

TEST REPORT

Reference No. : WTD22D03048052W005
FCC ID..... : 2AEPISILVERMAXLITE2
Applicant..... : COLOMBIANA DE COMERCIO S.A.
Address : Car. 43E No 8-71, Medellin, Colombia
Manufacturer : COOSEA GROUP (HK) COMPANY LIMITED LIMITED
Address : UNIT 5-6,16F.,MULTIFIELD PLAZA 3-7A PRAT AVENUE TSIM SHA
TSUI KL, HONG KONG
Product Name : Smartphone
Model No. : Silver Max Lite 2
Brand : Kalley
Standards : FCC CFR 47 Part 15 C Section 15.407
Date of Receipt sample..... : 2022-03-21
Date of Test..... : 2022-04-13 to 2022-04-14
Date of Issue : 2022-04-14
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.

Prepared By:

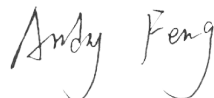
Waltek Testing Group Co., Ltd.

Address: No. 77, Houjie Section, Guantai Road, Houjie Town, Dongguan City, Guangdong, China

Tel: +86-769-2267 6998

Fax: +86-769-2267 6828

Compiled by:



Andy Feng / Project Engineer

Approved by:



Daniel Liu / Designated Reviewer

2 Contents

	Page
1 COVER PAGE	1
2 CONTENTS	2
3 REVISION HISTORY	4
4 GENERAL INFORMATION	5
4.1 GENERAL DESCRIPTION OF E.U.T.	5
4.2 DETAILS OF E.U.T.	5
4.3 CHANNEL LIST	6
4.4 TEST MODE DESCRIPTION:.....	9
4.5 TEST FACILITY	9
5 EQUIPMENT USED DURING TEST	10
5.1 EQUIPMENTS LIST	10
5.2 DESCRIPTION OF SUPPORT UNITS	11
5.3 MEASUREMENT UNCERTAINTY	11
5.4 TEST EQUIPMENT CALIBRATION	11
6 TEST SUMMARY	12
7 CONDUCTED EMISSION	13
7.1 E.U.T. OPERATION	13
7.2 EUT SETUP	13
7.3 MEASUREMENT DESCRIPTION	13
7.4 CONDUCTED EMISSION TEST RESULT	14
8 RADIATED EMISSIONS	16
8.1 EUT OPERATION.....	16
8.2 TEST SETUP	17
8.3 SPECTRUM ANALYZER SETUP	18
8.4 TEST PROCEDURE	19
8.5 CORRECTED AMPLITUDE & MARGIN CALCULATION	19
8.6 SUMMARY OF TEST RESULTS	20
9 DUTY CYCLE	52
9.1 SUMMARY OF TEST RESULTS	52
10 BAND EDGE	66
10.1 TEST PROCEDURE	66
10.2 TEST RESULT	67
11 6 DB BANDWIDTH	91
11.1 TEST PROCEDURE:.....	91
11.2 TEST RESULT:	91
12 26 DB BANDWIDTH AND 99% OCCUPIED BANDWIDTH	99
12.1 TEST PROCEDURE:.....	99
12.2 TEST RESULT:	100
13 CONDUCTED OUTPUT POWER	132
13.1 TEST PROCEDURE:.....	132
13.2 TEST RESULT :	133
14 POWER SPECTRAL DENSITY	165
14.1 TEST PROCEDURE:.....	165
14.2 TEST RESULT:	166
15 FREQUENCY STABILITY	198

15.1	TEST PROCEDURE:.....	198
15.2	TEST RESULT:	199
16	ANTENNA REQUIREMENT	201
17	RF EXPOSURE.....	202
18	PHOTOGRAPHS OF TEST SETUP AND EUT.....	203

3 Revision History

Test report No.	Date of Receipt sample	Date of Test	Date of Issue	Purpose	Comment	Approved
WTD22D03048 052W005	2022-03-21	2022-04-13 to 2022-04-14	2022-04-14	original	-	Valid

4 General Information

4.1 General Description of E.U.T.

Product:	Smartphone
Model(s):	Silver Max Lite 2
Model Description:	N/A
GSM Band(s):	GSM 850/900/1800/1900MHz
GPRS/EGPRS Class:	12
WCDMA Band(s):	FDD Band II/V
LTE Band(s):	FDD Band 4/7
Wi-Fi Specification:	2.4G-802.11b/g/n HT20/n HT40 5G-802.11a/ n(HT20/40)/ac(HT20/40/80)
Bluetooth Version:	Bluetooth v5.0 with BLE
GPS:	Support
NFC:	N/A
Hardware Version:	KE2S_01
Software Version:	Kally_SM_LITE_2_V01_20220225
Highest frequency (Exclude Radio):	1.8GHz
Storage Location:	Internal Storage
Note:	N/A

4.2 Details of E.U.T.

Operation Frequency:	802.11a/n/ac (HT20): U-NII-1: 5150-5250MHz, U-NII-2A: 5250-5350MHz(DFS), U-NII-2C: 5470-5725MHz(DFS), U-NII-3:5725-5850MHz 802.11n/ac (HT40): U-NII-1: 5190-5230MHz, U-NII-2A: 5270-5310MHz(DFS), U-NII-2C: 5510-5670MHz(DFS), U-NII-3: 5755-5795MHz 802.11ac (HT80): 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: 13.49dBm U-NII-2A: 13.30dBm U-NII-2C: 11.54dBm U-NII-3: 8.23dBm
Type of Modulation:	OFDM
Antenna installation:	internal permanent antenna

Antenna Gain:	0.8dBi
Ratings:	Battery DC 3.85V, 4900mAh DC 5V, 1.55A, charging from adapter (Adapter Input: 100-240V~50/60Hz 0.25A)
Adapter:	Manufacturer: Guangdong Beicom Electronics Co.,Ltd Model No.: U282F0A050155

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/ac(HT20):

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/ac(HT40):

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(HT80):

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/ac(HT20/40/80)	MCS0	TX
Duty Cycle	802.11a (HT20)	6 Mbps	TX
	802.11n/ac(HT20/40/80)	MCS0	TX
Band Edge	802.11a (HT20)	6 Mbps	TX
	802.11n/ac(HT20/40/80)	MCS0	TX
6dB Bandwidth	802.11a (HT20)	6 Mbps	TX
	802.11n/ac(HT20/40/80)	MCS0	TX
26dB Bandwidth and 99% Occupied Bandwidth	802.11a (HT20)	6 Mbps	TX
	802.11n/ac(HT20/40/80)	MCS0	TX
Conducted Output Power	802.11a (HT20)	6 Mbps	TX
	802.11n/ac(HT20/40/80)	MCS0	TX
Power Spectral Density	802.11a (HT20)	6 Mbps	TX
	802.11n/ac(HT20/40/80)	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.	EMI Test Receiver	R&S	ESCI	100947	2021-07-30	2022-07-29
2.	LISN	R&S	ENV216	101215	2021-07-30	2022-07-29
3.	Cable	Top	TYPE16(3.5M)	-	2021-07-30	2022-07-29
Conducted Emissions Test Site 2#						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1.	EMI Test Receiver	R&S	ESCI	101155	2021-07-30	2022-07-29
2.	LISN	SCHWARZBECK	NSLK 8128	8128-289	2021-07-30	2022-07-29
3.	Limitter	York	MTS-IMP-136	261115-001-0024	2021-07-30	2022-07-29
4.	Cable	LARGE	RF300	-	2021-07-30	2022-07-29
3m Semi-anechoic Chamber for Radiation Emissions Test site 1#						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1	EMC Analyzer	Agilent	E7405A	MY45114943	2021-04-20	2022-04-19
2	Active Loop Antenna	Beijing Dazhi	ZN30900A	-	2021-04-20	2022-04-19
3	Trilog Broadband Antenna	SCHWARZBECK	VULB9163	336	2021-08-22	2022-08-21
4	Coaxial Cable (below 1GHz)	Top	TYPE16(13M)	-	2021-04-20	2022-04-19
5	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120 D	667	2021-04-20	2022-04-19
6	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9170	335	2021-04-20	2022-04-19
7	Broadband Preamplifier	COMPLIANCE DIRECTION	PAP-1G18	2004	2021-04-20	2022-04-19
8	Coaxial Cable (above 1GHz)	Top	1GHz-25GHz	EW02014-7	2021-04-20	2022-04-19
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	2021-04-20	2022-04-19
2	Trilog Broadband Antenna	SCHWARZBECK	VULB9160	9160-3325	2021-04-25	2022-04-24
3	Amplifier	Compliance pirection systems inc	PAP-0203	22024	2021-04-20	2022-04-19
4	Cable	HUBER+SUHNER	CBL2	525178	2021-04-20	2022-04-19
RF Conducted Testing						

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1.	EMC Analyzer (9k~26.5GHz)	Agilent	E7405A	MY45114943	2021-04-20	2022-04-19
2.	Spectrum Analyzer (9k-6GHz)	R&S	FSL6	100959	2021-04-20	2022-04-19
3.	Signal Analyzer (9k~26.5GHz)	Agilent	N9010A	MY50520207	2021-04-20	2022-04-19

5.2 Description of Support Units

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

5.3 Measurement Uncertainty

Parameter	Uncertainty
Radio Frequency	$\pm 1 \times 10^{-6}$
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)

5.4 Test Equipment Calibration

All the test equipments used are valid and calibrated by CEPREI Certification Body that address is No.110 Dongguan Zhuang RD. Guangzhou, P.R.China.

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 Conducted Emission

Test Requirement:	FCC CFR 47 Part 15 Section 15.207
Test Method:	ANSI C63.10:2013
Test Result:	PASS
Frequency Range:	150kHz to 30MHz
Class/Severity:	Class B
Limit:	66-56 dB μ V between 0.15MHz & 0.5MHz 56 dB μ V between 0.5MHz & 5MHz 60 dB μ V between 5MHz & 30MHz
Detector:	Peak for pre-scan (9kHz Resolution Bandwidth)

7.1 E.U.T. Operation

Operating Environment :

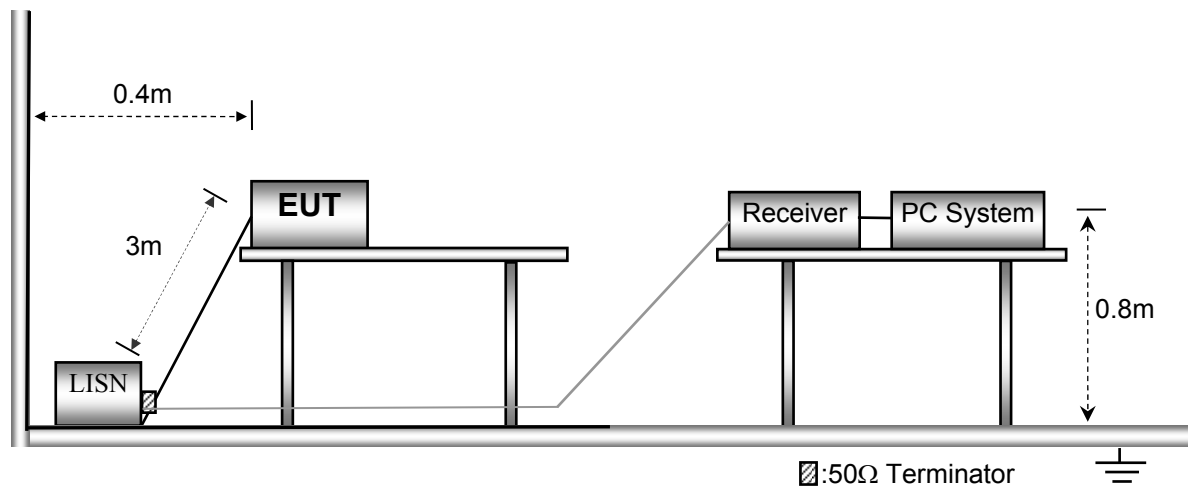
Temperature:	21.5 °C
Humidity:	51.9 % RH
Atmospheric Pressure:	101.2kPa

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.



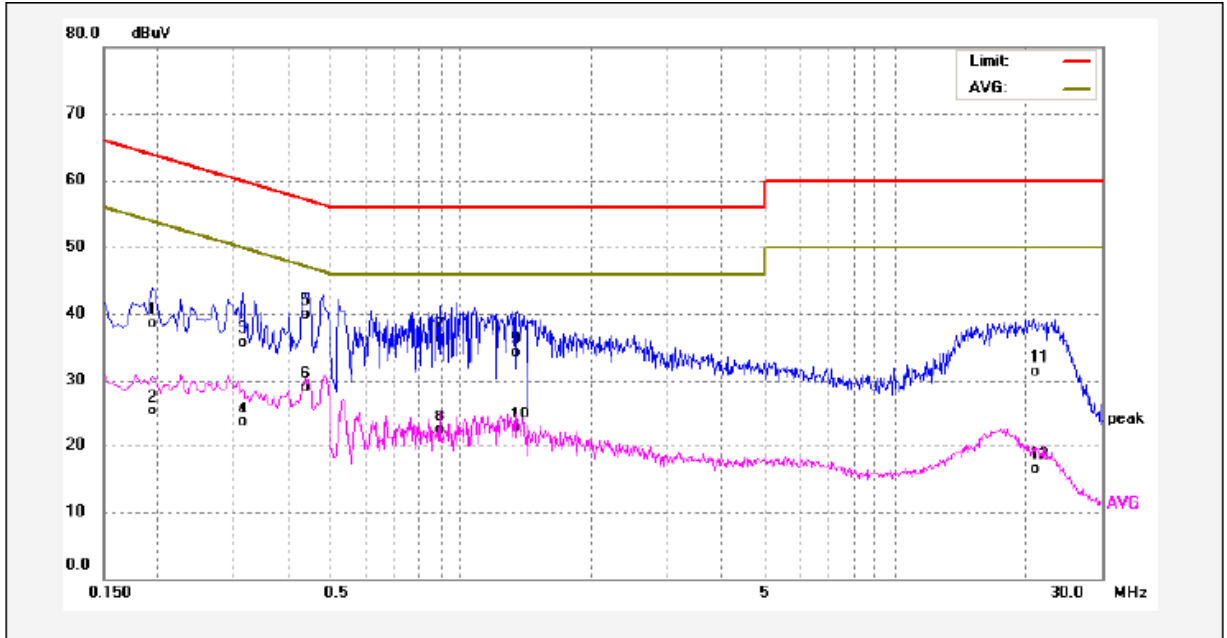
7.3 Measurement Description

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

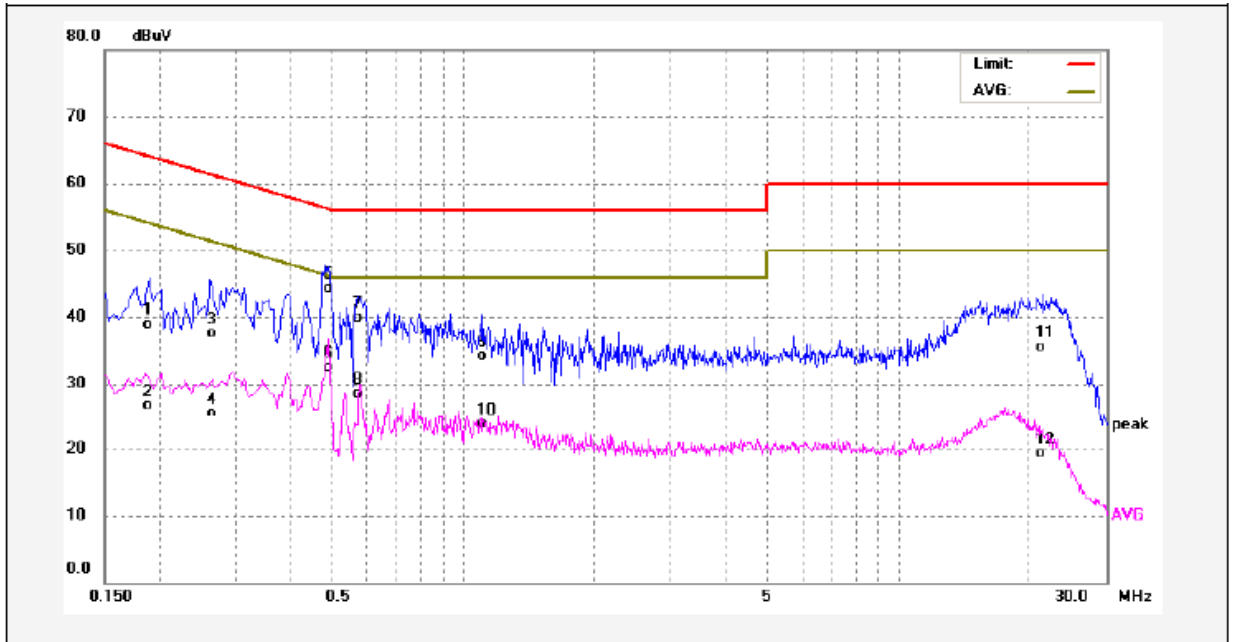
An initial pre-scan was performed on the live and neutral lines.

Live line:



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1940	28.58	9.96	38.54	63.86	-25.32	QP	
2	0.1940	15.39	9.96	25.35	53.86	-28.51	AVG	
3	0.3140	25.82	9.96	35.78	59.86	-24.08	QP	
4	0.3140	13.52	9.96	23.48	49.86	-26.38	AVG	
5	0.4420	29.84	9.97	39.81	57.02	-17.21	QP	
6	0.4420	18.86	9.97	28.83	47.02	-18.19	AVG	
7	0.8940	26.43	9.95	36.38	56.00	-19.62	QP	
8	0.8940	12.32	9.95	22.27	46.00	-23.73	AVG	
9	1.3460	24.03	9.98	34.01	56.00	-21.99	QP	
10	1.3460	12.76	9.98	22.74	46.00	-23.26	AVG	
11	20.8860	19.76	11.60	31.36	60.00	-28.64	QP	
12	20.8860	4.83	11.60	16.43	50.00	-33.57	AVG	

Neutral line:



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1900	29.03	9.96	38.99	64.03	-25.04	QP	
2	0.1900	16.72	9.96	26.68	54.03	-27.35	AVG	
3	0.2620	27.55	9.96	37.51	61.36	-23.85	QP	
4	0.2620	15.64	9.96	25.60	51.36	-25.76	AVG	
5	0.4820	34.39	9.97	44.36	56.30	-11.94	QP	
6	0.4820	22.51	9.97	32.48	46.30	-13.82	AVG	
7	0.5740	29.90	9.96	39.86	56.00	-16.14	QP	
8	0.5740	18.56	9.96	28.52	46.00	-17.48	AVG	
9	1.1060	24.08	9.96	34.04	56.00	-21.96	QP	
10	1.1060	13.92	9.96	23.88	46.00	-22.12	AVG	
11	21.4220	23.81	11.68	35.49	60.00	-24.51	QP	
12	21.4220	7.59	11.68	19.27	50.00	-30.73	AVG	

8 Radiated Emissions

Test Requirement: FCC CFR47 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	$2400/F(\text{kHz})$	300	$10000 * 2400/F(\text{kHz})$	$20\log^{(2400/F(\text{kHz}))} + 80$
0.490 ~ 1.705	$24000/F(\text{kHz})$	30	$100 * 24000/F(\text{kHz})$	$20\log^{(24000/F(\text{kHz}))} + 40$
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

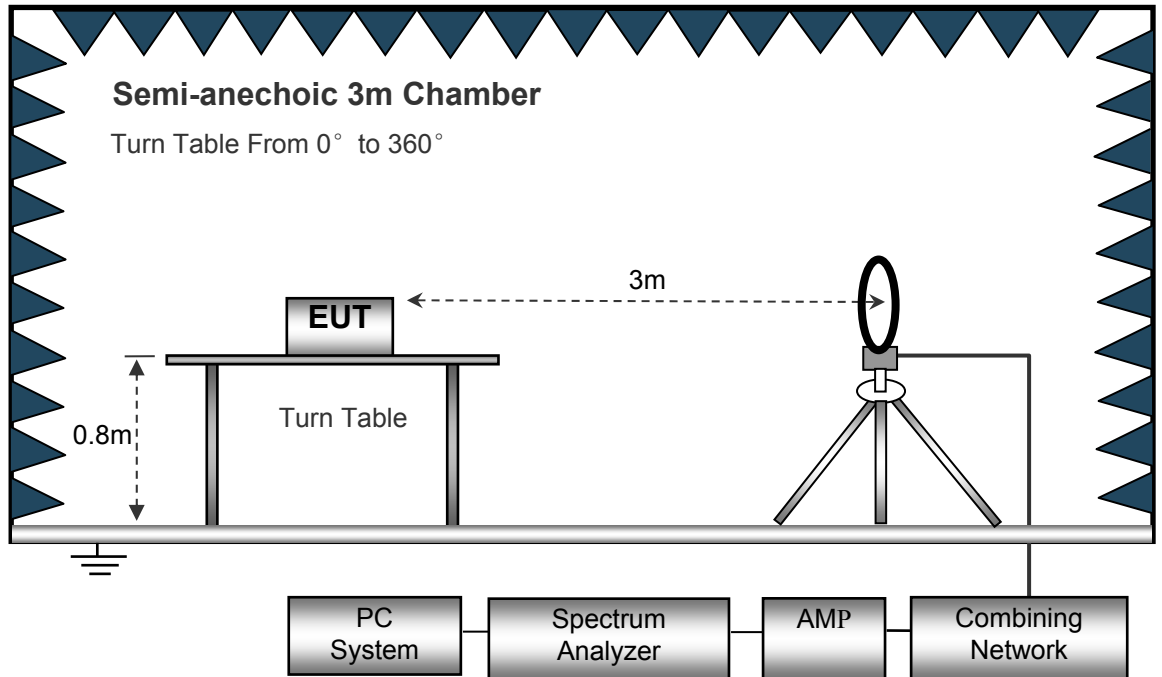
EUT Operation :

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

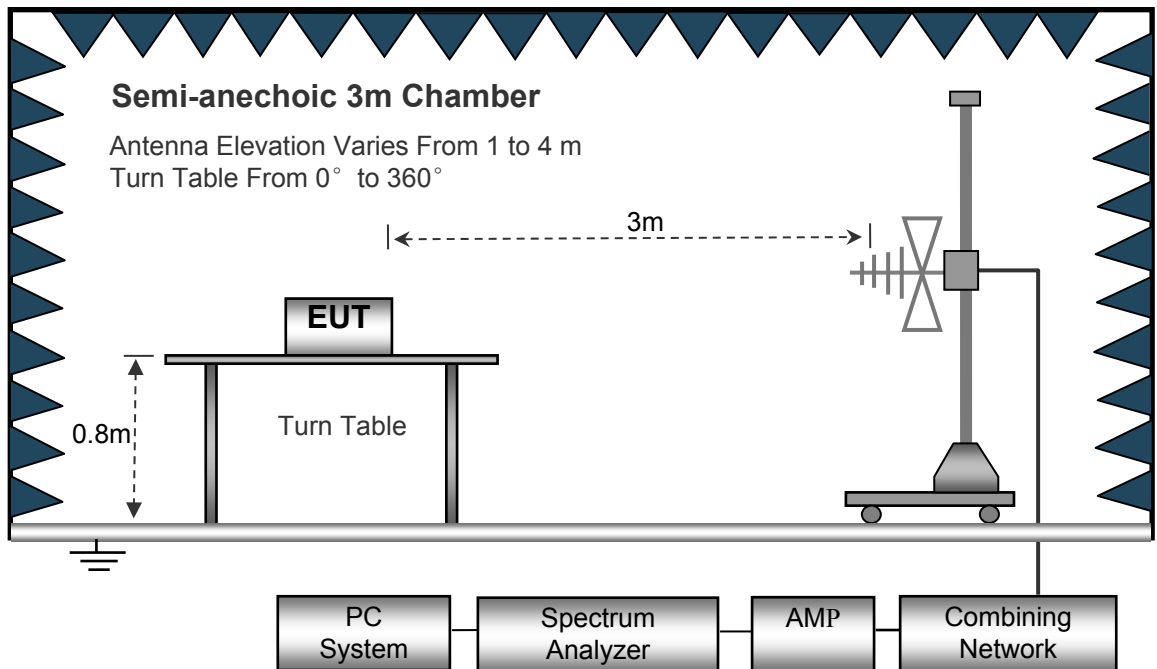
8.2 Test Setup

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

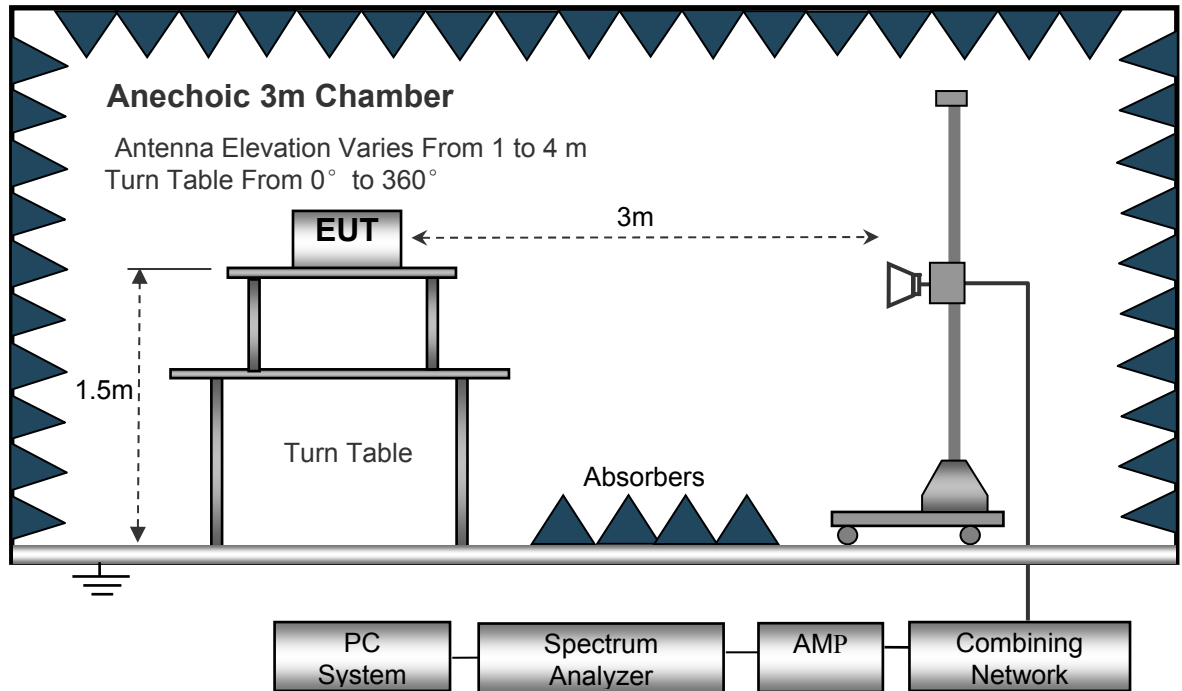
The test setup for emission measurement below 30MHz.



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 0.8m 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 during 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:

$$\text{Corr. Ampl.} = \text{Indicated Reading} + \text{Antenna Factor} + \text{Cable Factor} - \text{Amplifier Gain}$$

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:

$$\text{Margin} = \text{Corr. Ampl.} - \text{Limit}$$

8.6 Summary of Test Results

Test Frequency: 9KHz~30MHz

Frequency	Measurement results dB μ V @3m	Detector PK/QP	Correct factor dB/m	Extrapolation factor dB	Measurement results (calculated) dB μ V/m @30m	Limits dB μ V/m @30m	Margin dB
(MHz)	Measurement results	Detector	Correct factor	Extrapolation factor	Measurement results (calculated)	Limits	Margin
U-NII-1:802.11a 5180MHz							
6.023	25.17	QP	21.84	40.00	7.01	29.54	-22.53
15.765	24.86	QP	21.35	40.00	6.21	29.54	-23.33
15.711	25.03	QP	20.67	40.00	5.70	29.54	-23.84
U-NII-1:802.11n20 5180MHz							
6.023	25.07	QP	21.84	40.00	6.91	29.54	-22.63
15.765	24.68	QP	21.35	40.00	6.03	29.54	-23.51
15.711	25.11	QP	20.67	40.00	5.78	29.54	-23.76
U-NII-1:802.11ac 20 5180MHz							
6.023	25.13	QP	21.84	40.00	6.97	29.54	-22.57
15.765	25.19	QP	21.35	40.00	6.54	29.54	-23.00
15.711	25.04	QP	20.67	40.00	5.71	29.54	-23.83
U-NII-1:802.11n40 5190MHz							
6.023	25.07	QP	21.84	40.00	6.91	29.54	-22.63
15.765	24.66	QP	21.35	40.00	6.01	29.54	-23.53
15.711	25.13	QP	20.67	40.00	5.80	29.54	-23.74
U-NII-1:802.11ac40 5190MHz							
6.023	24.85	QP	21.84	40.00	6.69	29.54	-22.85
15.765	25.18	QP	21.35	40.00	6.53	29.54	-23.01
15.711	25.06	QP	20.67	40.00	5.73	29.54	-23.81
U-NII-1:802.11ac80 5210MHz							
6.023	25.03	QP	21.84	40.00	6.87	29.54	-22.67
15.765	24.56	QP	21.35	40.00	5.91	29.54	-23.63
15.711	24.88	QP	20.67	40.00	5.55	29.54	-23.99

Frequency	Measurement results dB μ V @3m	Detector PK/QP	Correct factor dB/m	Extrapolation factor dB	Measurement results (calculated) dB μ V/m @30m	Limits dB μ V/m @30m	Margin dB
(MHz)	Measurement results	Detector	Correct factor	Extrapolation factor	Measurement results (calculated)	Limits	Margin
U-NII-2A:802.11a 5260MHz							
6.023	24.15	QP	21.84	40.00	5.99	29.54	-23.55
15.765	23.67	QP	21.35	40.00	5.02	29.54	-24.52
15.711	25.19	QP	20.67	40.00	5.86	29.54	-23.68
U-NII-2A:802.11n20 5260MHz							
6.023	23.59	QP	21.84	40.00	5.43	29.54	-24.11
15.765	24.57	QP	21.35	40.00	5.92	29.54	-23.62
15.711	24.61	QP	20.67	40.00	5.28	29.54	-24.26
U-NII-2A:802.11ac 5260MHz							
6.023	24.87	QP	21.84	40.00	6.71	29.54	-22.83
15.765	25.11	QP	21.35	40.00	6.46	29.54	-23.08
15.711	24.61	QP	20.67	40.00	5.28	29.54	-24.26
U-NII-2A:802.11n40 5270MHz							
6.023	25.31	QP	21.84	40.00	7.15	29.54	-22.39
15.765	24.96	QP	21.35	40.00	6.31	29.54	-23.23
15.711	25.07	QP	20.67	40.00	5.74	29.54	-23.80
U-NII-2A:802.11ac40 5270MHz							
6.023	25.12	QP	21.84	40.00	6.96	29.54	-22.58
15.765	24.65	QP	21.35	40.00	6.00	29.54	-23.54
15.711	25.09	QP	20.67	40.00	5.76	29.54	-23.78
U-NII-2A:802.11ac80 5290MHz							
6.023	24.16	QP	21.84	40.00	6.00	29.54	-23.54
15.765	25.08	QP	21.35	40.00	6.43	29.54	-23.11
15.711	24.52	QP	20.67	40.00	5.19	29.54	-24.35

Frequency	Measurement results dB μ V @3m	Detector PK/QP	Correct factor dB/m	Extrapolation factor dB	Measurement results (calculated) dB μ V/m @30m	Limits dB μ V/m @30m	Margin dB
(MHz)	Measurement results	Detector	Correct factor	Extrapolation factor	Measurement results (calculated)	Limits	Margin
U-NII-2C:802.11a 5500MHz							
6.023	24.63	QP	21.84	40.00	6.47	29.54	-23.07
15.765	25.11	QP	21.35	40.00	6.46	29.54	-23.08
15.711	23.65	QP	20.67	40.00	4.32	29.54	-25.22
U-NII-2C:802.11n20 5500MHz							
6.023	24.61	QP	21.84	40.00	6.45	29.54	-23.09
15.765	24.82	QP	21.35	40.00	6.17	29.54	-23.37
15.711	25.00	QP	20.67	40.00	5.67	29.54	-23.87
U-NII-2C:802.11ac20 5500MHz							
6.023	24.63	QP	21.84	40.00	6.47	29.54	-23.07
15.765	25.14	QP	21.35	40.00	6.49	29.54	-23.05
15.711	24.87	QP	20.67	40.00	5.54	29.54	-24.00
U-NII-2C:802.11n40 5510MHz							
6.023	24.25	QP	21.84	40.00	6.09	29.54	-23.45
15.765	24.55	QP	21.35	40.00	5.90	29.54	-23.64
15.711	25.35	QP	20.67	40.00	6.02	29.54	-23.52
U-NII-2C:802.11ac40 5510MHz							
6.023	23.96	QP	21.84	40.00	5.80	29.54	-23.74
15.765	25.21	QP	21.35	40.00	6.56	29.54	-22.98
15.711	24.66	QP	20.67	40.00	5.33	29.54	-24.21
U-NII-2C:802.11ac80 5530MHz							
6.023	25.13	QP	21.84	40.00	6.97	29.54	-22.57
15.765	24.05	QP	21.35	40.00	5.40	29.54	-24.14
15.711	25.33	QP	20.67	40.00	6.00	29.54	-23.54

Frequency	Measurement results dB μ V @3m	Detector PK/QP	Correct factor dB/m	Extrapolation factor dB	Measurement results (calculated) dB μ V/m @30m	Limits dB μ V/m @30m	Margin dB
(MHz)	Measurement results	Detector	Correct factor	Extrapolation factor	Measurement results (calculated)	Limits	Margin
U-NII-3 802.11a 5745MHz							
6.023	25.04	QP	21.84	40.00	6.88	29.54	-22.66
15.765	25.81	QP	21.35	40.00	7.16	29.54	-22.38
15.711	25.11	QP	20.67	40.00	5.78	29.54	-23.76
U-NII-3 802.11n20 5745MHz							
6.021	24.58	QP	21.84	40.00	6.42	29.54	-23.12
15.730	25.43	QP	21.35	40.00	6.78	29.54	-22.76
25.680	24.25	QP	20.67	40.00	4.92	29.54	-24.62
U-NII-3 802.11ac 5745MHz							
6.021	25.67	QP	21.84	40.00	7.51	29.54	-22.03
15.730	24.52	QP	21.35	40.00	5.87	29.54	-23.67
25.680	25.06	QP	20.67	40.00	5.73	29.54	-23.81
U-NII-3 802.11n40 5755MHz							
6.021	24.50	QP	21.84	40.00	6.34	29.54	-23.20
15.730	24.64	QP	21.35	40.00	5.99	29.54	-23.55
25.680	24.36	QP	20.67	40.00	5.03	29.54	-24.51
U-NII-3 802.11ac40 5755MHz							
6.021	25.09	QP	21.84	40.00	6.93	29.54	-22.61
15.730	24.71	QP	21.35	40.00	6.06	29.54	-23.48
25.680	25.33	QP	20.67	40.00	6.00	29.54	-23.54
U-NII-3 802.11ac80 5775MHz							
6.021	25.06	QP	21.84	40.00	6.90	29.54	-22.64
15.730	24.09	QP	21.35	40.00	5.44	29.54	-24.10
25.680	25.18	QP	20.67	40.00	5.85	29.54	-23.69

