
FCC Test Report

Report No.: AGC12845230406FE07

FCC ID : 2A3NS-SCP300

APPLICATION PURPOSE : Original Equipment

PRODUCT DESIGNATION : RoboPusher Nimbo

BRAND NAME : Sveaverken

MODEL NAME : 9WZ-1.05A(SCP300)

APPLICANT : Sveaverken Svea Agri AB

DATE OF ISSUE : May 24, 2023

STANDARD(S) : FCC Part 15.407

TEST PROCEDURE(S) : KDB 789033 D02 v02r01

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	/	May 24, 2023	Valid	Initial Release

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1. VERIFICATION OF CONFORMITY

Applicant	Sveaverken Svea Agri AB
Address	Hogmossevangen 11, SE-641 39 Katrineholm, Sweden
Manufacturer	Sveaverken Svea Agri AB
Address	Hogmossevangen 11, SE-641 39 Katrineholm, Sweden
Factory	Sveaverken Svea Agri AB
Address	Hogmossevangen 11, SE-641 39 Katrineholm, Sweden
Product Designation	RoboPusher Nimbo
Brand Name	Sveaverken
Test Model	9WZ-1.05A(SCP300)
Test Model	Apr. 27. 2023
Date of receipt of test item	Apr. 27. 2023 to May 24, 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 requirement of FCC Part 15 Rules requirement.

Prepared By		
	Alan Duan (Project Engineer)	May 24, 2023
Reviewed By		
	Calvin Liu (Reviewer)	May 24, 2023
Approved By		
	Max Zhang (Authorized Officer)	May 24, 2023

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2. GENERAL INFORMATION

2.1. PRODUCT DESCRIPTION

The EUT is designed as “RoboPusher Nimbo”. 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

Equipment Type	<input type="checkbox"/> Outdoor access points <input type="checkbox"/> Indoor access points <input type="checkbox"/> Fixed P2P access points <input checked="" type="checkbox"/> Client devices
Operation Frequency	<input checked="" type="checkbox"/> U-NII 1:5150MHz~5250MHz <input type="checkbox"/> U-NII 2A: 5250MHz~5350MHz <input type="checkbox"/> U-NII 2C:5470MHz~5725MHz <input checked="" type="checkbox"/> U-NII 3: 5725MHz~5850MHz
DFS Design Type	<input type="checkbox"/> Master <input type="checkbox"/> Slave with radar detection <input checked="" type="checkbox"/> Slave without radar detection
TPC Function	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Hardware Version	V1.0
Software Version	V1.0
Test Frequency Range:	For 802.11a/n-HT20-VHT20: 5180~5240MHz, 5745~5825MHz For 802.11n-HT40-HE 40: 5190~5230MHz, 5755~5795MHz For 802.11ac-VHT80-HE80: 5210MHz, 5775MHz
Output Power	IEEE 802.11a(HT20):12.80dBm; IEEE 802.11n(HT20):12.13dBm; IEEE802.11n(HT40):11.37dBm; IEEE 802.11ac(VHT20):10.91dBm; IEEE802.11ac(VHT40):9.19dBm; IEEE802.11ac(VHT80):10.86dBm
Modulation	802.11a/n:(64-QAM, 16-QAM, QPSK, BPSK) OFDM 802.11ac :(256-QAM, 64-QAM, 16-QAM, QPSK, BPSK) OFDM
Data Rate	802.11a: 6/9/12/18/24/36/48/54Mbps; 802.11n: up to 300Mbps; 802.11ac: up to 866.6Mbps;
Number of channels	7 channels of U-NII-1 Band 8 channels of U-NII-3 Band
Antenna Designation	Rod antenna (Comply with requirements of the FCC part 15.203)
Antenna Gain	3.44dBi
Power Supply	DC 48V

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2.2. TABLE OF CARRIER FREQUENCIES

For 5180~5240MHz:

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20):

Channel	Frequency	Channel	Frequency
36	5180 MHz	44	5220 MHz
40	5200 MHz	48	5240 MHz

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40):

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (VHT80), 802.11ax (VHT80):

Channel	Frequency	Channel	Frequency
42	5210 MHz	--	--

For 5745~5825MHz:

5 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20) , 802.11ax (HE20):

Channel	Frequency	Channel	Frequency
149	5745 MHz	161	5805 MHz
153	5765 MHz	165	5825 MHz
157	5785 MHz	--	--

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40) , 802.11ax (HE40):

Channel	Frequency	Channel	Frequency
151	5755 MHz	159	5795 MHz

1 channel is provided for 802.11ac (VHT80) , 802.11ax (HE80):

Channel	Frequency	Channel	Frequency
155	5775 MHz	--	--

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

This submittal(s) (test report) is intended for **FCC ID: 2A3NS-SCP300** 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

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.

3. MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded 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	$U_c = \pm 2 \%$

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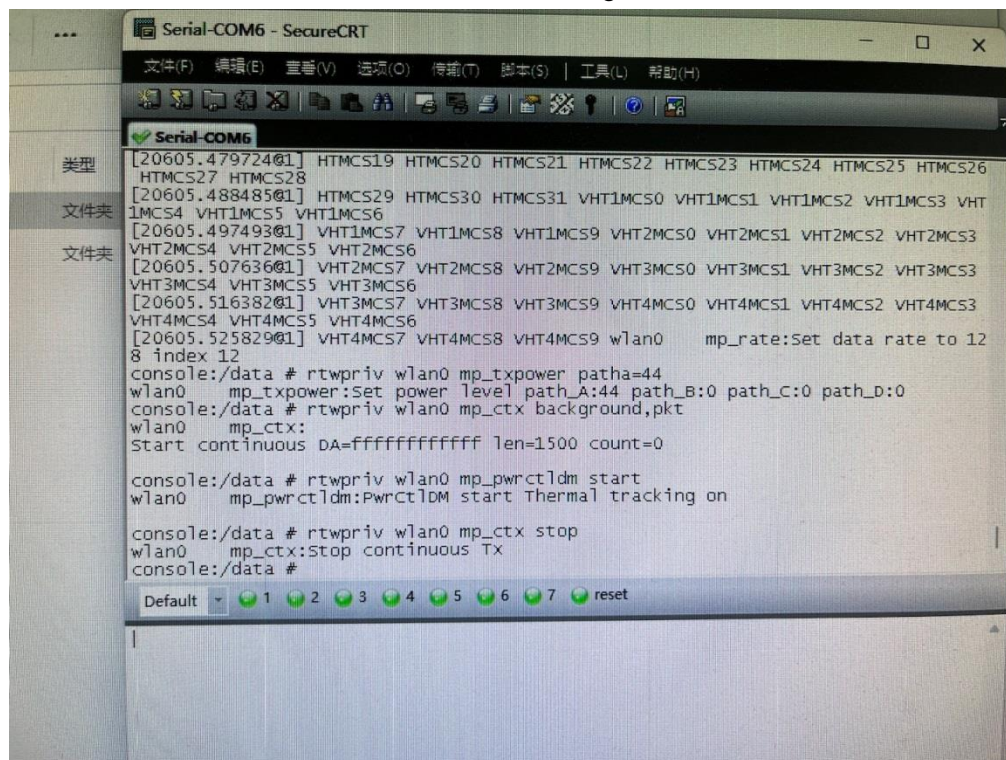
4. DESCRIPTION OF TEST MODES

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.

Software Setting



```

Serial-COM6 - SecureCRT
文件(F) 编辑(E) 查看(V) 选项(O) 传输(T) 脚本(S) | 工具(L) 帮助(H)

Serial-COM6
类型 [20605.479724@1] HTMCS19 HTMCS20 HTMCS21 HTMCS22 HTMCS23 HTMCS24 HTMCS25 HTMCS26
HTMCS27 HTMCS28
[20605.488485@1] HTMCS29 HTMCS30 HTMCS31 VHT1MCS0 VHT1MCS1 VHT1MCS2 VHT1MCS3 VHT
1MCS4 VHT1MCS5 VHT1MCS6
[20605.497493@1] VHT1MCS7 VHT1MCS8 VHT1MCS9 VHT2MCS0 VHT2MCS1 VHT2MCS2 VHT2MCS3
VHT2MCS4 VHT2MCS5 VHT2MCS6
[20605.507636@1] VHT2MCS7 VHT2MCS8 VHT2MCS9 VHT3MCS0 VHT3MCS1 VHT3MCS2 VHT3MCS3
VHT3MCS4 VHT3MCS5 VHT3MCS6
[20605.516382@1] VHT3MCS7 VHT3MCS8 VHT3MCS9 VHT4MCS0 VHT4MCS1 VHT4MCS2 VHT4MCS3
VHT4MCS4 VHT4MCS5 VHT4MCS6
[20605.525829@1] VHT4MCS7 VHT4MCS8 VHT4MCS9 wlan0 mp_rate:Set data rate to 12
8 index 12
console:/data # rtwpriv wlan0 mp_txpower patha=44
wlan0 mp_txpower:Set power level path_A:44 path_B:0 path_C:0 path_D:0
console:/data # rtwpriv wlan0 mp_ctx background,pkt
wlan0 mp_ctx:
Start continuous DA=fffffffffff len=1500 count=0

console:/data # rtwpriv wlan0 mp_pwrctldm start
wlan0 mp_pwrctldm:PwrCtlDM start Thermal tracking on

console:/data # rtwpriv wlan0 mp_ctx stop
wlan0 mp_ctx:Stop continuous Tx
console:/data #

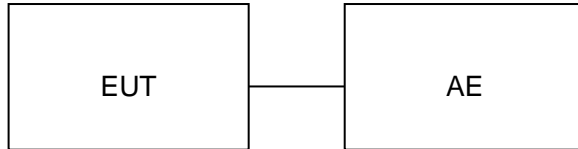
Default 1 2 3 4 5 6 7 reset
  
```

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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	RoboPusher Nimbo	9WZ-1.05A(SCP300)	2A3NS-SCP300	EUT
2	Sveaverken Easy Control	EC20	N/A	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	Aug. 04, 2022	Aug. 03, 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	N/A

TEST EQUIPMENT OF RADIATED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESCI	10096	Feb. 18, 2023	Feb. 17, 2024
EXA Signal Analyzer	Aglient	N9010A	MY53470504	Aug. 04, 2022	Aug. 03, 2023
EXA Signal Analyzer	KEYSIGHT	N9020B	MY56101792	Aug. 04, 2022	Aug. 03, 2023
Power sensor	Aglient	U2021XA	MY54110007	Mar. 03, 2023	Mar. 02, 2024
5GHz Fliter	EM Electronics	5150-5880MHz	N/A	N/A	N/A
Attenuator	ZHINAN	E-002	N/A	Aug. 04, 2022	Aug. 03, 2024
Horn antenna	SCHWARZBECK	BBHA 9170	#768	Oct. 31, 2021	Oct. 30, 2023
Active loop antenna (9K-30MHz)	ZHINAN	ZN30900C	18051	Mar. 12, 2022	Mar. 21, 2024
Double-Ridged Waveguide Horn	ETS LINDGREN	3117	00034609	Apr. 23, 2023	Apr. 22, 2024
Broadband Preamplifier	ETS LINDGREN	3117PA	00225134	Aug. 04, 2022	Aug. 03, 2024
ANTENNA	SCHWARZBECK	VULB9168	VULB9168-494	Jan. 05, 2023	Jan. 04, 2025
Test software	FARA	EZ-EMC (Ver RA-03A)	Ver.2.5	N/A	N/A

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7. MAXIMUM CONDUCTED OUTPUT POWER

7.1. MEASUREMENT PROCEDURE

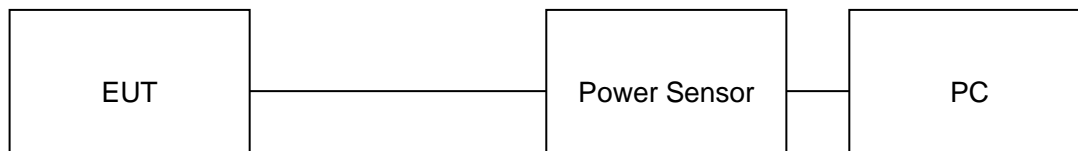
For average power test:

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

Test Data of Conducted Output Power for band 5.15-5.25 GHz				
Test Mode	Test Channel (MHz)	Average Power (dBm)	Limits (dBm)	Pass or Fail
802.11a	5180	12.03	23.98	Pass
	5200	12.80	23.98	Pass
	5240	12.25	23.98	Pass
802.11n20	5180	11.89	23.98	Pass
	5200	11.21	23.98	Pass
	5240	12.13	23.98	Pass
802.11n40	5190	11.06	23.98	Pass
	5230	11.37	23.98	Pass
802.11ac20	5180	10.91	23.98	Pass
	5200	10.19	23.98	Pass
	5240	10.64	23.98	Pass
802.11ac40	5190	7.58	23.98	Pass
	5230	8.43	23.98	Pass
802.11ac80	5210	9.62	23.98	Pass

Test Data of Conducted Output Power for band 5.725-5.85 GHz				
Test Mode	Test Channel (MHz)	Average Power (dBm)	Limits (dBm)	Pass or Fail
802.11a	5745	10.19	30	Pass
	5785	10.08	30	Pass
	5825	10.70	30	Pass
802.11n20	5745	10.31	30	Pass
	5785	10.01	30	Pass
	5825	10.63	30	Pass
802.11n40	5755	10.13	30	Pass
	5795	9.79	30	Pass
802.11ac20	5745	10.33	30	Pass
	5785	8.97	30	Pass
	5825	9.64	30	Pass
802.11ac40	5755	9.19	30	Pass
	5795	8.77	30	Pass
802.11ac80	5775	10.86	30	Pass

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8. BANDWIDTH

8.1. MEASUREMENT PROCEDURE

-6dB bandwidth (DTS bandwidth):

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 $\geq 3 \times$ 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.

99% occupied bandwidth:

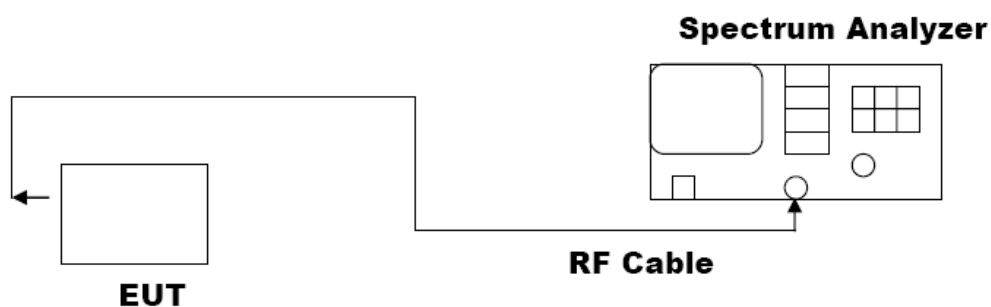
1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
3. Set Span = approximately 1.5 to 5 times the OBW, centered on a nominal channel
The nominal IF filter bandwidth (3 dB RBW) shall 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.

-26dB Bandwidth:

1. Set RBW = approximately 1% of the emission bandwidth.
2. Set the VBW $>$ RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Measure the maximum width of the emission that is 26 dB down from the maximum of the emission.
Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

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

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



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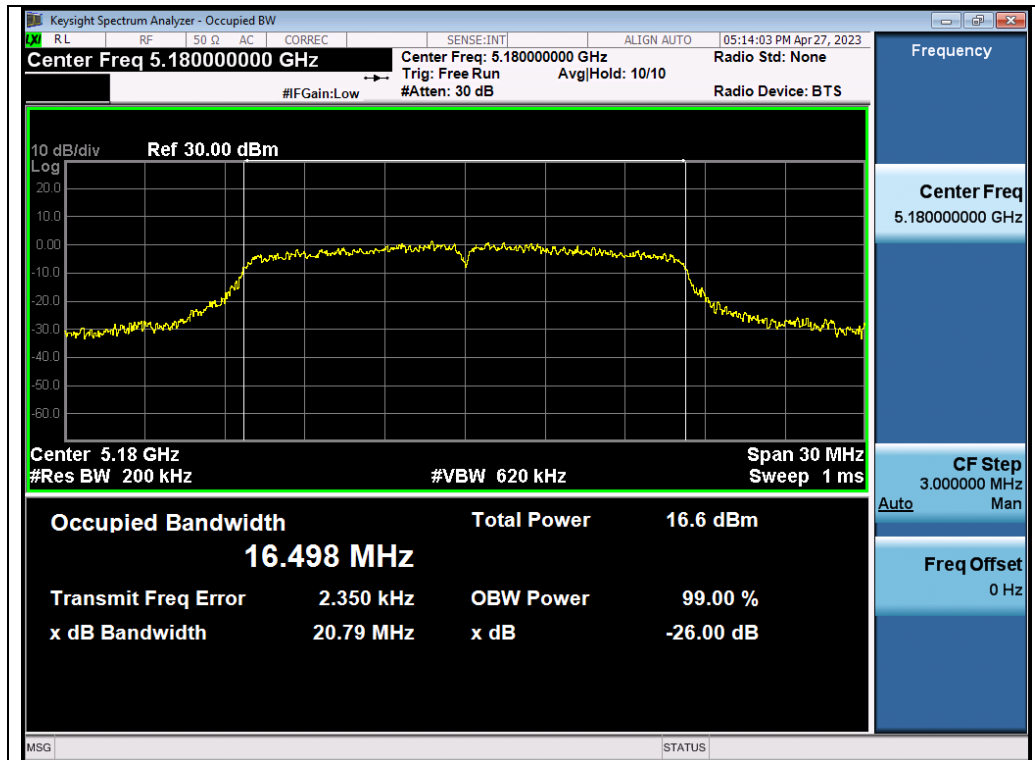
8.3. LIMITS AND MEASUREMENT RESULTS

Test Data of Occupied Bandwidth and -26dB Bandwidth for band 5.15-5.25 GHz					
Test Mode	Test Channel (MHz)	99% Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Limits (MHz)	Pass or Fail
802.11a	5180	16.498	20.79	N/A	Pass
	5200	16.556	24.25	N/A	Pass
	5240	16.532	24.09	N/A	Pass
802.11n20	5180	17.583	20.43	N/A	Pass
	5200	17.582	20.46	N/A	Pass
	5240	17.649	23.04	N/A	Pass
802.11n40	5190	36.111	53.68	N/A	Pass
	5230	36.098	53.31	N/A	Pass
802.11ac20	5180	17.577	19.94	N/A	Pass
	5200	17.572	23.26	N/A	Pass
	5240	17.659	23.89	N/A	Pass
802.11ac40	5190	35.953	39.63	N/A	Pass
	5230	35.907	39.82	N/A	Pass
802.11ac80	5210	75.863	80.95	N/A	Pass

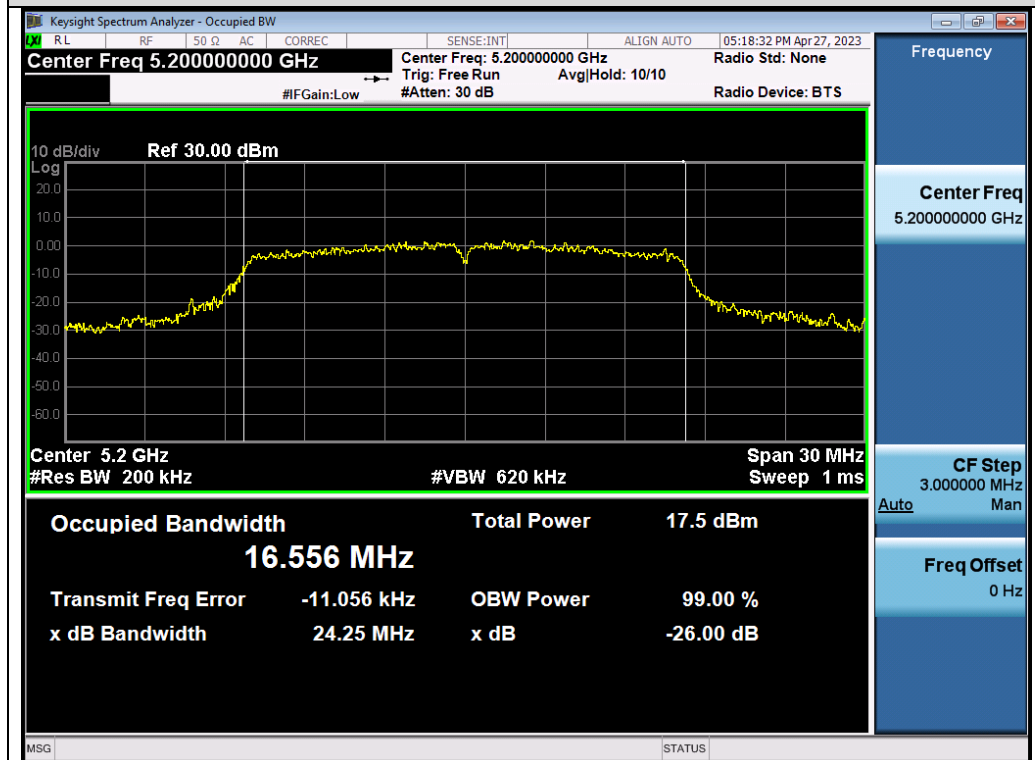
Test Data of Occupied Bandwidth and DTS Bandwidth for band 5.725-5.85 GHz					
Test Mode	Test Channel (MHz)	99% Occupied Bandwidth (MHz)	DTS Bandwidth (MHz)	Limits (MHz)	Pass or Fail
802.11a	5745	16.482	15.02	0.5	Pass
	5785	16.501	15.07	0.5	Pass
	5825	16.443	15.06	0.5	Pass
802.11n20	5745	17.544	15.07	0.5	Pass
	5785	17.538	15.06	0.5	Pass
	5825	17.547	15.06	0.5	Pass
802.11n40	5755	35.938	35.09	0.5	Pass
	5795	35.975	35.07	0.5	Pass
802.11ac20	5745	17.539	13.85	0.5	Pass
	5785	17.549	15.09	0.5	Pass
	5825	17.537	15.09	0.5	Pass
802.11ac40	5755	35.917	35.09	0.5	Pass
	5795	36.017	35.11	0.5	Pass
802.11ac80	5775	75.797	75.78	0.5	Pass

