

FCC Test Report

Report No.: AGC00688201219FE06

FCC ID : 2AU6EDNS-5B12
APPLICATION PURPOSE : Original Equipment
PRODUCT DESIGNATION : Wireless USB Adapter
BRAND NAME : Techkey
MODEL NAME : 5B12, 5B10
APPLICANT : Shenzhen Denos Trade Co., Ltd.
DATE OF ISSUE : Dec. 30, 2020
STANDARD(S) : FCC Part 15.407
TEST PROCEDURE(S) : KDB 789033 D02 v02r01
REPORT VERSION : V1.0

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REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Dec. 30, 2020	Valid	Initial Release

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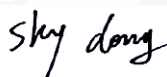
1. VERIFICATION OF CONFORMITY

Applicant	Shenzhen Denos Trade Co., Ltd.
Address	Room 610, Shibida Building, No. 55 ZhenHua Rd, Futian District, Shen Zhen, GuangDong, China
Manufacturer	SHEN ZHEN SHI XIN HUA TIAN TECHNOLOGY CO., LTD
Address	3Foor, B Buliding, DaHong Industrial Park, GuangMin District, Shenzhen City, China
Factory	SHEN ZHEN SHI XIN HUA TIAN TECHNOLOGY CO., LTD
Address	3Foor, B Buliding, DaHong Industrial Park, GuangMin District, Shenzhen City, China
Product Designation	Wireless USB Adapter
Brand Name	Techkey
Test Model	5B12
Series Model	5B10
Difference description	All the series models are the same as the test model except for the model names.
Date of test	Dec. 21, 2020 to Dec. 30, 2020
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 requirement of FCC Part 15 Rules requirement.

Prepared By



Sky Dong
(Project Engineer)

Dec. 30, 2020

Reviewed By



Max Zhang
(Reviewer)

Dec. 30, 2020

Approved By



Forrest Lei
(Authorized Officer)

Dec. 30, 2020

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2. GENERAL INFORMATION

2.1. PRODUCT DESCRIPTION

The EUT is designed as “Wireless USB Adapter”. It is designed by way of utilizing the OFDM technology to achieve the system operation.

A major technical description of EUT is described as following

Operation Frequency	5150 MHz ~ 5250MHz; 5725 MHz ~ 5850MHz
Output Power	IEEE 802.11a20:5.51dBm; IEEE 802.11n(20):5.51dBm; IEEE802.11n(40):5.06dBm; IEEE 802.11ac(20):5.41dBm; IEEE 802.11ac(40):5.72dBm; IEEE 802.11ac(80):5.22dBm
Modulation	BPSK, QPSK, 16QAM, 64QAM, 128QAM, 256QAM,OFDM
Number of channels	15
Hardware Version	A
Software Version	V1.0
Antenna Designation	Dedicated Antenna(Comply with requirements of the FCC part 15.203)
Antenna Gain	5dBi
Power Supply	DC 5V by PC

Note:

1. The EUT is designed as indoor access point operating device
2. The device do not support TPC.

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2.2. TABLE OF CARRIER FREQUENCIES

Frequency Band	Channel Number	Frequency	Frequency Band	Channel Number	Frequency
5150 GHz ~ 5250GHz	36	5180 MHz	5725 GHz ~ 5850GHz	149	5745 MHz
	38	5190 MHz		151	5755 MHz
	40	5200 MHz		153	5765 MHz
	42	5210 MHz		155	5775MHz
	44	5220 MHz		157	5785 MHz
	46	5230 MHz		159	5795 MHz
	48	5240 MHz		161	5805 MHz
				165	5825MHz

Note: For 20MHz bandwidth system use Channel 36,40,44,48,149,153,157,161,165; For 40MHz bandwidth system use Channel 38,46,151,159. For 80MHz bandwidth system use Channel 42,155.

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

This submittal(s) (test report) is intended for **FCC ID: 2AU6EDNS-5B12** filing to comply with the FCC Part 15 requirements.

2.4. TEST METHODOLOGY

Both conducted and radiated testing was performed according to the procedures in ANSI C63.10 (2013).

Radiated testing was performed at an antenna to EUT distance 3 meters.

Others testing (listed at item 5.3) was performed according to the procedures in FCC Part 15.407 rules KDB 789033 D02

2.5. SPECIAL ACCESSORIES

Refer to section 5.2.

2.6. EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

2.7. ANTENNA REQUIREMENT

EUT has a unique antenna connector (reverse SMA head)

For more information of the antenna, please refer to the APPENDIX B: PHOTOGRAPHS OF EUT.

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3. MEASUREMENT UNCERTAINTY

The uncertainty is calculated using the methods suggested in the “Guide to the Expression of Uncertainty in measurement” (GUM) published by CISPR and ANSI.

- Uncertainty of Conducted Emission, $U_c = \pm 3.2$ dB
- Uncertainty of Radiated Emission below 1GHz, $U_c = \pm 3.9$ dB
- Uncertainty of Radiated Emission above 1GHz, $U_c = \pm 4.8$ dB

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4. DESCRIPTION OF TEST MODES

Mode	Available channel	Tested channel	Modulation	Date rate(Mbps)
802.11a/n/ac20	36,40,44,48,149,153,157,161,165	36,40, 48,149,157,165	OFDM	6Mbps/MCS0
802.11n/ac40	38,46,151,159	38,46, 151,159	OFDM	MCS0
802.11ac80	42, 155	42, 155	OFDM	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.
3. The test software is the RTLBTAPP Version 5.1.2.4 which can set the EUT into the individual test modes.

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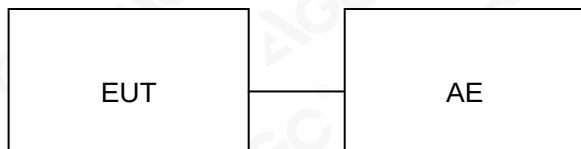
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5. SYSTEM TEST CONFIGURATION

5.1. CONFIGURATION OF EUT SYSTEM

Configure 1:



5.2. EQUIPMENT USED IN EUT SYSTEM

Item	Equipment	Model No.	ID or Specification	Remark
1	Wireless USB Adapter	5B12	2AU6EDNS-5B12	EUT
2	Laptop	MateBook 14	DC 5V	AE

5.3. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
§15.407	6dB Bandwidth	Compliant
§15.407	Emission Bandwidth	Compliant
§15.407	Maximum conducted output power	Compliant
§15.407	Conducted Spurious Emission	Compliant
§15.407	Maximum Conducted Output Power Density	Compliant
§15.209	Radiated Emission	Compliant
§15.407	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	May 15, 2020	May 14, 2021
LISN	R&S	ESH2-Z5	100086	Jul. 03,2020	Jul. 02,2021
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	May 15, 2020	May 14, 2021
EXA Signal Analyzer	Aglient	N9010A	MY53470504	Dec. 07, 2020	Dec. 06, 2021
Power sensor	Aglient	U2021XA	MY54110007	Jun. 08, 2020	Jun. 07, 2021
2.4GHz Fliter	EM Electronics	2400-2500MHz	N/A	Mar. 23, 2020	Mar. 22, 2022
Attenuator	ZHINAN	E-002	N/A	Sep. 03, 2020	Sep. 02, 2022
Horn antenna	SCHWARZBECK	BBHA 9170	#768	Sep.21, 2019	Sep. 20, 2021
Active loop antenna (9K-30MHz)	ZHINAN	ZN30900C	18051	May 22, 2020	May 21, 2022
Double-Ridged Waveguide Horn	ETS LINDGREN	3117	00034609	May 17, 2019	May 16, 2021
Broadband Preamplifier	ETS LINDGREN	3117PA	00225134	Sep. 03, 2020	Sep. 02, 2022
ANTENNA	SCHWARZBECK	VULB9168	494	Sep. 20, 2019	Sep. 19, 2021
Test software	FARA	EZ-EMC (Ver RA-03A)	N/A	N/A	N/A

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7. MAXIMUM CONDUCTED OUTPUT POWER

7.1. MEASUREMENT PROCEDURE

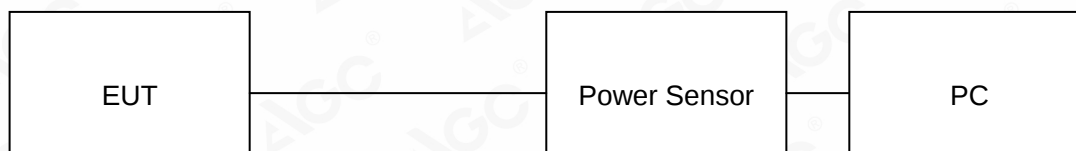
For average power test:

1. Connect EUT RF output port to power sensor through an RF attenuator.
2. Connect the power sensor to the PC.
3. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
4. Record the maximum power from the software.

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

7.2. TEST SET-UP

AVERAGE POWER SETUP



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7.3. LIMITS AND MEASUREMENT RESULT

LIMITS AND MEASUREMENT RESULT FOR 802.11A20 MODULATION			
Frequency (MHz)	Average Power (dBm)	Applicable Limits (dBm)	Pass or Fail
5180	4.18	30	Pass
5200	5.29	30	Pass
5240	4.83	30	Pass
5745	4.09	30	Pass
5785	5.51	30	Pass
5825	5.17	30	Pass

LIMITS AND MEASUREMENT RESULT FOR 802.11N20 MODULATION			
Frequency (MHz)	Average Power (dBm)	Applicable Limits (dBm)	Pass or Fail
5180	5.44	30	Pass
5200	5.51	30	Pass
5240	4.97	30	Pass
5745	4.46	30	Pass
5785	4.18	30	Pass
5825	4.28	30	Pass

LIMITS AND MEASUREMENT RESULT FOR 802.11N40 MODULATION			
Frequency (MHz)	Average Power (dBm)	Applicable Limits (dBm)	Pass or Fail
5190	4.37	30	Pass
5230	4.74	30	Pass
5755	5.06	30	Pass
5795	4.95	30	Pass

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LIMITS AND MEASUREMENT RESULT FOR 802.11AC20 MODULATION			
Frequency (MHz)	Average Power (dBm)	Applicable Limits (dBm)	Pass or Fail
5180	5.04	30	Pass
5200	4.75	30	Pass
5240	4.44	30	Pass
5745	4.47	30	Pass
5785	5.41	30	Pass
5825	4.24	30	Pass

LIMITS AND MEASUREMENT RESULT FOR 802.11AC40 MODULATION			
Frequency (MHz)	Average Power (dBm)	Applicable Limits (dBm)	Pass or Fail
5190	5.72	30	Pass
5230	4.96	30	Pass
5755	5.26	30	Pass
5795	5.12	30	Pass

LIMITS AND MEASUREMENT RESULT FOR 802.11AC80 MODULATION			
Frequency (MHz)	Average Power (dBm)	Applicable Limits (dBm)	Pass or Fail
5210	3.48	30	Pass
5775	5.22	30	Pass

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8. 6dB BANDWIDTH

8.1.1 -6dB BANDWIDTH MEASUREMENT PROCEDURE

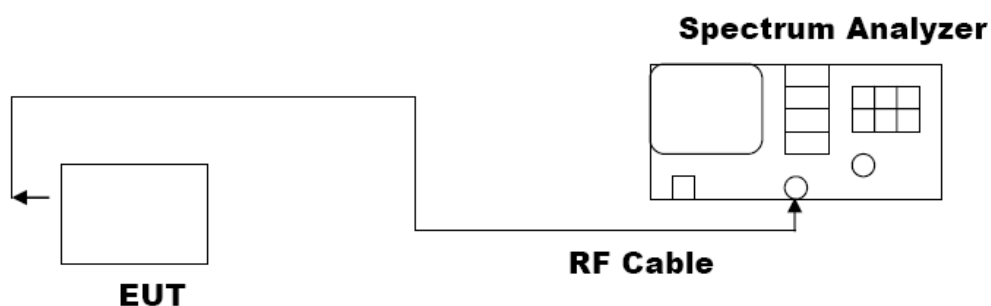
1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the EUT Work on operation frequency individually.
3. Set RBW = 100kHz.
4. Set the VBW $\geq 3 \times \text{RBW}$. Detector = Peak. Trace mode = max hold.
5. Measure the maximum width of the emission that is 6 dB down from the peak of the emission.

8.1.2 99% OCCUPIED BANDWIDTH

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
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.

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

8.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)



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8.3. LIMITS AND MEASUREMENT RESULTS

LIMITS AND MEASUREMENT RESULT FOR 802.11A20 MODULATION				
Applicable Limits	Applicable Limits			
	Test Data (MHz)			Criteria
	Frequency (MHz)	-6dB Bandwidth	99.00% Occupied Bandwidth	
>500KHZ	5745MHz	16.31	16.447	PASS
	5785MHz	16.30	16.451	PASS
	5825MHz	16.32	16.449	PASS

LIMITS AND MEASUREMENT RESULT FOR 802.11N20/40 MODULATION				
Applicable Limits	Applicable Limits			
	Test Data (MHz)			Criteria
	Frequency (MHz)	-6dB Bandwidth	99.00% Occupied Bandwidth	
>500KHZ	5745MHz	16.81	17.524	PASS
	5785MHz	16.71	17.536	PASS
	5825MHz	16.90	17.538	PASS
	5755MHz	35.40	36.142	PASS
	5795MHz	35.48	36.151	PASS

LIMITS AND MEASUREMENT RESULT FOR 802.11AC20/40/80 MODULATION				
Applicable Limits	Applicable Limits			
	Test Data (MHz)			Criteria
	Frequency (MHz)	-6dB Bandwidth	99.00% Occupied Bandwidth	
>500KHZ	5745MHz	16.91	17.536	PASS
	5785MHz	17.11	17.551	PASS
	5825MHz	16.94	17.536	PASS
	5755MHz	35.79	36.141	PASS
	5795MHz	35.49	36.136	PASS
	5775MHz	75.22	75.280	PASS

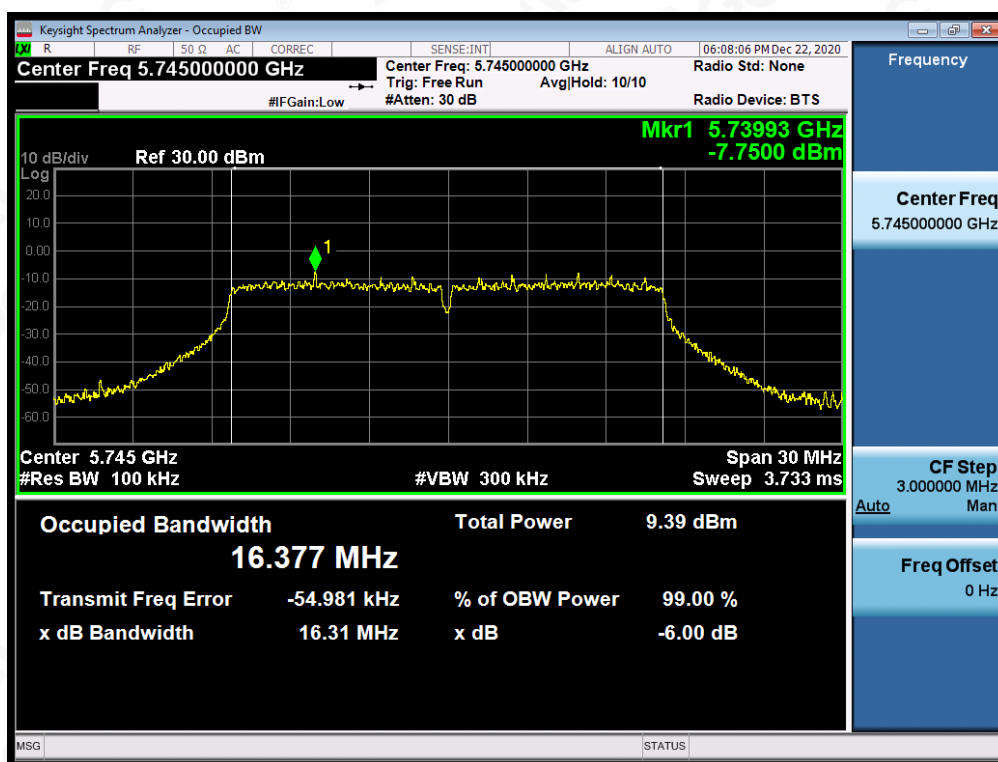
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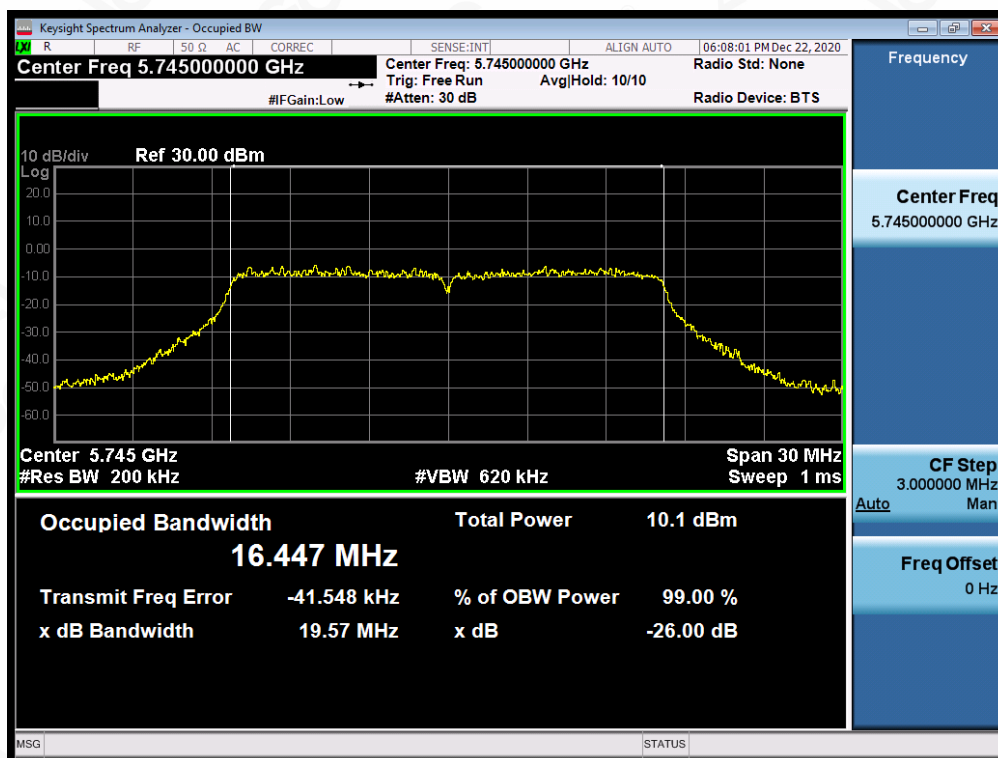


