TEST REPORT

Reference No.	:	WTX22D11238793W002
FCC ID	:	2A9P9MAX01
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
Brand Name.	:	BOTINKIT
Standards	:	FCC 47CFR Part 15 Section 15.407
Date of Receipt sample	:	2022-12-08
Date of Test	:	2022-12-08 to 2023-02-03
Date of Issue	:	2023-02-03
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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2 Contents

3 Revision History

Test Report No.	Date of Receipt Sample	Date of Test	Date of Issue	Purpose	Comment	Approved
WTX22D11238793W002	2022-12-08	2022-12-08 to 2023-02-03	2023-02-03	original	-	Valid

4 General Information

4.1 General Description of E.U.T.

Product:	Smart cooking machine
Model(s):	MAX01
Model Description:	N/A
Wi-Fi Specification:	2.4G-802.11b/g/n HT20/n HT40 5G-802.11a/ n(HT20/40)/ac(VHT20/40/80)
Hardware Version:	BTKJ_MAIN_V13
Software Version:	FW_V1.8.0

4.2 Details of E.U.T.

Operation Frequency:	802.11a/n(HT20)/ac (VHT20): U-NII-1: 5150-5250MHz, U-NII-2A: 5250-5350MHz(DFS), U-NII-2C: 5470-5725MHz(DFS), U-NII-3:5725-5850MHz 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: 17.21dBm U-NII-2A: 17.54dBm U-NII-2C: 19.47dBm U-NII-3: 17.09dBm
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
Ratings:	AC 220V

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 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(HT20/40/80)/ac(VHT20/40/80)	MCS0	TX
Duty Cycle	802.11a (HT20)	6 Mbps	TX
	802.11n(HT20/40/80)/ac(VHT20/40/80)	MCS0	TX
Band Edge	802.11a (HT20)	6 Mbps	TX
	802.11n(HT20/40/80)/ac(VHT20/40/80)	MCS0	TX
6dB Bandwidth	802.11a (HT20)	6 Mbps	TX
	802.11n(HT20/40/80)/ac(VHT20/40/80)	MCS0	TX
26dB Bandwidth and 99% Occupied Bandwidth	802.11a (HT20)	6 Mbps	TX
	802.11n(HT20/40/80)/ac(VHT20/40/80)	MCS0	TX
Conducted Output Power	802.11a (HT20)	6 Mbps	TX
	802.11n(HT20/40/80)/ac(VHT20/40/80)	MCS0	TX
Power Spectral Density	802.11a (HT20)	6 Mbps	TX
	802.11n(HT20/40/80)/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

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	2022-04-28	2023-04-27
2	Amplifier	Agilent	8447D	2944A10178	2022-08-01	2023-07-31
3	Trilog Broadband Antenna	SCHWARZBECK	VULB9163	336	2022-08-01	2023-07-31
4	Coaxial Cable (below 1GHz)	Top	TYPE16(13M)	-	2022-08-07	2023-08-06
5	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120 D	667	2022-04-28	2023-04-27
6	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9170	335	2022-04-28	2023-04-27
7	Broadband Preamplifier	COMPLIANCE DIRECTION	PAP-1G18	2004	2022-08-08	2023-08-07
8	Coaxial Cable (above 1GHz)	ZT26-NJ-NJ-8M/FA	1GHz-18GHz	NA	2022-04-28	2023-04-27
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	2022-04-28	2023-04-27
2	Trilog Broadband Antenna	SCHWARZBECK	VULB9160	9160-3325	2022-10-30	2023-10-29
3	Active Loop Antenna	Com-Power Corp.	AL-130R	10160007	2022-05-02	2023-05-01
4	Amplifier	ANRITSU	MH648A	M43381	2022-04-28	2023-04-27
5	Cable	HUBER+SUHNER	CBL2	525178	2022-04-28	2023-04-27
RF Conducted Testing						
Item	**Equipment**	**Manufacturer**	**Model No.**	**Serial No.**	**Last Calibration Date**	**Calibration Due Date**
1.	Spectrum Analyzer	R&S	FSP40	100501	2022-08-01	2023-07-31
2.	EXA Signal Analyzer	Malaysia Keysight	N9010A	MY50520207	2022-04-28	2023-04-27

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)	N/A
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 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	Average
0.15 to 0.5	66 to 56	56 to 46
0.5 to 5	56	46
5 o 30	60	50

7.1 E.U.T. Operation

Operating Environment **:**

Temperature: 21.5 °C

Humidity: 51.9 % RH

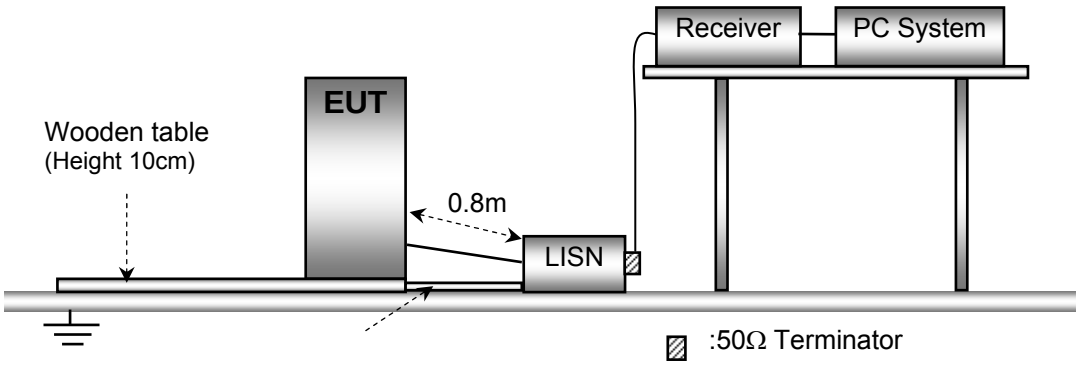
Atmospheric Pressure: 101.2kPa

EUT Operation :

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

7.2 EUT Setup

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

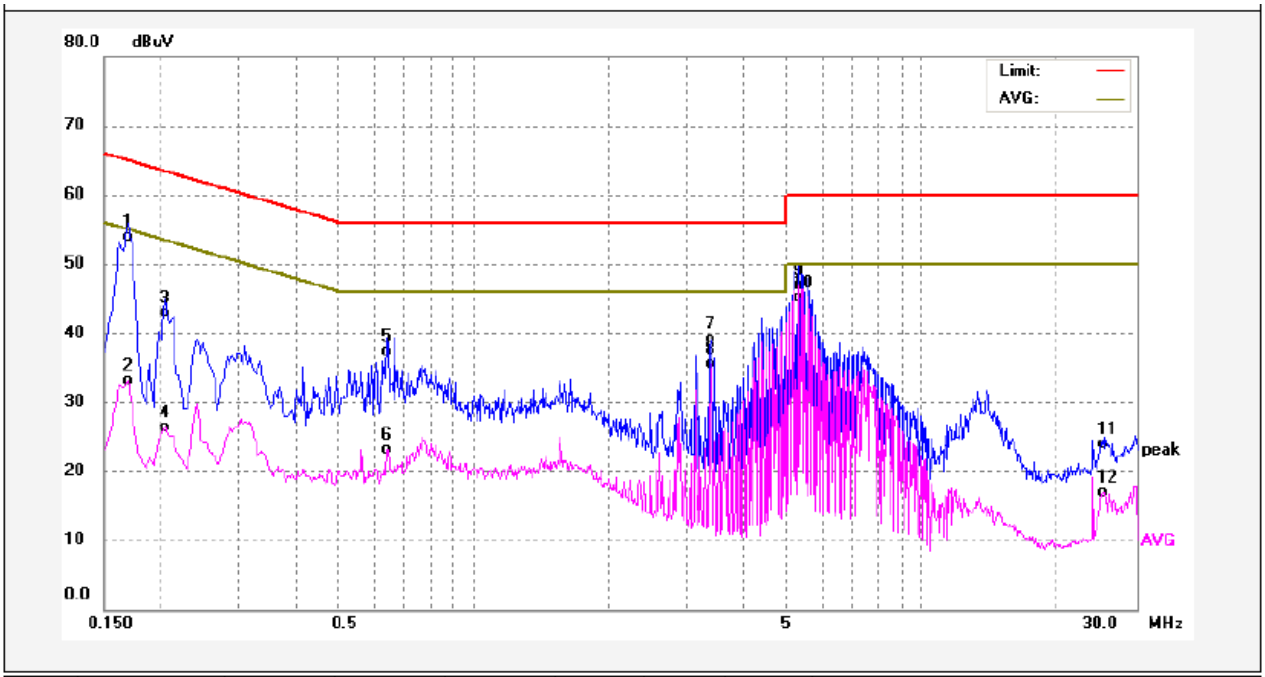


7.3 Measurement Description

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.

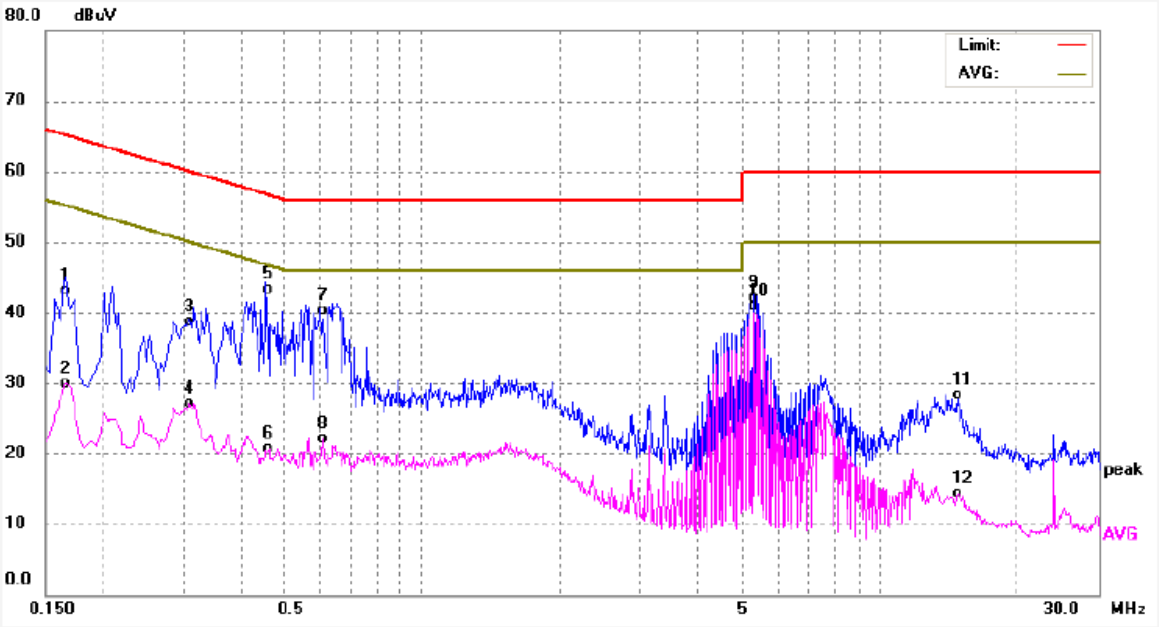
7.4 Conducted Emission Test Result

Live line 1:



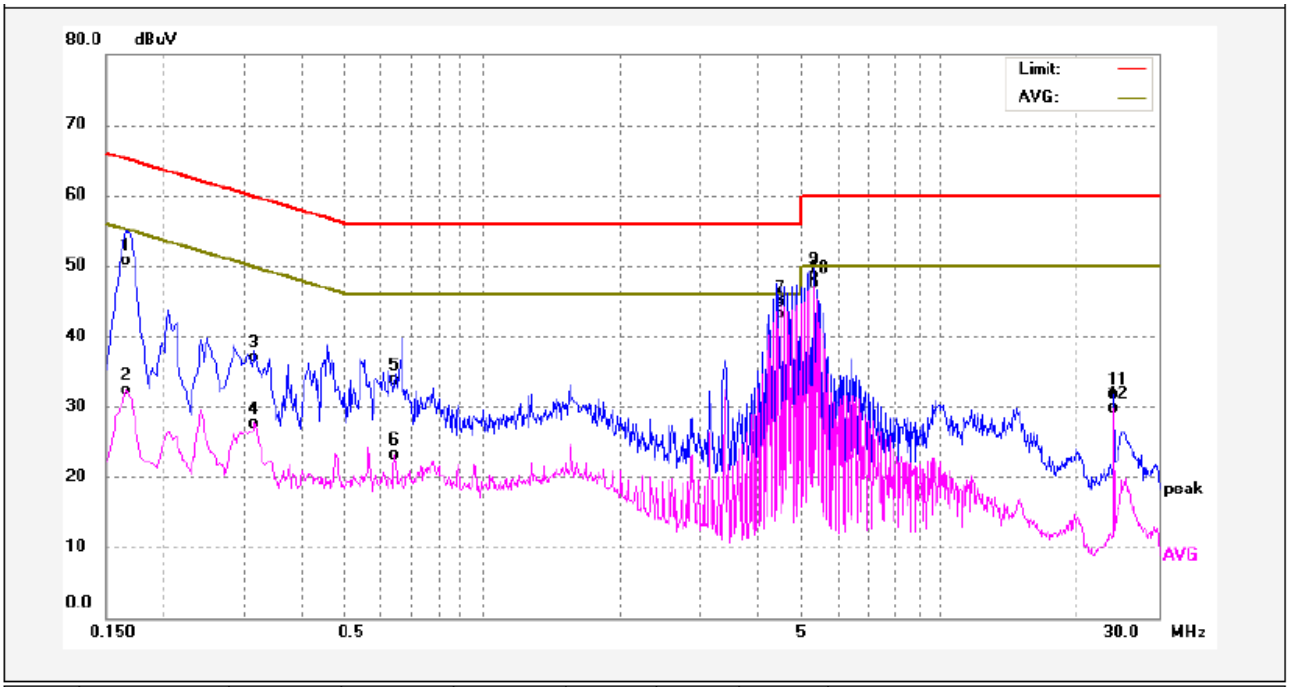
No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1700	43.53	10.32	53.85	64.96	-11.11	QP	
2	0.1700	22.72	10.32	33.04	54.96	-21.92	AVG	
3	0.2060	32.60	10.26	42.86	63.36	-20.50	QP	
4	0.2060	16.04	10.26	26.30	53.36	-27.06	AVG	
5	0.6460	27.18	10.04	37.22	56.00	-18.78	QP	
6	0.6460	13.15	10.04	23.19	46.00	-22.81	AVG	
7	3.3780	29.15	9.95	39.10	56.00	-16.90	QP	
8	3.3780	25.61	9.95	35.56	46.00	-10.44	AVG	
9	5.2860	36.80	10.03	46.83	60.00	-13.17	QP	
10	5.2860	35.01	10.03	45.04	50.00	-4.96	AVG	
11	25.2979	12.72	11.19	23.91	60.00	-36.09	QP	
12	25.2979	5.79	11.19	16.98	50.00	-33.02	AVG	

Live line 2:



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1660	32.85	10.32	43.17	65.15	-21.98	QP	
2	0.1660	19.68	10.32	30.00	55.15	-25.15	AVG	
3	0.3100	28.54	10.20	38.74	59.97	-21.23	QP	
4	0.3100	16.87	10.20	27.07	49.97	-22.90	AVG	
5	0.4620	33.10	10.13	43.23	56.66	-13.43	QP	
6	0.4620	10.65	10.13	20.78	46.66	-25.88	AVG	
7	0.6060	30.35	10.04	40.39	56.00	-15.61	QP	
8	0.6060	12.13	10.04	22.17	46.00	-23.83	AVG	
9	5.2860	32.33	9.84	42.17	60.00	-17.83	QP	
10	5.2860	31.14	9.84	40.98	50.00	-9.02	AVG	
11	14.7979	18.46	9.84	28.30	60.00	-31.70	QP	
12	14.7979	4.42	9.84	14.26	50.00	-35.74	AVG	

Live line 3:



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1660	40.44	10.32	50.76	65.15	-14.39	QP	
2	0.1660	21.91	10.32	32.23	55.15	-22.92	AVG	
3	0.3180	26.72	10.20	36.92	59.76	-22.84	QP	
4	0.3180	17.40	10.20	27.60	49.76	-22.16	AVG	
5	0.6419	23.68	10.01	33.69	56.00	-22.31	QP	
6	0.6419	13.16	10.01	23.17	46.00	-22.83	AVG	
7	4.4859	34.81	9.83	44.64	56.00	-11.36	QP	
8	4.4859	33.27	9.83	43.10	46.00	-2.90	AVG	
9	5.2859	38.85	9.84	48.69	60.00	-11.31	QP	
10	5.2859	37.72	9.84	47.56	50.00	-2.44	AVG	
11	24.0018	21.92	9.75	31.67	60.00	-28.33	QP	
12	24.0018	19.95	9.75	29.70	50.00	-20.30	AVG	

8 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	$20\log^{(500)}$

8.1 EUT Operation

Operating Environment **:**

Temperature: 23.5 °C

Humidity: 52.1 % RH

Atmospheric Pressure: 101.2kPa

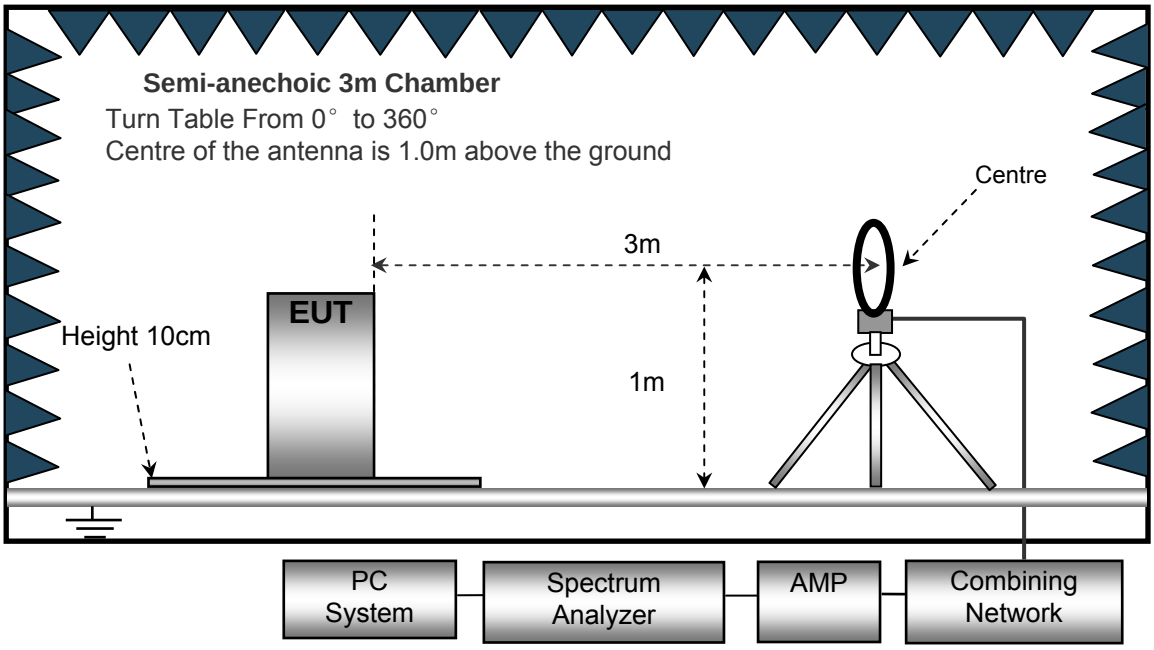
EUT Operation :

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

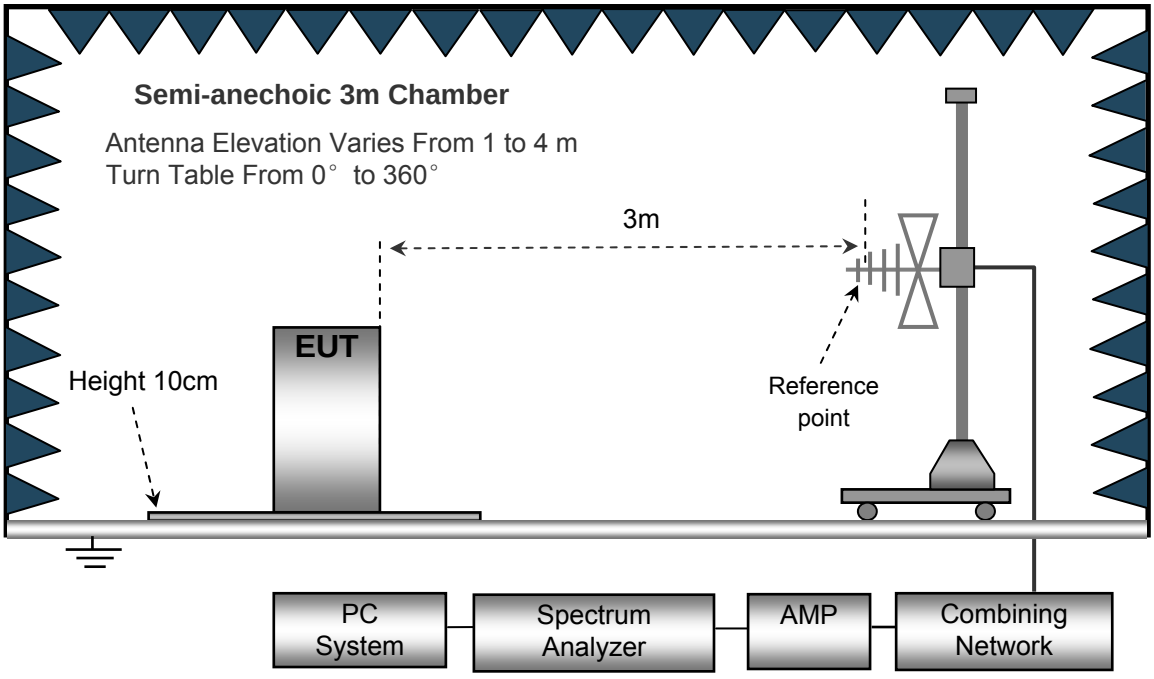
8.2 Test Setup

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

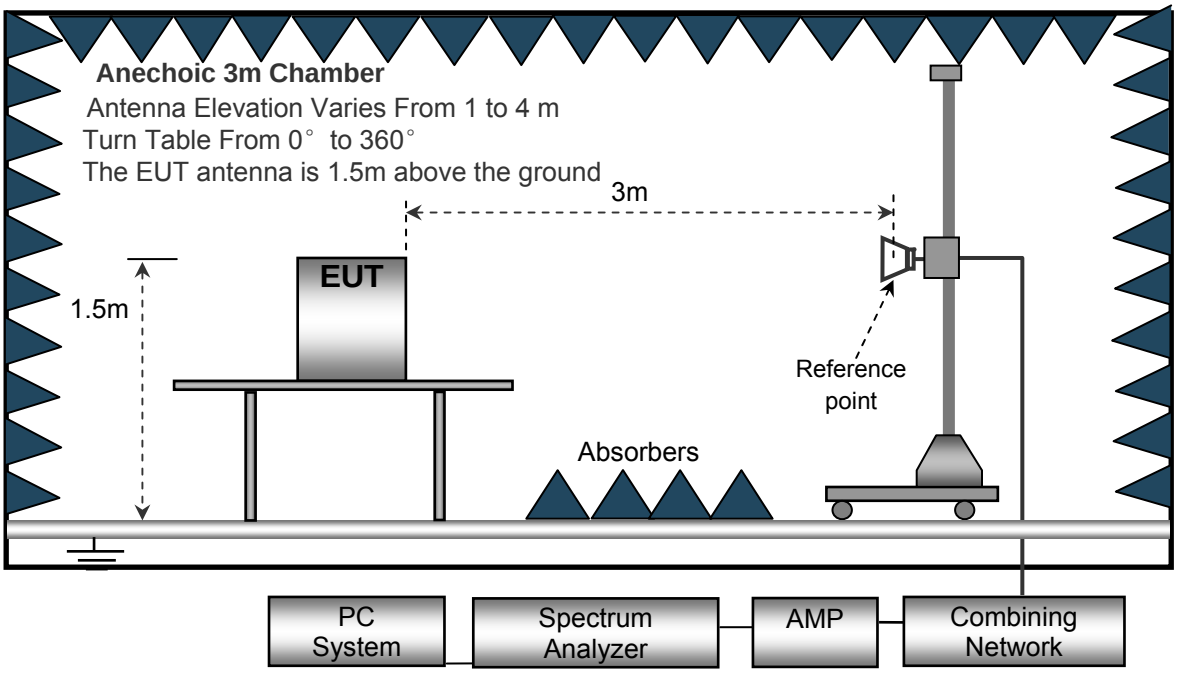
The test setup for emission measurement below 30MHz.



