RADIO TEST REPORT

FCC 47 CFR PART 15 SUBPART E
INDUSTRY CANADA RSS-247

Test Standard	**FCC Part 15.407+ RSS-247 issue 2 and RSS-GEN issue 5**
Product name	**Tablet PC**
Brand Name	**ADVANTECH**
Model No.	**FCC: AIM-75S-2 ; AIM-75H-2 ; AIM-75S-2XXXXXXXXXXXXXXXX ; AIM75S-2XXXXXXXXXXXXXXXX ; AIM-75H-2XXXXXXXXXXXXXXXX ; AIM75H-2XXXXXXXXXXXXXXXX (where "X" may be any alphanumeric character , "-" or blank) IC: AIM-75S-2 ; AIM-75H-2**
Test Result	**Pass**
Statements of Conformity	**Determination of compliance is based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.**

The test Result was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were given in ANSI C63.10: 2013 and compliance standards.

The test results of this report relate only to the tested sample (EUT) identified in this report. The test Report of full or partial shall not copy. Without written approval of Compliance Certification Services Inc.(Wugu Laboratory)

Approved by:

Kevin Tsai
Deputy Manager

Report No.: T200522D10-RP4

Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	June 18, 2021	Initial Issue	ALL	Doris Chu

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1. GENERAL INFORMATION

1.1 EUT INFORMATION

<table>
<tr><td>Applicant</td><td colspan="3">Advantech Co., Ltd.
No. 1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei 114, Taiwan, R.O.C.</td></tr>
<tr><td>Manufacturer</td><td colspan="3">Advantech Co., Ltd.
No. 1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei 114, Taiwan, R.O.C.</td></tr>
<tr><td>Equipment</td><td colspan="3">Tablet PC</td></tr>
<tr><td>Model No.</td><td colspan="3">FCC: AIM-75S-2 ; AIM-75H-2 ; AIM-75S-2XXXXXXXXXXXXXXXX ; AIM75S-2XXXXXXXXXXXXXXXX ; AIM-75H-2XXXXXXXXXXXXXXXX ; AIM75H-2XXXXXXXXXXXXXXXX (where “X” may be any alphanumeric character , “-” or blank)
IC: AIM-75S-2 ; AIM-75H-2</td></tr>
<tr><td rowspan="4">Model Discrepancy</td><td>Model</td><td>Adapter</td><td>Tablet color</td></tr>
<tr><td>AIM-75H-2</td><td>GlobTek, Inc / GTM96605-GEN2-A1-T2
I/P: 100-240VAC, 50-60Hz, 1.5A
O/P: 5VDC, 4.6A
5.8VDC, 4.6A
9VDC, 4.4A
12VDC, 4A
15VDC, 3.6A
20VDC, 3A</td><td>White</td></tr>
<tr><td>AIM-75S-2</td><td>FSP / FSP045-A1BR
I/P: 100-240VAC, 50-60Hz, 1.2A
O/P: 5.0VDC, 3.0A 15.0W
9.0VDC, 3.0A 27.0W
12.0VDC, 3.0A 36.0W
15.0VDC, 3.0A 45.0W
20.0VDC, 2.25A 45.0W</td><td>Black</td></tr>
<tr><td>AIM-75S-2XXXXXXXXXXXXXXXX ; AIM75S-2XXXXXXXXXXXXXXXX ; AIM-75H-2XXXXXXXXXXXXXXXX ; AIM75H-2XXXXXXXXXXXXXXXX (where “X” may be any alphanumeric character , “-” or blank)</td><td colspan="2">All the above models are identical except for the designation of model numbers. The suffix of (where “X” may be any alphanumeric character , “-” or blank) on model number is just for marketing purpose only.</td></tr>
<tr><td>Trade Name</td><td colspan="3">ADVANTECH</td></tr>
<tr><td>Received Date</td><td colspan="3">May 22, 2020</td></tr>
<tr><td>Date of Test</td><td colspan="3">December 07, 2020 ~ June 17, 2021</td></tr>
</table>

Power Supply	1. Power from Adapter. (1) GlobTek, Inc / GTM96605-GEN2-A1-T2 I/P: 100-240VAC, 50-60Hz, 1.5A O/P: 5VDC, 4.6A 5.8VDC, 4.6A 9VDC, 4.4A 12VDC, 4A 15VDC, 3.6A 20VDC, 3A (2) FSP / FSP045-A1BR I/P: 100-240VAC, 50-60Hz, 1.2A O/P: 5.0VDC, 3.0A 15.0W 9.0VDC, 3.0A 27.0W 12.0VDC, 3.0A 36.0W 15.0VDC, 3.0A 45.0W 20.0VDC, 2.25A 45.0W 2. Power from Battery. ADVANTECH / AIM-BAT-8 Rating: 3.8VDC, 4900mAh/18.62Wh
HW Version	AX2
SW Version	0.3.6.9_20201021.021551
EUT Serial #	200CT32E00140
Operating conditions for the EUT	QRCT v4.0.67.0

Remark:
1. For more details, please refer to the User's manual and Operation description of the EUT.
2. Disclaimer: Antenna information is provided by the applicant, test results of this report are applicable to the sample EUT received.
3. Disclaimer: Variant information between/among model numbers / trademarks is provided by the applicant, test results of this report are applicable to the sample EUT received of main test model name.

1.2 EUT CHANNEL INFORMATION

<table>
<tr><td>Frequency Range</td><td>
<table>
<tr><td colspan="2">UNII-1</td></tr>
<tr><td>IEEE 802.11a</td><td>5180 ~ 5240 MHz</td></tr>
<tr><td>IEEE 802.11n HT 20 MHz</td><td>5180 ~ 5240 MHz</td></tr>
<tr><td>IEEE 802.11n HT 40 MHz</td><td>5190 ~ 5230 MHz</td></tr>
<tr><td>IEEE 802.11ac VHT 80 MHz</td><td>5210 MHz</td></tr>
<tr><td colspan="2">UNII-2a</td></tr>
<tr><td>IEEE 802.11a</td><td>5260 ~ 5320 MHz</td></tr>
<tr><td>IEEE 802.11n HT 20 MHz</td><td>5260 ~ 5320 MHz</td></tr>
<tr><td>IEEE 802.11n HT 40 MHz</td><td>5270 ~ 5310 MHz</td></tr>
<tr><td>IEEE 802.11ac VHT 80 MHz</td><td>5290 MHz</td></tr>
<tr><td colspan="2">UNII-2c</td></tr>
<tr><td>IEEE 802.11a</td><td>5500 ~ 5700 MHz</td></tr>
<tr><td>IEEE 802.11n HT 20 MHz</td><td>5500 ~ 5700 MHz</td></tr>
<tr><td>IEEE 802.11n HT 40 MHz</td><td>5510 ~ 5670 MHz</td></tr>
<tr><td>IEEE 802.11ac VHT 80 MHz</td><td>5530, 5610 MHz</td></tr>
<tr><td colspan="2">UNII-3</td></tr>
<tr><td>IEEE 802.11a</td><td>5745 ~ 5825 MHz</td></tr>
<tr><td>IEEE 802.11n HT 20 MHz</td><td>5745 ~ 5825 MHz</td></tr>
<tr><td>IEEE 802.11n HT 40 MHz</td><td>5755 ~ 5795 MHz</td></tr>
<tr><td>IEEE 802.11ac VHT 80 MHz</td><td>5775 MHz</td></tr>
</table>
</td></tr>
<tr><td>Modulation Type</td><td>1. IEEE 802.11a mode: OFDM
2. IEEE 802.11n HT 20 MHz mode: OFDM
3. IEEE 802.11n HT 40 MHz mode: OFDM
4. IEEE 802.11ac VHT 80 MHz mode: OFDM</td></tr>
</table>

Remark:
1. Refer as ANSI C63.10: 2013 clause 5.6.1 Table 4 for test channels.
2. For Canada the EUT Frequency Range 5600~5650MHz will be disabled.

Number of frequencies to be tested		
Frequency range in which device operates	**Number of frequencies**	**Location in frequency range of operation**
☐ 1 MHz or less	1	Middle
☐ 1 MHz to 10 MHz	2	1 near top and 1 near bottom
☒ More than 10 MHz	3	1 near top, 1 near middle, and 1 near bottom

1.3 ANTENNA INFORMATION

Antenna Type	Omni-directional antenna
Antenna Gain	IEEE 802.11 a / 802.11n HT20 / HT40 / ac VHT 80 MHz mode:

Band	Chain0 (dBi)	Chain1 (dBi)	Power Directional Gain: (dBi)
5G_U-NII 1	2.83	2.78	2.81
5G_U-NII 2a	2.83	2.78	2.81
5G_U-NII 2c	2.83	2.78	2.81
5G_U-NII 3	2.83	2.78	2.81

Antenna Connector	N/A

1.4 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
AC Powerline Conducted Emission	+/- 1.2575
Emission bandwidth, 20dB bandwidth	+/- 0.0014
RF output power, conducted	+/- 1.14
Power density, conducted	+/- 1.40
3M Semi Anechoic Chamber / 30M~200M	+/- 4.12
3M Semi Anechoic Chamber / 200M~1000M	+/- 4.68
3M Semi Anechoic Chamber / 1G~8G	+/- 5.18
3M Semi Anechoic Chamber / 8G~18G	+/- 5.47
3M Semi Anechoic Chamber / 18G~26G	+/- 3.81
3M Semi Anechoic Chamber / 26G~40G	+/- 3.87

Remark:
1.This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2
2. ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report.

1.5 FACILITIES AND TEST LOCATION

All measurement facilities used to collect the measurement data are located at

No.11, Wugong 6th Rd., Wugu Dist., New Taipei City, Taiwan. (R.O.C.)
CAB identifier: TW1309

Test site	Test Engineer	Remark
AC Conduction Room	Jerry Chang, Dally Hong	-
Radiation	Jerry Chang, Ray Li	-
RF Conducted	Rick Lee, Lance Chen	-

Remark: The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22.

1.6 INSTRUMENT CALIBRATION

Test date for December 07, 2020

3M 966 Chamber Test Site					
Equipment	**Manufacturer**	**Model**	**Serial Number**	**Cal Date**	**Cal Due**
Bilog Antenna	Sunol Sciences	JB3	A030105	07/24/2020	07/23/2021
Coaxial Cable	HUBER SUHNER	SUCOFLEX 104PEA	20995	02/25/2020	02/24/2021
Coaxial Cable	EMCI	EMC105	190914+327109/4	09/19/2020	09/18/2021
Digital Thermo-Hygro Meter	WISEWIND	1206	D07	01/15/2020	01/14/2021
double Ridged Guide Horn Antenna	ETC	MCTD 1209	DRH13M02003	09/30/2020	09/29/2021
High Pass Filters	MICRO TRONICS	HPM13195	003	02/25/2020	02/24/2021
Horn Antenna	ETS LINDGREN	3116	00026370	12/20/2019	12/19/2020
Loop Ant	COM-POWER	AL-130	121051	03/27/2020	03/26/2021
Pre-Amplifier	EMEC	EM330	060609	02/25/2020	02/24/2021
Pre-Amplifier	EMEC	EM01G26G	060570	06/29/2020	06/28/2021
Pre-Amplifier	MITEQ	AMF-6F-18004000-37-8P	985646	09/02/2020	09/01/2021
PSA Series Spectrum Analyzer	Agilent	E4446A	MY46180323	07/24/2020	07/23/2021
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R	N.C.R
Controller	CCS	CC-C-1F	N/A	N.C.R	N.C.R
Turn Table	CCS	CC-T-1F	N/A	N.C.R	N.C.R
Software	e3 6.11-20180413				

Remark:
1. Each piece of equipment is scheduled for calibration once a year.
2. N.C.R. = No Calibration Required.