802.11a20 TEST RESULT

TEST PLOT OF BANDWIDTH FOR 5745MHz (-6dB BANDWIDTH)



TEST PLOT OF BANDWIDTH FOR 5745MHz (99% BANDWIDTH)



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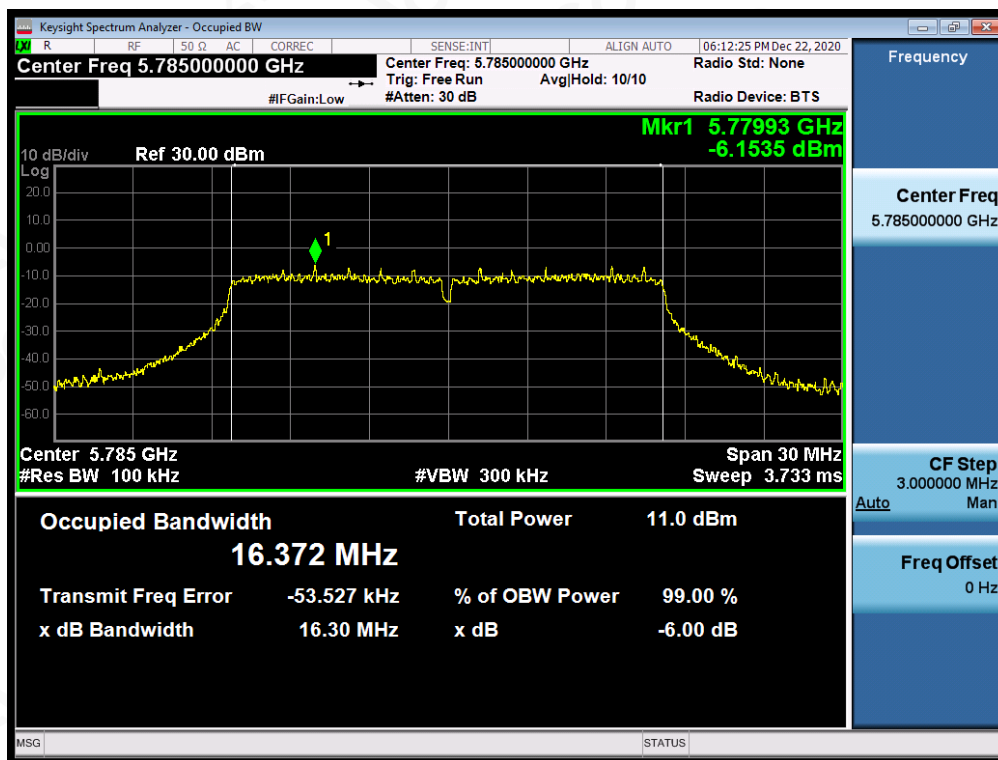
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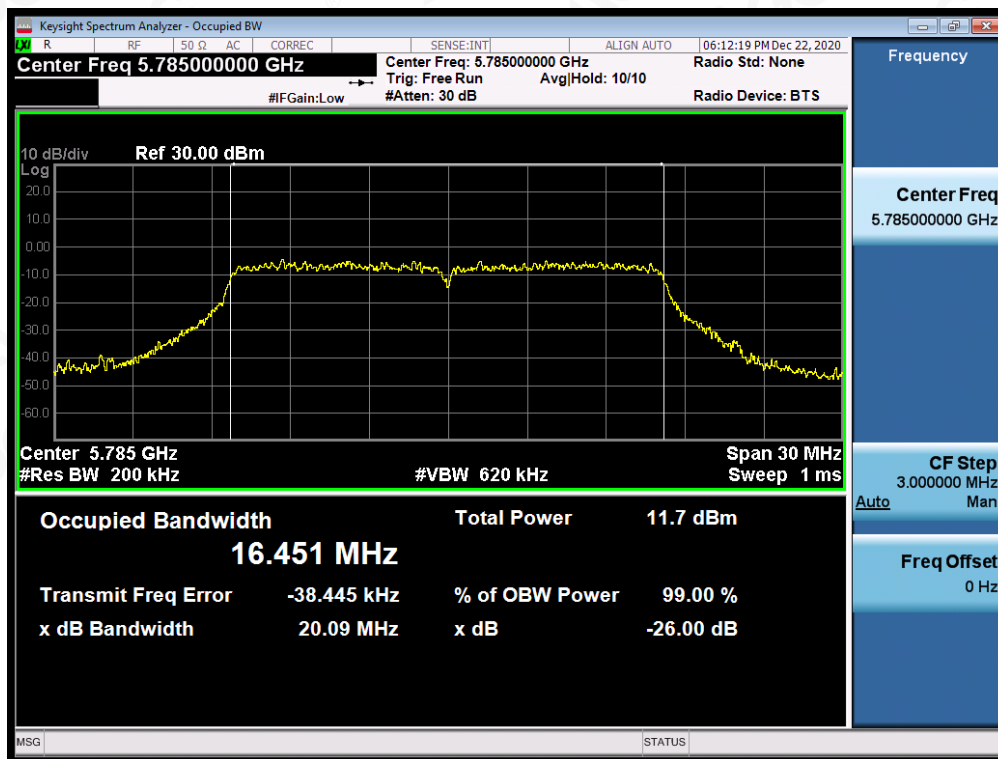
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TEST PLOT OF BANDWIDTH FOR 5785MHz (-6dB BANDWIDTH)



TEST PLOT OF BANDWIDTH FOR 5785MHz (99% BANDWIDTH)

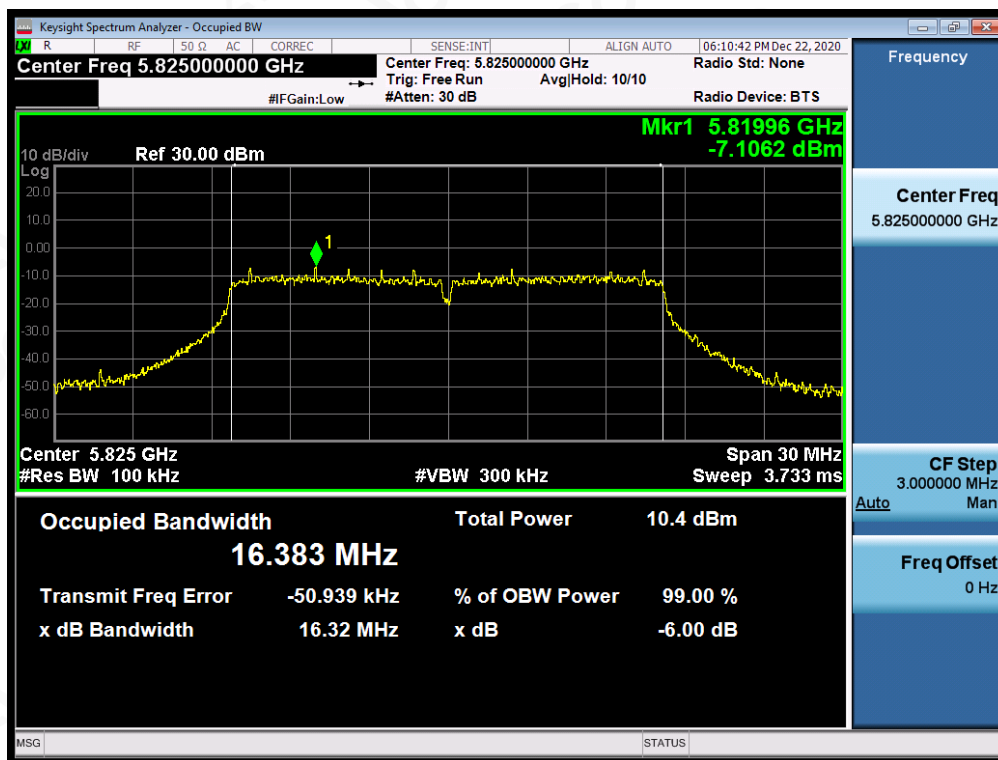


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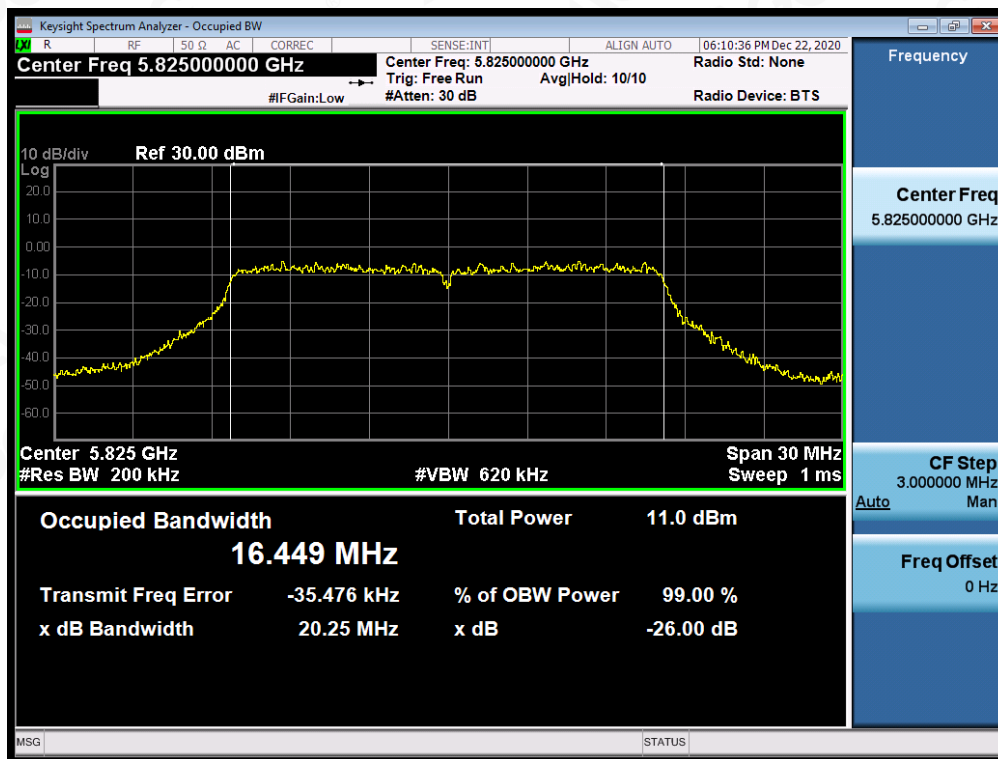
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TEST PLOT OF BANDWIDTH FOR 5825MHz (-6dB BANDWIDTH)



TEST PLOT OF BANDWIDTH FOR 5825MHz (99% BANDWIDTH)



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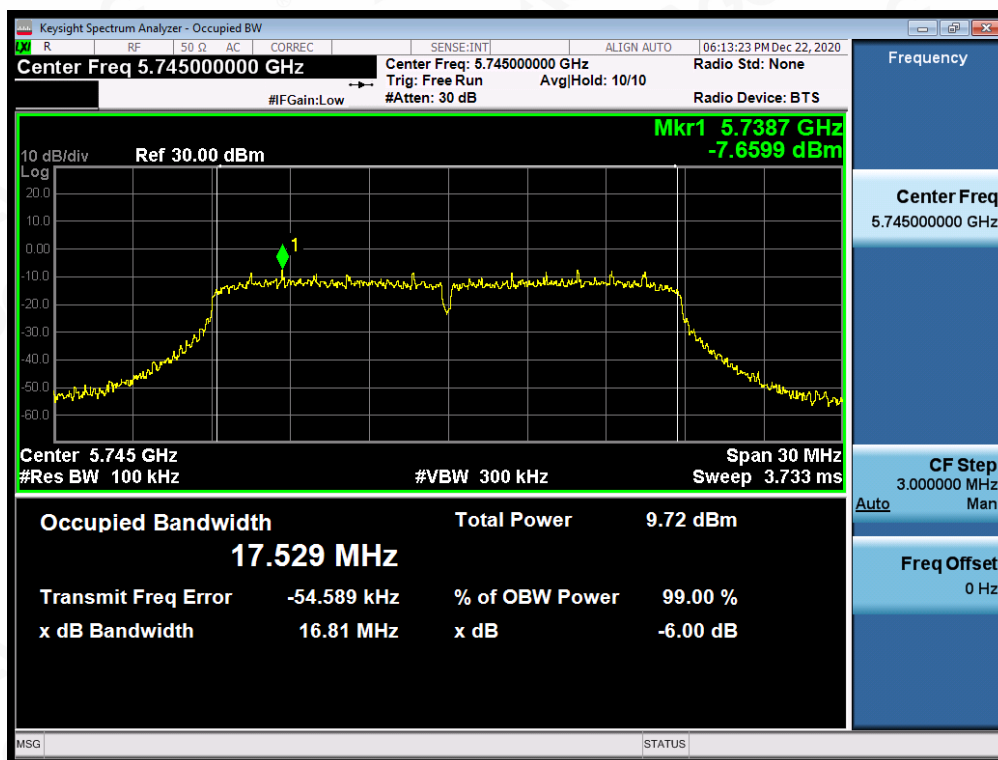
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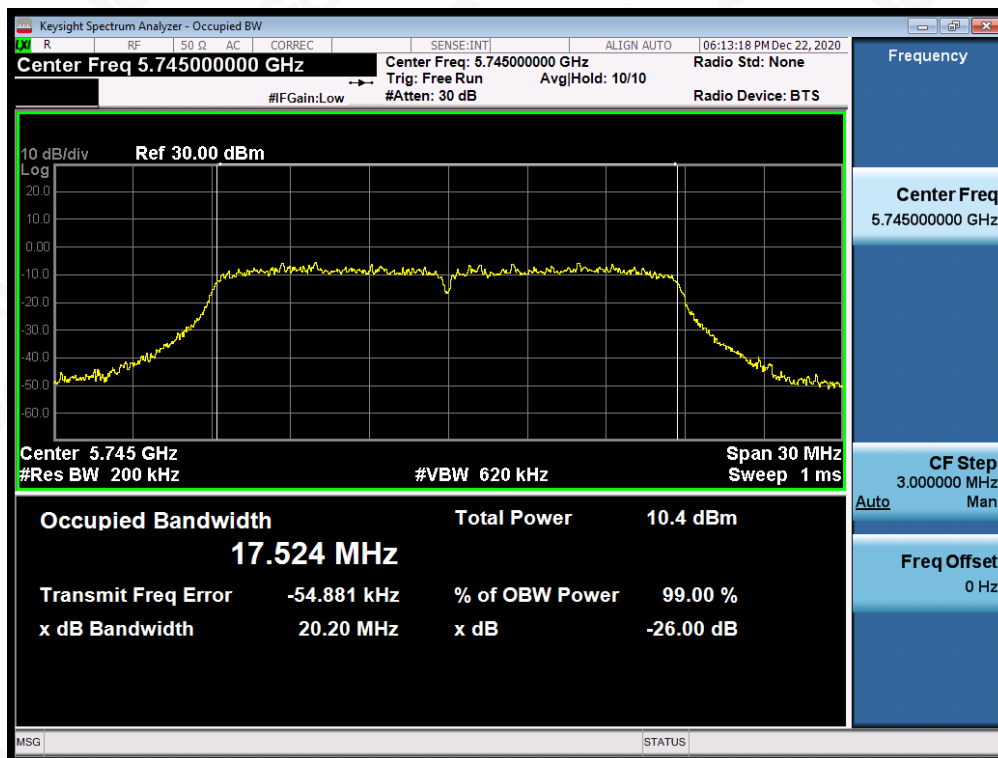


802.11n20 TEST RESULT

TEST PLOT OF BANDWIDTH FOR 5745MHz (-6dB BANDWIDTH)



TEST PLOT OF BANDWIDTH FOR 5745MHz (99% BANDWIDTH)

