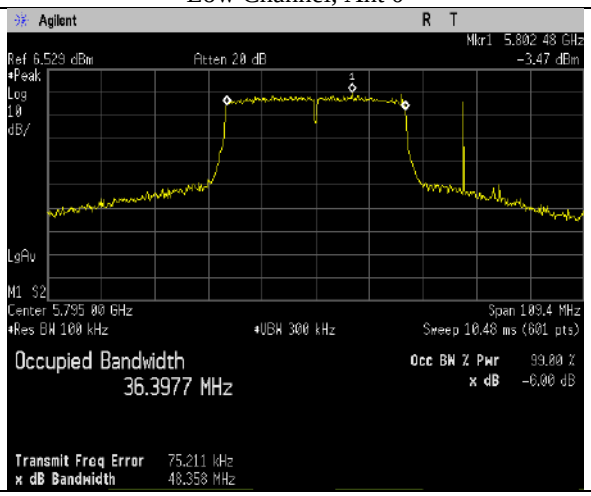
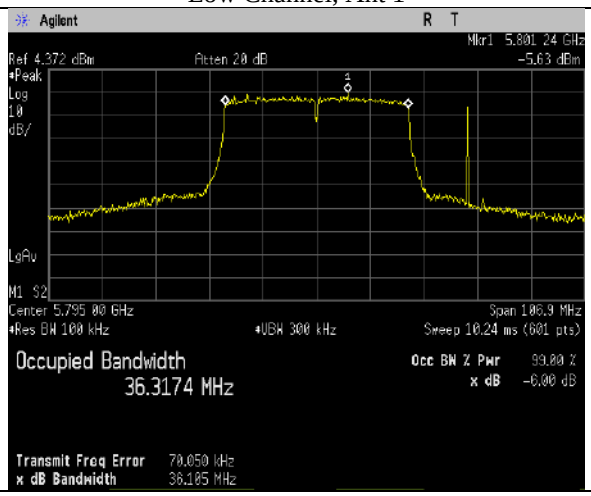
802.11n(40MHz) 99% / 26dB Bandwidth Plots, UNII-3	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

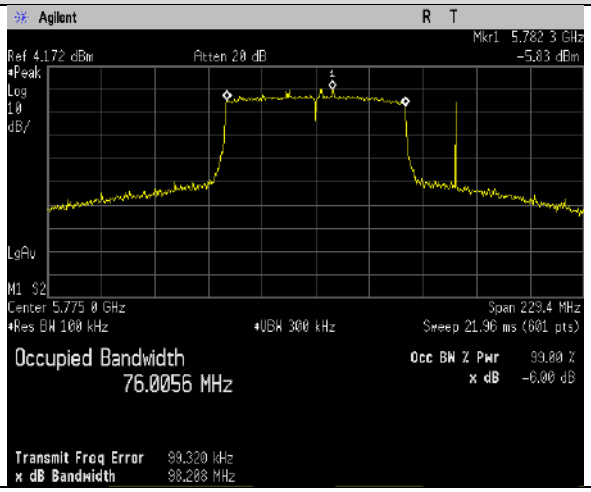
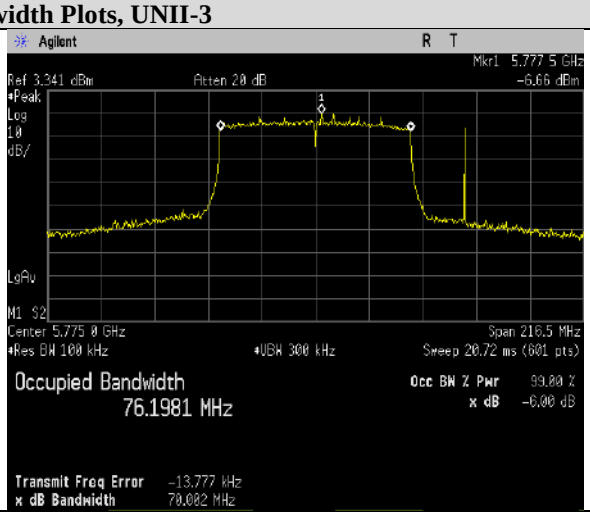
802.11ac 99% / 26dB Bandwidth Plots, UNII-3	
	
Mid Channel, Ant 0	Mid Channel, Ant 1

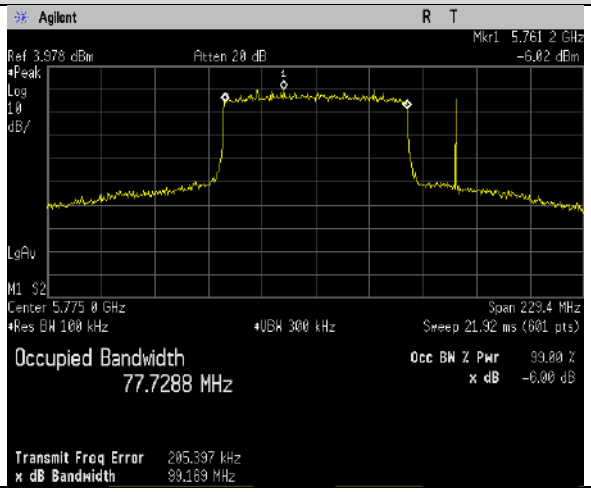
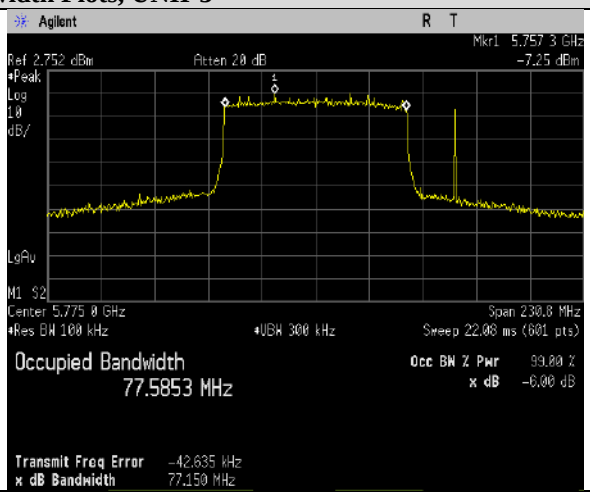
802.11ax 99% / 26dB Bandwidth Plots, UNII-3	
	
Mid Channel, Ant 0	Mid Channel, Ant 1

802.11a -6dB Bandwidth Plots, UNII-3	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

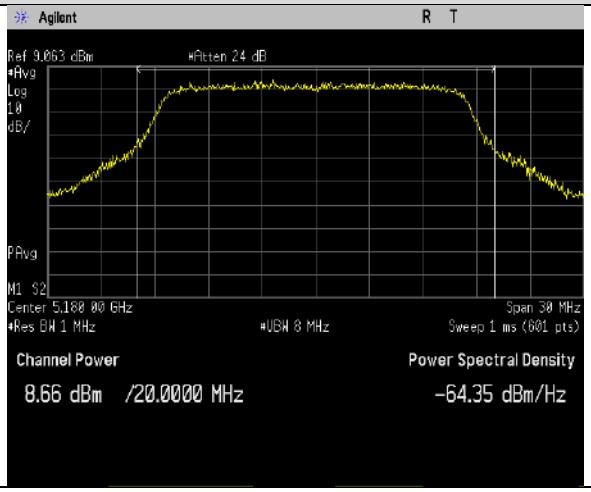
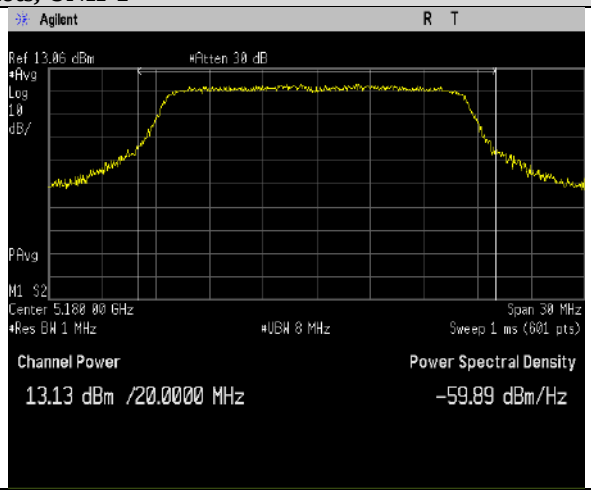
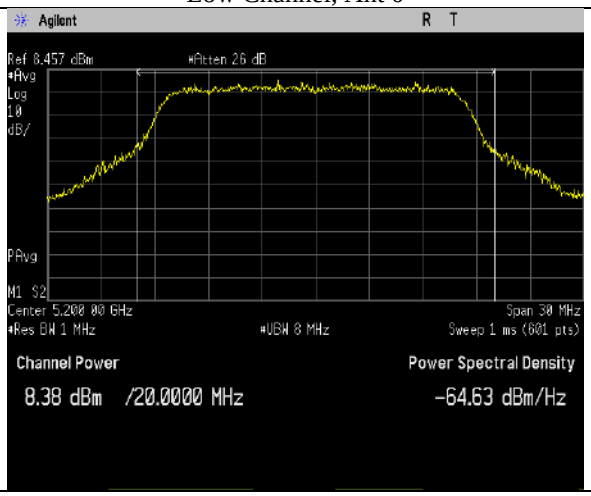
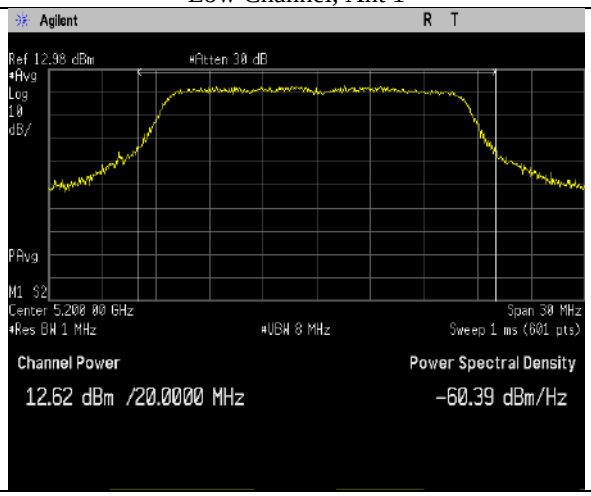
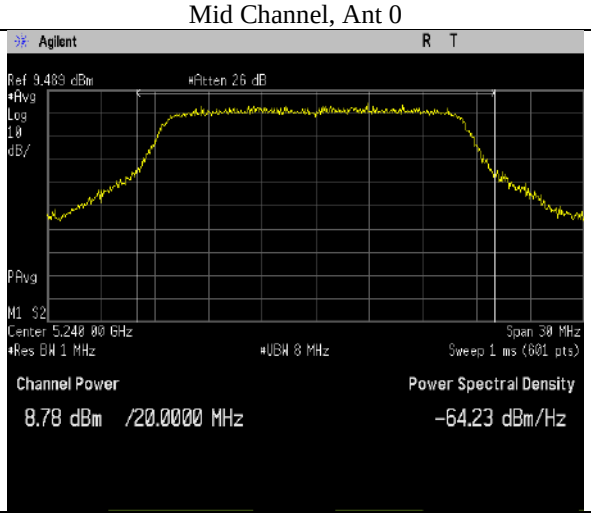
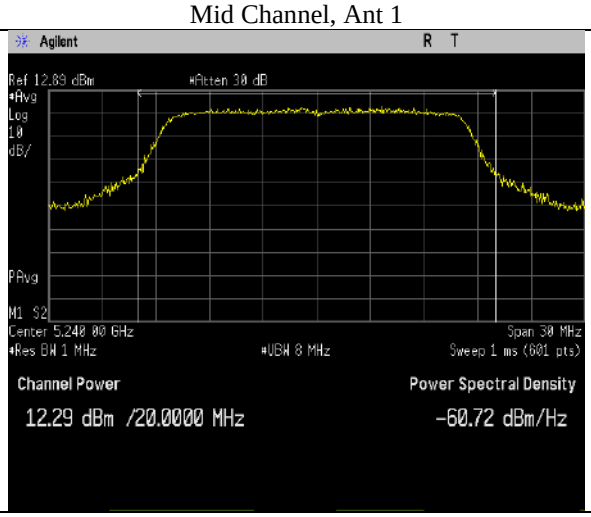
802.11n -6dB Bandwidth Plots, UNII-3	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

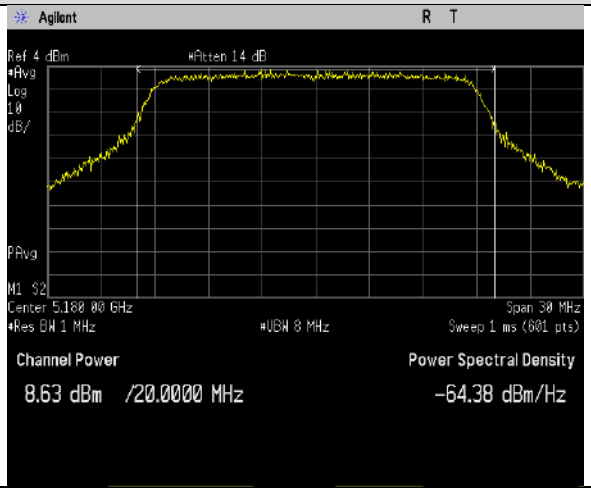
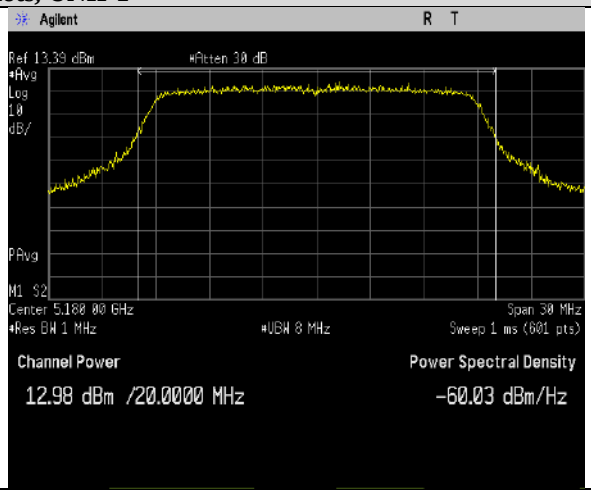
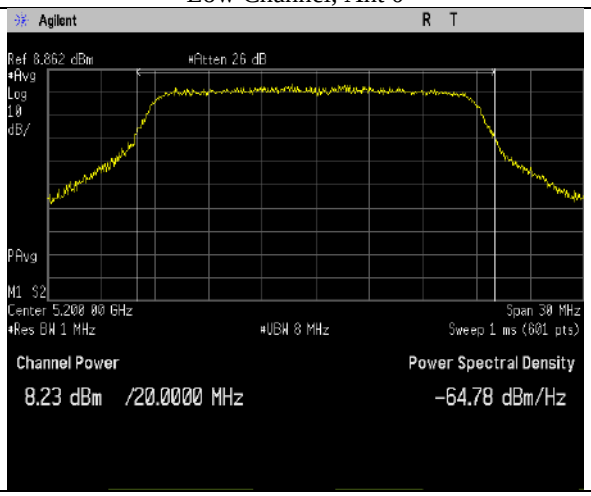
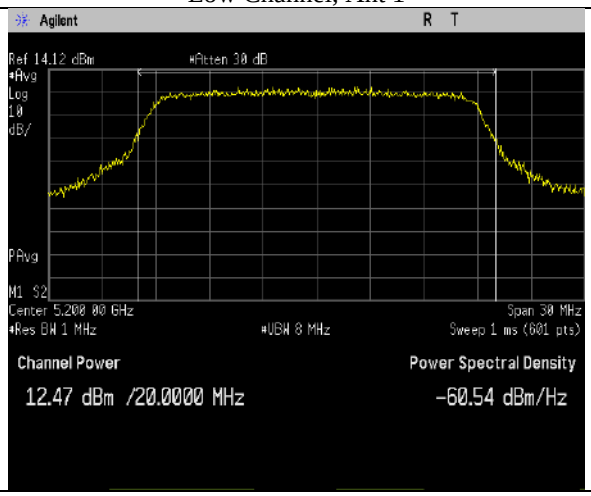
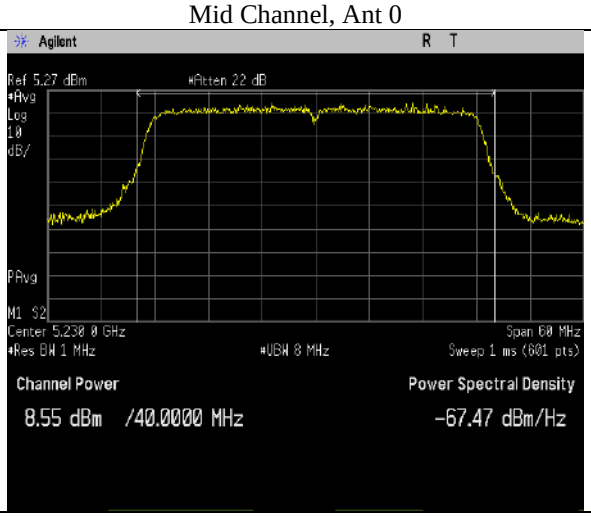
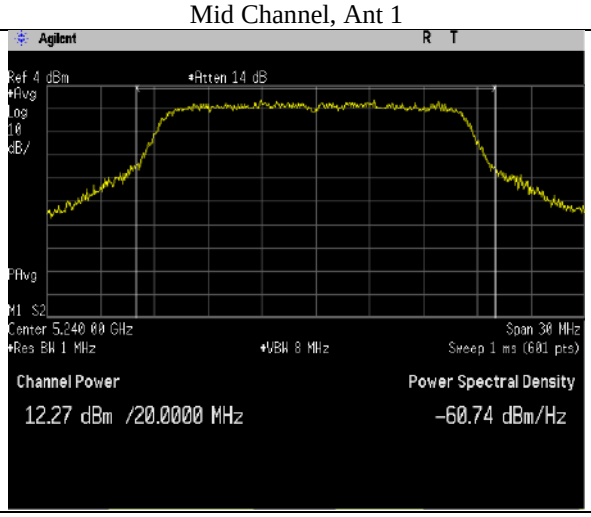
802.11n(40MHz) -6dB Bandwidth Plots, UNII-3	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

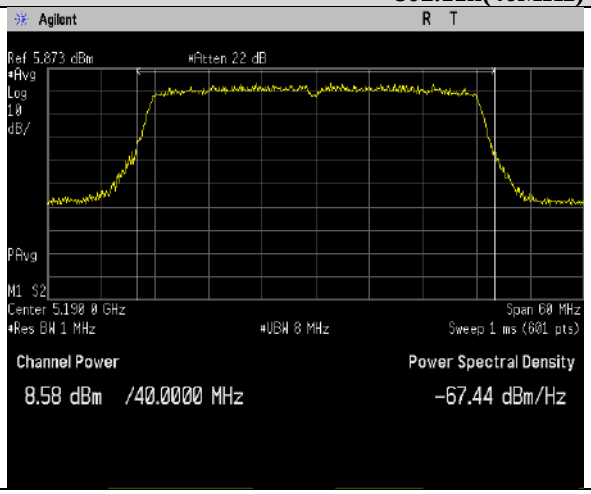
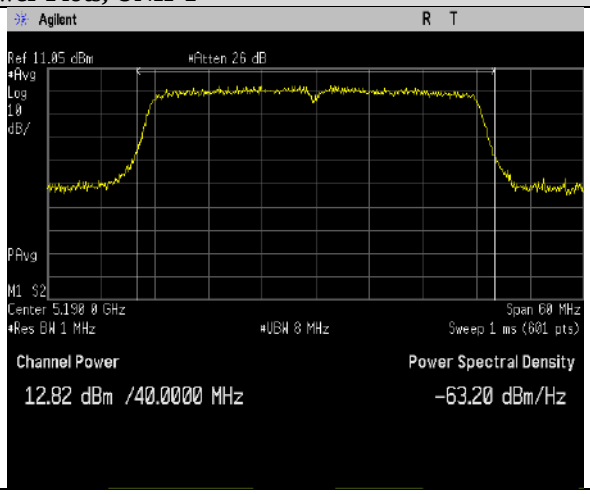
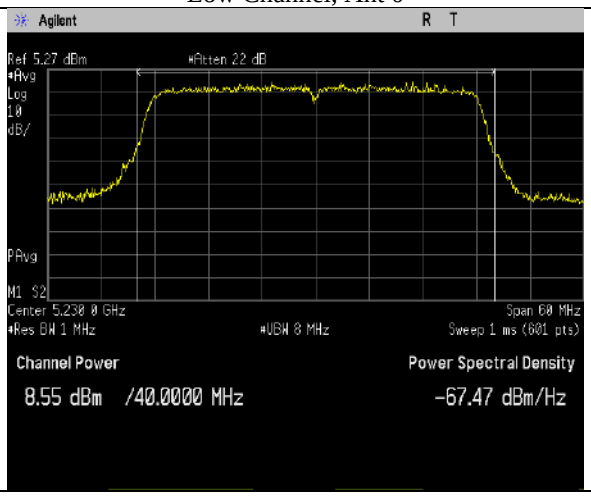
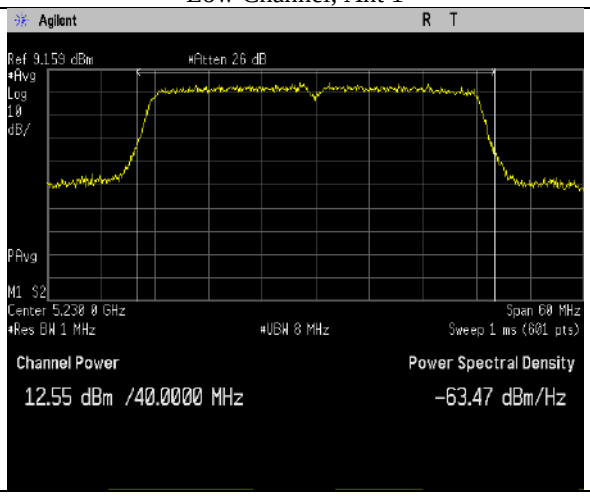
802.11ac -6dB Bandwidth Plots, UNII-3	
	
Mid Channel, Ant 0	Mid Channel, Ant 1

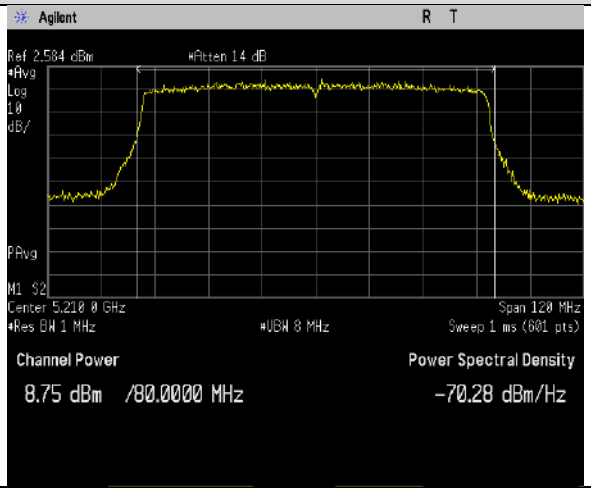
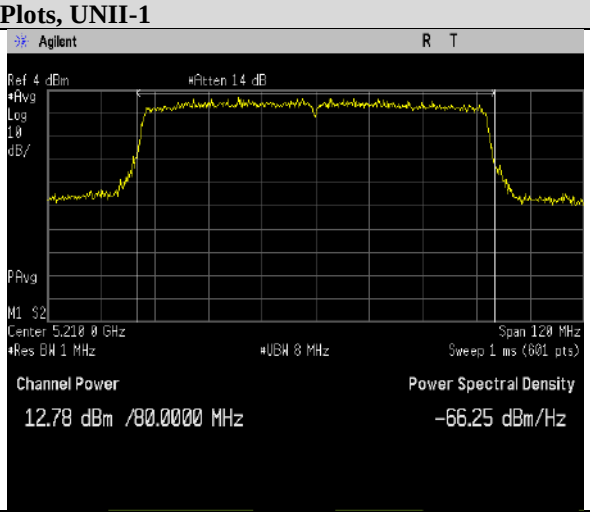
802.11ax -6dB Bandwidth Plots, UNII-3	
	
Mid Channel, Ant 0	Mid Channel, Ant 1

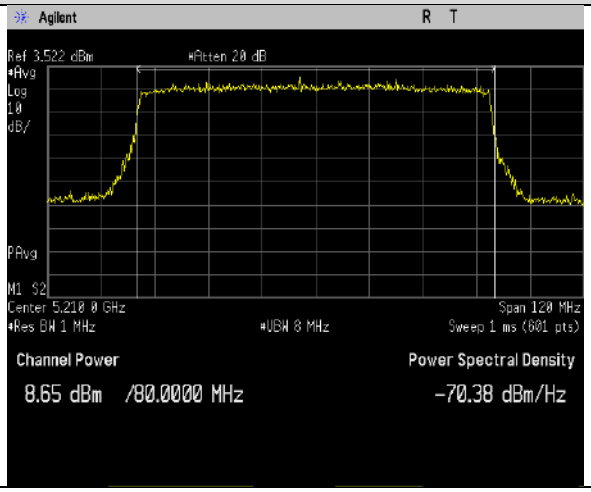
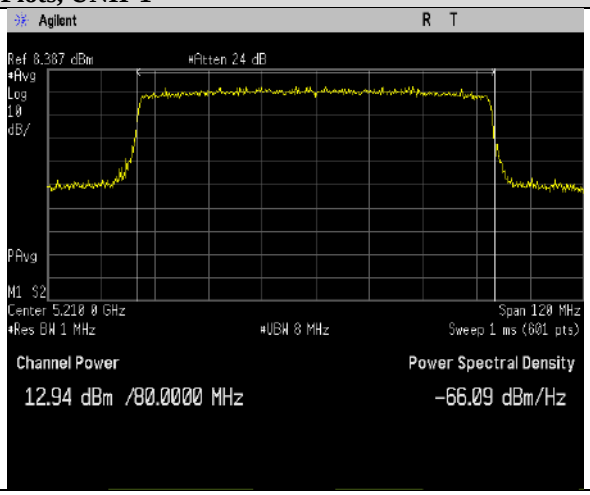
II. Output Power Plots

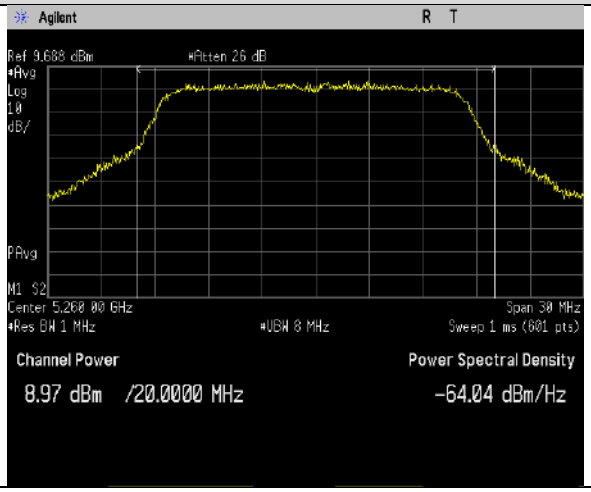
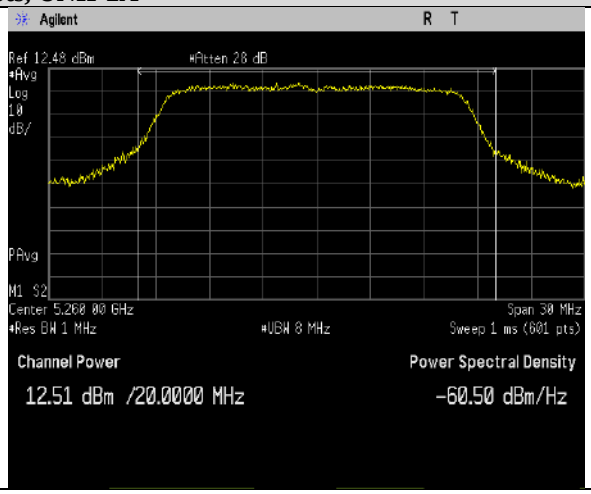
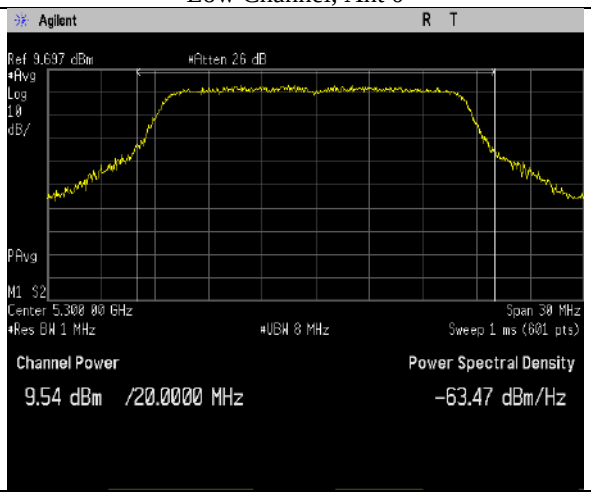
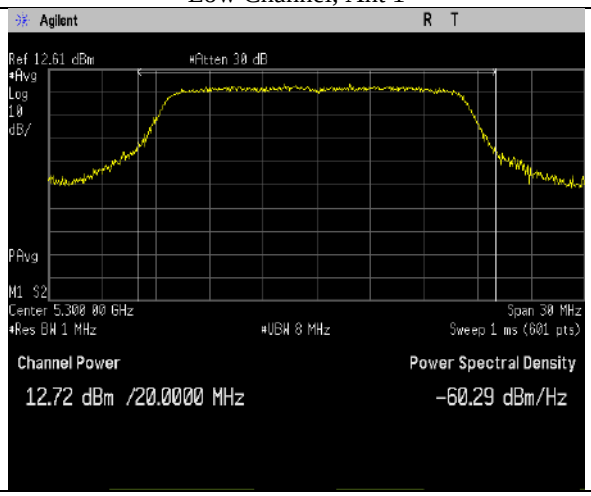
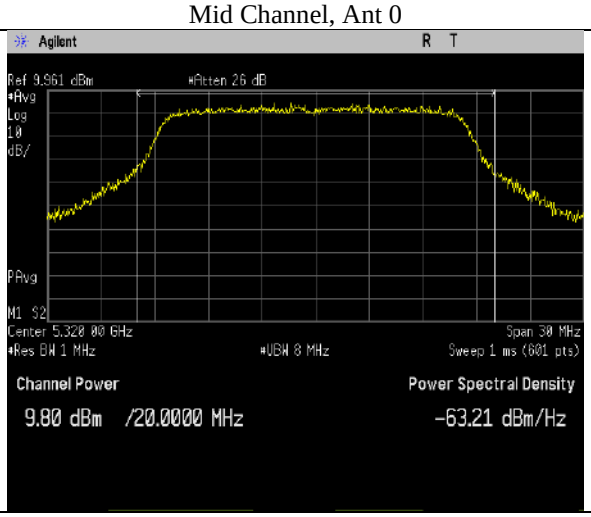
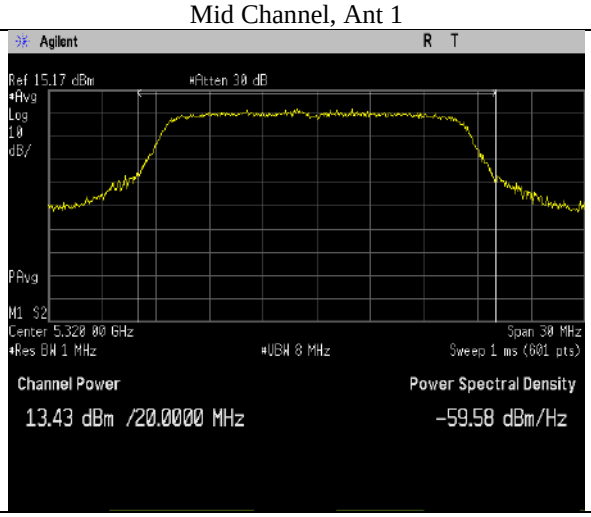
802.11a Power Plots, UNII-1	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

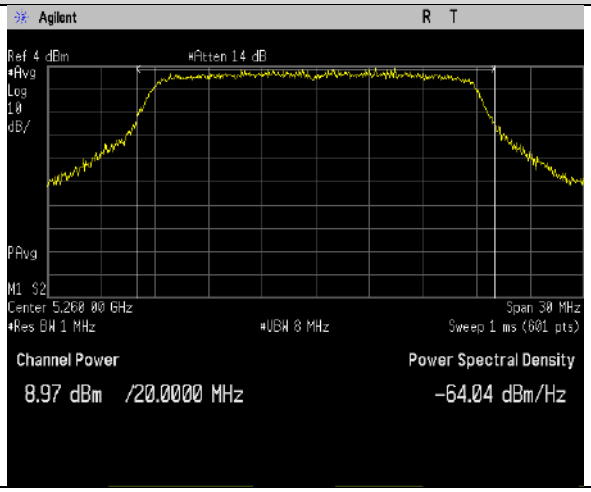
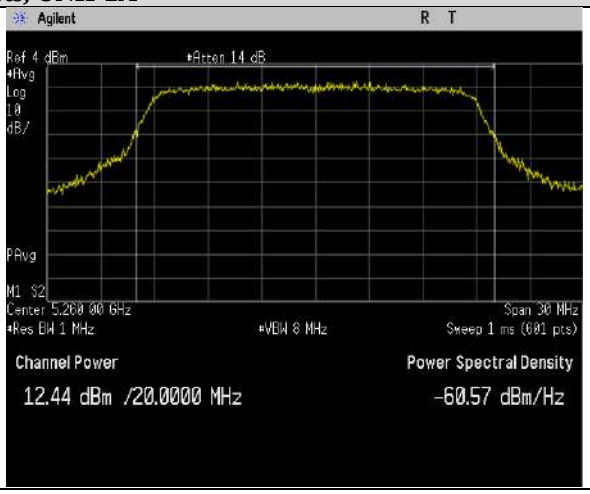
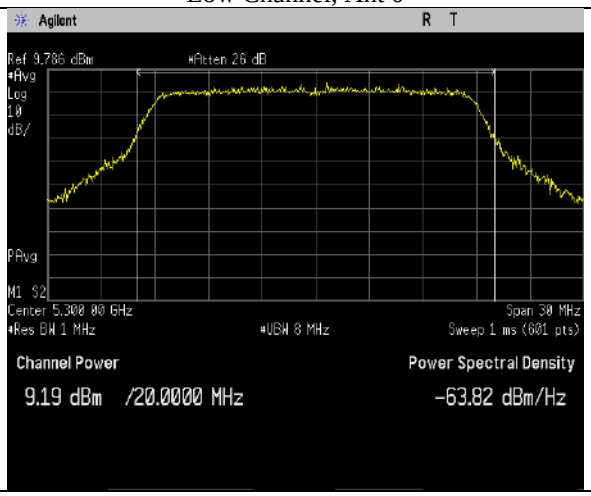
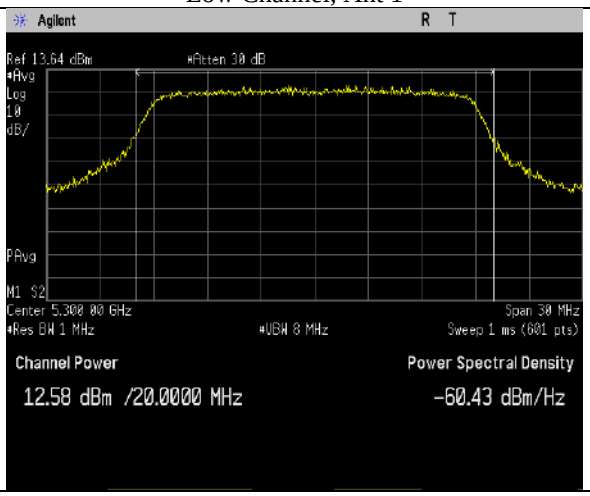
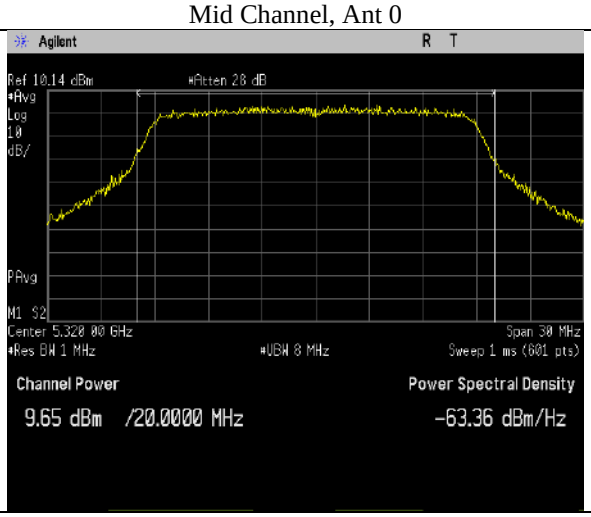
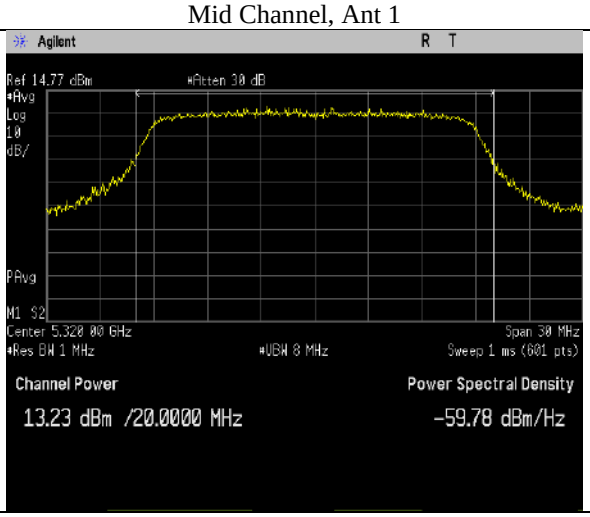
802.11n Power Plots, UNII-1	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

