

TEST REPORT

FCC ID: TVV-PIAPGW4

Product: Pronto Intelligent Access Point

Model No.: PIAP-11AC-M-GW4

**Additional Model No.: PC31, PC31-7455, PC31-QV, PC31-QT, PC31-QA,
PIAP-11AC-M2S-SW, PIAP-11AC-M2S-QT, PC31-IN**

Trade Mark: Pronto

Report No.: TCT171204E012

Issued Date: Jan. 10, 2017

Issued for:

Pronto Networks, Inc

1966 Tice Valley Boulevard #411 Walnut Creek, CA 94595 United States

Issued By:

Shenzhen Tongce Testing Lab.

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1. Test Certification

Product:	Pronto Intelligent Access Point
Model No.:	PIAP-11AC-M-GW4
Additional Model No.:	PC31, PC31-7455, PC31-QV, PC31-QT, PC31-QA, PIAP-11AC-M2S-SW, PIAP-11AC-M2S-QT, PC31-IN
Trade Mark:	Pronto
Applicant:	Pronto Networks, Inc
Address:	1966 Tice Valley Boulevard #411 Walnut Creek, CA 94595 United States
Manufacturer:	Shenzhen Yunlink Technology Co., Ltd
Address:	B2 Building, An'le Industrial Zone, Hangcheng Road, gushu, xixiang town, Baoan, Shenzhen Guangdong Province China
Date of Test:	Jan. 03, 2018 - Jan. 08, 2018
Applicable Standards:	FCC Rules and Regulations Part 15 Subpart C Section 15.407 ANSI C63.10: 2013

The above equipment has been tested by Shenzhen Tongce Testing Lab. and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Tested By:

Brews Xu

Date:

Jan. 03, 2018

Brews Xu

Reviewed By:

Joe Zhou

Date:

Jan. 08, 2018

Joe Zhou

Approved By:

Tomsin

Date:

Jan. 10, 2018

Tomsin



2. Test Result Summary

Requirement	CFR 47 Section	Result
Antenna requirement	§15.203	PASS
AC Power Line Conducted Emission	§15.207	PASS
Maximum Conducted Output Power	§15.407(a) §2.1046	PASS
6dB Emission Bandwidth	§15.407(a) §2.1049	PASS
26dB Emission Bandwidth & 99% Occupied Bandwidth	§15.407(a) §2.1049	PASS
Power Spectral Density	§15.407(a)	PASS
Band edge	§15.407(a)	PASS
Radiated Emission	§15.407(a) §2.1053	PASS
Frequency Stability	§15.407(g) §2.1055	PASS

Note:

1. PASS: Test item meets the requirement.
2. Fail: Test item does not meet the requirement.
3. N/A: Test case does not apply to the test object.
4. The test result judgment is decided by the limit of test standard.

3. EUT Description

Product:	Pronto Intelligent Access Point
Model No.:	PIAP-11AC-M-GW4
Additional Model No.:	PC31, PC31-7455, PC31-QV, PC31-QT, PC31-QA, PIAP-11AC-M2S-SW, PIAP-11AC-M2S-QT, PC31-IN
Trade Mark:	Pronto
Operation Frequency:	802.11a/n 20:5180~5240 MHz; 5745~5825 MHz 802.11n 40: 5190~5230 MHz; 5755 MHz -5795 MHz
MIMO type	5G BAND:2TX
Channel Bandwidth:	802.11a/n 20:20MHz 802.11n 40: 40 MHz
Modulation Technology:	IEEE 802.11a/n20/n40
Modulation Type	CCK/OFDM/DBPSK/DAPSK
Antenna Type:	reverse-SMA Antenna
Antenna Gain:	2dBi
Power Supply:	AC ADAPTOR MODEL: HB18C-1201503SPA INPUT: AC100-240V 50/60Hz 0.5A OUTPUT: DC12V 1500mA

Note: EUT only support 802.11 n(HT20)/n(HT40) for MIMO mode, not support 802.11 a for MIMO mode.802.11 a only support uses divestity (ant 1 and ant 2).

Operation Frequency each of channel

20MHz		40MHz	
Channel	Frequency	Channel	Frequency
36	5180	38	5190
40	5200	46	5230
44	5220	151	5755
48	5240	159	5790
149	5745		
153	5765		
157	5785		
161	5805		
165	5825		

Note:

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 (HT20)

Band I (5150 - 5250 MHz)			Band IV (5725 - 5850 MHz)		
Channel Number	Channel	Frequency (MHz)	Channel Number	Channel	Frequency (MHz)
36	Low	5180	149	Low	5745
40	Mid	5200	157	Mid	5785
48	High	5240	165	High	5825

For 802.11n (HT40)

Band I (5150 - 5250 MHz)			Band IV (5725 - 5850 MHz)		
Channel Number	Channel	Frequency (MHz)	Channel Number	Channel	Frequency (MHz)
38	Low	5190	151	Low	5755
46	High	5230	159	High	5795

4. Genera Information

4.1. Test environment and mode

Operating Environment:	
Temperature:	25.0 °C
Humidity:	56 % RH
Atmospheric Pressure:	1010 mbar
Test Mode:	
Engineering mode:	Keep the EUT in continuous transmitting by select channel and modulations(The value of duty cycle is 100%)
<p>The sample was placed 0.8m/1.5m for blow/above 1GHz above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.</p>	

<p>We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:</p>	
<p>Per-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.</p>	
Mode	Data rate
802.11a	6 Mbps
802.11n(HT20)	MCS0
802.11n(HT40)	MCS0
Final Test Mode:	
Operation mode:	Keep the EUT in continuous transmitting with modulation

4.2. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
/	/	/	/	/

Note:

- 1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.*
- 2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.*
- 3. For conducted measurements (Output Power, Emission Bandwidth, Power Spectral Density, Spurious Emissions), the antenna of EUT is connected to the test equipment via temporary antenna connector, the antenna connector is soldered on the antenna port of EUT, and the temporary antenna connector is listed in the Test Instruments.*

5. Facilities and Accreditations

5.1. Facilities

The test facility is recognized, certified, or accredited by the following organizations:

- FCC - Registration No.: 645098

Shenzhen Tongce Testing Lab

The 3m Semi-anechoic chamber has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

- IC - Registration No.: 10668A-1

The 3m Semi-anechoic chamber of Shenzhen TCT Testing Technology Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing

5.2. Location

Shenzhen Tongce Testing Lab

Address: 1B/F., Building 1, Yibaolai Industrial Park, Qiaotou, Fuyong, Baoan District, Shenzhen, Guangdong, China

TEL: +86-755-27673339

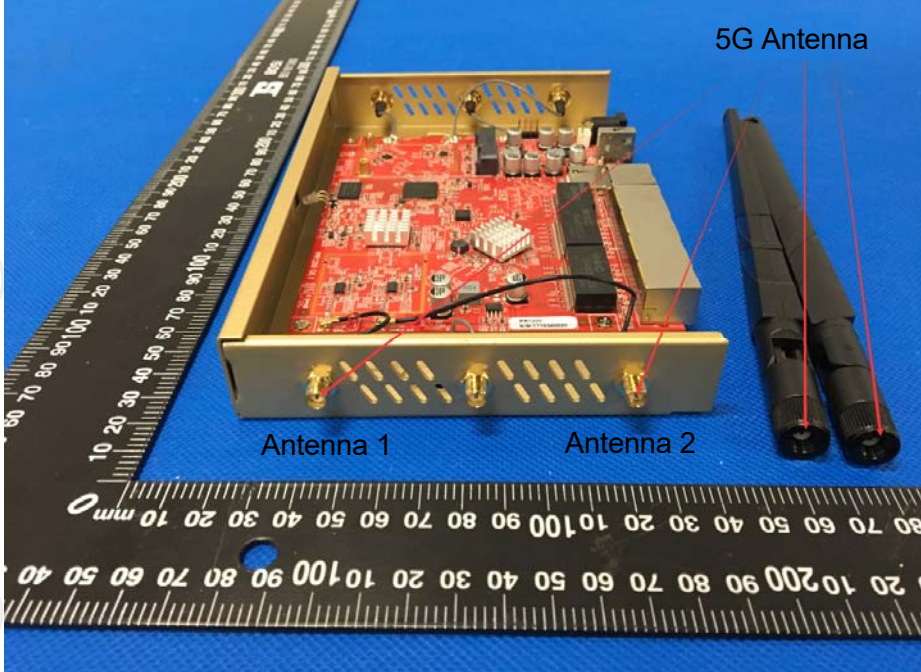
5.3. Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

No.	Item	MU
1	Conducted Emission	$\pm 2.56\text{dB}$
2	RF power, conducted	$\pm 0.12\text{dB}$
3	Spurious emissions, conducted	$\pm 0.11\text{dB}$
4	All emissions, radiated(<1G)	$\pm 3.92\text{dB}$
5	All emissions, radiated(>1G)	$\pm 4.28\text{dB}$
6	Temperature	$\pm 0.1^\circ\text{C}$
7	Humidity	$\pm 1.0\%$

6. Test Results and Measurement Data

6.1. Antenna requirement

Standard requirement:	FCC Part15 C Section 15.203 /247(c)
<p>15.203 requirement: 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, 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.</p>	
E.U.T Antenna:	Antenna port 1:anreverse-SMA Antenna Antenna port 2:anreverse-SMA Antenna
<p>The WIFI antenna is anreverse-SMA Antenna which permanently attached, and the best case gain of the antenna is Antenna port 1:2dBi and Antenna port 2:2dBi.</p>	
	

6.2. Conducted Emission

6.2.1. Test Specification

Test Requirement:	FCC Part15 C Section 15.207														
Test Method:	ANSI C63.10:2013														
Frequency Range:	150 kHz to 30 MHz														
Receiver setup:	RBW=9 kHz, VBW=30 kHz, Sweep time=auto														
Limits:	<table border="1"> <thead> <tr> <th rowspan="2">Frequency range (MHz)</th> <th colspan="2">Limit (dBuV)</th> </tr> <tr> <th>Quasi-peak</th> <th>Average</th> </tr> </thead> <tbody> <tr> <td>0.15-0.5</td> <td>66 to 56*</td> <td>56 to 46*</td> </tr> <tr> <td>0.5-5</td> <td>56</td> <td>46</td> </tr> <tr> <td>5-30</td> <td>60</td> <td>50</td> </tr> </tbody> </table>	Frequency range (MHz)	Limit (dBuV)		Quasi-peak	Average	0.15-0.5	66 to 56*	56 to 46*	0.5-5	56	46	5-30	60	50
Frequency range (MHz)	Limit (dBuV)														
	Quasi-peak	Average													
0.15-0.5	66 to 56*	56 to 46*													
0.5-5	56	46													
5-30	60	50													
Test Setup:	<p><i>Remark</i> E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m</p>														
Test Mode:	Tx Mode														
Test Procedure:	<ol style="list-style-type: none"> The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2013 on conducted measurement. 														
Test Result:	PASS														

6.2.2. Test Instruments

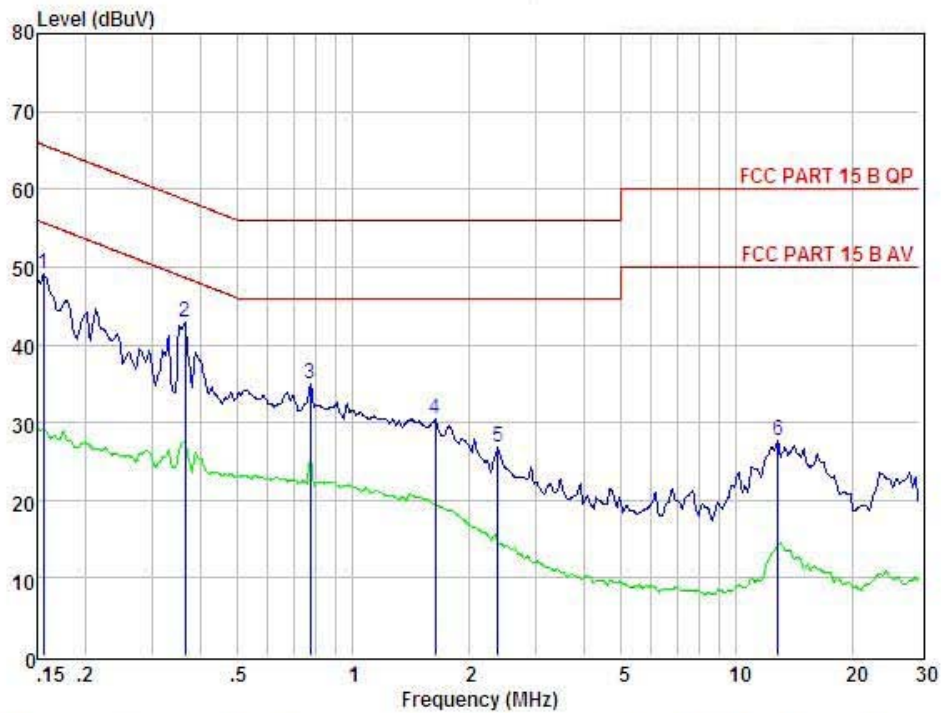
Conducted Emission Shielding Room Test Site (843)				
Equipment	Manufacturer	Model	Serial Number	Calibration Due
Test Receiver	R&S	ESPI	101401	Jun. 12, 2018
LISN	Schwarzbeck	NSLK 8126	8126453	Sep. 27, 2018
Coax cable (9KHz-30MHz)	TCT	CE-05	N/A	Sep. 27, 2018
EMI Test Software	Shurple Technology	EZ-EMC	N/A	N/A

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

6.2.3. Test data

Please refer to following diagram for individual

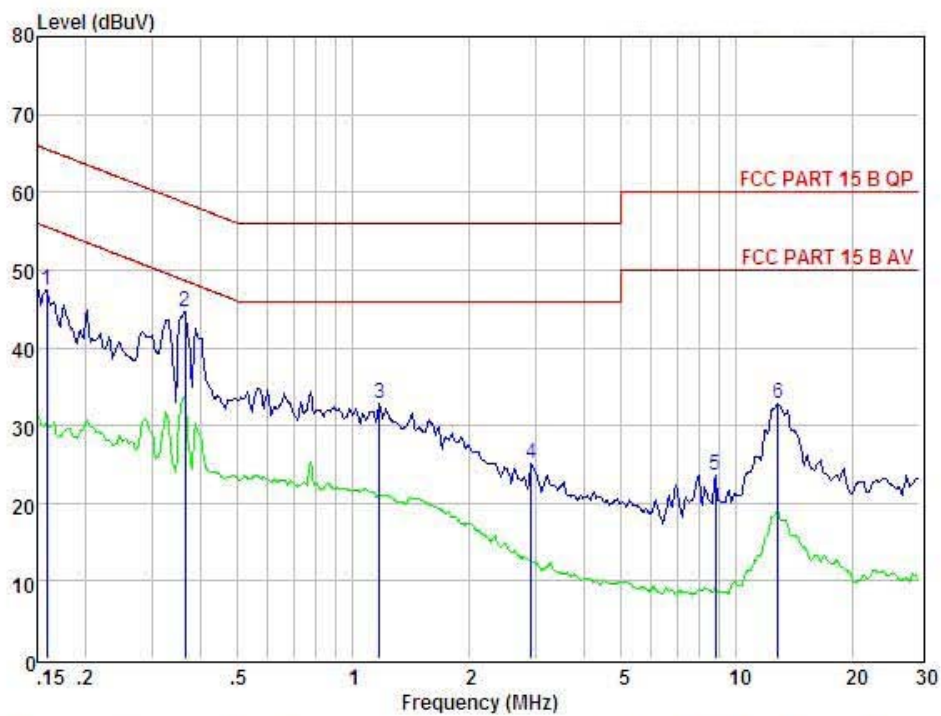
Conducted Emission on Line Terminal of the power line



Item	Freq MHz	Read Level dBuV	LISN Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	0.156	39.43	0.03	-9.52	0.10	49.08	65.69	-16.61	Peak
2	0.365	33.28	0.03	-9.57	0.10	42.98	58.61	-15.63	Peak
3	0.775	25.30	0.00	-9.60	0.10	35.00	56.00	-21.00	Peak
4	1.636	20.63	0.05	-9.69	0.10	30.47	56.00	-25.53	Peak
5	2.384	16.81	0.06	-9.75	0.11	26.73	56.00	-29.27	Peak
6	12.852	17.37	0.23	-9.89	0.22	27.71	60.00	-32.29	Peak

Remark: Level = Read Level + LISN Factor - Preamp Factor + Cable Loss

Conducted Emission on Neutral Terminal of the power line



Condition		: FCC PART 15 B QP			POL: NEUTRAL		Temp: 23.1°C		Hum: 48 %	
Item	Freq MHz	Read Level dBuV	LISN Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark	
1	0.159	37.80	0.03	-9.52	0.10	47.45	65.52	-18.07	Peak	
2	0.365	35.01	0.03	-9.57	0.10	44.71	58.61	-13.90	Peak	
3	1.172	23.08	0.04	-9.65	0.10	32.87	56.00	-23.13	Peak	
4	2.915	15.18	0.07	-9.79	0.12	25.16	56.00	-30.84	Peak	
5	8.822	13.36	0.16	-9.95	0.18	23.65	60.00	-36.35	Peak	
6	12.852	22.42	0.23	-9.89	0.22	32.76	60.00	-27.24	Peak	

Remark: Level = Read Level + LISN Factor - Preamp Factor + Cable Loss

Remark:

Transd = Cable lose+ PULSE LIMITER factor + ARTIFICIAL MAINS factor; Margin= Limit - Level

6.3.2. Test Instruments

RF Test Room				
Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100060	Sep. 27, 2018
Power Meter	Agilent	N1911A	MY45101557	Sep. 27, 2018
Power Sensor	Agilent	N1922A	MY44124432	Sep. 27, 2018
RF Cable (9KHz-40GHz)	TCT	RE-03	N/A	Sep. 27, 2018
Antenna Connector	TCT	RFC-03	N/A	Sep. 27, 2018

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

6.3.3. Test Data

Configuration Band I (5150 - 5250 MHz)						
Mode	Test channel	Maximum Conducted Output Power (dBm)			FCC Limit (dBm)	Result
		Antenna port 1	Antenna port 2	MIMO		
11a	CH36	15.91	14.19	/	24	PASS
11a	CH40	16.82	12.69	/	24	PASS
11a	CH48	16.13	13.78	/	24	PASS
11n(HT20)	CH36	15.52	12.96	17.44	24	PASS
11n(HT20)	CH40	16.33	13.49	18.15	24	PASS
11n(HT20)	CH48	16.42	13.53	18.22	24	PASS
11n(HT40)	CH38	16.32	12.64	17.87	24	PASS
11n(HT40)	CH46	15.71	13.84	17.89	24	PASS

Configuration Band IV (5725 - 5850 MHz)						
Mode	Test channel	Maximum Conducted Output Power (dBm)			FCC Limit (dBm)	Result
		Antenna port 1	Antenna port 2	MIMO		
11a	CH149	15.73	14.83	/	30	PASS
11a	CH157	16.11	12.99	/	30	PASS
11a	CH165	16.11	13.87	/	30	PASS
11n (HT20)	CH149	16.96	14.74	19.00	30	PASS
11n (HT20)	CH157	15.55	14.64	18.13	30	PASS
11n (HT20)	CH165	16.93	13.72	18.63	30	PASS
11n (HT40)	CH151	16.79	14.18	18.69	30	PASS
11n (HT40)	CH159	16.35	14.36	18.48	30	PASS

Note: 1 MIMO is Antenna port 1 and Antenna port 2.

2 According to KDB 662911, Result power = $10\log(10^{(ant1/10)}+10^{(ant2/10)})$.

3 Result unit: W, The end result is converted to units of dBm.

4 EUT only support 802.11 n(HT20)/n(HT40) for MIMO mode, not support 802.11 a for MIMO mode.802.11 a only support uses diversity (ant 2 and ant 1).

