

TEST REPORT

Reference No. : WTS18S09122875-3W
FCC ID..... : 2AQ7Q-DB0355
Applicant..... : DTEN Inc.
Address : 97 E. Brokaw Road, Suite 300, San Jose, California 95112, United States
Manufacturer : DTEN Inc.
Address : 97 E. Brokaw Road, Suite 300, San Jose, California 95112, United States
Factory : JIANGSU ECHOM SCIENCE&TECHNOLOGY CO.,LTD.
Address : No.168, Qianjin East Road, Kunshan City, Suzhou City, Jiangsu Province, China.
Product..... : DTEN Board D7
Model(s) : DB0355
Standards..... : FCC CFR47 Part 15 C Section 15.407: 2018
Date of Receipt sample..... : 2018-09-04
Date of Test..... : 2018-09-05 to 2018-11-19
Date of Issue : 2018-11-20
Test Result..... : Pass

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company.
The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

Prepared By:

Waltek Services (Shenzhen) Co., Ltd.

Address: 1/F., Fukangtai Building, West Baima Road, Songgang Street, Baoan District, Shenzhen, Guangdong, China

Tel :+86-755-83551033

Fax:+86-755-83552400

Compiled by:

Frank Yin

Frank Yin / Test Engineer

Approved by:



Philo Zhong

Philo Zhong / Manager

2 Laboratories Introduction

Waltek Services (Shenzhen) Co., Ltd is a professional third-party testing and certification laboratory with multi-year product testing and certification experience, established strictly in accordance with ISO/IEC 17025 requirements, and accredited by ILAC (International Laboratory Accreditation Cooperation) member. A2LA (American Association for Laboratory Accreditation, the certification number is 4243.01) of USA, CNAS (China National Accreditation Service for Conformity Assessment, the registration number is L3110) of China. Meanwhile, Waltek has got recognition as registration and accreditation laboratory from EMSD (Electrical and Mechanical Services Department), and American Energy star, FCC(The Federal Communications Commission), CEC(California energy efficiency), ISED Canada (Innovation, Science and Economic Development Canada). It's the strategic partner and data recognition laboratory of international authoritative organizations, such as Intertek(ETL-SEMKO), TÜV Rheinland, TÜV SÜD, etc.



Waltek Services (Shenzhen) Co., Ltd is one of the largest and the most comprehensive third party testing laboratory in China. Our test capability covered four large fields: safety test. ElectroMagnetic Compatibility(EMC), and energy performance, wireless radio. As a professional, comprehensive, justice international test organization, we still keep the scientific and rigorous work attitude to help each client satisfy the international standards and assist their product enter into globe market smoothly.

2.1 Test Facility

A. Accreditations for Conformity Assessment (International)

Country/Region	Scope Covered By	Scope	Note
USA	ISO/IEC 17025	FCC ID \ SDoC(VOC/DOC)	1
Canada		IC ID \ VOC	2
Japan		MIC-T \ MIC-R	-
Europe		EMCD \ RED	-
Taiwan		NCC	-
Hong Kong		OFCA	-
Australia		RCM	-
India		WPC	-
Thailand		NTC	-
Singapore		IDA	-
Note:			
1. FCC Designation No.: CN1201. Test Firm Registration No.: 523476.			
2. ISED Canada Registration No.: 7760A			

B.TCBs and Notify Bodies Recognized Testing Laboratory.

Recognized Testing Laboratory of ...	Notify body number
TUV Rheinland	Optional.
Intertek	
TUV SUD	
SGS	
Phoenix Testlab GmbH	0700
Element Materials Technology Warwick Ltd.	0891
Timco Engineering, Inc.	1177
Eurofins Product Service GmbH	0681

3 Revision History

Test report #	Date of Receipt sample	Date of Test	Date of Issue	Purpose	Comment	Approved
WTS18S09122875-3W	2018-09-04	2018-09-05 to 2018-11-19	2018-11-20	Original	-	Valid

4 Test Summary

Test Items	Test Requirement	Result
Conducted Emissions	15.207(a)	PASS
Radiated Emissions	15.407(a) 15.205(a) 15.209(a)	PASS
Duty Cycle	KDB 789033	PASS
6dB Bandwidth	15.407(a)	PASS
26 dB Emission Bandwidth & 99% Occupied Bandwidth	15.407(a)	PASS
Maximum Conducted Output Power	15.407(a)	PASS
Power Spectral Density	15.407(a)	PASS
Restricted bands around fundamental frequency	15.407(a)	PASS
Antenna Requirement	15.203	PASS
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	1.1307(b)(1)	PASS

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6 General Information

6.1 General Description of E.U.T

Product:	DTEN Board D7
Model(s):	DB0355
Operation Frequency:	IEEE 802.11a/ n(HT20/40)/ac(VHT20/40/80): 5150MHz to 5250MHz IEEE 802.11a/ n(HT20/40)/ac(VHT20/40/80): 5725MHz to 5850MHz
Type of modulation:	IEEE for 802.11a: OFDM(BPSK/QPSK/16QAM/64QAM) IEEE for 802.11n : OFDM(BPSK/QPSK/16QAM/64QAM) IEEE for 802.11ac : OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)
Antenna installation:	Integrated Antenna
Antenna Gain:	Ant.1: 2dBi; Ant.2: 2dBi; Ant.3: 2dBi for module 1 Ant.4: 2dBi; Ant.5: 2dBi for module 2 Ant.1, Ant.2, Ant.4 and Ant.5 for 5G WiFi (The EUT contain two different module.)

6.2 Details of E.U.T

Ratings	Input: AC 100-240V~, 50/60Hz, 3A
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6.3 Channel List

U-NII-1 (5.15-5.25GHz)		U-NII-3 (5.725-5.85GHz)	
channel	Frequency(MHz)	channel	Frequency(MHz)
36	5180	149	5745
38	5190	151	5755
40	5200	153	5765
42	5210	155	5775
44	5220	157	5785
46	5230	159	5795
48	5240	161	5805
		165	5825

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

For 802.11a/n(VHT20)/ac(VHT20):

channel	Frequency(MHz)	channel	Frequency(MHz)
36	5180	149	5745
40	5200	157	5785
48	5240	165	5825

For 802.11 n(HT40)/ac(HT40):

channel	Frequency(MHz)	channel	Frequency(MHz)
38	5190	151	5755
46	5230	159	5795

For 802.11 ac(HT80):

channel	Frequency(MHz)	channel	Frequency(MHz)
42	5210	155	5775

6.4 Test Mode:

During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product. Transmitting duty cycle is no less 98%.

Test Items	Mode	Data Rate	Channel	TX/RX
Radiated Emissions	802.11a	6 Mbps	U-NII-1 36/40/48 U-NII-3 149/155/165	TX
	802.11n(HT20)	MCS0	U-NII-1 36/40/48 U-NII-3 149/155/165	TX
	802.11n(HT40)	MCS0	U-NII-1 38/46 U-NII-3 151/159	TX
	802.11ac(VHT20)	MCS0	U-NII-1 36/40/48 U-NII-3 149/155/165	TX
	802.11ac(VHT40)	MCS0	U-NII-1 38/46 U-NII-3 151/159	TX
	802.11ac(VHT80)	MCS0	U-NII-1 38/46 U-NII-3 151/159	TX
Duty Cycle	802.11a	6 Mbps	U-NII-1 36/40/48 U-NII-3 149/155/165	TX
	802.11n(HT20)	MCS0	U-NII-1 36/40/48 U-NII-3 149/155/165	TX
	802.11n(HT40)	MCS0	U-NII-1 38/46 U-NII-3 151/159	TX
	802.11ac(VHT20)	MCS0	U-NII-1 36/40/48 U-NII-3 149/155/165	TX
	802.11ac(VHT40)	MCS0	U-NII-1 38/46 U-NII-3 151/159	TX
	802.11ac(VHT80)	MCS0	U-NII-1 38/46 U-NII-3 151/159	TX
Band Edge	802.11a	6 Mbps	U-NII-1 36/40/48 U-NII-3 149/155/165	TX
	802.11n(HT20)	MCS0	U-NII-1 36/40/48 U-NII-3 149/155/165	TX
	802.11n(HT40)	MCS0	U-NII-1 38/46 U-NII-3 151/159	TX
	802.11ac(VHT20)	MCS0	U-NII-1 36/40/48 U-NII-3 149/155/165	TX
	802.11ac(VHT40)	MCS0	U-NII-1 38/46 U-NII-3 151/159	TX
	802.11ac(VHT80)	MCS0	U-NII-1 38/46 U-NII-3 151/159	TX
6dB Bandwidth	802.11a	6 Mbps	U-NII-1 36/40/48 U-NII-3 149/155/165	TX
	802.11n(HT20)	MCS0	U-NII-1 36/40/48 U-NII-3 149/155/165	TX

	802.11n(HT40)	MCS0	U-NII-1 38/46 U-NII-3 151/159	TX
	802.11ac(VHT20)	MCS0	U-NII-1 36/40/48 U-NII-3 149/155/165	TX
	802.11ac(VHT40)	MCS0	U-NII-1 38/46 U-NII-3 151/159	TX
	802.11ac(VHT80)	MCS0	U-NII-1 38/46 U-NII-3 151/159	TX
26dB Bandwidth and 99% Occupied Bandwidth	802.11a	6 Mbps	U-NII-1 36/40/48 U-NII-3 149/155/165	TX
	802.11n(HT20)	MCS0	U-NII-1 36/40/48 U-NII-3 149/155/165	TX
	802.11n(HT40)	MCS0	U-NII-1 38/46 U-NII-3 151/159	TX
	802.11ac(VHT20)	MCS0	U-NII-1 36/40/48 U-NII-3 149/155/165	TX
	802.11ac(VHT40)	MCS0	U-NII-1 38/46 U-NII-3 151/159	TX
	802.11ac(VHT80)	MCS0	U-NII-1 38/46 U-NII-3 151/159	TX
Conducted Output Power	802.11a	6 Mbps	U-NII-1 36/40/48 U-NII-3 149/155/165	TX
	802.11n(HT20)	MCS0	U-NII-1 36/40/48 U-NII-3 149/155/165	TX
	802.11n(HT40)	MCS0	U-NII-1 38/46 U-NII-3 151/159	TX
	802.11ac(VHT20)	MCS0	U-NII-1 36/40/48 U-NII-3 149/155/165	TX
	802.11ac(VHT40)	MCS0	U-NII-1 38/46 U-NII-3 151/159	TX
	802.11ac(VHT80)	MCS0	U-NII-1 38/46 U-NII-3 151/159	TX
Power Spectral Density	802.11a	6 Mbps	U-NII-1 36/40/48 U-NII-3 149/155/165	TX
	802.11n(HT20)	MCS0	U-NII-1 36/40/48 U-NII-3 149/155/165	TX
	802.11n(HT40)	MCS0	U-NII-1 38/46 U-NII-3 151/159	TX
	802.11ac(VHT20)	MCS0	U-NII-1 36/40/48 U-NII-3 149/155/165	TX
	802.11ac(VHT40)	MCS0	U-NII-1 38/46 U-NII-3 151/159	TX
	802.11ac(VHT80)	MCS0	U-NII-1 38/46 U-NII-3 151/159	TX
Frequency Stability	Un-modulation	/	U-NII-1 36/40/48 U-NII-3 149/155/165	TX

7 Equipment Used during Test

7.1 Equipments List

Conducted Emissions Test Site						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1.	EMI Test Receiver	R&S	ESCI	100947	2017-09-15	2018-09-14
2.	LISN	R&S	ENV216	101215	2017-09-15	2018-09-14
3.	Cable	Top	TYPE16(3.5M)	-	2017-09-15	2018-09-14
3m Semi-anechoic Chamber for Radiation Emissions Test site						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1	Spectrum Analyzer	R&S	FSP30	100091	2018-04-20	2019-04-19
2	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120 D	667	2018-05-18	2019-05-17
3	Broadband Preamplifier	COMPLIANCE DIRECTION	PAP-1G18	2004	2018-04-07	2019-04-06
4	Coaxial Cable (above 1GHz)	Top	1GHz-18GHz	EW02014-7	2018-04-07	2019-04-06
5	Spectrum Analyzer	R&S	FSP40	100501	2018-04-20	2019-04-19
6	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9170	335	2018-04-20	2019-04-19
7	Microwave Broadband Preamplifier	SCHWARZBECK	BBV 9721	100472	2018-04-20	2019-04-19
8	Cable	Top	18GHz-40GHz	-	2018-04-20	2019-04-19
3m Semi-anechoic Chamber for Radiation Emissions Test site						
Item	Equipment	Manufacturer	Model No.	Serial No	Last Calibration Date	Calibration Due Date
1	Test Receiver	R&S	ESCI	101296	2018-04-20	2019-04-19
2	Ative Loop Antenna	Beijing Dazhi	ZN30900A	-	2018-04-17	2019-04-16
3	Trilog Broadband Antenna	SCHWARZBECK	VULB9160	9160-3325	2018-04-19	2019-04-18
4	Amplifier	ANRITSU	MH648A	M43381	2018-04-20	2019-04-19
5	Cable	HUBER+SUHNER	CBL2	525178	2018-04-20	2019-04-19
6	Coaxial Cable (below 1GHz)	Top	TYPE16(13M)	-	2018-04-20	2019-04-19
RF Conducted Testing						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1.	Spectrum Analyzer	Agilent	N9020A	MY49100060	2018-04-20	2019-04-19
2.	Spectrum Analyzer	R&S	FSP40	100501	2018-04-17	2019-04-16
3.	Coaxial Cable	Top	10Hz-30GHz	-	2018-04-20	2019-04-19
4	DC Block	Gwave	GDCB-3G-N-SMA	140307001	2018-04-20	2019-04-19

5.	Humidity Chamber	GF	GTH-225-40-1P	IAA061213	2018-04-20	2019-04-19
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7.2 Description of Support Units

Equipment	Manufacturer	Model No.	Series No.
/	/	/	/

7.3 Measurement Uncertainty

Parameter	Uncertainty
Radio Frequency	$\pm 1 \times 10^{-6}$
RF Power	± 1.0 dB
RF Power Density	± 2.2 dB
Radiated Spurious Emissions test	± 5.03 dB (30M~1000MHz)
	± 5.47 dB (1000M~25000MHz)
Conducted Spurious Emissions test	± 3.64 dB (A mains 150KHz~30MHz)

7.4 Test Equipment Calibration

All the test equipments used are valid and calibrated by GUANG ZHOU GRG METROLOGY & TEST CO., L TD. Address is No.163, Pingyun Rd. West of Huangpu Ave,Tianhe District, Guangzhou, Guangdong, China.

8 Conducted Emission

Test date	2018-09-05 to 2018-09-06
Test Requirement:	FCC CFR 47 Part 15 Section 15.207
Test Method:	ANSI C63.10:2013
Test Result:	PASS
Frequency Range:	150kHz to 30MHz
Class/Severity:	Class B
Limit:	66-56 dB μ V between 0.15MHz & 0.5MHz 56 dB μ V between 0.5MHz & 5MHz 60 dB μ V between 5MHz & 30MHz
Detector:	Peak for pre-scan (9kHz Resolution Bandwidth)

8.1 E.U.T. Operation

Operating Environment :

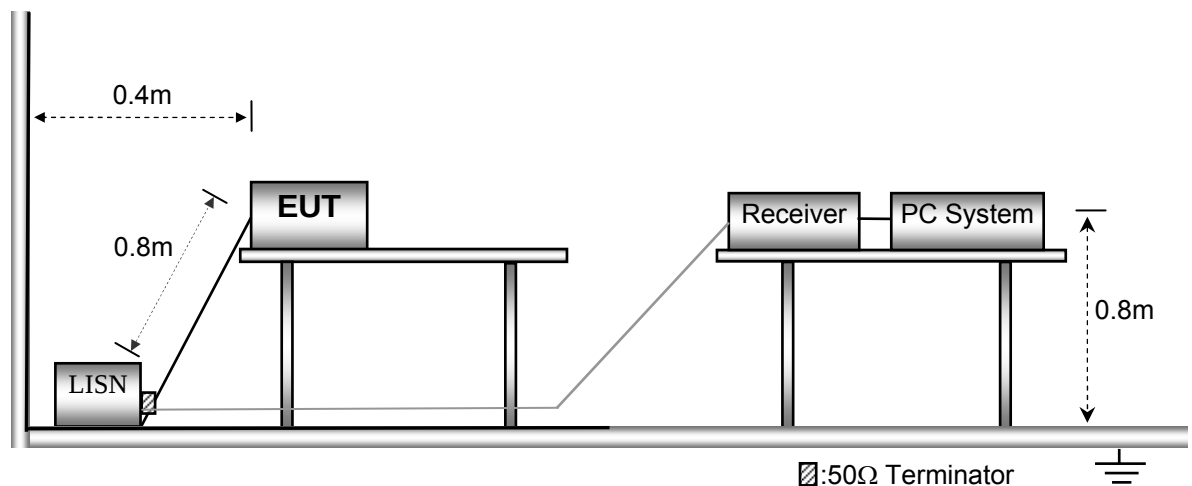
Temperature:	21.5 °C
Humidity:	51.9 % RH
Atmospheric Pressure:	101.2kPa

EUT Operation : Refer to section 6.4.

The test was performed in Transmitting mode(For WIFI), Only the worst case 802.11a mode were record in the report.

8.2 EUT Setup

The conducted emission tests were performed using the setup accordance with the ANSI C63.10:2013.



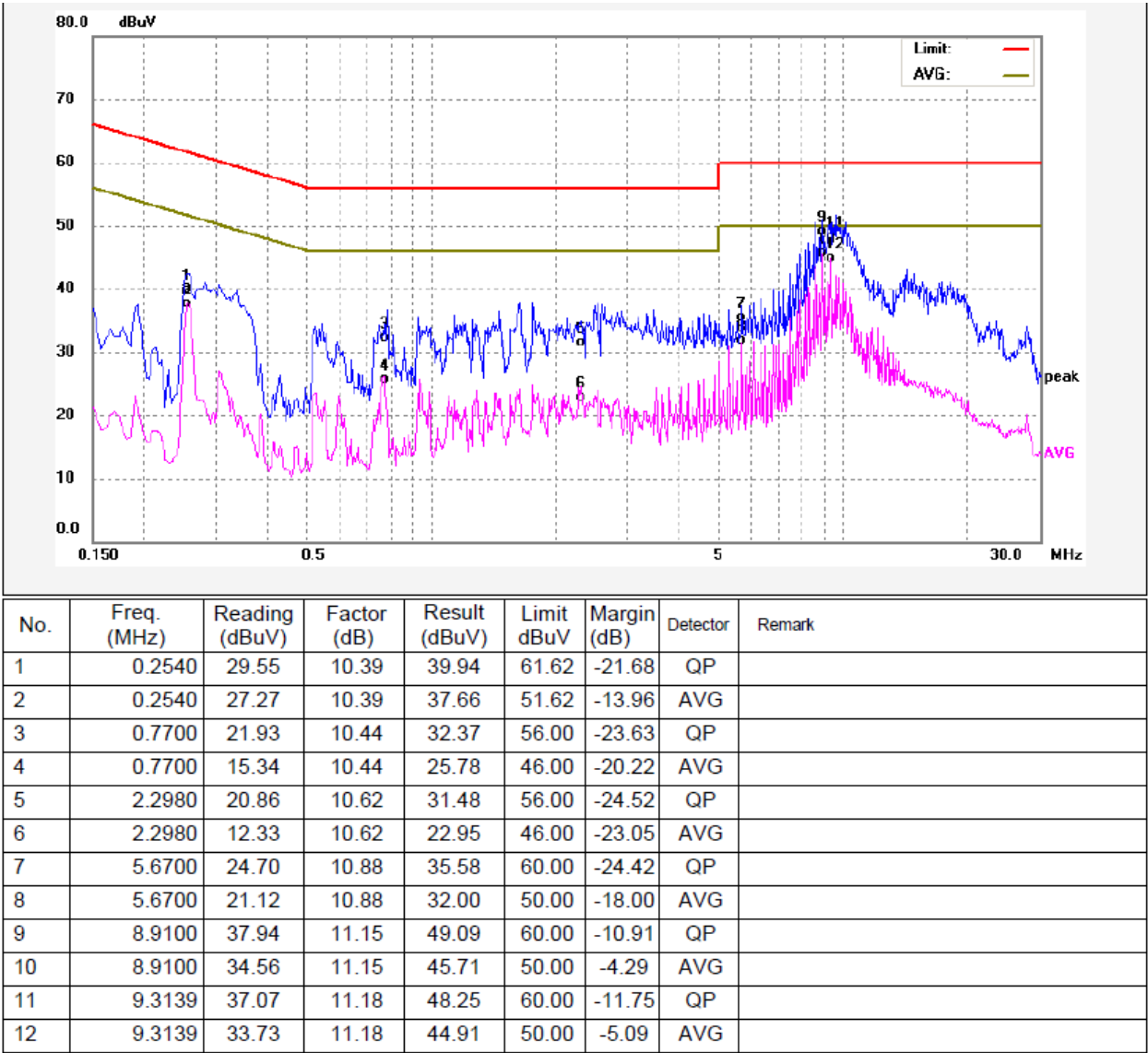
8.3 Measurement Description

The maximised peak emissions from the EUT was scanned and measured for both the Live and Neutral Lines. Quasi-peak & average measurements were performed if peak emissions were within 6dB of the average limit line.

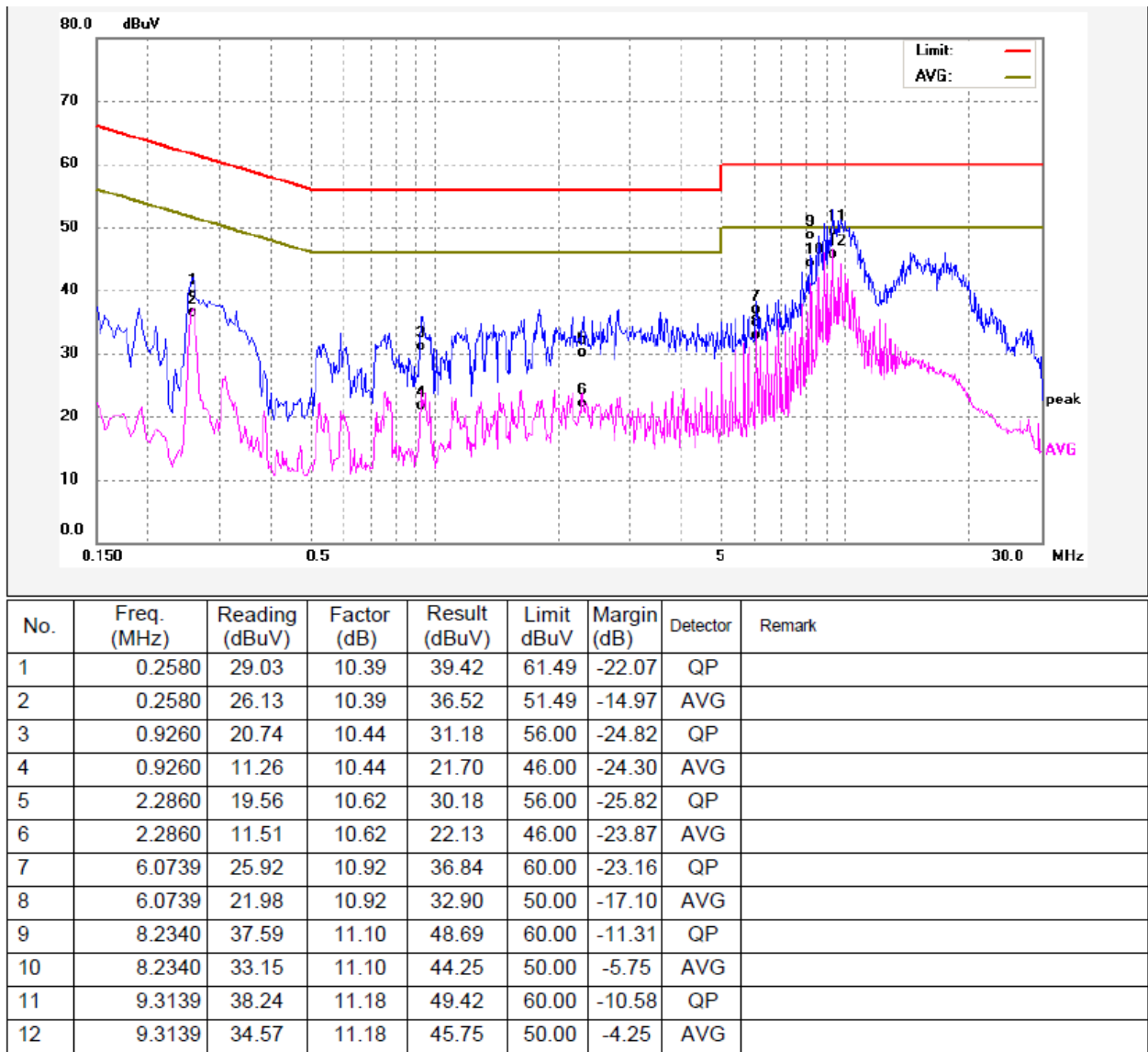
8.4 Conducted Emission Test Result

An initial pre-scan was performed on the live and neutral lines.

Live line:



Neutral line:



9 Radiated Emissions

Test date: 2018-09-07 to 2018-09-11
Test Requirement: FCC CFR47 Part 15 Section 15.209 & 15.407
Test Method: ANSI C63.10:2013
Test Result: PASS
Measurement Distance: 3m

Limit:

Frequency (MHz)	Field Strength		Field Strength Limit at 3m Measurement Distance	
	uV/m	Distance (m)	uV/m	dBuV/m
0.009 ~ 0.490	$2400/F(\text{kHz})$	300	$10000 * 2400/F(\text{kHz})$	$20\log^{(2400/F(\text{kHz}))} + 80$
0.490 ~ 1.705	$24000/F(\text{kHz})$	30	$100 * 24000/F(\text{kHz})$	$20\log^{(24000/F(\text{kHz}))} + 40$
1.705 ~ 30	30	30	$100 * 30$	$20\log^{(30)} + 40$
30 ~ 88	100	3	100	$20\log^{(100)}$
88 ~ 216	150	3	150	$20\log^{(150)}$
216 ~ 960	200	3	200	$20\log^{(200)}$
Above 960	500	3	500	$20\log^{(500)}$

9.1 EUT Operation

Operating Environment :

Temperature: 23.5 °C
Humidity: 52.1 % RH
Atmospheric Pressure: 101.2kPa

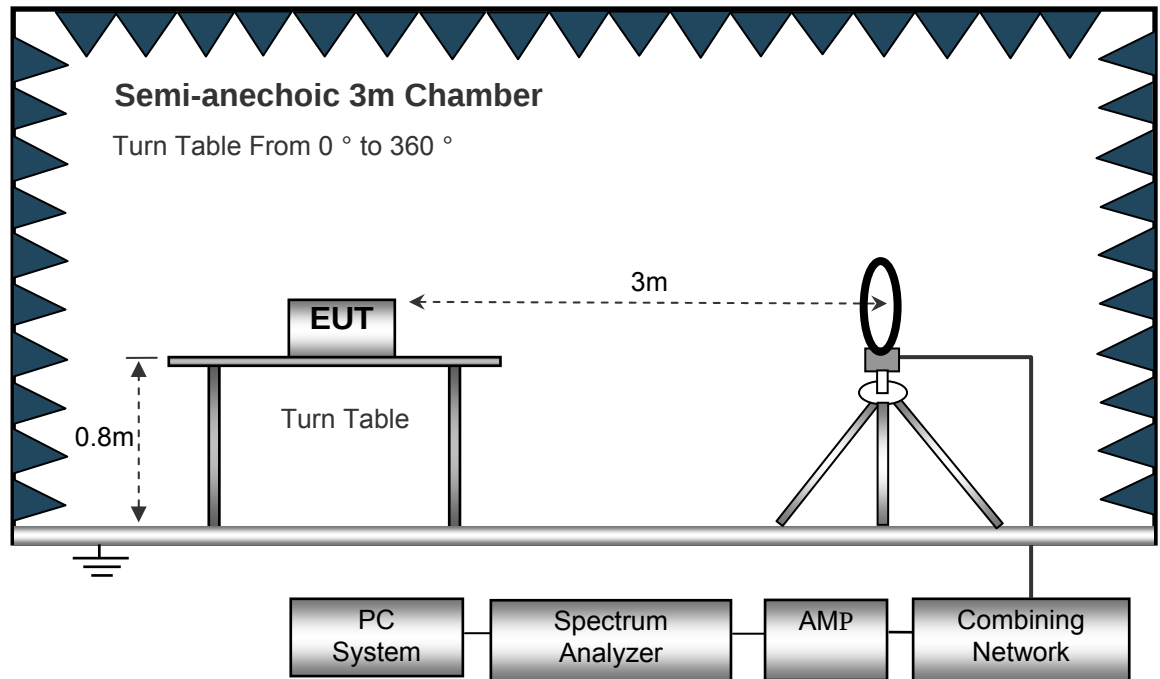
EUT Operation : Refer to section 6.4.

The test was performed in transmitting mode, the test data were shown in the report.

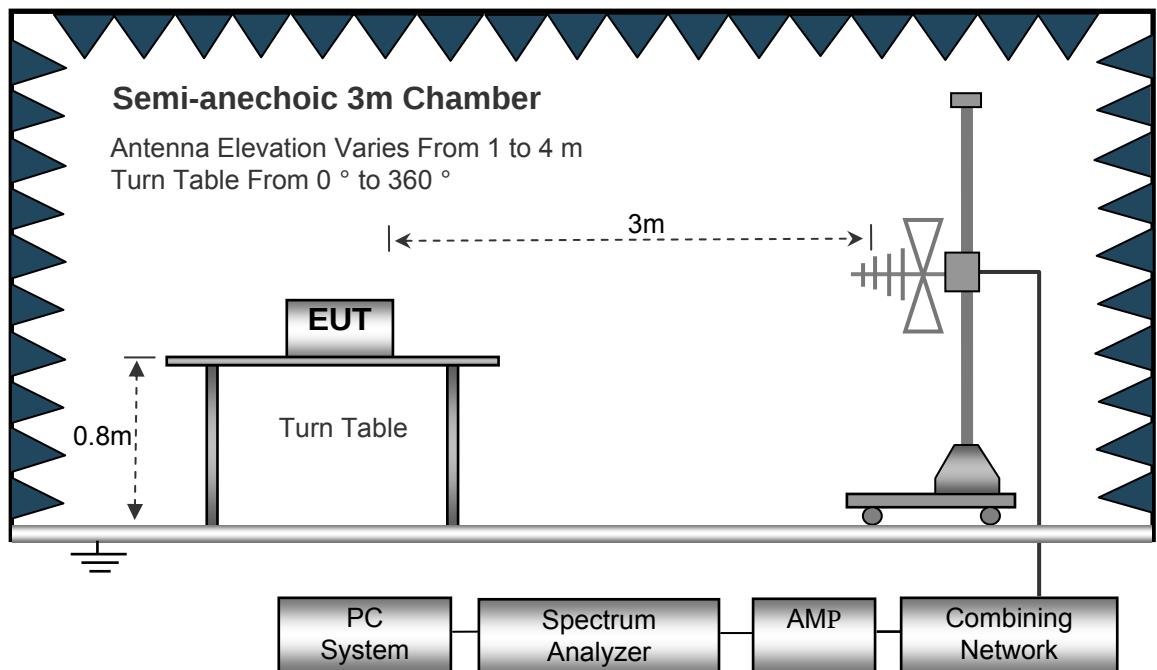
9.2 Test Setup

The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site, using the setup accordance with the ANSI C63.10: 2013.

