

Appendix Test Data for WLAN(2. 4G) (Conducted Measurement)

Product Name: IP Phone

Trade Mark: 

Test Model: H602W

FCC ID: 2APPZ-H602W

Environmental Conditions

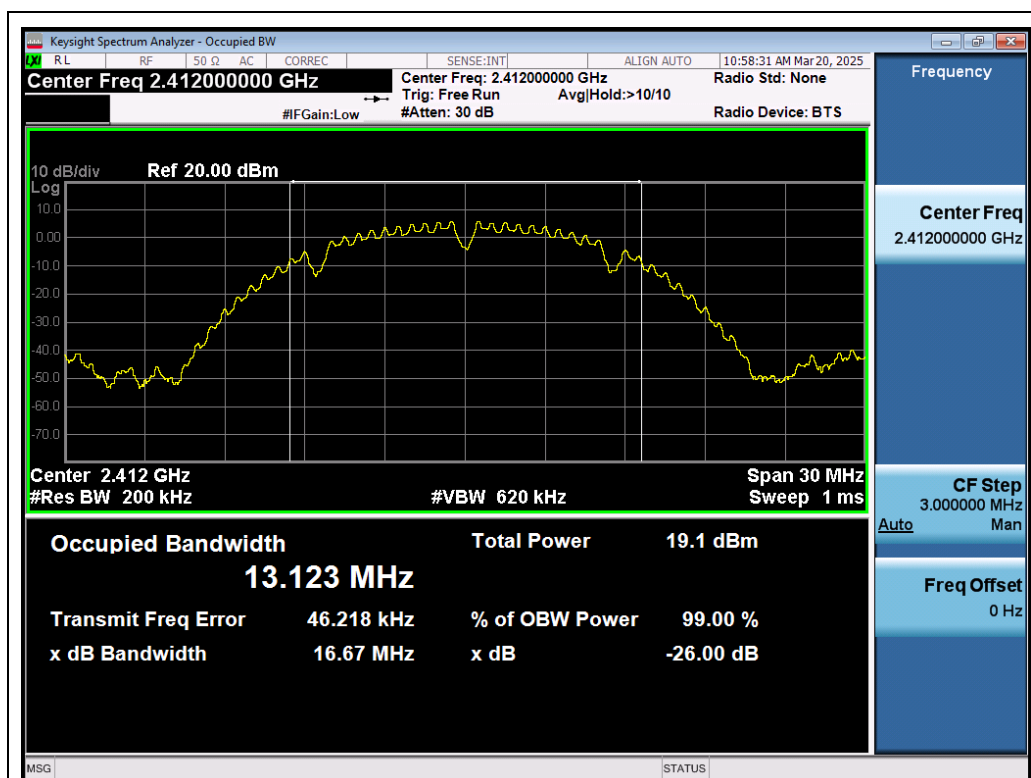
Temperature:	23.5℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Max Zhang
NOTE	N/A

Appendix A: 6dB Bandwidth Measurement

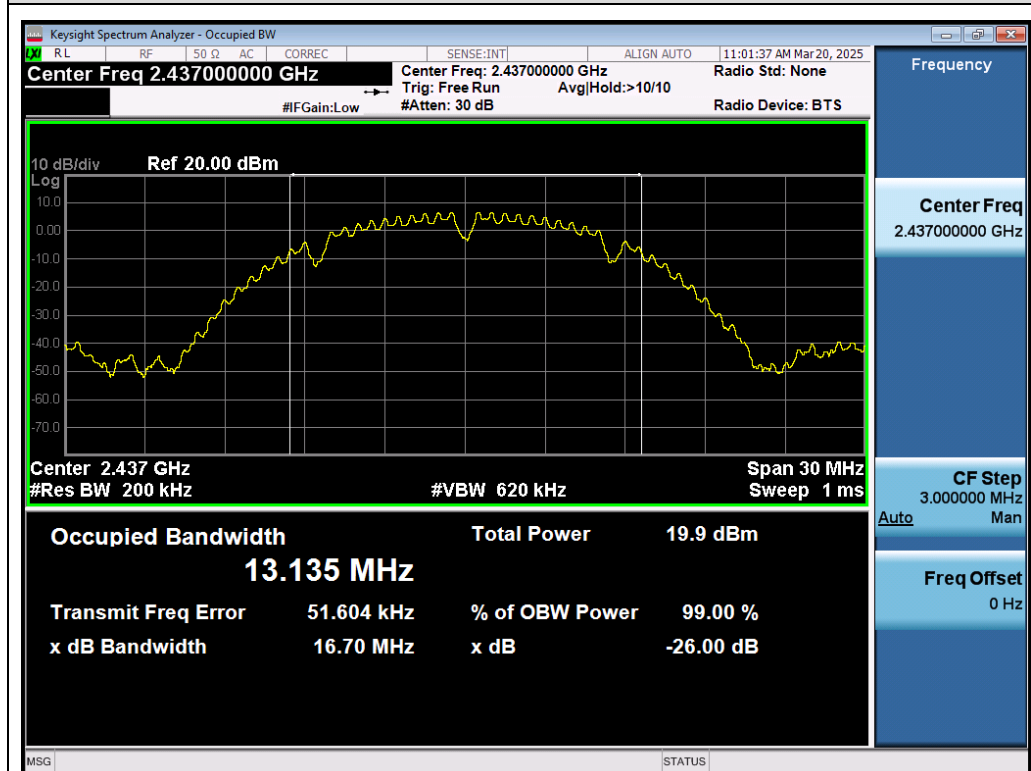
Test Result

Test Mode	Test Frequency (MHz)	99% Occupied Bandwidth (MHz)	DTS Bandwidth (MHz)	DTS Bandwidth Limits (MHz)	Result
802.11b	2412	13.123	9.088	≥0.5	Pass
	2437	13.135	9.043	≥0.5	Pass
	2462	13.169	8.062	≥0.5	Pass
802.11g	2412	16.629	15.766	≥0.5	Pass
	2437	16.648	16.316	≥0.5	Pass
	2462	16.662	15.394	≥0.5	Pass
802.11n20	2412	17.905	16.691	≥0.5	Pass
	2437	17.909	17.081	≥0.5	Pass
	2462	17.860	17.596	≥0.5	Pass
802.11n40	2422	36.406	35.502	≥0.5	Pass
	2437	36.427	35.553	≥0.5	Pass
	2452	36.456	35.709	≥0.5	Pass
802.11ax20	2412	19.028	18.360	≥0.5	Pass
	2437	19.026	18.672	≥0.5	Pass
	2462	19.082	18.758	≥0.5	Pass
802.11ax40	2422	37.818	36.341	≥0.5	Pass
	2437	37.874	37.623	≥0.5	Pass
	2452	37.864	37.804	≥0.5	Pass

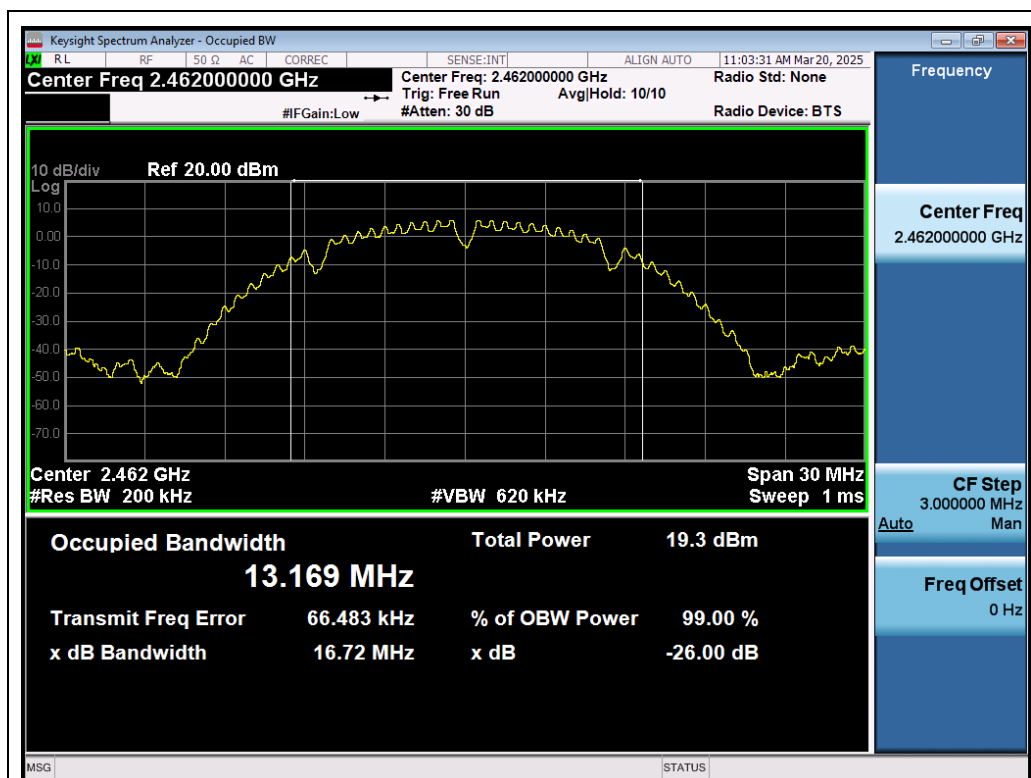
Test Graphs



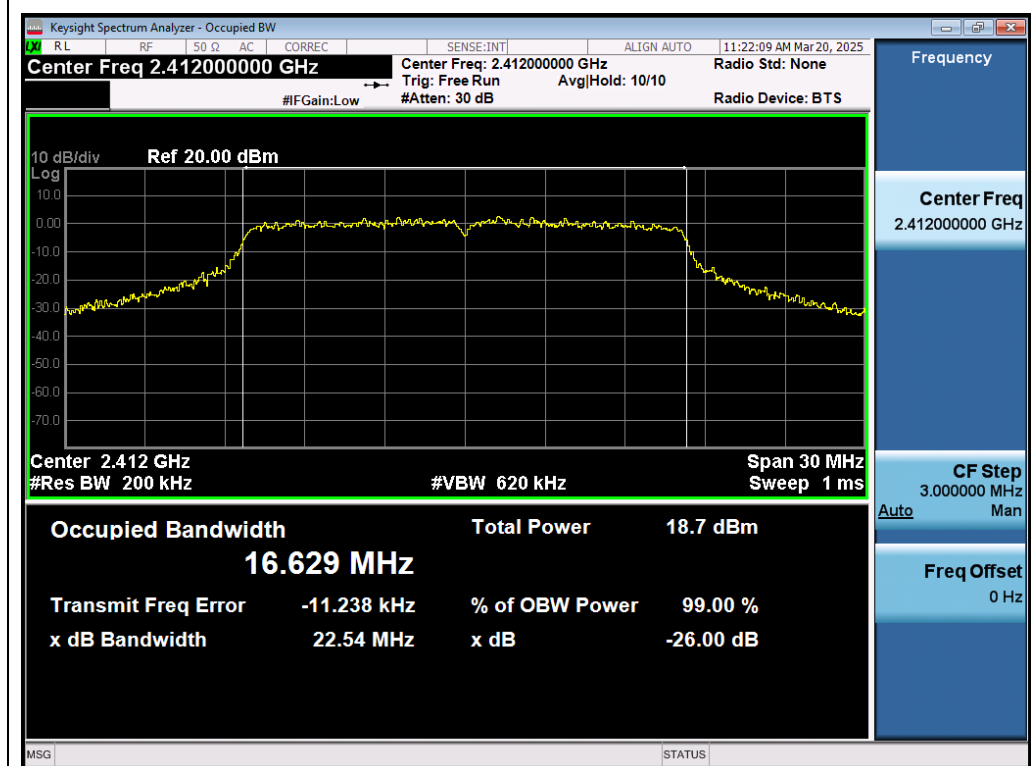
Test_Graph_802.11b_ANT1_2412_1Mbps_OBW



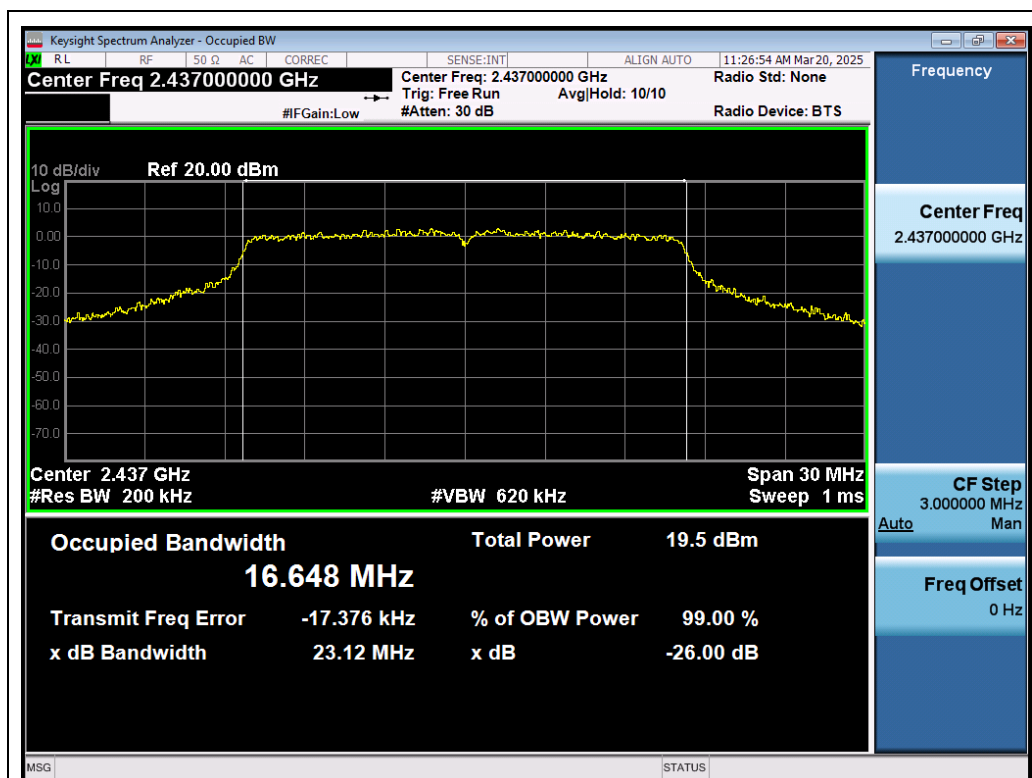
Test_Graph_802.11b_ANT1_2437_1Mbps_OBW



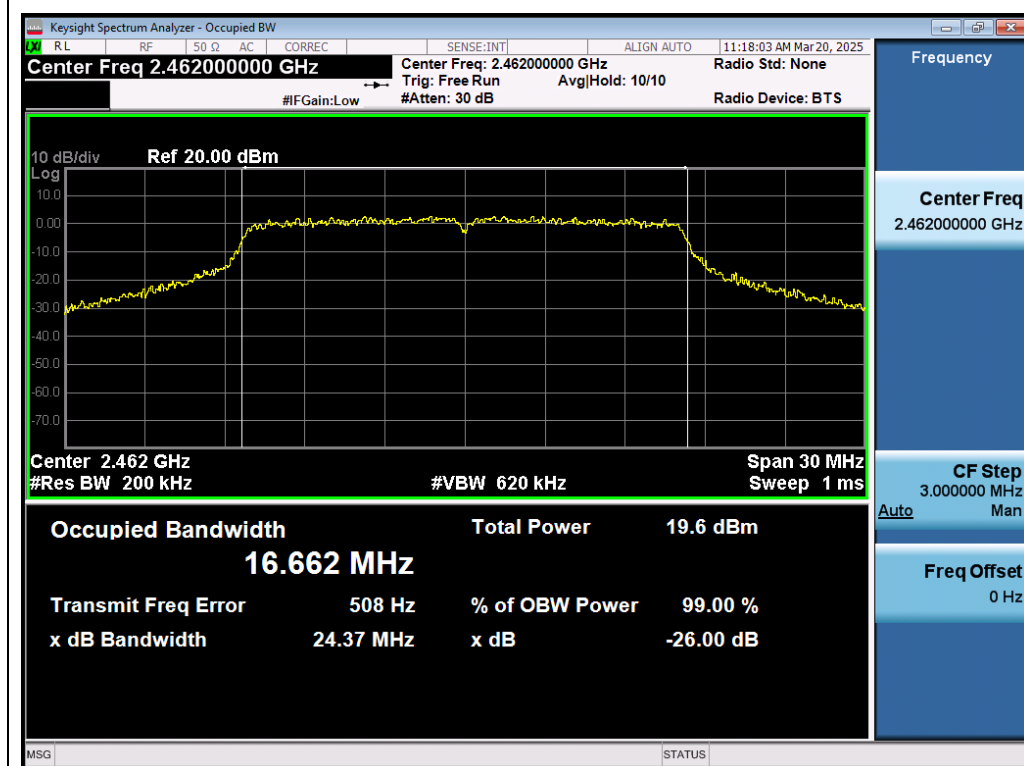
Test_Graph_802.11b_ANT1_2462_1Mbps_OBW



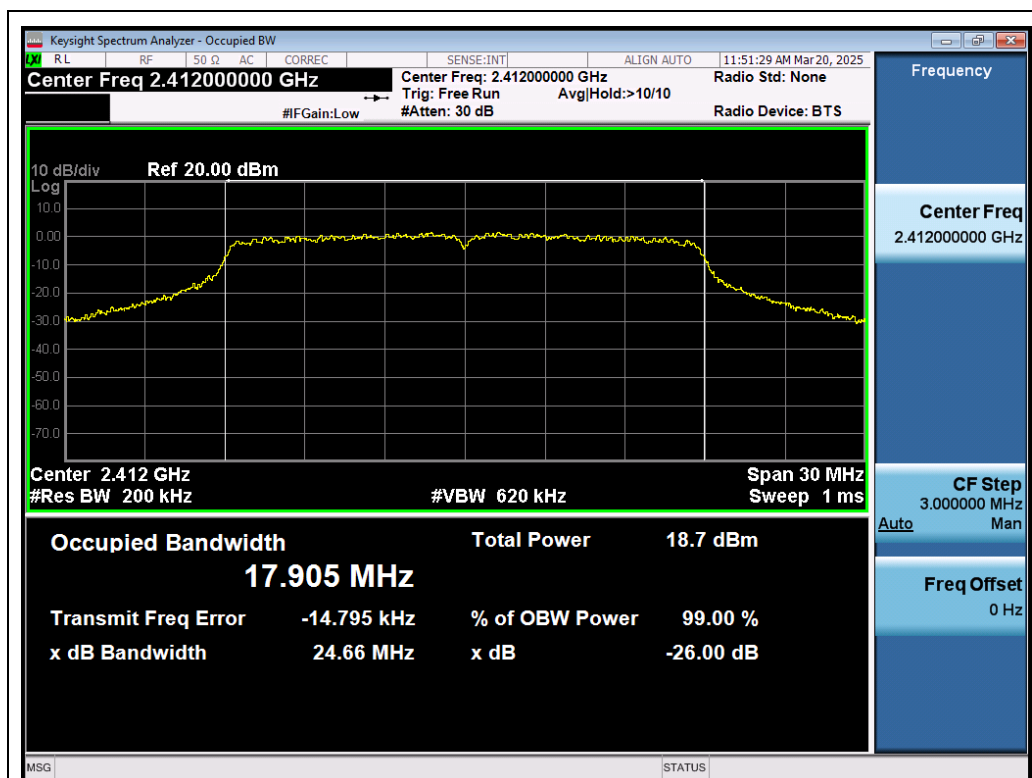
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Test_Graph_802.11g_ANT1_2437_6Mbps_OBW



