FCC Test Report

Report No.: AGC11143221003FE05

FCC ID	:	2AYLN-N104
APPLICATION PURPOSE	:	Original Equipment
PRODUCT DESIGNATION	:	NewCube Mini PC
BRAND NAME	:	JWIPC
MODEL NAME	:	N104, N1040, N*********(*=A-Z, 0-9, character or blank)
APPLICANT	:	JWIPC TECHNOLOGY CO., LTD.
DATE OF ISSUE	:	Nov. 11, 2022
STANDARD(S) **TEST PROCEDURE(S)**	:	FCC Part 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	/	Nov. 11, 2022	Valid	Initial Release

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1. VERIFICATION OF CONFORMITY

Applicant	JWIPC TECHNOLOGY CO., LTD.
Address	13/F, Building B, Haisong Edifice, Tairan 9th Road, Futian District, Shenzhen, China
manufacturer	JWIPC TECHNOLOGY CO., LTD.
Address	13/F, Building B, Haisong Edifice, Tairan 9th Road, Futian District, Shenzhen, China
Factory	DONGGUAN SCD TECHNOLOGY CO., LTD.
Address	No.1 Longcheng 2nd Street, Qingxi Town, Dongguan City, Guangdong Province, China
Product Designation	NewCube Mini PC
Brand Name	JWIPC
Test Model	N104
Series Model	N1040, N*********(*=A-Z, 0-9, character or blank)
Declaration of Difference	Different CPU models, memory hard disk capacity is different
Date of receipt of test item	Oct. 08, 2022
Date of Test	Oct. 08, 2022~Nov. 11, 2022
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.

Prepared By	Bibo Zhang (Project Engineer)	Nov. 11, 2022
Reviewed By	Calvin Liu (Reviewer)	Nov. 11, 2022
Approved By	Max Zhang Authorized Officer	Nov. 11, 2022

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2. GENERAL INFORMATION

2.1. PRODUCT DESCRIPTION

The EUT is designed as “NewCube Mini PC”. It is designed by way of utilizing the DSSS and OFDM technology to achieve the system operation.

A major technical description of EUT is described as following

Equipment Type	WLAN 2.4G
Frequency Band	2400MHz ~ 2483.5MHz
Operation Frequency	2412MHz ~ 2462MHz
Output Power (Average)	IEEE 802.11b:12.63dBm; IEEE 802.11g:12.16dBm; IEEE 802.11n(HT20):11.87dBm; IEEE 802.11n(HT40):10.98dBm IEEE 802.11ax (HE20):11.39dBm; IEEE 802.11ax(HE40):10.58dBm
Output Power (Peak)	IEEE 802.11b:15.32dBm; IEEE 802.11g:19.08dBm; IEEE 802.11n(HT20):18.71dBm; IEEE 802.11n(HT40):18.41dBm IEEE 802.11ax (HE20):19.61dBm; IEEE 802.11ax(HE40):19.15dBm
Output Power (MIMO-Average)	IEEE 802.11n(HT20):14.60dBm; IEEE 802.11n(HT40):13.73dBm IEEE 802.11ax (HE20):14.07dBm; IEEE 802.11ax(HE40):13.25dBm
Output Power (MIMO-Peak)	IEEE 802.11n(HT20):21.44dBm; IEEE 802.11n(HT40):21.18dBm IEEE 802.11ax (HE20):22.29dBm; IEEE 802.11ax(HE40):21.72dBm
Modulation	802.11b:DSSS(DQPSK, DBPSK, CCK) 802.11g/n: OFDM(64-QAM, 16-QAM, QPSK, BPSK) 802.11ax:OFDMA(1024-QAM,256-QAM,64-QAM, 16-QAM, QPSK, BPSK)
Data Rate	802.11b: 1/2/5.5/11Mbps 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	IADPNS02-00
Software Version	Windows 11
Antenna Designation	PIFA Antenna (Comply with requirements of the FCC part 15.203)
Antenna Gain	Refer to Chapter 2.10 of the report.
Number of transmit chain	2(802.11b/g/n/ax all used two antennas,802.11n/ax support MIMO)
Power Supply	DC 19V

Note: Three adapters (DA-90J19, NB-65B19, SOY-1900342-327) and four CPU (I5-1235U, I3-1215U, I5-1240P, I7-1255U) were tested. The test records reported below are the worst results compared with other modes (DA-90J19 and I7-1255U).

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2.2. TABLE OF CARRIER FREQUENCYS

Frequency Band	Channel Number	Frequency
2400~2483.5MHZ	1	2412 MHZ
	2	2417 MHZ
	3	2422 MHZ
	4	2427 MHZ
	5	2432 MHZ
	6	2437 MHZ
	7	2442 MHZ
	8	2447 MHZ
	9	2452 MHZ
	10	2457 MHZ
	11	2462 MHZ

Note: For 20MHZ bandwidth system use Channel 1 to Channel 11. For 40MHZ bandwidth system use Channel 3 to Channel 9

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2.3. IEEE 802.11N MODULATION SCHEME

MCS Index	Nss	Modulation	R	NBPSC	NCBPS		NDBPS		Data rate(Mbps) 800nsGI	
					20MHz	40MHz	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

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2.4. IEEE 802.11AX MODULATION SCHEME

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

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

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

HE-MCS Index	DCM	Modulation	R	N_{BPSCS}	N_{SD}	N_{CBPS}	N_{DBPS}	Data rate (Mb/s)		
								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
	0		1/2		468	468	234	17.2	16.3	14.6
1	1	QPSK	1/2	2	234	468	234	17.2	16.3	14.6
	0		1/2		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	16-QAM	1/2	4	234	936	468	34.4	32.5	29.3
	0		1/2		468	1 872	936	68.8	65.0	58.5
4	1		3/4		234	936	702	51.6	48.8	43.9
	0		3/4		468	1 872	1 404	103.2	97.5	87.8
5	N/A	64-QAM	2/3	6	468	2 808	1 872	137.6	130.0	117.0
6			3/4				2 106	154.9	146.3	131.6
7			5/6				2 340	172.1	162.5	146.3
8		256-QAM	3/4	8		3 744	2 808	206.5	195.0	175.5
9			5/6				3 120	229.4	216.7	195.0
10		1024-QAM	3/4	10		4 680	3 510	258.1	243.8	219.4
11			5/6				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: 2AYLN-N104** filing to comply with the FCC Part 15 requirements.

2.6. TEST METHODOLOGY

KDB 558074 D01 15.247 Meas Guidance v05: Guidance for compliance measurements on Digital transmission system, frequency hopping spread spectrum system, and hybrid system devices operating under section 15.247 of the FCC rules
ANSI C63.10:2013: American National Standard for Testing Unlicensed Wireless Devices

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

This intentional radiator is designed with a permanently attached antenna of an antenna to ensure that no antenna other than that furnished by the responsible party shall be used with the device.
For more information of the antenna, please refer to the APPENDIX B: PHOTOGRAPHS OF EUT.

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2.10. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna Type	Frequency Band (MHz)	TX Paths	Bandwidth (MHz)	Max Peak Gain (dBi)		Max Directional Gain (dBi)
				Ant 1	Ant 2	
2.4GWIFI PCB Antenna List (2.4GHz 2*2 MIMO)						
PIFA Antenna	2400~2483.5	2	20, 40	2.20	1.95	5.21

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, G_{ANT}, Directional gain = G_{ANT} + 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 $N_{ANT} \leq 4$;

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

  Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less, for 20 MHz channel widths with $N_{ANT} \geq 5$.

If antenna gains are not equal, Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} 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 = ±3.1 dB
Uncertainty of Radiated Emission below 1GHz	U_c = ±4.0 dB
Uncertainty of Radiated Emission above 1GHz	U_c = ±4.8 dB
Uncertainty of total RF power, conducted	U_c = ±0.8 dB
Uncertainty of RF power density, conducted	U_c = ±2.6 dB
Uncertainty of spurious emissions, conducted	U_c = ±2 %
Uncertainty of Occupied Channel Bandwidth	U_c = ±2 %

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4. DESCRIPTION OF TEST MODES

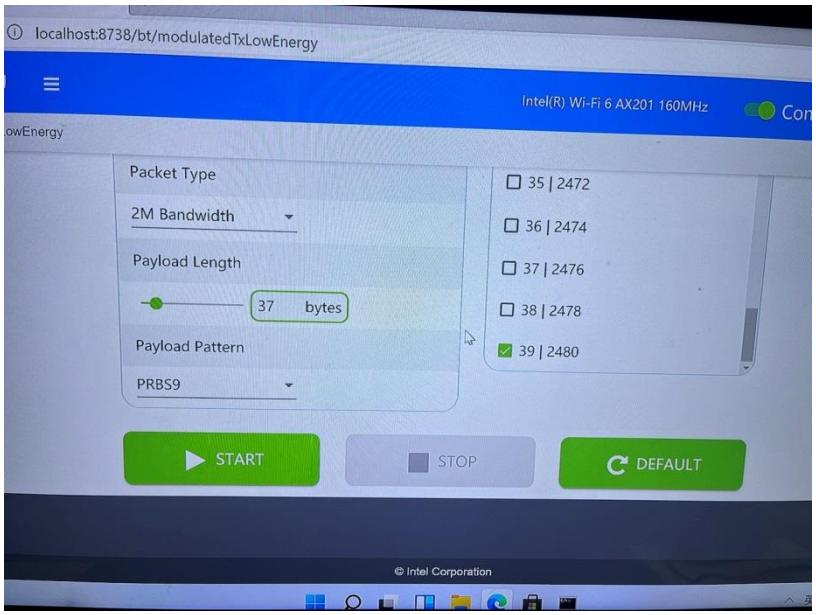
NO.	TEST MODE DESCRIPTION
1	Low channel transmitting (TX)
2	Middle channel transmitting (TX)
3	High channel transmitting (TX)

Note:
Transmit by 802.11b with Date rate (1/2/5.5/11)
Transmit by 802.11g with Date rate (6/9/12/18/24/36/48/54)
Transmit by 802.11n (20MHz) with Date rate (6.5/13/19.5/26/39/52/58.5/65)
Transmit by 802.11n (40MHz) with Date rate (13.5/27/40.5/54/81/108/121.5/135)
Transmit by 802.11ax(20MHz) with Date rate MCS0-MCS11
Transmit by 802.11ax(40MHz) with Date rate MCS0-MCS11
The test channel for 20MHZ bandwidth system is channel 1, 6 and 11.
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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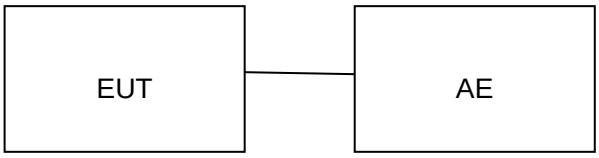
5. SYSTEM TEST CONFIGURATION

5.1. CONFIGURATION OF EUT SYSTEM

Configure:



5.2. EQUIPMENT USED IN EUT SYSTEM

Item	Equipment	Model No.	ID or Specification	Remark
1	NewCube Mini PC	N104	2AYLN-N104	EUT
2	Adapter 1	DA-90J19	Input: AC 100-240V 50-60Hz, 1.5A Max Output: DC 19V 4.74A	AE
3	Adapter 2	NB-65B19	Input: AC 100-240V 50-60Hz, 1.5A Max Output: DC 19V 3.42A	AE
4	Adapter 3	SOY-1900342-327	Input: AC 100-240V 50-60Hz, 1.5A Max Output: DC 19V 3.42A	AE

5.3. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
§15.247	RF Output Power	Compliant
§15.247	6 dB Bandwidth	Compliant
§15.247	Conducted Spurious Emission	Compliant
§15.247	Maximum Conducted Output Power Spectral Density	Compliant
§15.209	Radiated Emission	Compliant
§15.247	Band Edges	Compliant
§15.207	Line Conduction Emission	Compliant

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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	Nov. 17, 2021	Nov. 16, 2022
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	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	Apr. 23, 2021	Apr. 22, 2023
Broadband Preamplifier	ETS LINDGREN	3117PA	00225134	Sep. 01, 2022	Aug. 31, 2023
ANTENNA	SCHWARZBECK	VULB9168	494	Jan. 08, 2021	Jan. 07, 2023
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

According to Section (b)(3) of the FCC PART15.247 standard:

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

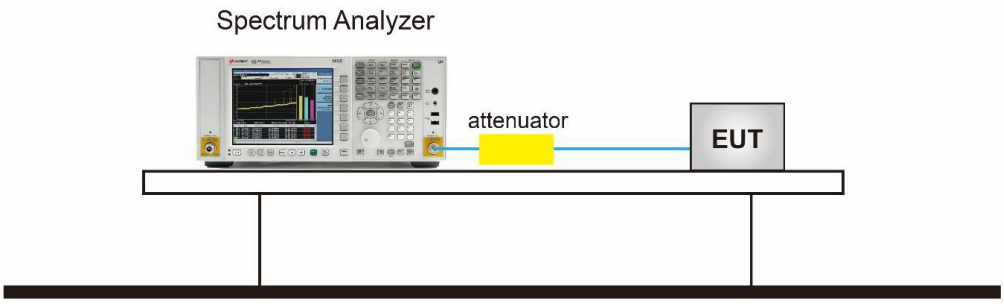
☒For peak power test:

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the RBW = 1 MHz.
3. Set the VBW ≥ [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.

☒For Average power test:

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.
9. 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. LIMITS AND MEASUREMENT RESULT

Test Data of Conducted Output Power-ANT 1					
Test Mode	Test Channel (MHz)	Average Power (dBm)	Peak Power (dBm)	Limits (dBm)	Pass or Fail
802.11b	2412	12.37	14.99	≤30	Pass
	2437	12.29	14.99	≤30	Pass
	2462	**12.46**	15.10	≤30	Pass
802.11g	2412	11.44	18.35	≤30	Pass
	2437	11.32	18.27	≤30	Pass
	2462	11.48	18.39	≤30	Pass
802.11n20	2412	11.28	18.06	≤30	Pass
	2437	11.20	18.03	≤30	Pass
	2462	11.28	18.12	≤30	Pass
802.11n40	2422	10.38	17.85	≤30	Pass
	2437	10.38	17.85	≤30	Pass
	2452	10.45	17.91	≤30	Pass
802.11ax20	2412	10.70	19.11	≤30	Pass
	2437	10.61	18.82	≤30	Pass
	2462	10.71	18.93	≤30	Pass
802.11ax40	2422	9.95	18.27	≤30	Pass
	2437	9.73	18.17	≤30	Pass
	2452	9.87	18.22	≤30	Pass

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Test Data of Conducted Output Power-ANT 2					
Test Mode	Test Channel (MHz)	Average Power (dBm)	Peak Power (dBm)	Limits (dBm)	Pass or Fail
802.11b	2412	12.11	14.76	≤30	Pass
	2437	12.45	15.05	≤30	Pass
	2462	**12.63**	15.32	≤30	Pass
802.11g	2412	11.62	18.49	≤30	Pass
	2437	11.87	18.80	≤30	Pass
	2462	12.16	19.08	≤30	Pass
802.11n20	2412	11.35	18.24	≤30	Pass
	2437	11.67	18.52	≤30	Pass
	2462	11.87	18.71	≤30	Pass
802.11n40	2422	10.63	18.11	≤30	Pass
	2437	10.77	18.25	≤30	Pass
	2452	10.98	18.41	≤30	Pass
802.11ax20	2412	10.93	19.09	≤30	Pass
	2437	11.16	19.56	≤30	Pass
	2462	11.39	19.61	≤30	Pass
802.11ax40	2422	10.32	18.97	≤30	Pass
	2437	10.42	19.08	≤30	Pass
	2452	10.58	19.15	≤30	Pass

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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	14.33	21.16	≤30	Pass
	2437	14.45	21.29	≤30	Pass
	2462	**14.60**	21.44	≤30	Pass
802.11n40	2422	13.52	20.99	≤30	Pass
	2437	13.59	21.06	≤30	Pass
	2452	13.73	21.18	≤30	Pass
802.11ax20	2412	13.83	22.11	≤30	Pass
	2437	13.90	22.22	≤30	Pass
	2462	14.07	22.29	≤30	Pass
802.11ax40	2422	13.15	21.64	≤30	Pass
	2437	13.10	21.66	≤30	Pass
	2452	13.25	21.72	≤30	Pass

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8. 6DB BANDWIDTH MEASUREMENT

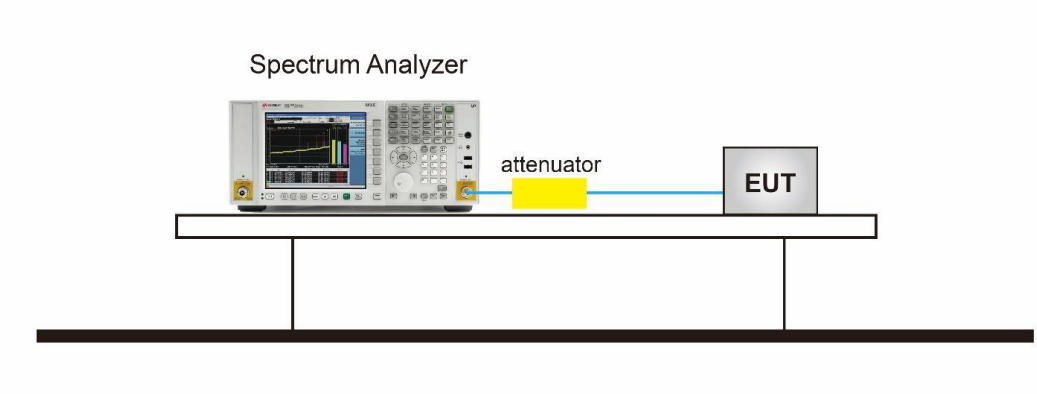
8.1 MEASUREMENT LIMITS

The minimum 6dB bandwidth shall be at least 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	13.387	10.110	≥0.5	Pass
	2437	13.369	10.105	≥0.5	Pass
	2462	13.365	10.111	≥0.5	Pass
802.11g	2412	16.576	15.122	≥0.5	Pass
	2437	16.575	15.122	≥0.5	Pass
	2462	16.581	15.124	≥0.5	Pass
802.11n20	2412	17.720	15.121	≥0.5	Pass
	2437	17.727	15.123	≥0.5	Pass
	2462	17.690	15.125	≥0.5	Pass
802.11n40	2422	35.942	35.079	≥0.5	Pass
	2437	35.923	35.088	≥0.5	Pass
	2452	35.951	35.088	≥0.5	Pass
802.11ax20	2412	18.864	16.083	≥0.5	Pass
	2437	18.856	15.210	≥0.5	Pass
	2462	18.881	15.217	≥0.5	Pass
802.11ax40	2422	37.432	35.431	≥0.5	Pass
	2437	37.399	35.124	≥0.5	Pass
	2452	37.418	35.102	≥0.5	Pass

