

TEST REPORT

FCC ID: 2AW9S-JR-J10

Product: Tablet

Model No.: JR-J10

Additional Model No.: JR-J7, JR-J8, JR-J11, JR-J71, JR-J81, J72, J12

Trade Mark: **Jren**

Report No.: TCT201119E010

Issued Date: Dec. 15, 2020

Issued for:

SHENZHEN JREN TECHNOLOGY CO., LTD
3 Floor, C4 Building, Xinxing Industry Area 4, Xinhe, Fuhai town, Bao An
district, Shenzhen, China

Issued By:

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1. Test Certification

Product:	Tablet
Model No.:	JR-J10
Additional Model No.:	JR-J7, JR-J8, JR-J11, JR-J71, JR-J81, J72, J12
Trade Mark:	
Applicant:	SHENZHEN JREN TECHNOLOGY CO., LTD
Address:	3 Floor, C4 Building, Xinxing Industry Area 4, Xinhe, Fuhai town, Bao An district, Shenzhen, China
Manufacturer:	SHENZHEN JREN TECHNOLOGY CO., LTD
Address:	3 Floor, C4 Building, Xinxing Industry Area 4, Xinhe, Fuhai town, Bao An district, Shenzhen, China
Date of Test:	Nov. 20, 2020 – Dec. 15, 2020
Applicable Standards:	FCC CFR Title 47 Part 15 Subpart E Section 15.407: 2016 KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General U-NII Test Procedures New Rules v02r01

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:

Kevin Huang

Date:

Dec. 15, 2020

Kevin Huang

Reviewed By:

Beryl Zhao

Date:

Dec. 15, 2020

Beryl Zhao

Approved By:

Tomsin

Date:

Dec. 15, 2020

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)	PASS
6dB Emission Bandwidth	§15.407(a)	PASS
26dB Emission Bandwidth & 99% Occupied Bandwidth	§15.407(a)	PASS
Power Spectral Density	§15.407(a)	PASS
Restricted Bands around fundamental frequency	§15.407(a)	PASS
Radiated Emission	§15.407(a)	PASS
Frequency Stability	§15.407(g)	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:	Tablet
Model No.:	JR-J10
Additional Model No.:	JR-J7, JR-J8, JR-J11, JR-J71, JR-J81, J72, J12
Trade Mark:	
Operation Frequency:	Band 1: 5150 MHz -5250 MHz Band 3: 5725 MHz -5850 MHz
Channel Bandwidth:	802.11a: 20MHz 802.11n: 20MHz, 40MHz 802.11ac: 20MHz, 40MHz, 80MHz
Modulation Technology:	Orthogonal Frequency Division Multiplexing(OFDM)
Modulation Type	256QAM, 64QAM, 16QAM, BPSK, QPSK
Antenna Type:	Internal Antenna
Antenna Gain:	2dBi
Power Supply:	Rechargeable Li-ion Battery DC 3.7V
AC adapter:	Adapter Information: Model: 018C Input: AC 100-240V, 50/60Hz Output: DC 5V, 2000mA
Remark:	All models above are identical in interior structure, electrical circuits and components, and just model names are different for the marketing requirement.

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

Test Frequency each of channel

Band 1

20MHz		40MHz		80MHz	
Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180	38	5190	42	5210
40	5200	46	5230		
48	5240				

Band 3

20MHz		40MHz		80MHz	
Channel	Frequency	Channel	Frequency	Channel	Frequency
149	5745	151	5755	155	5775
157	5785	159	5795		
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:

4. General 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>	

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:

Per-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

Mode	Data rate
802.11a	6 Mbps
802.11n(HT20)	6.5 Mbps
802.11n(HT40)	13.5 Mbps
802.11ac(VHT20)	6.5 Mbps
802.11ac(VHT40)	13.5 Mbps
802.11ac(VHT80)	29.3 Mbps

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 TONGCE TESTING LAB 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)
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.	
E.U.T Antenna:	
The WIFI antenna is internal antenna which permanently attached, and the best case gain of the antenna is 2dBi.	



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"> 1. 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. 2. 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). 3. 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														

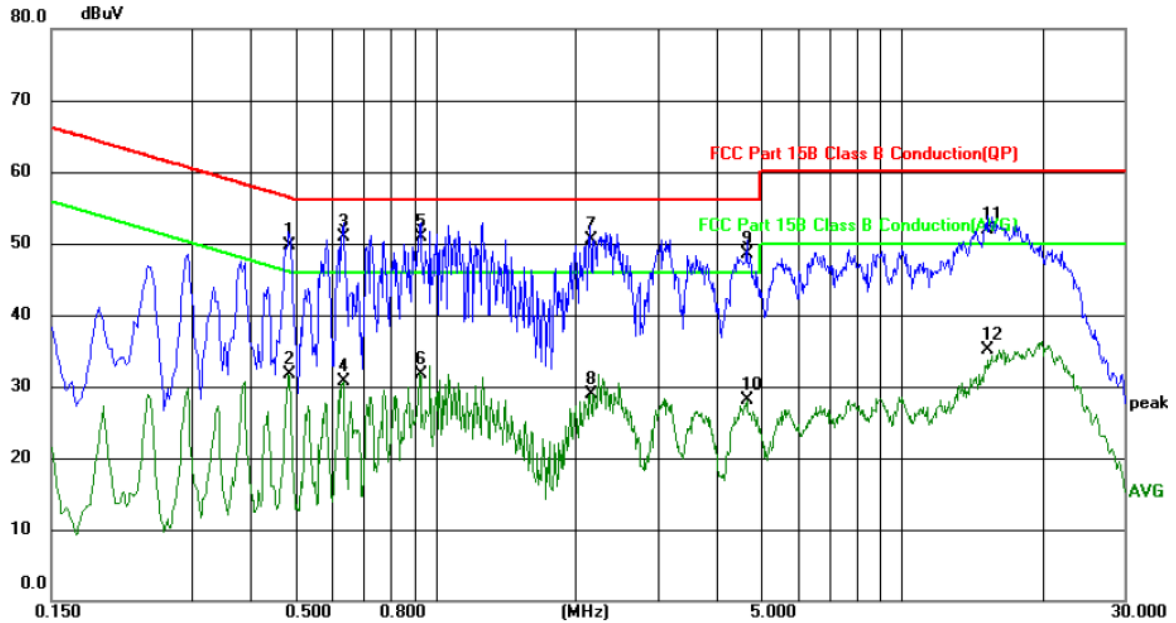
6.2.2. Test Instruments

Conducted Emission Shielding Room Test Site (843)				
Equipment	Manufacturer	Model	Serial Number	Calibration Due
Test Receiver	R&S	ESCI3	100898	Jul. 27, 2021
LISN-2	Schwarzbeck	NSLK 8126	8126453	Sep. 11, 2021
Line-5	TCT	CE-05	N/A	Sep. 02, 2021
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 (150 kHz to 30MHz)

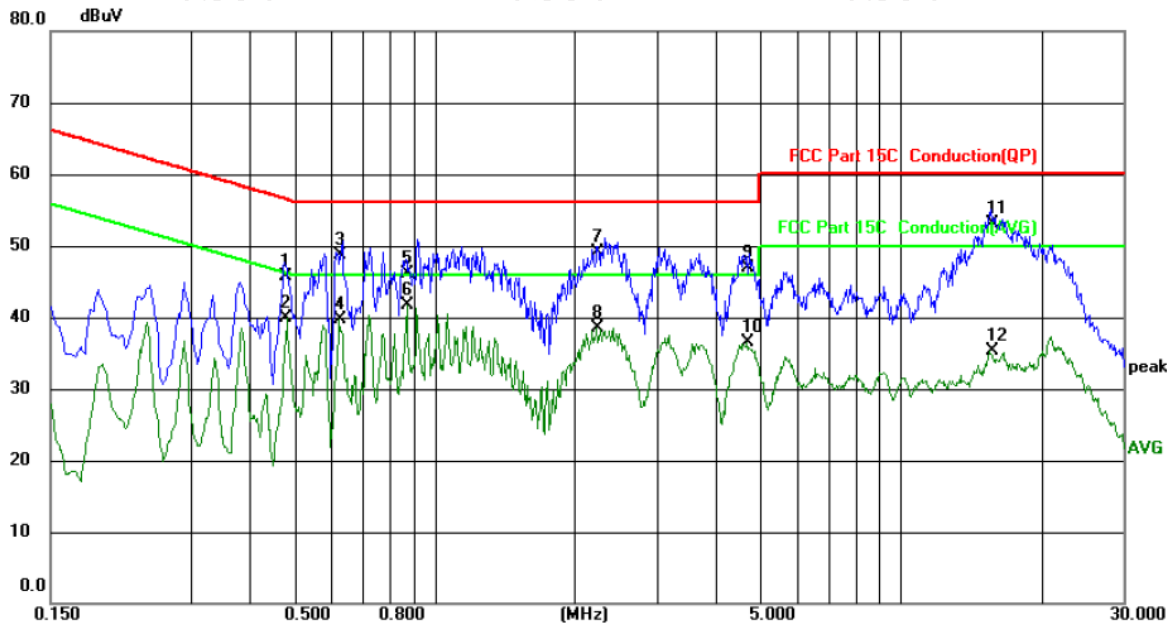


Site	Phase: L1		Temperature: 25 (C)					
Limit: FCC Part 15B Class B Conduction(QP)	Power: AC120V/60Hz		Humidity: 55 %RH					
No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV	Limit dBuV	Over dB	Detector	Comment
1	0.4858	39.60	10.14	49.74	56.24	-6.50	QP	
2	0.4858	21.64	10.14	31.78	46.24	-14.46	AVG	
3 *	0.6340	40.84	10.14	50.98	56.00	-5.02	QP	
4	0.6340	20.51	10.14	30.65	46.00	-15.35	AVG	
5	0.9300	40.64	10.17	50.81	56.00	-5.19	QP	
6	0.9300	21.63	10.17	31.80	46.00	-14.20	AVG	
7	2.1459	40.20	10.25	50.45	56.00	-5.55	QP	
8	2.1459	18.68	10.25	28.93	46.00	-17.07	AVG	
9	4.6657	38.16	10.39	48.55	56.00	-7.45	QP	
10	4.6657	17.63	10.39	28.02	46.00	-17.98	AVG	
11	15.2378	41.02	10.98	52.00	60.00	-8.00	QP	
12	15.2378	24.18	10.98	35.16	50.00	-14.84	AVG	

Note:

- Freq. = Emission frequency in MHz
- Reading level (dBuV) = Receiver reading
- Corr. Factor (dB) = LISN factor + Cable loss
- Measurement (dBuV) = Reading level (dBuV) + Corr. Factor (dB)
- Limit (dBuV) = Limit stated in standard
- Margin (dB) = Measurement (dBuV) – Limits (dBuV)
- Q.P. =Quasi-Peak
- AVG =average
- * is meaning the worst frequency has been tested in the frequency range 150 kHz to 30MHz.

Conducted Emission on Neutral Terminal of the power line (150 kHz to 30MHz)



Site: Phase: **N** Temperature: 25 (C)
 Limit: FCC Part 15C Conduction(QP) Power: AC120V/60Hz Humidity: 55 %RH

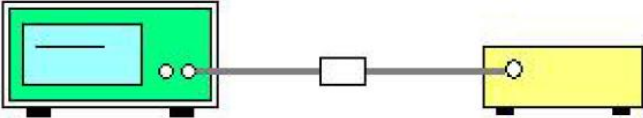
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.4778	35.57	10.14	45.71	56.38	-10.67	QP	
2		0.4778	29.71	10.14	39.85	46.38	-6.53	AVG	
3		0.6260	38.59	10.14	48.73	56.00	-7.27	QP	
4		0.6260	29.50	10.14	39.64	46.00	-6.36	AVG	
5		0.8739	35.88	10.17	46.05	56.00	-9.95	QP	
6	*	0.8739	31.47	10.17	41.64	46.00	-4.36	AVG	
7		2.2259	38.81	10.25	49.06	56.00	-6.94	QP	
8		2.2259	28.33	10.25	38.58	46.00	-7.42	AVG	
9		4.6736	36.55	10.39	46.94	56.00	-9.06	QP	
10		4.6736	26.06	10.39	36.45	46.00	-9.55	AVG	
11		15.6979	41.98	11.03	53.01	60.00	-6.99	QP	
12		15.6979	24.26	11.03	35.29	50.00	-14.71	AVG	

Note:

Freq. = Emission frequency in MHz
 Reading level (dBuV) = Receiver reading
 Corr. Factor (dB) = LISN factor + Cable loss
 Measurement (dBuV) = Reading level (dBuV) + Corr. Factor (dB)
 Limit (dBuV) = Limit stated in standard
 Margin (dB) = Measurement (dBuV) – Limits (dBuV)
 Q.P. =Quasi-Peak
 AVG =average
 * is meaning the worst frequency has been tested in the frequency range 150 kHz to 30MHz.

6.3. Maximum Conducted Output Power

6.3.1. Test Specification

Test Requirement:	FCC Part15 E Section 15.407(a)& Part 2 J Section 2.1046										
Test Method:	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section E										
Limit:	<table border="1"> <thead> <tr> <th>Frequency Band (MHz)</th> <th>Limit</th> </tr> </thead> <tbody> <tr> <td>5180 - 5240</td> <td>24dBm(250mW) for client device</td> </tr> <tr> <td>5260 - 5320</td> <td>24dBm(250mW) or 11 dBm + 10 log B, B is the 26 dB emission bandwidth in megahertz</td> </tr> <tr> <td>5470 - 5725</td> <td>24dBm(250mW) or 11 dBm + 10 log B, B is the 26 dB emission bandwidth in megahertz</td> </tr> <tr> <td>5745 - 5825</td> <td>30dBm(1W)</td> </tr> </tbody> </table>	Frequency Band (MHz)	Limit	5180 - 5240	24dBm(250mW) for client device	5260 - 5320	24dBm(250mW) or 11 dBm + 10 log B, B is the 26 dB emission bandwidth in megahertz	5470 - 5725	24dBm(250mW) or 11 dBm + 10 log B, B is the 26 dB emission bandwidth in megahertz	5745 - 5825	30dBm(1W)
Frequency Band (MHz)	Limit										
5180 - 5240	24dBm(250mW) for client device										
5260 - 5320	24dBm(250mW) or 11 dBm + 10 log B, B is the 26 dB emission bandwidth in megahertz										
5470 - 5725	24dBm(250mW) or 11 dBm + 10 log B, B is the 26 dB emission bandwidth in megahertz										
5745 - 5825	30dBm(1W)										
Test Setup:	 <p style="text-align: center;"> Power meter EUT </p>										
Test Mode:	Transmitting mode with modulation										
Test Procedure:	<ol style="list-style-type: none"> 1. The testing follows the Measurement Procedure of KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section E, 3, a 2. The RF output of EUT was connected to the power meter by RF cable and attenuator. The path loss was compensated to the results for each measurement. 3. Set to the maximum power setting and enable the EUT transmit continuously. 5. Measure the conducted output power and record the results in the test report. 										
Test Result:	PASS										
Remark:	<p>Conducted output power= measurement power +10log(1/x) X is duty cycle=1, so 10log(1/1)=0</p> <p>Conducted output power= measurement power</p>										

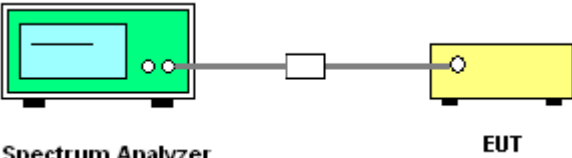
6.3.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100619	Sep. 11, 2021
Power Meter	Agilent	E4418B	GB43312526	Sep. 21, 2021
Power Sensor	Agilent	E9301A	MY41497725	Sep. 21, 2021
RF Cable (9KHz-40GHz)	TCT	RE-high-02	N/A	Sep. 02, 2021
Antenna Connector	TCT	RFC-03	N/A	Sep. 02, 2021

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

6.4. 6dB Emission Bandwidth

6.4.1. Test Specification

Test Requirement:	FCC CFR47 Part 15 Section 15.407(e)& Part 2 J Section 2.1049
Test Method:	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section C
Limit:	>500kHz
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. KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section C 2. Set to the maximum power setting and enable the EUT transmit continuously. 3. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6dB bandwidth must be greater than 500 kHz. 4. Measure and record the results in the test report.
Test Result:	PASS


6.4.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100619	Sep. 11, 2021
4 Ch. Simultaneous Sampling 14 Bits 2 MS/s	Agilent	U2531A	N/A	Sep. 02, 2021
Combiner Box	Ascentest	AT890-RFB	N/A	Sep. 02, 2021

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

6.5. 26dB Bandwidth and 99% Occupied Bandwidth

6.5.1. Test Specification

Test Requirement:	47 CFR Part 15C Section 15.407 (a)& Part 2 J Section 2.1049
Test Method:	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section D
Limit:	No restriction limits
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. KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section D 2. Set to the maximum power setting and enable the EUT transmit continuously. 3. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. 4. Measure and record the results in the test report.
Test Result:	PASS

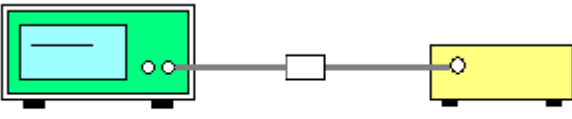
6.5.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100619	Sep. 11, 2021
RF Cable (9KHz-26.5GHz)	TCT	RE-high-02	N/A	Sep. 02, 2021
Antenna Connector	TCT	RFC-03	N/A	Sep. 02, 2021

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

6.6. Power Spectral Density

6.6.1. Test Specification

Test Requirement:	FCC Part15 E Section 15.407 (a)
Test Method:	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section F
Limit:	<p>≤11.00dBm/MHz for Band 1 5150MHz-5250MHz(client device)</p> <p>≤11.00dBm/MHz for Band 2A&2C 5250-5350&5470-5725</p> <p>≤30.00dBm/500KHz for Band 3 5725MHz-5850MHz</p> <p>The e.i,r,p spectral density for Band 1 5150MHz – 5250 MHz should not exceed 10dBm/MHz</p>
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. 4. The E.I.R.P spectral density used radiated test method. At a test site that has been validated using the procedures of ANSI C63.4 or the latest CISPR 16-1-4 for measurements above 1 GHz, so as to simulate a near free-space environment.
Test Result:	PASS

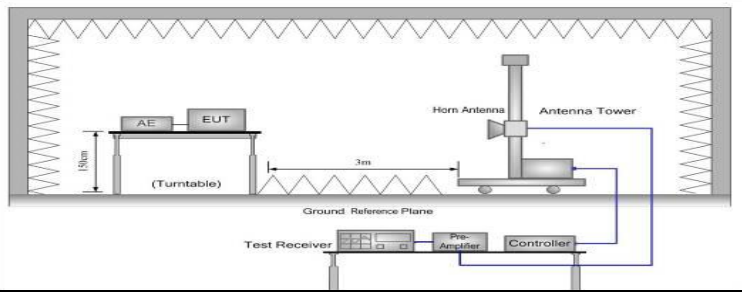
6.6.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100619	Sep. 11, 2021
RF Cable (9KHz-40GHz)	TCT	RE-high-02	N/A	Sep. 02, 2021
Antenna Connector	TCT	RFC-03	N/A	Sep. 02, 2021

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

6.7. Band edge

6.7.1. Test Specification

Test Requirement:	FCC CFR47 Part 15E Section 15.407																				
Test Method:	ANSI C63.10 2013																				
Limit:	In un-restricted band: For Band 1&2A&2C: -27dBm/MHz For Band 3:																				
	<table border="1"> <thead> <tr> <th>Frequency (MHz)</th> <th>Limit (dBm/MHz)</th> <th>Frequency (MHz)</th> <th>Limit (dBm/MHz)</th> </tr> </thead> <tbody> <tr> <td>< 5650</td> <td>-27</td> <td>5850~5855</td> <td>27~15.6</td> </tr> <tr> <td>5650~5700</td> <td>-27~10</td> <td>5855~5875</td> <td>15.6~10</td> </tr> <tr> <td>5700~5720</td> <td>10~15.6</td> <td>5875~5925</td> <td>10~-27</td> </tr> <tr> <td>5720~5725</td> <td>15.6~27</td> <td>> 5925</td> <td>-27</td> </tr> </tbody> </table>	Frequency (MHz)	Limit (dBm/MHz)	Frequency (MHz)	Limit (dBm/MHz)	< 5650	-27	5850~5855	27~15.6	5650~5700	-27~10	5855~5875	15.6~10	5700~5720	10~15.6	5875~5925	10~-27	5720~5725	15.6~27	> 5925	-27
	Frequency (MHz)	Limit (dBm/MHz)	Frequency (MHz)	Limit (dBm/MHz)																	
	< 5650	-27	5850~5855	27~15.6																	
	5650~5700	-27~10	5855~5875	15.6~10																	
5700~5720	10~15.6	5875~5925	10~-27																		
5720~5725	15.6~27	> 5925	-27																		
$E[dB\mu V/m] = EIRP[dBm] + 95.2 @3m$																					
In restricted band:																					
<table border="1"> <thead> <tr> <th>Detector</th> <th>Limit@3m</th> </tr> </thead> <tbody> <tr> <td>Peak</td> <td>74dBμV/m</td> </tr> <tr> <td>AVG</td> <td>54dBμV/m</td> </tr> </tbody> </table>	Detector	Limit@3m	Peak	74dB μ V/m	AVG	54dB μ V/m															
Detector	Limit@3m																				
Peak	74dB μ V/m																				
AVG	54dB μ V/m																				
Test Setup:	 <p>The diagram illustrates the test setup within an anechoic chamber. An Equipment Under Test (EUT) is placed on a turntable at a height of 0.8 meters. The turntable is positioned 3 meters away from a horn antenna mounted on an antenna tower. The antenna tower is connected to a test receiver system consisting of a test receiver, a pre-amplifier, and a controller. A ground reference plane is also indicated.</p>																				
Test Mode:	Transmitting mode with modulation																				
Test Procedure:	<ol style="list-style-type: none"> 1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 																				

	6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasipeak or average method as specified and then reported in a data sheet.
Test Result:	PASS

6.7.2. Test Instruments

Radiated Emission Test Site (966)				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Test Receiver	ROHDE&SCHW ARZ	ESIB7	100197	Jul. 27, 2021
Spectrum Analyzer	ROHDE&SCHW ARZ	FSQ40	200061	Sep. 11, 2021
Spectrum Analyzer	Agilent	N9020A	MY49100619	Sep. 11, 2021
Pre-amplifier	EM Electronics Corporation CO.,LTD	EM30265	07032613	Sep. 02, 2021
Pre-amplifier	HP	8447D	2727A05017	Sep. 02, 2021
Loop antenna	ZHINAN	ZN30900A	12024	Sep. 05, 2022
Broadband Antenna	Schwarzbeck	VULB9163	340	Sep. 04, 2022
Horn Antenna	Schwarzbeck	BBHA 9120D	631	Sep. 04, 2022
Horn Antenna	A-INFO	LB-180400-KF	J211020657	Sep. 02, 2021
Line-4	TCT	RE-high-04	N/A	Sep. 02, 2021
Line-8	TCT	RE-01	N/A	Jul. 27, 2021
Antenna Mast	Keleto	CC-A-4M	N/A	N/A
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).

