TEST REPORT

Reference No.	:	WTX24D10230381W002
FCC ID.....	:	2A9P9OMNIBP24
Applicant	:	Shenzhen BOTINKIT Co., Ltd.
Address	:	26A. Zimao Center, No.111 Taizi Road, Nanshan, Shenzhen, China
Manufacturer	:	Shenzhen BOTINKIT Co., Ltd.
Address	:	26A. Zimao Center, No.111 Taizi Road, Nanshan, Shenzhen, China
Product Name	:	Smart Cooking Machine
Model No.	:	MAX01, OMNI01
Brand Name.		BOTINKIT
Standards.....	:	FCC 47CFR Part 15 Section 15.407
Date of Receipt sample.....	:	2024-10-15
Date of Test.....	:	2024-10-18 to 2024-11-07
Date of Issue	:	2024-11-20
Test Result	:	**Pass**

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

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Approved by:

Deval Qin / Designated Reviewer

2 Contents

3 Revision History

Test Report No.	Date of Receipt Sample	Date of Test	Date of Issue	Purpose	Comment	Approved
WTX24D10230381W002	2024-10-15	2024-10-18 to 2024-11-07	2024-11-20	Original	-	Valid

4 General Information

4.1 General Description of E.U.T.

Product:	Smart Cooking Machine
Model(s):	MAX01, OMNI01
Model Description:	Only the model names and appearance are different for different market requirement. The test sample model was OMNI01.
Test Sample No.:	1-1/1
Wi-Fi Specification:	5G-802.11a/ n(HT20/40)/ac(VHT20/40/80)
Hardware Version:	V1.3
Software Version:	20240509.101558_0

4.2 Details of E.U.T.

Operation Frequency:	802.11a/n(HT20)/ac(VHT20): U-NII-1: 5180-5240MHz, U-NII-2A: 5260-5320MHz(DFS), U-NII-2C: 5500-5700MHz(DFS), U-NII-3:5745-5825MHz 802.11n(HT40)/ac(VHT40): U-NII-1: 5190-5230MHz, U-NII-2A: 5270-5310MHz(DFS), U-NII-2C: 5510-5670MHz(DFS), U-NII-3: 5755-5795MHz 802.11ac(VHT80): U-NII-1: 5210MHz, U-NII-2A: 5290MHz(DFS), U-NII-2C: 5530-5610MHz(DFS), U-NII-3: 5775MHz
Max. RF output power:	U-NII-1: 17.26dBm U-NII-2A: 17.41dBm U-NII-2C: 17.30dBm U-NII-3: 15.71dBm
Type of Modulation:	OFDM and VHT-OFDM
Antenna installation:	External antenna
Antenna Gain:	U-NII-1: 2.86dBi U-NII-2A: 3.38dBi U-NII-2C: 4.14dBi U-NII-3: 3.07dBi

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:	200V~, 3-phase, 3 wire, 50/60Hz

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-2A (5.25-5.35GHz)			
channel	**Frequency(MHz)**	**channel**	**Frequency(MHz)**
52	5260	54	5270
56	5280	58	5290
60	5300	62	5310
64	5320		

U-NII-2C (5.47-5.725GHz)			
channel	**Frequency(MHz)**	**channel**	**Frequency(MHz)**
100	5500	102	5510
104	5520	106	5530
108	5540	110	5550
112	5560	116	5580
118	5590	120	5600
122	5610	124	5620
126	5630	128	5640
132	5660	134	5670
136	5680	140	5700

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)**
52	5260	56	5280
64	5320		

channel	**Frequency(MHz)**	**channel**	**Frequency(MHz)**
100	5500	120	5600
140	5700		

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)**
54	5270	62	5310

channel	**Frequency(MHz)**	**channel**	**Frequency(MHz)**
102	5510	110	5550
134	5670		

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

For 802.11ac(VHT80):

channel	Frequency(MHz)	channel	Frequency(MHz)
42	5210		

channel	Frequency(MHz)	channel	Frequency(MHz)
58	5290		

channel	Frequency(MHz)	channel	Frequency(MHz)
106	5530	122	5610

channel	Frequency(MHz)	channel	Frequency(MHz)
155	5775		

4.4 Test Mode Description

During testing, Channel and Power Controlling Software provided by the applicant was used to control the operating channel as well as the maximum 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)/ac(VHT20/40/80)	MCS0	TX
Duty Cycle	802.11a(HT20)	6 Mbps	TX
	802.11n(HT20/40)/ac(VHT20/40/80)	MCS0	TX
Band Edge	802.11a(HT20)	6 Mbps	TX
	802.11n(HT20/40)/ac(VHT20/40/80)	MCS0	TX
6dB Bandwidth	802.11a(HT20)	6 Mbps	TX
	802.11n(HT20/40)/ac(VHT20/40/80)	MCS0	TX
26dB Bandwidth and 99% Occupied Bandwidth	802.11a(HT20)	6 Mbps	TX
	802.11n(HT20/40)/ac(VHT20/40/80)	MCS0	TX
Conducted Output Power	802.11a(HT20)	6 Mbps	TX
	802.11n(HT20/40)/ac(VHT20/40/80)	MCS0	TX
Power Spectral Density	802.11a(HT20)	6 Mbps	TX
	802.11n(HT20/40)/ac(VHT20/40/80)	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

Conducted Emissions Test Site 1#						
Item	**Equipment**	**Manufacturer**	**Model No.**	**Serial No.**	**Last Calibration Date**	**Calibration Due Date**
1	Cable	Laplace	RF300	-	2024-07-18	2025-07-17
2	Limiter	CYBERTEK	EM5010	261115-001-0024	2024-07-18	2025-07-17
3	LISN	R&S	ENV 4200	100279	2024-10-10	2025-10-09
4	EMI Test Receiver	R&S	ESCI	101155	2024-07-18	2025-07-17
5	Test Software	Frad Technology	EZ-EMC(RA-03A1-1)	/	/	/
3m Semi-anechoic Chamber for Radiation Emissions Test site 1#						
Item	**Equipment**	**Manufacturer**	**Model No.**	**Serial No.**	**Last Calibration Date**	**Calibration Due Date**
1	Spectrum Analyzer	R&S	FSP30	100091	2024-04-22	2025-04-21
2	Amplifier	Agilent	8447D	2944A10178	2024-07-18	2025-07-17
3	Trilog Broadband Antenna	SCHWARZBECK	VULB9163	336	2024-07-21	2025-07-20
4	Coaxial Cable (below 1GHz)	Top	TYPE16(13M)	-	2024-04-22	2025-04-21
5	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120 D	667	2024-01-23	2025-01-22
6	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9170	335	2024-07-18	2025-07-17
7	Broadband Preamplifier	COMPLIANCE DIRECTION	PAP-1G18	2004	2024-07-18	2025-07-17
8	Coaxial Cable (above 1GHz)	ZT26-NJ-NJ-8M/FA	1GHz-18GHz	NA	2024-04-22	2025-04-21
3m Semi-anechoic Chamber for Radiation Emissions Test site 2#						
Item	**Equipment**	**Manufacturer**	**Model No.**	**Serial No**	**Last Calibration Date**	**Calibration Due Date**
1	Test Receiver	R&S	ESCI	101296	2024-04-22	2025-04-21
2	Trilog Broadband Antenna	SCHWARZBECK	VULB9160	9160-3325	2023-11-04 2024-11-03	2024-11-03 2025-11-03
3	Active Loop Antenna	Com-Power Corp.	AL-130R	10160007	2024-04-27	2025-04-26
4	Amplifier	ANRITSU	MH648A	M43381	2024-04-22	2025-04-21
5	Cable	HUBER+SUHNER	CBL2	525178	2024-04-22	2025-04-21

RF Conducted Testing						
Item	**Equipment**	**Manufacturer**	**Model No.**	**Serial No.**	**Last Calibration Date**	**Calibration Due Date**
1.	Spectrum Analyzer	R&S	FSP40	100501	2024-07-18	2025-07-17
2.	EXA Signal Analyzer	Malaysia Keysight	N9010A	MY50520207	2024-04-22	2025-04-21

Test Software:

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

5.2 Description of Support Units

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

5.3 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.

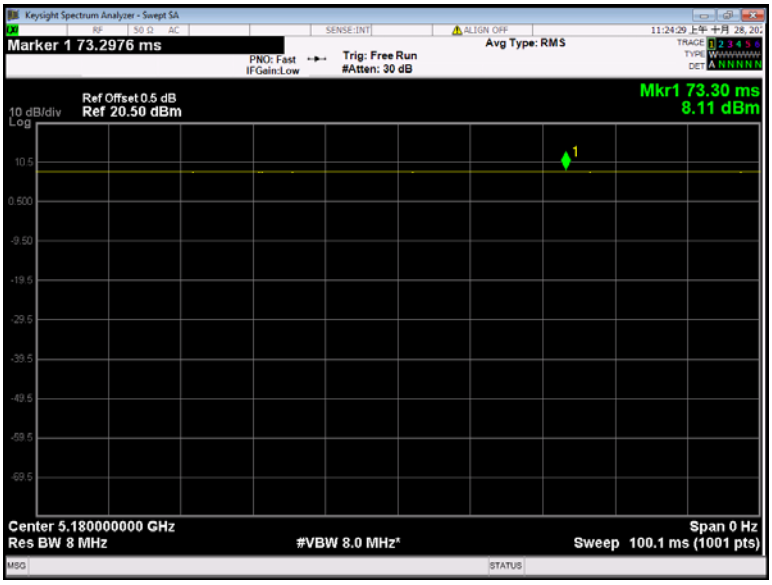
7.1 Summary of Test Results

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	100.10	100.10	1.00	100.00	0.00	0.00
U-NII-1 802.11n(HT20)	100.10	100.10	1.00	100.00	0.00	0.00
U-NII-1 802.11n(HT40)	100.10	100.10	1.00	100.00	0.00	0.00
U-NII-1 802.11ac(VHT20)	100.10	100.10	1.00	100.00	0.00	0.00
U-NII-1 802.11ac(VHT40)	100.10	100.10	1.00	100.00	0.00	0.00
U-NII-1 802.11ac(VHT80)	100.10	100.10	1.00	100.00	0.00	0.00
U-NII-2A 802.11a	100.00	100.00	1.00	100.00	0.00	0.00
U-NII-2A 802.11n(HT20)	100.00	100.00	1.00	100.00	0.00	0.00
U-NII-2A 802.11n(HT40)	100.00	100.00	1.00	100.00	0.00	0.00
U-NII-2A 802.11ac(VHT20)	100.00	100.00	1.00	100.00	0.00	0.00
U-NII-2A 802.11ac(VHT40)	100.00	100.00	1.00	100.00	0.00	0.00
U-NII-2A 802.11ac(VHT80)	100.00	100.00	1.00	100.00	0.00	0.00
U-NII-2C 802.11a	100.00	100.00	1.00	100.00	0.00	0.00
U-NII-2C 802.11n(HT20)	100.00	100.00	1.00	100.00	0.00	0.00
U-NII-2C 802.11n(HT40)	100.00	100.00	1.00	100.00	0.00	0.00
U-NII-2C 802.11ac(VHT20)	100.00	100.00	1.00	100.00	0.00	0.00
U-NII-2C 802.11ac(VHT40)	100.00	100.00	1.00	100.00	0.00	0.00
U-NII-2C 802.11ac(VHT80)	100.00	100.00	1.00	100.00	0.00	0.00

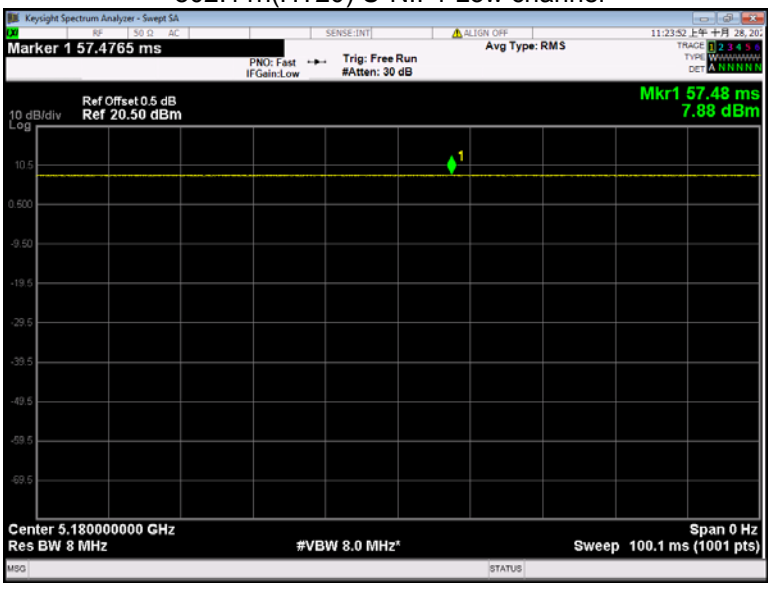
U-NII-3 802.11a	100.00	100.00	1.00	100.00	0.00	0.00
U-NII-3 802.11n(HT20)	100.00	100.00	1.00	100.00	0.00	0.00
U-NII-3 802.11n(HT40)	100.00	100.00	1.00	100.00	0.00	0.00
U-NII-3 802.11ac(VHT20)	100.00	100.00	1.00	100.00	0.00	0.00
U-NII-3 802.11ac(VHT40)	100.00	100.00	1.00	100.00	0.00	0.00
U-NII-3 802.11ac(VHT80)	100.00	100.00	1.00	100.00	0.00	0.00

Test result plots shown as follows:

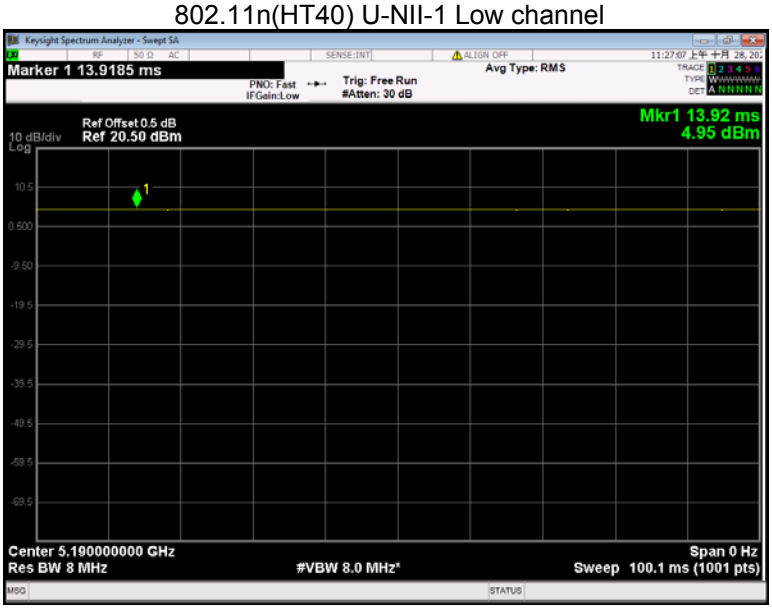
802.11a U-NII-1 Low channel



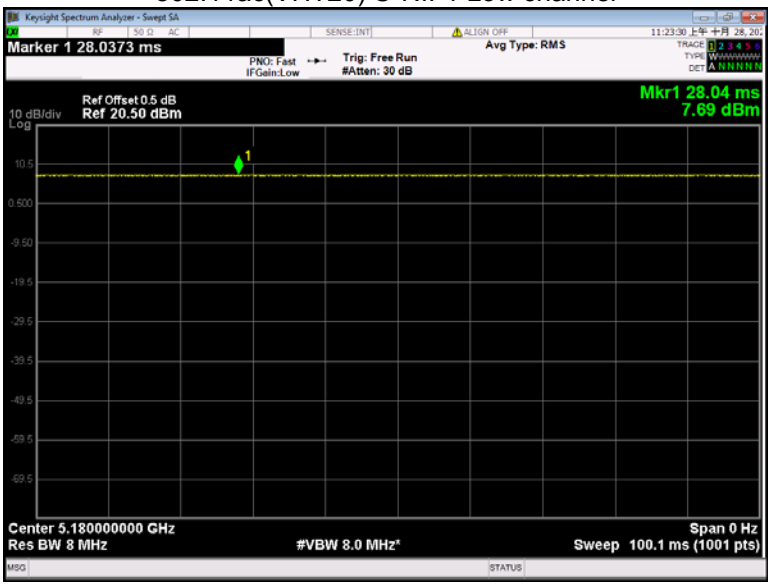
802.11n(HT20) U-NII-1 Low channel



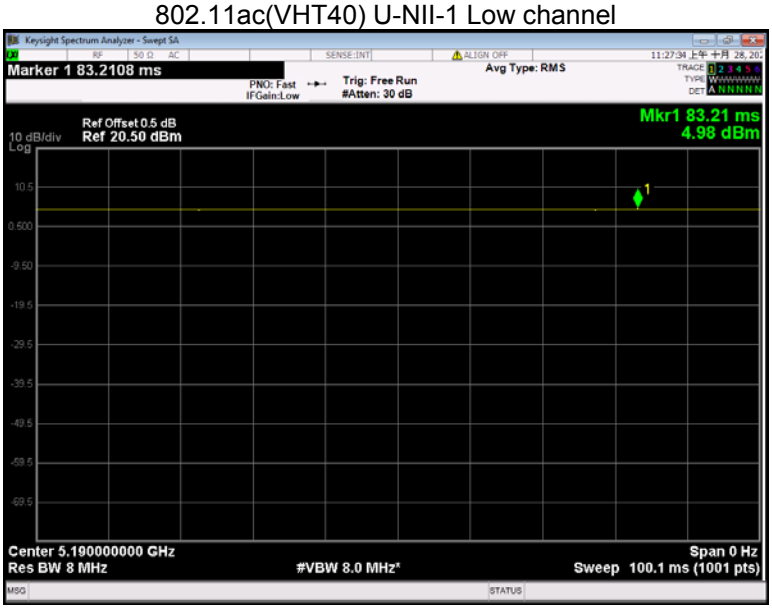
802.11n(HT40) U-NII-1 Low channel



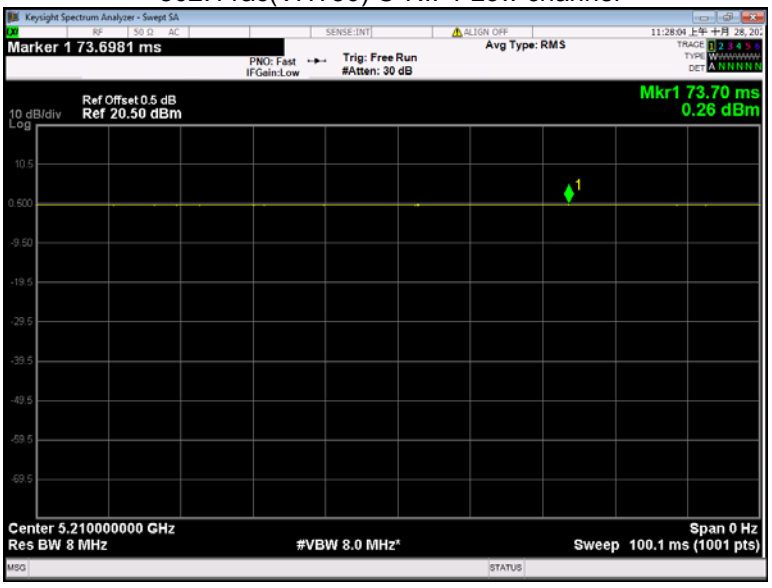
802.11ac(VHT20) U-NII-1 Low channel



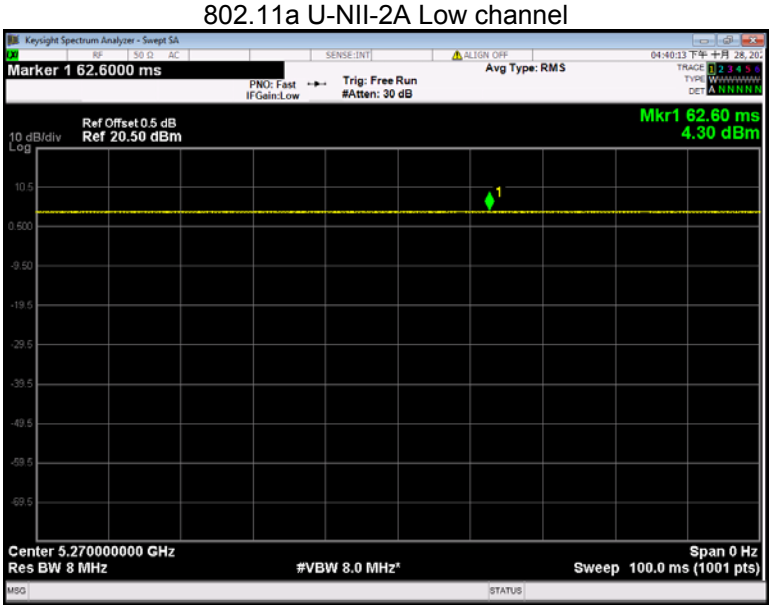
802.11ac(VHT40) U-NII-1 Low channel



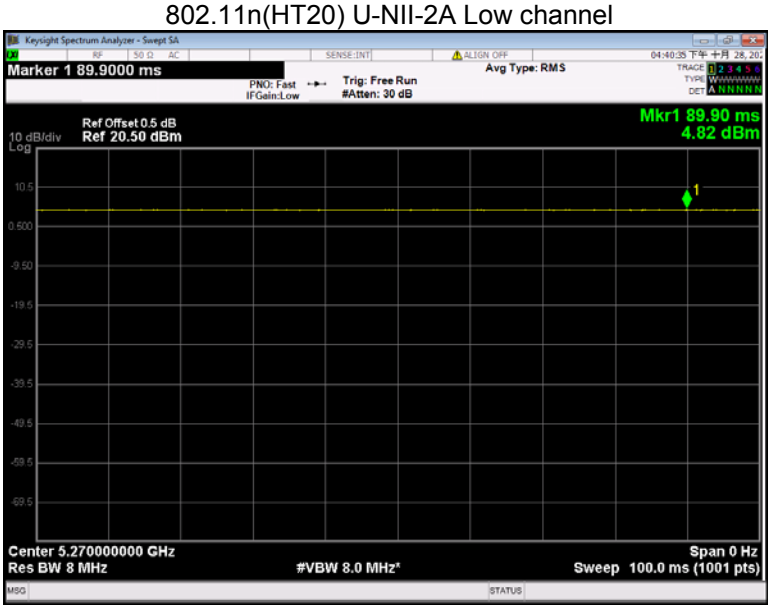
802.11ac(VHT80) U-NII-1 Low channel



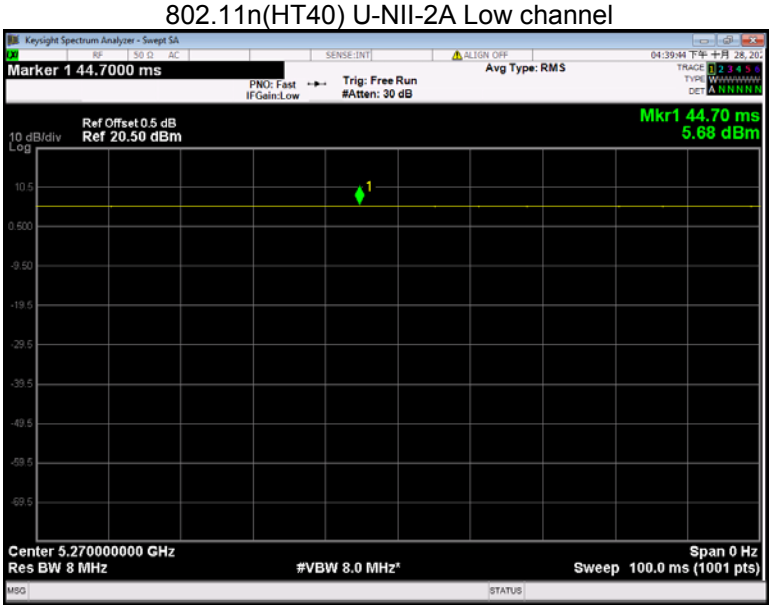
802.11a U-NII-2A Low channel



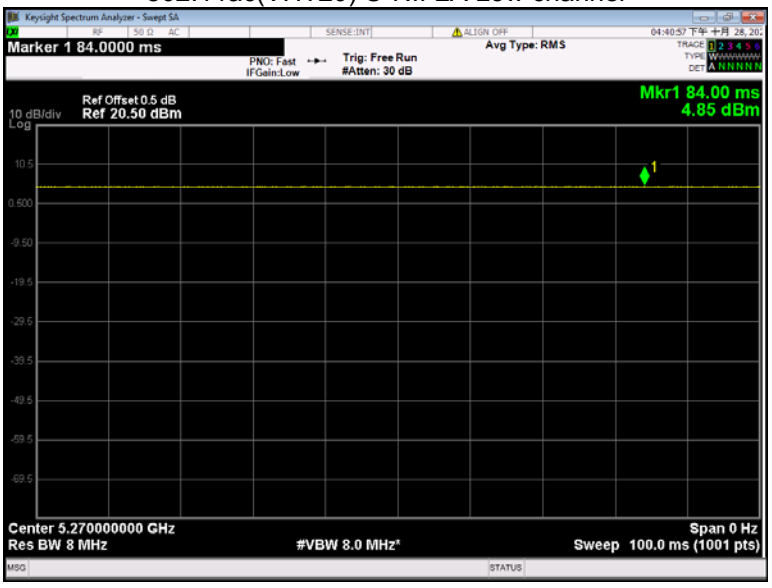
802.11n(HT20) U-NII-2A Low channel



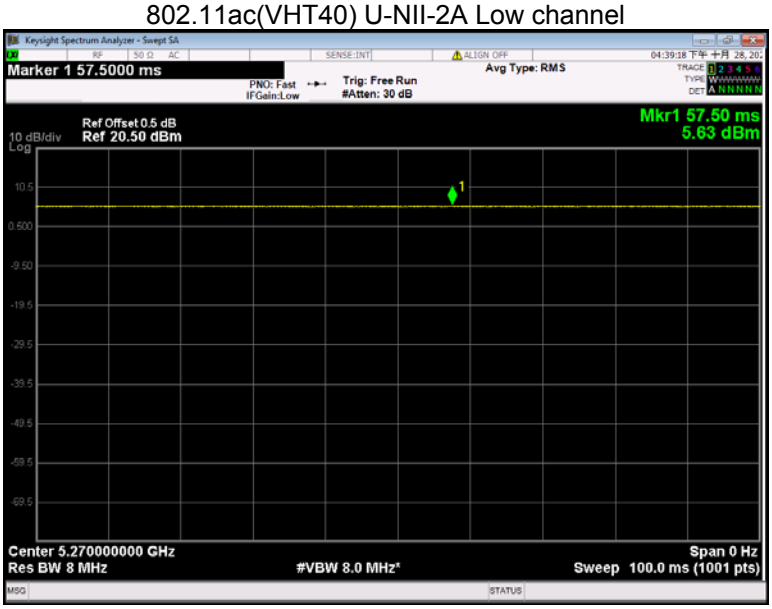
802.11n(HT40) U-NII-2A Low channel



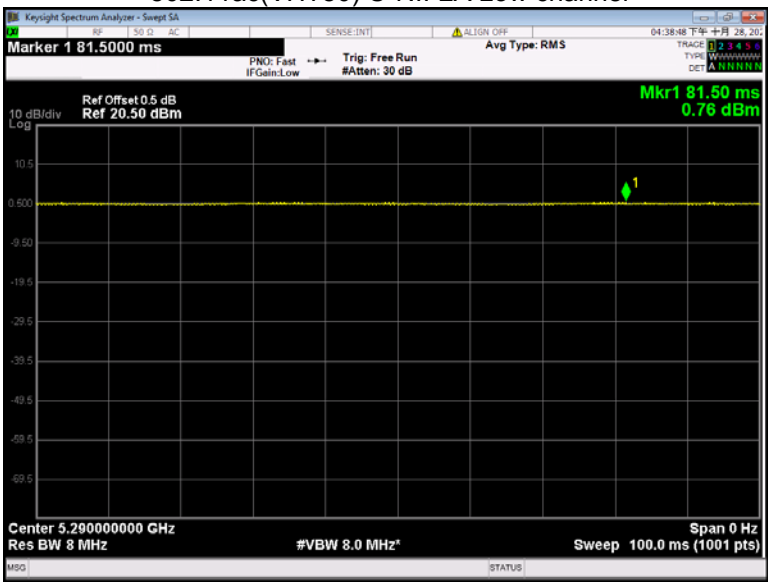
802.11ac(VHT20) U-NII-2A Low channel



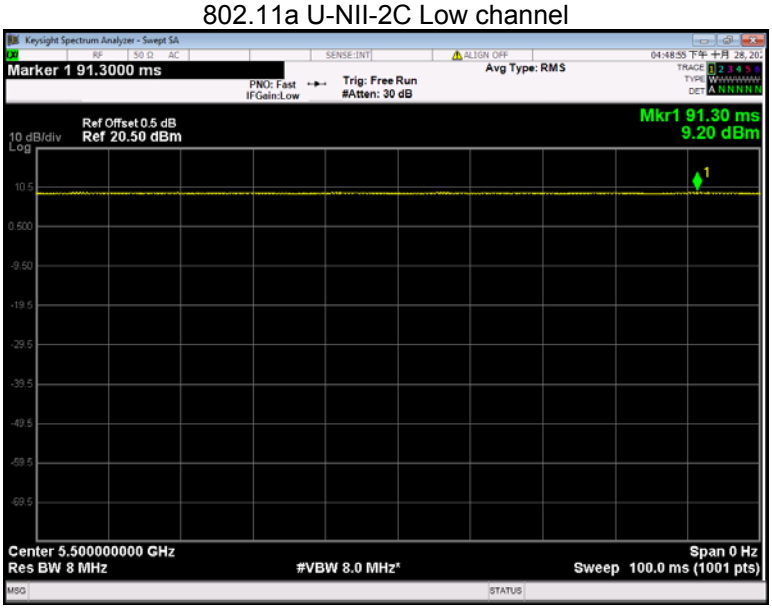
802.11ac(VHT40) U-NII-2A Low channel



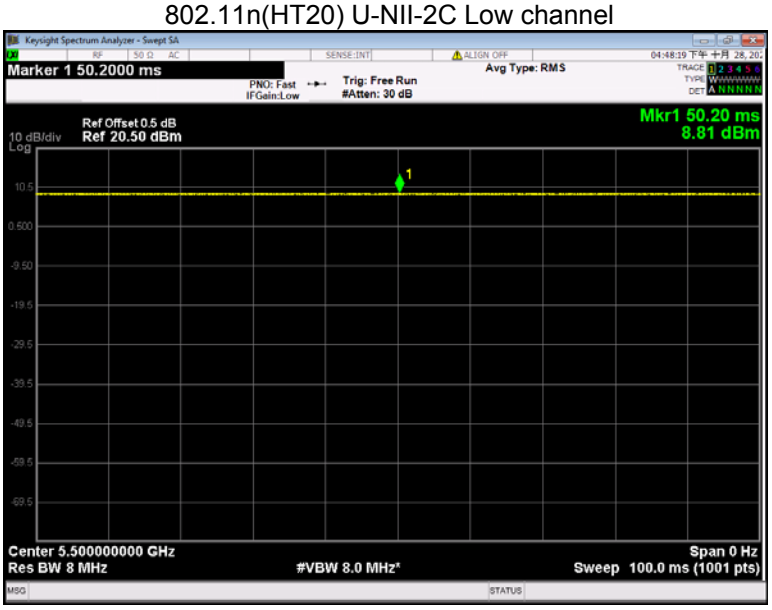
802.11ac(VHT80) U-NII-2A Low channel



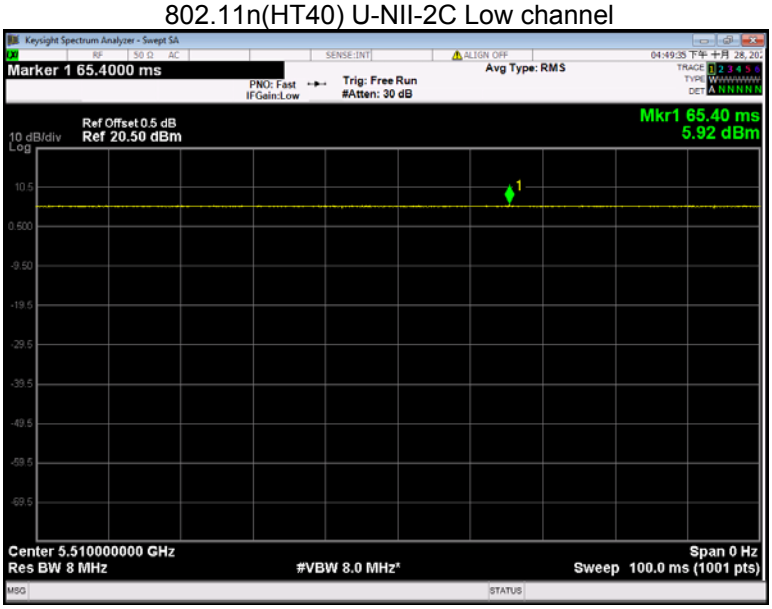
802.11a U-NII-2C Low channel



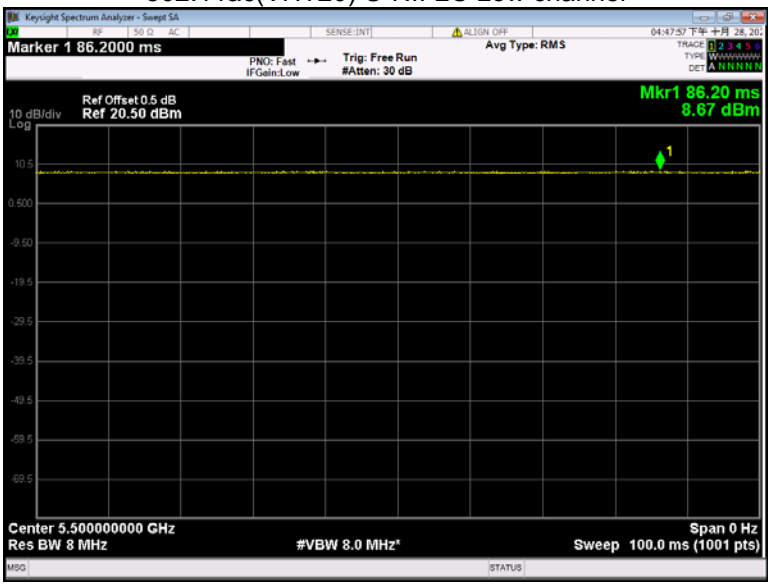
802.11n(HT20) U-NII-2C Low channel



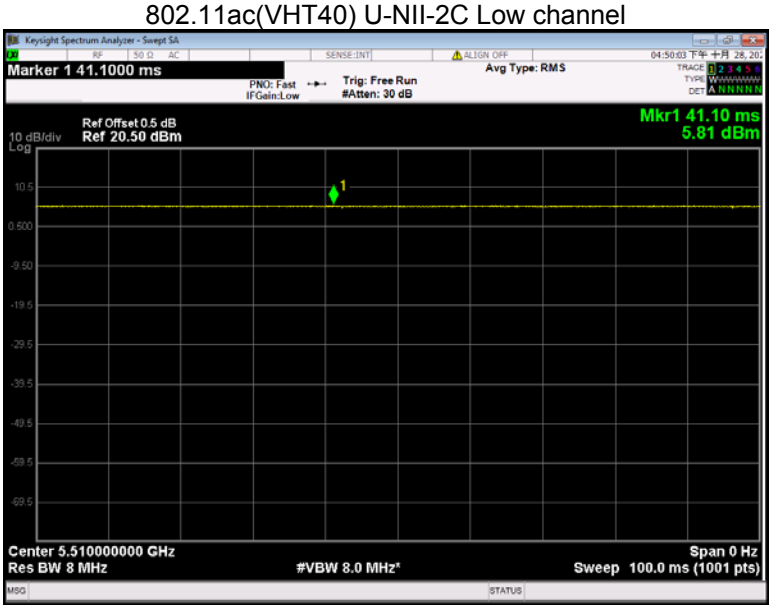
802.11n(HT40) U-NII-2C Low channel



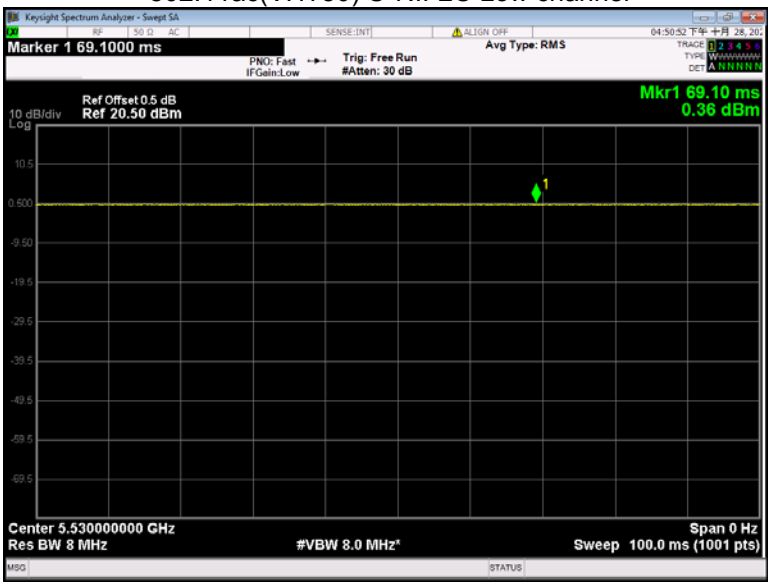
802.11ac(VHT20) U-NII-2C Low channel



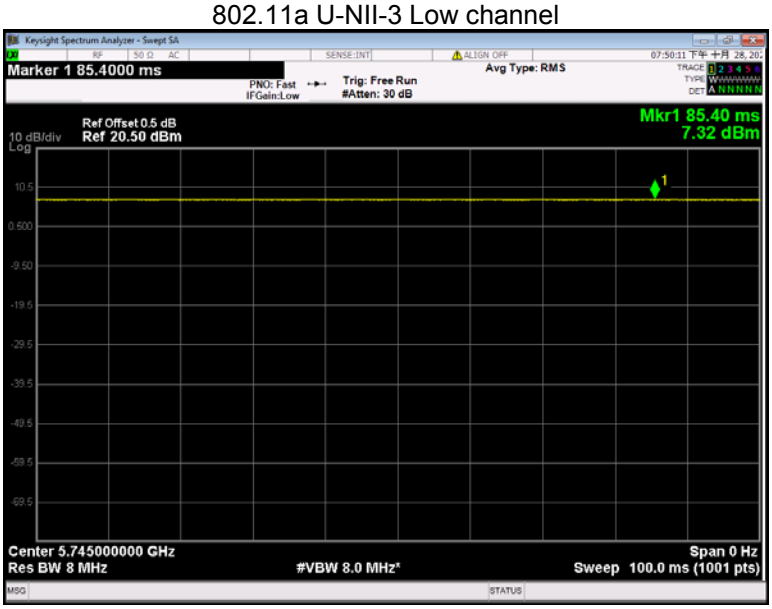
802.11ac(VHT40) U-NII-2C Low channel



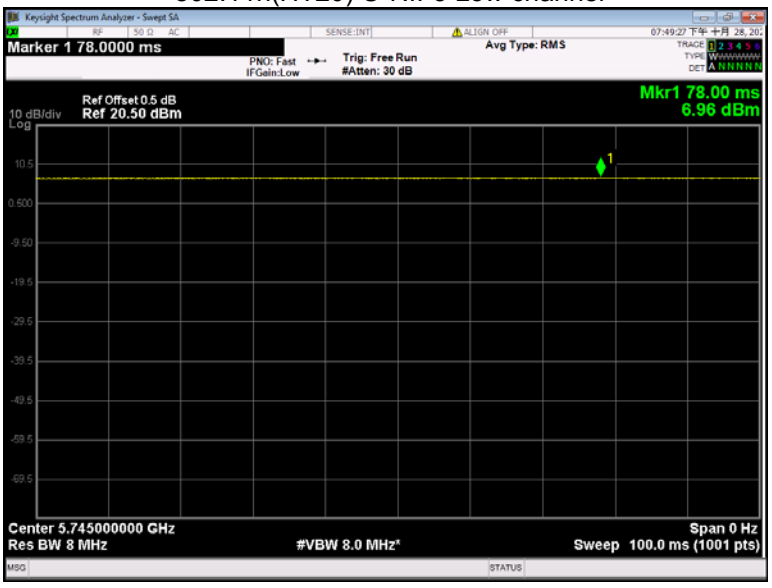
802.11ac(VHT80) U-NII-2C Low channel



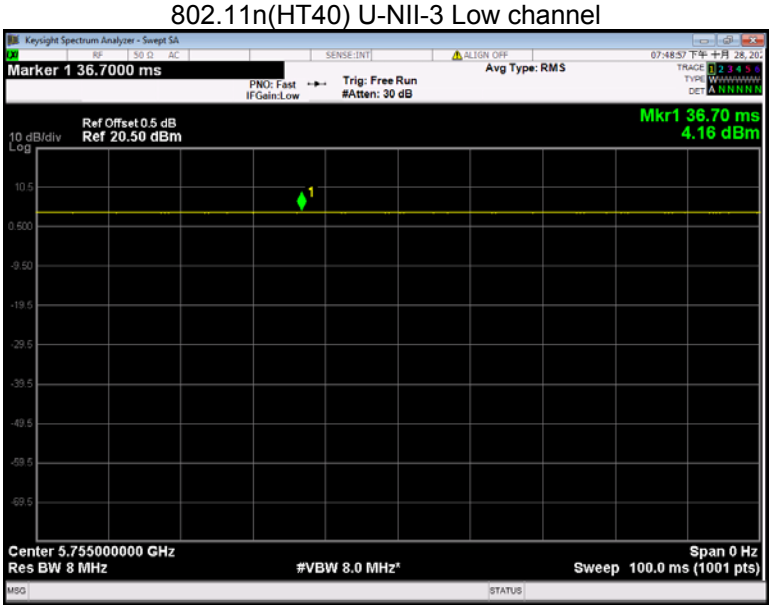
802.11a U-NII-3 Low channel



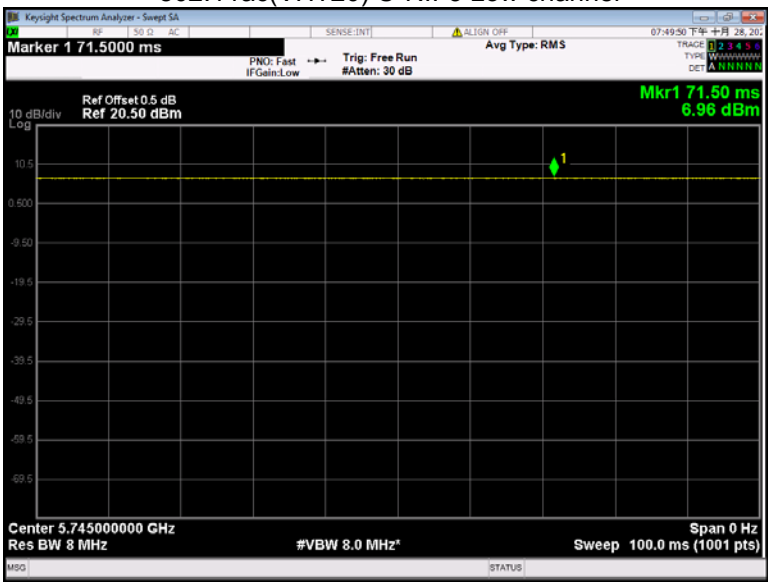
802.11n(HT20) U-NII-3 Low channel



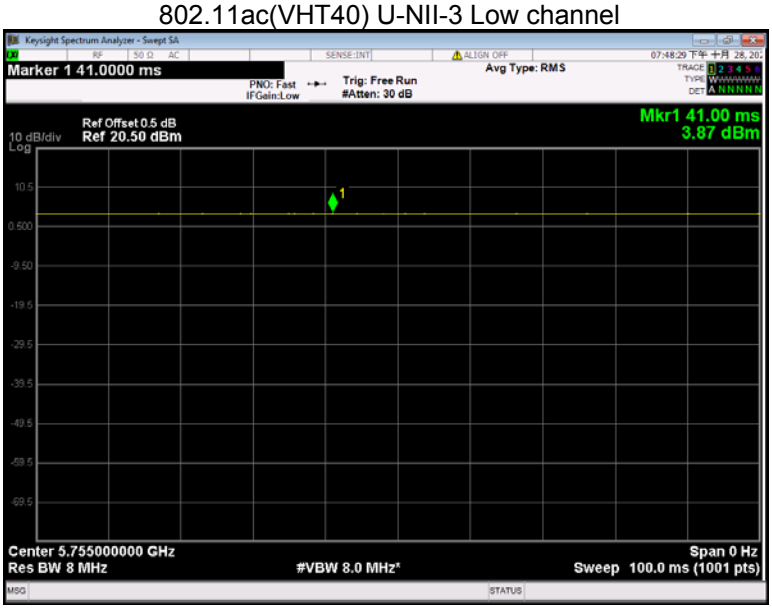
802.11n(HT40) U-NII-3 Low channel



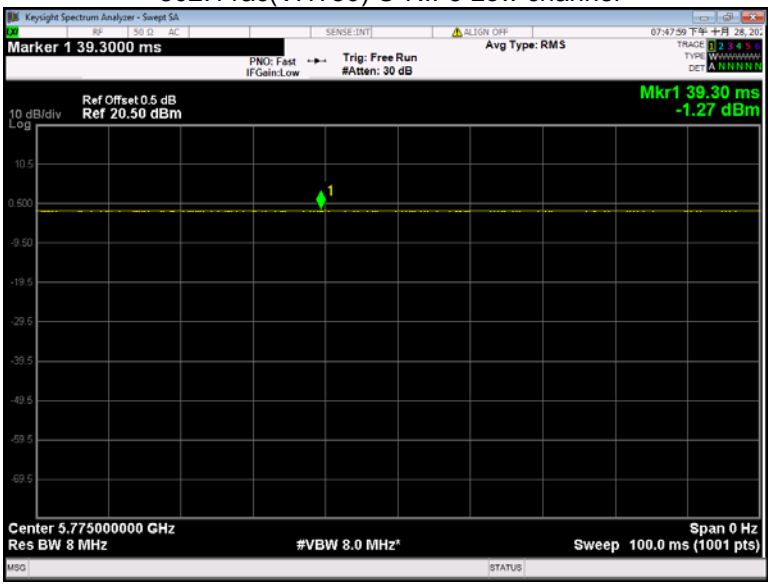
802.11ac(VHT20) U-NII-3 Low channel



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



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



8 Conducted Emission

Test Requirement: FCC 47CFR Part 15 Section 15.207

Test Method: ANSI C63.10:2013

Test Result: PASS

Frequency Range: 150kHz to 30MHz

Limit:

Frequency (MHz)	Limit (dBμV)	
	Quasi-peak	Aver ge
0.15 to 0.5	66 to 56	56 to 46
0.5 to 5	56	46
5 o 30	60	50

8.1 E.U.T. Operation

Operating Environment **:**

Temperature: 25.9°C

Humidity: 42.4%RH

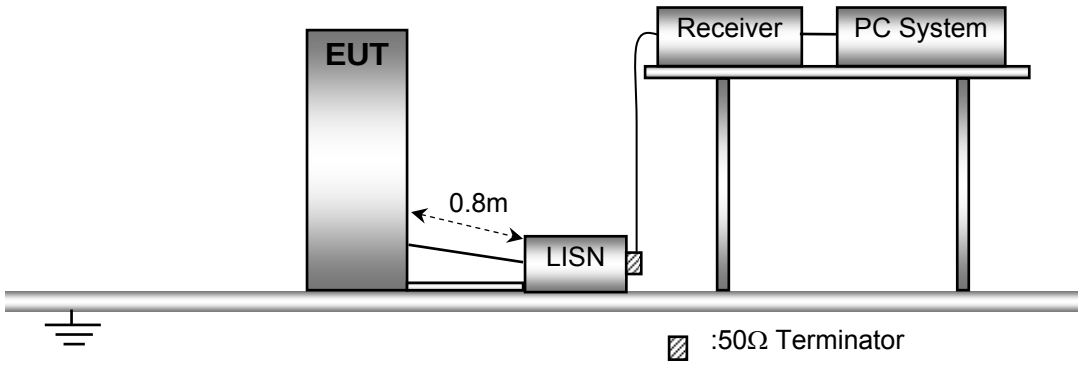
Atmospheric Pressure: 101.1kPa

EUT Operation :

The test was performed in transmitting mode, the 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.