Test date for April 22, 2021

3M 966 Chamber Test Site					
Equipment	**Manufacturer**	**Model**	**Serial Number**	**Cal Date**	**Cal Due**
Band Reject Filters	MICRO TRONICS	BRM 50702	120	02/08/2021	02/07/2022
Bilog Antenna	Sunol Sciences	JB3	A030105	07/24/2020	07/23/2021
Coaxial Cable	HUBER SUHNER	SUCOFLEX 104PEA	20995	02/24/2021	02/23/2022
Coaxial Cable	EMCI	EMC105	190914+327109/4	09/19/2020	09/18/2021
Digital Thermo-Hygro Meter	WISEWIND	1206	D07	01/06/2021	01/05/2022
Horn Antenna	ETS LINDGREN	3116	00026370	12/11/2020	12/10/2021
double Ridged Guide Horn Antenna	ETC	MCTD 1209	DRH13M02003	09/30/2020	09/29/2021
K Type Cable	Huber+Suhner	SUCOFLEX 102	29406/2	12/09/2020	12/08/2021
K Type Cable	Huber+Suhner	SUCOFLEX 102	22470/2	12/09/2020	12/08/2021
Loop Ant	COM-POWER	AL-130	121051	04/07/2021	04/06/2022
Pre-Amplifier	EMEC	EM330	060609	02/24/2021	02/23/2022
Pre-Amplifier	HP	8449B	3008A00965	12/25/2020	12/24/2021
PSA Series Spectrum Analyzer	Agilent	E4446A	MY46180323	07/24/2020	07/23/2021
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R	N.C.R
Controller	CCS	CC-C-1F	N/A	N.C.R	N.C.R
Turn Table	CCS	CC-T-1F	N/A	N.C.R	N.C.R
Software	e3 6.11-20180413				

RF Conducted Test Site					
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Date**	**Calibration Due**
Coaxial Cable	Woken	WC12	CC003	06/29/2020	06/28/2021
EXA Signal Analyzer	KEYSIGHT	N9010B	MY55460167	09/07/2020	09/06/2021
Power Meter	Anritsu	ML2487A	6K00003260	05/21/2020	05/20/2021
Power Seneor	Anritsu	MA2490A	032910	05/21/2020	05/20/2021
Software	N/A				

Test date for January 5, 2021

Conducted Emission Room					
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Date**	**Calibration Due**
CABLE	EMCI	CFD300-NL	CERF	06/29/2020	06/28/2021
EMI Test Receiver	R&S	ESCI	100064	07/17/2020	07/16/2021
LISN	SCHAFFNER	NNB 41	03/10013	02/13/2020	02/12/2021
Software	EZ-EMC(CCS-3A1-CE)				

Test date for April 15, 2021

Conducted Emission Room					
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Date**	**Calibration Due**
CABLE	EMCI	CFD300-NL	CERF	06/29/2020	06/28/2021
EMI Test Receiver	R&S	ESCI	100064	07/17/2020	07/16/2021
LISN	SCHAFFNER	NNB 41	03/10013	02/02/2021	02/01/2022
Software	EZ-EMC(CCS-3A1-CE)				

Remark:
1. Each piece of equipment is scheduled for calibration once a year.
2. N.C.R. = No Calibration Required.

1.7 SUPPORT AND EUT ACCESSORIES EQUIPMENT

EUT Accessories Equipment					
No.	**Equipment**	**Brand**	**Model**	**Series No.**	**FCC ID**
	N/A				

Support Equipment					
No.	**Equipment**	**Brand**	**Model**	**Series No.**	**FCC ID**
1	NB(J)	TOSHIBA	PT345T-00L002	N/A	N/A

1.8 TEST METHODOLOGY AND APPLIED STANDARDS

The test methodology, setups and results comply with all requirements in accordance with ANSI C63.10:2013, FCC Part 2, FCC Part 15.407, KDB 789033 D02, KDB 905462 D02, RSS-247 Issue 2 and RSS-GEN Issue 5.

2. TEST SUMMARY

FCC Standard Sec.	IC Standard Sec.	Chapter	Test Item	Result
15.203	-	1.3	Antenna Requirement	Pass
15.207	RSS-Gen(8.8)	4.1	AC Conducted Emission	Pass
15.403(i)	-	4.2	26dB Bandwidth	Pass
15.407(e)	RSS-247(6.2.4)	4.2	6dB Bandwidth	Pass
15.403(i)	RSS-Gen (6.7)	4.2	Occupied Bandwidth (99%)	Pass
15.407(a)	RSS-247(6.2.1.1) RSS-247(6.2.2.1) RSS-247(6.2.3.1) RSS-247(6.2.4.1)	4.3	Output Power Measurement	Pass
15.407(a)	RSS-247(6.2.1.1) RSS-247(6.2.2.1) RSS-247(6.2.3.1) RSS-247(6.2.4.1)	4.4	Power Spectral Density	Pass
15.407(b)	RSS-247(6.2.1.2) RSS-247(6.2.2.2) RSS-247(6.2.3.2) RSS-247(6.2.4.2)	4.5	Radiation Band Edge	Pass
15.407(b)	RSS-247(6.2.1.2) RSS-247(6.2.2.2) RSS-247(6.2.3.2) RSS-247(6.2.4.2)	4.5	Radiation Spurious Emission	Pass

3. DESCRIPTION OF TEST MODES

3.1 THE EUT CHANNEL NUMBER OF OPERATING CONDITION

<table>
<tr><td>Operation mode</td><td>1. IEEE 802.11a mode: 6Mbps
2. IEEE 802.11n HT 20 MHz mode: MCS8
3. IEEE 802.11n HT 40 MHz mode: MCS8
4. IEEE 802.11ac VHT 80 MHz mode: MCS0</td></tr>
<tr><td>Operating Frequency</td><td>
<table>
<tr><th></th><th>Mode</th><th>Frequency Range (MHz)</th></tr>
<tr><td rowspan="4">U-NII-1</td><td>IEEE 802.11a</td><td>5180, 5220, 5240</td></tr>
<tr><td>IEEE 802.11n HT 20 MHz</td><td>5180, 5220, 5240</td></tr>
<tr><td>IEEE 802.11n HT 40 MHz</td><td>5190, 5230</td></tr>
<tr><td>IEEE 802.11ac VHT 80 MHz</td><td>5210</td></tr>
<tr><td rowspan="4">U-NII-2a</td><td>IEEE 802.11a</td><td>5260, 5280, 5320</td></tr>
<tr><td>IEEE 802.11n HT 20 MHz</td><td>5260, 5280, 5320</td></tr>
<tr><td>IEEE 802.11n HT 40 MHz</td><td>5270, 5310</td></tr>
<tr><td>IEEE 802.11ac VHT 80 MHz</td><td>5290</td></tr>
<tr><td rowspan="4">U-NII-2c</td><td>IEEE 802.11a</td><td>5500, 5580, 5700</td></tr>
<tr><td>IEEE 802.11n HT 20 MHz</td><td>5500, 5580, 5700</td></tr>
<tr><td>IEEE 802.11n HT 40 MHz</td><td>5510, 5550, 5670</td></tr>
<tr><td>IEEE 802.11ac VHT 80 MHz</td><td>5530, 5610</td></tr>
<tr><td rowspan="4">U-NII-3</td><td>IEEE 802.11a</td><td>5745, 5785, 5825</td></tr>
<tr><td>IEEE 802.11n HT 20 MHz</td><td>5745, 5785, 5825</td></tr>
<tr><td>IEEE 802.11n HT 40 MHz</td><td>5755, 5795</td></tr>
<tr><td>IEEE 802.11ac VHT 80 MHz</td><td>5775</td></tr>
</table>
</td></tr>
</table>

Remark:
1. EUT pre-scanned data rate of output power for each mode, the worst data rate were recorded in this report.
2. For Canada the EUT Frequency Range 5600~5650MHz will be disabled.
3. MIMO mode covered SISO mode due to MIMO mode with the power equal or higher than SISO modes as worst-case scenario.

3.2 THE WORST MODE OF MEASUREMENT

AC Power Line Conducted Emission	
Test Condition	AC Power line conducted emission for line and neutral
Power supply Mode	Mode 1: EUT power by Adapter. (GlobTek) 120VAC Mode 2: EUT power by Adapter. (GlobTek) 240VAC Mode 3: EUT power by Adapter. (FSP) 120VAC Mode 4: EUT power by Adapter. (FSP) 240VAC
Worst Mode	☐ Mode 1 ☐ Mode 2 ☒ Mode 3 ☒ Mode 4

Radiated Emission Measurement Above 1G	
Test Condition	Radiated Emission Above 1G
Power supply Mode	Mode 1: EUT power by Adapter. (GlobTek) Mode 2: EUT power by Adapter. (FSP) Mode 3: EUT power by Battery
Worst Mode	☐ Mode 1 ☒ Mode 2 ☐ Mode 3 ☐ Mode 4
Worst Position	☐ Placed in fixed position. ☒ Placed in fixed position at X-Plane (E2-Plane) ☐ Placed in fixed position at Y-Plane (E1-Plane) ☐ Placed in fixed position at Z-Plane (H-Plane)

Radiated Emission Measurement Below 1G	
Test Condition	Radiated Emission Below 1G
Power supply Mode	Mode 1: EUT power by Adapter. (GlobTek) Mode 2: EUT power by Adapter. (FSP) Mode 3: EUT power by Battery
Worst Mode	☐ Mode 1 ☒ Mode 2 ☐ Mode 3 ☐ Mode 4

Remark:
1. The worst mode was record in this test report.
2. EUT pre-scanned in three axis ,X,Y, Z and two polarity, for radiated measurement. The worst case(X-Plane) were recorded in this report.
3. AC power line conducted emission and for below 1G radiation emission were performed the EUT transmit at the highest output power channel as worse case.

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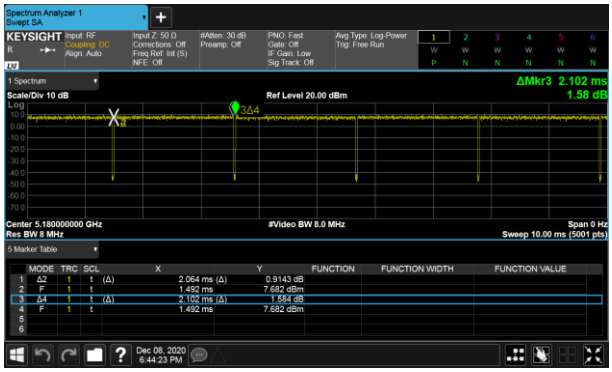
3.3 EUT DUTY CYCLE

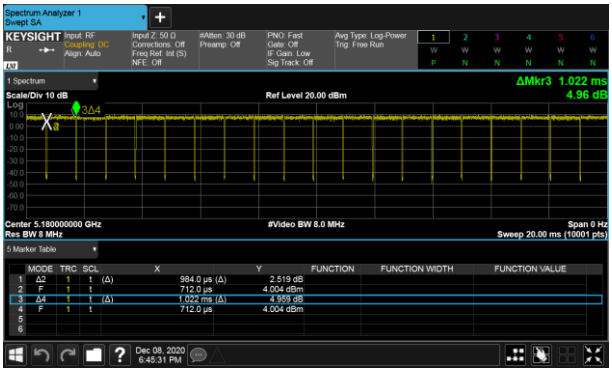
Temperature:	22.3℃	**Humidity:**	58.1% RH
Tested by:	Rick Lee	**Test date:**	December 08, 2020

Duty Cycle				
Configuration	Duty Cycle (%)	Duty Factor (dB) =10*log (1/Duty Cycle)	1/T (kHz)	VBW setting (kHz)
802.11a	98.19	0.08	0.48	0.01
802.11n HT20	96.28	0.16	1.02	2.00
802.11n HT40	93.23	0.30	2.02	3.00
802.11ac VHT80	67.86	1.68	13.16	14.00

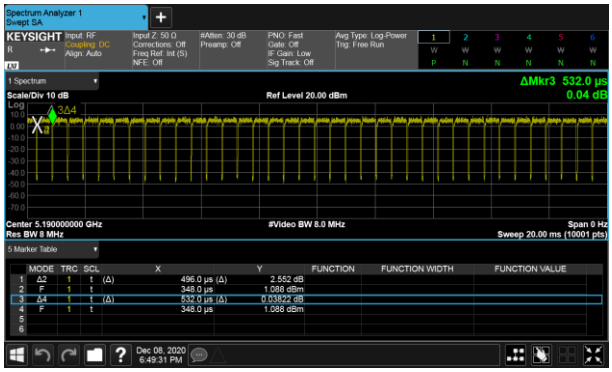
802.11a



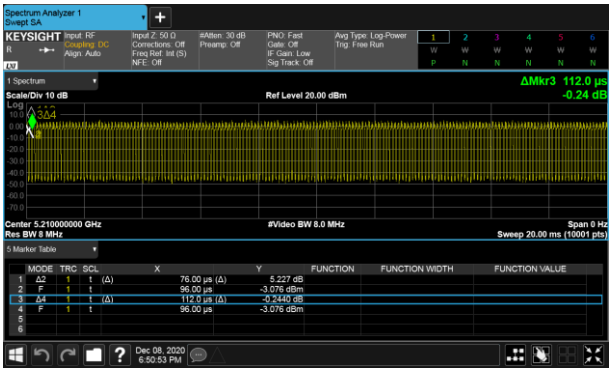
802.11n HT20



802.11n HT40



802.11ac VHT80



4. TEST RESULT

4.1 AC POWER LINE CONDUCTED EMISSION

4.1.1 Test Limit

According to §15.207(a) and RSS-GEN section 8.8,

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

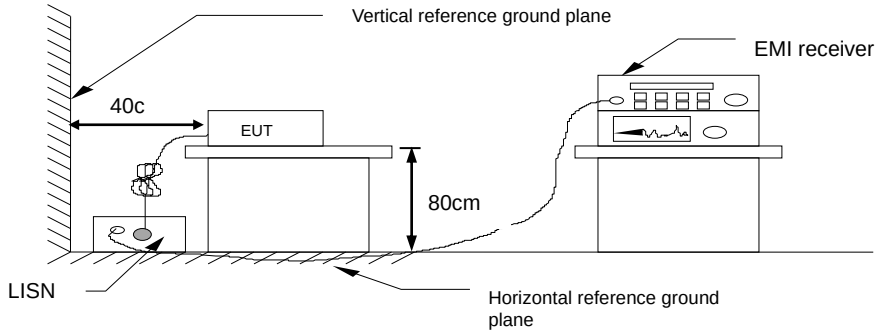
* Decreases with the logarithm of the frequency.