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



The test setup for emission measurement above 1 GHz.



8.3 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

8.4 Test Procedure

1. The EUT is placed on a turntable, which is 0.1m above ground plane for below 1GHz and 0.8m for above 1GHz and The EUT antenna is 1.5m above the ground.
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.

8.5 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

8.6 Summary of Test Results

Test Frequency: 9KHz~30MHz

Note:Low Middle High channel are tests, and only the worst channel(Low channel) data is recorded on the report.

Frequency	Measurement results dBμV @3m	Detector PK/QP	Correct factor dB/m	Extrapolation factor dB	Measurement results (calculated) dBμV/m @30m	Limits dBμV/m @30m	Margin dB
(MHz)	Measurement results	Detector	Correct factor	Extrapolation factor	Measurement results (calculated)	Limits	Margin
U-NII-1:802.11a 5180MHz							
6.586	25.61	QP	21.84	40.00	7.45	29.54	-22.09
16.126	25.90	QP	21.35	40.00	7.25	29.54	-22.29
26.520	25.38	QP	20.67	40.00	6.05	29.54	-23.49
U-NII-1:802.11n20 5180MHz							
6.723	25.64	QP	21.84	40.00	7.48	29.54	-22.06
15.936	26.62	QP	21.35	40.00	7.97	29.54	-21.57
26.342	24.37	QP	20.67	40.00	5.04	29.54	-24.50
U-NII-1:802.11ac 20 5180MHz							
6.916	25.78	QP	21.84	40.00	7.62	29.54	-21.92
16.042	25.74	QP	21.35	40.00	7.09	29.54	-22.45
26.540	24.43	QP	20.67	40.00	5.10	29.54	-24.44
U-NII-1:802.11n40 5190MHz							
6.443	25.70	QP	21.84	40.00	7.54	29.54	-22.00
16.582	25.89	QP	21.35	40.00	7.24	29.54	-22.30
26.108	24.53	QP	20.67	40.00	5.20	29.54	-24.34
U-NII-1:802.11ac40 5190MHz							
6.768	25.82	QP	21.84	40.00	7.66	29.54	-21.88
16.383	26.12	QP	21.35	40.00	7.47	29.54	-22.07
26.048	25.03	QP	20.67	40.00	5.70	29.54	-23.84
U-NII-1:802.11ac80 5210MHz							
6.657	25.30	QP	21.84	40.00	7.14	29.54	-22.40
16.137	26.74	QP	21.35	40.00	8.09	29.54	-21.45
26.760	25.02	QP	20.67	40.00	5.69	29.54	-23.85

Frequency	Measurement results dBμV @3m	Detector PK/QP	Correct factor dB/m	Extrapolation factor dB	Measurement results (calculated) dBμV/m @30m	Limits dBμV/m @30m	Margin dB
(MHz)	Measurement results	Detector	Correct factor	Extrapolation factor	Measurement results (calculated)	Limits	Margin
U-NII-2A:802.11a 5260MHz							
6.377	25.27	QP	21.84	40.00	7.11	29.54	-22.43
16.495	25.81	QP	21.35	40.00	7.16	29.54	-22.38
26.163	24.54	QP	20.67	40.00	5.21	29.54	-24.33
U-NII-2A:802.11n20 5260MHz							
6.711	25.58	QP	21.84	40.00	7.42	29.54	-22.12
16.077	26.41	QP	21.35	40.00	7.76	29.54	-21.78
26.805	24.70	QP	20.67	40.00	5.37	29.54	-24.17
U-NII-2A:802.11ac 5260MHz							
7.102	25.74	QP	21.84	40.00	7.58	29.54	-21.96
15.978	26.29	QP	21.35	40.00	7.64	29.54	-21.90
26.108	24.56	QP	20.67	40.00	5.23	29.54	-24.31
U-NII-2A:802.11n40 5270MHz							
7.227	25.50	QP	21.84	40.00	7.34	29.54	-22.20
15.965	25.67	QP	21.35	40.00	7.02	29.54	-22.52
26.860	25.19	QP	20.67	40.00	5.86	29.54	-23.68
U-NII-2A:802.11ac40 5270MHz							
7.146	25.62	QP	21.84	40.00	7.46	29.54	-22.08
16.401	26.01	QP	21.35	40.00	7.36	29.54	-22.18
26.406	24.54	QP	20.67	40.00	5.21	29.54	-24.33
U-NII-2A:802.11ac80 5290MHz							
7.020	25.54	QP	21.84	40.00	7.38	29.54	-22.16
16.342	25.84	QP	21.35	40.00	7.19	29.54	-22.35
26.361	24.89	QP	20.67	40.00	5.56	29.54	-23.98

Frequency	Measurement results dBμV @3m	Detector PK/QP	Correct factor dB/m	Extrapolation factor dB	Measurement results (calculated) dBμV/m @30m	Limits dBμV/m @30m	Margin dB
(MHz)	Measurement results	Detector	Correct factor	Extrapolation factor	Measurement results (calculated)	Limits	Margin
U-NII-2C:802.11a 5500MHz							
6.661	25.49	QP	21.84	40.00	7.33	29.54	-22.21
16.431	25.93	QP	21.35	40.00	7.28	29.54	-22.26
26.672	24.53	QP	20.67	40.00	5.20	29.54	-24.34
U-NII-2C:802.11n20 5500MHz							
6.787	25.48	QP	21.84	40.00	7.32	29.54	-22.22
15.861	25.88	QP	21.35	40.00	7.23	29.54	-22.31
26.071	24.34	QP	20.67	40.00	5.01	29.54	-24.53
U-NII-2C:802.11ac20 5500MHz							
6.982	25.86	QP	21.84	40.00	7.70	29.54	-21.84
15.643	25.90	QP	21.35	40.00	7.25	29.54	-22.29
26.393	25.16	QP	20.67	40.00	5.83	29.54	-23.71
U-NII-2C:802.11n40 5510MHz							
6.526	25.54	QP	21.84	40.00	7.38	29.54	-22.16
15.724	26.34	QP	21.35	40.00	7.69	29.54	-21.85
26.535	24.86	QP	20.67	40.00	5.53	29.54	-24.01
U-NII-2C:802.11ac40 5510MHz							
6.382	25.65	QP	21.84	40.00	7.49	29.54	-22.05
15.632	26.28	QP	21.35	40.00	7.63	29.54	-21.91
26.432	24.48	QP	20.67	40.00	5.15	29.54	-24.39
U-NII-2C:802.11ac80 5530MHz							
6.390	25.68	QP	21.84	40.00	7.52	29.54	-22.02
15.663	26.54	QP	21.35	40.00	7.89	29.54	-21.65
26.705	24.90	QP	20.67	40.00	5.57	29.54	-23.97

Frequency	Measurement results dBμV @3m	Detector PK/QP	Correct factor dB/m	Extrapolation factor dB	Measurement results (calculated) dBμV/m @30m	Limits dBμV/m @30m	Margin dB
(MHz)	Measurement results	Detector	Correct factor	Extrapolation factor	Measurement results (calculated)	Limits	Margin
U-NII-3 802.11a 5745MHz							
6.804	25.94	QP	21.84	40.00	7.78	29.54	-21.76
16.034	25.69	QP	21.35	40.00	7.04	29.54	-22.50
26.132	24.54	QP	20.67	40.00	5.21	29.54	-24.33
U-NII-3 802.11n20 5745MHz							
6.861	25.54	QP	21.84	40.00	7.38	29.54	-22.16
16.222	25.74	QP	21.35	40.00	7.09	29.54	-22.45
26.046	24.60	QP	20.67	40.00	5.27	29.54	-24.27
U-NII-3 802.11ac 5745MHz							
6.871	26.10	QP	21.84	40.00	7.94	29.54	-21.60
15.918	26.38	QP	21.35	40.00	7.73	29.54	-21.81
26.634	24.43	QP	20.67	40.00	5.10	29.54	-24.44
U-NII-3 802.11n40 5755MHz							
6.942	25.46	QP	21.84	40.00	7.30	29.54	-22.24
16.318	25.64	QP	21.35	40.00	6.99	29.54	-22.55
26.540	25.37	QP	20.67	40.00	6.04	29.54	-23.50
U-NII-3 802.11ac40 5755MHz							
6.665	25.58	QP	21.84	40.00	7.42	29.54	-22.12
16.573	26.04	QP	21.35	40.00	7.39	29.54	-22.15
26.388	25.33	QP	20.67	40.00	6.00	29.54	-23.54
U-NII-3 802.11ac80 5775MHz							
6.862	26.07	QP	21.84	40.00	7.91	29.54	-21.63
16.119	25.75	QP	21.35	40.00	7.10	29.54	-22.44
26.790	24.57	QP	20.67	40.00	5.24	29.54	-24.30

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									
235.19	41.76	QP	324	1.2	H	-11.62	30.14	46.00	-15.86
235.19	39.26	QP	261	1.5	V	-11.62	27.64	46.00	-18.36
4503.32	53.80	PK	271	1.7	H	-2.03	51.77	74.00	-22.23
4503.32	43.96	Ave	271	1.7	H	-2.03	41.93	54.00	-12.07
5120.70	53.55	PK	99	1.9	H	-1.02	52.53	74.00	-21.47
5120.70	44.20	Ave	99	1.9	H	-1.02	43.18	54.00	-10.82
10360.00	41.53	PK	275	1.5	H	5.33	46.86	74.00	-27.14
10360.00	37.27	Ave	275	1.5	H	5.33	42.60	54.00	-11.40
802.11a U-NII-1 Middle channel 5200MHz									
235.19	42.48	QP	134	1.8	H	-11.62	30.86	46.00	-15.14
235.19	39.56	QP	341	1.2	V	-11.62	27.94	46.00	-18.06
4507.43	52.52	PK	153	1.9	H	-1.94	50.58	74.00	-23.42
4507.43	44.43	Ave	153	1.9	H	-1.94	42.49	54.00	-11.51
5129.52	55.16	PK	10	2.0	H	-1.06	54.10	74.00	-19.90
5129.52	43.79	Ave	10	2.0	H	-1.06	42.73	54.00	-11.27
10400.00	40.06	PK	186	1.1	H	5.21	45.27	74.00	-28.73
10400.00	37.26	Ave	186	1.1	H	5.21	42.47	54.00	-11.53

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									
235.19	43.06	QP	153	1.5	H	-11.62	31.44	46.00	-14.56
235.19	39.49	QP	270	1.9	V	-11.62	27.87	46.00	-18.13
4523.51	53.55	PK	9	1.1	H	-2.24	51.31	74.00	-22.69
4523.51	43.92	Ave	9	1.1	H	-2.24	41.68	54.00	-12.32
5116.45	54.91	PK	131	1.9	H	-1.09	53.82	74.00	-20.18
5116.45	45.42	Ave	131	1.9	H	-1.09	44.33	54.00	-9.67
10480.00	41.89	PK	253	1.9	H	5.14	47.03	74.00	-26.97
10480.00	36.16	Ave	253	1.9	H	5.14	41.30	54.00	-12.70
802.11a U-NII-2A Low Channel 5260MHz									
223.45	42.48	QP	334	1.6	H	-11.62	30.86	46.00	-15.14
223.45	38.17	QP	69	1.3	V	-11.62	26.55	46.00	-19.45
4508.07	51.96	PK	327	1.6	H	-2.03	49.93	74.00	-24.07
4508.07	44.28	Ave	327	1.6	H	-2.03	42.25	54.00	-11.75
5111.96	52.91	PK	185	1.7	H	-1.02	51.89	74.00	-22.11
5111.96	41.04	Ave	185	1.7	H	-1.02	40.02	54.00	-13.98
10520.00	41.67	PK	256	1.9	H	5.33	47.00	74.00	-27.00
10520.00	38.32	Ave	256	1.9	H	5.33	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-2A Middle channel 5280MHz									
223.45	42.88	QP	235	1.8	H	-11.62	31.26	46.00	-14.74
223.45	37.04	QP	337	1.9	V	-11.62	25.42	46.00	-20.58
4518.84	51.71	PK	160	1.1	H	-1.94	49.77	74.00	-24.23
4518.84	44.79	Ave	160	1.1	H	-1.94	42.85	54.00	-11.15
5112.36	53.88	PK	336	1.5	H	-1.06	52.82	74.00	-21.18
5112.36	42.00	Ave	336	1.5	H	-1.06	40.94	54.00	-13.06
10560.00	40.82	PK	287	1.3	H	5.21	46.03	74.00	-27.97
10560.00	37.21	Ave	287	1.3	H	5.21	42.42	54.00	-11.58
802.11a U-NII-2A High channel 5320MHz									
223.45	42.55	QP	173	2.0	H	-11.62	30.93	46.00	-15.07
223.45	36.88	QP	239	1.6	V	-11.62	25.26	46.00	-20.74
4520.35	51.86	PK	171	1.9	H	-2.24	49.62	74.00	-24.38
4520.35	43.77	Ave	171	1.9	H	-2.24	41.53	54.00	-12.47
5140.58	55.71	PK	296	2.0	H	-1.09	54.62	74.00	-19.38
5140.58	43.28	Ave	296	2.0	H	-1.09	42.19	54.00	-11.81
10640.00	41.15	PK	51	1.8	H	5.14	46.29	74.00	-27.71
10640.00	36.94	Ave	51	1.8	H	5.14	42.08	54.00	-11.92

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									
223.45	42.47	QP	5	1.3	H	-11.62	30.85	46.00	-15.15
223.45	37.52	QP	146	1.9	V	-11.62	25.90	46.00	-20.10
4538.60	52.09	PK	341	1.1	H	-2.03	50.06	74.00	-23.94
4538.60	41.76	Ave	341	1.1	H	-2.03	39.73	54.00	-14.27
5117.05	53.94	PK	118	1.0	H	-1.02	52.92	74.00	-21.08
5117.05	44.93	Ave	118	1.0	H	-1.02	43.91	54.00	-10.09
11000.00	41.84	PK	133	1.1	H	5.33	47.17	74.00	-26.83
11000.00	37.49	Ave	133	1.1	H	5.33	42.82	54.00	-11.18
802.11a U-NII-2C Middle channel 5600MHz									
223.45	41.43	QP	307	1.6	H	-11.62	29.81	46.00	-16.19
223.45	36.95	QP	57	1.1	V	-11.62	25.33	46.00	-20.67
4512.92	51.81	PK	36	1.9	H	-1.94	49.87	74.00	-24.13
4512.92	42.17	Ave	36	1.9	H	-1.94	40.23	54.00	-13.77
5147.57	54.90	PK	349	1.2	H	-1.06	53.84	74.00	-20.16
5147.57	44.88	Ave	349	1.2	H	-1.06	43.82	54.00	-10.18
11200.00	40.40	PK	211	1.0	H	5.21	45.61	74.00	-28.39
11200.00	38.62	Ave	211	1.0	H	5.21	43.83	54.00	-10.17

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									
235.19	42.77	QP	128	1.5	H	-11.62	31.15	46.00	-14.85
235.19	37.91	QP	127	2.0	V	-11.62	26.29	46.00	-19.71
4536.01	55.58	PK	310	1.9	H	-2.06	53.52	74.00	-20.48
4536.01	43.37	Ave	310	1.9	H	-2.06	41.31	54.00	-12.69
11490.00	40.86	PK	350	1.3	H	5.93	46.79	74.00	-27.21
11490.00	38.41	Ave	350	1.3	H	5.93	44.34	54.00	-9.66
5362.02	45.70	PK	0	1.3	H	-1.25	44.45	74.00	-29.55
5362.02	38.83	Ave	0	1.3	H	-1.25	37.58	54.00	-16.42
802.11a U-NII-3 Low Channel 5745MHz									
235.19	40.35	QP	87	1.9	H	-11.62	28.73	46.00	-17.27
235.19	41.06	QP	210	1.5	V	-11.62	29.44	46.00	-16.56
4500.92	54.36	PK	35	1.7	H	-2.03	52.33	74.00	-21.67
4500.92	41.83	Ave	35	1.7	H	-2.03	39.80	54.00	-14.20
11570.00	42.39	PK	329	1.4	H	5.81	48.20	74.00	-25.80
11570.00	36.68	Ave	329	1.4	H	5.81	42.49	54.00	-11.51
5381.81	46.20	PK	222	2.0	H	-1.22	44.98	74.00	-29.02
5381.81	39.35	Ave	222	2.0	H	-1.22	38.13	54.00	-15.87

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									
235.19	40.35	QP	87	1.9	H	-11.62	28.73	46.00	-17.27
235.19	41.06	QP	210	1.5	V	-11.62	29.44	46.00	-16.56
4500.92	54.36	PK	35	1.7	H	-2.03	52.33	74.00	-21.67
4500.92	41.83	Ave	35	1.7	H	-2.03	39.80	54.00	-14.20
11570.00	42.39	PK	329	1.4	H	5.81	48.20	74.00	-25.80
11570.00	36.68	Ave	329	1.4	H	5.81	42.49	54.00	-11.51
5381.81	46.20	PK	222	2.0	H	-1.22	44.98	74.00	-29.02
5381.81	39.35	Ave	222	2.0	H	-1.22	38.13	54.00	-15.87
802.11a U-NII-3 High channel 5825MHz									
235.19	39.31	QP	100	1.8	H	-11.62	27.69	46.00	-18.31
235.19	40.99	QP	18	1.0	V	-11.62	29.37	46.00	-16.63
4532.54	54.69	PK	177	2.0	H	-1.84	52.85	74.00	-21.15
4532.54	41.41	Ave	177	2.0	H	-1.84	39.57	54.00	-14.43
11650.00	42.45	PK	114	1.7	H	5.84	48.29	74.00	-25.71
11650.00	39.06	Ave	114	1.7	H	5.84	44.90	54.00	-9.10
5375.88	45.60	PK	16	1.4	H	-1.30	44.30	74.00	-29.70
5375.88	37.53	Ave	16	1.4	H	-1.30	36.23	54.00	-17.77

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									
285.49	44.44	QP	65	1.7	H	-11.62	32.82	46.00	-13.18
285.49	38.37	QP	122	1.1	V	-11.62	26.75	46.00	-19.25
4515.73	55.01	PK	100	1.4	H	-2.14	52.87	74.00	-21.13
4515.73	40.37	Ave	100	1.4	H	-2.14	38.23	54.00	-15.77
5116.93	47.86	PK	157	1.2	H	-1.06	46.80	74.00	-27.20
5116.93	37.77	Ave	157	1.2	H	-1.06	36.71	54.00	-17.29
10360.00	40.80	PK	87	1.8	H	5.33	46.13	74.00	-27.87
10360.00	38.49	Ave	87	1.8	H	5.33	43.82	54.00	-10.18
802.11n(HT20) U-NII-1 Middle channel 5200MHz									
285.49	43.41	QP	175	1.8	H	-11.62	31.79	46.00	-14.21
285.49	37.88	QP	263	1.6	V	-11.62	26.26	46.00	-19.74
4524.69	55.99	PK	229	1.7	H	-2.12	53.87	74.00	-20.13
4524.69	40.61	Ave	229	1.7	H	-2.12	38.49	54.00	-15.51
5116.04	48.66	PK	83	1.7	H	-1.06	47.60	74.00	-26.40
5116.04	38.96	Ave	83	1.7	H	-1.06	37.90	54.00	-16.10
10400.00	40.89	PK	35	1.4	H	5.21	46.10	74.00	-27.90
10400.00	36.29	Ave	35	1.4	H	5.21	41.50	54.00	-12.50

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									
285.49	41.97	QP	141	2.0	H	-11.62	30.35	46.00	-15.65
285.49	38.68	QP	319	1.3	V	-11.62	27.06	46.00	-18.94
4504.67	55.81	PK	237	1.7	H	-1.96	53.85	74.00	-20.15
4504.67	40.96	Ave	237	1.7	H	-1.96	39.00	54.00	-15.00
5121.61	48.31	PK	235	1.8	H	-1.06	47.25	74.00	-26.75
5121.61	39.57	Ave	235	1.8	H	-1.06	38.51	54.00	-15.49
10480.00	43.73	PK	110	1.5	H	5.14	48.87	74.00	-25.13
10480.00	36.25	Ave	110	1.5	H	5.14	41.39	54.00	-12.61
802.11n(HT20) U-NII-2A Low Channel 5260MHz									
285.49	39.93	QP	262	1.3	H	-11.62	28.31	46.00	-17.69
285.49	43.96	QP	194	1.3	V	-11.62	32.34	46.00	-13.66
4502.67	37.74	PK	93	2.0	H	-2.03	35.71	74.00	-38.29
4502.67	44.93	Ave	93	2.0	H	-2.03	42.90	54.00	-11.10
5126.65	38.99	PK	125	1.1	H	-1.02	37.97	74.00	-36.03
5126.65	1.78	Ave	125	1.1	H	-1.02	0.76	54.00	-53.24
10520.00	43.37	PK	294	1.1	H	5.33	48.70	74.00	-25.30
10520.00	37.16	Ave	294	1.1	H	5.33	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)
802.11n(HT20) U-NII-2A Middle channel 5280MHz									
285.49	39.29	QP	248	1.1	H	-11.62	27.67	46.00	-18.33
285.49	44.81	QP	241	1.6	V	-11.62	33.19	46.00	-12.81
4509.62	36.57	PK	54	1.7	H	-1.94	34.63	74.00	-39.37
4509.62	44.23	Ave	54	1.7	H	-1.94	42.29	54.00	-11.71
5117.30	39.61	PK	248	1.6	H	-1.06	38.55	74.00	-35.45
5117.30	3.62	Ave	248	1.6	H	-1.06	2.56	54.00	-51.44
10560.00	44.84	PK	74	1.6	H	5.21	50.05	74.00	-23.95
10560.00	38.06	Ave	74	1.6	H	5.21	43.27	54.00	-10.73
802.11n(HT20) U-NII-2A High channel 5320MHz									
285.49	39.36	QP	93	1.7	H	-11.62	27.74	46.00	-18.26
285.49	43.99	QP	252	1.3	V	-11.62	32.37	46.00	-13.63
4503.45	37.41	PK	235	1.8	H	-2.24	35.17	74.00	-38.83
4503.45	45.56	Ave	235	1.8	H	-2.24	43.32	54.00	-10.68
5123.53	39.32	PK	311	1.3	H	-1.09	38.23	74.00	-35.77
5123.53	4.13	Ave	311	1.3	H	-1.09	3.04	54.00	-50.96
10640.00	43.48	PK	354	1.1	H	5.14	48.62	74.00	-25.38
10640.00	36.68	Ave	354	1.1	H	5.14	41.82	54.00	-12.18