6.7.3. Test Data

802.11 a	CH	Freq. (MHz)	Read_level (dBuV/m)	Factor (dB)	Peak (dBuV/m)	Limit (dBuV/m) (Peak)	Limit (dBuV/m) (Avg)	Over	Ant. Pol. H/V
Band 1	Lowest	5150	41.86	5.82	47.68	74	54	-6.32	H
		5150	37.15	5.82	42.97	74	54	-11.03	V
	Highest	5250	41.53	6.52	48.05	74	54	-5.95	H
		5250	38.71	6.52	45.23	74	54	-8.77	V
Band 3	Lowest	5725	62.38	5.82	68.20	112.2	/	-44.00	H
		5725	67.72	5.82	73.54	112.2	/	-38.66	V
	Highest	5850	62.09	6.52	68.61	112.2	/	-43.59	H
		5850	61.10	6.52	67.62	112.2	/	-44.58	V
Remark: Factor(dB)=Ant. Factor+Cable Loss-Amp. Factor									

802.11 nHT20	CH	Freq. (MHz)	Read_level (dBuV/m)	Factor (dB)	Peak (dBuV/m)	Limit (dBuV/m) (Peak)	Limit (dBuV/m) (Avg)	Over	Ant. Pol. H/V
Band 1	Lowest	5150	41.27	6.96	48.23	74	54	-5.77	H
		5150	40.75	6.96	47.71	74	54	-6.29	V
	Highest	5250	35.26	8.21	43.47	74	54	-10.53	H
		5250	38.19	8.21	46.40	74	54	-7.60	V
Band 3	Lowest	5725	60.31	8.21	68.52	112.2	/	-43.68	H
		5725	57.56	8.21	65.77	112.2	/	-46.43	V
	Highest	5850	61.15	8.87	70.02	112.2	/	-42.18	H
		5850	59.20	8.87	68.07	112.2	/	-44.13	V
Remark: Factor(dB)=Ant. Factor+Cable Loss-Amp. Factor									

802.11 nHT40	CH	Freq. (MHz)	Read_level (dBuV/m)	Factor (dB)	Peak (dBuV/m)	Limit (dBuV/m) (Peak)	Limit (dBuV/m) (Avg)	Over	Ant. Pol. H/V
Band 1	Lowest	5150	42.69	5.82	48.51	74	54	-5.49	H
		5150	38.42	5.82	44.24	74	54	-9.76	V
	Highest	5250	41.55	6.52	48.07	74	54	-5.93	H
		5250	38.61	6.52	45.13	74	54	-8.87	V

Band 3	Lowest	5725	62.15	5.82	67.97	112.2	/	-44.23	H
		5725	56.88	5.82	62.70	112.2	/	-49.50	V
	Highest	5850	64.22	6.52	70.74	112.2	/	-41.46	H
		5850	62.08	6.52	68.60	112.2	/	-43.60	V

Remark: Factor(dB)=Ant. Factor+Cable Loss-Amp. Factor

802.11 ac HT20	CH	Freq. (MHz)	Read_level (dBuV/m)	Factor (dB)	Peak (dBuV/m)	Limit (dBuV/m) (Peak)	Limit (dBuV/m) (Avg)	Over	Ant. Pol. H/V
Band 1	Lowest	5150	36.96	6.96	43.92	74	54	-10.08	H
		5150	40.84	6.96	47.80	74	54	-6.20	V
	Highest	5250	40.63	8.21	48.84	74	54	-5.16	H
		5250	38.06	8.21	46.27	74	54	-7.73	V

Band 3	Lowest	5725	65.98	8.21	74.19	112.2	/	-38.01	H
		5725	59.04	8.21	67.25	112.2	/	-44.95	V
	Highest	5850	61.02	8.87	69.89	112.2	/	-42.31	H
		5850	59.41	8.87	68.28	112.2	/	-43.92	V

Remark: Factor(dB)=Ant. Factor+Cable Loss-Amp. Factor

802.11 ac HT40	CH	Freq. (MHz)	Read_level (dBuV/m)	Factor (dB)	Peak (dBuV/m)	Limit (dBuV/m) (Peak)	Limit (dBuV/m) (Avg)	Over	Ant. Pol. H/V
Band 1	Lowest	5150	42.95	5.82	48.77	74	54	-5.23	H
		5150	37.61	5.82	43.43	74	54	-10.57	V
	Highest	5250	42.07	6.52	48.59	74	54	-5.41	H
		5250	38.58	6.52	45.10	74	54	-8.90	V

Band 3	Lowest	5725	69.70	5.82	75.52	112.2	/	-36.68	H
		5725	67.66	5.82	73.48	112.2	/	-38.72	V
	Highest	5850	64.49	6.52	71.01	112.2	/	-41.19	H
		5850	61.51	6.52	68.03	112.2	/	-44.17	V

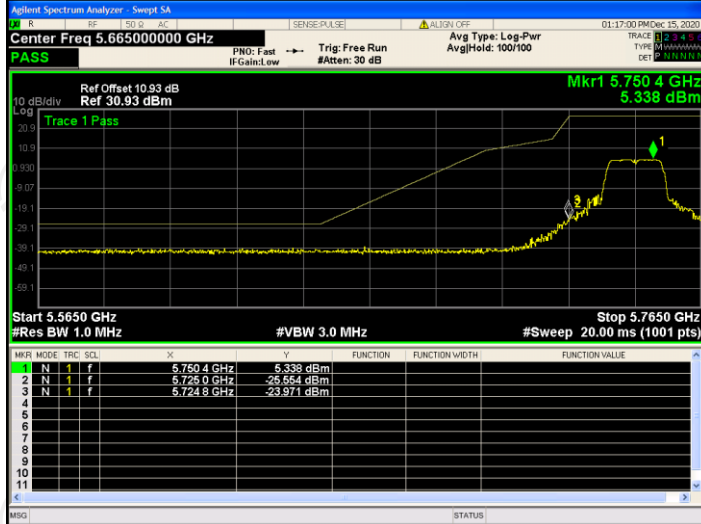
Remark: Factor(dB)=Ant. Factor+Cable Loss-Amp. Factor

802.11 ac HT80	CH	Freq. (MHz)	Read_level (dBuV/m)	Factor (dB)	Peak (dBuV/m)	Limit (dBuV/m) (Peak)	Limit (dBuV/m) (Avg)	Over	Ant. Pol. H/V
Band 1	Lowest	5150	39.68	6.96	46.64	74	54	-7.36	H
		5150	41.03	6.96	47.99	74	54	-6.01	V
	Highest	5250	35.95	8.21	44.16	74	54	-9.84	H
		5250	38.19	8.21	46.40	74	54	-7.60	V
Band 3	Lowest	5725	66.65	8.21	74.86	112.2	/	-37.34	H
		5725	69.08	8.21	77.29	112.2	/	-34.91	V
	Highest	5850	61.41	8.87	70.28	112.2	/	-41.92	H
		5850	69.55	8.87	78.42	112.2	/	-33.78	V

Remark: Factor(dB)=Ant. Factor+Cable Loss-Amp. Factor

Band 3 Band-edge for RF Conducted Emissions

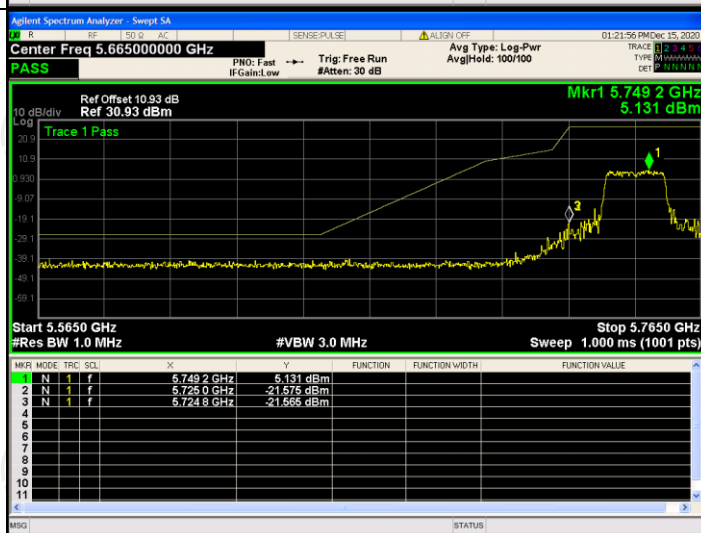
802.11a
/LCH



802.11a
/HCH



802.11n
HT20 / LCH

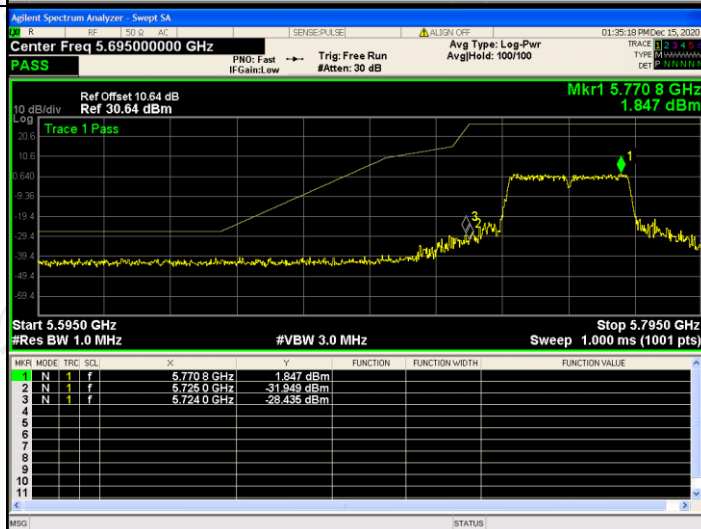


Band 3 Band-edge for RF Conducted Emissions

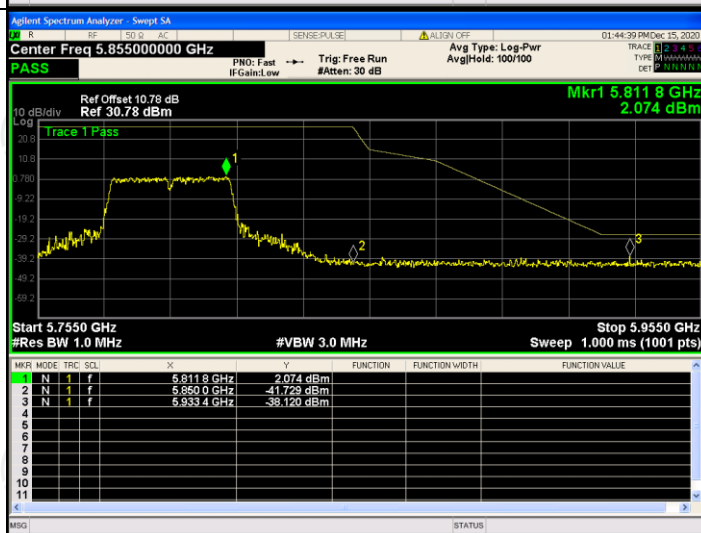
802.11n
HT20 / HCH



802.11n
HT40 / LCH

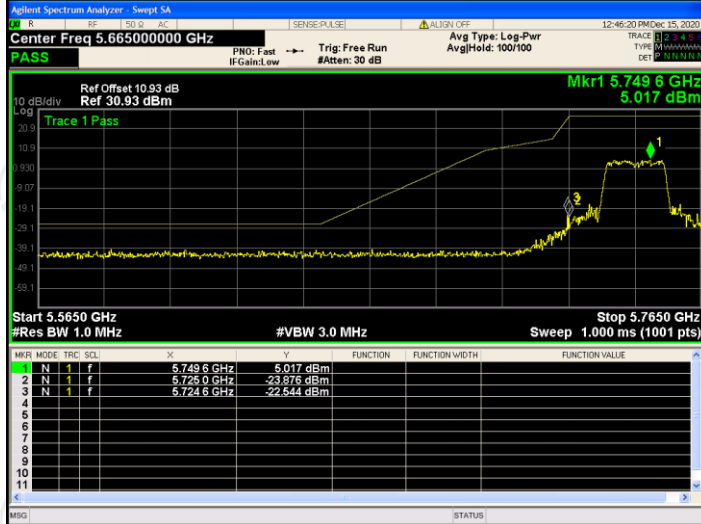


802.11n
HT40 / HCH



Band 3 Band-edge for RF Conducted Emissions

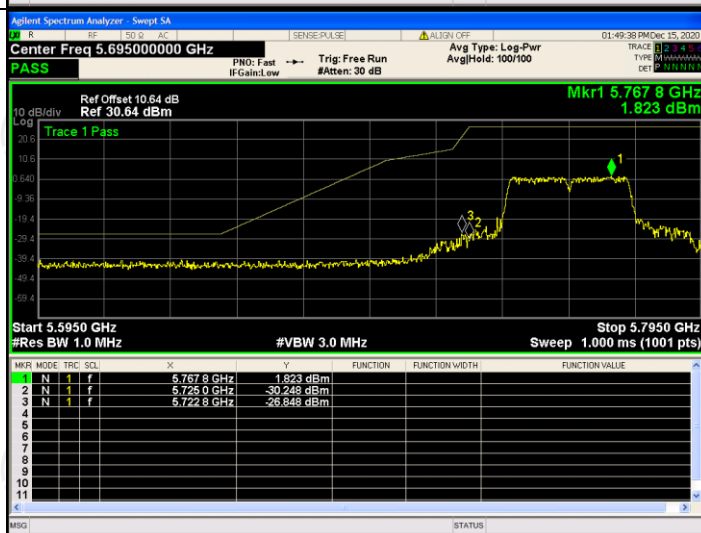
802.11ac
HT20 / LCH



802.11ac
HT20 / HCH



802.11ac
HT40 / LCH

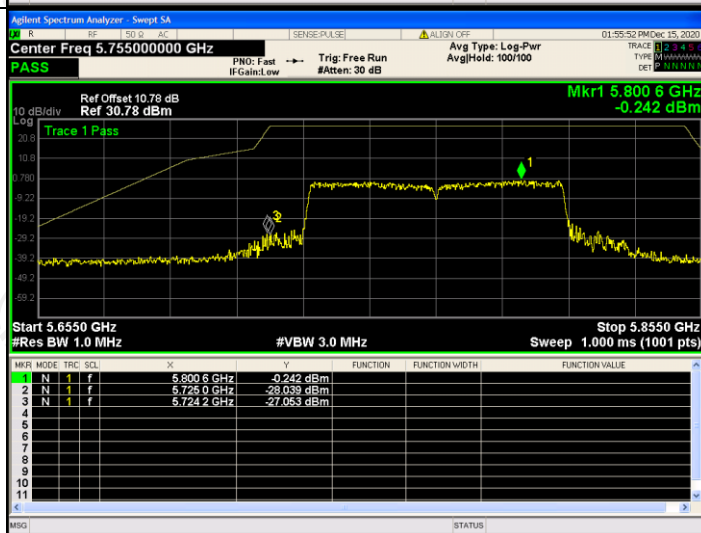


Band 3 Band-edge for RF Conducted Emissions

802.11ac
HT40 / HCH



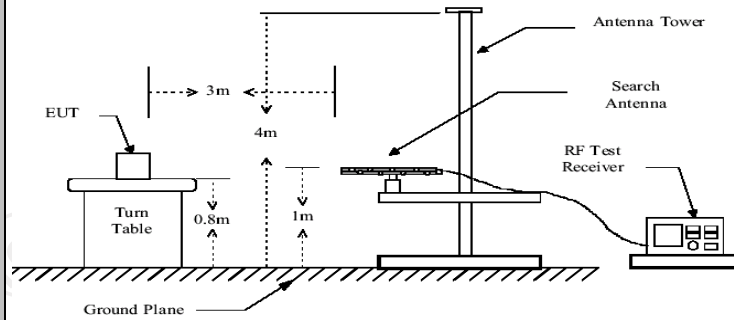
802.11ac
HT80 / LCH



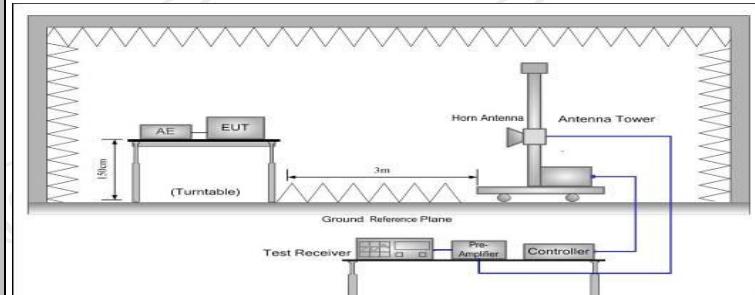
6.8. Unwanted Emission

6.8.1. Test Specification

Test Requirement:	FCC CFR47 Part 15 Section 15.407 & 15.209 & 15.205				
Test Method:	KDB 789033 D02 v02r01				
Frequency Range:	9kHz to 40GHz				
Measurement Distance:	3 m				
Antenna Polarization:	Horizontal & Vertical				
Operation mode:	Transmitting mode with modulation				
Receiver Setup:	Frequency	Detector	RBW	VBW	Remark
	9kHz- 150kHz	Quasi-peak	200Hz	1kHz	Quasi-peak Value
	150kHz- 30MHz	Quasi-peak	9kHz	30kHz	Quasi-peak Value
	30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak Value
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
		Peak	1MHz	10Hz	Average Value
Limit:	Unwanted spurious emissions fallen in restricted bands per FCC Part15.205 shall comply with the general field strength limits set forth in § 15.209 as below table,				
	Frequency	Field Strength (microvolts/meter)	Measurement Distance (meters)		
	0.009-0.490	2400/F(KHz)	300		
	0.490-1.705	24000/F(KHz)	30		
	1.705-30	30	30		
	30-88	100	3		
	88-216	150	3		
	216-960	200	3		
	Above 960	500	3		
	Frequency	Limit (dBuV/m @3m)	Detector		
Above 1G	74.0	Peak			
	54.0	Average			
Test setup:	For radiated emissions below 30MHz				
	<p>The diagram illustrates the test setup for radiated emissions below 30MHz. It shows an Equipment Under Test (EUT) placed on a turn table. A distance of 3m is maintained between the EUT and the antenna. The antenna is positioned above a ground plane. The receiver chain consists of a pre-amplifier, a receiver, and a computer connected to the receiver.</p>				
	30MHz to 1GHz				



Above 1GHz



Test Procedure:

1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Test results:

PASS

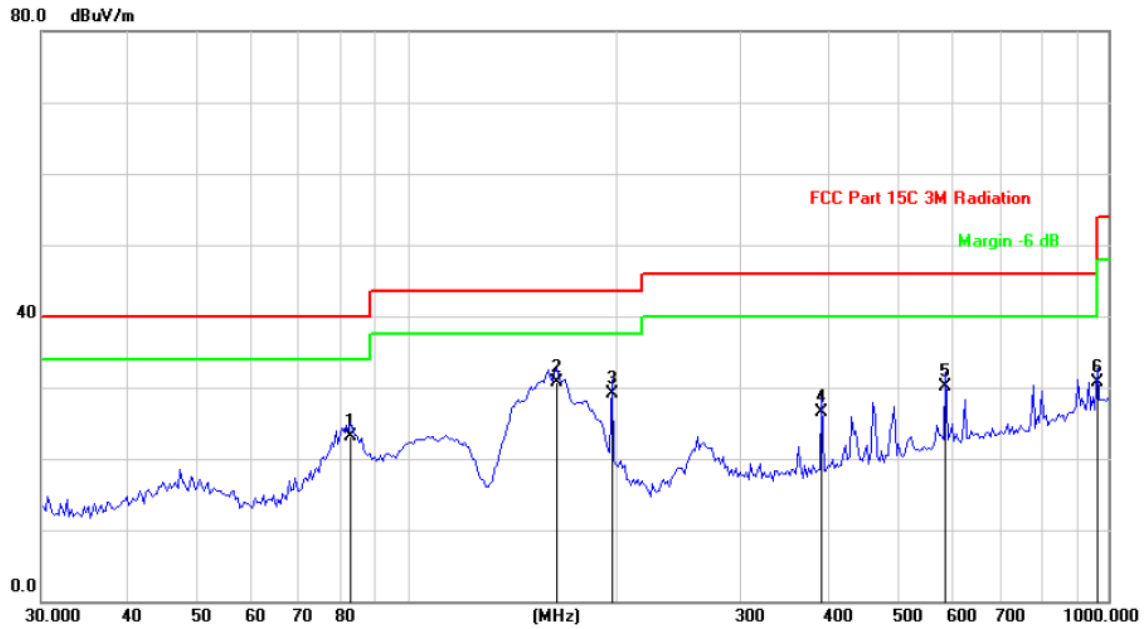
6.8.2. Test Instruments

Radiated Emission Test Site (966)				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Test Receiver	ROHDE&SCHWARZ	ESIB7	100197	Jul. 27, 2021
Spectrum Analyzer	ROHDE&SCHWARZ	FSQ40	200061	Sep. 11, 2021
Pre-amplifier	EM Electronics Corporation CO.,LTD	EM30265	07032613	Sep. 02, 2021
Pre-amplifier	HP	8447D	2727A05017	Sep. 02, 2021
Loop antenna	ZHINAN	ZN30900A	12024	Sep. 05, 2022
Broadband Antenna	Schwarzbeck	VULB9163	340	Sep. 04, 2022
Horn Antenna	Schwarzbeck	BBHA 9120D	631	Sep. 04, 2022
Horn Antenna	A-INFO	LB-180400-KF	J211020657	Sep. 04, 2022
Antenna Mast	Keleto	RE-AM	N/A	N/A
Line-4	TCT	RE-high-04	N/A	Sep. 02, 2021
Line-8	TCT	RE-01	N/A	Jul. 27, 2021
EMI Test Software	Shurple Technology	EZ-EMC	N/A	N/A

6.8.3. Test Data

Please refer to following diagram for individual
Below 1GHz

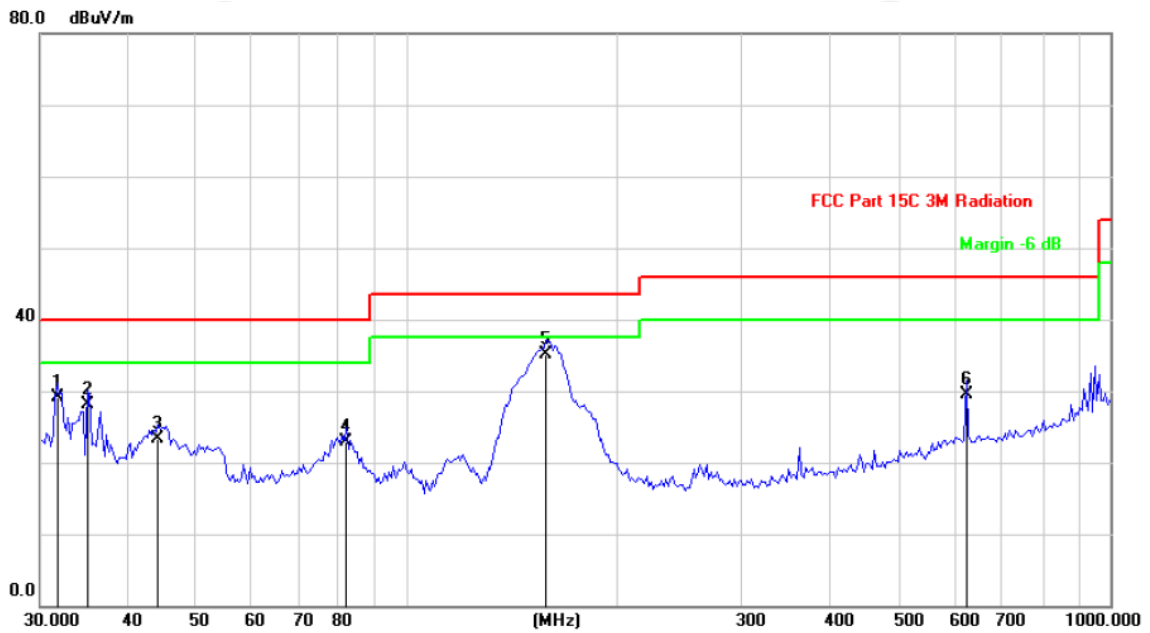
Horizontal:



Site: Polarization: *Horizontal* Temperature: 25
Limit: FCC Part 15C 3M Radiation Power: AC 120V/60Hz Humidity: 55 %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		83.1076	39.03	-15.85	23.18	40.00	-16.82	QP
2	*	163.1622	45.80	-15.06	30.74	43.50	-12.76	QP
3		195.8701	42.72	-13.59	29.13	43.50	-14.37	QP
4		389.9873	35.65	-9.13	26.52	46.00	-19.48	QP
5		586.2172	35.54	-5.39	30.15	46.00	-15.85	QP
6		965.4741	31.66	-0.99	30.67	54.00	-23.33	QP

Vertical:



Site: Polarization: **Vertical** Temperature: 25
 Limit: FCC Part 15C 3M Radiation Power: AC 120V/60Hz Humidity: 55 %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		31.7348	43.95	-14.81	29.14	40.00	-10.86	QP
2		35.0157	42.35	-14.17	28.18	40.00	-11.82	QP
3		44.1544	35.57	-12.32	23.25	40.00	-16.75	QP
4		81.9477	38.73	-15.87	22.86	40.00	-17.14	QP
5	*	157.5290	50.32	-15.31	35.01	43.50	-8.49	QP
6		624.4897	34.69	-5.23	29.46	46.00	-16.54	QP

- Note:**
- The low frequency, which started from 9KHz~30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported
 - Measurements were conducted in all three channels (high, middle, low) and all modulation (802.11a, 802.11n(HT20), 802.11n(HT40), 802.11ac(VHT20), 802.11ac(VHT40), 802.11ac(VHT80), and the worst case Mode (Lowest channel and 802.11ac(HT20)) was submitted only.
 - Measurement (dBuV) = Reading level + Correction Factor, correction Factor= Antenna Factor + Cable loss - Pre-amplifier.

Modulation Type: Band 1

11a CH36: 5180MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
10360	H	39.37	---	8.02	47.39	---	74	54	-6.61
15540	H	40.69	---	9.87	50.56	---	74	54	-3.44
---	H	---	---	---	---	---	---	---	---
10360	V	39.25	---	8.02	47.27	---	74	54	-6.73
15540	V	39.98	---	9.87	49.85	---	74	54	-4.15
---	V	---	---	---	---	---	---	---	---

11a CH40: 5200MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
10400	H	40.81	---	7.97	48.78	---	74	54	-5.22
15600	H	39.26	---	9.83	49.09	---	74	54	-4.91
---	H	---	---	---	---	---	---	---	---
10400	V	41.52	---	7.97	49.49	---	74	54	-4.51
15600	V	39.96	---	9.83	49.79	---	74	54	-4.21
---	V	---	---	---	---	---	---	---	---

11a CH48: 5240MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
10480	H	40.55	---	7.97	48.52	---	74	54	-5.48
15720	H	39.93	---	9.83	49.76	---	74	54	-4.24
---	H	---	---	---	---	---	---	---	---
10480	V	40.46	---	7.97	48.43	---	74	54	-5.57
15720	V	38.39	---	9.83	48.22	---	74	54	-5.78
---	V	---	---	---	---	---	---	---	---

11n(HT20) CH36: 5180MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
10360	H	40.97	---	8.02	48.99	---	74	54	-5.01
15540	H	39.80	---	9.87	49.67	---	74	54	-4.33
---	H	---	---	---	---	---	---	---	---
10360	V	41.34	---	8.02	49.36	---	74	54	-4.64
15540	V	38.21	---	9.87	48.08	---	74	54	-5.92
---	V	---	---	---	---	---	---	---	---

11n(HT20) CH40: 5200MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
10400	H	39.20	---	7.97	47.17	---	74	54	-6.83
15600	H	40.39	---	9.83	50.22	---	74	54	-3.78
---	H	---	---	---	---	---	---	---	---
10400	V	41.99	---	7.97	49.96	---	74	54	-4.04
15600	V	39.52	---	9.83	49.35	---	74	54	-4.65
---	V	---	---	---	---	---	---	---	---

11n(HT20) CH48: 5240MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
10480	H	39.52	---	7.97	47.49	---	74	54	-6.51
15720	H	38.91	---	9.83	48.74	---	74	54	-5.26
---	H	---	---	---	---	---	---	---	---
10480	V	40.44	---	7.97	48.41	---	74	54	-5.59
15720	V	39.98	---	9.83	49.81	---	74	54	-4.19
---	V	---	---	---	---	---	---	---	---

11n(HT40)CH38: 5190MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
10380	H	41.59	---	7.75	49.34	---	74	54	-4.66
15570	H	38.87	---	9.87	48.74	---	74	54	-5.26
---	H	---	---	---	---	---	---	---	---
10380	V	41.07	---	7.75	48.82	---	74	54	-5.18
15570	V	39.84	---	9.87	49.71	---	74	54	-4.29
---	V	---	---	---	---	---	---	---	---

11n(HT40)CH46: 5230MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
10460	H	41.91	---	7.97	49.88	---	74	54	-4.12
15690	H	39.58	---	9.83	49.41	---	74	54	-4.59
---	H	---	---	---	---	---	---	---	---
10460	V	41.89	---	7.97	49.86	---	74	54	-4.14
15690	V	39.74	---	9.83	49.57	---	74	54	-4.43
---	V	---	---	---	---	---	---	---	---

11ac(VHT20) CH36: 5180MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
10360	H	41.20	---	8.02	49.22	---	74	54	-4.78
15540	H	39.74	---	9.87	49.61	---	74	54	-4.39
---	H	---	---	---	---	---	---	---	---
10360	V	39.52	---	8.02	47.54	---	74	54	-6.46
15540	V	39.86	---	9.87	49.73	---	74	54	-4.27
---	V	---	---	---	---	---	---	---	---

11ac(VHT20) CH40: 5200MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
10400	H	41.87	---	7.97	49.84	---	74	54	-4.16
15600	H	40.11	---	9.83	49.94	---	74	54	-4.06
---	H	---	---	---	---	---	---	---	---
10400	V	40.78	---	7.97	48.75	---	74	54	-5.25
15600	V	40.05	---	9.83	49.88	---	74	54	-4.12
---	V	---	---	---	---	---	---	---	---

11ac(VHT20) CH48: 5240MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
10480	H	37.64	---	7.97	45.61	---	74	54	-8.39
15720	H	39.72	---	9.83	49.55	---	74	54	-4.45
---	H	---	---	---	---	---	---	---	---
10480	V	40.01	---	7.97	47.98	---	74	54	-6.02
15720	V	39.94	---	9.83	49.77	---	74	54	-4.23
---	V	---	---	---	---	---	---	---	---
11ac(VHT40) CH38: 5190MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
10380	H	42.32	---	7.75	50.07	---	74	54	-3.93
15570	H	39.85	---	9.87	49.72	---	74	54	-4.28
---	H	---	---	---	---	---	---	---	---
10380	V	40.19	---	7.75	47.94	---	74	54	-6.06
15570	V	40.05	---	9.87	49.92	---	74	54	-4.08
---	V	---	---	---	---	---	---	---	---
11ac(VHT40) CH46: 5230MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
10460	H	40.56	---	7.97	48.53	---	74	54	-5.47
15690	H	40.28	---	9.83	50.11	---	74	54	-3.89
---	H	---	---	---	---	---	---	---	---
10460	V	41.56	---	7.97	49.53	---	74	54	-4.47
15690	V	39.02	---	9.83	48.85	---	74	54	-5.15
---	V	---	---	---	---	---	---	---	---
11ac(VHT80) CH42:5210									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
10420	H	41.69	---	7.96	49.65	---	74	54	-4.35
15630	H	39.81	---	9.84	49.65	---	74	54	-4.35
---	H	---	---	---	---	---	---	---	---
10420	V	41.20	---	7.96	49.16	---	74	54	-4.84
15630	V	39.55	---	9.84	49.39	---	74	54	-4.61
---	V	---	---	---	---	---	---	---	---

Note:

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
2. Margin (dB) = Emission Level (Peak) (dBμV/m)-Average limit (dBμV/m)
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 40GHz.
5. Data of measurement shown "---" in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.