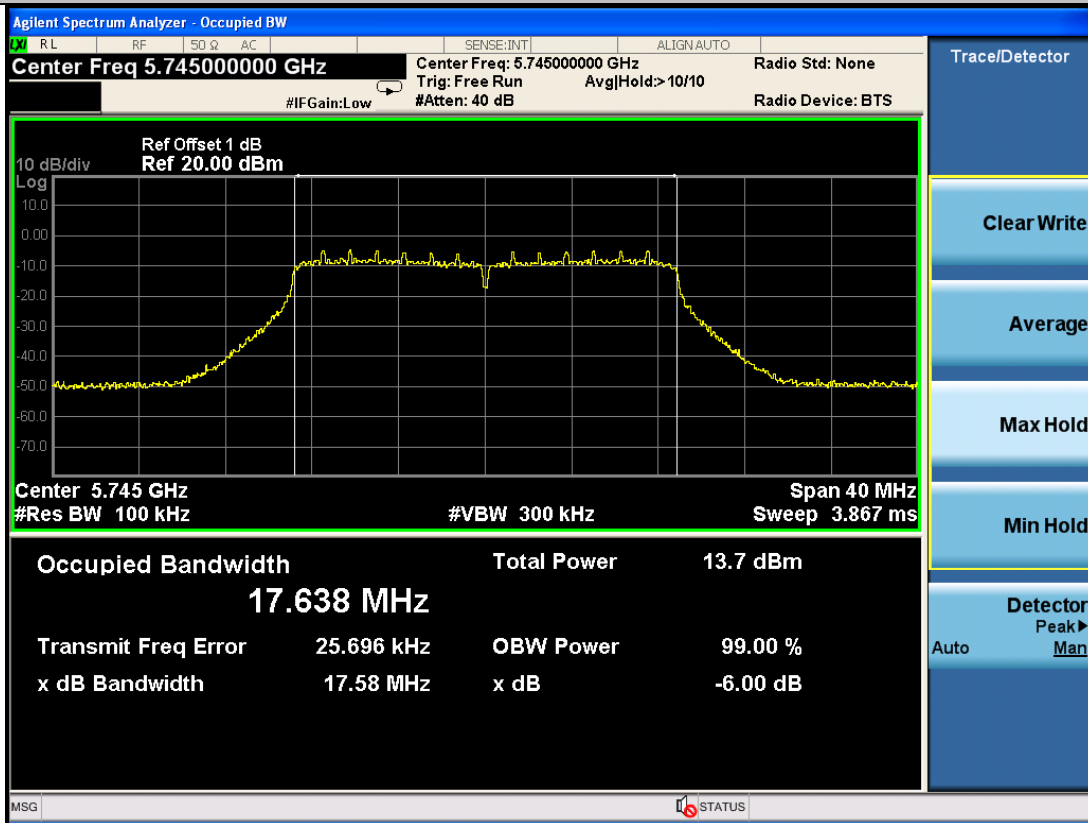
6.4.3. Test data

Band IV (5725 - 5850 MHz) For antenna 1					
Mode	Test channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
11a	CH149	5745	17.58	0.5	PASS
11a	CH157	5785	17.61	0.5	PASS
11a	CH161	5825	17.56	0.5	PASS
11n(HT20)	CH149	5745	17.58	0.5	PASS
11n(HT20)	CH157	5785	17.59	0.5	PASS
11n(HT20)	CH161	5825	17.56	0.5	PASS
11n(HT40)	CH151	5755	36.34	0.5	PASS
11n(HT40)	CH159	5795	36.12	0.5	PASS

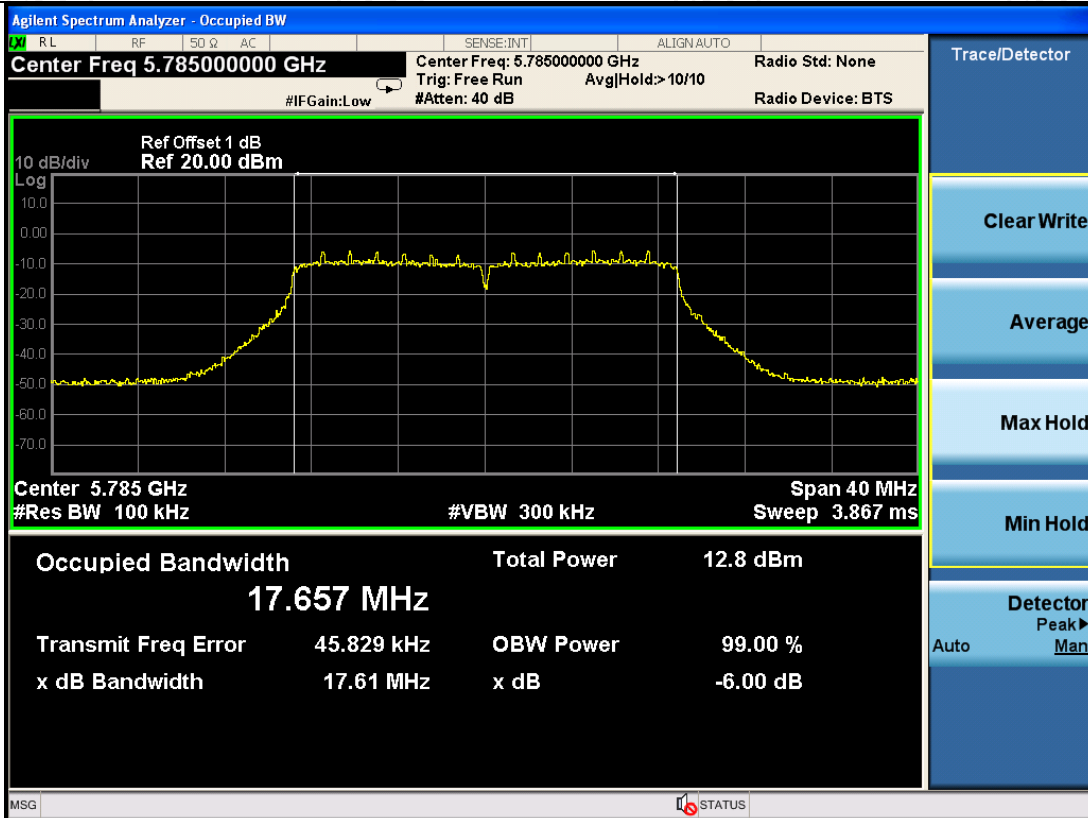
Test plots as follows:

Band IV (5725 – 5850 MHz)

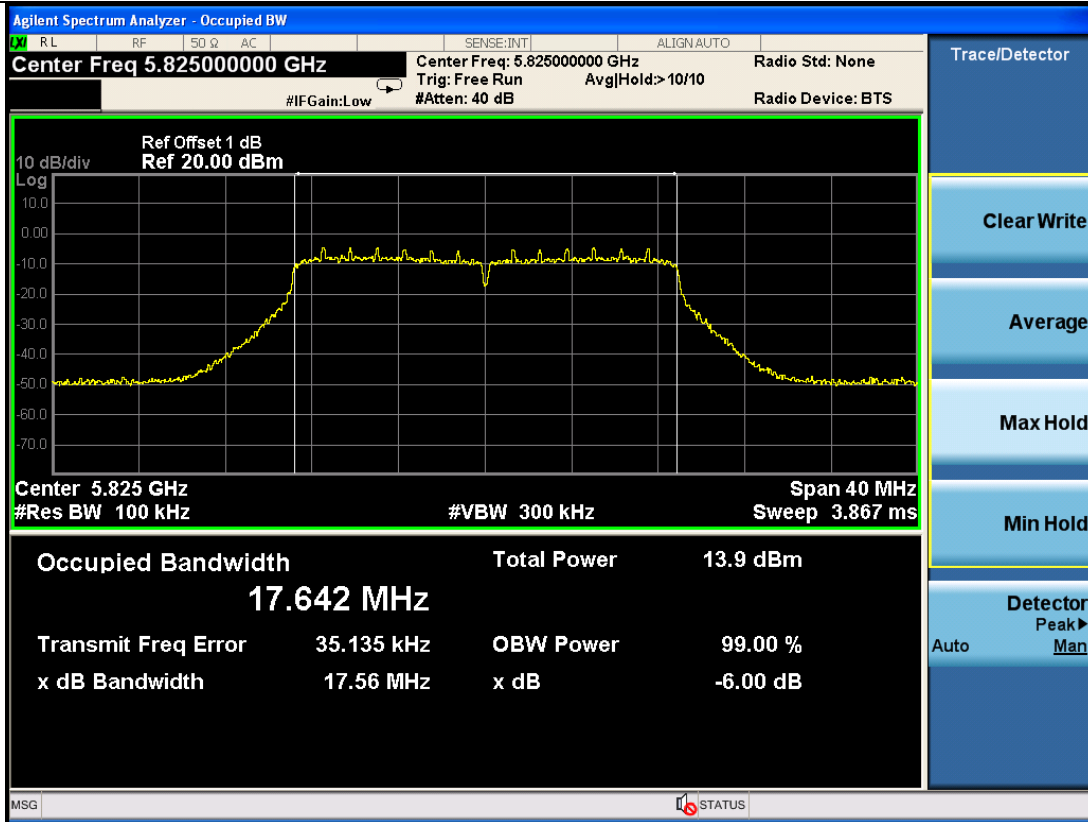
802.11a



Low

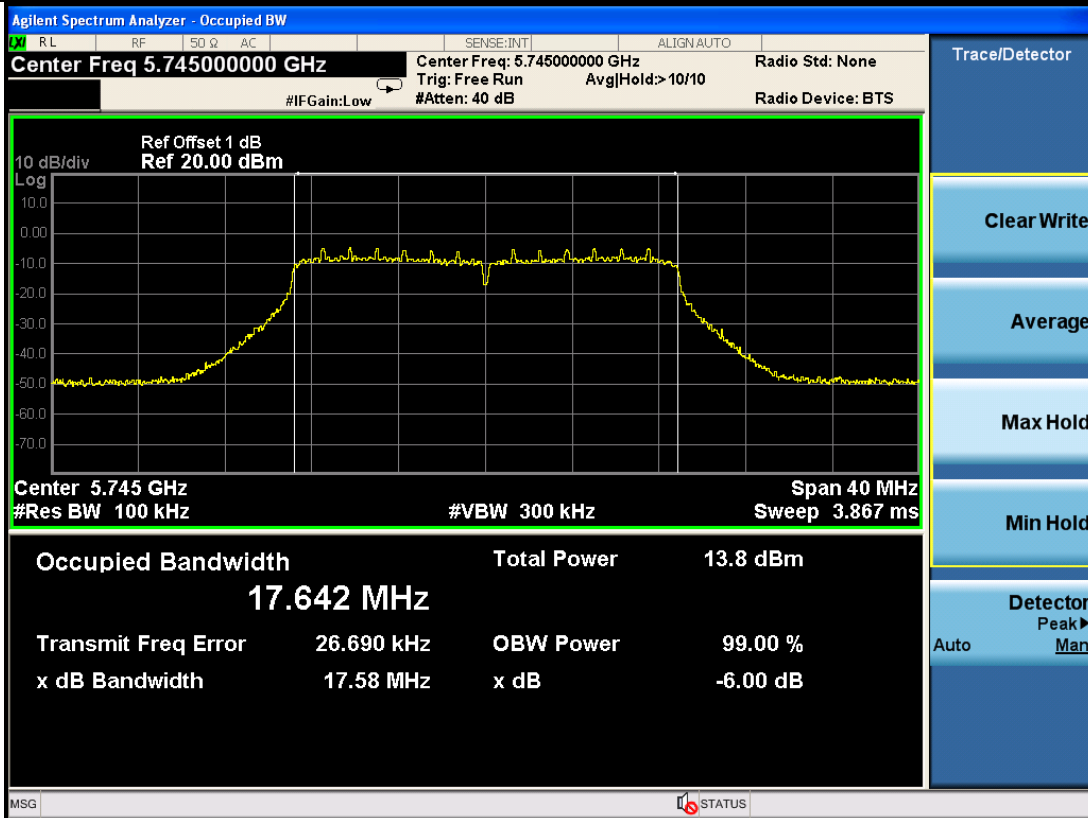


Mid

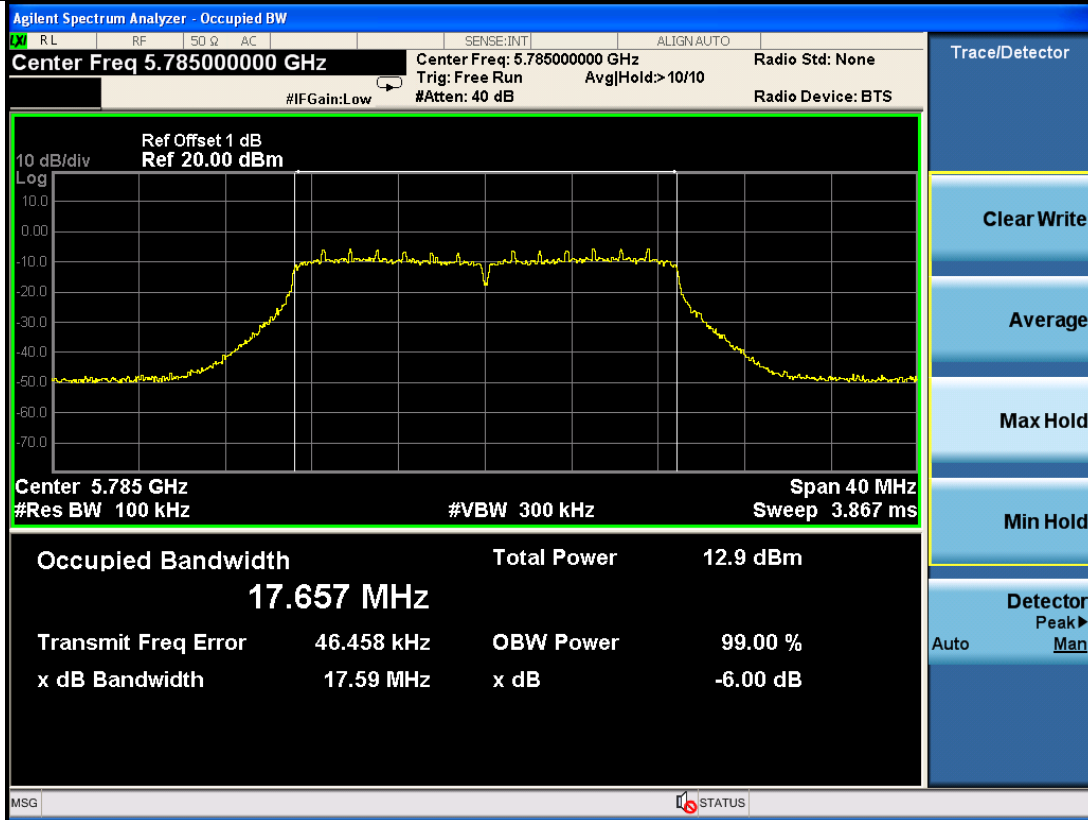


High

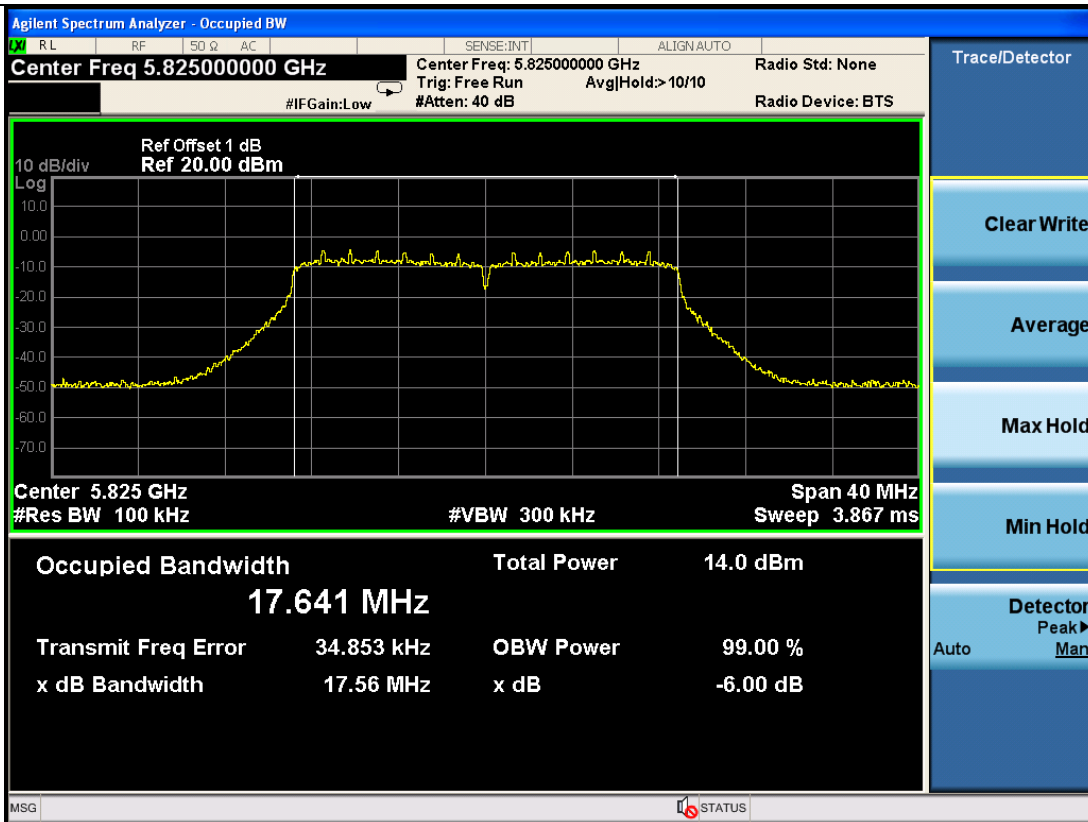
802.11n(HT20)



