

FCC Test Report

Report No.: AGC00408221201FE04

FCC ID : 2A3DR-G2

APPLICATION PURPOSE : Original Equipment

PRODUCT DESIGNATION: 5G Smart phone

BRAND NAME : AGM

MODEL NAME

AGM G2, AGM G2 Pro, AGM G2 Guardian, AGM G2 1KM,

Glory G2

APPLICANT : AGM MOBILE LIMITED

DATE OF ISSUE : Feb. 23, 2023

STANDARD(S) : FCC Part 15 Subpart C §15.247

REPORT VERSION: V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd



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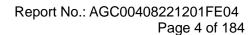
REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Feb. 23, 2023	Valid	Initial Release



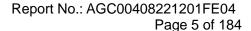
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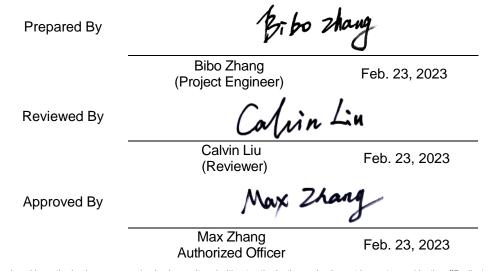


1. VERIFICATION OF CONFORMITY

Applicant	AGM MOBILE LIMITED
Address	FLAT/RM 2253 22/F HOI TAI FACTORY ESTATE TSING YEUNG CIRCUIT TUEN MUN NT HONG KONG
manufacturer	Shenzhen AlJIEMO Technology Company Limited
Address	1st Floor 101 and 2nd Floor 201, Building A2, Huafeng Century Technology Park, Nanchang Community, Xixiang, Baoan District, Shenzhen, China
Factory	Shenzhen AlJIEMO Technology Company Limited
Address	1st Floor 101 and 2nd Floor 201, Building A2, Huafeng Century Technology Park, Nanchang Community, Xixiang, Baoan District, Shenzhen, China
Product Designation	5G Smart phone
Brand Name	AGM
Test Model	AGM G2
Series Model	AGM G2 Pro, AGM G2 Guardian, AGM G2 1KM, Glory G2
Declaration of Difference	All the same except the model name
Date of receipt of test item	Dec. 28, 2022
Date of test	Dec. 28, 2022~Feb. 23, 2023
Deviation	No any deviation from the test method
Condition of Test Sample	Normal
Test Result	Pass
Report Template	AGCRT-US-BGN/RF

We hereby certify that:

The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC Rules Part 15.247.





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2. GENERAL INFORMATION

2.1. PRODUCT DESCRIPTION

Equipment Type	WLAN 2.4G				
Frequency Band	2400MHz ~ 2483.5MHz				
Operation Frequency	2412MHz ~ 2462MHz				
	IEEE 802.11b:14.31dBm; IEEE 802.11g:12.92dBm;				
Output Power (Average)	IEEE 802.11n(HT20):12.74dBm; IEEE 802.11n(HT40):12.12dBm				
	IEEE 802.11ax (HE20):11.98dBm; IEEE 802.11ax (HE40):11.93dBm				
	IEEE 802.11b:15.38dBm; IEEE 802.11g:19.61dBm;				
Output Power (Peak)	IEEE 802.11n(HT20):20.61dBm; IEEE 802.11n(HT40):21.80dBm				
	IEEE 802.11ax (HE20):21.34dBm; IEEE 802.11ax (HE40):22.69dBm				
Output Power (MIMO- Average)	IEEE 802.11n(HT20):15.19dBm; IEEE 802.11n(HT40):15.00dBm				
Output Fower (Milwo-Average)	IEEE 802.11ax (HE20):14.87dBm; IEEE 802.11ax (HE40):14.73dBm				
Output Power (MIMO- Peak)	IEEE 802.11n(HT20):23.38dBm; IEEE 802.11n(HT40):24.53dBm				
Output i ower (wilwio- i eak)	IEEE 802.11ax (HE20):24.03dBm; IEEE 802.11ax (HE40):25.04dBm				
	802.11b:(DQPSK, DBPSK,CCK)DSSS				
Modulation	802.11g/n:(64-QAM,16-QAM,QPSK, BPSK)OFDM				
	802.11ax:(1024-QAM,256-QAM,64-QAM,16-QAM,QPSK,BPSK)OFDMA				
	802.11b:1/2/5.5/11Mbps				
Data Rate	802.11g: 6/9/12/18/24/36/48/54Mbps				
	802.11n: up to 300Mbps				
	802.11ax: up to 574Mbps				
Number of channels	11				
Hardware Version	V1.00				
Software Version	N2060.6.01.00.00				
Antenna Designation	PIFA antenna (Comply with requirements of the FCC part 15.203)				
Antenna Gain	Please refer to report section 2.10 description				
Number of transmit chain	2(802.11b/g/n all used two antennas,802.11b/g/n/ax support MIMO)				
Power Supply	DC 3.85V by battery				



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2.2. TABLE OF CARRIER FREQUENCYS

802.11b/g/n-HT20/ax-HE20

Channel	Frequency	Channel	Frequency	Channel	Frequency
01	2412 MHz	02	2417 MHz	03	2422 MHz
04	2427 MHz	05	2432 MHz	06	2437 MHz
07	2442 MHz	08	2447 MHz	09	2452 MHz
10	2457 MHz	11	2462 MHz		

802.11n-HT40/ax-HE40

Channel	Frequency	Channel	Frequency	Channel	Frequency
03	2422 MHz	04	2427 MHz	05	2432 MHz
06	2437 MHz	07	2442 MHz	08	2447 MHz
09	2452 MHz	-		-	



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2.3. IEEE 802.11N MODULATION SCHEME

MCS Index	Nss	Modulation	R	NBPSC	NCI	NCBPS NDBI 20MHz 40MHz 20MHz		BPS		ata Mbps) nsGl
					20MHz			40MHz	20MHz	40MHz
0	1	BPSK	1/2	1	52	108	26	54	6.5	13.5
1	1	QPSK	1/2	2	104	216	52	108	13.0	27.0
2	1	QPSK	3/4	2	104	216	78	162	19.5	40.5
3	1	16-QAM	1/2	4	208	432	104	216	26.0	54.0
4	1	16-QAM	3/4	4	208	432	156	324	39.0	81.0
5	1	64-QAM	2/3	6	312	648	208	432	52.0	108.0
6	1	64-QAM	3/4	6	312	648	234	489	58.5	121.5
7	1	64-QAM	5/6	6	312	648	260	540	65.0	135.0

Symbol	Explanation		
NSS	Number of spatial streams		
R	Code rate		
NBPSC	Number of coded bits per single carrier		
NCBPS	Number of coded bits per symbol		
NDBPS	Number of data bits per symbol		
GI	Guard interval		



2.4. IEEE 802.11AX MODULATION SCHEME

Table 27-79—HE-MCSs for 242-tone RU, $N_{SS} = 1$

HE-MCS Index DCM							Data rate (Mb/s)			
	DCM	Modulation	R	N _{BPSCS}	N _{SD}	N _{CBPS}	N_{DBPS}	0.8 μs GI	1.6 μs GI	3.2 μs GI
0	1	BPSK	1/2	1	117	117	58	4.3	4.0	3.6
U	0	BPSK	1/2	1	234	234	117	8.6	8.1	7.3
1	1		1/2		117	234	117	8.6	8.1	7.3
1	0	QPSK	1/2	2	234	468	234	17.2	16.3	14.6
2	N/A		3/4		234	468	351	25.8	24.4	21.9
3	1 1/2	16-QAM		117	468	234	17.2	16.3	14.6	
3	0		1/2	,	234	936	468	34.4	32.5	29.3
4	1		3/4	4	117	468	351	25.8	24.4	21.9
4	0		3/4		234	936	702	51.6	48.8	43.9
5			2/3				936	68.8	65.0	58.5
6		64-QAM	4-QAM 3/4 6 1 4	1 404	1 053	77.4	73.1	65.8		
7			5/6				1 170	86.0	81.3	73.1
8	N/A	256 0414	3/4	8	234	1 973	1 404	103.2	97.5	87.8
9		256-QAM	5/6	8		1 872	1 560	114.7	108.3	97.5
10		1024 0434	3/4	10		2.240	1 755	129.0	121.9	109.7
11		1024-QAM	5/6	10		2 340	1 950	143.4	135.4	121.9

Symbol	Explanation
NSS	Number of spatial streams
R	Code rate
NBPSC	Number of coded bits per single carrier
NCBPS	Number of coded bits per symbol
NDBPS	Number of data bits per symbol
GI	Guard interval