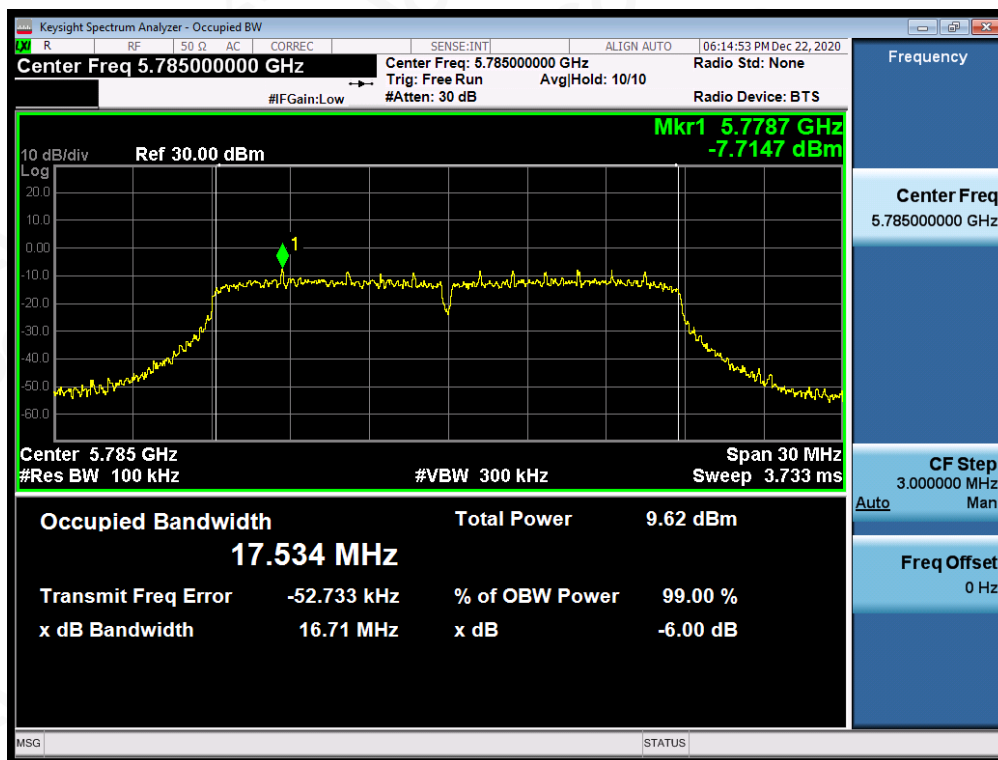


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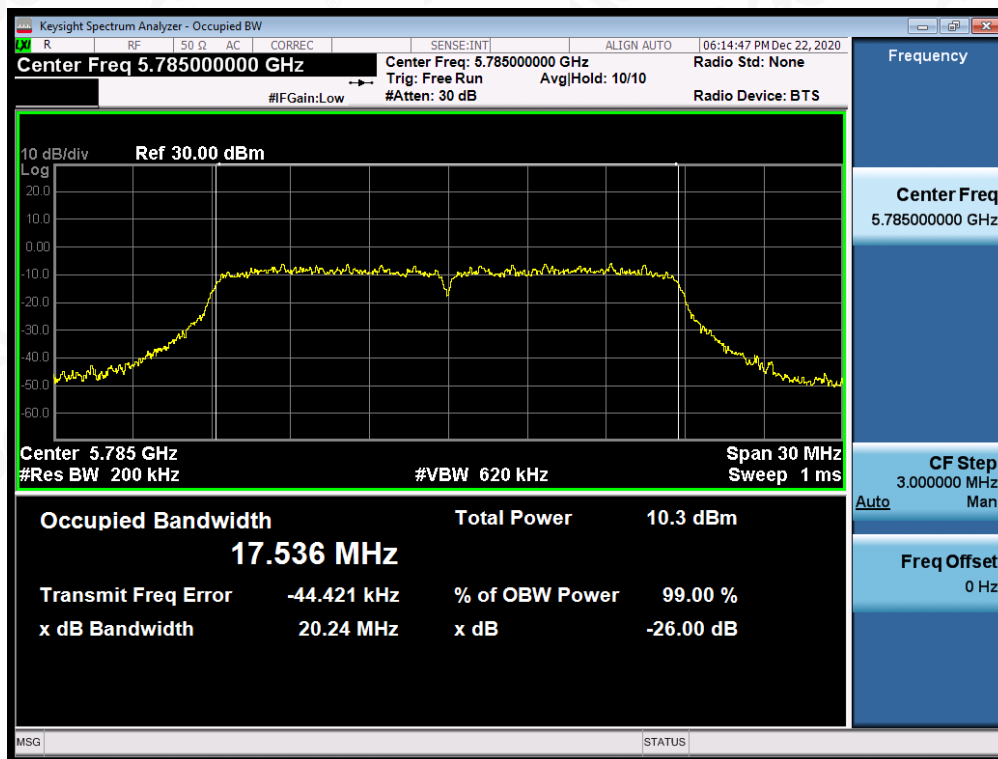
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TEST PLOT OF BANDWIDTH FOR 5785MHz (-6dB BANDWIDTH)



TEST PLOT OF BANDWIDTH FOR 5785MHz (99% BANDWIDTH)

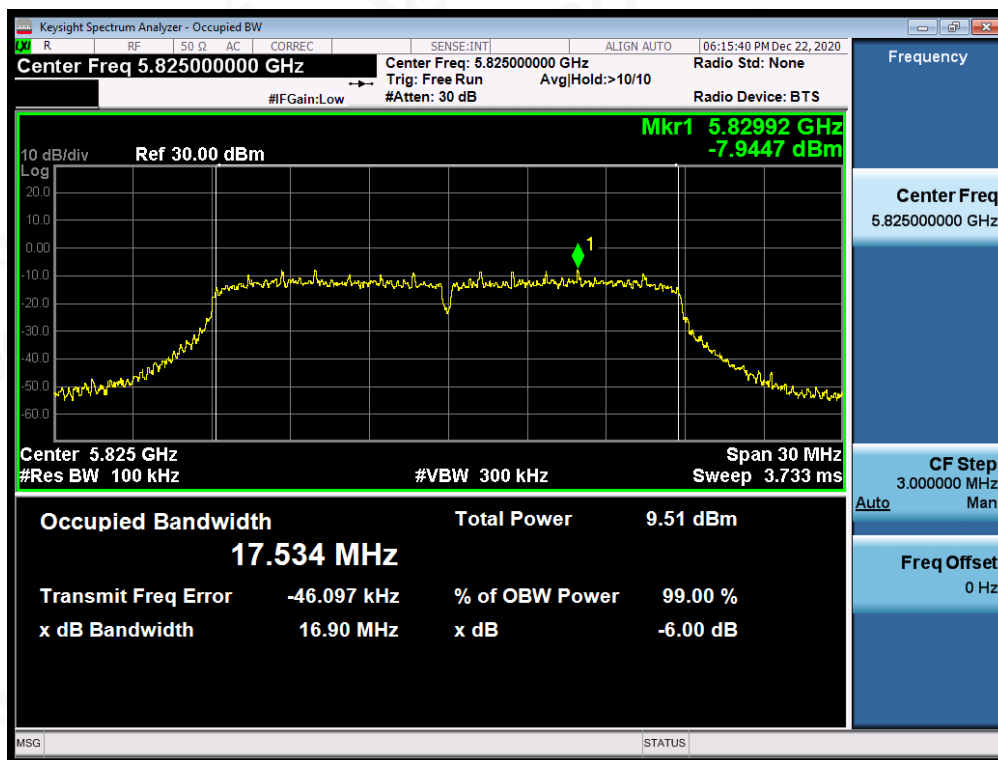


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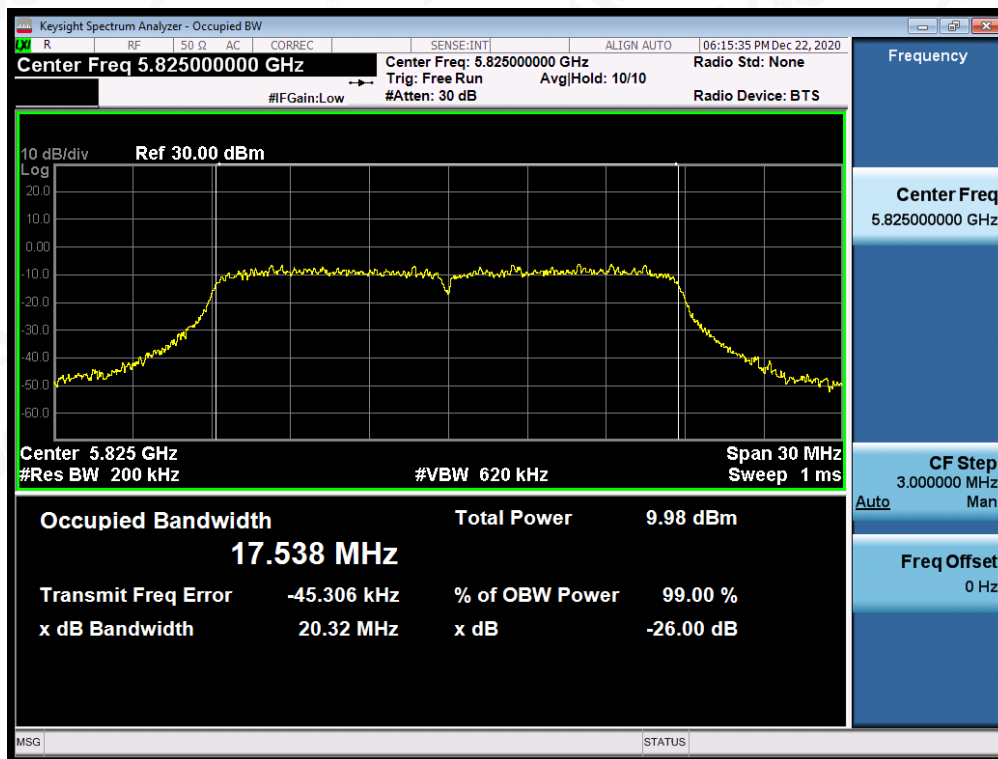
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TEST PLOT OF BANDWIDTH FOR 5825MHz (-6dB BANDWIDTH)



TEST PLOT OF BANDWIDTH FOR 5825MHz (99% BANDWIDTH)



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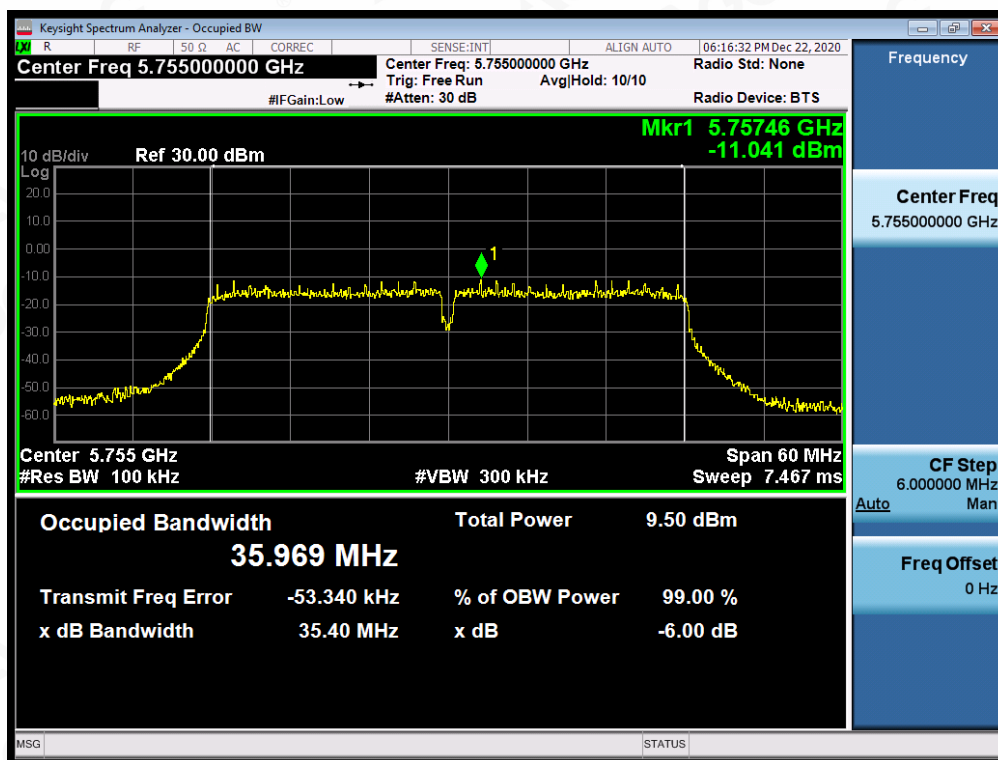
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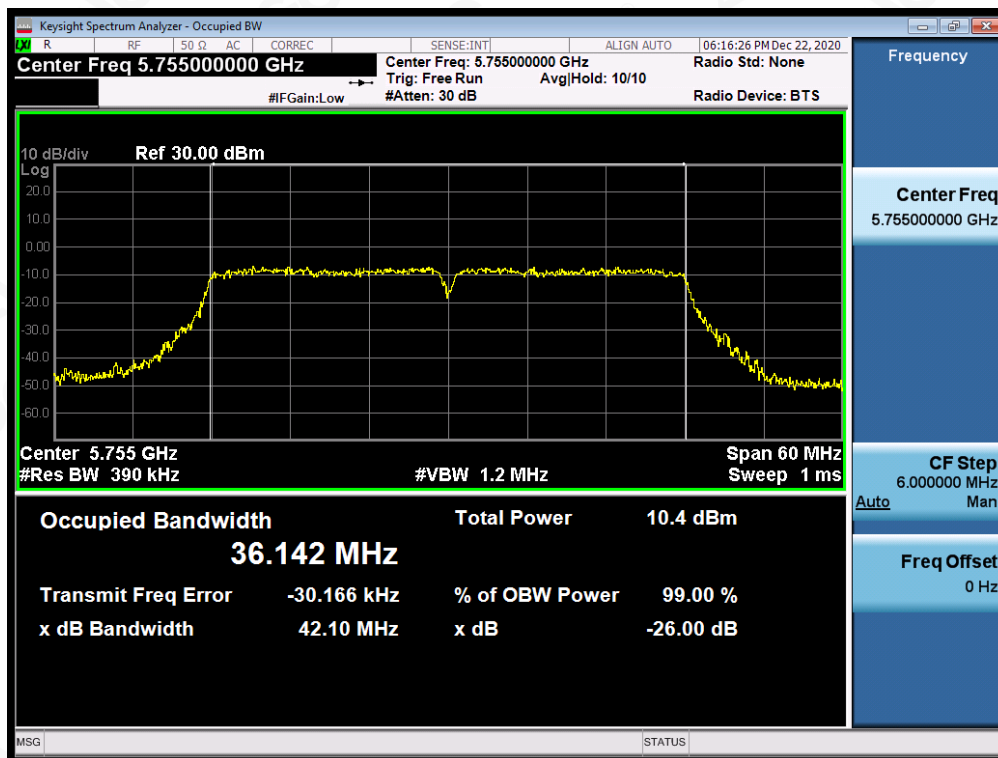


802.11n40 TEST RESULT

TEST PLOT OF BANDWIDTH FOR 5755MHz (-6dB BANDWIDTH)



TEST PLOT OF BANDWIDTH FOR 5755MHz (99% BANDWIDTH)