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(HT20) U-NII-2C Low Channel 5500MHz									
285.49	38.68	QP	336	1.7	H	-11.62	27.06	46.00	-18.94
285.49	3.99	QP	241	2.0	V	-11.62	-7.63	46.00	-53.63
4516.11	43.41	PK	169	1.4	H	-2.03	41.38	74.00	-32.62
4516.11	38.13	Ave	169	1.4	H	-2.03	36.10	54.00	-17.90
5130.26	45.30	PK	248	1.4	H	-1.02	44.28	74.00	-29.72
5130.26	39.65	Ave	248	1.4	H	-1.02	38.63	54.00	-15.37
11000.00	-0.99	PK	69	1.3	H	5.33	4.34	74.00	-69.66
11000.00	37.97	Ave	69	1.3	H	5.33	43.30	54.00	-10.70
802.11n(HT20) U-NII-2C Middle channel 5600MHz									
285.49	39.33	QP	352	1.0	H	-11.62	27.71	46.00	-18.29
285.49	5.07	QP	305	1.7	V	-11.62	-6.55	46.00	-52.55
4538.38	42.37	PK	339	1.7	H	-1.94	40.43	74.00	-33.57
4538.38	37.35	Ave	339	1.7	H	-1.94	35.41	54.00	-18.59
5145.18	44.83	PK	309	1.4	H	-1.06	43.77	74.00	-30.23
5145.18	40.09	Ave	309	1.4	H	-1.06	39.03	54.00	-14.97
11200.00	-0.09	PK	104	1.6	H	5.21	5.12	74.00	-68.88
11200.00	37.39	Ave	104	1.6	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)
802.11n(HT20) U-NII-2C High channel 5700MHz									
285.49	37.92	QP	178	1.7	H	-11.62	26.30	46.00	-19.70
285.49	4.59	QP	327	1.4	V	-11.62	-7.03	46.00	-53.03
4530.83	43.55	PK	241	1.3	H	-2.24	41.31	74.00	-32.69
4530.83	35.97	Ave	241	1.3	H	-2.24	33.73	54.00	-20.27
5114.19	46.49	PK	175	1.1	H	-1.09	45.40	74.00	-28.60
5114.19	40.55	Ave	175	1.1	H	-1.09	39.46	54.00	-14.54
11400.00	0.01	PK	231	1.9	H	5.14	5.15	74.00	-68.85
11400.00	37.41	Ave	231	1.9	H	5.14	42.55	54.00	-11.45
802.11n(HT20) U-NII-3 Low Channel 5745MHz									
285.49	39.58	QP	63	2.0	H	-11.62	27.96	46.00	-18.04
285.49	52.17	QP	193	1.9	V	-11.62	40.55	46.00	-5.45
4515.10	39.77	PK	291	1.7	H	-2.06	37.71	74.00	-36.29
4515.10	48.19	Ave	291	1.7	H	-2.06	46.13	54.00	-7.87
11490.00	38.33	PK	53	1.5	H	5.93	44.26	74.00	-29.74
11490.00	37.88	Ave	53	1.5	H	5.93	43.81	54.00	-10.19
5360.77	46.77	PK	119	1.6	H	-1.25	45.52	74.00	-28.48
5360.77	38.10	Ave	119	1.6	H	-1.25	36.85	54.00	-17.15

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)
802.11n(HT20) U-NII-3 Middle channel 5785MHz									
285.49	40.16	QP	57	1.4	H	-11.62	28.54	46.00	-17.46
285.49	46.29	QP	252	1.3	V	-11.62	34.67	46.00	-11.33
4521.14	39.58	PK	216	1.0	H	-2.03	37.55	74.00	-36.45
4521.14	48.97	Ave	216	1.0	H	-2.03	46.94	54.00	-7.06
11570.00	38.98	PK	260	1.6	H	5.81	44.79	74.00	-29.21
11570.00	37.99	Ave	260	1.6	H	5.81	43.80	54.00	-10.20
5387.81	45.18	PK	141	1.1	H	-1.22	43.96	74.00	-30.04
5387.81	37.64	Ave	141	1.1	H	-1.22	36.42	54.00	-17.58
802.11n(HT20) U-NII-3 High channel 5825MHz									
285.49	41.07	QP	182	1.0	H	-11.62	29.45	46.00	-16.55
285.49	47.15	QP	118	2.0	V	-11.62	35.53	46.00	-10.47
4514.54	38.32	PK	236	1.7	H	-1.84	36.48	74.00	-37.52
4514.54	48.92	Ave	236	1.7	H	-1.84	47.08	54.00	-6.92
11650.00	37.59	PK	14	1.6	H	5.84	43.43	74.00	-30.57
11650.00	39.24	Ave	14	1.6	H	5.84	45.08	54.00	-8.92
5375.75	46.55	PK	117	1.5	H	-1.30	45.25	74.00	-28.75
5375.75	38.89	Ave	117	1.5	H	-1.30	37.59	54.00	-16.41

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									
285.49	38.90	QP	73	1.1	H	-11.62	27.28	46.00	-18.72
285.49	38.03	QP	167	1.6	V	-11.62	26.41	46.00	-19.59
4526.89	46.94	PK	239	1.0	H	-1.86	45.08	74.00	-28.92
4526.89	39.00	Ave	239	1.0	H	-1.86	37.14	54.00	-16.86
5119.52	41.59	PK	291	1.7	H	-1.06	40.53	74.00	-33.47
5119.52	37.41	Ave	291	1.7	H	-1.06	36.35	54.00	-17.65
10360.00	45.59	PK	180	1.8	H	5.33	50.92	74.00	-23.08
10360.00	39.04	Ave	180	1.8	H	5.33	44.37	54.00	-9.63
802.11ac(VHT20) U-NII-1 Middle channel 5200MHz									
285.49	38.66	QP	196	1.6	H	-11.62	27.04	46.00	-18.96
285.49	37.70	QP	338	1.4	V	-11.62	26.08	46.00	-19.92
4515.33	47.15	PK	283	1.8	H	-1.82	45.33	74.00	-28.67
4515.33	39.54	Ave	283	1.8	H	-1.82	37.72	54.00	-16.28
5126.77	43.03	PK	108	1.7	H	-1.06	41.97	74.00	-32.03
5126.77	38.79	Ave	108	1.7	H	-1.06	37.73	54.00	-16.27
10400.00	42.39	PK	149	1.4	H	5.21	47.60	74.00	-26.40
10400.00	38.30	Ave	149	1.4	H	5.21	43.51	54.00	-10.49

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(VHT20) U-NII-1 High channel 5240MHz									
285.49	37.80	QP	17	1.8	H	-11.62	26.18	46.00	-19.82
285.49	36.87	QP	139	1.0	V	-11.62	25.25	46.00	-20.75
4516.67	46.33	PK	261	1.0	H	-1.81	44.52	74.00	-29.48
4516.67	39.91	Ave	261	1.0	H	-1.81	38.10	54.00	-15.90
5115.54	43.93	PK	3	1.2	H	-1.06	42.87	74.00	-31.13
5115.54	39.29	Ave	3	1.2	H	-1.06	38.23	54.00	-15.77
10480.00	42.81	PK	193	1.3	H	5.14	47.95	74.00	-26.05
10480.00	37.85	Ave	193	1.3	H	5.14	42.99	54.00	-11.01
802.11ac(VHT20) U-NII-2A Low Channel 5260MHz									
285.49	43.65	QP	321	2.0	H	-11.62	32.03	46.00	-13.97
285.49	40.26	QP	318	1.3	V	-11.62	28.64	46.00	-17.36
4522.09	42.95	PK	314	1.8	H	-2.03	40.92	74.00	-33.08
4522.09	36.85	Ave	314	1.8	H	-2.03	34.82	54.00	-19.18
5131.59	46.56	PK	47	1.4	H	-1.02	45.54	74.00	-28.46
5131.59	39.71	Ave	47	1.4	H	-1.02	38.69	54.00	-15.31
10520.00	42.58	PK	68	1.7	H	5.33	47.91	74.00	-26.09
10520.00	37.18	Ave	68	1.7	H	5.33	42.51	54.00	-11.49

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(VHT20) U-NII-2A Middle channel 5280MHz									
285.49	43.74	QP	73	1.8	H	-11.62	32.12	46.00	-13.88
285.49	41.03	QP	318	1.8	V	-11.62	29.41	46.00	-16.59
4523.43	43.33	PK	222	1.2	H	-1.94	41.39	74.00	-32.61
4523.43	36.59	Ave	222	1.2	H	-1.94	34.65	54.00	-19.35
5140.96	46.26	PK	139	1.3	H	-1.06	45.20	74.00	-28.80
5140.96	39.85	Ave	139	1.3	H	-1.06	38.79	54.00	-15.21
10560.00	42.76	PK	122	1.1	H	5.21	47.97	74.00	-26.03
10560.00	37.94	Ave	122	1.1	H	5.21	43.15	54.00	-10.85
802.11ac(VHT20) U-NII-2A High channel 5320MHz									
285.49	42.44	QP	44	1.3	H	-11.62	30.82	46.00	-15.18
285.49	42.35	QP	271	1.8	V	-11.62	30.73	46.00	-15.27
4508.76	41.92	PK	167	2.0	H	-2.24	39.68	74.00	-34.32
4508.76	37.56	Ave	167	2.0	H	-2.24	35.32	54.00	-18.68
5138.82	48.04	PK	59	1.8	H	-1.09	46.95	74.00	-27.05
5138.82	41.47	Ave	59	1.8	H	-1.09	40.38	54.00	-13.62
10640.00	43.96	PK	268	1.8	H	5.14	49.10	74.00	-24.90
10640.00	37.31	Ave	268	1.8	H	5.14	42.45	54.00	-11.55

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									
285.49	47.47	QP	148	1.7	H	-11.62	35.85	46.00	-10.15
285.49	37.96	QP	275	1.2	V	-11.62	26.34	46.00	-19.66
4505.31	41.43	PK	352	1.2	H	-2.03	39.40	74.00	-34.60
4505.31	34.39	Ave	352	1.2	H	-2.03	32.36	54.00	-21.64
5119.21	46.05	PK	58	1.7	H	-1.02	45.03	74.00	-28.97
5119.21	38.23	Ave	58	1.7	H	-1.02	37.21	54.00	-16.79
11000.00	42.00	PK	342	1.3	H	5.33	47.33	74.00	-26.67
11000.00	33.23	Ave	342	1.3	H	5.33	38.56	54.00	-15.44
802.11ac(VHT20) U-NII-2C Middle channel 5600MHz									
285.49	47.19	QP	165	1.4	H	-11.62	35.57	46.00	-10.43
285.49	36.55	QP	321	1.3	V	-11.62	24.93	46.00	-21.07
4529.91	41.57	PK	120	1.7	H	-1.94	39.63	74.00	-34.37
4529.91	34.56	Ave	120	1.7	H	-1.94	32.62	54.00	-21.38
5125.68	47.42	PK	260	1.4	H	-1.06	46.36	74.00	-27.64
5125.68	39.24	Ave	260	1.4	H	-1.06	38.18	54.00	-15.82
11200.00	42.90	PK	238	1.0	H	5.21	48.11	74.00	-25.89
11200.00	32.77	Ave	238	1.0	H	5.21	37.98	54.00	-16.02

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									
285.49	47.15	QP	37	1.9	H	-11.62	35.53	46.00	-10.47
285.49	36.18	QP	323	1.2	V	-11.62	24.56	46.00	-21.44
4525.07	40.36	PK	98	1.1	H	-2.24	38.12	74.00	-35.88
4525.07	34.23	Ave	98	1.1	H	-2.24	31.99	54.00	-22.01
5144.39	46.95	PK	359	1.6	H	-1.09	45.86	74.00	-28.14
5144.39	40.02	Ave	359	1.6	H	-1.09	38.93	54.00	-15.07
11400.00	42.04	PK	336	1.8	H	5.14	47.18	74.00	-26.82
11400.00	32.07	Ave	336	1.8	H	5.14	37.21	54.00	-16.79
802.11ac(VHT20) U-NII-3 Low Channel 5745MHz									
285.49	37.21	QP	116	1.1	H	-11.62	25.59	46.00	-20.41
285.49	36.95	QP	99	1.9	V	-11.62	25.33	46.00	-20.67
4503.03	44.88	PK	101	1.0	H	-1.92	42.96	74.00	-31.04
4503.03	34.82	Ave	101	1.0	H	-1.92	32.90	54.00	-21.10
11490.00	39.71	PK	337	1.7	H	5.93	45.64	74.00	-28.36
11490.00	34.20	Ave	337	1.7	H	5.93	40.13	54.00	-13.87
5357.75	46.12	PK	64	1.9	H	-1.03	45.09	74.00	-28.91
5357.75	37.71	Ave	64	1.9	H	-1.03	36.68	54.00	-17.32

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)
802.11ac(VHT20) U-NII-3 Middle channel 5785MHz									
285.49	36.24	QP	109	1.8	H	-11.62	24.62	46.00	-21.38
285.49	36.17	QP	278	1.8	V	-11.62	24.55	46.00	-21.45
4518.03	44.41	PK	169	1.4	H	-1.97	42.44	74.00	-31.56
4518.03	35.71	Ave	169	1.4	H	-1.97	33.74	54.00	-20.26
11570.00	41.36	PK	80	1.9	H	5.81	47.17	74.00	-26.83
11570.00	37.75	Ave	80	1.9	H	5.81	43.56	54.00	-10.44
5369.52	45.98	PK	37	1.1	H	-1.05	44.93	74.00	-29.07
5369.52	37.34	Ave	37	1.1	H	-1.05	36.29	54.00	-17.71
802.11ac(VHT20) U-NII-3 High channel 5825MHz									
285.49	35.33	QP	221	1.2	H	-11.62	23.71	46.00	-22.29
285.49	36.25	QP	186	1.1	V	-11.62	24.63	46.00	-21.37
4527.25	44.64	PK	138	1.9	H	-1.88	42.76	74.00	-31.24
4527.25	36.23	Ave	138	1.9	H	-1.88	34.35	54.00	-19.65
11650.00	41.71	PK	199	1.6	H	5.84	47.55	74.00	-26.45
11650.00	36.44	Ave	199	1.6	H	5.84	42.28	54.00	-11.72
5379.88	46.98	PK	177	1.5	H	-1.06	45.92	74.00	-28.08
5379.88	37.71	Ave	177	1.5	H	-1.06	36.65	54.00	-17.35

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)
802.11n(HT40) U-NII-1 Low Channel 5190MHz									
285.49	35.80	QP	351	1.4	H	-11.62	24.18	46.00	-21.82
285.49	37.26	QP	55	1.6	V	-11.62	25.64	46.00	-20.36
4514.50	41.94	PK	155	1.9	H	-1.89	40.05	74.00	-33.95
4514.50	33.81	Ave	155	1.9	H	-1.89	31.92	54.00	-22.08
5131.63	45.23	PK	307	2.0	H	-1.06	44.17	74.00	-29.83
5131.63	39.12	Ave	307	2.0	H	-1.06	38.06	54.00	-15.94
10380.00	40.69	PK	146	1.1	H	5.26	45.95	74.00	-28.05
10380.00	35.25	Ave	146	1.1	H	5.26	40.51	54.00	-13.49
802.11n(HT40) U-NII-1 High channel 5230MHz									
285.49	35.30	QP	300	1.8	H	-11.62	23.68	46.00	-22.32
285.49	37.22	QP	154	1.1	V	-11.62	25.60	46.00	-20.40
4507.53	40.98	PK	55	1.6	H	-1.94	39.04	74.00	-34.96
4507.53	32.97	Ave	55	1.6	H	-1.94	31.03	54.00	-22.97
5128.96	45.36	PK	45	1.2	H	-1.06	44.30	74.00	-29.70
5128.96	40.06	Ave	45	1.2	H	-1.06	39.00	54.00	-15.00
10460.00	42.14	PK	293	1.8	H	5.28	47.42	74.00	-26.58
10480.00	36.19	Ave	293	1.8	H	5.28	41.47	54.00	-12.53

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									
285.49	47.42	QP	269	1.1	H	-11.62	35.80	46.00	-10.20
285.49	38.71	QP	270	1.3	V	-11.62	27.09	46.00	-18.91
4538.40	42.65	PK	257	1.8	H	-1.89	40.76	74.00	-33.24
4538.40	38.24	Ave	257	1.8	H	-1.89	36.35	54.00	-17.65
5142.40	45.82	PK	102	1.3	H	-1.06	44.76	74.00	-29.24
5142.40	37.92	Ave	102	1.3	H	-1.06	36.86	54.00	-17.14
10540.00	46.47	PK	74	1.4	H	5.26	51.73	74.00	-22.27
10540.00	37.45	Ave	74	1.4	H	5.26	42.71	54.00	-11.29
802.11n(HT40) U-NII-2A High channel 5310MHz									
285.49	47.80	QP	17	1.4	H	-11.62	36.18	46.00	-9.82
285.49	38.07	QP	143	1.3	V	-11.62	26.45	46.00	-19.55
4513.32	41.88	PK	36	1.3	H	-1.94	39.94	74.00	-34.06
4513.32	37.66	Ave	36	1.3	H	-1.94	35.72	54.00	-18.28
5124.46	46.22	PK	266	1.7	H	-1.06	45.16	74.00	-28.84
5124.46	38.41	Ave	266	1.7	H	-1.06	37.35	54.00	-16.65
10620.00	41.79	PK	280	1.5	H	5.28	47.07	74.00	-26.93
10620.00	37.55	Ave	280	1.5	H	5.28	42.83	54.00	-11.17

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									
285.49	46.78	QP	117	1.8	H	-11.62	35.16	46.00	-10.84
285.49	38.66	QP	289	1.5	V	-11.62	27.04	46.00	-18.96
4528.70	42.51	PK	267	1.2	H	-1.89	40.62	74.00	-33.38
4528.70	36.60	Ave	267	1.2	H	-1.89	34.71	54.00	-19.29
5124.38	45.97	PK	85	1.8	H	-1.06	44.91	74.00	-29.09
5124.38	36.85	Ave	85	1.8	H	-1.06	35.79	54.00	-18.21
11020.00	44.75	PK	319	1.6	H	5.26	50.01	74.00	-23.99
11020.00	39.77	Ave	319	1.6	H	5.26	45.03	54.00	-8.97
802.11n(HT40) U-NII-2C Middle channel 5550MHz									
285.49	46.38	QP	121	1.7	H	-11.62	34.76	46.00	-11.24
285.49	38.79	QP	86	1.7	V	-11.62	27.17	46.00	-18.83
4521.16	43.04	PK	92	1.7	H	-1.94	41.10	74.00	-32.90
4521.16	37.06	Ave	92	1.7	H	-1.94	35.12	54.00	-18.88
5110.18	46.39	PK	126	1.5	H	-1.06	45.33	74.00	-28.67
5110.18	38.67	Ave	126	1.5	H	-1.06	37.61	54.00	-16.39
11100.00	46.83	PK	55	1.6	H	5.28	52.11	74.00	-21.89
11100.00	38.23	Ave	55	1.6	H	5.28	43.51	54.00	-10.49
802.11n(HT40) U-NII-2C High channel 5670MHz									
285.49	46.36	QP	109	1.2	H	-11.62	34.74	46.00	-11.26
285.49	39.37	QP	90	1.4	V	-11.62	27.75	46.00	-18.25
4538.80	43.73	PK	57	1.2	H	-1.94	41.79	74.00	-32.21
4538.80	37.96	Ave	57	1.2	H	-1.94	36.02	54.00	-17.98
5121.78	45.79	PK	186	1.1	H	-1.06	44.73	74.00	-29.27
5121.78	40.06	Ave	186	1.1	H	-1.06	39.00	54.00	-15.00
11340.00	40.60	PK	204	1.4	H	5.28	45.88	74.00	-28.12
11340.00	36.80	Ave	204	1.4	H	5.28	42.08	54.00	-11.92

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)
802.11n(HT40) U-NII-3 Low Channel 5755MHz									
285.49	38.93	QP	34	1.6	H	-11.62	27.31	46.00	-18.69
285.49	41.29	QP	155	1.8	V	-11.62	29.67	46.00	-16.33
4515.96	40.37	PK	246	1.7	H	-1.96	38.41	74.00	-35.59
4515.96	36.57	Ave	246	1.7	H	-1.96	34.61	54.00	-19.39
11510.00	39.20	PK	274	1.3	H	5.88	45.08	74.00	-28.92
11510.00	34.18	Ave	274	1.3	H	5.88	40.06	54.00	-13.94
5387.62	45.17	PK	203	1.7	H	-1.01	44.16	74.00	-29.84
5387.62	38.50	Ave	203	1.7	H	-1.01	37.49	54.00	-16.51
802.11n(HT40) U-NII-3 High Channel 5795MHz									
285.49	39.38	QP	6	1.4	H	-11.62	27.76	46.00	-18.24
285.49	40.89	QP	139	2.0	V	-11.62	29.27	46.00	-16.73
4519.99	39.48	PK	252	1.0	H	-1.92	37.56	74.00	-36.44
4519.99	36.09	Ave	252	1.0	H	-1.92	34.17	54.00	-19.83
11590.00	42.95	PK	74	1.4	H	5.63	48.58	74.00	-25.42
11590.00	37.75	Ave	74	1.4	H	5.63	43.38	54.00	-10.62
5358.44	45.86	PK	237	1.8	H	-1.04	44.82	74.00	-29.18
5358.44	39.47	Ave	237	1.8	H	-1.04	38.43	54.00	-15.57