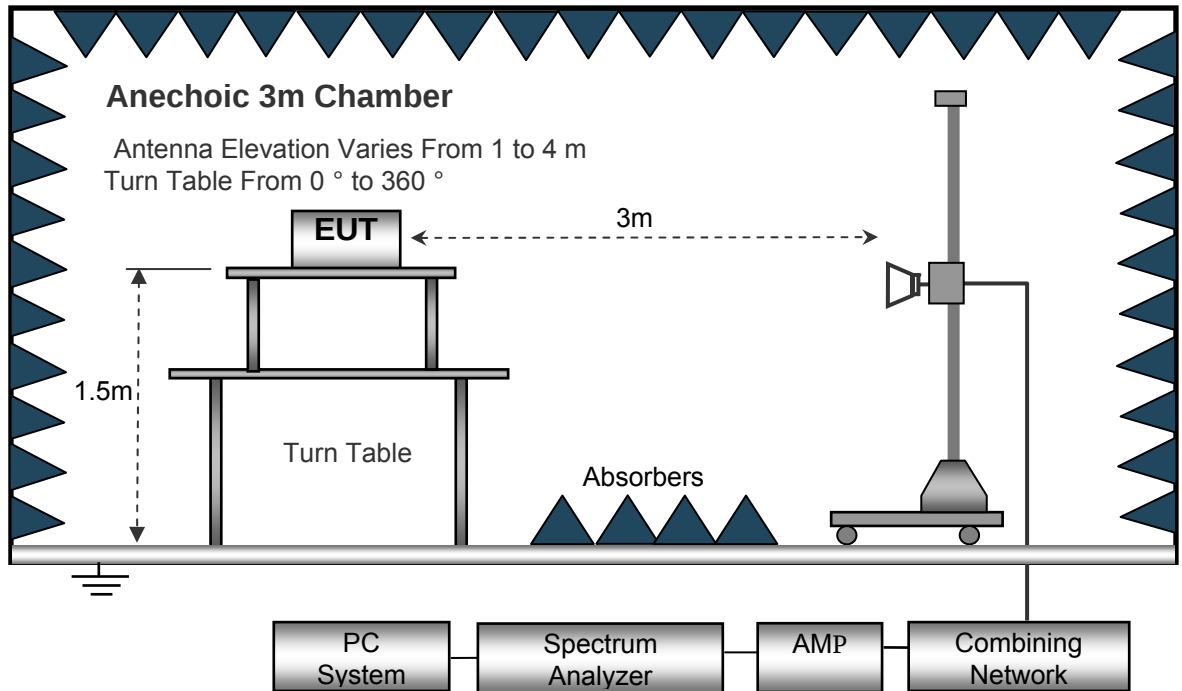
The test setup for emission measurement below 30MHz.



The test setup for emission measurement from 30 MHz to 1 GHz.



The test setup for emission measurement above 1 GHz.



9.3 Spectrum Analyzer Setup

Below 30MHz

Sweep Speed Auto
IF Bandwidth..... 10kHz
Video Bandwidth..... 10kHz
Resolution Bandwidth..... 10kHz

30MHz ~ 1GHz

Sweep Speed Auto
Detector PK
Resolution Bandwidth..... 100kHz
Video Bandwidth..... 300kHz

Above 1GHz

Sweep Speed Auto
Detector PK
Resolution Bandwidth..... 1MHz
Video Bandwidth..... 3MHz
Detector Ave.
Resolution Bandwidth..... 1MHz
Video Bandwidth..... 10Hz

9.4 Test Procedure

1. The EUT is placed on a turntable, which is 0.8m above ground plane for below 1GHz and 1.5m for above 1GHz.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is moved from 1m to 4m to find out the maximum emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until the measurements for all frequencies are complete.
7. The radiation measurements are performed in X,Y and Z axis positioning(X denotes lying on the table, Y denotes side stand and Z denotes vertical stand),the worst condition was tested putting the eut in X axis,so the worst data were shown as follow.
8. A 2.4GHz high –pass filter is used during radiated emissions above 1GHz measurement.

9.5 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

$$\text{Corr. Ampl.} = \text{Indicated Reading} + \text{Antenna Factor} + \text{Cable Factor} - \text{Amplifier Gain}$$

The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB means the emission is 7dB below the maximum limit for Class B. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Corr. Ampl.} - \text{Limit}$$

9.6 Summary of Test Results

Test Frequency: 9kHz ~ 30MHz

The measurements were more than 20 dB below the limit and not reported.

Test Frequency : 30MHz ~ 18GHz

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Fator	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11a U-NII-1 low Channel 5180MHz									
842.13	44.74	QP	331	1.7	H	-3.70	41.04	46.00	-4.96
842.13	38.02	QP	225	1.3	V	-3.70	34.32	46.00	-11.68
4517.75	46.91	PK	60	1.8	H	-1.54	45.37	74.00	-28.63
4517.75	38.70	Ave	60	1.8	H	-1.54	37.16	54.00	-16.84
5136.48	47.02	PK	193	1.7	H	-0.75	46.27	74.00	-27.73
5136.48	33.33	Ave	193	1.7	H	-0.75	32.58	54.00	-21.42
10360.00	38.75	PK	22	1.2	H	5.33	44.08	74.00	-29.92
10360.00	23.99	Ave	22	1.2	H	5.33	29.32	54.00	-24.68
15540.00	45.75	PK	264	1.5	H	5.29	51.04	74.00	-22.96
15540.00	39.42	Ave	264	1.5	H	5.29	44.71	54.00	-9.29
802.11a U-NII-1 middle channel 5200MHz									
842.13	46.01	QP	260	1.7	H	-3.70	42.31	46.00	-3.69
842.13	37.20	QP	129	1.5	V	-3.70	33.50	46.00	-12.50
4507.61	46.45	PK	177	1.8	H	-1.64	44.81	74.00	-29.19
4507.61	38.28	Ave	177	1.8	H	-1.64	36.64	54.00	-17.36
5136.52	46.30	PK	249	1.9	H	-0.91	45.39	74.00	-28.61
5136.52	33.13	Ave	249	1.9	H	-0.91	32.22	54.00	-21.78
10400.00	38.82	PK	261	1.4	H	5.21	44.03	74.00	-29.97
10400.00	23.20	Ave	261	1.4	H	5.21	28.41	54.00	-25.59
15600.00	46.82	PK	254	2.0	H	5.30	52.12	74.00	-21.88
15600.00	39.82	Ave	254	2.0	H	5.30	45.12	54.00	-8.88

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Fator	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11a U-NII-1 High channel 5240MHz									
842.13	45.33	QP	340	1.3	H	-3.70	41.63	46.00	-4.37
842.13	37.77	QP	207	1.3	V	-3.70	34.07	46.00	-11.93
4527.61	46.81	PK	224	1.2	H	-1.56	45.25	74.00	-28.75
4527.61	39.57	Ave	224	1.2	H	-1.56	38.01	54.00	-15.99
5112.02	45.39	PK	58	1.1	H	-0.81	44.58	74.00	-29.42
5112.02	32.76	Ave	58	1.1	H	-0.81	31.95	54.00	-22.05
10480.00	39.78	PK	208	1.0	H	5.14	44.92	74.00	-29.08
10480.00	22.43	Ave	208	1.0	H	5.14	27.57	54.00	-26.43
15720.00	45.29	PK	206	1.0	H	5.10	50.39	74.00	-23.61
15720.00	38.72	Ave	206	1.0	H	5.10	43.82	54.00	-10.18
802.11a U-NII-3 low Channel 5745MHz									
842.13	44.39	QP	338	1.4	H	-3.70	40.69	46.00	-5.31
842.13	37.34	QP	141	1.8	V	-3.70	33.64	46.00	-12.36
4531.92	47.49	PK	175	1.5	H	-1.80	45.69	74.00	-28.31
4531.92	40.21	Ave	175	1.5	H	-1.80	38.41	54.00	-15.59
5113.36	46.56	PK	90	1.3	H	-0.96	45.60	74.00	-28.40
5113.36	32.08	Ave	90	1.3	H	-0.96	31.12	54.00	-22.88
11490.00	40.13	PK	209	1.6	H	5.93	46.06	74.00	-27.94
11490.00	23.54	Ave	209	1.6	H	5.93	29.47	54.00	-24.53
17235.00	46.01	PK	1	1.4	H	10.35	56.36	74.00	-17.64
17235.00	39.94	Ave	1	1.4	H	10.35	50.29	54.00	-3.71

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Fator	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11a U-NII-3 middle channel 5785MHz									
842.13	45.83	QP	226	1.1	H	-3.70	42.13	46.00	-3.87
842.13	36.08	QP	184	1.9	V	-3.70	32.38	46.00	-13.62
4532.03	47.75	PK	229	1.0	H	-1.59	46.16	74.00	-27.84
4532.03	40.45	Ave	229	1.0	H	-1.59	38.86	54.00	-15.14
5116.63	48.33	PK	322	1.9	H	-0.95	47.38	74.00	-26.62
5116.63	34.02	Ave	322	1.9	H	-0.95	33.07	54.00	-20.93
11570.00	40.92	PK	242	1.7	H	5.81	46.73	74.00	-27.27
11570.00	24.45	Ave	242	1.7	H	5.81	30.26	54.00	-23.74
17355.00	45.12	PK	87	1.3	H	10.37	55.49	74.00	-18.51
17355.00	38.83	Ave	87	1.3	H	10.37	49.20	54.00	-4.80
802.11a U-NII-3 High channel 5825MHz									
842.13	44.50	QP	215	1.0	H	-3.70	40.80	46.00	-5.20
842.13	37.34	QP	152	1.4	V	-3.70	33.64	46.00	-12.36
4529.22	49.06	PK	354	1.8	H	-1.68	47.38	74.00	-26.62
4529.22	41.04	Ave	354	1.8	H	-1.68	39.36	54.00	-14.64
5130.53	47.65	PK	50	1.4	H	-0.96	46.69	74.00	-27.31
5130.53	35.79	Ave	50	1.4	H	-0.96	34.83	54.00	-19.17
11650.00	40.96	PK	134	1.8	H	5.84	46.80	74.00	-27.20
11650.00	23.75	Ave	134	1.8	H	5.84	29.59	54.00	-24.41
17475.00	45.22	PK	126	1.4	H	10.41	55.63	74.00	-18.37
17475.00	38.68	Ave	126	1.4	H	10.41	49.09	54.00	-4.91

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Fator	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT20) U-NII-1 low Channel 5180MHz									
842.13	45.03	QP	137	1.9	H	-3.70	43.33	46.00	-4.67
842.13	39.37	QP	243	1.0	V	-3.70	35.67	46.00	-10.33
4504.97	48.23	PK	113	1.5	H	-1.54	46.69	74.00	-27.31
4504.97	37.30	Ave	113	1.5	H	-1.54	35.76	54.00	-18.24
5147.85	45.83	PK	30	1.1	H	-0.75	45.08	74.00	-28.92
5147.85	32.33	Ave	30	1.1	H	-0.75	31.58	54.00	-22.42
10360.00	37.86	PK	283	1.3	H	5.33	43.19	74.00	-30.81
10360.00	24.06	Ave	283	1.3	H	5.33	29.39	54.00	-24.61
15540.00	44.93	PK	38	1.6	H	5.29	50.22	74.00	-23.78
15540.00	38.53	Ave	38	1.6	H	5.29	43.82	54.00	-10.18
802.11n(HT20) U-NII-1 middle channel 5200MHz									
842.13	45.67	QP	108	1.2	H	-3.70	41.97	46.00	-4.03
842.13	38.68	QP	34	1.7	V	-3.70	34.98	46.00	-11.02
4523.81	49.66	PK	97	1.9	H	-1.64	48.02	74.00	-25.98
4523.81	36.39	Ave	97	1.9	H	-1.64	34.75	54.00	-19.25
5136.64	46.07	PK	243	1.5	H	-0.91	45.16	74.00	-28.84
5136.64	33.27	Ave	243	1.5	H	-0.91	32.36	54.00	-21.64
10400.00	36.83	PK	205	1.3	H	5.21	42.04	74.00	-31.96
10400.00	23.31	Ave	205	1.3	H	5.21	28.52	54.00	-25.48
15600.00	46.03	PK	268	1.1	H	5.30	51.33	74.00	-22.67
15600.00	39.51	Ave	268	1.1	H	5.30	44.81	54.00	-9.19

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Fator	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT20) U-NII-1 High channel 5240MHz									
842.13	45.43	QP	115	1.2	H	-3.70	41.73	46.00	-4.27
842.13	40.37	QP	352	1.2	V	-3.70	36.67	46.00	-9.33
4516.56	46.27	PK	161	2.0	H	-1.56	44.71	74.00	-29.29
4516.56	39.08	Ave	161	2.0	H	-1.56	37.52	54.00	-16.48
5126.22	48.58	PK	109	1.9	H	-0.81	47.77	74.00	-26.23
5126.22	33.68	Ave	109	1.9	H	-0.81	32.87	54.00	-21.13
10480.00	38.91	PK	321	1.1	H	5.14	44.05	74.00	-29.95
10480.00	23.71	Ave	321	1.1	H	5.14	28.85	54.00	-25.15
15720.00	46.66	PK	276	1.3	H	5.10	51.76	74.00	-22.24
15720.00	38.75	Ave	276	1.3	H	5.10	43.85	54.00	-10.15
802.11n(HT20) U-NII-3 low Channel 5745MHz									
842.13	45.76	QP	233	1.3	H	-3.70	42.06	46.00	-3.94
842.13	40.40	QP	177	1.9	V	-3.70	36.70	46.00	-9.30
4539.96	46.71	PK	188	1.8	H	-1.80	44.91	74.00	-29.09
4539.96	38.40	Ave	188	1.8	H	-1.80	36.60	54.00	-17.40
5136.47	49.33	PK	216	1.1	H	-0.96	48.37	74.00	-25.63
5136.47	35.18	Ave	216	1.1	H	-0.96	34.22	54.00	-19.78
11490.00	37.96	PK	179	1.7	H	5.93	43.89	74.00	-30.11
11490.00	24.08	Ave	179	1.7	H	5.93	30.01	54.00	-23.99
17235.00	43.43	PK	202	1.9	H	10.35	53.78	74.00	-20.22
17235.00	37.07	Ave	202	1.9	H	10.35	47.42	54.00	-6.58

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Fator	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT20) U-NII-3 middle channel 5785MHz									
842.13	45.46	QP	295	1.1	H	-3.70	41.76	46.00	-4.24
842.13	40.33	QP	336	1.1	V	-3.70	36.63	46.00	-9.37
4529.74	47.30	PK	347	1.0	H	-1.59	45.71	74.00	-28.29
4529.74	38.63	Ave	347	1.0	H	-1.59	37.04	54.00	-16.96
5148.82	49.67	PK	196	1.0	H	-0.95	48.72	74.00	-25.28
5148.82	36.83	Ave	196	1.0	H	-0.95	35.88	54.00	-18.12
11570.00	36.74	PK	100	1.4	H	5.81	42.55	74.00	-31.45
11570.00	23.72	Ave	100	1.4	H	5.81	29.53	54.00	-24.47
17355.00	45.32	PK	307	1.7	H	10.37	55.69	74.00	-18.31
17355.00	39.63	Ave	307	1.7	H	10.37	50.00	54.00	-4.00
802.11n(HT20) U-NII-3 High channel 5825MHz									
842.13	46.62	QP	154	1.1	H	-3.70	42.92	46.00	-3.08
842.13	42.54	QP	57	2.0	V	-3.70	38.84	46.00	-7.16
4536.39	46.61	PK	192	1.1	H	-1.68	44.93	74.00	-29.07
4536.39	37.61	Ave	192	1.1	H	-1.68	35.93	54.00	-18.07
5142.41	51.67	PK	334	1.8	H	-0.96	50.71	74.00	-23.29
5142.41	35.25	Ave	334	1.8	H	-0.96	34.29	54.00	-19.71
11650.00	38.88	PK	117	1.4	H	5.84	44.72	74.00	-29.28
11650.00	23.74	Ave	117	1.4	H	5.84	29.58	54.00	-24.42
17475.00	46.10	PK	323	1.2	H	10.41	56.51	74.00	-17.49
17475.00	38.83	Ave	323	1.2	H	10.41	49.24	54.00	-4.76

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Fator	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11ac(VHT20) U-NII-1 low Channel 5180MHz									
842.13	44.88	QP	14	1.8	H	-3.70	41.18	46.00	-4.82
842.13	37.13	QP	79	1.6	V	-3.70	33.43	46.00	-12.57
4511.56	43.81	PK	110	1.1	H	-1.80	42.01	74.00	-31.99
4511.56	37.27	Ave	110	1.1	H	-1.80	35.47	54.00	-18.53
5132.07	44.82	PK	139	1.6	H	-0.94	43.88	74.00	-30.12
5132.07	35.26	Ave	139	1.6	H	-0.94	34.32	54.00	-19.68
10360.00	41.12	PK	209	1.1	H	5.33	46.45	74.00	-27.55
10360.00	32.97	Ave	209	1.1	H	5.33	38.30	54.00	-15.70
15540.00	42.49	PK	233	1.0	H	5.29	47.78	74.00	-26.22
15540.00	36.56	Ave	233	1.0	H	5.29	41.85	54.00	-12.15
802.11ac(VHT20) U-NII-1 middle channel 5200MHz									
842.13	45.79	QP	160	1.8	H	-3.70	42.09	46.00	-3.91
842.13	38.11	QP	109	2.0	V	-3.70	34.41	46.00	-11.59
4534.37	42.78	PK	32	1.2	H	-1.69	41.09	74.00	-32.91
4534.37	36.93	Ave	32	1.2	H	-1.69	35.24	54.00	-18.76
5127.52	44.67	PK	25	1.5	H	-0.91	43.76	74.00	-30.24
5127.52	34.30	Ave	25	1.5	H	-0.91	33.39	54.00	-20.61
10400.00	40.69	PK	130	1.3	H	5.21	45.90	74.00	-28.10
10400.00	32.93	Ave	130	1.3	H	5.21	38.14	54.00	-15.86
15600.00	46.28	PK	71	1.3	H	5.30	51.58	74.00	-22.42
15600.00	37.02	Ave	71	1.3	H	5.30	42.32	54.00	-11.68

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Fator	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11ac(VHT20) U-NII-1 High channel 5240MHz									
842.13	46.26	QP	50	2.0	H	-3.70	42.56	46.00	-3.44
842.13	37.70	QP	29	1.5	V	-3.70	34.00	46.00	-12.00
4538.90	41.56	PK	254	1.9	H	-1.77	39.79	74.00	-34.21
4538.90	37.57	Ave	254	1.9	H	-1.77	35.80	54.00	-18.20
5114.70	45.61	PK	164	1.7	H	-0.79	44.82	74.00	-29.18
5114.70	36.06	Ave	164	1.7	H	-0.79	35.27	54.00	-18.73
10480.00	40.27	PK	85	1.2	H	5.14	45.41	74.00	-28.59
10480.00	32.71	Ave	85	1.2	H	5.14	37.85	54.00	-16.15
15720.00	46.71	PK	75	1.9	H	5.10	51.81	74.00	-22.19
15720.00	39.95	Ave	75	1.9	H	5.10	45.05	54.00	-8.95
802.11ac(VHT20) U-NII-3 low Channel 5745MHz									
842.13	45.22	QP	64	1.4	H	-3.70	41.52	46.00	-4.48
842.13	39.42	QP	294	1.2	V	-3.70	35.72	46.00	-10.28
4513.47	42.38	PK	191	1.0	H	-1.64	40.74	74.00	-33.26
4513.47	34.82	Ave	191	1.0	H	-1.64	33.18	54.00	-20.82
5111.60	40.00	PK	248	1.7	H	-0.84	39.16	74.00	-34.84
5111.60	33.10	Ave	248	1.7	H	-0.84	32.26	54.00	-21.74
11490.00	45.91	PK	141	1.0	H	5.93	51.84	74.00	-22.16
11490.00	39.03	Ave	141	1.0	H	5.93	44.96	54.00	-9.04
17235.00	43.85	PK	293	1.5	H	10.35	54.20	74.00	-19.80
17235.00	38.45	Ave	293	1.5	H	10.35	48.80	54.00	-5.20

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Fator	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11ac(VHT20) U-NII-3 middle channel 5785MHz									
842.13	45.95	QP	20	1.3	H	-3.70	42.25	46.00	-3.75
842.13	40.75	QP	203	1.5	V	-3.70	37.05	46.00	-8.95
4500.85	41.95	PK	107	1.2	H	-1.63	40.32	74.00	-33.68
4500.85	33.51	Ave	107	1.2	H	-1.63	31.88	54.00	-22.12
5140.04	39.01	PK	223	1.2	H	-0.73	38.28	74.00	-35.72
5140.04	32.42	Ave	223	1.2	H	-0.73	31.69	54.00	-22.31
11570.00	46.37	PK	146	1.9	H	5.81	52.18	74.00	-21.82
11570.00	39.20	Ave	146	1.9	H	5.81	45.01	54.00	-8.99
17355.00	45.56	PK	246	1.9	H	10.37	55.93	74.00	-18.07
17355.00	38.75	Ave	246	1.9	H	10.37	49.12	54.00	-4.88
802.11ac(VHT20) U-NII-3 High channel 5825MHz									
842.13	44.19	QP	280	2.0	H	-3.70	40.49	46.00	-5.51
842.13	39.79	QP	301	1.9	V	-3.70	36.09	46.00	-9.91
4535.79	42.44	PK	158	1.2	H	-1.67	40.77	74.00	-33.23
4535.79	35.02	Ave	158	1.2	H	-1.67	33.35	54.00	-20.65
5132.00	41.35	PK	174	1.7	H	-0.83	40.52	74.00	-33.48
5132.00	34.20	Ave	174	1.7	H	-0.83	33.37	54.00	-20.63
11650.00	45.22	PK	19	1.4	H	5.84	51.06	74.00	-22.94
11650.00	40.32	Ave	19	1.4	H	5.84	46.16	54.00	-7.84
17475.00	45.94	PK	92	2.0	H	10.41	56.35	74.00	-17.65
17475.00	38.94	Ave	92	2.0	H	10.41	49.35	54.00	-4.65

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(VHT40) U-NII-1 low Channel 5190MHz									
842.13	45.20	QP	253	1.6	H	-3.70	41.50	46.00	-4.50
842.13	38.11	QP	289	1.2	V	-3.70	34.41	46.00	-11.59
4537.02	40.01	PK	346	1.5	H	-1.50	38.51	74.00	-35.49
4537.02	35.71	Ave	346	1.5	H	-1.50	34.21	54.00	-19.79
5110.02	44.64	PK	279	1.1	H	-0.86	43.78	74.00	-30.22
5110.02	38.46	Ave	279	1.1	H	-0.86	37.60	54.00	-16.40
10380.00	39.64	PK	219	1.2	H	5.26	44.90	74.00	-29.10
10380.00	20.36	Ave	219	1.2	H	5.26	25.62	54.00	-28.38
15570.00	42.11	PK	47	1.9	H	5.13	47.24	74.00	-26.76
15570.00	36.60	Ave	47	1.9	H	5.13	41.73	54.00	-12.27
802.11n(VHT40) U-NII-1 High channel 5230MHz									
842.13	46.95	QP	293	1.6	H	-3.70	43.25	46.00	-2.75
842.13	37.63	QP	168	1.0	V	-3.70	33.93	46.00	-12.07
4526.61	40.70	PK	162	1.9	H	-1.63	39.07	74.00	-34.93
4526.61	34.61	Ave	162	1.9	H	-1.63	32.98	54.00	-21.02
5147.50	45.61	PK	27	1.9	H	-0.90	44.71	74.00	-29.29
5147.50	38.62	Ave	27	1.9	H	-0.90	37.72	54.00	-16.28
10460.00	40.39	PK	25	1.9	H	5.28	45.67	74.00	-28.33
10460.00	21.46	Ave	25	1.9	H	5.28	26.74	54.00	-27.26
15690.00	46.84	PK	226	1.8	H	5.02	51.86	74.00	-22.14
15690.00	38.36	Ave	226	1.8	H	5.02	43.38	54.00	-10.62

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(VHT40) U-NII-3 low Channel 5755MHz									
842.13	45.24	QP	358	1.8	H	-3.70	41.54	46.00	-4.46
842.13	37.02	QP	279	1.4	V	-3.70	33.32	46.00	-12.68
4535.57	40.44	PK	312	1.2	H	-1.69	38.75	74.00	-35.25
4535.57	36.19	Ave	312	1.2	H	-1.69	34.50	54.00	-19.50
5130.91	43.67	PK	74	2.0	H	-0.74	42.93	74.00	-31.07
5130.91	36.63	Ave	74	2.0	H	-0.74	35.89	54.00	-18.11
11510.00	45.63	PK	192	1.7	H	5.88	51.51	74.00	-22.49
11510.00	34.88	Ave	192	1.7	H	5.88	40.76	54.00	-13.24
17265.00	43.93	PK	243	1.5	H	10.42	54.35	74.00	-19.65
17265.00	38.03	Ave	243	1.5	H	10.42	48.45	54.00	-5.55
802.11n(VHT40) U-NII-3 High channel 5795MHz									
842.13	44.57	QP	205	1.1	H	-3.70	40.87	46.00	-5.13
842.13	38.46	QP	331	1.3	V	-3.70	34.76	46.00	-11.24
4503.59	39.81	PK	48	1.9	H	-1.69	38.12	74.00	-35.88
4503.59	35.75	Ave	48	1.9	H	-1.69	34.06	54.00	-19.94
5115.58	43.86	PK	139	1.6	H	-0.89	42.97	74.00	-31.03
5115.58	38.61	Ave	139	1.6	H	-0.89	37.72	54.00	-16.28
11590.00	44.18	PK	36	1.2	H	5.63	49.81	74.00	-24.19
11590.00	36.21	Ave	36	1.2	H	5.63	41.84	54.00	-12.16
17385.00	46.38	PK	335	1.6	H	10.63	57.01	74.00	-16.99
17385.00	39.98	Ave	335	1.6	H	10.63	50.61	54.00	-3.39

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11ac(VHT40) U-NII-1 low Channel 5190MHz									
842.13	45.33	QP	262	1.2	H	-3.70	41.63	46.00	-4.37
842.13	37.65	QP	110	1.4	V	-3.70	33.95	46.00	-12.05
4526.93	39.79	PK	161	2.0	H	-1.70	38.09	74.00	-35.91
4526.93	31.98	Ave	161	2.0	H	-1.70	30.28	54.00	-23.72
5137.92	50.45	PK	81	1.9	H	-0.78	49.67	74.00	-24.33
5137.92	41.78	Ave	81	1.9	H	-0.78	41.00	54.00	-13.00
10380.00	39.16	PK	39	1.0	H	5.26	44.42	74.00	-29.58
10380.00	35.17	Ave	39	1.0	H	5.26	40.43	54.00	-13.57
15570.00	44.17	PK	14	1.3	H	5.13	49.30	74.00	-24.70
15570.00	37.36	Ave	14	1.3	H	5.13	42.49	54.00	-11.51
802.11ac(VHT40) U-NII-1 High channel 5230MHz									
842.13	44.35	QP	297	1.6	H	-3.70	40.65	46.00	-5.35
842.13	37.09	QP	261	1.8	V	-3.70	33.39	46.00	-12.61
4529.45	39.72	PK	221	1.3	H	-1.50	38.22	74.00	-35.78
4529.45	32.52	Ave	221	1.3	H	-1.50	31.02	54.00	-22.98
5149.70	52.09	PK	264	1.6	H	-0.85	51.24	74.00	-22.76
5149.70	40.91	Ave	264	1.6	H	-0.85	40.06	54.00	-13.94
10460.00	40.34	PK	209	1.0	H	5.28	45.62	74.00	-28.38
10460.00	33.84	Ave	209	1.0	H	5.28	39.12	54.00	-14.88
15690.00	46.63	PK	5	1.6	H	5.02	51.65	74.00	-22.35
15690.00	39.85	Ave	5	1.6	H	5.02	44.87	54.00	-9.13

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11ac(VHT40) U-NII-3 low Channel 5755MHz									
842.13	45.72	QP	11	1.3	H	-3.70	42.02	46.00	-3.98
842.13	39.37	QP	322	1.5	V	-3.70	35.67	46.00	-10.33
4528.11	40.95	PK	222	1.7	H	-1.79	39.16	74.00	-34.84
4528.11	35.46	Ave	222	1.7	H	-1.79	33.67	54.00	-20.33
5128.33	43.28	PK	104	1.8	H	-0.81	42.47	74.00	-31.53
5128.33	38.89	Ave	104	1.8	H	-0.81	38.08	54.00	-15.92
11510.00	46.13	PK	11	1.1	H	5.88	52.01	74.00	-21.99
11510.00	35.89	Ave	11	1.1	H	5.88	41.77	54.00	-12.23
17265.00	42.20	PK	43	1.1	H	10.42	52.62	74.00	-21.38
17265.00	36.27	Ave	43	1.1	H	10.42	46.69	54.00	-7.31
802.11ac(VHT40) U-NII-3 High channel 5795MHz									
842.13	46.42	QP	1	1.3	H	-3.70	42.72	46.00	-3.28
842.13	40.10	QP	345	1.4	V	-3.70	36.40	46.00	-9.60
4507.41	39.79	PK	58	1.1	H	-1.54	38.25	74.00	-35.75
4507.41	35.99	Ave	58	1.1	H	-1.54	34.45	54.00	-19.55
5143.83	42.58	PK	350	1.8	H	-0.89	41.69	74.00	-32.31
5143.83	38.74	Ave	350	1.8	H	-0.89	37.85	54.00	-16.15
11590.00	46.18	PK	321	1.0	H	5.63	51.81	74.00	-22.19
11590.00	37.22	Ave	321	1.0	H	5.63	42.85	54.00	-11.15
17385.00	45.73	PK	130	1.9	H	10.63	56.36	74.00	-17.64
17385.00	38.20	Ave	130	1.9	H	10.63	48.83	54.00	-5.17

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11ac(HT80) U-NII-1 low Channel 5210MHz									
842.13	46.35	QP	298	1.4	H	-3.70	42.65	46.00	-3.35
842.13	39.43	QP	115	1.8	V	-3.70	35.73	46.00	-10.27
4522.28	53.04	PK	141	1.3	H	-1.77	51.27	74.00	-22.73
4522.28	47.32	Ave	141	1.3	H	-1.77	45.55	54.00	-8.45
5123.49	41.69	PK	19	1.2	H	-0.82	40.87	74.00	-33.13
5123.49	37.18	Ave	19	1.2	H	-0.82	36.36	54.00	-17.64
10420.00	45.16	PK	274	1.5	H	4.65	49.81	74.00	-24.19
10420.00	39.05	Ave	274	1.5	H	4.65	43.70	54.00	-10.30
15630.00	45.70	PK	327	1.8	H	5.10	50.80	74.00	-23.20
15630.00	39.25	Ave	327	1.8	H	5.10	44.35	54.00	-9.65
802.11ac(HT80) U-NII-3 low Channel 5775MHz									
842.13	45.41	QP	98	1.6	H	-3.70	41.71	46.00	-4.29
842.13	39.29	QP	70	1.4	V	-3.70	35.59	46.00	-10.41
4514.60	53.26	PK	198	1.5	H	-1.75	51.51	74.00	-22.49
4514.60	47.97	Ave	198	1.5	H	-1.75	46.22	54.00	-7.78
5127.79	40.88	PK	276	1.8	H	-0.95	39.93	74.00	-34.07
5127.79	37.56	Ave	276	1.8	H	-0.95	36.61	54.00	-17.39
11550.00	45.95	PK	124	1.3	H	4.83	50.78	74.00	-23.22
11550.00	38.87	Ave	124	1.3	H	4.83	43.70	54.00	-10.30
17325.00	46.54	PK	116	1.1	H	10.55	57.09	74.00	-16.91
17325.00	39.67	Ave	116	1.1	H	10.55	50.22	54.00	-3.78

Test Frequency: 18GHz~40GHz

The measurements were more than 20 dB below the limit and not reported.