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)	(dB μ V)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)
802.11a U-NII-1 Low Channel 5180MHz									
223.58	40.88	QP	190	1.5	H	-11.62	29.26	46.00	-16.74
223.58	36.20	QP	204	1.7	V	-11.62	24.58	46.00	-21.42
4535.85	51.40	PK	34	1.3	H	-2.03	49.37	74.00	-24.63
4535.85	45.00	Ave	34	1.3	H	-2.03	42.97	54.00	-11.03
5138.72	52.32	PK	230	1.5	H	-1.02	51.30	74.00	-22.70
5138.72	47.95	Ave	230	1.5	H	-1.02	46.93	54.00	-7.07
10360.00	42.34	PK	107	1.4	H	5.33	47.67	74.00	-26.33
10360.00	35.79	Ave	107	1.4	H	5.33	41.12	54.00	-12.88
802.11a U-NII-1 Middle channel 5200MHz									
223.58	40.86	QP	63	1.3	H	-11.62	29.24	46.00	-16.76
223.58	35.54	QP	94	1.5	V	-11.62	23.92	46.00	-22.08
4510.94	50.51	PK	126	1.4	H	-1.94	48.57	74.00	-25.43
4510.94	43.92	Ave	126	1.4	H	-1.94	41.98	54.00	-12.02
5114.16	52.28	PK	123	1.3	H	-1.06	51.22	74.00	-22.78
5114.16	48.21	Ave	123	1.3	H	-1.06	47.15	54.00	-6.85
10400.00	43.48	PK	133	1.9	H	5.21	48.69	74.00	-25.31
10400.00	35.33	Ave	133	1.9	H	5.21	40.54	54.00	-13.46

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dB μ V)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)
802.11a U-NII-1 High channel 5240MHz									
223.58	40.91	QP	154	1.3	H	-11.62	29.29	46.00	-16.71
223.58	36.12	QP	243	1.4	V	-11.62	24.50	46.00	-21.50
4527.46	50.10	PK	270	1.9	H	-2.24	47.86	74.00	-26.14
4527.46	43.53	Ave	270	1.9	H	-2.24	41.29	54.00	-12.71
5145.75	51.54	PK	350	1.6	H	-1.09	50.45	74.00	-23.55
5145.75	49.23	Ave	350	1.6	H	-1.09	48.14	54.00	-5.86
10480.00	41.13	PK	105	1.0	H	5.14	46.27	74.00	-27.73
10480.00	36.70	Ave	105	1.0	H	5.14	41.84	54.00	-12.16
802.11a U-NII-2A Low Channel 5260MHz									
223.45	41.05	QP	272	1.8	H	-11.62	29.43	46.00	-16.57
223.45	36.26	QP	133	1.0	V	-11.62	24.64	46.00	-21.36
4513.95	50.44	PK	224	1.8	H	-2.03	48.41	74.00	-25.59
4513.95	46.32	Ave	224	1.8	H	-2.03	44.29	54.00	-9.71
5112.82	52.53	PK	83	1.8	H	-1.02	51.51	74.00	-22.49
5112.82	48.18	Ave	83	1.8	H	-1.02	47.16	54.00	-6.84
10520.00	41.08	PK	235	1.1	H	5.33	46.41	74.00	-27.59
10520.00	36.85	Ave	235	1.1	H	5.33	42.18	54.00	-11.82

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dB μ V)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)
802.11a U-NII-2A middle channel 5280MHz									
223.45	42.14	QP	203	1.6	H	-11.62	30.52	46.00	-15.48
223.45	36.08	QP	269	1.6	V	-11.62	24.46	46.00	-21.54
4533.64	51.85	PK	349	1.5	H	-1.94	49.91	74.00	-24.09
4533.64	47.78	Ave	349	1.5	H	-1.94	45.84	54.00	-8.16
5142.32	52.22	PK	171	1.7	H	-1.06	51.16	74.00	-22.84
5142.32	49.30	Ave	171	1.7	H	-1.06	48.24	54.00	-5.76
10560.00	39.61	PK	297	1.6	H	5.21	44.82	74.00	-29.18
10560.00	38.25	Ave	297	1.6	H	5.21	43.46	54.00	-10.54
802.11a U-NII-2A High channel 5320MHz									
223.45	41.27	QP	250	1.3	H	-11.62	29.65	46.00	-16.35
223.45	36.35	QP	88	1.6	V	-11.62	24.73	46.00	-21.27
4523.40	52.77	PK	324	1.7	H	-2.24	50.53	74.00	-23.47
4523.40	48.36	Ave	324	1.7	H	-2.24	46.12	54.00	-7.88
5136.15	52.66	PK	70	1.1	H	-1.09	51.57	74.00	-22.43
5136.15	50.25	Ave	70	1.1	H	-1.09	49.16	54.00	-4.84
10640.00	40.12	PK	101	1.6	H	5.14	45.26	68.20	-22.94
10640.00	36.11	Ave	101	1.6	H	5.14	41.25	54.00	-12.75

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dB μ V)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)
802.11a U-NII-2C Low Channel 5500MHz									
223.45	41.05	QP	212	1.4	H	-11.62	29.43	46.00	-16.57
223.45	36.26	QP	240	1.7	V	-11.62	24.64	46.00	-21.36
4532.85	50.44	PK	261	1.8	H	-2.03	48.41	74.00	-25.59
4532.85	46.32	Ave	261	1.8	H	-2.03	44.29	54.00	-9.71
5147.55	52.53	PK	273	1.3	H	-1.02	51.51	74.00	-22.49
5147.55	48.18	Ave	273	1.3	H	-1.02	47.16	54.00	-6.84
11000.00	41.08	PK	20	2.0	H	5.33	46.41	68.20	-21.79
11000.00	36.85	Ave	20	2.0	H	5.33	42.18	54.00	-11.82
802.11a U-NII-2C Middle channel 5600MHz									
223.45	42.30	QP	175	1.9	H	-11.62	30.68	46.00	-15.32
223.45	35.41	QP	203	1.5	V	-11.62	23.79	46.00	-22.21
4513.45	50.72	PK	94	1.5	H	-1.94	48.78	74.00	-25.22
4513.45	44.96	Ave	94	1.5	H	-1.94	43.02	54.00	-10.98
5148.56	53.13	PK	149	1.6	H	-1.06	52.07	74.00	-21.93
5148.56	49.94	Ave	149	1.6	H	-1.06	48.88	54.00	-5.12
11200.00	40.57	PK	279	1.4	H	5.21	45.78	68.20	-22.42
11200.00	37.30	Ave	279	1.4	H	5.21	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)	(dB μ V)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)
802.11a U-NII-2C High channel 5700MHz									
223.45	43.34	QP	228	1.4	H	-11.62	31.72	46.00	-14.28
223.45	33.95	QP	265	1.9	V	-11.62	22.33	46.00	-23.67
4500.79	50.71	PK	288	1.6	H	-2.24	48.47	74.00	-25.53
4500.79	44.59	Ave	288	1.6	H	-2.24	42.35	54.00	-11.65
5121.04	54.37	PK	79	1.4	H	-1.09	53.28	74.00	-20.72
5121.04	51.45	Ave	79	1.4	H	-1.09	50.36	54.00	-3.64
11400.00	41.99	PK	90	1.8	H	5.14	47.13	68.20	-21.07
11400.00	37.20	Ave	90	1.8	H	5.14	42.34	54.00	-11.66
802.11a U-NII-3 Low Channel 5745MHz									
223.58	42.07	QP	214	1.7	H	-11.62	30.45	46.00	-15.55
223.58	35.48	QP	330	1.0	V	-11.62	23.86	46.00	-22.14
4513.50	49.59	PK	192	1.3	H	-2.06	47.53	74.00	-26.47
4513.50	42.39	Ave	192	1.3	H	-2.06	40.33	54.00	-13.67
11490.00	41.12	PK	295	1.8	H	5.93	47.05	68.20	-21.15
11490.00	34.54	Ave	295	1.8	H	5.93	40.47	54.00	-13.53
5358.00	45.53	PK	199	1.6	H	-1.25	44.28	74.00	-29.72
5358.00	37.31	Ave	199	1.6	H	-1.25	36.06	54.00	-17.94

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dB μ V)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)
802.11a U-NII-3 middle channel 5785MHz									
223.58	41.69	QP	243	1.2	H	-11.62	30.07	46.00	-15.93
223.58	34.67	QP	14	1.3	V	-11.62	23.05	46.00	-22.95
4524.65	49.63	PK	248	1.9	H	-2.03	47.60	74.00	-26.40
4524.65	41.51	Ave	248	1.9	H	-2.03	39.48	54.00	-14.52
11570.00	43.27	PK	302	1.9	H	5.81	49.08	68.20	-19.12
11570.00	35.94	Ave	302	1.9	H	5.81	41.75	54.00	-12.25
5371.49	46.17	PK	30	1.2	H	-1.22	44.95	74.00	-29.05
5371.49	38.45	Ave	30	1.2	H	-1.22	37.23	54.00	-16.77
802.11a U-NII-3 High channel 5825MHz									
223.58	43.04	QP	358	1.2	H	-11.62	31.42	46.00	-14.58
223.58	35.13	QP	193	1.2	V	-11.62	23.51	46.00	-22.49
4519.36	50.54	PK	315	1.1	H	-1.84	48.70	74.00	-25.30
4519.36	41.07	Ave	315	1.1	H	-1.84	39.23	54.00	-14.77
11650.00	42.31	PK	163	1.5	H	5.84	48.15	68.20	-20.05
11650.00	34.98	Ave	163	1.5	H	5.84	40.82	54.00	-13.18
5379.94	45.60	PK	93	1.5	H	-1.30	44.30	74.00	-29.70
5379.94	38.16	Ave	93	1.5	H	-1.30	36.86	54.00	-17.14

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dB μ V)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)
802.11n(HT20) U-NII-1 Low Channel 5180MHz									
223.58	44.20	QP	330	1.6	H	-11.62	32.58	46.00	-13.42
223.58	35.34	QP	280	1.4	V	-11.62	23.72	46.00	-22.28
4533.64	50.19	PK	70	1.7	H	-2.14	48.05	74.00	-25.95
4533.64	41.04	Ave	70	1.7	H	-2.14	38.90	54.00	-15.10
5141.47	45.97	PK	324	1.4	H	-1.06	44.91	74.00	-29.09
5141.47	40.24	Ave	324	1.4	H	-1.06	39.18	54.00	-14.82
10360.00	42.94	PK	136	1.8	H	5.33	48.27	74.00	-25.73
10360.00	35.80	Ave	136	1.8	H	5.33	41.13	54.00	-12.87
802.11n(HT20) U-NII-1 Middle channel 5200MHz									
223.58	44.72	QP	106	1.6	H	-11.62	33.10	46.00	-12.90
223.58	36.43	QP	295	1.6	V	-11.62	24.81	46.00	-21.19
4500.54	49.13	PK	55	1.8	H	-2.12	47.01	74.00	-26.99
4500.54	41.09	Ave	55	1.8	H	-2.12	38.97	54.00	-15.03
5121.52	46.11	PK	305	1.5	H	-1.06	45.05	74.00	-28.95
5121.52	41.60	Ave	305	1.5	H	-1.06	40.54	54.00	-13.46
10400.00	41.97	PK	236	1.3	H	5.21	47.18	74.00	-26.82
10400.00	37.05	Ave	236	1.3	H	5.21	42.26	54.00	-11.74

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dB μ V)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)
802.11n(HT20) U-NII-1 High channel 5240MHz									
223.58	44.94	QP	272	1.1	H	-11.62	33.32	46.00	-12.68
223.58	37.31	QP	52	1.7	V	-11.62	25.69	46.00	-20.31
4504.07	49.05	PK	261	1.4	H	-1.96	47.09	74.00	-26.91
4504.07	42.31	Ave	261	1.4	H	-1.96	40.35	54.00	-13.65
5133.65	47.50	PK	250	1.6	H	-1.06	46.44	74.00	-27.56
5133.65	42.54	Ave	250	1.6	H	-1.06	41.48	54.00	-12.52
10480.00	40.98	PK	329	1.7	H	5.14	46.12	74.00	-27.88
10480.00	36.94	Ave	329	1.7	H	5.14	42.08	54.00	-11.92
802.11n(HT20) U-NII-2A Low Channel 5260MHz									
223.58	42.97	QP	96	1.5	H	-11.62	31.35	46.00	-14.65
223.58	39.52	QP	107	1.8	V	-11.62	27.90	46.00	-18.10
4507.95	36.63	PK	325	1.6	H	-2.03	34.60	74.00	-39.40
4507.95	44.50	Ave	325	1.6	H	-2.03	42.47	54.00	-11.53
5142.21	38.78	PK	95	1.2	H	-1.02	37.76	74.00	-36.24
5142.21	0.33	Ave	95	1.2	H	-1.02	-0.69	54.00	-54.69
10520.00	41.90	PK	217	1.5	H	5.33	47.23	74.00	-26.77
10520.00	36.83	Ave	217	1.5	H	5.33	42.16	54.00	-11.84

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									
223.58	43.34	QP	261	1.8	H	-11.62	31.72	46.00	-14.28
223.58	38.80	QP	99	1.4	V	-11.62	27.18	46.00	-18.82
4509.31	35.60	PK	177	1.2	H	-1.94	33.66	74.00	-40.34
4509.31	43.50	Ave	177	1.2	H	-1.94	41.56	54.00	-12.44
5149.66	38.80	PK	164	1.0	H	-1.06	37.74	74.00	-36.26
5149.66	0.68	Ave	164	1.0	H	-1.06	-0.38	54.00	-54.38
10560.00	41.41	PK	127	1.1	H	5.21	46.62	74.00	-27.38
10560.00	37.44	Ave	127	1.1	H	5.21	42.65	54.00	-11.35
802.11n(HT20) U-NII-2A High channel 5320MHz									
223.58	43.72	QP	16	1.9	H	-11.62	32.10	46.00	-13.90
223.58	39.53	QP	112	1.9	V	-11.62	27.91	46.00	-18.09
4512.27	36.91	PK	216	2.0	H	-2.24	34.67	74.00	-39.33
4512.27	44.66	Ave	216	2.0	H	-2.24	42.42	54.00	-11.58
5144.28	38.85	PK	270	1.6	H	-1.09	37.76	74.00	-36.24
5144.28	2.47	Ave	270	1.6	H	-1.09	1.38	54.00	-52.62
10640.00	41.05	PK	147	1.1	H	5.14	46.19	68.20	-22.01
10640.00	37.49	Ave	147	1.1	H	5.14	42.63	54.00	-11.37

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dB μ V)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)
802.11n(HT20) U-NII-2C Low Channel 5500MHz									
223.58	37.45	QP	202	1.3	H	-11.62	25.83	46.00	-20.17
223.58	2.58	QP	30	1.4	V	-11.62	-9.04	46.00	-55.04
4535.77	41.10	PK	233	1.4	H	-2.03	39.07	74.00	-34.93
4535.77	37.73	Ave	233	1.4	H	-2.03	35.70	54.00	-18.30
5145.96	46.48	PK	85	1.8	H	-1.02	45.46	74.00	-28.54
5145.96	40.85	Ave	85	1.8	H	-1.02	39.83	54.00	-14.17
11000.00	0.82	PK	351	1.1	H	5.33	6.15	68.20	-62.05
11000.00	44.02	Ave	351	1.1	H	5.33	49.35	54.00	-4.65
802.11n(HT20) U-NII-2C Middle channel 5600MHz									
223.58	38.45	QP	66	1.9	H	-11.62	26.83	46.00	-19.17
223.58	3.69	QP	118	1.2	V	-11.62	-7.93	46.00	-53.93
4523.59	40.73	PK	229	1.4	H	-1.94	38.79	74.00	-35.21
4523.59	39.01	Ave	229	1.4	H	-1.94	37.07	54.00	-16.93
5120.83	47.20	PK	74	1.1	H	-1.06	46.14	74.00	-27.86
5120.83	40.84	Ave	74	1.1	H	-1.06	39.78	54.00	-14.22
11200.00	-0.38	PK	15	1.9	H	5.21	4.83	68.20	-63.37
11200.00	44.12	Ave	15	1.9	H	5.21	49.33	54.00	-4.67

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dB μ V)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)
802.11n(HT20) U-NII-2C High channel 5700MHz									
223.58	37.73	QP	257	1.4	H	-11.62	26.11	46.00	-19.89
223.58	2.21	QP	120	1.9	V	-11.62	-9.41	46.00	-55.41
4503.92	41.09	PK	60	1.2	H	-2.24	38.85	74.00	-35.15
4503.92	40.41	Ave	60	1.2	H	-2.24	38.17	54.00	-15.83
5110.75	46.93	PK	281	1.2	H	-1.09	45.84	74.00	-28.16
5110.75	40.17	Ave	281	1.2	H	-1.09	39.08	54.00	-14.92
11400.00	0.02	PK	290	1.6	H	5.14	5.16	68.20	-63.04
11400.00	43.95	Ave	290	1.6	H	5.14	49.09	54.00	-4.91
802.11n(HT20) U-NII-3 Low Channel 5745MHz									
223.58	36.92	QP	308	1.9	H	-11.62	25.30	46.00	-20.70
223.58	48.92	QP	166	1.3	V	-11.62	37.30	46.00	-8.70
4535.57	42.68	PK	336	1.5	H	-2.06	40.62	74.00	-33.38
4535.57	47.71	Ave	336	1.5	H	-2.06	45.65	54.00	-8.35
11490.00	35.19	PK	203	1.4	H	5.93	41.12	68.20	-27.08
11490.00	46.67	Ave	203	1.4	H	5.93	52.60	54.00	-1.40
5369.34	45.60	PK	158	2.0	H	-1.25	44.35	74.00	-29.65
5369.34	39.35	Ave	158	2.0	H	-1.25	38.10	54.00	-15.90

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dB μ V)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)
802.11n(HT20) U-NII-3 middle channel 5785MHz									
223.58	36.49	QP	33	1.3	H	-11.62	24.87	46.00	-21.13
223.58	48.93	QP	222	1.6	V	-11.62	37.31	46.00	-8.69
4504.01	43.47	PK	46	1.8	H	-2.03	41.44	74.00	-32.56
4504.01	47.57	Ave	46	1.8	H	-2.03	45.54	54.00	-8.46
11570.00	37.00	PK	315	1.7	H	5.81	42.81	68.20	-25.39
11570.00	47.59	Ave	315	1.7	H	5.81	53.40	54.00	-0.60
5352.38	45.49	PK	177	1.4	H	-1.22	44.27	74.00	-29.73
5352.38	38.65	Ave	177	1.4	H	-1.22	37.43	54.00	-16.57
802.11n(HT20) U-NII-3 High channel 5825MHz									
223.58	37.85	QP	335	1.5	H	-11.62	26.23	46.00	-19.77
223.58	48.56	QP	212	1.1	V	-11.62	36.94	46.00	-9.06
4539.95	43.36	PK	206	1.9	H	-1.84	41.52	74.00	-32.48
4539.95	46.95	Ave	206	1.9	H	-1.84	45.11	54.00	-8.89
11650.00	36.17	PK	42	1.0	H	5.84	42.01	68.20	-26.19
11650.00	47.08	Ave	42	1.0	H	5.84	52.92	54.00	-1.08
5357.41	45.84	PK	38	1.5	H	-1.30	44.54	74.00	-29.46
5357.41	39.30	Ave	38	1.5	H	-1.30	38.00	54.00	-16.00

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dB μ V)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)
802.11ac(HT20) U-NII-1 Low Channel 5180MHz									
223.58	35.64	QP	16	1.5	H	-11.62	24.02	46.00	-21.98
223.58	45.77	QP	315	2.0	V	-11.62	34.15	46.00	-11.85
4535.74	45.57	PK	240	1.4	H	-1.86	43.71	74.00	-30.29
4535.74	40.78	Ave	240	1.4	H	-1.86	38.92	54.00	-15.08
5124.38	43.56	PK	286	1.0	H	-1.06	42.50	74.00	-31.50
5124.38	36.55	Ave	286	1.0	H	-1.06	35.49	54.00	-18.51
10360.00	45.60	PK	330	1.5	H	5.33	50.93	74.00	-23.07
10360.00	37.06	Ave	330	1.5	H	5.33	42.39	54.00	-11.61
802.11ac(HT20) U-NII-1 Middle channel 5200MHz									
223.58	35.53	QP	191	1.5	H	-11.62	23.91	46.00	-22.09
223.58	44.85	QP	336	1.4	V	-11.62	33.23	46.00	-12.77
4515.87	45.40	PK	230	1.5	H	-1.82	43.58	74.00	-30.42
4515.87	40.57	Ave	230	1.5	H	-1.82	38.75	54.00	-15.25
5123.79	44.62	PK	70	1.9	H	-1.06	43.56	74.00	-30.44
5123.79	36.87	Ave	70	1.9	H	-1.06	35.81	54.00	-18.19
10400.00	42.39	PK	12	1.1	H	5.21	47.60	74.00	-26.40
10400.00	36.75	Ave	12	1.1	H	5.21	41.96	54.00	-12.04

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dB μ V)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)
802.11ac(HT20) U-NII-1 High channel 5240MHz									
223.58	34.72	QP	358	1.1	H	-11.62	23.10	46.00	-22.90
223.58	45.76	QP	33	1.8	V	-11.62	34.14	46.00	-11.86
4511.53	45.08	PK	289	1.1	H	-1.81	43.27	74.00	-30.73
4511.53	39.77	Ave	289	1.1	H	-1.81	37.96	54.00	-16.04
5142.56	44.64	PK	76	1.5	H	-1.06	43.58	74.00	-30.42
5142.56	36.82	Ave	76	1.5	H	-1.06	35.76	54.00	-18.24
10480.00	41.61	PK	189	1.6	H	5.14	46.75	74.00	-27.25
10480.00	35.81	Ave	189	1.6	H	5.14	40.95	54.00	-13.05
802.11ac(HT20) U-NII-2A Low Channel 5260MHz									
223.58	43.78	QP	296	1.1	H	-11.62	32.16	46.00	-13.84
223.58	36.21	QP	44	1.7	V	-11.62	24.59	46.00	-21.41
4501.61	40.76	PK	348	1.9	H	-2.03	38.73	74.00	-35.27
4501.61	36.83	Ave	348	1.9	H	-2.03	34.80	54.00	-19.20
5110.21	45.07	PK	87	1.6	H	-1.02	44.05	74.00	-29.95
5110.21	36.70	Ave	87	1.6	H	-1.02	35.68	54.00	-18.32
10520.00	46.43	PK	292	1.6	H	5.33	51.76	74.00	-22.24
10520.00	37.36	Ave	292	1.6	H	5.33	42.69	54.00	-11.31

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dB μ V)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)
802.11ac(HT20) U-NII-2A middle channel 5280MHz									
223.58	43.36	QP	267	1.4	H	-11.62	31.74	46.00	-14.26
223.58	36.02	QP	287	1.4	V	-11.62	24.40	46.00	-21.60
4512.01	39.44	PK	13	1.8	H	-1.94	37.50	74.00	-36.50
4512.01	37.32	Ave	13	1.8	H	-1.94	35.38	54.00	-18.62
5114.77	44.95	PK	154	1.4	H	-1.06	43.89	74.00	-30.11
5114.77	38.44	Ave	154	1.4	H	-1.06	37.38	54.00	-16.62
10560.00	45.23	PK	299	2.0	H	5.21	50.44	74.00	-23.56
10560.00	36.45	Ave	299	2.0	H	5.21	41.66	54.00	-12.34
802.11ac(HT20) U-NII-2A High channel 5320MHz									
223.58	44.00	QP	135	1.8	H	-11.62	32.38	46.00	-13.62
223.58	36.03	QP	135	1.8	V	-11.62	24.41	46.00	-21.59
4500.88	40.57	PK	188	1.5	H	-2.24	38.33	74.00	-35.67
4500.88	37.30	Ave	188	1.5	H	-2.24	35.06	54.00	-18.94
5145.99	45.68	PK	117	1.7	H	-1.09	44.59	74.00	-29.41
5145.99	38.42	Ave	117	1.7	H	-1.09	37.33	54.00	-16.67
10640.00	47.12	PK	18	1.9	H	5.14	52.26	68.20	-15.94
10640.00	37.38	Ave	18	1.9	H	5.14	42.52	54.00	-11.48

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dB μ V)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)
802.11ac(HT20) U-NII-2C Low Channel 5500MHz									
223.58	45.75	QP	108	1.3	H	-11.62	34.13	46.00	-11.87
223.58	39.55	QP	155	1.1	V	-11.62	27.93	46.00	-18.07
4538.93	48.52	PK	6	1.9	H	-2.03	46.49	74.00	-27.51
4538.93	37.68	Ave	6	1.9	H	-2.03	35.65	54.00	-18.35
5149.91	47.34	PK	332	1.4	H	-1.02	46.32	74.00	-27.68
5149.91	37.23	Ave	332	1.4	H	-1.02	36.21	54.00	-17.79
11000.00	-0.19	PK	138	1.2	H	5.33	5.14	68.20	-63.06
11000.00	43.75	Ave	138	1.2	H	5.33	49.08	54.00	-4.92
802.11ac(HT20) U-NII-2C Middle channel 5600MHz									
223.58	44.31	QP	101	2.0	H	-11.62	32.69	46.00	-13.31
223.58	40.68	QP	310	1.7	V	-11.62	29.06	46.00	-16.94
4532.52	49.14	PK	211	1.2	H	-1.94	47.20	74.00	-26.80
4532.52	36.76	Ave	211	1.2	H	-1.94	34.82	54.00	-19.18
5112.42	49.32	PK	44	1.5	H	-1.06	48.26	74.00	-25.74
5112.42	38.25	Ave	44	1.5	H	-1.06	37.19	54.00	-16.81
11200.00	-1.61	PK	338	1.2	H	5.21	3.60	68.20	-64.60
11200.00	42.65	Ave	338	1.2	H	5.21	47.86	54.00	-6.14

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dB μ V)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)
802.11ac(HT20) U-NII-2C High channel 5700MHz									
223.58	44.49	QP	93	1.4	H	-11.62	32.87	46.00	-13.13
223.58	41.75	QP	273	1.9	V	-11.62	30.13	46.00	-15.87
4517.26	50.62	PK	199	1.1	H	-2.24	48.38	74.00	-25.62
4517.26	36.67	Ave	199	1.1	H	-2.24	34.43	54.00	-19.57
5115.47	50.89	PK	87	1.5	H	-1.09	49.80	74.00	-24.20
5115.47	39.92	Ave	87	1.5	H	-1.09	38.83	54.00	-15.17
11400.00	-1.61	PK	173	1.9	H	5.14	3.53	68.20	-64.67
11400.00	44.37	Ave	173	1.9	H	5.14	49.51	54.00	-4.49
802.11ac(HT20) U-NII-3 Low Channel 5745MHz									
223.58	35.68	QP	225	1.6	H	-11.62	24.06	46.00	-21.94
223.58	46.98	QP	98	1.4	V	-11.62	35.36	46.00	-10.64
4501.07	44.01	PK	253	1.3	H	-1.92	42.09	74.00	-31.91
4501.07	37.99	Ave	253	1.3	H	-1.92	36.07	54.00	-17.93
11490.00	40.09	PK	41	1.5	H	5.93	46.02	68.20	-22.18
11490.00	33.37	Ave	41	1.5	H	5.93	39.30	54.00	-14.70
5353.17	45.54	PK	267	1.9	H	-1.03	44.51	74.00	-29.49
5353.17	39.08	Ave	267	1.9	H	-1.03	38.05	54.00	-15.95

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dB μ V)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)
802.11ac(HT20) U-NII-3 middle channel 5785MHz									
223.58	35.91	QP	254	1.1	H	-11.62	24.29	46.00	-21.71
223.58	46.51	QP	103	1.7	V	-11.62	34.89	46.00	-11.11
4538.44	44.25	PK	357	1.2	H	-1.97	42.28	74.00	-31.72
4538.44	38.86	Ave	357	1.2	H	-1.97	36.89	54.00	-17.11
11570.00	41.87	PK	39	1.1	H	5.81	47.68	68.20	-20.52
11570.00	35.47	Ave	39	1.1	H	5.81	41.28	54.00	-12.72
5377.12	46.59	PK	219	2.0	H	-1.05	45.54	74.00	-28.46
5377.12	39.76	Ave	219	2.0	H	-1.05	38.71	54.00	-15.29
802.11ac(HT20) U-NII-3 High channel 5825MHz									
223.58	36.84	QP	97	1.5	H	-11.62	25.22	46.00	-20.78
223.58	47.01	QP	185	1.4	V	-11.62	35.39	46.00	-10.61
4518.33	44.85	PK	9	1.6	H	-1.88	42.97	74.00	-31.03
4518.33	39.06	Ave	9	1.6	H	-1.88	37.18	54.00	-16.82
11650.00	42.33	PK	185	1.6	H	5.84	48.17	68.20	-20.03
11650.00	35.16	Ave	185	1.6	H	5.84	41.00	54.00	-13.00
5384.40	45.44	PK	203	1.9	H	-1.06	44.38	74.00	-29.62
5384.40	37.01	Ave	203	1.9	H	-1.06	35.95	54.00	-18.05

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT40) U-NII-1 Low Channel 5190MHz									
223.58	37.52	QP	178	1.2	H	-11.62	25.90	46.00	-20.10
223.58	46.53	QP	85	1.5	V	-11.62	34.91	46.00	-11.09
4521.73	43.53	PK	23	1.7	H	-1.89	41.64	74.00	-32.36
4521.73	37.55	Ave	23	1.7	H	-1.89	35.66	54.00	-18.34
5127.12	45.24	PK	262	1.7	H	-1.06	44.18	74.00	-29.82
5127.12	38.41	Ave	262	1.7	H	-1.06	37.35	54.00	-16.65
10380.00	40.44	PK	66	1.8	H	5.26	45.70	74.00	-28.30
10380.00	33.60	Ave	66	1.8	H	5.26	38.86	54.00	-15.14
802.11n(HT40) U-NII-1 High channel 5230MHz									
223.58	37.28	QP	239	1.2	H	-11.62	25.66	46.00	-20.34
223.58	45.74	QP	250	1.0	V	-11.62	34.12	46.00	-11.88
4536.21	43.53	PK	18	1.8	H	-1.94	41.59	74.00	-32.41
4536.21	37.98	Ave	18	1.8	H	-1.94	36.04	54.00	-17.96
5142.00	44.80	PK	329	1.3	H	-1.06	43.74	74.00	-30.26
5142.00	37.79	Ave	329	1.3	H	-1.06	36.73	54.00	-17.27
10460.00	42.38	PK	132	1.3	H	5.28	47.66	74.00	-26.34
10480.00	35.11	Ave	132	1.3	H	5.28	40.39	54.00	-13.61

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dB μ V)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)
802.11n(HT40) U-NII-2A Low Channel 5270MHz									
223.58	45.03	QP	10	1.1	H	-11.62	33.41	46.00	-12.59
223.58	38.02	QP	224	1.1	V	-11.62	26.40	46.00	-19.60
4505.51	42.01	PK	28	1.6	H	-1.89	40.12	74.00	-33.88
4505.51	34.37	Ave	28	1.6	H	-1.89	32.48	54.00	-21.52
5126.25	47.58	PK	112	1.3	H	-1.06	46.52	74.00	-27.48
5126.25	36.26	Ave	112	1.3	H	-1.06	35.20	54.00	-18.80
10540.00	46.31	PK	260	1.7	H	5.26	51.57	74.00	-22.43
10540.00	37.52	Ave	260	1.7	H	5.26	42.78	54.00	-11.22
802.11n(HT40) U-NII-2A High channel 5310MHz									
223.58	45.72	QP	152	1.4	H	-11.62	34.10	46.00	-11.90
223.58	38.79	QP	35	1.7	V	-11.62	27.17	46.00	-18.83
4511.07	42.37	PK	176	1.6	H	-1.94	40.43	74.00	-33.57
4511.07	34.71	Ave	176	1.6	H	-1.94	32.77	54.00	-21.23
5113.43	46.79	PK	339	1.2	H	-1.06	45.73	74.00	-28.27
5113.43	36.28	Ave	339	1.2	H	-1.06	35.22	54.00	-18.78
10620.00	42.06	PK	358	1.6	H	5.28	47.34	68.20	-20.86
10620.00	35.70	Ave	358	1.6	H	5.28	40.98	54.00	-13.02

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)
802.11n(HT40) U-NII-2C Low Channel 5510MHz									
223.58	47.46	QP	40	1.7	H	-11.62	35.84	46.00	-10.16
223.58	36.15	QP	304	1.4	V	-11.62	24.53	46.00	-21.47
4537.84	41.56	PK	310	1.4	H	-1.89	39.67	74.00	-34.33
4537.84	36.24	Ave	310	1.4	H	-1.89	34.35	54.00	-19.65
5130.55	48.40	PK	34	1.9	H	-1.06	47.34	74.00	-26.66
5130.55	38.99	Ave	34	1.9	H	-1.06	37.93	54.00	-16.07
11020.00	41.90	PK	183	1.6	H	5.26	47.16	68.20	-21.04
11020.00	38.10	Ave	183	1.6	H	5.26	43.36	54.00	-10.64
802.11n(HT40) U-NII-2C Middle channel 5550MHz									
223.58	46.59	QP	219	1.2	H	-11.62	34.97	46.00	-11.03
223.58	36.75	QP	256	1.8	V	-11.62	25.13	46.00	-20.87
4518.12	41.14	PK	75	1.3	H	-1.94	39.20	74.00	-34.80
4518.12	35.39	Ave	75	1.3	H	-1.94	33.45	54.00	-20.55
5119.63	49.54	PK	264	1.6	H	-1.06	48.48	74.00	-25.52
5119.63	39.95	Ave	264	1.6	H	-1.06	38.89	54.00	-15.11
11100.00	45.39	PK	193	1.6	H	5.28	50.67	68.20	-17.53
11100.00	39.81	Ave	193	1.6	H	5.28	45.09	54.00	-8.91
802.11n(HT40) U-NII-2C High channel 5670MHz									
223.58	46.49	QP	0	1.1	H	-11.62	34.87	46.00	-11.13
223.58	37.50	QP	102	1.6	V	-11.62	25.88	46.00	-20.12
4519.49	41.85	PK	86	2.0	H	-1.94	39.91	74.00	-34.09
4519.49	35.36	Ave	86	2.0	H	-1.94	33.42	54.00	-20.58
5128.20	51.00	PK	302	1.4	H	-1.06	49.94	74.00	-24.06
5128.20	39.99	Ave	302	1.4	H	-1.06	38.93	54.00	-15.07
11340.00	41.70	PK	126	1.8	H	5.28	46.98	68.20	-21.22
11340.00	36.04	Ave	126	1.8	H	5.28	41.32	54.00	-12.68

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(HT40) U-NII-3 Low Channel 5755MHz									
223.58	37.08	QP	42	1.2	H	-11.62	25.46	46.00	-20.54
223.58	45.98	QP	116	1.3	V	-11.62	34.36	46.00	-11.64
4508.08	41.78	PK	288	1.3	H	-1.96	39.82	74.00	-34.18
4508.08	36.92	Ave	288	1.3	H	-1.96	34.96	54.00	-19.04
11510.00	39.52	PK	137	1.8	H	5.88	45.40	68.20	-22.80
11510.00	32.89	Ave	137	1.8	H	5.88	38.77	54.00	-15.23
5380.40	46.24	PK	44	1.8	H	-1.01	45.23	74.00	-28.77
5380.40	38.56	Ave	44	1.8	H	-1.01	37.55	54.00	-16.45
802.11n(HT40) U-NII-3 High Channel 5795MHz									
223.58	37.29	QP	2	1.2	H	-11.62	25.67	46.00	-20.33
223.58	45.62	QP	73	2.0	V	-11.62	34.00	46.00	-12.00
4531.28	41.27	PK	249	1.2	H	-1.92	39.35	74.00	-34.65
4531.28	37.67	Ave	249	1.2	H	-1.92	35.75	54.00	-18.25
11590.00	41.49	PK	139	1.0	H	5.63	47.12	68.20	-21.08
11590.00	36.08	Ave	139	1.0	H	5.63	41.71	54.00	-12.29
5365.43	45.41	PK	322	1.0	H	-1.04	44.37	74.00	-29.63
5365.43	39.52	Ave	322	1.0	H	-1.04	38.48	54.00	-15.52