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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
802.11b	2412	13.250	10.108	≥0.5	Pass
	2437	13.376	10.111	≥0.5	Pass
	2462	13.408	10.114	≥0.5	Pass
802.11g	2412	16.557	15.120	≥0.5	Pass
	2437	16.579	15.124	≥0.5	Pass
	2462	16.612	15.124	≥0.5	Pass
802.11n20	2412	17.678	15.123	≥0.5	Pass
	2437	17.723	15.125	≥0.5	Pass
	2462	17.713	15.126	≥0.5	Pass
802.11n40	2422	35.946	35.070	≥0.5	Pass
	2437	35.971	35.087	≥0.5	Pass
	2452	35.997	35.086	≥0.5	Pass
802.11ax20	2412	18.863	15.124	≥0.5	Pass
	2437	18.870	16.269	≥0.5	Pass
	2462	18.893	15.129	≥0.5	Pass
802.11ax40	2422	37.433	35.774	≥0.5	Pass
	2437	37.504	35.094	≥0.5	Pass
	2452	37.496	35.095	≥0.5	Pass

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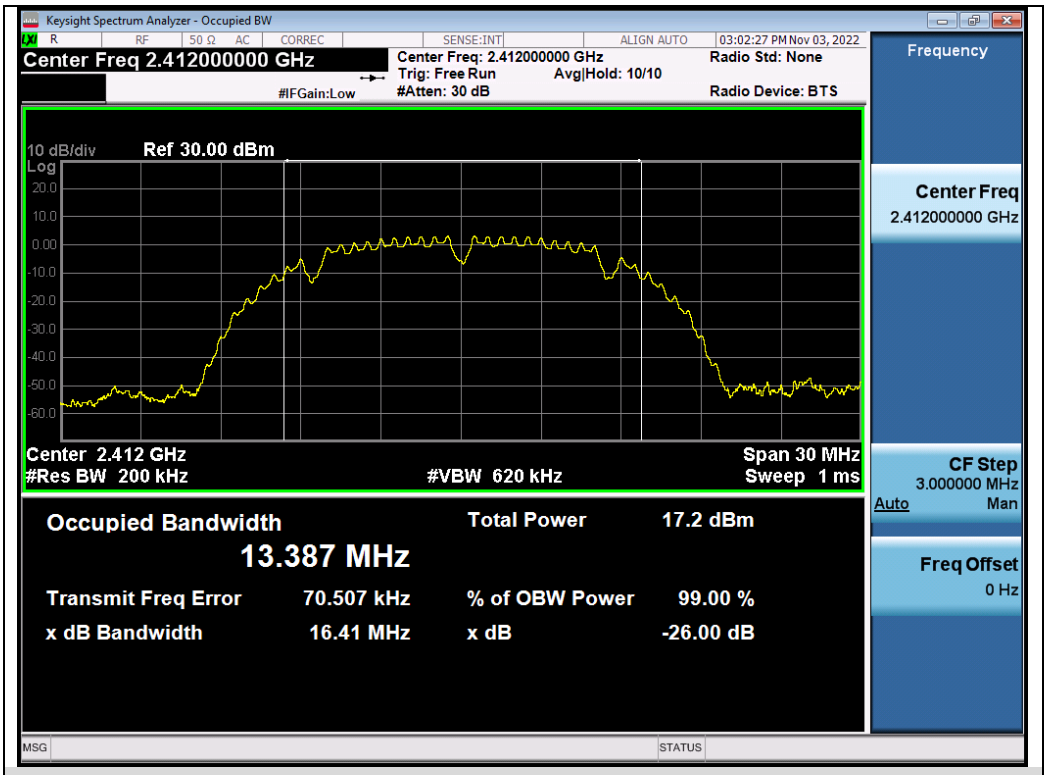
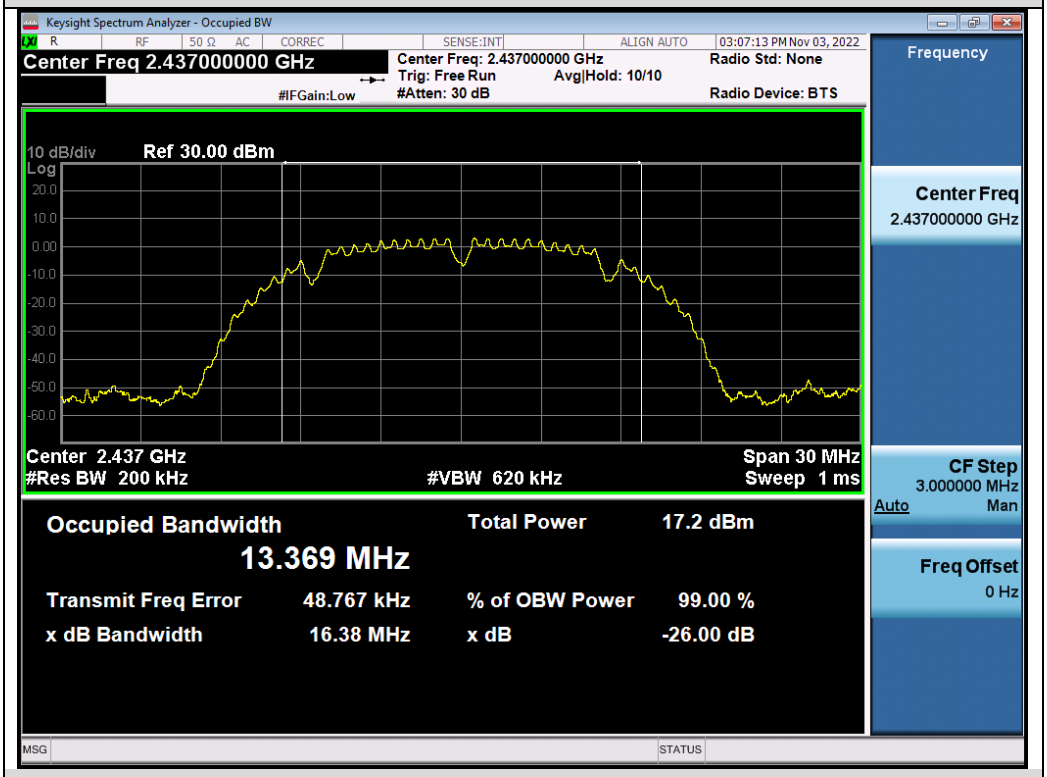
Test Graphs of Occupied Bandwidth-ANT 1



Test_Graph_802.11b_ANT1_2412_1Mbps_OBW



Test_Graph_802.11b_ANT1_2437_1Mbps_OBW

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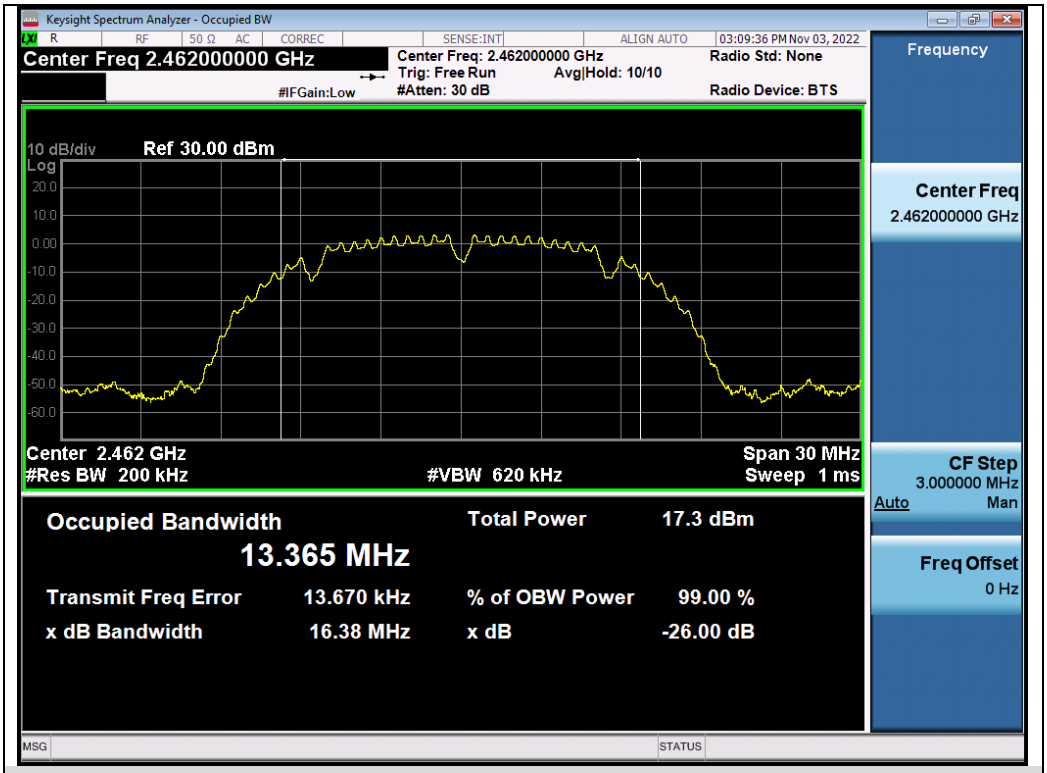

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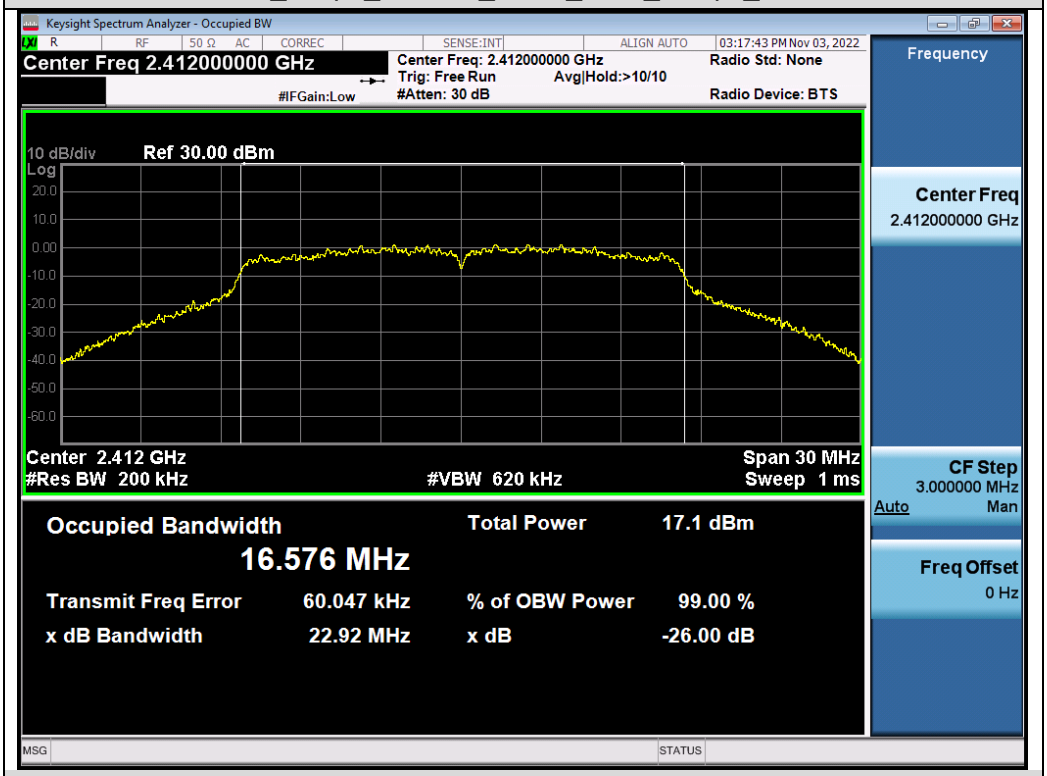

Test_Graph_802.11g_ANT1_2412_6Mbps_OBW

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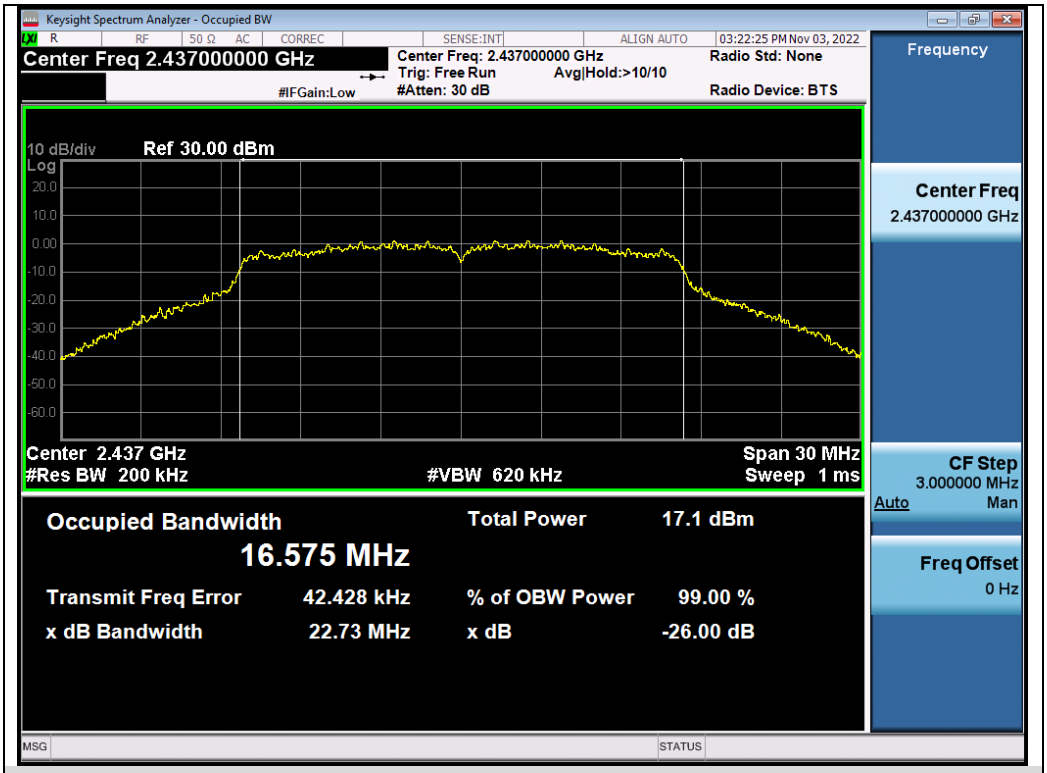

Test_Graph_802.11g_ANT1_2437_6Mbps_OBW

Test_Graph_802.11g_ANT1_2462_6Mbps_OBW

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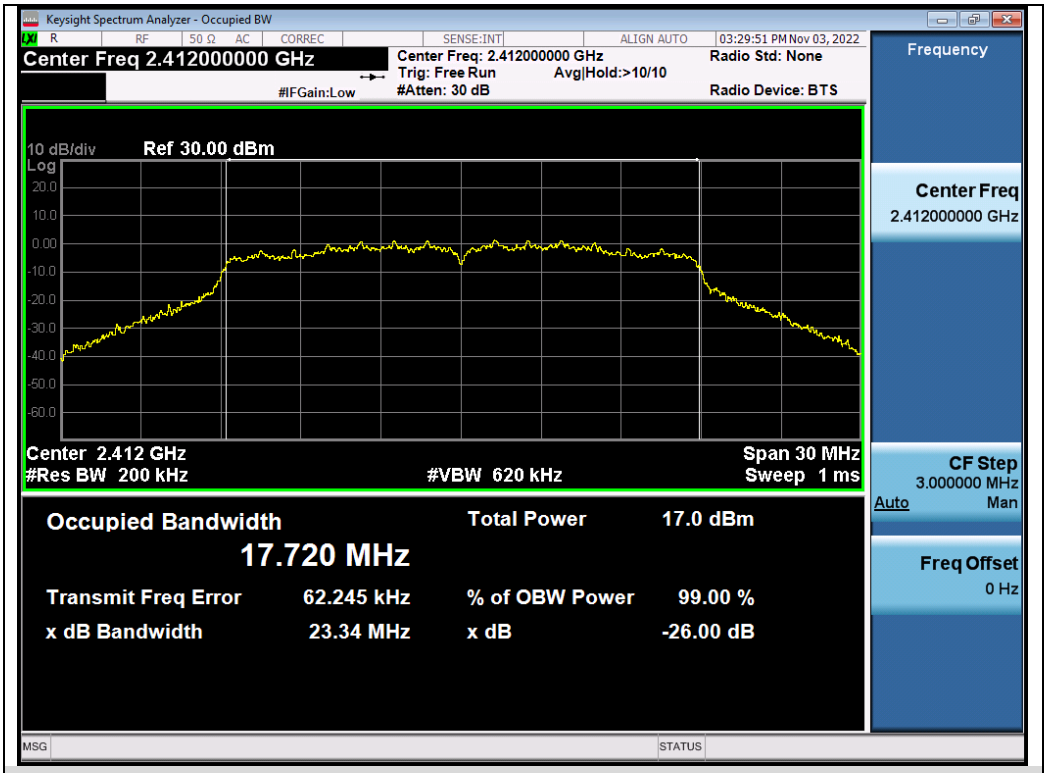

