TEST REPORT

Reference No.	:	WTF23D12272895W004
FCC ID.....	:	2BCDM-ABCC1
Applicant	:	Guangzhou Bochong Technology Co., Ltd
Address	:	Unit 2270, No. 283-2, Tongsha Road, Tonghe Street, Baiyun District, Guangzhou City, China
Manufacturer	:	Guangzhou Bochong Technology Co., Ltd
Address	:	Unit 2270, No. 283-2, Tongsha Road, Tonghe Street, Baiyun District, Guangzhou City, China
Product Name	:	Smart Cat Litter Box
Model No.	:	LE, LEV, FRANK, FRV, REM, REV, REM1, REV1
Standards.....	:	FCC 47CFR Part 15 Section 15.407
Date of Receipt sample.....	:	2023-12-29
Date of Test.....	:	2024-01-05 to 2024-02-26
Date of Issue	:	2024-03-13
Test Result	:	**Pass**

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

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3 Revision History

Test Report No.	Date of Receipt Sample	Date of Test	Date of Issue	Purpose	Comment	Approved
WTF23D12272895W004	2023-12-29	2024-01-05 to 2024-02-26	2024-03-13	Original	-	Valid

4 General Information

4.1 General Description of E.U.T.

Product:	Smart Cat Litter Box
Model(s):	LE, LEV, FRANK, FRV, REM, REV, REM1, REV1
Model Description:	Only the model names, appearance and control circuit PCB board are different for different market requirement. The models LE and LEV use control circuit PCB board A. The models FRANK and FRV use control circuit PCB board B. The models REM, REV, REM1 and REV1 use control circuit PCB board C. The test sample models were LEV, FRV and REV1.
Wi-Fi Specification:	802.11a/ n(HT20/40)/ ac(VHT20/40)
Hardware Version:	Main Board: BC002_Main_V1.2 Extend Board: AC002_Key_V1.0 Weigh Board: BC002_Weight_V1.0 Hall Board: BC002_Hall_V1.0 Barn door Hall board: AC002_CHall_V1.2 Pir Board: BC002_Pir_V1.0
Software Version:	Aug 31 2020, 39ff055

4.2 Details of E.U.T.

Operation Frequency:	802.11a/ n(HT20)/ ac(VHT20): U-NII-1: 5150-5250MHz, U-NII-3:5725-5850MHz 802.11n(HT40)/ ac(VHT40): U-NII-1: 5190-5230MHz, U-NII-3: 5755-5795MHz
Max. RF output power:	U-NII-1: 18.01dBm U-NII-3: 13.73dBm
Type of Modulation:	OFDM
Antenna installation:	FPC Antenna
Antenna Gain:	U-NII-1: 3.2dBi U-NII-3: 3.4dBi

Note:
#: The antenna gain is provided by the applicant, and the applicant should be responsible for its authenticity, WALTEK lab has not verified the authenticity of its information.

Ratings:	Input: DC 12V by adapter
Adapter:	Model: AS024-1202000U Input: 100-240V~ 50/60Hz 0.8A Output: 12V⎓ 2A

4.3 Channel List

U-NII-1 (5.15-5.25GHz)			
channel	**Frequency(MHz)**	**channel**	**Frequency(MHz)**
36	5180	38	5190
40	5200	42	5210
44	5220	46	5230
48	5240		

U-NII-3 (5.725-5.85GHz)			
channel	**Frequency(MHz)**	**channel**	**Frequency(MHz)**
149	5745	151	5755
153	5765	155	5775
157	5785	159	5795
161	5805	165	5825

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

For 802.11a/n (HT20)/ ac(VHT20):

channel	Frequency(MHz)	channel	Frequency(MHz)
36	5180	40	5200
48	5240		

channel	Frequency(MHz)	channel	Frequency(MHz)
149	5745	157	5785
165	5825		

For 802.11n (HT40)/ ac(VHT40):

channel	Frequency(MHz)	channel	Frequency(MHz)
38	5190	46	5230

channel	Frequency(MHz)	channel	Frequency(MHz)
151	5755	159	5795

4.4 Test Mode Description

During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

Transmitting duty cycle is no less 98%.

The software is TermAssist and SecureCRT tool Use together.

Test Items	Mode	Data Rate	TX/RX
Radiated Emissions	802.11a (HT20)	6 Mbps	TX
	802.11n(HT20/40)	MCS0	TX
	802.11ac(VHT20/40)	MCS0	TX
Duty Cycle	802.11a (HT20)	6 Mbps	TX
	802.11n(HT20/40)	MCS0	TX
	802.11ac(VHT20/40)	MCS0	TX
Band Edge	802.11a (HT20)	6 Mbps	TX
	802.11n(HT20/40)	MCS0	TX
	802.11ac(VHT20/40)	MCS0	TX
6dB Bandwidth	802.11a (HT20)	6 Mbps	TX
	802.11n(HT20/40)	MCS0	TX
	802.11ac(VHT20/40)	MCS0	TX
26dB Bandwidth and 99% Occupied Bandwidth	802.11a (HT20)	6 Mbps	TX
	802.11n(HT20/40)	MCS0	TX
	802.11ac(VHT20/40)	MCS0	TX
Conducted Output Power	802.11a (HT20)	6 Mbps	TX
	802.11n(HT20/40)	MCS0	TX
	802.11ac(VHT20/40)	MCS0	TX
Power Spectral Density	802.11a (HT20)	6 Mbps	TX
	802.11n(HT20/40)	MCS0	TX
	802.11ac(VHT20/40)	MCS0	TX
Frequency Stability	Un-modulation	/	TX

4.5 Test Facility

The test facility has a test site registered with the following organizations:

ISED CAB identifier: CN0013. Test Firm Registration No.: 7760A.

Waltek Testing Group Co., Ltd. Has been registered and fully described in a report filed with the Industry Canada. The acceptance letter from the Industry Canada is maintained in our files. Registration number 7760A, October 15, 2016.

FCC Designation No.: CN1201. Test Firm Registration No.: 523476.

Waltek Testing Group Co., Ltd. EMC Laboratory `has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration number 523476, September 10, 2019.

5 Equipment Used during Test

5.1 Equipments List

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal. Date	Calibration Due Date
Conducted Emissions 2#						
1	EMI Test Receiver	R&S	ESCI	101155	2023-07-27	2024-07-26
2	LISN	SCHWARZBECK	NSLK 8128	8128-259	2023-10-31	2024-10-30
3	Limiter	CYBERTEK	EM5010	261115-001-0024	2023-07-27	2024-07-26
4	Cable	Laplace	RF300	-	2023-07-27	2024-07-26
3m Semi-anechoic Chamber for Radiation Emissions 1#						
1	Spectrum Analyzer	R&S	FSP30	100091	2023-04-24	2024-04-23
2	Amplifier	Agilent	8447D	2944A10178	2023-07-27	2024-07-26
3	Tri-log Broadband Antenna	SCHWARZBECK	VULB9163	336	2023-08-07	2024-08-06
4	Coaxial Cable	Top	TYPE16(13M)	-	2023-04-24	2024-04-23
5	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120D	667	2023-02-02 2024-01-23	2024-01-23 2025-01-22
6	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9170	335	2023-07-27	2024-07-26
7	Broadband Preamplifier	COMPLIANCE	PAP-1G18	2004	2023-08-08	2024-08-07
8	Coaxial Cable	Top	ZT26-NJ-NJ-8M/FA	-	2023-02-02 2024-01-23	2024-01-23 2025-01-22
9	Microwave Amplifier	SCHWARZBECK	BBV 9721	100472	2023-07-27	2024-07-26
10	Coaxial Cable	Top	ZT40-2.92J-2.92J-2.0M	17100919	2023-04-24	2024-04-23
3m Semi-anechoic Chamber for Radiation Emissions 2#						
1	Test Receiver	R&S	ESCI	101296	2023-04-24	2024-04-23
2	Trilog Broadband Antenna	SCHWARZBECK	VULB9160	9160-3325	2023-11-04	2024-11-03
3	Active Loop Antenna	Com-Power	AL-130R	10160007	2023-05-07	2024-05-06
4	Amplifier	ANRITSU	MH648A	M43381	2023-04-24	2024-04-23
5	Cable	HUBER+SUHNER	CBL2	525178	2023-04-24	2024-04-23
RF Conducting						
1	Spectrum Analyzer	R&S	FSP40	100501	2023-07-27	2024-07-26
2	Spectrum Analyzer	Agilent	N9020A	MY49100060	2023-07-27	2024-07-26

Test Software:

Test Item	Software name	Software version
Conducted Emission Radiated Emission(3m)	EZ-EMC	EZ-EMC(RA-03A1-1)

5.2 Measurement Uncertainty

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

6 Test Summary

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

7 Duty cycle

Test Requirement:	FCC 47CFR Part 15 Section 15.407 KDB789033 D02 General U-NII Test Procedures New Rules v02r01, Section (B)
Test Method:	ANSI C63.10: 2013
Test Limit:	N/A
Test Result:	PASS
Remark:	Through Pre-scan, and found 802.11a at lowest channel is the worst case. Only the worst case is recorded in the report.

7.1 Summary of Test Results

Type of Modulation	On time ms	Period ms	Duty Cycle linear	Duty Cycle %	Duty Cycle Factor(dB)	Average Factor(dB)
U-NII-1 802.11a	1.36	1.44	0.94	94.44	0.25	-0.50
U-NII-1 802.11n(HT20)	1.268	1.352	0.94	93.79	0.28	-0.56
U-NII-1 802.11n(HT40)	0.632	0.738	0.86	85.64	0.67	-1.35
U-NII-1 802.11ac(VHT20)	1.276	1.356	0.94	94.10	0.26	-0.53
U-NII-1 802.11ac(VHT40)	0.638	0.712	0.90	89.61	0.48	-0.95
U-NII-3 802.11a	1.351	1.437	0.94	94.02	0.27	-0.54
U-NII-3 802.11n(HT20)	1.266	1.377	0.92	91.94	0.37	-0.73
U-NII-3 802.11n(HT40)	0.634	0.708	0.90	89.55	0.48	-0.96
U-NII-1 802.11ac(VHT20)	1.271	1.357	0.94	93.66	0.28	-0.57
U-NII-1 802.11ac(VHT40)	0.636	0.712	0.89	89.33	0.49	-0.98

Remark:

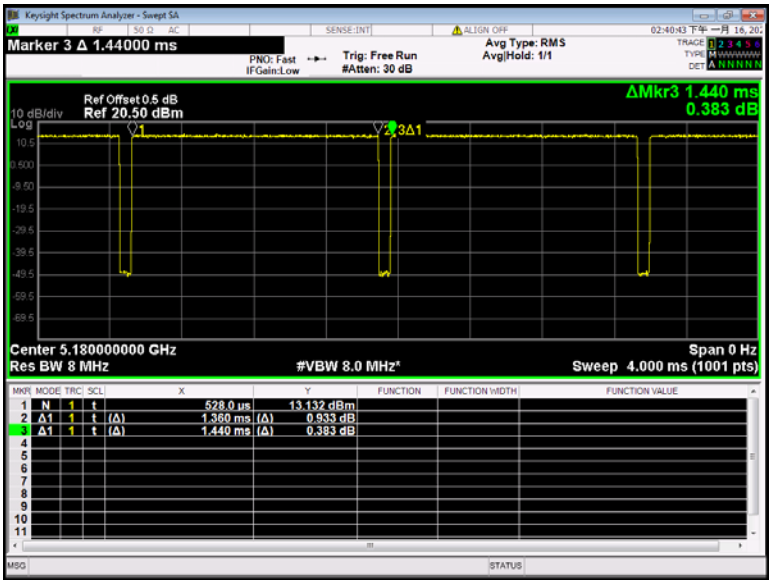
Duty cycle=On Time/period;

Duty cycle factor=10*log (1/Duty cycle);

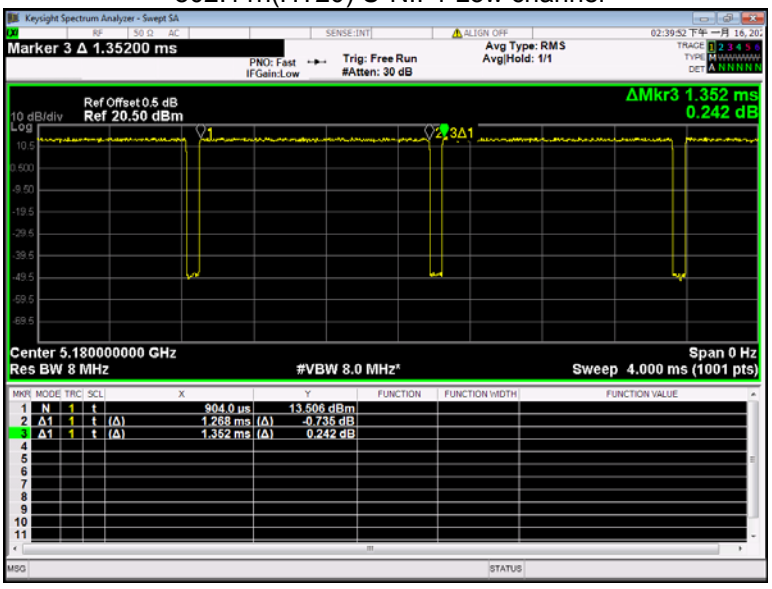
Average factor=$20\log_{10}$Duty cycle

Test result plots shown as follows:

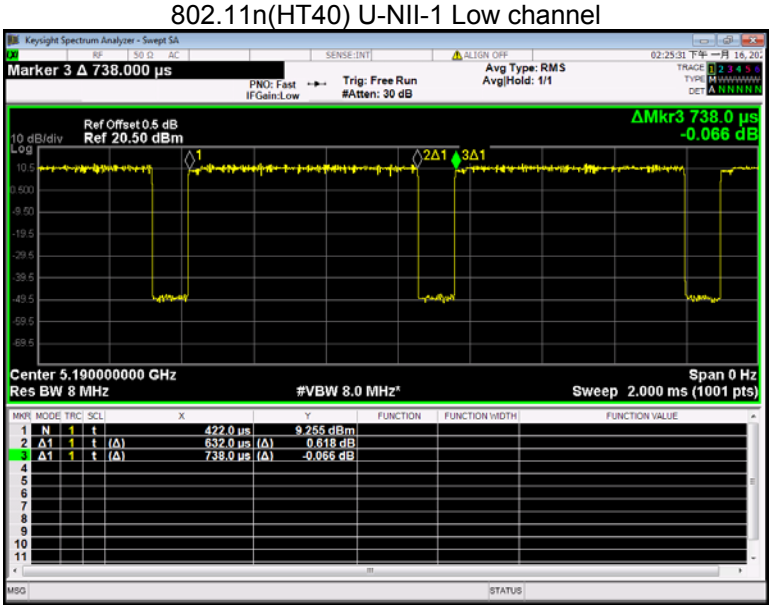
802.11a U-NII-1 Low channel



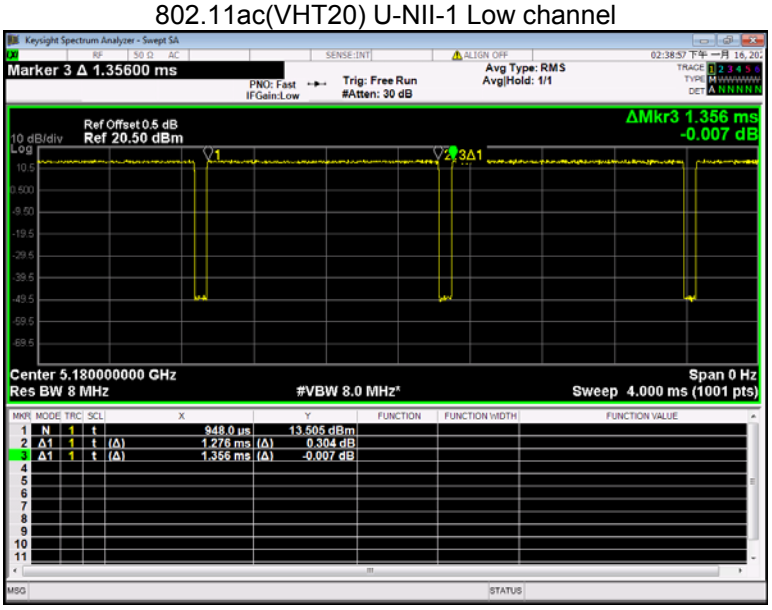
802.11n(HT20) U-NII-1 Low channel



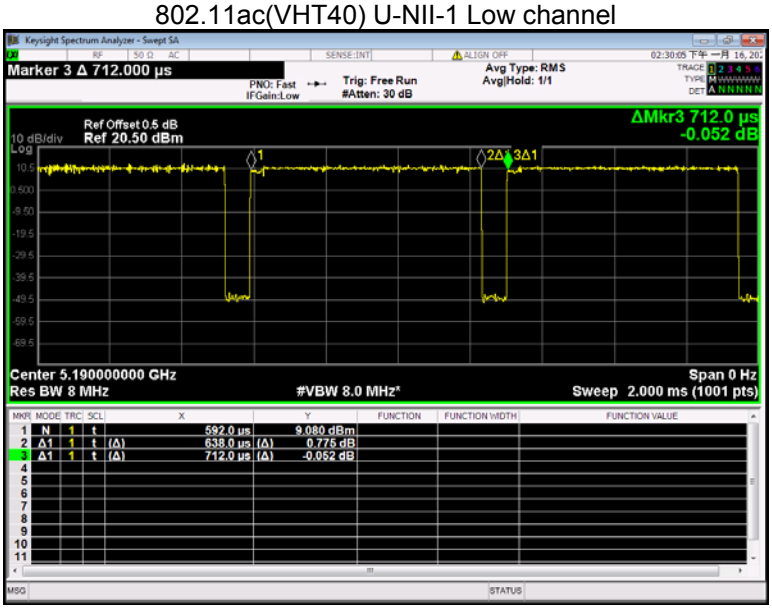
802.11n(HT40) U-NII-1 Low channel



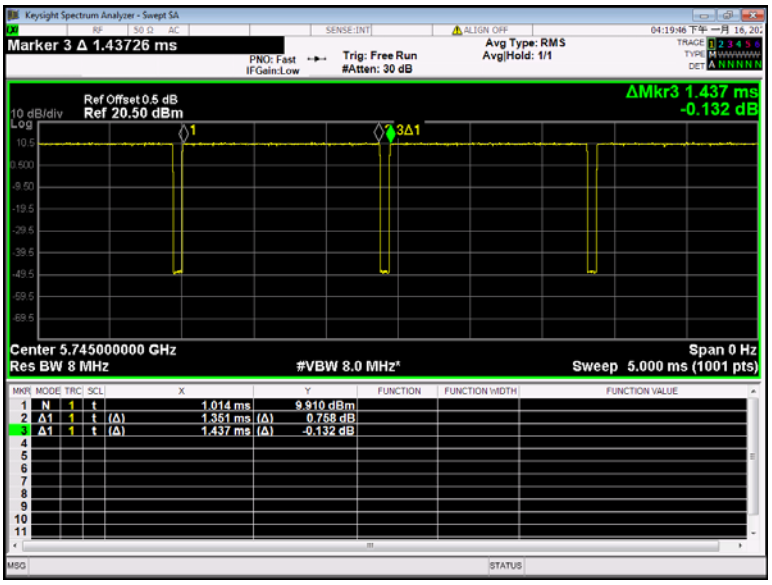
802.11ac(VHT20) U-NII-1 Low channel



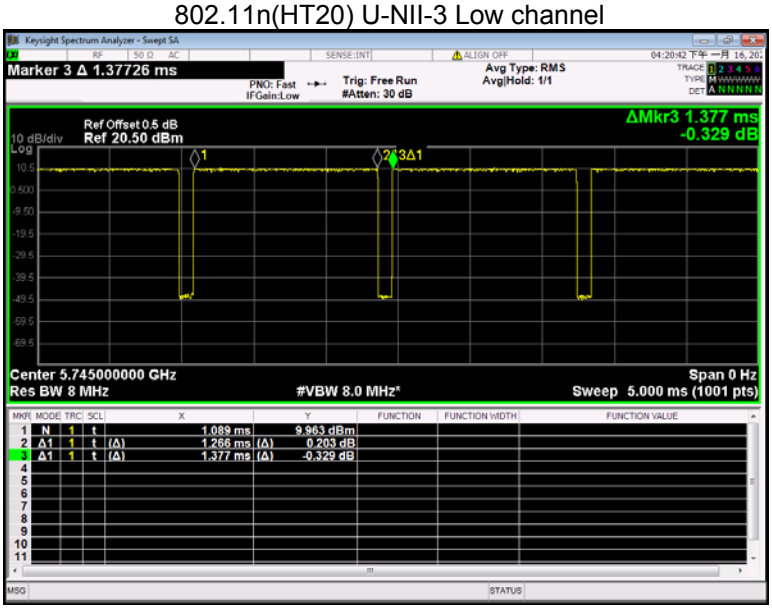
802.11ac(VHT40) U-NII-1 Low channel



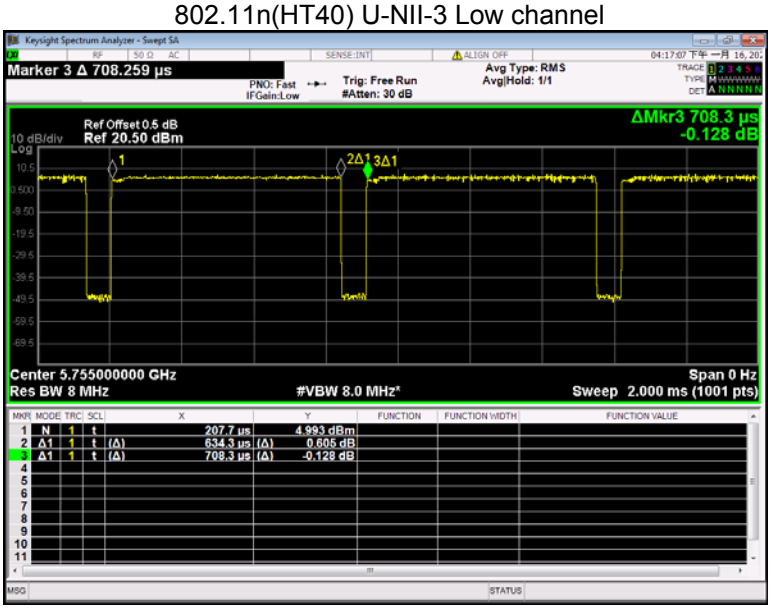
802.11a U-NII-3 Low channel



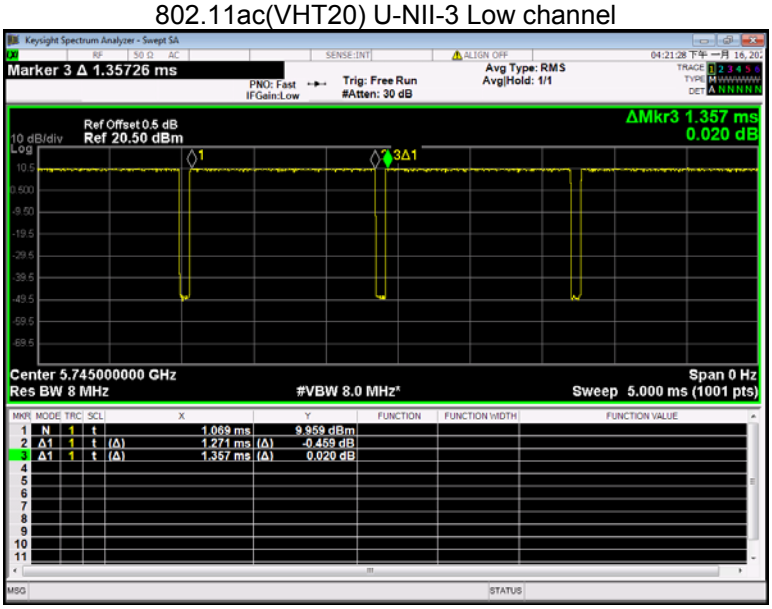
802.11n(HT20) U-NII-3 Low channel



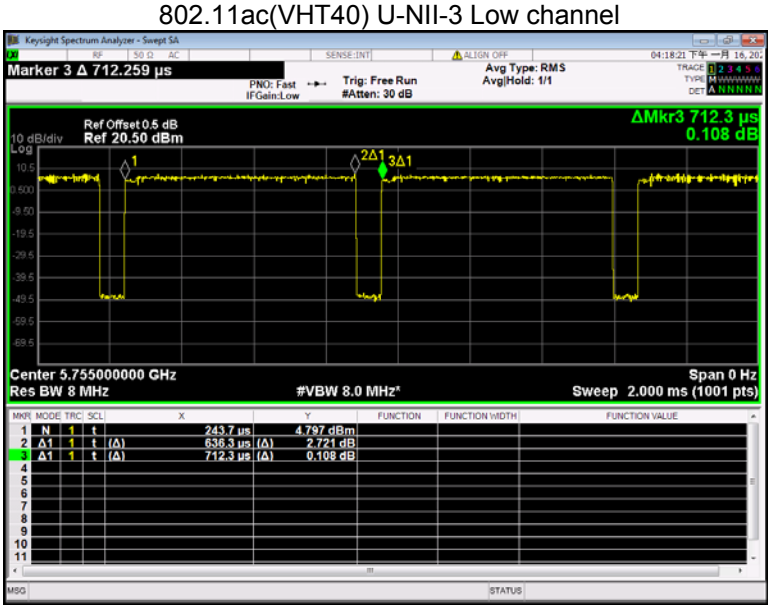
802.11n(HT40) U-NII-3 Low channel



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



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



8 Conducted Emission

Test Requirement: 47CFR FCC Part15 Subpart C §15.207

Test Method: ANSI C63.10:2013

Test Result: PASS

Frequency Range: 150kHz to 30MHz

Limit:

Frequency (MHz)	Conducted Li it (dBμV)	
	Quasi-peak	Average
0.15 to 0.5	66 to 56*	56 to 46*
0.5 to 5.0	56	46
5.0 to 30	60	50
*Decreases with the logarithm of the frequency.		