4.1.2 Test Procedure

Test method Refer as ANSI C63.10: 2013 clause 6.2,

1. The EUT was placed on a non-conducted table, which is 0.8m above horizontal ground plane and 0.4m above vertical ground plane.
2. EUT connected to the line impedance stabilization network (LISN)
3. Receiver set RBW of 9kHz and Detector Peak, and note as quasi-Peak and Average.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. Recorded Line for Neutral and Line.

4.1.3 Test Setup



4.1.4 Test Result

PASS

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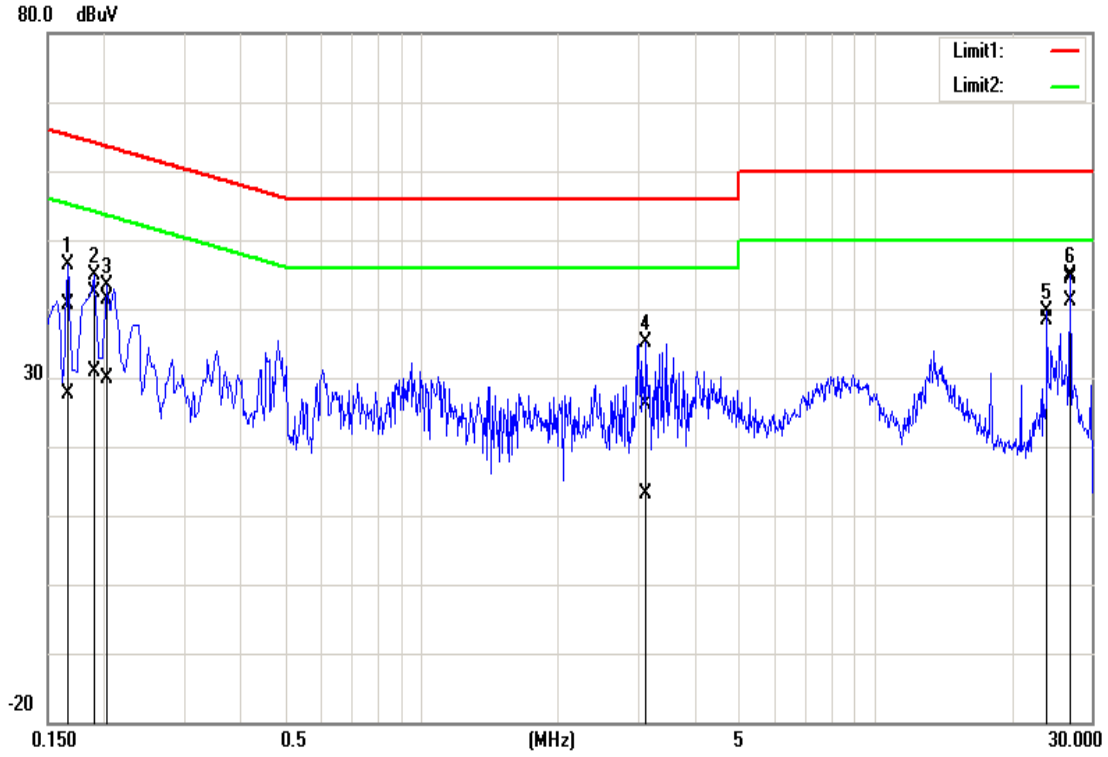
Test Data

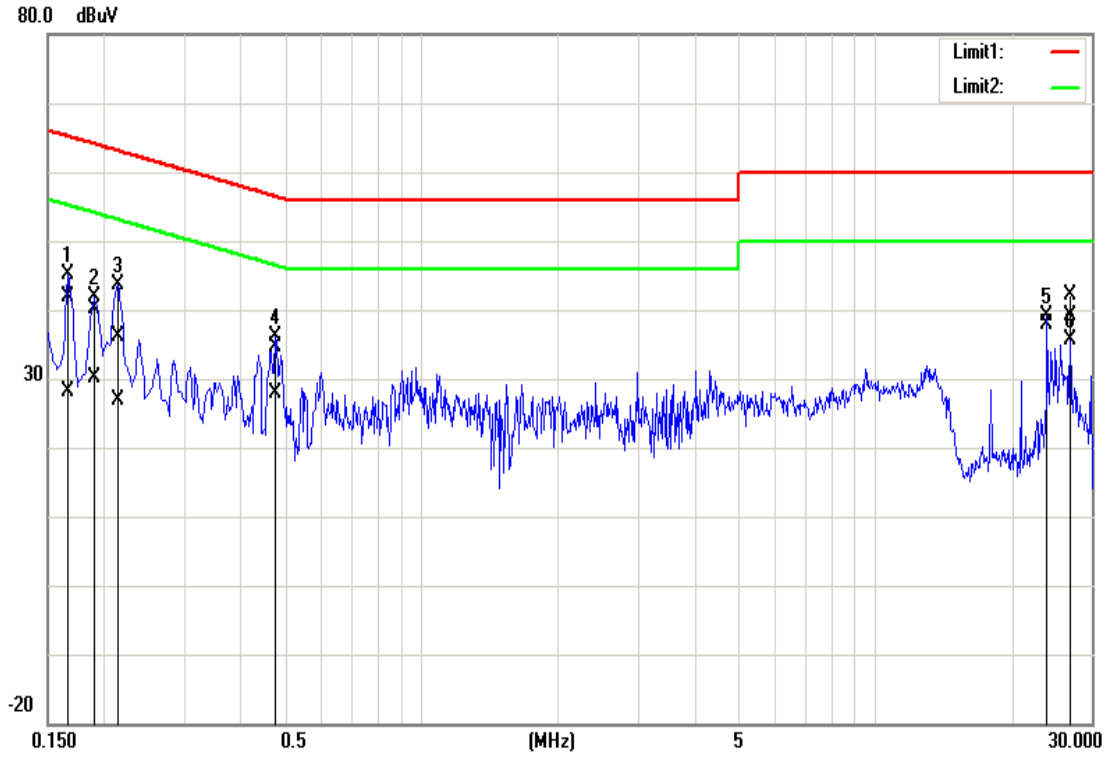
Test Mode:	Mode 3	Temp/Hum	20(℃)/ 63%RH
Phase:	Line	Test Date	January 05, 2021
		Test Engineer	Jerry Chang



Frequency (MHz)	Quasi Peak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	Quasi Peak result (dBuV)	Average result (dBuV)	Quasi Peak limit (dBuV)	Average limit (dBuV)	Quasi Peak margin (dB)	Average margin (dB)	Remark
0.1660	30.49	17.53	10.21	40.70	27.74	65.16	55.16	-24.46	-27.42	Pass
0.1900	32.23	20.72	10.21	42.44	30.93	64.04	54.04	-21.60	-23.11	Pass
0.2020	31.23	19.58	10.21	41.44	29.79	63.53	53.53	-22.09	-23.74	Pass
3.1340	15.87	2.76	10.28	26.15	13.04	56.00	46.00	-29.85	-32.96	Pass
23.9500	29.36	28.05	10.31	39.67	38.36	60.00	50.00	-20.33	-11.64	Pass
26.9420	34.03	30.80	10.24	44.27	41.04	60.00	50.00	-15.73	-8.96	Pass

Report No.: T200522D10-RP4

Test Mode:	Mode 3	Temp/Hum	20(℃)/ 63%RH
Phase:	Neutral	Test Date	January 05, 2021
		Test Engineer	Jerry Chang



Frequency (MHz)	Quasi Peak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	Quasi Peak result (dBuV)	Average result (dBuV)	Quasi Peak limit (dBuV)	Average limit (dBuV)	Quasi Peak margin (dB)	Average margin (dB)	Remark
0.1660	31.77	17.90	10.18	41.95	28.08	65.16	55.16	-23.21	-27.08	Pass
0.1900	30.00	19.95	10.19	40.19	30.14	64.04	54.04	-23.85	-23.90	Pass
0.2140	25.82	16.66	10.19	36.01	26.85	63.05	53.05	-27.04	-26.20	Pass
0.4780	24.48	17.74	10.19	34.67	27.93	56.37	46.37	-21.70	-18.44	Pass
23.9500	28.58	27.28	10.51	39.09	37.79	60.00	50.00	-20.91	-12.21	Pass
26.9420	31.56	28.44	10.59	42.15	39.03	60.00	50.00	-17.85	-10.97	Pass

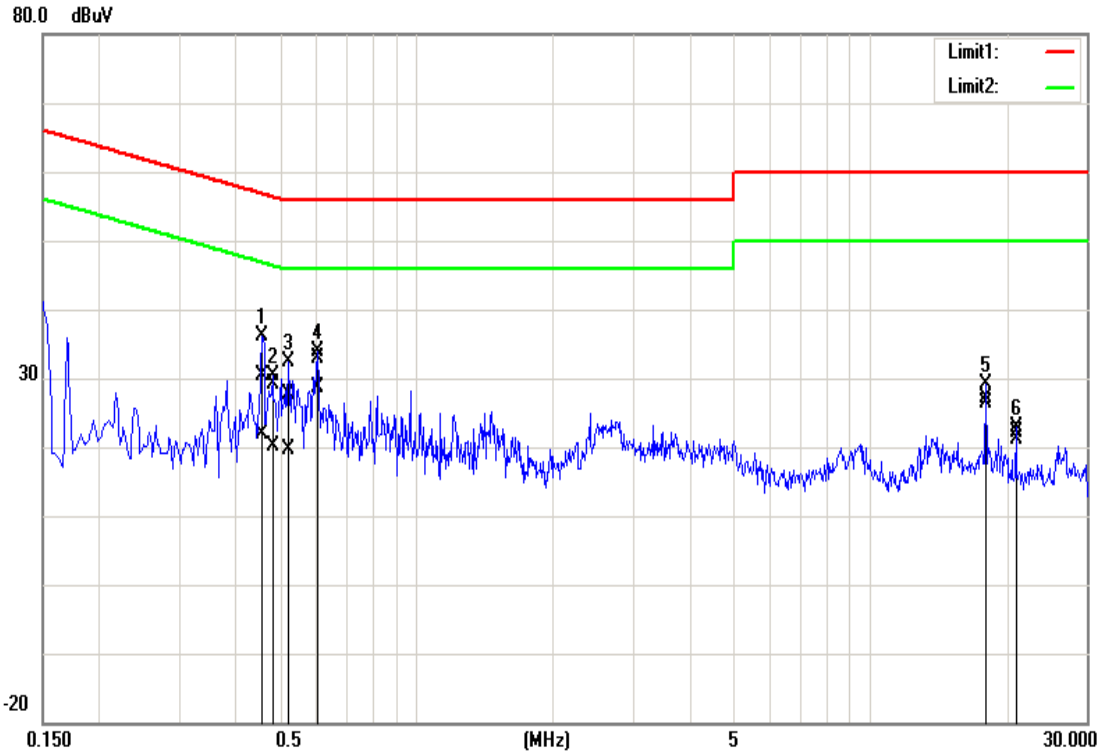
Report No.: T200522D10-RP4

Test Mode:	Mode 4	Temp/Hum	23(℃)/ 51%RH
Phase:	Line	Test Date	April 15, 2021
		Test Engineer	Dally Hong

Frequency (MHz)	Quasi Peak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	Quasi Peak result (dBuV)	Average result (dBuV)	Quasi Peak limit (dBuV)	Average limit (dBuV)	Quasi Peak margin (dB)	Average margin (dB)	Remark
0.1620	21.66	5.81	10.29	31.95	16.10	65.36	55.36	-33.41	-39.26	Pass
0.2100	19.11	7.37	10.29	29.40	17.66	63.21	53.21	-33.81	-35.55	Pass
0.4740	21.72	13.07	10.29	32.01	23.36	56.44	46.44	-24.43	-23.08	Pass
0.6020	22.89	18.83	10.29	33.18	29.12	56.00	46.00	-22.82	-16.88	Pass
3.3980	15.95	5.97	10.35	26.30	16.32	56.00	46.00	-29.70	-29.68	Pass
17.9620	19.73	19.17	10.44	30.17	29.61	60.00	50.00	-29.83	-20.39	Pass

Report No.: T200522D10-RP4

Test Mode:	Mode 4	Temp/Hum	23(℃)/ 51%RH
Phase:	Neutral	Test Date	April 15, 2021
		Test Engineer	Dally Hong



Frequency (MHz)	Quasi Peak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	Quasi Peak result (dBuV)	Average result (dBuV)	Quasi Peak limit (dBuV)	Average limit (dBuV)	Quasi Peak margin (dB)	Average margin (dB)	Remark
0.4580	20.14	11.61	10.26	30.40	21.87	56.73	46.73	-26.33	-24.86	Pass
0.4820	18.92	9.91	10.26	29.18	20.17	56.30	46.30	-27.12	-26.13	Pass
0.5220	17.42	9.41	10.26	27.68	19.67	56.00	46.00	-28.32	-26.33	Pass
0.6060	22.54	18.42	10.26	32.80	28.68	56.00	46.00	-23.20	-17.32	Pass
17.9620	16.66	15.88	10.47	27.13	26.35	60.00	50.00	-32.87	-23.65	Pass
20.9540	11.70	10.58	10.50	22.20	21.08	60.00	50.00	-37.80	-28.92	Pass

4.2 26dB BANDWIDTH, 6dB BANDWIDTH AND OCCUPIED BANDWIDTH(99%)

4.2.1 Test Limit

26 dB Bandwidth ：For reporting purposes only.