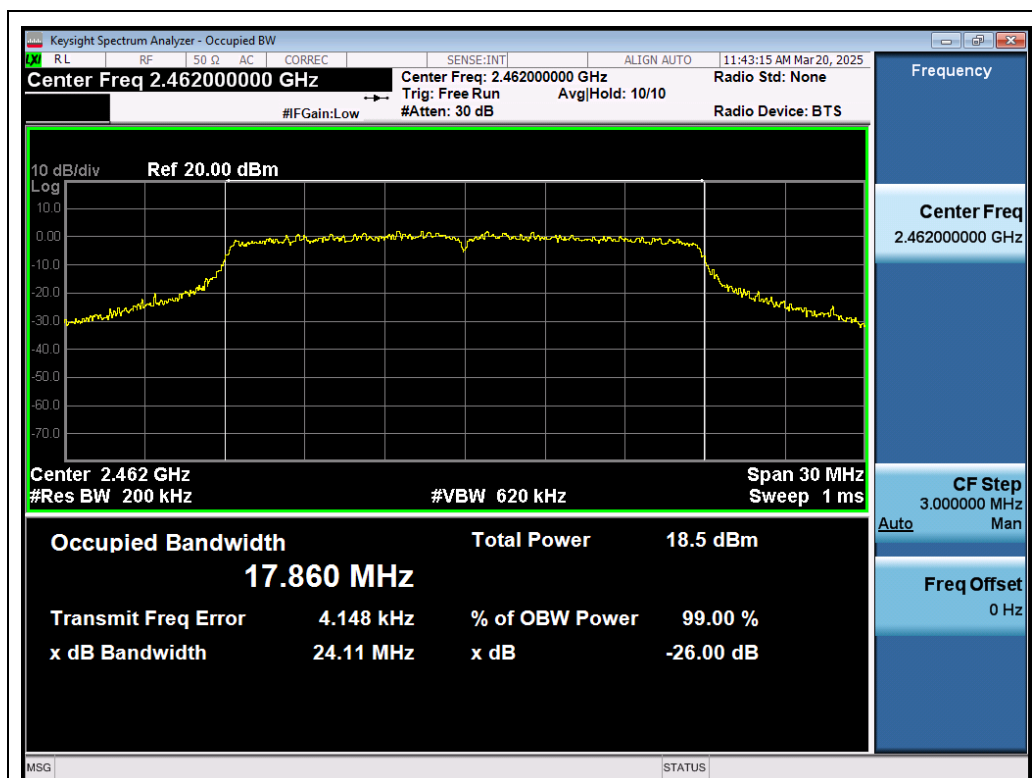
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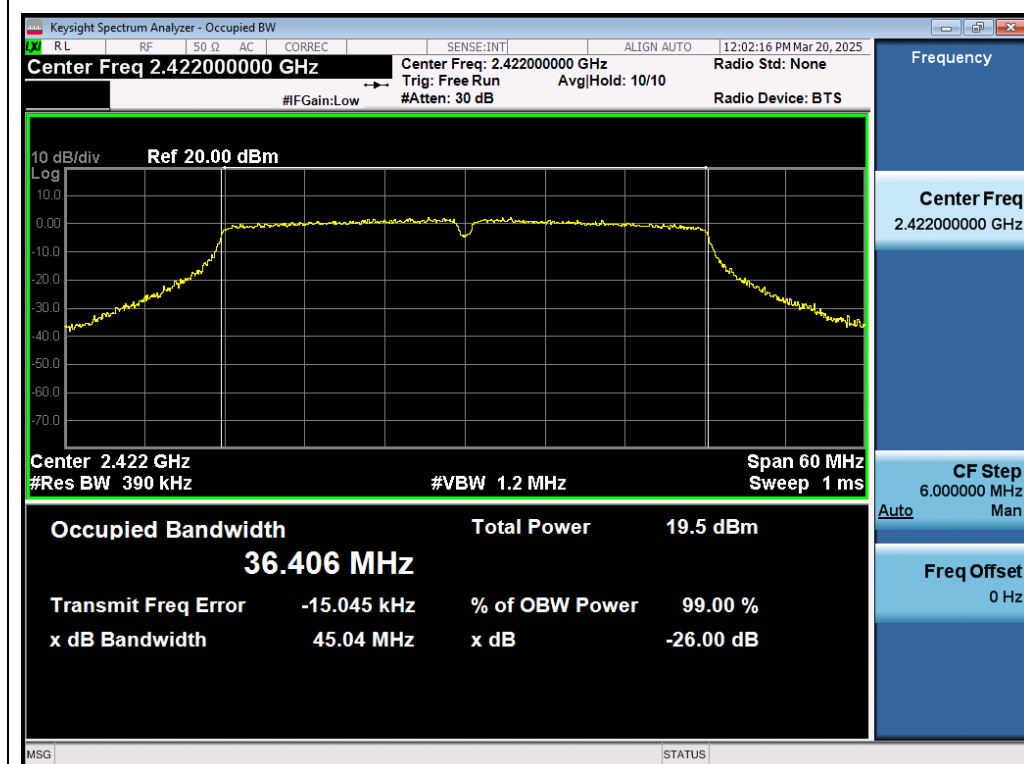
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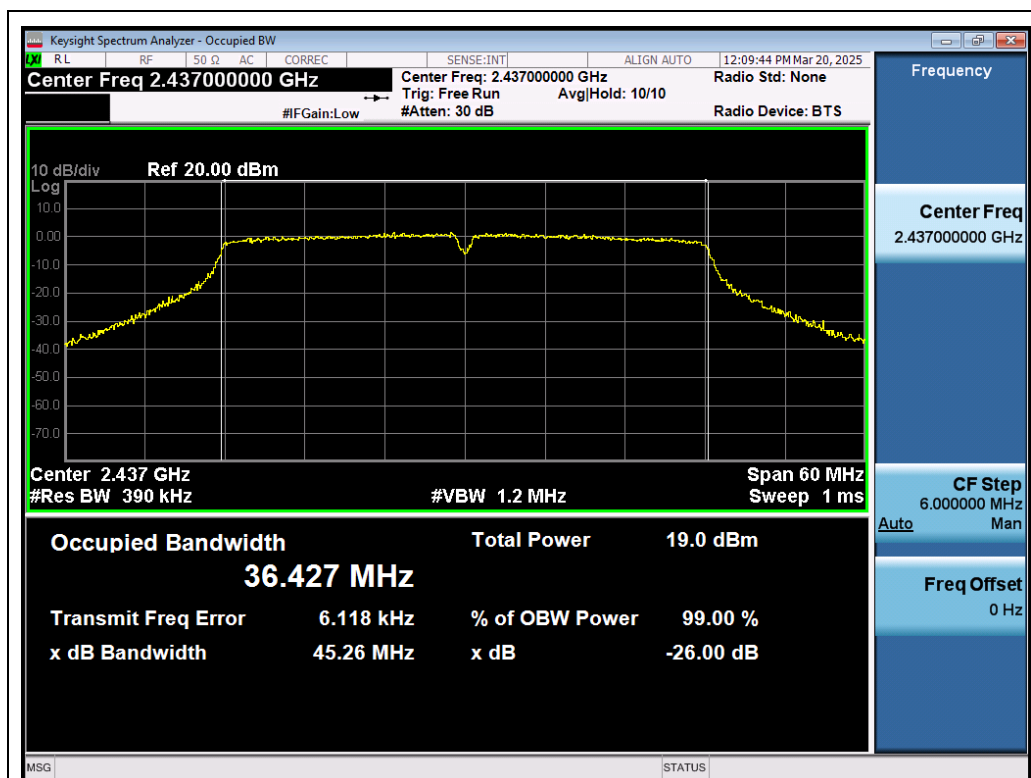
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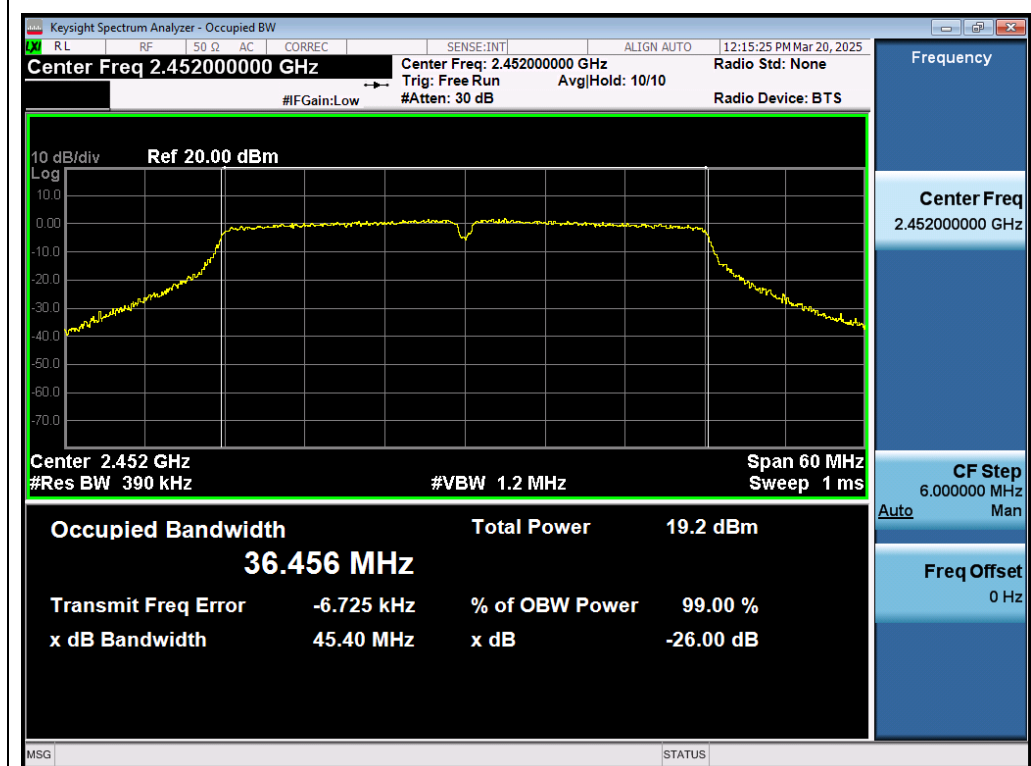
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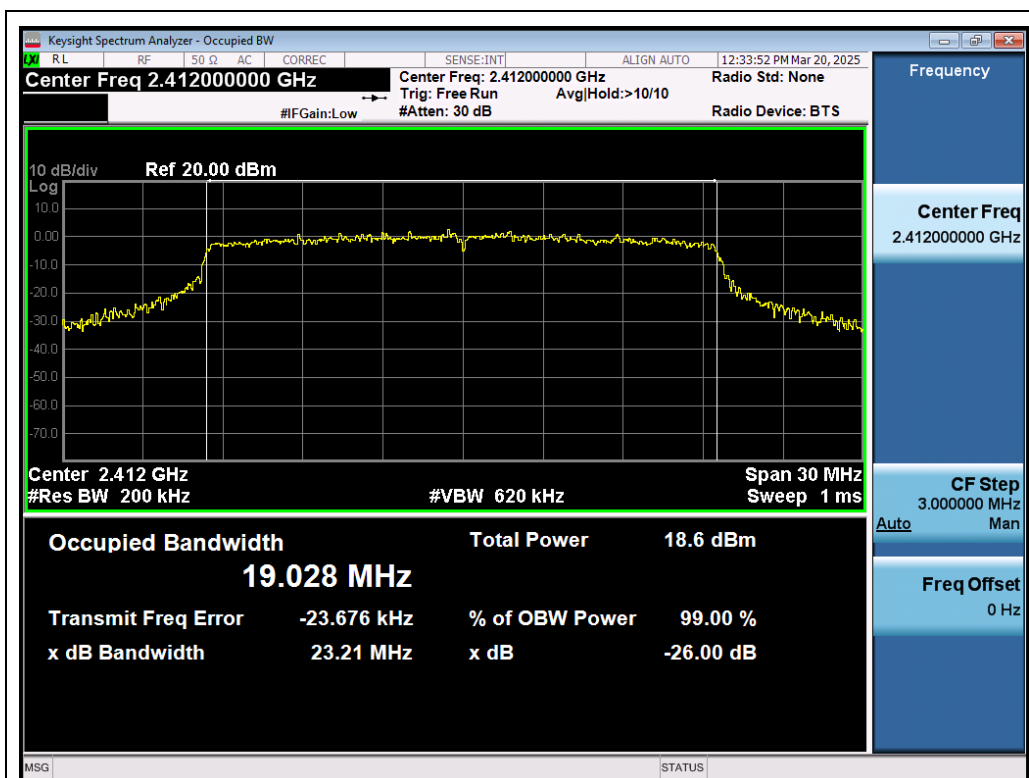
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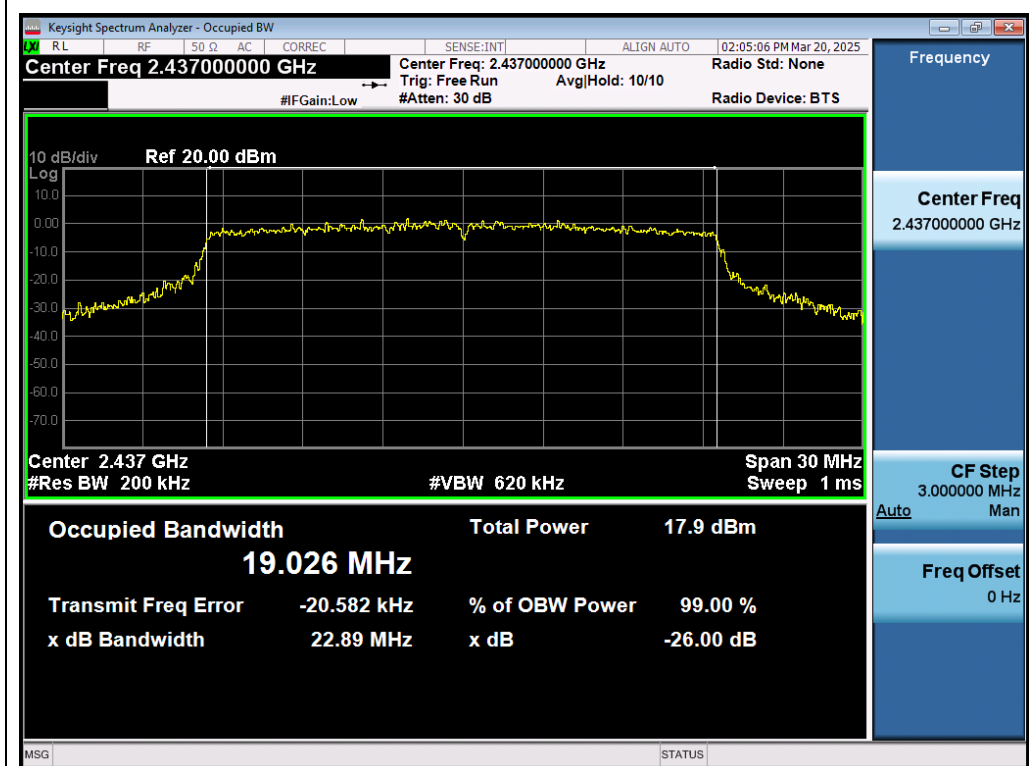
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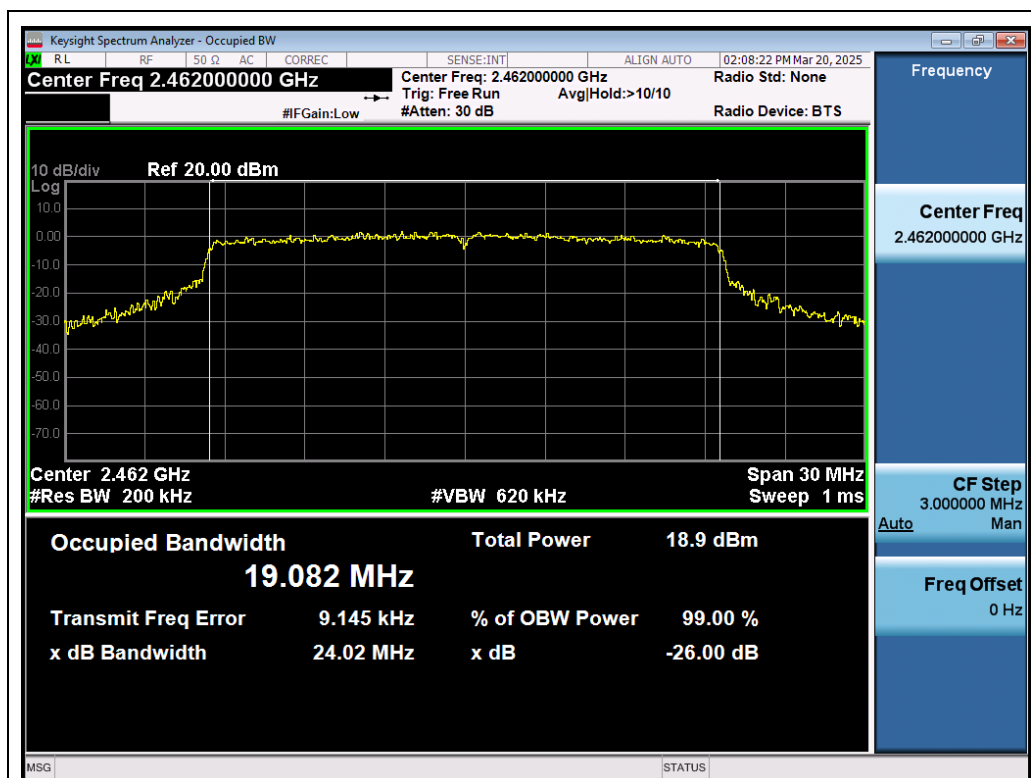
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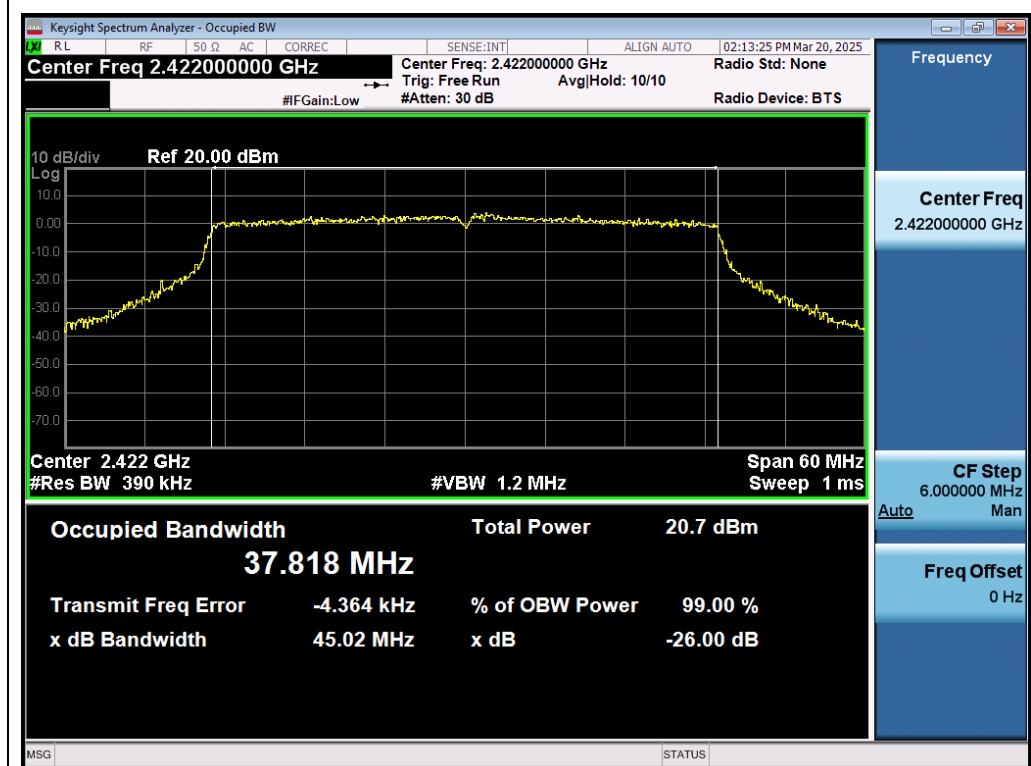
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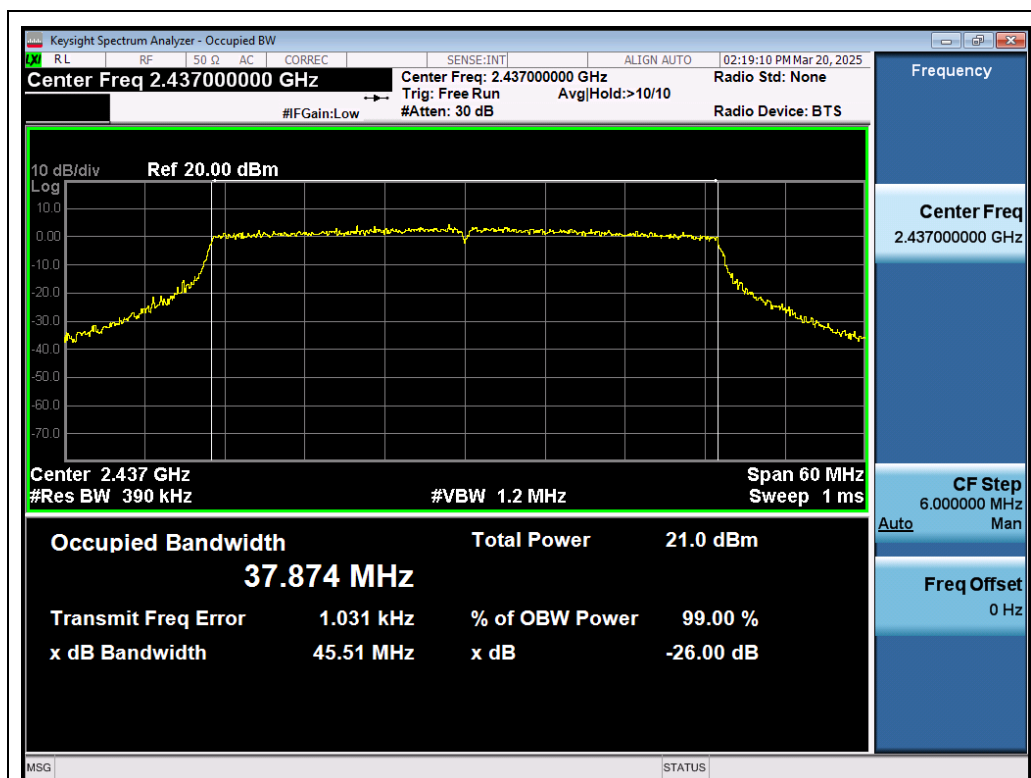
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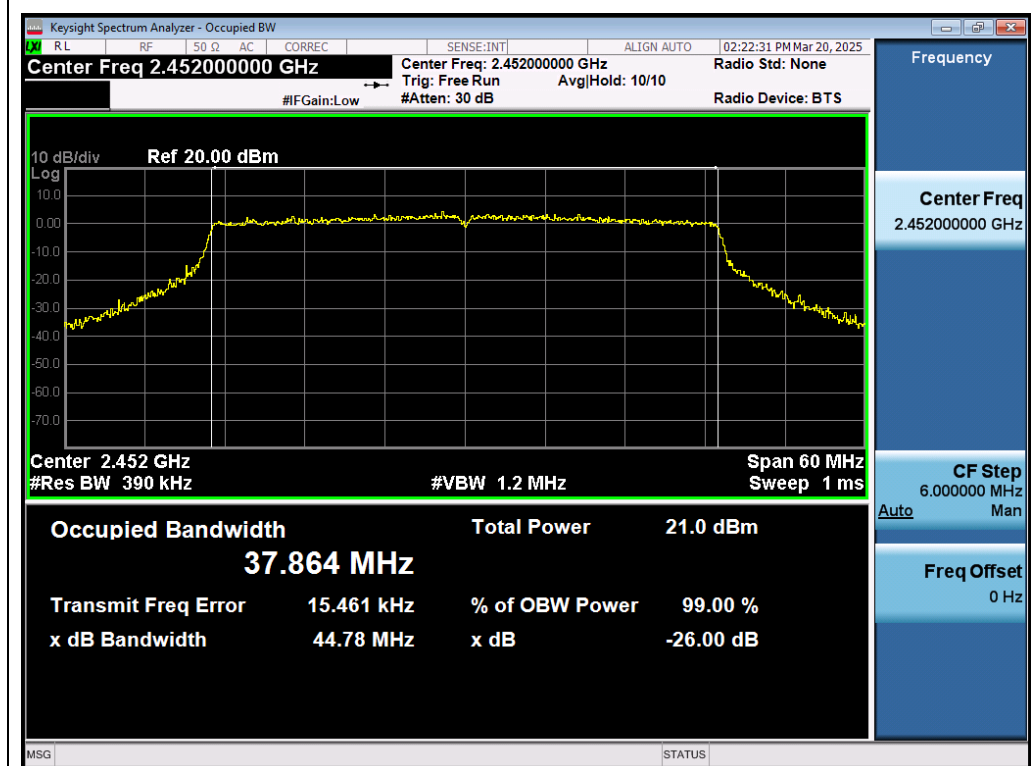
Test_Graph_802.11ax20_ANT1_2462_MCS0_OBW



