HCT CO.,LTD.

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FCC UNII REPORT

Certification

Applicant Name:
SAMSUNG Electronics Co., Ltd.

Address:
129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea

Date of Issue:
December 15, 2021

Test Site/Location:
74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383 KOREA

Report No.: HCT-RF-2111-FC063-R2

FCC ID:	**A3LSMX806B**
APPLICANT:	**SAMSUNG Electronics Co., Ltd.**

According to the Evaluation report, all of the data contained herein is reused from the reference FCC ID : A3LSMX808U report.

Model:	SM-X806B
EUT Type:	Tablet
Modulation type	OFDM
FCC Classification:	Unlicensed National Information Infrastructure(NII)
FCC Rule Part(s):	Part 15.407

Engineering Statement:

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

REVIEWED BY

Report prepared by : Woong Jin Kim **Engineer of Telecommunication Testing Center**	**Report approved by : Jong Seok Lee** **Manager of Telecommunication Testing Center**

This test results were applied only to the test methods required by the standard.

This laboratory is not accredited for the test results marked *.
The above Test Report is the accredited test result by (KS Q) ISO/IEC 17025 and KOLAS(Korea Laboratory Accreditation Scheme), which signed the ILAC-MRA. (HCT Accreditation No.: KT197)

Version

TEST REPORT NO.	DATE	DESCRIPTION
HCT-RF-2111-FC063	November 26, 2021	- First Approval Report
HCT-RF-2111-FC063-R1	December 13, 2021	- Revised Antenna Configurations (Page 6) - Added Sample Calculation (Page 8) - Typo (Page 112)
HCT-RF-2111-FC063-R2	December 15, 2021	- Revised Sample Calculation (Page 8)

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1. GENERAL INFORMATION

EUT DESCRIPTION

Model	SM-X806B	
Additional Model	-	
EUT Type	Tablet	
Power Supply	DC 3.86 V	
Modulation Type	OFDM : 802.11a, 802.11n, 802.11ac	
Frequency Range (MHz)	U-NII-1	20 MHz BW : 5180 - 5240 40 MHz BW : 5190 - 5230 80 MHz BW : 5210
	U-NII-2A	20 MHz BW : 5260 - 5320 40 MHz BW : 5270 - 5310 80 MHz BW : 5290
	U-NII-2C	20 MHz BW : 5500 - 5720 40 MHz BW : 5510 - 5710 80 MHz BW : 5530 – 5690
	U-NII-3	20 MHz BW : 5745 - 5825 40 MHz BW : 5755 - 5795 80 MHz BW : 5775
	U-NII-4	20 MHz BW : 5845 - 5885 40 MHz BW : 5835 - 5875 80 MHz BW : 5855
Straddle channel	Supported	
TDWR Band	Supported	
Dynamic Frequency Selection	Slave without radar detection	
Date(s) of Tests	September 13, 2021 ~ November 22, 2021	
Serial number	Radiated: R32RA005PBY Conducted: R32R8006AAW	

ANTENNA CONFIGURATIONS

Configurations	SISO		MIMO	
	Ant.1	Ant.2	SDM	CDD
802.11a	X	X	X	O
802.11n	X	X	O	O
802.11ac	X	X	O	O

Note:

(1) O = Support, X = Not Support

(2) SISO = Single Input Single Output

(3) SDM = Spatial Diversity Multiplexing

(4) CDD = Cyclic Delay Diversity

(5) SISO test was performed for the MIMO test result.

2.This device supports simultaneous transmission operation, which allows for two channels to operate independent of one another in the 2.4 GHz and 5 GHz bands simultaneously on each antenna.

RSDB Scenario	2.4 GHz WiFi Ant.1	2.4 GHz WiFi Ant.2	5 GHz WiFi Ant.1	5 GHz WiFi Ant.2	6 GHz WiFi Ant.1	6 GHz WiFi Ant.2	Bluetooth Ant.1	Bluetooth Ant.2
2.4 GHz WiFi MIMO + 6 GHz WiFi MIMO	on	on			on	on		
2.4 GHz WiFi MIMO + 5 GHz WiFi MIMO	on	on	on	on				
Bluetooth ANT.1 + 2.4 GHz WiFi ANT.2 + 5 GHz WiFi MIMO		on	on	on			on	
Bluetooth ANT.1 + 2.4 GHz WiFi ANT.2 + 6 GHz WiFi MIMO		on			on	on	on	

Non-DBS	2.4 GHz WiFi Ant.1	2.4 GHz WiFi Ant.2	5 GHz WiFi Ant.1	5 GHz WiFi Ant.2	6 GHz WiFi Ant.1	6 GHz WiFi Ant.2	Bluetooth Ant.1	Bluetooth Ant.2
Bluetooth ANT.2 + 6 GHz WiFi MIMO					on	on		on
Bluetooth ANT.2 + 5GHz WiFi MIMO			on	on				on
Bluetooth ANT.1 + 6 GHz WiFi MIMO					on	on	on	
Bluetooth ANT.1 + 5GHz WiFi MIMO			on	on	-	-	on	-

3. Directional Gain Calculation

According to KDB 662911 D01 Multiple Transmitter Output v02r01 F) 2) f) (ii)

Directional gain =

- $$DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$$

Band	Ant Gain (dBi)		N_{ANT}/ N_{ss}	Directional Gain (dBi)
UNII 1	ANT1	-8.45	2 / 2	-5.21
	ANT2	-7.99		
UNII 2A	ANT1	-5.99	2 / 2	-4.23
	ANT2	-8.70		
UNII 2C	ANT1	-5.75	2 / 2	-3.60
	ANT2	-7.56		
UNII 3	ANT1	-6.11	2 / 2	-3.86
	ANT2	-7.70		
UNII 4	ANT1	-6.11	2 / 2	-3.86
	ANT2	-7.70		

Note

According to Ansi C63.10-2013 section 14.4.3, the directional gain is calculated using the formula, where GN is the gain of the nth antenna and NANT is the total number of antennas used.

Directional Gain = $10*LOG(((10^{(ANT1\ Gain/20)}+10^{(ANT2\ Gain/20)})^2)/2)$ dBi

Sample MIMO Calculation:

Ex) Ant 1 : 11.58 dBm Ant 2 : 12.08 dBm

Ant1 + Ant 2 = MIMO

(11.58 dBm + 12.08 dBm) = (14.387 mW + 16.143 mW) = 30.53 mW = 14.88 dBm

Sample e.i.r.p Power Spectral Density Calculation:

Ex) Ant 1 : -8.45 dBi Ant 2 : -7.99 dBi

e.i.r.p Power Spectral Density(dBm) = Power spectral Density(dBm) + Ant Gain (dBi)

14.88 dBm+-5.21 dBi = 9.67 dBm

2. MAXIMUM OUTPUT POWER

The transmitter has a maximum total conducted average output power as follows:

Band	Mode	Ant.1 Power		Ant.2 Power		MIMO Ant.1 + Ant.2 Power	
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)
UNII1	802.11a	17.83	0.061	17.20	0.053	20.54	0.113
	802.11n (HT20)	17.69	0.059	17.02	0.050	20.38	0.109
	802.11n (HT40)	16.09	0.041	15.58	0.036	18.85	0.077
	802.11ac (VHT20)	17.72	0.059	17.05	0.051	20.41	0.110
	802.11ac (VHT40)	16.08	0.041	15.58	0.036	18.85	0.077
	802.11ac (VHT80)	14.48	0.028	13.30	0.021	16.94	0.049
UNII2A	802.11a	17.95	0.062	16.97	0.050	20.50	0.112
	802.11n (HT20)	17.94	0.062	16.83	0.048	20.43	0.110
	802.11n (HT40)	15.95	0.039	15.31	0.034	18.65	0.073
	802.11ac (VHT20)	17.83	0.061	16.86	0.049	20.38	0.109
	802.11ac (VHT40)	15.98	0.040	15.20	0.033	18.62	0.073
	802.11ac (VHT80)	13.12	0.021	11.91	0.016	15.57	0.036
UNII2C	802.11a	17.54	0.057	16.47	0.044	20.05	0.101
	802.11n (HT20)	17.37	0.055	16.35	0.043	19.90	0.098
	802.11n (HT40)	16.46	0.044	15.64	0.037	19.08	0.081
	802.11ac (VHT20)	17.29	0.054	16.43	0.044	19.88	0.097
	802.11ac (VHT40)	16.26	0.042	15.53	0.036	18.92	0.078
	802.11ac (VHT80)	15.69	0.037	14.50	0.028	18.14	0.065
UNII3	802.11a	17.50	0.056	17.06	0.051	20.27	0.106
	802.11n (HT20)	17.37	0.055	16.92	0.049	20.13	0.103
	802.11n (HT40)	15.89	0.039	15.33	0.034	18.63	0.073
	802.11ac (VHT20)	17.41	0.055	16.95	0.050	20.14	0.103
	802.11ac (VHT40)	15.88	0.039	15.26	0.034	18.59	0.072
	802.11ac (VHT80)	14.85	0.031	14.00	0.025	17.45	0.056
UNII4 Conducted For inf.	802.11a	17.08	0.051	17.92	0.062	20.53	0.113
	802.11n (HT20)	17.03	0.050	17.79	0.060	20.44	0.111
	802.11n (HT40)	15.03	0.032	15.47	0.035	18.27	0.067
	802.11ac (VHT20)	17.00	0.050	17.91	0.062	20.49	0.112
	802.11ac (VHT40)	15.01	0.032	15.46	0.035	18.25	0.067
	802.11ac (VHT80)	13.98	0.025	13.84	0.024	16.93	0.049

Band	Mode	Ant.1 Power				Ant.2 Power				MIMO Ant.1 + Ant.2 Power			
		(dBm)	ANT Gain(dBi)	EIRP (dBm)	(W)	(dBm)	ANT Gain(dBi)	EIRP (dBm)	(W)	(dBm)	ANT Gain(dBi)	EIRP (dBm)	(W)
UNII4 (E.I.R.P)	802.11a	17.08	-3.86	13.23	0.021	17.92	-3.86	14.06	0.025	20.53	-3.86	16.67	0.046
	802.11n (HT20)	17.03	-3.86	13.17	0.021	17.79	-3.86	13.93	0.025	20.44	-3.86	16.58	0.046
	802.11n (HT40)	15.03	-3.86	11.17	0.013	15.47	-3.86	11.61	0.014	18.27	-3.86	14.41	0.028
	802.11ac (VHT20)	17.00	-3.86	13.14	0.021	17.91	-3.86	14.05	0.025	20.49	-3.86	16.63	0.046
	802.11ac (VHT40)	15.01	-3.86	11.16	0.013	15.46	-3.86	11.60	0.014	18.25	-3.86	14.39	0.027
	802.11ac (VHT80)	13.98	-3.86	10.13	0.010	13.84	-3.86	9.99	0.010	16.93	-3.86	13.07	0.020

3. TEST METHODOLOGY

The measurement procedure described in FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01 dated December 14, 2017 entitled “Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part15, Subpart E” and ANSI C63.10(Version : 2013) ‘the American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices’ were used in the measurement. Additionally, for U-NII-4 band, use the following measurement procedure KDB 291074 U-NII-4 5.9 Band DR01-44460

EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

EUT EXERCISE

The EUT was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements. According to its specifications, the EUT must comply with the requirements of the Section 15.207, 15.209 and 15.407 under the FCC Rules Part 15 Subpart E.

GENERAL TEST PROCEDURES

Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 6.2 of ANSI C63.10. (Version :2013) Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-peak and average detector modes.

Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane below 1 GHz. Above 1 GHz with 1.5 m using absorbers between the EUT and receive antenna. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3 m away from the receiving antenna, which varied from 1 m to 4 m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, the relative positions of this hand-held transmitter (EUT) was rotated through three orthogonal axes according to the requirements in Section 6.6.5 of ANSI C63.10. (Version: 2013)

DESCRIPTION OF TEST MODES

The EUT has been tested under operating condition. Test program used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

4. INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment's, which is traceable to recognized national standards.
Especially, all antenna for measurement is calibrated in accordance with the requirements of C63.5 (Version : 2017).

5. FACILITIES AND ACCREDITATIONS

5.1 FACILITIES

The SAC(Semi-Anechoic Chamber) and conducted measurement facility used to collect the radiated data are located at the 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383, Rep. of KOREA. The site is constructed in conformance with the requirements of ANSI C63.4. (Version :2014) and CISPR Publication 22.
Detailed description of test facility was submitted to the Commission and accepted dated April 02, 2018 (Registration Number: KR0032).

5.2 EQUIPMENT

Radiated emissions are measured with one or more of the following types of Linearly polarized antennas: tuned dipole, bi-conical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements.
Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers. Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.
All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

6. ANTENNA REQUIREMENTS

According to FCC 47 CFR §15.203, §15.407:

"An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section."

(1) The antennas of this E.U.T are permanently attached.

(2) The E.U.T Complies with the requirement of §15.203, §15.407

7. MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.10-2013.

All measurement uncertainty values are shown with a coverage factor of k = 2 to indicate a 95 % level of confidence.

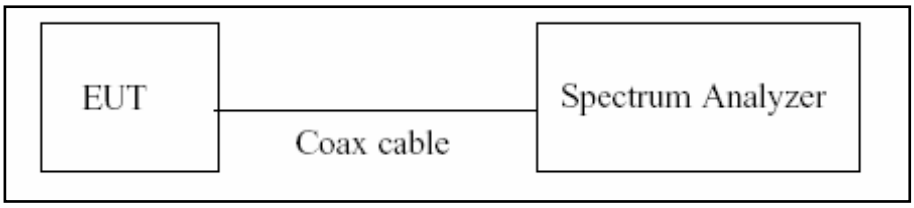
The measurement data shown herein meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

Parameter	Expanded Uncertainty (dB)
Conducted Disturbance (150 kHz ~ 30 MHz)	1.82 (Confidence level about 95 %, k=2)
Radiated Disturbance (9 kHz ~ 30 MHz)	3.40 (Confidence level about 95 %, k=2)
Radiated Disturbance (30 MHz ~ 1 GHz)	4.80 (Confidence level about 95 %, k=2)
Radiated Disturbance (1 GHz ~ 18 GHz)	5.70 (Confidence level about 95 %, k=2)
Radiated Disturbance (18 GHz ~ 40 GHz)	5.05 (Confidence level about 95 %, k=2)

8. DESCRIPTION OF TESTS

8.1. Duty Cycle

Test Configuration



Test Procedure

The transmitter output is connected to the Spectrum Analyzer.

We tested according to Procedure B.2 in KDB 789033 D02 v02r01.

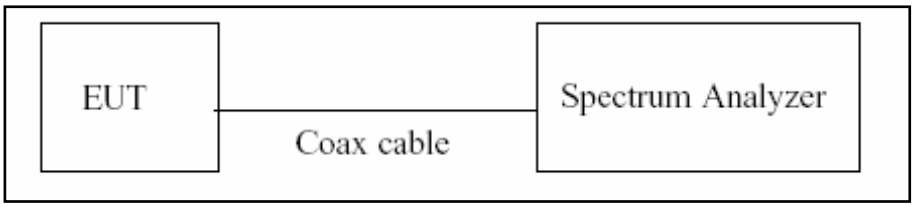
1. RBW = 8 MHz (the largest availble value)
2. VBW = 8 MHz (≥ RBW)
3. SPAN = 0 Hz
4. Detector = Peak
5. Number of points in sweep > 100
6. Trace mode = Clear write
7. Measure T_{total} and T_{on}
8. Calculate Duty Cycle = T_{on}/ T_{total} and Duty Cycle Factor = 10log(1/Duty Cycle)

8.2. 6 dB Bandwidth & 26 dB Bandwidth

Limit

Within the 5.725-5.85 GHz(NII-3) &5.85-5.895 GHz(NII-4) band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

Test Configuration



Test Procedure(26 dB Bandwidth)

The transmitter output is connected to the Spectrum Analyzer.

We tested according to Procedure C.1 in KDB 789033 D02 v02r01.

1. RBW = approximately 1 % of the emission bandwidth
2. VBW > RBW
3. Detector = Peak
4. Trace mode = max hold
5. Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1 %.

Test Procedure (6 dB Bandwidth)

The transmitter output is connected to the Spectrum Analyzer.

We tested according to Procedure C.2 in KDB 789033 D02 v02r01.

1. RBW = 100 kHz
2. VBW ≥ 3 x RBW
3. Detector = Peak
4. Trace mode = max hold
5. Allow the trace to stabilize
6. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points(upper and lower frequencies) that are attenuated by 6 dB relative to the maximum lever measured in the fundamental emission.

Note:

1. We tested X dB bandwidth using the automatic bandwidth measurement capability of a spectrum analyzer.
2. DFS test channels should be defined. So, We performed the OBW test to prove that no part of the fundamental emissions of any channels belong to UNII1 and UNII3 band for DFS.
3. The 26 dB bandwidth is used to determine the conducted power limits.

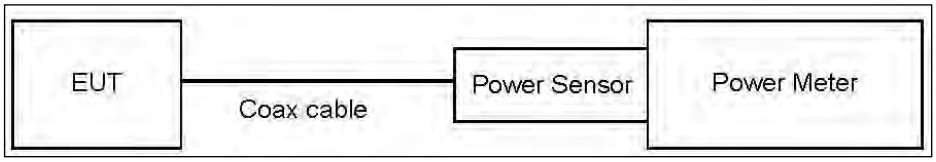
8.3. Output Power Measurement

Limit

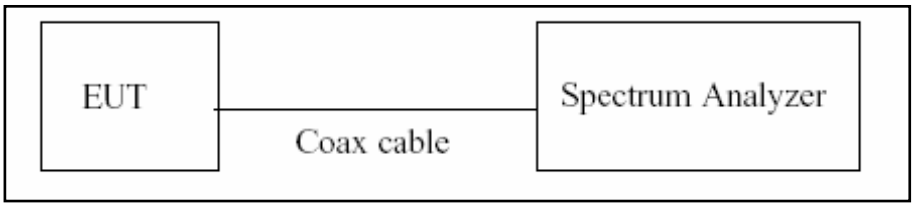
Band	Limit
UNII 1	- Master : Not exceed 1 W(=30 dBm) - Slave : Not exceed 250 mW(=23.98 dBm)
UNII 2A, 2C	Not exceed the lesser of 250 mW or 11 dBm + 10 log B, (where B is the 26 dB emission bandwidth in megahertz.)
UNII 3	Not exceed 1 W(=30 dBm)
UNII 4	EIRP 30 dBm

Test Configuration

Power Meter



Spectrum Analyzer(Only Straddle Channel)



Test Procedure(Power Meter)

We tested according to Procedure E.3.a in KDB 789033 D02 v02r01.

1. Measure the duty cycle.
2. Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
3. Add 10 log (1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times.

Test Procedure(Spectrum Analyzer)

The transmitter output is connected to the Spectrum Analyzer.

We use the spectrum analyzer's integrated band power measurement function.

We tested according to Procedure E.2.d) in KDB 789033 D02 v02r01.

1. Measure the duty cycle.
2. Set span to encompass the 26 dB EBW of the signal.
3. RBW = 1 MHz.
4. VBW ≥ 3 MHz.
5. Number of points in sweep ≥ 2 x span/RBW.
6. Sweep time = auto.
7. Detector = RMS.
8. Do not use sweep triggering. Allow the sweep to "free run".
9. Trace average at least 100 traces in power averaging(RMS) mode
10. Integrated bandwidth = OBW
11. Add 10log(1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times.

Sample Calculation

Total Power(dBm) = Measured Value(dBm) + ATT loss(dB) + Cable loss(dB) + Duty Cycle Factor(dB)

Note

1. Spectrum Measured Levels are not plot data.
   The power results in plot is already including the actual values of loss for the attenuator and cable combination.
2. Spectrum offset
   Loss = Attenuator loss(10 dB) + Cable loss + EUT Cable loss
3. Actual value of loss for the attenuator and cable combination is below table.

Band	Loss(dB)
UNII 1	11.31
UNII 2A	11.31
UNII 2C	11.31
UNII 3&4	11.31

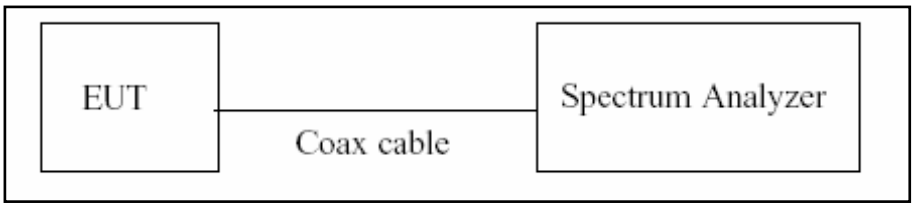
(Actual value of loss for the attenuator and cable combination)

8.4. Power Spectral Density

Limit

Band	Limit
UNII 1	11 dBm/MHz
UNII 2A, 2C	11 dBm/MHz
UNII 3	30 dBm/500 kHz
UNII 4	EIRP 14 dBm/MHz

Test Configuration



Test Procedure

We tested according to Procedure F in KDB 789033 D02 v02r01.

1. Set span to encompass the entire emission bandwidth(EBW) of the signal.
2. RBW = 1 MHz(510 kHz for UNII 3)
3. VBW ≥ 3 MHz
4. Number of points in sweep ≥ 2 x span/RBW.
5. Sweep time = auto.
6. Detector = RMS(i.e., power averaging), if available. Otherwise, use sample detector mode.
7. Do not use sweep triggering. Allow the sweep to “free run”.
8. Trace average at least 100 traces in power averaging(RMS) mode
9. Use the peak search function on the spectrum analyzer to find the peak of the spectrum.
10. If Method SA-2 was used, add 10 log(1/x), where x is the duty cycle, to the peak of the spectrum.

Sample Calculation

Total PSD(dBm) = Measured Value(dBm) + ATT loss(dB) + Cable loss(dB) + Duty Cycle Factor(dB)

Note

1. Spectrum Measured Levels are not plot data.
   The PSD results in plot is already including the actual values of loss for the attenuator and cable combination.
2. Spectrum offset
   Loss = Attenuator loss(10 dB) + Cable loss + EUT cable Loss
3. Actual value of loss for the attenuator and cable combination is below table.