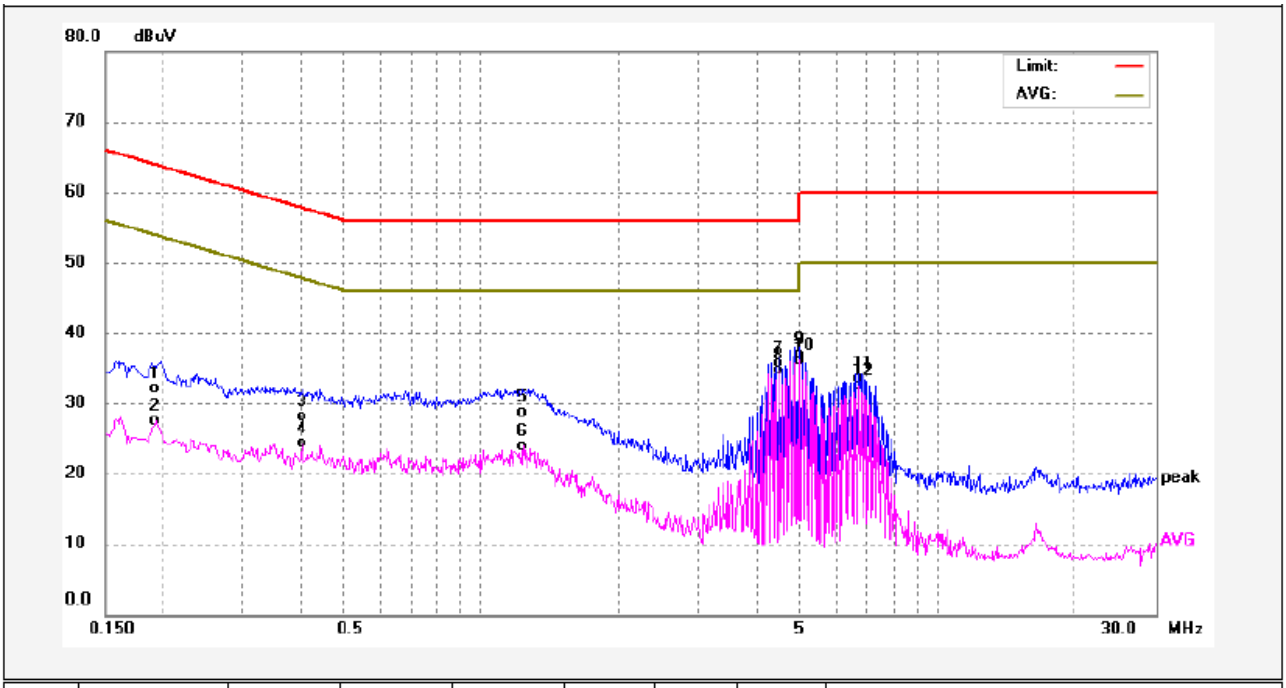
8.3 Measurement Description

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

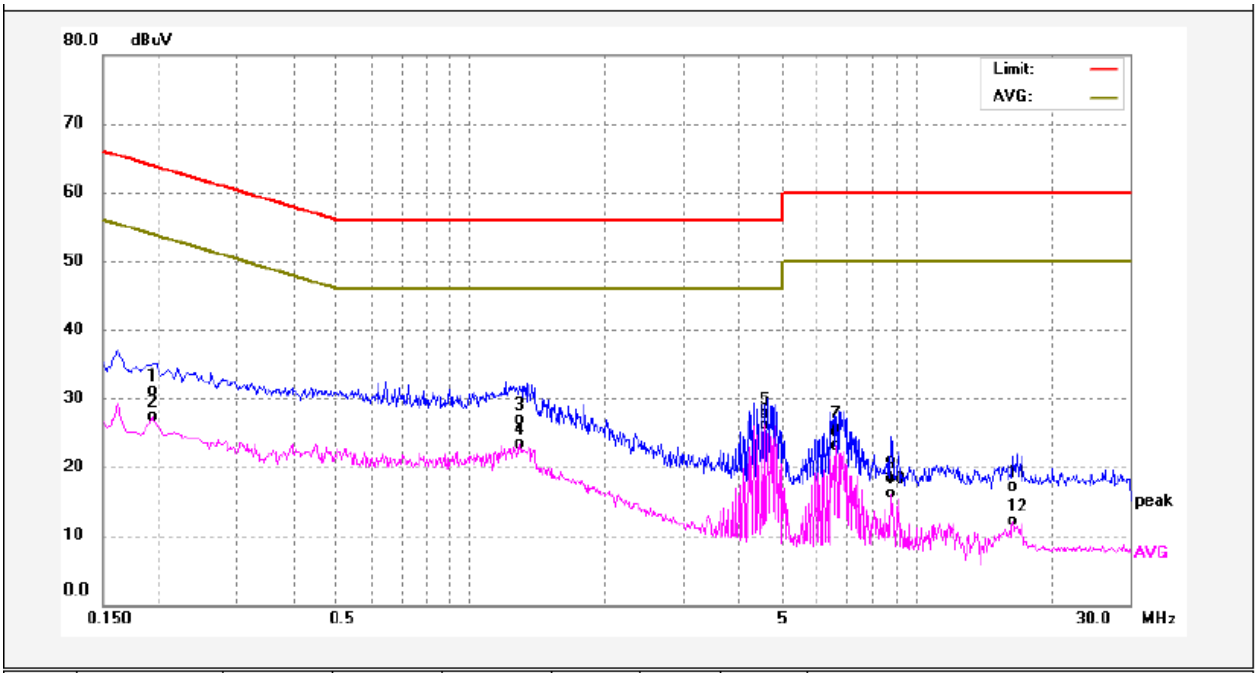
Remark: only the worst data (U-NII-1 802.11a High channel mode) were reported

L1



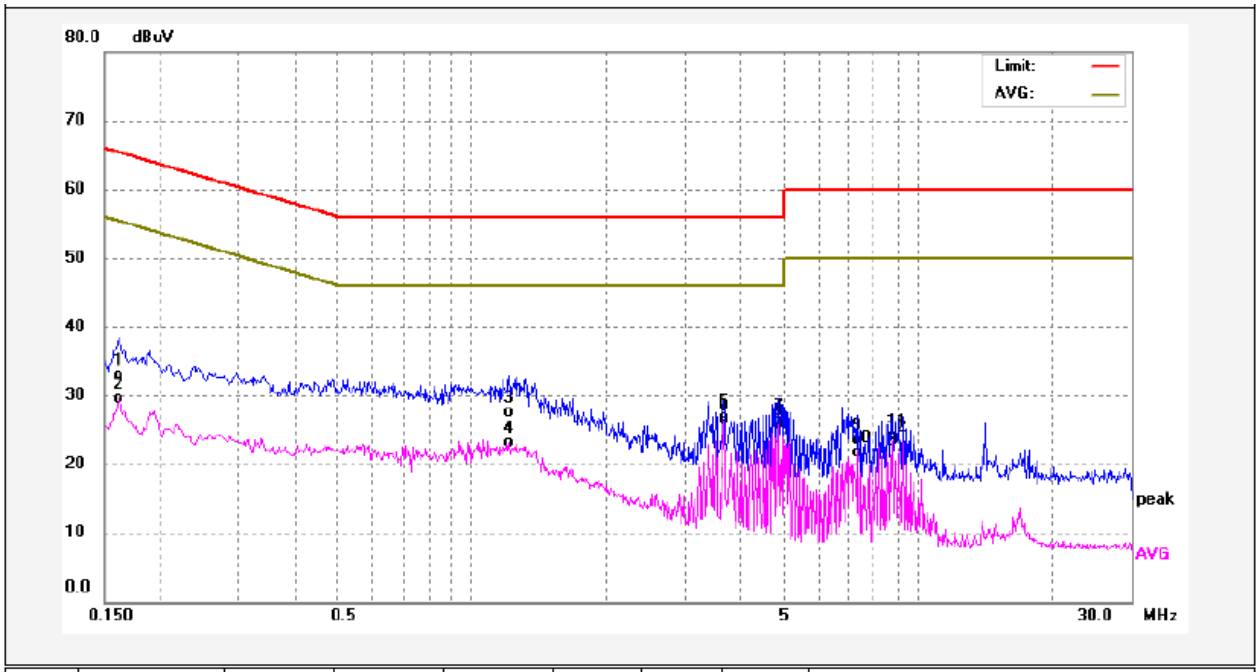
No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1940	21.69	10.34	32.03	63.86	-31.83	QP	
2	0.1940	17.10	10.34	27.44	53.86	-26.42	AVG	
3	0.4060	17.95	10.16	28.11	57.73	-29.62	QP	
4	0.4060	14.08	10.16	24.24	47.73	-23.49	AVG	
5	1.2379	18.52	10.11	28.63	56.00	-27.37	QP	
6	1.2379	13.89	10.11	24.00	46.00	-22.00	AVG	
7	4.4897	25.44	10.18	35.62	56.00	-20.38	QP	
8	4.4897	24.46	10.18	34.64	46.00	-11.36	AVG	
9	4.9618	26.76	10.19	36.95	56.00	-19.05	QP	
10	4.9618	25.88	10.19	36.07	46.00	-9.93	AVG	
11	6.6939	23.24	10.24	33.48	60.00	-26.52	QP	
12	6.6939	22.27	10.24	32.51	50.00	-17.49	AVG	

L2



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1940	20.69	10.33	31.02	63.86	-32.84	QP	
2	0.1940	16.90	10.33	27.23	53.86	-26.63	AVG	
3	1.2940	16.74	10.11	26.85	56.00	-29.15	QP	
4	1.2940	13.25	10.11	23.36	46.00	-22.64	AVG	
5	4.5617	17.43	10.18	27.61	56.00	-28.39	QP	
6	4.5617	15.91	10.18	26.09	46.00	-19.91	AVG	
7	6.6097	15.57	10.23	25.80	60.00	-34.20	QP	
8	6.6097	12.84	10.23	23.07	50.00	-26.93	AVG	
9	8.7299	8.01	10.29	18.30	60.00	-41.70	QP	
10	8.7299	5.84	10.29	16.13	50.00	-33.87	AVG	
11	16.4779	6.67	10.43	17.10	60.00	-42.90	QP	
12	16.4779	1.64	10.43	12.07	50.00	-37.93	AVG	

L3



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1620	22.62	10.38	33.00	65.36	-32.36	QP	
2	0.1620	19.08	10.38	29.46	55.36	-25.90	AVG	
3	1.2096	17.30	10.11	27.41	56.00	-28.59	QP	
4	1.2096	12.96	10.11	23.07	46.00	-22.93	AVG	
5	3.6619	16.70	10.14	26.84	56.00	-29.16	QP	
6	3.6619	16.14	10.14	26.28	46.00	-19.72	AVG	
7	4.8738	16.17	10.19	26.36	56.00	-29.64	QP	
8	4.8738	15.58	10.19	25.77	46.00	-20.23	AVG	
9	7.3258	13.36	10.24	23.60	60.00	-36.40	QP	
10	7.3258	11.46	10.24	21.70	50.00	-28.30	AVG	
11	8.7299	13.84	10.28	24.12	60.00	-35.88	QP	
12	8.7299	12.94	10.28	23.22	50.00	-26.78	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: 24.1 °C

Humidity: 43.6 % RH

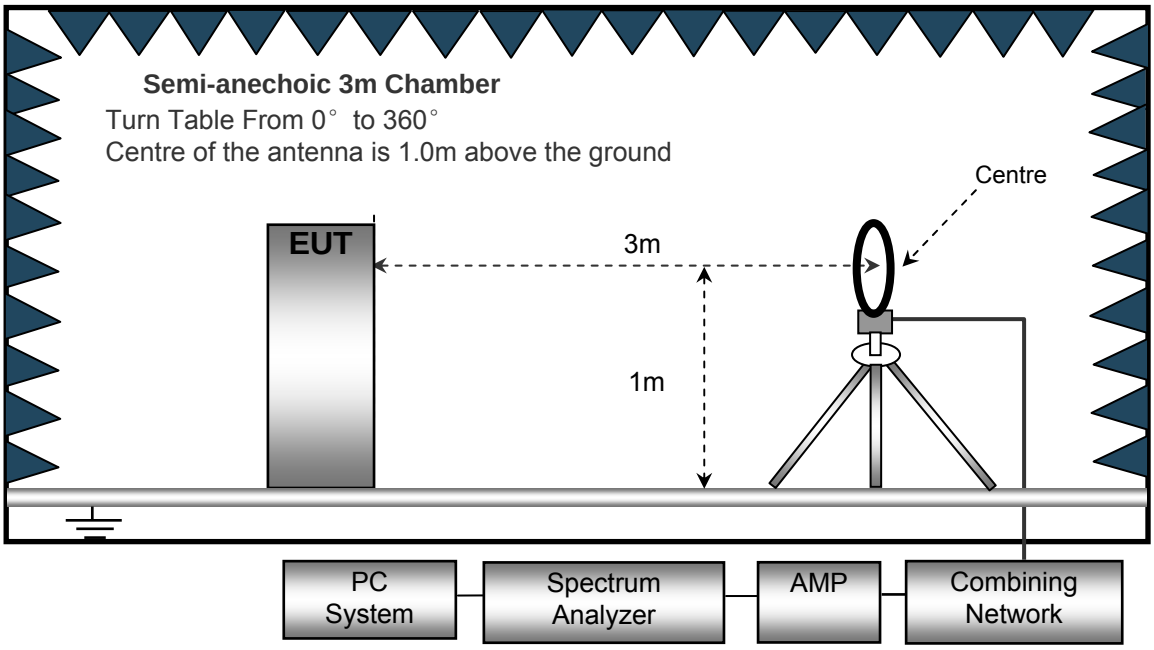
Atmospheric Pressure: 101.1kPa

EUT Operation :

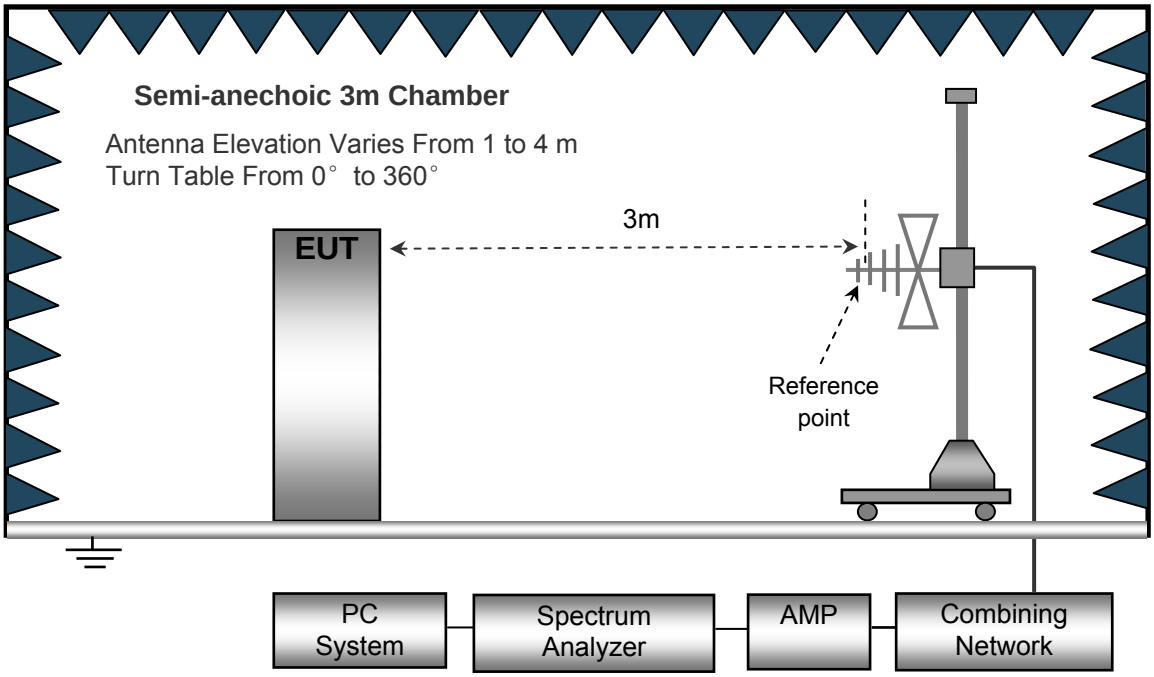
The test was performed in transmitting mode, the test data were shown in the report.

9.2 Test Setup

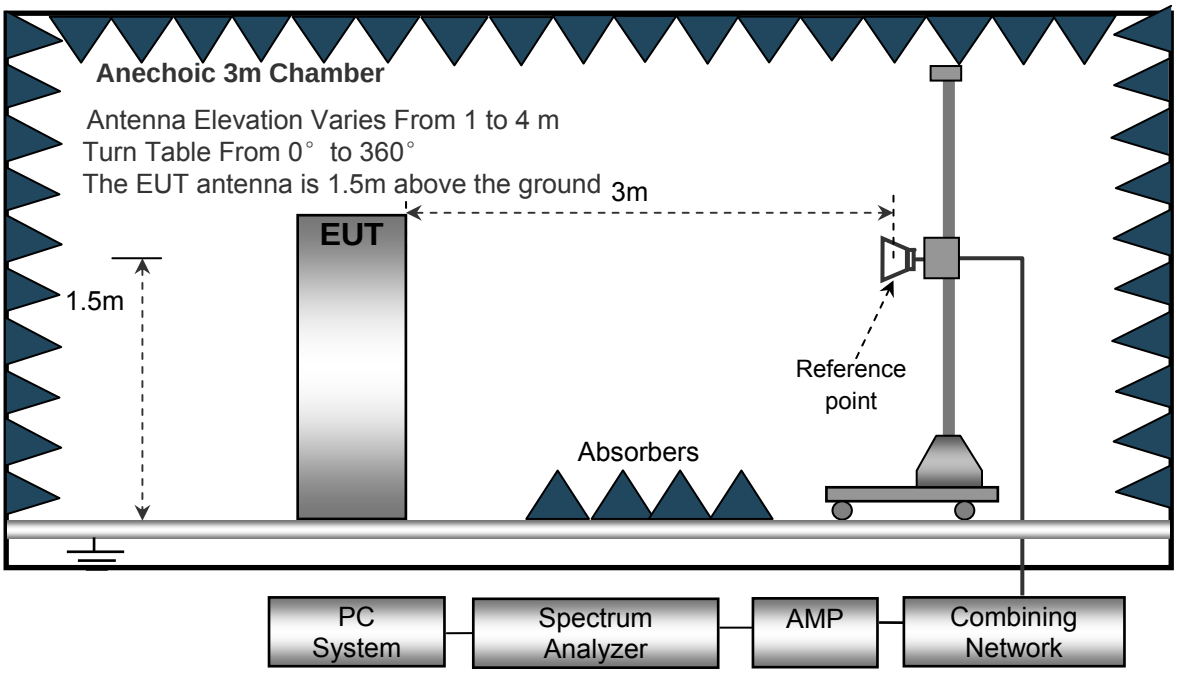
The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site, using the setup accordance with the ANSI C63.10: 2013.
The test setup for emission measurement below 30MHz.



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

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									
251.46	39.94	QP	354	1.4	H	-11.62	28.32	46.00	-17.68
251.46	47.05	QP	180	2.0	V	-11.62	35.43	46.00	-10.57
4523.88	54.08	PK	87	1.6	H	-2.03	52.05	74.00	-21.95
4523.88	43.62	Ave	87	1.6	H	-2.03	41.59	54.00	-12.41
5139.83	53.51	PK	208	1.2	H	-1.02	52.49	74.00	-21.51
5139.83	44.33	Ave	208	1.2	H	-1.02	43.31	54.00	-10.69
10360.00	41.69	PK	324	1.2	H	5.33	47.02	74.00	-26.98
10360.00	36.99	Ave	324	1.2	H	5.33	42.32	54.00	-11.68
802.11a U-NII-1 Middle channel 5200MHz									
251.46	41.38	QP	308	1.1	H	-11.62	29.76	46.00	-16.24
251.46	46.57	QP	120	1.7	V	-11.62	34.95	46.00	-11.05
4523.05	53.57	PK	158	1.5	H	-1.94	51.63	74.00	-22.37
4523.05	44.01	Ave	158	1.5	H	-1.94	42.07	54.00	-11.93
5126.97	52.84	PK	9	1.7	H	-1.06	51.78	74.00	-22.22
5126.97	43.63	Ave	9	1.7	H	-1.06	42.57	54.00	-11.43
10400.00	41.30	PK	67	1.2	H	5.21	46.51	74.00	-27.49
10400.00	38.44	Ave	67	1.2	H	5.21	43.65	54.00	-10.35

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									
251.46	40.45	QP	208	1.2	H	-11.62	28.83	46.00	-17.17
251.46	46.08	QP	26	1.5	V	-11.62	34.46	46.00	-11.54
4520.61	53.17	PK	285	1.8	H	-2.24	50.93	74.00	-23.07
4520.61	45.34	Ave	285	1.8	H	-2.24	43.10	54.00	-10.90
5136.36	54.32	PK	58	1.0	H	-1.09	53.23	74.00	-20.77
5136.36	45.09	Ave	58	1.0	H	-1.09	44.00	54.00	-10.00
10480.00	42.08	PK	357	1.5	H	5.14	47.22	74.00	-26.78
10480.00	37.70	Ave	357	1.5	H	5.14	42.84	54.00	-11.16
802.11a U-NII-2A Low Channel 5260MHz									
251.46	40.18	QP	294	1.9	H	-11.62	28.56	46.00	-17.44
251.46	46.15	QP	329	1.2	V	-11.62	34.53	46.00	-11.47
4500.27	53.96	PK	321	1.9	H	-2.03	51.93	74.00	-22.07
4500.27	40.60	Ave	321	1.9	H	-2.03	38.57	54.00	-15.43
5121.84	53.24	PK	43	1.9	H	-1.02	52.22	74.00	-21.78
5121.84	38.58	Ave	43	1.9	H	-1.02	37.56	54.00	-16.44
10520.00	41.65	PK	281	1.8	H	5.33	46.98	74.00	-27.02
10520.00	33.53	Ave	281	1.8	H	5.33	38.86	54.00	-15.14

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-2A middle channel 5280MHz									
251.46	38.94	QP	267	1.7	H	-11.62	27.32	46.00	-18.68
251.46	45.20	QP	286	1.6	V	-11.62	33.58	46.00	-12.42
4520.71	54.40	PK	209	1.2	H	-1.94	52.46	74.00	-21.54
4520.71	39.60	Ave	209	1.2	H	-1.94	37.66	54.00	-16.34
5123.72	52.80	PK	235	1.2	H	-1.06	51.74	74.00	-22.26
5123.72	38.51	Ave	235	1.2	H	-1.06	37.45	54.00	-16.55
10560.00	42.00	PK	226	1.6	H	5.21	47.21	74.00	-26.79
10560.00	32.35	Ave	226	1.6	H	5.21	37.56	54.00	-16.44
802.11a U-NII-2A High channel 5320MHz									
251.46	40.34	QP	340	1.8	H	-11.62	28.72	46.00	-17.28
251.46	46.42	QP	221	1.9	V	-11.62	34.80	46.00	-11.20
4520.27	55.26	PK	45	1.5	H	-2.24	53.02	74.00	-20.98
4520.27	40.72	Ave	45	1.5	H	-2.24	38.48	54.00	-15.52
5114.62	54.57	PK	281	1.2	H	-1.09	53.48	74.00	-20.52
5114.62	40.37	Ave	281	1.2	H	-1.09	39.28	54.00	-14.72
10640.00	41.21	PK	43	1.9	H	5.14	46.35	74.00	-27.65
10640.00	32.94	Ave	43	1.9	H	5.14	38.08	54.00	-15.92

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-2C Low Channel 5500MHz									
251.46	42.00	QP	101	1.8	H	-11.62	30.38	46.00	-15.62
251.46	46.39	QP	188	1.1	V	-11.62	34.77	46.00	-11.23
4511.22	53.56	PK	157	1.8	H	-2.03	51.53	74.00	-22.47
4511.22	39.97	Ave	157	1.8	H	-2.03	37.94	54.00	-16.06
5125.29	52.97	PK	143	1.7	H	-1.02	51.95	74.00	-22.05
5125.29	38.86	Ave	143	1.7	H	-1.02	37.84	54.00	-16.16
11000.00	42.00	PK	299	1.3	H	5.33	47.33	74.00	-26.67
11000.00	37.08	Ave	299	1.3	H	5.33	42.41	54.00	-11.59
802.11a U-NII-2C Middle channel 5600MHz									
251.46	40.98	QP	151	1.0	H	-11.62	29.36	46.00	-16.64
251.46	45.49	QP	202	1.5	V	-11.62	33.87	46.00	-12.13
4524.62	54.22	PK	86	1.7	H	-1.94	52.28	74.00	-21.72
4524.62	39.89	Ave	86	1.7	H	-1.94	37.95	54.00	-16.05
5139.39	55.49	PK	273	1.9	H	-1.06	54.43	74.00	-19.57
5139.39	37.75	Ave	273	1.9	H	-1.06	36.69	54.00	-17.31
11200.00	42.45	PK	166	1.7	H	5.21	47.66	74.00	-26.34
11200.00	36.56	Ave	166	1.7	H	5.21	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)
802.11a U-NII-2C High channel 5700MHz									
251.46	41.85	QP	128	1.8	H	-11.62	30.23	46.00	-15.77
251.46	46.25	QP	56	1.6	V	-11.62	34.63	46.00	-11.37
4529.69	53.33	PK	260	1.8	H	-2.24	51.09	74.00	-22.91
4529.69	38.95	Ave	260	1.8	H	-2.24	36.71	54.00	-17.29
5128.54	55.47	PK	117	1.3	H	-1.09	54.38	74.00	-19.62
5128.54	38.27	Ave	117	1.3	H	-1.09	37.18	54.00	-16.82
11400.00	42.83	PK	173	1.6	H	5.14	47.97	74.00	-26.03
11400.00	36.47	Ave	173	1.6	H	5.14	41.61	54.00	-12.39
802.11a U-NII-3 Low Channel 5745MHz									
251.46	41.31	QP	340	2.0	H	-11.62	29.69	46.00	-16.31
251.46	44.52	QP	336	1.8	V	-11.62	32.90	46.00	-13.10
4529.76	52.67	PK	88	1.5	H	-2.06	50.61	74.00	-23.39
4529.76	43.79	Ave	88	1.5	H	-2.06	41.73	54.00	-12.27
5358.50	41.84	PK	142	1.2	H	5.93	47.77	74.00	-26.23
5358.50	35.76	Ave	142	1.2	H	5.93	41.69	54.00	-12.31
11490.00	46.63	PK	134	1.9	H	-1.25	45.38	74.00	-28.62
11490.00	39.10	Ave	134	1.9	H	-1.25	37.85	54.00	-16.15