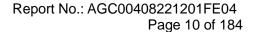




Table 27-87—HE-MCSs for 484-tone RU, $N_{SS} = 1$

HE-MCS								Da	ta rate (M	b/s)
Index	DCM	Modulation	R	N _{BPSCS}	N _{SD}	N _{CBPS}	N _{DBPS}	0.8 μs GI	1.6 μs GI	3.2 μs GI
0	1	BPSK	1/2	1	234	234	117	8.6	8.1	7.3
U	0	BPSK	1/2	1	468	468	234	17.2	16.3	14.6
1	1		1/2		234	468	234	17.2	16.3	14.6
1	0	QPSK	1/2	2	468	936	468	34.4	32.5	29.3
2	N/A		3/4		468	936	702	51.6	48.8	43.9
3	1 1/2			234	936	468	34.4	32.5	29.3	
3	0	16 OAM	1/2	4	468	1 872	936	68.8	65.0	58.5
4	1	16-QAM	3/4		234	936	702	51.6	48.8	43.9
4	0		3/4		468	1 872	1 404	103.2	97.5	87.8
5			2/3				1 872	137.6	130.0	117.0
6		64-QAM	3/4	6		2 808	2 106	154.9	146.3	131.6
7			5/6				2 340	172.1	162.5	146.3
8	N/A	256 0434	3/4	8	468	3 744	2 808	206.5	195.0	175.5
9		256-QAM	256-QAM 5/6	8		3 /44	3 120	229.4	216.7	195.0
10		1024 0 434	3/4	10		4.690	3 510	258.1	243.8	219.4
11		1024-QAM	5/6	10		4 680	3 900	286.8	270.8	243.8

Symbol	Explanation	
NSS	Number of spatial streams	
R	Code rate	
NBPSC	Number of coded bits per single carrier	
NCBPS	Number of coded bits per symbol	
NDBPS	Number of data bits per symbol	
GI	Guard interval	



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2.5. RELATED SUBMITTAL(S) / GRANT (S)

This submittal(s) (test report) is intended for **FCC ID: 2A3DR-G2** filing to comply with the FCC Part 15 requirements.

2.6. TEST METHODOLOGY

The tests were performed according to following standards:

No.	Identity	Document Title
1	FCC 47 CFR Part 2	Frequency allocations and radio treaty matters; general rules and regulations
2	FCC 47 CFR Part 15	Radio Frequency Devices
3	ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices
4	KDB 662911	KDB 662911 D01 Multiple Transmitter Output v02r01 Emissions Testing of Transmitters with Multiple Outputs in the Same Band (e.g., MIMO, Smart Antenna, etc)

2.7. SPECIAL ACCESSORIES

Refer to section 5.2.

2.8. EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

2.9. ANTENNA REQUIREMENT

Standard Requirement

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi

EUT Antenna:

The non-detachable antenna inside the device cannot be replaced by the user at will. For the antenna gain, please refer to the description in Chapter 2.10 of the report.



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2.10. DESCRIPTION OF AVAILABLE ANTENNAS

Ī	Antenna	Frequency	TX	Bandwidth	Max Peak Gain (dBi)		Max Directional Gain		
	Type	Band (MHz)	Paths	(MHz)	Ant 1	Ant 2	(dBi)		
		2.4GWIFI PIFA Antenna List (2.4GHz 2*2 MIMO)							
	PIFA Antenna	2400~2483.5	2	20, 40	0.62	0.2	3.63		

Note 1: The EUT supports Cyclic Delay Diversity (CDD) technology for 802.11n/ax mode.

Note 2: The EUT supports Cyclic Delay Diversity (CDD) mode, and CDD signals are correlated.

If all antennas have the same gain, Gant, Directional gain = Gant + Array Gain, where Array Gain is as follows.

• For power spectral density (PSD) measurements on devices:

Array Gain = $10 \log (N_{ANT}/N_{SS}) dB = 3.01$;

• For power measurements on IEEE 802.1devices:

Array Gain = 0 dB for $N_{ANT} \le 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥40 MHz for any Nant;

Array Gain = 5 log(Nant/Nss) dB or 3 dB, whichever is less, for 20 MHz channel widths with Nant ≥ 5.

If antenna gains are not equal, Directional gain may be calculated by using the formulas applicable to equal gain antennas with Gant set equal to the gain of the antenna having the highest gain..



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3. 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	$U_c = \pm 3.1 \text{ dB}$
Uncertainty of Radiated Emission below 1GHz	$U_c = \pm 4.0 \text{ dB}$
Uncertainty of Radiated Emission above 1GHz	$U_c = \pm 4.8 \text{ dB}$
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	$U_c = \pm 2 \%$
Uncertainty of Occupied Channel Bandwidth	U _c = ±2 %



4. DESCRIPTION OF TEST MODES

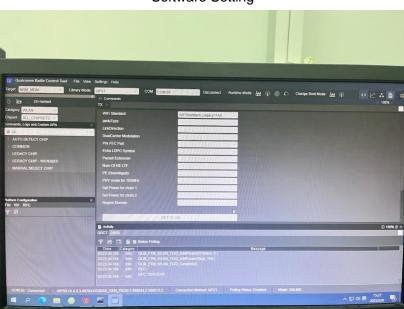
NO.	TEST MODE DESCRIPTION
1	Low channel transmitting (TX)
2	Middle channel transmitting (TX)
3	High channel transmitting (TX)

Note:

- 1) Transmit by 802.11b with Date rate (1/2/5.5/11)
- 2) Transmit by 802.11g with Date rate (6/9/12/18/24/36/48/54)
- 3) Transmit by 802.11n (20MHz) with Date rate (6.5/13/19.5/26/39/52/58.5/65)
- 4) Transmit by 802.11n (40MHz) with Date rate (13.5/27/40.5/54/81/108/121.5/135)
- 5) Transmit by 802.11ax (20MHz) with Date rate (MCS0-MCS15)
- 6) Transmit by 802.11ax (40MHz) with Date rate (MCS0-MCS15)
- 7) The test channel for 20MHz bandwidth system is channel 1, 6 and 11.
- B) The test channel for 40MHz bandwidth system is channel 3, 6 and 9.

Note:

- 1. The EUT has been set to operate continuously on the lowest, middle and highest operation frequency 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.



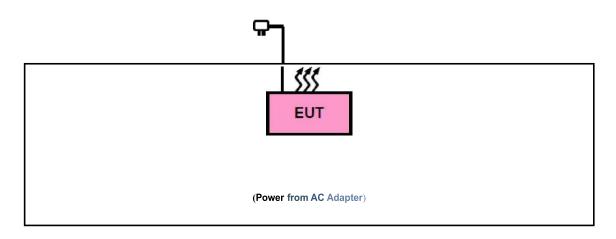
Software Setting



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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.	Identifier	Note
1	5G Smart phone	AGM G2	2A3DR-G2	EUT
2	Adapter	U312QC1801	Input: AC 100-240V 50/60Hz, 0.5A Output: DC 5V 3A, 9V 2A, 12V 1.5A	AE
3	Battery	Glory G2	DC 3.85V 7000mAh	AE
4	USB Cable	N/A	N/A	AE

5.3. SUMMARY OF TEST RESULTS

Item	FCC Rules	Description Of Test	Result
1	§15.203&15.247(b)(4)	Antenna Equipment	Pass
2	§15.247 (b)(1)	RF Output Power	Pass
3	§15.247 (a)(1)	6 dB Bandwidth	Pass
4	§15.247 (e)	Power Spectral Density	Pass
4	§15.247 (d)	Conducted Spurious Emission	Pass
5	§15.209	Radiated Emission& Band Edge	Pass
6	§15.207	AC Power Line Conducted Emission	Pass



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6. TEST FACILITY

Test Site	Attestation of Global Compliance (Shenzhen) Co., Ltd
Location	1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
Designation Number	CN1259
FCC Test Firm Registration Number	975832
A2LA Cert. No.	5054.02
Description	Attestation of Global Compliance(Shenzhen) Co., Ltd is accredited by A2LA

TEST EQUIPMENT OF CONDUCTED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESPI	101206	Mar. 28, 2022	Mar. 27, 2023
LISN	R&S	ESH2-Z5	100086	Jun. 08, 2022	Jun. 07, 2023
Test software	R&S	ES-K1	Ver.V1.71	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	Mar. 28, 2022	Mar. 27, 2023
EXA Signal Analyzer	Aglient	N9010A	MY53470504	Aug. 04, 2022	Aug. 03, 2023
2.4GHz Filter	EM Electronics	2400-2500MHz	N/A	N/A	N/A
Attenuator	ZHINAN	E-002	N/A	Sep. 01, 2022	Aug. 31, 2023
Horn antenna	SCHWARZBEC K	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	Apr. 23, 2021	Apr. 22, 2023
Broadband Preamplifier	ETS LINDGREN	3117PA	00225134	Sep. 01, 2022	Aug. 31, 2023
ANTENNA	SCHWARZBEC K	VULB9168	494	Jan. 07, 2021	Jan. 06, 2023
ANTENNA	SCHWARZBEC K	VULB9168	494	Jan. 05, 2023	Jan. 04, 2025
Test software	Tonscend	JS32-RE	Ver.2.5	N/A	N/A



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7. RF OUTPUT POWER MEASUREMENT

7.1 MEASUREMENT LIMITS

For DTSs employing digital modulation techniques operating in the bands 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1 W.