Band	Loss(dB)
UNII 1	11.31
UNII 2A	11.31
UNII 2C	11.31
UNII 3&4	11.31

(Actual value of loss for the attenuator and cable combination)

8.5. AC Power line Conducted Emissions

Limit

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN).

Frequency Range (MHz)	Limits (dBμV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56[a]	56 to 46[a]
0.50 to 5	56	46
5 to 30	60	50

[a]Decreases with the logarithm of the frequency.

Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line (LINE and NEUTRAL) and ground at the power terminals.

Test Configuration

See test photographs attached in Annex A for the actual connections between EUT and support equipment.

Test Procedure

1. The EUT is placed on a wooden table 80 cm above the reference ground plane.
2. The EUT is connected via LISN to a test power supply.
3. The measurement results are obtained as described below:
4. Detectors : Quasi Peak and Average Detector.

Sample Calculation

Quasi-peak(Final Result) = Measured Value + Correction Factor

8.6. Radiated Test

Limit

1. UNII 1: All emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of −27 dBm/MHz.
2. UNII 2A, 2C: All emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of −27 dBm/MHz.
3. UNII 3: All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
4. UNII 4: [Low Channel O.O.B.E] measured with an Peak detector

   For a client device or indoor access point or subordinate device, all emissions below 5.725 GHz shall not exceed an e.i.r.p. of −27 dBm/MHz at 5.65 GHz increasing linearly to 10 dBm/MHz at 5.7 GHz, and from 5.7 GHz increasing linearly to a level of 15.6 dBm/MHz at 5.72 GHz, and from 5.72 GHz increasing linearly to a level of 27 dBm/MHz at 5.725 GHz.

   [High Channel O.O.B.E] measured with an RMS detector

   For a client device, all emissions at or above 5.895 GHz shall not exceed an e.i.r.p. of −5 dBm/MHz and shall decrease linearly to an e.i.r.p. of −27 dBm/MHz at or above 5.925 GHz.

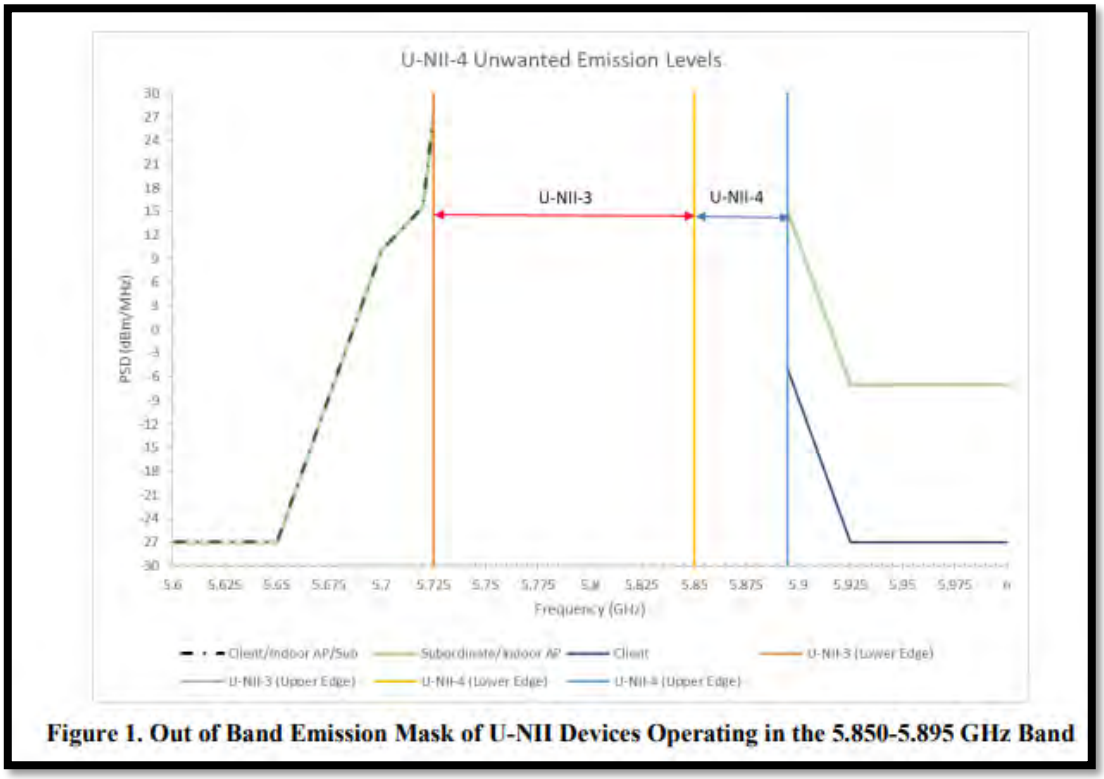


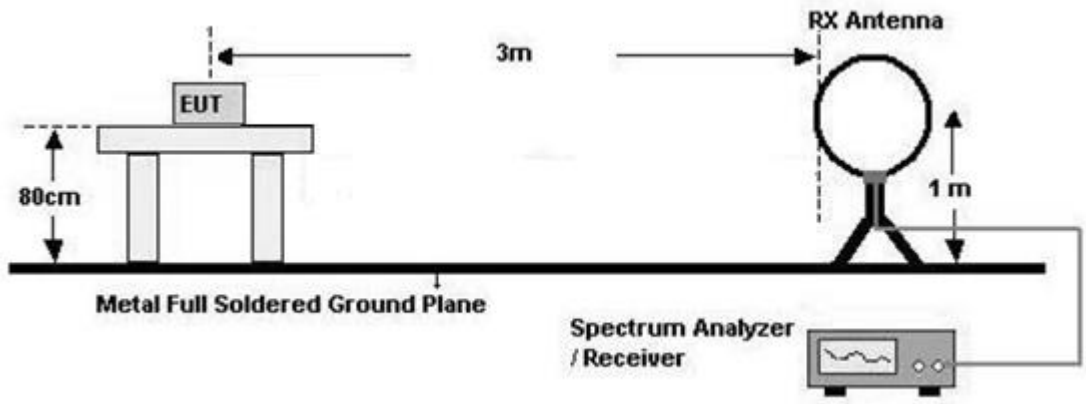
Figure 1. Out of Band Emission Mask of U-NII Devices Operating in the 5.850-5.895 GHz Band

5. All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Section 15.209.

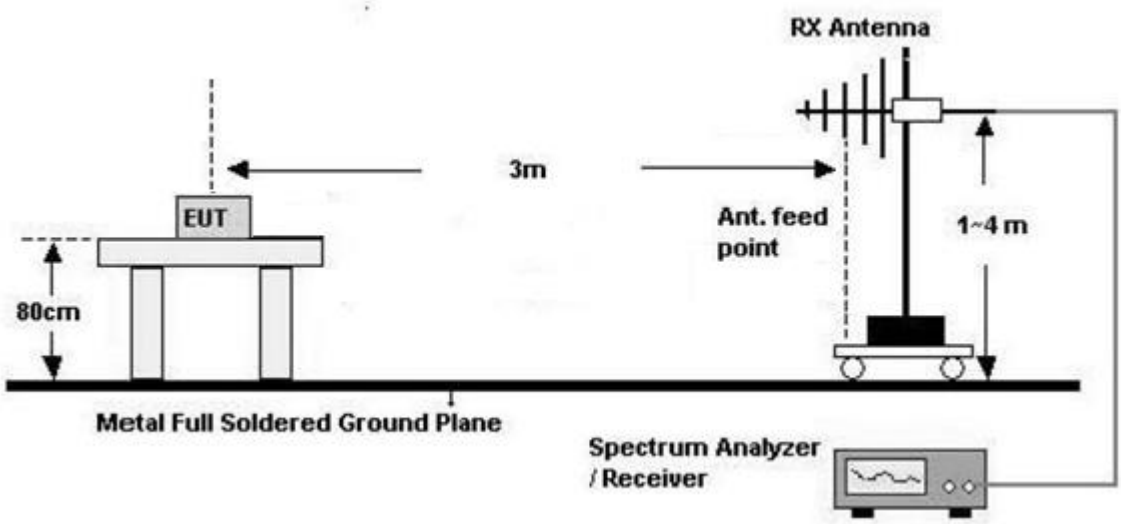
Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Test Configuration

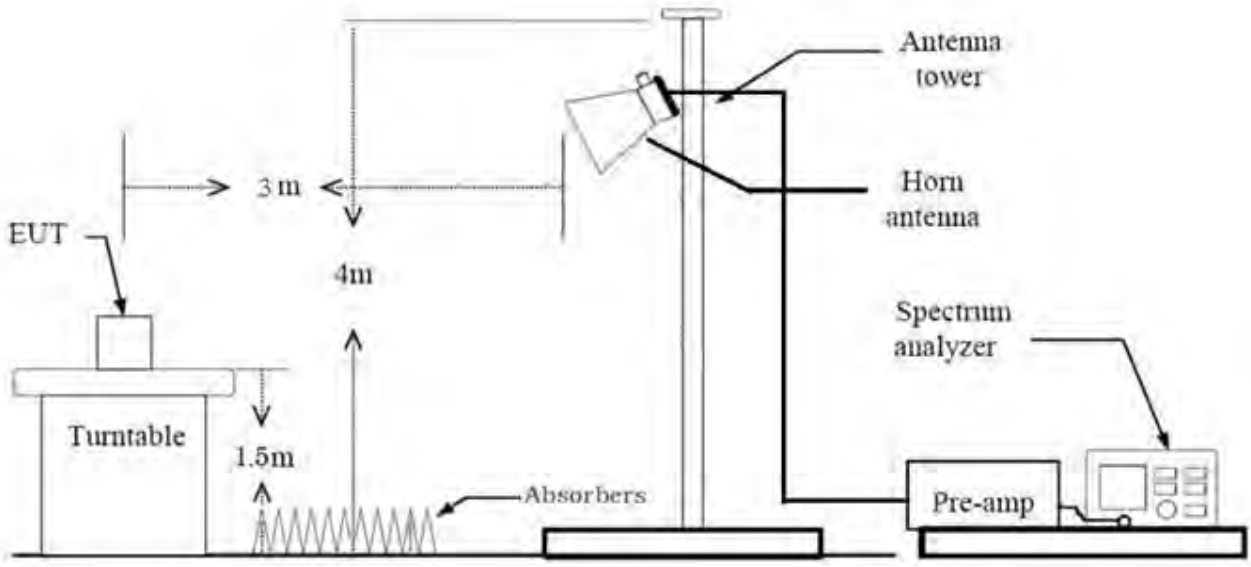
Below 30 MHz



30 MHz - 1 GHz



Above 1 GHz



Test Procedure of Radiated spurious emissions(Below 30 MHz)

1. The EUT was placed on a non-conductive table located on semi-anechoic chamber.
2. The loop antenna was placed at a location 3 m from the EUT
3. The EUT is placed on a turntable, which is 0.8 m above ground plane.
4. .We have done x, y, z planes in EUT and horizontal and vertical polarization and Parallel to the ground plane in detecting antenna.
5. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
6. Distance Correction Factor(0.009 MHz – 0.490 MHz) = 40log(3 m/300 m) = - 80 dB
   Measurement Distance : 3 m
7. Distance Correction Factor(0.490 MHz – 30 MHz) = 40log(3 m/30 m) = - 40 dB
   Measurement Distance : 3 m
8. Spectrum Setting
   - Frequency Range = 9 kHz ~ 30 MHz
   - Detector = Peak
   - Trace = Maxhold
   - RBW = 9 kHz
   - VBW ≥ 3 x RBW
9. Total = Measured Value + Antenna Factor(A.F) + Cable Loss(C.L) + Distance Factor(D.F)
10. Measurement value only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.

KDB 414788 OFS and Chamber Correlation Justification

Base on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

OFS and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

Test Procedure of Radiated spurious emissions(Below 1 GHz)

1. The EUT was placed on a non-conductive table located on semi-anechoic chamber.
2. The EUT is placed on a turntable, which is 0.8 m above ground plane.
3. The Hybrid antenna was placed at a location 3 m from the EUT, which is varied from 1 m to 4 m to find out the highest emissions.
4. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
5. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
6. Spectrum Setting
   (1) Measurement Type(Peak):
      - Measured Frequency Range : 30 MHz – 1 GHz
      - Detector = Peak
      - Trace = Maxhold
      - RBW = 100 kHz
      - VBW ≥ 3 x RBW
   (2) Measurement Type(Quasi-peak):
      - Measured Frequency Range : 30 MHz – 1 GHz
      - Detector = Quasi-Peak
      - RBW = 120 kHz

   ※ In general, (1) is used mainly
7. Total = Measured Value + Antenna Factor(A.F) + Cable Loss(C.L)
8. Measurement value only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.

Test Procedure of Radiated spurious emissions (Above 1 GHz)

1. The EUT is placed on a turntable, which is 1.5 m above ground plane.
2. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
3. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
4. EUT is set 3 m away from the receiving antenna, which is varied from 1 m to 4 m to find out the highest emissions.
5. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
6. Each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
7. The unit was tested with its standard battery.
8. Spectrum Setting

(1) Measurement Type (Peak, G.5 in KDB 789033 v02r01):

- RBW = 1 MHz
- VBW ≥ 3 MHz
- Detector = Peak
- Sweep Time = auto
- Trace mode = max hold
- Allow sweeps to continue until the trace stabilizes.

Note that if the transmission is not continuous, the time required for the trace to stabilize will increase by a factor of approximately 1/x, where x is the duty cycle.

(2) Measurement Type (Average, G.6.d in KDB 789033 v02r01):

- RBW = 1 MHz
- VBW(Duty cycle ≥ 98 %) = VBW ≤ RBW/100(i.e., 10 kHz) but not less than 10 Hz.
- VBW(Duty cycle is < 98 %) = VBW ≥ 1/T, where T is the minimum transmission duration.
- The analyzer is set to linear detector mode.
- Detector = Peak.
- Sweep time = auto.
- Trace mode = max hold.
- Allow max hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98 % duty cycle. For lower duty cycles, increase the minimym number of traces by a factor of 1/x, where x is the duty cycle.

9. Measurement value only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor
10. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency
11. Distance extrapolation factor = 20log (test distance / specific distance) (dB)
12. Total = Measured Value + Antenna Factor(A.F) + Cable Loss(C.L) - Amp Gain(A.G) + Distance Factor(D.F)

Test Procedure of Radiated Restricted Band Edge

1. The EUT is placed on a turntable, which is 1.5 m above ground plane.
2. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
3. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
4. EUT is set 3 m away from the receiving antenna, which is varied from 1 m to 4 m to find out the highest emissions.
5. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
6. Each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
7. The unit was tested with its standard battery.
8. Spectrum Setting
   (1) Measurement Type(Peak, G.5 in KDB 789033 v02r01):
   - RBW = 1 MHz
   - VBW ≥ 3 MHz
   - Detector = Peak
   - Sweep Time = auto
   - Trace mode = max hold
   - Allow sweeps to continue until the trace stabilizes.
     Note that if the transmission is not continuous, the time required for the trace to stabilize will increase by a factor of approximately 1/x, where x is the duty cycle.

   (2) Measurement Type(Average, G.6.d in KDB 789033 v02r01):
   - RBW = 1 MHz
   - VBW(Duty cycle ≥ 98 %) = VBW ≤ RBW/100(i.e., 10 kHz) but not less than 10 Hz.
   - VBW(Duty cycle is < 98 %) = VBW ≥ 1/T, where T is the minimum transmission duration.
   - The analyzer is set to linear detector mode.
   - Detector = Peak.
   - Sweep time = auto.
   - Trace mode = max hold.
   - Allow max hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98 % duty cycle. For lower duty cycles, increase the minimym number of traces by a factor of 1/x, where x is the duty cycle.

9. Measured Frequency Range :
   - 4 500 MHz ~ 5 150 MHz
   - 5 350 MHz ~ 5 460 MHz
   - 5 460 MHz ~ 5 470 MHz
   - (75 MHz or more below the 5 725 MHz) ~ 5 725 MHz
   - 5 850 MHz ~ (75 MHz or more above the 5 850 MHz)
10. Distance extrapolation factor = 20log (test distance / specific distance) (dB)
11. Total = Measured Value + Antenna Factor(A.F) + Cable Loss(C.L) - Amp Gain(A.G) + Attenuator(ATT) + Distance Factor(D.F)

The actual setting value of VBW

Mode	Worst Data rate (Mbps)	Duty Cycle	Duty Cycle Factor (dB)	The actual setting value of VBW (Hz)
802.11a	6	0.935	0.291	1000
802.11n(HT20)	MCS0	0.925	0.339	1000
802.11n(HT40)	MCS0	0.866	0.624	3000
802.11ac(VHT20)	MCS0	0.925	0.338	1000
802.11ac(VHT40)	MCS0	0.867	0.619	3000
802.11ac(VHT80)	MCS0	0.763	1.178	5000

8.7. Worst case configuration and mode

Radiated test

1. All modes of operation were investigated and the worst case configuration results are reported.
   - Mode : Stand alone, Stand alone + External accessories(Earphone, etc)
   - Worstcase : Stand alone
2. EUT Axis
   - Radiated Spurious Emissions : X, Y, Z
   - Radiated Restricted Band Edge : Z
3. All datarate of operation were investigated and the worst case datarate results are reported.
   - Mode : Ant.1(SISO), Ant.2(SISO), Ant.1+Ant.2(SDM), Ant.1+Ant.2(CDD)
   - Worstcase : Ant.1+Ant.2(CDD)
   - 802.11a : 6 Mbps
   - 802.11n_HT20 : MCS0
   - 802.11n_HT40 : MCS0
   - 802.11ac_VHT20 : MCS0
   - 802.11ac_VHT40 : MCS0
   - 802.11ac_VHT80 : MCS0
4. Radiated Spurious Emission
   - All modulation of operation were investigated and the worst case modulation results are reported.
     (Worstcase : 802.11a_6Mbps)
5. All position of loop antenna were investigated and the test result is a no critical peak found at all positions.
   - Position : Horizontal, Vertical, Parallel to the ground plane

AC Power line Conducted Emissions

1. All modes of operation were investigated and the worst case configuration results are reported.
   - Mode : Stand alone + External accessories(Earphone, Keyboard .,etc) + Travel Adapter,
     Stand alone + Tr avel Adapter
   - Worstcase : Stand alone + Travel Adapter

Conducted test

1. All datarate of operation were investigated and the worst case datarate results are reported.

9. SUMMARY OF TEST RESULTS

Test Description	FCC Part Section(s)	Test Limit	Test Condition	Test Result
26 dB Bandwidth	§15.407 (for Power Measurement)	N/A	Conducted	PASS
6 dB Bandwidth	§15.407(e)	>500 kHz (5725-5850 MHz)(UNII-3) (5850-5895 MHz)(UNII-4)		PASS
Maximum Conducted Output Power	§15.407(a)(1),(2),(3)	< 250 mW(5150-5250 MHz) < 250 mW or 11+10log$_{10}$ (BW) dBm (5250-5350 MHz) < 250 mW or 11+10log$_{10}$ (BW) dBm (5470-5725 MHz) <1 W (5725-5850 MHz)		PASS
Maximum EIRP Output Power	§15.407(a)(1)(3)(iii)	< EIRP 30dBm (5850-5895 MHz)		
Maximum Power Spectral Density	§15.407(a)(1),(2),(3)	<11 dBm/ MHz (5150-5250 MHz) <11 dBm/ MHz (5250-5350 MHz) <11 dBm/ MHz (5470-5725 MHz) <30 dBm/500 kHz(5725-5850 MHz) < EIRP 14 dBm/MHz(5850-5895 MHz)		PASS
AC Conducted Emissions 150 kHz-30 MHz	15.207 15.407(b)(8)	<FCC 15.207 limits		PASS
Undesirable Emissions	§15.407(b) (1),(2),(3),(4) §15.407(b)(5)(ii),(iii)	<-27 dBm/MHz EIRP (UNII1, 2A, 2C) cf. Section 8.6 (UNII 3&4)	Radiated	PASS
General Field Strength Limits(Restricted Bands and Radiated Emission Limits)	15.205, 15.407(b)(9),(10)	Emissions in restricted bands must meet the radiated limits detailed in 15.209		PASS