6 dB Bandwidth ：Least 500kHz.

Occupied Bandwidth(99%) ： For reporting purposes only.

4.2.2 Test Procedure

26dB

1. This measurement setting are specified in section D of KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

2. Set RBW: approximately 1% of the emission bandwidth.

3. Set the VBW>RBW.

4. Detoctor = Peak.

5. Trace mode = max hold.

6. Measure the maximum width of the emission that is 26dB down from the peak of the emission. Compare this with the RBW setting of the analyser. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

6dB

1. This measurement setting are specified in section D of KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

2. Set RBW = 100 kHz.

3. Set the video bandwidth (VBW) ≥ 3 x RBW.

4. Detoctor = Peak.

5. Trace mode = max hold.

6. Sweep = auto couple.

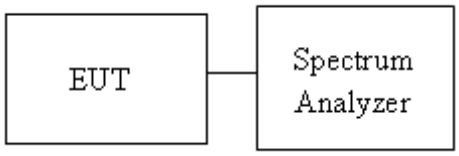
7. Allow the trace to stabilize.

8. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

99%

1. This measurement setting are specified in section D of KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
2. Set center frequency to the nominal EUT channel center frequency.
3. Set span = 1.5 times to 5.0 times the OBW.
4. Set RBW = 1 % to 5% of the OBW.
5. Set VBW ≧ 3 xRBW

4.2.3 Test Setup



4.2.4 Test Result

Temperature:	23.5℃	**Humidity:**	58.5% RH
Tested by:	Rick Lee	**Test date:**	December 09, 2020
Temperature:	22.1℃	**Humidity:**	59.5% RH
Tested by:	Rick Lee	**Test date:**	December 10, 2020
Temperature:	25.3℃	**Humidity:**	55.4% RH
Tested by:	Lance Chen	**Test date:**	May 20, 2021
Temperature:	25.3℃	**Humidity:**	55.4% RH
Tested by:	Lance Chen	**Test date:**	June 15, 2021

Report No.: T200522D10-RP4

UNII-1 5150-5250 MHz					
Test mode: IEEE 802.11a mode					
Channel	**Frequency (MHz)**	**Chain 0 OBW (99%) (MHz)**	**Chain 1 OBW (99%) (MHz)**	**Chain 0 26dB BW (MHz)**	**Chain 1 26dB BW (MHz)**
Low	5180	16.989	18.075	28.72	30.00
Mid	5220	17.089	19.479	27.96	30.00
High	5240	17.025	17.117	21.09	21.83
Test mode: IEEE 802.11n HT20 mode					
Channel	**Frequency (MHz)**	**Chain 0 OBW (99%) (MHz)**	**Chain 1 OBW (99%) (MHz)**	**Chain 0 26dB BW (MHz)**	**Chain 1 26dB BW (MHz)**
Low	5180	17.963	18.076	28.81	30.00
Mid	5220	17.967	18.095	26.92	29.42
High	5240	18.091	18.164	22.46	22.70
Test mode: IEEE 802.11n HT40 mode					
Channel	**Frequency (MHz)**	**Chain 0 OBW (99%) (MHz)**	**Chain 1 OBW (99%) (MHz)**	**Chain 0 26dB BW (MHz)**	**Chain 1 26dB BW (MHz)**
Low	5190	36.352	36.479	50.00	50.00
High	5230	36.289	36.532	47.15	50.00
Test mode: IEEE 802.11ac VHT80 mode					
Channel	**Frequency (MHz)**	**Chain 0 OBW (99%) (MHz)**	**Chain 1 OBW (99%) (MHz)**	**Chain 0 26dB BW (MHz)**	**Chain 1 26dB BW (MHz)**
Mid	5210	76.288	76.427	98.77	100.0

Report No.: T200522D10-RP4

UNII-2a 5250-5350 MHz					
Test mode: IEEE 802.11a mode					
Channel	**Frequency (MHz)**	**Chain 0 OBW (99%) (MHz)**	**Chain 1 OBW (99%) (MHz)**	**Chain 0 26dB BW (MHz)**	**Chain 1 26dB BW (MHz)**
Low	5260	16.871	19.177	26.86	30.00
Mid	5280	16.560	16.523	26.91	30.00
High	5320	16.850	18.527	28.61	30.00
Test mode: IEEE 802.11n HT20 mode					
Channel	**Frequency (MHz)**	**Chain 0 OBW (99%) (MHz)**	**Chain 1 OBW (99%) (MHz)**	**Chain 0 26dB BW (MHz)**	**Chain 1 26dB BW (MHz)**
Low	5260	17.928	18.041	26.93	26.62
Mid	5280	17.787	17.781	26.70	28.68
High	5320	18.004	18.032	25.07	27.39
Test mode: IEEE 802.11n HT40 mode					
Channel	**Frequency (MHz)**	**Chain 0 OBW (99%) (MHz)**	**Chain 1 OBW (99%) (MHz)**	**Chain 0 26dB BW (MHz)**	**Chain 1 26dB BW (MHz)**
Low	5270	36.340	36.490	46.78	50.00
High	5310	36.288	36.439	48.45	50.00
Test mode: IEEE 802.11ac VHT80 mode					
Channel	**Frequency (MHz)**	**Chain 0 OBW (99%) (MHz)**	**Chain 1 OBW (99%) (MHz)**	**Chain 0 26dB BW (MHz)**	**Chain 1 26dB BW (MHz)**
Mid	5290	76.228	76.456	98.97	99.83

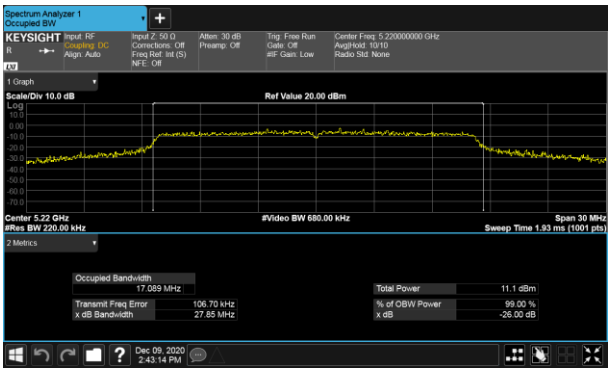
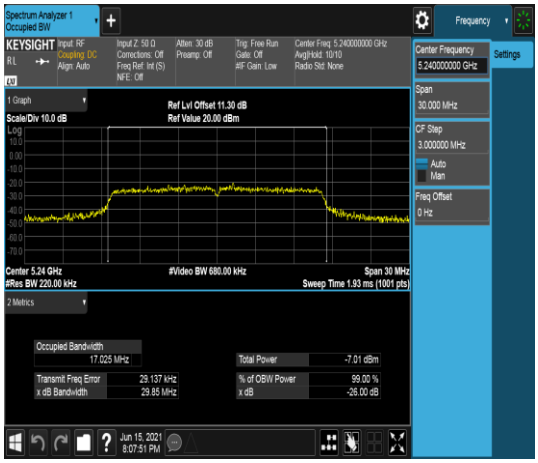
Report No.: T200522D10-RP4

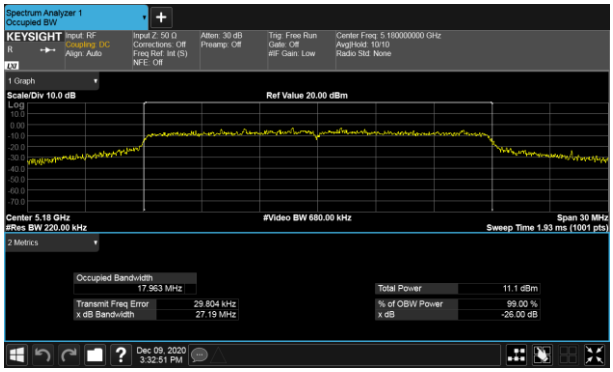
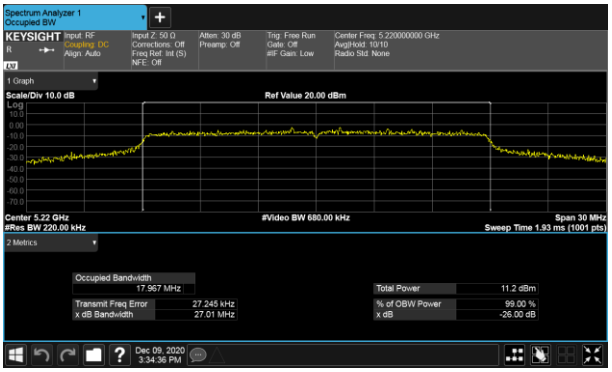
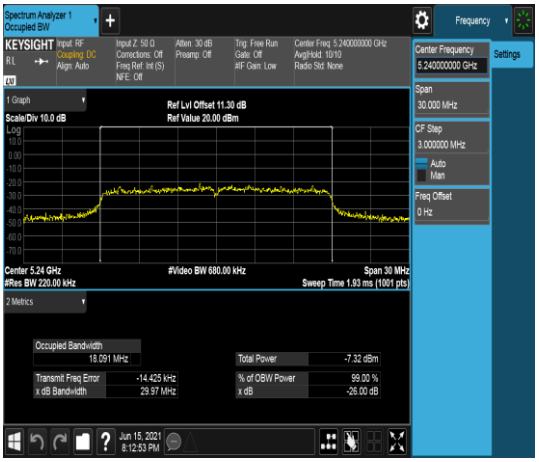
UNII-2c 5475-5725 MHz					
Test mode: IEEE 802.11a mode					
Channel	**Frequency (MHz)**	**Chain 0 OBW (99%) (MHz)**	**Chain 1 OBW (99%) (MHz)**	**Chain 0 26dB BW (MHz)**	**Chain 1 26dB BW (MHz)**
Low	5500	17.157	17.888	28.74	29.74
Mid	5580	16.813	17.834	25.10	30.00
High	5700	16.762	17.398	25.13	27.79
Test mode: IEEE 802.11n HT20 mode					
Channel	**Frequency (MHz)**	**Chain 0 OBW (99%) (MHz)**	**Chain 1 OBW (99%) (MHz)**	**Chain 0 26dB BW (MHz)**	**Chain 1 26dB BW (MHz)**
Low	5500	17.887	17.919	27.04	26.35
Mid	5580	17.828	17.913	25.07	27.24
High	5700	17.810	17.865	24.48	26.73
Test mode: IEEE 802.11n HT40 mode					
Channel	**Frequency (MHz)**	**Chain 0 OBW (99%) (MHz)**	**Chain 1 OBW(99%) (MHz)**	**Chain 0 26dB BW (MHz)**	**Chain 1 26dB BW (MHz)**
Low	5510	36.323	36.383	49.56	49.72
Mid	5550	36.291	36.390	49.31	50.00
High	5670	36.252	36.299	46.33	45.44
Test mode: IEEE 802.11ac VHT80 mode					
Channel	**Frequency (MHz)**	**Chain 0 OBW(99%) (MHz)**	**Chain 1 OBW(99%) (MHz)**	**Chain 0 26dB BW (MHz)**	**Chain 1 26dB BW (MHz)**
Low	5530	76.316	76.351	99.46	98.95
High	5610	76.303	76.274	99.66	100.0

UNII-3 5725-5825MHz					
Test mode: IEEE 802.11a mode					
Channel	**Frequency (MHz)**	**Chain 0 OBW(99%) (MHz)**	**Chain 1 OBW(99%) (MHz)**	**Chain 0 6dB BW (MHz)**	**Chain 1 6dB BW (MHz)**
Low	5745	16.674	17.318	16.39	14.91
Mid	5785	16.690	17.253	15.97	15.51
High	5825	16.704	17.186	16.47	16.32
Test mode: IEEE 802.11n HT20 mode					
Channel	**Frequency (MHz)**	**Chain 0 OBW(99%) (MHz)**	**Chain 1 OBW(99%) (MHz)**	**Chain 0 6dB BW (MHz)**	**Chain 1 6dB BW (MHz)**
Low	5745	17.789	17.891	17.30	17.27
Mid	5785	17.789	17.868	15.28	17.17
High	5825	17.826	17.828	17.30	12.53
Test mode: IEEE 802.11n HT40 mode					
Channel	**Frequency (MHz)**	**Chain 0 OBW(99%) (MHz)**	**Chain 1 OBW(99%) (MHz)**	**Chain 0 6dB BW (MHz)**	**Chain 1 6dB BW (MHz)**
Low	5755	36.247	36.252	35.13	35.13
High	5795	36.270	36.275	35.38	35.66
Test mode: IEEE 802.11ac VHT80 mode					
Channel	**Frequency (MHz)**	**Chain 0 OBW(99%) (MHz)**	**Chain 1 OBW(99%) (MHz)**	**Chain 0 6dB BW (MHz)**	**Chain 1 6dB BW (MHz)**
Mid	5775	76.152	76.274	76.47	76.20