Modulation Type: Band 3

11a(HT20) CH149: 5745MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
11490	H	40.88	---	8.09	48.97	---	74	54	-5.03
17235	H	38.02	---	9.67	47.69	---	74	54	-6.31
---	H	---	---	---	---	---	---	---	---
11490	V	42.53	---	8.09	50.62	---	74	54	-3.38
17235	V	39.19	---	9.67	48.86	---	74	54	-5.14
---	V	---	---	---	---	---	---	---	---

11a(HT20) CH157: 5785MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
11570	H	41.72	---	8.10	49.82	---	74	54	-4.18
17355	H	38.90	---	9.65	48.55	---	74	54	-5.45
---	H	---	---	---	---	---	---	---	---
11570	V	40.03	---	8.10	48.13	---	74	54	-5.87
17355	V	37.29	---	9.65	46.94	---	74	54	-7.06
---	V	---	---	---	---	---	---	---	---

11a(HT20) CH161: 5825MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
11650	H	40.75	---	8.12	48.87	---	74	54	-5.13
17475	H	38.89	---	9.62	48.51	---	74	54	-5.49
---	H	---	---	---	---	---	---	---	---
11650	V	41.19	---	8.12	49.31	---	74	54	-4.69
17475	V	38.73	---	9.62	48.35	---	74	54	-5.65
---	V	---	---	---	---	---	---	---	---

11n(HT20) CH151: 5745MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
11510	H	41.22	---	8.09	49.31	---	74	54	-4.69
17265	H	37.84	---	9.67	47.51	---	74	54	-6.49
---	H	---	---	---	---	---	---	---	---
11510	V	41.26	---	8.09	49.35	---	74	54	-4.65
17265	V	38.49	---	9.67	48.16	---	74	54	-5.84
---	V	---	---	---	---	---	---	---	---

11n(HT20) CH157: 5785MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
11570	H	41.86	---	8.10	49.96	---	74	54	-4.04
17355	H	38.17	---	9.65	47.82	---	74	54	-6.18
---	H	---	---	---	---	---	---	---	---
11570	V	40.20	---	8.10	48.30	---	74	54	-5.70
17355	V	36.74	---	9.65	46.39	---	74	54	-7.61
---	V	---	---	---	---	---	---	---	---

11n(HT20) CH165: 5825MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
11650	H	40.57	---	8.12	48.69	---	74	54	-5.31
17475	H	38.22	---	9.62	47.84	---	74	54	-6.16
---	H	---	---	---	---	---	---	---	---
11650	V	41.85	---	8.12	49.97	---	74	54	-4.03
17475	V	38.34	---	9.62	47.96	---	74	54	-6.04
---	V	---	---	---	---	---	---	---	---

11n(HT40) CH151: 5755MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
11510	H	42.55	---	8.09	50.64	---	74	54	-3.36
17265	H	39.30	---	9.67	48.97	---	74	54	-5.03
---	H	---	---	---	---	---	---	---	---
11510	V	42.03	---	8.09	50.12	---	74	54	-3.88
17265	V	38.75	---	9.67	48.42	---	74	54	-5.58
---	V	---	---	---	---	---	---	---	---

11n(HT40) CH159: 5795MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
11590	H	41.33	---	8.10	49.43	---	74	54	-4.57
17385	H	39.21	---	9.65	48.86	---	74	54	-5.14
---	H	---	---	---	---	---	---	---	---
11590	V	41.28	---	8.10	49.38	---	74	54	-4.62
17385	V	38.09	---	9.65	47.74	---	74	54	-6.26
---	V	---	---	---	---	---	---	---	---

11ac(VHT20) CH149: 5745MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
11490	H	41.77	---	8.09	49.86	---	74	54	-4.14
17235	H	39.39	---	9.67	49.06	---	74	54	-4.94
---	H	---	---	---	---	---	---	---	---
11490	V	40.93	---	8.09	49.02	---	74	54	-4.98
17235	V	38.61	---	9.67	48.28	---	74	54	-5.72
---	V	---	---	---	---	---	---	---	---

11ac(VHT20) CH157: 5785MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
11570	H	40.18	---	8.10	48.28	---	74	54	-5.72
17355	H	38.22	---	9.65	47.87	---	74	54	-6.13
---	H	---	---	---	---	---	---	---	---
11570	V	38.96	---	8.10	47.06	---	74	54	-6.94
17355	V	36.74	---	9.65	46.39	---	74	54	-7.61
---	V	---	---	---	---	---	---	---	---

11ac(VHT20) CH165: 5825MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
11650	H	41.22	---	8.12	49.34	---	74	54	-4.66
17475	H	38.89	---	9.62	48.51	---	74	54	-5.49
---	H	---	---	---	---	---	---	---	---
11650	V	41.16	---	8.12	49.28	---	74	54	-4.72
17475	V	36.72	---	9.62	46.34	---	74	54	-7.66
---	V	---	---	---	---	---	---	---	---

11ac(VHT40) CH151: 5755MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
11510	H	41.09	---	8.09	49.18	---	74	54	-4.82
17265	H	38.35	---	9.67	48.02	---	74	54	-5.98
---	H	---	---	---	---	---	---	---	---
11510	V	42.21	---	8.09	50.30	---	74	54	-3.70
17265	V	39.38	---	9.67	49.05	---	74	54	-4.95
---	V	---	---	---	---	---	---	---	---

11ac(VHT40) CH159: 5795MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
11590	H	41.03	---	8.10	49.13	---	74	54	-4.87
17385	H	37.18	---	9.65	46.83	---	74	54	-7.17
---	H	---	---	---	---	---	---	---	---
11590	V	41.79	---	8.10	49.89	---	74	54	-4.11
17385	V	39.32	---	9.65	48.97	---	74	54	-5.03
---	V	---	---	---	---	---	---	---	---

11ac(VHT80) CH155: 5775MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
11550	H	41.53	---	8.09	49.62	---	74	54	-4.38
17325	H	36.70	---	9.66	46.36	---	74	54	-7.64
---	H	---	---	---	---	---	---	---	---
11550	V	42.09	---	8.09	50.18	---	74	54	-3.82
17325	V	38.58	---	9.66	48.24	---	74	54	-5.76
---	V	---	---	---	---	---	---	---	---

Note:

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
2. Margin (dB) = Emission Level (Peak) (dBμV/m)-Average limit (dBμV/m)
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 40GHz.
5. Data of measurement shown “---“in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.

6.9. Frequency Stability Measurement

6.9.1. Test Specification

Test Requirement:	FCC Part15 Section 15.407(g) &Part2 J Section 2.1055
Test Method:	ANSI C63.10: 2013
Limit:	The frequency tolerance shall be maintained within the band of operation frequency over a temperature variation of 0 degrees to 45 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.
Test Setup:	
Test Procedure:	The EUT was placed inside the environmental test chamber and powered by nominal AC/DC voltage. b. Turn the EUT on and couple its output to a spectrum analyzer. c. Turn the EUT off and set the chamber to the highest temperature specified. d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize. e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature. f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.
Test Result:	PASS
Remark:	Pre-scan was performed at all models(11a,11n,11ac), the worst case (11ac) was found and test data was shown in this report.

Test plots as follows:

Test mode:		802.11ac(VHT20)	Frequency(MHz):	5180
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.7V	5180.0095	9500	PASS
35		5179.9764	-23600	PASS
25		5179.9876	-12400	PASS
15		5179.9888	-11200	PASS
5		5180.0134	13400	PASS
0		5179.9841	-15900	PASS
20	3.2	5179.9932	-6800	PASS
	3.7	5180.0035	3500	PASS
	4.2	5179.9829	-17100	PASS

Test mode:		802.11ac(VHT20)	Frequency(MHz):	5200
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.7V	5200.0091	9100	PASS
35		5200.0084	8400	PASS
25		5200.0076	7600	PASS
15		5200.0045	4500	PASS
5		5199.9982	-1800	PASS
0		5199.9870	-13000	PASS
20	3.2	5199.9955	-4500	PASS
	3.7	5200.0023	2300	PASS
	4.2	5200.0058	5800	PASS

Test mode:		802.11ac(VHT20)	Frequency(MHz):	5240
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.7V	5240.0044	4400	PASS
35		5240.0038	3800	PASS
25		5240.0029	2900	PASS
15		5239.9995	-500	PASS
5		5239.9982	-1800	PASS
0		5239.9971	-2900	PASS
20	3.2	5240.0036	3600	PASS
	3.7	5240.0017	1700	PASS
	4.2	5239.9983	-1700	PASS

Test mode:		802.11ac(VHT20)	Frequency(MHz):	5745
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.7V	5745.0014	1400	PASS
35		5745.0010	1000	PASS
25		5744.9963	-3700	PASS
15		5744.9958	-4200	PASS
5		5745.0034	3400	PASS
0		5745.0049	4900	PASS
20	3.2	5745.0077	7700	PASS
	3.7	5745.0071	7100	PASS
	4.2	5745.0025	2500	PASS

Test mode:		802.11ac(VHT20)	Frequency(MHz):	5785
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.7V	5785.0081	8100	PASS
35		5785.0035	3500	PASS
25		5785.0026	2600	PASS
15		5784.9984	-1600	PASS
5		5785.0027	2700	PASS
0		5784.9972	-2800	PASS
20	3.2	5785.0053	5300	PASS
	3.7	5785.0028	2800	PASS
	4.2	5784.9979	-2100	PASS

Test mode:		802.11ac(VHT20)	Frequency(MHz):	5825
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.7V	5824.9815	-18500	PASS
35		5825.0080	8000	PASS
25		5824.9956	-4400	PASS
15		5824.9982	-1800	PASS
5		5825.0017	1700	PASS
0		5825.0044	4400	PASS
20	3.2	5825.0048	4800	PASS
	3.7	5824.9983	-1700	PASS
	4.2	5825.0021	2100	PASS

Test mode:		802.11ac(VHT40)	Frequency(MHz):	5190
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.7V	5190.0121	12100	PASS
35		5190.0118	11800	PASS
25		5190.0104	10400	PASS
15		5190.0036	3600	PASS
5		5190.0062	6200	PASS
0		5190.0077	7700	PASS
20	3.2	5189.9918	-8200	PASS
	3.7	5189.9972	-2800	PASS
	4.2	5190.0043	4300	PASS

Test mode:		802.11ac(VHT40)	Frequency(MHz):	5230
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.7V	5230.0122	12200	PASS
35		5230.0125	12500	PASS
25		5230.0093	9300	PASS
15		5229.9987	-1300	PASS
5		5229.9981	-1900	PASS
0		5230.0055	5500	PASS
20	3.2	5230.0049	4900	PASS
	3.7	5230.0024	2400	PASS
	4.2	5229.9978	-2200	PASS

Test mode:		802.11ac(VHT40)	Frequency(MHz):	5755
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.7V	5755.0104	10400	PASS
35		5755.0028	2800	PASS
25		5755.0110	11000	PASS
15		5755.0095	9500	PASS
5		5755.0033	3300	PASS
0		5755.0076	7600	PASS
20	3.2	5755.0047	4700	PASS
	3.7	5755.0033	3300	PASS
	4.2	5755.0061	6100	PASS

Test mode:		802.11ac(VHT40)	Frequency(MHz):	5795
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.7V	5794.9801	-19900	PASS
35		5794.9845	-15500	PASS
25		5795.0047	4700	PASS
15		5795.0036	3600	PASS
5		5795.0022	2200	PASS
0		5795.0061	6100	PASS
20		3.2	5795.0052	5200
	3.7	5794.9983	-1700	PASS
	4.2	5795.0089	8900	PASS

Test mode:		802.11ac(VHT80)	Frequency(MHz):	5210
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.7V	5209.9807	-19300	PASS
35		5209.9843	-15700	PASS
25		5210.0046	4600	PASS
15		5210.0031	3100	PASS
5		5210.0025	2500	PASS
0		5210.0066	6600	PASS
20		3.2	5210.0058	5800
	3.7	5209.9984	-1600	PASS
	4.2	5210.0087	8700	PASS

Test mode:		802.11ac(VHT80)	Frequency(MHz):	5775
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.7V	5775.0041	4100	PASS
35		5774.9975	-2500	PASS
25		5775.0048	4800	PASS
15		5775.0030	3000	PASS
5		5775.0029	2900	PASS
0		5775.0064	6400	PASS
20		3.2	5775.0055	5500
	3.7	5774.9986	-1400	PASS
	4.2	5775.0081	8100	PASS

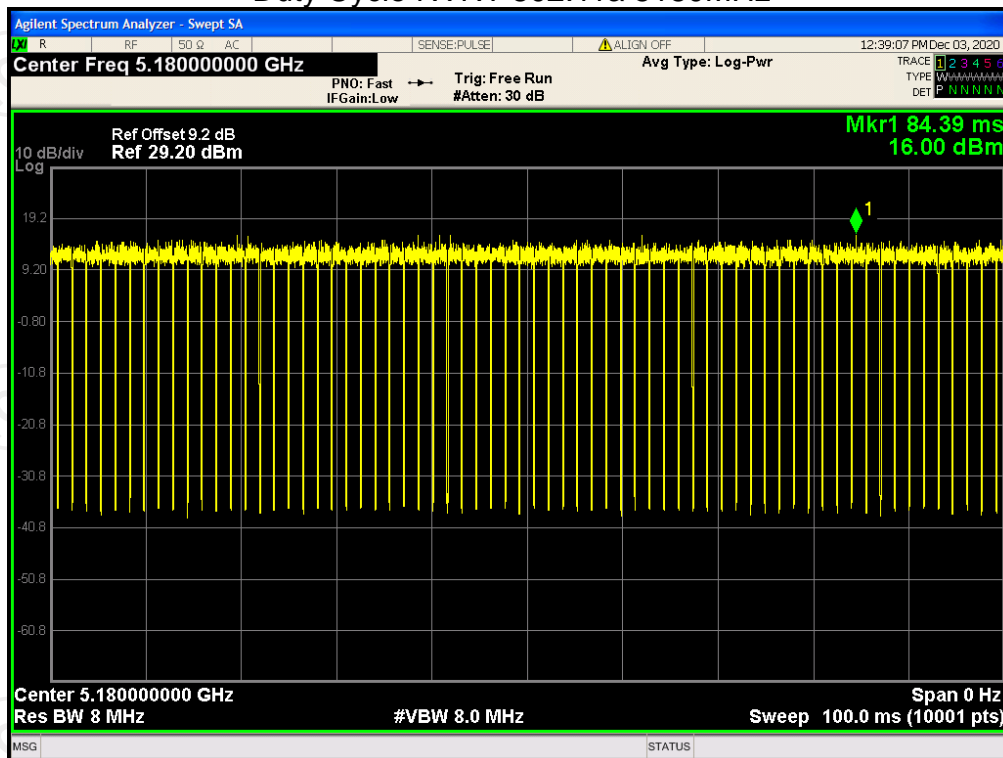
Appendix A: Test Result of Conducted Test

Band 1:

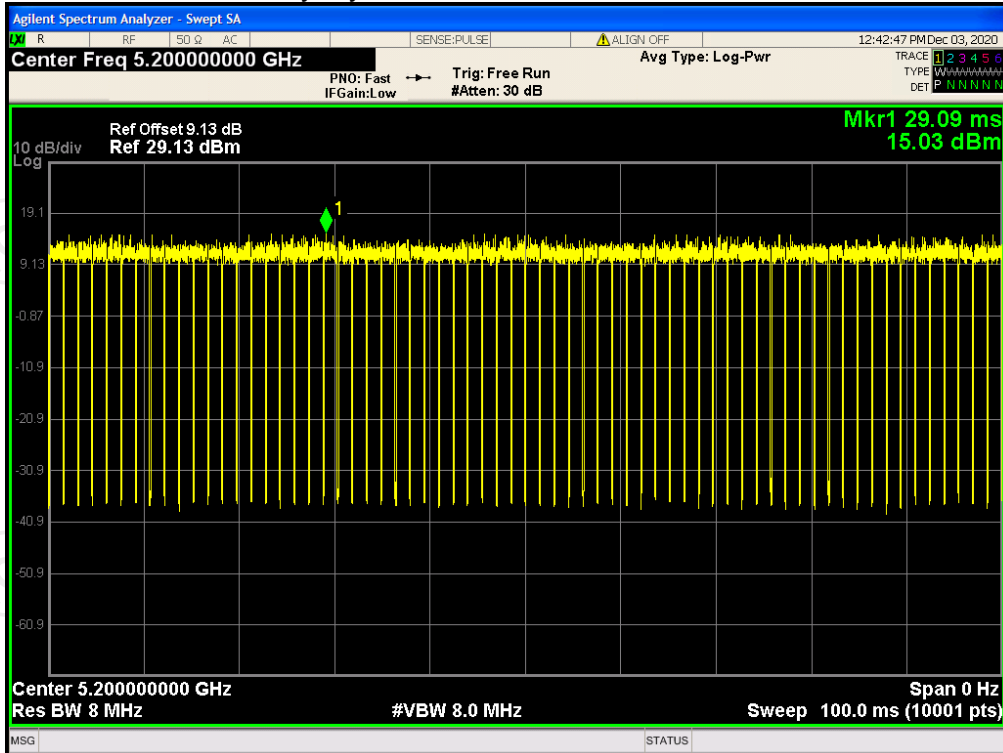
Duty Cycle

Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor (dB)
802.11a	5180	100	0
802.11a	5200	100	0
802.11a	5240	100	0
802.11ac20	5180	100	0
802.11ac20	5200	100	0
802.11ac20	5240	100	0
802.11ac40	5190	100	0
802.11ac40	5230	100	0
802.11ac80	5210	100	0
802.11n(HT20)	5180	100	0
802.11n(HT20)	5200	100	0
802.11n(HT20)	5240	100	0
802.11n(HT40)	5190	100	0
802.11n(HT40)	5230	100	0