Test_Graph_802.11ax40_ANT1_2422_MCS0_OBW



Test_Graph_802.11ax40_ANT1_2437_MCS0_OBW



Test_Graph_802.11ax40_ANT1_2452_MCS0_OBW

Appendix B: Maximum Average conducted output power

Test Result

Test Data of Conducted Output Power					
Test Mode	Test Frequency (MHz)	Average Power (dBm)	Peak Power (dBm)	Limits (dBm)	Result
802.11b	2412	13.96	16.51	≤ 30	Pass
	2437	14.25	16.93	≤ 30	Pass
	2462	13.97	16.35	≤ 30	Pass
802.11g	2412	12.48	19.99	≤ 30	Pass
	2437	12.73	20.49	≤ 30	Pass
	2462	13.14	20.58	≤ 30	Pass
802.11n20	2412	12.12	19.88	≤ 30	Pass
	2437	11.70	19.59	≤ 30	Pass
	2462	12.05	20.01	≤ 30	Pass
802.11n40	2422	12.09	20.16	≤ 30	Pass
	2437	11.60	19.82	≤ 30	Pass
	2452	11.81	19.68	≤ 30	Pass
802.11ax20	2412	11.30	20.50	≤ 30	Pass
	2437	11.15	21.04	≤ 30	Pass
	2462	11.48	20.12	≤ 30	Pass
802.11ax40	2422	11.35	21.20	≤ 30	Pass
	2437	11.69	21.49	≤ 30	Pass
	2452	11.52	21.45	≤ 30	Pass

Note: The Duty Cycle Factor is compensated in the result.

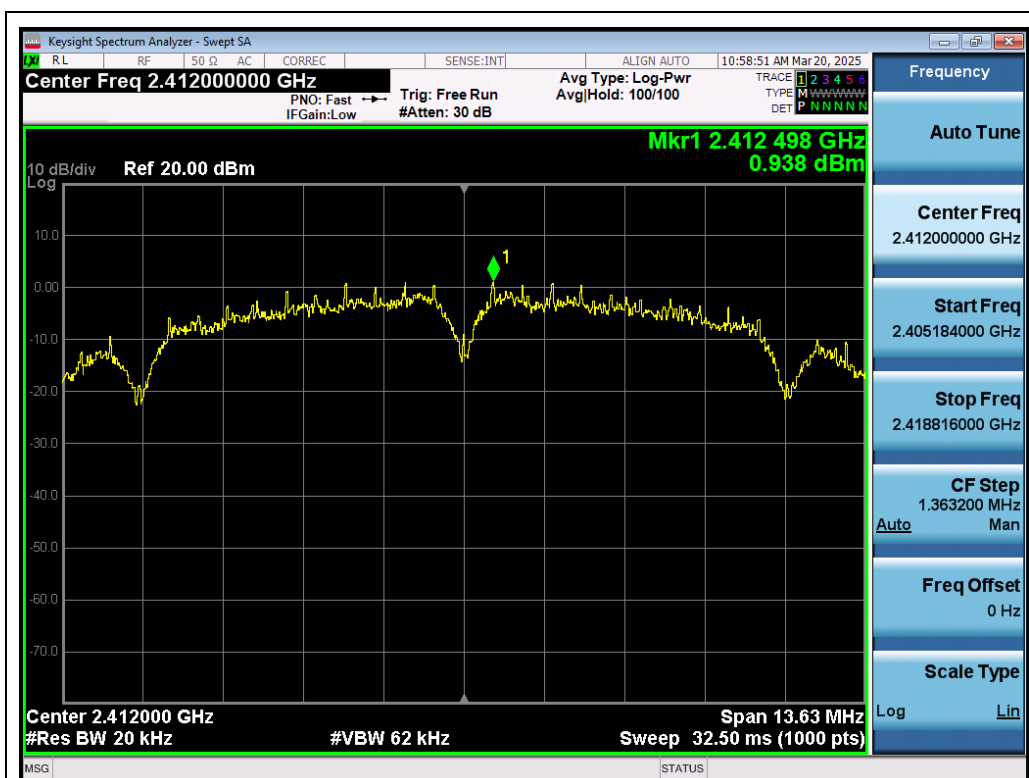
Appendix C: Maximum Average power spectral density

Test Result

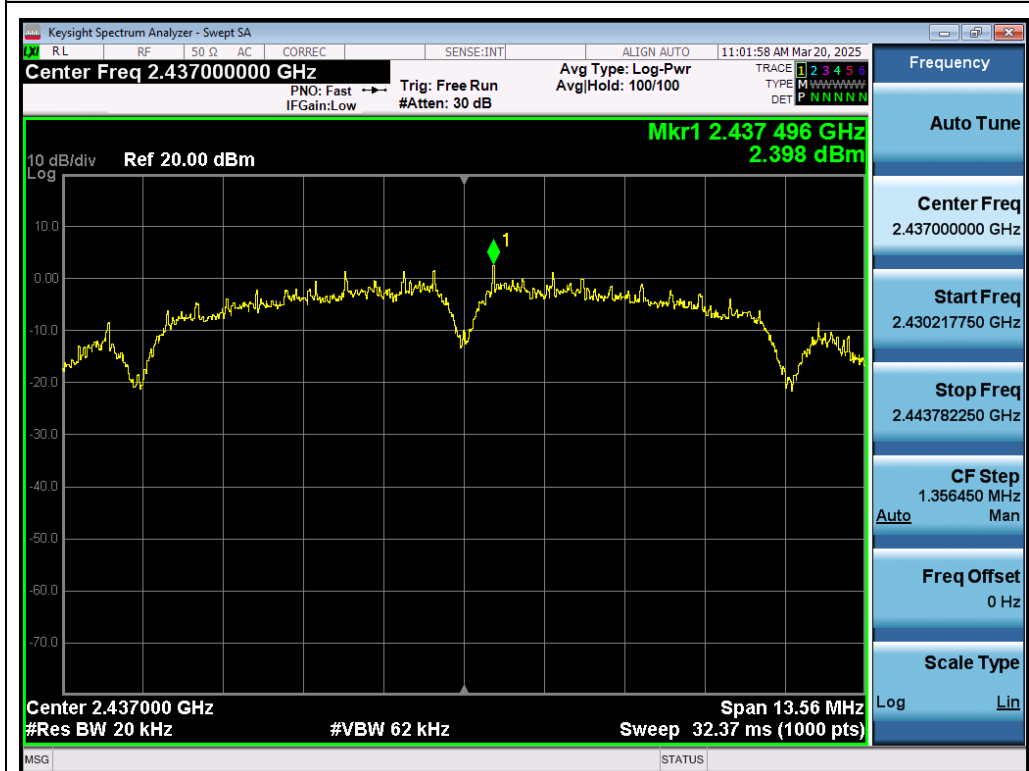
Test Data of Conducted Output Power Spectral Density					
Test Mode	Test Frequency (MHz)	Power Spectral density (dBm/20kHz)	Power Spectral density (dBm/3kHz)	Limit (dBm/3kHz)	Result
802.11b	2412	0.938	-7.301	≤ 8	Pass
	2437	2.398	-5.841	≤ 8	Pass
	2462	2.341	-5.898	≤ 8	Pass
802.11g	2412	-3.453	-11.692	≤ 8	Pass
	2437	-4.117	-12.356	≤ 8	Pass
	2462	-3.130	-11.369	≤ 8	Pass
802.11n20	2412	-3.919	-12.158	≤ 8	Pass
	2437	-5.653	-13.892	≤ 8	Pass
	2462	-4.618	-12.857	≤ 8	Pass
802.11n40	2422	-7.368	-15.607	≤ 8	Pass
	2437	-7.360	-15.599	≤ 8	Pass
	2452	-8.141	-16.38	≤ 8	Pass
802.11ax20	2412	-4.694	-12.933	≤ 8	Pass
	2437	-5.579	-13.818	≤ 8	Pass
	2462	-4.502	-12.741	≤ 8	Pass
802.11ax40	2422	-10.113	-18.352	≤ 8	Pass
	2437	-9.534	-17.773	≤ 8	Pass
	2452	-9.188	-17.427	≤ 8	Pass

Note: Power density(dBm/3kHz) = Power density(dBm/20kHz) – 10*log(20/3).

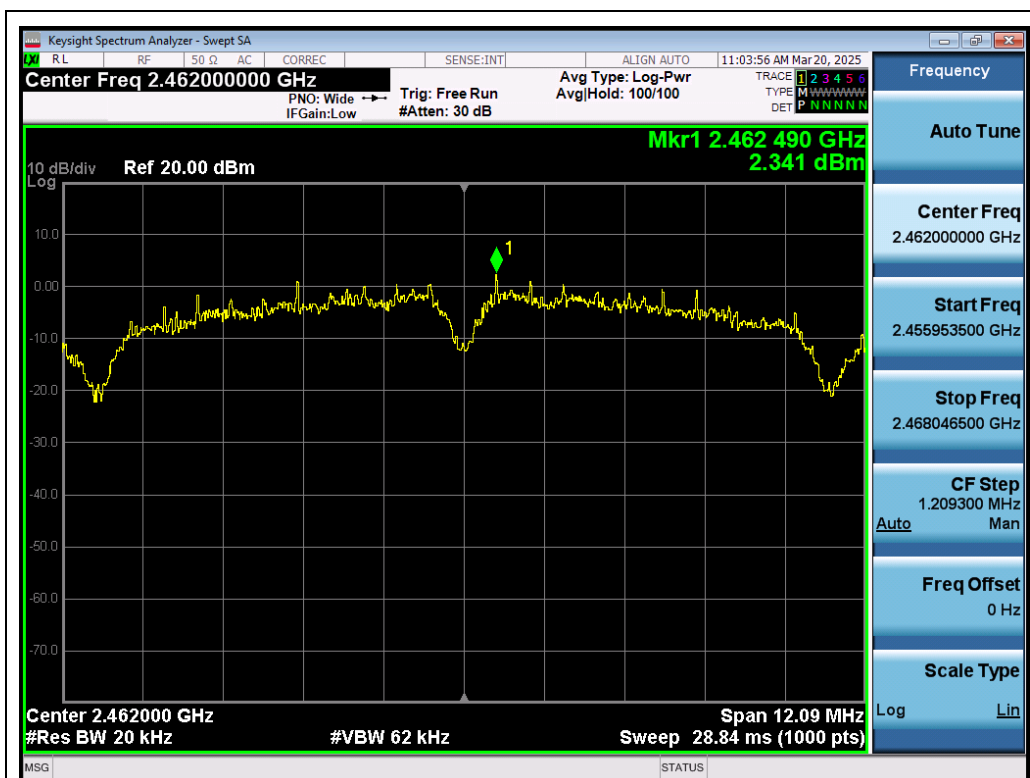
Test Graphs



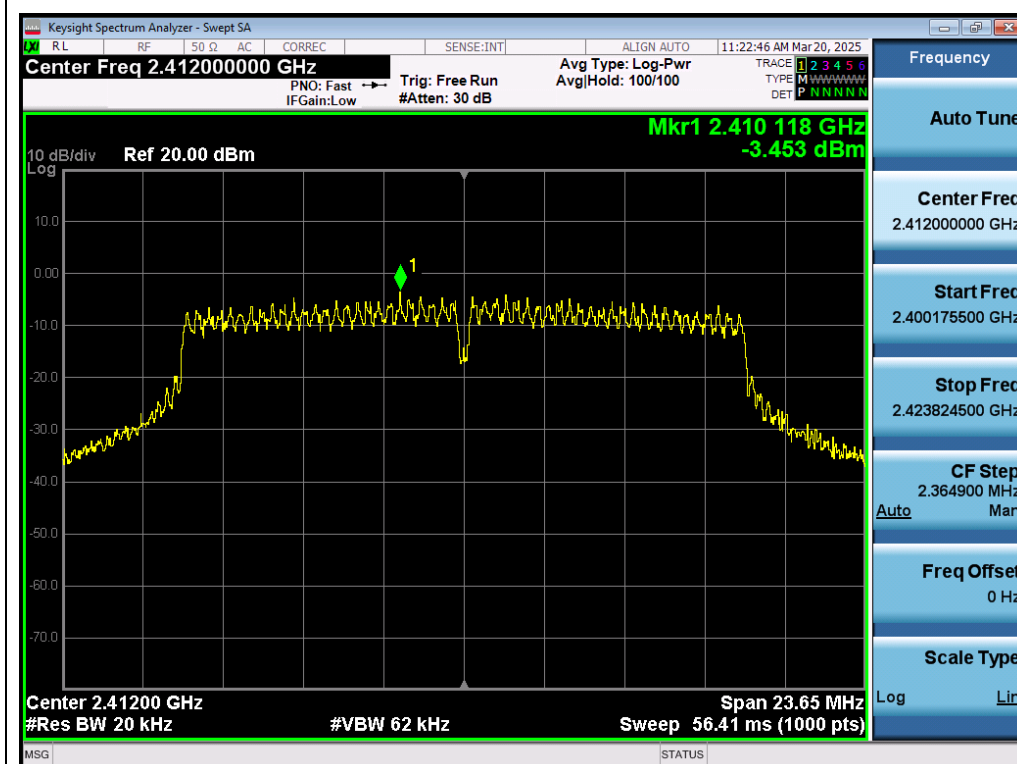
Test_Graph_802.11b_ANT1_2412_1Mbps_PSD



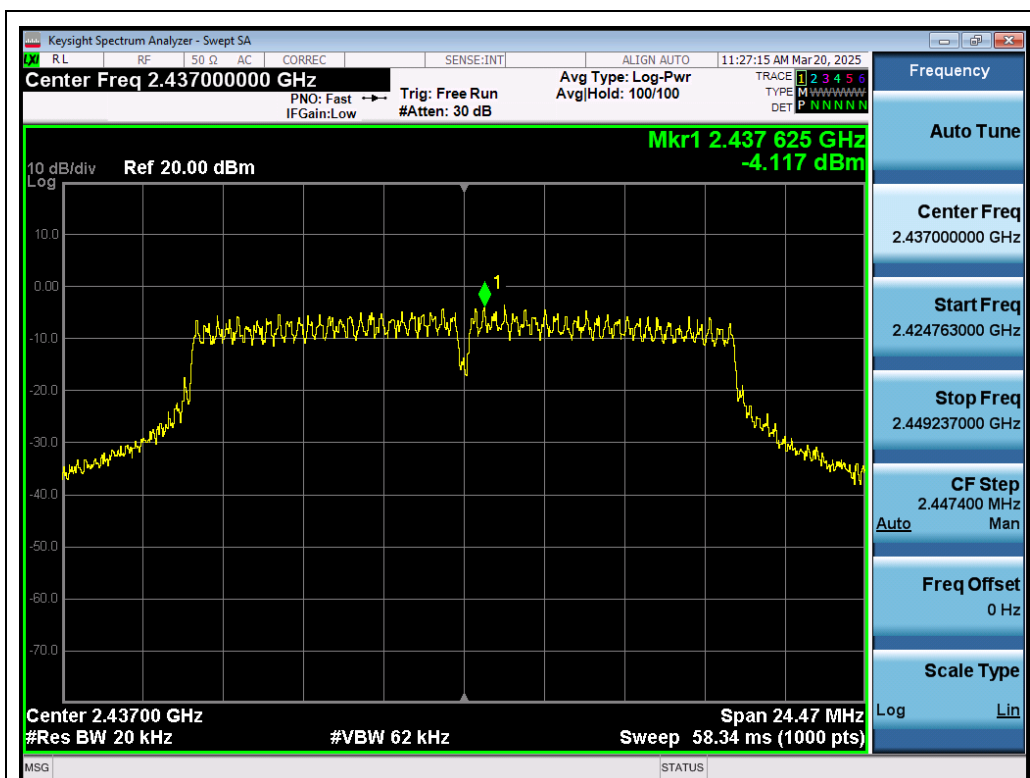
Test_Graph_802.11b_ANT1_2437_1Mbps_PSD



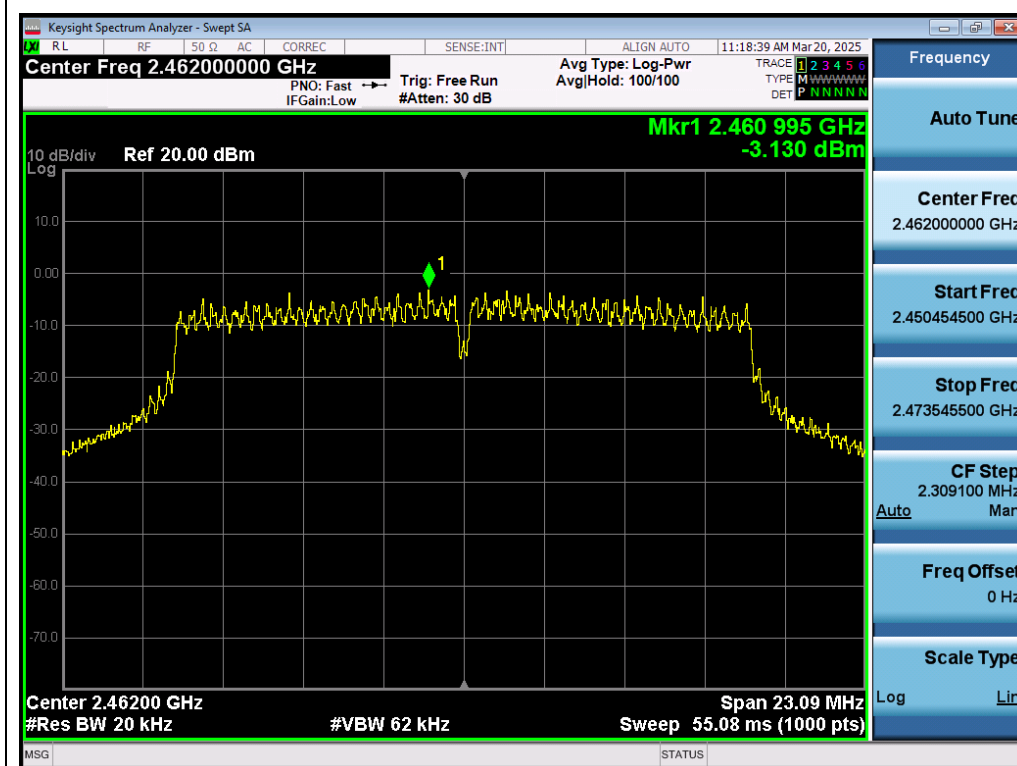
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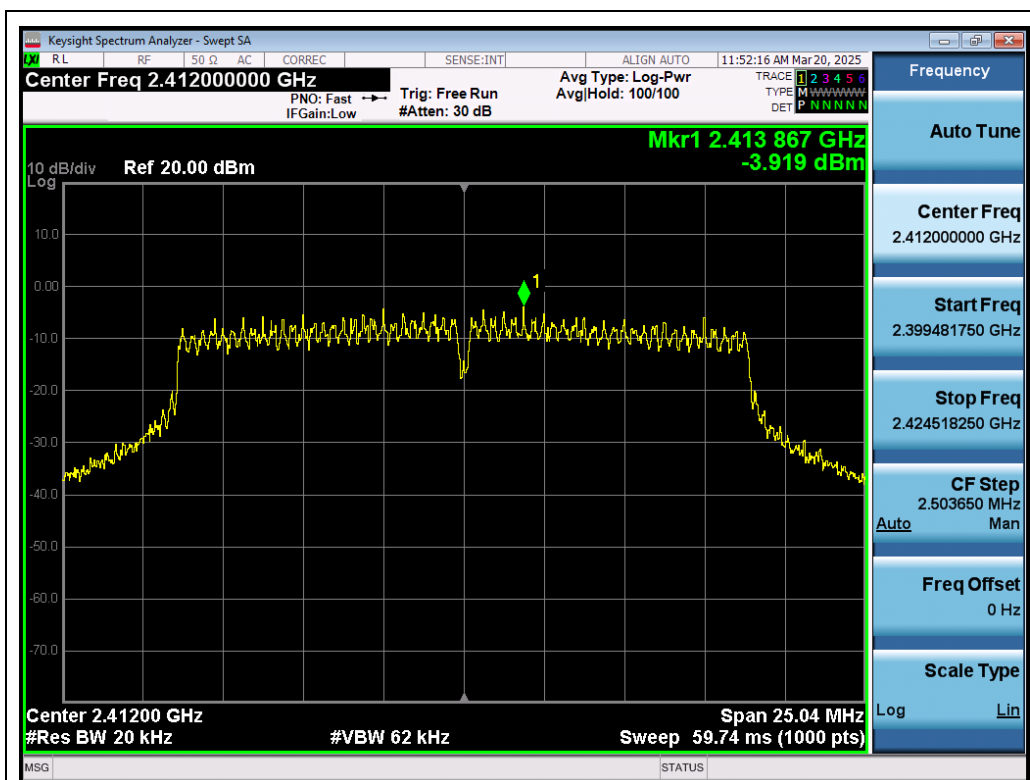
Test_Graph_802.11g_ANT1_2412_6Mbps_PSD



