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#### 3. TEST ENVIRONMENT

#### 3.1 ADDRESS OF THE TEST LABORATORY

Laboratory: Attestation of Global Compliance (Shenzhen) Co., Ltd.

Address: 1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

#### 3.2 TEST FACILITY

The test facility is recognized, certified, or accredited by the following organizations:

## CNAS-Lab Code: L5488

Attestation of Global Compliance (Shenzhen) Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2017 General Requirements) for the Competence of Testing and Calibration Laboratories.

## A2LA-Lab Cert. No.: 5054.02

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

## FCC-Registration No.: 975832

Attestation of Global Compliance (Shenzhen) 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 with Registration 975832.

## IC-Registration No.: 24842 (CAB identifier: CN0063)

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the Certification and Engineering Bureau of Industry Canada. The acceptance letter from the IC is maintained in our files with Registration 24842.



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## 3.3 ENVIRONMENTAL CONDITIONS

	EXTREME CONDITIONS
15 - 35	-30 - 50
20 % - 75 %	20 % - 75 %
86 - 106	86 - 106
DC 3.85V	
	20 % - 75 % 86 - 106 DC 3.85V

Note: The Extreme Temperature and Extreme Voltages declared by the manufacturer.

#### 3.4 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement y ±U, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%

Item	Measurement Uncertainty
Uncertainty of Conducted Emission for AC Port	$U_c = \pm 2.9 \text{ dB}$
Uncertainty of Radiated Emission below 1GHz	$U_c = \pm 3.9 \text{ dB}$
Uncertainty of Radiated Emission above 1GHz	$U_c = \pm 4.9 \text{ dB}$
Uncertainty of total RF power, conducted	$U_c = \pm 0.8 \text{ dB}$
Uncertainty of RF power density, conducted	$U_c = \pm 2.6 \text{ dB}$
Uncertainty of spurious emissions, conducted	U <sub>c</sub> = ±2.7 %
Uncertainty of Occupied Channel Bandwidth	U <sub>c</sub> = ±2 %



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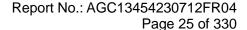
## 3.5 LIST OF EQUIPMENTS USED

## TEST EQUIPMENT OF CONDUCTED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESPI	101206	Jun. 03, 2023	Jun. 02, 2024
LISN	R&S	ESH2-Z5	100086	Jun. 03, 2023	Jun. 02, 2024
Test software	R&S	ES-K1 (Ver.V1.71)	N/A	N/A	N/A

## **TEST EQUIPMENT OF RADIATED EMISSION TEST**

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESCI	10096	Feb. 18, 2023	Feb. 17, 2024
EXA Signal Analyzer	Aglient	N9010A	MY53470504	Jun. 01, 2023	May 31, 2024
Power sensor	Aglient	U2021XA	MY54110007	Mar. 03, 2023	Mar. 02, 2024
5GHz Fliter	EM Electronics	5150-5880MHz	N/A	N/A	N/A
Horn antenna	SCHWARZBECK	BBHA 9170	#768	Oct. 31, 2021	Oct. 30, 2023
Active loop antenna (9K-30MHz)	ZHINAN	ZN30900C	18051	Mar. 12, 2022	Mar. 11, 2024
Double-Ridged Waveguide Horn	ETS LINDGREN	3117	00034609	Mar. 23, 2023	Mar. 22, 2024
Broadband Preamplifier	ETS LINDGREN	3117PA	00225134	Aug. 04, 2022	Aug. 03, 2024
ANTENNA	SCHWARZBECK	VULB9168	494	Jan. 05, 2023	Jan. 04, 2025
Test software	FARA	EZ-EMC (Ver.RA-03A)	N/A	N/A	N/A





#### 4. DESCRIPTION OF TEST MODES

Mode	Available channel	Tested channel	Modulation	Date rate (Mbps)
802.11a/n/ac	Refer to Section 2.2	36,40,48,52,60,64,100 116,140,149,157,165	OFDM/OFDMA	6Mbps/MCS0
802.11n/ac		38,46,54,62,102 110,134,151,159	OFDM/OFDMA	MCS0
802.11ac		42,58,106,121,155	OFDM/OFDMA	MCS0

#### Note:

- 1. The EUT has been set to operate continuously on tested channel individually, and the EUT is operating at its maximum duty cycle>or equal 98%.
- 2. All modes under which configure applicable have been tested and the worst mode test data recording in the test report, if no other mode data.

#### Software Setting

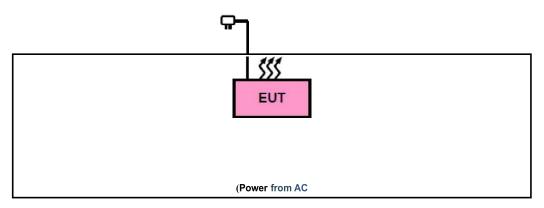
```
rtwpriv wlan0 mp_txpower patha=0, pathb=64
rtwpriv wlan0 mp_txte 160
rtwpriv wlan0 mp_tate 160
rtwpriv wlan0 mp_channel 155
rtwpriv wlan0 mp_bandwidth 40M=2, shortGI=0
rtwpriv wlan0 mp_bandwidth 40M=2, shortGI=0
rtwpriv wlan0 mp_txpower patha=0, pathb=64
rtwpriv wlan0 mp_txpower patha=0, pathb=64
rtwpriv wlan0 mp_txpower patha=0 between the shortGI=0
wlan0 mp_channel:Change channel 155
wlan0 mp_channel:Change channel 155
wlan0 mp_channel:Change channel 155
wlan0 mp_channel:Change by 1 to BW 2
m6:/ # rtwpriv wlan0 mp_bandwidth 40M=2, shortGI=0
wlan0 mp_bandwidth:Change BW 1 to BW 2
m6:/ # rtwpriv wlan0 mp_ant_tx b
wlan0 mp_ant_tx:switch Tx antenna to b
m6:/ # rtwpriv wlan0 mp_txpower patha=0, pathb=64
wlan0 mp_txpower patha=0, pathb=64
wlan0 mp_txpower patha=0, pathb=64
wlan0 mp_txpower patha=0.path_A:0 path_B:64 path_C:0 path_D:0
m6:/ # rtwpriv wlan0 mp_rate 160
wlan0 mp_rate:Set data rate to 160 index 44
m6:/ # rtwpriv wlan0 mp_ctx count=%100, pkt
wlan0 mp_ctx:Stop continuous DA=ffffffffffff len=1500 count=0
m6:/ # rtwpriv wlan0 mp_ctx stop
```



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# 5. SYSTEM TEST CONFIGURATION

## **5.1. CONFIGURATION OF EUT SYSTEM**



#### **5.2. EQUIPMENT USED IN EUT SYSTEM**

Item	Equipment	Model No.	ID or Specification	Remark
1	Portable Smart Projector 1080P	VA-SP009	2A94QVA-SP009	EUT
2	Cable	N/A	N/A	AE
3	Remote Controller	N/A	N/A	AE
4	Adapter	S-TR-149D	Input: AC 100-240V,50-60Hz 1.5A Max Output: PD: 5V, 3A; 9V,3A; 12V,3A; 15V,4A; 20V,3.25A; Total: 65W Max	AE

## 5.3. SUMMARY OF TEST RESULTS

Item	FCC Rules	Description Of Test	Result
1	§15.203	Antenna Equipment	Pass
2	§15.407(a/1/2/3)	RF Output Power	Pass
3	§15.407(e)	6dB Bandwidth Measurement	Pass
4	§2.1049	26dB bandwidth Measurement	Pass
5	§15.407(a/1/2/3)	Power Spectral Density	Pass
6	§15.407(b)(1/2/3/4/5)	Conducted Spurious Emission	Pass
7	§15.209,§15.407(b)(1/2/3/4/5)	Radiated Emission& Band Edge	Pass
8	§15.207	AC Power Line Conducted Emission	Pass



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## 6. RF OUTPUT POWER MEASUREMENT

#### **6.1 MEASUREMENT LIMITS**

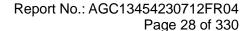
Operation Band	EUT Category		LIMIT		
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p < 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)		
J		Fixed point-to-point Access Point	1 Watt (30 dBm)		
		Indoor Access Point	1 Watt (30 dBm)		
	$\square$	Client devices	250mW (23.98 dBm)		
U-NII-2A		/	250mW (23.98 dBm) or 11 dBm+10 log B*		
U-NII-2C	/				250mW (23.98 dBm) or 11 dBm+10 log B*
U-NII-3	_	/	1 Watt (30 dBm)		

Note: Where B is the 26dB emission bandwidth in MHz.

## **6.2 MEASUREMENT PROCEDURE**

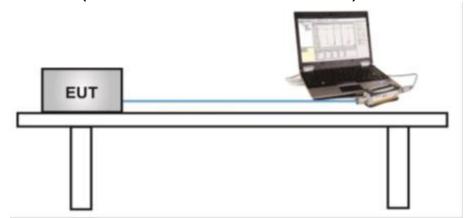
Method PM is Measurement using an RF average power meter. The procedure for this method is as follows:

- 1. The testing follows the ANSI C63.10 Section 12.3.3.1
- 2. Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the following conditions are satisfied:
- 3. The EUT is configured to transmit continuously, or to transmit with a constant duty cycle.
- 4. At all times when the EUT is transmitting, it shall be transmitting at its maximum power control level.
- 5. The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.
- Determine according to the duty cycle of the equipment: when it is less than 98%, follow the steps below.
- 7. Measure the average power of the transmitter. This measurement is an average over both the ON and OFF periods of the transmitter.
- 8. Adjust the measurement in dBm by adding [10 log (1 / D)], where D is the duty cycle {e.g., [10 log (1 / 0.25)], if the duty cycle is 25%}.
- 9. Record the test results in the report.



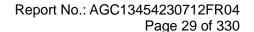


# 6.3 MEASUREMENT SETUP (BLOCK DIAGRAM OF CONFIGURATION)



## **6.4 MEASUREMENT RESULT**

	Test Data of Conducted Output Power for band 5.15-5.25 GHz-ANT 1					
Test Mode	Test Channel (MHz)	Average Power (dBm)	Limits (dBm)	Pass or Fail		
	5180	11.43	23.98	Pass		
802.11a	5200	11.84	23.98	Pass		
	5240	13.13	23.98	Pass		
	5180	10.60	23.98	Pass		
802.11n20	5200	10.79	23.98	Pass		
	5240	12.63	23.98	Pass		
000 44 = 40	5190	10.58	23.98	Pass		
802.11n40	5230	11.30	23.98	Pass		
	5180	11.02	23.98	Pass		
802.11ac20	5200	11.51	23.98	Pass		
	5240	12.41	23.98	Pass		
802.11ac40	5190	10.17	23.98	Pass		
	5230	11.44	23.98	Pass		
802.11ac80	5210	10.65	23.98	Pass		





Trad Data of Oracle de LO de de De conferil de LE dE E OF OUL ANTIO							
	Test Data of Conducted Output Power for band 5.15-5.25 GHz-ANT 2						
Test Mode	Test Channel	Average Power	Limits	Pass or Fail			
rest wede	(MHz)	(dBm)	(dBm)	i ass of i all			
	5180	11.82	23.98	Pass			
802.11a	5200	12.34	23.98	Pass			
	5240	13.98	23.98	Pass			
	5180	10.92	23.98	Pass			
802.11n20	5200	11.98	23.98	Pass			
	5240	13.12	23.98	Pass			
802.11n40	5190	11.00	23.98	Pass			
802.111140	5230	12.20	23.98	Pass			
	5180	11.15	23.98	Pass			
802.11ac20	5200	11.87	23.98	Pass			
	5240	13.36	23.98	Pass			
802.11ac40	5190	10.59	23.98	Pass			
002.11ac40	5230	12.18	23.98	Pass			
802.11ac80	5210	10.68	23.98	Pass			



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	Test Data of Conducted Output Power for band 5.25-5.35 GHz-ANT 1					
Test Mode	Test Channel (MHz)	Average Power (dBm)	Limits (dBm)	Pass or Fail		
	5260	10.98	23.98	Pass		
802.11a	5300	12.18	23.98	Pass		
	5320	12.49	23.98	Pass		
	5260	10.14	23.98	Pass		
802.11n20	5300	11.30	23.98	Pass		
	5320	12.15	23.98	Pass		
000 11 = 10	5270	9.91	23.98	Pass		
802.11n40	5310	11.00	23.98	Pass		
	5260	10.66	23.98	Pass		
802.11ac20	5300	11.65	23.98	Pass		
	5320	11.93	23.98	Pass		
902 110040	5270	10.20	23.98	Pass		
802.11ac40	5310	11.48	23.98	Pass		
802.11ac80	5290	9.97	23.98	Pass		



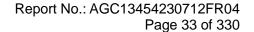
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	Test Data of Conducted Output Power for band 5.25-5.35 GHz-ANT 2					
Test Mode	Test Channel (MHz)	Average Power (dBm)	Limits (dBm)	Pass or Fail		
	5260	10.89	23.98	Pass		
802.11a	5300	12.27	23.98	Pass		
	5320	12.48	23.98	Pass		
	5260	10.30	23.98	Pass		
802.11n20	5300	11.63	23.98	Pass		
	5320	11.78	23.98	Pass		
000 44 = 40	5270	10.46	23.98	Pass		
802.11n40	5310	11.80	23.98	Pass		
	5260	10.54	23.98	Pass		
802.11ac20	5300	11.97	23.98	Pass		
	5320	12.08	23.98	Pass		
000 44 40	5270	10.26	23.98	Pass		
802.11ac40	5310	11.70	23.98	Pass		
802.11ac80	5290	10.42	23.98	Pass		