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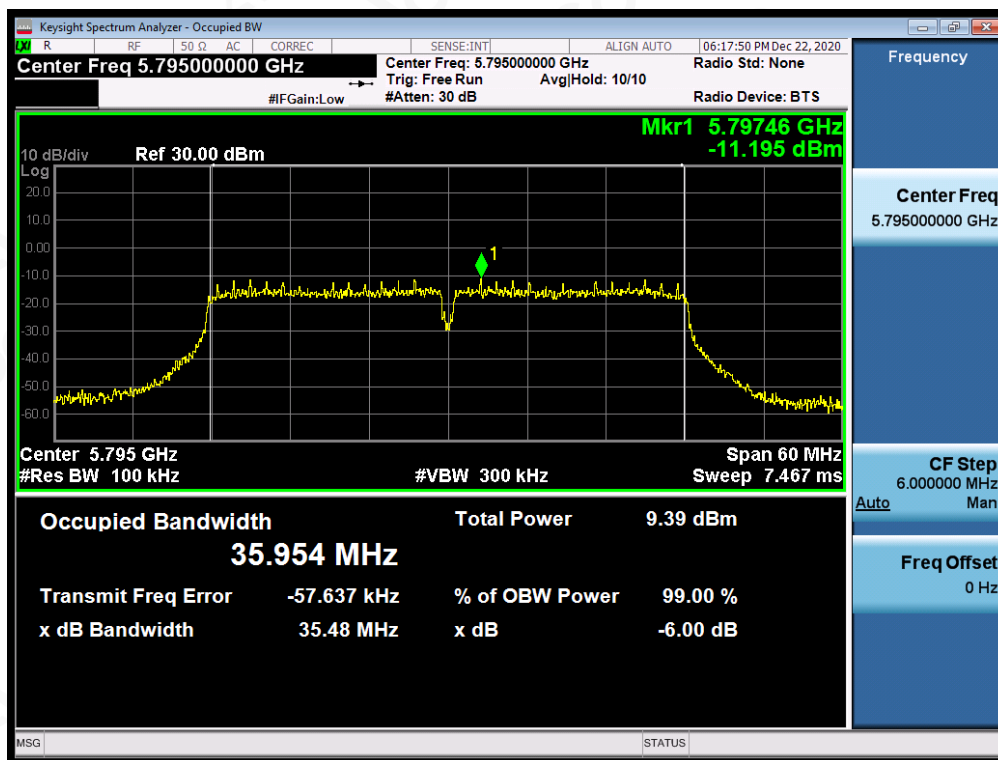
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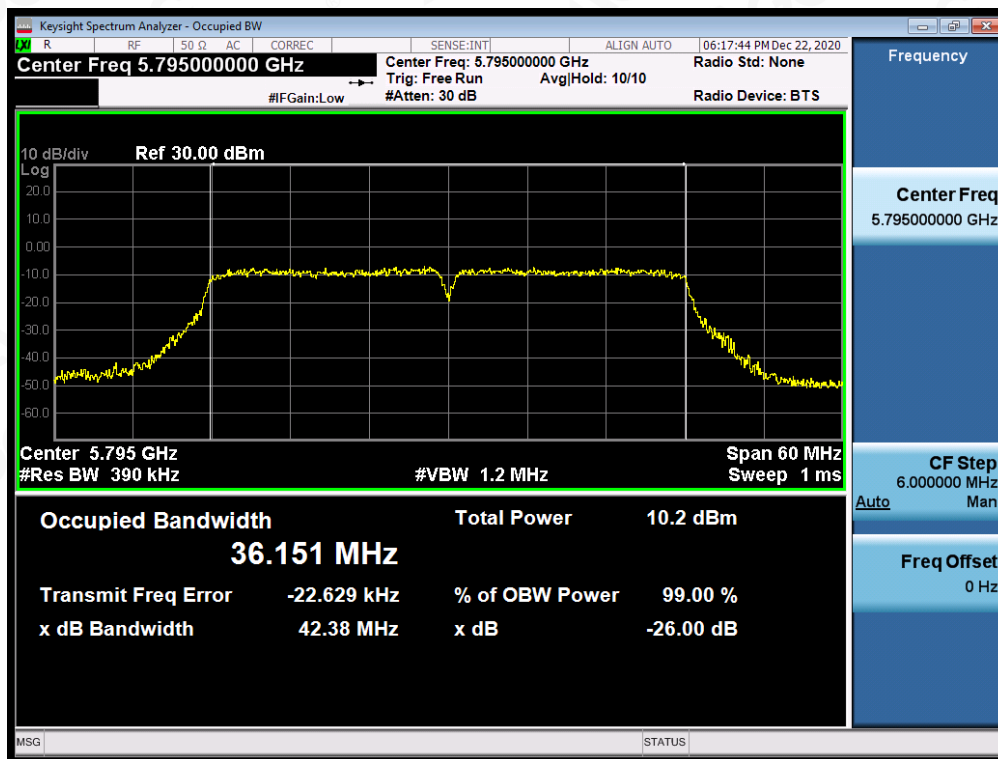
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TEST PLOT OF BANDWIDTH FOR 5795MHz (-6dB BANDWIDTH)



TEST PLOT OF BANDWIDTH FOR 5795MHz (99% BANDWIDTH)



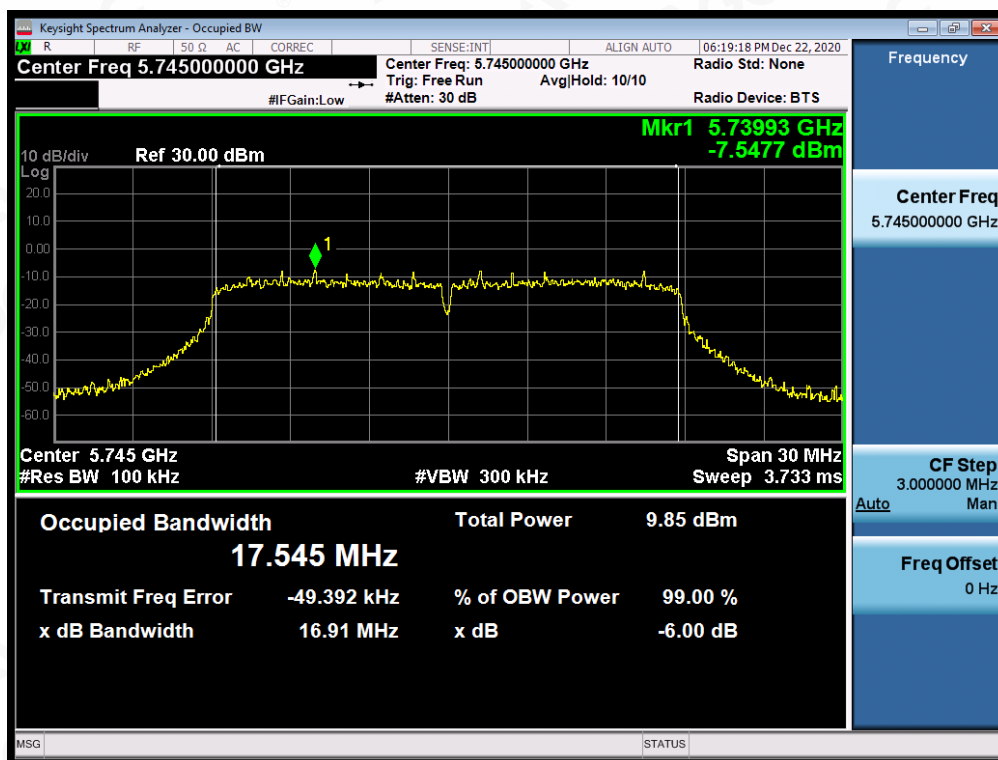
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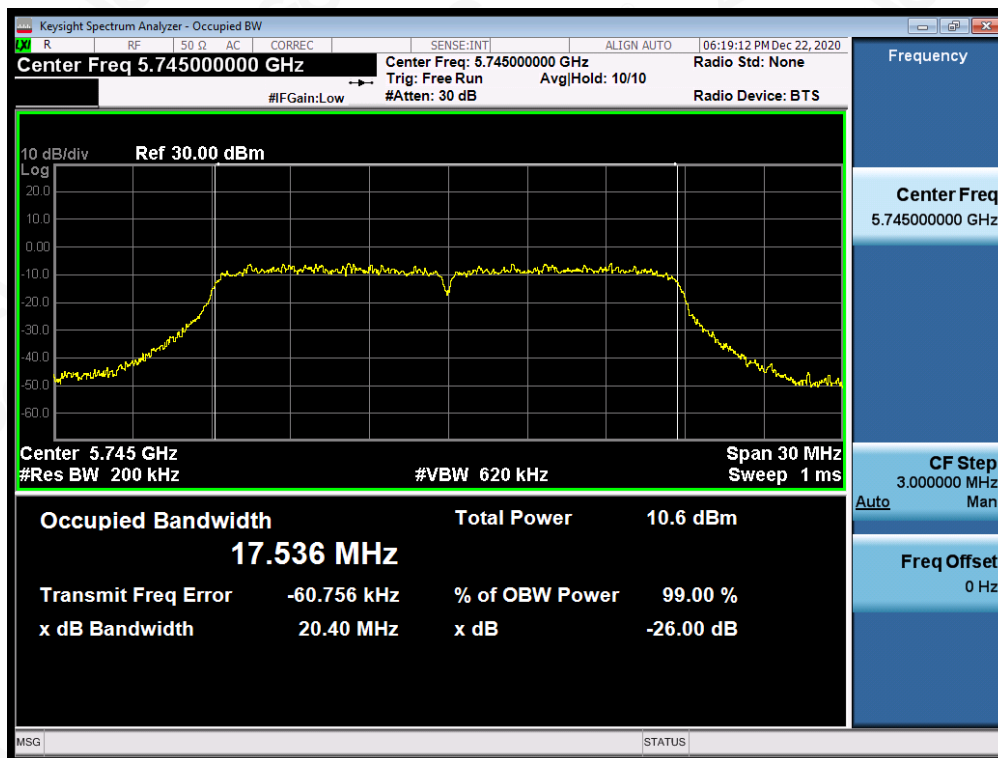


802.11ac20 TEST RESULT

TEST PLOT OF BANDWIDTH FOR 5745MHz (-6dB BANDWIDTH)



TEST PLOT OF BANDWIDTH FOR 5745MHz (99% BANDWIDTH)



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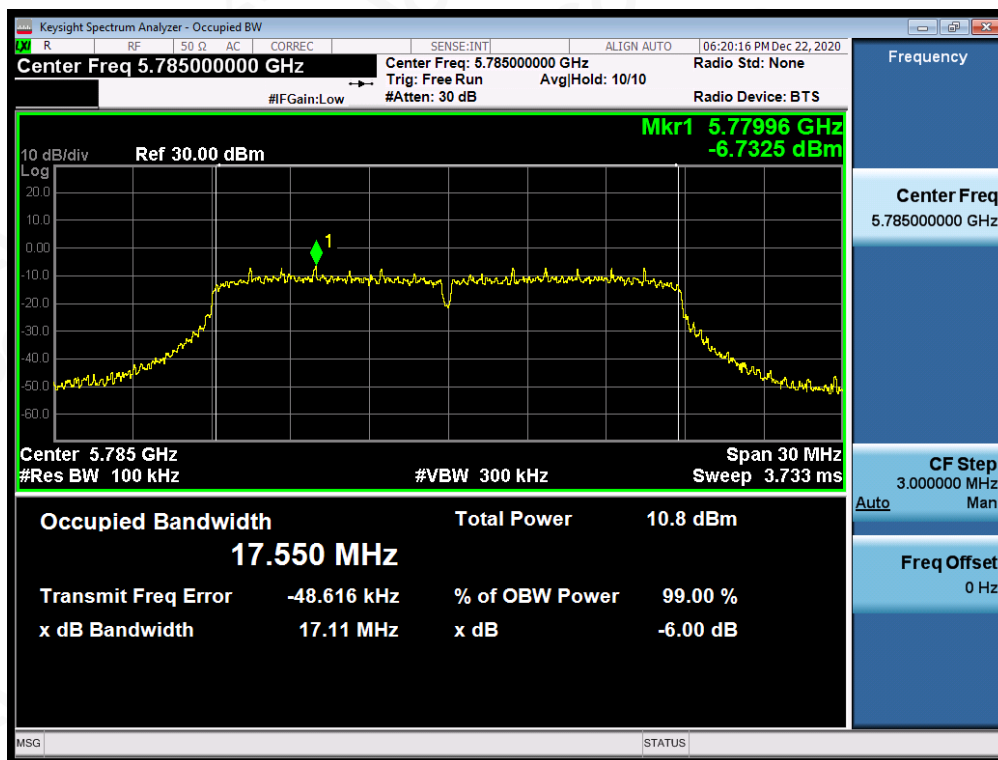
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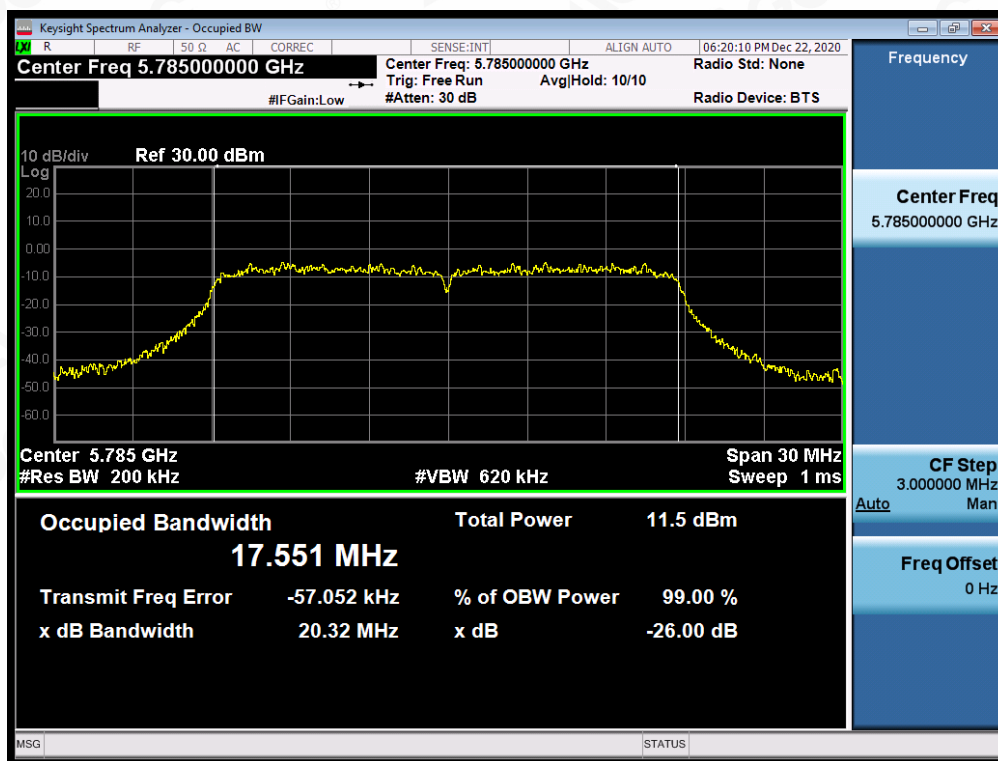
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TEST PLOT OF BANDWIDTH FOR 5785MHz (-6dB BANDWIDTH)



TEST PLOT OF BANDWIDTH FOR 5785MHz (99% BANDWIDTH)

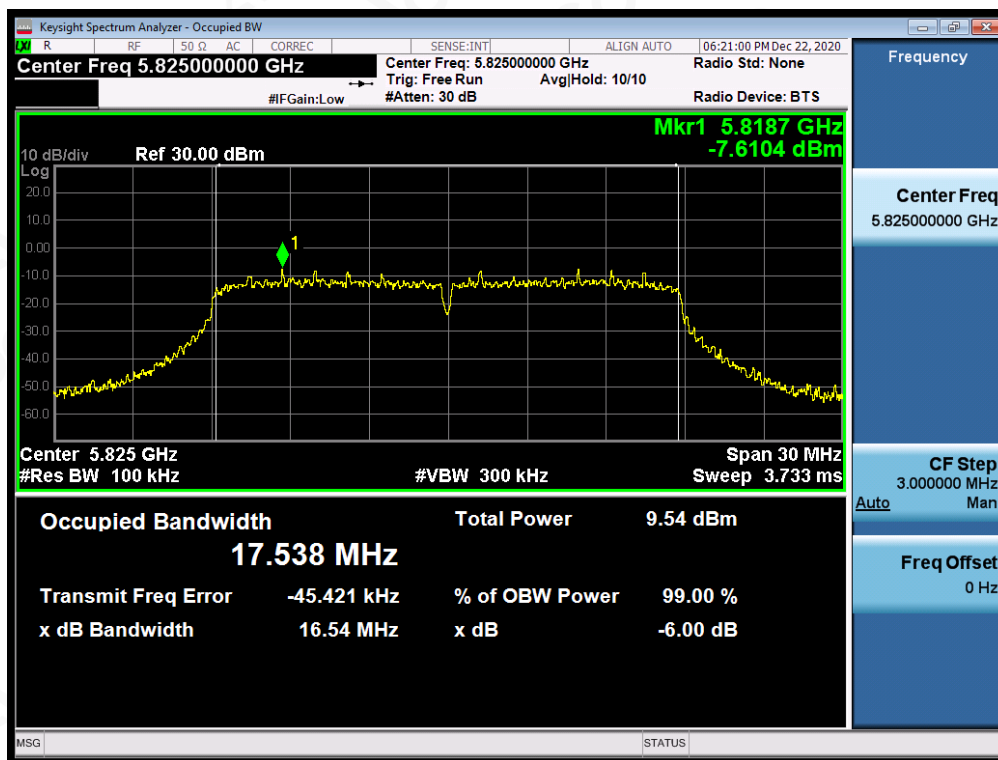


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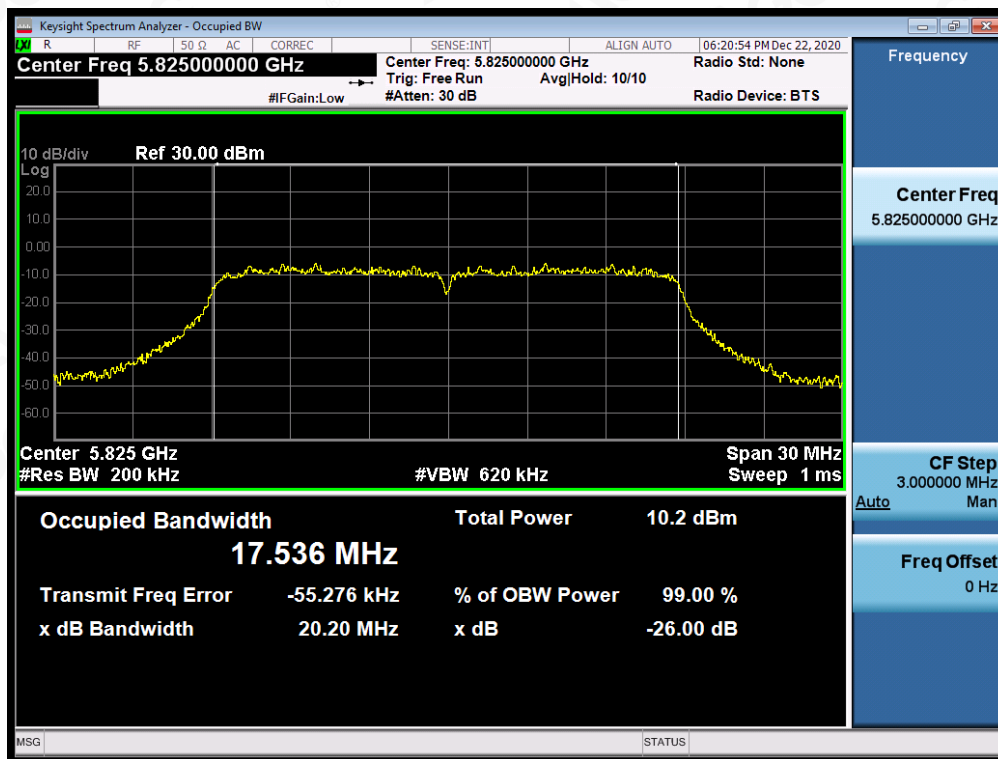
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TEST PLOT OF BANDWIDTH FOR 5825MHz (-6dB BANDWIDTH)