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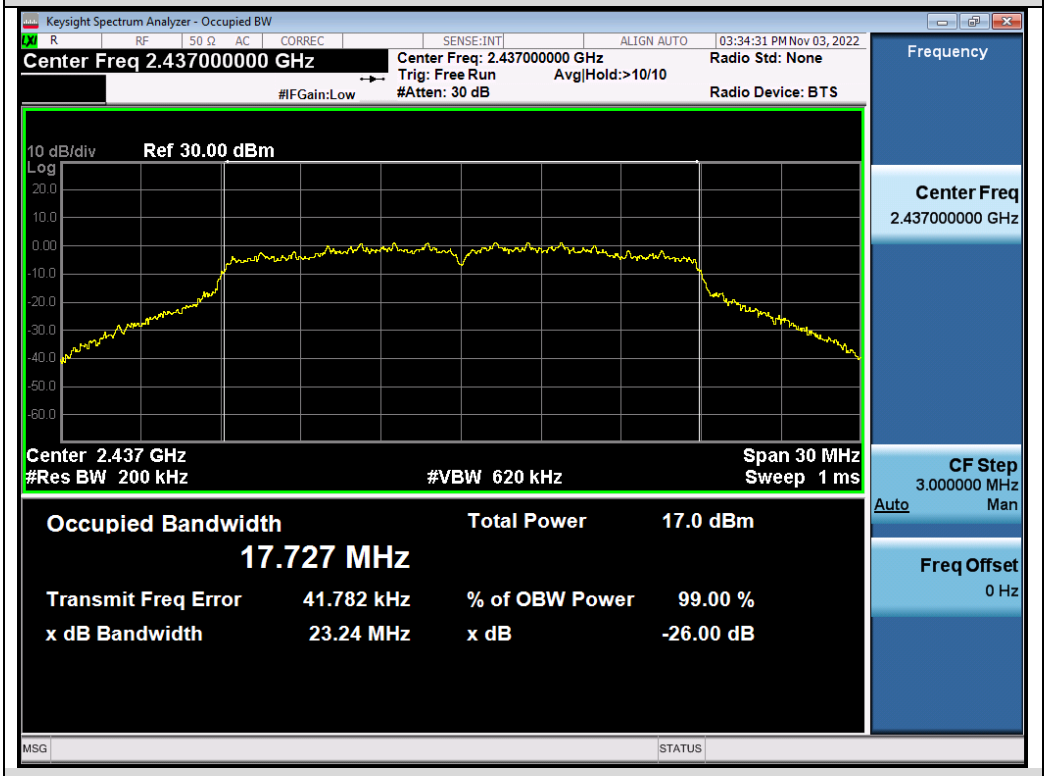

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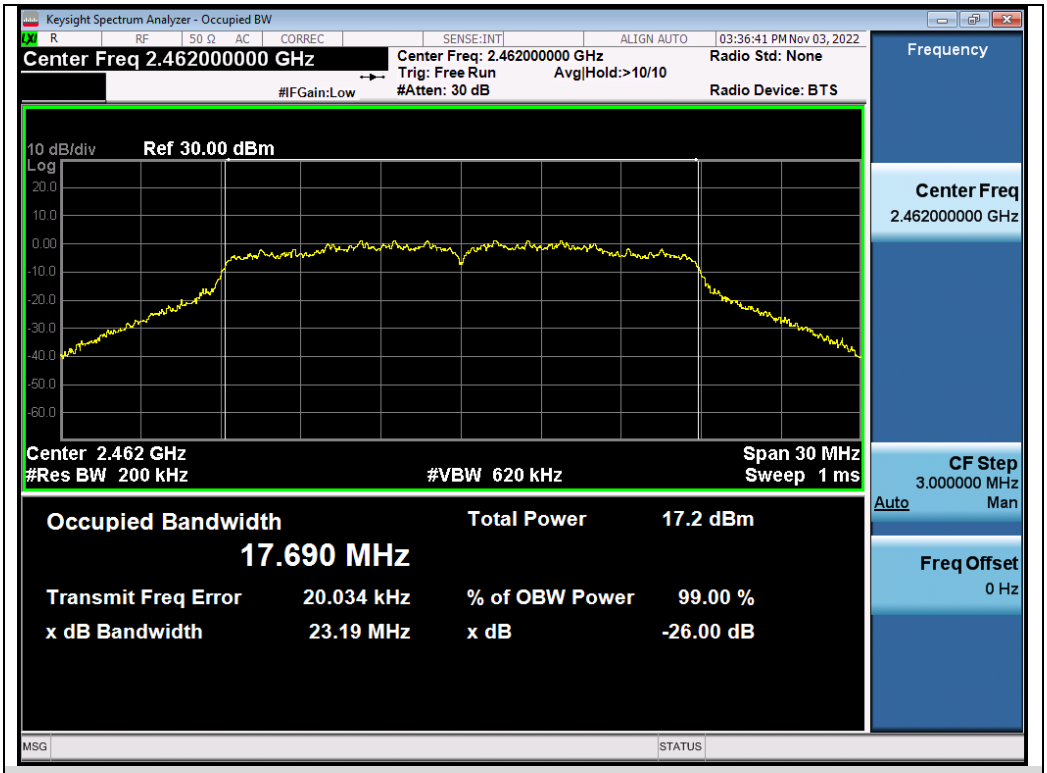

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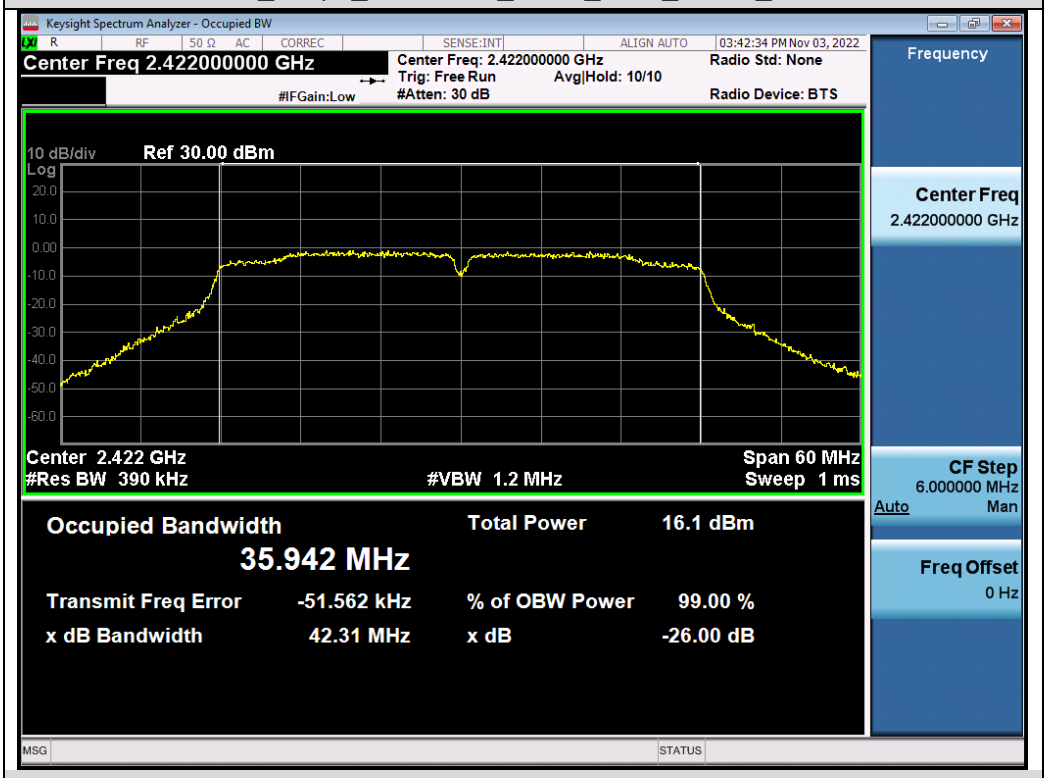

Test_Graph_802.11n40_ANT1_2422_MCS0_OBW

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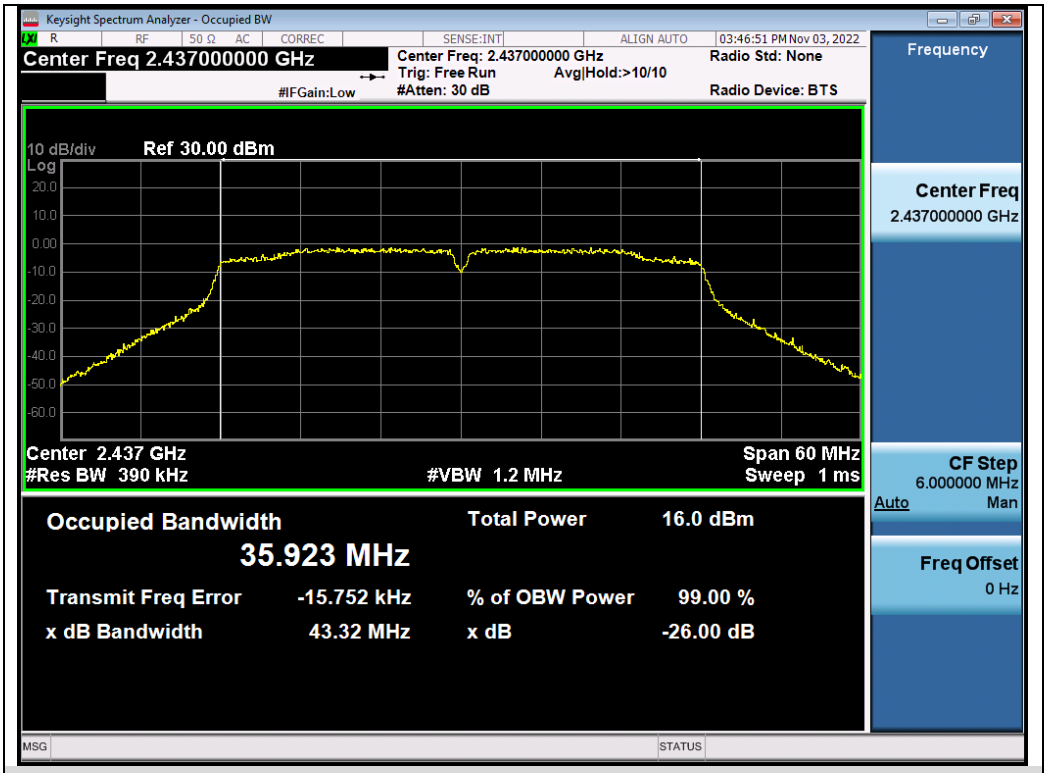

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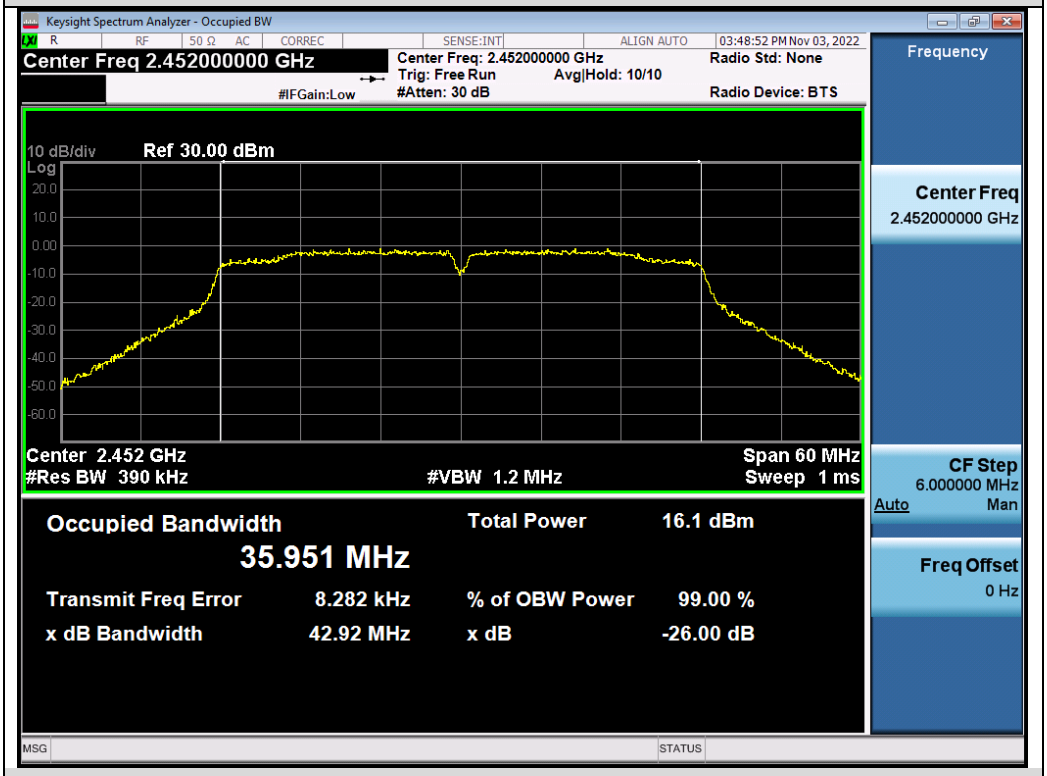

Test_Graph_802.11n40_ANT1_2452_MCS0_OBW

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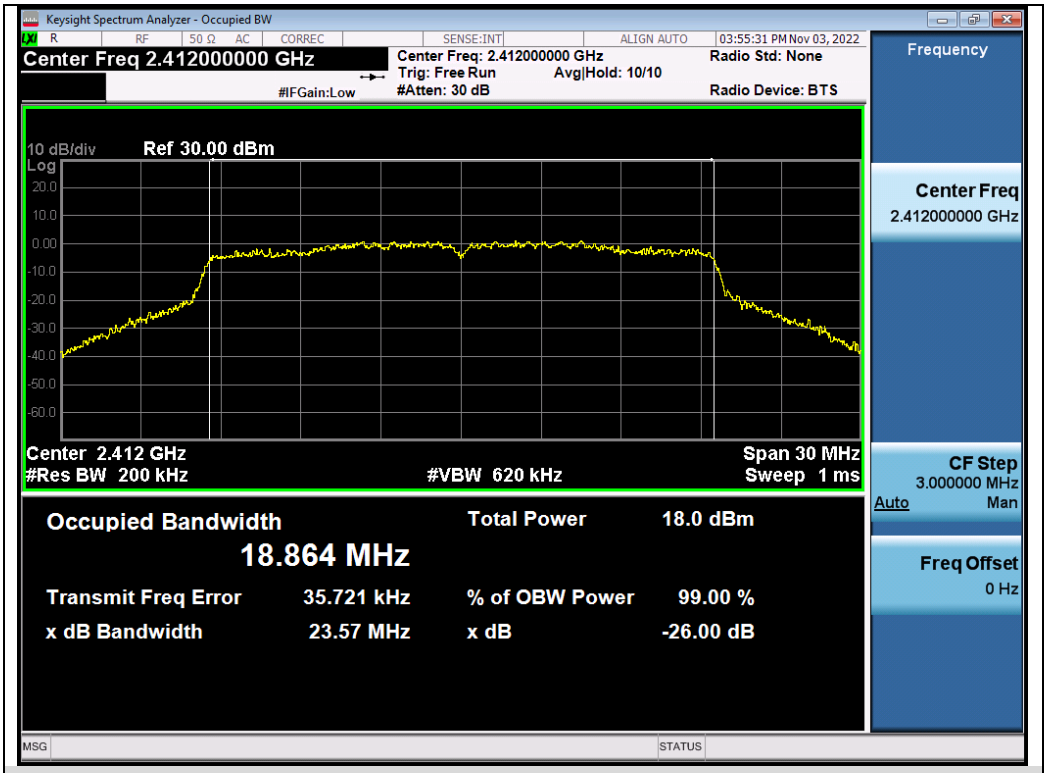

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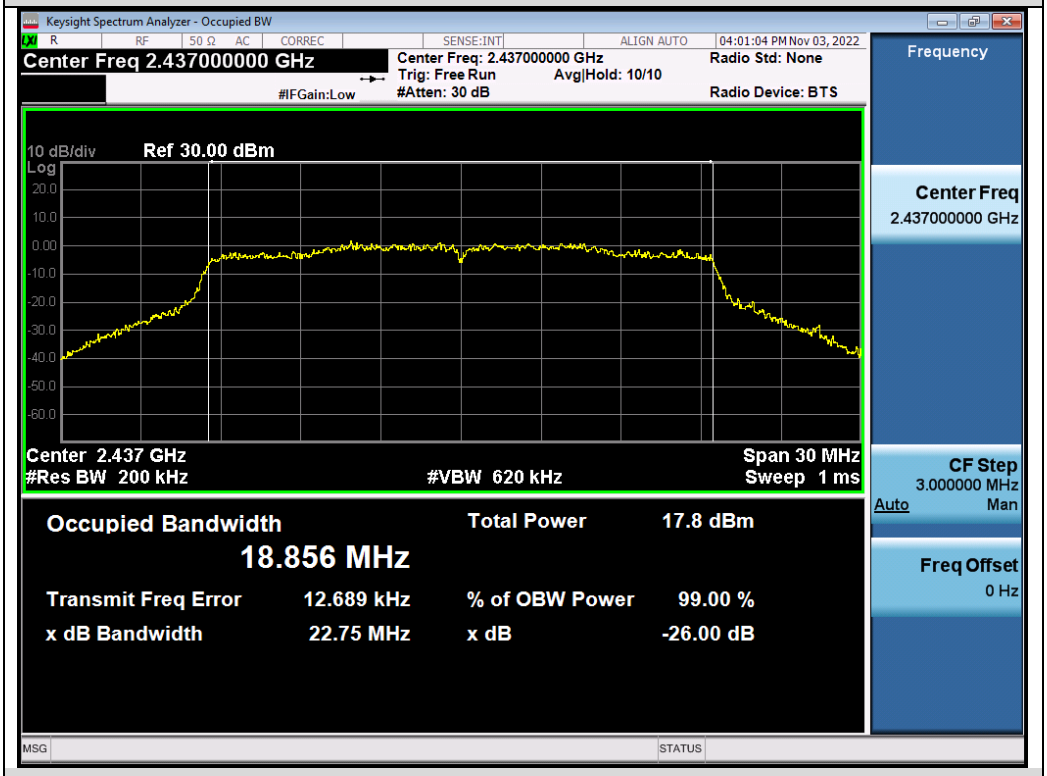

