

RF TEST REPORT

Applicant	PATEO CONNECT Technology (Shanghai) Corporation
FCC ID	2BOT7-PCM3-NA
Product	Infotainment System
Brand	PATEO
Model	PCCM Plus 997/987 II; PCCM Plus 991/981 I
Report No.	EFTA25020036-IE-08-R4V1
Issue Date	August 18, 2025

Eurofins TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 15E (2024)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

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Version	Revision Description	Issue Date
Rev.0	Initial issue of report.	July 3, 2025
Rev.1	Add the data of Unwanted Emissions for model PCCM Plus 997/987 II.	August 18, 2025
Note: This revised report (Report No.: EFTA25020036-IE-08-R4V1) supersedes and replaces the previously issued report (Report No.: EFTA25020036-IE-08-R4). Please discard or destroy the previously issued report and dispose of it accordingly.		

Summary of measurement results

Number	Test Case	Clause in FCC rules	Verdict
1	Average output power	15.407(a)	PASS
2	Occupied bandwidth	15.407(e)	PASS
3	Frequency stability	15.407(g)	PASS
4	Power spectral density	15.407(a)	PASS
5	Unwanted Emissions	15.407(b)	PASS
6	Conducted Emissions	15.207	NA
Date of Testing: March 11, 2025 ~ April 28, 2025 and August 13, 2025			
Date of Sample Received: February 11, 2025			
Note: PASS: The EUT complies with the essential requirements in the standard. FAIL: The EUT does not comply with the essential requirements in the standard. All indications of Pass/Fail in this report are opinions expressed by Eurofins TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.			

1. Test Laboratory

1.1. Notes of the test report

This report shall not be reproduced in full or partial, without the written approval of **Eurofins TA Technology (Shanghai) Co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

1.2. Test facility

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

A2LA (Certificate Number: 3857.01)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

1.3. Testing Location

Company: Eurofins TA Technology (Shanghai) Co., Ltd.
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City: Shanghai
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E-mail: Kain.Xu@cpt.eurofinscn.com

2. General Description of Equipment under Test

2.1. Applicant and Manufacturer Information

Applicant	PATEO CONNECT Technology (Shanghai) Corporation
Applicant address	Room 3701, No. 866 Dongchangzhi Road, Hongkou District, Shanghai, 200080, PR.China
Manufacturer	PATEO CONNECT Technology (Shanghai) Corporation
Manufacturer address	Room 3701, No. 866 Dongchangzhi Road, Hongkou District, Shanghai, 200080, PR.China

2.2. General information

EUT Description			
Model	PCCM Plus 997/987 II; PCCM Plus 991/981 I		
Lab internal SN	EFTA25020036-IE-02/S01		
HW Version	V2.0		
SW Version	rc1.userdebug.PCM3		
Power Supply	External power supply		
Antenna Type	Internal Antenna		
Antenna Connector	A permanently attached antenna (meet with the standard FCC Part 15.203 requirement)		
Antenna Gain	Band	Antenna 1	Antenna 2
	U-NII-1	4.30	5.20
	U-NII-3	6.90	6.90
Directional Gain	U-NII-1	For Power: 5.20 dBi For PSD: 8.21 dBi	
	U-NII-3	For Power: 6.90 dBi For PSD: 9.91 dBi	
Operating Frequency Range(s)	U-NII-1: 5150MHz-5250MHz U-NII-3: 5725MHz -5850MHz		
Modulation Type	802.11a: OFDM 802.11n (HT20/HT40): OFDM 802.11ac (VHT20/VHT40/VHT80): OFDM		
Max. Output Power	16.18 dBm		
Operating temperature range	-45 ° C to 85 ° C		
Operating voltage range	9 VDC to 16 VDC		
Testing temperature range	-30 ° C to 50° C		
Testing voltage range	9 VDC - 12 VDC - 16 VDC		
State voltage	12 VDC		
Note:			
1. The EUT is sent from the applicant to Eurofins TA and the information of the EUT is declared			

by the applicant.

2. This device support automatically discontinue transmission, while the device is not transmitting any information, the device can automatically discontinue transmission and become standby mode for power saving. The device can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

3. (a) Manufacturers implements security features in any digitally modulated devices capable of operating in any of the U-NII bands, so that third parties are not able to reprogram the device to operate outside the parameters for which the device was certified. The software prevents the user from operating the transmitter with operating frequencies, output power, modulation types or other radio frequency parameters outside those that were approved for the device.

Manufacturers uses means including, but not limited to the use of a private network that allows only authenticated users to download software, electronic signatures in software or coding in hardware that is decoded by software to verify that new software can be legally loaded into a device to meet these requirements and must describe the methods in their application for equipment authorization.

(b) Manufacturers take steps to ensure that DFS functionality cannot be disabled by the operator of the U-NII device.

3. The customer declares that PCCM Plus 997/987 II and PCCM Plus 991/981 I are the same except for different appearance. This report only tests PCCM Plus 991/981 I.

3. Applied Standards

According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

Test standards:

FCC CFR47 Part 15E (2024) Unlicensed National Information Infrastructure Devices

ANSI C63.10-2013

Reference standard:

KDB 789033 D02 General UNII Test Procedures New Rules v02r01

KDB 662911 D01 Multiple Transmitter Output v02r01

4. Test Configuration

Test Mode

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

The radiated emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in stand-up position (Z axis) and the worst case was recorded.

In order to find the worst case condition, Pre-tests are needed at the presence of different data rate. Preliminary tests have been done on all the configuration for confirming worst case. Data rate below means worst-case rate of each test item.

Worst-case data rates are shown as following table.

Mode	Data Rate		
	Antenna 1	Antenna 2	CDD/MIMO
802.11a	6 Mbps	6 Mbps	6 Mbps
802.11n HT20	MCS0	MCS0	MCS8
802.11n HT40	MCS0	MCS0	MCS8
802.11ac VHT20	MCS0	MCS0	MCS0
802.11ac VHT40	MCS0	MCS0	MCS0
802.11ac VHT80	MCS0	MCS0	MCS0

The worst case Antenna mode for each of the following tests for Wi-Fi:

Test Cases	Antenna 1	Antenna 2	MIMO
Average conducted output power	O	O	O
Occupied bandwidth	--	--	O
Frequency stability	--	--	O
Power Spectral Density	O	O	O
Unwanted Emissions	--	--	O
Conducted Emissions	--	--	--
Note: "O": test all bands			

Wireless Technology and Frequency Range

Wireless Technology		Bandwidth	Channel	Frequency
Wi-Fi	U-NII-1	20 MHz	36	5180MHz
			40	5200MHz
			44	5220MHz
			48	5240MHz
		40 MHz	38	5190MHz
			46	5230MHz
		80 MHz	42	5210MHz
	U-NII-3	20 MHz	149	5745MHz
			153	5765MHz
			157	5785MHz
			161	5805MHz
			165	5825MHz
		40 MHz	151	5755MHz
			159	5795MHz
		80 MHz	155	5775MHz
Does this device support TPC Function? ☐ Yes ☒ No				

5. Test Case Results

5.1. Occupied Bandwidth

Ambient condition

Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

Method of Measurement

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable.

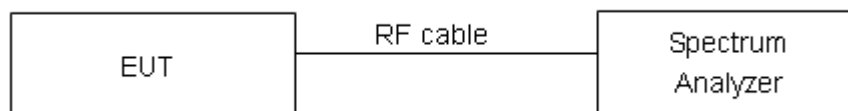
For U-NII-1, set RBW $\approx 1\%$ OCB kHz, VBW $\geq 3 \times$ RBW, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 26 dB relative to the maximum level measured in the fundamental emission.

For U-NII-3, Set RBW = 100 kHz, VBW $\geq 3 \times$ RBW, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described above.

Use the 99 % power bandwidth function of the instrument

Test Setup



Limits

For U-NII-1

No specific occupied bandwidth requirements in Part 15.407.

For U-NII-3

Rule FCC Part §15.407(e)

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 936$ Hz.

Test Results:
U-NII-1

Mode	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Conclusion
802.11a	5180	16.550	20.899	PASS
	5200	16.546	20.951	PASS
	5240	16.561	21.294	PASS
802.11n HT20	5180	17.722	21.599	PASS
	5200	17.691	21.731	PASS
	5240	17.712	21.571	PASS
802.11n HT40	5190	36.275	41.455	PASS
	5230	36.285	42.030	PASS
802.11ac VHT20	5180	17.724	21.983	PASS
	5200	17.695	22.396	PASS
	5240	17.707	21.694	PASS
802.11ac VHT40	5190	36.246	41.784	PASS
	5230	36.226	41.623	PASS
802.11ac VHT80	5210	75.884	84.662	PASS

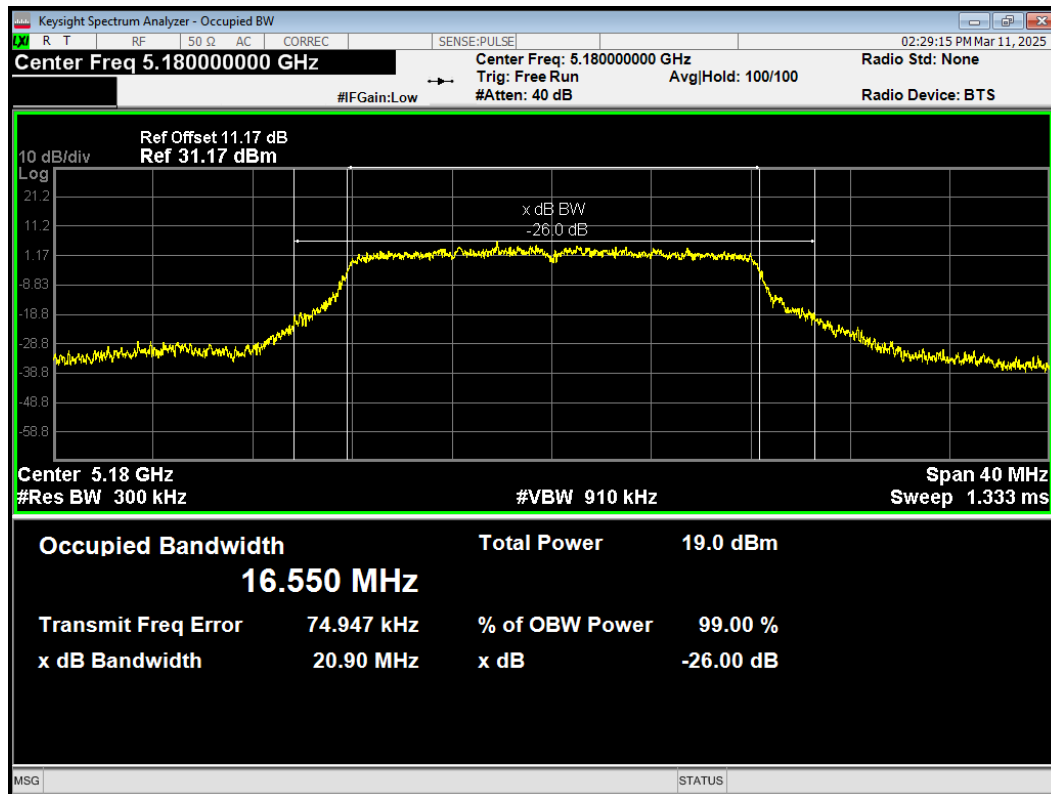
U-NII-3

Mode	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 6 dB bandwidth (MHz)	Limit (kHz)	Conclusion
802.11a	5745	16.548	16.288	500	PASS
	5785	16.517	15.530	500	PASS
	5825	16.554	14.087	500	PASS
802.11n HT20	5745	17.695	13.817	500	PASS
	5785	17.698	16.161	500	PASS
	5825	17.694	16.165	500	PASS
802.11n HT40	5755	36.257	35.105	500	PASS
	5795	36.275	35.142	500	PASS
802.11ac VHT20	5745	17.686	15.895	500	PASS
	5785	17.703	17.166	500	PASS
	5825	17.708	15.944	500	PASS
802.11ac VHT40	5755	36.227	35.150	500	PASS
	5795	36.273	35.283	500	PASS
802.11ac VHT80	5775	75.989	75.154	500	PASS