Low

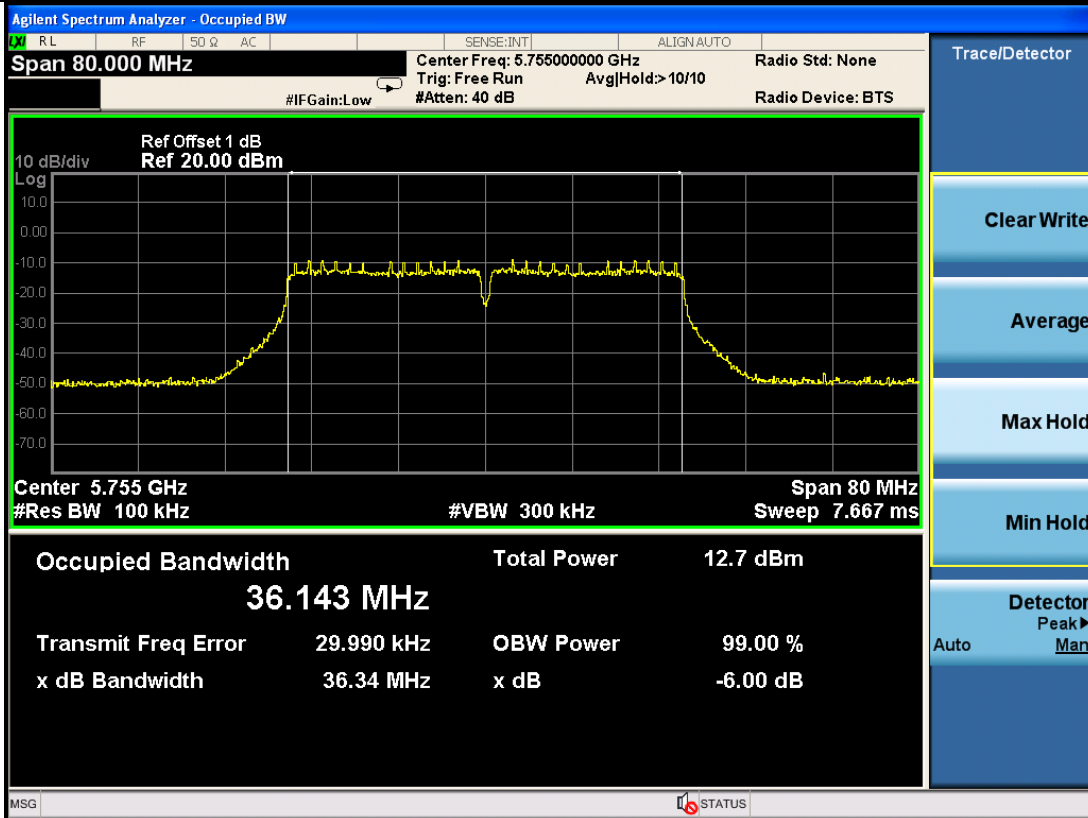


Mid

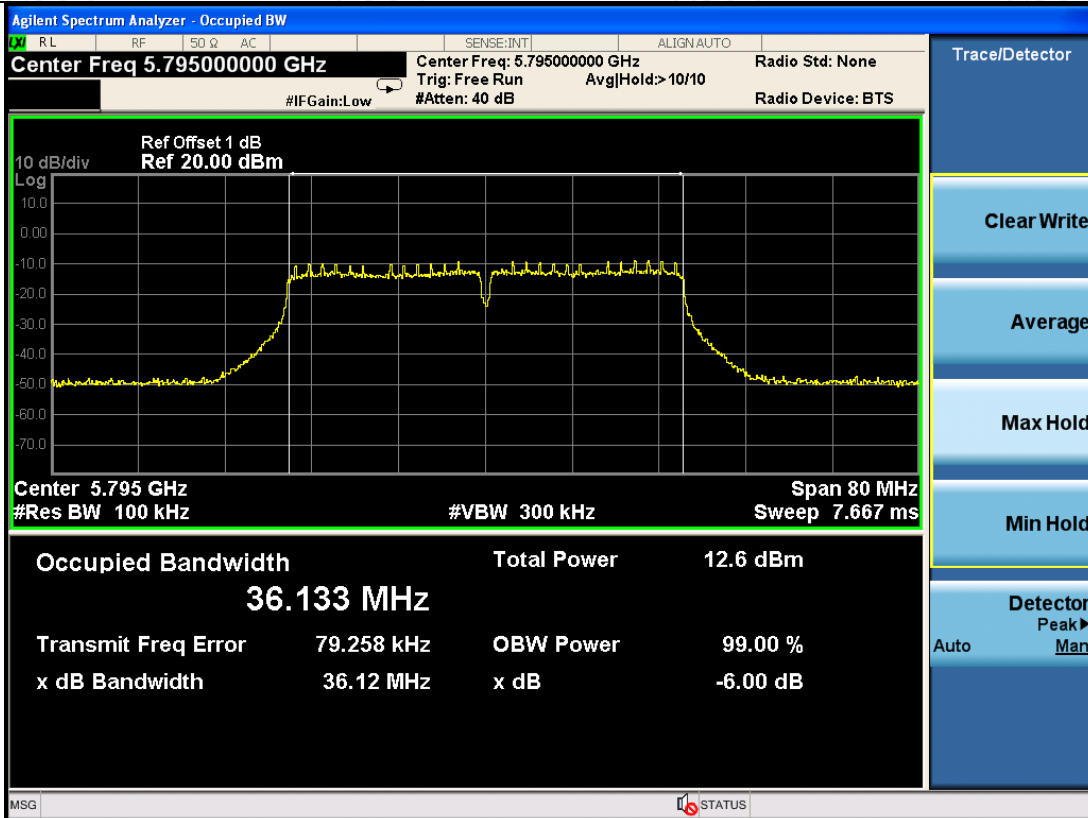


High

802.11n(HT40)



Low



High

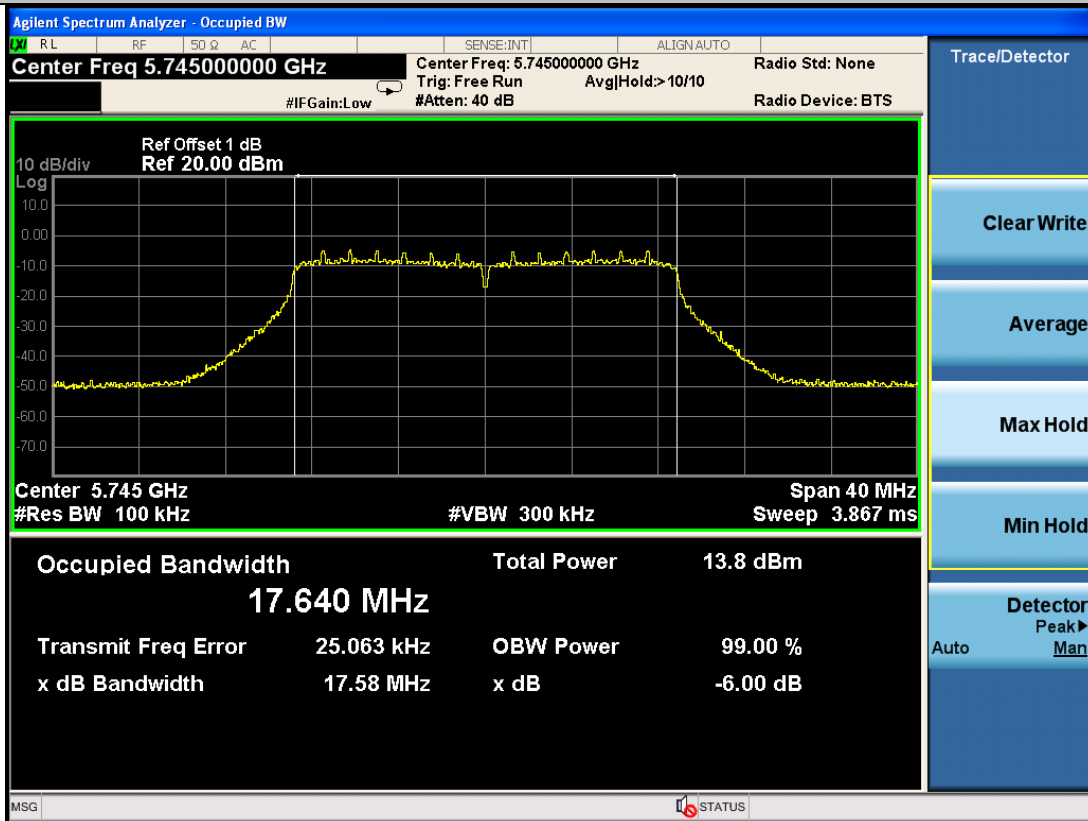
Band IV (5725 - 5850 MHz) For antenna 2

Mode	Test channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
11a	CH149	5745	17.58	0.5	PASS
11a	CH157	5785	17.59	0.5	PASS
11a	CH161	5825	17.57	0.5	PASS
11n(HT20)	CH149	5745	17.58	0.5	PASS
11n(HT20)	CH157	5785	17.61	0.5	PASS
11n(HT20)	CH161	5825	17.56	0.5	PASS
11n(HT40)	CH151	5755	36.35	0.5	PASS
11n(HT40)	CH159	5795	36.13	0.5	PASS

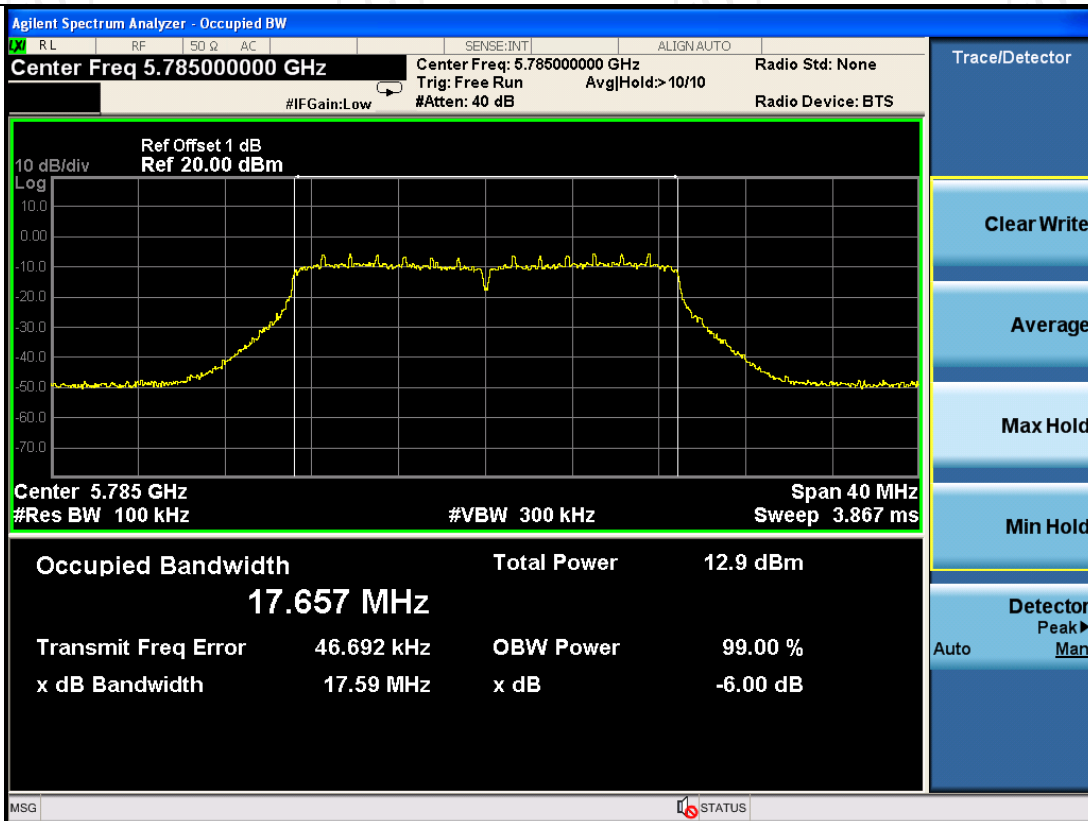
Test plots as follows:

Band IV (5725 – 5850 MHz)

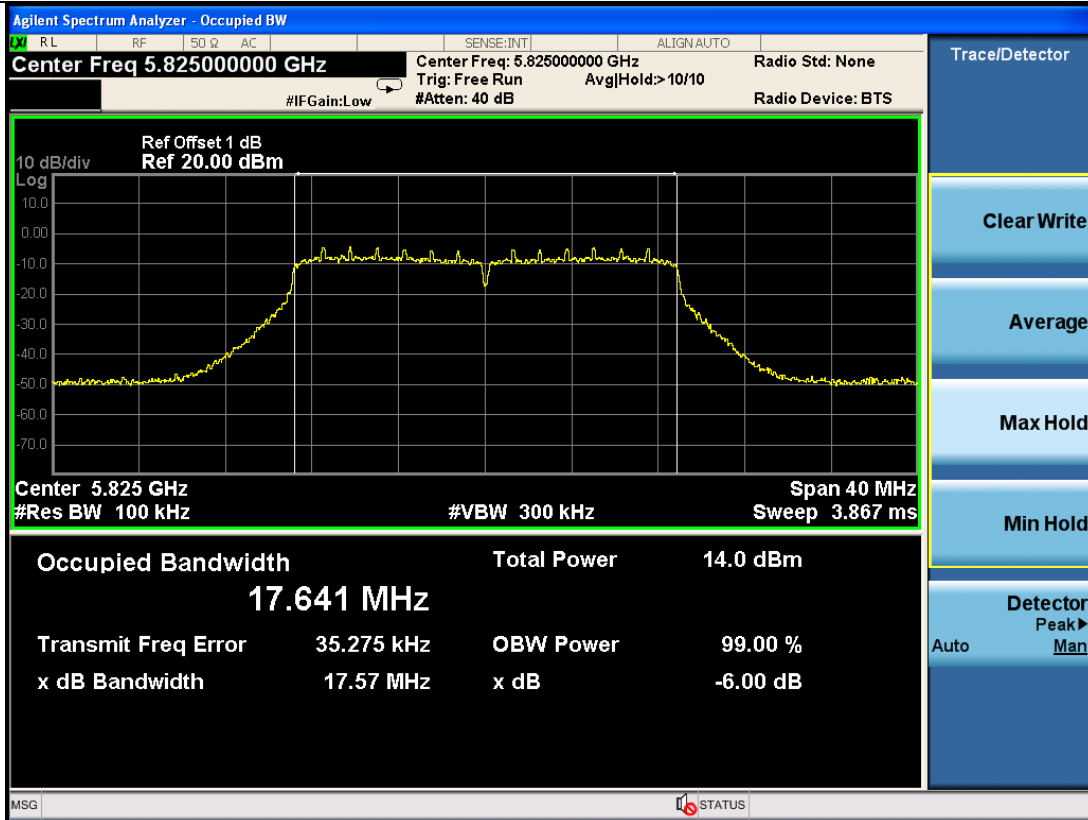
802.11a



Low

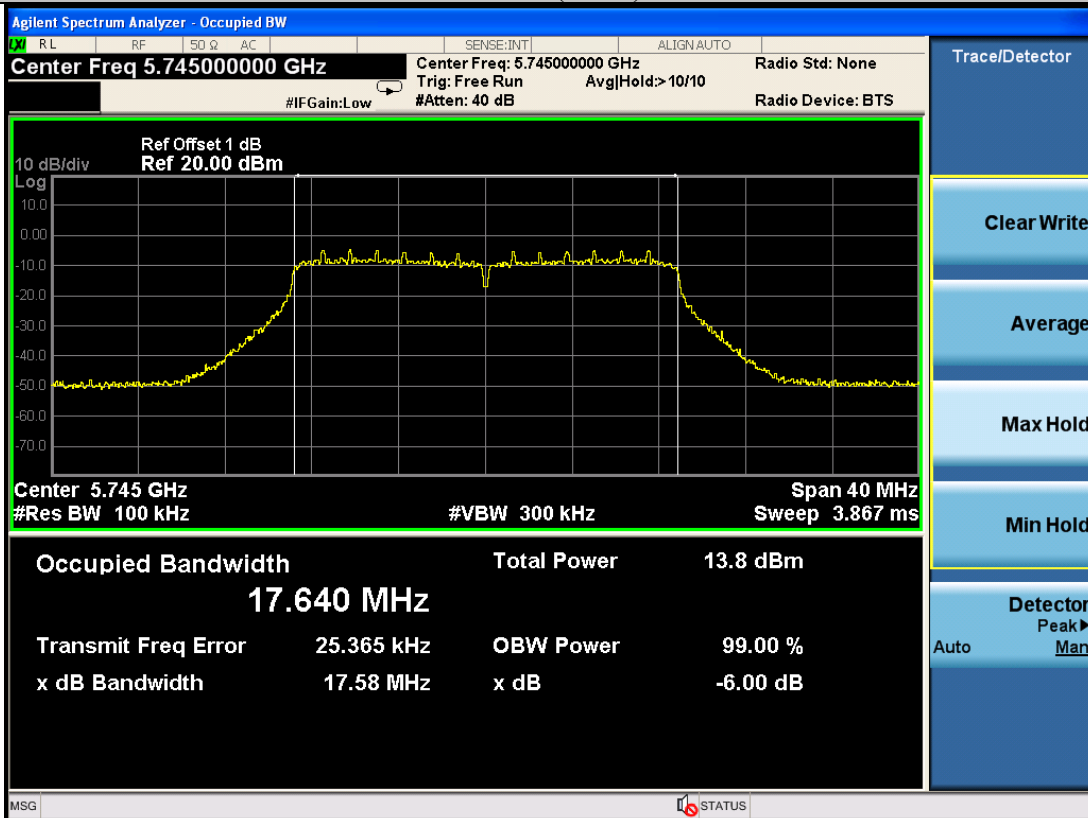


Mid

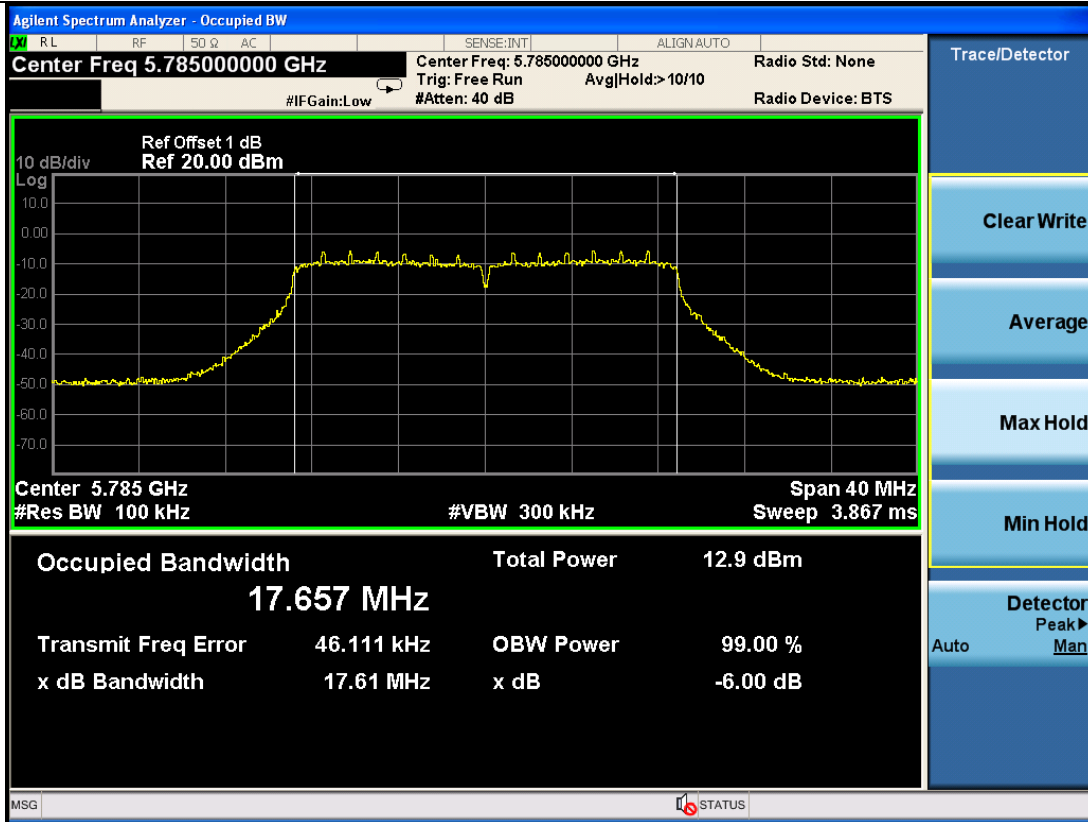


High

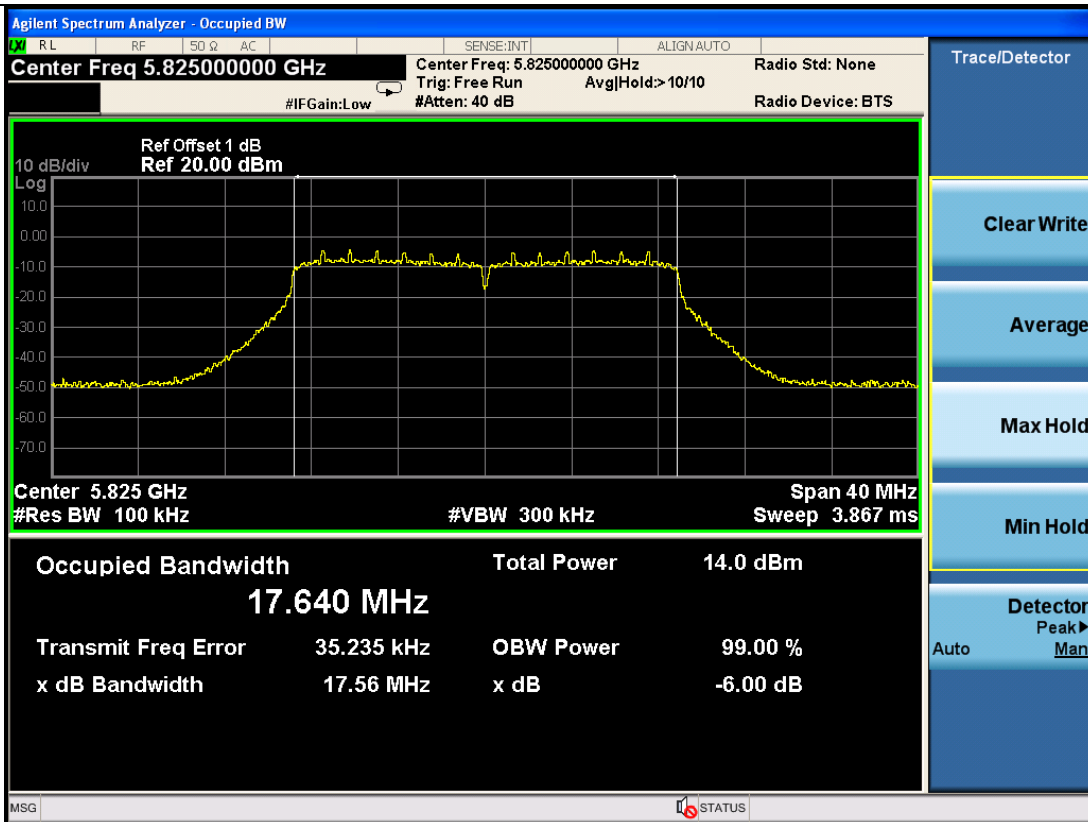
802.11n(HT20)