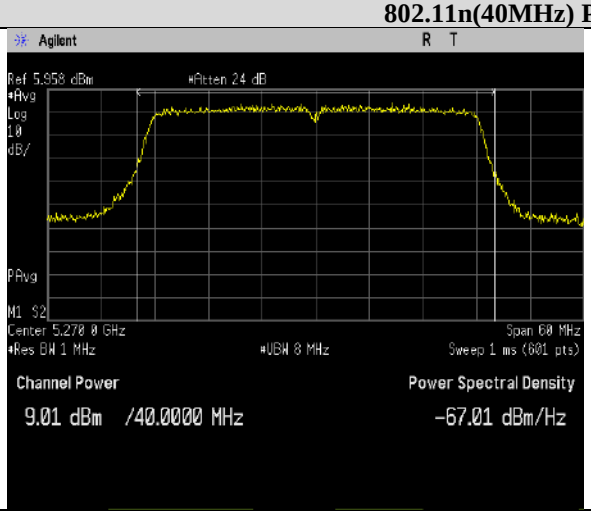
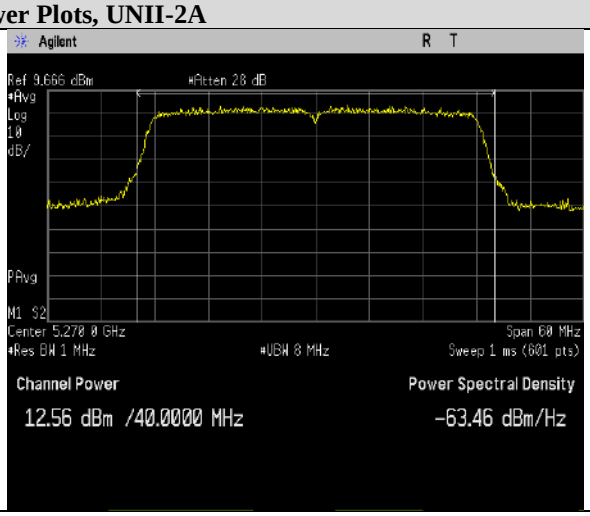
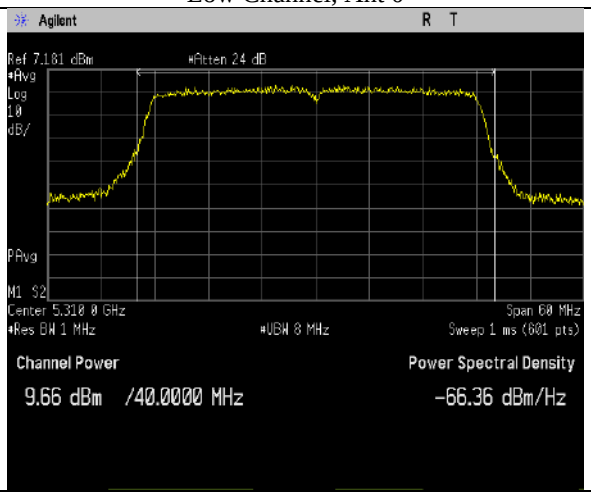
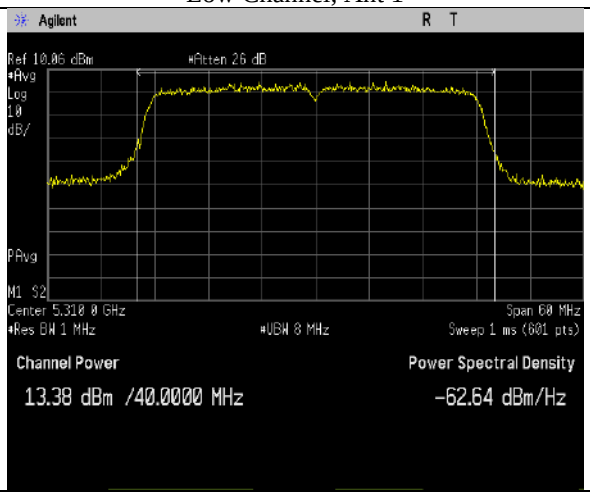
802.11n(40MHz) Power Plots, UNII-1	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

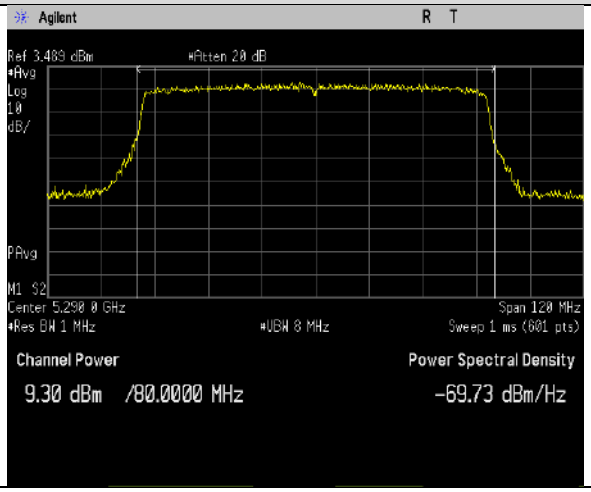
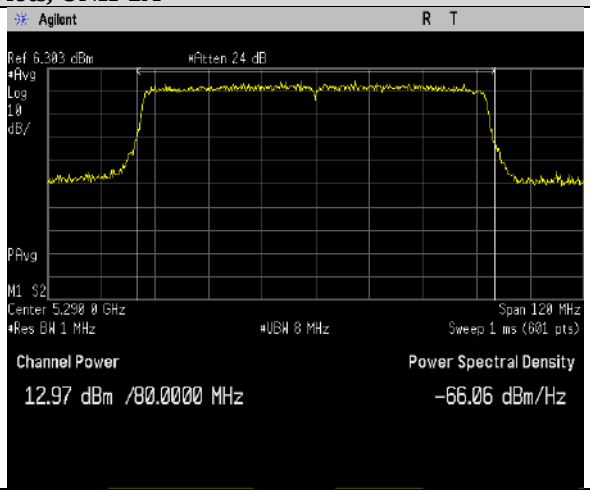
802.11ac Power Plots, UNII-1	
	
Mid Channel, Ant 0	Mid Channel, Ant 1

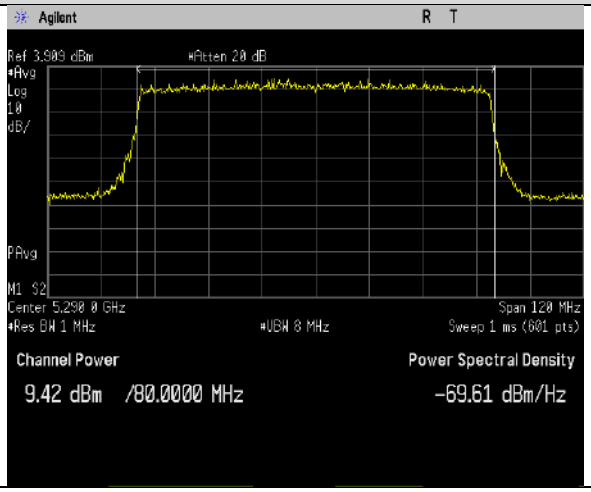
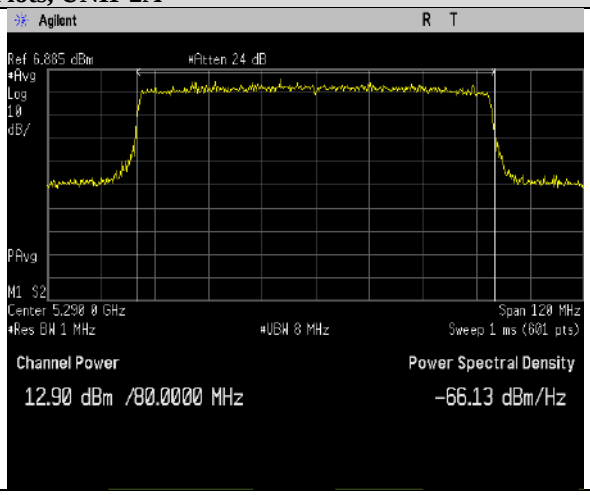
802.11ax Power Plots, UNII-1	
	
Mid Channel, Ant 0	Mid Channel, Ant 1

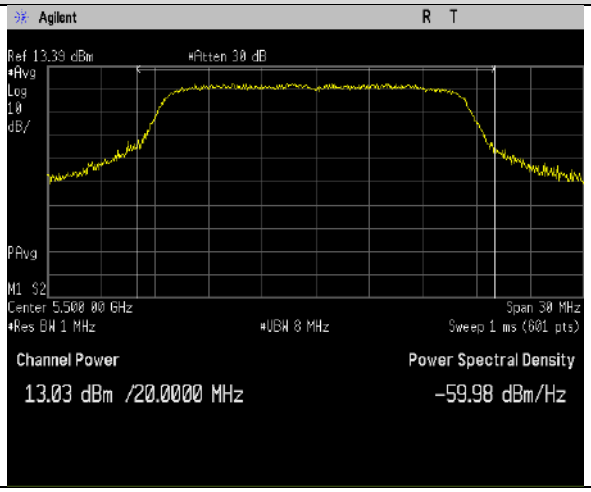
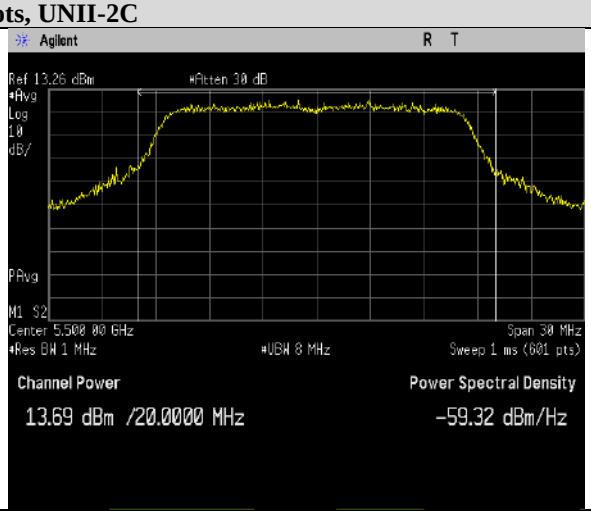
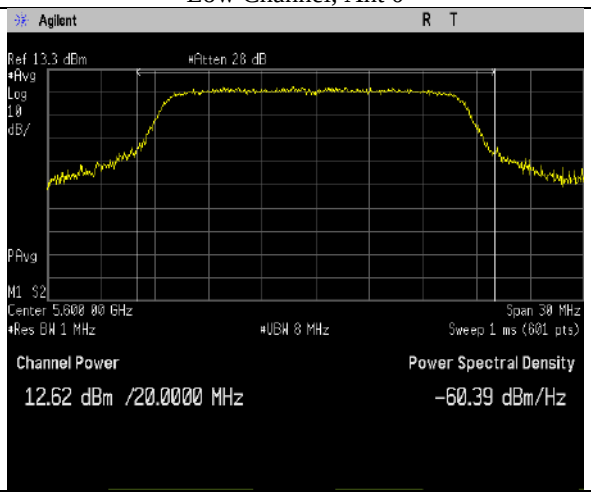
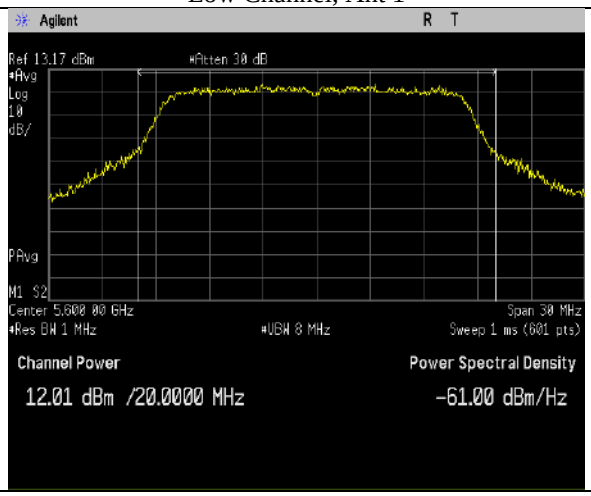
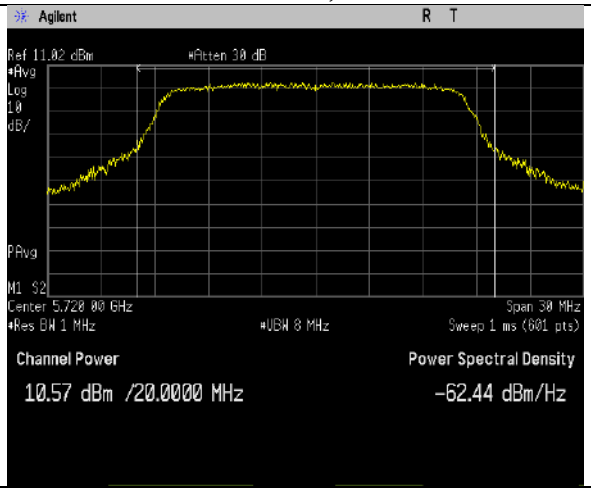
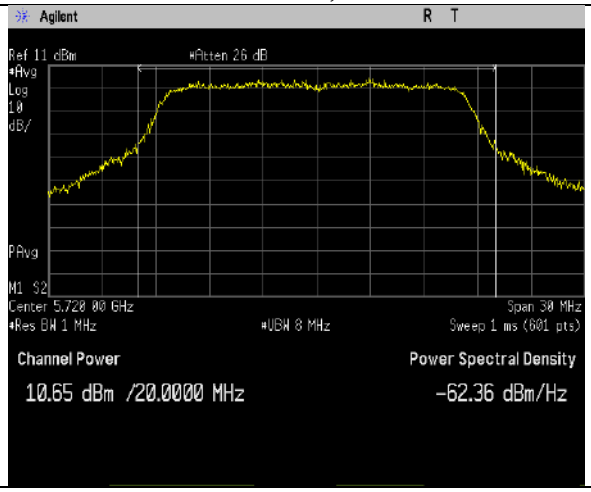
802.11a Power Plots, UNII-2A	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

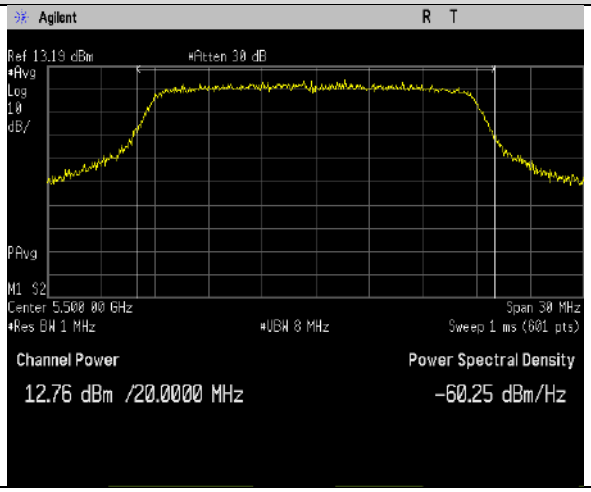
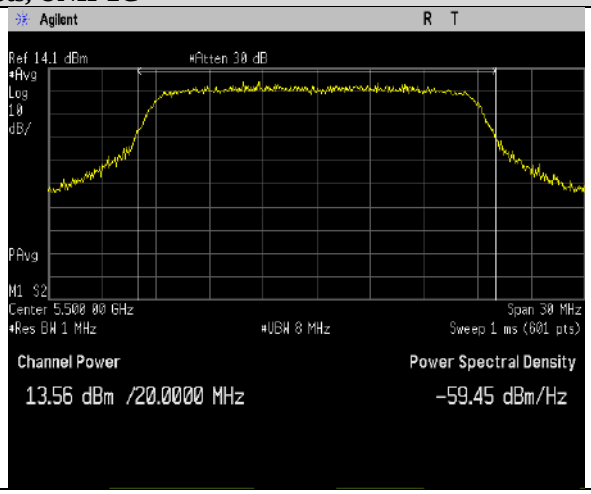
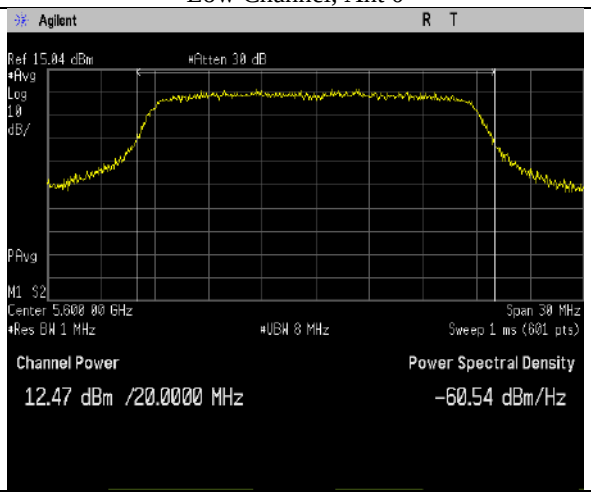
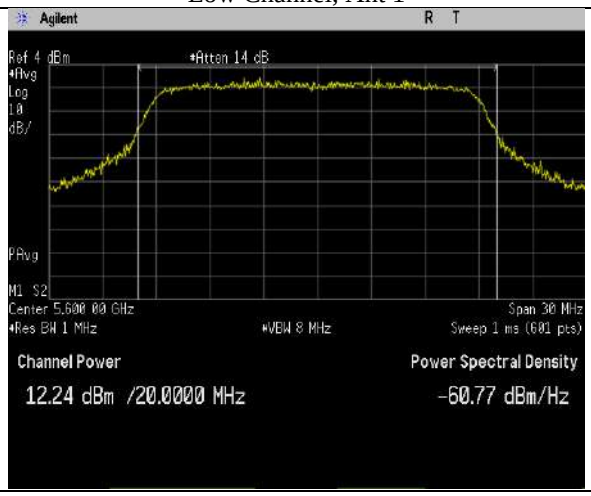
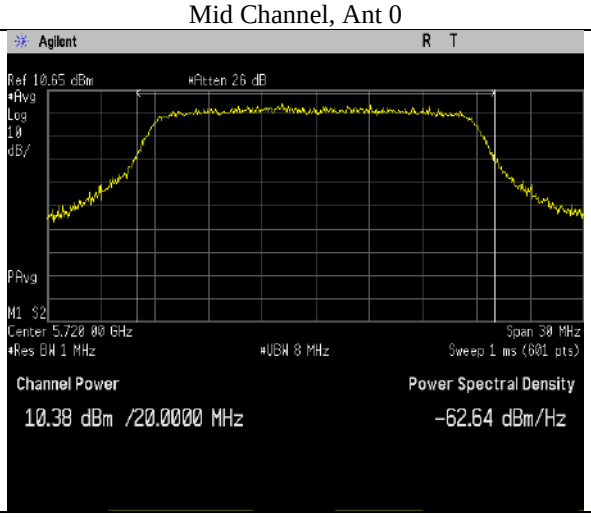
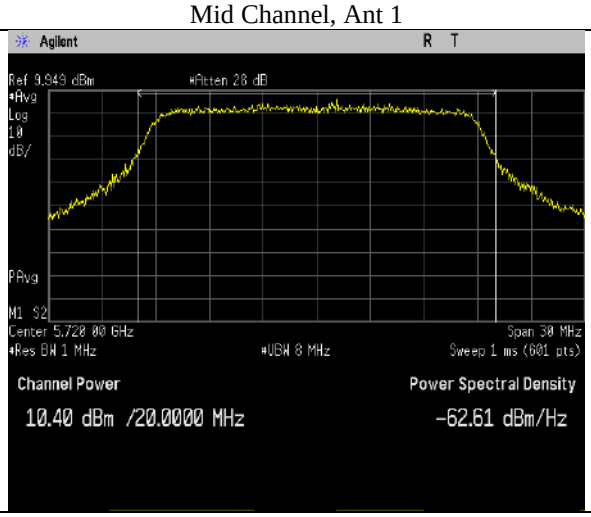
802.11n Power Plots, UNII-2A	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

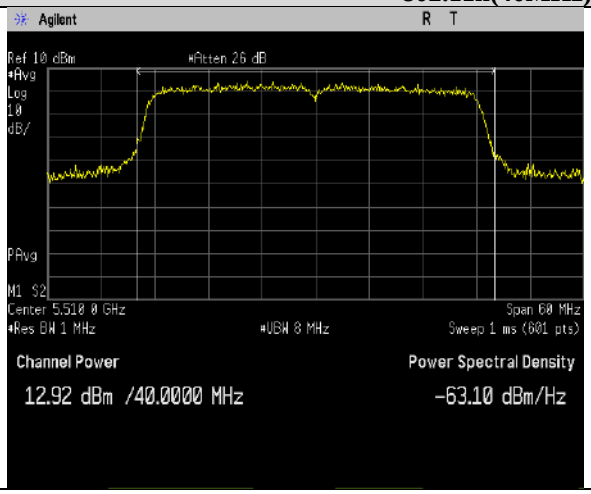
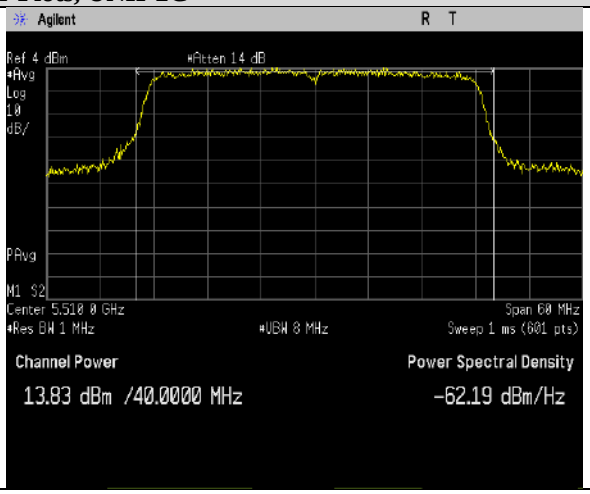
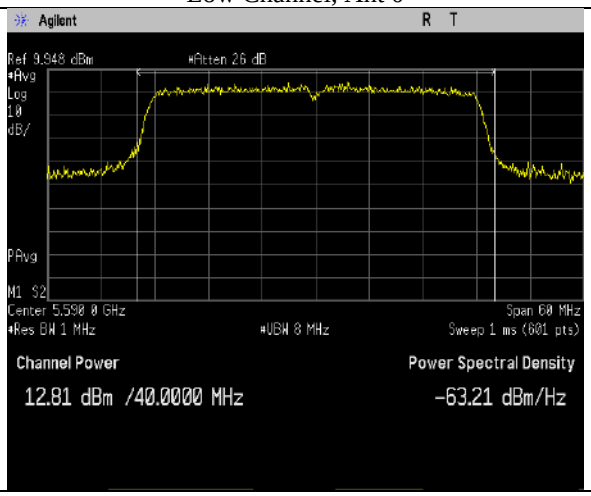
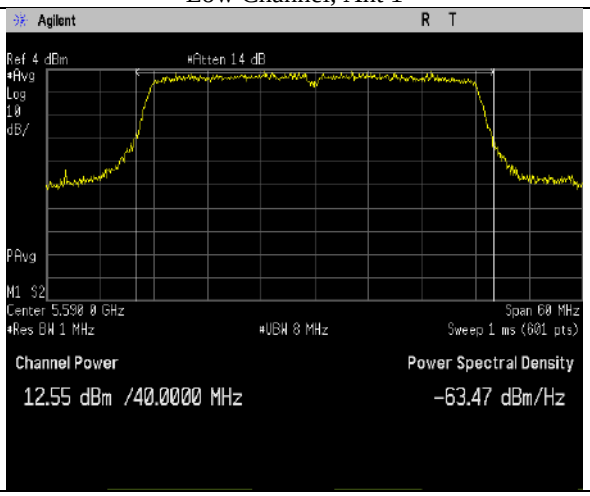
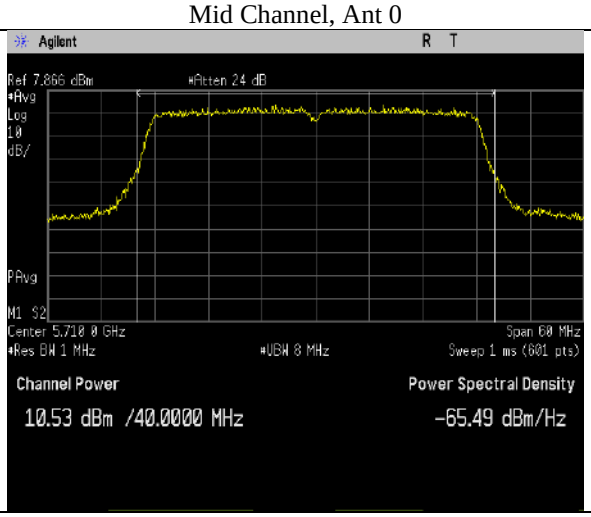
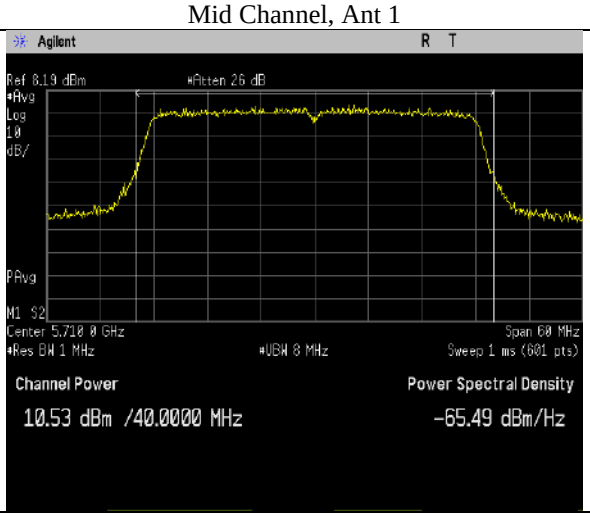
802.11n(40MHz) Power Plots, UNII-2A	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

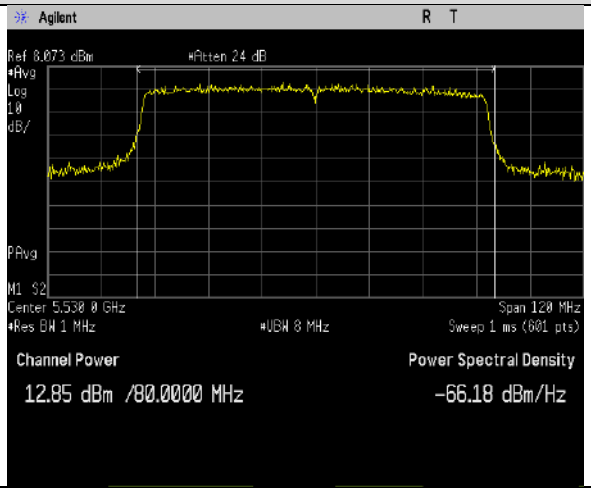
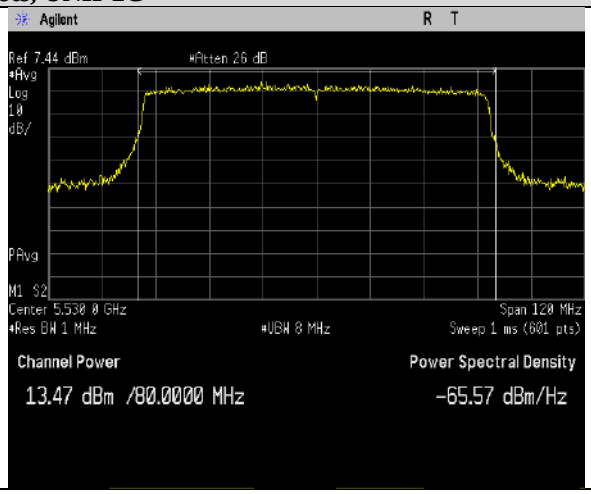
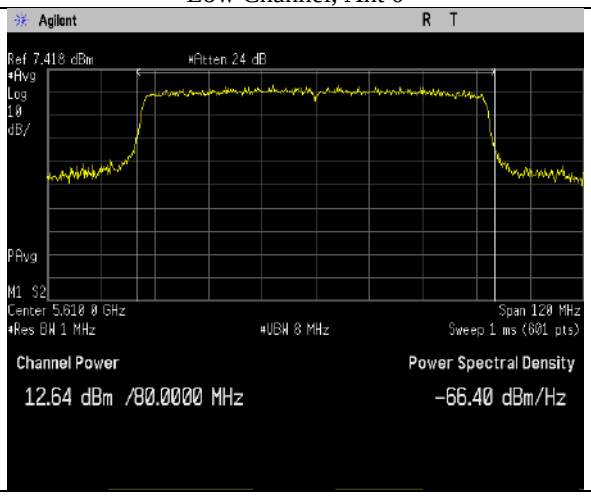
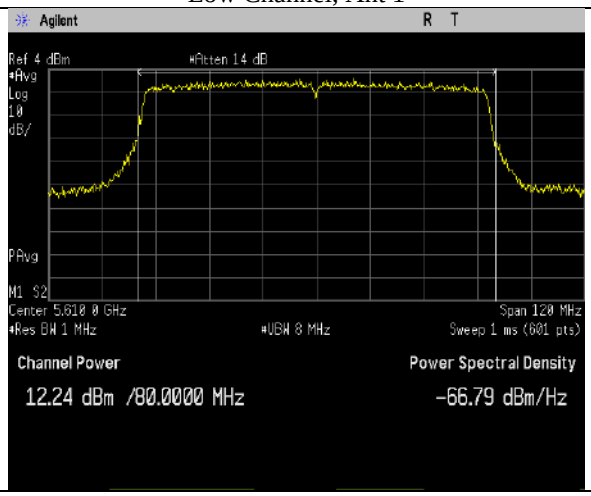
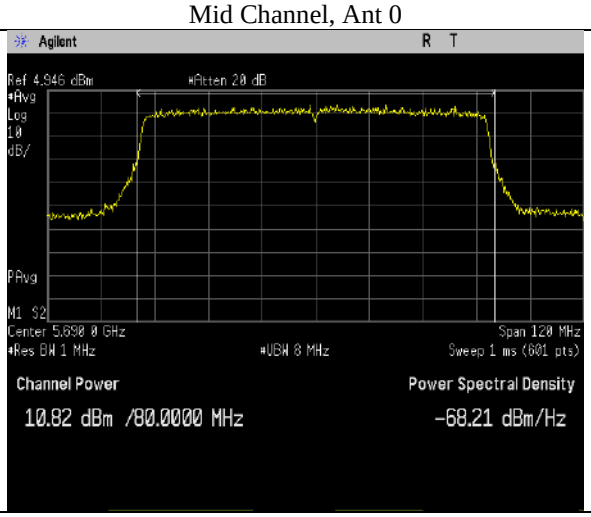
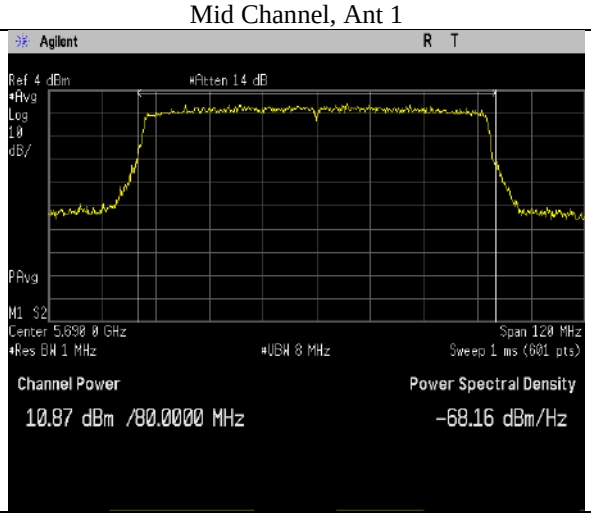
802.11ac Power Plots, UNII-2A	
	
Mid Channel, Ant 0	Mid Channel, Ant 1

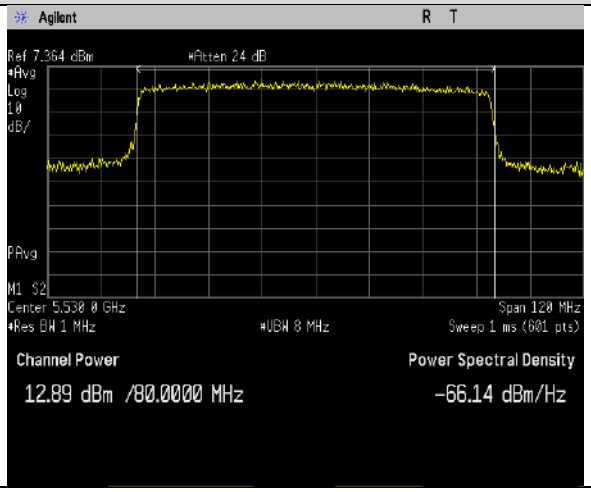
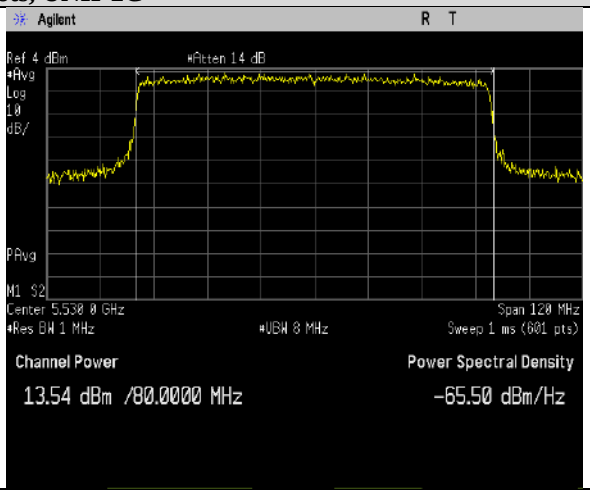
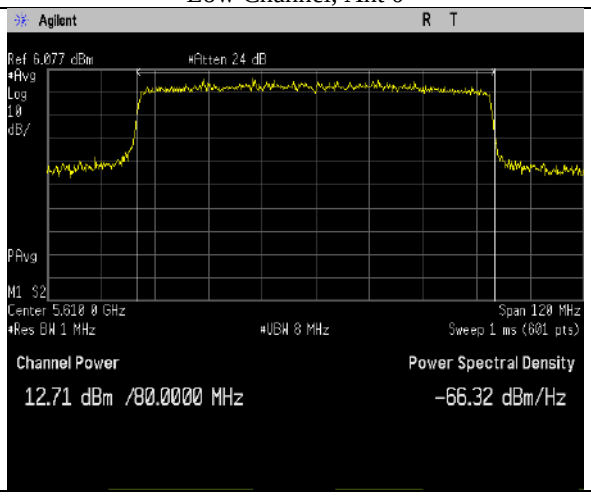
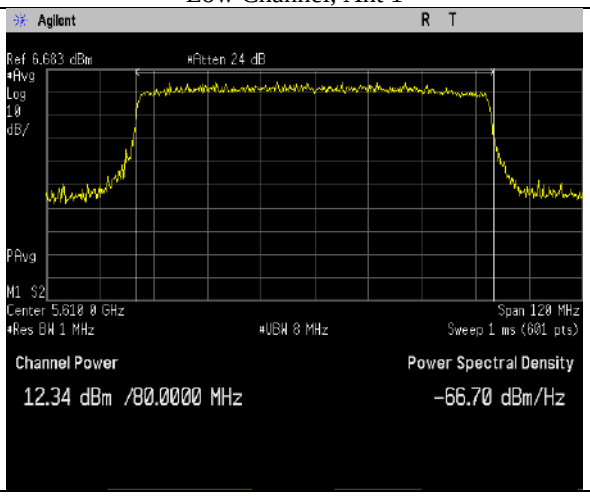
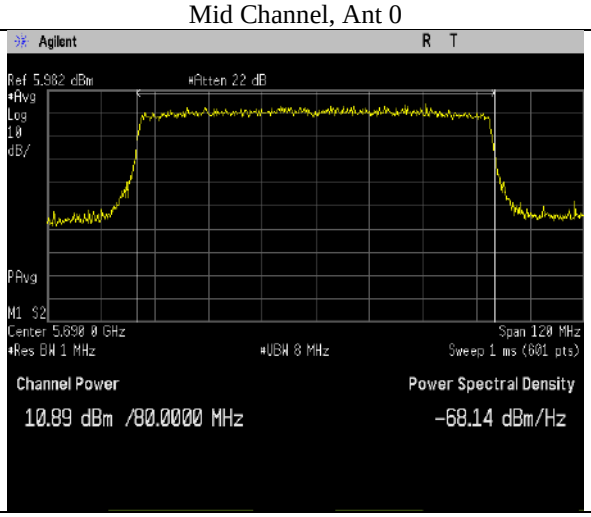
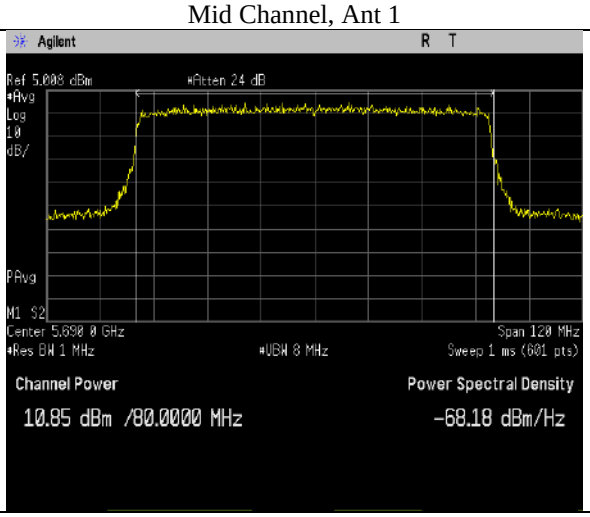
802.11ax Power Plots, UNII-2A	
	
Mid Channel, Ant 0	Mid Channel, Ant 1

802.11a Power Plots, UNII-2C	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

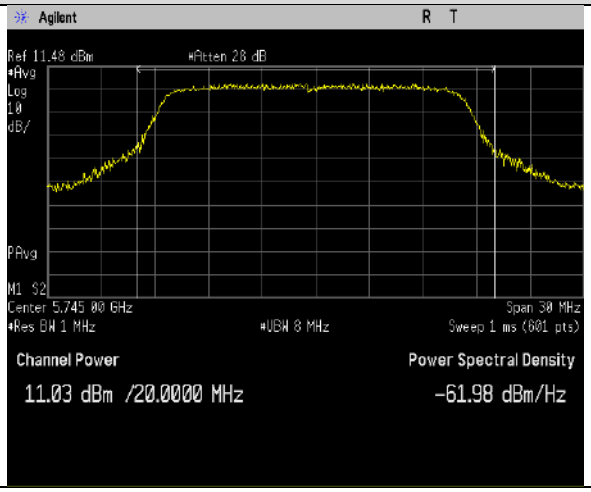
802.11n Power Plots, UNII-2C	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

802.11n(40MHz) Power Plots, UNII-2C	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

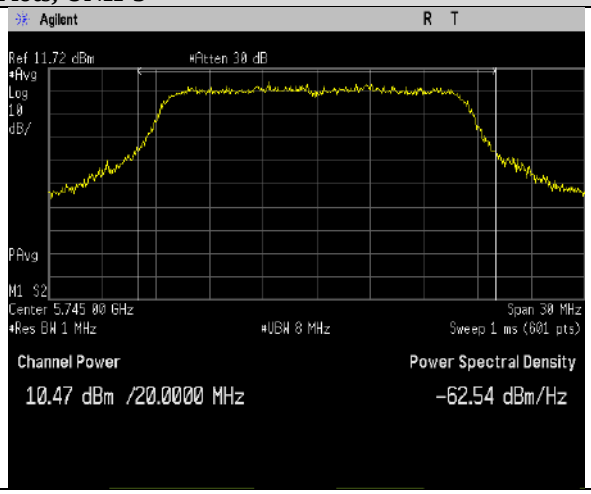
802.11ac Power Plots, UNII-2C	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