10. TEST RESULT

10.1 DUTY CYCLE

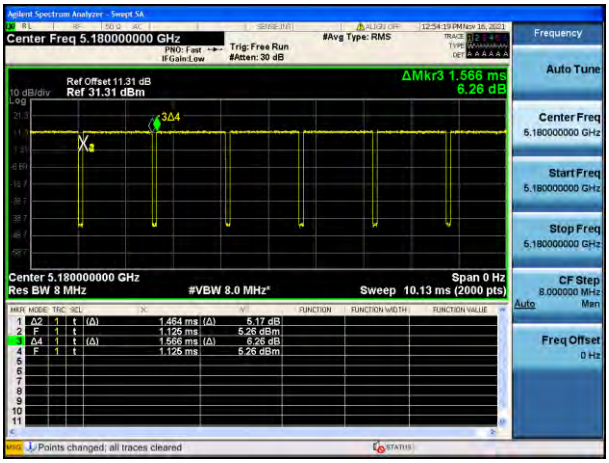
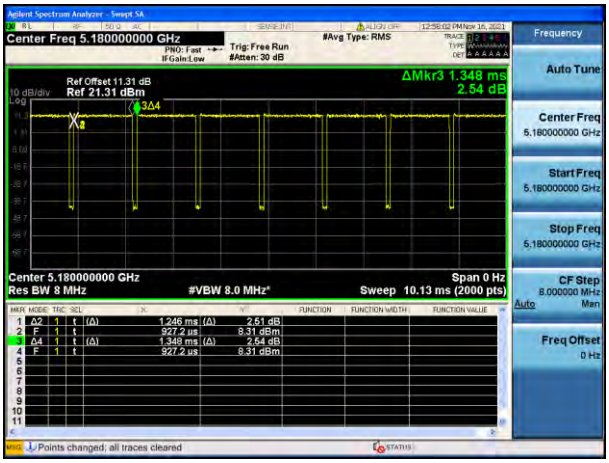
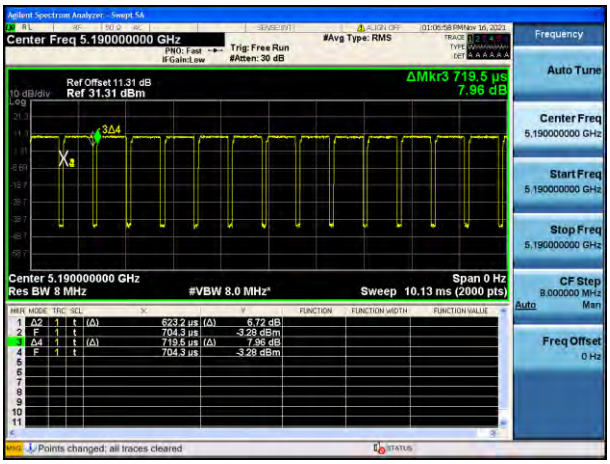
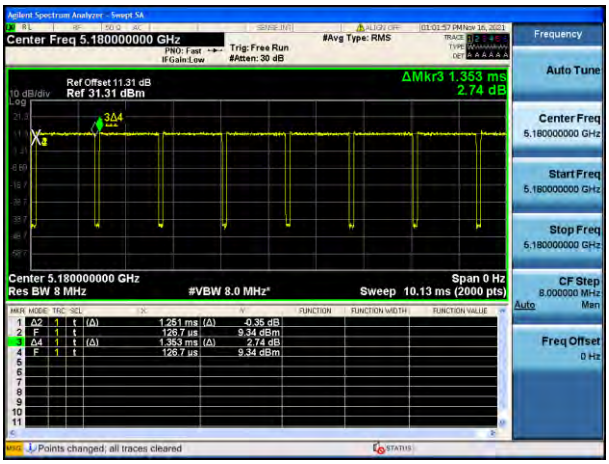
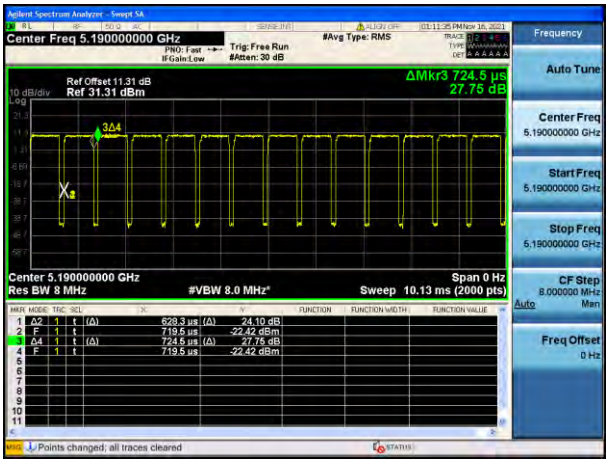
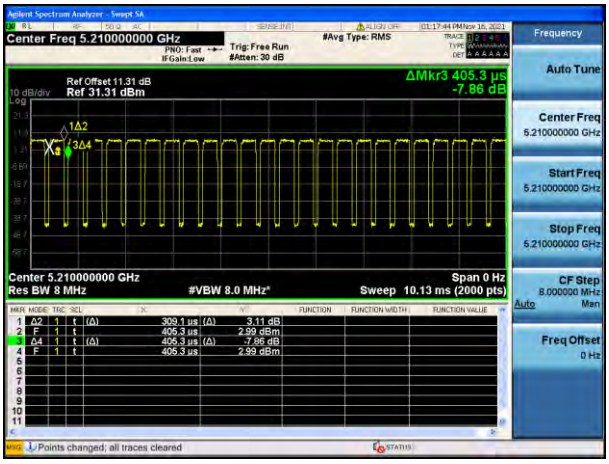
Mode	Data Rate (Mbps)	T_{on} (ms)	T_{total} (ms)	Duty Cycle	Duty Cycle Factor(dB)
802.11a	6	1.464	1.566	0.935	0.291
	9	0.983	1.084	0.907	0.426
	12	0.745	0.841	0.886	0.528
	18	0.502	0.603	0.832	0.799
	24	0.385	0.481	0.800	0.969
	36	0.263	0.365	0.722	1.413
	48	0.203	0.299	0.678	1.688
	54	0.184	0.294	0.625	2.041

Mode	MCS Index	T_{on} (ms)	T_{total} (ms)	Duty Cycle	Duty Cycle Factor(dB)
802.11n (HT20)	0	1.246	1.348	0.925	0.339
	1	0.643	0.740	0.870	0.605
	2	0.441	0.537	0.821	0.858
	3	0.339	0.436	0.779	1.084
	4	0.243	0.339	0.716	1.448
	5	0.187	0.314	0.597	2.242
	6	0.172	0.314	0.548	2.609
	7	0.160	0.304	0.525	2.795
802.11n (HT40)	0	0.623	0.719	0.866	0.624
	1	0.329	0.426	0.774	1.114
	2	0.233	0.329	0.708	1.502
	3	0.182	0.319	0.571	2.430
	4	0.137	0.324	0.422	3.748
	5	0.111	0.334	0.333	4.771
	6	0.101	0.309	0.328	4.843
	7	0.096	0.319	0.302	5.206

Mode	MCS Index	T_{on} (ms)	T_{total} (ms)	Duty Cycle	Duty Cycle Factor(dB)
802.11ac (VHT20)	0	1.251	1.353	0.925	0.338
	1	0.643	0.745	0.864	0.635
	2	0.446	0.542	0.822	0.849
	3	0.345	0.441	0.782	1.070
	4	0.243	0.339	0.716	1.448
	5	0.193	0.299	0.644	1.911
	6	0.177	0.319	0.556	2.553
	7	0.163	0.298	0.546	2.626
	8	0.144	0.304	0.475	3.236
802.11ac (VHT40)	0	0.628	0.725	0.867	0.619
	1	0.329	0.426	0.774	1.114
	2	0.238	0.334	0.712	1.474
	3	0.187	0.313	0.598	2.232
	4	0.137	0.319	0.429	3.680
	5	0.117	0.329	0.354	4.512
	6	0.107	0.322	0.333	4.773
	7	0.101	0.314	0.323	4.914
	8	0.091	0.309	0.295	5.301
	9	0.086	0.329	0.262	5.825
802.11ac (VHT80)	0	0.309	0.405	0.763	1.178
	1	0.177	0.329	0.538	2.688
	2	0.132	0.319	0.414	3.834
	3	0.106	0.329	0.323	4.907
	4	0.086	0.324	0.266	5.757
	5	0.074	0.334	0.220	6.573
	6	0.071	0.328	0.215	6.676
	7	0.066	0.324	0.203	6.922
	8	0.064	0.321	0.201	6.976
	9	0.064	0.322	0.199	7.017

Note:

In order to simplify the report, attached plots were only lowest datarate.

802.11a	802.11n(HT20)
	
802.11n(HT40)	**802.11ac(VHT20)**
	
802.11ac(VHT40)	**802.11ac(VHT80)**
	

10.2 26 dB Bandwidth

Straddle channel data in the table below are for reporting purposes only. Straddle channel data were added in section 10.7.1.

[Ant.1]

802.11a Mode		26 dB Bandwidth [MHz]	99 % bandwidth [MHz]
Frequency [MHz]	Channel No.		
5180	36	18.57	16.249
5200	40	18.44	16.252
5240	48	18.42	16.254
5260	52	18.29	16.255
5300	60	18.21	16.238
5320	64	18.30	16.237
5500	100	18.51	16.237
5600	120	18.43	16.226
5720	144	18.30	16.241
5745	149	18.60	16.253
5785	157	18.32	16.240
5825	165	18.46	16.254
5845	169	18.50	16.243
5865	173	18.36	16.252
5885	177	18.59	16.253

802.11n(HT20) Mode		26 dB Bandwidth [MHz]	99 % bandwidth [MHz]
Frequency [MHz]	Channel No.		
5180	36	19.55	17.425
5200	40	19.82	17.466
5240	48	19.43	17.455
5260	52	19.35	17.441
5300	60	19.24	17.436
5320	64	19.79	17.444
5500	100	19.83	17.442
5600	120	19.45	17.447
5720	144	19.73	17.460
5745	149	19.55	17.431
5785	157	19.41	17.447
5825	165	19.67	17.424
5845	169	20.14	17.449
5865	173	19.70	17.456
5885	177	19.41	17.454

802.11n(HT40) Mode		26 dB Bandwidth [MHz]	99 % bandwidth [MHz]
Frequency [MHz]	Channel No.		
5190	38	39.05	35.717
5230	46	39.06	35.756
5270	54	38.97	35.710
5310	62	39.00	35.740
5510	102	39.04	35.728
5590	118	39.09	35.703
5710	142	39.15	35.752
5755	151	38.99	35.722
5795	159	39.19	35.763
5835	167	39.14	35.759
5875	175	39.11	35.736

802.11ac(VHT20) Mode		26 dB Bandwidth [MHz]	99 % bandwidth [MHz]
Frequency [MHz]	Channel No.		
5180	36	19.60	17.453
5200	40	19.27	17.449
5240	48	20.03	17.447
5260	52	19.46	17.466
5300	60	19.57	17.466
5320	64	19.41	17.449
5500	100	19.33	17.452
5600	120	19.55	17.448
5720	144	19.56	17.460
5745	149	19.46	17.438
5785	157	19.36	17.416
5825	165	19.88	17.429
5845	169	19.56	17.451
5865	173	19.93	17.451
5885	177	19.76	17.453

802.11ac(VHT40) Mode		26 dB Bandwidth [MHz]	99 % bandwidth [MHz]
Frequency [MHz]	Channel No.		
5190	38	39.18	35.784
5230	46	39.06	35.732
5270	54	39.12	35.762
5310	62	39.31	35.750
5510	102	39.08	35.745
5590	118	39.14	35.764
5710	142	38.94	35.727
5755	151	39.12	35.731
5795	159	39.36	35.706
5835	167	39.68	35.755
5875	175	39.10	35.723

802.11ac(VHT80) Mode		26 dB Bandwidth [MHz]	99 % bandwidth [MHz]
Frequency [MHz]	Channel No.		
5210	42	79.88	74.917
5290	58	80.34	74.820
5530	106	80.28	74.851
5610	122	80.41	74.805
5690	138	80.33	74.874
5775	155	79.80	74.801
5855	171	80.21	74.790

[Ant.2]

802.11a Mode		26 dB Bandwidth [MHz]	99 % bandwidth [MHz]
Frequency [MHz]	Channel No.		
5180	36	18.50	16.249
5200	40	18.68	16.254
5240	48	18.55	16.268
5260	52	18.63	16.253
5300	60	18.36	16.235
5320	64	18.43	16.234
5500	100	18.26	16.233
5600	120	18.57	16.236
5720	144	18.51	16.242
5745	149	18.36	16.246
5785	157	18.41	16.250
5825	165	18.43	16.233
5845	169	18.38	16.246
5865	173	18.34	16.241
5885	177	18.99	16.276

802.11n(HT20) Mode		26 dB Bandwidth [MHz]	99 % bandwidth [MHz]
Frequency [MHz]	Channel No.		
5180	36	20.07	17.440
5200	40	19.60	17.441
5240	48	19.53	17.459
5260	52	19.42	17.434
5300	60	19.43	17.459
5320	64	19.90	17.445
5500	100	19.25	17.424
5600	120	19.53	17.440
5720	144	19.49	17.437
5745	149	20.03	17.447
5785	157	19.67	17.430
5825	165	19.84	17.462
5845	169	20.04	17.469
5865	173	19.98	17.487
5885	177	19.61	17.474

802.11n(HT40) Mode		26 dB Bandwidth [MHz]	99 % bandwidth [MHz]
Frequency [MHz]	Channel No.		
5190	38	39.23	35.734
5230	46	38.85	35.739
5270	54	39.34	35.740
5310	62	38.99	35.722
5510	102	39.02	35.761
5590	118	38.90	35.744
5710	142	38.95	35.730
5755	151	39.09	35.794
5795	159	38.96	35.732
5835	167	39.04	35.723
5875	175	39.47	35.737

802.11ac(VHT20) Mode		26 dB Bandwidth [MHz]	99 % bandwidth [MHz]
Frequency [MHz]	Channel No.		
5180	36	19.68	17.448
5200	40	19.26	17.462
5240	48	19.58	17.463
5260	52	19.42	17.451
5300	60	19.55	17.450
5320	64	19.43	17.451
5500	100	19.50	17.447
5600	120	19.40	17.437
5720	144	19.90	17.468
5745	149	19.39	17.457
5785	157	19.47	17.437
5825	165	19.91	17.460
5845	169	19.51	17.435
5865	173	19.95	17.426
5885	177	20.04	17.488

802.11ac(VHT40) Mode		26 dB Bandwidth [MHz]	99 % bandwidth [MHz]
Frequency [MHz]	Channel No.		
5190	38	39.36	35.707
5230	46	38.92	35.751
5270	54	39.11	35.720
5310	62	39.27	35.755
5510	102	38.88	35.711
5590	118	39.12	35.729
5710	142	38.87	35.741
5755	151	39.20	35.764
5795	159	39.09	35.739
5835	167	39.19	35.731
5875	175	39.13	35.756

802.11ac(VHT80) Mode		26 dB Bandwidth [MHz]	99 % bandwidth [MHz]
Frequency [MHz]	Channel No.		
5210	42	79.84	74.869
5290	58	80.04	74.889
5530	106	80.10	74.867
5610	122	80.00	74.818
5690	138	80.26	74.836
5775	155	79.91	74.807
5855	171	79.93	74.798

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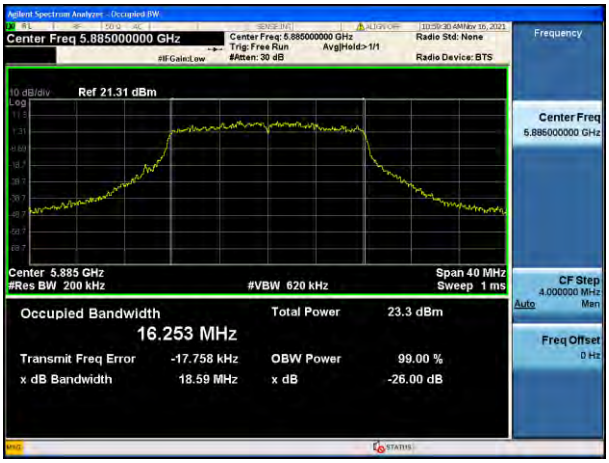
[Ant.1]

▣ Test Plots(802.11a)

Note:

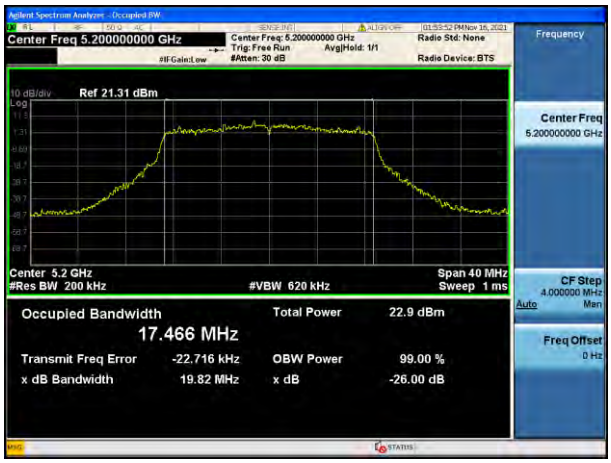
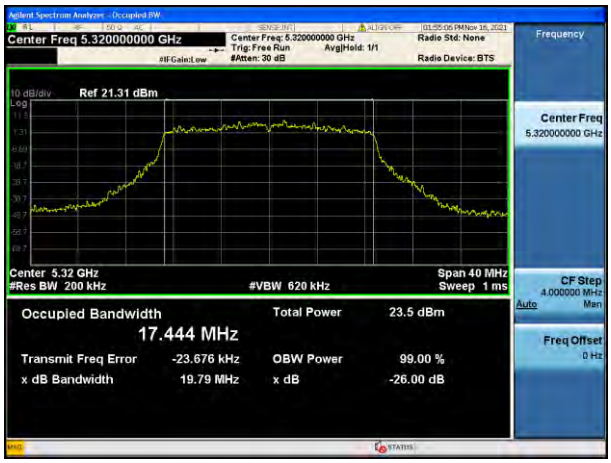
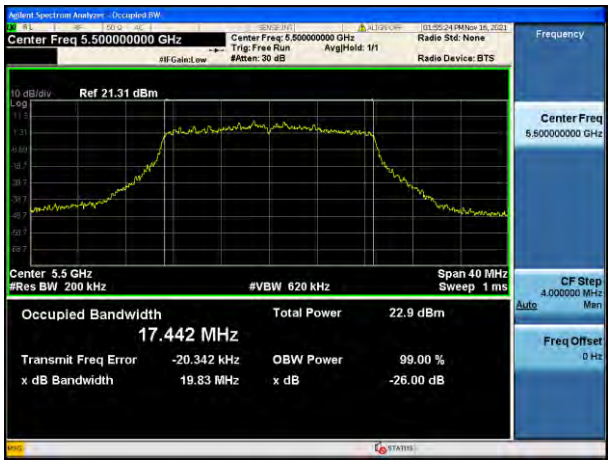
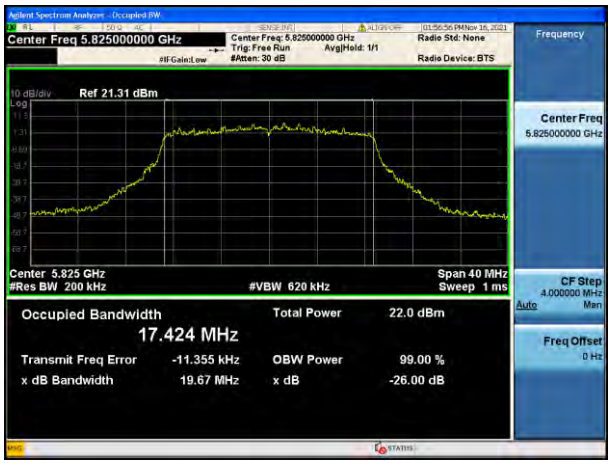
In order to simplify the report, attached plots were only the most wide channel.

802.11a UNII 1 BAND 26 dB Bandwidth (CH 36)	802.11a UNII 2A BAND 26 dB Bandwidth (CH 64)
	
802.11a UNII 2C BAND 26 dB Bandwidth (CH 100)	**802.11a UNII 3 BAND 26 dB Bandwidth (CH 149)**
	
802.11a UNII 4 BAND 26 dB Bandwidth (CH 177)	
	

▣ Test Plots(802.11n(HT20))

Note:

In order to simplify the report, attached plots were only the most wide channel.

802.11n_HT20 UNII 1 BAND 26 dB Bandwidth(CH 40)	802.11n_HT20 UNII 2A BAND 26 dB Bandwidth(CH 64)
	
802.11n_HT20 UNII 2C BAND 26 dB Bandwidth(CH 100)	**802.11n_HT20 UNII 3 BAND 26 dB Bandwidth(CH 165)**
	
802.11n_HT20 UNII 4 BAND 26 dB Bandwidth(CH 169)	
	

▣ Test Plots(802.11n(HT40))

Note:

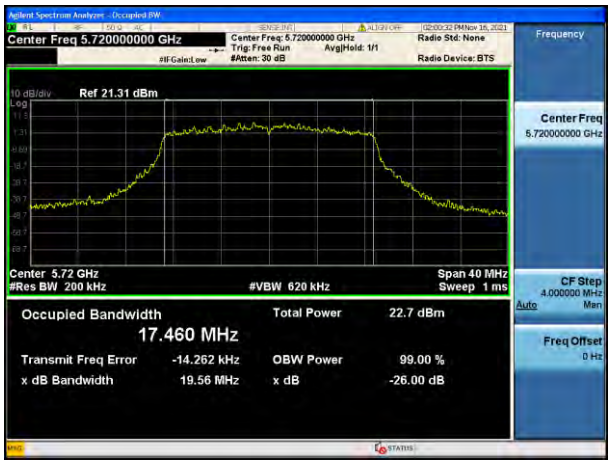
In order to simplify the report, attached plots were only the most wide channel.

802.11n_HT40 UNII 1 BAND 26 dB Bandwidth(CH 46)	802.11n_HT40 UNII 2A BAND 26 dB Bandwidth (CH 62)
	
802.11n_HT40 UNII 2C BAND 26 dB Bandwidth(CH 142)	**802.11n_HT40 UNII 3 BAND 26 dB Bandwidth (CH 159)**
	
802.11n_HT40 UNII 4 BAND 26 dB Bandwidth (CH 167)	
	

▣ Test Plots(802.11ac(VHT20))

Note:

In order to simplify the report, attached plots were only the most wide channel.

802.11ac_VHT20 UNII 1 BAND 26 dB Bandwidth(CH 48)	802.11ac_VHT20 UNII 2A BAND 26 dB Bandwidth(CH 60)
	
802.11ac_VHT20 UNII 2C BAND 26 dB Bandwidth(CH 144)	**802.11ac_VHT20 UNII 3 BAND 26 dB Bandwidth(CH 165)**
	
802.11ac_VHT20 UNII 4 BAND 26 dB Bandwidth(CH 173)	
	

▣ Test Plots(802.11ac(VHT40))

Note:

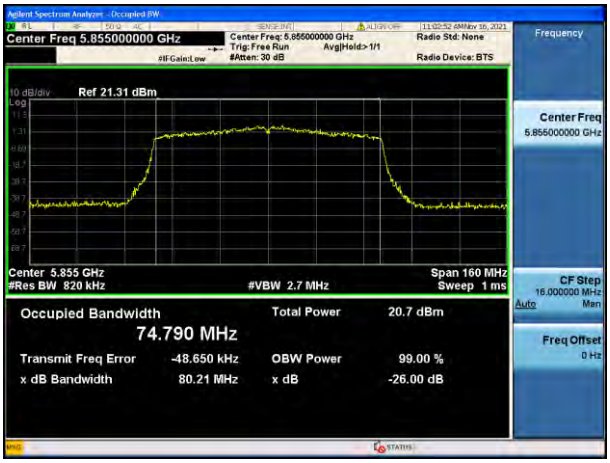
In order to simplify the report, attached plots were only the most wide channel.