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)
802.11ac(HT40) U-NII-1 Low Channel 5190MHz									
223.58	37.93	QP	88	1.9	H	-11.62	26.31	46.00	-19.69
223.58	44.32	QP	260	1.7	V	-11.62	32.70	46.00	-13.30
4535.54	39.23	PK	262	1.5	H	-1.91	37.32	74.00	-36.68
4535.54	34.97	Ave	262	1.5	H	-1.91	33.06	54.00	-20.94
5120.04	46.00	PK	9	1.0	H	-1.06	44.94	74.00	-29.06
5120.04	39.30	Ave	9	1.0	H	-1.06	38.24	54.00	-15.76
10380.00	41.23	PK	327	1.6	H	5.26	46.49	74.00	-27.51
10380.00	34.50	Ave	327	1.6	H	5.26	39.76	54.00	-14.24
802.11ac(HT40) U-NII-1 High channel 5230MHz									
223.58	38.81	QP	279	1.7	H	-11.62	27.19	46.00	-18.81
223.58	43.37	QP	227	1.5	V	-11.62	31.75	46.00	-14.25
4538.35	39.12	PK	353	1.1	H	-1.93	37.19	74.00	-36.81
4538.35	34.68	Ave	353	1.1	H	-1.93	32.75	54.00	-21.25
5134.18	46.52	PK	234	1.5	H	-1.06	45.46	74.00	-28.54
5134.18	39.04	Ave	234	1.5	H	-1.06	37.98	54.00	-16.02
10460.00	42.63	PK	335	1.6	H	5.28	47.91	74.00	-26.09
10480.00	35.00	Ave	335	1.6	H	5.28	40.28	54.00	-13.72

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dB μ V)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)
802.11ac(HT40) U-NII-2A Low Channel 5270MHz									
223.58	45.54	QP	54	1.8	H	-11.62	33.92	46.00	-12.08
223.58	38.40	QP	198	1.5	V	-11.62	26.78	46.00	-19.22
4501.77	42.70	PK	42	1.6	H	-1.89	40.81	74.00	-33.19
4501.77	34.85	Ave	42	1.6	H	-1.89	32.96	54.00	-21.04
5112.03	44.72	PK	256	1.9	H	-1.06	43.66	74.00	-30.34
5112.03	39.85	Ave	256	1.9	H	-1.06	38.79	54.00	-15.21
10540.00	35.09	PK	158	1.6	H	5.26	40.35	74.00	-33.65
10540.00	49.64	Ave	158	1.6	H	5.26	54.90	54.00	0.90
802.11ac(HT40) U-NII-2A High channel 5310MHz									
223.58	45.69	QP	136	1.5	H	-11.62	34.07	46.00	-11.93
223.58	38.96	QP	144	1.1	V	-11.62	27.34	46.00	-18.66
4522.44	41.87	PK	323	1.2	H	-1.94	39.93	74.00	-34.07
4522.44	35.21	Ave	323	1.2	H	-1.94	33.27	54.00	-20.73
5145.14	45.53	PK	189	1.0	H	-1.06	44.47	74.00	-29.53
5145.14	40.91	Ave	189	1.0	H	-1.06	39.85	54.00	-14.15
10620.00	0.51	PK	74	1.6	H	5.28	5.79	68.20	-62.41
10620.00	41.48	Ave	74	1.6	H	5.28	46.76	54.00	-7.24

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dB μ V)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)
802.11ac(HT40) U-NII-2C Low Channel 5510MHz									
223.58	45.05	QP	324	1.4	H	-11.62	33.43	46.00	-12.57
223.58	41.58	QP	256	1.1	V	-11.62	29.96	46.00	-16.04
4522.95	-0.26	PK	222	1.6	H	-1.89	-2.15	74.00	-76.15
4522.95	40.72	Ave	222	1.6	H	-1.89	38.83	54.00	-15.17
5114.84	45.25	PK	83	1.8	H	-1.06	44.19	74.00	-29.81
5114.84	38.51	Ave	83	1.8	H	-1.06	37.45	54.00	-16.55
11020.00	35.61	PK	164	1.6	H	5.26	40.87	68.20	-27.33
11020.00	49.57	Ave	164	1.6	H	5.26	54.83	54.00	0.83
802.11ac(HT40) U-NII-2C Middle channel 5550MHz									
223.58	45.59	QP	350	1.3	H	-11.62	33.97	46.00	-12.03
223.58	42.34	QP	118	1.9	V	-11.62	30.72	46.00	-15.28
4538.96	-0.84	PK	253	1.0	H	-1.94	-2.78	74.00	-76.78
4538.96	40.24	Ave	253	1.0	H	-1.94	38.30	54.00	-15.70
5148.06	47.05	PK	172	1.7	H	-1.06	45.99	74.00	-28.01
5148.06	40.16	Ave	172	1.7	H	-1.06	39.10	54.00	-14.90
11100.00	37.69	PK	207	1.7	H	5.28	42.97	68.20	-25.23
11100.00	49.76	Ave	207	1.7	H	5.28	55.04	54.00	1.04
802.11ac(HT40) U-NII-2C High channel 5670MHz									
223.58	46.39	QP	142	1.0	H	-11.62	34.77	46.00	-11.23
223.58	42.17	QP	266	1.9	V	-11.62	30.55	46.00	-15.45
4510.49	-0.16	PK	214	1.3	H	-1.94	-2.10	74.00	-76.10
4510.49	40.18	Ave	214	1.3	H	-1.94	38.24	54.00	-15.76
5114.69	47.93	PK	309	1.4	H	-1.06	46.87	74.00	-27.13
5114.69	42.10	Ave	309	1.4	H	-1.06	41.04	54.00	-12.96
11340.00	-0.64	PK	89	1.9	H	5.28	4.64	68.20	-63.56
11340.00	45.07	Ave	89	1.9	H	5.28	50.35	54.00	-3.65

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dB μ V)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)
802.11ac(HT40) U-NII-3 Low Channel 5755MHz									
223.58	37.95	QP	309	1.5	H	-11.62	26.33	46.00	-19.67
223.58	44.80	QP	33	1.1	V	-11.62	33.18	46.00	-12.82
4507.06	36.83	PK	140	1.2	H	-1.92	34.91	74.00	-39.09
4507.06	32.52	Ave	140	1.2	H	-1.92	30.60	54.00	-23.40
11510.00	40.94	PK	82	1.1	H	5.88	46.82	68.20	-21.38
11510.00	34.04	Ave	82	1.1	H	5.88	39.92	54.00	-14.08
5354.29	46.60	PK	164	1.5	H	-1.07	45.53	74.00	-28.47
5354.29	39.41	Ave	164	1.5	H	-1.07	38.34	54.00	-15.66
802.11ac(HT40) U-NII-3 High Channel 5795MHz									
223.58	37.81	QP	83	1.9	H	-11.62	26.19	46.00	-19.81
223.58	44.12	QP	253	1.4	V	-11.62	32.50	46.00	-13.50
4539.54	36.01	PK	33	1.0	H	-1.86	34.15	74.00	-39.85
4539.54	32.08	Ave	33	1.0	H	-1.86	30.22	54.00	-23.78
11590.00	41.93	PK	62	1.1	H	5.63	47.56	68.20	-20.64
11590.00	35.13	Ave	62	1.1	H	5.63	40.76	54.00	-13.24
5361.76	46.50	PK	312	1.1	H	-1.03	45.47	74.00	-28.53
5361.76	39.24	Ave	312	1.1	H	-1.03	38.21	54.00	-15.79

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dB μ V)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)
802.11ac(HT80) U-NII-1 Low Channel 5210MHz									
223.58	43.25	QP	351	1.2	H	-11.62	31.63	46.00	-14.37
4539.54	35.22	QP	351	1.5	V	-11.62	23.60	46.00	-22.40
4501.91	31.23	PK	33	1.7	H	-1.88	29.35	74.00	-44.65
4501.91	41.48	Ave	33	1.7	H	-1.88	39.60	54.00	-14.40
5143.69	36.61	PK	151	1.5	H	-1.06	35.55	74.00	-38.45
5143.69	47.51	Ave	151	1.5	H	-1.06	46.45	54.00	-7.55
10420.00	42.71	PK	285	1.1	H	4.65	47.36	74.00	-26.64
10420.00	36.63	Ave	285	1.1	H	4.65	41.28	54.00	-12.72
802.11ac(HT80) U-NII-2A Low Channel 5290MHz									
4539.54	35.46	QP	75	1.6	H	-11.62	23.84	46.00	-22.16
4501.91	31.20	QP	72	1.2	V	-11.62	19.58	46.00	-26.42
4518.35	42.47	PK	333	1.3	H	-1.88	40.59	74.00	-33.41
4518.35	35.75	Ave	333	1.3	H	-1.88	33.87	54.00	-20.13
5147.81	47.73	PK	44	1.5	H	-1.06	46.67	74.00	-27.33
5147.81	44.53	Ave	44	1.5	H	-1.06	43.47	54.00	-10.53
10580.00	35.71	PK	131	1.6	H	4.65	40.36	74.00	-33.64
10580.00	46.43	Ave	131	1.6	H	4.65	51.08	54.00	-2.92

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dB μ V)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)
802.11ac(HT80) U-NII-2C Low Channel 5530MHz									
4501.91	31.11	QP	125	1.8	H	-11.62	19.49	46.00	-26.51
4518.35	43.35	QP	188	1.0	V	-11.62	31.73	46.00	-14.27
4513.80	34.82	PK	352	1.5	H	-1.88	32.94	74.00	-41.06
4513.80	47.77	Ave	352	1.5	H	-1.88	45.89	54.00	-8.11
5132.41	46.13	PK	260	1.6	H	-1.06	45.07	74.00	-28.93
5132.41	34.76	Ave	260	1.6	H	-1.06	33.70	54.00	-20.30
11060.00	46.53	PK	205	1.9	H	4.65	51.18	68.20	-17.02
11060.00	36.96	Ave	205	1.9	H	4.65	41.61	54.00	-12.39
802.11ac(HT80) U-NII-3 Low channel 5775MHz									
4539.54	35.95	QP	227	1.4	H	-11.62	24.33	46.00	-21.67
4501.91	30.56	QP	137	1.5	V	-11.62	18.94	46.00	-27.06
4511.69	41.85	PK	47	1.3	H	-1.85	40.00	74.00	-34.00
4511.69	42.76	Ave	47	1.3	H	-1.85	40.91	54.00	-13.09
11550.00	42.25	PK	87	2.0	H	4.83	47.08	68.20	-21.12
11550.00	35.47	Ave	87	2.0	H	4.83	40.30	54.00	-13.70
5386.88	46.78	PK	14	1.7	H	-1.14	45.64	74.00	-28.36
5386.88	38.36	Ave	14	1.7	H	-1.14	37.22	54.00	-16.78

Test Frequency: 12GHz~40GHz

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

9 Duty cycle

Test Requirement:	47 CFR Part 15C 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

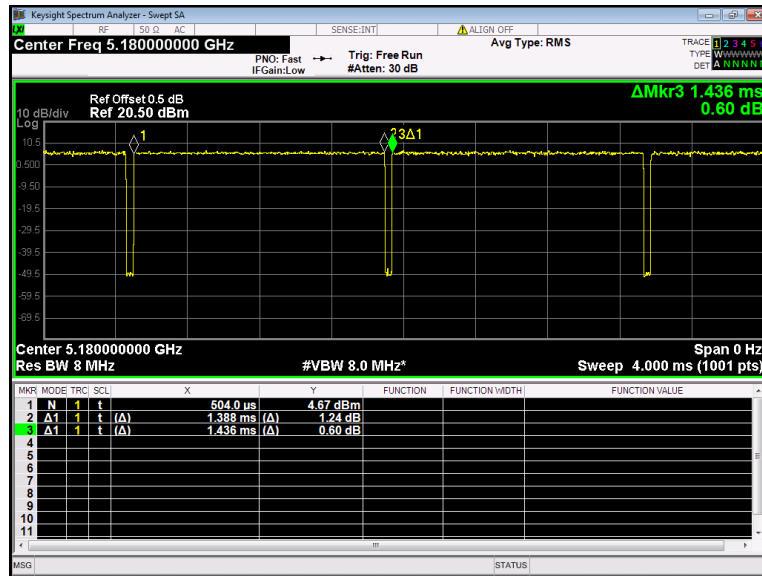
802.11a(HT20) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
36	100	100	100
52	100	100	100
100	100	100	100
149	100	100	100
802.11n(HT20) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
36	100	100	100
52	100	100	100
100	100	100	100
149	100	100	100
802.11ac(HT20) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
36	100	100	100
52	100	100	100
100	100	100	100
149	100	100	100
802.11n(HT40) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
38	100	100	100
54	100	100	100
102	100	100	100
151	100	100	100

802.11ac(HT40) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
38	100	100	100
54	100	100	100
102	100	100	100
151	100	100	100

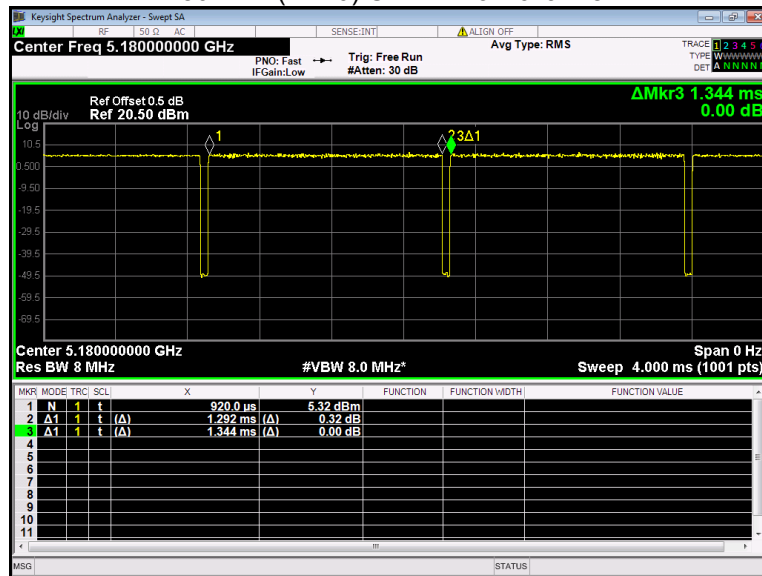
802.11ac(HT80) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
38	100	100	100
54	100	100	100
102	100	100	100
151	100	100	100

Test result plots shown as follows:

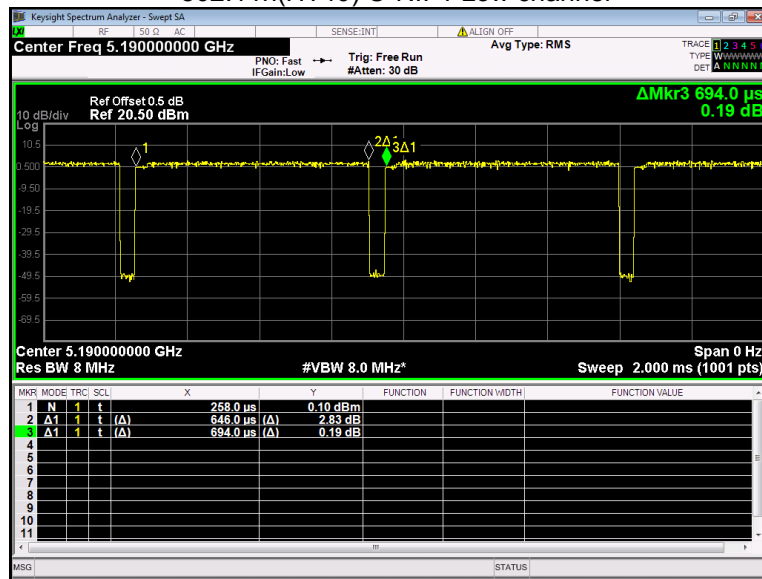
802.11a U-NII-1 Low channel



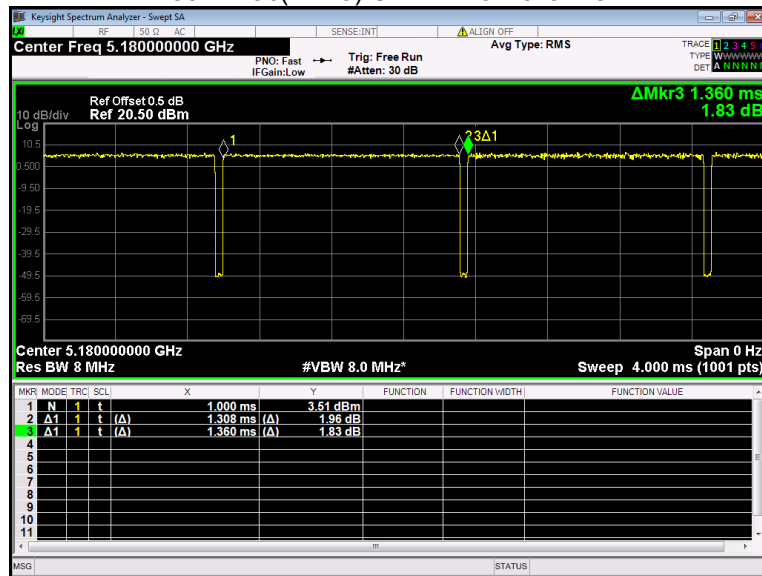
802.11n(HT20) U-NII-1 Low channel



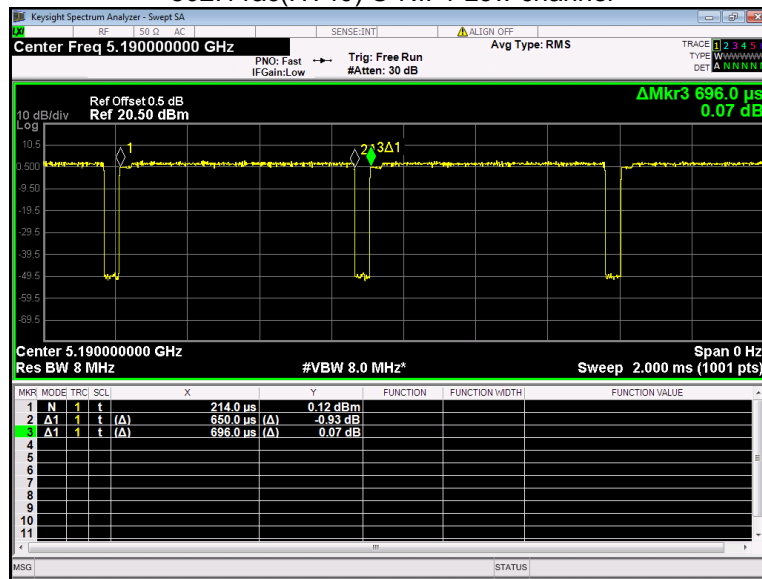
802.11n(HT40) U-NII-1 Low channel



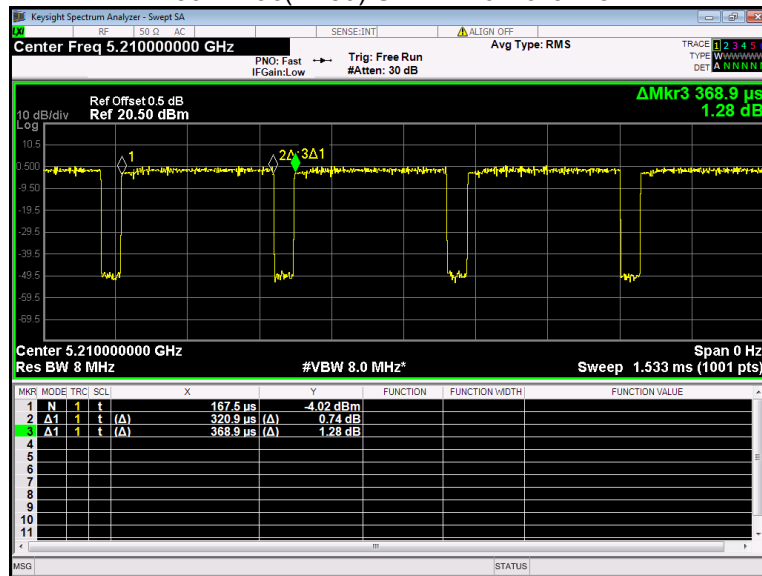
802.11ac(HT20) U-NII-1 Low channel



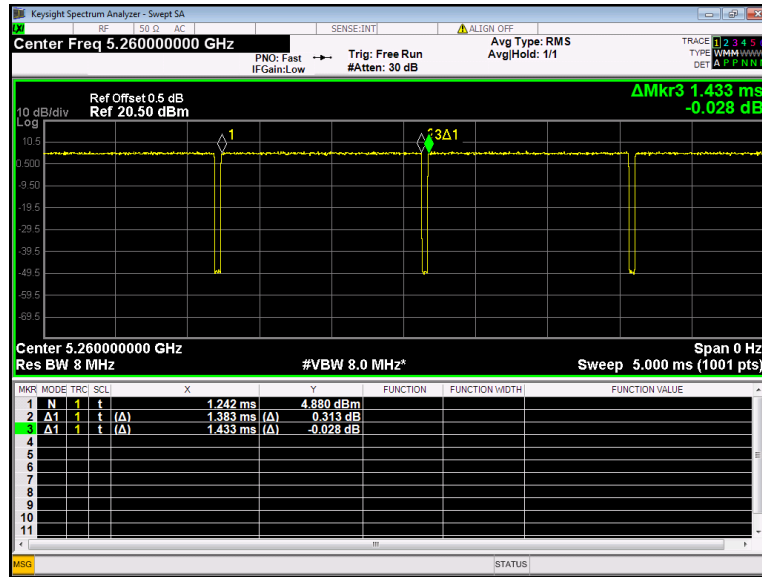
802.11ac(HT40) U-NII-1 Low channel



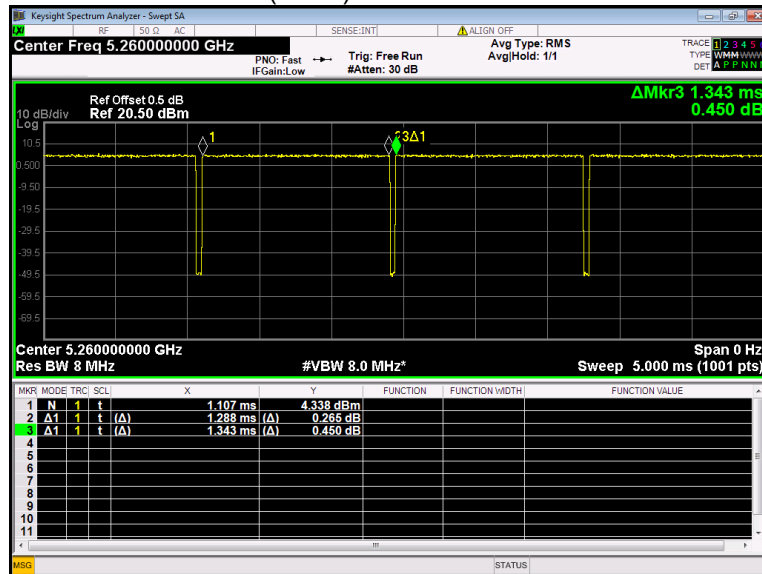
802.11ac(HT80) U-NII-1 Low channel



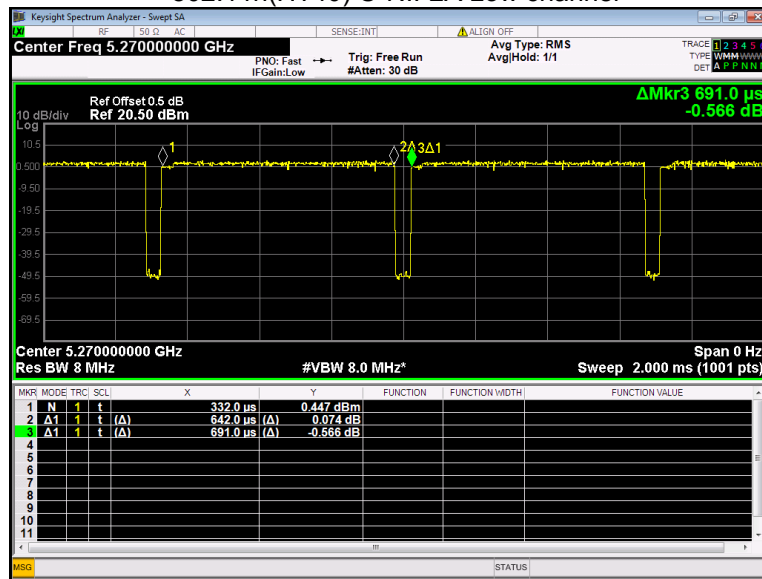
802.11a U-NII-2A Low channel



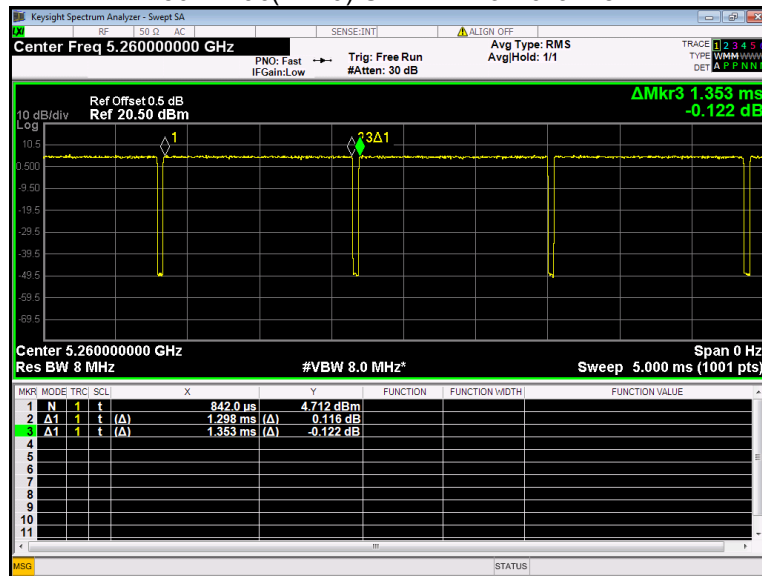
802.11n(HT20) U-NII-2A Low channel



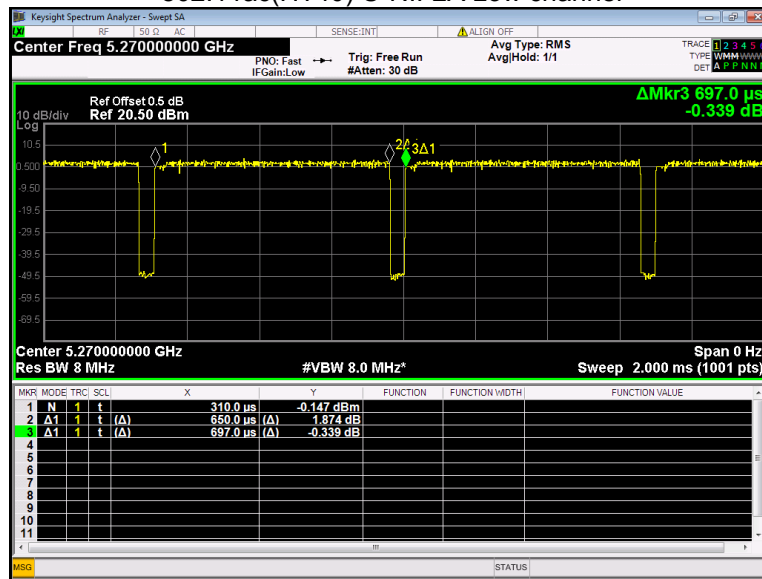
802.11n(HT40) U-NII-2A Low channel



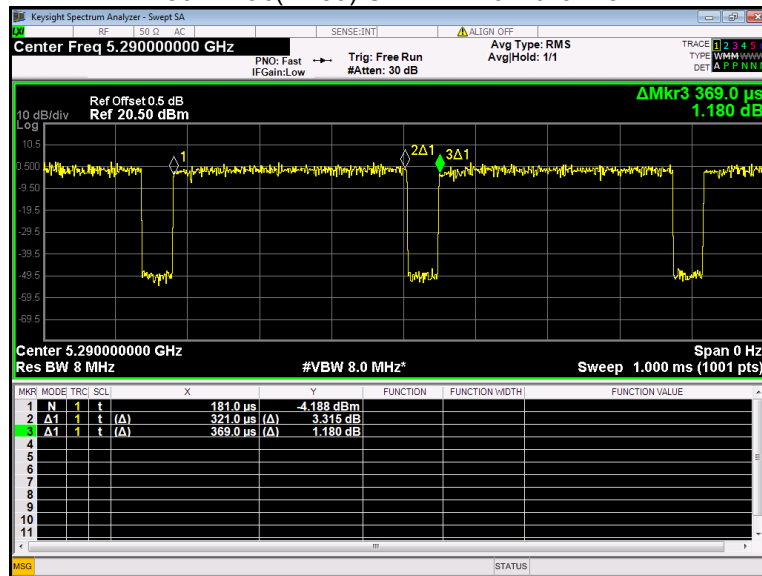
802.11ac(HT20) U-NII-2A Low channel



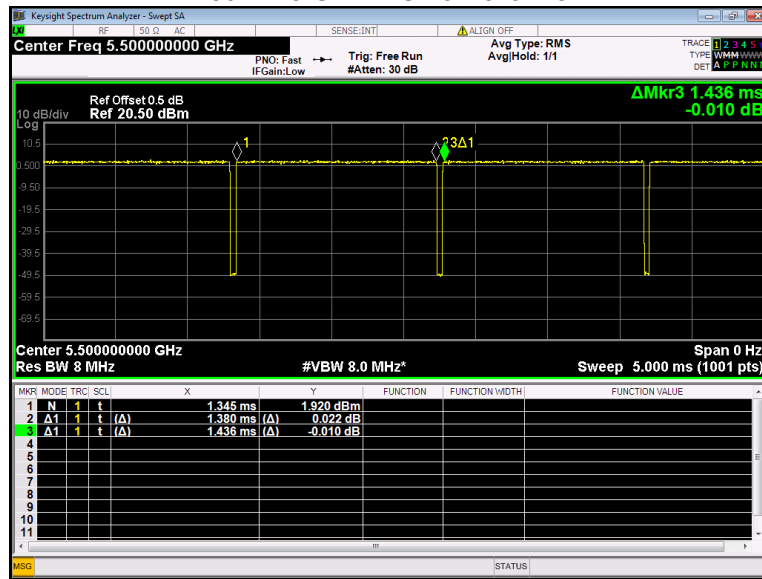
802.11ac(HT40) U-NII-2A Low channel



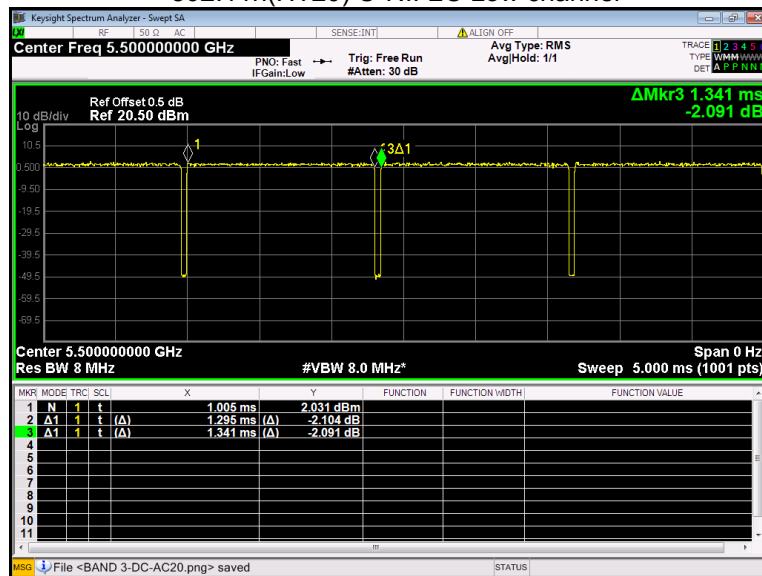
802.11ac(HT80) U-NII-2A Low channel



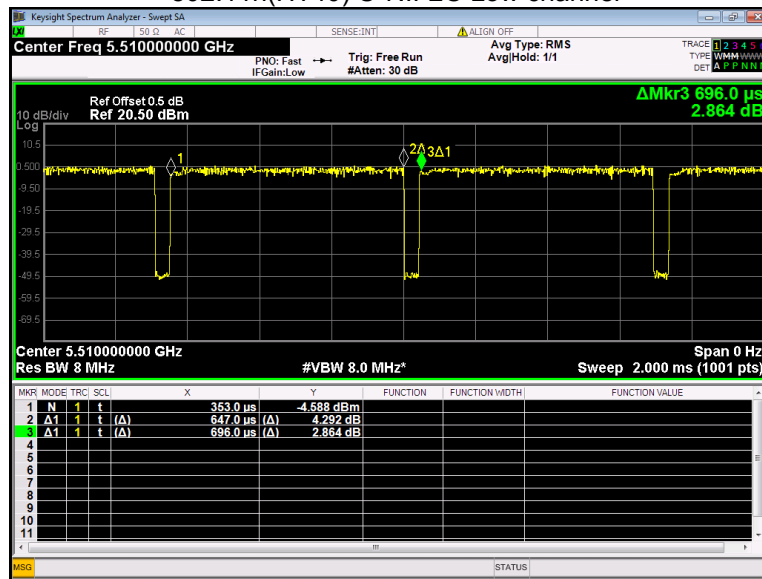
802.11a U-NII-2C Low channel



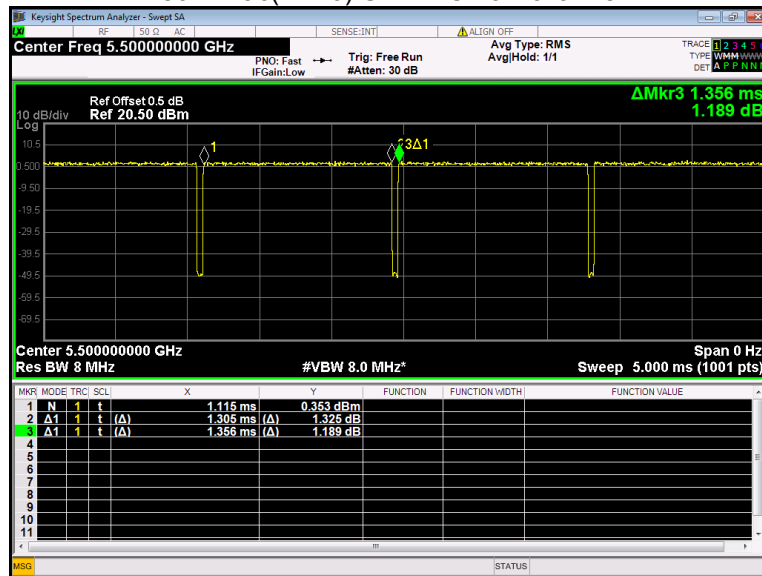
802.11n(HT20) U-NII-2C Low channel



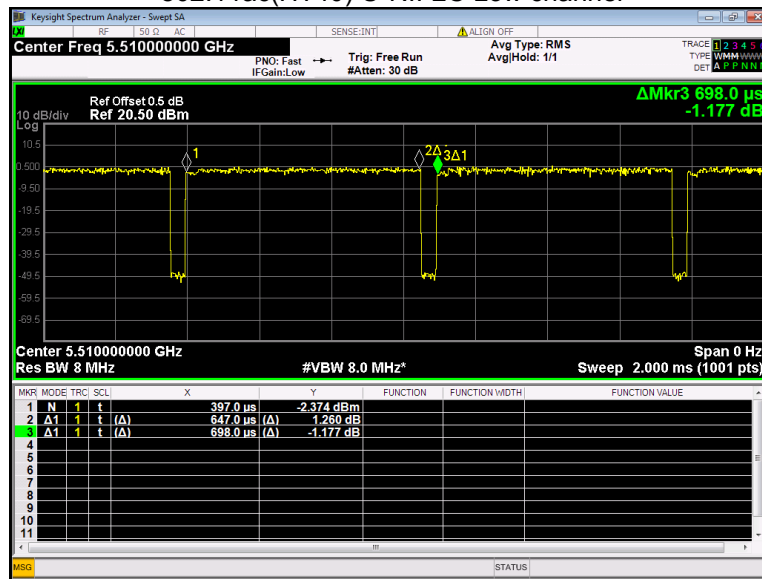
802.11n(HT40) U-NII-2C Low channel



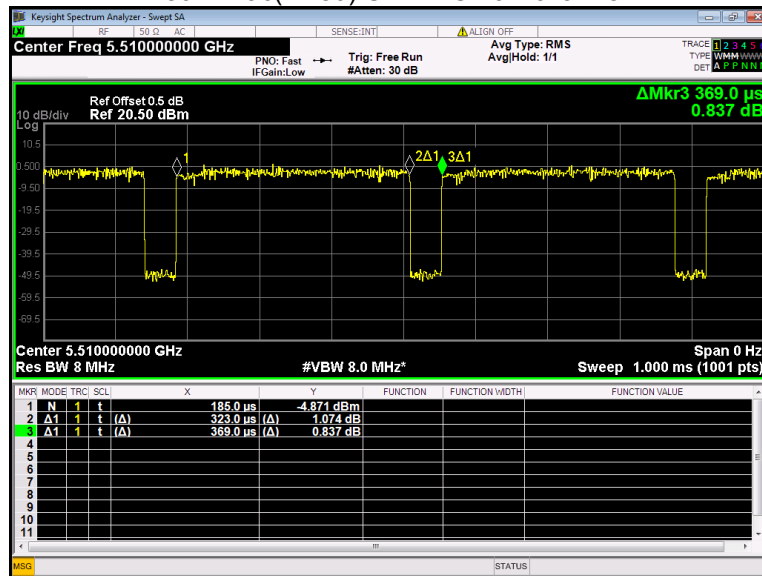
802.11ac(HT20) U-NII-2C Low channel



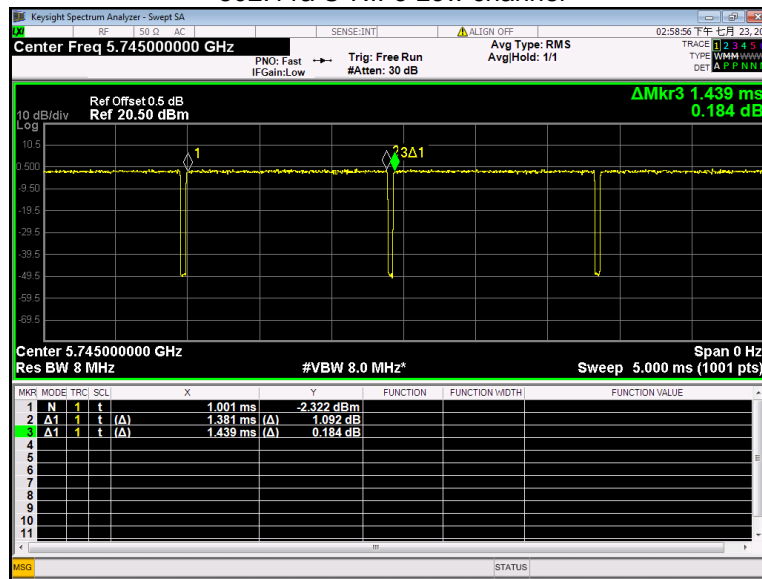
802.11ac(HT40) U-NII-2C Low channel



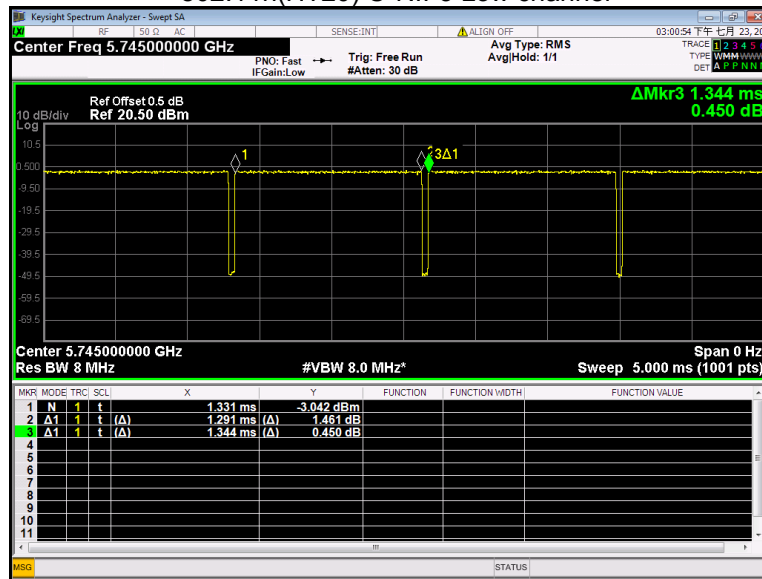
802.11ac(HT80) U-NII-2C Low channel



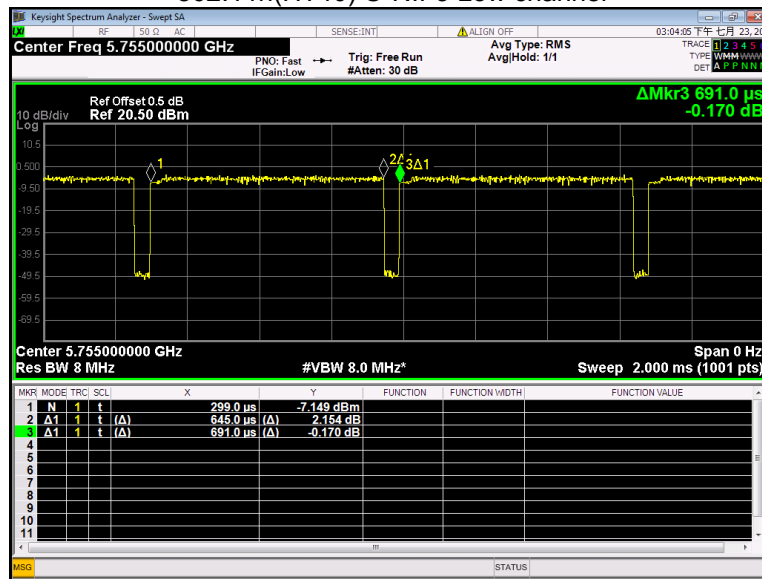
802.11a U-NII-3 Low channel



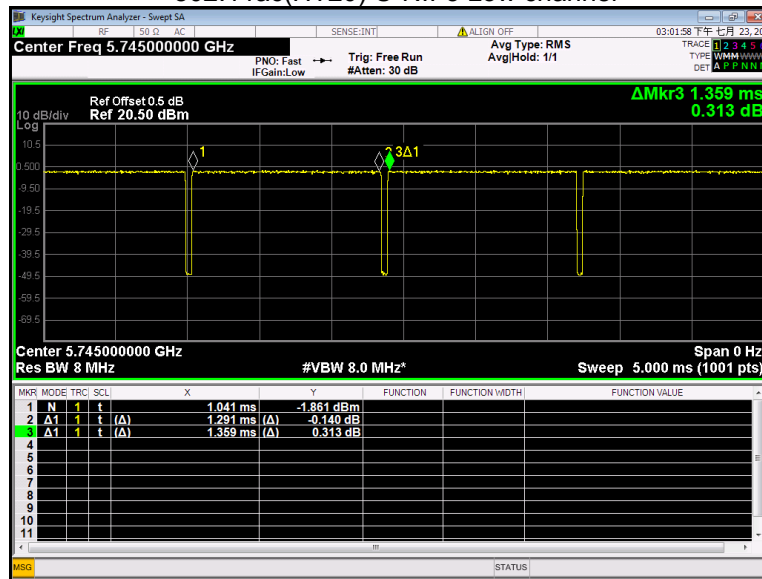
802.11n(HT20) U-NII-3 Low channel



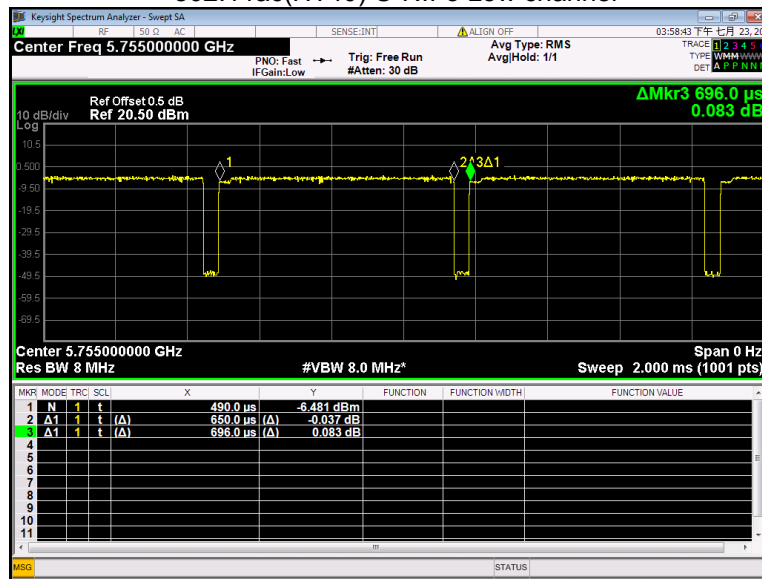
802.11n(HT40) U-NII-3 Low channel



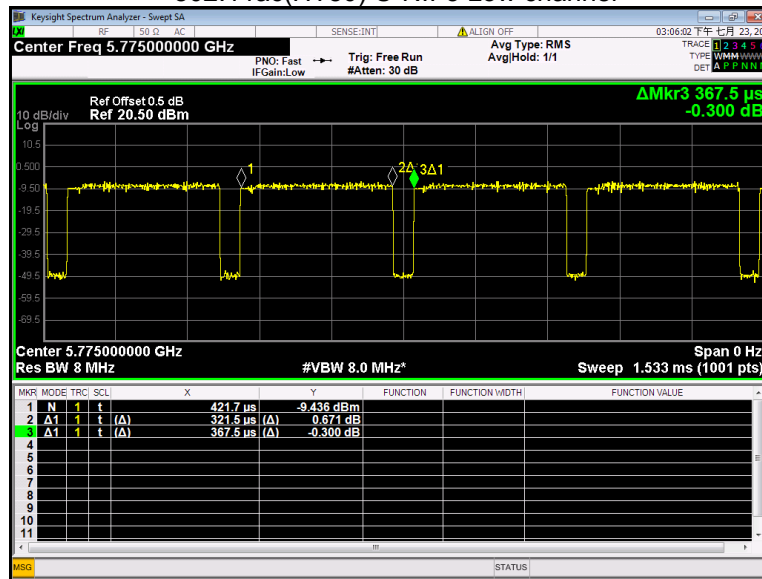
802.11ac(HT20) U-NII-3 Low channel



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



802.11ac(HT80) U-NII-3 Low channel



10 Band Edge

Test Requirement:	FCC CFR47 Part 15 Section 15.407
Test Method:	ANSI C63.10 2013
Test Limit:	<p>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.</p> <p>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.</p> <p>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.</p> <p>For transmitters operating in the 5.725-5.85 GHz band:</p> <p>(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.</p> <p>(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.</p>
Test Result:	PASS

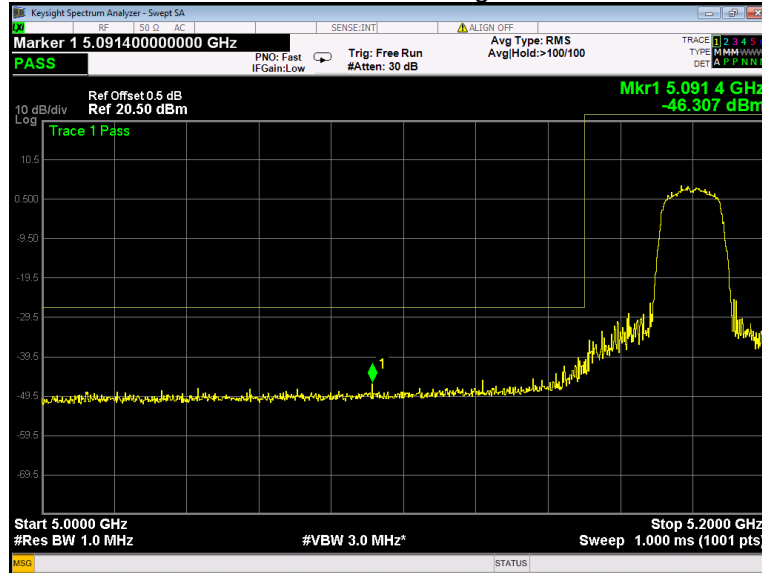
10.1 Test Produce

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.

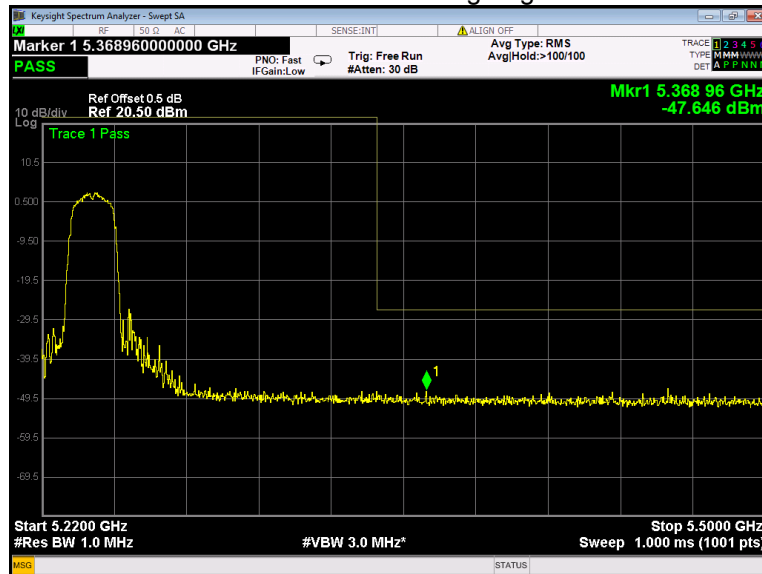
10.2 Test Result

Test result plots shown as follows:

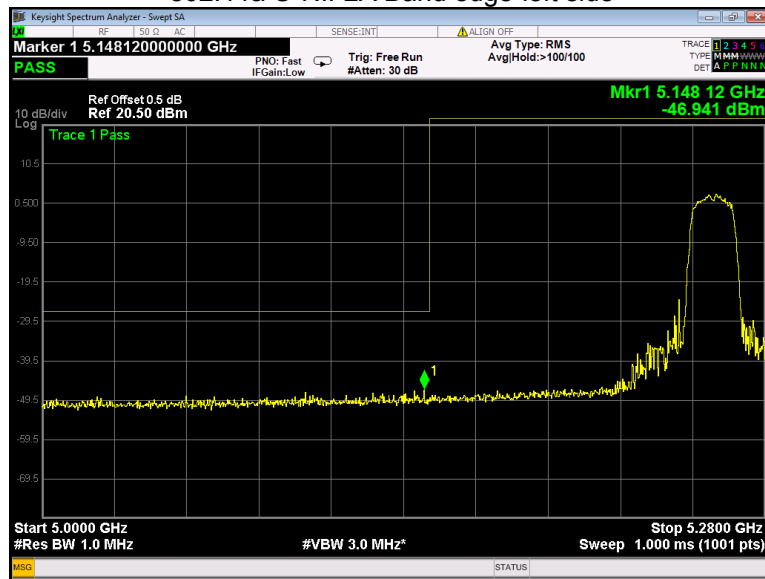
802.11a U-NII-1 Band edge-left side



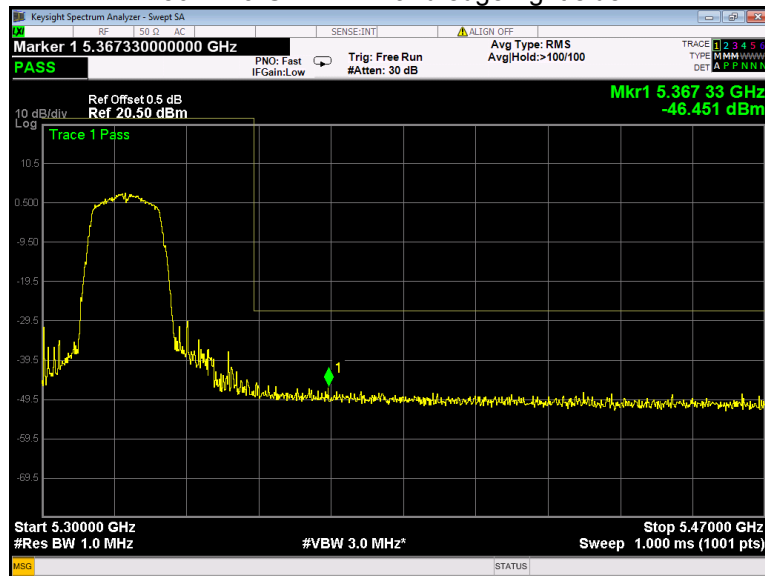
802.11a U-NII-1 Band edge-right side



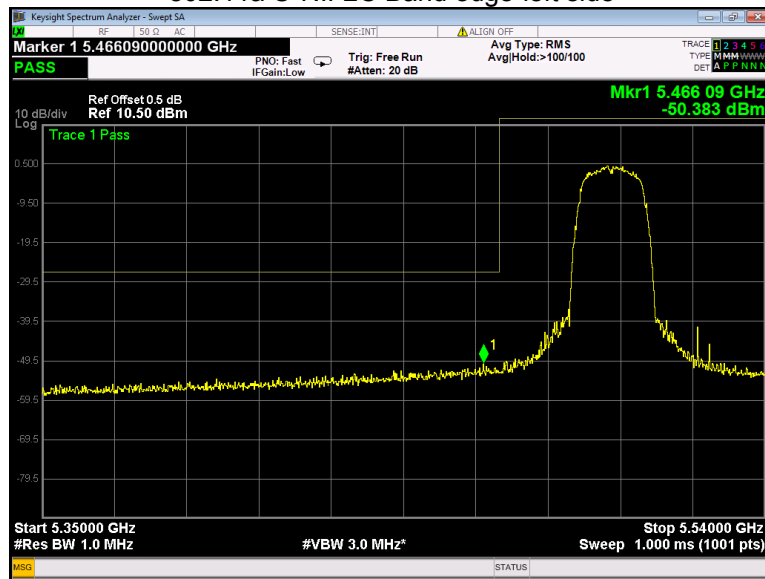
802.11a U-NII-2A Band edge-left side



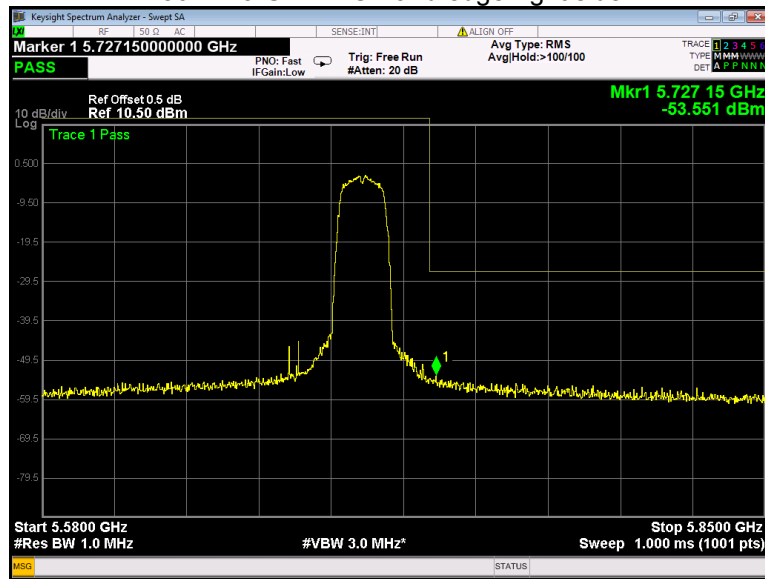
802.11a U-NII-2A Band edge-right side



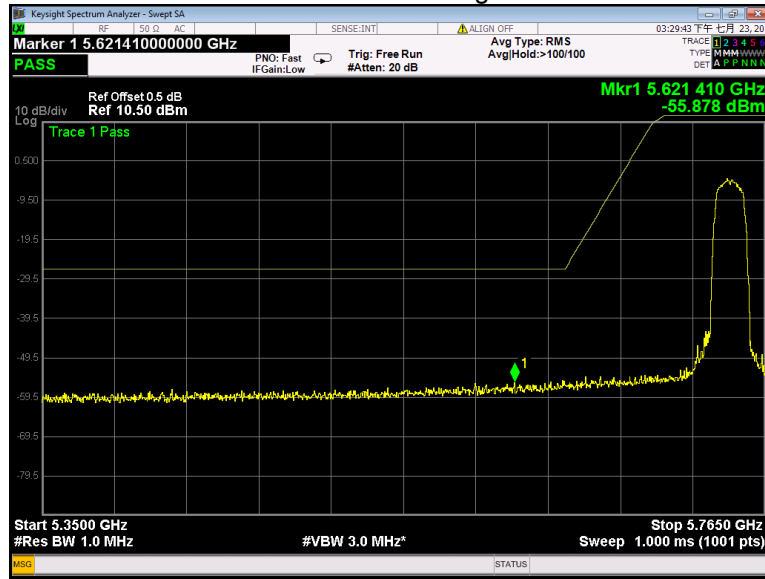
802.11a U-NII-2C Band edge-left side



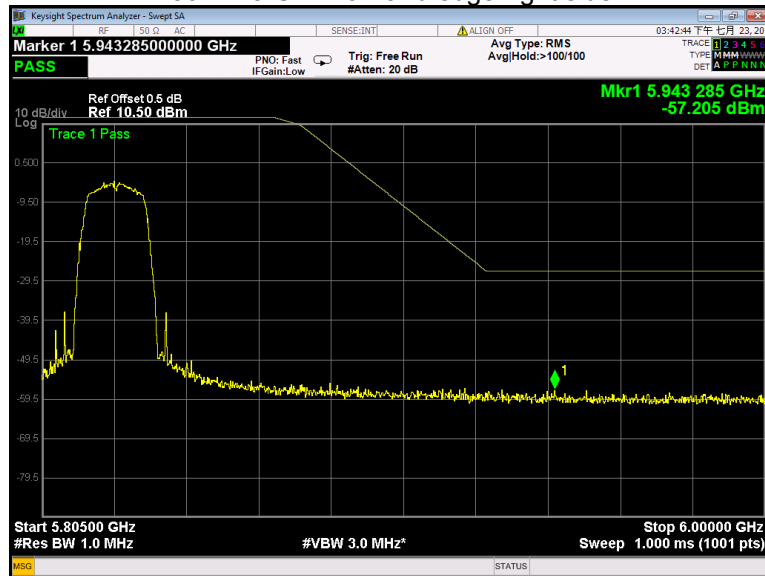
802.11a U-NII-2C Band edge-right side



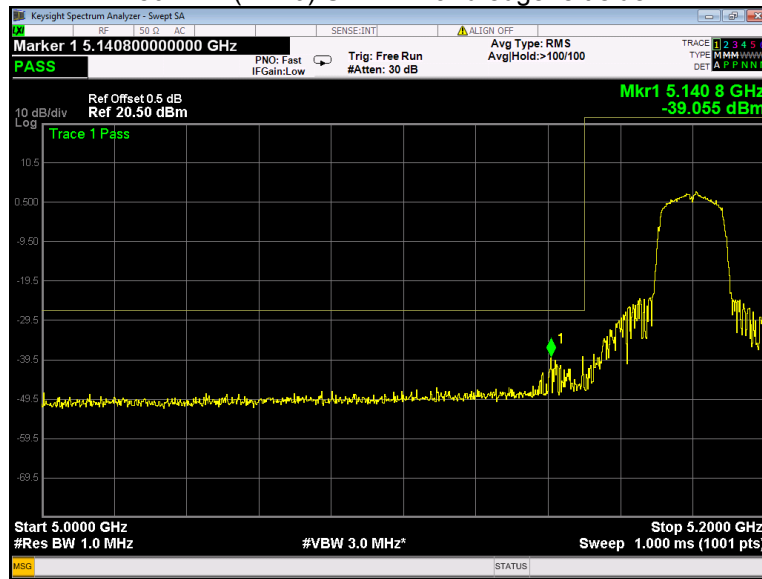
802.11a U-NII-3 Band edge-left side



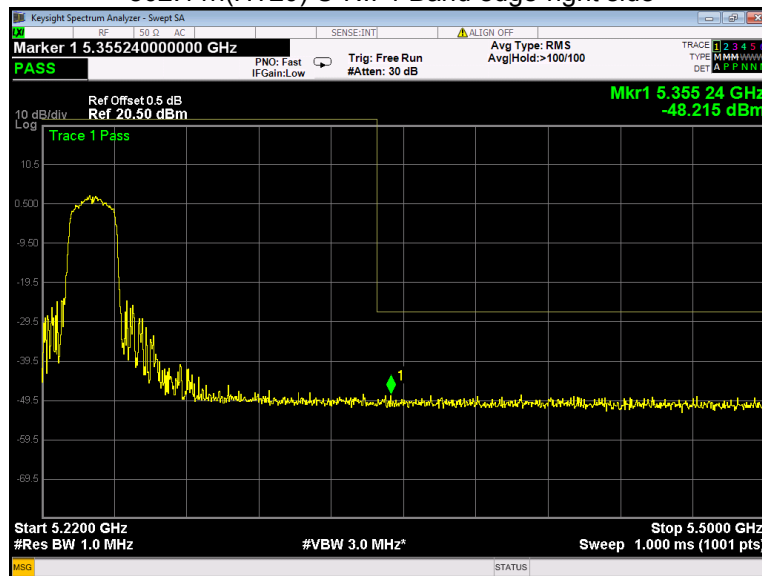
802.11a U-NII-3 Band edge-right side



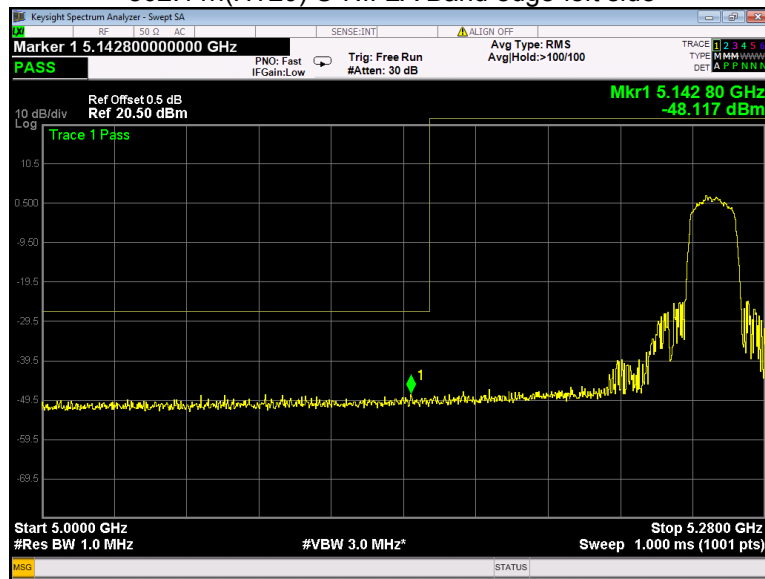
802.11n(HT20) U-NII-1 Band edge-left side



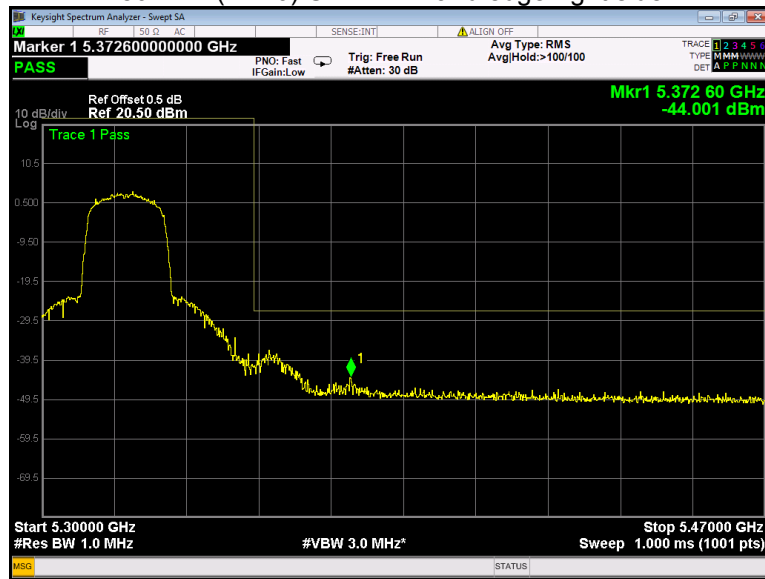
802.11n(HT20) U-NII-1 Band edge-right side



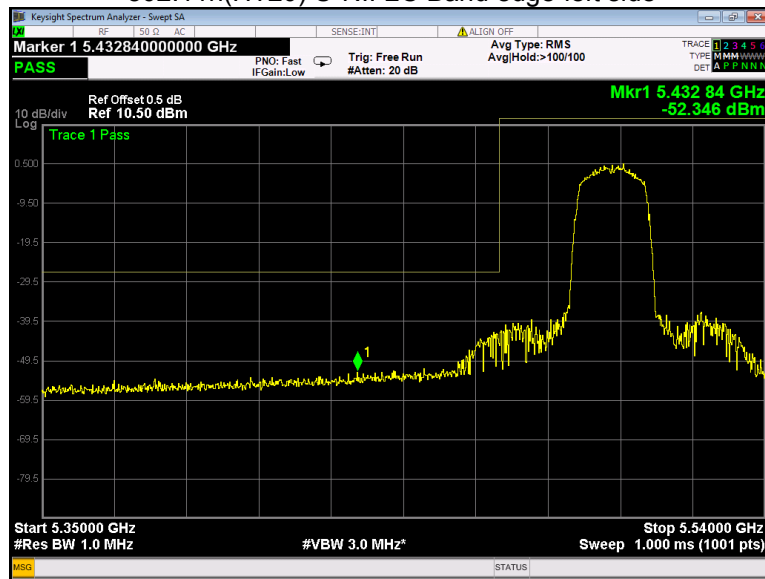
802.11n(HT20) U-NII-2A Band edge-left side



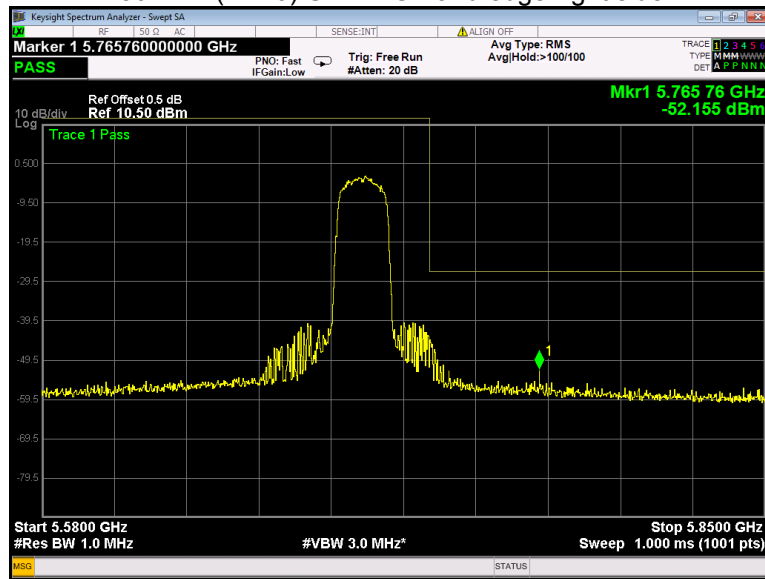
802.11n(HT20) U-NII-2A Band edge-right side



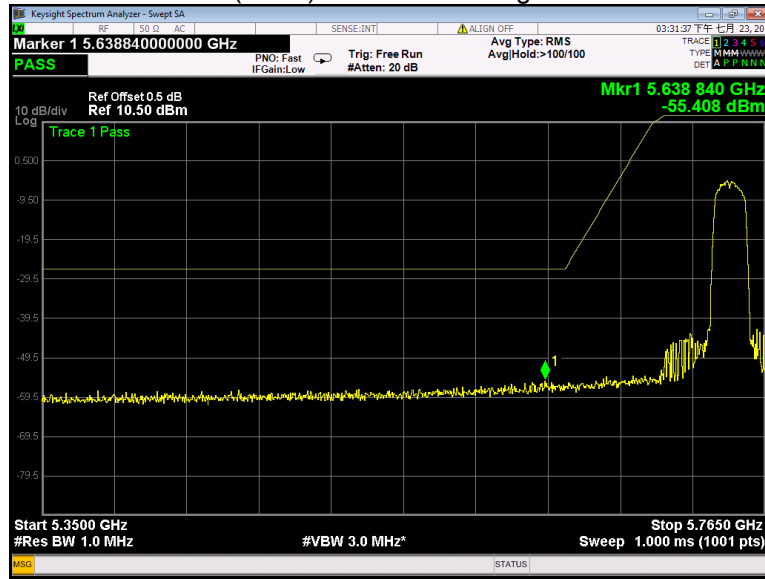
802.11n(HT20) U-NII-2C Band edge-left side



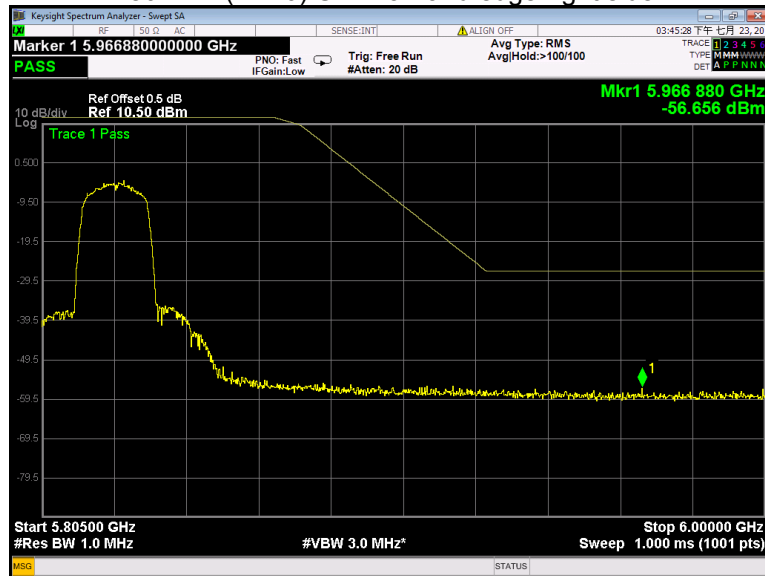
802.11n(HT20) U-NII-2C Band edge-right side



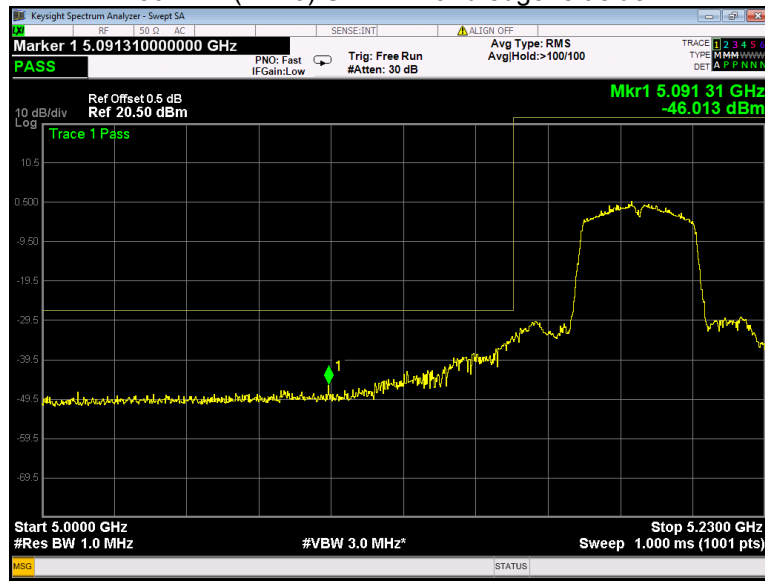
802.11n(HT20) U-NII-3 Band edge-left side



