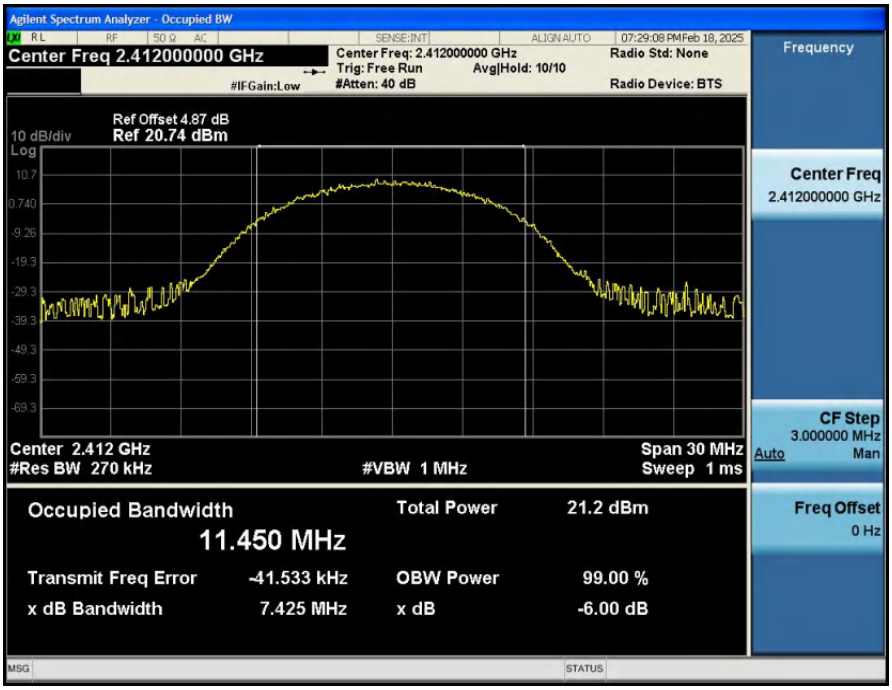
Appendix Test Data

Report No.:	1812C40186012501	Test Sample No.:	1-2-2
Start Test Date:	2024.12.19	Finish Test Date:	2025.2.18
Test Engineer:	Xiangfei Yang	Auditor:	Justin Feng
Temperature:	21.3℃	Relative Humidity:	60%
Pressure:	101kPa		

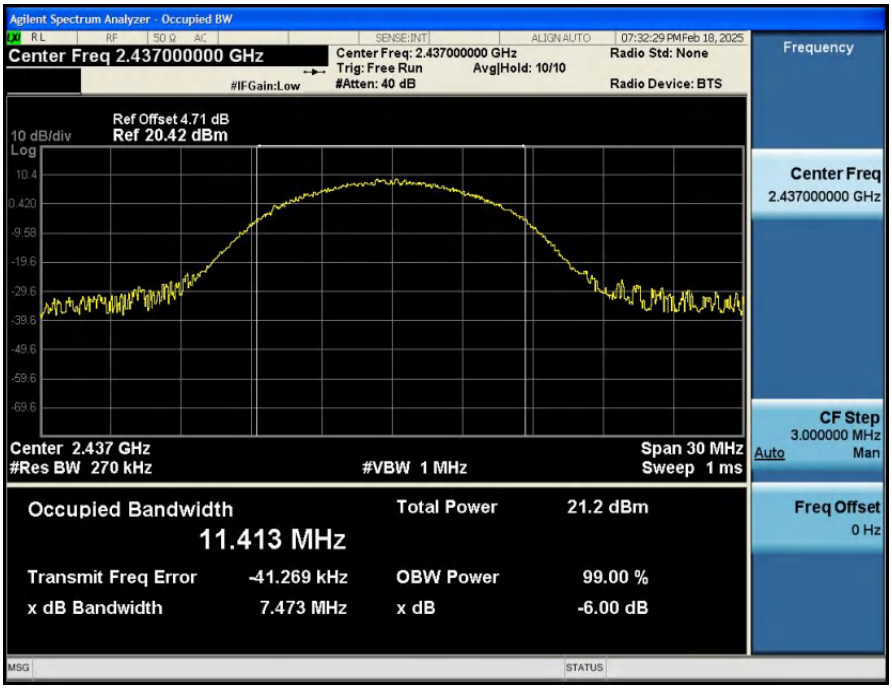
Appendix A: -6dB Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	7.43	500	Pass
NVNT	ANT1	802.11b	2437.00	7.47	500	Pass
NVNT	ANT1	802.11b	2462.00	7.55	500	Pass
NVNT	ANT1	802.11g	2412.00	16.49	500	Pass
NVNT	ANT1	802.11g	2437.00	16.48	500	Pass
NVNT	ANT1	802.11g	2462.00	16.43	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	17.85	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	17.81	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	17.66	500	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	17.89	500	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	17.82	500	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	17.89	500	Pass