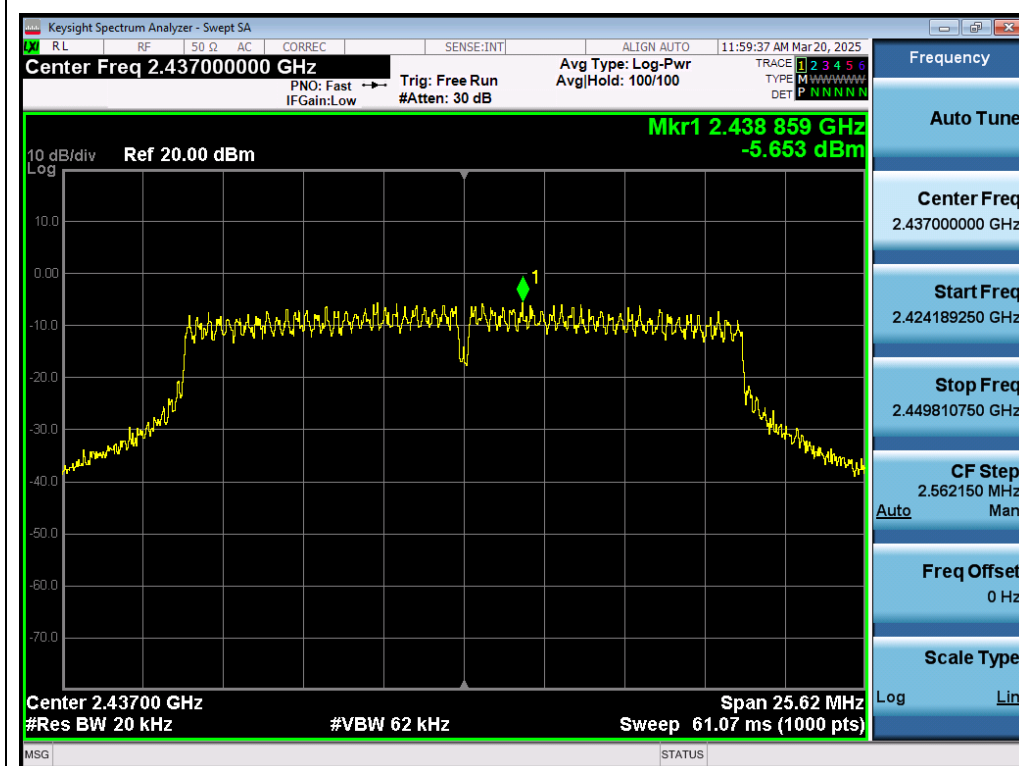
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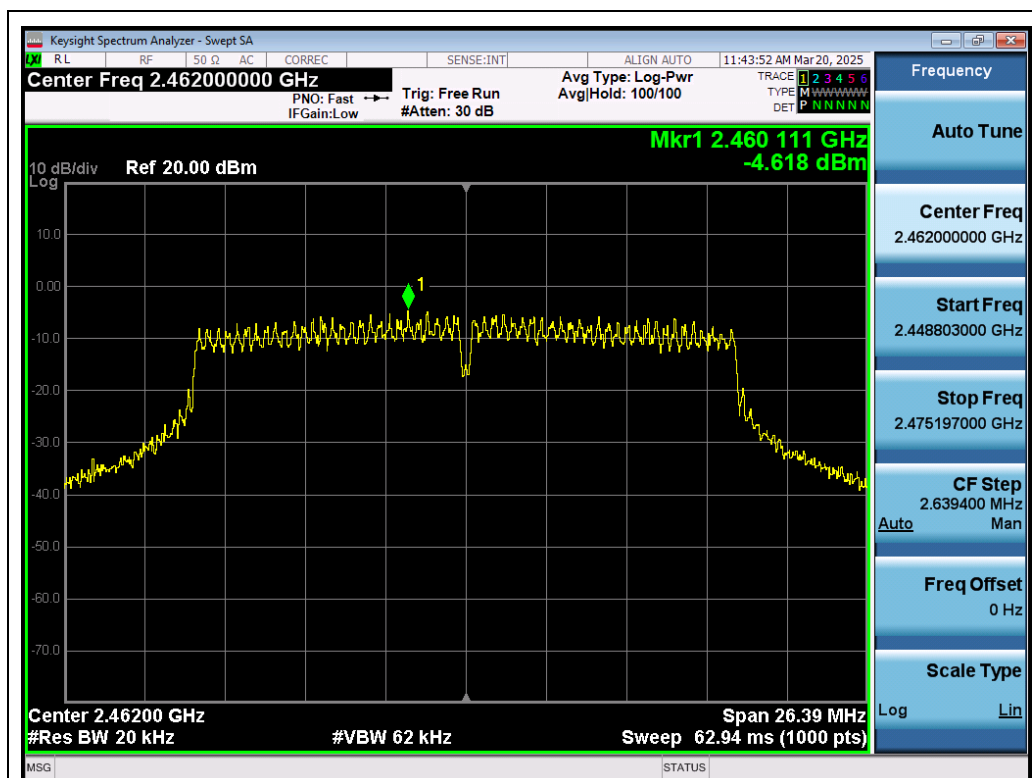
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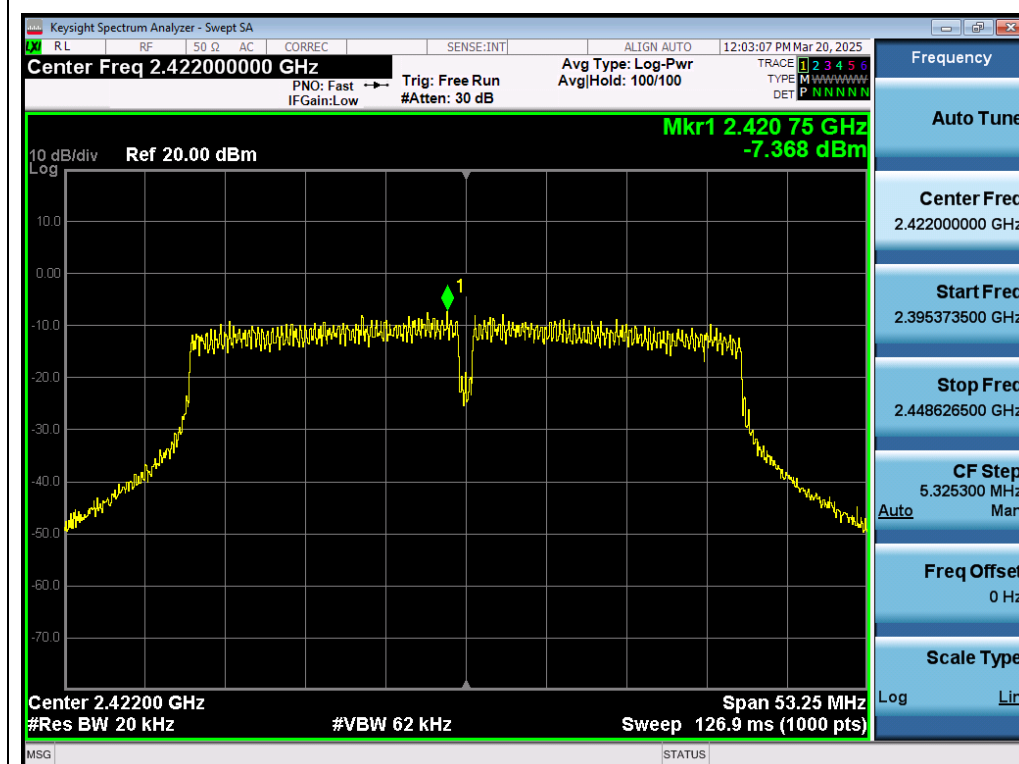
Test_Graph_802.11n20_ANT1_2412_MCS0_PSD



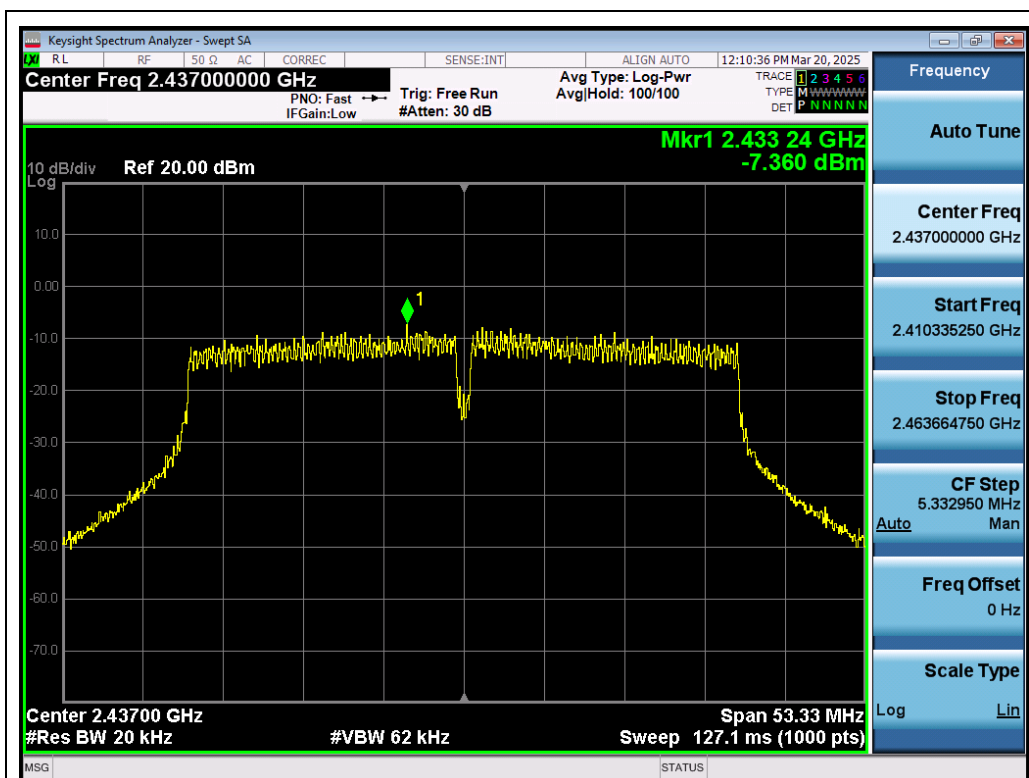
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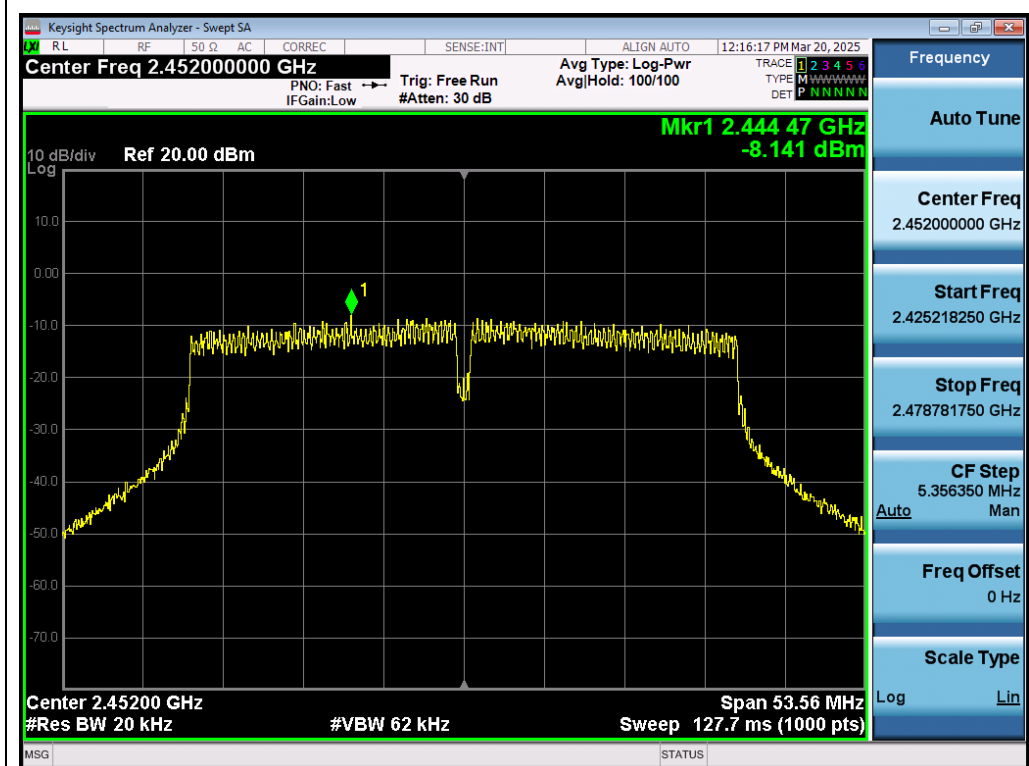
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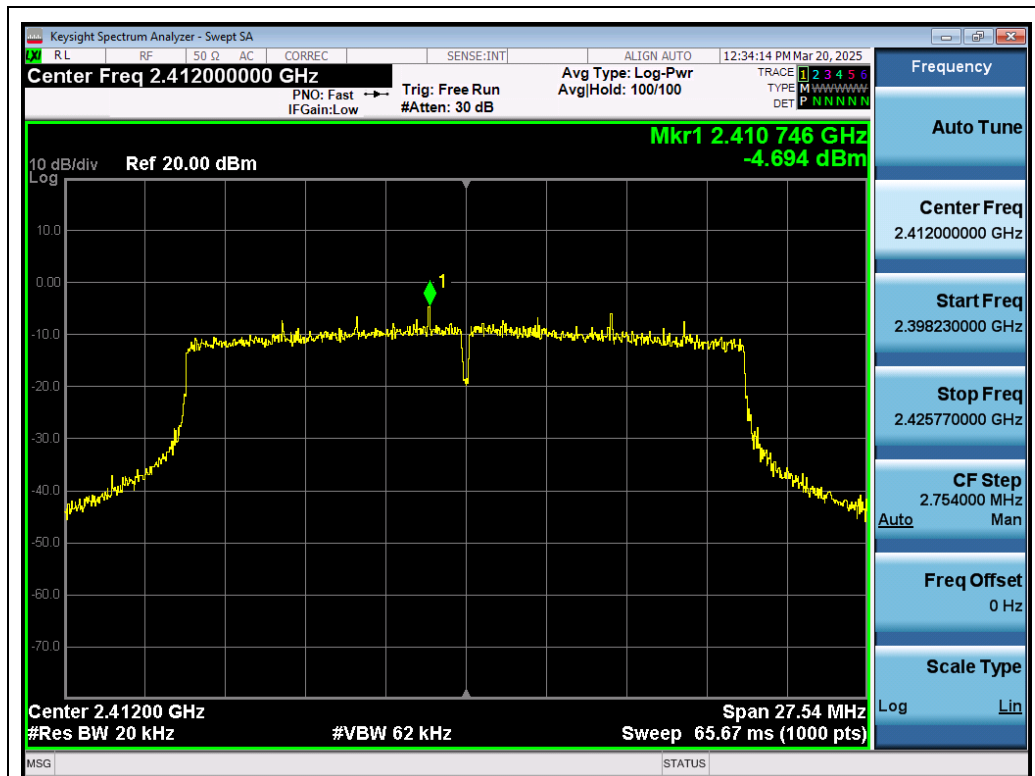
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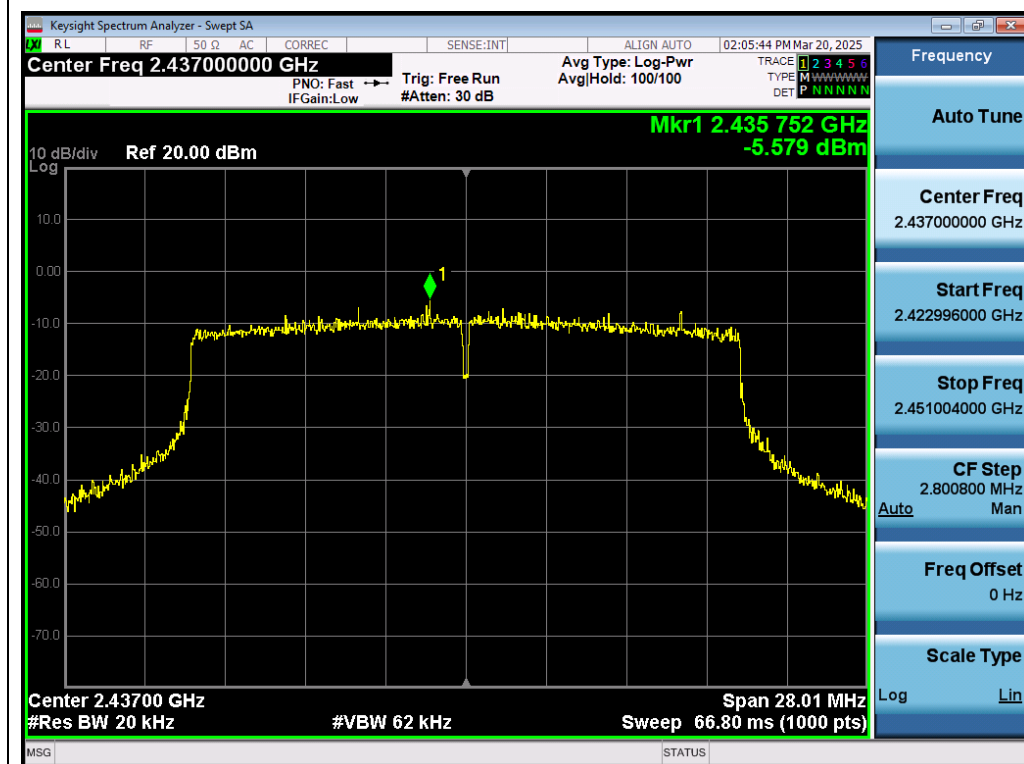
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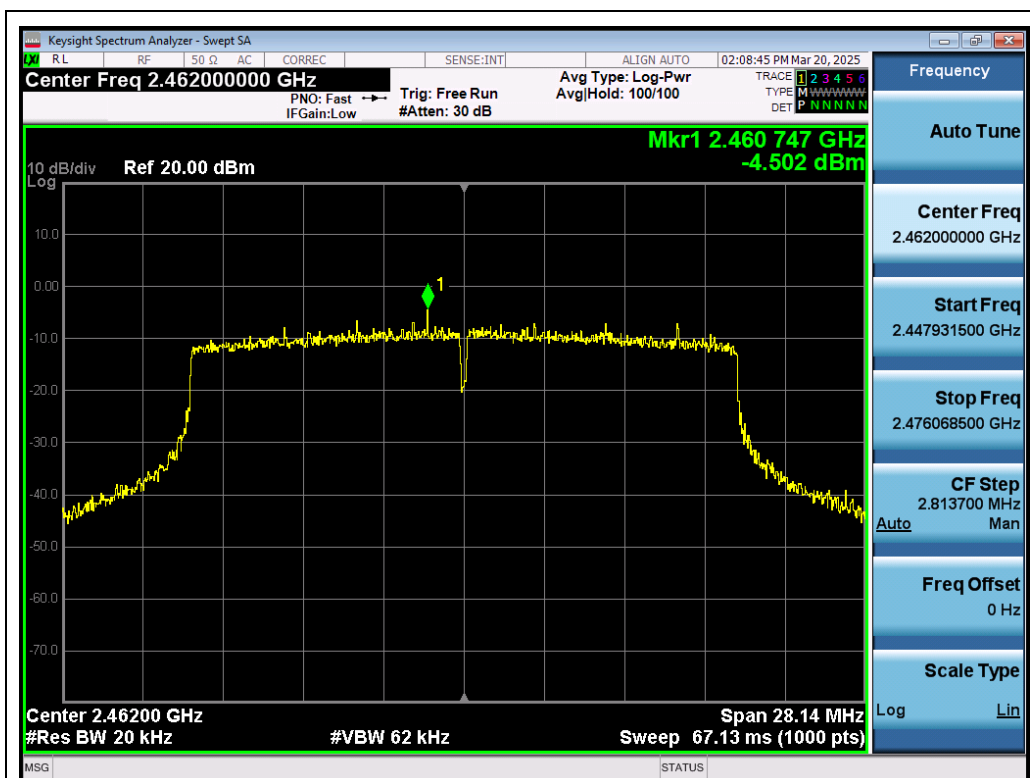
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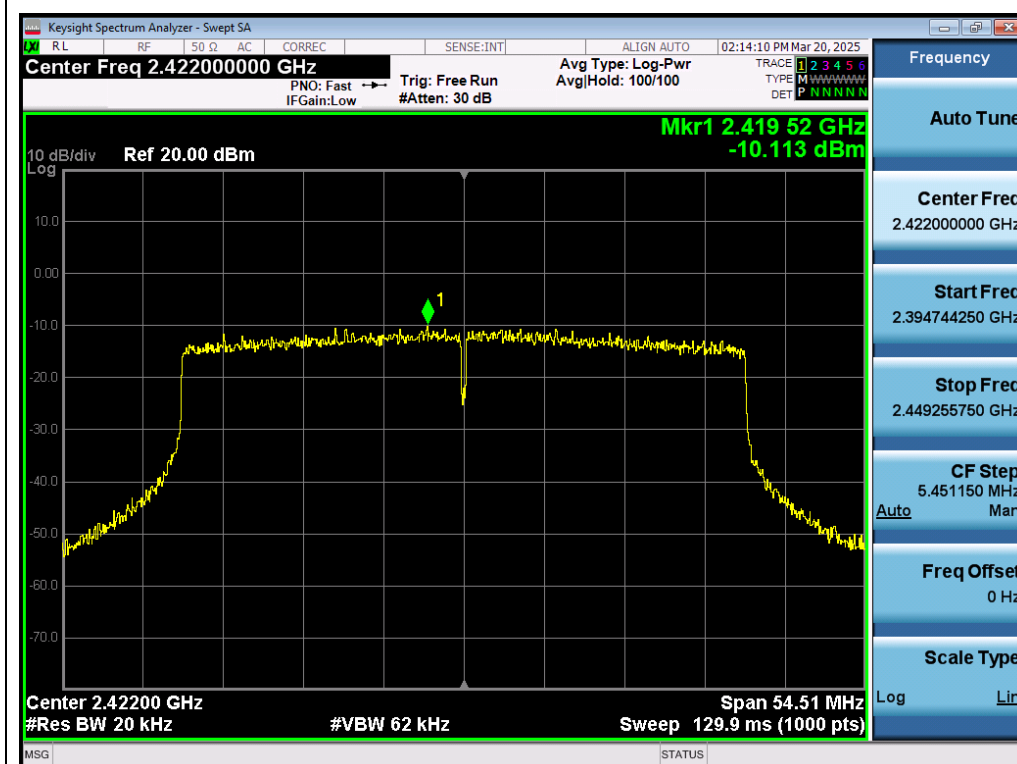
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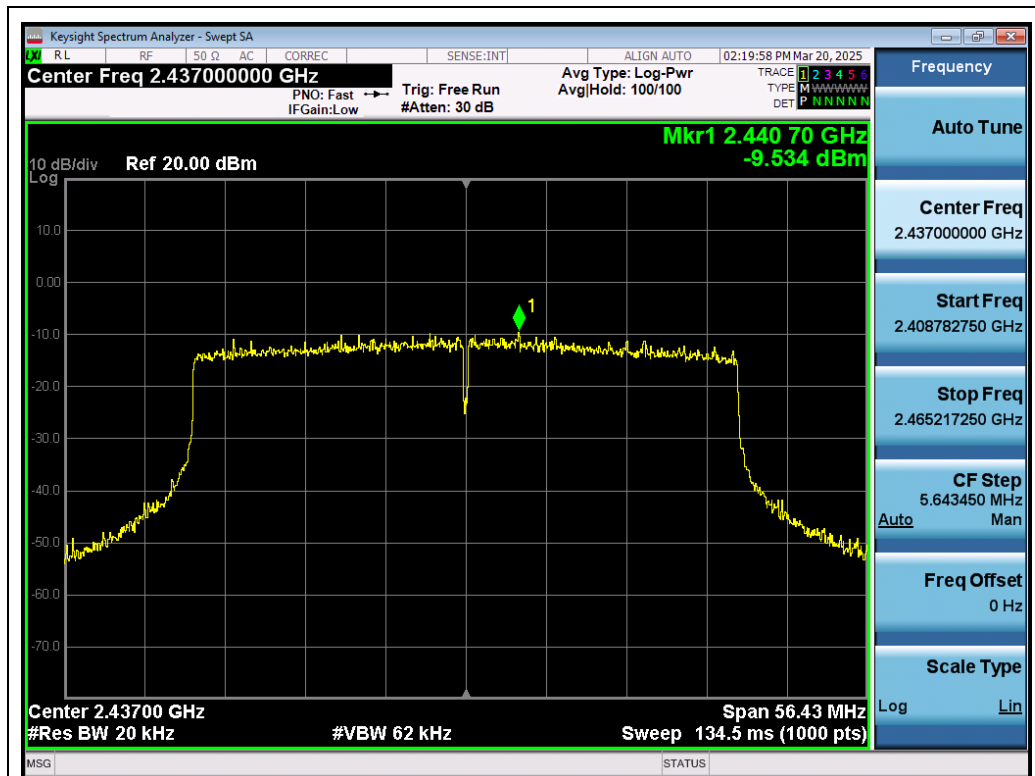
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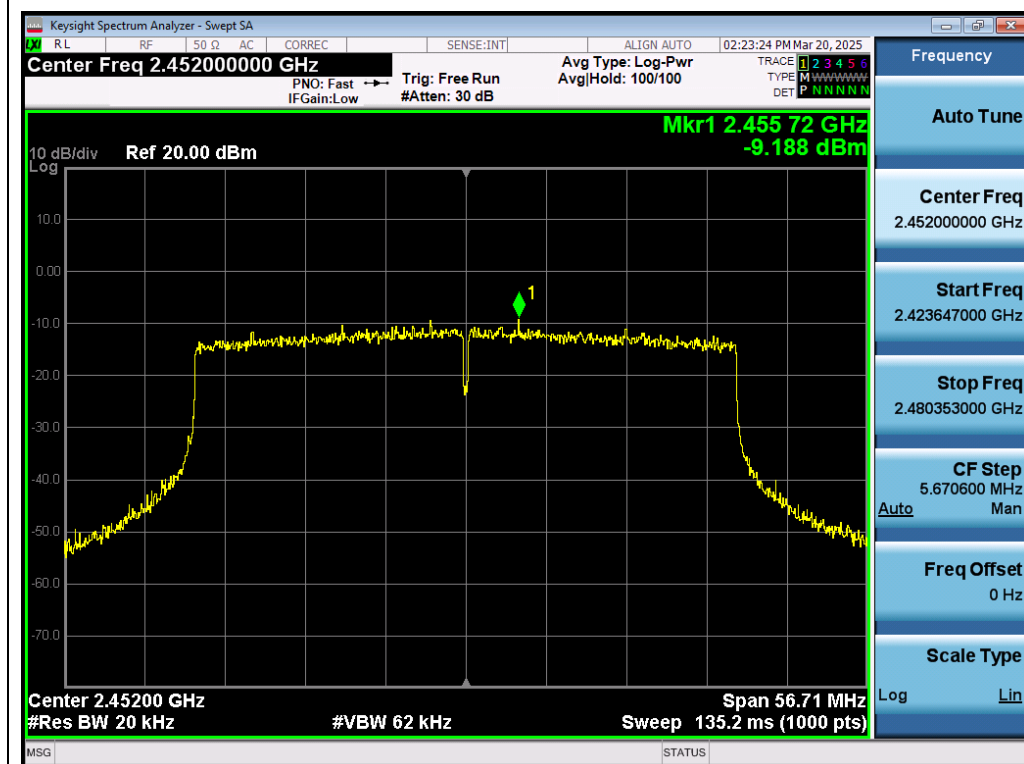
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Test_Graph_802.11ax40_ANT1_2422_MCS0_PSD