8.1 E.U.T. Operation

Operating Environment:

Temperature: 24.5°C

Humidity: 58.5%RH

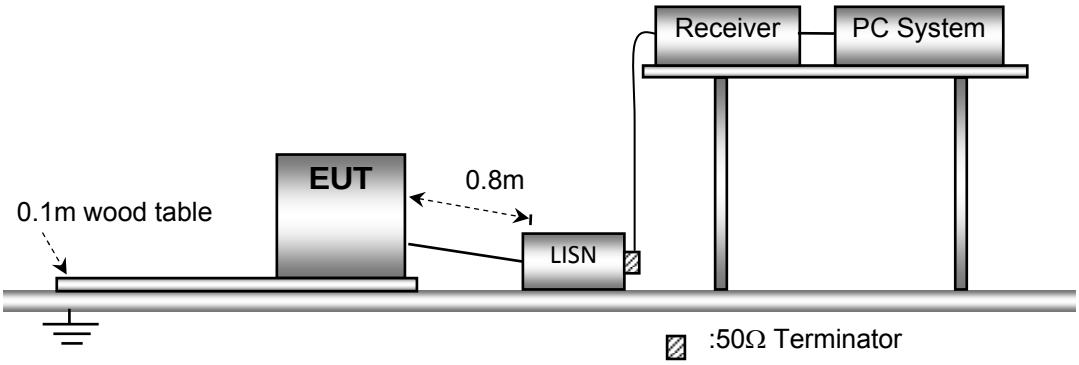
Atmospheric Pressure: 101.3kPa

EUT Operation:

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

8.2 EUT Setup

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



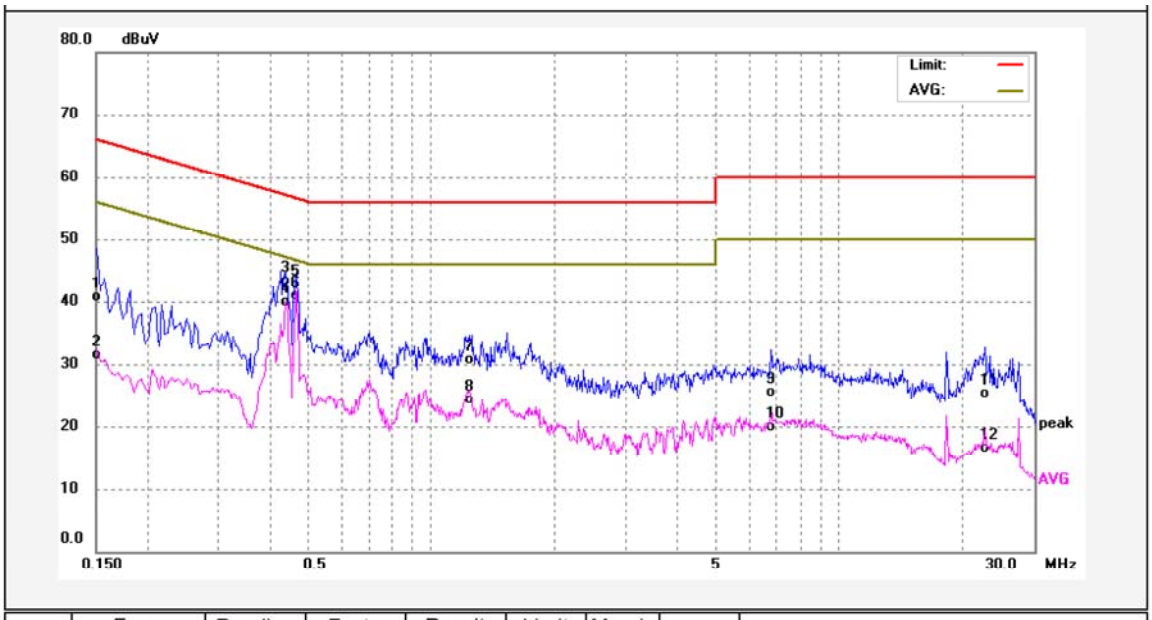
8.3 Measurement Description

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

8.4 Conducted Emission Test Result

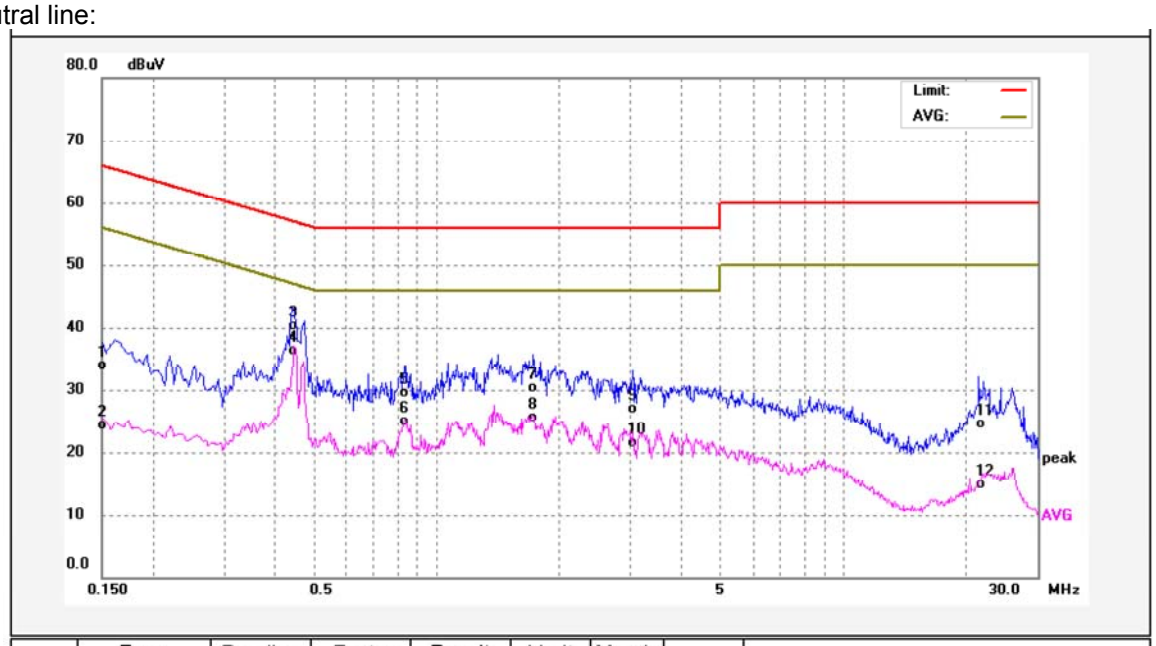
Remark: only the worst data (U-NII-1 802.11a High channel mode) were reported

Live line:



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1500	30.53	10.10	40.63	65.99	-25.36	QP	
2	0.1500	21.42	10.10	31.52	55.99	-24.47	AVG	
3	0.4420	32.64	10.70	43.34	57.02	-13.68	QP	
4	0.4420	29.13	10.70	39.83	47.02	-7.19	AVG	
5	0.4660	32.04	10.71	42.75	56.58	-13.83	QP	
6	0.4660	30.20	10.71	40.91	46.58	-5.67	AVG	
7	1.2540	19.46	11.17	30.63	56.00	-25.37	QP	
8	1.2540	13.14	11.17	24.31	46.00	-21.69	AVG	
9	6.7940	14.45	10.98	25.43	60.00	-34.57	QP	
10	6.7940	8.83	10.98	19.81	50.00	-30.19	AVG	
11	22.6900	14.17	11.22	25.39	60.00	-34.61	QP	
12	22.6900	5.26	11.22	16.48	50.00	-33.52	AVG	

Neutral line:



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1500	23.91	10.03	33.94	65.99	-32.05	QP	
2	0.1500	14.36	10.03	24.39	55.99	-31.60	AVG	
3	0.4420	29.60	10.61	40.21	57.02	-16.81	QP	
4	0.4420	25.78	10.61	36.39	47.02	-10.63	AVG	
5	0.8380	18.87	10.71	29.58	56.00	-26.42	QP	
6	0.8380	14.14	10.71	24.85	46.00	-21.15	AVG	
7	1.7300	19.42	10.92	30.34	56.00	-25.66	QP	
8	1.7300	14.53	10.92	25.45	46.00	-20.55	AVG	
9	3.0380	15.76	11.14	26.90	56.00	-29.10	QP	
10	3.0380	10.34	11.14	21.48	46.00	-24.52	AVG	
11	21.4980	13.62	10.85	24.47	60.00	-35.53	QP	
12	21.4980	4.12	10.85	14.97	50.00	-35.03	AVG	

9 Radiated Emissions

Test Requirement: FCC 47CFR Part 15 Section 15.209 & 15.407

Test Method: ANSI C63.10:2013

Test Result: PASS

Measurement Distance: 3m

Limit:

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

9.1 EUT Operation

Operating Environment **:**

Temperature: 24.5 °C

Humidity: 52.1 % RH

Atmospheric Pressure: 101.4kPa

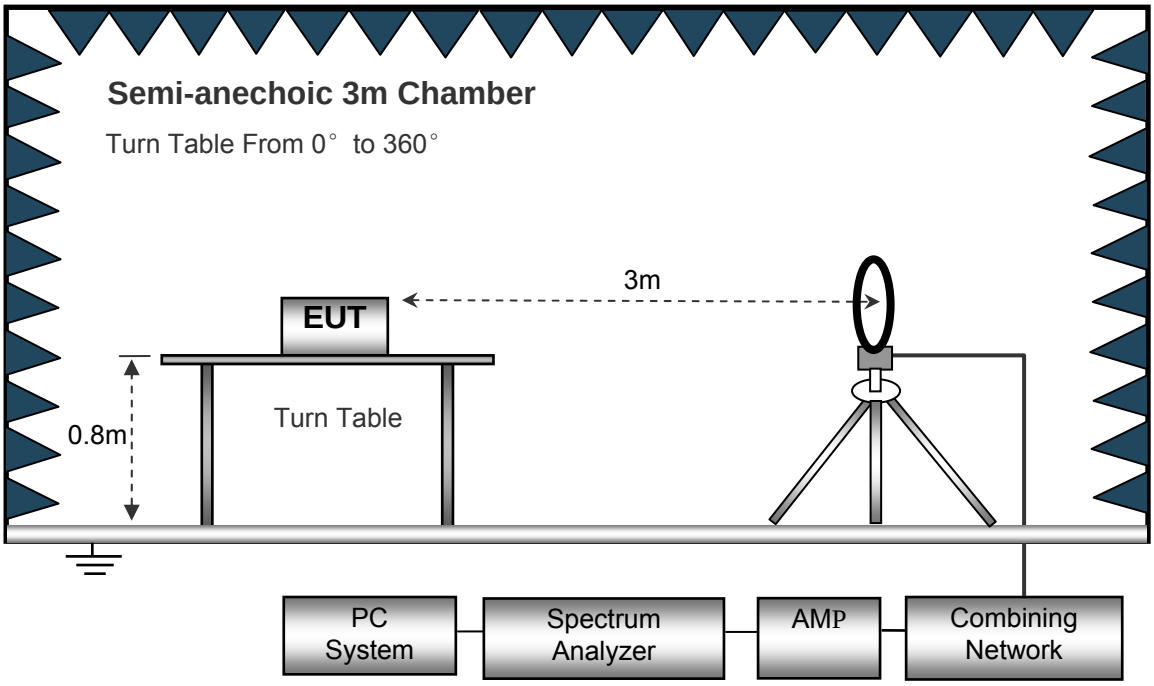
EUT Operation :

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

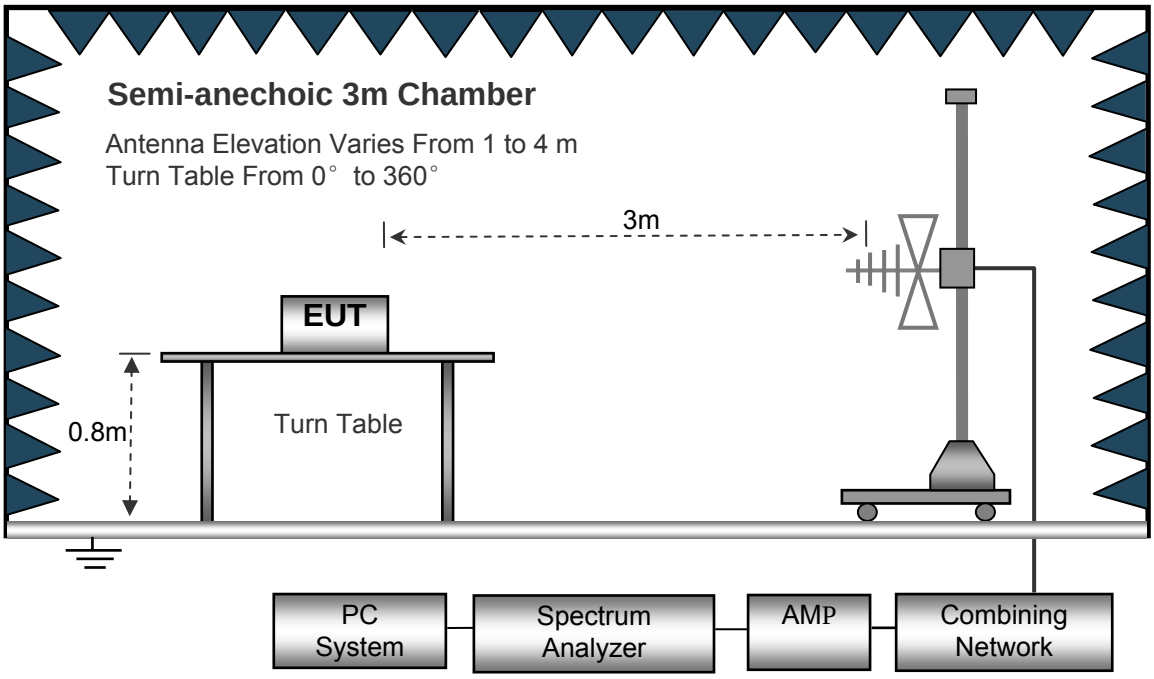
9.2 Test Setup

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

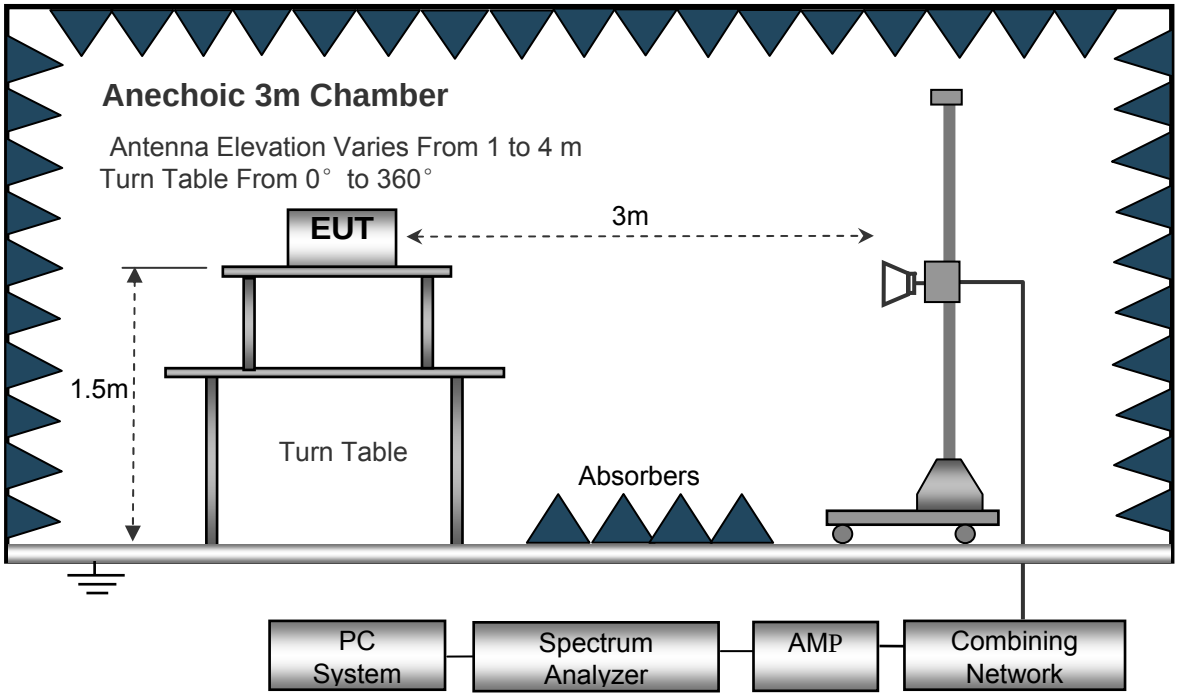
The test setup for emission measurement below 30MHz.



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



The test setup for emission measurement above 1 GHz.



9.3 Spectrum Analyzer Setup

Below 30MHz

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

30MHz ~ 1GHz

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

Above 1GHz

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

9.4 Test Procedure

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

9.5 Corrected Amplitude & Margin Calculation

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

Corr. Ampl. = Indicated Reading + Antenna Factor + Cable Factor - Amplifier Gain

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

Margin = Corr. Ampl. – Limit

9.6 Summary of Test Results

Test Frequency: 9KHz~30MHz

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

Test Frequency : 30MHz ~ 18GHz

Model: LEV

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11a U-NII-1 Low Channel 5180MHz									
316.58	40.63	QP	267	1.1	H	-11.62	29.01	46.00	-16.99
316.58	42.91	QP	132	1.7	V	-11.62	31.29	46.00	-14.71
4518.33	53.79	PK	268	1.9	H	-2.03	51.76	74.00	-22.24
4518.33	43.97	Ave	268	1.9	H	-2.03	41.94	54.00	-12.06
5149.26	52.78	PK	72	1.1	H	-1.02	51.76	74.00	-22.24
5149.26	44.73	Ave	72	1.1	H	-1.02	43.71	54.00	-10.29
10360.00	41.08	PK	138	1.4	H	5.33	46.41	74.00	-27.59
10360.00	36.88	Ave	138	1.4	H	5.33	42.21	54.00	-11.79
802.11a U-NII-1 Middle channel 5200MHz									
316.58	39.91	QP	205	1.9	H	-11.62	28.29	46.00	-17.71
316.58	42.21	QP	131	1.7	V	-11.62	30.59	46.00	-15.41
4515.70	53.20	PK	197	1.6	H	-1.94	51.26	74.00	-22.74
4515.70	44.23	Ave	197	1.6	H	-1.94	42.29	54.00	-11.71
5139.71	54.57	PK	325	1.1	H	-1.06	53.51	74.00	-20.49
5139.71	45.78	Ave	325	1.1	H	-1.06	44.72	54.00	-9.28
10400.00	39.60	PK	274	1.4	H	5.21	44.81	74.00	-29.19
10400.00	37.68	Ave	274	1.4	H	5.21	42.89	54.00	-11.11

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11a U-NII-1 High channel 5240MHz									
316.58	40.50	QP	296	1.8	H	-11.62	28.88	46.00	-17.12
316.58	42.33	QP	29	1.9	V	-11.62	30.71	46.00	-15.29
4501.19	52.02	PK	66	1.3	H	-2.24	49.78	74.00	-24.22
4501.19	44.50	Ave	66	1.3	H	-2.24	42.26	54.00	-11.74
5149.61	56.48	PK	327	1.8	H	-1.09	55.39	74.00	-18.61
5149.61	47.35	Ave	327	1.8	H	-1.09	46.26	54.00	-7.74
10480.00	41.23	PK	4	1.5	H	5.14	46.37	74.00	-27.63
10480.00	38.49	Ave	4	1.5	H	5.14	43.63	54.00	-10.37
802.11a U-NII-3 Low Channel 5745MHz									
316.58	39.12	QP	297	1.6	H	-11.62	27.50	46.00	-18.50
316.58	42.43	QP	5	1.3	V	-11.62	30.81	46.00	-15.19
4517.22	56.60	PK	119	1.1	H	-2.06	54.54	74.00	-19.46
4517.22	40.61	Ave	119	1.1	H	-2.06	38.55	54.00	-15.45
5364.44	40.04	PK	272	1.8	H	5.93	45.97	74.00	-28.03
5364.44	36.82	Ave	272	1.8	H	5.93	42.75	54.00	-11.25
11490.00	46.14	PK	265	2.0	H	-1.25	44.89	74.00	-29.11
11490.00	37.41	Ave	265	2.0	H	-1.25	36.16	54.00	-17.84

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Heig ht	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11a U-NII-3 middle channel 5785MHz									
316.58	39.68	QP	149	1.8	H	-11.62	28.06	46.00	-17.94
316.58	42.59	QP	86	1.2	V	-11.62	30.97	46.00	-15.03
4501.63	55.86	PK	274	1.1	H	-2.03	53.83	74.00	-20.17
4501.63	39.52	Ave	274	1.1	H	-2.03	37.49	54.00	-16.51
5358.74	40.70	PK	355	1.8	H	5.81	46.51	74.00	-27.49
5358.74	37.33	Ave	355	1.8	H	5.81	43.14	54.00	-10.86
11570.00	46.13	PK	74	1.3	H	-1.22	44.91	74.00	-29.09
11570.00	38.47	Ave	74	1.3	H	-1.22	37.25	54.00	-16.75
802.11a U-NII-3 High channel 5825MHz									
316.58	38.51	QP	299	1.1	H	-11.62	26.89	46.00	-19.11
316.58	43.94	QP	6	1.3	V	-11.62	32.32	46.00	-13.68
4528.20	55.21	PK	266	1.9	H	-1.84	53.37	74.00	-20.63
4528.20	40.28	Ave	266	1.9	H	-1.84	38.44	54.00	-15.56
5352.72	42.26	PK	131	1.3	H	5.84	48.10	74.00	-25.90
5352.72	36.46	Ave	131	1.3	H	5.84	42.30	54.00	-11.70
11650.00	45.47	PK	212	1.8	H	-1.30	44.17	74.00	-29.83
11650.00	39.61	Ave	212	1.8	H	-1.30	38.31	54.00	-15.69

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT20) U-NII-1 Low Channel 5180MHz									
316.58	37.40	QP	222	1.5	H	-11.62	25.78	46.00	-20.22
316.58	45.34	QP	16	1.4	V	-11.62	33.72	46.00	-12.28
4503.82	53.84	PK	320	1.5	H	-2.14	51.70	74.00	-22.30
4503.82	40.92	Ave	320	1.5	H	-2.14	38.78	54.00	-15.22
5121.16	47.89	PK	176	1.8	H	-1.06	46.83	74.00	-27.17
5121.16	39.24	Ave	176	1.8	H	-1.06	38.18	54.00	-15.82
10360.00	40.04	PK	200	1.6	H	5.33	45.37	74.00	-28.63
10360.00	37.17	Ave	200	1.6	H	5.33	42.50	54.00	-11.50
802.11n(HT20) U-NII-1 Middle channel 5200MHz									
316.58	36.06	QP	251	1.6	H	-11.62	24.44	46.00	-21.56
316.58	46.40	QP	200	1.5	V	-11.62	34.78	46.00	-11.22
4517.16	54.90	PK	183	1.3	H	-2.12	52.78	74.00	-21.22
4517.16	40.78	Ave	183	1.3	H	-2.12	38.66	54.00	-15.34
5135.02	47.70	PK	260	1.1	H	-1.06	46.64	74.00	-27.36
5135.02	39.14	Ave	260	1.1	H	-1.06	38.08	54.00	-15.92
10400.00	41.84	PK	151	1.6	H	5.21	47.05	74.00	-26.95
10400.00	38.06	Ave	151	1.6	H	5.21	43.27	54.00	-10.73

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT20) U-NII-1 High channel 5240MHz									
316.58	35.19	QP	262	1.2	H	-11.62	23.57	46.00	-22.43
316.58	47.31	QP	257	1.7	V	-11.62	35.69	46.00	-10.31
4511.45	56.36	PK	280	1.1	H	-1.96	54.40	74.00	-19.60
4511.45	41.33	Ave	280	1.1	H	-1.96	39.37	54.00	-14.63
5141.69	46.94	PK	83	2.0	H	-1.06	45.88	74.00	-28.12
5141.69	39.07	Ave	83	2.0	H	-1.06	38.01	54.00	-15.99
10480.00	40.15	PK	254	1.5	H	5.14	45.29	74.00	-28.71
10480.00	36.52	Ave	254	1.5	H	5.14	41.66	54.00	-12.34
802.11n(HT20) U-NII-3 Low Channel 5745MHz									
316.58	41.61	QP	170	1.3	H	-11.62	29.99	46.00	-16.01
316.58	47.82	QP	346	1.7	V	-11.62	36.20	46.00	-9.80
4520.87	44.16	PK	255	2.0	H	-2.06	42.10	74.00	-31.90
4520.87	45.33	Ave	255	2.0	H	-2.06	43.27	54.00	-10.73
5352.72	37.82	PK	154	1.1	H	5.93	43.75	74.00	-30.25
5352.72	38.65	Ave	154	1.1	H	5.93	44.58	54.00	-9.42
11490.00	46.54	PK	155	1.1	H	-1.25	45.29	74.00	-28.71
11490.00	38.40	Ave	155	1.1	H	-1.25	37.15	54.00	-16.85