10 Duty cycle

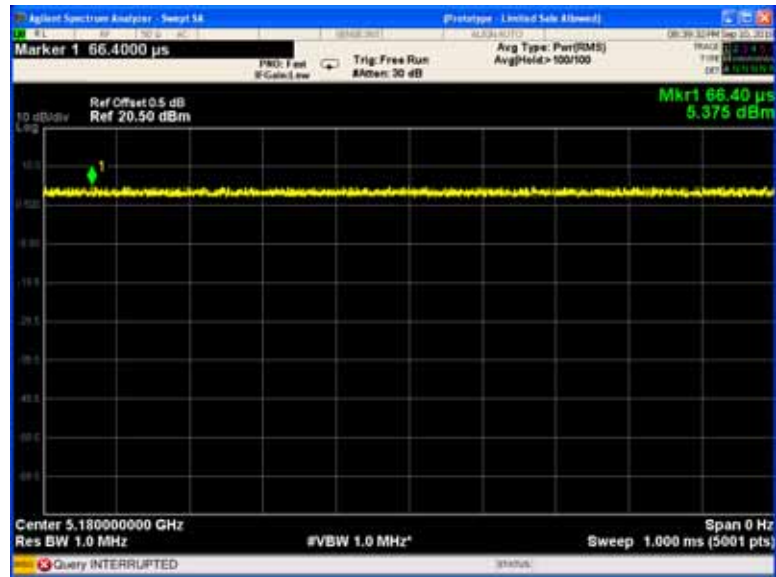
Test Requirement:	47 CFR Part 15C 15.407 and 789033 D02 General UNII Test Procedures New Rules v02r01 , Section (B)
Test Method:	ANSI C63.10: 2013
Test Limit:	N/A
Test Result:	PASS
Remark:	Only the worst case is recorded in the report.

10.1 Summary of Test Results

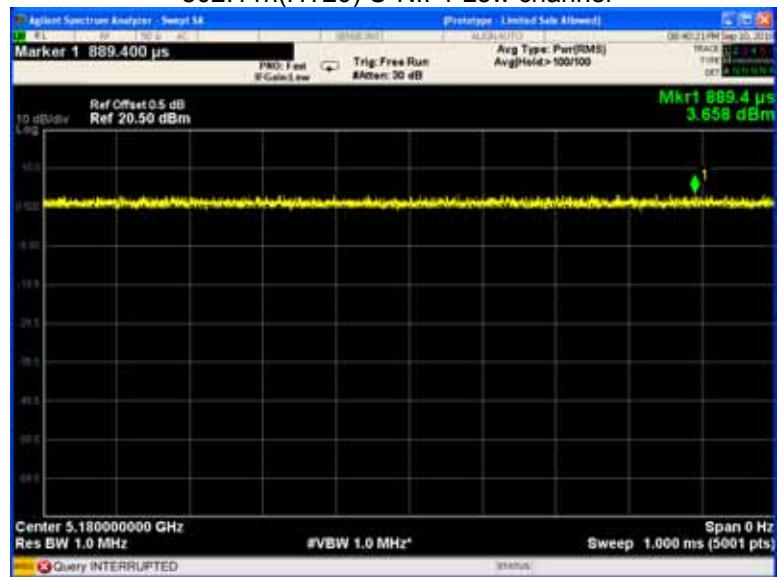
802.11a mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
36	100	100	100
149	100	100	100
802.11n(HT20) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
36	100	100	100
149	100	100	100
802.11n(HT40) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
38	100	100	100
151	100	100	100
802.11ac(VHT20) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
36	100	100	100
149	100	100	100
802.11ac(VHT40) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
38	100	100	100
151	100	100	100
802.11ac(VHT80) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
38	100	100	100
151	100	100	100