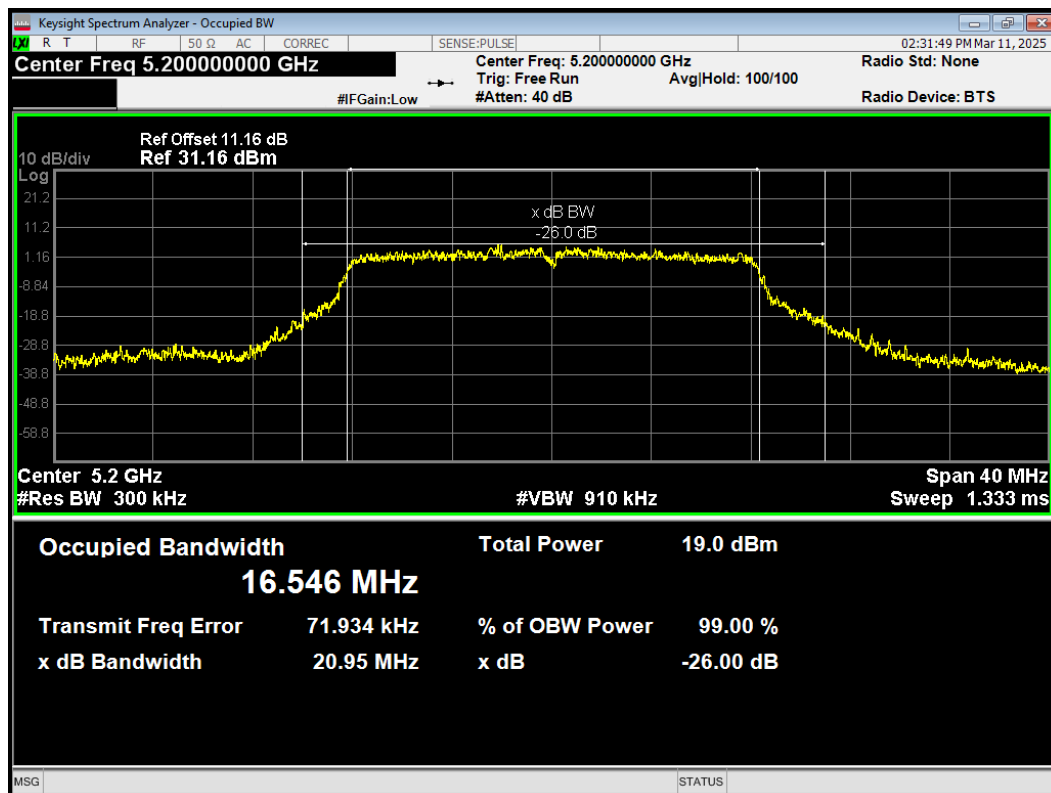
99% bandwidth

U-NII-1

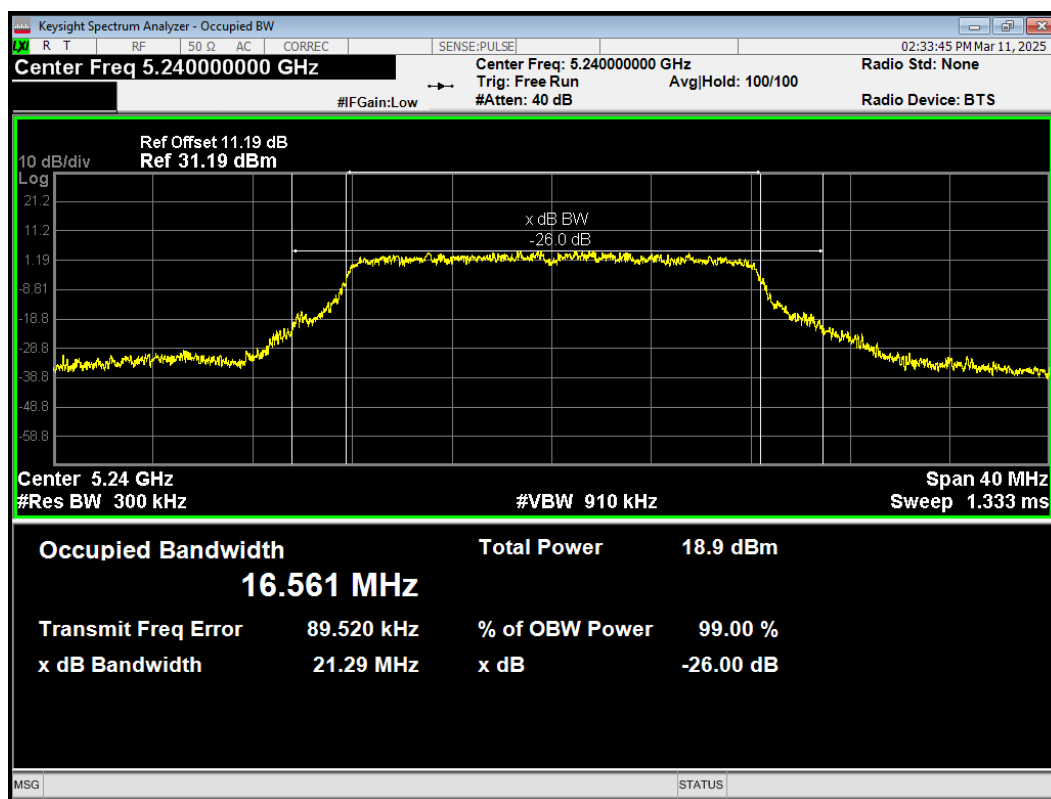
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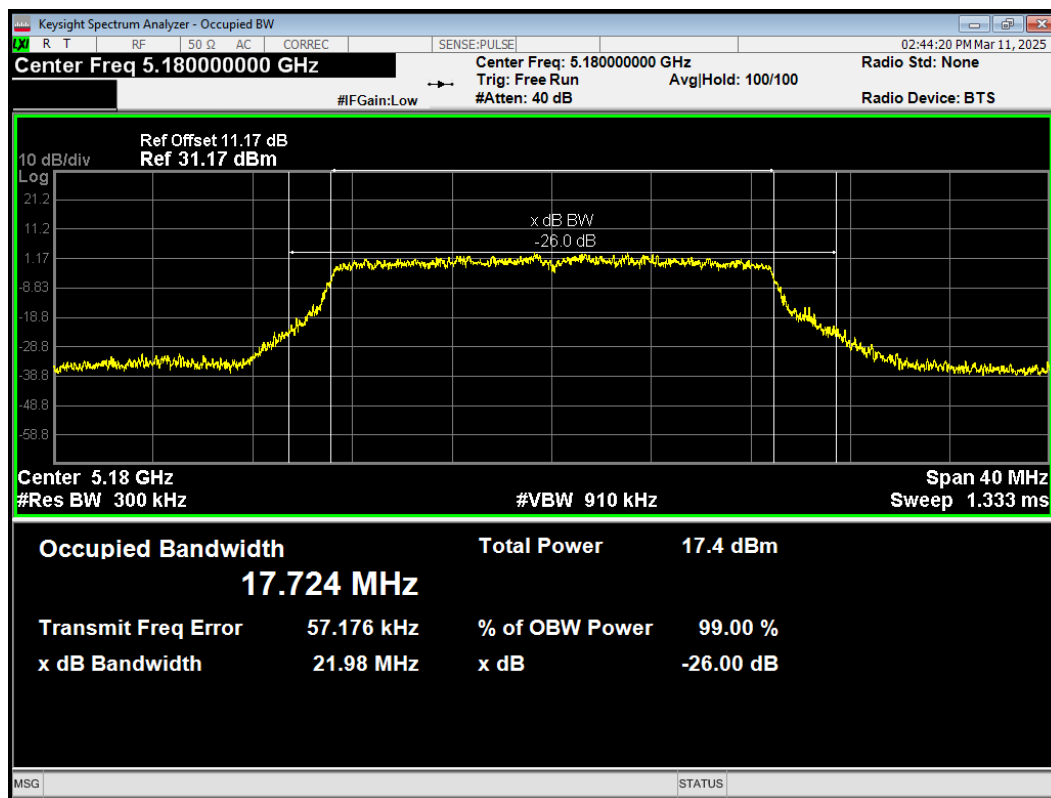
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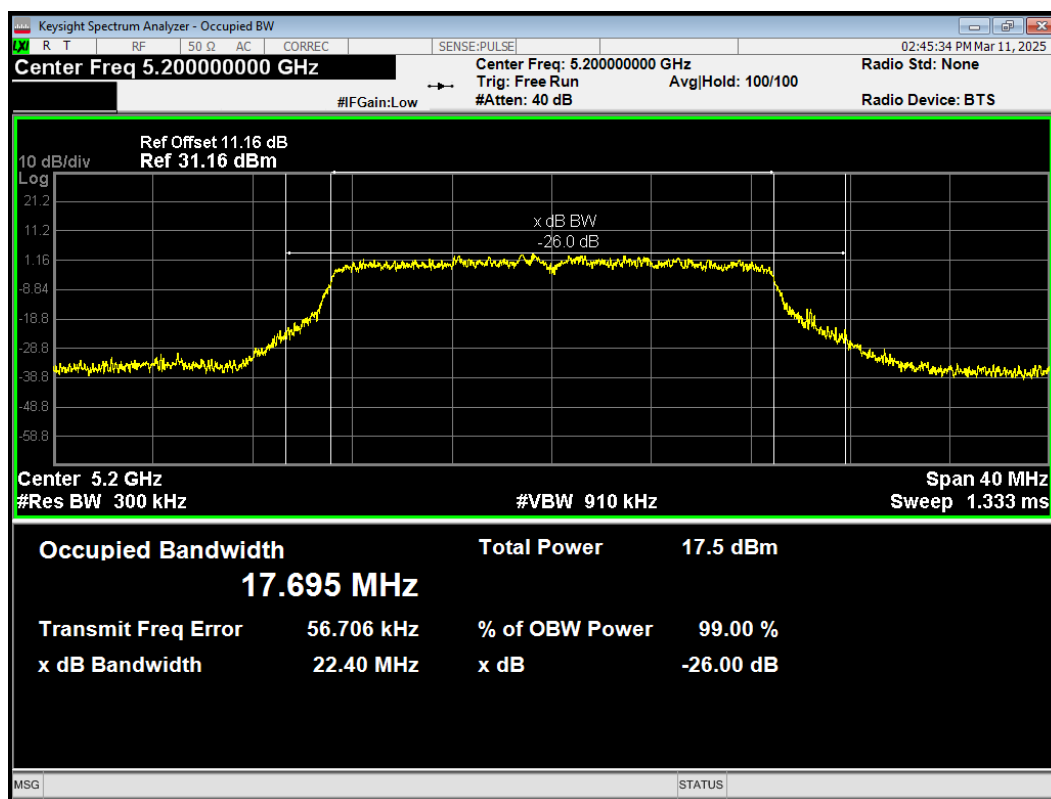
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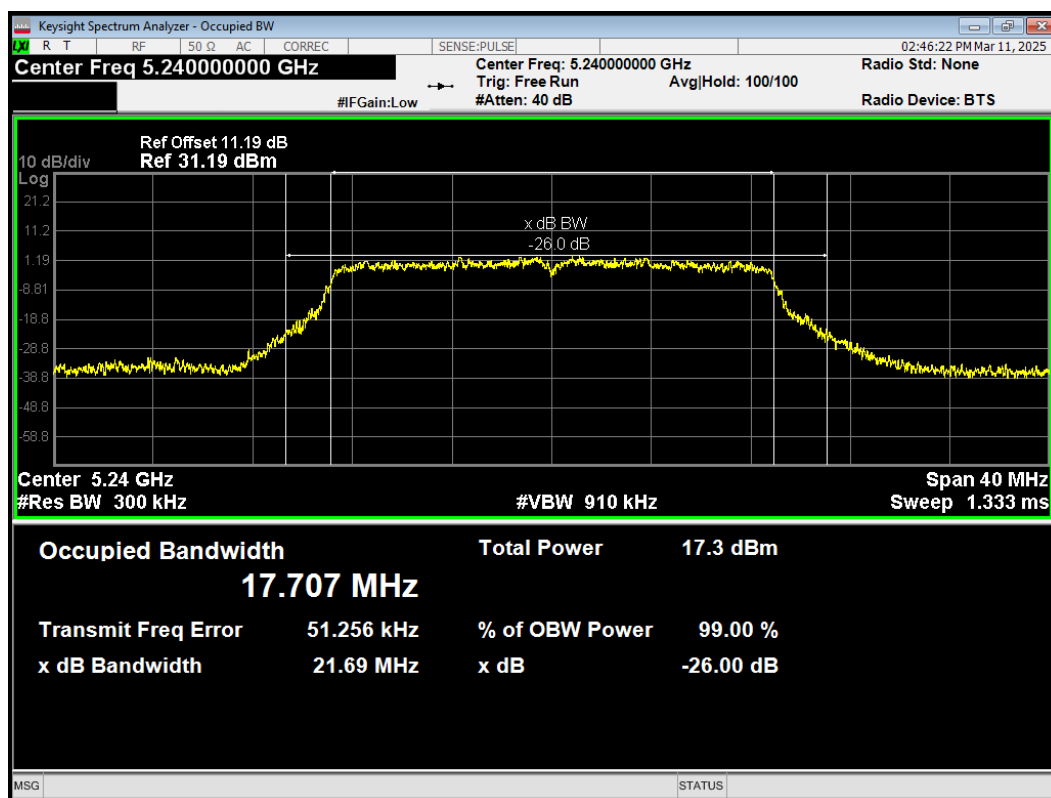
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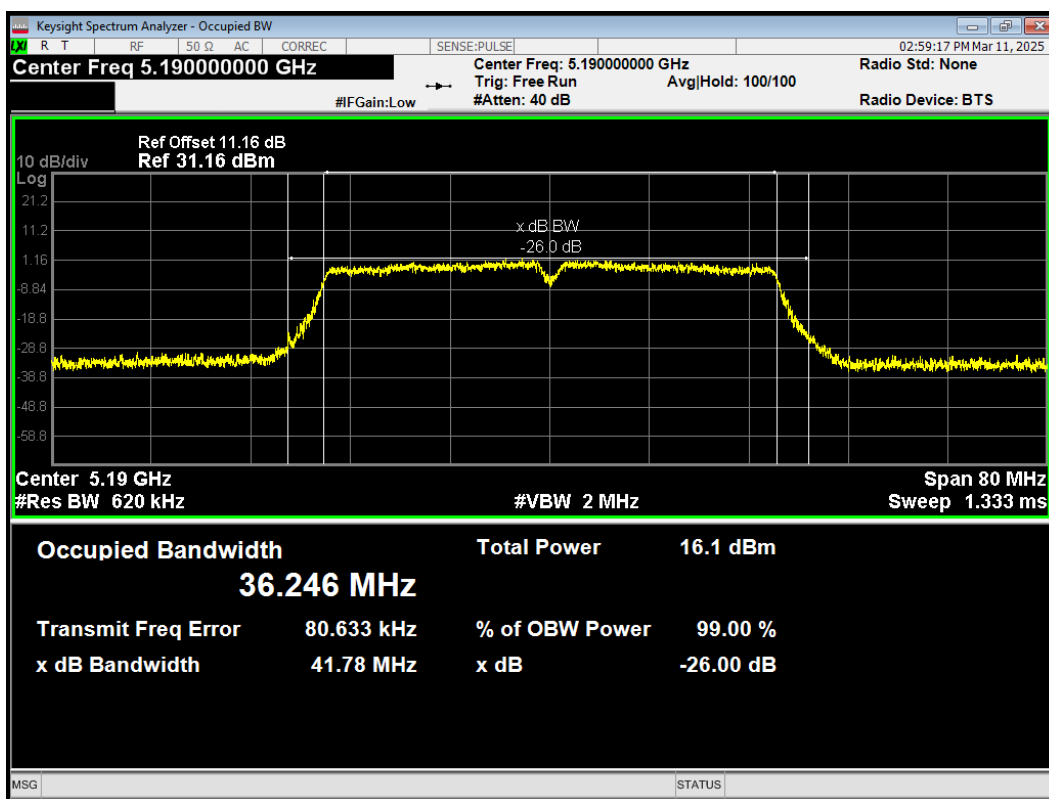
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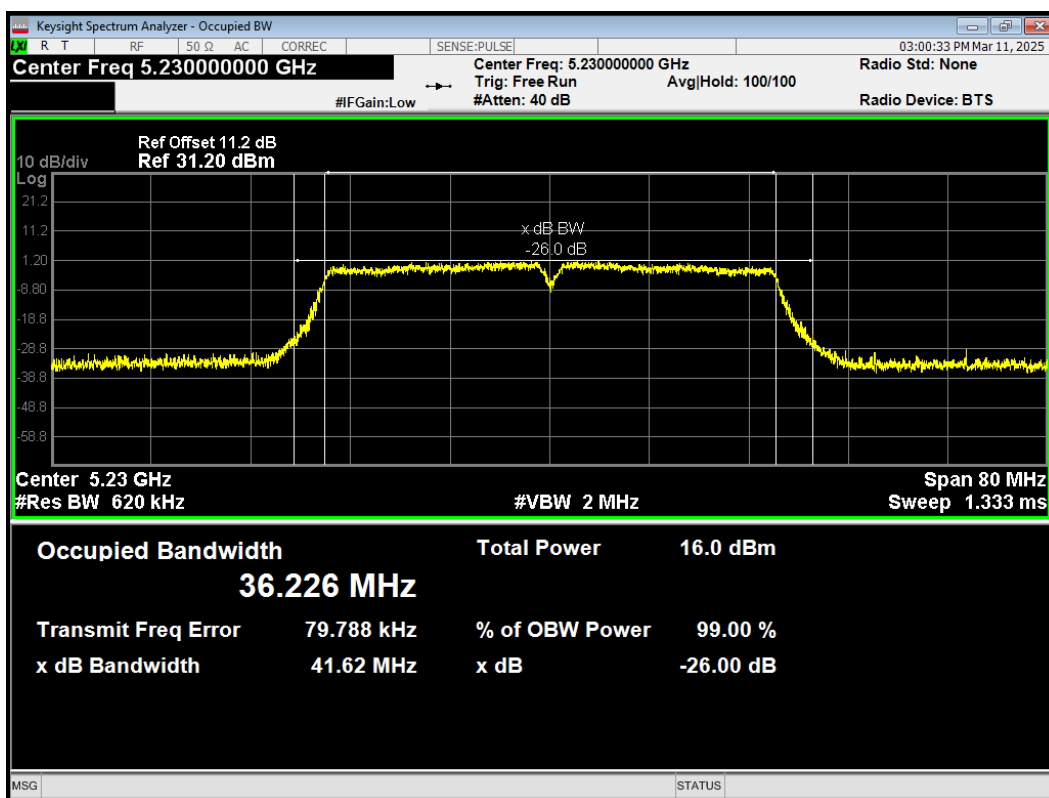
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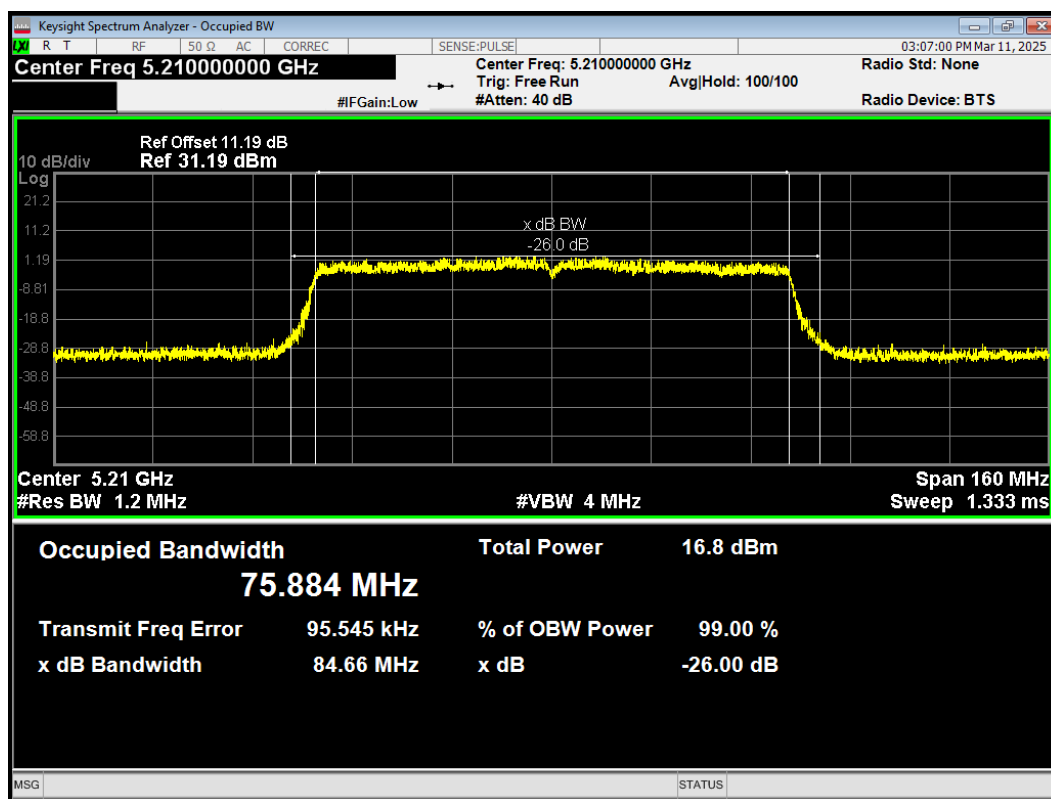
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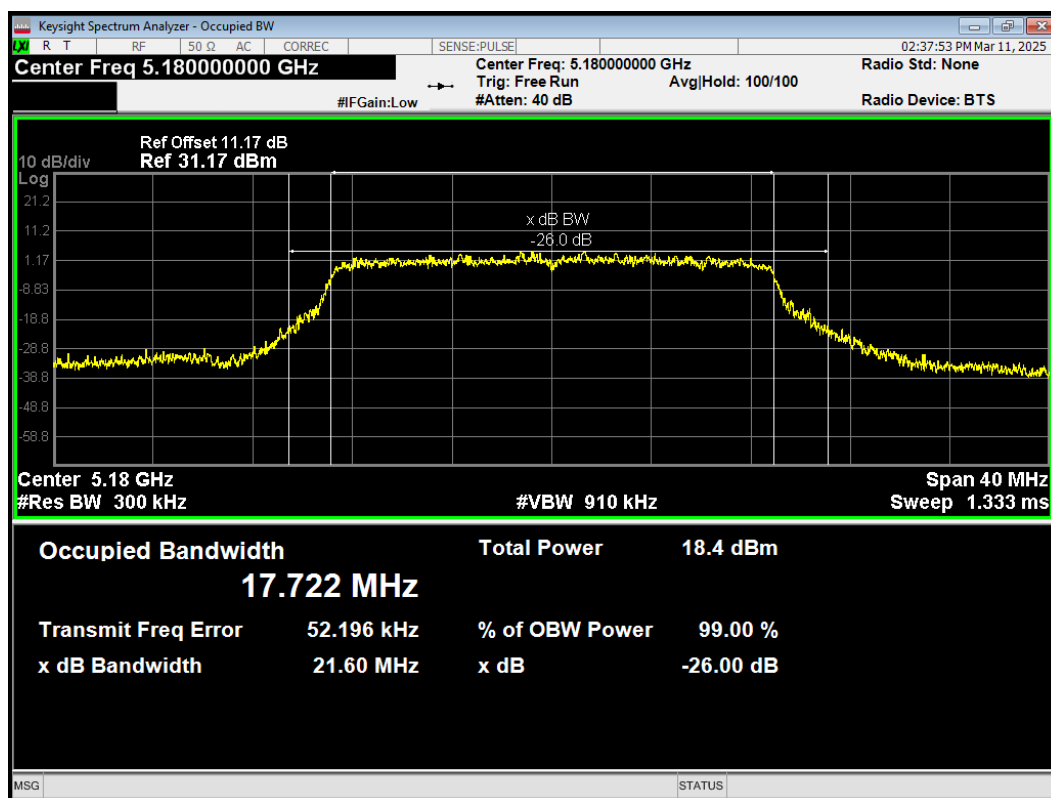
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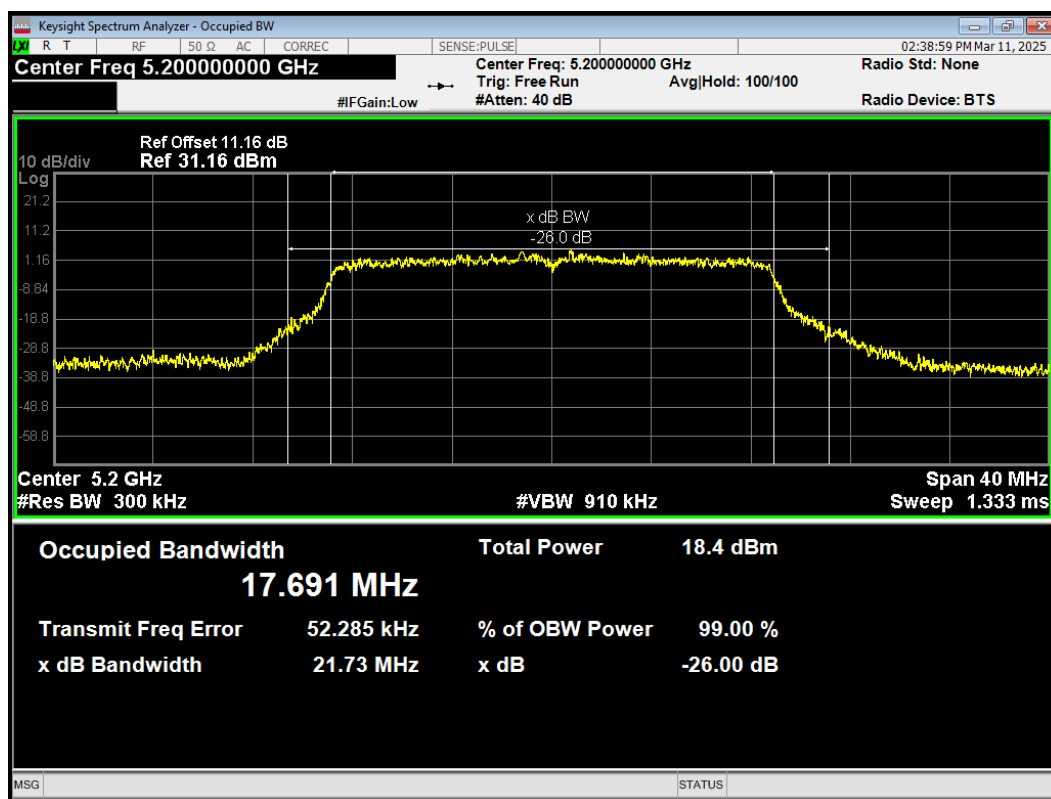
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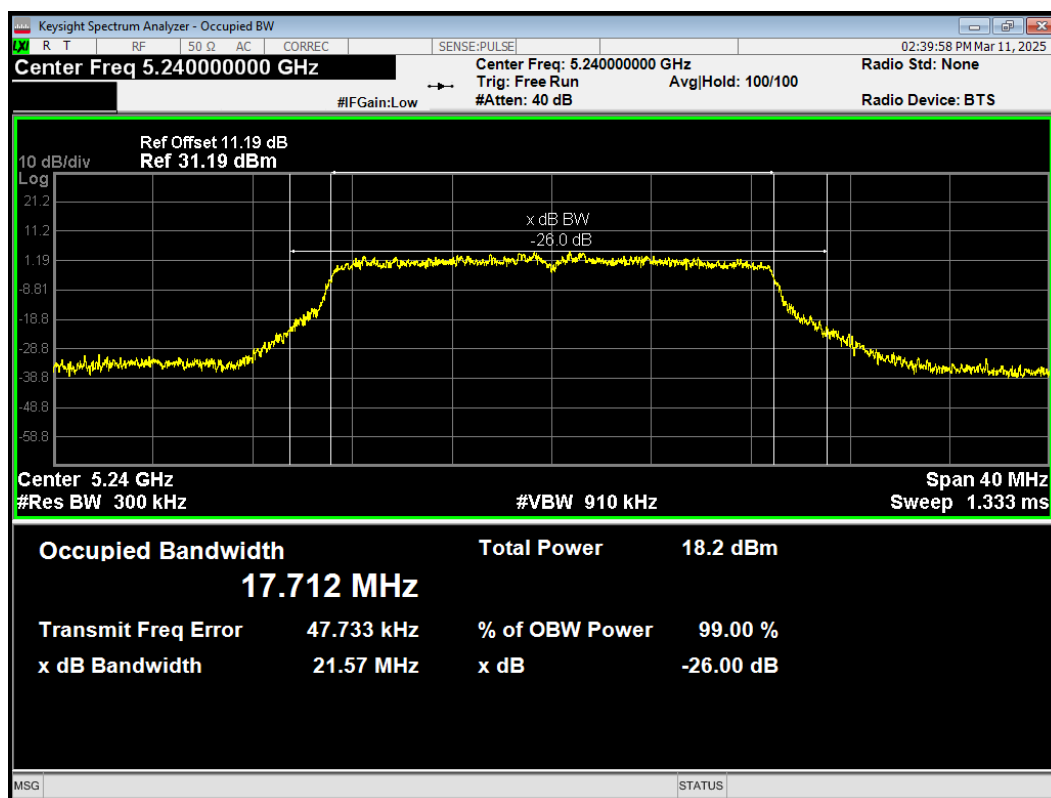
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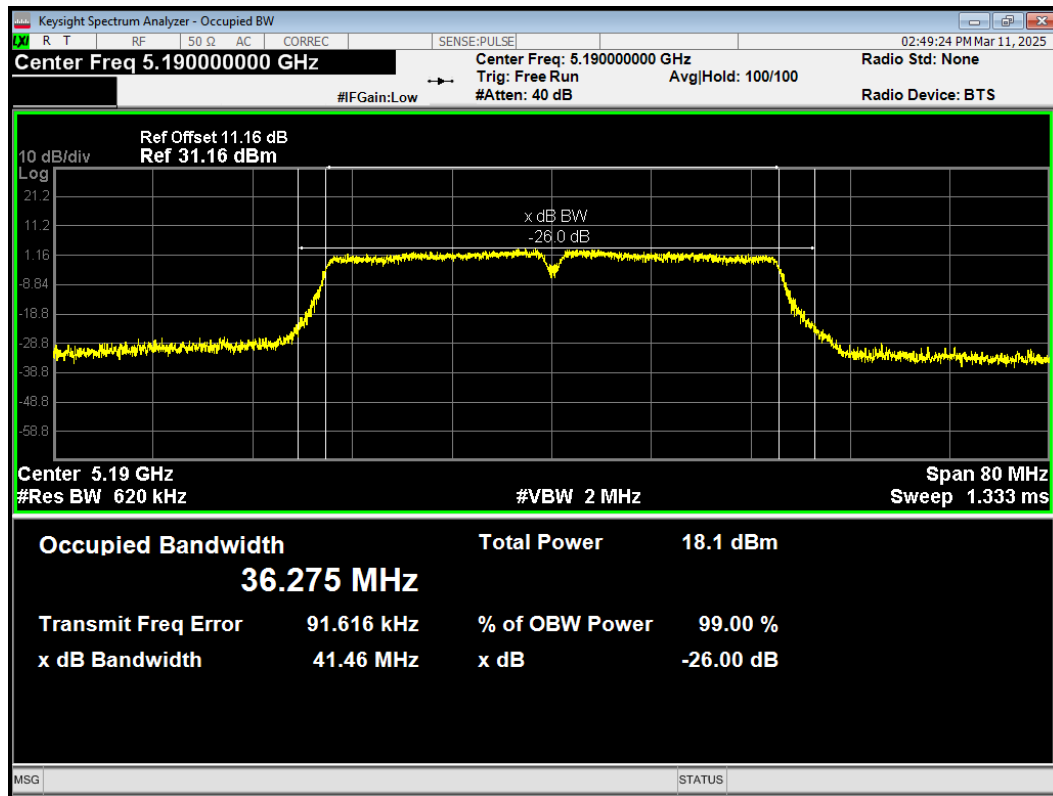
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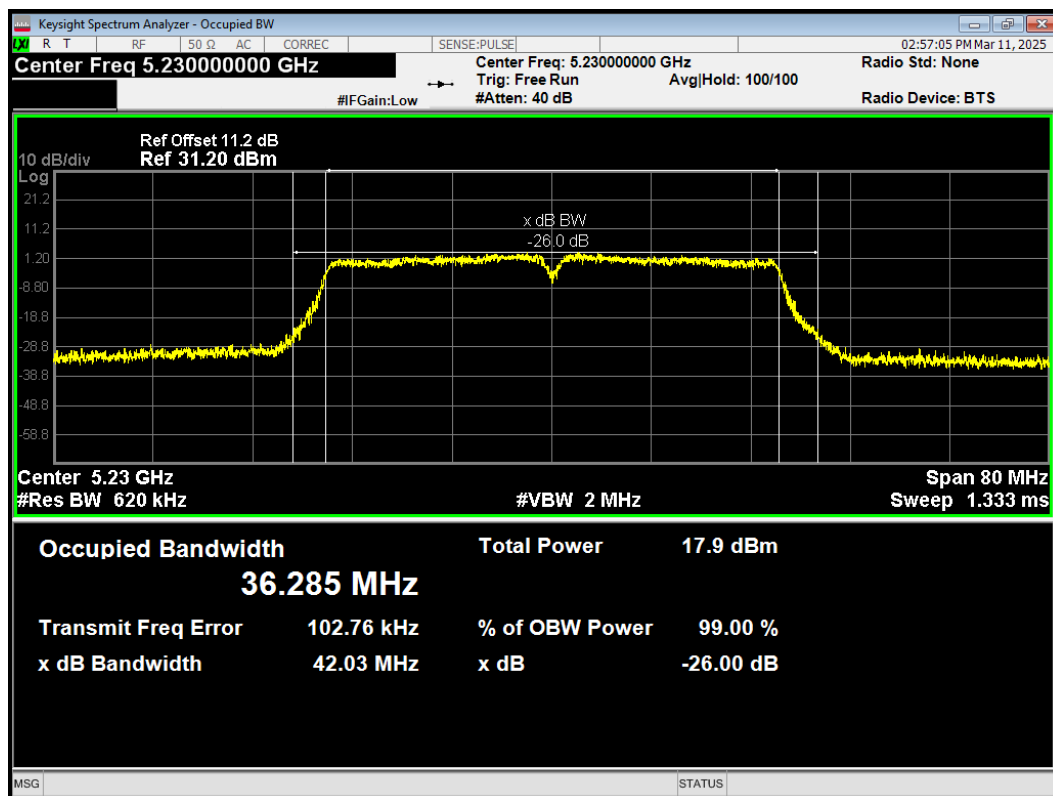
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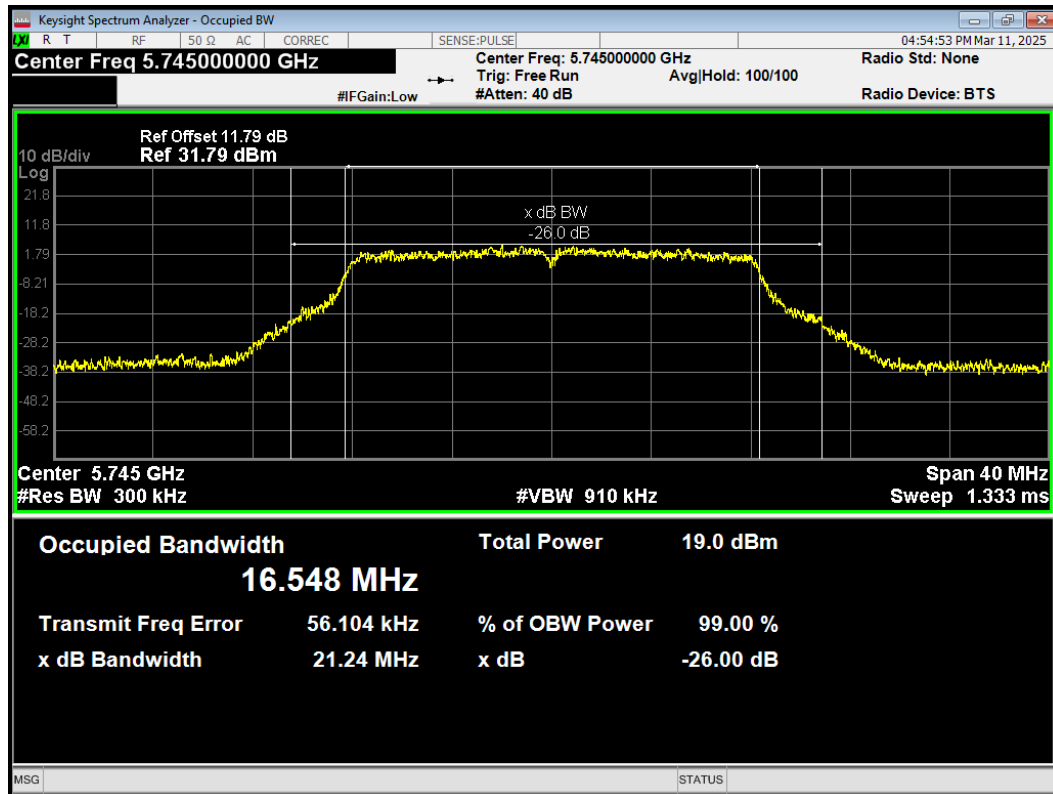
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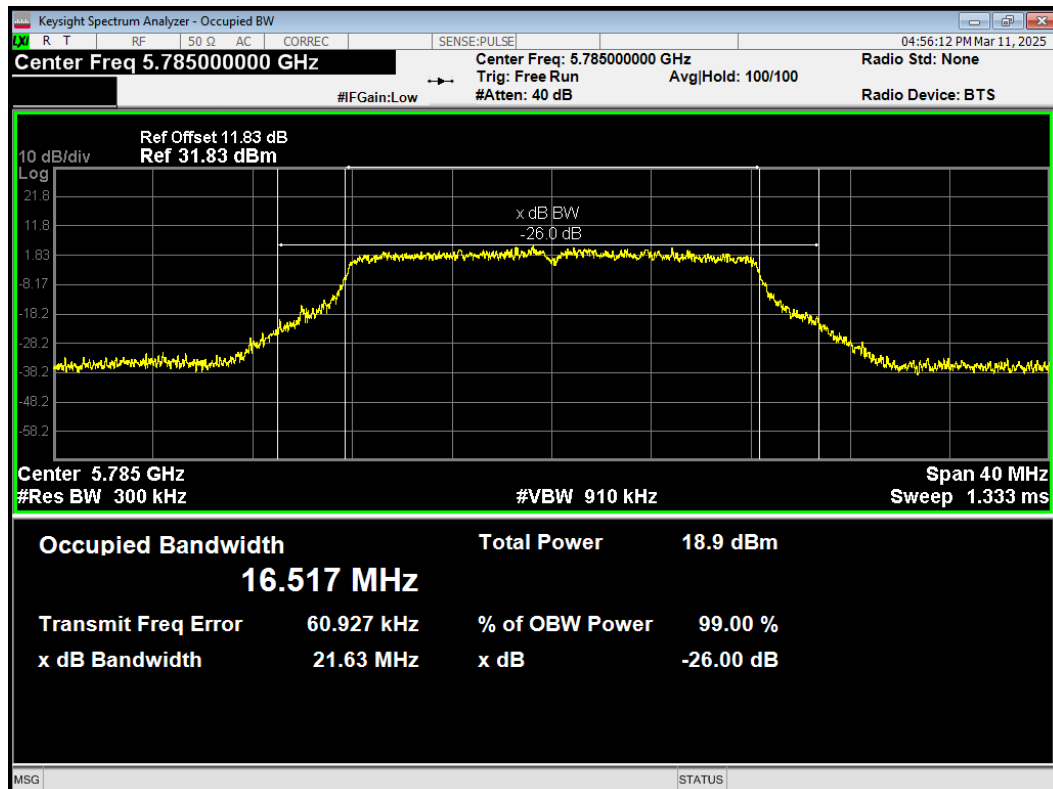
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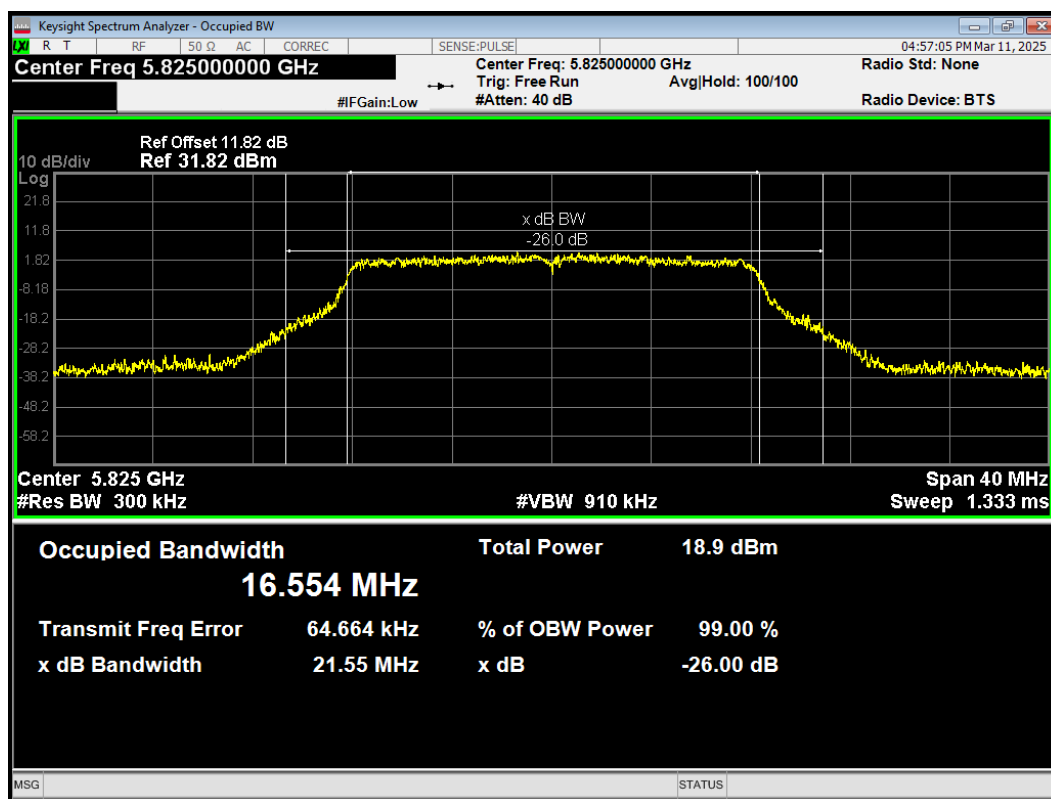
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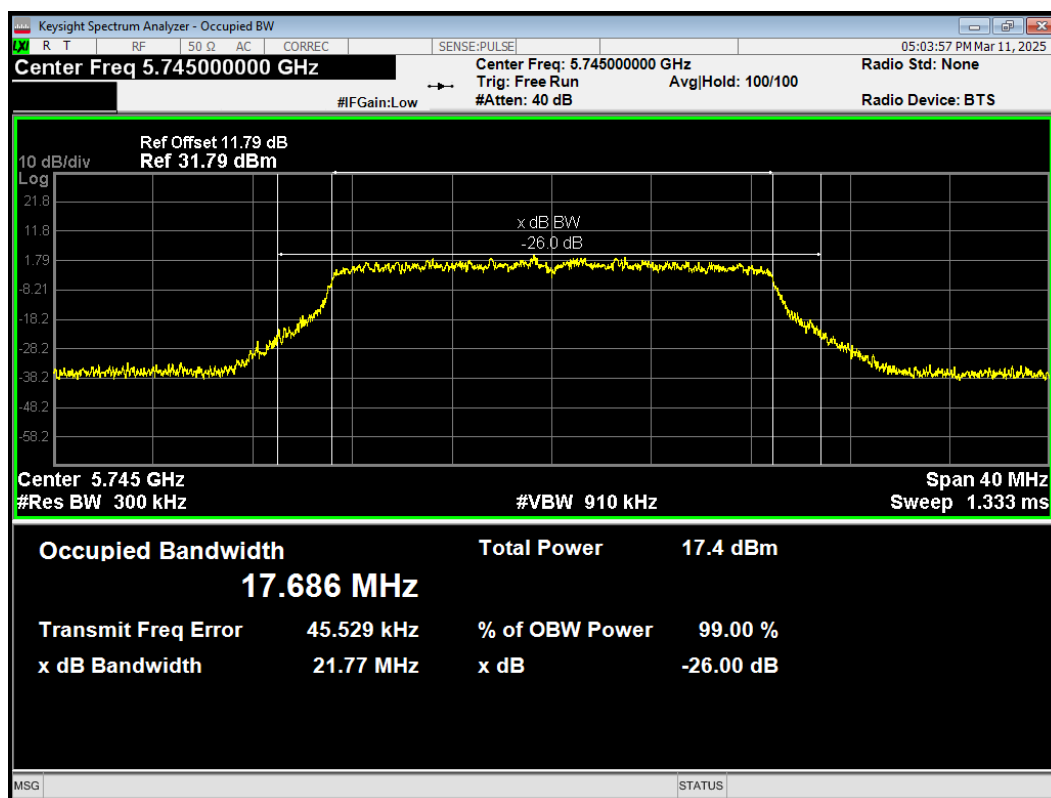
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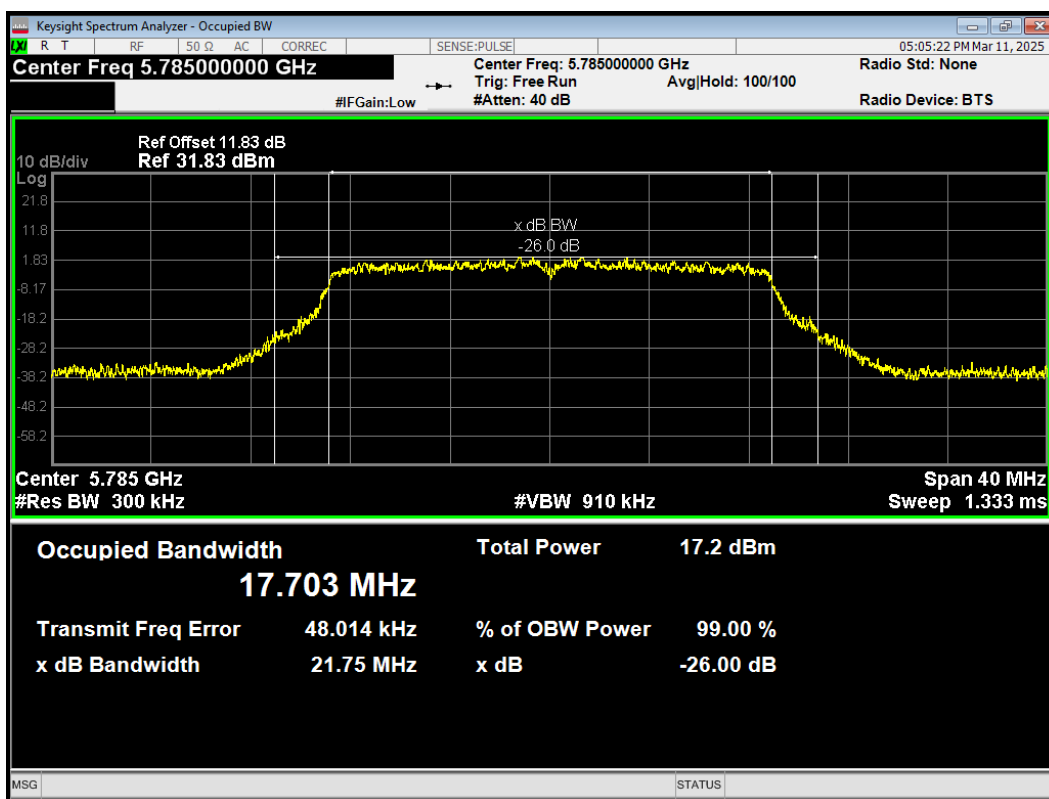
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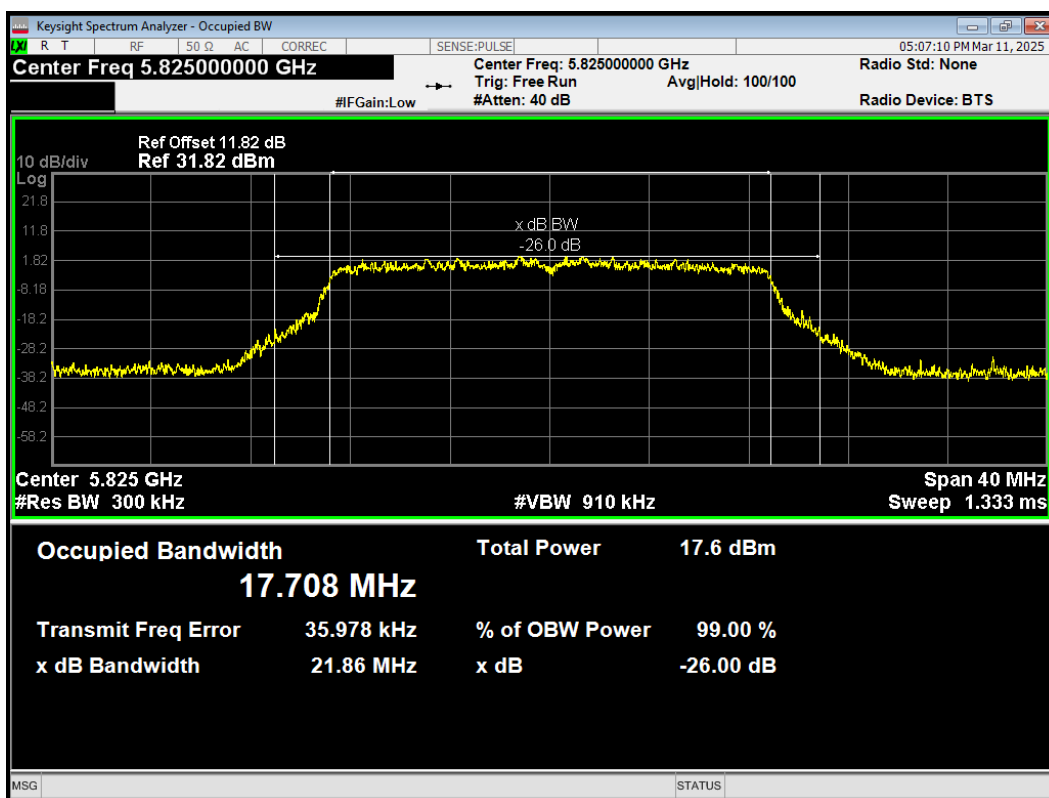
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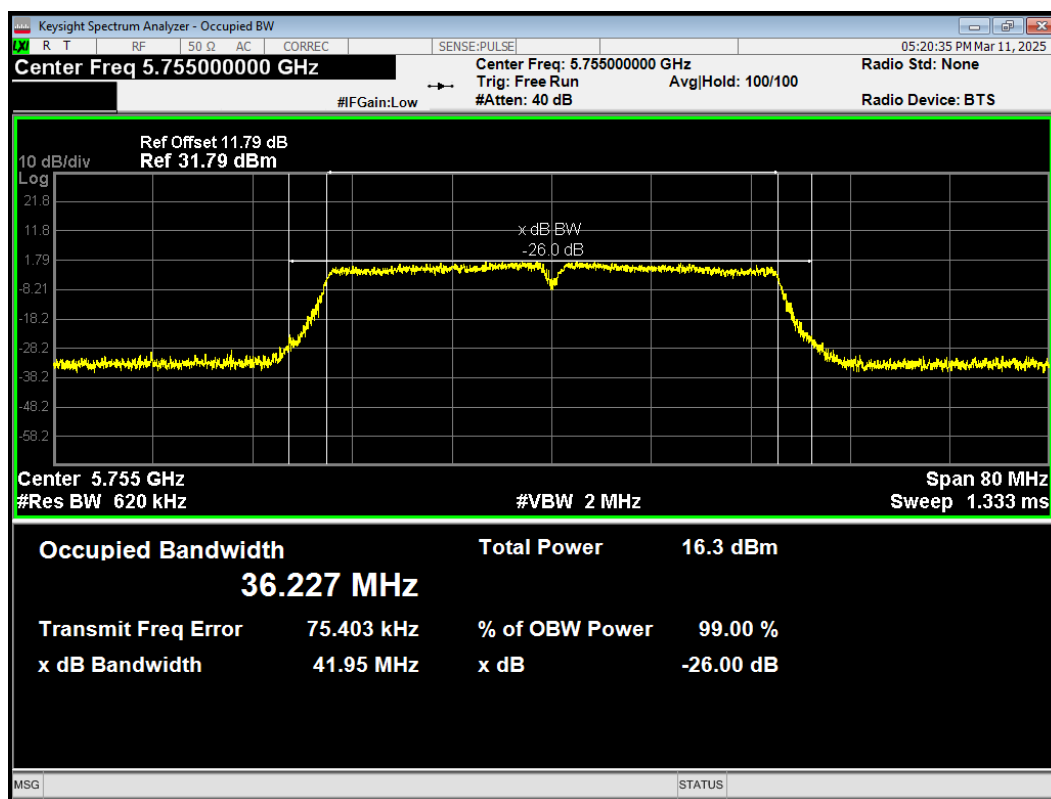
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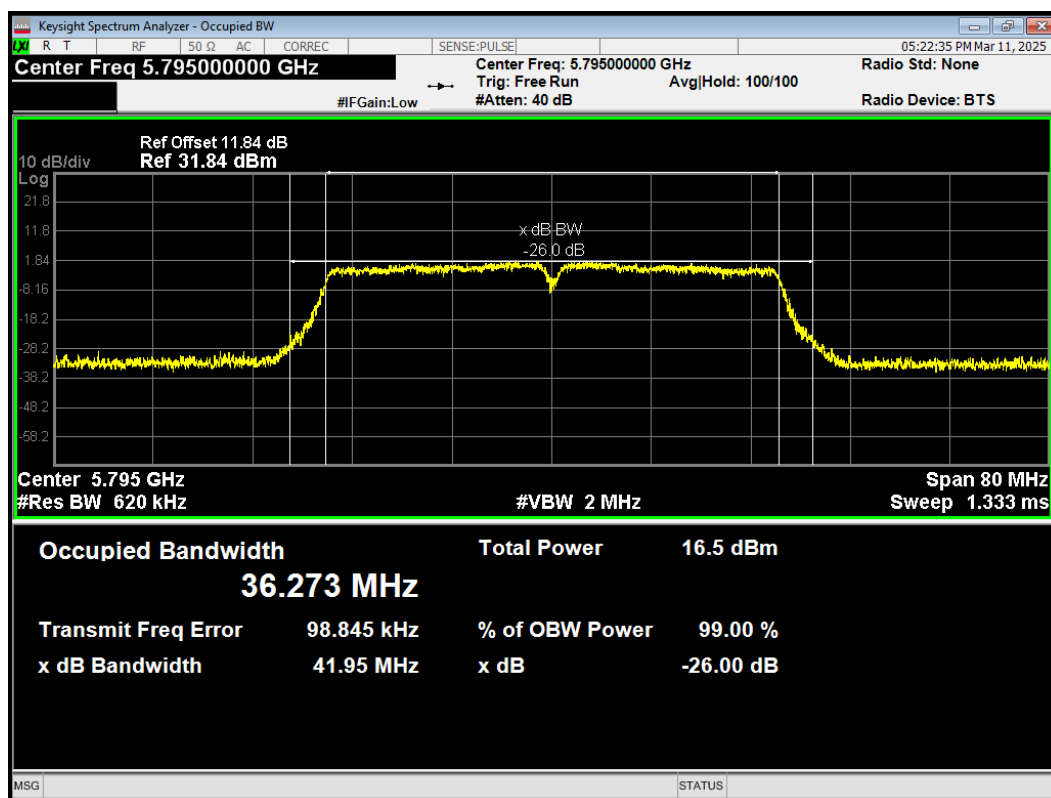
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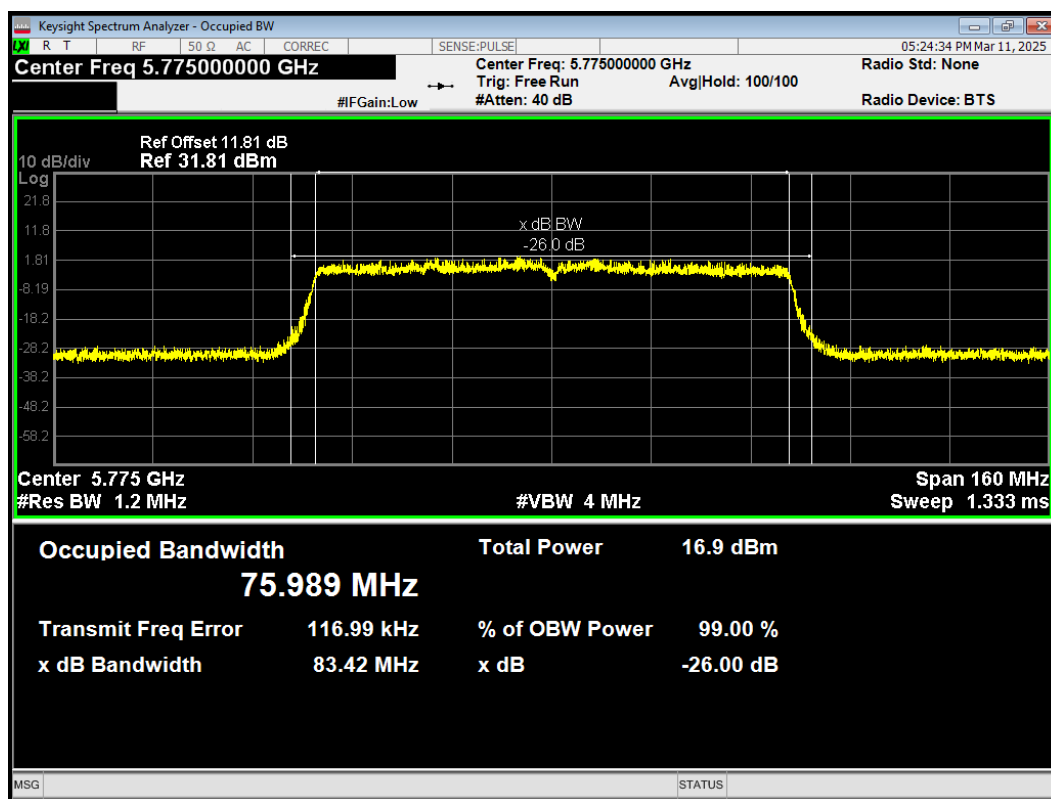
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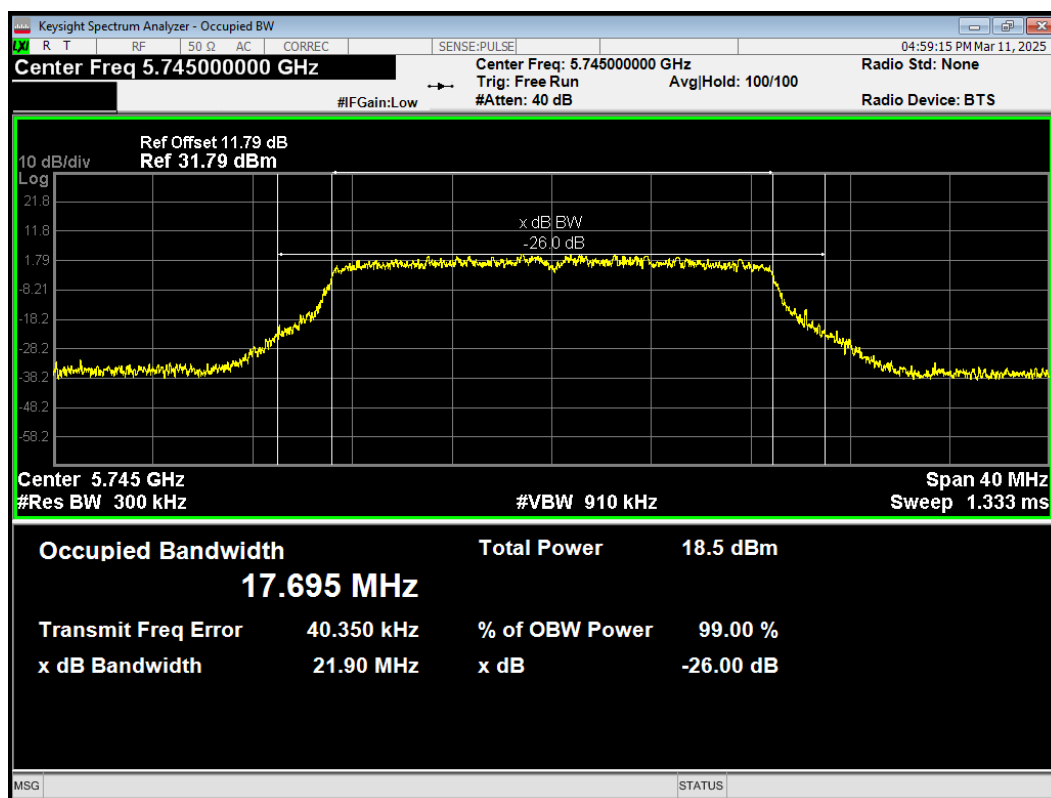
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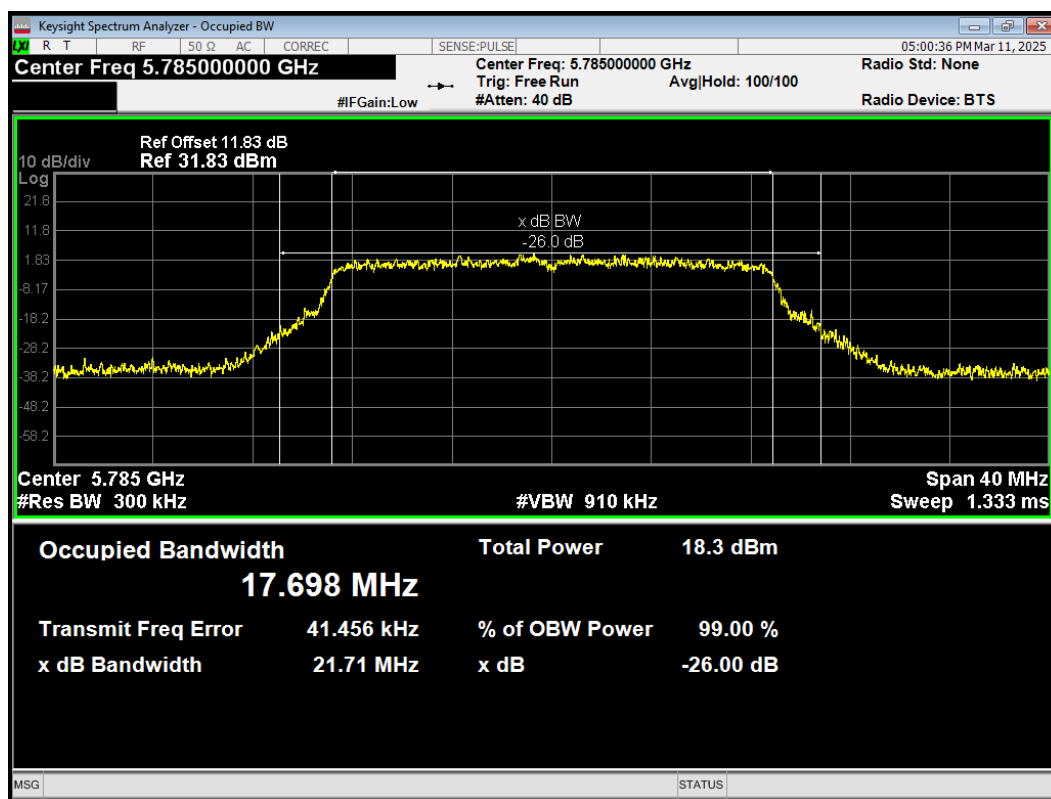
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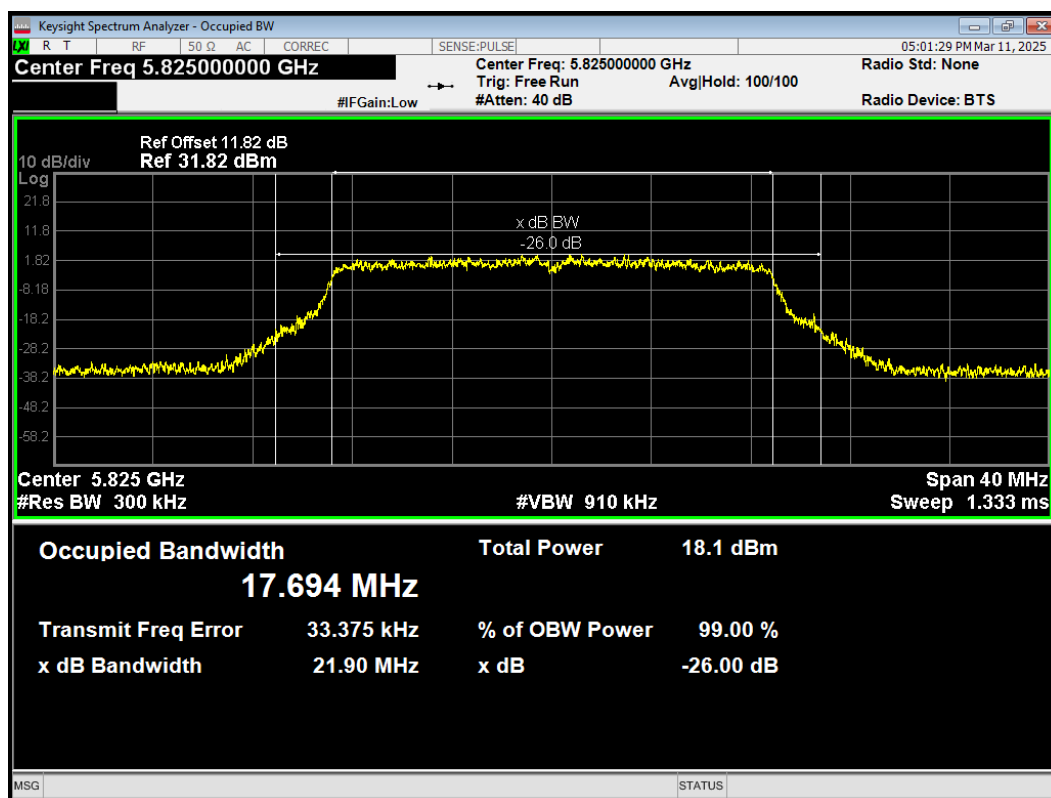
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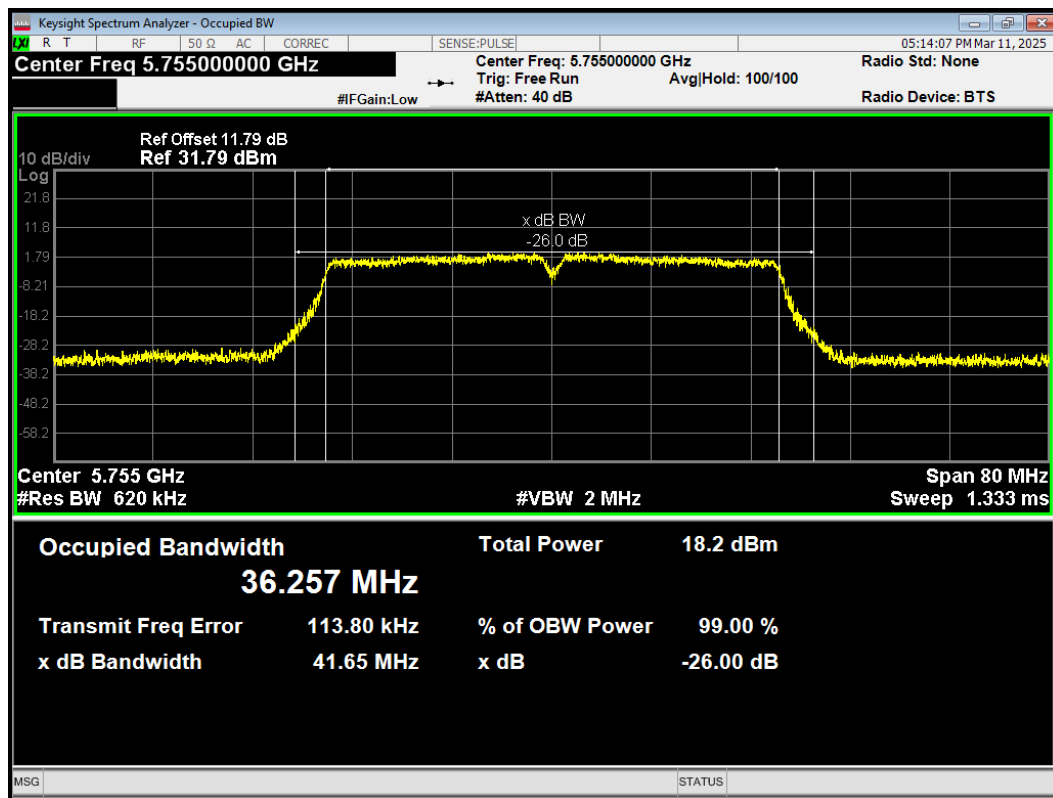
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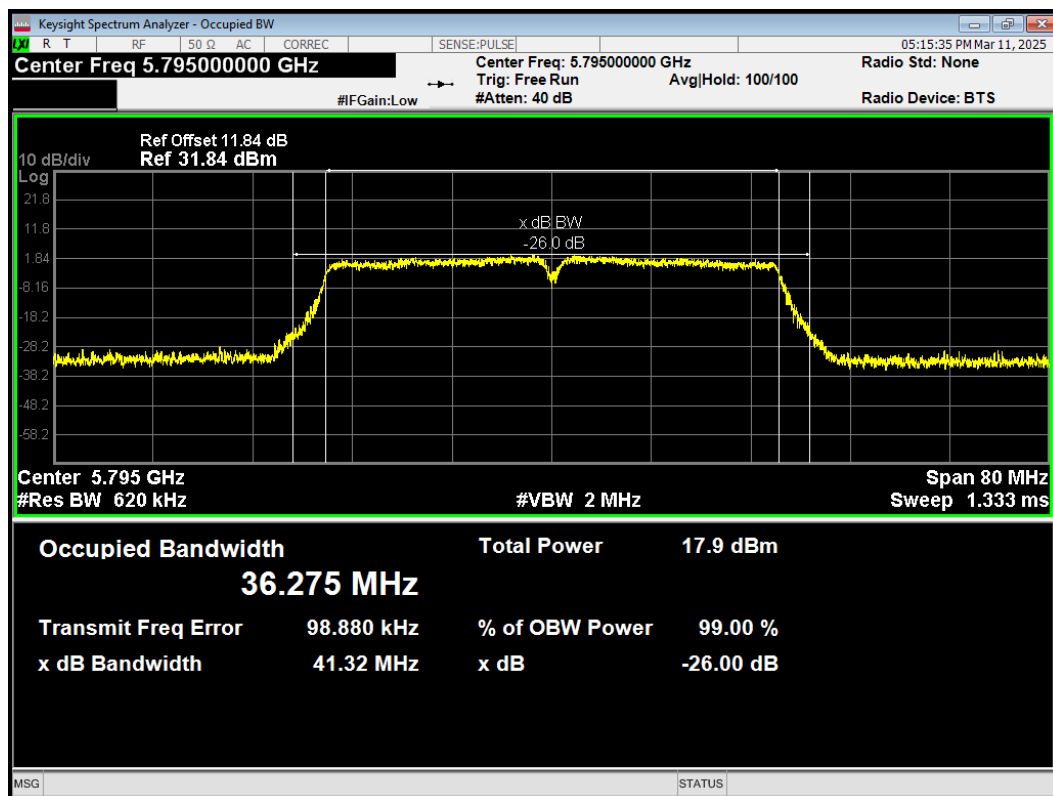
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OBW 802.11n(HT40) 5755MHz Ant1



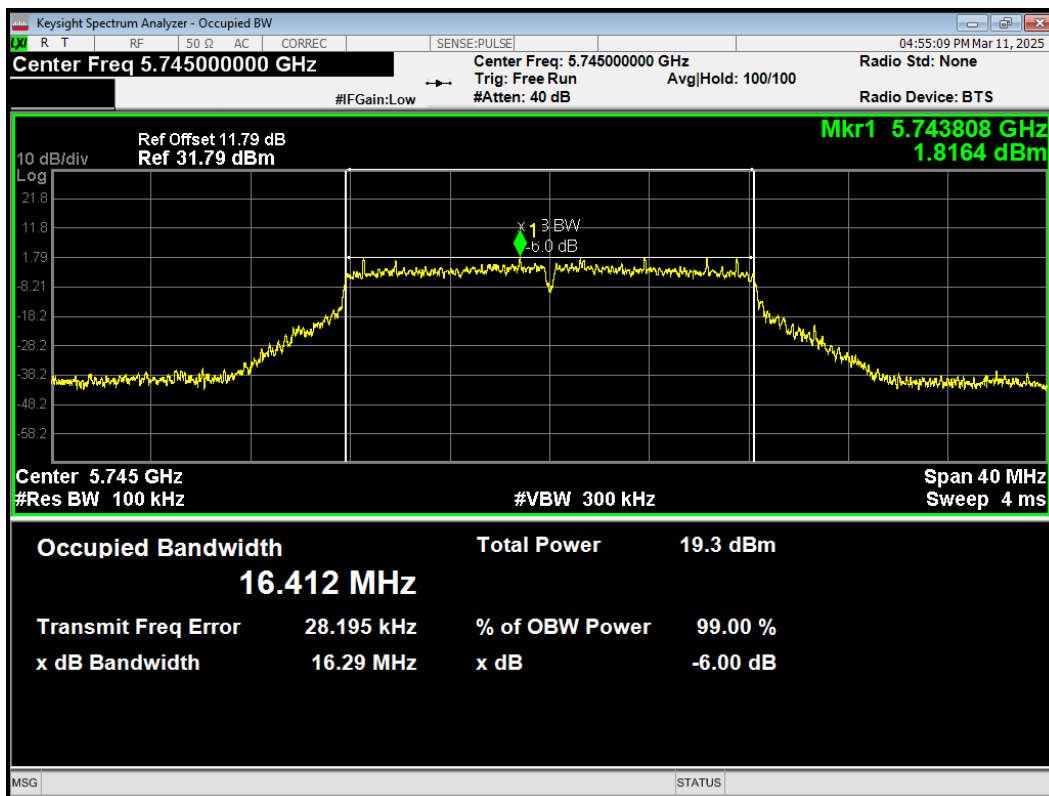
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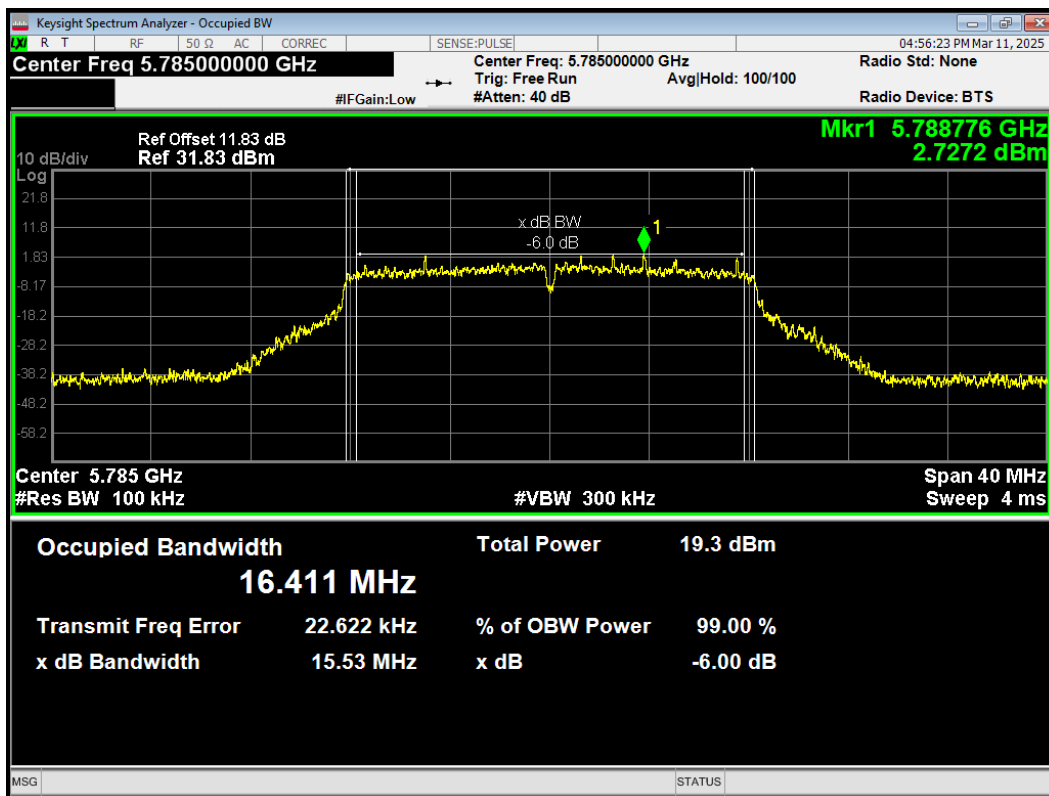
Minimum 6 dB bandwidth

U-NII-3

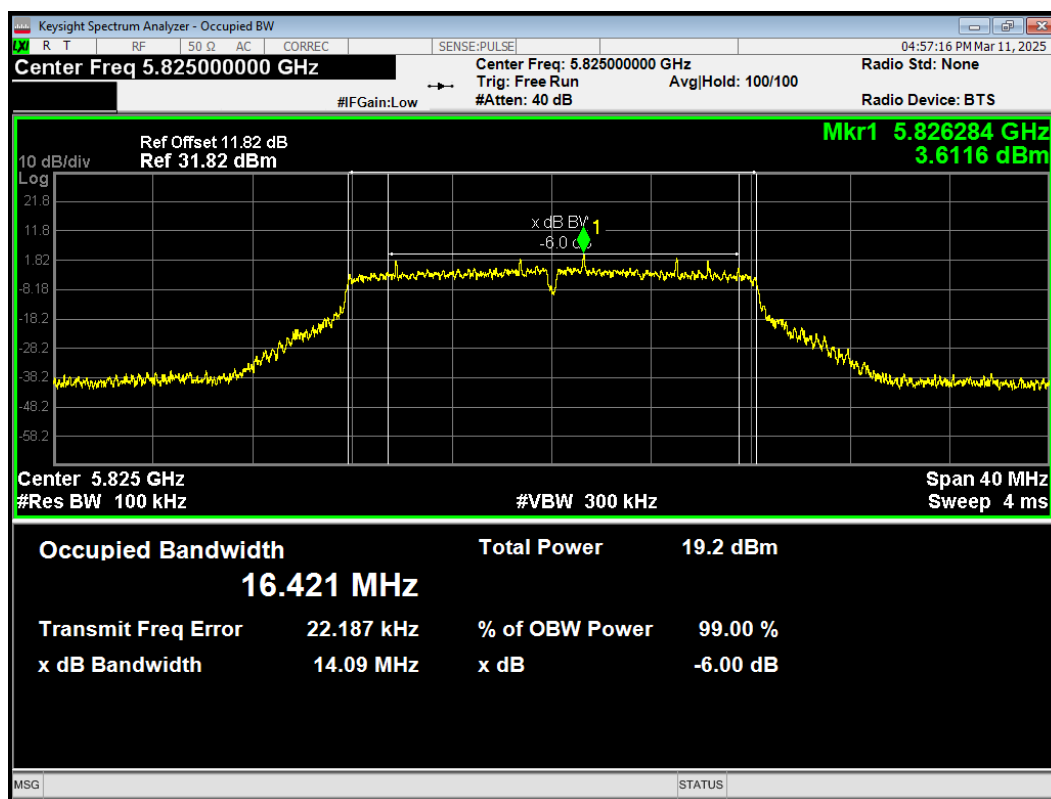
-6dB Bandwidth 802.11a 5745MHz Ant1



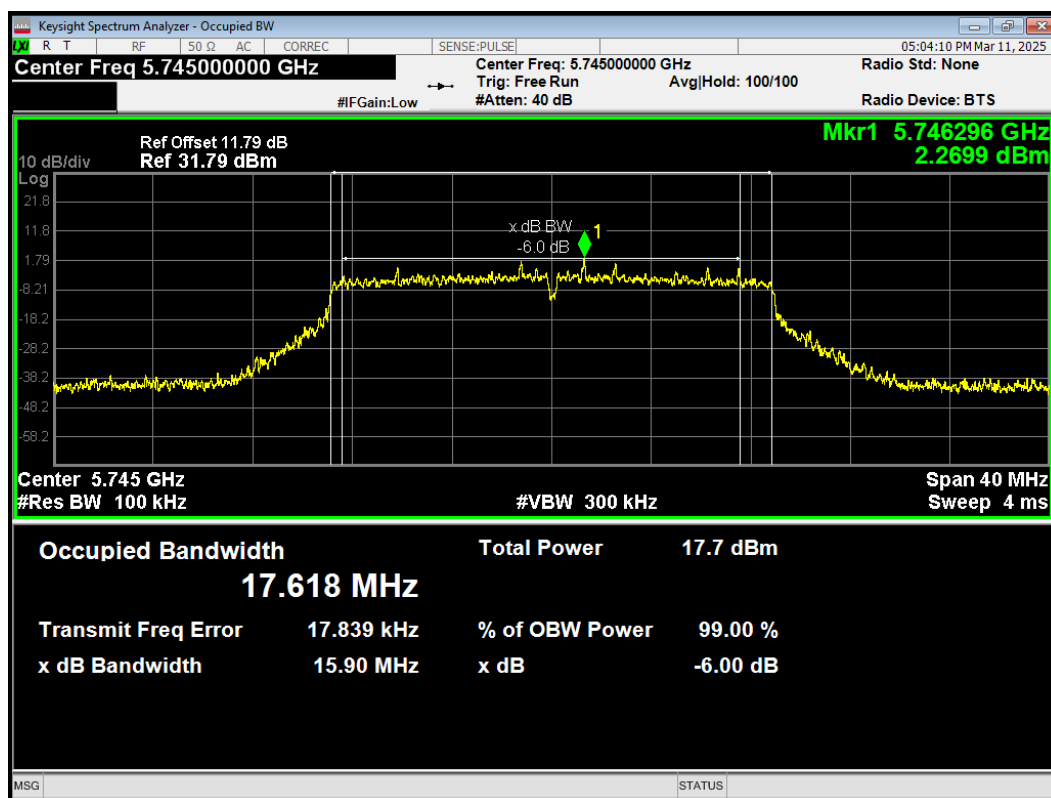
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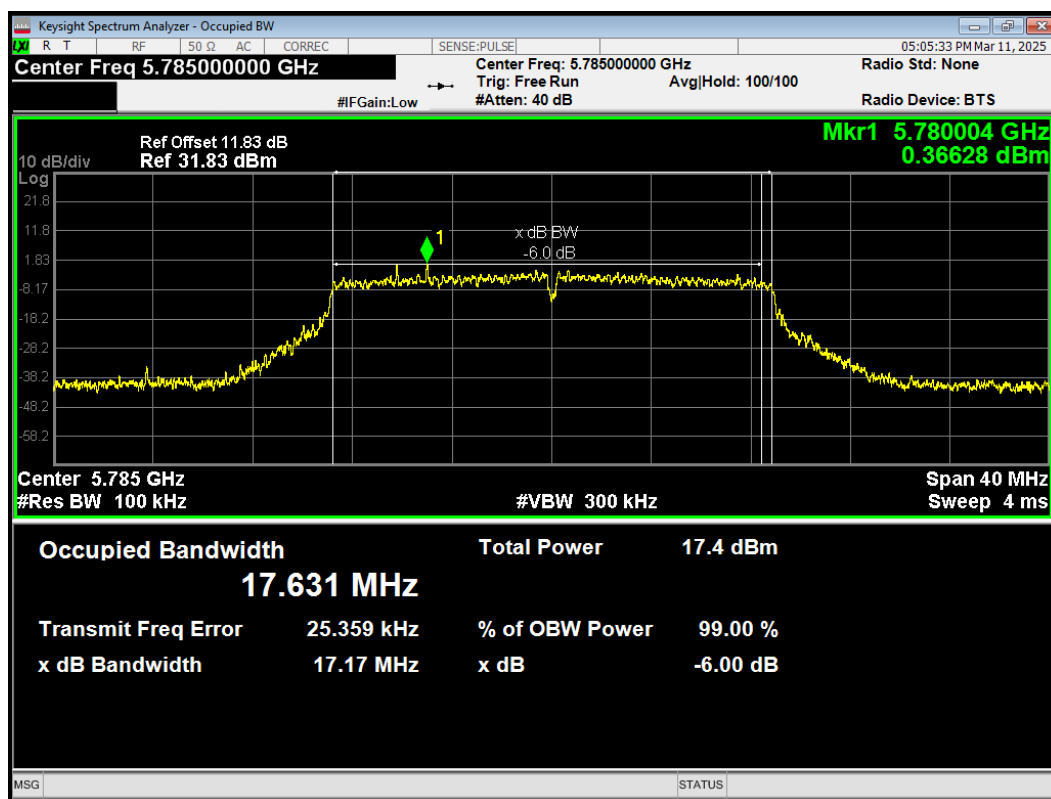
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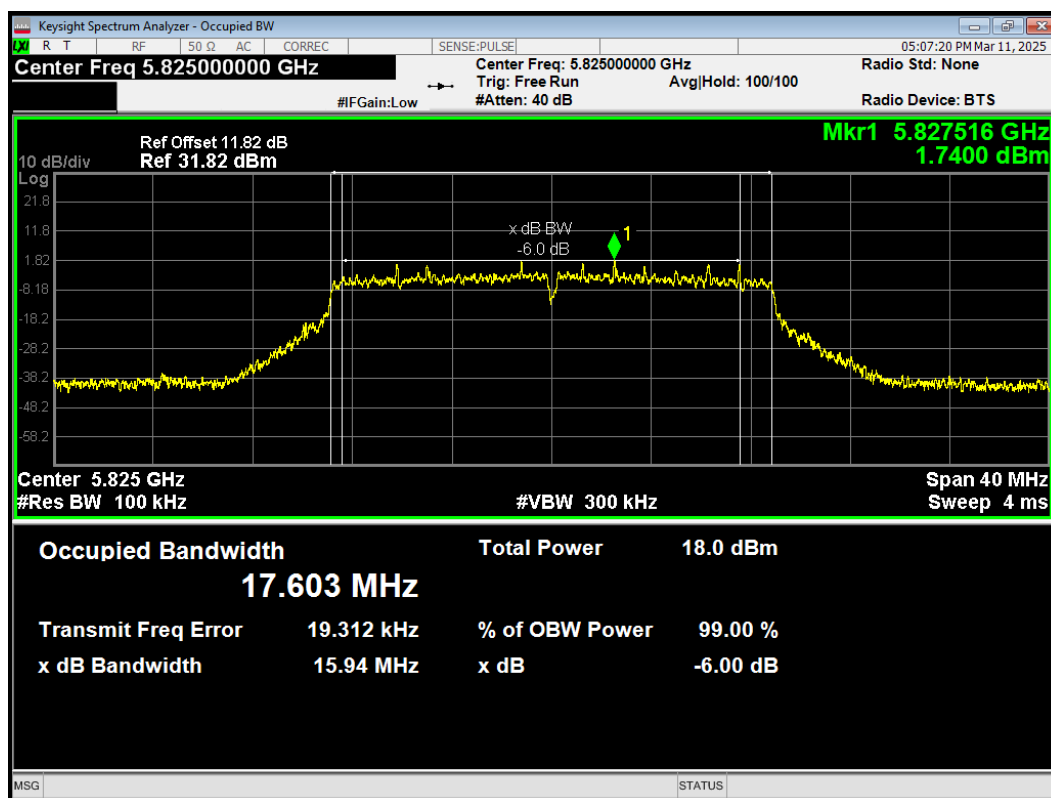
-6dB Bandwidth 802.11ac(VHT20) 5745MHz Ant1