Low

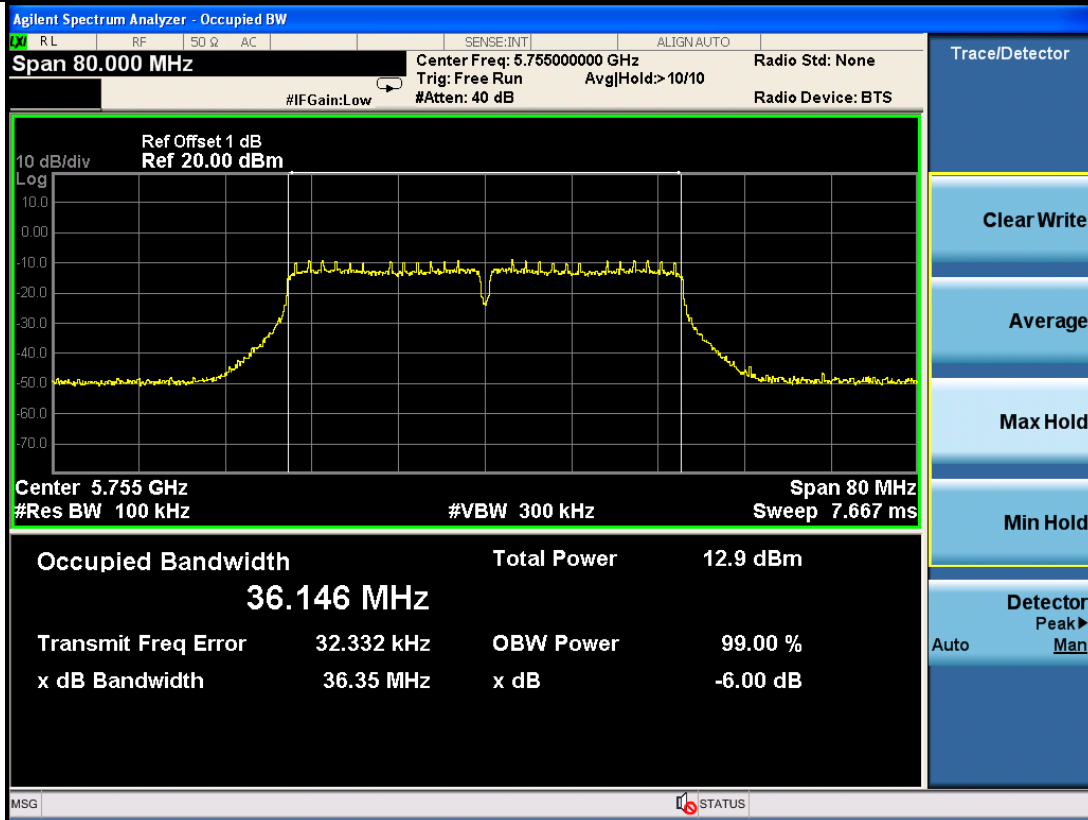


Mid

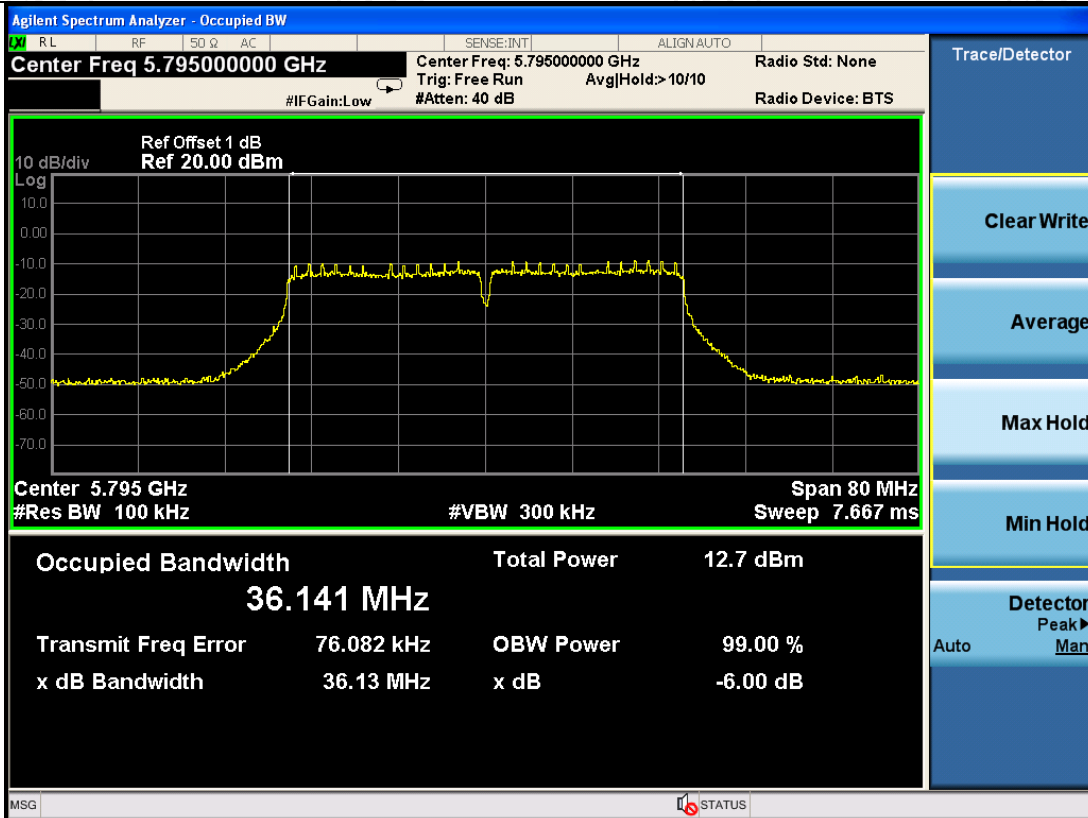


High

802.11n(HT40)



Low



High

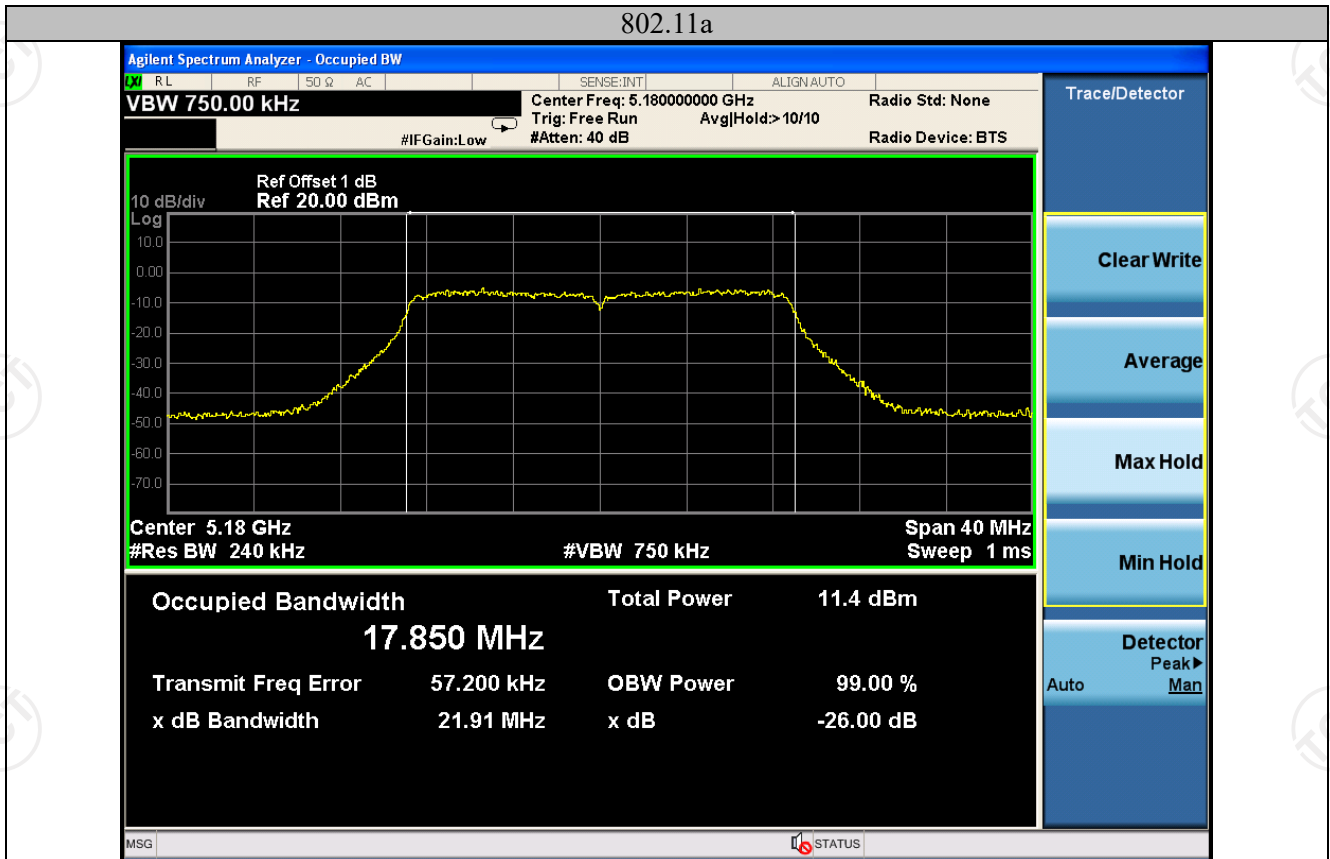
6.5.3. Test data**Band I For antenna 1**

Mode	Test channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
11a	CH36	5180	21.91	17.850
11a	CH40	5200	22.00	17.836
11a	CH48	5240	21.97	17.842
11n(HT20)	CH36	5180	21.91	17.855
11n(HT20)	CH40	5200	22.00	17.836
11n(HT20)	CH48	5240	21.97	17.842
11n(HT40)	CH38	5190	43.39	36.455
11n(HT40)	CH46	5230	43.24	36.475

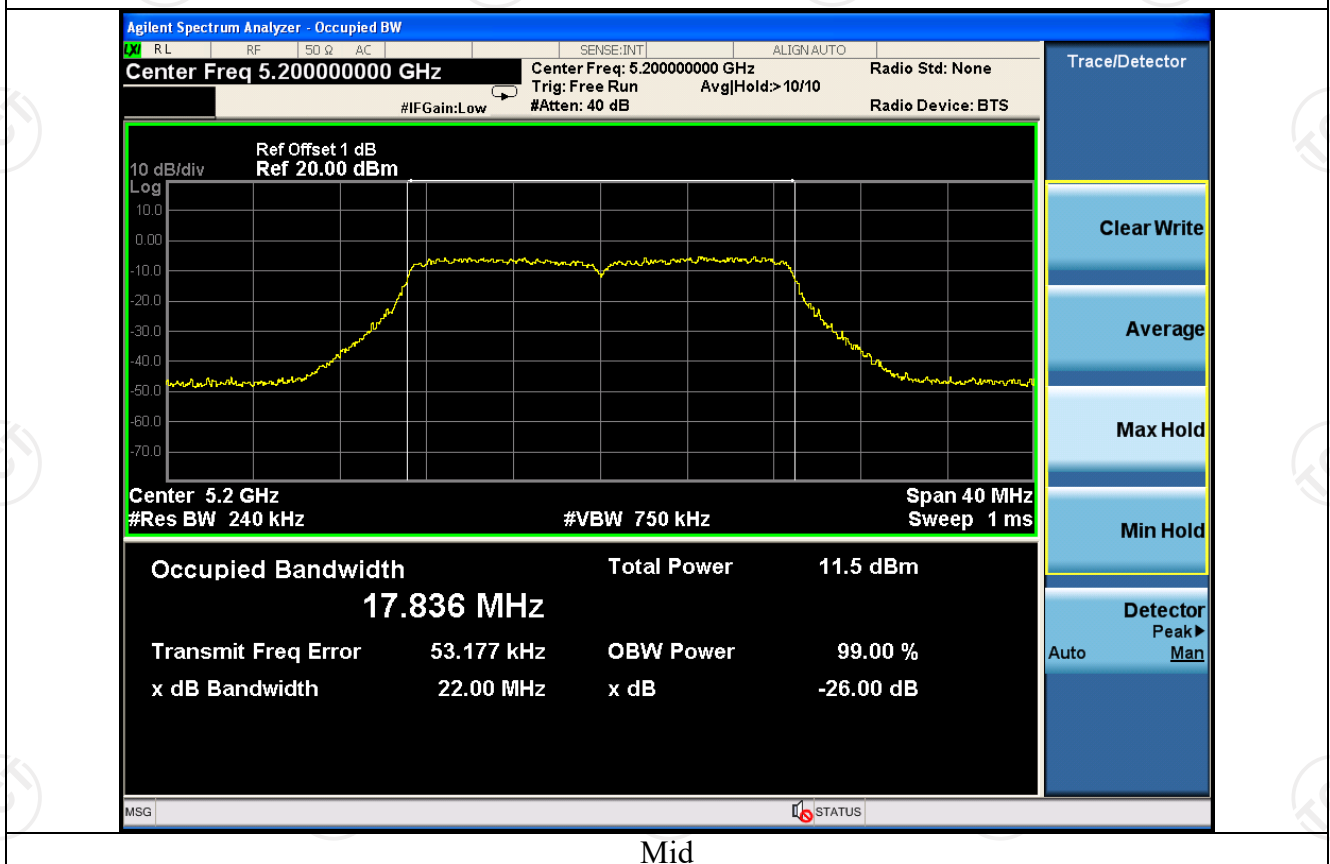
Test plots as follows:

Band I (5150 – 5250 MHz)