ANT1

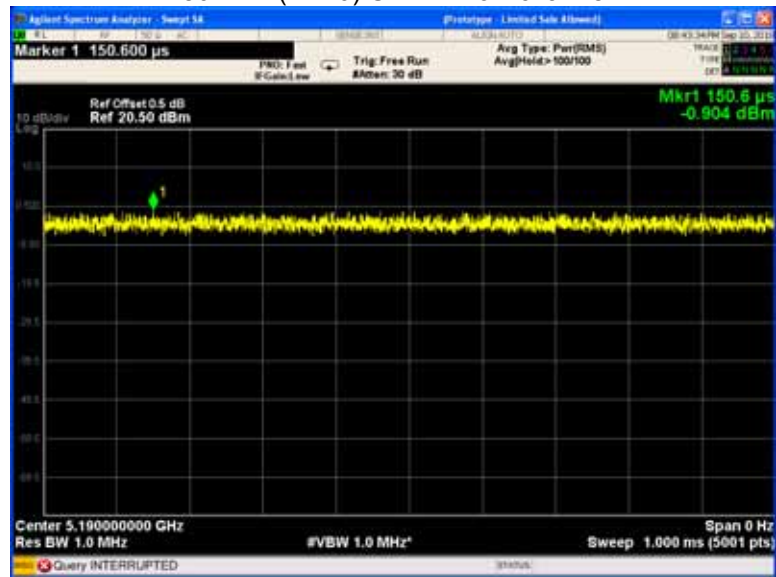
802.11a U-NII-1 Low channel



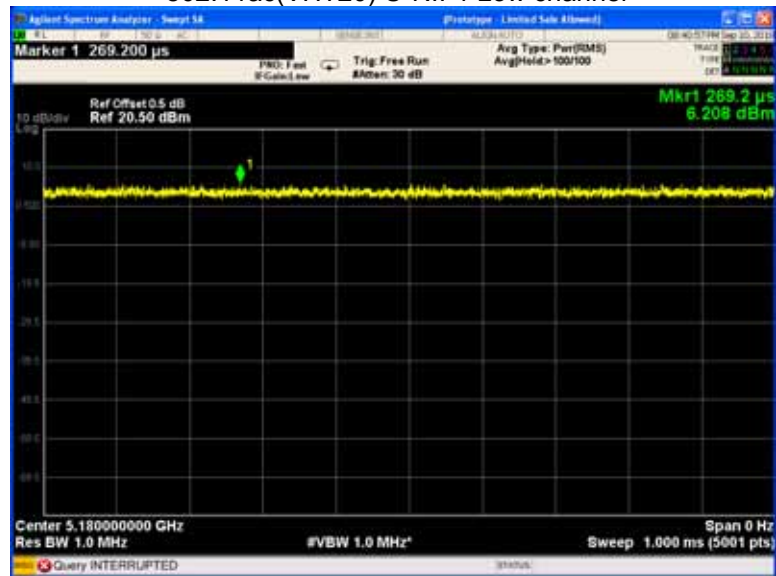
802.11n(HT20) U-NII-1 Low channel



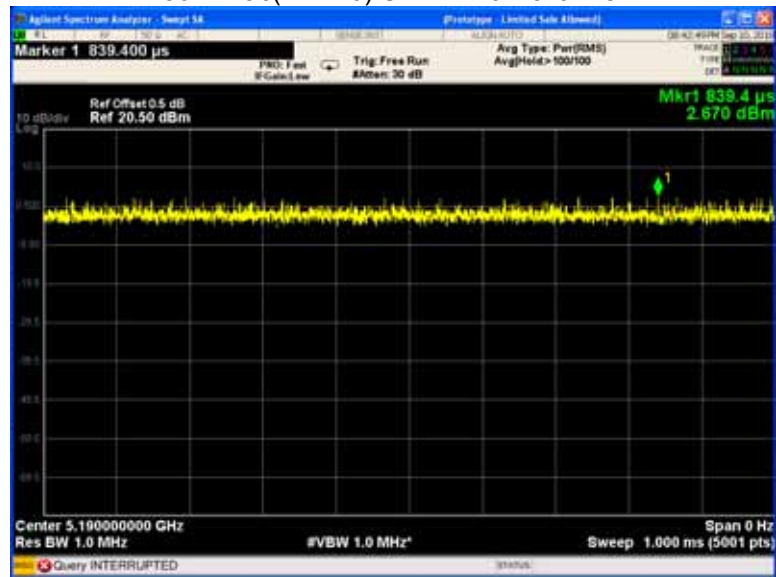
802.11n(HT40) U-NII-1 Low channel



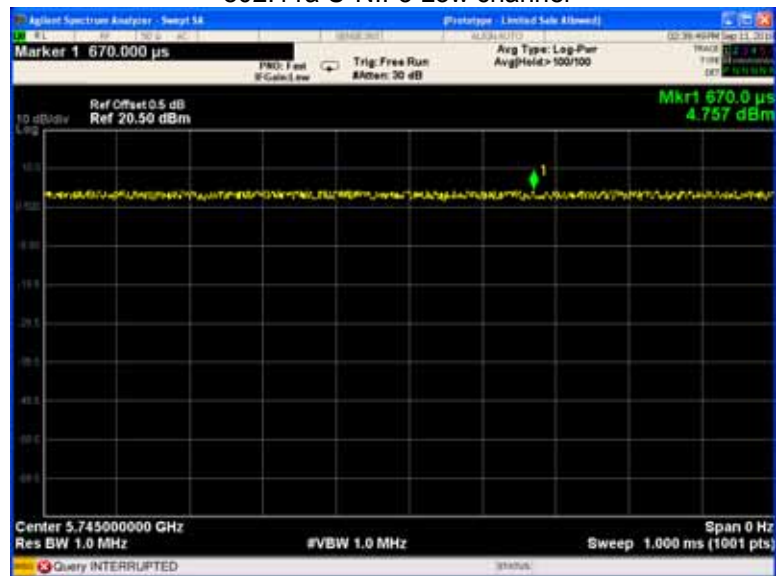
802.11ac(VHT20) U-NII-1 Low channel



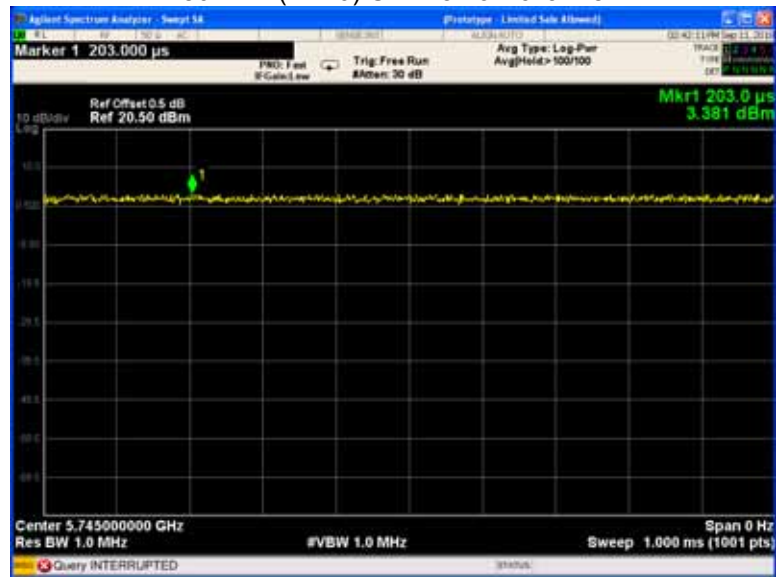
802.11ac(VHT40) U-NII-1 Low channel



802.11a U-NII-3 Low channel



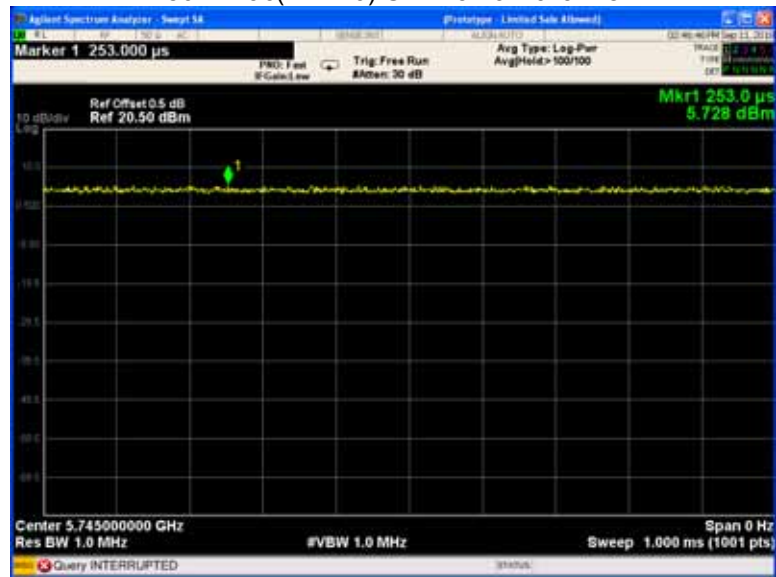
802.11n(HT20) U-NII-3 Low channel



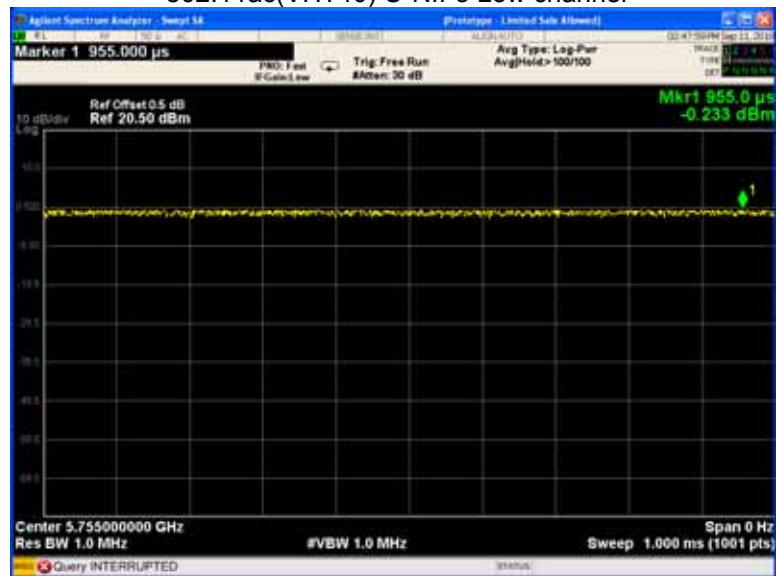
802.11n(HT40) U-NII-3 Low channel



802.11ac(VHT20) U-NII-3 Low channel

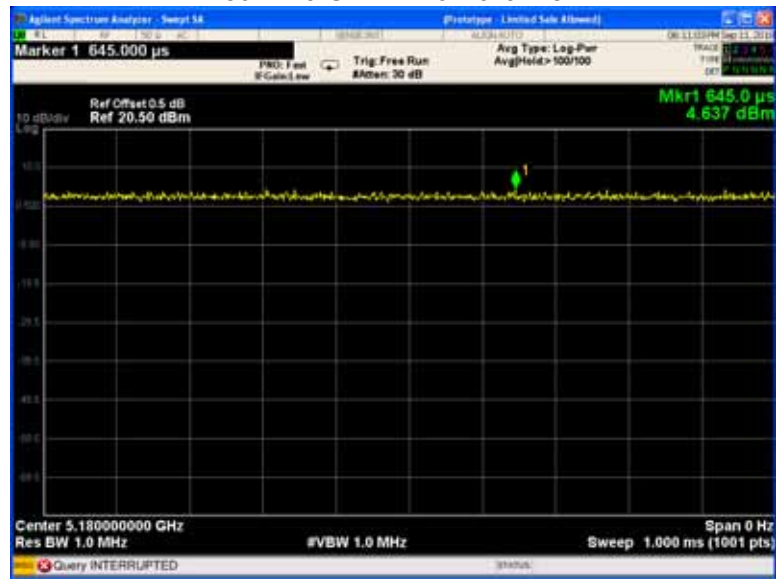


802.11ac(VHT40) U-NII-3 Low channel

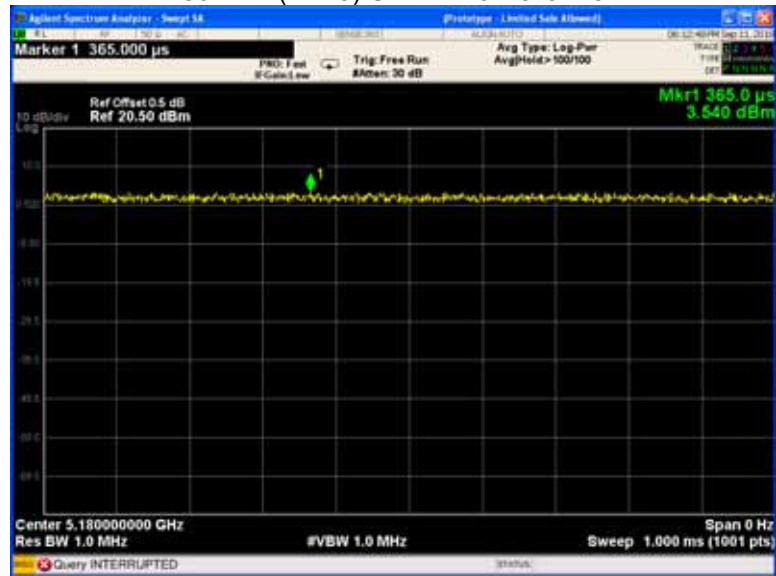


ANT2

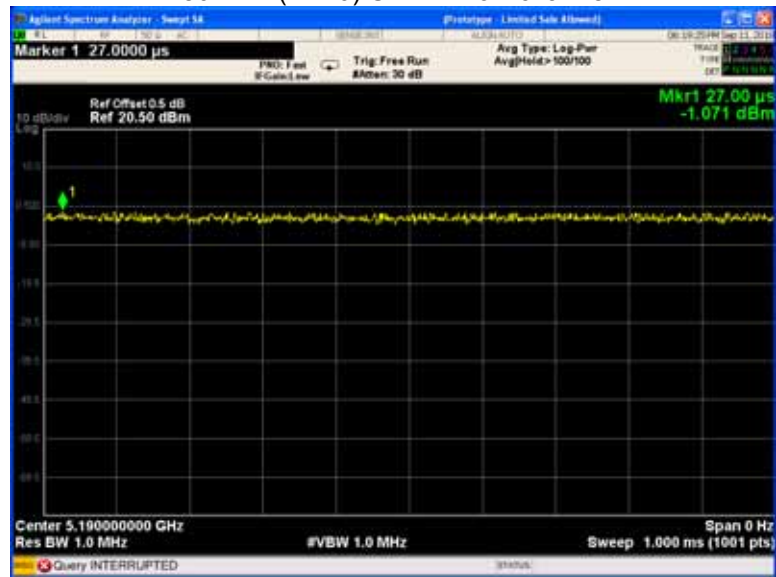
802.11a U-NII-1 Low channel



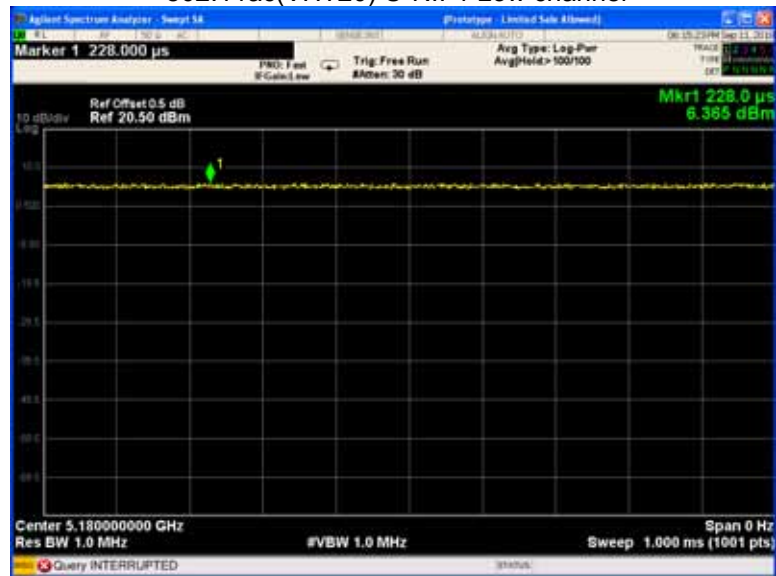
802.11n(HT20) U-NII-1 Low channel



802.11n(HT40) U-NII-1 Low channel



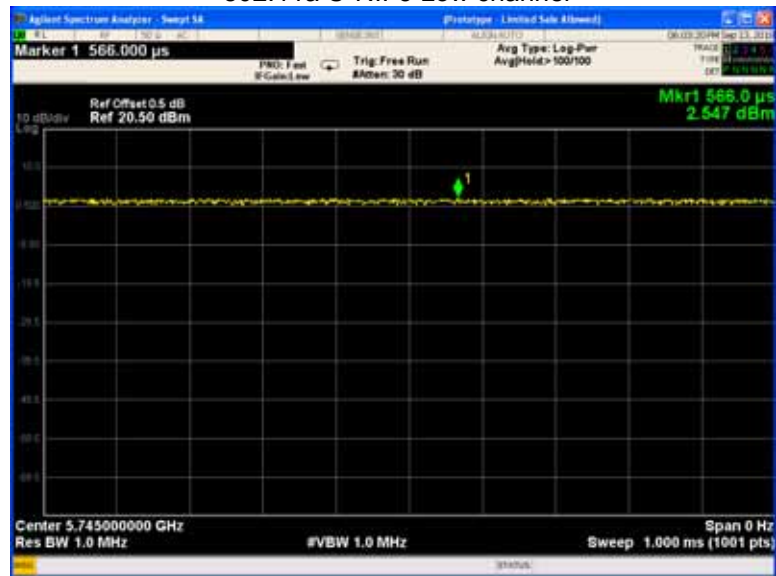
802.11ac(VHT20) U-NII-1 Low channel



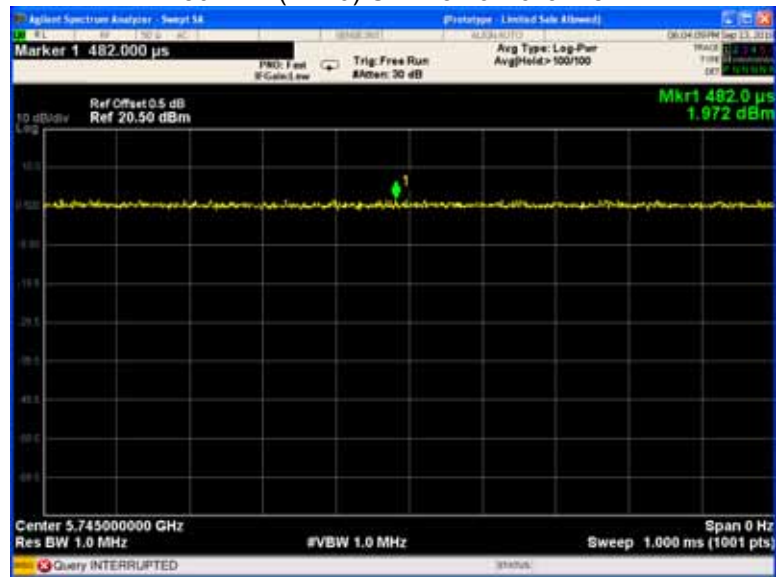
802.11ac(VHT40) U-NII-1 Low channel



802.11a U-NII-3 Low channel



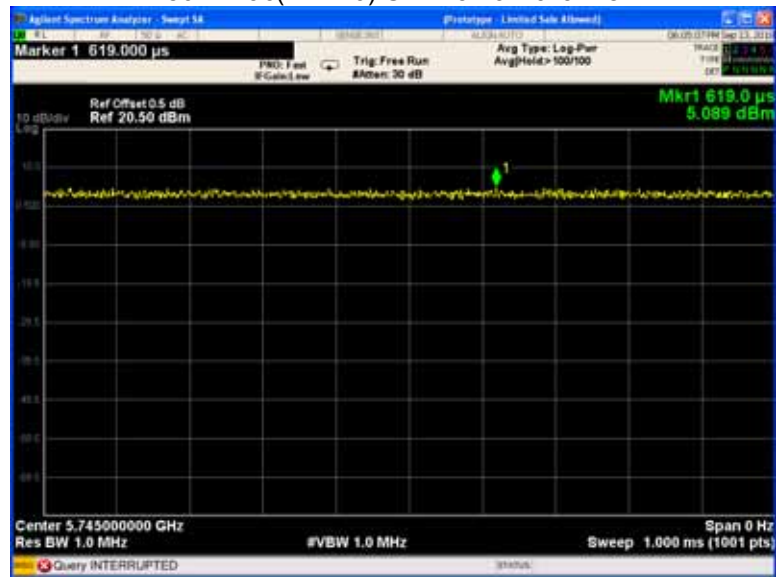
802.11n(HT20) U-NII-3 Low channel



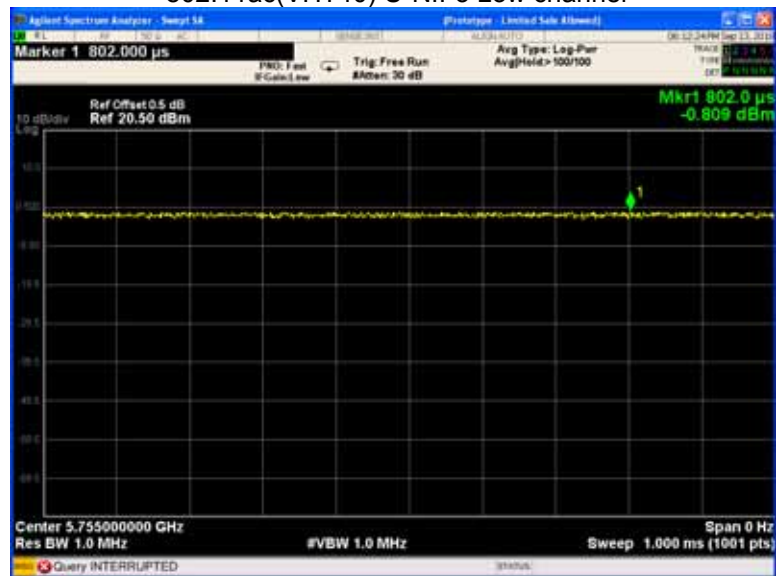
802.11n(HT40) U-NII-3 Low channel



802.11ac(VHT20) U-NII-3 Low channel

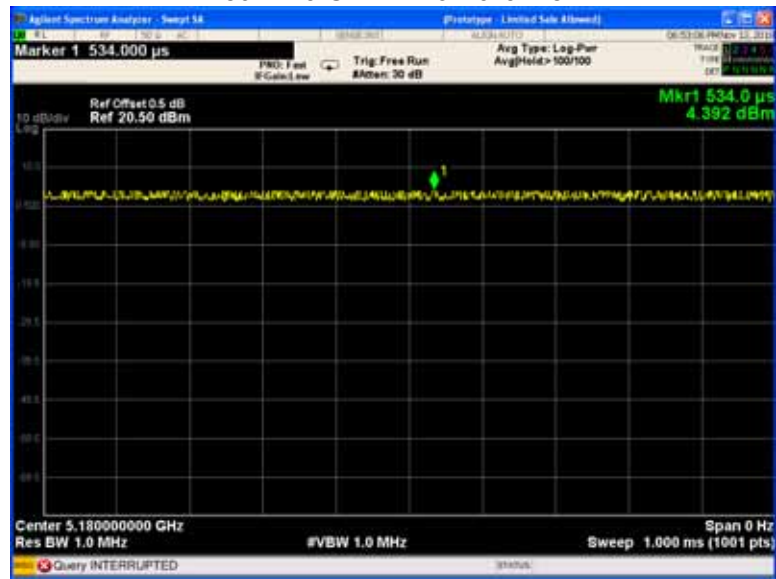


802.11ac(VHT40) U-NII-3 Low channel

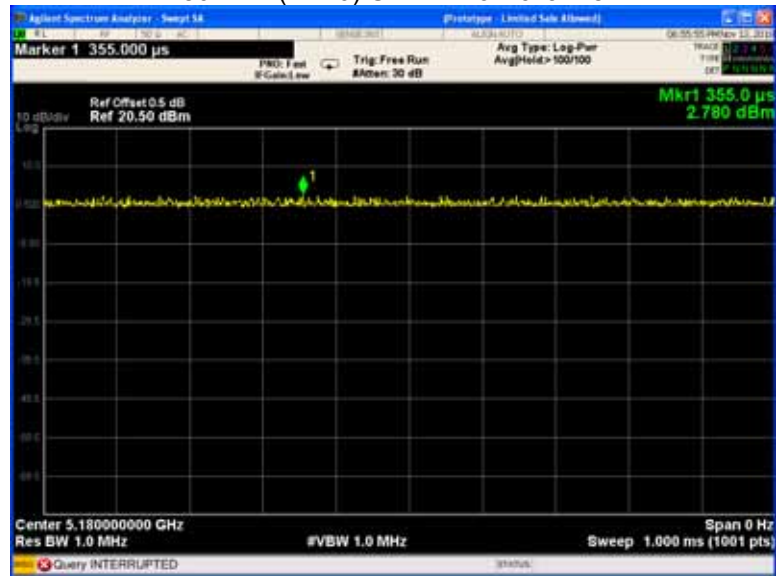


ANT4

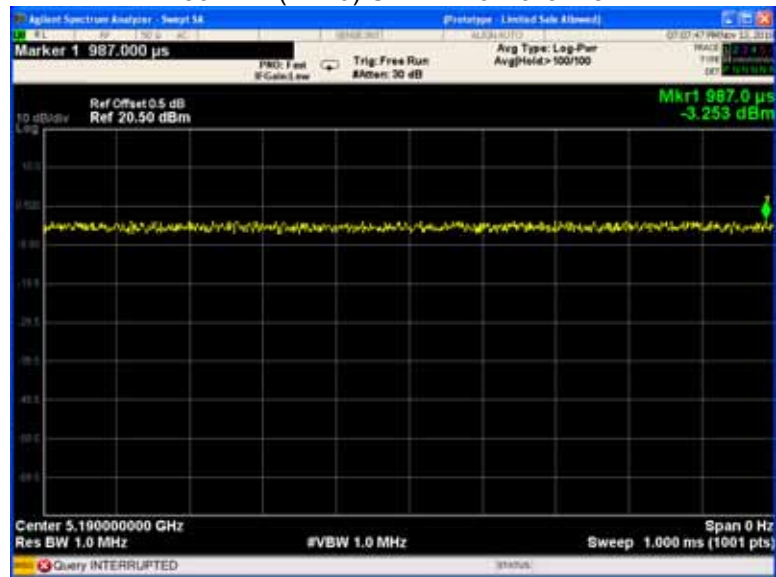
802.11a U-NII-1 Low channel



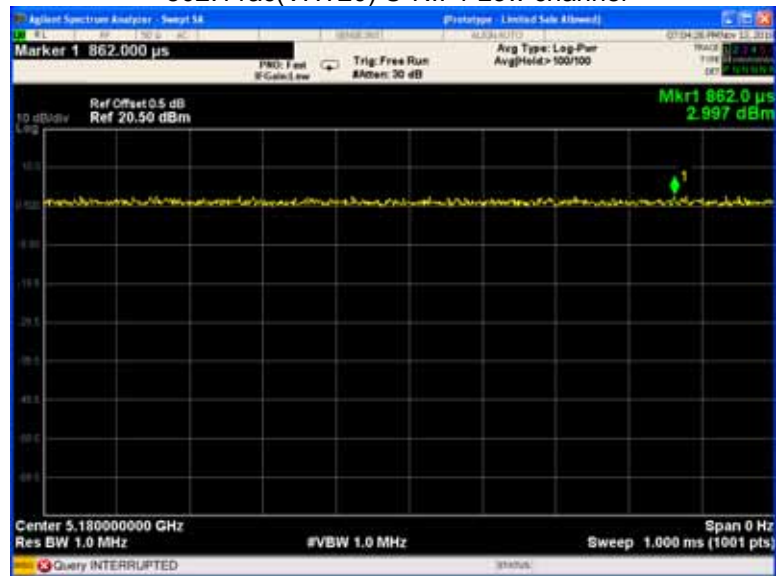
802.11n(HT20) U-NII-1 Low channel



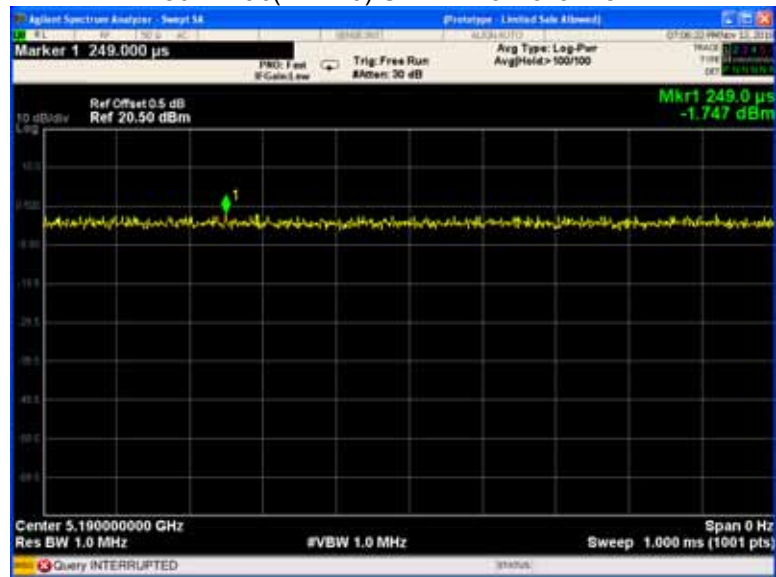
802.11n(HT40) U-NII-1 Low channel



802.11ac(VHT20) U-NII-1 Low channel



802.11ac(VHT40) U-NII-1 Low channel



802.11ac(VHT80) U-NII-1 Low channel



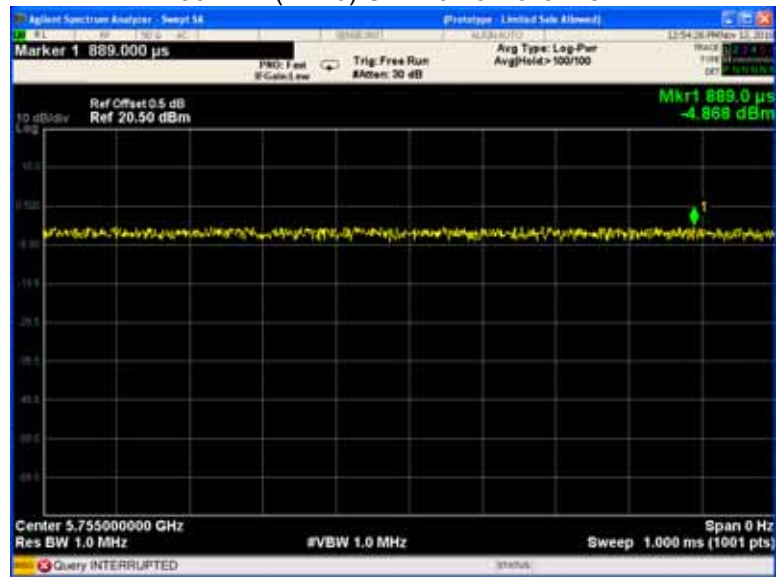
802.11a U-NII-3 Low channel



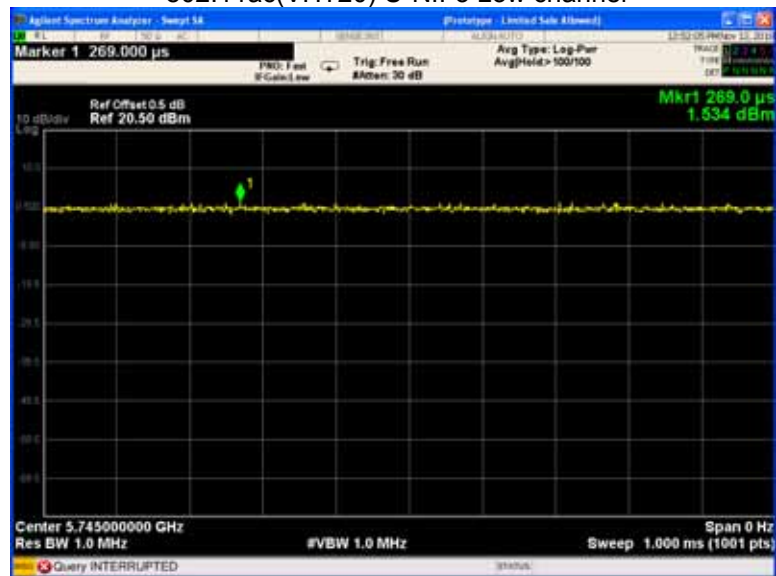
802.11n(HT20) U-NII-3 Low channel



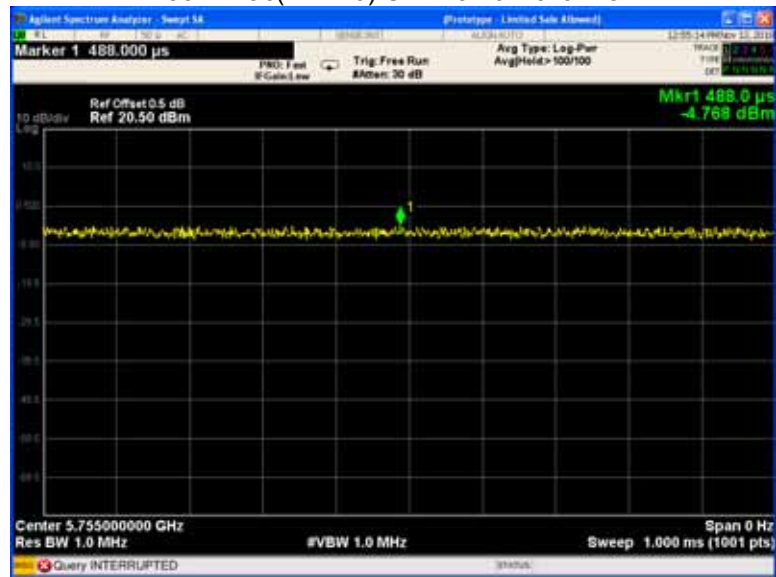
802.11n(HT40) U-NII-3 Low channel



802.11ac(VHT20) U-NII-3 Low channel



802.11ac(VHT40) U-NII-3 Low channel

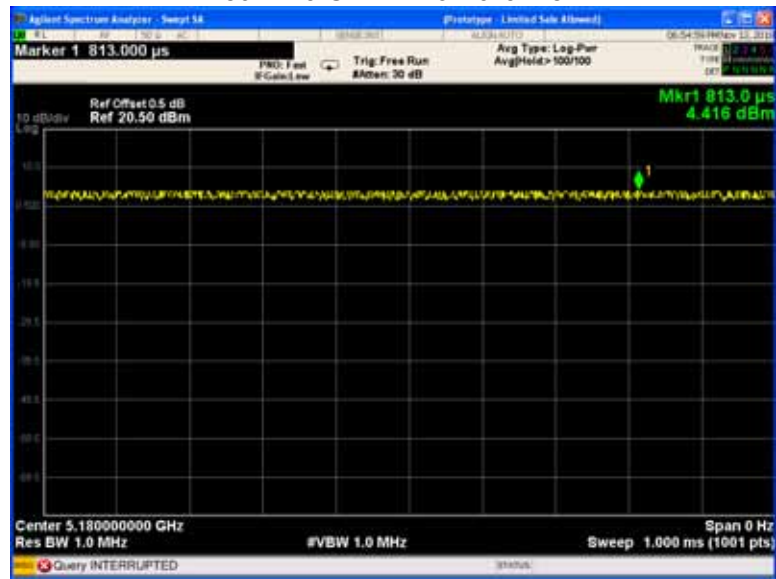


802.11ac(VHT80) U-NII-3 Low channel

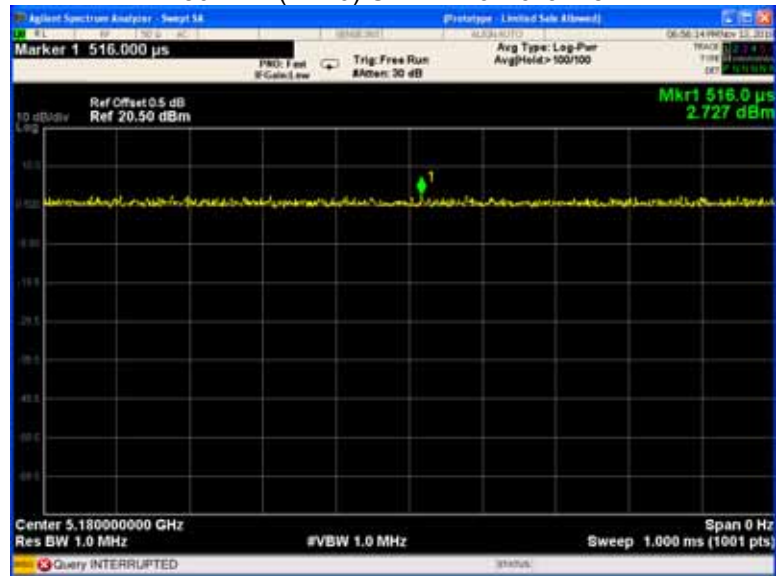


ANT5

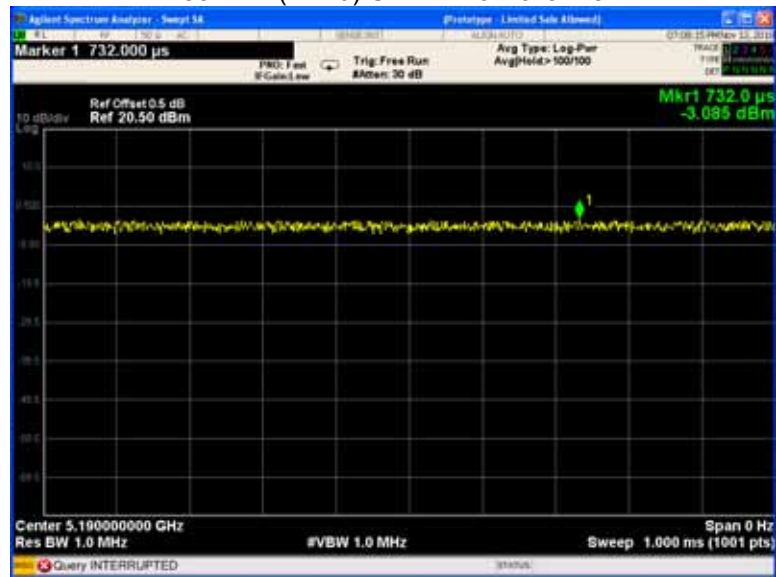
802.11a U-NII-1 Low channel



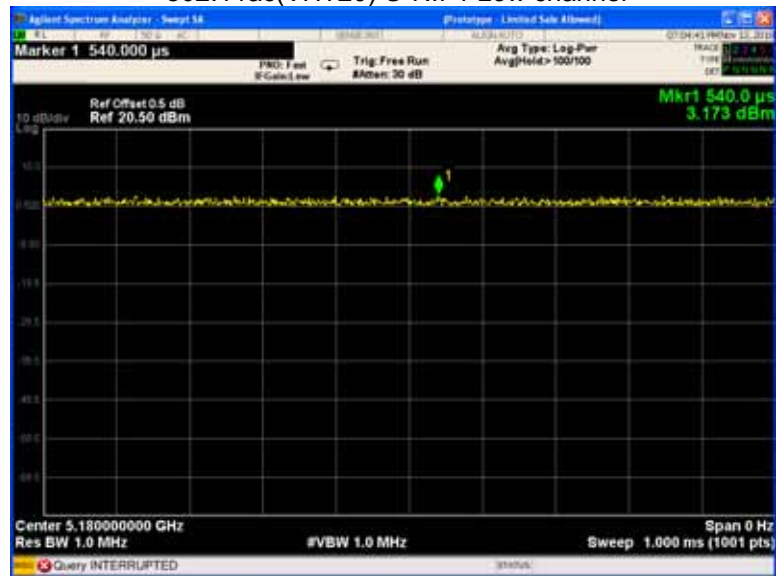
802.11n(HT20) U-NII-1 Low channel



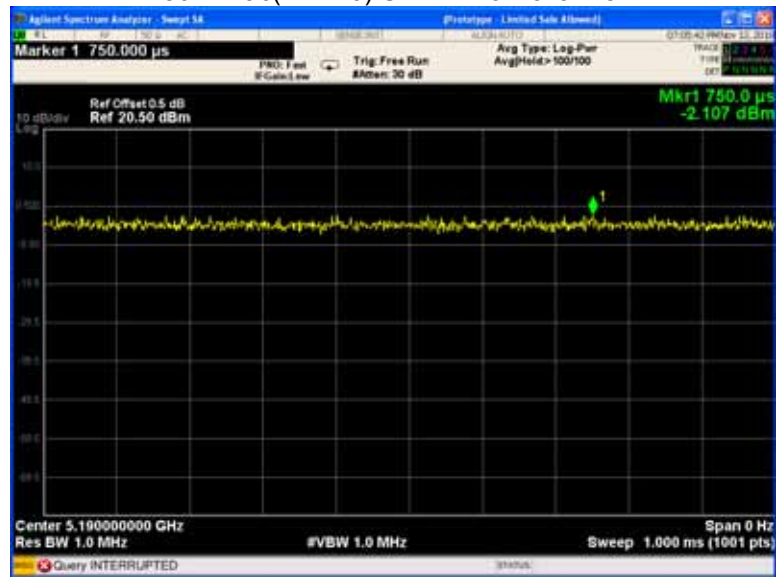
802.11n(HT40) U-NII-1 Low channel



802.11ac(VHT20) U-NII-1 Low channel



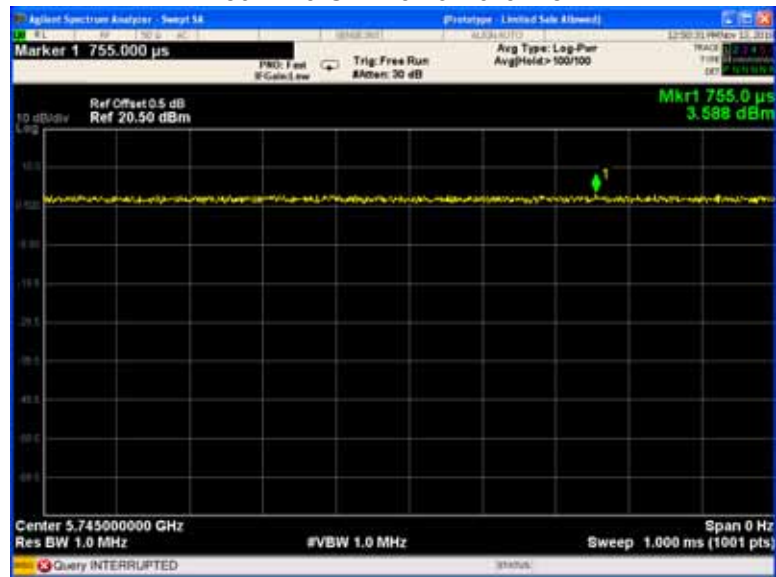
802.11ac(VHT40) U-NII-1 Low channel



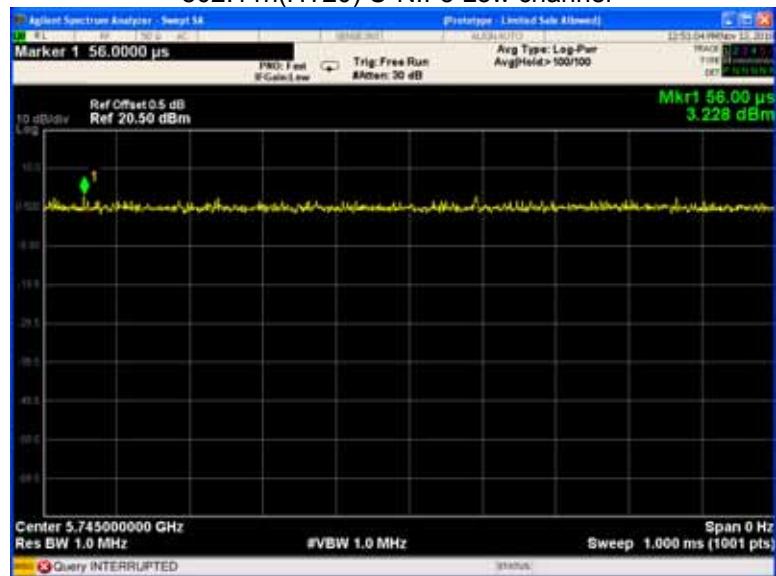
802.11ac(VHT80) U-NII-1 Low channel



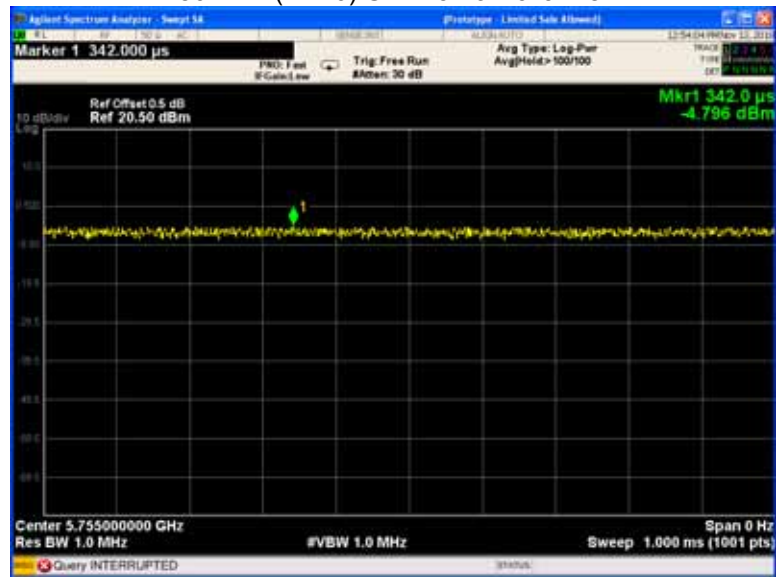
802.11a U-NII-3 Low channel



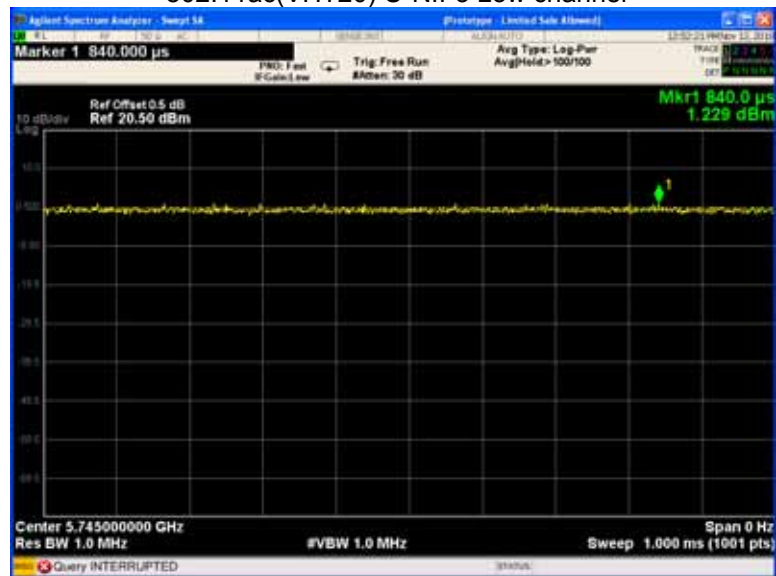
802.11n(HT20) U-NII-3 Low channel



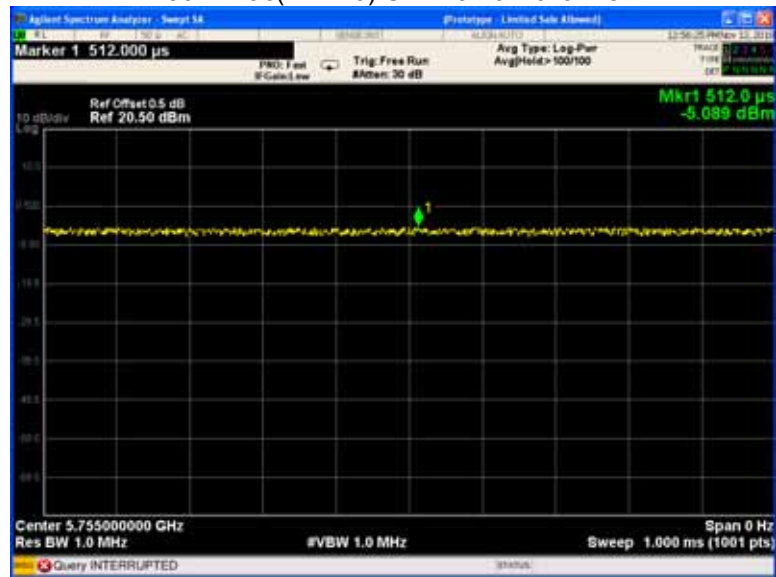
802.11n(HT40) U-NII-3 Low channel



802.11ac(VHT20) U-NII-3 Low channel



802.11ac(VHT40) U-NII-3 Low channel



802.11ac(VHT80) U-NII-3 Low channel



11 Band Edge

Test Requirement:	FCC CFR47 Part 15 Section 15.407
Test Method:	ANSI C63.10 2013
Test Limit:	(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27dBm/MHz. (2) For transmitters operating in the 5.725-5.85 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.
Test Result:	PASS

11.1 Test Produce

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

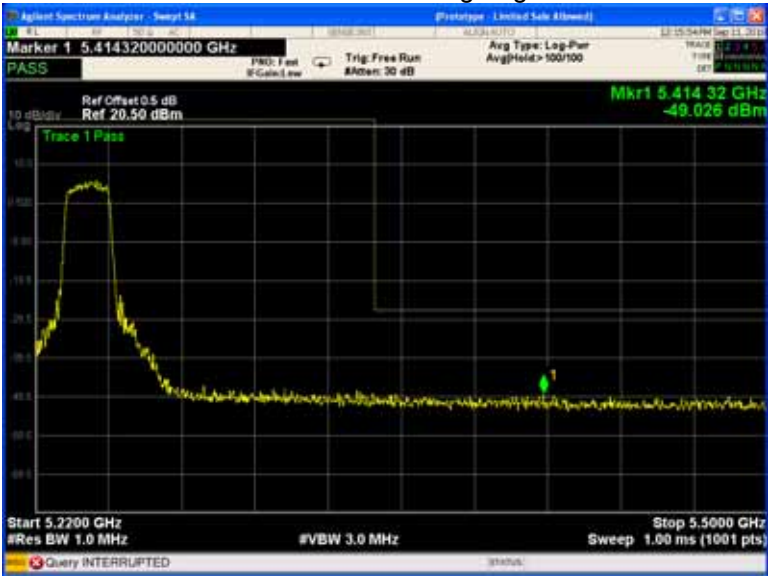
11.2 Test Result

ANT1

802.11a U-NII-1 Band edge-left side



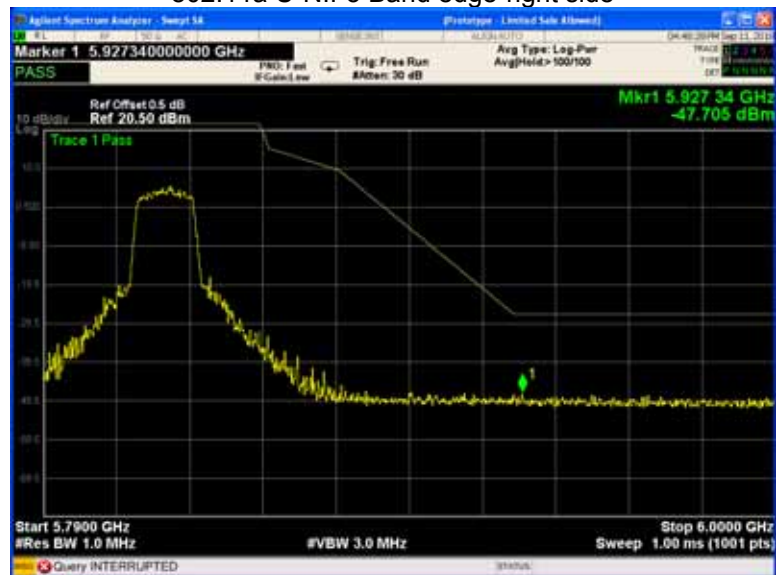
802.11a U-NII-1 Band edge-right side



802.11a U-NII-3 Band edge-left side



802.11a U-NII-3 Band edge-right side



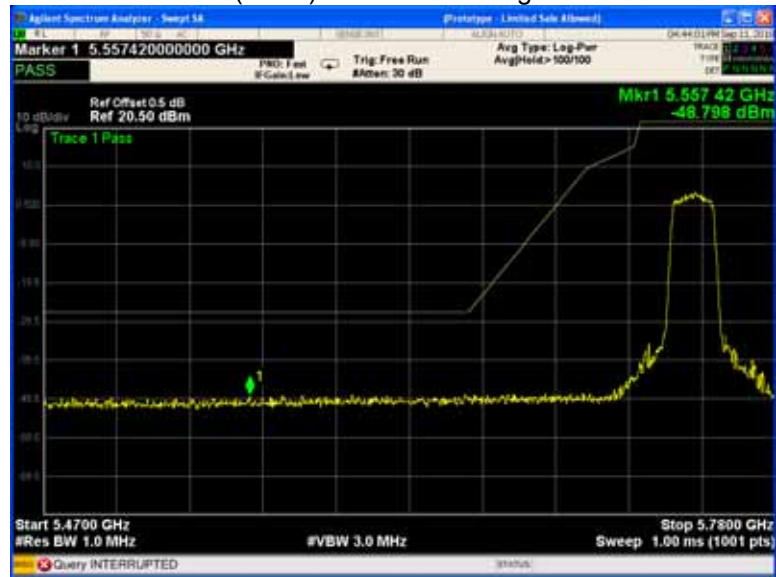
802.11n(HT20) U-NII-1 Band edge-left side



802.11n(HT20) U-NII-1 Band edge-right side



802.11n(HT20) U-NII-3 Band edge-left side



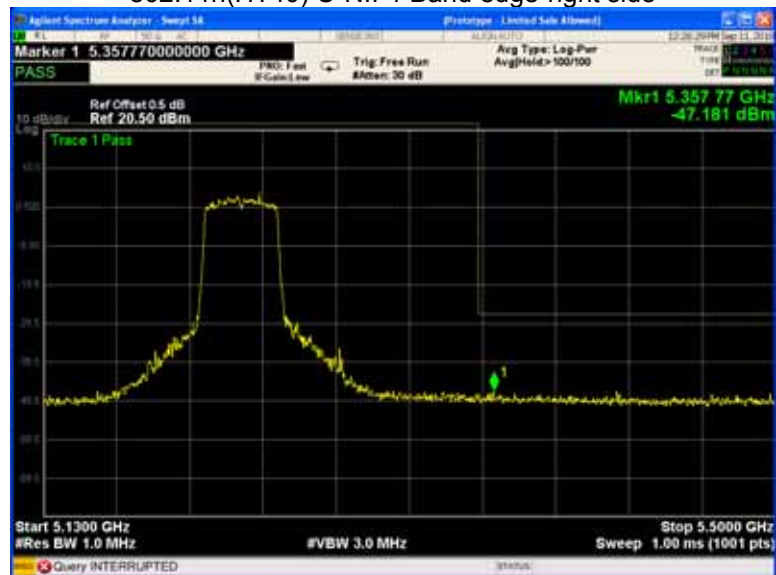
802.11n(HT20) U-NII-3 Band edge-right side



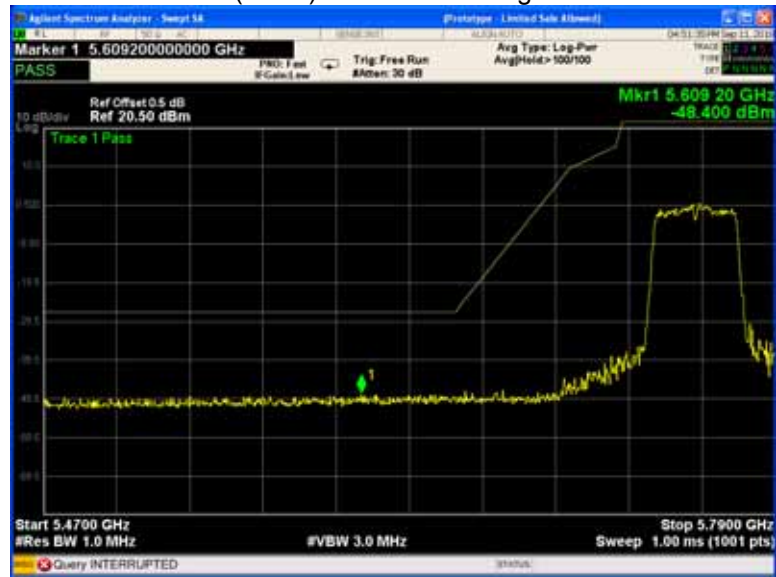
802.11n(HT40) U-NII-1 Band edge-left side