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Test Data of Conducted Output Power for band 5.470-5.725 GHz-ANT 1					
Test Mode	de Test Channel Average Power (MHz) (dBm)		Limits (dBm)	Pass or Fail	
	5500	10.66	23.98	Pass	
802.11a	5600	12.07	23.98	Pass	
	5700	12.80	23.98	Pass	
	5500	10.20	23.98	Pass	
802.11n20	5600	10.97	23.98	Pass	
	5700	12.28	23.98	Pass	
	5510	9.90	23.98	Pass	
802.11n40	5590	10.92	23.98	Pass	
	5670	11.61	23.98	Pass	
	5500	10.21	23.98	Pass	
802.11ac20	5600	11.45	23.98	Pass	
	5700	11.85	23.98	Pass	
	5510	9.35	23.98	Pass	
802.11ac40	5590	10.74	23.98	Pass	
	5670	11.20	23.98	Pass	
802.11ac80	5530	9.11	23.98	Pass	
002.118000	5610	9.78	23.98	Pass	





	Test Data of Conducted Output Power for band 5.470-5.725 GHz-ANT 2					
Test Mode	Test Channel (MHz)	Average Power (dBm)	Limits (dBm)	Pass or Fail		
	5500	10.67	23.98	Pass		
802.11a	5600	13.07	23.98	Pass		
	5700	13.75	23.98	Pass		
	5500	9.52	23.98	Pass		
802.11n20	5600	12.54	23.98	Pass		
	5700	13.28	23.98	Pass		
	5510	9.67	23.98	Pass		
802.11n40	5590	11.96	23.98	Pass		
	5670	13.18	23.98	Pass		
	5500	9.53	23.98	Pass		
802.11ac20	5600	12.31	23.98	Pass		
	5700	13.24	23.98	Pass		
	5510	9.67	23.98	Pass		
802.11ac40	5590	11.83	23.98	Pass		
	5670	13.19	23.98	Pass		
002 44 5 50	5530	9.43	23.98	Pass		
802.11ac80	5610	11.65	23.98	Pass		



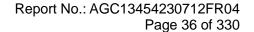
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	Test Data of Conducted Output Power for band 5.725-5.850 GHz-ANT 1					
Test Mode	Test Channel (MHz)	Average Power (dBm)	Limits (dBm)	Pass or Fail		
	5745	11.79	30	Pass		
802.11a	5785	10.39	30	Pass		
	5825	8.64	30	Pass		
	5745	11.18	30	Pass		
802.11n20	5785	9.37	30	Pass		
	5825	8.10	30	Pass		
802.11n40	5755	10.48	30	Pass		
602.111140	5795	8.14	30	Pass		
	5745	10.98	30	Pass		
802.11ac20	5785	9.49	30	Pass		
	5825	7.65	30	Pass		
902 110040	5755	10.51	30	Pass		
802.11ac40	5795	8.71	30	Pass		
802.11ac80	5775	8.95	30	Pass		



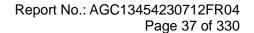
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Test Data of Conducted Output Power for band 5.725-5.850 GHz-ANT 2					
Test Mode	Test Channel (MHz)			Pass or Fail	
	5745	12.45	30	Pass	
802.11a	5785	11.61	30	Pass	
	5825	10.57	30	Pass	
	5745	11.69	30	Pass	
802.11n20	5785	10.93	30	Pass	
	5825	9.82	30	Pass	
002 11 = 10	5755	11.16	30	Pass	
802.11n40	5795	9.92	30	Pass	
	5745	11.76	30	Pass	
802.11ac20	5785	11.15	30	Pass	
	5825	9.74	30	Pass	
000 44 40	5755	11.07	30	Pass	
802.11ac40	5795	9.91	30	Pass	
802.11ac80	5775	10.85	30	Pass	





Test Data of Conducted Output Power for band 5.15-5.25 GHz-MIMO						
Test Mode	Test Channel (MHz)	nel Average Power Limit (dBm) (dBn		Pass or Fail		
	5180	13.77	23.98	Pass		
802.11n20	5200	14.44	23.98	Pass		
	5240	15.89	23.98	Pass		
802.11n40	5190	13.81	23.98	Pass		
002.111140	5230	14.78	23.98	Pass		
	5180	14.10	23.98	Pass		
802.11ac20	5200	14.70	23.98	Pass		
	5240	15.92	23.98	Pass		
902 44 0040	5190	13.40	23.98	Pass		
802.11ac40	5230	14.84	23.98	Pass		
802.11ac80	5210	13.68	23.98	Pass		



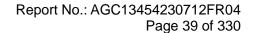


Test Data of Conducted Output Power for band 5.25-5.35 GHz-MIMO						
Test Mode	Test Channel (MHz)	7.1.5.6.95.1.51.5.		Pass or Fail		
	5260	13.23	23.98	Pass		
802.11n20	5300	14.48	23.98	Pass		
	5320	14.98	23.98	Pass		
802.11n40	5270	13.20	23.98	Pass		
002.111140	5310	14.43	23.98	Pass		
	5260	13.61	23.98	Pass		
802.11ac20	5300	14.82	23.98	Pass		
	5320	15.02	23.98	Pass		
902 44 0040	5270	13.24	23.98	Pass		
802.11ac40	5310	14.60	23.98	Pass		
802.11ac80	5290	13.21	23.98	Pass		



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Test Data of Conducted Output Power for band 5.470-5.725 GHz-MIMO					
Test Mode	Test Channel (MHz)	Average Power (dBm)	Limits (dBm)	Pass or Fail	
	5500	12.88	23.98	Pass	
802.11n20	5600	14.84	23.98	Pass	
	5700	15.82	23.98	Pass	
	5510	12.80	23.98	Pass	
802.11n40	5590	14.48	23.98	Pass	
	5670	15.48	23.98	Pass	
	5500	12.89	23.98	Pass	
802.11ac20	5600	14.91	23.98	Pass	
	5700	15.61	23.98	Pass	
	5510	12.52	23.98	Pass	
802.11ac40	5590	14.33	23.98	Pass	
	5670	15.32	23.98	Pass	
802.11ac80	5530	12.28	23.98	Pass	
602.11acou	5610	13.83	23.98	Pass	





	Test Data of Conducted Output Power for band 5.725-5.85 GHz-MIMO					
Test Mode	Test Channel (MHz)	Average Power Limits (dBm) (dBm)		Pass or Fail		
	5745	14.45	30	Pass		
802.11n20	5785	13.23	30	Pass		
	5825	12.05	30	Pass		
000 11 0 10	5755	13.84	30	Pass		
802.11n40	5795	12.13	30	Pass		
	5745	14.40	30	Pass		
802.11ac20	5785	13.41	30	Pass		
	5825	11.83	30	Pass		
902 44 5540	5755	13.81	30	Pass		
802.11ac40	5795	12.36	30	Pass		
802.11ac80	5775	13.01	30	Pass		



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#### 7. 6DB&26DB BANDWIDTH MEASUREMENT

#### 7.1 MEASUREMENT LIMITS

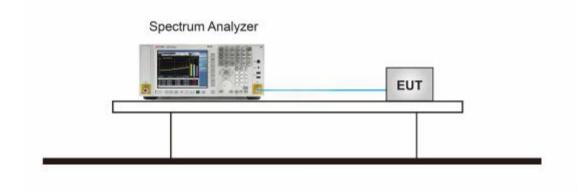
The minimum 6dB bandwidth shall be at least 500 kHz.

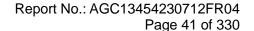
#### 7.2 MEASUREMENT PROCEDURE

- 7.2.1 -6dB bandwidth (DTS bandwidth) Test setting:
  - 1. Connect EUT RF output port to the Spectrum Analyzer
  - 2. Set the EUT Work on operation frequency individually.
  - 3. Set RBW = 100kHz.
  - 4. Set the VBW ≥3\*RBW. Detector = Peak. Trace mode = max hold.
  - 5. Measure the maximum width of the emission that is 6 dB down from the peak of the emission.
- 7.2.2 99% occupied bandwidth test setting:
  - 1. Connect EUT RF output port to the Spectrum Analyzer
  - 2. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
  - 3. Set Span = approximately 1.5 to 5 times the OBW, centered on a nominal channel
    The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW and video
    bandwidth (VBW) shall be approximately three times RBW; Sweep = auto; Detector function = peak
  - 4. Set SPA Trace 1 Max hold, then View.
- 7.2.3 -26dB Bandwidth test setting:
  - 1. Set RBW = approximately 1% of the emission bandwidth.
  - 2. Set the VBW > RBW.
  - 3. Detector = Peak.
  - 4. Trace mode = max hold.
  - 5. Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

Note: The EUT was tested according to KDB 789033 for compliance to FCC 47CFR 15.407 requirements.

#### 7.3 MEASUREMENT SETUP (BLOCK DIAGRAM OF CONFIGURATION)



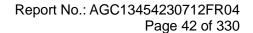




#### 7.4 MEASUREMENT RESULTS

Test Data of Occupied Bandwidth and -26dB Bandwidth for band 5.15-5.25 GHz-ANT 1					
Test Mode	Test Channel (MHz)	99% Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Limits (MHz)	Pass or Fail
	5180	16.378	19.696	N/A	Pass
802.11a	5200	16.416	26.929	N/A	Pass
	5240	16.743	29.951	N/A	Pass
	5180	17.547	19.333	N/A	Pass
802.11n20	5200	17.564	23.401	N/A	Pass
	5240	17.762	29.310	N/A	Pass
802.11n40	5190	36.045	40.751	N/A	Pass
602.111140	5230	36.104	49.680	N/A	Pass
	5180	17.565	21.217	N/A	Pass
802.11ac20	5200	17.576	23.982	N/A	Pass
	5240	17.713	28.836	N/A	Pass
902 110040	5190	36.011	47.733	N/A	Pass
802.11ac40	5230	36.139	50.171	N/A	Pass
802.11ac80	5210	74.819	85.969	N/A	Pass

Test Data of Occupied Bandwidth and -26dB Bandwidth for band 5.15-5.25 GHz-ANT 2					
Test Mode	Test Channel (MHz)	99% Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Limits (MHz)	Pass or Fail
	5180	16.369	19.195	N/A	Pass
802.11a	5200	16.405	21.643	N/A	Pass
	5240	16.605	29.174	N/A	Pass
	5180	17.536	19.250	N/A	Pass
802.11n20	5200	17.545	19.371	N/A	Pass
	5240	17.623	24.578	N/A	Pass
802.11n40	5190	36.038	40.424	N/A	Pass
002.111140	5230	36.047	45.610	N/A	Pass
	5180	17.534	19.157	N/A	Pass
802.11ac20	5200	17.578	22.195	N/A	Pass
	5240	17.651	26.540	N/A	Pass
902 112040	5190	36.074	40.654	N/A	Pass
802.11ac40	5230	36.058	43.106	N/A	Pass
802.11ac80	5210	74.775	98.941	N/A	Pass





Test Data of Occupied Bandwidth and -26dB Bandwidth for band 5.25-5.35 GHz-ANT 1					
Test Mode	Test Channel (MHz)	99% Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Limits (MHz)	Pass or Fail
	5260	16.451	25.667	N/A	Pass
802.11a	5300	16.447	25.578	N/A	Pass
	5320	16.483	27.743	N/A	Pass
	5260	17.573	24.520	N/A	Pass
802.11n20	5300	17.580	24.107	N/A	Pass
	5320	17.594	27.249	N/A	Pass
000 11 - 10	5270	36.055	40.234	N/A	Pass
802.11n40	5310	36.040	41.066	N/A	Pass
	5260	17.590	24.503	N/A	Pass
802.11ac20	5300	17.584	24.334	N/A	Pass
	5320	17.588	22.911	N/A	Pass
002 11 0010	5270	36.032	41.268	N/A	Pass
802.11ac40	5310	36.035	43.229	N/A	Pass
802.11ac80	5290	74.722	80.468	N/A	Pass

Test Data	Test Data of Occupied Bandwidth and -26dB Bandwidth for band 5.25-5.35 GHz-ANT 2					
Test Mode	Test Channel (MHz)	99% Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Limits (MHz)	Pass or Fail	
	5260	16.377	18.506	N/A	Pass	
802.11a	5300	16.375	20.074	N/A	Pass	
	5320	16.361	18.520	N/A	Pass	
	5260	17.519	19.209	N/A	Pass	
802.11n20	5300	17.524	19.348	N/A	Pass	
	5320	17.539	19.535	N/A	Pass	
000 11 - 10	5270	35.965	40.381	N/A	Pass	
802.11n40	5310	36.036	40.692	N/A	Pass	
	5260	17.534	19.255	N/A	Pass	
802.11ac20	5300	17.531	19.314	N/A	Pass	
	5320	17.528	19.297	N/A	Pass	
902 110040	5270	36.010	40.129	N/A	Pass	
802.11ac40	5310	36.067	41.354	N/A	Pass	
802.11ac80	5290	74.577	80.467	N/A	Pass	