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-3 middle channel 5785MHz									
251.46	42.22	QP	50	1.6	H	-11.62	30.60	46.00	-15.40
251.46	45.02	QP	34	1.0	V	-11.62	33.40	46.00	-12.60
4531.42	51.27	PK	221	1.5	H	-2.03	49.24	74.00	-24.76
4531.42	43.95	Ave	221	1.5	H	-2.03	41.92	54.00	-12.08
5360.56	41.93	PK	197	2.0	H	5.81	47.74	74.00	-26.26
5360.56	36.74	Ave	197	2.0	H	5.81	42.55	54.00	-11.45
11570.00	46.00	PK	240	1.1	H	-1.22	44.78	74.00	-29.22
11570.00	39.64	Ave	240	1.1	H	-1.22	38.42	54.00	-15.58
802.11a U-NII-3 High channel 5825MHz									
251.46	41.02	QP	214	1.9	H	-11.62	29.40	46.00	-16.60
251.46	42.65	QP	359	1.0	V	-11.62	31.03	46.00	-14.97
4520.52	56.09	PK	145	1.8	H	-1.84	54.25	74.00	-19.75
4520.52	44.93	Ave	145	1.8	H	-1.84	43.09	54.00	-10.91
5350.91	41.56	PK	139	1.6	H	5.84	47.40	74.00	-26.60
5350.91	38.54	Ave	139	1.6	H	5.84	44.38	54.00	-9.62
11650.00	46.88	PK	151	1.9	H	-1.30	45.58	74.00	-28.42
11650.00	37.62	Ave	151	1.9	H	-1.30	36.32	54.00	-17.68

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									
251.46	39.61	QP	319	1.8	H	-11.62	27.99	46.00	-18.01
251.46	46.28	QP	201	1.1	V	-11.62	34.66	46.00	-11.34
4500.21	53.80	PK	53	1.4	H	-2.14	51.66	74.00	-22.34
4500.21	42.41	Ave	53	1.4	H	-2.14	40.27	54.00	-13.73
5114.11	46.15	PK	324	1.0	H	-1.06	45.09	74.00	-28.91
5114.11	37.74	Ave	324	1.0	H	-1.06	36.68	54.00	-17.32
10360.00	40.27	PK	126	1.8	H	5.33	45.60	74.00	-28.40
10360.00	37.95	Ave	126	1.8	H	5.33	43.28	54.00	-10.72
802.11n(HT20) U-NII-1 Middle channel 5200MHz									
251.46	39.18	QP	45	1.7	H	-11.62	27.56	46.00	-18.44
251.46	46.80	QP	158	1.1	V	-11.62	35.18	46.00	-10.82
4507.62	55.14	PK	28	1.0	H	-2.12	53.02	74.00	-20.98
4507.62	42.47	Ave	28	1.0	H	-2.12	40.35	54.00	-13.65
5135.63	45.92	PK	310	1.2	H	-1.06	44.86	74.00	-29.14
5135.63	38.37	Ave	310	1.2	H	-1.06	37.31	54.00	-16.69
10400.00	42.26	PK	173	1.9	H	5.21	47.47	74.00	-26.53
10400.00	36.57	Ave	173	1.9	H	5.21	41.78	54.00	-12.22

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									
251.46	38.53	QP	224	1.5	H	-11.62	26.91	46.00	-19.09
251.46	45.72	QP	345	1.2	V	-11.62	34.10	46.00	-11.90
4515.86	54.60	PK	245	1.5	H	-1.96	52.64	74.00	-21.36
4515.86	42.81	Ave	245	1.5	H	-1.96	40.85	54.00	-13.15
5123.13	47.00	PK	226	1.3	H	-1.06	45.94	74.00	-28.06
5123.13	38.69	Ave	226	1.3	H	-1.06	37.63	54.00	-16.37
10480.00	41.96	PK	135	1.0	H	5.14	47.10	74.00	-26.90
10480.00	36.49	Ave	135	1.0	H	5.14	41.63	54.00	-12.37
802.11n(HT20) U-NII-2A Low Channel 5260MHz									
251.46	41.33	QP	273	1.8	H	-11.62	29.71	46.00	-16.29
251.46	48.34	QP	154	2.0	V	-11.62	36.72	46.00	-9.28
4536.10	36.19	PK	226	1.7	H	-2.03	34.16	74.00	-39.84
4536.10	46.28	Ave	226	1.7	H	-2.03	44.25	54.00	-9.75
5125.94	46.17	PK	225	1.4	H	-1.25	44.92	74.00	-29.08
5125.94	37.27	Ave	225	1.4	H	-1.25	36.02	54.00	-17.98
10520.00	39.40	PK	313	1.5	H	5.33	44.73	74.00	-29.27
10520.00	45.23	Ave	313	1.5	H	5.33	50.56	54.00	-3.44

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-2A middle channel 5280MHz									
251.46	40.26	QP	350	1.8	H	-11.62	28.64	46.00	-17.36
251.46	46.09	QP	296	1.6	V	-11.62	34.47	46.00	-11.53
4513.84	54.14	PK	16	1.2	H	-2.03	52.11	74.00	-21.89
4513.84	43.99	Ave	16	1.2	H	-2.03	41.96	54.00	-12.04
5117.95	53.79	PK	136	1.4	H	-1.02	52.77	74.00	-21.23
5117.95	44.52	Ave	136	1.4	H	-1.02	43.50	54.00	-10.50
10560.00	41.56	PK	59	1.4	H	5.33	46.89	74.00	-27.11
10560.00	37.30	Ave	59	1.4	H	5.33	42.63	54.00	-11.37
802.11n(HT20) U-NII-2A High channel 5320MHz									
251.46	39.39	QP	241	1.3	H	-11.62	27.77	46.00	-18.23
251.46	46.36	QP	310	1.8	V	-11.62	34.74	46.00	-11.26
4533.40	54.63	PK	344	1.6	H	-1.94	52.69	74.00	-21.31
4533.40	45.22	Ave	344	1.6	H	-1.94	43.28	54.00	-10.72
5115.04	52.80	PK	311	1.8	H	-1.06	51.74	74.00	-22.26
5115.04	44.26	Ave	311	1.8	H	-1.06	43.20	54.00	-10.80
10640.00	41.95	PK	244	1.3	H	5.21	47.16	74.00	-26.84
10640.00	36.79	Ave	244	1.3	H	5.21	42.00	54.00	-12.00

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-2C Low Channel 5500MHz									
251.46	39.94	QP	345	1.3	H	-11.62	28.32	46.00	-17.68
251.46	43.96	QP	44	1.2	V	-11.62	32.34	46.00	-13.66
4527.64	55.70	PK	42	1.6	H	-2.24	53.46	74.00	-20.54
4527.64	43.64	Ave	42	1.6	H	-2.24	41.40	54.00	-12.60
5116.83	54.02	PK	190	1.1	H	-1.09	52.93	74.00	-21.07
5116.83	45.75	Ave	190	1.1	H	-1.09	44.66	54.00	-9.34
11000.00	41.57	PK	207	1.7	H	5.14	46.71	74.00	-27.29
11000.00	37.95	Ave	207	1.7	H	5.14	43.09	54.00	-10.91
802.11n(HT20) U-NII-2C Middle channel 5600MHz									
251.46	38.60	QP	336	1.2	H	-11.62	26.98	46.00	-19.02
251.46	46.25	QP	340	1.3	V	-11.62	34.63	46.00	-11.37
4520.44	54.82	PK	166	1.8	H	-1.94	52.88	74.00	-21.12
4520.44	40.14	Ave	166	1.8	H	-1.94	38.20	54.00	-15.80
5112.76	52.13	PK	314	1.2	H	-1.06	51.07	74.00	-22.93
5112.76	40.22	Ave	314	1.2	H	-1.06	39.16	54.00	-14.84
11200.00	42.45	PK	293	1.7	H	5.21	47.66	74.00	-26.34
11200.00	33.40	Ave	293	1.7	H	5.21	38.61	54.00	-15.39

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)
802.11n(HT20) U-NII-2C High channel 5700MHz									
251.46	39.68	QP	179	1.5	H	-11.62	28.06	46.00	-17.94
251.46	44.04	QP	174	1.1	V	-11.62	32.42	46.00	-13.58
4505.33	53.27	PK	303	1.1	H	-2.24	51.03	74.00	-22.97
4505.33	40.21	Ave	303	1.1	H	-2.24	37.97	54.00	-16.03
5125.13	53.43	PK	35	1.8	H	-1.09	52.34	74.00	-21.66
5125.13	40.35	Ave	35	1.8	H	-1.09	39.26	54.00	-14.74
11400.00	40.51	PK	57	1.6	H	5.14	45.65	74.00	-28.35
11400.00	33.19	Ave	57	1.6	H	5.14	38.33	54.00	-15.67
802.11n(HT20) U-NII-3 Low Channel 5745MHz									
251.46	44.72	QP	185	1.4	H	-11.62	33.10	46.00	-12.90
251.46	49.32	QP	260	2.0	V	-11.62	37.70	46.00	-8.30
4505.54	44.00	PK	257	1.5	H	-2.06	41.94	74.00	-32.06
4505.54	45.86	Ave	257	1.5	H	-2.06	43.80	54.00	-10.20
5359.79	38.35	PK	280	1.7	H	5.93	44.28	74.00	-29.72
5359.79	37.60	Ave	280	1.7	H	5.93	43.53	54.00	-10.47
11490.00	47.00	PK	256	1.1	H	-1.25	45.75	74.00	-28.25
11490.00	38.22	Ave	256	1.1	H	-1.25	36.97	54.00	-17.03

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									
251.46	44.75	QP	60	1.3	H	-11.62	33.13	46.00	-12.87
251.46	45.63	QP	220	1.2	V	-11.62	34.01	46.00	-11.99
4538.59	43.72	PK	352	1.1	H	-2.03	41.69	74.00	-32.31
4538.59	46.77	Ave	352	1.1	H	-2.03	44.74	54.00	-9.26
5379.96	37.83	PK	79	1.8	H	5.81	43.64	74.00	-30.36
5379.96	37.69	Ave	79	1.8	H	5.81	43.50	54.00	-10.50
11570.00	46.67	PK	14	1.2	H	-1.22	45.45	74.00	-28.55
11570.00	39.87	Ave	14	1.2	H	-1.22	38.65	54.00	-15.35
802.11n(HT20) U-NII-3 High channel 5825MHz									
251.46	43.90	QP	84	1.0	H	-11.62	32.28	46.00	-13.72
251.46	45.24	QP	45	1.7	V	-11.62	33.62	46.00	-12.38
4538.83	44.28	PK	272	1.6	H	-1.84	42.44	74.00	-31.56
4538.83	47.30	Ave	272	1.6	H	-1.84	45.46	54.00	-8.54
5354.50	39.11	PK	144	1.8	H	5.84	44.95	74.00	-29.05
5354.50	39.87	Ave	144	1.8	H	5.84	45.71	54.00	-8.29
11650.00	45.27	PK	110	1.3	H	-1.30	43.97	74.00	-30.03
11650.00	39.66	Ave	110	1.3	H	-1.30	38.36	54.00	-15.64

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									
251.46	35.79	QP	71	1.1	H	-11.62	24.17	46.00	-21.83
251.46	39.12	QP	304	1.2	V	-11.62	27.50	46.00	-18.50
4509.90	46.66	PK	186	1.5	H	-1.86	44.80	74.00	-29.20
4509.90	40.91	Ave	186	1.5	H	-1.86	39.05	54.00	-14.95
5131.62	44.08	PK	174	1.6	H	-1.06	43.02	74.00	-30.98
5131.62	48.92	Ave	174	1.6	H	-1.06	47.86	54.00	-6.14
10360.00	46.30	PK	132	1.5	H	5.33	51.63	74.00	-22.37
10360.00	38.74	Ave	132	1.5	H	5.33	44.07	54.00	-9.93
802.11ac(VHT20) U-NII-1 Middle channel 5200MHz									
251.46	35.58	QP	298	1.1	H	-11.62	23.96	46.00	-22.04
251.46	39.24	QP	94	1.7	V	-11.62	27.62	46.00	-18.38
4505.00	47.34	PK	193	1.7	H	-1.82	45.52	74.00	-28.48
4505.00	41.14	Ave	193	1.7	H	-1.82	39.32	54.00	-14.68
5143.20	43.71	PK	258	1.9	H	-1.06	42.65	74.00	-31.35
5143.20	49.37	Ave	258	1.9	H	-1.06	48.31	54.00	-5.69
10400.00	41.50	PK	150	1.4	H	5.21	46.71	74.00	-27.29
10400.00	36.79	Ave	150	1.4	H	5.21	42.00	54.00	-12.00

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									
251.46	41.78	QP	47	1.2	H	-11.62	30.16	46.00	-15.84
251.46	46.22	QP	359	1.4	V	-11.62	34.60	46.00	-11.40
4517.72	53.23	PK	97	1.1	H	-2.03	51.20	74.00	-22.80
4517.72	39.71	Ave	97	1.1	H	-2.03	37.68	54.00	-16.32
5125.36	53.78	PK	41	1.7	H	-1.02	52.76	74.00	-21.24
5125.36	38.80	Ave	41	1.7	H	-1.02	37.78	54.00	-16.22
10480.00	41.13	PK	167	1.2	H	5.33	46.46	74.00	-27.54
10480.00	37.31	Ave	167	1.2	H	5.33	42.64	54.00	-11.36
802.11ac(VHT20) U-NII-2A Low Channel 5260MHz									
251.46	40.80	QP	101	2.0	H	-11.62	29.18	46.00	-16.82
251.46	47.18	QP	259	1.4	V	-11.62	35.56	46.00	-10.44
4532.57	51.75	PK	193	1.0	H	-1.94	49.81	74.00	-24.19
4532.57	39.50	Ave	193	1.0	H	-1.94	37.56	54.00	-16.44
5127.51	55.55	PK	280	1.6	H	-1.06	54.49	74.00	-19.51
5127.51	38.41	Ave	280	1.6	H	-1.06	37.35	54.00	-16.65
10520.00	42.65	PK	231	1.9	H	5.21	47.86	74.00	-26.14
10520.00	35.96	Ave	231	1.9	H	5.21	41.17	54.00	-12.83

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-2A middle channel 5280MHz									
251.46	39.82	QP	59	1.4	H	-11.62	28.20	46.00	-17.80
251.46	45.16	QP	52	1.2	V	-11.62	33.54	46.00	-12.46
4522.48	53.85	PK	89	1.5	H	-1.94	51.91	74.00	-22.09
4522.48	40.46	Ave	89	1.5	H	-1.94	38.52	54.00	-15.48
5131.08	54.78	PK	53	1.3	H	-1.06	53.72	74.00	-20.28
5131.08	37.53	Ave	53	1.3	H	-1.06	36.47	54.00	-17.53
10560.00	42.16	PK	78	1.2	H	5.21	47.37	74.00	-26.63
10560.00	32.29	Ave	78	1.2	H	5.21	37.50	54.00	-16.50
802.11ac(VHT20) U-NII-2A High channel 5320MHz									
251.46	40.63	QP	326	1.0	H	-11.62	29.01	46.00	-16.99
251.46	46.24	QP	90	1.9	V	-11.62	34.62	46.00	-11.38
4526.57	54.35	PK	27	1.4	H	-2.24	52.11	74.00	-21.89
4526.57	40.82	Ave	27	1.4	H	-2.24	38.58	54.00	-15.42
5115.65	55.99	PK	296	1.1	H	-1.09	54.90	74.00	-19.10
5115.65	37.89	Ave	296	1.1	H	-1.09	36.80	54.00	-17.20
10640.00	42.03	PK	148	1.4	H	5.14	47.17	74.00	-26.83
10640.00	34.24	Ave	148	1.4	H	5.14	39.38	54.00	-14.62

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(VHT20) U-NII-2C Low Channel 5500MHz									
251.46	40.19	QP	61	1.7	H	-11.62	28.57	46.00	-17.43
251.46	45.03	QP	21	1.4	V	-11.62	33.41	46.00	-12.59
4500.89	55.03	PK	331	1.2	H	-1.94	53.09	74.00	-20.91
4500.89	40.65	Ave	331	1.2	H	-1.94	38.71	54.00	-15.29
5146.77	54.36	PK	269	1.5	H	-1.06	53.30	74.00	-20.70
5146.77	38.74	Ave	269	1.5	H	-1.06	37.68	54.00	-16.32
11000.00	41.33	PK	88	1.5	H	5.21	46.54	74.00	-27.46
11000.00	32.73	Ave	88	1.5	H	5.21	37.94	54.00	-16.06
802.11ac(VHT20) U-NII-2C Middle channel 5600MHz									
251.46	39.35	QP	287	1.0	H	-11.62	27.73	46.00	-18.27
251.46	46.20	QP	174	1.8	V	-11.62	34.58	46.00	-11.42
4537.52	56.43	PK	113	1.1	H	-2.24	54.19	74.00	-19.81
4537.52	40.31	Ave	113	1.1	H	-2.24	38.07	54.00	-15.93
5124.42	54.85	PK	325	1.9	H	-1.09	53.76	74.00	-20.24
5124.42	40.61	Ave	325	1.9	H	-1.09	39.52	54.00	-14.48
11200.00	40.95	PK	292	1.3	H	5.14	46.09	74.00	-27.91
11200.00	34.13	Ave	292	1.3	H	5.14	39.27	54.00	-14.73

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)
802.11ac(VHT20) U-NII-2C High channel 5700MHz									
251.46	41.04	QP	192	1.4	H	-11.62	29.42	46.00	-16.58
251.46	45.72	QP	84	1.2	V	-11.62	34.10	46.00	-11.90
4526.76	52.25	PK	230	1.0	H	-1.94	50.31	74.00	-23.69
4526.76	38.84	Ave	230	1.0	H	-1.94	36.90	54.00	-17.10
5134.71	54.07	PK	47	1.1	H	-1.06	53.01	74.00	-20.99
5134.71	40.78	Ave	47	1.1	H	-1.06	39.72	54.00	-14.28
11400.00	42.38	PK	41	1.2	H	5.21	47.59	74.00	-26.41
11400.00	36.39	Ave	41	1.2	H	5.21	41.60	54.00	-12.40
802.11ac(VHT20) U-NII-3 Low Channel 5745MHz									
251.46	34.30	QP	336	1.9	H	-11.62	22.68	46.00	-23.32
251.46	42.39	QP	220	1.6	V	-11.62	30.77	46.00	-15.23
4535.01	45.40	PK	255	1.5	H	-1.92	43.48	74.00	-30.52
4535.01	35.94	Ave	255	1.5	H	-1.92	34.02	54.00	-19.98
5356.87	38.75	PK	40	1.9	H	5.93	44.68	74.00	-29.32
5356.87	36.01	Ave	40	1.9	H	5.93	41.94	54.00	-12.06
11490.00	46.89	PK	72	1.9	H	-1.03	45.86	74.00	-28.14
11490.00	37.67	Ave	72	1.9	H	-1.03	36.64	54.00	-17.36

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									
251.46	33.44	QP	344	1.6	H	-11.62	21.82	46.00	-24.18
251.46	41.43	QP	4	1.1	V	-11.62	29.81	46.00	-16.19
4520.61	44.56	PK	208	1.0	H	-1.97	42.59	74.00	-31.41
4520.61	36.14	Ave	208	1.0	H	-1.97	34.17	54.00	-19.83
5388.71	41.81	PK	340	1.8	H	5.81	47.62	74.00	-26.38
5388.71	37.33	Ave	340	1.8	H	5.81	43.14	54.00	-10.86
11570.00	46.66	PK	162	1.4	H	-1.05	45.61	74.00	-28.39
11570.00	39.21	Ave	162	1.4	H	-1.05	38.16	54.00	-15.84
802.11ac(VHT20) U-NII-3 High channel 5825MHz									
251.46	37.33	QP	192	1.4	H	-11.62	25.71	46.00	-20.29
251.46	43.73	QP	183	1.9	V	-11.62	32.11	46.00	-13.89
4521.79	43.61	PK	196	1.6	H	-1.88	41.73	74.00	-32.27
4521.79	38.79	Ave	196	1.6	H	-1.88	36.91	54.00	-17.09
5369.50	41.64	PK	278	2.0	H	5.84	47.48	74.00	-26.52
5369.50	38.11	Ave	278	2.0	H	5.84	43.95	54.00	-10.05
11650.00	46.52	PK	230	1.9	H	-1.06	45.46	74.00	-28.54
11650.00	37.76	Ave	230	1.9	H	-1.06	36.70	54.00	-17.30

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)
802.11n(HT40) U-NII-1 Low Channel 5190MHz									
251.46	36.44	QP	253	1.4	H	-11.62	24.82	46.00	-21.18
251.46	44.51	QP	215	1.8	V	-11.62	32.89	46.00	-13.11
4500.05	42.04	PK	259	1.8	H	-1.89	40.15	74.00	-33.85
4500.05	37.60	Ave	259	1.8	H	-1.89	35.71	54.00	-18.29
5147.57	45.86	PK	70	1.9	H	-1.06	44.80	74.00	-29.20
5147.57	38.99	Ave	70	1.9	H	-1.06	37.93	54.00	-16.07
10380.00	38.57	PK	201	1.0	H	5.26	43.83	74.00	-30.17
10380.00	34.59	Ave	201	1.0	H	5.26	39.85	54.00	-14.15
802.11n(HT40) U-NII-1 High channel 5230MHz									
251.46	38.73	QP	179	1.4	H	-11.62	27.11	46.00	-18.89
251.46	42.02	QP	240	1.7	V	-11.62	30.40	46.00	-15.60
4528.94	41.13	PK	118	1.8	H	-1.94	39.19	74.00	-34.81
4528.94	35.17	Ave	118	1.8	H	-1.94	33.23	54.00	-20.77
5148.21	48.21	PK	350	1.9	H	-1.06	47.15	74.00	-26.85
5148.21	37.26	Ave	350	1.9	H	-1.06	36.20	54.00	-17.80
10460.00	41.88	PK	216	1.9	H	5.28	47.16	74.00	-26.84
10460.00	36.20	Ave	216	1.9	H	5.28	41.48	54.00	-12.52

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-2A Low Channel 5270MHz									
251.46	44.45	QP	307	1.2	H	-11.62	32.83	46.00	-13.17
251.46	40.01	QP	127	1.2	V	-11.62	28.39	46.00	-17.61
4512.46	41.84	PK	355	1.1	H	-1.89	39.95	74.00	-34.05
4512.46	36.72	Ave	355	1.1	H	-1.89	34.83	54.00	-19.17
5117.17	46.22	PK	65	1.5	H	-1.06	45.16	74.00	-28.84
5117.17	40.27	Ave	65	1.5	H	-1.06	39.21	54.00	-14.79
10540.00	45.54	PK	84	2.0	H	5.26	50.80	74.00	-23.20
10540.00	38.29	Ave	84	2.0	H	5.26	43.55	54.00	-10.45
802.11n(HT40) U-NII-2A High channel 5310MHz									
251.46	44.65	QP	267	1.1	H	-11.62	33.03	46.00	-12.97
251.46	40.55	QP	132	1.3	V	-11.62	28.93	46.00	-17.07
4505.77	41.39	PK	309	1.9	H	-1.94	39.45	74.00	-34.55
4505.77	35.96	Ave	309	1.9	H	-1.94	34.02	54.00	-19.98
5135.13	47.57	PK	238	1.9	H	-1.06	46.51	74.00	-27.49
5135.13	40.87	Ave	238	1.9	H	-1.06	39.81	54.00	-14.19
10620.00	41.23	PK	56	1.2	H	5.28	46.51	74.00	-27.49
10620.00	37.54	Ave	56	1.2	H	5.28	42.82	54.00	-11.18

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)
802.11n(HT40) U-NII-2C Low Channel 5510MHz									
251.46	47.31	QP	318	1.7	H	-11.62	35.69	46.00	-10.31
251.46	40.90	QP	211	1.2	V	-11.62	29.28	46.00	-16.72
4538.84	40.80	PK	306	1.4	H	-1.89	38.91	74.00	-35.09
4538.84	37.10	Ave	306	1.4	H	-1.89	35.21	54.00	-18.79
5125.74	45.95	PK	14	1.2	H	-1.06	44.89	74.00	-29.11
5125.74	38.00	Ave	14	1.2	H	-1.06	36.94	54.00	-17.06
11020.00	43.94	PK	202	1.6	H	5.26	49.20	74.00	-24.80
11020.00	38.29	Ave	202	1.6	H	5.26	43.55	54.00	-10.45
802.11n(HT40) U-NII-2C Middle channel 5550MHz									
251.46	46.29	QP	162	1.9	H	-11.62	34.67	46.00	-11.33
251.46	38.44	QP	298	1.5	V	-11.62	26.82	46.00	-19.18
4522.87	41.32	PK	193	1.3	H	-1.94	39.38	74.00	-34.62
4522.87	37.31	Ave	193	1.3	H	-1.94	35.37	54.00	-18.63
5122.41	45.26	PK	56	1.5	H	-1.06	44.20	74.00	-29.80
5122.41	40.68	Ave	56	1.5	H	-1.06	39.62	54.00	-14.38
11100.00	45.90	PK	45	1.8	H	5.28	51.18	74.00	-22.82
11100.00	37.39	Ave	45	1.8	H	5.28	42.67	54.00	-11.33
802.11n(HT40) U-NII-2C High channel 5670MHz									
251.46	46.79	QP	223	1.9	H	-11.62	35.17	46.00	-10.83
251.46	38.96	QP	85	1.3	V	-11.62	27.34	46.00	-18.66
4525.40	42.16	PK	249	1.8	H	-1.94	40.22	74.00	-33.78
4525.40	37.40	Ave	249	1.8	H	-1.94	35.46	54.00	-18.54
5135.74	45.60	PK	167	1.5	H	-1.06	44.54	74.00	-29.46
5135.74	42.65	Ave	167	1.5	H	-1.06	41.59	54.00	-12.41
11340.00	40.98	PK	322	1.1	H	5.28	46.26	74.00	-27.74
11340.00	33.39	Ave	322	1.1	H	5.28	38.67	54.00	-15.33