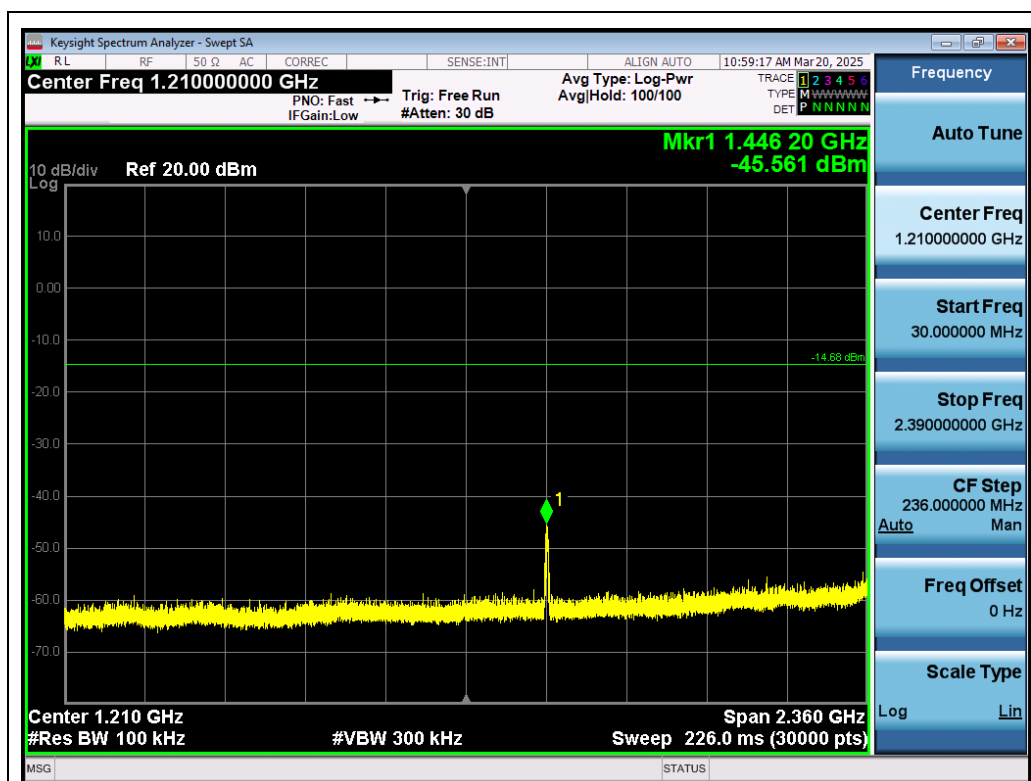
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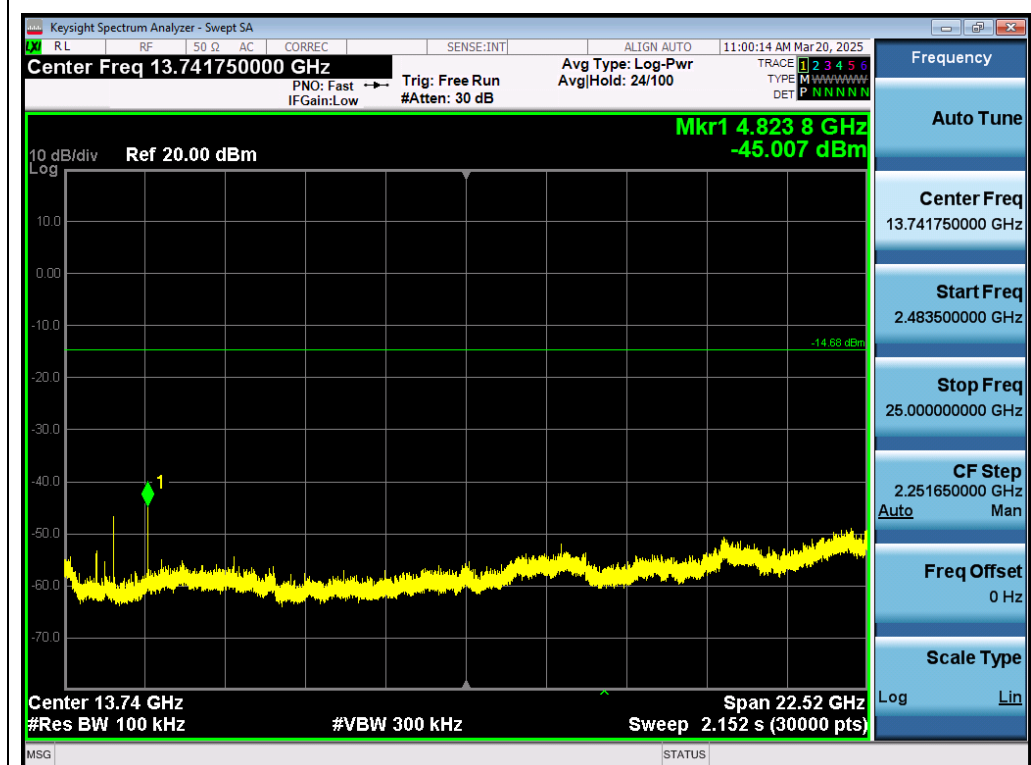
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Appendix D: Conducted Spurious Emission and Band edge measurements