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

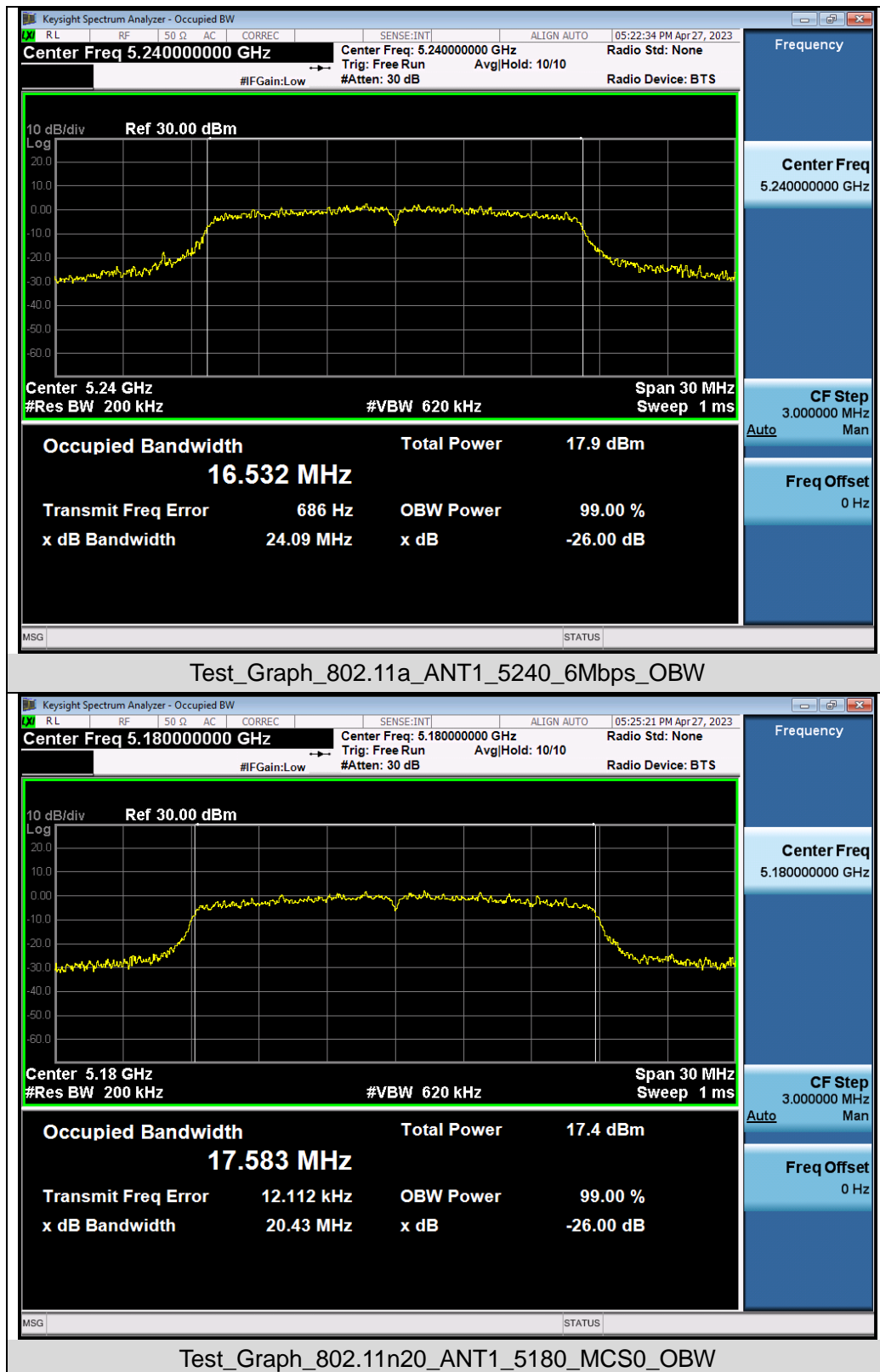


Test_Graph_802.11a_ANT1_5180_6Mbps_OBW



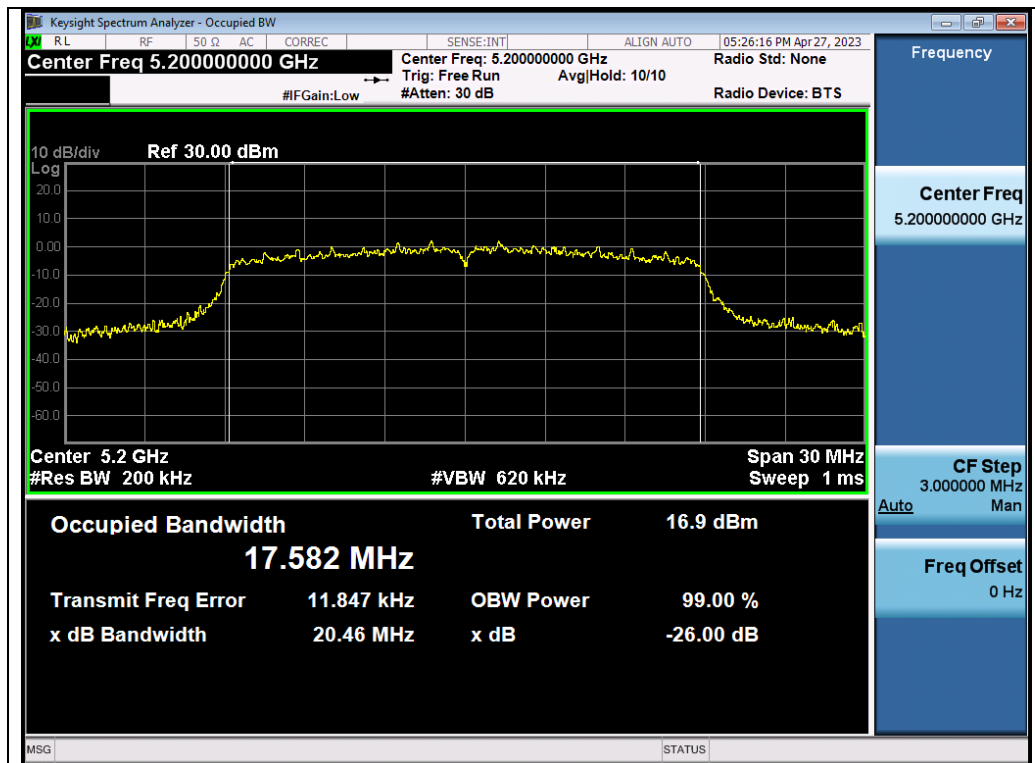
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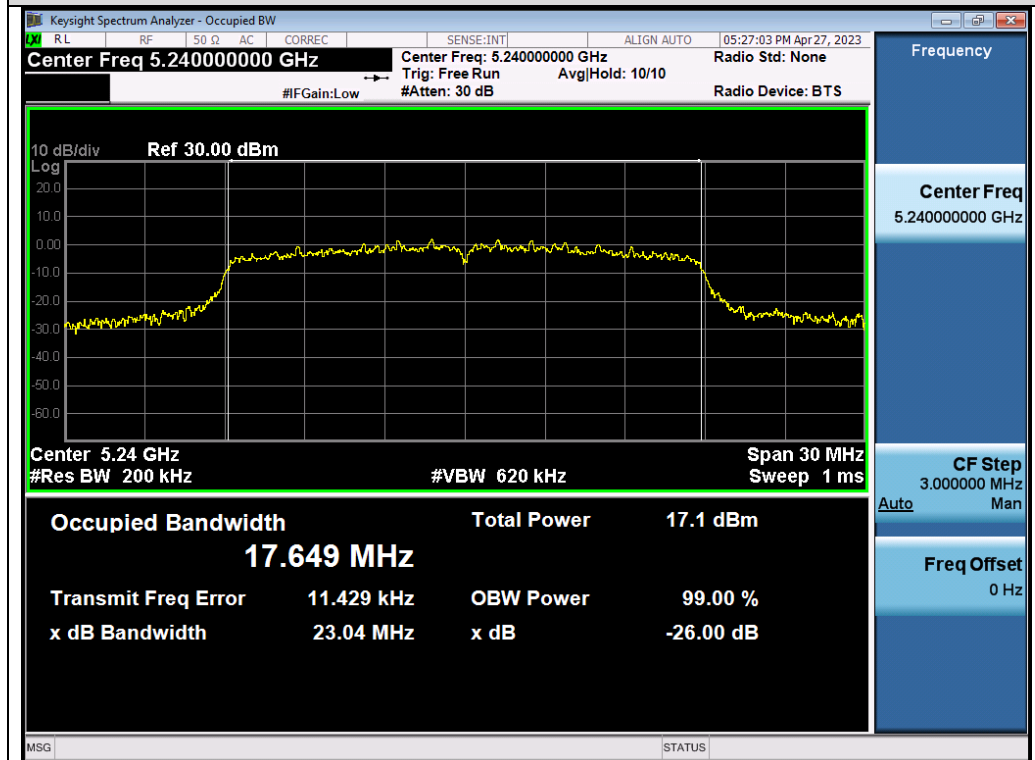


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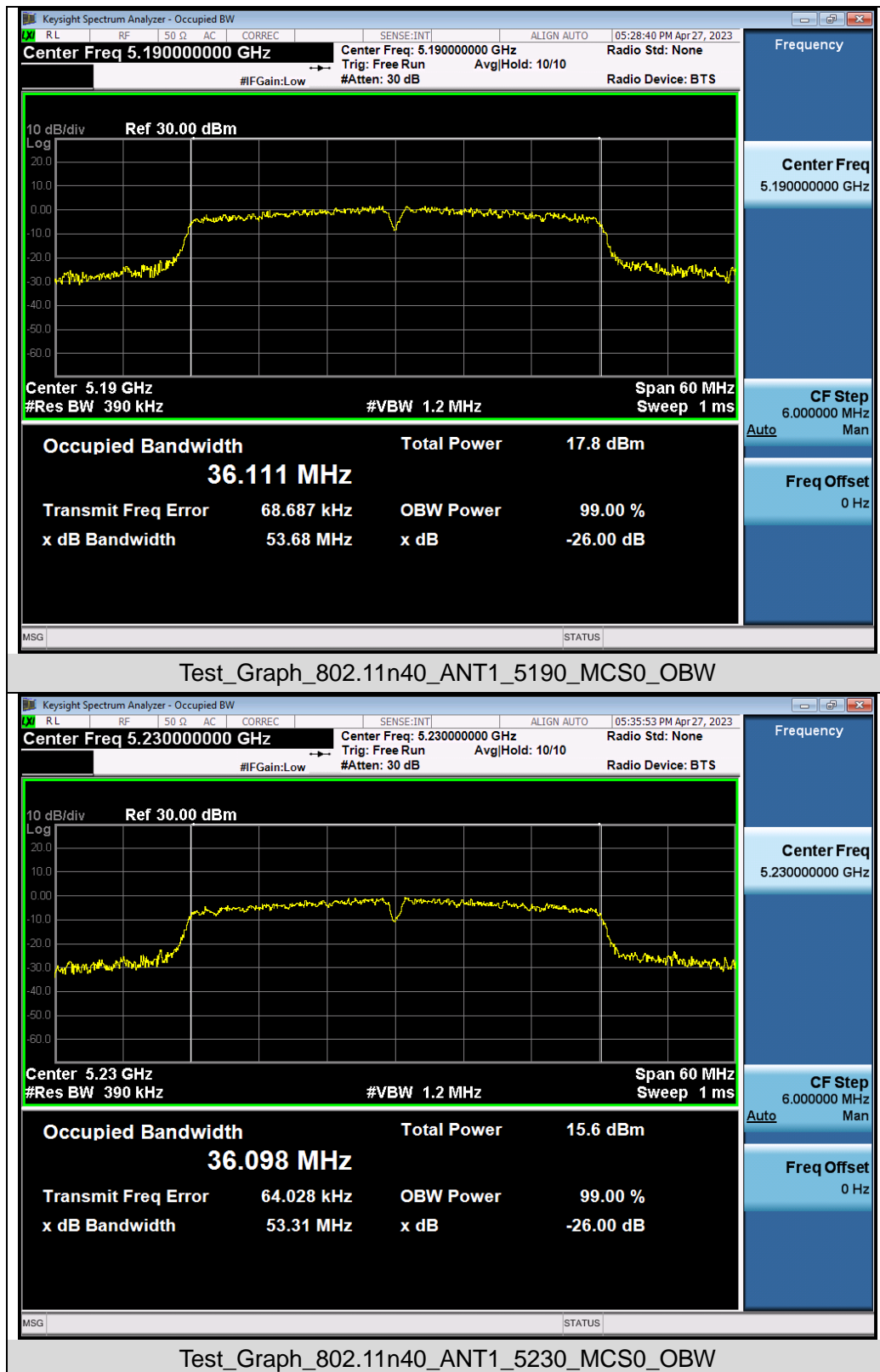


Test_Graph_802.11n20_ANT1_5200_MCS0_OBW

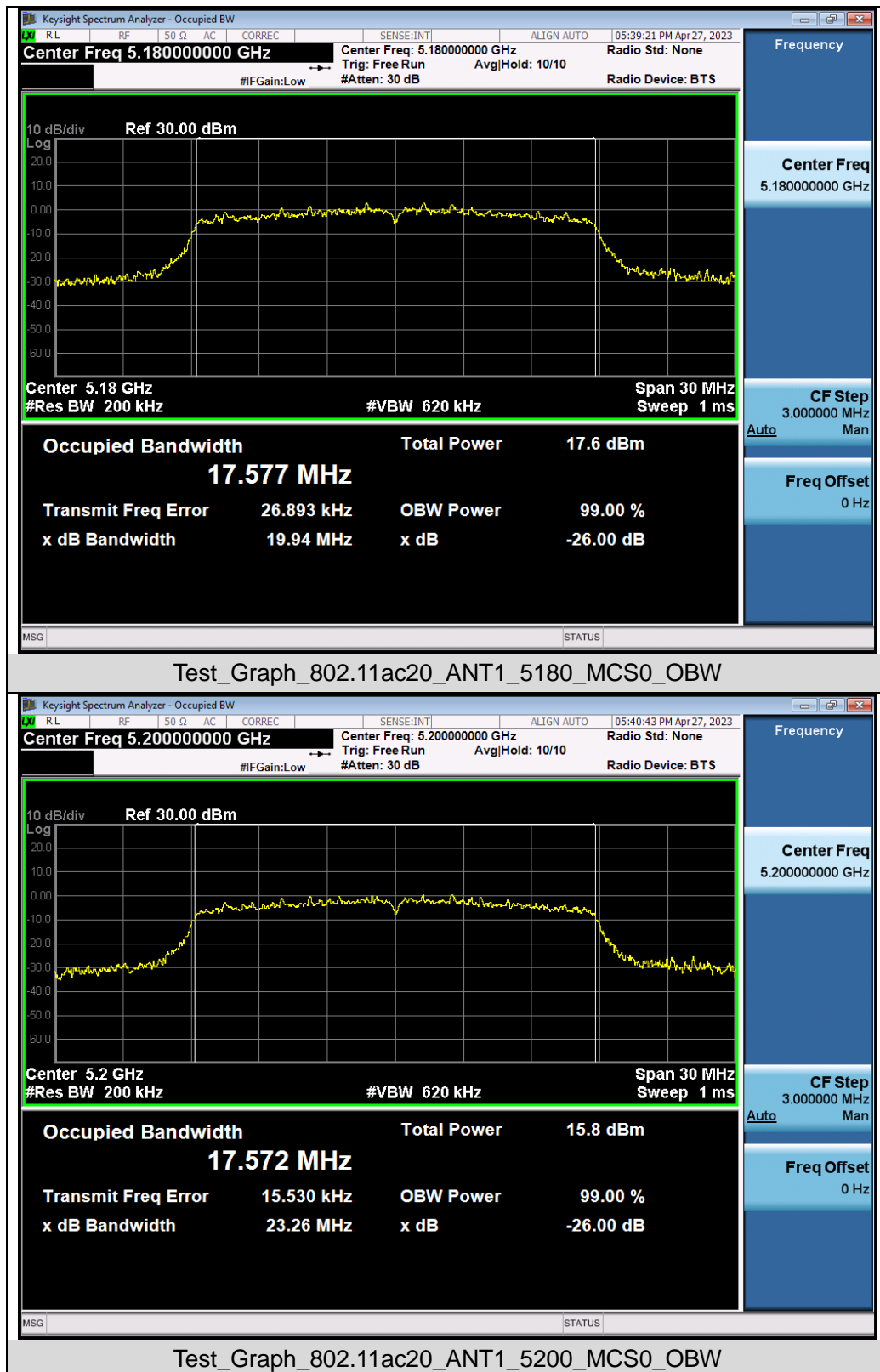


Test_Graph_802.11n20_ANT1_5240_MCS0_OBW

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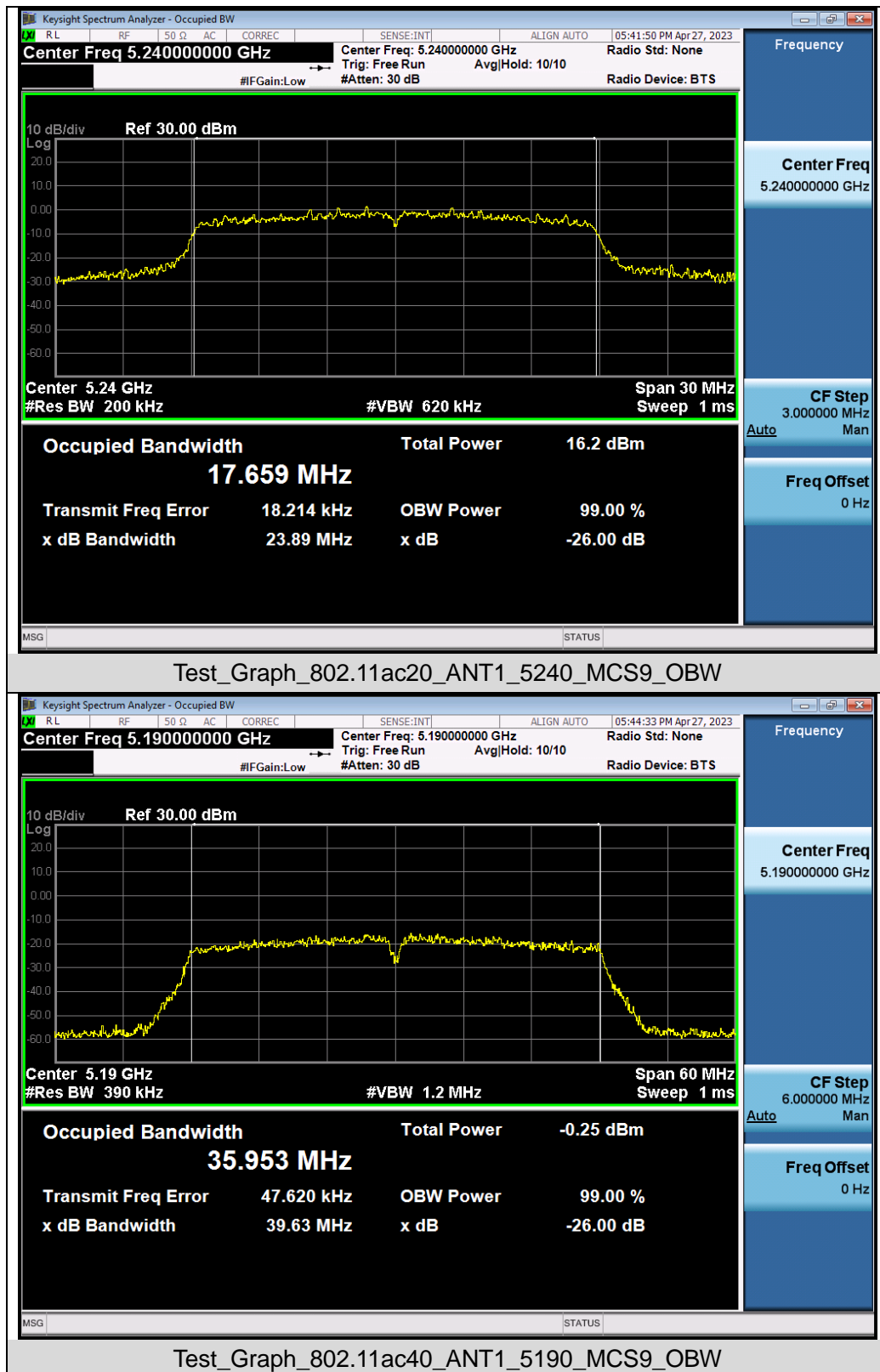


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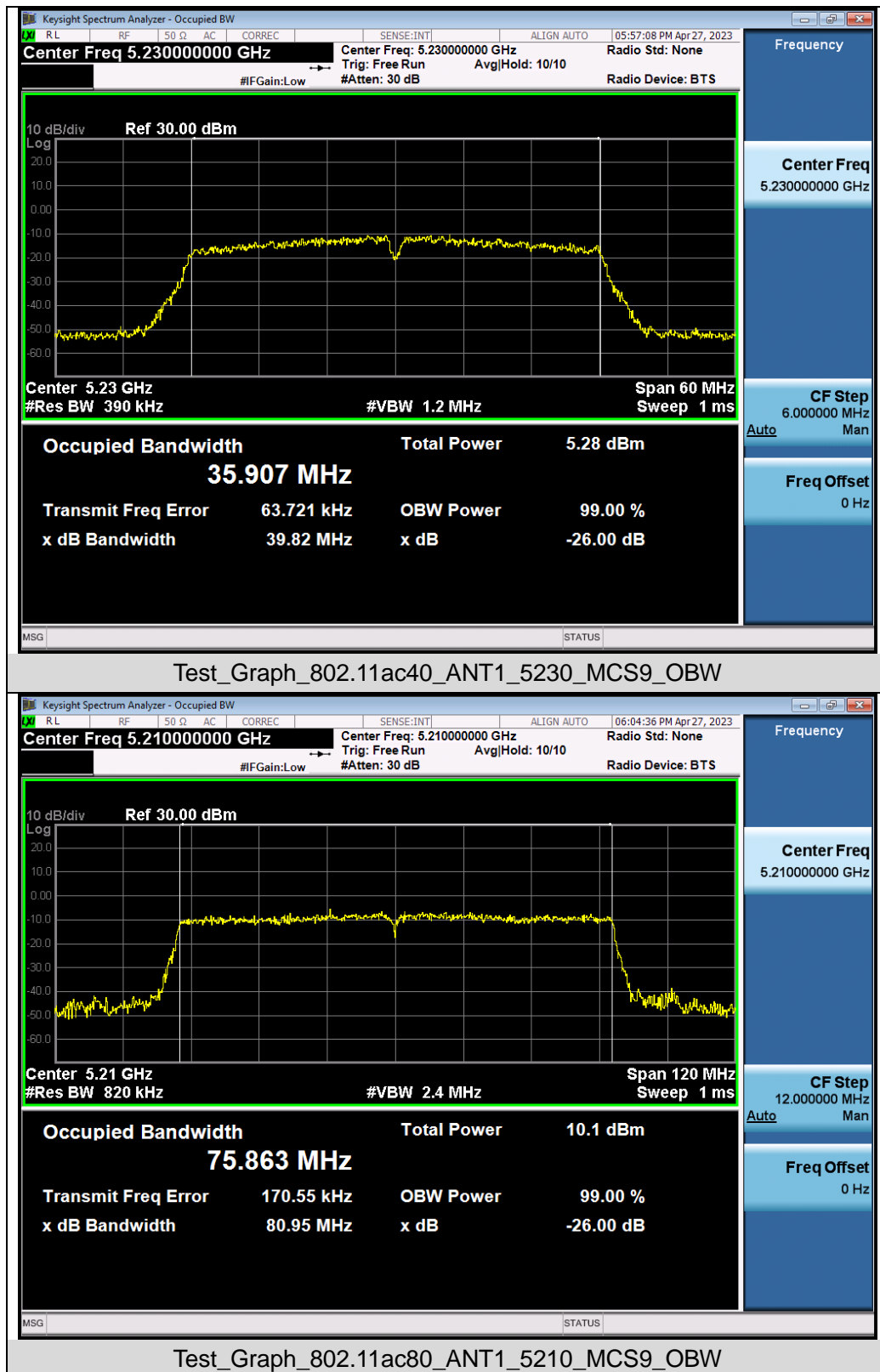