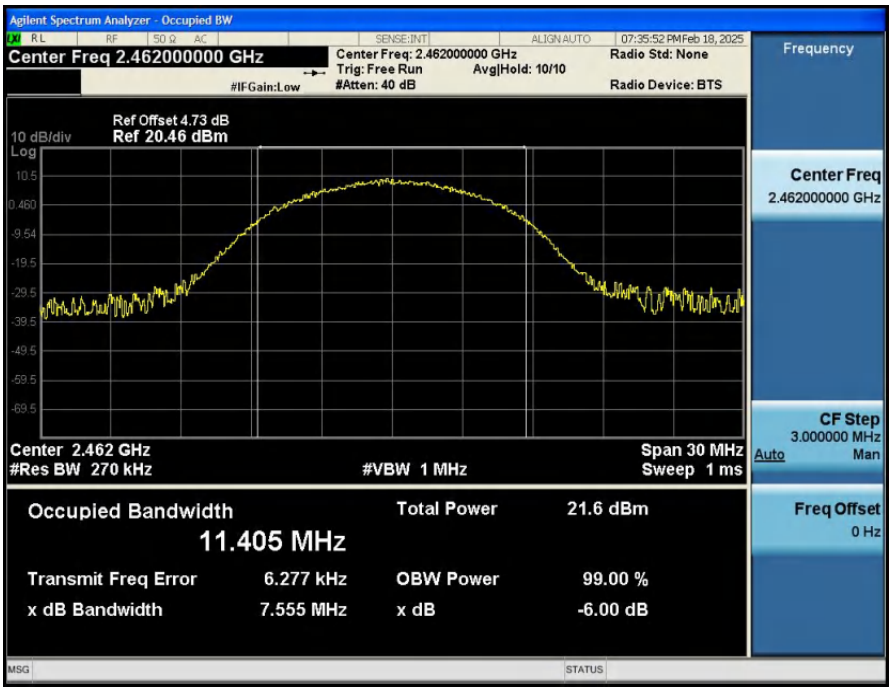
-6dB_Bandwidth_NVNT_ANT1_802_11b_2412



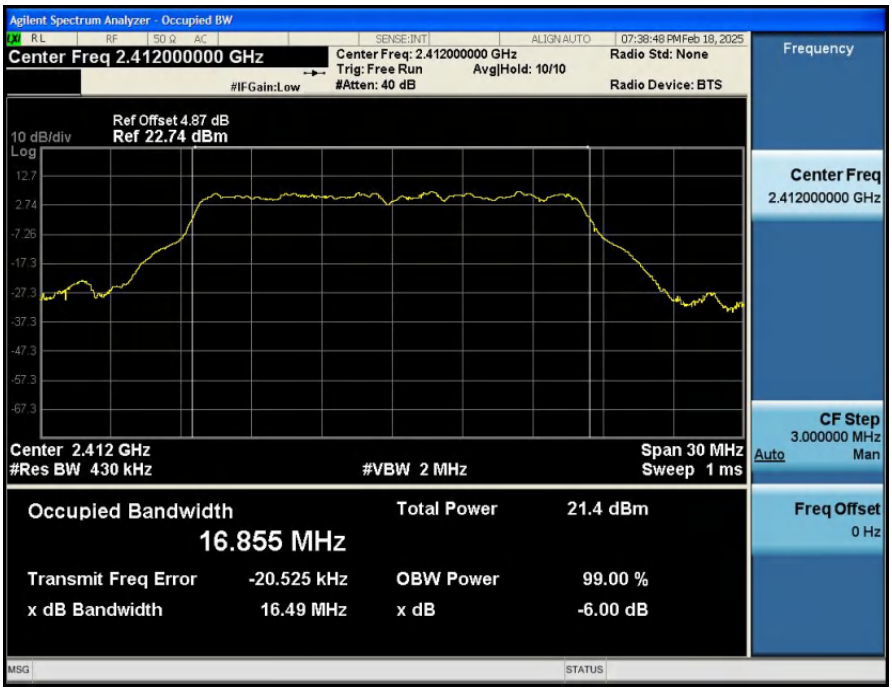
-6dB_Bandwidth_NVNT_ANT1_802_11b_2437



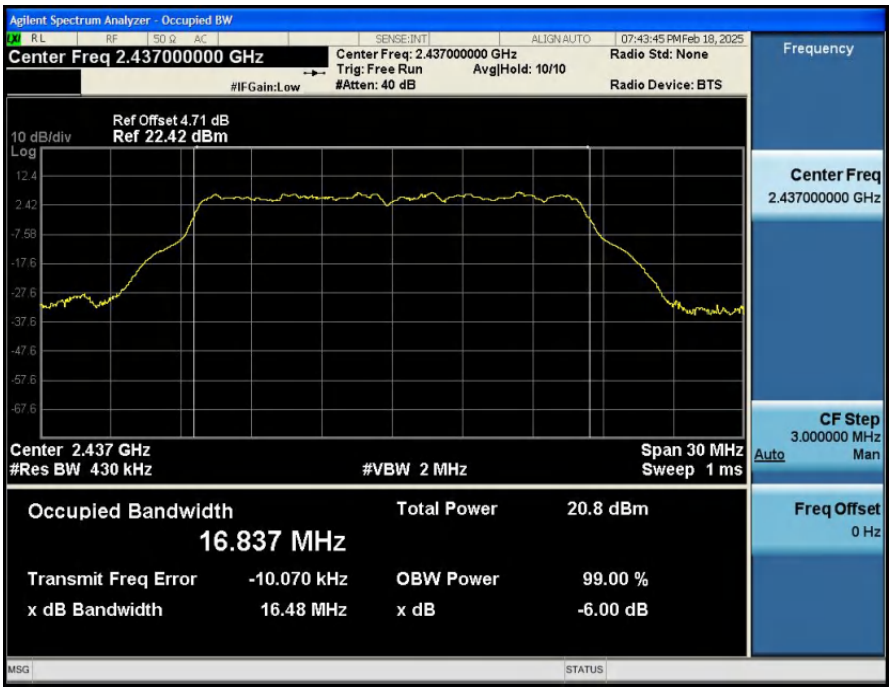
-6dB_Bandwidth_NVNT_ANT1_802_11b_2462



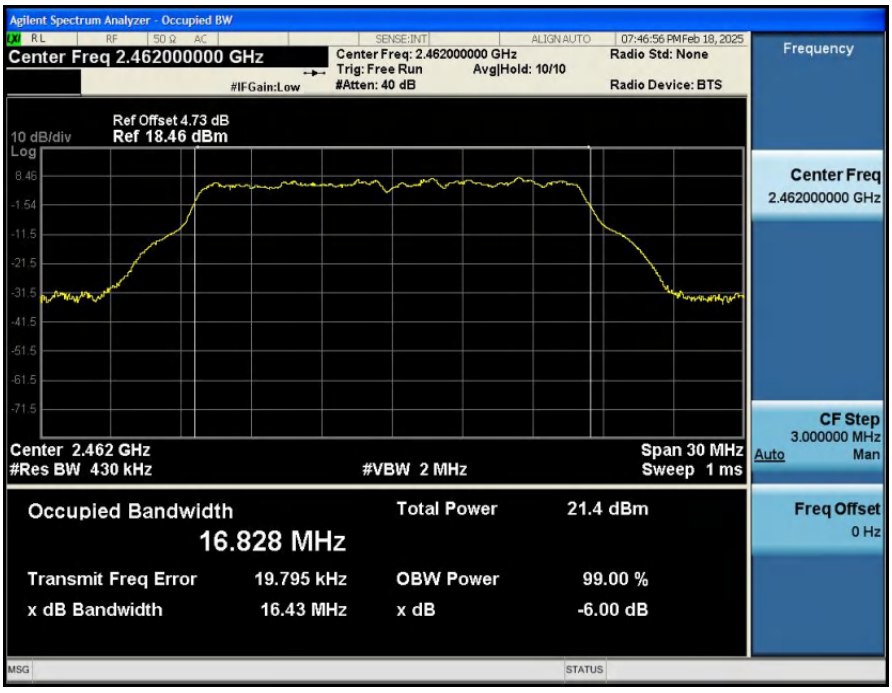
-6dB_Bandwidth_NVNT_ANT1_802_11g_2412