802.11ax Power Plots, UNII-2C	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

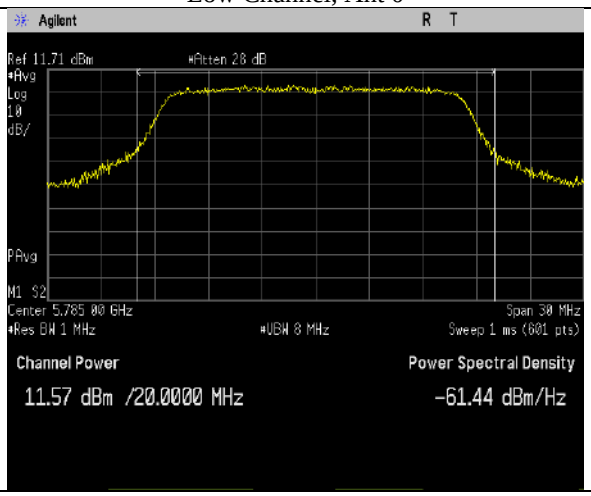
802.11a Power Plots, UNII-3



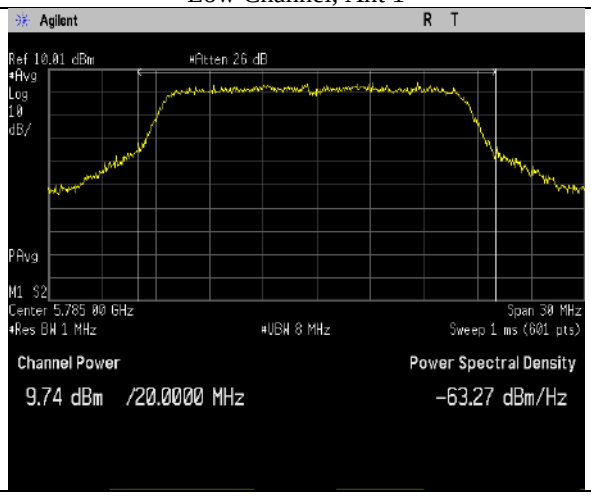
Low Channel, Ant 0



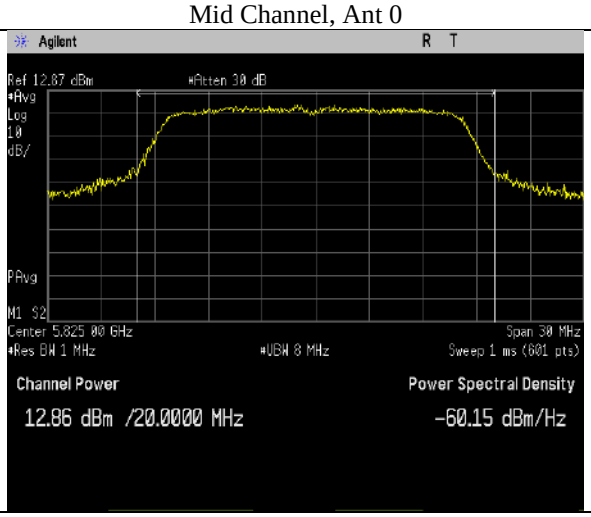
Low Channel, Ant 1



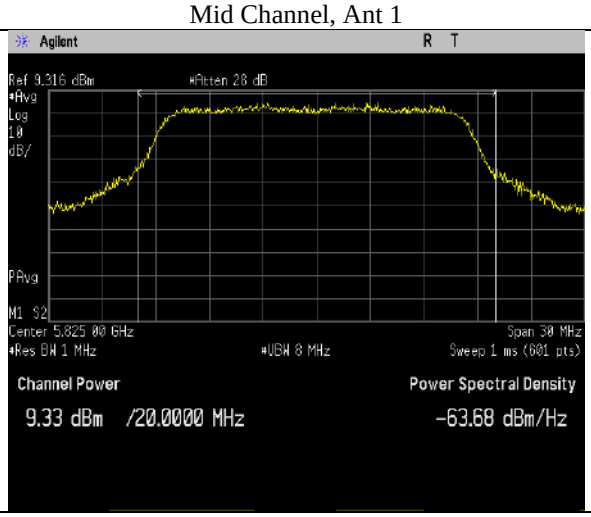
Mid Channel, Ant 0



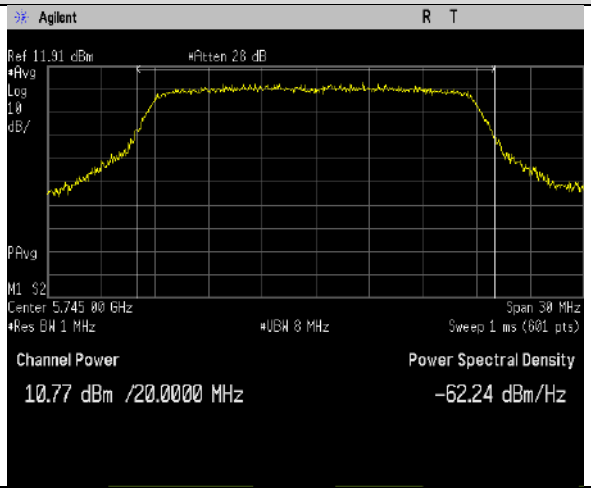
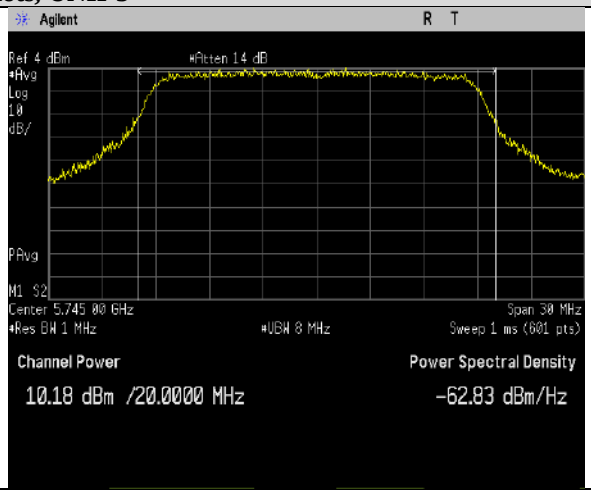
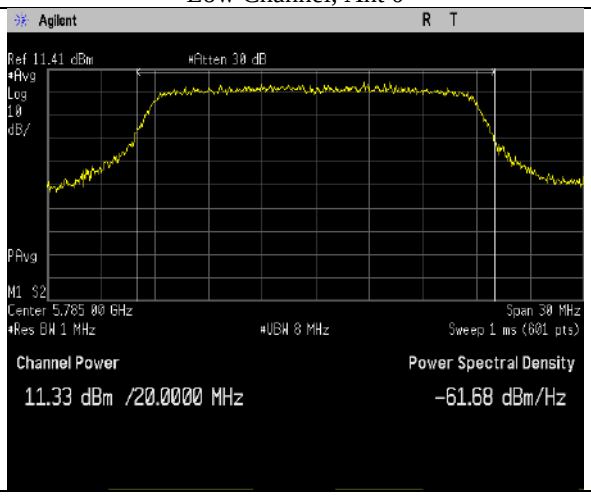
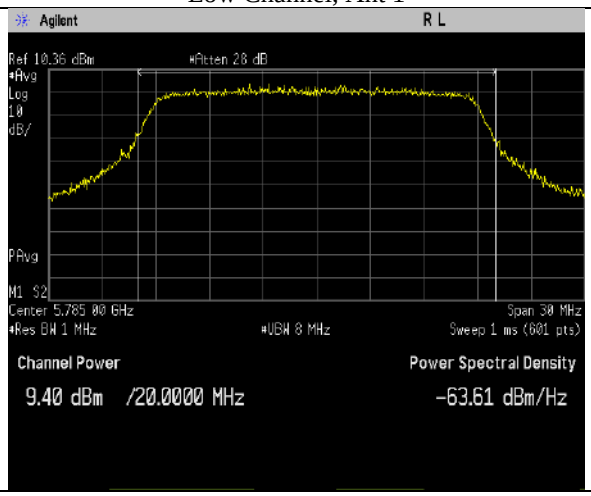
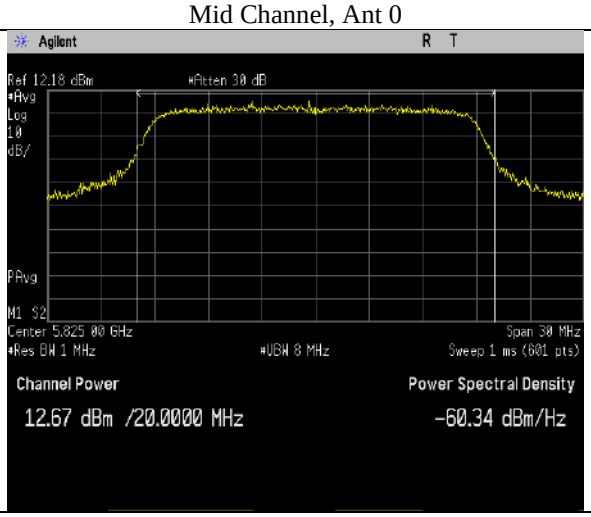
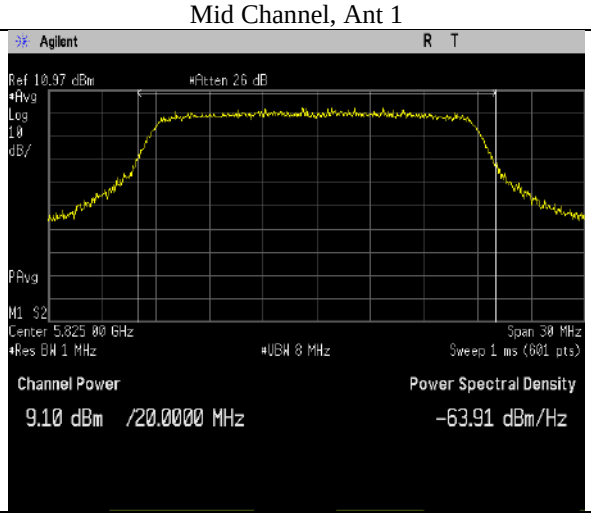
Mid Channel, Ant 1

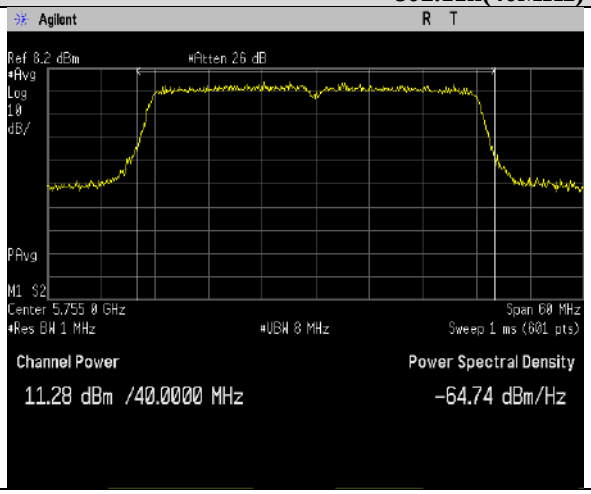
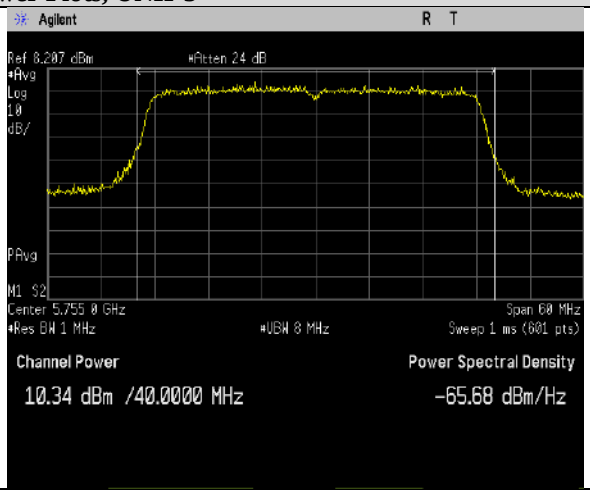
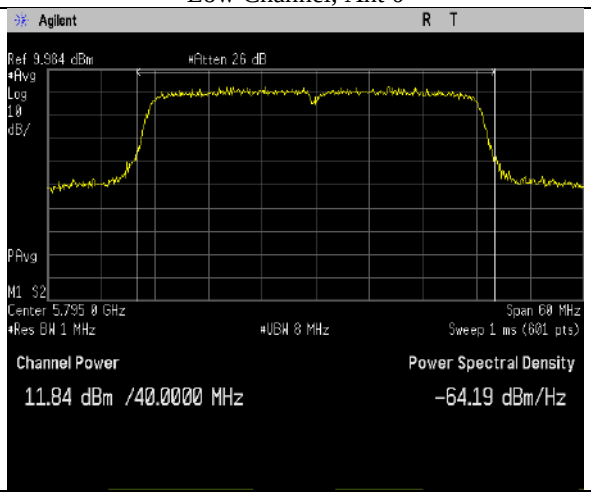
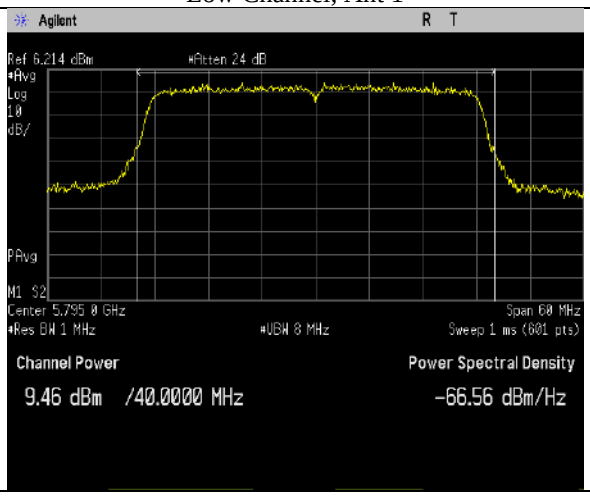


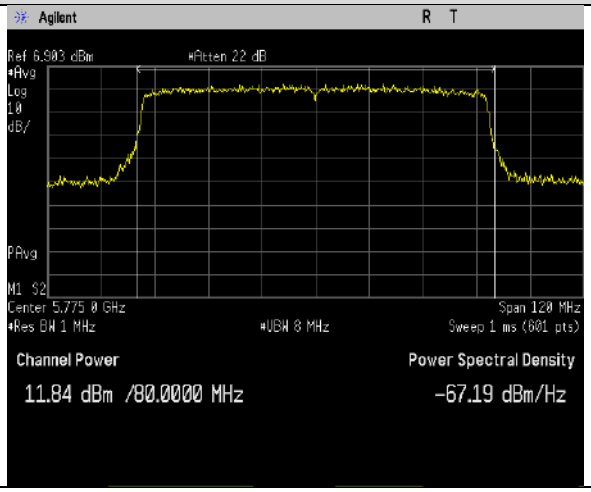
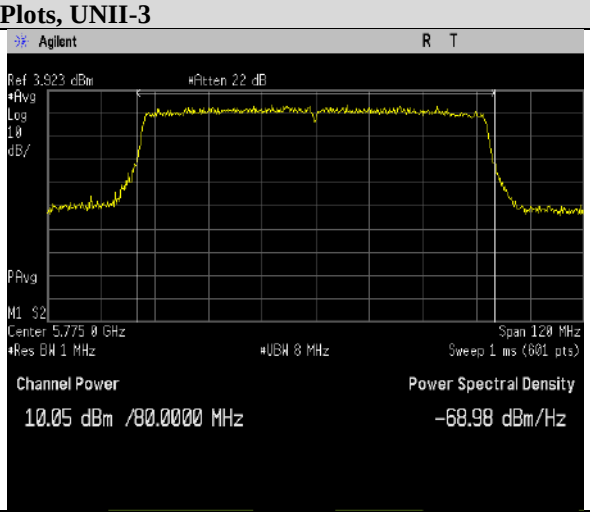
High Channel, Ant 0

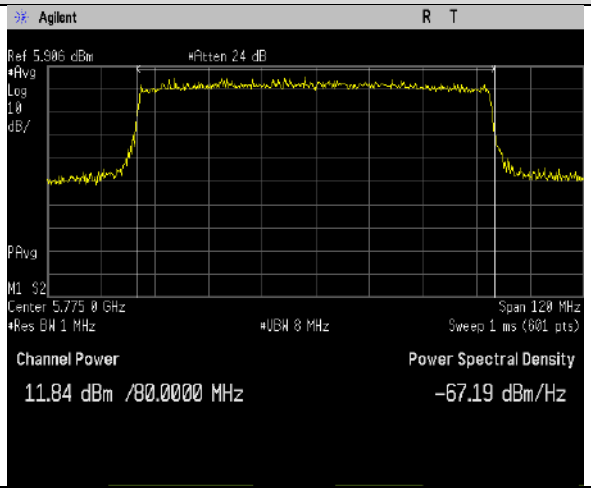
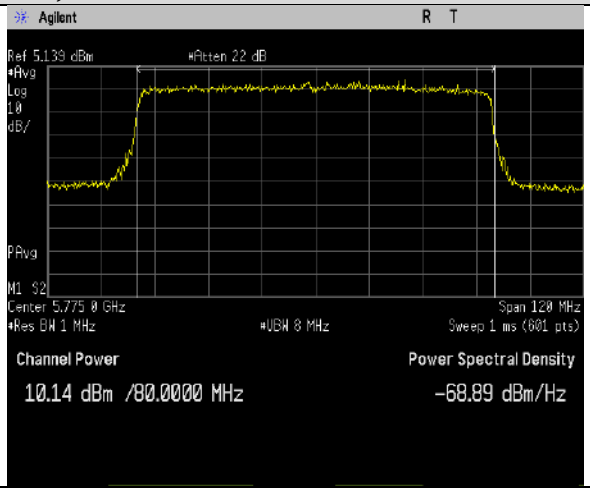


High Channel, Ant 1

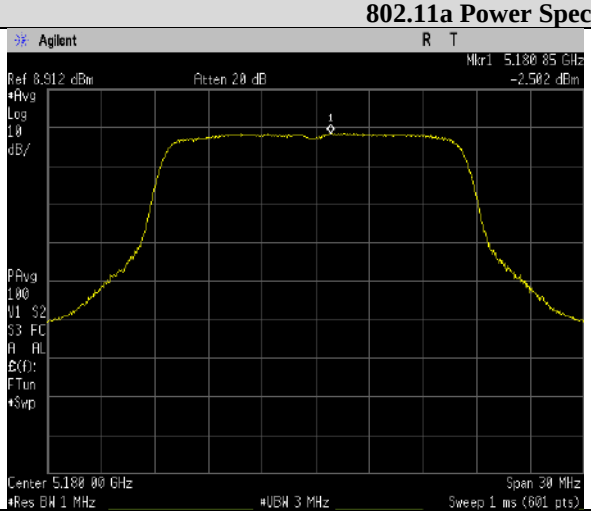
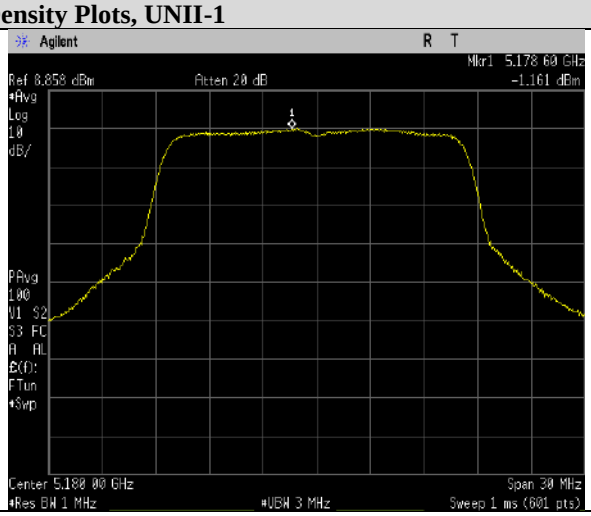
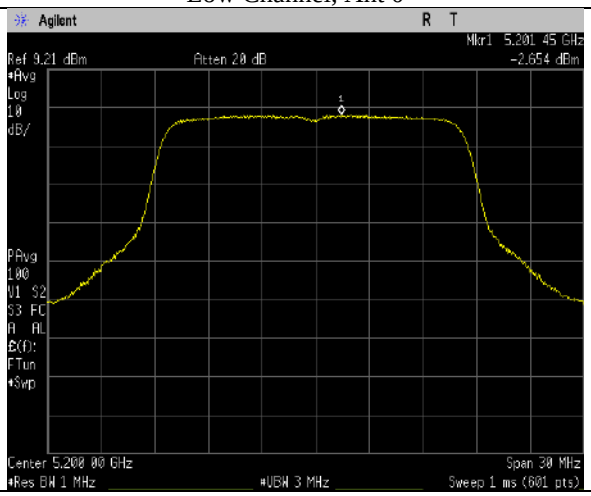
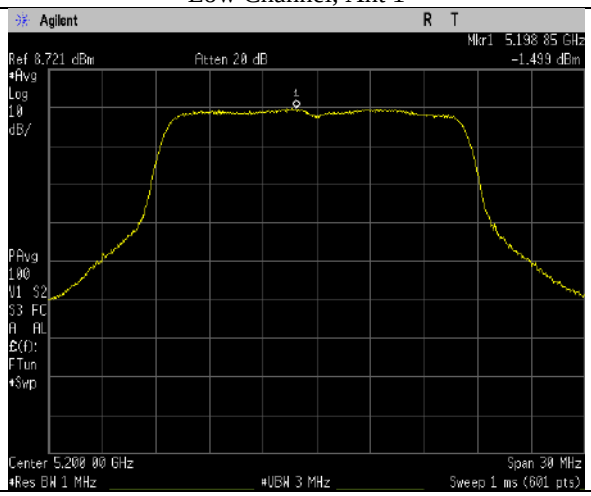
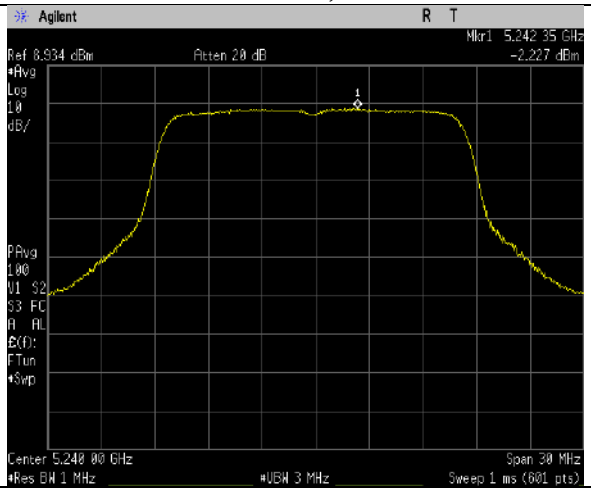
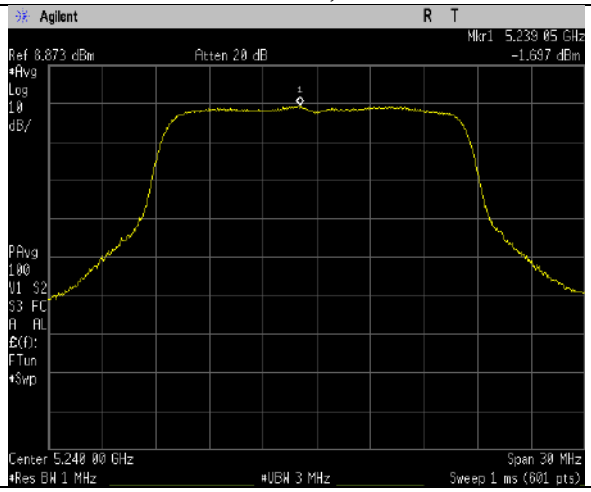
802.11n Power Plots, UNII-3	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

802.11n(40MHz) Power Plots, UNII-3	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

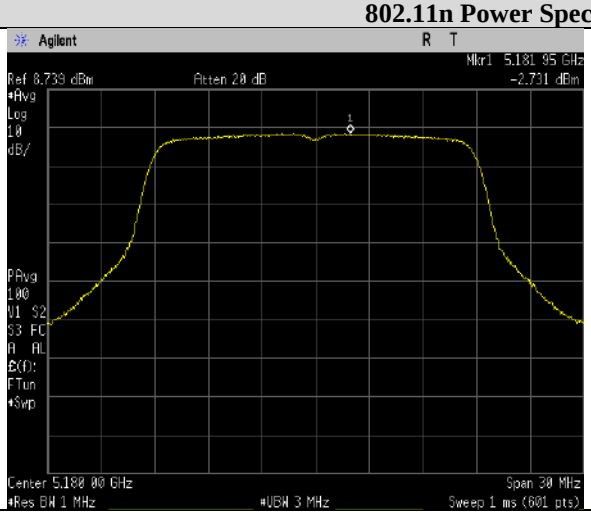
802.11ac Power Plots, UNII-3	
	
Mid Channel, Ant 0	Mid Channel, Ant 1

802.11ax Power Plots, UNII-3	
	
Mid Channel, Ant 0	Mid Channel, Ant 1

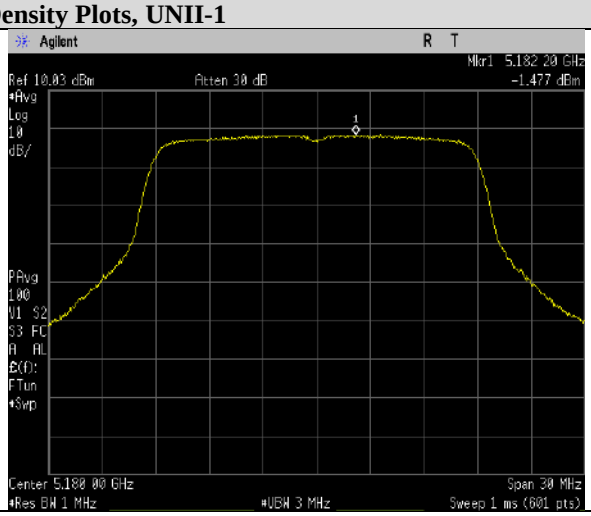
III. Power Spectral Density Plots

802.11a Power Spectral Density Plots, UNII-1	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

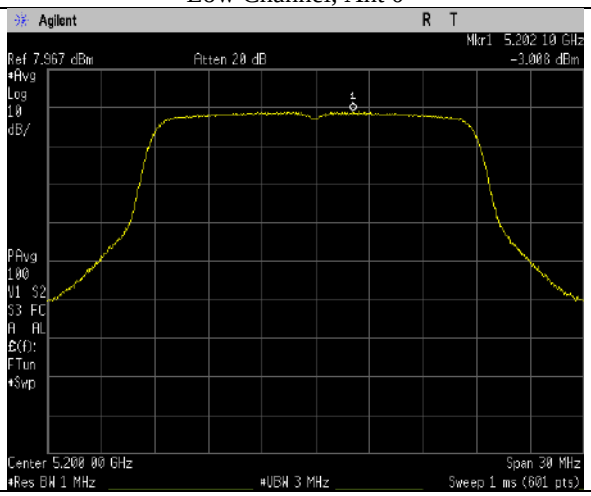
802.11n Power Spectral Density Plots, UNII-1



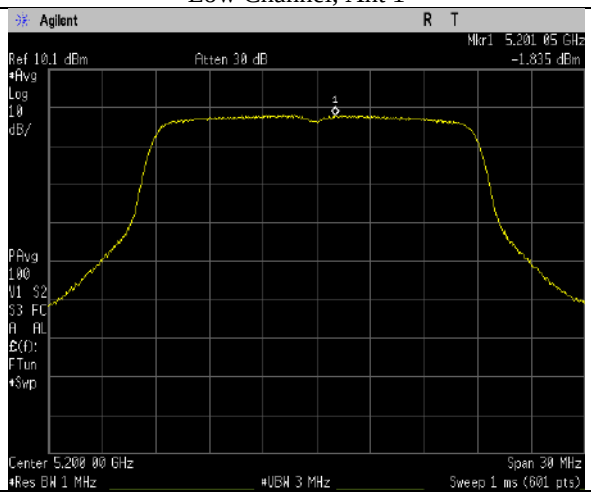
Low Channel, Ant 0



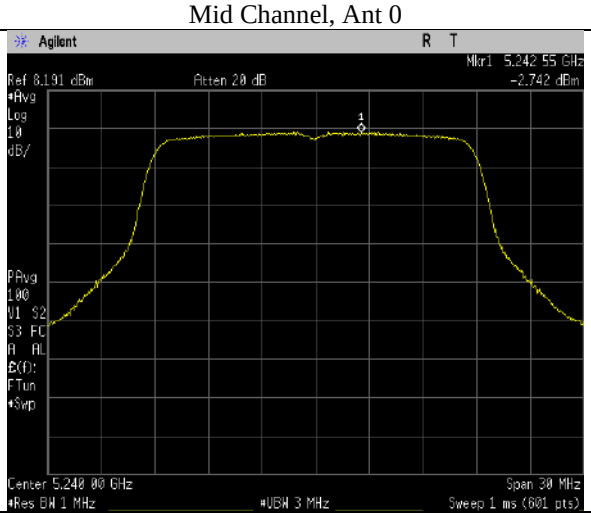
Low Channel, Ant 1



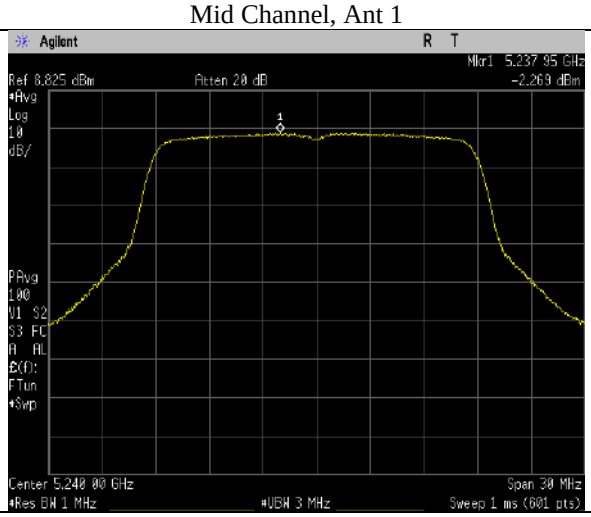
Mid Channel, Ant 0



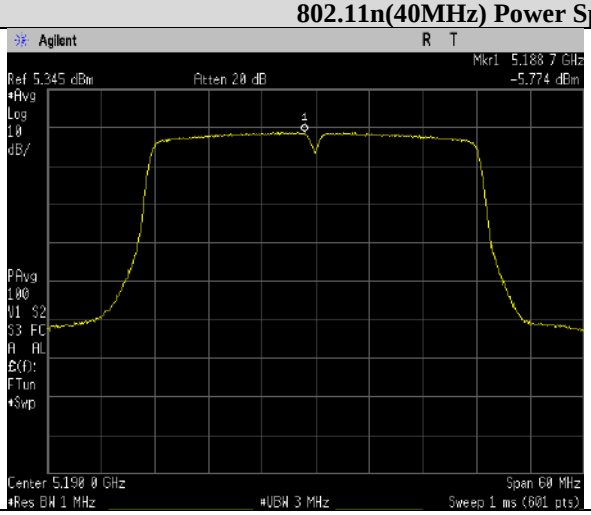
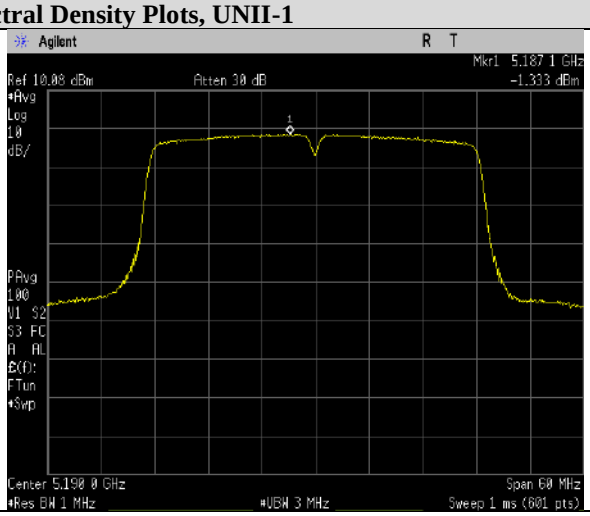
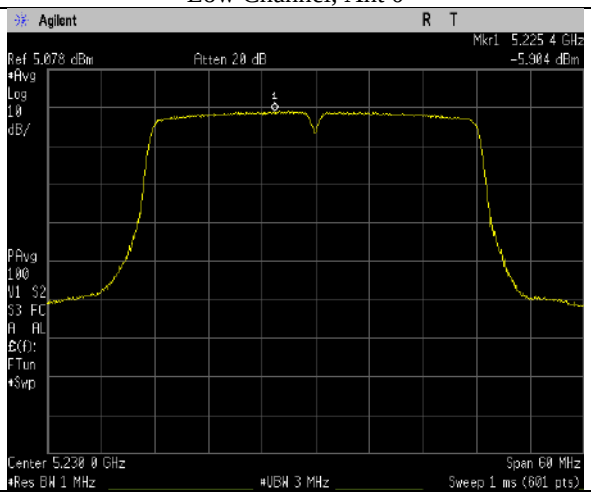
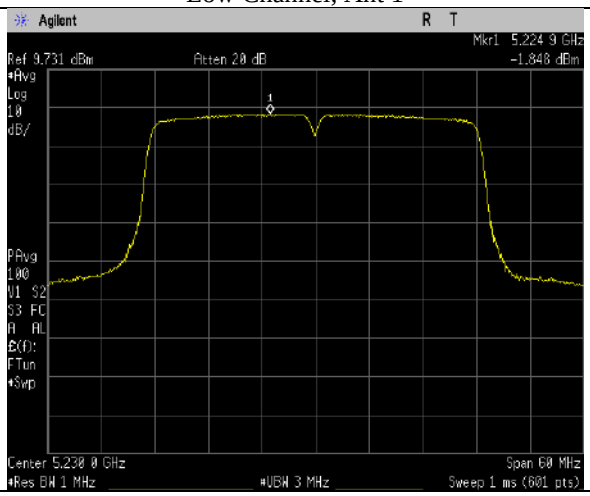
Mid Channel, Ant 1



High Channel, Ant 0



High Channel, Ant 1

802.11n(40MHz) Power Spectral Density Plots, UNII-1	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