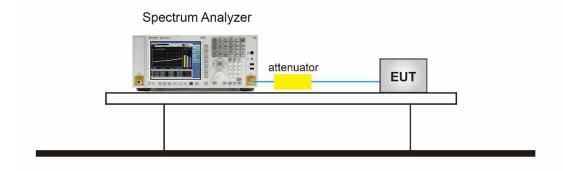
7.2 MEASUREMENT PROCEDURE

⊠For peak power test:

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2. Set the RBW = 1 MHz.
- 3. Set the VBW \geq [3 × RBW].
- 4. Set the Span ≥ [1.5 × DTS bandwidth].
- 5. Sweep time=Auto couple.
- 6. Detector function=Peak.
- 7. Trace Mode=Max hold.
- 8. Allow trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission.
- 9. The indicated level is the peak output power, after any corrections for external attenuators and cables.

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2. Set Span to at least 1.5 times the OBW.
- 3. Set RBW = 1% to 5% of the OBW, not to exceed 1 MHz.
- 4. Set VBW≥[3×RBW].
- 5. Sweep Time=Auto couple.
- 6. Detector function=RMS (i.e., power averaging).
- 7. Trace average at least 100 traces in power averaging (rms) mode;
- 8. Determine according to the duty cycle of the equipment: when it is less than 98%, follow the steps below.
- Add [10 log (1 / D)], where D is the duty cycle, to the measured power to compute the average power during the actual transmission times (because the measurement represents an average over both the ON and OFF times of the transmission). For example, add [10 log (1/0.25)] = 6 dB if the duty cycle is 25%.
- 10. Record the test results in the report.

7.3 MEASUREMENT SETUP (BLOCK DIAGRAM OF CONFIGURATION)

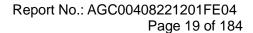




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7.4 MEASUREMENT RESULT

	Test I	Data of Conducted O	utput Power-ANT 1		
Test Mode	Test Channel (MHz)	Average Power (dBm)	Peak Power (dBm)	Limits (dBm)	Pass or Fail
	2412	12.32	13.34	≤30	Pass
802.11b	2437	14.31	15.38	≤30	Pass
	2462	13.04	14.09	≤30	Pass
	2412	11.34	17.98	≤30	Pass
802.11g	2437	12.86	19.52	≤30	Pass
	2462	11.54	18.39	≤30	Pass
	2412	11.09	19.05	≤30	Pass
802.11n20	2437	12.40	20.51	≤30	Pass
	2462	11.10	19.43	≤30	Pass
	2422	11.85	21.21	≤30	Pass
802.11n40	2437	11.78	20.41	≤30	Pass
	2452	11.18	19.96	≤30	Pass
	2412	10.36	19.59	≤30	Pass
802.11ax20	2437	11.94	21.11	≤30	Pass
	2462	10.30	20.12	≤30	Pass
	2422	11.50	21.24	≤30	Pass
802.11ax40	2437	11.38	21.34	≤30	Pass
	2452	10.85	20.88	≤30	Pass





	Test Data of Conducted Output Power-ANT 2					
Test Mode	Test Channel (MHz)	Average Power (dBm)	Peak Power (dBm)	Limits (dBm)	Pass or Fail	
	2412	14.09	15.34	≤30	Pass	
802.11b	2437	13.65	14.96	≤30	Pass	
	2462	14.31	15.38	≤30	Pass	
	2412	12.87	19.61	≤30	Pass	
802.11g	2437	11.54	19.21	≤30	Pass	
	2462	12.92	19.60	≤30	Pass	
	2412	12.20	20.59	≤30	Pass	
802.11n20	2437	11.95	20.22	≤30	Pass	
	2462	12.74	20.61	≤30	Pass	
	2422	12.12	21.80	≤30	Pass	
802.11n40	2437	12.11	21.24	≤30	Pass	
	2452	11.96	20.61	≤30	Pass	
	2412	11.98	21.34	≤30	Pass	
802.11ax20	2437	11.78	20.92	≤30	Pass	
	2462	11.47	21.24	≤30	Pass	
	2422	11.93	22.69	≤30	Pass	
802.11ax40	2437	11.83	21.93	≤30	Pass	
	2452	11.74	21.68	≤30	Pass	

Test Data of Conducted Output Power-MIMO						
Test Mode	Test Channel (MHz)	Average Power (dBm)	Peak Power (dBm)	Limits (dBm)	Pass or Fail	
802.11n20	2412	14.69	22.90	≤30	Pass	
	2437	15.19	23.38	≤30	Pass	
	2462	15.01	23.07	≤30	Pass	
802.11n40	2422	15.00	24.53	≤30	Pass	
	2437	14.96	23.86	≤30	Pass	
	2452	14.60	23.31	≤30	Pass	
802.11ax20	2412	14.26	23.56	≤30	Pass	
	2437	14.87	24.03	≤30	Pass	
	2462	13.93	23.73	≤30	Pass	
802.11ax40	2422	14.73	25.04	≤30	Pass	
	2437	14.62	24.66	≤30	Pass	
	2452	14.33	24.31	≤30	Pass	



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8. 6DB BANDWIDTH MEASUREMENT

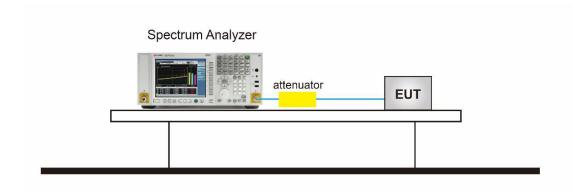
8.1 MEASUREMENT LIMITS

The minimum 6 dB bandwidth shall be 500 kHz.

8.2 MEASUREMENT PROCEDURE

- 1) The testing follows the ANSI C63.10 Section 6.9.3 (OBW) and 11.8.1 (6dB BW).
- 2) The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
- 3) Set to the maximum power setting and enable the EUT transmit continuously.
- 4) For 6dB Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement.
- 5) For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1-5% of the emission bandwidth and set the Video bandwidth (VBW) ≥ 3 * RBW.
- 6) Detector = peak
- 7) Trace mode = max hold.
- 8) Sweep = auto couple.
- 9) Allow the trace to stabilize.
- 10) Measure and record the results in the test report.

8.3 MEASUREMENT SETUP (BLOCK DIAGRAM OF CONFIGURATION)

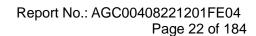




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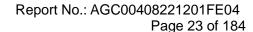
8.4 MEASUREMENT RESULTS

Test Data of Occupied Bandwidth and DTS Bandwidth-ANT 1							
Test Mode	Test Channel (MHz)	99% Occupied Bandwidth (MHz)	-6dB Bandwidth (MHz)	Limits (MHz)	Pass or Fail		
802.11b	2412	13.113	7.112	≥0.5	Pass		
	2437	13.069	8.081	≥0.5	Pass		
	2462	13.114	8.071	≥0.5	Pass		
802.11g	2412	16.201	15.088	≥0.5	Pass		
	2437	16.224	15.121	≥0.5	Pass		
	2462	16.220	15.107	≥0.5	Pass		
802.11n20	2412	17.420	16.069	≥0.5	Pass		
	2437	17.438	15.105	≥0.5	Pass		
	2462	17.429	15.394	≥0.5	Pass		
802.11n40	2422	36.215	34.661	≥0.5	Pass		
	2437	35.746	35.245	≥0.5	Pass		
	2452	36.006	36.318	≥0.5	Pass		
802.11ax20	2412	18.764	16.077	≥0.5	Pass		
	2437	18.814	15.480	≥0.5	Pass		
	2462	18.809	16.695	≥0.5	Pass		
802.11ax40	2422	37.857	26.856	≥0.5	Pass		
	2437	37.489	35.042	≥0.5	Pass		
	2452	37.707	36.912	≥0.5	Pass		



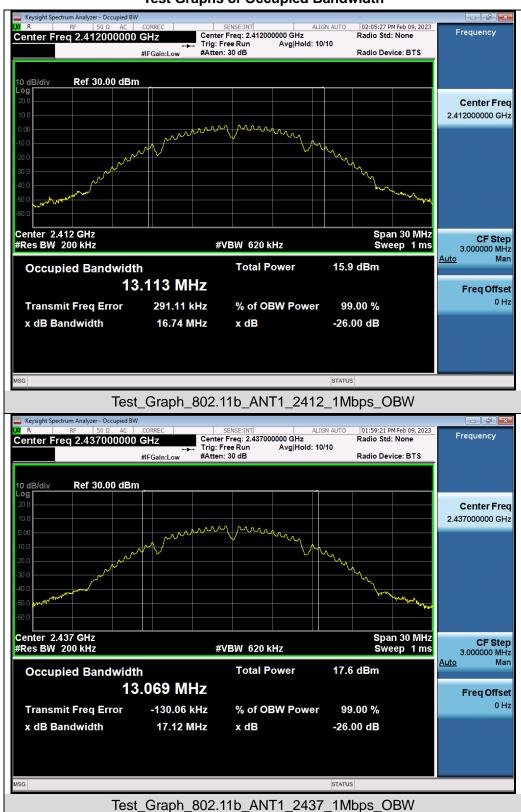


	Test Data of Occupied Bandwidth and DTS Bandwidth-ANT 2						
Test Mode	Test Channel (MHz)	99% Occupied Bandwidth (MHz)	-6dB Bandwidth (MHz)	Limits (MHz)	Pass or Fail		
	2412	13.130	8.090	≥0.5	Pass		
802.11b	2437	13.166	8.539	≥0.5	Pass		
	2462	13.047	8.051	≥0.5	Pass		
	2412	16.239	15.127	≥0.5	Pass		
802.11g	2437	16.230	15.094	≥0.5	Pass		
	2462	16.205	15.324	≥0.5	Pass		
	2412	17.459	15.690	≥0.5	Pass		
802.11n20	2437	17.443	15.713	≥0.5	Pass		
	2462	17.410	15.715	≥0.5	Pass		
	2422	36.685	36.948	≥0.5	Pass		
802.11n40	2437	36.542	35.644	≥0.5	Pass		
	2452	35.635	35.009	≥0.5	Pass		
	2412	18.817	16.472	≥0.5	Pass		
802.11ax20	2437	18.811	16.682	≥0.5	Pass		
	2462	18.796	16.601	≥0.5	Pass		
	2422	38.168	38.037	≥0.5	Pass		
802.11ax40	2437	38.043	36.958	≥0.5	Pass		
	2452	37.312	34.996	≥0.5	Pass		