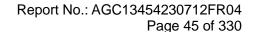
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Test Data of Occupied Bandwidth and -26dB Bandwidth for band 5.47-5.725 GHz-ANT 1						
Test Mode	Test Channel (MHz)	99% Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Limits (MHz)	Pass or Fail	
802.11a	5500	16.340	18.136	N/A	Pass	
	5600	16.508	26.552	N/A	Pass	
	5700	16.871	30.000	N/A	Pass	
802.11n20	5500	17.526	19.310	N/A	Pass	
	5600	17.587	24.447	N/A	Pass	
	5700	17.746	30.000	N/A	Pass	
802.11n40	5510	36.083	41.103	N/A	Pass	
	5590	36.096	40.822	N/A	Pass	
	5670	36.313	58.131	N/A	Pass	
802.11ac20	5500	17.533	19.321	N/A	Pass	
	5600	17.578	26.321	N/A	Pass	
	5700	17.755	30.000	N/A	Pass	
802.11ac40	5510	36.073	41.009	N/A	Pass	
	5590	74.876	81.440	N/A	Pass	
	5670	36.340	39.907	N/A	Pass	
802.11ac80	5530	75.880	81.462	N/A	Pass	
	5610	75.902	81.507	N/A	Pass	



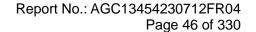
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Test Data of Occupied Bandwidth and -26dB Bandwidth for band 5.47-5.725 GHz-ANT 2						
Test Mode	Test Channel (MHz)	99% Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Limits (MHz)	Pass or Fail	
802.11a	5500	16.345	18.367	N/A	Pass	
	5600	16.400	21.485	N/A	Pass	
	5700	16.416	23.453	N/A	Pass	
802.11n20	5500	17.529	19.199	N/A	Pass	
	5600	17.556	20.864	N/A	Pass	
	5700	17.563	19.948	N/A	Pass	
	5510	36.073	40.400	N/A	Pass	
802.11n40	5590	36.073	40.857	N/A	Pass	
	5670	36.093	41.142	N/A	Pass	
802.11ac20	5500	17.523	19.410	N/A	Pass	
	5600	17.565	23.007	N/A	Pass	
	5700	17.576	21.791	N/A	Pass	
802.11ac40	5510	36.030	41.059	N/A	Pass	
	5590	74.747	80.384	N/A	Pass	
	5670	36.332	40.287	N/A	Pass	
802.11ac80	5530	75.779	81.644	N/A	Pass	
	5610	75.891	81.595	N/A	Pass	



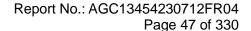


Test Data of Occupied Bandwidth and DTS Bandwidth for band 5.725-5.85 GHz-ANT 1 **Test Channel** DTS Limits 99% Occupied Test Mode Pass or Fail (MHz) Bandwidth (MHz) Bandwidth (MHz) (MHz) 5745 16.420 16.346 0.5 Pass 16.334 802.11a 5785 16.333 0.5 **Pass** 5825 16.368 16.361 0.5 Pass 5745 17.570 17.554 0.5 **Pass** 802.11n20 5785 17.528 17.577 0.5 **Pass** 5825 17.541 17.571 0.5 Pass 5755 36.022 33.861 0.5 **Pass** 802.11n40 5795 **Pass** 36.030 35.113 0.5 17.524 **Pass** 5745 17.573 0.5 5785 17.522 17.582 **Pass** 0.5 802.11ac20 17.546 17.569 **Pass** 5825 0.5 36.022 35.147 Pass 5755 0.5 802.11ac40 36.029 35.440 **Pass** 5795 0.5 74.611 **Pass** 802.11ac80 5775 70.000 0.5



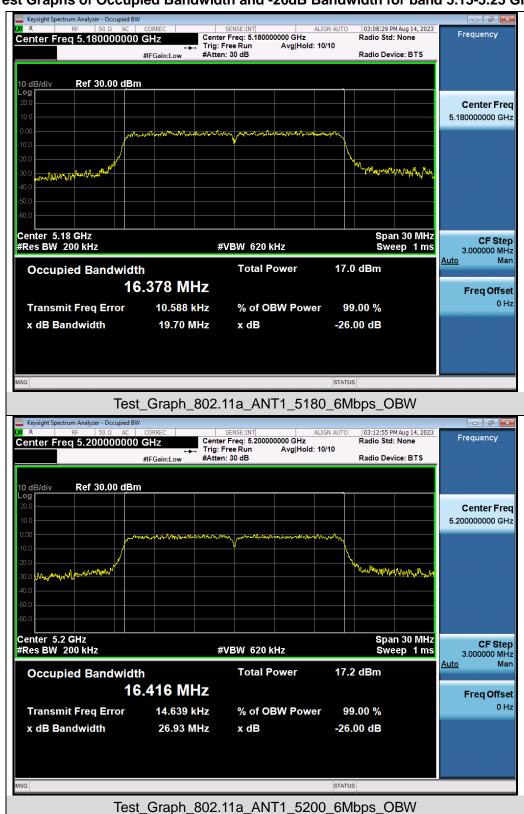


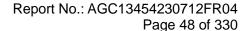
Test Data of Occupied Bandwidth and DTS Bandwidth for band 5.725-5.85 GHz-ANT 2						
Test Mode	Test Channel (MHz)	99% Occupied Bandwidth (MHz)	DTS Bandwidth (MHz)	Limits (MHz)	Pass or Fail	
802.11a	5745	16.334	16.334	0.5	Pass	
	5785	16.332	16.340	0.5	Pass	
	5825	16.357	16.332	0.5	Pass	
802.11n20	5745	17.523	17.570	0.5	Pass	
	5785	17.527	17.325	0.5	Pass	
	5825	17.514	17.556	0.5	Pass	
802.11n40	5755	36.014	35.138	0.5	Pass	
	5795	36.023	35.142	0.5	Pass	
802.11ac20	5745	17.540	17.556	0.5	Pass	
	5785	17.524	17.571	0.5	Pass	
	5825	17.530	17.574	0.5	Pass	
802.11ac40	5755	36.084	35.076	0.5	Pass	
	5795	36.026	35.141	0.5	Pass	
802.11ac80	5775	74.715	72.567	0.5	Pass	



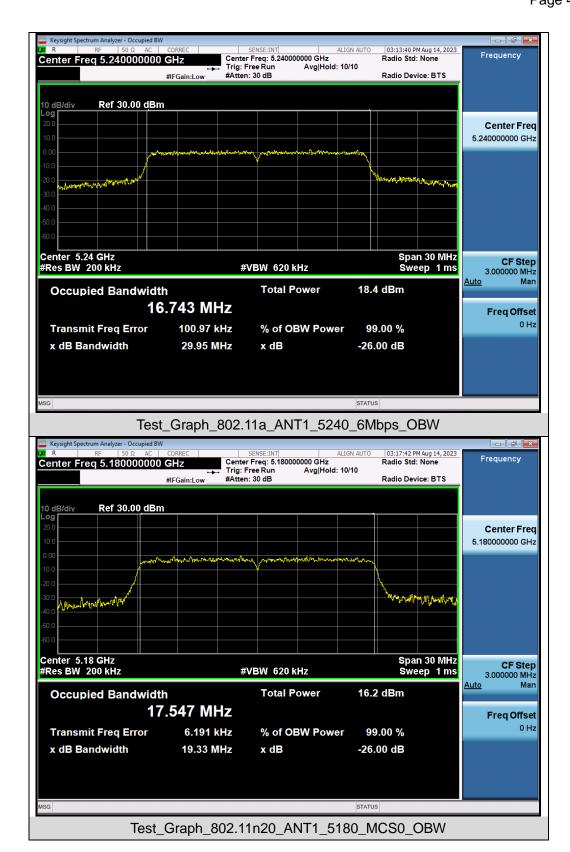


## Test Graphs of Occupied Bandwidth and -26dB Bandwidth for band 5.15-5.25 GHz

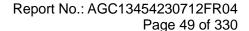




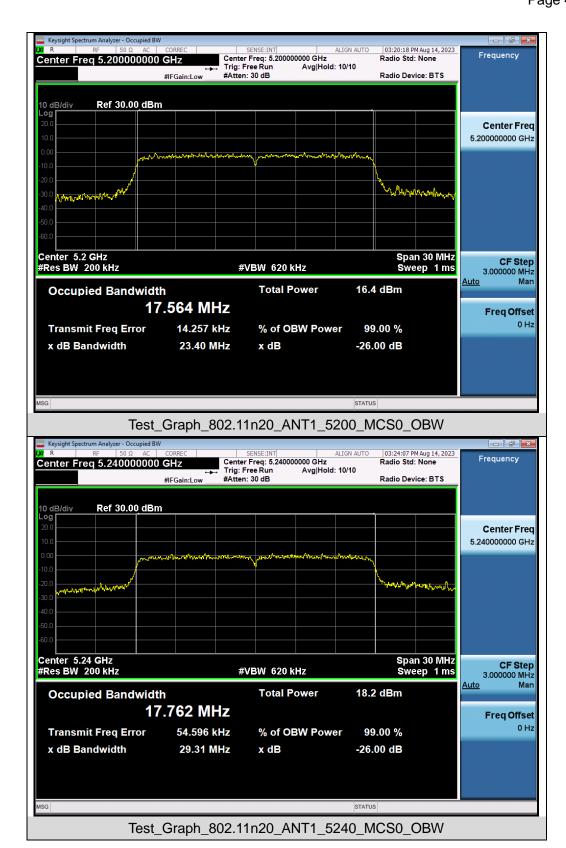


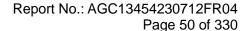


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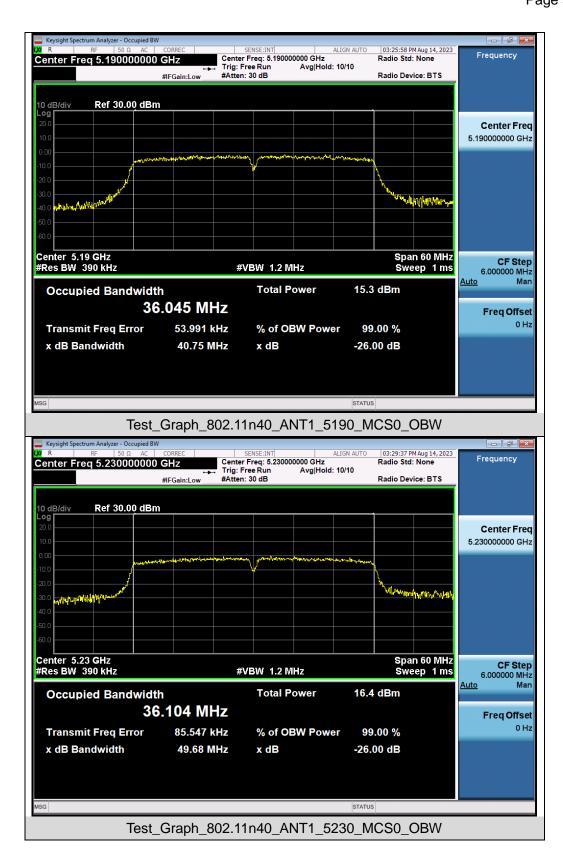