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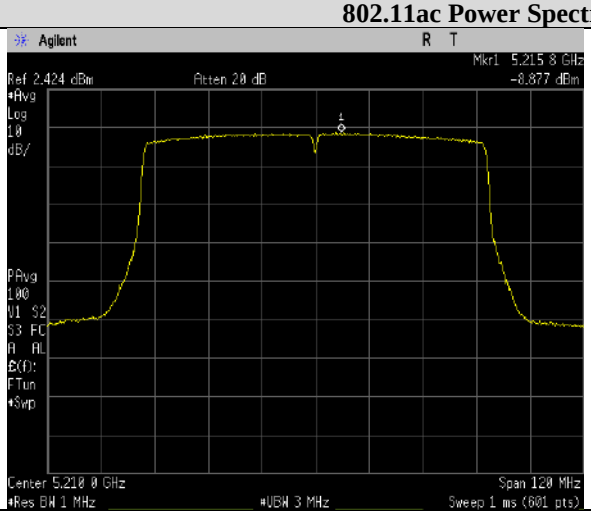
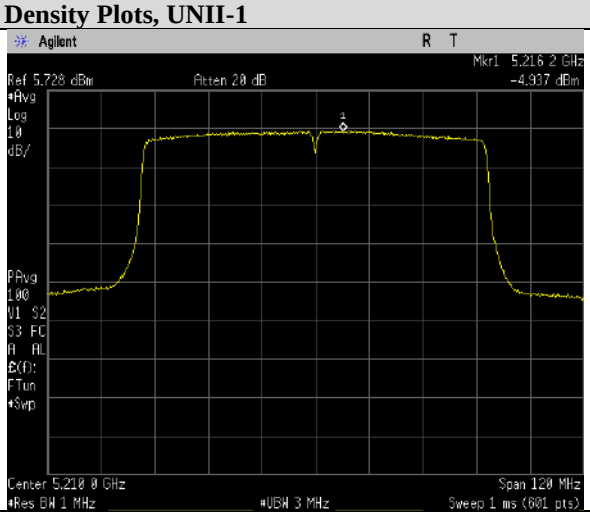
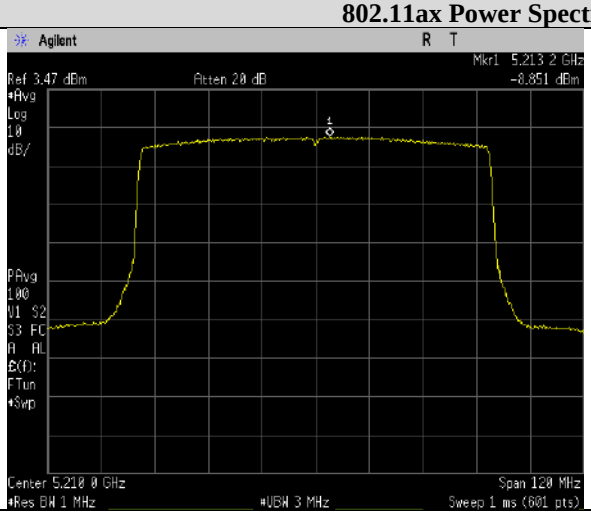
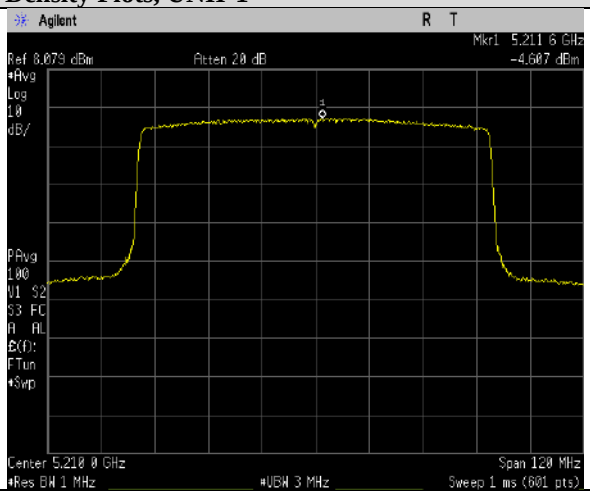
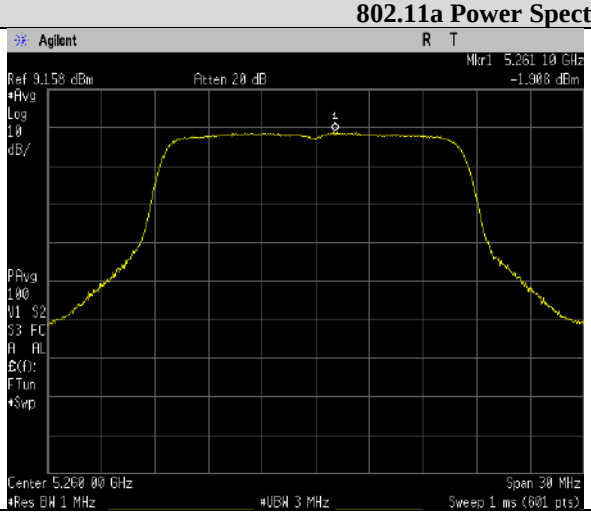
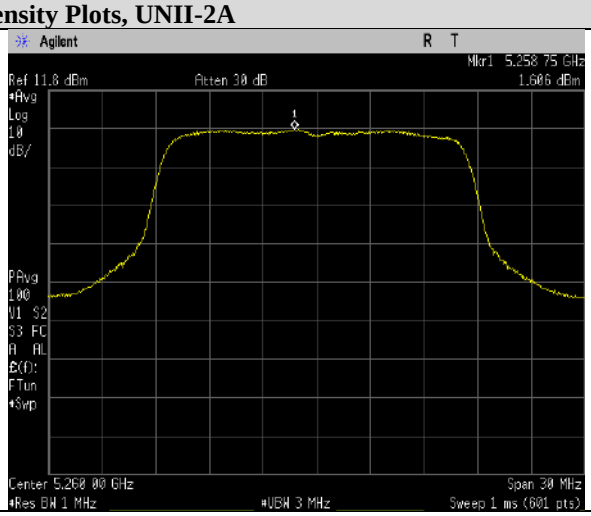
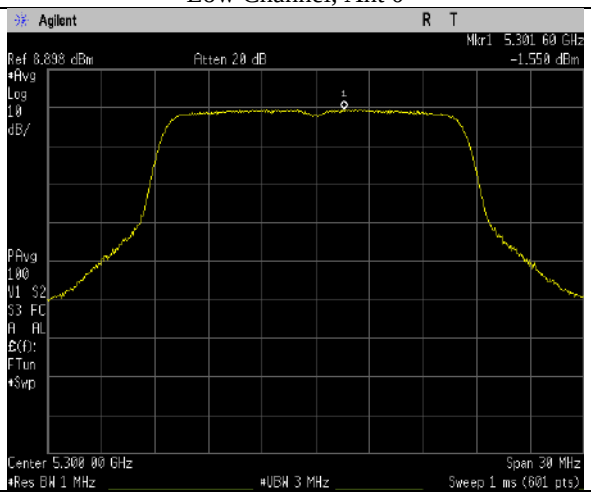
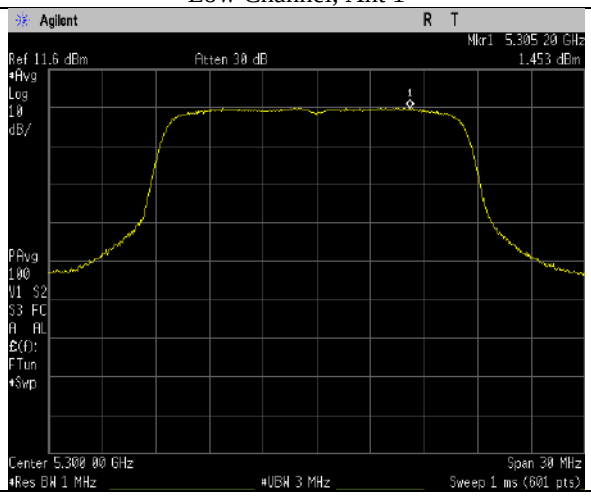
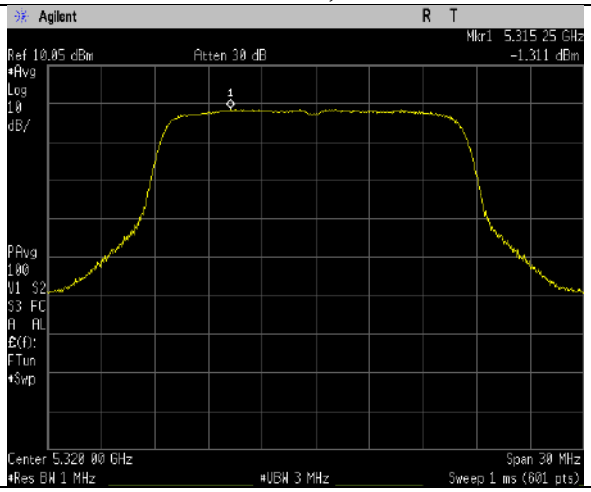
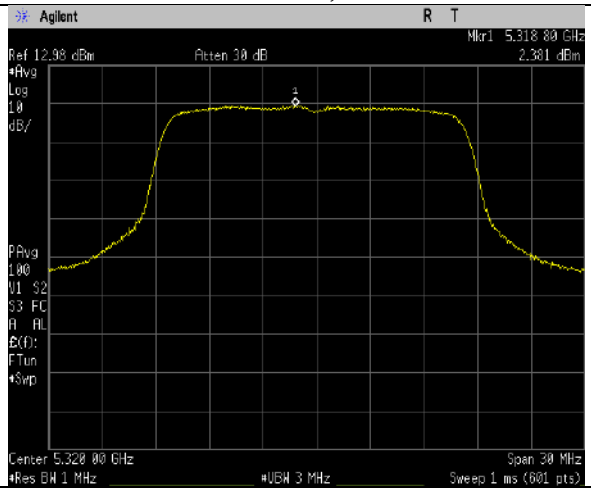
	
Mid Channel, Ant 0	Mid Channel, Ant 1

802.11ax Power Spectral Density Plots, UNII-1	
	
Mid Channel, Ant 0	Mid Channel, Ant 1

802.11a Power Spectral Density Plots, UNII-2A	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

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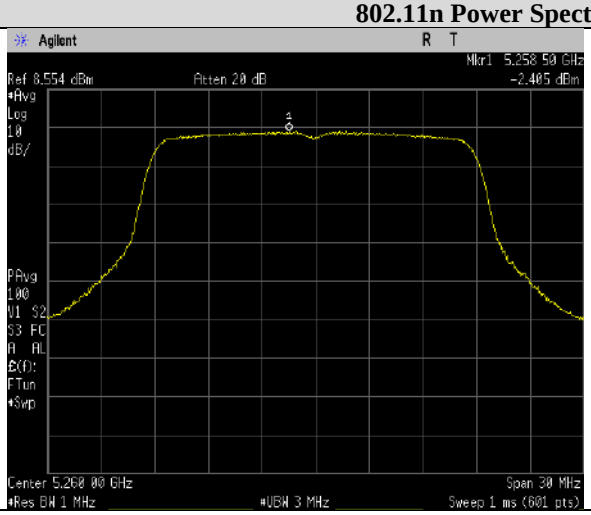
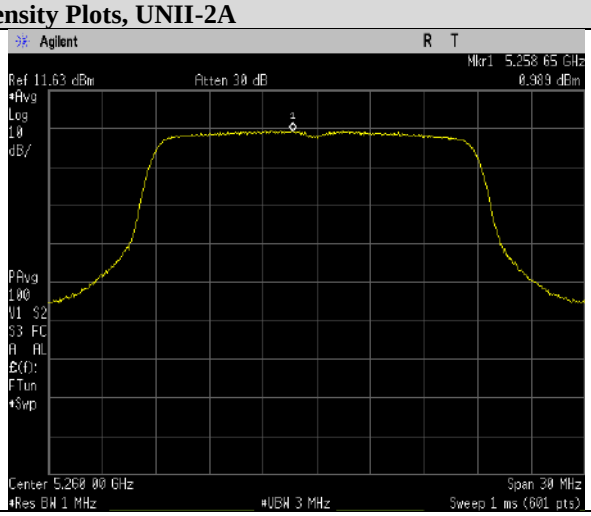
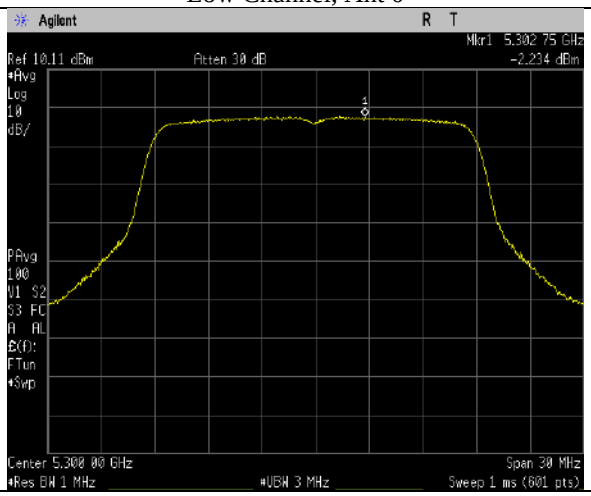
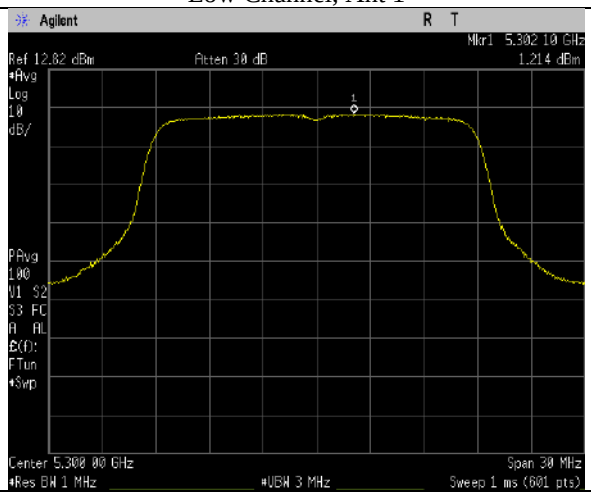
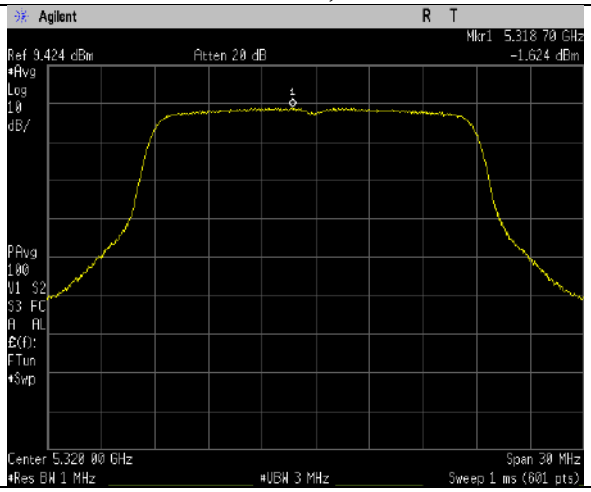
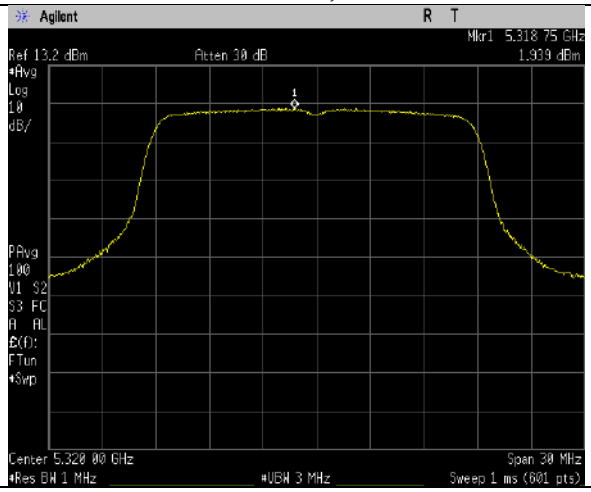
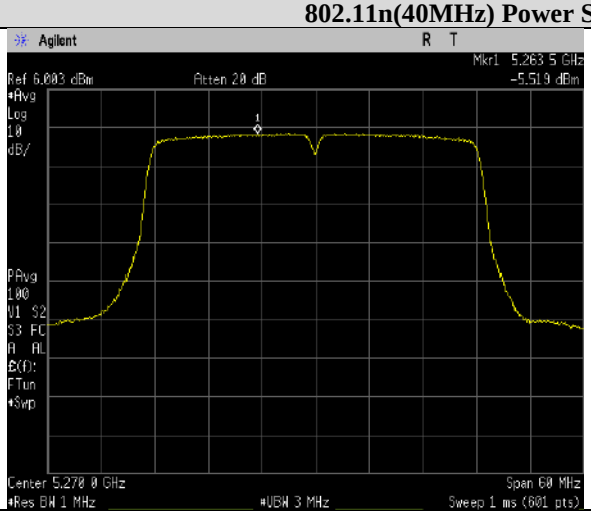
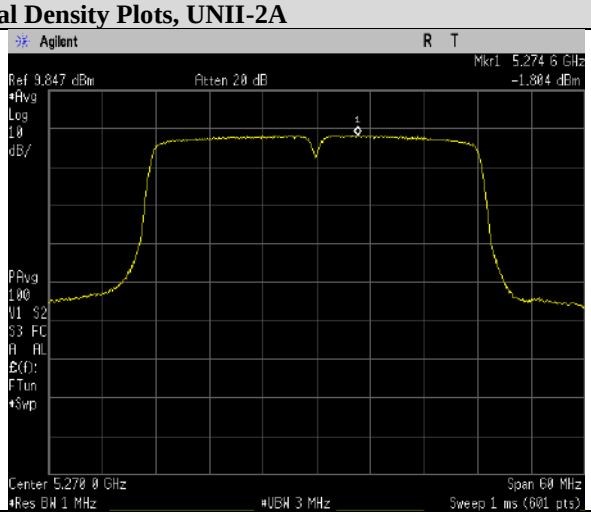
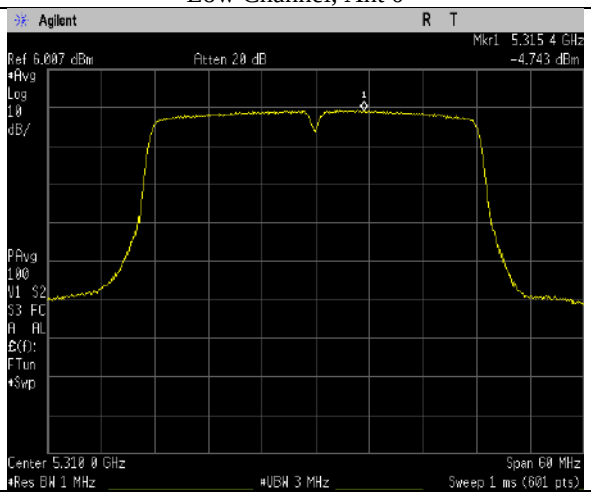
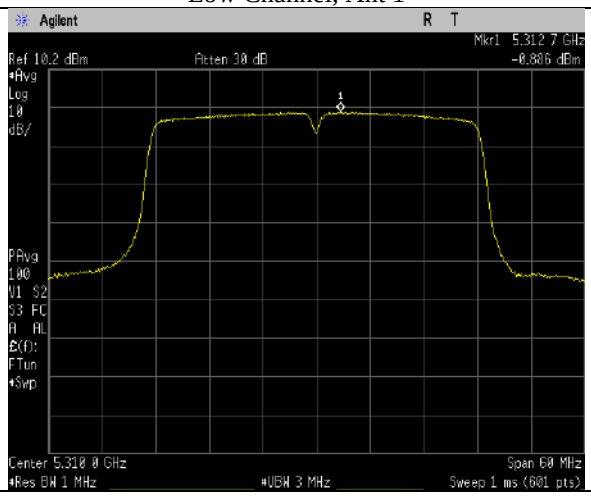
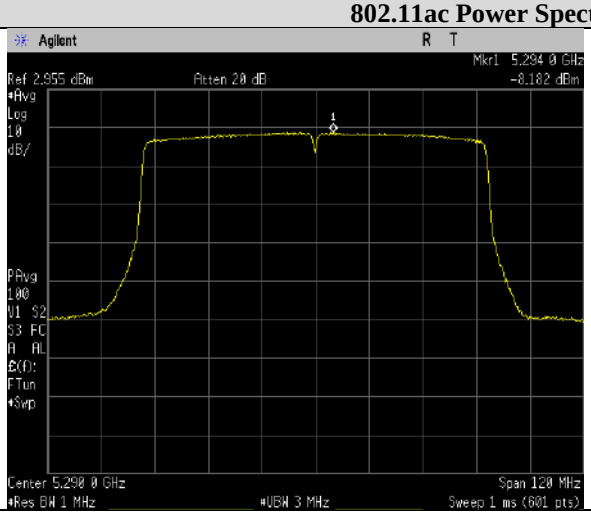
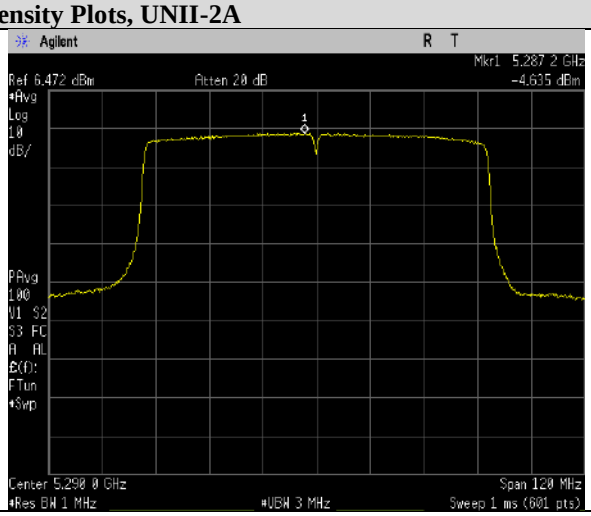
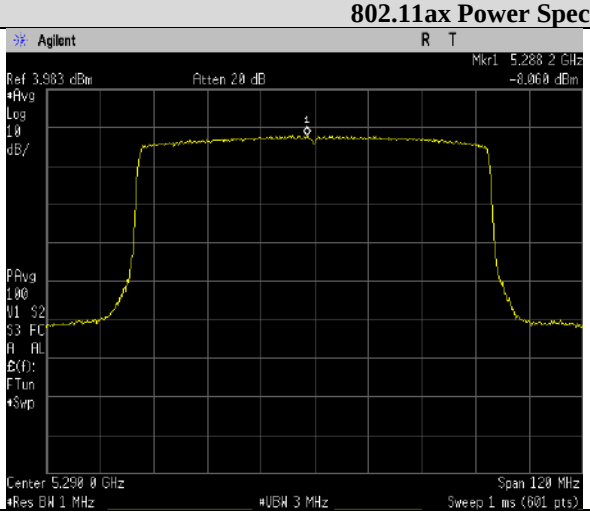
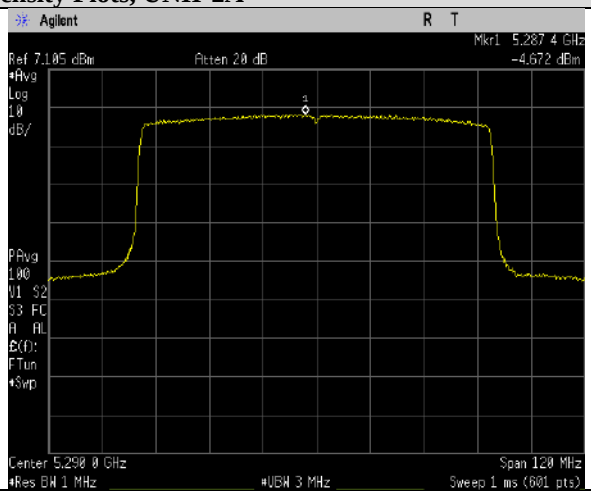
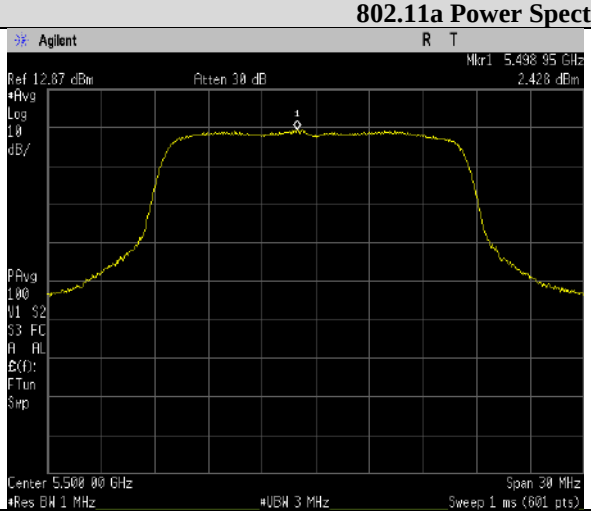
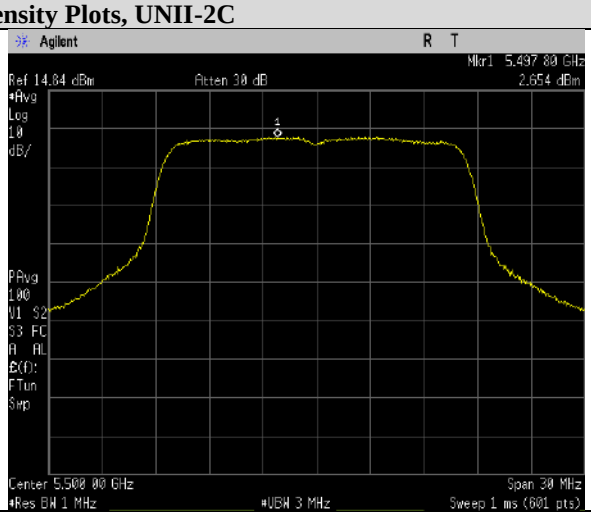
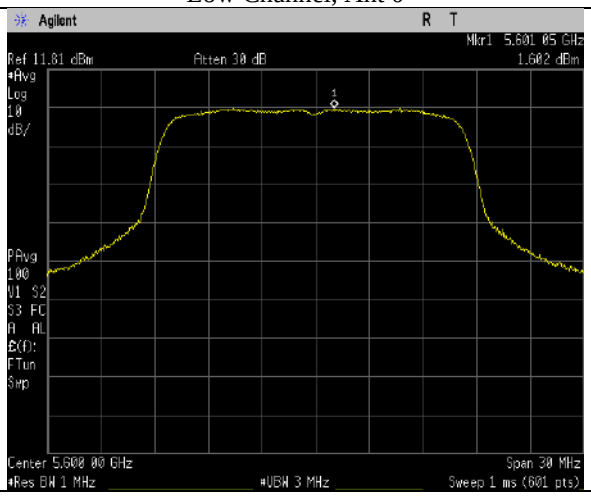
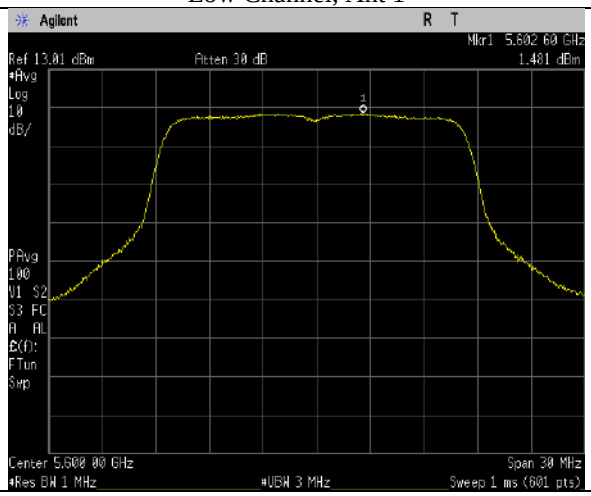
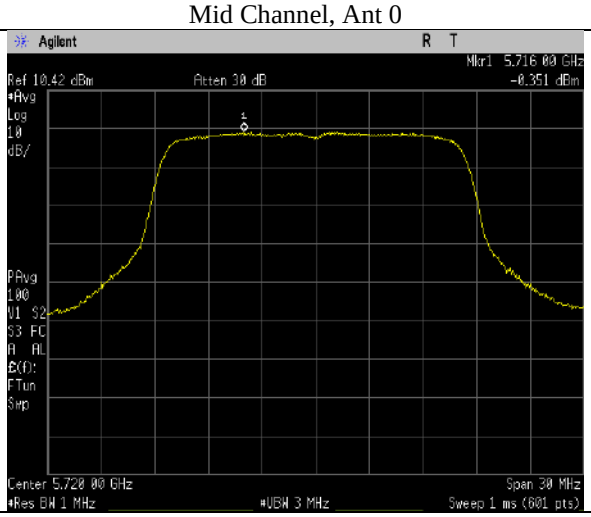
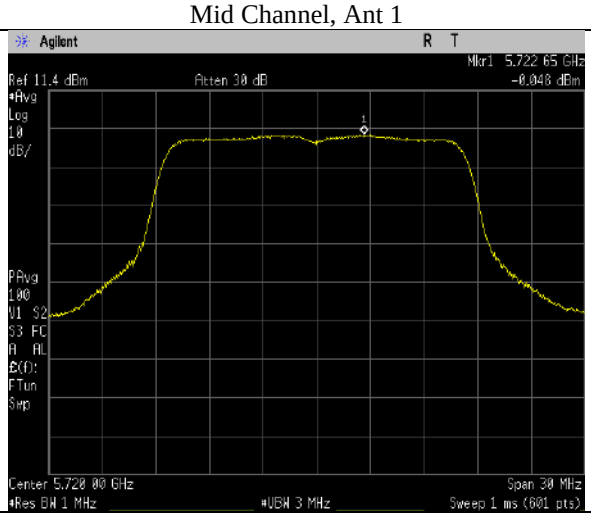
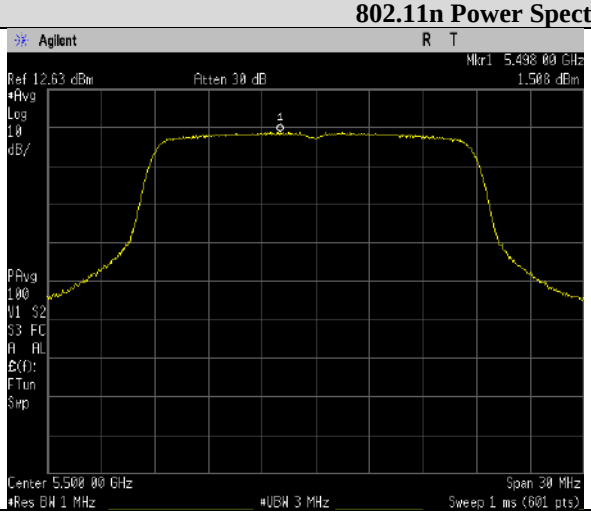
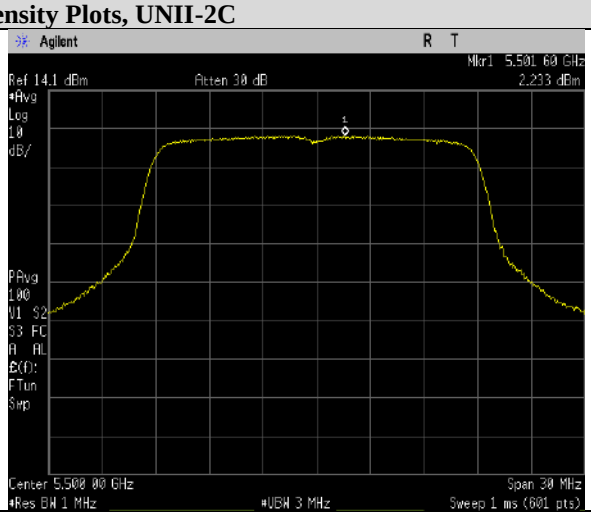
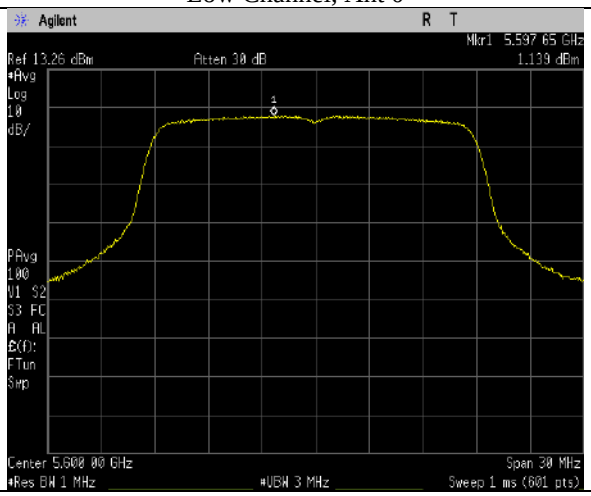
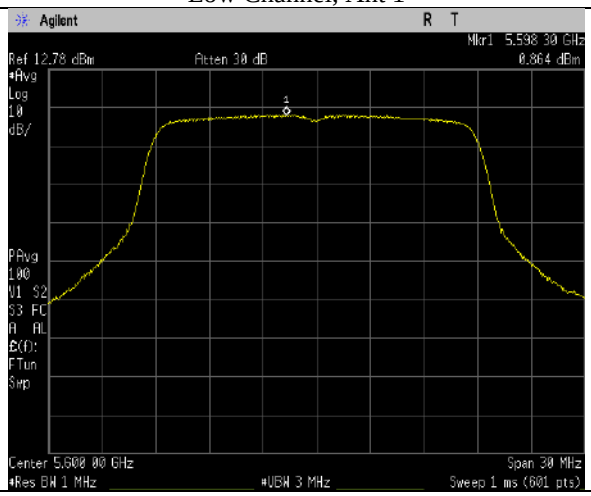
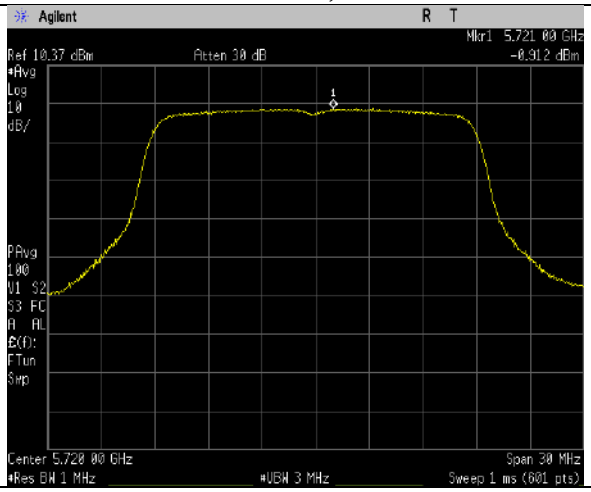
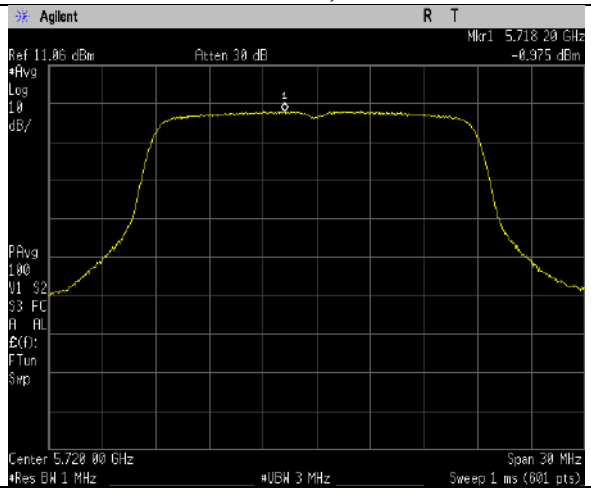
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

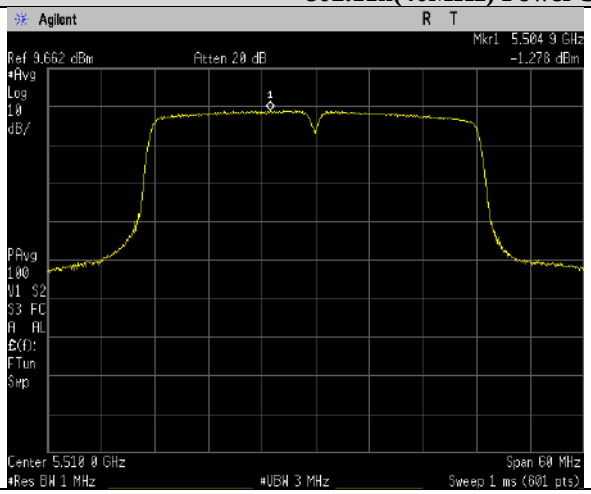
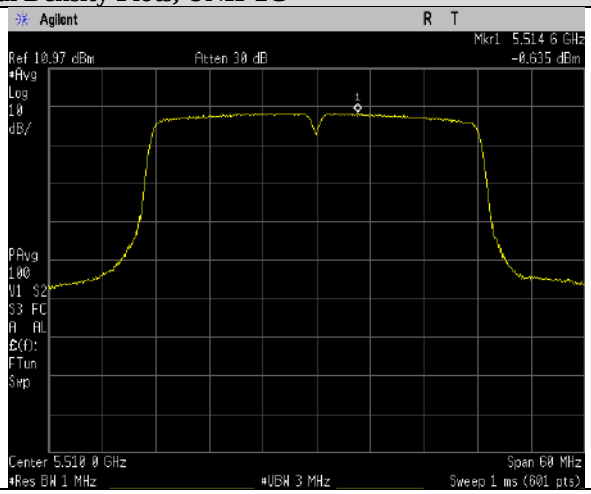
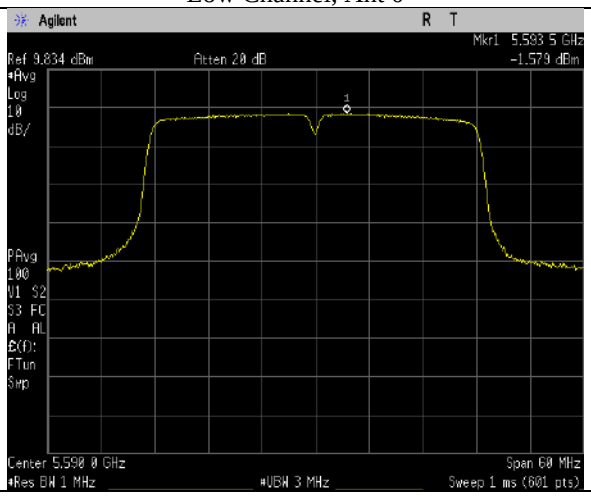
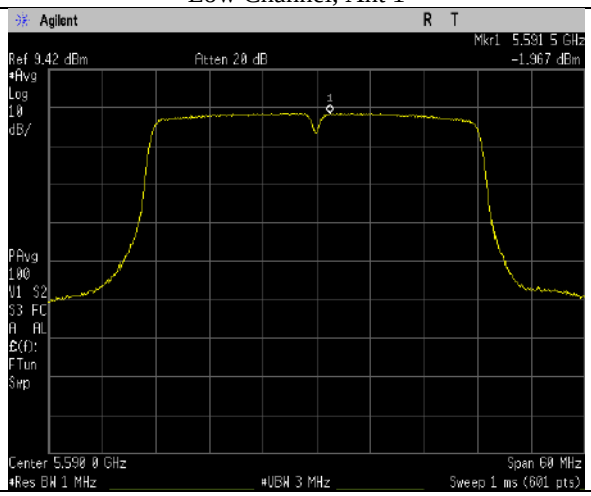
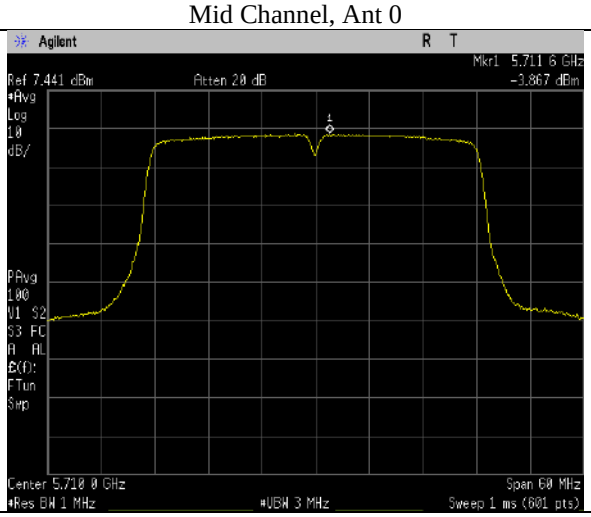
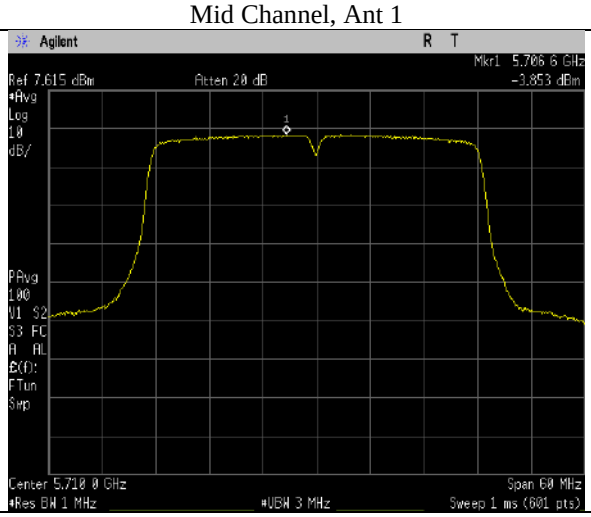
802.11n(40MHz) Power Spectral Density Plots, UNII-2A	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