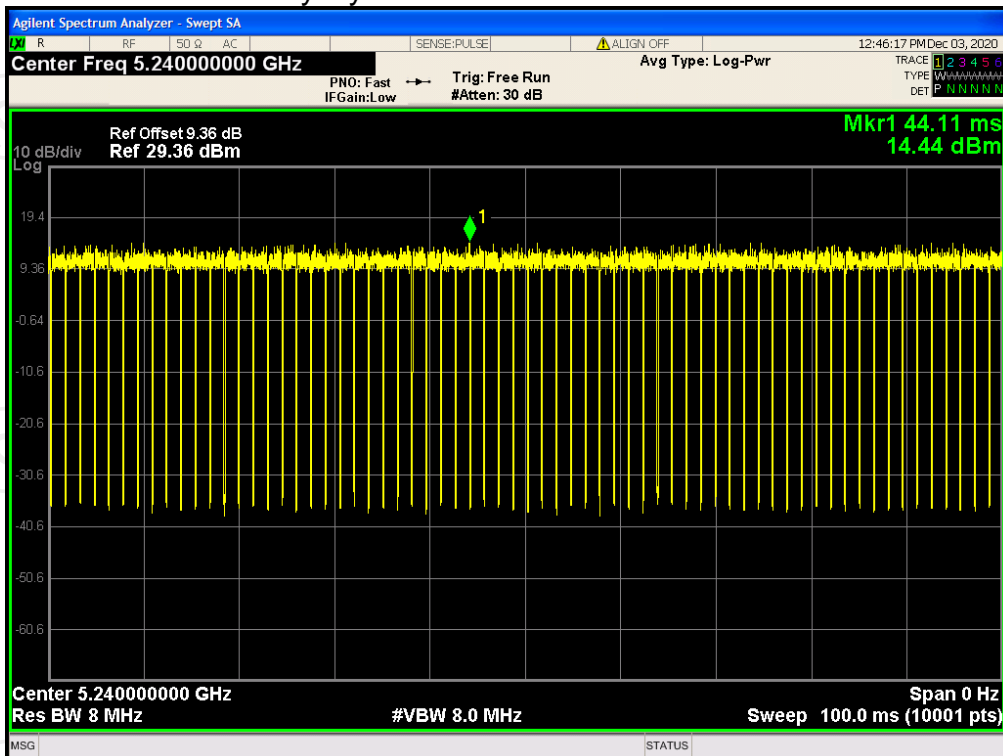
Duty Cycle NVNT 802.11a 5180MHz



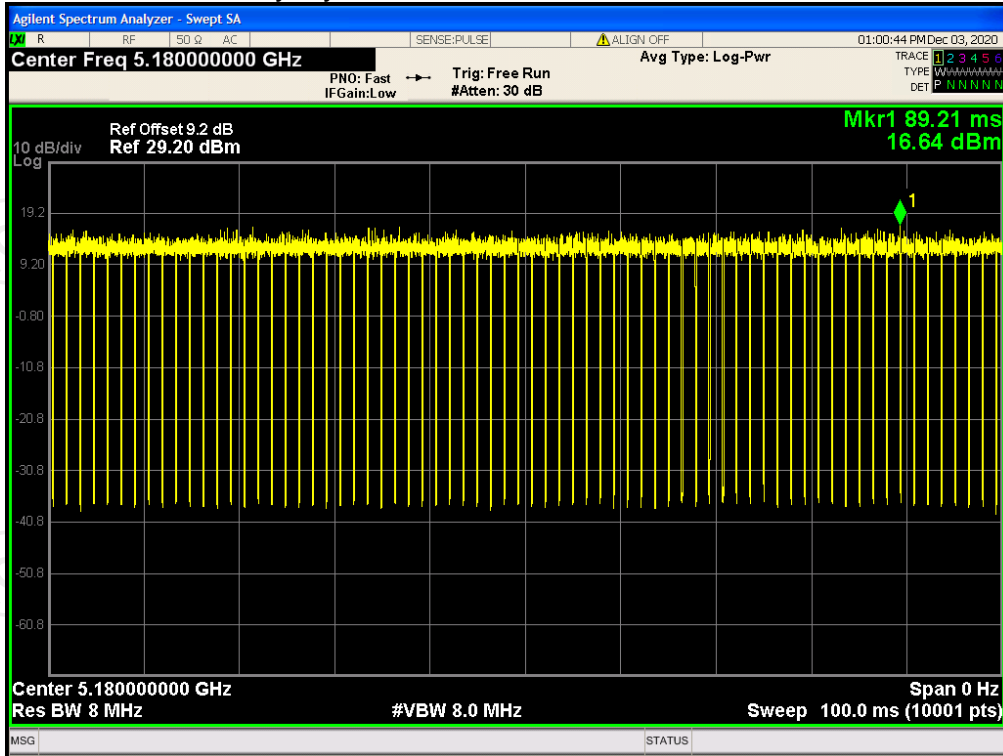
Duty Cycle NVNT 802.11a 5200MHz



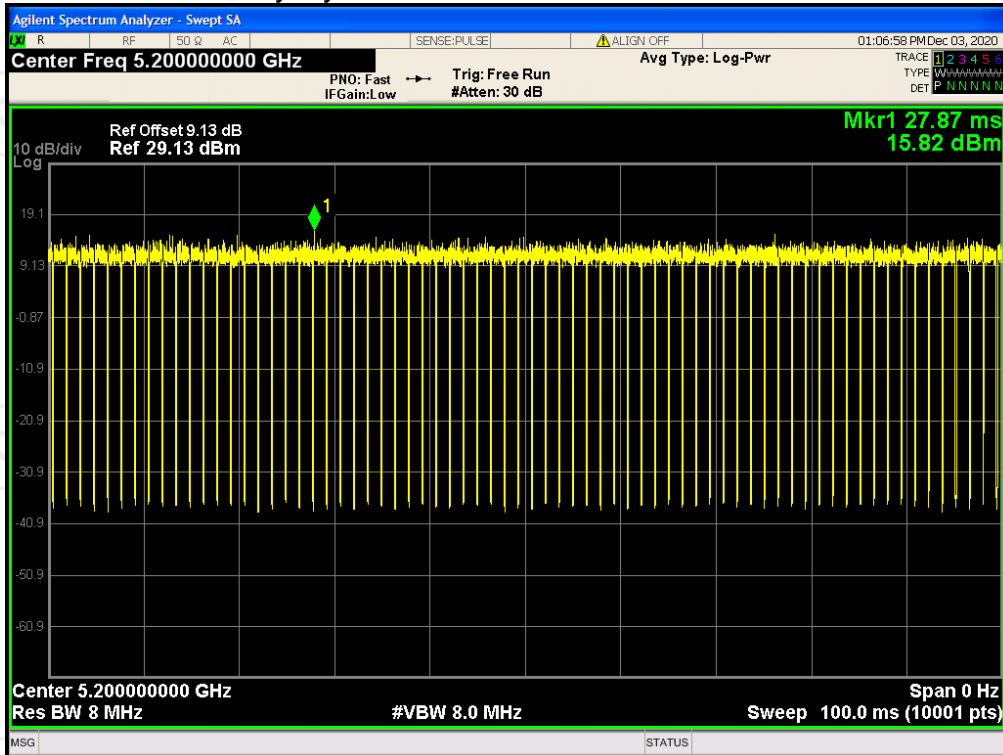
Duty Cycle NVNT 802.11a 5240MHz



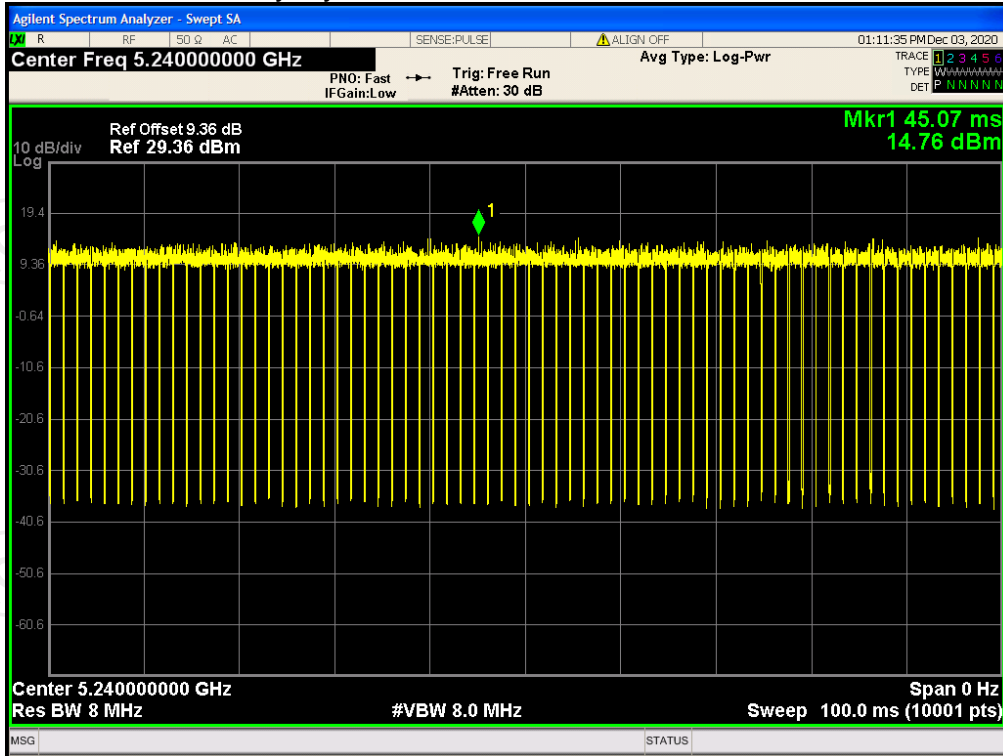
Duty Cycle NVNT 802.11ac20 5180MHz



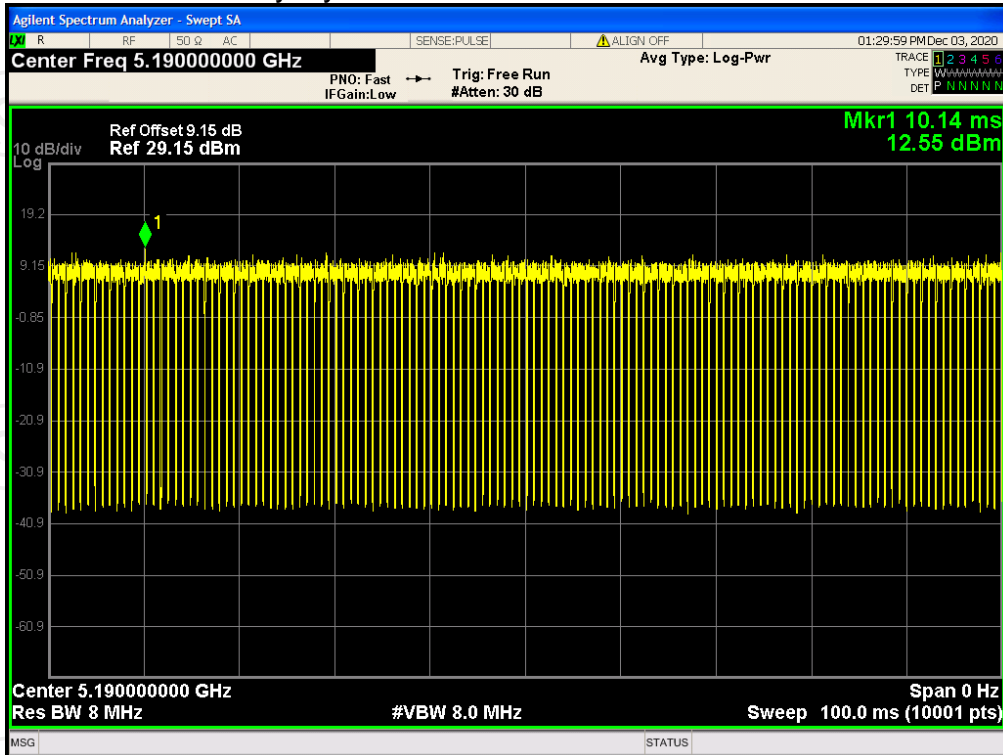
Duty Cycle NVNT 802.11ac20 5200MHz



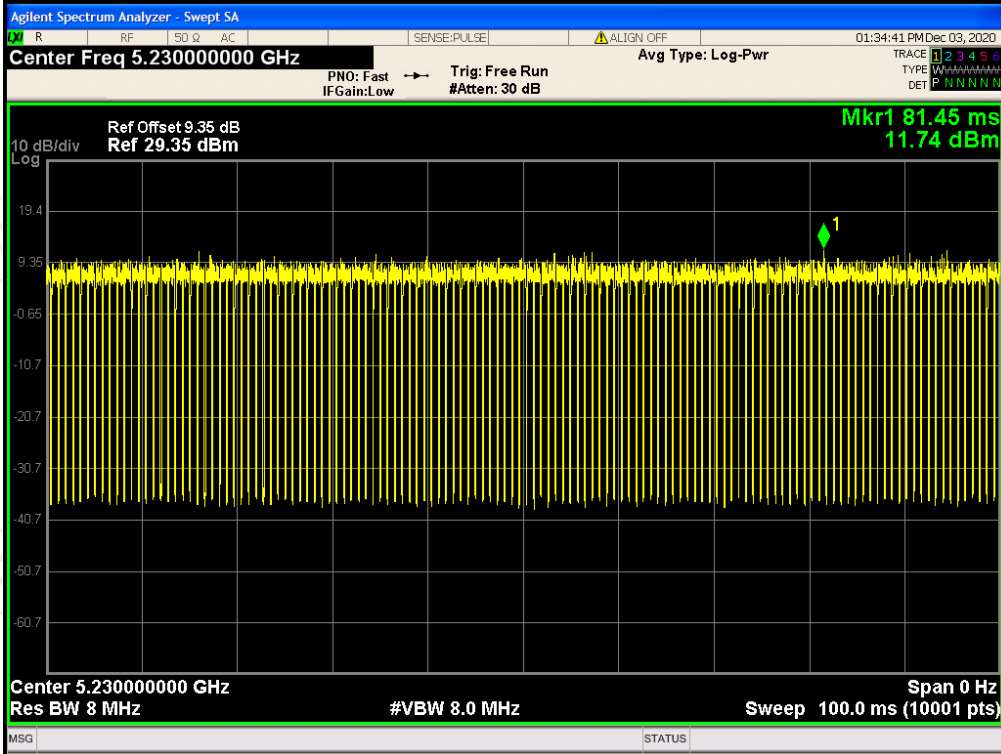
Duty Cycle NVNT 802.11ac20 5240MHz



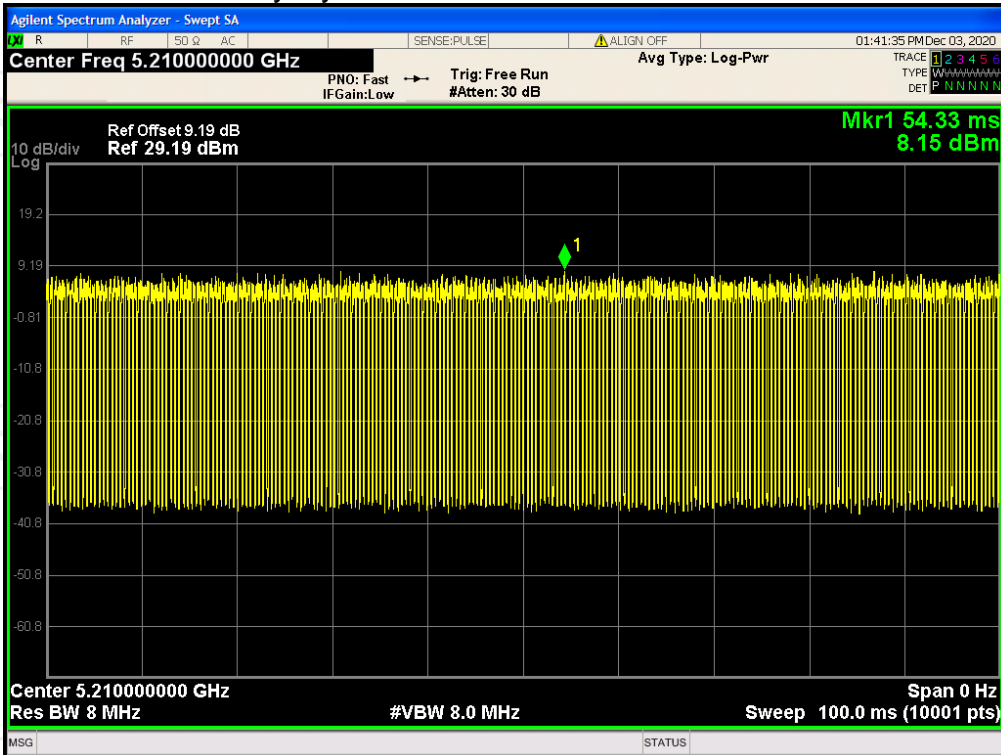
Duty Cycle NVNT 802.11ac40 5190MHz



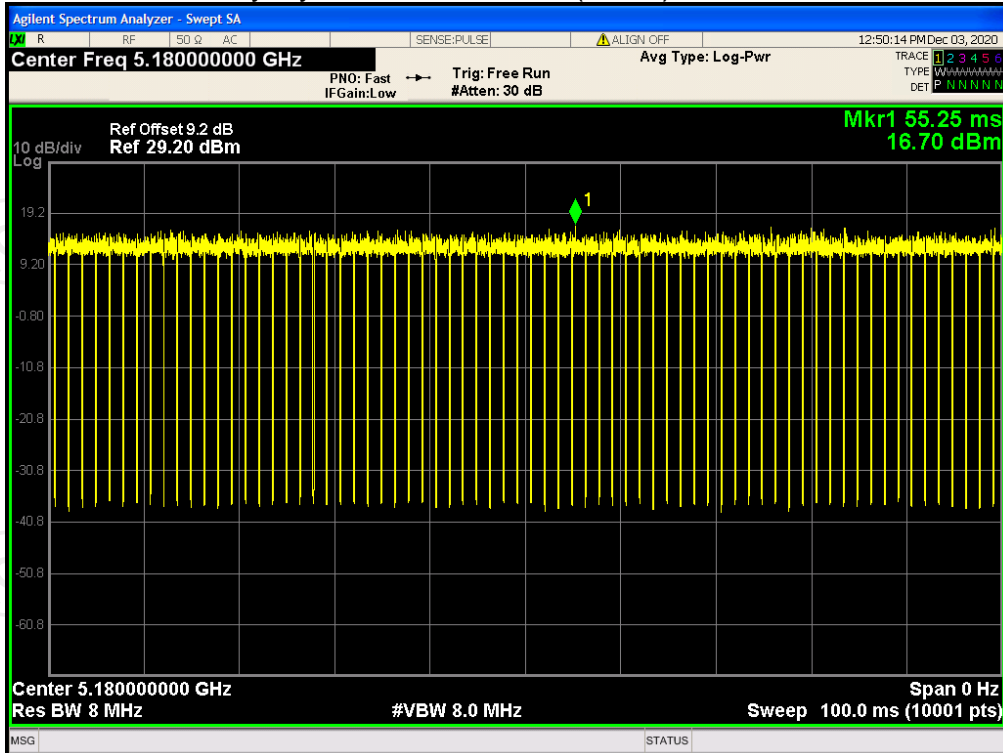
Duty Cycle NVNT 802.11ac40 5230MHz



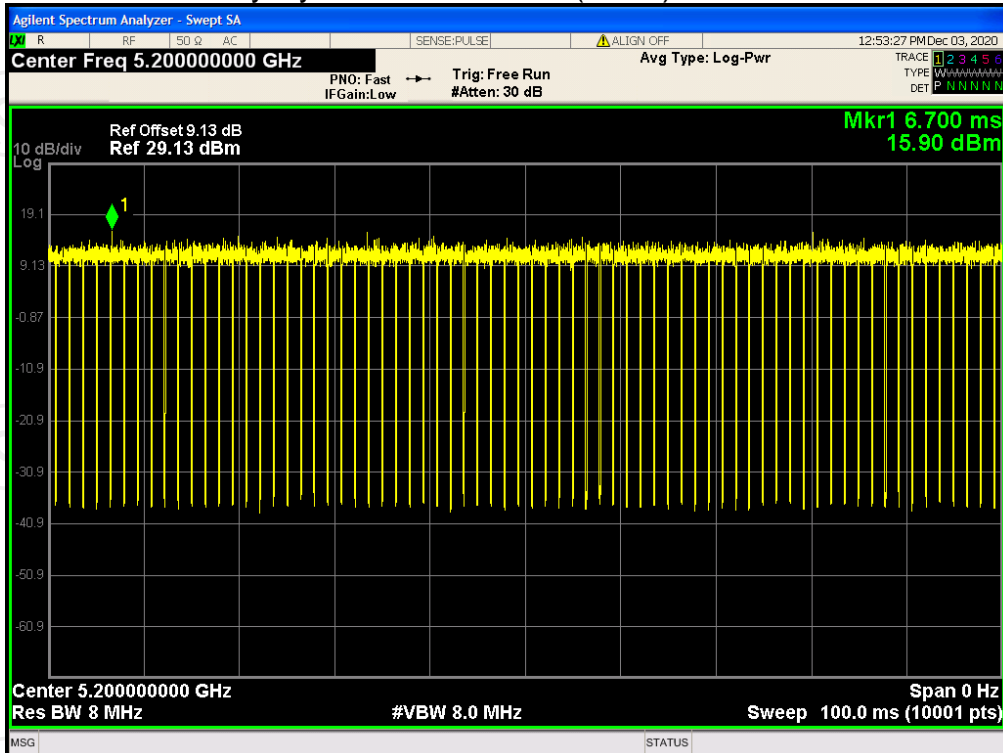
Duty Cycle NVNT 802.11ac80 5210MHz



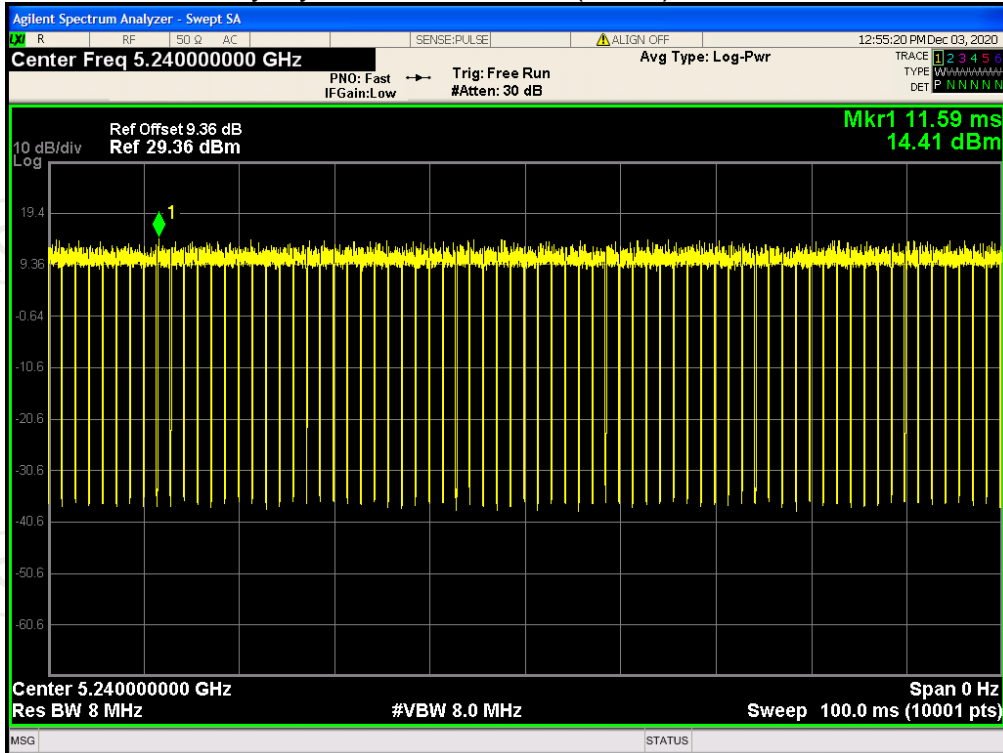
Duty Cycle NVNT 802.11n(HT20) 5180MHz



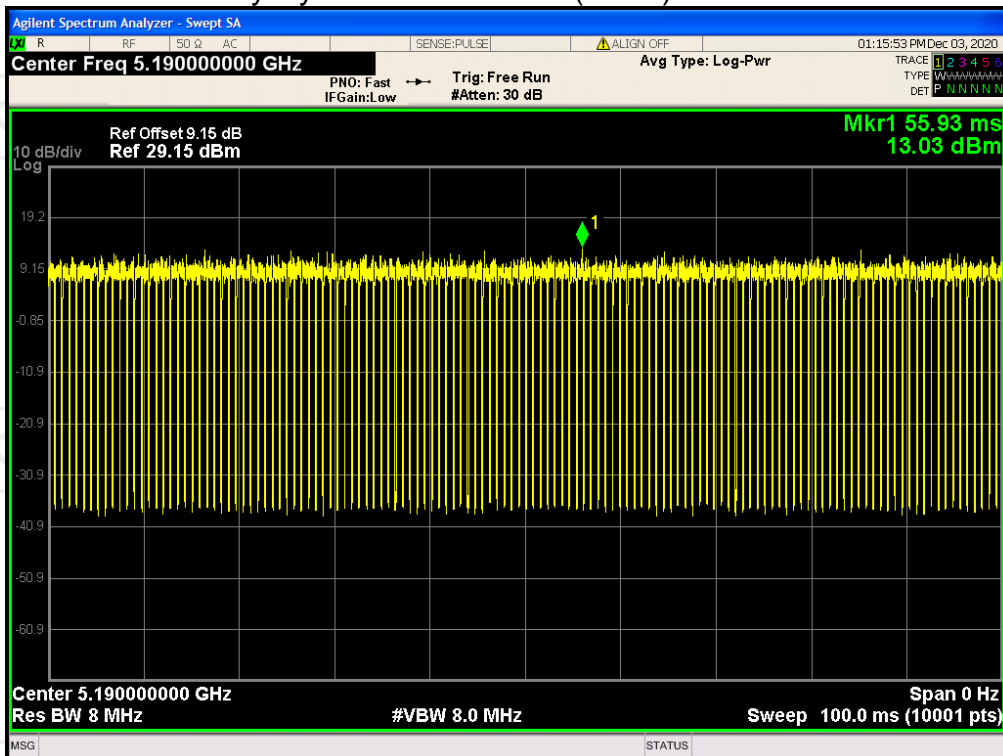
Duty Cycle NVNT 802.11n(HT20) 5200MHz



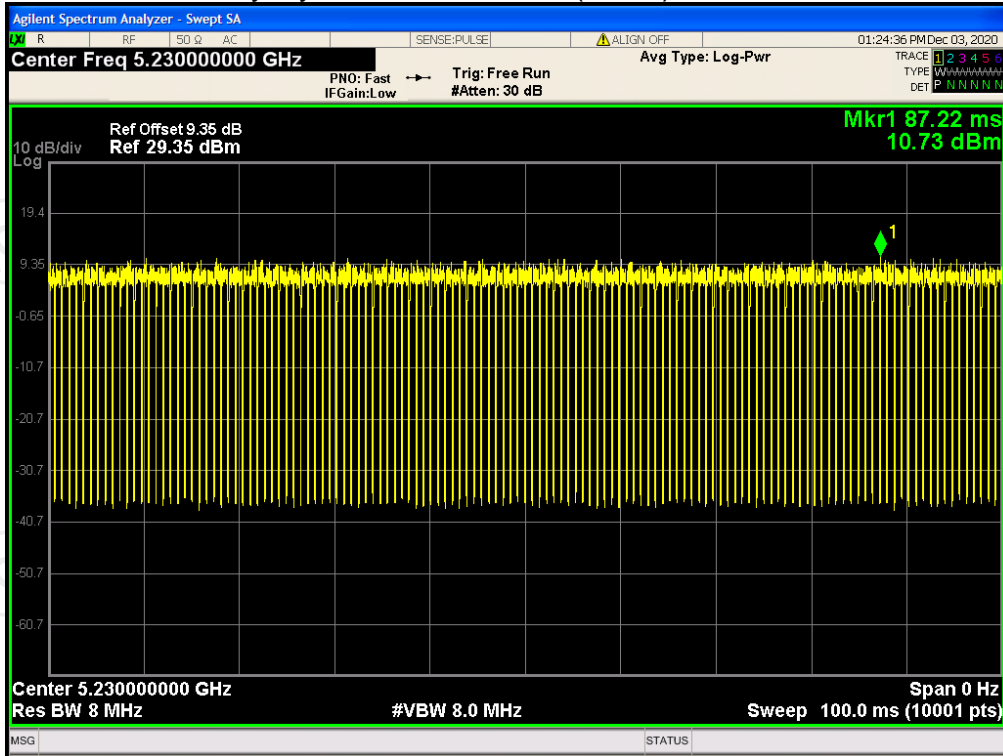
Duty Cycle NVNT 802.11n(HT20) 5240MHz



Duty Cycle NVNT 802.11n(HT40) 5190MHz



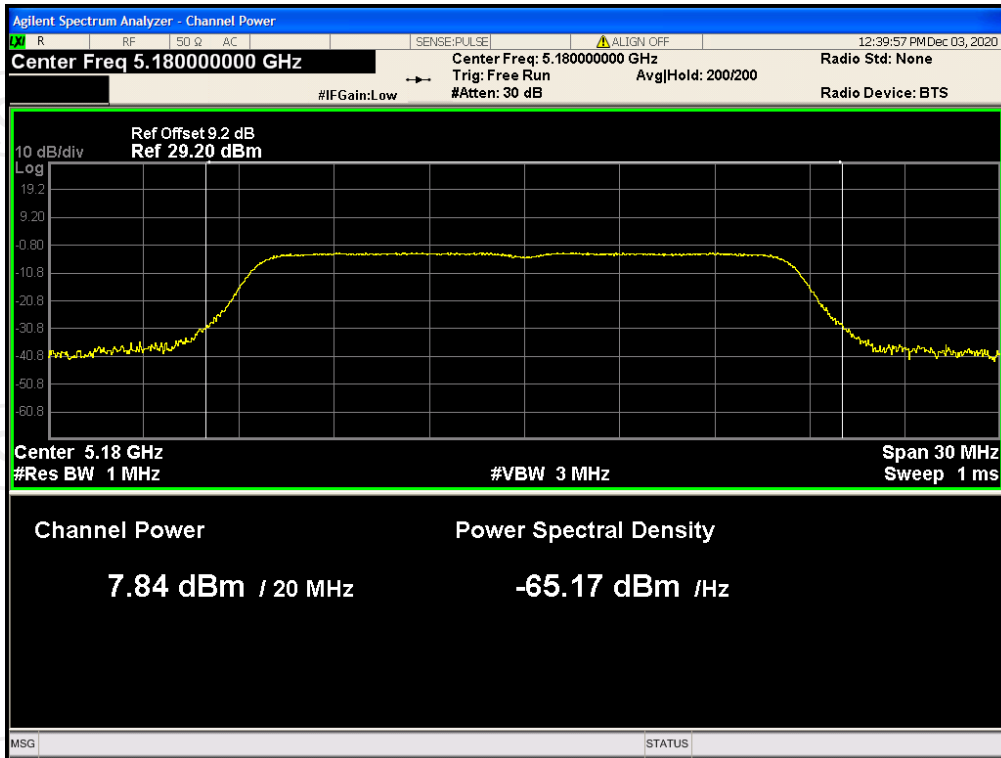
Duty Cycle NVNT 802.11n(HT40) 5230MHz



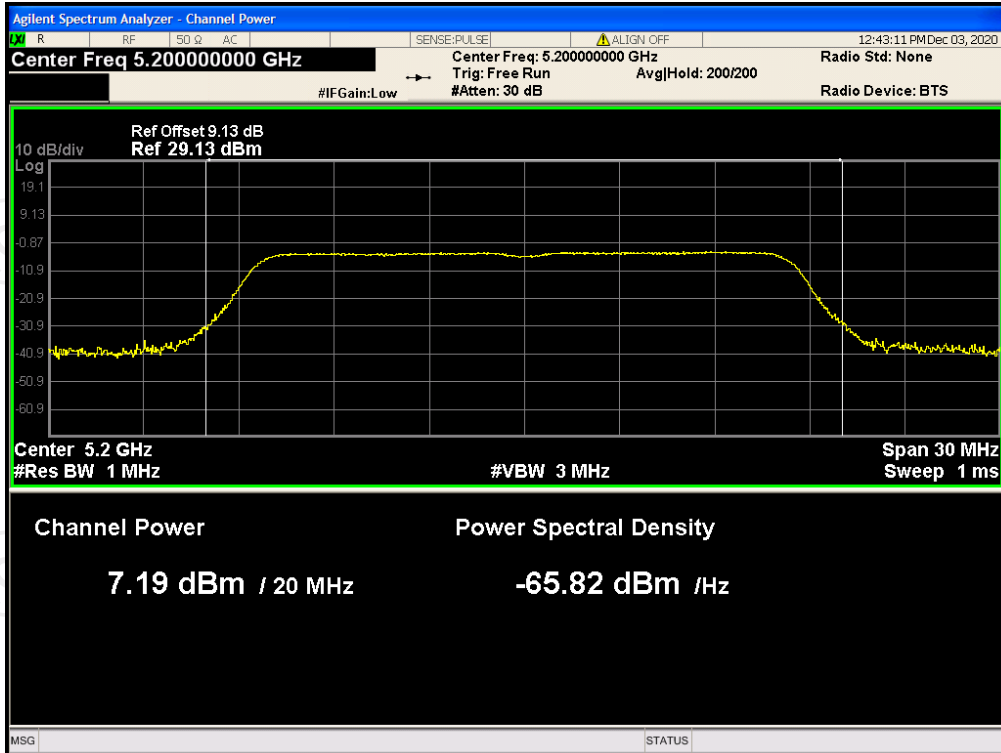
Maximum Conducted Output Power

Mode	Frequency (MHz)	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
802.11a	5180	7.840	0	7.840	24	Pass
802.11a	5200	7.189	0	7.189	24	Pass
802.11a	5240	7.533	0	7.533	24	Pass
802.11ac20	5180	7.859	0	7.859	24	Pass
802.11ac20	5200	7.332	0	7.332	24	Pass
802.11ac20	5240	7.716	0	7.716	24	Pass
802.11ac40	5190	6.848	0	6.848	24	Pass
802.11ac40	5230	6.353	0	6.353	24	Pass
802.11ac80	5210	6.532	0	6.532	24	Pass
802.11n(HT20)	5180	7.850	0	7.850	24	Pass
802.11n(HT20)	5200	7.366	0	7.366	24	Pass
802.11n(HT20)	5240	7.590	0	7.590	24	Pass
802.11n(HT40)	5190	7.018	0	7.018	24	Pass
802.11n(HT40)	5230	6.311	0	6.311	24	Pass