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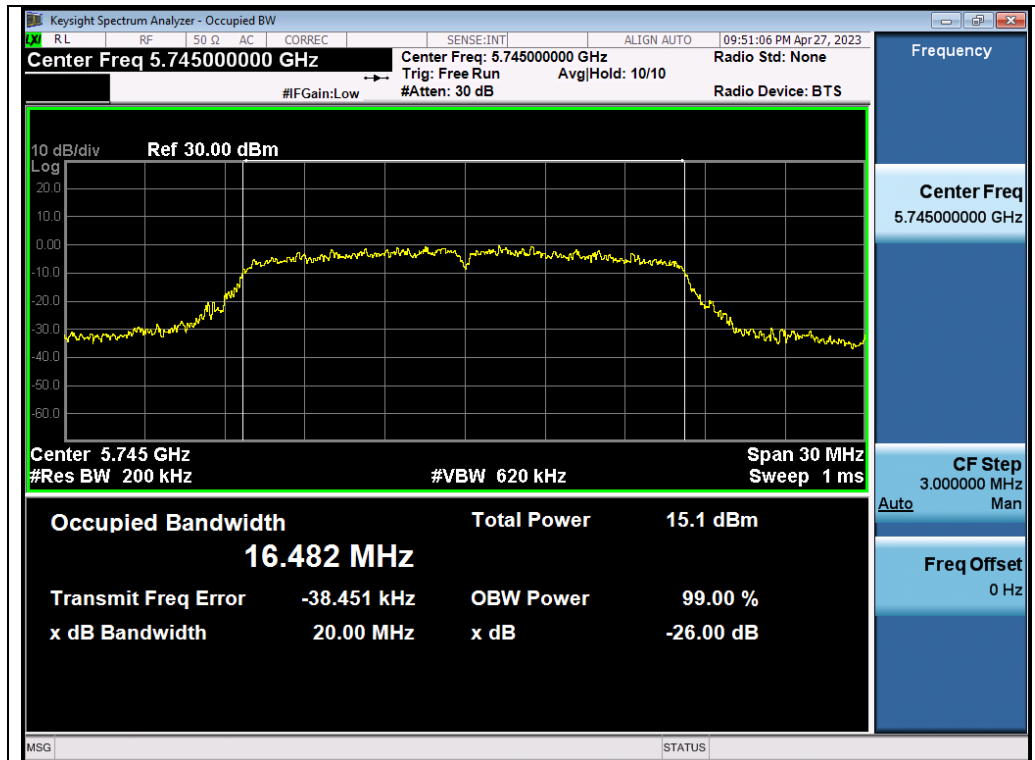


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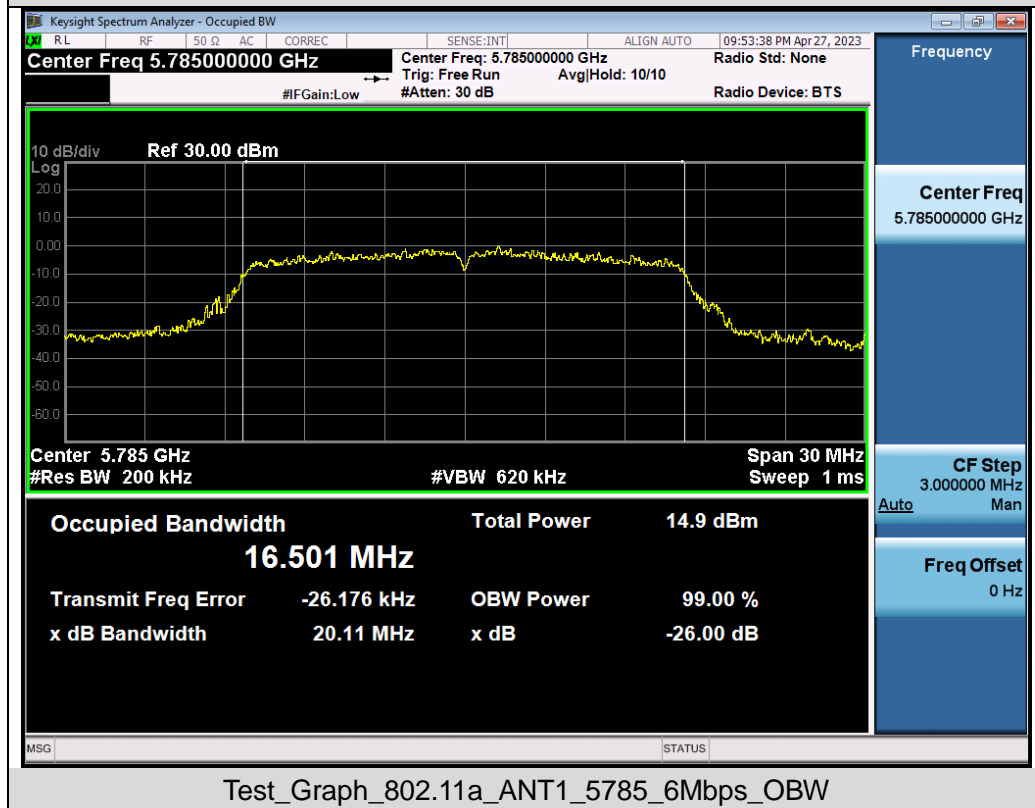


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Test Graphs of Occupied Bandwidth for band 5.725-5.85 GHz

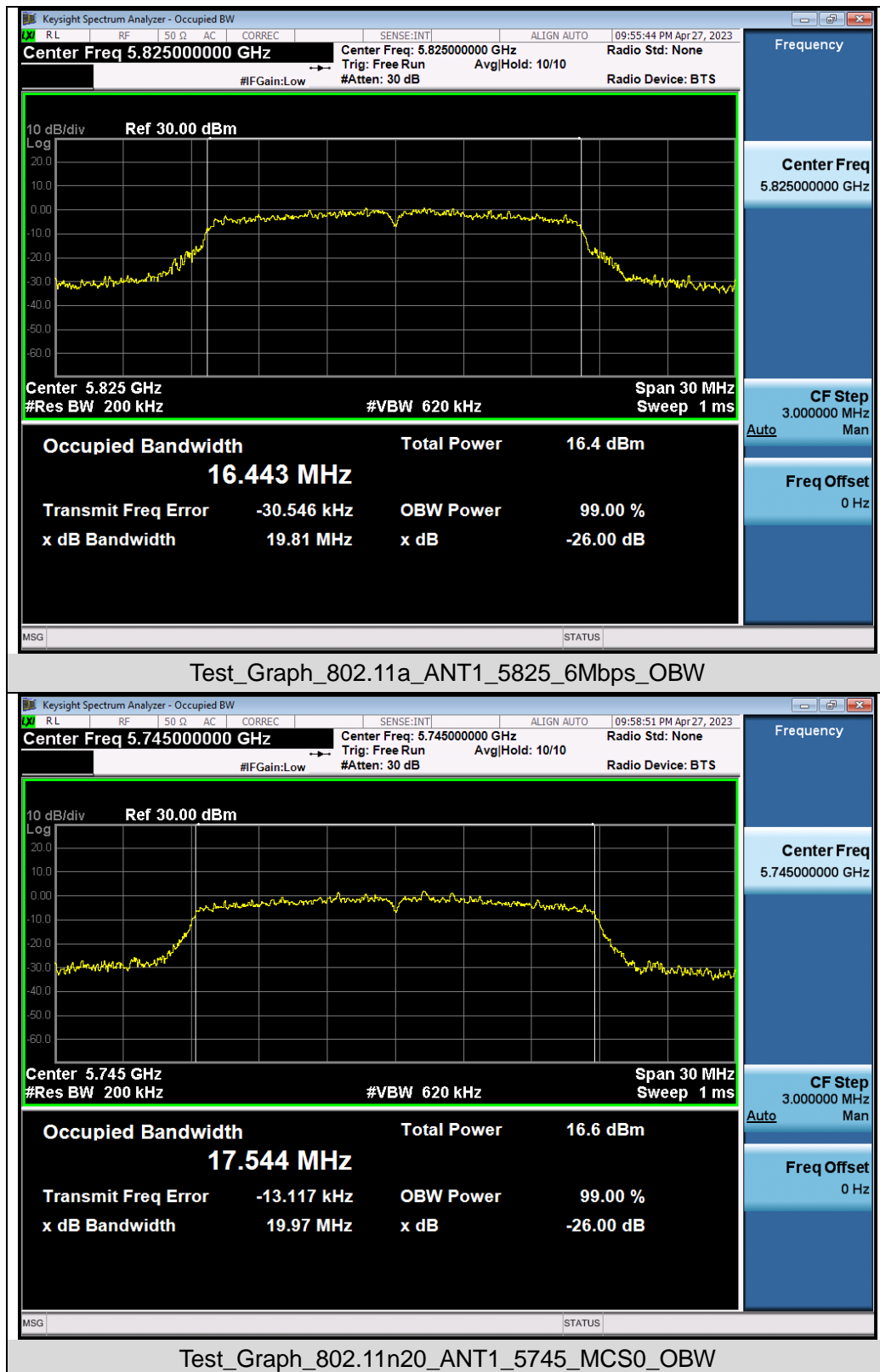


Test_Graph_802.11a_ANT1_5745_6Mbps_OBW



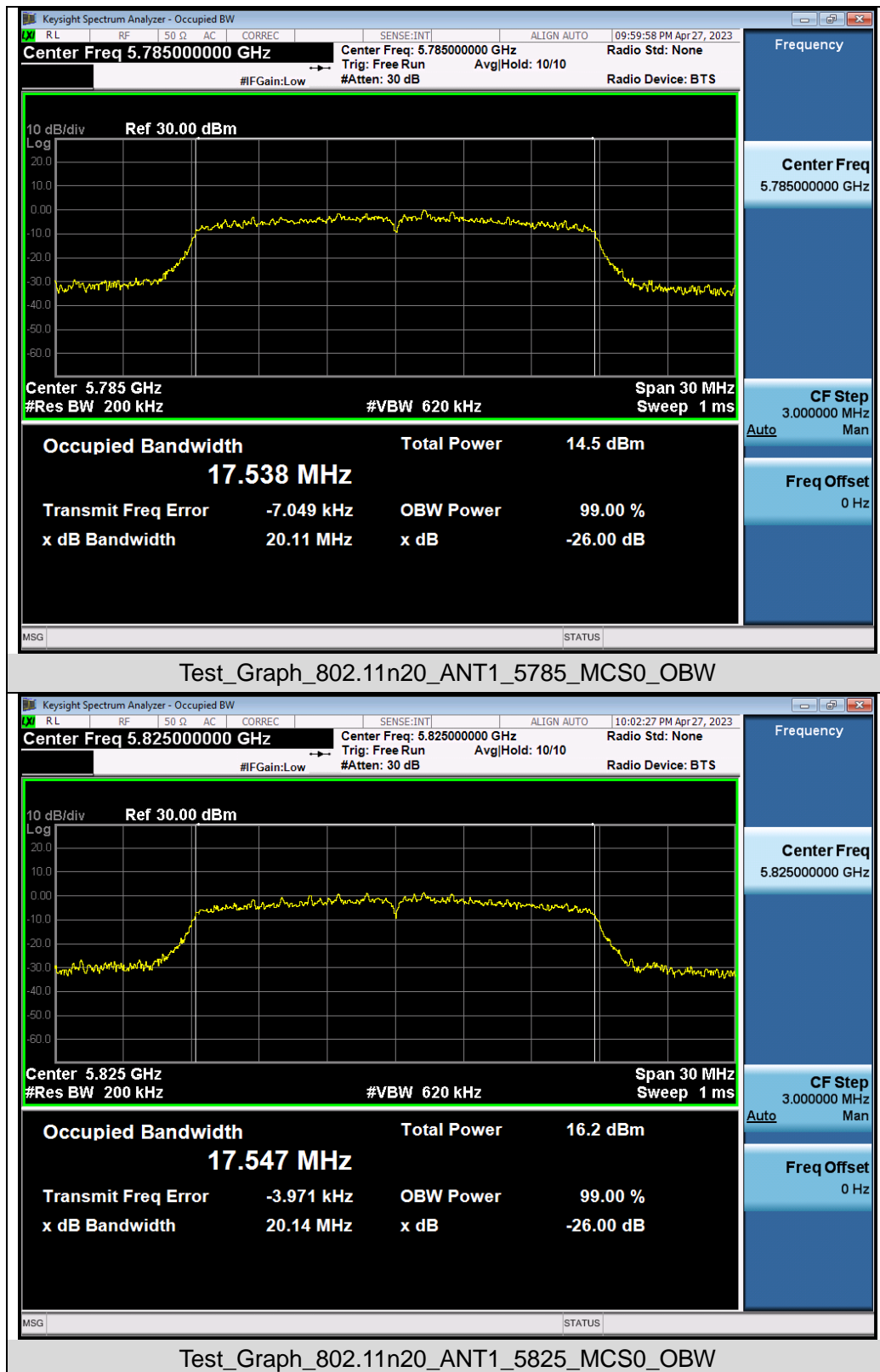
Test_Graph_802.11a_ANT1_5785_6Mbps_OBW

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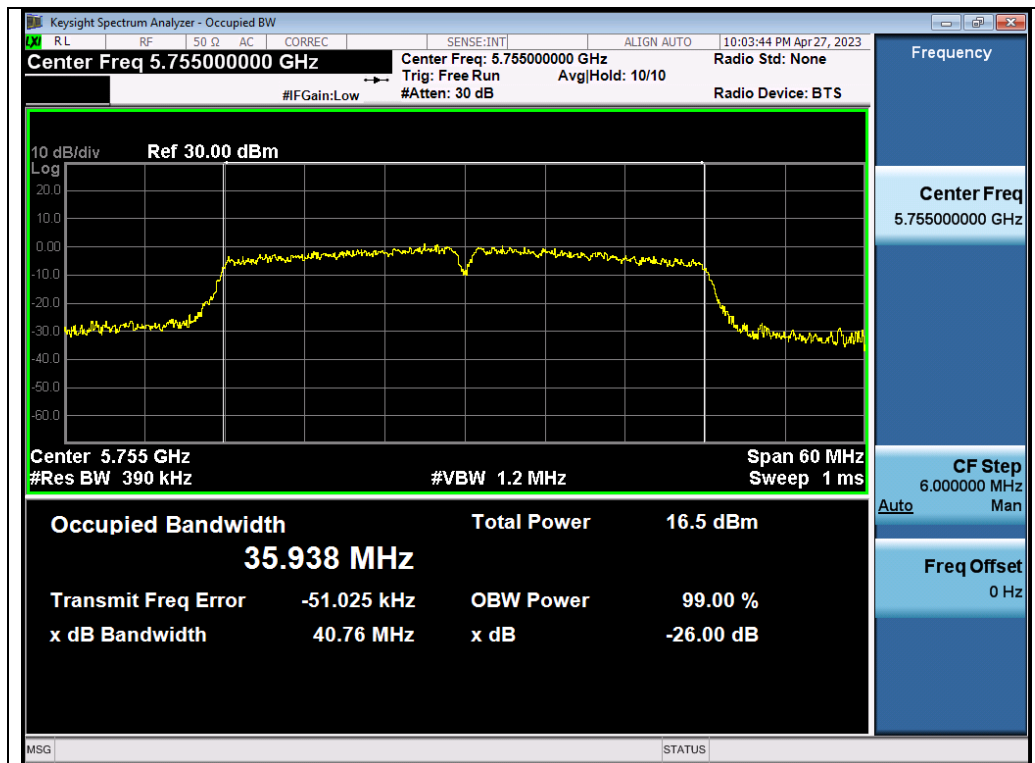


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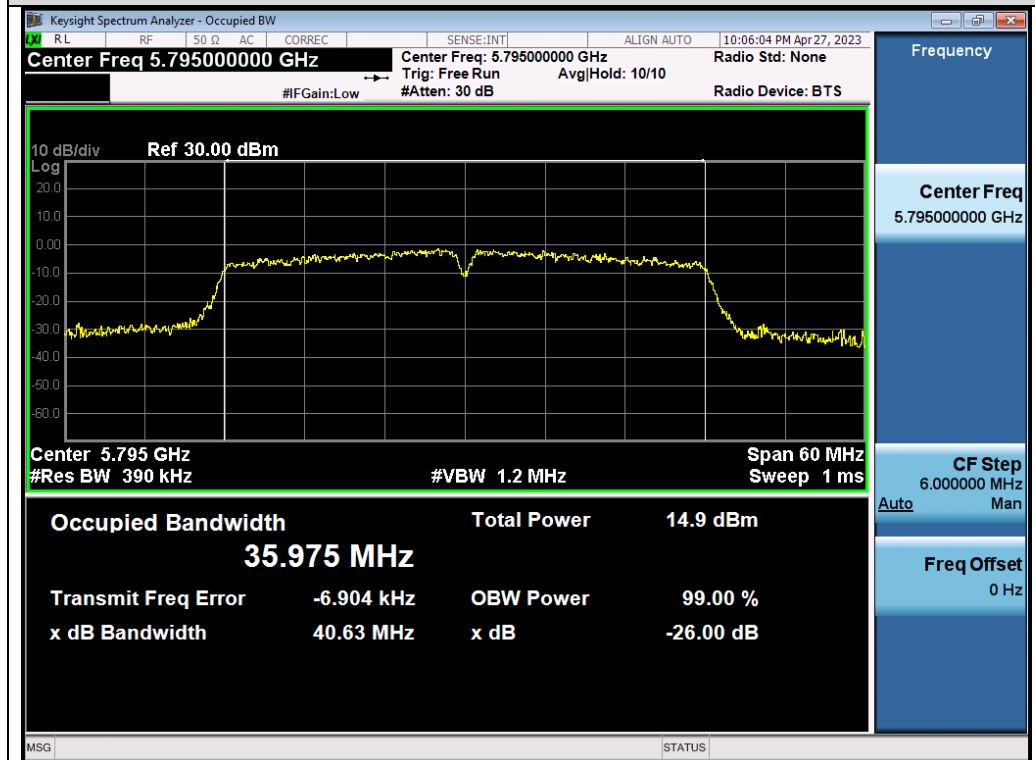
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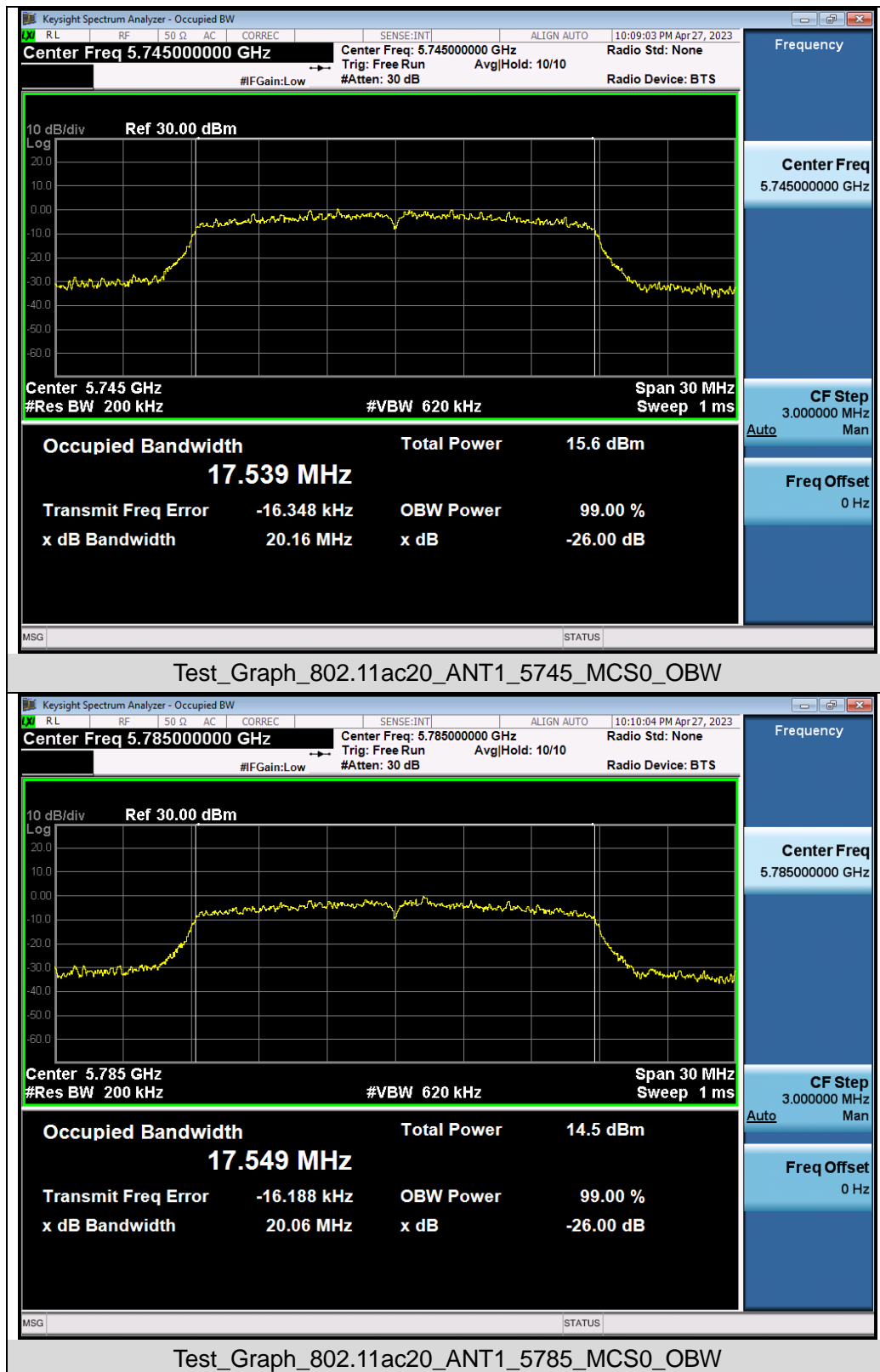