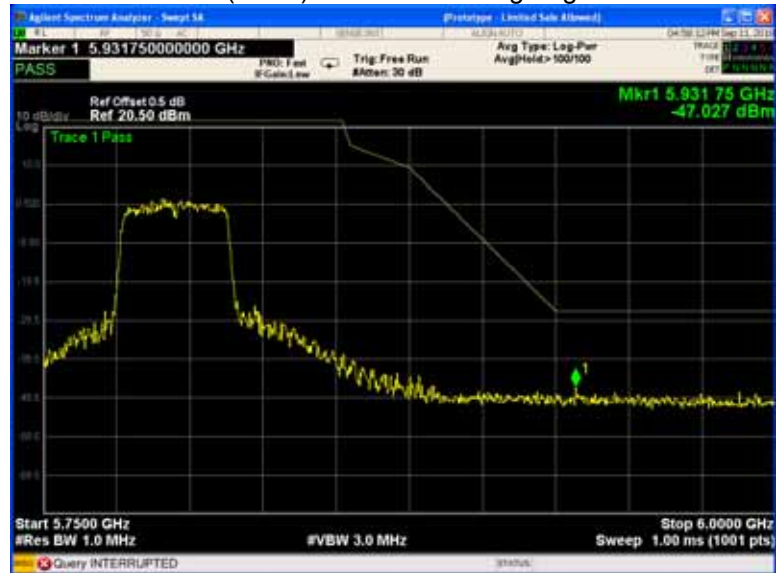
802.11n(HT40) U-NII-1 Band edge-right side



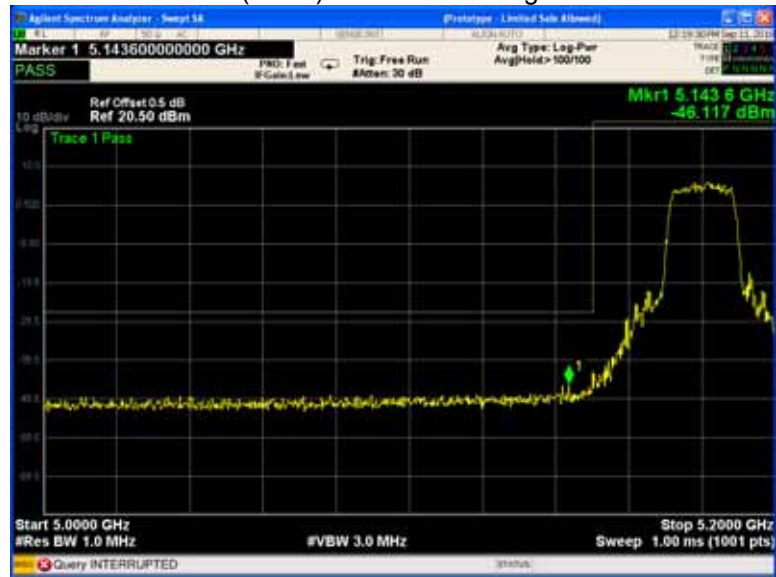
802.11n(HT40) U-NII-3 Band edge-left side



802.11n(HT40) U-NII-3 Band edge-right side



802.11ac(HT20) U-NII-1 Band edge-left side



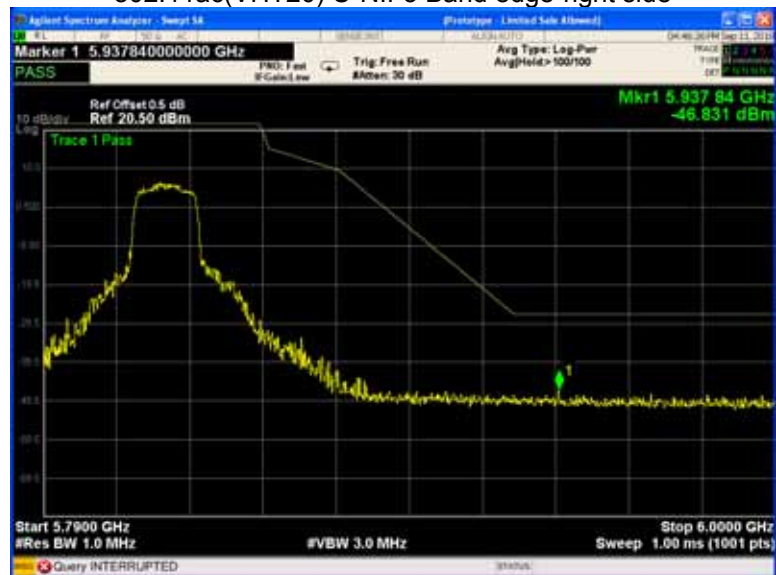
802.11ac(VHT20) U-NII-1 Band edge-right side



802.11ac(VHT20) U-NII-3 Band edge-left side



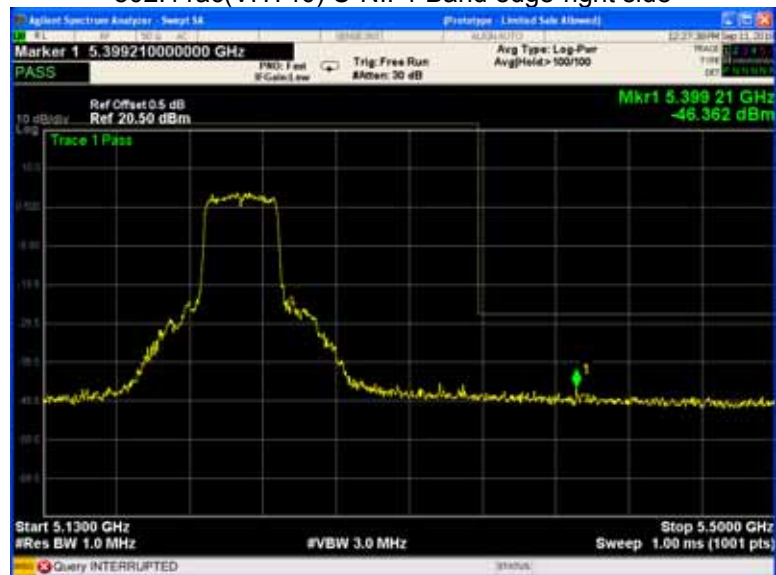
802.11ac(VHT20) U-NII-3 Band edge-right side



802.11ac(VHT40) U-NII-1 Band edge-left side



802.11ac(VHT40) U-NII-1 Band edge-right side



802.11ac(VHT40) U-NII-3 Band edge-left side



802.11ac(VHT40) U-NII-3 Band edge-right side



ANT2

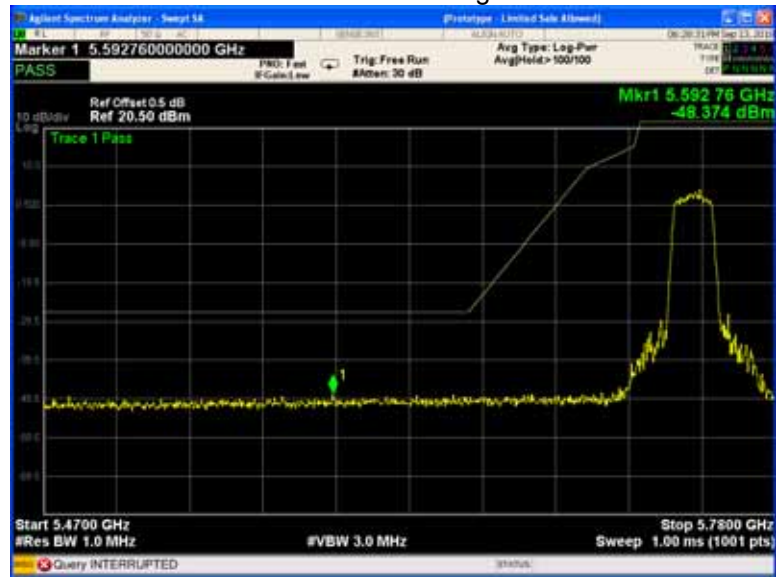
802.11a U-NII-1 Band edge-left side



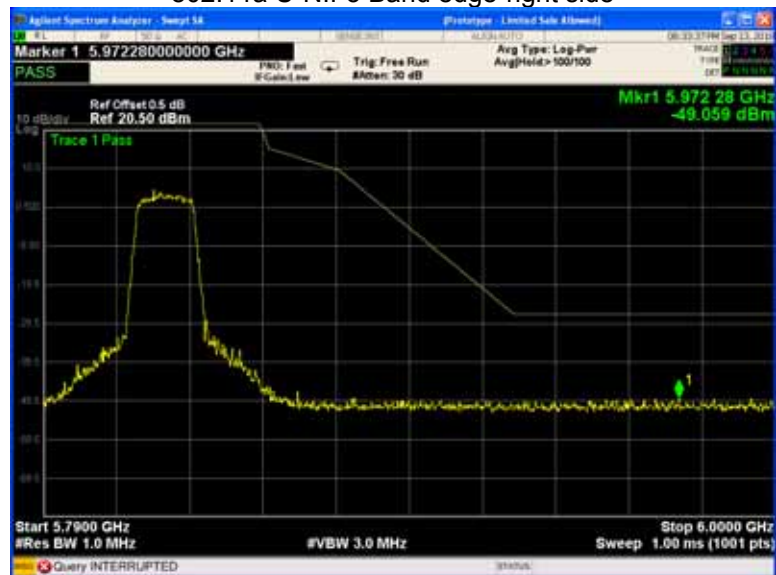
802.11a U-NII-1 Band edge-right side



802.11a U-NII-3 Band edge-left side



802.11a U-NII-3 Band edge-right side



802.11n(HT20) U-NII-1 Band edge-left side



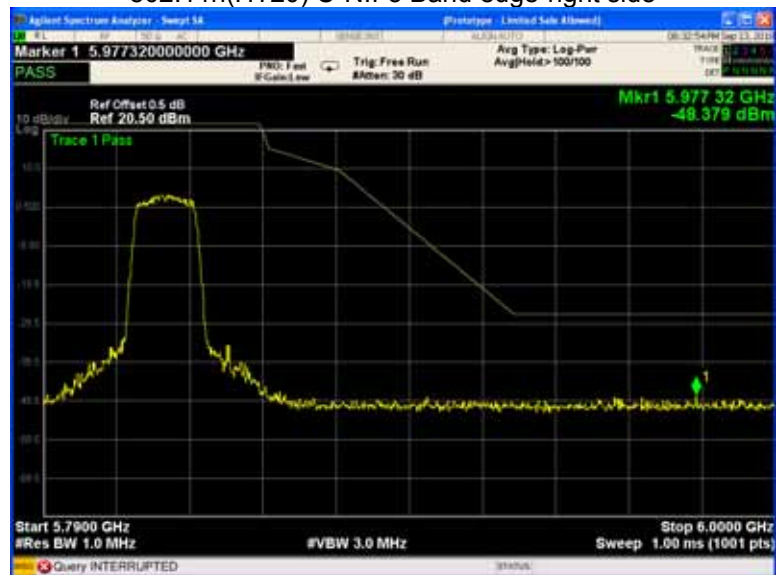
802.11n(HT20) U-NII-1 Band edge-right side



802.11n(HT20) U-NII-3 Band edge-left side



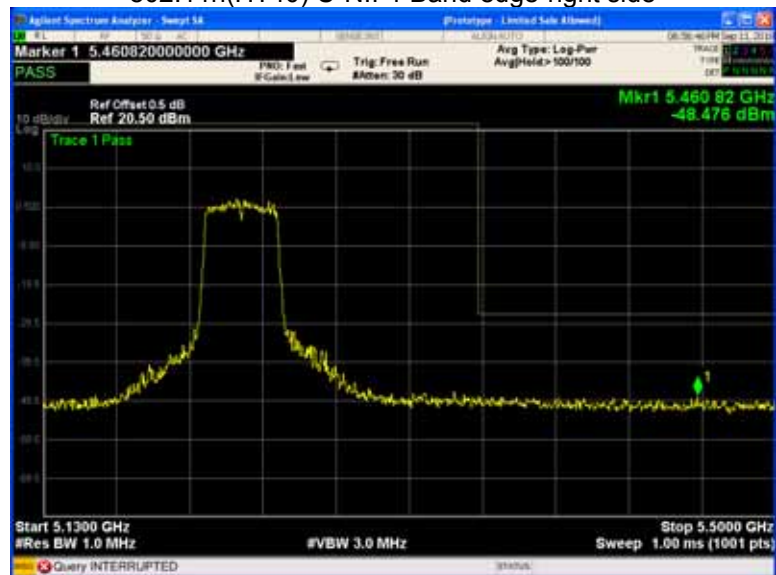
802.11n(HT20) U-NII-3 Band edge-right side



802.11n(HT40) U-NII-1 Band edge-left side



802.11n(HT40) U-NII-1 Band edge-right side



802.11n(HT40) U-NII-3 Band edge-left side



802.11n(HT40) U-NII-3 Band edge-right side



802.11ac(VHT20) U-NII-1 Band edge-left side



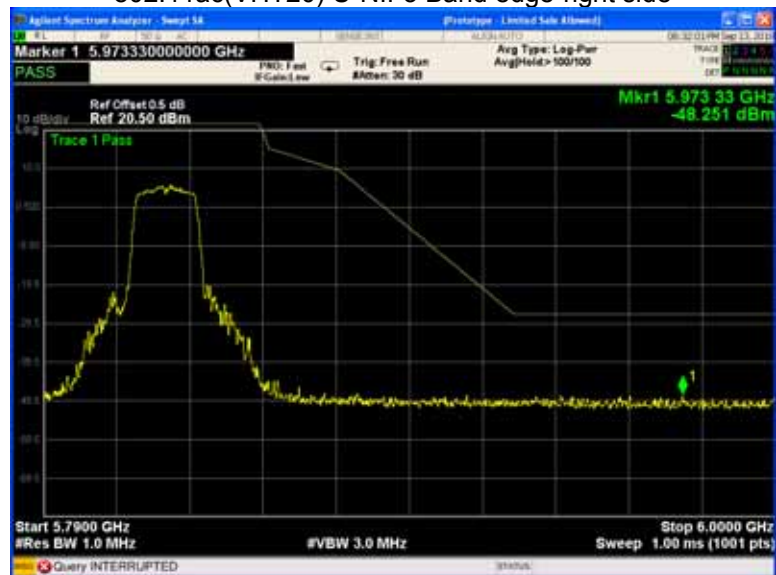
802.11ac(VHT20) U-NII-1 Band edge-right side



802.11ac(VHT20) U-NII-3 Band edge-left side



802.11ac(VHT20) U-NII-3 Band edge-right side



802.11ac(VHT40) U-NII-1 Band edge-left side



802.11ac(VHT40) U-NII-1 Band edge-right side



802.11ac(VHT40) U-NII-3 Band edge-left side



802.11ac(VHT40) U-NII-3 Band edge-right side



ANT4

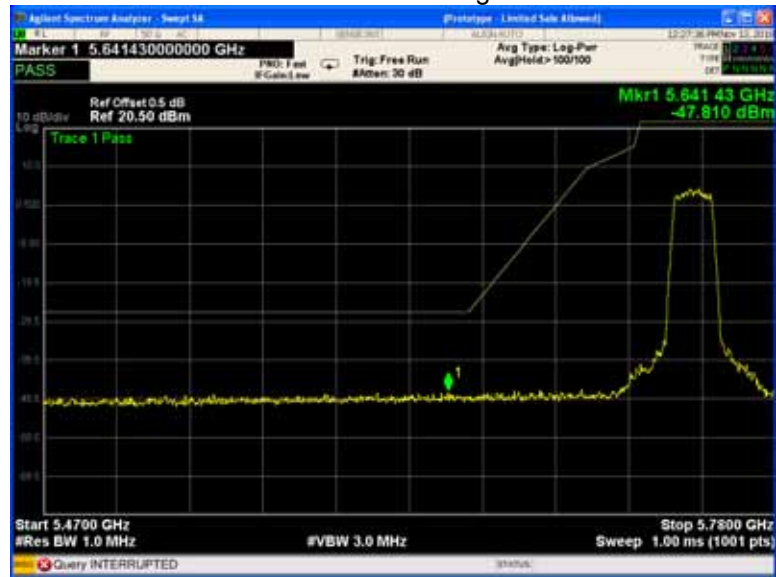
802.11a U-NII-1 Band edge-left side



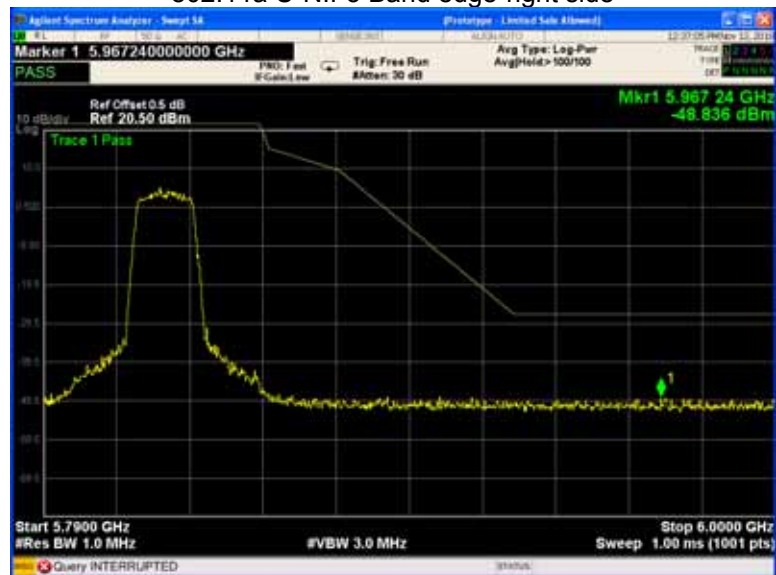
802.11a U-NII-1 Band edge-right side



802.11a U-NII-3 Band edge-left side



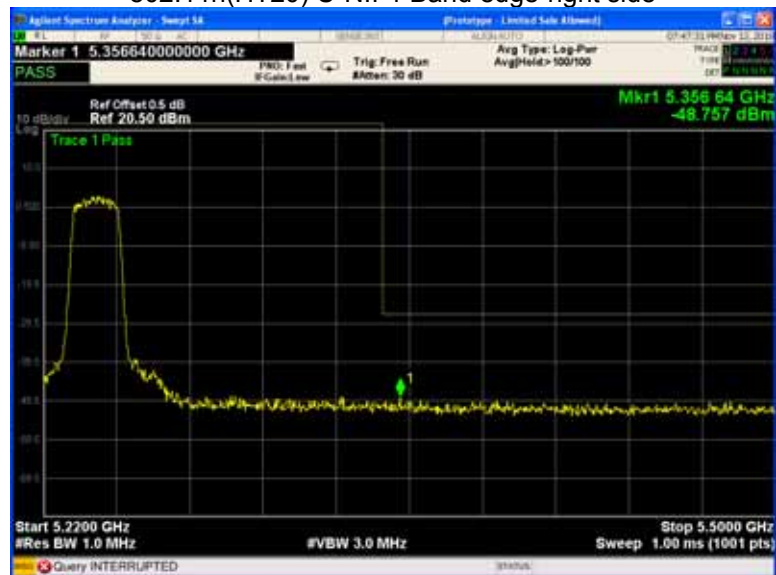
802.11a U-NII-3 Band edge-right side



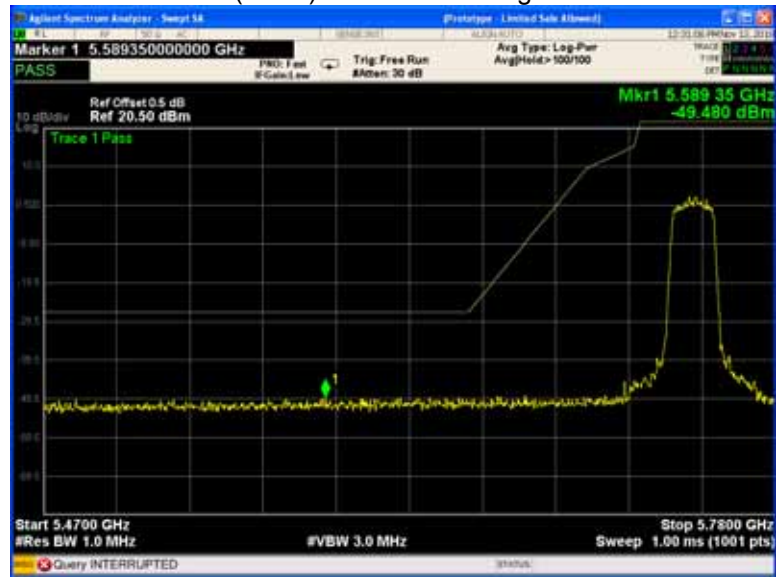
802.11n(HT20) U-NII-1 Band edge-left side



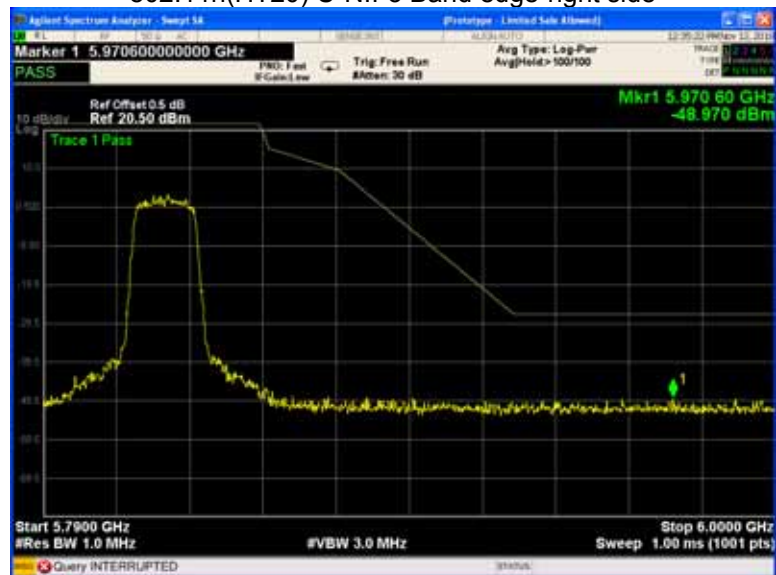
802.11n(HT20) U-NII-1 Band edge-right side



802.11n(HT20) U-NII-3 Band edge-left side



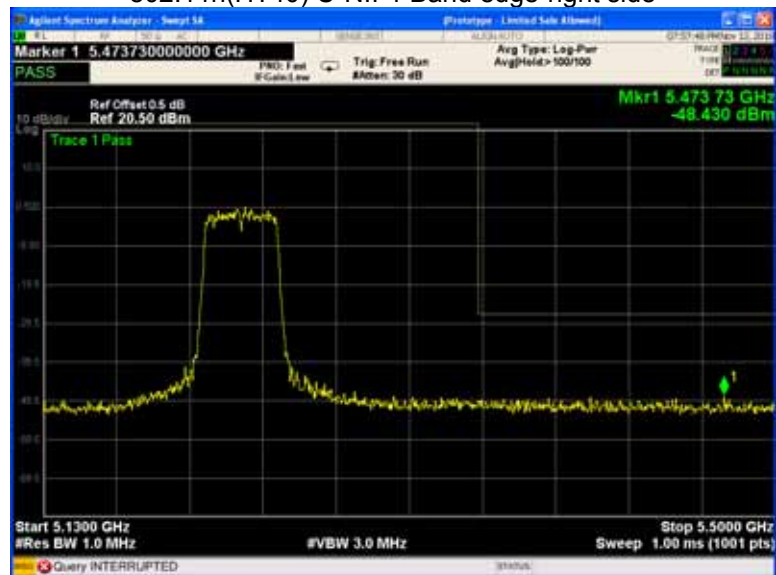
802.11n(HT20) U-NII-3 Band edge-right side



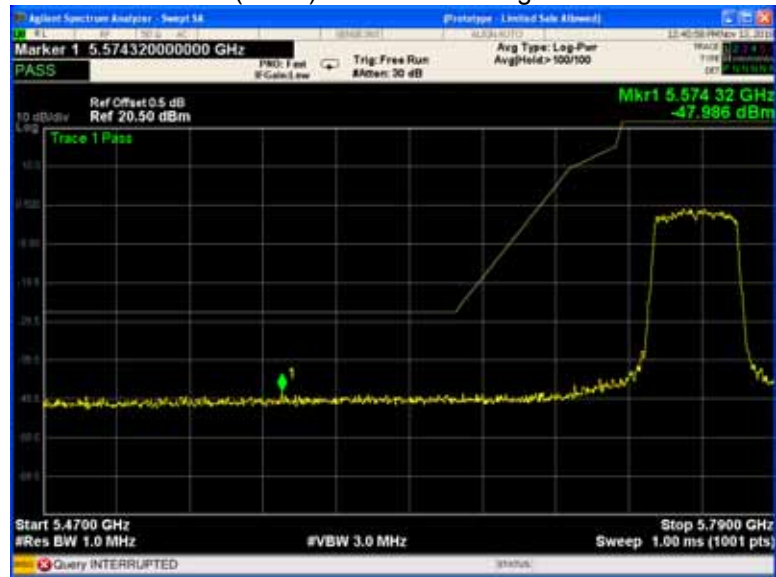
802.11n(HT40) U-NII-1 Band edge-left side



802.11n(HT40) U-NII-1 Band edge-right side



802.11n(HT40) U-NII-3 Band edge-left side



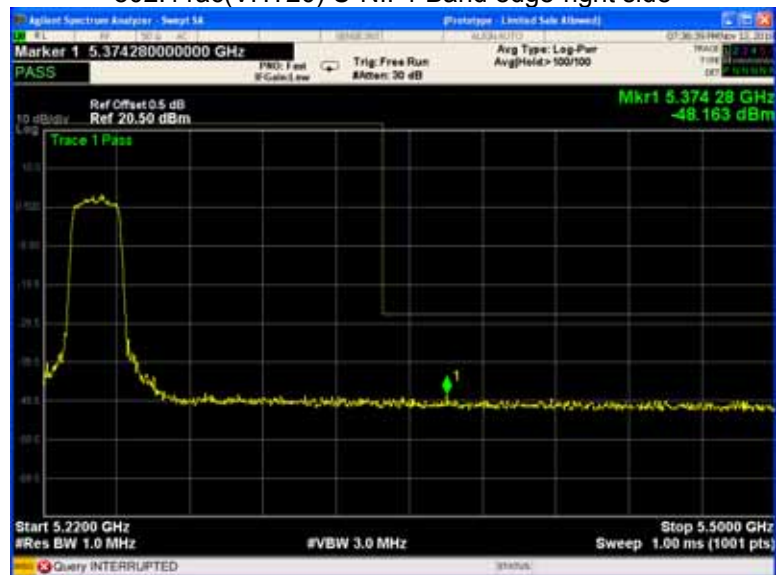
802.11n(HT40) U-NII-3 Band edge-right side



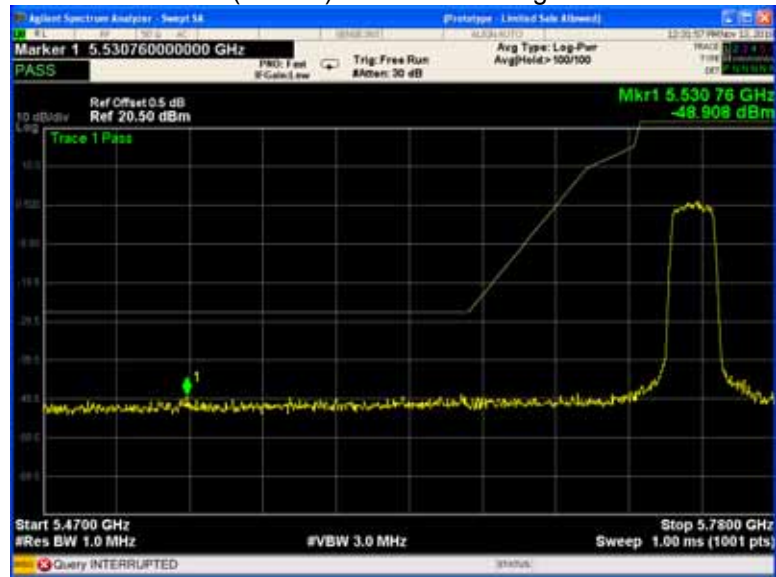
802.11ac(VHT20) U-NII-1 Band edge-left side



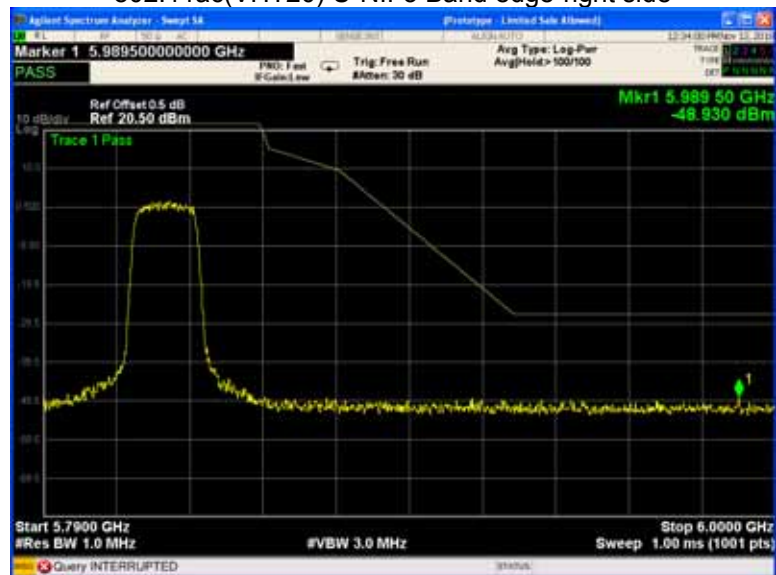
802.11ac(VHT20) U-NII-1 Band edge-right side



802.11ac(VHT20) U-NII-3 Band edge-left side



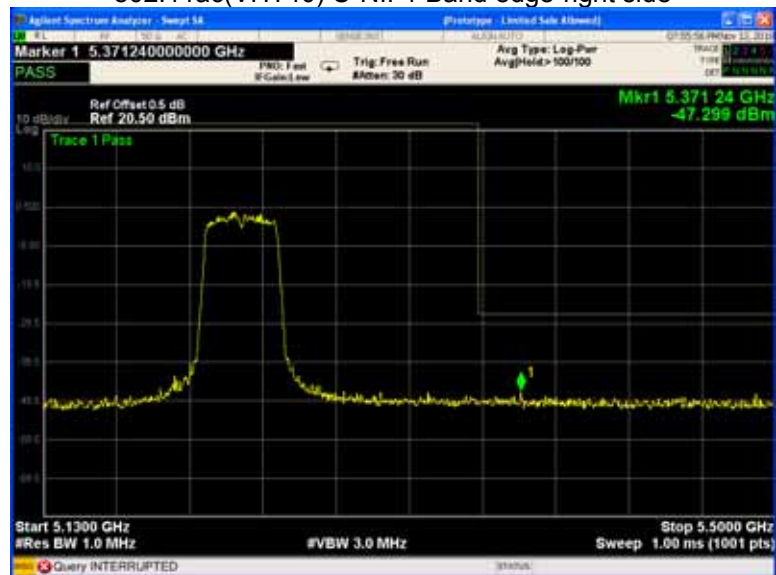
802.11ac(VHT20) U-NII-3 Band edge-right side