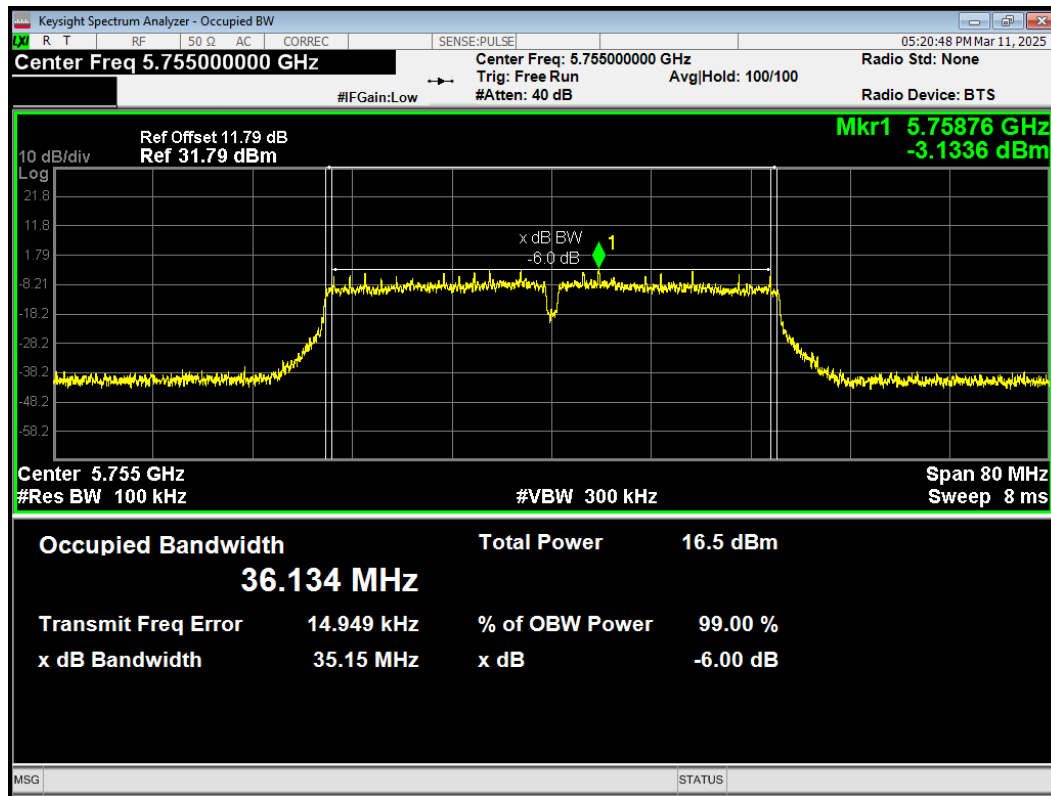
-6dB Bandwidth 802.11ac(VHT20) 5785MHz Ant1



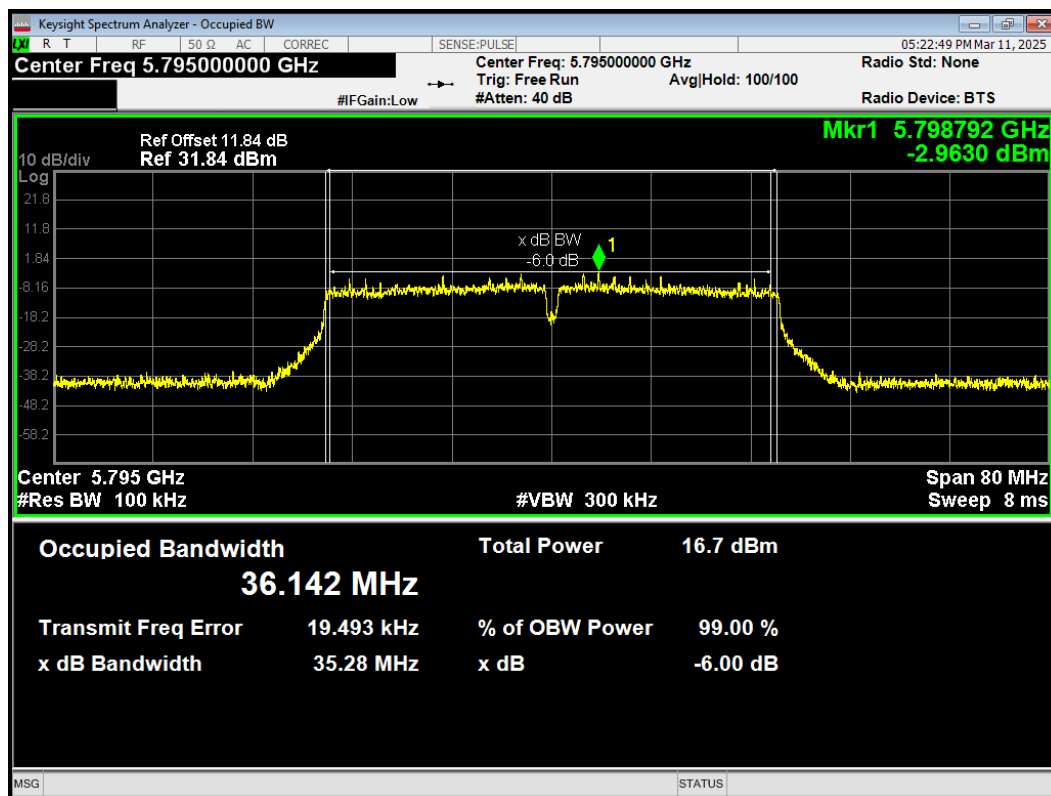
-6dB Bandwidth 802.11ac(VHT20) 5825MHz Ant1



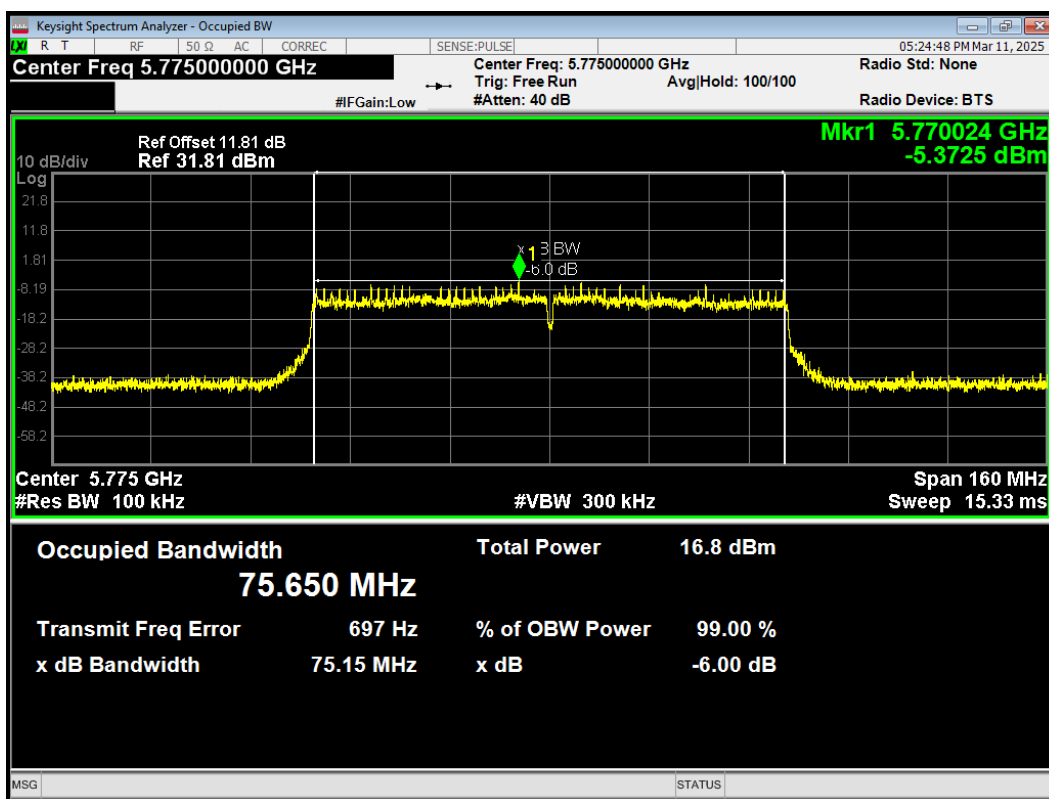
-6dB Bandwidth 802.11ac(VHT40) 5755MHz Ant1



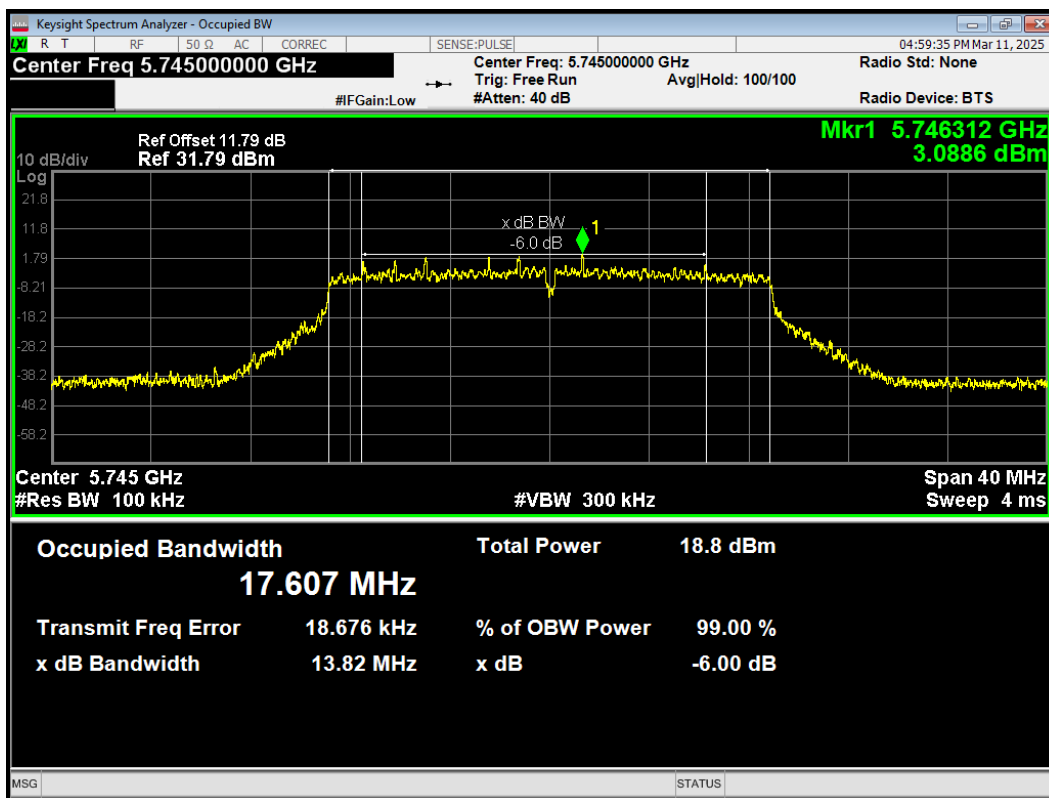
-6dB Bandwidth 802.11ac(VHT40) 5795MHz Ant1



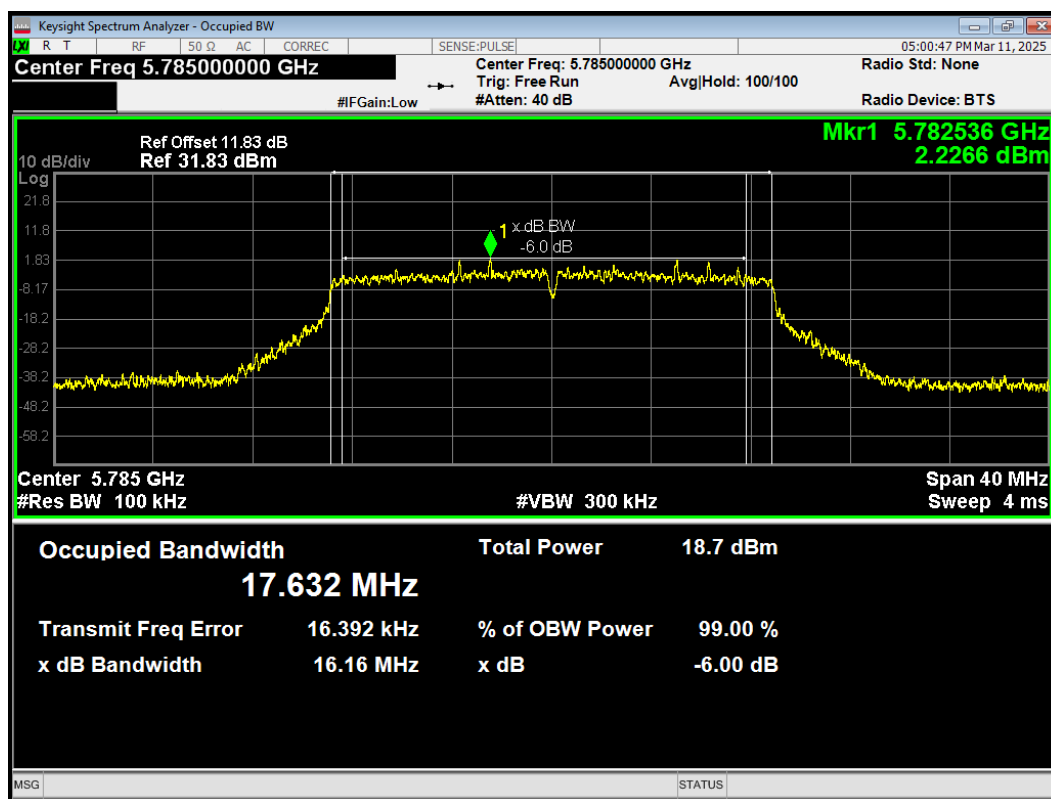
-6dB Bandwidth 802.11ac(VHT80) 5775MHz Ant1



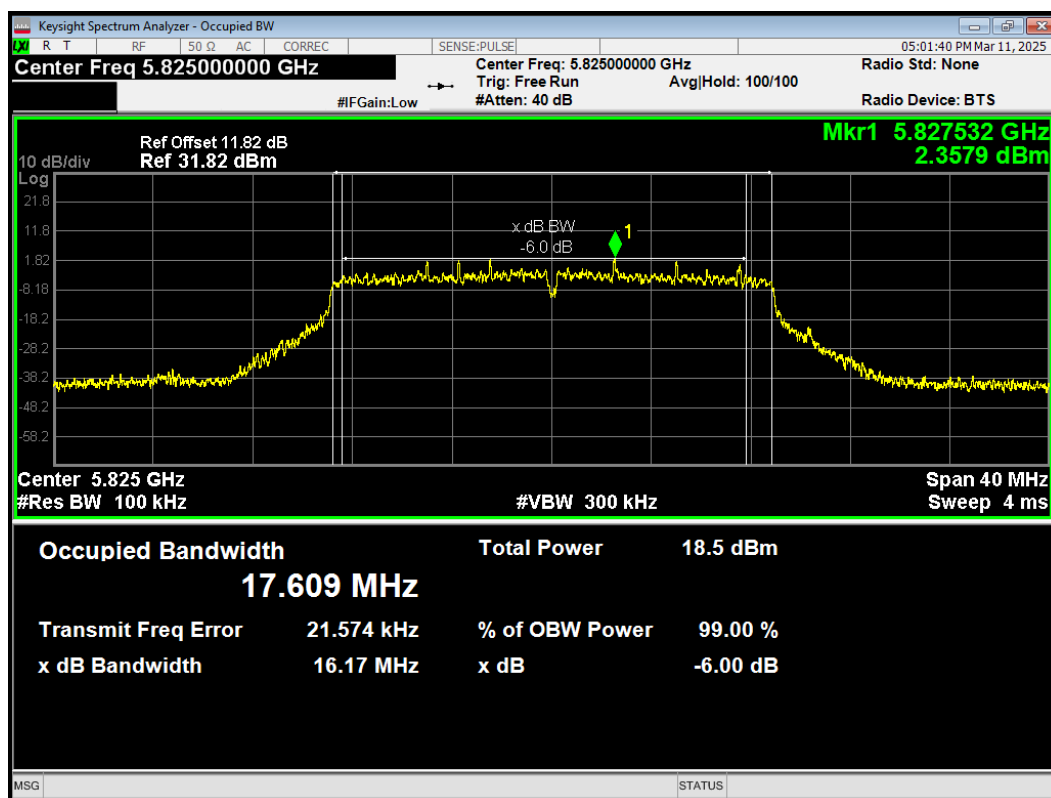
-6dB Bandwidth 802.11n(HT20) 5745MHz Ant1



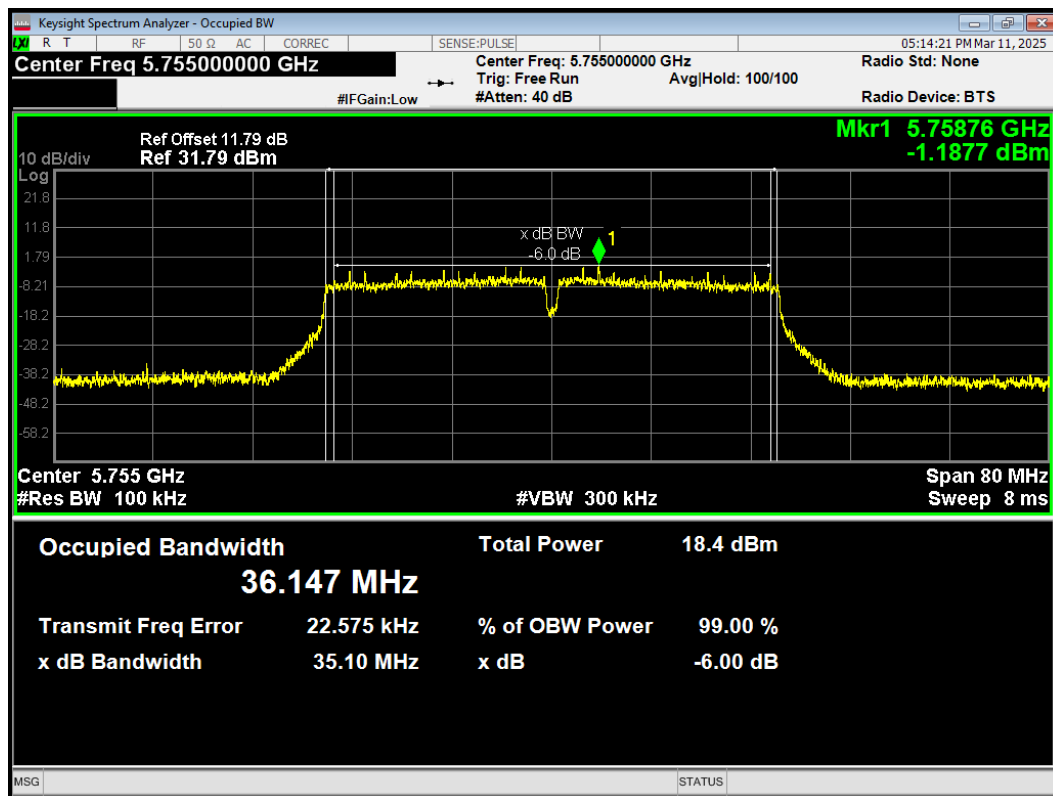
-6dB Bandwidth 802.11n(HT20) 5785MHz Ant1



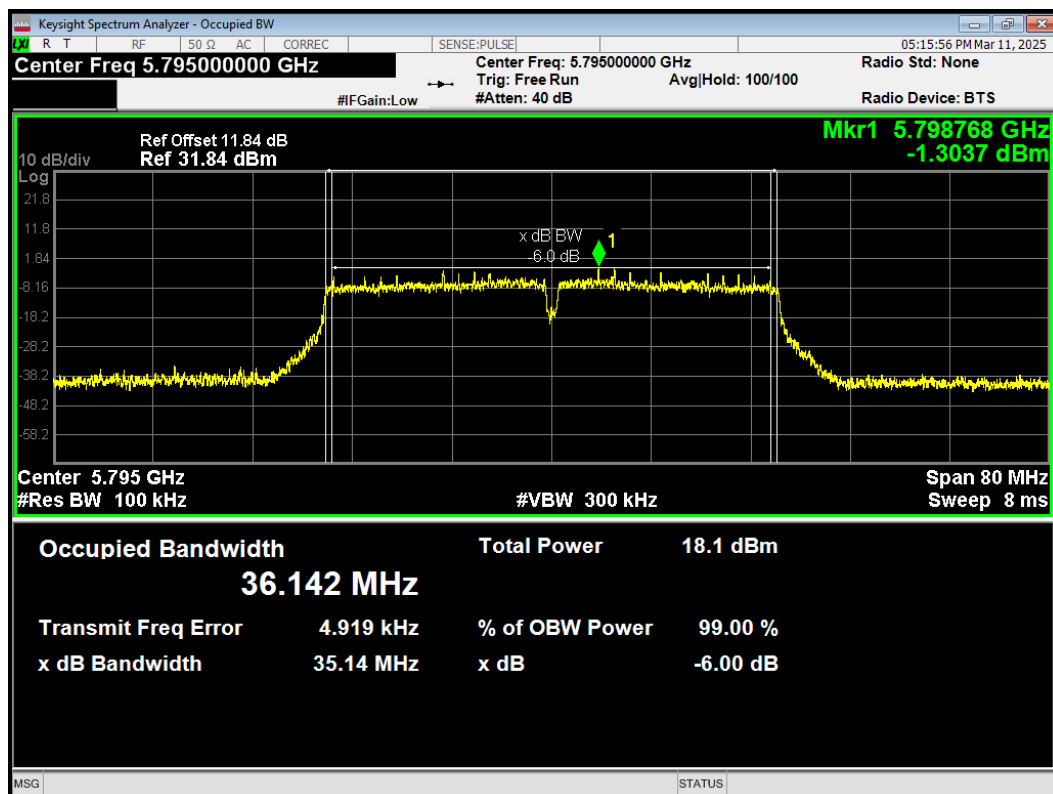
-6dB Bandwidth 802.11n(HT20) 5825MHz Ant1



-6dB Bandwidth 802.11n(HT40) 5755MHz Ant1



-6dB Bandwidth 802.11n(HT40) 5795MHz Ant1



5.2. Average Power Output

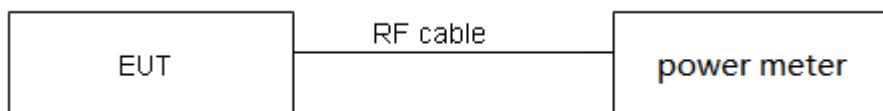
Ambient condition

Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

Methods of Measurement

During the process of the testing, The EUT was connected to the average power meter through an external attenuator and a known loss cable. The EUT is max power transmission with proper modulation. We use Maximum average Conducted Output Power Level Method in KDB789033 for this test

Test Setup



Limits

Rule FCC Part 15.407(a)(1) / FCC Part 15.407(a) (3)

(1) For the band 5.15-5.25 GHz.

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude

the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(3) For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 0.44$ dB.

Test Results

Mode	Duty cycle	Duty cycle correction Factor (dB)
802.11a	0.98	0.00
802.11n HT20	0.98	0.00
802.11n HT40	0.96	0.16
802.11ac VHT20	0.98	0.00
802.11ac VHT40	0.97	0.15
802.11ac VHT80	0.93	0.32
Note: when Duty cycle ≥ 0.98 , Duty cycle correction Factor not required.		

Power Index SISO Antenna 1								
Channel	802.11a	802.11n HT20	802.11ac VHT20	Channel	802.11n HT40	802.11ac VHT40	Channel	802.11ac VHT80
CH36	13.5	13	12	CH38	12	10	CH42	10.5
CH40	13.5	13	12	CH46	12	10	/	/
CH48	13.5	13	12	/	/	/	/	/
CH149	13	12.5	11.5	CH151	12	10	CH155	10
CH157	13	12.5	11.5	CH159	12	10	/	/
CH165	12.5	12	11	/	/	/	/	/
Power Index SISO Antenna 2								
Channel	802.11a	802.11n HT20	802.11ac VHT20	Channel	802.11n HT40	802.11ac VHT40	Channel	802.11ac VHT80
CH36	12.5	12	11.5	CH38	11.5	9.5	CH42	9.5
CH40	12.5	12.5	11.5	CH46	12	10	/	/
CH48	13	12.5	12	/	/	/	/	/
CH149	14	13.5	12.5	CH151	13	11	CH155	11
CH157	13.5	13	12	CH159	12.5	11	/	/
CH165	13.5	13	12.5	/	/	/	/	/
Power Index MIMO								
Channel	802.11a	802.11n HT20	802.11ac VHT20	Channel	802.11n HT40	802.11ac VHT40	Channel	802.11ac VHT80
CH36	13	13	12	CH38	12	10.5	CH42	10.5
CH40	13	13	12	CH46	12.5	10.5	/	/
CH48	13	13	12.5	/	/	/	/	/
CH149	13.5	13	12	CH151	12.5	10.5	CH155	10.5
CH157	13.5	13	12	CH159	12.5	10.5	/	/
CH165	13	12.5	11.5	/	/	/	/	/

SISO Antenna 1
U-NII-1

Test Mode	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	36/5180	13.14	13.14	24	PASS
	40/5200	13.12	13.12	24	PASS
	48/5240	13.00	13.00	24	PASS
802.11n HT20	36/5180	12.54	12.54	24	PASS
	40/5200	12.53	12.53	24	PASS
	48/5240	12.37	12.37	24	PASS
802.11n HT40	38/5190	11.97	12.13	24	PASS
	46/5230	11.81	11.96	24	PASS
802.11ac VHT20	36/5180	11.60	11.60	24	PASS
	40/5200	11.57	11.57	24	PASS
	48/5240	11.43	11.43	24	PASS
802.11ac VHT40	38/5190	9.91	10.07	24	PASS
	46/5230	9.77	9.92	24	PASS
802.11ac VHT80	42/5210	9.49	9.81	24	PASS

Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor

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Test Mode	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	149/5745	12.91	12.91	29.10	PASS
	157/5785	13.19	13.19	29.10	PASS
	165/5825	13.18	13.18	29.10	PASS
802.11n HT20	149/5745	12.25	12.25	29.10	PASS
	157/5785	12.44	12.44	29.10	PASS
	165/5825	12.52	12.52	29.10	PASS
802.11n HT40	151/5755	11.95	12.10	29.10	PASS
	159/5795	12.35	12.51	29.10	PASS
802.11ac VHT20	149/5745	11.24	11.24	29.10	PASS
	157/5785	11.54	11.54	29.10	PASS
	165/5825	11.58	11.58	29.10	PASS
802.11ac VHT40	151/5755	10.09	10.24	29.10	PASS
	159/5795	9.99	10.14	29.10	PASS
802.11ac VHT80	155/5775	9.47	9.79	29.10	PASS

Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor

SISO Antenna 2
U-NII-1

Test Mode	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	36/5180	13.16	13.16	24	PASS
	40/5200	12.85	12.85	24	PASS
	48/5240	12.93	12.93	24	PASS
802.11n HT20	36/5180	12.48	12.48	24	PASS
	40/5200	12.66	12.66	24	PASS
	48/5240	12.20	12.20	24	PASS
802.11n HT40	38/5190	12.01	12.16	24	PASS
	46/5230	11.75	11.90	24	PASS
802.11ac VHT20	36/5180	11.54	11.54	24	PASS
	40/5200	11.23	11.23	24	PASS
	48/5240	11.27	11.27	24	PASS
802.11ac VHT40	38/5190	9.99	10.14	24	PASS
	46/5230	9.85	10.00	24	PASS
802.11ac VHT80	42/5210	9.34	9.66	24	PASS

Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor

U-NII-3

Test Mode	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	149/5745	13.19	13.19	29.10	PASS
	157/5785	13.05	13.05	29.10	PASS
	165/5825	13.00	13.00	29.10	PASS
802.11n HT20	149/5745	12.50	12.50	29.10	PASS
	157/5785	12.35	12.35	29.10	PASS
	165/5825	12.29	12.29	29.10	PASS
802.11n HT40	151/5755	12.06	12.21	29.10	PASS
	159/5795	11.78	11.94	29.10	PASS
802.11ac VHT20	149/5745	11.47	11.47	29.10	PASS
	157/5785	11.31	11.31	29.10	PASS
	165/5825	11.69	11.69	29.10	PASS
802.11ac VHT40	151/5755	10.14	10.29	29.10	PASS
	159/5795	10.37	10.52	29.10	PASS
802.11ac VHT80	155/5775	9.87	10.19	29.10	PASS

Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor

MIMO

U-NII-1

Test Mode	Channel/ Frequency (MHz)	MIMO Antenna 1		MIMO Antenna 2		Total Power (dBm)	Limit (dBm)	Conclusion
		Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11a	36/5180	12.32	12.32	12.62	12.62	15.48	24	PASS
	40/5200	12.26	12.62	12.54	12.54	15.59	24	PASS
	48/5240	11.90	12.54	12.12	12.12	15.35	24	PASS
802.11n HT20	36/5180	12.42	12.42	13.22	13.22	15.85	24	PASS
	40/5200	12.38	12.38	12.97	12.97	15.69	24	PASS
	48/5240	12.27	12.27	12.55	12.55	15.42	24	PASS
802.11n HT40	38/5190	11.74	11.89	12.18	12.33	15.13	24	PASS
	46/5230	12.13	12.28	12.15	12.31	15.31	24	PASS
802.11ac VHT20	36/5180	11.47	11.47	12.14	12.14	14.83	24	PASS
	40/5200	11.43	11.43	11.96	11.96	14.71	24	PASS
	48/5240	11.89	11.89	12.03	12.03	14.97	24	PASS
802.11ac VHT40	38/5190	10.18	10.33	10.69	10.84	13.60	24	PASS
	46/5230	10.18	10.33	10.16	10.31	13.33	24	PASS
802.11ac VHT80	42/5210	9.49	9.81	9.88	10.20	13.02	24	PASS

Note: 1. For Total Power, according to KDB 662911 D01 Multiple Transmitter Output v02r01 1),

The Total Power = $10\log(10^{(\text{Power antenna1 in dBm}/10)} + 10^{(\text{Power antenna2 in dBm}/10)})$.

2. According to KDB 662911 D01 Multiple Transmitter Output v02r01 F)2)f)(ii): If antenna gains are not equal, the user may use either of the following methods to calculate Directional gain, provided that each transmit antenna is driven by only one spatial stream: 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.

Directional gain = $G_{\text{ANT MAX}} + \text{Array Gain}$,

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{\text{ANT}} \leq 4$;

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

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

So Directional gain = $G_{\text{ANT}} + \text{Array Gain} = 5.20 + 0 = 5.20$ dBi < 6 dBi. So the power limit is 24 dBm.

U-NII-3

Test Mode	Channel/ Frequency (MHz)	MIMO Antenna 1		MIMO Antenna 2		Total Power (dBm)	Limit (dBm)	Conclusion
		Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11a	149/5745	13.16	13.16	12.48	12.48	15.84	29.10	PASS
	157/5785	13.44	13.44	12.89	12.89	16.18	29.10	PASS
	165/5825	13.57	13.57	12.36	12.36	16.02	29.10	PASS
802.11n HT20	149/5745	12.44	12.44	11.92	11.92	15.20	29.10	PASS
	157/5785	12.84	12.84	12.29	12.29	15.58	29.10	PASS
	165/5825	12.87	12.87	11.66	11.66	15.32	29.10	PASS
802.11n HT40	151/5755	12.55	12.70	11.58	11.73	15.26	29.10	PASS
	159/5795	12.87	13.03	11.73	11.88	15.50	29.10	PASS
802.11ac VHT20	149/5745	11.61	11.61	10.96	10.96	14.31	29.10	PASS
	157/5785	12.00	12.00	11.20	11.20	14.63	29.10	PASS
	165/5825	12.03	12.03	10.66	10.66	14.41	29.10	PASS
802.11ac VHT40	151/5755	10.51	10.66	9.55	9.70	13.22	29.10	PASS
	159/5795	10.81	10.96	9.71	9.86	13.45	29.10	PASS
802.11ac VHT80	155/5775	9.70	10.02	8.62	8.94	12.53	29.10	PASS

Note: 1. For Total Power, according to KDB 662911 D01 Multiple Transmitter Output v02r01 1),

The Total Power = $10\log(10^{(\text{Power antenna1 in dBm}/10)} + 10^{(\text{Power antenna2 in dBm}/10)})$.

2. According to KDB 662911 D01 Multiple Transmitter Output v02r01 F2)f(ii): If antenna gains are not equal, the user may use either of the following methods to calculate Directional gain, provided that each transmit antenna is driven by only one spatial stream: 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.

Directional gain = $G_{\text{ANT MAX}} + \text{Array Gain}$,

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{\text{ANT}} \leq 4$;

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

So Directional gain = $G_{\text{ANT}} + \text{Array Gain} = 6.90 + 0 = 6.90 \text{ dBi} > 6 \text{ dBi}$.

So the power limit $30 - (\text{Directional gain} - 6 \text{ dBi}) = 30 - (6.09 - 6) = 29.10 \text{ dBm}$.

5.3. Frequency Stability

Ambient condition

Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

Method of Measurement

1. Frequency stability with respect to ambient temperature

- Supply the EUT with a nominal ac voltage or install a new or fully charged battery in the EUT. If possible, a dummy load shall be connected to the EUT because an antenna near the metallic walls of an environmental test chamber could affect the output frequency of the EUT. If the EUT is equipped with a permanently attached, adjustable-length antenna, then the EUT shall be placed in the center of the chamber with the antenna adjusted to the shortest length possible. Turn ON the EUT and tune it to one of the number of frequencies shown in 5.6.
- Couple the unlicensed wireless device output to the measuring instrument by connecting an antenna to the measuring instrument with a suitable length of coaxial cable and placing the measuring antenna near the EUT (e.g., 15 cm away), or by connecting a dummy load to the measuring instrument, through an attenuator if necessary.
- Adjust the location of the measurement antenna and the controls on the measurement instrument to obtain a suitable signal level (i.e., a level that will not overload the measurement instrument but is strong enough to allow measurement of the operating or fundamental frequency of the EUT).
- Turn the EUT OFF and place it inside the environmental temperature chamber. For devices that have oscillator heaters, energize only the heater circuit.
- Set the temperature control on the chamber to the highest specified in the regulatory requirements for the type of device and allow the oscillator heater and the chamber temperature to stabilize.
- While maintaining a constant temperature inside the environmental chamber, turn the EUT ON and record the operating frequency at startup, and at 2 minutes, 5 minutes, and 10 minutes after the EUT is energized. Four measurements in total are made.
- Measure the frequency at each of frequencies specified in 5.6.
- Switch OFF the EUT but do not switch OFF the oscillator heater.
- Lower the chamber temperature by not more than 10°C, and allow the temperature inside the chamber to stabilize.
- Repeat step f) through step i) down to the lowest specified temperature.

2. Frequency stability when varying supply voltage

Unless otherwise specified, these tests shall be made at ambient room temperature (+15°C to +25 °C). An antenna shall be connected to the antenna output terminals of the EUT if possible. If the EUT is equipped with or uses an adjustable-length antenna, then it shall be fully extended.

- Supply the EUT with nominal voltage or install a new or fully charged battery in the EUT. Turn ON the EUT and couple its output to a frequency counter or other frequency-measuring instrument.

- b) Tune the EUT to one of the number of frequencies required in 5.6. Adjust the location of the measurement antenna and the controls on the measurement instrument to obtain a suitable signal level (i.e., a level that will not overload the measurement instrument but is strong enough to allow measurement of the operating or fundamental frequency of the EUT).
- c) Measure the frequency at each of the frequencies specified in 5.6.
- d) Repeat the above procedure at 85% and 115% of the nominal supply voltage.

Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 936\text{Hz}$

Test Results

Voltage (V)	Temperature (°C)	U-NII-1 Test Results			
		5200MHz			
		1min	2min	5min	10min
12	-30	5199.991475	5199.986521	5199.980833	5199.980498
12	-20	5199.996384	5199.982470	5199.972544	5199.971722
12	-10	5199.998185	5199.972753	5199.967806	5199.970732
12	0	5199.989216	5199.976289	5199.964253	5199.965469
12	10	5199.989011	5199.969706	5199.963857	5199.963179
12	20	5199.979428	5199.968725	5199.962618	5199.961276
12	30	5199.977415	5199.967558	5199.953911	5199.957653
12	40	5199.973688	5199.958989	5199.944258	5199.953235
12	50	5199.965177	5199.949663	5199.935916	5199.944309
9	20	5199.956919	5199.940901	5199.926137	5199.935766
16	20	5199.953351	5199.936378	5199.925966	5199.932595
Max. ΔMHz		-0.046649	-0.063622	-0.074034	-0.067405
PPM		-8.970962	-12.235000	-14.237308	-12.962500

Voltage (V)	Temperature (°C)	U-NII-3 Test Results			
		5785MHz			
		1min	2min	5min	10min
12	-30	5784.994341	5784.987033	5784.980681	5784.976443
12	-20	5784.989544	5784.983673	5784.976754	5784.975008
12	-10	5784.986620	5784.975448	5784.968155	5784.973935
12	0	5784.986215	5784.980498	5784.969143	5784.967313
12	10	5784.980038	5784.978025	5784.966860	5784.967031
12	20	5784.975246	5784.968451	5784.958257	5784.964994
12	30	5784.969845	5784.968402	5784.952139	5784.955171
12	40	5784.963213	5784.964860	5784.949921	5784.954233
12	50	5784.957272	5784.963303	5784.948982	5784.953656
9	20	5784.952848	5784.959564	5784.946725	5784.952467
16	20	5784.943512	5784.957506	5784.941784	5784.944754
Max. ΔMHz		-0.056488	-0.042494	-0.058216	-0.055246
PPM		-9.764564	-7.345549	-10.063267	-9.549870

5.4. Power Spectral Density

Ambient condition

Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

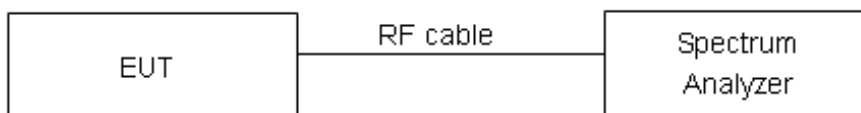
Method of Measurement

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable.

Set RBW = 1MHz, VBW = 3MHz for the band 5.150-5.250GHz,
Set RBW = 470kHz, VBW = 1.5MHz for the band 5.725-5.850GHz

The conducted PSD is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically.

Test setup



Limits

Rule FCC Part 15.407(a)(1)/ FCC Part 15.407(a)(3)

For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Frequency Bands/GHz	Limits
5.15-5.25	11dBm/MHz
5.725-5.85	30dBm/500kHz

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 0.75\text{dB}$.

Test Results:
SISO Antenna 1
U-NII-1

Mode	Channel/ Frequency (MHz)	Read Value (dBm /MHz)	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11a	36/5180	3.21	3.21	11	PASS
	40/5200	3.15	3.15	11	PASS
	48/5240	3.03	3.03	11	PASS
802.11n HT20	36/5180	2.40	2.40	11	PASS
	40/5200	2.58	2.58	11	PASS
	48/5240	2.55	2.55	11	PASS
802.11n HT40	38/5190	-1.11	-0.95	11	PASS
	46/5230	-1.41	-1.25	11	PASS
802.11ac VHT20	36/5180	1.36	1.36	11	PASS
	40/5200	1.31	1.31	11	PASS
	48/5240	1.07	1.07	11	PASS
802.11ac VHT40	38/5190	-3.15	-3.00	11	PASS
	46/5230	-3.30	-3.15	11	PASS
802.11ac VHT80	42/5210	-6.72	-6.40	11	PASS

Note: Power Spectral Density =Read Value+Duty cycle correction factor

U-NII-3

Mode	Channel /Frequency (MHz)	Read Value (dBm/470kHz)	Power Spectral Density (dBm/500kHz)	Limit (dBm/500kHz)	Conclusion
802.11a	149/5745	0.11	0.38	28.20	PASS
	157/5785	0.21	0.48	28.20	PASS
	165/5825	0.40	0.67	28.20	PASS
802.11n HT20	149/5745	-0.85	-0.58	28.20	PASS
	157/5785	-0.65	-0.38	28.20	PASS
	165/5825	-0.76	-0.49	28.20	PASS
802.11n HT40	151/5755	-2.54	-2.11	28.20	PASS
	159/5795	-4.05	-3.62	28.20	PASS
802.11ac VHT20	149/5745	-1.60	-1.33	28.20	PASS
	157/5785	-1.60	-1.33	28.20	PASS
	165/5825	-1.22	-0.95	28.20	PASS
802.11ac VHT40	151/5755	-6.36	-5.94	28.20	PASS
	159/5795	-6.56	-6.14	28.20	PASS
802.11ac VHT80	155/5775	-9.68	-9.09	28.20	PASS

Note: PSD=Read Value+Duty cycle correction factor +10*log(500/470)

SISO Antenna 2
U-NII-1

Mode	Channel/ Frequency (MHz)	Read Value (dBm /MHz)	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11a	36/5180	3.22	3.22	29.10	PASS
	40/5200	2.88	2.88	29.10	PASS
	48/5240	2.92	2.92	29.10	PASS
802.11n HT20	36/5180	2.23	2.23	29.10	PASS
	40/5200	2.50	2.50	29.10	PASS
	48/5240	2.01	2.01	29.10	PASS
802.11n HT40	38/5190	-1.45	-1.29	29.10	PASS
	46/5230	-1.46	-1.30	29.10	PASS
802.11ac VHT20	36/5180	1.59	1.59	29.10	PASS
	40/5200	1.00	1.00	29.10	PASS
	48/5240	1.07	1.07	29.10	PASS
802.11ac VHT40	38/5190	-3.20	-3.05	29.10	PASS
	46/5230	-3.19	-3.04	29.10	PASS
802.11ac VHT80	42/5210	-6.86	-6.54	29.10	PASS
Note: Power Spectral Density =Read Value+Duty cycle correction factor					

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Mode	Channel /Frequency (MHz)	Read Value (dBm/470kHz)	Power Spectral Density (dBm/500kHz)	Limit (dBm/500kHz)	Conclusion
802.11a	149/5745	0.13	0.40	29.10	PASS
	157/5785	0.23	0.50	29.10	PASS
	165/5825	0.54	0.81	29.10	PASS
802.11n HT20	149/5745	-0.77	-0.50	29.10	PASS
	157/5785	0.18	0.45	29.10	PASS
	165/5825	0.27	0.54	29.10	PASS
802.11n HT40	151/5755	-3.78	-3.35	29.10	PASS
	159/5795	-3.40	-2.97	29.10	PASS
802.11ac VHT20	149/5745	-1.68	-1.41	29.10	PASS
	157/5785	-0.48	-0.21	29.10	PASS
	165/5825	-0.68	-0.41	29.10	PASS
802.11ac VHT40	151/5755	-5.62	-5.20	29.10	PASS
	159/5795	-4.72	-4.30	29.10	PASS
802.11ac VHT80	155/5775	-8.46	-7.87	29.10	PASS
Note: PSD=Read Value+Duty cycle correction factor +10*log(500/470)					

MIMO

U-NII-1

Mode	Channel /Frequency (MHz)	Power Spectral Density					Limit (dBm /MHz)	Conclusion
		Antenna 1		Antenna 2		Total PSD (dBm/MHz)		
		Read Value (dBm/MHz)	PSD (dBm/MHz)	Read Value (dBm/MHz)	PSD (dBm/MHz)			
802.11a	36/5180	2.54	2.54	2.68	2.68	5.62	8.79	PASS
	40/5200	2.72	2.72	2.67	2.67	5.71	8.79	PASS
	48/5240	2.31	2.31	2.34	2.34	5.34	8.79	PASS
802.11n HT20	36/5180	2.28	2.28	3.31	3.31	5.84	8.79	PASS
	40/5200	2.68	2.68	2.59	2.59	5.65	8.79	PASS
	48/5240	2.19	2.19	2.15	2.15	5.18	8.79	PASS
802.11n HT40	38/5190	-1.42	-1.26	-1.25	-1.09	1.83	8.79	PASS
	46/5230	-0.52	-0.36	-0.90	-0.74	2.46	8.79	PASS
802.11ac VHT20	36/5180	1.33	1.33	1.87	1.87	4.62	8.79	PASS
	40/5200	1.37	1.37	1.80	1.80	4.60	8.79	PASS
	48/5240	1.53	1.53	2.08	2.08	4.82	8.79	PASS
802.11ac VHT40	38/5190	-2.83	-2.68	-2.51	-2.36	0.50	8.79	PASS
	46/5230	-2.73	-2.58	-2.78	-2.63	0.41	8.79	PASS
802.11ac VHT80	42/5210	-6.80	-6.48	-6.32	-6.00	-3.22	8.79	PASS

Note: 1. Power Spectral Density =Read Value+Duty cycle correction factor

2. For Total PSD, according to KDB 662911 D01 Multiple Transmitter Output v02r01 2)a),

the power spectral density= $10\log(10^{(\text{PSD antenna 1 in dBm/10})}+10^{(\text{PSD antenna 2 in dBm/10})})$

3. According to KDB 662911 D01 Multiple Transmitter Output v02r01 F)2)f)(ii): If antenna gains are not equal, the user may use either of the following methods to calculate Directional gain, provided that each transmit antenna is driven by only one spatial stream: 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.

Directional gain = $G_{\text{ANT MAX}} + \text{Array Gain}$, For PSD measurements on all devices, Array Gain= $10\log(N_{\text{ant}}/N_{\text{ss}})\text{dB}$,

So Directional gain= $G_{\text{ANT}} + \text{Array Gain} = 5.20 + 10\log(2/1) = 8.21 > 6 \text{ dBi}$.

So the PSD limit is $11 - (\text{Directional gain} - 6 \text{ dBi}) = 11 - (8.21 - 6) = 8.79 \text{ dBm..}$

U-NII-3

Mode	Channel/ Frequency (MHz)	Power Spectral Density					Limit (dBm/ 500kHz)	Conclusion
		Antenna 1		Antenna 2		Total PSD (dBm/ 500kHz)		
		Read Value (dBm/ 470kHz)	PSD (dBm/ 500kHz)	Read Value (dBm/ 470kHz)	PSD (dBm/ 500kHz)			
802.11a	149/5745	0.50	0.77	-0.39	-0.12	3.36	26.09	PASS
	157/5785	-0.35	-0.08	0.47	0.74	3.36	26.09	PASS
	165/5825	-0.76	-0.49	0.31	0.58	3.09	26.09	PASS
802.11n HT20	149/5745	-1.04	-0.77	-1.21	-0.94	2.16	26.09	PASS
	157/5785	-1.99	-1.72	-0.15	0.12	2.31	26.09	PASS
	165/5825	-0.48	-0.21	-1.28	-1.01	2.42	26.09	PASS
802.11n HT40	151/5755	-4.11	-3.68	-4.81	-4.38	-1.01	26.09	PASS
	159/5795	-3.72	-3.29	-4.51	-4.08	-0.66	26.09	PASS
802.11ac VHT20	149/5745	-1.69	-1.42	-1.97	-1.70	1.45	26.09	PASS
	157/5785	-1.75	-1.48	-1.63	-1.36	1.59	26.09	PASS
	165/5825	-1.23	-0.96	-1.78	-1.51	1.78	26.09	PASS
802.11ac VHT40	151/5755	-5.22	-4.80	-6.40	-5.98	-2.34	26.09	PASS
	159/5795	-5.43	-5.01	-6.74	-6.32	-2.60	26.09	PASS
802.11ac VHT80	155/5775	-9.59	-9.00	-10.37	-9.78	-6.36	26.09	PASS

Note: 1. Power Spectral Density = Read Value + Duty cycle correction factor + $10 \cdot \log(500/470)$.