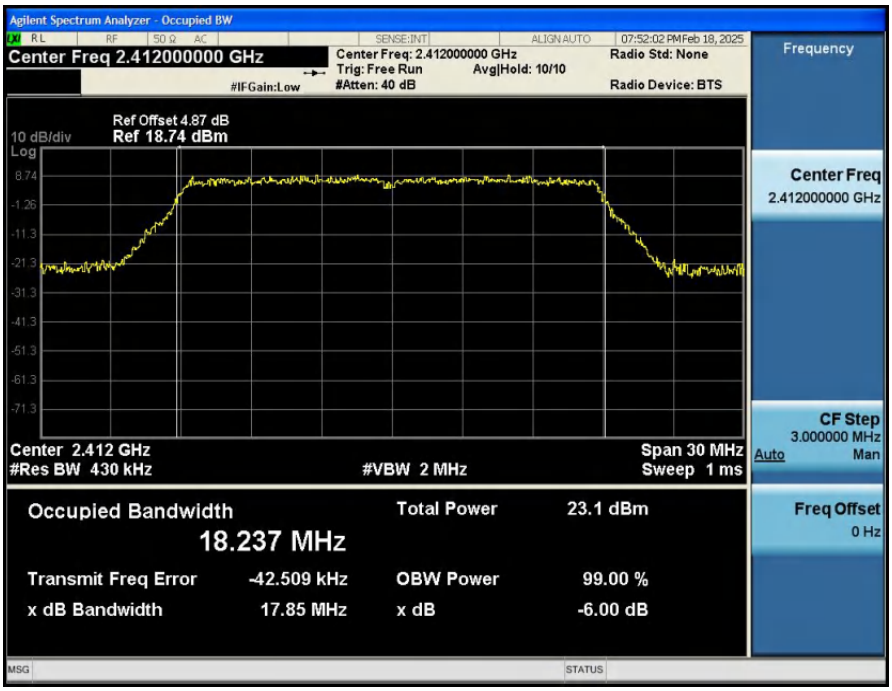
-6dB_Bandwidth_NVNT_ANT1_802_11g_2437



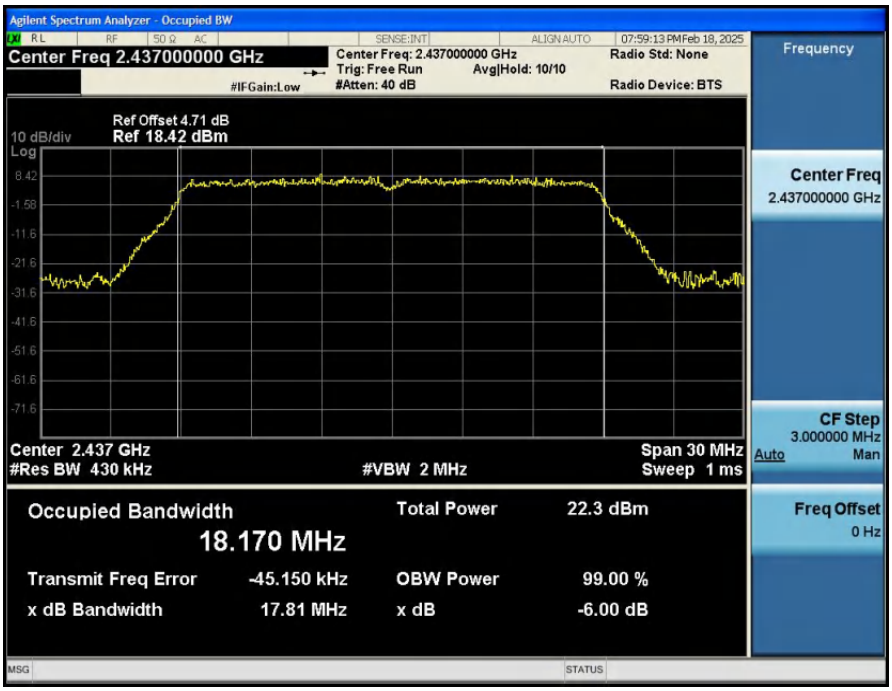
-6dB_Bandwidth_NVNT_ANT1_802_11g_2462



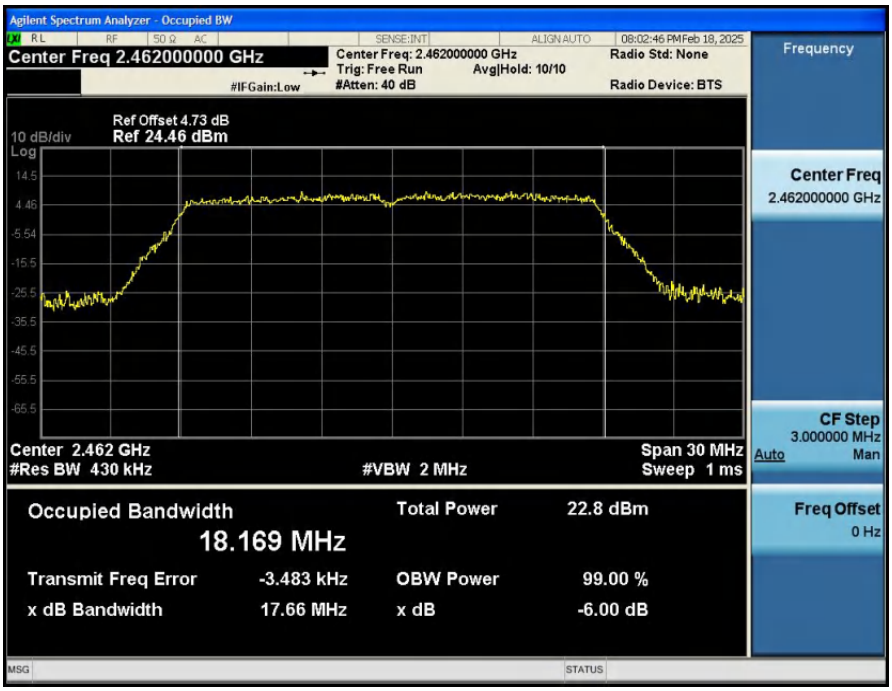
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2412



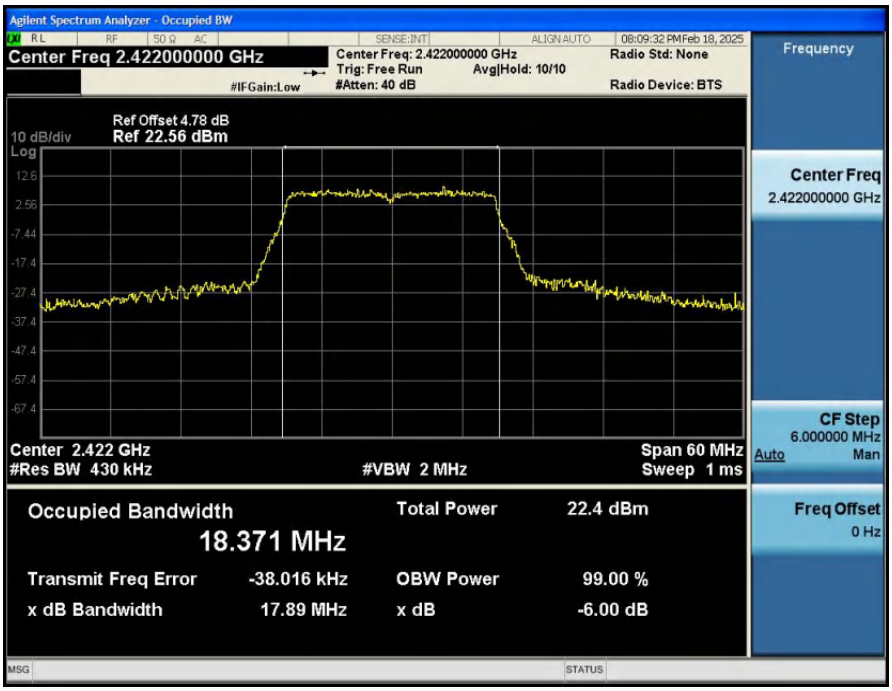
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2437