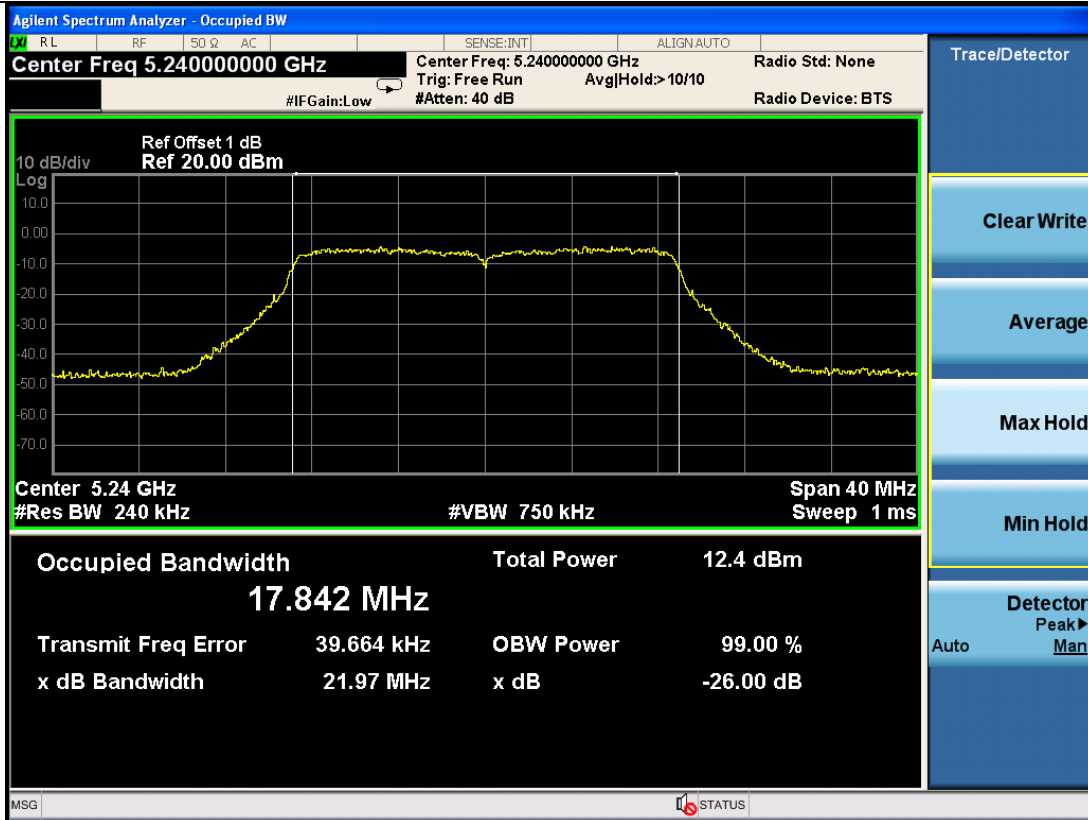
802.11a



Low

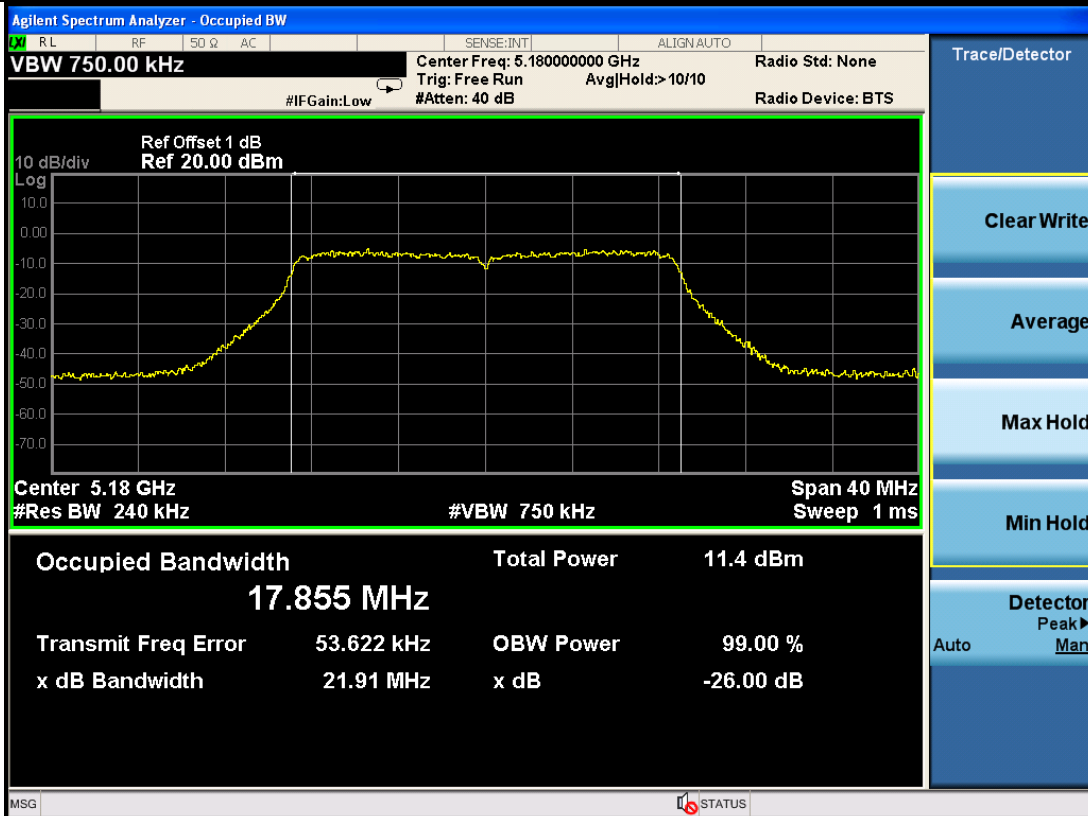


Mid

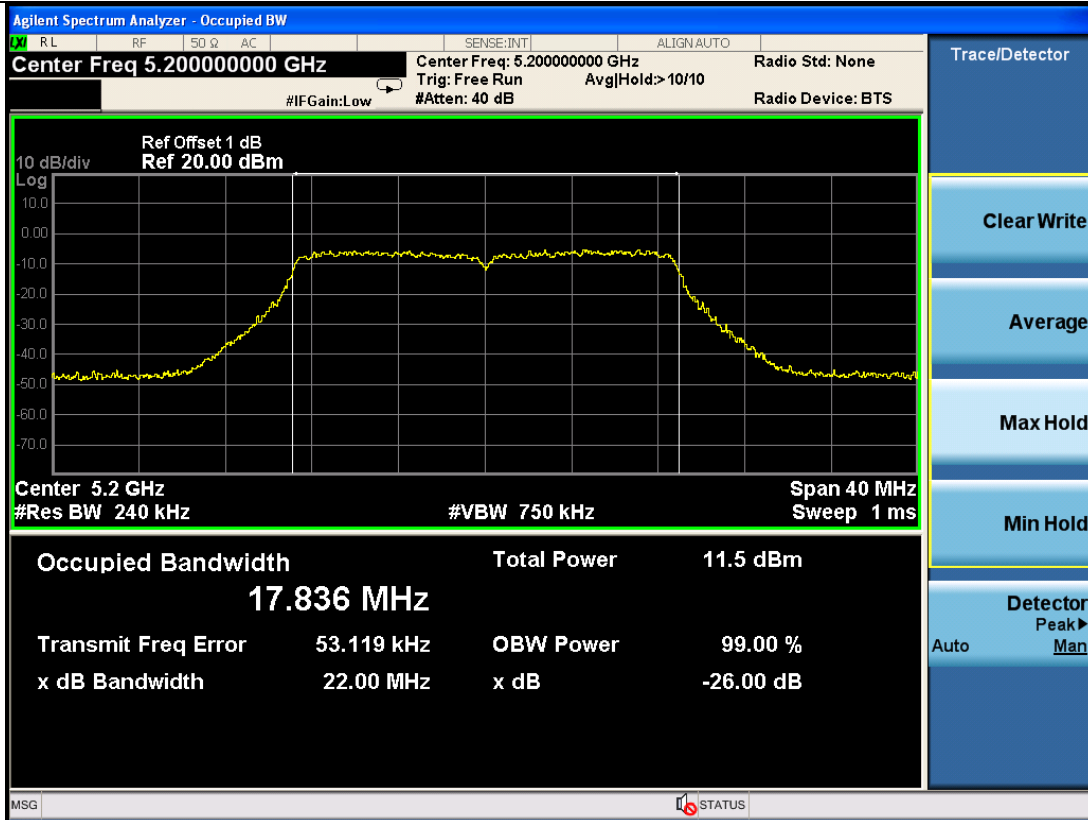


High

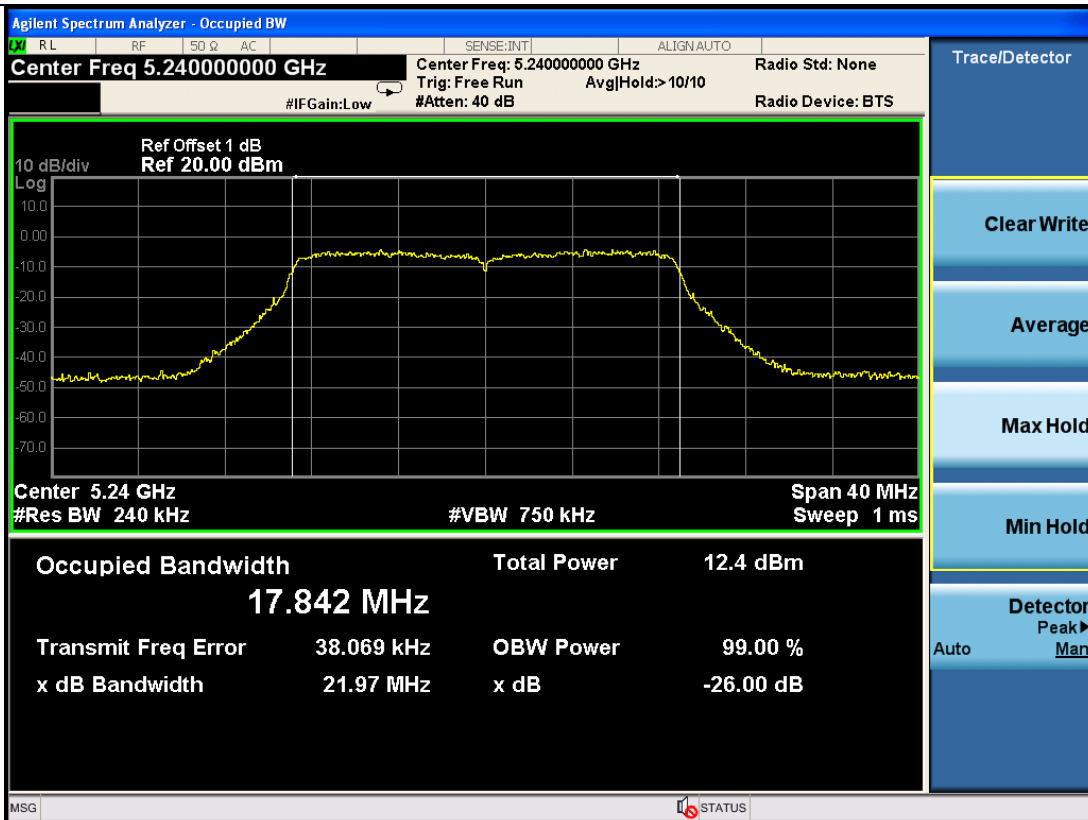
802.11n(HT20)



Low

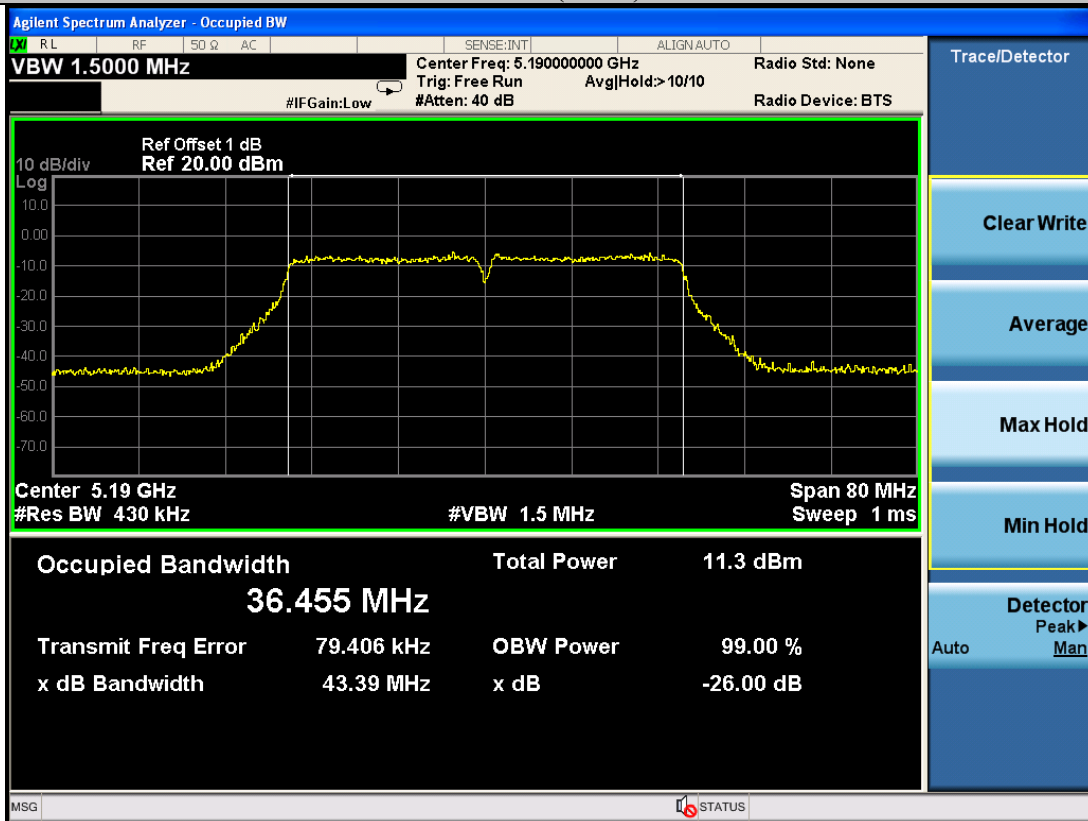


Mid

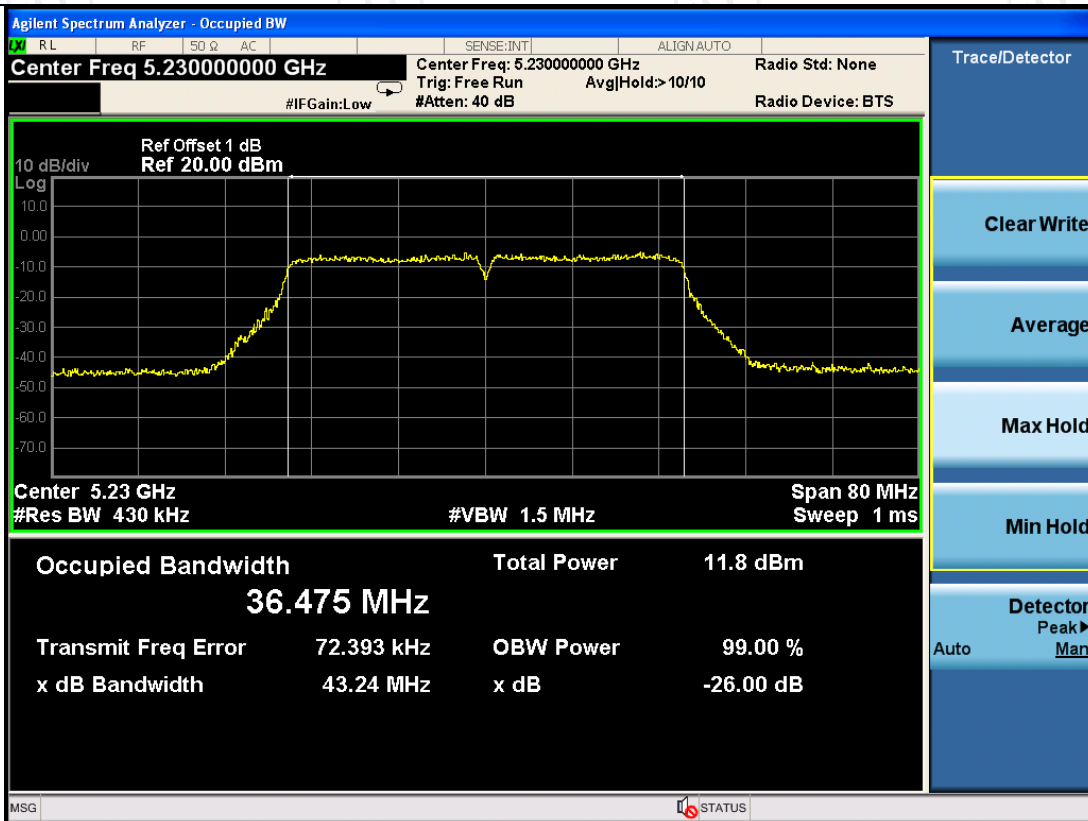


High

802.11n(HT40)



Low



High

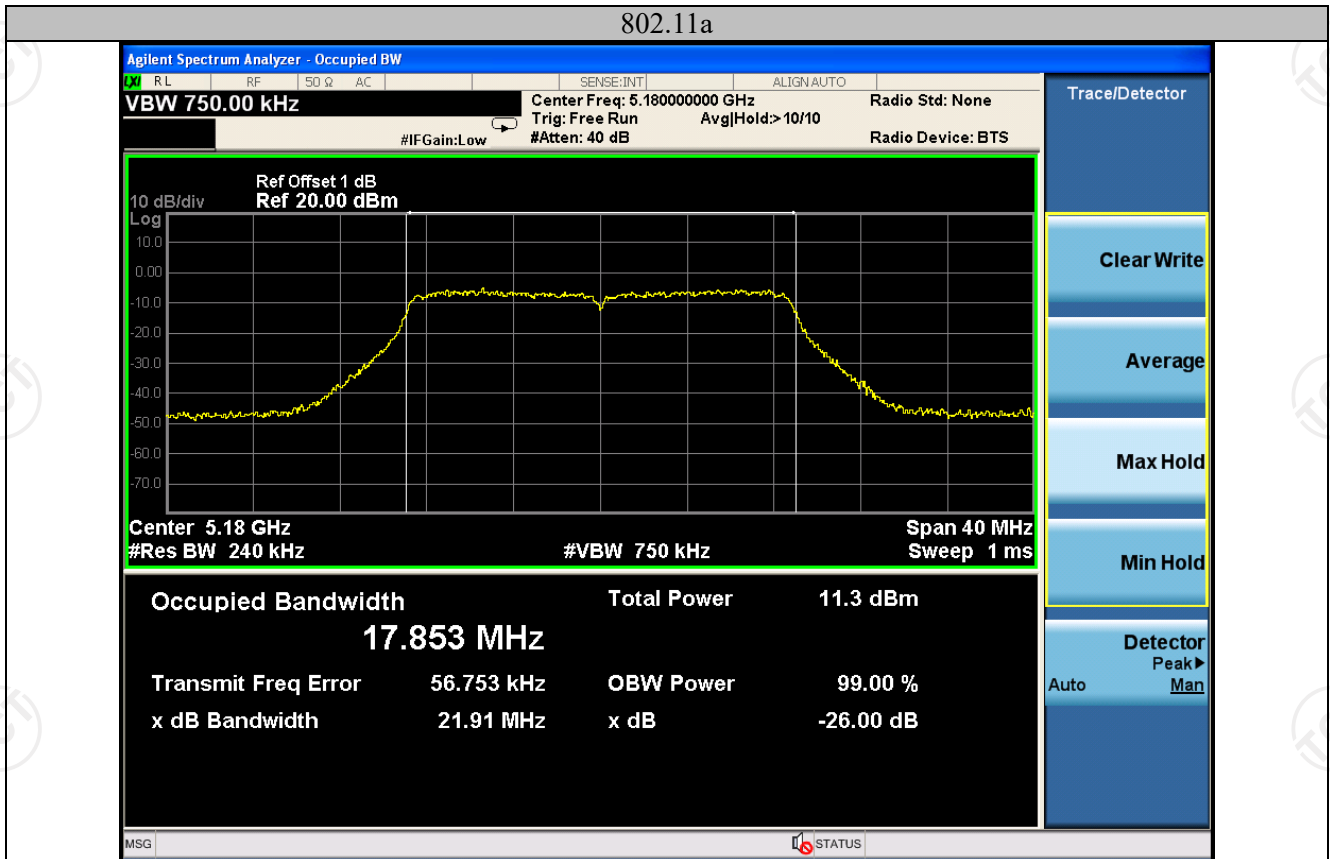
Band I For antenna 2

Mode	Test channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
11a	CH36	5180	21.91	17.853
11a	CH40	5200	22.13	17.844
11a	CH48	5240	21.97	17.843
11n(HT20)	CH36	5180	21.91	17.830
11n(HT20)	CH40	5200	22.13	17.841
11n(HT20)	CH48	5240	21.97	17.842
11n(HT40)	CH38	5190	43.55	36.480
11n(HT40)	CH46	5230	43.35	36.488

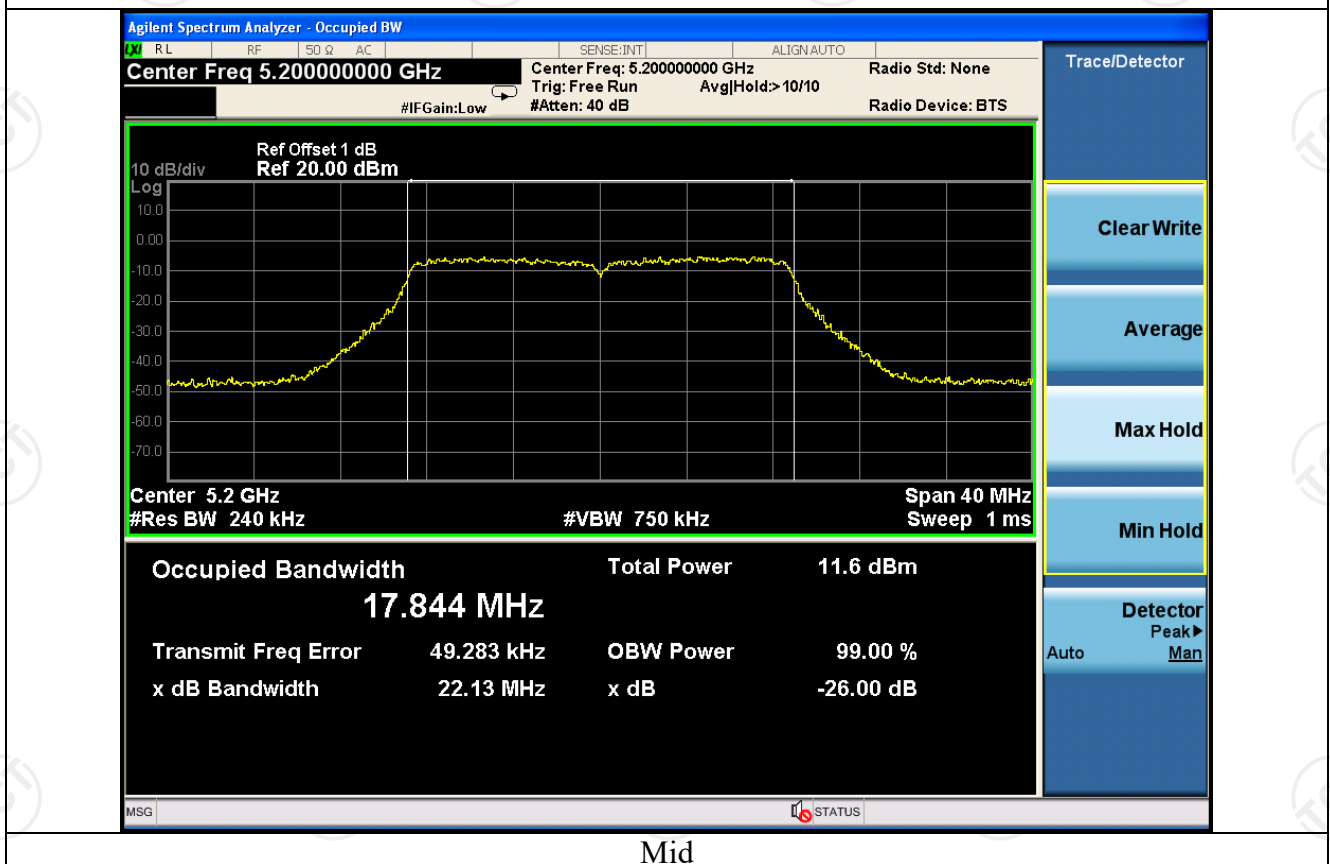
Test plots as follows:

Band I (5150 – 5250 MHz)