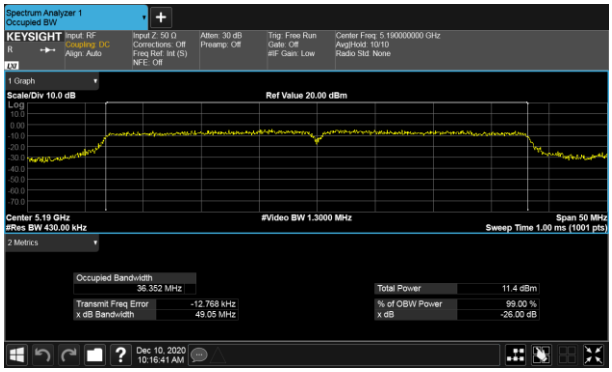
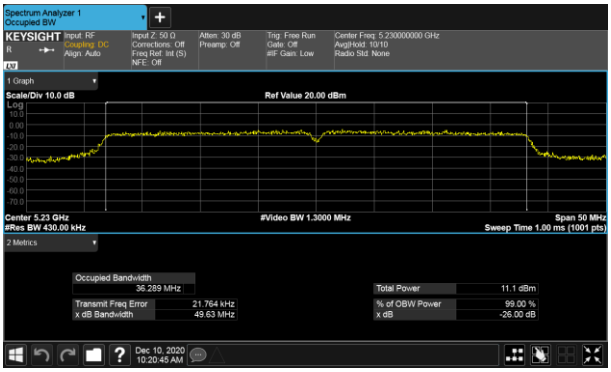
Test Data (99% OBW)

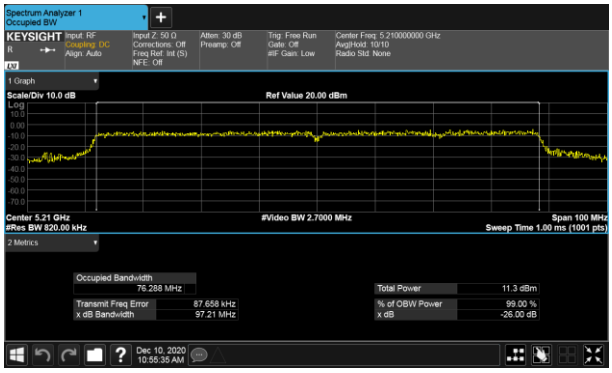
Chain 0

UNII-1 IEEE 802.11a mode	
Low CH	**Mid CH**
	
High CH	
	

UNII-1 IEEE 802.11n HT20 mode	
Low CH	**Mid CH**
	
High CH	
	

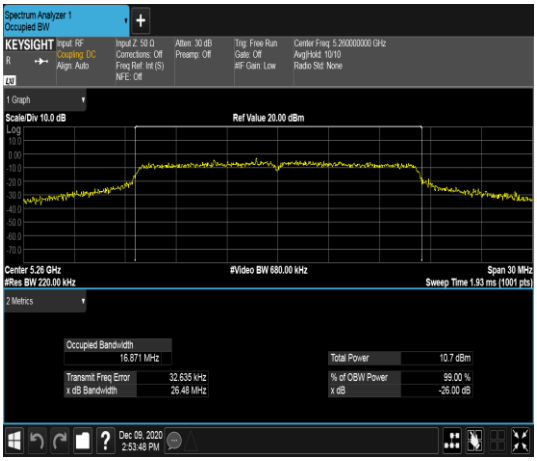
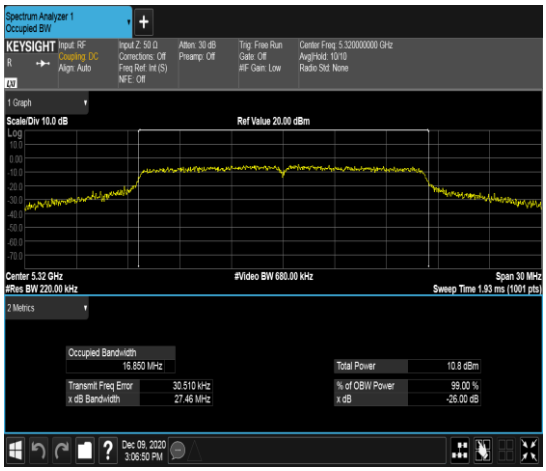
Report No.: T200522D10-RP4

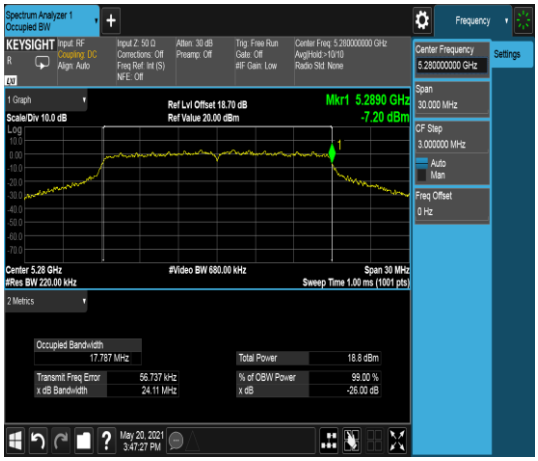
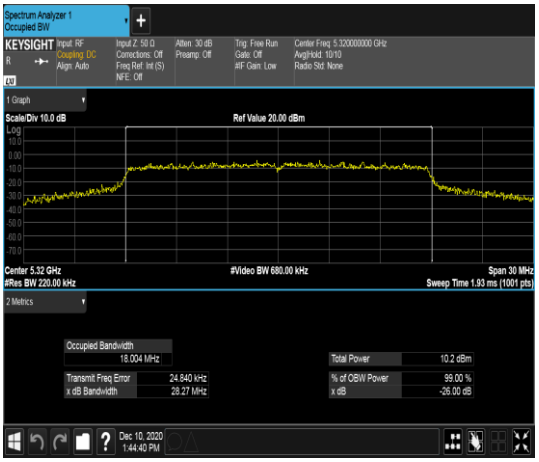
UNII-1 IEEE 802.11n HT40 mode	
Low CH	**High CH**
	

UNII-1 IEEE 802.11ac VHT80 mode	
Low CH	
	

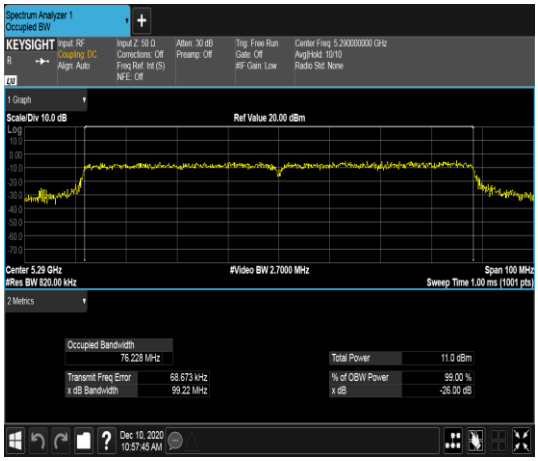
Report No.: T200522D10-RP4

Test Data (99% OBW)

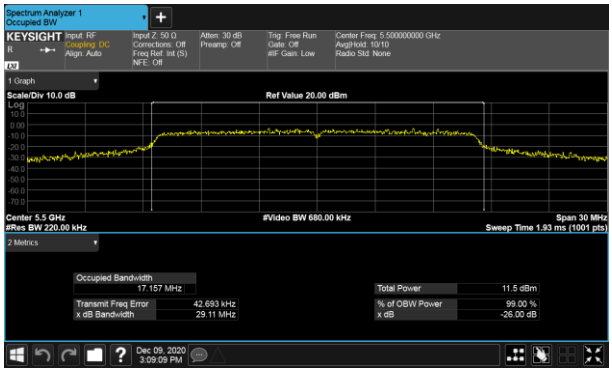
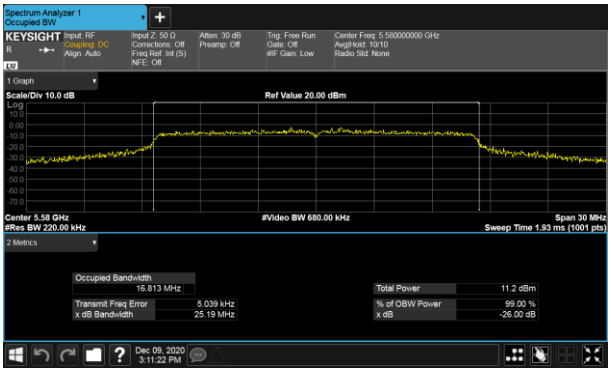
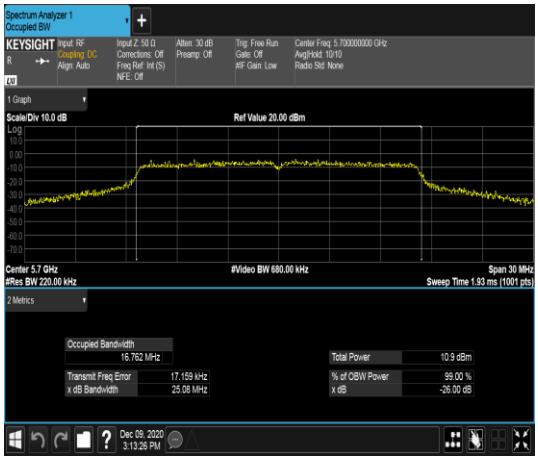
UNII-2a IEEE 802.11a mode	
Low CH	**Mid CH**
	
High CH	
	

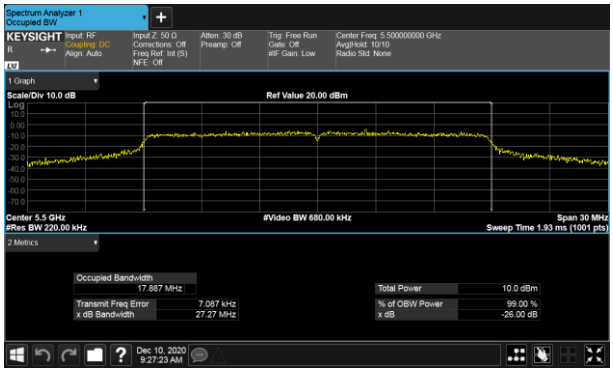
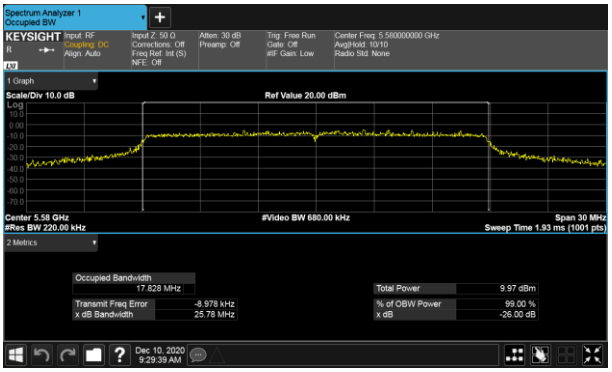
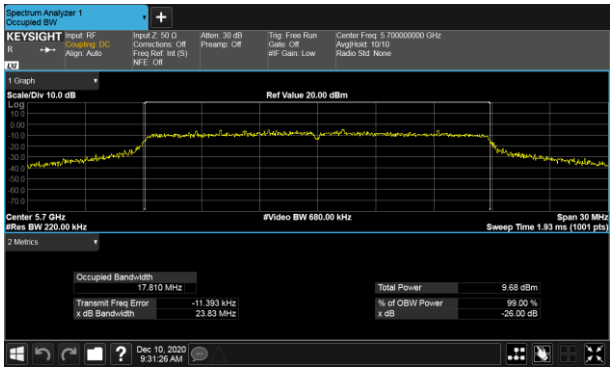
UNII-2a IEEE 802.11n HT20 mode	
Low CH	**Mid CH**
	