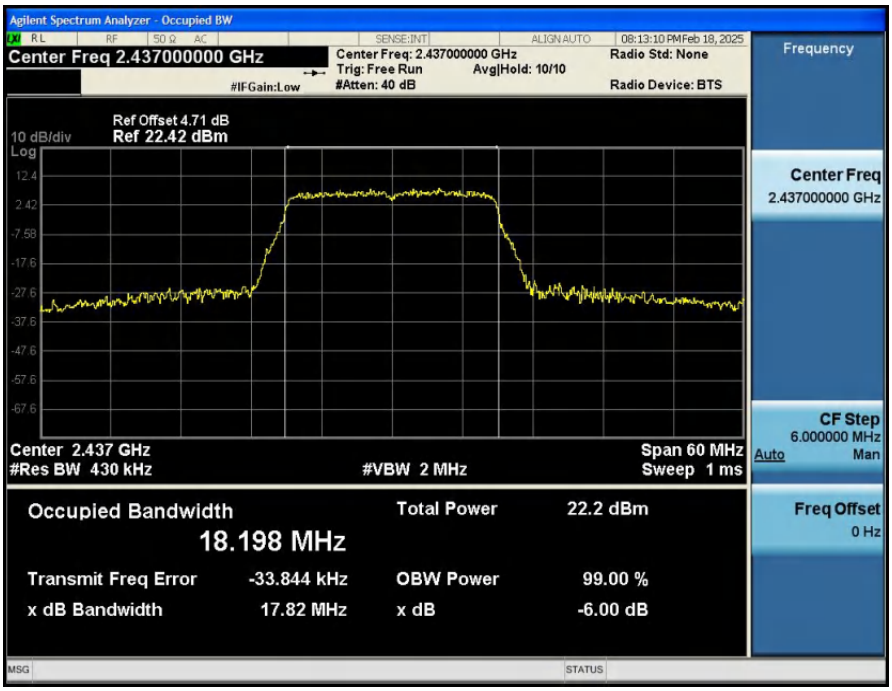
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462



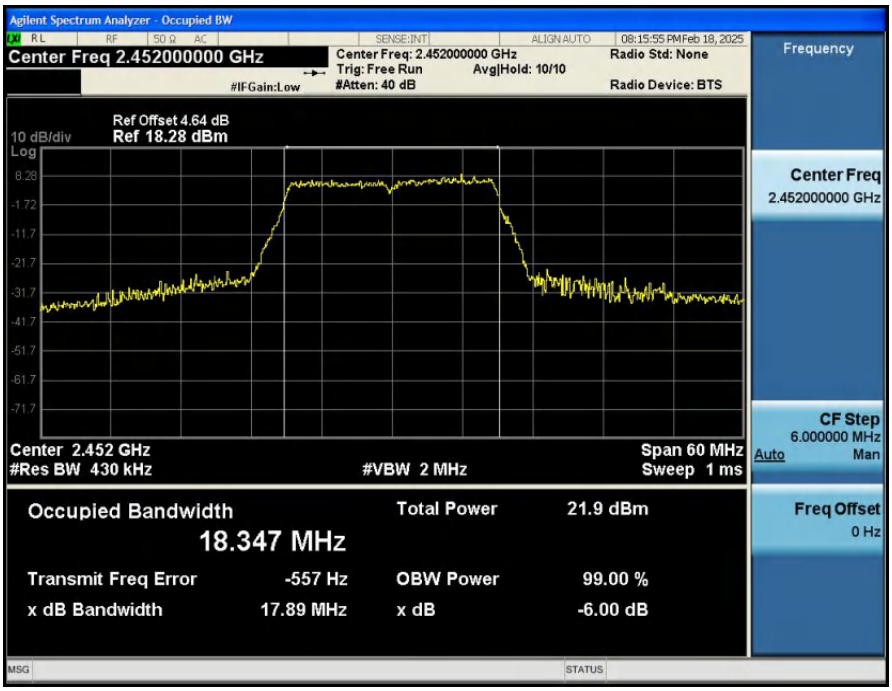
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2422



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2437



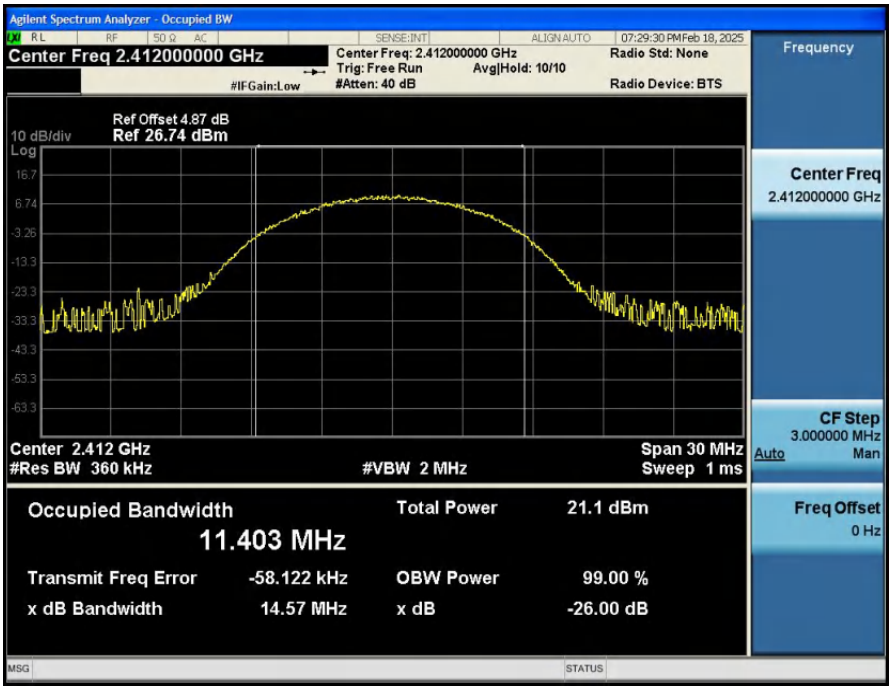
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2452