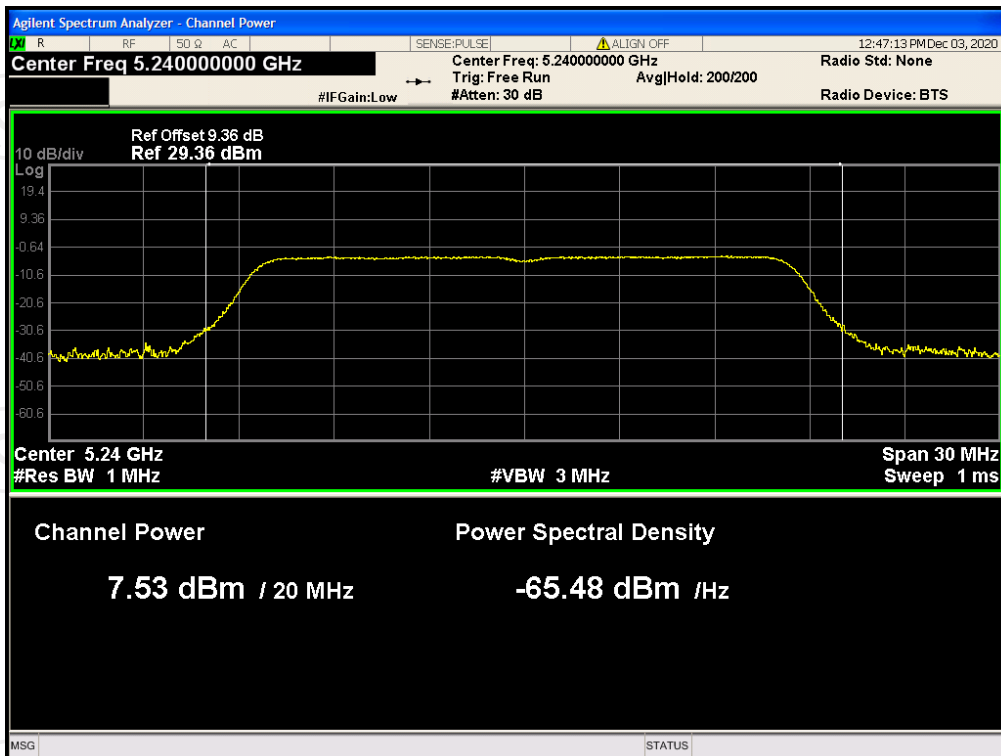
Power NVNT 802.11a 5180MHz



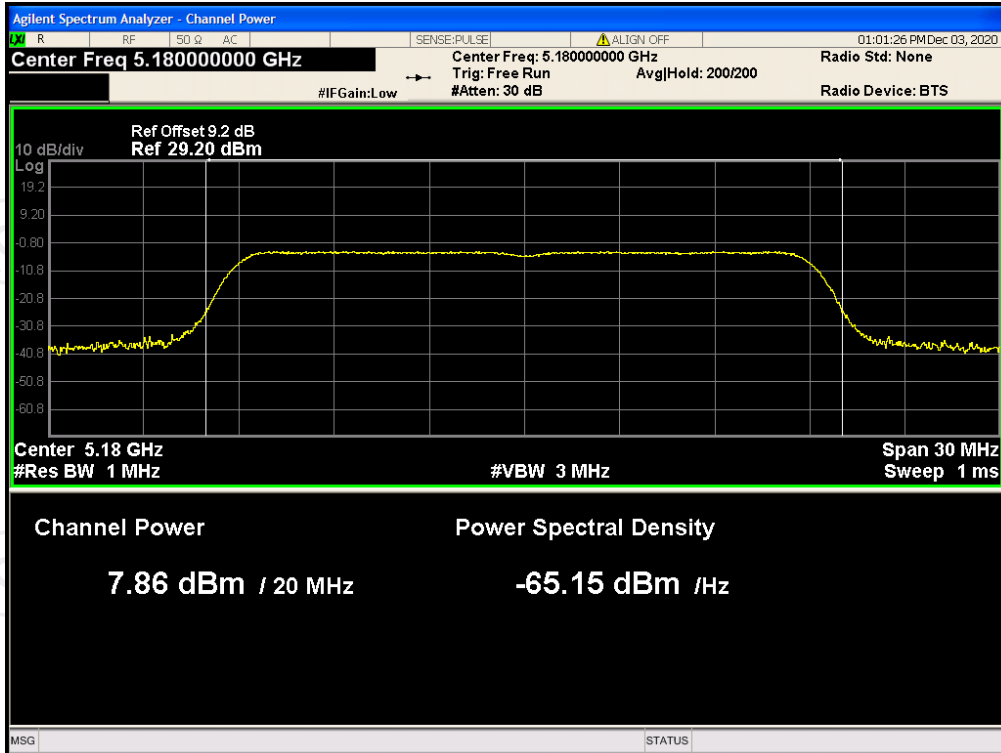
Power NVNT 802.11a 5200MHz



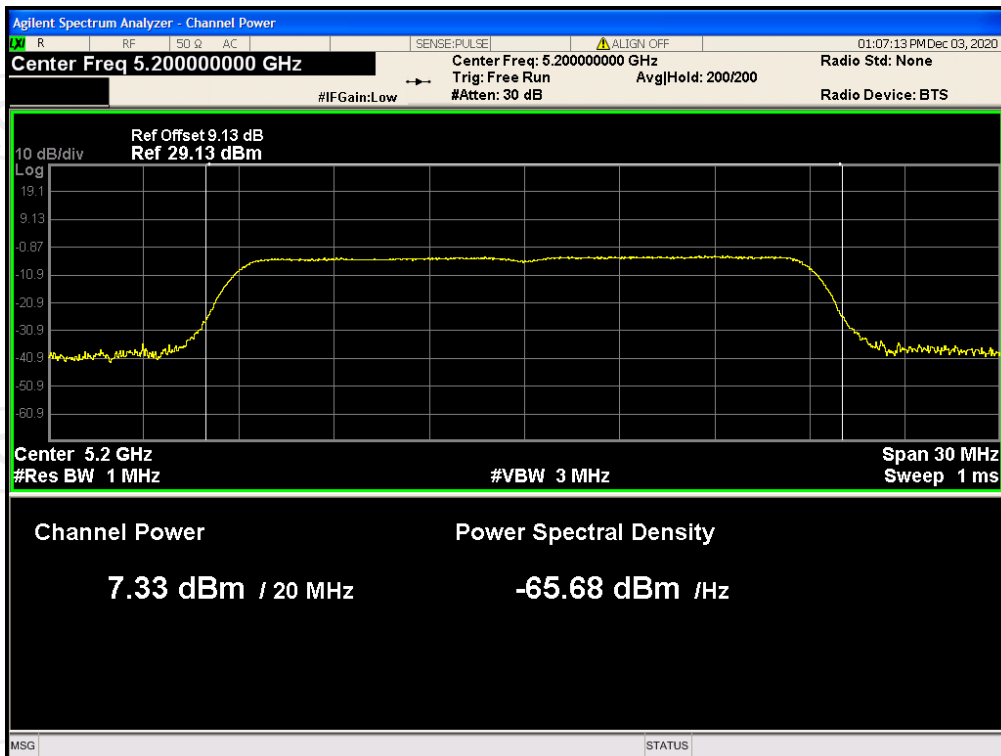
Power NVNT 802.11a 5240MHz



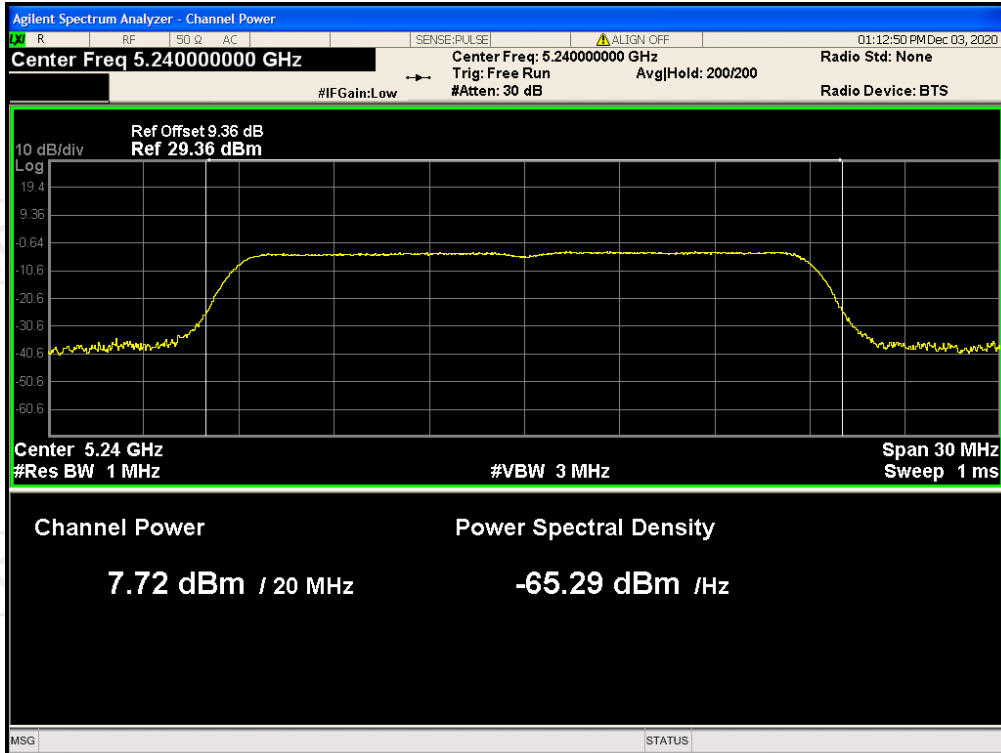
Power NVNT 802.11ac20 5180MHz



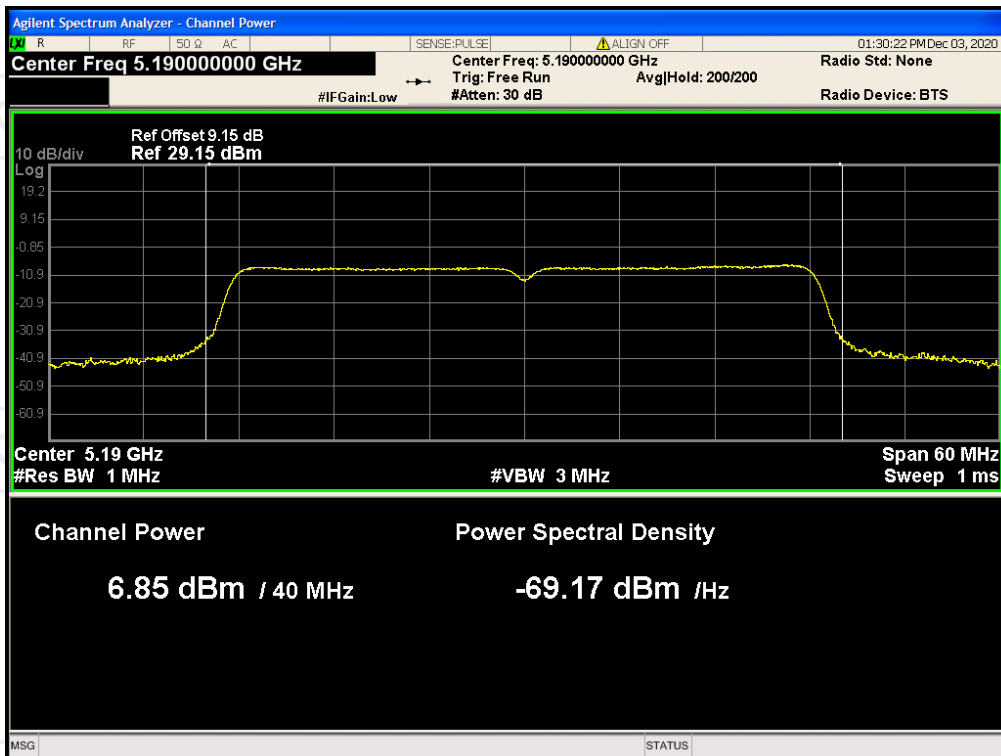
Power NVNT 802.11ac20 5200MHz



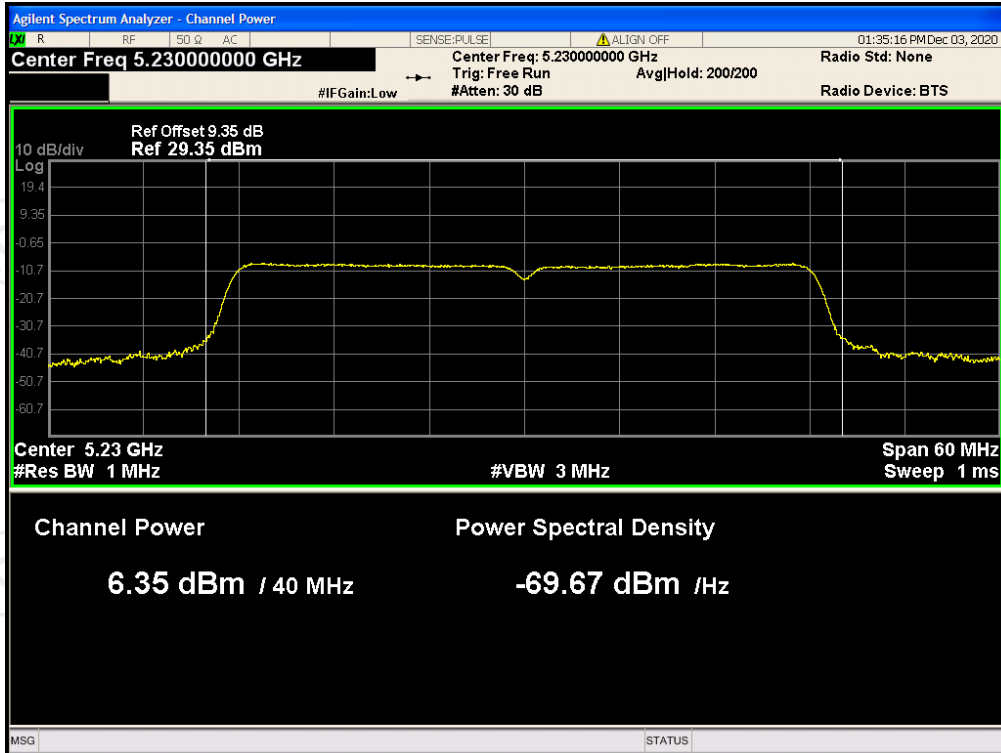
Power NVNT 802.11ac20 5240MHz



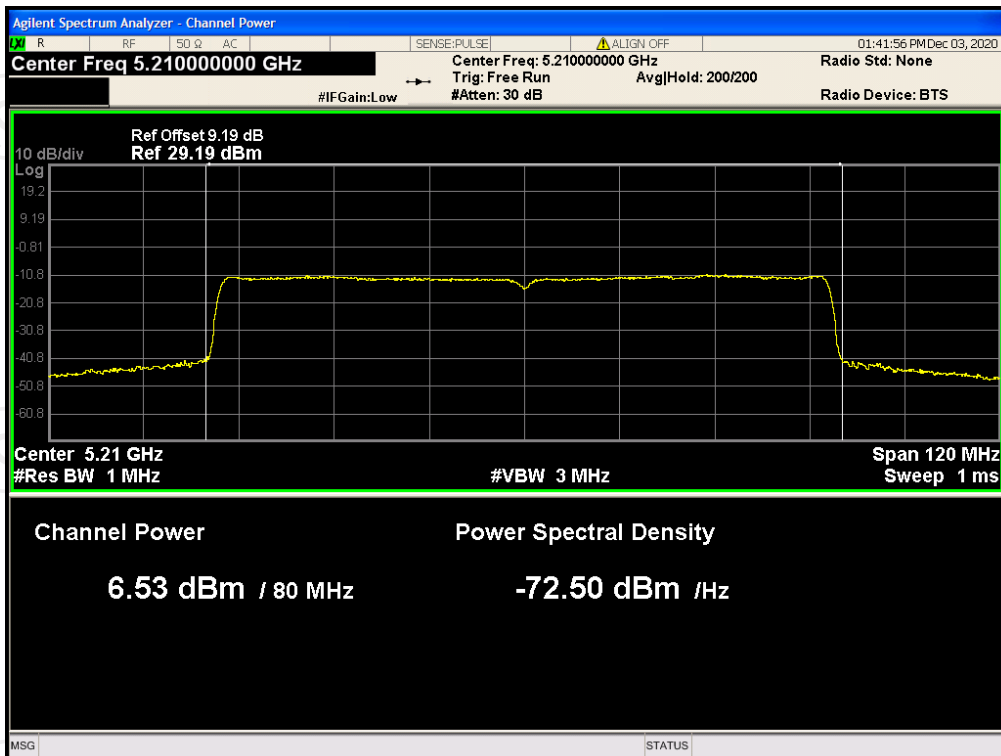
Power NVNT 802.11ac40 5190MHz



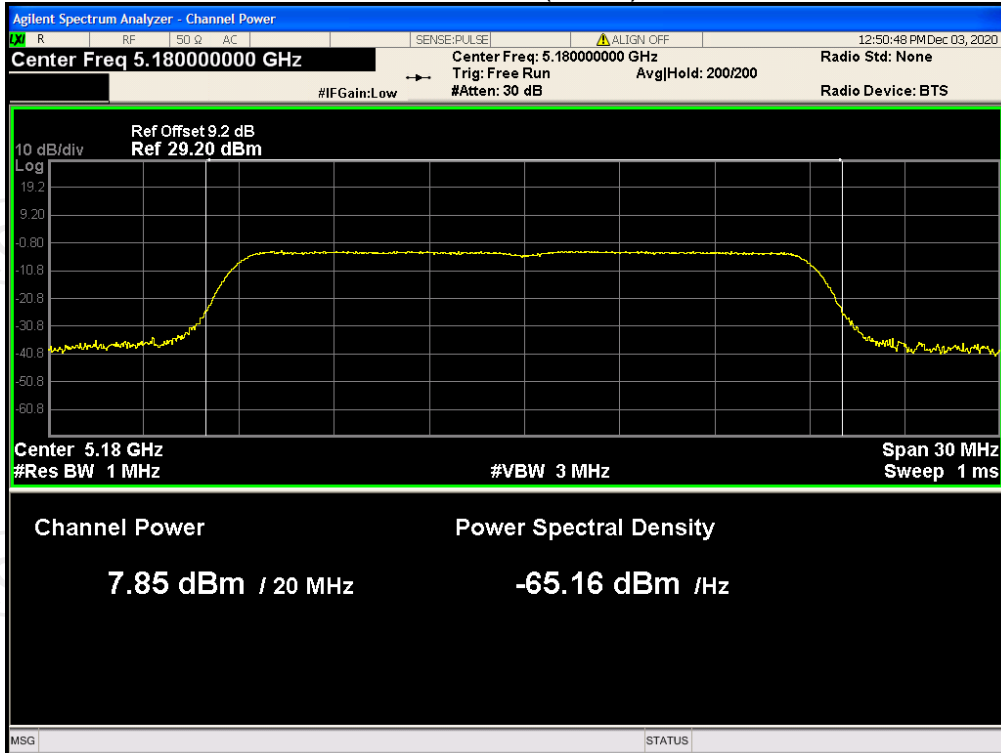
Power NVNT 802.11ac40 5230MHz



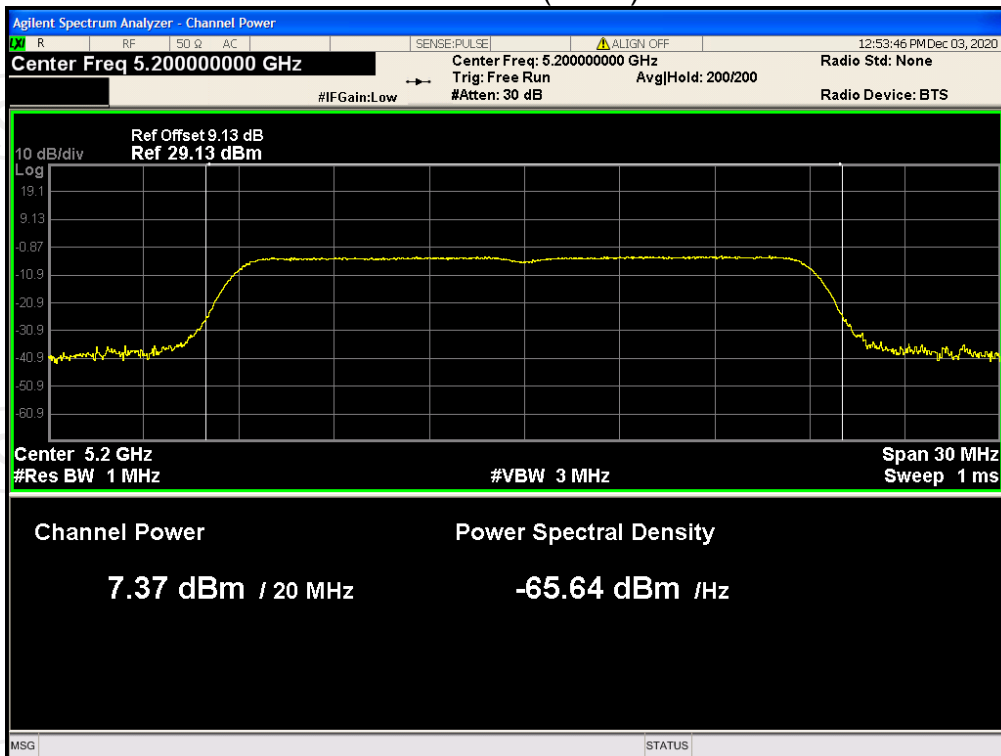
Power NVNT 802.11ac80 5210MHz



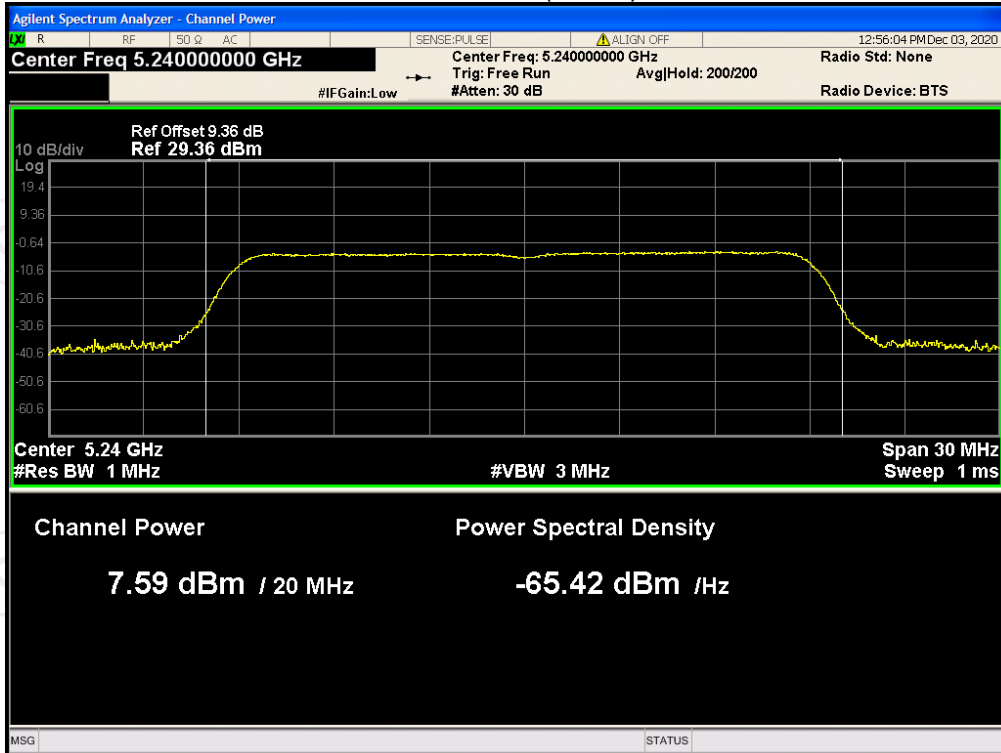
Power NVNT 802.11n(HT20) 5180MHz



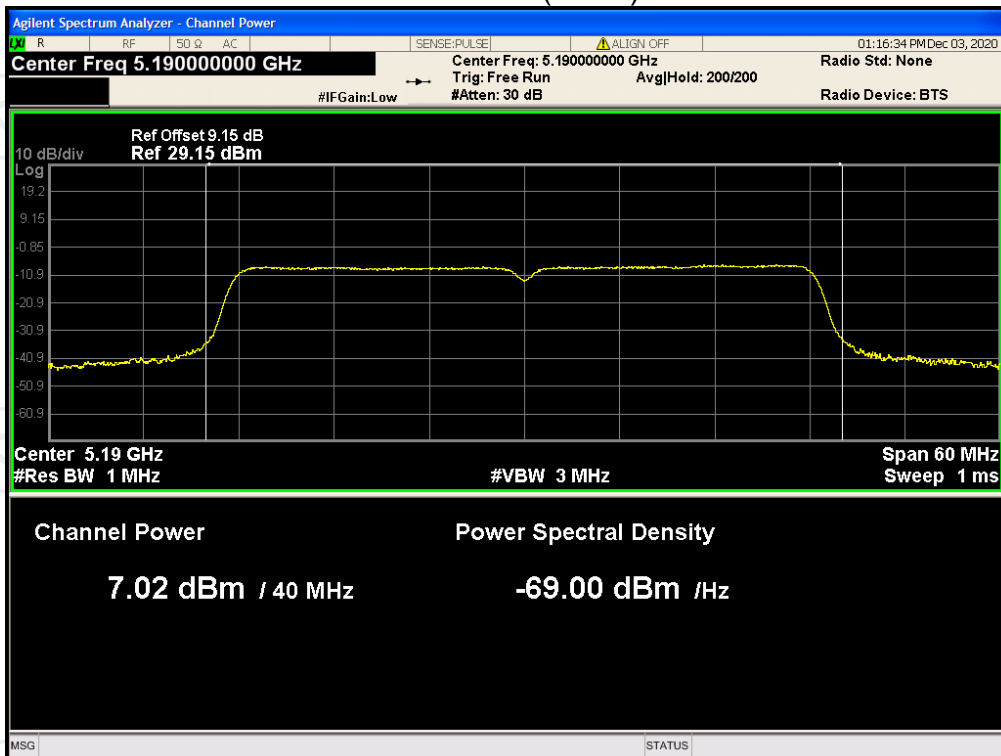
Power NVNT 802.11n(HT20) 5200MHz



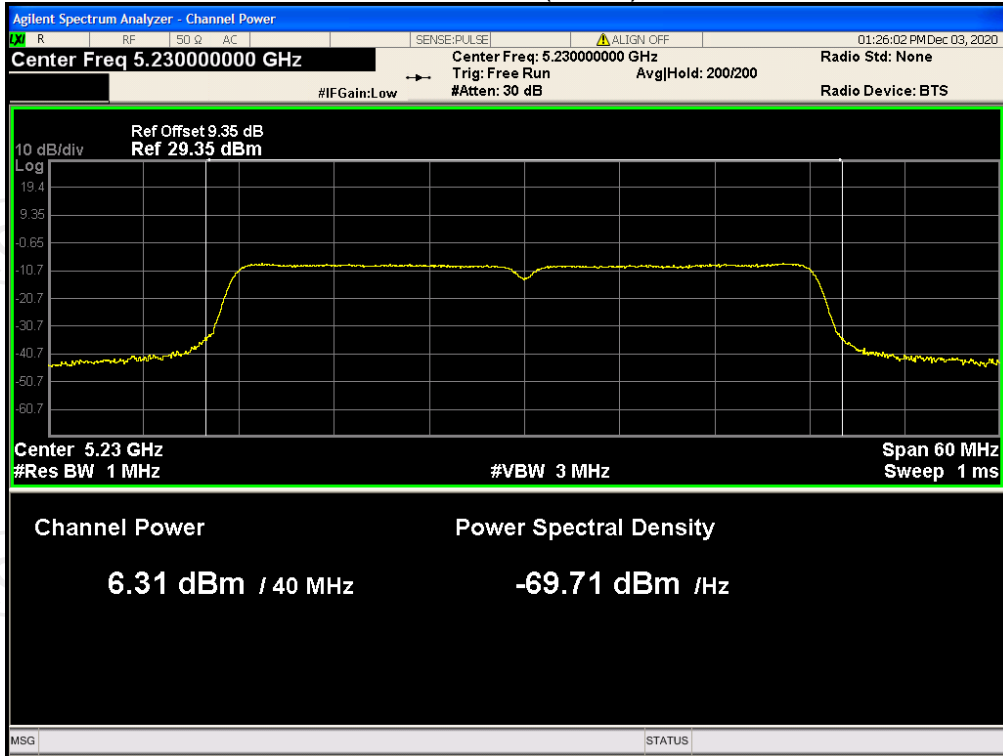
Power NVNT 802.11n(HT20) 5240MHz



Power NVNT 802.11n(HT40) 5190MHz



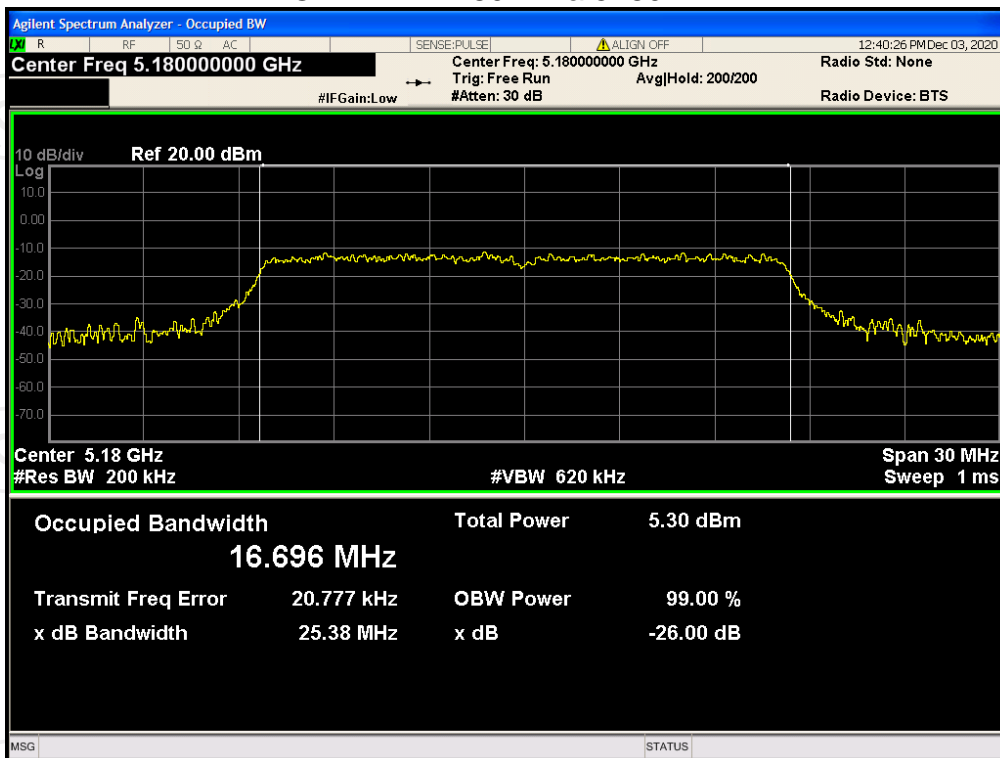
Power NVNT 802.11n(HT40) 5230MHz



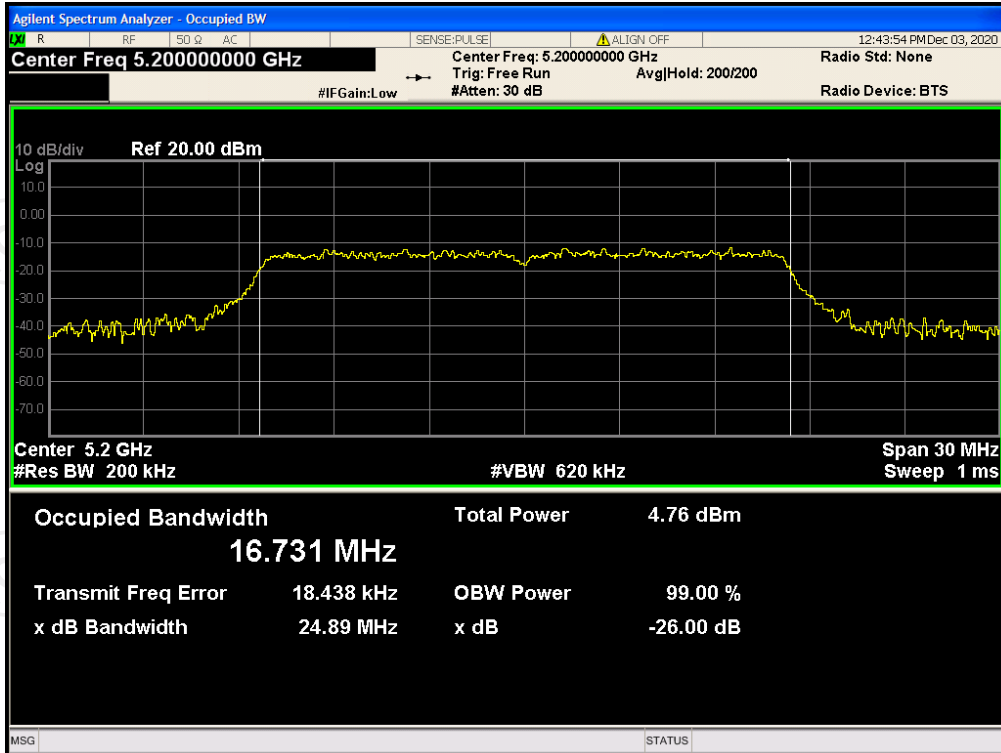
Occupied Channel Bandwidth

Mode	Frequency (MHz)	99% OBW (MHz)	-26 dB Bandwidth (MHz)	Verdict
802.11a	5180	16.6962	25.3838	Pass
802.11a	5200	16.7314	24.8912	Pass
802.11a	5240	16.7407	28.172	Pass
802.11ac20	5180	17.7943	25.9661	Pass
802.11ac20	5200	17.7593	25.7223	Pass
802.11ac20	5240	17.7945	27.4361	Pass
802.11ac40	5190	36.3625	51.7982	Pass
802.11ac40	5230	36.3661	52.9502	Pass
802.11ac80	5210	75.7615	94.3595	Pass
802.11n(HT20)	5180	17.7481	25.3678	Pass
802.11n(HT20)	5200	17.7639	25.6159	Pass
802.11n(HT20)	5240	17.7653	27.1141	Pass
802.11n(HT40)	5190	36.2802	47.992	Pass
802.11n(HT40)	5230	36.3477	47.8479	Pass