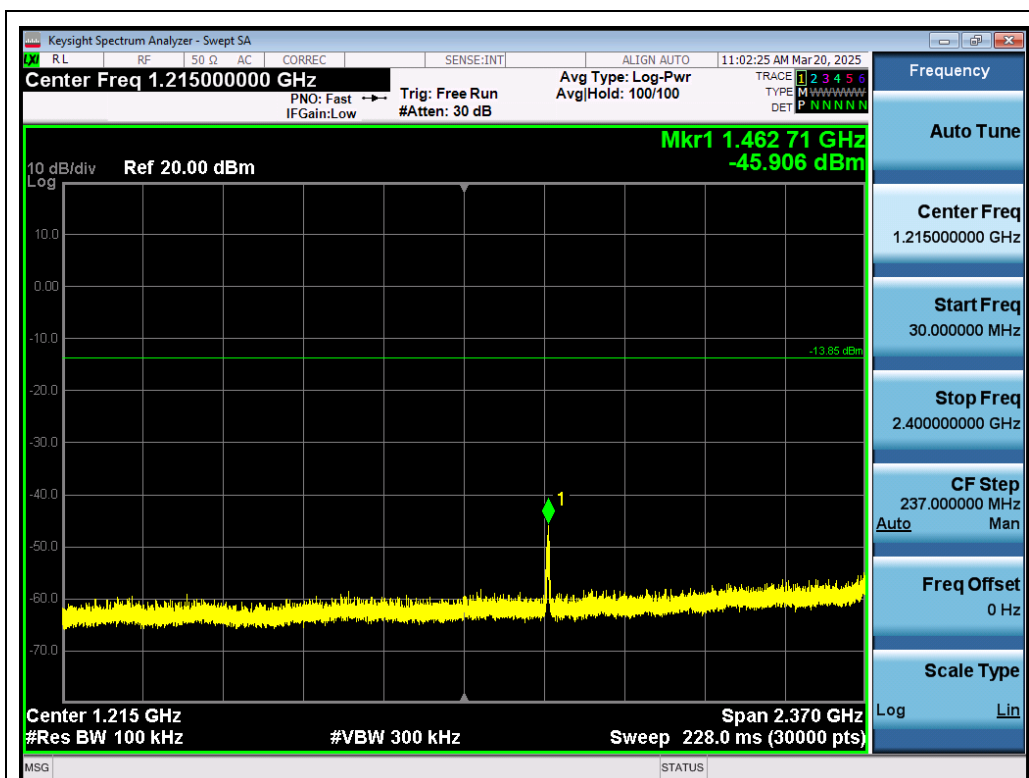
Test Result



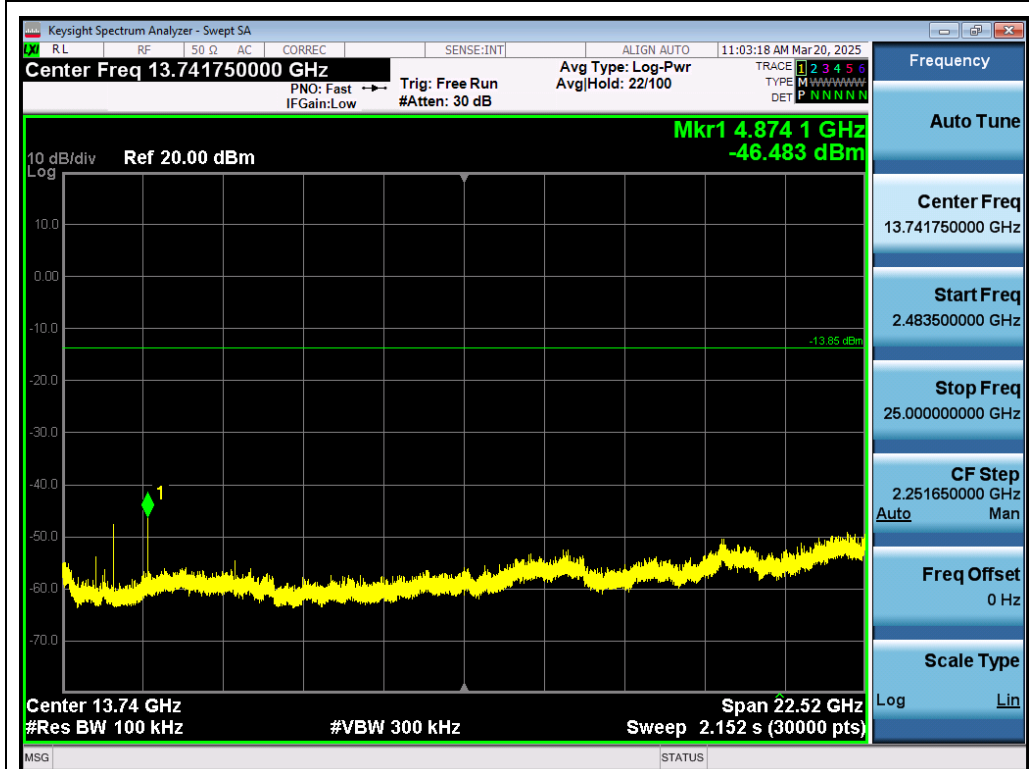
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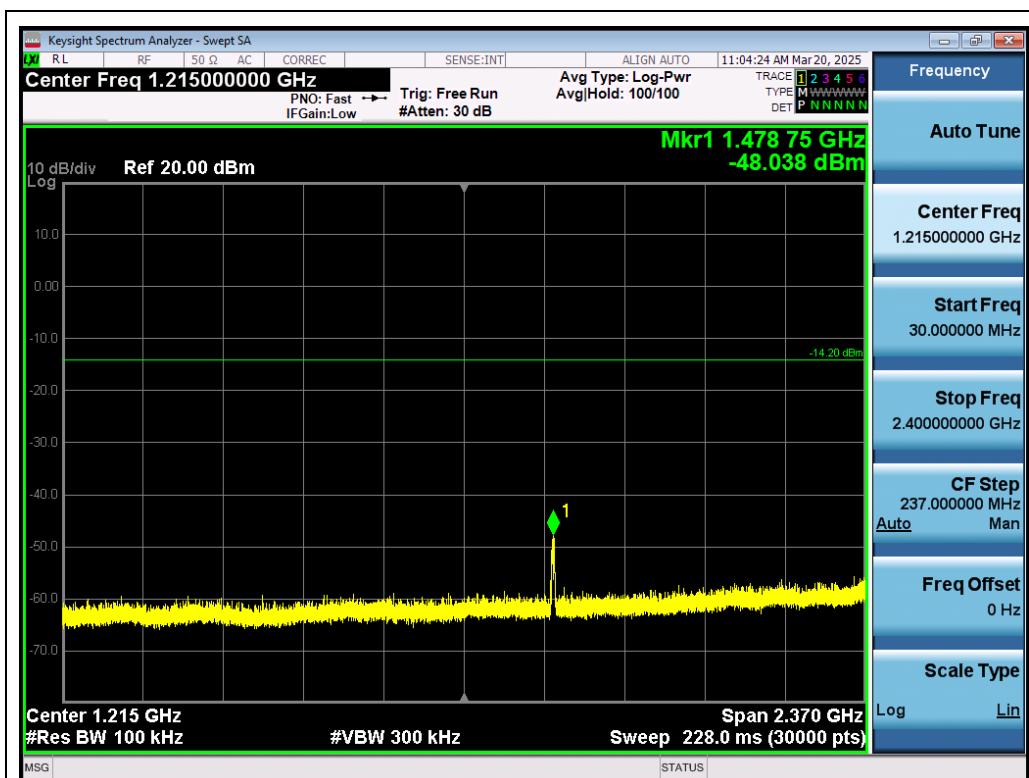
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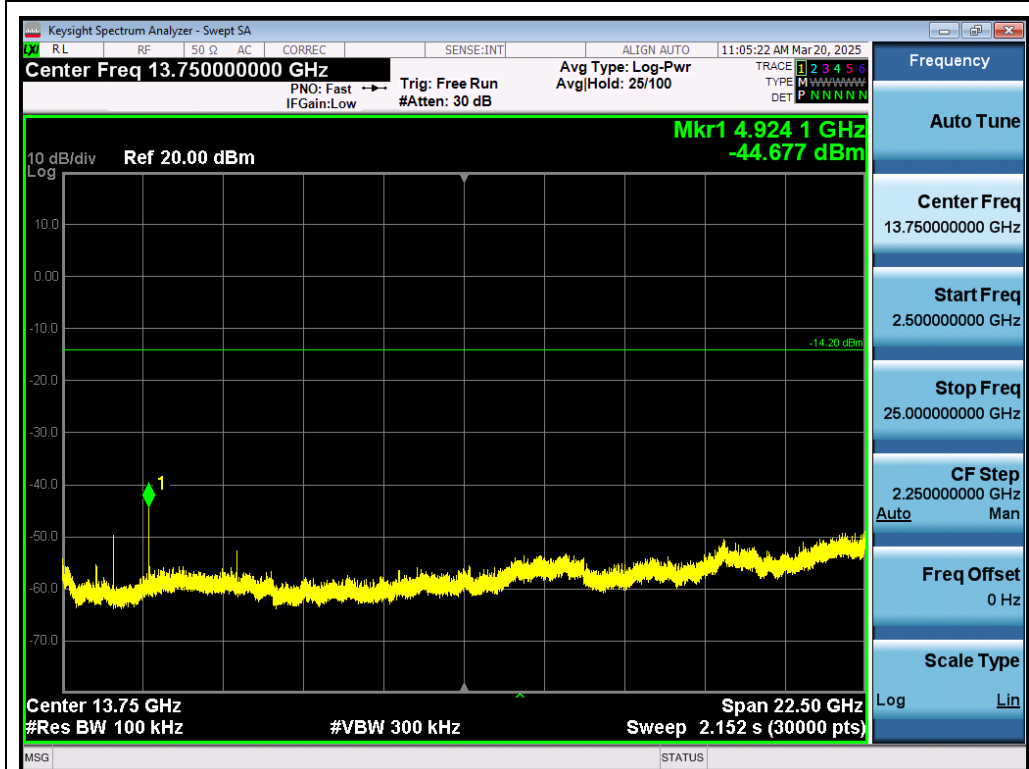
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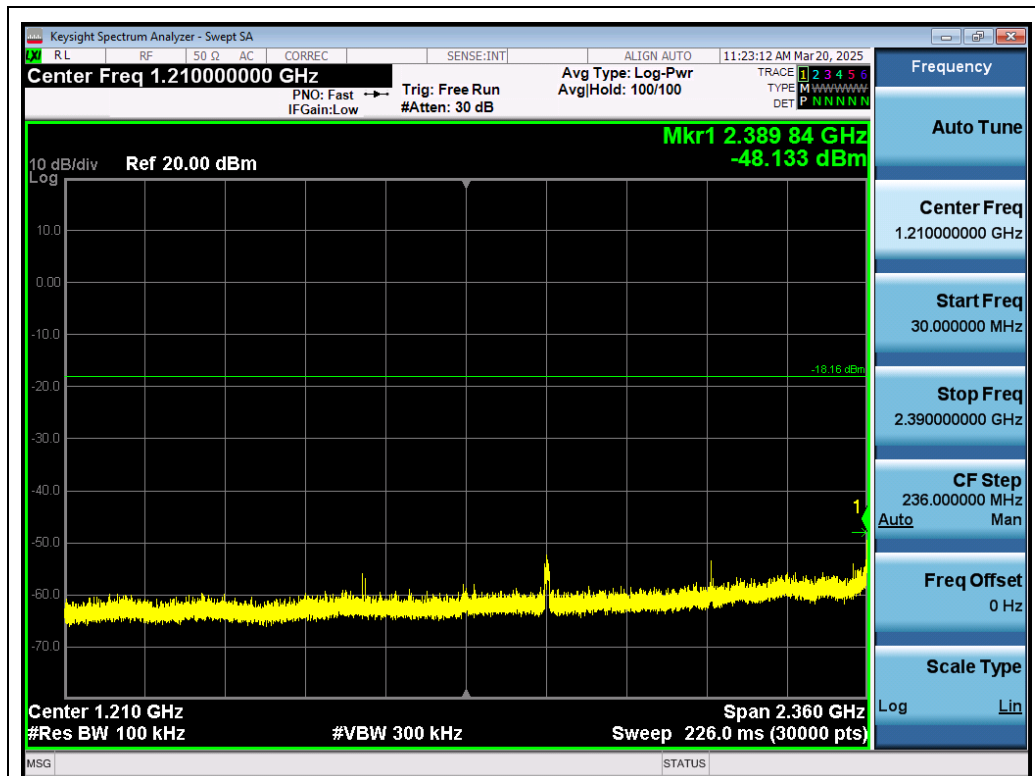
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Test_Graph_802.11b_ANT1_2462_1Mbps_Lower Band Emissions



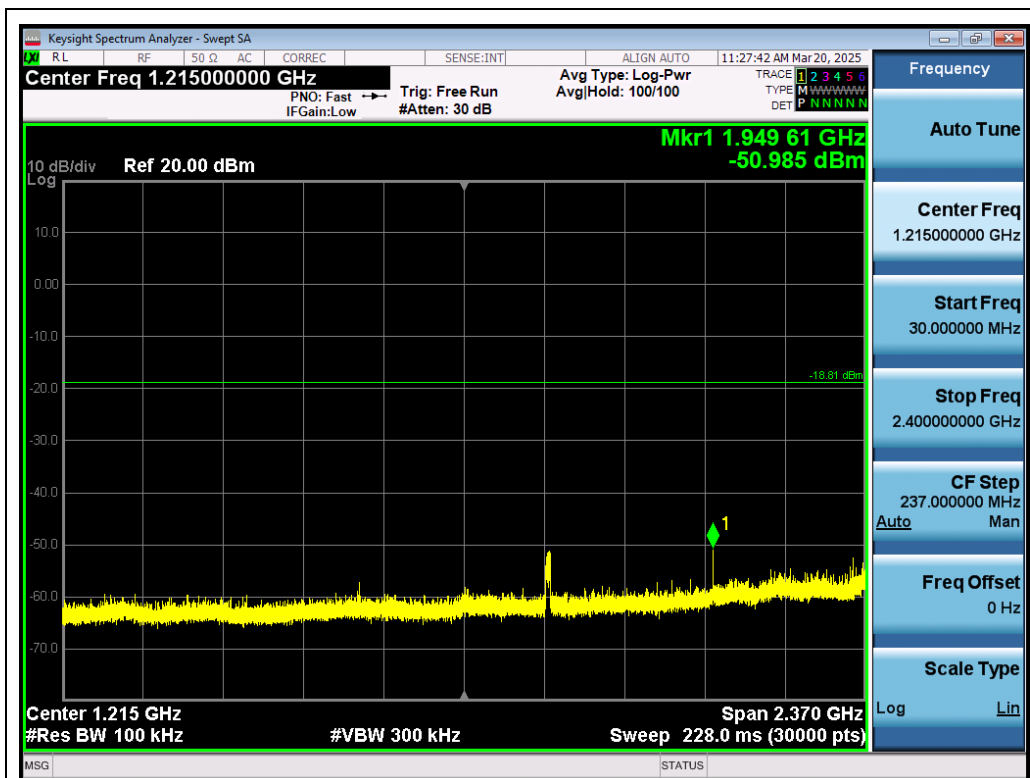
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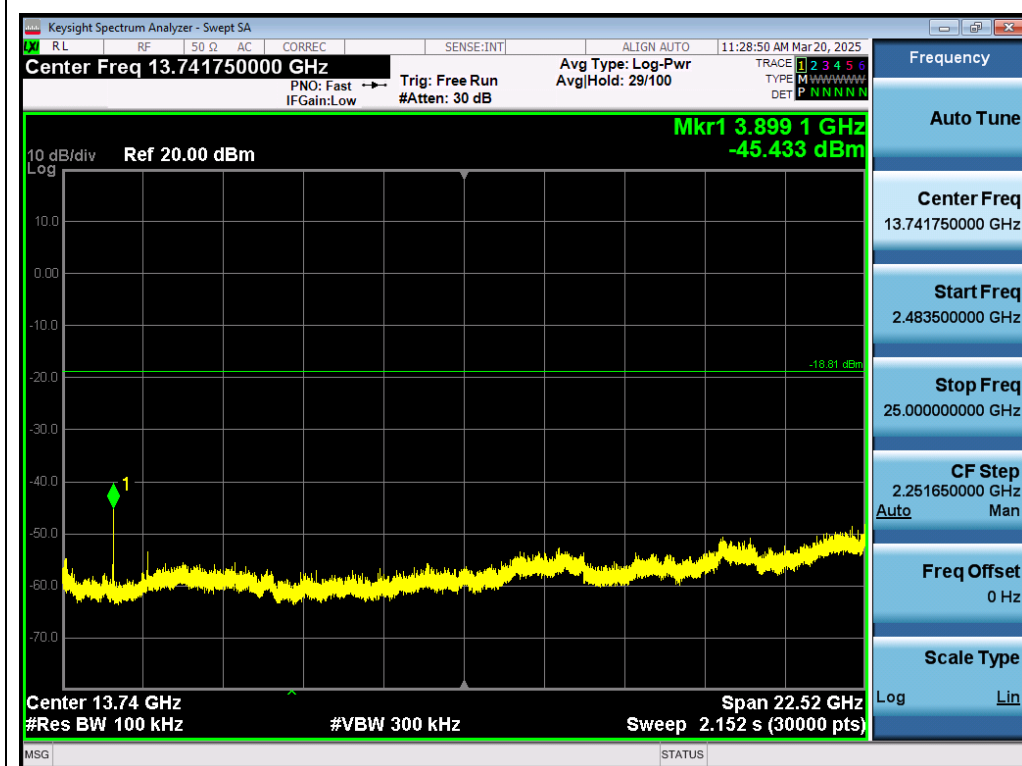
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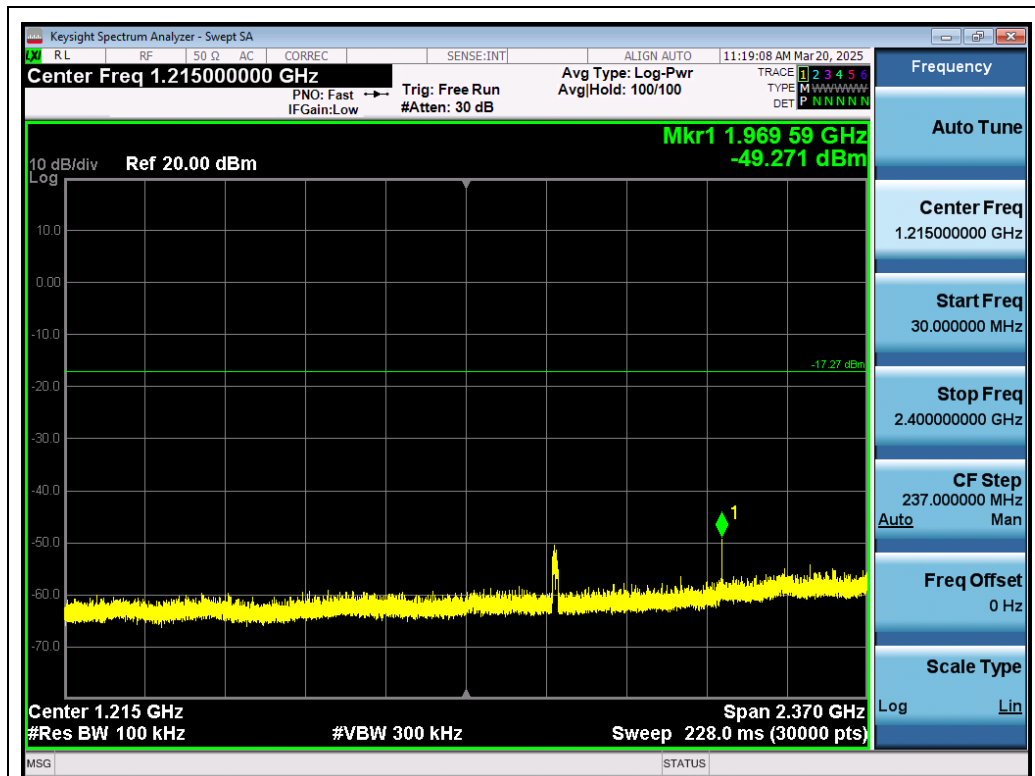
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Test_Graph_802.11g_ANT1_2437_6Mbps_Lower Band Emissions



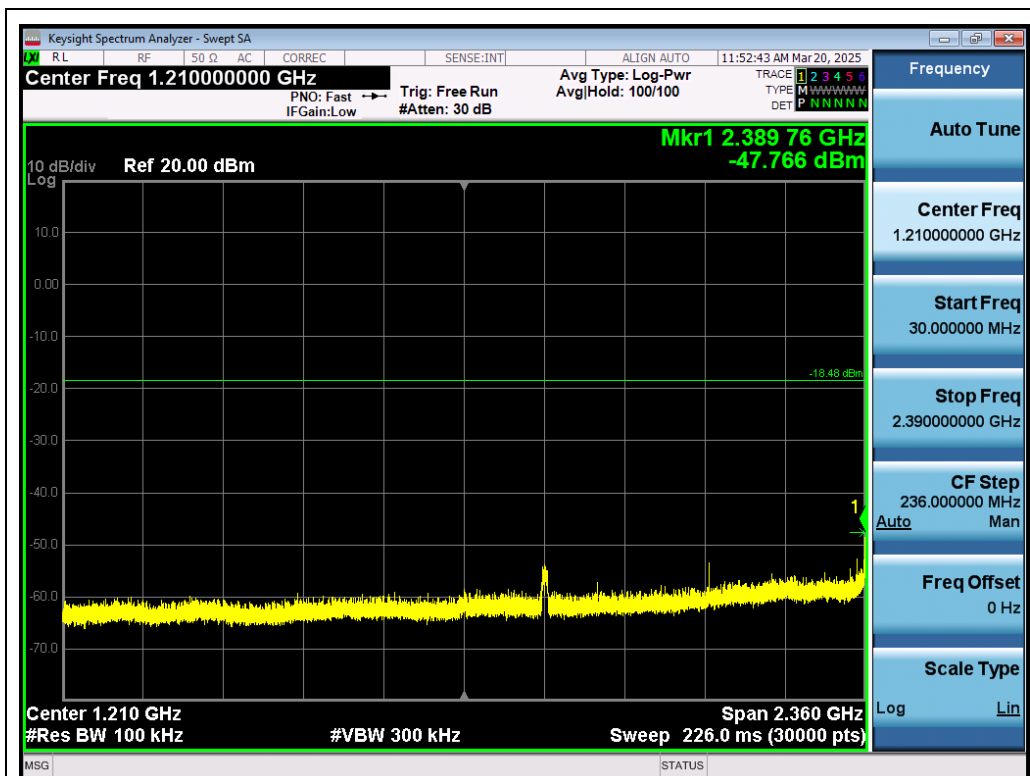
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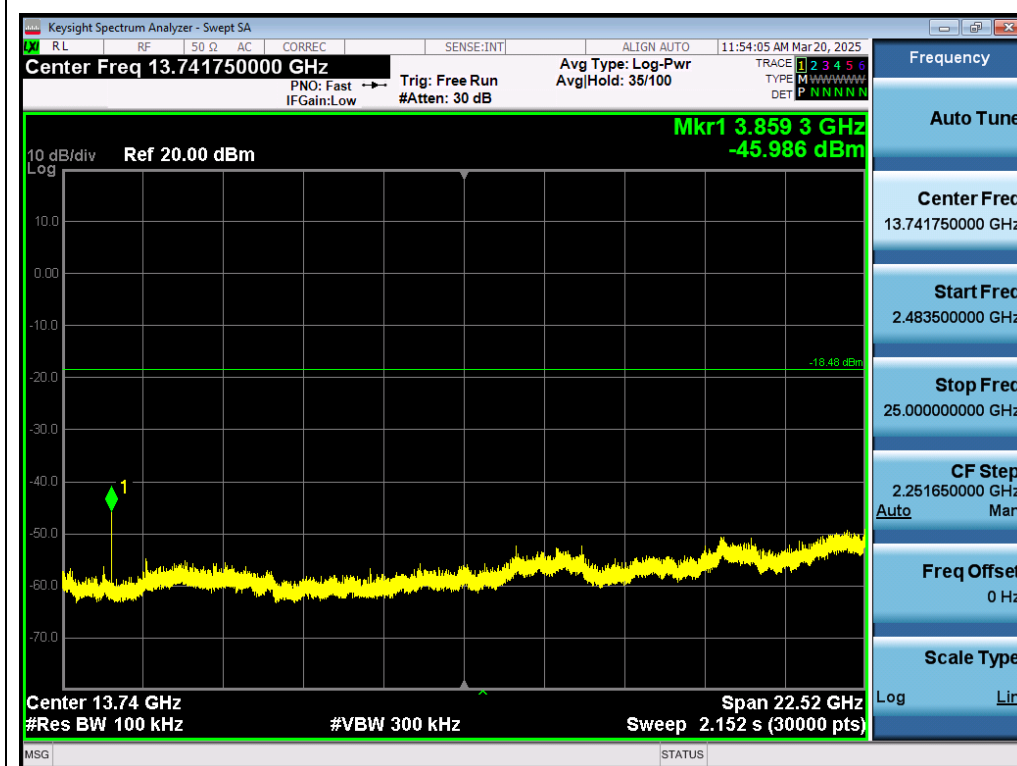
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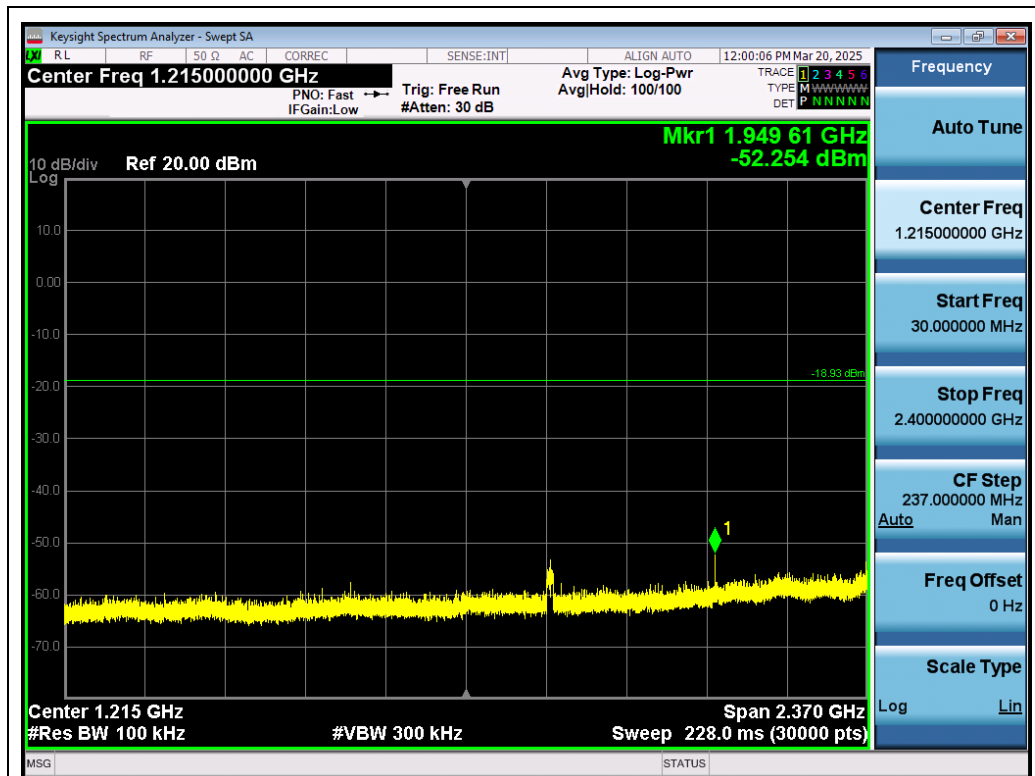
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Test_Graph_802.11n20_ANT1_2412_MCS0_Lower Band Emissions