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT20) U-NII-3 middle channel 5785MHz									
316.58	42.20	QP	32	1.9	H	-11.62	30.58	46.00	-15.42
316.58	47.89	QP	347	1.2	V	-11.62	36.27	46.00	-9.73
4539.55	44.31	PK	336	1.1	H	-2.03	42.28	74.00	-31.72
4539.55	41.20	Ave	336	1.1	H	-2.03	39.17	54.00	-14.83
5388.61	38.79	PK	85	1.2	H	5.81	44.60	74.00	-29.40
5388.61	38.69	Ave	85	1.2	H	5.81	44.50	54.00	-9.50
11570.00	46.12	PK	323	1.1	H	-1.22	44.90	74.00	-29.10
11570.00	39.62	Ave	323	1.1	H	-1.22	38.40	54.00	-15.60
802.11n(HT20) U-NII-3 High channel 5825MHz									
316.58	41.38	QP	345	1.3	H	-11.62	29.76	46.00	-16.24
316.58	43.55	QP	89	1.7	V	-11.62	31.93	46.00	-14.07
4513.77	49.01	PK	156	1.0	H	-1.84	47.17	74.00	-26.83
4513.77	43.97	Ave	156	1.0	H	-1.84	42.13	54.00	-11.87
5364.47	37.30	PK	343	1.5	H	5.84	43.14	74.00	-30.86
5364.47	30.47	Ave	343	1.5	H	5.84	36.31	54.00	-17.69
11650.00	46.87	PK	34	1.1	H	-1.30	45.57	74.00	-28.43
11650.00	37.85	Ave	34	1.1	H	-1.30	36.55	54.00	-17.45

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT40) U-NII-1 Low Channel 5190MHz									
316.58	36.97	QP	244	1.1	H	-11.62	25.35	46.00	-20.65
316.58	39.32	QP	196	1.3	V	-11.62	27.70	46.00	-18.30
4527.79	41.27	PK	120	1.2	H	-1.89	39.38	74.00	-34.62
4527.79	34.29	Ave	120	1.2	H	-1.89	32.40	54.00	-21.60
5129.22	46.55	PK	306	1.4	H	-1.06	45.49	74.00	-28.51
5129.22	39.71	Ave	306	1.4	H	-1.06	38.65	54.00	-15.35
10380.00	39.22	PK	133	1.0	H	5.26	44.48	74.00	-29.52
10380.00	34.97	Ave	133	1.0	H	5.26	40.23	54.00	-13.77
802.11n(HT40) U-NII-1 High channel 5230MHz									
316.58	36.60	QP	67	1.7	H	-11.62	24.98	46.00	-21.02
316.58	38.96	QP	267	1.4	V	-11.62	27.34	46.00	-18.66
4537.53	41.58	PK	86	1.9	H	-1.94	39.64	74.00	-34.36
4537.53	34.80	Ave	86	1.9	H	-1.94	32.86	54.00	-21.14
5133.49	46.80	PK	72	1.3	H	-1.06	45.74	74.00	-28.26
5133.49	41.42	Ave	72	1.3	H	-1.06	40.36	54.00	-13.64
10460.00	41.69	PK	15	1.7	H	5.28	46.97	74.00	-27.03
10460.00	37.66	Ave	15	1.7	H	5.28	42.94	54.00	-11.06

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT40) U-NII-3 Low Channel 5755MHz									
316.58	34.85	QP	292	1.8	H	-11.62	23.23	46.00	-22.77
316.58	39.48	QP	118	1.2	V	-11.62	27.86	46.00	-18.14
4535.01	38.88	PK	130	1.6	H	-1.96	36.92	74.00	-37.08
4535.01	33.64	Ave	130	1.6	H	-1.96	31.68	54.00	-22.32
5360.70	40.59	PK	345	1.1	H	5.88	46.47	74.00	-27.53
5360.70	35.85	Ave	345	1.1	H	5.88	41.73	54.00	-12.27
11510.00	45.95	PK	240	1.6	H	-1.01	44.94	74.00	-29.06
11510.00	38.92	Ave	240	1.6	H	-1.01	37.91	54.00	-16.09
802.11n(HT40) U-NII-3 High Channel 5795MHz									
316.58	34.31	QP	246	1.9	H	-11.62	22.69	46.00	-23.31
316.58	40.19	QP	208	1.8	V	-11.62	28.57	46.00	-17.43
4521.02	39.57	PK	265	1.3	H	-1.92	37.65	74.00	-36.35
4521.02	33.55	Ave	265	1.3	H	-1.92	31.63	54.00	-22.37
5385.59	42.01	PK	155	1.8	H	5.63	47.64	74.00	-26.36
5385.59	37.23	Ave	155	1.8	H	5.63	42.86	54.00	-11.14
11590.00	46.26	PK	110	1.3	H	-1.04	45.22	74.00	-28.78
11590.00	37.86	Ave	110	1.3	H	-1.04	36.82	54.00	-17.18

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11ac(VHT20) U-NII-1 Low Channel 5180MHz									
316.58	37.95	QP	325	1.0	H	-11.62	26.33	46.00	-19.67
316.58	38.43	QP	146	1.5	V	-11.62	26.81	46.00	-19.19
4534.75	45.10	PK	198	1.4	H	-1.86	43.24	74.00	-30.76
4534.75	37.31	Ave	198	1.4	H	-1.86	35.45	54.00	-18.55
5133.02	40.96	PK	174	1.6	H	-1.06	39.90	74.00	-34.10
5133.02	43.69	Ave	174	1.6	H	-1.06	42.63	54.00	-11.37
10360.00	45.04	PK	80	1.8	H	5.33	50.37	74.00	-23.63
10360.00	38.21	Ave	80	1.8	H	5.33	43.54	54.00	-10.46
802.11ac(VHT20) U-NII-1 Middle channel 5200MHz									
316.58	38.59	QP	99	1.0	H	-11.62	26.97	46.00	-19.03
316.58	40.51	QP	172	1.7	V	-11.62	28.89	46.00	-17.11
4526.98	44.15	PK	350	1.1	H	-1.82	42.33	74.00	-31.67
4526.98	39.10	Ave	350	1.1	H	-1.82	37.28	54.00	-16.72
5146.36	41.21	PK	268	1.3	H	-1.06	40.15	74.00	-33.85
5146.36	43.44	Ave	268	1.3	H	-1.06	42.38	54.00	-11.62
10400.00	41.13	PK	237	1.1	H	5.21	46.34	74.00	-27.66
10400.00	37.91	Ave	237	1.1	H	5.21	43.12	54.00	-10.88

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11ac(VHT20) U-NII-1 High channel 5240MHz									
316.58	38.93	QP	82	1.3	H	-11.62	27.31	46.00	-18.69
316.58	40.36	QP	146	1.7	V	-11.62	28.74	46.00	-17.26
4535.18	44.78	PK	227	1.1	H	-1.81	42.97	74.00	-31.03
4535.18	38.91	Ave	227	1.1	H	-1.81	37.10	54.00	-16.90
5119.08	42.61	PK	326	1.5	H	-1.06	41.55	74.00	-32.45
5119.08	42.57	Ave	326	1.5	H	-1.06	41.51	54.00	-12.49
10480.00	42.41	PK	30	1.3	H	5.14	47.55	74.00	-26.45
10480.00	37.89	Ave	30	1.3	H	5.14	43.03	54.00	-10.97
802.11ac(VHT20) U-NII-3 Low Channel 5745MHz									
316.58	39.01	QP	134	1.5	H	-11.62	27.39	46.00	-18.61
316.58	39.05	QP	176	1.6	V	-11.62	27.43	46.00	-18.57
4530.60	43.01	PK	117	1.2	H	-1.92	41.09	74.00	-32.91
4530.60	36.33	Ave	117	1.2	H	-1.92	34.41	54.00	-19.59
5389.59	38.71	PK	316	1.0	H	5.93	44.64	74.00	-29.36
5389.59	34.51	Ave	316	1.0	H	5.93	40.44	54.00	-13.56
11490.00	46.07	PK	110	1.8	H	-1.03	45.04	74.00	-28.96
11490.00	37.28	Ave	110	1.8	H	-1.03	36.25	54.00	-17.75

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Heig ht	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11ac(VHT20) U-NII-3 middle channel 5785MHz									
316.58	39.47	QP	307	1.1	H	-11.62	27.85	46.00	-18.15
316.58	38.71	QP	130	1.6	V	-11.62	27.09	46.00	-18.91
4525.70	42.86	PK	172	1.7	H	-1.97	40.89	74.00	-33.11
4525.70	37.02	Ave	172	1.7	H	-1.97	35.05	54.00	-18.95
5360.84	41.14	PK	339	1.7	H	5.81	46.95	74.00	-27.05
5360.84	36.40	Ave	339	1.7	H	5.81	42.21	54.00	-11.79
11570.00	45.76	PK	280	1.4	H	-1.05	44.71	74.00	-29.29
11570.00	39.36	Ave	280	1.4	H	-1.05	38.31	54.00	-15.69
802.11ac(VHT20) U-NII-3 High channel 5825MHz									
316.58	37.73	QP	316	1.0	H	-11.62	26.11	46.00	-19.89
316.58	39.58	QP	205	1.8	V	-11.62	27.96	46.00	-18.04
4504.38	43.40	PK	115	1.2	H	-1.88	41.52	74.00	-32.48
4504.38	35.98	Ave	115	1.2	H	-1.88	34.10	54.00	-19.90
5359.69	41.63	PK	201	1.4	H	5.84	47.47	74.00	-26.53
5359.69	38.00	Ave	201	1.4	H	5.84	43.84	54.00	-10.16
11650.00	46.86	PK	22	1.8	H	-1.06	45.80	74.00	-28.20
11650.00	39.76	Ave	22	1.8	H	-1.06	38.70	54.00	-15.30

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11ac(VHT40) U-NII-1 Low Channel 5190MHz									
316.58	39.33	QP	2	1.0	H	-11.62	27.71	46.00	-18.29
316.58	39.88	QP	26	2.0	V	-11.62	28.26	46.00	-17.74
4527.29	38.58	PK	83	1.4	H	-1.91	36.67	74.00	-37.33
4527.29	30.67	Ave	83	1.4	H	-1.91	28.76	54.00	-25.24
5111.58	46.03	PK	184	1.7	H	-1.06	44.97	74.00	-29.03
5111.58	40.16	Ave	184	1.7	H	-1.06	39.10	54.00	-14.90
10380.00	38.46	PK	196	1.8	H	5.26	43.72	74.00	-30.28
10380.00	35.00	Ave	196	1.8	H	5.26	40.26	54.00	-13.74
802.11ac(VHT40) U-NII-1 High channel 5230MHz									
316.58	39.97	QP	313	1.6	H	-11.62	28.35	46.00	-17.65
316.58	40.72	QP	30	1.9	V	-11.62	29.10	46.00	-16.90
4509.81	39.16	PK	196	1.6	H	-1.93	37.23	74.00	-36.77
4509.81	29.82	Ave	196	1.6	H	-1.93	27.89	54.00	-26.11
5133.61	46.37	PK	177	1.1	H	-1.06	45.31	74.00	-28.69
5133.61	40.55	Ave	177	1.1	H	-1.06	39.49	54.00	-14.51
10460.00	41.03	PK	13	1.9	H	5.28	46.31	74.00	-27.69
10460.00	37.33	Ave	13	1.9	H	5.28	42.61	54.00	-11.39

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11ac(VHT40) U-NII-3 Low Channel 5755MHz									
316.58	35.28	QP	199	1.3	H	-11.62	23.66	46.00	-22.34
316.58	44.07	QP	6	1.6	V	-11.62	32.45	46.00	-13.55
4514.19	35.91	PK	15	1.8	H	-1.92	33.99	74.00	-40.01
4514.19	30.60	Ave	15	1.8	H	-1.92	28.68	54.00	-25.32
5382.38	39.36	PK	288	1.1	H	5.88	45.24	74.00	-28.76
5382.38	36.27	Ave	288	1.1	H	5.88	42.15	54.00	-11.85
11510.00	46.26	PK	105	1.2	H	-1.07	45.19	74.00	-28.81
11510.00	39.00	Ave	105	1.2	H	-1.07	37.93	54.00	-16.07
802.11ac(VHT40) U-NII-3 High Channel 5795MHz									
316.58	35.81	QP	192	1.0	H	-11.62	24.19	46.00	-21.81
316.58	43.54	QP	113	1.1	V	-11.62	31.92	46.00	-14.08
4524.02	36.38	PK	61	1.1	H	-1.86	34.52	74.00	-39.48
4524.02	30.64	Ave	61	1.1	H	-1.86	28.78	54.00	-25.22
5360.39	42.70	PK	103	1.7	H	5.63	48.33	74.00	-25.67
5360.39	37.55	Ave	103	1.7	H	5.63	43.18	54.00	-10.82
11590.00	45.38	PK	38	1.5	H	-1.03	44.35	74.00	-29.65
11590.00	39.37	Ave	38	1.5	H	-1.03	38.34	54.00	-15.66

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Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11a U-NII-1 Low Channel 5180MHz									
316.58	40.45	QP	95	1.6	H	-11.62	28.83	46.00	-17.17
316.58	42.64	QP	66	1.0	V	-11.62	31.02	46.00	-14.98
4506.30	53.90	PK	287	1.9	H	-2.03	51.87	74.00	-22.13
4506.30	43.54	Ave	287	1.9	H	-2.03	41.51	54.00	-12.49
5123.08	53.12	PK	55	1.1	H	-1.02	52.10	74.00	-21.90
5123.08	45.05	Ave	55	1.1	H	-1.02	44.03	54.00	-9.97
10360.00	41.68	PK	204	1.3	H	5.33	47.01	74.00	-26.99
10360.00	37.46	Ave	204	1.3	H	5.33	42.79	54.00	-11.21
802.11a U-NII-1 Middle channel 5200MHz									
316.58	38.97	QP	120	1.6	H	-11.62	27.35	46.00	-18.65
316.58	44.12	QP	51	1.1	V	-11.62	32.50	46.00	-13.50
4520.23	52.97	PK	281	1.2	H	-1.94	51.03	74.00	-22.97
4520.23	42.31	Ave	281	1.2	H	-1.94	40.37	54.00	-13.63
5129.17	54.86	PK	62	1.4	H	-1.06	53.80	74.00	-20.20
5129.17	46.13	Ave	62	1.4	H	-1.06	45.07	54.00	-8.93
10400.00	42.15	PK	320	1.5	H	5.21	47.36	74.00	-26.64
10400.00	37.25	Ave	320	1.5	H	5.21	42.46	54.00	-11.54

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11a U-NII-1 High channel 5240MHz									
316.58	39.53	QP	346	1.4	H	-11.62	27.91	46.00	-18.09
316.58	42.93	QP	24	1.1	V	-11.62	31.31	46.00	-14.69
4510.56	52.88	PK	62	1.6	H	-2.24	50.64	74.00	-23.36
4510.56	43.21	Ave	62	1.6	H	-2.24	40.97	54.00	-13.03
5136.03	55.13	PK	26	1.4	H	-1.09	54.04	74.00	-19.96
5136.03	46.08	Ave	26	1.4	H	-1.09	44.99	54.00	-9.01
10480.00	42.15	PK	44	1.0	H	5.14	47.29	74.00	-26.71
10480.00	37.25	Ave	44	1.0	H	5.14	42.39	54.00	-11.61
802.11a U-NII-3 Low Channel 5745MHz									
316.58	39.25	QP	206	1.9	H	-11.62	27.63	46.00	-18.37
316.58	42.21	QP	10	1.9	V	-11.62	30.59	46.00	-15.41
4508.76	52.91	PK	244	1.2	H	-2.06	50.85	74.00	-23.15
4508.76	43.06	Ave	244	1.2	H	-2.06	41.00	54.00	-13.00
5389.84	41.52	PK	284	1.7	H	5.93	47.45	74.00	-26.55
5389.84	37.54	Ave	284	1.7	H	5.93	43.47	54.00	-10.53
11490.00	46.03	PK	323	1.9	H	-1.25	44.78	74.00	-29.22
11490.00	37.75	Ave	323	1.9	H	-1.25	36.50	54.00	-17.50

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Heig ht	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11a U-NII-3 middle channel 5785MHz									
316.58	39.59	QP	143	1.8	H	-11.62	27.97	46.00	-18.03
316.58	41.14	QP	94	1.8	V	-11.62	29.52	46.00	-16.48
4505.68	53.20	PK	123	1.6	H	-2.03	51.17	74.00	-22.83
4505.68	42.69	Ave	123	1.6	H	-2.03	40.66	54.00	-13.34
5388.92	40.59	PK	157	1.3	H	5.81	46.40	74.00	-27.60
5388.92	36.88	Ave	157	1.3	H	5.81	42.69	54.00	-11.31
11570.00	45.18	PK	67	1.1	H	-1.22	43.96	74.00	-30.04
11570.00	38.72	Ave	67	1.1	H	-1.22	37.50	54.00	-16.50
802.11a U-NII-3 High channel 5825MHz									
316.58	38.69	QP	339	1.5	H	-11.62	27.07	46.00	-18.93
316.58	41.28	QP	42	1.3	V	-11.62	29.66	46.00	-16.34
4533.25	51.84	PK	342	1.8	H	-1.84	50.00	74.00	-24.00
4533.25	43.24	Ave	342	1.8	H	-1.84	41.40	54.00	-12.60
5389.90	42.42	PK	353	1.1	H	5.84	48.26	74.00	-25.74
5389.90	37.06	Ave	353	1.1	H	5.84	42.90	54.00	-11.10
11650.00	45.45	PK	55	1.6	H	-1.30	44.15	74.00	-29.85
11650.00	39.98	Ave	55	1.6	H	-1.30	38.68	54.00	-15.32

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT20) U-NII-1 Low Channel 5180MHz									
316.58	37.57	QP	108	1.9	H	-11.62	25.95	46.00	-20.05
316.58	41.13	QP	286	1.1	V	-11.62	29.51	46.00	-16.49
4511.73	52.68	PK	105	1.0	H	-2.14	50.54	74.00	-23.46
4511.73	42.79	Ave	105	1.0	H	-2.14	40.65	54.00	-13.35
5147.83	46.90	PK	11	1.2	H	-1.06	45.84	74.00	-28.16
5147.83	39.47	Ave	11	1.2	H	-1.06	38.41	54.00	-15.59
10360.00	40.73	PK	124	1.4	H	5.33	46.06	74.00	-27.94
10360.00	36.31	Ave	124	1.4	H	5.33	41.64	54.00	-12.36
802.11n(HT20) U-NII-1 Middle channel 5200MHz									
316.58	38.14	QP	176	1.7	H	-11.62	26.52	46.00	-19.48
316.58	41.11	QP	35	2.0	V	-11.62	29.49	46.00	-16.51
4511.98	52.16	PK	36	1.3	H	-2.12	50.04	74.00	-23.96
4511.98	42.34	Ave	36	1.3	H	-2.12	40.22	54.00	-13.78
5137.86	47.28	PK	218	1.6	H	-1.06	46.22	74.00	-27.78
5137.86	41.03	Ave	218	1.6	H	-1.06	39.97	54.00	-14.03
10400.00	42.41	PK	77	2.0	H	5.21	47.62	74.00	-26.38
10400.00	37.86	Ave	77	2.0	H	5.21	43.07	54.00	-10.93

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT20) U-NII-1 High channel 5240MHz									
316.58	37.34	QP	51	1.0	H	-11.62	25.72	46.00	-20.28
316.58	40.97	QP	231	1.7	V	-11.62	29.35	46.00	-16.65
4520.12	54.91	PK	312	2.0	H	-1.96	52.95	74.00	-21.05
4520.12	44.78	Ave	312	2.0	H	-1.96	42.82	54.00	-11.18
5146.04	48.66	PK	91	1.8	H	-1.06	47.60	74.00	-26.40
5146.04	39.86	Ave	91	1.8	H	-1.06	38.80	54.00	-15.20
10480.00	40.84	PK	5	1.0	H	5.14	45.98	74.00	-28.02
10480.00	36.54	Ave	5	1.0	H	5.14	41.68	54.00	-12.32
802.11n(HT20) U-NII-3 Low Channel 5745MHz									
316.58	38.20	QP	114	2.0	H	-11.62	26.58	46.00	-19.42
316.58	41.71	QP	312	1.6	V	-11.62	30.09	46.00	-15.91
4520.26	47.65	PK	168	1.9	H	-2.06	45.59	74.00	-28.41
4520.26	39.22	Ave	168	1.9	H	-2.06	37.16	54.00	-16.84
5375.84	36.01	PK	21	1.5	H	5.93	41.94	74.00	-32.06
5375.84	30.96	Ave	21	1.5	H	5.93	36.89	54.00	-17.11
11490.00	45.24	PK	255	2.0	H	-1.25	43.99	74.00	-30.01
11490.00	37.22	Ave	255	2.0	H	-1.25	35.97	54.00	-18.03

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Heig ht	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT20) U-NII-3 middle channel 5785MHz									
316.58	38.94	QP	216	1.4	H	-11.62	27.32	46.00	-18.68
316.58	48.05	QP	335	1.2	V	-11.62	36.43	46.00	-9.57
4528.79	46.82	PK	198	1.7	H	-2.03	44.79	74.00	-29.21
4528.79	47.78	Ave	198	1.7	H	-2.03	45.75	54.00	-8.25
5372.41	34.76	PK	26	1.3	H	5.81	40.57	74.00	-33.43
5372.41	40.38	Ave	26	1.3	H	5.81	46.19	54.00	-7.81
11570.00	45.24	PK	136	1.9	H	-1.22	44.02	74.00	-29.98
11570.00	37.69	Ave	136	1.9	H	-1.22	36.47	54.00	-17.53
802.11n(HT20) U-NII-3 High channel 5825MHz									
316.58	37.82	QP	94	1.1	H	-11.62	26.20	46.00	-19.80
316.58	49.24	QP	340	1.7	V	-11.62	37.62	46.00	-8.38
4503.65	45.67	PK	73	1.8	H	-1.84	43.83	74.00	-30.17
4503.65	46.46	Ave	73	1.8	H	-1.84	44.62	54.00	-9.38
5379.48	36.29	PK	46	1.4	H	5.84	42.13	74.00	-31.87
5379.48	41.13	Ave	46	1.4	H	5.84	46.97	54.00	-7.03
11650.00	45.49	PK	341	1.3	H	-1.30	44.19	74.00	-29.81
11650.00	38.67	Ave	341	1.3	H	-1.30	37.37	54.00	-16.63

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT40) U-NII-1 Low Channel 5190MHz									
316.58	35.87	QP	121	1.7	H	-11.62	24.25	46.00	-21.75
316.58	39.51	QP	316	1.2	V	-11.62	27.89	46.00	-18.11
4530.27	41.76	PK	252	1.4	H	-1.89	39.87	74.00	-34.13
4530.27	35.53	Ave	252	1.4	H	-1.89	33.64	54.00	-20.36
5134.31	46.63	PK	334	1.4	H	-1.06	45.57	74.00	-28.43
5134.31	39.73	Ave	334	1.4	H	-1.06	38.67	54.00	-15.33
10380.00	38.67	PK	164	1.1	H	5.26	43.93	74.00	-30.07
10380.00	34.71	Ave	164	1.1	H	5.26	39.97	54.00	-14.03
802.11n(HT40) U-NII-1 High channel 5230MHz									
316.58	35.08	QP	108	1.1	H	-11.62	23.46	46.00	-22.54
316.58	40.32	QP	156	1.0	V	-11.62	28.70	46.00	-17.30
4531.22	41.56	PK	293	1.8	H	-1.94	39.62	74.00	-34.38
4531.22	34.77	Ave	293	1.8	H	-1.94	32.83	54.00	-21.17
5127.99	48.49	PK	314	1.3	H	-1.06	47.43	74.00	-26.57
5127.99	40.75	Ave	314	1.3	H	-1.06	39.69	54.00	-14.31
10460.00	40.51	PK	27	1.7	H	5.28	45.79	74.00	-28.21
10460.00	37.65	Ave	27	1.7	H	5.28	42.93	54.00	-11.07