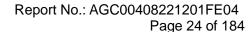


Test Graphs of Occupied Bandwidth

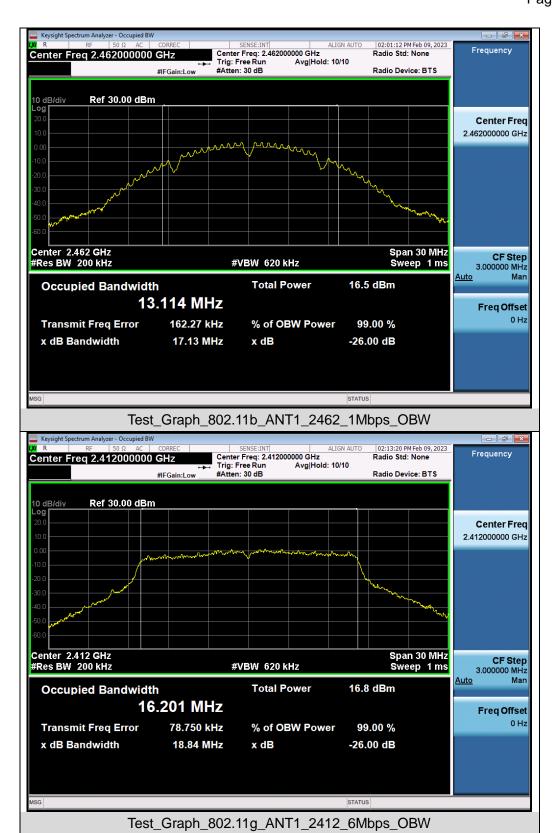


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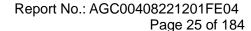
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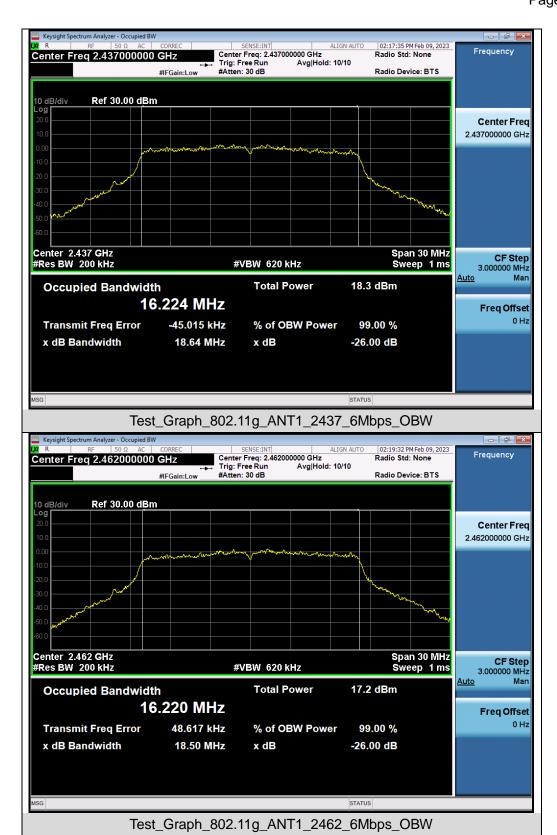


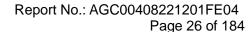


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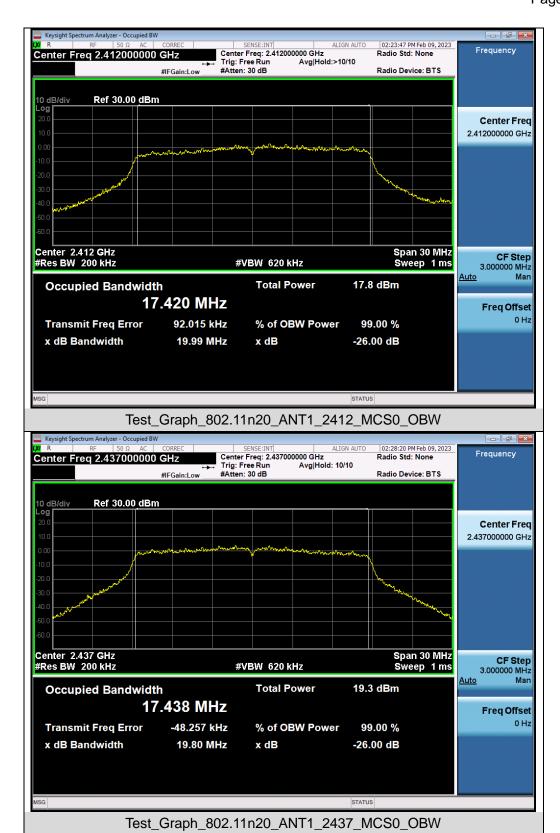




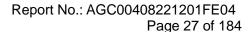






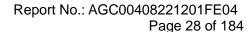


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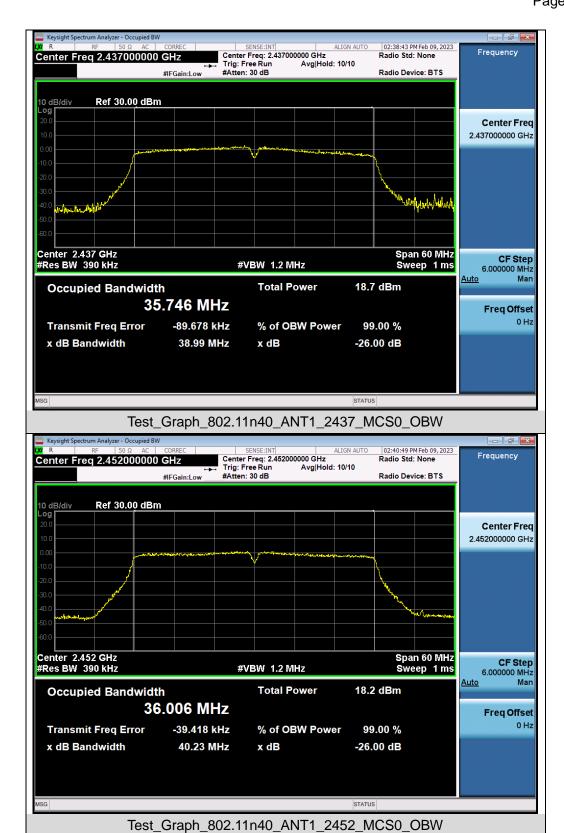