TEST PLOT OF BANDWIDTH FOR 5825MHz (99% BANDWIDTH)



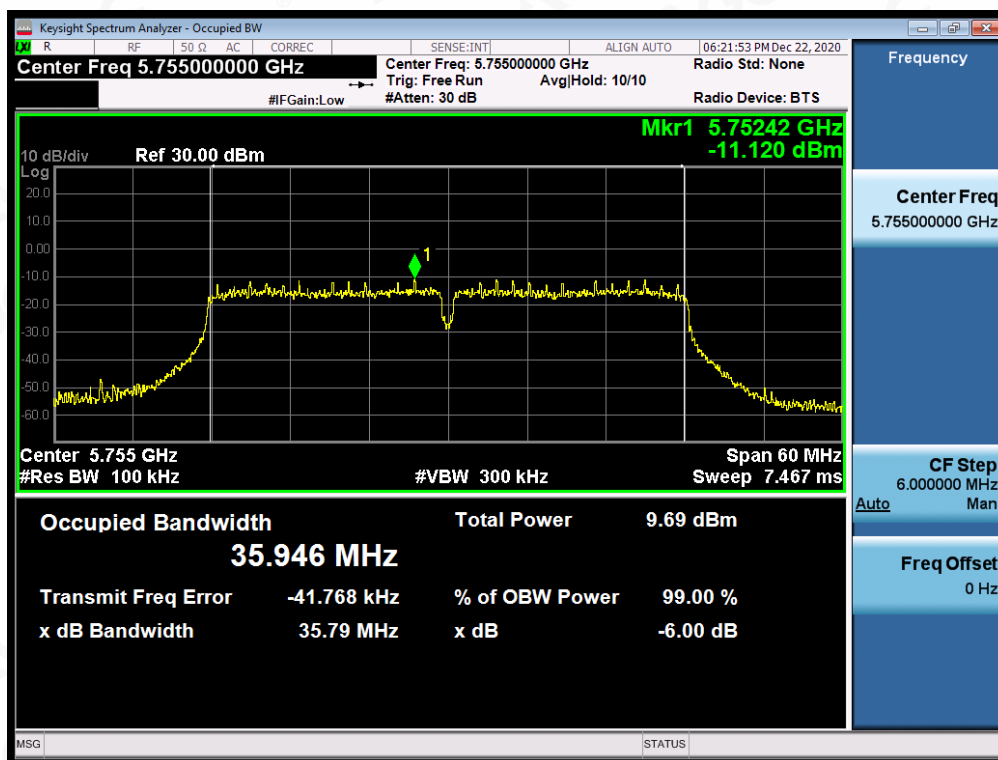
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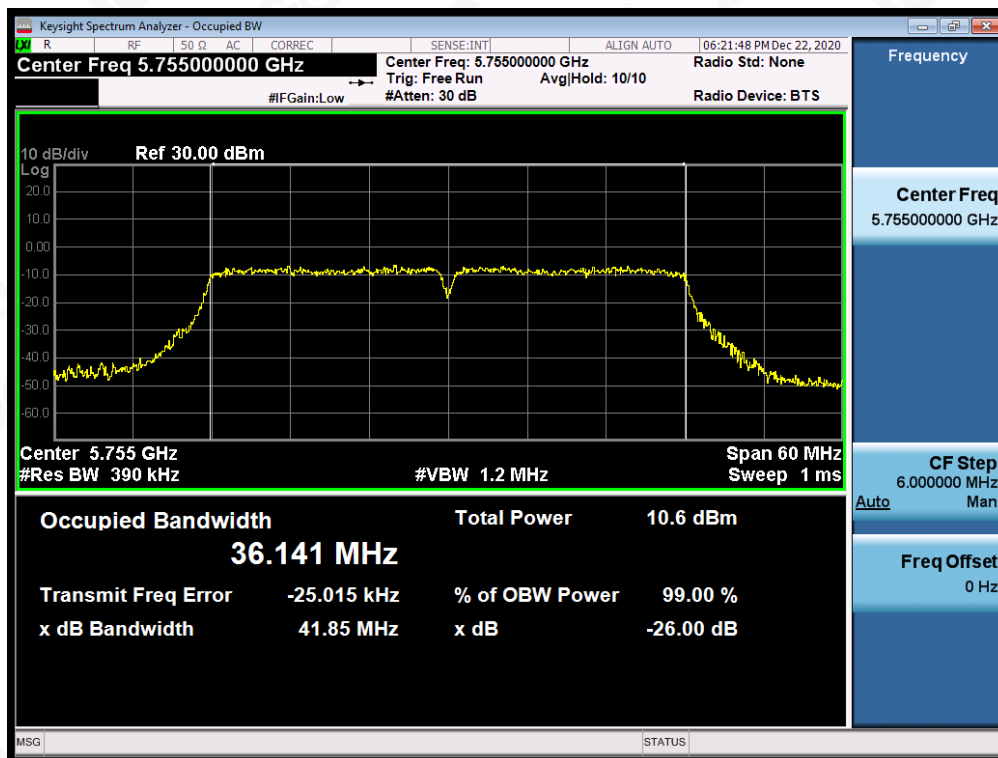


802.11ac40 TEST RESULT

TEST PLOT OF BANDWIDTH FOR 5755MHz (-6dB BANDWIDTH)



TEST PLOT OF BANDWIDTH FOR 5755MHz (99% BANDWIDTH)



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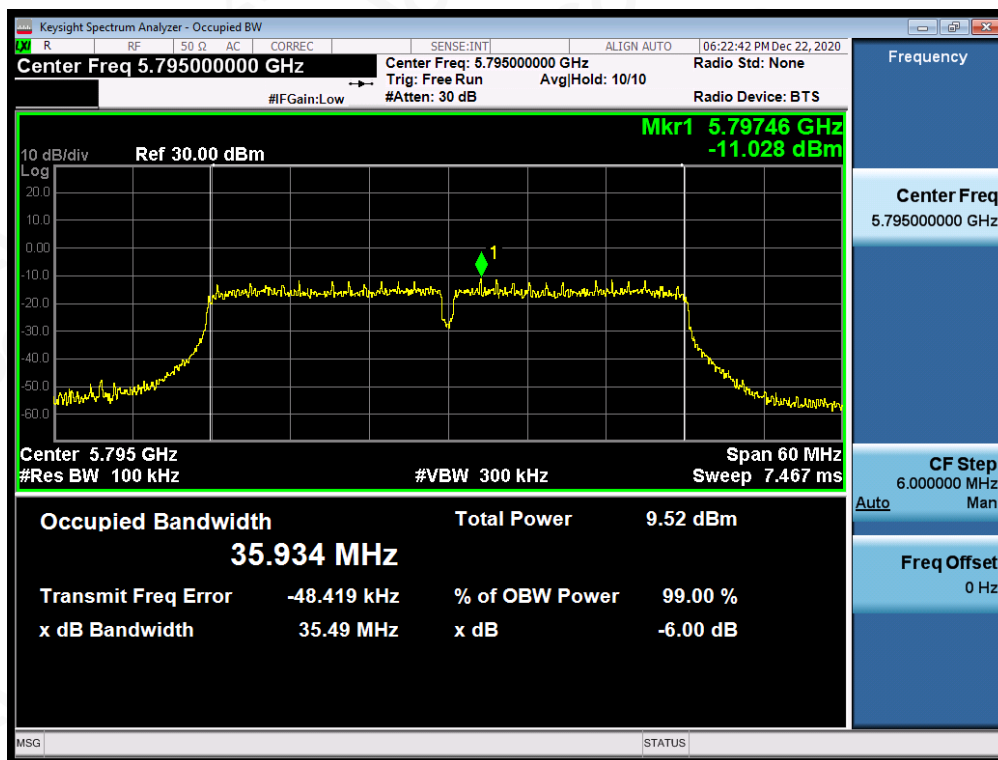
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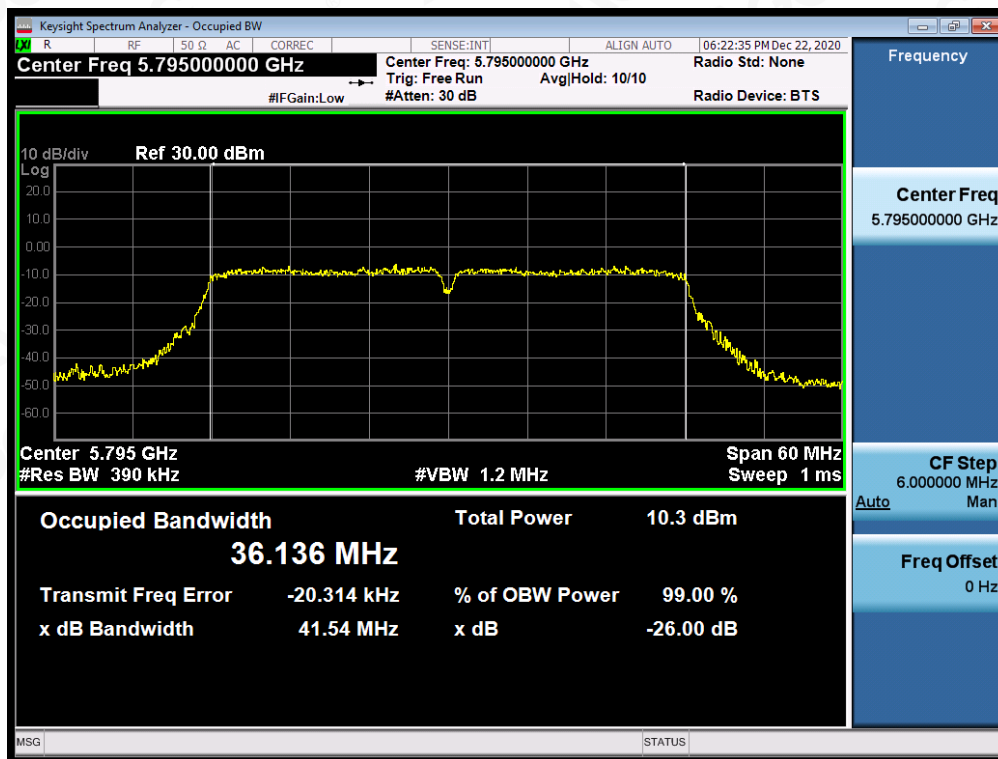
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TEST PLOT OF BANDWIDTH FOR 5795MHz (-6dB BANDWIDTH)



TEST PLOT OF BANDWIDTH FOR 5795MHz (99% BANDWIDTH)



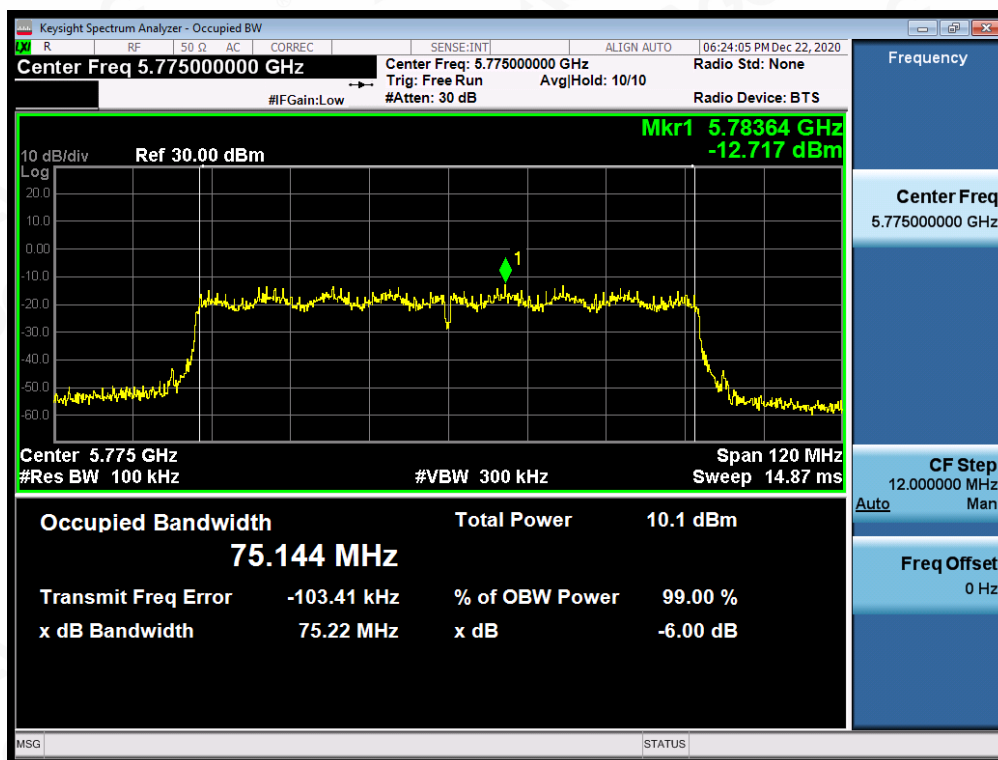
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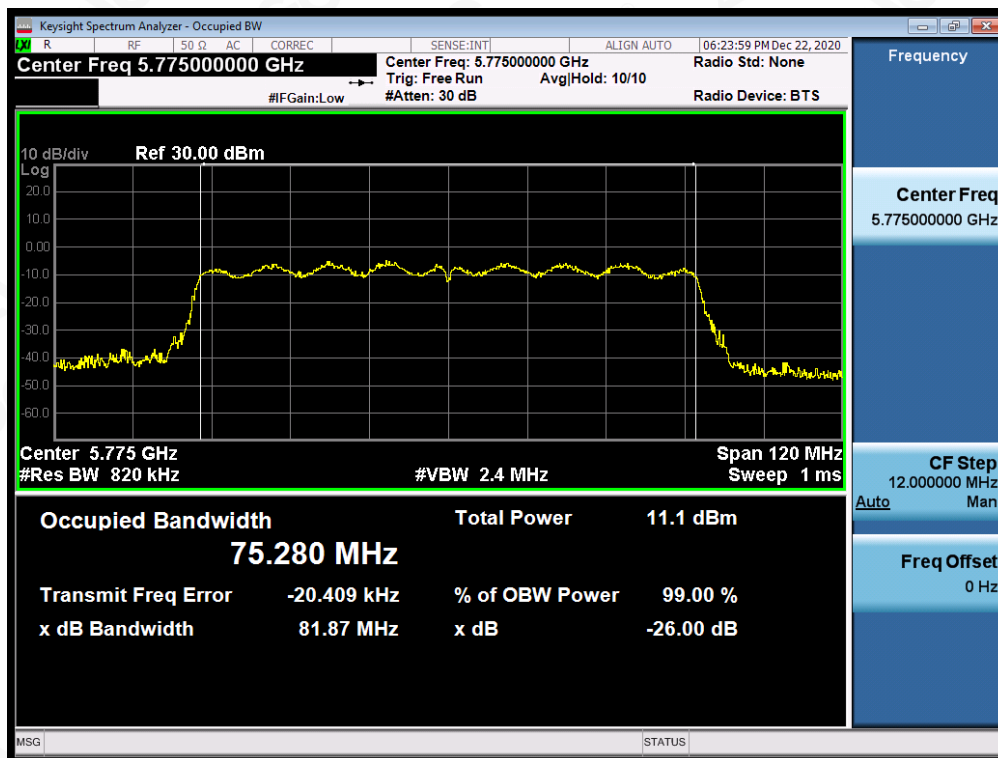


802.11ac80 TEST RESULT

TEST PLOT OF BANDWIDTH FOR 5775MHz (-6dB BANDWIDTH)



TEST PLOT OF BANDWIDTH FOR 5775MHz (99% BANDWIDTH)



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9. EMISSION BANDWIDTH

9.1. MEASUREMENT PROCEDURE

9.1.1. -26dB Bandwidth MEASUREMENT PROCEDURE

- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = Peak.
- Trace mode = max hold.
- 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%.

9.1.2. 99.00% Occupied Bandwidth MEASUREMENT PROCEDURE

- Connect the antenna port(s) to the spectrum analyzer input.
- Configure the spectrum analyzer as shown below (enter all losses between the transmitter output and the spectrum analyzer).