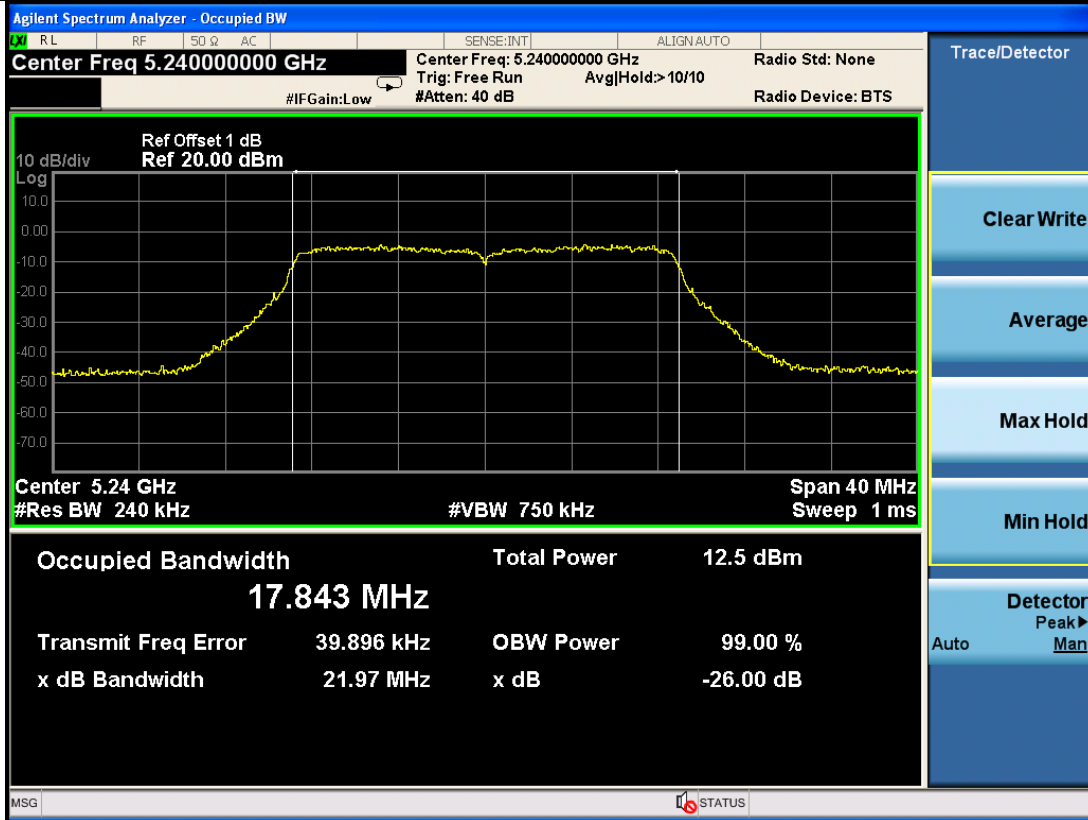
802.11a



Low

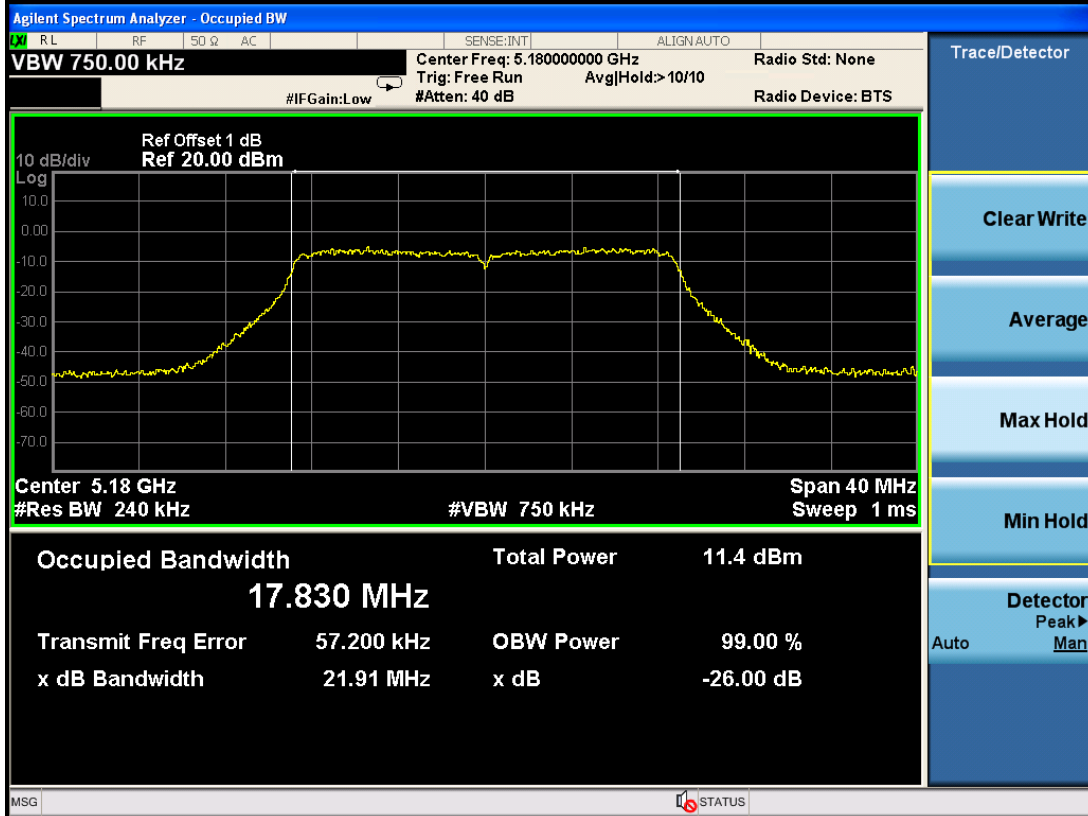


Mid

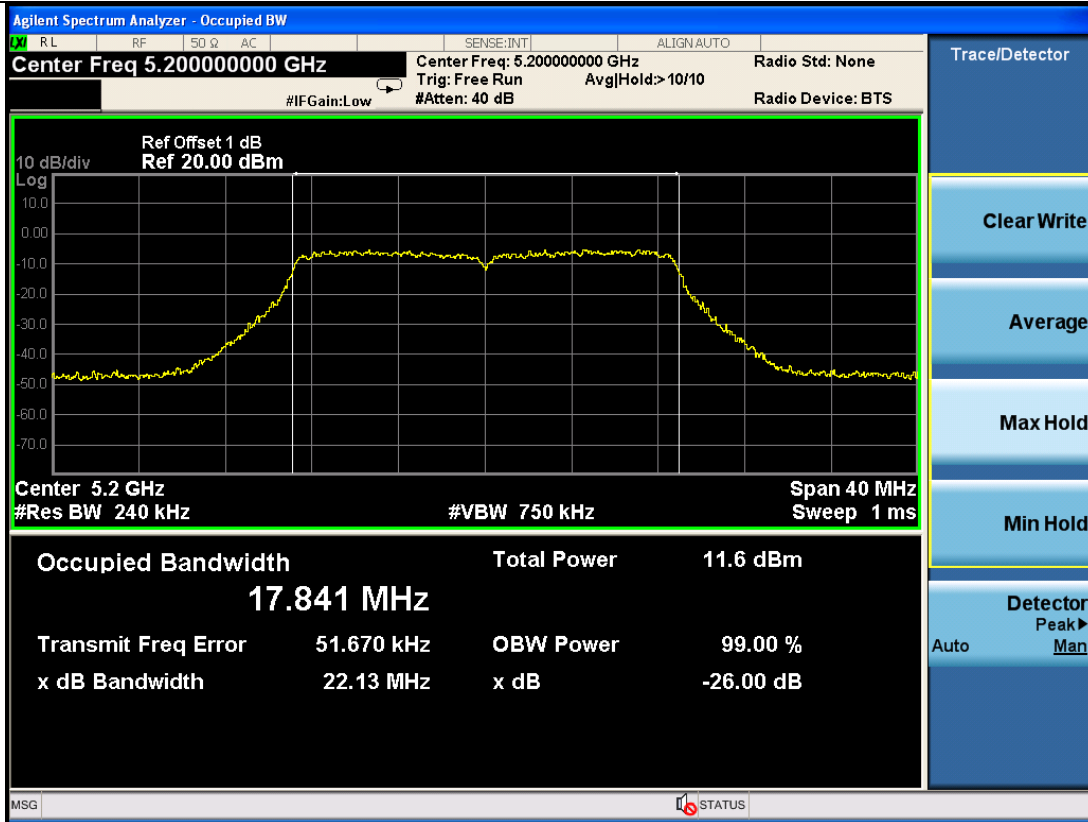


High

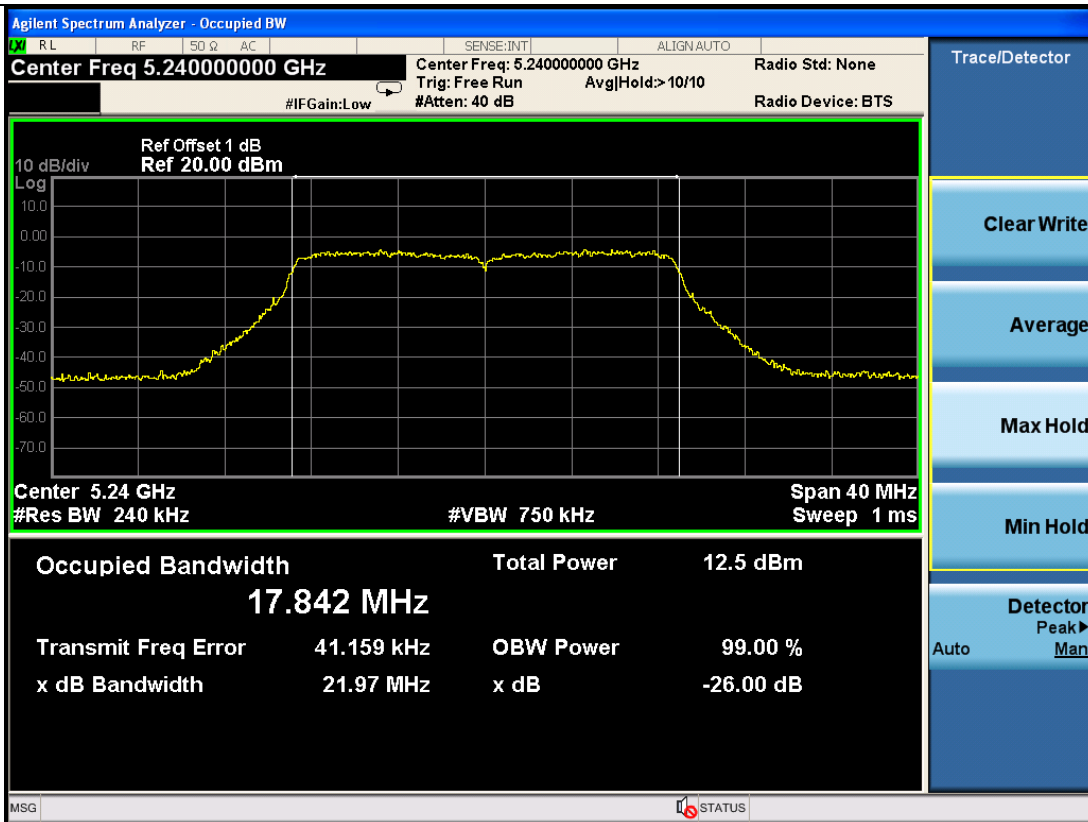
802.11n(HT20)



Low

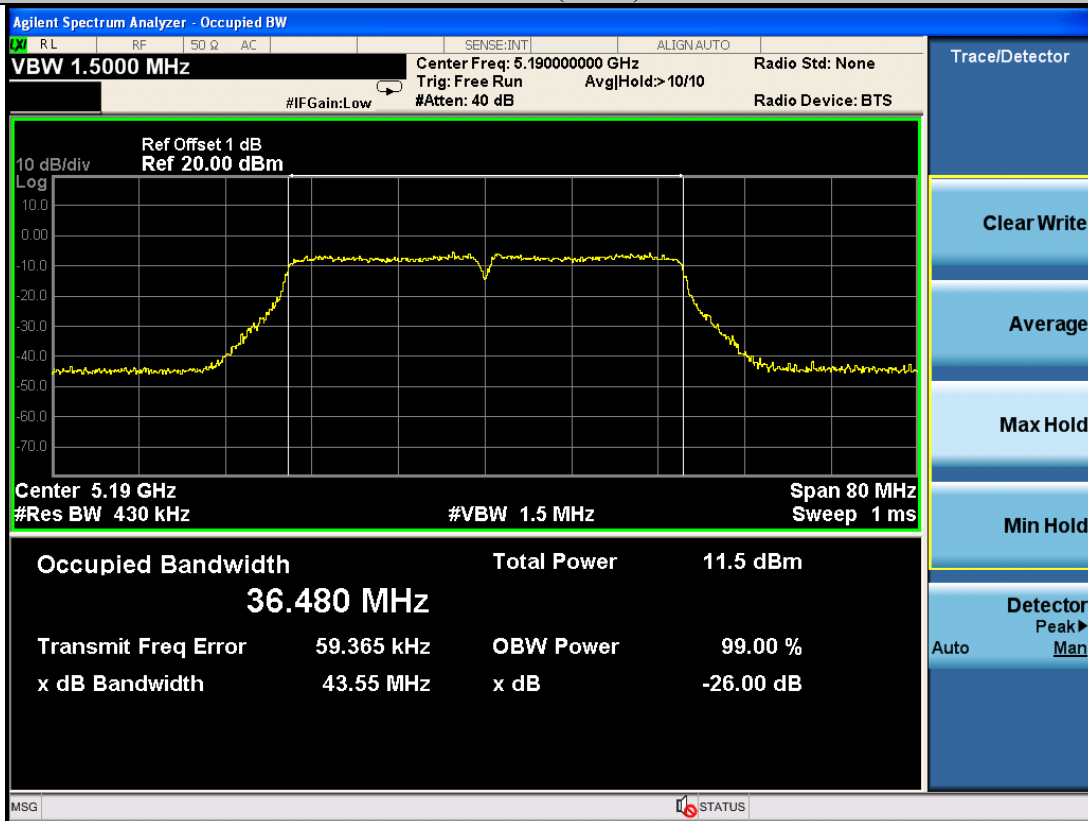


Mid

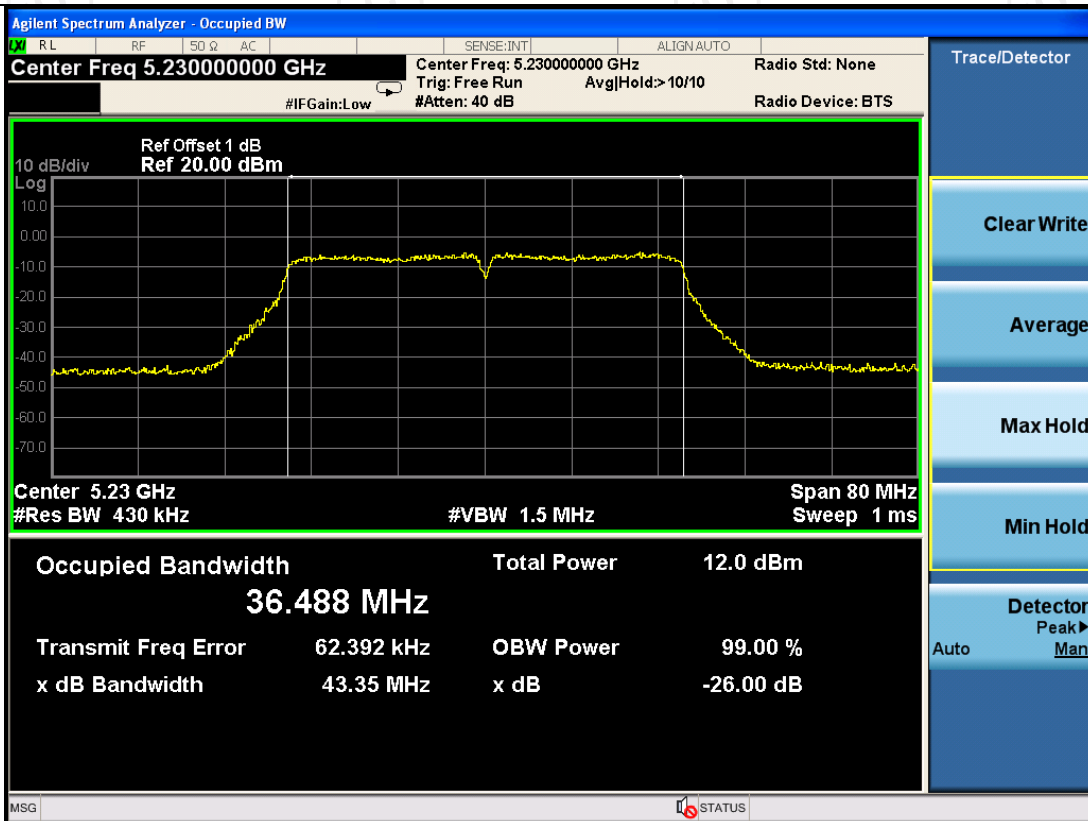


High

802.11n(HT40)




Low



High

6.6. Power Spectral Density

6.6.1. Test Specification

Test Requirement:	FCC Part15 E Section 15.407 (a)
Test Method:	KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section F
Limit:	≤11.00dBm/MHz for Band I 5150MHz-5250MHz ≤30.00dBm/500KHz for Band IV 5725MHz-5850MHz The e.i,r,p spectral density for Band I 5150MHz – 5250 MHz should not exceed 10dBm/MHz
Test Setup:	 <p style="text-align: center;">Spectrum Analyzer EUT</p>
Test Mode:	Transmitting mode with modulation
Test Procedure:	<ol style="list-style-type: none"> 1. Set the spectrum analyzer or EMI receiver span to view the entire emission bandwidth. 1. Set RBW = 510 kHz/1 MHz, VBW ≥ 3*RBW, Sweep time = Auto, Detector = RMS. 2. Allow the sweeps to continue until the trace stabilizes. 3. Use the peak marker function to determine the maximum amplitude level.
Test Result:	PASS

6.6.2. Test Instruments

RF Test Room				
Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100060	Sep. 27, 2018
RF Cable (9KHz-40GHz)	TCT	RE-03	N/A	Sep. 27, 2018
Antenna Connector	TCT	RFC-03	N/A	Sep. 27, 2018

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

6.6.3. Test data

Configuration Band I (5150 - 5250 MHz)						
Mode	Test channel	Power Spectral Density			FCC Limit (dBm)	Result
		Antenna port 1	Antenna port 2	MIMO		
11a	CH149	0.324	-0.188	/	11	PASS
11a	CH157	0.796	0.797	/	11	PASS
11a	CH165	1.527	1.803	/	11	PASS
11n (HT20)	CH149	-0.057	0.480	3.230	11	PASS
11n (HT20)	CH157	1.571	0.796	4.211	11	PASS
11n (HT20)	CH165	-1.624	1.464	4.555	11	PASS
11n (HT40)	CH151	-1.439	-1.902	1.346	11	PASS
11n (HT40)	CH159	-1.457	-1.476	1.544	11	PASS

Configuration Band IV (5725 - 5850 MHz)						
Mode	Test channel	Power Spectral Density			FCC Limit (dBm)	Result
		Antenna port 1	Antenna port 2	MIMO		
11a	CH149	-3.872	-4.330	/	30	PASS
11a	CH157	-6.956	-4.915	/	30	PASS
11a	CH165	-8.222	-7.622	/	30	PASS
11n (HT20)	CH149	-5.829	-6.316	-3.055	30	PASS
11n (HT20)	CH157	-7.887	-6.623	-4.199	30	PASS
11n (HT20)	CH165	-9.211	-9.233	-6.212	30	PASS
11n (HT40)	CH151	-6.587	-7.300	-3.919	30	PASS
11n (HT40)	CH159	-8.160	-8.633	-5.380	30	PASS

Note: 1 MIMO is Antenna port 1 and Antenna port 2.