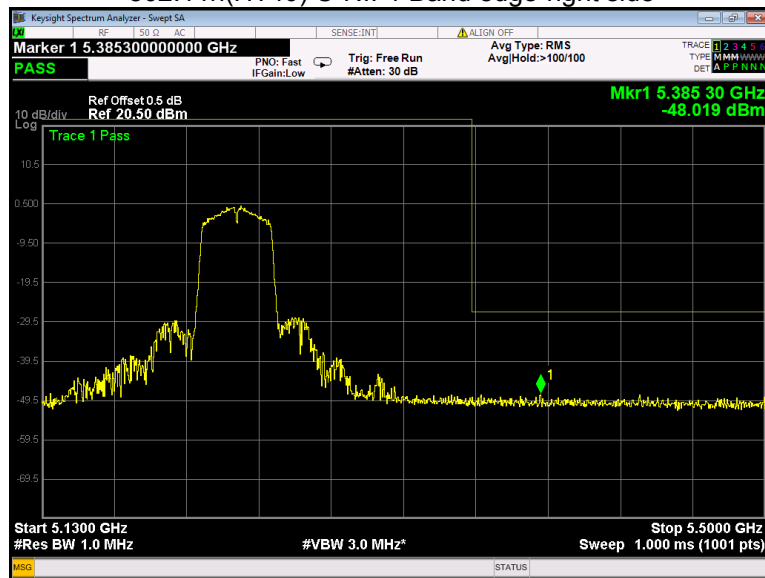
802.11n(HT20) U-NII-3 Band edge-right side



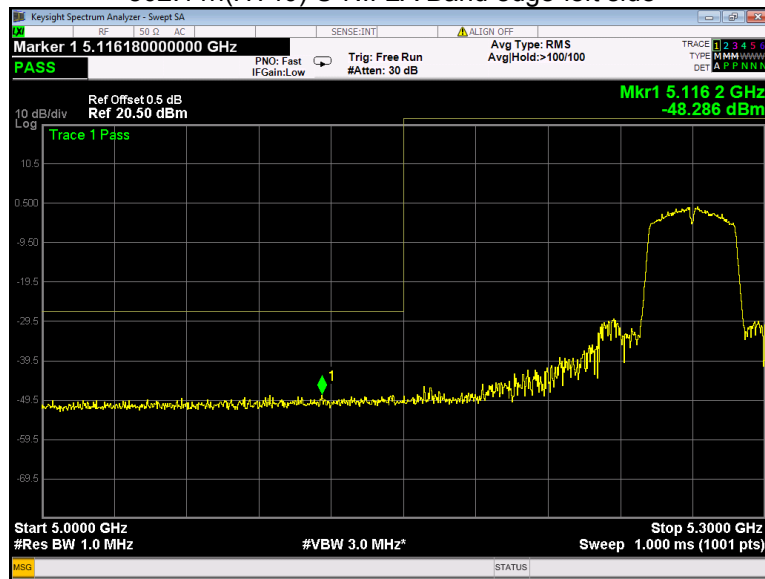
802.11n(HT40) U-NII-1 Band edge-left side



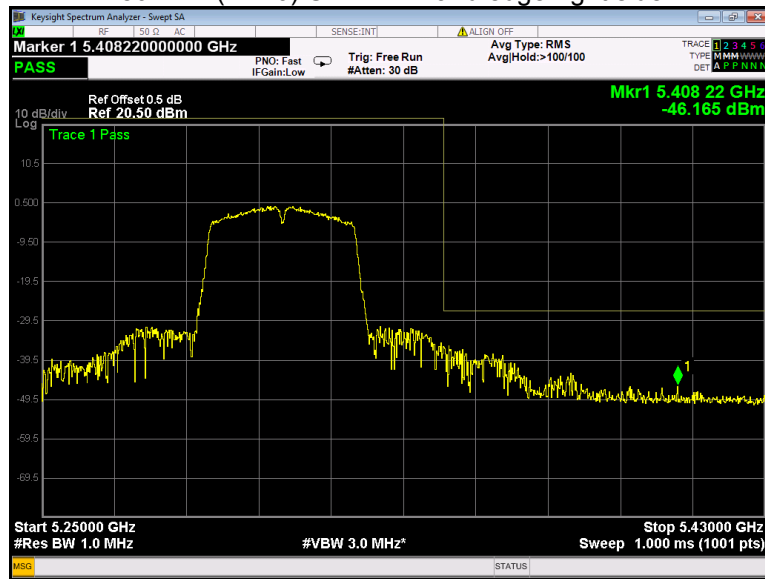
802.11n(HT40) U-NII-1 Band edge-right side



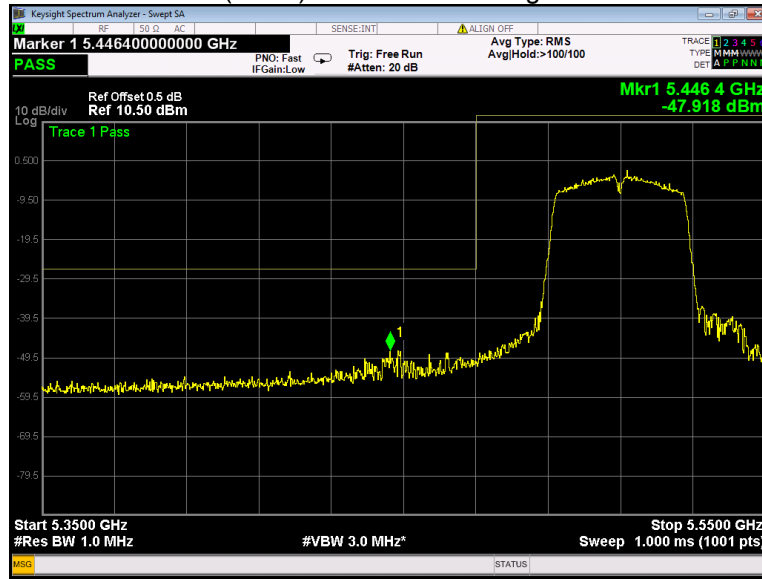
802.11n(HT40) U-NII-2A Band edge-left side



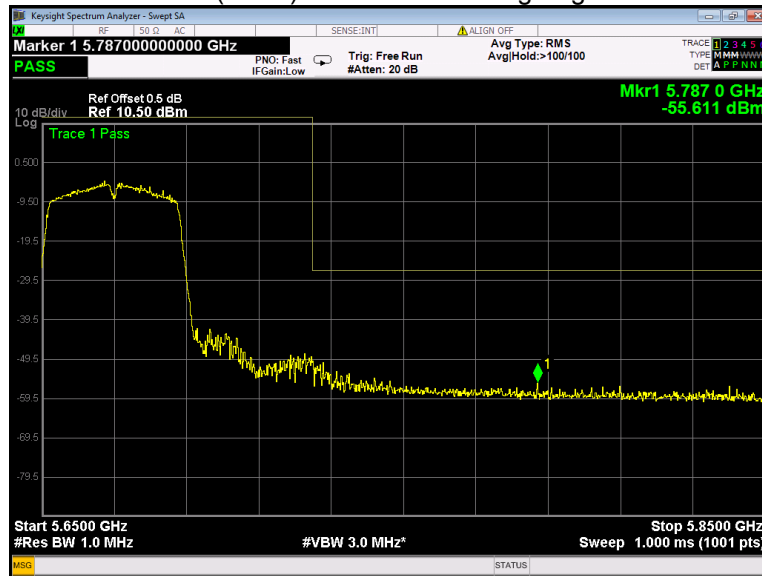
802.11n(HT40) U-NII-2A Band edge-right side



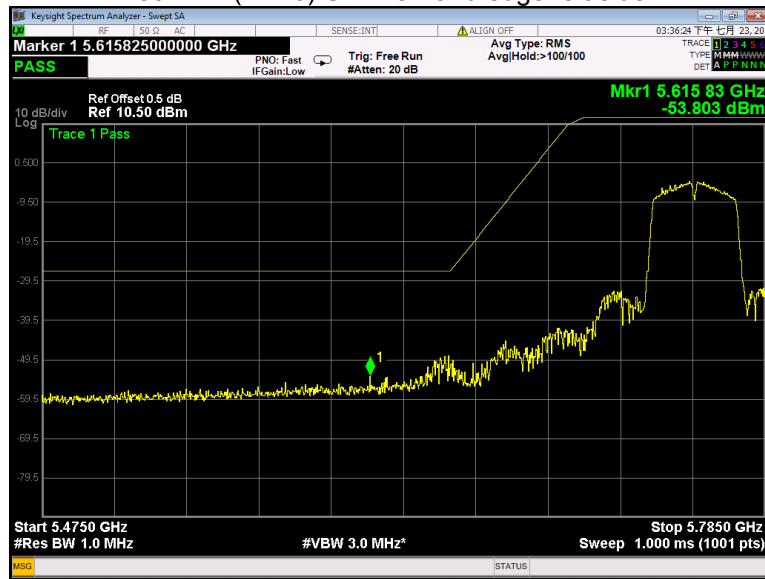
802.11n(HT40) U-NII-2C Band edge-left side



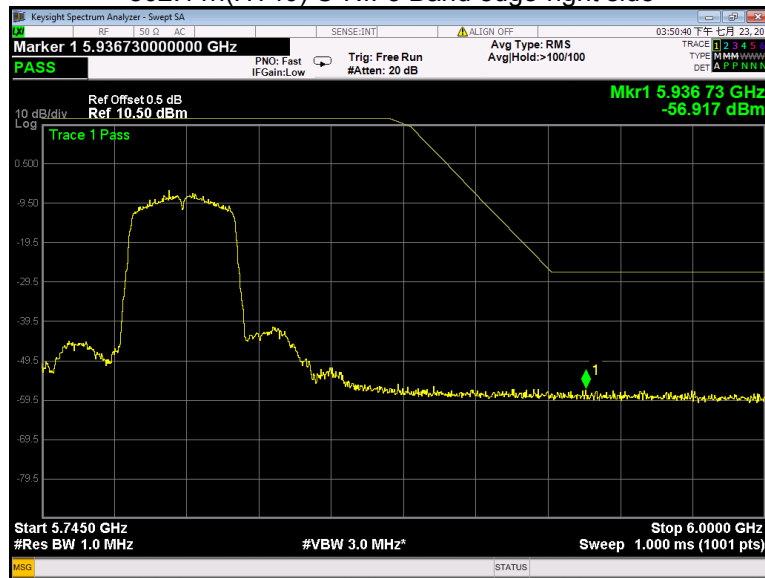
802.11n(HT40) U-NII-2C Band edge-right side



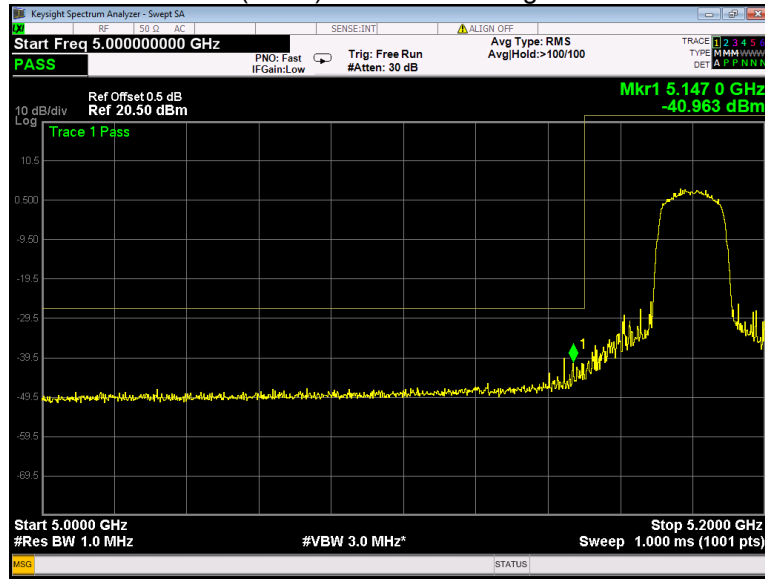
802.11n(HT40) U-NII-3 Band edge-left side



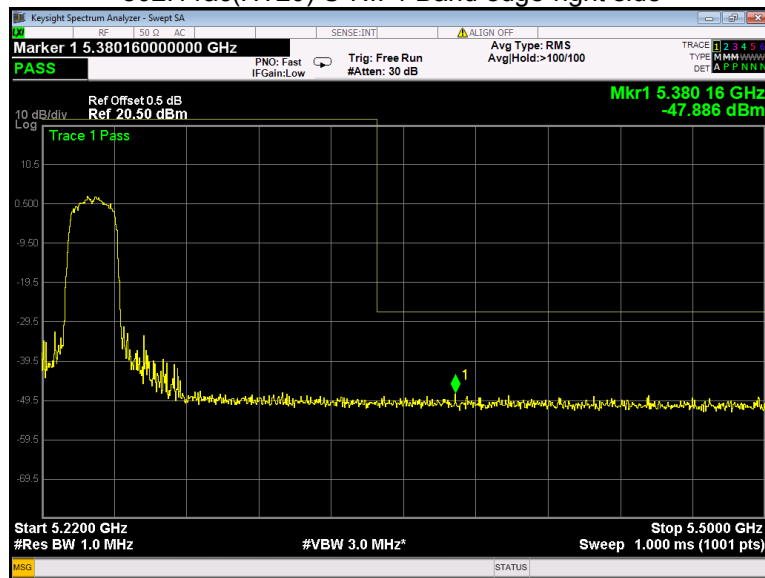
802.11n(HT40) U-NII-3 Band edge-right side



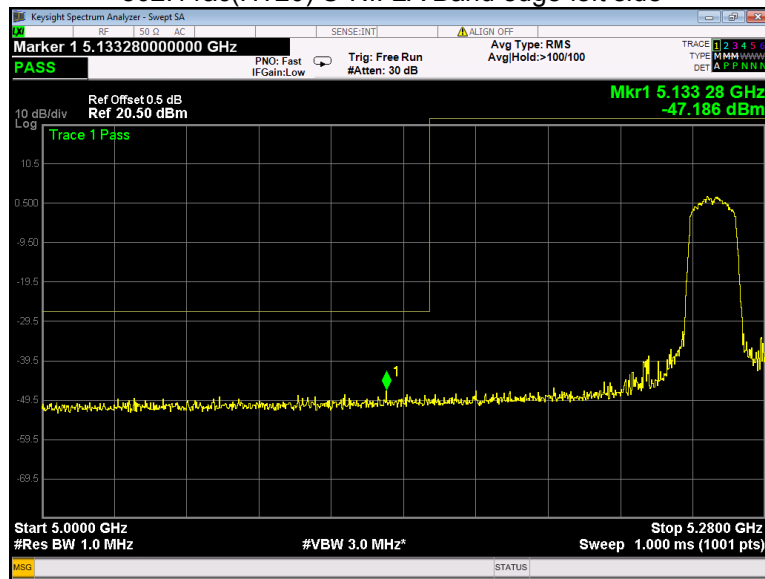
802.11ac(HT20) U-NII-1 Band edge-left side



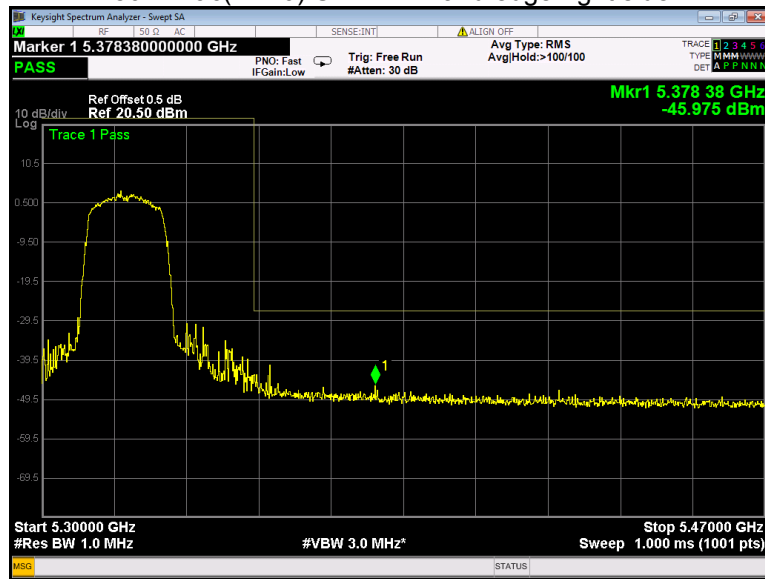
802.11ac(HT20) U-NII-1 Band edge-right side



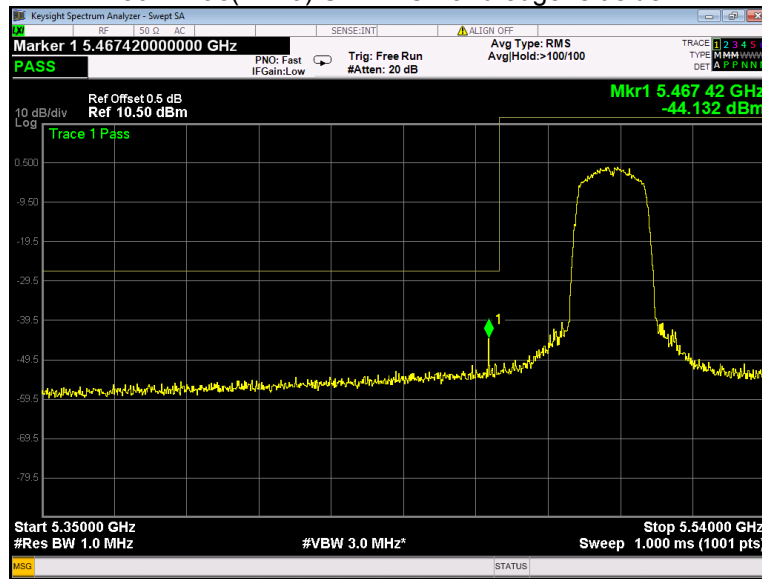
802.11ac(HT20) U-NII-2A Band edge-left side



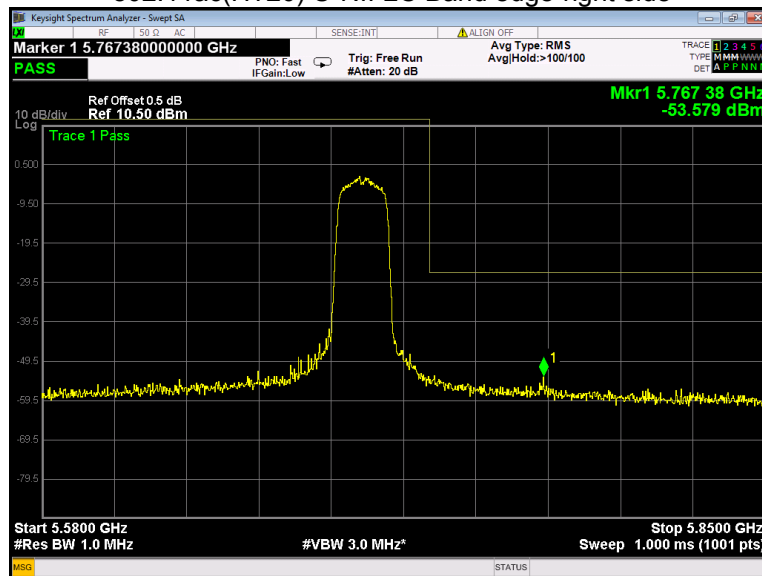
802.11ac(HT20) U-NII-2A Band edge-right side



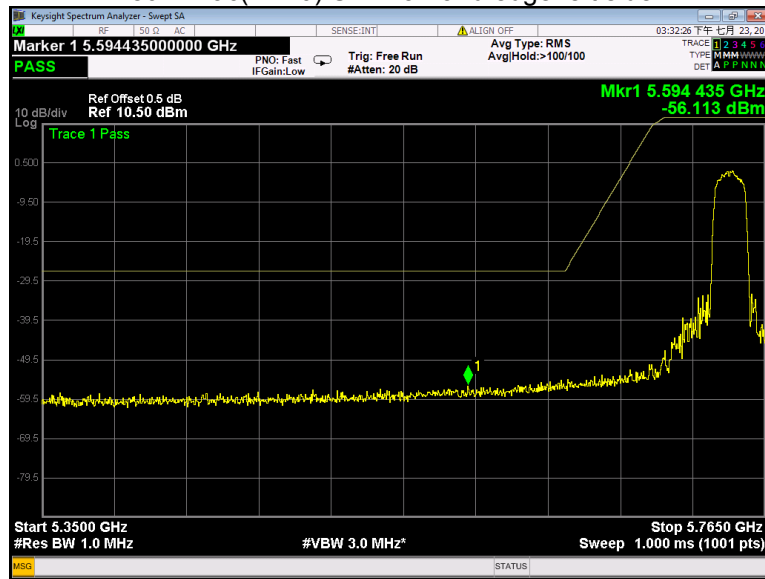
802.11ac(HT20) U-NII-2C Band edge-left side



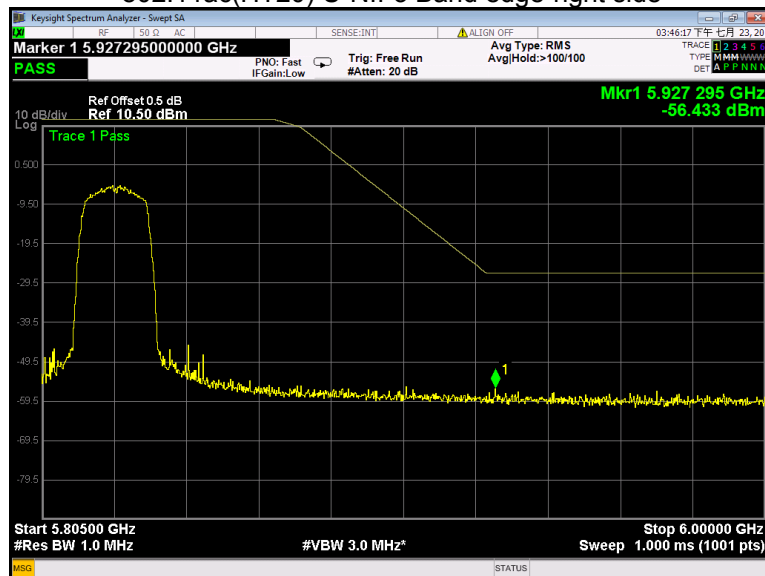
802.11ac(HT20) U-NII-2C Band edge-right side



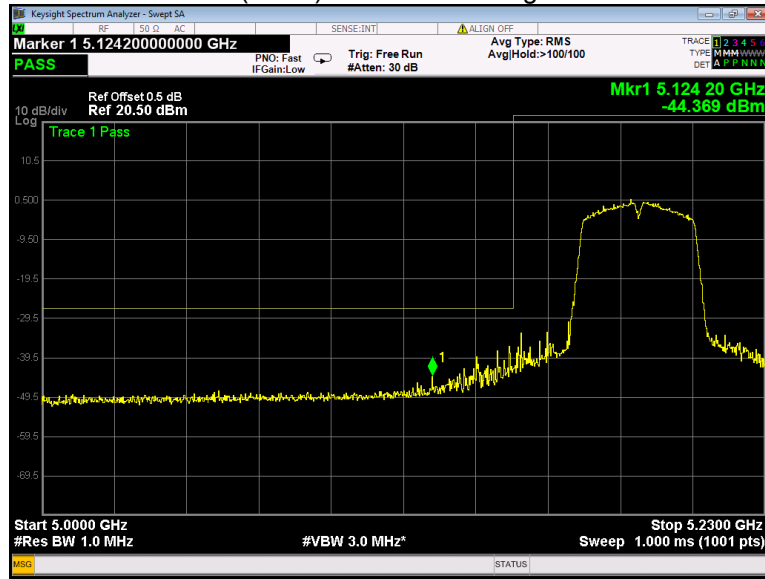
802.11ac(HT20) U-NII-3 Band edge-left side



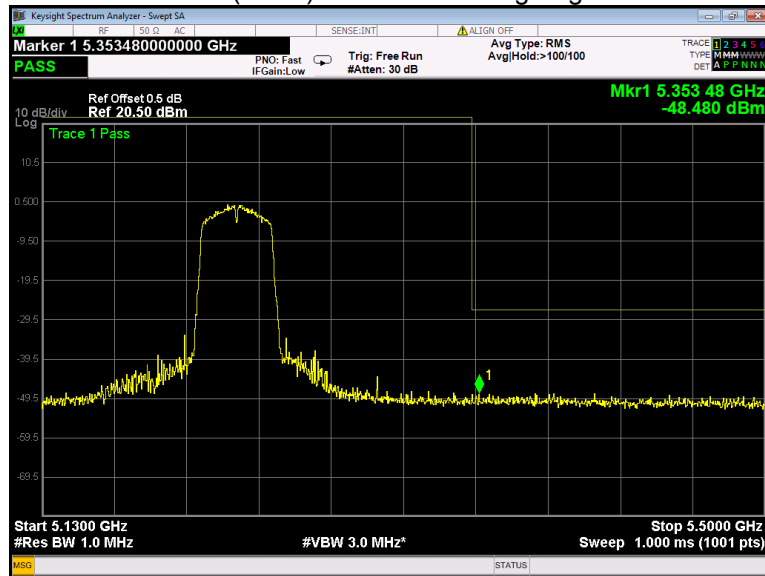
802.11ac(HT20) U-NII-3 Band edge-right side



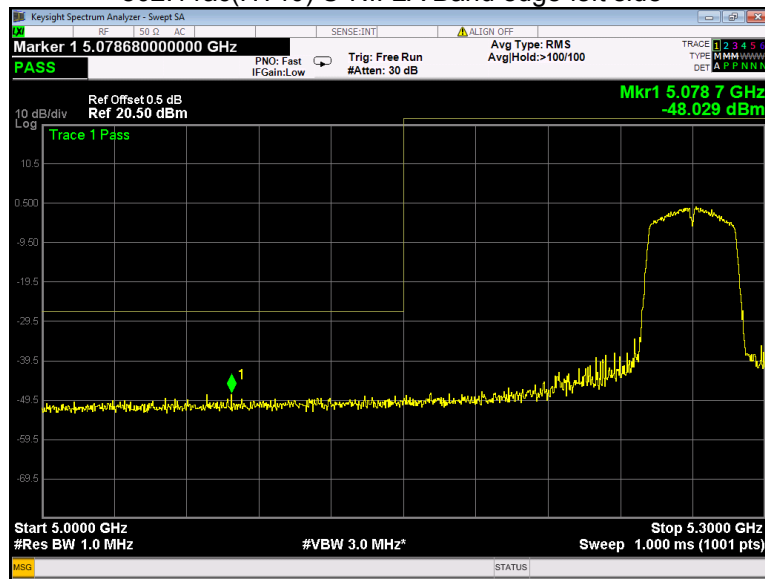
802.11ac(HT40) U-NII-1 Band edge-left side



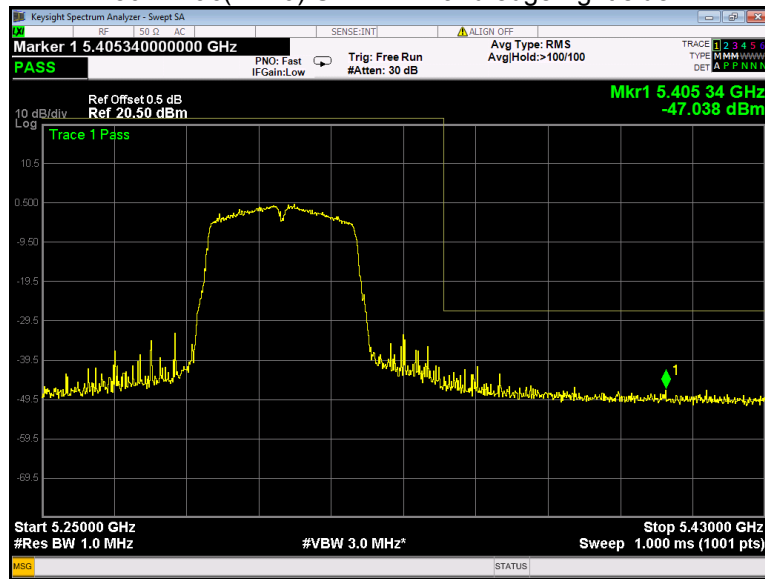
802.11ac(HT40) U-NII-1 Band edge-right side



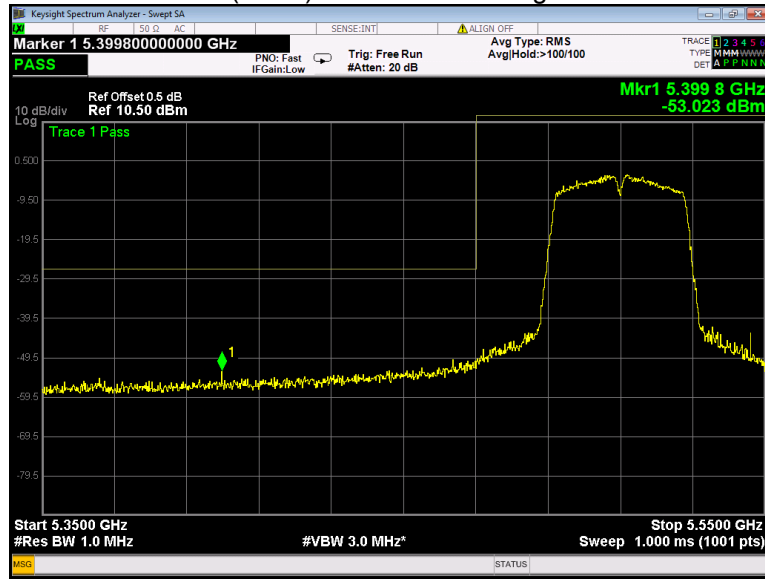
802.11ac(HT40) U-NII-2A Band edge-left side



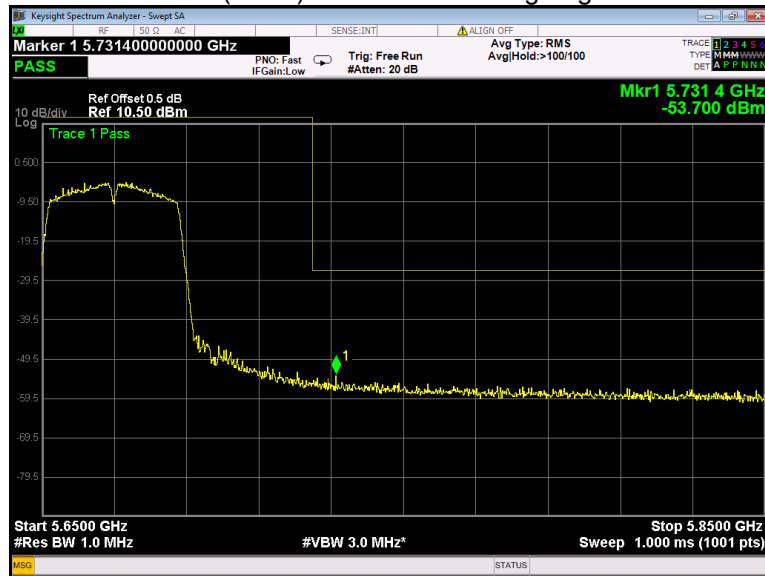
802.11ac(HT40) U-NII-2A Band edge-right side



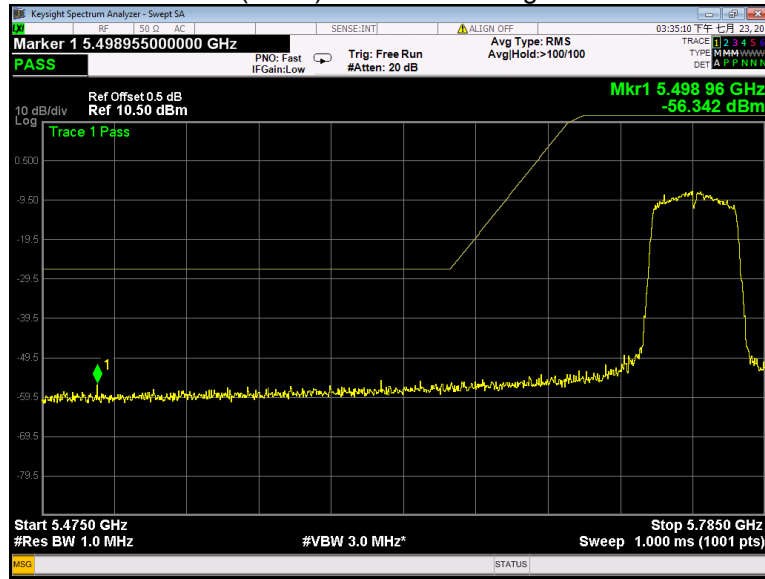
802.11ac(HT40) U-NII-2C Band edge-left side



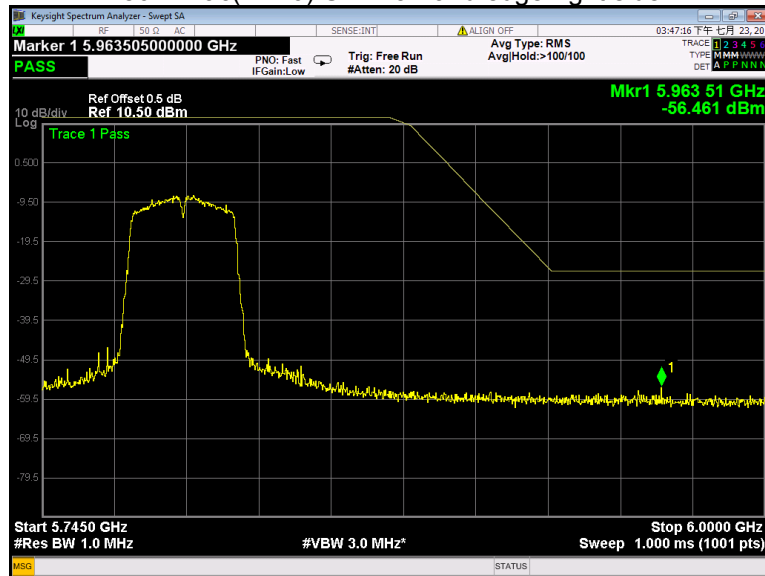
802.11ac(HT40) U-NII-2C Band edge-right side



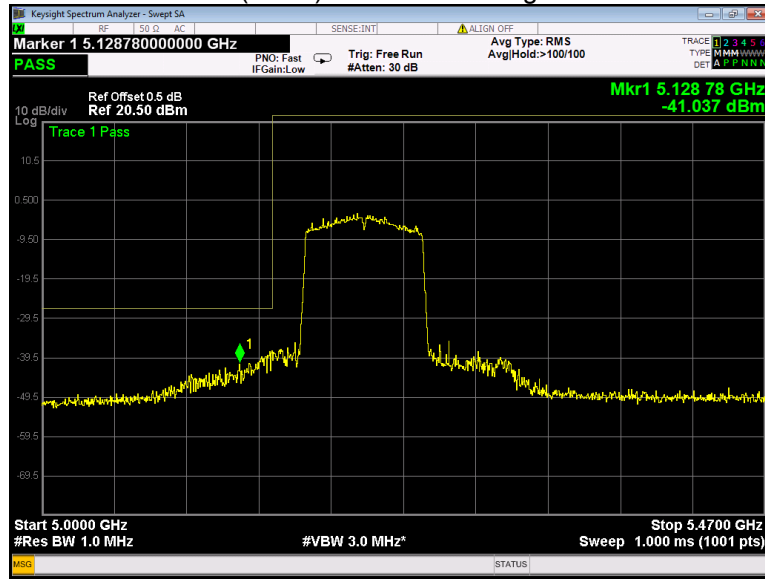
802.11ac(HT40) U-NII-3 Band edge-left side