802.11ac_VHT40 UNII 1 BAND 26 dB Bandwidth(CH 38)	802.11ac_VHT40 UNII 2A BAND 26 dB Bandwidth (CH 62)
	
802.11ac_VHT40 UNII 2C BAND 26 dB Bandwidth(CH 118)	**802.11ac_VHT40 UNII 3 BAND 26 dB Bandwidth (CH 159)**
	
802.11ac_VHT40 UNII 4 BAND 26 dB Bandwidth (CH 167)	
	

▣ Test Plots(802.11ac(VHT80))

Note:

In order to simplify the report, attached plots were only the most wide channel.

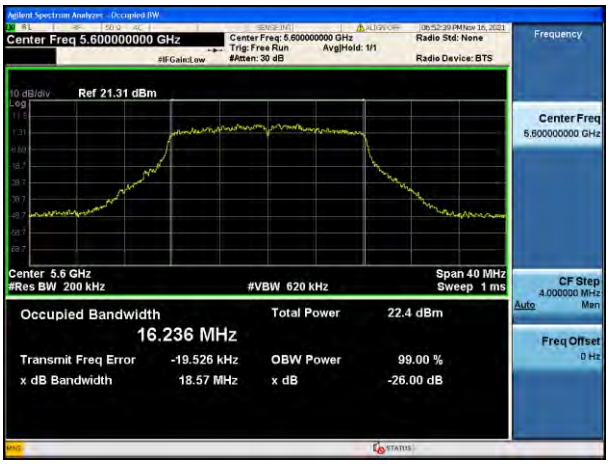
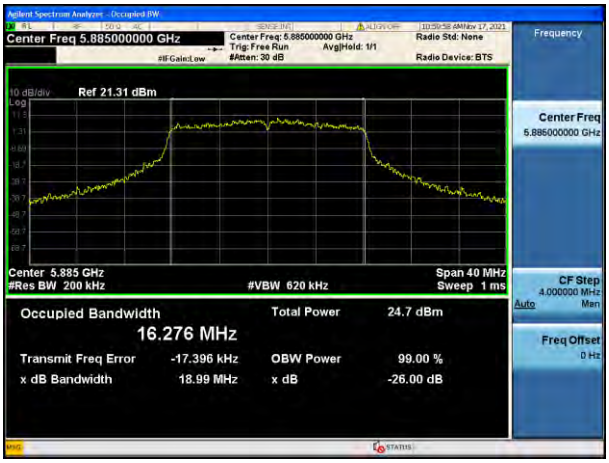
802.11ac_VHT80 UNII 1 BAND 26 dB Bandwidth(CH 42)	802.11ac_VHT80 UNII 2A BAND 26 dB Bandwidth (CH 58)
	
802.11ac_VHT80 UNII 2C BAND 26 dB Bandwidth(CH 122)	**802.11ac_VHT80 UNII 3 BAND 26 dB Bandwidth (CH 155)**
	
802.11ac_VHT80 UNII 4 BAND 26 dB Bandwidth (CH 171)	
	

[Ant.2]

▣ Test Plots(802.11a)

Note:

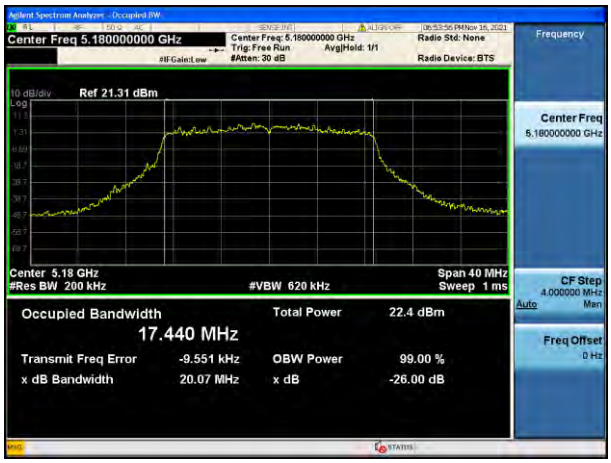
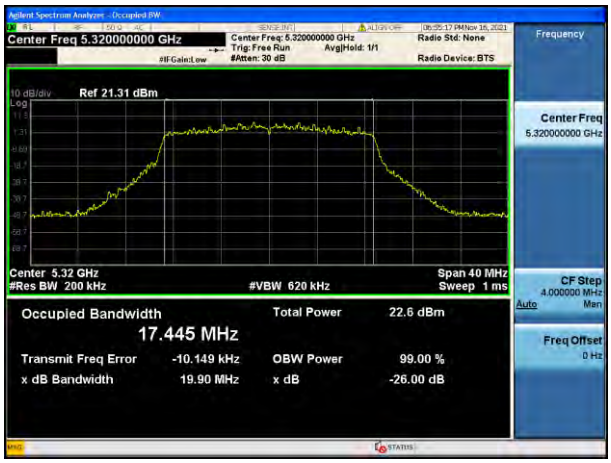
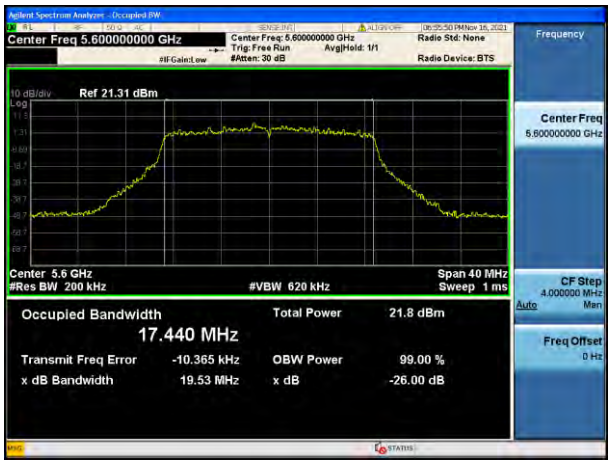
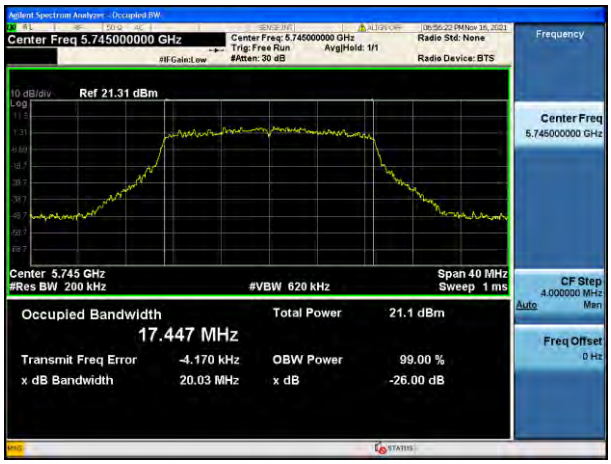
In order to simplify the report, attached plots were only the most wide channel.

802.11a UNII 1 BAND 26 dB Bandwidth (CH 40)	802.11a UNII 2A BAND 26 dB Bandwidth (CH 52)
	
802.11a UNII 2C BAND 26 dB Bandwidth (CH 120)	**802.11a UNII 3 BAND 26 dB Bandwidth (CH 165)**
	
802.11a UNII 4 BAND 26 dB Bandwidth (CH 177)	
	

▣ Test Plots(802.11n(HT20))

Note:

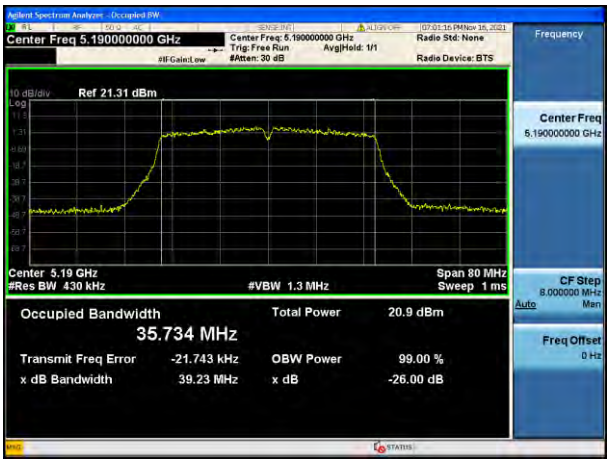
In order to simplify the report, attached plots were only the most wide channel.

802.11n_HT20 UNII 1 BAND 26 dB Bandwidth(CH 36)	802.11n_HT20 UNII 2A BAND 26 dB Bandwidth(CH 64)
	
802.11n_HT20 UNII 2C BAND 26 dB Bandwidth(CH 120)	**802.11n_HT20 UNII 3 BAND 26 dB Bandwidth(CH 149)**
	
802.11n_HT20 UNII 4 BAND 26 dB Bandwidth(CH 169)	
	

▣ Test Plots(802.11n(HT40))

Note:

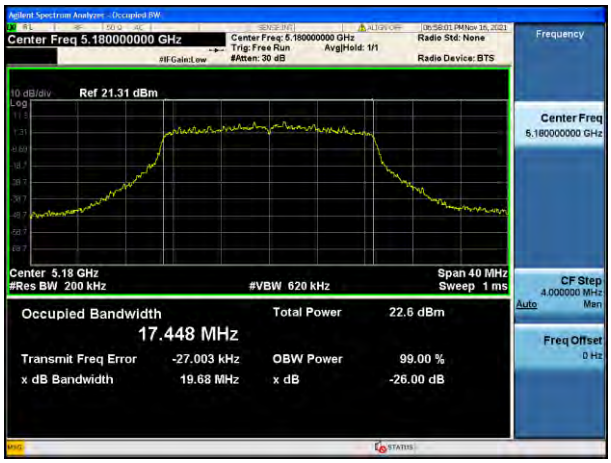
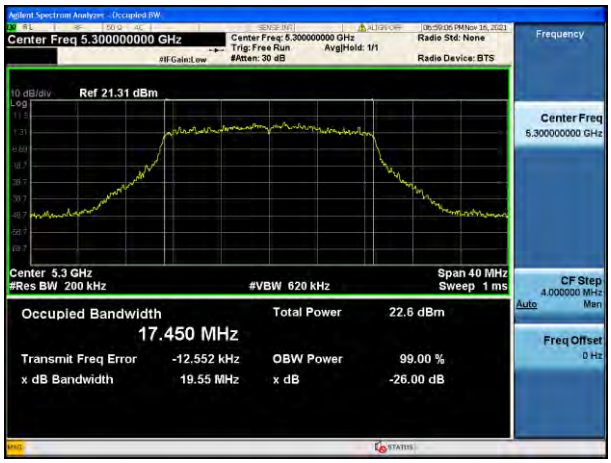
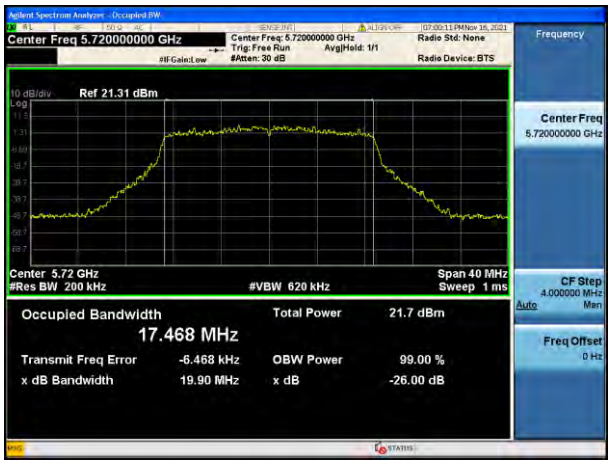
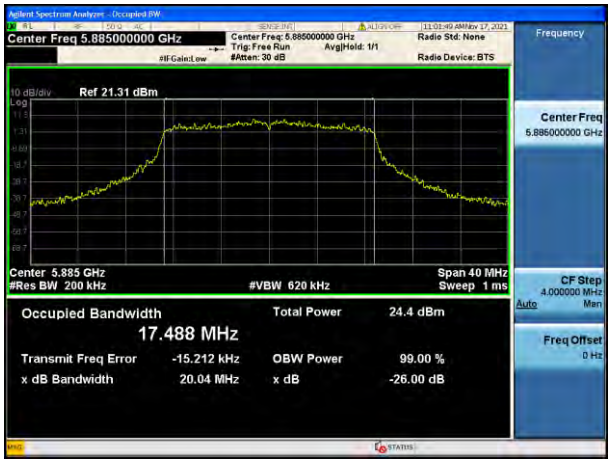
In order to simplify the report, attached plots were only the most wide channel.

802.11n_HT40 UNII 1 BAND 26 dB Bandwidth(CH 38)	802.11n_HT40 UNII 2A BAND 26 dB Bandwidth (CH 54)
	
802.11n_HT40 UNII 2C BAND 26 dB Bandwidth(CH 102)	**802.11n_HT40 UNII 3 BAND 26 dB Bandwidth (CH 151)**
	
802.11n_HT40 UNII 4 BAND 26 dB Bandwidth (CH 175)	
	

▣ Test Plots(802.11ac(VHT20))

Note:

In order to simplify the report, attached plots were only the most wide channel.

802.11ac_VHT20 UNII 1 BAND 26 dB Bandwidth(CH 36)	802.11ac_VHT20 UNII 2A BAND 26 dB Bandwidth(CH 60)
	
802.11ac_VHT20 UNII 2C BAND 26 dB Bandwidth(CH 144)	**802.11ac_VHT20 UNII 3 BAND 26 dB Bandwidth(CH 165)**
	
802.11ac_VHT20 UNII 4 BAND 26 dB Bandwidth(CH 177)	
	

▣ Test Plots(802.11ac(VHT40))

Note:

In order to simplify the report, attached plots were only the most wide channel.

802.11ac_VHT40 UNII 1 BAND 26 dB Bandwidth(CH 38)	802.11ac_VHT40 UNII 2A BAND 26 dB Bandwidth (CH 62)
	
802.11ac_VHT40 UNII 2C BAND 26 dB Bandwidth(CH 118)	**802.11ac_VHT40 UNII 3 BAND 26 dB Bandwidth (CH 151)**
	
802.11ac_VHT40 UNII 4 BAND 26 dB Bandwidth (CH 167)	
	

▣ Test Plots(802.11ac(VHT80))

Note:

In order to simplify the report, attached plots were only the most wide channel.

802.11ac_VHT80 UNII 1 BAND 26 dB Bandwidth(CH 42)	802.11ac_VHT80 UNII 2A BAND 26 dB Bandwidth (CH 58)
	
802.11ac_VHT80 UNII 2C BAND 26 dB Bandwidth(CH 138)	**802.11ac_VHT80 UNII 3 BAND 26 dB Bandwidth (CH 155)**
	
802.11ac_VHT80 UNII 4 BAND 26 dB Bandwidth (CH 171)	
	

10.3 6 dB BANDWIDTH

[Ant.1]

802.11a Mode		Measured Bandwidth [MHz]	Limit [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5745	149	16.32	> 0.5	Pass
5785	157	16.24	> 0.5	Pass
5825	165	16.33	> 0.5	Pass
5845	169	15.05	> 0.5	Pass
5865	173	13.90	> 0.5	Pass
5885	177	14.50	> 0.5	Pass

802.11n(HT20) Mode		Measured Bandwidth [MHz]	Limit [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5745	149	16.96	> 0.5	Pass
5785	157	16.83	> 0.5	Pass
5825	165	16.84	> 0.5	Pass
5845	169	15.10	> 0.5	Pass
5865	173	15.08	> 0.5	Pass
5885	177	13.81	> 0.5	Pass

802.11n(HT40) Mode		Measured Bandwidth [MHz]	Limit [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5755	151	35.36	> 0.5	Pass
5795	159	35.15	> 0.5	Pass
5835	167	35.11	> 0.5	Pass
5875	175	33.93	> 0.5	Pass

802.11ac(VHT20) Mode		Measured Bandwidth [MHz]	Limit [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5745	149	16.79	> 0.5	Pass
5785	157	16.84	> 0.5	Pass
5825	165	16.82	> 0.5	Pass
5845	169	15.10	> 0.5	Pass
5865	173	15.13	> 0.5	Pass
5885	177	13.88	> 0.5	Pass

802.11ac(VHT40) Mode		Measured Bandwidth [MHz]	Limit [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5755	151	35.34	> 0.5	Pass
5795	159	35.24	> 0.5	Pass
5835	167	33.91	> 0.5	Pass
5875	175	35.13	> 0.5	Pass

802.11ac(VHT80) Mode		Measured Bandwidth [MHz]	Limit [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5775	155	75.48	> 0.5	Pass
5855	171	71.24	> 0.5	Pass

[Ant.2]

802.11a Mode		Measured Bandwidth [MHz]	Limit [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5745	149	16.06	> 0.5	Pass
5785	157	15.92	> 0.5	Pass
5825	165	16.34	> 0.5	Pass
5845	169	13.90	> 0.5	Pass
5865	173	10.97	> 0.5	Pass
5885	177	15.13	> 0.5	Pass

802.11n(HT20) Mode		Measured Bandwidth [MHz]	Limit [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5745	149	16.92	> 0.5	Pass
5785	157	16.80	> 0.5	Pass
5825	165	17.33	> 0.5	Pass
5845	169	12.97	> 0.5	Pass
5865	173	15.07	> 0.5	Pass
5885	177	15.08	> 0.5	Pass

802.11n(HT40) Mode		Measured Bandwidth [MHz]	Limit [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5755	151	35.10	> 0.5	Pass
5795	159	35.26	> 0.5	Pass
5835	167	33.86	> 0.5	Pass
5875	175	33.93	> 0.5	Pass

802.11ac(VHT20) Mode		Measured Bandwidth [MHz]	Limit [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5745	149	16.78	> 0.5	Pass
5785	157	16.84	> 0.5	Pass
5825	165	17.07	> 0.5	Pass
5845	169	15.16	> 0.5	Pass
5865	173	15.09	> 0.5	Pass
5885	177	15.09	> 0.5	Pass

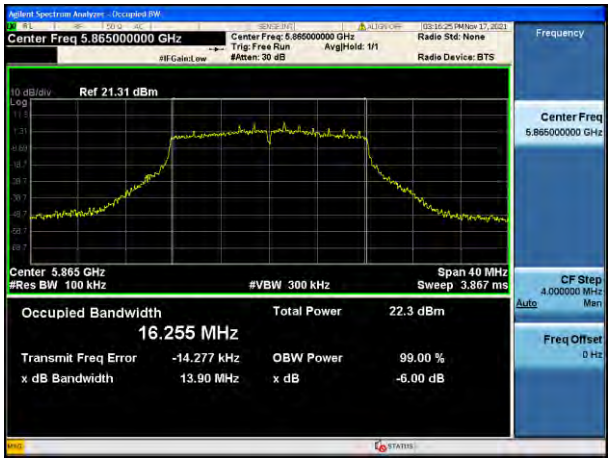
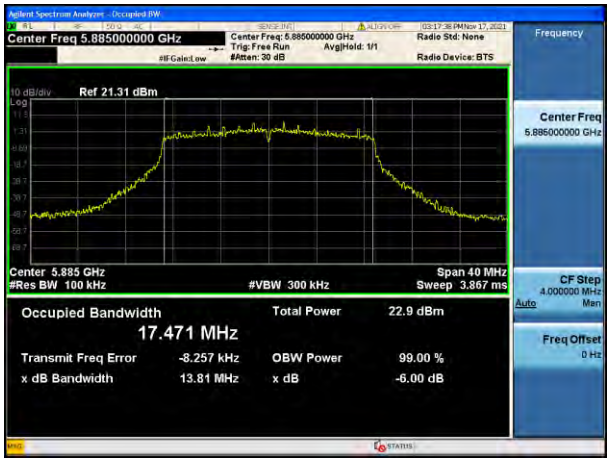
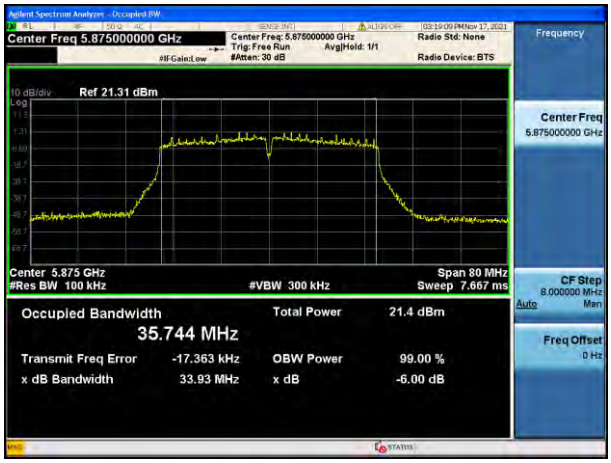
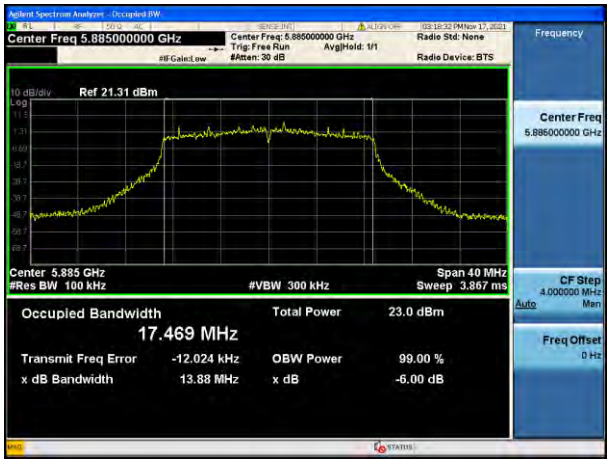
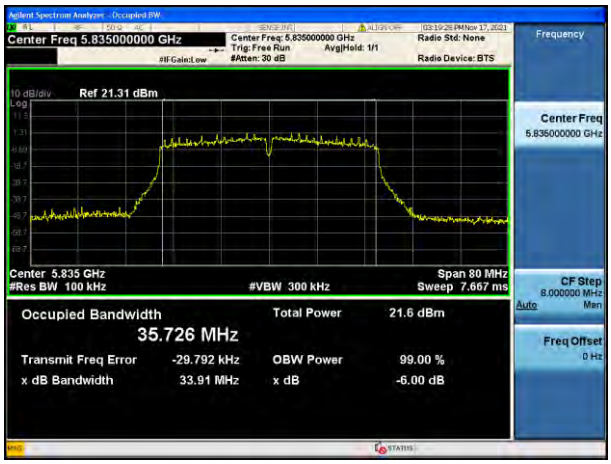
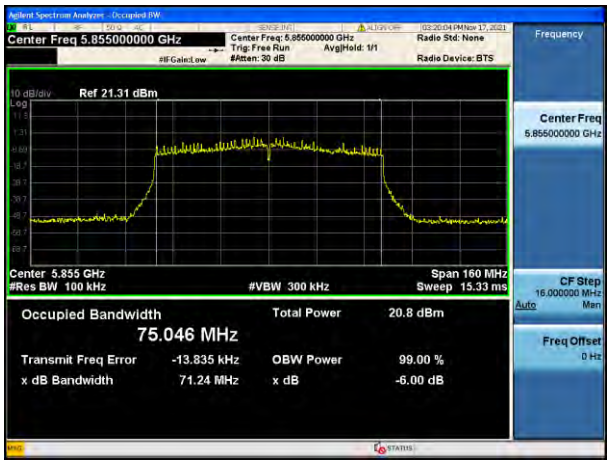
802.11ac(VHT40) Mode		Measured Bandwidth [MHz]	Limit [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5755	151	35.24	> 0.5	Pass
5795	159	35.24	> 0.5	Pass
5835	167	35.12	> 0.5	Pass
5875	175	35.14	> 0.5	Pass