Test_Graph_802.11n40_ANT1_5755_MCS0_OBW



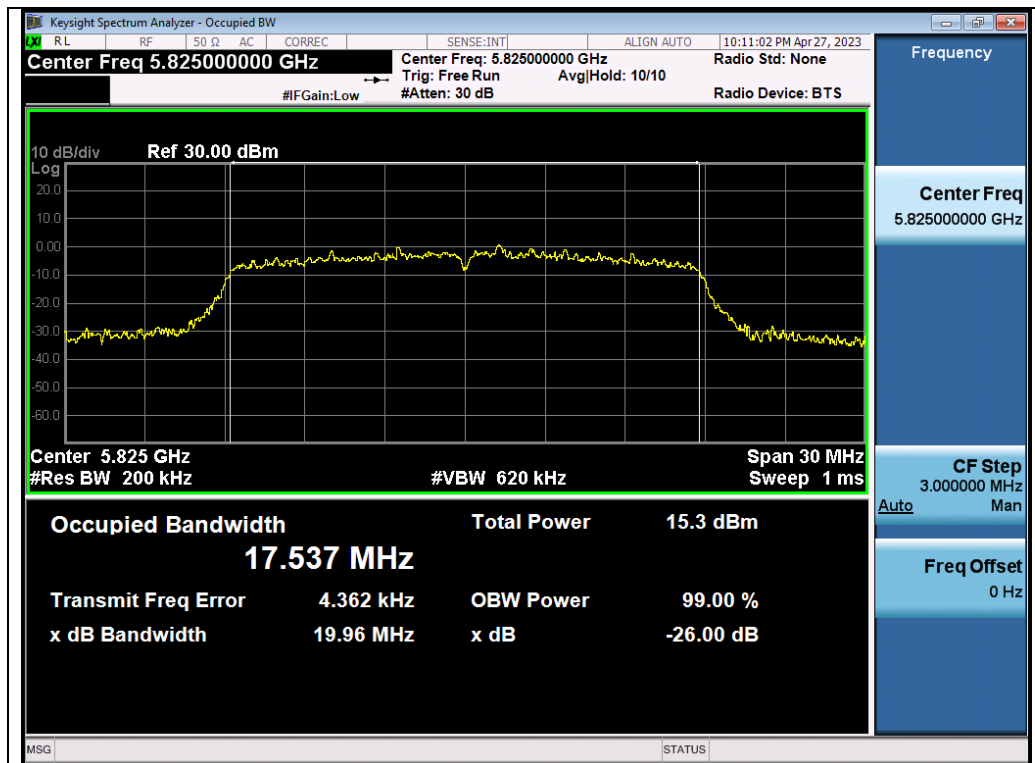
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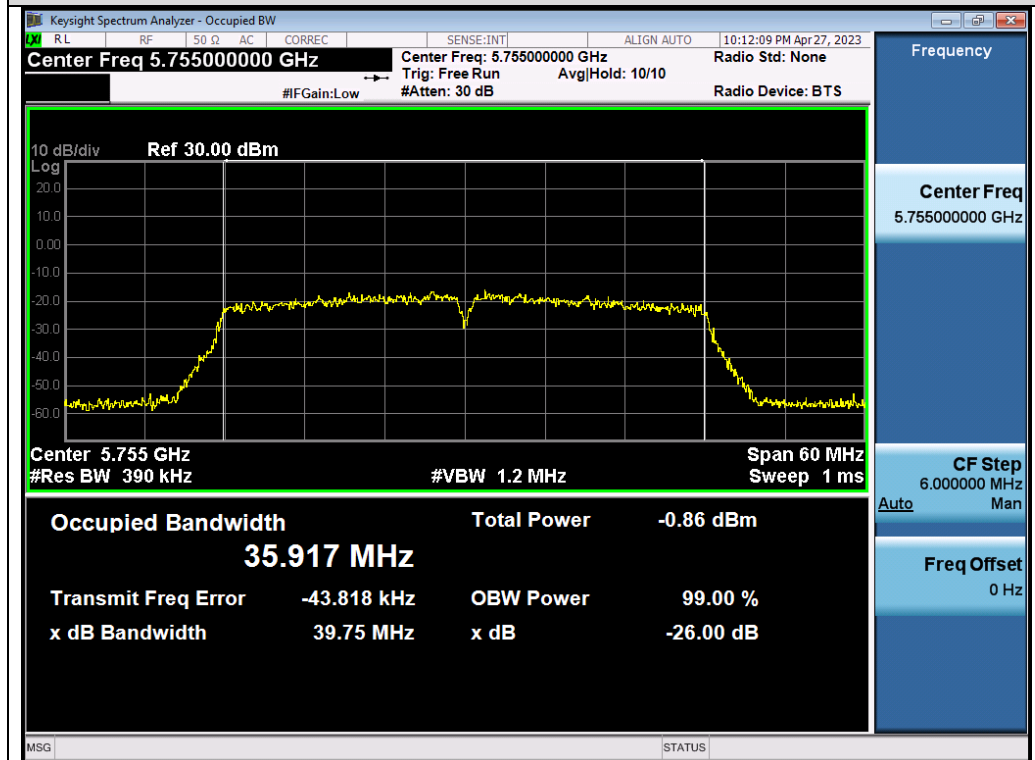


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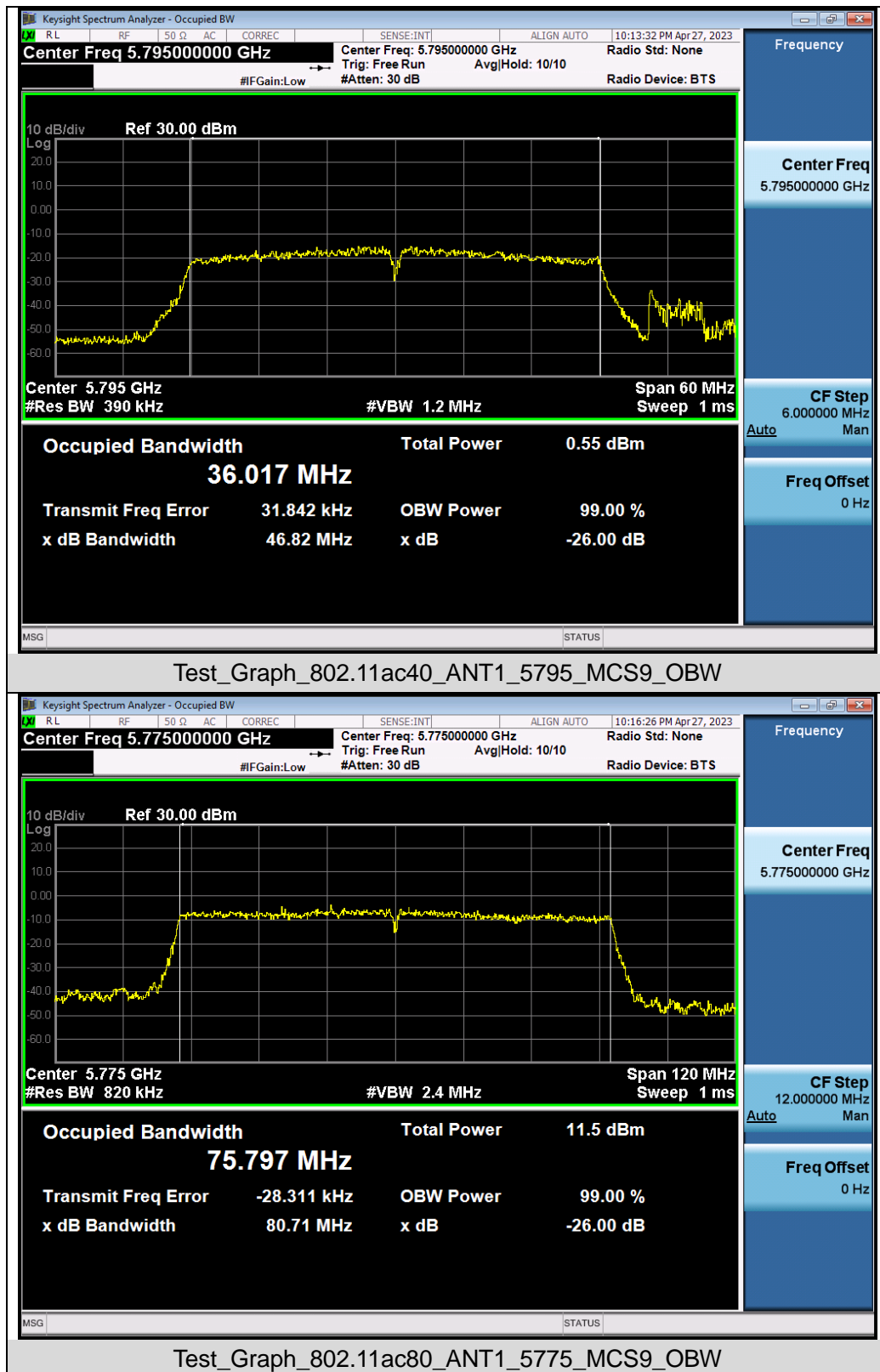


Test_Graph_802.11ac20_ANT1_5825_MCS9_OBW



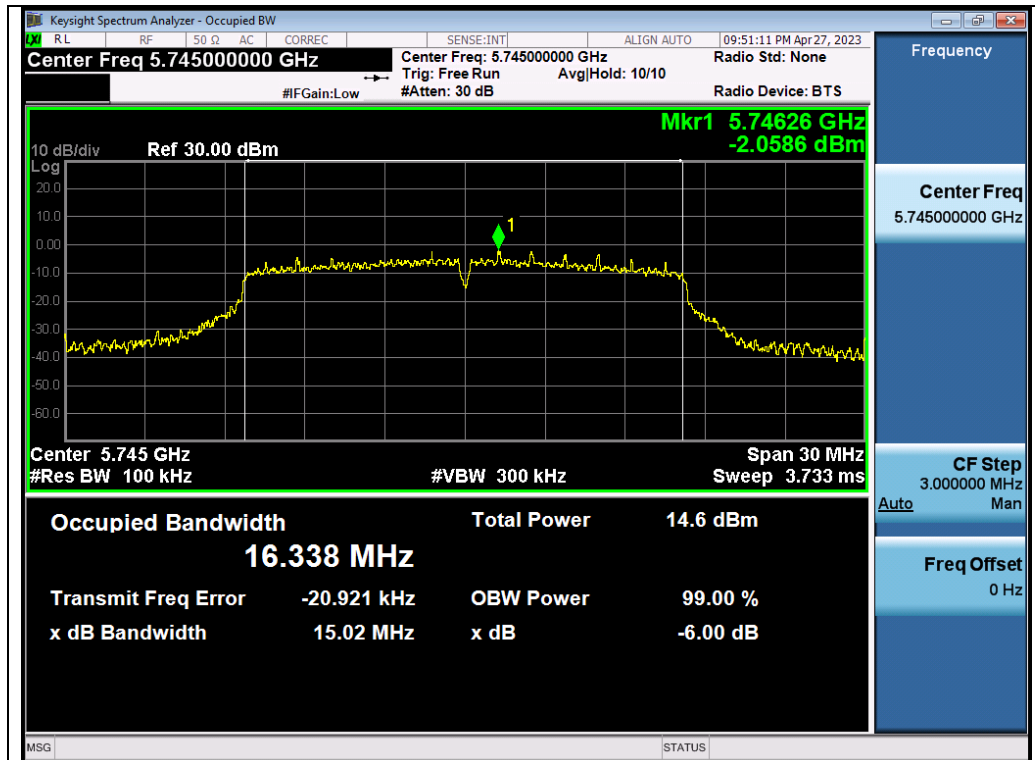
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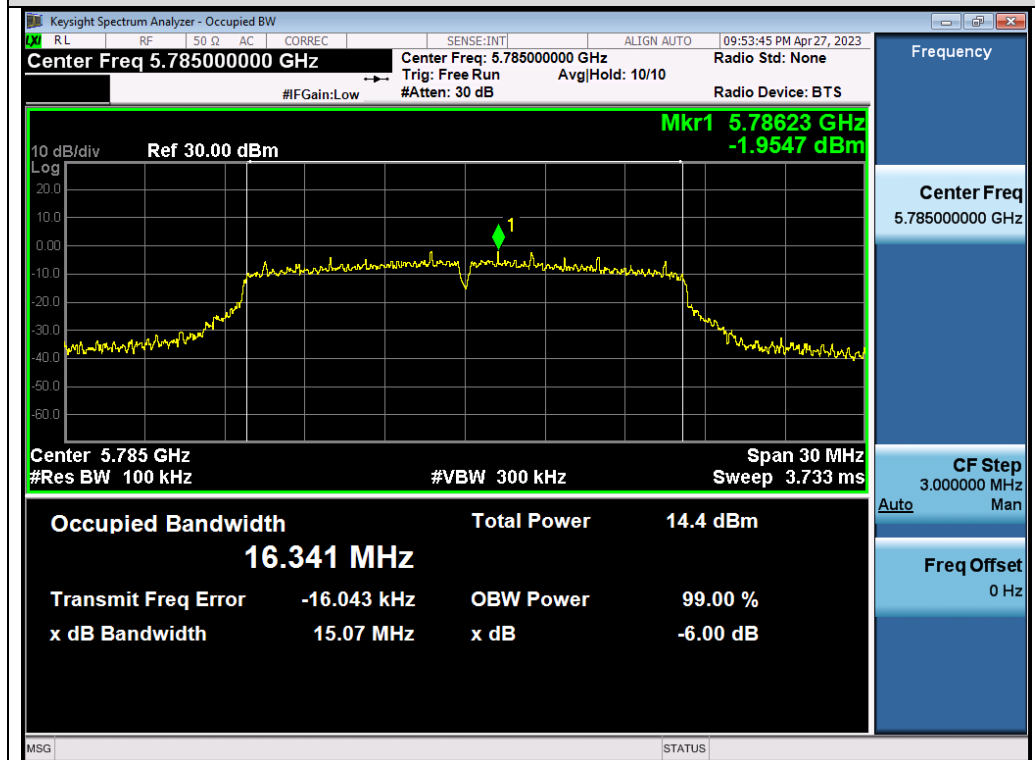


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Test Graphs of DTS Bandwidth for band 5.725-5.85 GHz

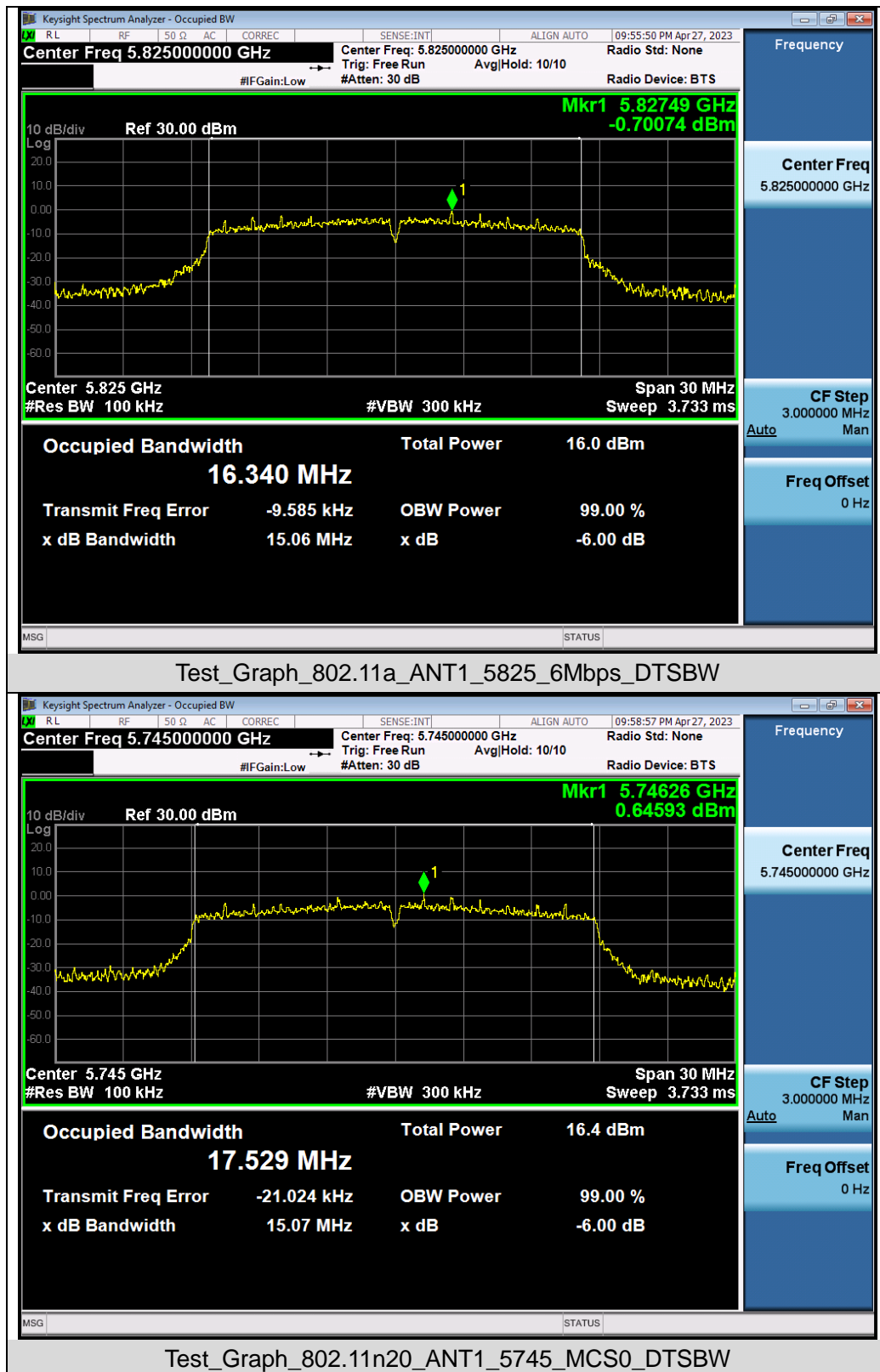


Test_Graph_802.11a_ANT1_5745_6Mbps_DTBSW



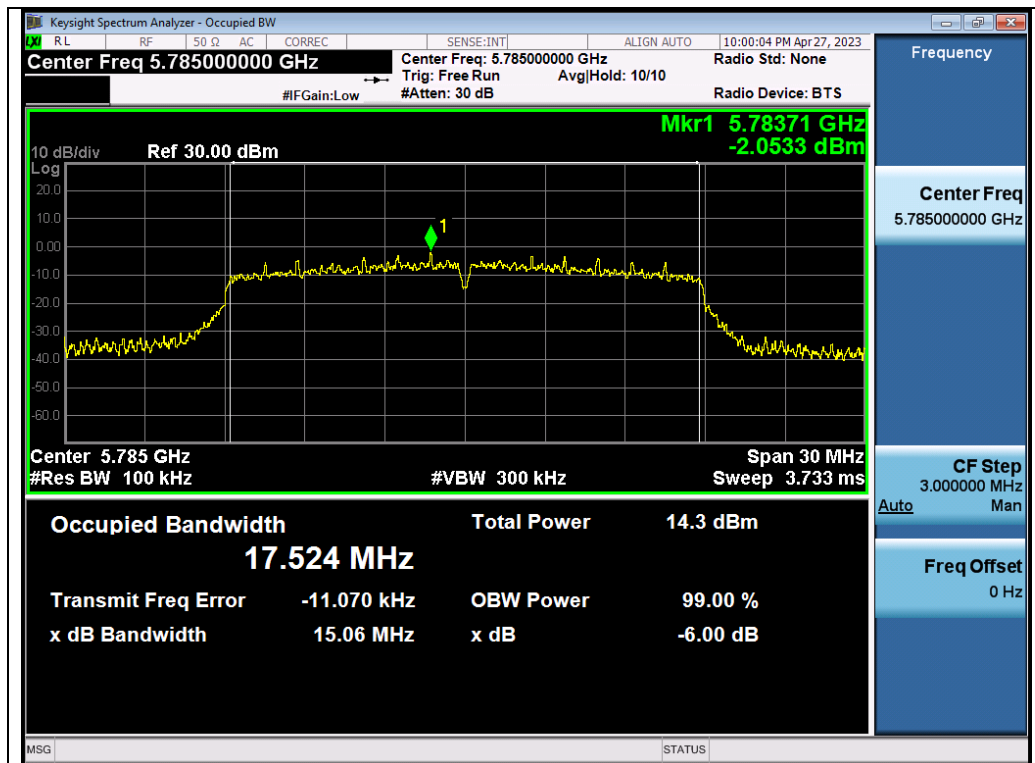
Test_Graph_802.11a_ANT1_5785_6Mbps_DTBSW

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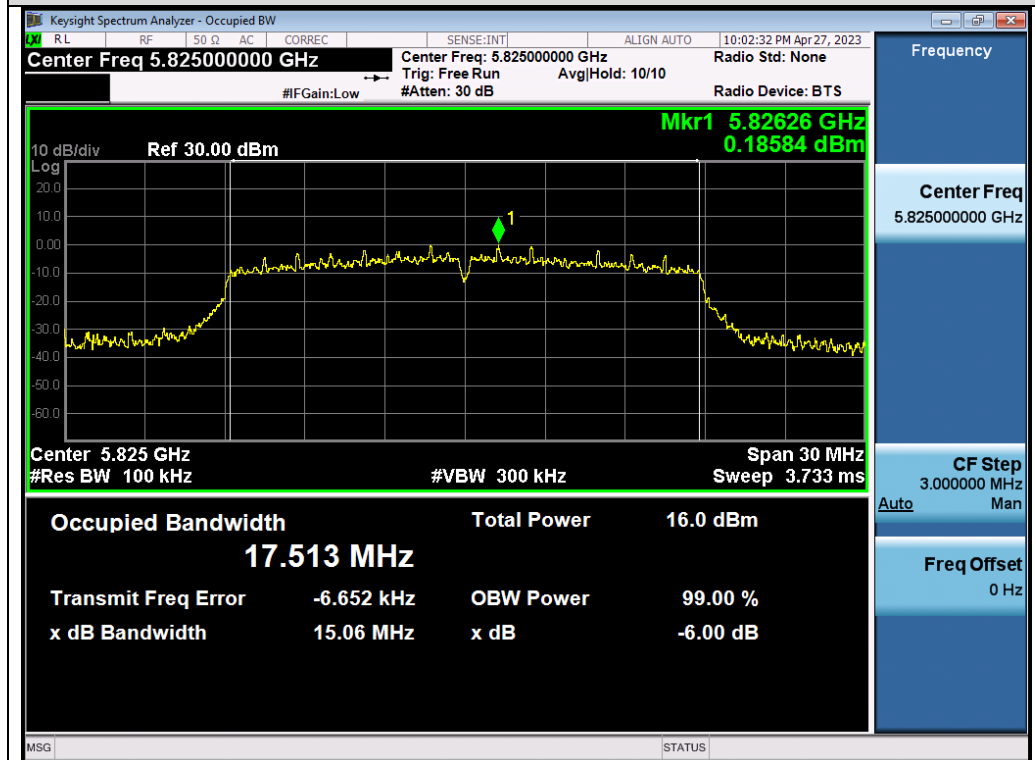