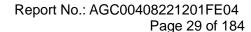




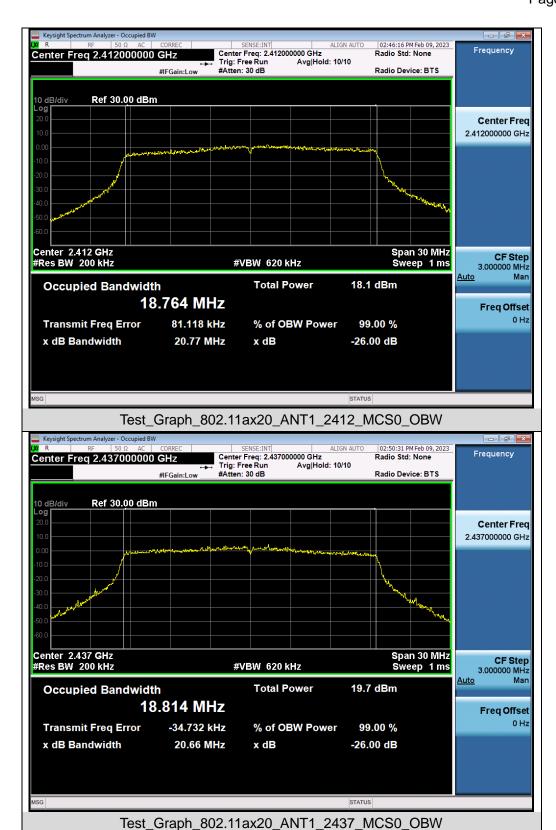


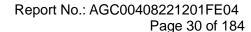


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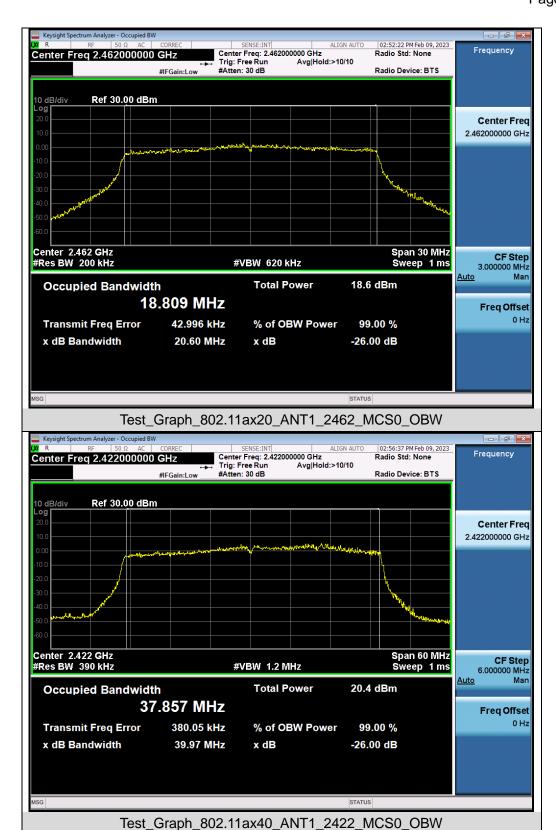


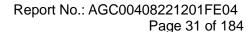




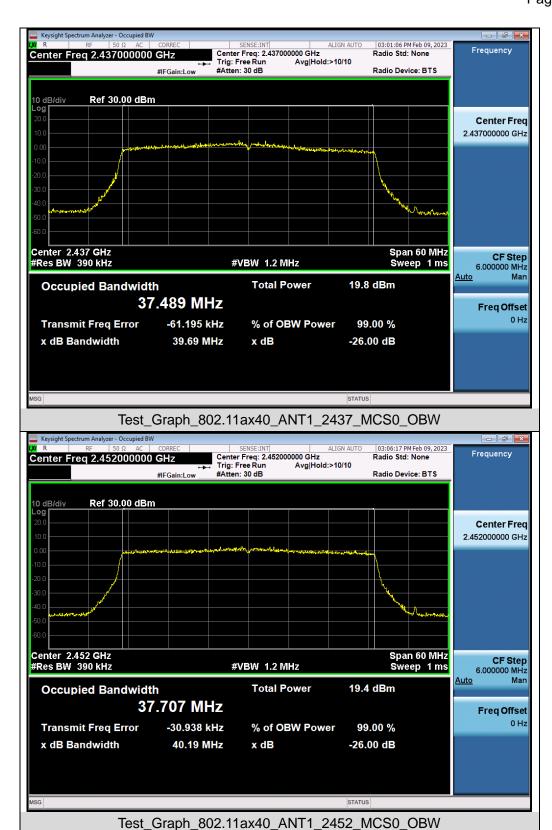




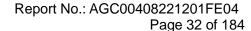




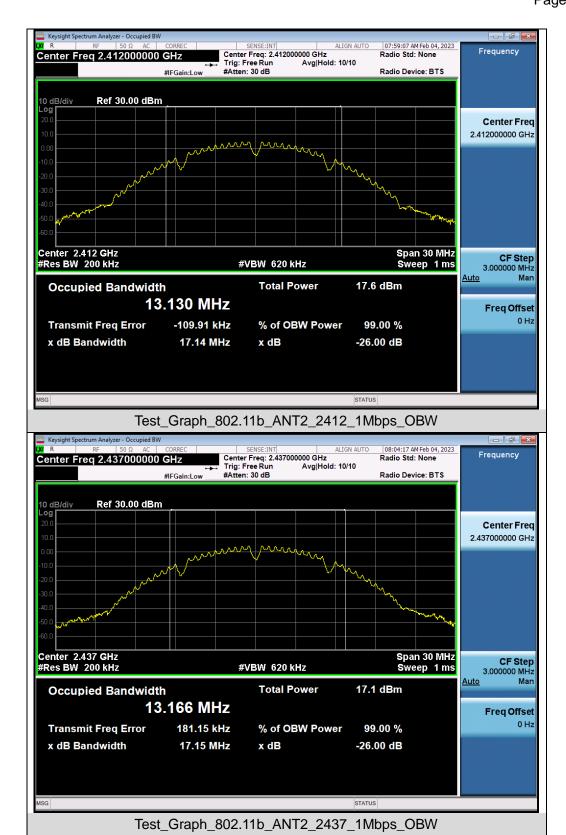


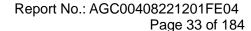


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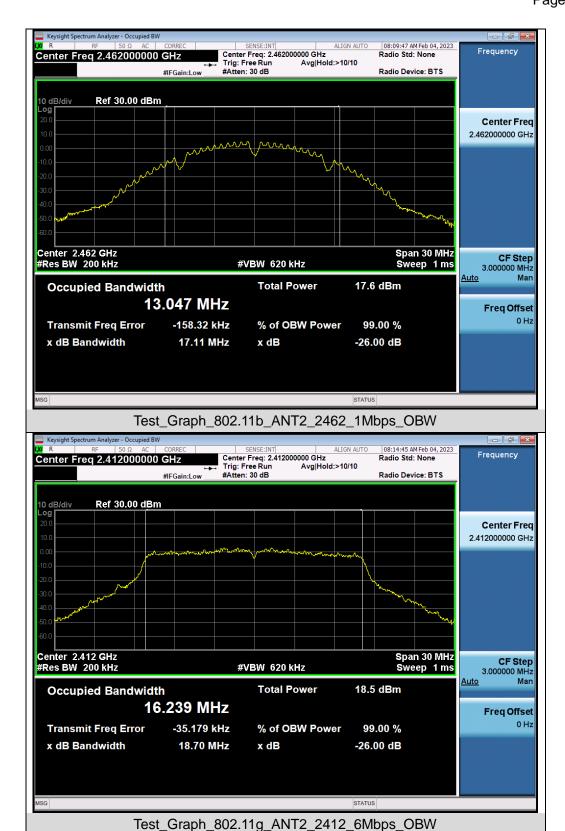