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT40) U-NII-3 Low Channel 5755MHz									
316.58	34.71	QP	42	1.2	H	-11.62	23.09	46.00	-22.91
316.58	41.09	QP	288	1.6	V	-11.62	29.47	46.00	-16.53
4505.85	39.70	PK	0	2.0	H	-1.96	37.74	74.00	-36.26
4505.85	33.45	Ave	0	2.0	H	-1.96	31.49	54.00	-22.51
5386.89	40.11	PK	278	1.5	H	5.88	45.99	74.00	-28.01
5386.89	35.66	Ave	278	1.5	H	5.88	41.54	54.00	-12.46
11510.00	45.40	PK	15	1.4	H	-1.01	44.39	74.00	-29.61
11510.00	37.17	Ave	15	1.4	H	-1.01	36.16	54.00	-17.84
802.11n(HT40) U-NII-3 High Channel 5795MHz									
316.58	34.41	QP	190	1.2	H	-11.62	22.79	46.00	-23.21
316.58	42.01	QP	5	1.4	V	-11.62	30.39	46.00	-15.61
4500.83	39.53	PK	265	1.0	H	-1.92	37.61	74.00	-36.39
4500.83	32.83	Ave	265	1.0	H	-1.92	30.91	54.00	-23.09
5374.32	42.06	PK	200	1.1	H	5.63	47.69	74.00	-26.31
5374.32	38.28	Ave	200	1.1	H	5.63	43.91	54.00	-10.09
11590.00	45.85	PK	293	1.4	H	-1.04	44.81	74.00	-29.19
11590.00	37.95	Ave	293	1.4	H	-1.04	36.91	54.00	-17.09

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11ac(VHT20) U-NII-1 Low Channel 5180MHz									
316.58	36.96	QP	73	1.5	H	-11.62	25.34	46.00	-20.66
316.58	41.64	QP	116	2.0	V	-11.62	30.02	46.00	-15.98
4511.33	47.61	PK	318	1.5	H	-1.86	45.75	74.00	-28.25
4511.33	39.31	Ave	318	1.5	H	-1.86	37.45	54.00	-16.55
5130.99	38.83	PK	310	1.7	H	-1.06	37.77	74.00	-36.23
5130.99	41.67	Ave	310	1.7	H	-1.06	40.61	54.00	-13.39
10360.00	45.27	PK	332	1.5	H	5.33	50.60	74.00	-23.40
10360.00	37.29	Ave	332	1.5	H	5.33	42.62	54.00	-11.38
802.11ac(VHT20) U-NII-1 Middle channel 5200MHz									
316.58	36.07	QP	164	1.6	H	-11.62	24.45	46.00	-21.55
316.58	41.71	QP	136	1.9	V	-11.62	30.09	46.00	-15.91
4507.60	47.79	PK	245	1.5	H	-1.82	45.97	74.00	-28.03
4507.60	40.06	Ave	245	1.5	H	-1.82	38.24	54.00	-15.76
5124.72	39.99	PK	151	1.6	H	-1.06	38.93	74.00	-35.07
5124.72	42.11	Ave	151	1.6	H	-1.06	41.05	54.00	-12.95
10400.00	43.14	PK	94	1.2	H	5.21	48.35	74.00	-25.65
10400.00	37.39	Ave	94	1.2	H	5.21	42.60	54.00	-11.40

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11ac(VHT20) U-NII-1 High channel 5240MHz									
316.58	35.52	QP	160	1.6	H	-11.62	23.90	46.00	-22.10
316.58	40.83	QP	14	1.8	V	-11.62	29.21	46.00	-16.79
4503.58	48.69	PK	295	1.8	H	-1.81	46.88	74.00	-27.12
4503.58	39.51	Ave	295	1.8	H	-1.81	37.70	54.00	-16.30
5139.85	41.19	PK	82	1.5	H	-1.06	40.13	74.00	-33.87
5139.85	43.53	Ave	82	1.5	H	-1.06	42.47	54.00	-11.53
10480.00	42.11	PK	148	1.3	H	5.14	47.25	74.00	-26.75
10480.00	36.99	Ave	148	1.3	H	5.14	42.13	54.00	-11.87
802.11ac(VHT20) U-NII-3 Low Channel 5745MHz									
316.58	36.94	QP	140	1.3	H	-11.62	25.32	46.00	-20.68
316.58	41.90	QP	67	1.9	V	-11.62	30.28	46.00	-15.72
4506.12	47.66	PK	77	1.5	H	-1.92	45.74	74.00	-28.26
4506.12	37.44	Ave	77	1.5	H	-1.92	35.52	54.00	-18.48
5385.71	40.82	PK	328	1.2	H	5.93	46.75	74.00	-27.25
5385.71	36.08	Ave	328	1.2	H	5.93	42.01	54.00	-11.99
11490.00	46.90	PK	164	1.4	H	-1.03	45.87	74.00	-28.13
11490.00	39.66	Ave	164	1.4	H	-1.03	38.63	54.00	-15.37

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Heig ht	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11ac(VHT20) U-NII-3 middle channel 5785MHz									
316.58	36.09	QP	178	1.7	H	-11.62	24.47	46.00	-21.53
316.58	41.00	QP	329	1.7	V	-11.62	29.38	46.00	-16.62
4502.59	47.12	PK	26	1.8	H	-1.97	45.15	74.00	-28.85
4502.59	37.27	Ave	26	1.8	H	-1.97	35.30	54.00	-18.70
5363.59	41.46	PK	120	1.2	H	5.81	47.27	74.00	-26.73
5363.59	37.89	Ave	120	1.2	H	5.81	43.70	54.00	-10.30
11570.00	45.93	PK	244	1.8	H	-1.05	44.88	74.00	-29.12
11570.00	38.44	Ave	244	1.8	H	-1.05	37.39	54.00	-16.61
802.11ac(VHT20) U-NII-3 High channel 5825MHz									
316.58	35.39	QP	163	1.5	H	-11.62	23.77	46.00	-22.23
316.58	41.30	QP	333	2.0	V	-11.62	29.68	46.00	-16.32
4505.82	47.62	PK	7	1.1	H	-1.88	45.74	74.00	-28.26
4505.82	37.26	Ave	7	1.1	H	-1.88	35.38	54.00	-18.62
5370.12	41.30	PK	266	1.7	H	5.84	47.14	74.00	-26.86
5370.12	38.58	Ave	266	1.7	H	5.84	44.42	54.00	-9.58
11650.00	45.06	PK	212	1.9	H	-1.06	44.00	74.00	-30.00
11650.00	38.58	Ave	212	1.9	H	-1.06	37.52	54.00	-16.48

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11ac(VHT40) U-NII-1 Low Channel 5190MHz									
316.58	37.83	QP	91	1.5	H	-11.62	26.21	46.00	-19.79
316.58	39.53	QP	273	1.8	V	-11.62	27.91	46.00	-18.09
4539.71	38.40	PK	320	1.0	H	-1.91	36.49	74.00	-37.51
4539.71	31.43	Ave	320	1.0	H	-1.91	29.52	54.00	-24.48
5140.24	45.62	PK	174	1.5	H	-1.06	44.56	74.00	-29.44
5140.24	39.29	Ave	174	1.5	H	-1.06	38.23	54.00	-15.77
10380.00	39.89	PK	279	1.1	H	5.26	45.15	74.00	-28.85
10380.00	35.71	Ave	279	1.1	H	5.26	40.97	54.00	-13.03
802.11ac(VHT40) U-NII-1 High channel 5230MHz									
316.58	38.07	QP	231	1.4	H	-11.62	26.45	46.00	-19.55
316.58	39.52	QP	32	1.2	V	-11.62	27.90	46.00	-18.10
4529.32	38.05	PK	17	1.5	H	-1.93	36.12	74.00	-37.88
4529.32	31.10	Ave	17	1.5	H	-1.93	29.17	54.00	-24.83
5130.50	45.23	PK	262	1.6	H	-1.06	44.17	74.00	-29.83
5130.50	39.19	Ave	262	1.6	H	-1.06	38.13	54.00	-15.87
10460.00	42.42	PK	49	1.2	H	5.28	47.70	74.00	-26.30
10460.00	37.61	Ave	49	1.2	H	5.28	42.89	54.00	-11.11

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11ac(VHT40) U-NII-3 Low Channel 5755MHz									
316.58	34.84	QP	340	1.5	H	-11.62	23.22	46.00	-22.78
316.58	45.46	QP	233	1.2	V	-11.62	33.84	46.00	-12.16
4512.63	35.98	PK	230	1.5	H	-1.92	34.06	74.00	-39.94
4512.63	26.99	Ave	230	1.5	H	-1.92	25.07	54.00	-28.93
5374.88	39.52	PK	106	1.7	H	5.88	45.40	74.00	-28.60
5374.88	35.16	Ave	106	1.7	H	5.88	41.04	54.00	-12.96
11510.00	46.52	PK	129	1.4	H	-1.07	45.45	74.00	-28.55
11510.00	39.78	Ave	129	1.4	H	-1.07	38.71	54.00	-15.29
802.11ac(VHT40) U-NII-3 High Channel 5795MHz									
316.58	35.21	QP	303	1.9	H	-11.62	23.59	46.00	-22.41
316.58	45.08	QP	24	1.1	V	-11.62	33.46	46.00	-12.54
4515.47	36.40	PK	70	1.8	H	-1.86	34.54	74.00	-39.46
4515.47	26.40	Ave	70	1.8	H	-1.86	24.54	54.00	-29.46
5351.81	41.50	PK	87	1.4	H	5.63	47.13	74.00	-26.87
5351.81	37.24	Ave	87	1.4	H	5.63	42.87	54.00	-11.13
11590.00	46.45	PK	188	1.7	H	-1.03	45.42	74.00	-28.58
11590.00	37.20	Ave	188	1.7	H	-1.03	36.17	54.00	-17.83

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Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11a U-NII-1 Low Channel 5180MHz									
316.58	39.83	QP	331	1.6	H	-11.62	28.21	46.00	-17.79
316.58	42.85	QP	19	1.1	V	-11.62	31.23	46.00	-14.77
4529.16	53.57	PK	35	1.2	H	-2.03	51.54	74.00	-22.46
4529.16	44.17	Ave	35	1.2	H	-2.03	42.14	54.00	-11.86
5143.33	53.71	PK	157	1.4	H	-1.02	52.69	74.00	-21.31
5143.33	44.29	Ave	157	1.4	H	-1.02	43.27	54.00	-10.73
10360.00	41.39	PK	42	1.5	H	5.33	46.72	74.00	-27.28
10360.00	37.60	Ave	42	1.5	H	5.33	42.93	54.00	-11.07
802.11a U-NII-1 Middle channel 5200MHz									
316.58	38.70	QP	230	1.4	H	-11.62	27.08	46.00	-18.92
316.58	41.77	QP	181	1.9	V	-11.62	30.15	46.00	-15.85
4515.72	54.81	PK	124	1.7	H	-1.94	52.87	74.00	-21.13
4515.72	44.71	Ave	124	1.7	H	-1.94	42.77	54.00	-11.23
5132.32	54.64	PK	92	1.8	H	-1.06	53.58	74.00	-20.42
5132.32	44.64	Ave	92	1.8	H	-1.06	43.58	54.00	-10.42
10400.00	41.44	PK	18	1.1	H	5.21	46.65	74.00	-27.35
10400.00	36.63	Ave	18	1.1	H	5.21	41.84	54.00	-12.16

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11a U-NII-1 High channel 5240MHz									
316.58	38.23	QP	115	1.8	H	-11.62	26.61	46.00	-19.39
316.58	40.29	QP	352	1.8	V	-11.62	28.67	46.00	-17.33
4526.39	55.52	PK	299	1.3	H	-2.24	53.28	74.00	-20.72
4526.39	44.04	Ave	299	1.3	H	-2.24	41.80	54.00	-12.20
5137.64	55.69	PK	292	2.0	H	-1.09	54.60	74.00	-19.40
5137.64	43.96	Ave	292	2.0	H	-1.09	42.87	54.00	-11.13
10480.00	40.45	PK	47	1.0	H	5.14	45.59	74.00	-28.41
10480.00	37.14	Ave	47	1.0	H	5.14	42.28	54.00	-11.72
802.11a U-NII-3 Low Channel 5745MHz									
316.58	38.60	QP	223	2.0	H	-11.62	26.98	46.00	-19.02
316.58	45.01	QP	61	1.5	V	-11.62	33.39	46.00	-12.61
4539.47	53.51	PK	173	1.0	H	-2.06	51.45	74.00	-22.55
4539.47	41.80	Ave	173	1.0	H	-2.06	39.74	54.00	-14.26
5355.32	40.36	PK	137	1.1	H	5.93	46.29	74.00	-27.71
5355.32	39.02	Ave	137	1.1	H	5.93	44.95	54.00	-9.05
11490.00	46.07	PK	258	1.1	H	-1.25	44.82	74.00	-29.18
11490.00	38.56	Ave	258	1.1	H	-1.25	37.31	54.00	-16.69

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Heig ht	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11a U-NII-3 middle channel 5785MHz									
316.58	37.48	QP	25	1.9	H	-11.62	25.86	46.00	-20.14
316.58	46.13	QP	86	1.8	V	-11.62	34.51	46.00	-11.49
4512.59	53.13	PK	160	1.6	H	-2.03	51.10	74.00	-22.90
4512.59	41.43	Ave	160	1.6	H	-2.03	39.40	54.00	-14.60
5353.99	41.47	PK	228	1.3	H	5.81	47.28	74.00	-26.72
5353.99	37.64	Ave	228	1.3	H	5.81	43.45	54.00	-10.55
11570.00	46.11	PK	334	1.4	H	-1.22	44.89	74.00	-29.11
11570.00	38.10	Ave	334	1.4	H	-1.22	36.88	54.00	-17.12
802.11a U-NII-3 High channel 5825MHz									
316.58	38.21	QP	29	1.8	H	-11.62	26.59	46.00	-19.41
316.58	46.86	QP	264	1.9	V	-11.62	35.24	46.00	-10.76
4515.36	52.12	PK	117	1.5	H	-1.84	50.28	74.00	-23.72
4515.36	41.87	Ave	117	1.5	H	-1.84	40.03	54.00	-13.97
5386.27	42.06	PK	26	1.8	H	5.84	47.90	74.00	-26.10
5386.27	37.19	Ave	26	1.8	H	5.84	43.03	54.00	-10.97
11650.00	46.53	PK	116	1.7	H	-1.30	45.23	74.00	-28.77
11650.00	37.25	Ave	116	1.7	H	-1.30	35.95	54.00	-18.05

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT20) U-NII-1 Low Channel 5180MHz									
316.58	36.13	QP	343	1.8	H	-11.62	24.51	46.00	-21.49
316.58	37.93	QP	18	1.5	V	-11.62	26.31	46.00	-19.69
4527.33	55.23	PK	207	2.0	H	-2.14	53.09	74.00	-20.91
4527.33	43.57	Ave	207	2.0	H	-2.14	41.43	54.00	-12.57
5126.06	45.52	PK	310	1.4	H	-1.06	44.46	74.00	-29.54
5126.06	37.55	Ave	310	1.4	H	-1.06	36.49	54.00	-17.51
10360.00	42.82	PK	256	1.5	H	5.33	48.15	74.00	-25.85
10360.00	35.86	Ave	256	1.5	H	5.33	41.19	54.00	-12.81
802.11n(HT20) U-NII-1 Middle channel 5200MHz									
316.58	36.51	QP	41	1.3	H	-11.62	24.89	46.00	-21.11
316.58	38.10	QP	355	1.9	V	-11.62	26.48	46.00	-19.52
4510.80	54.21	PK	219	1.1	H	-2.12	52.09	74.00	-21.91
4510.80	44.94	Ave	219	1.1	H	-2.12	42.82	54.00	-11.18
5110.30	47.33	PK	272	1.7	H	-1.06	46.27	74.00	-27.73
5110.30	39.05	Ave	272	1.7	H	-1.06	37.99	54.00	-16.01
10400.00	43.50	PK	162	1.4	H	5.21	48.71	74.00	-25.29
10400.00	37.06	Ave	162	1.4	H	5.21	42.27	54.00	-11.73

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT20) U-NII-1 High channel 5240MHz									
316.58	37.10	QP	349	1.9	H	-11.62	25.48	46.00	-20.52
316.58	38.71	QP	71	1.2	V	-11.62	27.09	46.00	-18.91
4509.11	54.75	PK	134	1.7	H	-1.96	52.79	74.00	-21.21
4509.11	43.69	Ave	134	1.7	H	-1.96	41.73	54.00	-12.27
5115.39	47.84	PK	173	1.7	H	-1.06	46.78	74.00	-27.22
5115.39	40.71	Ave	173	1.7	H	-1.06	39.65	54.00	-14.35
10480.00	42.02	PK	82	2.0	H	5.14	47.16	74.00	-26.84
10480.00	37.32	Ave	82	2.0	H	5.14	42.46	54.00	-11.54
802.11n(HT20) U-NII-3 Low Channel 5745MHz									
316.58	39.70	QP	174	1.6	H	-11.62	28.08	46.00	-17.92
316.58	52.22	QP	324	1.8	V	-11.62	40.60	46.00	-5.40
4505.49	43.40	PK	107	1.4	H	-2.06	41.34	74.00	-32.66
4505.49	47.99	Ave	107	1.4	H	-2.06	45.93	54.00	-8.07
5367.84	37.27	PK	66	1.9	H	5.93	43.20	74.00	-30.80
5367.84	38.68	Ave	66	1.9	H	5.93	44.61	54.00	-9.39
11490.00	45.41	PK	110	1.1	H	-1.25	44.16	74.00	-29.84
11490.00	37.15	Ave	110	1.1	H	-1.25	35.90	54.00	-18.10

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Heig ht	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT20) U-NII-3 middle channel 5785MHz									
316.58	40.54	QP	289	1.5	H	-11.62	28.92	46.00	-17.08
316.58	45.75	QP	265	1.4	V	-11.62	34.13	46.00	-11.87
4520.18	42.91	PK	243	1.6	H	-2.03	40.88	74.00	-33.12
4520.18	48.53	Ave	243	1.6	H	-2.03	46.50	54.00	-7.50
5353.24	35.48	PK	51	2.0	H	5.81	41.29	74.00	-32.71
5353.24	37.05	Ave	51	2.0	H	5.81	42.86	54.00	-11.14
11570.00	45.50	PK	301	1.1	H	-1.22	44.28	74.00	-29.72
11570.00	39.66	Ave	301	1.1	H	-1.22	38.44	54.00	-15.56
802.11n(HT20) U-NII-3 High channel 5825MHz									
316.58	40.80	QP	95	1.5	H	-11.62	29.18	46.00	-16.82
316.58	47.23	QP	135	1.6	V	-11.62	35.61	46.00	-10.39
4500.47	43.11	PK	319	1.5	H	-1.84	41.27	74.00	-32.73
4500.47	47.63	Ave	319	1.5	H	-1.84	45.79	54.00	-8.21
5388.62	36.24	PK	59	1.3	H	5.84	42.08	74.00	-31.92
5388.62	40.58	Ave	59	1.3	H	5.84	46.42	54.00	-7.58
11650.00	45.29	PK	59	1.0	H	-1.30	43.99	74.00	-30.01
11650.00	38.07	Ave	59	1.0	H	-1.30	36.77	54.00	-17.23

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT40) U-NII-1 Low Channel 5190MHz									
316.58	35.51	QP	79	1.4	H	-11.62	23.89	46.00	-22.11
316.58	40.78	QP	300	1.6	V	-11.62	29.16	46.00	-16.84
4517.90	39.92	PK	217	1.7	H	-1.89	38.03	74.00	-35.97
4517.90	37.30	Ave	217	1.7	H	-1.89	35.41	54.00	-18.59
5132.93	47.67	PK	264	1.8	H	-1.06	46.61	74.00	-27.39
5132.93	38.62	Ave	264	1.8	H	-1.06	37.56	54.00	-16.44
10380.00	40.18	PK	222	1.9	H	5.26	45.44	74.00	-28.56
10380.00	34.05	Ave	222	1.9	H	5.26	39.31	54.00	-14.69
802.11n(HT40) U-NII-1 High channel 5230MHz									
316.58	34.79	QP	29	1.7	H	-11.62	23.17	46.00	-22.83
316.58	40.29	QP	273	2.0	V	-11.62	28.67	46.00	-17.33
4533.17	40.73	PK	319	1.1	H	-1.94	38.79	74.00	-35.21
4533.17	37.66	Ave	319	1.1	H	-1.94	35.72	54.00	-18.28
5129.70	48.10	PK	223	1.7	H	-1.06	47.04	74.00	-26.96
5129.70	39.72	Ave	223	1.7	H	-1.06	38.66	54.00	-15.34
10460.00	42.24	PK	313	1.4	H	5.28	47.52	74.00	-26.48
10460.00	36.49	Ave	313	1.4	H	5.28	41.77	54.00	-12.23

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT40) U-NII-3 Low Channel 5755MHz									
316.58	34.52	QP	122	1.0	H	-11.62	22.90	46.00	-23.10
316.58	38.00	QP	349	1.9	V	-11.62	26.38	46.00	-19.62
4535.63	38.93	PK	130	1.2	H	-1.96	36.97	74.00	-37.03
4535.63	31.56	Ave	130	1.2	H	-1.96	29.60	54.00	-24.40
5353.22	39.43	PK	235	1.8	H	5.88	45.31	74.00	-28.69
5353.22	35.81	Ave	235	1.8	H	5.88	41.69	54.00	-12.31
11510.00	46.01	PK	0	1.7	H	-1.01	45.00	74.00	-29.00
11510.00	37.26	Ave	0	1.7	H	-1.01	36.25	54.00	-17.75
802.11n(HT40) U-NII-3 High Channel 5795MHz									
316.58	35.40	QP	104	1.1	H	-11.62	23.78	46.00	-22.22
316.58	37.42	QP	64	1.7	V	-11.62	25.80	46.00	-20.20
4529.71	39.21	PK	35	1.3	H	-1.92	37.29	74.00	-36.71
4529.71	30.95	Ave	35	1.3	H	-1.92	29.03	54.00	-24.97
5359.63	41.90	PK	310	1.2	H	5.63	47.53	74.00	-26.47
5359.63	37.27	Ave	310	1.2	H	5.63	42.90	54.00	-11.10
11590.00	46.73	PK	98	1.4	H	-1.04	45.69	74.00	-28.31
11590.00	38.18	Ave	98	1.4	H	-1.04	37.14	54.00	-16.86

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11ac(VHT20) U-NII-1 Low Channel 5180MHz									
316.58	36.80	QP	333	1.7	H	-11.62	25.18	46.00	-20.82
316.58	39.75	QP	354	1.3	V	-11.62	28.13	46.00	-17.87
4523.08	44.58	PK	106	1.5	H	-1.86	42.72	74.00	-31.28
4523.08	36.92	Ave	106	1.5	H	-1.86	35.06	54.00	-18.94
5136.74	41.67	PK	204	1.6	H	-1.06	40.61	74.00	-33.39
5136.74	41.25	Ave	204	1.6	H	-1.06	40.19	54.00	-13.81
10360.00	45.77	PK	322	1.4	H	5.33	51.10	74.00	-22.90
10360.00	39.44	Ave	322	1.4	H	5.33	44.77	54.00	-9.23
802.11ac(VHT20) U-NII-1 Middle channel 5200MHz									
316.58	37.97	QP	162	1.8	H	-11.62	26.35	46.00	-19.65
316.58	41.33	QP	108	1.2	V	-11.62	29.71	46.00	-16.29
4532.49	45.76	PK	123	1.1	H	-1.82	43.94	74.00	-30.06
4532.49	36.22	Ave	123	1.1	H	-1.82	34.40	54.00	-19.60
5114.29	43.76	PK	160	1.2	H	-1.06	42.70	74.00	-31.30
5114.29	40.77	Ave	160	1.2	H	-1.06	39.71	54.00	-14.29
10400.00	40.96	PK	160	1.2	H	5.21	46.17	74.00	-27.83
10400.00	37.60	Ave	160	1.2	H	5.21	42.81	54.00	-11.19

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11ac(VHT20) U-NII-1 High channel 5240MHz									
316.58	37.86	QP	238	1.3	H	-11.62	26.24	46.00	-19.76
316.58	41.20	QP	190	2.0	V	-11.62	29.58	46.00	-16.42
4511.97	45.66	PK	260	1.3	H	-1.81	43.85	74.00	-30.15
4511.97	37.05	Ave	260	1.3	H	-1.81	35.24	54.00	-18.76
5137.73	45.65	PK	342	1.8	H	-1.06	44.59	74.00	-29.41
5137.73	41.66	Ave	342	1.8	H	-1.06	40.60	54.00	-13.40
10480.00	41.05	PK	269	1.4	H	5.14	46.19	74.00	-27.81
10480.00	38.01	Ave	269	1.4	H	5.14	43.15	54.00	-10.85
802.11ac(VHT20) U-NII-3 Low Channel 5745MHz									
316.58	38.86	QP	45	1.0	H	-11.62	27.24	46.00	-18.76
316.58	40.47	QP	134	1.5	V	-11.62	28.85	46.00	-17.15
4514.23	43.17	PK	306	1.4	H	-1.92	41.25	74.00	-32.75
4514.23	35.16	Ave	306	1.4	H	-1.92	33.24	54.00	-20.76
5351.88	38.68	PK	43	1.4	H	5.93	44.61	74.00	-29.39
5351.88	34.65	Ave	43	1.4	H	5.93	40.58	54.00	-13.42
11490.00	45.86	PK	81	1.6	H	-1.03	44.83	74.00	-29.17
11490.00	38.17	Ave	81	1.6	H	-1.03	37.14	54.00	-16.86