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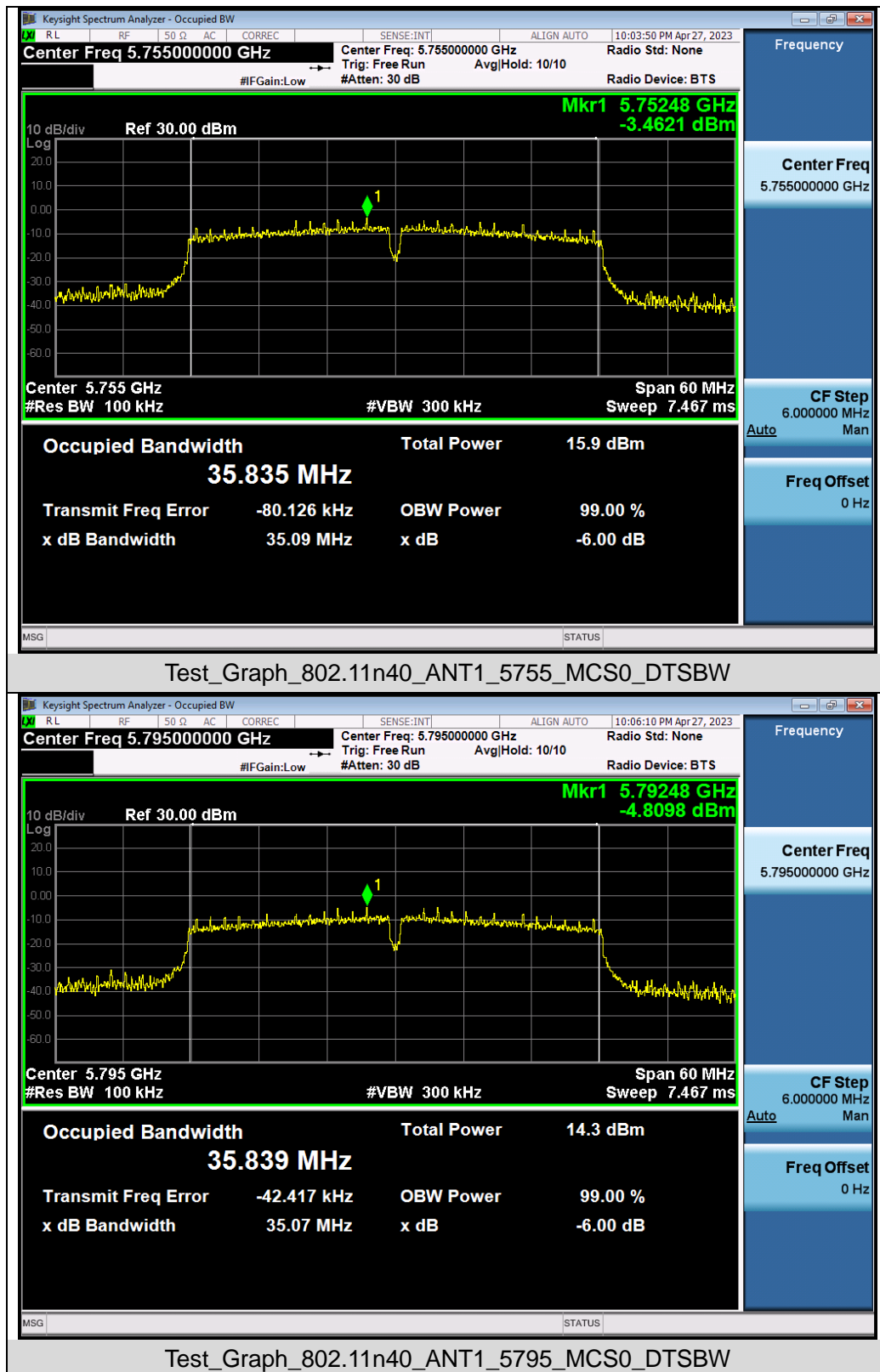


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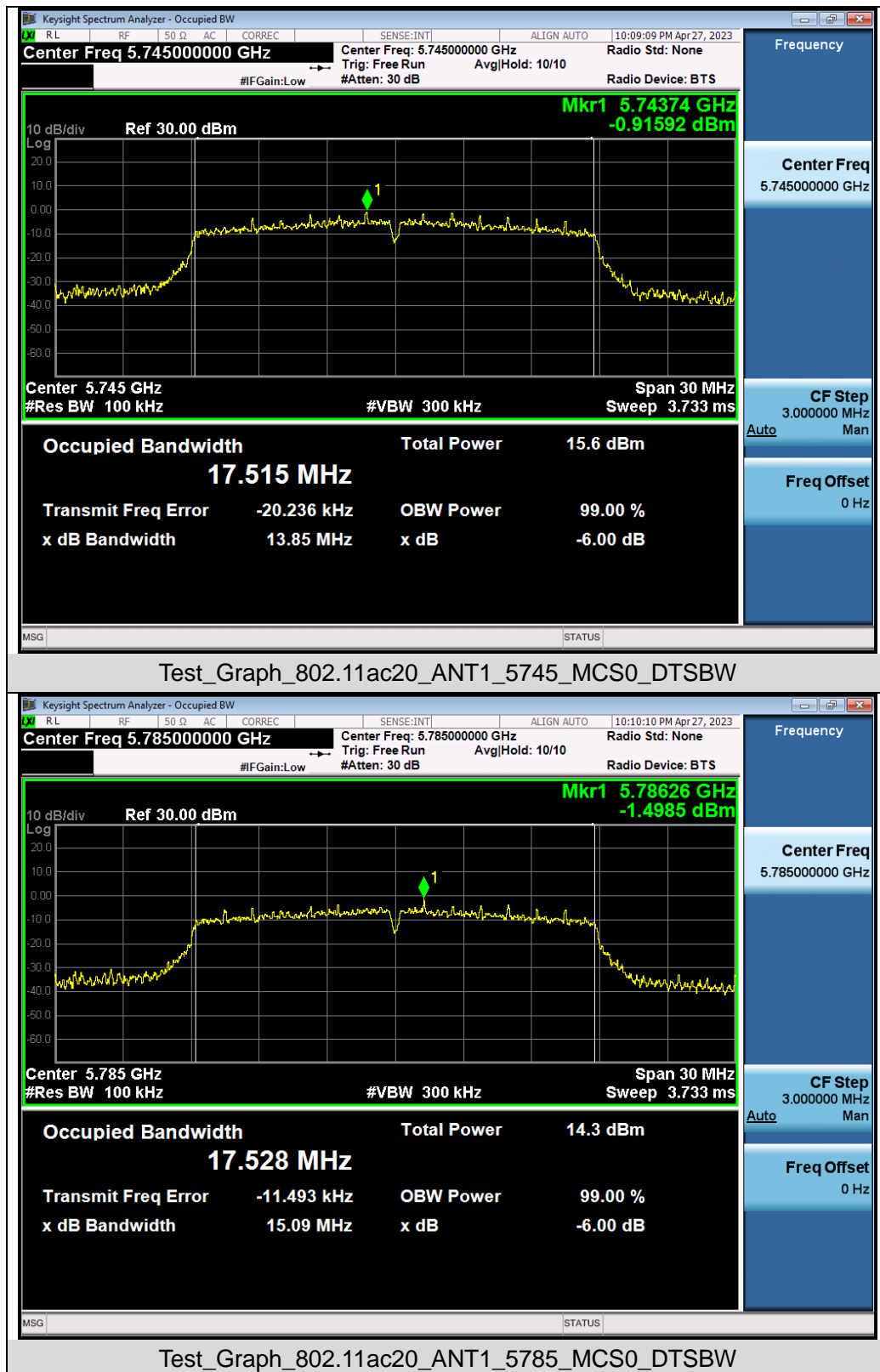
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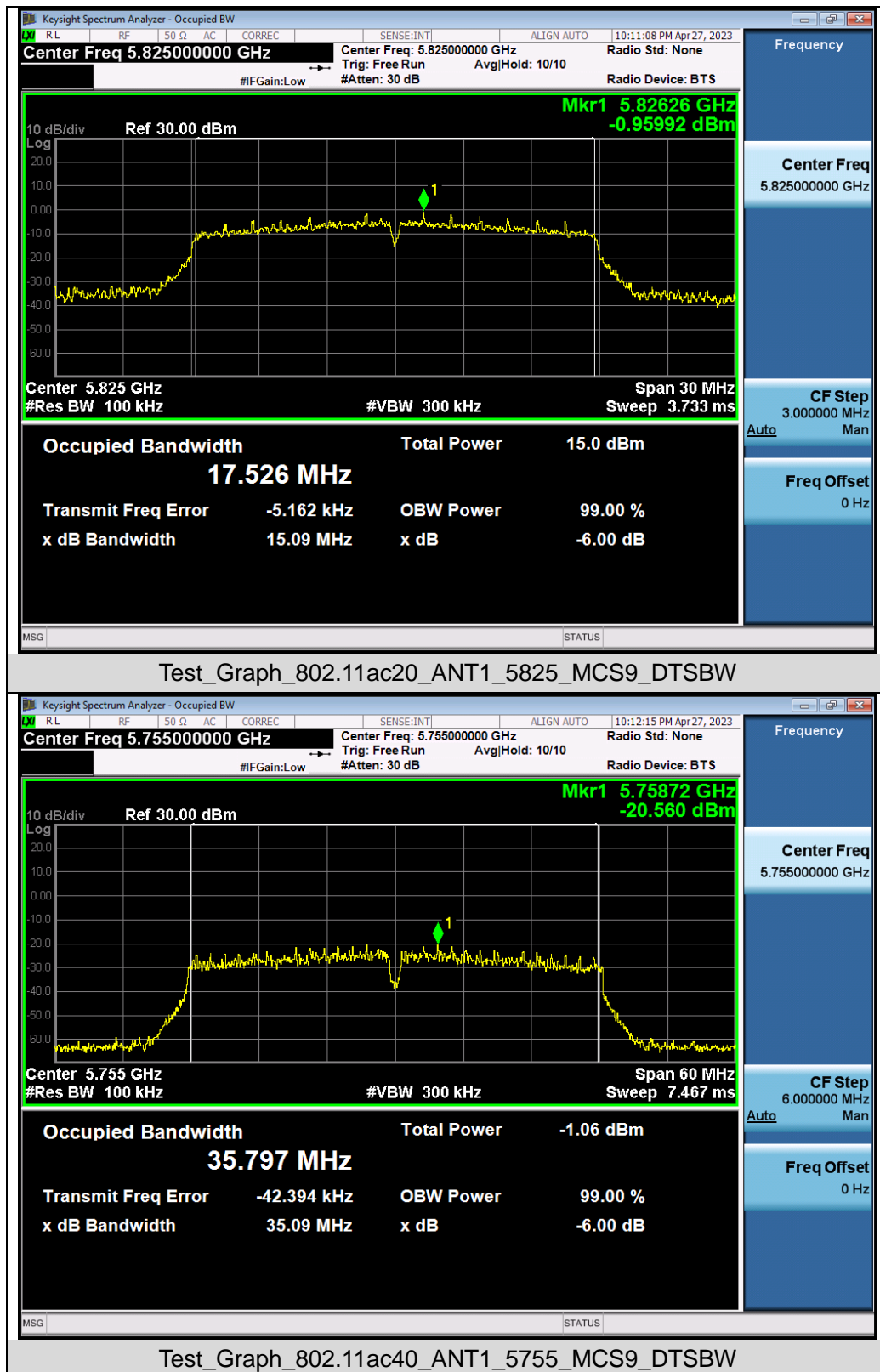
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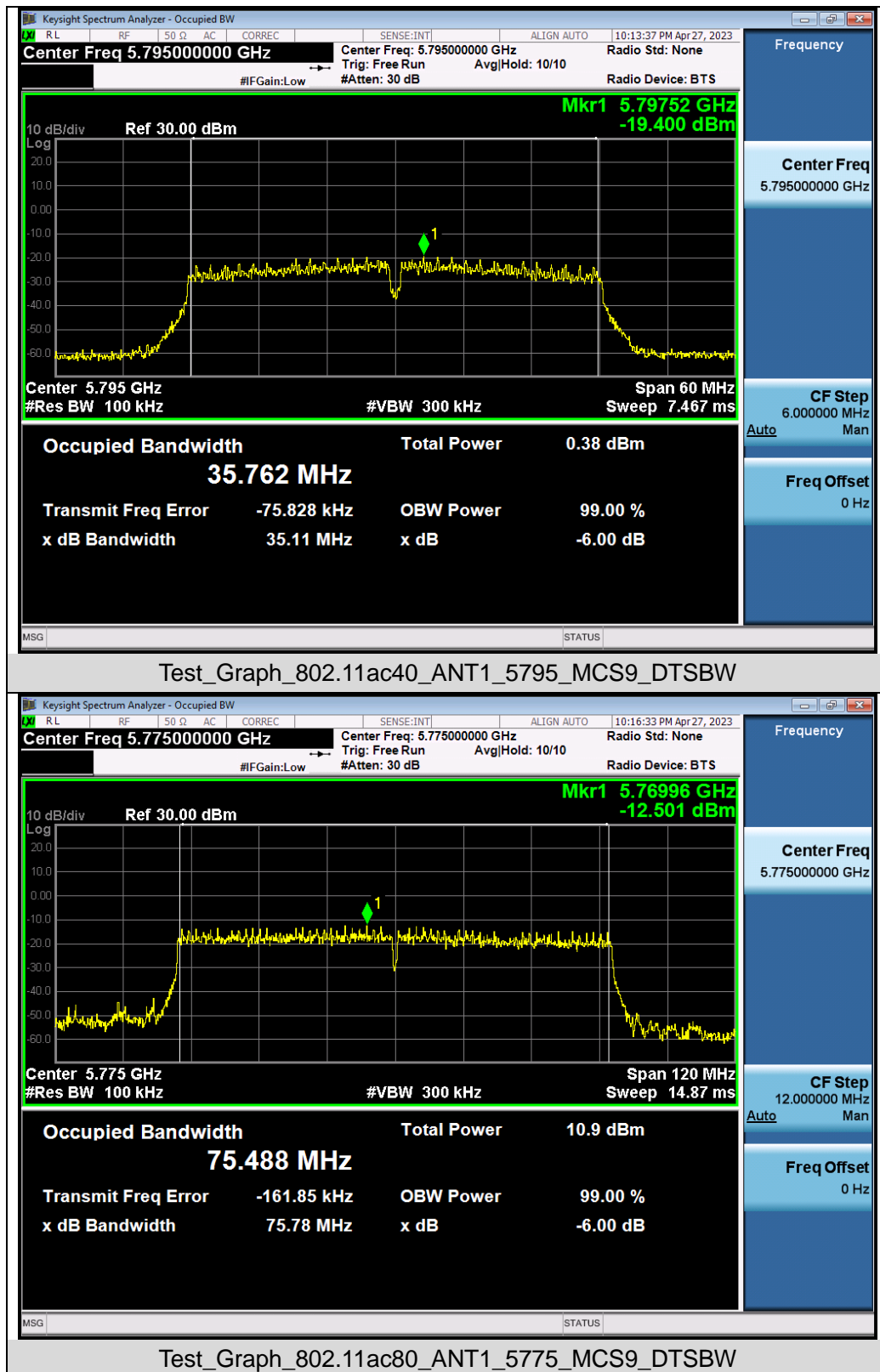
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9. MAXIMUM CONDUCTED OUTPUT AVERAGE POWER SPECTRAL DENSITY

9.1. MEASUREMENT PROCEDURE

Refer to KDB 789033 section F

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

Refer to Section 8.2.

9.3. MEASUREMENT EQUIPMENT USED

Refer to Section 6.

9.4. LIMITS AND MEASUREMENT RESULT

Test Data of Conducted Output Power Density for band 5.15-5.25 GHz				
Test Mode	Test Channel (MHz)	Average Power Density (dBm/MHz)	Limits (dBm/MHz)	Pass or Fail
802.11a	5180	1.967	11	Pass
	5200	2.683	11	Pass
	5240	2.224	11	Pass
802.11n20	5180	1.681	11	Pass
	5200	1.117	11	Pass
	5240	2.014	11	Pass
802.11n40	5190	-2.078	11	Pass
	5230	-1.730	11	Pass
802.11ac20	5180	0.807	11	Pass
	5200	0.230	11	Pass
	5240	0.291	11	Pass
802.11ac40	5190	-5.240	11	Pass
	5230	-3.827	11	Pass
802.11ac80	5210	-6.531	11	Pass

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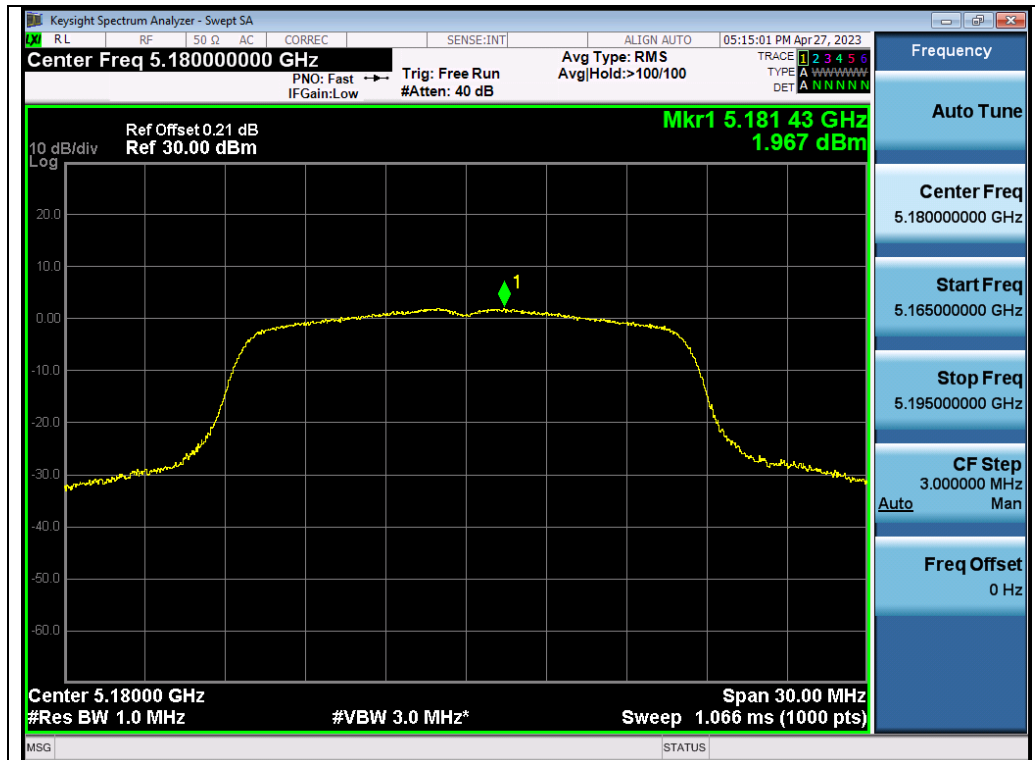
Test Data of Conducted Output Power Density for band 5.725-5.85 GHz					
Test Mode	Test Channel (MHz)	Average Power Density (dBm/100kHz)	Average Power Density (dBm/500kHz)	Limits (dBm/500kHz)	Pass or Fail
802.11a	5745	-8.524	-1.534	30	Pass
	5785	-8.703	-1.713	30	Pass
	5825	-8.131	-1.141	30	Pass
802.11n20	5745	-8.603	-1.613	30	Pass
	5785	-8.823	-1.833	30	Pass
	5825	-8.425	-1.435	30	Pass
802.11n40	5755	-12.011	-5.021	30	Pass
	5795	-12.135	-5.145	30	Pass
802.11ac20	5745	-8.601	-1.611	30	Pass
	5785	-9.613	-2.623	30	Pass
	5825	-9.368	-2.378	30	Pass
802.11ac40	5755	-10.421	-3.431	30	Pass
	5795	-10.245	-3.255	30	Pass
802.11ac80	5775	-11.792	-4.802	30	Pass

Note:1. Power density(dBm/500kHz) = Power density(dBm/100kHz) +10*log(500/100).

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Test Graphs of Conducted Output Power Spectral Density for band 5.15-5.25 GHz



Test_Graph_802.11a_ANT1_5180_6Mbps_PSD

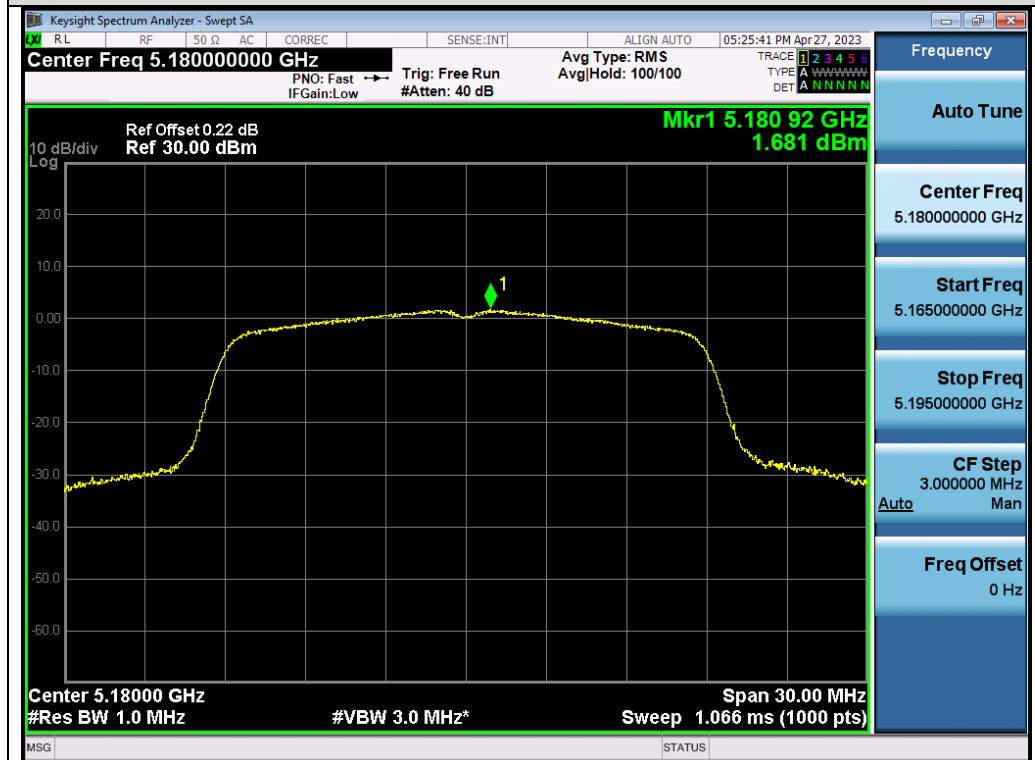


Test_Graph_802.11a_ANT1_5200_6Mbps_PSD

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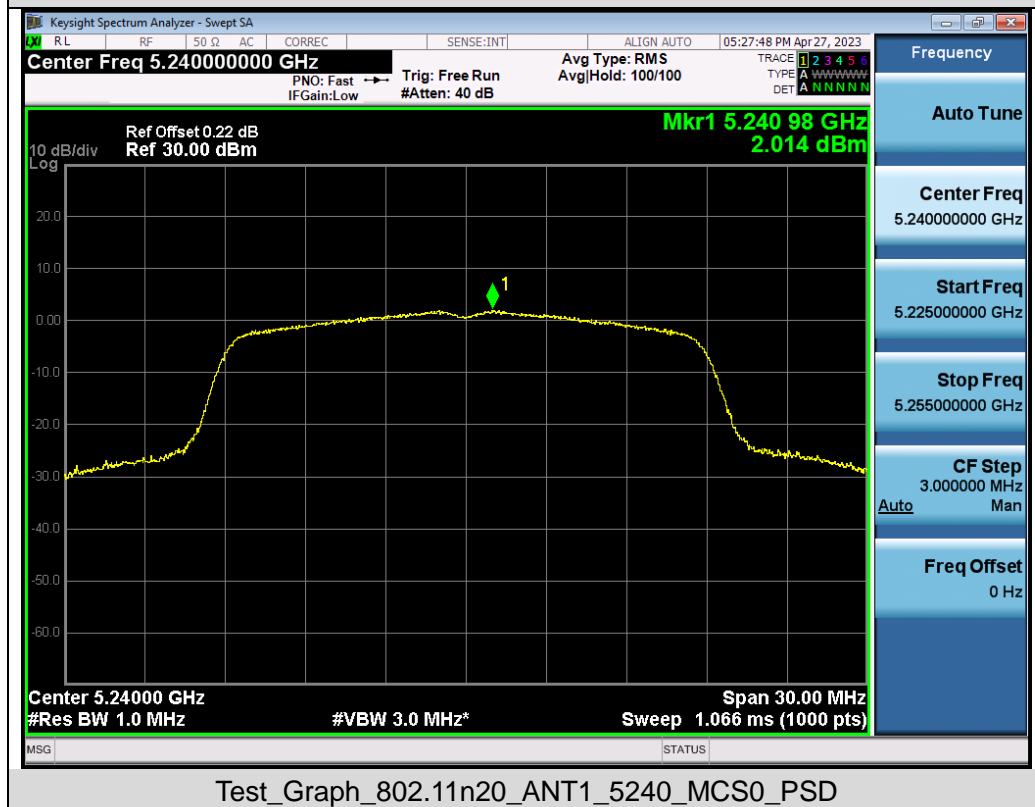
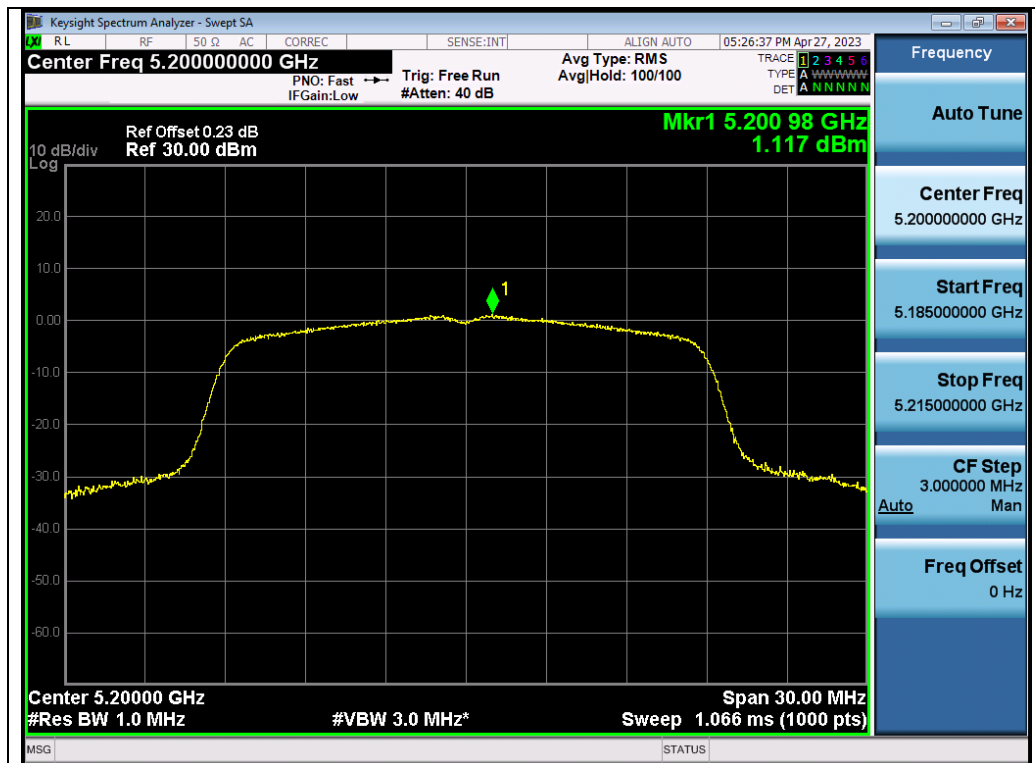
Test_Graph_802.11a_ANT1_5240_6Mbps_PSD