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									
285.49	37.98	QP	95	1.5	H	-11.62	26.36	46.00	-19.64
285.49	41.02	QP	137	1.8	V	-11.62	29.40	46.00	-16.60
4534.54	37.58	PK	237	1.7	H	-1.91	35.67	74.00	-38.33
4534.54	33.94	Ave	237	1.7	H	-1.91	32.03	54.00	-21.97
5126.18	46.40	PK	70	1.1	H	-1.06	45.34	74.00	-28.66
5126.18	38.55	Ave	70	1.1	H	-1.06	37.49	54.00	-16.51
10380.00	40.88	PK	119	1.7	H	5.26	46.14	74.00	-27.86
10380.00	35.92	Ave	119	1.7	H	5.26	41.18	54.00	-12.82
802.11ac(VHT40) U-NII-1 High channel 5230MHz									
285.49	38.44	QP	292	1.1	H	-11.62	26.82	46.00	-19.18
285.49	40.71	QP	318	1.0	V	-11.62	29.09	46.00	-16.91
4503.06	38.56	PK	118	1.4	H	-1.93	36.63	74.00	-37.37
4503.06	34.01	Ave	118	1.4	H	-1.93	32.08	54.00	-21.92
5134.09	47.75	PK	245	1.3	H	-1.06	46.69	74.00	-27.31
5134.09	38.43	Ave	245	1.3	H	-1.06	37.37	54.00	-16.63
10460.00	42.90	PK	309	1.7	H	5.28	48.18	74.00	-25.82
10460.00	37.83	Ave	309	1.7	H	5.28	43.11	54.00	-10.89

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									
285.49	45.15	QP	119	1.0	H	-11.62	33.53	46.00	-12.47
285.49	38.34	QP	253	1.1	V	-11.62	26.72	46.00	-19.28
4513.92	40.99	PK	309	1.7	H	-1.89	39.10	74.00	-34.90
4513.92	38.80	Ave	309	1.7	H	-1.89	36.91	54.00	-17.09
5143.98	47.80	PK	54	1.1	H	-1.06	46.74	74.00	-27.26
5143.98	40.98	Ave	54	1.1	H	-1.06	39.92	54.00	-14.08
10540.00	40.23	PK	166	1.5	H	5.26	45.49	74.00	-28.51
10540.00	41.48	Ave	166	1.5	H	5.26	46.74	54.00	-7.26
802.11ac(VHT40) U-NII-2A High channel 5310MHz									
285.49	43.37	QP	164	1.1	H	-11.62	31.75	46.00	-14.25
285.49	37.68	QP	67	1.8	V	-11.62	26.06	46.00	-19.94
4524.66	40.22	PK	282	1.0	H	-1.94	38.28	74.00	-35.72
4524.66	38.28	Ave	282	1.0	H	-1.94	36.34	54.00	-17.66
5148.49	46.85	PK	53	2.0	H	-1.06	45.79	74.00	-28.21
5148.49	40.20	Ave	53	2.0	H	-1.06	39.14	54.00	-14.86
10620.00	44.89	PK	306	1.7	H	5.28	50.17	74.00	-23.83
10620.00	41.42	Ave	306	1.7	H	5.28	46.70	54.00	-7.30

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-2C Low Channel 5510MHz									
285.49	46.04	QP	54	1.9	H	-11.62	34.42	46.00	-11.58
285.49	39.29	QP	160	1.2	V	-11.62	27.67	46.00	-18.33
4523.52	45.76	PK	30	1.3	H	-1.89	43.87	74.00	-30.13
4523.52	40.71	Ave	30	1.3	H	-1.89	38.82	54.00	-15.18
5148.32	46.91	PK	133	1.5	H	-1.06	45.85	74.00	-28.15
5148.32	39.90	Ave	133	1.5	H	-1.06	38.84	54.00	-15.16
11020.00	38.76	PK	142	1.6	H	5.26	44.02	74.00	-29.98
11020.00	38.65	Ave	142	1.6	H	5.26	43.91	54.00	-10.09
802.11ac(VHT40) U-NII-2C Middle channel 5550MHz									
285.49	46.92	QP	42	1.5	H	-11.62	35.30	46.00	-10.70
285.49	38.76	QP	287	1.9	V	-11.62	27.14	46.00	-18.86
4507.27	45.14	PK	230	1.6	H	-1.94	43.20	74.00	-30.80
4507.27	40.78	Ave	230	1.6	H	-1.94	38.84	54.00	-15.16
5133.50	45.98	PK	117	1.3	H	-1.06	44.92	74.00	-29.08
5133.50	40.36	Ave	117	1.3	H	-1.06	39.30	54.00	-14.70
11100.00	37.57	PK	289	1.4	H	5.28	42.85	74.00	-31.15
11100.00	37.82	Ave	289	1.4	H	5.28	43.10	54.00	-10.90
802.11ac(VHT40) U-NII-2C High channel 5670MHz									
285.49	51.73	QP	268	1.2	H	-11.62	40.11	46.00	-5.89
285.49	35.73	QP	73	1.7	V	-11.62	24.11	46.00	-21.89
4531.20	45.64	PK	325	1.9	H	-1.94	43.70	74.00	-30.30
4531.20	37.88	Ave	325	1.9	H	-1.94	35.94	54.00	-18.06
5110.13	46.43	PK	296	1.8	H	-1.06	45.37	74.00	-28.63
5110.13	37.65	Ave	296	1.8	H	-1.06	36.59	54.00	-17.41
11340.00	41.72	PK	195	1.7	H	5.28	47.00	74.00	-27.00
11340.00	36.54	Ave	195	1.7	H	5.28	41.82	54.00	-12.18

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(VHT40) U-NII-3 Low Channel 5755MHz									
285.49	36.24	QP	328	1.9	H	-11.62	24.62	46.00	-21.38
285.49	39.85	QP	258	1.3	V	-11.62	28.23	46.00	-17.77
4526.64	34.14	PK	230	1.2	H	-1.92	32.22	74.00	-41.78
4526.64	28.47	Ave	230	1.2	H	-1.92	26.55	54.00	-27.45
11510.00	40.23	PK	340	1.3	H	5.88	46.11	74.00	-27.89
11510.00	35.21	Ave	340	1.3	H	5.88	41.09	54.00	-12.91
5350.99	45.18	PK	57	2.0	H	-1.07	44.11	74.00	-29.89
5350.99	39.93	Ave	57	2.0	H	-1.07	38.86	54.00	-15.14
802.11ac(VHT40) U-NII-3 High Channel 5795MHz									
285.49	35.67	QP	228	1.4	H	-11.62	24.05	46.00	-21.95
285.49	38.93	QP	14	1.4	V	-11.62	27.31	46.00	-18.69
4520.40	34.49	PK	262	1.1	H	-1.86	32.63	74.00	-41.37
4520.40	29.03	Ave	262	1.1	H	-1.86	27.17	54.00	-26.83
11590.00	40.84	PK	162	1.1	H	5.63	46.47	74.00	-27.53
11590.00	37.38	Ave	162	1.1	H	5.63	43.01	54.00	-10.99
5369.01	46.83	PK	33	1.3	H	-1.03	45.80	74.00	-28.20
5369.01	37.30	Ave	33	1.3	H	-1.03	36.27	54.00	-17.73

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(VHT80) U-NII-1 Low Channel 5210MHz									
285.49	38.70	QP	255	1.4	H	-11.62	27.08	46.00	-18.92
285.49	33.64	QP	266	1.6	V	-11.62	22.02	46.00	-23.98
4511.65	28.74	PK	357	1.8	H	-1.88	26.86	74.00	-47.14
4511.65	40.98	Ave	357	1.8	H	-1.88	39.10	54.00	-14.90
5114.67	37.49	PK	201	1.9	H	-1.06	36.43	74.00	-37.57
5114.67	46.56	Ave	201	1.9	H	-1.06	45.50	54.00	-8.50
10420.00	41.84	PK	208	1.1	H	4.65	46.49	74.00	-27.51
10420.00	37.64	Ave	208	1.1	H	4.65	42.29	54.00	-11.71
802.11ac(VHT80) U-NII-2A Low Channel 5290MHz									
285.49	36.34	QP	11	1.8	H	-11.62	24.72	46.00	-21.28
285.49	29.67	QP	74	2.0	V	-11.62	18.05	46.00	-27.95
4533.19	43.20	PK	278	1.1	H	-1.88	41.32	74.00	-32.68
4533.19	37.87	Ave	278	1.1	H	-1.88	35.99	54.00	-18.01
5143.69	46.00	PK	19	1.4	H	-1.06	44.94	74.00	-29.06
5143.69	39.67	Ave	19	1.4	H	-1.06	38.61	54.00	-15.39
10580.00	37.28	PK	183	1.4	H	4.65	41.93	74.00	-32.07
10580.00	45.15	Ave	183	1.4	H	4.65	49.80	54.00	-4.20

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									
285.49	28.81	QP	4	1.7	H	-11.62	17.19	46.00	-28.81
285.49	42.70	QP	334	1.7	V	-11.62	31.08	46.00	-14.92
4522.08	37.51	PK	317	1.9	H	-1.88	35.63	74.00	-38.37
4522.08	45.94	Ave	317	1.9	H	-1.88	44.06	54.00	-9.94
5141.33	40.68	PK	65	1.2	H	-1.06	39.62	74.00	-34.38
5141.33	37.96	Ave	65	1.2	H	-1.06	36.90	54.00	-17.10
11060.00	46.14	PK	88	1.2	H	4.65	50.79	74.00	-23.21
11060.00	39.01	Ave	88	1.2	H	4.65	43.66	54.00	-10.34
802.11ac(VHT80) U-NII-2C High Channel 5610MHz									
285.49	26.13	QP	196	1.5	H	-11.62	14.51	46.00	-31.49
285.49	40.64	QP	273	1.2	V	-11.62	29.02	46.00	-16.98
4536.57	38.14	PK	87	1.0	H	-1.88	36.26	74.00	-37.74
4536.57	48.28	Ave	87	1.0	H	-1.88	46.40	54.00	-7.60
5116.75	42.45	PK	179	1.5	H	-1.06	41.39	74.00	-32.61
5116.75	36.61	Ave	179	1.5	H	-1.06	35.55	54.00	-18.45
11220.00	46.39	PK	138	1.2	H	4.65	51.04	68.20	-17.16
11220.00	39.92	Ave	138	1.2	H	4.65	44.57	54.00	-9.43
802.11ac(VHT80) U-NII-3 Low channel 5775MHz									
285.49	37.56	QP	180	2.0	H	-11.62	25.94	46.00	-20.06
285.49	29.80	QP	223	1.8	V	-11.62	18.18	46.00	-27.82
4511.46	43.04	PK	217	1.5	H	-1.85	41.19	74.00	-32.81
4511.46	41.36	Ave	217	1.5	H	-1.85	39.51	54.00	-14.49
11550.00	41.47	PK	255	1.5	H	4.83	46.30	74.00	-27.70
11550.00	37.61	Ave	255	1.5	H	4.83	42.44	54.00	-11.56
5378.28	46.69	PK	38	2.0	H	-1.14	45.55	74.00	-28.45
5378.28	39.07	Ave	38	2.0	H	-1.14	37.93	54.00	-16.07

Test Frequency: 12GHz~40GHz

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

9 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.

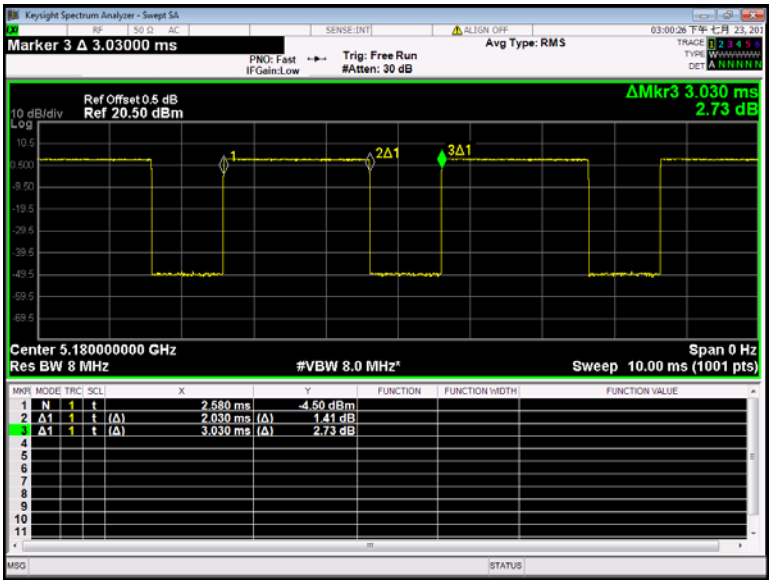
9.1 Summary of Test Results

802.11a(HT20) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
36	2.030	3.030	67
52	2.030	3.030	67
100	2.020	3.035	67
149	2.045	3.060	67
802.11n(HT20) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
36	1.870	2.890	65
52	1.890	2.900	65
100	1.890	2.895	65
149	1.885	2.900	65
802.11ac(VHT20) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
36	1.890	2.890	65
52	1.890	2.890	65
100	1.900	2.895	66
149	1.885	2.880	65
802.11n(HT40) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
38	0.930	1.935	48
54	0.930	1.935	48
102	0.930	1.935	48
151	0.930	1.940	48

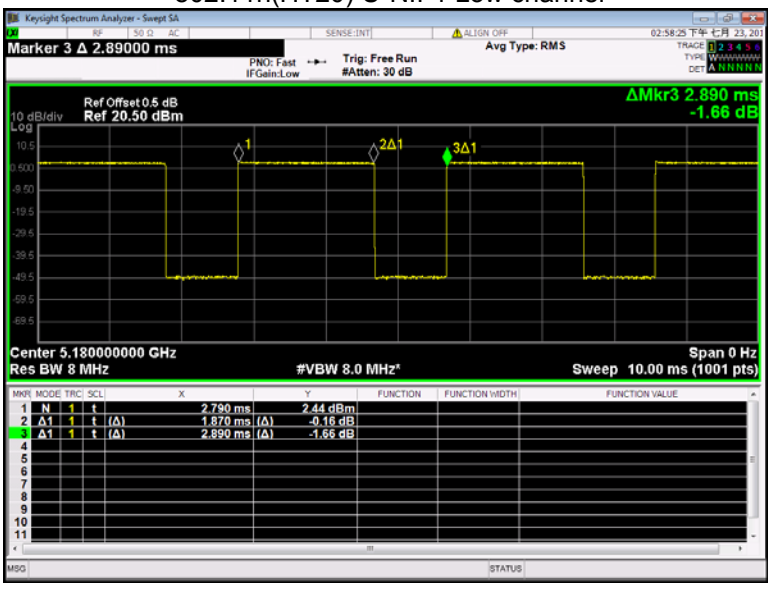
802.11ac(VHT40) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
38	0.930	1.935	48
54	0.930	1.935	48
102	0.930	1.935	48
151	0.940	1.940	48
802.11ac(VHT80) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
38	0.450	1.455	31
54	0.450	1.455	31
102	0.450	1.455	31
151	0.450	1.455	31

Test result plots shown as follows:

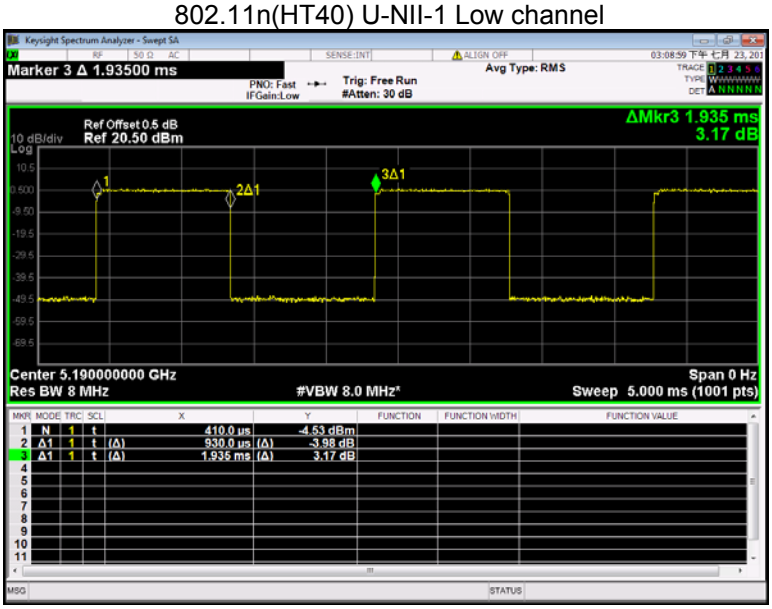
802.11a U-NII-1 Low channel



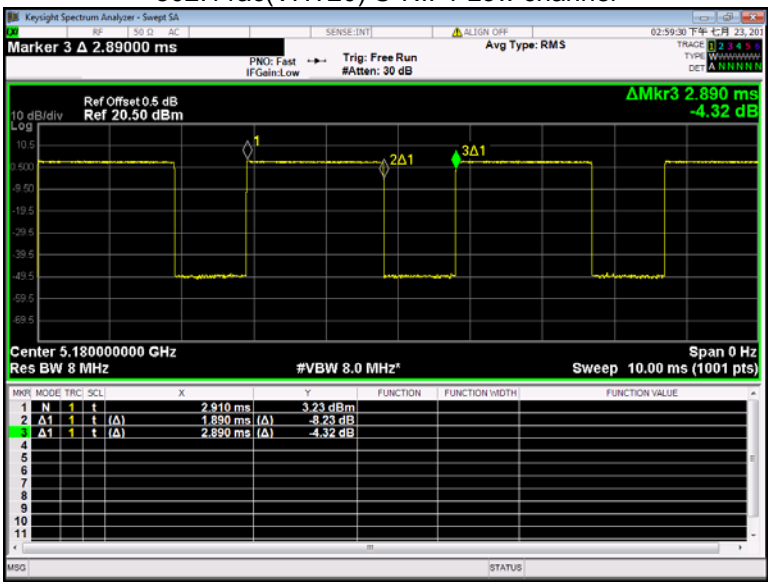
802.11n(HT20) U-NII-1 Low channel



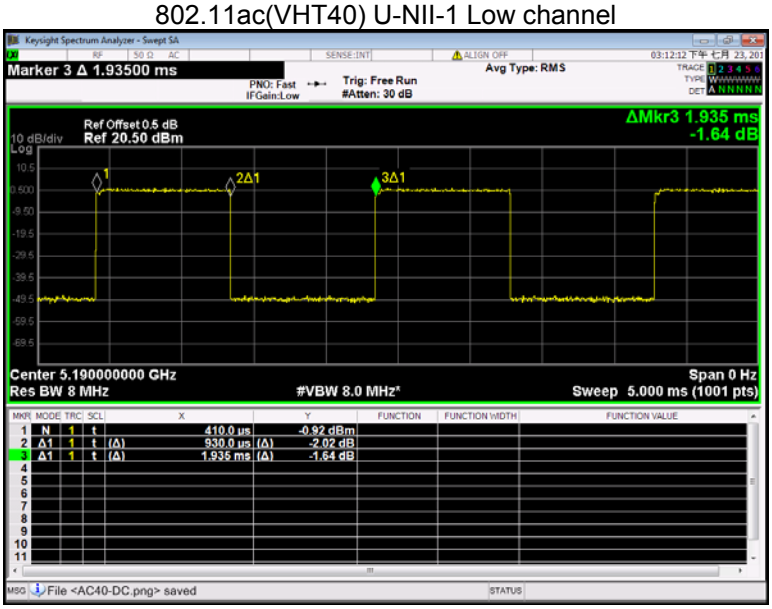
802.11n(HT40) U-NII-1 Low channel



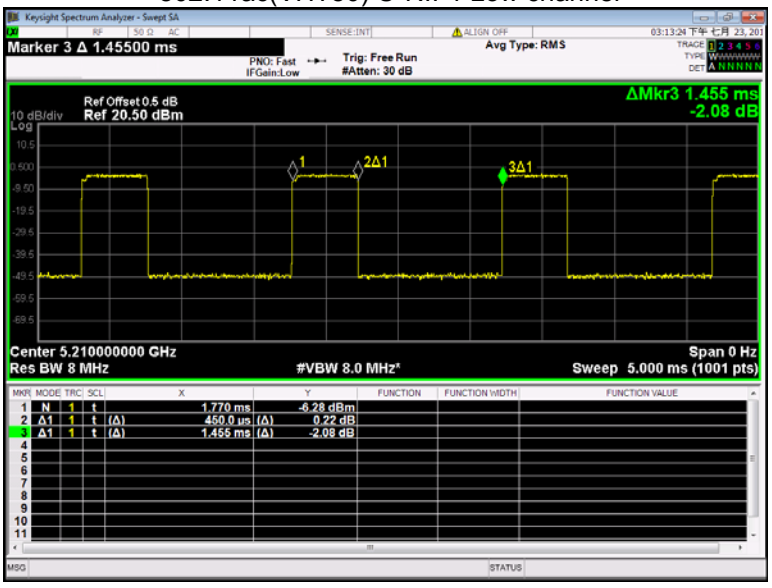
802.11ac(VHT20) U-NII-1 Low channel



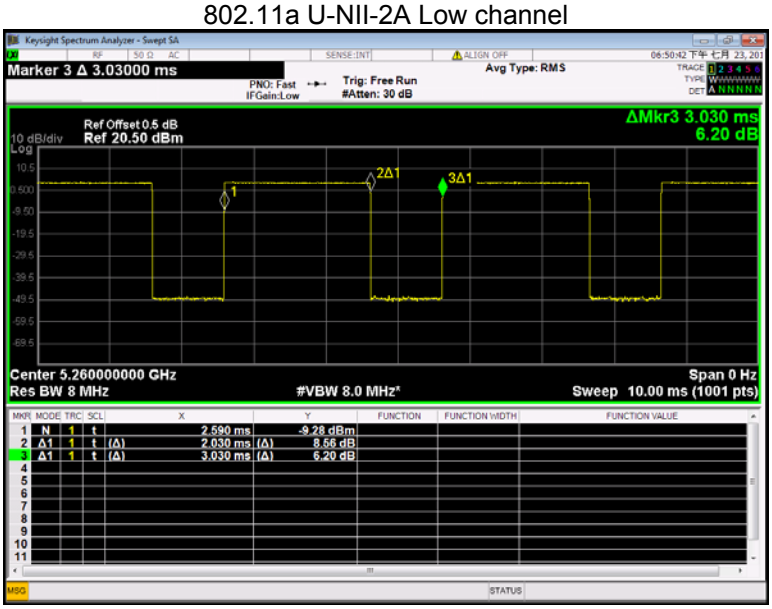
802.11ac(VHT40) U-NII-1 Low channel



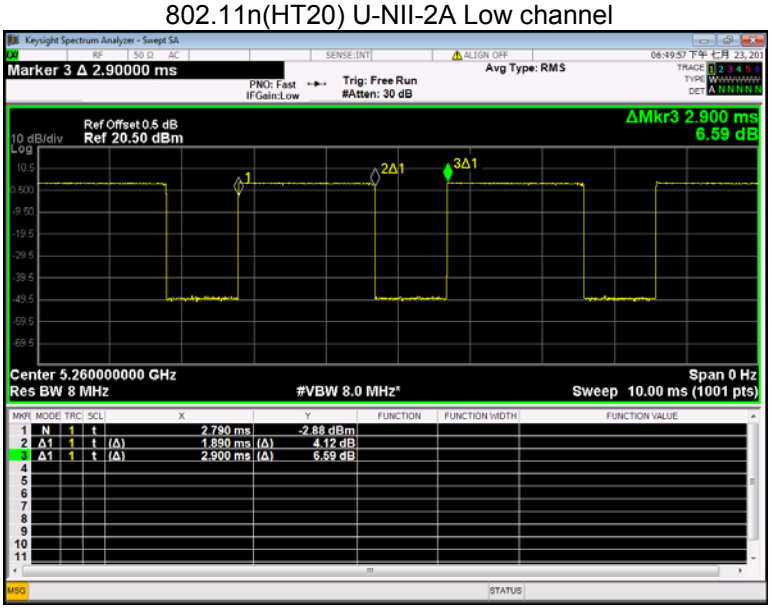
802.11ac(VHT80) U-NII-1 Low channel



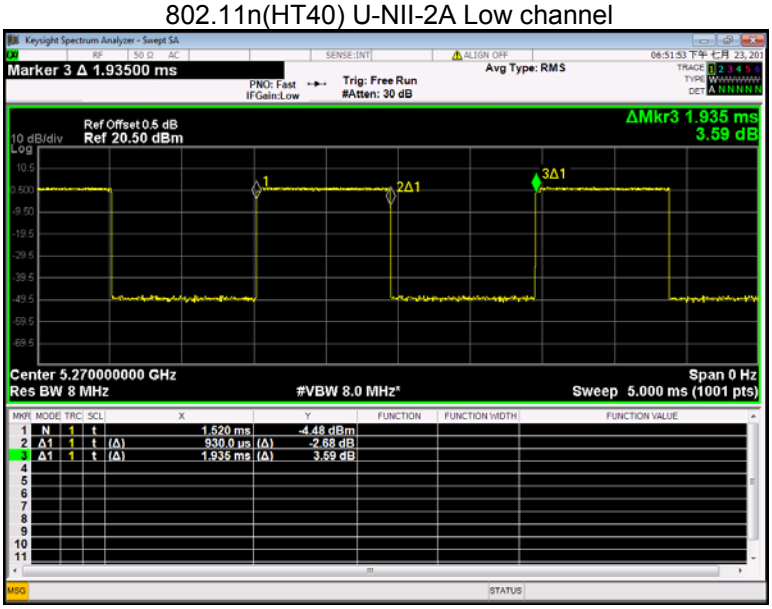
802.11a U-NII-2A Low channel



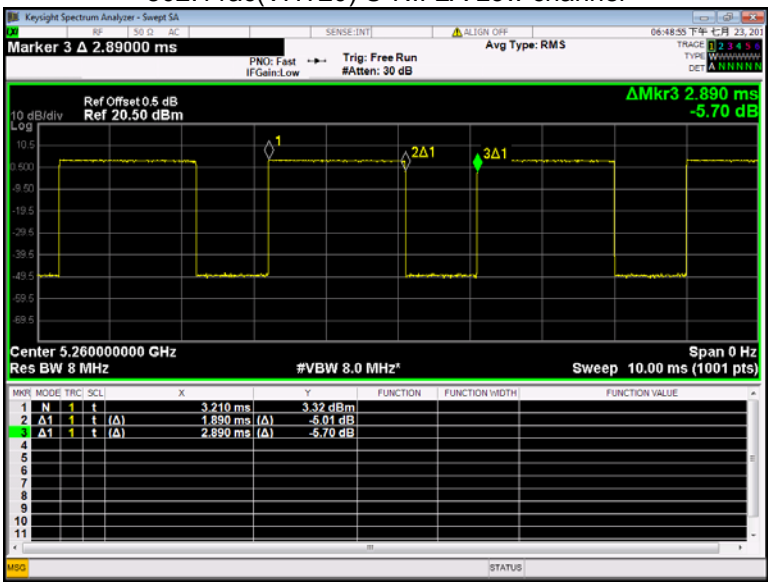
802.11n(HT20) U-NII-2A Low channel



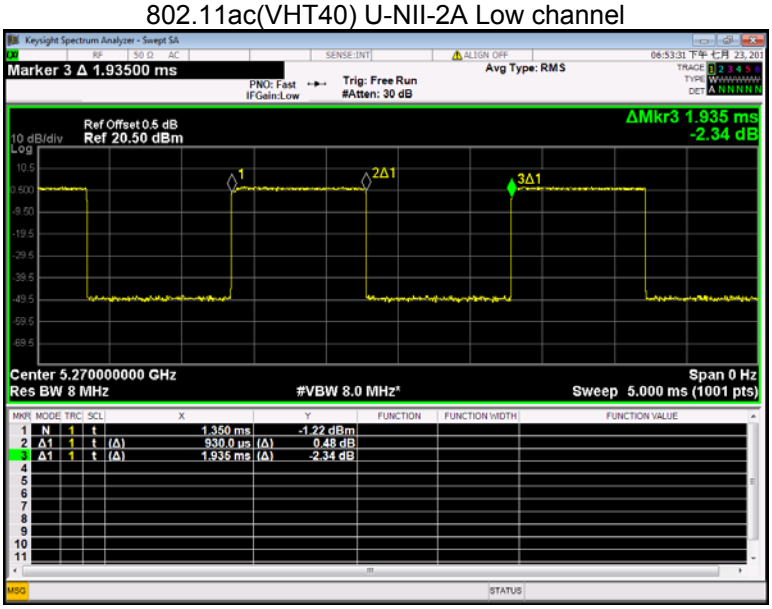
802.11n(HT40) U-NII-2A Low channel



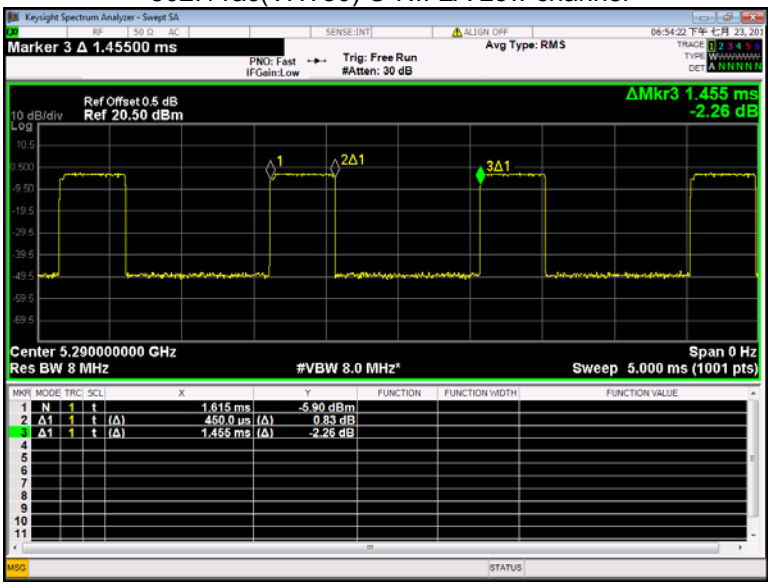
802.11ac(VHT20) U-NII-2A Low channel



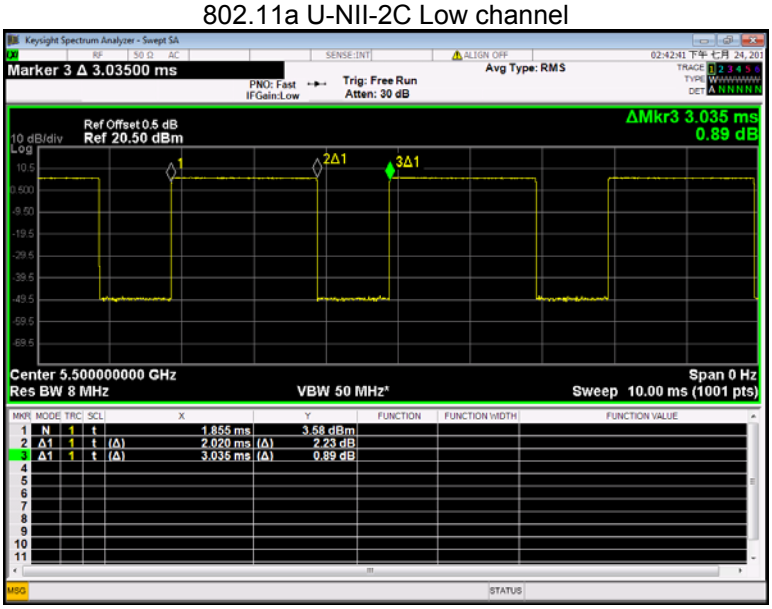
802.11ac(VHT40) U-NII-2A Low channel



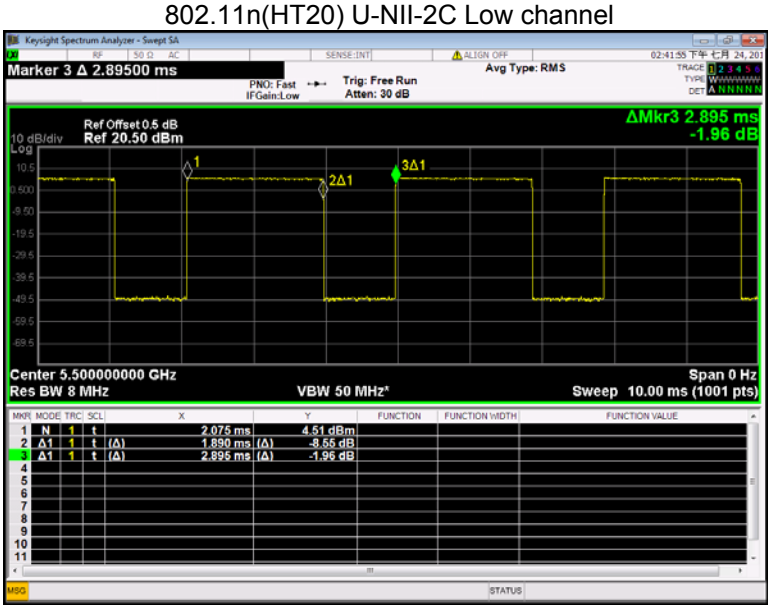
802.11ac(VHT80) U-NII-2A Low channel



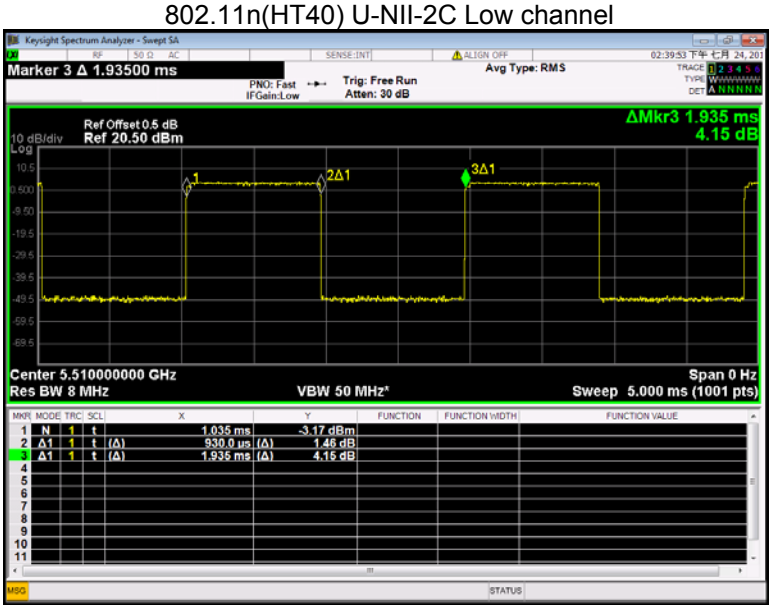
802.11a U-NII-2C Low channel



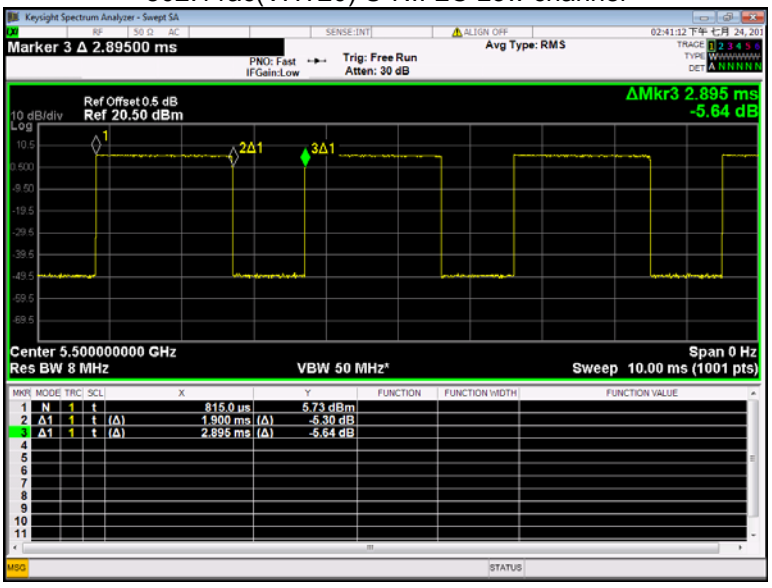
802.11n(HT20) U-NII-2C Low channel



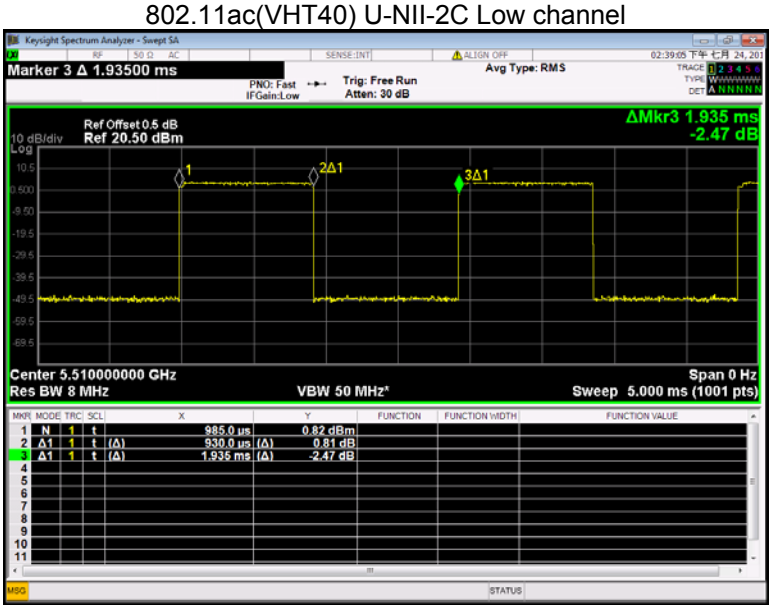
802.11n(HT40) U-NII-2C Low channel



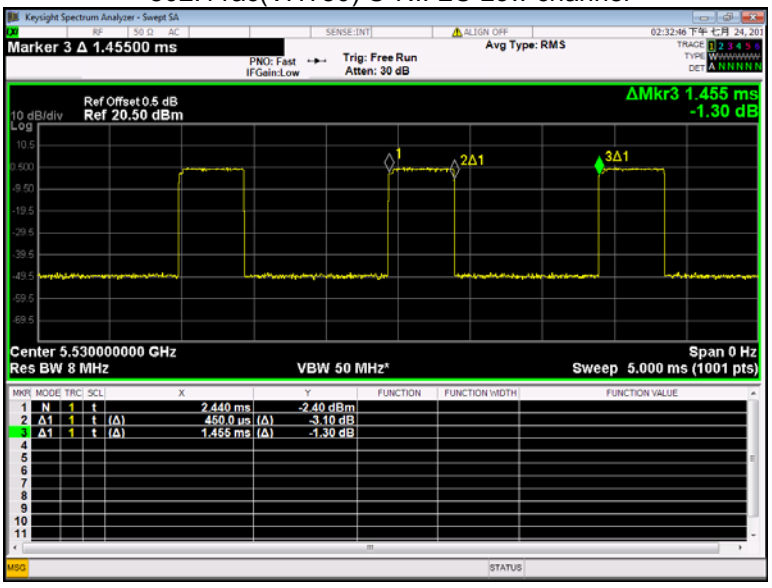
802.11ac(VHT20) U-NII-2C Low channel



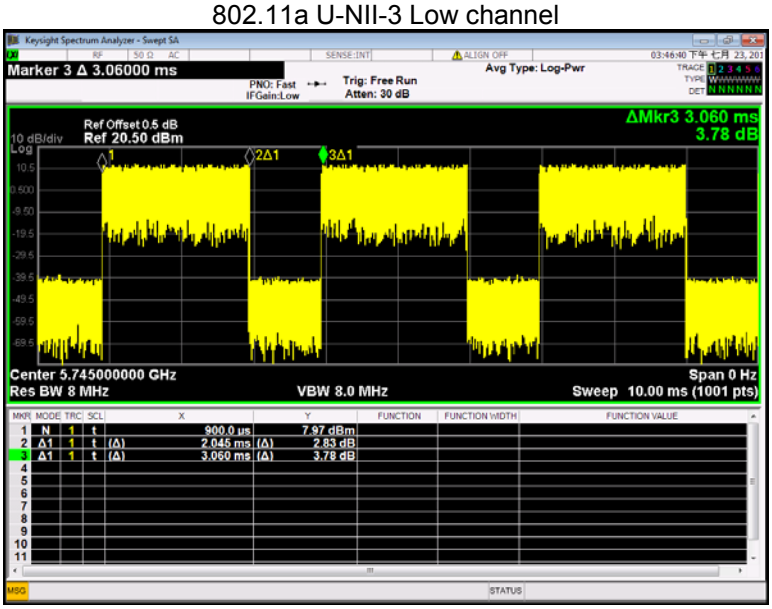
802.11ac(VHT40) U-NII-2C Low channel



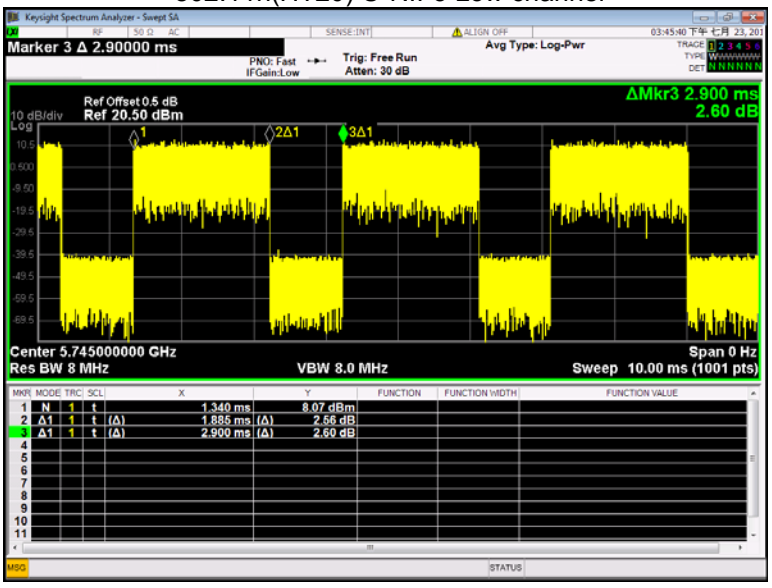
802.11ac(VHT80) U-NII-2C Low channel



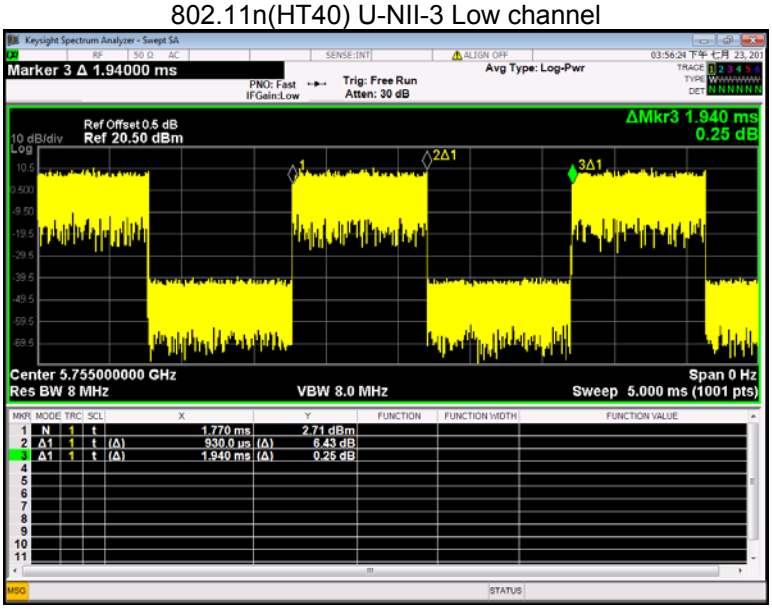
802.11a U-NII-3 Low channel