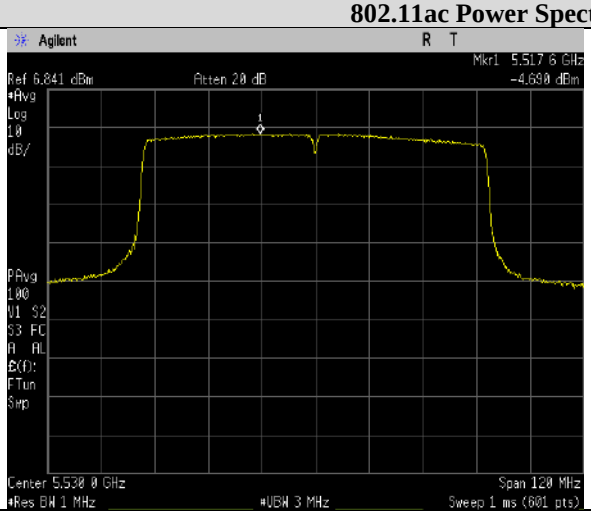
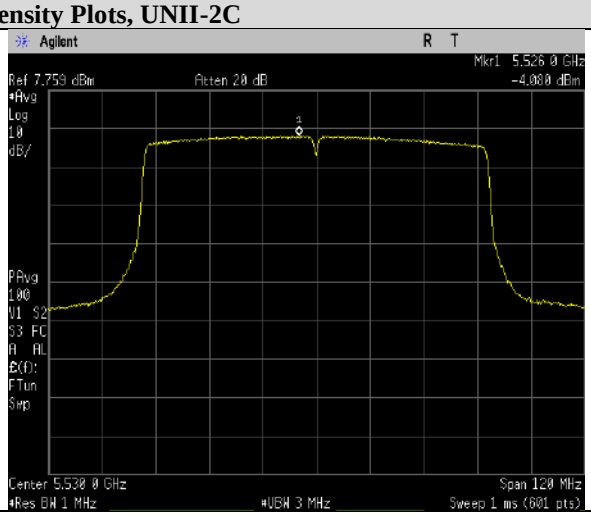
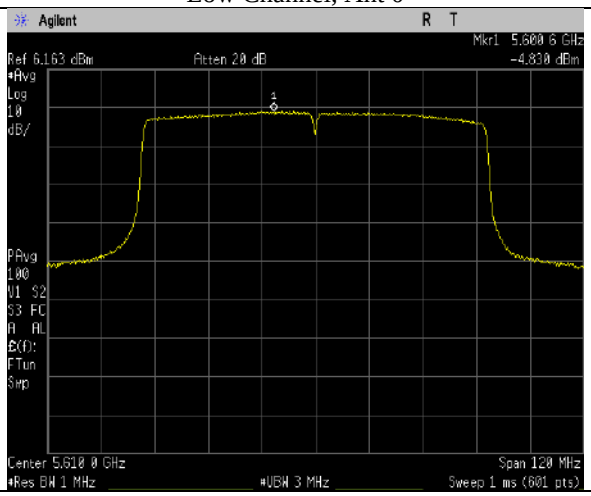
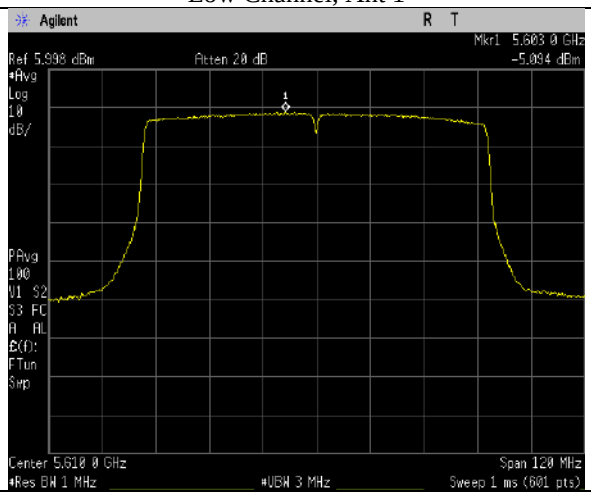
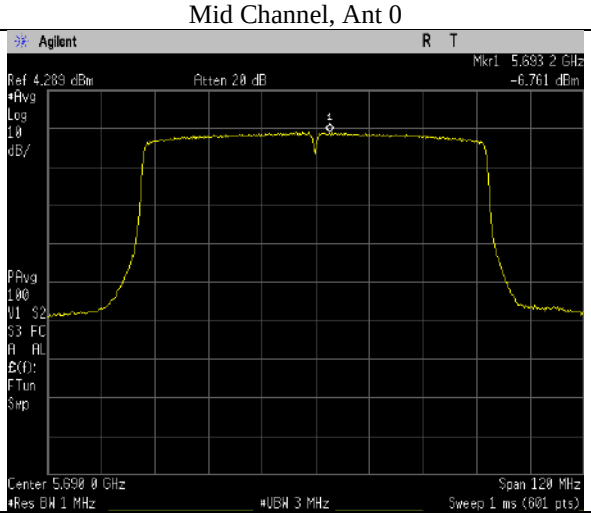
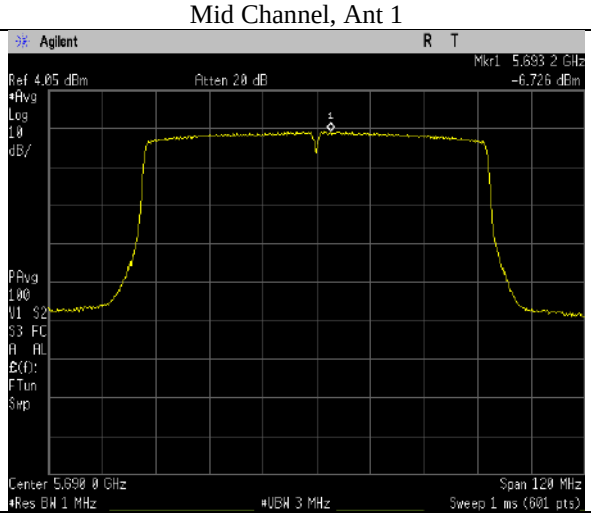
802.11ac Power Spectral Density Plots, UNII-2A	
	
Mid Channel, Ant 0	Mid Channel, Ant 1

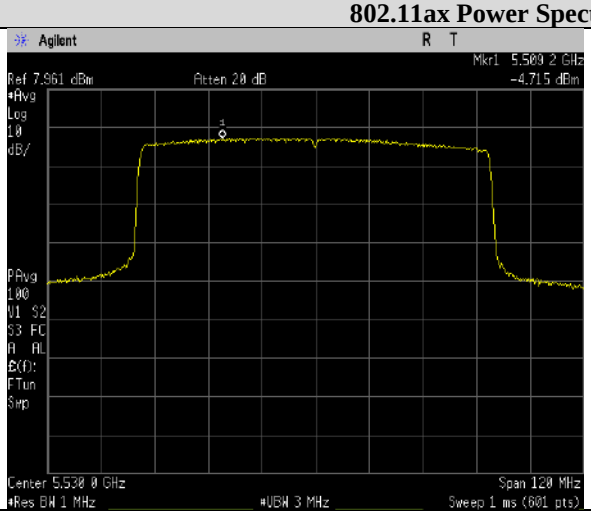
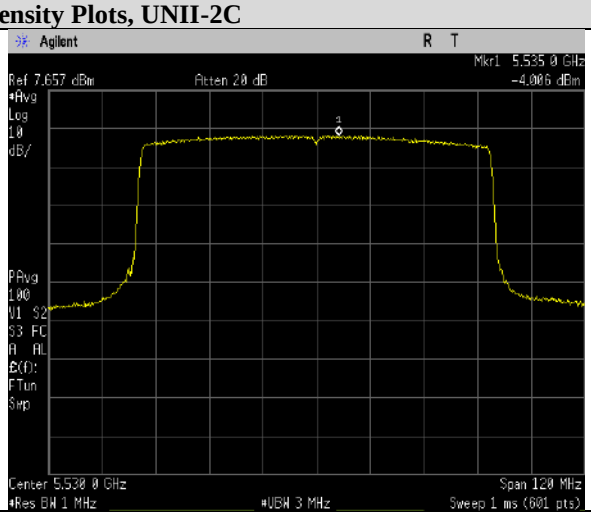
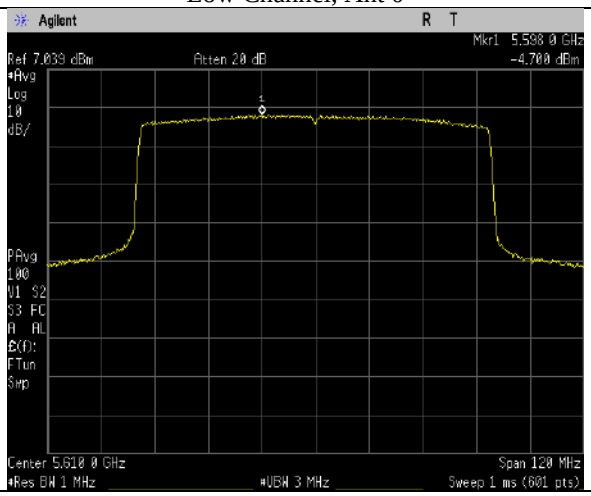
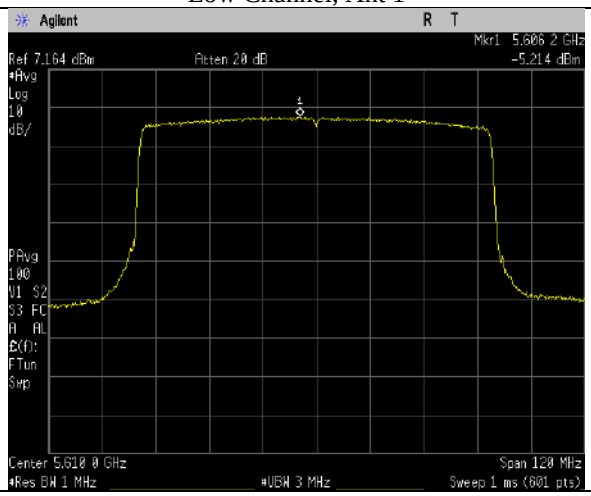
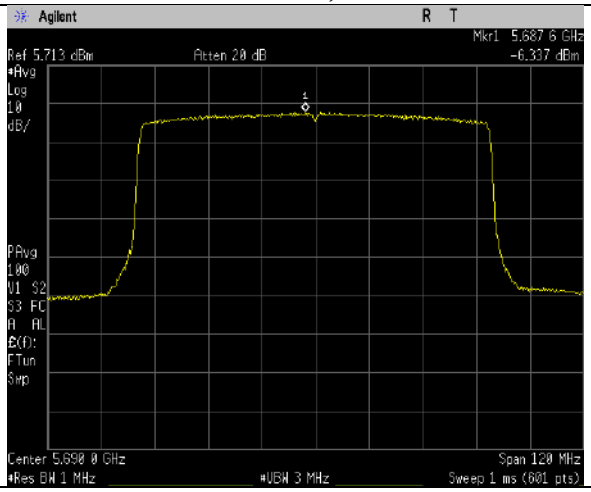
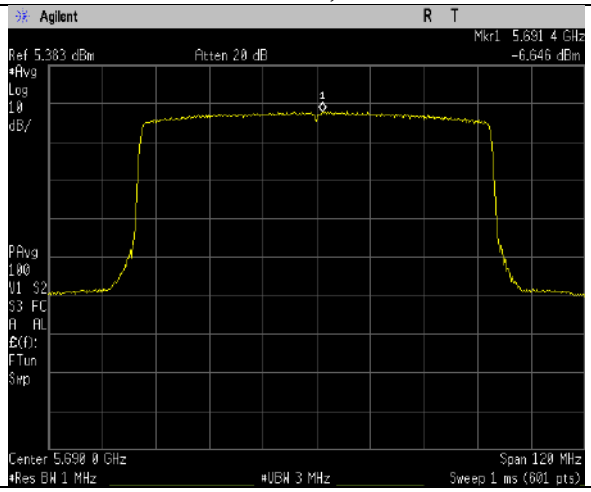
802.11ax Power Spectral Density Plots, UNII-2A	
	
Mid Channel, Ant 0	Mid Channel, Ant 1

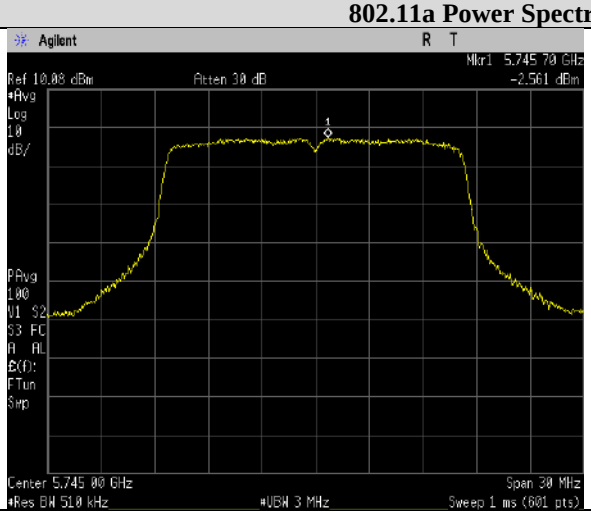
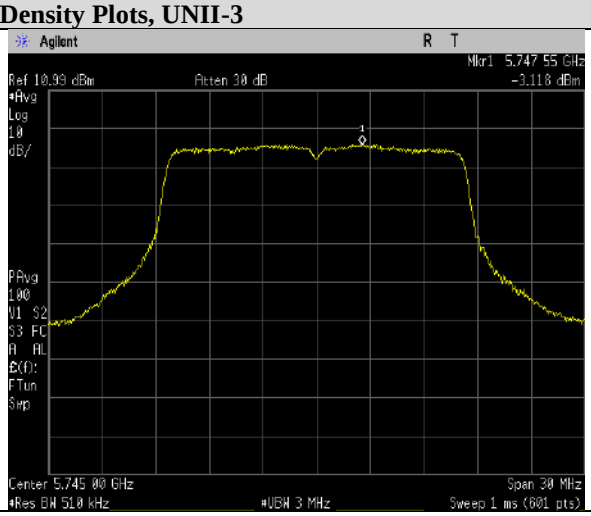
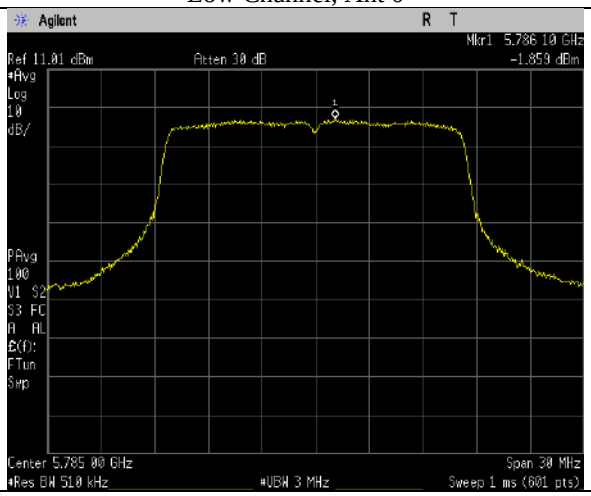
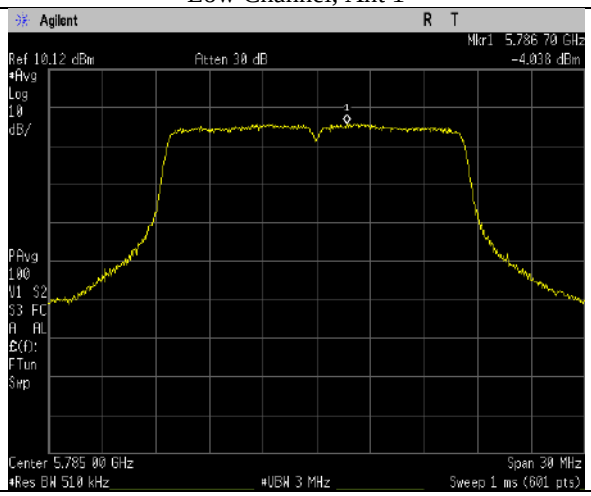
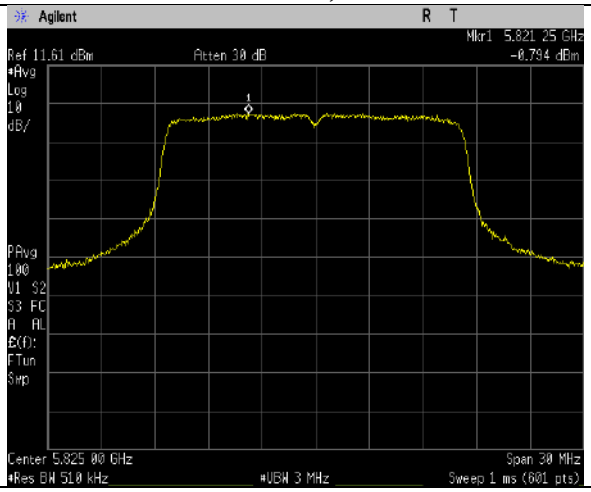
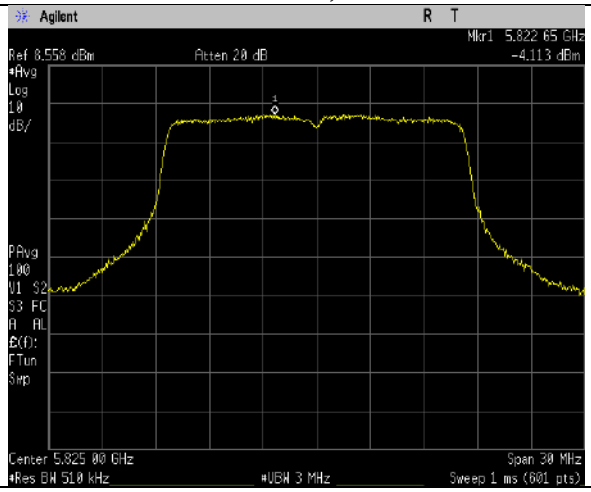
802.11a Power Spectral Density Plots, UNII-2C	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

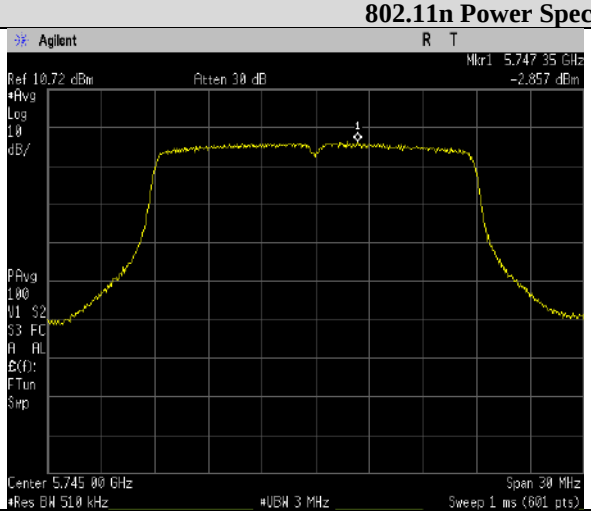
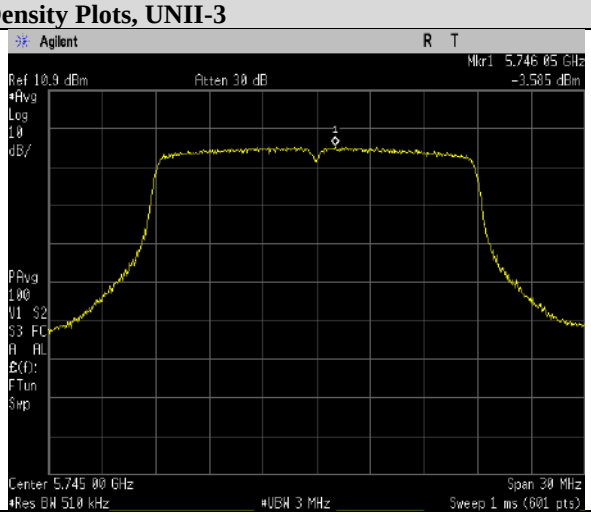
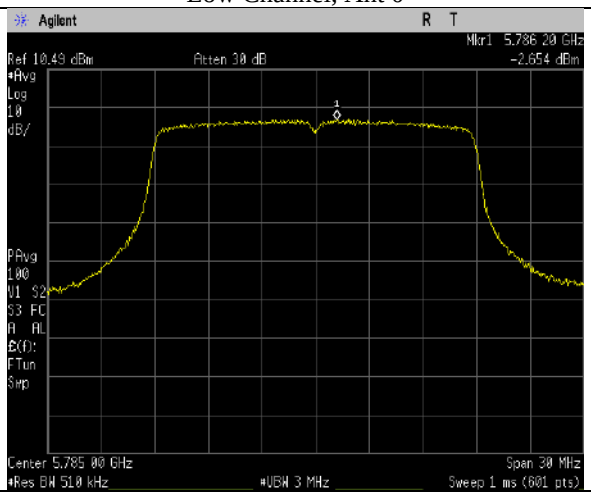
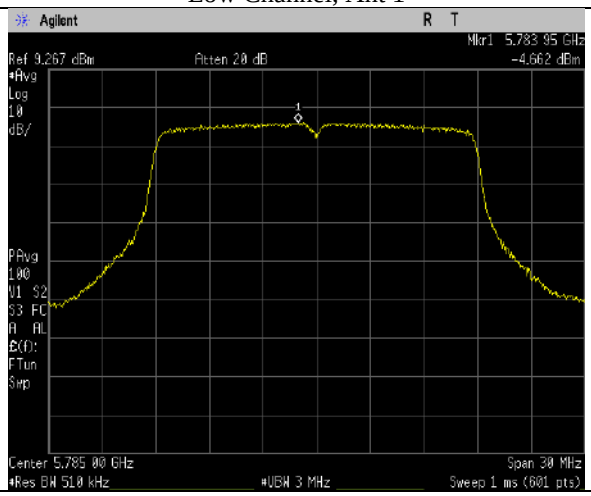
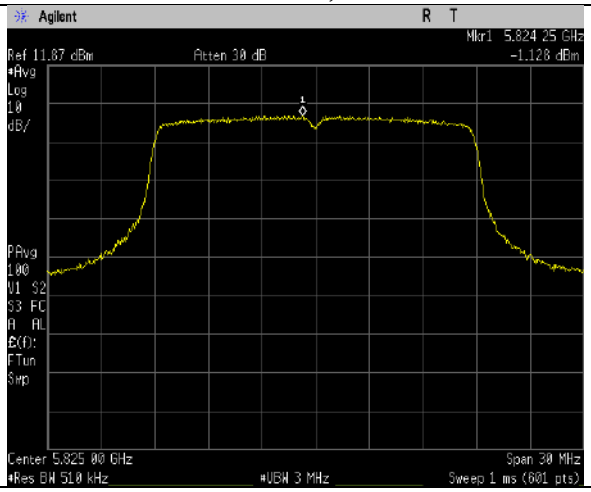
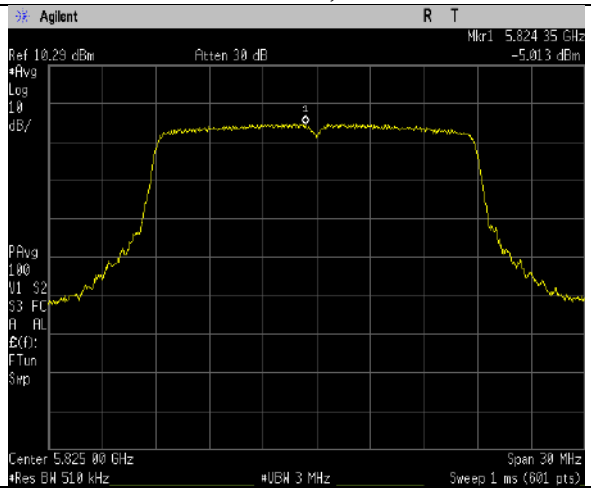
802.11n Power Spectral Density Plots, UNII-2C	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

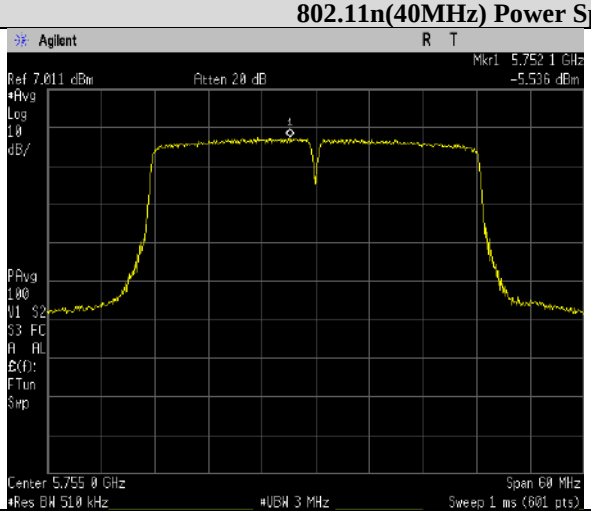
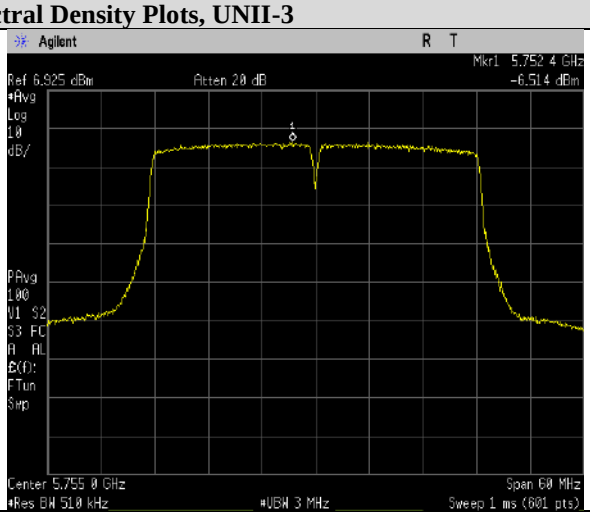
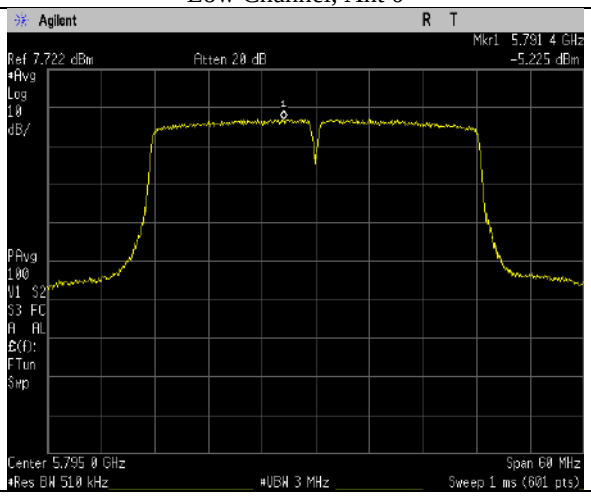
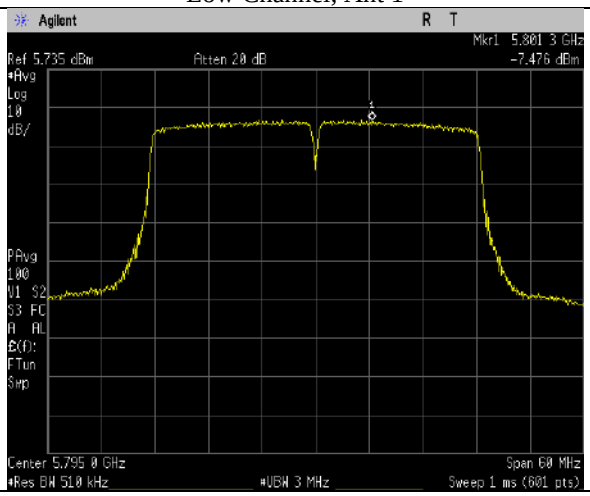
802.11n(40MHz) Power Spectral Density Plots, UNII-2C	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

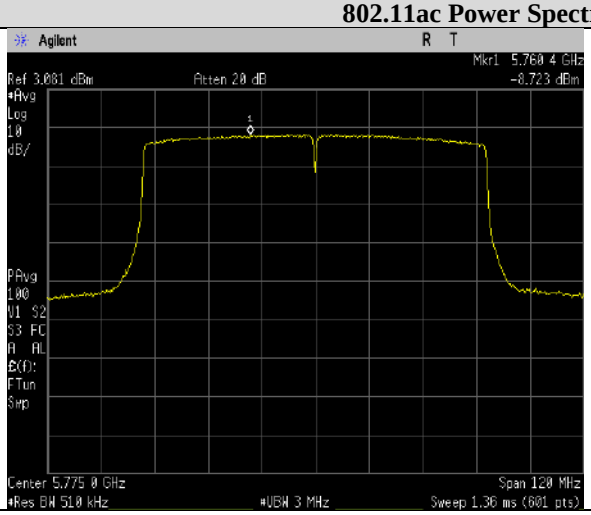
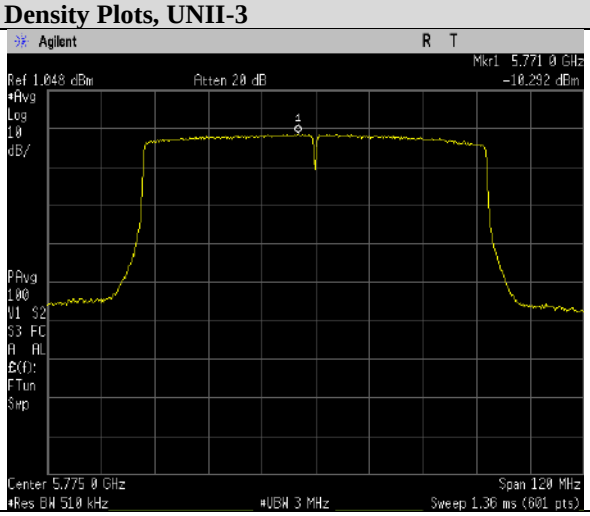
802.11ac Power Spectral Density Plots, UNII-2C	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

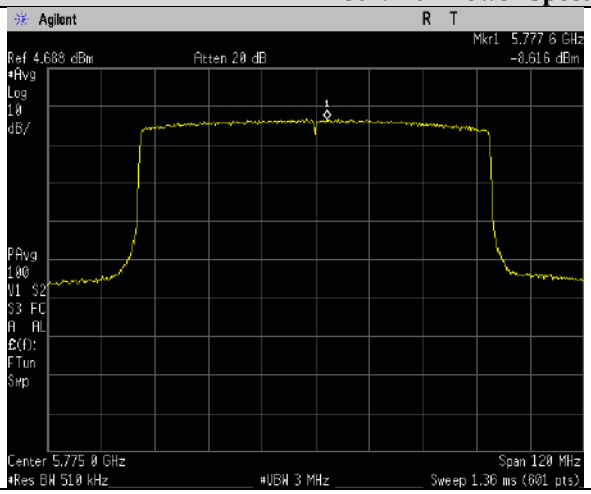
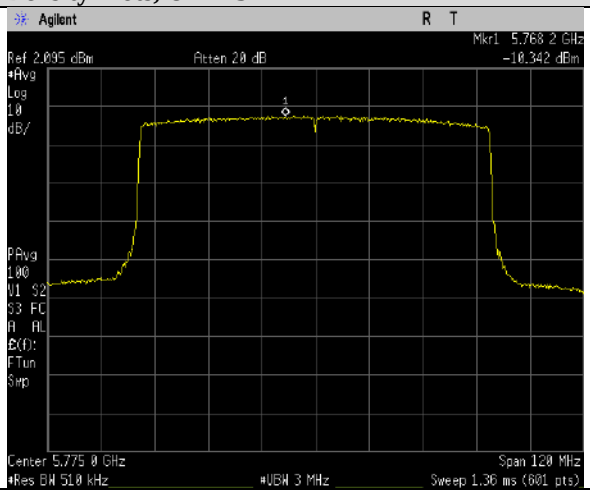
802.11ax Power Spectral Density Plots, UNII-2C	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

802.11a Power Spectral Density Plots, UNII-3	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

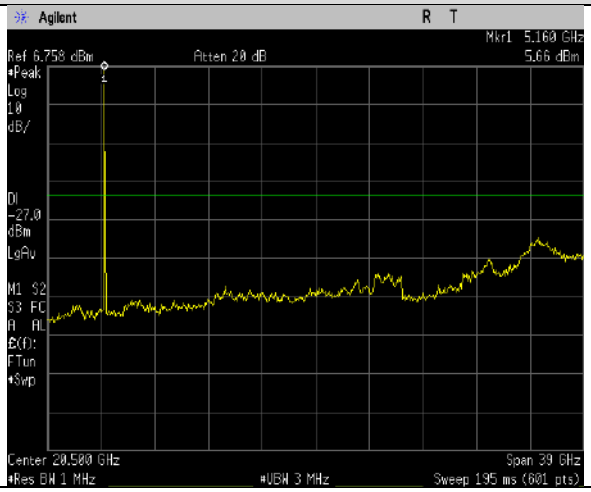
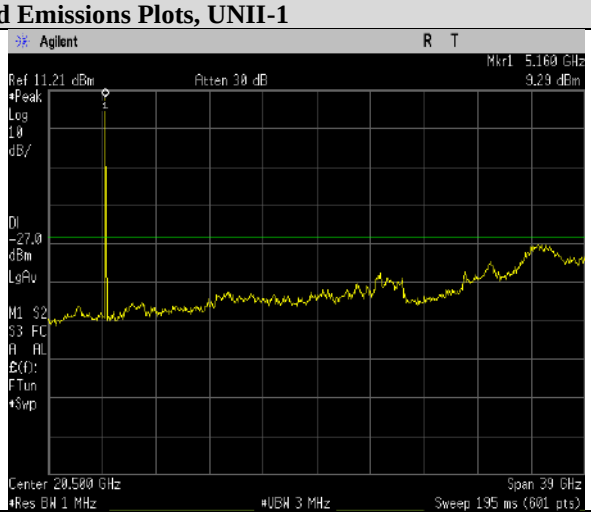
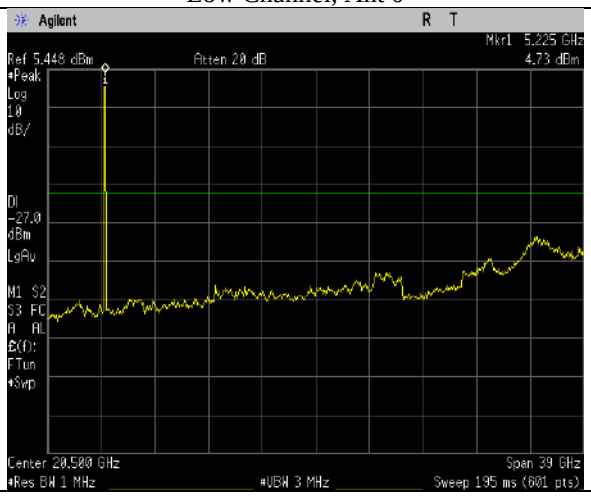
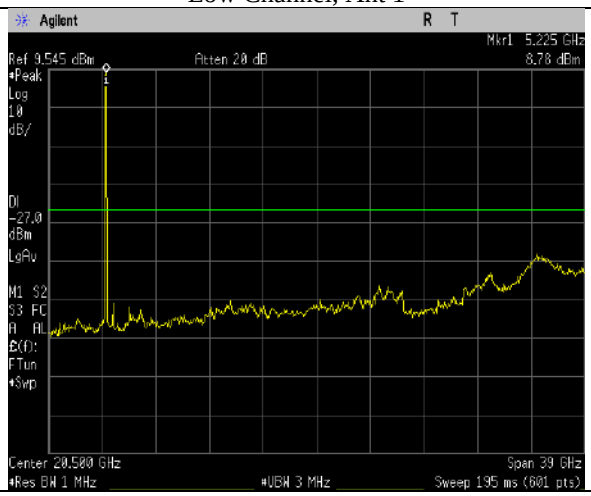
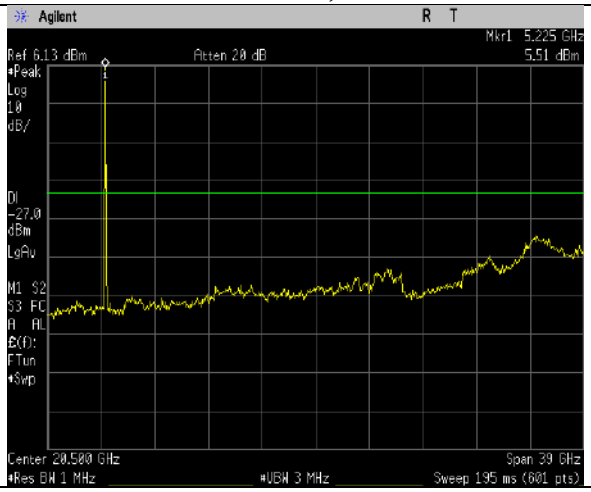
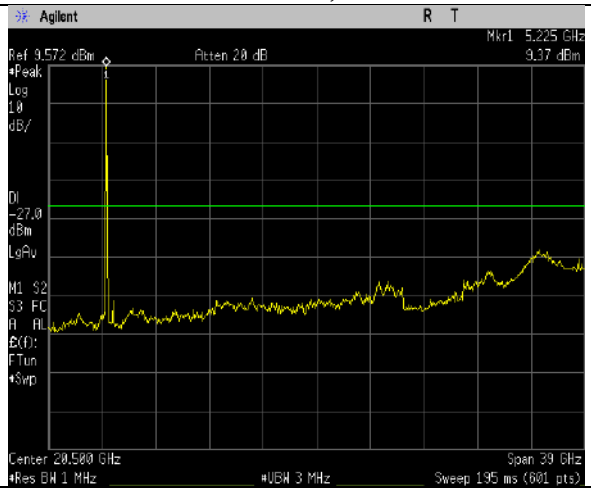
802.11n Power Spectral Density Plots, UNII-3	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