802.11ac(VHT80) Mode		Measured Bandwidth [MHz]	Limit [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5775	155	75.47	> 0.5	Pass
5855	171	70.11	> 0.5	Pass

[Ant.1]

▣ Test Plots

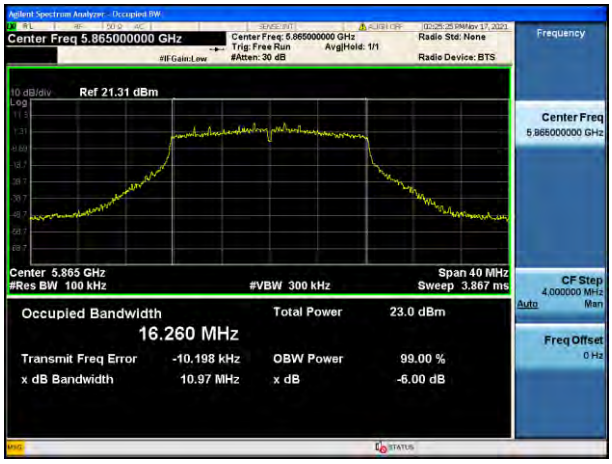
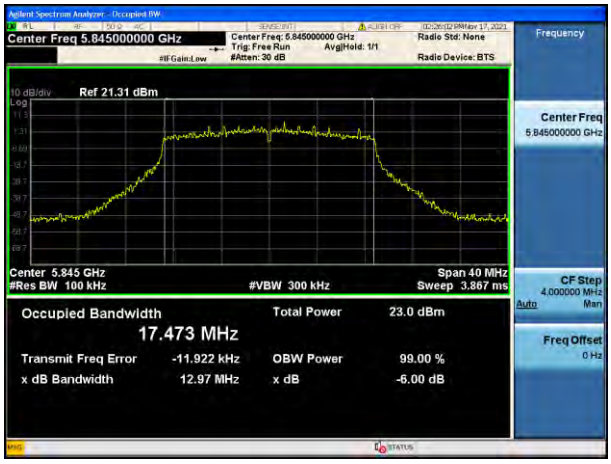
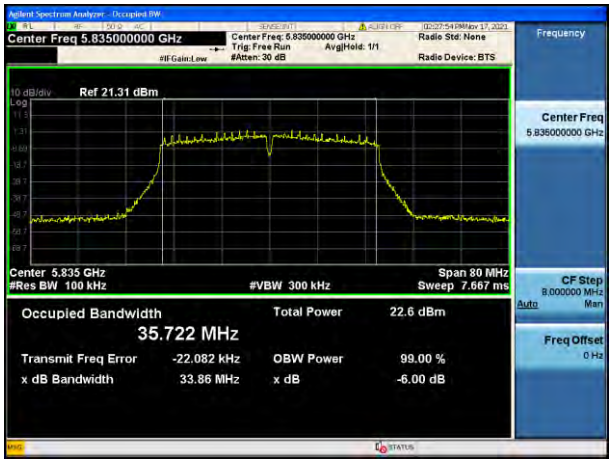
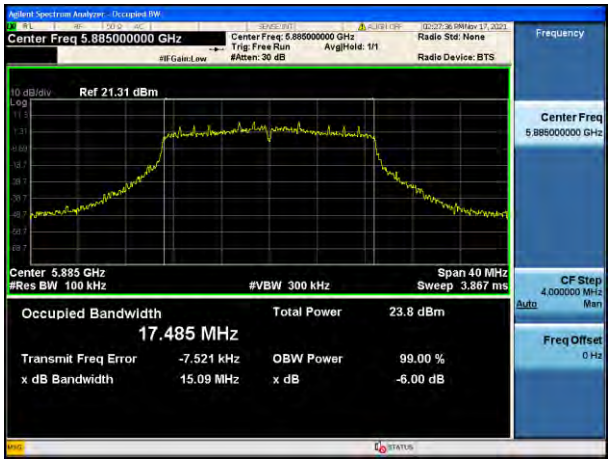
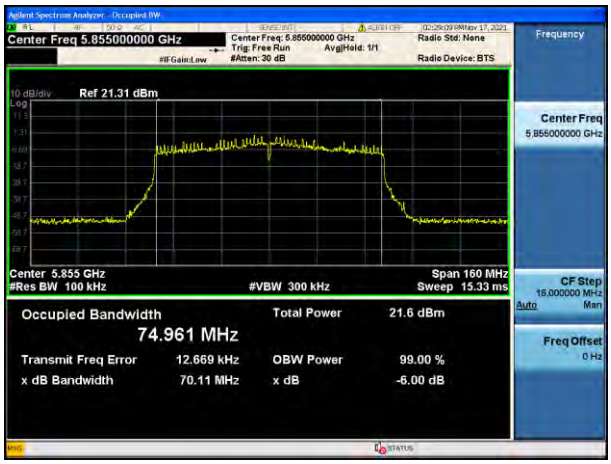
Note: In order to simplify the report, attached plots were only the most narrow channel.

802.11a (CH.173)	802.11n(HT20) (CH.177)
	
802.11n(HT40) (CH.175)	**802.11ac(VHT20) (CH.177)**
	
802.11ac(VHT40) (CH.167)	**802.11ac(VHT80) (CH.171)**
	

[Ant.2]

▣ Test Plots

Note: In order to simplify the report, attached plots were only the most narrow channel.

802.11a (CH.173)	802.11n(HT20) (CH.169)
	
802.11n(HT40) (CH.167)	**802.11ac(VHT20) (CH.177)**
	
802.11ac(VHT40) (CH.167)	**802.11ac(VHT80) (CH.171)**
	

10.4 OUTPUT POWER MEASUREMENT

Straddle channel data in the table below are for reporting purposes only.

Straddle channel data were added in section 10.7.3.

Limit

(UNII 1) : 23.98 dBm

(UNII 2A, 2C) : 23.98 dBm or 11 dBm + 10 log B, (where B is the 26 dB emission bandwidth in megahertz.)

(UNII 3) : 30.00 dBm

(UNII 4) : EIRP 30.0 dBm/MHz

[Ant.1] UNII1 ~ UNII3

802.11a Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase Datarate [Mbps]
Frequency [MHz]	Channel No.					
5180	36	16.83	0.799	17.63	23.98	18M
5200	40	16.78	0.799	17.58	23.98	18M
5240	48	17.03	0.799	17.83	23.98	18M
5260	52	16.89	0.799	17.69	23.62	18M
5300	60	16.82	0.799	17.62	23.60	18M
5320	64	17.15	0.799	17.95	23.62	18M
5500	100	16.74	0.799	17.54	23.67	18M
5600	120	16.61	0.799	17.41	23.66	18M
5720	144	16.24	0.799	17.03	23.62	18M
5745	149	16.61	0.799	17.41	30.00	18M
5785	157	16.70	0.799	17.50	30.00	18M
5825	165	15.51	0.799	16.31	30.00	18M

802.11n(20 MHz) Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.					
5180	36	15.23	2.242	17.47	23.98	MCS5
5200	40	15.24	2.242	17.48	23.98	MCS5
5240	48	15.45	2.242	17.69	23.98	MCS5
5260	52	15.38	2.242	17.62	23.87	MCS5
5300	60	15.28	2.242	17.52	23.84	MCS5
5320	64	15.70	2.242	17.94	23.96	MCS5
5500	100	15.13	2.242	17.37	23.97	MCS5
5600	120	15.00	2.242	17.24	23.89	MCS5
5720	144	14.65	2.242	16.89	23.95	MCS5
5745	149	15.00	2.242	17.24	30.00	MCS5
5785	157	15.13	2.242	17.37	30.00	MCS5
5825	165	14.21	2.242	16.46	30.00	MCS5

802.11n(40 MHz) Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.					
5190	38	13.84	1.114	14.96	23.98	MCS1
5230	46	14.97	1.114	16.09	23.98	MCS1
5270	54	14.84	1.114	15.95	23.98	MCS1
5310	62	13.49	1.114	14.61	23.98	MCS1
5510	102	12.88	1.114	14.00	23.98	MCS1
5590	118	14.66	1.114	15.77	23.98	MCS1
5710	142	15.35	1.114	16.46	23.98	MCS1
5755	151	14.77	1.114	15.88	30.00	MCS1
5795	159	14.78	1.114	15.89	30.00	MCS1

802.11ac(20 MHz) Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.					
5180	36	14.94	2.553	17.49	23.98	MCS6
5200	40	14.86	2.553	17.42	23.98	MCS6
5240	48	15.17	2.553	17.72	23.98	MCS6
5260	52	14.96	2.553	17.51	23.89	MCS6
5300	60	14.91	2.553	17.47	23.92	MCS6
5320	64	15.27	2.553	17.83	23.88	MCS6
5500	100	14.73	2.553	17.29	23.86	MCS6
5600	120	14.66	2.553	17.21	23.91	MCS6
5720	144	14.28	2.553	16.83	23.91	MCS6
5745	149	14.69	2.553	17.25	30.00	MCS6
5785	157	14.85	2.553	17.41	30.00	MCS6
5825	165	13.84	2.553	16.39	30.00	MCS6

802.11ac(40 MHz) Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.					
5190	38	13.92	1.114	15.04	23.98	MCS1
5230	46	14.97	1.114	16.08	23.98	MCS1
5270	54	14.86	1.114	15.98	23.98	MCS1
5310	62	13.45	1.114	14.57	23.98	MCS1
5510	102	12.91	1.114	14.02	23.98	MCS1
5590	118	14.67	1.114	15.78	23.98	MCS1
5710	142	15.15	1.114	16.26	23.98	MCS1
5755	151	14.67	1.114	15.78	30.00	MCS1
5795	159	14.77	1.114	15.88	30.00	MCS1

802.11ac(80 MHz) Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.					
5210	42	7.90	6.573	14.48	23.98	MCS5
5290	58	6.55	6.573	13.12	23.98	MCS5
5530	106	7.50	6.573	14.07	23.98	MCS5
5610	122	9.12	6.573	15.69	23.98	MCS5
5690	138	8.82	6.573	15.39	23.98	MCS5
5775	155	8.28	6.573	14.85	30.00	MCS5

[Ant.1] UNII4

802.11a Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Ant Gain [dBi]	E.I.R.P [dBm]	Limit [dBm]	Worstcase Datarate [Mbps]
Frequency [MHz]	Channel No.							
5845	169	15.52	0.799	16.32	-3.86	12.46	30	18M
5865	173	15.36	0.799	16.16	-3.86	12.30	30	18M
5885	177	16.29	0.799	17.08	-3.86	13.22	30	18M

802.11n(20MHz) Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Ant Gain [dBi]	E.I.R.P [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5845	169	14.05	2.242	16.29	-3.86	12.43	30	MCS5
5865	173	13.91	2.242	16.15	-3.86	12.29	30	MCS5
5885	177	14.79	2.242	17.03	-3.86	13.17	30	MCS5

802.11n(40MHz) Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Ant Gain [dBi]	E.I.R.P [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5835	167	13.92	1.114	15.03	-3.86	11.17	30	MCS1
5875	175	13.55	1.114	14.66	-3.86	10.80	30	MCS1

802.11ac(20MHz) Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Ant Gain [dBi]	E.I.R.P [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5845	169	13.73	2.553	16.28	-3.86	12.42	30	MCS6
5865	173	13.57	2.553	16.12	-3.86	12.26	30	MCS6
5885	177	14.45	2.553	17.00	-3.86	13.14	30	MCS6

802.11ac(40MHz) Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Ant Gain [dBi]	E.I.R.P [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5835	167	13.90	1.114	15.01	-3.86	11.15	30	MCS1
5875	175	13.80	1.114	14.91	-3.86	11.05	30	MCS1

802.11ac(80MHz) Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Ant Gain [dBi]	E.I.R.P [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5855	171	7.41	6.573	13.98	-3.86	10.12	30	MCS5

[Ant.2] UNII1 ~ UNII3

802.11a Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase Datarate [Mbps]
Frequency [MHz]	Channel No.					
5180	36	16.13	0.799	16.93	23.98	18M
5200	40	16.16	0.799	16.96	23.98	18M
5240	48	16.41	0.799	17.20	23.98	18M
5260	52	16.12	0.799	16.92	23.70	18M
5300	60	16.13	0.799	16.93	23.64	18M
5320	64	16.17	0.799	16.97	23.66	18M
5500	100	15.68	0.799	16.47	23.62	18M
5600	120	15.61	0.799	16.41	23.69	18M
5720	144	15.32	0.799	16.12	23.67	18M
5745	149	15.74	0.799	16.54	30.00	18M
5785	157	16.20	0.799	17.00	30.00	18M
5825	165	16.26	0.799	17.06	30.00	18M

802.11n(20 MHz) Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.					
5180	36	14.55	2.242	16.79	23.98	MCS5
5200	40	14.55	2.242	16.79	23.98	MCS5
5240	48	14.78	2.242	17.02	23.98	MCS5
5260	52	14.50	2.242	16.74	23.88	MCS5
5300	60	14.54	2.242	16.78	23.88	MCS5
5320	64	14.58	2.242	16.83	23.98	MCS5
5500	100	14.11	2.242	16.35	23.84	MCS5
5600	120	14.08	2.242	16.32	23.91	MCS5
5720	144	13.81	2.242	16.05	23.90	MCS5
5745	149	14.11	2.242	16.35	30.00	MCS5
5785	157	14.60	2.242	16.85	30.00	MCS5
5825	165	14.68	2.242	16.92	30.00	MCS5

802.11n(40 MHz) Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.					
5190	38	13.37	1.114	14.49	23.98	MCS1
5230	46	14.46	1.114	15.58	23.98	MCS1
5270	54	14.20	1.114	15.31	23.98	MCS1
5310	62	12.31	1.114	13.42	23.98	MCS1
5510	102	11.80	1.114	12.92	23.98	MCS1
5590	118	13.77	1.114	14.88	23.98	MCS1
5710	142	14.52	1.114	15.64	23.98	MCS1
5755	151	13.72	1.114	14.83	30.00	MCS1
5795	159	14.21	1.114	15.33	30.00	MCS1

802.11ac(20 MHz) Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.					
5180	36	14.25	2.553	16.80	23.98	MCS6
5200	40	14.24	2.553	16.79	23.98	MCS6
5240	48	14.50	2.553	17.05	23.98	MCS6
5260	52	14.23	2.553	16.78	23.88	MCS6
5300	60	14.30	2.553	16.85	23.91	MCS6
5320	64	14.31	2.553	16.86	23.88	MCS6
5500	100	13.86	2.553	16.42	23.90	MCS6
5600	120	13.88	2.553	16.43	23.88	MCS6
5720	144	13.52	2.553	16.07	23.98	MCS6
5745	149	13.77	2.553	16.33	30.00	MCS6
5785	157	14.28	2.553	16.83	30.00	MCS6
5825	165	14.40	2.553	16.95	30.00	MCS6

802.11ac(40 MHz) Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.					
5190	38	13.32	1.114	14.43	23.98	MCS1
5230	46	14.47	1.114	15.58	23.98	MCS1
5270	54	14.09	1.114	15.20	23.98	MCS1
5310	62	12.21	1.114	13.33	23.98	MCS1
5510	102	11.66	1.114	12.77	23.98	MCS1
5590	118	13.63	1.114	14.74	23.98	MCS1
5710	142	14.41	1.114	15.53	23.98	MCS1
5755	151	13.69	1.114	14.81	30.00	MCS1
5795	159	14.14	1.114	15.26	30.00	MCS1

802.11ac(80 MHz) Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.					
5210	42	6.73	6.573	13.30	23.98	MCS5
5290	58	5.34	6.573	11.91	23.98	MCS5
5530	106	6.28	6.573	12.85	23.98	MCS5
5610	122	7.92	6.573	14.50	23.98	MCS5
5690	138	7.76	6.573	14.34	23.98	MCS5
5775	155	7.43	6.573	14.00	30.00	MCS5

[Ant.2] UNII4

802.11a Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Ant Gain [dBi]	E.I.R.P [dBm]	Limit [dBm]	Worstcase Datarate [Mbps]
Frequency [MHz]	Channel No.							
5845	169	16.25	0.799	17.05	-3.86	13.19	30	18M
5865	173	16.17	0.799	16.97	-3.86	13.11	30	18M
5885	177	17.12	0.799	17.92	-3.86	14.06	30	18M

802.11n(20MHz) Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Ant Gain [dBi]	E.I.R.P [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5845	169	14.69	2.242	16.93	-3.86	13.07	30	MCS5
5865	173	14.65	2.242	16.89	-3.86	13.03	30	MCS5
5885	177	15.55	2.242	17.79	-3.86	13.93	30	MCS5

802.11n(40MHz) Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Ant Gain [dBi]	E.I.R.P [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5835	167	14.36	1.114	15.47	-3.86	11.61	30	MCS1
5875	175	14.14	1.114	15.25	-3.86	11.39	30	MCS1

802.11ac(20MHz) Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Ant Gain [dBi]	E.I.R.P [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5845	169	14.49	2.553	17.04	-3.86	13.18	30	MCS6
5865	173	14.41	2.553	16.97	-3.86	13.11	30	MCS6
5885	177	15.36	2.553	17.91	-3.86	14.05	30	MCS6

802.11ac(40MHz) Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Ant Gain [dBi]	E.I.R.P [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5835	167	14.34	1.114	15.46	-3.86	11.60	30	MCS1
5875	175	14.16	1.114	15.28	-3.86	11.42	30	MCS1

802.11ac(80MHz) Mode		Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Ant Gain [dBi]	E.I.R.P [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5855	171	7.27	6.573	13.84	-3.86	9.98	30	MCS5

[MIMO] UNII1 ~ 3

802.11a Mode		Ant.1 Measured Power [dBm] + Duty Cycle Factor[dB]	Ant.2 Measured Power (dBm) + Duty Cycle Factor[dB]	MIMO Total Power [dBm]	Limit [dBm]	Worstcase Datarate [Mbps]
Frequency [MHz]	Channel No.					
5180	36	17.63	16.93	20.31	23.98	18M
5200	40	17.58	16.96	20.29	23.98	18M
5240	48	17.83	17.20	20.54	23.98	18M
5260	52	17.69	16.92	20.33	23.73	18M
5300	60	17.62	16.93	20.30	23.73	18M
5320	64	17.95	16.97	20.50	23.73	18M
5500	100	17.54	16.47	20.05	23.75	18M
5600	120	17.41	16.41	19.95	23.75	18M
5720	144	17.03	16.12	19.61	23.75	18M
5745	149	17.41	16.54	20.00	30.00	18M
5785	157	17.50	17.00	20.27	30.00	18M
5825	165	16.31	17.06	19.71	30.00	18M

802.11n(20 MHz) Mode		Ant.1 Measured Power [dBm] + Duty Cycle Factor[dB]	Ant.2 Measured Power (dBm) + Duty Cycle Factor[dB]	MIMO Total Power [dBm]	Limit [dBm]	Worstcase MCS INDEX
Frequency [MHz]	Channel No.					
5180	36	17.47	16.79	20.15	23.98	MCS5
5200	40	17.48	16.79	20.16	23.98	MCS5
5240	48	17.69	17.02	20.38	23.98	MCS5
5260	52	17.62	16.74	20.21	23.97	MCS5
5300	60	17.52	16.78	20.18	23.97	MCS5
5320	64	17.94	16.83	20.43	23.97	MCS5
5500	100	17.37	16.35	19.90	23.95	MCS5
5600	120	17.24	16.32	19.82	23.95	MCS5
5720	144	16.89	16.05	19.50	23.95	MCS5
5745	149	17.24	16.35	19.83	30.00	MCS5
5785	157	17.37	16.85	20.13	30.00	MCS5
5825	165	16.46	16.92	19.71	30.00	MCS5

802.11n(40 MHz) Mode		Ant.1 Measured Power [dBm] + Duty Cycle Factor[dB]	Ant.2 Measured Power (dBm) + Duty Cycle Factor[dB]	MIMO Total Power [dBm]	Limit [dBm]	Worstcase MCS INDEX
Frequency [MHz]	Channel No.					
5190	38	14.96	14.49	17.74	23.98	MCS1
5230	46	16.09	15.58	18.85	23.98	MCS1
5270	54	15.95	15.31	18.65	23.98	MCS1
5310	62	14.61	13.42	17.06	23.98	MCS1
5510	102	14.00	12.92	16.50	23.98	MCS1
5590	118	15.77	14.88	18.36	23.98	MCS1
5710	142	16.46	15.64	19.08	23.98	MCS1
5755	151	15.88	14.83	18.40	30.00	MCS1
5795	159	15.89	15.33	18.63	30.00	MCS1