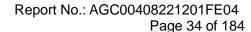






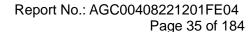




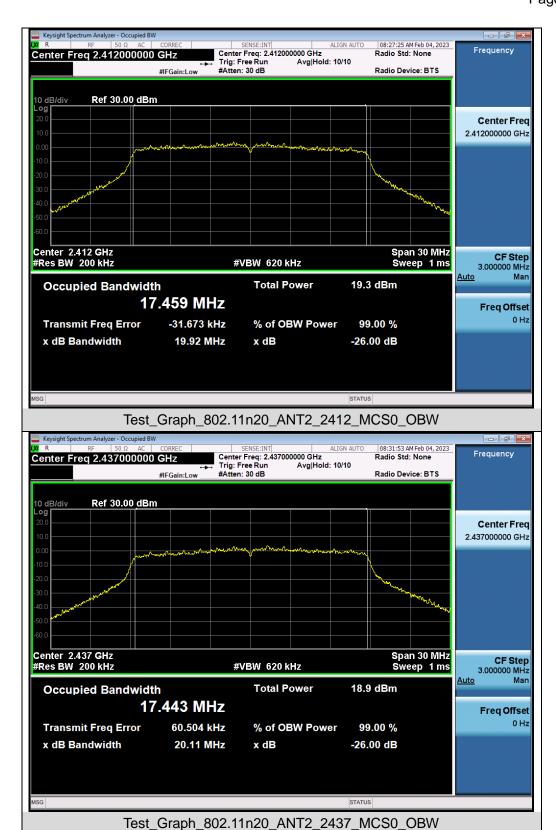




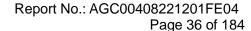




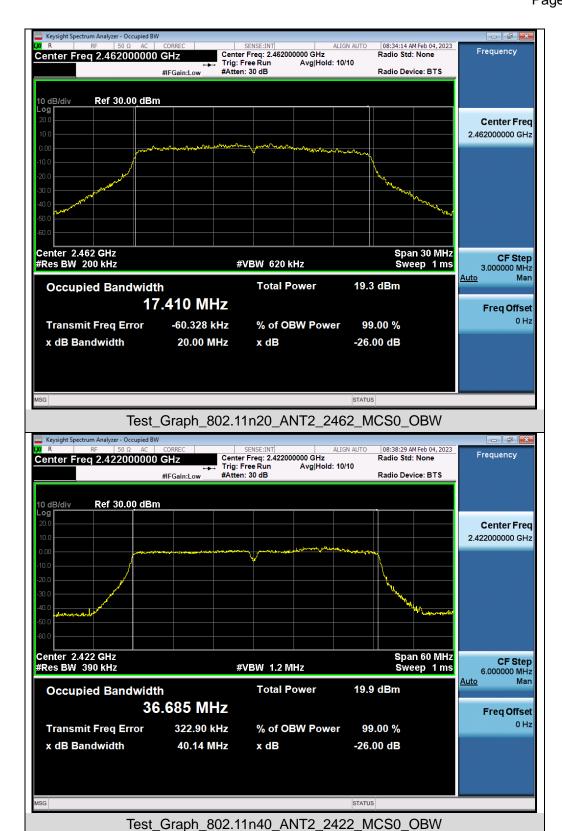




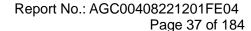
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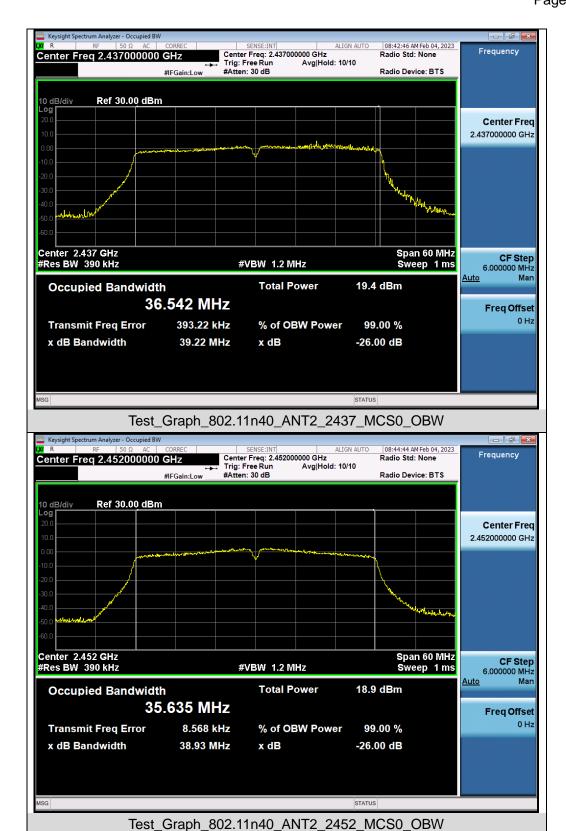


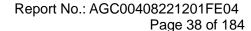


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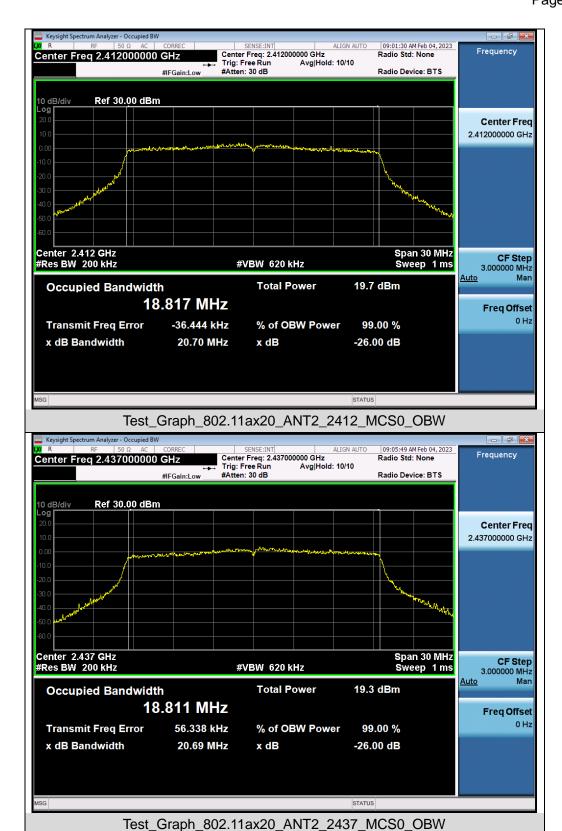