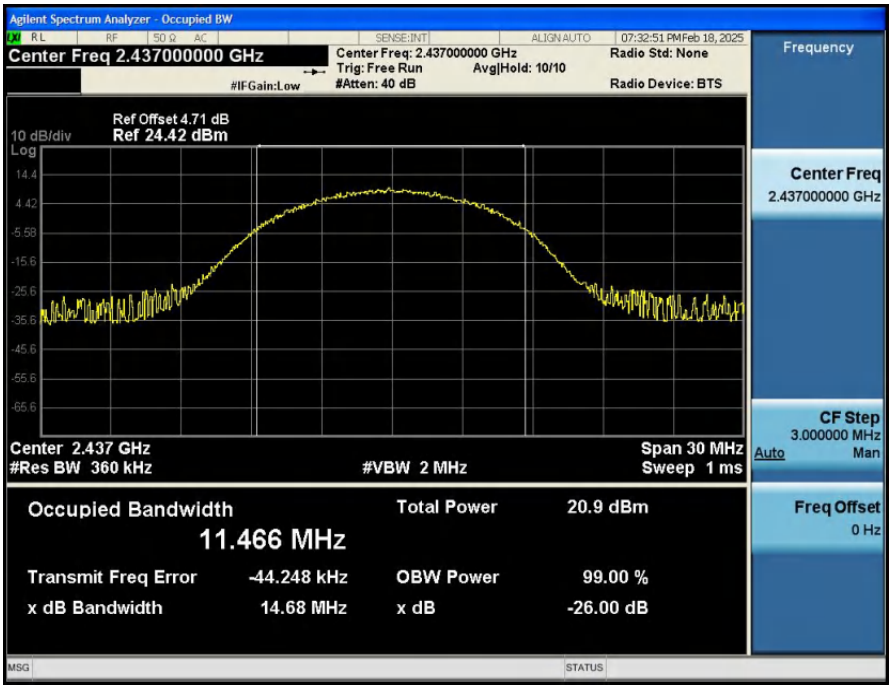
Appendix B: 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99%%BW(MHz)
NVNT	ANT1	802.11b	2412.00	11.403
NVNT	ANT1	802.11b	2437.00	11.466
NVNT	ANT1	802.11b	2462.00	11.434
NVNT	ANT1	802.11g	2412.00	16.981
NVNT	ANT1	802.11g	2437.00	16.958
NVNT	ANT1	802.11g	2462.00	16.939
NVNT	ANT1	802.11n(HT20)	2412.00	18.323
NVNT	ANT1	802.11n(HT20)	2437.00	18.318
NVNT	ANT1	802.11n(HT20)	2462.00	18.294
NVNT	ANT1	802.11n(HT40)	2422.00	18.561
NVNT	ANT1	802.11n(HT40)	2437.00	18.361
NVNT	ANT1	802.11n(HT40)	2452.00	18.561

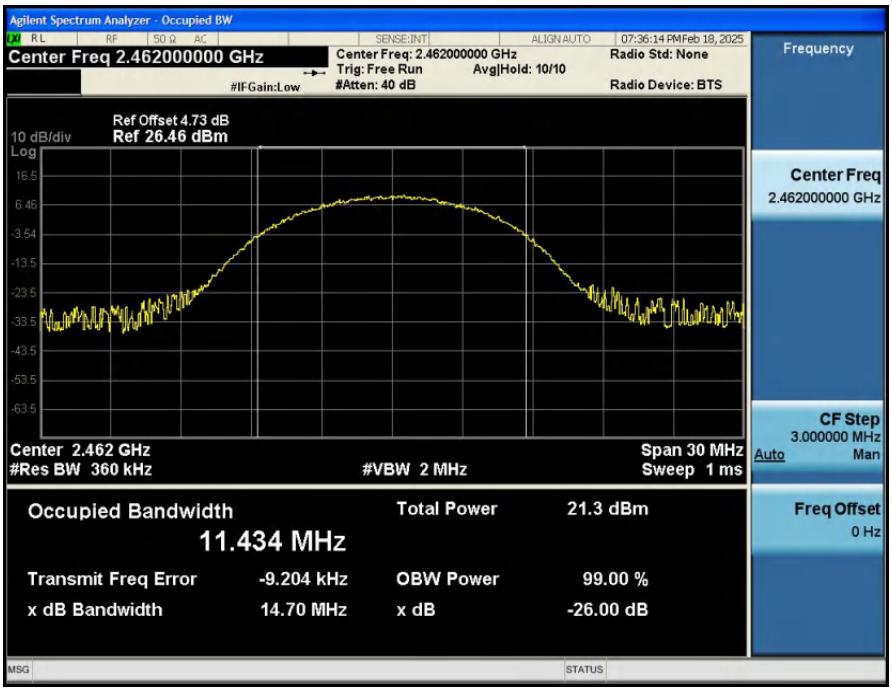
99%_Occupied_Bandwidth_NVNT_ANT1_802_11b_2412



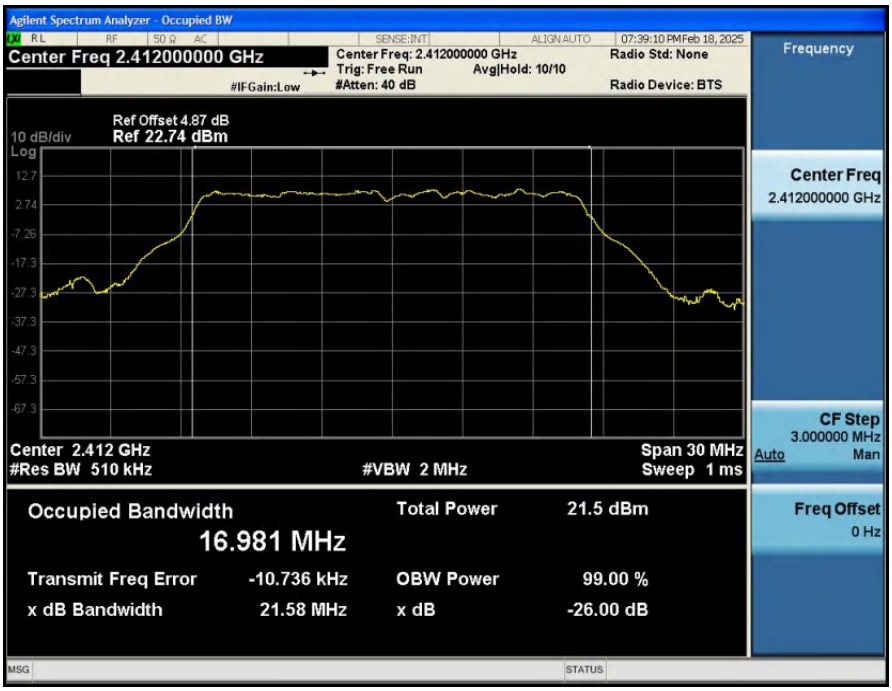
99%_Occupied_Bandwidth_NVNT_ANT1_802_11b_2437



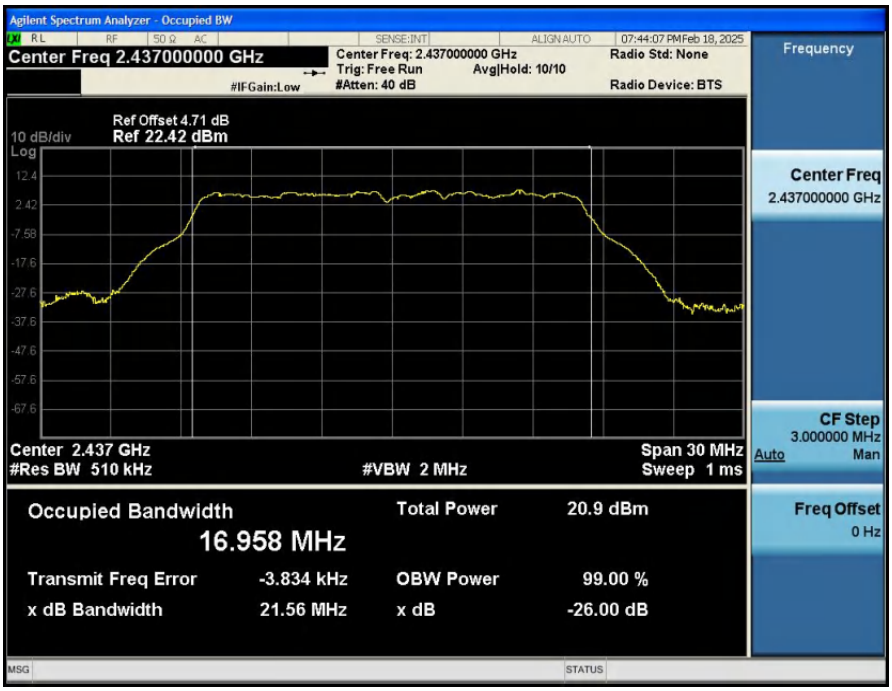
99%_Occupied_Bandwidth_NVNT_ANT1_802_11b_2462