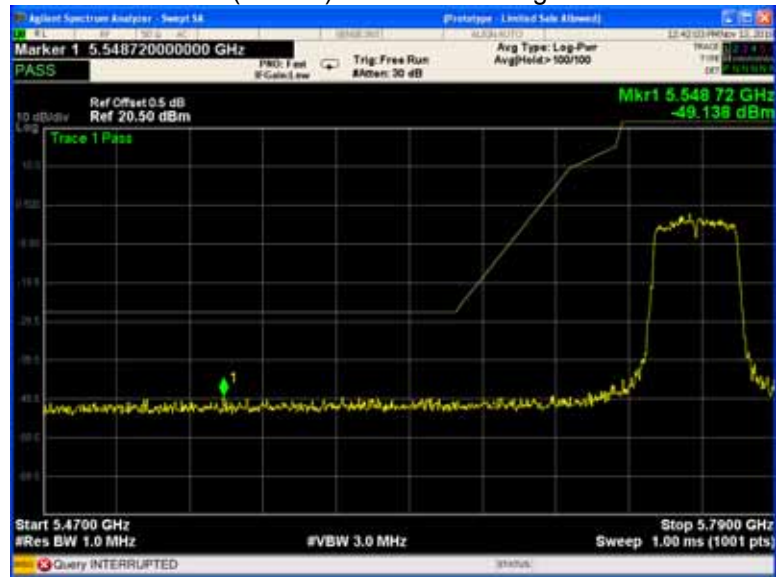
802.11ac(VHT40) U-NII-1 Band edge-left side



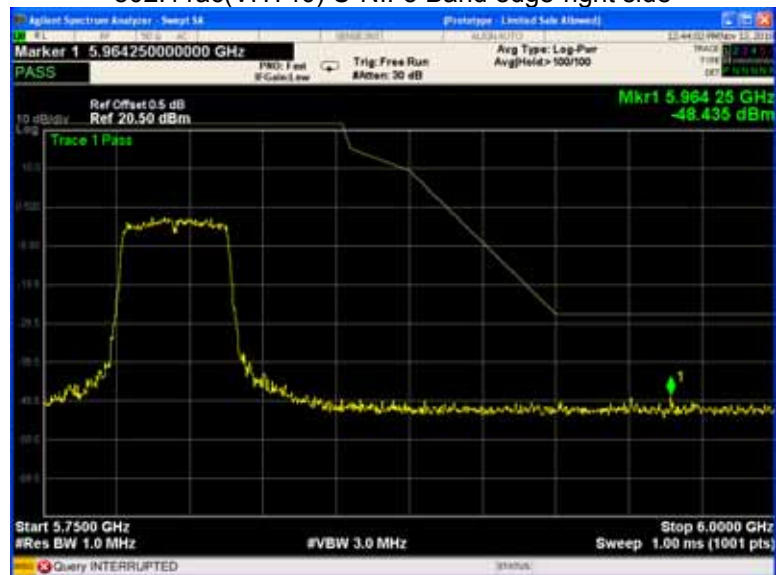
802.11ac(VHT40) U-NII-1 Band edge-right side



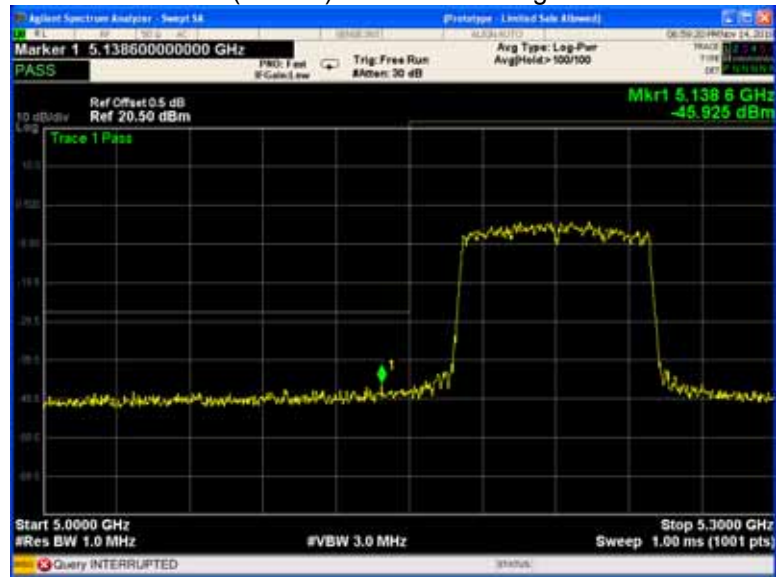
802.11ac(VHT40) U-NII-3 Band edge-left side



802.11ac(VHT40) U-NII-3 Band edge-right side



802.11ac(VHT80) U-NII-1 Band edge-left side



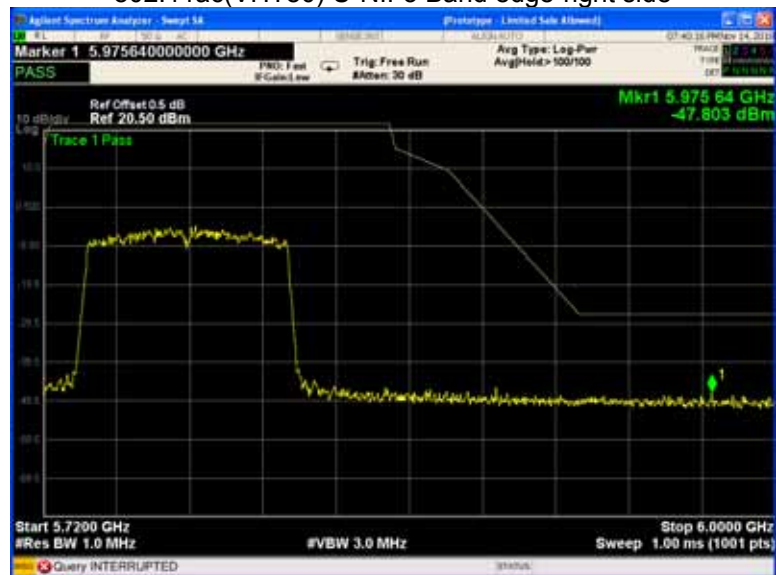
802.11ac(VHT80) U-NII-1 Band edge-right side



802.11ac(VHT80) U-NII-3 Band edge-left side

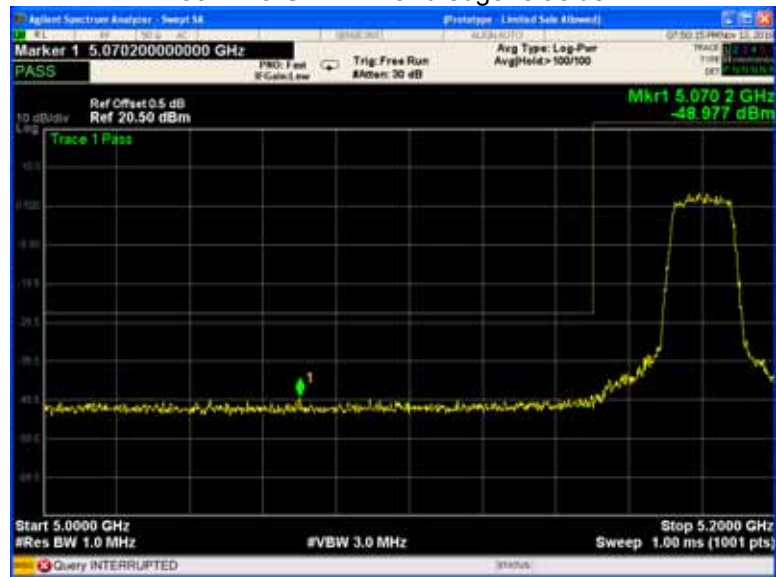


802.11ac(VHT80) U-NII-3 Band edge-right side



ANT5

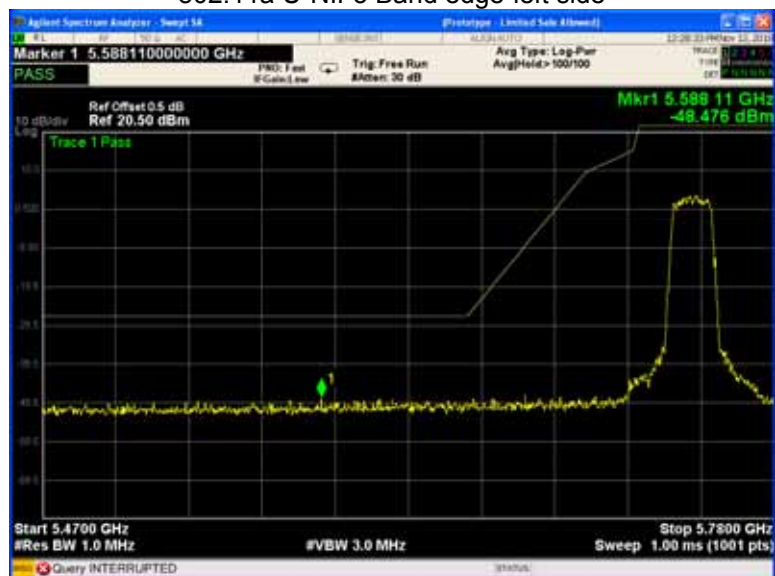
802.11a U-NII-1 Band edge-left side



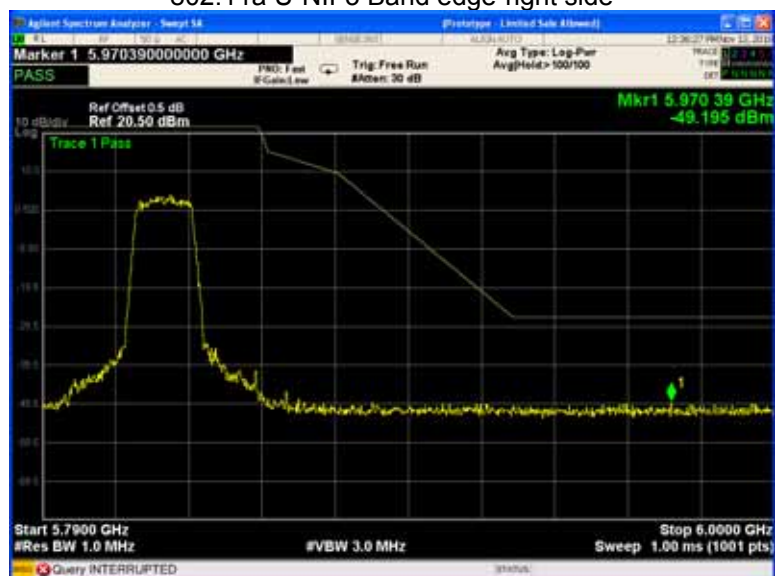
802.11a U-NII-1 Band edge-right side



802.11a U-NII-3 Band edge-left side



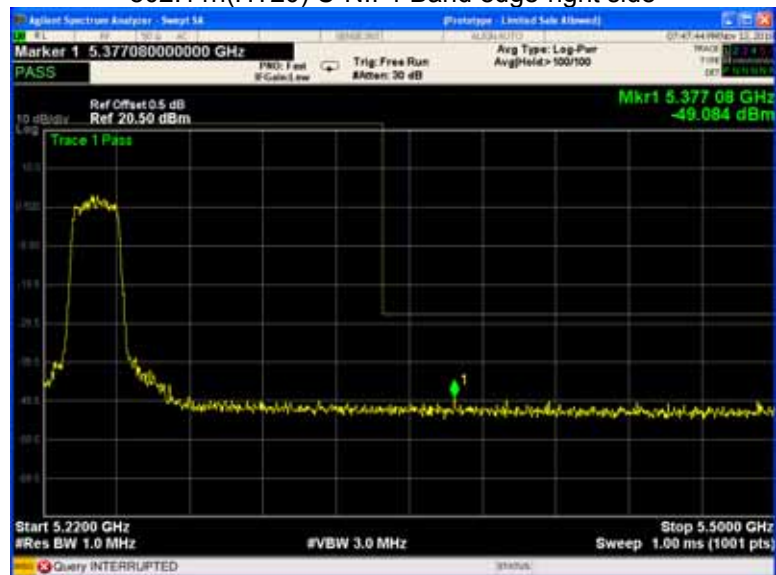
802.11a U-NII-3 Band edge-right side



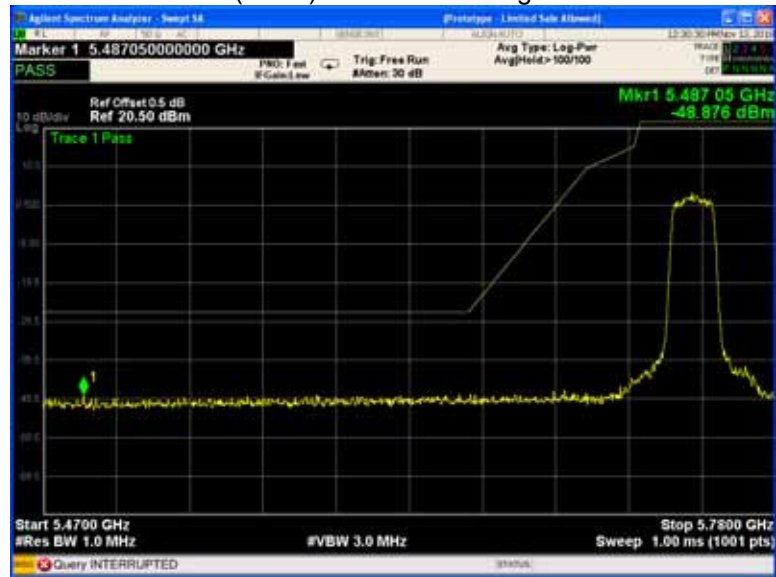
802.11n(HT20) U-NII-1 Band edge-left side



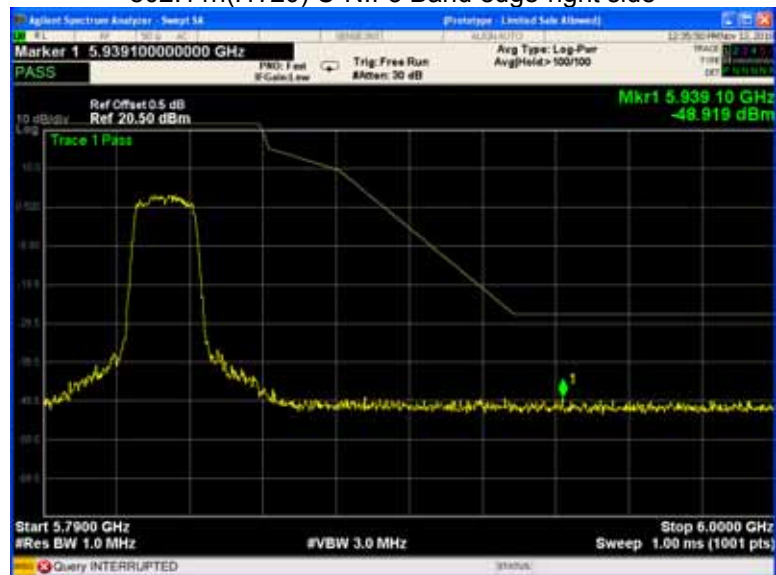
802.11n(HT20) U-NII-1 Band edge-right side



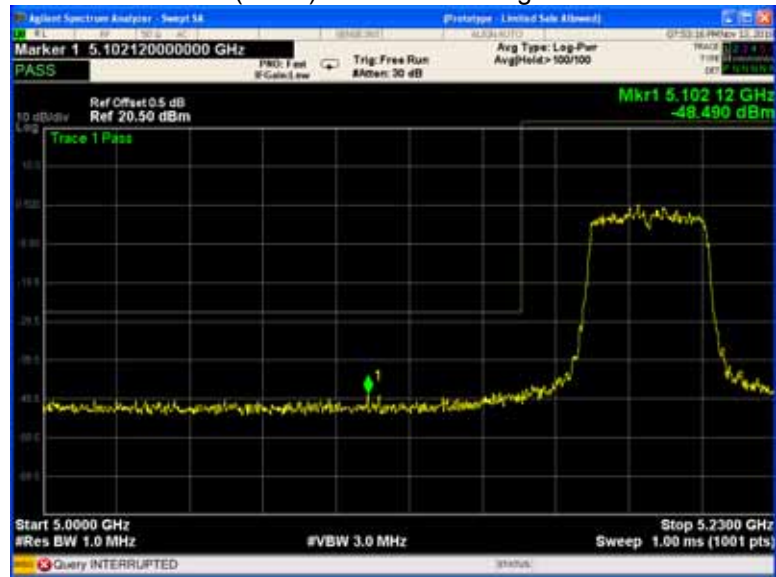
802.11n(HT20) U-NII-3 Band edge-left side



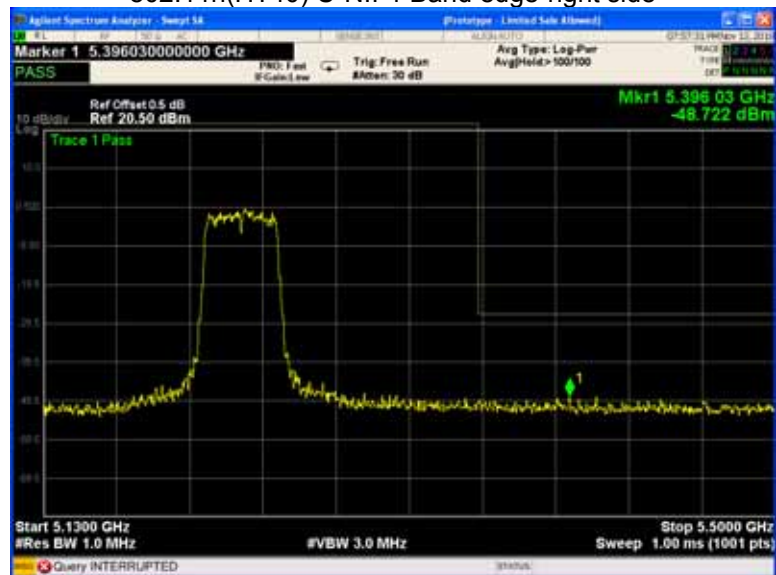
802.11n(HT20) U-NII-3 Band edge-right side



802.11n(HT40) U-NII-1 Band edge-left side



802.11n(HT40) U-NII-1 Band edge-right side



802.11n(HT40) U-NII-3 Band edge-left side



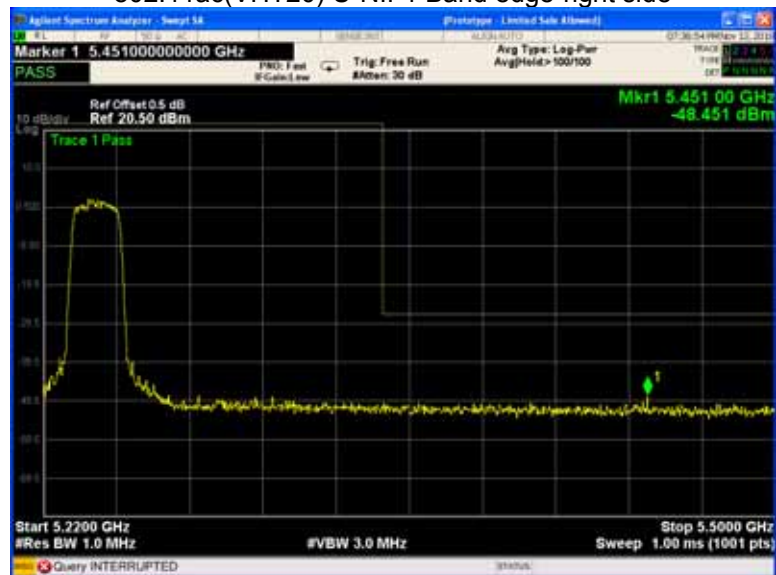
802.11n(HT40) U-NII-3 Band edge-right side



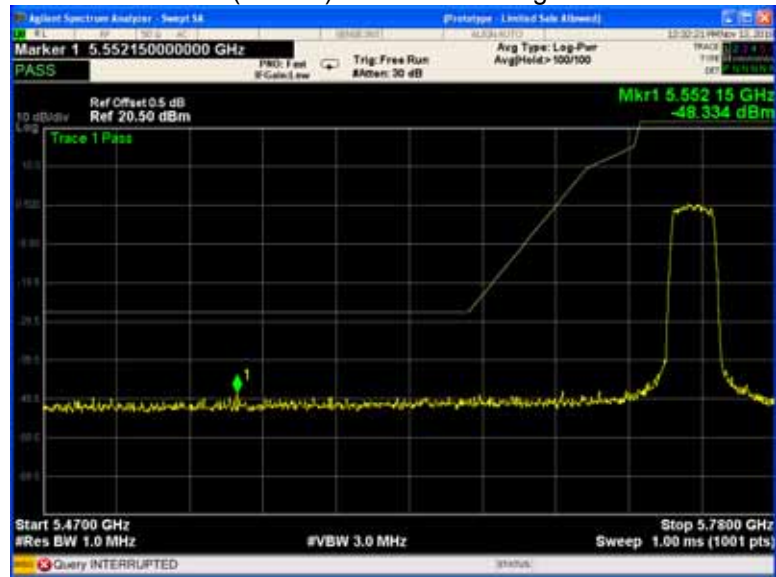
802.11ac(VHT20) U-NII-1 Band edge-left side



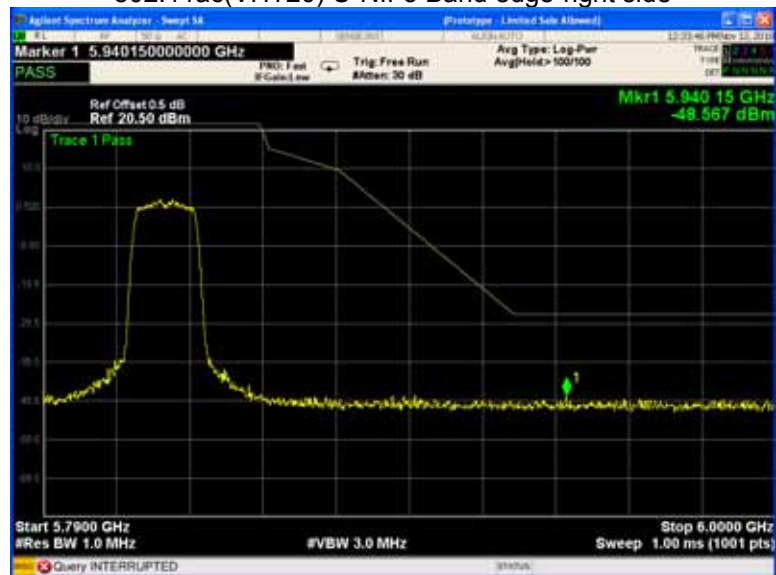
802.11ac(VHT20) U-NII-1 Band edge-right side



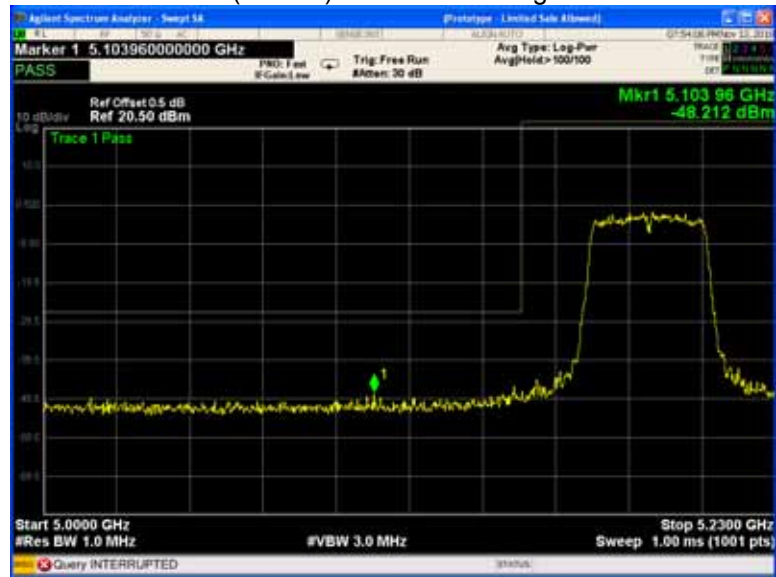
802.11ac(VHT20) U-NII-3 Band edge-left side



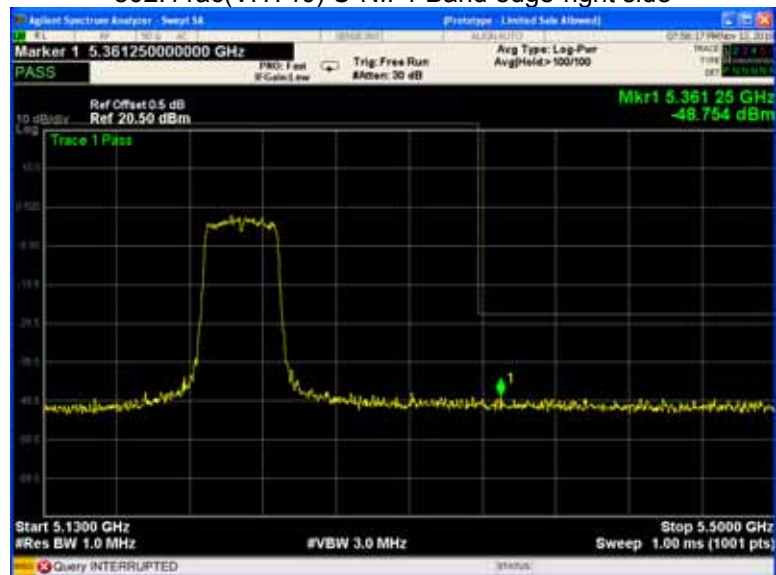
802.11ac(VHT20) U-NII-3 Band edge-right side



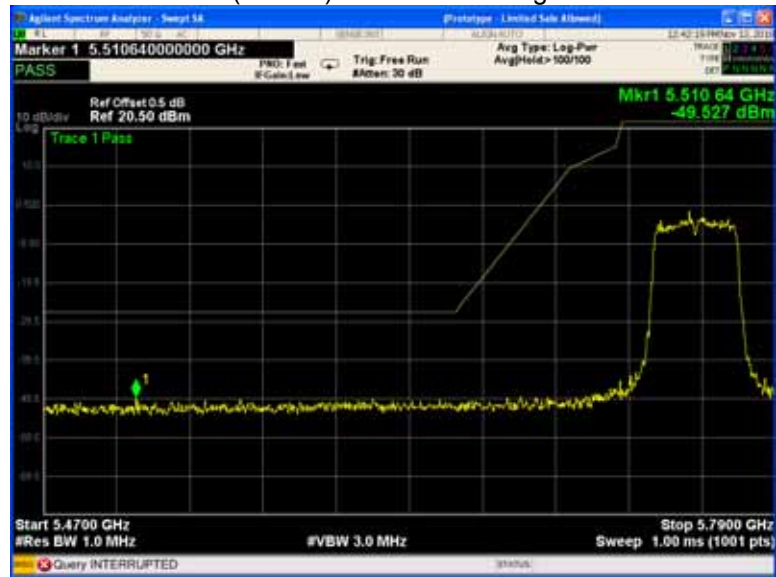
802.11ac(VHT40) U-NII-1 Band edge-left side



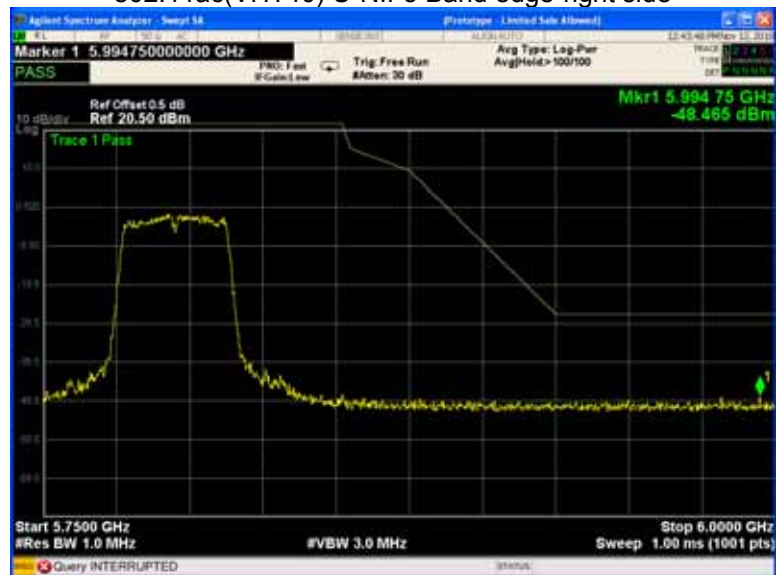
802.11ac(VHT40) U-NII-1 Band edge-right side



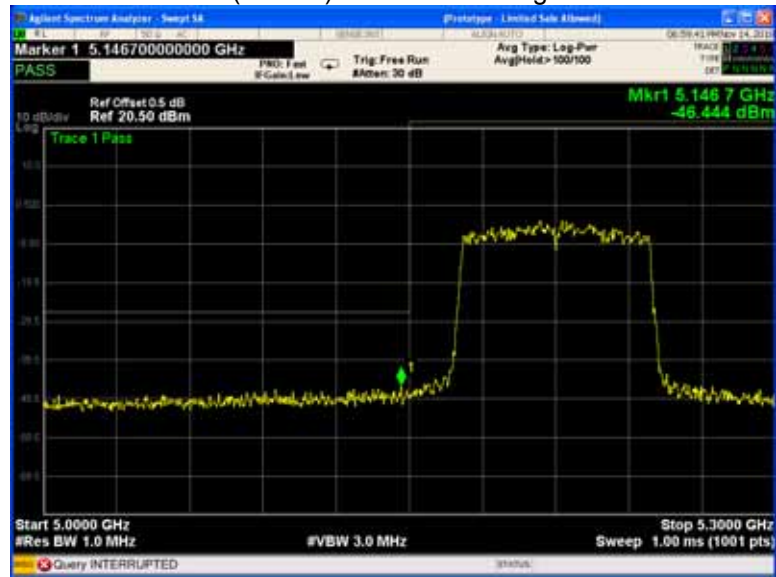
802.11ac(VHT40) U-NII-3 Band edge-left side



802.11ac(VHT40) U-NII-3 Band edge-right side



802.11ac(VHT80) U-NII-1 Band edge-left side



802.11ac(VHT80) U-NII-1 Band edge-right side



802.11ac(VHT80) U-NII-3 Band edge-left side



802.11ac(VHT80) U-NII-3 Band edge-right side



12 6 dB Bandwidth

Test Requirement:	FCC CFR47 Part 15 Section 15.407(e)
Test Method:	KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section C
Test Limit:	≥ 500 kHz
Test Result:	PASS

12.1 Test Procedure:

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum;
2. Set the spectrum analyzer: RBW = 100kHz, VBW = 300kHz