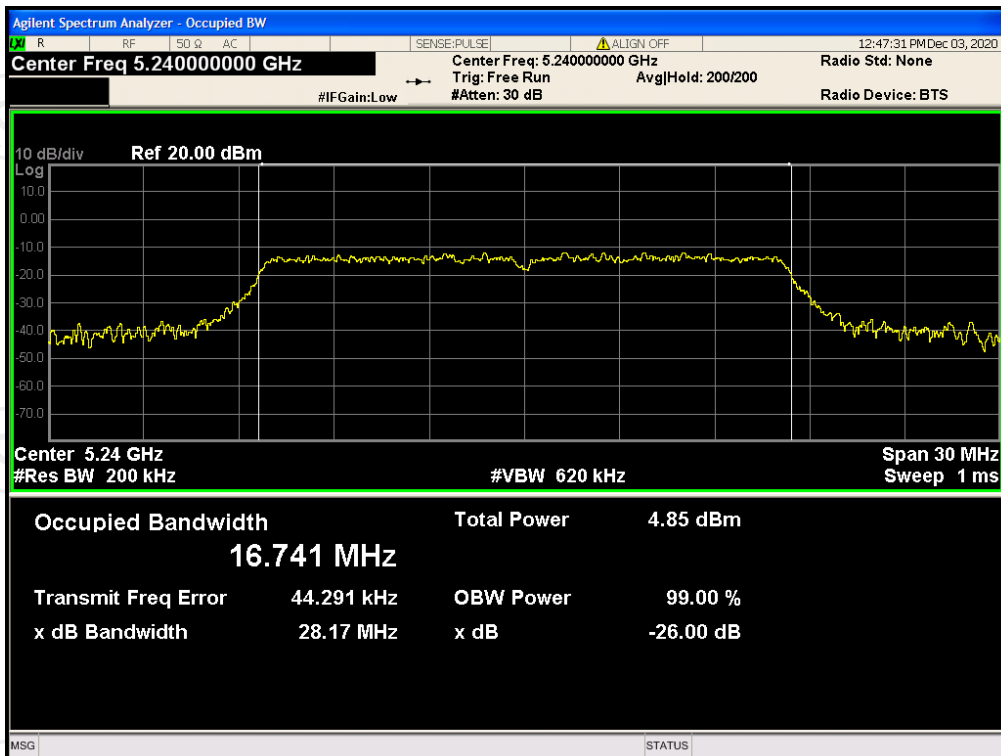
OBW NVNT 802.11a 5180MHz



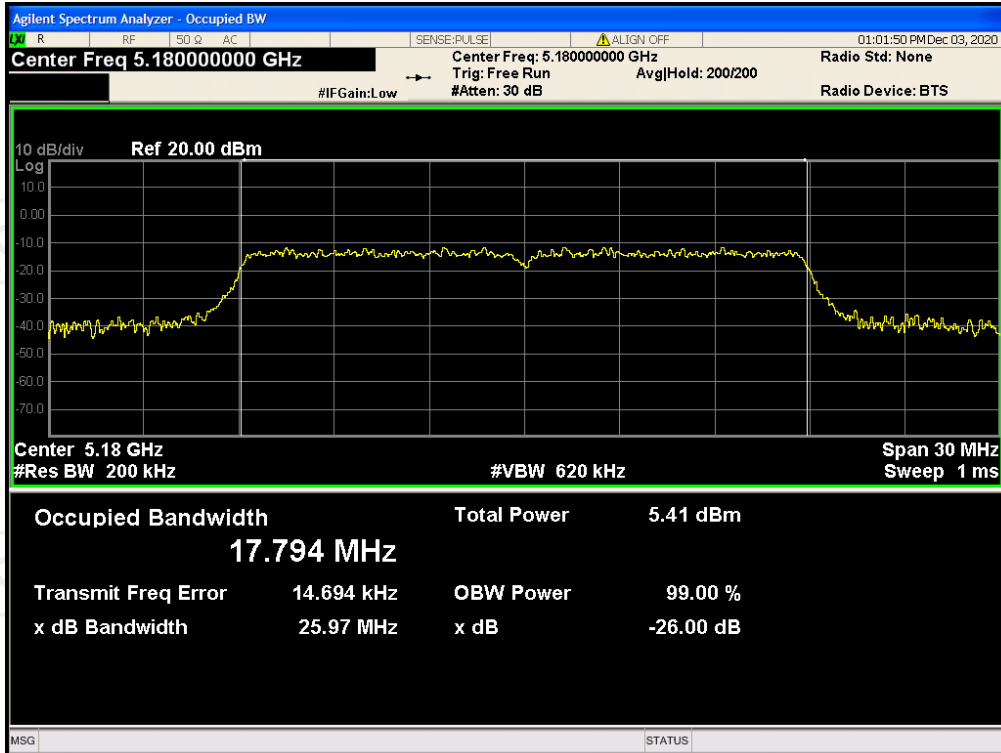
OBW NVNT 802.11a 5200MHz



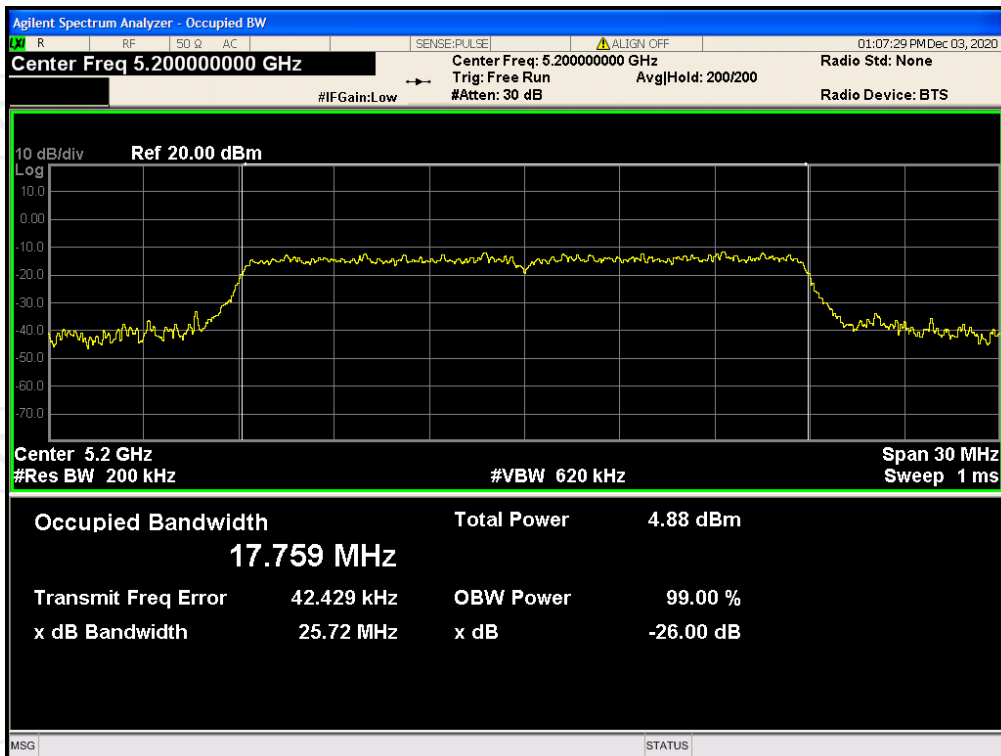
OBW NVNT 802.11a 5240MHz



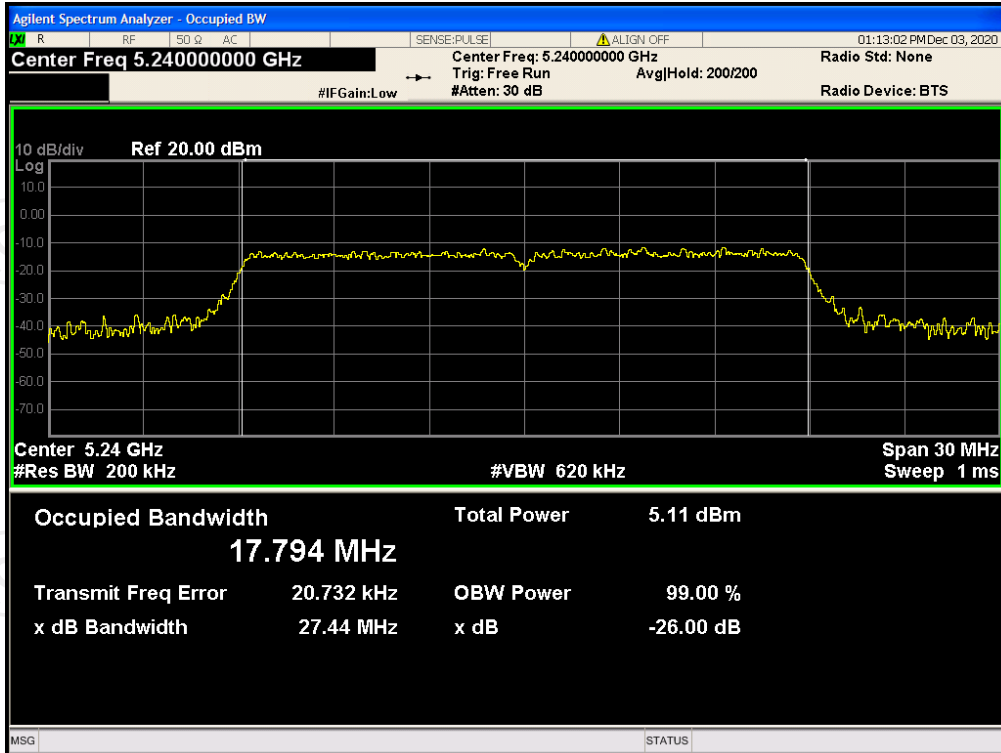
OBW NVNT 802.11ac20 5180MHz



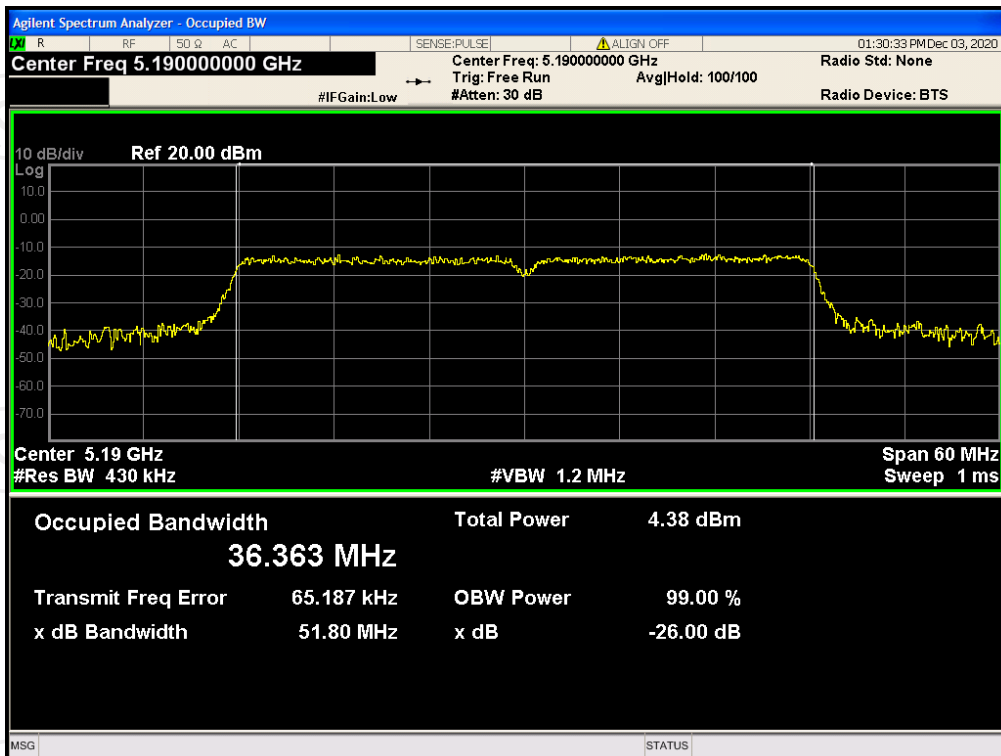
OBW NVNT 802.11ac20 5200MHz



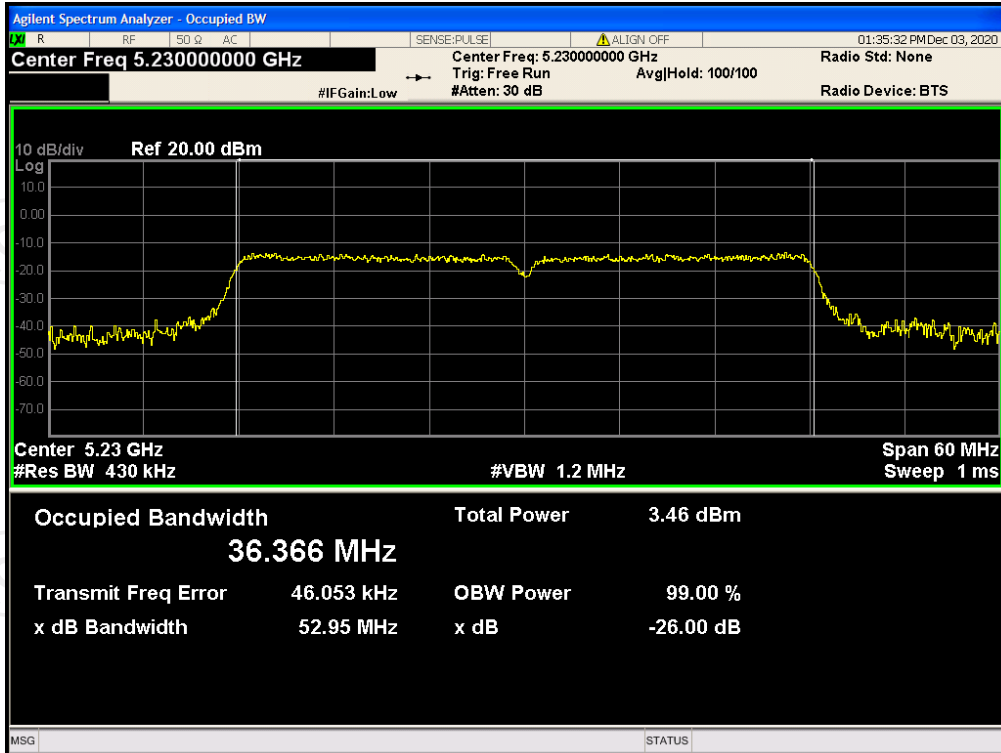
OBW NVNT 802.11ac20 5240MHz



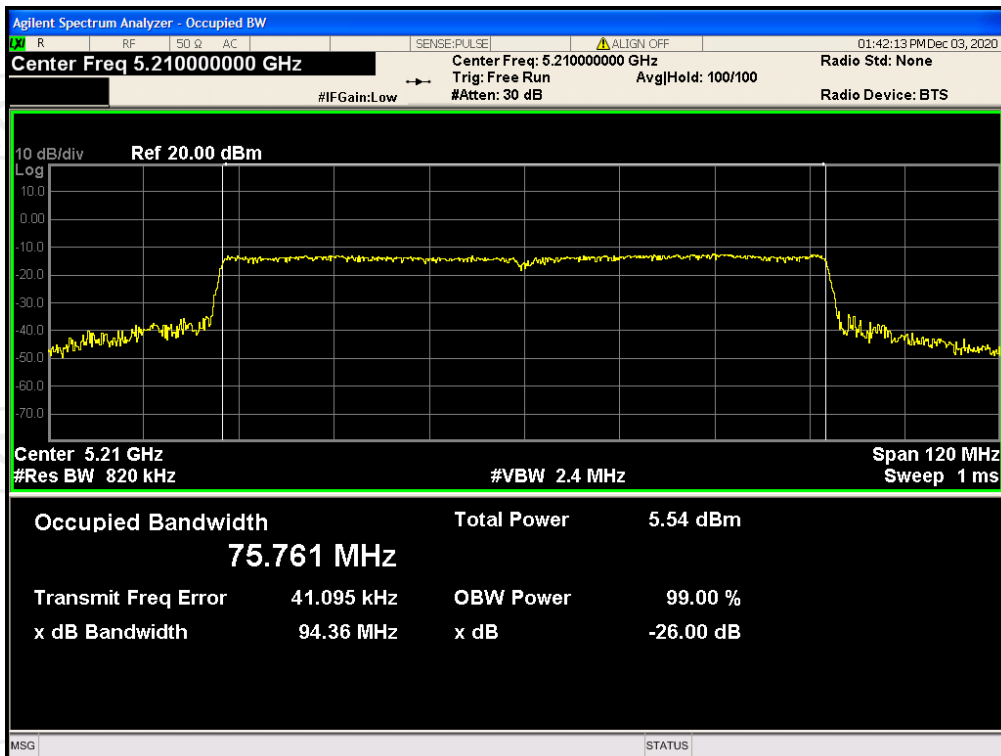
OBW NVNT 802.11ac40 5190MHz



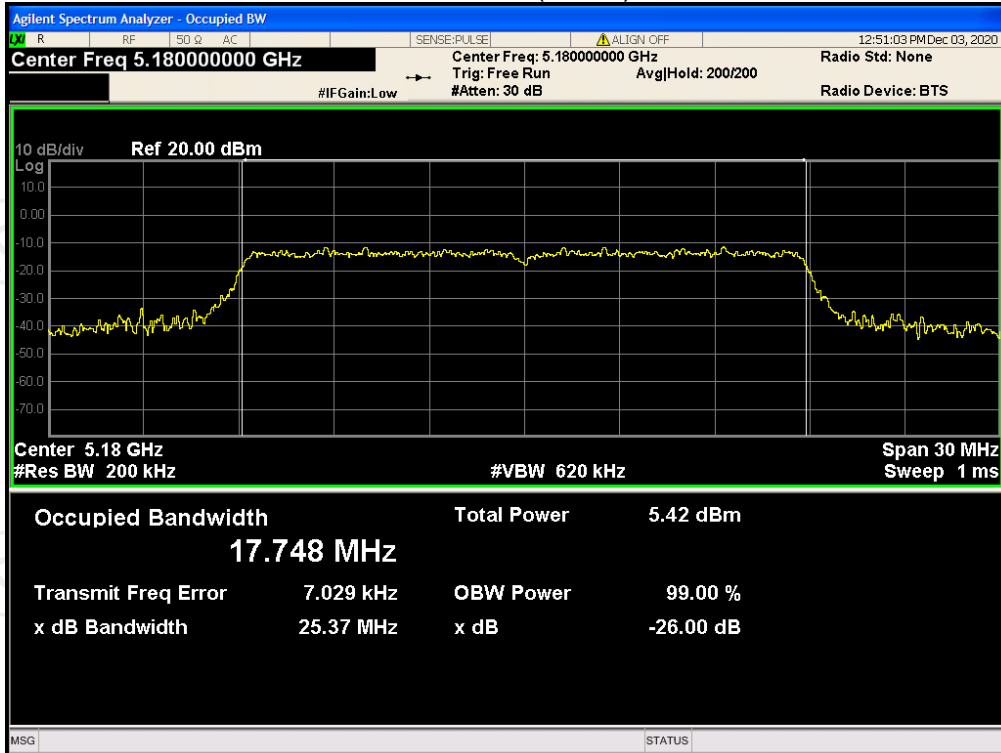
OBW NVNT 802.11ac40 5230MHz



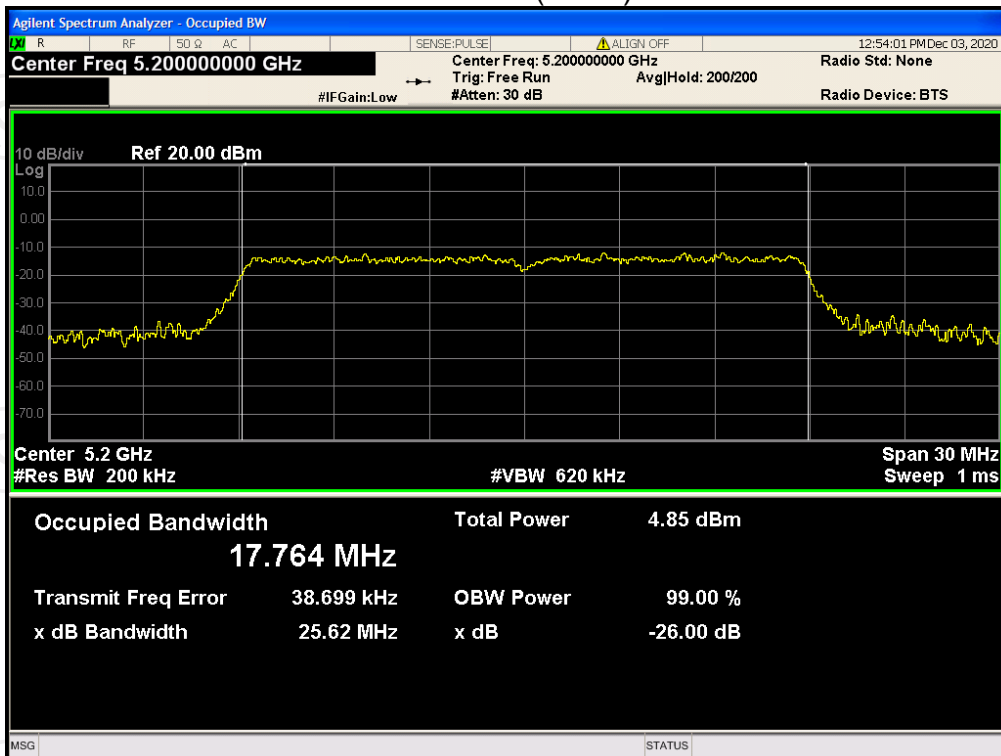
OBW NVNT 802.11ac80 5210MHz



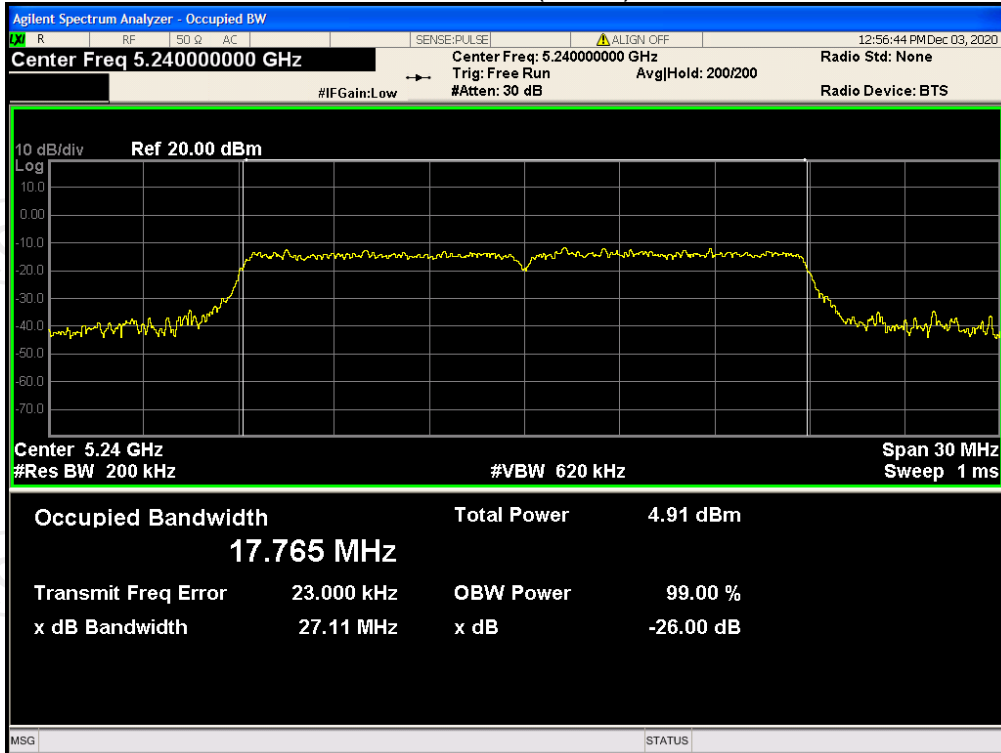
OBW NVNT 802.11n(HT20) 5180MHz



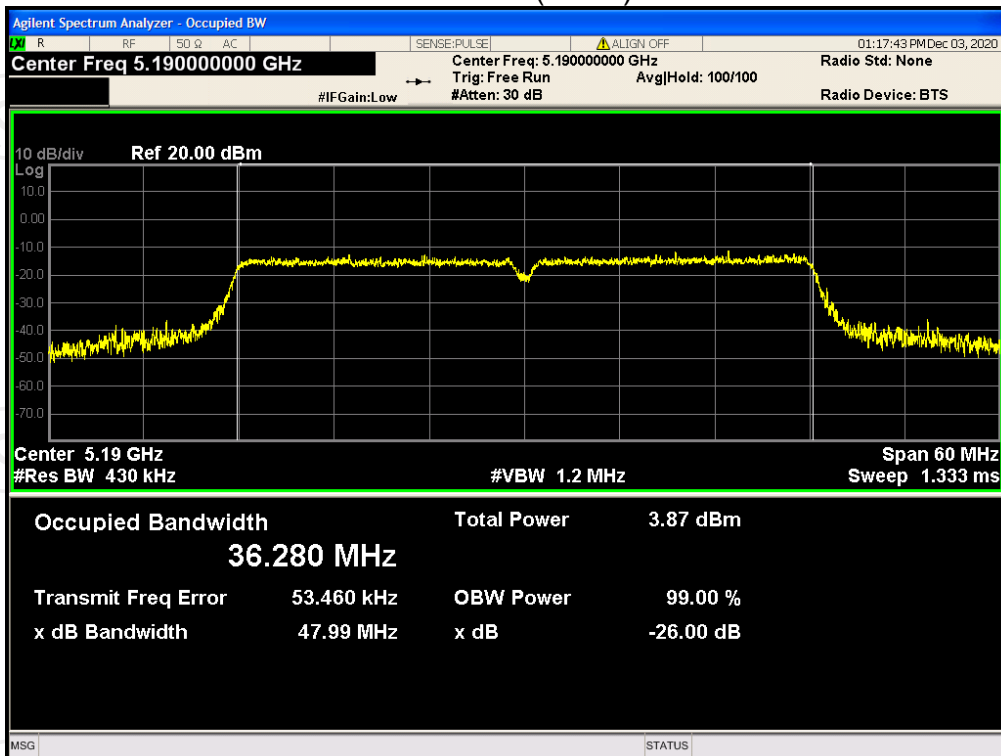
OBW NVNT 802.11n(HT20) 5200MHz



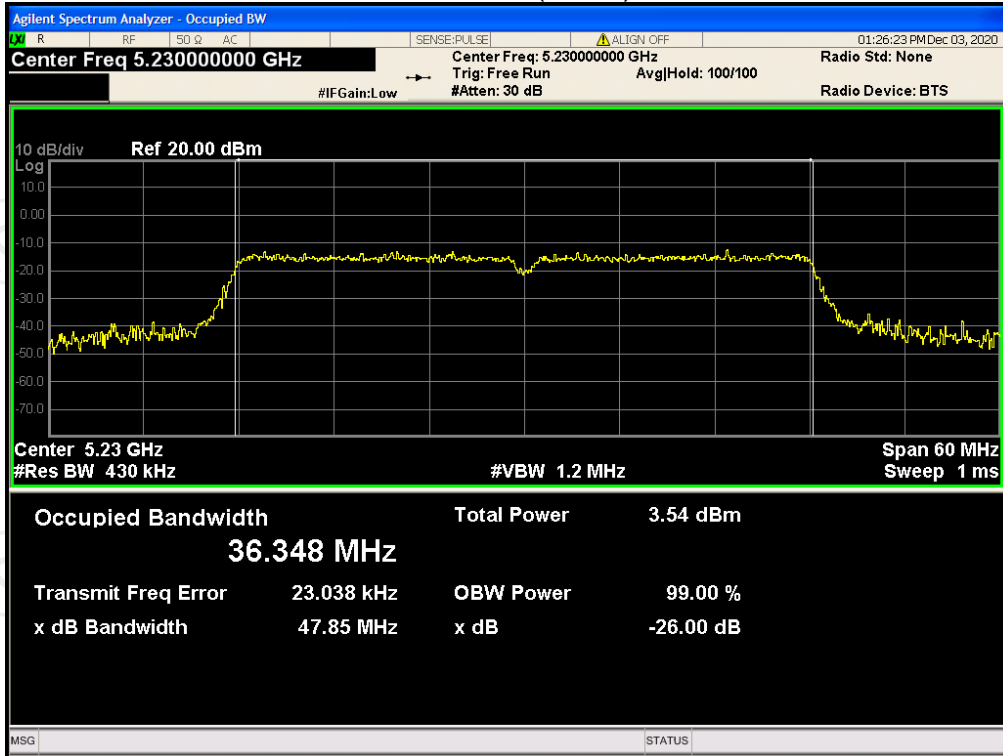
OBW NVNT 802.11n(HT20) 5240MHz