Test_Graph_802.11n20_ANT1_5180_MCS0_PSD

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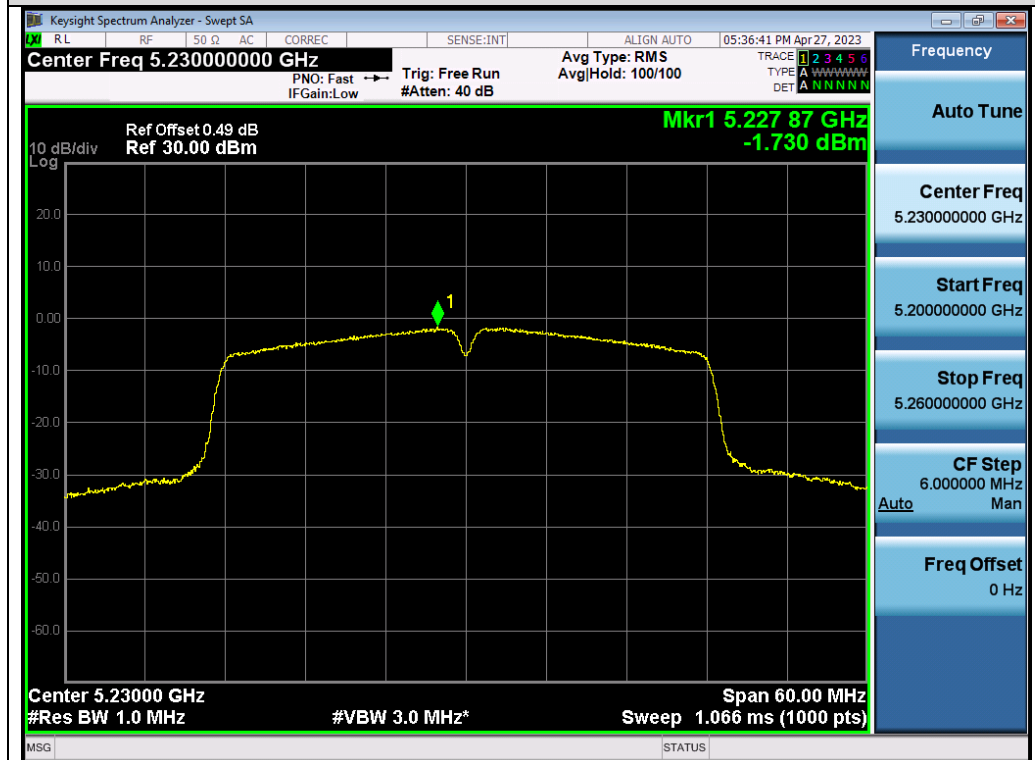


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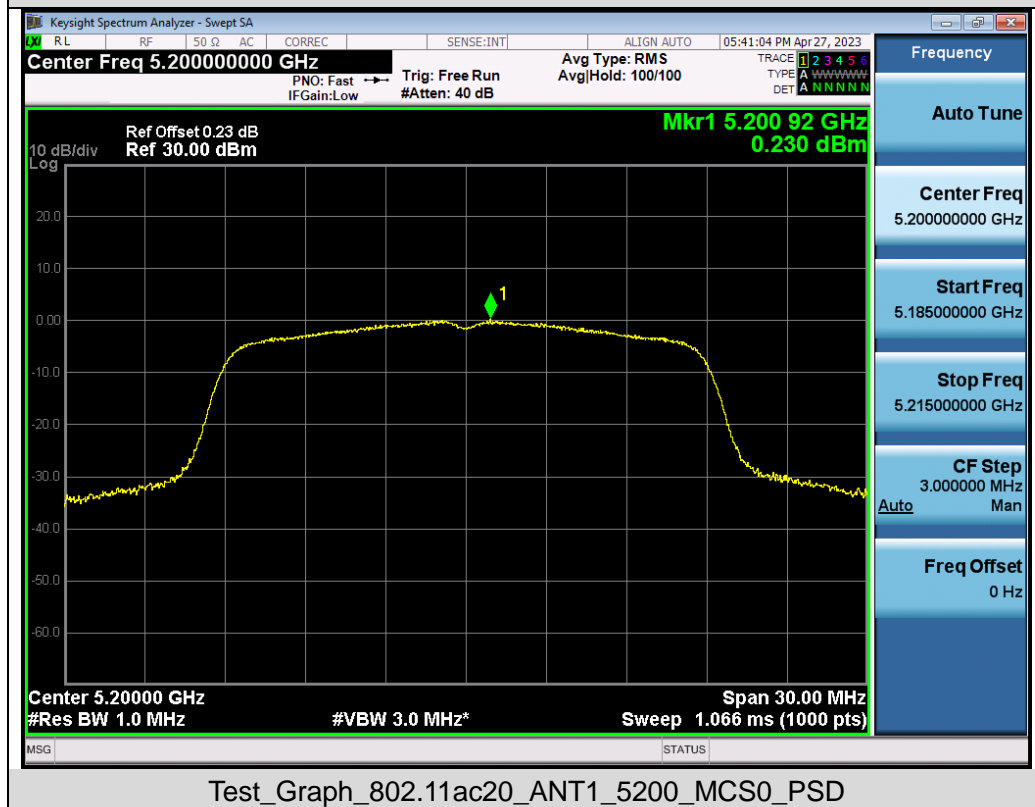


Test_Graph_802.11n40_ANT1_5190_MCS0_PSD

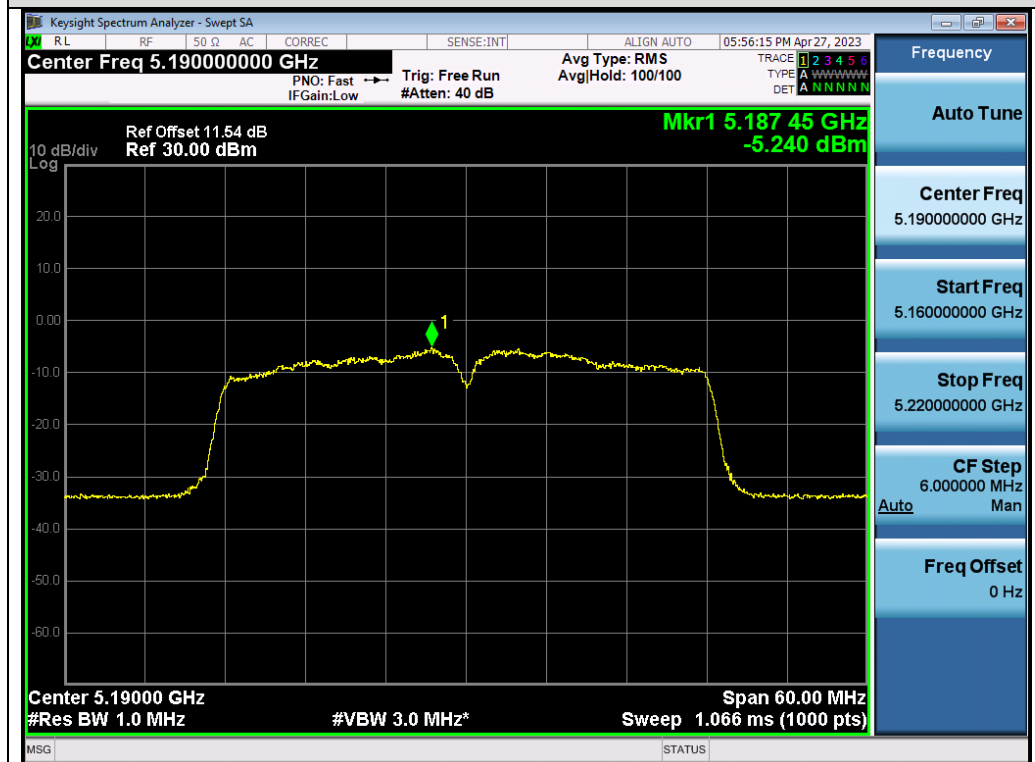


Test_Graph_802.11n40_ANT1_5230_MCS0_PSD

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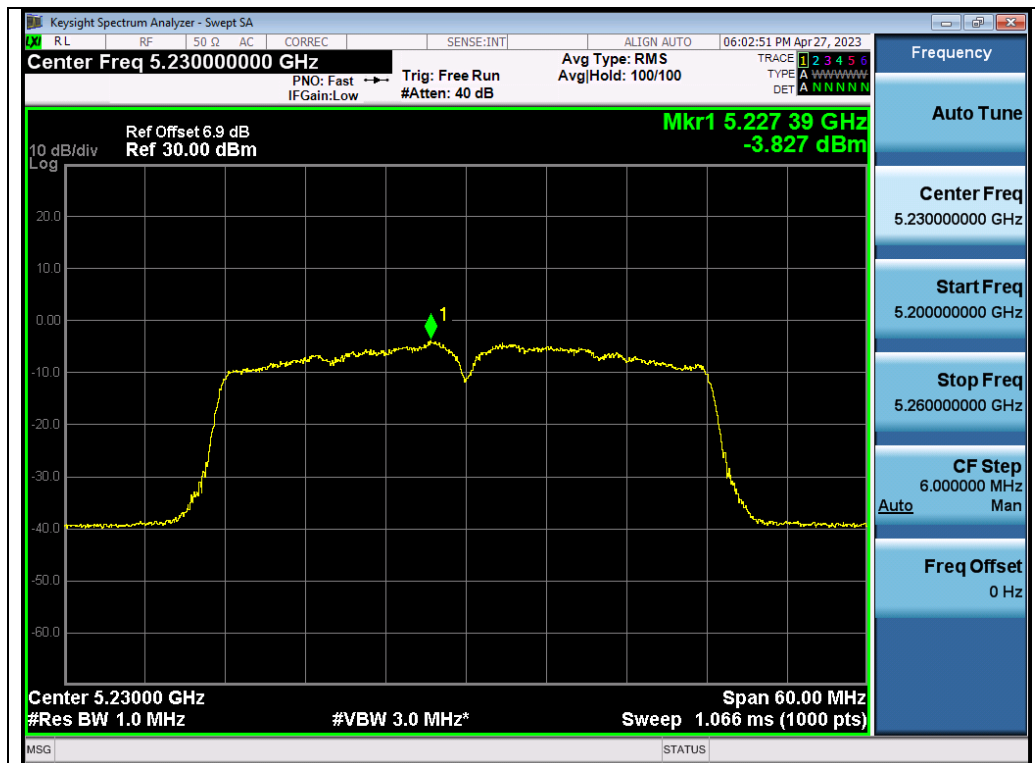


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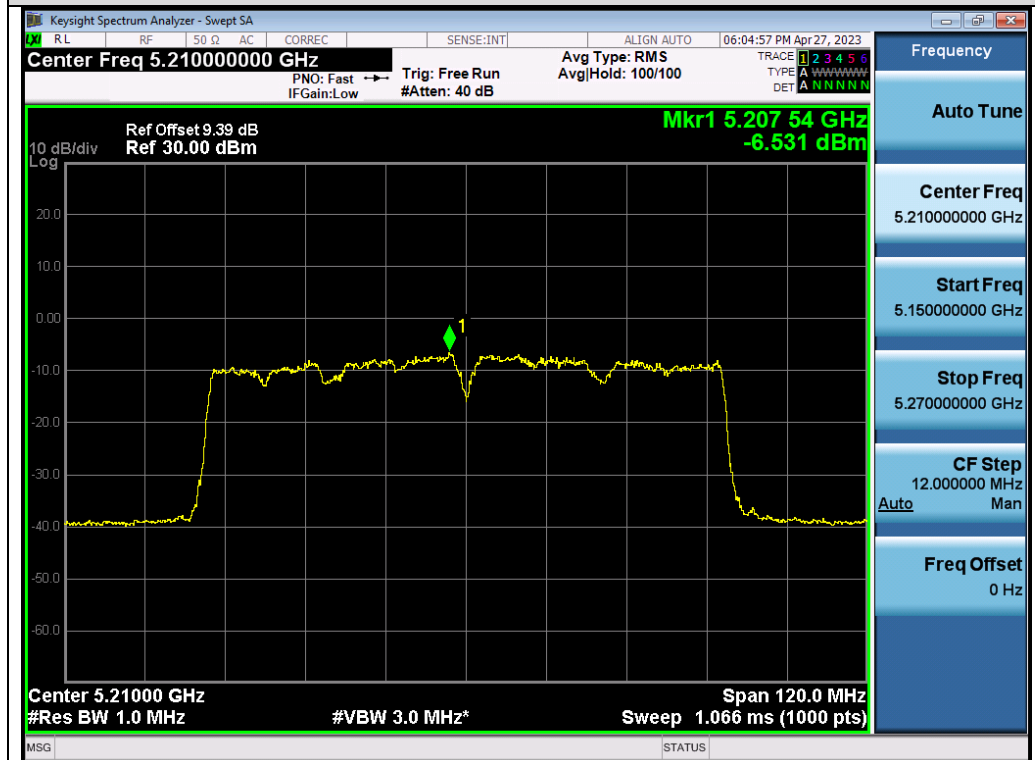


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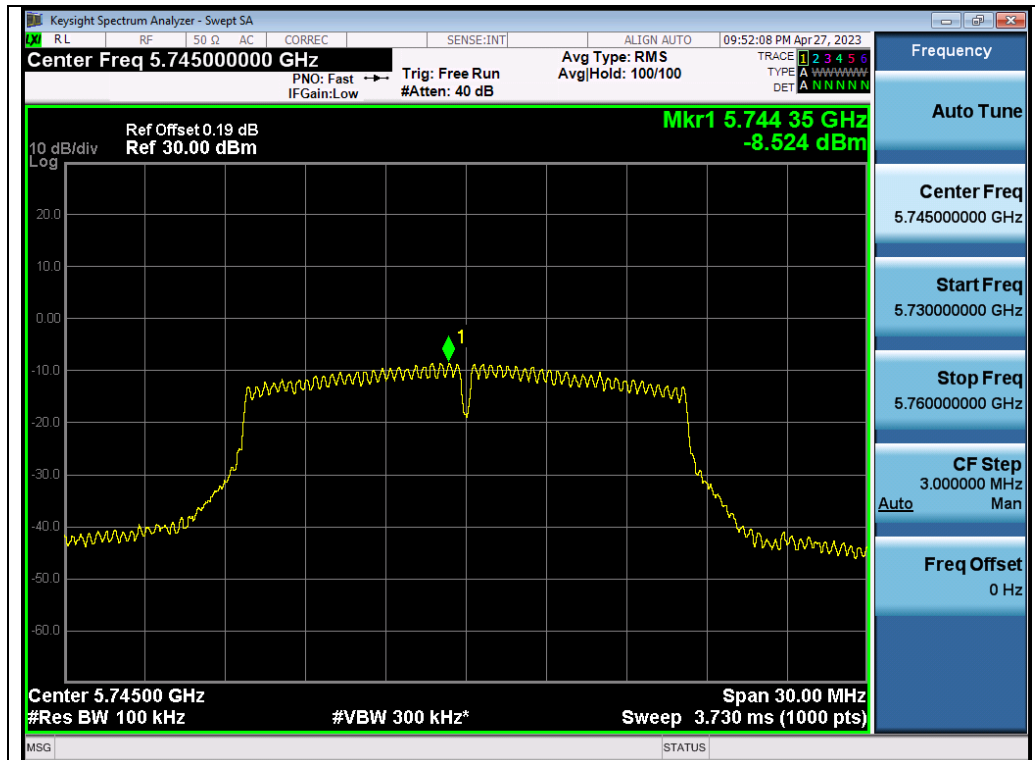
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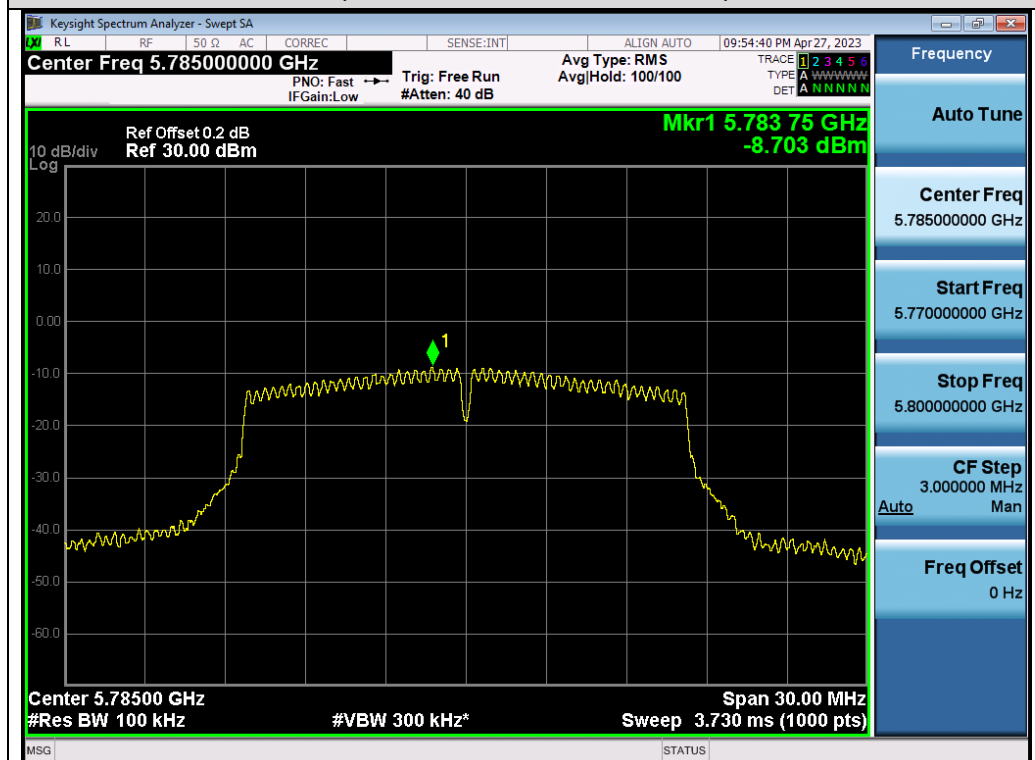
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Test Graphs of Conducted Output Power Spectral Density for band 5.725-5.85 GHz