2. For Total PSD, according to KDB 662911 D01 Multiple Transmitter Output v02r01 2)a),

the power spectral density = $10 \log(10^{(\text{PSD antenna 1 in dBm}/10)} + 10^{(\text{PSD antenna 2 in dBm}/10)})$

3. According to KDB 662911 D01 Multiple Transmitter Output v02r01 F)2)f)(ii): If antenna gains are not equal, the user may use either of the following methods to calculate Directional gain, provided that each transmit antenna is driven by only one spatial stream: 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.

Directional gain = $G_{\text{ANT MAX}} + \text{Array Gain}$, For PSD measurements on all devices, Array Gain = $10 \log(N_{\text{ant}}/N_{\text{ss}})$ dB,

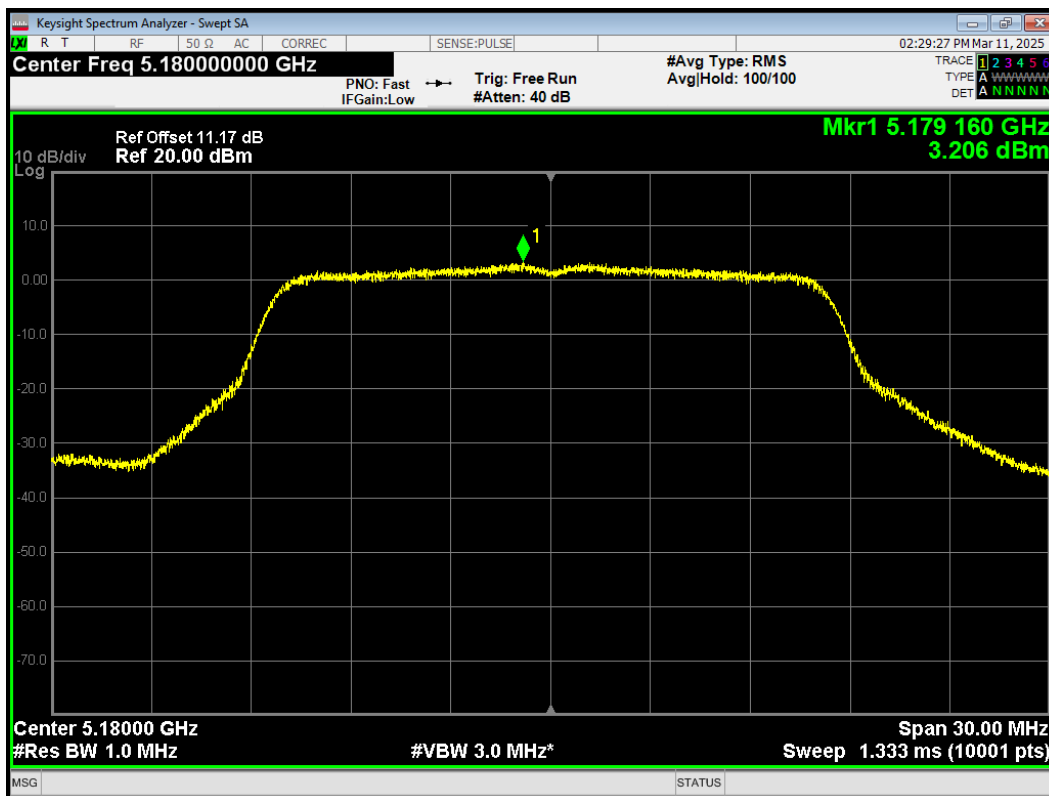
So Directional gain = $G_{\text{ANT}} + \text{Array Gain} = 6.90 + 10 \log(2/1) = 9.91 < 6$ dBi.

So the PSD limit is $30 - (\text{Directional gain} - 6 \text{ dBi}) = 30 - (9.91 - 6) = 26.09$ dBm.

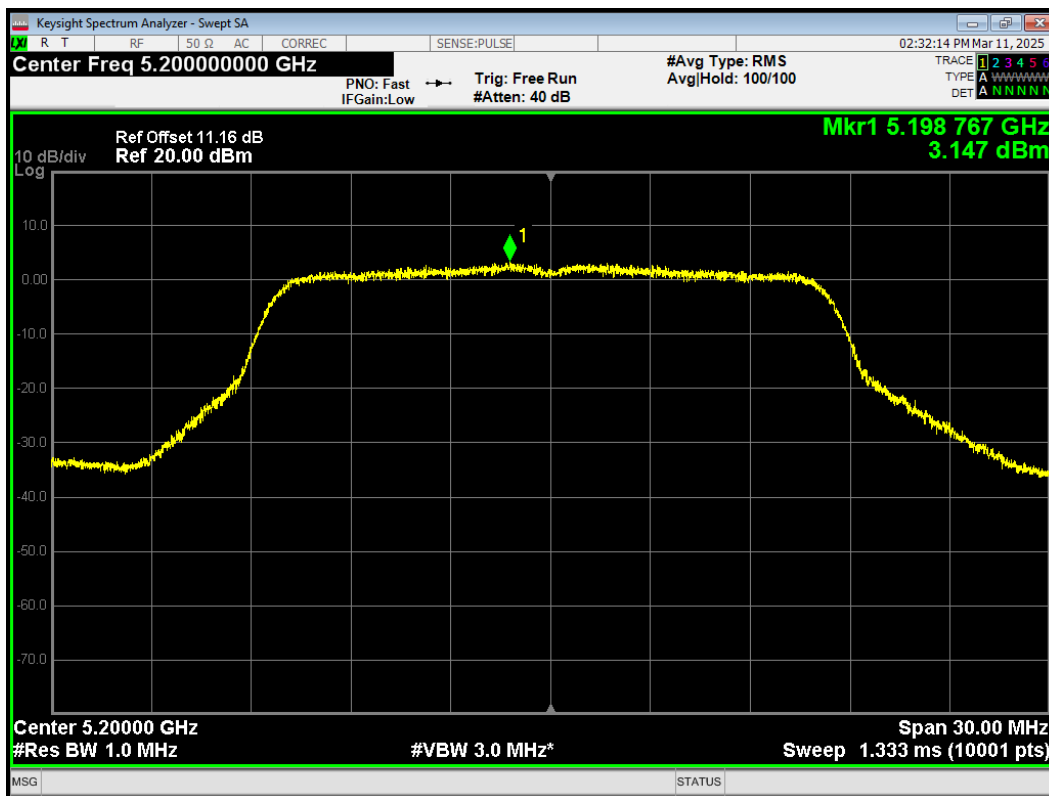
SISO Antenna 1

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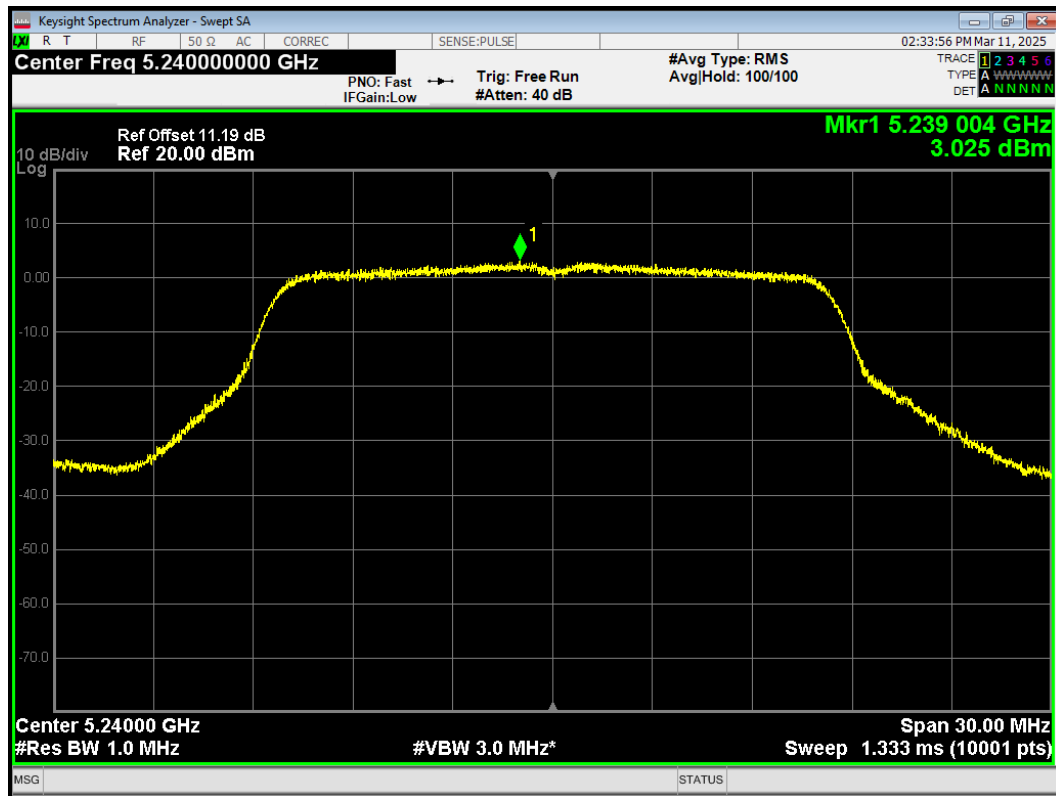
PSD 802.11a 5180MHz



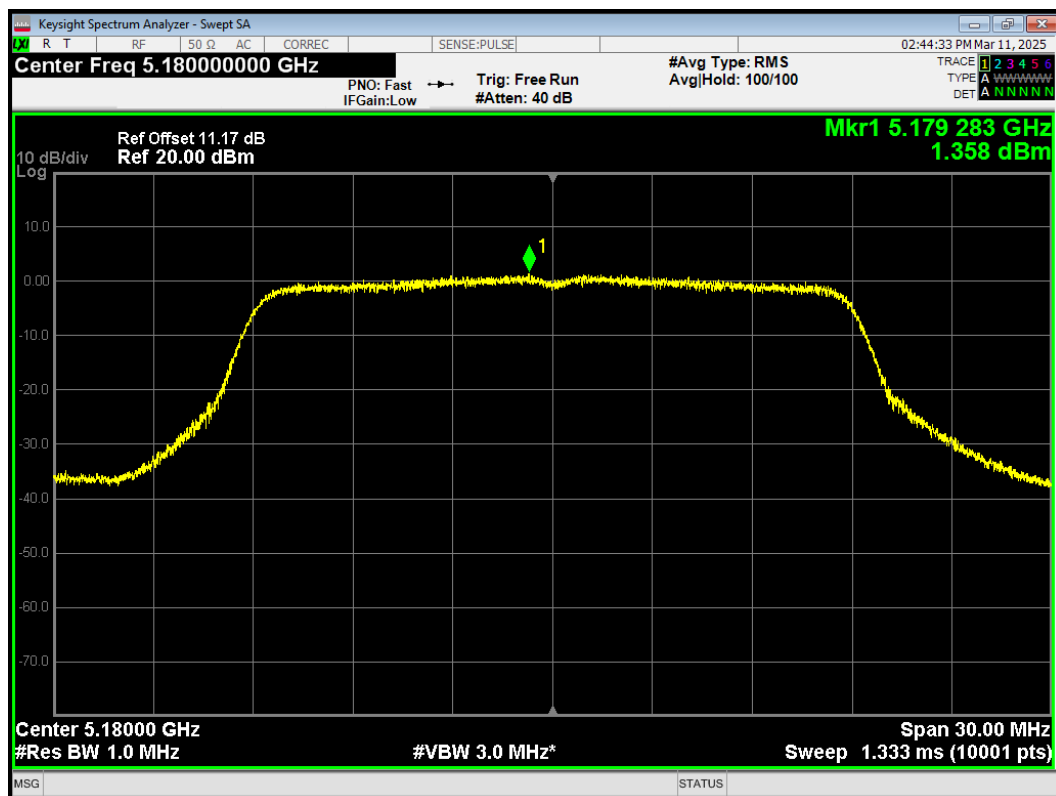
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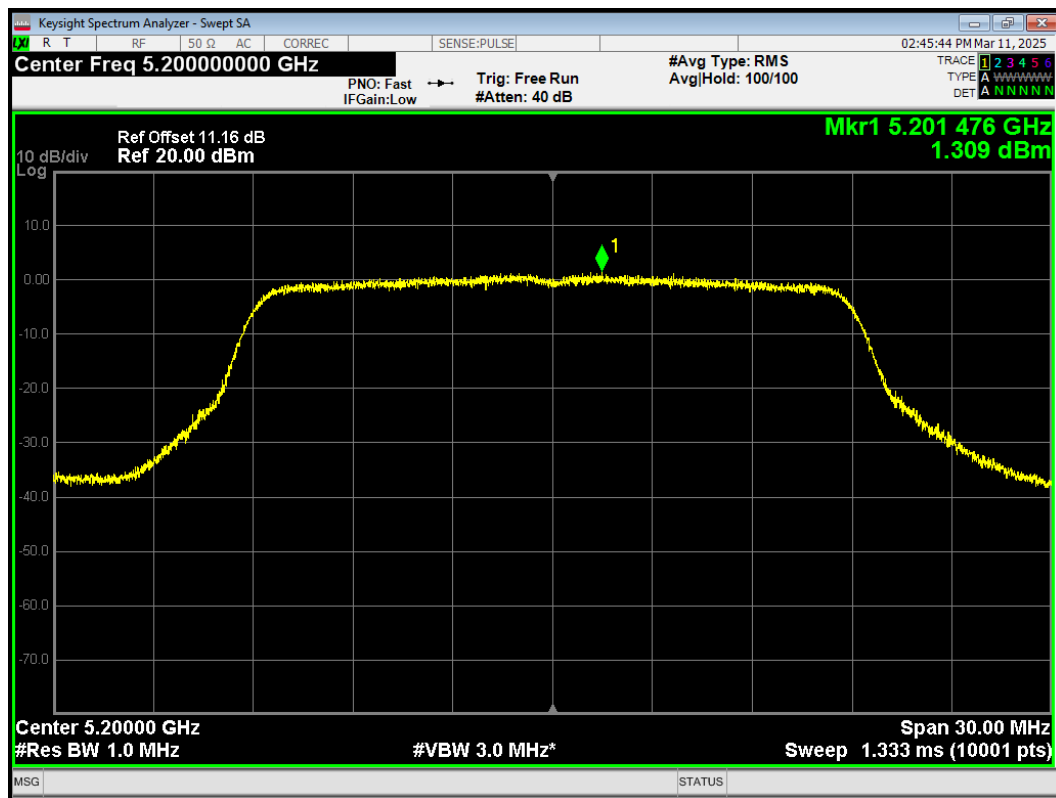
PSD 802.11a 5240MHz



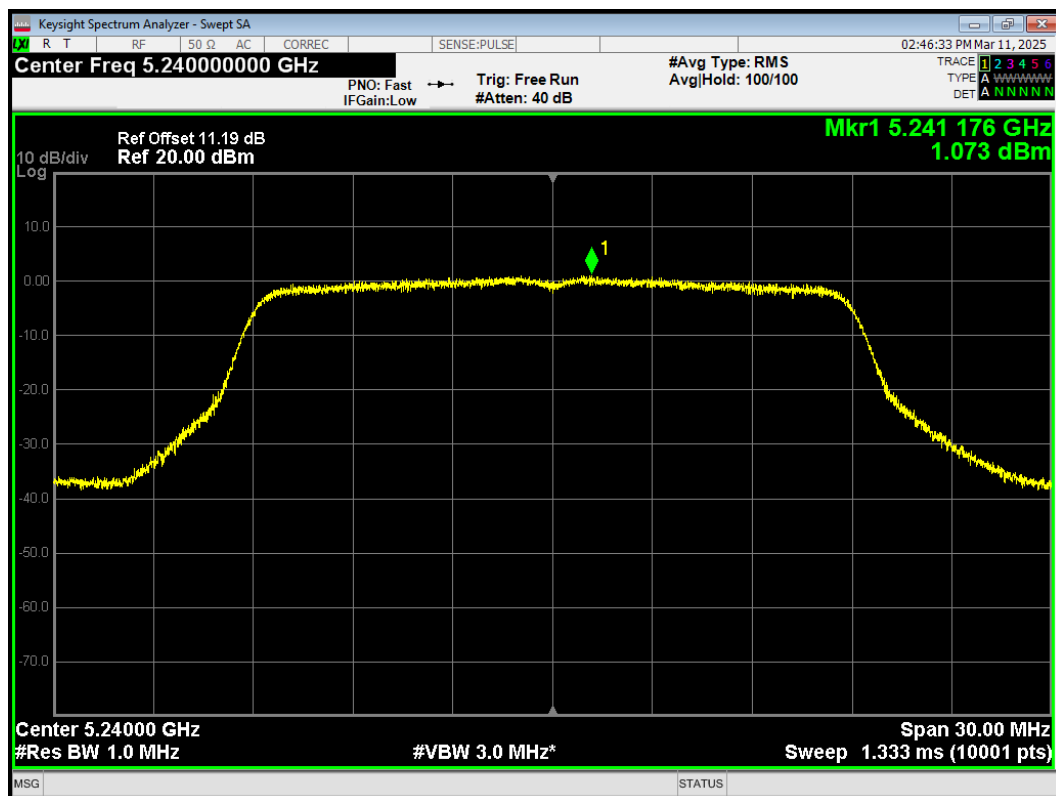
PSD 802.11ac(VHT20) 5180MHz



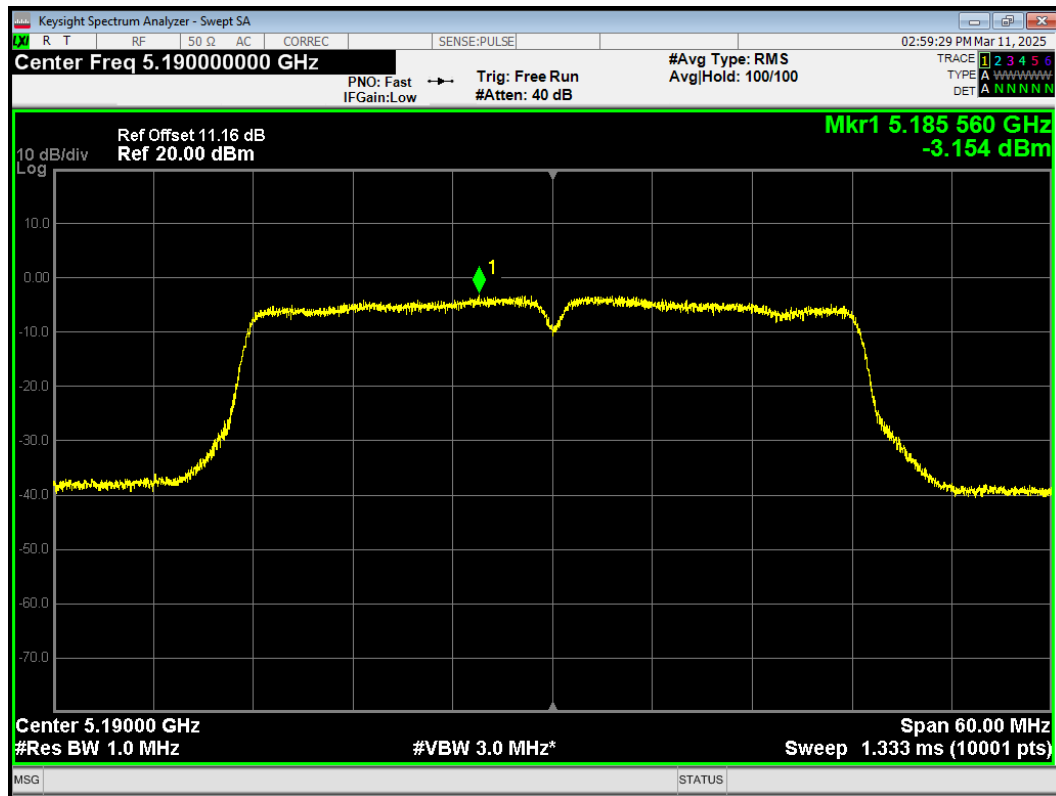
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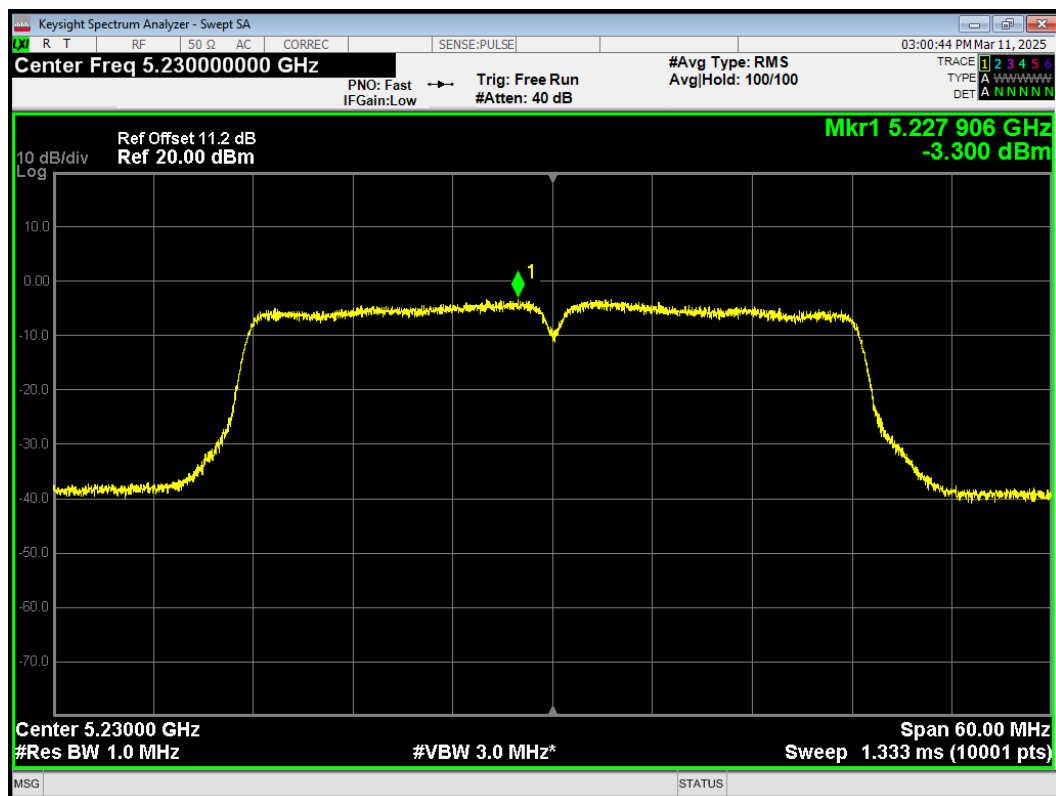
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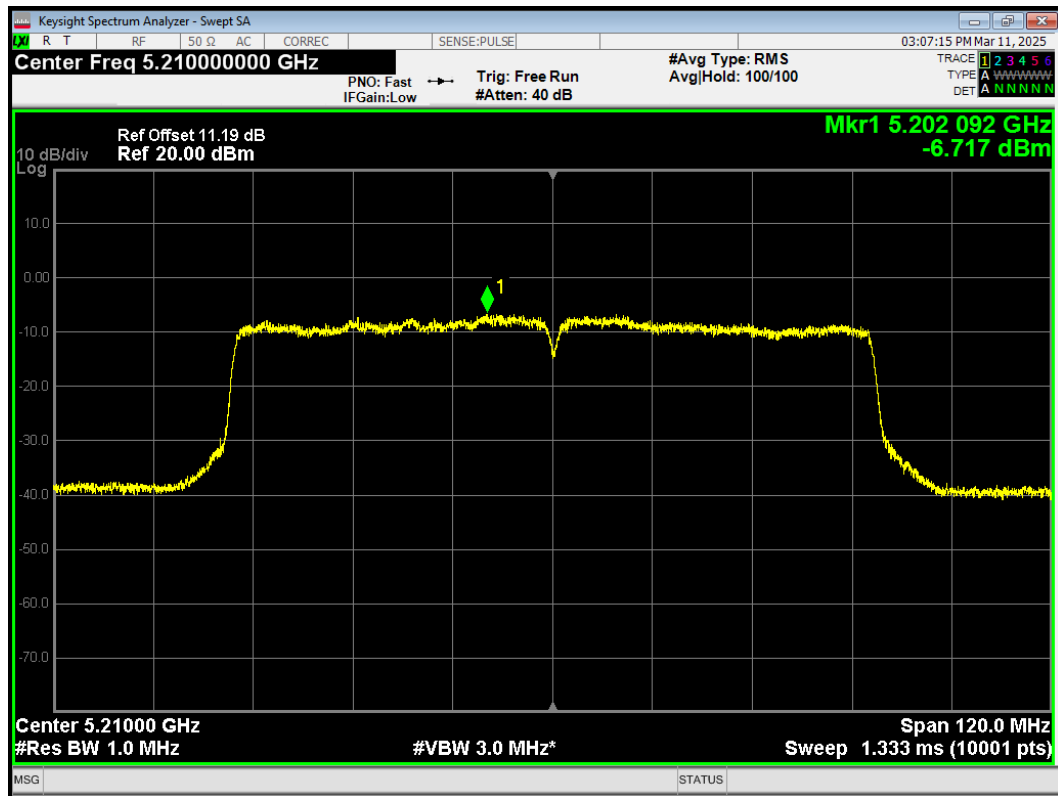
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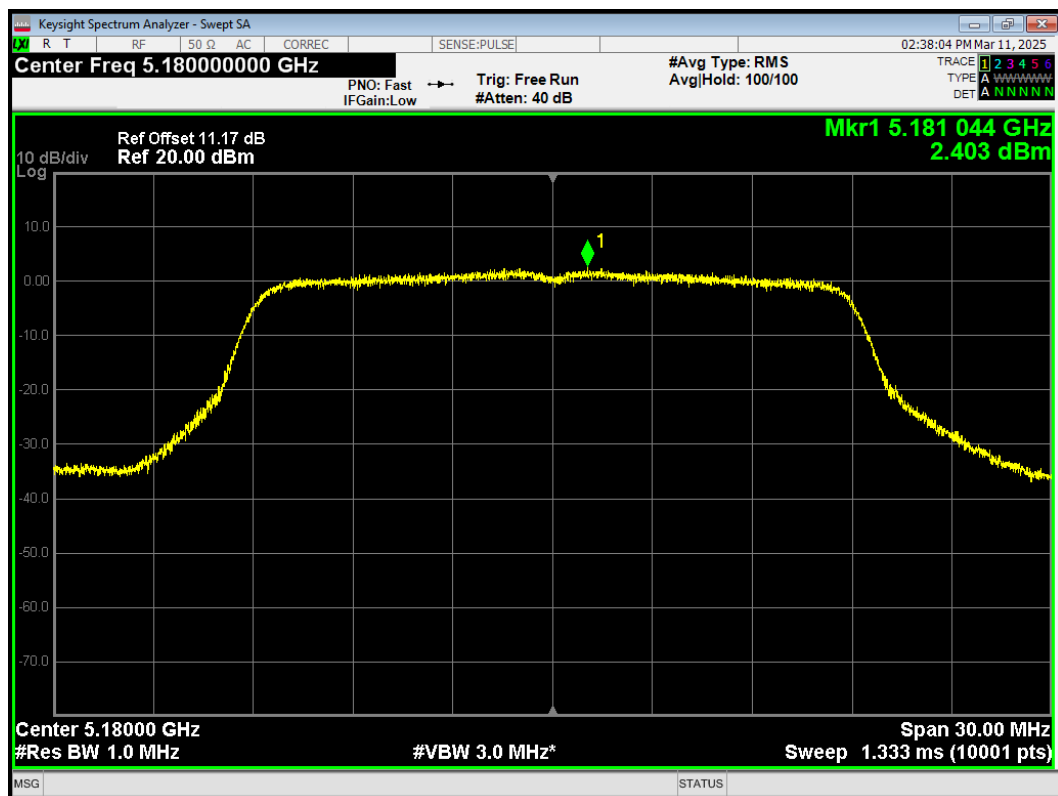
PSD 802.11ac(VHT40) 5230MHz



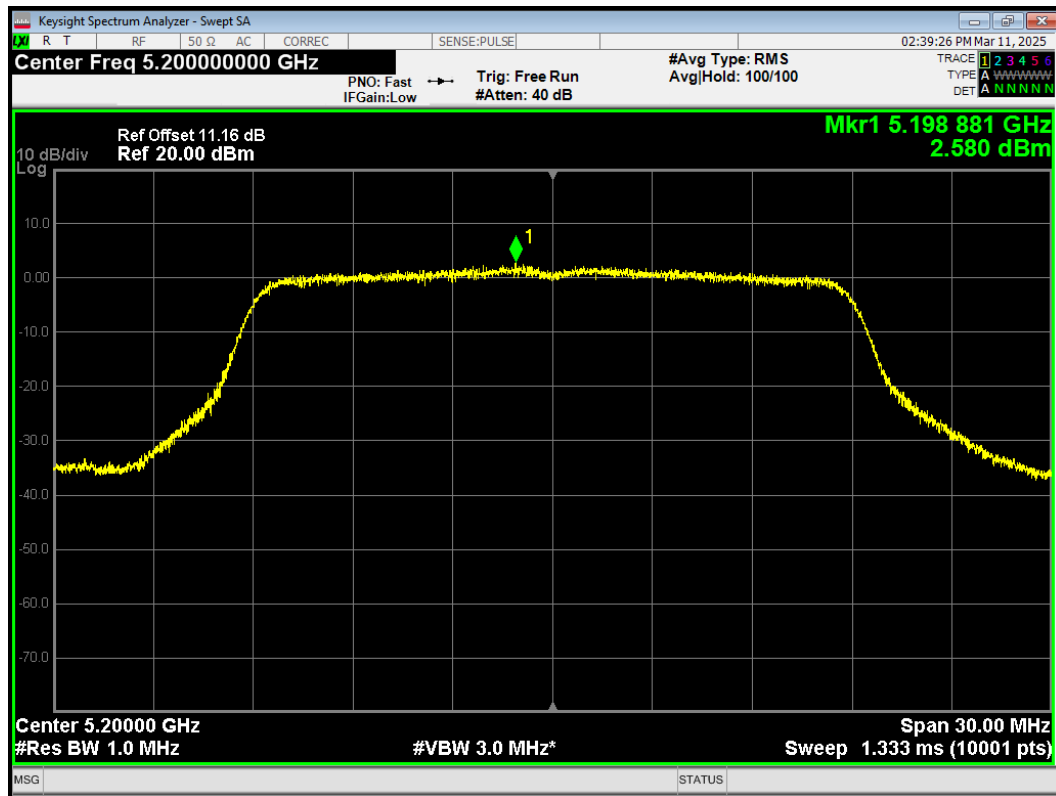
PSD 802.11ac(VHT80) 5210MHz



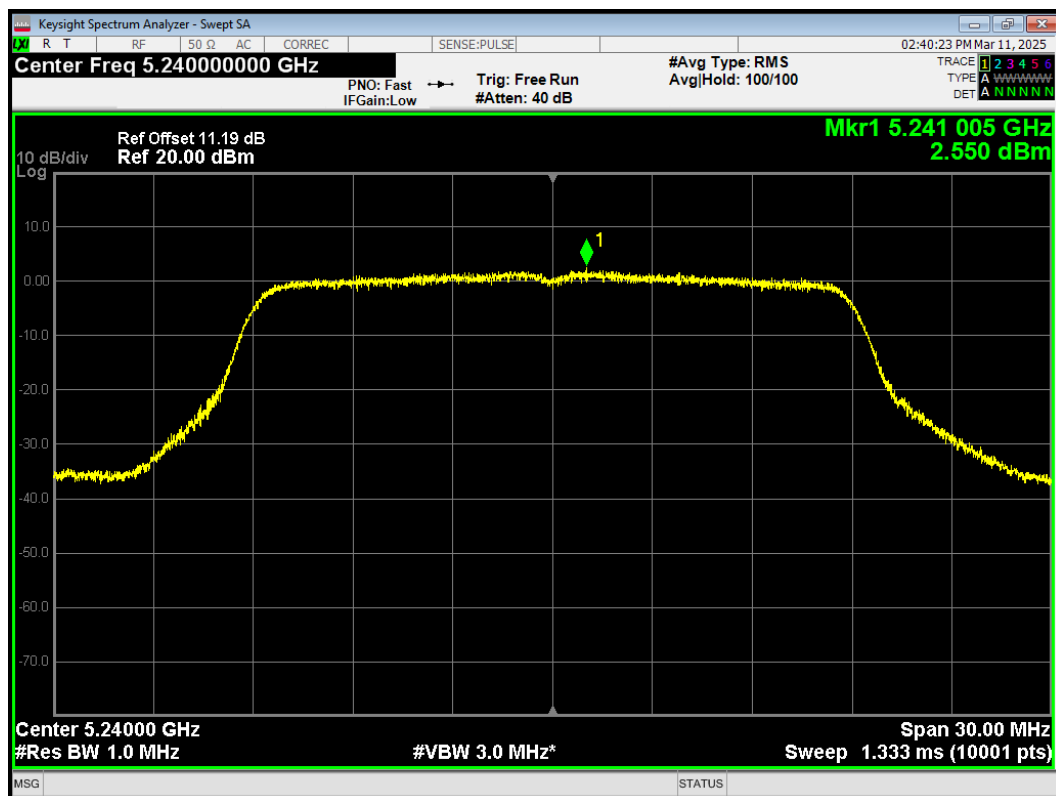
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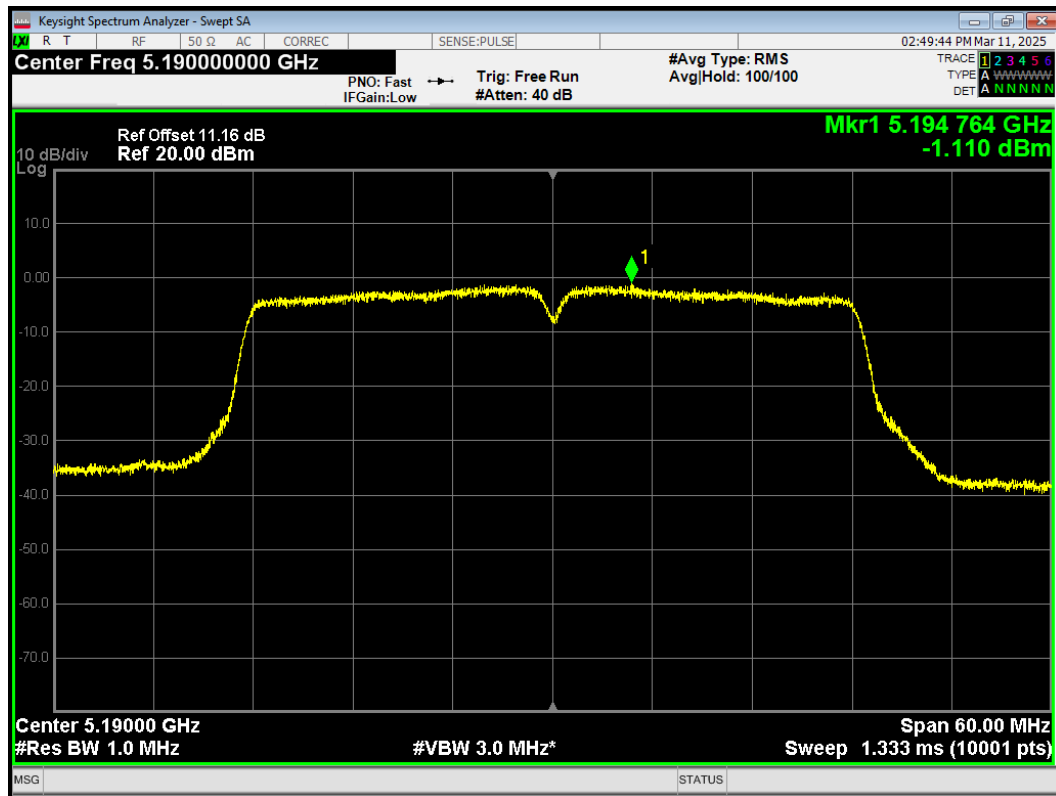
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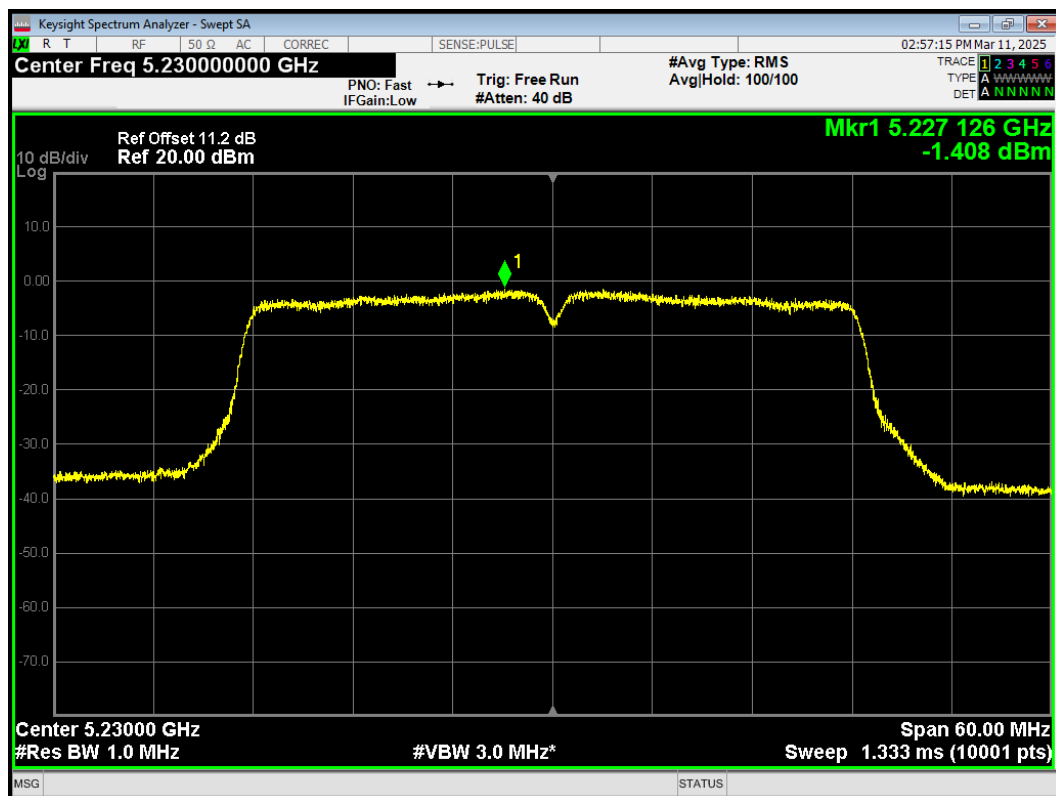
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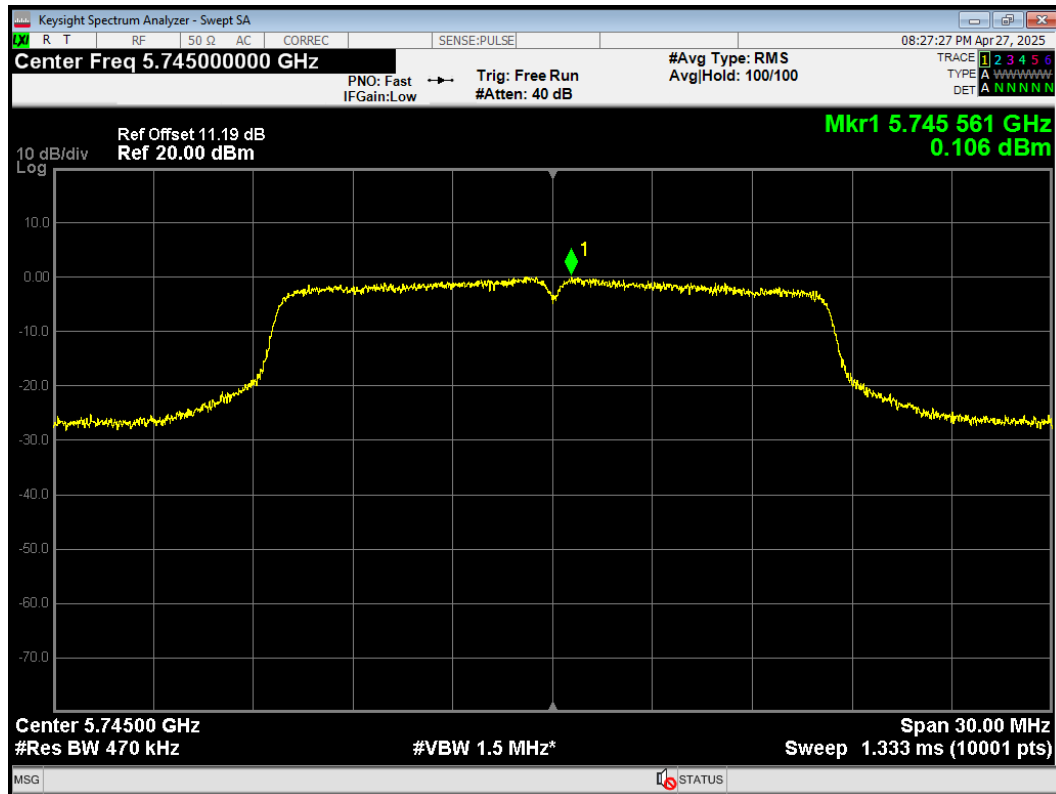
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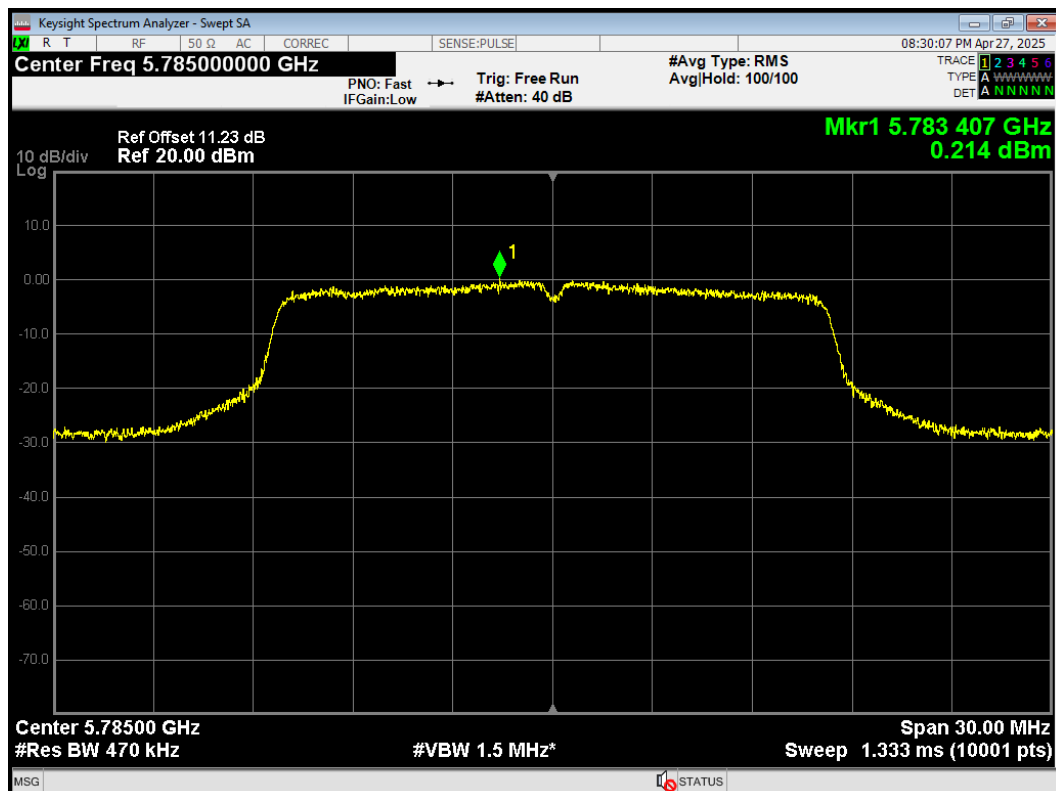
PSD 802.11n(HT40) 5230MHz