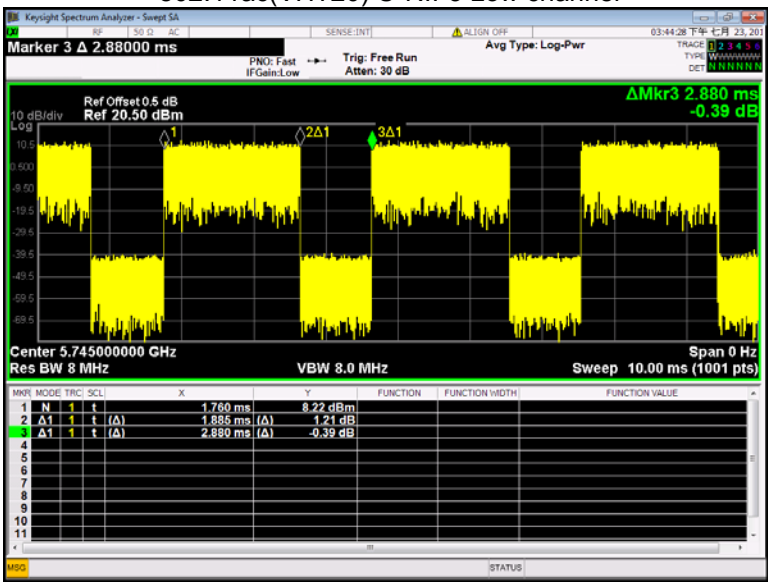
802.11n(HT20) U-NII-3 Low channel



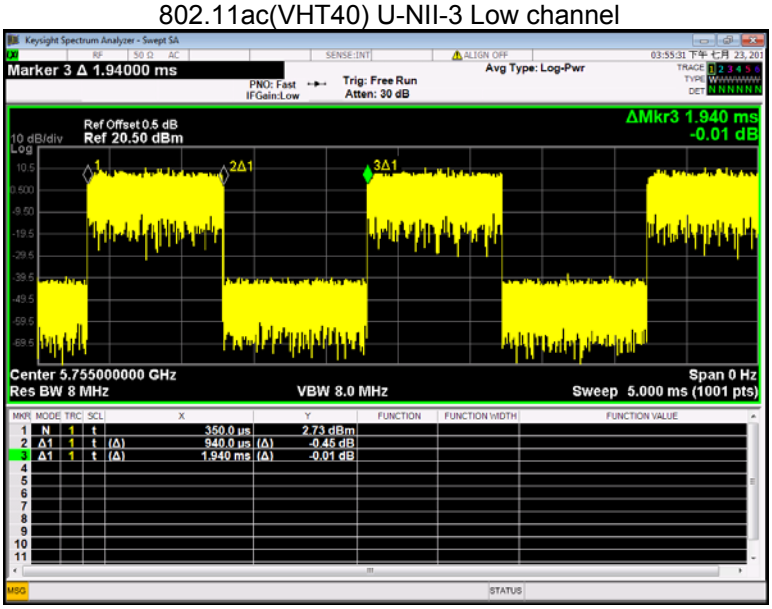
802.11n(HT40) U-NII-3 Low channel



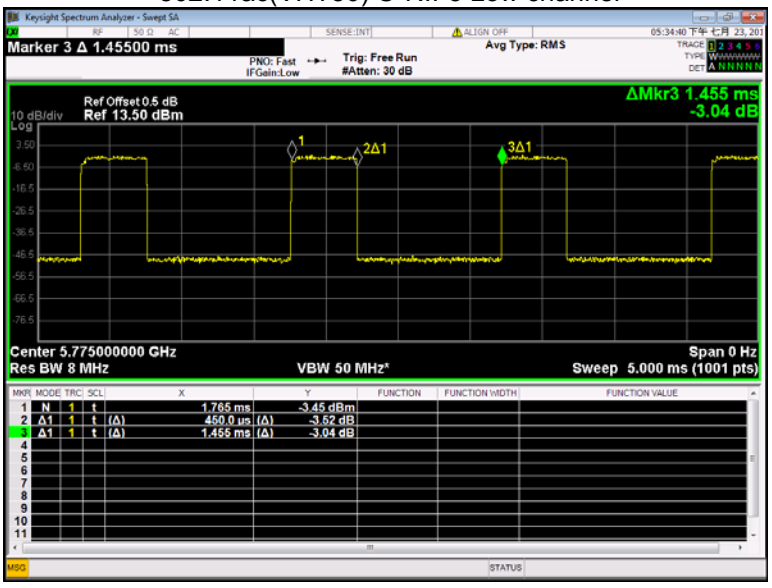
802.11ac(VHT20) U-NII-3 Low channel



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



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



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

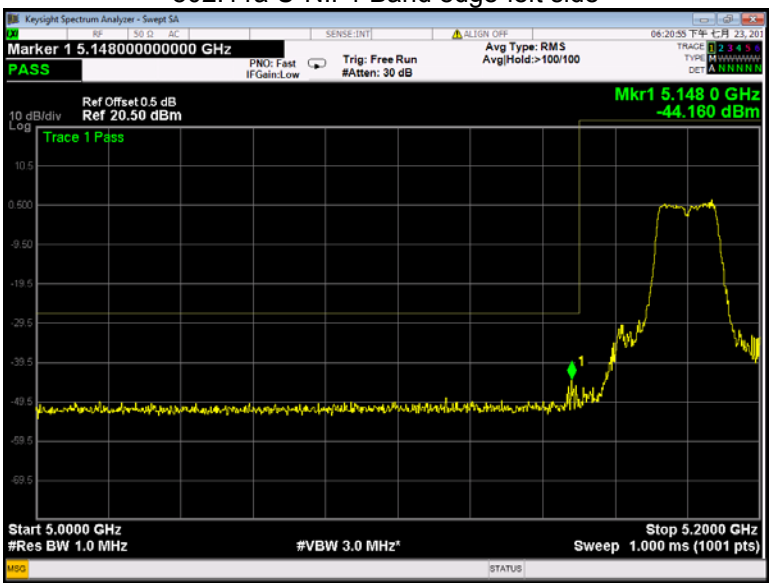
10.1 Test Produce

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.

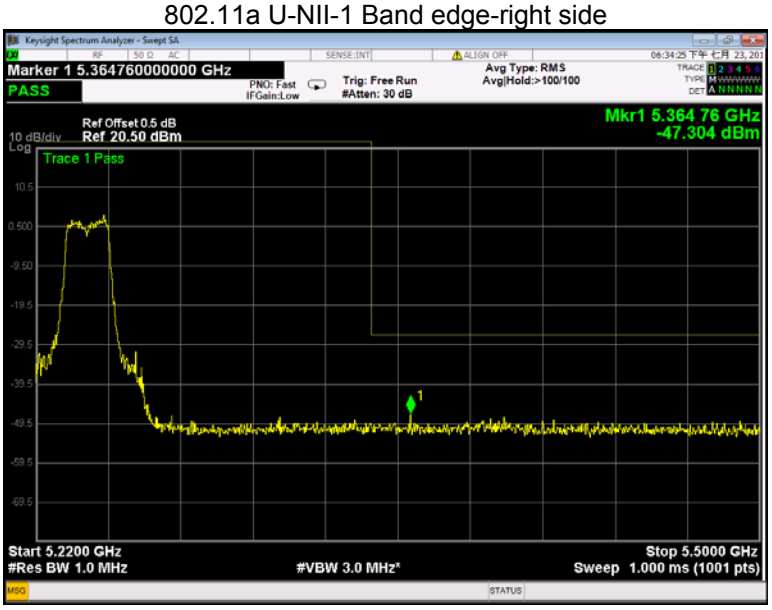
10.2 Test Result

Test result plots shown as follows:

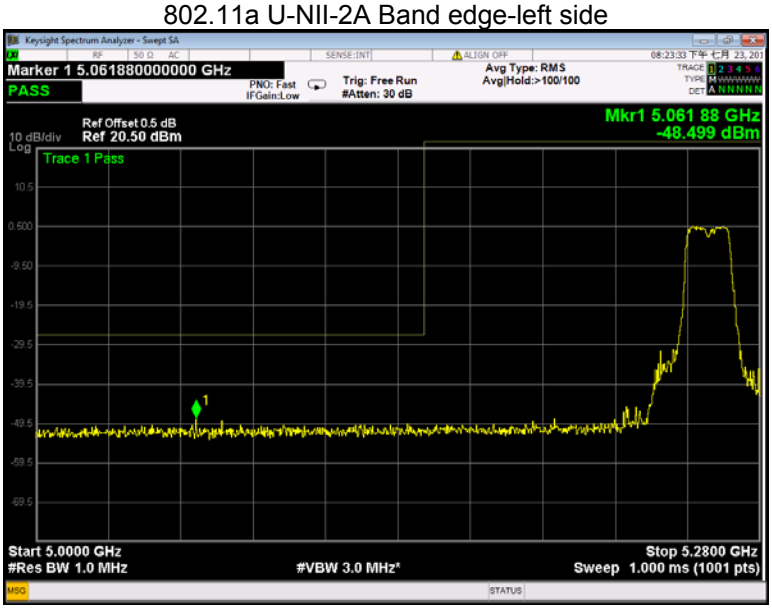
802.11a U-NII-1 Band edge-left side



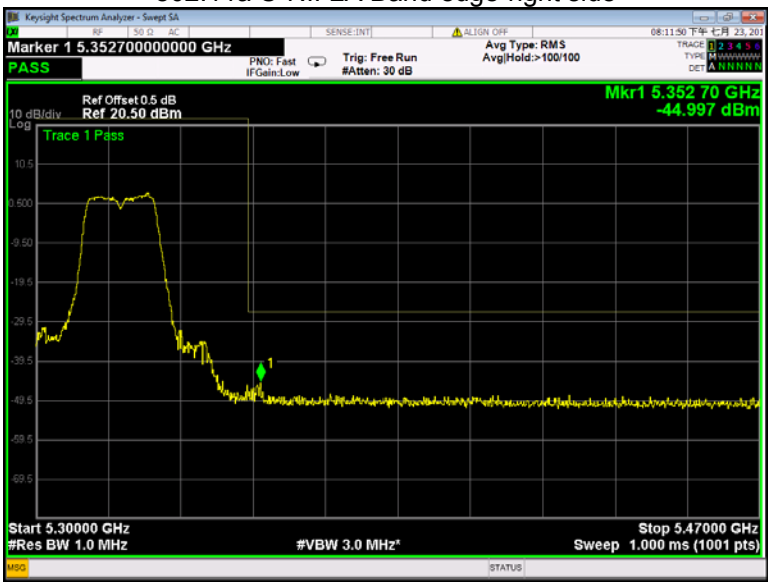
802.11a U-NII-1 Band edge-right side



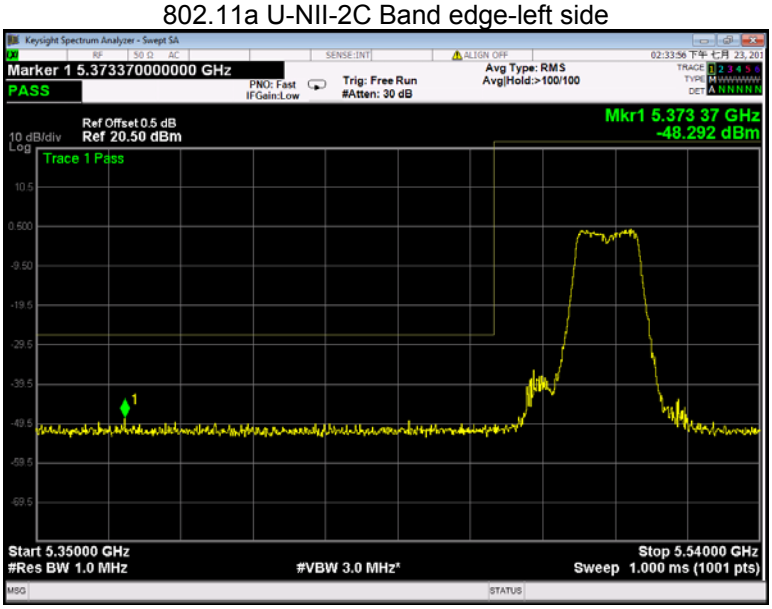
802.11a U-NII-2A Band edge-left side



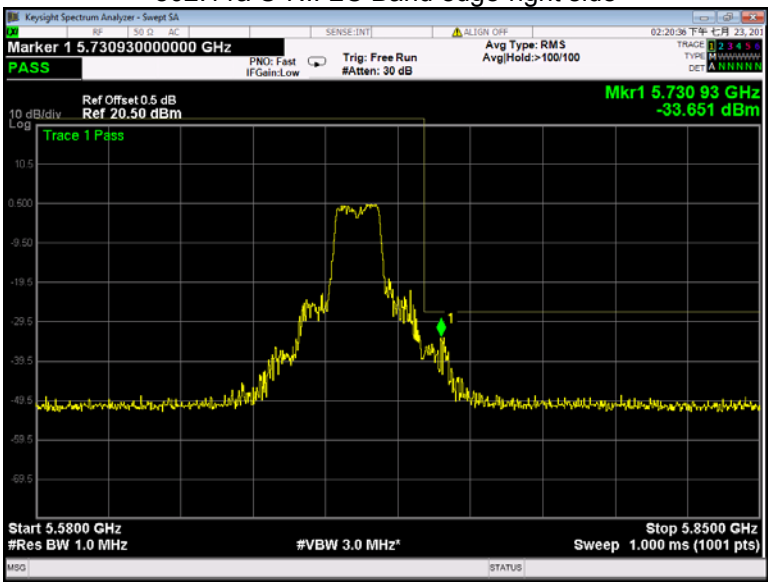
802.11a U-NII-2A Band edge-right side



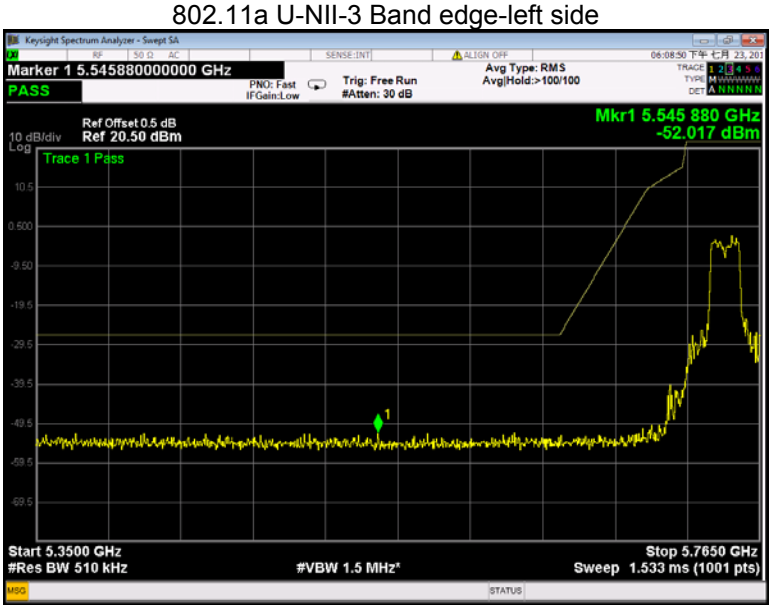
802.11a U-NII-2C Band edge-left side



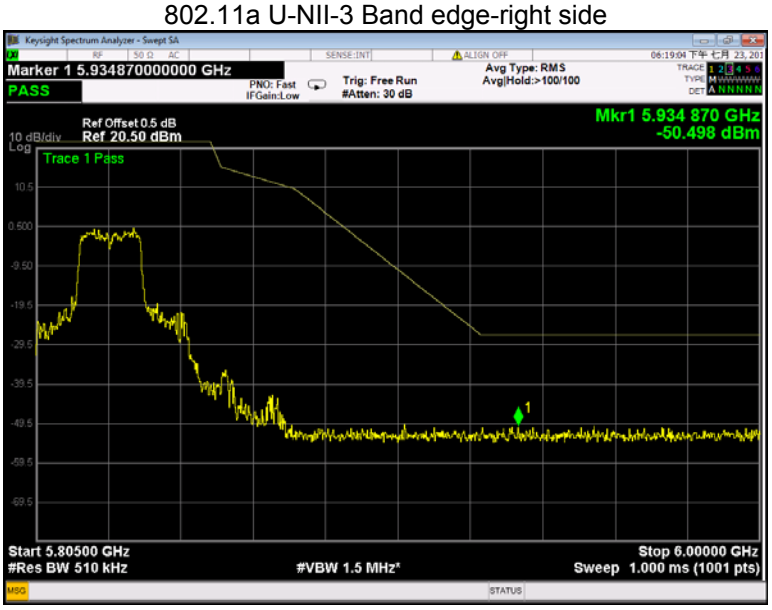
802.11a U-NII-2C Band edge-right side



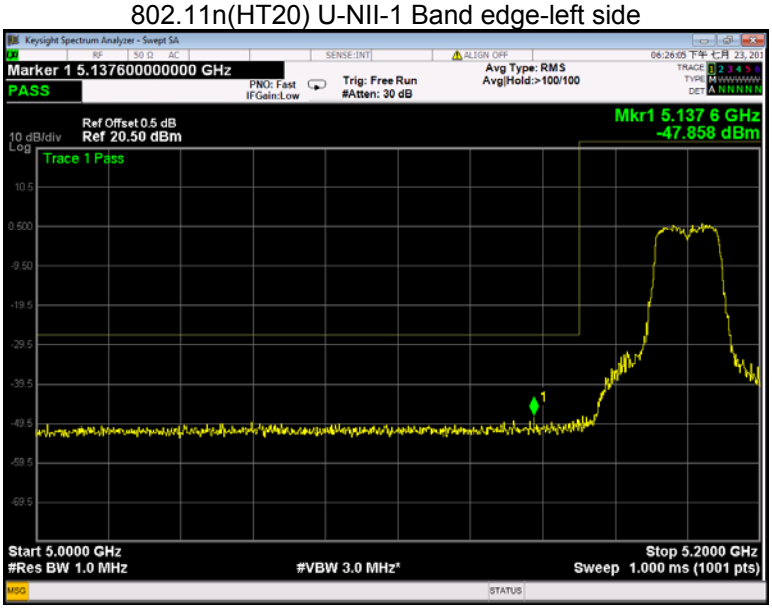
802.11a U-NII-3 Band edge-left side



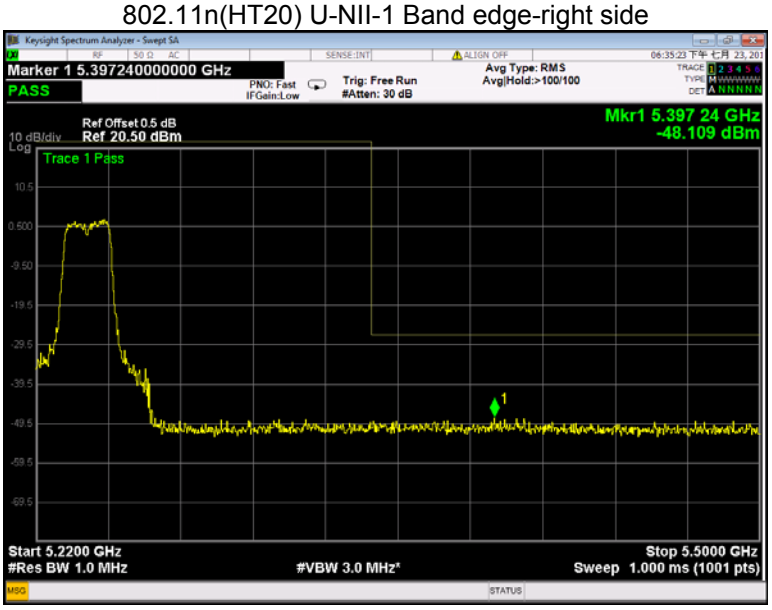
802.11a U-NII-3 Band edge-right side



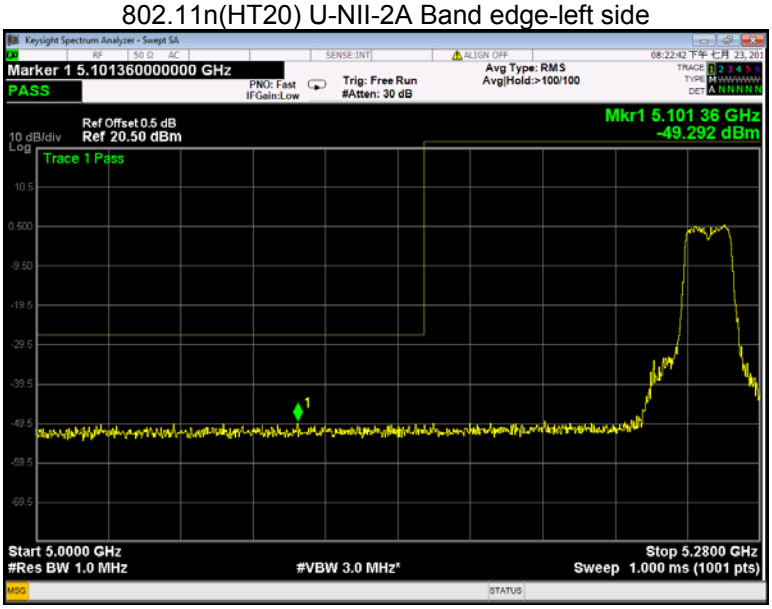
802.11n(HT20) U-NII-1 Band edge-left side



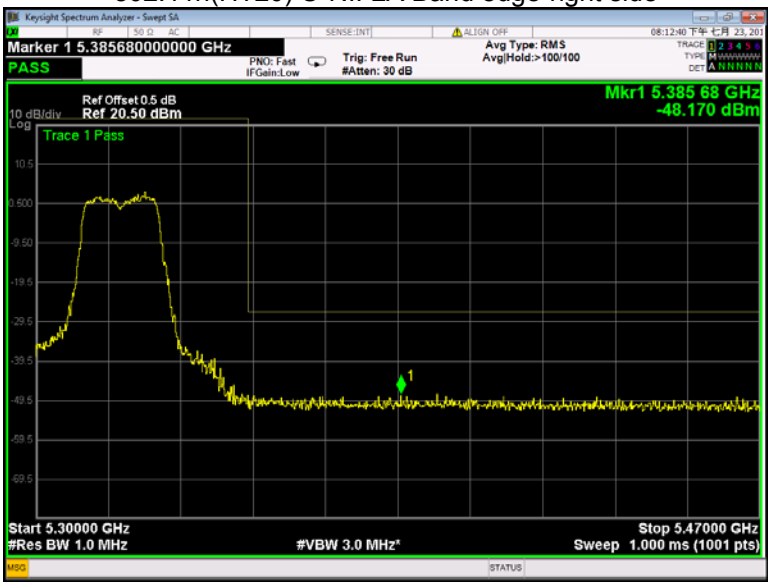
802.11n(HT20) U-NII-1 Band edge-right side



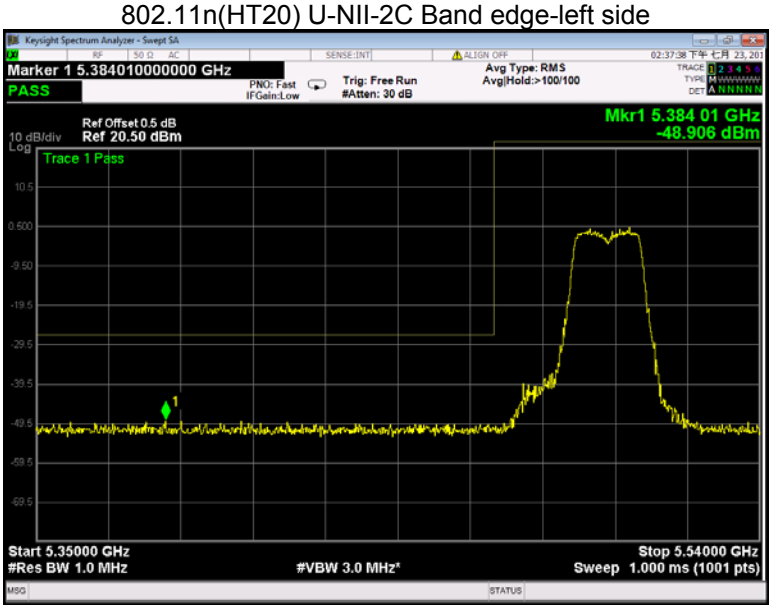
802.11n(HT20) U-NII-2A Band edge-left side