802.11ac(20 MHz) Mode		Ant.1 Measured Power [dBm] + Duty Cycle Factor[dB]	Ant.2 Measured Power (dBm) + Duty Cycle Factor[dB]	MIMO Total Power [dBm]	Limit [dBm]	Worstcase MCS INDEX
Frequency [MHz]	Channel No.					
5180	36	17.49	16.80	20.17	23.98	MCS6
5200	40	17.42	16.79	20.13	23.98	MCS6
5240	48	17.72	17.05	20.41	23.98	MCS6
5260	52	17.51	16.78	20.17	23.97	MCS6
5300	60	17.47	16.85	20.18	23.97	MCS6
5320	64	17.83	16.86	20.38	23.97	MCS6
5500	100	17.29	16.42	19.88	23.96	MCS6
5600	120	17.21	16.43	19.85	23.96	MCS6
5720	144	16.83	16.07	19.48	23.96	MCS6
5745	149	17.25	16.33	19.82	30.00	MCS6
5785	157	17.41	16.83	20.14	30.00	MCS6
5825	165	16.39	16.95	19.69	30.00	MCS6

802.11ac(40 MHz) Mode		Ant.1 Measured Power [dBm] + Duty Cycle Factor[dB]	Ant.2 Measured Power (dBm) + Duty Cycle Factor[dB]	MIMO Total Power [dBm]	Limit [dBm]	Worstcase MCS INDEX
Frequency [MHz]	Channel No.					
5190	38	15.04	14.43	17.76	23.98	MCS1
5230	46	16.08	15.58	18.85	23.98	MCS1
5270	54	15.98	15.20	18.62	23.98	MCS1
5310	62	14.57	13.33	17.00	23.98	MCS1
5510	102	14.02	12.77	16.45	23.98	MCS1
5590	118	15.78	14.74	18.30	23.98	MCS1
5710	142	16.26	15.53	18.92	23.98	MCS1
5755	151	15.78	14.81	18.33	30.00	MCS1
5795	159	15.88	15.26	18.59	30.00	MCS1

802.11ac(80 MHz) Mode		Ant.1 Measured Power [dBm] + Duty Cycle Factor[dB]	Ant.2 Measured Power (dBm) + Duty Cycle Factor[dB]	MIMO Total Power [dBm]	Limit [dBm]	Worstcase MCS INDEX
Frequency [MHz]	Channel No.					
5210	42	14.48	13.30	16.94	23.98	MCS5
5290	58	13.12	11.91	15.57	23.98	MCS5
5530	106	14.07	12.85	16.51	23.98	MCS5
5610	122	15.69	14.50	18.14	23.98	MCS5
5690	138	15.39	14.34	17.91	23.98	MCS5
5775	155	14.85	14.00	17.45	30.00	MCS5

[MIMO] UNII4

802.11a Mode		Ant.1 Measured Power [dBm] + Duty Cycle Factor[dB]	Ant.2 Measured Power [dBm] + Duty Cycle Factor[dB]	MIMO Total Power [dBm]	Ant Gain [dBi]	MIMO Total E.I.R.P [dBm]	Limit [dBm]	Worstcase Datarate [Mbps]
Frequency [MHz]	Channel No.							
5845	169	16.32	17.05	19.71	-3.86	15.85	30	18M
5865	173	16.16	16.97	19.60	-3.86	15.74	30	18M
5885	177	17.08	17.92	20.53	-3.86	16.67	30	18M

802.11n(20MHz) Mode		Ant.1 Measured Power [dBm] + Duty Cycle Factor[dB]	Ant.2 Measured Power [dBm] + Duty Cycle Factor[dB]	MIMO Total Power [dBm]	Ant Gain [dBi]	MIMO Total E.I.R.P [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5845	169	16.29	16.93	19.63	-3.86	15.78	30	MCS5
5865	173	16.15	16.89	19.55	-3.86	15.69	30	MCS5
5885	177	17.03	17.79	20.44	-3.86	16.58	30	MCS5

802.11n(40MHz) Mode		Ant.1 Measured Power [dBm] + Duty Cycle Factor[dB]	Ant.2 Measured Power [dBm] + Duty Cycle Factor[dB]	MIMO Total Power [dBm]	Ant Gain [dBi]	MIMO Total E.I.R.P [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5835	167	15.03	15.47	18.27	-3.86	14.41	30	MCS1
5875	175	14.66	15.25	17.98	-3.86	14.12	30	MCS1

802.11ac(20MHz) Mode		Ant.1 Measured Power [dBm] + Duty Cycle Factor[dB]	Ant.2 Measured Power [dBm] + Duty Cycle Factor[dB]	MIMO Total Power [dBm]	Ant Gain [dBi]	MIMO Total E.I.R.P [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5845	169	16.28	17.04	19.69	-3.86	15.83	30	MCS6
5865	173	16.12	16.97	19.57	-3.86	15.71	30	MCS6
5885	177	17.00	17.91	20.49	-3.86	16.63	30	MCS6

802.11ac(40MHz) Mode		Ant.1 Measured Power [dBm] + Duty Cycle Factor[dB]	Ant.2 Measured Power [dBm] + Duty Cycle Factor[dB]	MIMO Total Power [dBm]	Ant Gain [dBi]	MIMO Total E.I.R.P [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5835	167	15.01	15.46	18.25	-3.86	14.39	30	MCS1
5875	175	14.91	15.28	18.11	-3.86	14.25	30	MCS1

802.11ac(80MHz) Mode		Ant.1 Measured Power [dBm] + Duty Cycle Factor[dB]	Ant.2 Measured Power [dBm] + Duty Cycle Factor[dB]	MIMO Total Power [dBm]	Ant Gain [dBi]	MIMO Total E.I.R.P [dBm]	Limit [dBm]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5855	171	13.98	13.84	16.93	-3.86	13.07	30	MCS5

10.5 POWER SPECTRAL DENSITY

[Ant.1] UNII1 ~ 3

802.11a Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Worstcase Datarate [Mbps]	Limit
Frequency [MHz]	Channel No.					
5180	36	7.151	0.799	7.950	18M	11 dBm/MHz
5200	40	7.091	0.799	7.890	18M	
5240	48	7.157	0.799	7.956	18M	
5260	52	7.257	0.799	8.056	18M	
5300	60	7.110	0.799	7.909	18M	
5320	64	7.216	0.799	8.015	18M	
5500	100	7.143	0.799	7.942	18M	
5600	120	6.982	0.799	7.781	18M	
5720	144	6.575	0.799	7.374	18M	
5745	149	4.478	0.799	5.277	18M	30 dBm/500 kHz
5785	157	4.706	0.799	5.505	18M	
5825	165	3.650	0.799	4.449	18M	

802.11n(20 MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Worstcase MCS Index	Limit
Frequency [MHz]	Channel No.					
5180	36	4.181	2.242	6.423	MCS5	11 dBm/MHz
5200	40	4.143	2.242	6.385	MCS5	
5240	48	4.602	2.242	6.844	MCS5	
5260	52	4.106	2.242	6.348	MCS5	
5300	60	4.106	2.242	6.348	MCS5	
5320	64	4.515	2.242	6.757	MCS5	
5500	100	4.060	2.242	6.302	MCS5	
5600	120	4.442	2.242	6.684	MCS5	
5720	144	3.838	2.242	6.080	MCS5	
5745	149	1.608	2.242	3.850	MCS5	30 dBm/500 kHz
5785	157	1.915	2.242	4.157	MCS5	
5825	165	0.538	2.242	2.780	MCS5	

802.11n(40 MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Worstcase MCS Index	Limit
Frequency [MHz]	Channel No.					
5190	38	1.021	1.114	2.135	MCS1	11 dBm/MHz
5230	46	2.716	1.114	3.830	MCS1	
5270	54	1.887	1.114	3.001	MCS1	
5310	62	0.501	1.114	1.615	MCS1	
5510	102	0.446	1.114	1.560	MCS1	
5590	118	1.808	1.114	2.922	MCS1	
5710	142	2.236	1.114	3.350	MCS1	
5755	151	-0.437	1.114	0.677	MCS1	30 dBm /500 kHz
5795	159	-1.069	1.114	0.045	MCS1	

802.11ac(20 MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Worstcase MCS Index	Limit
Frequency [MHz]	Channel No.					
5180	36	4.112	2.553	6.665	MCS6	11 dBm/MHz
5200	40	3.970	2.553	6.523	MCS6	
5240	48	4.124	2.553	6.677	MCS6	
5260	52	4.389	2.553	6.942	MCS6	
5300	60	3.949	2.553	6.502	MCS6	
5320	64	4.420	2.553	6.973	MCS6	
5500	100	3.833	2.553	6.386	MCS6	
5600	120	3.884	2.553	6.437	MCS6	
5720	144	3.072	2.553	5.625	MCS6	
5745	149	1.567	2.553	4.120	MCS6	30 dBm/500 kHz
5785	157	1.712	2.553	4.265	MCS6	
5825	165	0.429	2.553	2.982	MCS6	

802.11ac(40 MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Worstcase MCS Index	Limit
Frequency [MHz]	Channel No.					
5190	38	1.208	1.114	2.322	MCS1	11 dBm/MHz
5230	46	2.462	1.114	3.576	MCS1	
5270	54	2.275	1.114	3.389	MCS1	
5310	62	0.874	1.114	1.988	MCS1	
5510	102	0.309	1.114	1.423	MCS1	
5590	118	2.041	1.114	3.155	MCS1	
5710	142	2.407	1.114	3.521	MCS1	
5755	151	-0.919	1.114	0.195	MCS1	30 dBm/500 kHz
5795	159	-0.408	1.114	0.706	MCS1	

802.11ac(80 MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Worstcase MCS Index	Limit
Frequency [MHz]	Channel No.					
5210	42	-7.620	6.573	-1.047	MCS5	11 dBm/MHz
5290	58	-8.876	6.573	-2.303	MCS5	
5530	106	-8.682	6.573	-2.109	MCS5	
5610	122	-7.379	6.573	-0.806	MCS5	
5690	138	-6.946	6.573	-0.373	MCS5	
5775	155	-9.769	6.573	-3.196	MCS5	30 dBm/500 kHz

[Ant.1] UNII4

802.11a Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Ant Gain [dBi]	E.I.R.PSD [dBm]	Limit [dBm/MHz]	Worstcase Datarate [Mbps]
Frequency [MHz]	Channel No.							
5845	169	5.888	0.799	6.687	-3.86	2.827	14	18M
5865	173	5.397	0.799	6.196	-3.86	2.336	14	18M
5885	177	6.236	0.799	7.035	-3.86	3.175	14	18M

802.11n(20MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Ant Gain [dBi]	E.I.R.PSD [dBm]	Limit [dBm/MHz]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5845	169	2.573	2.242	4.815	-3.86	0.955	14	MCS5
5865	173	2.714	2.242	4.956	-3.86	1.096	14	MCS5
5885	177	3.656	2.242	5.898	-3.86	2.038	14	MCS5

802.11n(40MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Ant Gain [dBi]	E.I.R.PSD [dBm]	Limit [dBm/MHz]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5835	167	0.135	1.114	1.249	-3.86	-2.611	14	MCS1
5875	175	0.102	1.114	1.216	-3.86	-2.644	14	MCS1

802.11ac(20MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Ant Gain [dBi]	E.I.R.PSD [dBm]	Limit [dBm/MHz]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5845	169	2.268	2.553	4.821	-3.86	0.961	14	MCS6
5865	173	2.388	2.553	4.941	-3.86	1.081	14	MCS6
5885	177	3.246	2.553	5.799	-3.86	1.939	14	MCS6

802.11ac(40MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Ant Gain [dBi]	E.I.R.PSD [dBm]	Limit [dBm/MHz]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5835	167	0.160	1.114	1.274	-3.86	-2.586	14	MCS1
5875	175	0.181	1.114	1.295	-3.86	-2.565	14	MCS1

802.11ac(80MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Ant Gain [dBi]	E.I.R.PSD [dBm]	Limit [dBm/MHz]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5855	171	-9.529	6.573	-2.956	-3.86	-6.816	14	MCS5

[Ant.2] UNII1 ~ 3

802.11a Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Worstcase Datarate (Mbps)	Limit
Frequency [MHz]	Channel No.					
5180	36	6.332	0.799	7.131	6M	11 dBm/MHz
5200	40	6.323	0.799	7.122	6M	
5240	48	6.570	0.799	7.369	6M	
5260	52	6.356	0.799	7.155	6M	
5300	60	6.352	0.799	7.151	6M	
5320	64	6.321	0.799	7.120	6M	
5500	100	5.996	0.799	6.795	6M	
5600	120	6.441	0.799	7.240	6M	
5720	144	5.627	0.799	6.426	6M	
5745	149	3.585	0.799	4.384	6M	30 dBm/500 kHz
5785	157	3.740	0.799	4.539	6M	
5825	165	3.793	0.799	4.592	6M	

802.11n(20 MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Worstcase MCS Index	Limit
Frequency [MHz]	Channel No.					
5180	36	4.166	2.242	6.408	MCS0	11 dBm/MHz
5200	40	4.246	2.242	6.488	MCS0	
5240	48	4.061	2.242	6.303	MCS0	
5260	52	3.806	2.242	6.048	MCS0	
5300	60	3.865	2.242	6.107	MCS0	
5320	64	3.500	2.242	5.742	MCS0	
5500	100	3.097	2.242	5.339	MCS0	
5600	120	3.161	2.242	5.403	MCS0	
5720	144	2.936	2.242	5.178	MCS0	
5745	149	0.419	2.242	2.661	MCS0	30 dBm/500 kHz
5785	157	1.380	2.242	3.622	MCS0	
5825	165	0.970	2.242	3.212	MCS0	

802.11n(40 MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Worstcase MCS Index	Limit
Frequency [MHz]	Channel No.					
5190	38	0.716	1.114	1.830	MCS0	11 dBm/MHz
5230	46	1.715	1.114	2.829	MCS0	
5270	54	1.318	1.114	2.432	MCS0	
5310	62	-0.257	1.114	0.857	MCS0	
5510	102	-0.735	1.114	0.379	MCS0	
5590	118	0.826	1.114	1.940	MCS0	
5710	142	1.899	1.114	3.013	MCS5	
5755	151	-1.854	1.114	-0.740	MCS0	30 dBm /500 kHz
5795	159	-1.520	1.114	-0.406	MCS0	

802.11ac(20 MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Worstcase MCS Index	Limit
Frequency [MHz]	Channel No.					
5180	36	3.573	2.553	6.126	MCS0	11 dBm/MHz
5200	40	3.166	2.553	5.719	MCS0	
5240	48	3.459	2.553	6.012	MCS0	
5260	52	3.622	2.553	6.175	MCS0	
5300	60	3.504	2.553	6.057	MCS0	
5320	64	3.381	2.553	5.934	MCS0	
5500	100	2.803	2.553	5.356	MCS0	
5600	120	2.962	2.553	5.515	MCS0	
5720	144	2.515	2.553	5.068	MCS0	
5745	149	0.083	2.553	2.636	MCS0	30 dBm/500 kHz
5785	157	0.982	2.553	3.535	MCS0	
5825	165	1.077	2.553	3.630	MCS0	

802.11ac(40 MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Worstcase MCS Index	Limit
Frequency [MHz]	Channel No.					
5190	38	0.897	1.114	2.011	MCS0	11 dBm/MHz
5230	46	1.579	1.114	2.693	MCS0	
5270	54	1.264	1.114	2.378	MCS0	
5310	62	-0.481	1.114	0.633	MCS0	
5510	102	-0.521	1.114	0.593	MCS0	
5590	118	0.717	1.114	1.831	MCS0	
5710	142	1.517	1.114	2.631	MCS0	
5755	151	-1.408	1.114	-0.294	MCS0	30 dBm/500 kHz
5795	159	-0.815	1.114	0.299	MCS0	

802.11ac(80 MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Worstcase MCS Index	Limit
Frequency [MHz]	Channel No.					
5210	42	-8.903	6.573	-2.330	MCS0	11 dBm/MHz
5290	58	-9.937	6.573	-3.364	MCS0	
5530	106	-9.626	6.573	-3.053	MCS0	
5610	122	-8.251	6.573	-1.678	MCS0	
5690	138	-8.030	6.573	-1.457	MCS0	
5775	155	-10.620	6.573	-4.047	MCS0	30 dBm/500 kHz

[Ant.2] UNII4

802.11a Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Ant Gain [dBi]	E.I.R.PSD [dBm]	Limit [dBm/MHz]	Worstcase Datarate [Mbps]
Frequency [MHz]	Channel No.							
5845	169	6.344	0.799	7.143	-3.86	3.283	14	18M
5865	173	6.612	0.799	7.411	-3.86	3.551	14	18M
5885	177	7.329	0.799	8.128	-3.86	4.268	14	18M

802.11n(20MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Ant Gain [dBi]	E.I.R.PSD [dBm]	Limit [dBm/MHz]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5845	169	3.448	2.242	5.690	-3.86	1.830	14	MCS5
5865	173	3.466	2.242	5.708	-3.86	1.848	14	MCS5
5885	177	4.494	2.242	6.736	-3.86	2.876	14	MCS5

802.11n(40MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Ant Gain [dBi]	E.I.R.PSD [dBm]	Limit [dBm/MHz]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5835	167	1.431	1.114	2.545	-3.86	-1.315	14	MCS1
5875	175	1.192	1.114	2.306	-3.86	-1.554	14	MCS1

802.11ac(20MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Ant Gain [dBi]	E.I.R.PSD [dBm]	Limit [dBm/MHz]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5845	169	3.729	2.553	6.282	-3.86	2.422	14	MCS6
5865	173	3.126	2.553	5.679	-3.86	1.819	14	MCS6
5885	177	4.245	2.553	6.798	-3.86	2.938	14	MCS6

802.11ac(40MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Ant Gain [dBi]	E.I.R.PSD [dBm]	Limit [dBm/MHz]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5835	167	1.234	1.114	2.348	-3.86	-1.512	14	MCS1
5875	175	1.111	1.114	2.225	-3.86	-1.635	14	MCS1

802.11ac(80MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Ant Gain [dBi]	E.I.R.PSD [dBm]	Limit [dBm/MHz]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5855	171	-8.819	6.573	-2.246	-3.86	-6.106	14	MCS5

[MIMO] UNII1 ~ 3

802.11a Mode		ANT.1 Measured PSD[dBm] + Duty Cycle Factor [dB]	ANT.2 Measured PSD[dBm] + Duty Cycle Factor [dB]	MIMO Total PSD [dBm]	Worstcase Datarate [Mbps]	Limit
Frequency [MHz]	Channel No.					
5180	36	7.950	7.131	10.570	18M	11 dBm/MHz
5200	40	7.890	7.122	10.533	18M	
5240	48	7.956	7.369	10.683	18M	
5260	52	8.056	7.155	10.639	18M	
5300	60	7.909	7.151	10.557	18M	
5320	64	8.015	7.120	10.601	18M	
5500	100	7.942	6.795	10.417	18M	
5600	120	7.781	7.240	10.529	18M	
5720	144	7.374	6.426	9.936	18M	
5745	149	5.277	4.384	7.864	18M	30 dBm/500 kHz
5785	157	5.505	4.539	8.059	18M	
5825	165	4.449	4.592	7.532	18M	

802.11n(20 MHz) Mode		ANT.1 Measured PSD[dBm] + Duty Cycle Factor [dB]	ANT.2 Measured PSD[dBm] + Duty Cycle Factor [dB]	MIMO Total PSD [dBm]	Worstcase MCS Index	Limit
Frequency [MHz]	Channel No.					
5180	36	6.423	6.408	9.426	MCS5	11 dBm/MHz
5200	40	6.385	6.488	9.447	MCS5	
5240	48	6.844	6.303	9.592	MCS5	
5260	52	6.348	6.048	9.211	MCS5	
5300	60	6.348	6.107	9.239	MCS5	
5320	64	6.757	5.742	9.289	MCS5	
5500	100	6.302	5.339	8.857	MCS5	
5600	120	6.684	5.403	9.101	MCS5	
5720	144	6.080	5.178	8.663	MCS5	
5745	149	3.850	2.661	6.306	MCS5	30 dBm/500 kHz
5785	157	4.157	3.622	6.908	MCS5	
5825	165	2.780	3.212	6.012	MCS5	

802.11n(40 MHz) Mode		ANT.1 Measured PSD[dBm] + Duty Cycle Factor [dB]	ANT.2 Measured PSD[dBm] + Duty Cycle Factor [dB]	MIMO Total PSD [dBm]	Worstcase MCS Index	Limit
Frequency [MHz]	Channel No.					
5190	38	2.135	1.830	4.995	MCS1	11 dBm/MHz
5230	46	3.830	2.829	6.368	MCS1	
5270	54	3.001	2.432	5.736	MCS1	
5310	62	1.615	0.857	4.262	MCS1	
5510	102	1.560	0.379	4.019	MCS1	
5590	118	2.922	1.940	5.469	MCS1	
5710	142	3.350	3.013	6.195	MCS1	
5755	151	0.677	-0.740	3.036	MCS1	30 dBm/500 kHz
5795	159	0.045	-0.406	2.835	MCS1	

802.11ac(20 MHz) Mode		ANT.1 Measured PSD[dBm] + Duty Cycle Factor [dB]	ANT.2 Measured PSD[dBm] + Duty Cycle Factor [dB]	MIMO Total PSD [dBm]	Worstcase MCS Index	Limit
Frequency [MHz]	Channel No.					
5180	36	6.665	6.126	9.414	MCS6	11 dBm/MHz
5200	40	6.523	5.719	9.150	MCS6	
5240	48	6.677	6.012	9.367	MCS6	
5260	52	6.942	6.175	9.585	MCS6	
5300	60	6.502	6.057	9.295	MCS6	
5320	64	6.973	5.934	9.495	MCS6	
5500	100	6.386	5.356	8.911	MCS6	
5600	120	6.437	5.515	9.010	MCS6	
5720	144	5.625	5.068	8.365	MCS6	
5745	149	4.120	2.636	6.451	MCS6	30 dBm/500 kHz
5785	157	4.265	3.535	6.925	MCS6	
5825	165	2.982	3.630	6.328	MCS6	