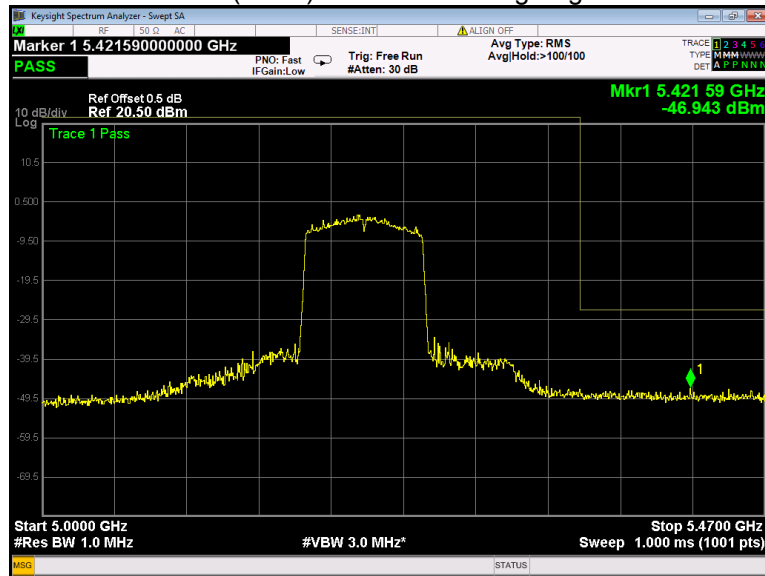
802.11ac(HT40) U-NII-3 Band edge-right side



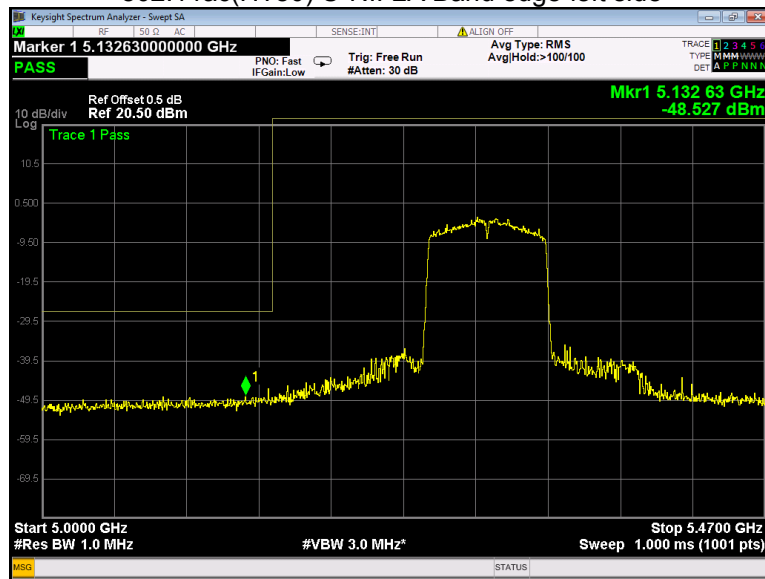
802.11ac(HT80) U-NII-1 Band edge-left side



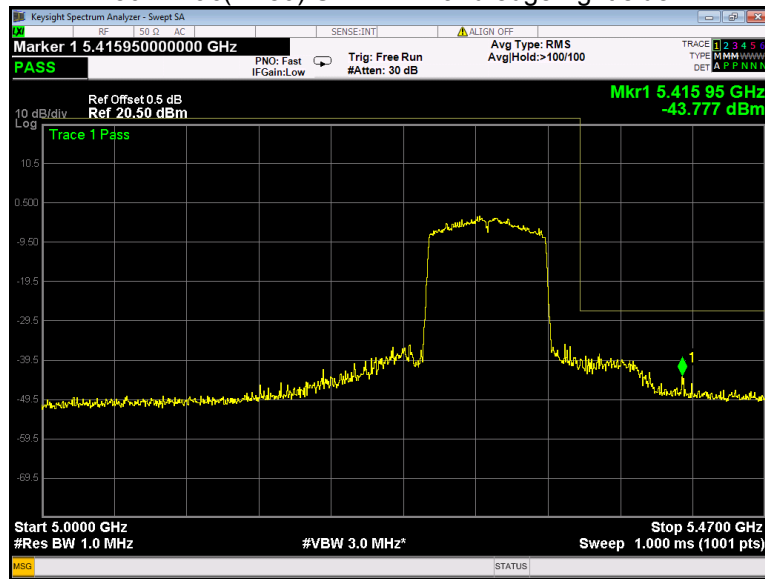
802.11ac(HT80) U-NII-1 Band edge-right side



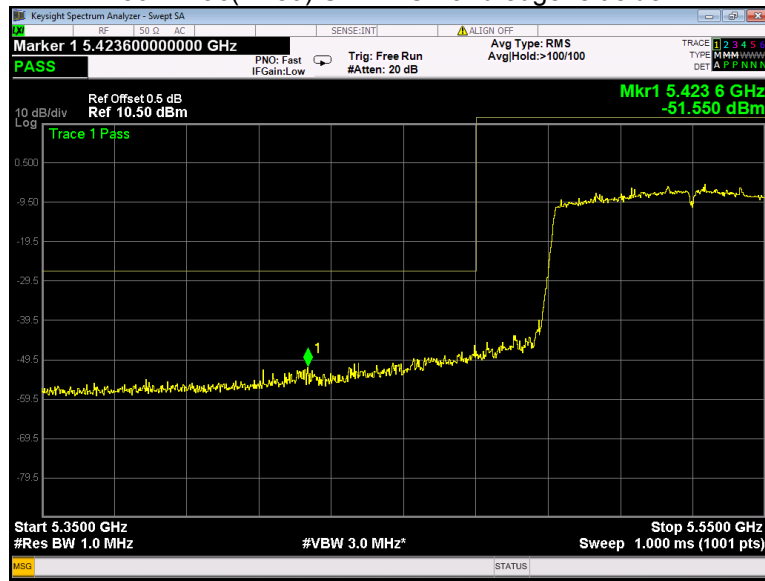
802.11ac(HT80) U-NII-2A Band edge-left side



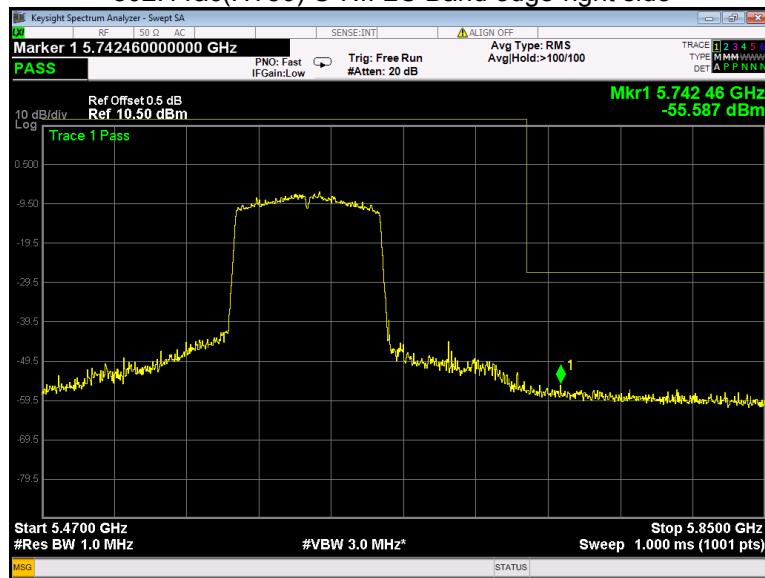
802.11ac(HT80) U-NII-2A Band edge-right side



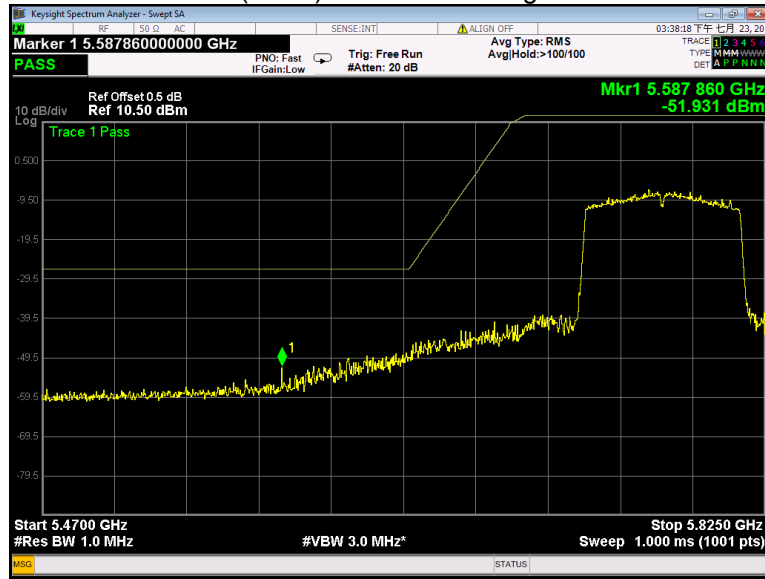
802.11ac(HT80) U-NII-2C Band edge-left side



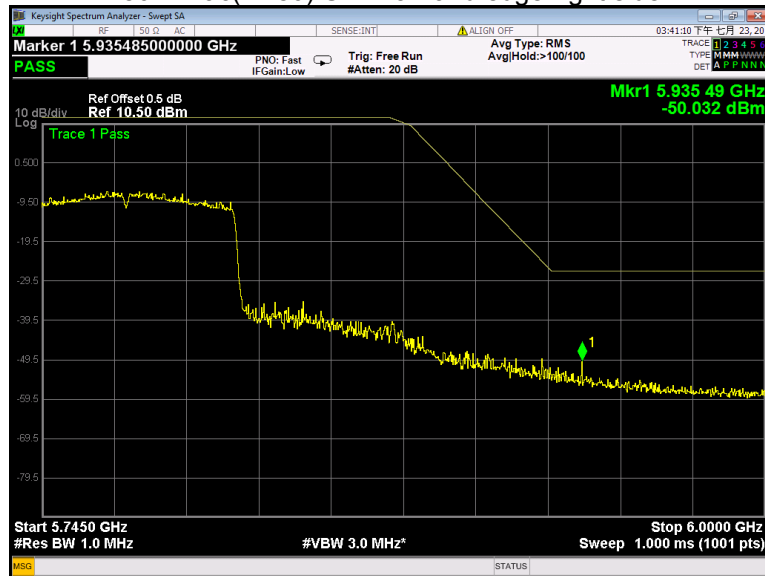
802.11ac(HT80) U-NII-2C Band edge-right side



802.11ac(HT80) U-NII-3 Band edge-left side



802.11ac(HT80) U-NII-3 Band edge-right side



11 6 dB Bandwidth

Test Requirement:	FCC CFR47 Part 15 Section 15.407(e) KDB662911 D01 Multiple Transmitter Output v02r01
Test Method:	KDB789033 D02 General U-NII Test Procedures New Rules v02r01 Section C
Test Limit:	≥ 500 kHz
Test Result:	PASS

11.1 Test Procedure:

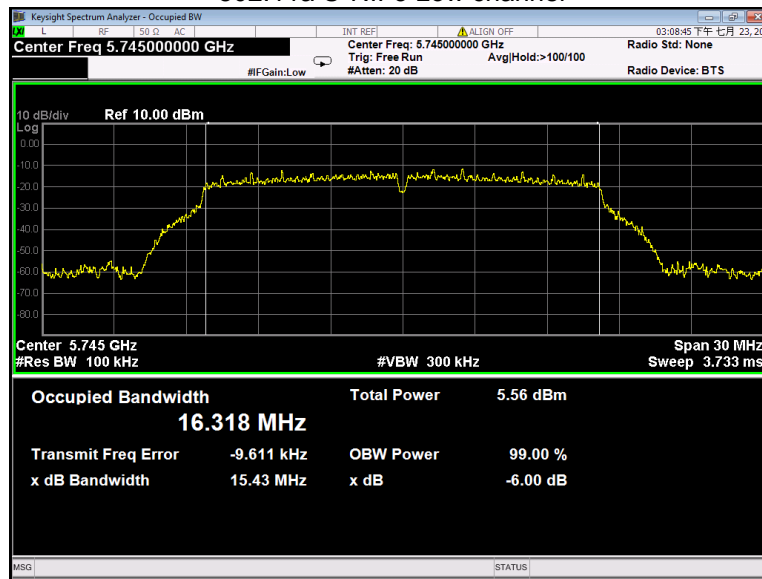
1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum;
2. Set the spectrum analyzer: RBW = 100kHz, VBW = 300kHz

11.2 Test Result:

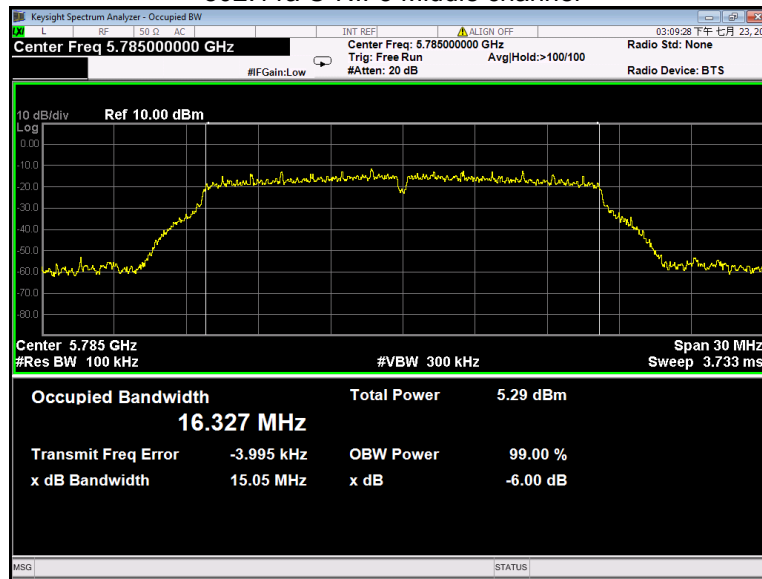
Band	Operation mode	6 dB Bandwidth (MHz)		
		Low	Middle	High
U-NII-3	802.11a	15.43	15.05	15.09
	802.11n(HT20)	15.11	15.04	15.12
	802.11n(HT40)	35.10	/	35.09
	802.11ac(HT20)	15.12	15.09	15.10
	802.11ac(HT40)	35.10	/	35.10
	802.11ac(HT80)	75.14	/	/

Test result plots shown as follows:

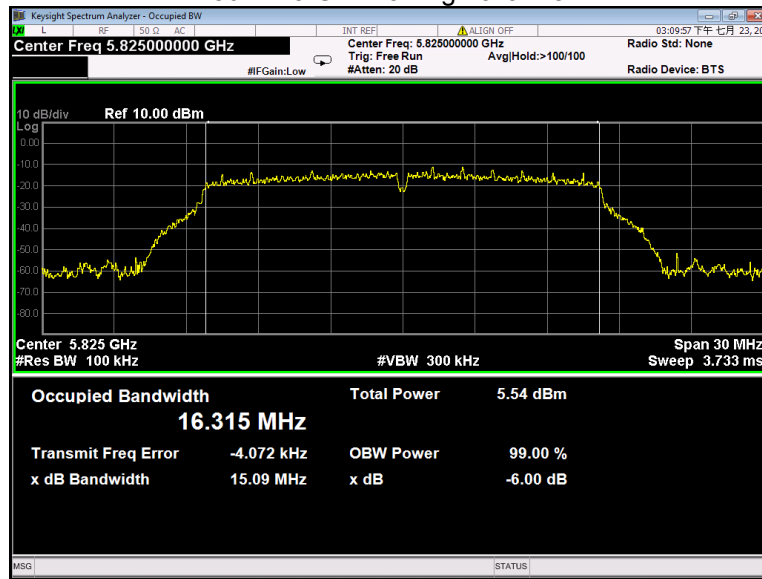
802.11a U-NII-3 Low channel



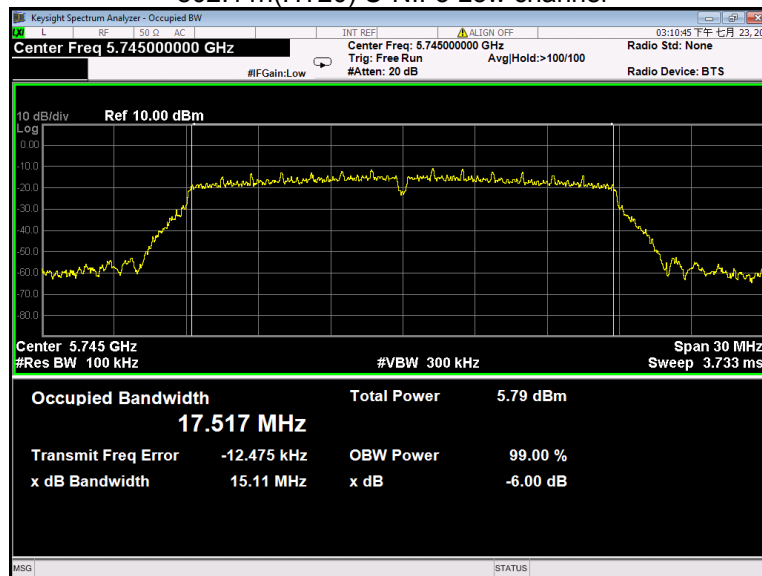
802.11a U-NII-3 Middle channel



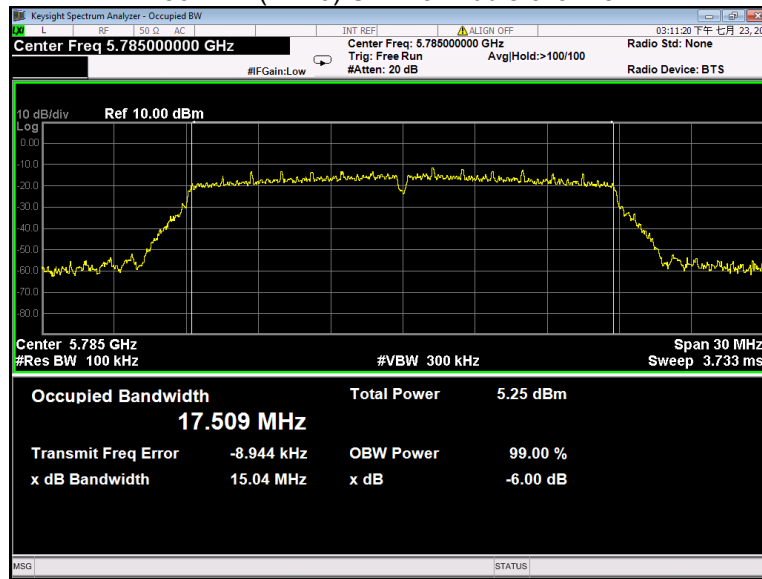
802.11a U-NII-3 High channel



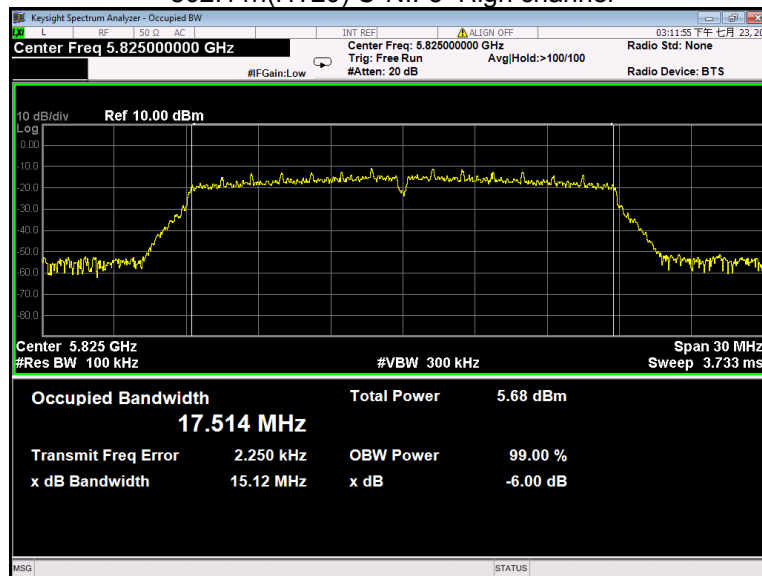
802.11n(HT20) U-NII-3 Low channel



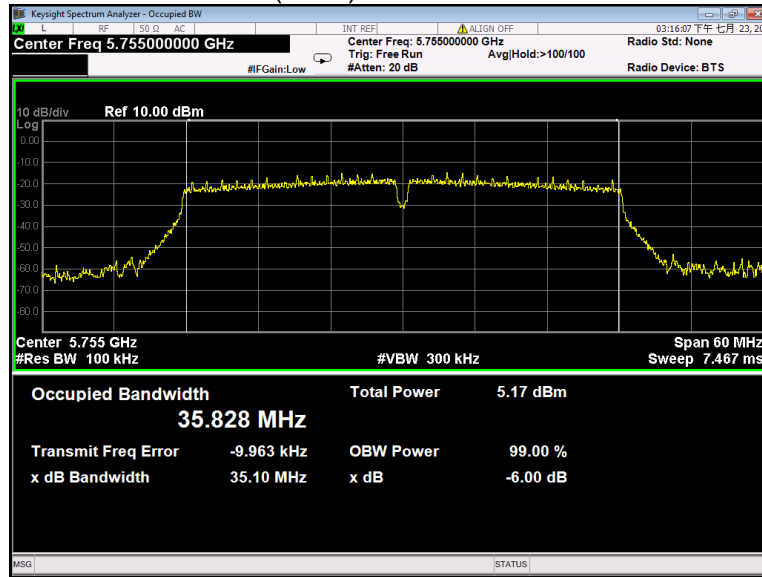
802.11n(HT20) U-NII-3 Middle channel



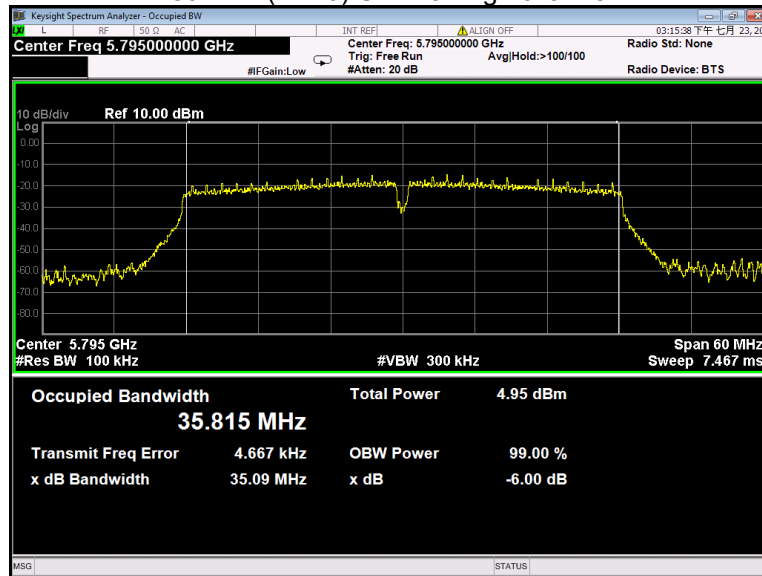
802.11n(HT20) U-NII-3 High channel



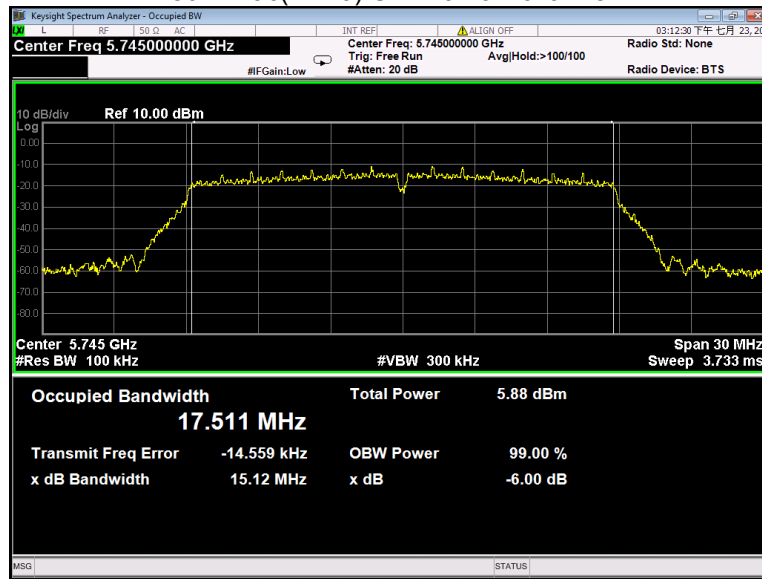
802.11n(HT40) U-NII-3 Low channel



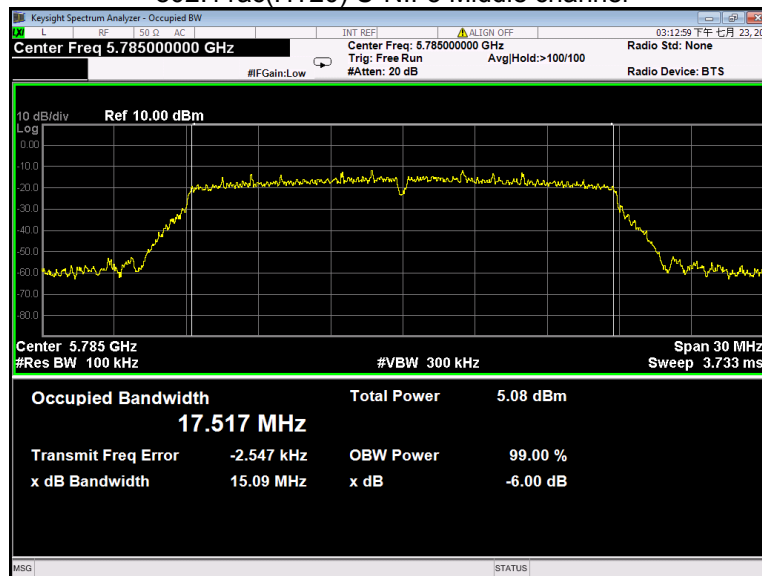
802.11n(HT40) U-NII-3 High channel



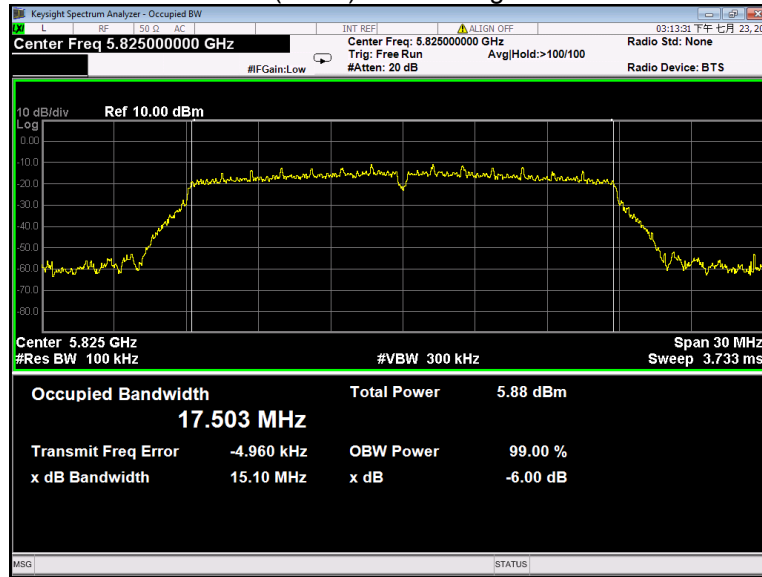
802.11ac(HT20) U-NII-3 Low channel



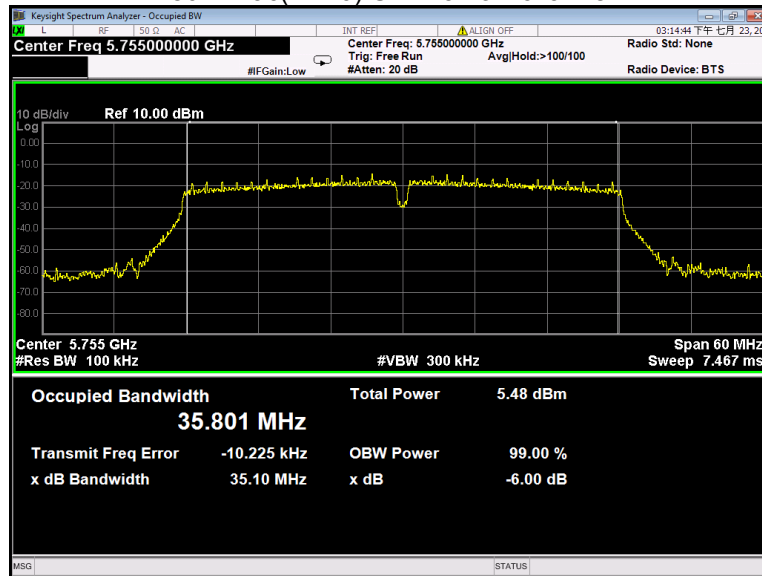
802.11ac(HT20) U-NII-3 Middle channel



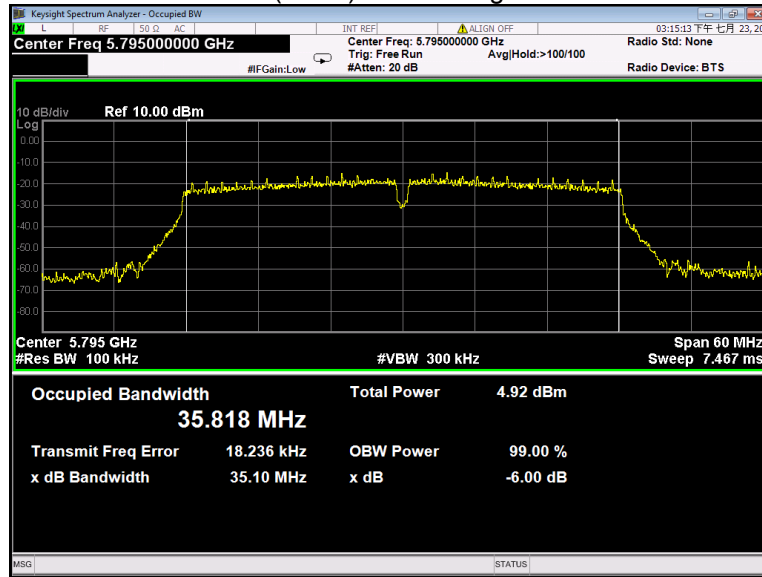
802.11ac(HT20) U-NII-3 High channel



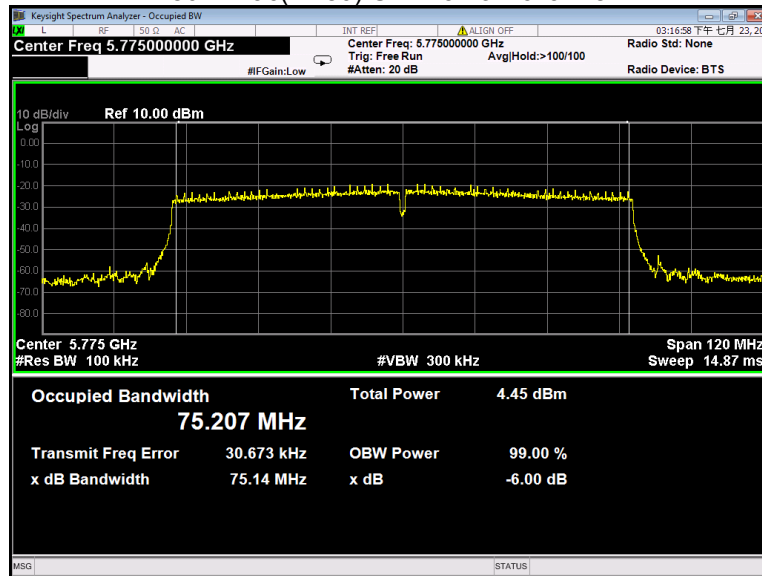
802.11ac(HT40) U-NII-3 Low channel



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



802.11ac(HT80) U-NII-3 Low channel



12 26 dB Bandwidth and 99% Occupied Bandwidth

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

12.1 Test Procedure:

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum;
2. Set the spectrum analyzer: RBW = 1% to 5% of the OBW, VBW = 3x RBW

12.2 Test Result:

Band	Operation mode	26 dB Bandwidth (MHz)			99% Bandwidth (MHz)		
		Low	Middle	High	Low	Middle	High
U-NII-1	802.11a	19.97	19.82	20.02	16.469	16.428	16.431
	802.11n(HT20)	20.24	20.38	20.23	17.578	17.571	17.580
	802.11n(HT40)	40.36	/	40.30	36.017	/	36.026
	802.11ac(HT20)	20.10	20.22	20.10	17.546	17.544	17.553
	802.11ac(HT40)	40.12	/	40.50	35.943	/	35.952
	802.11ac(HT80)	80.58	/	/	75.321	/	/

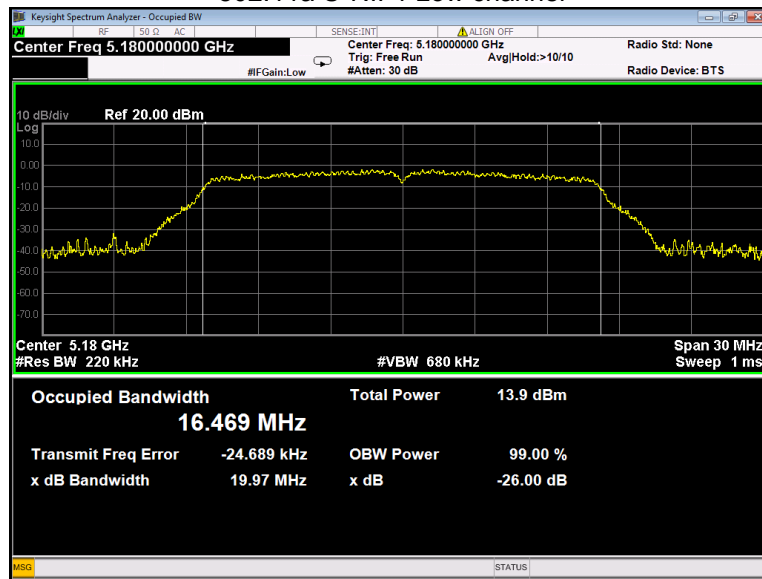
Band	Operation mode	26 dB Bandwidth (MHz)			99% Bandwidth (MHz)		
		Low	Middle	High	Low	Middle	High
U-NII-2A	802.11a	19.79	19.86	19.87	16.447	16.425	16.440
	802.11n(HT20)	20.18	20.18	20.09	17.548	17.546	17.536
	802.11n(HT40)	40.31	/	40.18	36.019	/	35.983
	802.11ac(HT20)	20.04	20.09	20.11	17.536	17.555	17.472
	802.11ac(HT40)	40.35	/	39.94	35.952	/	35.951
	802.11ac(HT80)	80.64	/	/	75.324	/	/

Band	Operation mode	26 dB Bandwidth (MHz)			99% Bandwidth (MHz)		
		Low	Middle	High	Low	Middle	High
U-NII-2C	802.11a	20.05	19.83	19.77	16.489	16.426	16.447
	802.11n(HT20)	20.18	20.22	20.08	17.541	17.550	17.583
	802.11n(HT40)	40.16	40.39	40.04	36.024	35.991	35.937
	802.11ac(HT20)	20.28	20.05	20.04	17.542	17.530	17.530
	802.11ac(HT40)	40.29	40.47	40.46	35.958	35.978	35.924
	802.11ac(HT80)	80.37	/	75.338	80.46	/	75.327