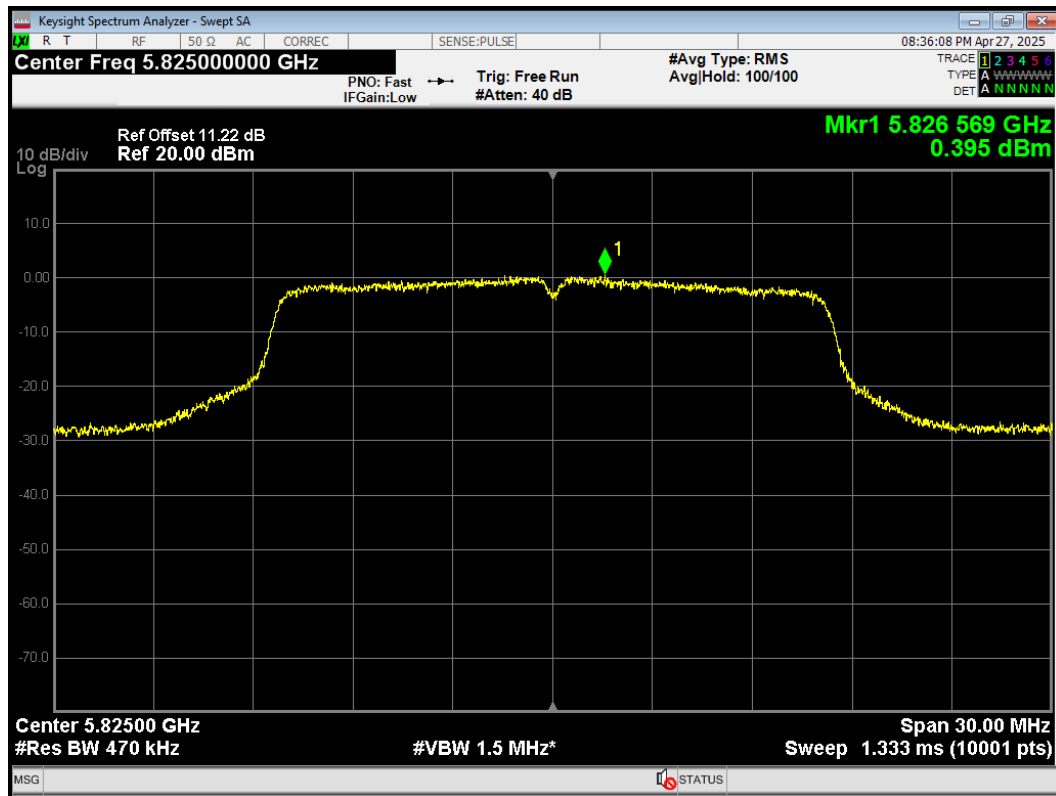
PSD 802.11a 5745MHz



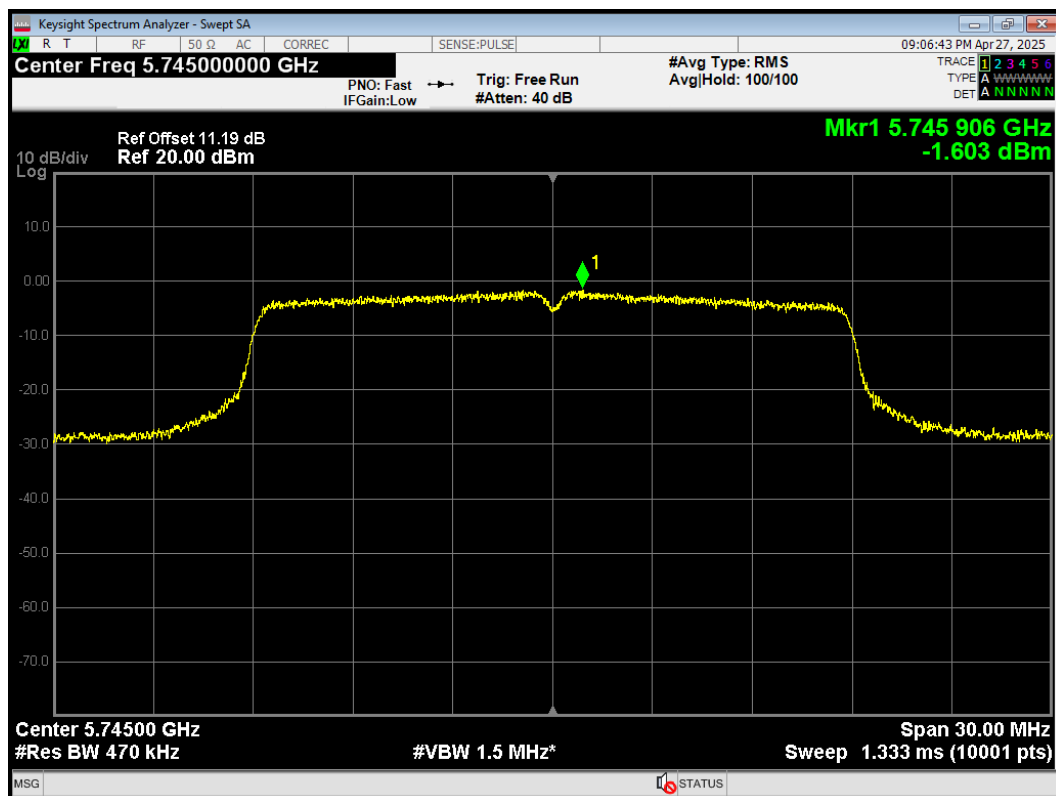
PSD 802.11a 5785MHz



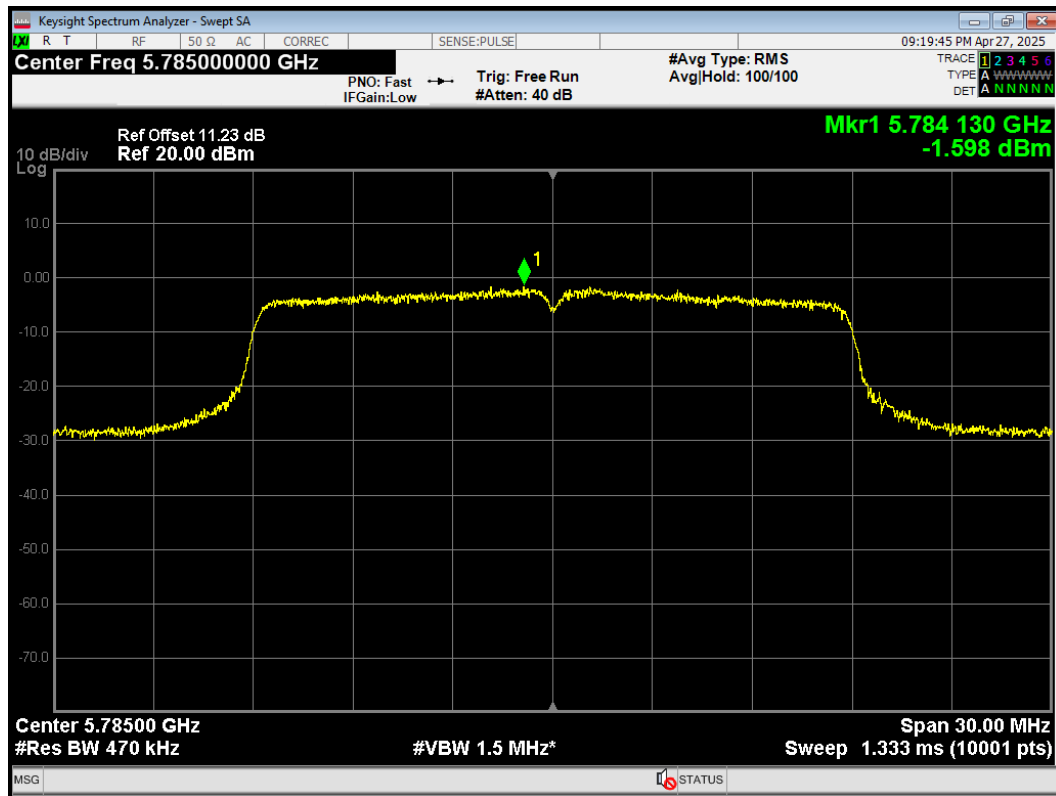
PSD 802.11a 5825MHz



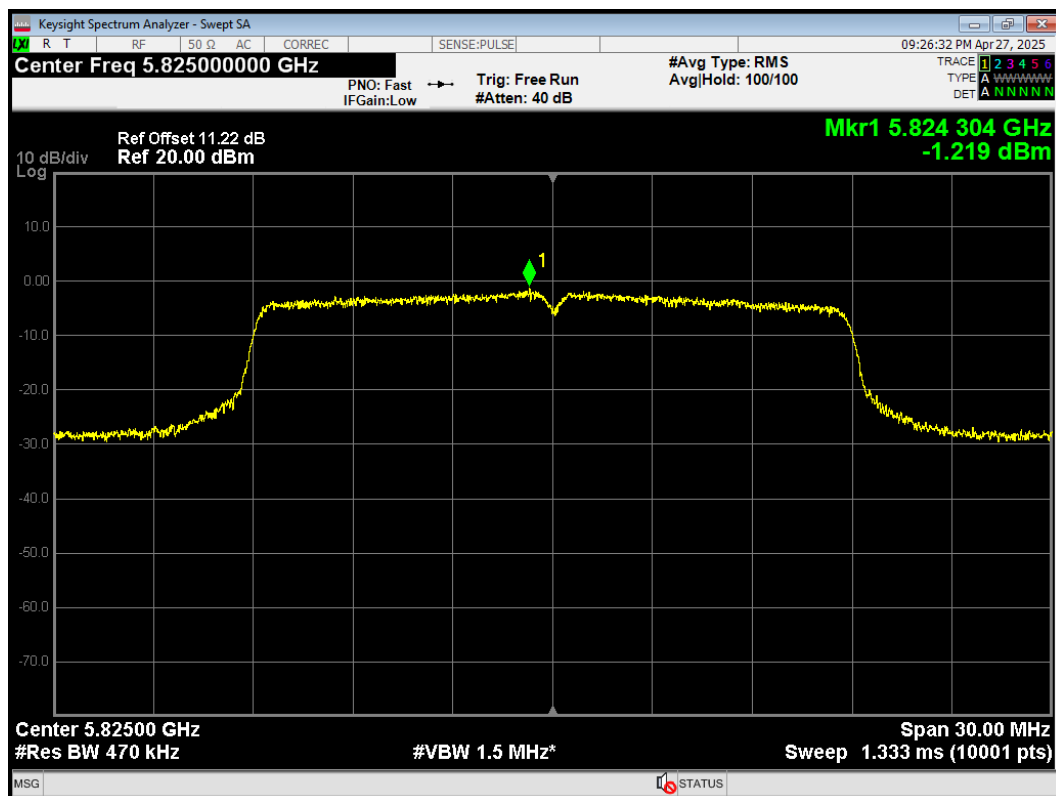
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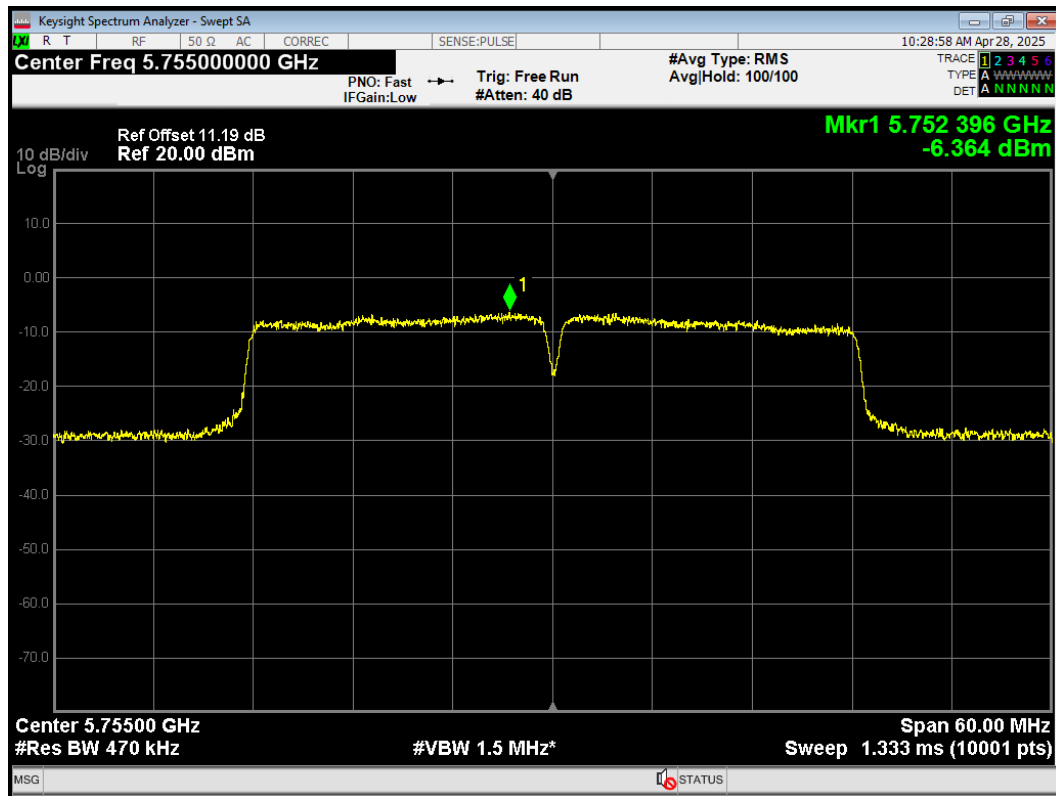
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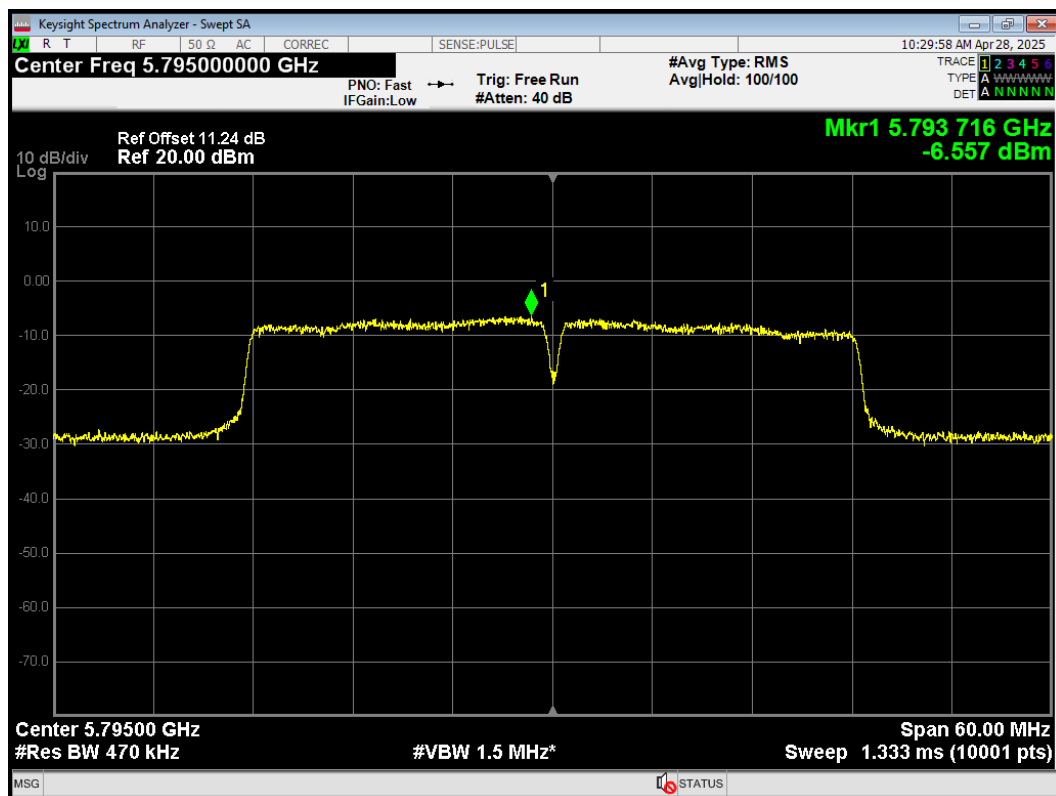
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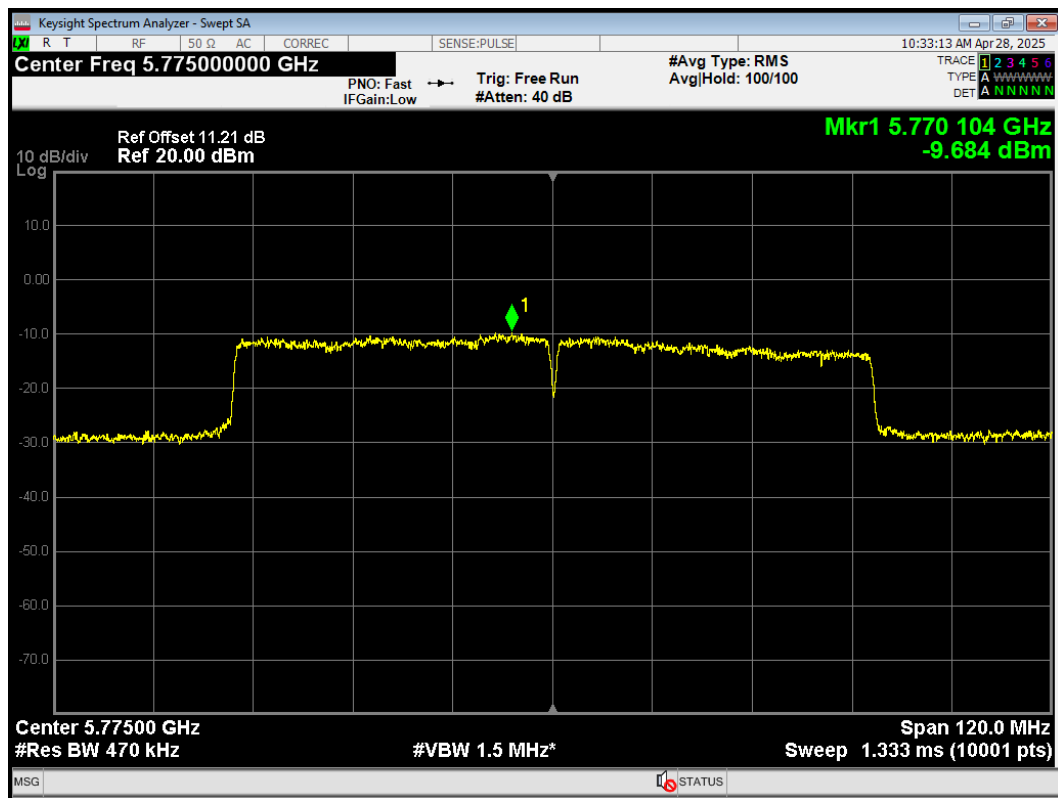
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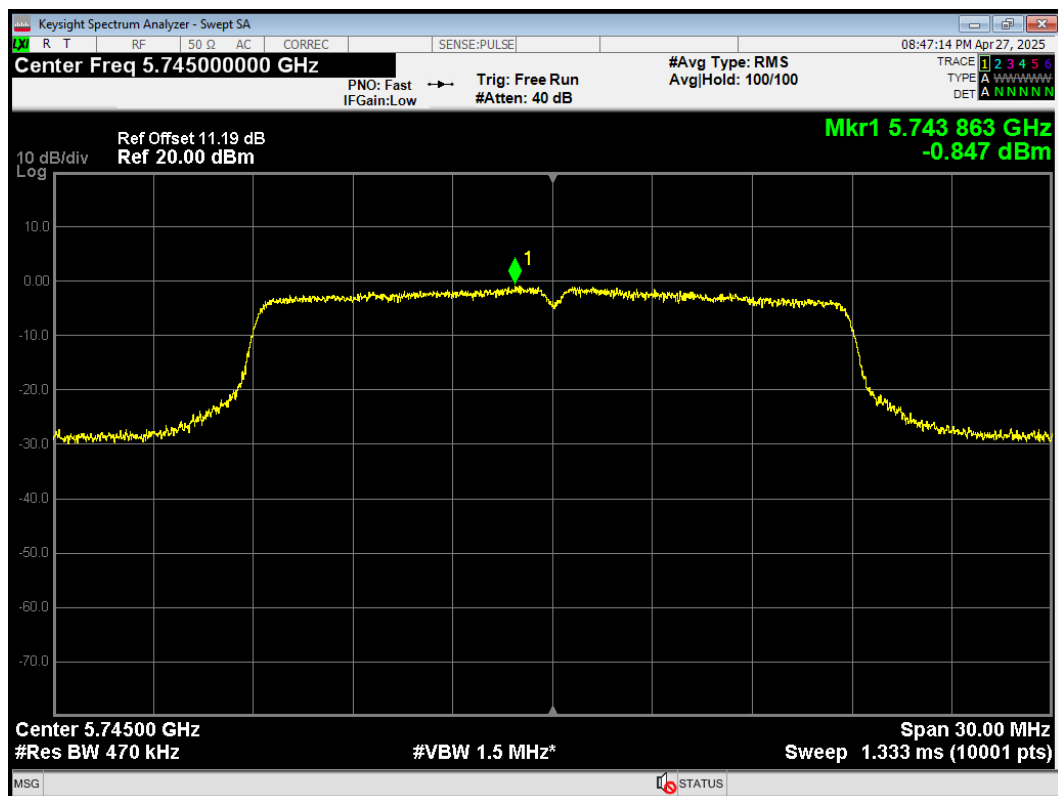
PSD 802.11ac(VHT40) 5795MHz



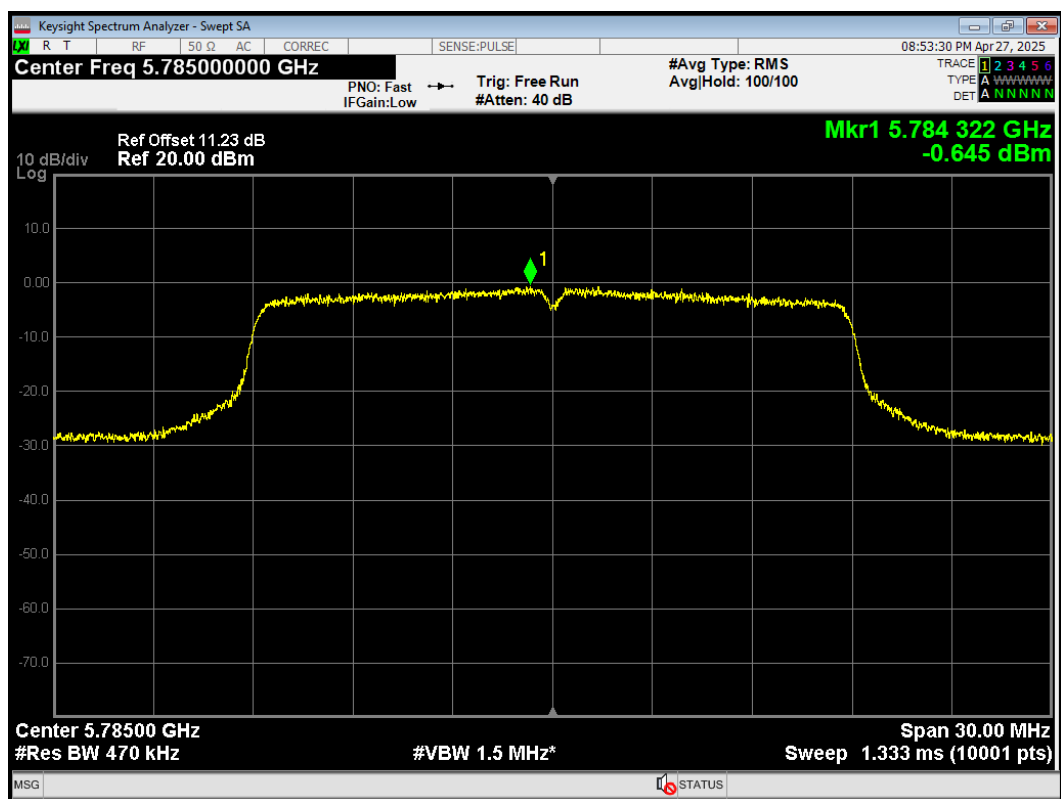
PSD 802.11ac(VHT80) 5775MHz



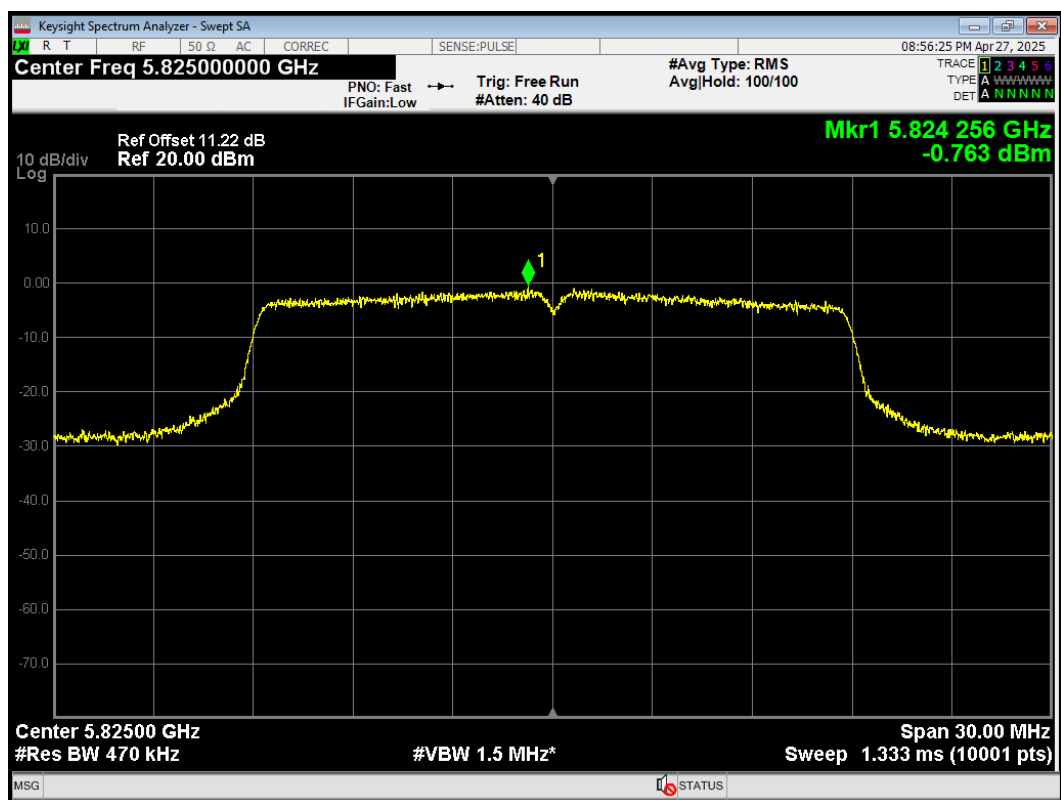
PSD 802.11n(HT20) 5745MHz



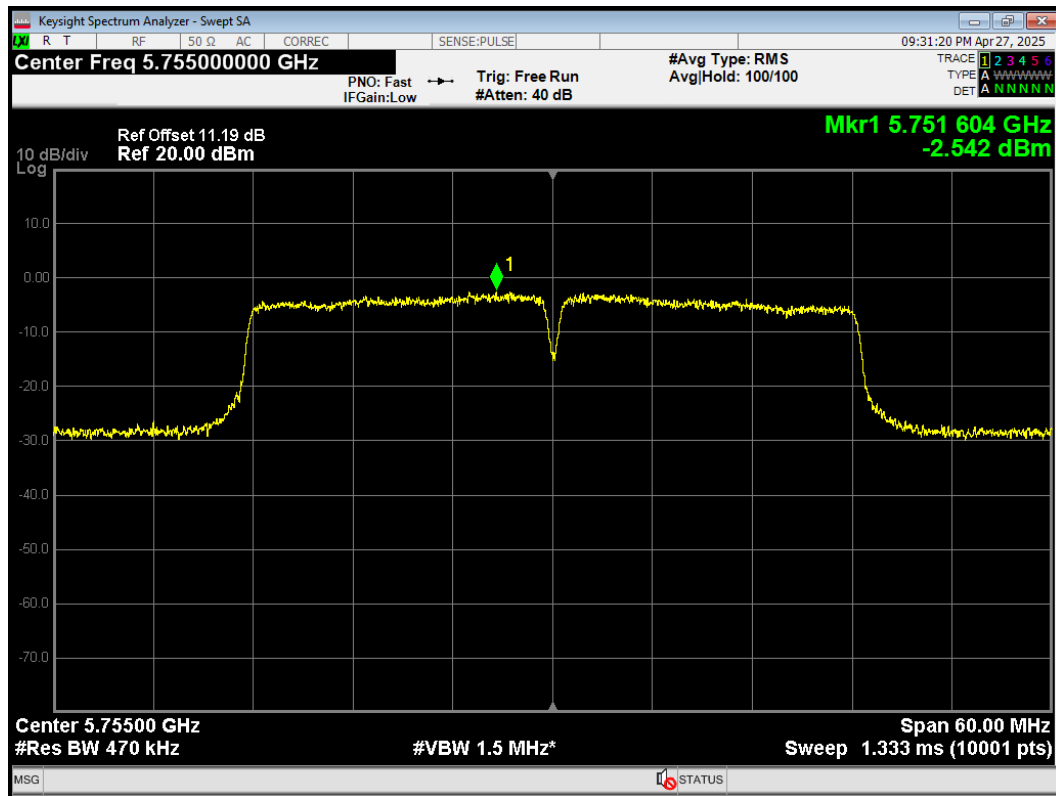
PSD 802.11n(HT20) 5785MHz



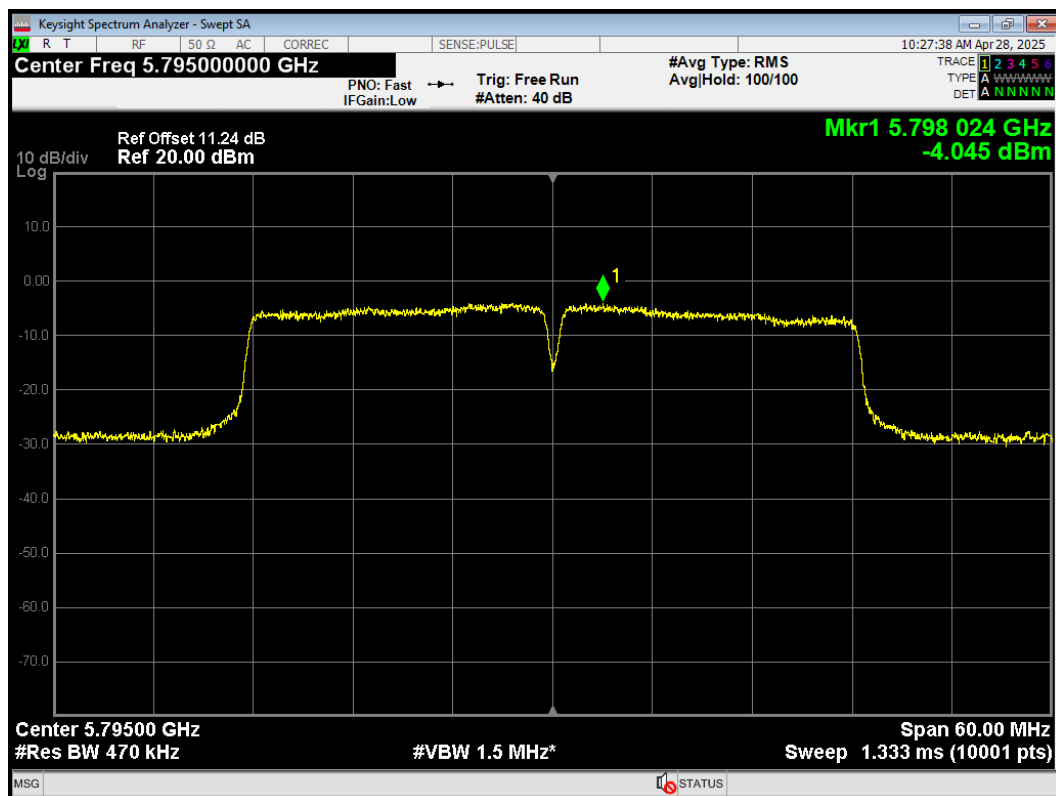
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PSD 802.11n(HT40) 5755MHz



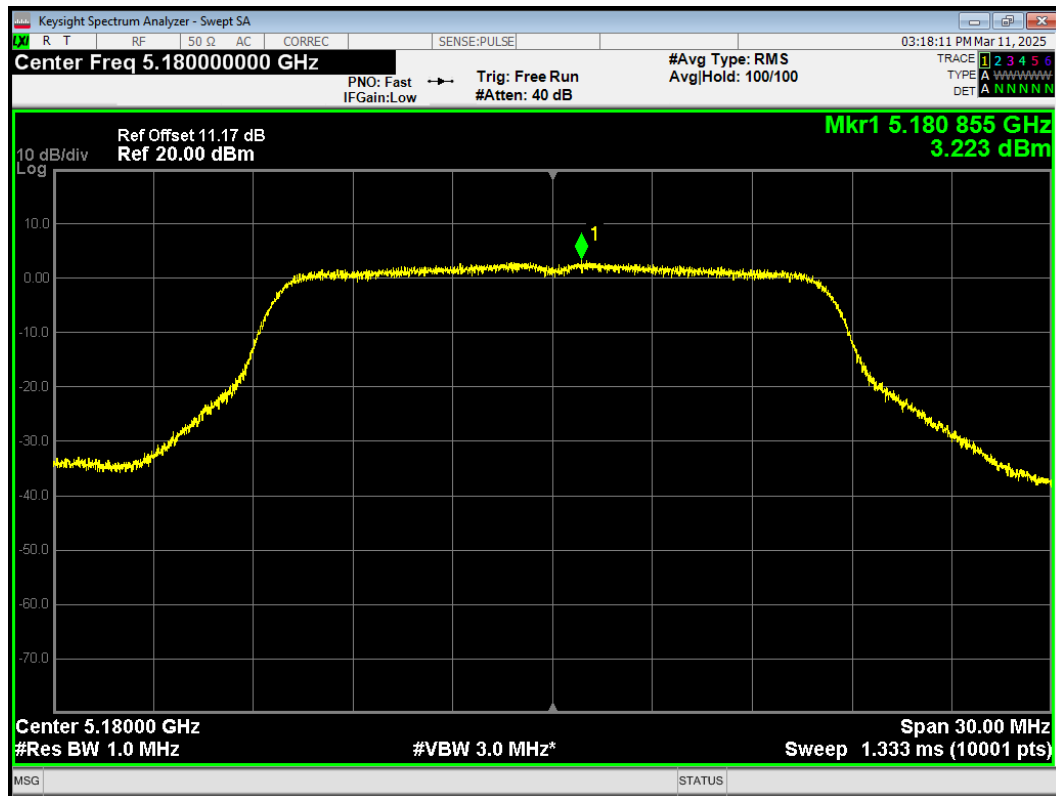
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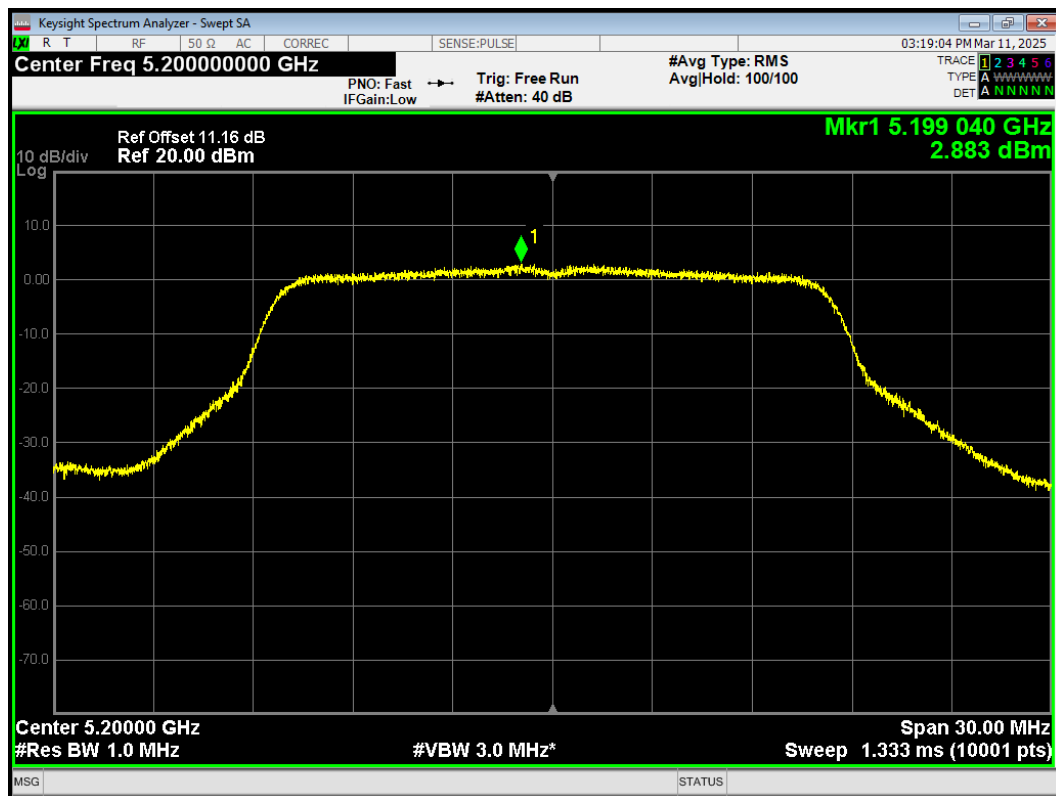
SISO Antenna 2

U-NII-1

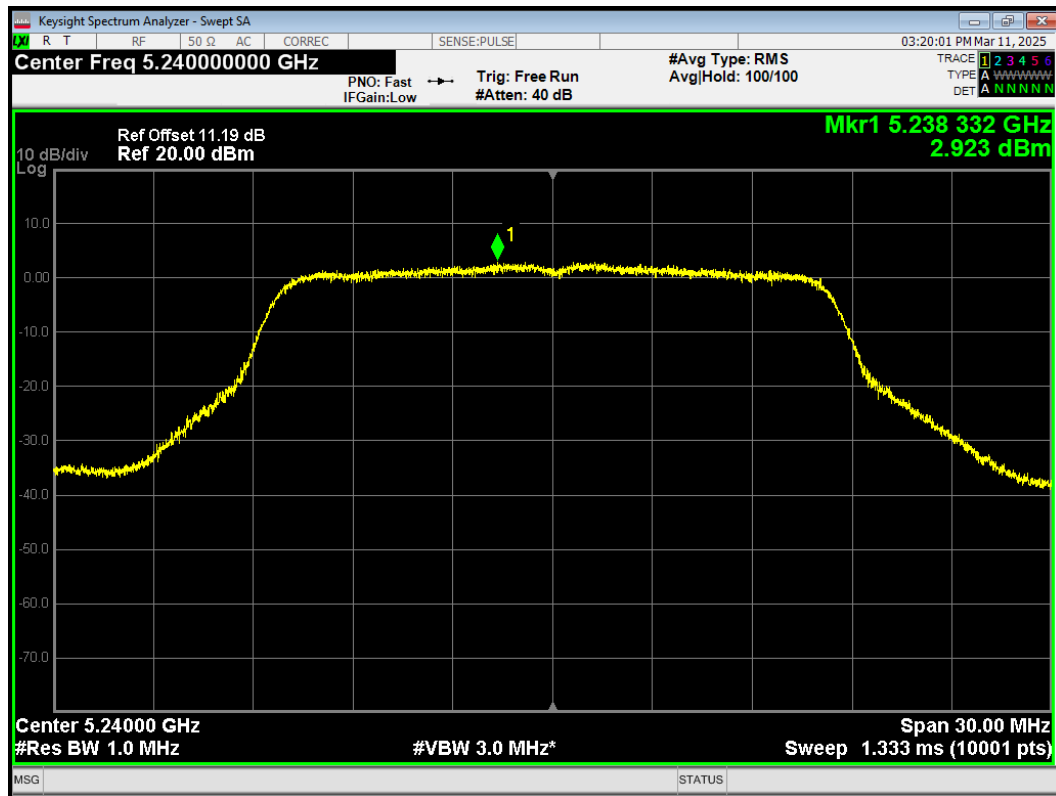
PSD 802.11a 5180MHz



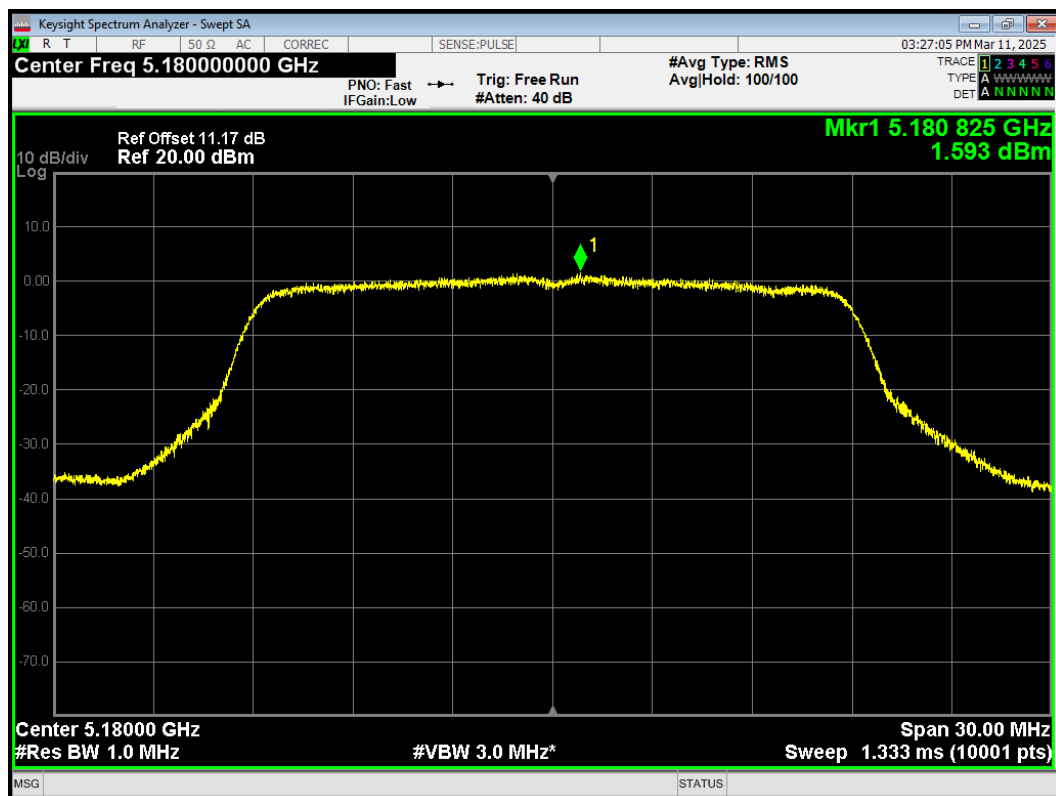
PSD 802.11a 5200MHz



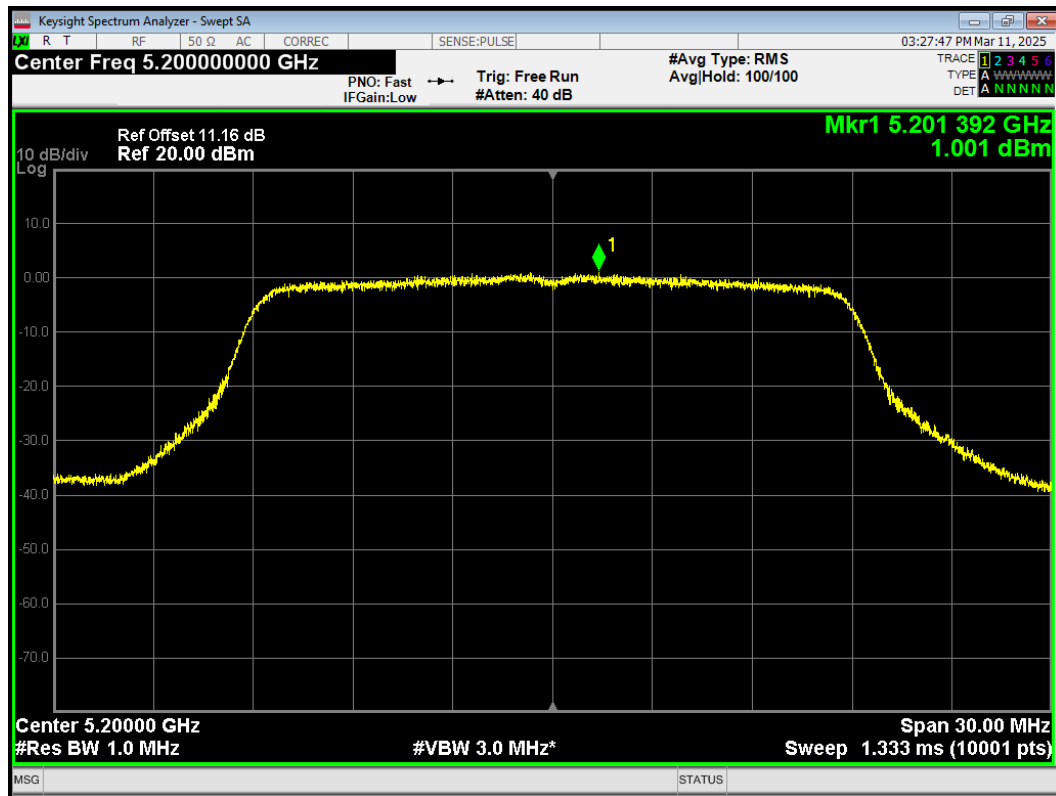
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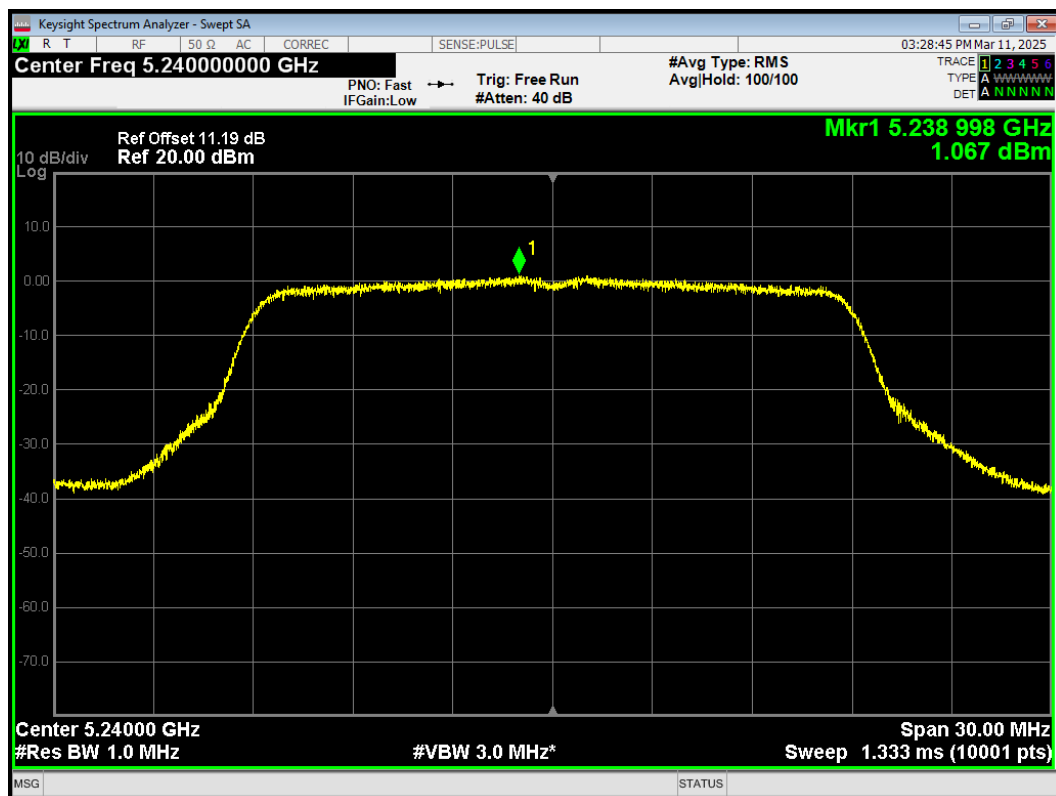
PSD 802.11ac(VHT20) 5180MHz



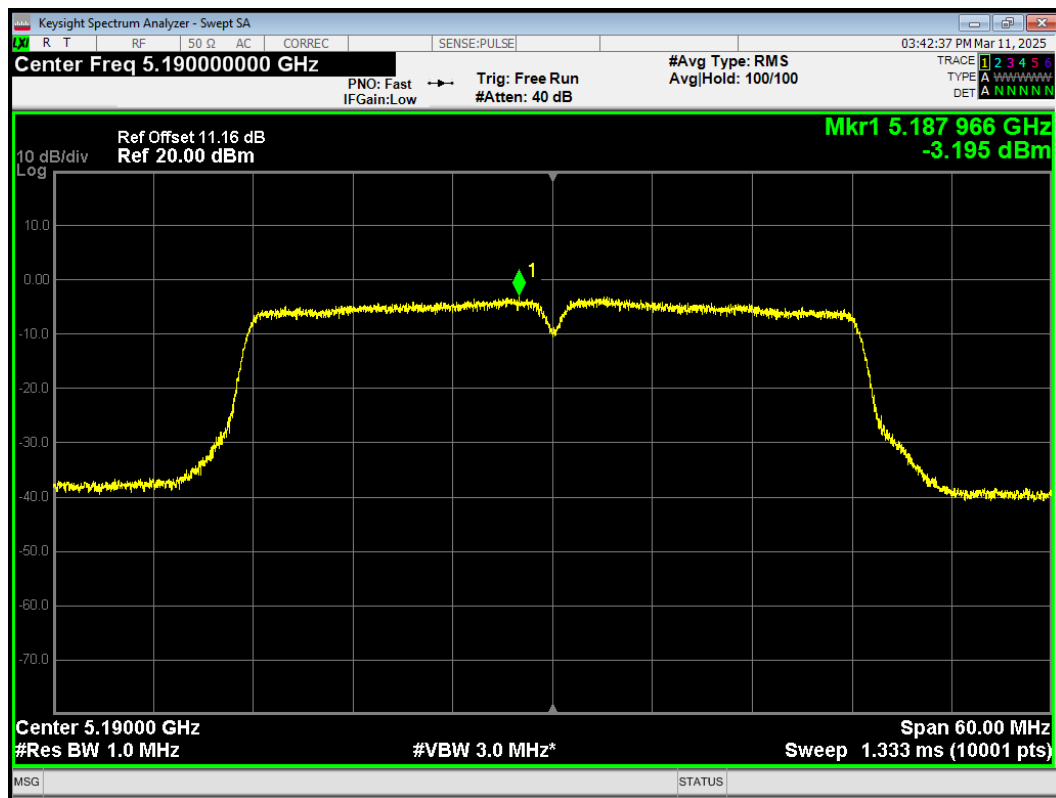
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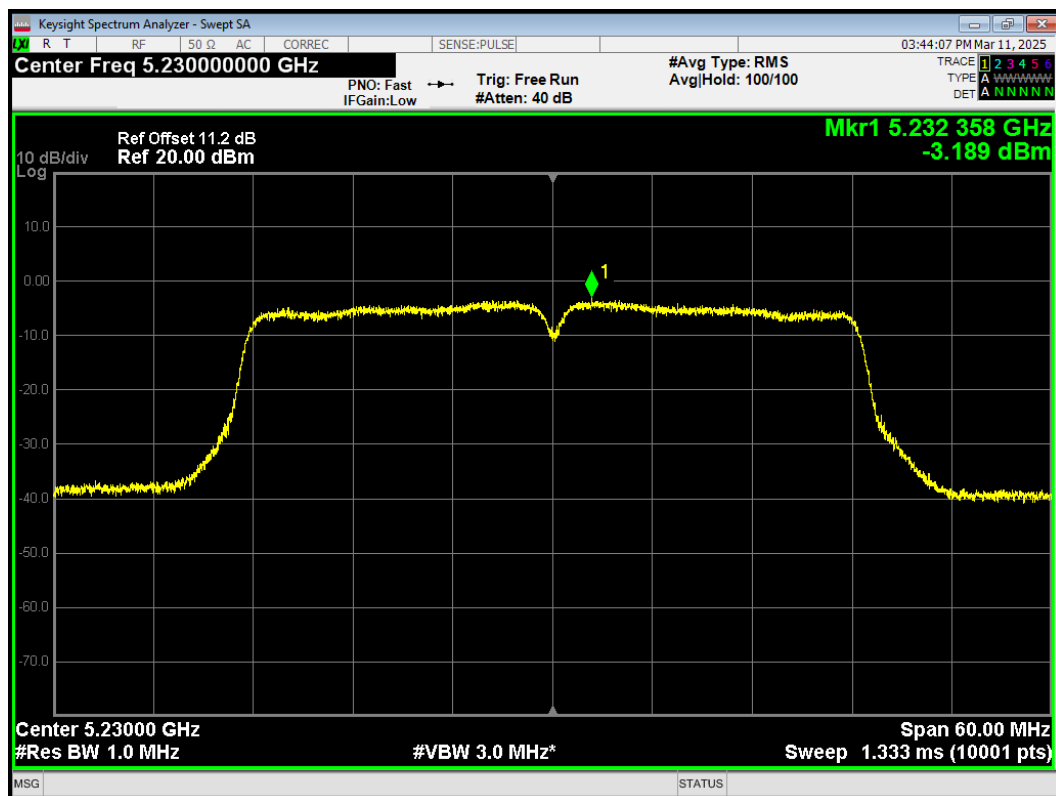
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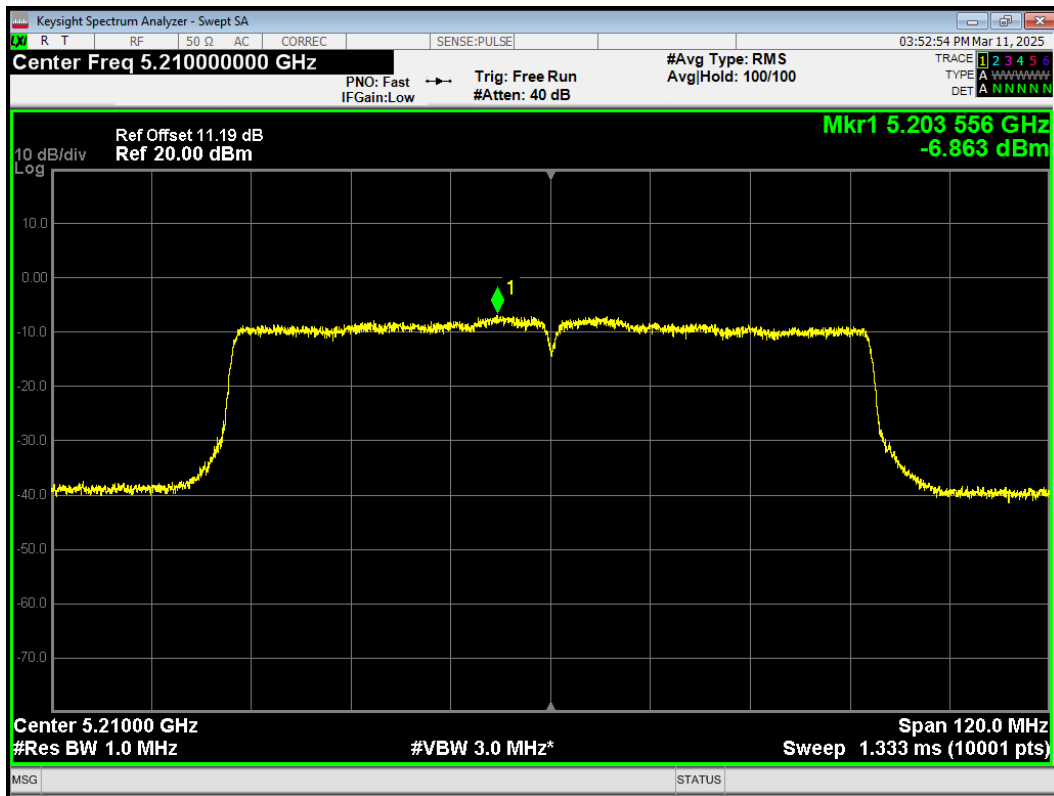
PSD 802.11ac(VHT40) 5190MHz