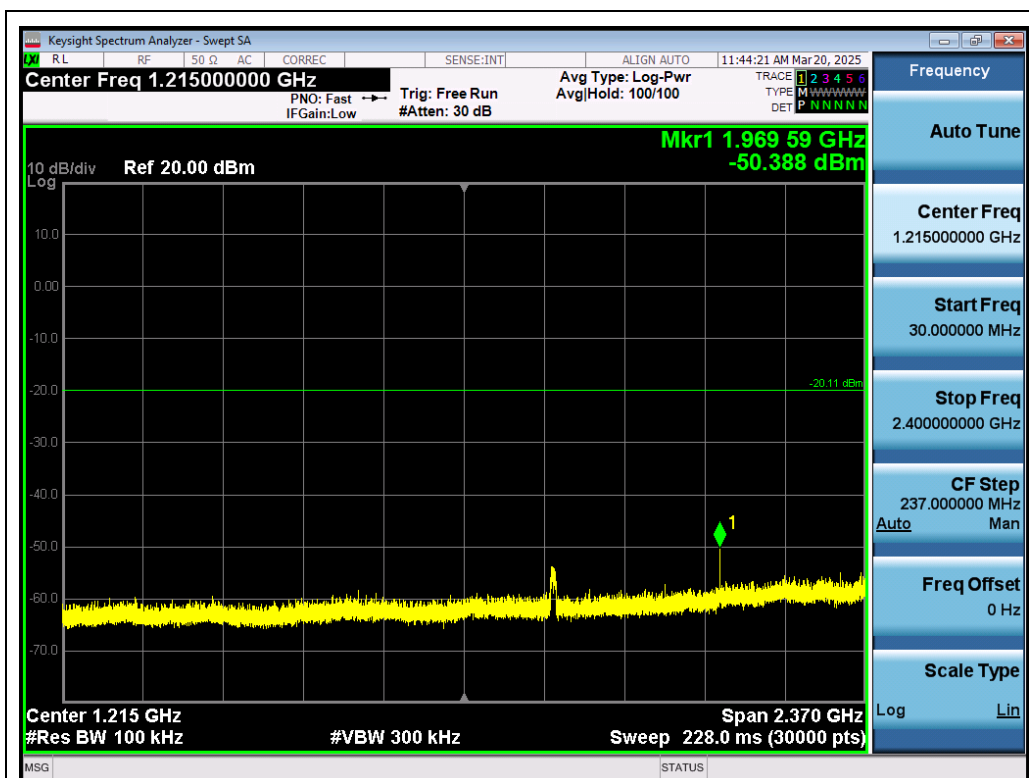
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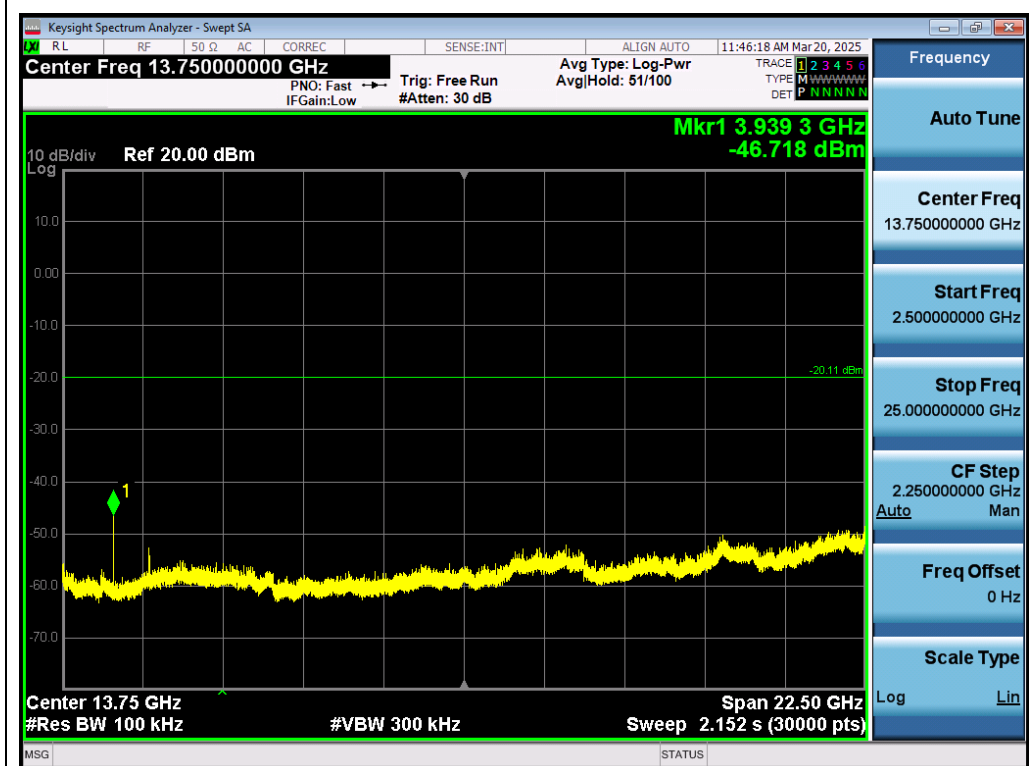
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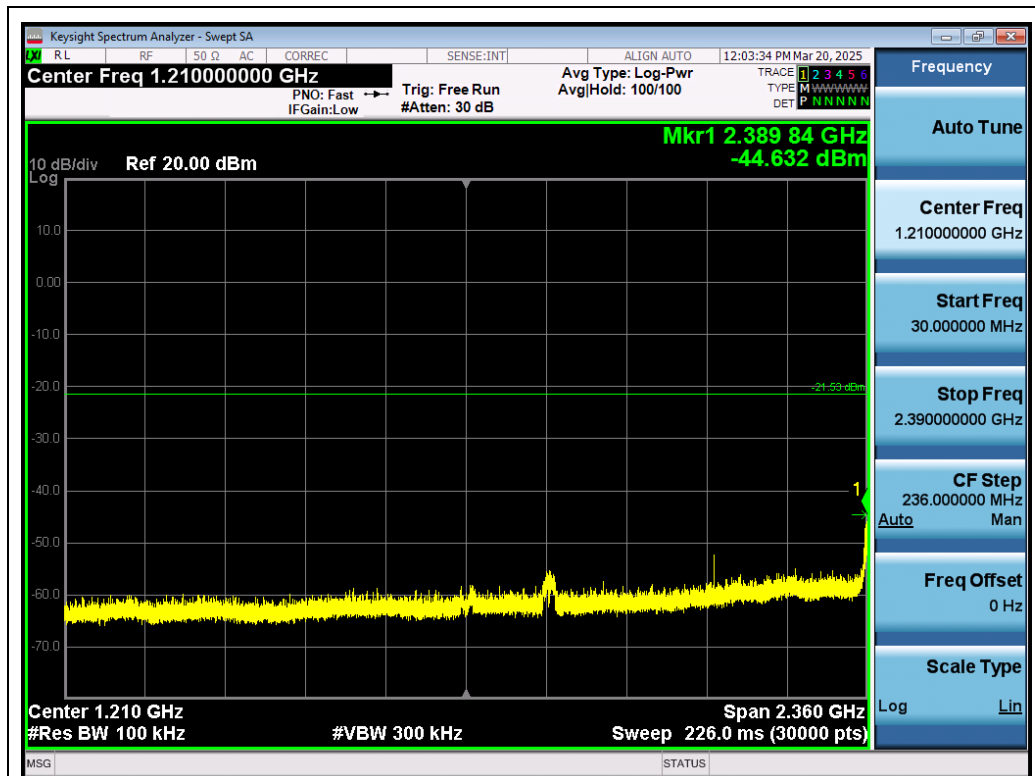
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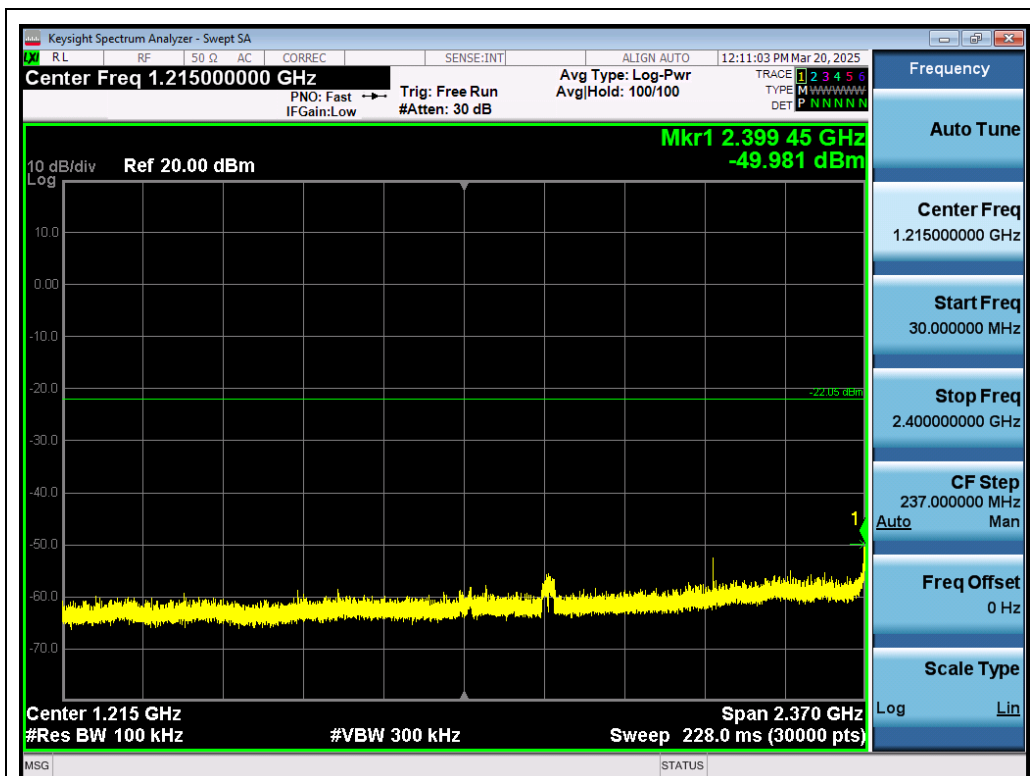
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Test_Graph_802.11n40_ANT1_2422_MCS0_Lower Band Emissions



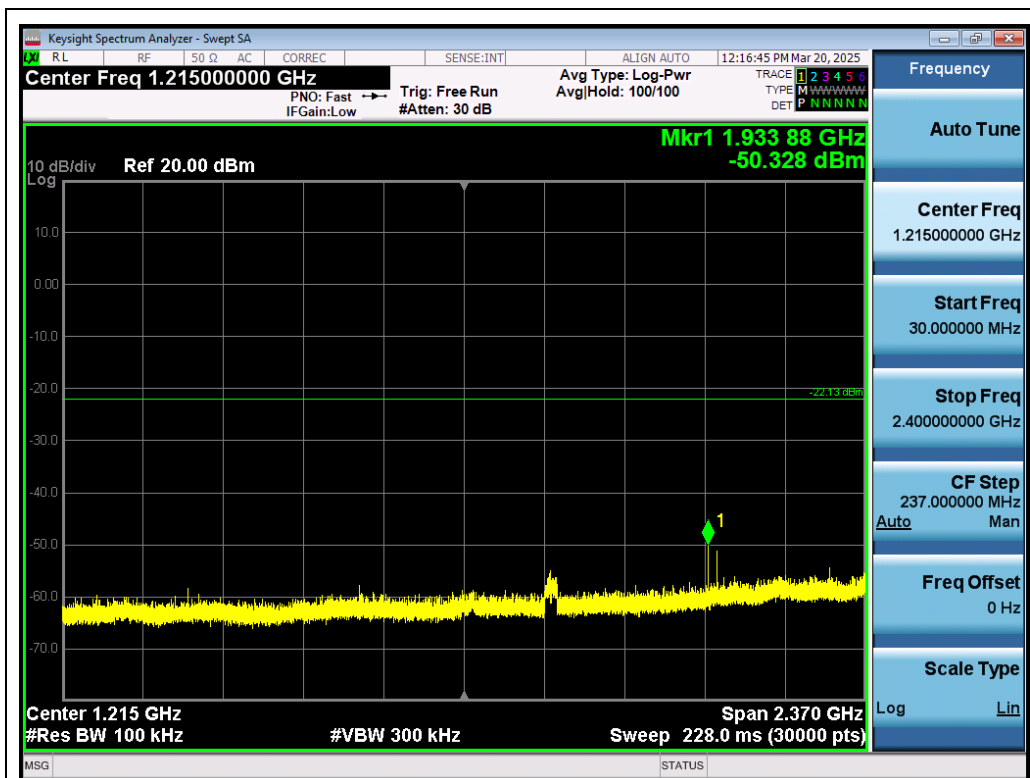
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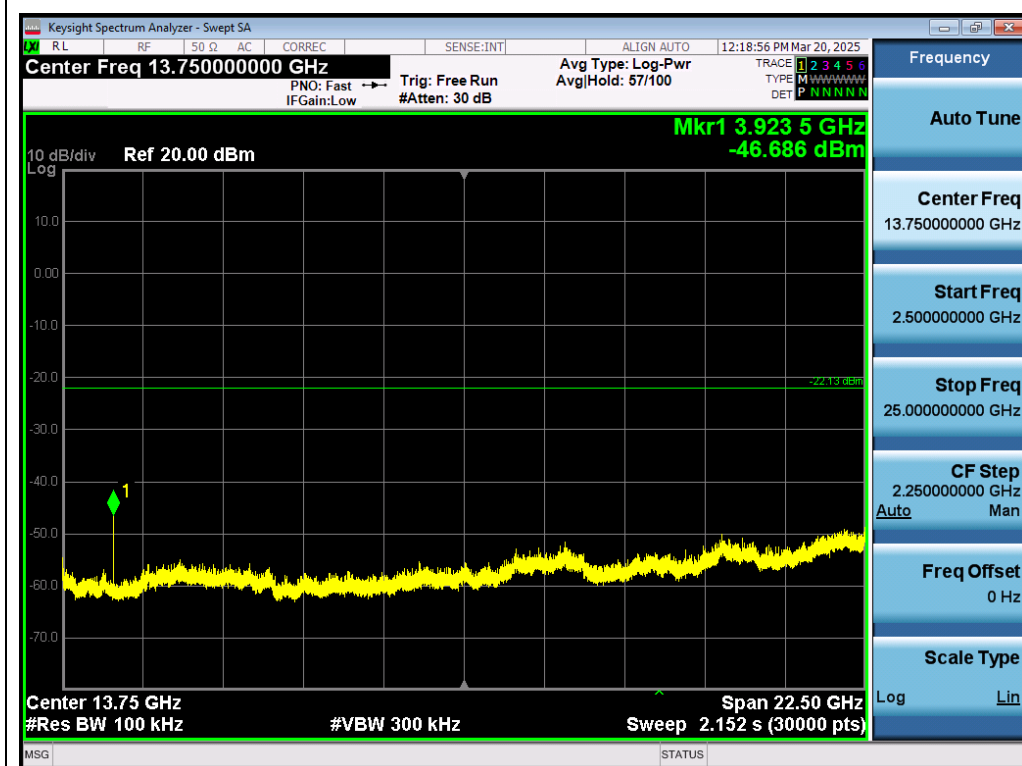
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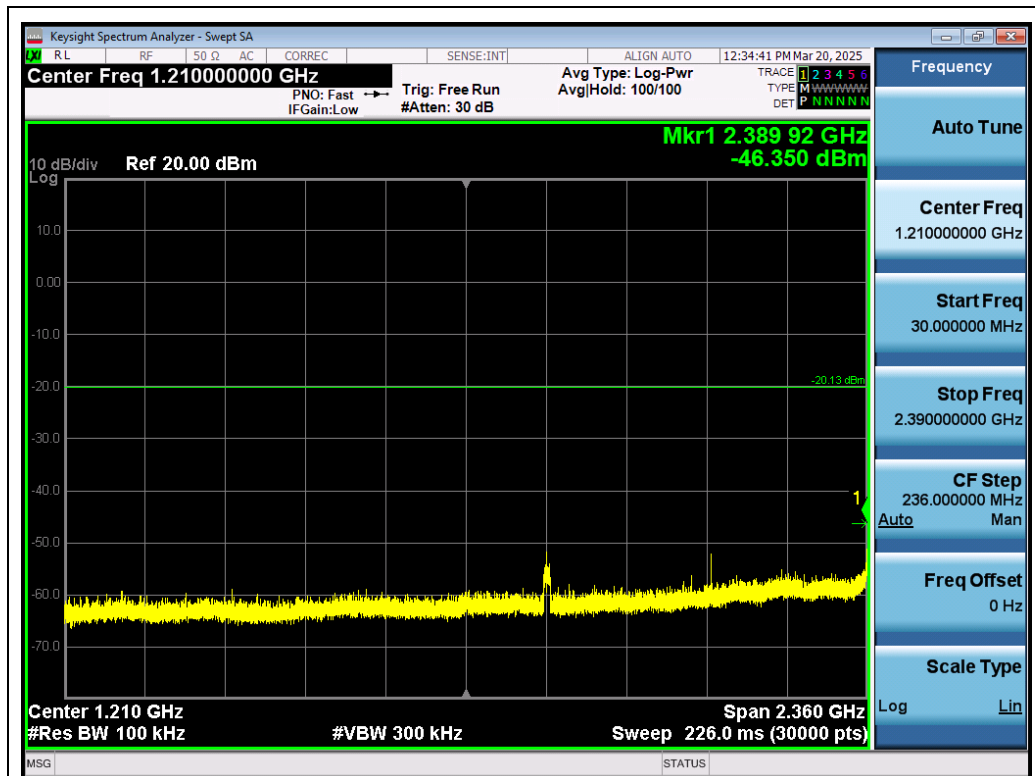
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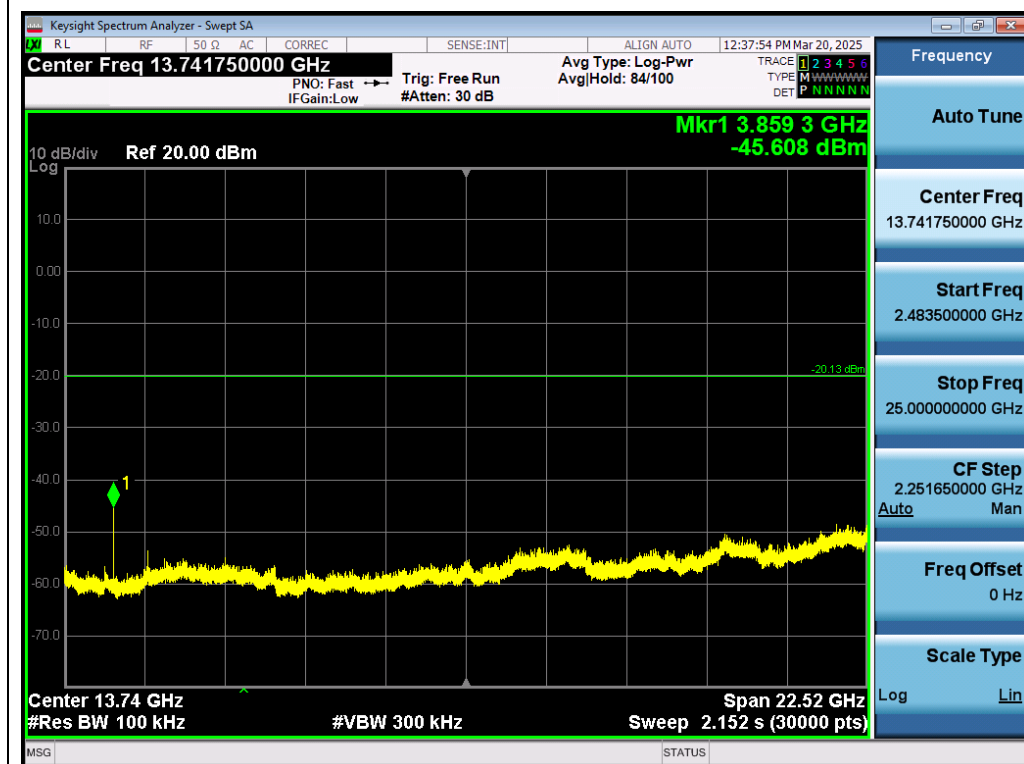
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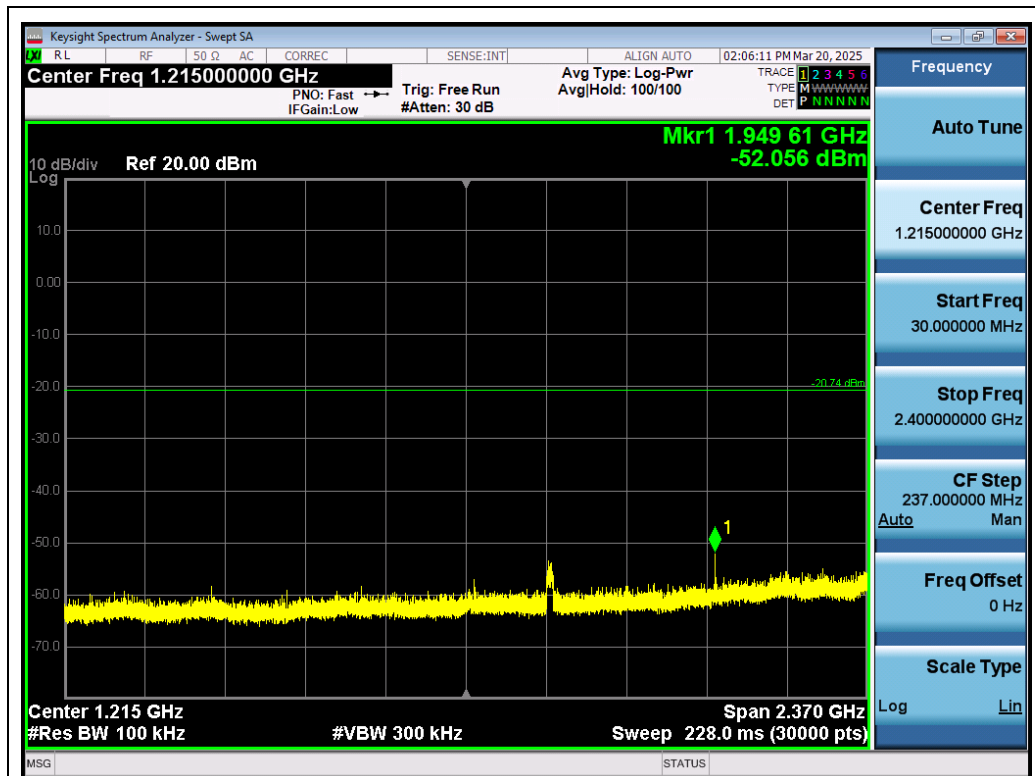
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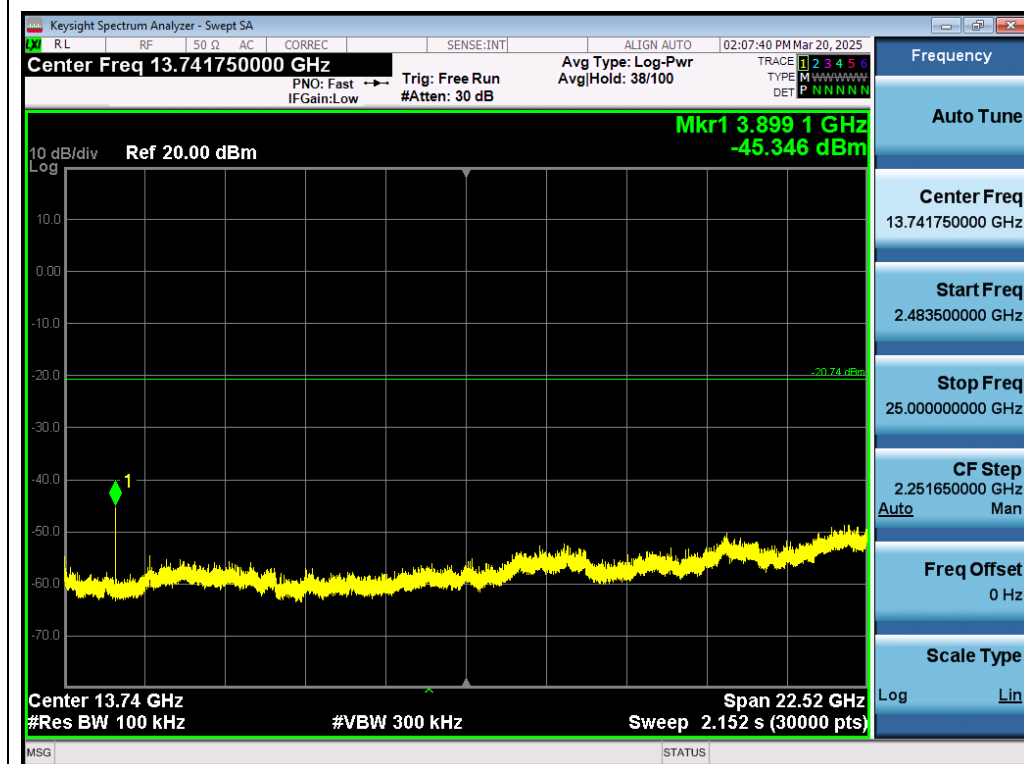
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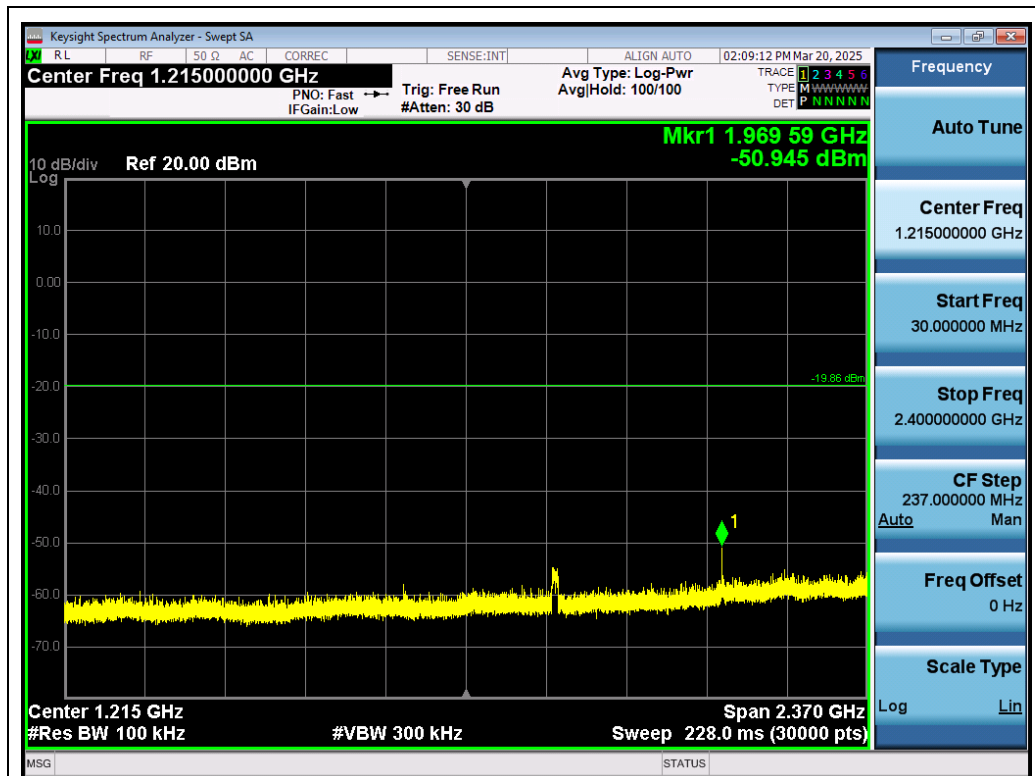
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Test_Graph_802.11ax20_ANT1_2437_MCS0_Lower Band Emissions