Test_Graph_802.11ax20_ANT1_2437_MCS0_OBW

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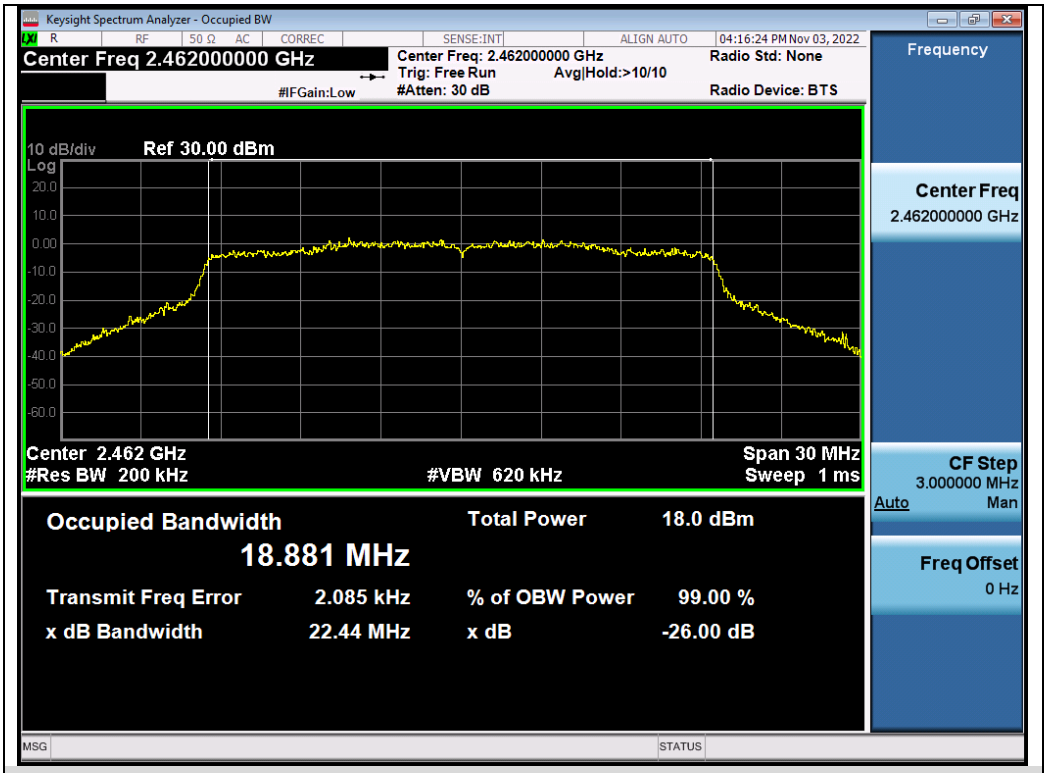
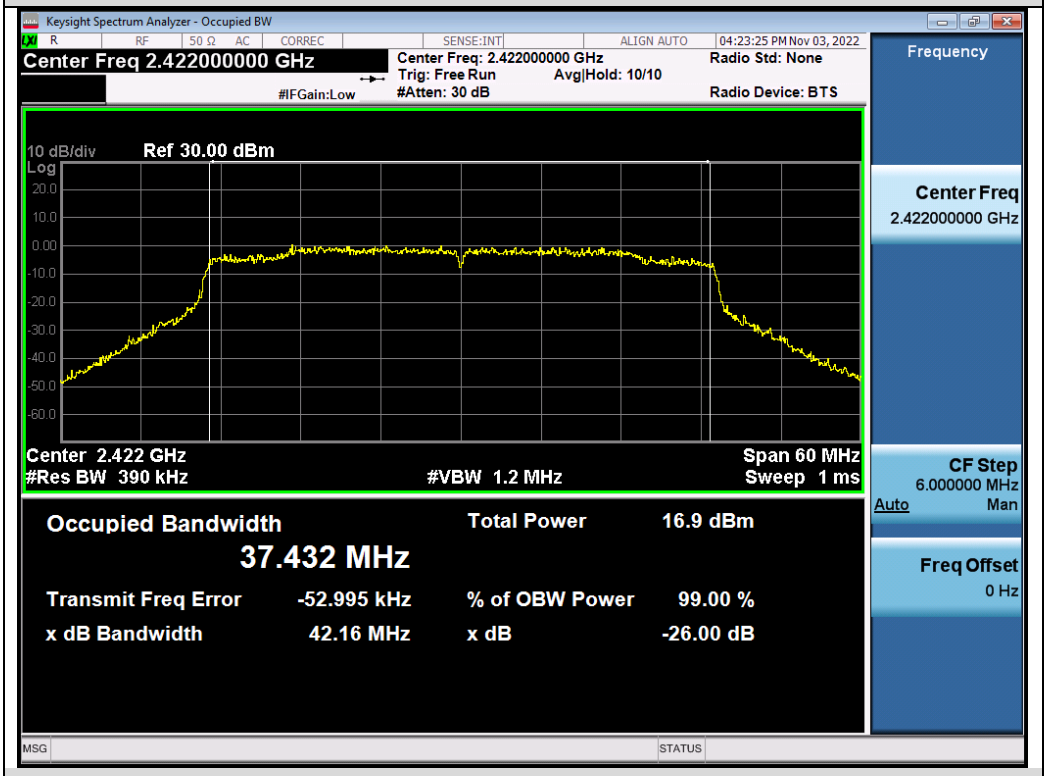


Test_Graph_802.11ax20_ANT1_2462_MCS0_OBW



Test_Graph_802.11ax40_ANT1_2422_MCS0_OBW

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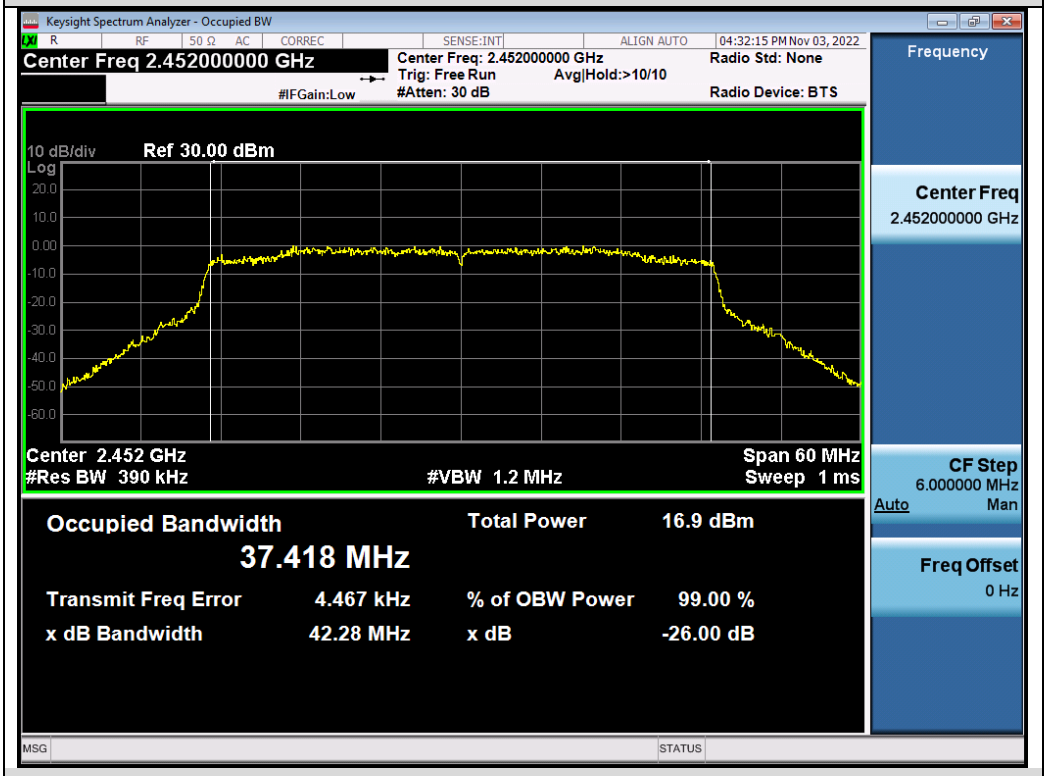
Test_Graph_802.11ax40_ANT1_2437_MCS0_OBW



Test_Graph_802.11ax40_ANT1_2452_MCS0_OBW

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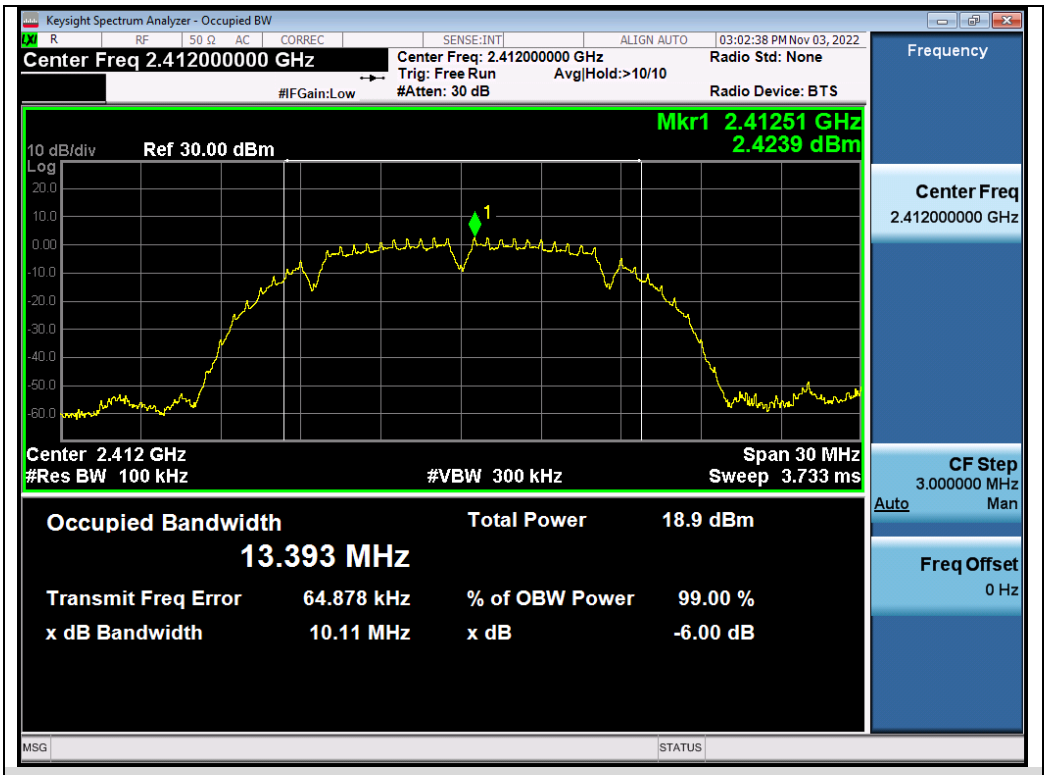
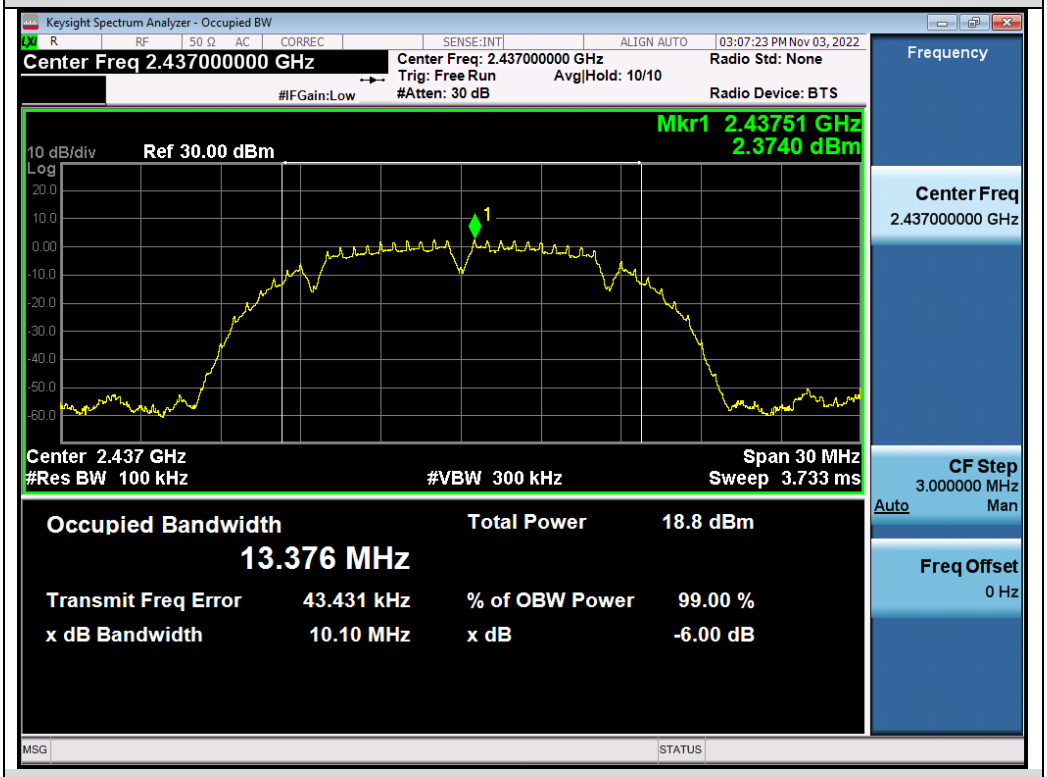
Test Graphs of DTS Bandwidth



Test_Graph_802.11b_ANT1_2412_1Mbps_DTSBW



Test_Graph_802.11b_ANT1_2437_1Mbps_DTSBW

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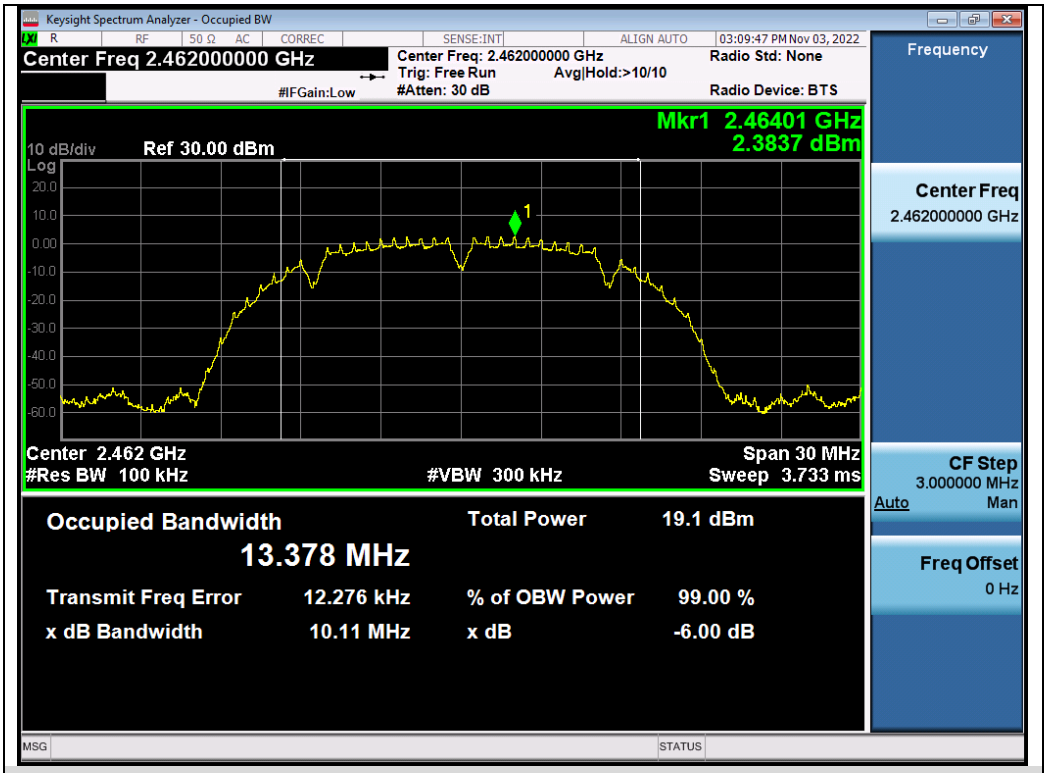

Test_Graph_802.11b_ANT1_2462_1Mbps_DTSBW

Test_Graph_802.11g_ANT1_2412_6Mbps_DTSBW

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Test_Graph_802.11g_ANT1_2437_6Mbps_DTSBW

Test_Graph_802.11g_ANT1_2462_6Mbps_DTSBW

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Test_Graph_802.11n20_ANT1_2412_MCS0_DTSBW