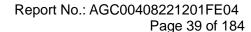




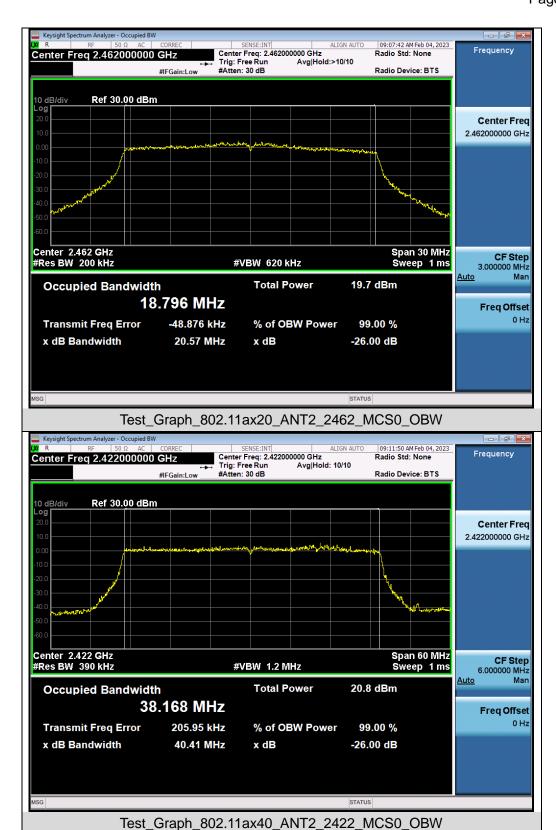




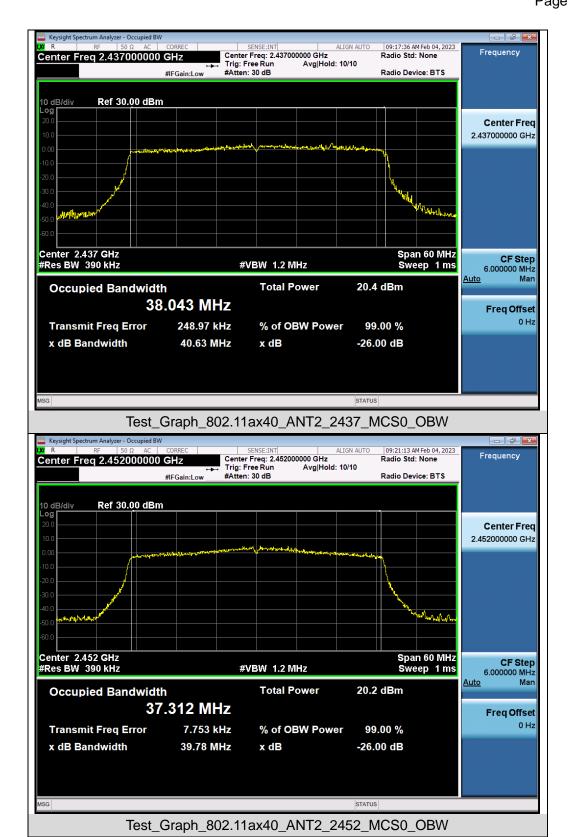


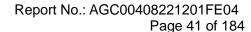






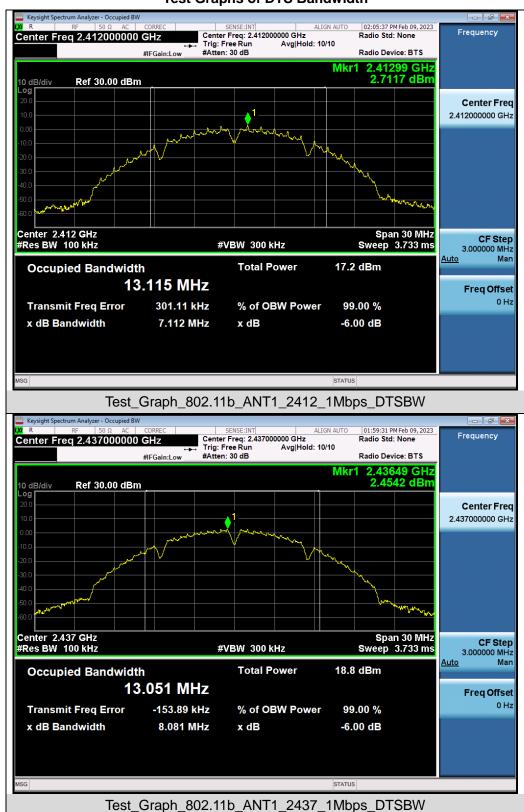




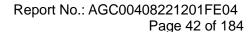




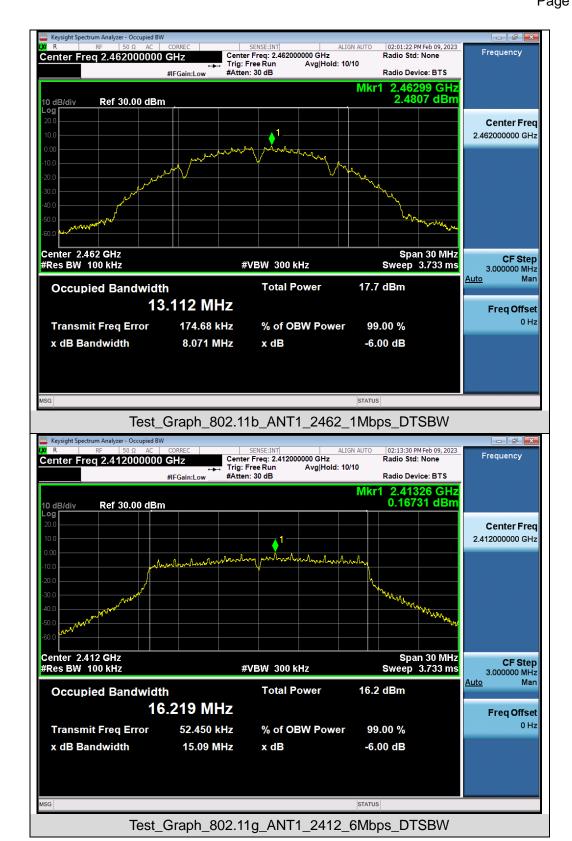
Test Graphs of DTS Bandwidth



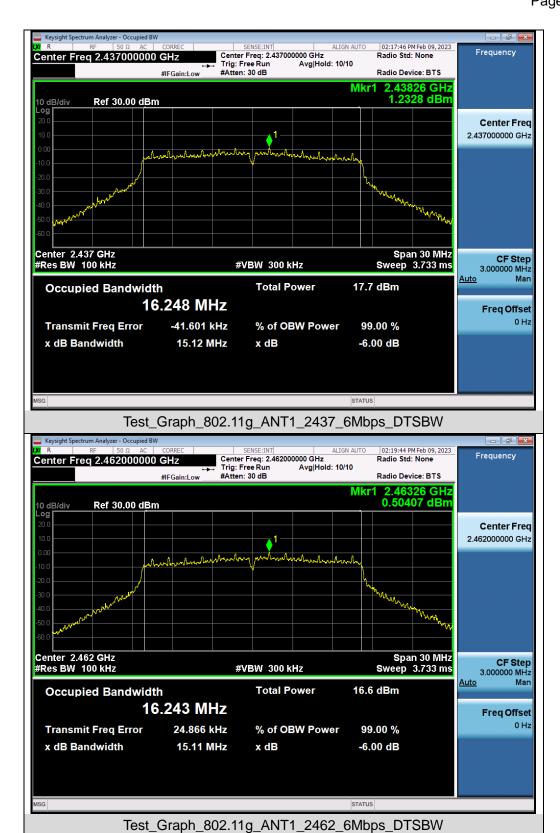
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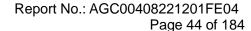




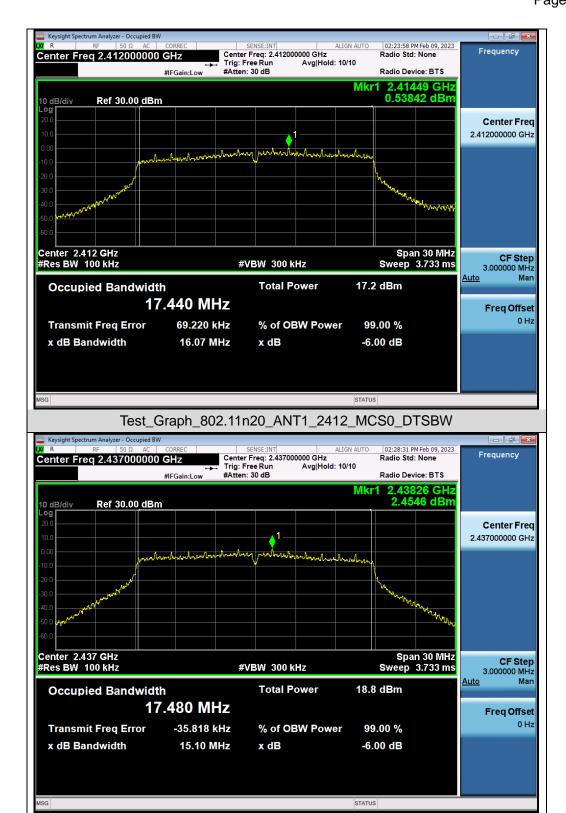






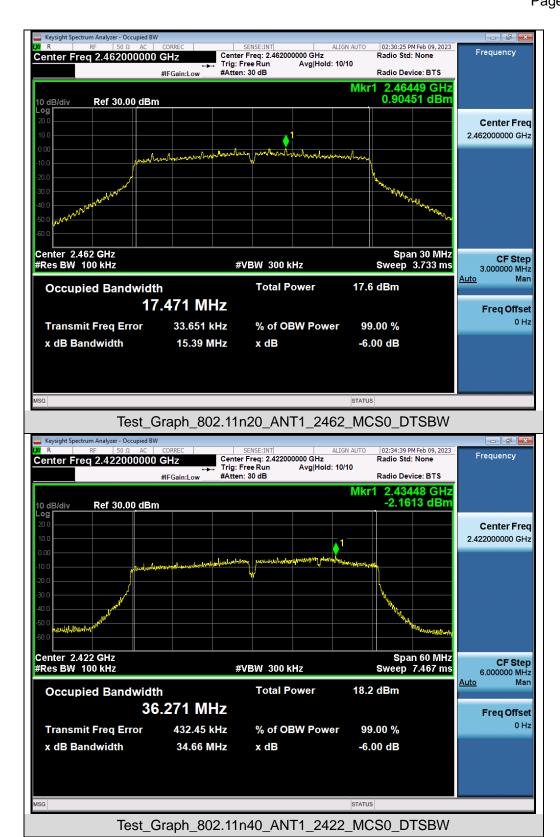


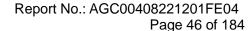




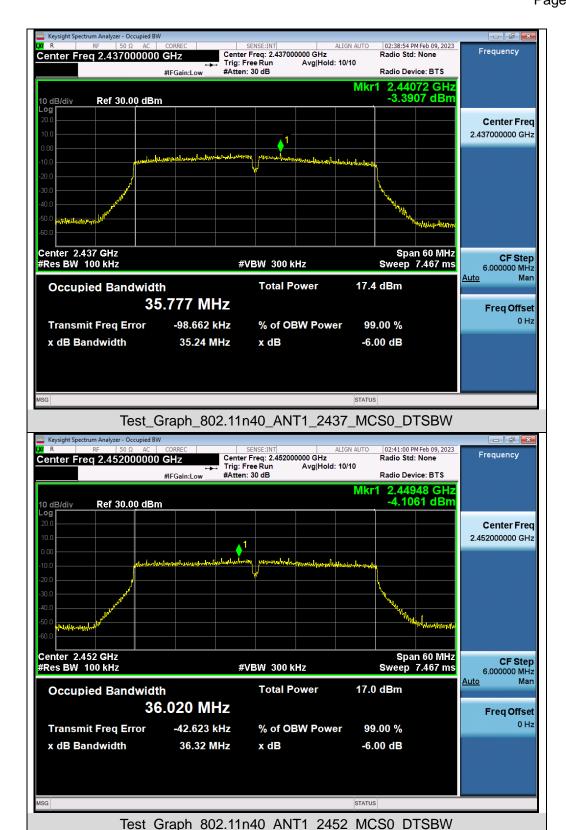
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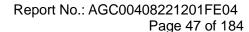