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									
251.46	39.56	QP	319	1.6	H	-11.62	27.94	46.00	-18.06
251.46	43.18	QP	320	1.3	V	-11.62	31.56	46.00	-14.44
4524.19	40.08	PK	13	1.8	H	-1.96	38.12	74.00	-35.88
4524.19	31.83	Ave	13	1.8	H	-1.96	29.87	54.00	-24.13
5354.92	39.42	PK	9	1.3	H	5.88	45.30	74.00	-28.70
5354.92	34.92	Ave	9	1.3	H	5.88	40.80	54.00	-13.20
11510.00	45.52	PK	309	1.4	H	-1.01	44.51	74.00	-29.49
11510.00	39.29	Ave	309	1.4	H	-1.01	38.28	54.00	-15.72
802.11n(HT40) U-NII-3 High Channel 5795MHz									
251.46	40.30	QP	10	1.8	H	-11.62	28.68	46.00	-17.32
251.46	42.68	QP	31	1.0	V	-11.62	31.06	46.00	-14.94
4538.85	39.79	PK	352	1.1	H	-1.92	37.87	74.00	-36.13
4538.85	31.20	Ave	352	1.1	H	-1.92	29.28	54.00	-24.72
5381.40	40.29	PK	113	1.0	H	5.63	45.92	74.00	-28.08
5381.40	36.23	Ave	113	1.0	H	5.63	41.86	54.00	-12.14
11590.00	46.64	PK	214	1.3	H	-1.04	45.60	74.00	-28.40
11590.00	39.75	Ave	214	1.3	H	-1.04	38.71	54.00	-15.29

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									
251.46	38.93	QP	186	1.8	H	-11.62	27.31	46.00	-18.69
251.46	43.78	QP	313	1.4	V	-11.62	32.16	46.00	-13.84
4518.46	38.75	PK	286	1.5	H	-1.91	36.84	74.00	-37.16
4518.46	28.71	Ave	286	1.5	H	-1.91	26.80	54.00	-27.20
5119.72	47.30	PK	136	1.5	H	-1.06	46.24	74.00	-27.76
5119.72	40.40	Ave	136	1.5	H	-1.06	39.34	54.00	-14.66
10380.00	38.40	PK	33	1.0	H	5.26	43.66	74.00	-30.34
10380.00	34.17	Ave	33	1.0	H	5.26	39.43	54.00	-14.57
802.11ac(VHT40) U-NII-1 High channel 5230MHz									
251.46	38.98	QP	319	1.5	H	-11.62	27.36	46.00	-18.64
251.46	43.61	QP	289	1.8	V	-11.62	31.99	46.00	-14.01
4509.64	38.45	PK	258	1.6	H	-1.93	36.52	74.00	-37.48
4509.64	28.21	Ave	258	1.6	H	-1.93	26.28	54.00	-27.72
5134.59	46.36	PK	171	1.9	H	-1.06	45.30	74.00	-28.70
5134.59	40.86	Ave	171	1.9	H	-1.06	39.80	54.00	-14.20
10460.00	41.53	PK	60	1.1	H	5.28	46.81	74.00	-27.19
10460.00	37.13	Ave	60	1.1	H	5.28	42.41	54.00	-11.59

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-2A Low Channel 5270MHz									
251.46	41.62	QP	194	1.3	H	-11.62	30.00	46.00	-16.00
251.46	44.26	QP	278	1.4	V	-11.62	32.64	46.00	-13.36
4523.61	51.12	PK	156	1.3	H	-2.24	48.88	74.00	-25.12
4523.61	37.91	Ave	156	1.3	H	-2.24	35.67	54.00	-18.33
5133.98	53.34	PK	285	1.0	H	-1.09	52.25	74.00	-21.75
5133.98	40.55	Ave	285	1.0	H	-1.09	39.46	54.00	-14.54
10540.00	40.81	PK	144	1.4	H	5.14	45.95	74.00	-28.05
10540.00	36.72	Ave	144	1.4	H	5.14	41.86	54.00	-12.14
802.11ac(VHT40) U-NII-2A High channel 5310MHz									
251.46	39.09	QP	90	1.5	H	-11.62	27.47	46.00	-18.53
251.46	45.87	QP	104	1.5	V	-11.62	34.25	46.00	-11.75
4529.97	52.34	PK	47	1.7	H	-2.06	50.28	74.00	-23.72
4529.97	44.41	Ave	47	1.7	H	-2.06	42.35	54.00	-11.65
5142.09	42.22	PK	322	1.4	H	5.93	48.15	74.00	-25.85
5142.09	37.20	Ave	322	1.4	H	5.93	43.13	54.00	-10.87
10620.00	46.27	PK	234	1.5	H	-1.25	45.02	74.00	-28.98
10620.00	37.29	Ave	234	1.5	H	-1.25	36.04	54.00	-17.96

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-2C Low Channel 5510MHz									
251.46	40.40	QP	101	1.0	H	-11.62	28.78	46.00	-17.22
251.46	44.96	QP	315	1.7	V	-11.62	33.34	46.00	-12.66
4522.15	52.34	PK	37	1.3	H	-2.03	50.31	74.00	-23.69
4522.15	45.85	Ave	37	1.3	H	-2.03	43.82	54.00	-10.18
5124.70	39.99	PK	322	1.8	H	5.81	45.80	74.00	-28.20
5124.70	36.49	Ave	322	1.8	H	5.81	42.30	54.00	-11.70
11020.00	45.48	PK	252	1.0	H	-1.22	44.26	74.00	-29.74
11020.00	38.21	Ave	252	1.0	H	-1.22	36.99	54.00	-17.01
802.11ac(VHT40) U-NII-2C Middle channel 5550MHz									
251.46	40.71	QP	94	1.2	H	-11.62	29.09	46.00	-16.91
251.46	45.17	QP	278	1.6	V	-11.62	33.55	46.00	-12.45
4525.66	51.05	PK	59	1.9	H	-1.84	49.21	74.00	-24.79
4525.66	44.81	Ave	59	1.9	H	-1.84	42.97	54.00	-11.03
5116.85	40.71	PK	232	1.5	H	5.84	46.55	74.00	-27.45
5116.85	37.28	Ave	232	1.5	H	5.84	43.12	54.00	-10.88
11100.00	46.88	PK	81	1.7	H	-1.30	45.58	74.00	-28.42
11100.00	37.29	Ave	81	1.7	H	-1.30	35.99	54.00	-18.01
802.11ac(VHT40) U-NII-2C High channel 5670MHz									
251.46	46.18	QP	197	1.1	H	-11.62	34.56	46.00	-11.44
251.46	36.08	QP	344	1.6	V	-11.62	24.46	46.00	-21.54
4531.74	0.17	PK	127	1.8	H	-1.94	-1.77	74.00	-75.77
4531.74	40.30	Ave	127	1.8	H	-1.94	38.36	54.00	-15.64
5134.51	46.43	PK	179	1.8	H	-1.06	45.37	74.00	-28.63
5134.51	41.34	Ave	179	1.8	H	-1.06	40.28	54.00	-13.72
11340.00	45.99	PK	267	1.5	H	-1.22	44.77	74.00	-29.23
11340.00	38.21	Ave	267	1.5	H	-1.22	36.99	54.00	-17.01

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									
251.46	35.40	QP	102	1.7	H	-11.62	23.78	46.00	-22.22
251.46	42.02	QP	199	1.3	V	-11.62	30.40	46.00	-15.60
4526.37	35.29	PK	198	1.8	H	-1.92	33.37	74.00	-40.63
4526.37	27.93	Ave	198	1.8	H	-1.92	26.01	54.00	-27.99
5369.26	39.33	PK	68	1.3	H	5.88	45.21	74.00	-28.79
5369.26	34.85	Ave	68	1.3	H	5.88	40.73	54.00	-13.27
11510.00	46.96	PK	222	1.4	H	-1.07	45.89	74.00	-28.11
11510.00	38.02	Ave	222	1.4	H	-1.07	36.95	54.00	-17.05
802.11ac(VHT40) U-NII-3 High Channel 5795MHz									
251.46	35.20	QP	355	1.7	H	-11.62	23.58	46.00	-22.42
251.46	41.69	QP	89	1.7	V	-11.62	30.07	46.00	-15.93
4536.41	35.94	PK	214	1.9	H	-1.86	34.08	74.00	-39.92
4536.41	28.48	Ave	214	1.9	H	-1.86	26.62	54.00	-27.38
5380.28	42.21	PK	61	1.5	H	5.63	47.84	74.00	-26.16
5380.28	36.08	Ave	61	1.5	H	5.63	41.71	54.00	-12.29
11590.00	46.97	PK	173	1.8	H	-1.03	45.94	74.00	-28.06
11590.00	37.54	Ave	173	1.8	H	-1.03	36.51	54.00	-17.49

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(VHT80) U-NII-1 Low Channel 5210MHz									
251.46	42.38	QP	280	1.8	H	-11.62	30.76	46.00	-15.24
251.46	36.60	QP	74	1.0	V	-11.62	24.98	46.00	-21.02
4525.73	28.42	PK	67	1.8	H	-1.88	26.54	74.00	-47.46
4525.73	43.07	Ave	67	1.8	H	-1.88	41.19	54.00	-12.81
5139.05	35.64	PK	312	1.3	H	-1.06	34.58	74.00	-39.42
5139.05	48.65	Ave	312	1.3	H	-1.06	47.59	54.00	-6.41
10420.00	42.06	PK	233	1.6	H	4.65	46.71	74.00	-27.29
10420.00	37.15	Ave	233	1.6	H	4.65	41.80	54.00	-12.20
802.11ac(VHT80) U-NII-2A Low Channel 5290MHz									
251.46	38.92	QP	358	1.9	H	-11.62	27.30	46.00	-18.70
251.46	43.95	QP	50	1.3	V	-11.62	32.33	46.00	-13.67
4529.11	53.44	PK	3	1.4	H	-2.03	51.41	74.00	-22.59
4529.11	41.96	Ave	3	1.4	H	-2.03	39.93	54.00	-14.07
5111.54	42.10	PK	112	1.4	H	5.81	47.91	74.00	-26.09
5111.54	36.25	Ave	112	1.4	H	5.81	42.06	54.00	-11.94
10580.00	45.07	PK	116	1.8	H	-1.22	43.85	74.00	-30.15
10580.00	39.57	Ave	116	1.8	H	-1.22	38.35	54.00	-15.65

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11ac(VHT80) U-NII-2C Low Channel 5530MHz									
251.46	29.05	QP	345	1.9	H	-11.62	17.43	46.00	-28.57
251.46	42.51	QP	206	1.4	V	-11.62	30.89	46.00	-15.11
4505.98	38.54	PK	263	1.4	H	-1.88	36.66	74.00	-37.34
4505.98	46.65	Ave	263	1.4	H	-1.88	44.77	54.00	-9.23
5140.33	43.52	PK	239	1.3	H	-1.06	42.46	74.00	-31.54
5140.33	36.71	Ave	239	1.3	H	-1.06	35.65	54.00	-18.35
11060.00	45.50	PK	70	1.3	H	4.65	50.15	74.00	-23.85
11060.00	36.61	Ave	70	1.3	H	4.65	41.26	54.00	-12.74
802.11ac(VHT80) U-NII-3 Low channel 5775MHz									
251.46	35.99	QP	61	1.8	H	-11.62	24.37	46.00	-21.63
251.46	29.10	QP	217	1.9	V	-11.62	17.48	46.00	-28.52
4502.66	42.19	PK	286	2.0	H	-1.85	40.34	74.00	-33.66
4502.66	41.50	Ave	286	2.0	H	-1.85	39.65	54.00	-14.35
5357.20	43.00	PK	248	1.6	H	4.83	47.83	74.00	-26.17
5357.20	36.99	Ave	248	1.6	H	4.83	41.82	54.00	-12.18
11550.00	46.06	PK	259	1.6	H	-1.14	44.92	74.00	-29.08
11550.00	37.44	Ave	259	1.6	H	-1.14	36.30	54.00	-17.70

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

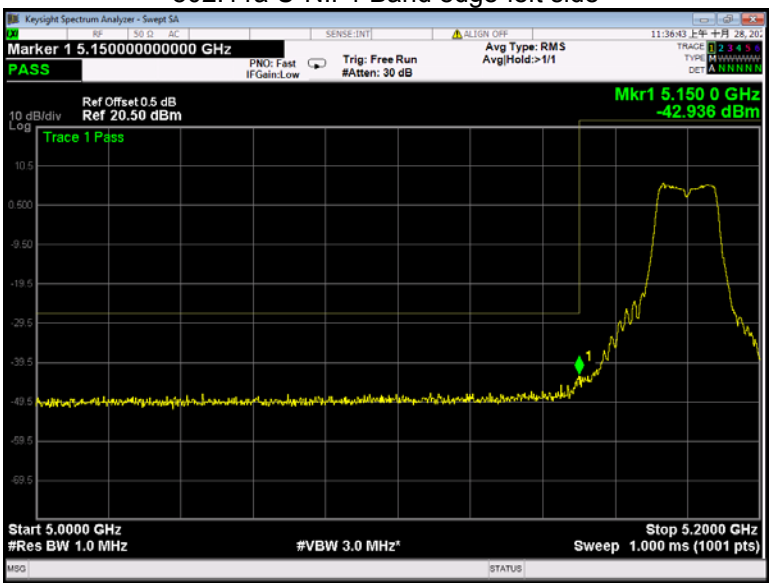
10.1 Test Produce

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.

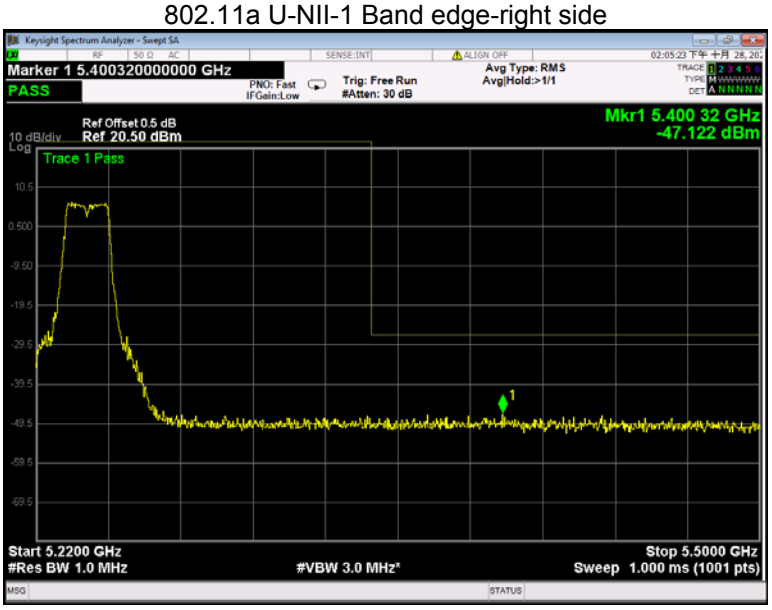
10.2 Test Result

Test result plots shown as follows:

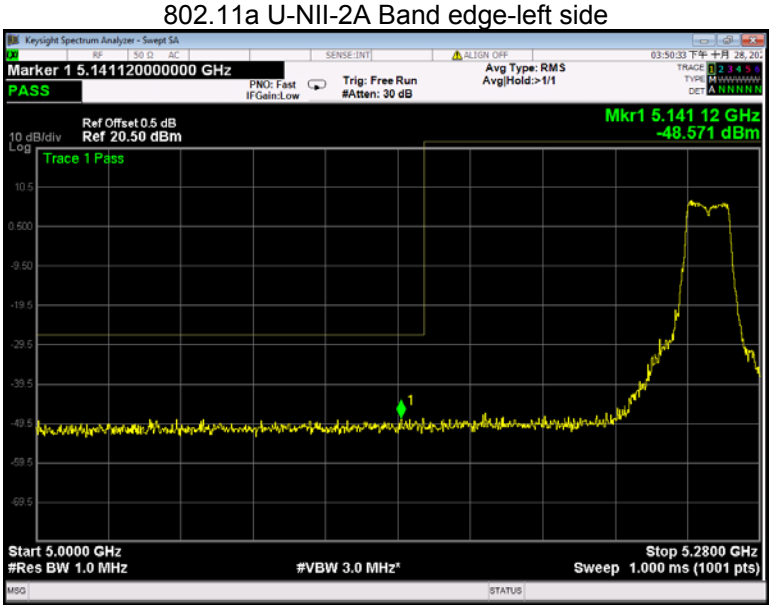
802.11a U-NII-1 Band edge-left side



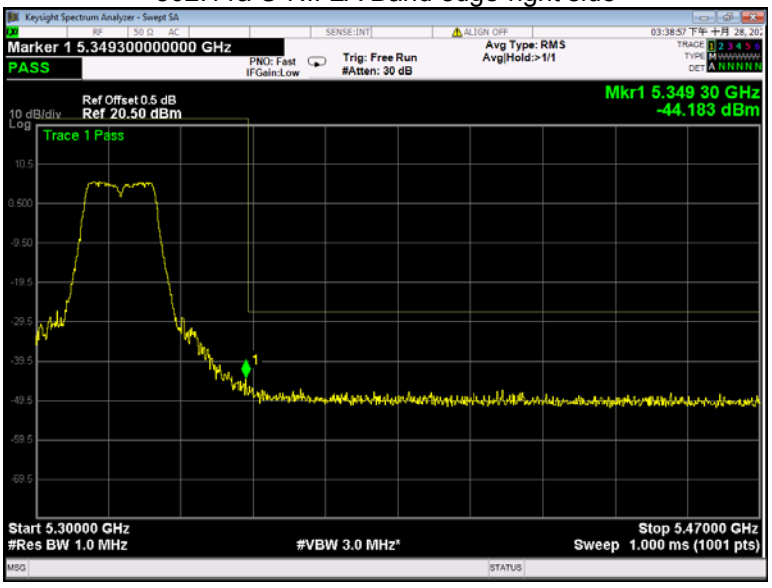
802.11a U-NII-1 Band edge-right side



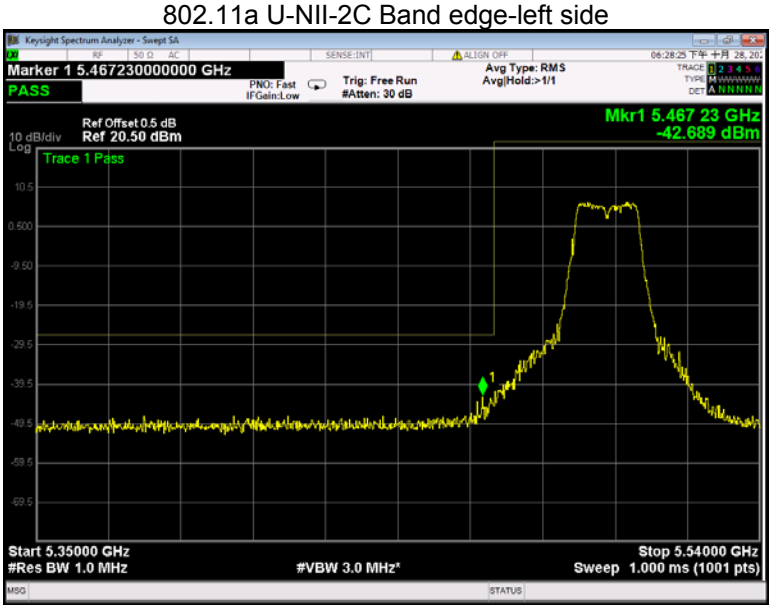
802.11a U-NII-2A Band edge-left side



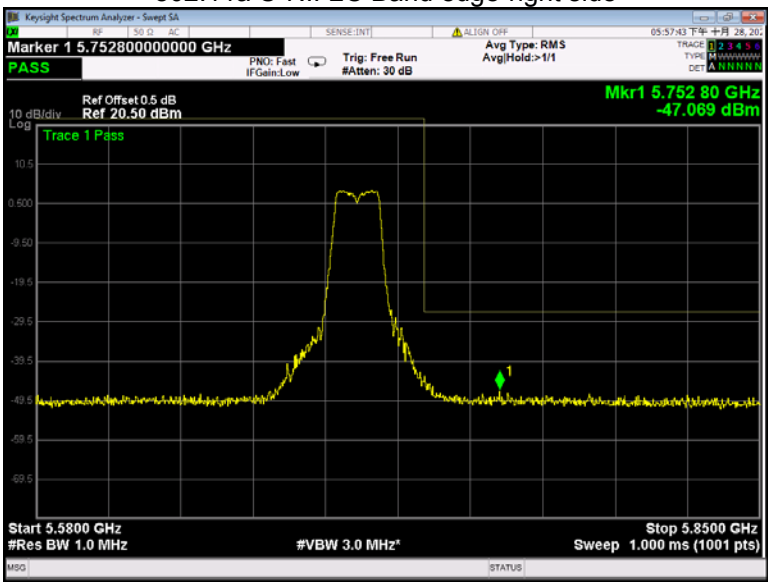
802.11a U-NII-2A Band edge-right side



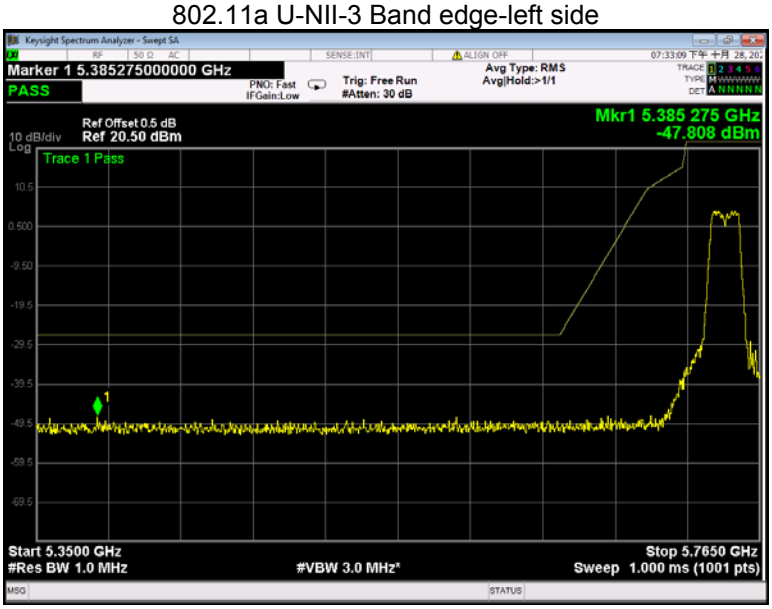
802.11a U-NII-2C Band edge-left side



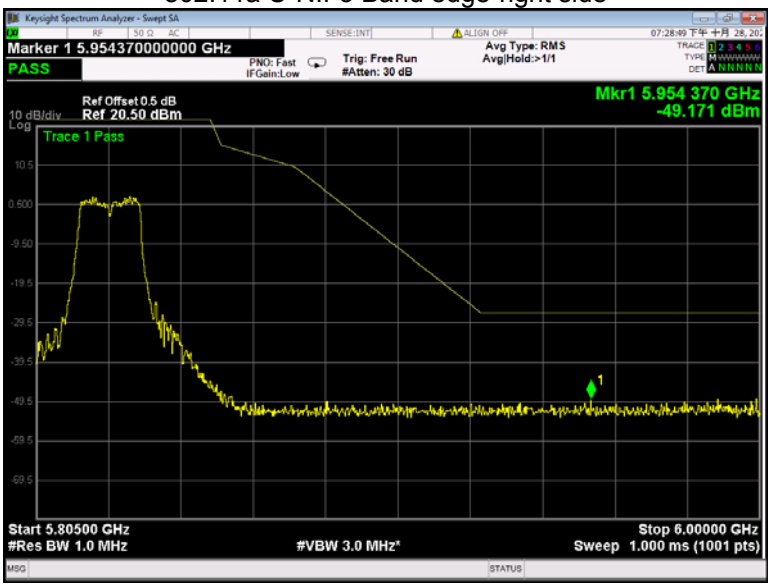
802.11a U-NII-2C Band edge-right side



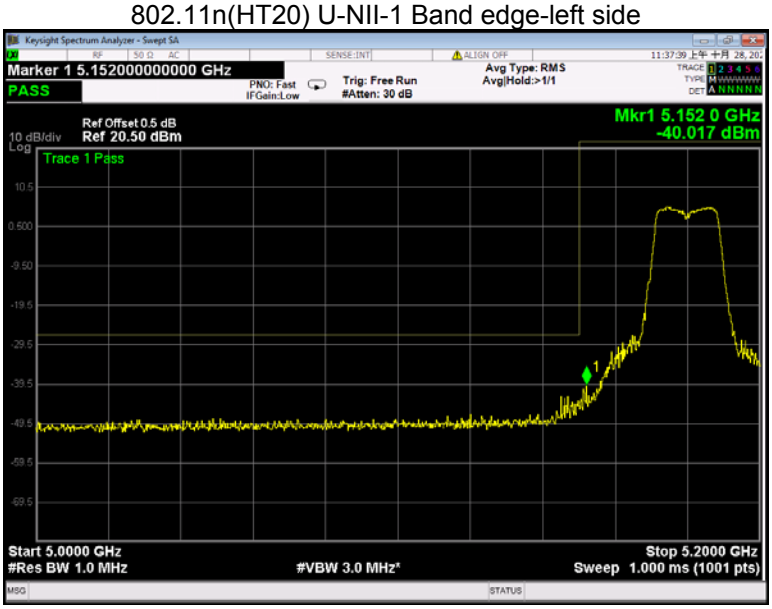
802.11a U-NII-3 Band edge-left side



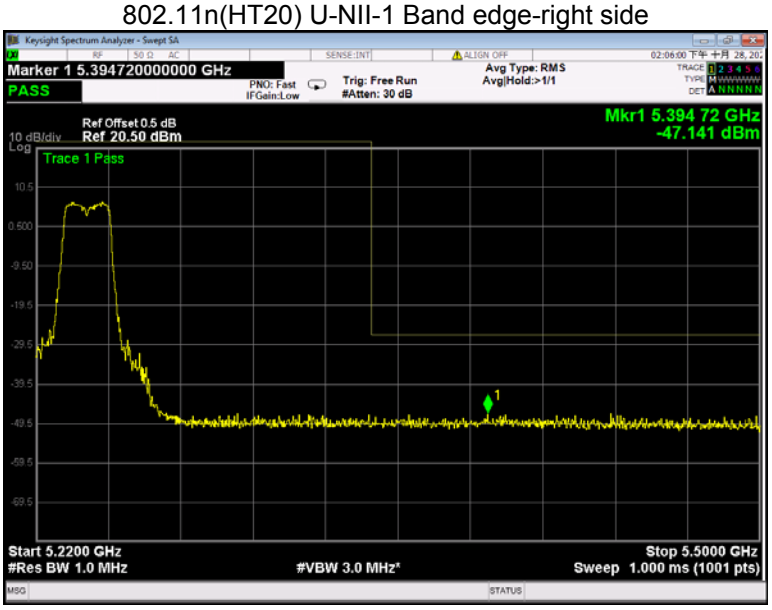
802.11a U-NII-3 Band edge-right side



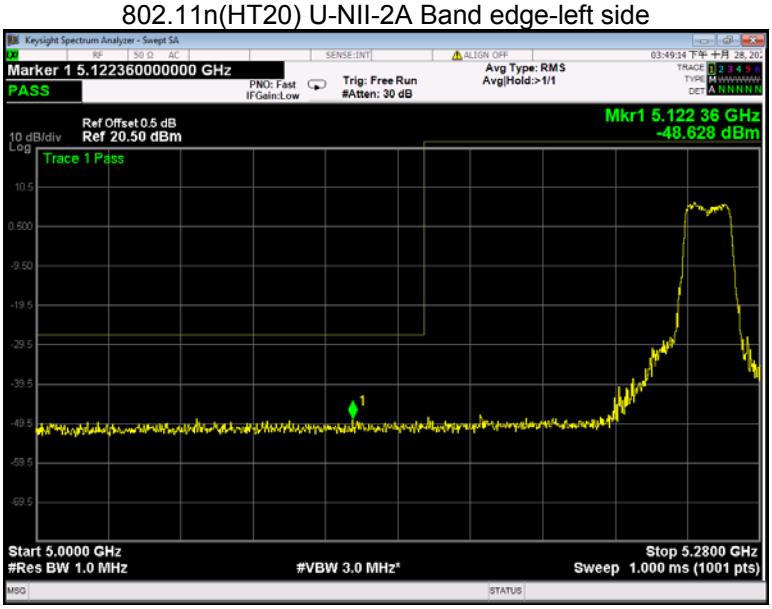
802.11n(HT20) U-NII-1 Band edge-left side