High CH	
	

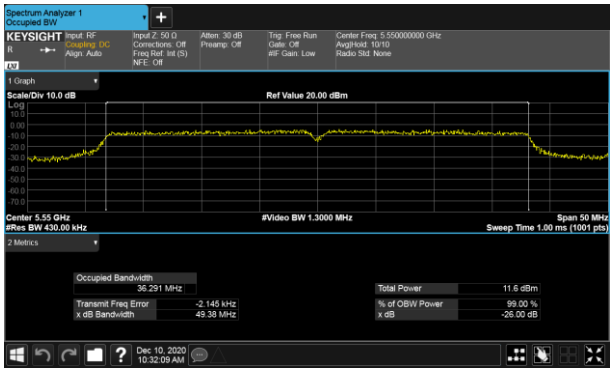
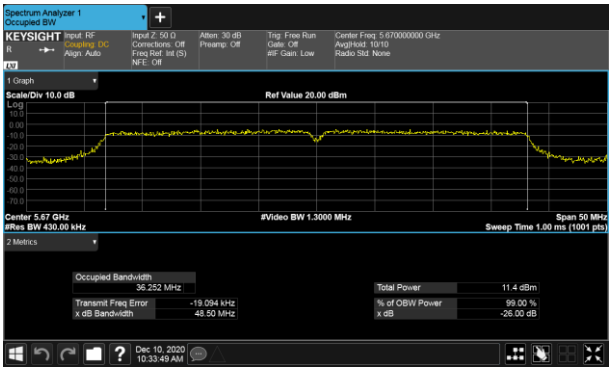
UNII-2a IEEE 802.11n HT40 mode	
Low CH	High CH
	

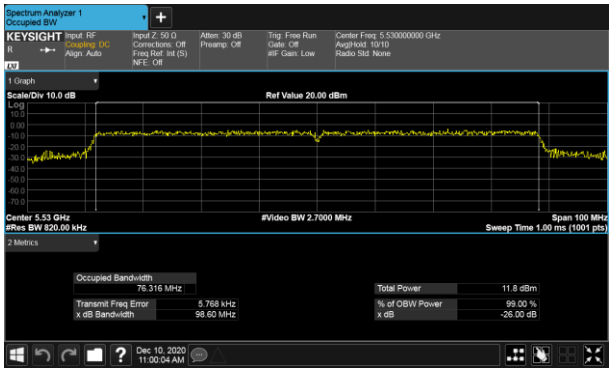
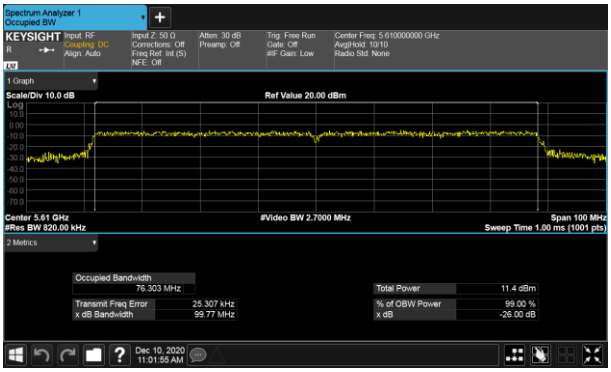
UNII-2a IEEE 802.11ac VHT80 mode	
Low CH	
	

Test Data (99% OBW)

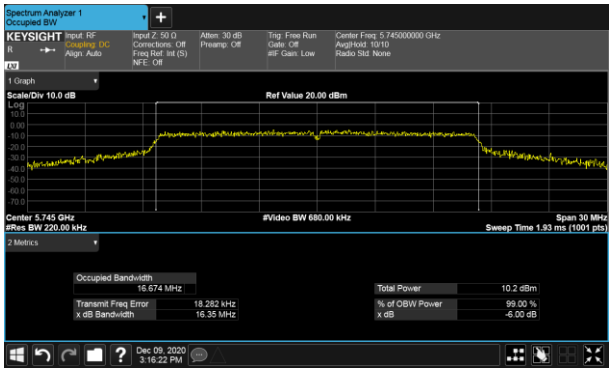
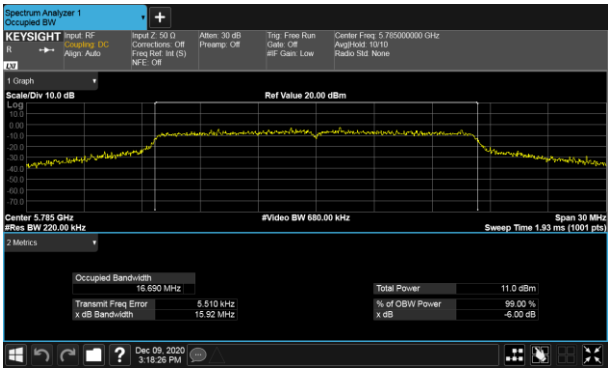
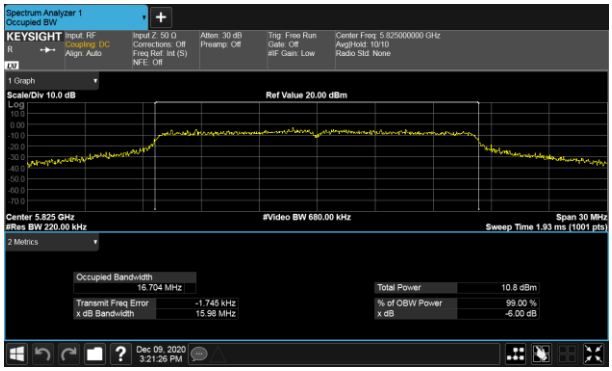
UNII-2c IEEE 802.11a mode	
Low CH	**Mid CH**
	
High CH	
	

UNII-2c IEEE 802.11n HT20 mode	
Low CH	**Mid CH**
	
High CH	
	

UNII-2c IEEE 802.11n HT40 mode	
Low CH	**Mid CH**
	
High CH	
	

UNII-2c IEEE 802.11ac VHT80 mode	
Low CH	**High CH**
	

Test Data (99% OBW)

UNII-3 IEEE 802.11a mode	
Low CH	**Mid CH**
	
High CH	
	

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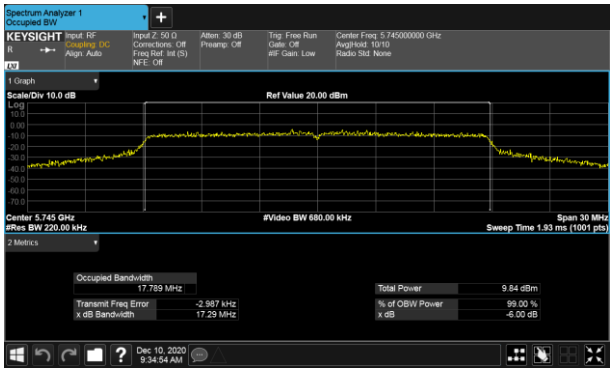
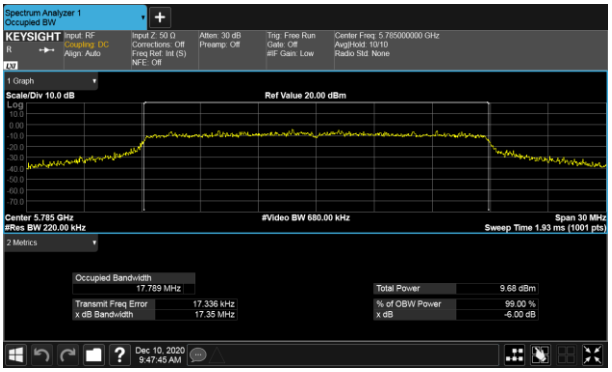
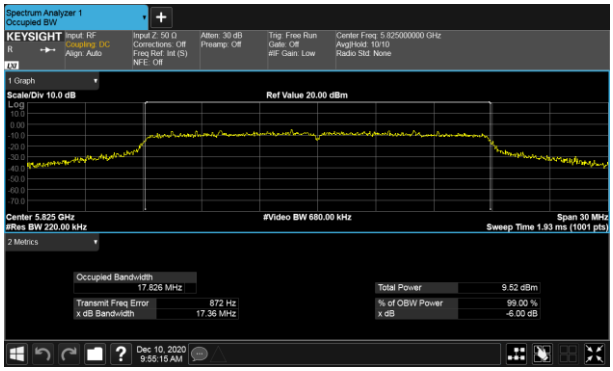
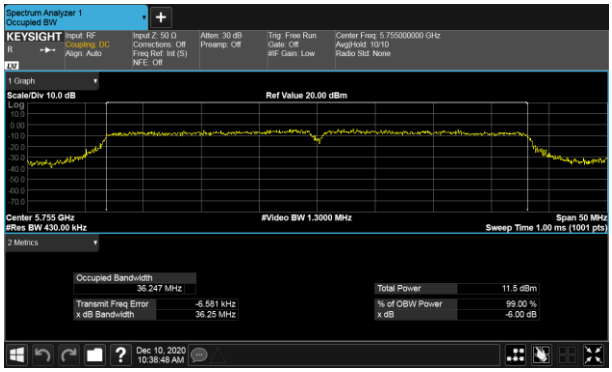
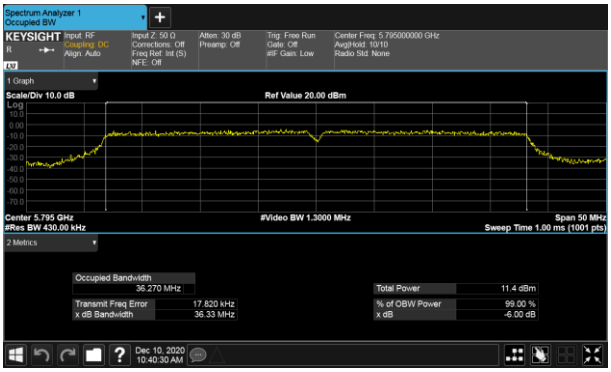
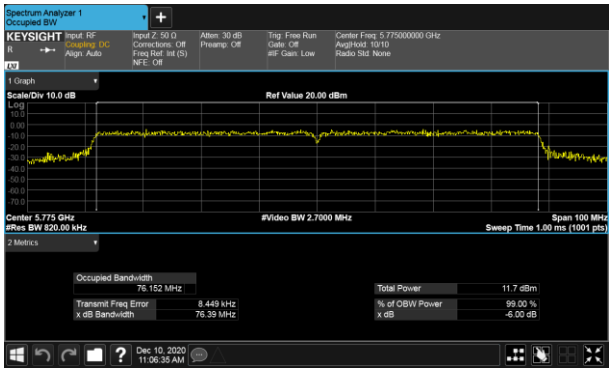
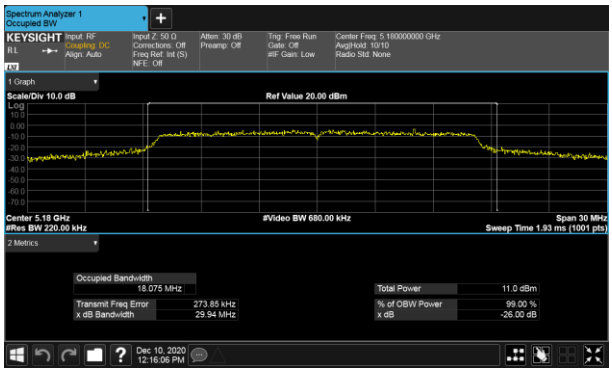
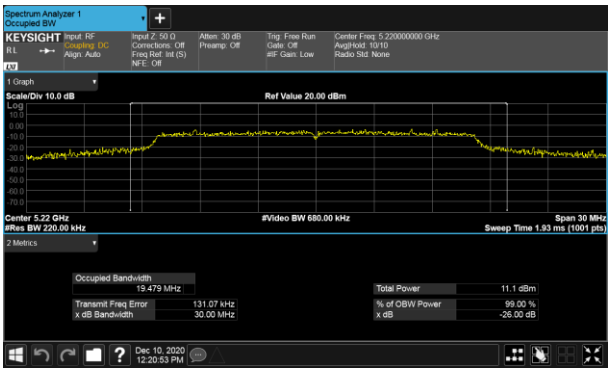
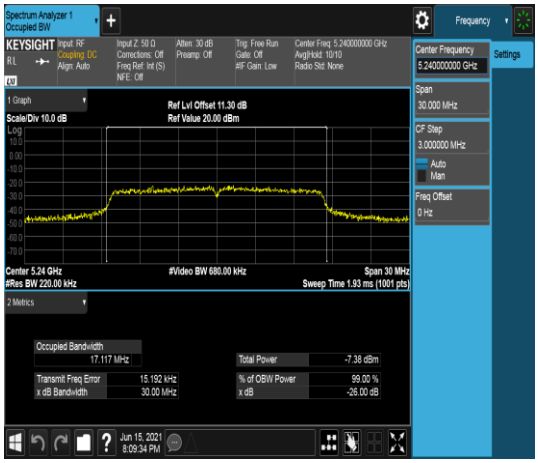
UNII-3 IEEE 802.11n HT20 mode	
Low CH	**Mid CH**
	