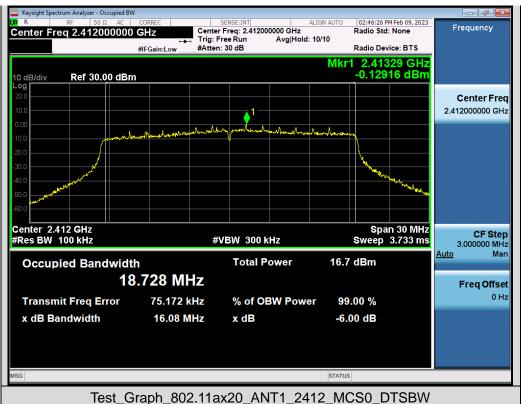


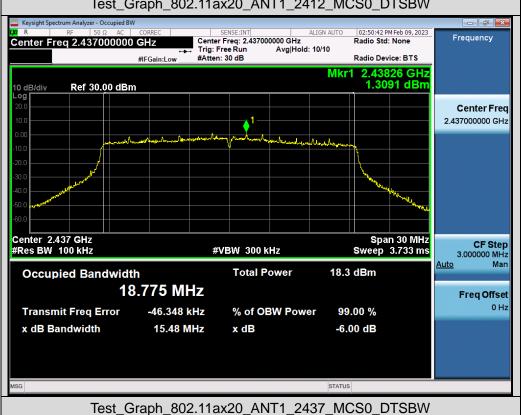


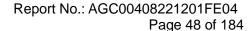






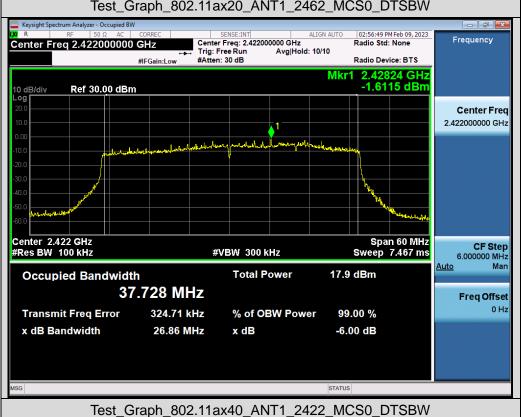


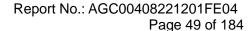






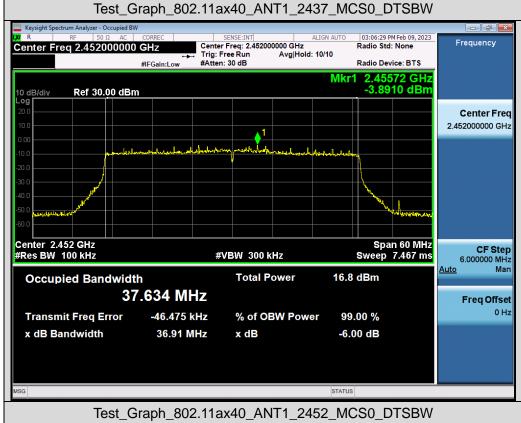








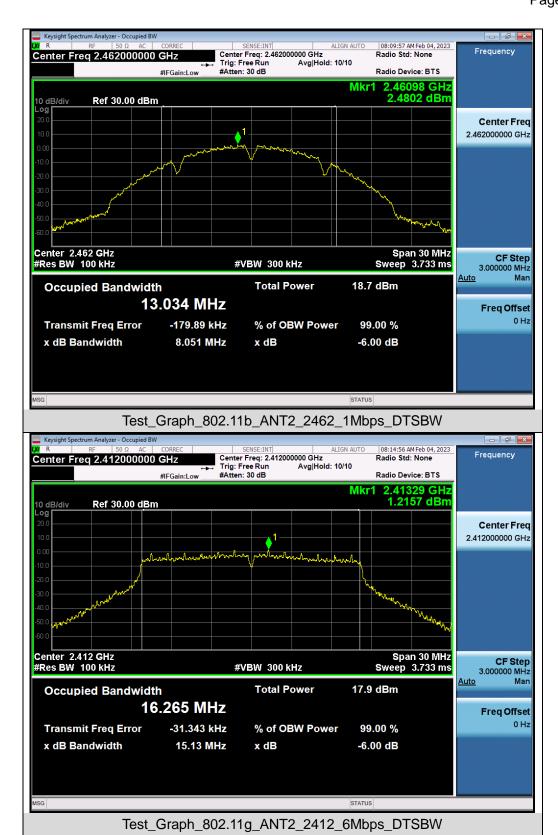


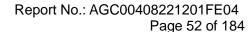






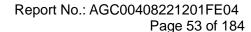




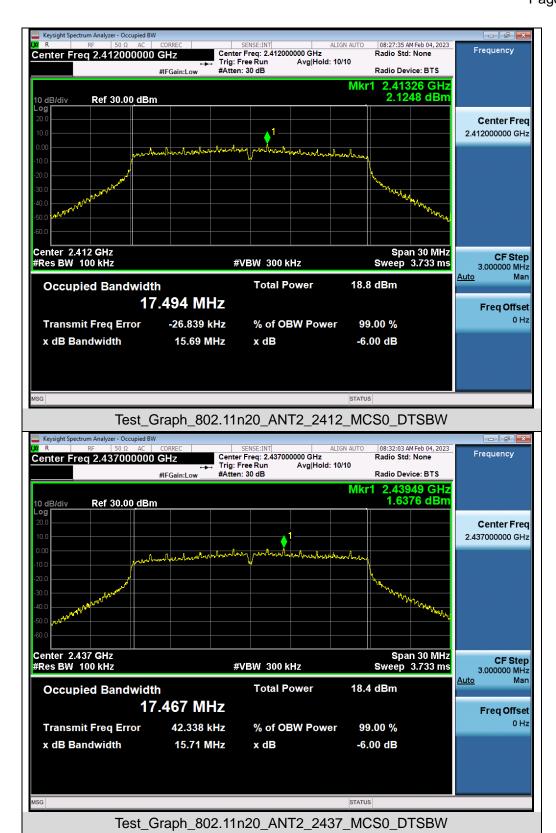


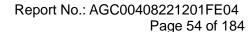






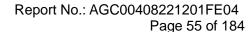




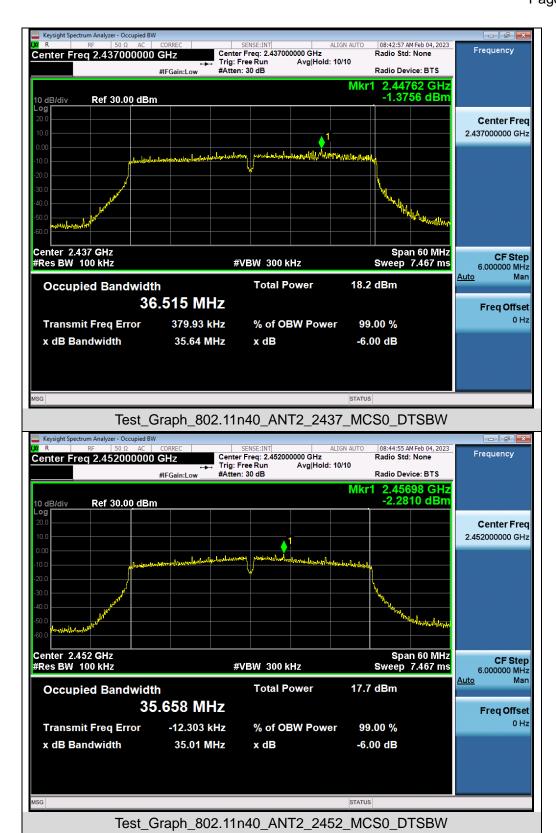










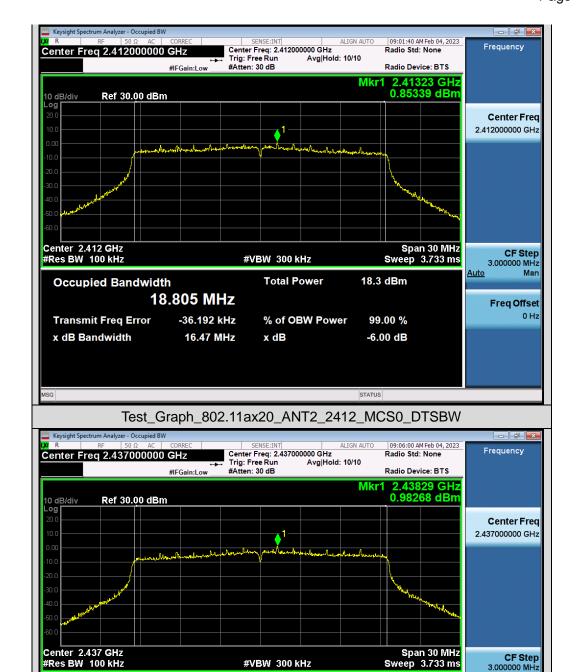


<u>Auto</u>

Mar

Freq Offset





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Test_Graph_802.11ax20_ANT2_2437 MCS0 DTSBW

Total Power

x dB

% of OBW Power

17.9 dBm

99.00 %

-6.00 dB

Occupied Bandwidth

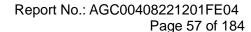
Transmit Freq Error

x dB Bandwidth

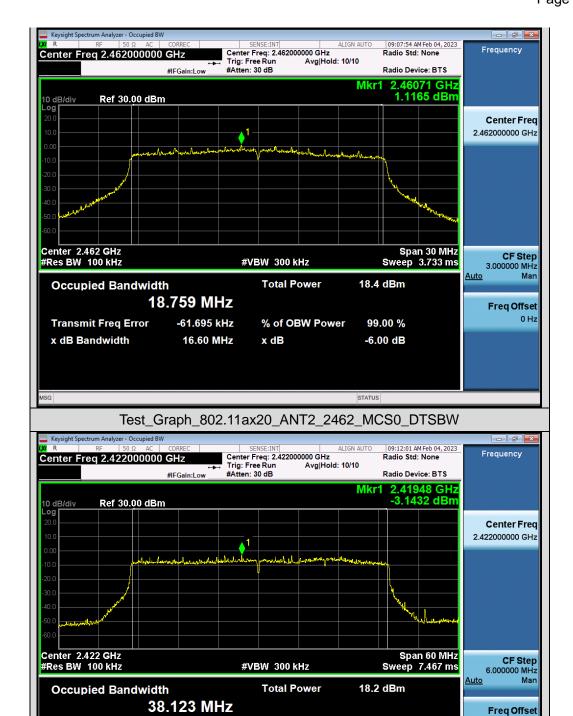
18.788 MHz

53.965 kHz

16.68 MHz







Test_Graph_802.11ax40_ANT2_2422 MCS0 DTSBW

% of OBW Power

x dB

99.00 %

-6.00 dB

Transmit Freq Error

x dB Bandwidth

200.30 kHz

38.04 MHz