OBW NVNT 802.11n(HT40) 5190MHz



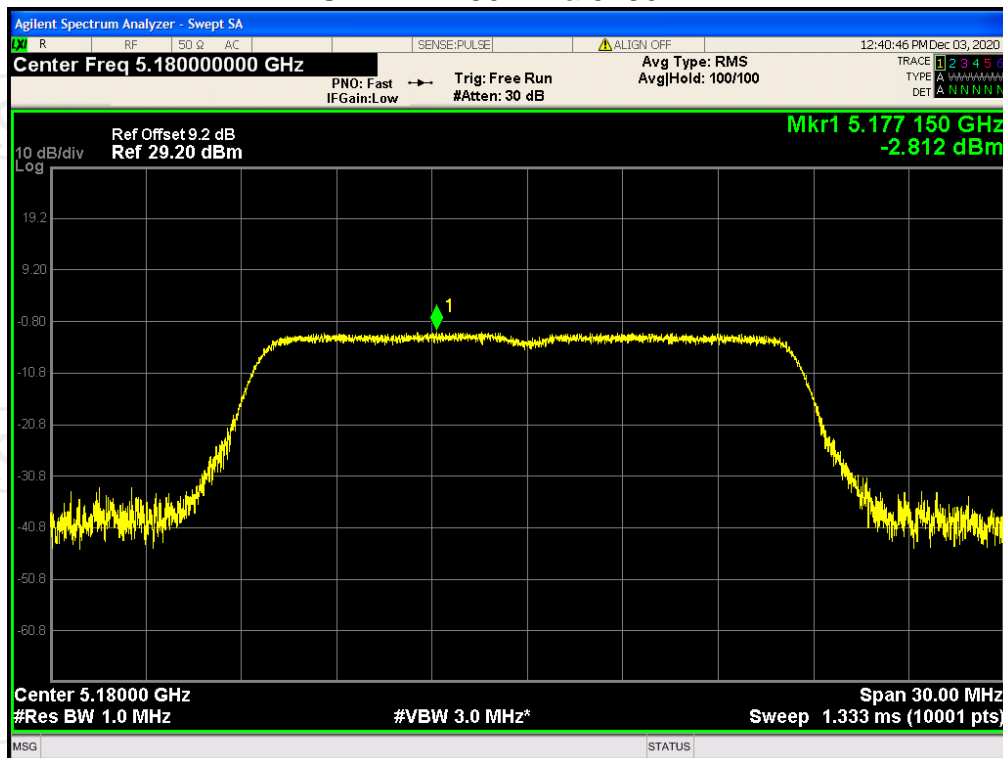
OBW NVNT 802.11n(HT40) 5230MHz



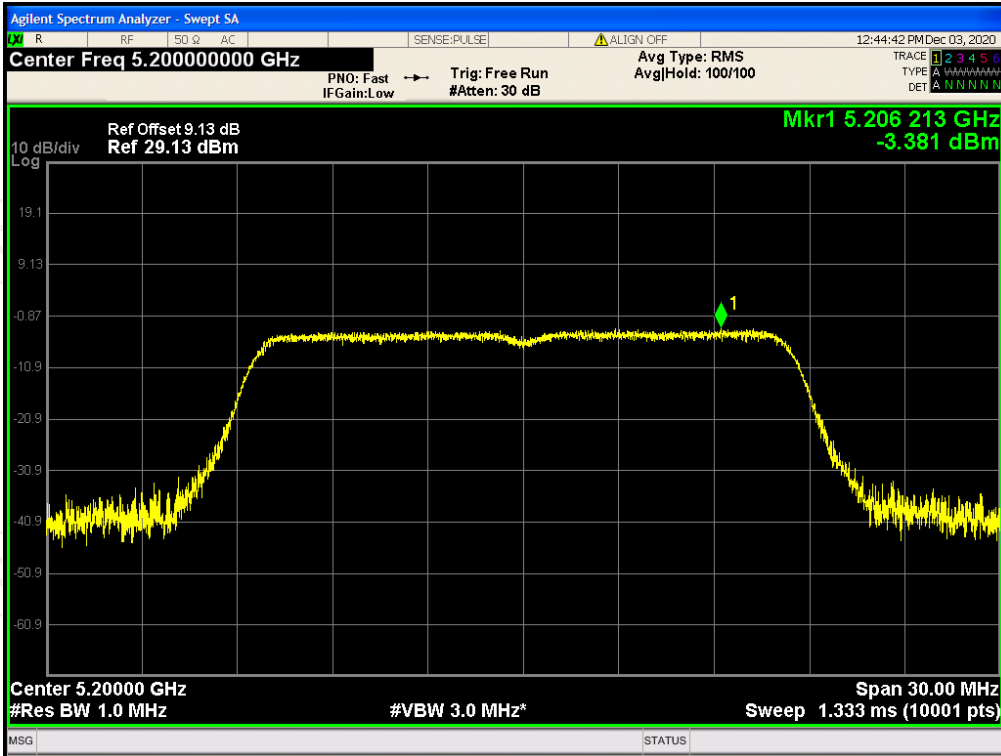
Maximum Power Spectral Density Level

Mode	Frequency (MHz)	Max PSD (dBm)	Duty Cycle Factor(dB)	Result (dBm)	Limit (dBm)	Verdict
802.11a	5180	-2.812	0	-2.812	11	Pass
802.11a	5200	-3.381	0	-3.381	11	Pass
802.11a	5240	-2.725	0	-2.725	11	Pass
802.11ac20	5180	-3.003	0	-3.003	11	Pass
802.11ac20	5200	-3.242	0	-3.242	11	Pass
802.11ac20	5240	-2.897	0	-2.897	11	Pass
802.11ac40	5190	-6.182	0	-6.182	11	Pass
802.11ac40	5230	-7.337	0	-7.337	11	Pass
802.11ac80	5210	-9.944	0	-9.944	11	Pass
802.11n(HT20)	5180	-3.598	0	-3.598	11	Pass
802.11n(HT20)	5200	-4.036	0	-4.036	11	Pass
802.11n(HT20)	5240	-3.749	0	-3.749	11	Pass
802.11n(HT40)	5190	-6.889	0	-6.889	11	Pass
802.11n(HT40)	5230	-7.622	0	-7.622	11	Pass