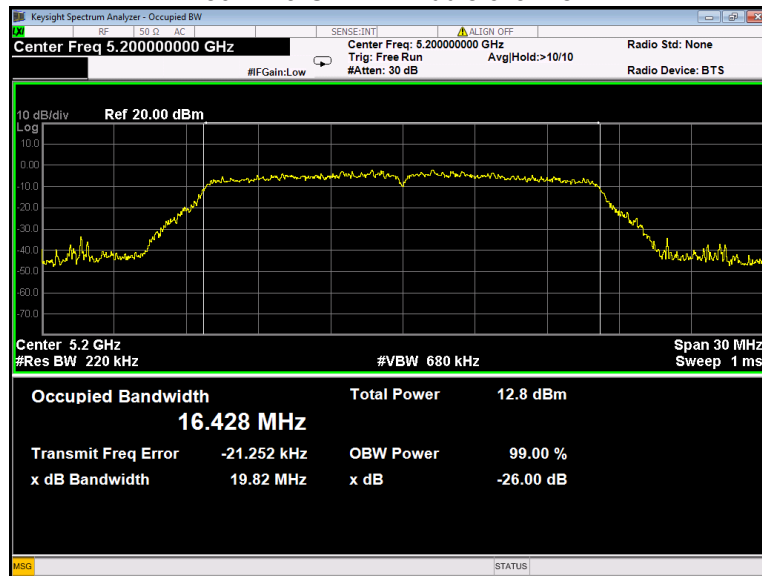
Band	Operation mode	26 dB Bandwidth (MHz)			99% Bandwidth (MHz)		
		Low	Middle	High	Low	Middle	High
U-NII-3	802.11a	20.12	19.94	19.74	16.496	16.453	16.441
	802.11n(HT20)	20.25	20.09	20.29	17.579	17.557	17.588
	802.11n(HT40)	40.26	/	41.92	36.037	/	36.018
	802.11ac(HT20)	20.09	20.21	20.49	17.549	17.580	17.552
	802.11ac(HT40)	40.20	/	40.04	36.000	/	35.963
	802.11ac(HT80)	80.75	/	/	75.440	/	/

Test result plots shown as follows:

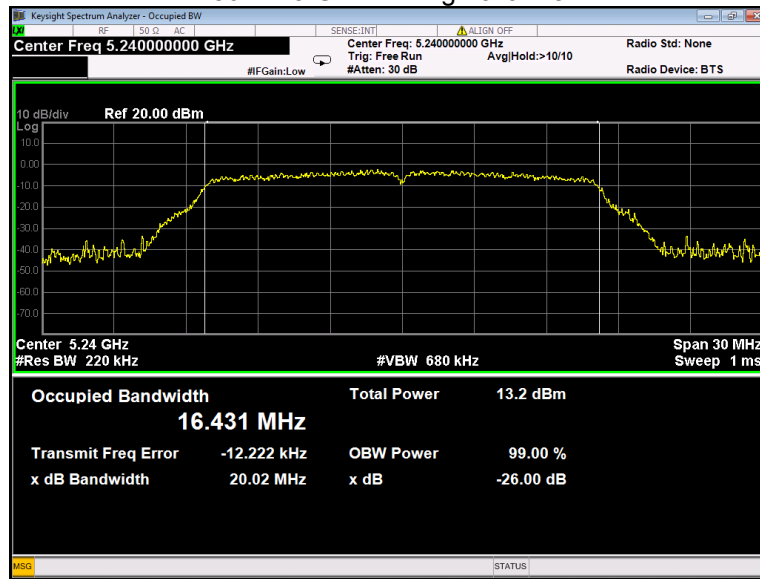
802.11a U-NII-1 Low channel



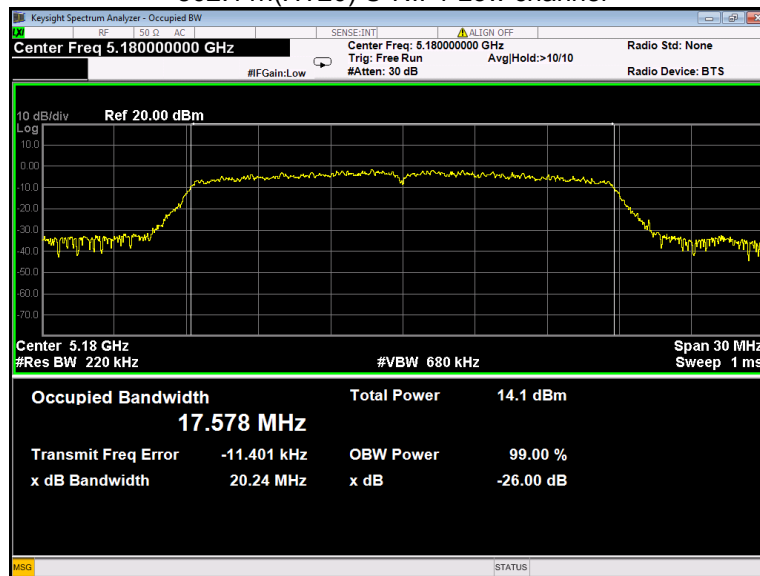
802.11a U-NII-1 Middle channel



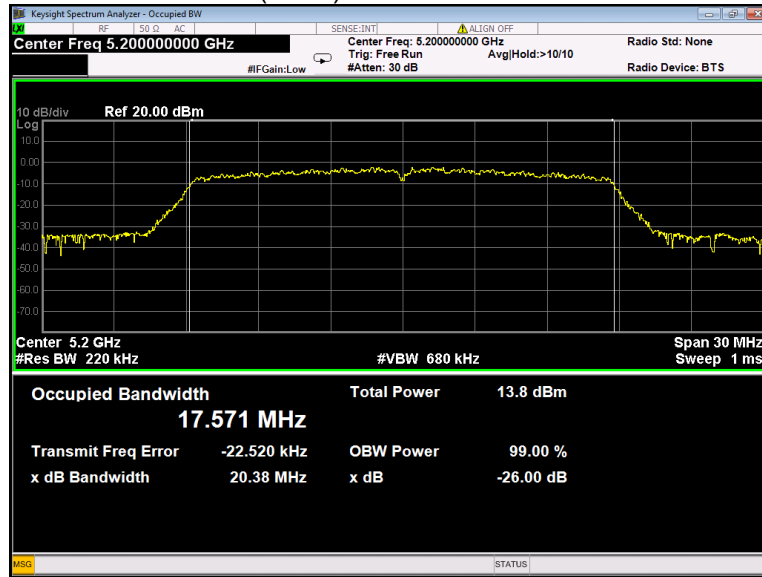
802.11a U-NII-1 High channel



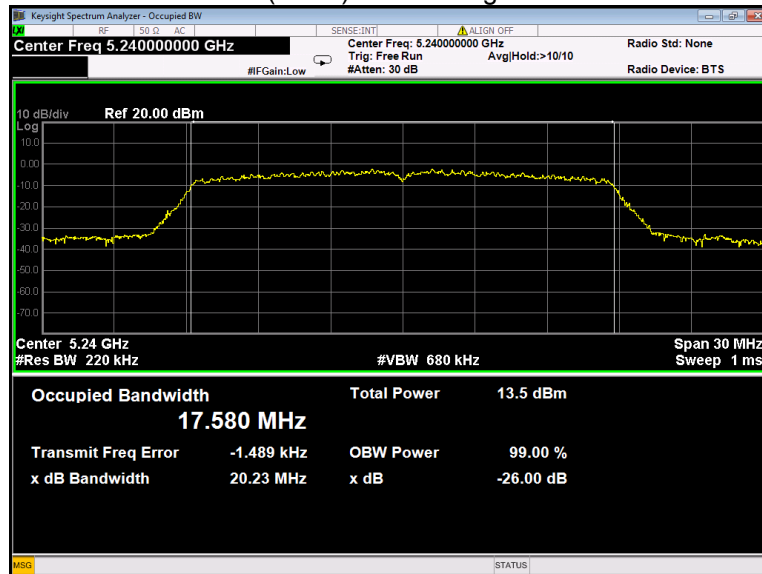
802.11n(HT20) U-NII-1 Low channel



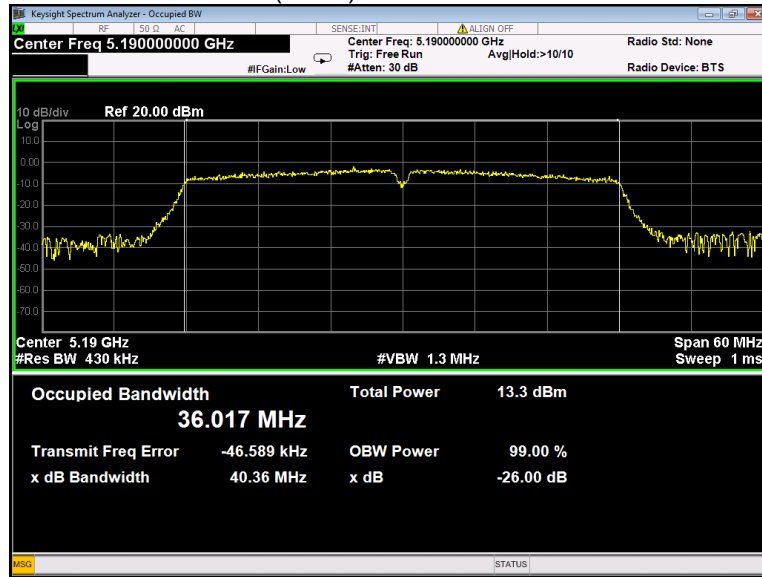
802.11n(HT20) U-NII-1 Middle channel



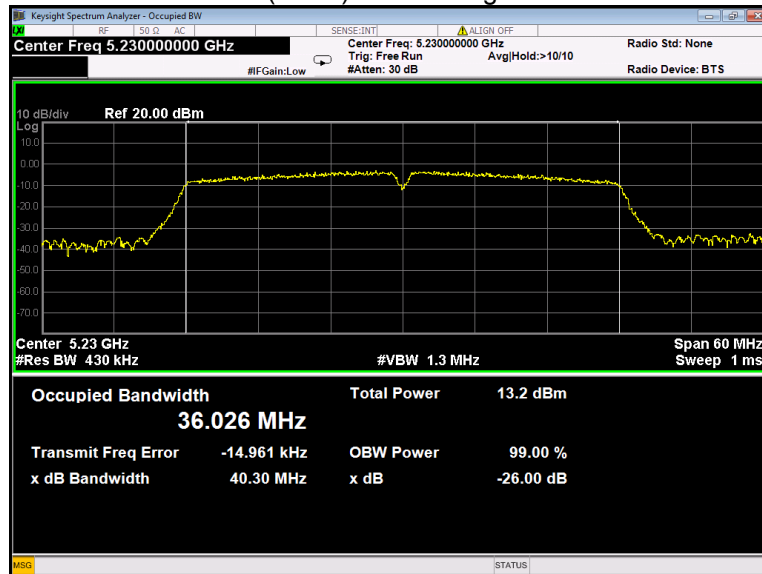
802.11n(HT20) U-NII-1 High channel



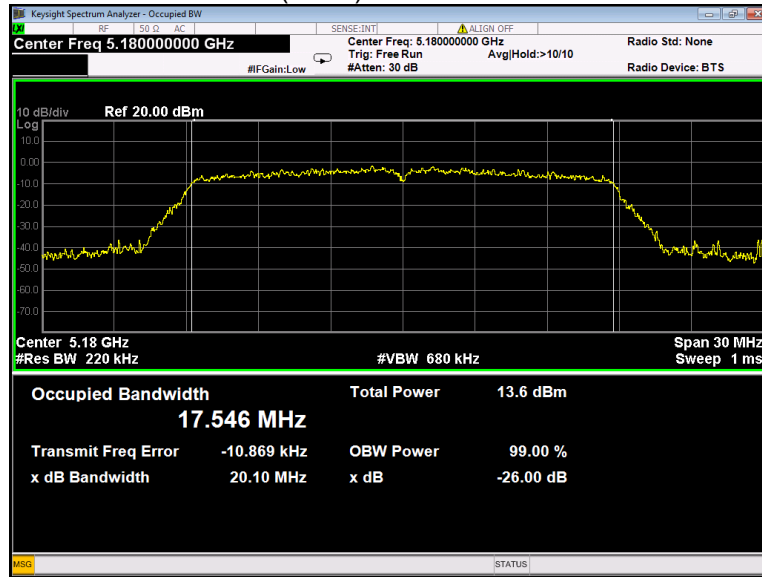
802.11n(HT40) U-NII-1 Low channel



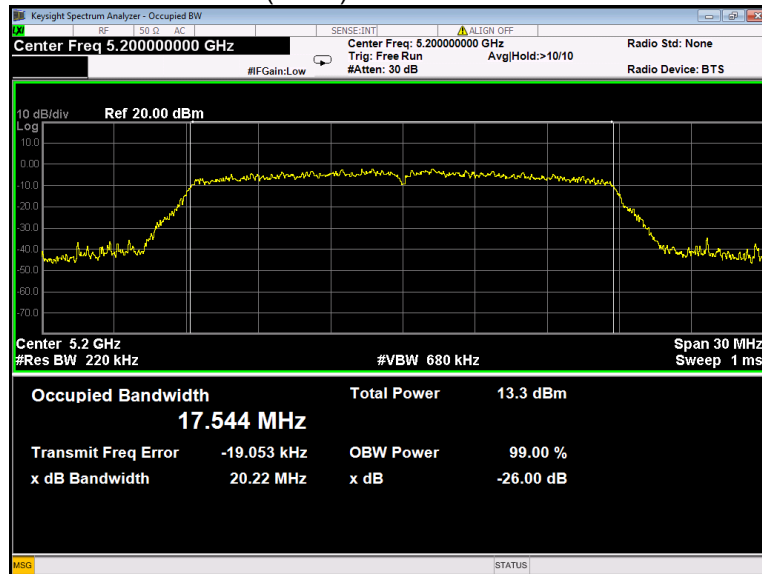
802.11n(HT40) U-NII-1 High channel



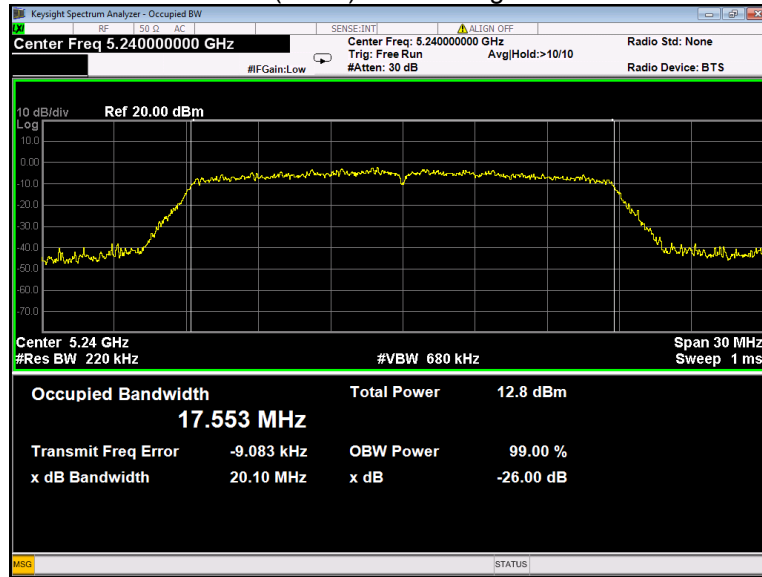
802.11ac(HT20) U-NII-1 Low channel



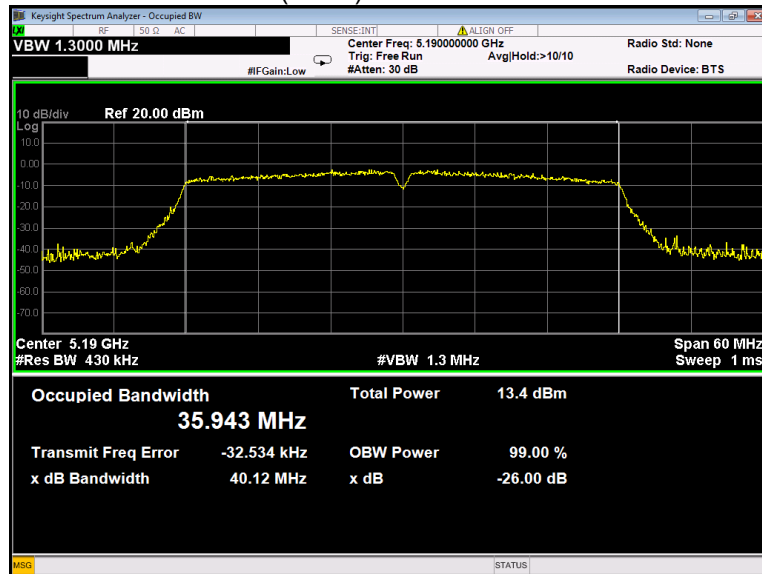
802.11ac(HT20) U-NII-1 Middle channel



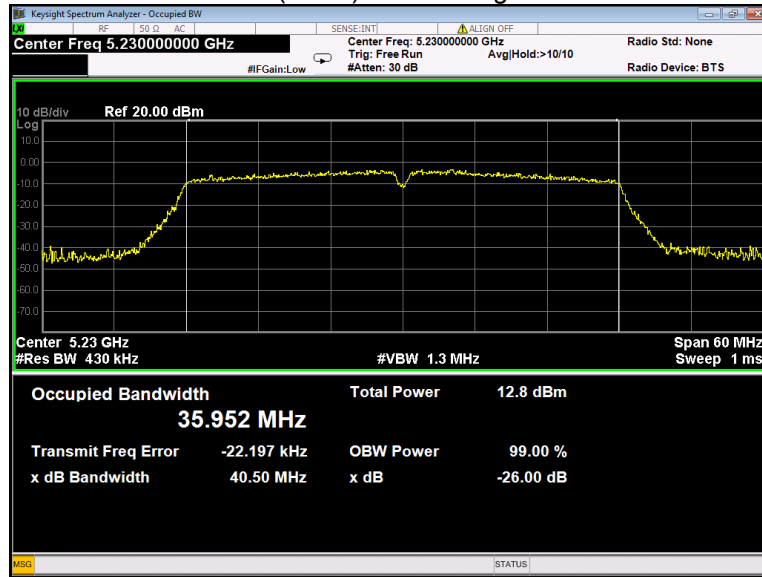
802.11ac(HT20) U-NII-1 High channel



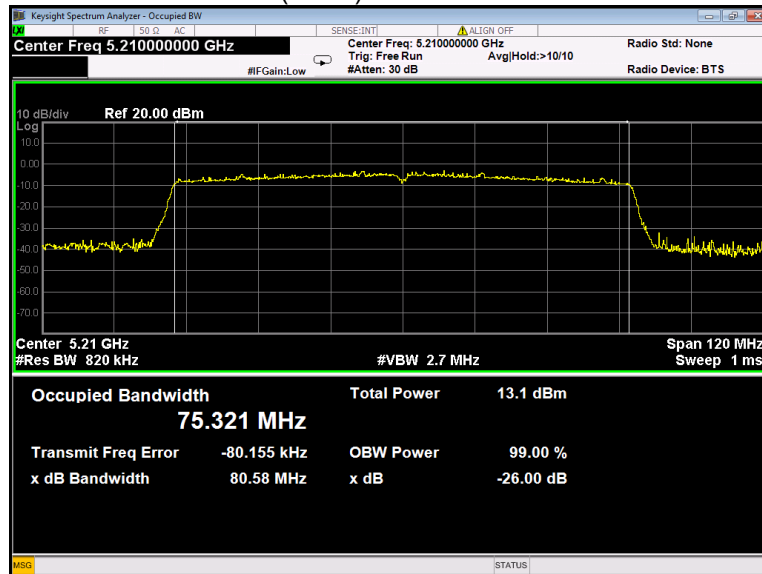
802.11ac(HT40) U-NII-1 Low channel



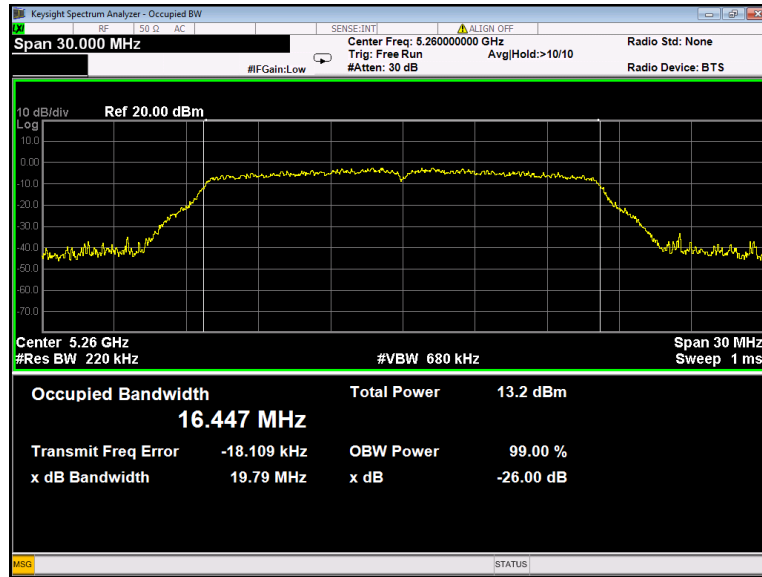
802.11 ac(HT40) U-NII-1 High channel



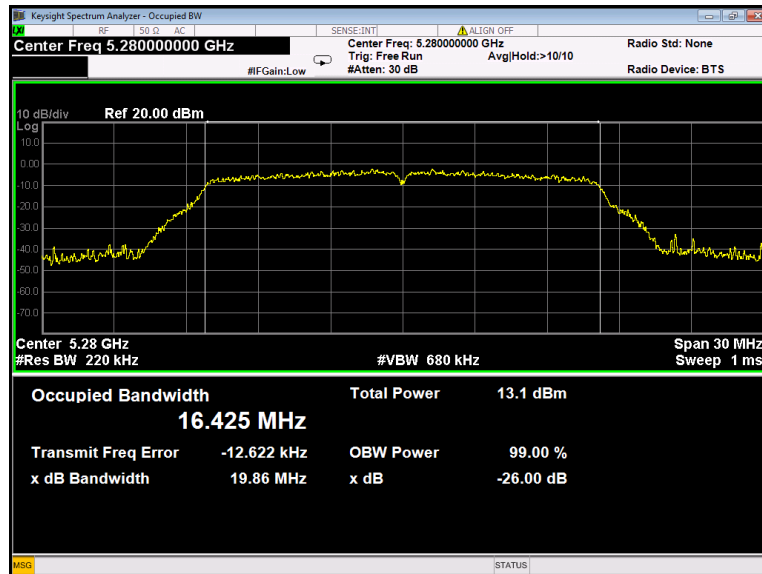
802.11ac(HT80) U-NII-1 Low channel



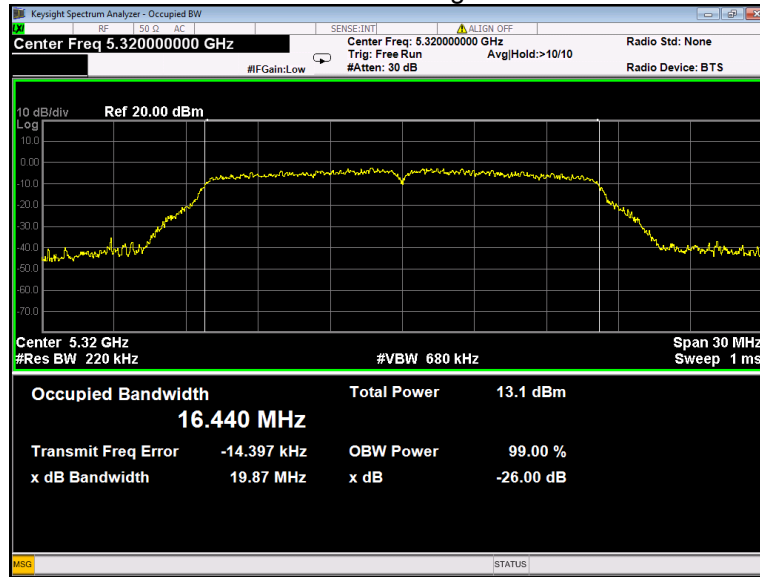
802.11a U-NII-2A Low channel



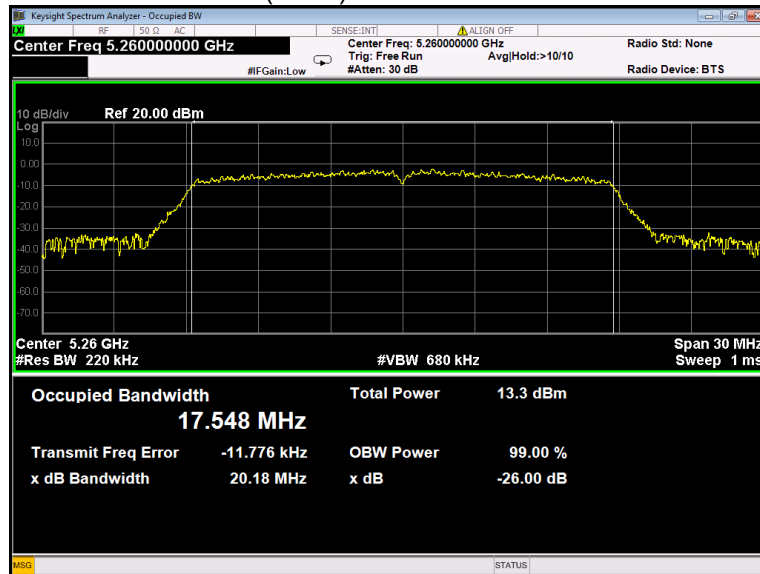
802.11a U-NII-2A Middle channel



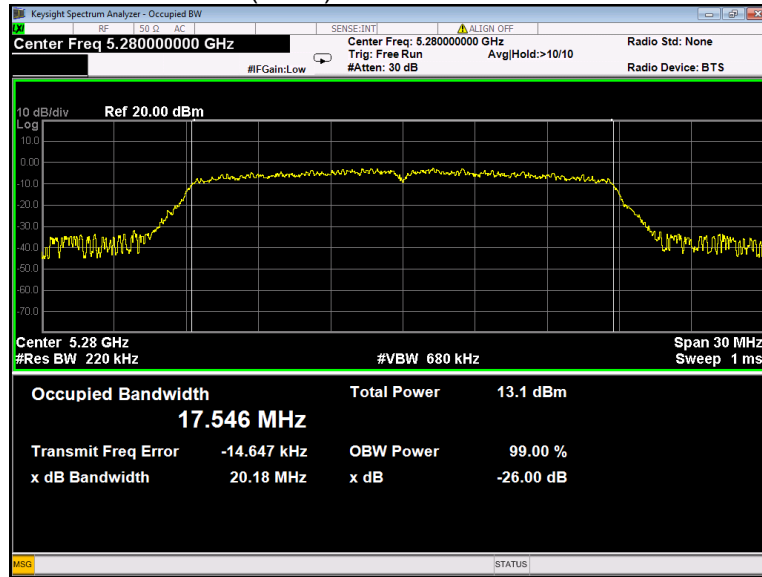
802.11a U-NII-2A High channel



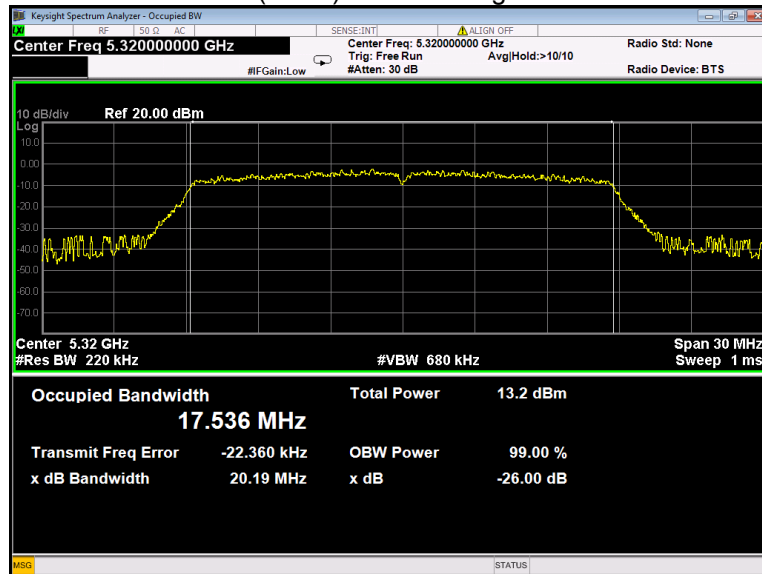
802.11n(HT20) U-NII-2A Low channel



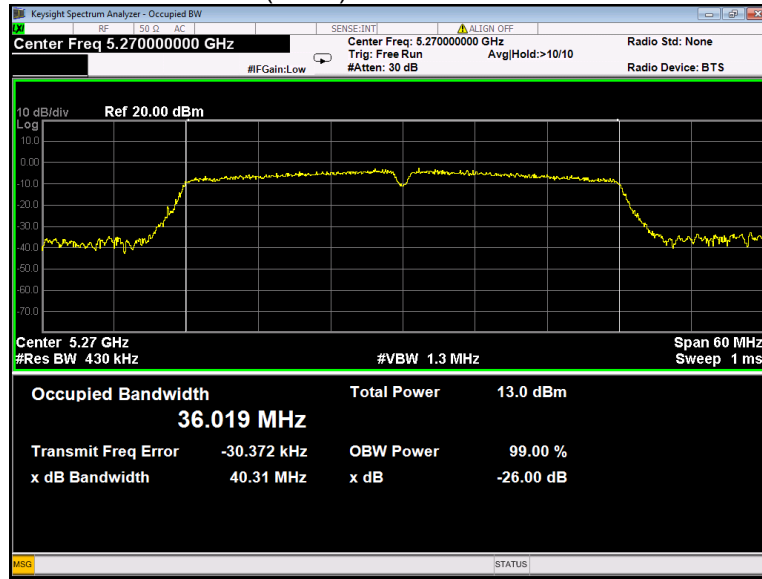
802.11n(HT20) U-NII-2A Middle channel



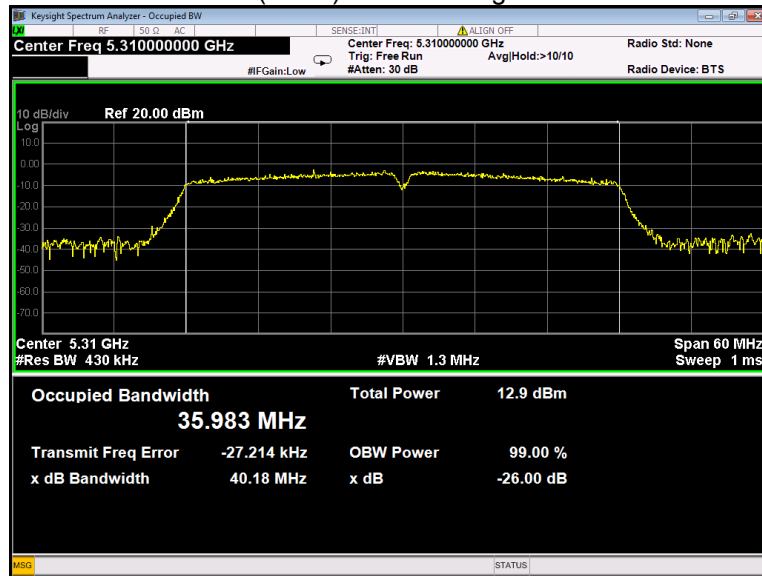
802.11n(HT20) U-NII-2A High channel



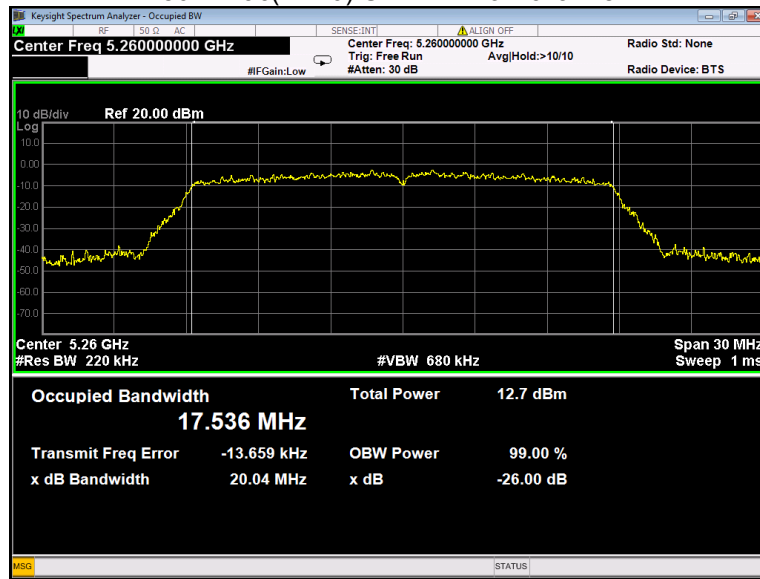
802.11n(HT40) U-NII-2A Low channel



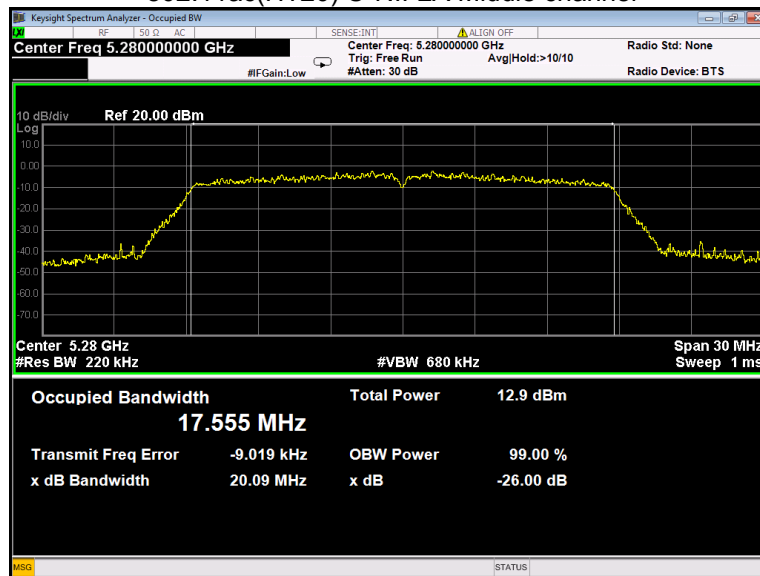
802.11n(HT40) U-NII-2A High channel



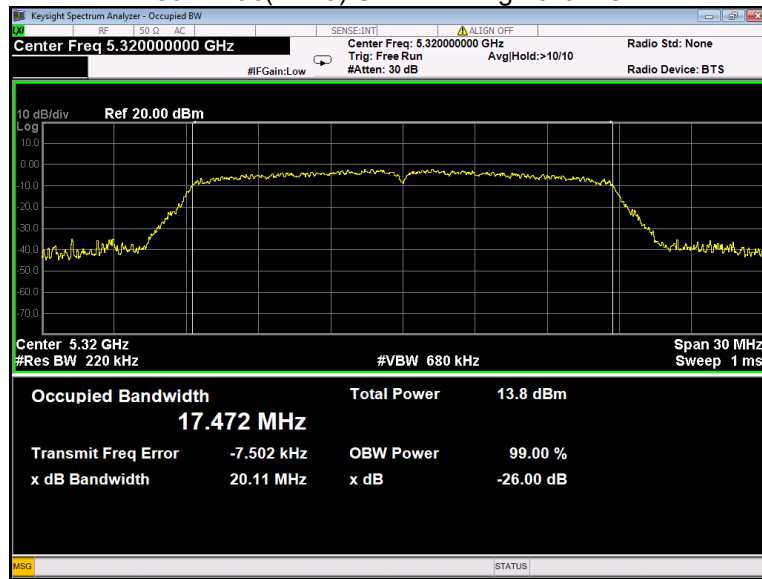
802.11ac(HT20) U-NII-2A Low channel



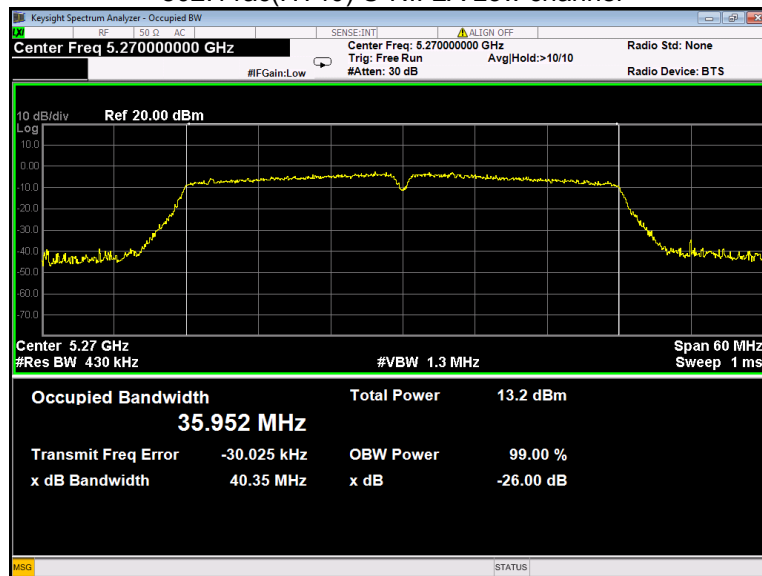
802.11ac(HT20) U-NII-2A Middle channel



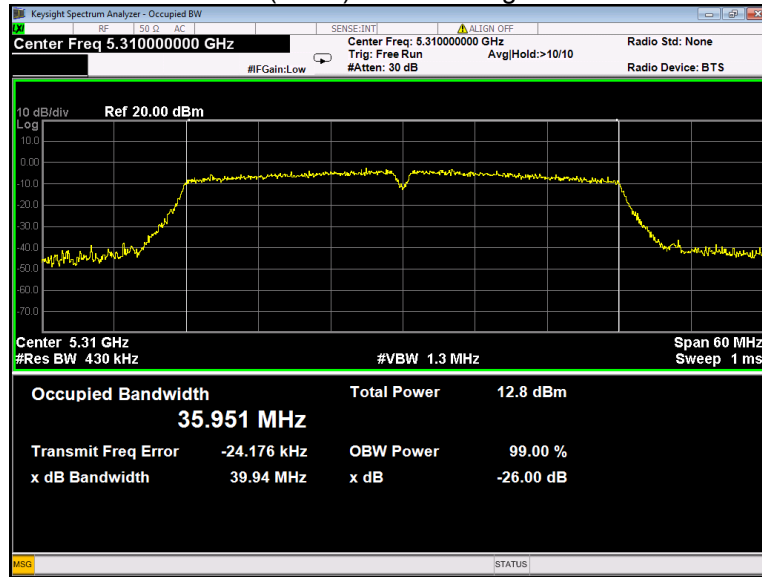
802.11ac(HT20) U-NII-2A High channel



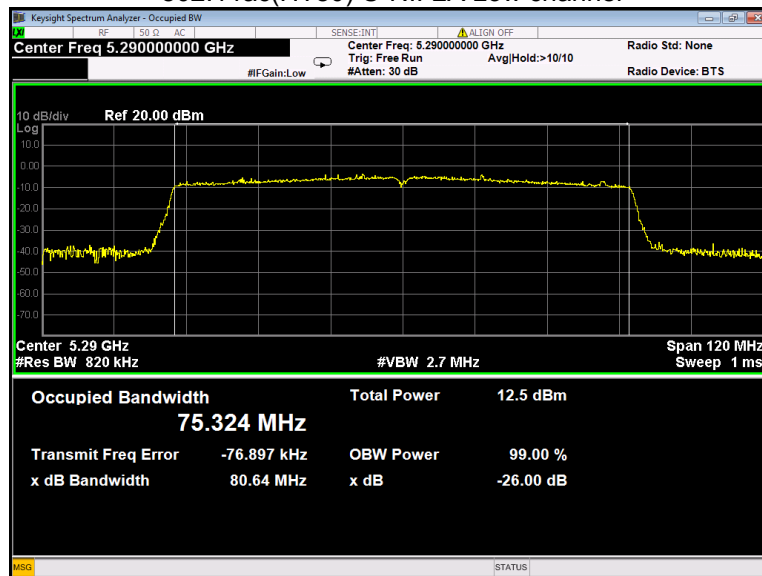
802.11ac(HT40) U-NII-2A Low channel



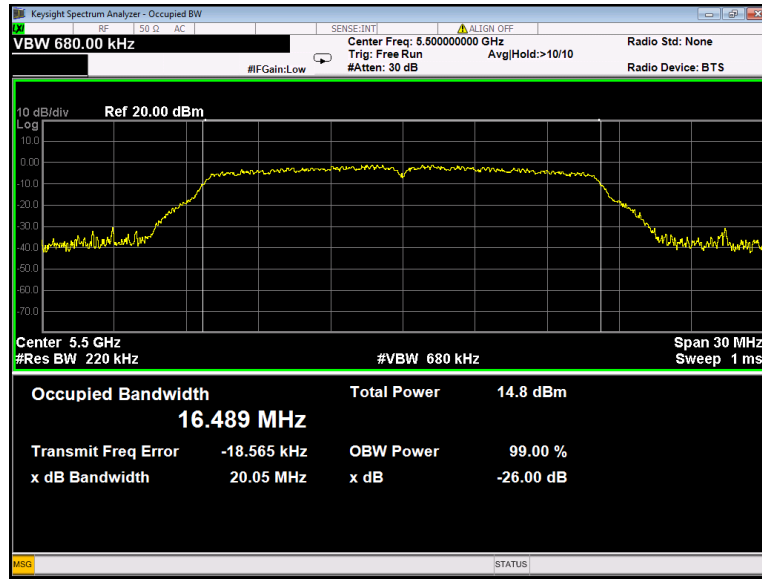
802.11 ac(HT40) U-NII-2A High channel



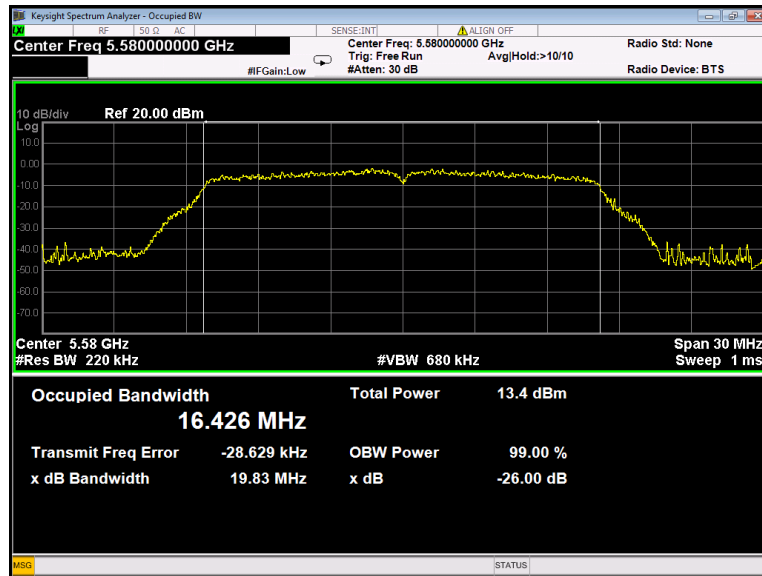
802.11ac(HT80) U-NII-2A Low channel



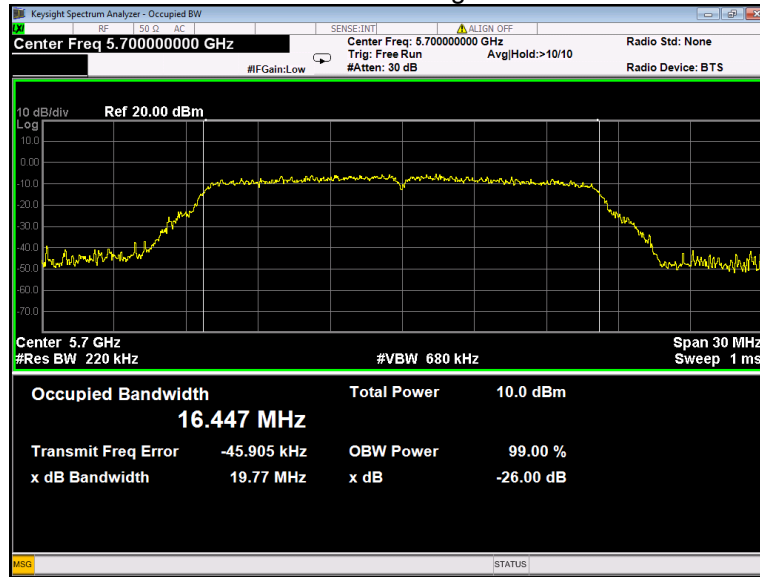
802.11a U-NII-2C Low channel



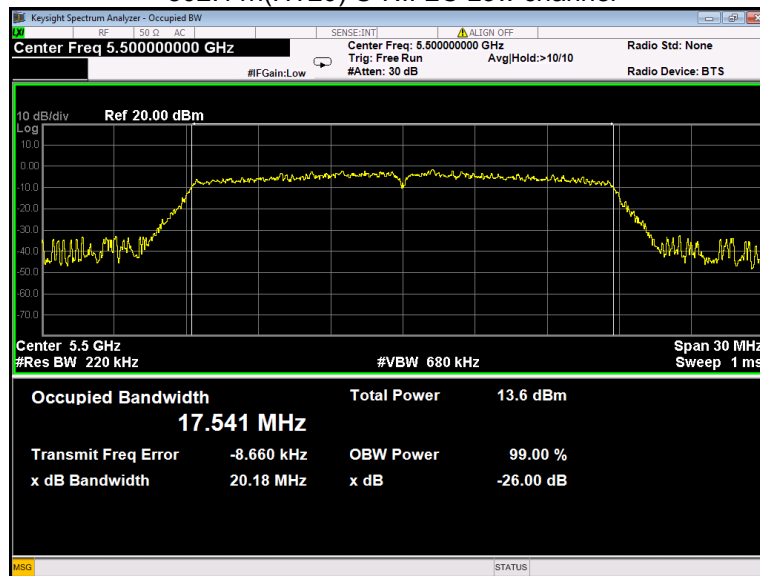
802.11a U-NII-2C Middle channel



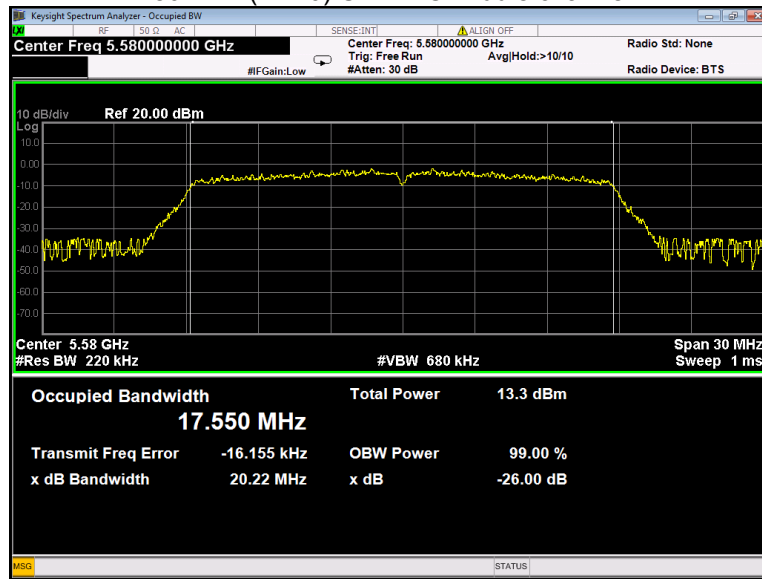
802.11a U-NII-2C High channel



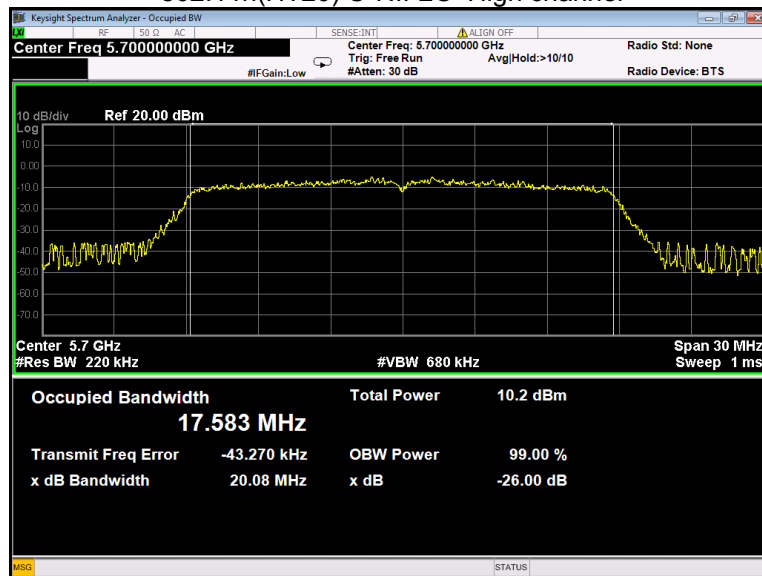
802.11n(HT20) U-NII-2C Low channel



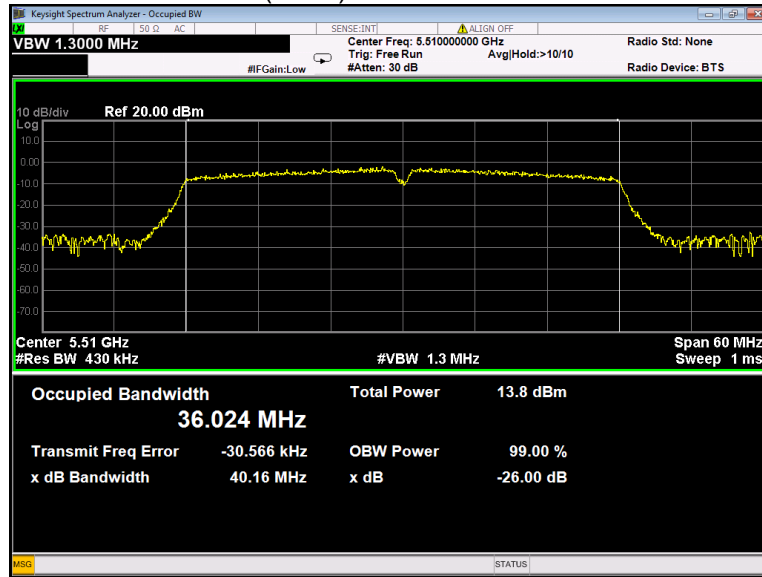
802.11n(HT20) U-NII-2C Middle channel



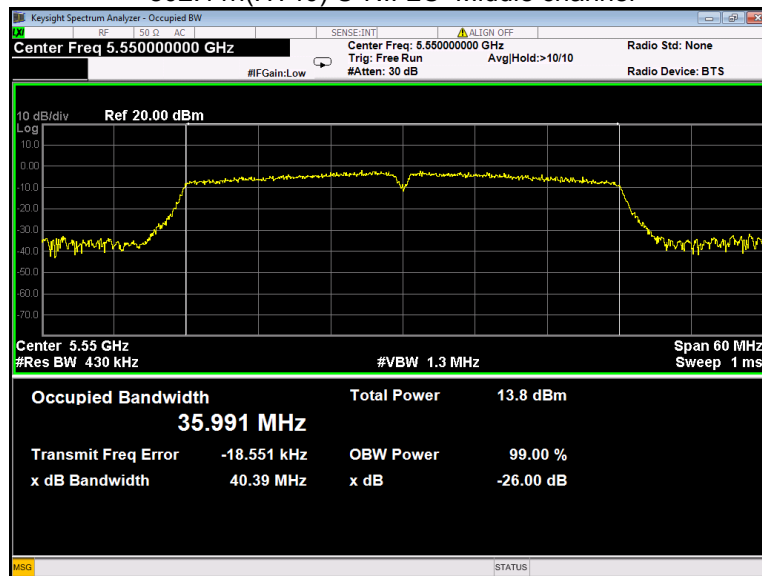
802.11n(HT20) U-NII-2C High channel



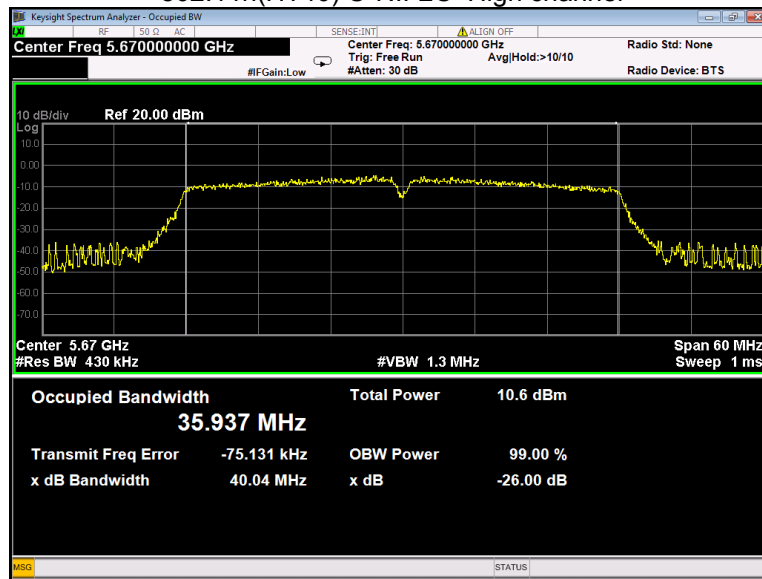
802.11n(HT40) U-NII-2C Low channel



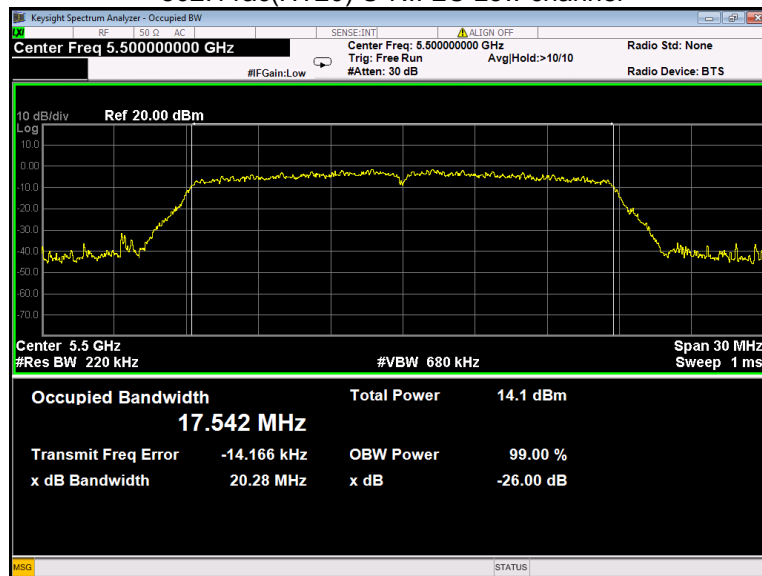
802.11n(HT40) U-NII-2C Middle channel



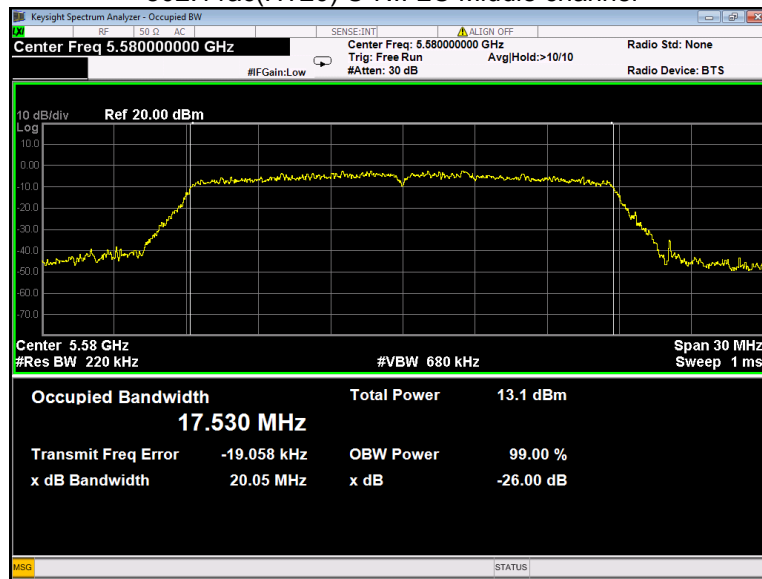
802.11n(HT40) U-NII-2C High channel



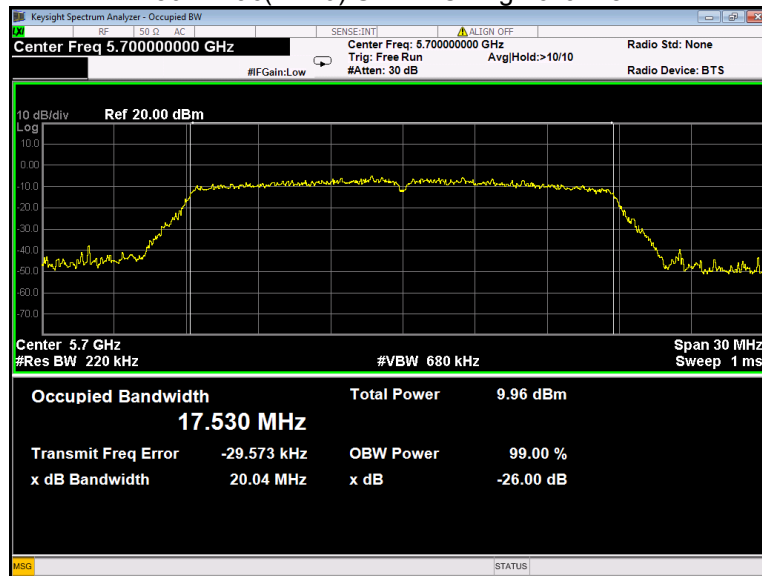
802.11ac(HT20) U-NII-2C Low channel



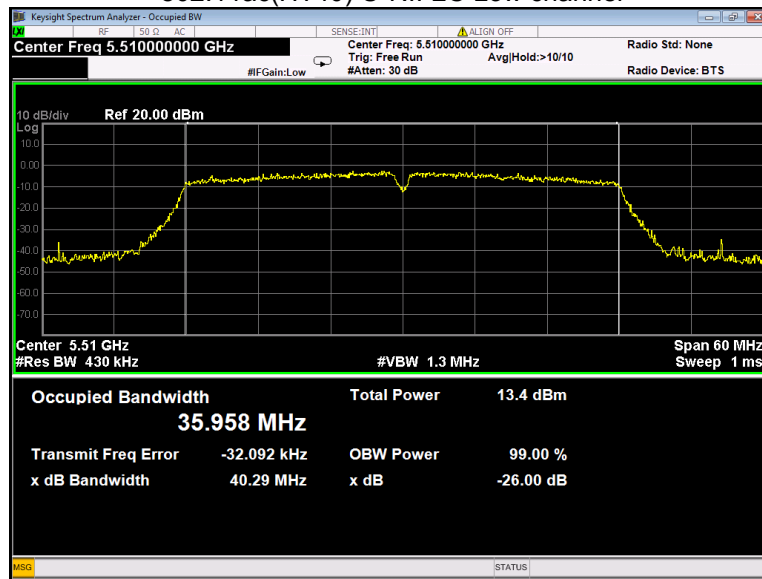
802.11ac(HT20) U-NII-2C Middle channel



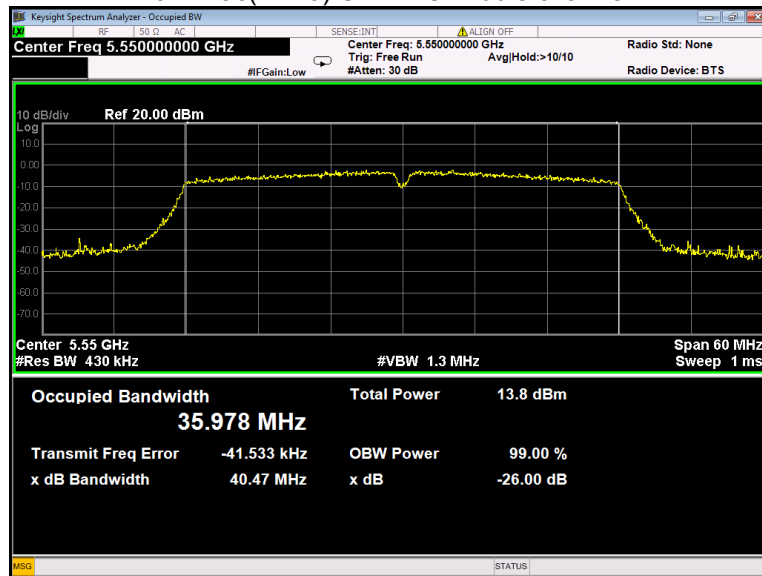
802.11ac(HT20) U-NII-2C High channel



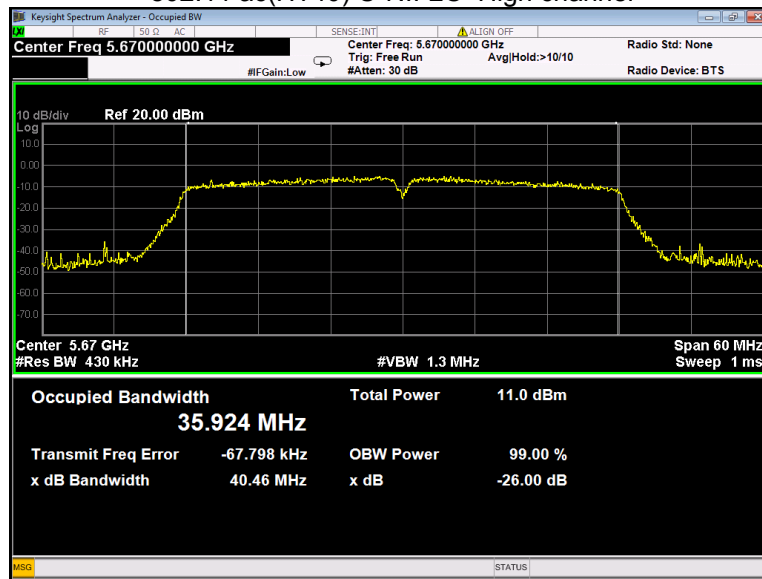
802.11ac(HT40) U-NII-2C Low channel



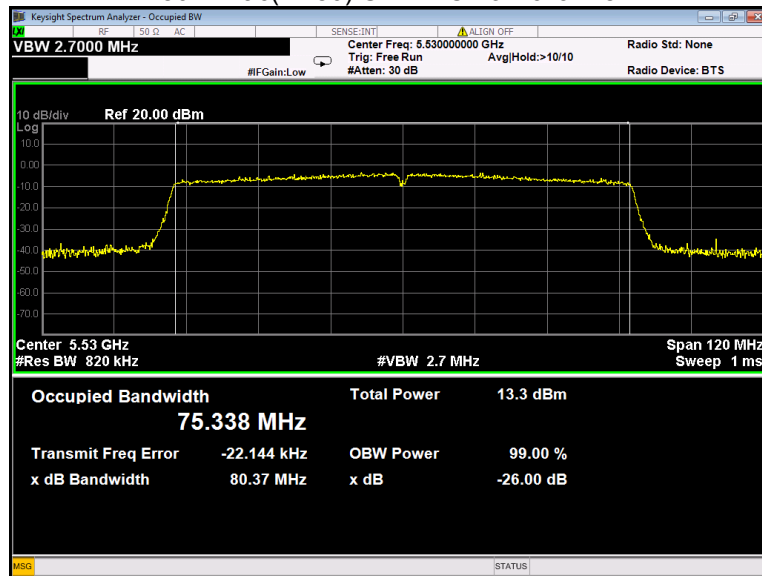
02.11ac(HT40) U-NII-2C Middle channel



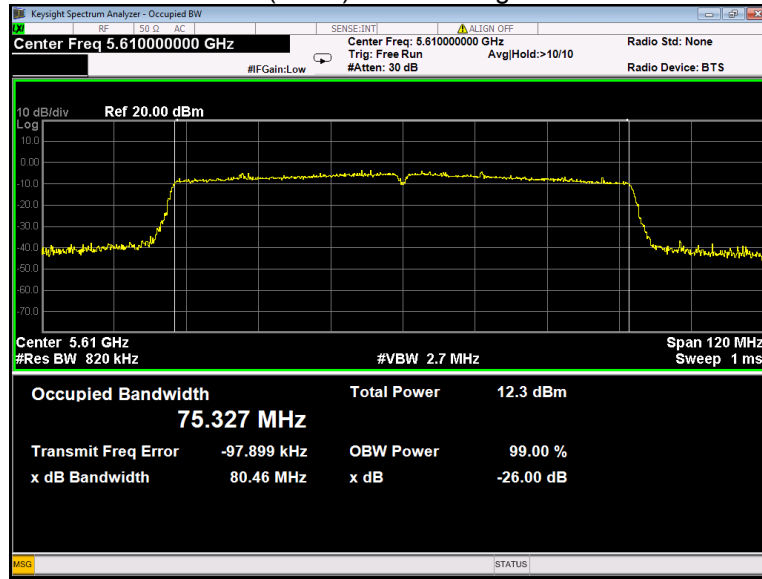
802.11 ac(HT40) U-NII-2C High channel



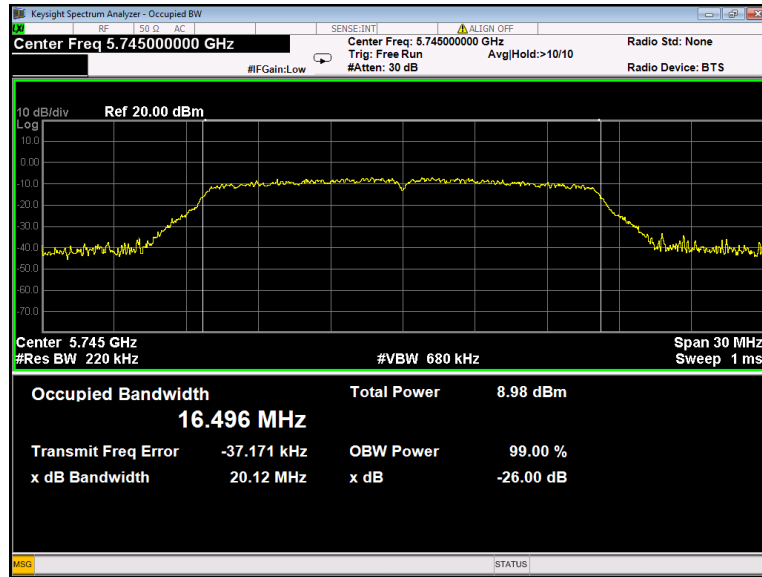
802.11ac(HT80) U-NII-2C Low channel



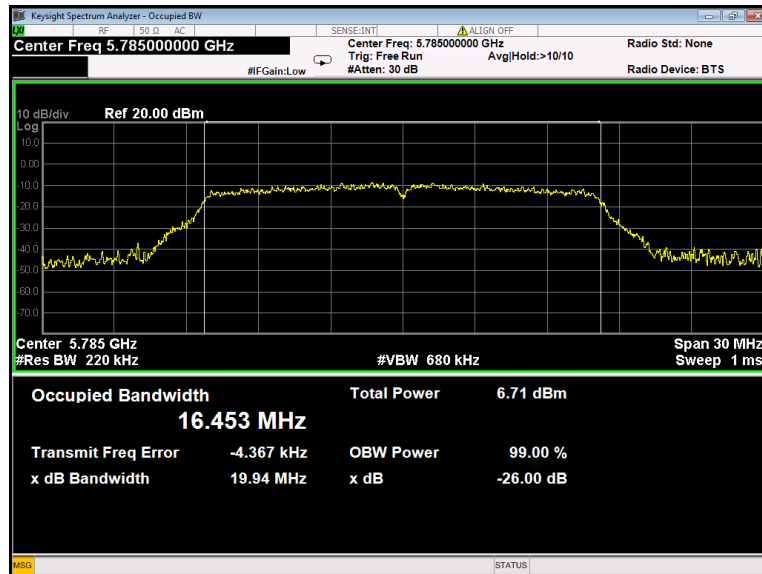
802.11ac(HT80) U-NII-2C High channel



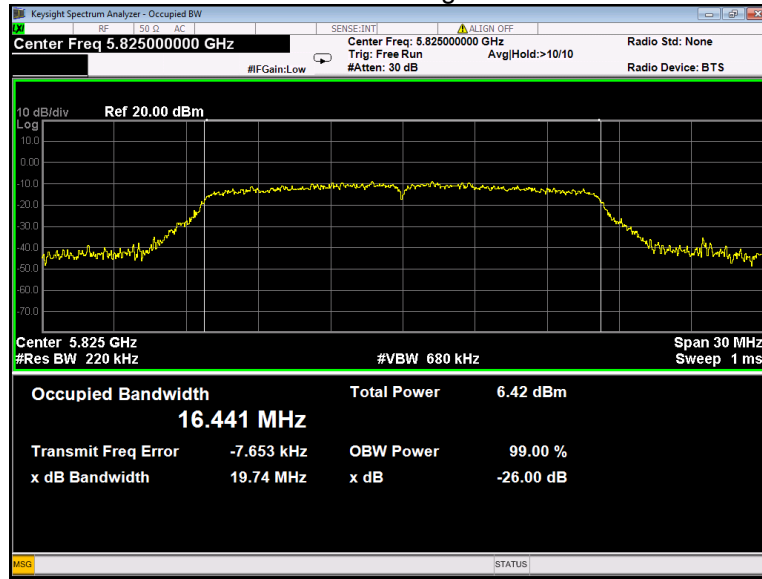
802.11a U-NII-3 Low channel



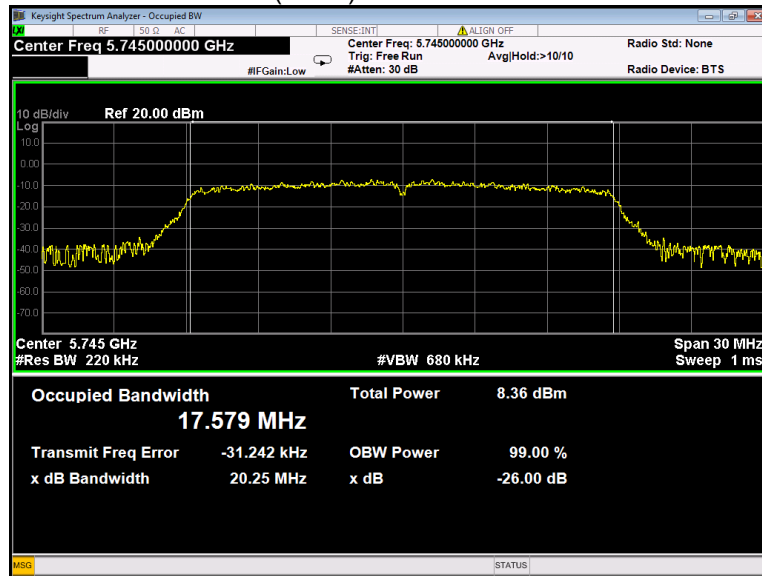
802.11a U-NII-3 Middle channel



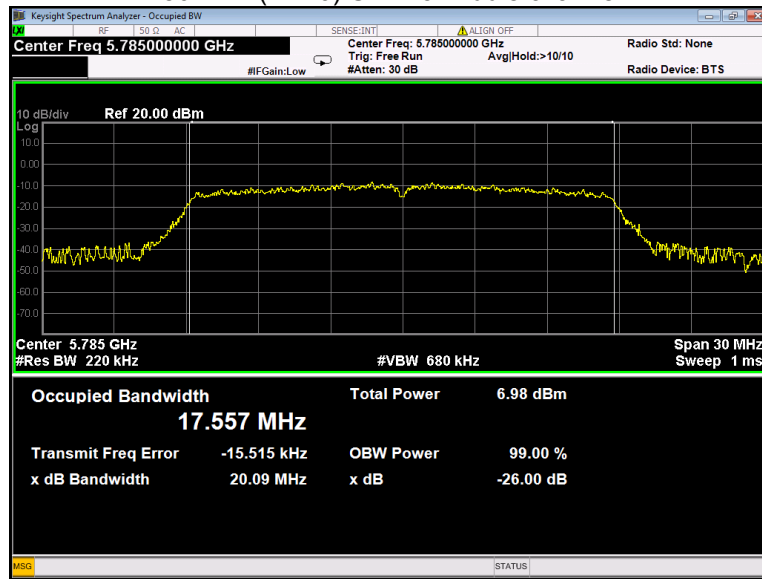
802.11a U-NII-3 High channel



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



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



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