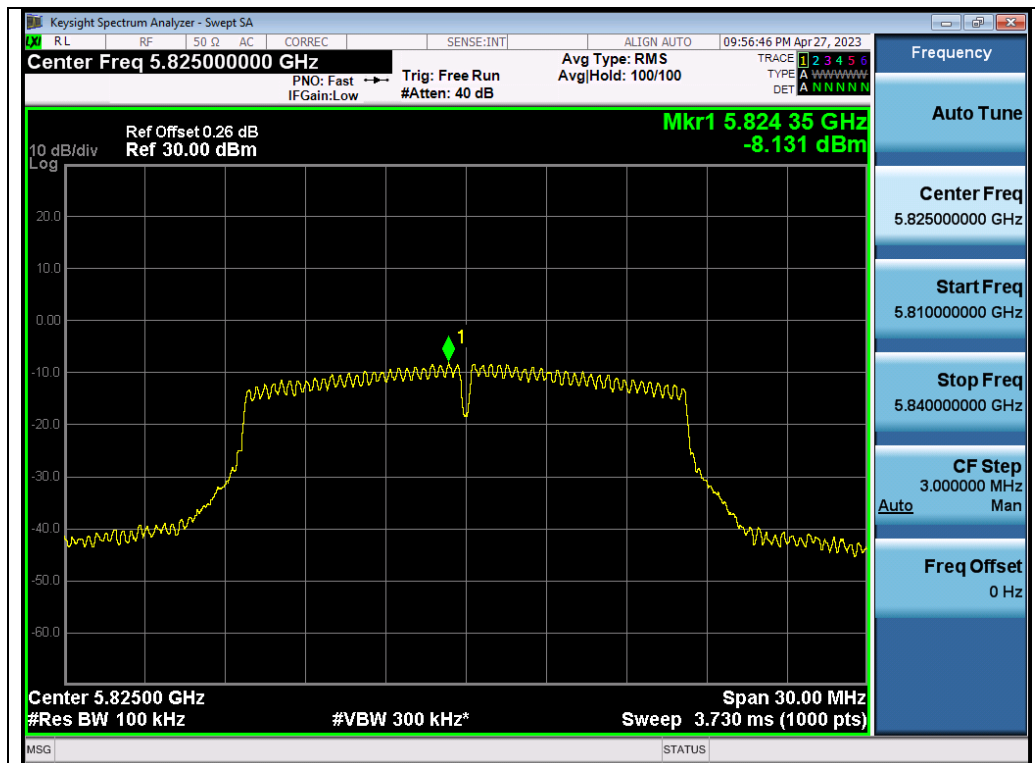


Test_Graph_802.11a_ANT1_5745_6Mbps_PSD

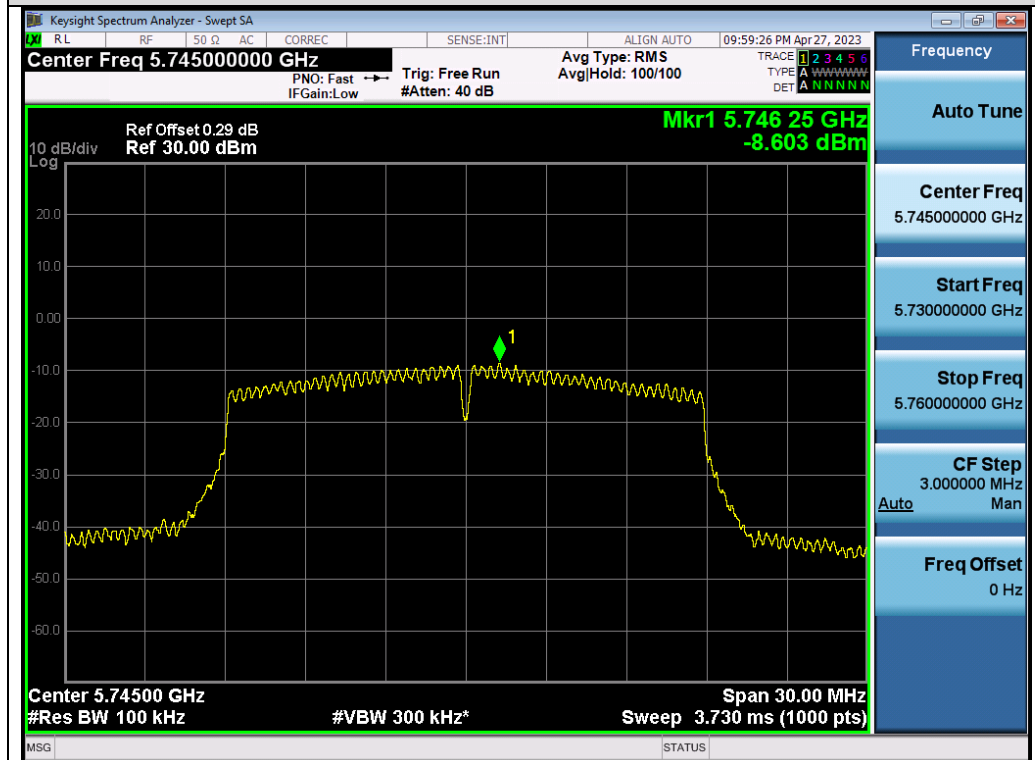


Test_Graph_802.11a_ANT1_5785_6Mbps_PSD

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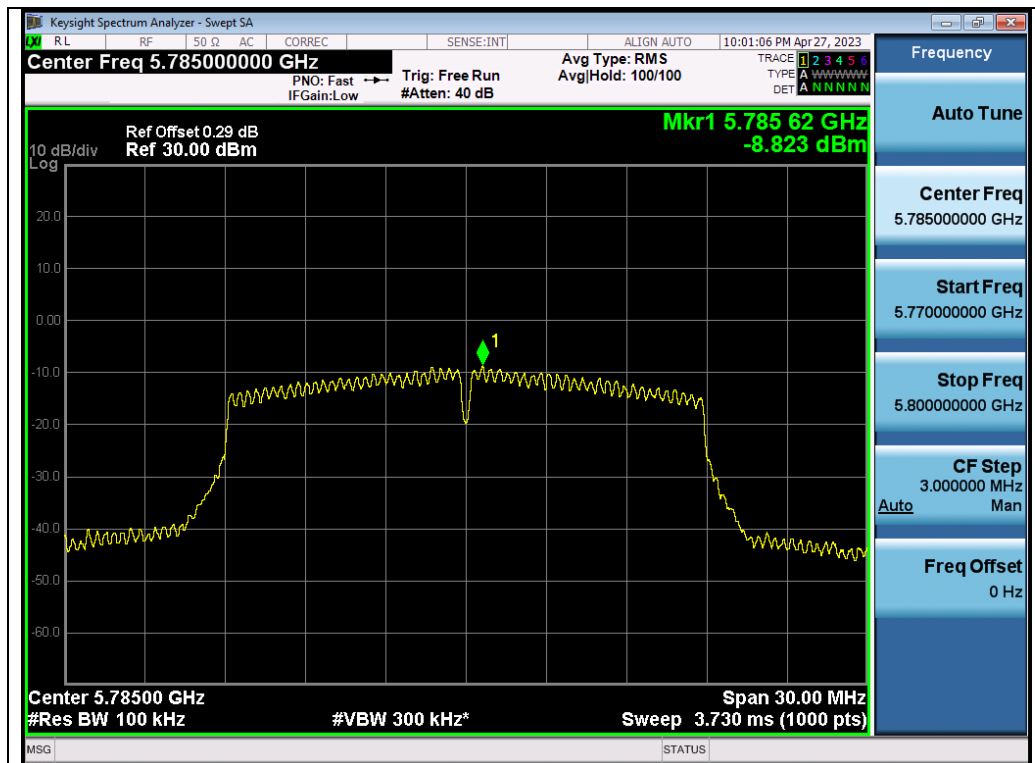
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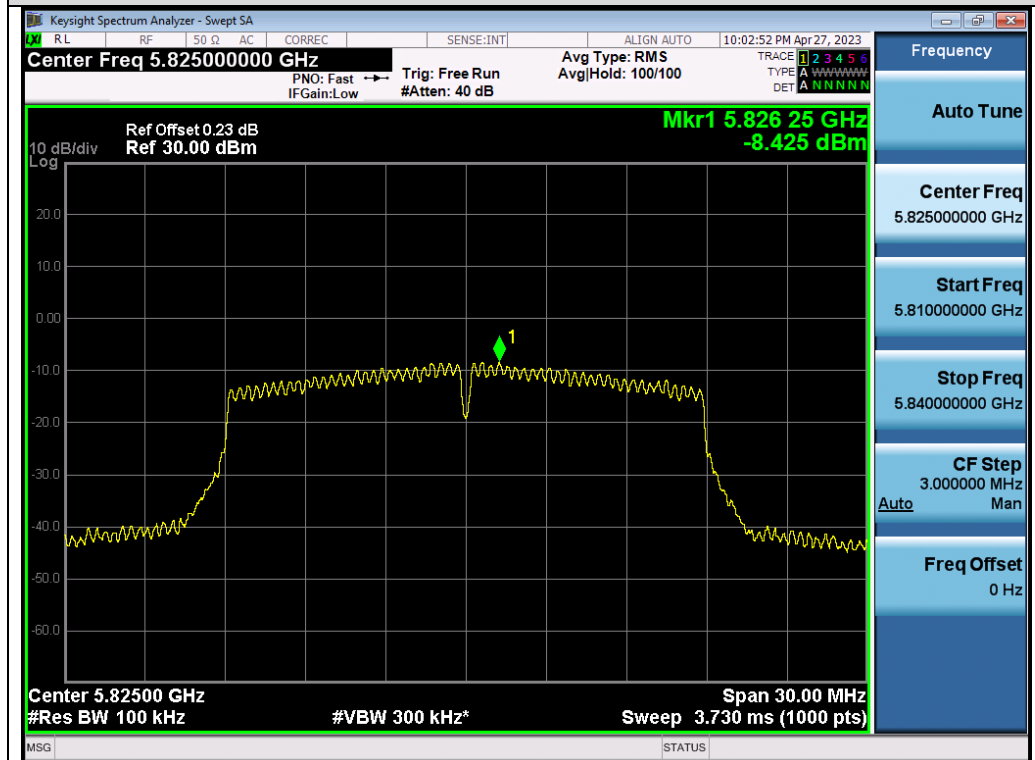
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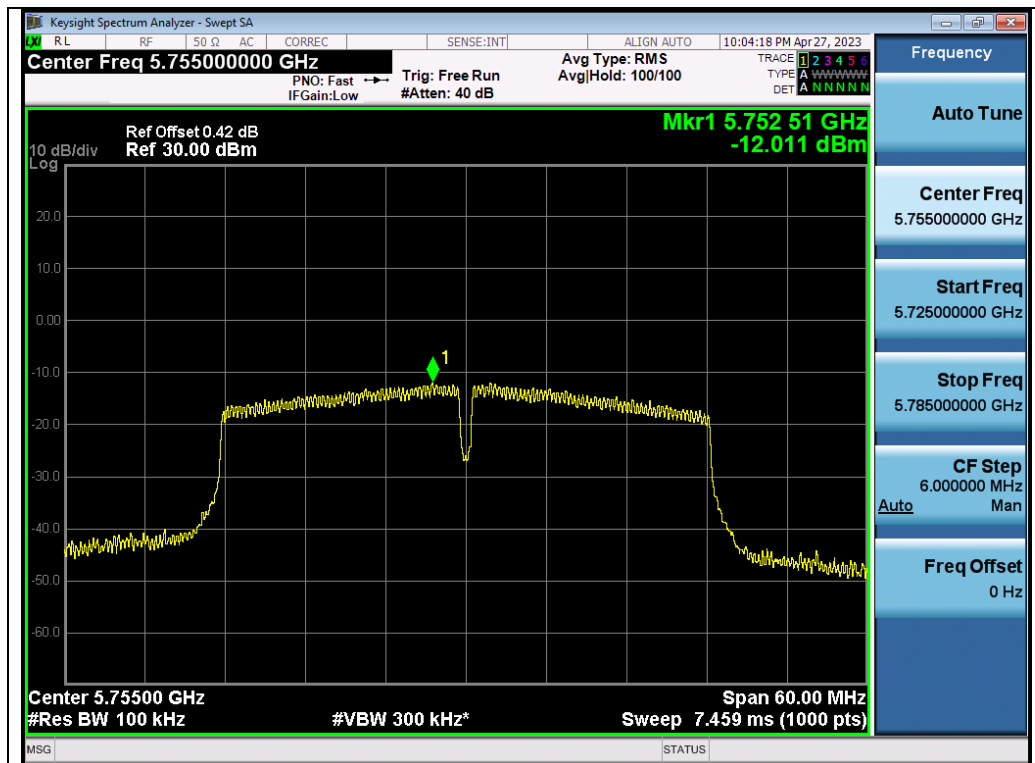
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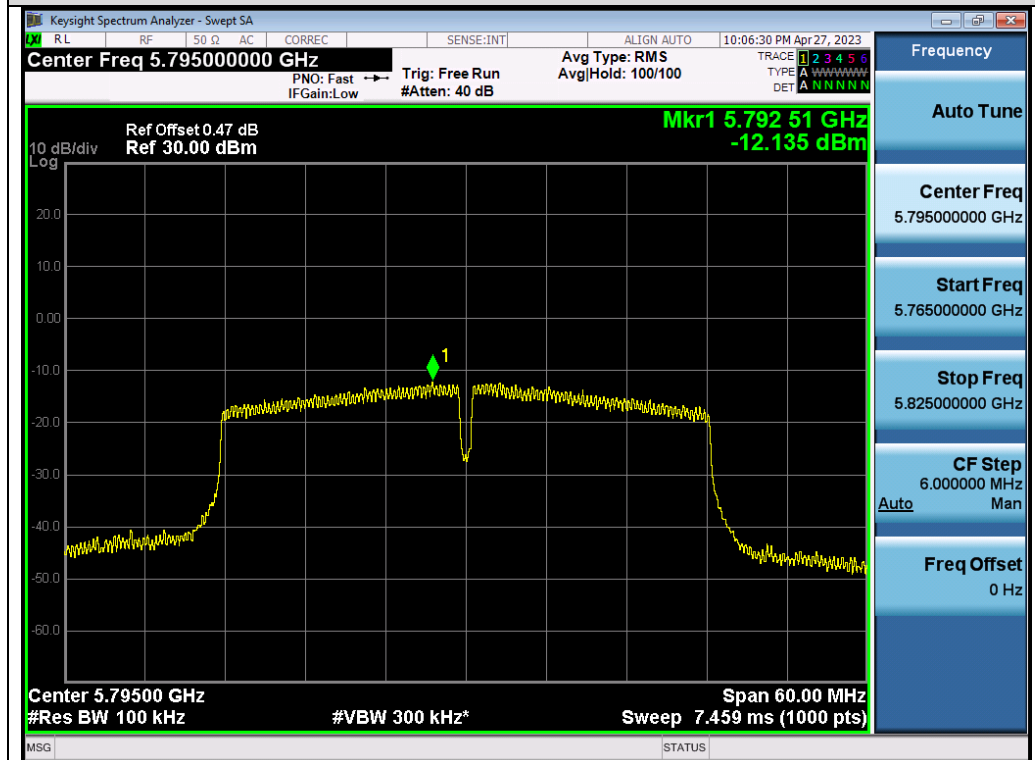
Test_Graph_802.11n20_ANT1_5825_MCS0_PSD

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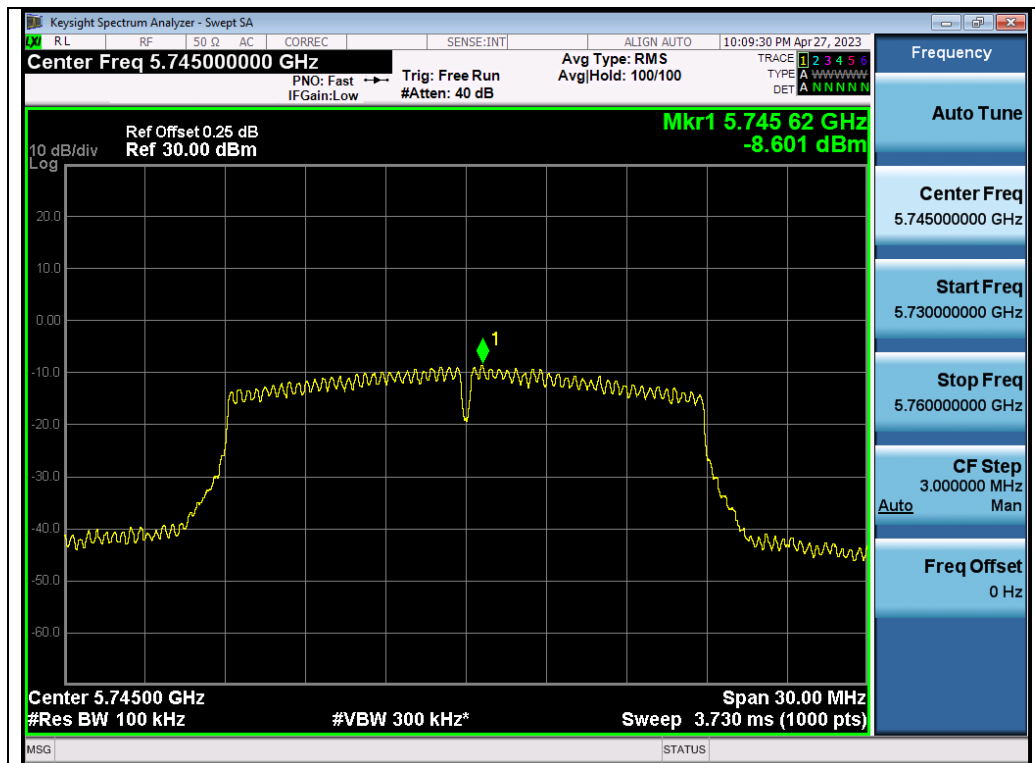
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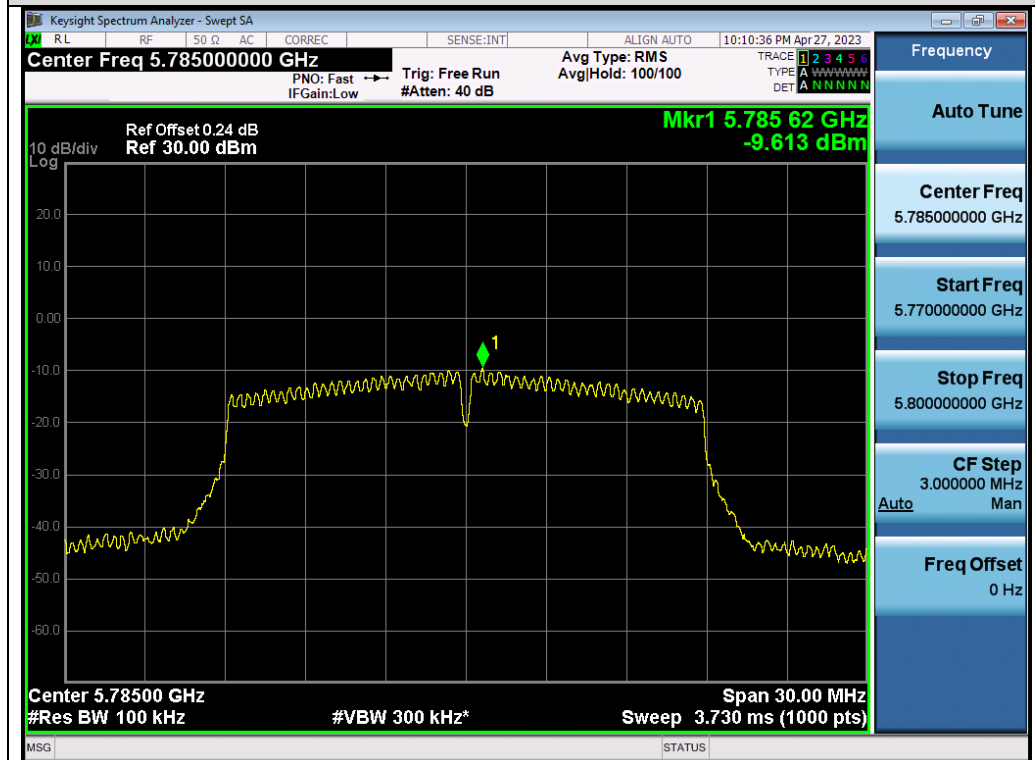
Test_Graph_802.11n40_ANT1_5795_MCS0_PSD

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Test_Graph_802.11ac20_ANT1_5745_MCS0_PSD

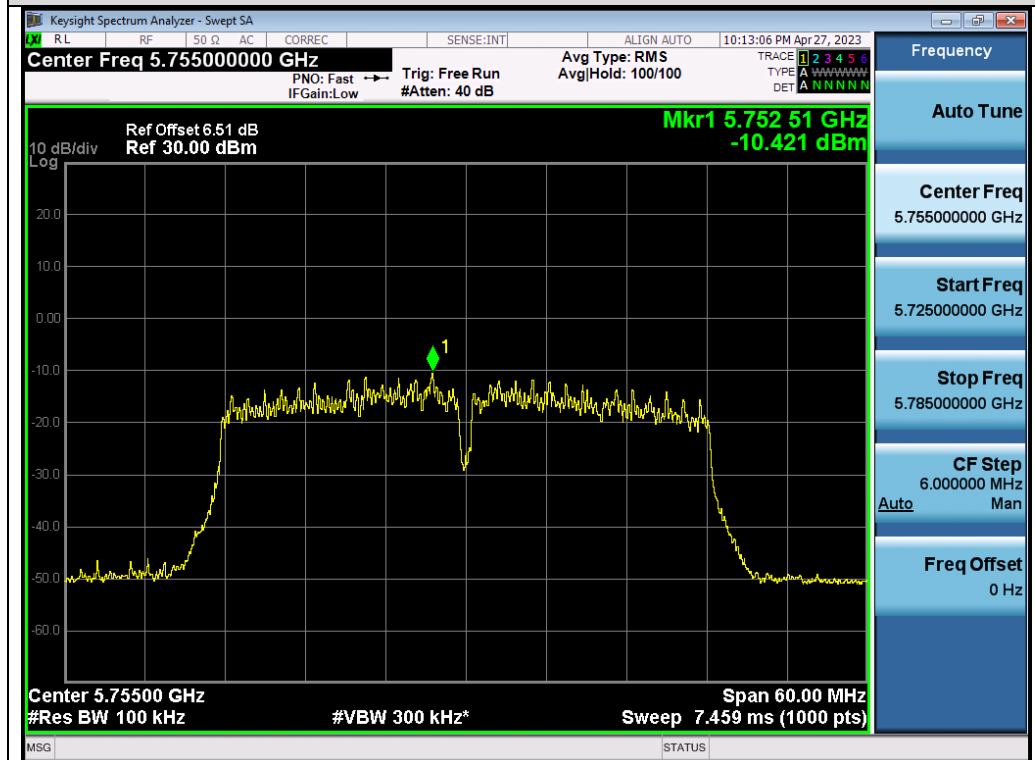


Test_Graph_802.11ac20_ANT1_5785_MCS0_PSD

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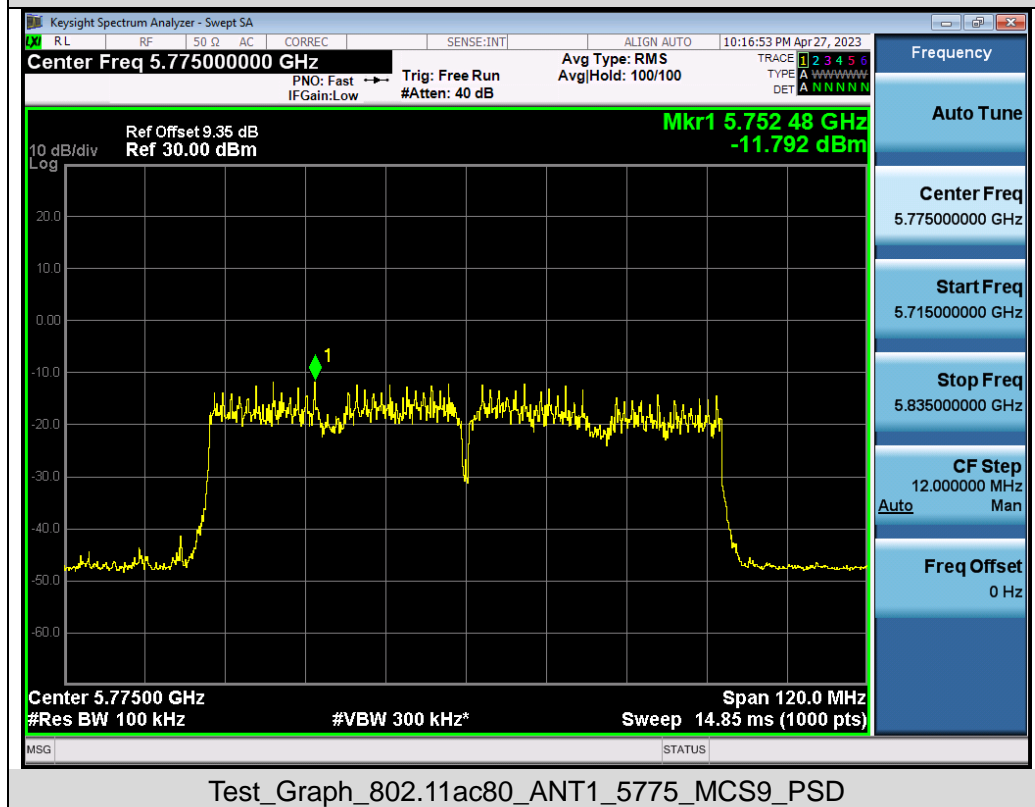
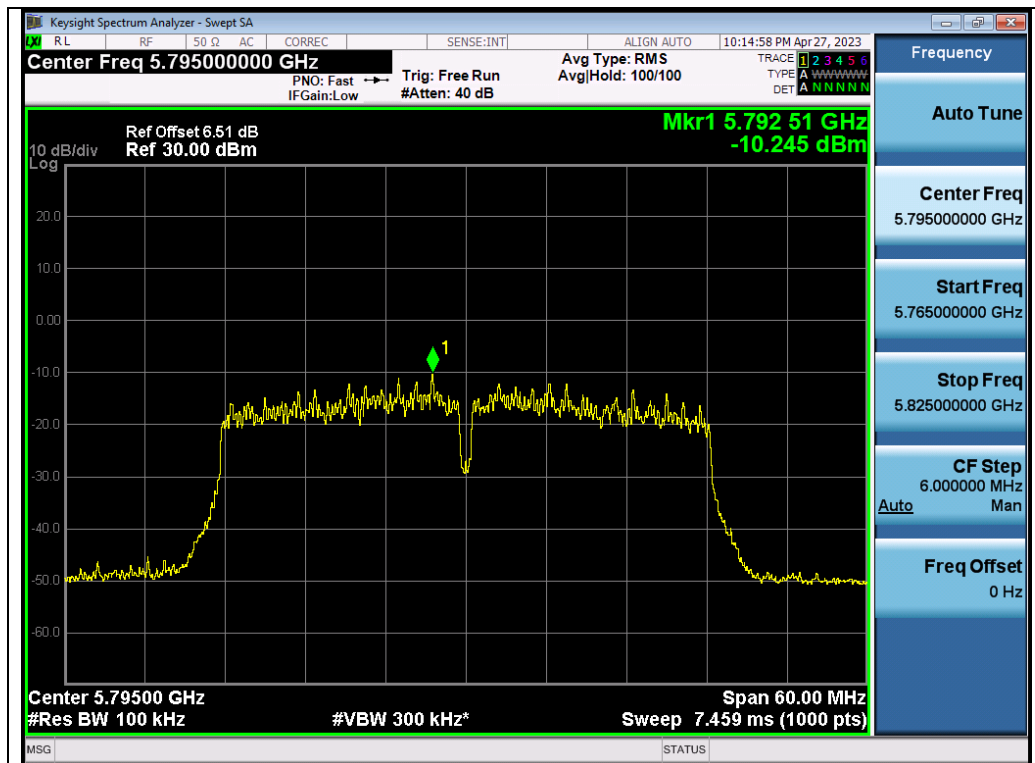


Test_Graph_802.11ac20_ANT1_5825_MCS9_PSD



Test_Graph_802.11ac40_ANT1_5755_MCS9_PSD

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10. CONDUCTED SPURIOUS EMISSION

10.1. MEASUREMENT PROCEDURE

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 SPA Trace 1 Max hold, then View.