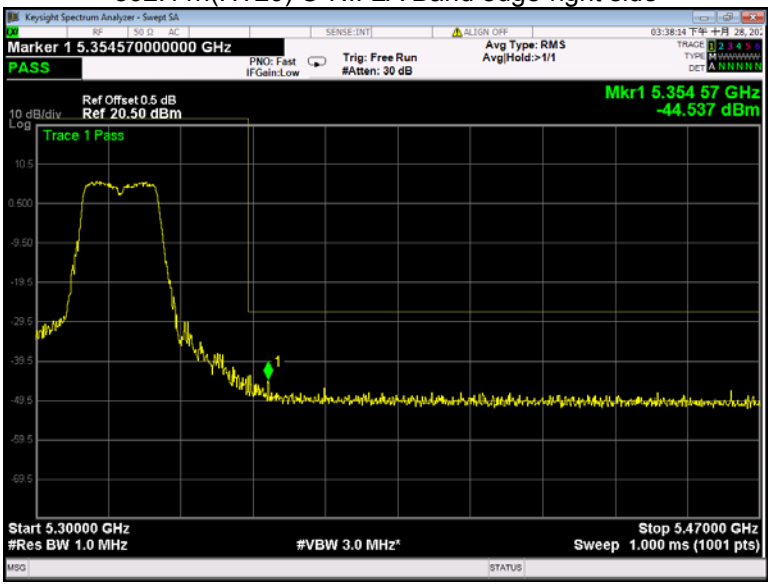
802.11n(HT20) U-NII-1 Band edge-right side



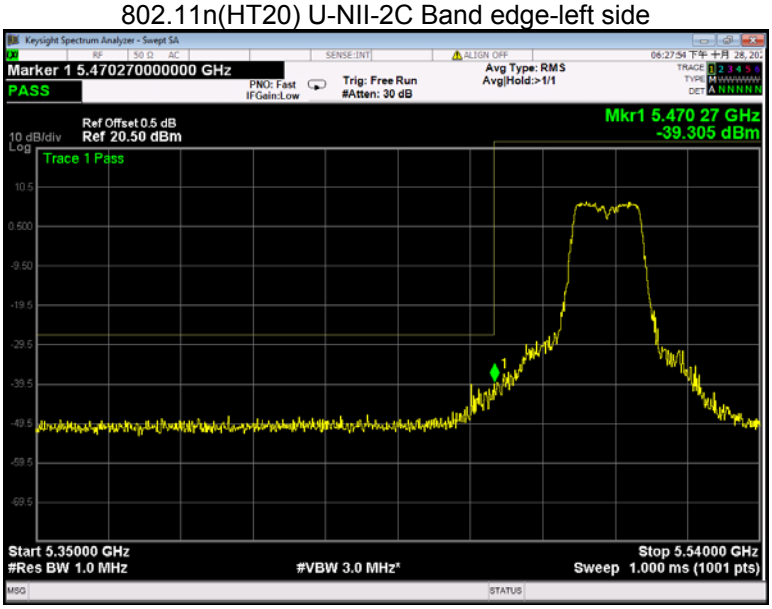
802.11n(HT20) U-NII-2A Band edge-left side



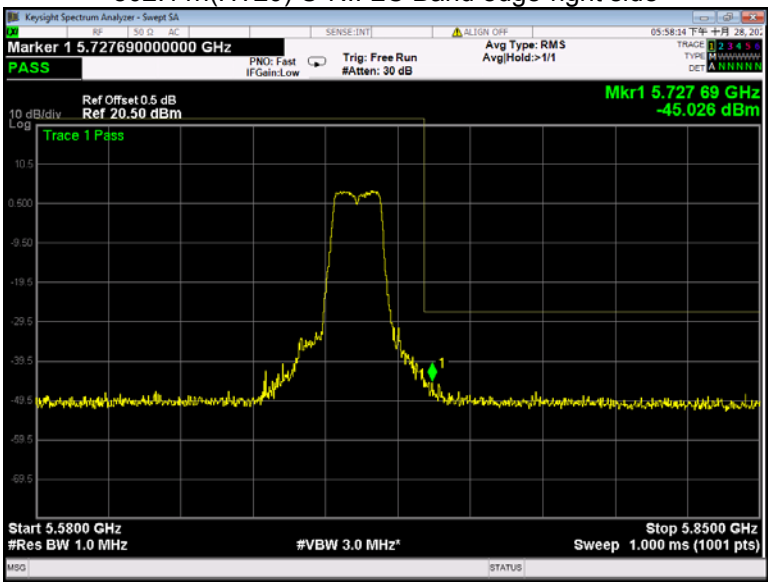
802.11n(HT20) U-NII-2A Band edge-right side



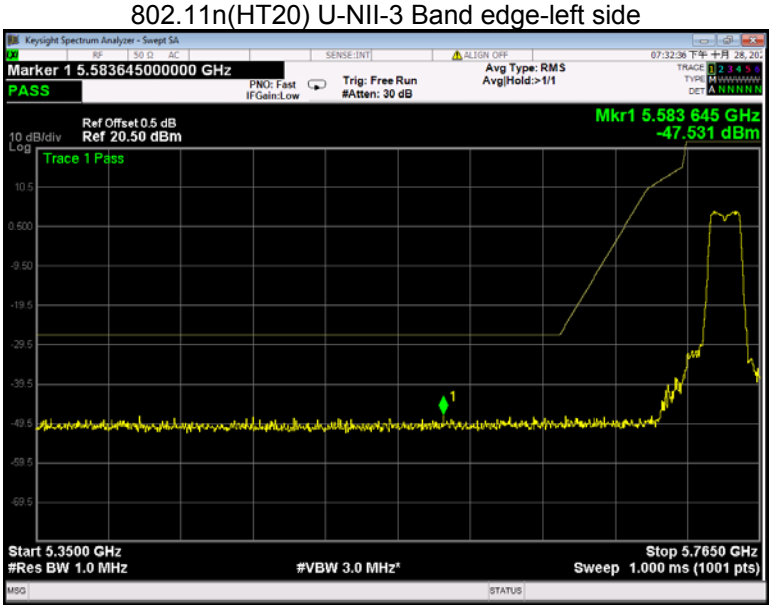
802.11n(HT20) U-NII-2C Band edge-left side



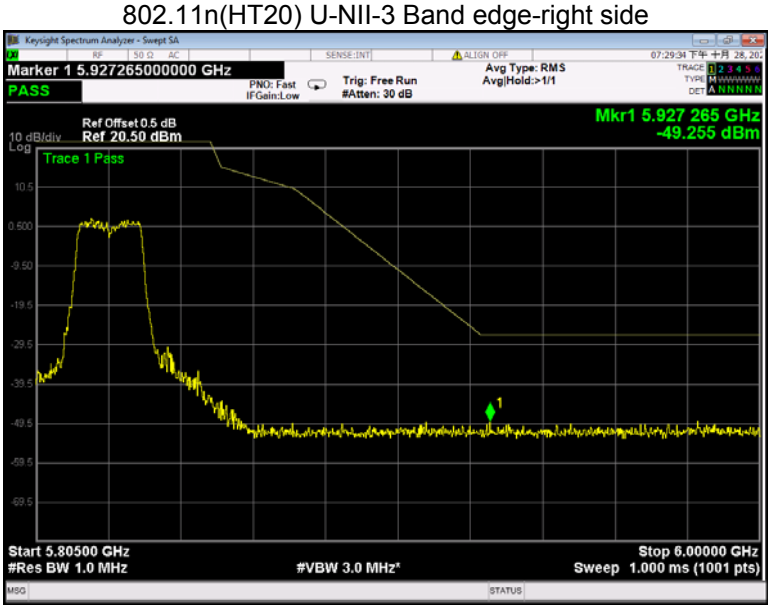
802.11n(HT20) U-NII-2C Band edge-right side



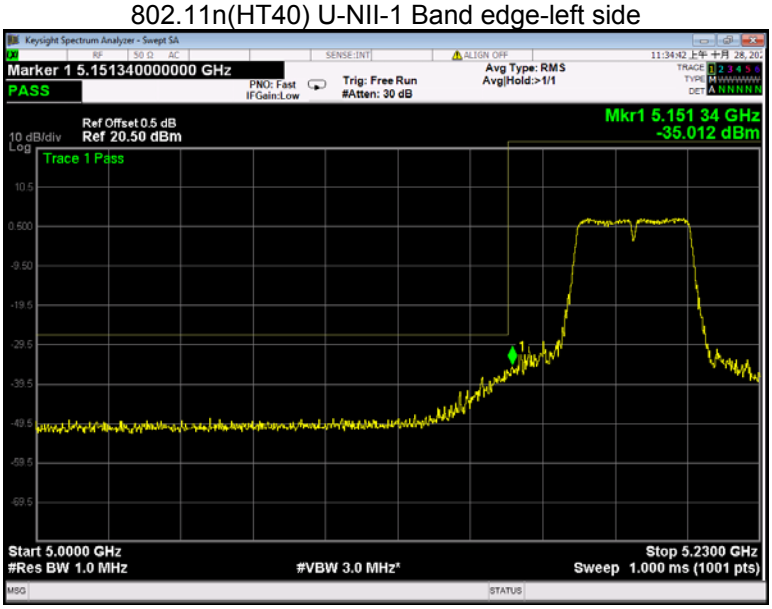
802.11n(HT20) U-NII-3 Band edge-left side



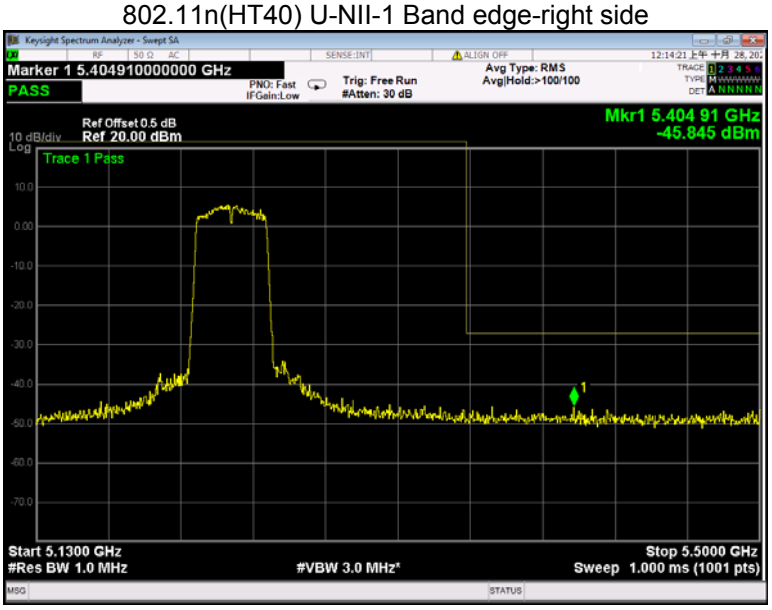
802.11n(HT20) U-NII-3 Band edge-right side



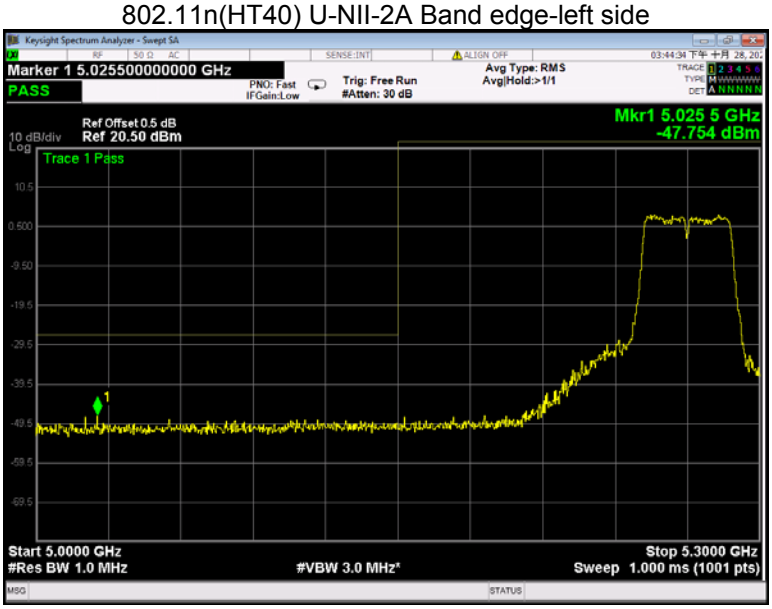
802.11n(HT40) U-NII-1 Band edge-left side



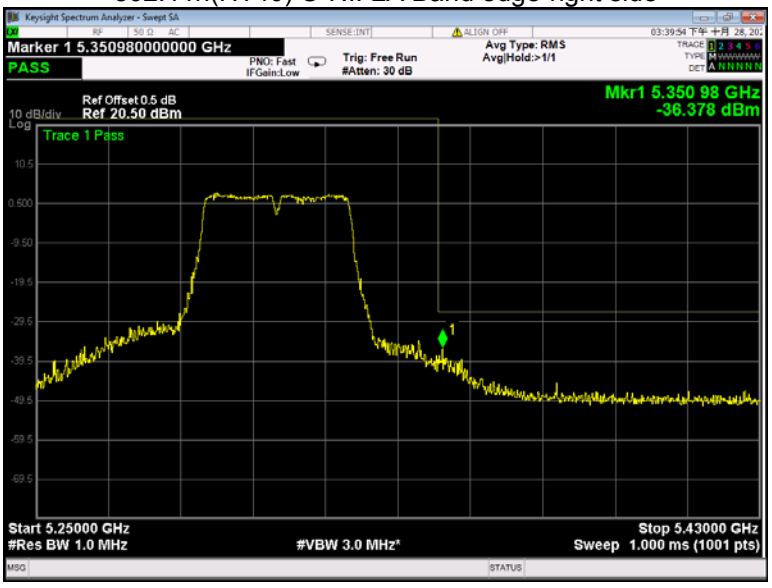
802.11n(HT40) U-NII-1 Band edge-right side



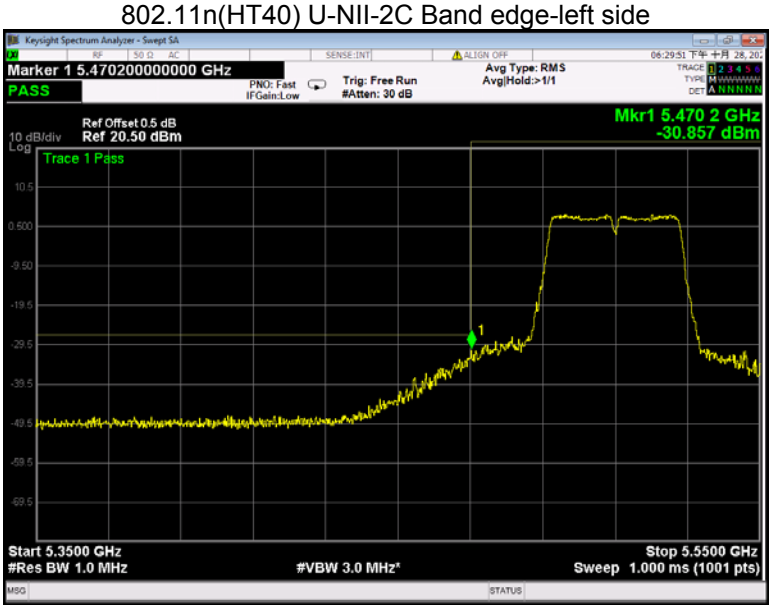
802.11n(HT40) U-NII-2A Band edge-left side



802.11n(HT40) U-NII-2A Band edge-right side

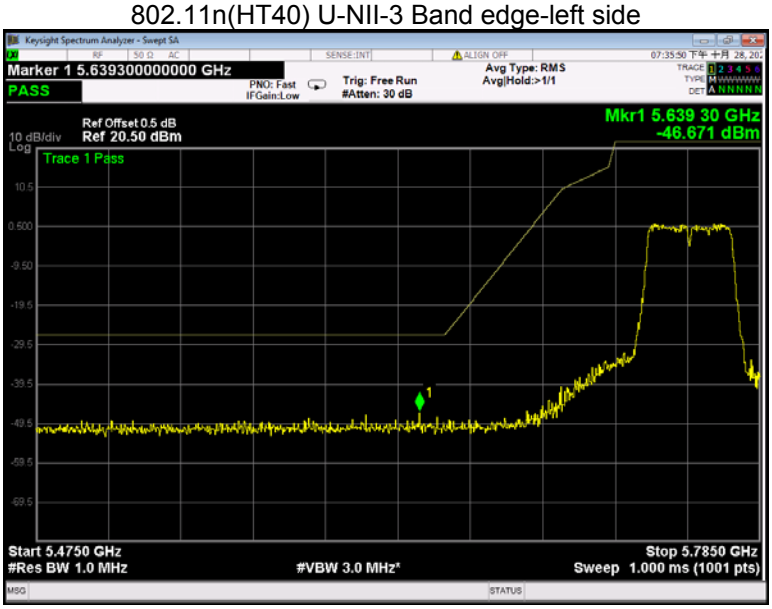


802.11n(HT40) U-NII-2C Band edge-left side

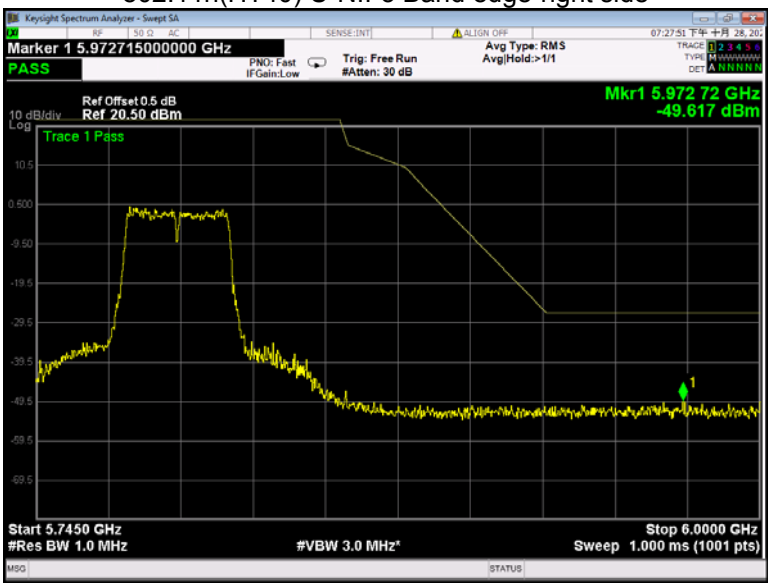


802.11n(HT40) U-NII-2C Band edge-right side

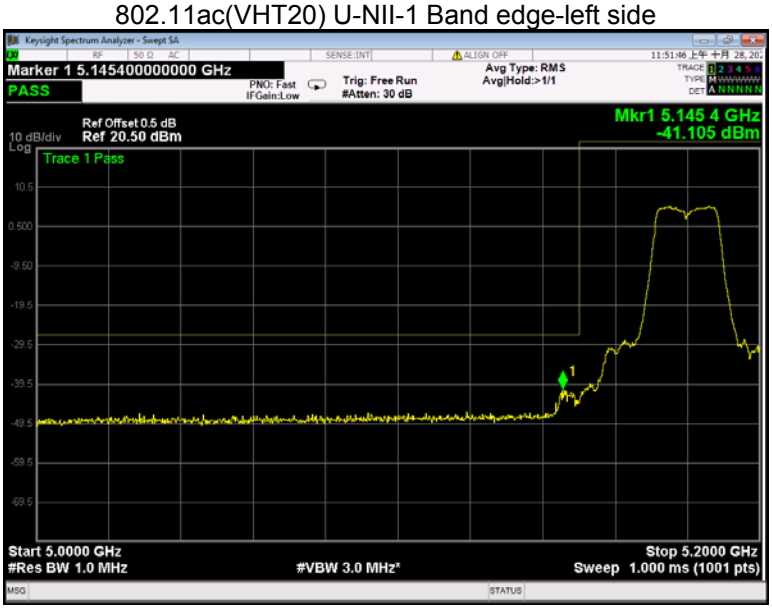
802.11n(HT40) U-NII-3 Band edge-left side



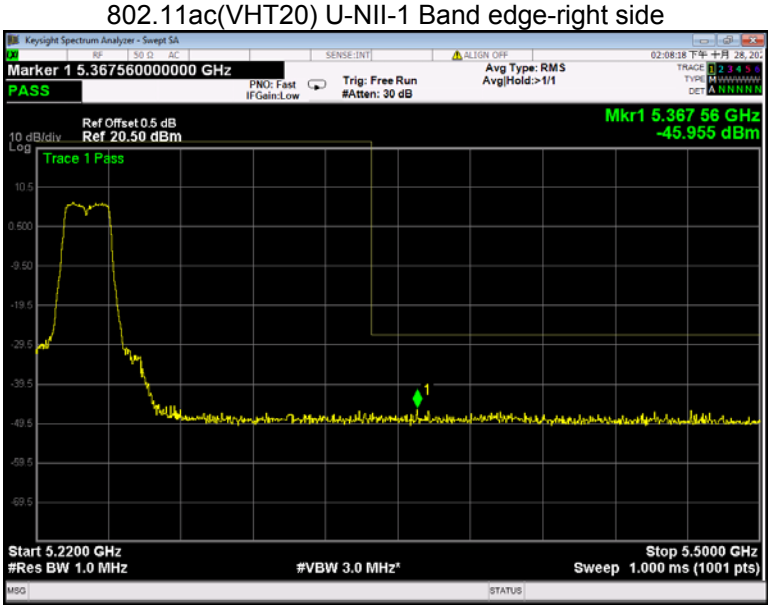
802.11n(HT40) U-NII-3 Band edge-right side



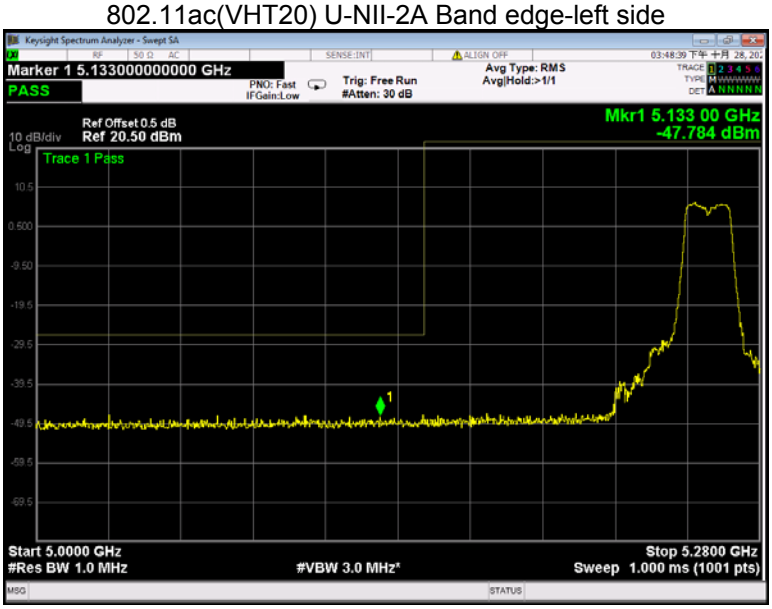
802.11ac(VHT20) U-NII-1 Band edge-left side