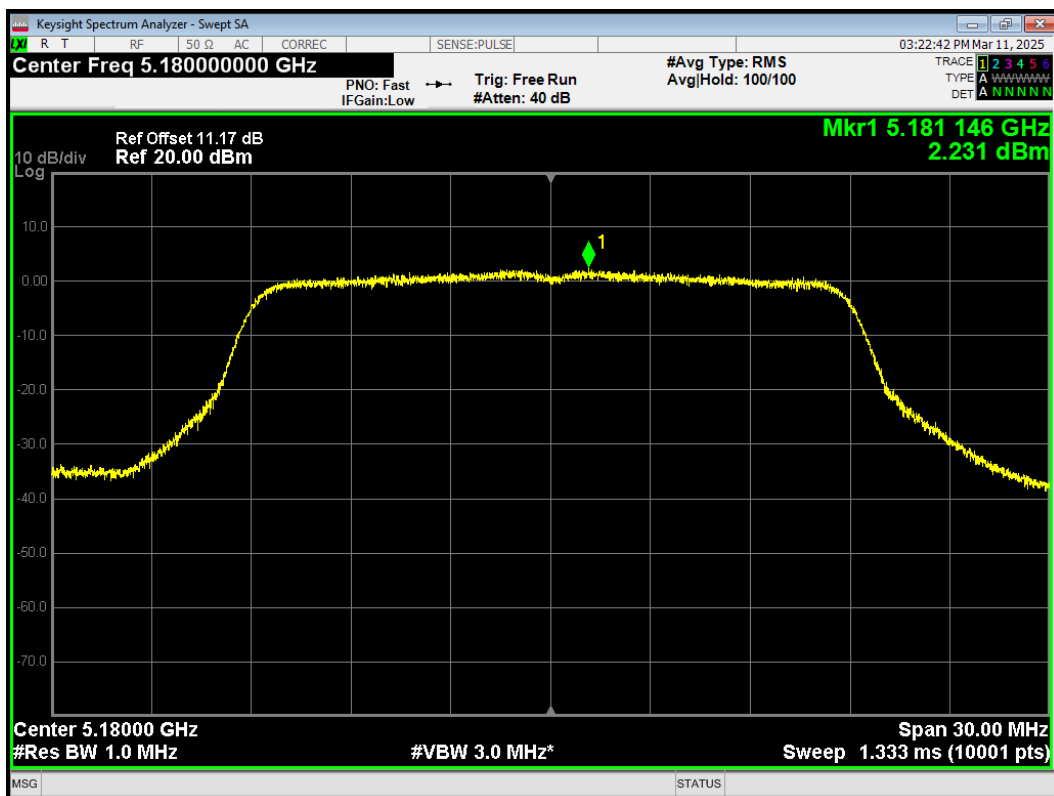
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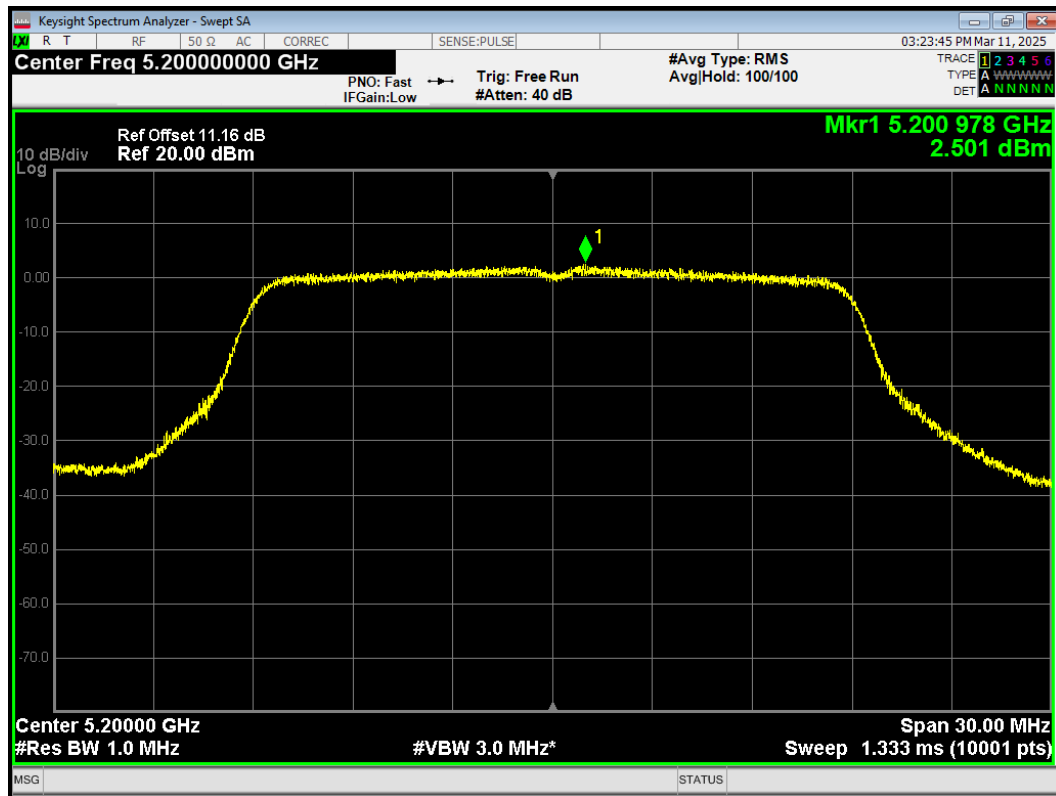
PSD 802.11ac(VHT80) 5210MHz



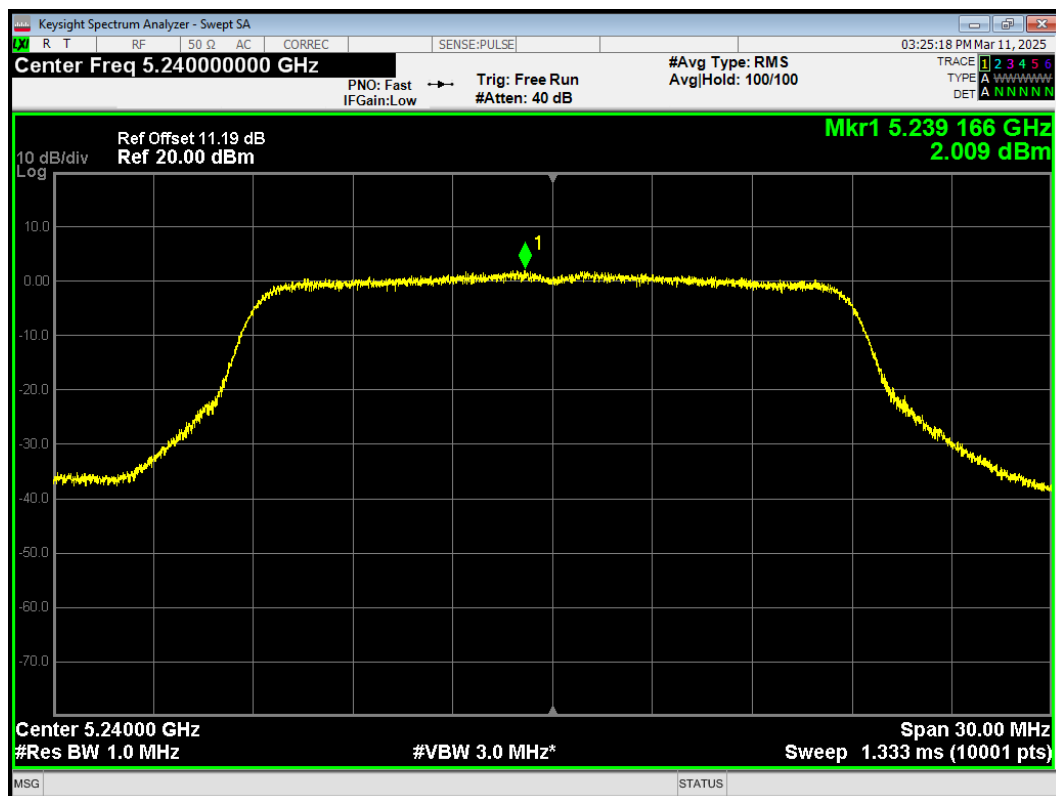
PSD 802.11n(HT20) 5180MHz



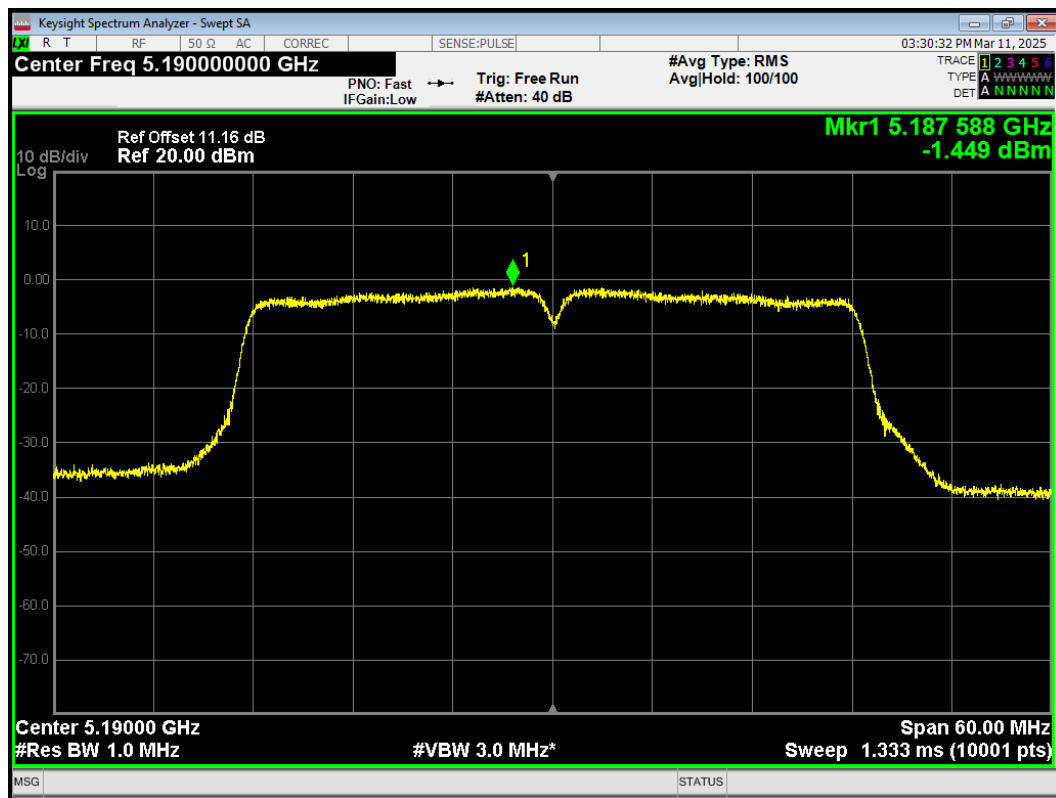
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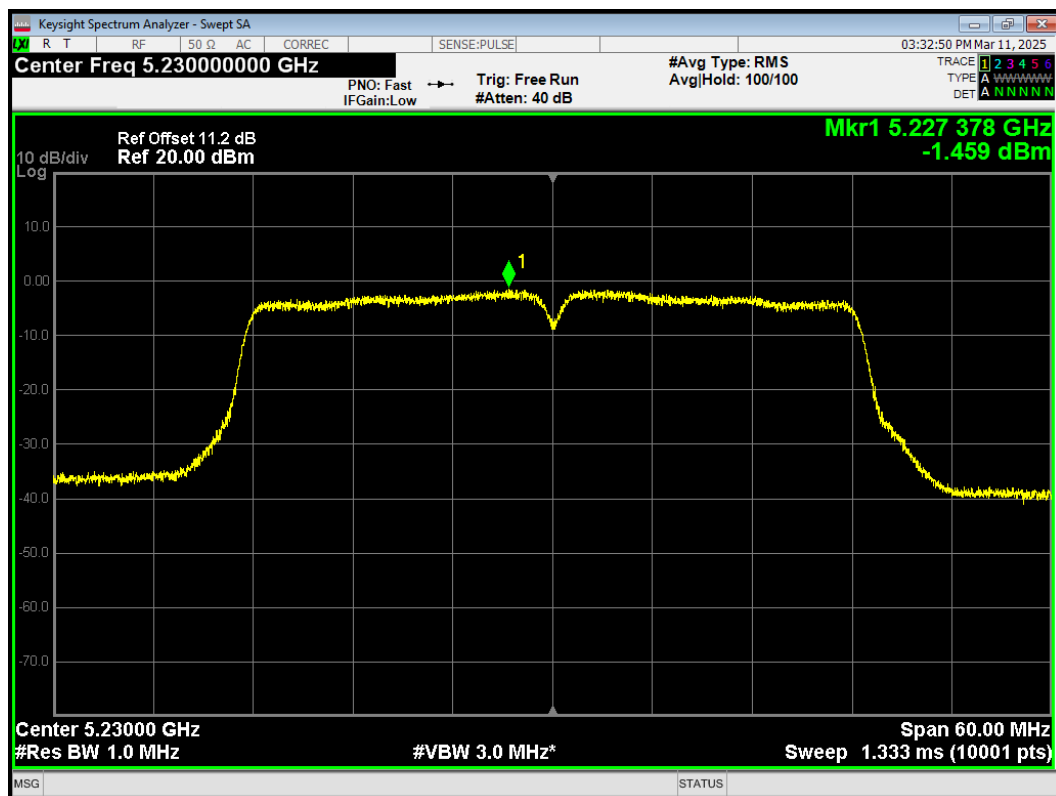
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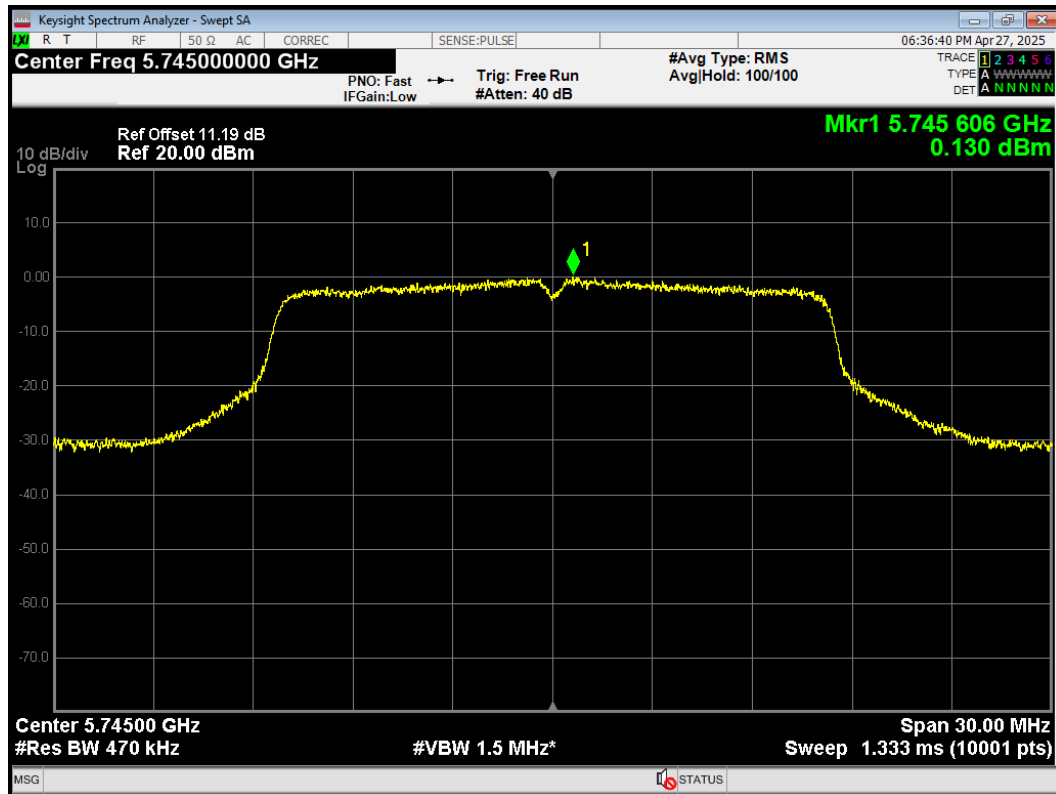
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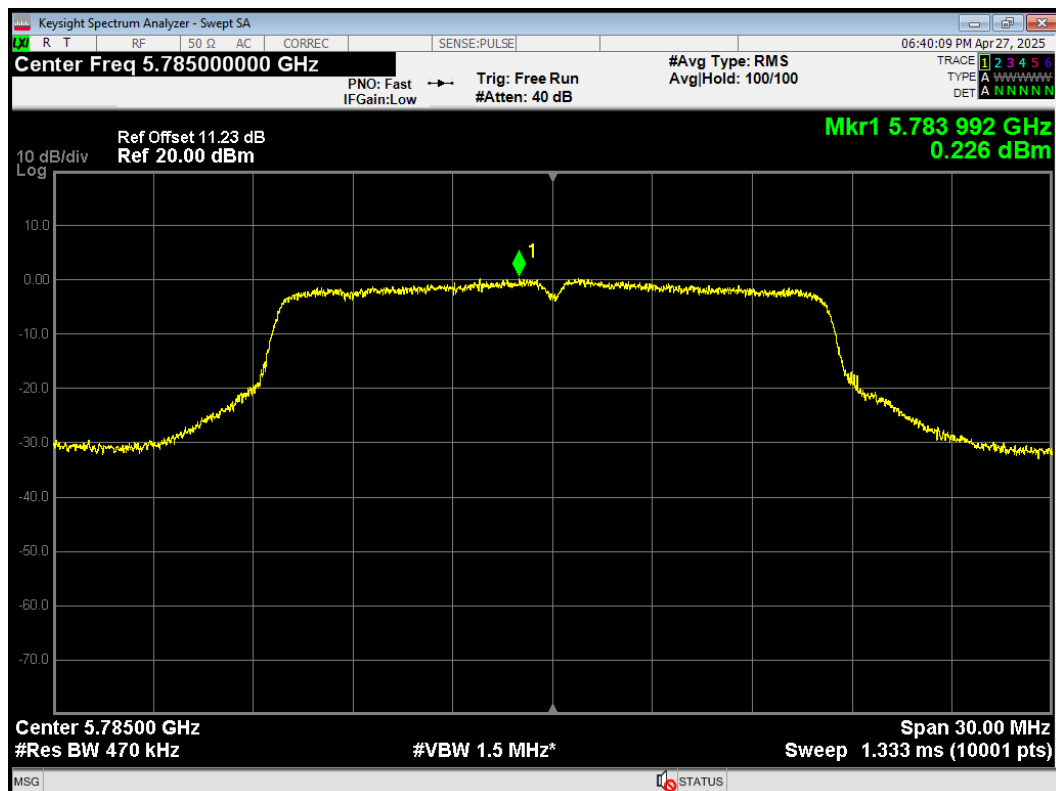
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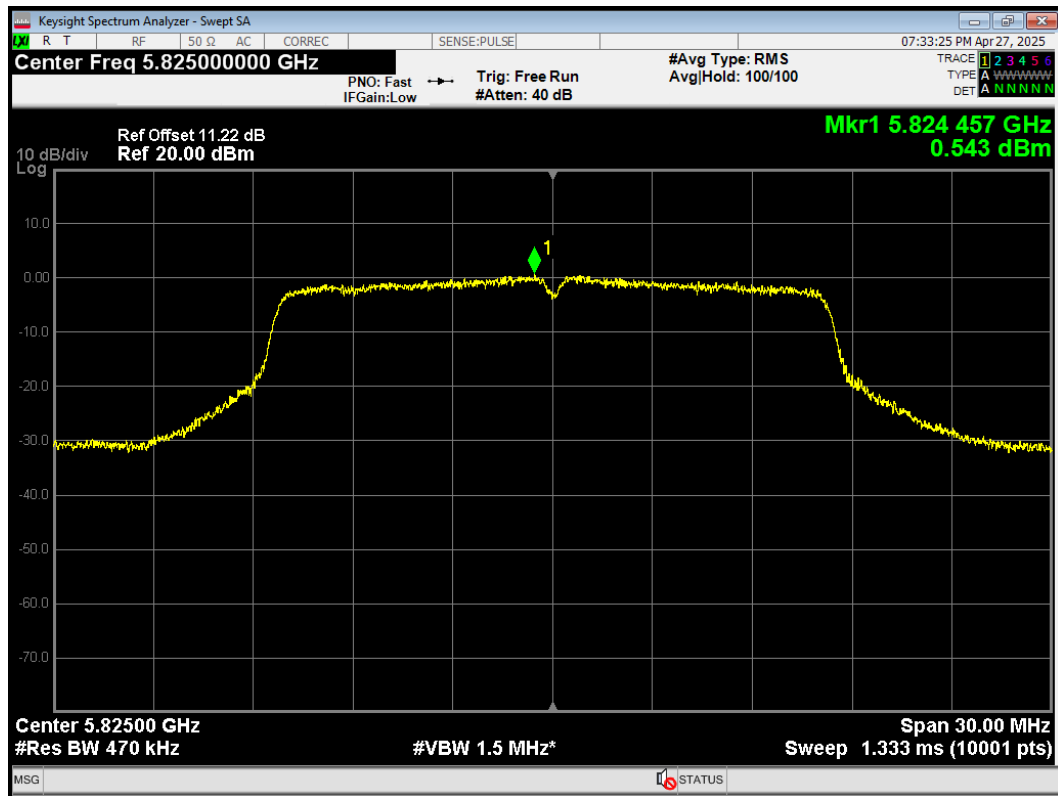
PSD 802.11a 5745MHz