Test_Graph_802.11n20_ANT1_2437_MCS0_DTSBW

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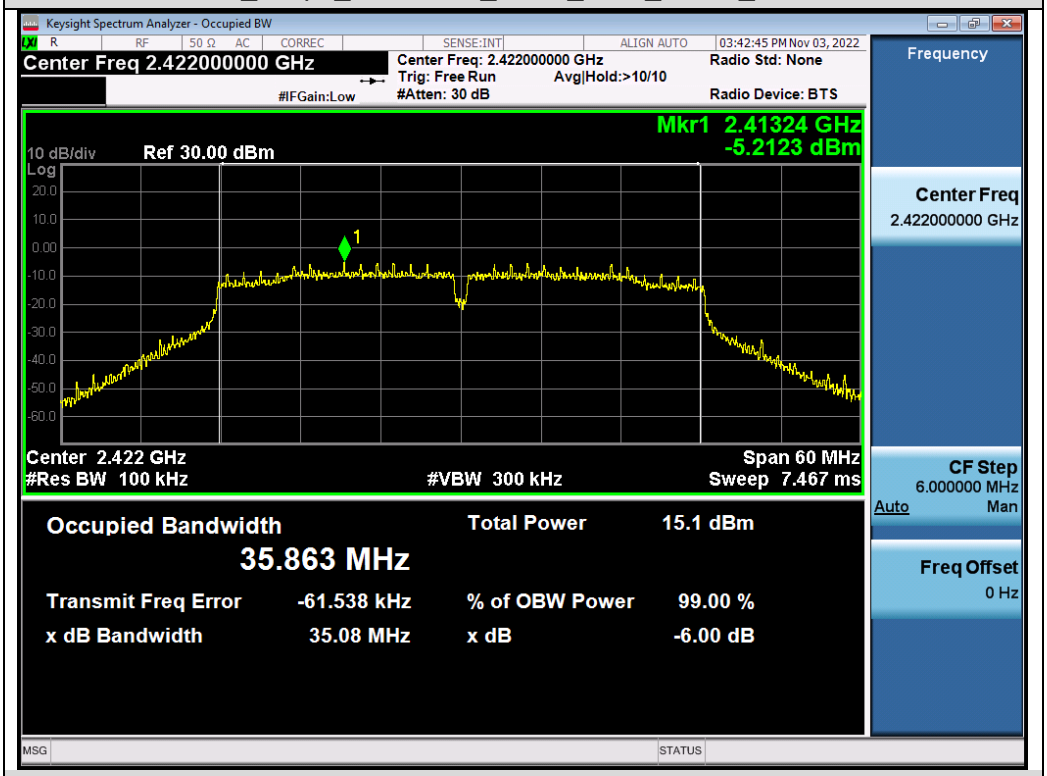
Test_Graph_802.11n20_ANT1_2462_MCS0_DTSBW



Test_Graph_802.11n40_ANT1_2422_MCS0_DTSBW

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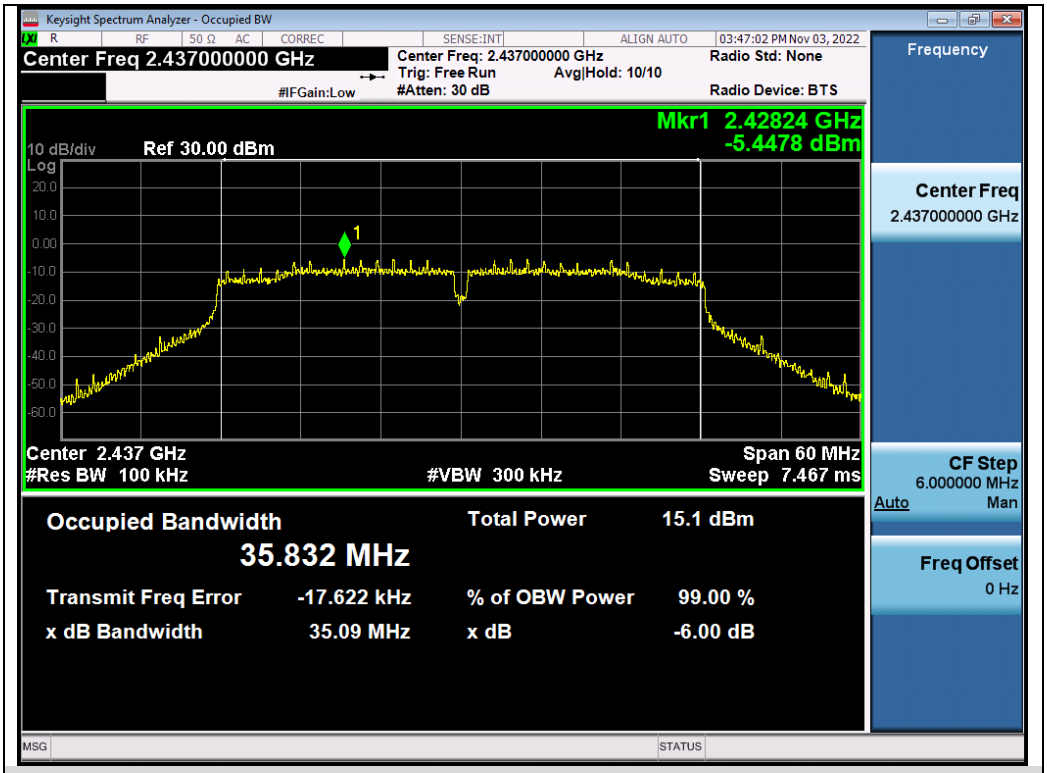

Test_Graph_802.11n40_ANT1_2437_MCS0_DTSBW

Test_Graph_802.11n40_ANT1_2452_MCS0_DTSBW

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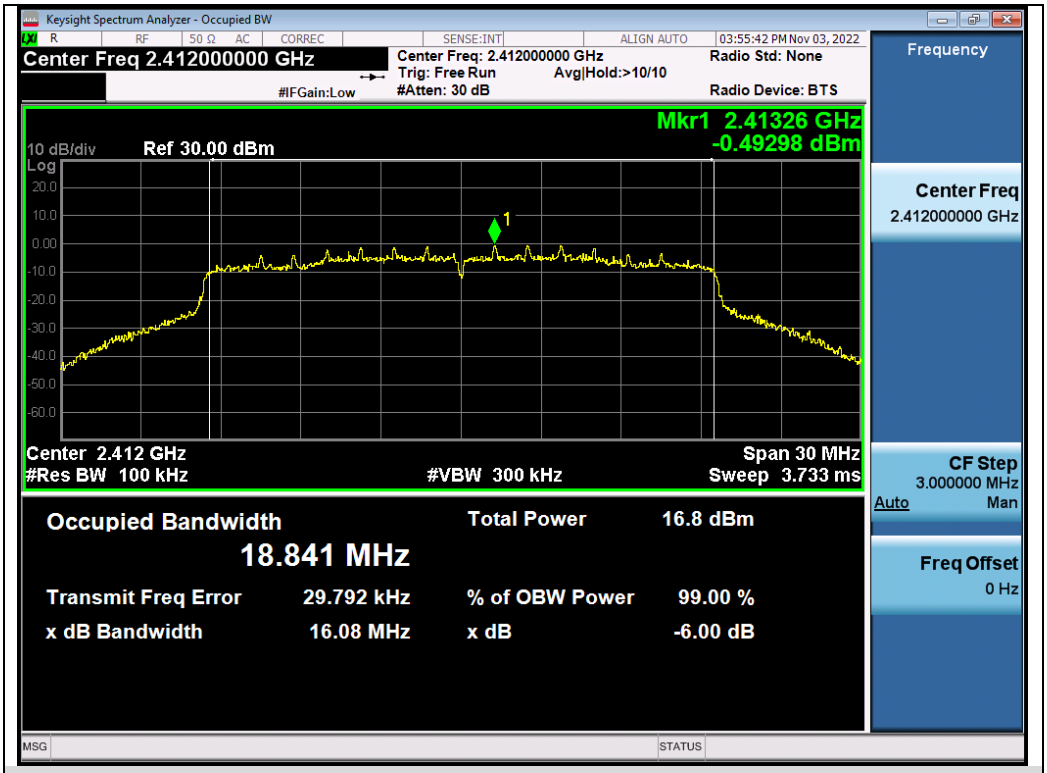

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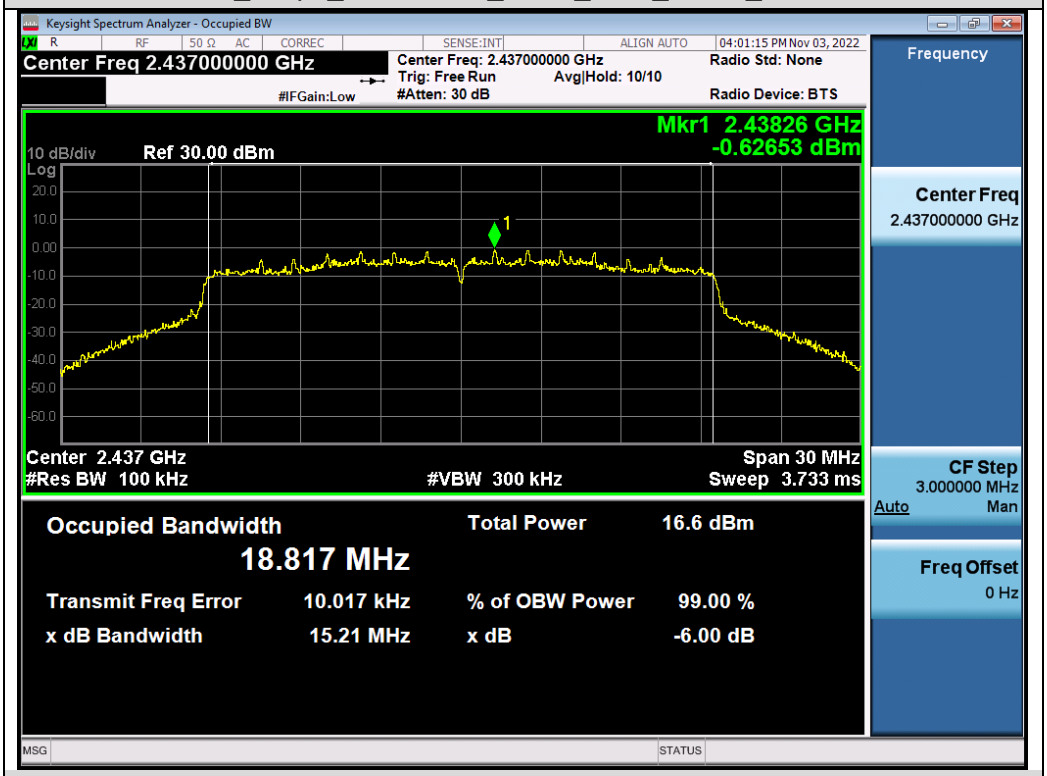

Test_Graph_802.11ax20_ANT1_2437_MCS0_DTSBW

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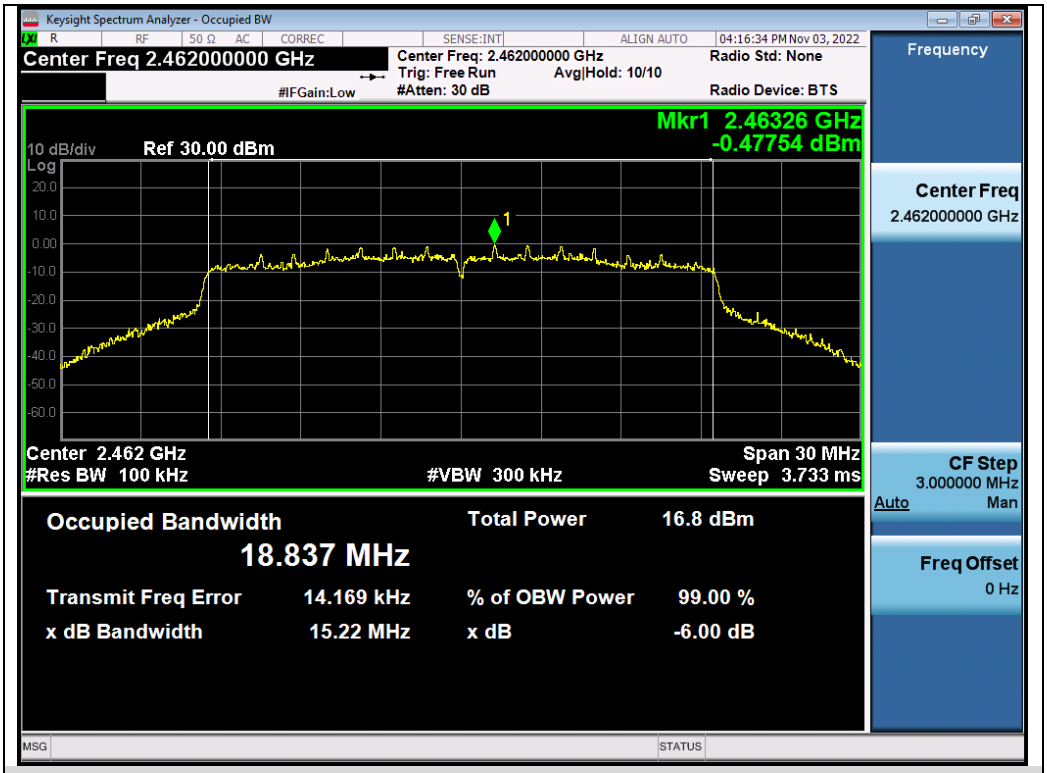
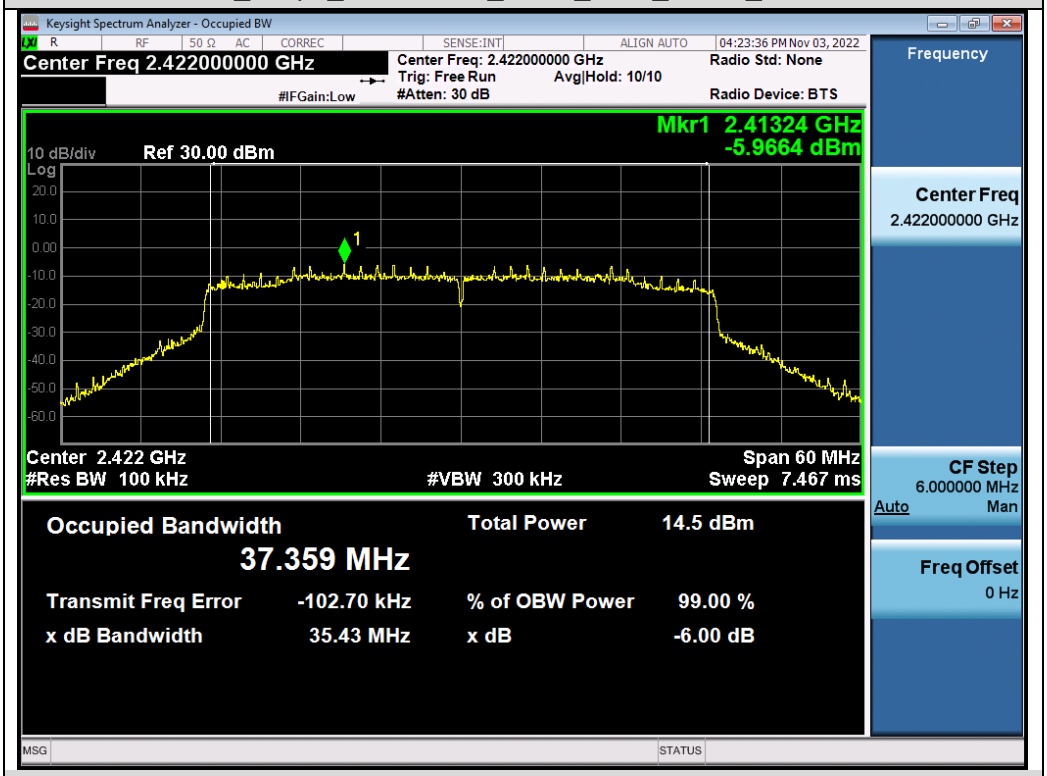


Test_Graph_802.11ax20_ANT1_2462_MCS0_DTSBW



Test_Graph_802.11ax40_ANT1_2422_MCS0_DTSBW

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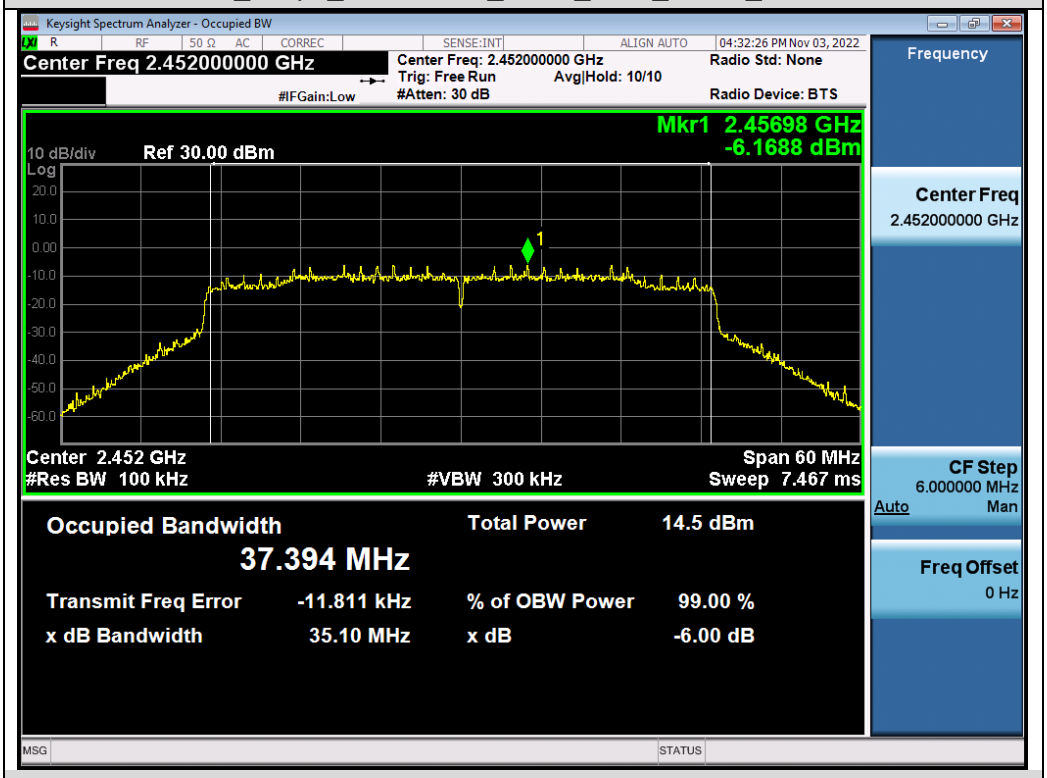
Test_Graph_802.11ax40_ANT1_2437_MCS0_DTSBW