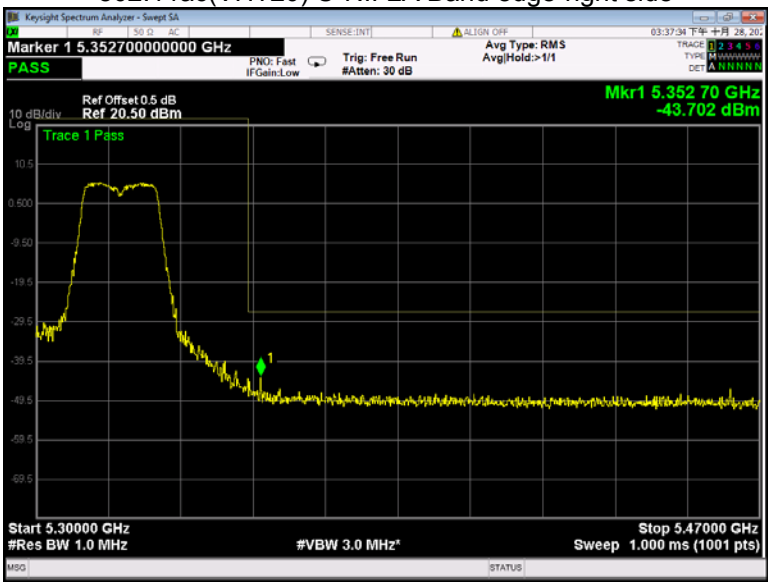
802.11ac(VHT20) U-NII-1 Band edge-right side



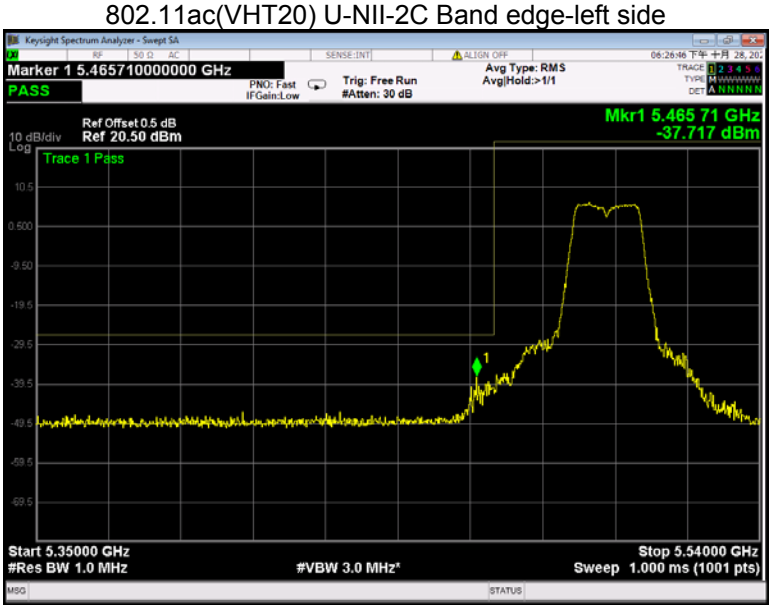
802.11ac(VHT20) U-NII-2A Band edge-left side



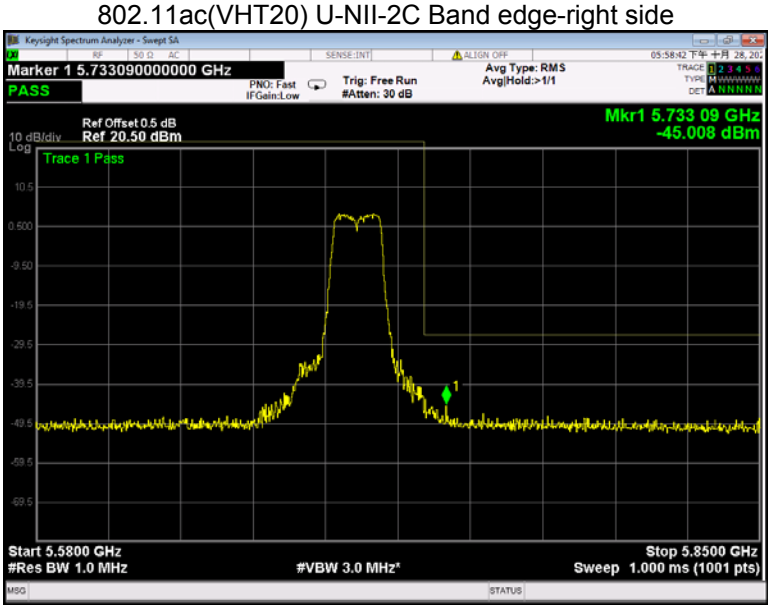
802.11ac(VHT20) U-NII-2A Band edge-right side



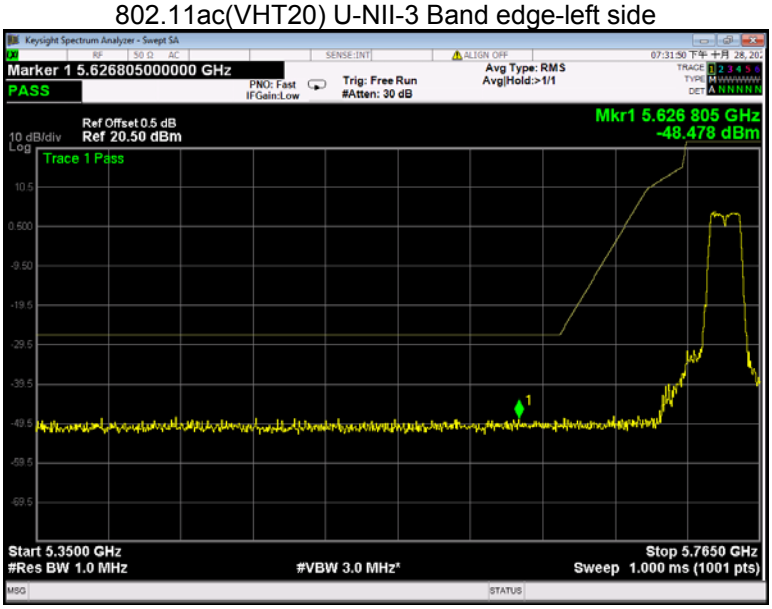
802.11ac(VHT20) U-NII-2C Band edge-left side



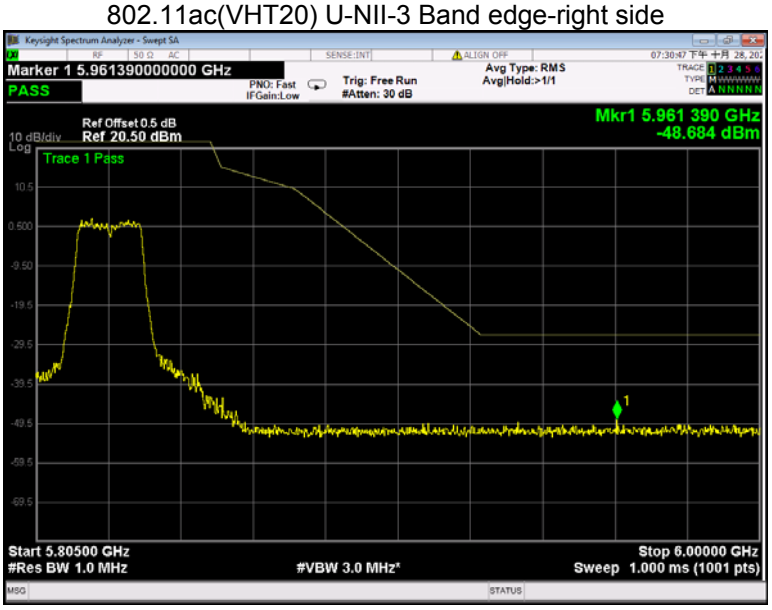
802.11ac(VHT20) U-NII-2C Band edge-right side



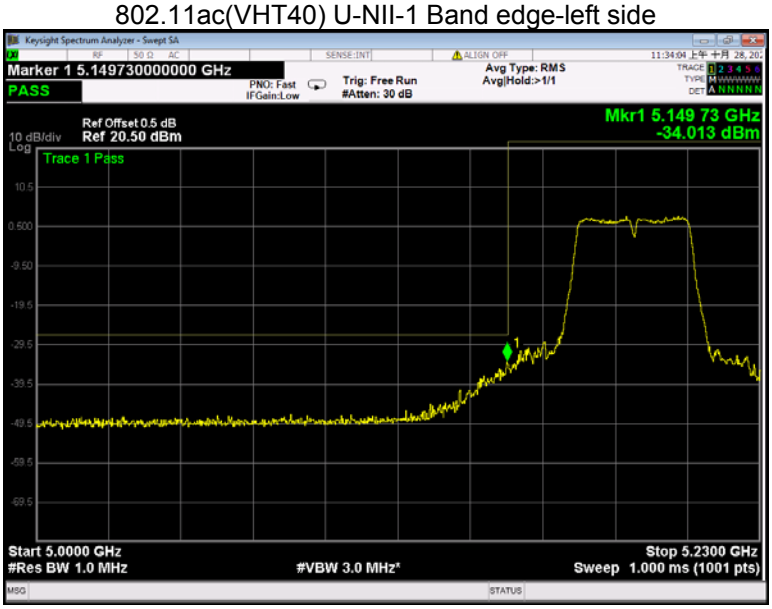
802.11ac(VHT20) U-NII-3 Band edge-left side



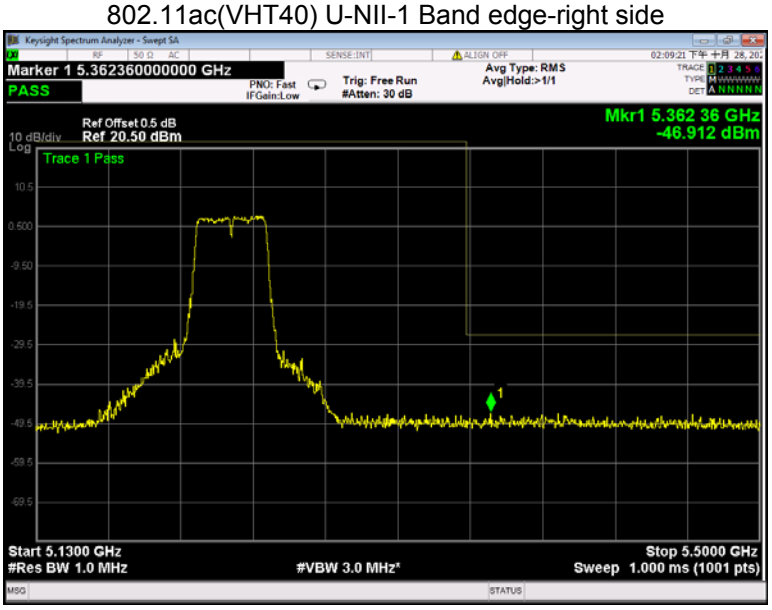
802.11ac(VHT20) U-NII-3 Band edge-right side



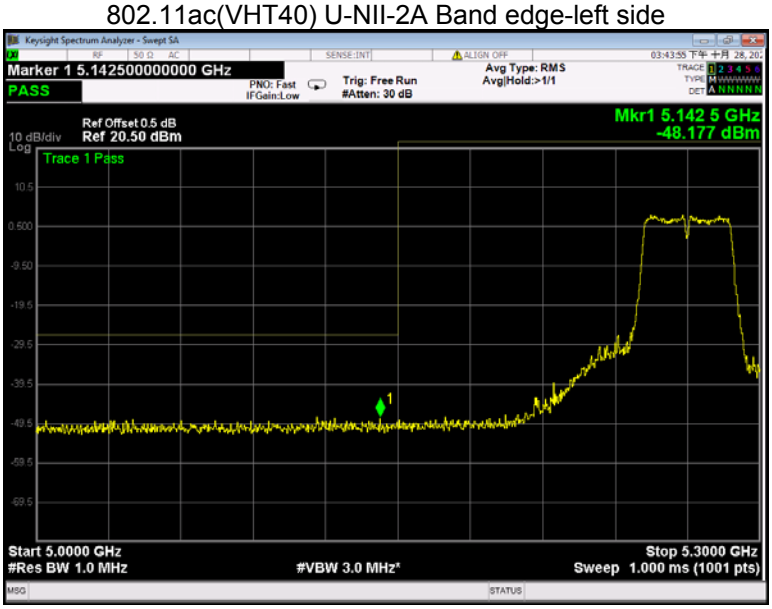
802.11ac(VHT40) U-NII-1 Band edge-left side



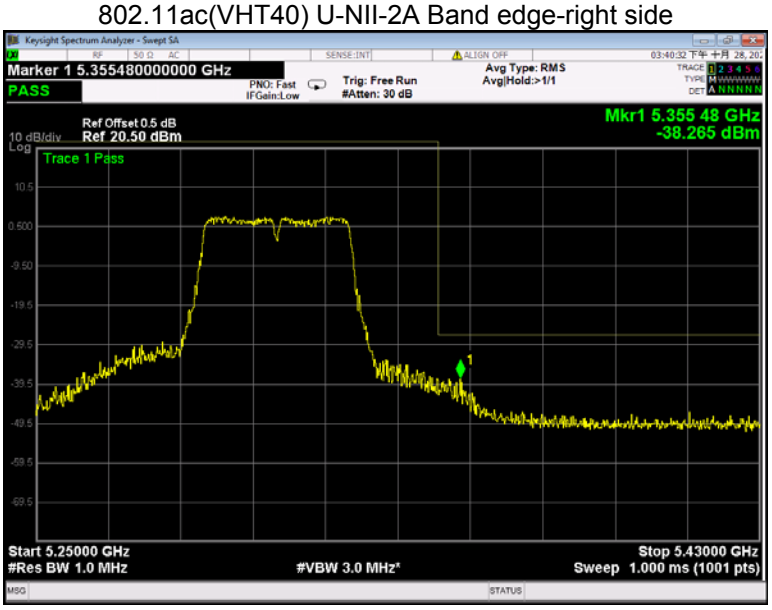
802.11ac(VHT40) U-NII-1 Band edge-right side



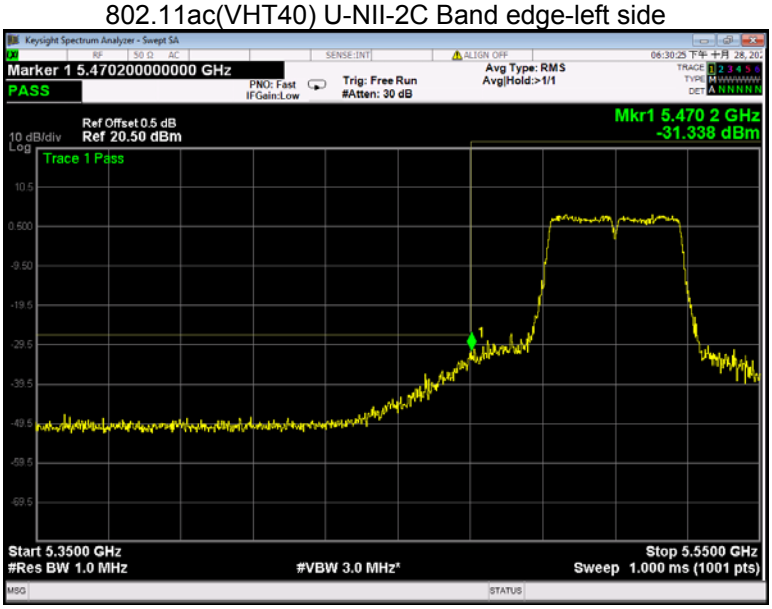
802.11ac(VHT40) U-NII-2A Band edge-left side



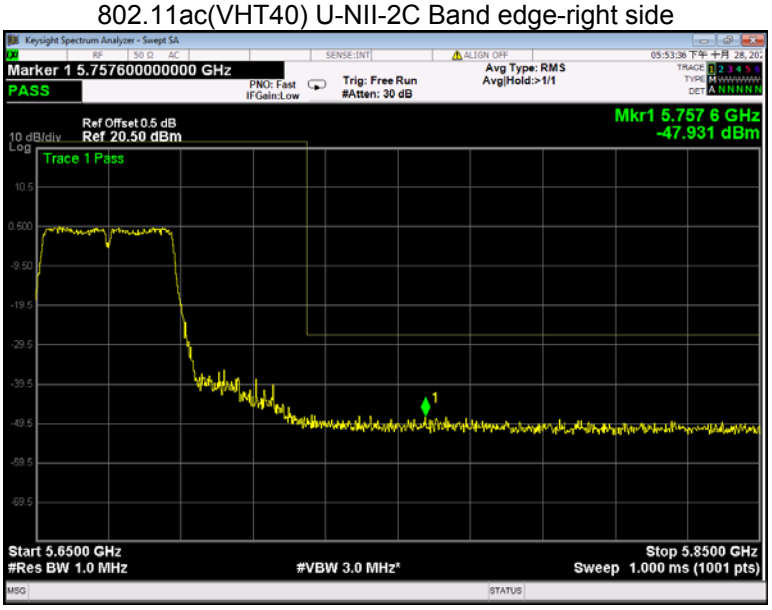
802.11ac(VHT40) U-NII-2A Band edge-right side



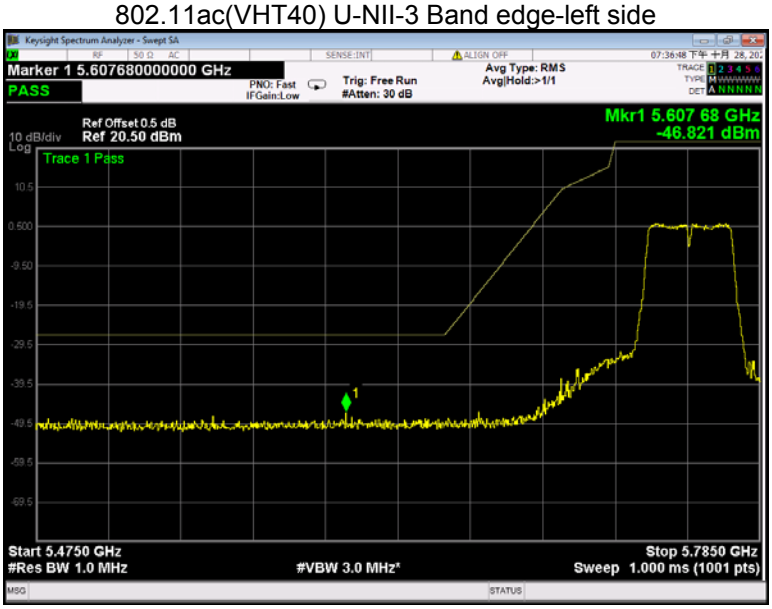
802.11ac(VHT40) U-NII-2C Band edge-left side



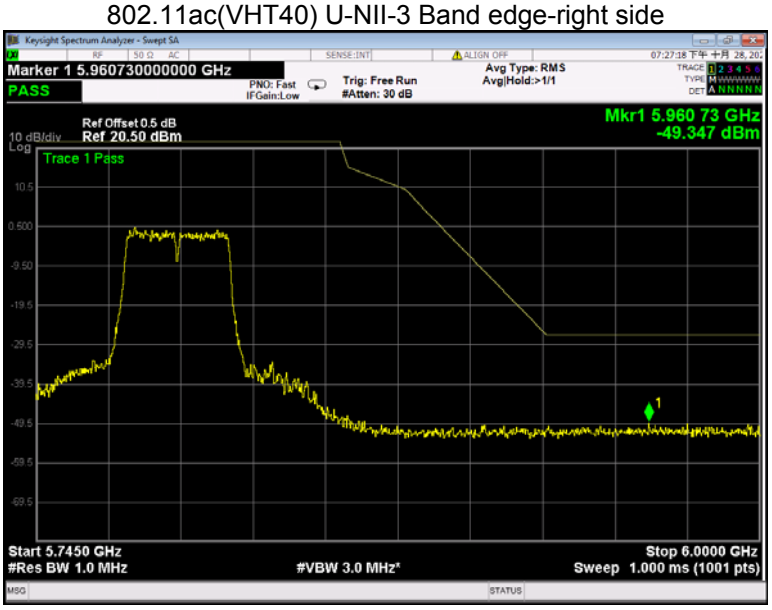
802.11ac(VHT40) U-NII-2C Band edge-right side



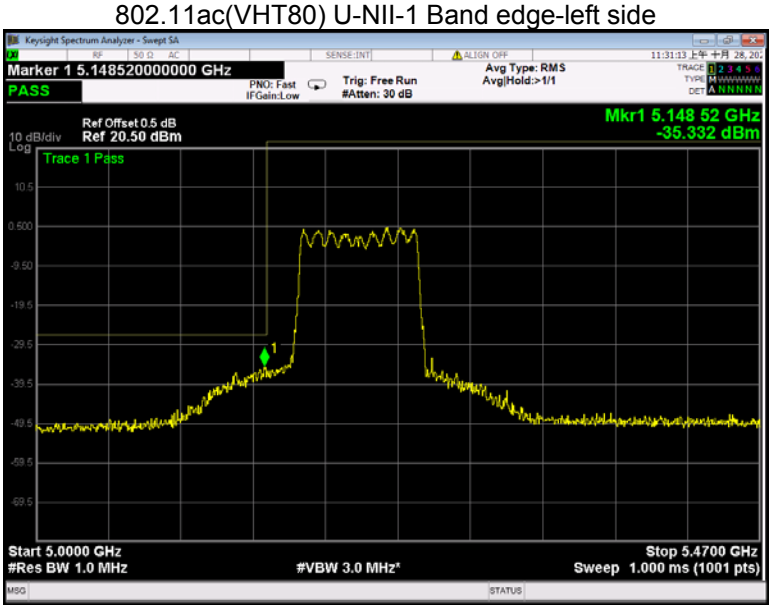
802.11ac(VHT40) U-NII-3 Band edge-left side



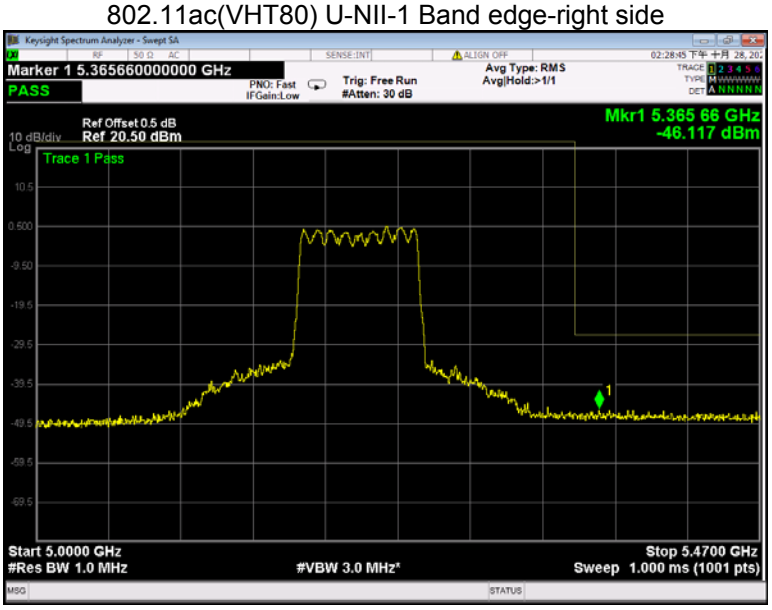
802.11ac(VHT40) U-NII-3 Band edge-right side



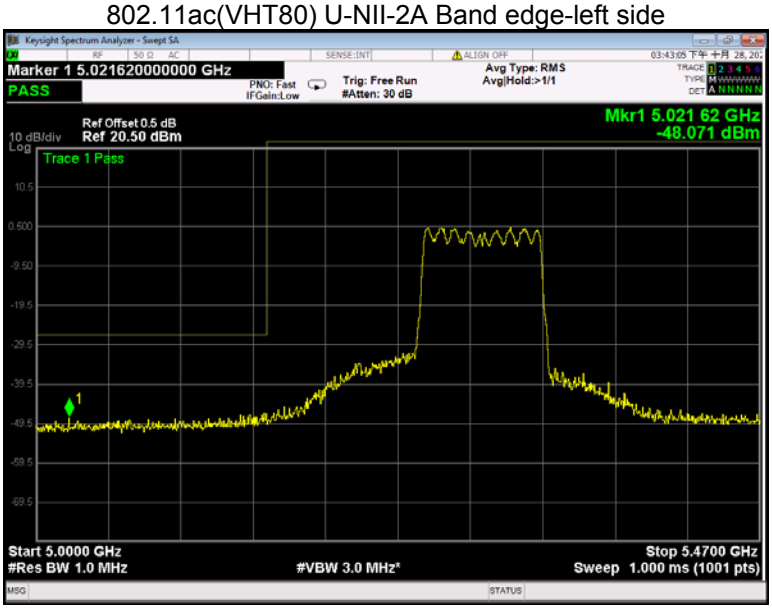
802.11ac(VHT80) U-NII-1 Band edge-left side