2 According to KDB 662911, Result power = $10\log(10^{(ant1/10)}+10^{(ant2/10)})$.

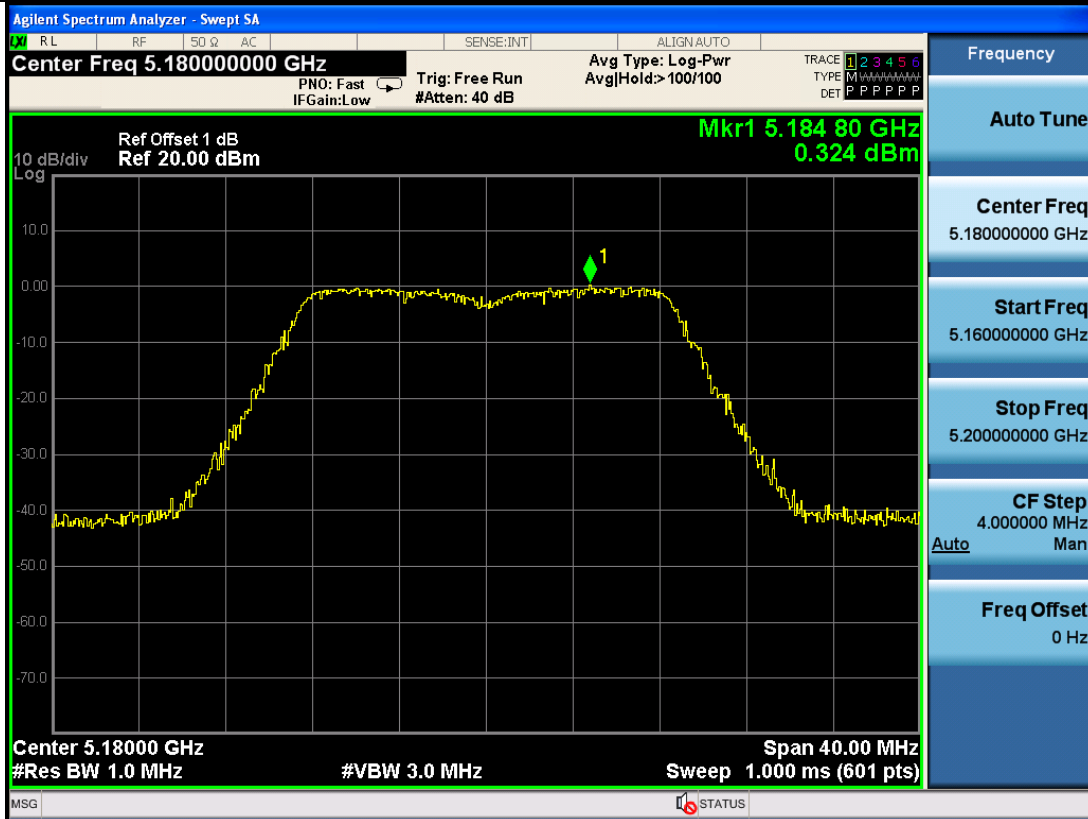
3 Result unit: W, The end result is converted to units of dBm.

4 EUT only support 802.11 n(HT20)/n(HT40) for MIMO mode, not support 802.11 a for MIMO mode.802.11 a only support uses divestity (ant 2 and ant 1).

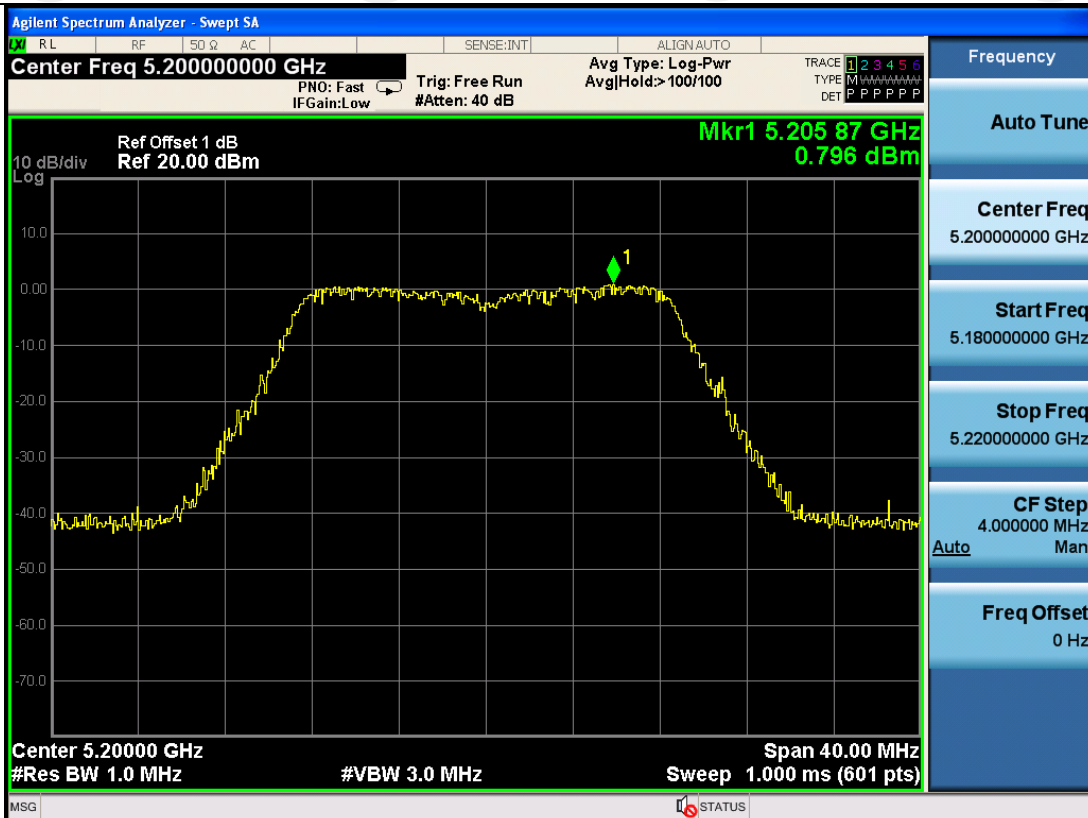
Test plots as follows:

Band I (5150 – 5250 MHz) For Antenna 1

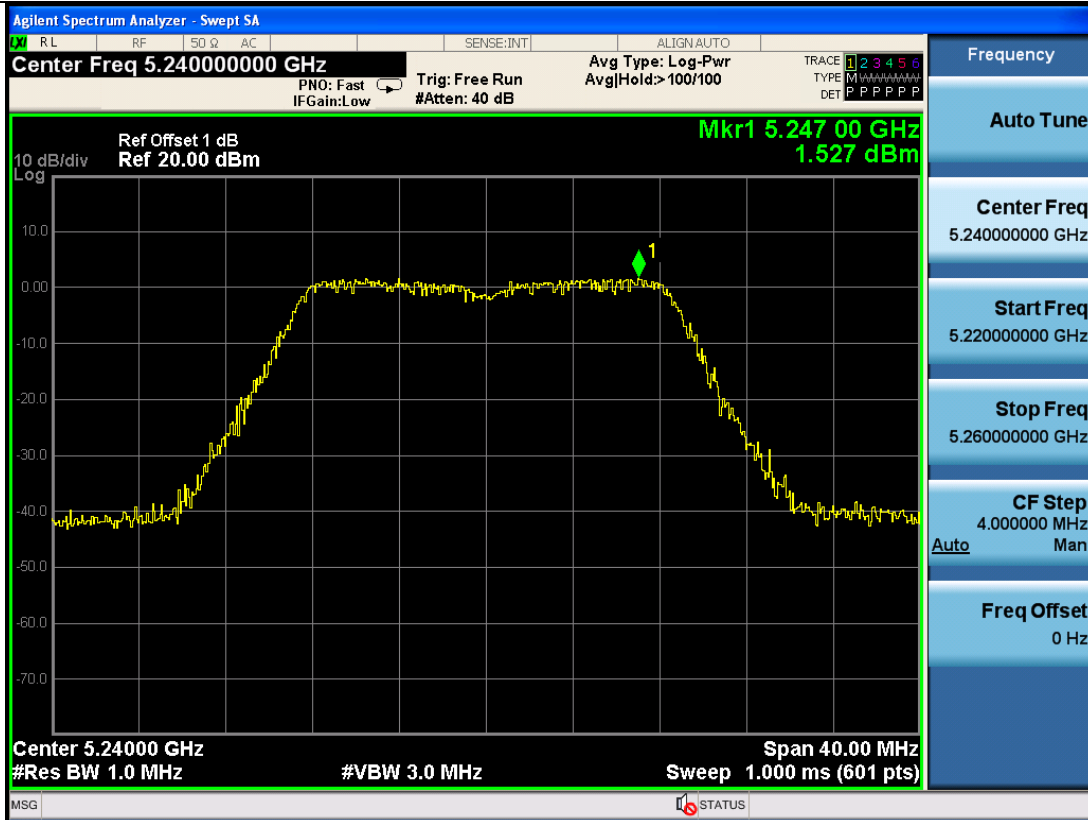
802.11a



Low

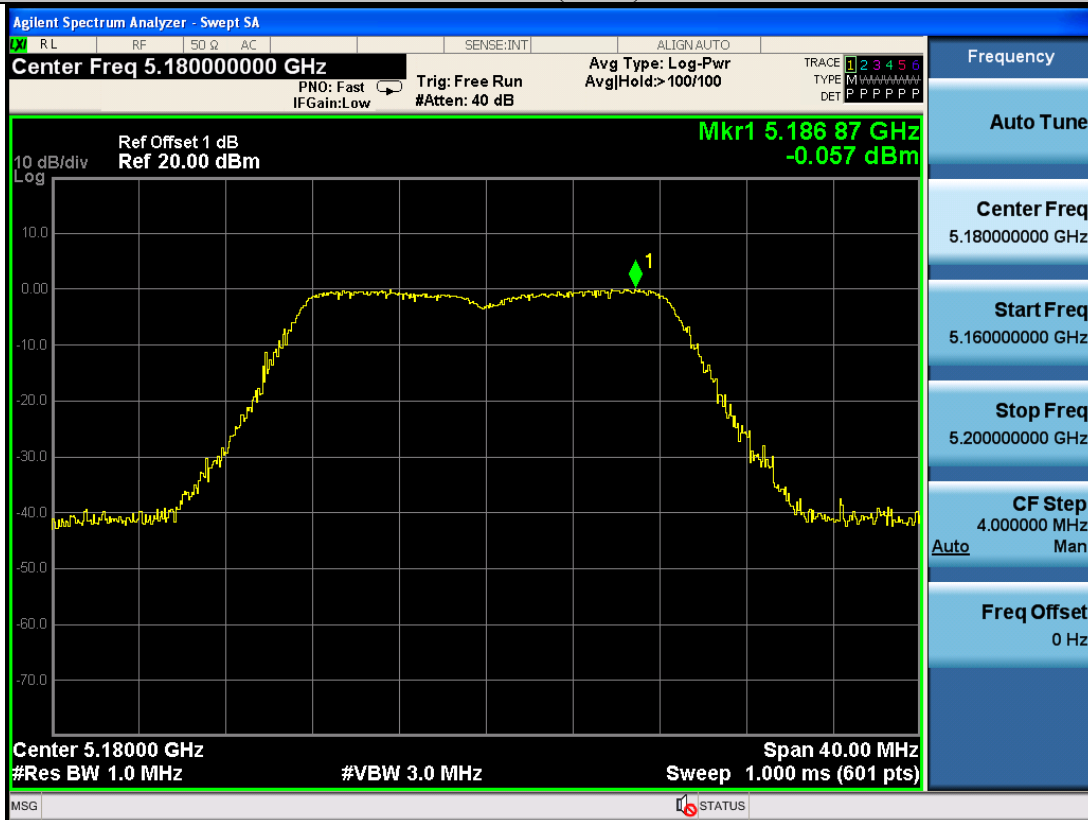


Mid

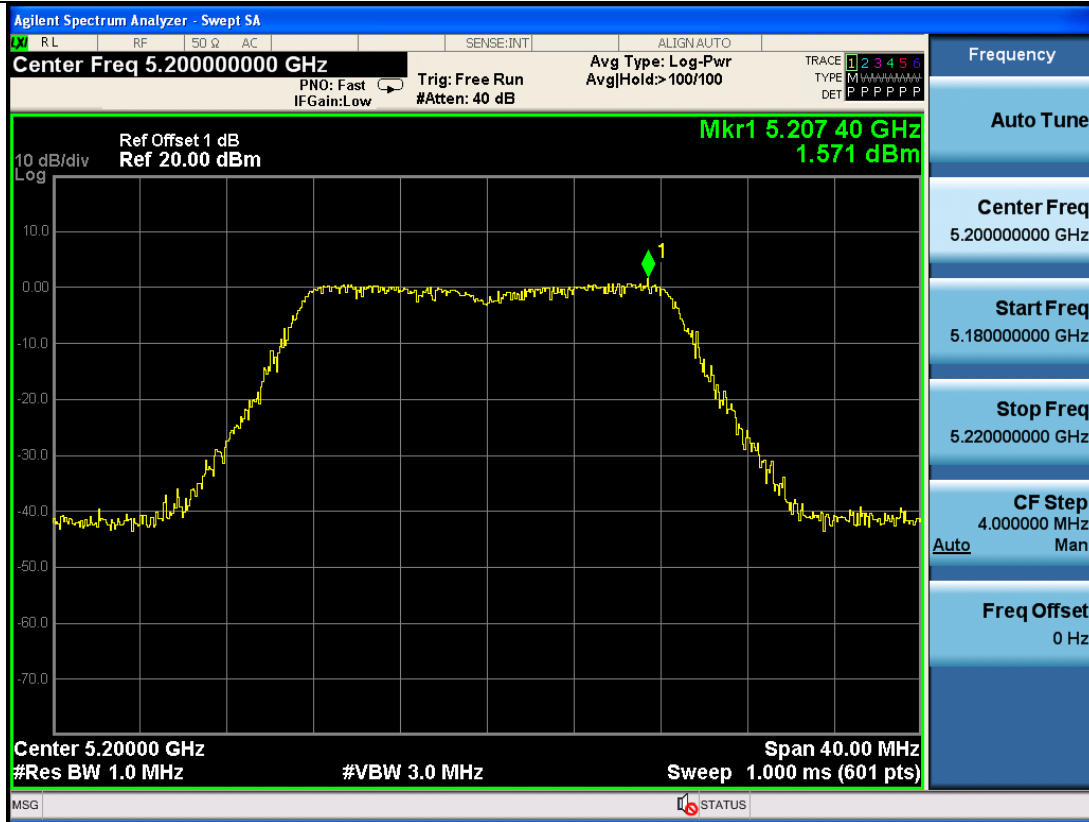


High

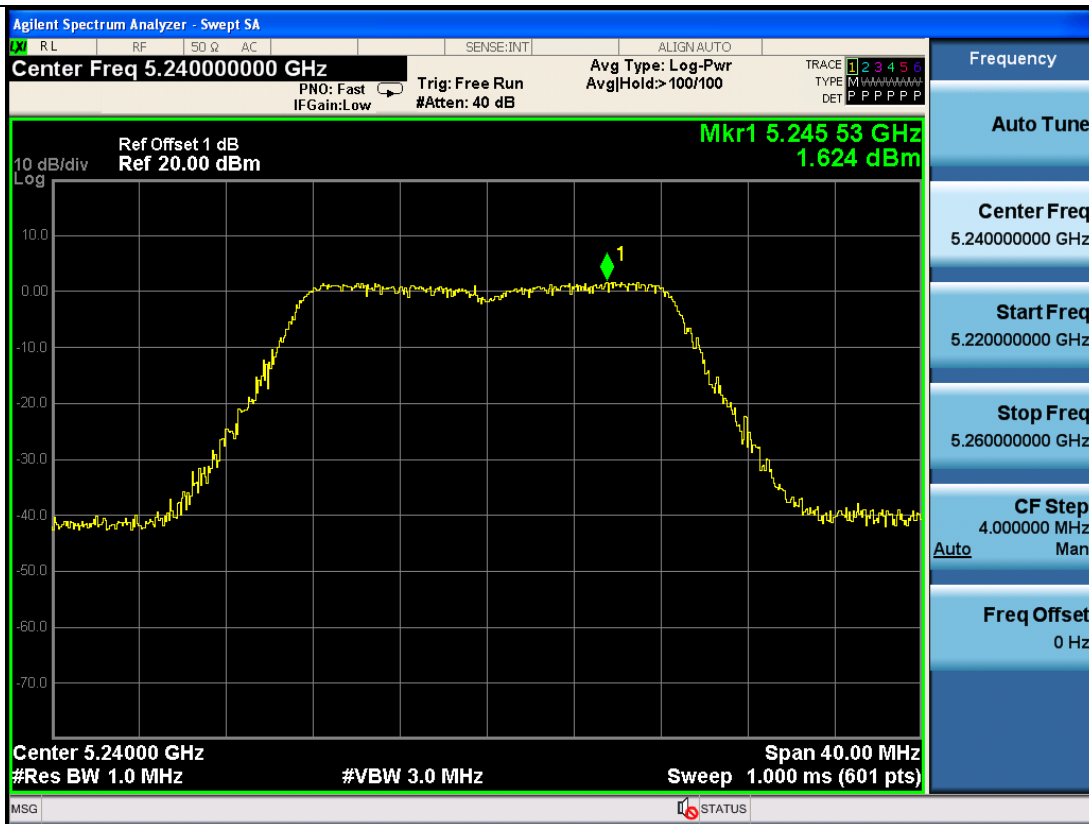
802.11n(HT20)



Low

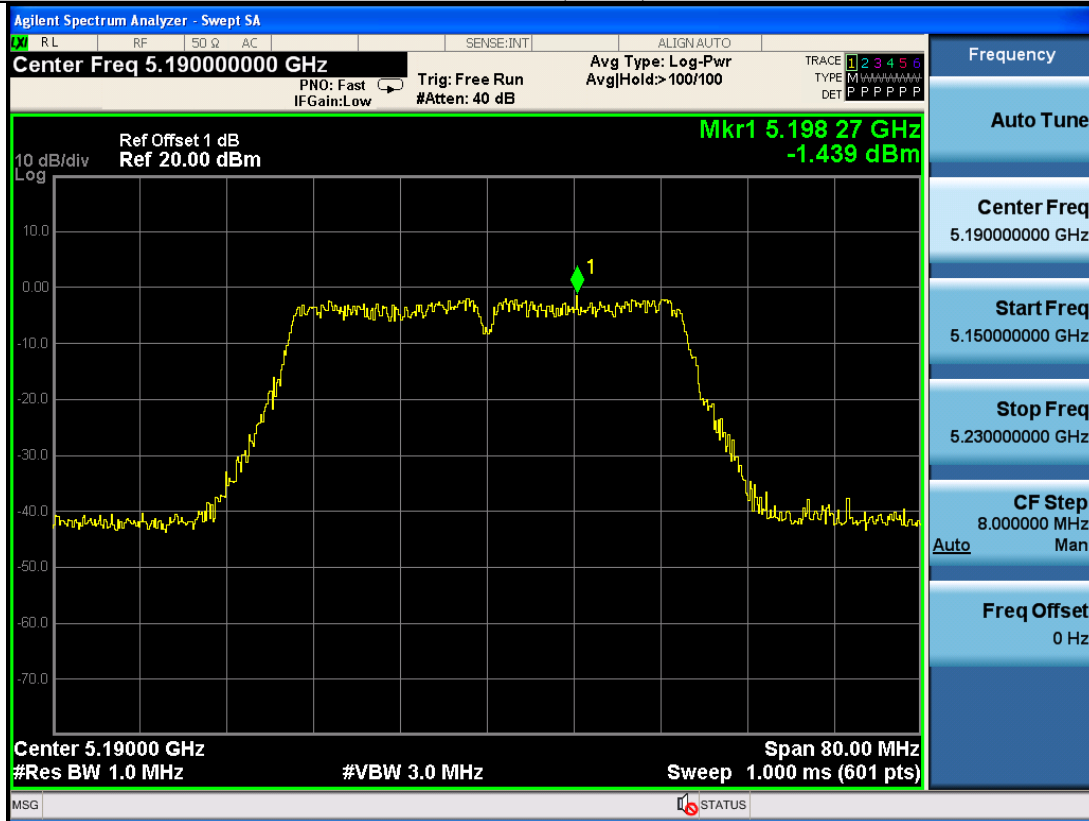


Mid

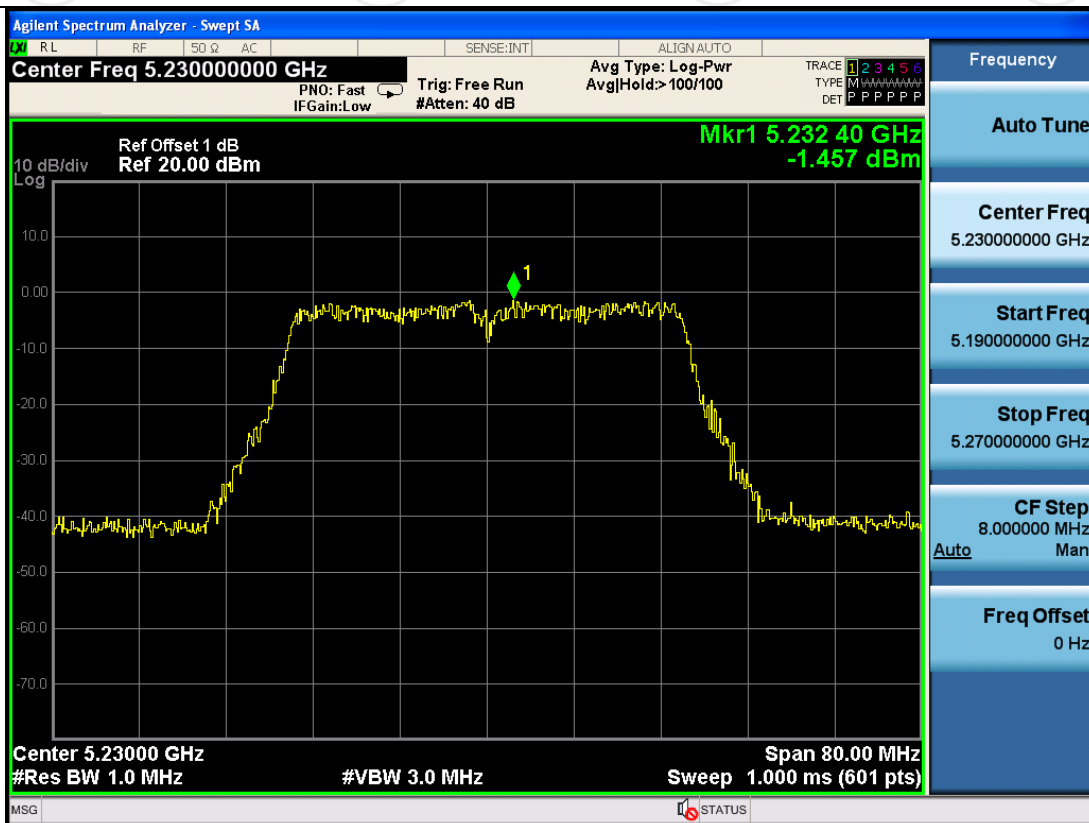


High

802.11n(HT40)