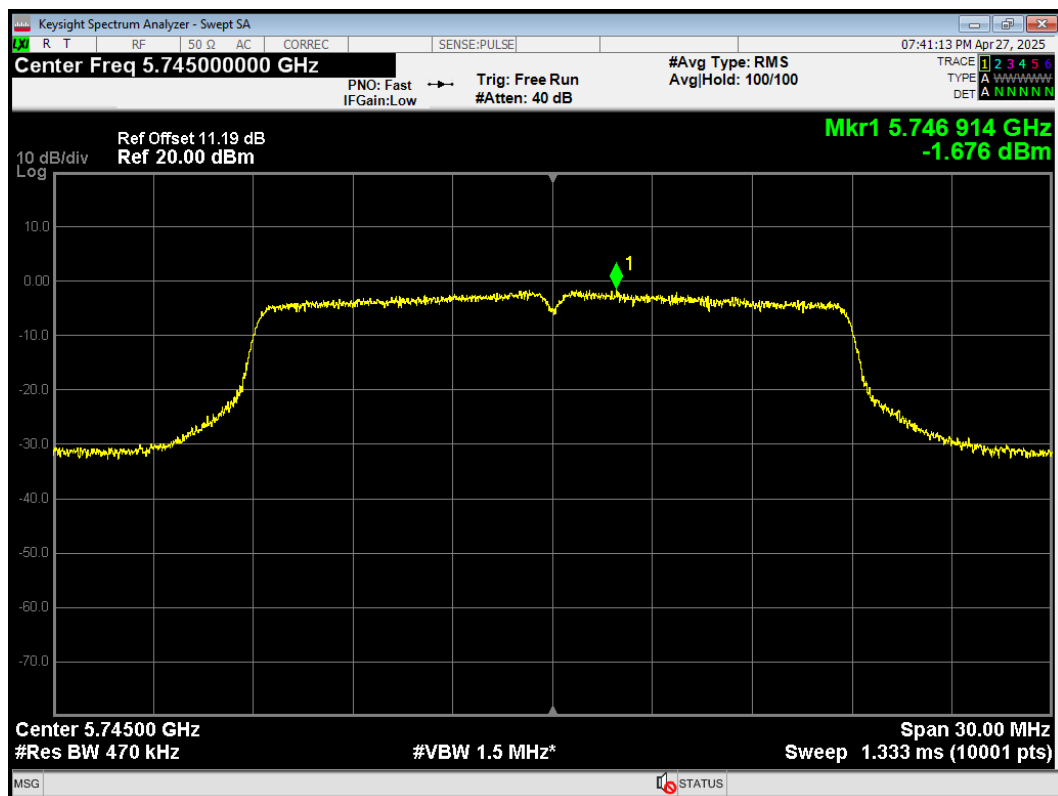
PSD 802.11a 5785MHz



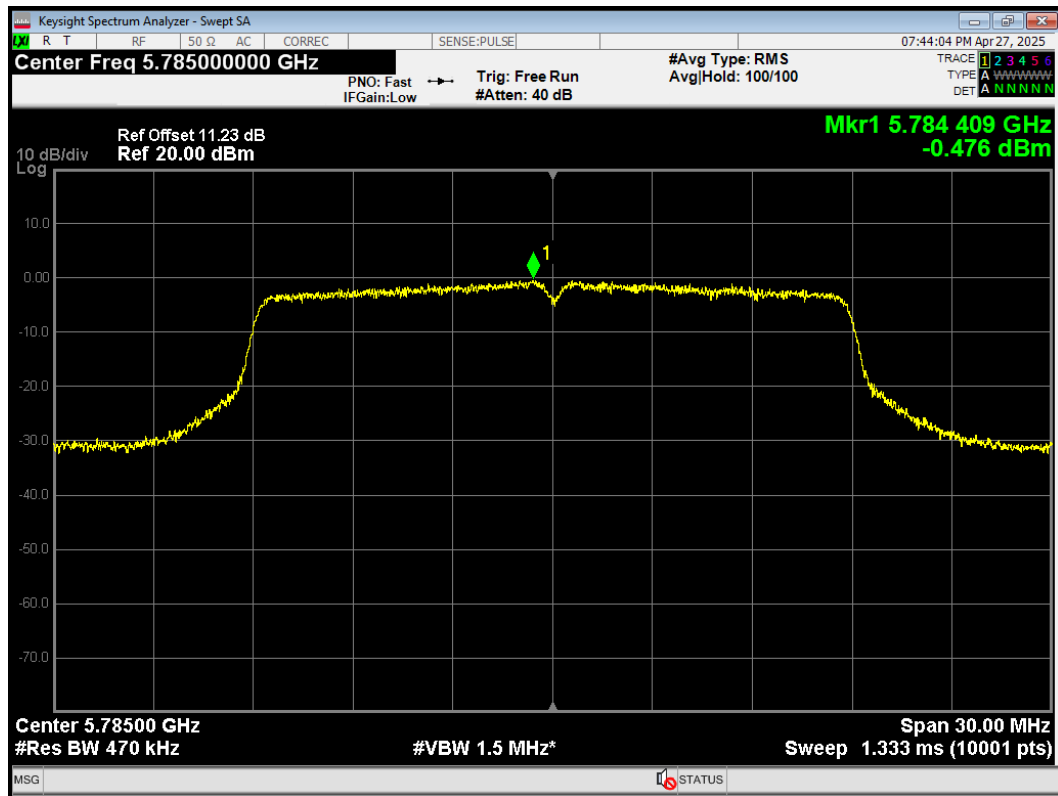
PSD 802.11a 5825MHz



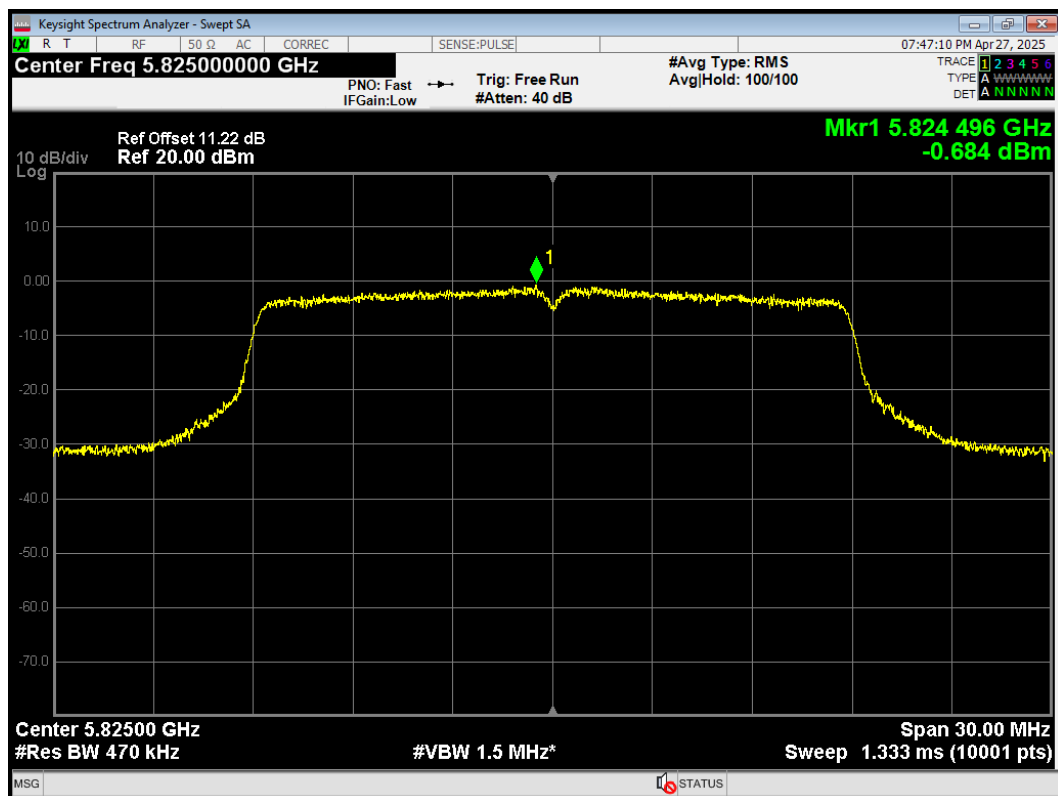
PSD 802.11ac(VHT20) 5745MHz



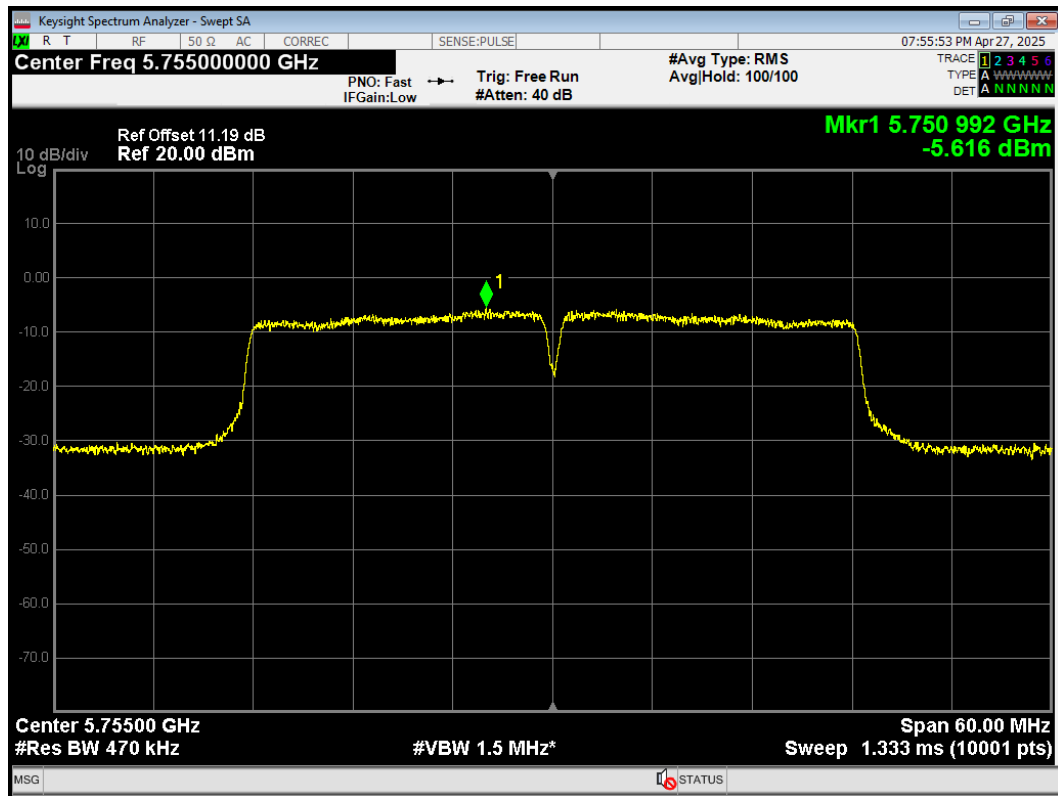
PSD 802.11ac(VHT20) 5785MHz



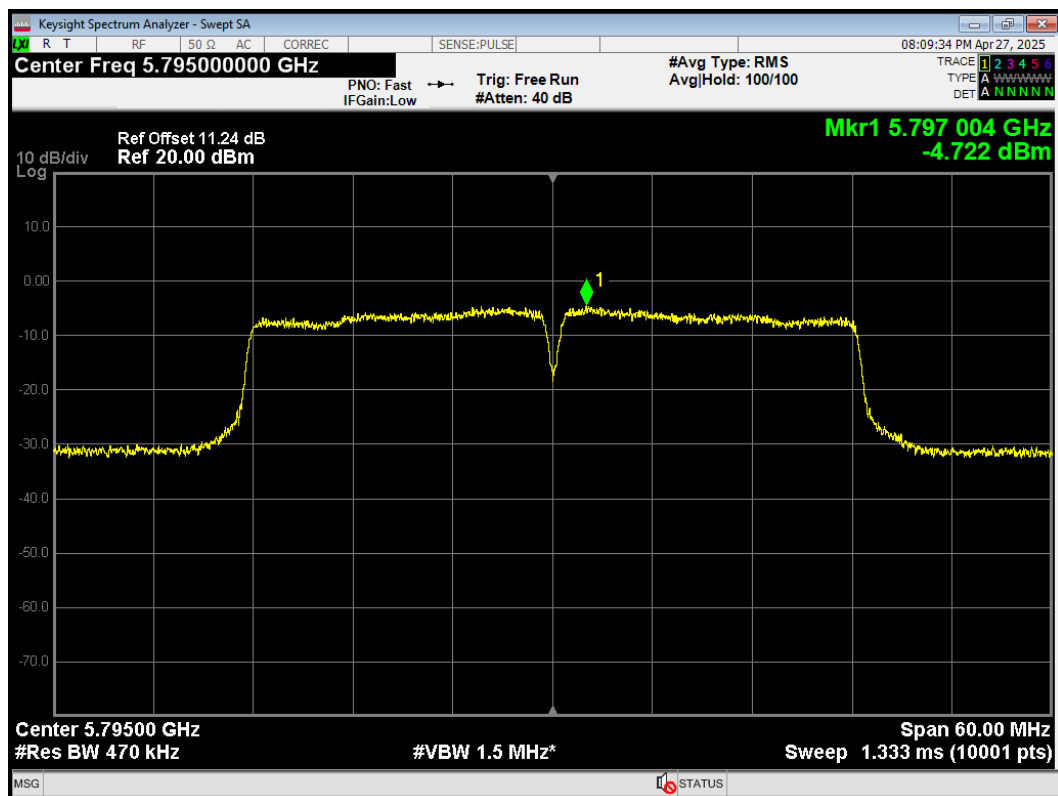
PSD 802.11ac(VHT20) 5825MHz



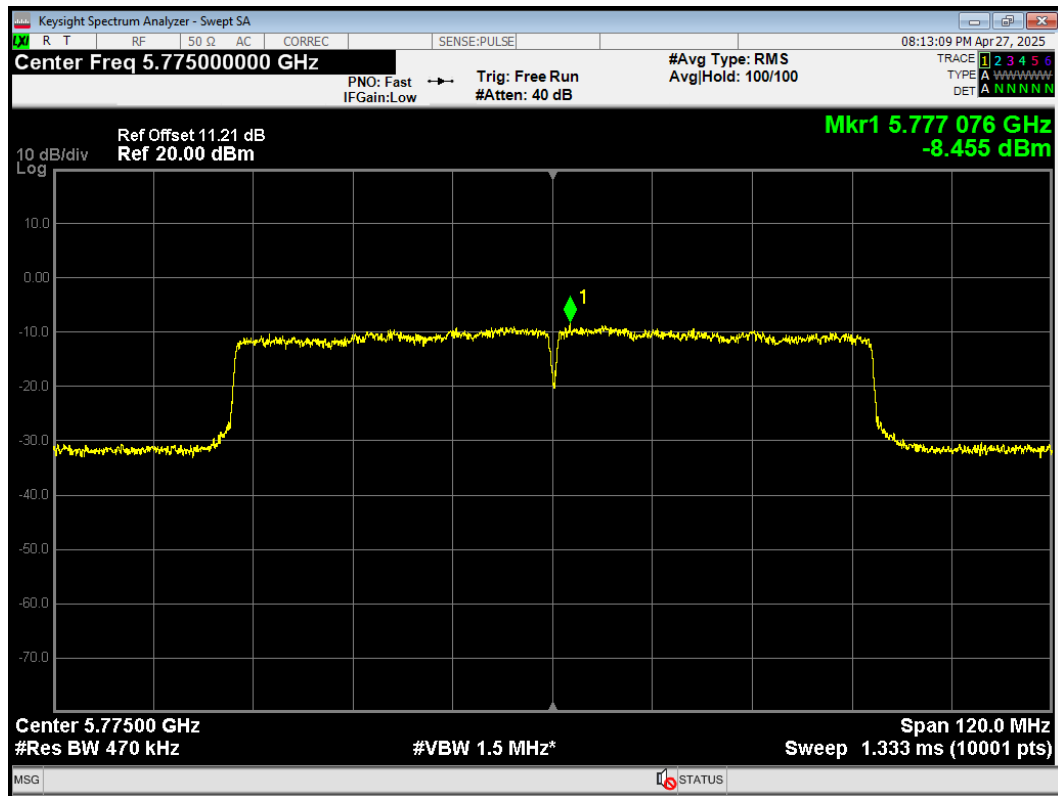
PSD 802.11ac(VHT40) 5755MHz



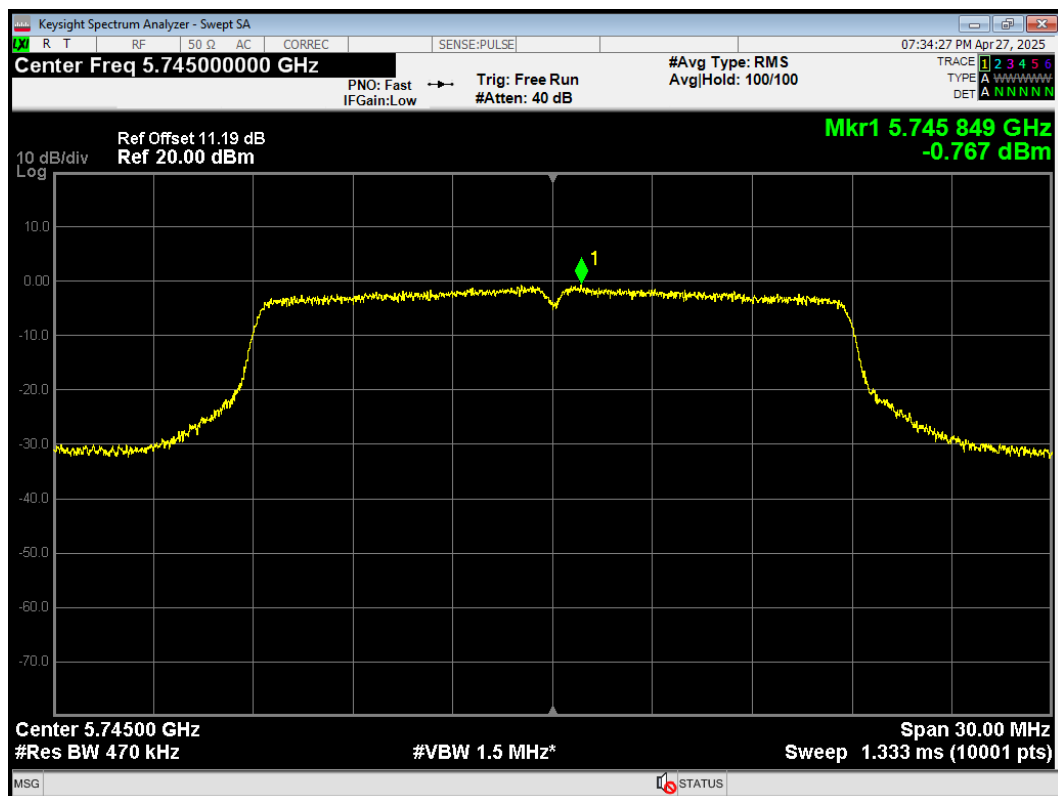
PSD 802.11ac(VHT40) 5795MHz



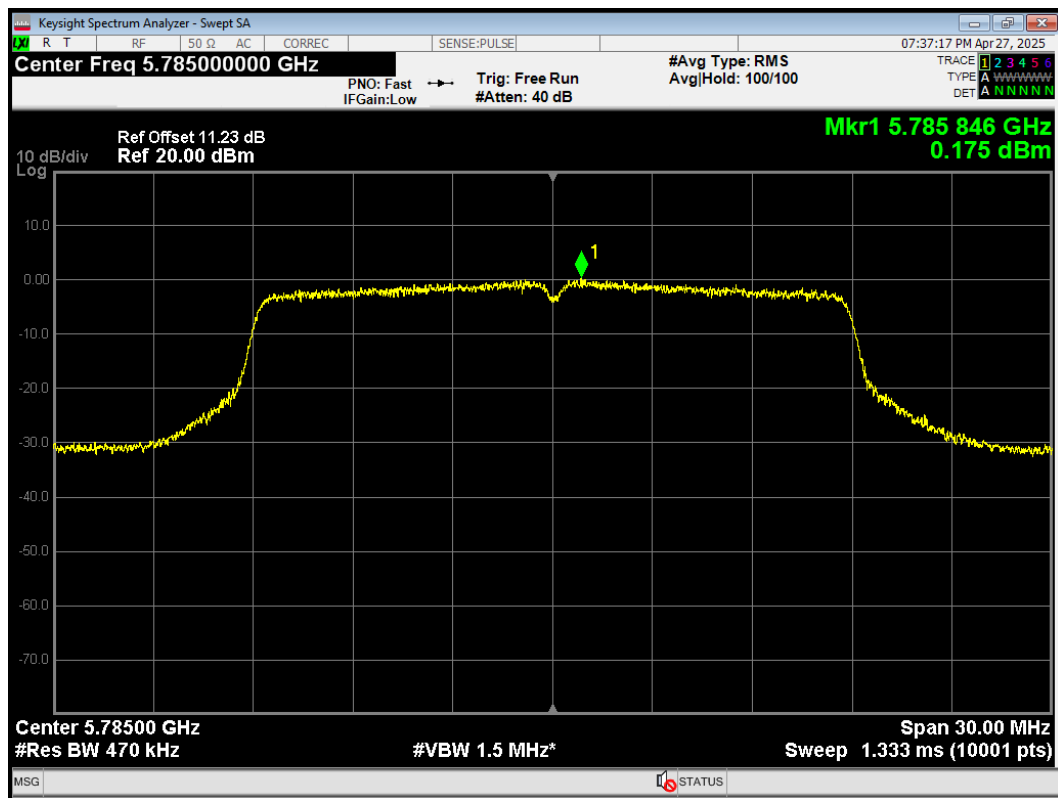
PSD 802.11ac(VHT80) 5775MHz



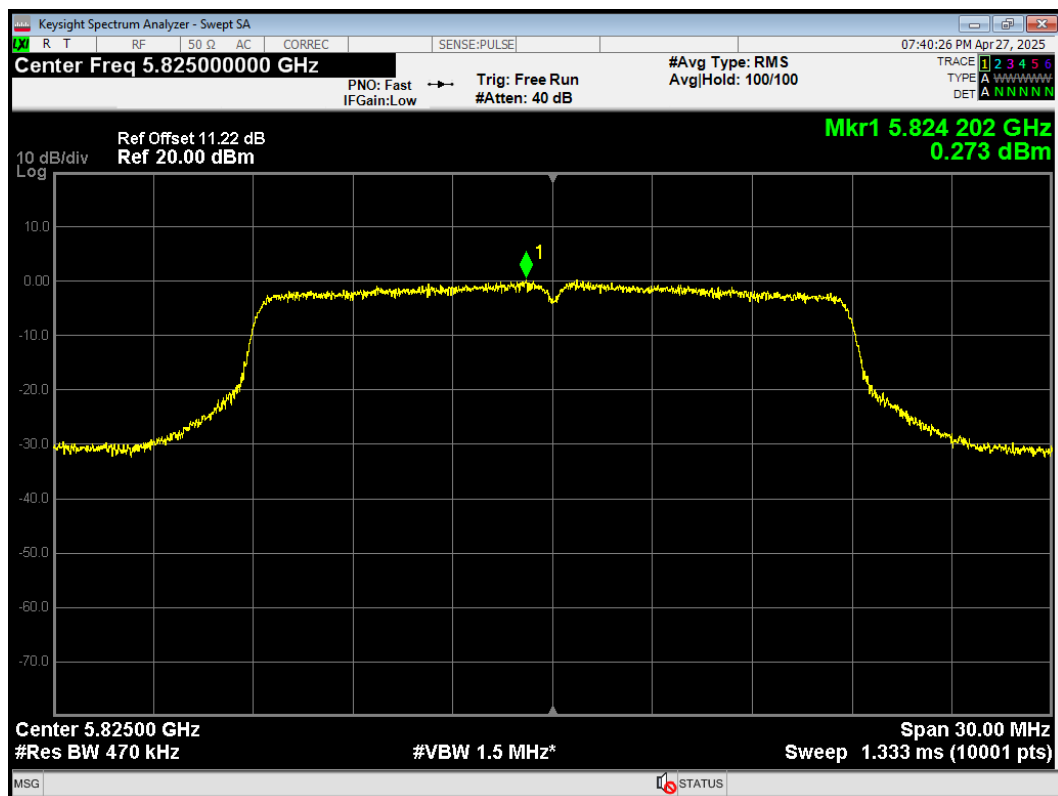
PSD 802.11n(HT20) 5745MHz



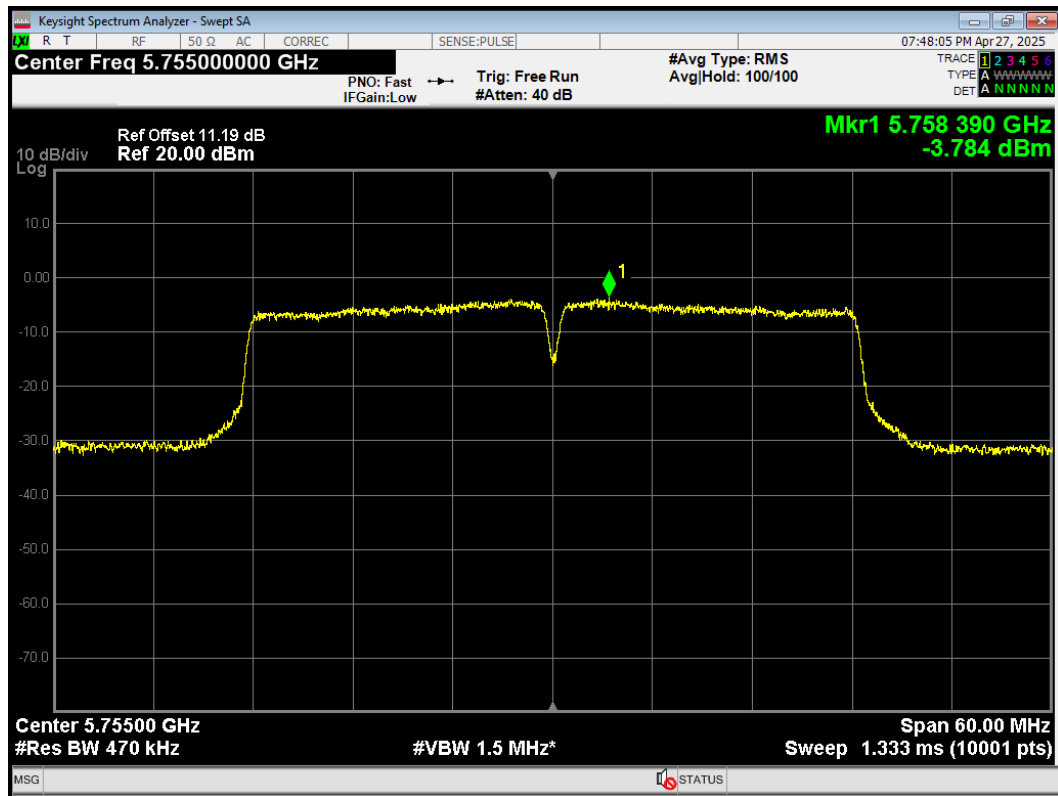
PSD 802.11n(HT20) 5785MHz



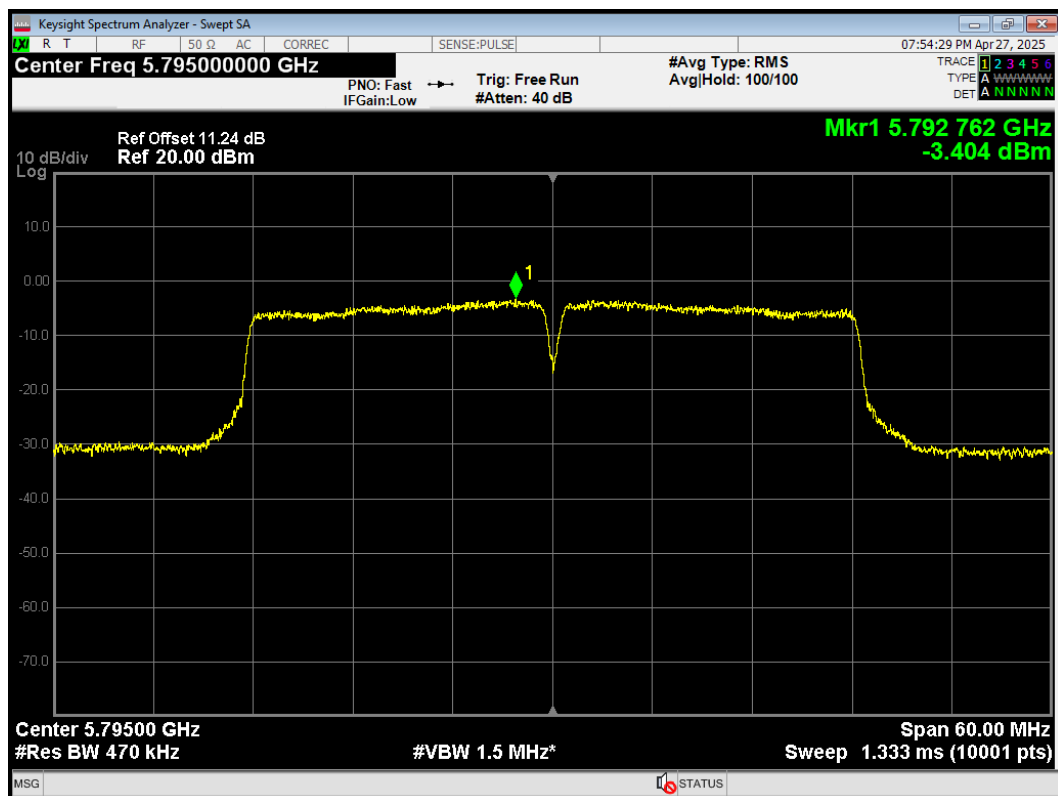
PSD 802.11n(HT20) 5825MHz



PSD 802.11n(HT40) 5755MHz



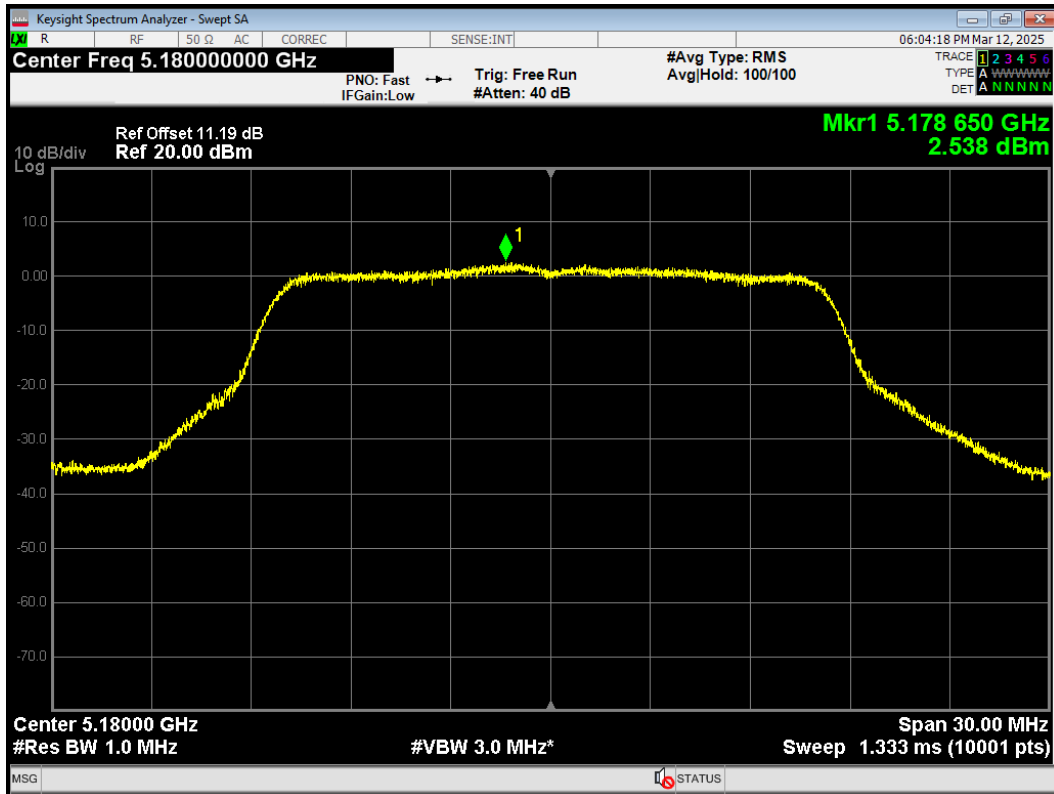
PSD 802.11n(HT40) 5795MHz



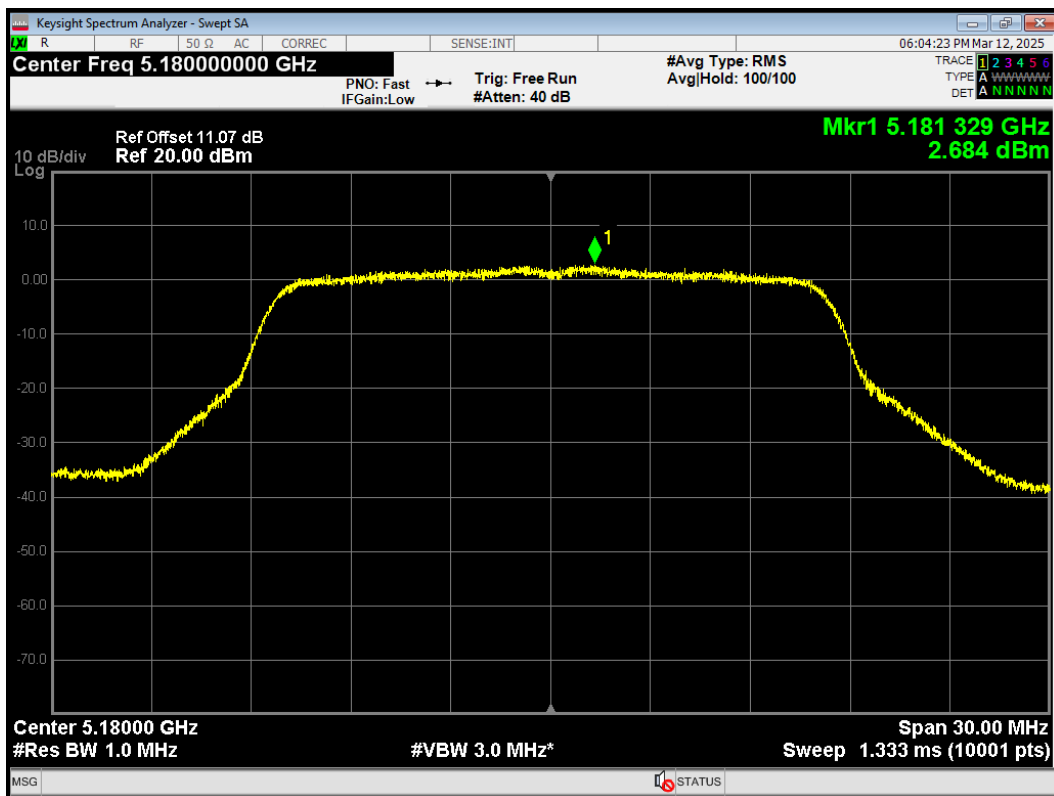
MIMO

U-NII-1

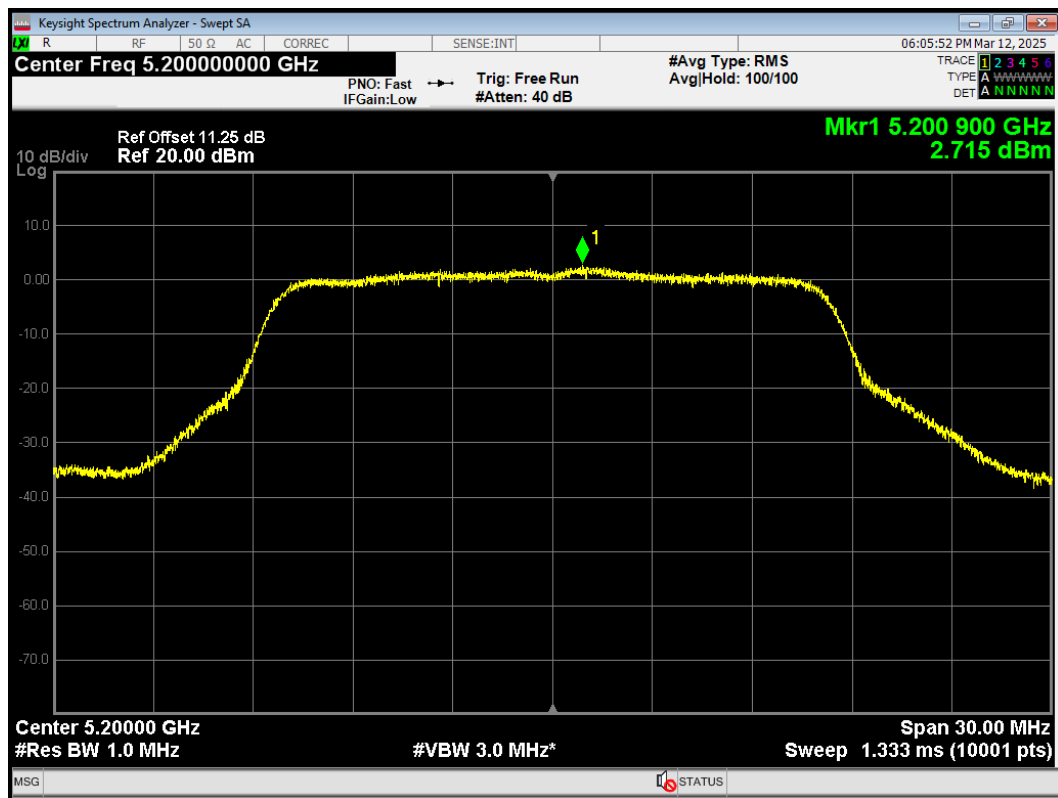
PSD 802.11a 5180MHz Ant1



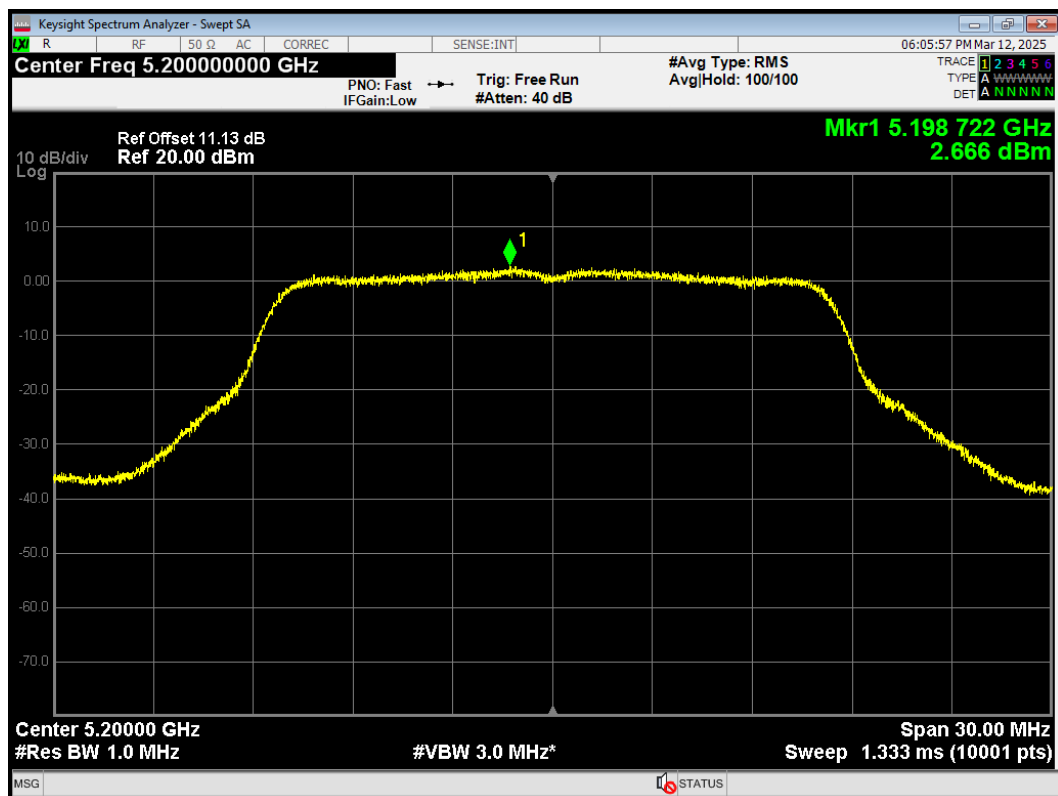
PSD 802.11a 5180MHz Ant2



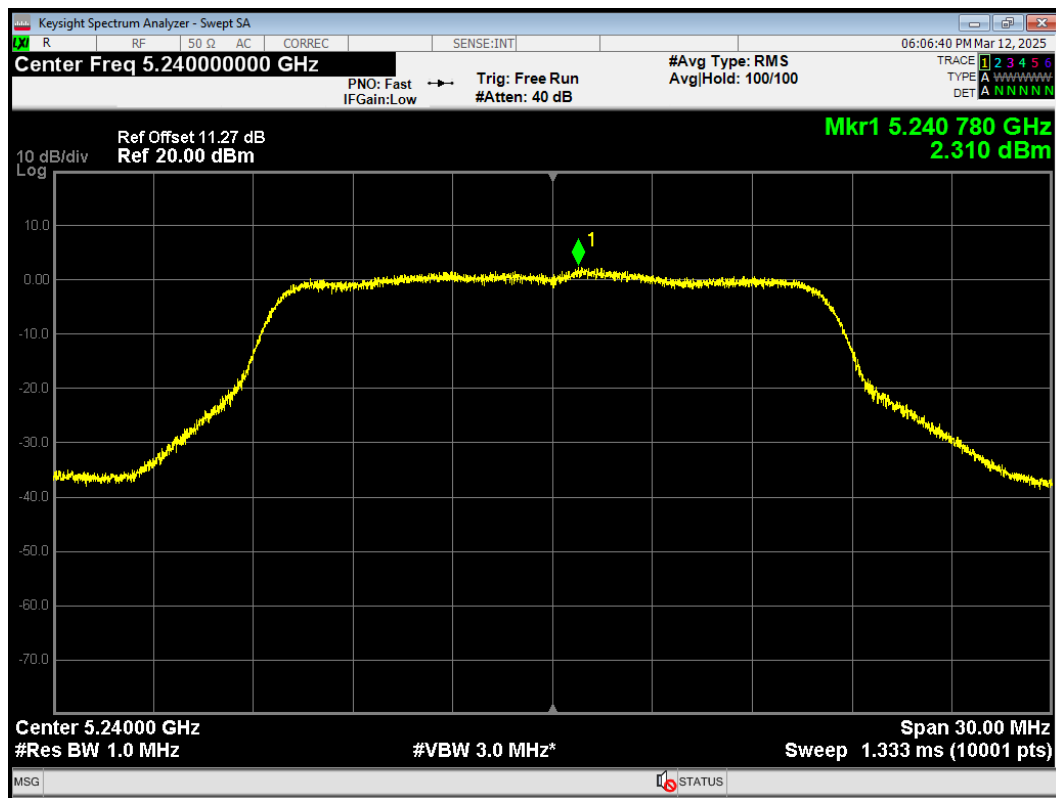
PSD 802.11a 5200MHz Ant1



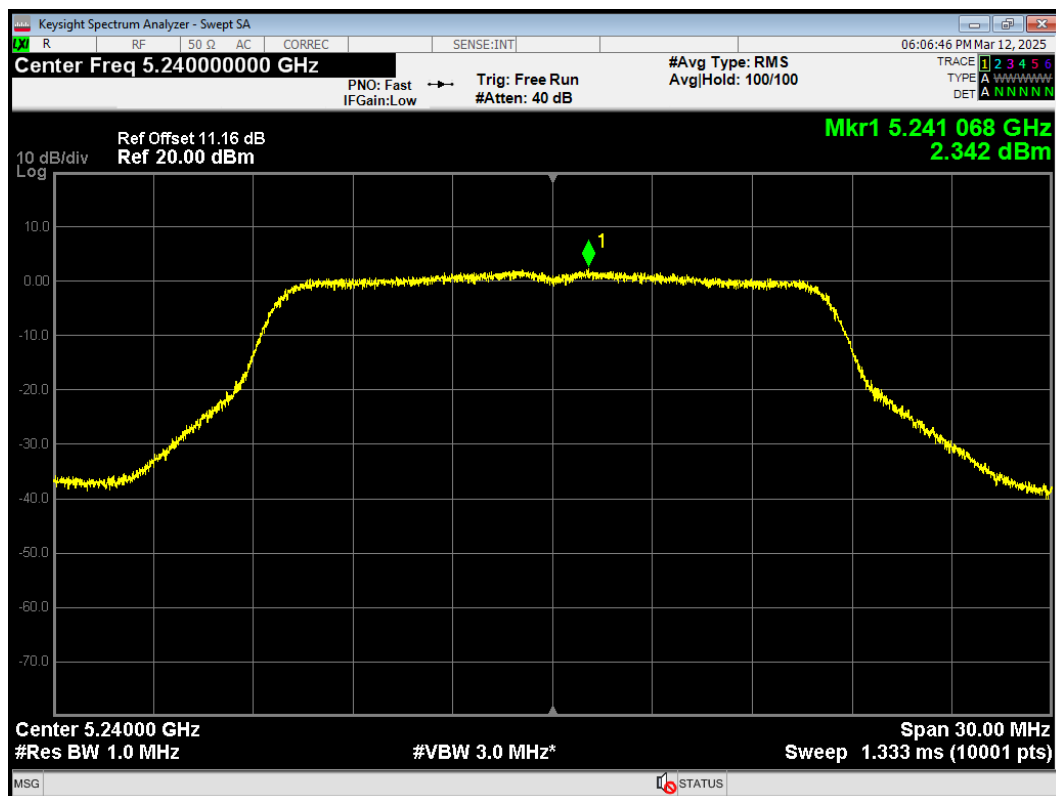
PSD 802.11a 5200MHz Ant2



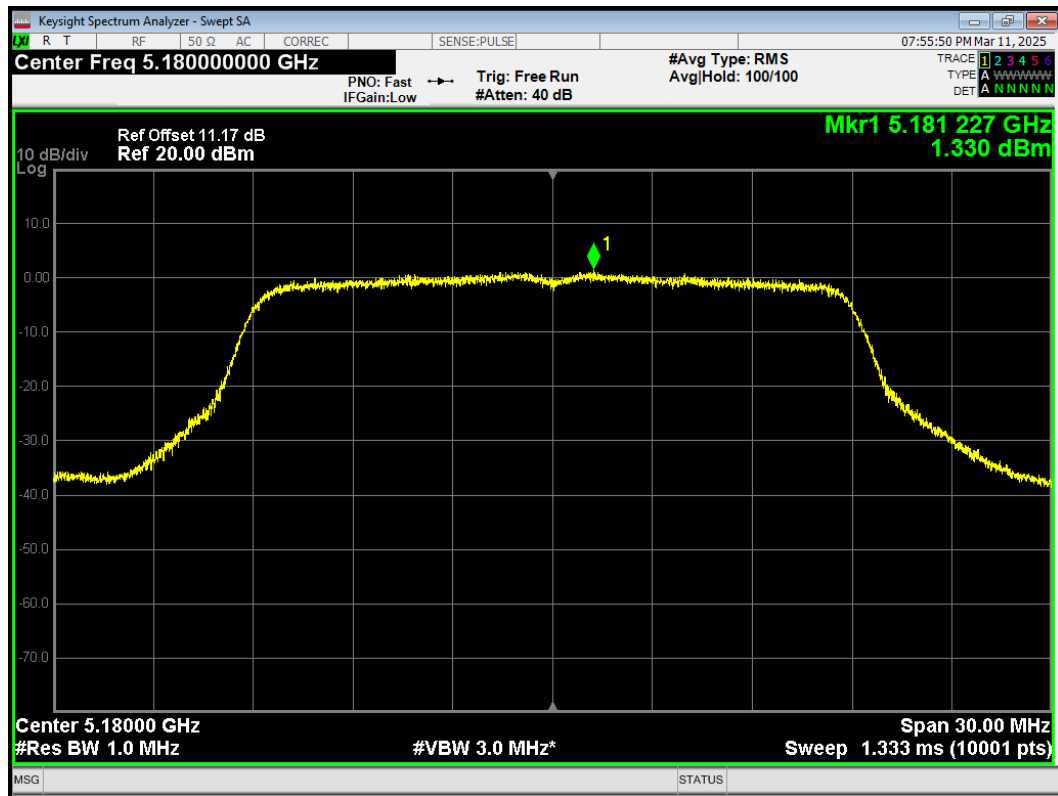
PSD 802.11a 5240MHz Ant1



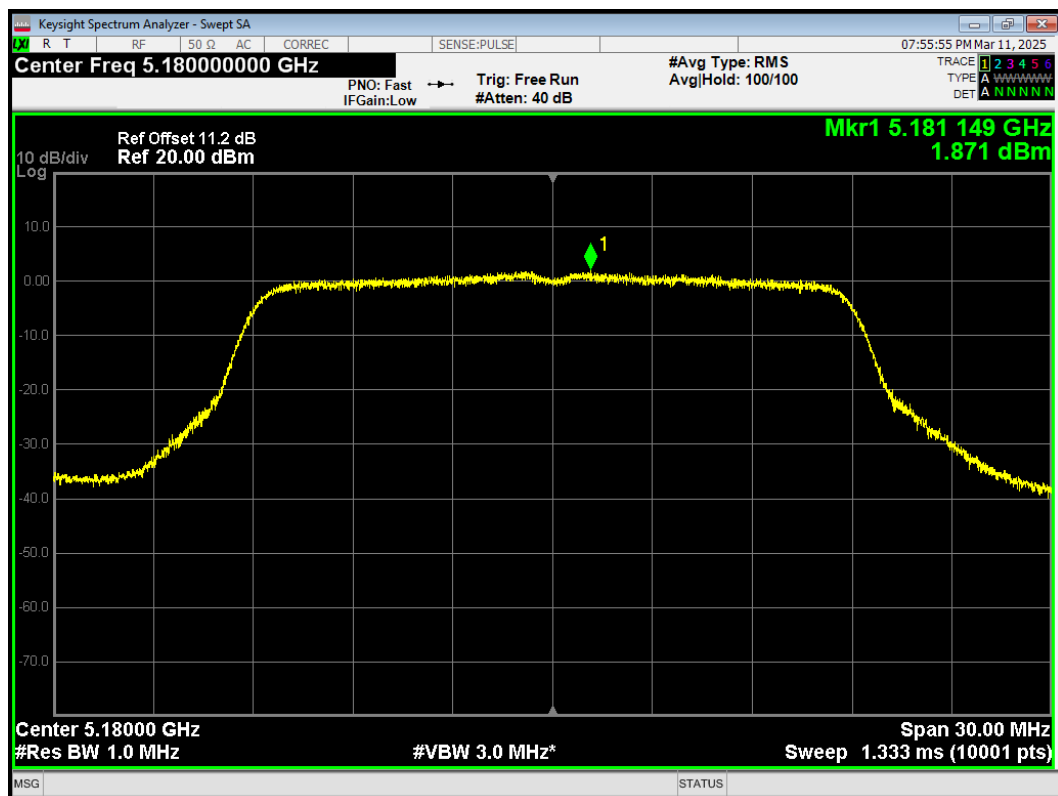
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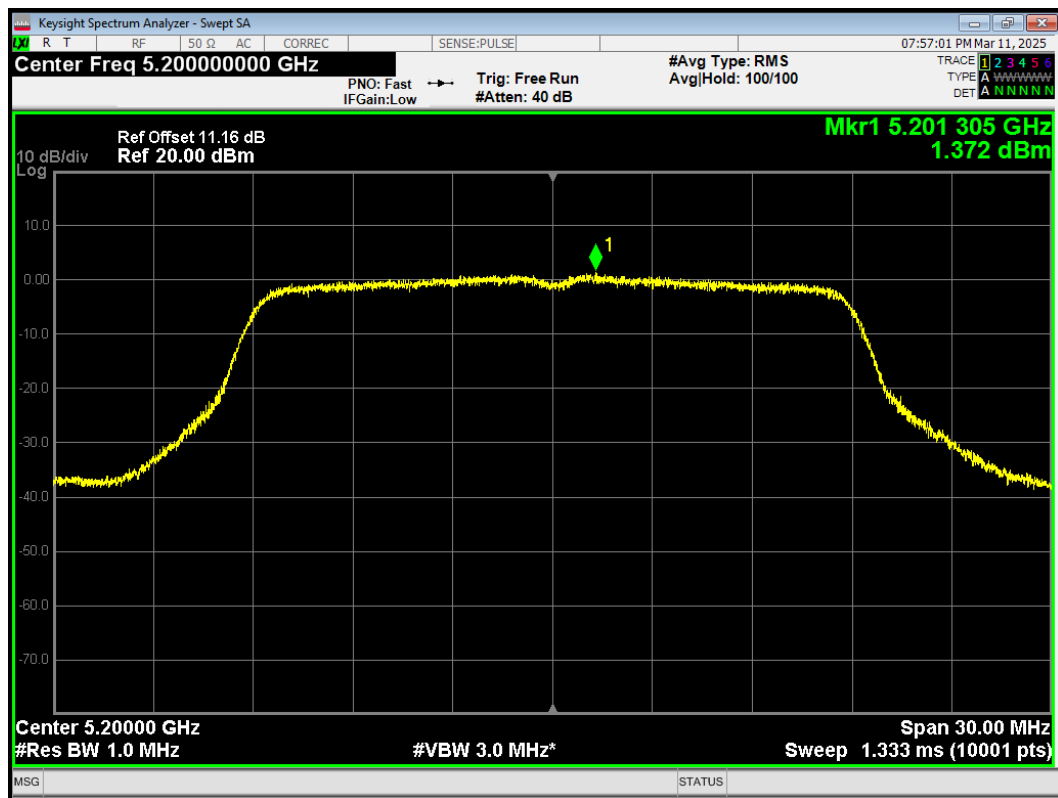
PSD 802.11ac(VHT20) 5180MHz Ant1



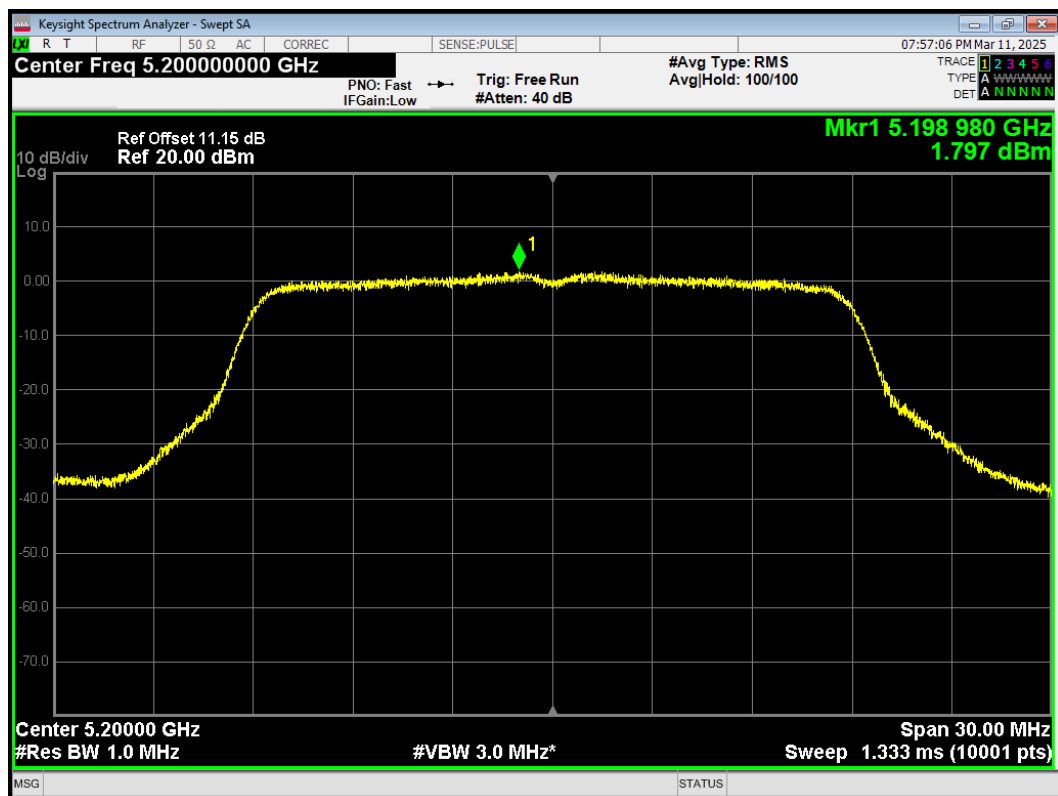
PSD 802.11ac(VHT20) 5180MHz Ant2



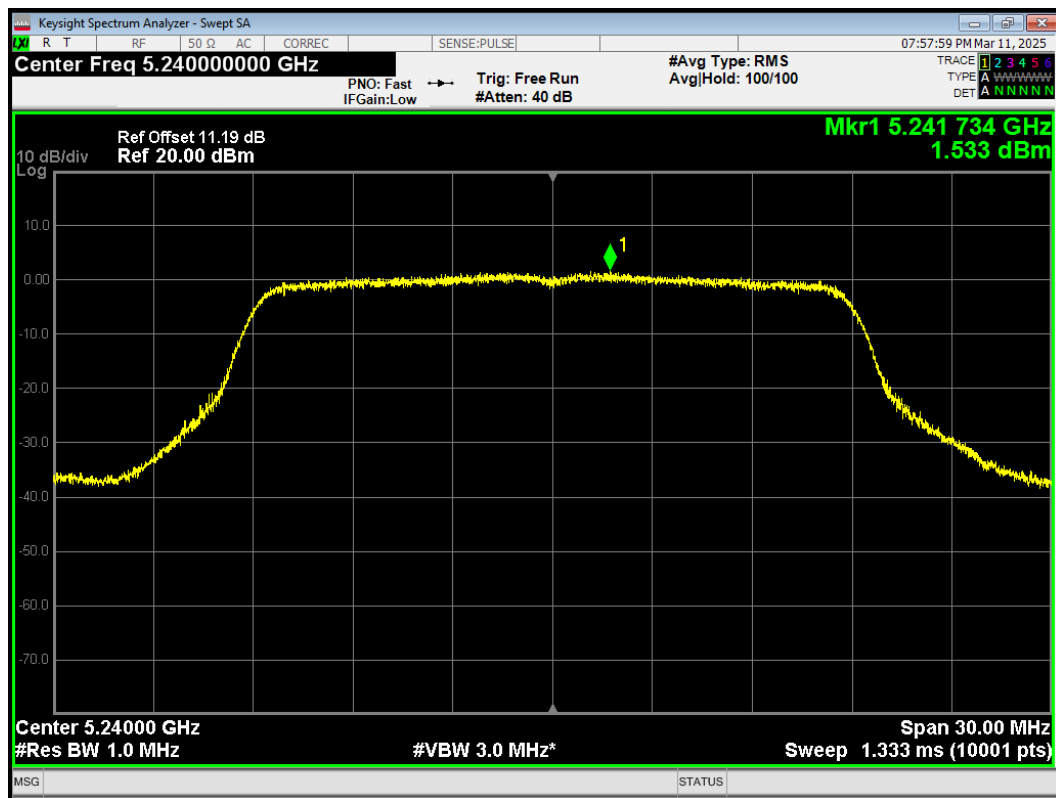
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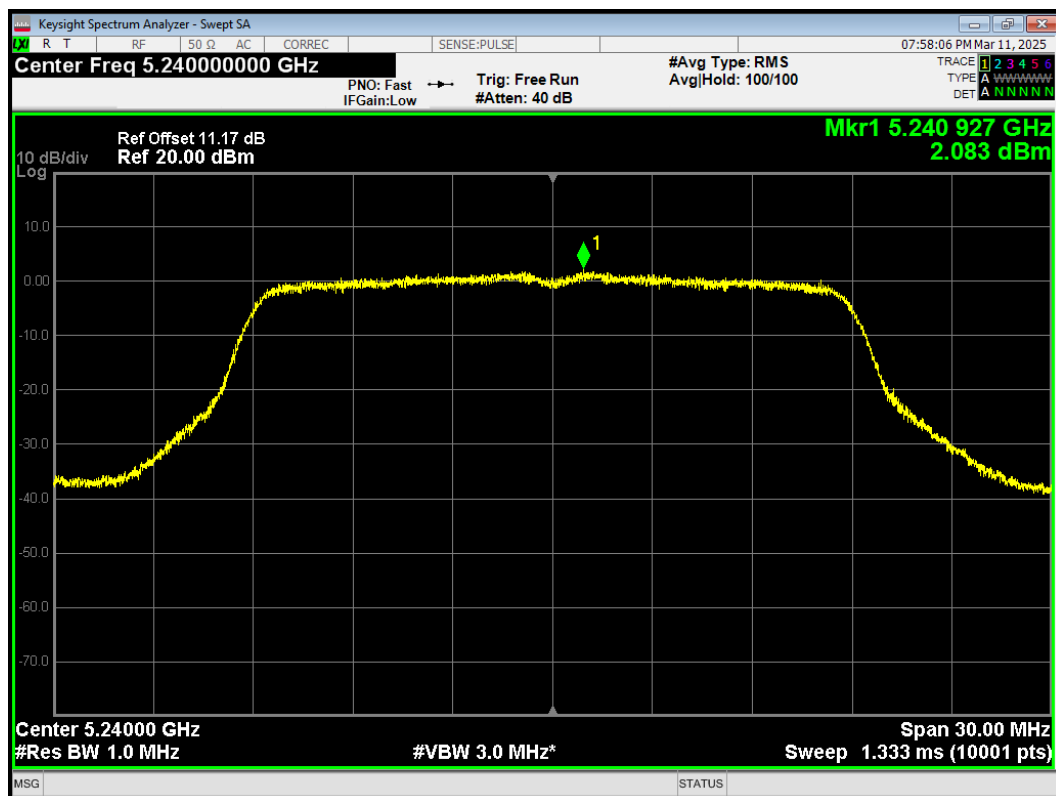
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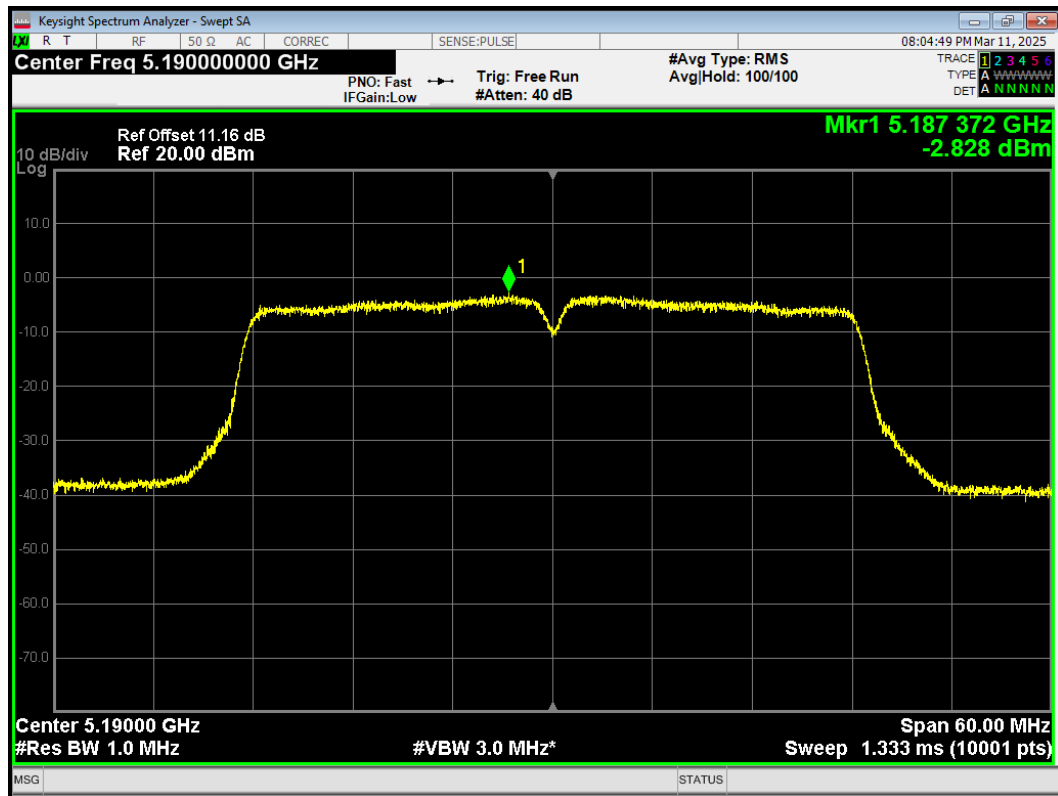
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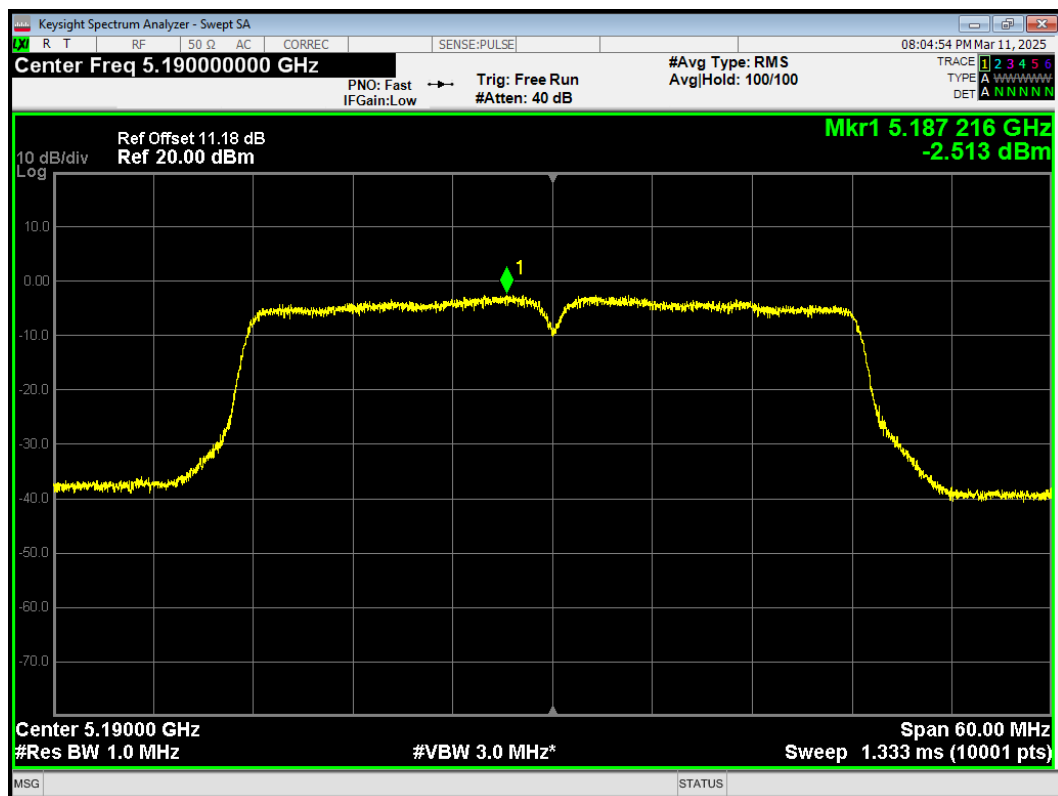
PSD 802.11ac(VHT20) 5240MHz Ant2