Test_Graph_802.11ax40_ANT1_2452_MCS0_DTSBW

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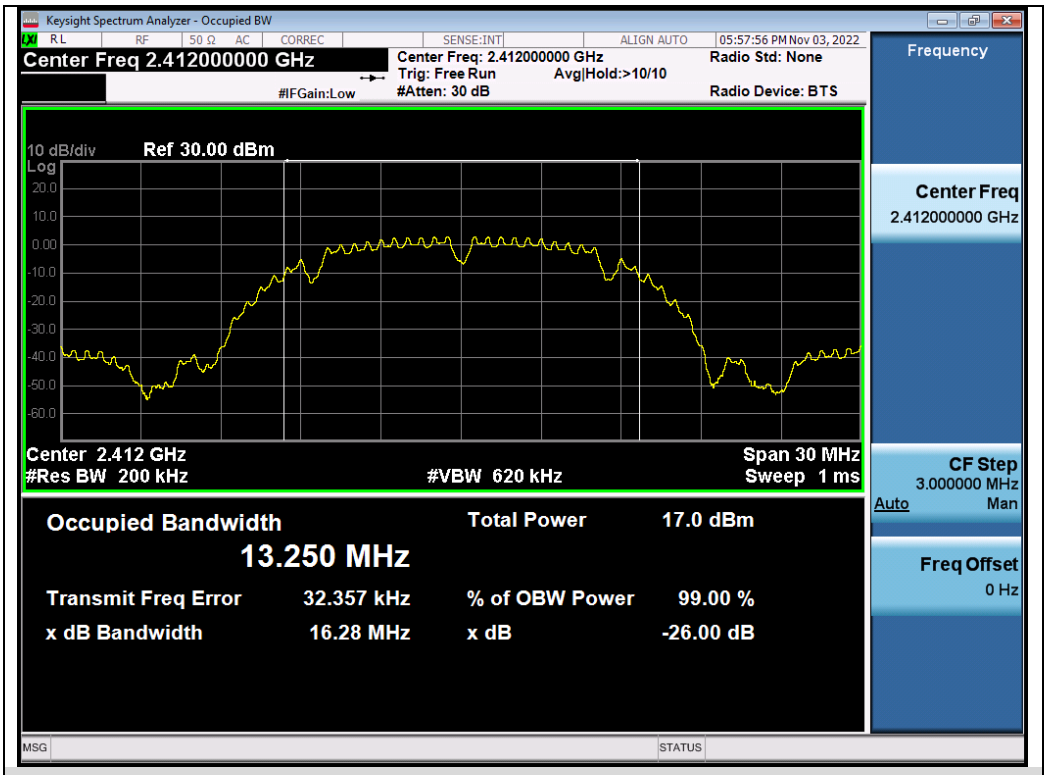
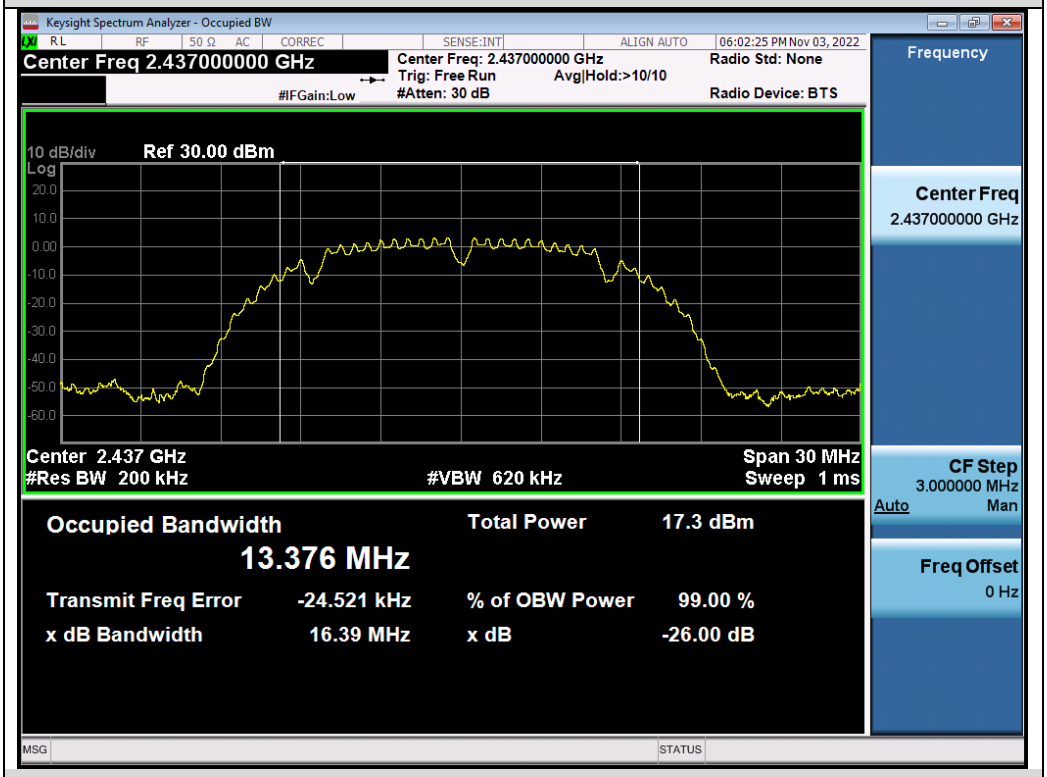
Test Graphs of Occupied Bandwidth-ANT 2



Test_Graph_802.11b_ANT1_2412_1Mbps_OBW



Test_Graph_802.11b_ANT1_2437_1Mbps_OBW

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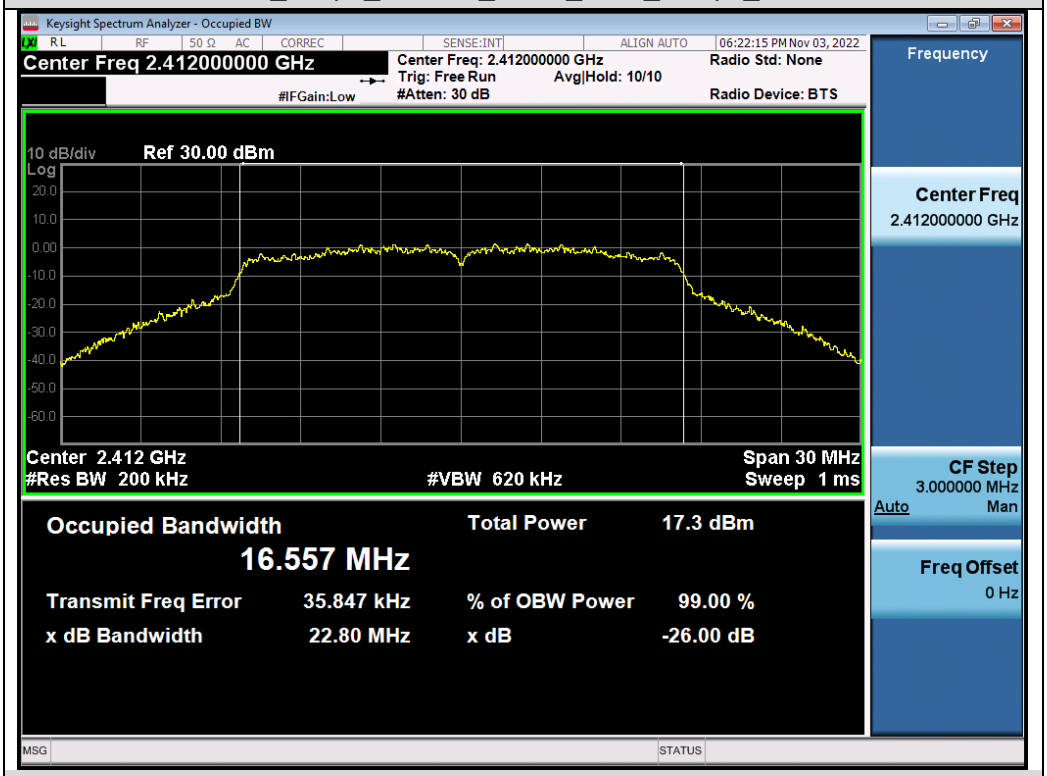
Test_Graph_802.11b_ANT1_2462_1Mbps_OBW



Test_Graph_802.11g_ANT1_2412_6Mbps_OBW

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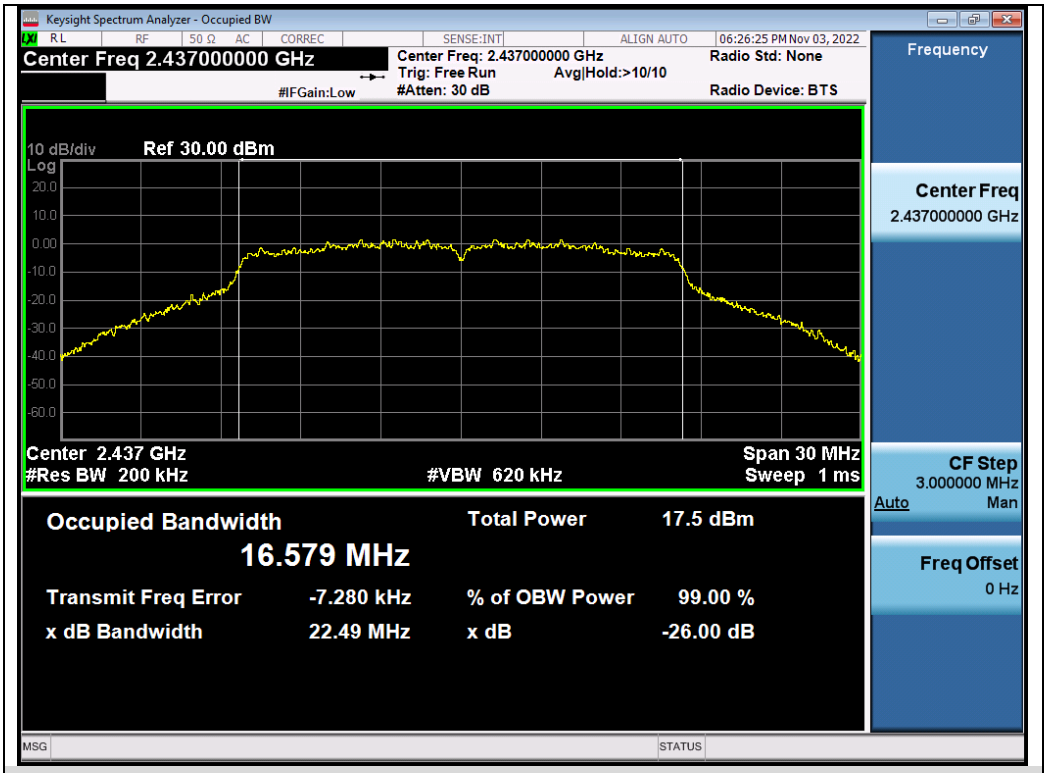

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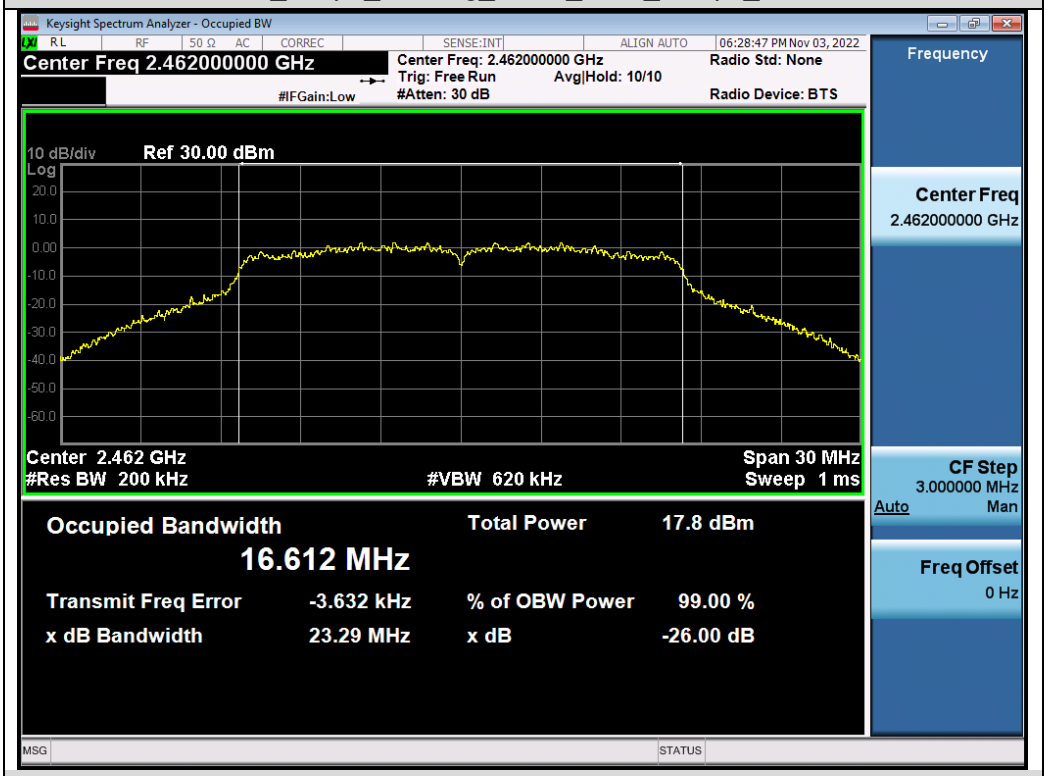

Test_Graph_802.11g_ANT1_2462_6Mbps_OBW

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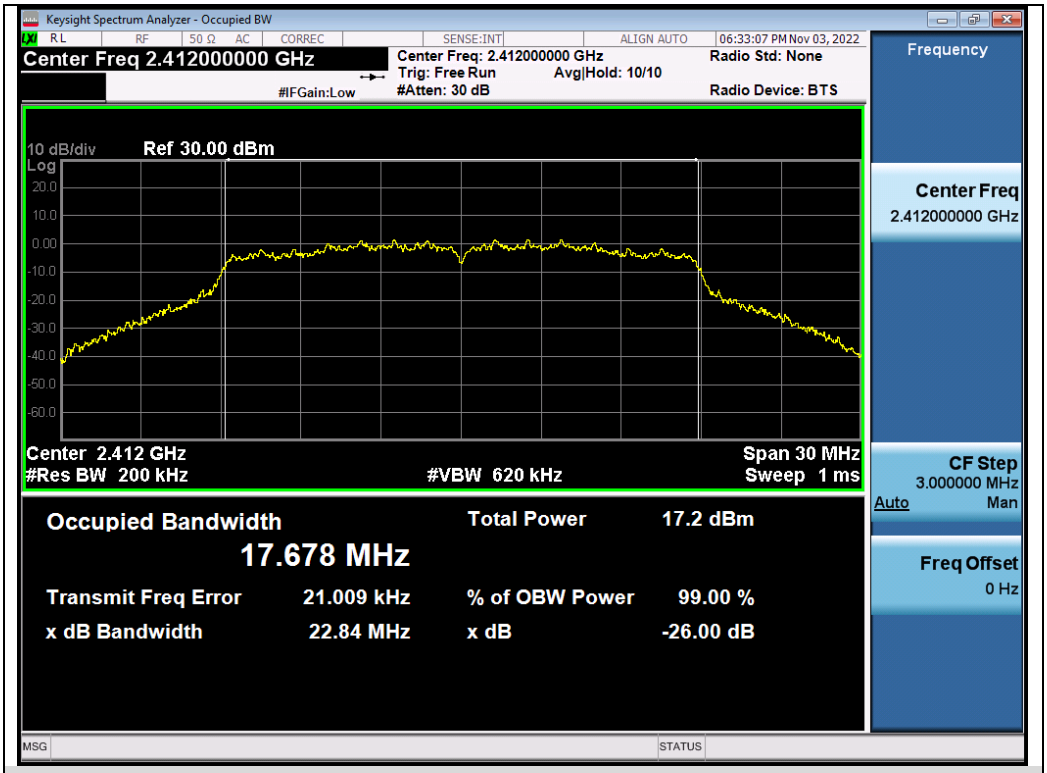
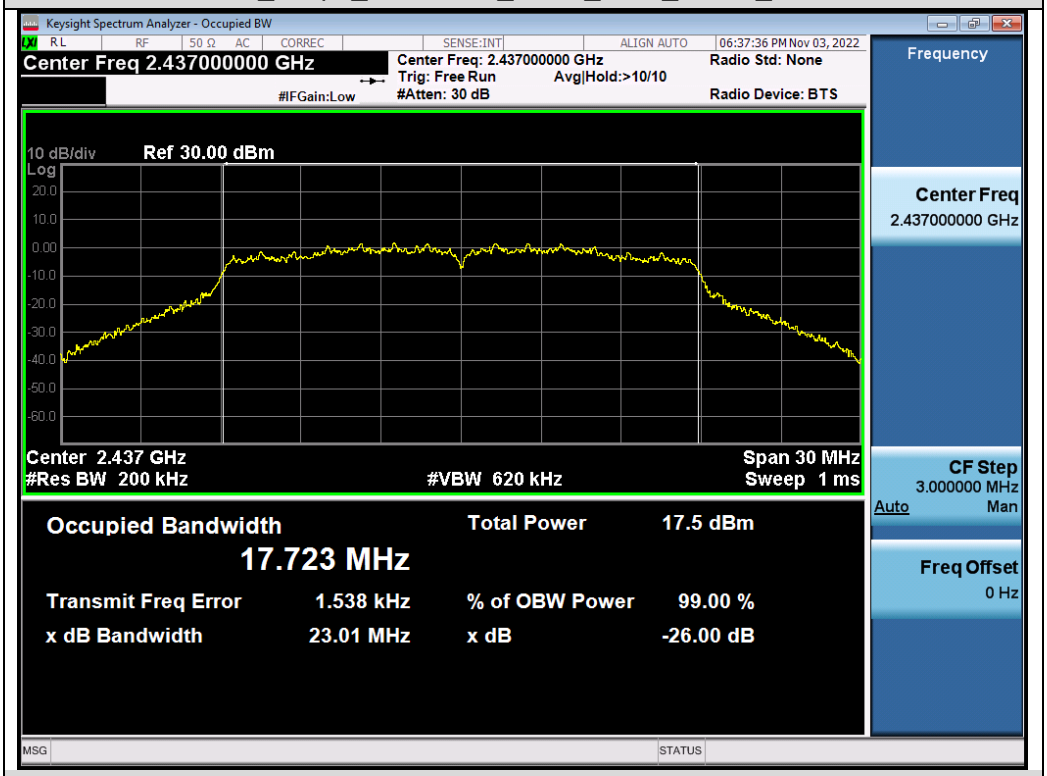