Center Frequency = Channel center frequency

Span = 2 x emission bandwidth

RBW = 1% to 5% of the emission bandwidth

VBW > 3 x RBW

Sweep time = auto couple

Detector = Peak

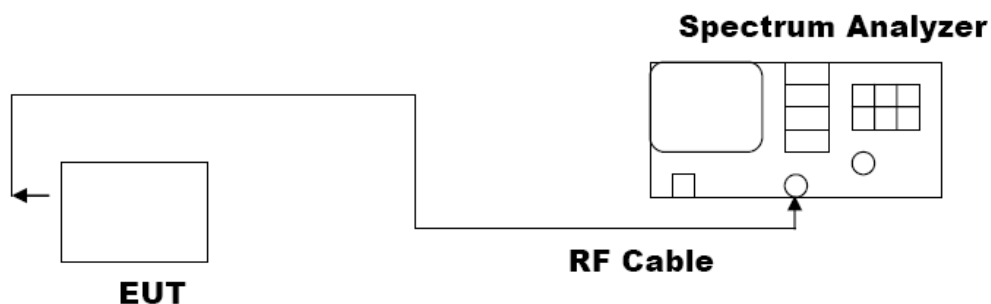
Trace mode = max hold

- Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter wave form on the spectrum analyzer.

- Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is 1% to 5%.

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

9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)



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9.3. LIMITS AND MEASUREMENT RESULTS

LIMITS AND MEASUREMENT RESULT FOR 802.11A20 MODULATION				
Applicable Limits	Applicable Limits			
	Test Data (MHz)			Criteria
	Frequency (MHz)	-26dB Bandwidth	99.00% Occupied Bandwidth	
Within the Band	5180MHz	19.71	16.451	PASS
	5200MHz	20.24	16.450	PASS
	5240MHz	19.79	16.454	PASS

LIMITS AND MEASUREMENT RESULT FOR 802.11N20/40 MODULATION				
Applicable Limits	Applicable Limits			
	Test Data (MHz)			Criteria
	Frequency (MHz)	-26dB Bandwidth	99.00% Occupied Bandwidth	
Within the Band	5180MHz	20.20	17.531	PASS
	5200MHz	20.23	17.538	PASS
	5240MHz	20.28	17.533	PASS
	5190MHz	41.74	36.133	PASS
	5230MHz	41.39	36.114	PASS

LIMITS AND MEASUREMENT RESULT FOR 802.11AC20/40/80 MODULATION				
Applicable Limits	Applicable Limits			
	Test Data (MHz)			Criteria
	Frequency (MHz)	-26dB Bandwidth	99.00% Occupied Bandwidth	
Within the Band	5180MHz	20.22	17.517	PASS
	5200MHz	20.29	17.536	PASS
	5240MHz	20.28	17.528	PASS
	5190MHz	41.55	36.141	PASS
	5230MHz	41.50	36.087	PASS
	5210MHz	79.84	75.151	PASS

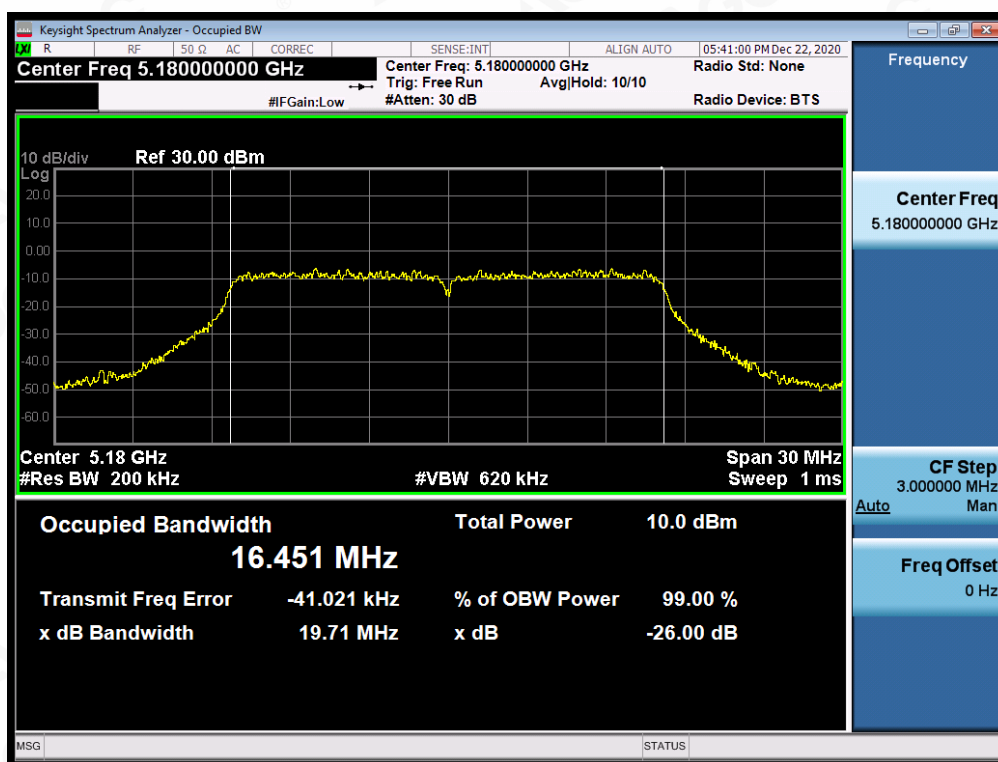
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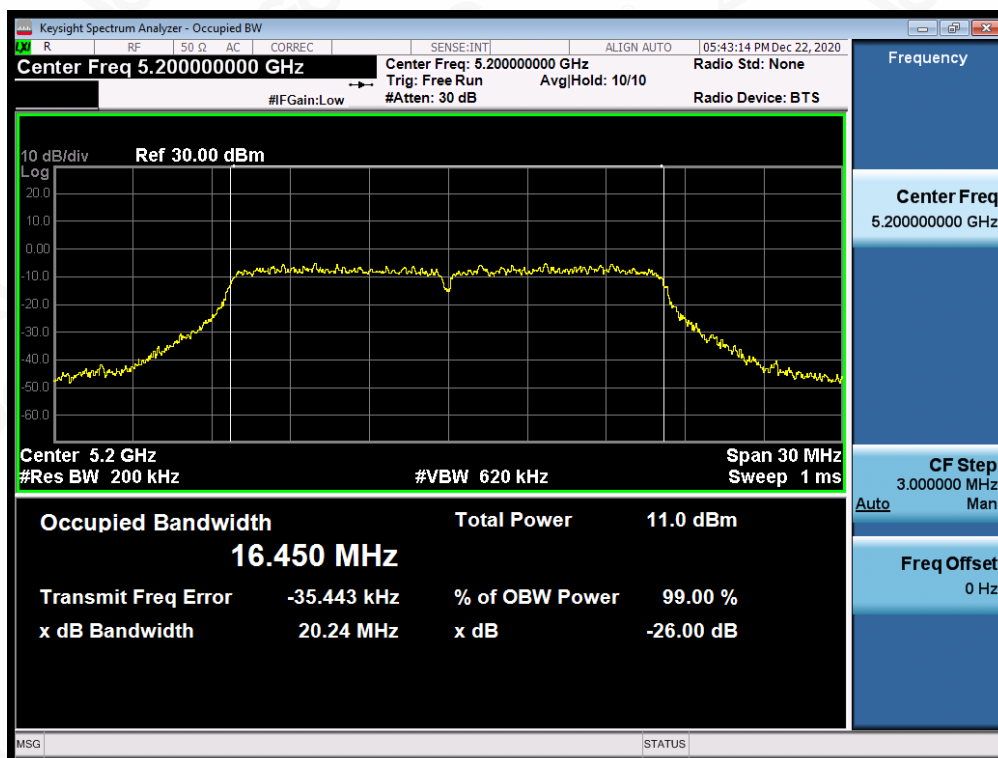


802.11a20 TEST RESULT

TEST PLOT OF BANDWIDTH FOR 5180MHZ



TEST PLOT OF BANDWIDTH FOR 5200MHZ

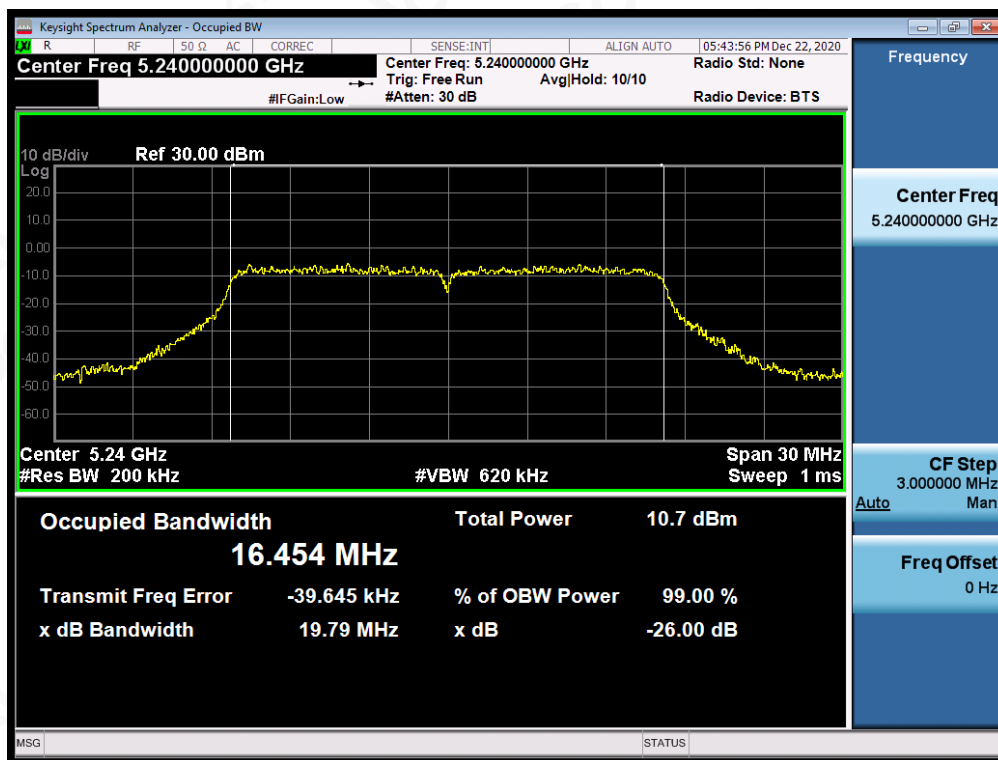


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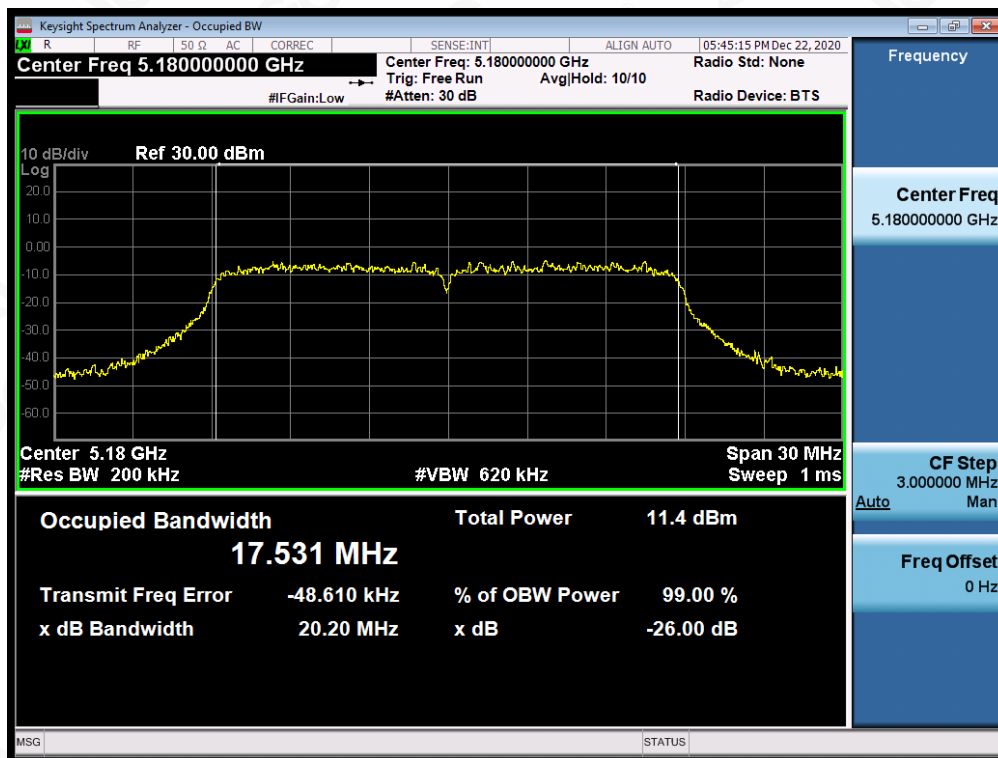


TEST PLOT OF BANDWIDTH FOR 5240MHz



802.11n20 TEST RESULT

TEST PLOT OF BANDWIDTH FOR 5180MHz



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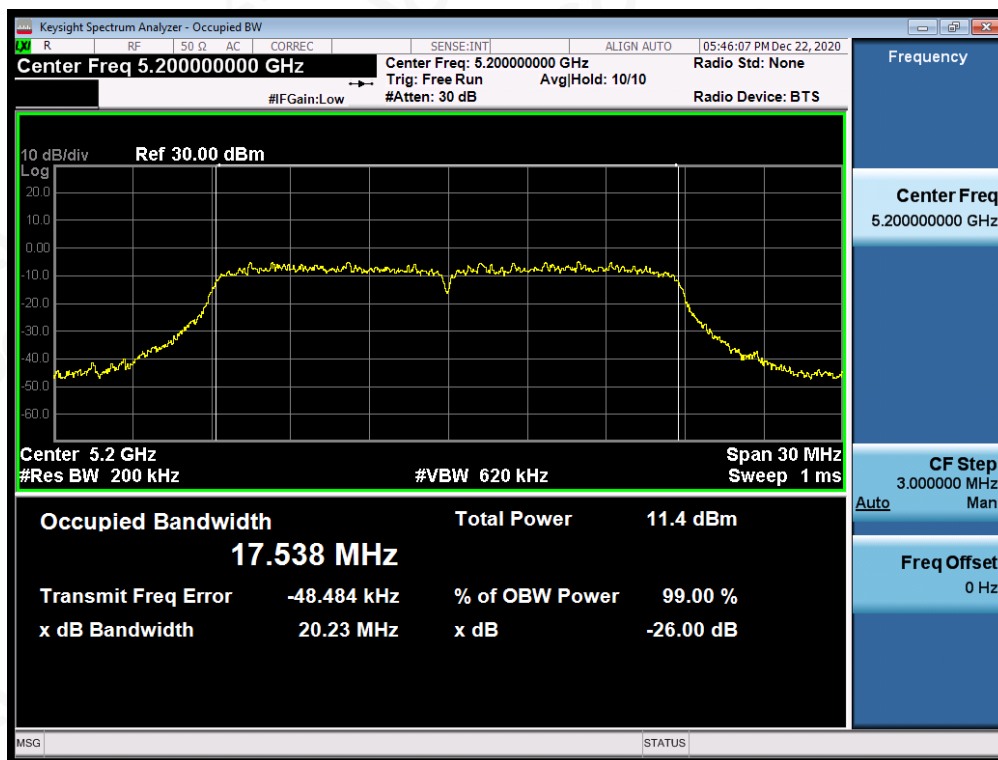
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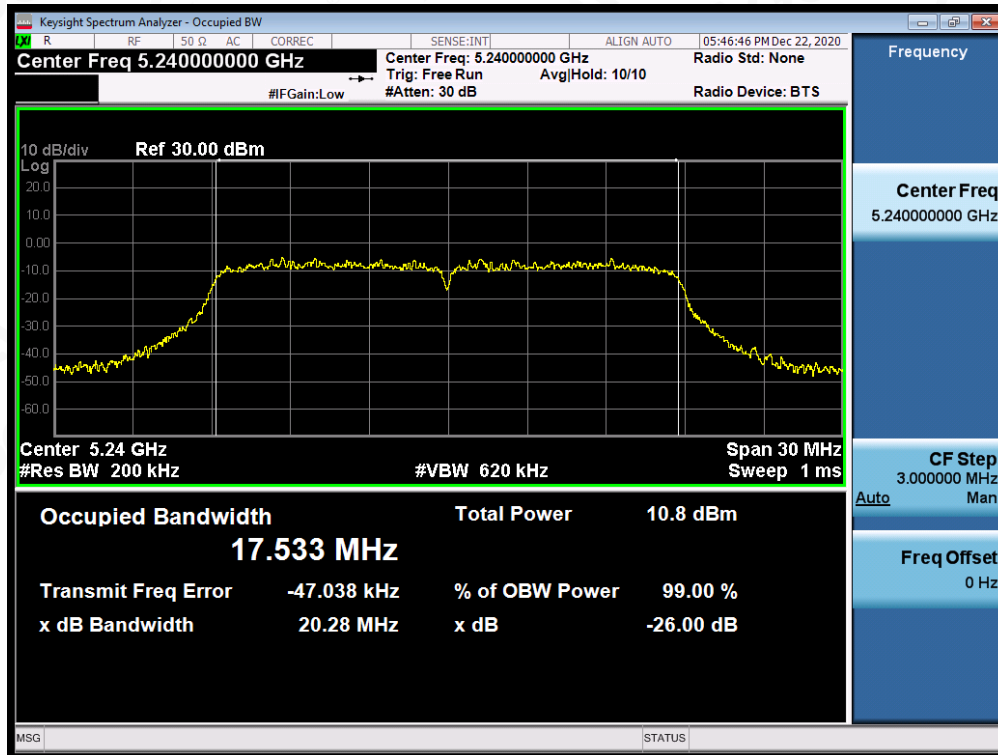
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TEST PLOT OF BANDWIDTH FOR 5200MHZ