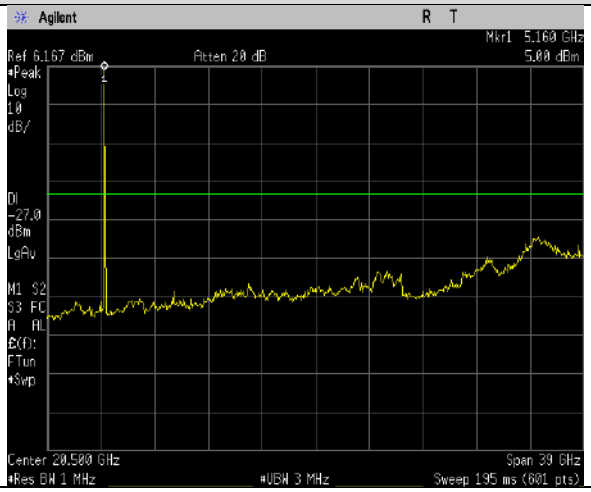
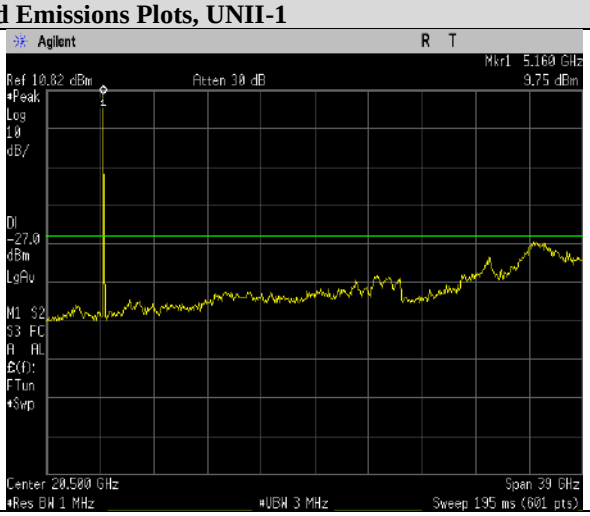
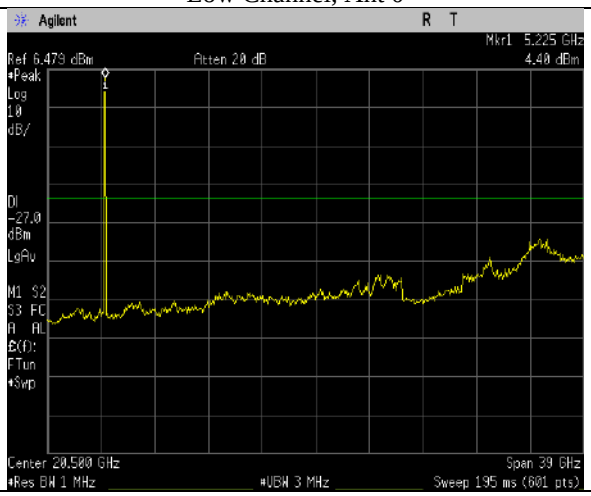
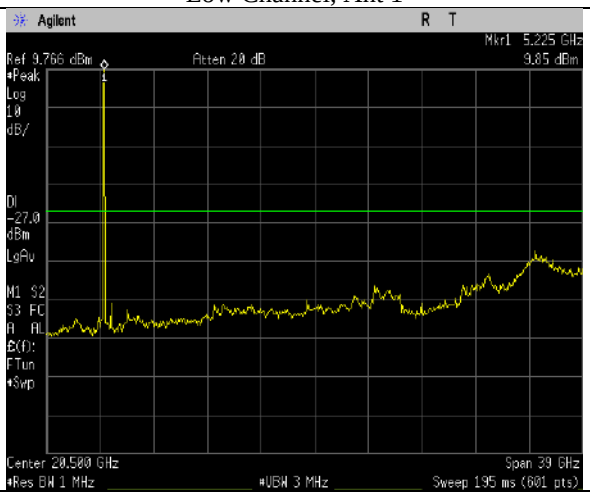
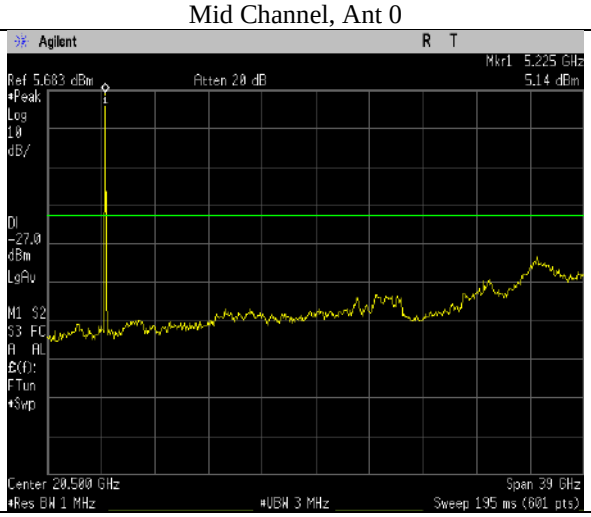
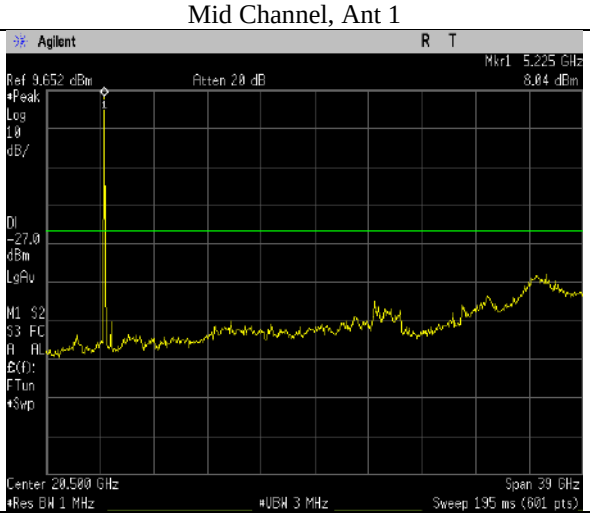
802.11n(40MHz) Power Spectral Density Plots, UNII-3	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

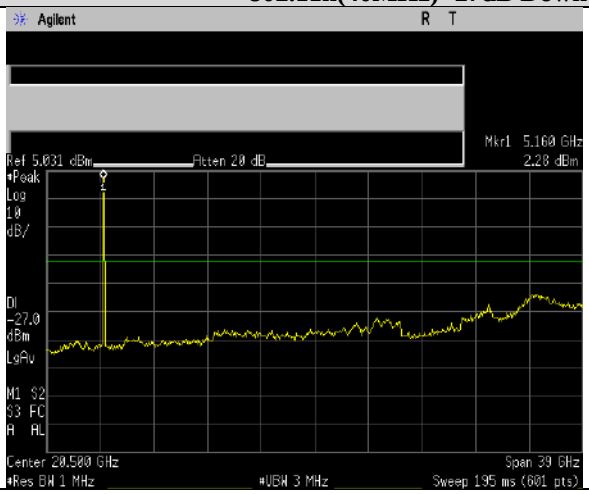
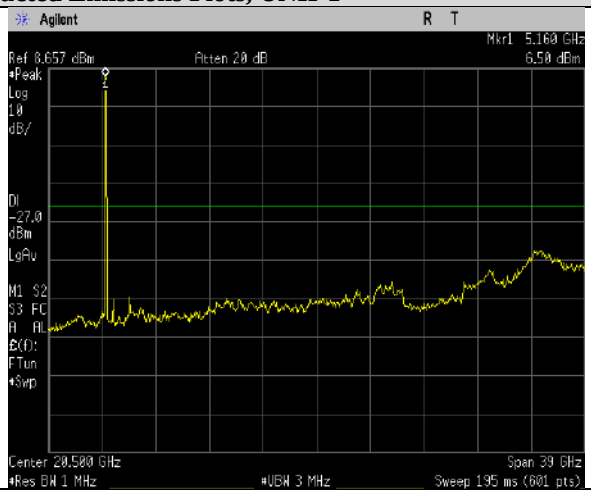
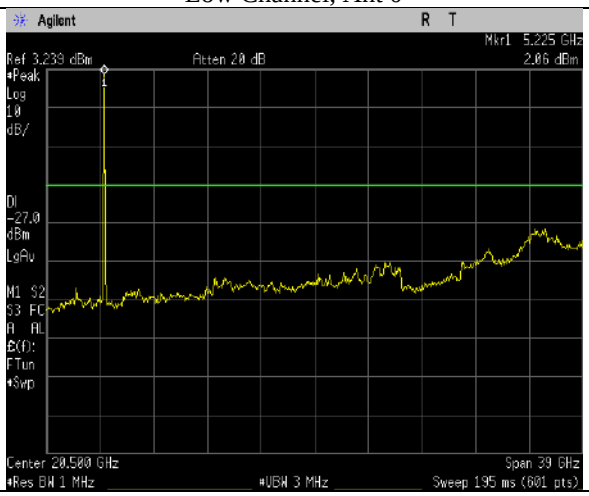
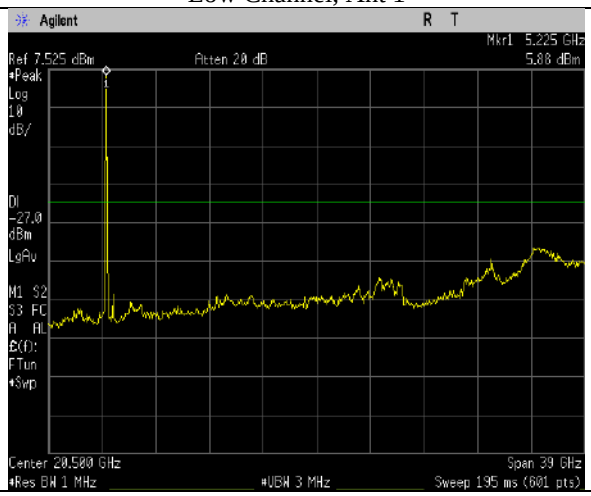
802.11ac Power Spectral Density Plots, UNII-3	
	
Mid Channel, Ant 0	Mid Channel, Ant 1

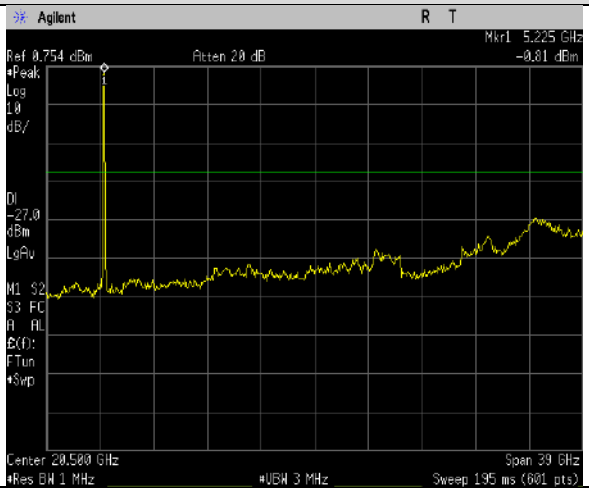
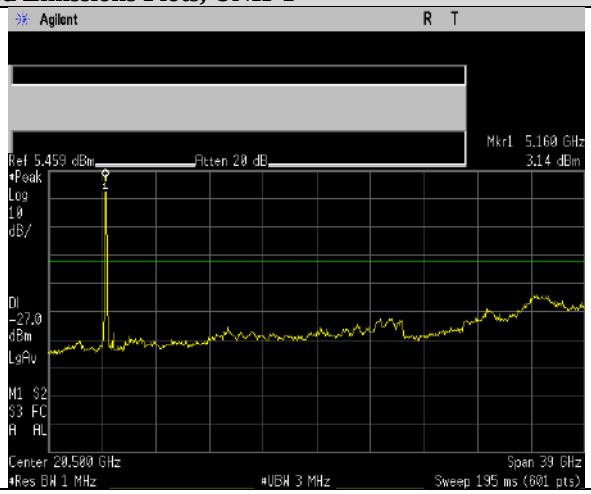
802.11ax Power Spectral Density Plots, UNII-3	
	
Mid Channel, Ant 0	Mid Channel, Ant 1

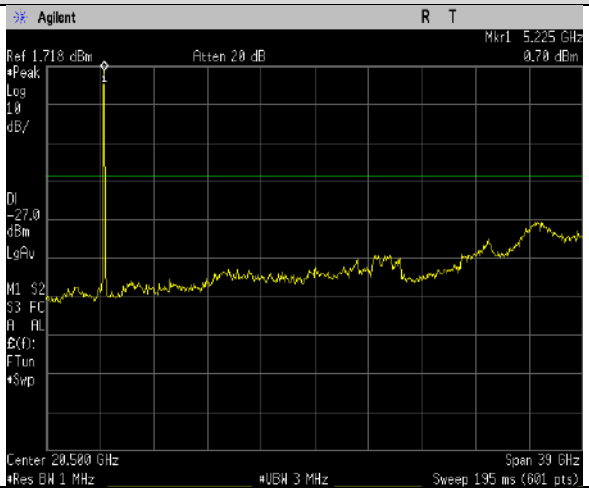
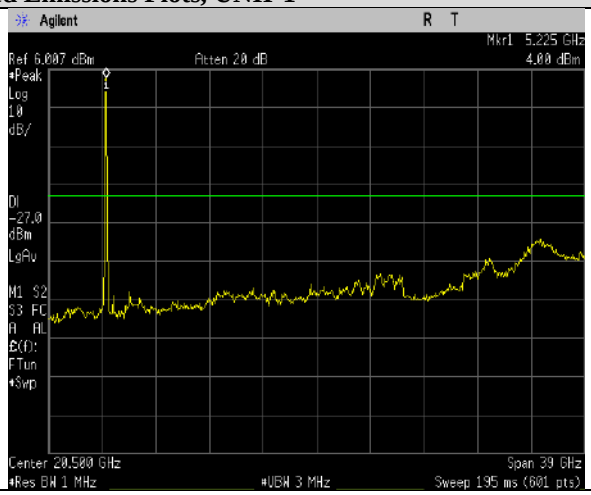
IV. Conducted Spurious Emissions Plots

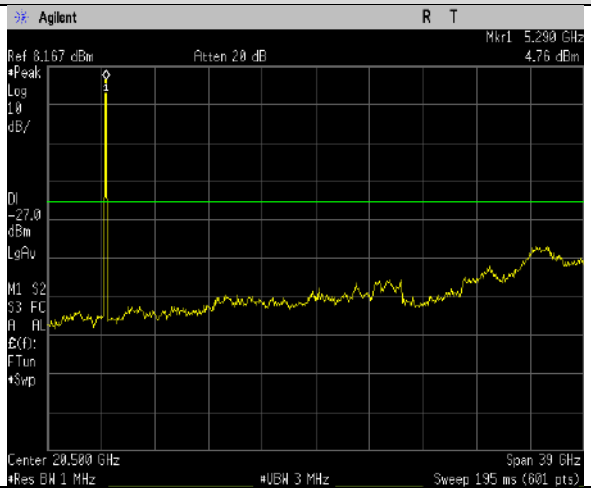
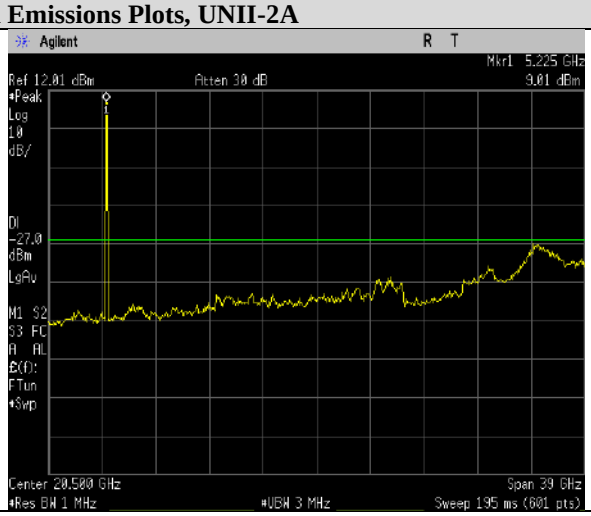
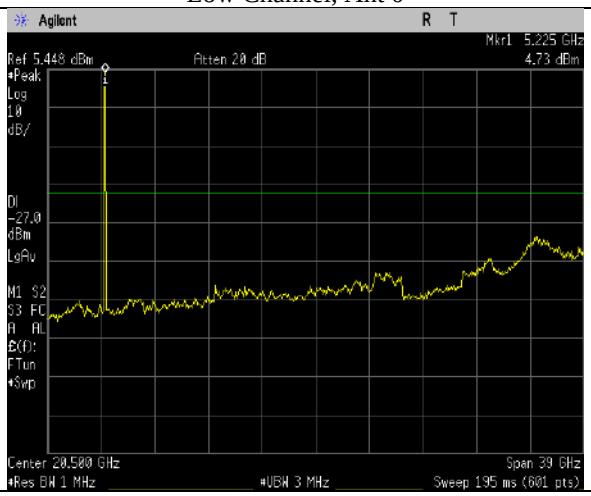
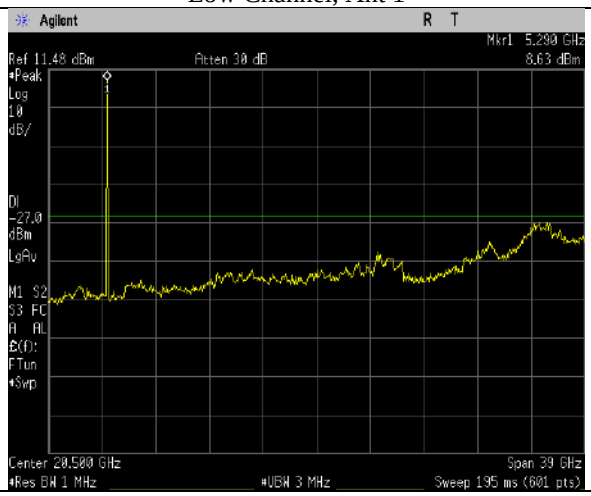
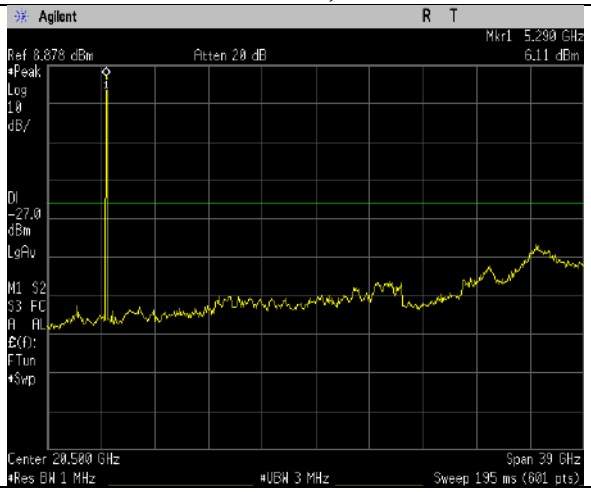
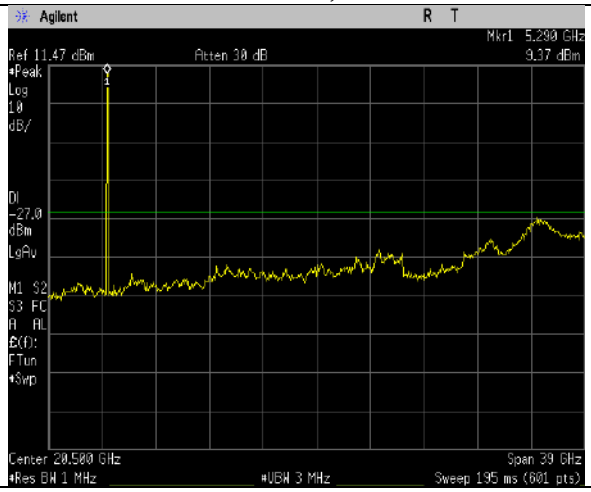
802.11a -27dB Down Conducted Emissions Plots, UNII-1	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

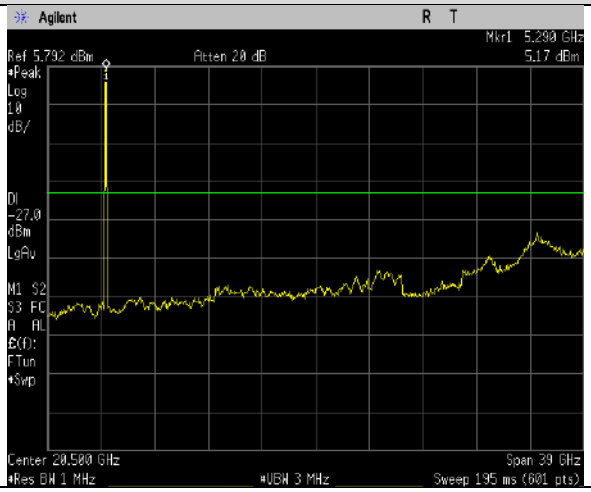
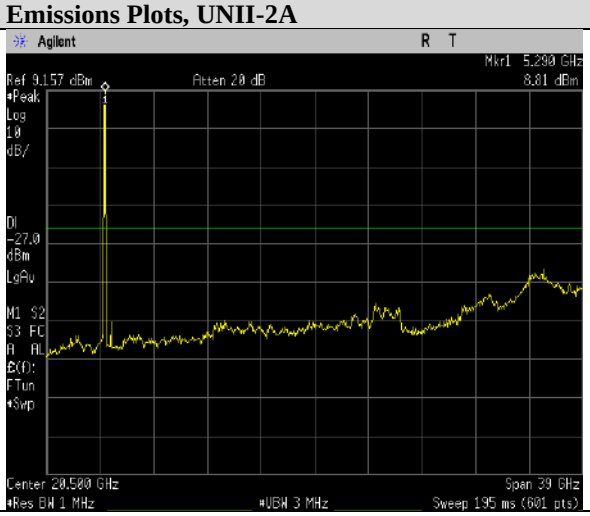
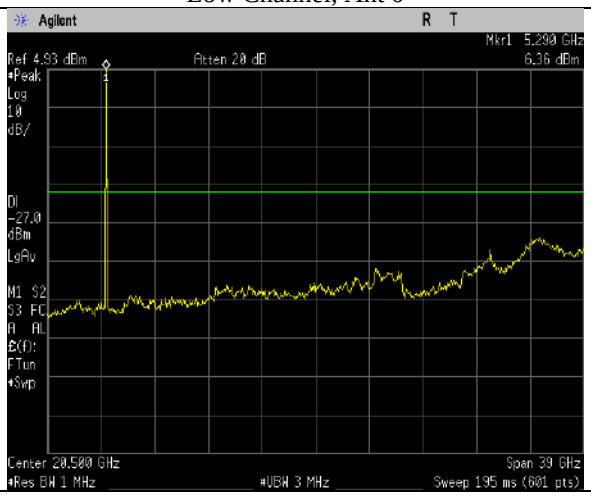
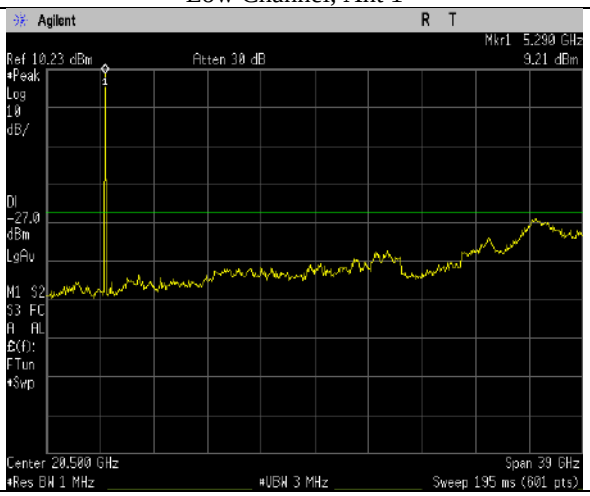
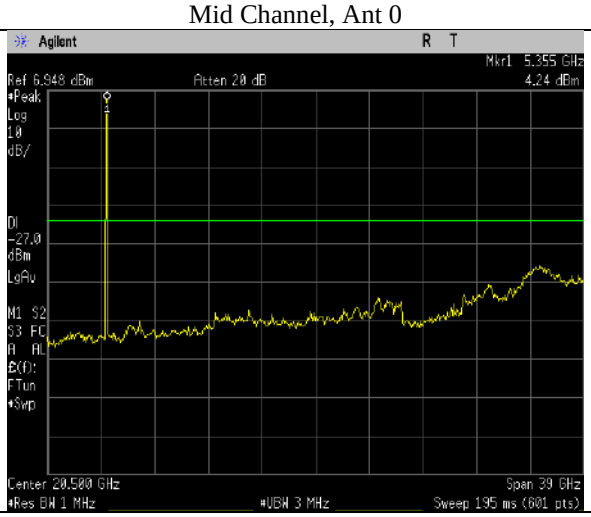
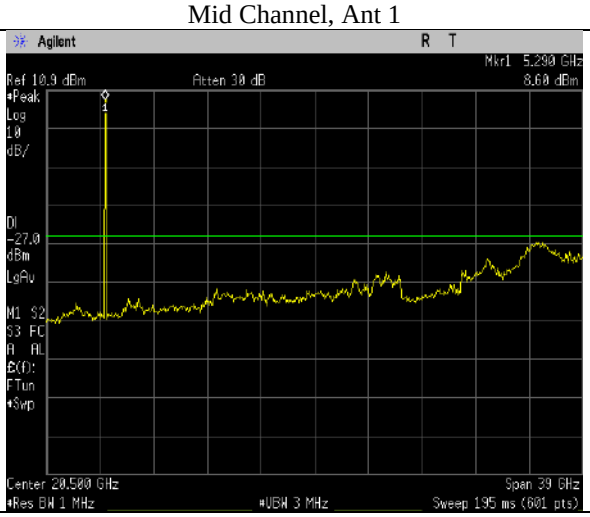
802.11n -27dB Down Conducted Emissions Plots, UNII-1	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

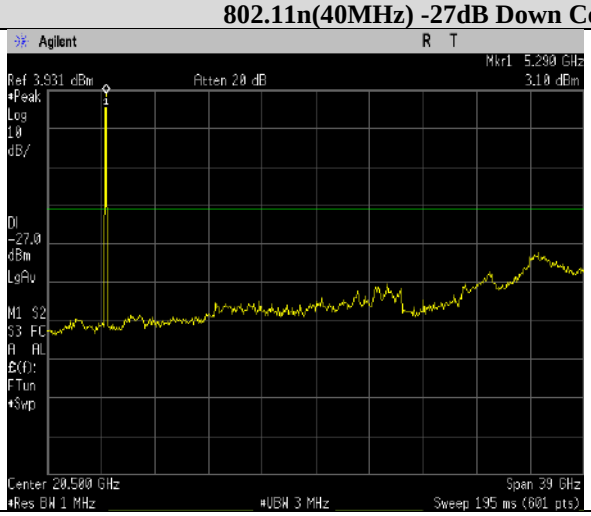
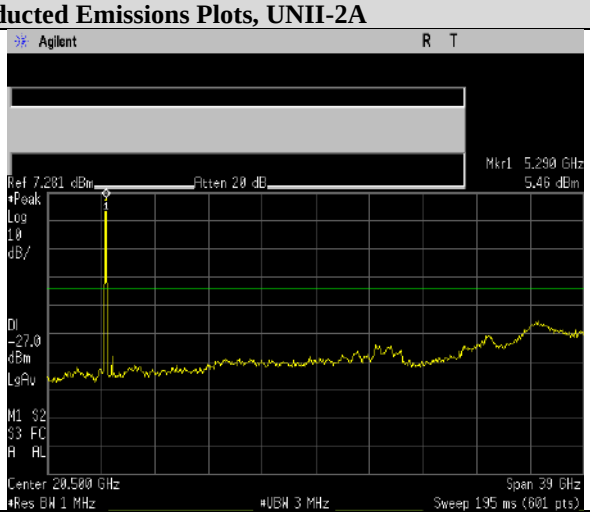
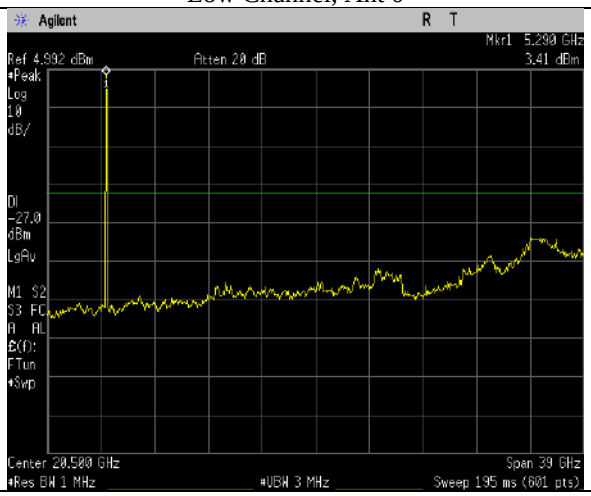
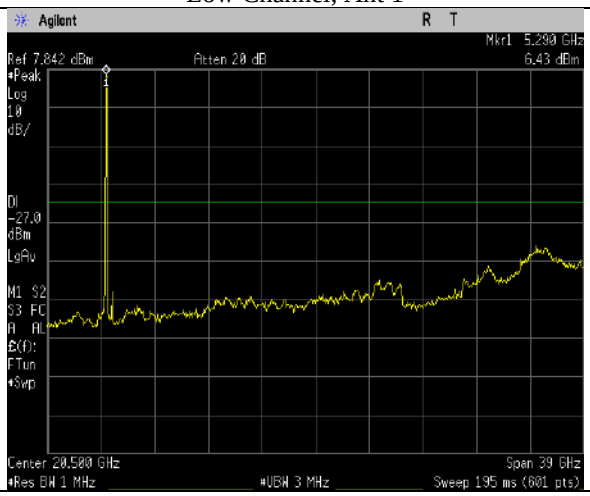
802.11n(40MHz) -27dB Down Conducted Emissions Plots, UNII-1	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

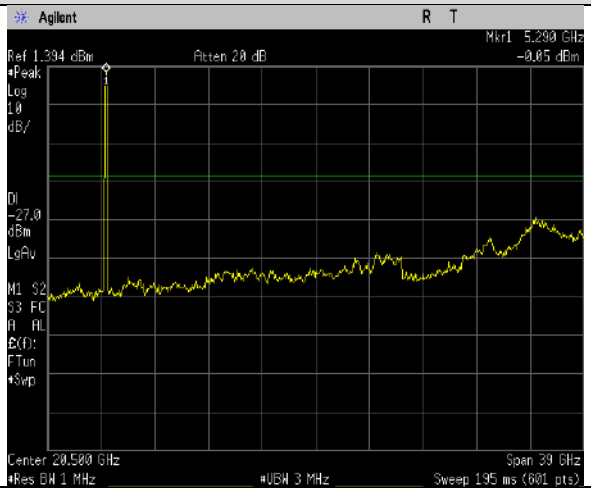
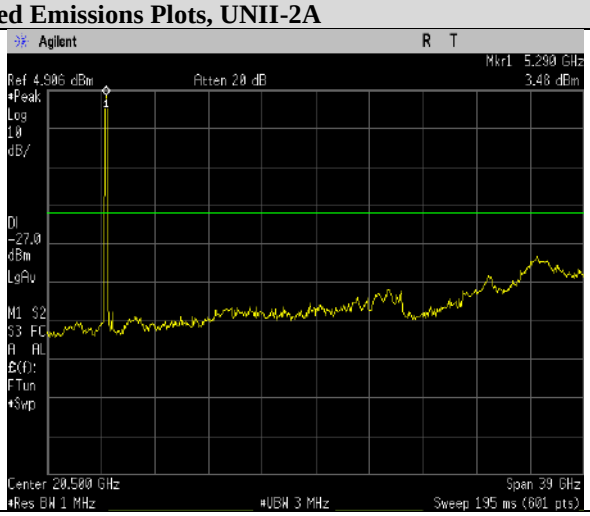
802.11ac -27dB Down Conducted Emissions Plots, UNII-1	
	
Mid Channel, Ant 0	Mid Channel, Ant 1

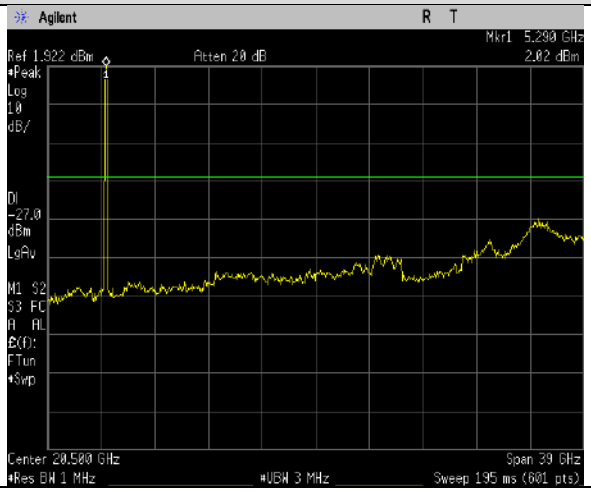
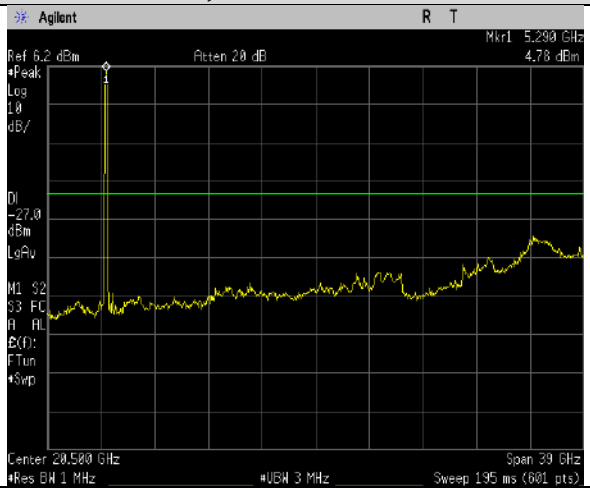
802.11ax -27dB Down Conducted Emissions Plots, UNII-1	
	
Mid Channel, Ant 0	Mid Channel, Ant 1

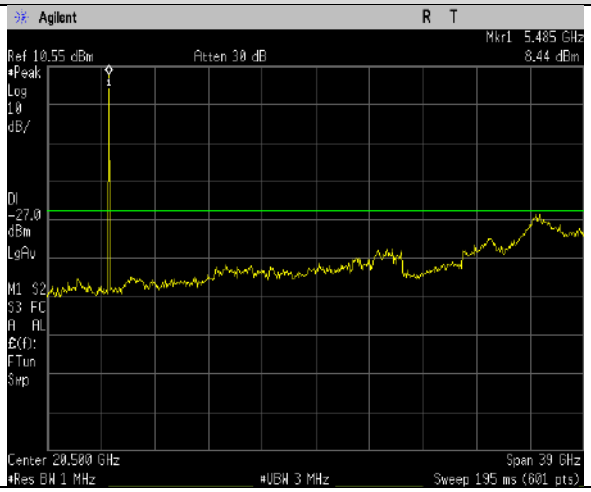
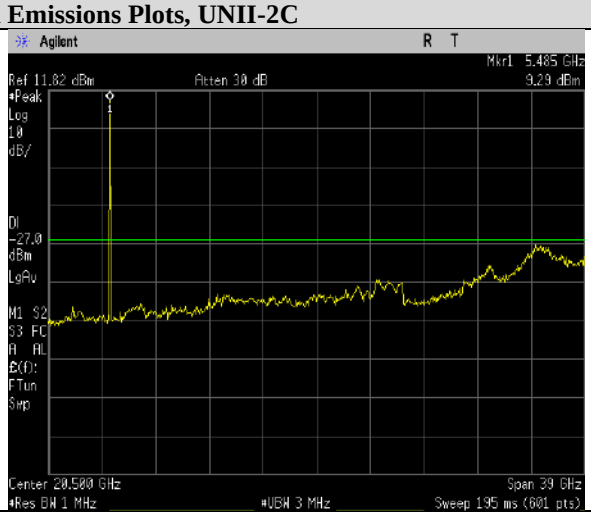
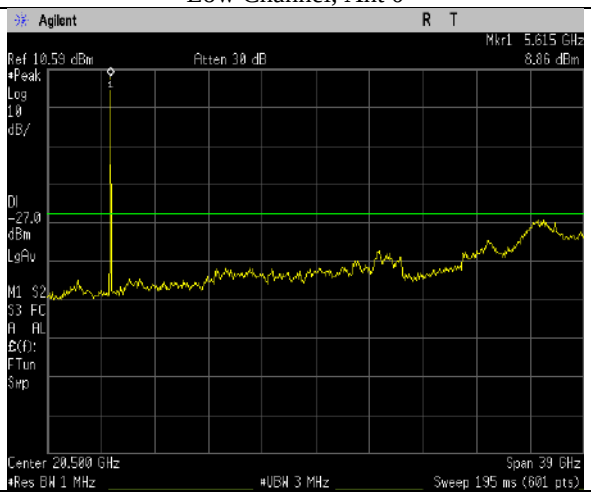
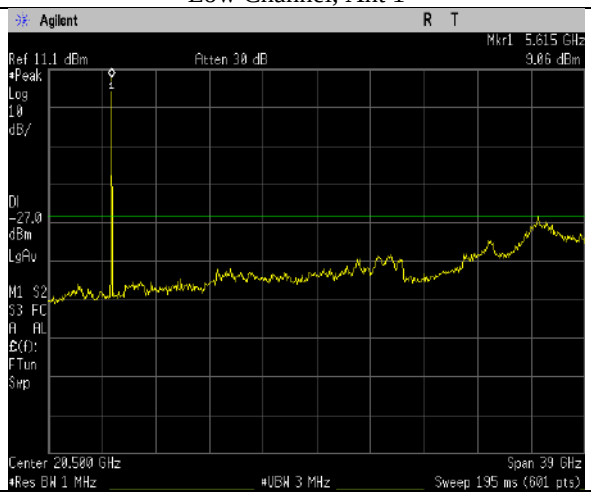
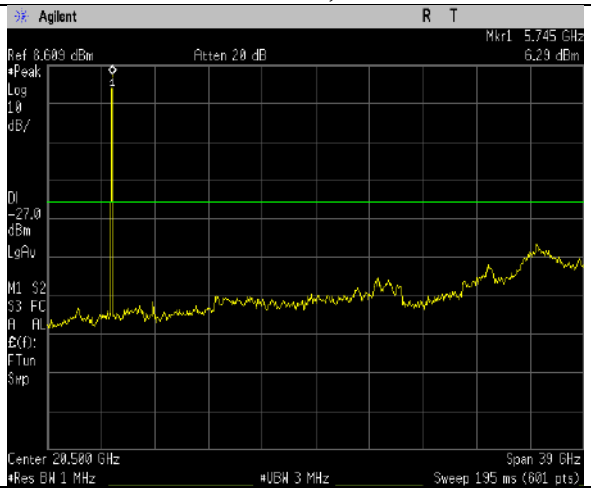
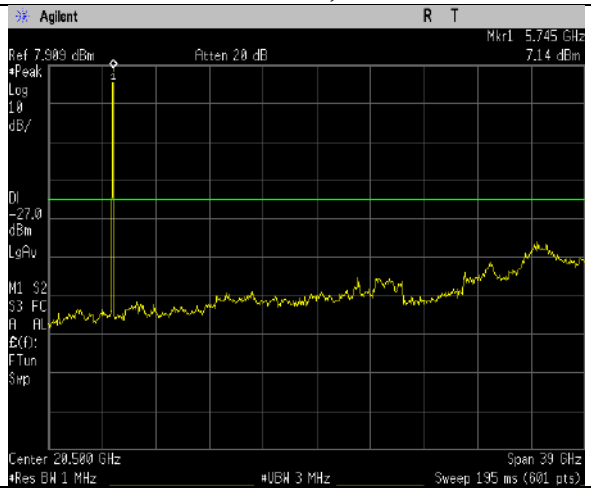
802.11a -27dB Down Conducted Emissions Plots, UNII-2A	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