High CH	
	

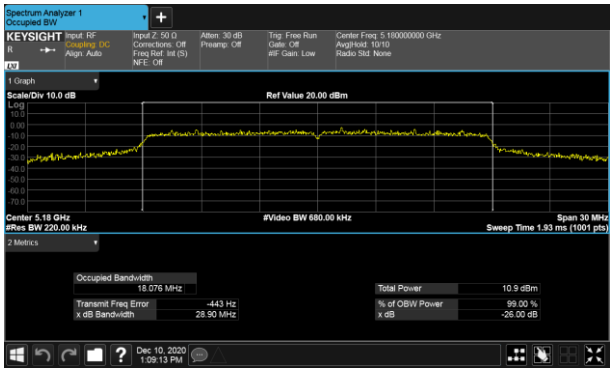
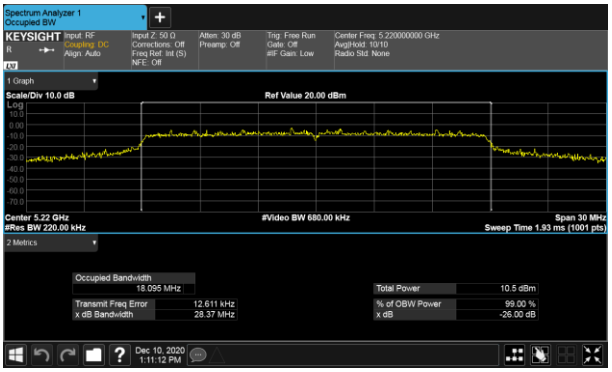
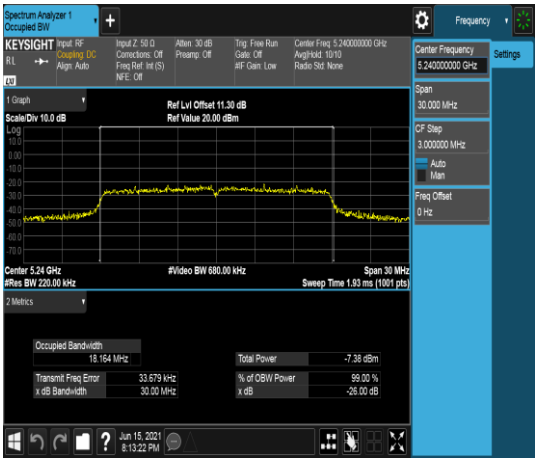
UNII-3 IEEE 802.11n HT40 mode	
Low CH	**High CH**
	

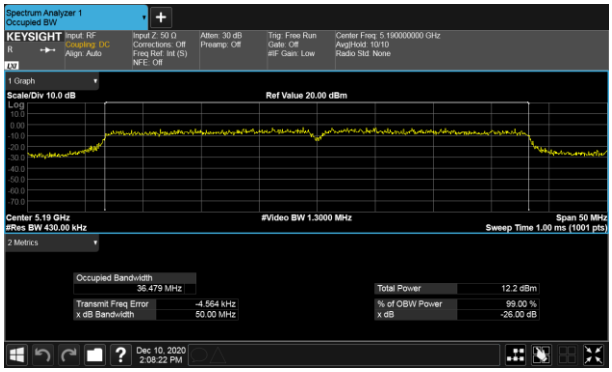
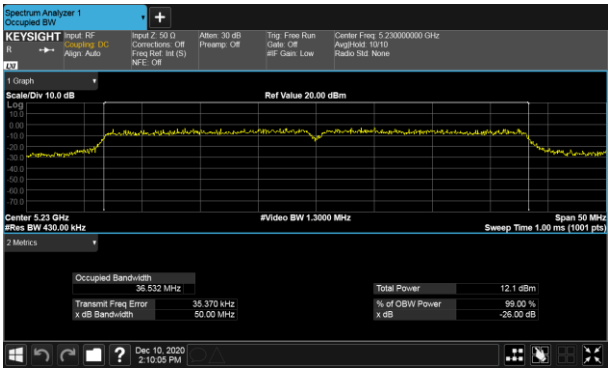
UNII-3 IEEE 802.11ac VHT80 mode	
Low CH	
	

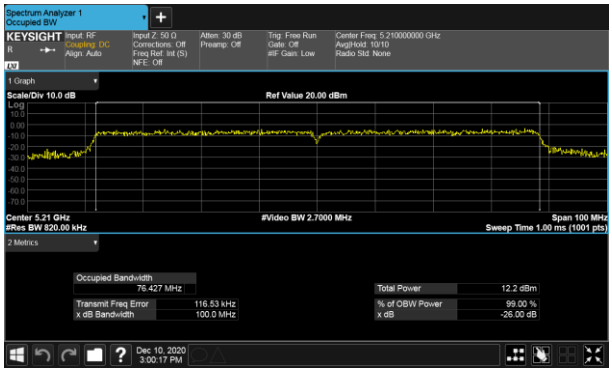
Test Data (99% OBW)

Chain 1

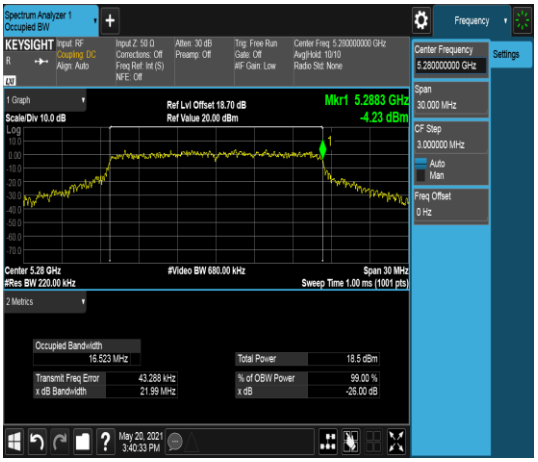
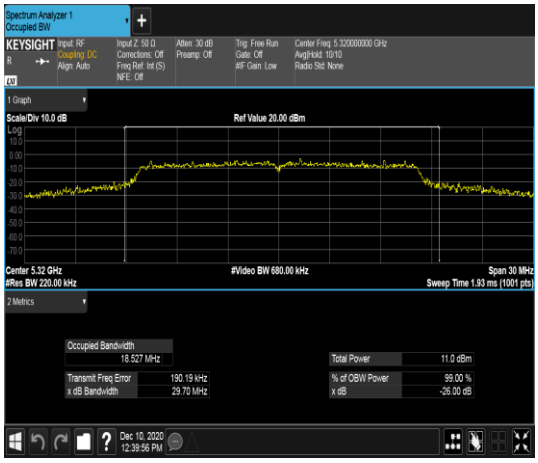
UNII-1 IEEE 802.11a mode	
Low CH	**Mid CH**
	
High CH	
	

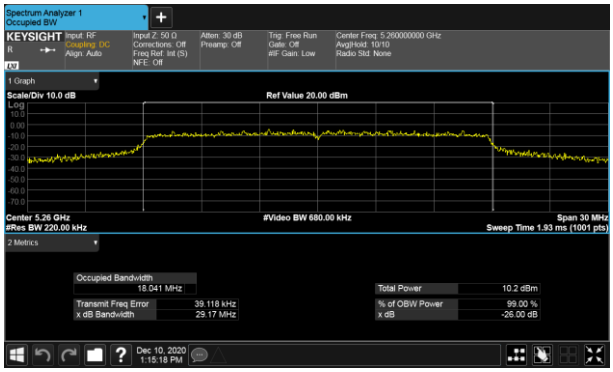
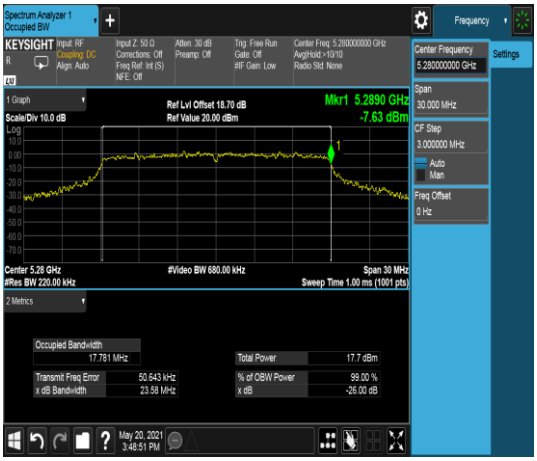
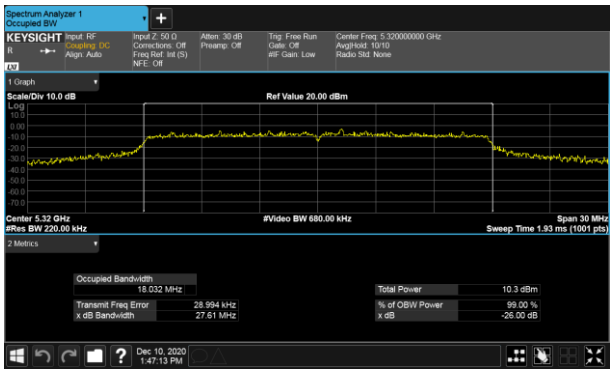
UNII-1 IEEE 802.11n HT20 mode	
Low CH	**Mid CH**
	
High CH	
	

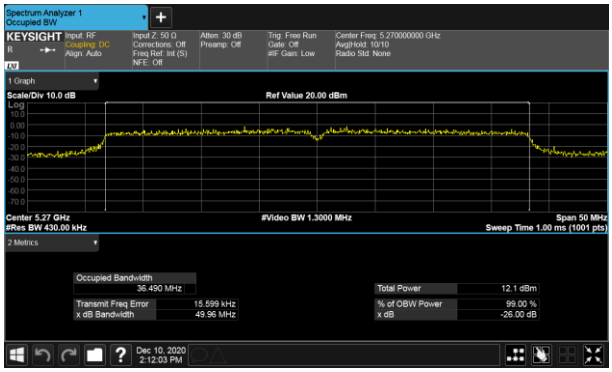
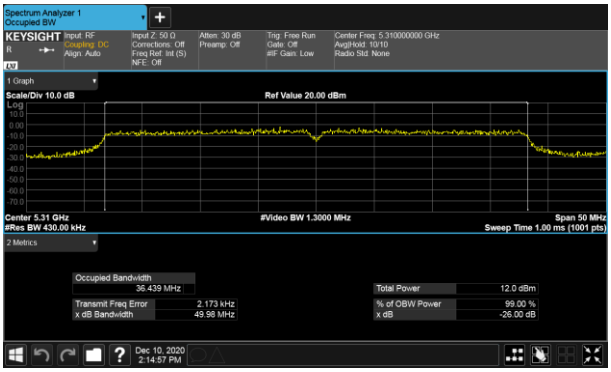
UNII-1 IEEE 802.11n HT40 mode	
Low CH	**High CH**
	

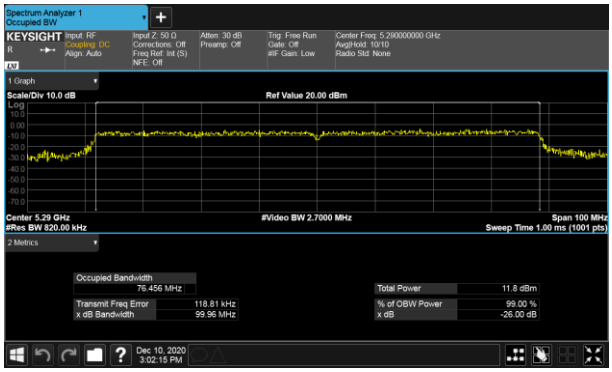
UNII-1 IEEE 802.11ac VHT80 mode	
Low CH	
	

Test Data (99% OBW)

UNII-2a IEEE 802.11a mode	
Low CH	**Mid CH**
	
High CH	
	

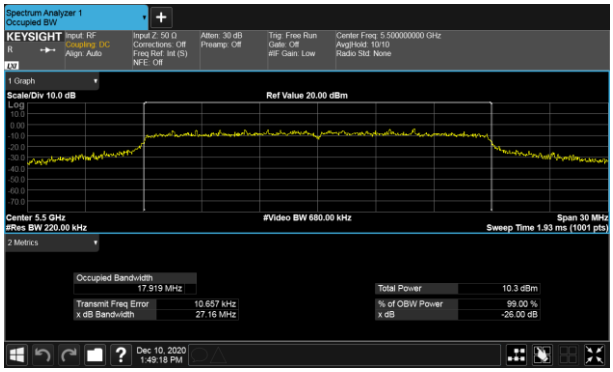
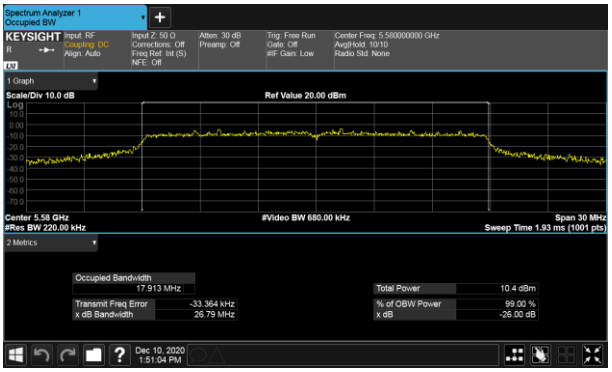
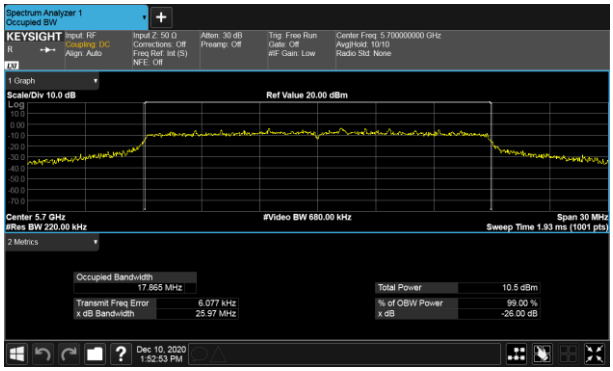
UNII-2a IEEE 802.11n HT20 mode	
Low CH	**Mid CH**
	