TEST PLOT OF BANDWIDTH FOR 5240MHZ



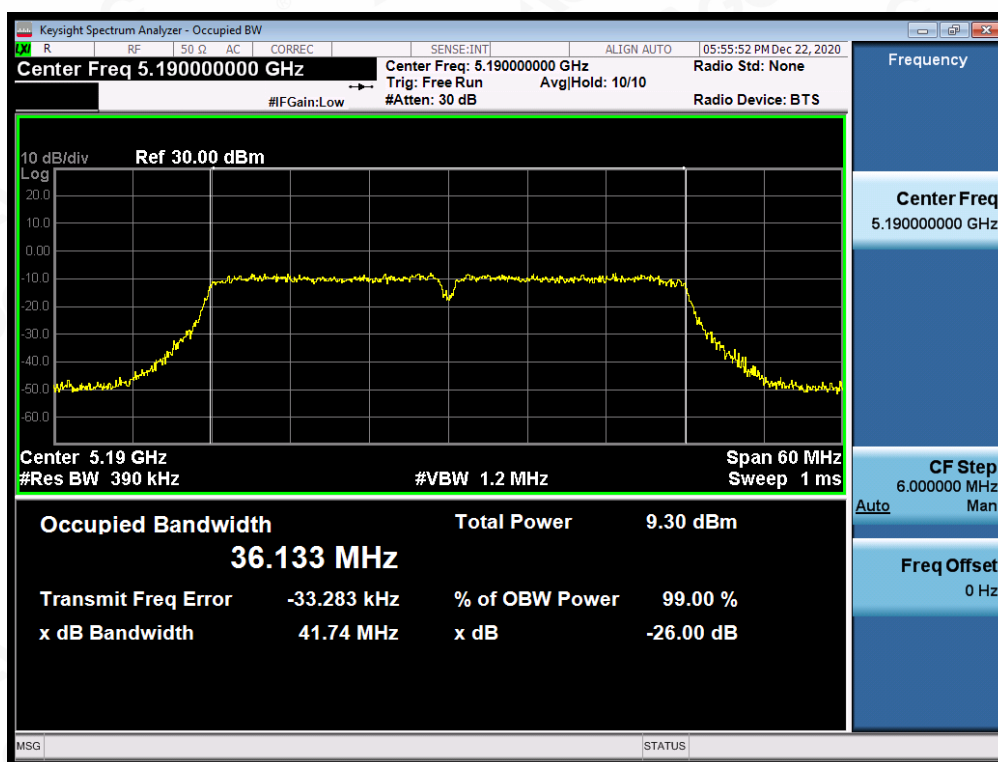
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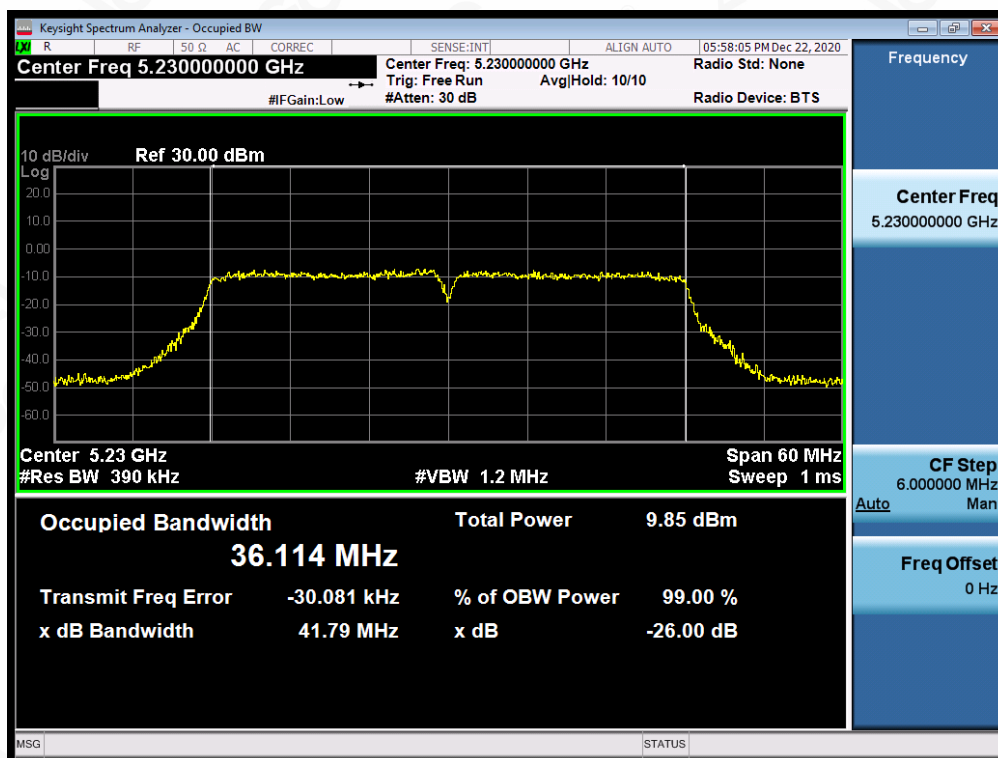


802.11n40 TEST RESULT

TEST PLOT OF BANDWIDTH FOR 5190MHz



TEST PLOT OF BANDWIDTH FOR 5230MHz



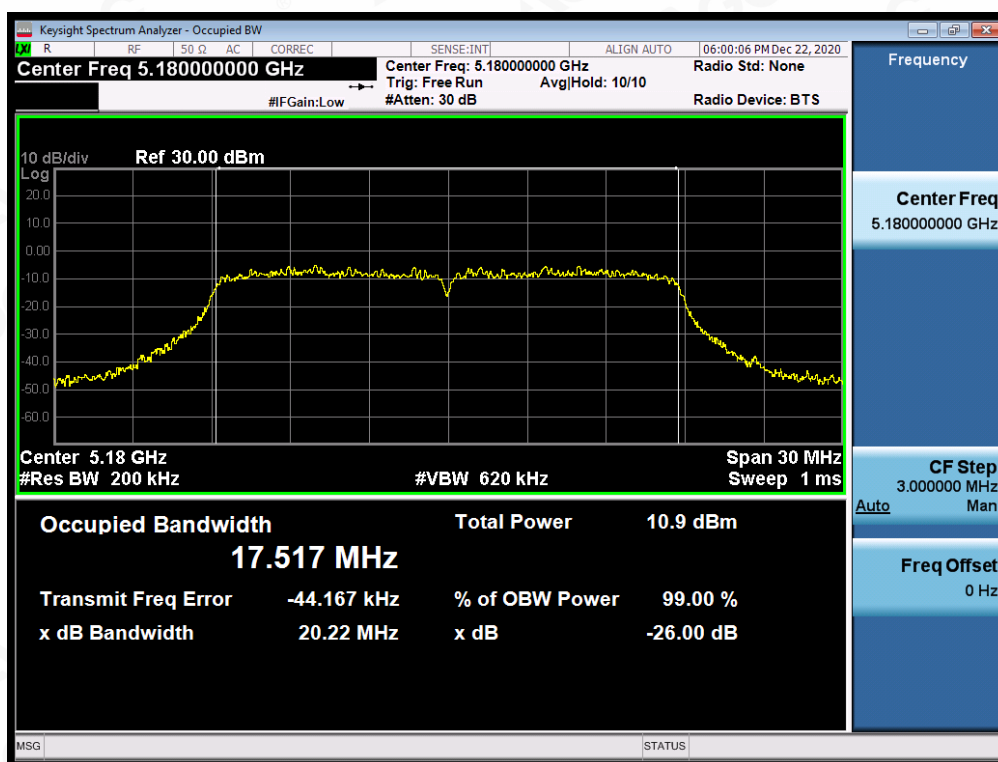
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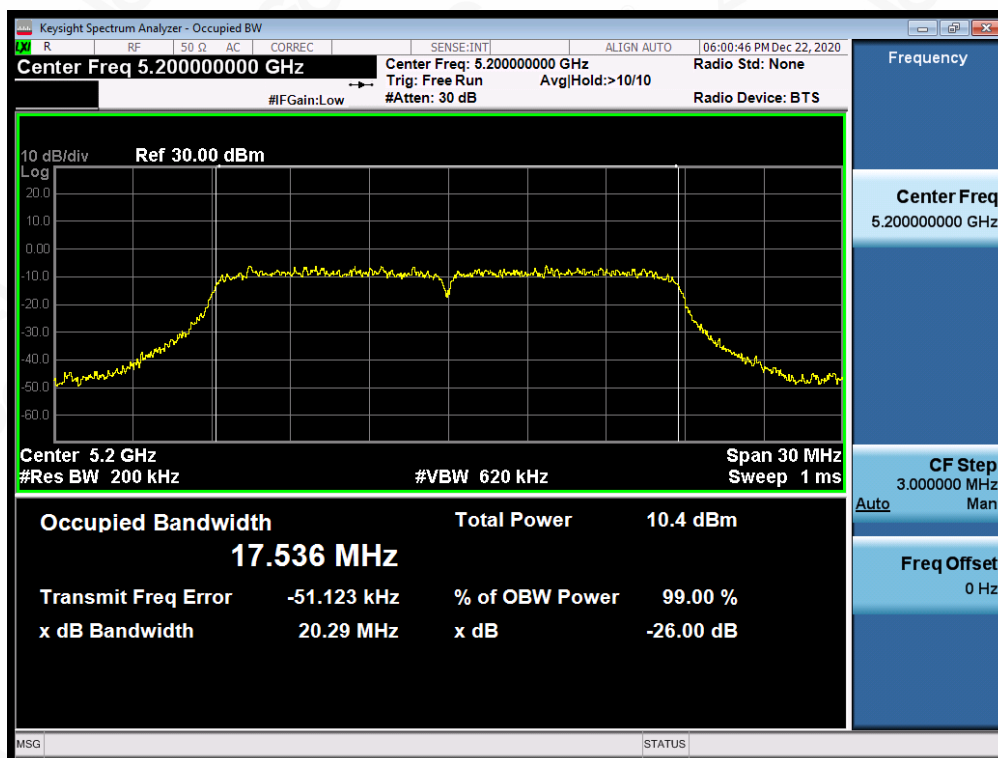


802.11ac20 TEST RESULT

TEST PLOT OF BANDWIDTH FOR 5180MHZ



TEST PLOT OF BANDWIDTH FOR 5200MHZ

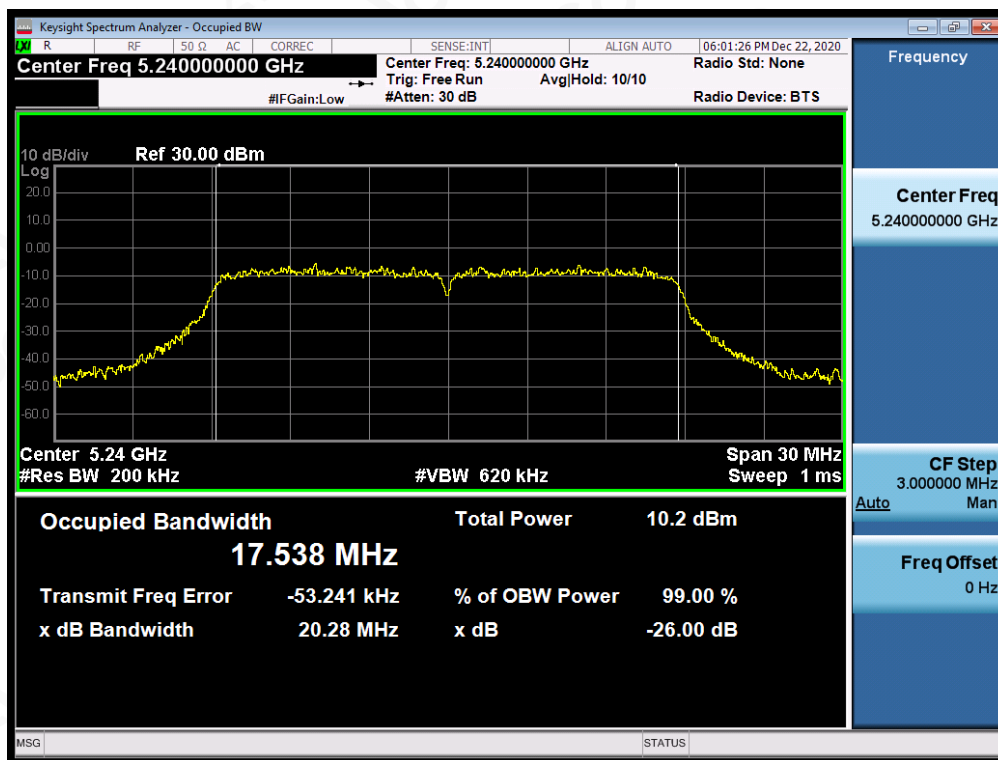


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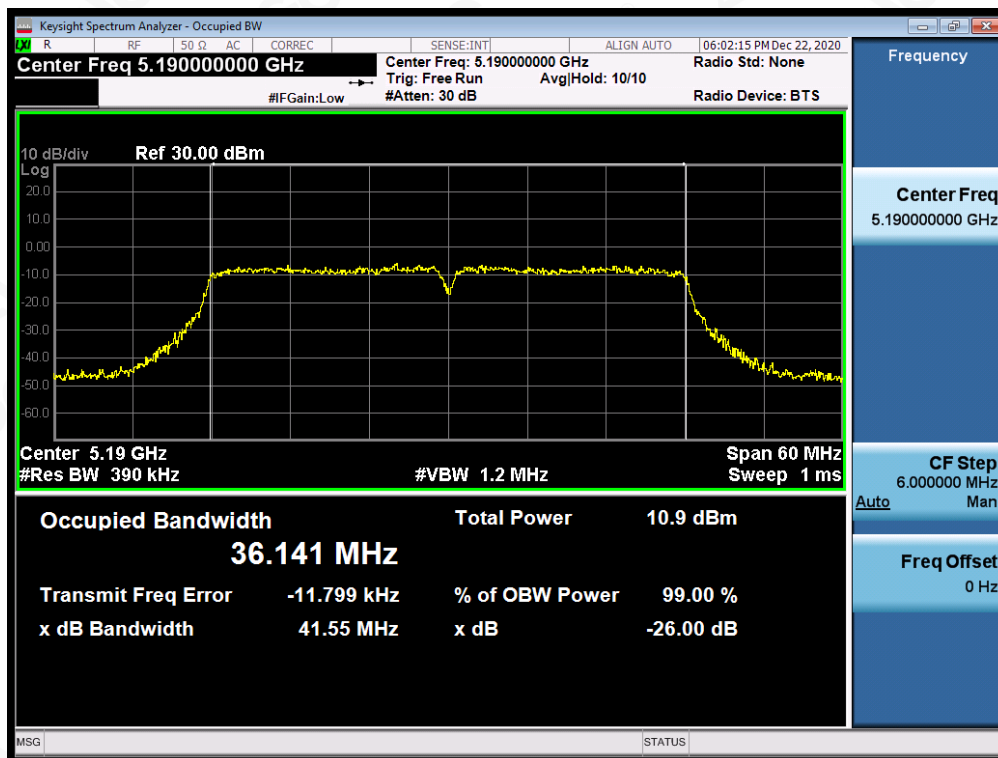