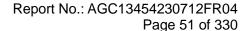




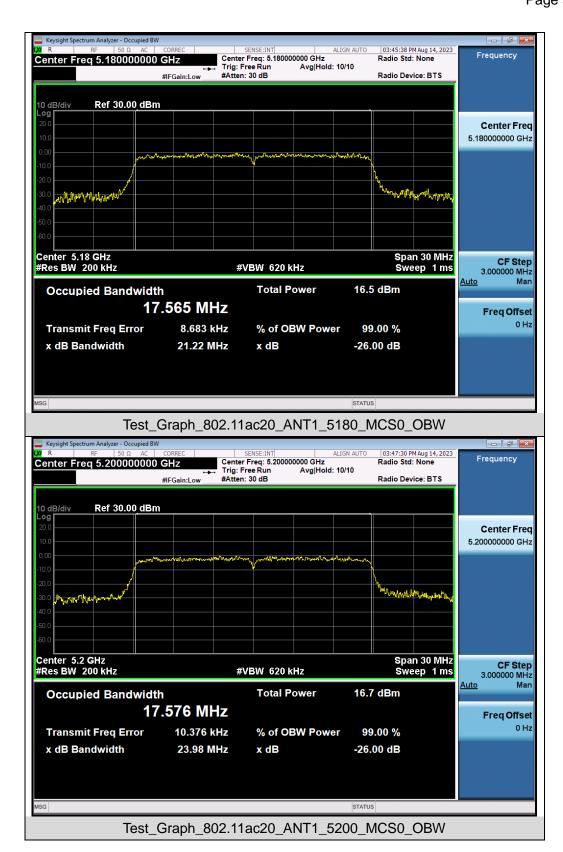


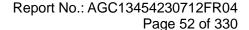




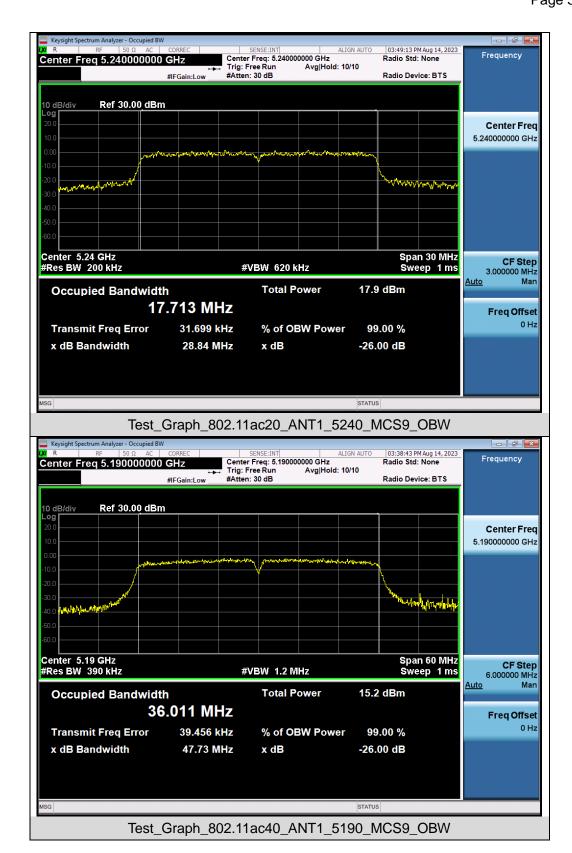


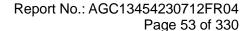




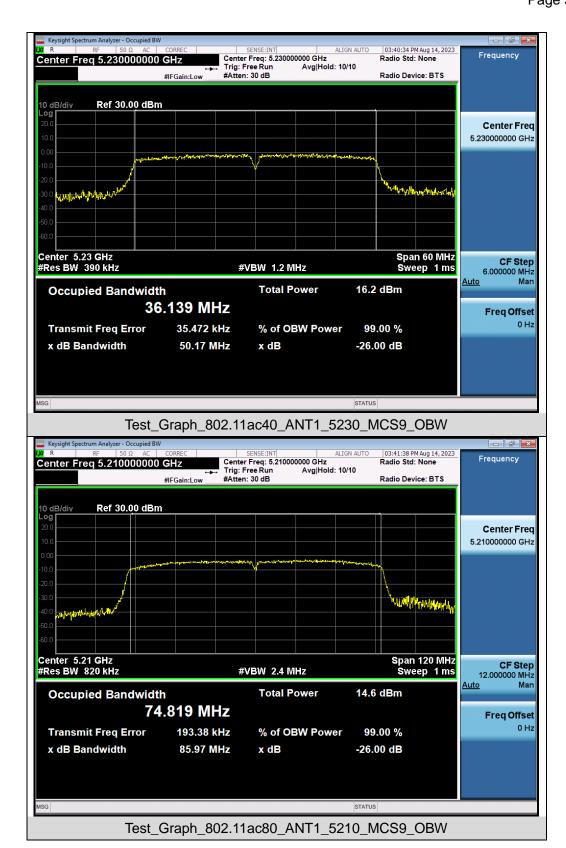


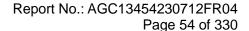




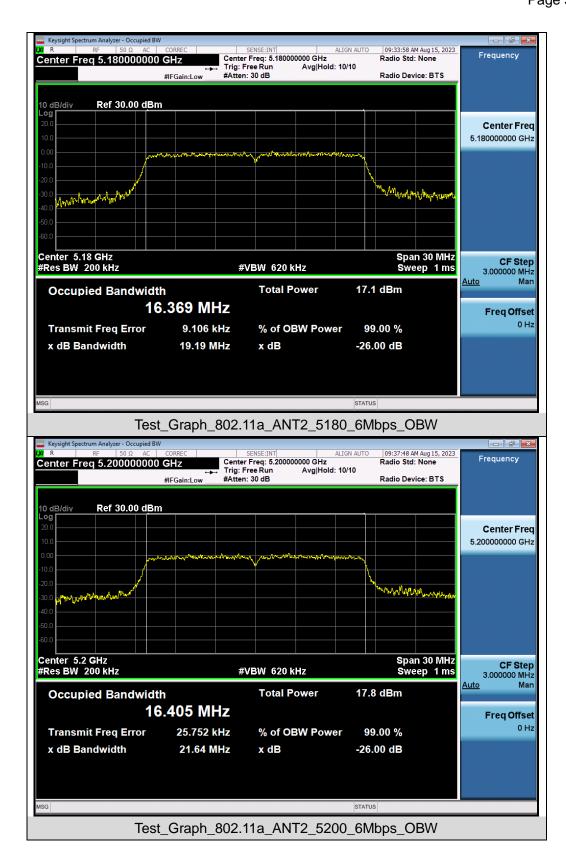


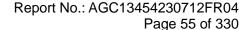




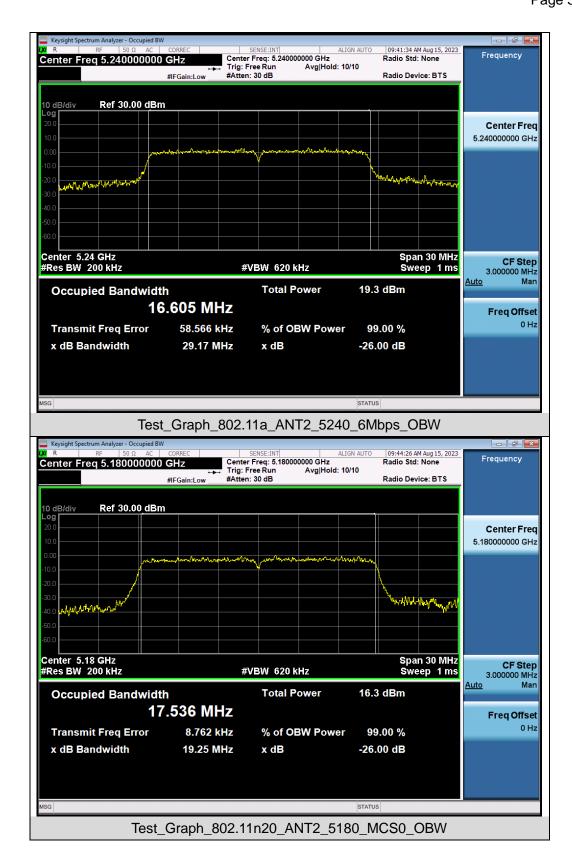


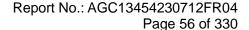




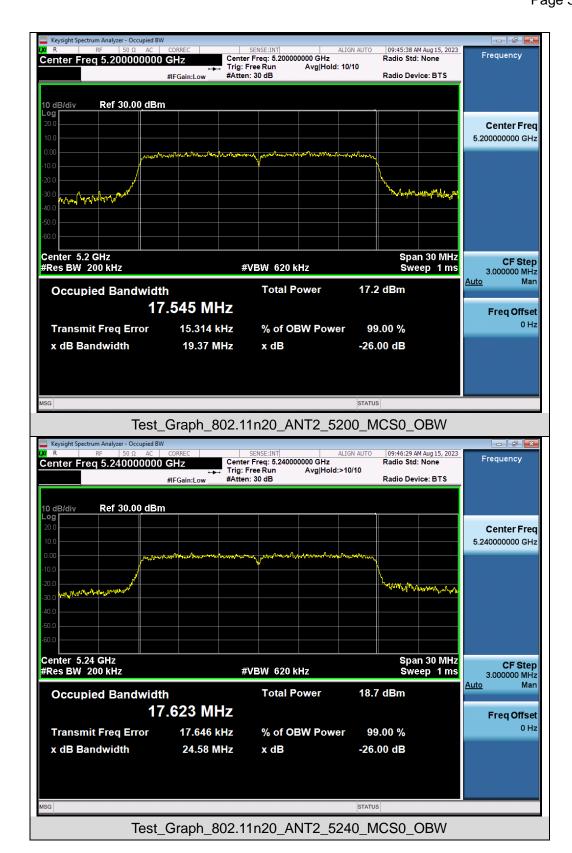


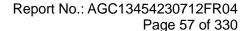




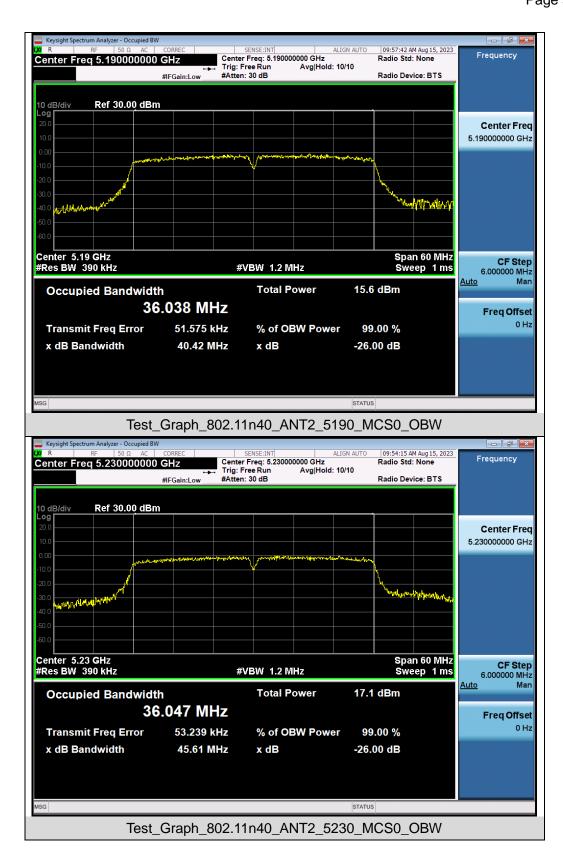


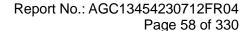




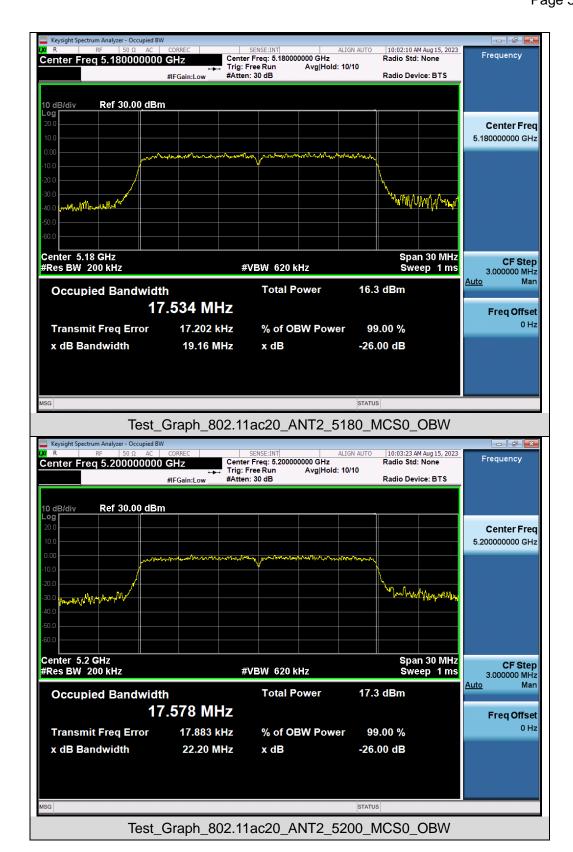


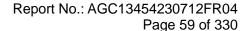




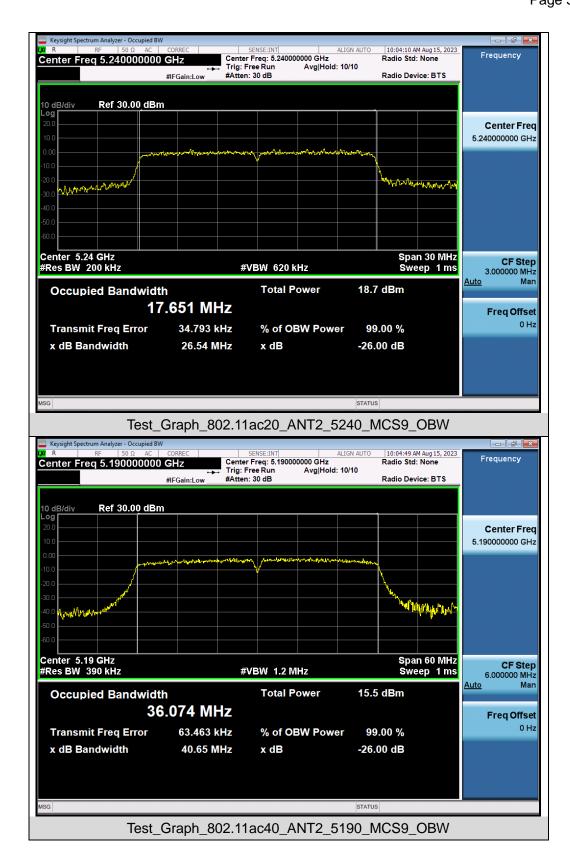


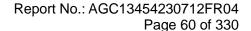




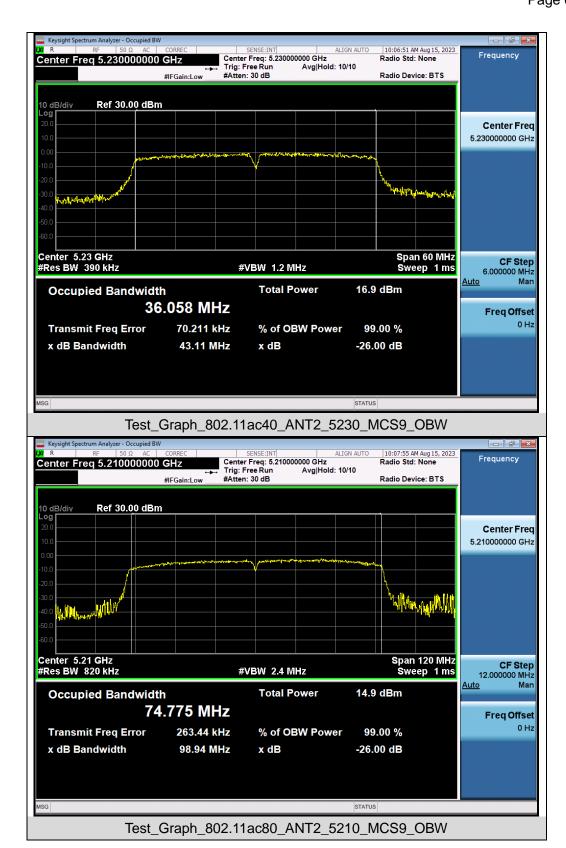


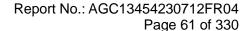






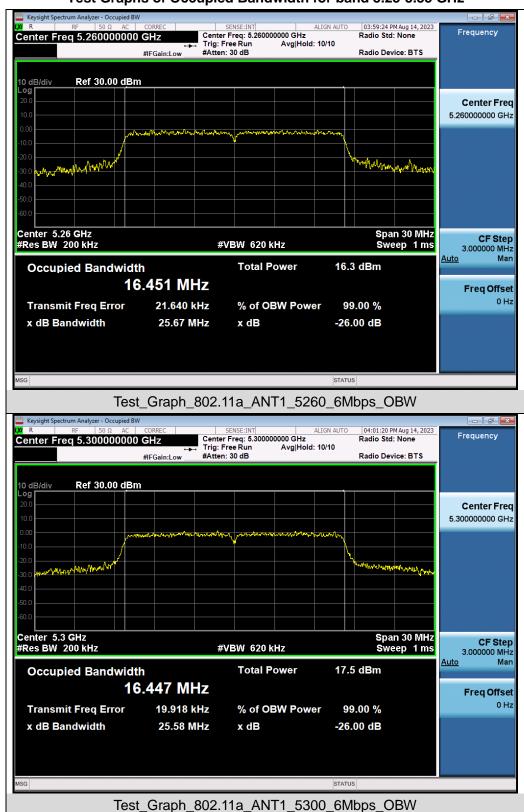


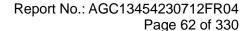




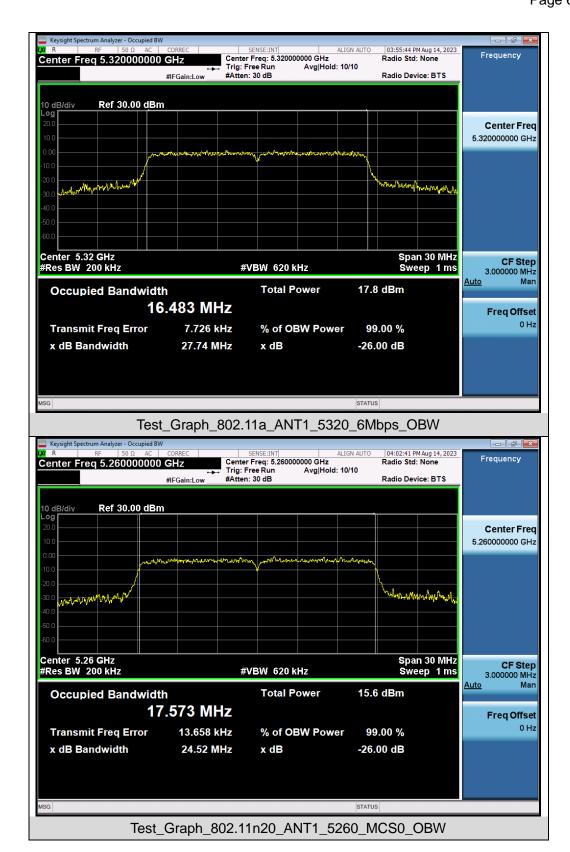


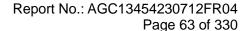
## Test Graphs of Occupied Bandwidth for band 5.25-5.35 GHz