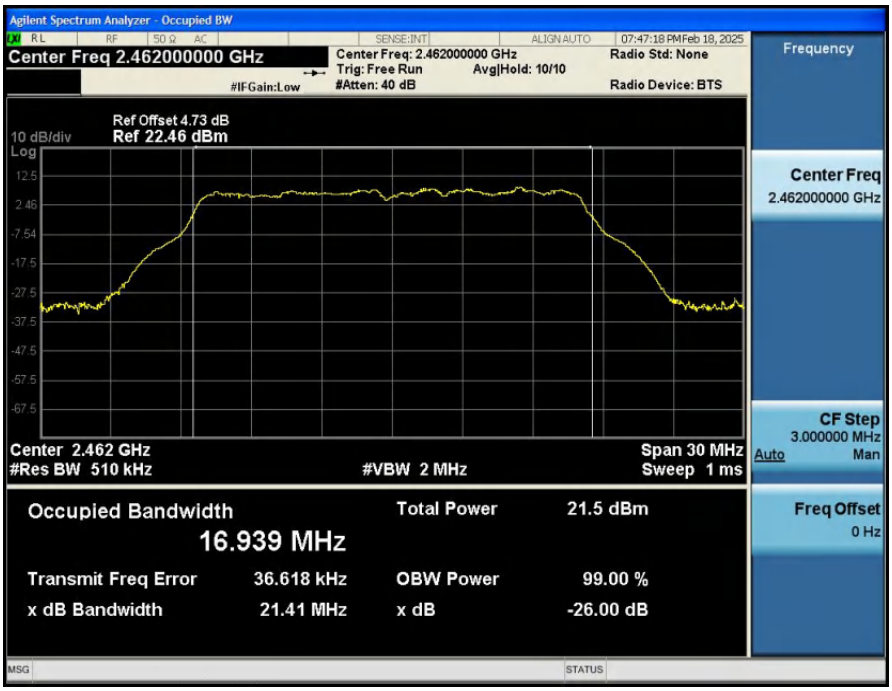
99%_Occupied_Bandwidth_NVNT_ANT1_802_11g_2412



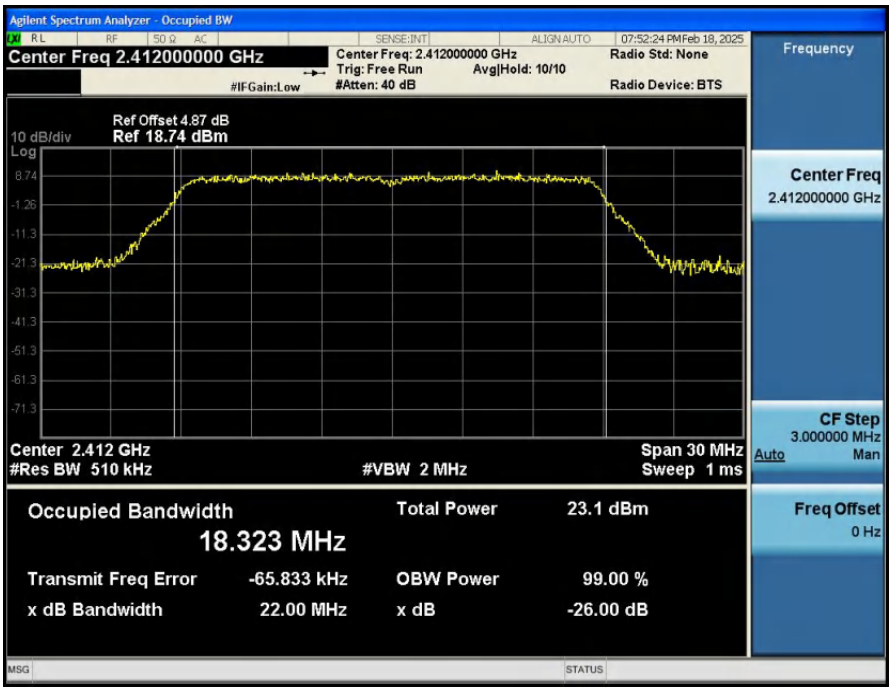
99%_Occupied_Bandwidth_NVNT_ANT1_802_11g_2437



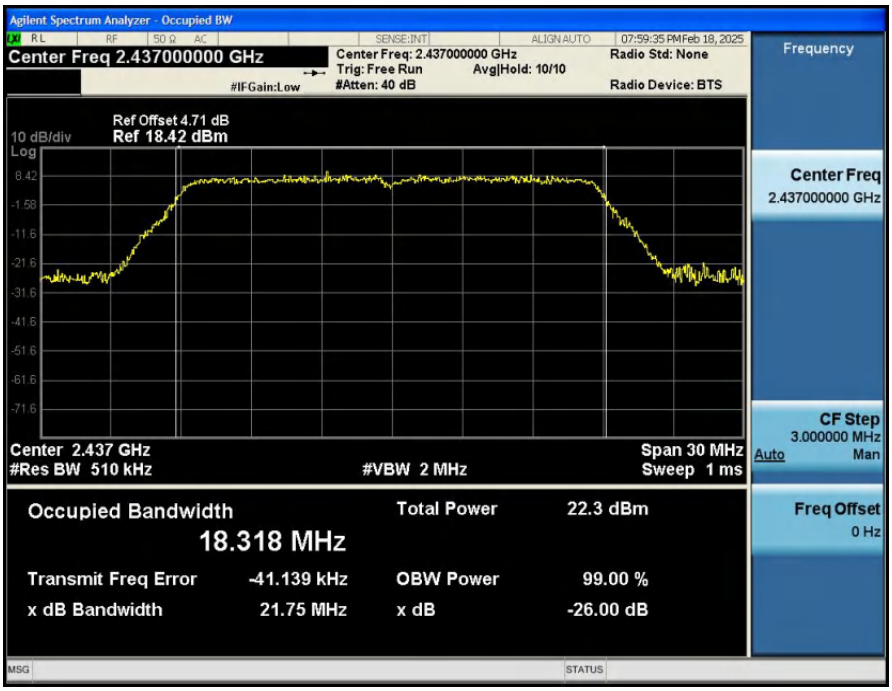
99%_Occupied_Bandwidth_NVNT_ANT1_802_11g_2462