12.2 Test Result:

Module 1				
Band	Operation mode	6 dB Bandwidth (MHz)		
		Low	Middle	High
ANT1 U-NII-3	802.11a	16.41	16.41	16.47
	802.11n(HT20)	17.49	16.95	17.16
	802.11n(HT40)	36.21	/	36.22
	802.11ac(VHT20)	16.98	17.01	16.89
	802.11ac(VHT40)	35.88	/	36.00
ANT2 U-NII-3	802.11a	16.38	16.35	16.41
	802.11n(HT20)	16.68	16.68	16.86
	802.11n(HT40)	35.76	/	36.36
	802.11ac(VHT20)	17.07	17.19	17.07
	802.11ac(VHT40)	35.16	/	35.16
Module 2				
Band	Operation mode	6 dB Bandwidth (MHz)		
		Low	Middle	High
ANT4 U-NII-3	802.11a	16.41	16.38	16.32
	802.11n(HT20)	17.04	16.95	17.16
	802.11n(HT40)	35.88	/	35.70
	802.11ac(VHT20)	17.49	17.52	17.49
	802.11ac(VHT40)	35.58	/	35.64
	802.11ac(VHT80)	75.72	/	/
ANT5 U-NII-3	802.11a	16.44	16.32	16.41
	802.11n(HT20)	17.25	16.98	16.92
	802.11n(HT40)	35.94	/	36.12
	802.11ac(VHT20)	17.19	17.61	17.52
	802.11ac(VHT40)	35.46	/	35.28
	802.11ac(VHT80)	75.96	/	/

Test result plots shown as follows:

ANT1

802.11a U-NII-3 Low channel



802.11a U-NII-3 Middle channel



802.11a U-NII-3 High channel



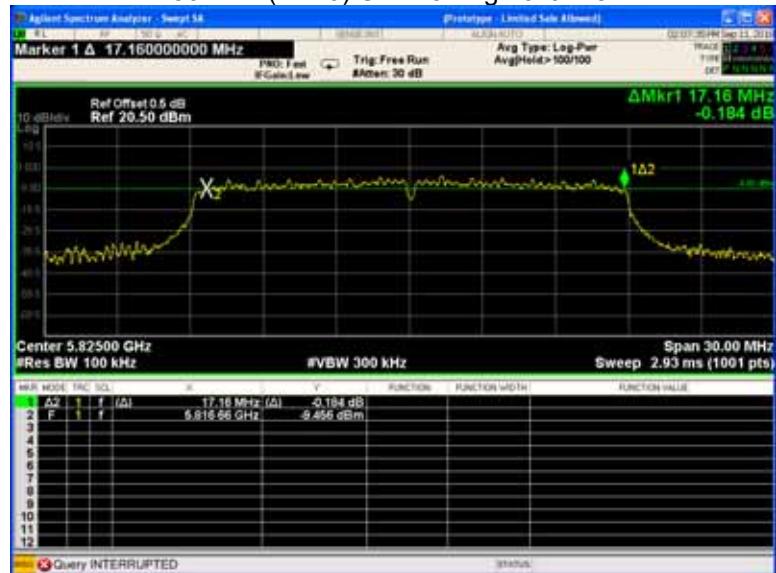
802.11n(HT20) U-NII-3 Low channel



802.11n(HT20) U-NII-3 Middle channel



802.11n(HT20) U-NII-3 High channel



802.11n(HT40) U-NII-3 Low channel



802.11n(HT40) U-NII-3 High channel



802.11ac(VHT20) U-NII-3 Low channel



802.11ac(VHT20) U-NII-3 Middle channel



802.11ac(VHT20) U-NII-3 High channel



802.11ac(VHT40) U-NII-3 Low channel



802.11ac(VHT40) U-NII-3 High channel



ANT2

802.11a U-NII-3 Low channel



802.11a U-NII-3 Middle channel



802.11a U-NII-3 High channel



802.11n(HT20) U-NII-3 Low channel



802.11n(HT20) U-NII-3 Middle channel



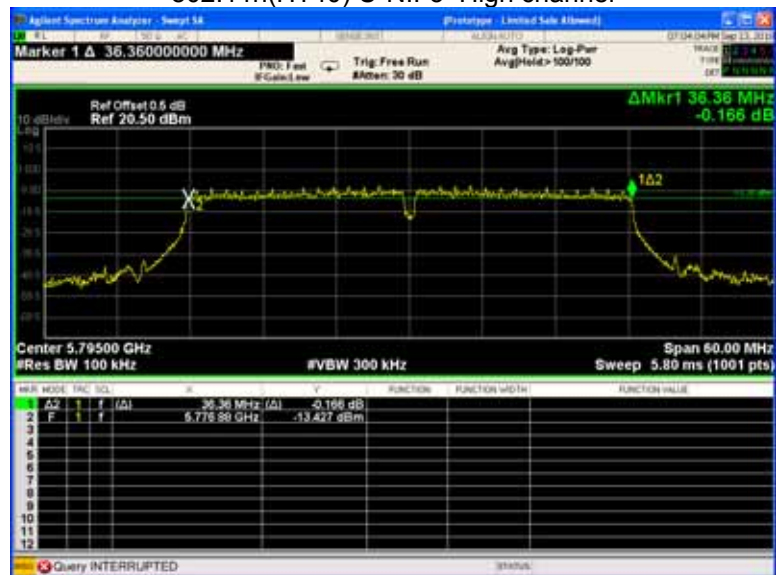
802.11n(HT20) U-NII-3 High channel



802.11n(HT40) U-NII-3 Low channel



802.11n(HT40) U-NII-3 High channel



802.11ac(VHT20) U-NII-3 Low channel



802.11ac(VHT20) U-NII-3 Middle channel



802.11ac(VHT20) U-NII-3 High channel



802.11ac(VHT40) U-NII-3 Low channel



802.11ac(VHT40) U-NII-3 High channel



ANT4

802.11a U-NII-3 Low channel



802.11a U-NII-3 Middle channel



802.11a U-NII-3 High channel



802.11n(HT20) U-NII-3 Low channel



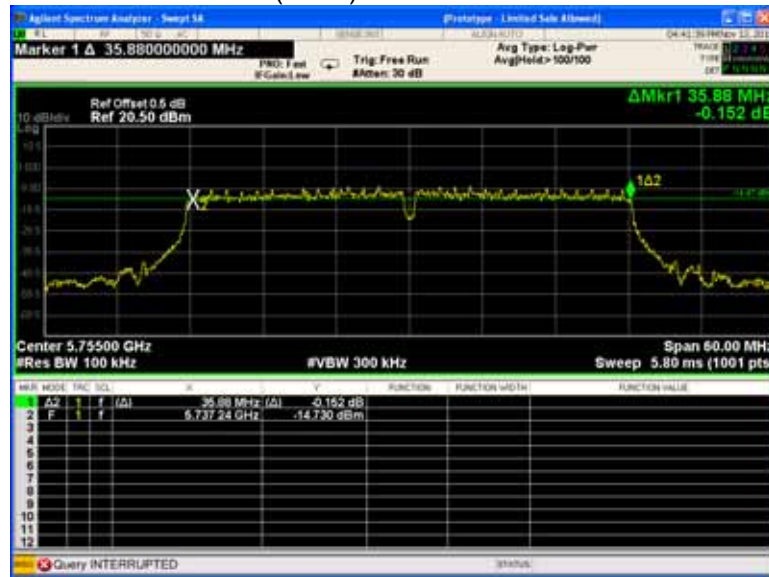
802.11n(HT20) U-NII-3 Middle channel



802.11n(HT20) U-NII-3 High channel



802.11n(HT40) U-NII-3 Low channel



802.11n(HT40) U-NII-3 High channel



802.11ac(VHT20) U-NII-3 Low channel



802.11ac(VHT20) U-NII-3 Middle channel



802.11ac(VHT20) U-NII-3 High channel



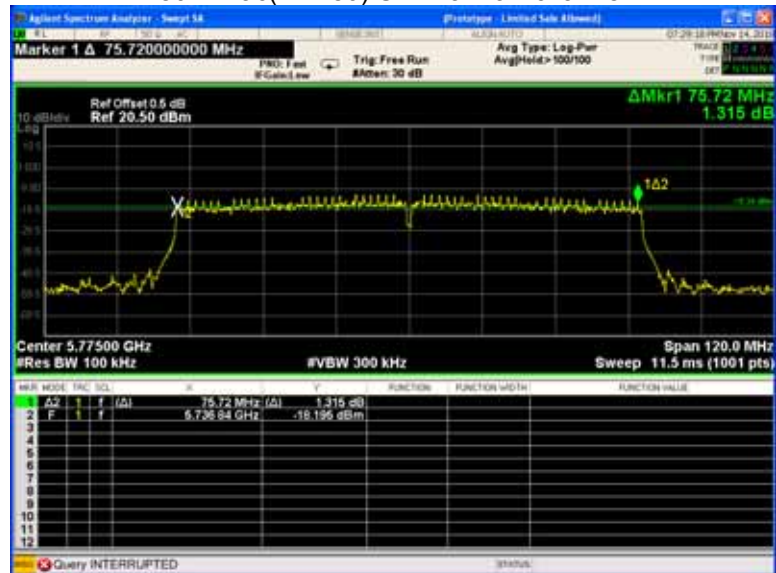
802.11ac(VHT40) U-NII-3 Low channel



802.11ac(VHT40) U-NII-3 High channel



802.11ac(VHT80) U-NII-3 Low channel



ANT5

802.11a U-NII-3 Low channel



802.11a U-NII-3 Middle channel



802.11a U-NII-3 High channel



802.11n(HT20) U-NII-3 Low channel



802.11n(HT20) U-NII-3 Middle channel



802.11n(HT20) U-NII-3 High channel



802.11n(HT40) U-NII-3 Low channel



802.11n(HT40) U-NII-3 High channel



802.11ac(VHT20) U-NII-3 Low channel



802.11ac(VHT20) U-NII-3 Middle channel



802.11ac(VHT20) U-NII-3 High channel



802.11ac(VHT40) U-NII-3 Low channel



802.11ac(VHT40) U-NII-3 High channel



802.11ac(VHT80) U-NII-3 Low channel



13 26 dB Bandwidth and 99% Occupied Bandwidth

Test Requirement:	47 CFR Part 15C Section 15.407 (a)
Test Method:	KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section D
Test Limit:	No restriction limits
Test Result:	PASS

13.1 Test Procedure:

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum;
2. Set the spectrum analyzer:
RBW = approximately 1% of the emission bandwidth,
 $VBW \geq 3 \times RBW$

13.2 Test Result:

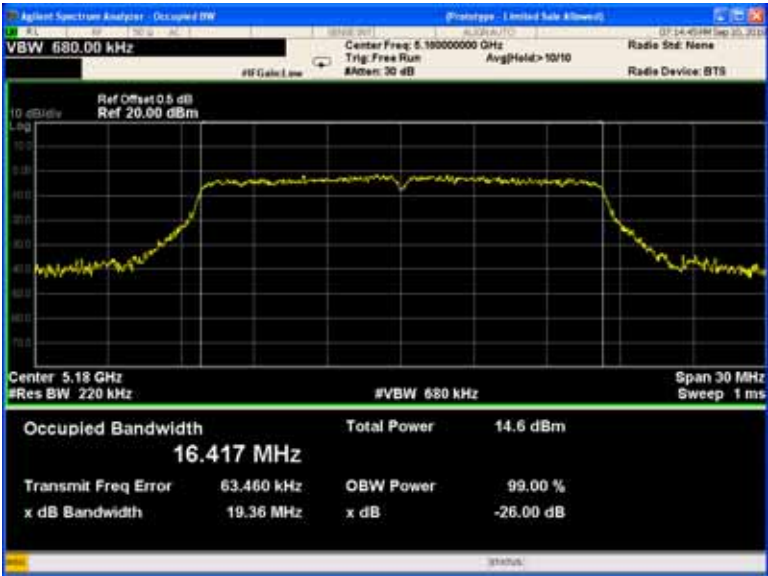
Module 1							
Band	Operation mode	26 dB Bandwidth (MHz)			99% Bandwidth (MHz)		
		Low	Middle	High	Low	Middle	High
ANT1 U-NII-1	802.11a	19.36	19.18	19.06	16.417	16.410	16.408
	802.11n(HT20)	19.60	19.57	19.84	17.466	17.480	17.468
	802.11n(HT40)	39.84	/	40.41	36.054	/	36.049
	802.11ac(VHT20)	20.10	19.69	20.25	17.619	17.610	17.631
	802.11ac(VHT40)	40.46	/	40.08	36.076	/	36.080
ANT1 U-NII-3	802.11a	19.24	19.11	19.53	16.423	16.410	16.428
	802.11n(HT20)	19.53	19.64	19.71	17.514	17.476	17.480
	802.11n(HT40)	40.09	/	40.77	36.016	/	36.123
	802.11ac(VHT20)	19.95	26.39	28.49	17.623	17.692	17.725
	802.11ac(VHT40)	40.54	/	49.44	36.044	/	36.171
ANT2 U-NII-1	802.11a	19.25	19.16	19.16	16.416	16.406	16.419
	802.11n(HT20)	19.64	19.61	19.55	17.474	17.460	17.469
	802.11n(HT40)	40.09	/	39.80	36.019	/	36.106
	802.11ac(VHT20)	21.79	19.99	20.51	17.631	17.645	17.628
	802.11ac(VHT40)	40.23	/	40.27	36.028	/	36.054
ANT2 U-NII-3	802.11a	19.31	19.15	18.91	16.405	16.391	16.437
	802.11n(HT20)	19.57	19.66	19.40	17.445	17.463	17.489
	802.11n(HT40)	39.97	/	39.89	36.085	/	36.062
	802.11ac(VHT20)	20.02	21.33	27.55	17.603	17.621	17.702
	802.11ac(VHT40)	39.58	/	46.10	36.016	/	36.157

Module 2							
Band	Operation mode	26 dB Bandwidth (MHz)			99% Bandwidth (MHz)		
		Low	Middle	High	Low	Middle	High
ANT4 U-NII-1	802.11a	19.22	18.91	19.05	16.391	16.360	16.417
	802.11n(HT20)	19.47	19.34	19.45	17.461	17.456	17.432
	802.11n(HT40)	39.40	/	39.71	36.015	/	36.096
	802.11ac(VHT20)	19.85	19.65	20.00	17.591	17.574	17.590
	802.11ac(VHT40)	39.76	/	39.89	36.053	/	36.005
	802.11ac(VHT80)	80.45	/	/	75.632	/	/
ANT4 U-NII-3	802.11a	18.87	18.88	19.08	16.370	16.400	16.383
	802.11n(HT20)	19.48	19.74	19.59	17.479	17.485	17.456
	802.11n(HT40)	39.82	/	39.76	36.042	/	36.001
	802.11ac(VHT20)	19.84	19.63	19.84	17.601	17.582	17.631
	802.11ac(VHT40)	39.86	/	39.95	36.031	/	36.012
	802.11ac(VHT80)	80.87	/	/	75.507	/	/
ANT5 U-NII-1	802.11a	19.06	19.19	18.89	16.366	16.432	16.420
	802.11n(HT20)	19.80	19.43	19.47	17.522	17.420	17.457
	802.11n(HT40)	40.02	/	39.53	36.003	/	35.990
	802.11ac(VHT20)	19.92	19.71	19.97	17.619	17.584	17.579
	802.11ac(VHT40)	39.68	/	39.72	36.074	/	36.017
	802.11ac(VHT80)	80.78	/	/	75.758	/	/
ANT5 U-NII-3	802.11a	18.93	18.99	19.12	16.389	16.418	16.357
	802.11n(HT20)	19.50	19.53	19.82	17.543	17.446	17.459
	802.11n(HT40)	39.81	/	39.30	36.078	/	36.024
	802.11ac(VHT20)	19.86	19.76	19.79	17.597	17.607	17.579
	802.11ac(VHT40)	39.80	/	39.82	36.050	/	36.013
	802.11ac(VHT80)	80.56	/	/	75.581	/	/

Test result plots shown as follows:

ANT1

802.11a U-NII-1 Low channel



802.11a U-NII-1 Middle channel



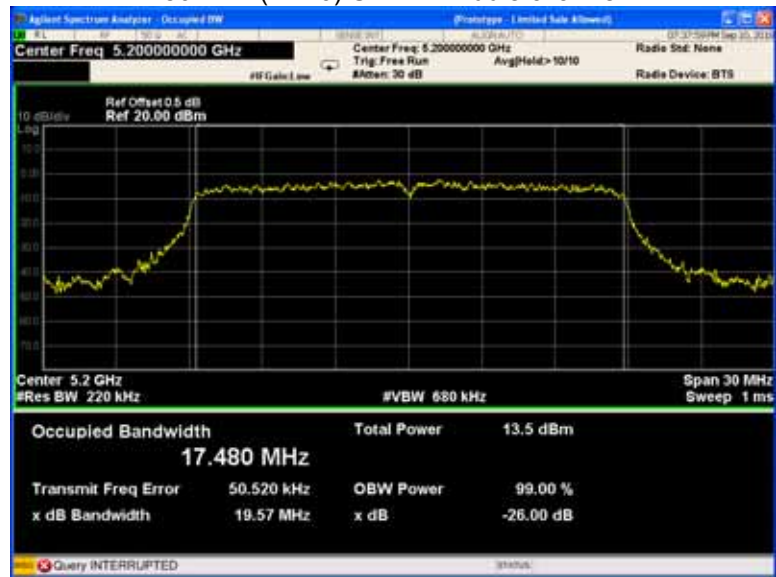
802.11a U-NII-1 High channel



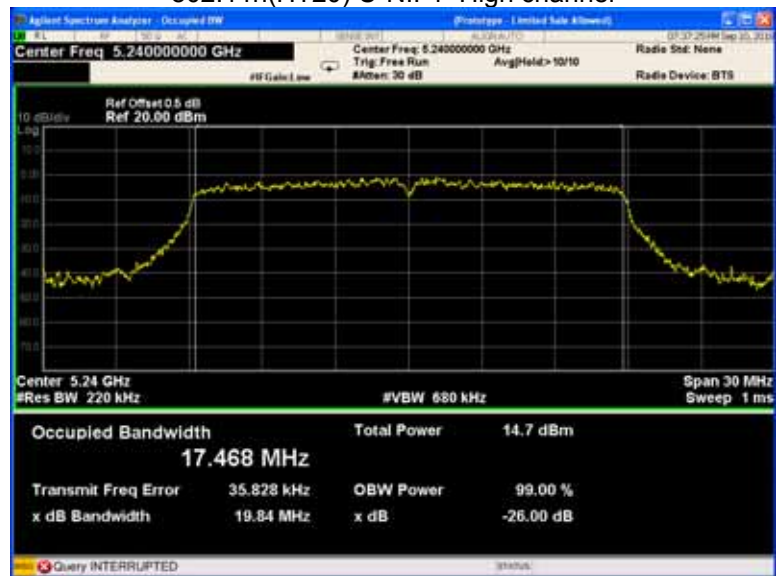
802.11n(HT20) U-NII-1 Low channel



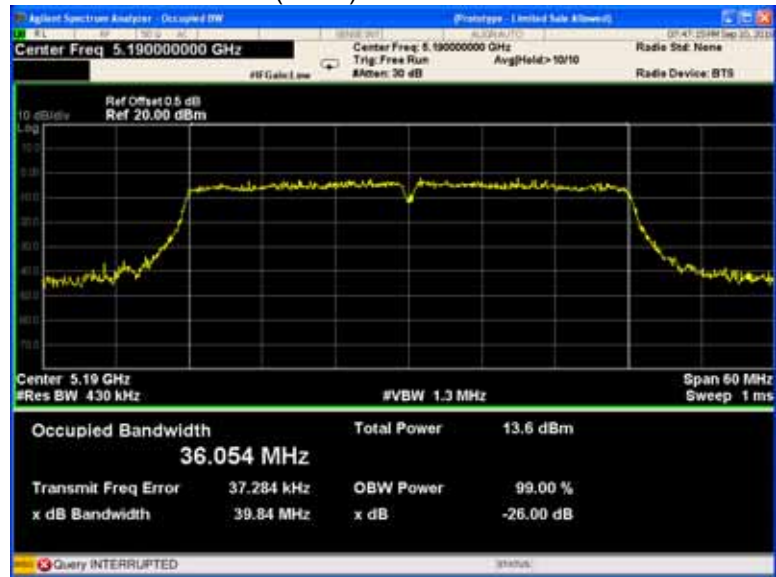
802.11n(HT20) U-NII-1 Middle channel



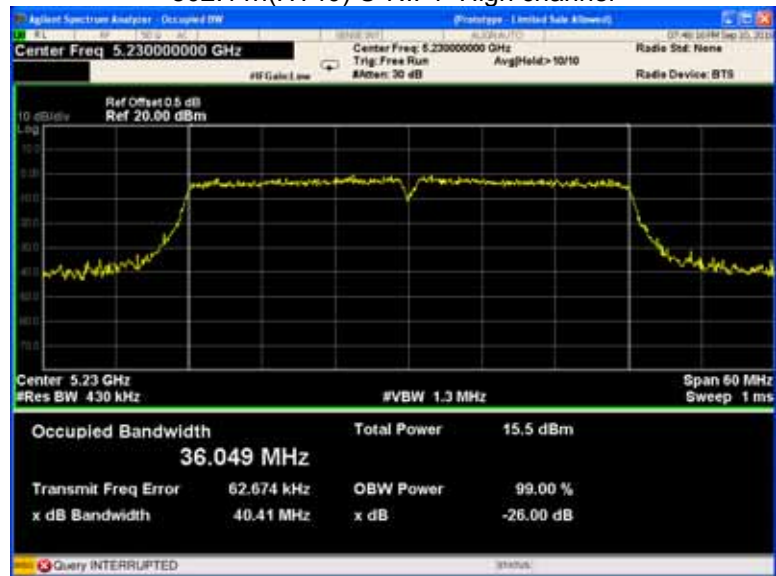
802.11n(HT20) U-NII-1 High channel



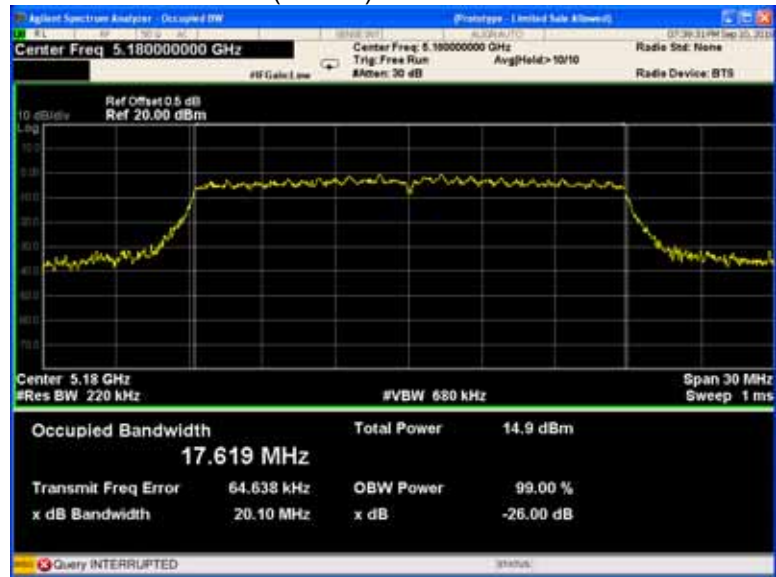
802.11n(HT40) U-NII-1 Low channel



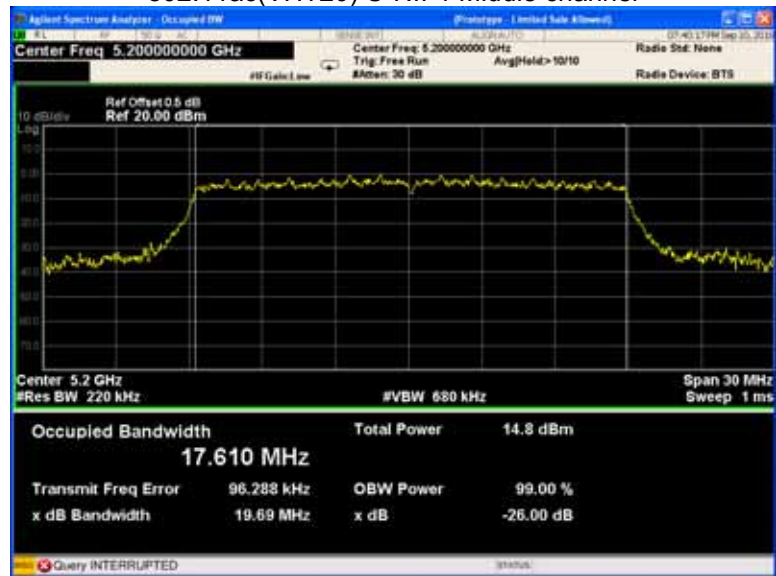
802.11n(HT40) U-NII-1 High channel



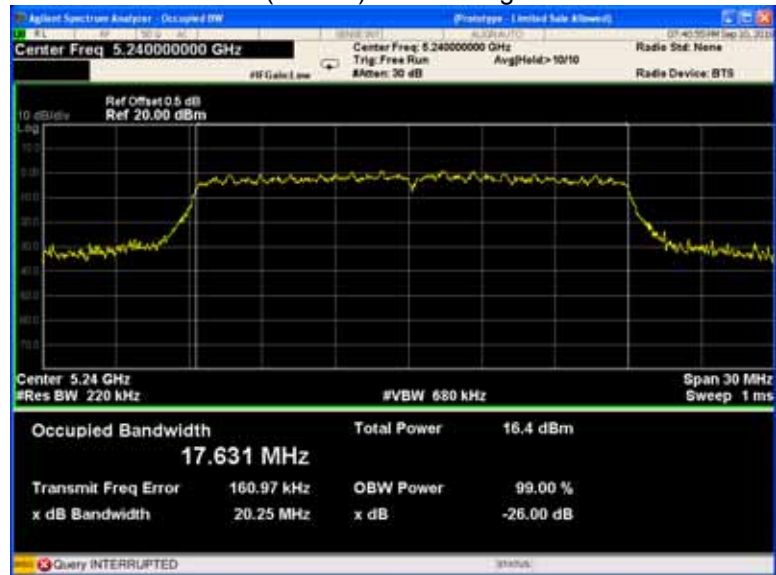
802.11ac(VHT20) U-NII-1 Low channel



802.11ac(VHT20) U-NII-1 Middle channel



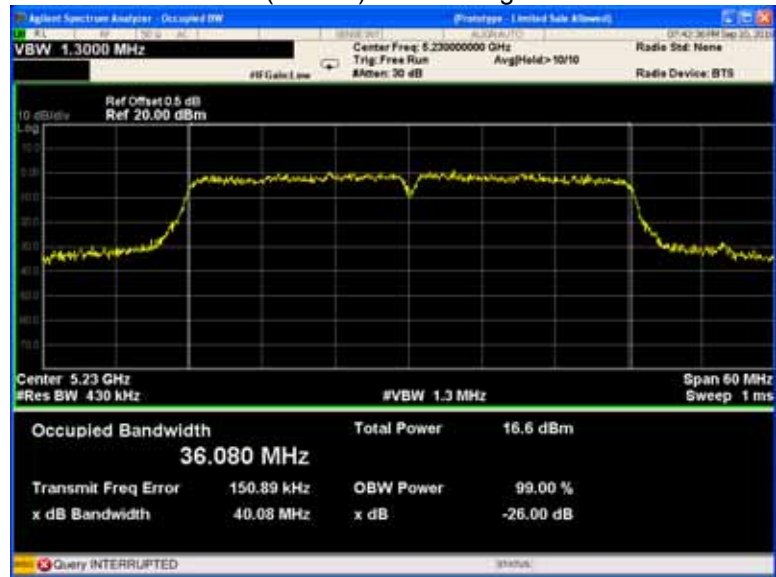
802.11ac(VHT20) U-NII-1 High channel



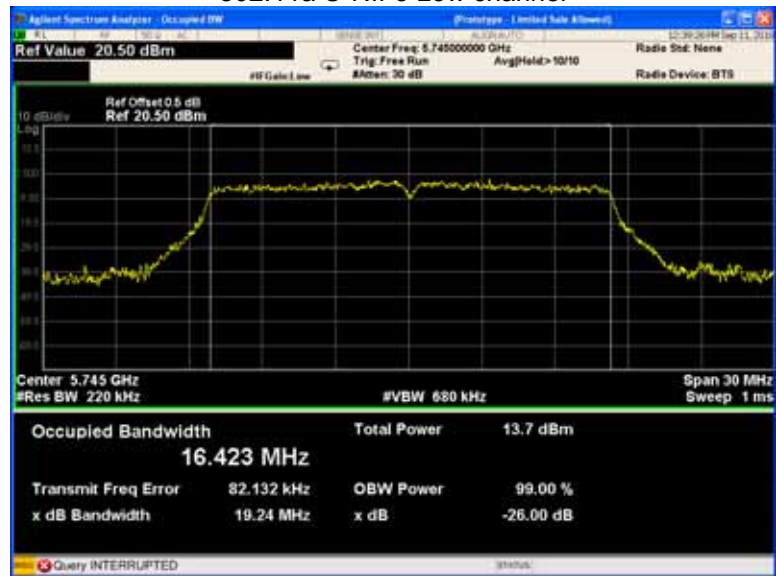
802.11ac(VHT40) U-NII-1 Low channel



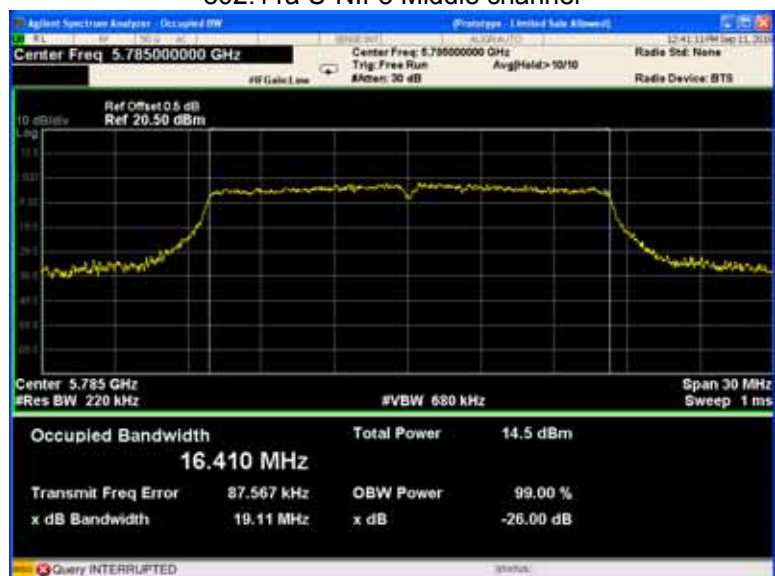
802.11ac(VHT40) U-NII-1 High channel



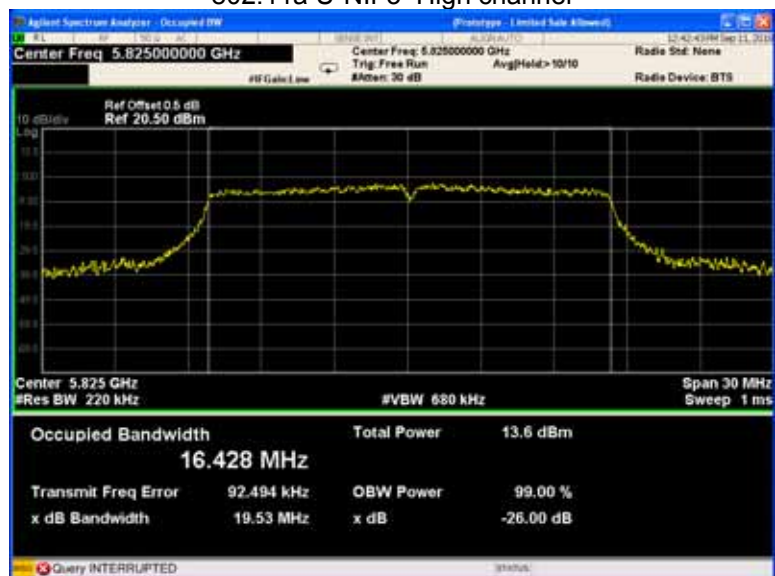
802.11a U-NII-3 Low channel



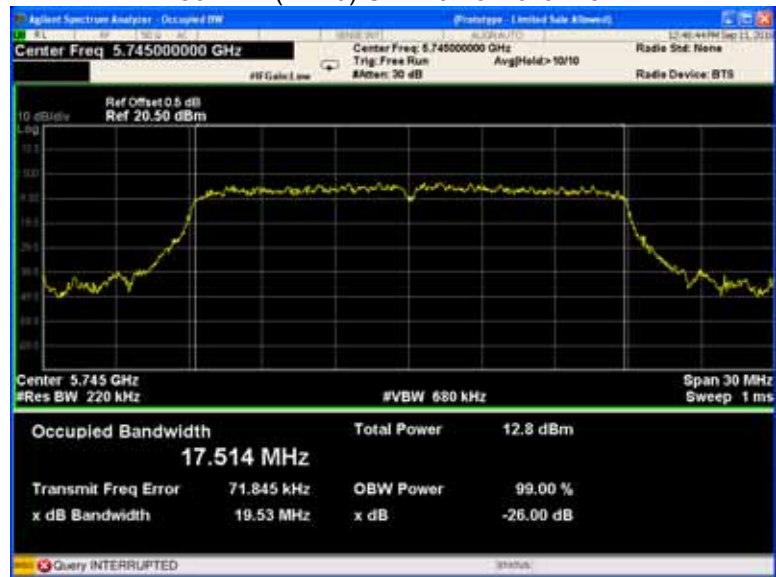
802.11a U-NII-3 Middle channel



802.11a U-NII-3 High channel



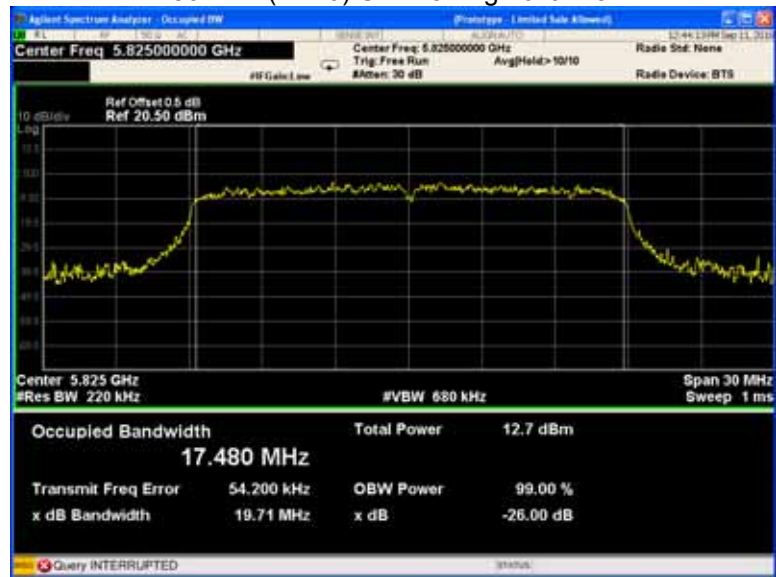
802.11n(HT20) U-NII-3 Low channel



802.11n(HT20) U-NII-3 Middle channel



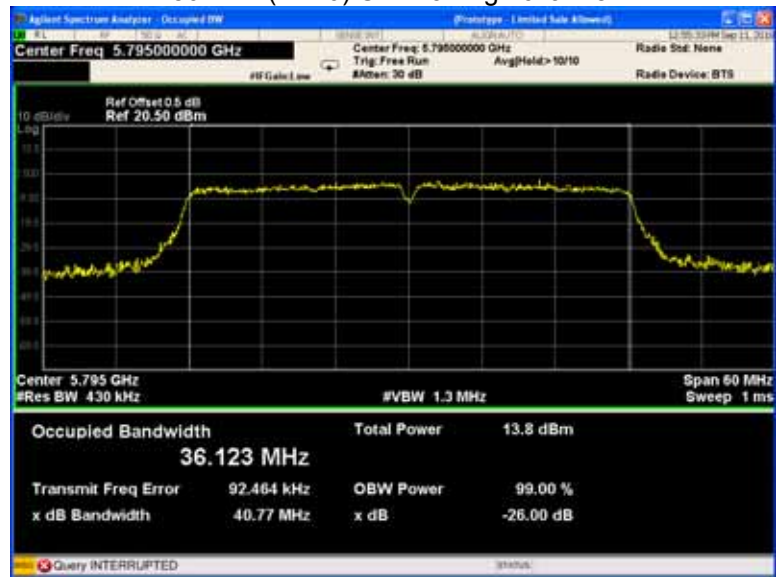
802.11n(HT20) U-NII-3 High channel



802.11n(HT40) U-NII-3 Low channel



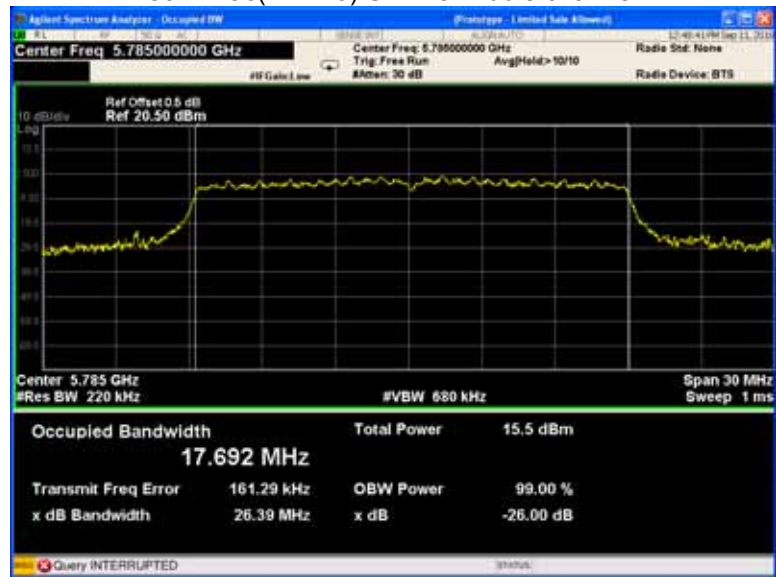
802.11n(HT40) U-NII-3 High channel



802.11ac(VHT20) U-NII-3 Low channel



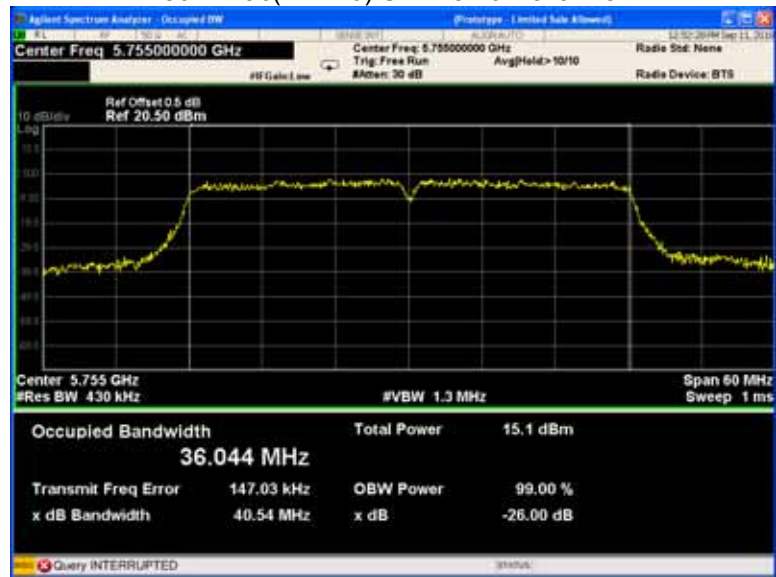
802.11ac(VHT20) U-NII-3 Middle channel



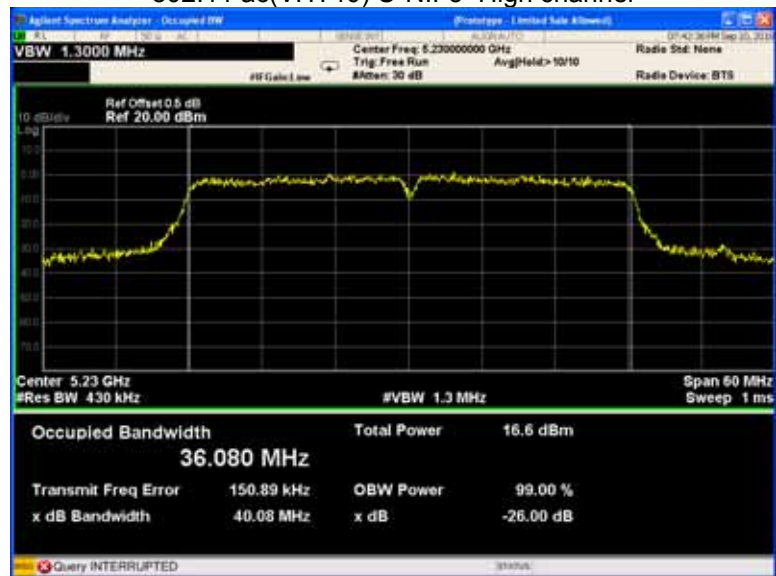
802.11ac(VHT20) U-NII-3 High channel



802.11ac(VHT40) U-NII-3 Low channel



802.11 ac(VHT40) U-NII-3 High channel



ANT2

802.11a U-NII-1 Low channel



802.11a U-NII-1 Middle channel



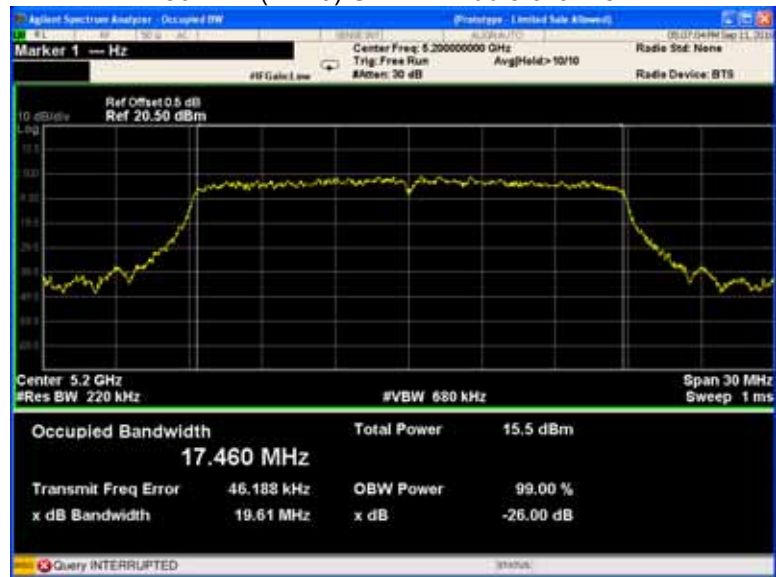
802.11a U-NII-1 High channel



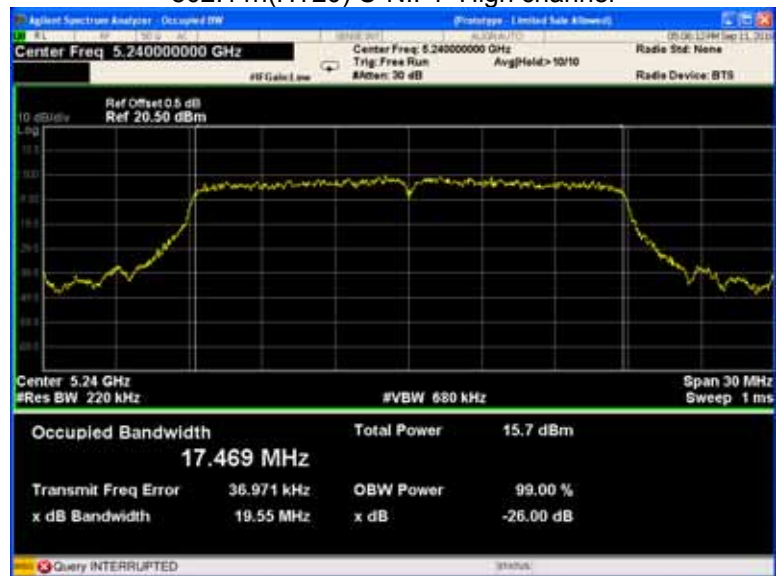
802.11n(HT20) U-NII-1 Low channel



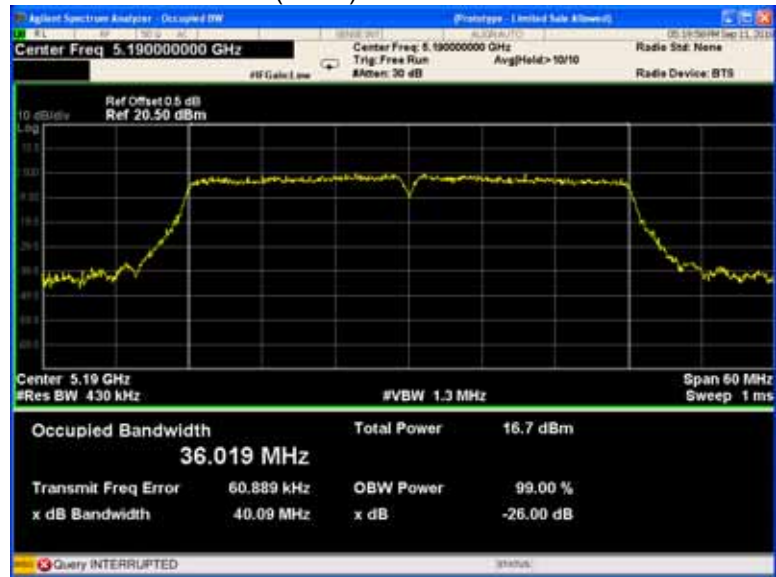
802.11n(HT20) U-NII-1 Middle channel



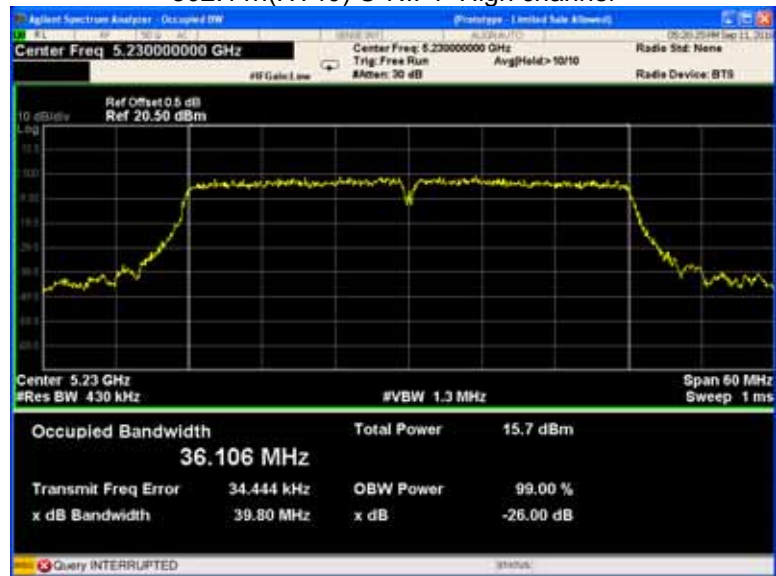
802.11n(HT20) U-NII-1 High channel



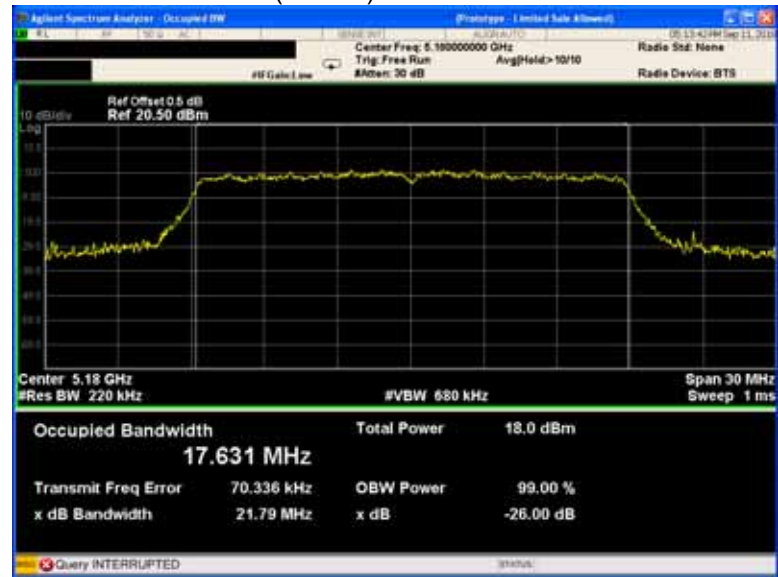
802.11n(HT40) U-NII-1 Low channel



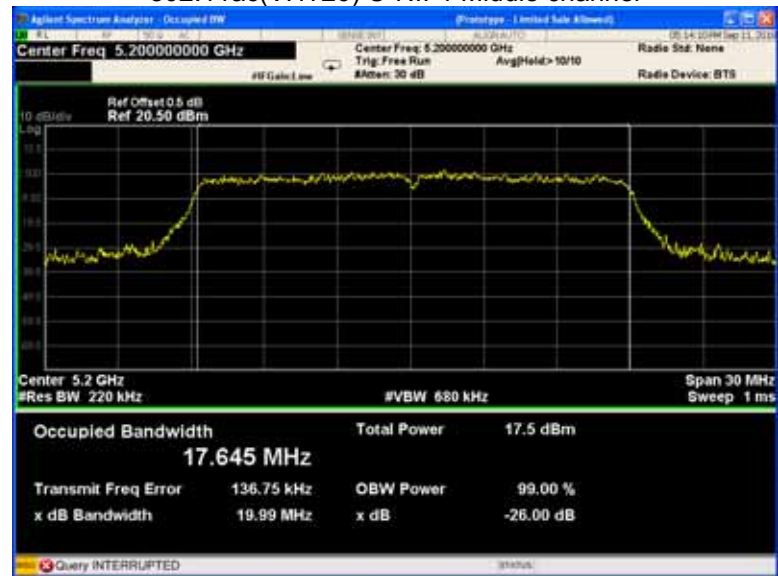
802.11n(HT40) U-NII-1 High channel



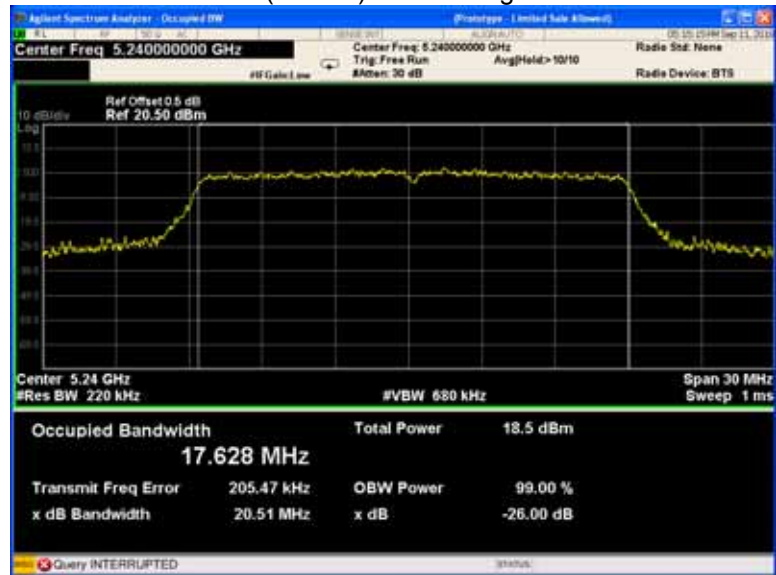
802.11ac(VHT20) U-NII-1 Low channel



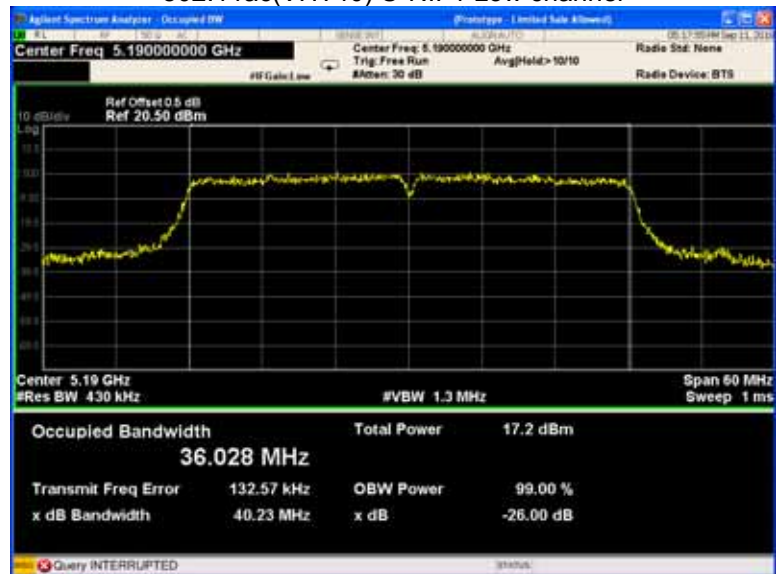
802.11ac(VHT20) U-NII-1 Middle channel



802.11ac(VHT20) U-NII-1 High channel



802.11ac(VHT40) U-NII-1 Low channel



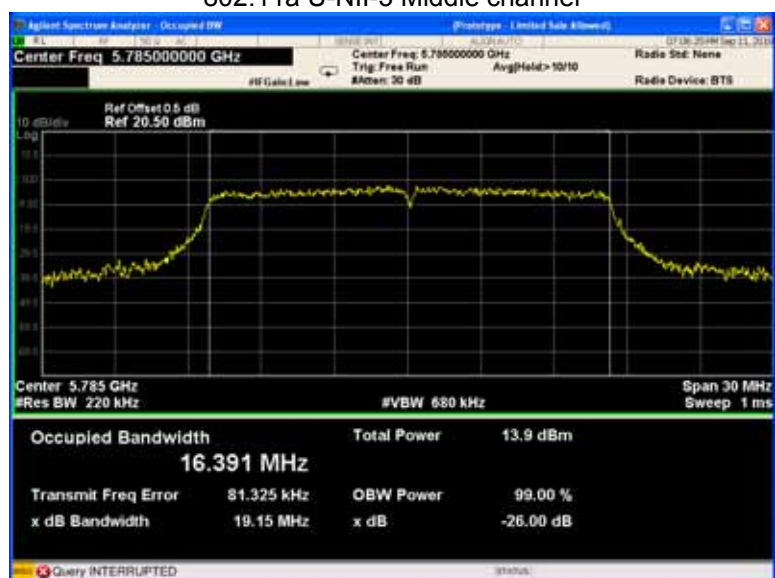
802.11ac(VHT40) U-NII-1 High channel



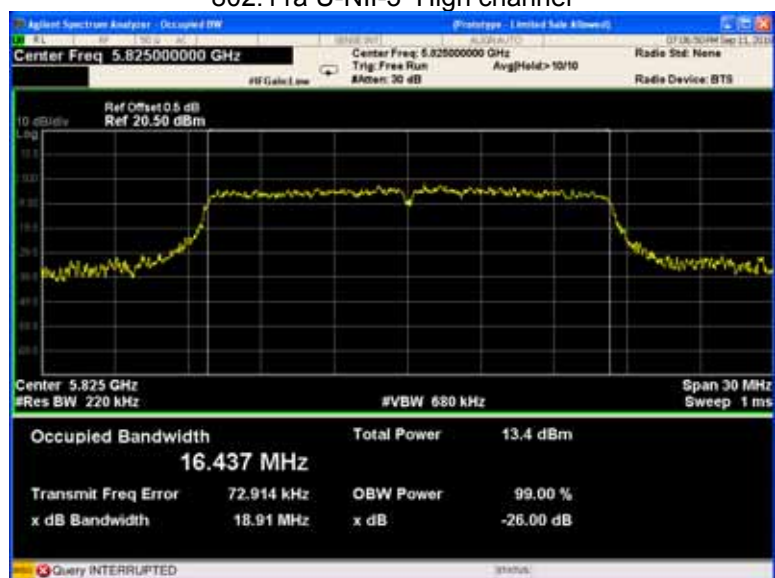
802.11a U-NII-3 Low channel



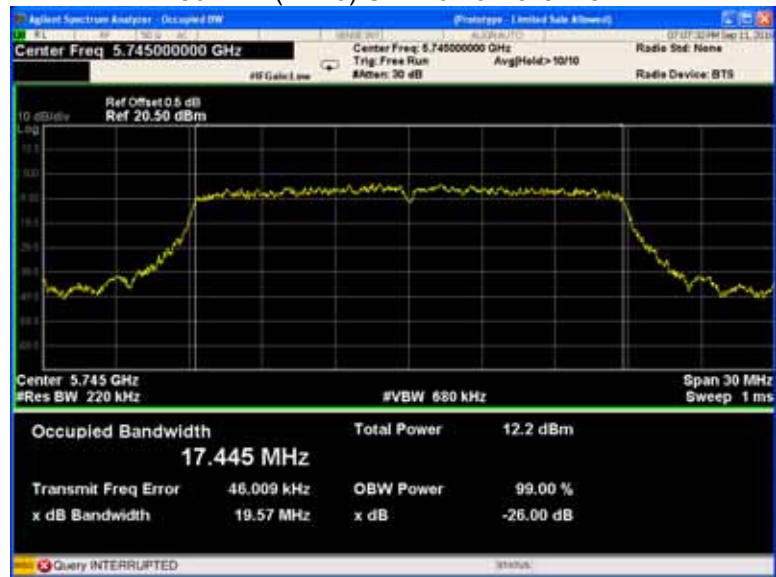
802.11a U-NII-3 Middle channel



802.11a U-NII-3 High channel



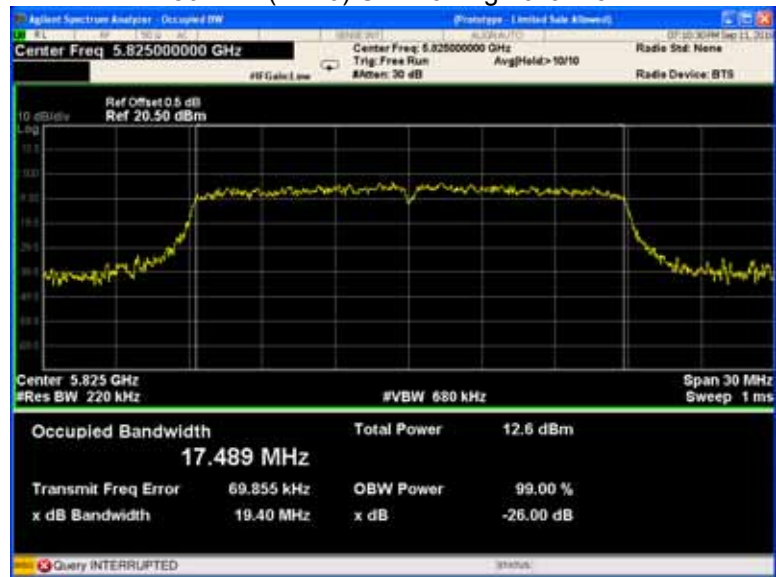
802.11n(HT20) U-NII-3 Low channel



802.11n(HT20) U-NII-3 Middle channel



802.11n(HT20) U-NII-3 High channel



802.11n(HT40) U-NII-3 Low channel



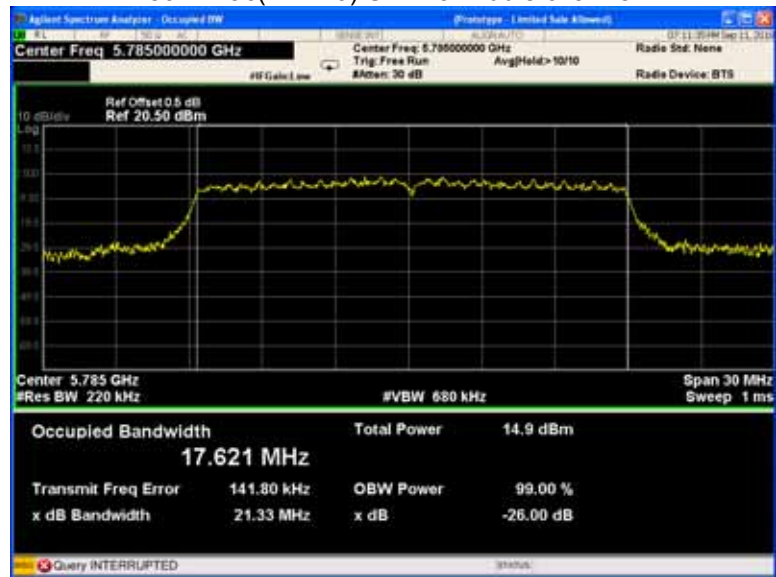
802.11n(HT40) U-NII-3 High channel



802.11ac(VHT20) U-NII-3 Low channel



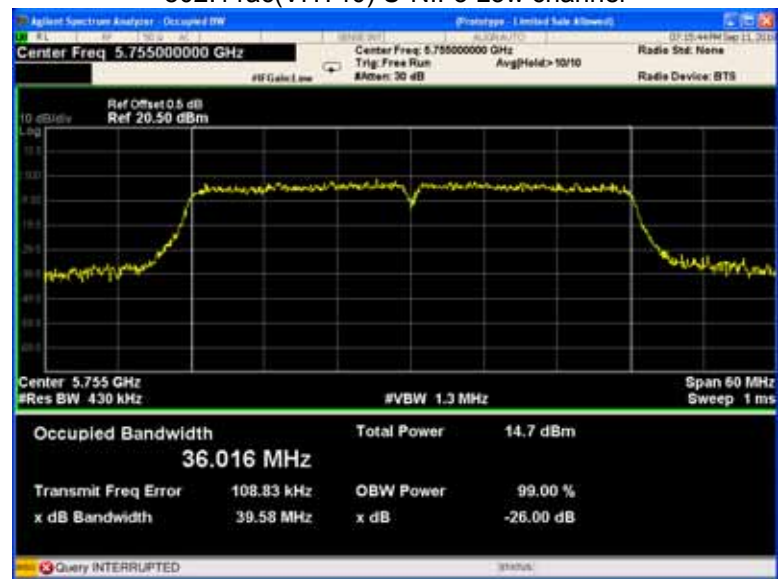
802.11ac(VHT20) U-NII-3 Middle channel



802.11ac(VHT20) U-NII-3 High channel



802.11ac(VHT40) U-NII-3 Low channel



802.11ac(VHT40) U-NII-3 High channel