TEST PLOT OF BANDWIDTH FOR 5240MHz



802.11ac40 TEST RESULT

TEST PLOT OF BANDWIDTH FOR 5190MHz

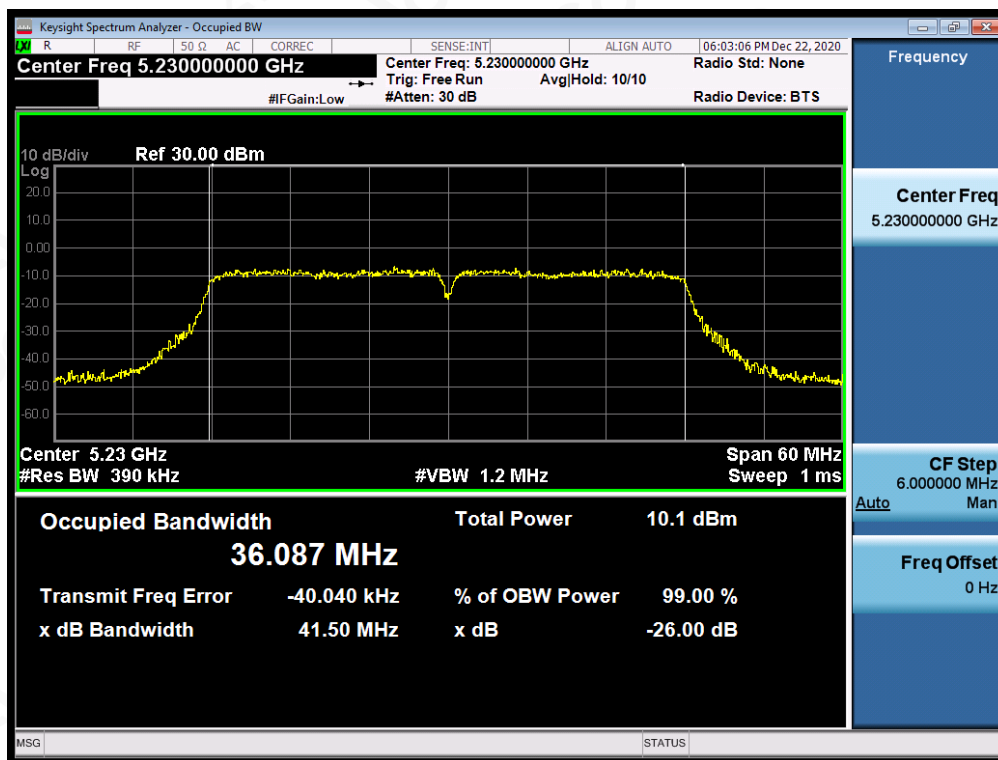


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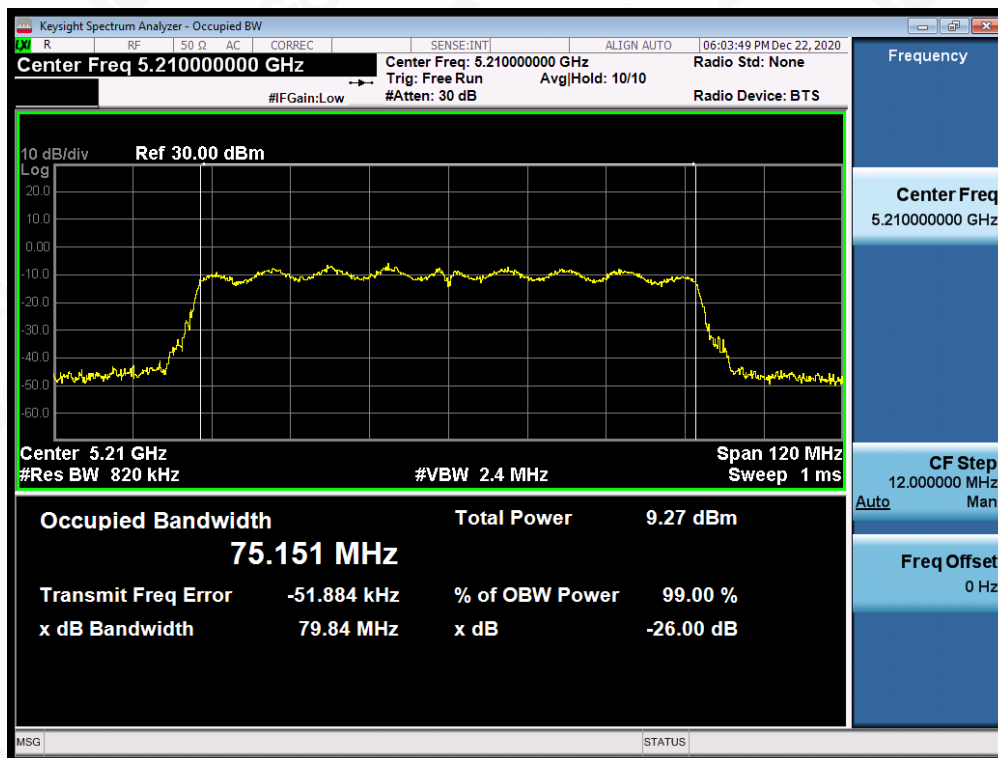


TEST PLOT OF BANDWIDTH FOR 5230MHz



802.11ac80 TEST RESULT

TEST PLOT OF BANDWIDTH FOR 5210MHz



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10. MAXIMUM CONDUCTED OUTPUT AVERAGE POWER SPECTRAL DENSITY

10.1 MEASUREMENT PROCEDURE

Refer to KDB 789033 section F

10.2 TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

Refer To Section 8.2.

10.3 MEASUREMENT EQUIPMENT USED

Refer To Section 6.

10.4 LIMITS AND MEASUREMENT RESULT

LIMITS AND MEASUREMENT RESULT FOR 802.11A20 MODULATION			
Frequency (MHz)	Power density (dBm/MHz)	Applicable Limits (dBm/MHz)	Pass or Fail
5180	-6.822	17	Pass
5200	-5.843	17	Pass
5240	-6.104	17	Pass
Frequency (MHz)	Power density (30dBm/500kHz)	Applicable Limits (30dBm/500kHz)	Pass or Fail
5745	-9.803	30	Pass
5785	-8.546	30	Pass
5825	-8.762	30	Pass

LIMITS AND MEASUREMENT RESULT FOR 802.11N20 MODULATION			
Frequency (MHz)	Power density (dBm/MHz)	Applicable Limits (dBm/MHz)	Pass or Fail
5180	-5.821	17	Pass
5200	-5.841	17	Pass
5240	-6.308	17	Pass
Frequency (MHz)	Power density (30dBm/500kHz)	Applicable Limits (30dBm/500kHz)	Pass or Fail
5745	-9.665	30	Pass
5785	-9.920	30	Pass
5825	-9.734	30	Pass

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LIMITS AND MEASUREMENT RESULT FOR 802.1N40 MODULATION			
Frequency (MHz)	Power density (dBm/MHz)	Applicable Limits (dBm/MHz)	Pass or Fail
5190	-9.933	17	Pass
5230	-9.549	17	Pass
Frequency (MHz)	Power density (30dBm/500kHz)	Applicable Limits (30dBm/500kHz)	Pass or Fail
5755	-12.158	30	Pass
5795	-12.327	30	Pass

LIMITS AND MEASUREMENT RESULT FOR 802.11AC20 MODULATION			
Frequency (MHz)	Power density (dBm/MHz)	Applicable Limits (dBm/MHz)	Pass or Fail
5180	-6.221	17	Pass
5200	-6.491	17	Pass
5240	-6.851	17	Pass
Frequency (MHz)	Power density (30dBm/500kHz)	Applicable Limits (30dBm/500kHz)	Pass or Fail
5745	-9.618	30	Pass
5785	-8.665	30	Pass
5825	-9.965	30	Pass

LIMITS AND MEASUREMENT RESULT FOR 802.1AC40 MODULATION			
Frequency (MHz)	Power density (dBm/MHz)	Applicable Limits (dBm/MHz)	Pass or Fail
5190	-8.524	17	Pass
5230	-9.410	17	Pass
Frequency (MHz)	Power density (30dBm/500kHz)	Applicable Limits (30dBm/500kHz)	Pass or Fail
5755	-11.832	30	Pass
5795	-12.123	30	Pass

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LIMITS AND MEASUREMENT RESULT FOR 802.1AC80 MODULATION			
Frequency (MHz)	Power density (dBm/MHz)	Applicable Limits (dBm/MHz)	Pass or Fail
5210	-12.593	17	Pass
Frequency (MHz)	Power density (30dBm/500kHz)	Applicable Limits (30dBm/500kHz)	Pass or Fail
5775	-13.364	30	Pass

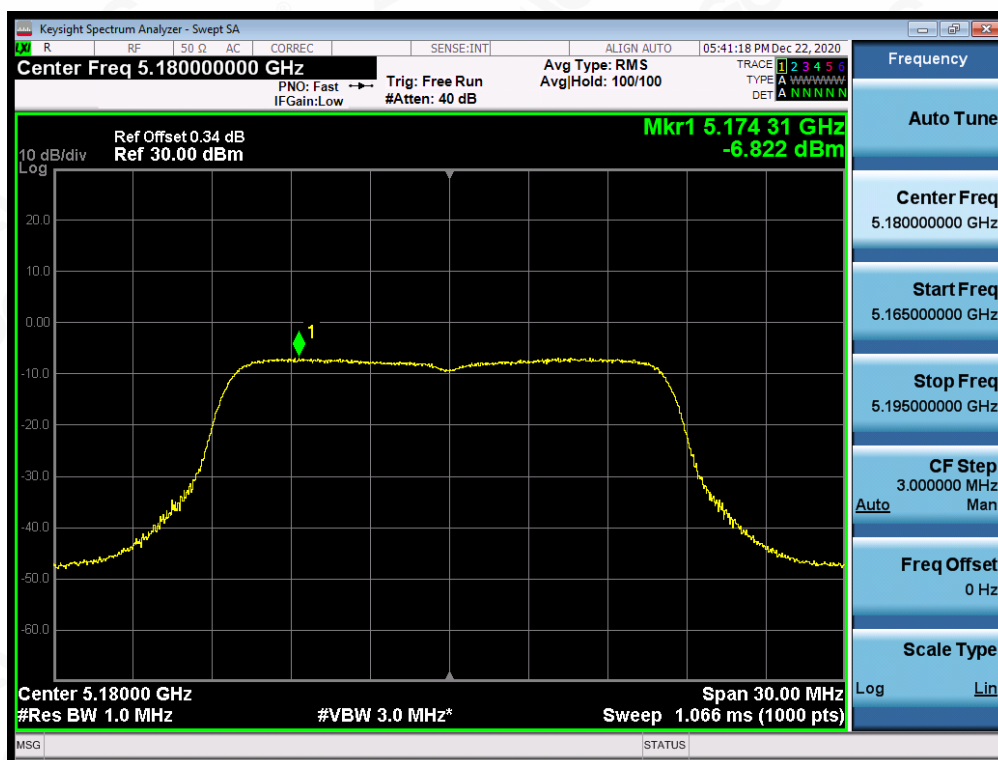
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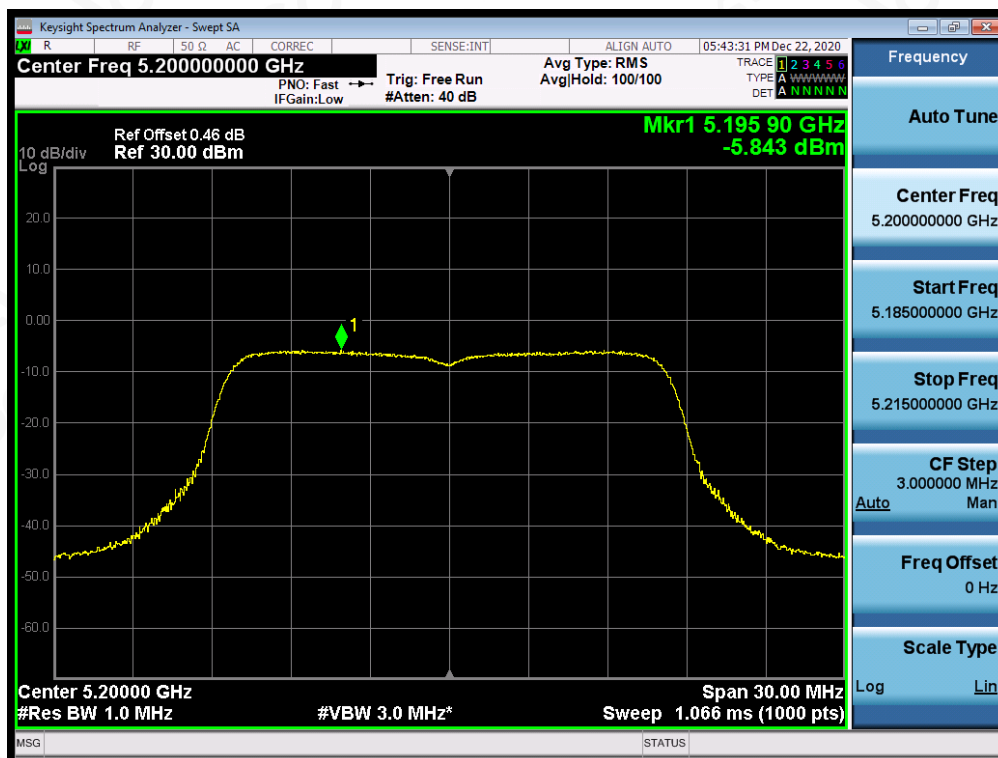


802.11a20 TEST RESULT

TEST PLOT OF SPECTRAL DENSITY FOR 5180MHz



TEST PLOT OF SPECTRAL DENSITY FOR 5200MHz



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TEST PLOT OF SPECTRAL DENSITY FOR 5240MHz



TEST PLOT OF SPECTRAL DENSITY FOR 5745MHz

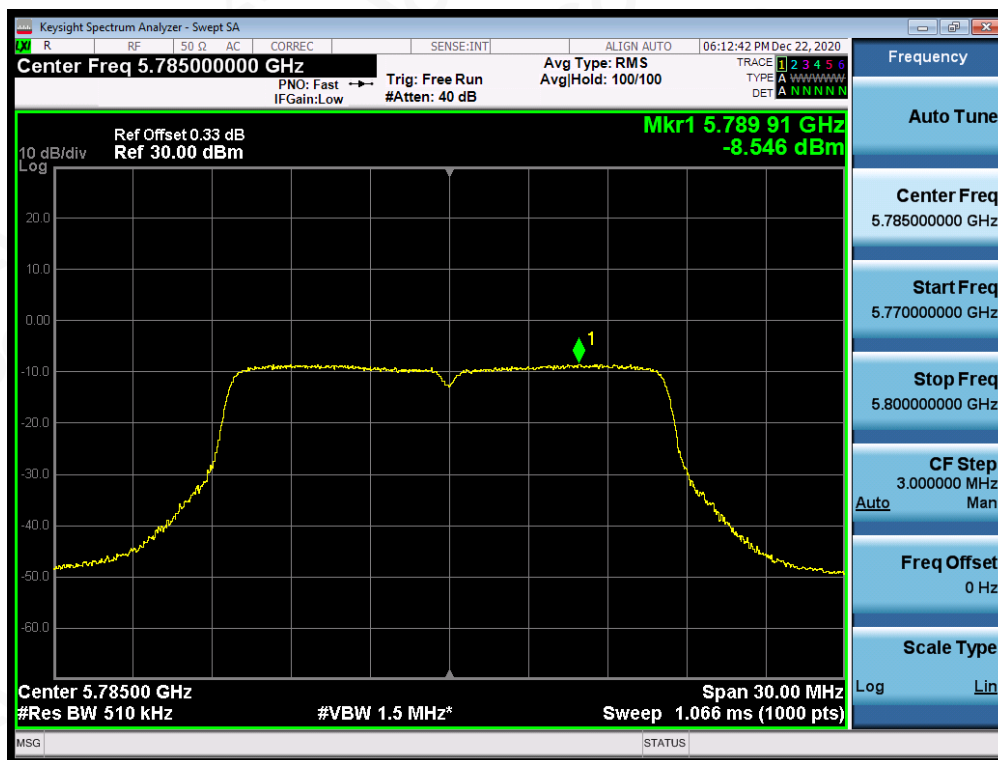


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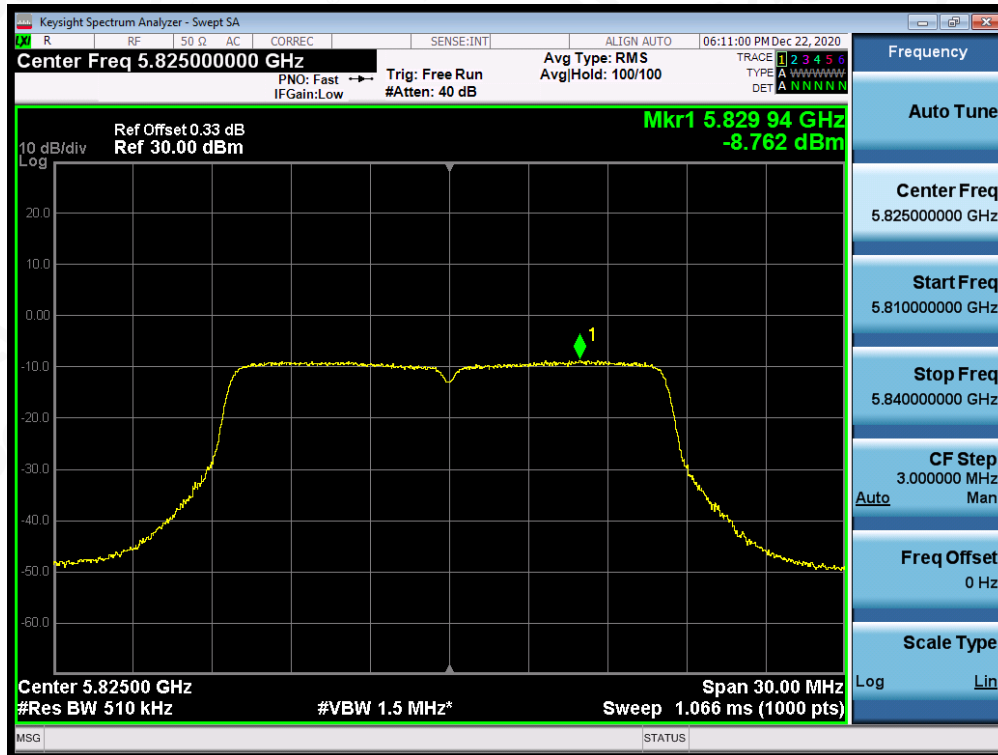
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TEST PLOT OF SPECTRAL DENSITY FOR 5785MHz



TEST PLOT OF SPECTRAL DENSITY FOR 5825MHz



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