802.11ac(40 MHz) Mode		ANT.1 Measured PSD[dBm] + Duty Cycle Factor [dB]	ANT.2 Measured PSD[dBm] + Duty Cycle Factor [dB]	MIMO Total PSD [dBm]	Worstcase MCS Index	Limit
Frequency [MHz]	Channel No.					
5190	38	2.322	2.011	5.179	MCS1	11 dBm/MHz
5230	46	3.576	2.693	6.167	MCS1	
5270	54	3.389	2.378	5.923	MCS1	
5310	62	1.988	0.633	4.373	MCS1	
5510	102	1.423	0.593	4.038	MCS1	
5590	118	3.155	1.831	5.553	MCS1	
5710	142	3.521	2.631	6.109	MCS1	
5755	151	0.195	-0.294	2.967	MCS1	30 dBm/500 kHz
5795	159	0.706	0.299	3.517	MCS1	

802.11ac(80 MHz) Mode		ANT.1 Measured PSD[dBm] + Duty Cycle Factor [dB]	ANT.2 Measured PSD[dBm] + Duty Cycle Factor [dB]	MIMO Total PSD [dBm]	Worstcase MCS Index	Limit
Frequency [MHz]	Channel No.					
5210	42	-1.047	-2.330	1.369	MCS5	11 dBm/MHz
5290	58	-2.303	-3.364	0.209	MCS5	
5530	106	-2.109	-3.053	0.454	MCS5	
5610	122	-0.806	-1.678	1.790	MCS5	
5690	138	-0.373	-1.457	2.129	MCS5	
5775	155	-3.196	-4.047	-0.591	MCS5	30 dBm/500 kHz

[MIMO] UNII4

802.11a Mode		ANT.1 Measured PSD[dBm] + Duty Cycle Factor[dB]	ANT.2 Measured PSD[dBm] + Duty Cycle Factor[dB]	MIMO Total PSD [dBm]	Ant Gain [dBi]	MIMO Total E.I.R.PSD [dBm]	Limit [dBm/MHz]	Worstcase Datarate [Mbps]
Frequency [MHz]	Channel No.							
5845	169	6.687	7.143	9.931	-3.86	6.071	14	18M
5865	173	6.196	7.411	9.856	-3.86	5.996	14	18M
5885	177	7.035	8.128	10.626	-3.86	6.766	14	18M

802.11n(20MHz) Mode		ANT.1 Measured PSD[dBm] + Duty Cycle Factor[dB]	ANT.2 Measured PSD[dBm] + Duty Cycle Factor[dB]	MIMO Total PSD [dBm]	Ant Gain [dBi]	MIMO Total E.I.R.PSD [dBm]	Limit [dBm/MHz]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5845	169	4.815	5.690	8.285	-3.86	4.425	14	MCS5
5865	173	4.956	5.708	8.358	-3.86	4.498	14	MCS5
5885	177	5.898	6.736	9.347	-3.86	5.487	14	MCS5

802.11n(40MHz) Mode		ANT.1 Measured PSD[dBm] + Duty Cycle Factor[dB]	ANT.2 Measured PSD[dBm] + Duty Cycle Factor[dB]	MIMO Total PSD [dBm]	Ant Gain [dBi]	MIMO Total E.I.R.PSD [dBm]	Limit [dBm/MHz]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5865	173	1.249	2.545	4.955	-3.86	1.095	14	MCS1
5885	177	1.216	2.306	4.805	-3.86	0.945	14	MCS1

802.11ac(20MHz) Mode		ANT.1 Measured PSD[dBm] + Duty Cycle Factor[dB]	ANT.2 Measured PSD[dBm] + Duty Cycle Factor[dB]	MIMO Total PSD [dBm]	Ant Gain [dBi]	MIMO Total E.I.R.PSD [dBm]	Limit [dBm/MHz]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5845	169	4.821	6.282	8.623	-3.86	4.763	14	MCS6
5865	173	4.941	5.679	8.336	-3.86	4.476	14	MCS6
5885	177	5.799	6.798	9.337	-3.86	5.477	14	MCS6

802.11ac(40MHz) Mode		ANT.1 Measured PSD[dBm] + Duty Cycle Factor[dB]	ANT.2 Measured PSD[dBm] + Duty Cycle Factor[dB]	MIMO Total PSD [dBm]	Ant Gain [dBi]	MIMO Total E.I.R.PSD [dBm]	Limit [dBm/MHz]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5865	173	1.274	2.348	4.854	-3.86	0.994	14	MCS1
5885	177	1.295	2.225	4.795	-3.86	0.935	14	MCS1

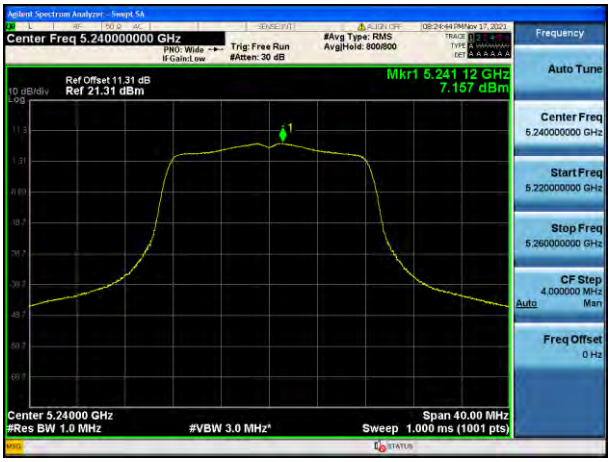
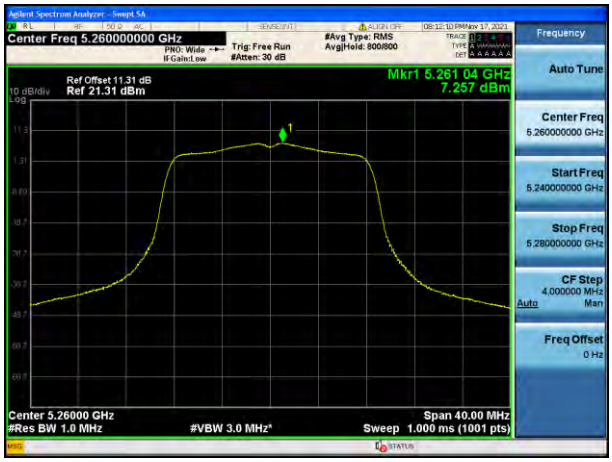
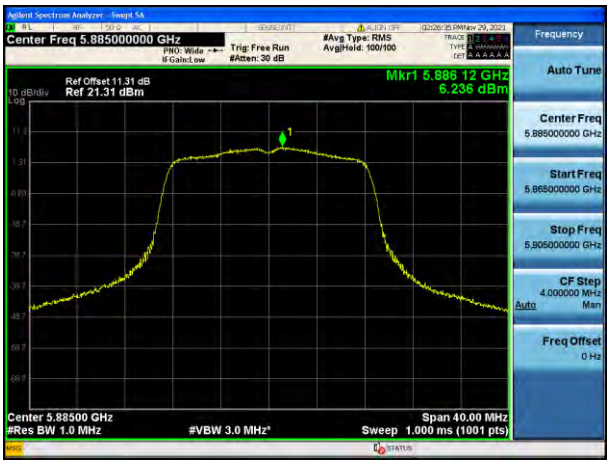
802.11ac(80MHz) Mode		ANT.1 Measured PSD[dBm] + Duty Cycle Factor [dB]	ANT.2 Measured PSD[dBm] + Duty Cycle Factor [dB]	MIMO Total PSD [dBm]	Ant Gain [dBi]	MIMO Total E.I.R.PSD [dBm/MHz]	Limit [dBm/MHz]	Worstcase MCS Index
Frequency [MHz]	Channel No.							
5855	171	-2.956	-2.246	0.423	-3.86	-3.437	14	MCS5

[Ant.1]

▣ Test Plots(802.11a)

Note:

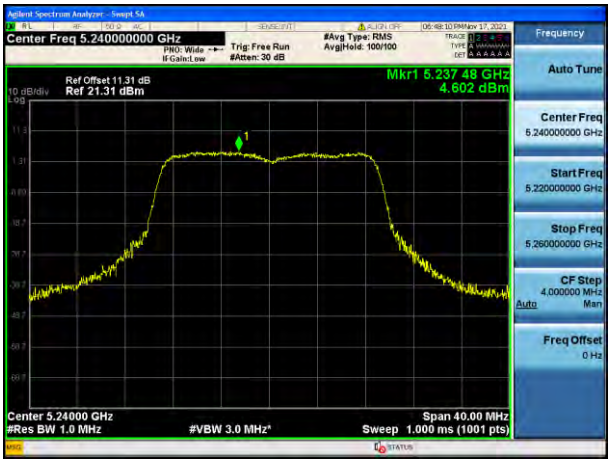
In order to simplify the report, attached plots were only channel of highest power.

UNII 1 (Ch. 48)	UNII 2A (Ch. 52)
	
UNII 2C (Ch. 100)	**UNII 3 (Ch. 157)**
	
UNII 4 (Ch. 177)	
	

▣ Test Plots(802.11n(HT20))

Note:

In order to simplify the report, attached plots were only channel of highest power.

UNII 1 (Ch. 48)	UNII 2A (Ch. 64)
	
UNII 2C (Ch. 120)	**UNII 3 (Ch. 157)**
	
UNII 4 (Ch. 177)	
	

▣ Test Plots(802.11n(HT40))

Note:

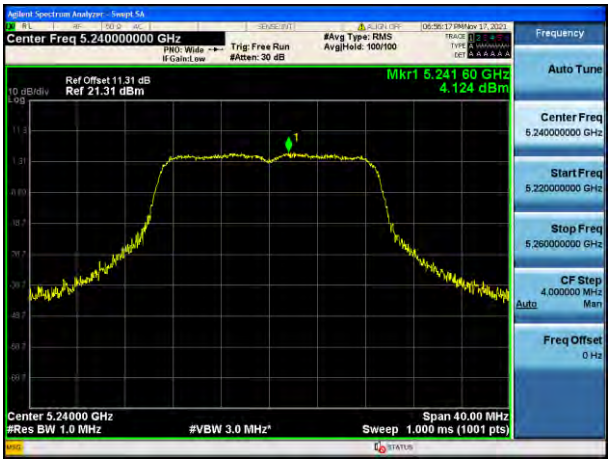
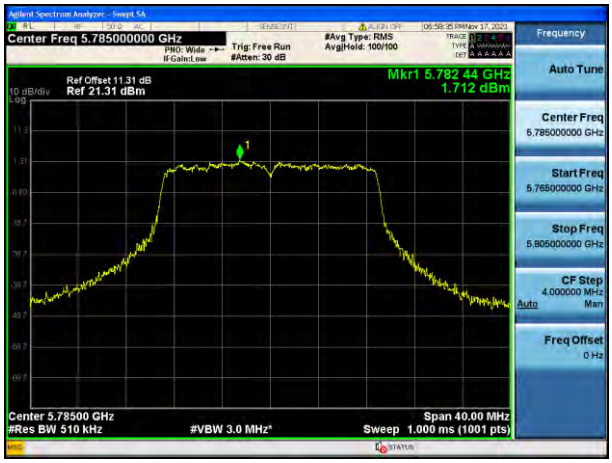
In order to simplify the report, attached plots were only channel of highest power.

UNII 1 (Ch. 46)	UNII 2A (Ch. 54)
	
UNII 2C (Ch. 142)	**UNII 3 (Ch. 151)**
	
UNII 4 (Ch. 167)	
	

▣ Test Plots(802.11ac(VHT20))

Note:

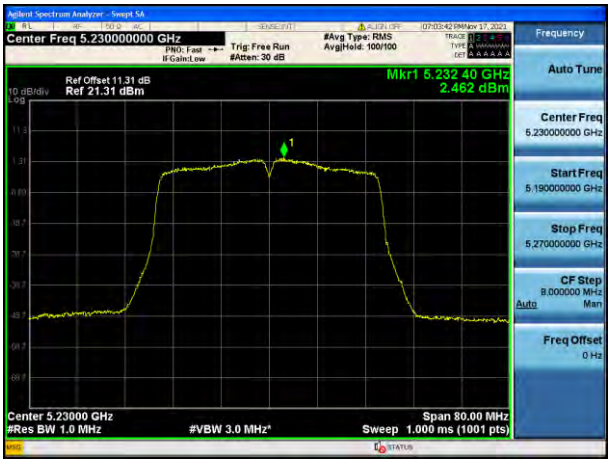
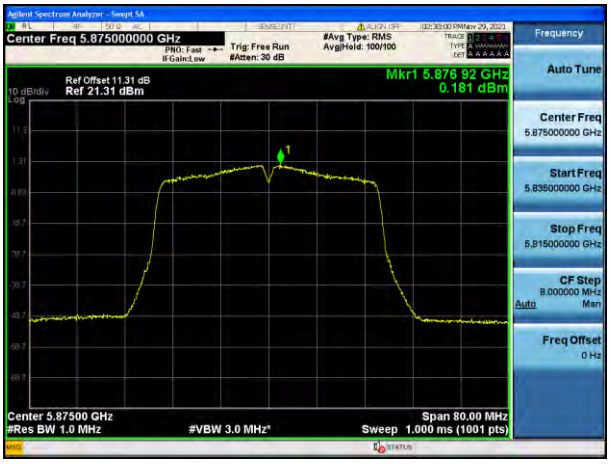
In order to simplify the report, attached plots were only channel of highest power.

UNII 1 (Ch. 48)	UNII 2A (Ch. 64)
	
UNII 2C (Ch. 120)	**UNII 3 (Ch. 157)**
	
UNII 4 (Ch. 177)	
	

▣ Test Plots(802.11ac(VHT40))

Note:

In order to simplify the report, attached plots were only channel of highest power.

UNII 1 (Ch. 46)	UNII 2A (Ch. 54)
	
UNII 2C (Ch. 142)	**UNII 3 (Ch. 159)**
	
UNII 4 (Ch. 175)	
	

▣ Test Plots(802.11ac(VHT80))

Note:

In order to simplify the report, attached plots were only channel of highest power.

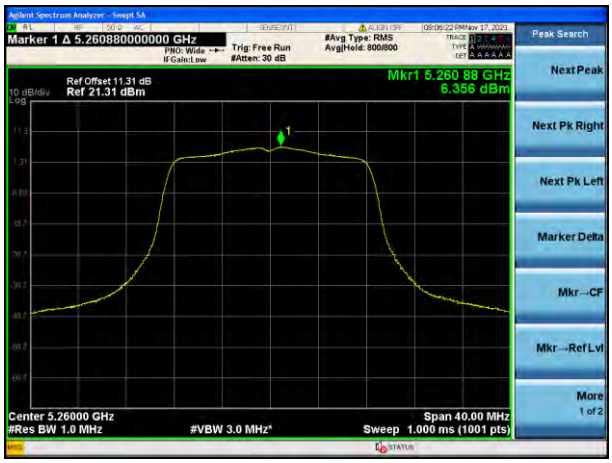
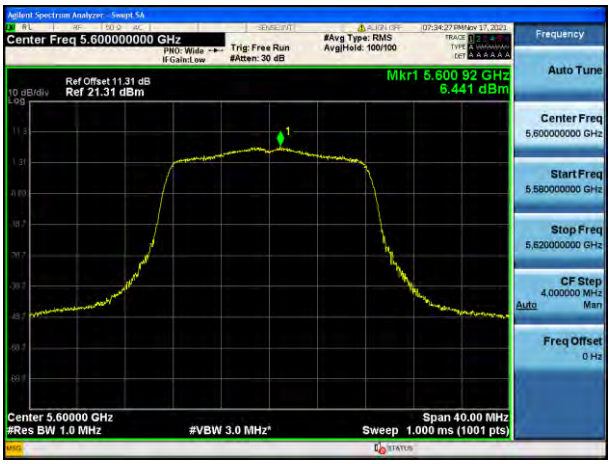
UNII 1 (Ch. 42)	UNII 2A (Ch. 58)
	
UNII 2C (Ch. 138)	**UNII 3 (Ch. 155)**
	
UNII 4 (Ch. 171)	
	

[Ant.2]

▣ Test Plots(802.11a)

Note:

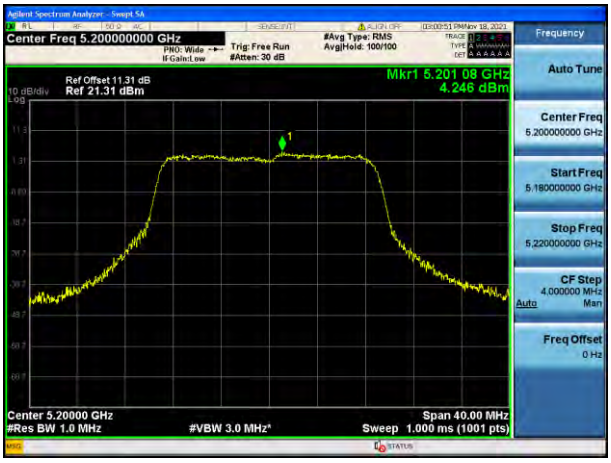
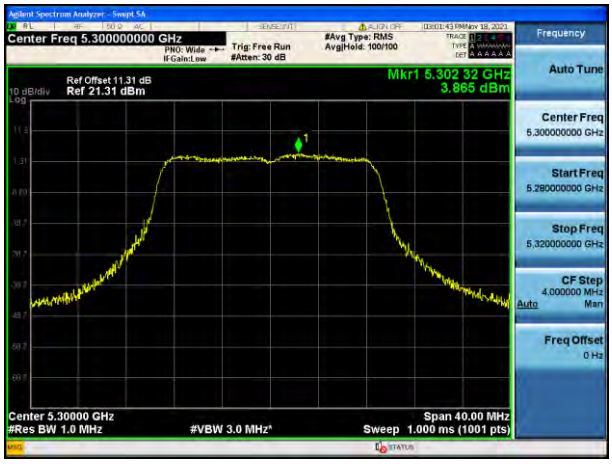
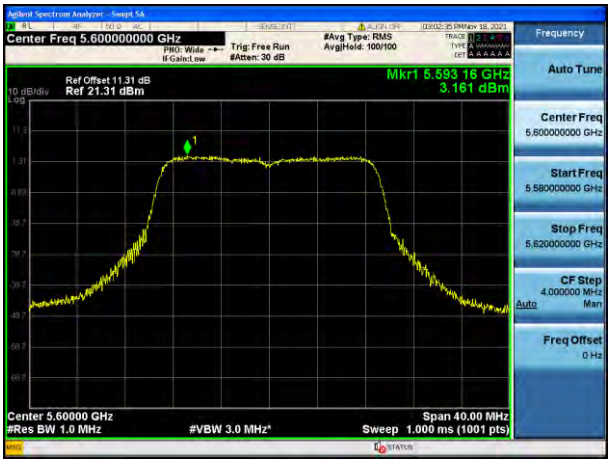
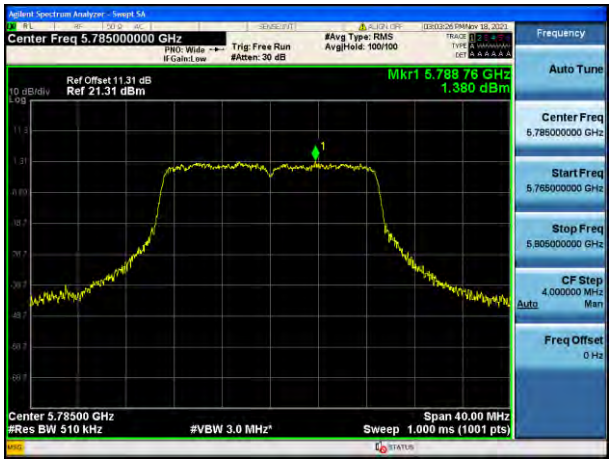
In order to simplify the report, attached plots were only channel of highest power.

UNII 1 (Ch. 48)	UNII 2A (Ch. 52)
	
UNII 2C (Ch. 120)	**UNII 3 (Ch. 165)**
	
UNII 4 (Ch. 177)	
	

▣ Test Plots(802.11n(HT20))

Note:

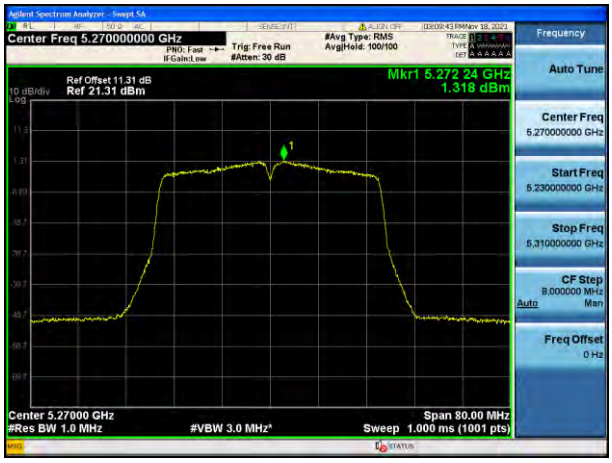
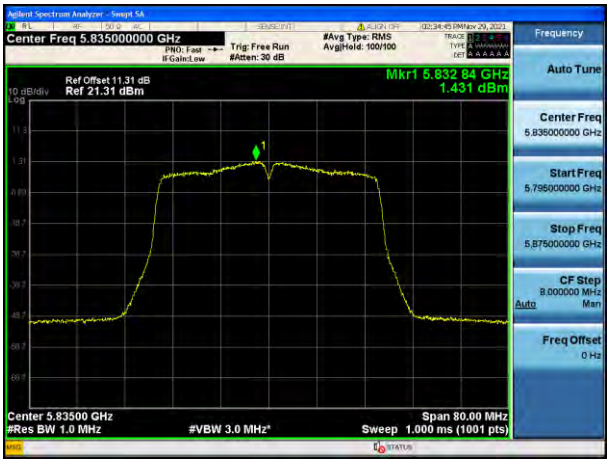
In order to simplify the report, attached plots were only channel of highest power.

UNII 1 (Ch. 40)	UNII 2A (Ch. 60)
	
UNII 2C (Ch. 120)	**UNII 3 (Ch. 157)**
	
UNII 4 (Ch. 177)	
	

▣ Test Plots(802.11n(HT40))

Note:

In order to simplify the report, attached plots were only channel of highest power.