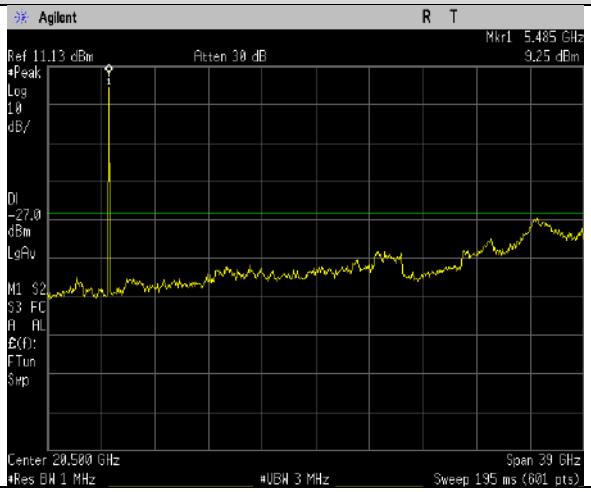
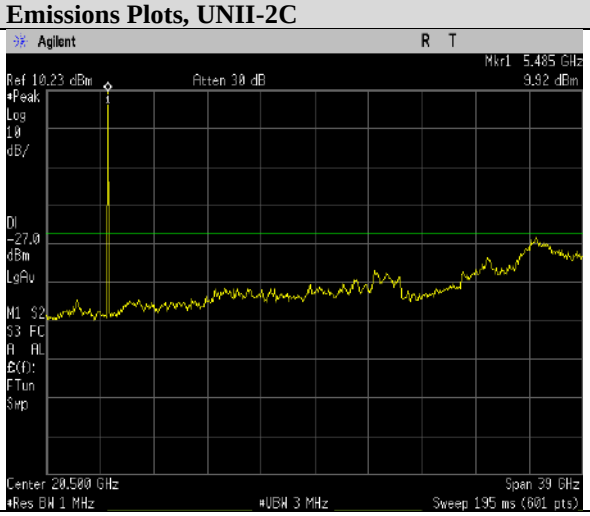
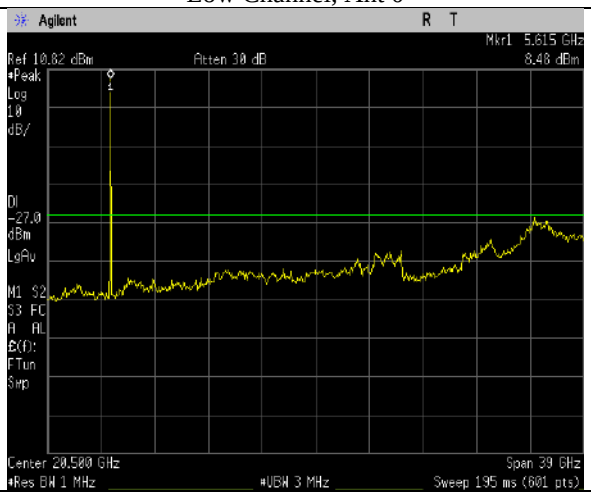
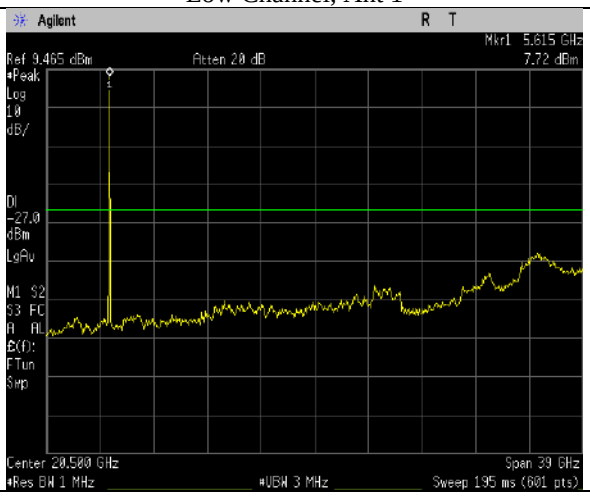
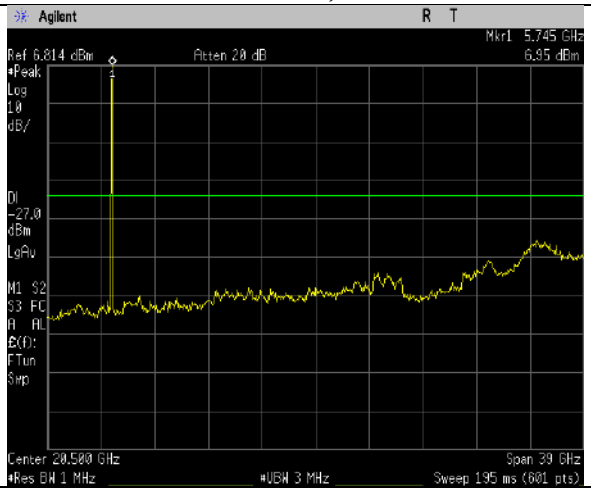
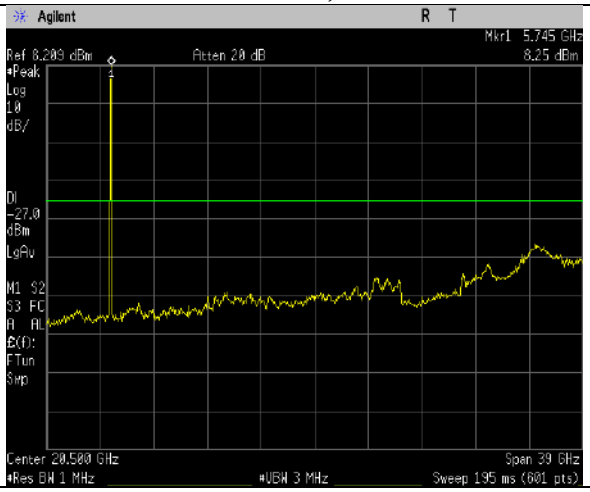
802.11n -27dB Down Conducted Emissions Plots, UNII-2A	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

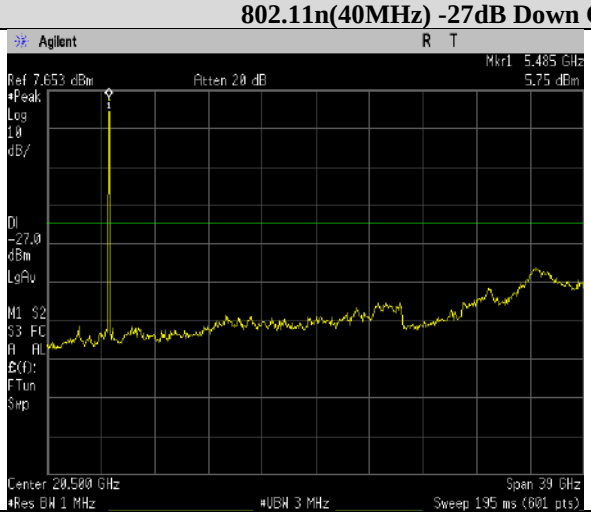
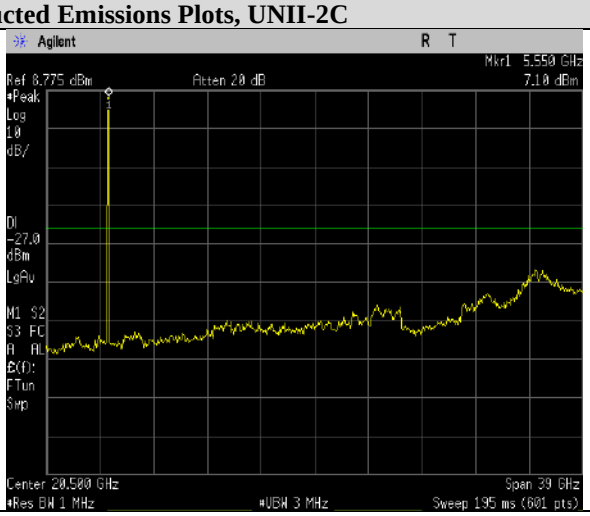
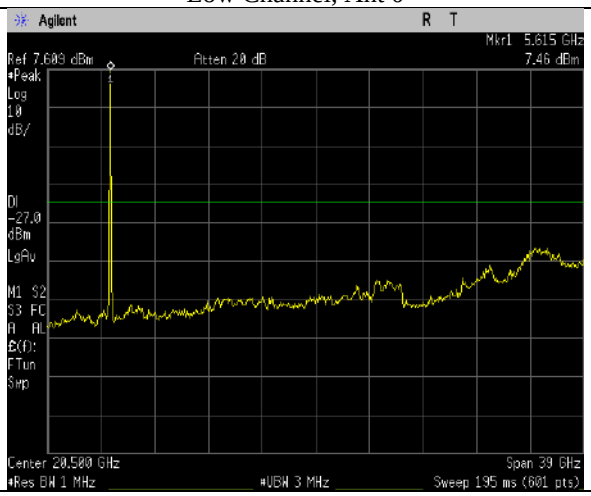
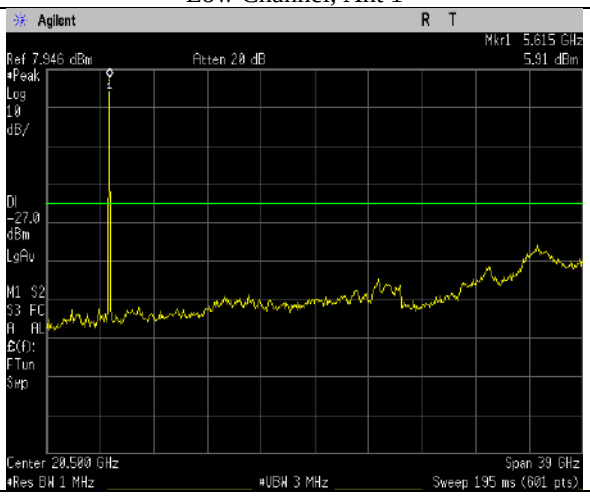
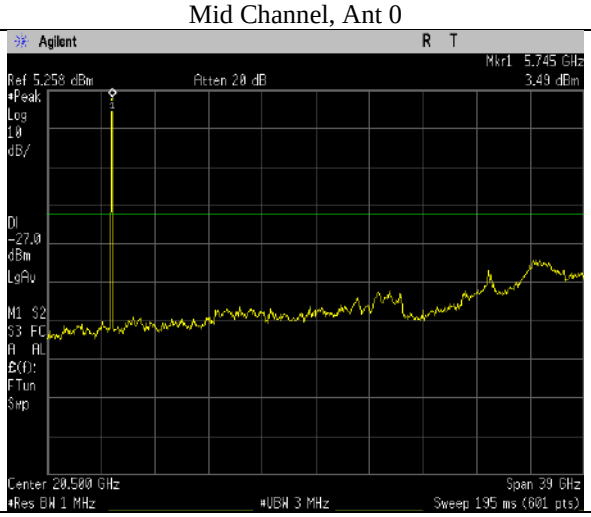
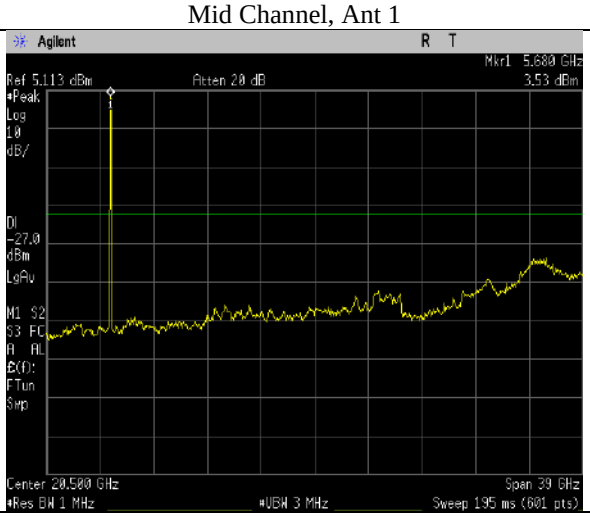
802.11n(40MHz) -27dB Down Conducted Emissions Plots, UNII-2A	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

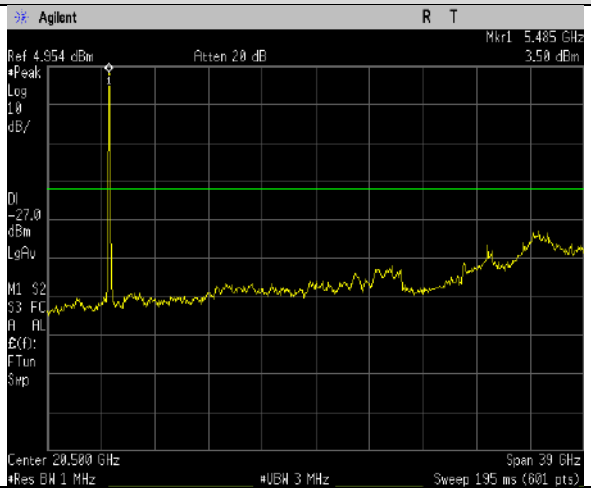
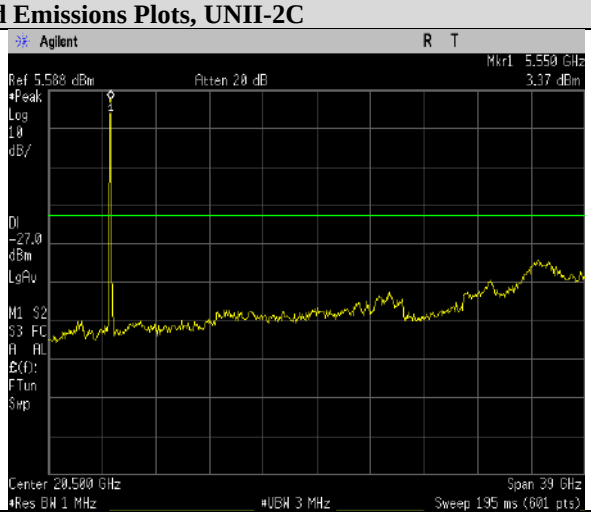
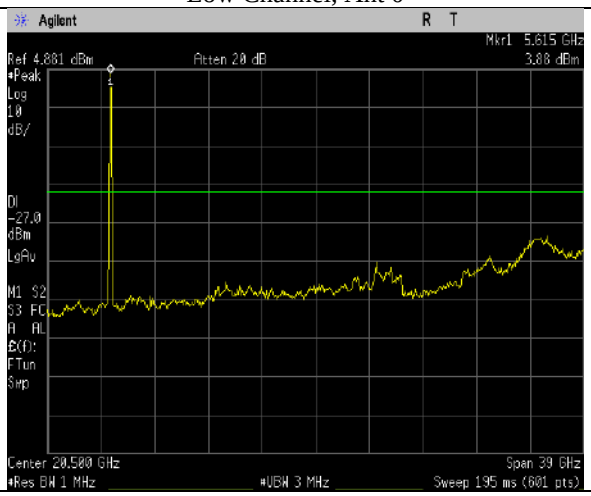
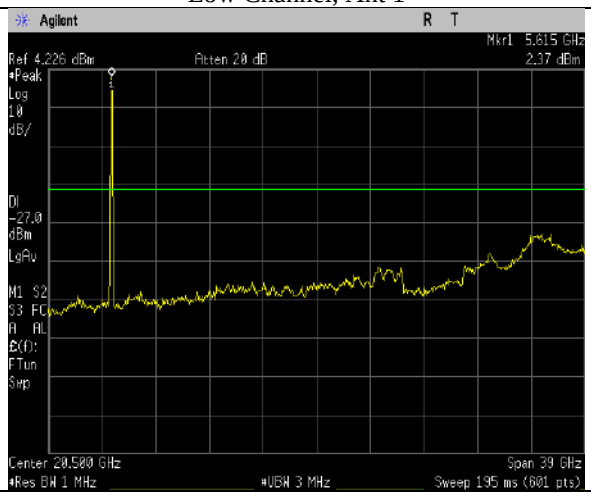
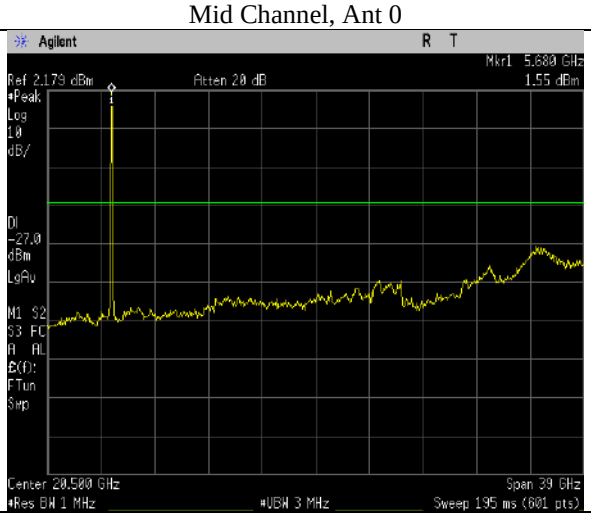
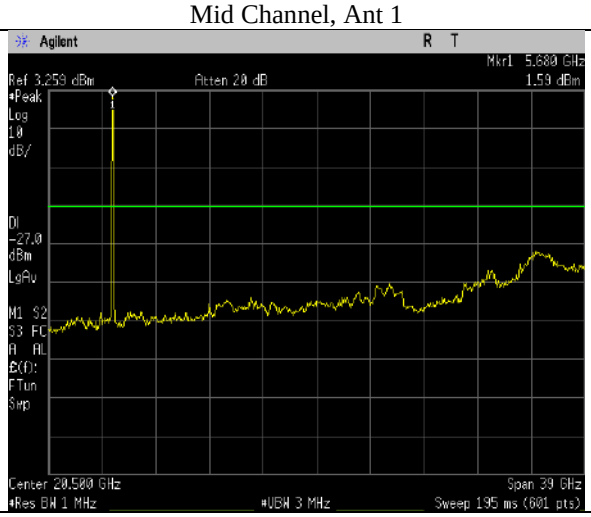
802.11ac -27dB Down Conducted Emissions Plots, UNII-2A	
	
Mid Channel, Ant 0	Mid Channel, Ant 1

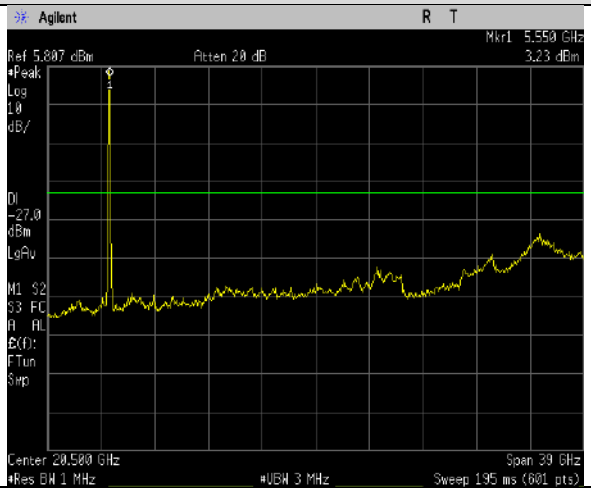
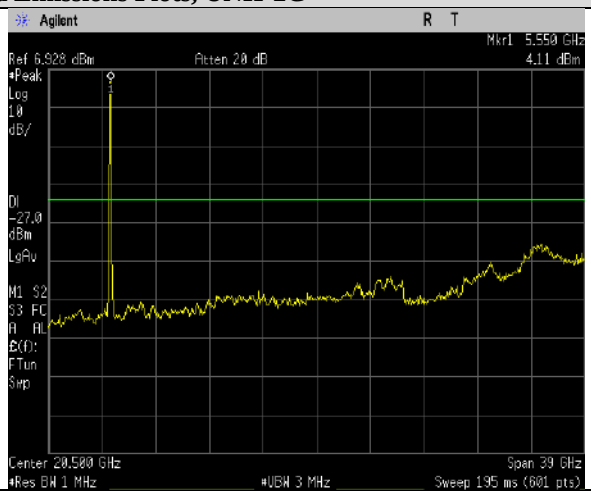
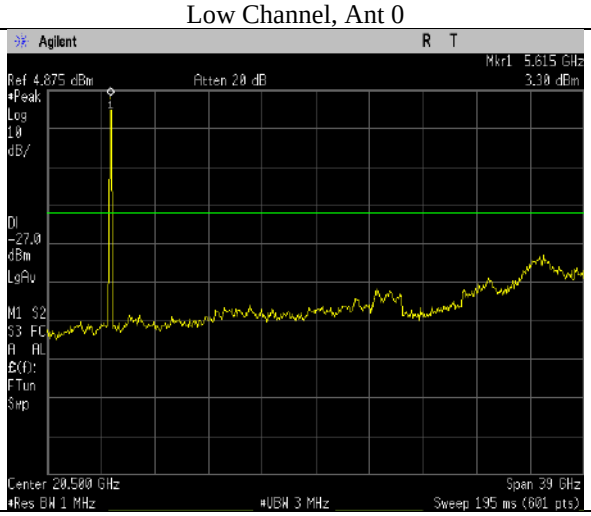
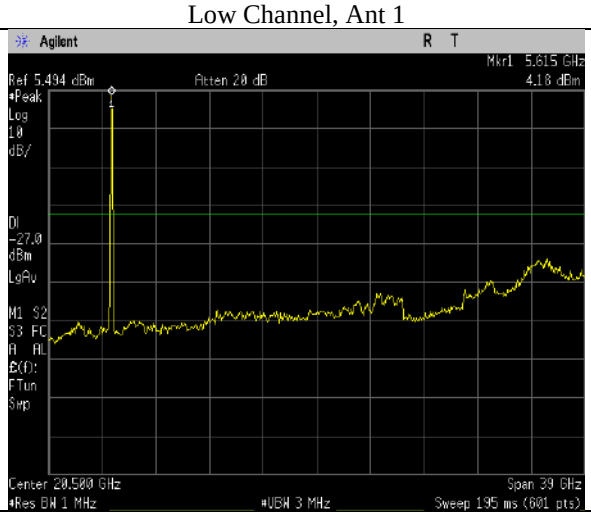
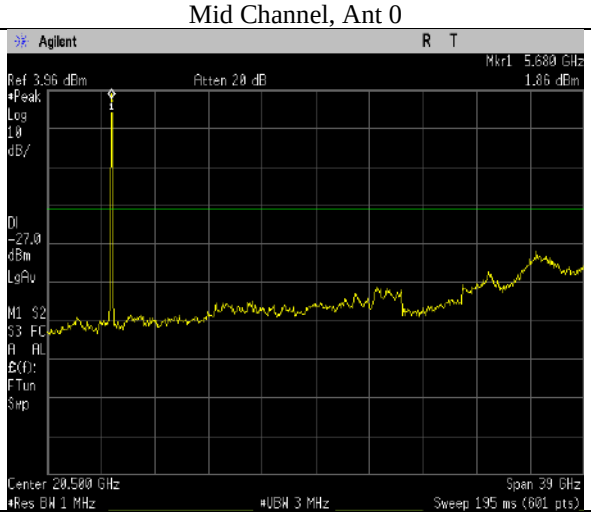
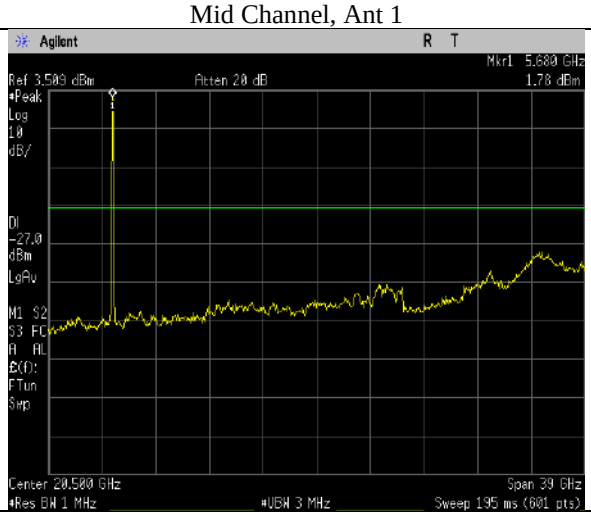
802.11ax -27dB Down Conducted Emissions Plots, UNII-2A	
	
Mid Channel, Ant 0	Mid Channel, Ant 1

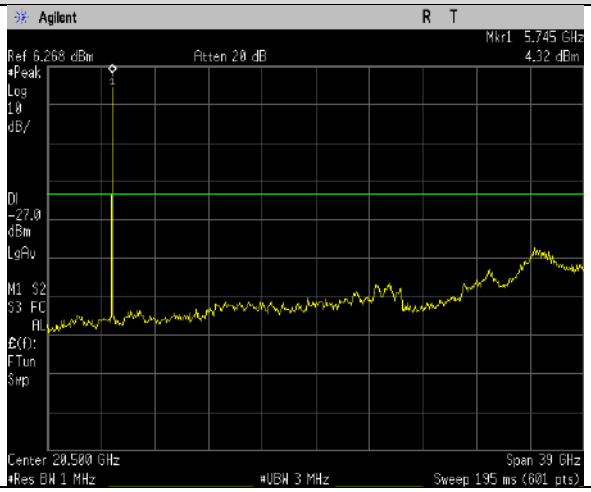
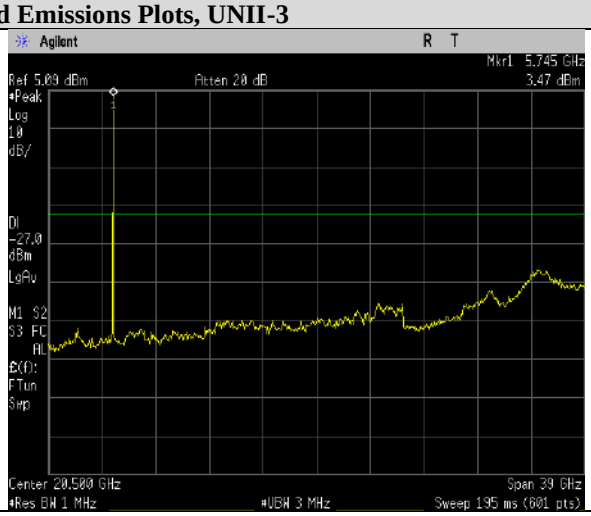
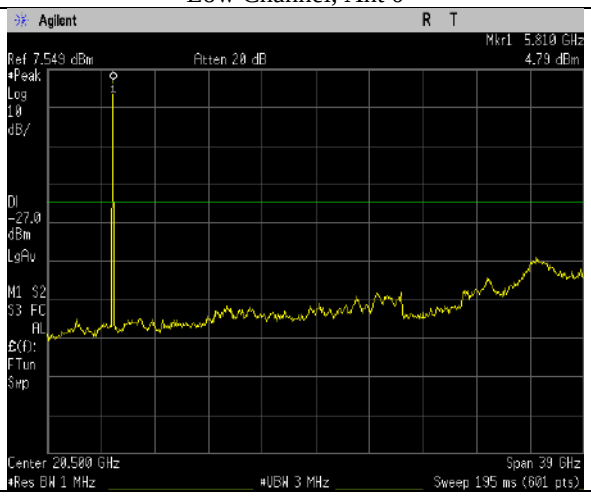
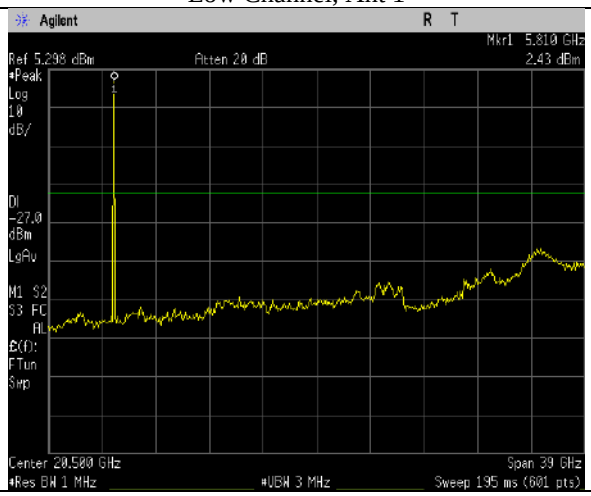
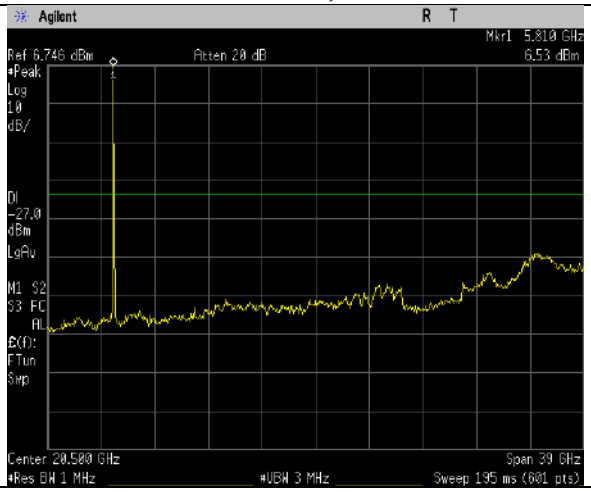
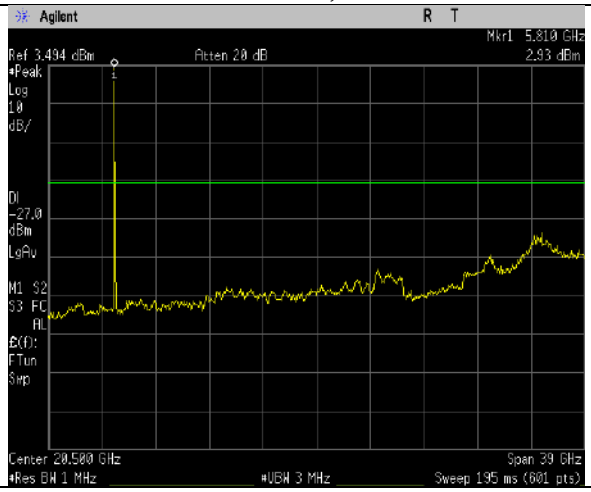
802.11a -27dB Down Conducted Emissions Plots, UNII-2C	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

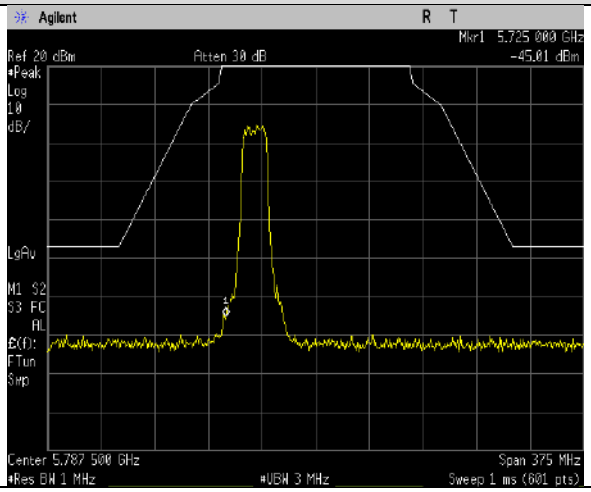
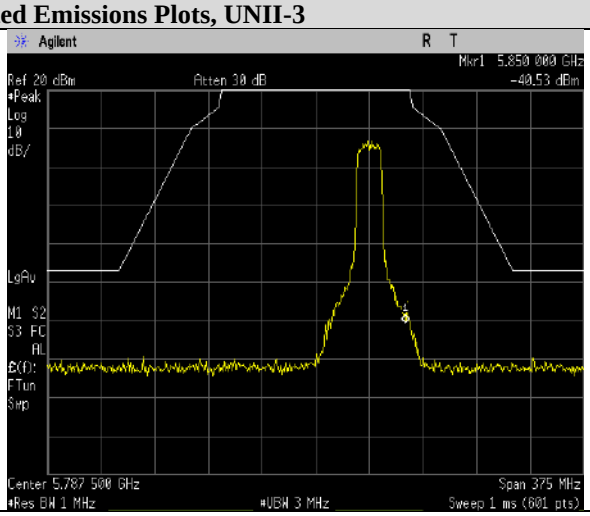
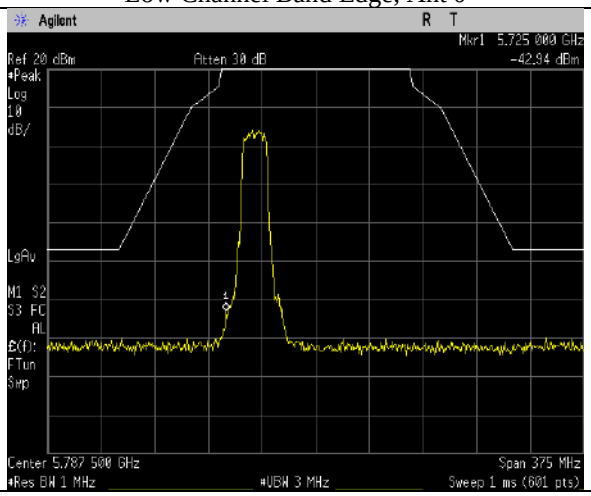
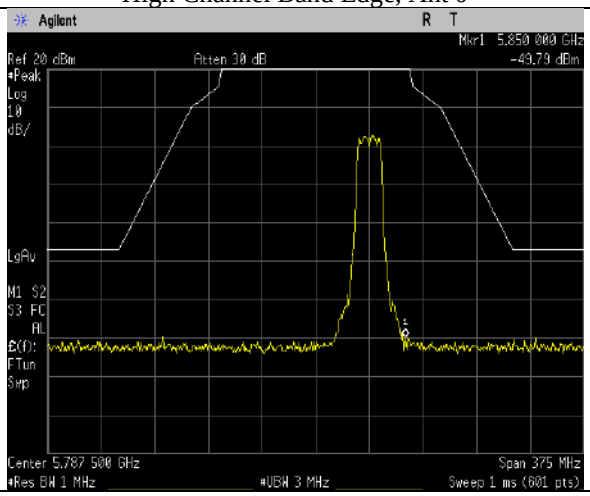
802.11n -27dB Down Conducted Emissions Plots, UNII-2C	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

802.11n(40MHz) -27dB Down Conducted Emissions Plots, UNII-2C	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

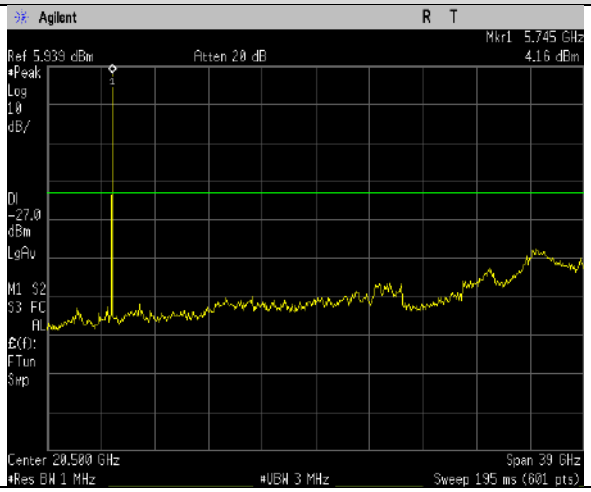
802.11ac -27dB Down Conducted Emissions Plots, UNII-2C	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

802.11ax -27dB Down Conducted Emissions Plots, UNII-2C	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

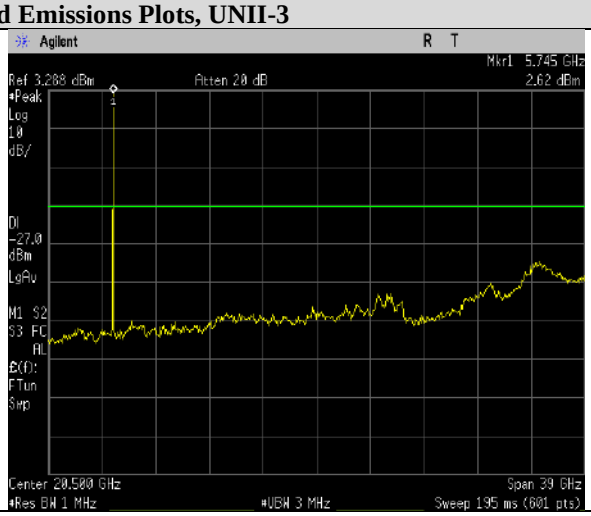
802.11a -27dB Down Conducted Emissions Plots, UNII-3	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
Mid Channel, Ant 0	Mid Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

802.11a -27dB Down Conducted Emissions Plots, UNII-3	
	
Low Channel Band Edge, Ant 0	High Channel Band Edge, Ant 0
	
Low Channel Band Edge, Ant 1	High Channel Band Edge, Ant 1

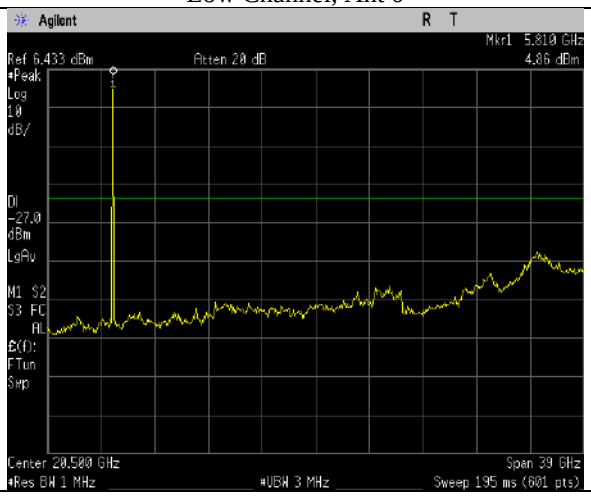
802.11n -27dB Down Conducted Emissions Plots, UNII-3