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11ac(VHT20) U-NII-3 middle channel 5785MHz									
316.58	38.97	QP	132	1.0	H	-11.62	27.35	46.00	-18.65
316.58	41.41	QP	70	1.8	V	-11.62	29.79	46.00	-16.21
4513.42	42.77	PK	72	1.1	H	-1.97	40.80	74.00	-33.20
4513.42	34.33	Ave	72	1.1	H	-1.97	32.36	54.00	-21.64
5375.11	40.91	PK	2	2.0	H	5.81	46.72	74.00	-27.28
5375.11	36.94	Ave	2	2.0	H	5.81	42.75	54.00	-11.25
11570.00	45.32	PK	11	1.9	H	-1.05	44.27	74.00	-29.73
11570.00	37.71	Ave	11	1.9	H	-1.05	36.66	54.00	-17.34
802.11ac(VHT20) U-NII-3 High channel 5825MHz									
316.58	38.32	QP	33	1.8	H	-11.62	26.70	46.00	-19.30
316.58	40.48	QP	330	1.4	V	-11.62	28.86	46.00	-17.14
4518.62	43.59	PK	111	1.6	H	-1.88	41.71	74.00	-32.29
4518.62	35.33	Ave	111	1.6	H	-1.88	33.45	54.00	-20.55
5356.45	40.77	PK	200	1.9	H	5.84	46.61	74.00	-27.39
5356.45	36.61	Ave	200	1.9	H	5.84	42.45	54.00	-11.55
11650.00	45.32	PK	172	1.2	H	-1.06	44.26	74.00	-29.74
11650.00	37.44	Ave	172	1.2	H	-1.06	36.38	54.00	-17.62

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11ac(VHT40) U-NII-1 Low Channel 5190MHz									
316.58	39.03	QP	96	1.6	H	-11.62	27.41	46.00	-18.59
316.58	42.20	QP	5	1.1	V	-11.62	30.58	46.00	-15.42
4515.96	40.27	PK	147	1.7	H	-1.91	38.36	74.00	-35.64
4515.96	31.05	Ave	147	1.7	H	-1.91	29.14	54.00	-24.86
5145.36	48.08	PK	63	1.5	H	-1.06	47.02	74.00	-26.98
5145.36	36.44	Ave	63	1.5	H	-1.06	35.38	54.00	-18.62
10380.00	38.31	PK	324	1.9	H	5.26	43.57	74.00	-30.43
10380.00	35.15	Ave	324	1.9	H	5.26	40.41	54.00	-13.59
802.11ac(VHT40) U-NII-1 High channel 5230MHz									
316.58	38.12	QP	232	1.6	H	-11.62	26.50	46.00	-19.50
316.58	41.58	QP	79	1.7	V	-11.62	29.96	46.00	-16.04
4509.85	39.48	PK	41	1.7	H	-1.93	37.55	74.00	-36.45
4509.85	31.55	Ave	41	1.7	H	-1.93	29.62	54.00	-24.38
5129.97	48.59	PK	159	1.5	H	-1.06	47.53	74.00	-26.47
5129.97	36.07	Ave	159	1.5	H	-1.06	35.01	54.00	-18.99
10460.00	40.97	PK	146	1.7	H	5.28	46.25	74.00	-27.75
10460.00	37.21	Ave	146	1.7	H	5.28	42.49	54.00	-11.51

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11ac(VHT40) U-NII-3 Low Channel 5755MHz									
316.58	34.31	QP	149	1.1	H	-11.62	22.69	46.00	-23.31
316.58	43.63	QP	193	1.3	V	-11.62	32.01	46.00	-13.99
4538.55	33.82	PK	317	1.2	H	-1.92	31.90	74.00	-42.10
4538.55	28.60	Ave	317	1.2	H	-1.92	26.68	54.00	-27.32
5350.36	39.26	PK	78	1.1	H	5.88	45.14	74.00	-28.86
5350.36	34.80	Ave	78	1.1	H	5.88	40.68	54.00	-13.32
11510.00	45.31	PK	86	1.6	H	-1.07	44.24	74.00	-29.76
11510.00	39.24	Ave	86	1.6	H	-1.07	38.17	54.00	-15.83
802.11ac(VHT40) U-NII-3 High Channel 5795MHz									
316.58	34.80	QP	54	1.0	H	-11.62	23.18	46.00	-22.82
316.58	43.33	QP	325	1.5	V	-11.62	31.71	46.00	-14.29
4525.22	33.22	PK	78	1.4	H	-1.86	31.36	74.00	-42.64
4525.22	28.17	Ave	78	1.4	H	-1.86	26.31	54.00	-27.69
5359.51	40.70	PK	31	1.7	H	5.63	46.33	74.00	-27.67
5359.51	36.33	Ave	31	1.7	H	5.63	41.96	54.00	-12.04
11590.00	45.25	PK	1	2.0	H	-1.03	44.22	74.00	-29.78
11590.00	39.16	Ave	1	2.0	H	-1.03	38.13	54.00	-15.87

Test Frequency: 12GHz~40GHz

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

10 Band Edge

Test Requirement:	FCC 47CFR Part 15 Section 15.407
Test Method:	ANSI C63.10 2013
Test Limit:	For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27dBm/MHz. For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz. For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz. For transmitters operating in the 5.725-5.85 GHz band: (i) 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. (ii) Devices certified before March 2, 2017 with antenna gain greater than 10 dBi may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease by March 2, 2018. Devices certified before March 2, 2018 with antenna gain of 10 dBi or less may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease before March 2, 2020.
Test Result:	PASS

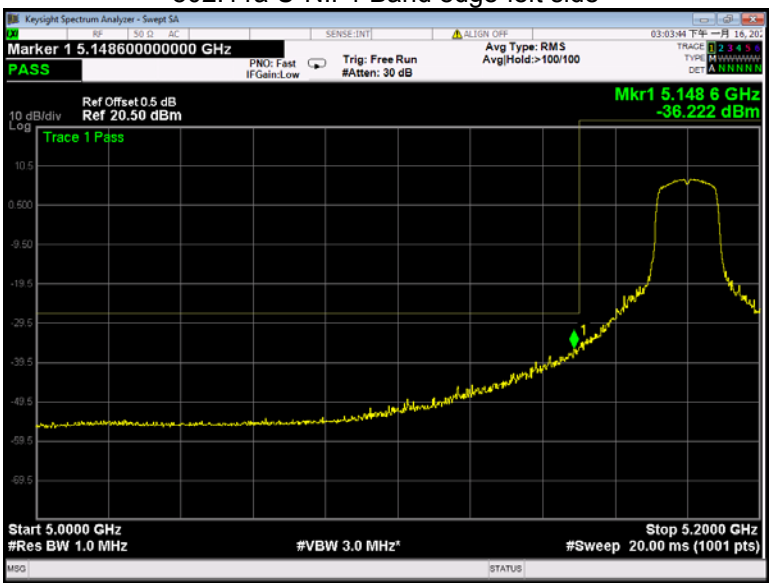
10.1 Test Produce

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

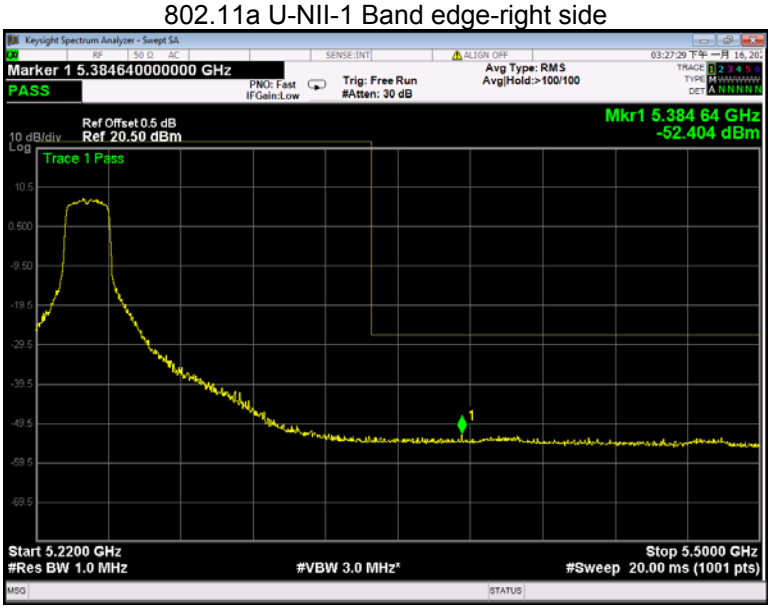
10.2 Test Result

Test result plots shown as follows:

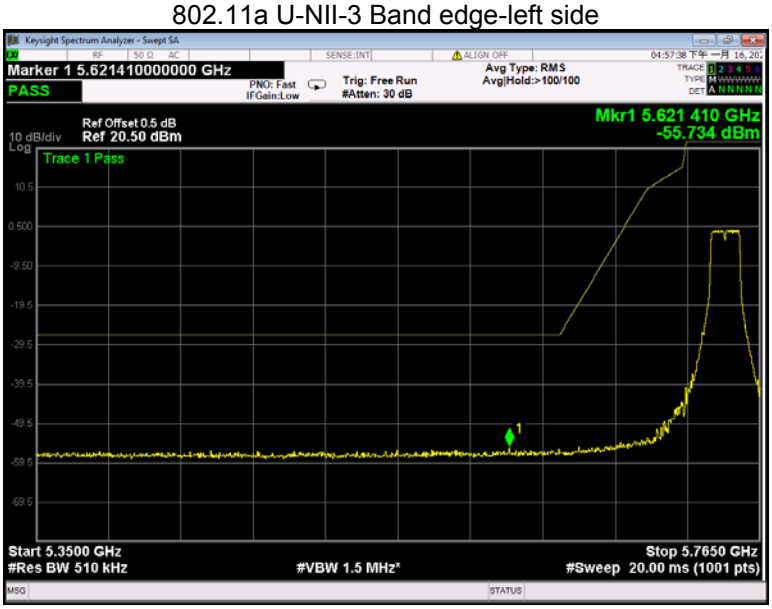
802.11a U-NII-1 Band edge-left side



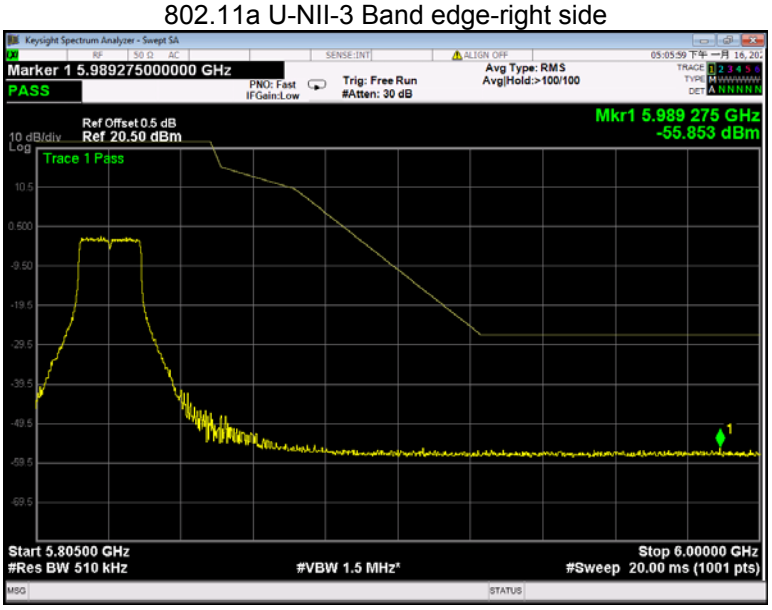
802.11a U-NII-1 Band edge-right side



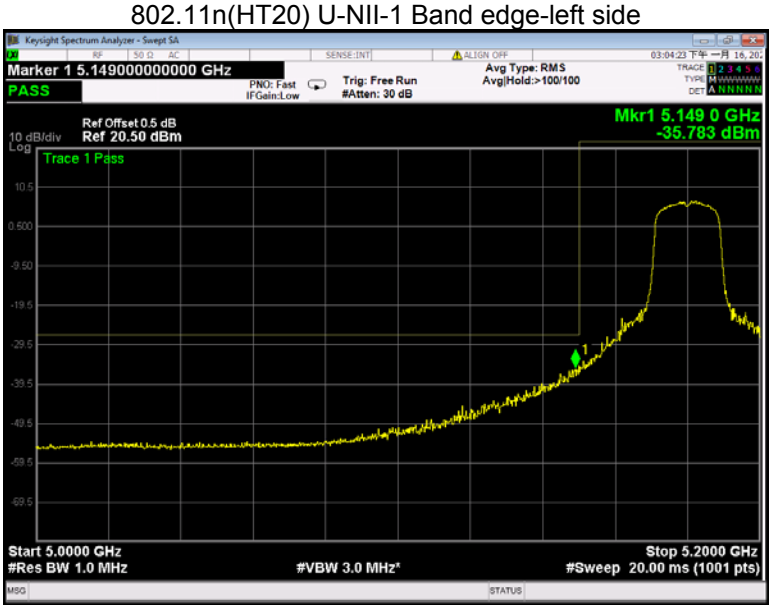
802.11a U-NII-3 Band edge-left side



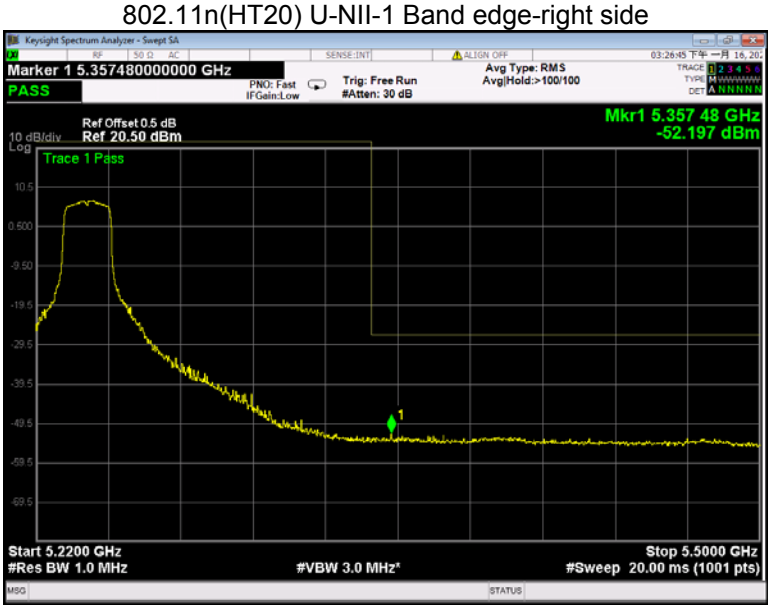
802.11a U-NII-3 Band edge-right side



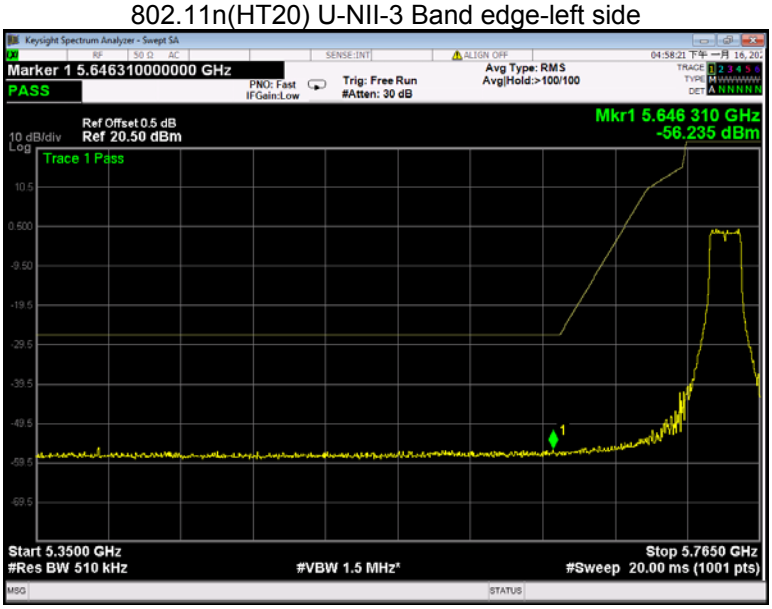
802.11n(HT20) U-NII-1 Band edge-left side



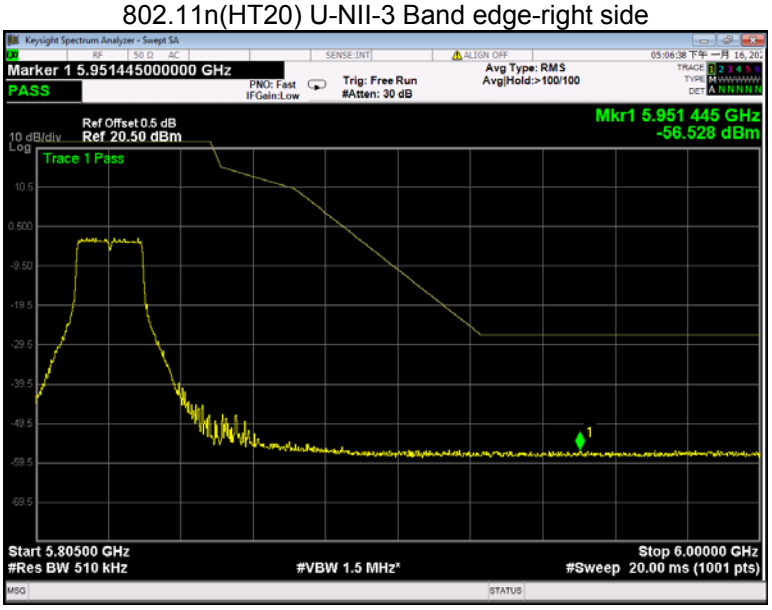
802.11n(HT20) U-NII-1 Band edge-right side



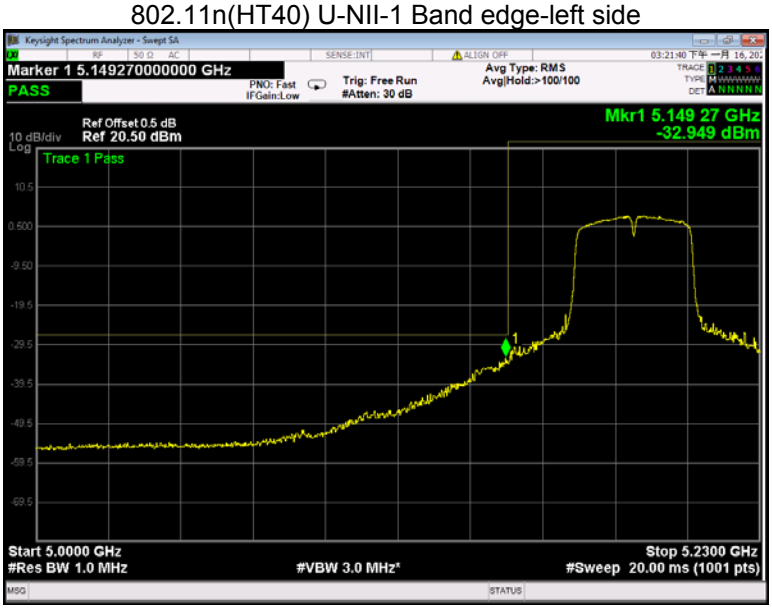
802.11n(HT20) U-NII-3 Band edge-left side



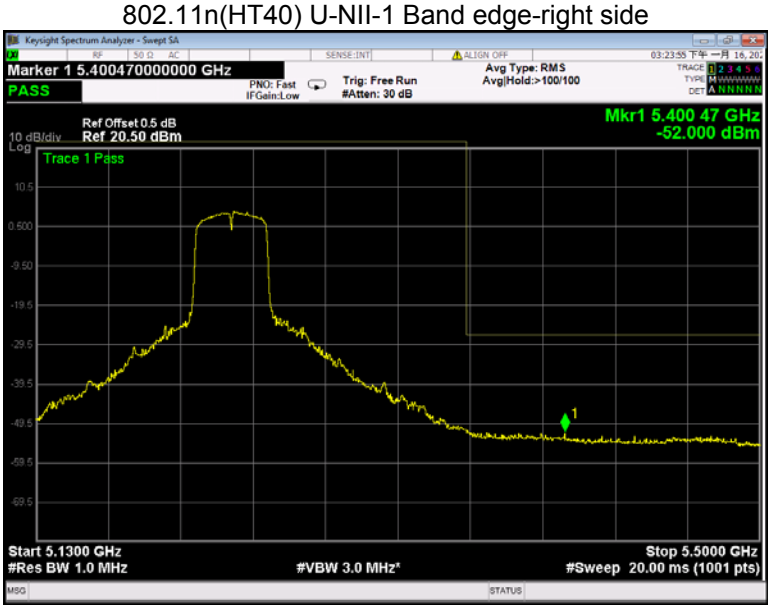
802.11n(HT20) U-NII-3 Band edge-right side



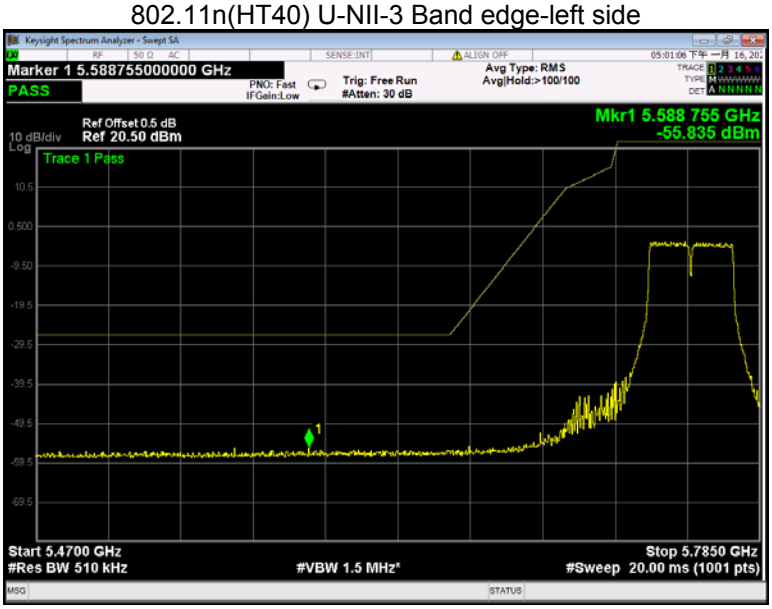
802.11n(HT40) U-NII-1 Band edge-left side



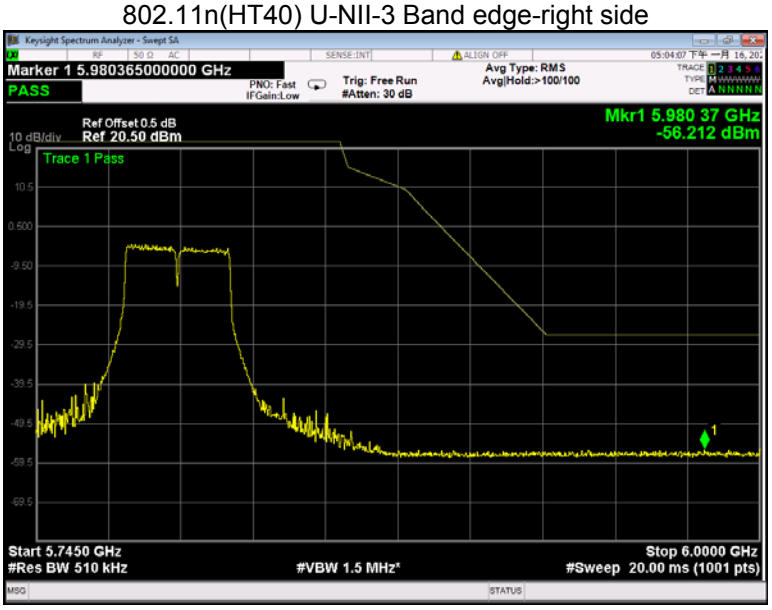
802.11n(HT40) U-NII-1 Band edge-right side



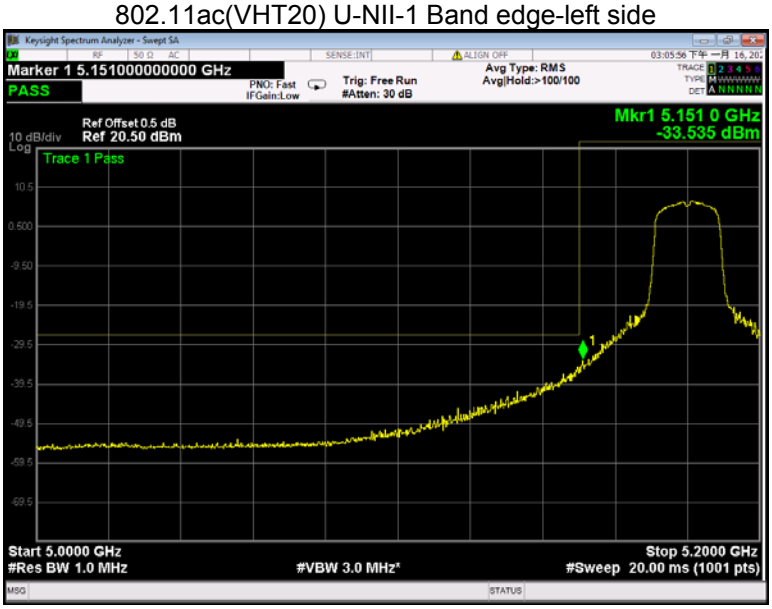
802.11n(HT40) U-NII-3 Band edge-left side