UNII 1 (Ch. 46)	UNII 2A (Ch. 54)
	
UNII 2C (Ch. 142)	**UNII 3 (Ch. 159)**
	
UNII 4 (Ch. 167)	
	

▣ Test Plots(802.11ac(VHT20))

Note:

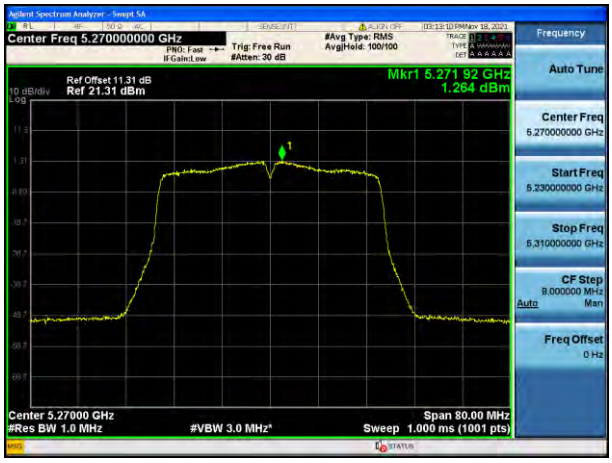
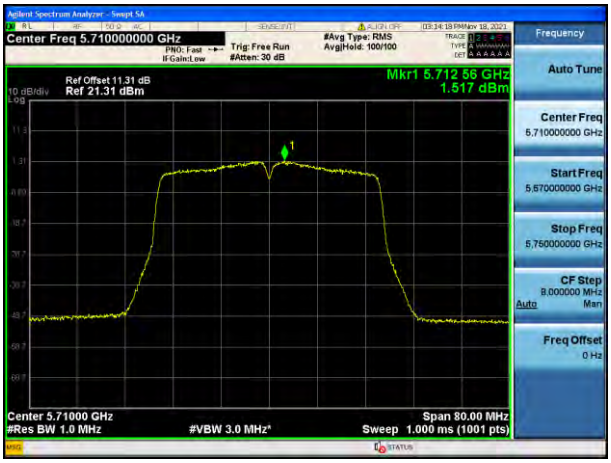
In order to simplify the report, attached plots were only channel of highest power.

UNII 1 (Ch. 36)	UNII 2A (Ch. 52)
	
UNII 2C (Ch. 120)	**UNII 3 (Ch. 165)**
	
UNII 4 (Ch. 177)	
	

▣ Test Plots(802.11ac(VHT40))

Note:

In order to simplify the report, attached plots were only channel of highest power.

UNII 1 (Ch. 46)	UNII 2A (Ch. 54)
	
UNII 2C (Ch. 142)	**UNII 3 (Ch. 159)**
	
UNII 4 (Ch. 167)	
	

▣ Test Plots(802.11ac(VHT80))

Note:

In order to simplify the report, attached plots were only channel of highest power.

UNII 1 (Ch. 42)	UNII 2A (Ch. 58)
	
UNII 2C (Ch. 138)	**UNII 3 (Ch. 155)**
	
UNII 4 (Ch. 171)	
	

10.6 STRADDLE CHANNEL

10.6.1 26 dB Bandwidth

[U-NII 2C & 3]

[Ant.1]

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	26 dB Bandwidth [MHz]
802.11a	UNII 2C	5720	144	5710.68	14.32
802.11n(HT20)				5709.28	15.72
802.11ac(VHT20)				5709.12	15.88
802.11a	UNII 3	5720	144	5729.20	4.20
802.11n(HT20)				5730.76	5.76
802.11ac(VHT20)				5731.00	6.00

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	26 dB Bandwidth [MHz]
802.11n(HT40)	UNII 2C	5710	142	5690.56	34.44
802.11ac(VHT40)				5690.56	34.44
802.11n(HT40)	UNII 3	5710	142	5729.36	4.36
802.11ac(VHT40)				5729.28	4.28

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	26 dB Bandwidth [MHz]
802.11ac(VHT80)	UNII 2C	5690	138	5647.12	77.88
	UNII 3	5690	138	5733.52	8.52

Note:

[UNII 2C] 26 dB Bandwidth = 5 725 MHz - Measured Frequency[MHz]

[UNII 3C] 26 dB Bandwidth = Measured Frequency[MHz] – 5 725 MHz

[Ant.2]

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	26 dB Bandwidth [MHz]
802.11a	UNII 2C	5720	144	5710.88	14.12
802.11n(HT20)				5709.40	15.60
802.11ac(VHT20)				5709.24	15.76
802.11a	UNII 3	5720	144	5729.04	4.04
802.11n(HT20)				5730.76	5.76
802.11ac(VHT20)				5730.76	5.76

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	26 dB Bandwidth [MHz]
802.11n(HT40)	UNII 2C	5710	142	5690.32	34.68
802.11ac(VHT40)				5690.56	34.44
802.11n(HT40)	UNII 3	5710	142	5729.52	4.52
802.11ac(VHT40)				5729.60	4.60

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	26 dB Bandwidth [MHz]
802.11ac(VHT80)	UNII 2C	5690	138	5645.84	79.16
	UNII 3	5690	138	5733.68	8.68

Note:

[UNII 2C] 26 dB Bandwidth = 5 725 MHz **-** Measured Frequency[MHz]

[UNII 3C] 26 dB Bandwidth = Measured Frequency[MHz] – 5 725 MHz

[Ant.1]

▣ Test Plots (26 dB Bandwidth)

802.11a UNII Band	802.11n(HT20) UNII Band
	

802.11ac(VHT20) UNII Band


▣ Test Plots (26 dB Bandwidth)

802.11n(HT40) UNII Band	802.11ac(VHT40) UNII Band
	

802.11ac(VHT80) UNII Band


[Ant.2]

▣ Test Plots (26 dB Bandwidth)

802.11a UNII Band	802.11n(HT20) UNII Band
	

802.11ac(VHT20) UNII Band


▣ Test Plots (26 dB Bandwidth)

802.11n(HT40) UNII Band	802.11ac(VHT40) UNII Band
	

802.11ac(VHT80) UNII Band


10.6.2 6 dB Bandwidth

[Ant.1]

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	6 dB Bandwidth [MHz]	Limit [MHz]
802.11a	UNII 3	5720	144	5727.60	2.60	> 0.5
802.11n(HT20)				5728.88	3.88	> 0.5
802.11ac(VHT20)				5728.84	3.84	> 0.5

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	6 dB Bandwidth [MHz]	Limit [MHz]
802.11n(HT40)	UNII 3	5710	142	5727.60	2.60	> 0.5
802.11ac(VHT40)				5727.60	2.60	> 0.5

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	6 dB Bandwidth [MHz]	Limit [MHz]
802.11ac(VHT80)	UNII 3	5690	138	5728.40	3.40	> 0.5

Note:

6 dB Bandwidth = Measured Frequency[MHz] – 5 725MHz

[Ant.2]

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	6 dB Bandwidth [MHz]	Limit [MHz]
802.11a	UNII 3	5720	144	5727.56	2.56	> 0.5
802.11n(HT20)				5728.88	3.88	> 0.5
802.11ac(VHT20)				5728.88	3.88	> 0.5

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	6 dB Bandwidth [MHz]	Limit [MHz]
802.11n(HT40)	UNII 3	5710	142	5727.60	2.60	> 0.5
802.11ac(VHT40)				5727.60	2.60	> 0.5

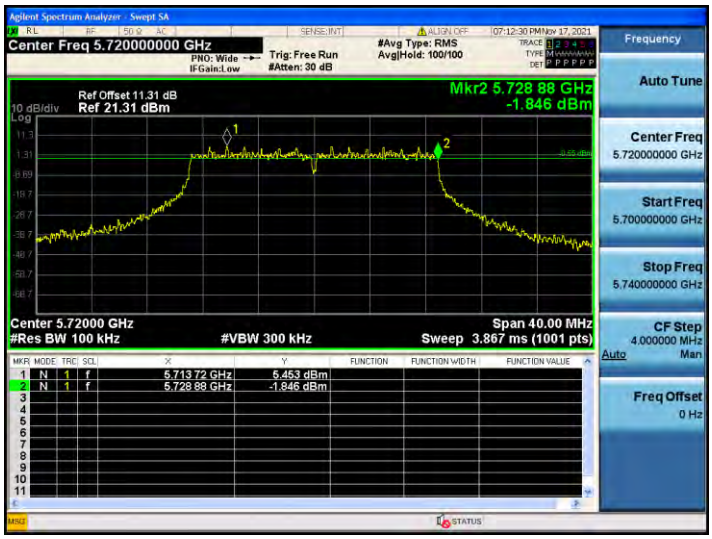
Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	6 dB Bandwidth [MHz]	Limit [MHz]
802.11ac(VHT80)	UNII 3	5690	138	5727.92	2.92	> 0.5

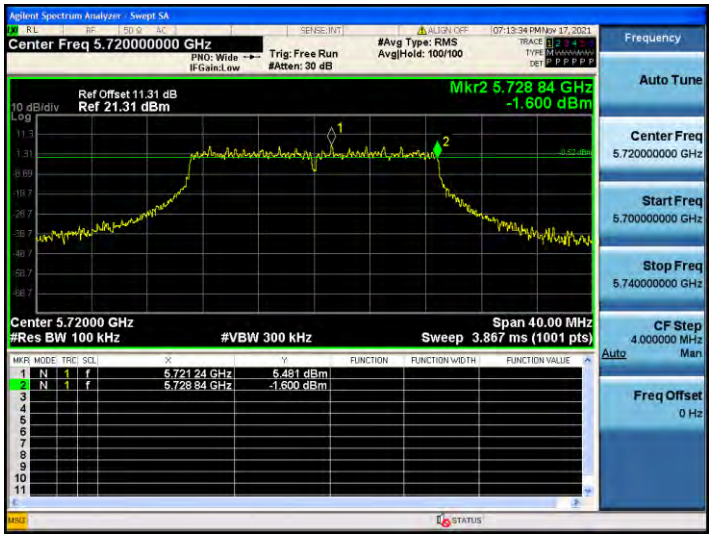
Note:

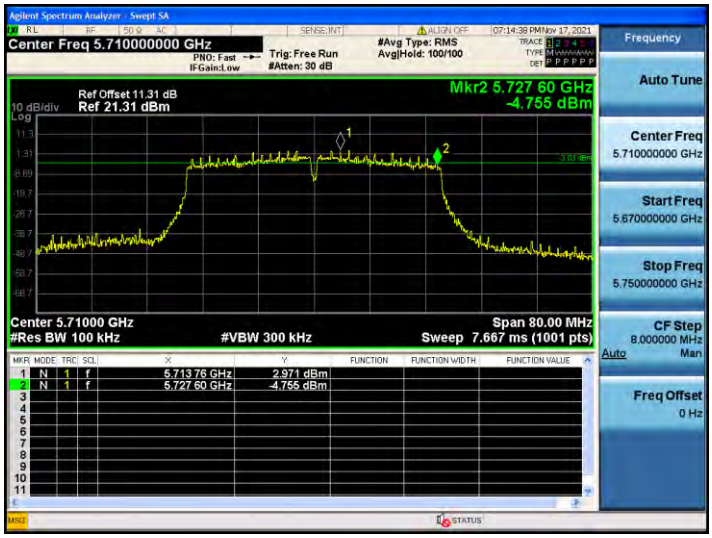
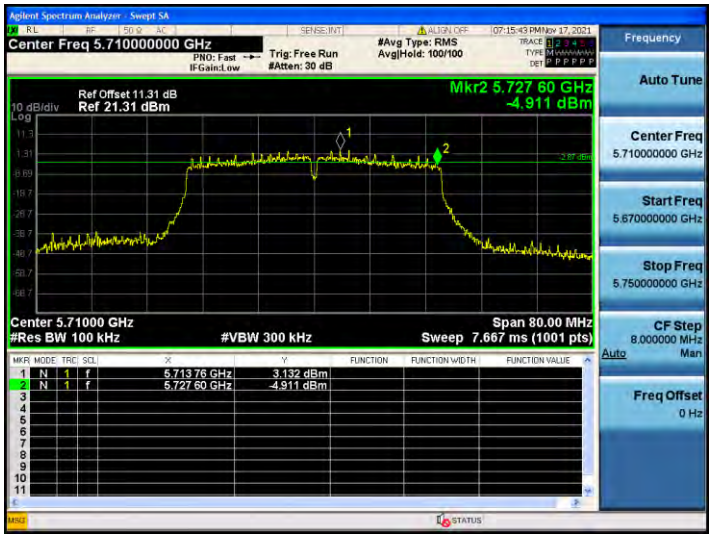
6 dB Bandwidth = Measured Frequency[MHz] – 5725MHz

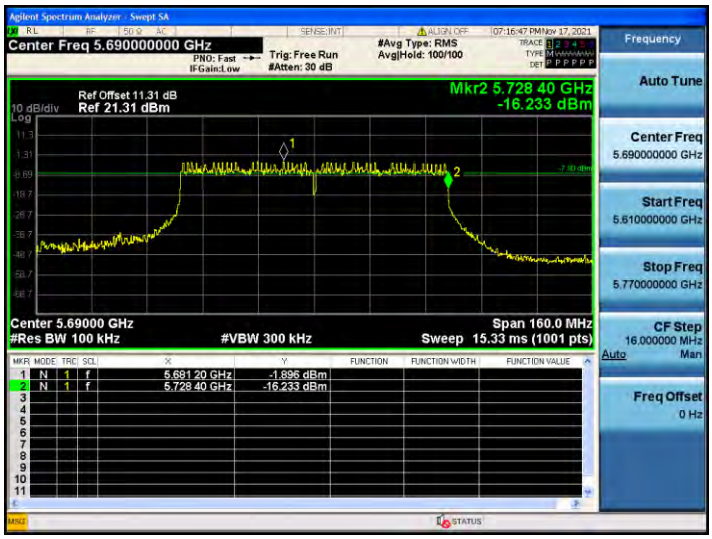
[Ant.1]

▣ Test Plots(UNII 3 Band 6 dB Bandwidth)

802.11a CH.144	802.11n_HT20 CH.144
	

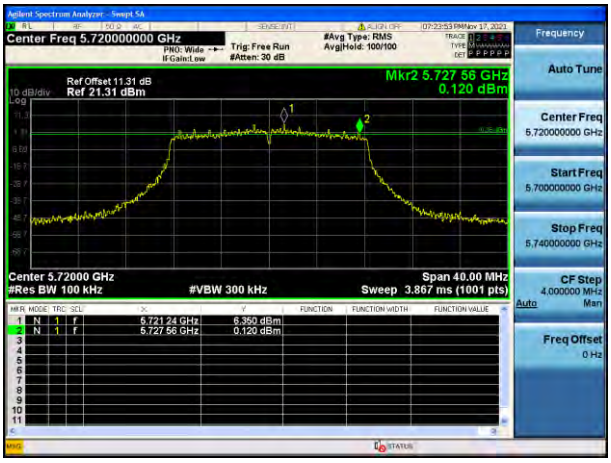
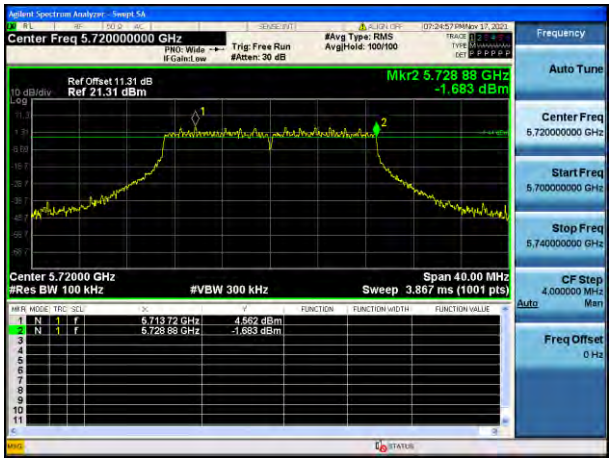
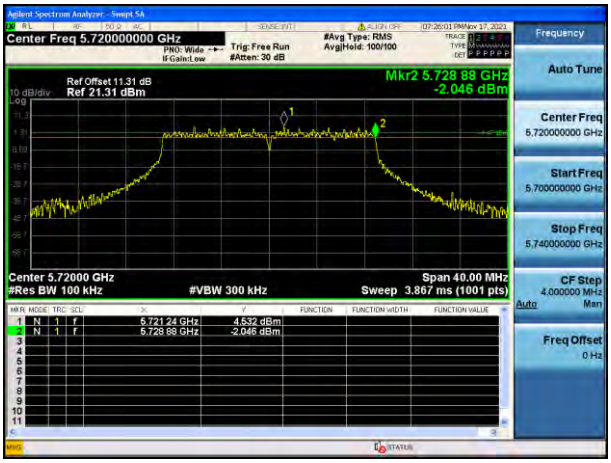
802.11ac_VHT20 CH.144


802.11n_HT40 CH.142	802.11ac_VHT40 CH.142
	

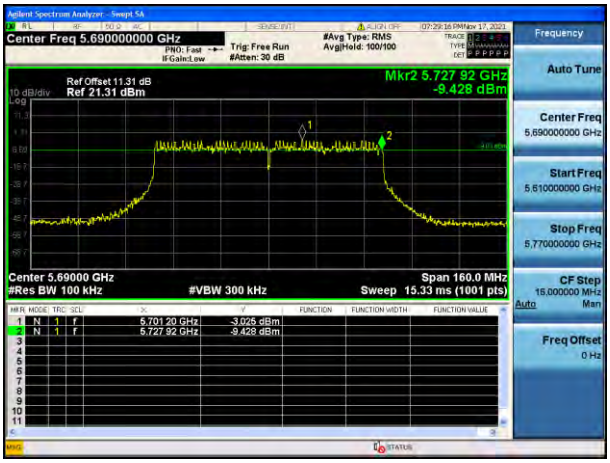
802.11ac_VHT80 CH.138


[Ant.2]

▣ Test Plots(UNII 3 Band 6 dB Bandwidth)

802.11a CH.144	802.11n_HT20 CH.144
	
802.11ac_VHT20 CH.144	
	

802.11n_HT40 CH.142	802.11ac_VHT40 CH.142
	

802.11ac_VHT80 CH.138


10.6.3 Output Power

[Ant.1]

Mode	Frequency [MHz]	Channel	Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase Datarate
802.11a	5720 (UNII 2C Band)	144	15.56	0.799	16.36	22.56	18 Mbps
802.11n(HT20)			13.36	2.242	15.60	22.96	MCS5
802.11ac(VHT20)			13.25	2.553	15.80	23.01	MCS1
802.11a	5720 (UNII 3 Band)	144	7.59	0.799	8.39	30.00	18 Mbps
802.11n(HT20)			7.89	2.242	10.13	30.00	MCS5
802.11ac(VHT20)			7.52	2.553	10.08	30.00	MCS1

Mode	Frequency [MHz]	Channel	Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase Datarate
802.11n(HT40)	5710 (UNII 2C Band)	142	14.90	1.114	16.02	23.98	MCS6
802.11ac(VHT40)			14.93	1.114	16.04	23.98	MCS1
802.11n(HT40)	5710 (UNII 3 Band)	142	2.34	1.114	3.45	30.00	MCS6
802.11ac(VHT40)			2.34	1.114	3.45	30.00	MCS1

Mode	Frequency [MHz]	Channel	Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase Datarate
802.11ac(VHT80)	5690 (UNII 2C Band)	138	8.92	6.573	15.49	23.98	MCS5
	5690 (UNII 3 Band)	138	-5.41	6.573	1.16	30.00	MCS5

[Ant.2]

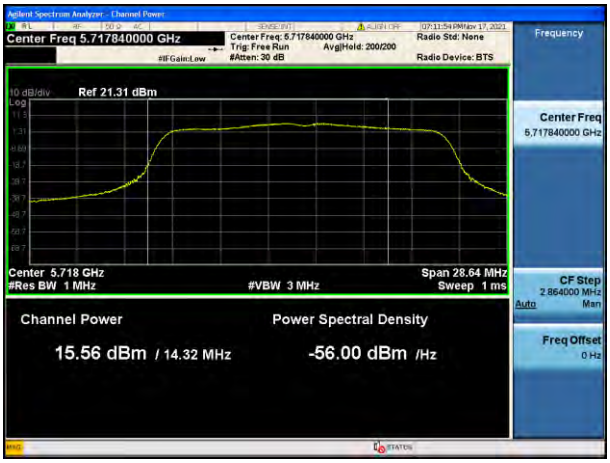
Mode	Frequency [MHz]	Channel	Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase Datarate
802.11a	5720 (UNII 2C Band)	144	14.69	0.799	15.49	22.50	18 Mbps
802.11n(HT20)			12.76	2.242	15.00	22.93	MCS5
802.11ac(VHT20)			12.33	2.553	14.88	22.98	MCS1
802.11a	5720 (UNII 3 Band)	144	6.79	0.799	7.59	30.00	18 Mbps
802.11n(HT20)			7.04	2.242	9.28	30.00	MCS5
802.11ac(VHT20)			6.75	2.553	9.30	30.00	MCS1

Mode	Frequency [MHz]	Channel	Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase Datarate
802.11n(HT40)	5710 (UNII 2C Band)	142	14.17	1.114	15.29	23.98	MCS6
802.11ac(VHT40)			14.21	1.114	15.33	23.98	MCS1
802.11n(HT40)	5710 (UNII 3 Band)	142	1.75	1.114	2.87	30.00	MCS6
802.11ac(VHT40)			1.74	1.114	2.85	30.00	MCS1

Mode	Frequency [MHz]	Channel	Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase Datarate
802.11ac(VHT80)	5690 (UNII 2C Band)	138	7.61	6.573	14.18	23.98	MCS5
	5690 (UNII 3 Band)	138	-5.97	6.573	0.61	30.00	MCS5

[Ant.1]

▣ Test Plots_

802.11a UNII 2C Band	802.11a UNII 3 Band
	
802.11n(HT20) UNII 2C Band	**802.11n(HT20) UNII 3 Band**
	
802.11ac(VHT20) UNII 2C Band	**802.11ac(VHT20) UNII 3 Band**