High CH	
	

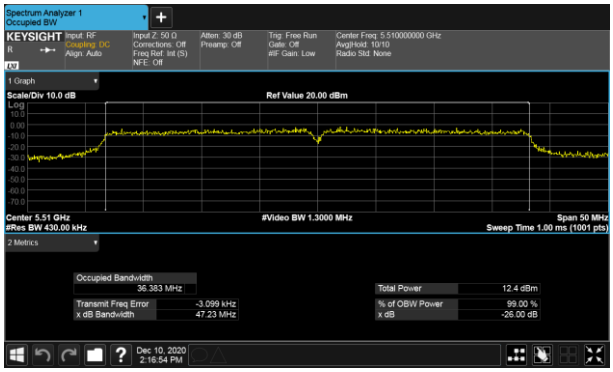
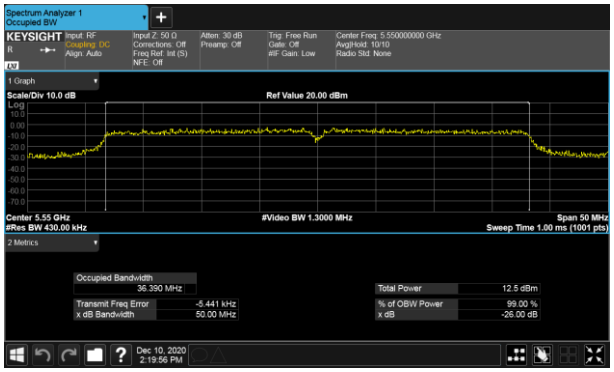
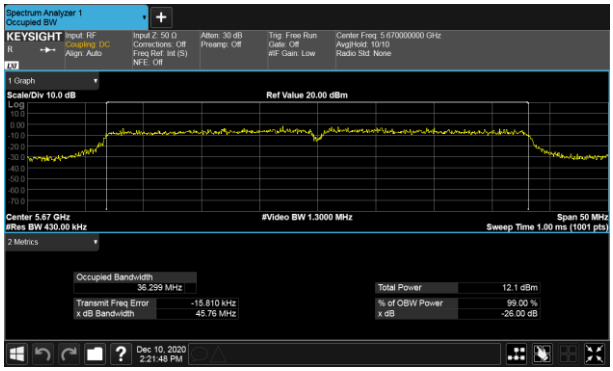
UNII-2a IEEE 802.11n HT40 mode	
Low CH	**High CH**
	

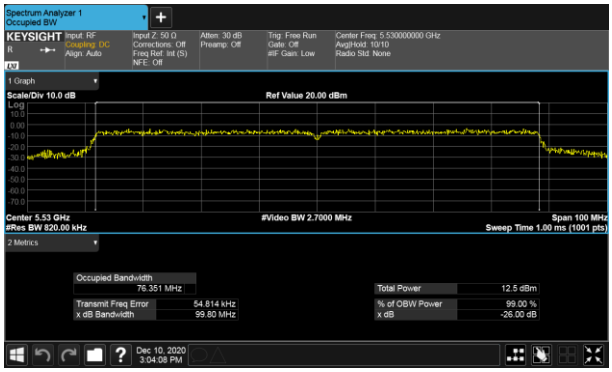
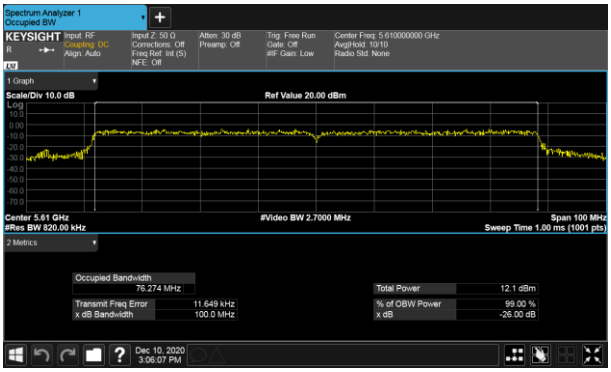
UNII-2a IEEE 802.11ac VHT80 mode	
Low CH	
	

Test Data (99% OBW)

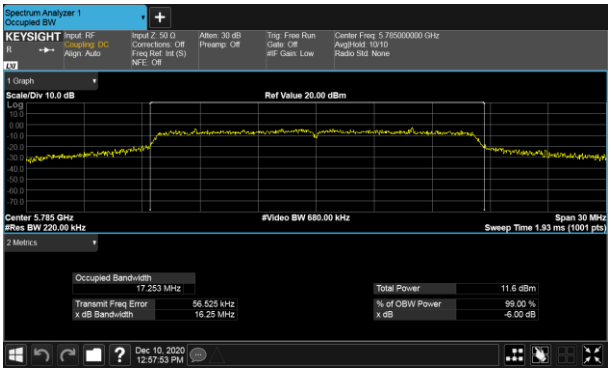
UNII-2c IEEE 802.11a mode	
Low CH	**Mid CH**
	
High CH	
	

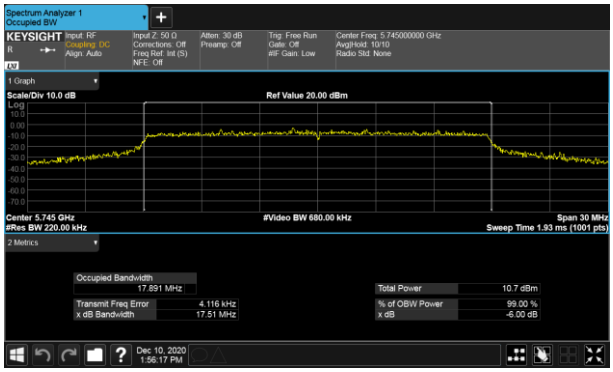
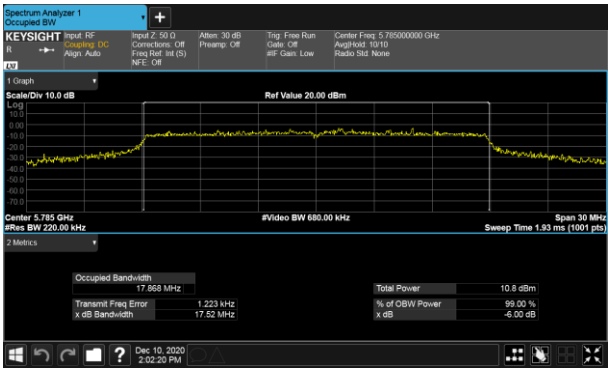
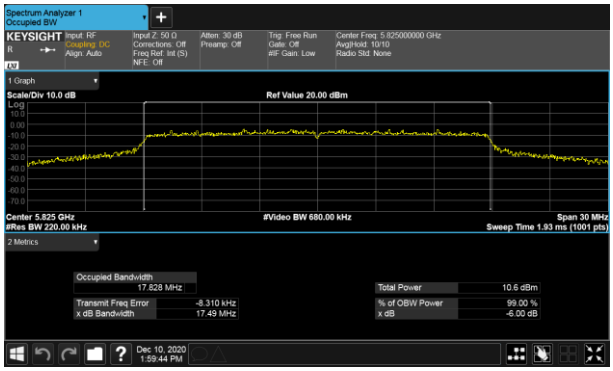
UNII-2c IEEE 802.11n HT20 mode	
Low CH	**Mid CH**
	
High CH	
	

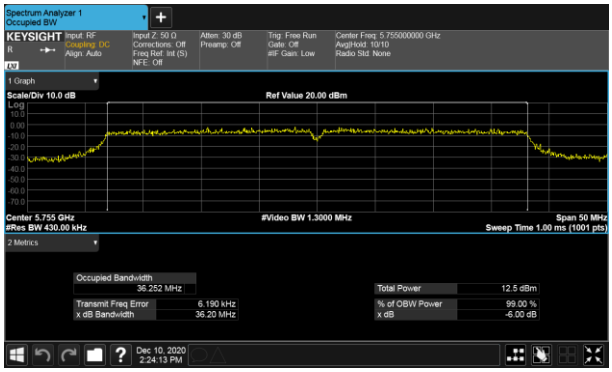
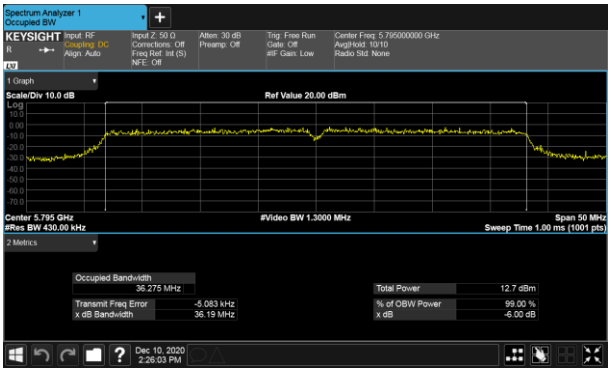
UNII-2c IEEE 802.11n HT40 mode	
Low CH	**Mid CH**
	
High CH	
	

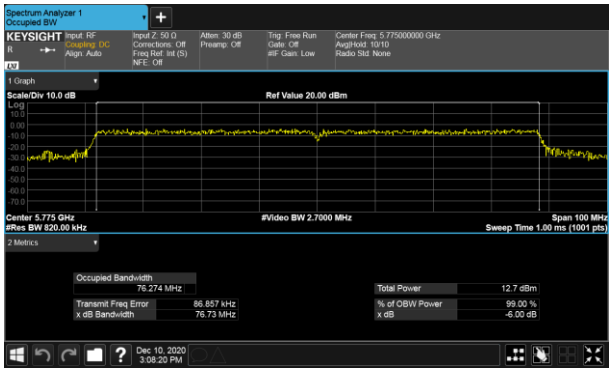
UNII-2c IEEE 802.11ac VHT80 mode	
Low CH	**High CH**
	

Test Data (99% OBW)

UNII-3 IEEE 802.11a mode	
Low CH	**Mid CH**
	
High CH	
	

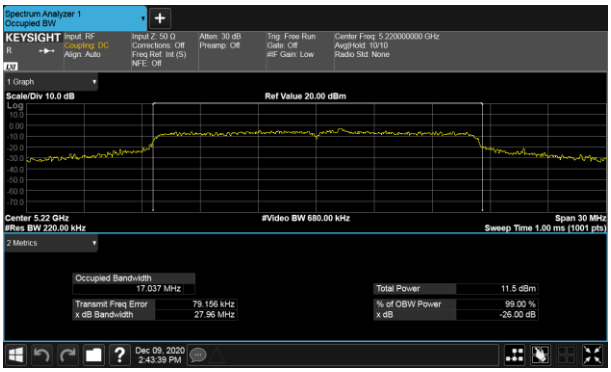
UNII-3 IEEE 802.11n HT20 mode	
Low CH	**Mid CH**
	
High CH	
	

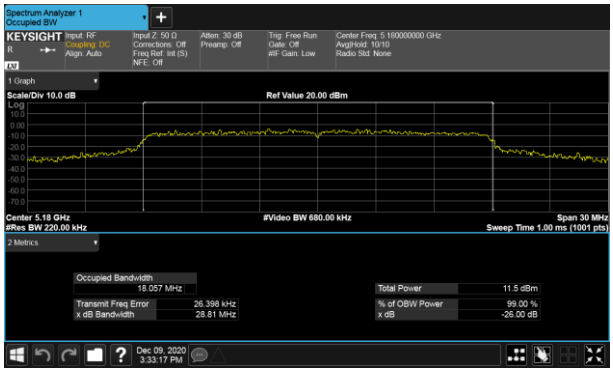
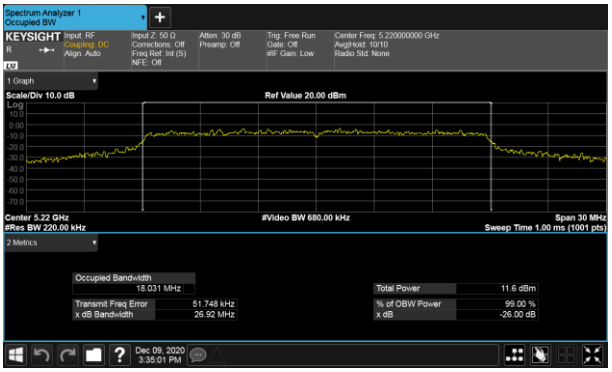
UNII-3 IEEE 802.11n HT40 mode	
Low CH	**High CH**
	

UNII-3 IEEE 802.11ac VHT80 mode	
Low CH	
	

Test Data (26dB BANDWIDTH)

Chain 0

UNII-1 IEEE 802.11a mode	
Low CH	**Mid CH**
	
High CH	
	

UNII-1 IEEE 802.11n HT20 mode	
Low CH	**Mid CH**
	
High CH