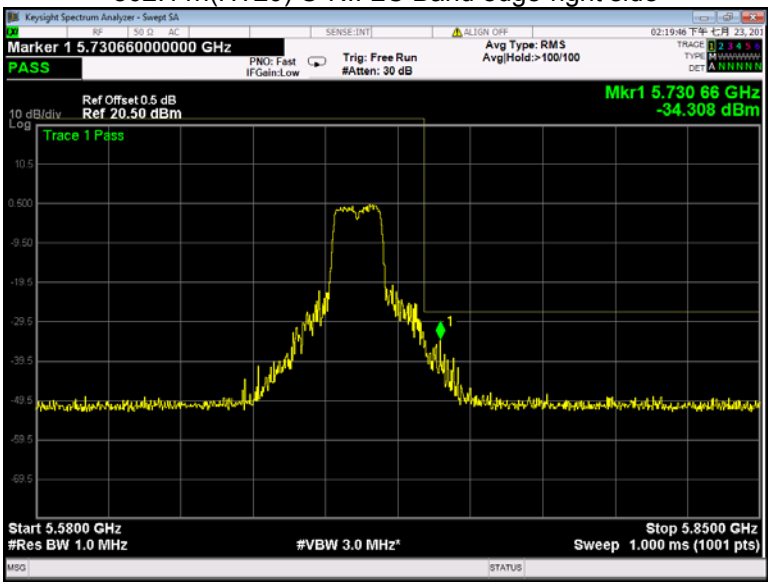
802.11n(HT20) U-NII-2A Band edge-right side



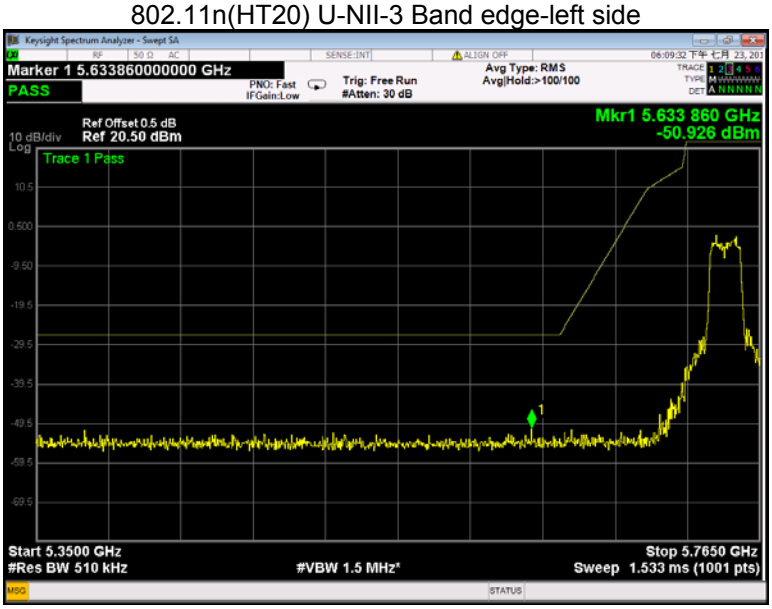
802.11n(HT20) U-NII-2C Band edge-left side



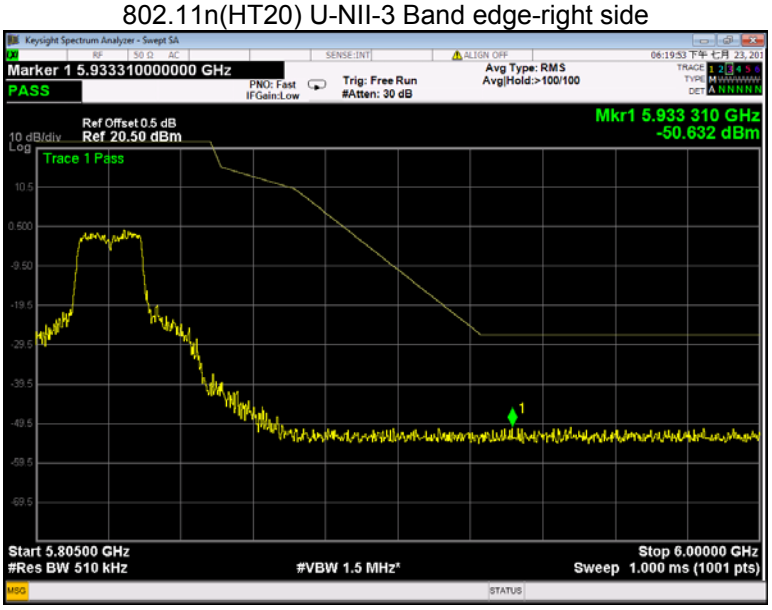
802.11n(HT20) U-NII-2C Band edge-right side



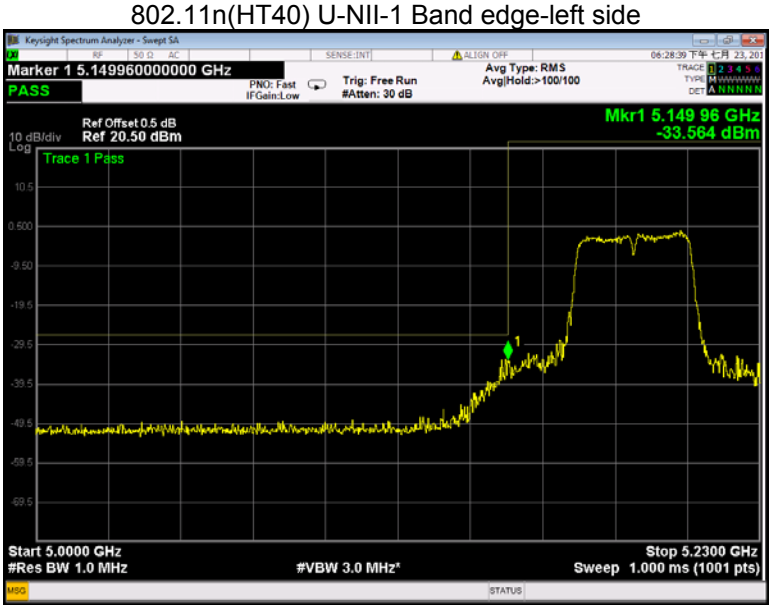
802.11n(HT20) U-NII-3 Band edge-left side



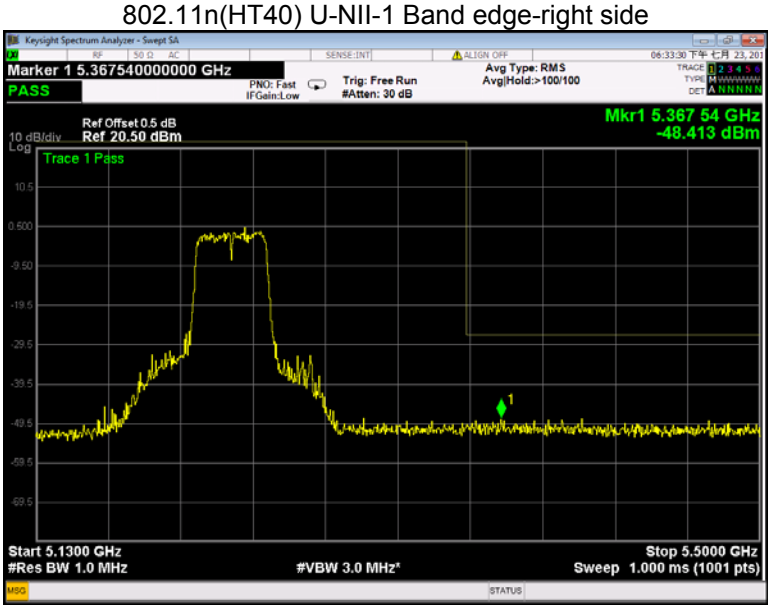
802.11n(HT20) U-NII-3 Band edge-right side



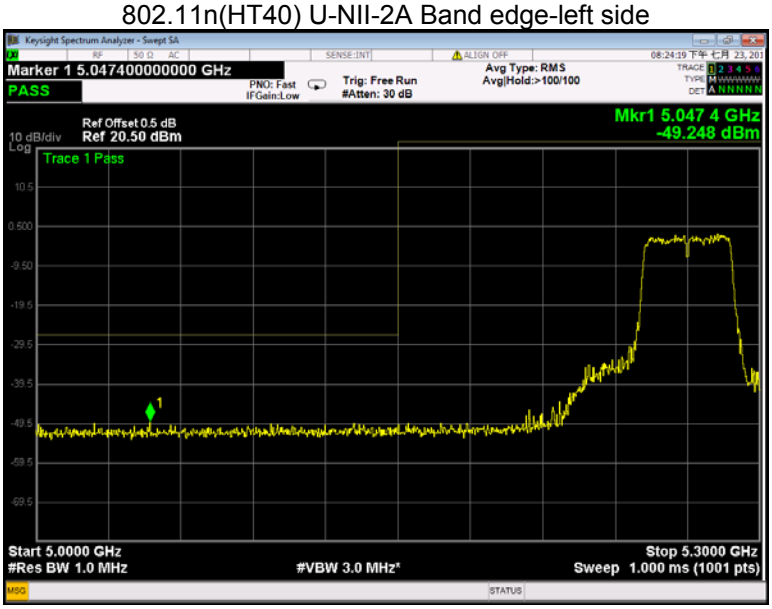
802.11n(HT40) U-NII-1 Band edge-left side



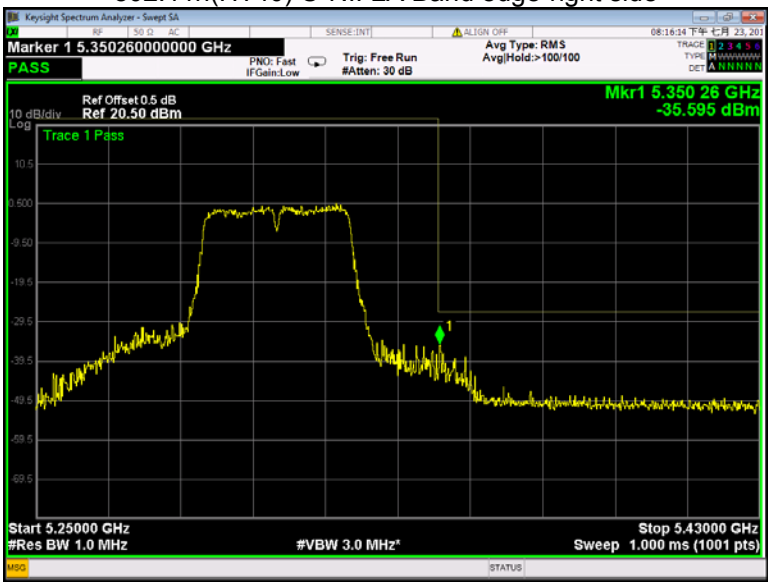
802.11n(HT40) U-NII-1 Band edge-right side



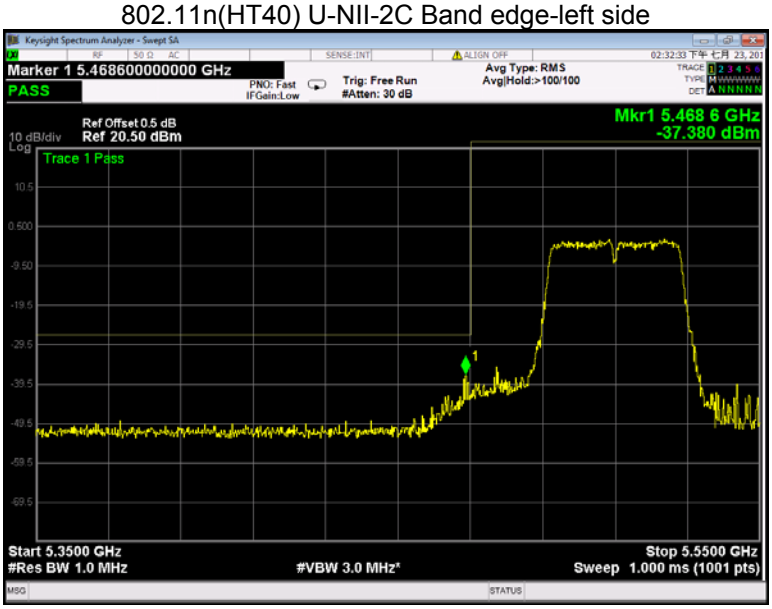
802.11n(HT40) U-NII-2A Band edge-left side



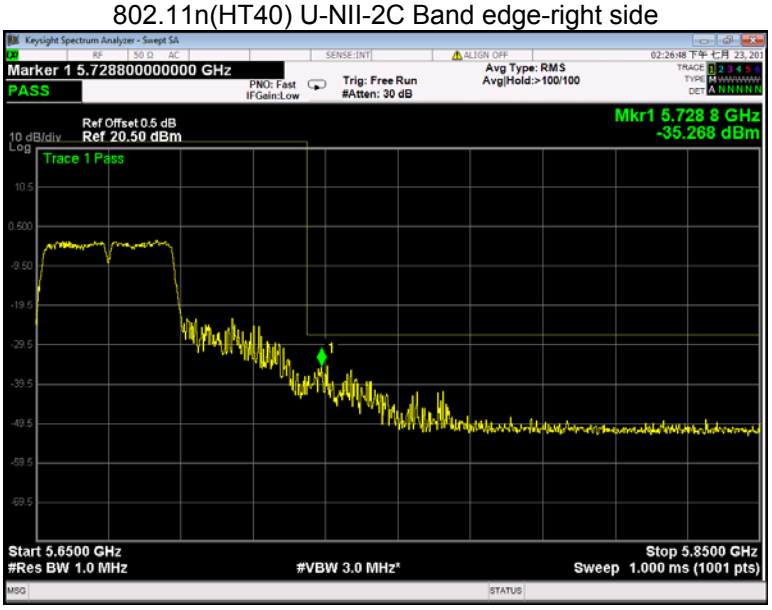
802.11n(HT40) U-NII-2A Band edge-right side



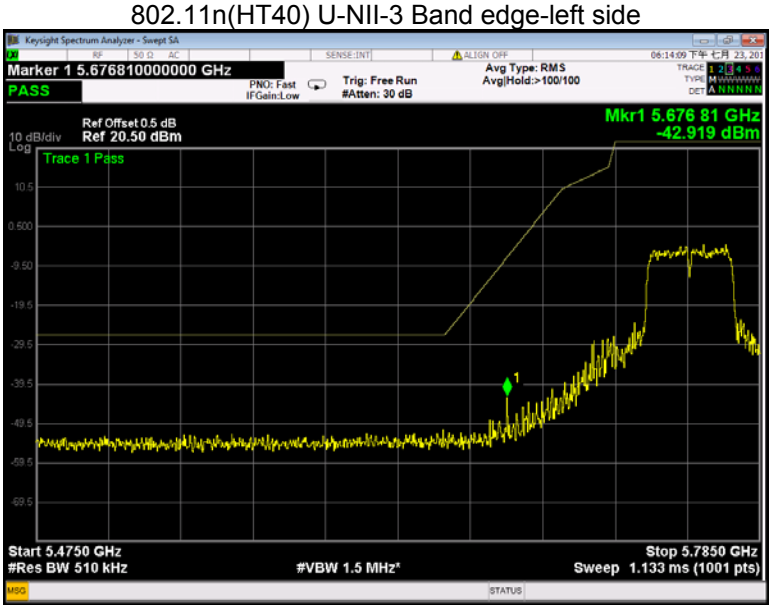
802.11n(HT40) U-NII-2C Band edge-left side



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

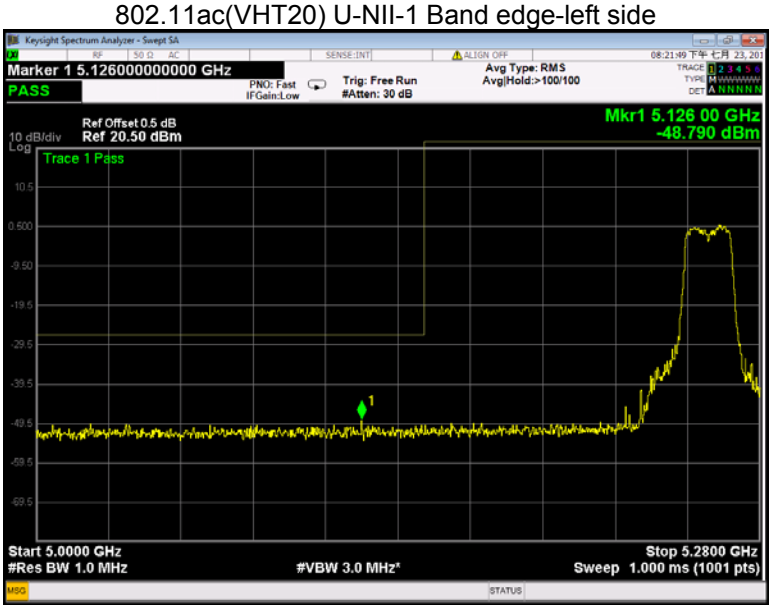


802.11n(HT40) U-NII-3 Band edge-left side

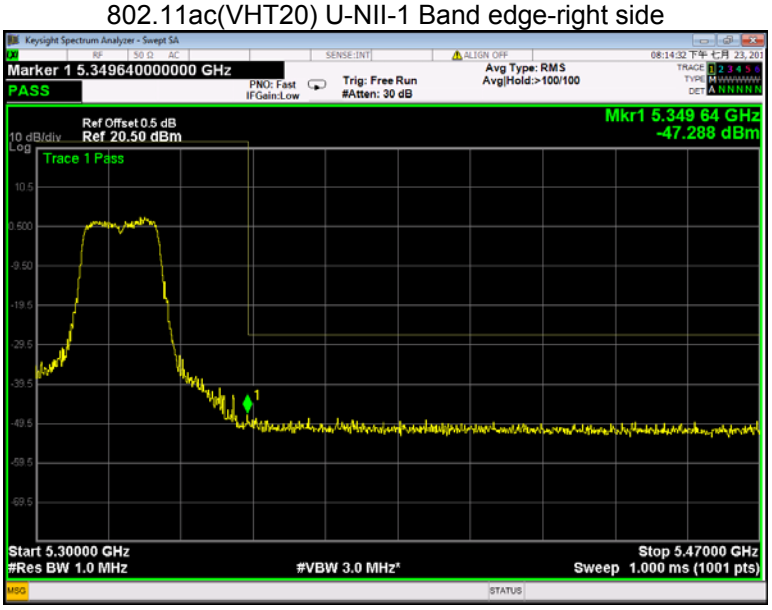


802.11n(HT40) U-NII-3 Band edge-right side

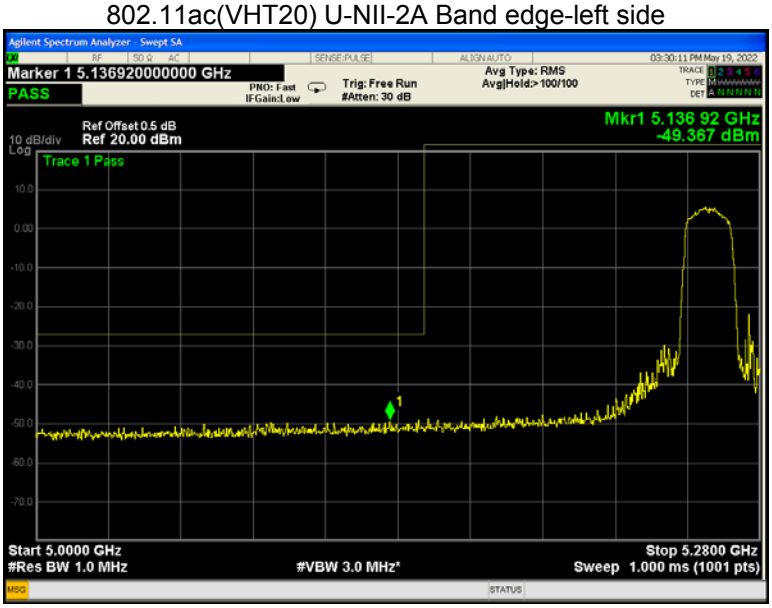
802.11ac(VHT20) U-NII-1 Band edge-left side



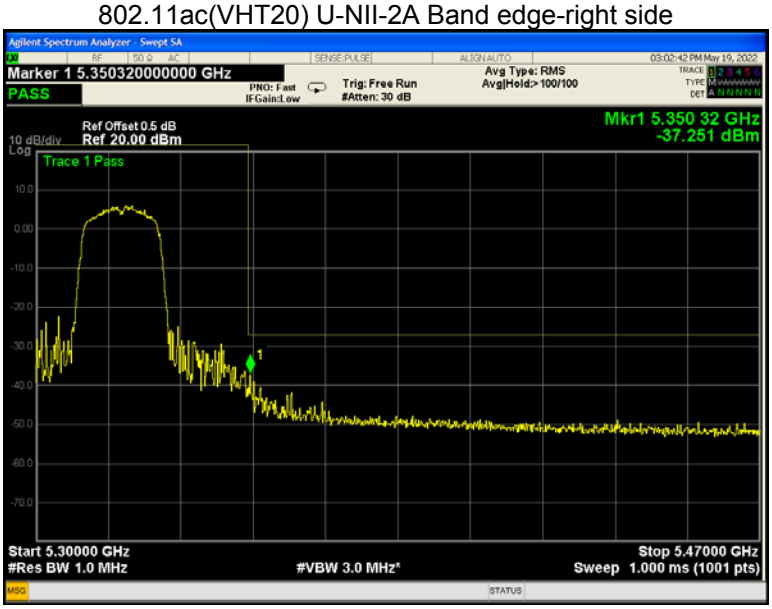
802.11ac(VHT20) U-NII-1 Band edge-right side