Test_Graph_802.11n20_ANT1_2412_MCS0_OBW



Test_Graph_802.11n20_ANT1_2437_MCS0_OBW

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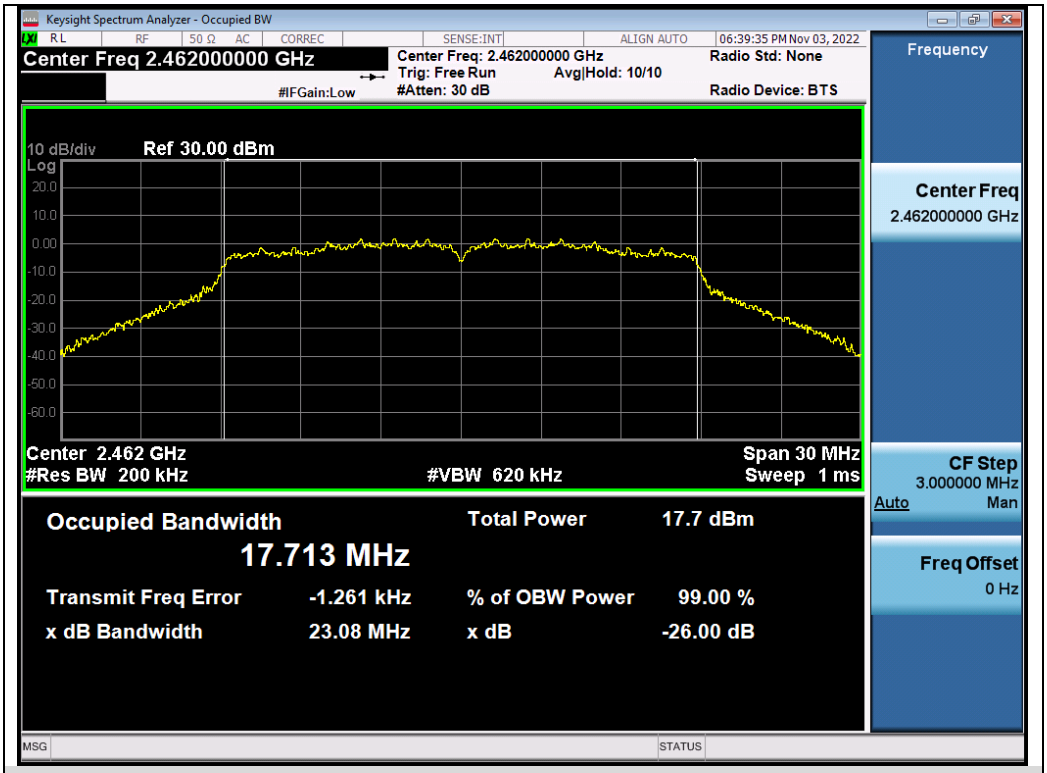

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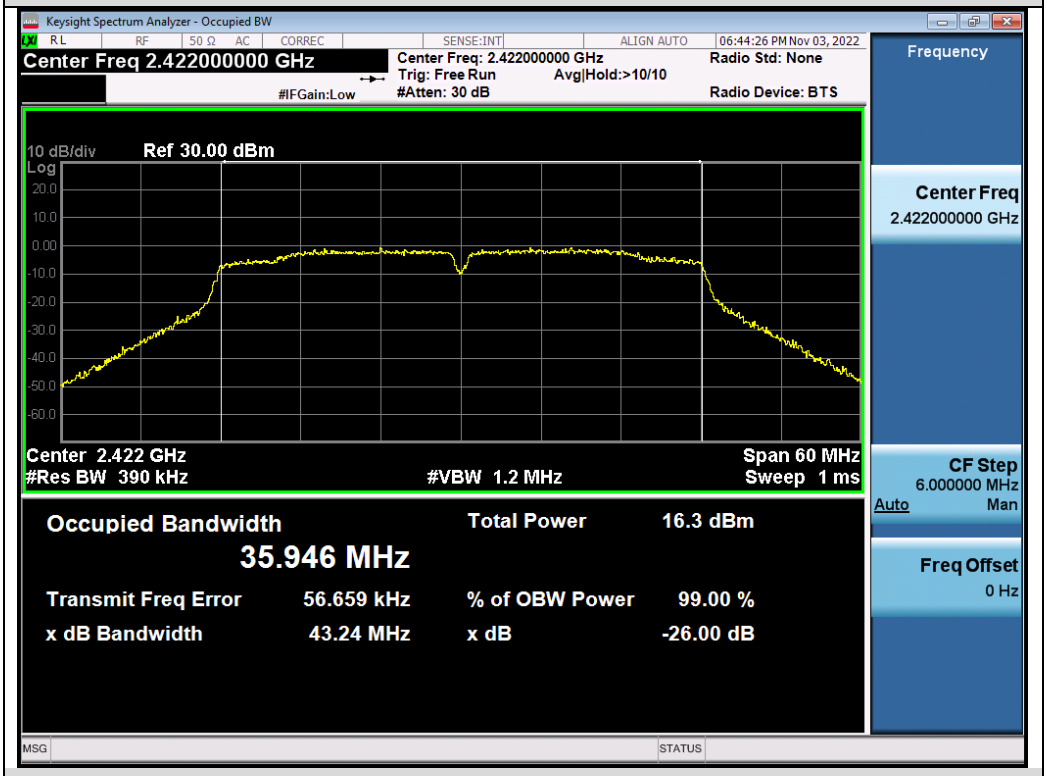

Test_Graph_802.11n40_ANT1_2422_MCS0_OBW

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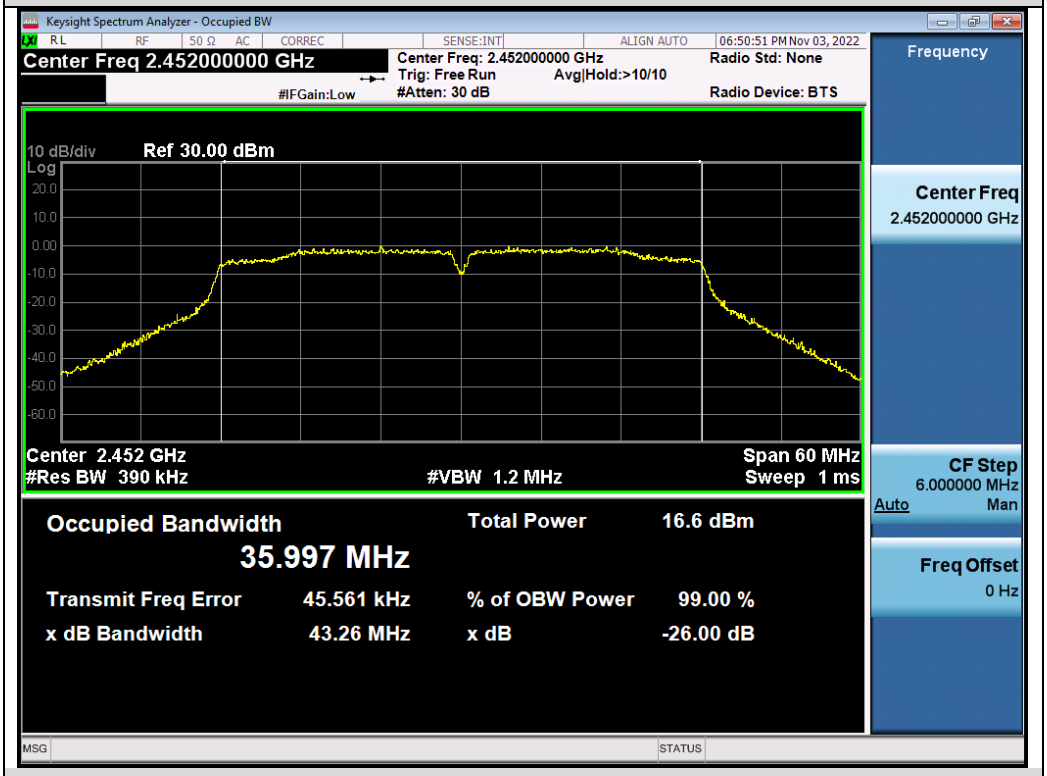
Test_Graph_802.11n40_ANT1_2437_MCS0_OBW



Test_Graph_802.11n40_ANT1_2452_MCS0_OBW

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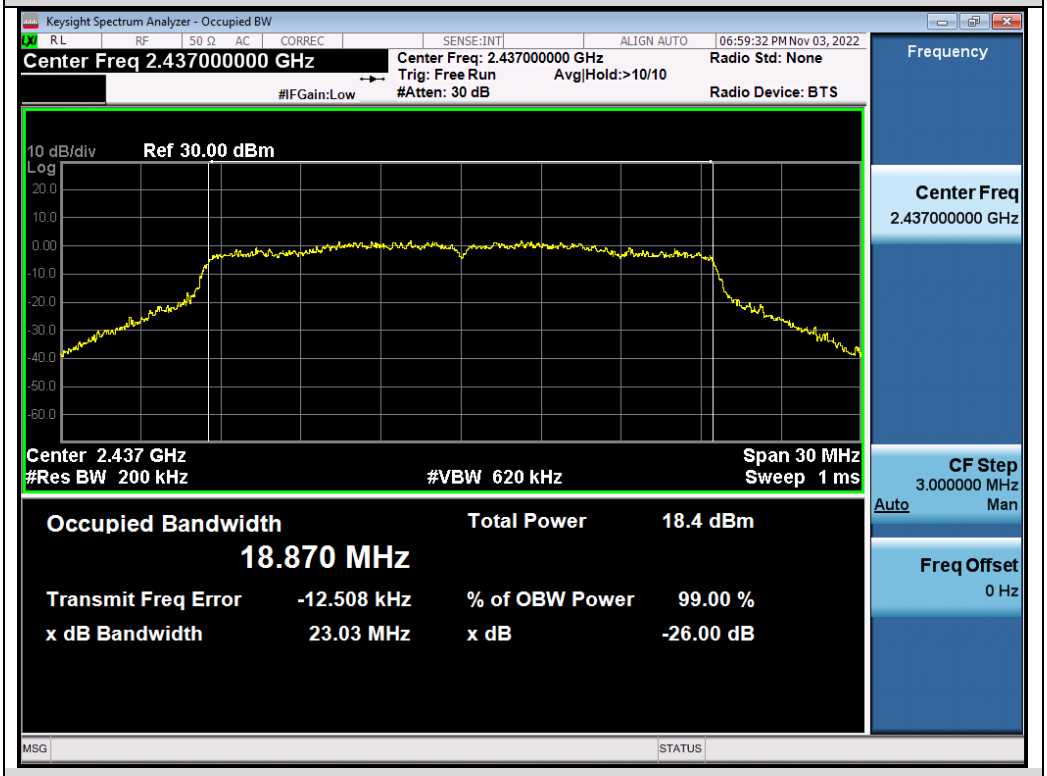
Test_Graph_802.11ax20_ANT1_2412_MCS0_OBW



Test_Graph_802.11ax20_ANT1_2437_MCS0_OBW

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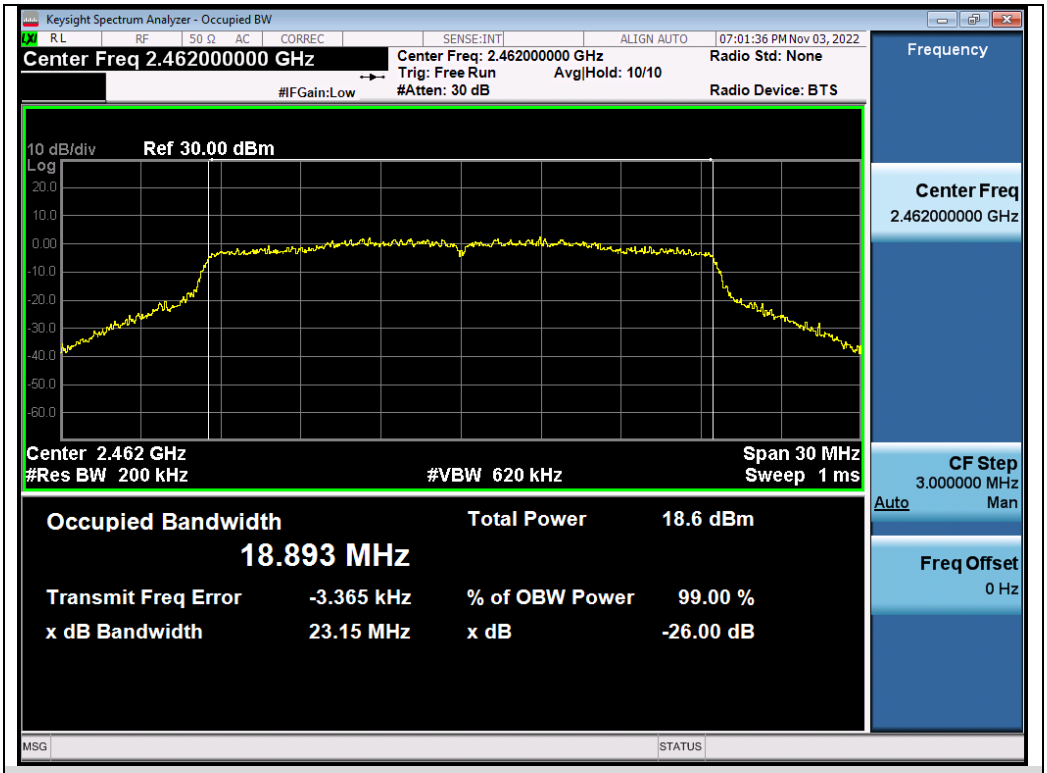

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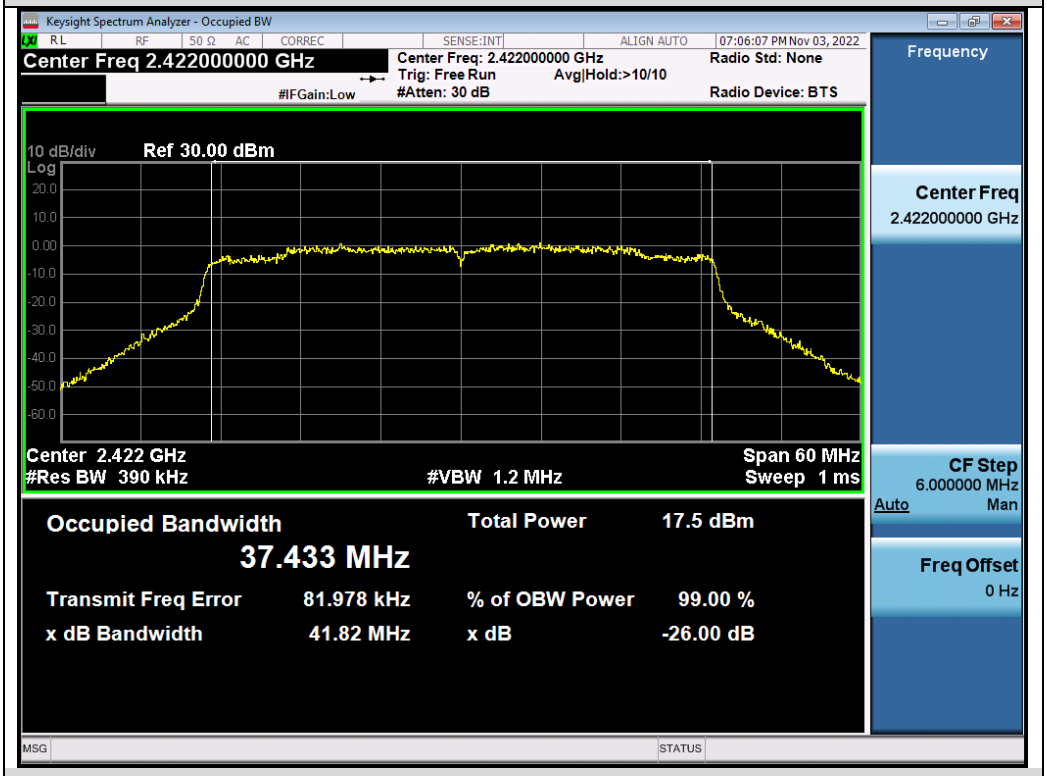

Test_Graph_802.11ax40_ANT1_2422_MCS0_OBW

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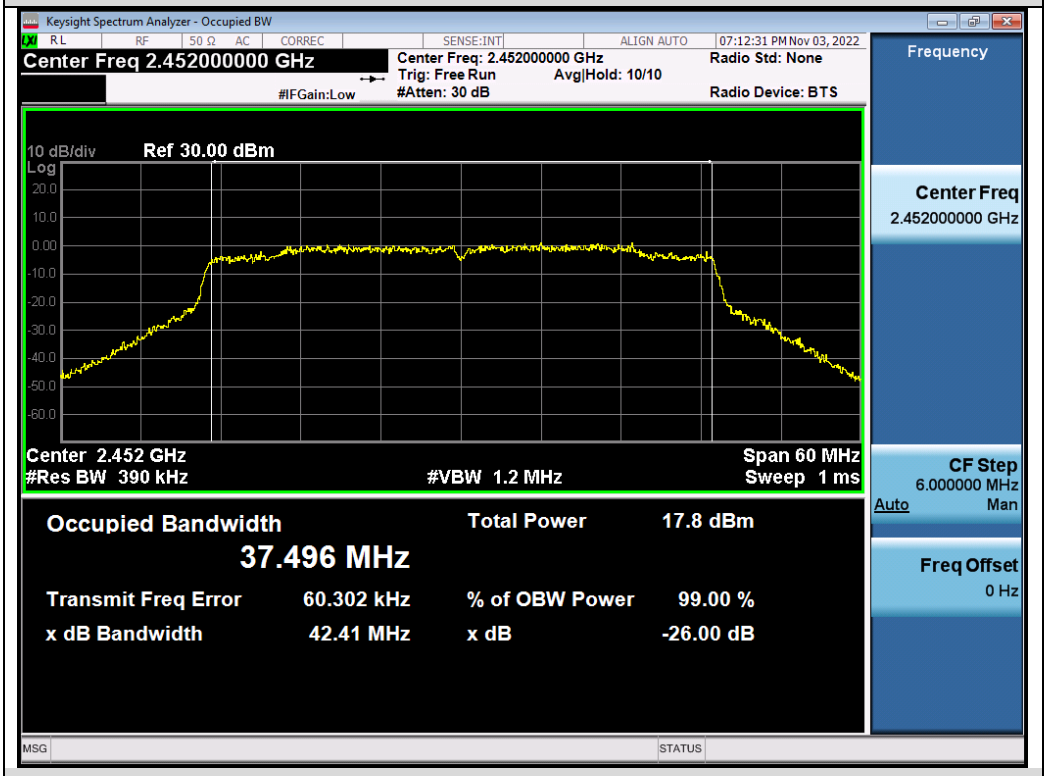
Test_Graph_802.11ax40_ANT1_2437_MCS0_OBW