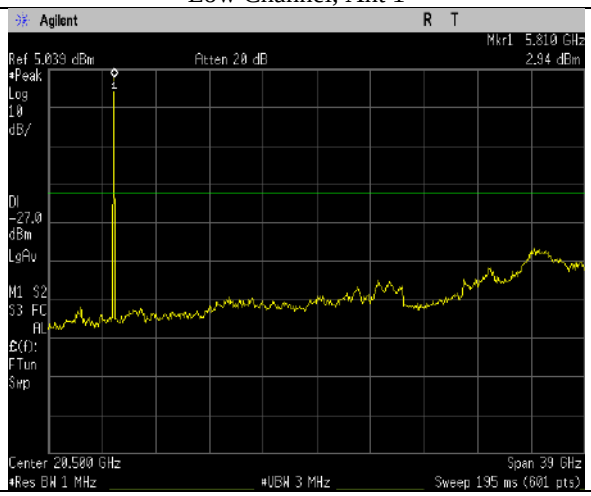
Low Channel, Ant 0



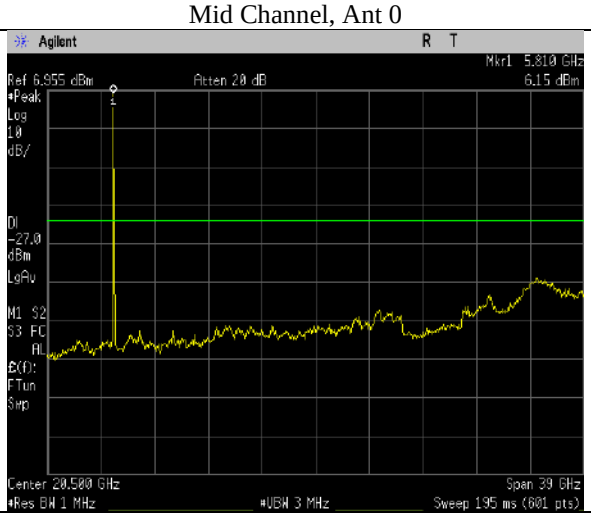
Low Channel, Ant 1



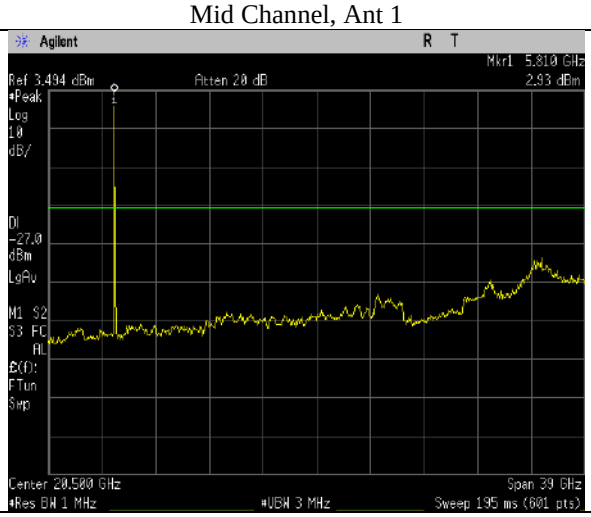
Mid Channel, Ant 0



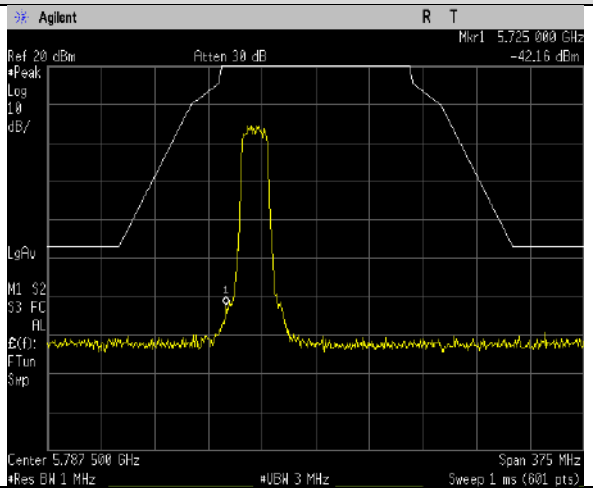
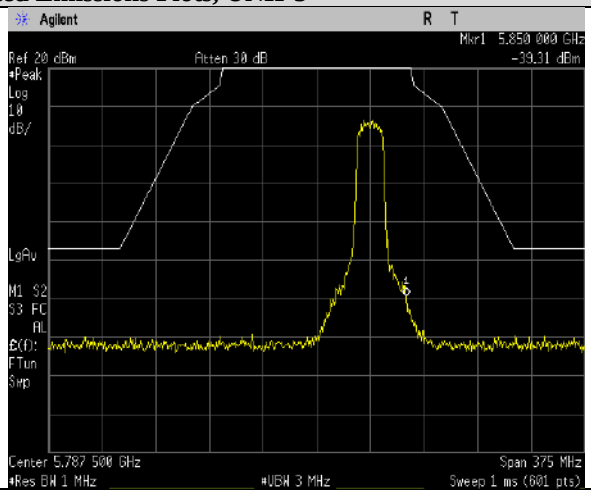
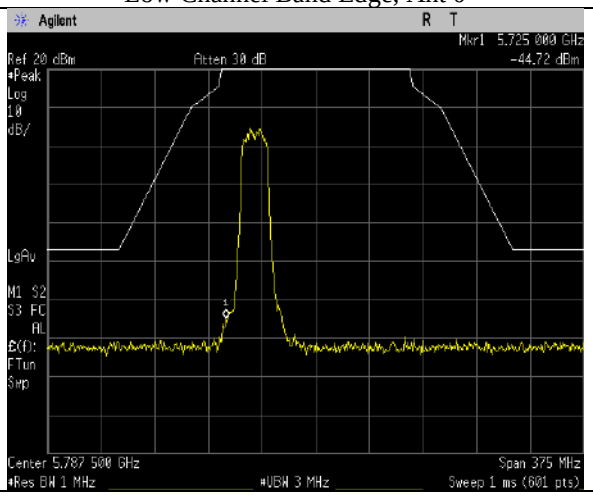
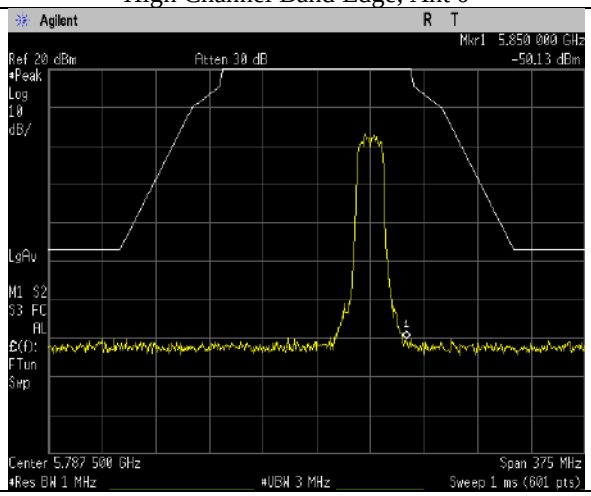
Mid Channel, Ant 1

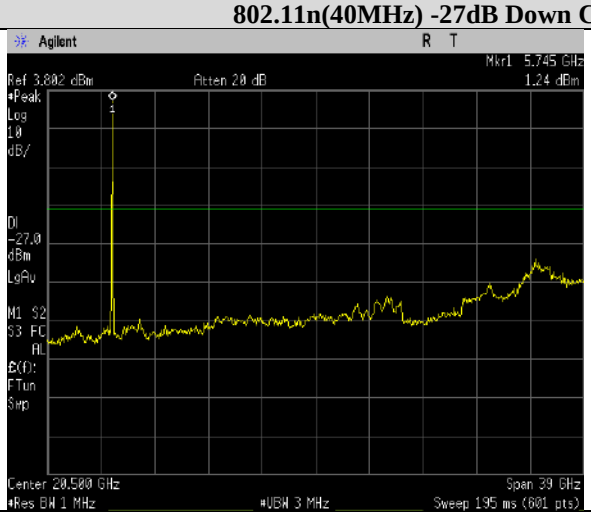
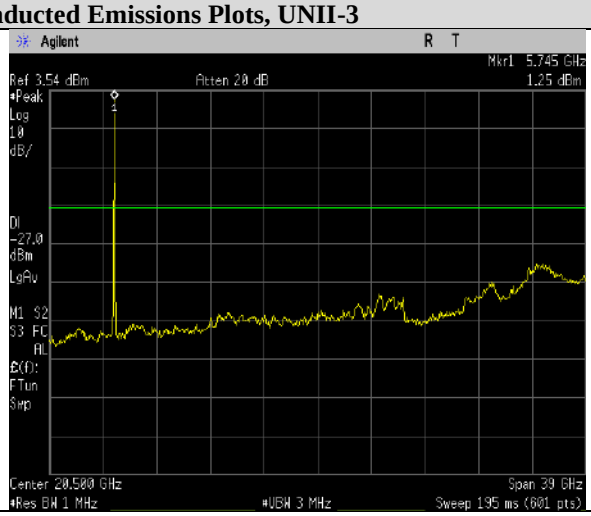
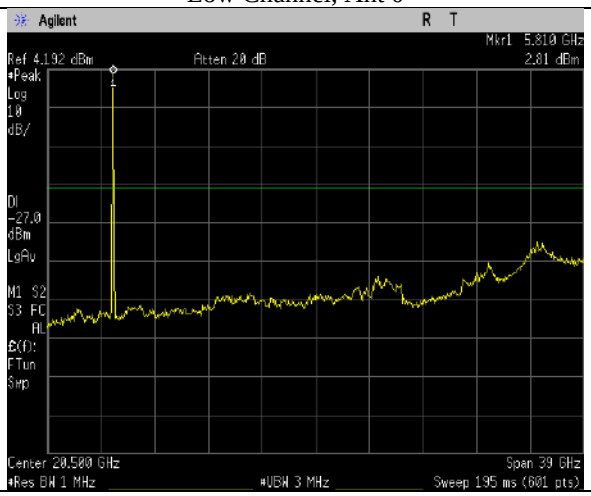
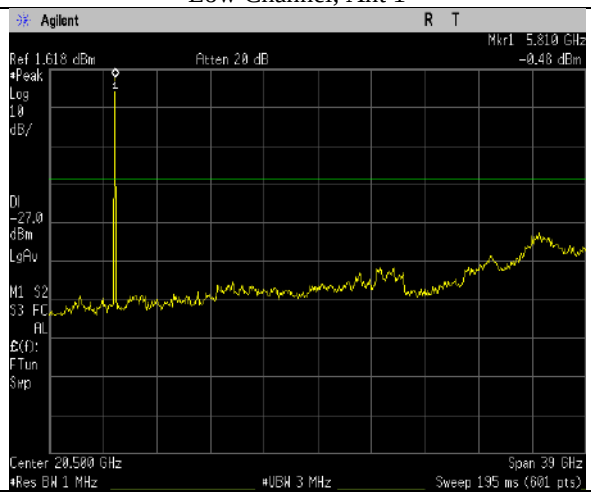


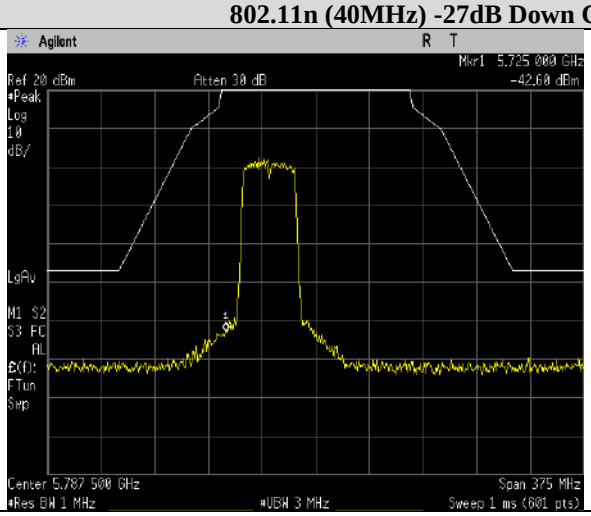
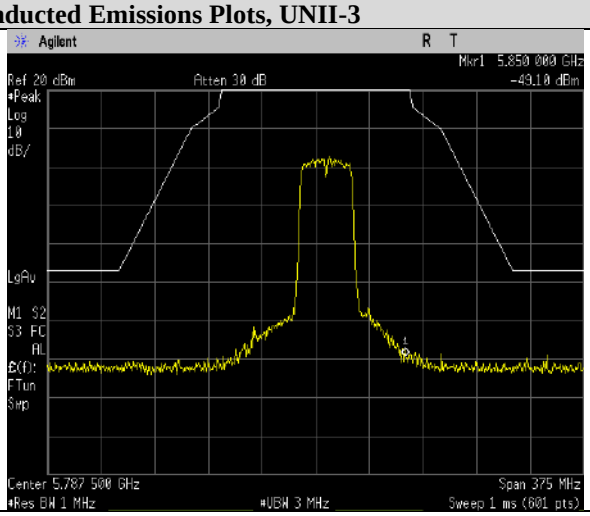
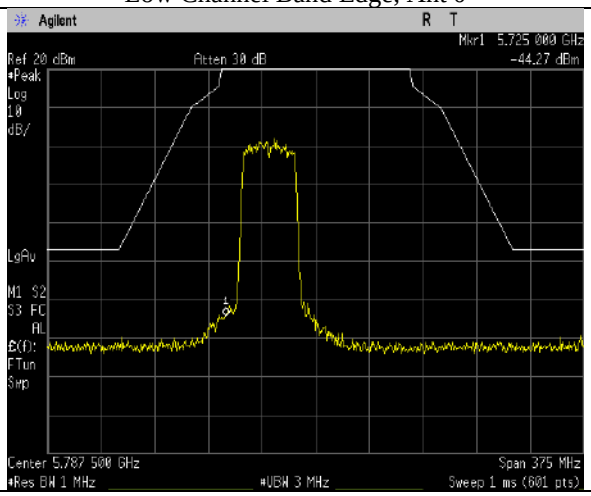
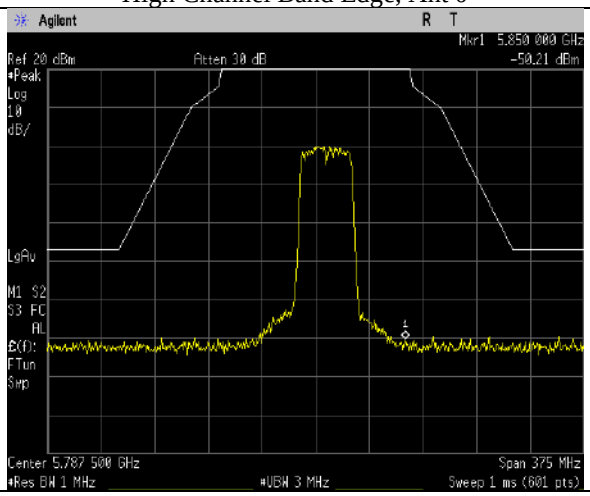
High Channel, Ant 0

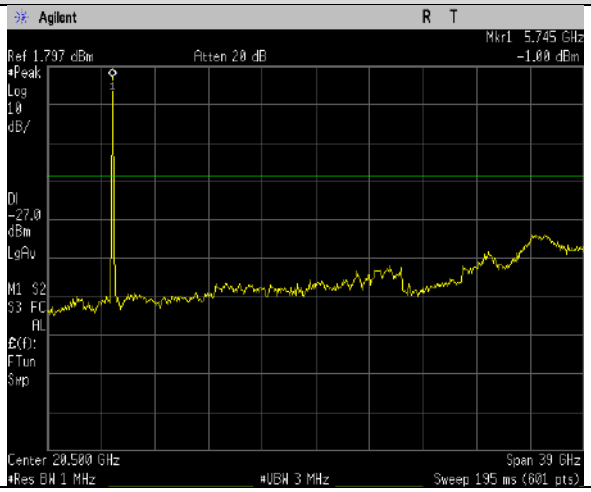
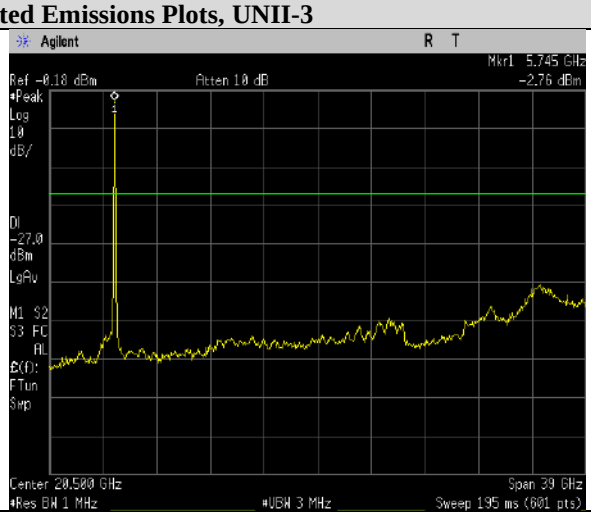


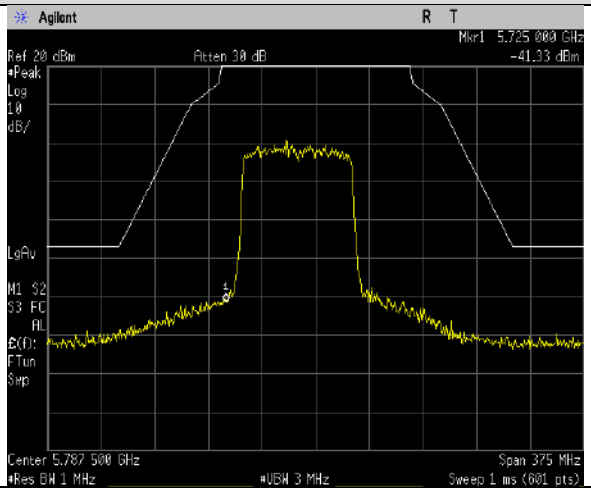
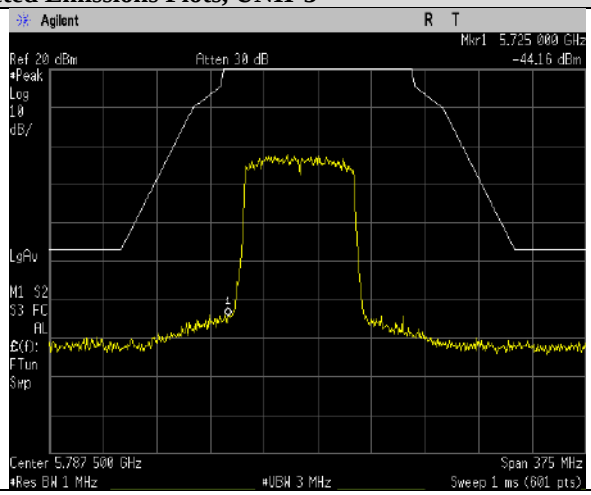
High Channel, Ant 1

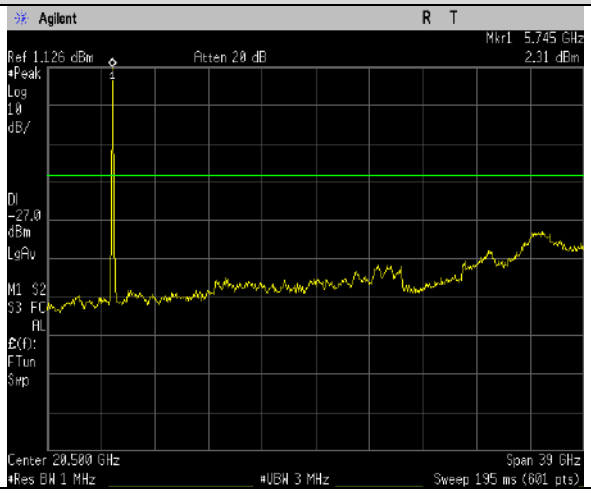
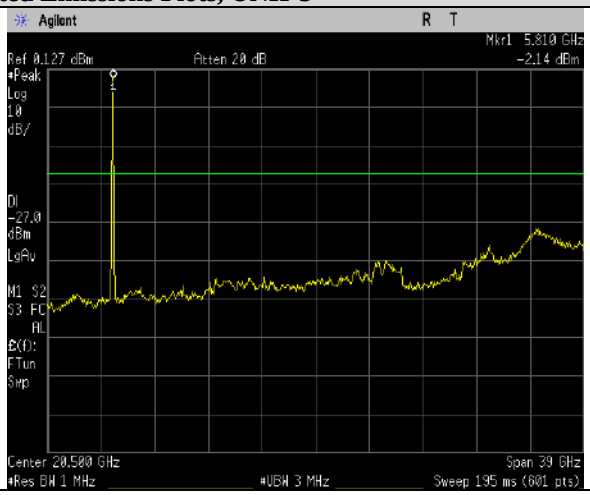
802.11n -27dB Down Conducted Emissions Plots, UNII-3	
	
Low Channel Band Edge, Ant 0	High Channel Band Edge, Ant 0
	
Low Channel Band Edge, Ant 1	High Channel Band Edge, Ant 1

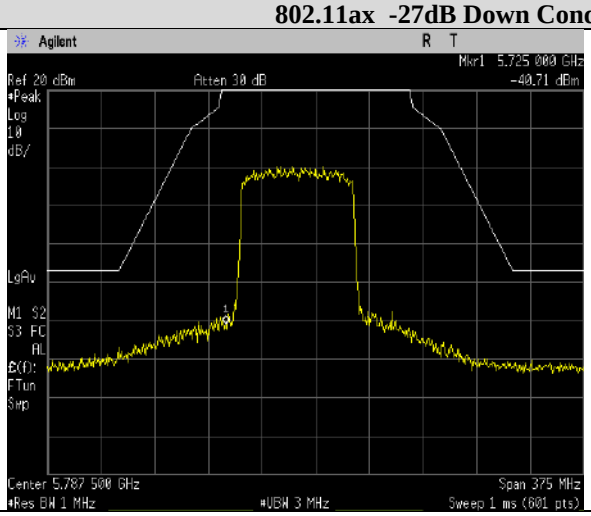
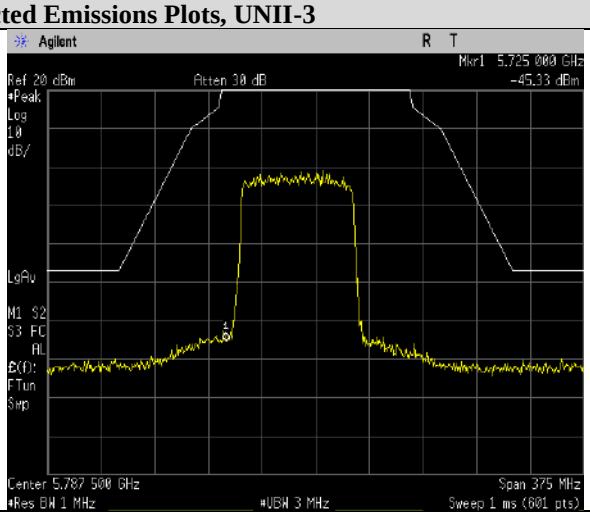
802.11n(40MHz) -27dB Down Conducted Emissions Plots, UNII-3	
	
Low Channel, Ant 0	Low Channel, Ant 1
	
High Channel, Ant 0	High Channel, Ant 1

802.11n (40MHz) -27dB Down Conducted Emissions Plots, UNII-3	
	
Low Channel Band Edge, Ant 0	High Channel Band Edge, Ant 0
	
Low Channel Band Edge, Ant 1	High Channel Band Edge, Ant 1

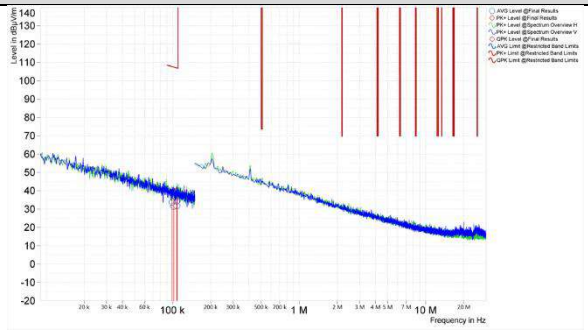
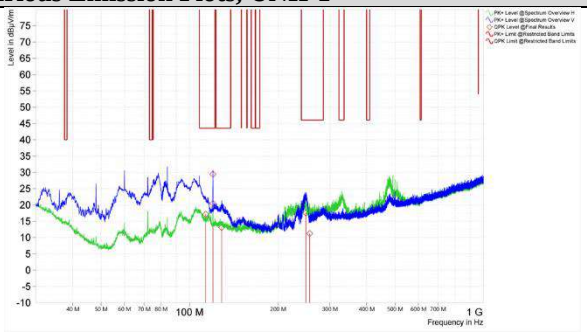
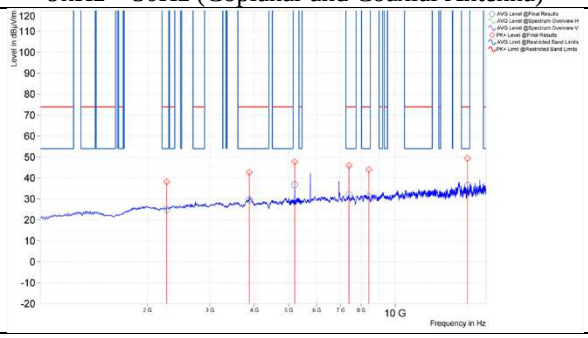
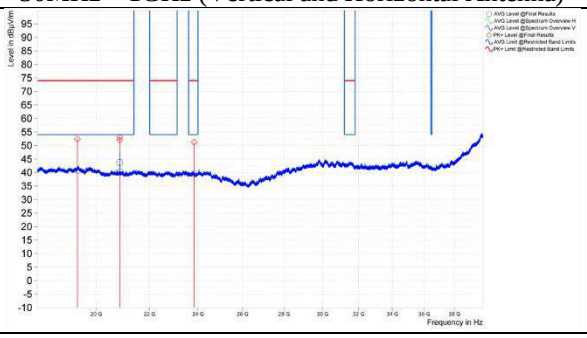
802.11ac -27dB Down Conducted Emissions Plots, UNII-3	
	
Mid Channel, Ant 0	Mid Channel, Ant 1

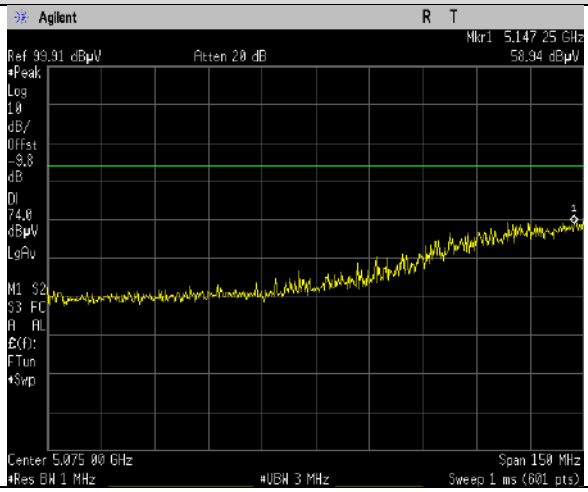
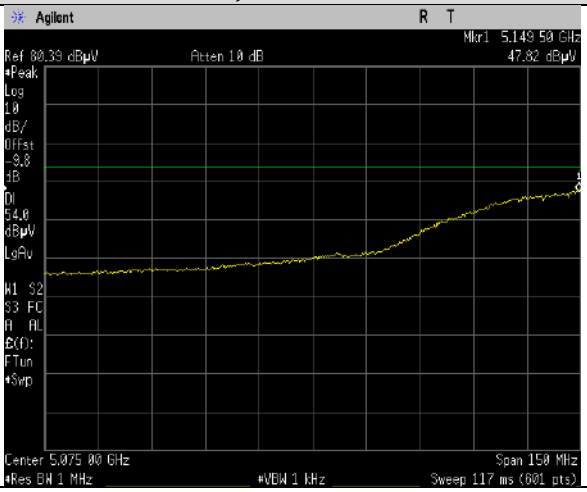
802.11ac -27dB Down Conducted Emissions Plots, UNII-3	
	
Mid Channel Band Edge, Ant 0	Mid Channel Band Edge, Ant 1

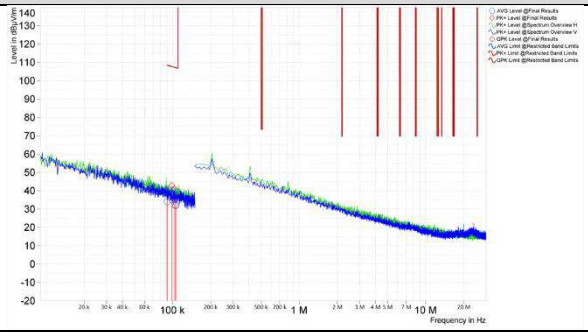
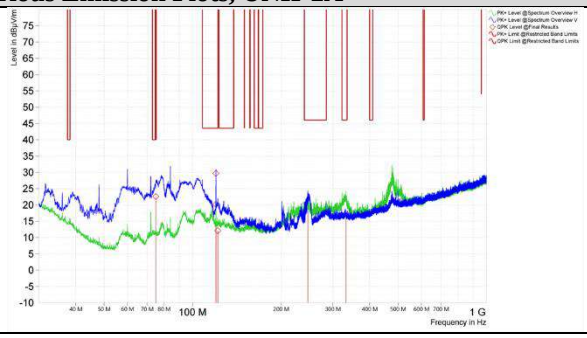
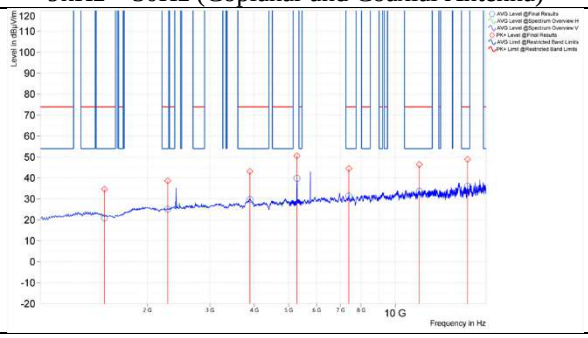
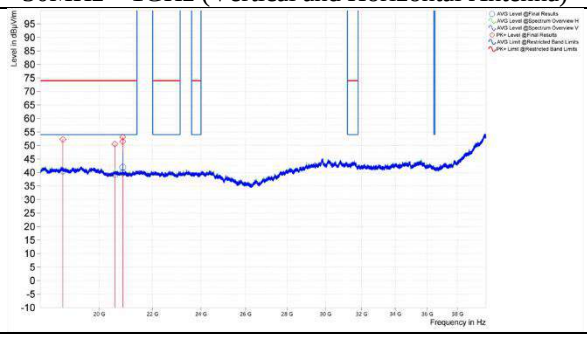
802.11ax -27dB Down Conducted Emissions Plots, UNII-3	
	
Mid Channel, Ant 0	Mid Channel, Ant 1

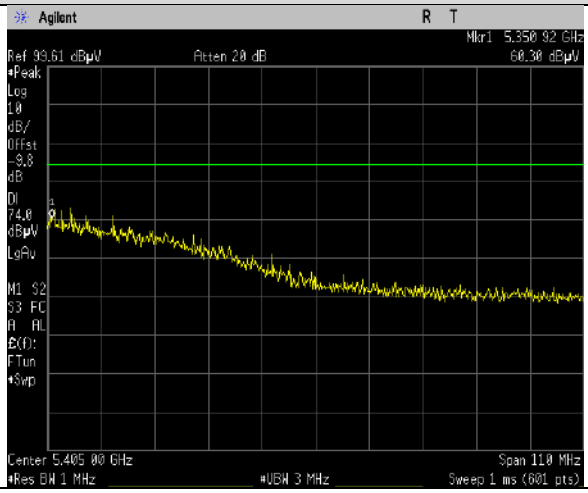
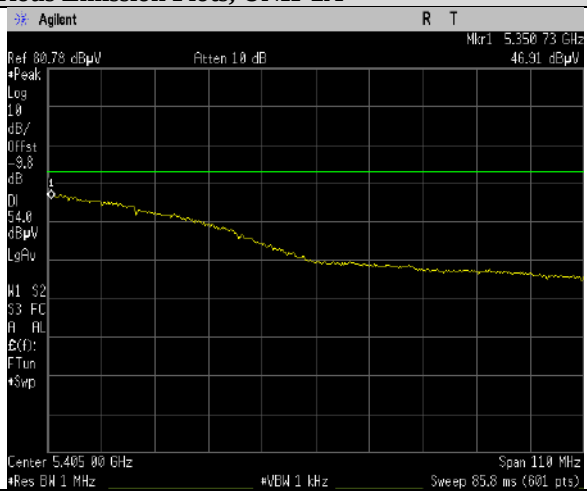
802.11ax -27dB Down Conducted Emissions Plots, UNII-3	
	
Mid Channel Band Edge, Ant 0	Mid Channel Band Edge, Ant 1

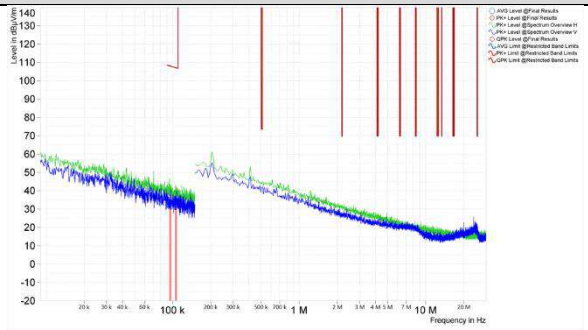
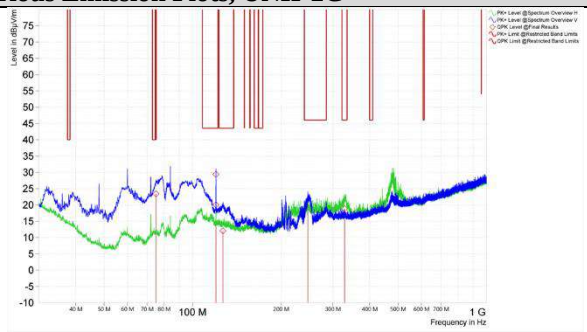
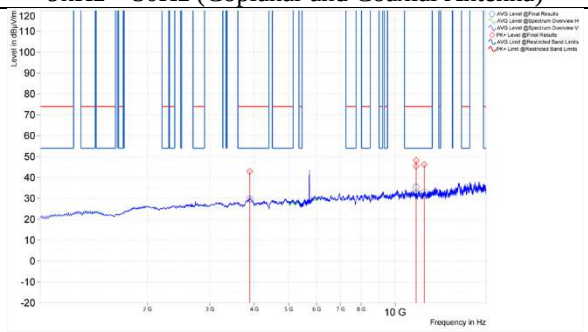
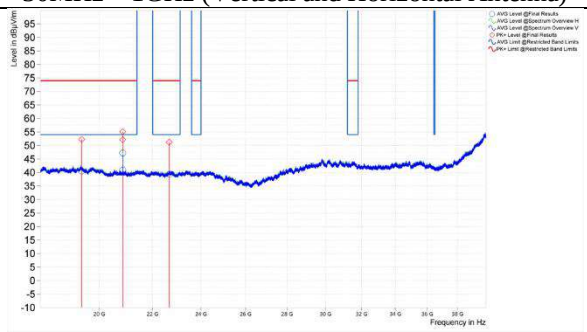
V. Restricted Band Emissions Plots

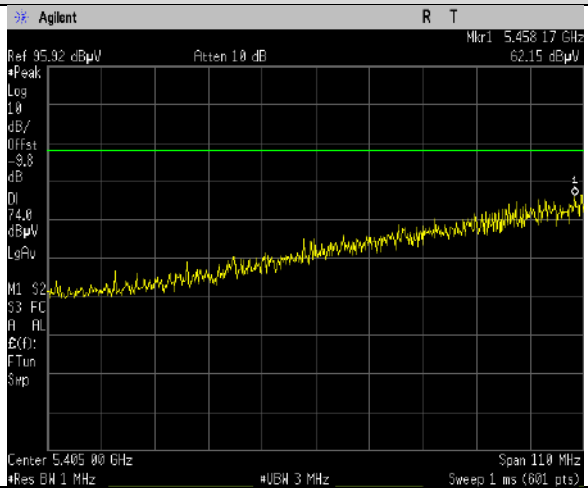
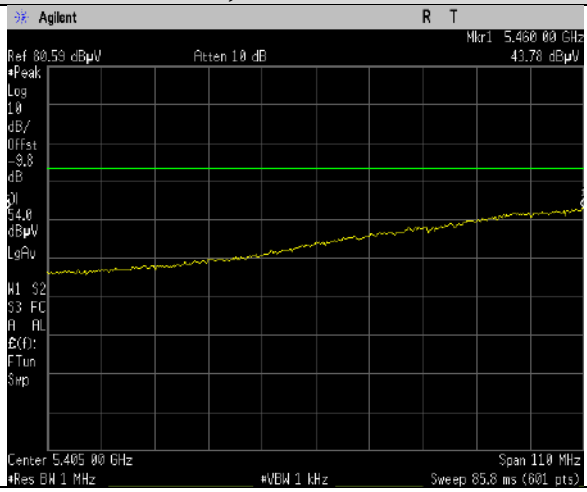
Worst Case Restricted Band Spurious Emission Plots, UNII-1	
	
9kHz – 30Hz (Coplanar and Coaxial Antenna)	30MHz – 1GHz (Vertical and Horizontal Antenna)
	
1GHz – 18GHz (Vertical and Horizontal Antenna)	18GHz – 40GHz (Vertical and Horizontal Antenna)

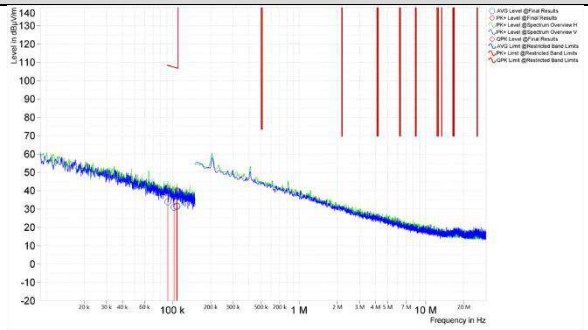
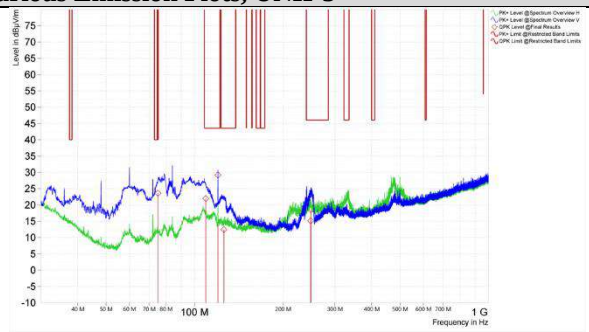
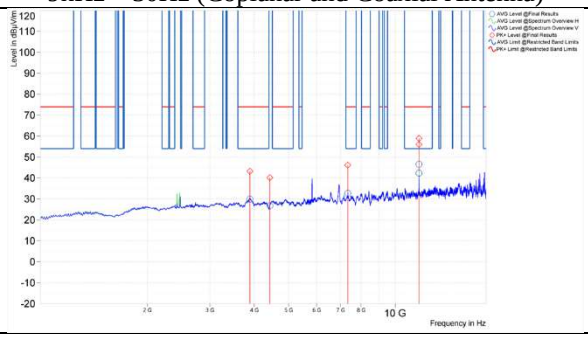
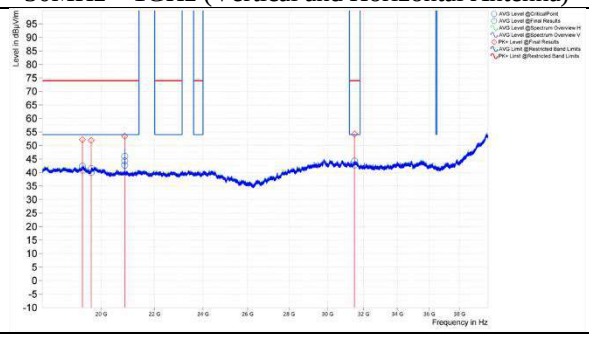
Worst Case Restricted Band Spurious Emission Plots, UNII-1	
	
Low Band Edge (Peak Detector)	Low Band Edge (Average Detector)

Worst Case Restricted Band Spurious Emission Plots, UNII-2A	
	
9kHz – 30Hz (Coplanar and Coaxial Antenna)	30MHz – 1GHz (Vertical and Horizontal Antenna)
	
1GHz – 18GHz (Vertical and Horizontal Antenna)	18GHz – 40GHz (Vertical and Horizontal Antenna)

Worst Case Restricted Band Spurious Emission Plots, UNII-2A	
	
Upper Band Edge (Peak Detector)	Upper Band Edge (Average Detector)

Worst Case Restricted Band Spurious Emission Plots, UNII-2C	
	
9kHz – 30Hz (Coplanar and Coaxial Antenna)	30MHz – 1GHz (Vertical and Horizontal Antenna)
	
1GHz – 18GHz (Vertical and Horizontal Antenna)	18GHz – 40GHz (Vertical and Horizontal Antenna)

Worst Case Restricted Band Spurious Emission Plots, UNII-2C	
	
Lower Band Edge (Peak Detection)	Lower Band Edge (Average Detector)

Worst Case Restricted Band Spurious Emission Plots, UNII-3	
	
9kHz – 30Hz (Coplanar and Coaxial Antenna)	30MHz – 1GHz (Vertical and Horizontal Antenna)
	
1GHz – 18GHz (Vertical and Horizontal Antenna)	18GHz – 40GHz (Vertical and Horizontal Antenna)

End of Report