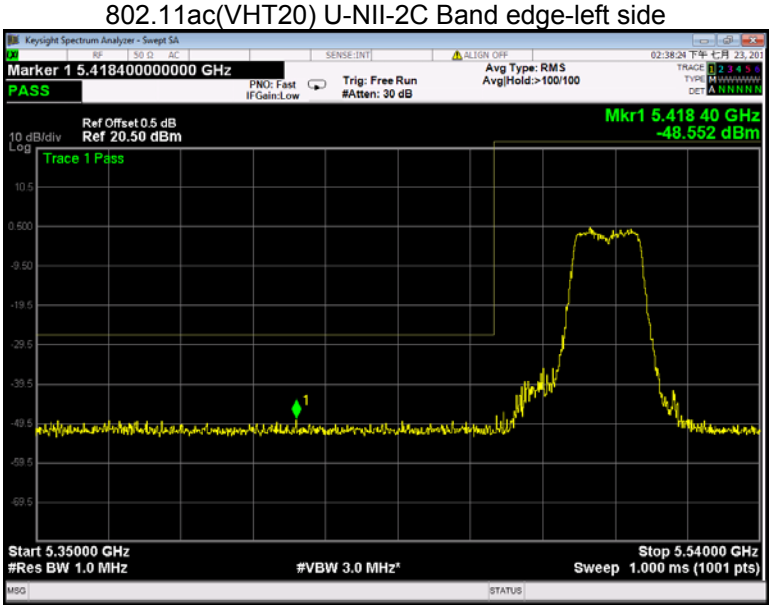
802.11ac(VHT20) U-NII-2A Band edge-left side



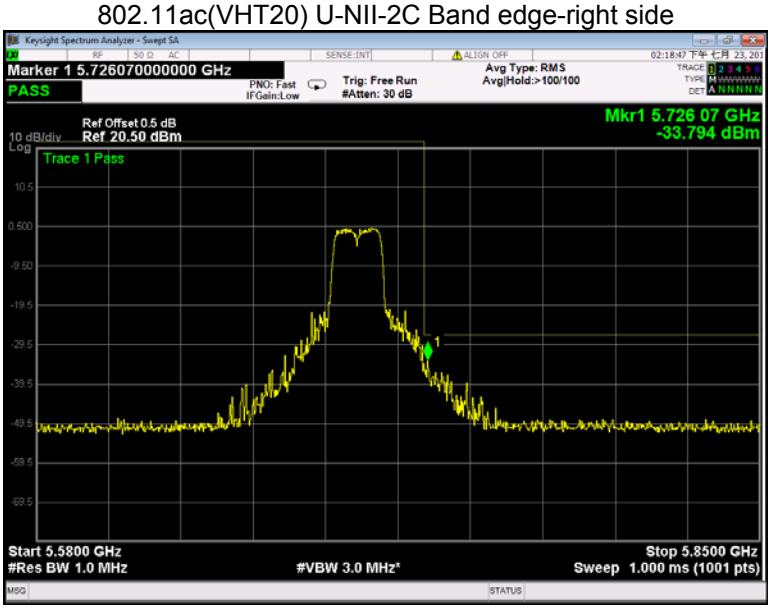
802.11ac(VHT20) U-NII-2A Band edge-right side



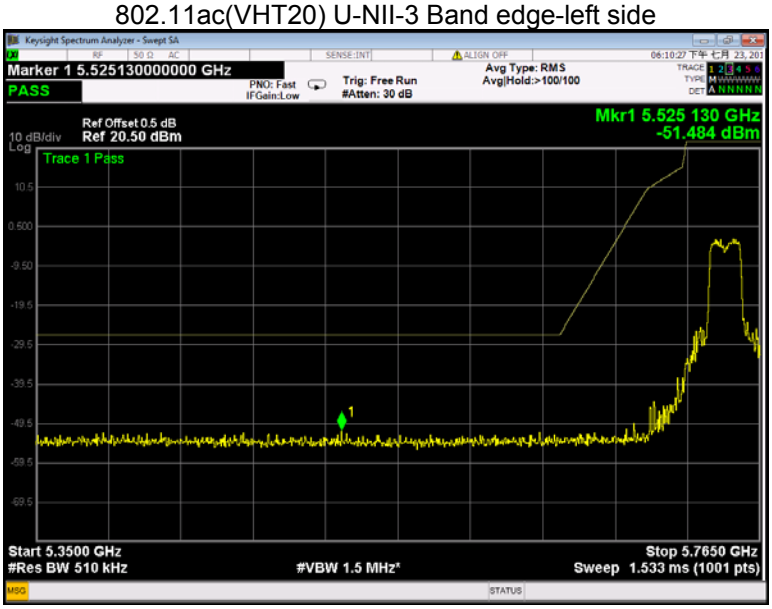
802.11ac(VHT20) U-NII-2C Band edge-left side



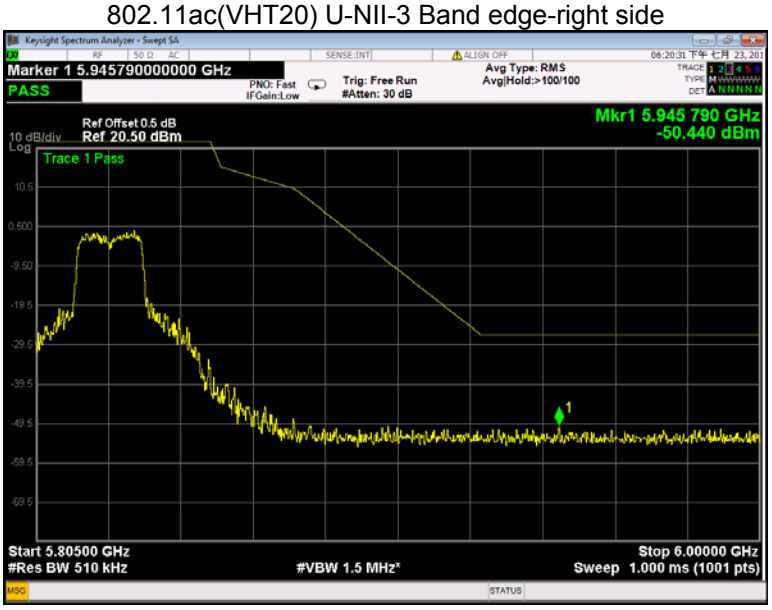
802.11ac(VHT20) U-NII-2C Band edge-right side



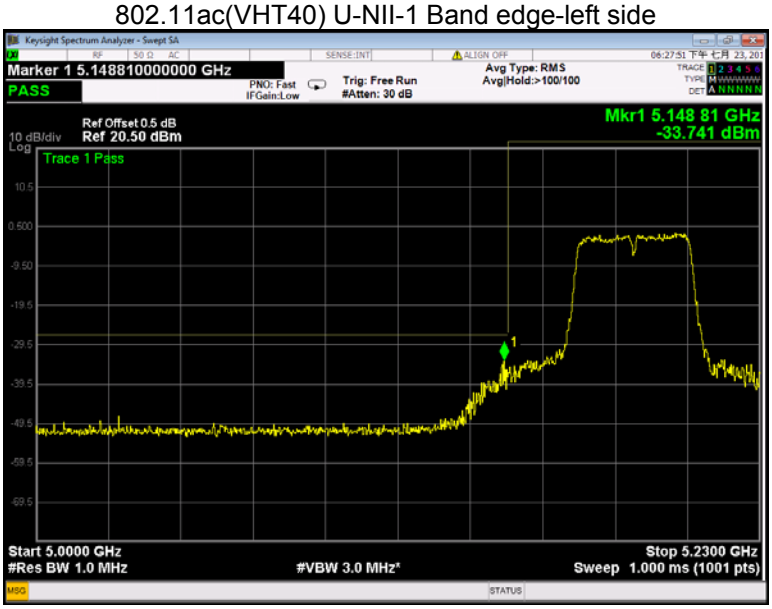
802.11ac(VHT20) U-NII-3 Band edge-left side



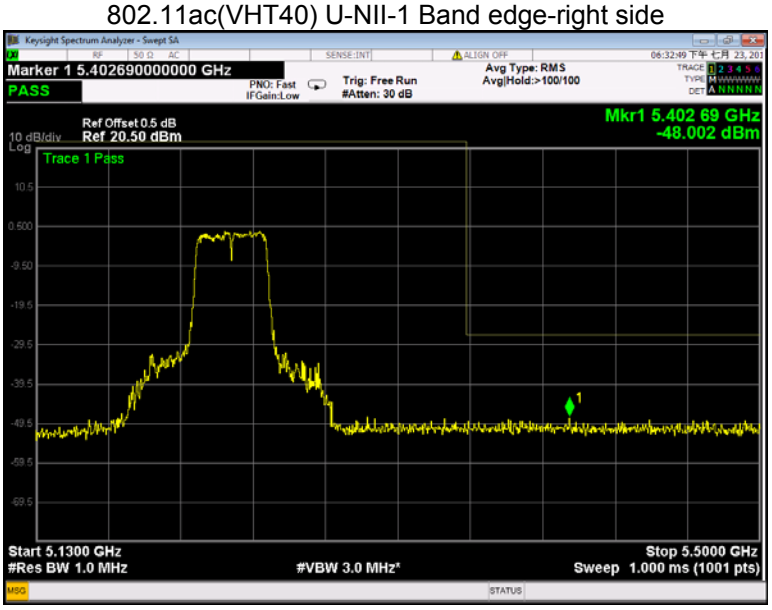
802.11ac(VHT20) U-NII-3 Band edge-right side



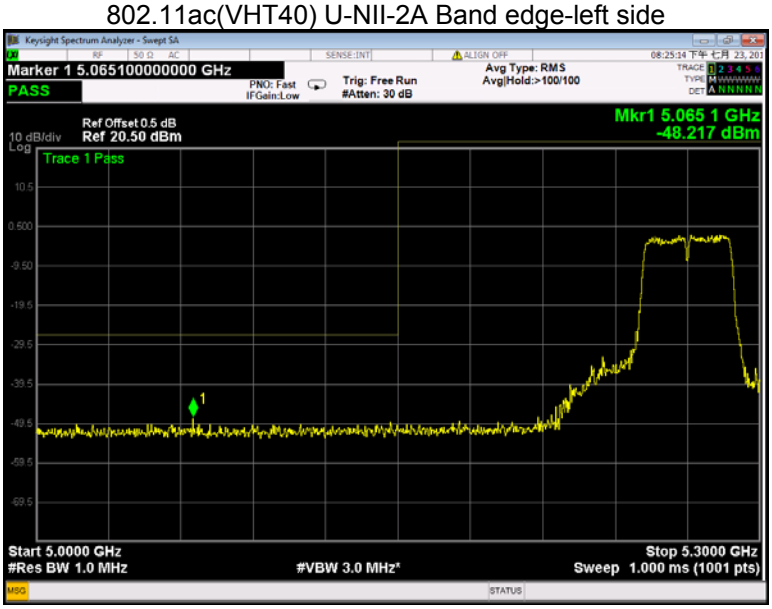
802.11ac(VHT40) U-NII-1 Band edge-left side



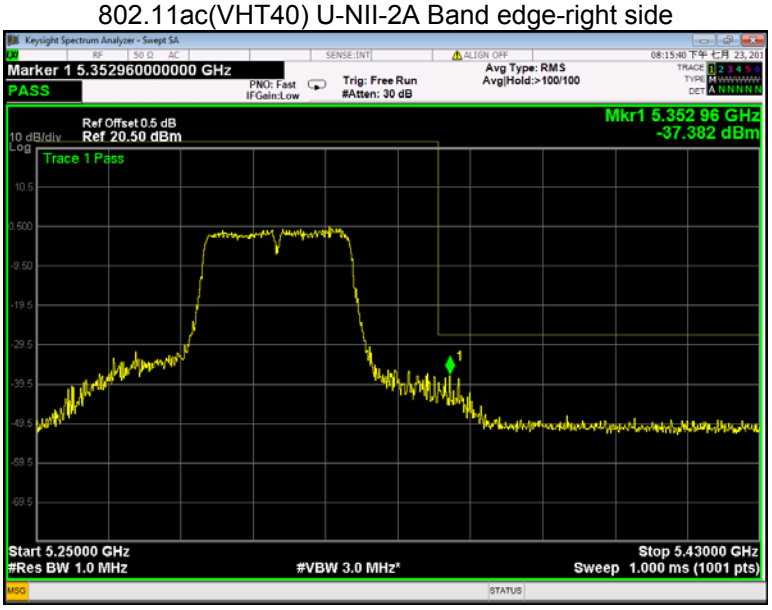
802.11ac(VHT40) U-NII-1 Band edge-right side



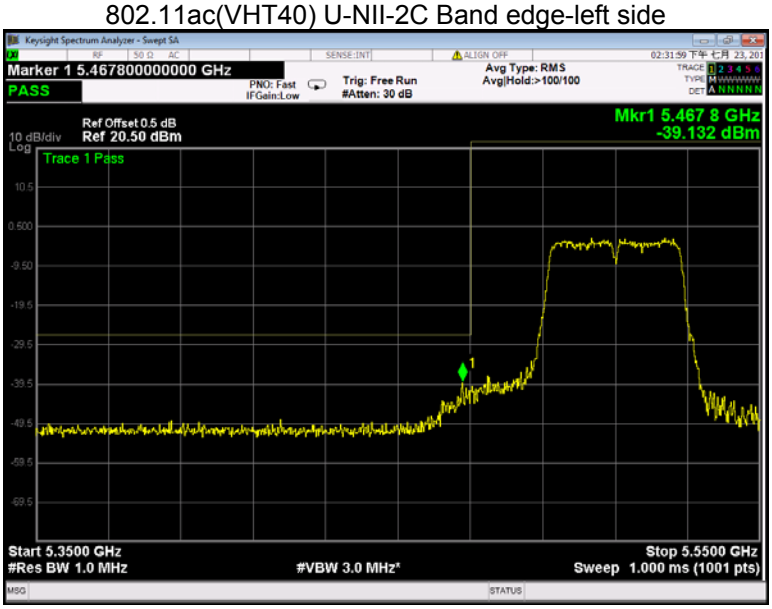
802.11ac(VHT40) U-NII-2A Band edge-left side



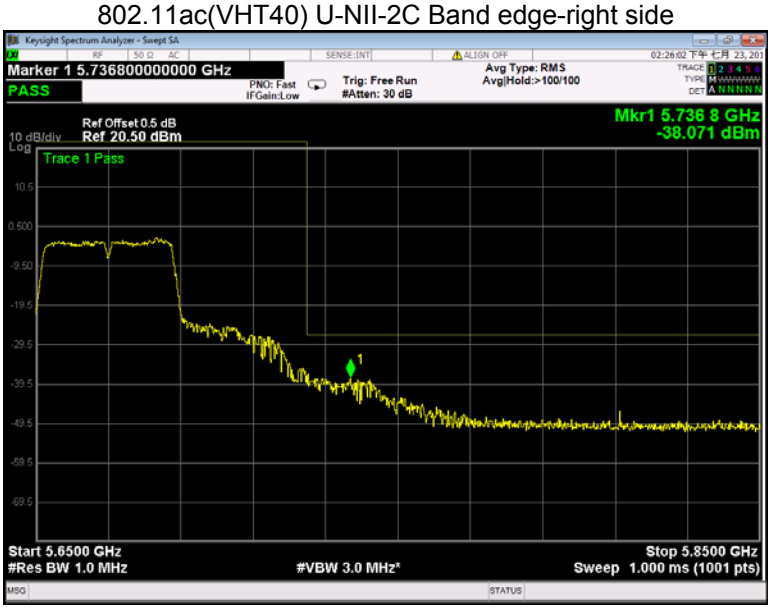
802.11ac(VHT40) U-NII-2A Band edge-right side



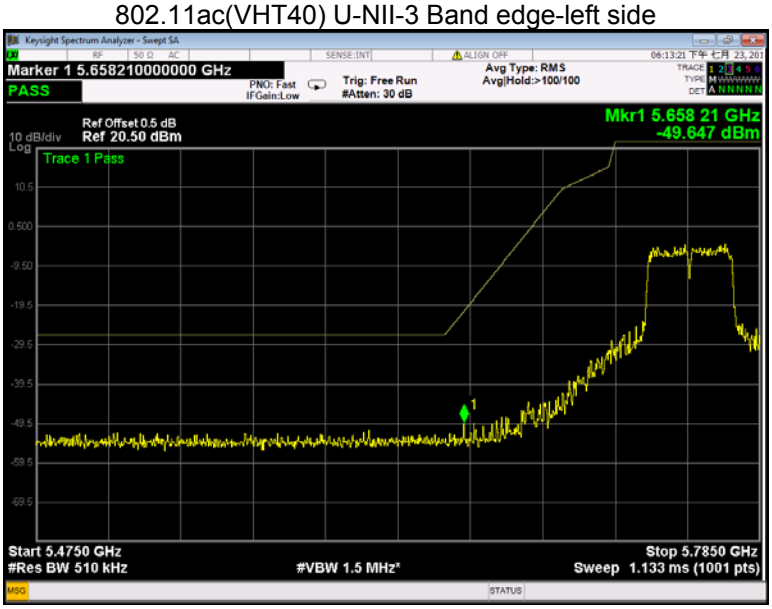
802.11ac(VHT40) U-NII-2C Band edge-left side



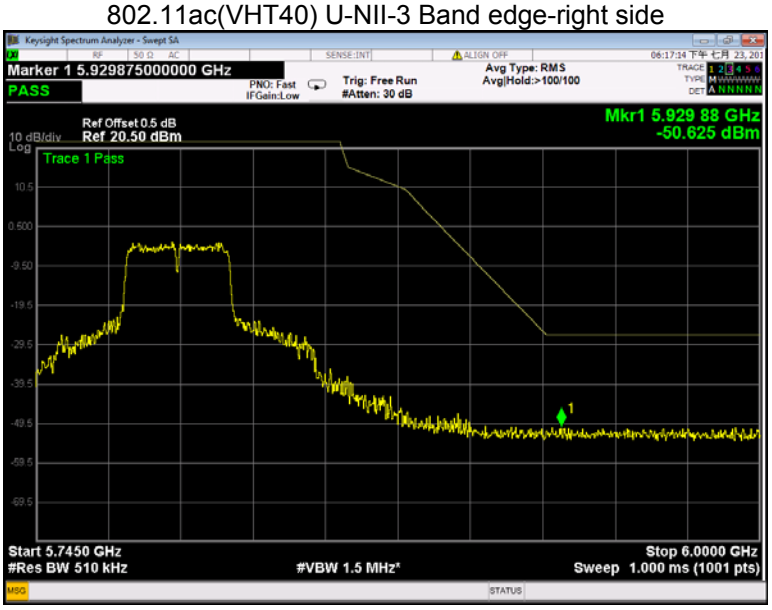
802.11ac(VHT40) U-NII-2C Band edge-right side



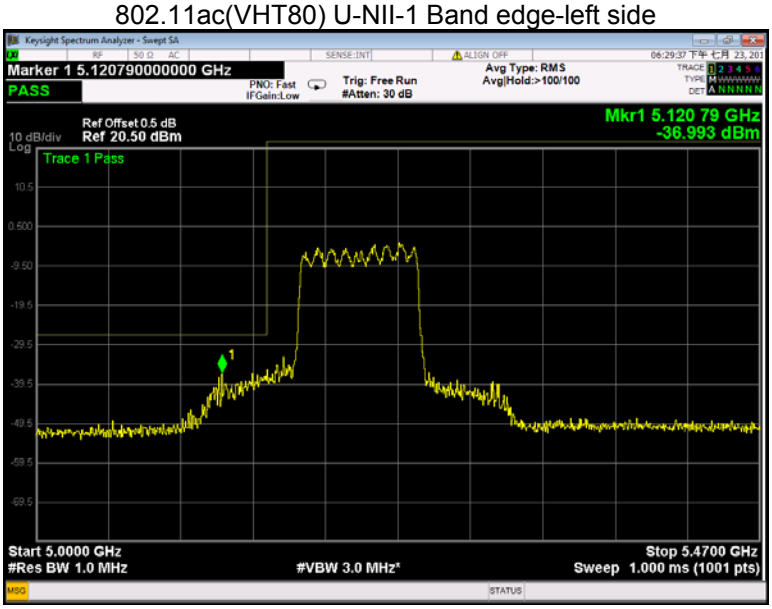
802.11ac(VHT40) U-NII-3 Band edge-left side



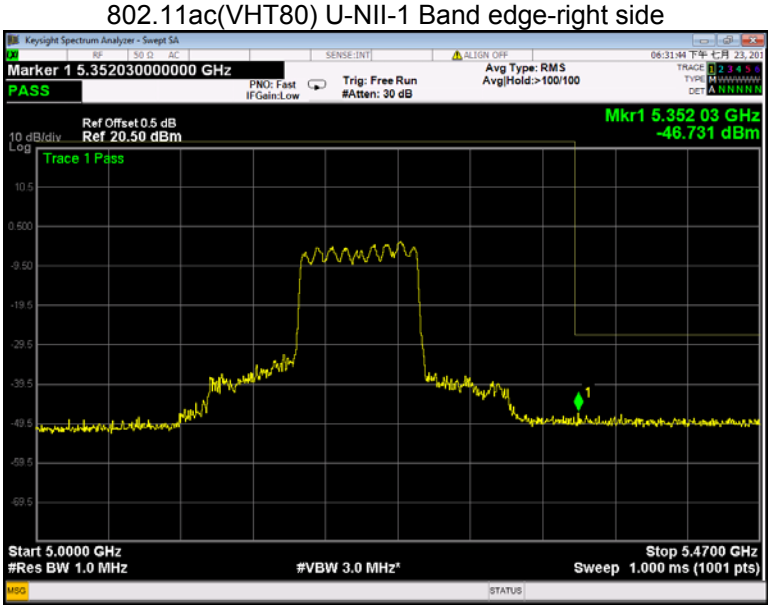
802.11ac(VHT40) U-NII-3 Band edge-right side



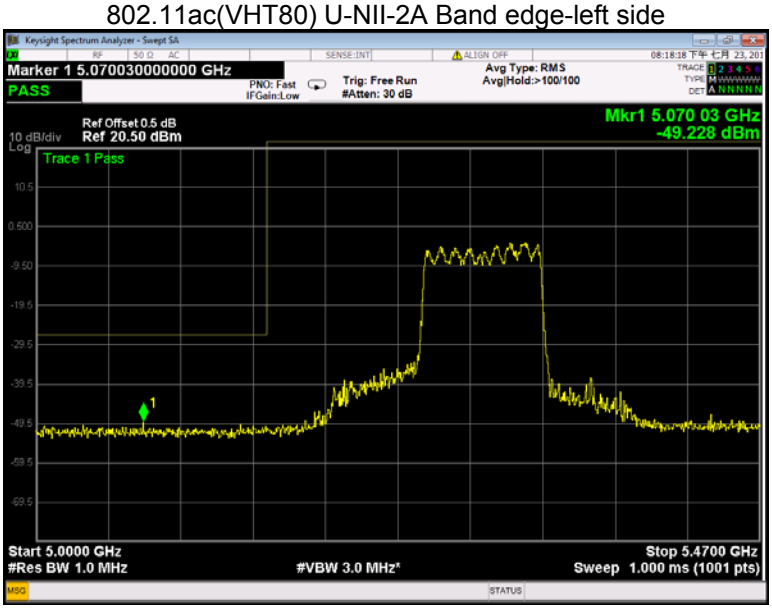
802.11ac(VHT80) U-NII-1 Band edge-left side



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