Test_Graph_802.11ax40_ANT1_2452_MCS0_OBW

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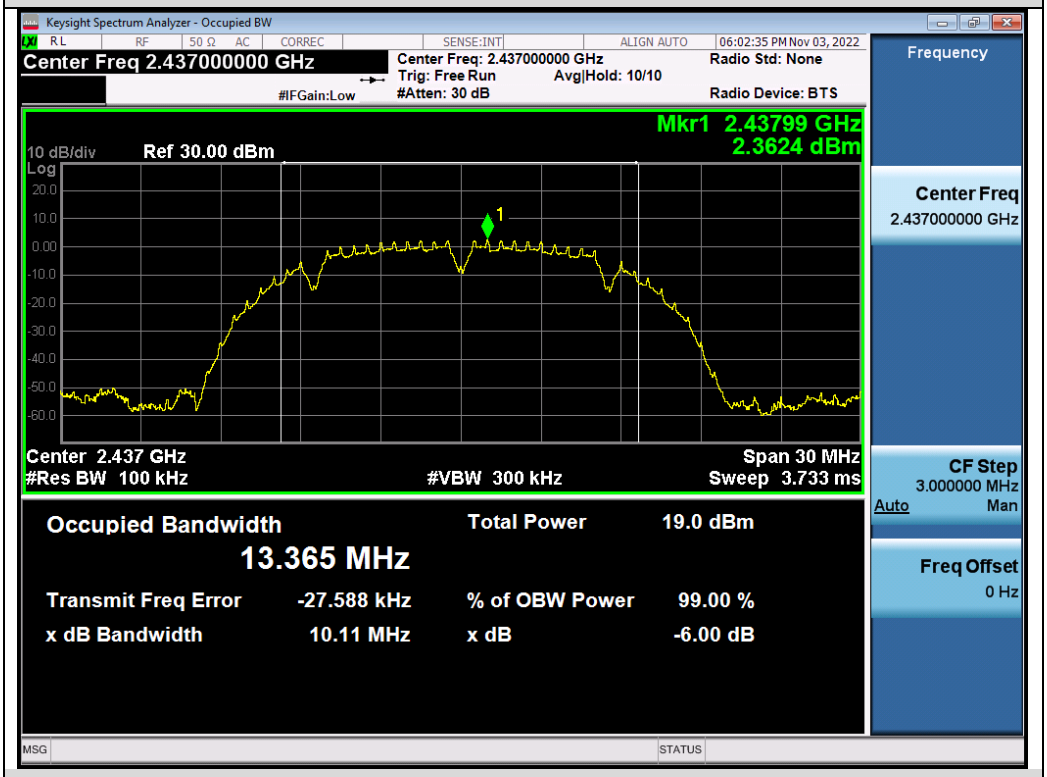
Test Graphs of DTS Bandwidth

Test_Graph_802.11b_ANT1_2412_1Mbps_DTSBW



Test_Graph_802.11b_ANT1_2437_1Mbps_DTSBW

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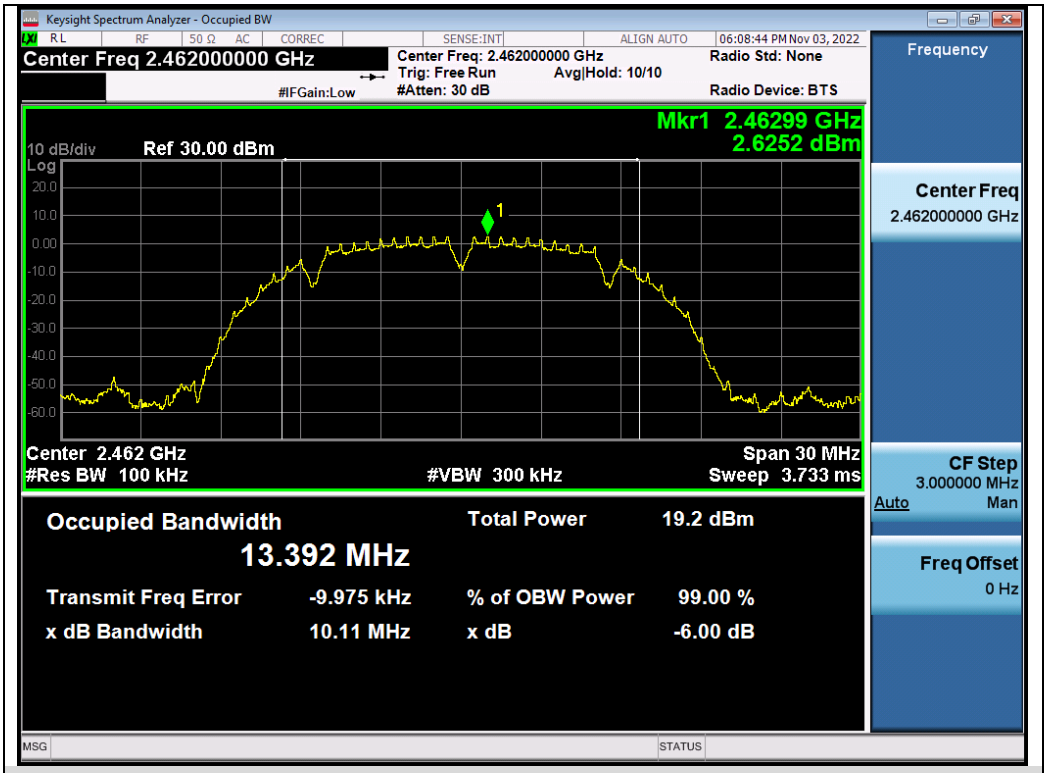
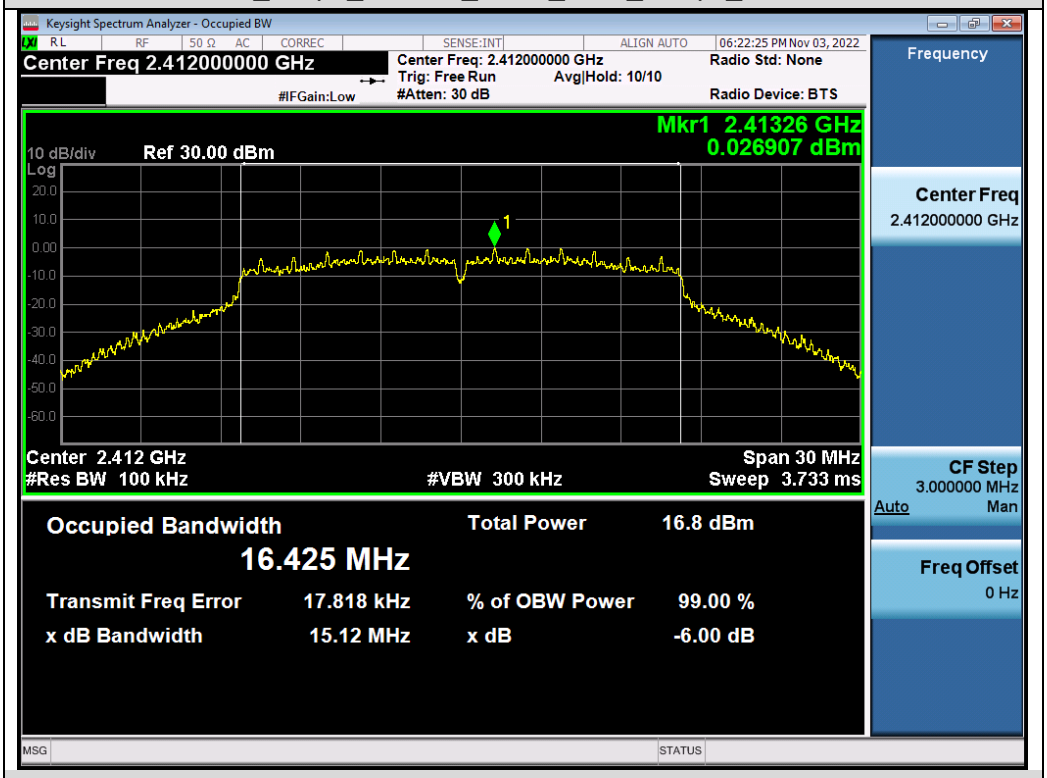


Test_Graph_802.11b_ANT1_2462_1Mbps_DTSBW



Test_Graph_802.11g_ANT1_2412_6Mbps_DTSBW

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Test_Graph_802.11g_ANT1_2437_6Mbps_DTSBW

Test_Graph_802.11g_ANT1_2462_6Mbps_DTSBW

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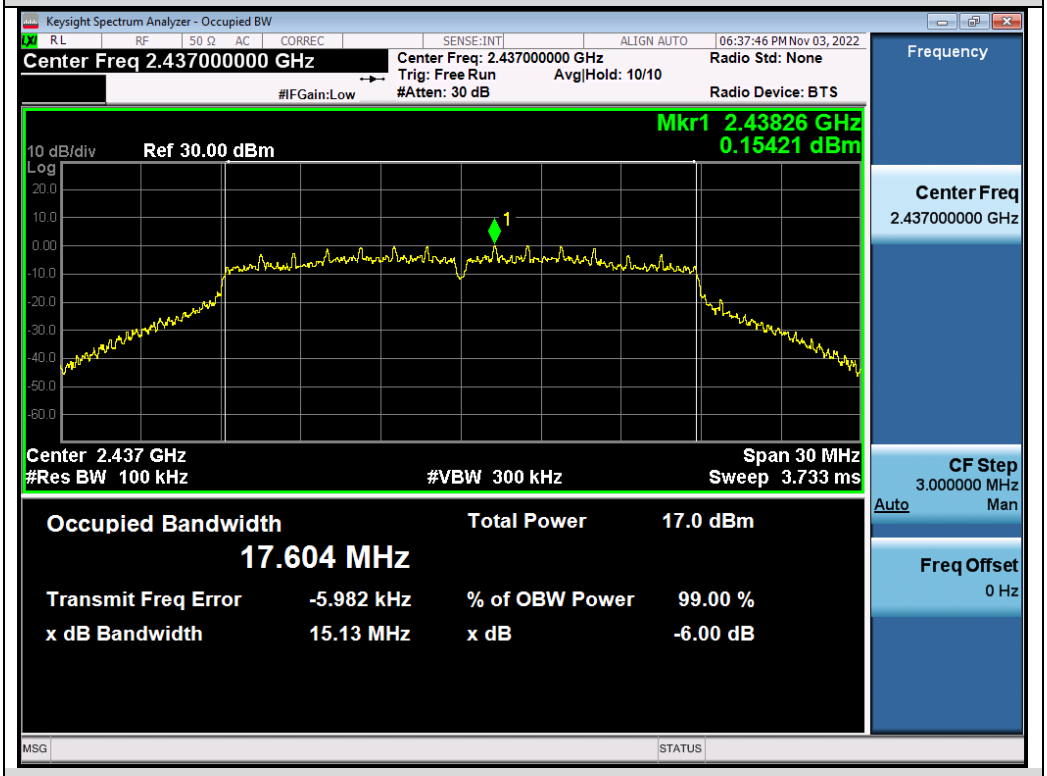
Test_Graph_802.11n20_ANT1_2412_MCS0_DTSBW



Test_Graph_802.11n20_ANT1_2437_MCS0_DTSBW

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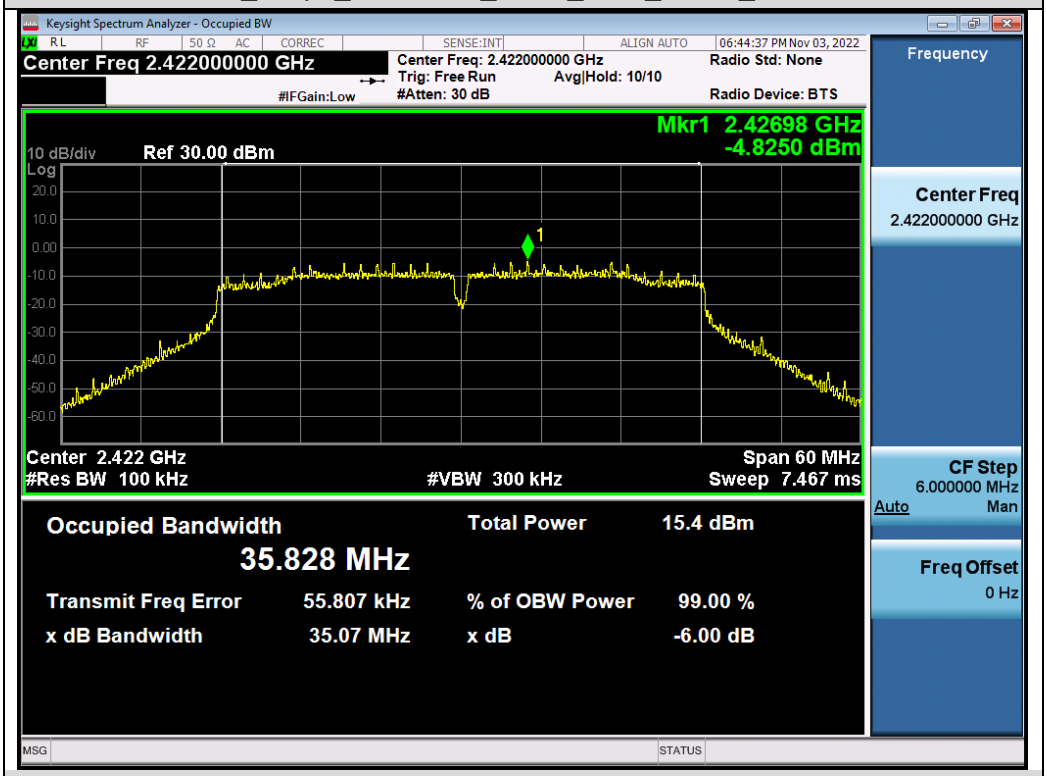
Test_Graph_802.11n20_ANT1_2462_MCS0_DTSBW



Test_Graph_802.11n40_ANT1_2422_MCS0_DTSBW

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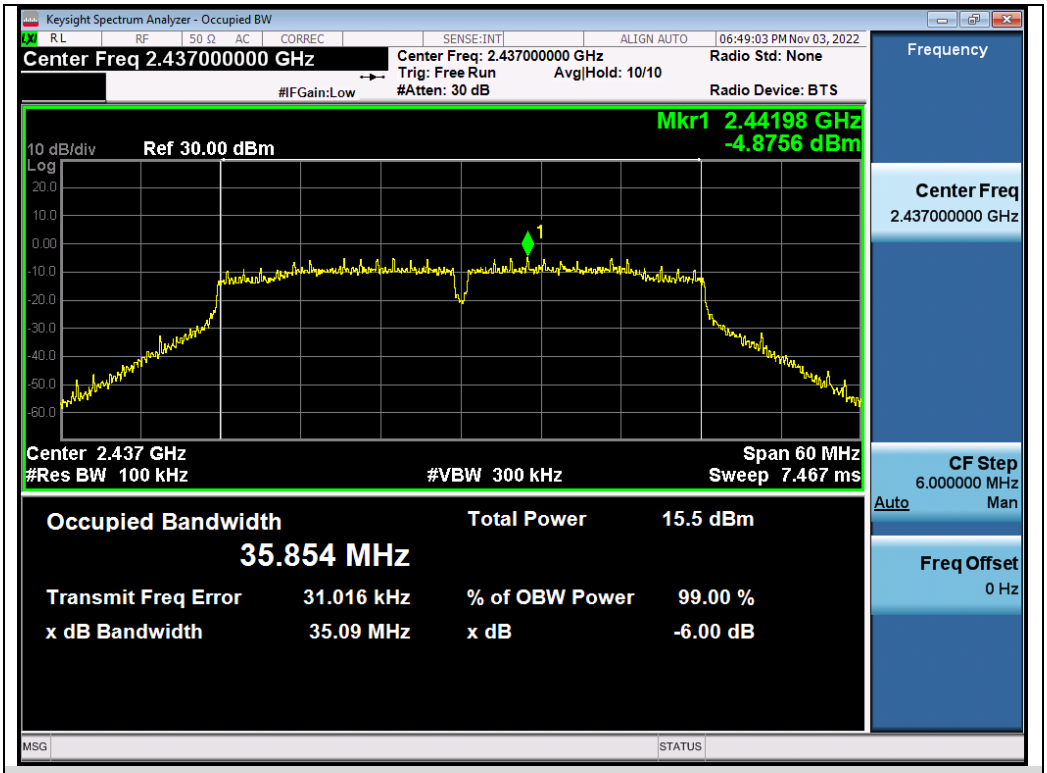

Test_Graph_802.11n40_ANT1_2437_MCS0_DTSBW

Test_Graph_802.11n40_ANT1_2452_MCS0_DTSBW

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Test_Graph_802.11ax20_ANT1_2412_MCS0_DTSBW

Test_Graph_802.11ax20_ANT1_2437_MCS0_DTSBW

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Test_Graph_802.11ax20_ANT1_2462_MCS0_DTSBW

Test_Graph_802.11ax40_ANT1_2422_MCS0_DTSBW

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