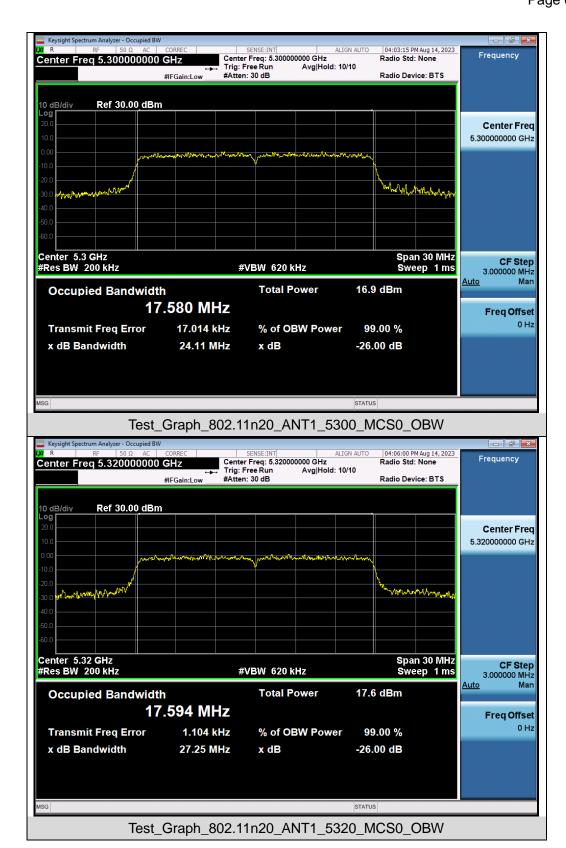


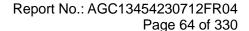




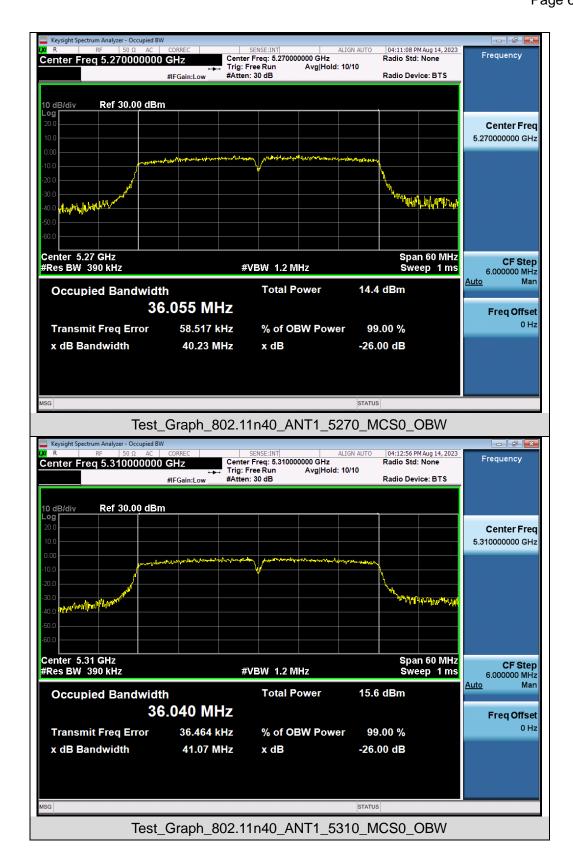


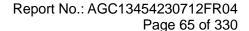




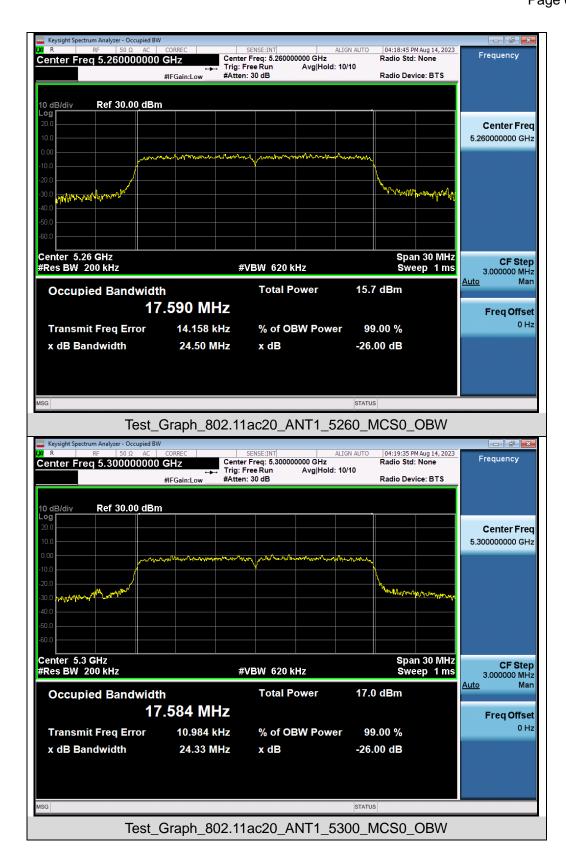


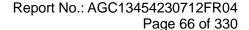




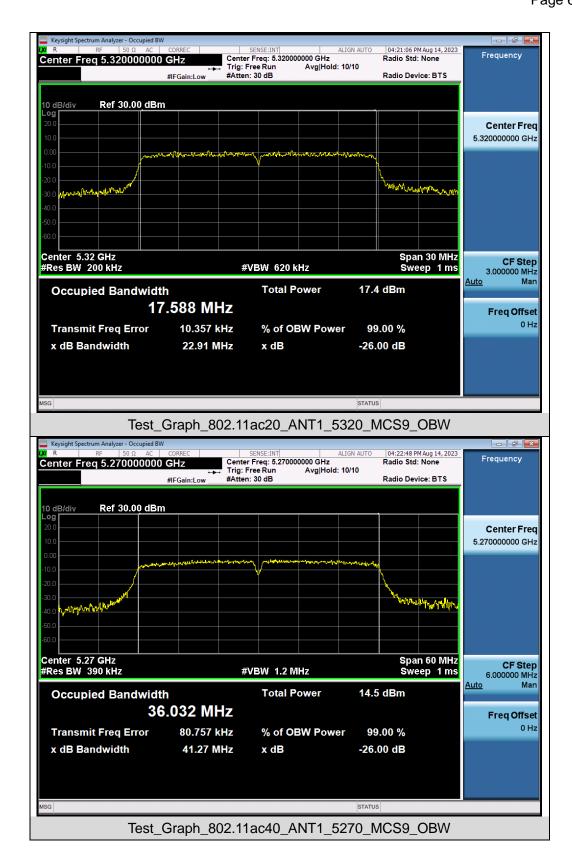


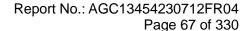




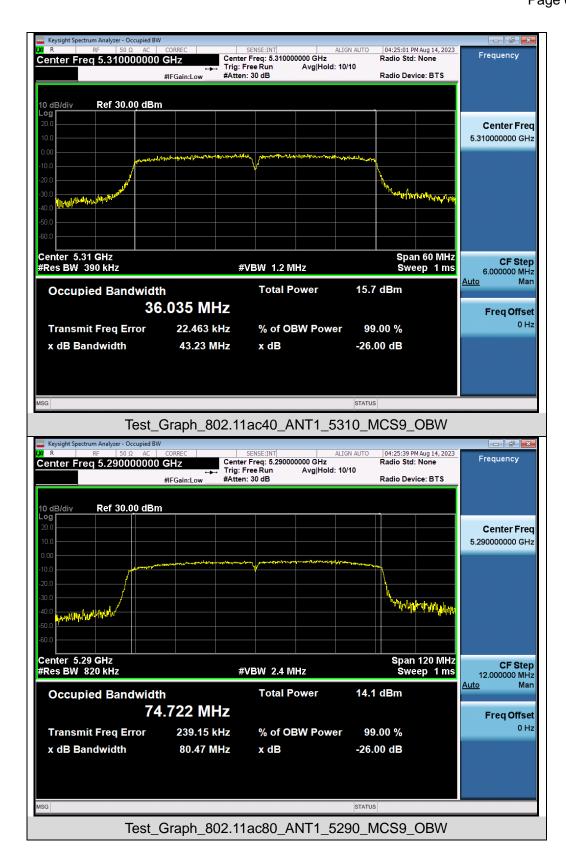


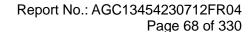




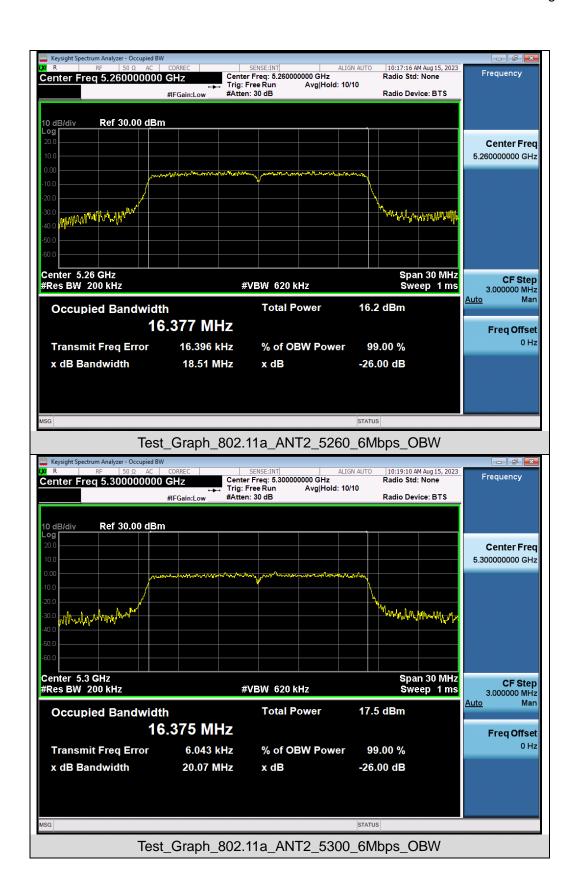


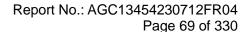




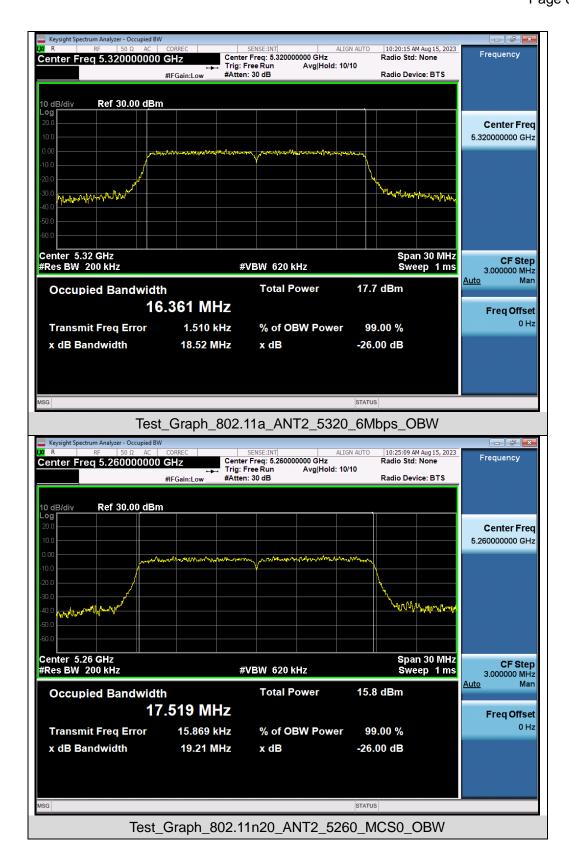


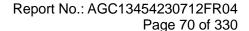




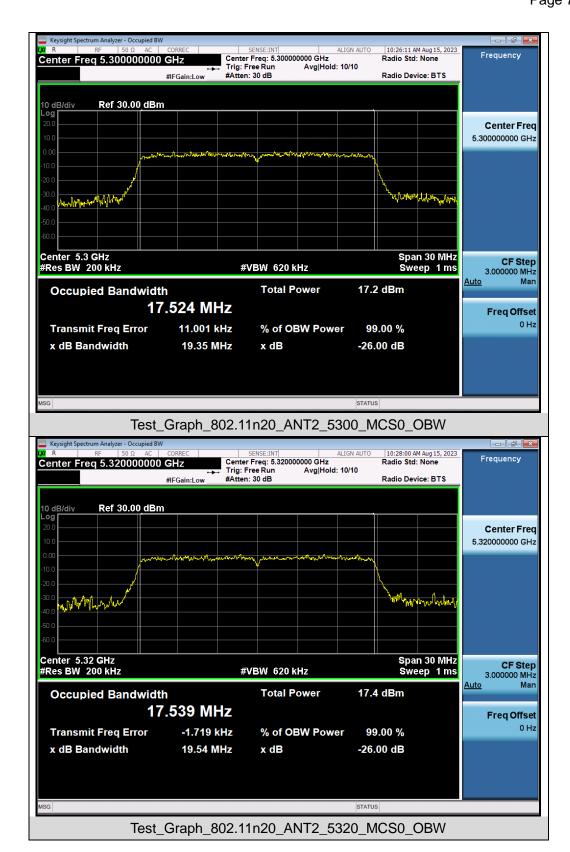