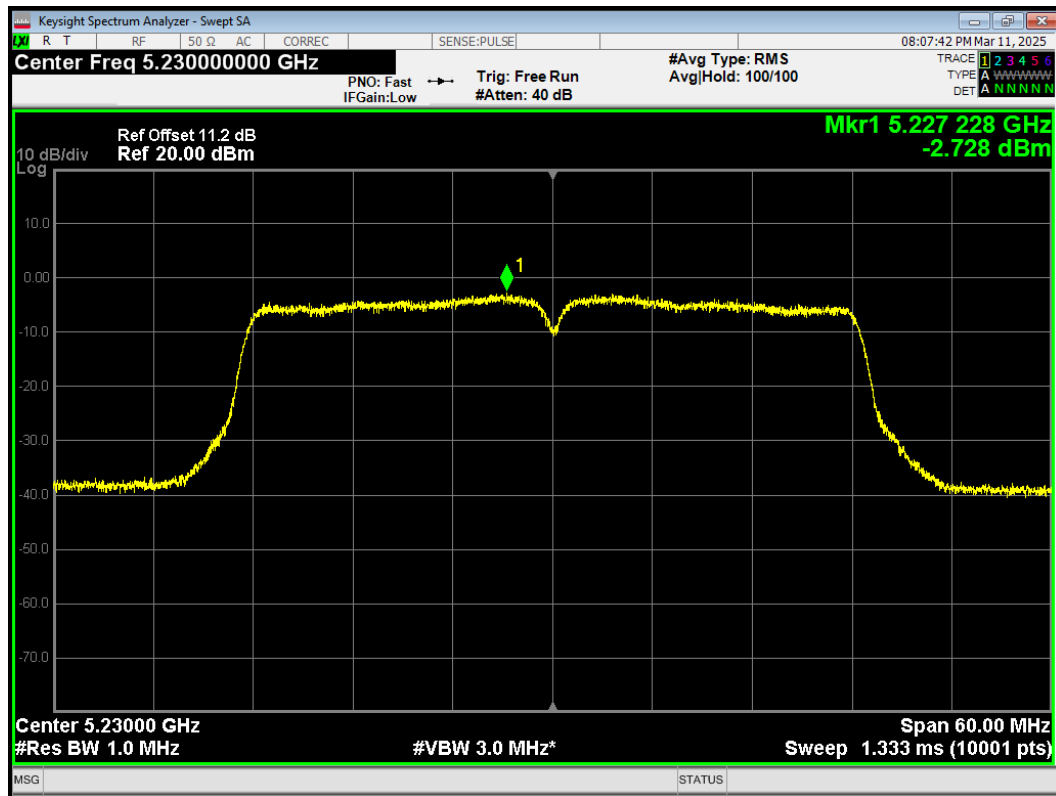
PSD 802.11ac(VHT40) 5190MHz Ant1



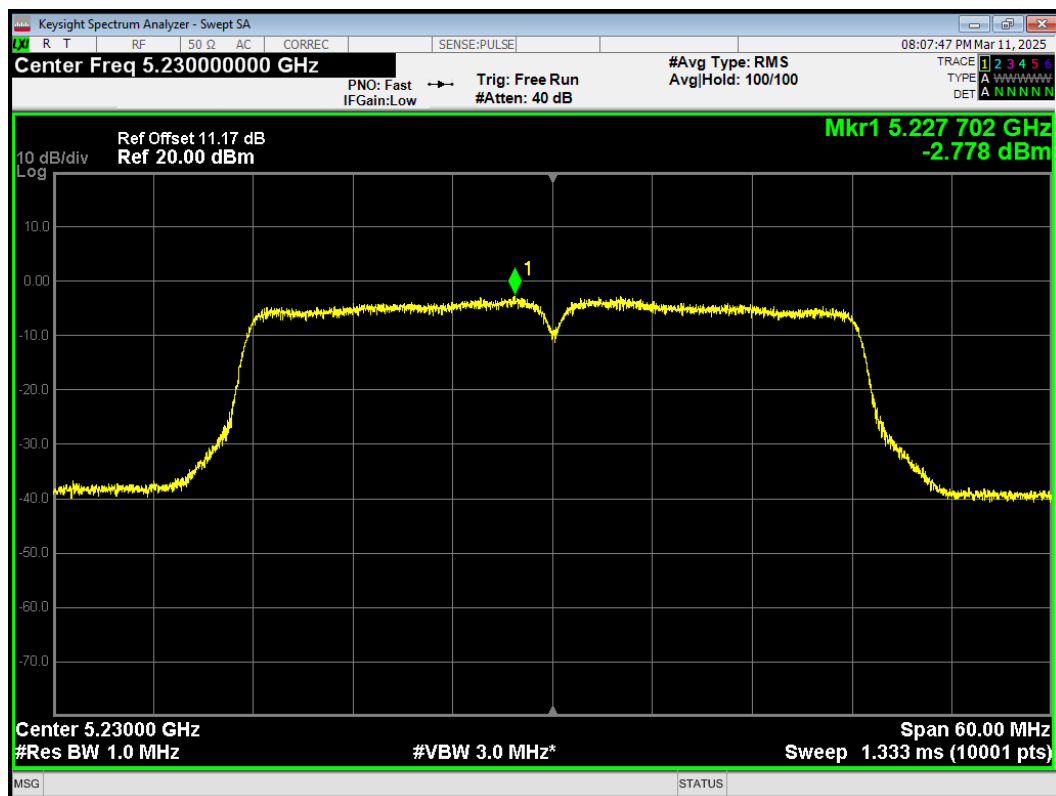
PSD 802.11ac(VHT40) 5190MHz Ant2



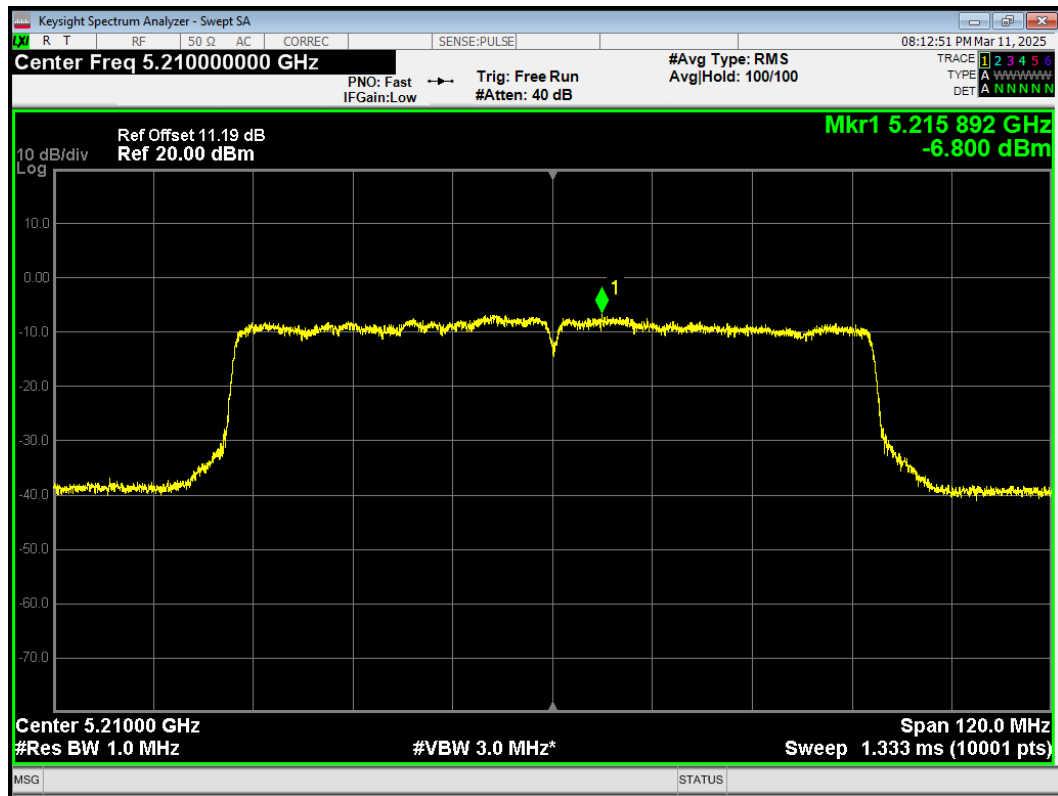
PSD 802.11ac(VHT40) 5230MHz Ant1



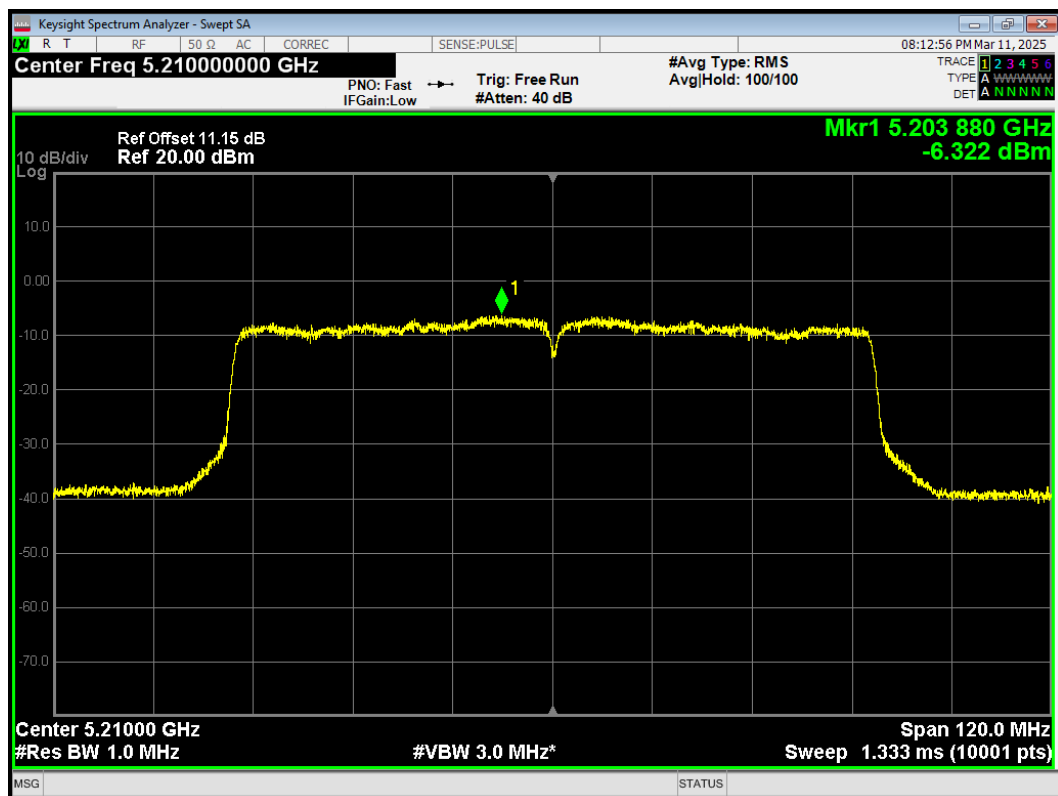
PSD 802.11ac(VHT40) 5230MHz Ant2



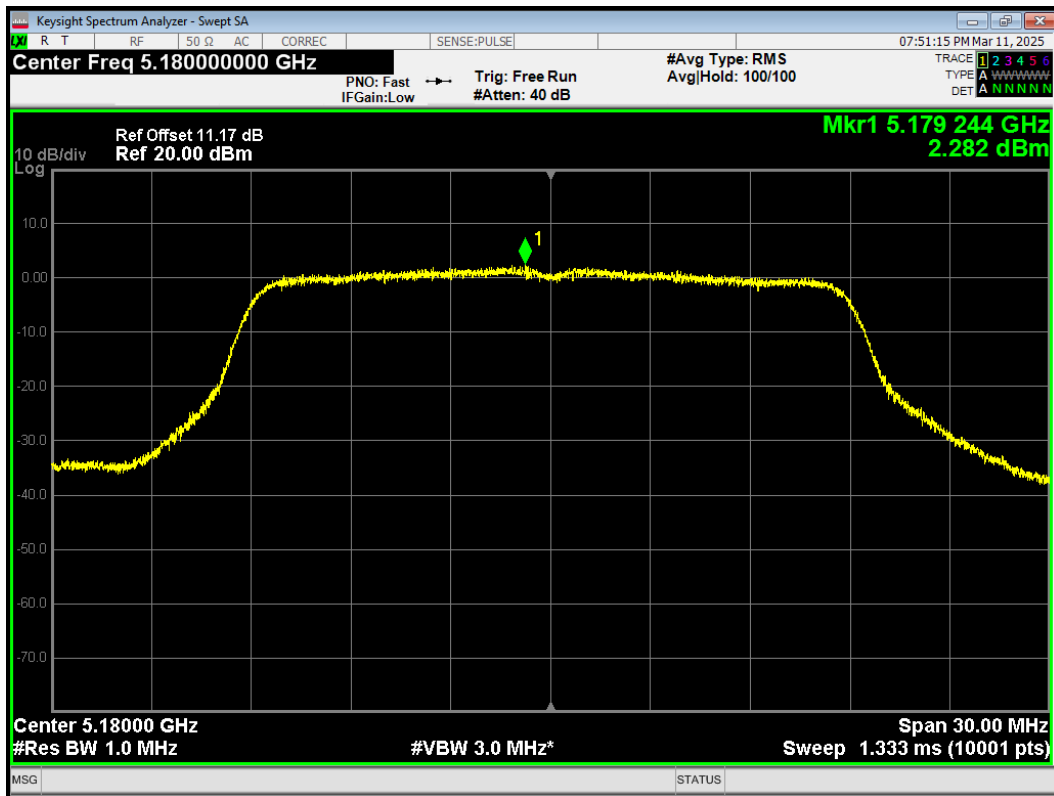
PSD 802.11ac(VHT80) 5210MHz Ant1



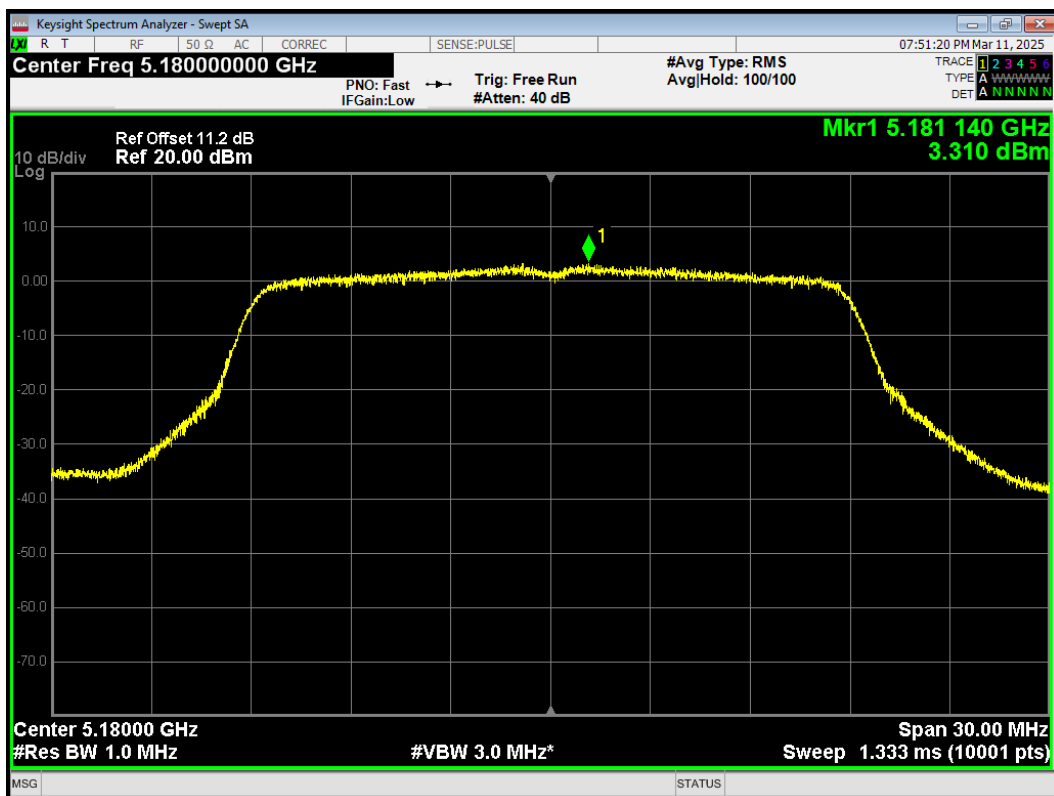
PSD 802.11ac(VHT80) 5210MHz Ant2



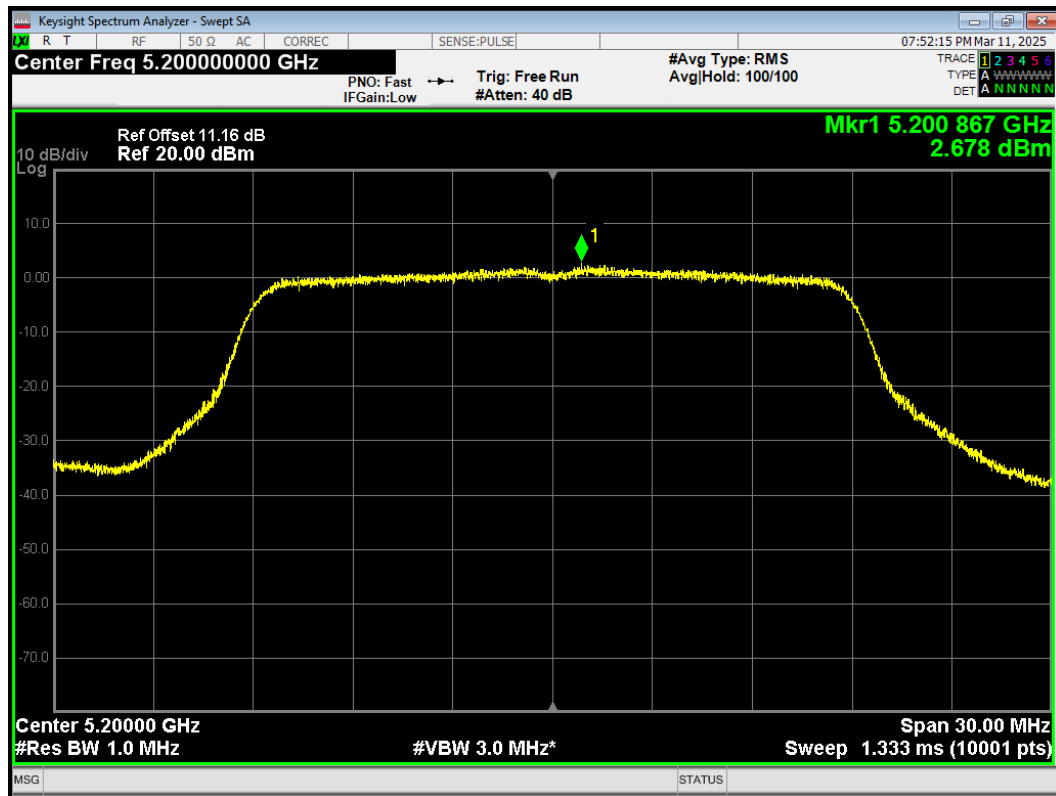
PSD 802.11n(HT20) 5180MHz Ant1



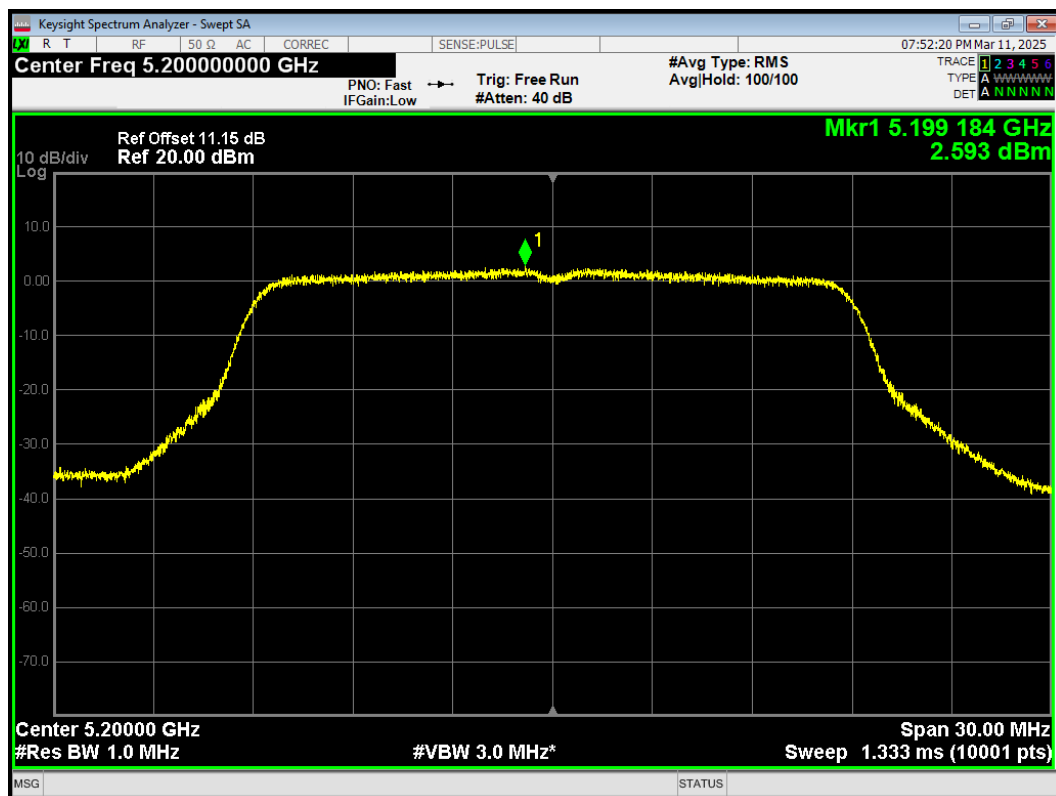
PSD 802.11n(HT20) 5180MHz Ant2



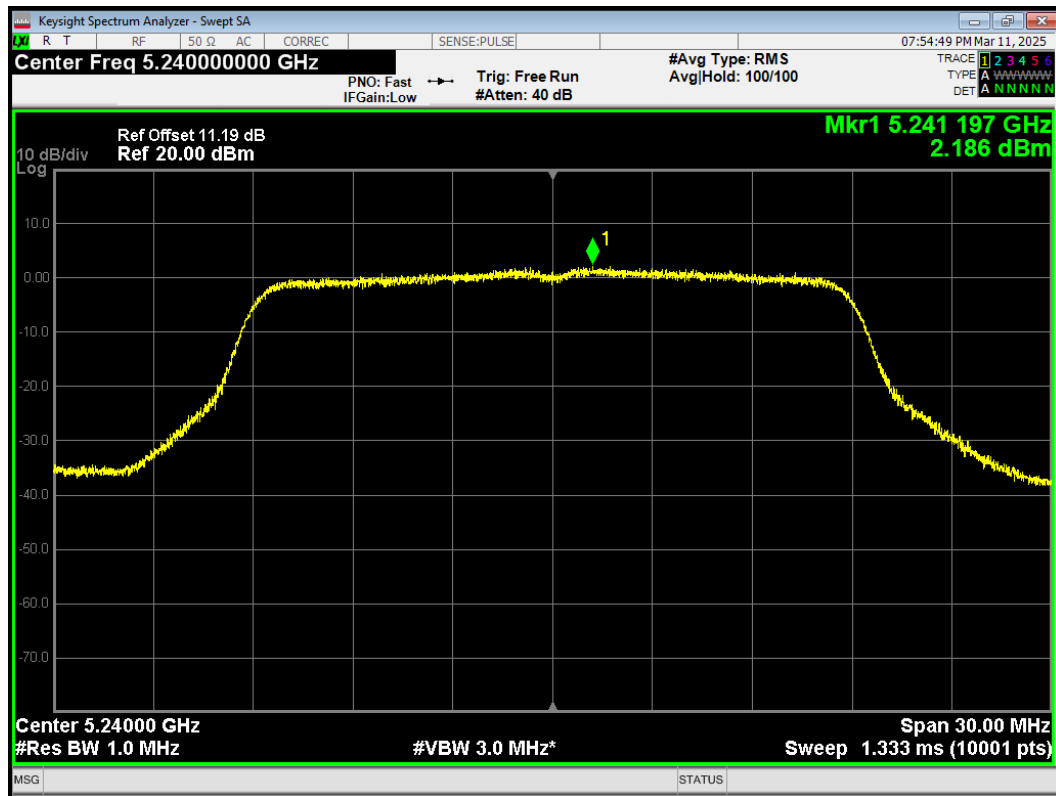
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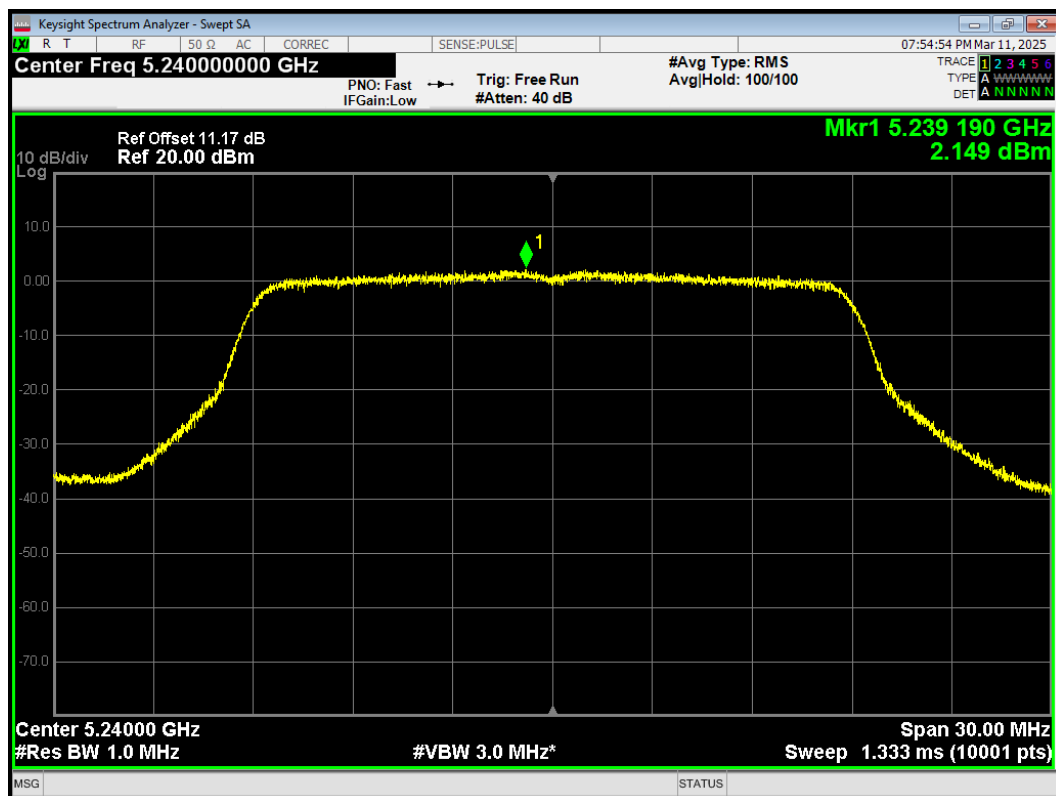
PSD 802.11n(HT20) 5200MHz Ant2



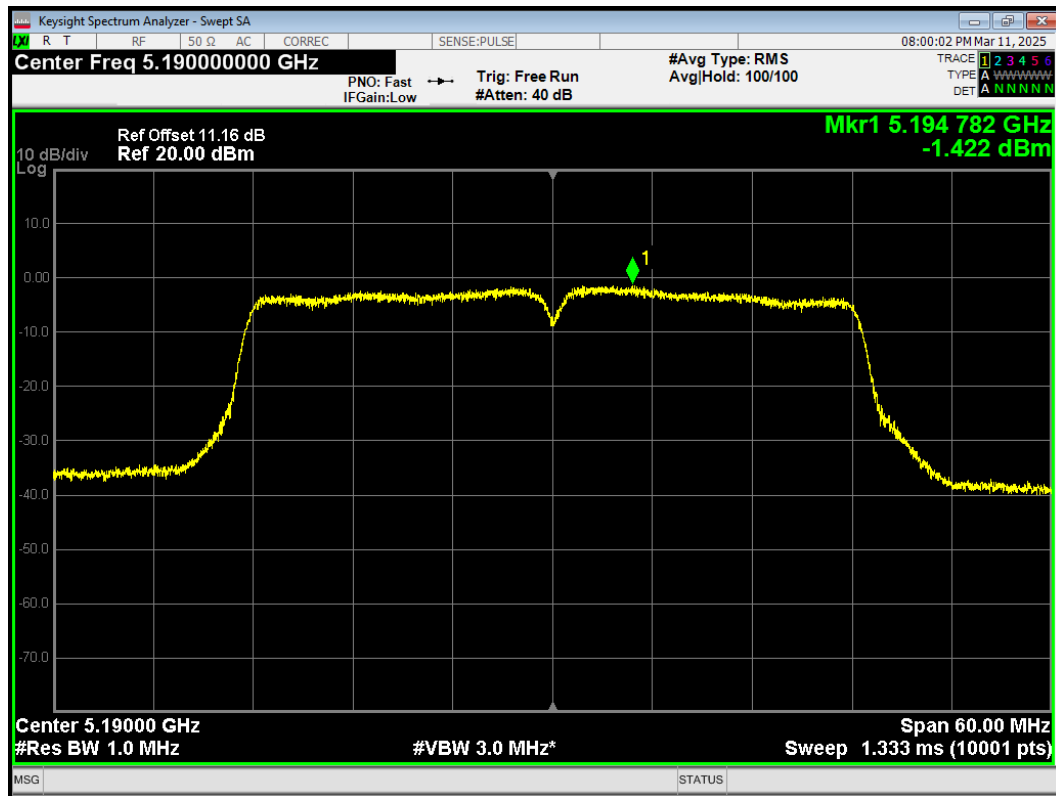
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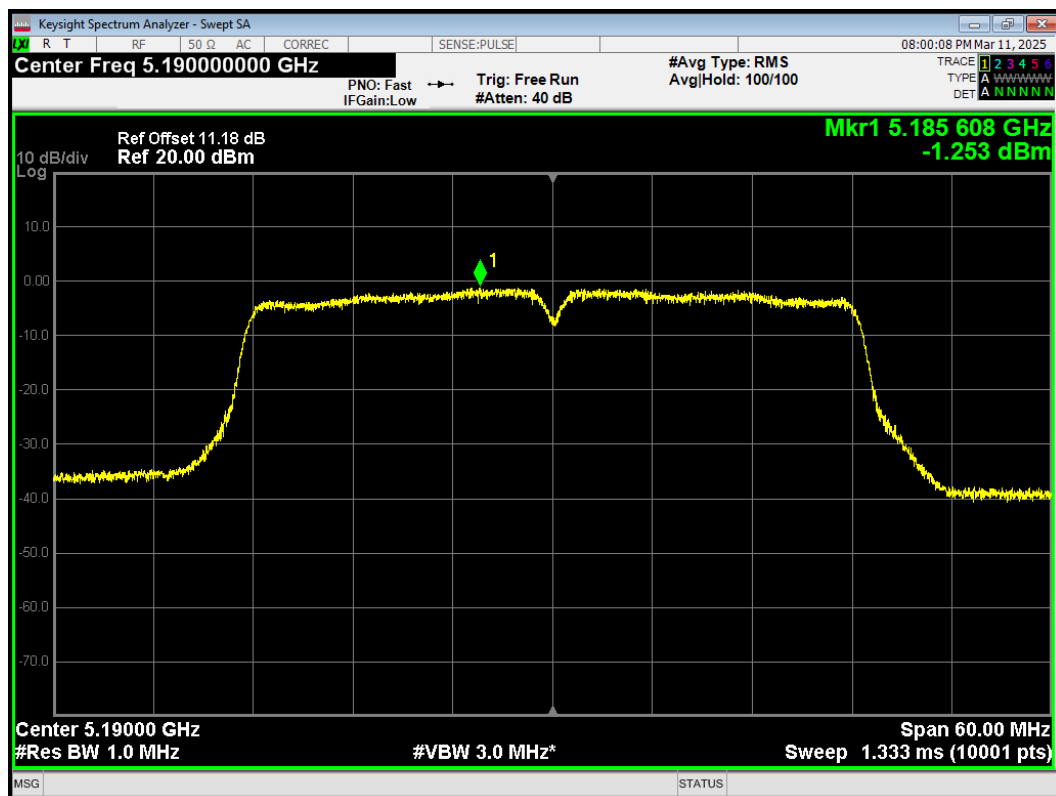
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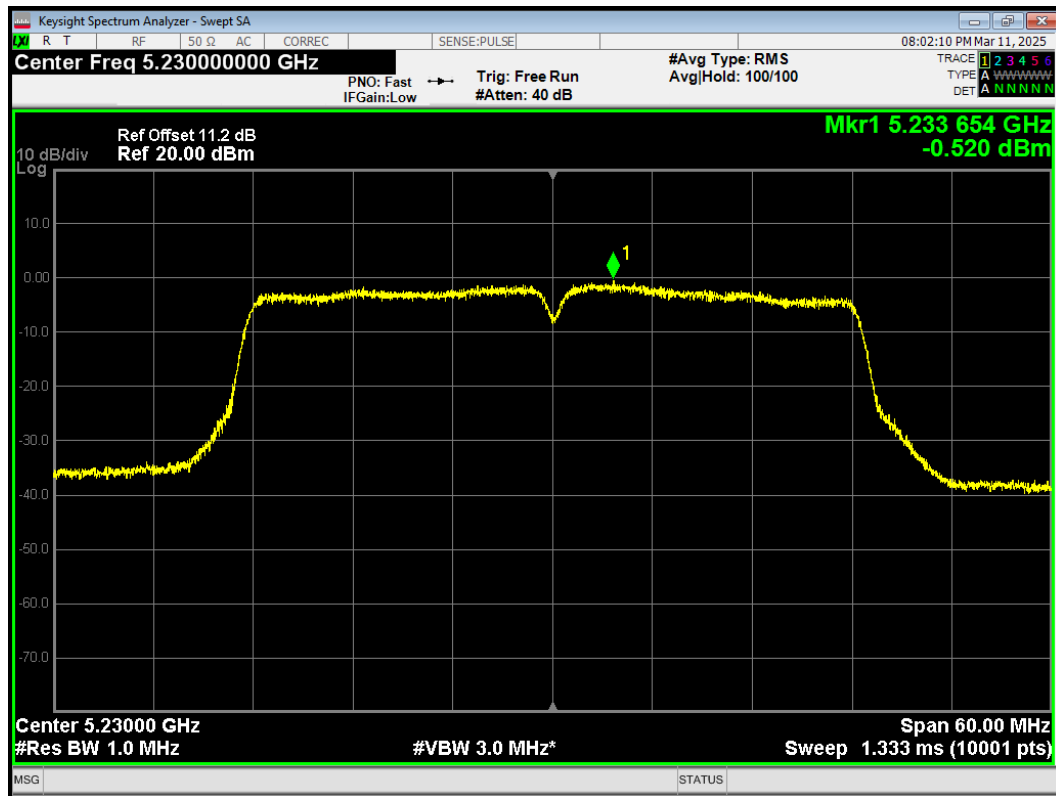
PSD 802.11n(HT40) 5190MHz Ant1



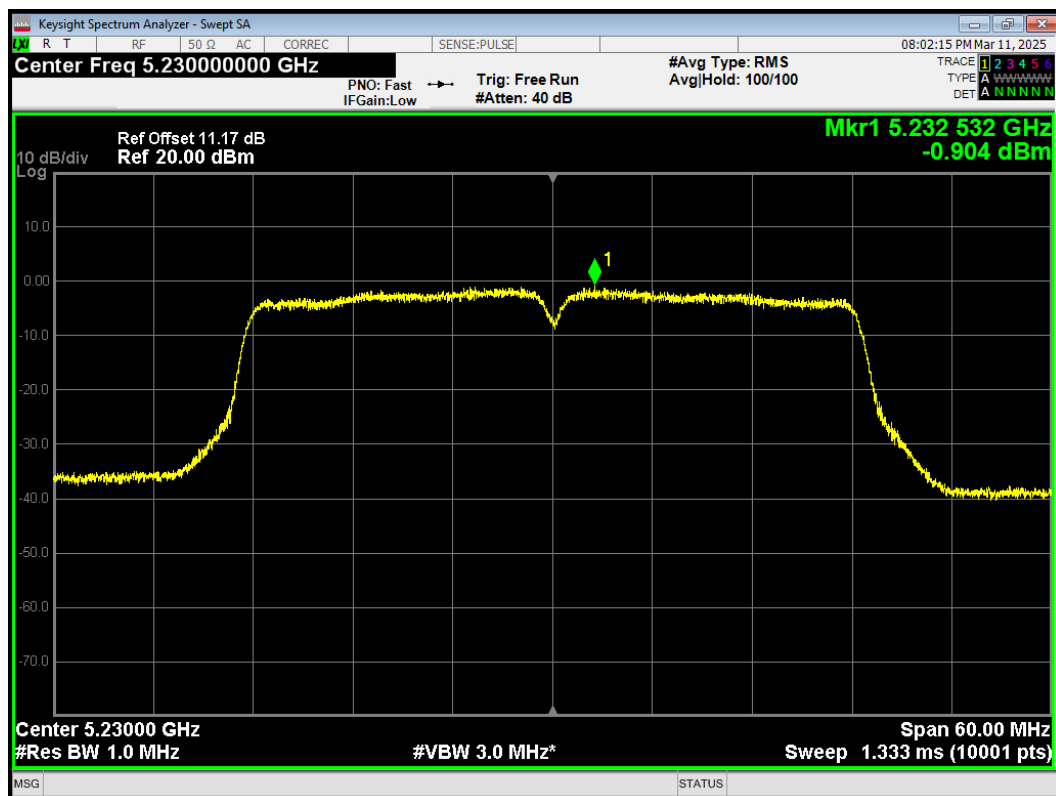
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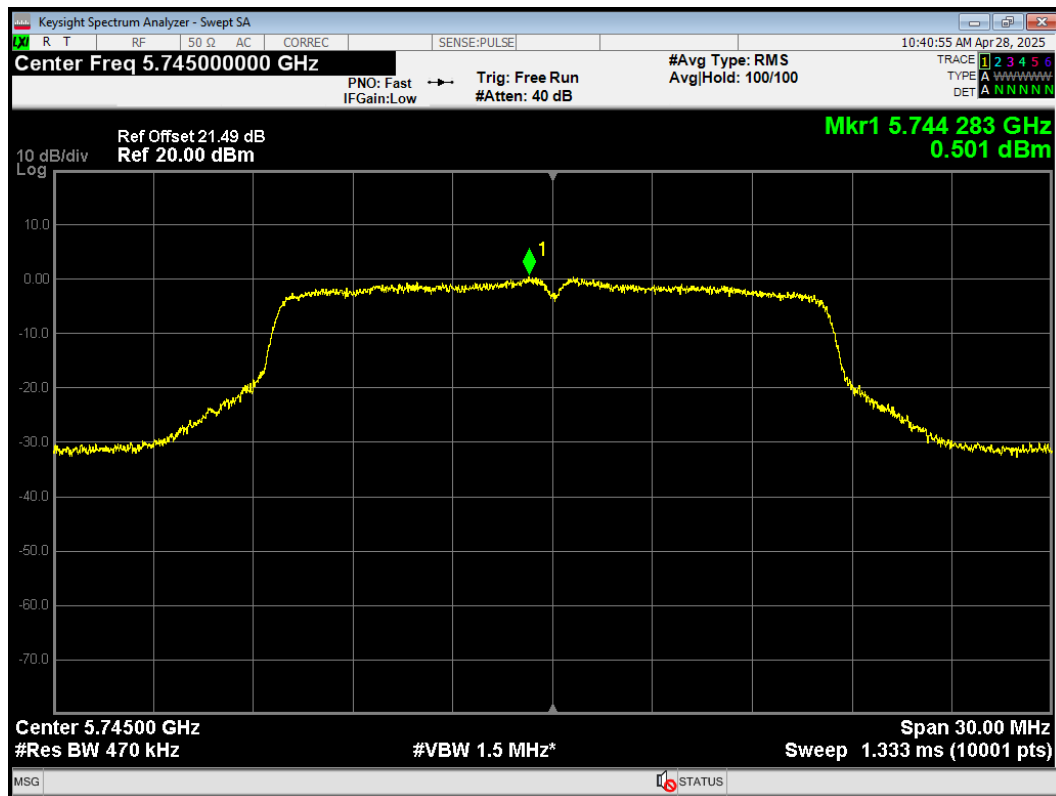
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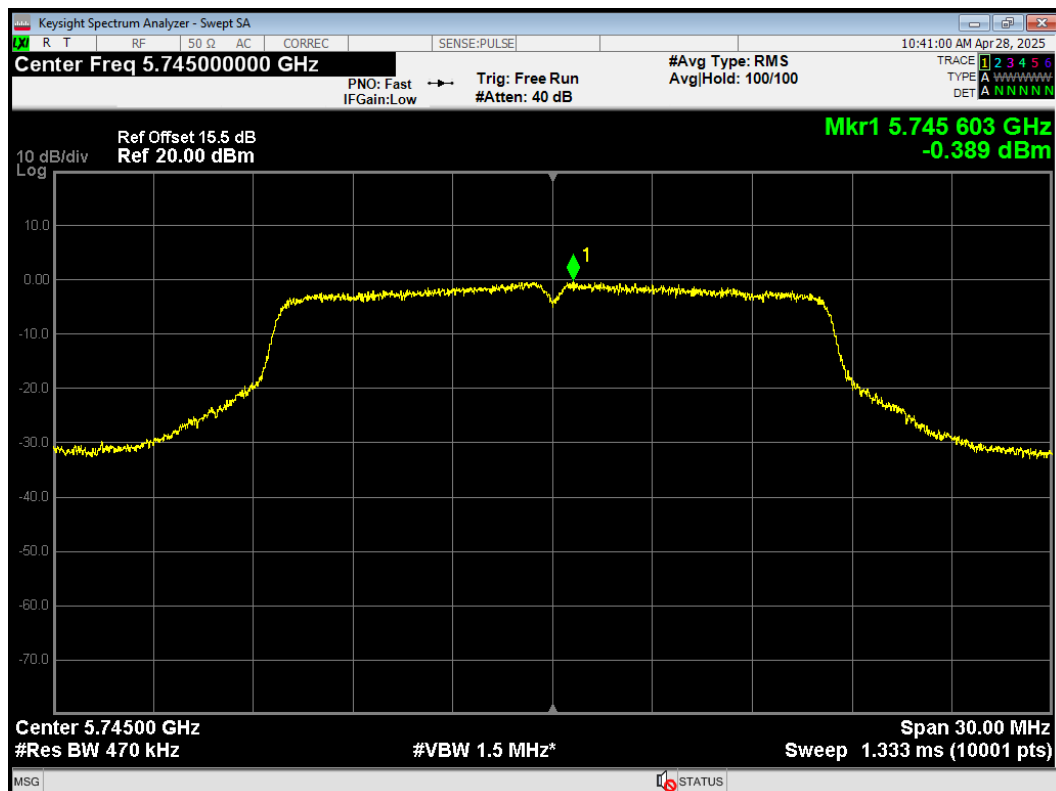
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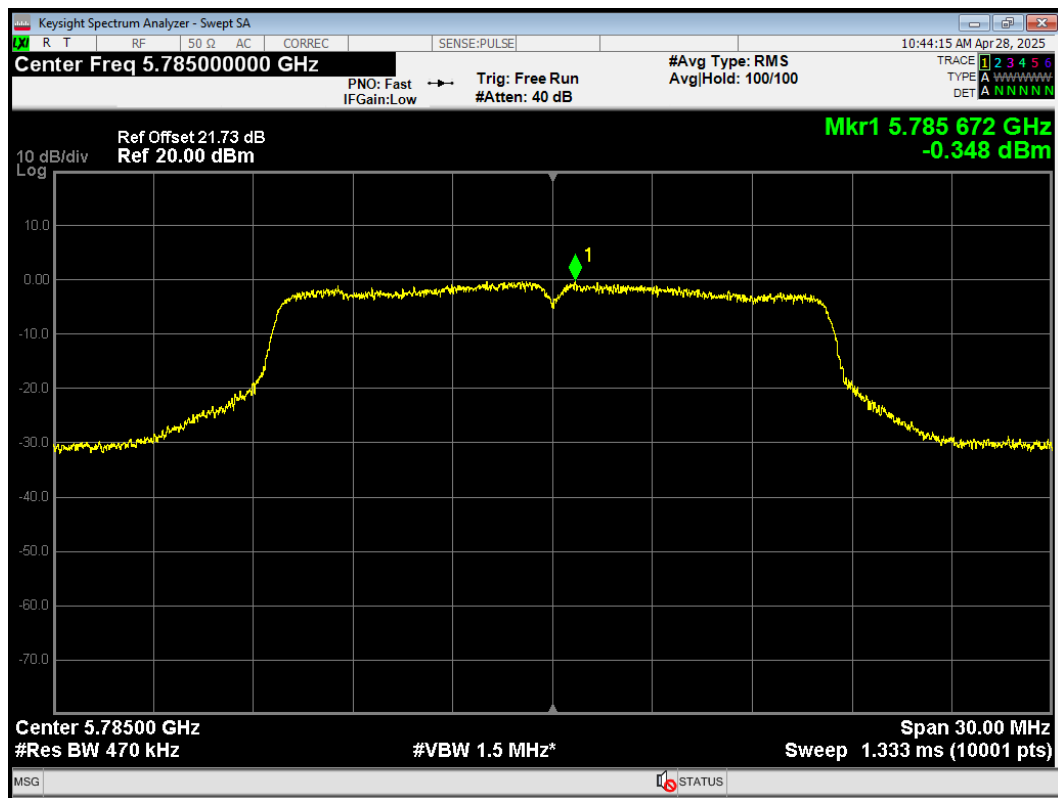
PSD 802.11a 5745MHz Ant1



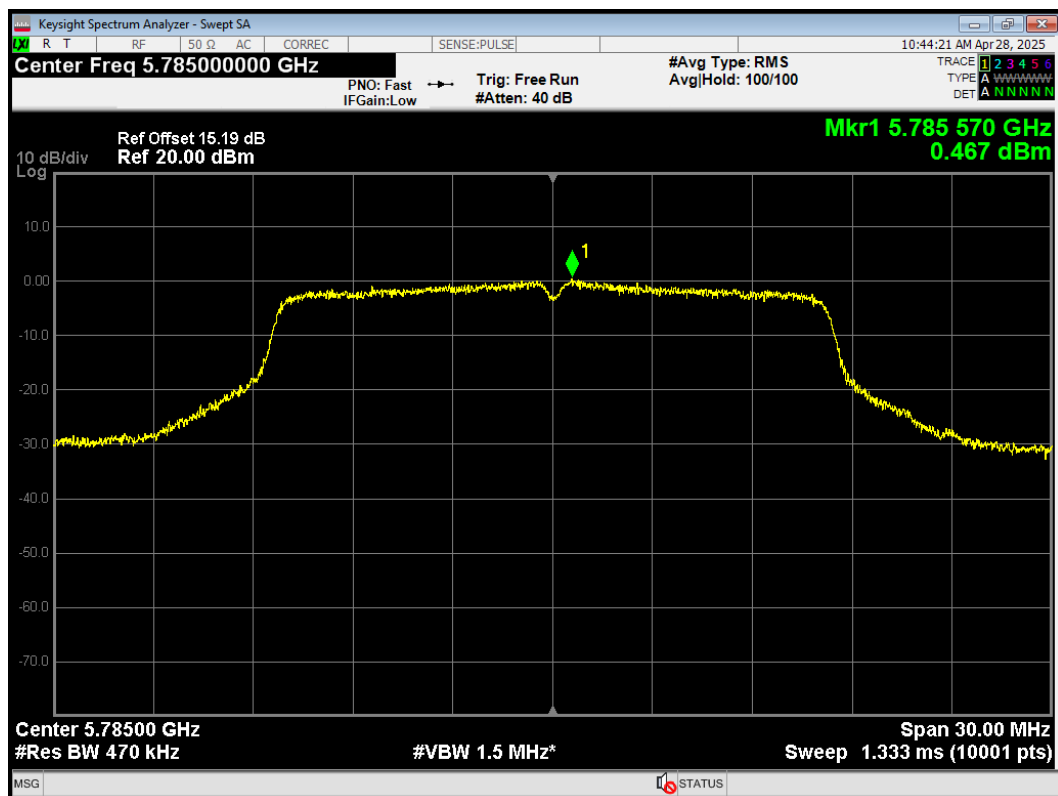
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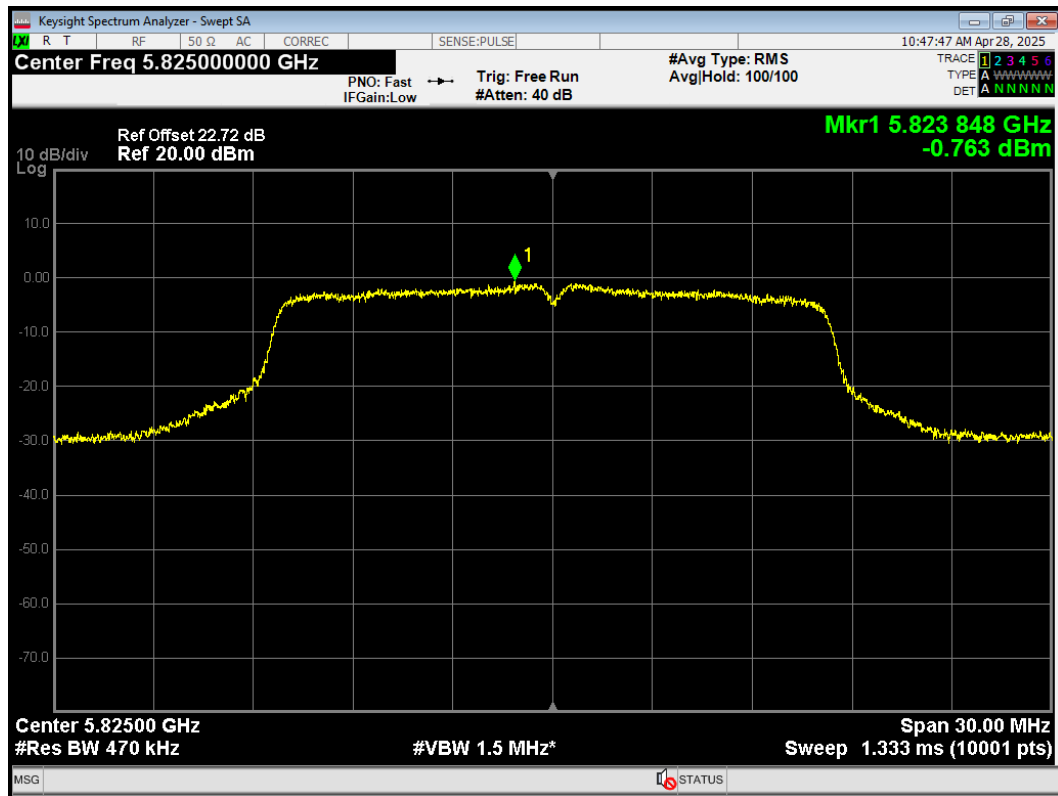
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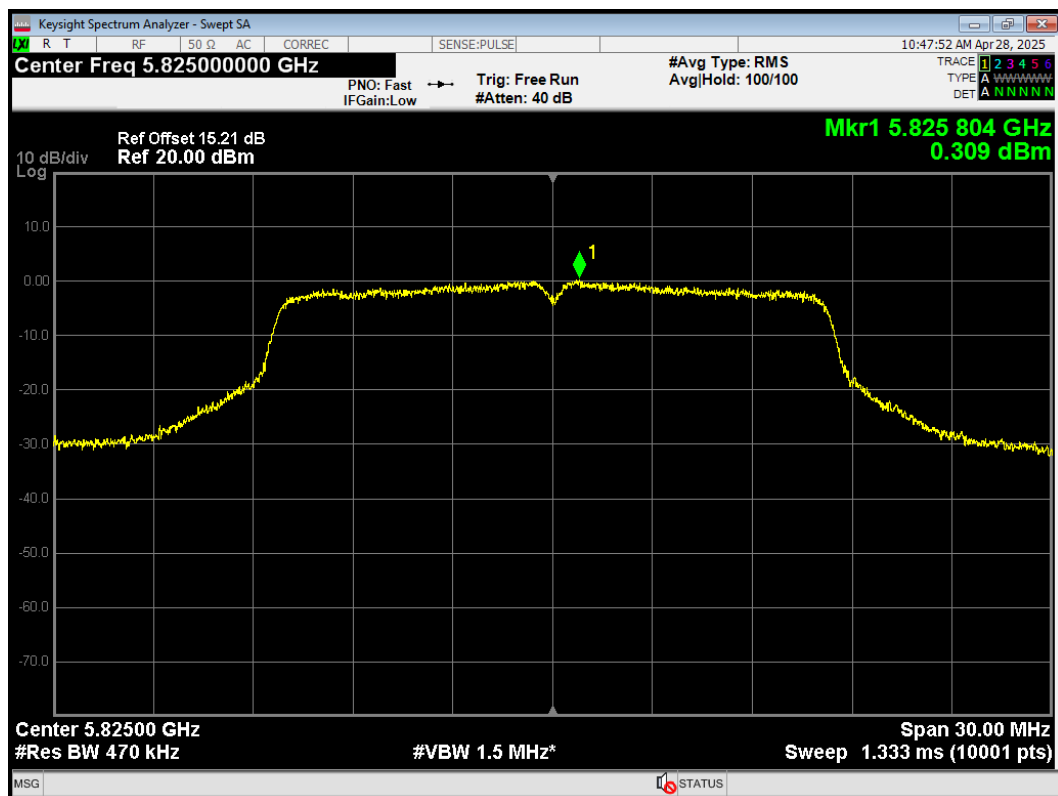
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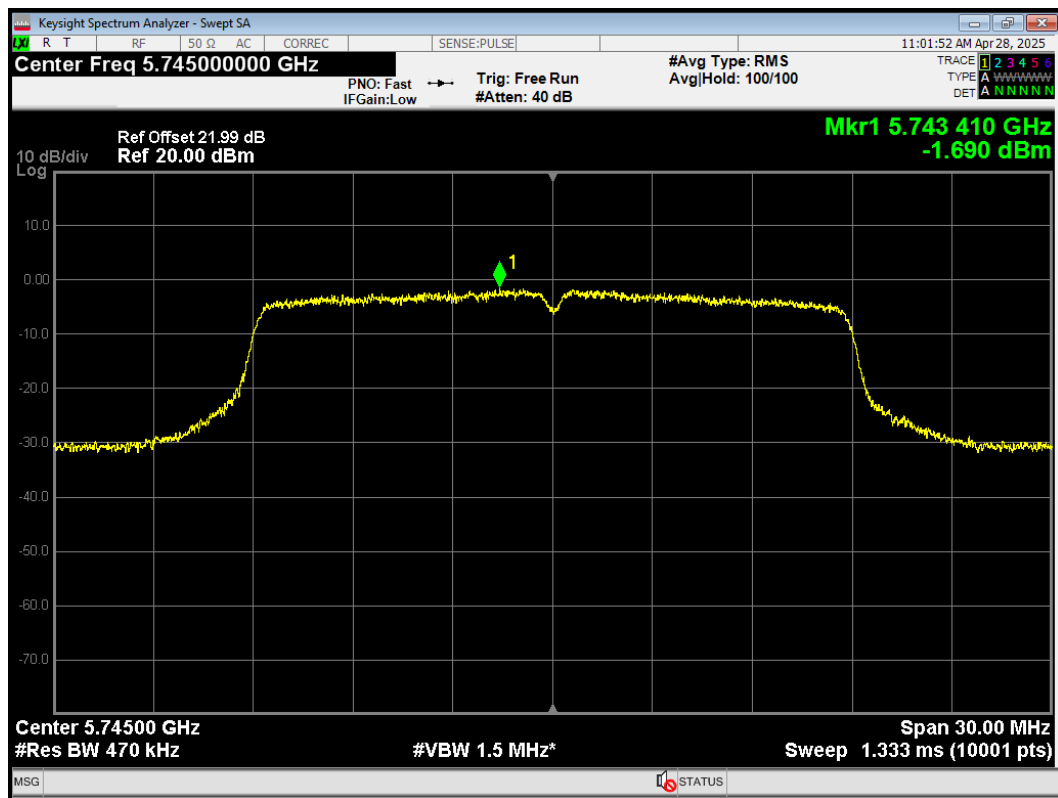
PSD 802.11a 5825MHz Ant1



PSD 802.11a 5825MHz Ant2



PSD 802.11ac(VHT20) 5745MHz Ant1



PSD 802.11ac(VHT20) 5745MHz Ant2