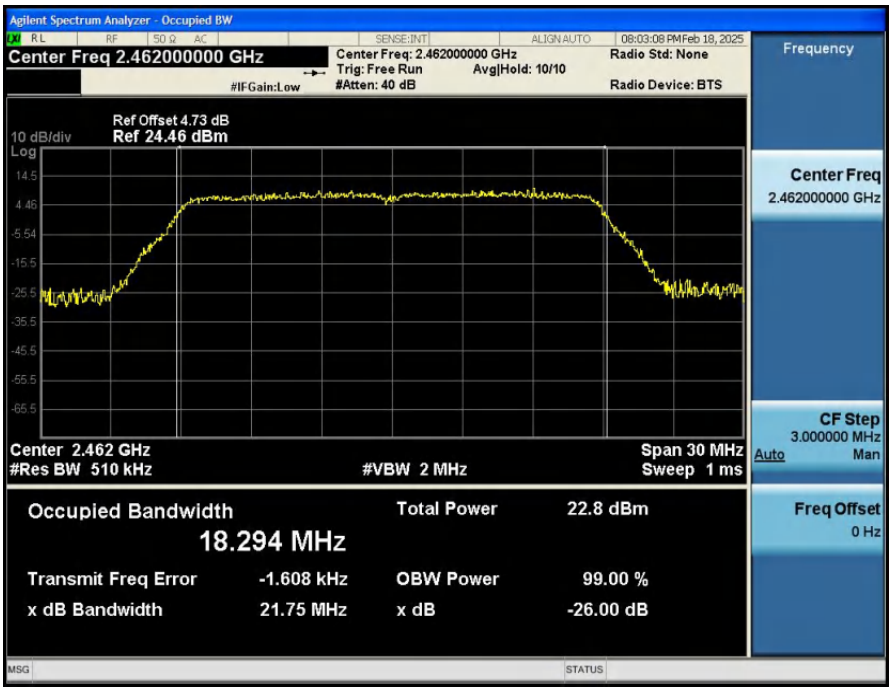
99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2412



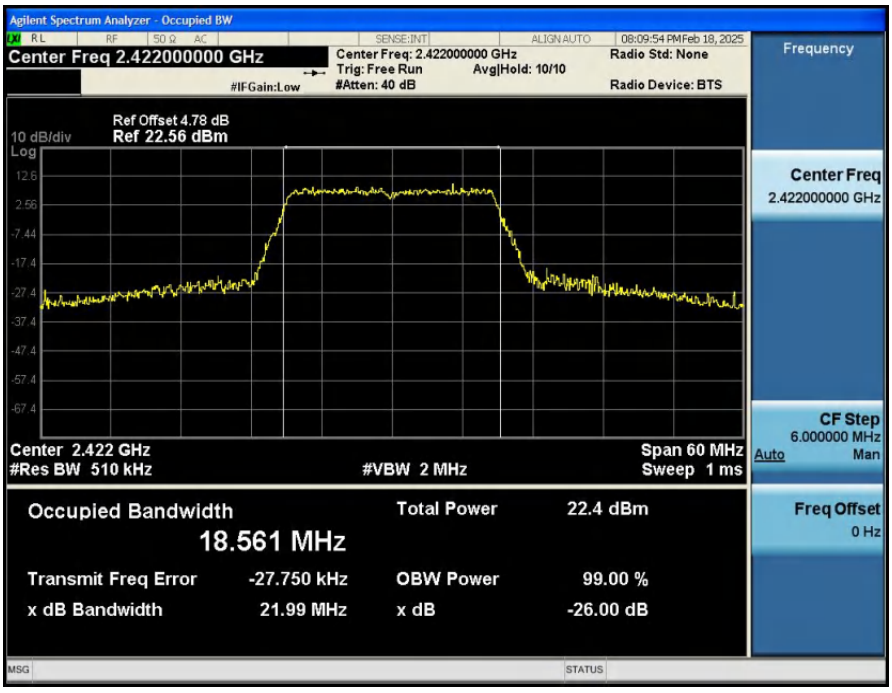
99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2437



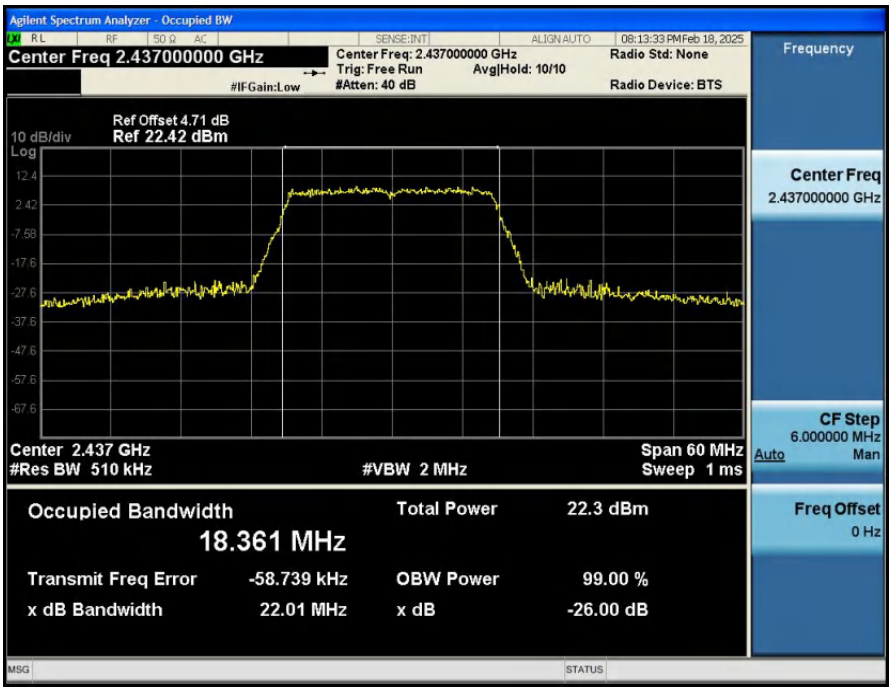
99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462



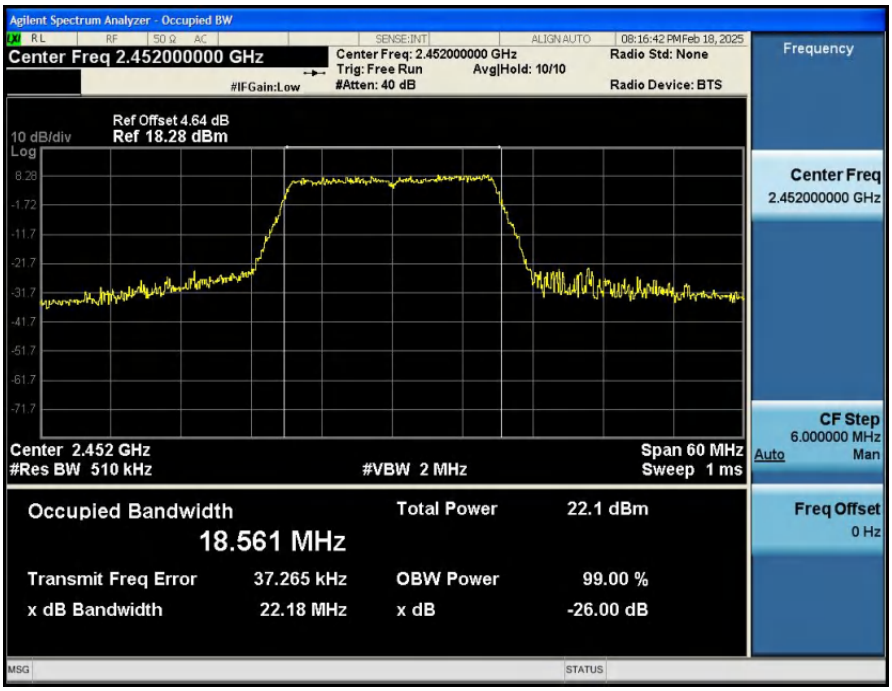
99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT40)_2422