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

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

The same as described in section 8.2.

10.3. MEASUREMENT EQUIPMENT USED

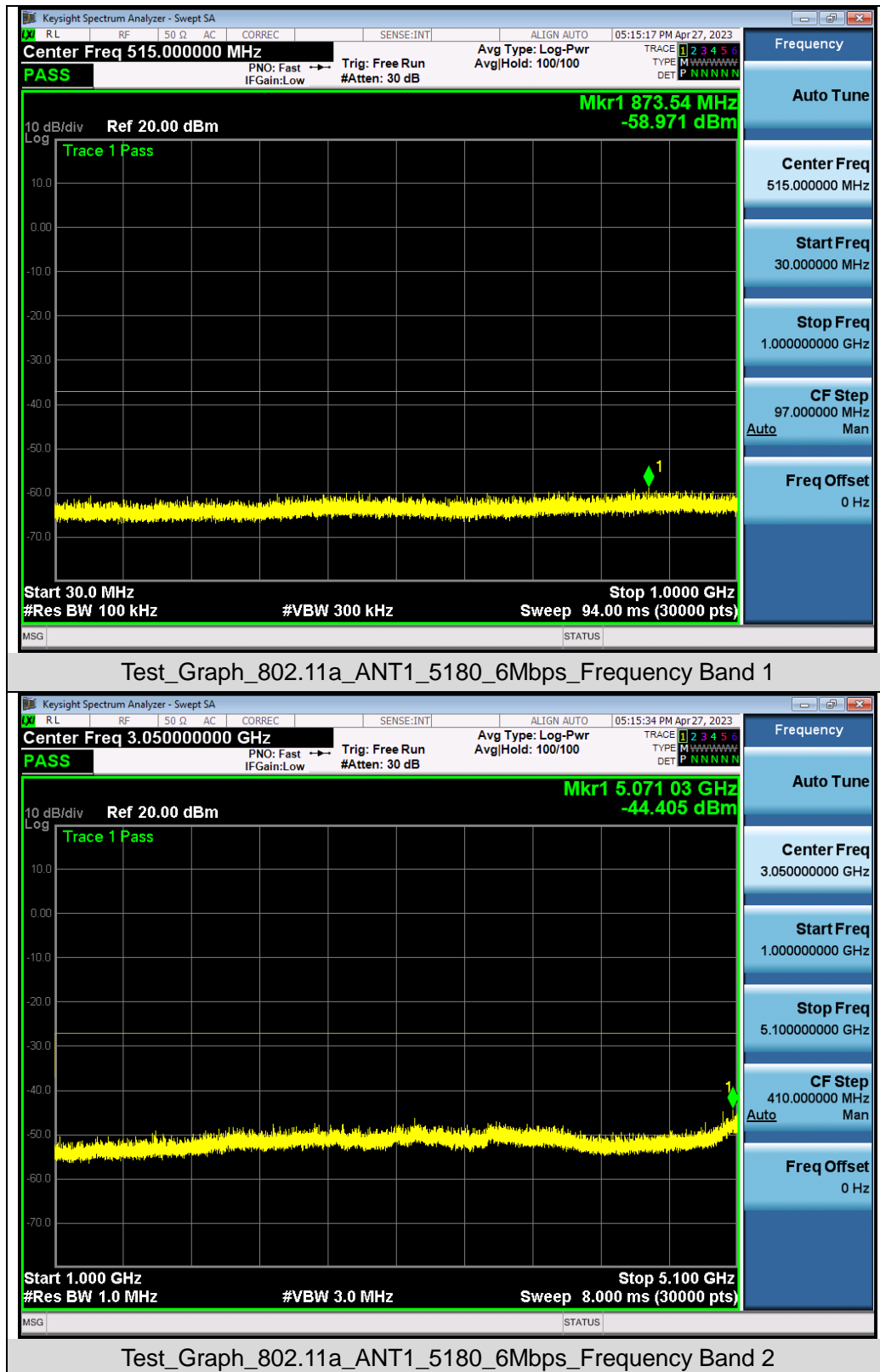
The same as described in section 6.

10.4. LIMITS AND MEASUREMENT RESULT

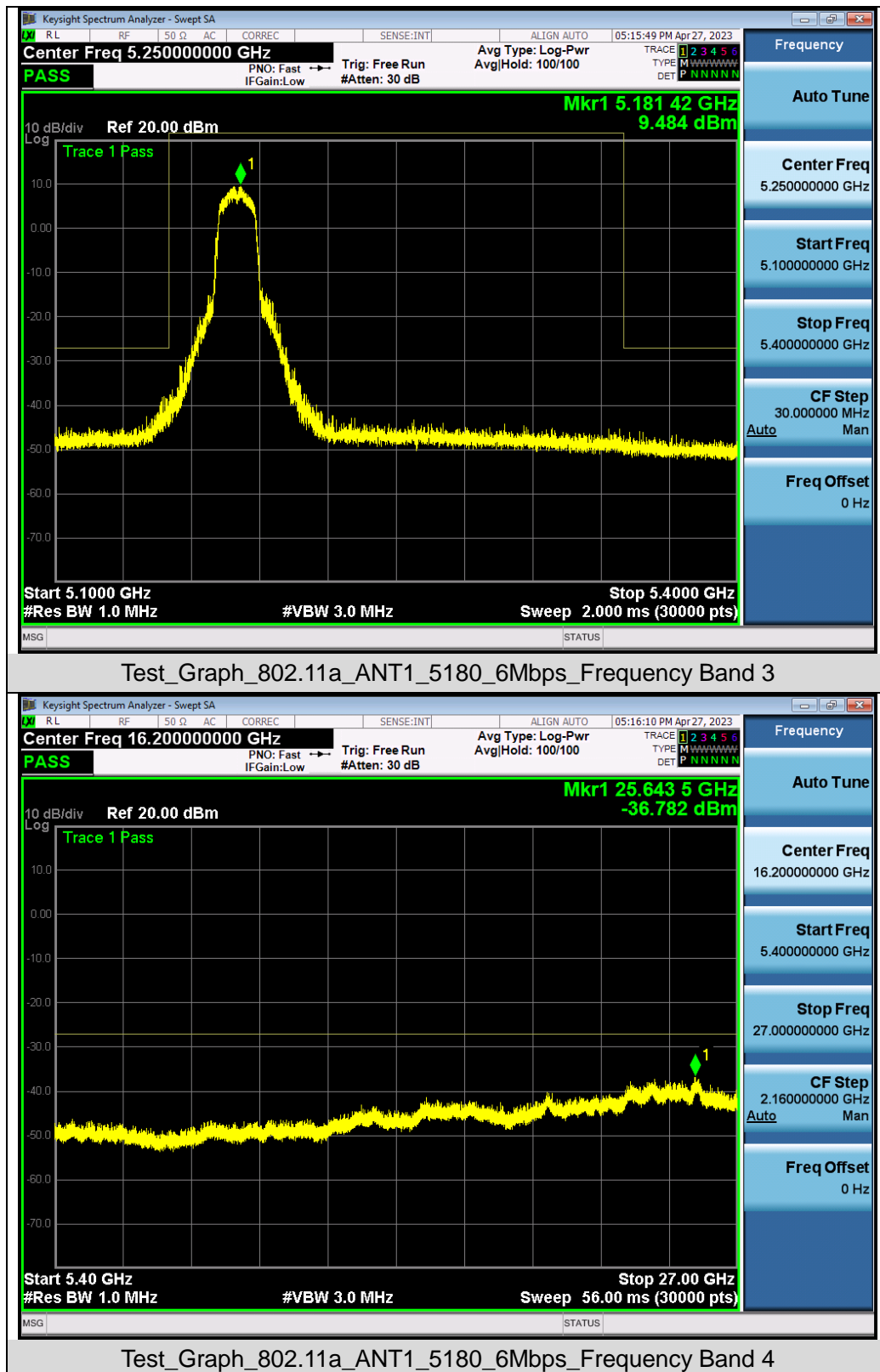
LIMITS AND MEASUREMENT RESULT		
Applicable Limits	Measurement Result	
	Test channel	Criteria
-27dBm/MHz	5150MHz-5250MHz	PASS
All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.	5725MHz-5850MHz	PASS

Note: All the 20MHz bandwidth modulation had been tested, the 802.11a20 was the worst case and record in his test report. All the 40MHz bandwidth modulation had been tested, the 802.11N40 was the worst case and record in his test report. All the 80MHz bandwidth modulation had been tested, the 802.11AC80 was the worst case and record in his test report.

Test Graphs of Spurious Emissions outside of the 5.15-5.35 GHz band for transmitters operating in the 5.15-5.25 GHz band

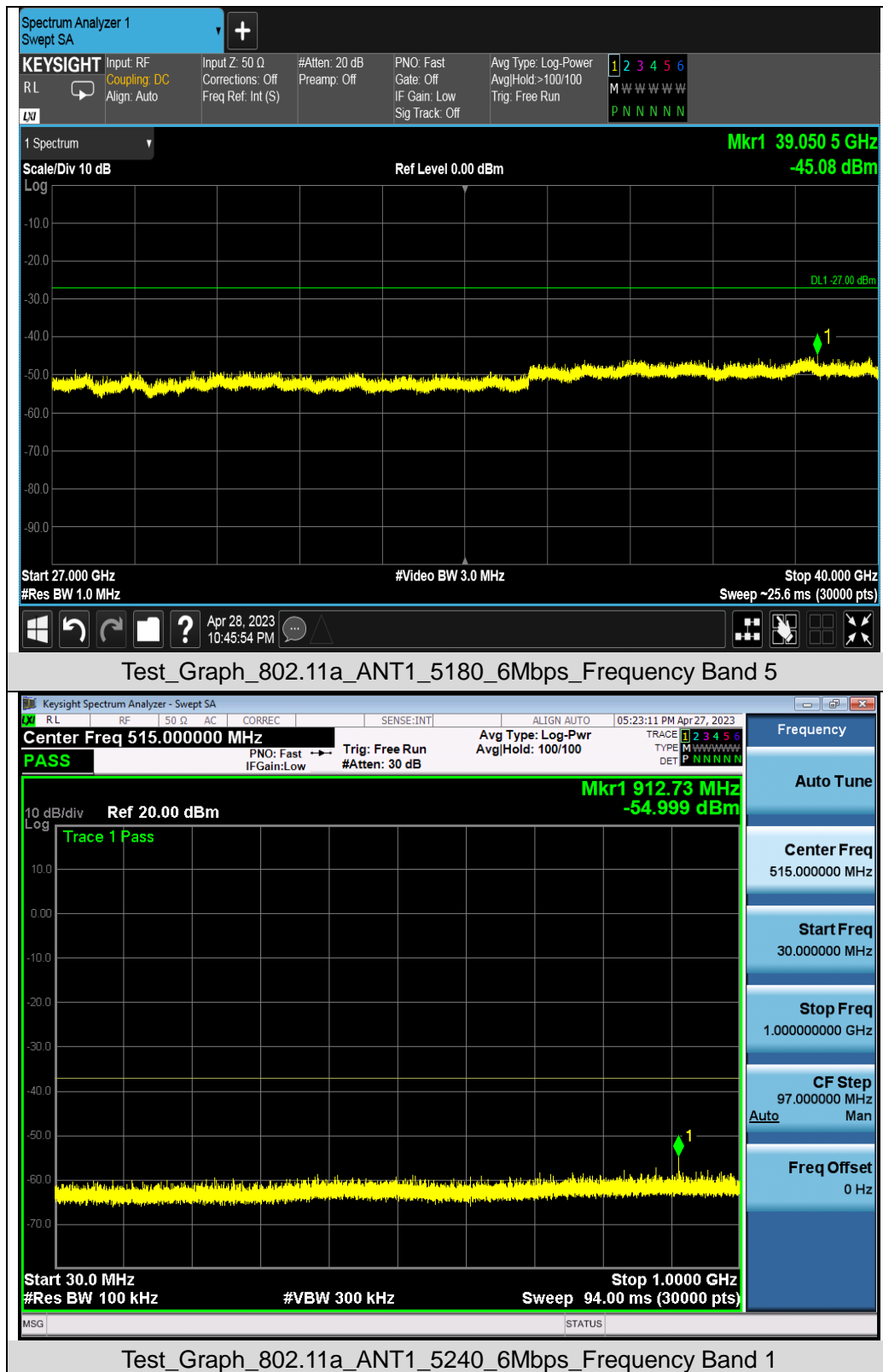


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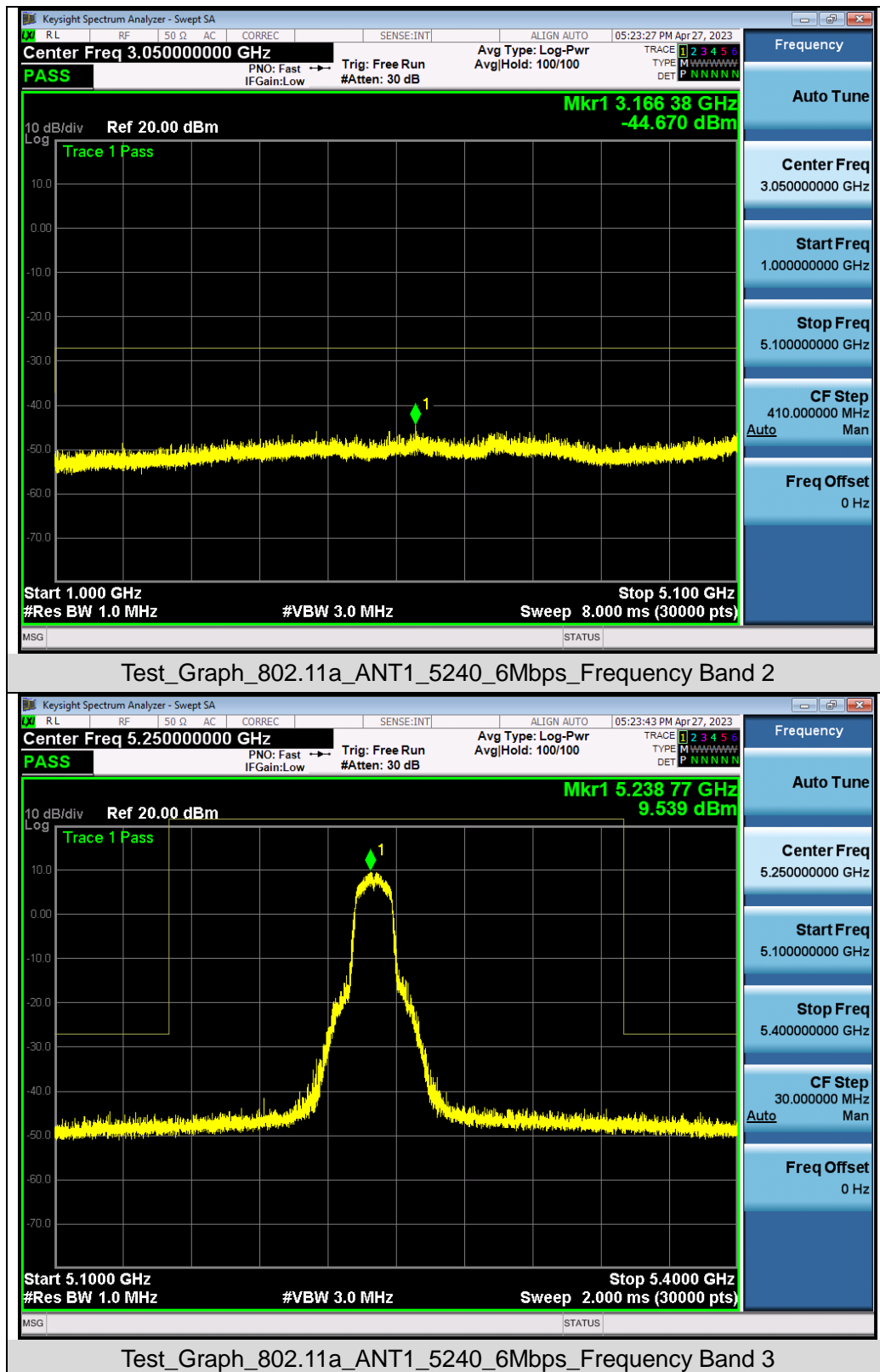
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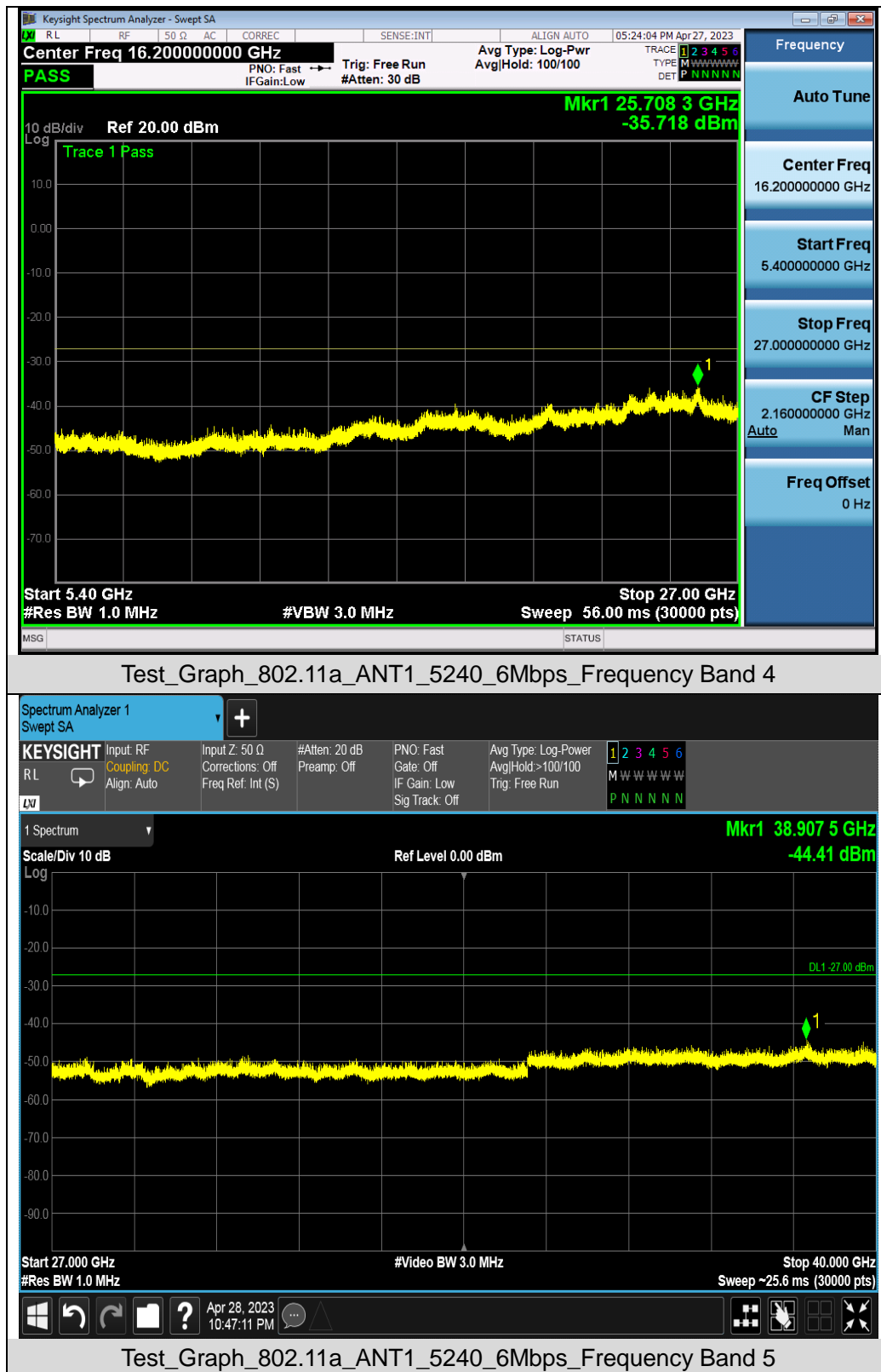
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