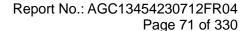




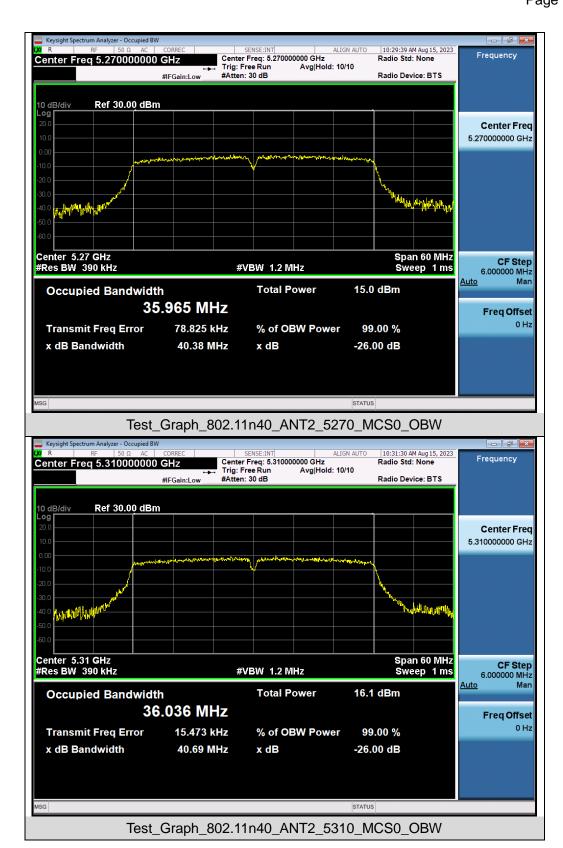


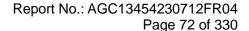




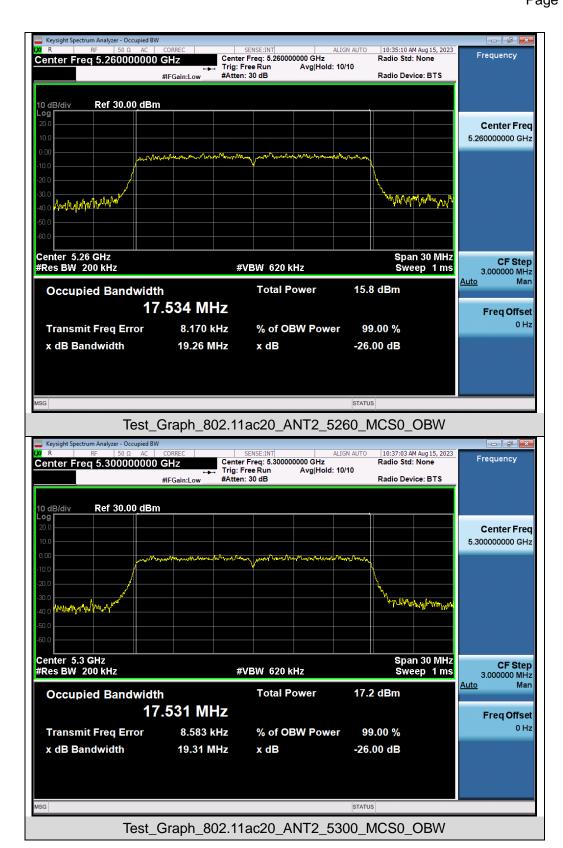


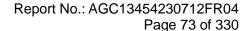




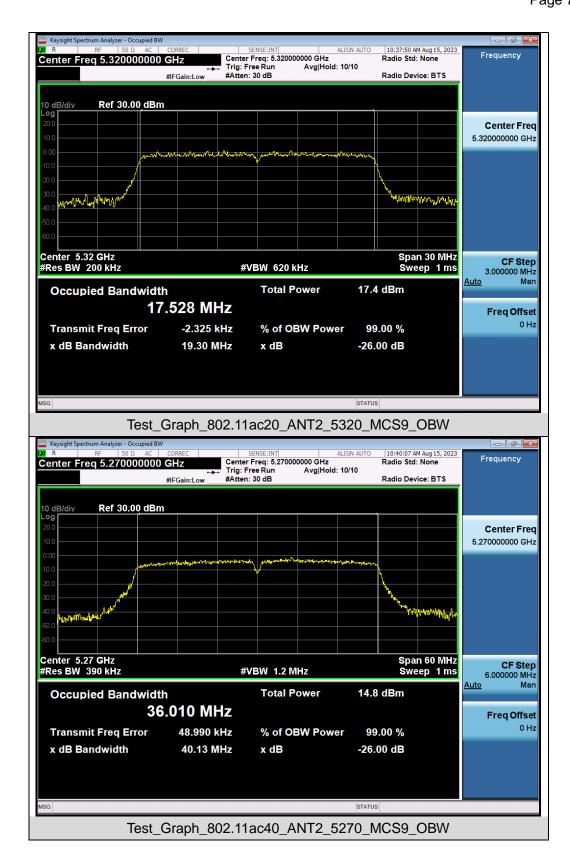


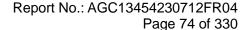




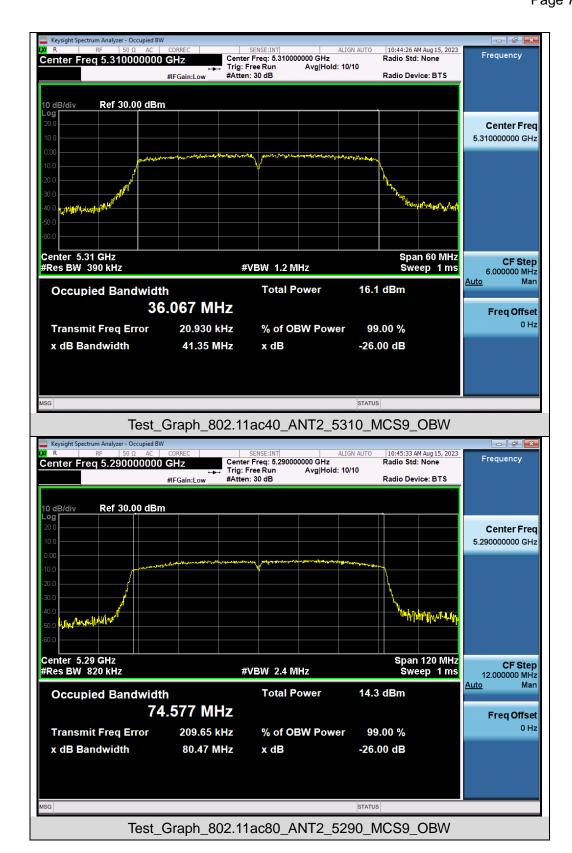


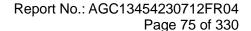






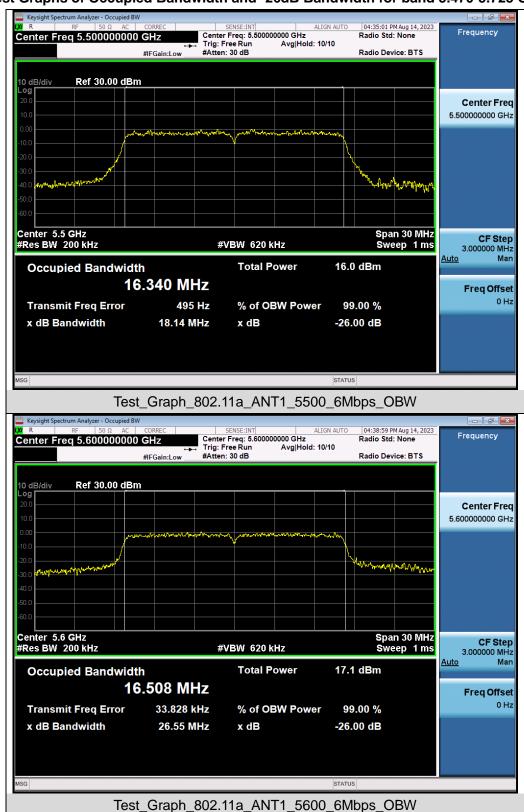


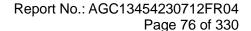




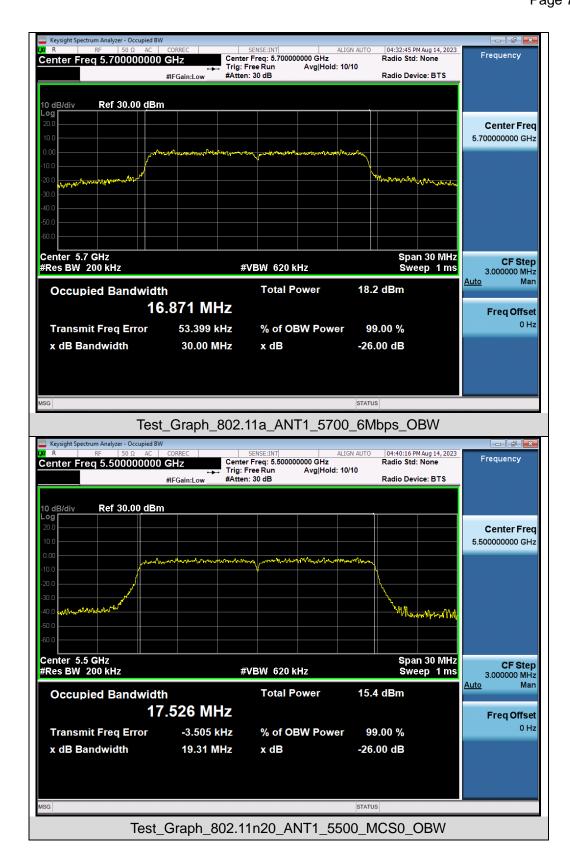


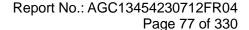
## Test Graphs of Occupied Bandwidth and -26dB Bandwidth for band 5.470-5.725 GHz