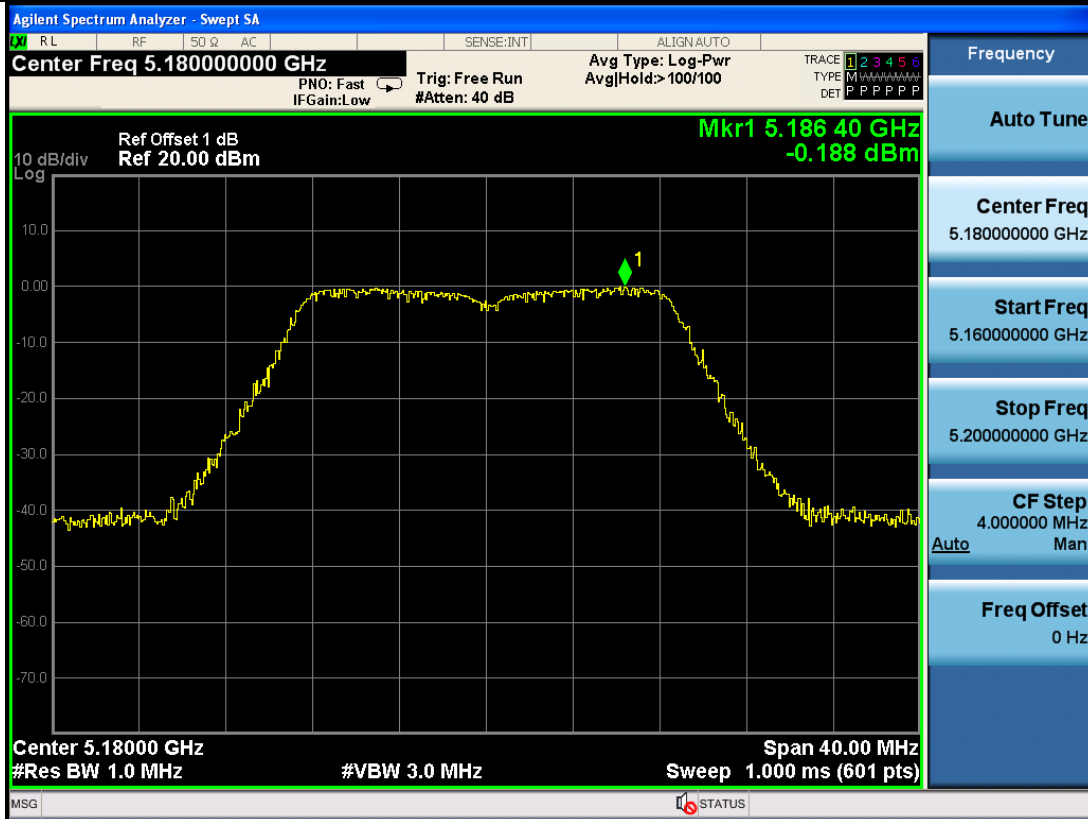
Low



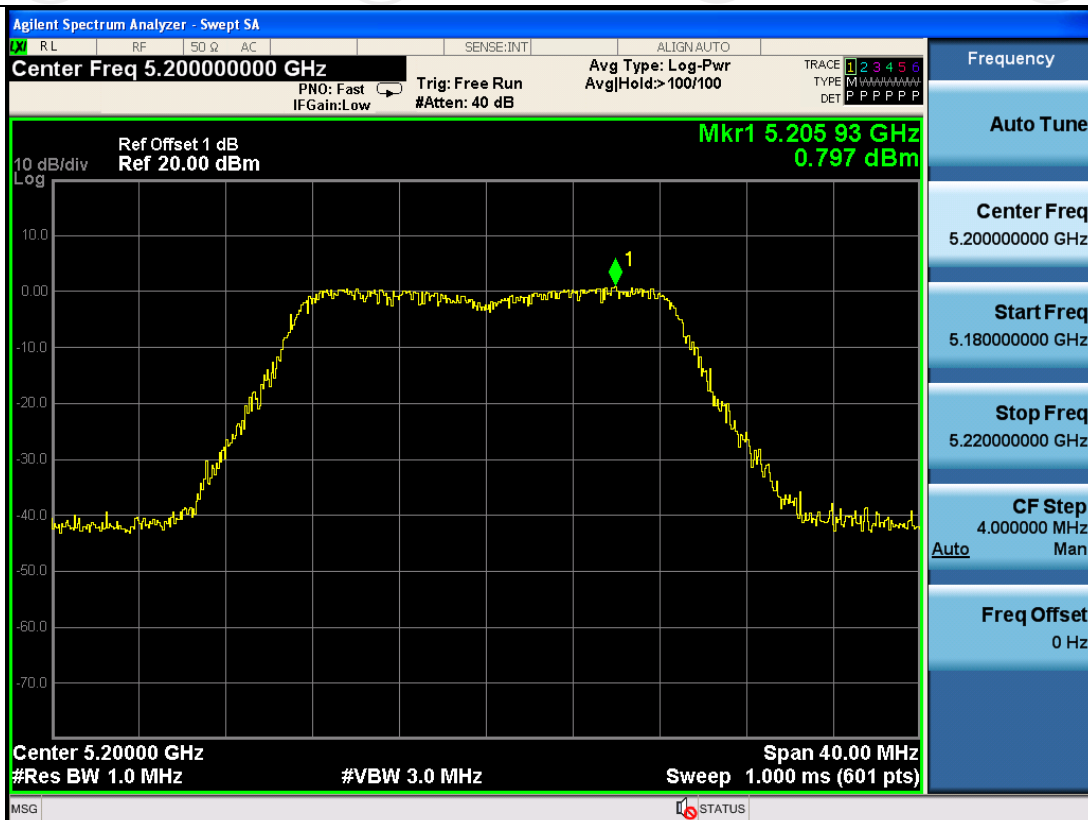
High

Band I (5150 – 5250 MHz) For Antenna 2

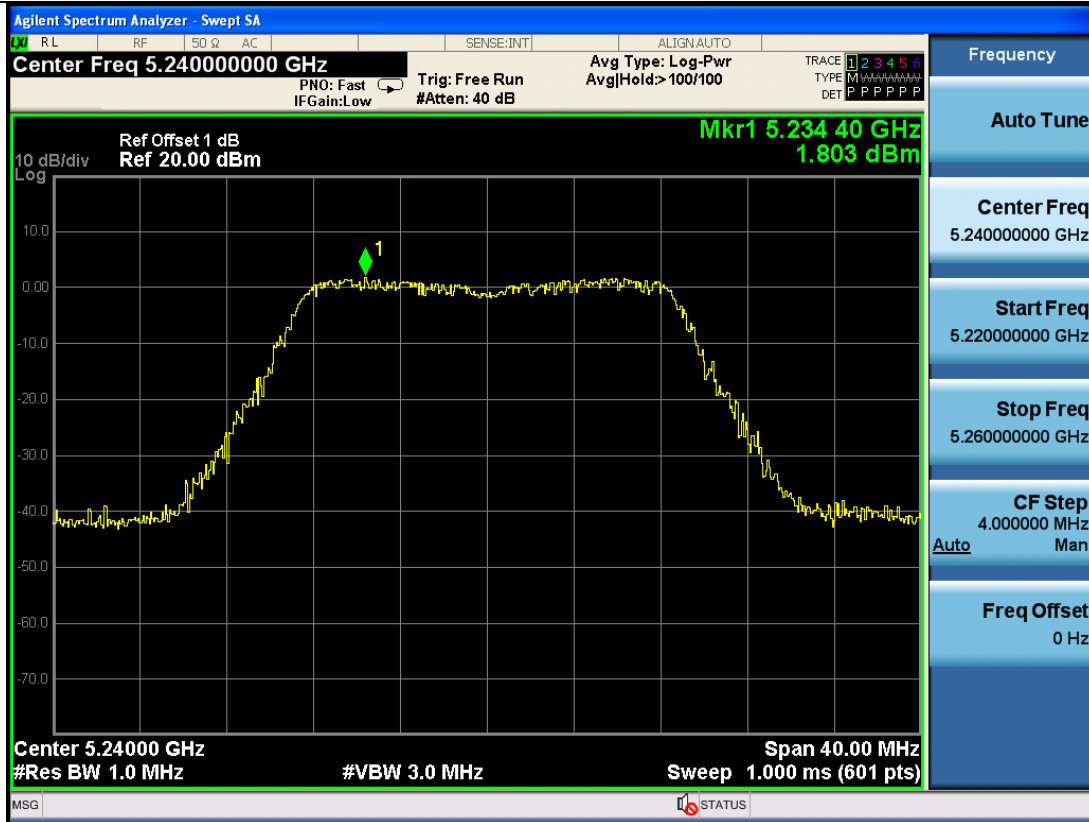
802.11a



Low

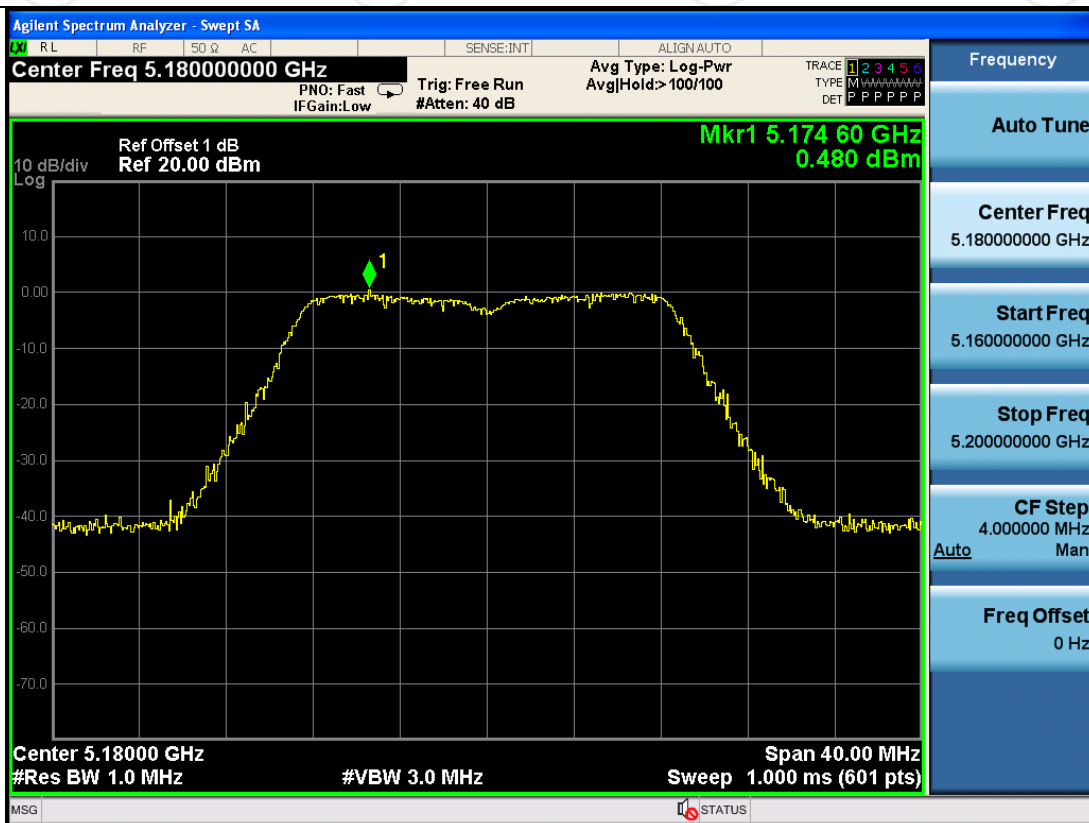


Mid



High

802.11n(HT20)

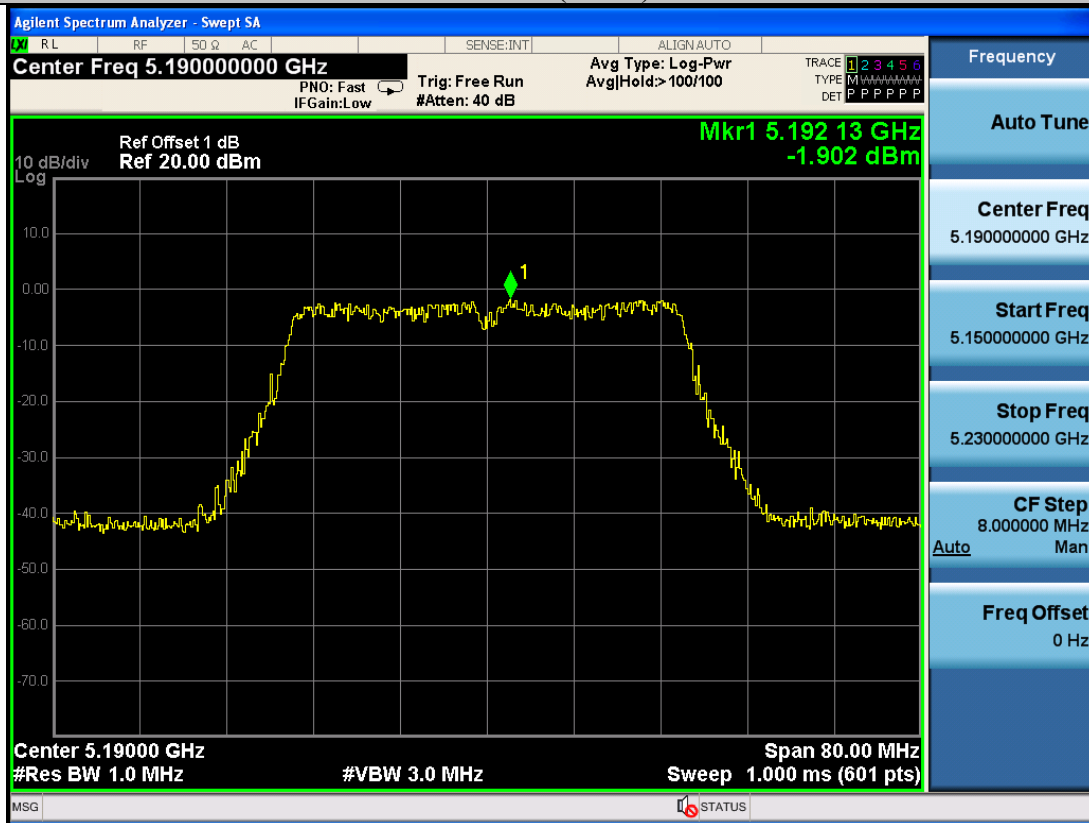


Low

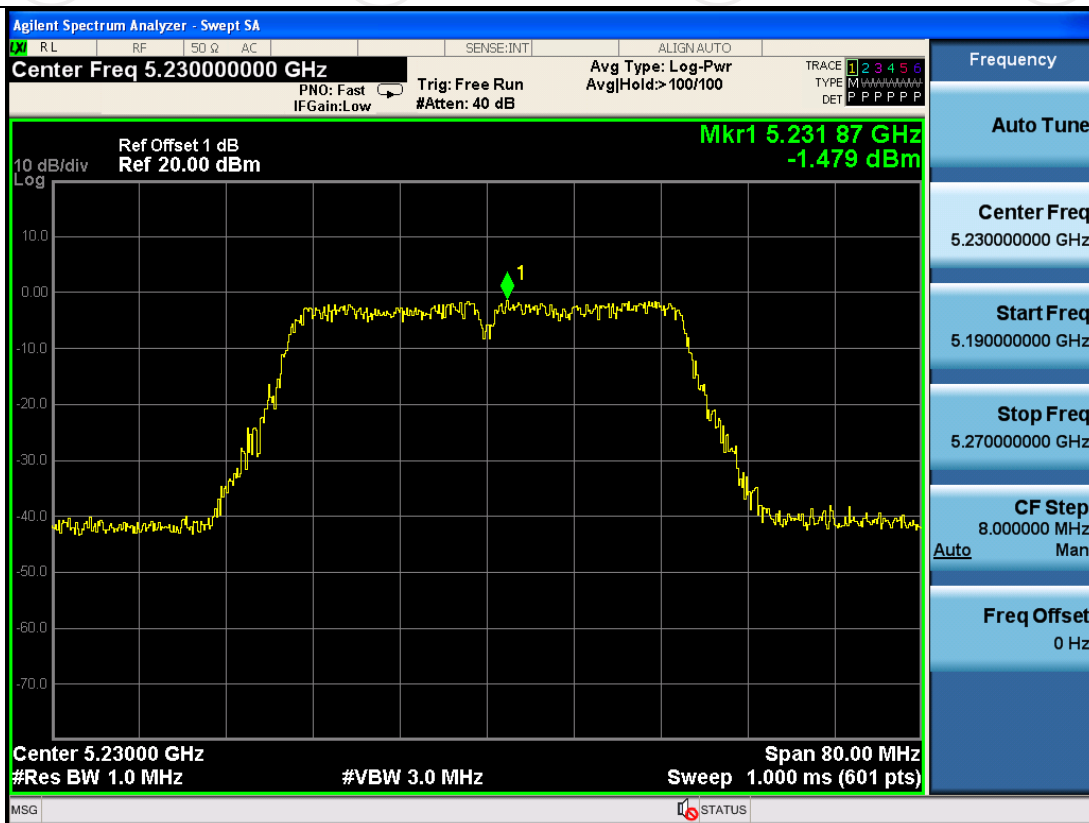


Mid

802.11n(HT40)



Low



High

Band IV (5725 – 5850 MHz) for antenna 1

802.11a



Low