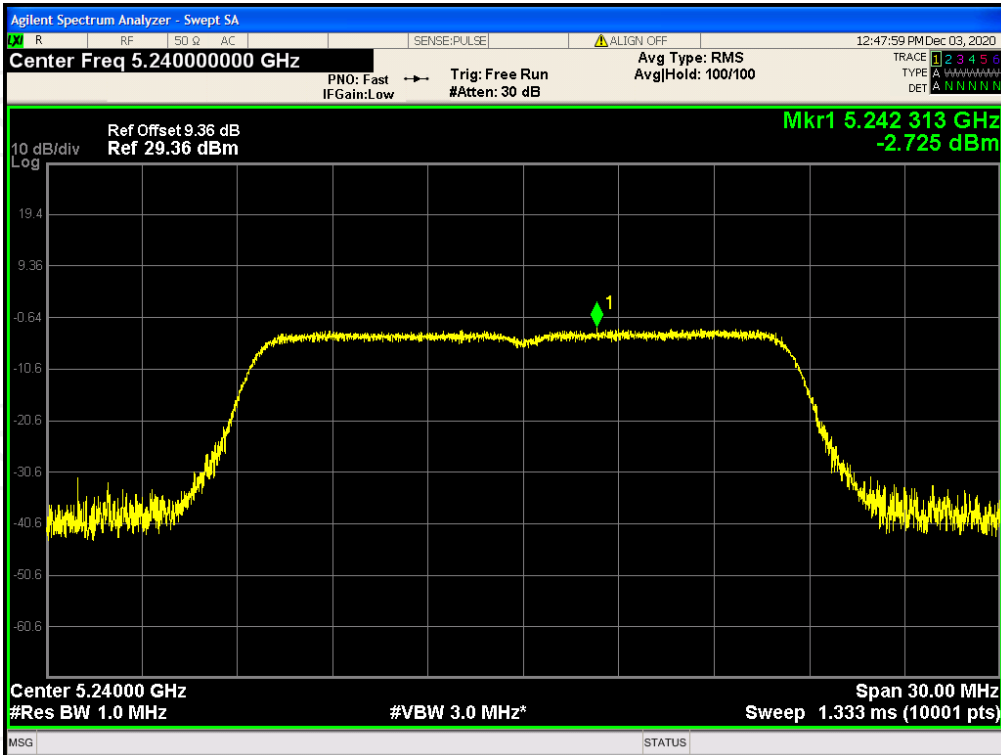
PSD NVNT 802.11a 5180MHz



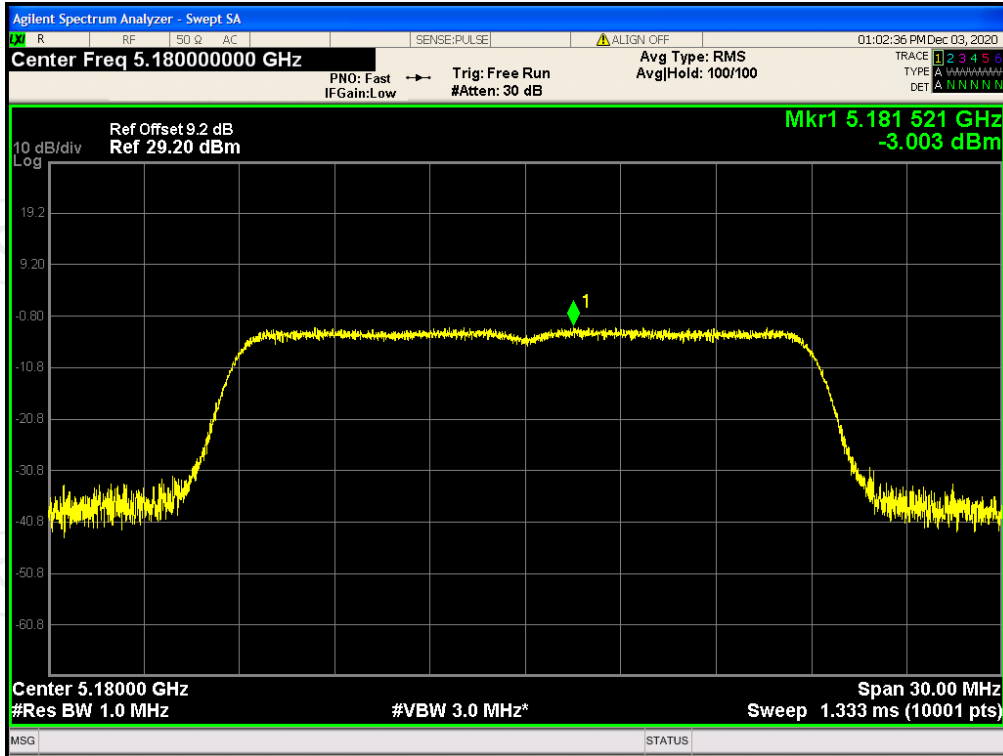
PSD NVNT 802.11a 5200MHz



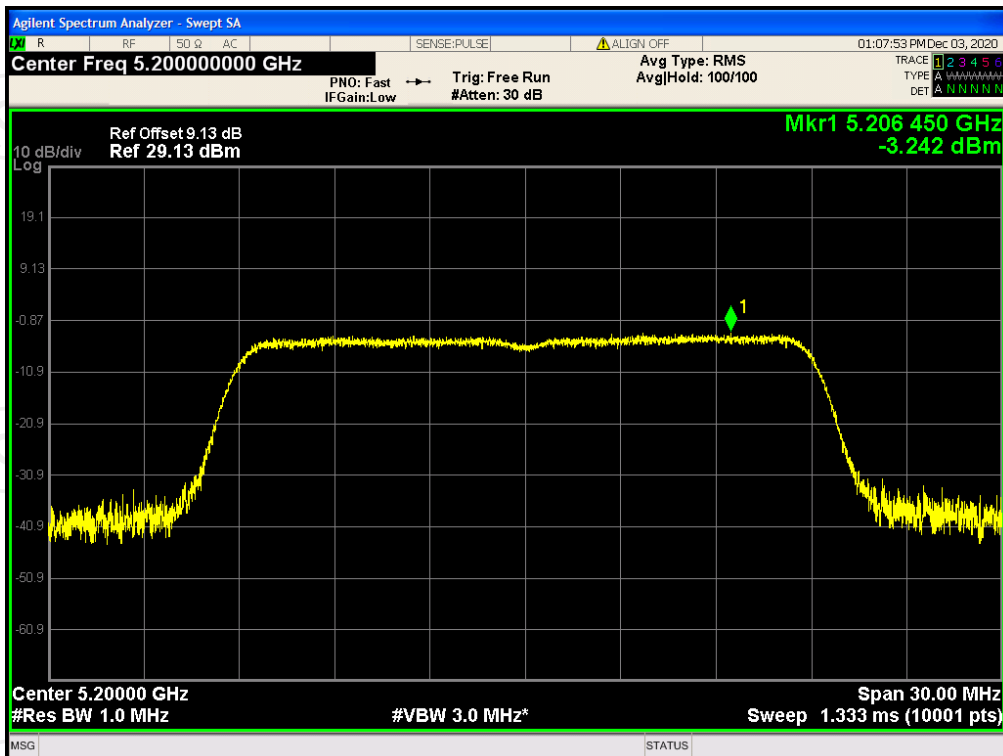
PSD NVNT 802.11a 5240MHz



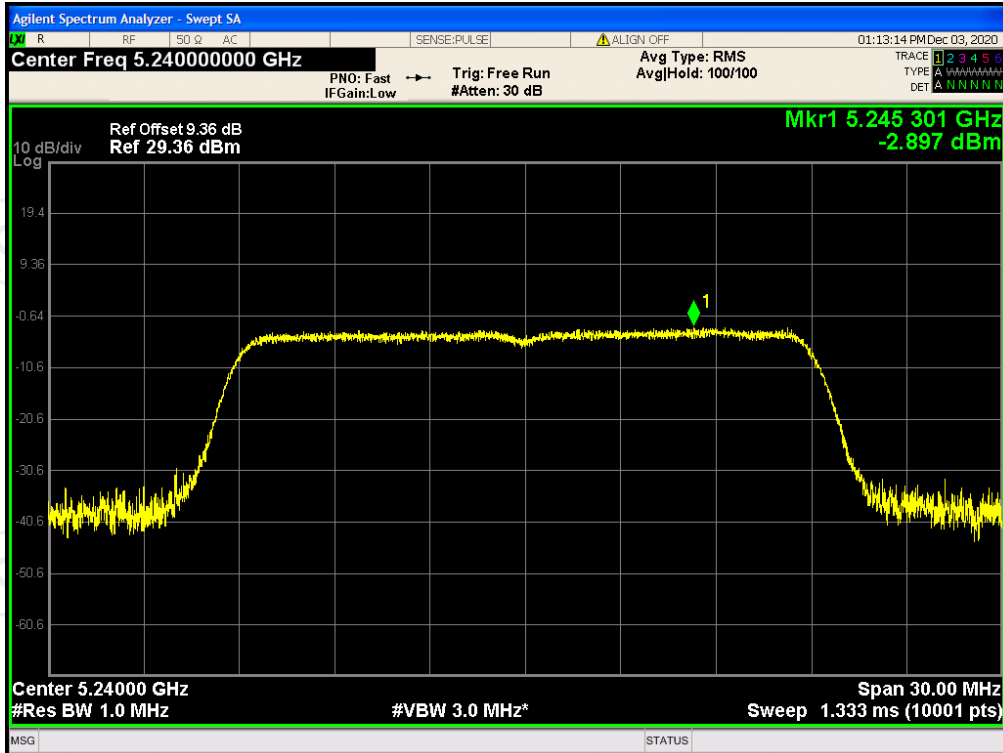
PSD NVNT 802.11ac20 5180MHz



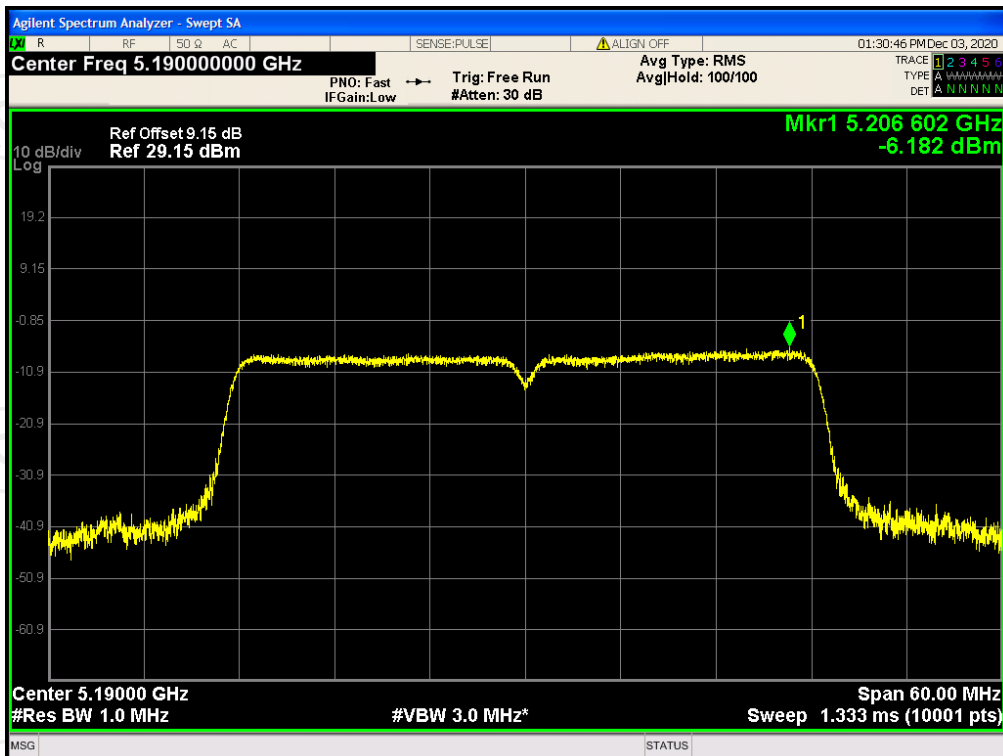
PSD NVNT 802.11ac20 5200MHz



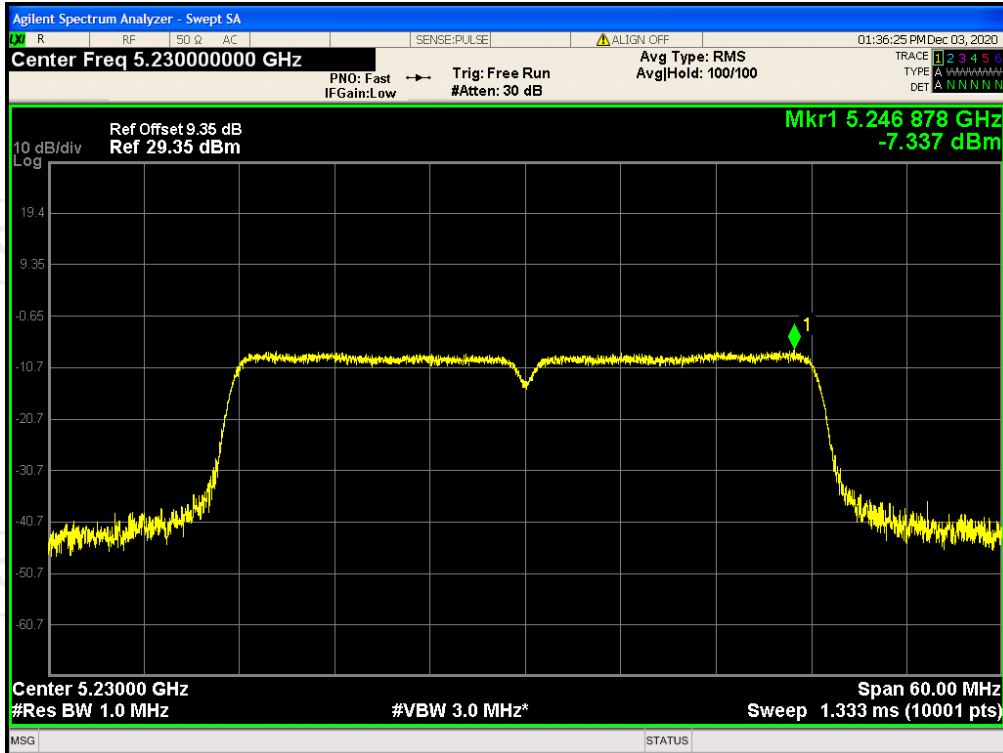
PSD NVNT 802.11ac20 5240MHz



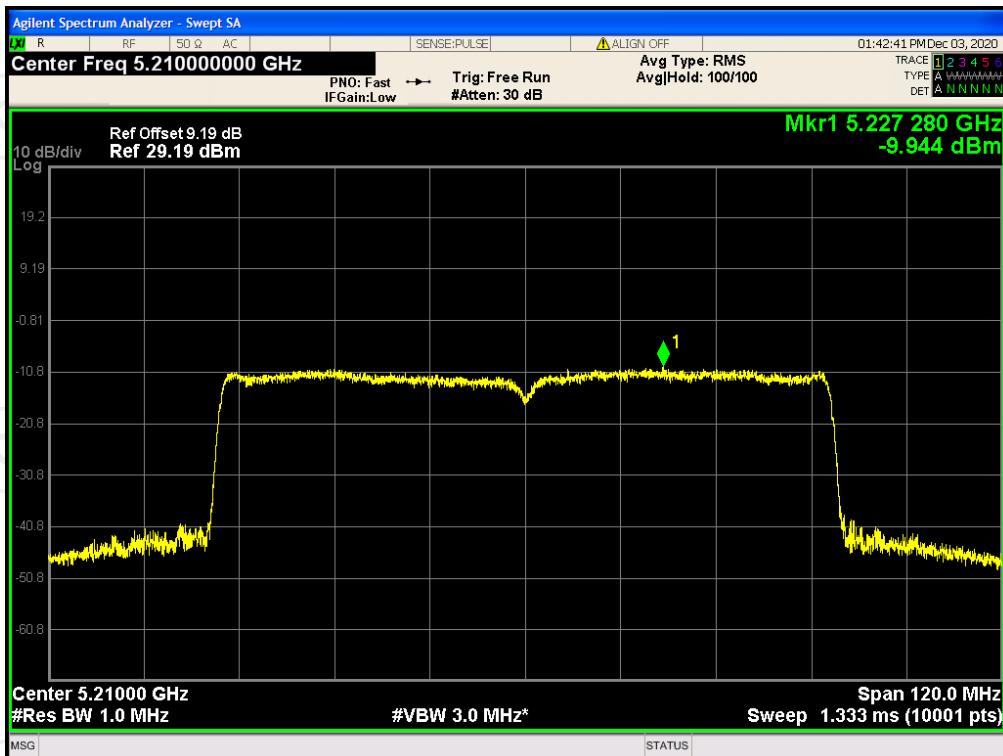
PSD NVNT 802.11ac40 5190MHz



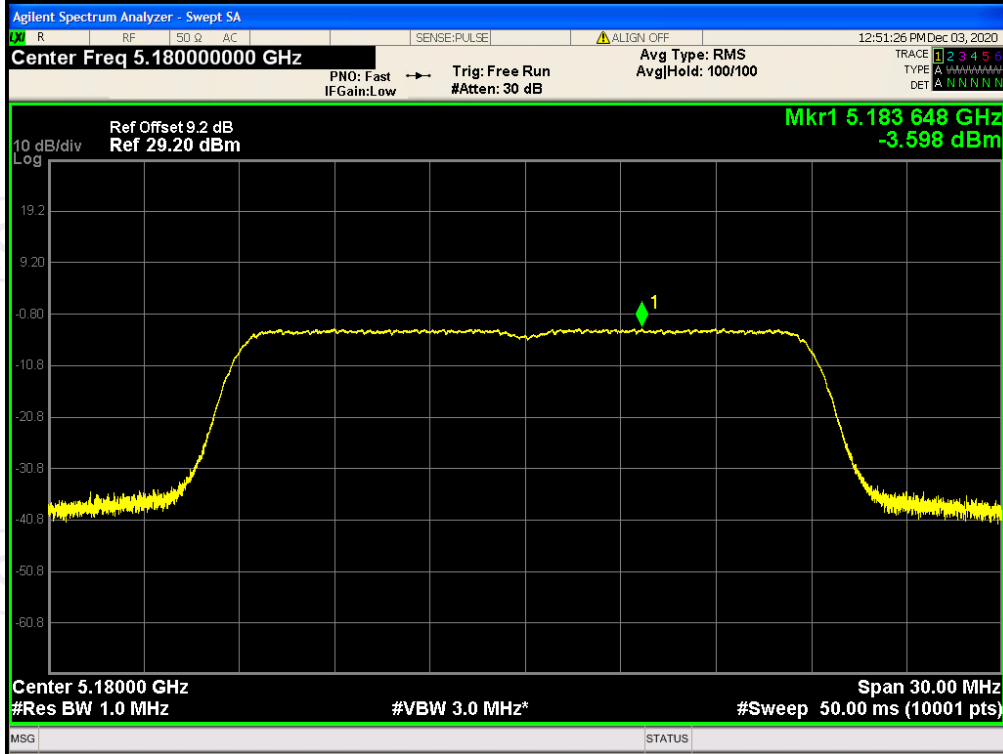
PSD NVNT 802.11ac40 5230MHz



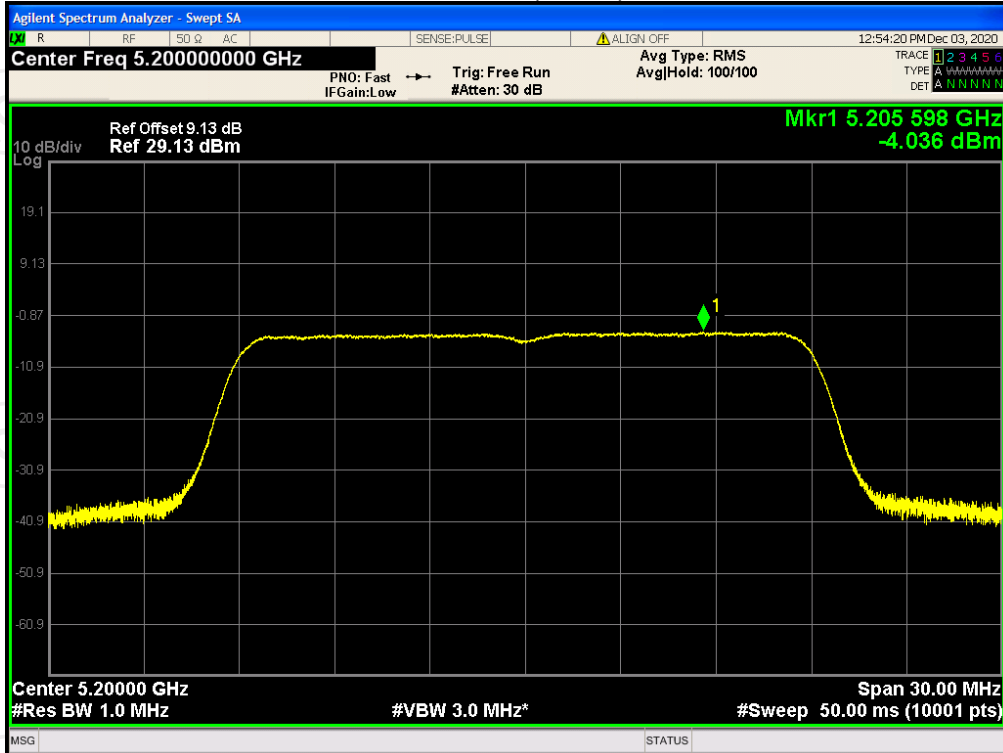
PSD NVNT 802.11ac80 5210MHz



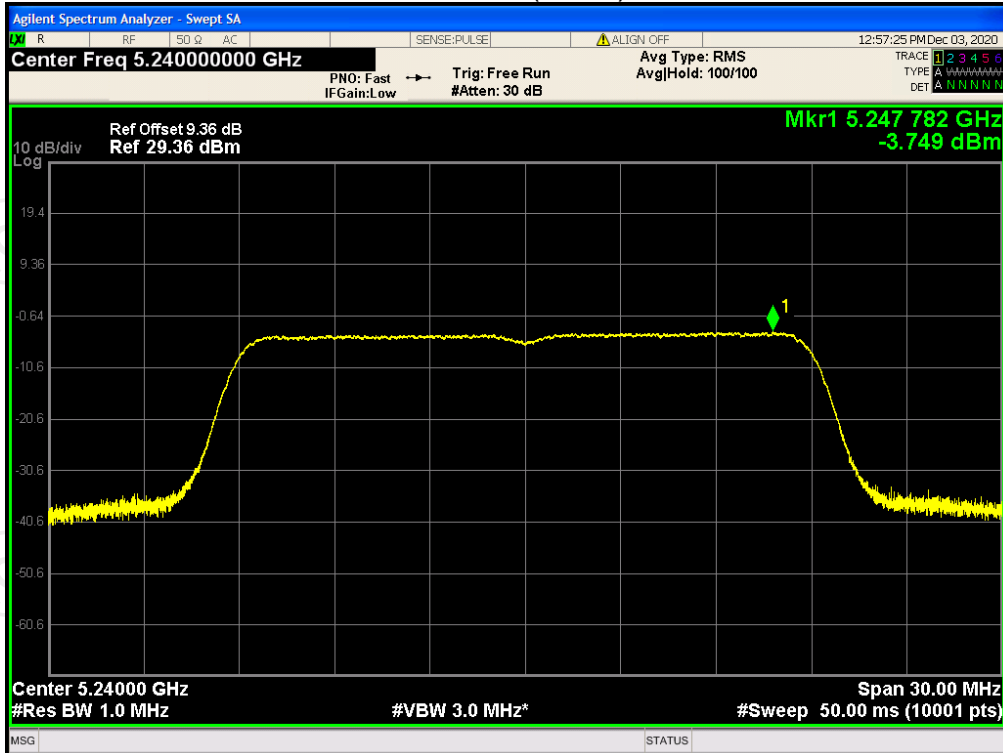
PSD NVNT 802.11n(HT20) 5180MHz



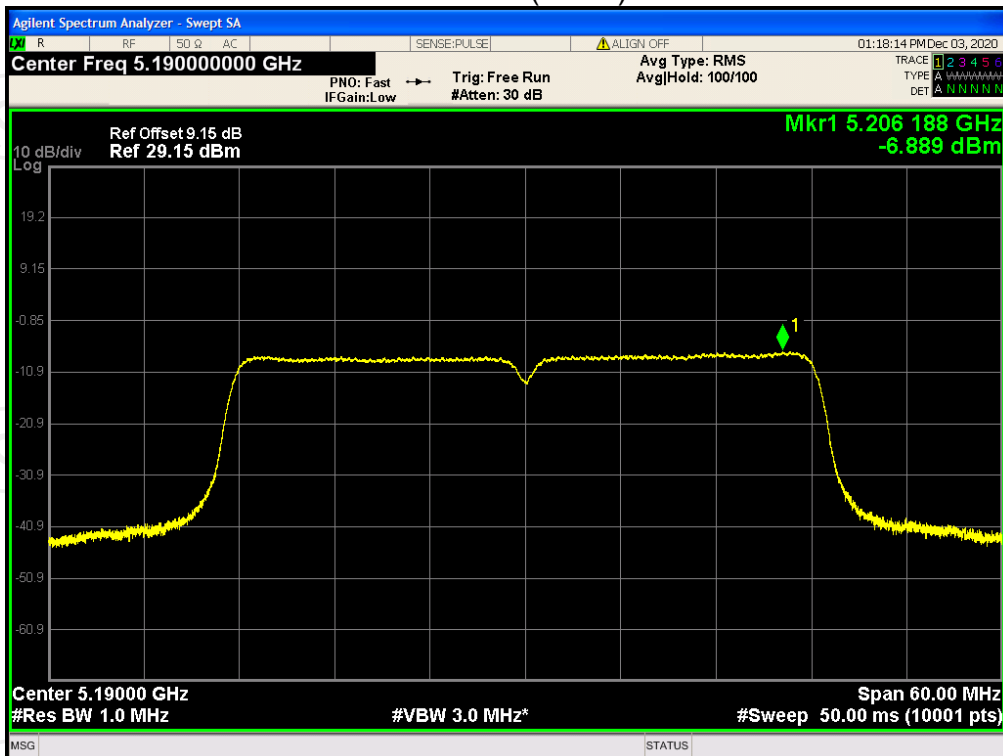
PSD NVNT 802.11n(HT20) 5200MHz



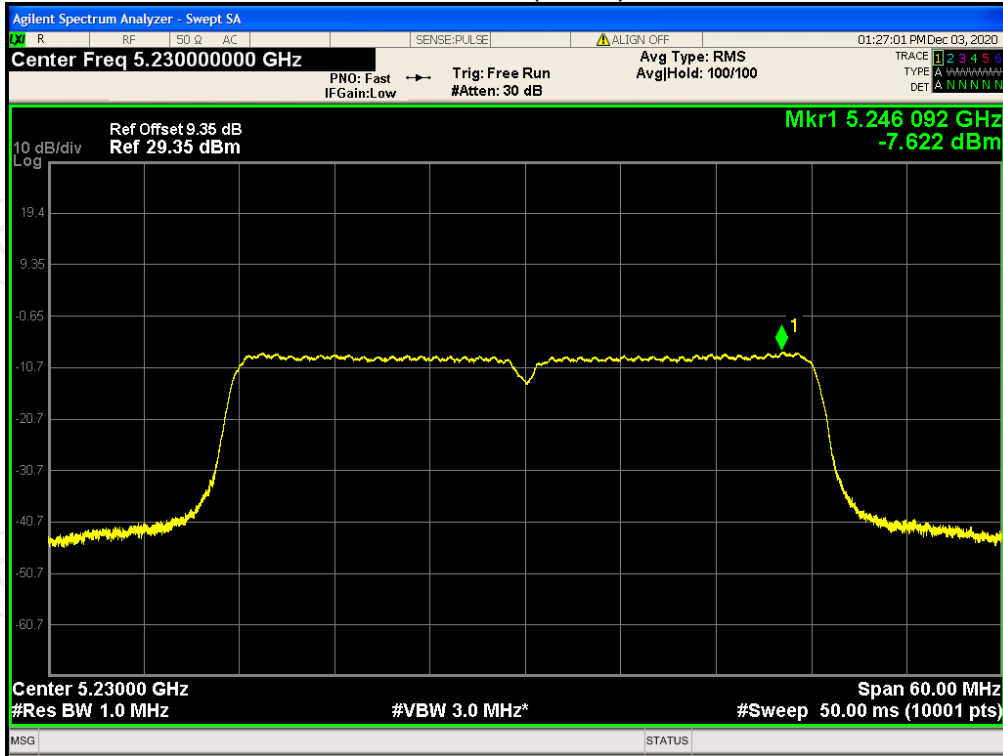
PSD NVNT 802.11n(HT20) 5240MHz



PSD NVNT 802.11n(HT40) 5190MHz



PSD NVNT 802.11n(HT40) 5230MHz

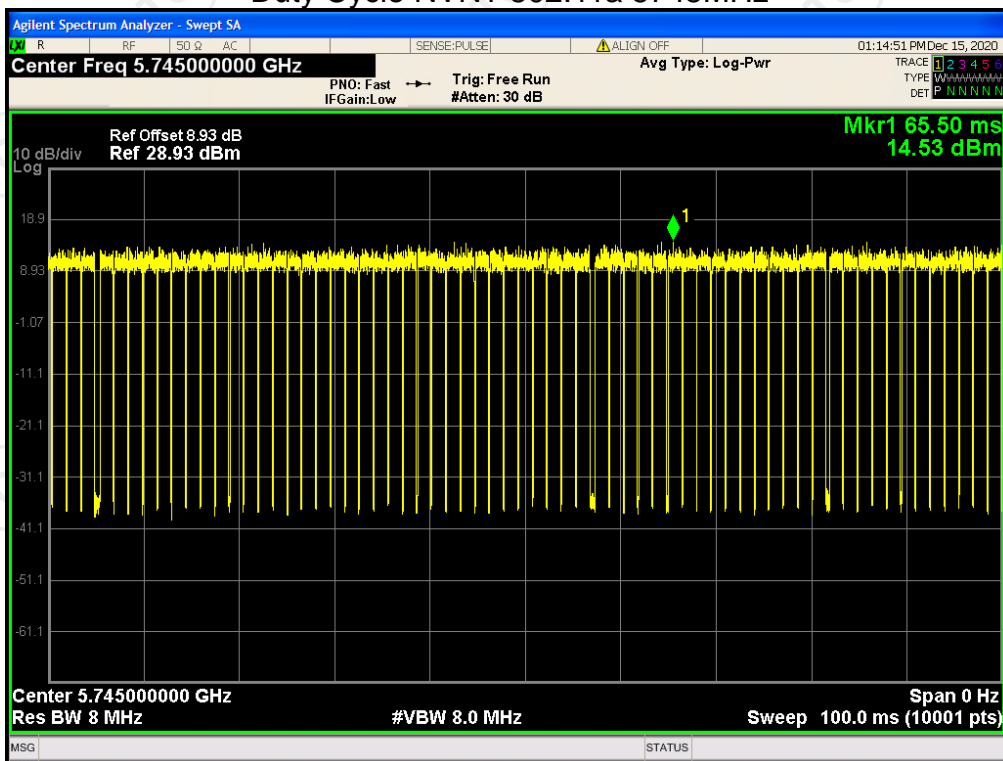


Band 3

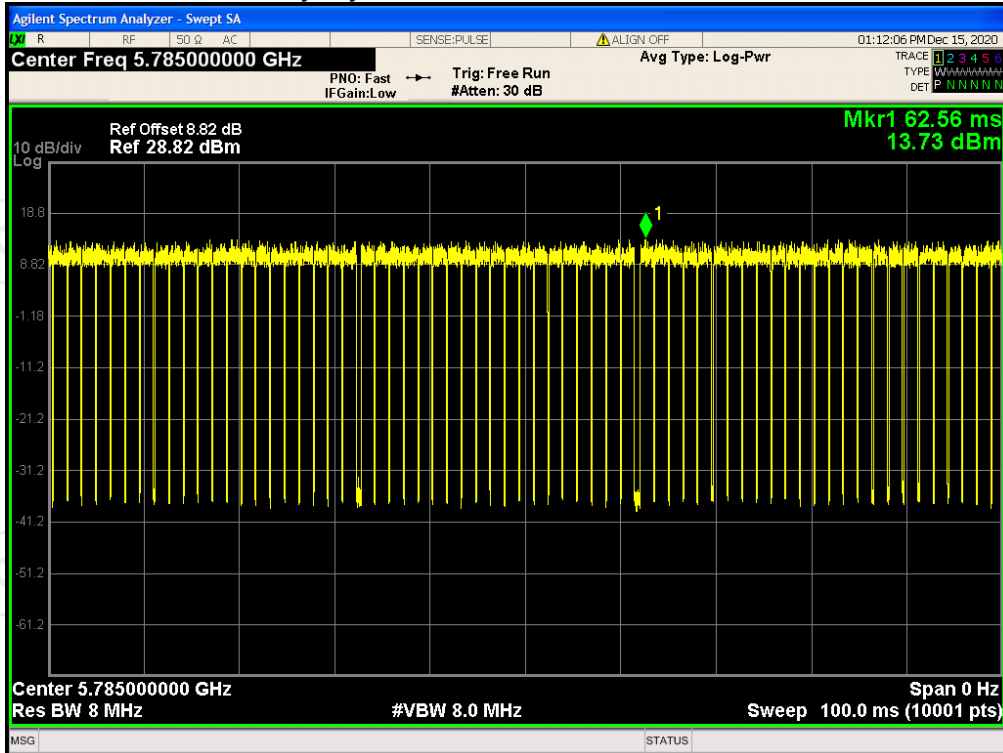
Duty Cycle

Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor (dB)
802.11a	5745	100	0
802.11a	5785	100	0
802.11a	5825	100	0
802.11ac20	5745	100	0
802.11ac20	5785	100	0
802.11ac20	5825	100	0
802.11ac40	5755	100	0
802.11ac40	5795	100	0
802.11ac80	5775	100	0
802.11n(HT20)	5745	100	0
802.11n(HT20)	5785	100	0
802.11n(HT20)	5825	100	0
802.11n(HT40)	5755	100	0
802.11n(HT40)	5795	100	0

Duty Cycle NVNT 802.11a 5745MHz



Duty Cycle NVNT 802.11a 5785MHz



Duty Cycle NVNT 802.11a 5825MHz