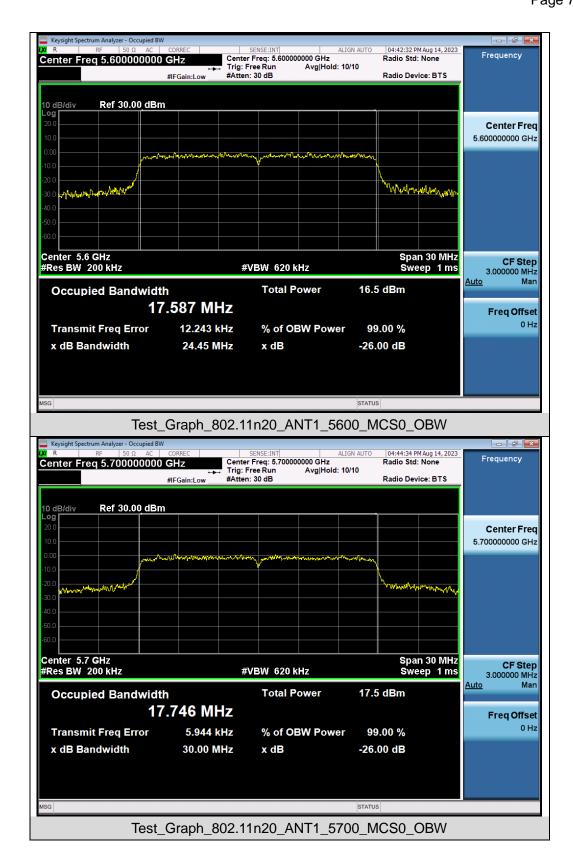


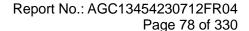




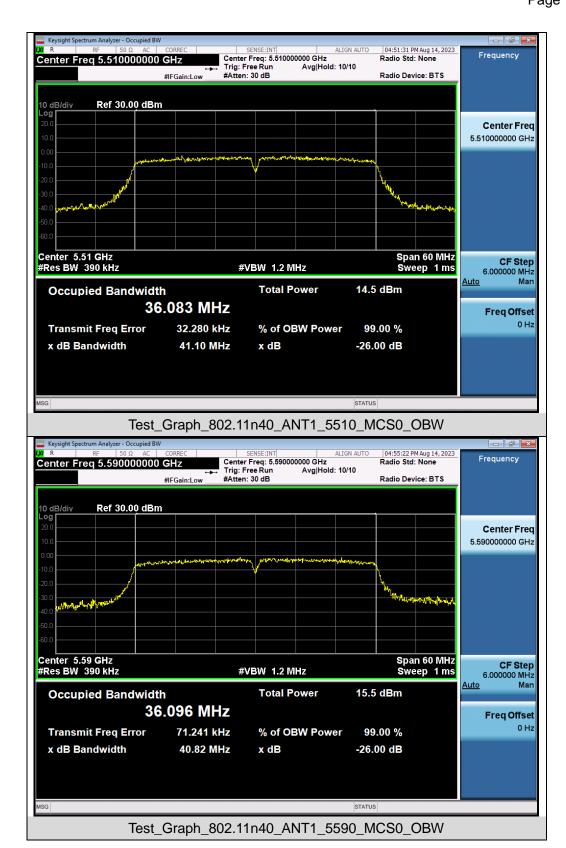


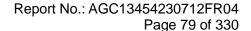




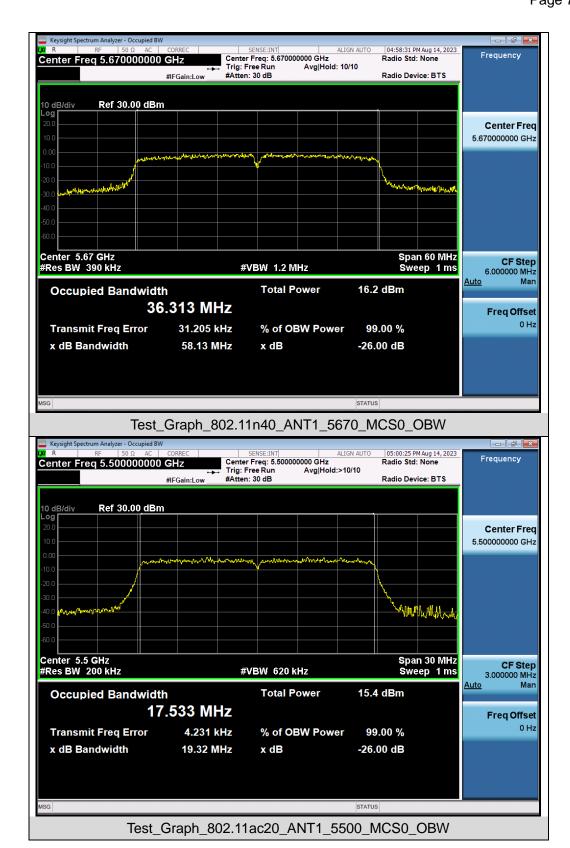


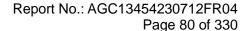




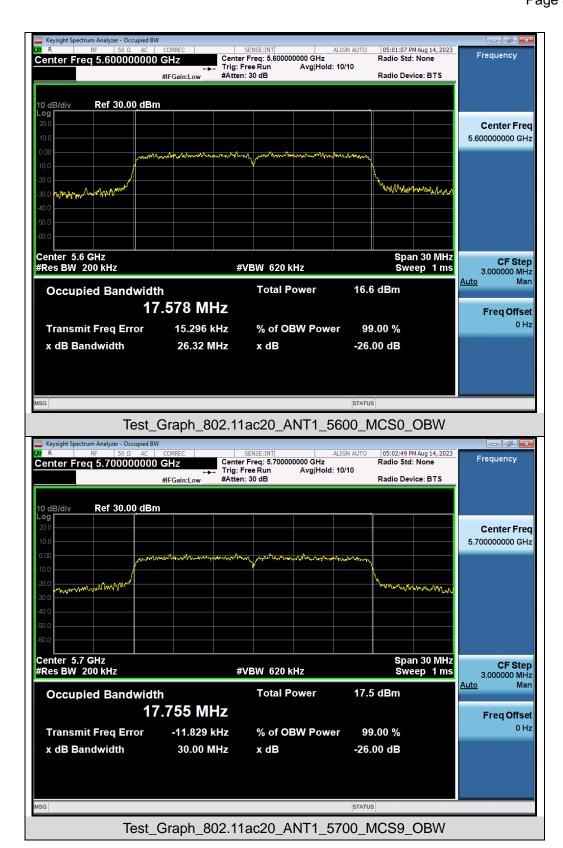


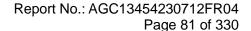




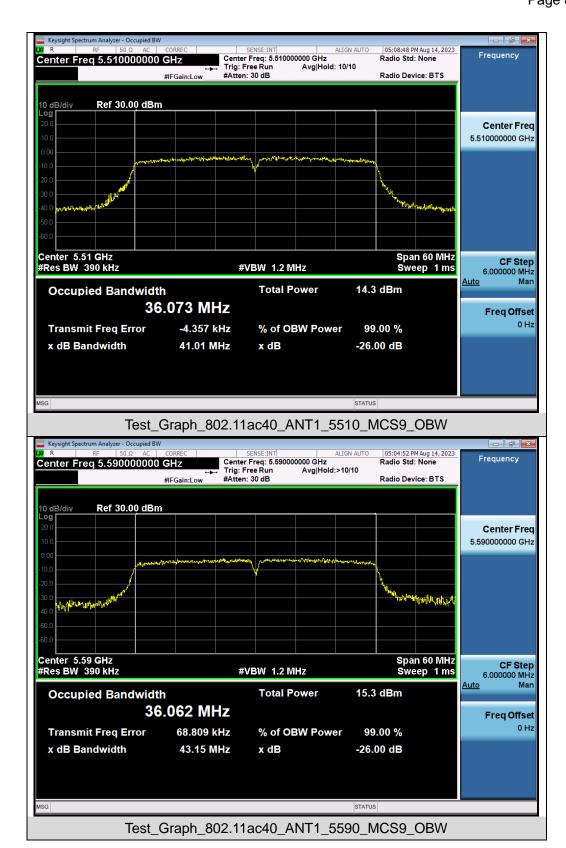


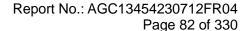




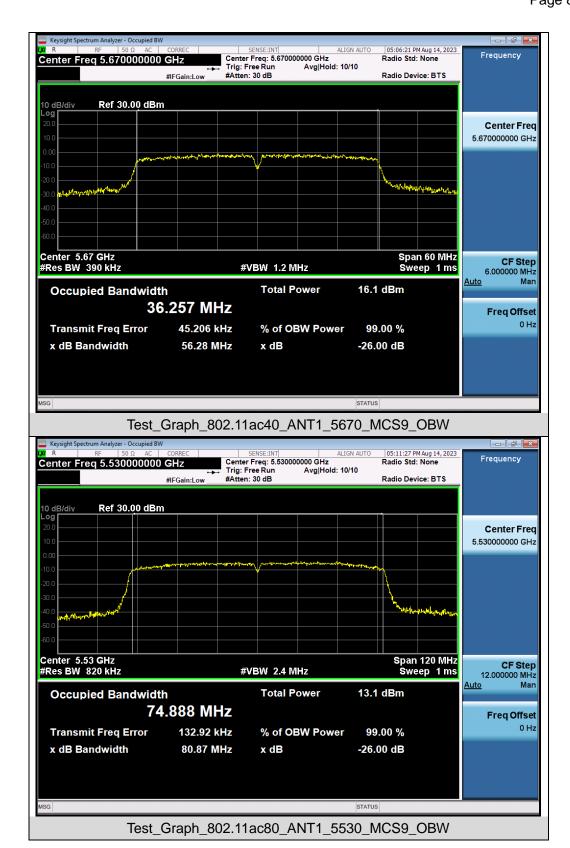


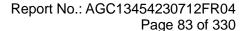




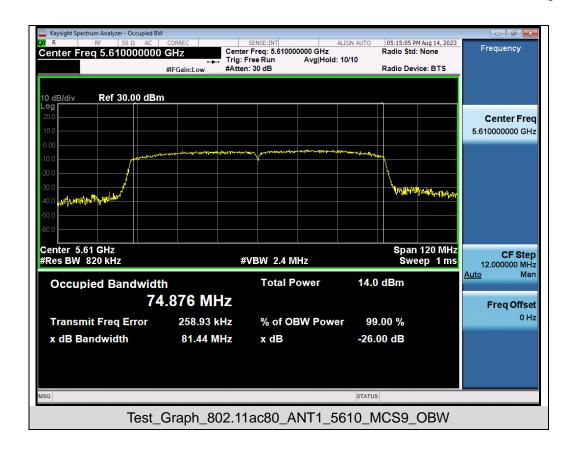


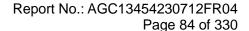




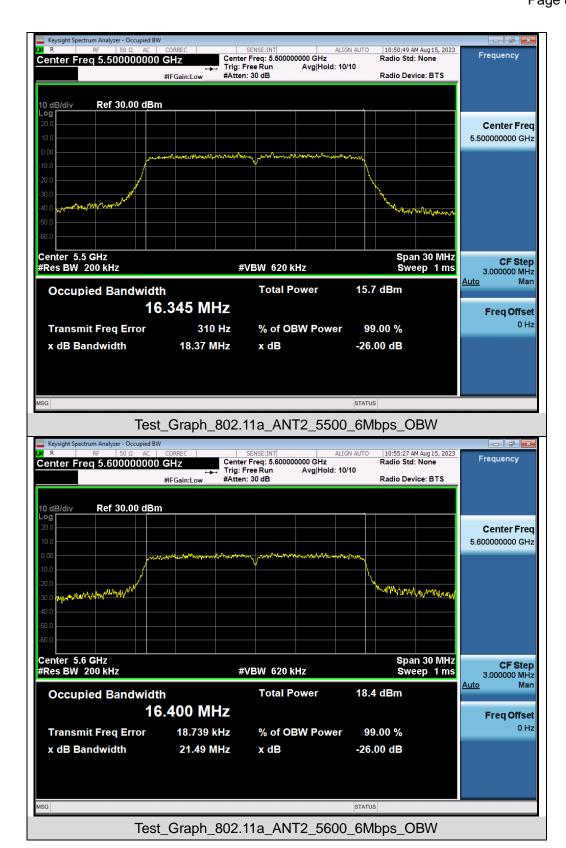


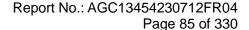




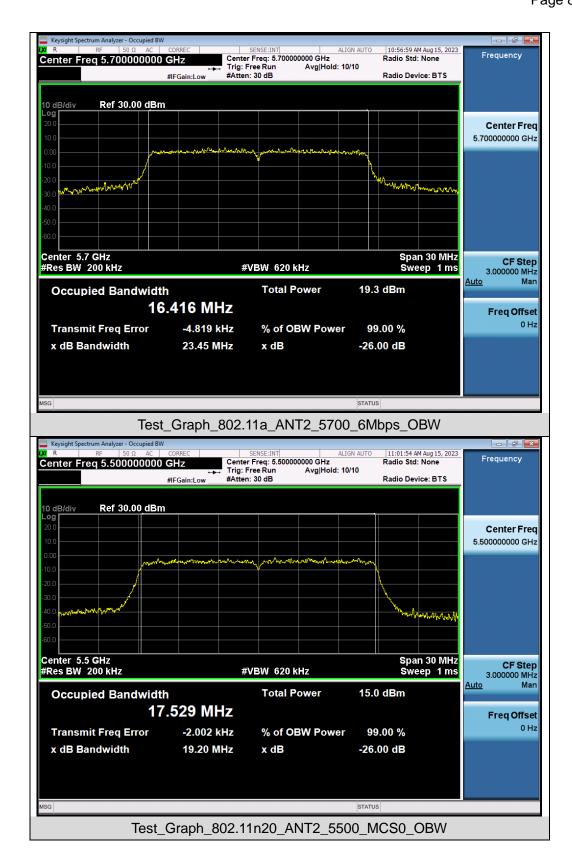