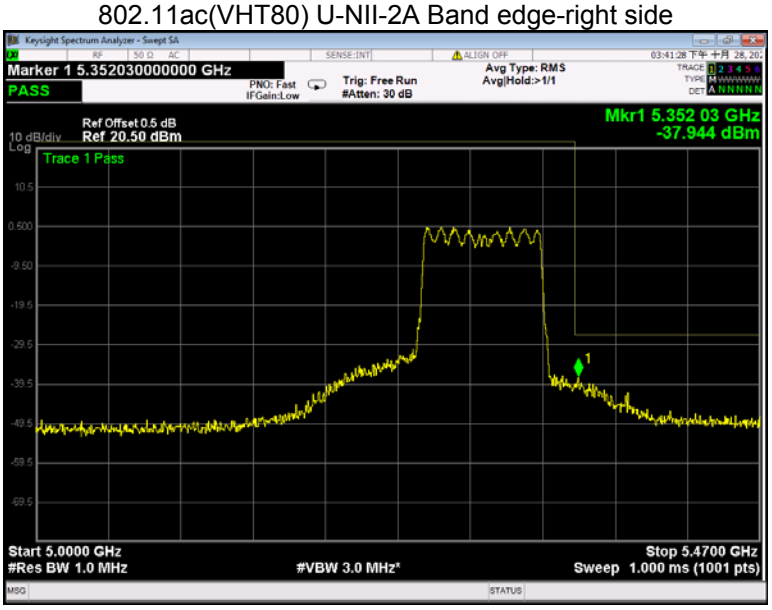
802.11ac(VHT80) U-NII-1 Band edge-right side



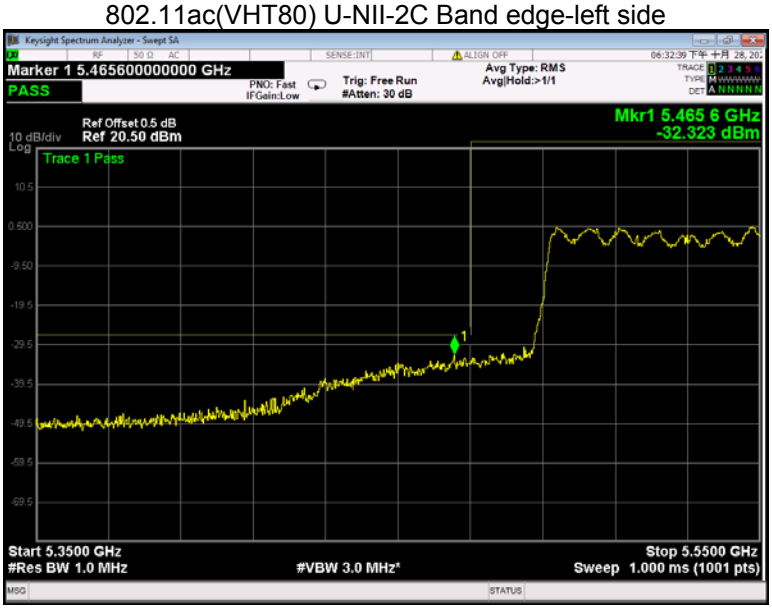
802.11ac(VHT80) U-NII-2A Band edge-left side



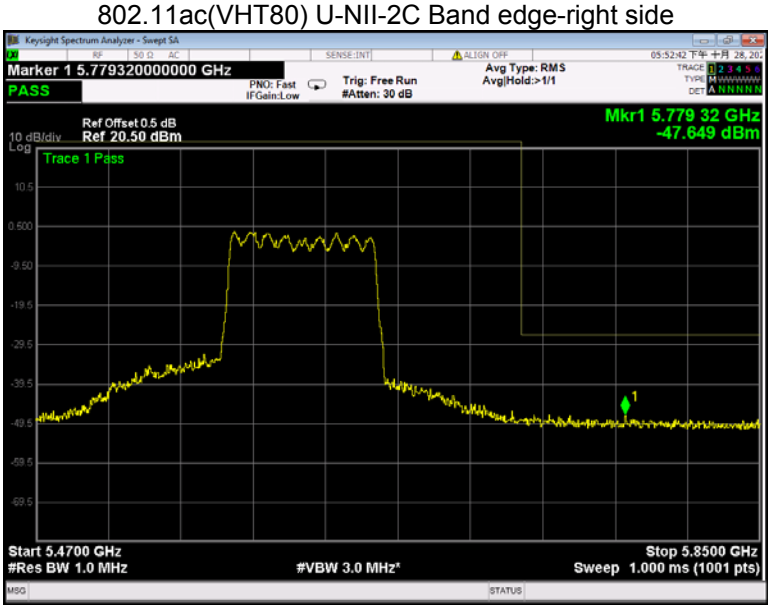
802.11ac(VHT80) U-NII-2A Band edge-right side



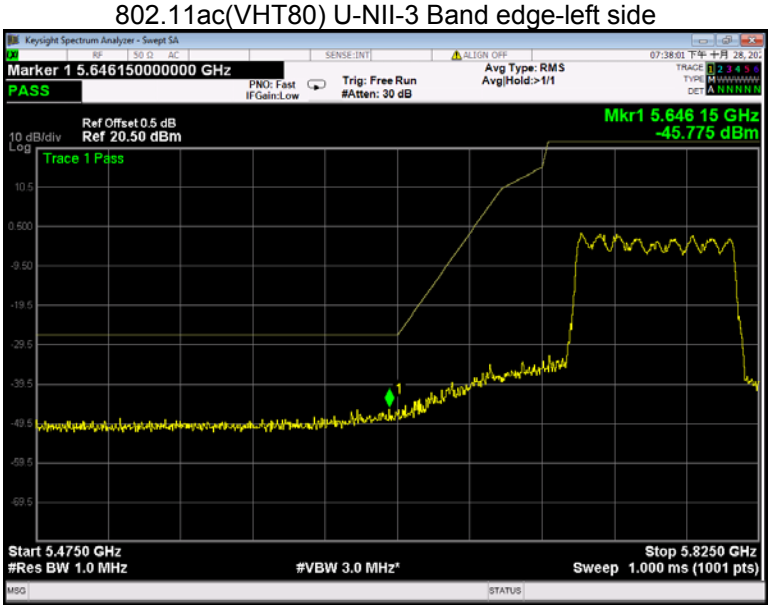
802.11ac(VHT80) U-NII-2C Band edge-left side



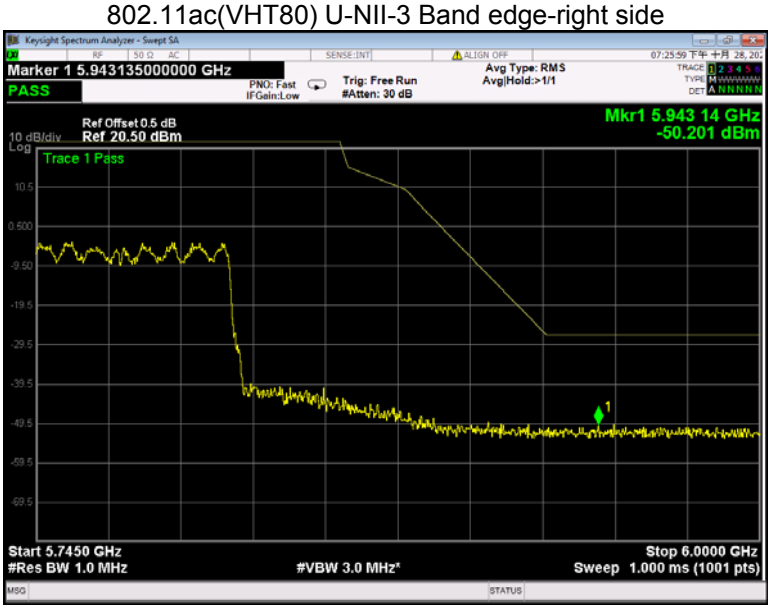
802.11ac(VHT80) U-NII-2C Band edge-right side



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



802.11ac(VHT80) 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;

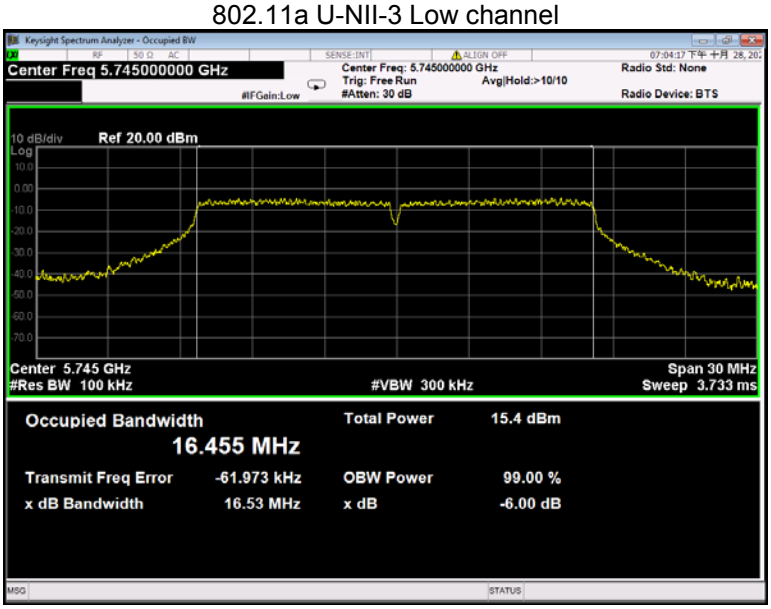
2. Set the spectrum analyzer: RBW = 100kHz, VBW = 300kHz

11.2 Test Result

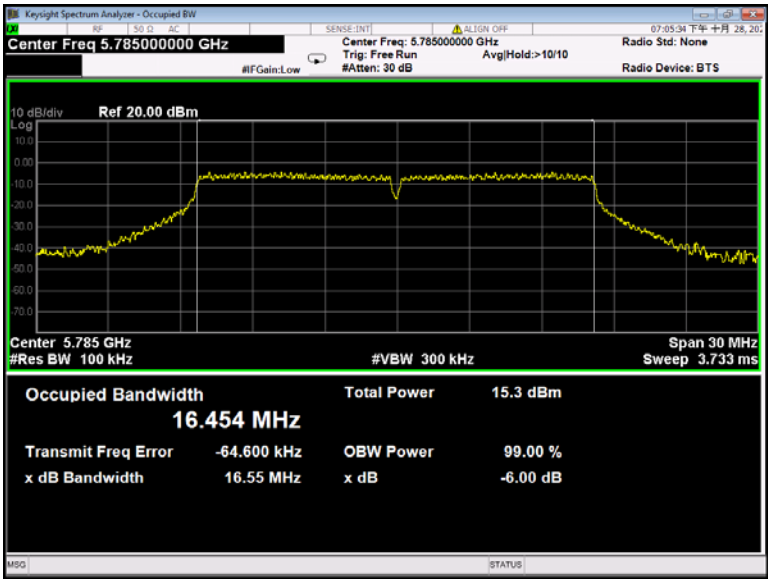
Band	Operation mode	6 dB Bandwidth (MHz)		
		Low	Middle	High
U-NII-3	802.11a	16.53	16.55	16.54
	802.11n(HT20)	17.68	17.70	17.72
	802.11n(HT40)	36.50	/	36.46
	802.11ac(VHT20)	17.66	17.76	17.64
	802.11ac(VHT40)	36.48	/	36.47
	802.11ac(VHT80)	76.42	/	/

Test result plots shown as follows:

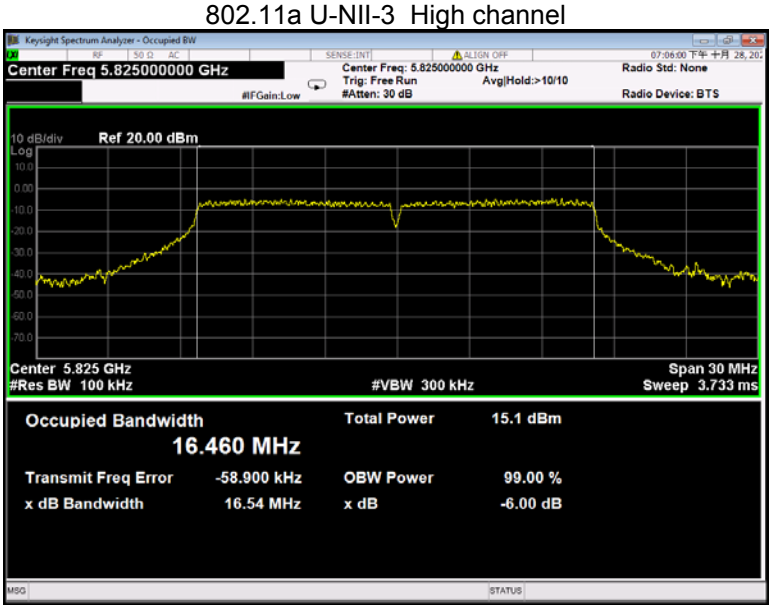
802.11a U-NII-3 Low channel



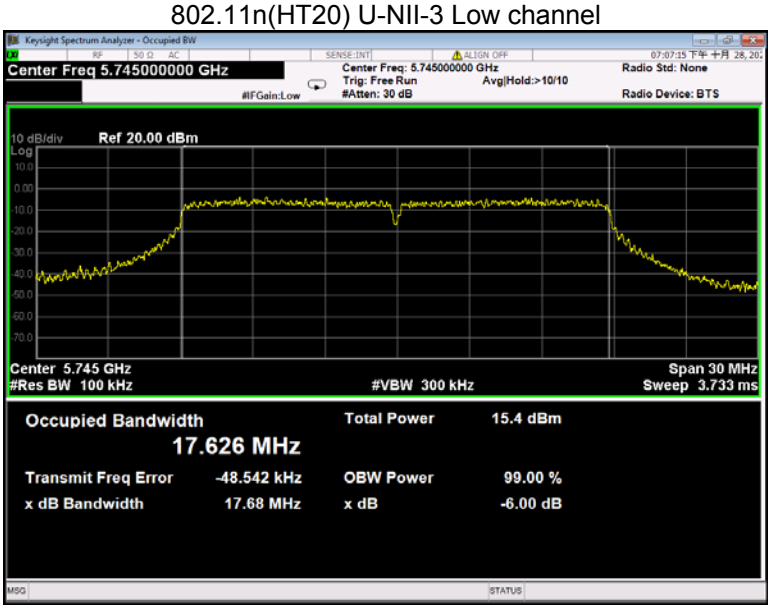
802.11a U-NII-3 Middle channel



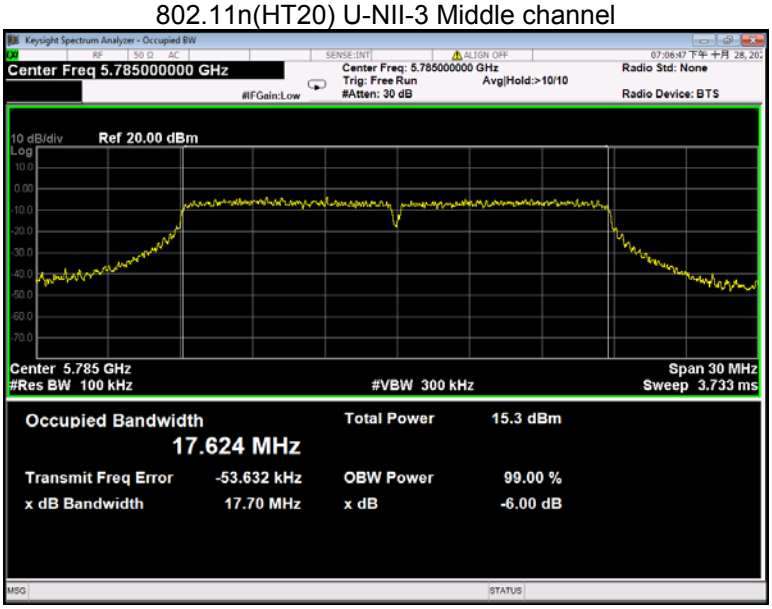
802.11a U-NII-3 High channel



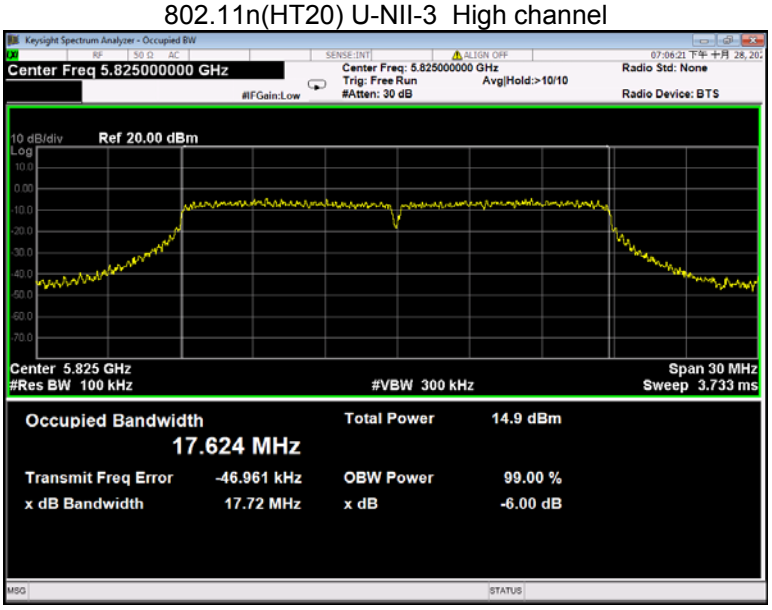
802.11n(HT20) U-NII-3 Low channel



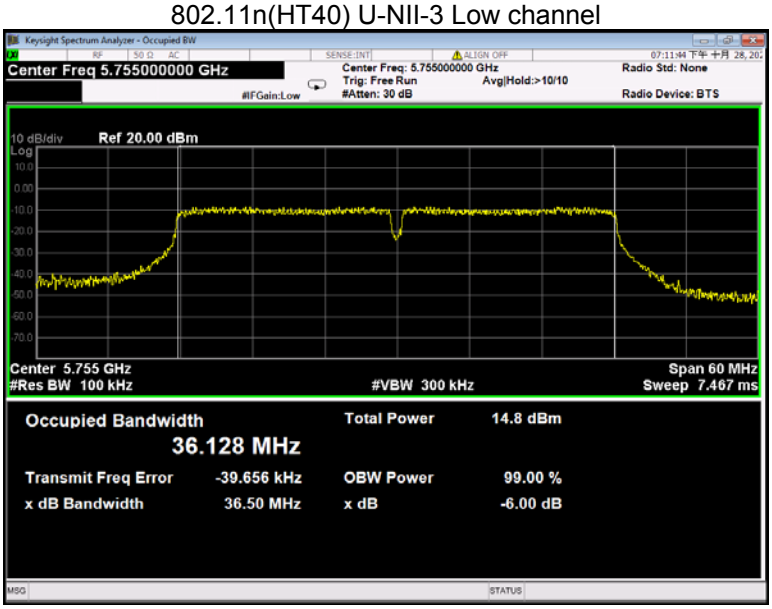
802.11n(HT20) U-NII-3 Middle channel



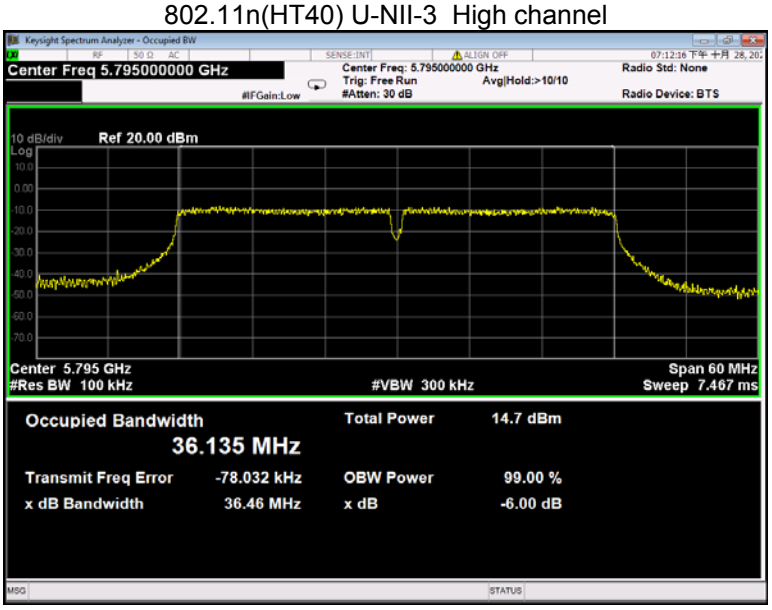
802.11n(HT20) U-NII-3 High channel



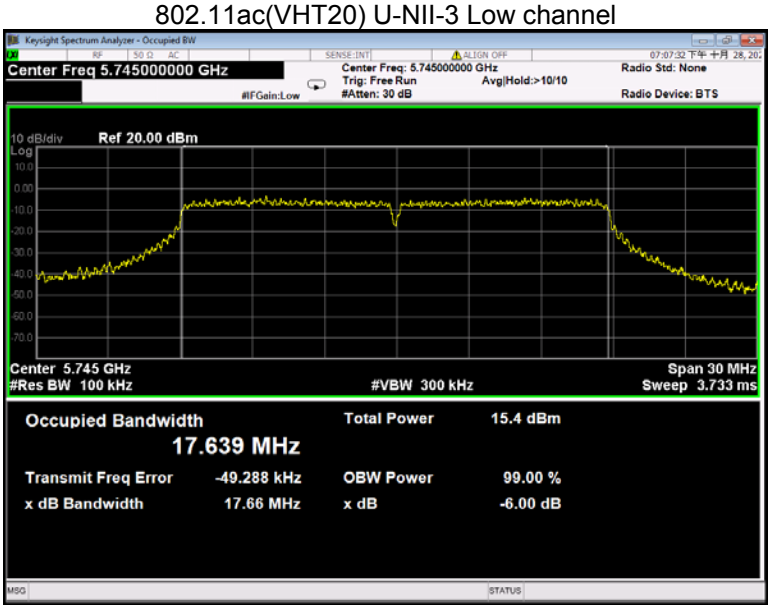
802.11n(HT40) U-NII-3 Low channel



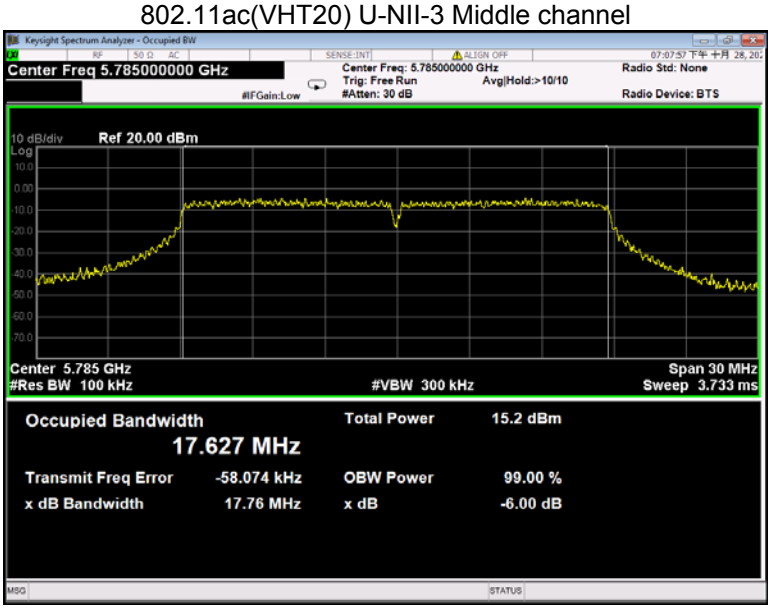
802.11n(HT40) U-NII-3 High channel



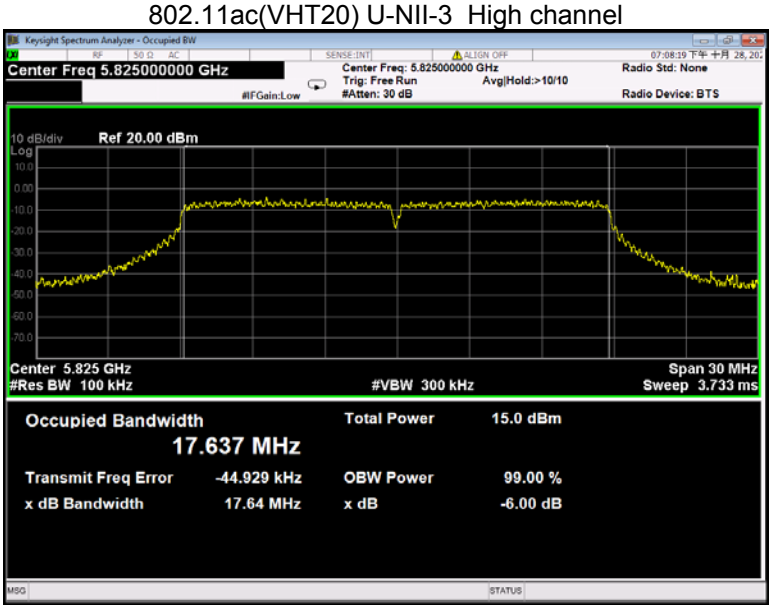
802.11ac(VHT20) U-NII-3 Low channel



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



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



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