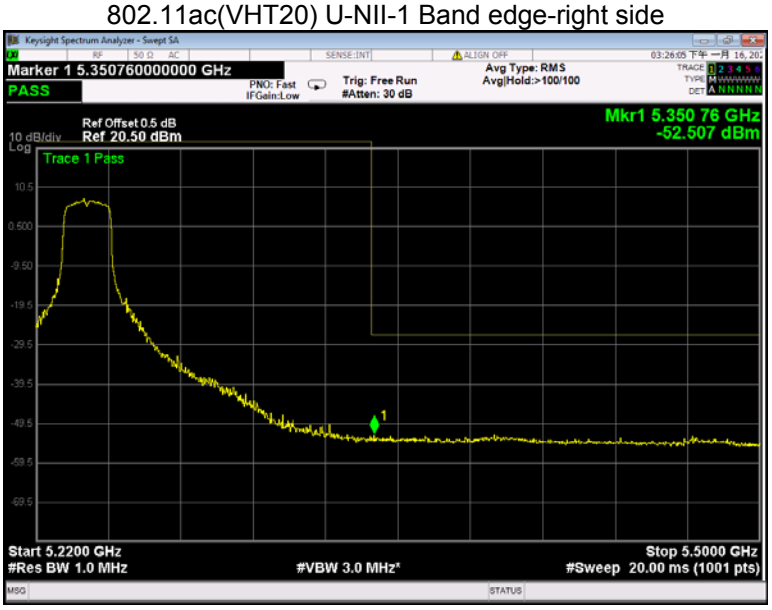
802.11n(HT40) U-NII-3 Band edge-right side



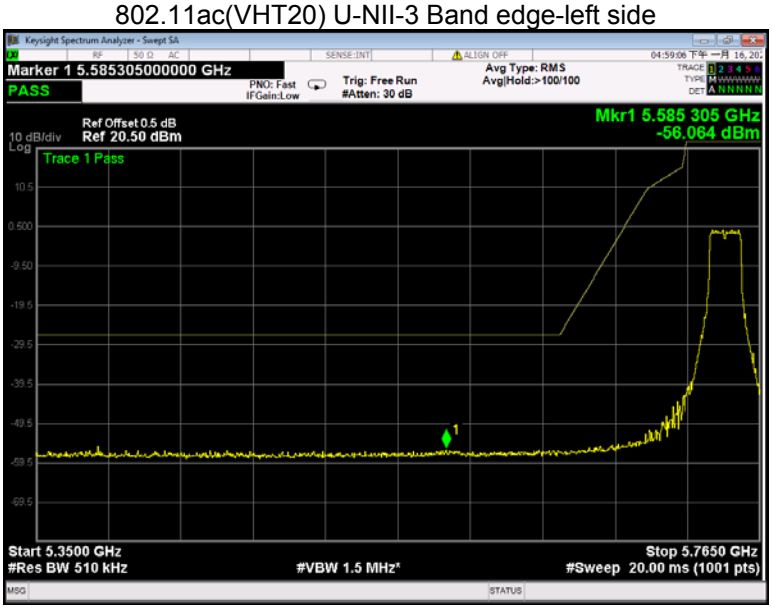
802.11ac(VHT20) U-NII-1 Band edge-left side



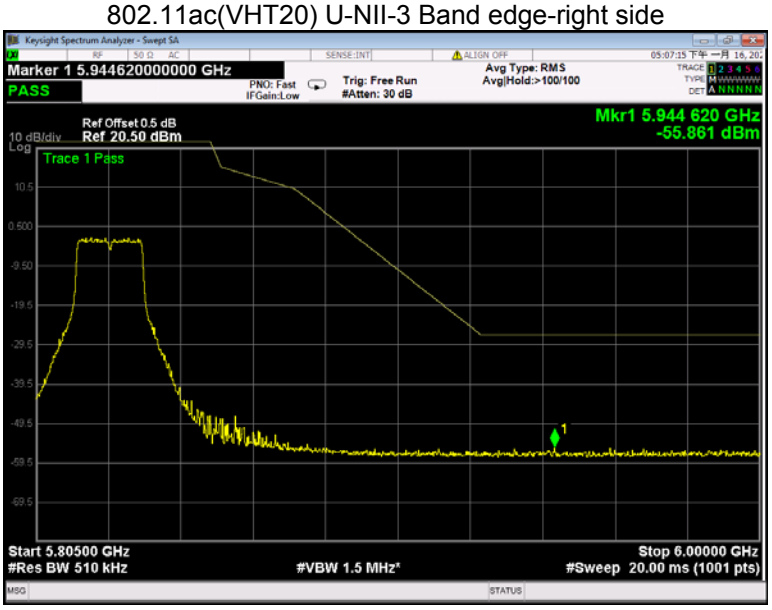
802.11ac(VHT20) U-NII-1 Band edge-right side



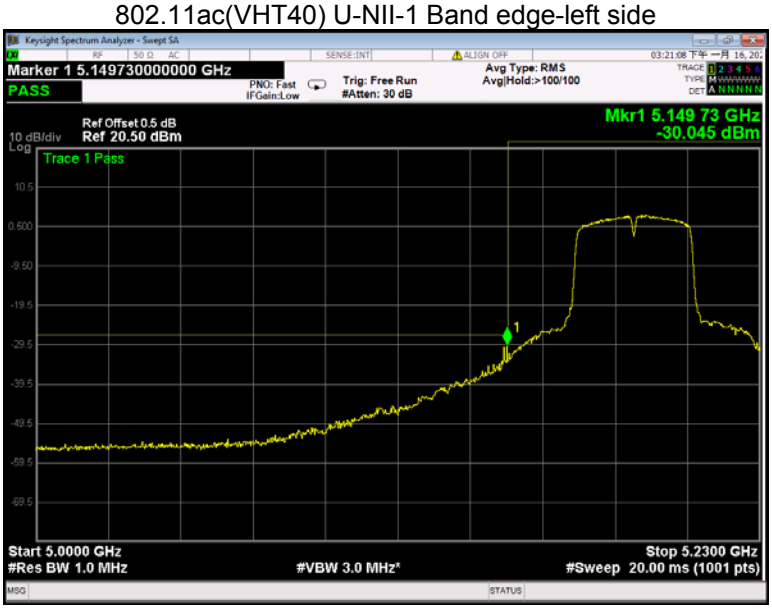
802.11ac(VHT20) U-NII-3 Band edge-left side



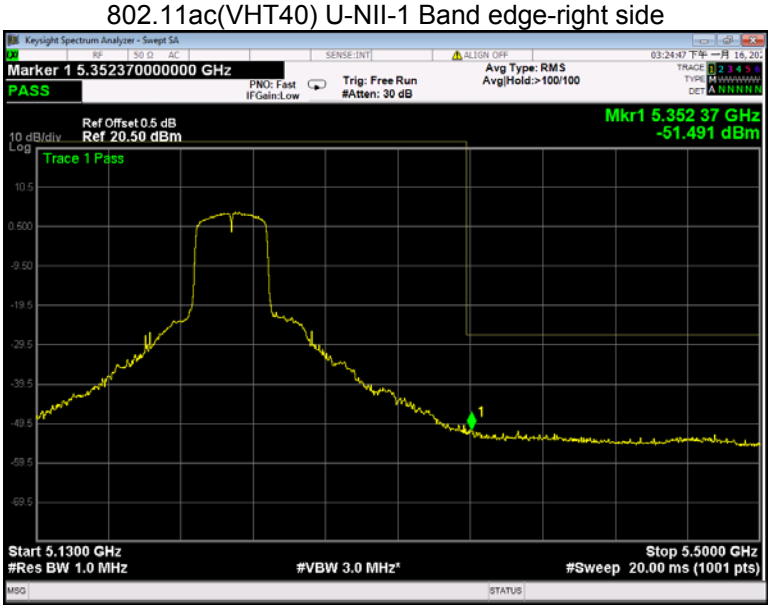
802.11ac(VHT20) U-NII-3 Band edge-right side



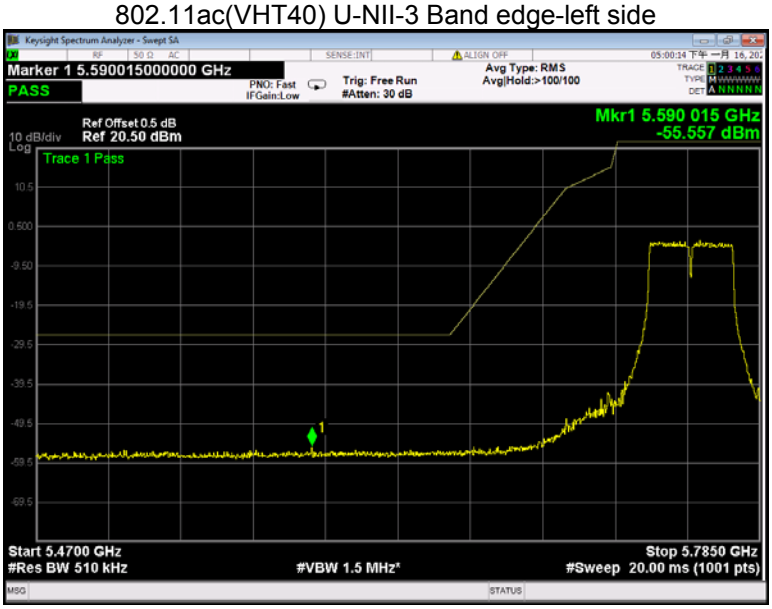
802.11ac(VHT40) U-NII-1 Band edge-left side



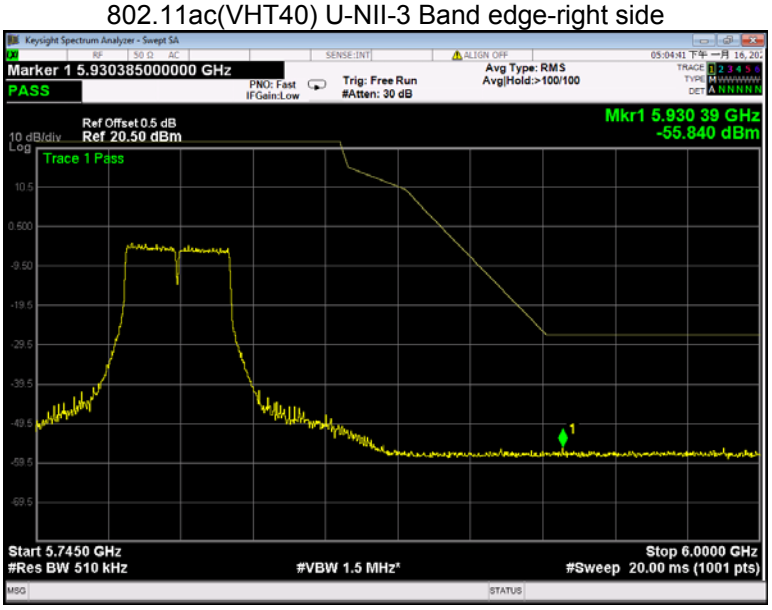
802.11ac(VHT40) U-NII-1 Band edge-right side



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



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



11 6 dB Bandwidth

Test Requirement:	FCC 47CFR Part 15 Section 15.407(e)
Test Method:	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General U-NII Test Procedures New Rules v02r01 Section C
Test Limit:	≥ 500 kHz
Test Result:	PASS

11.1 Test Procedure

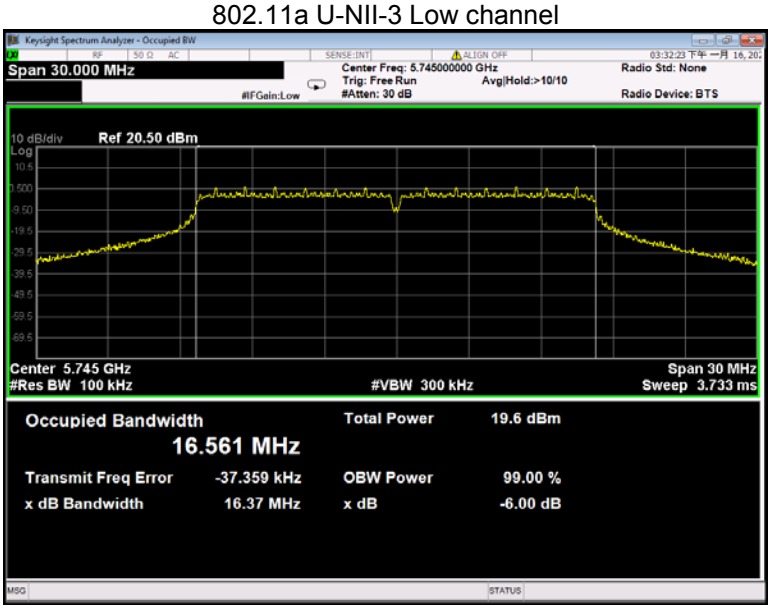
1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum;
2. Set the spectrum analyzer: RBW = 100kHz, VBW = 300kHz

11.2 Test Result

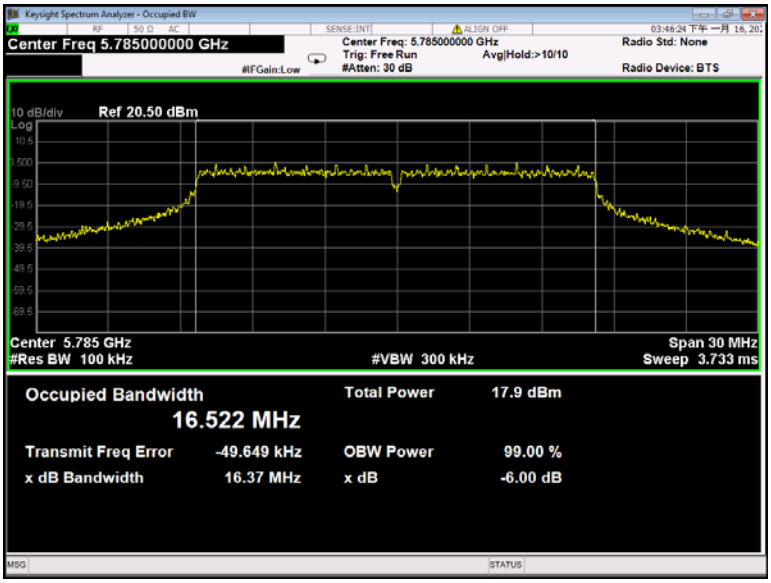
Band	Operation mode	6 dB Bandwidth (MHz)		
		Low	Middle	High
U-NII-3	802.11a	16.37	16.37	16.37
	802.11n(HT20)	17.61	17.59	17.60
	802.11n(HT40)	36.02	/	35.75
	802.11ac(VHT20)	17.61	17.60	17.58
	802.11ac(VHT40)	35.74	/	35.76

Test result plots shown as follows:

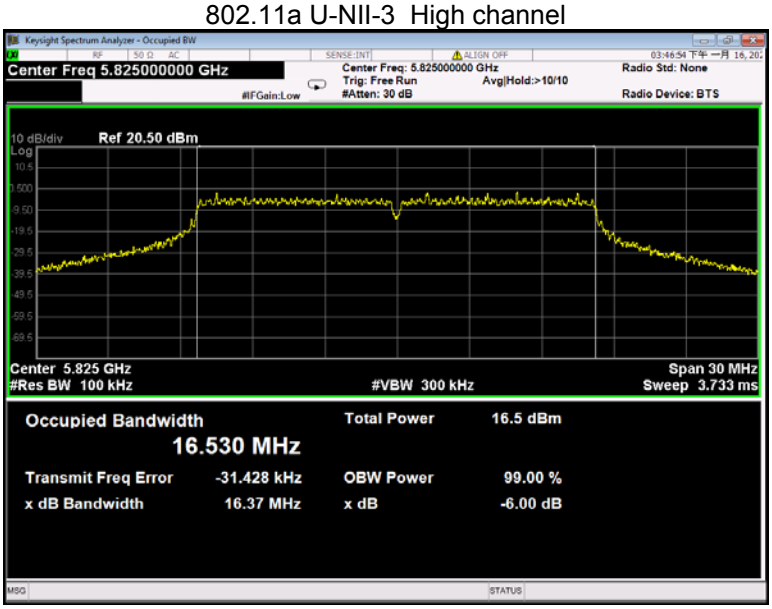
802.11a U-NII-3 Low channel



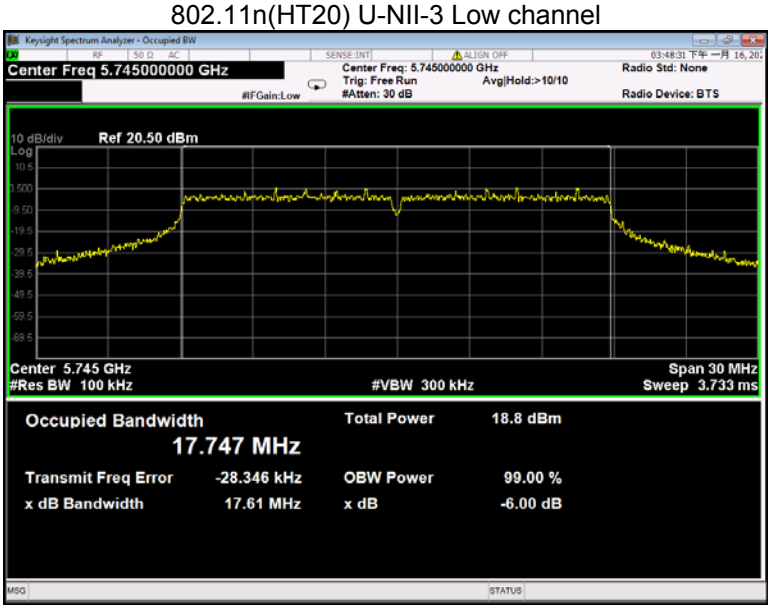
802.11a U-NII-3 Middle channel



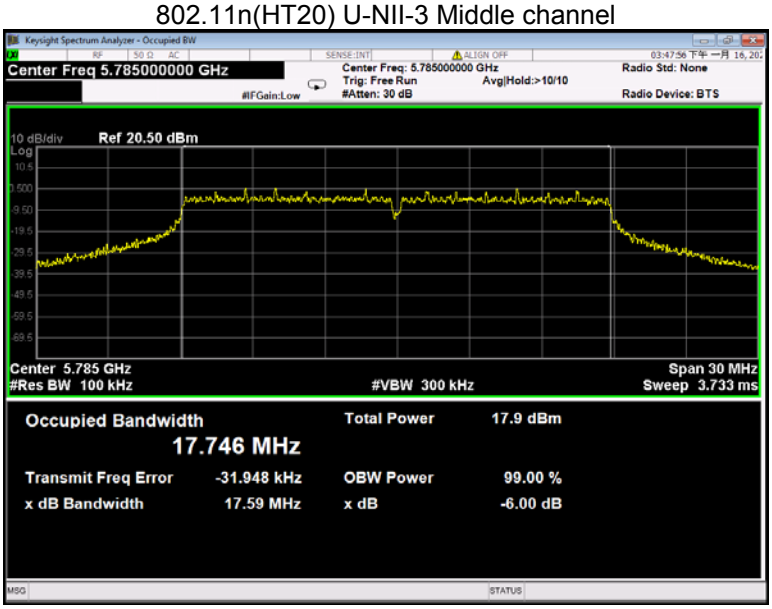
802.11a U-NII-3 High channel



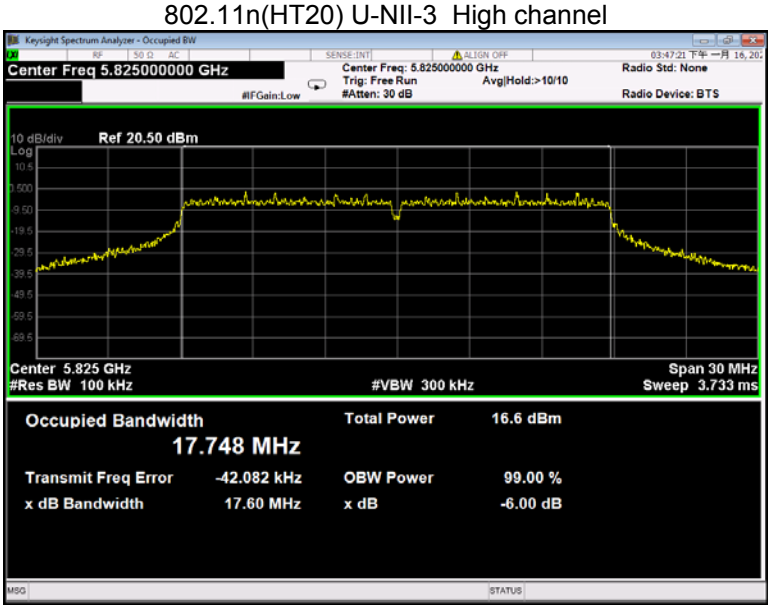
802.11n(HT20) U-NII-3 Low channel



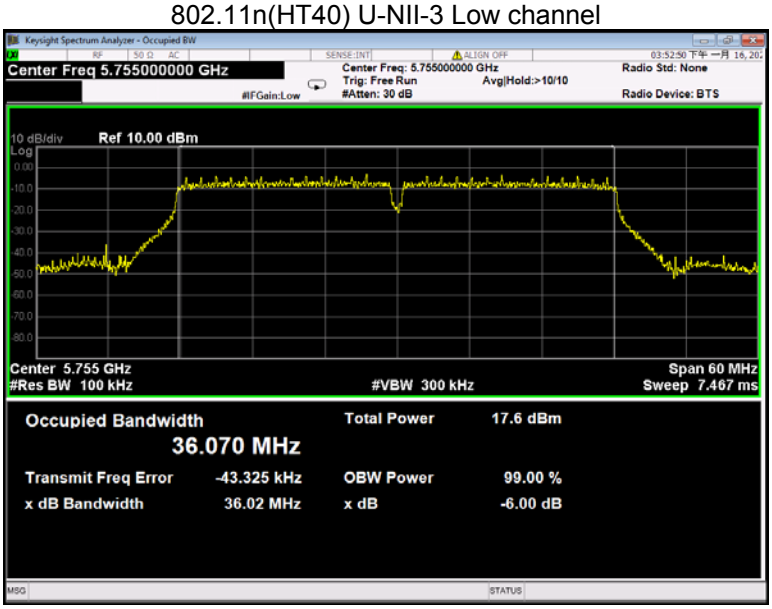
802.11n(HT20) U-NII-3 Middle channel



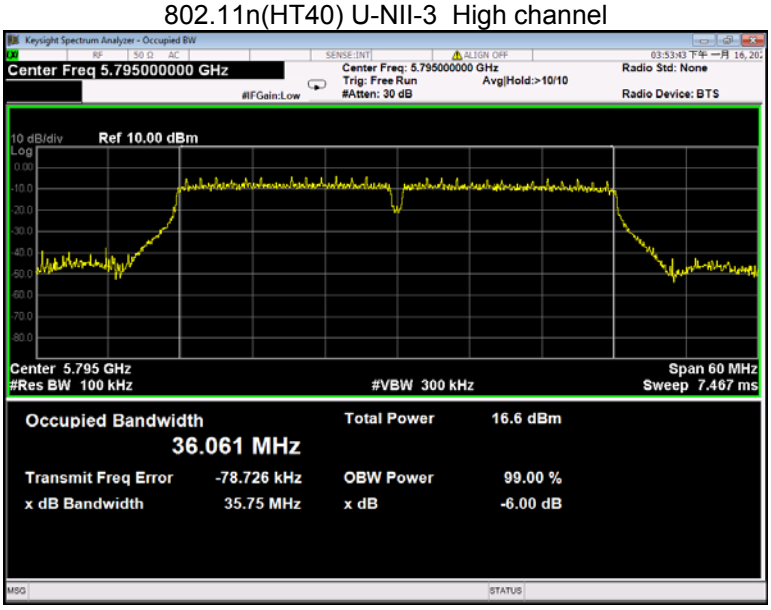
802.11n(HT20) U-NII-3 High channel



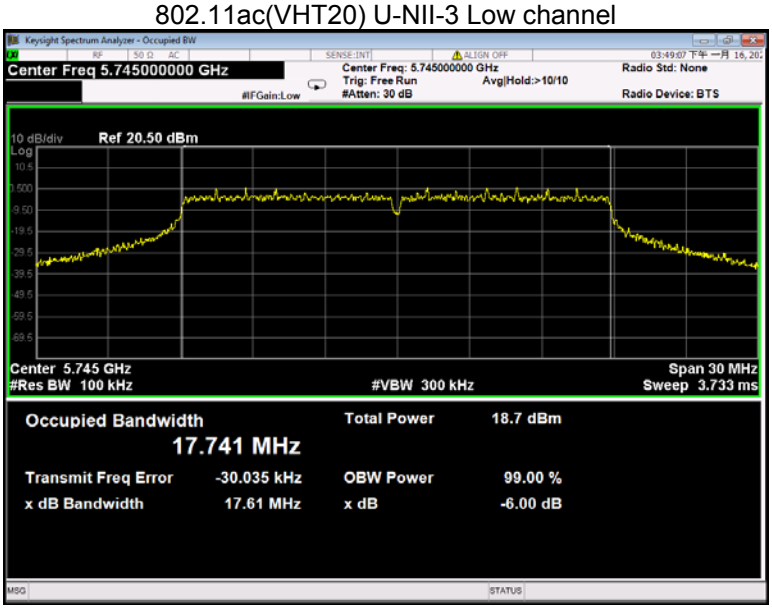
802.11n(HT40) U-NII-3 Low channel



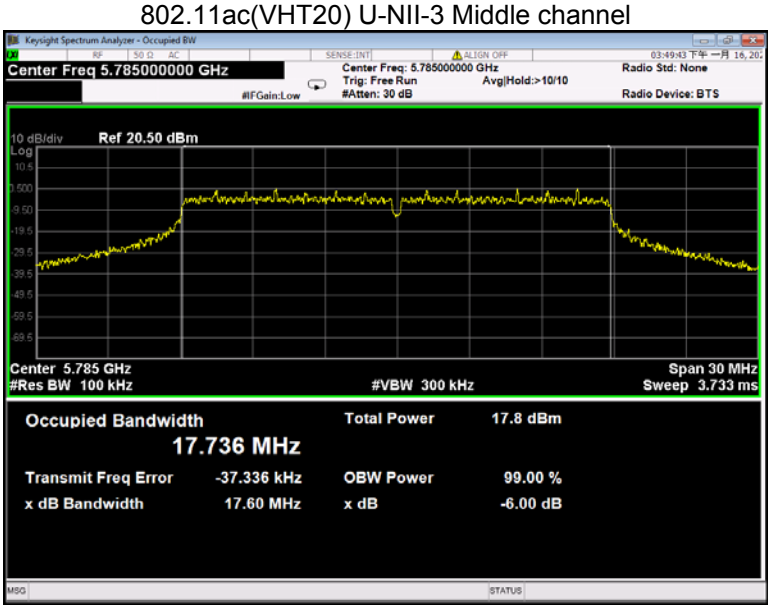
802.11n(HT40) U-NII-3 High channel



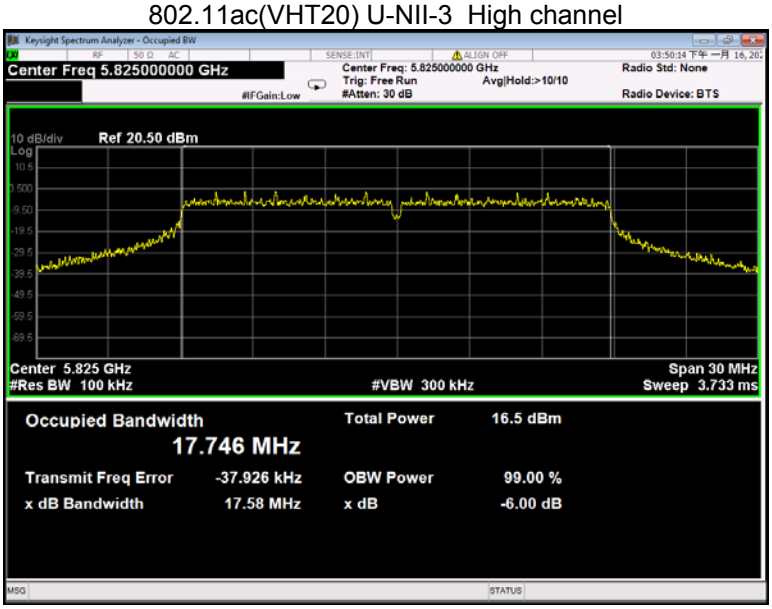
802.11ac(VHT20) U-NII-3 Low channel



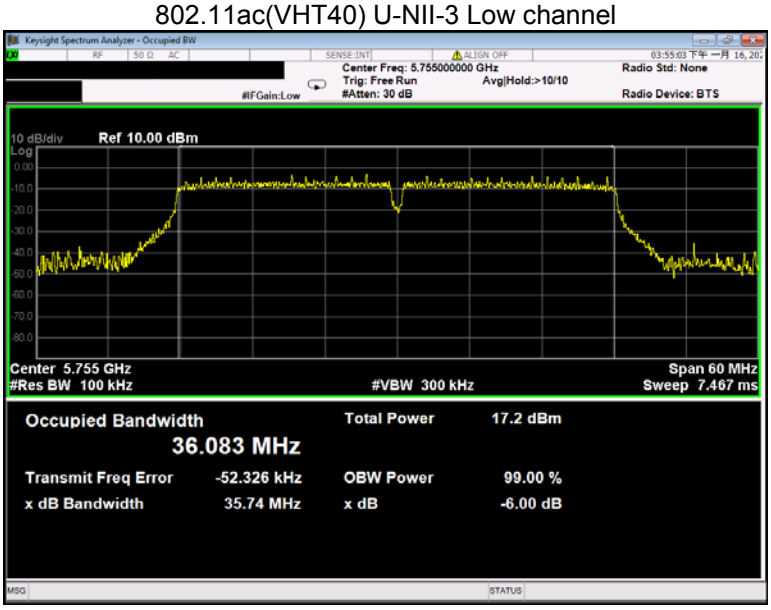
802.11ac(VHT20) U-NII-3 Middle channel



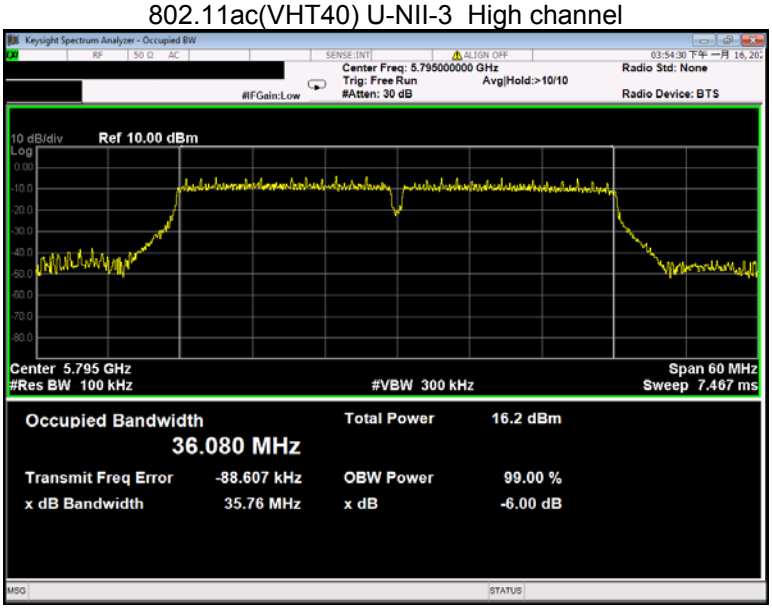
802.11ac(VHT20) U-NII-3 High channel



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



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



12 26 dB Bandwidth and 99% Occupied Bandwidth

Test Requirement:	FCC 47CFR Part 15 Section 15.407 (a)
Test Method:	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General U-NII Test Procedures New Rules v02r01 Section D
Test Limit:	No restriction limits
Test Result:	PASS

12.1 Test Procedure

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum;

2. Set the spectrum analyzer: RBW = 1% to 5% of the OBW, VBW = 3x RBW

12.2 Test Result

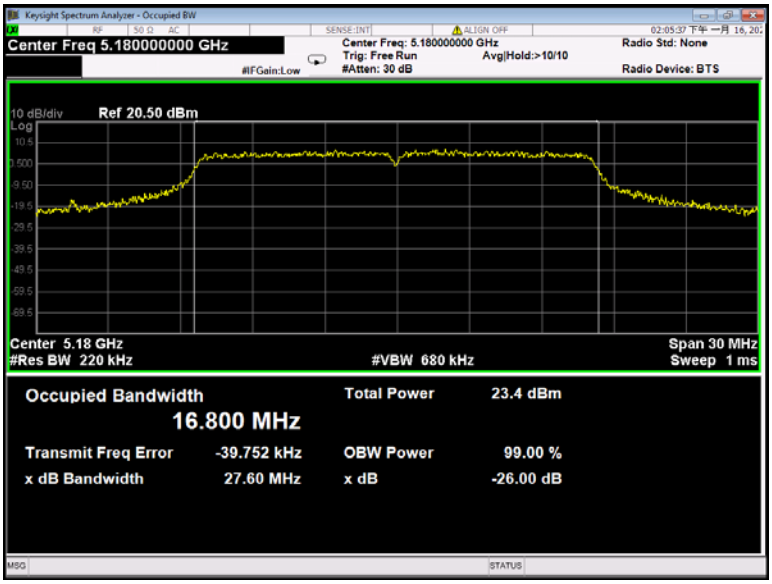
Band	Operation mode	26 dB Bandwidth (MHz)			99% Bandwidth (MHz)		
		Low	Middle	High	Low	Middle	High
U-NII-1	802.11a	27.60	27.48	28.23	16.800	16.744	16.758
	802.11n(HT20)	26.23	28.58	27.67	17.930	17.902	17.955
	802.11n(HT40)	50.90	/	51.93	36.378	/	36.399
	802.11ac(VHT20)	24.60	26.11	26.98	17.930	17.915	17.897
	802.11ac(VHT40)	52.04	/	56.93	36.428	/	36.452

Band	Operation mode	99% Bandwidth (MHz)		
		Low	Middle	High
U-NII-3	802.11a	16.611	16.532	16.558
	802.11n(HT20)	17.691	17.683	17.606
	802.11n(HT40)	35.790	/	35.788
	802.11ac(VHT20)	17.691	17.683	17.606
	802.11ac(VHT40)	35.790	/	35.788

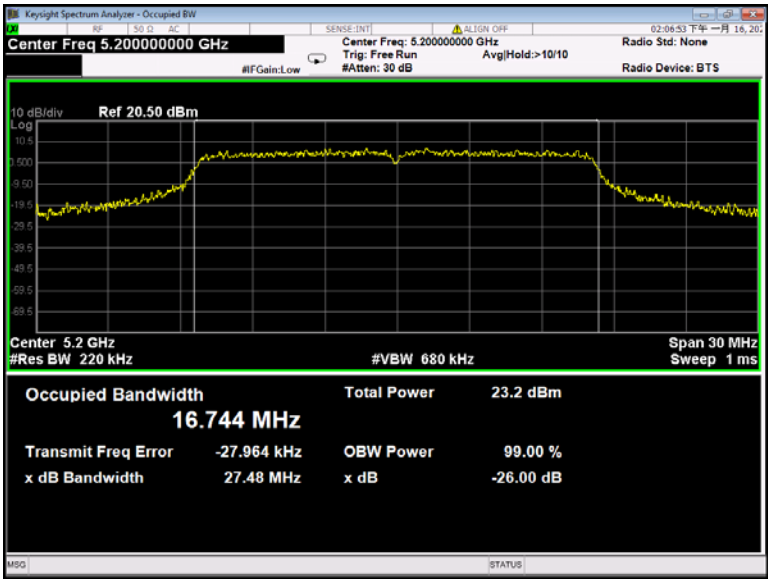
Test result plots shown as follows:

26 dB Bandwidth and 99% Occupied Bandwidth

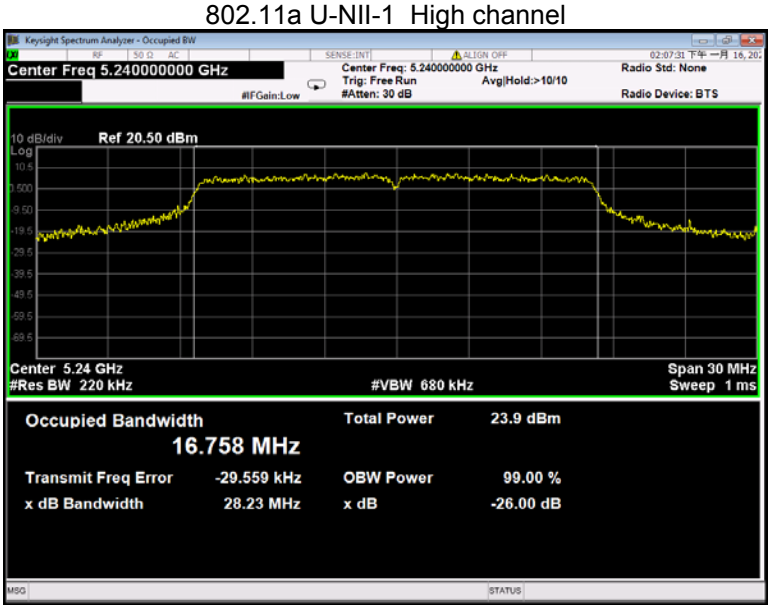
802.11a U-NII-1 Low channel



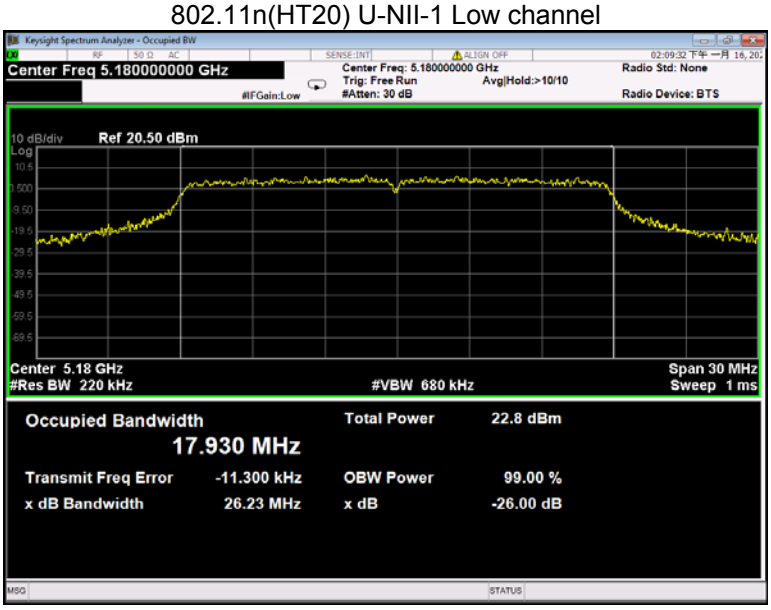
802.11a U-NII-1 Middle channel



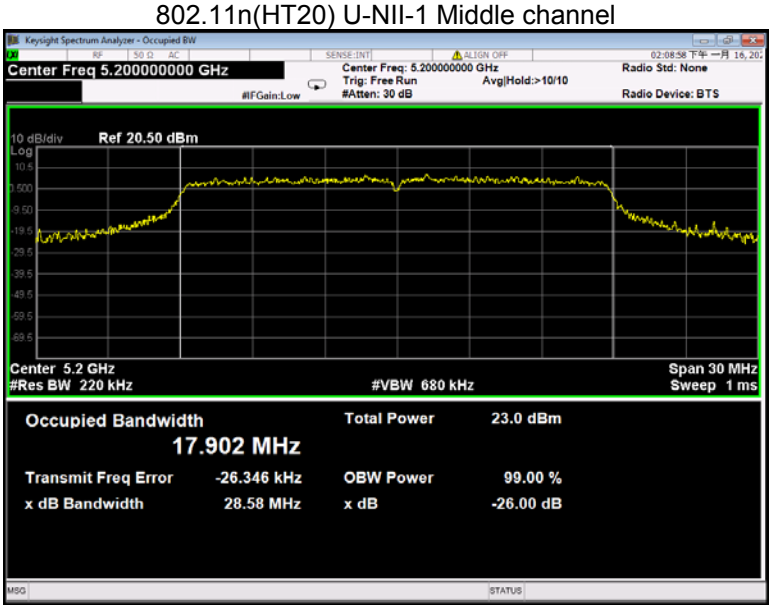
802.11a U-NII-1 High channel



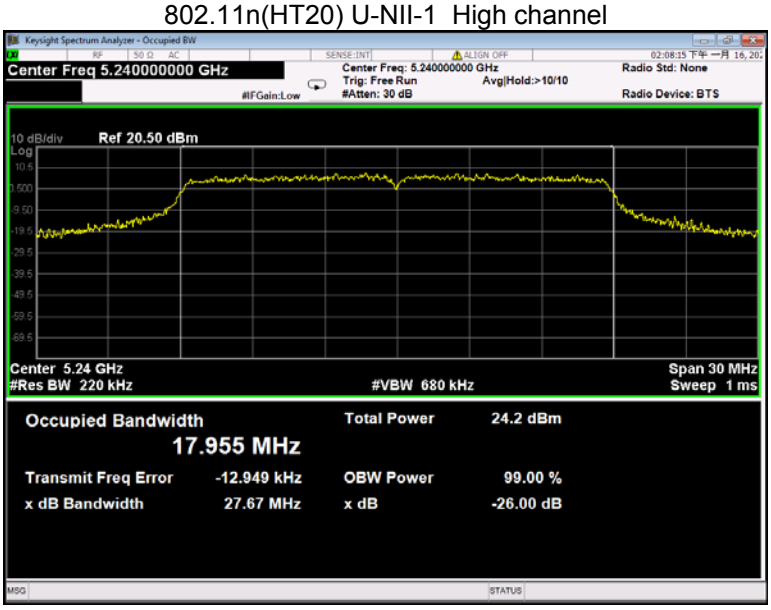
802.11n(HT20) U-NII-1 Low channel



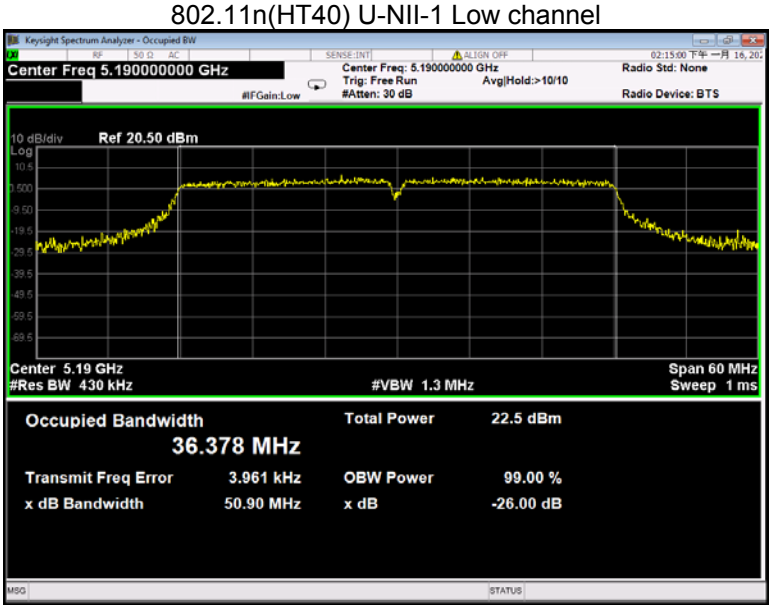
802.11n(HT20) U-NII-1 Middle channel



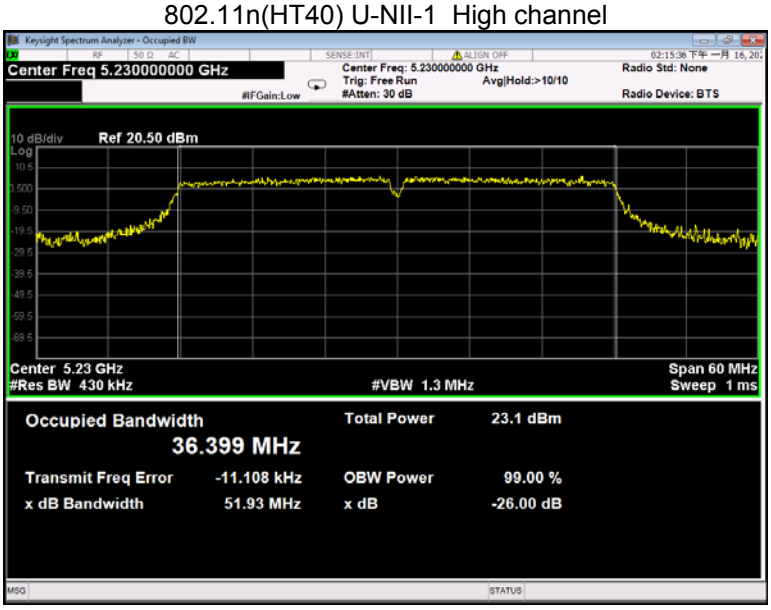
802.11n(HT20) U-NII-1 High channel



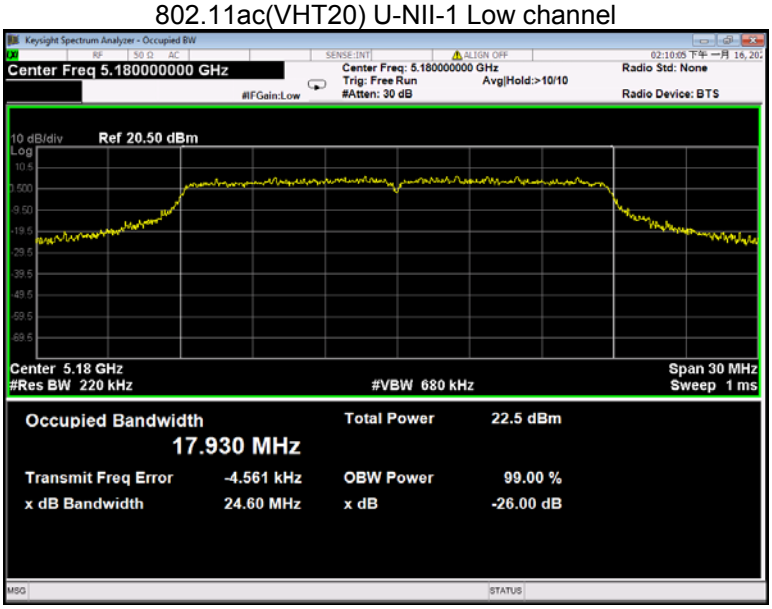
802.11n(HT40) U-NII-1 Low channel



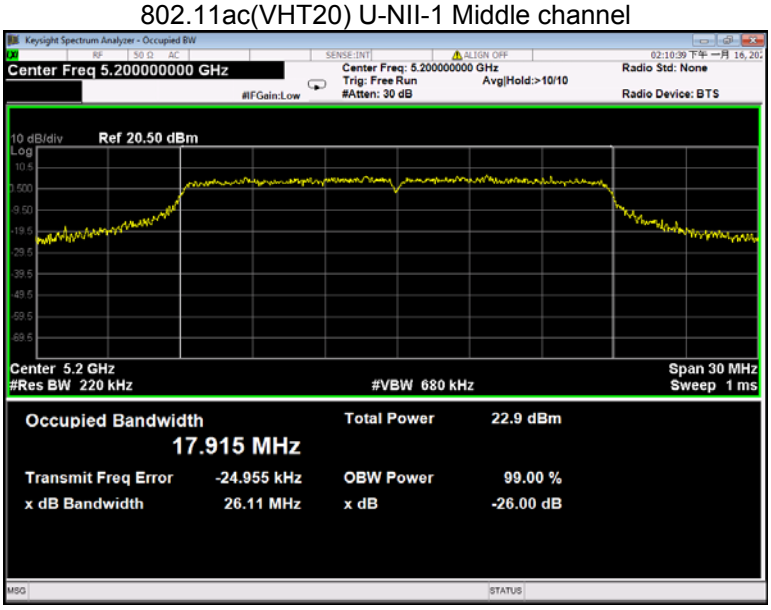
802.11n(HT40) U-NII-1 High channel



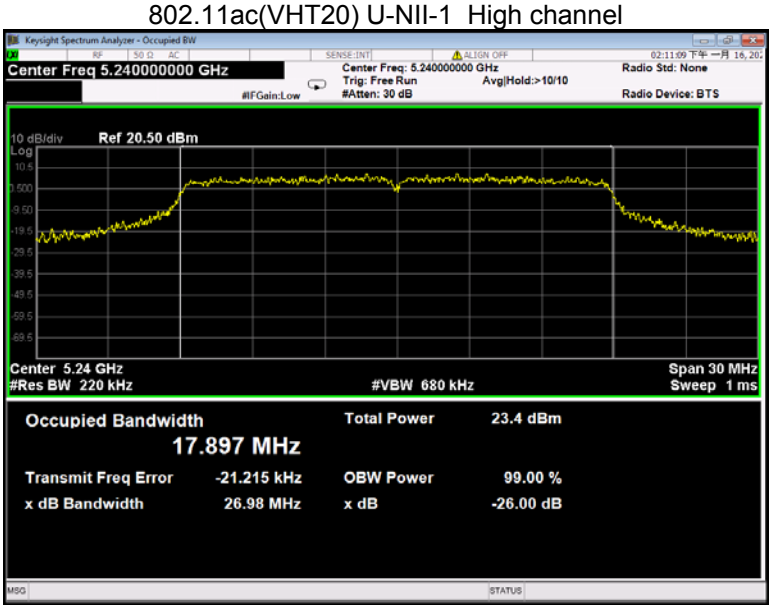
802.11ac(VHT20) U-NII-1 Low channel



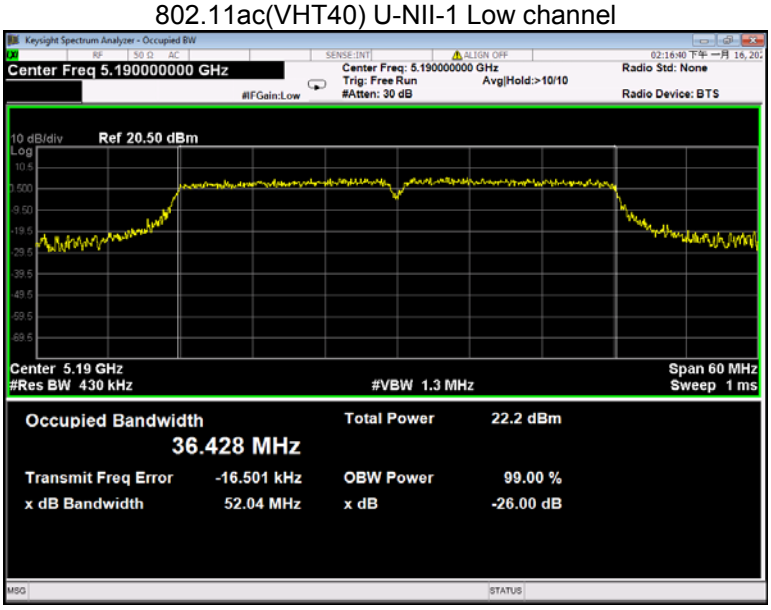
802.11ac(VHT20) U-NII-1 Middle channel



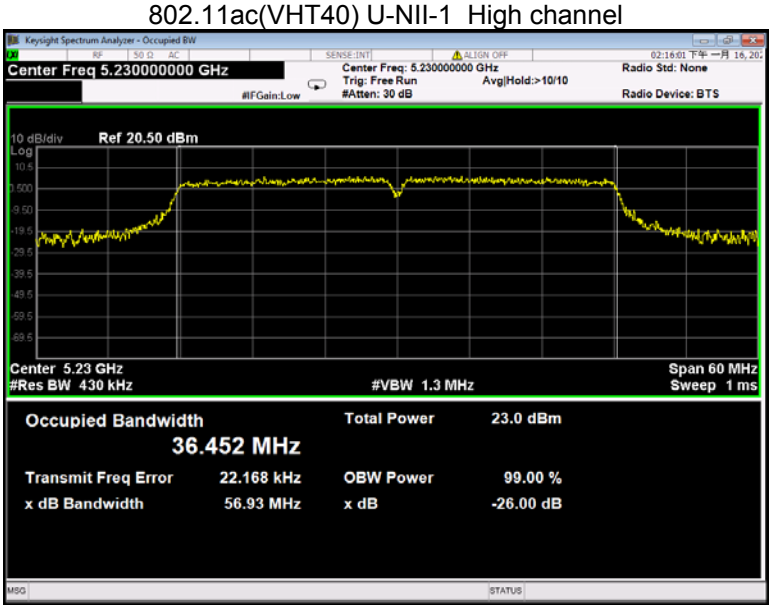
802.11ac(VHT20) U-NII-1 High channel



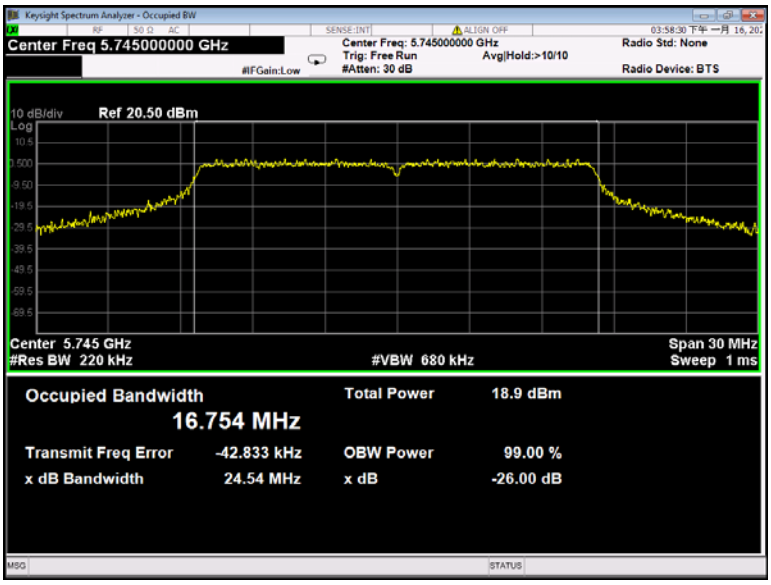
802.11ac(VHT40) U-NII-1 Low channel



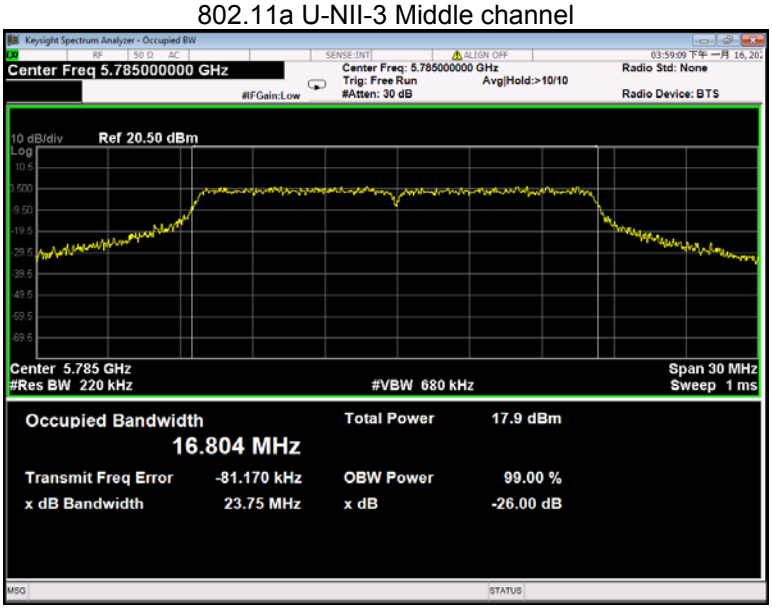
802.11ac(VHT40) U-NII-1 High channel



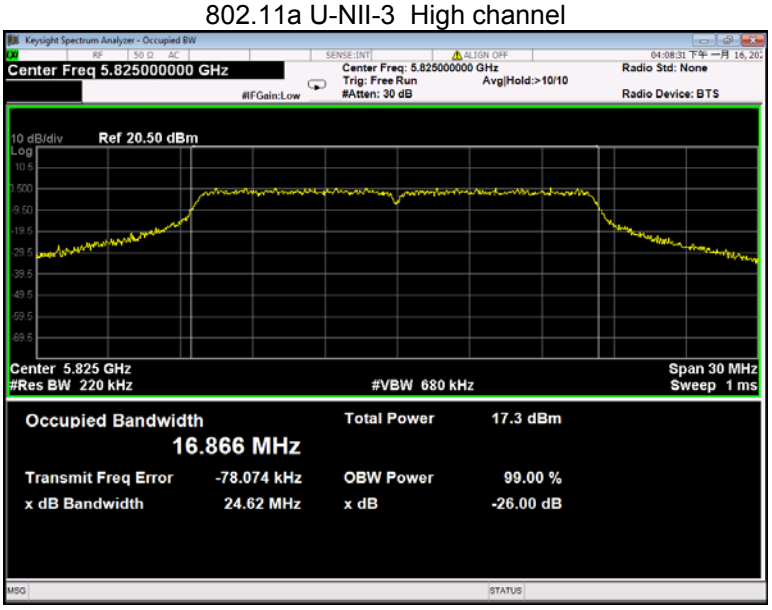
802.11a U-NII-3 Low channel



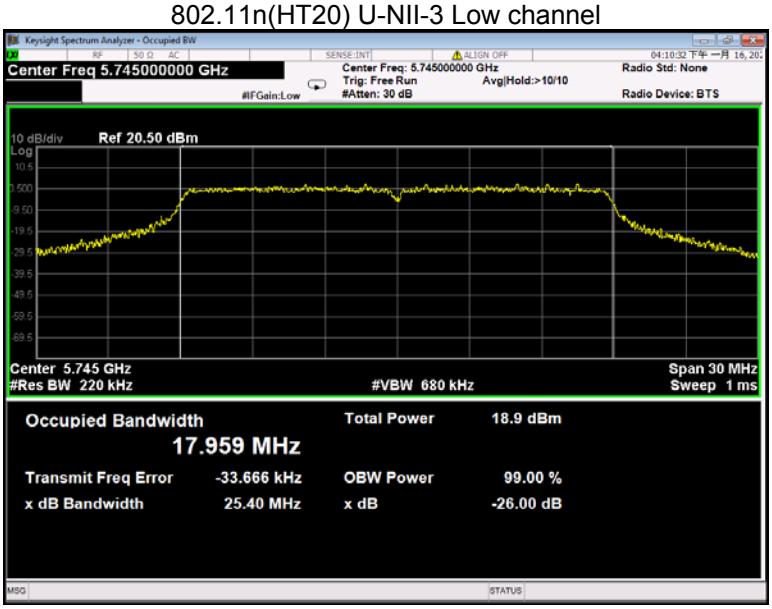
802.11a U-NII-3 Middle channel



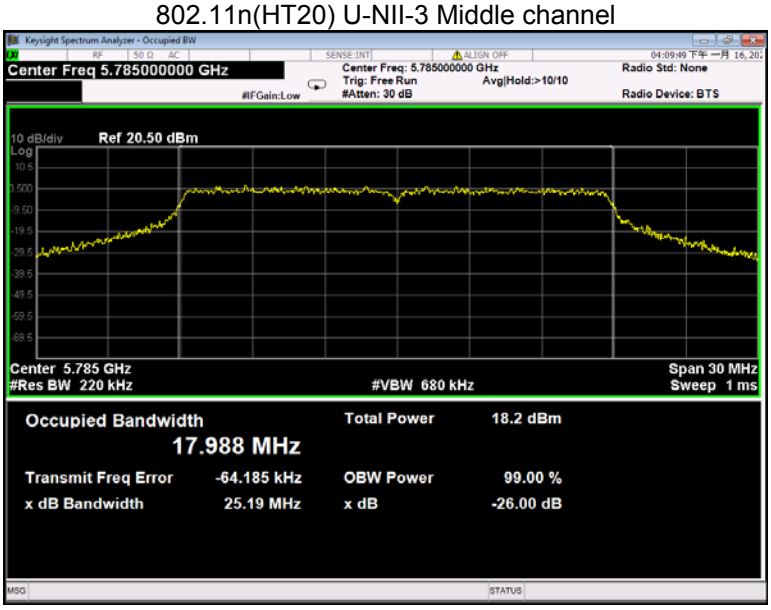
802.11a U-NII-3 High channel



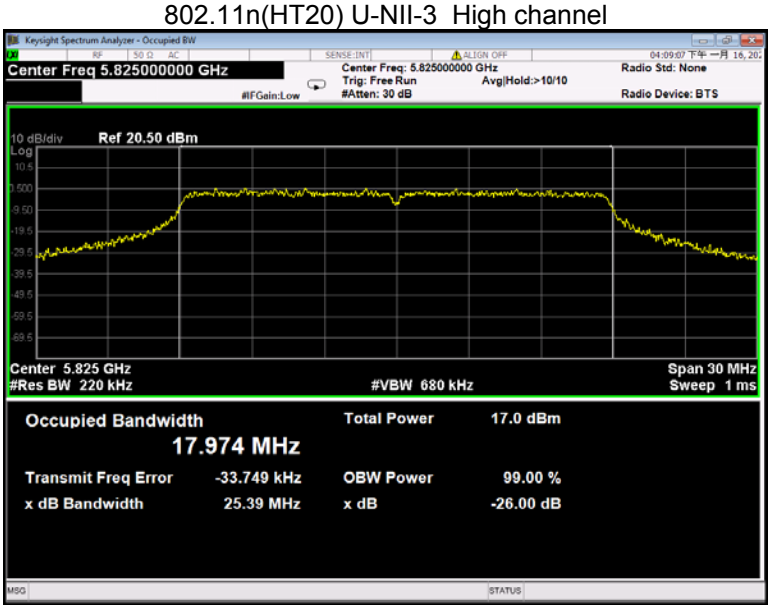
802.11n(HT20) U-NII-3 Low channel



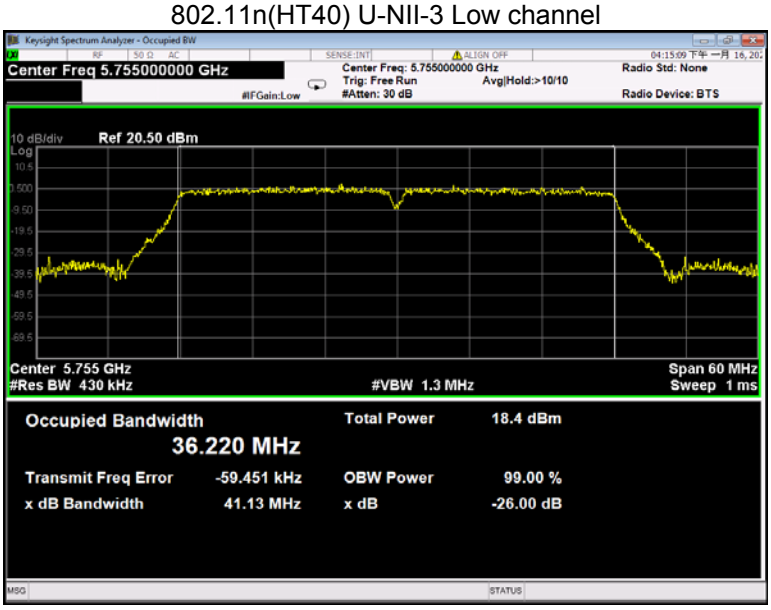
802.11n(HT20) U-NII-3 Middle channel



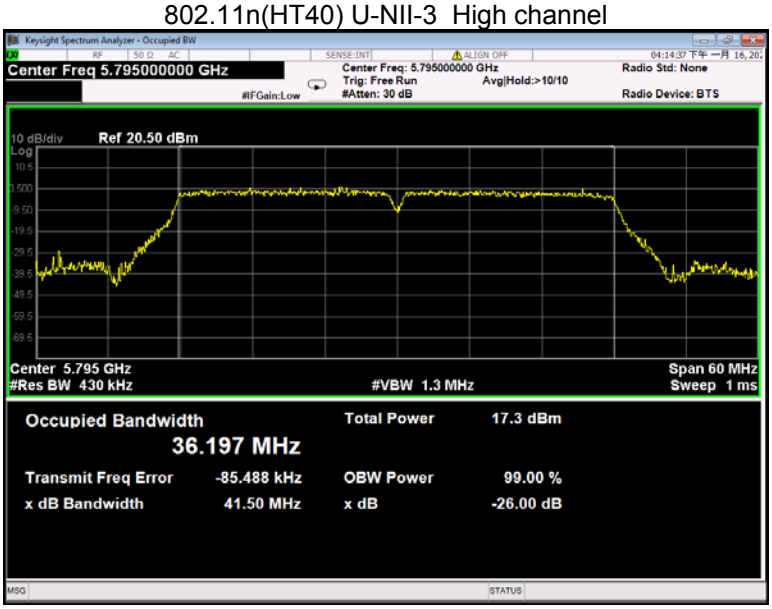
802.11n(HT20) U-NII-3 High channel



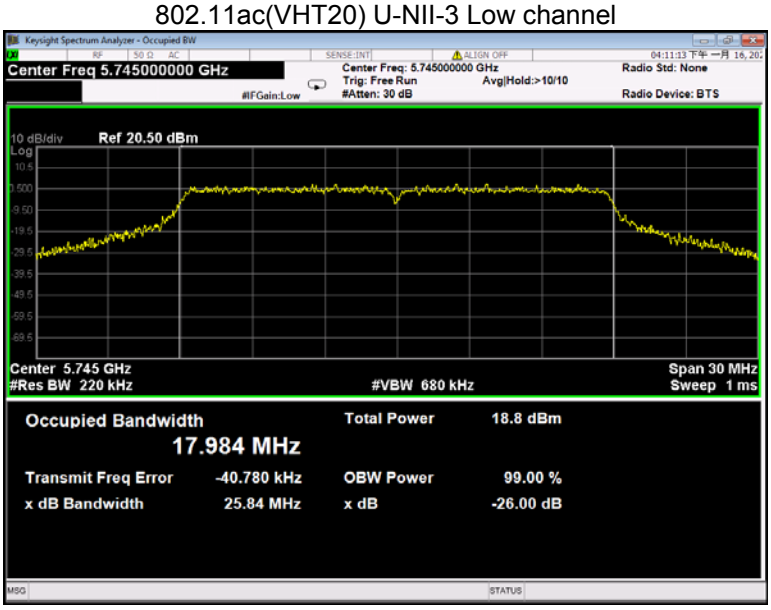
802.11n(HT40) U-NII-3 Low channel



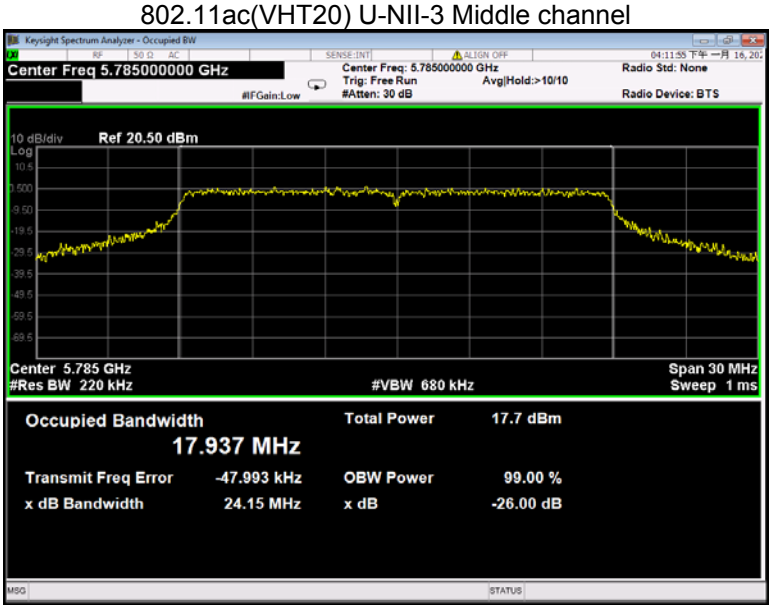
802.11n(HT40) U-NII-3 High channel



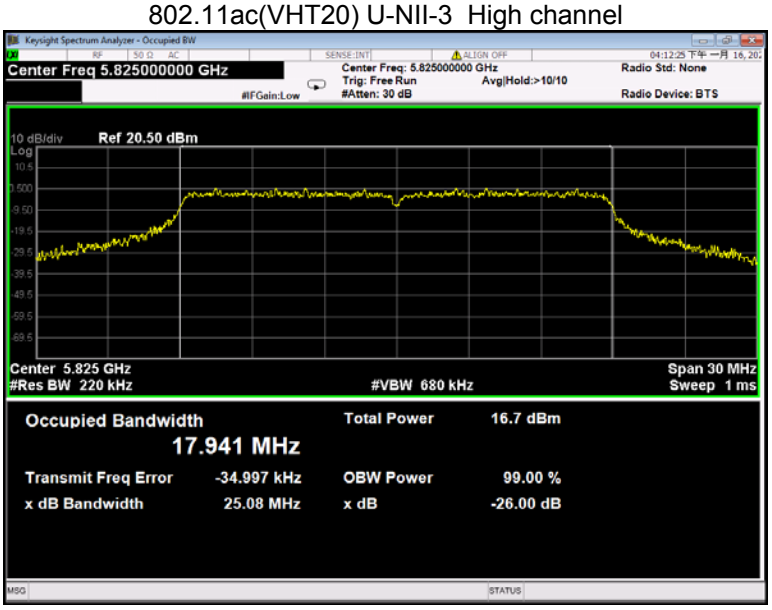
802.11ac(VHT20) U-NII-3 Low channel



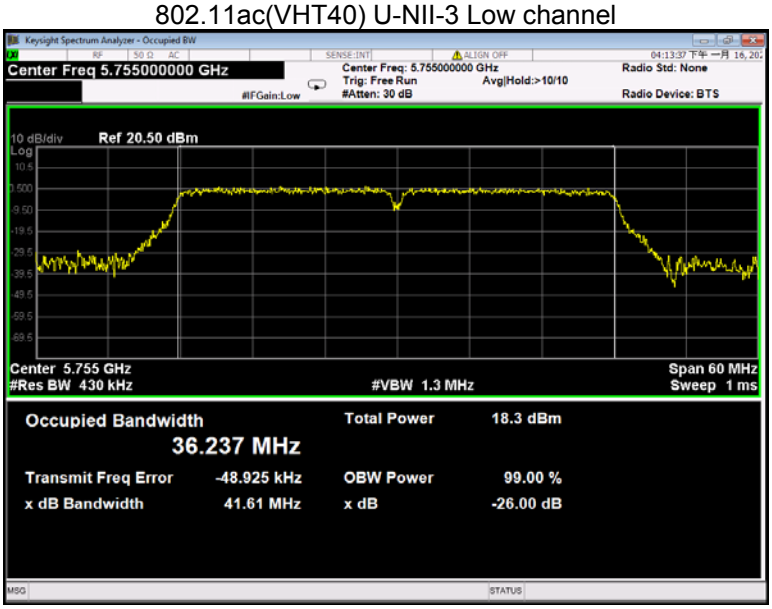
802.11ac(VHT20) U-NII-3 Middle channel



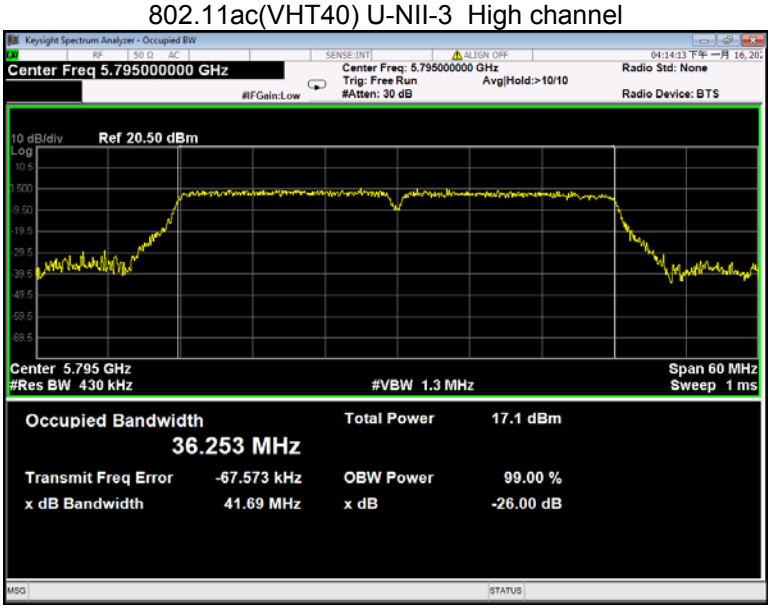
802.11ac(VHT20) U-NII-3 High channel



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



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



13 Conducted Output Power

Test Requirement:	FCC 47CFR Part 15 Section 15.407(a)
Test Method:	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General U-NII Test Procedures New Rules v02r01 Section E
Test Limit:	U-NII-1 250mW(24dBm) U-NII-2A 250mW(24dBm) U-NII-2C 250mW(24dBm) U-NII-3 1W(30dBm)
Test Result:	PASS
Remark:	Conducted output power= measurement power+10log(1/x) X is duty cycle=1, so 10log(1/1)=0 Conducted output power= measurement power

13.1 Test Procedure

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum.
2. Set the spectrum analyzer: RBW = 1 MHz. VBW = 3 MHz. Sweep = auto; Detector Function = Peak, Set the span to fully encompass the DTS bandwidth.
3. Keep the EUT in transmitting at lowest, medium and highest channel individually. Record the max value.

13.2 Test Result

Band	Operation mode	Channel	Measurements (dBm)	Duty Cycle Factor (dB)	Conducted Output Power (dBm)
U-NII-1	802.11a	Low	16.46	025	16.71
		Middle	16.77		17.02
		High	17.49		17.74
	802.11n(HT20)	Low	16.28	0.28	16.56
		Middle	16.77		17.05
		High	17.48		17.76
	802.11n(HT40)	Low	16.64	0.67	17.31
		Middle	/		/
		High	17.34		**18.01**
	802.11ac(VHT20)	Low	16.36	0.26	16.62
		Middle	16.68		16.94
		High	17.43		17.69
	802.11ac(VHT40)	Low	16.6	0.48	17.08
		Middle	/		/
		High	17.34		17.82

Band	Operation mode	Channel	Measurements (dBm)	Duty Cycle Factor (dB)	Conducted Output Power (dBm)
U-NII-3	802.11a	Low	13.44	0.27	13.71
		Middle	12.33		12.60
		High	11.07		11.34
	802.11n(HT20)	Low	13.27	0.37	13.64
		Middle	12.34		12.71
		High	11.07		11.44
	802.11n(HT40)	Low	13.21	0.48	13.69
		Middle	/		/
		High	12.01		12.49
	802.11ac(VHT20)	Low	13.36	0.28	13.64
		Middle	12.35		12.63
		High	10.98		11.26
	802.11ac(VHT40)	Low	13.24	0.49	**13.73**
		Middle	/		/
		High	12.04		12.53

Note:

1. Conducted Output Power = Measurements + Duty Cycle Factor

* All transmit signals are completely uncorrelated with each other, Directional gain = G_{ANT} which is less than 6dBi. So the limit does not be reduced.