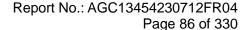




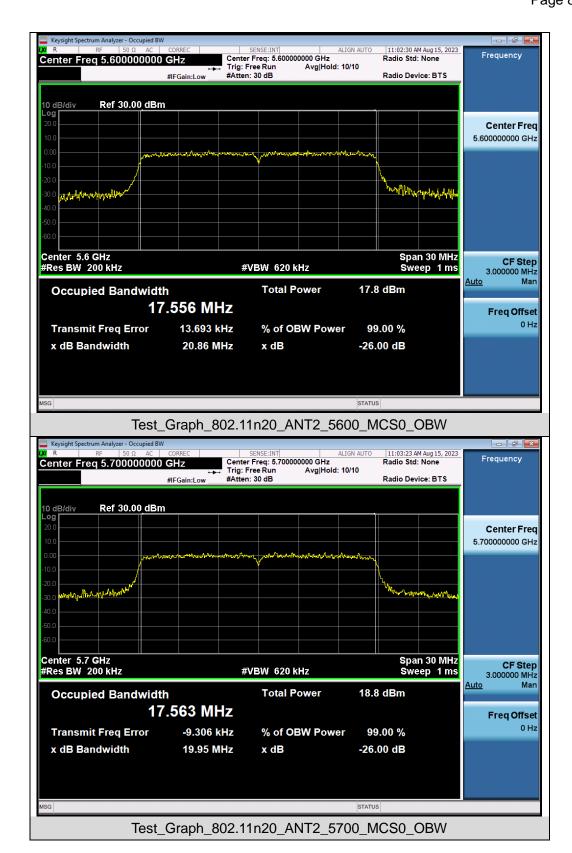


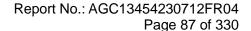




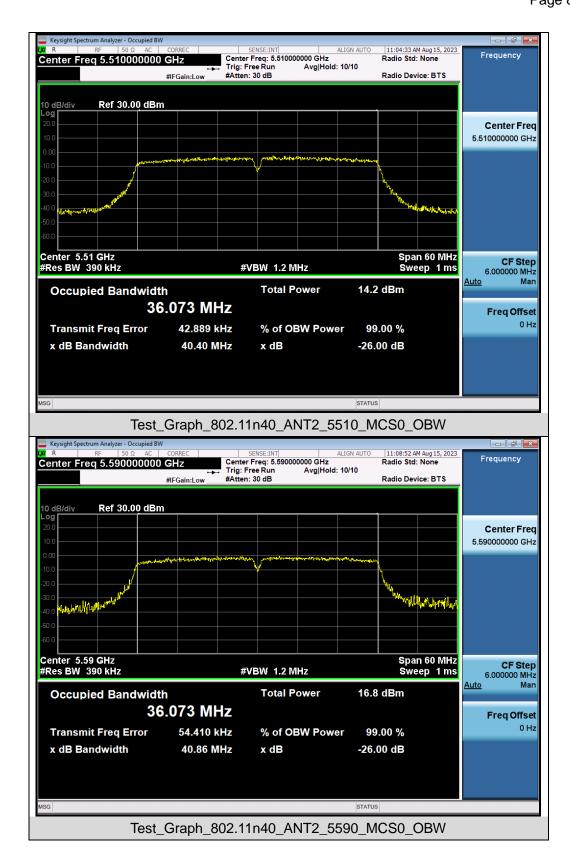


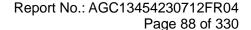




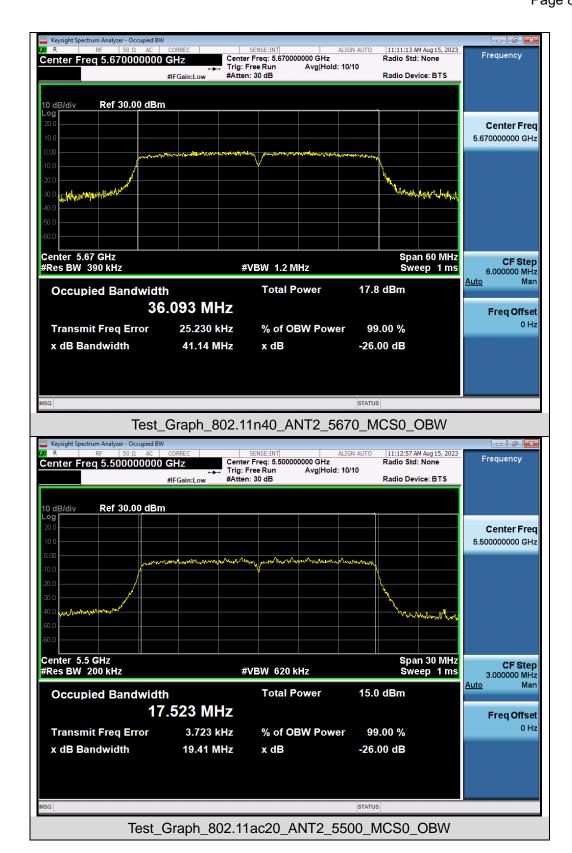


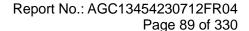




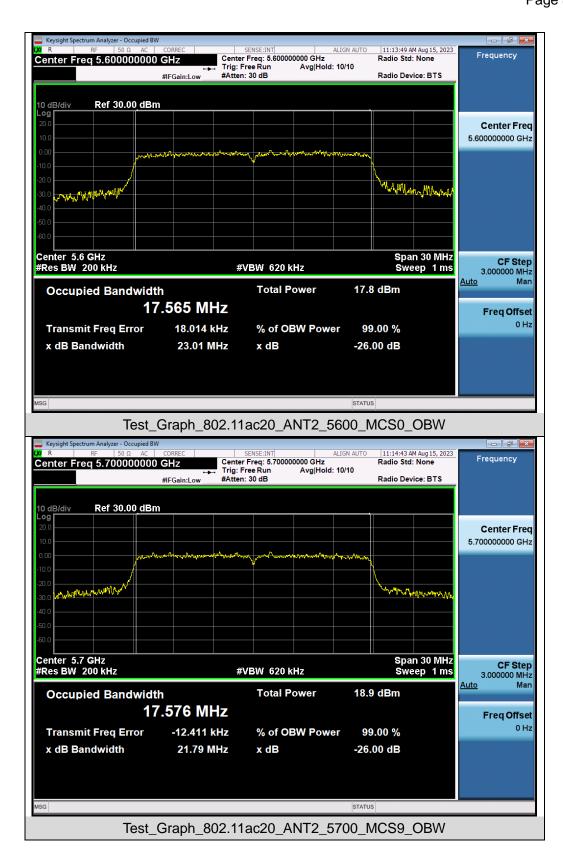


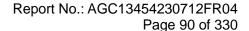




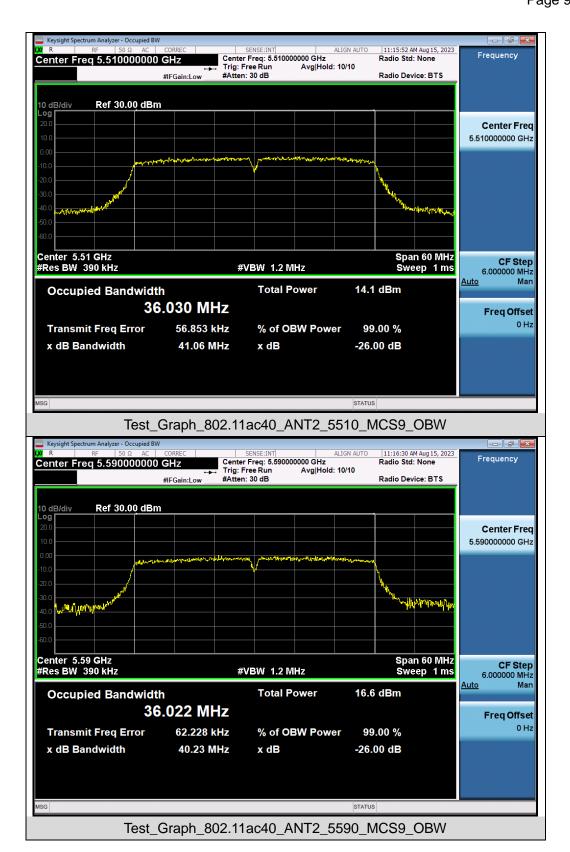


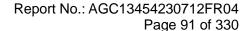




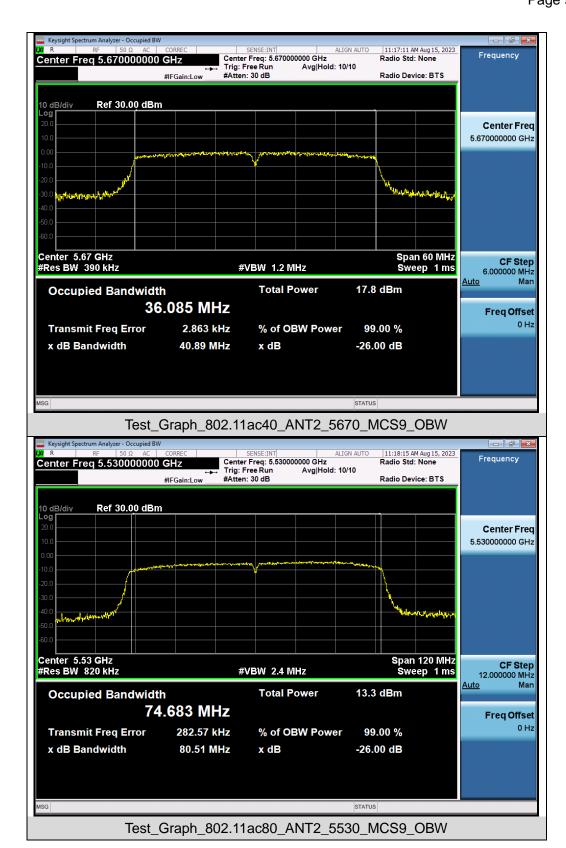


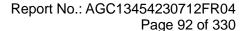




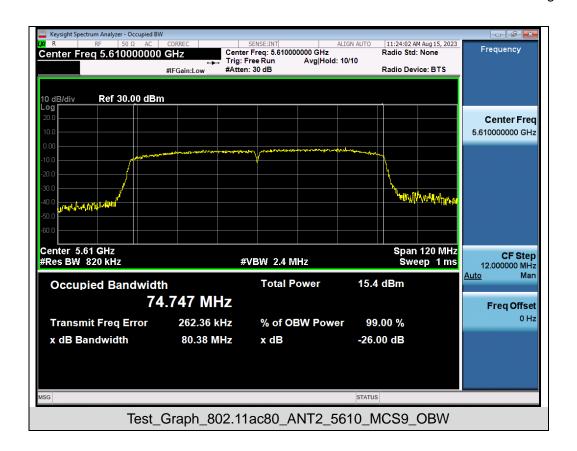


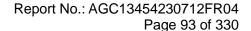














## Test Graphs of Occupied Bandwidth and -26dB Bandwidth for band 5.745-5.825 GHz