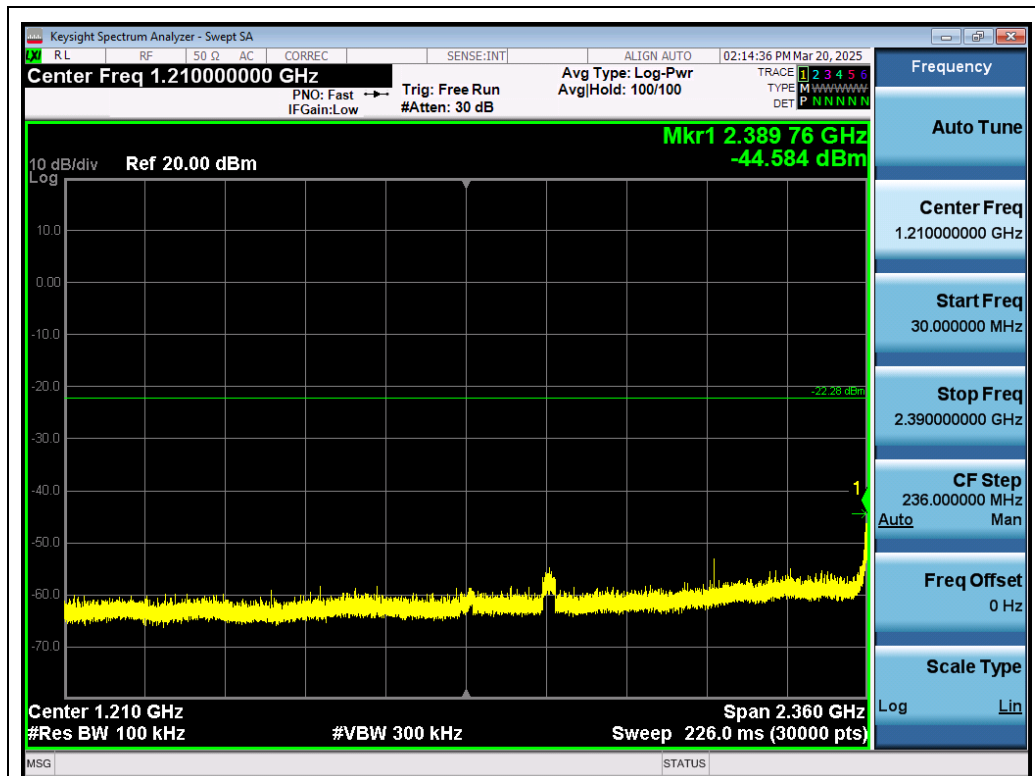
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Test_Graph_802.11ax20_ANT1_2462_MCS0_Lower Band Emissions



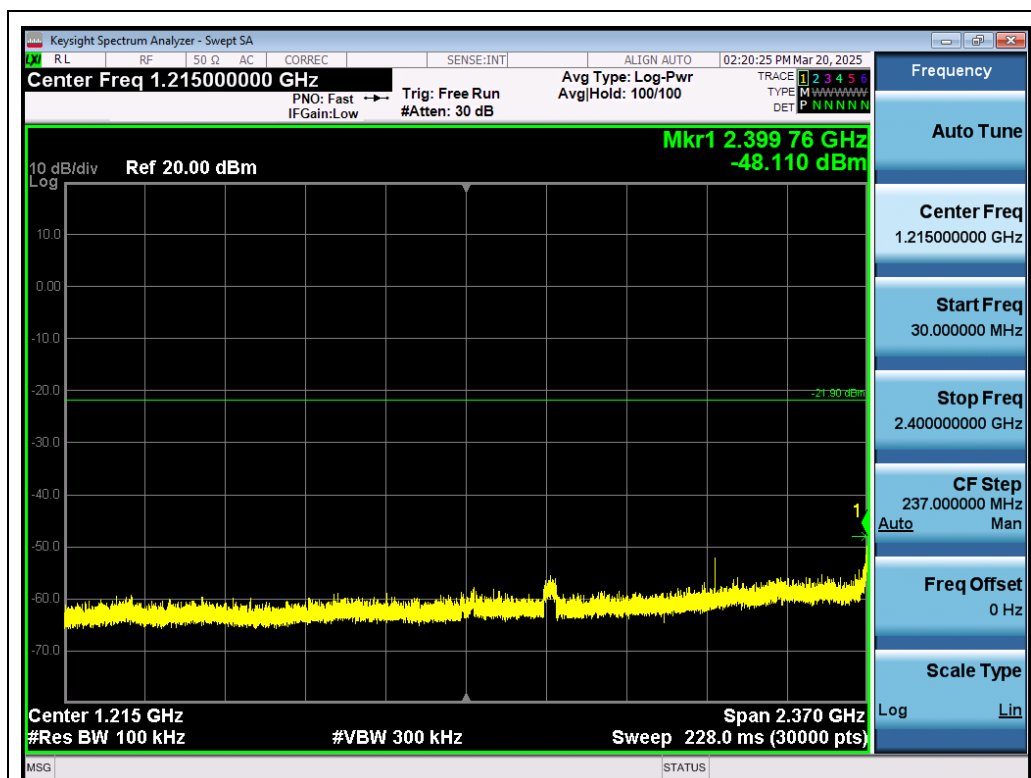
Test_Graph_802.11ax20_ANT1_2462_MCS0_Higher Band Emissions



Test_Graph_802.11ax40_ANT1_2422_MCS0_Lower Band Emissions



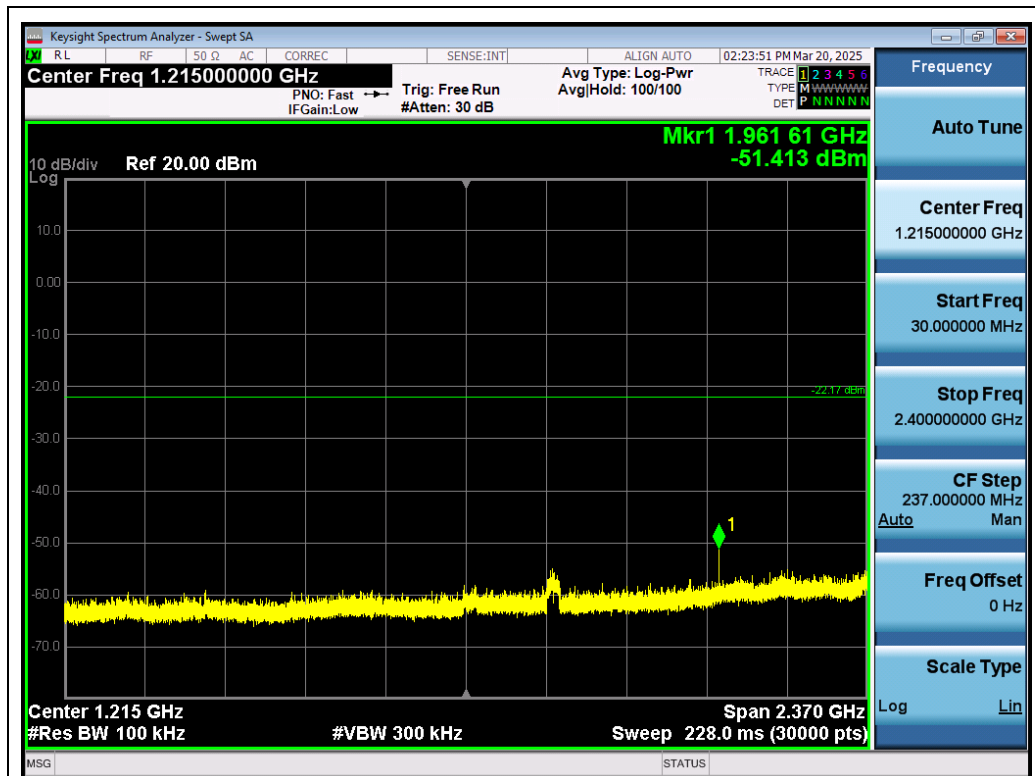
Test_Graph_802.11ax40_ANT1_2422_MCS0_Higher Band Emissions



Test_Graph_802.11ax40_ANT1_2437_MCS0_Lower Band Emissions



Test_Graph_802.11ax40_ANT1_2437_MCS0_Higher Band Emissions



Test_Graph_802.11ax40_ANT1_2452_MCS0_Lower Band Emissions



Test_Graph_802.11ax40_ANT1_2452_MCS0_Higher Band Emissions

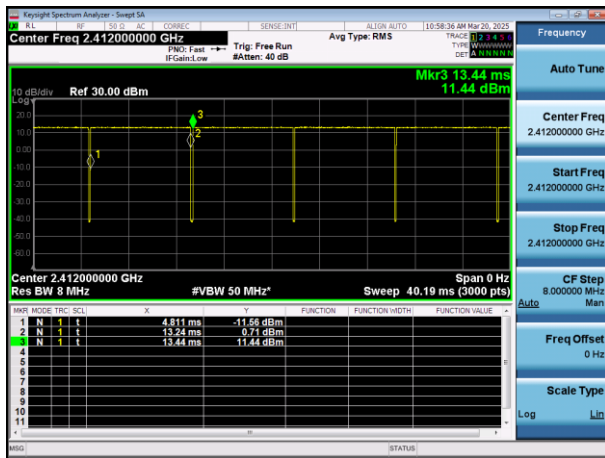
Appendix E: Duty Cycle

Test Result

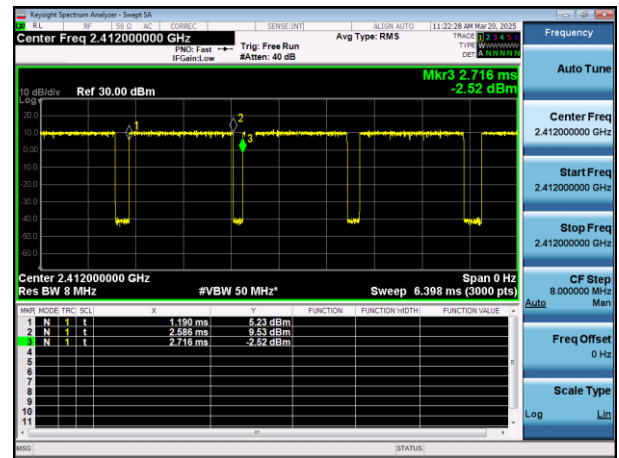
Operating mode	Data rates (Mbps)	Duty Cycle (%)	Duty Cycle Factor (dB)
IEEE 802.11b	1	97	0.09
IEEE 802.11g	6	91	0.41
IEEE 802.11n-HT20	MCS0	97	0.13
IEEE 802.11n-HT40	MCS0	97	0.13
IEEE 802.11ax-HE20	MCS0	97	0.13
IEEE 802.11ax-HE40	MCS0	97	0.13

Test Graphs

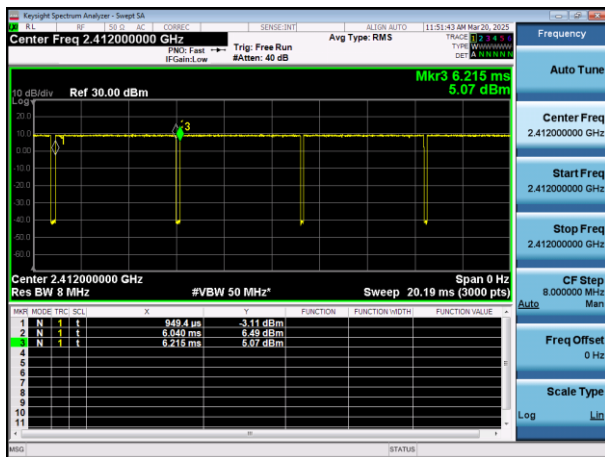
IEEE 802.11b



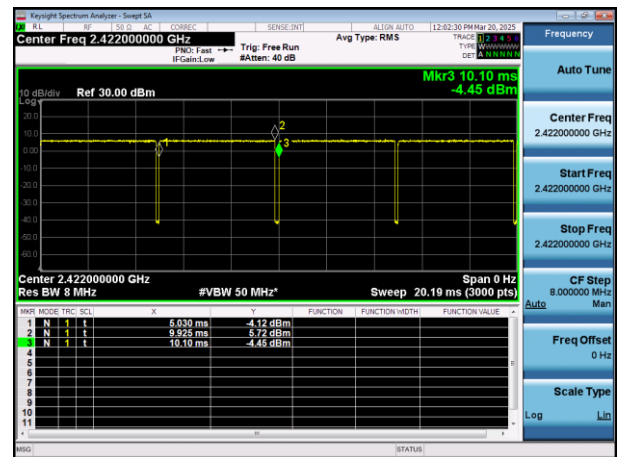
IEEE 802.11g



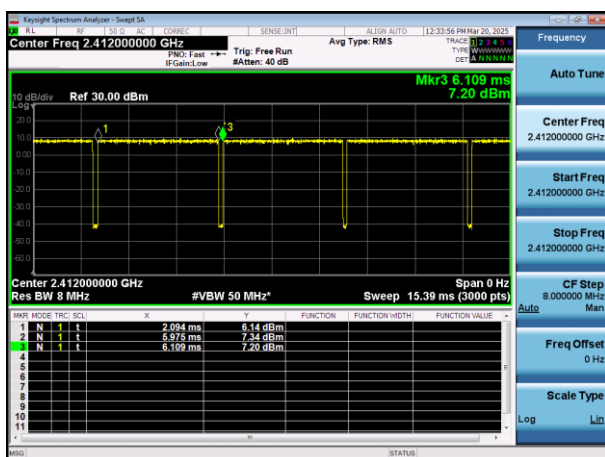
IEEE 802.11n-HT20



IEEE 802.11n-HT40



IEEE 802.11ax-HE20



IEEE 802.11ax-HE40