99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT40)_2437

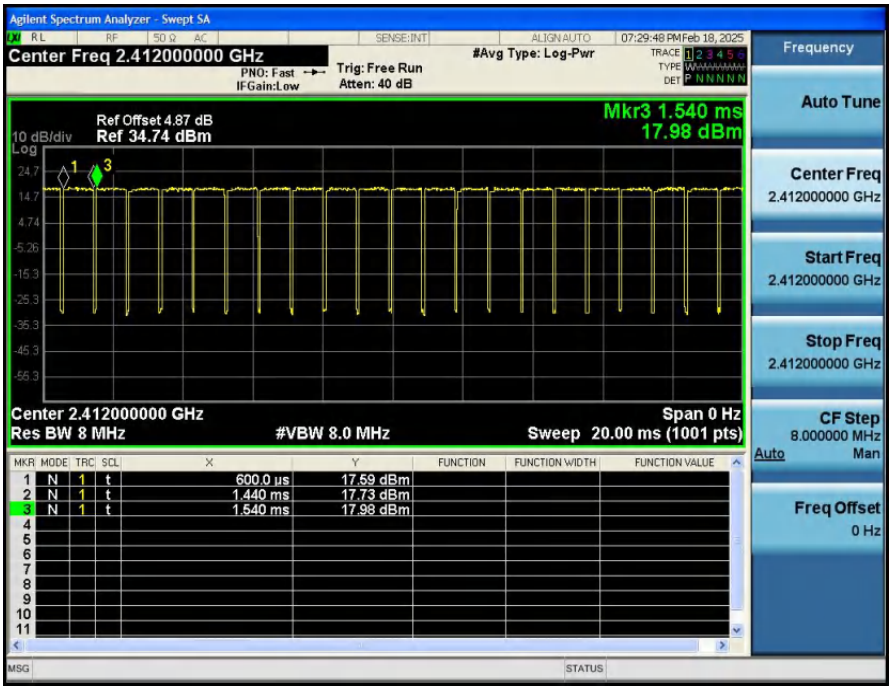


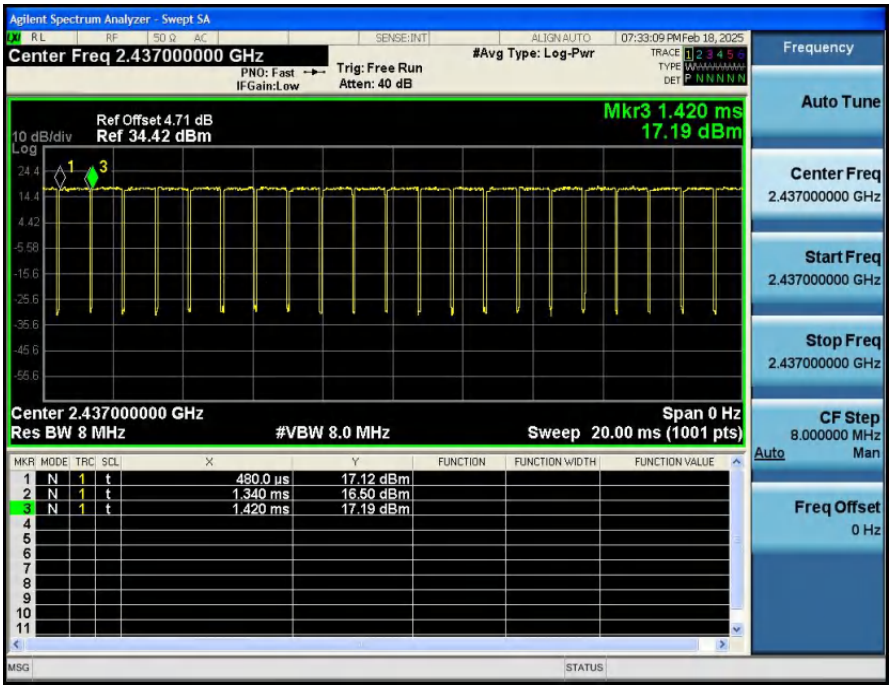
99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT40)_2452



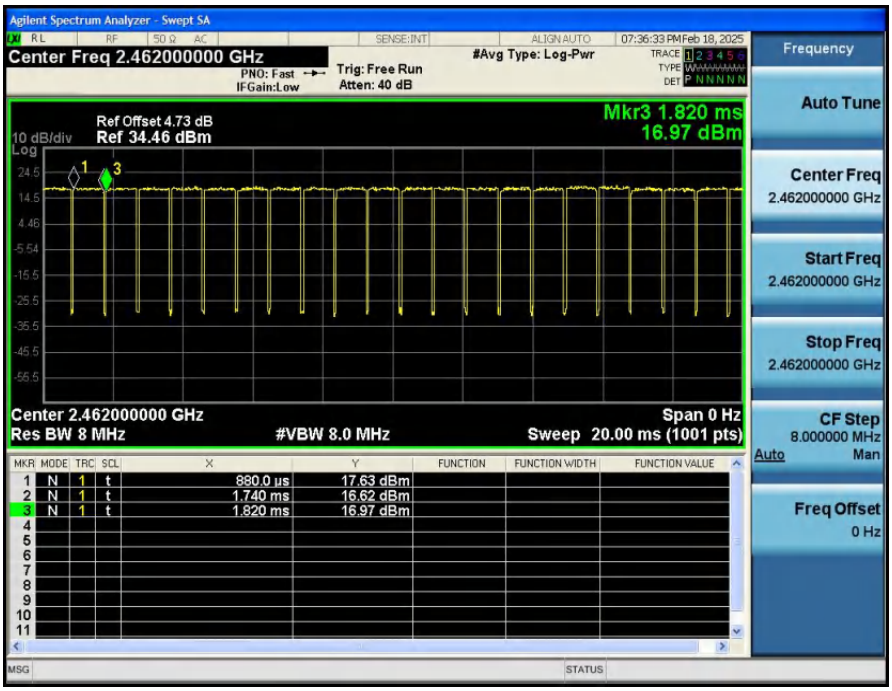
Appendix C: Duty Cycle

Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty factor(dB)
NVNT	ANT1	802.11b	2412.00	91.49	0.39
NVNT	ANT1	802.11b	2437.00	93.62	0.29
NVNT	ANT1	802.11b	2462.00	93.62	0.29
NVNT	ANT1	802.11g	2412.00	67.86	1.68
NVNT	ANT1	802.11g	2437.00	66.67	1.76
NVNT	ANT1	802.11g	2462.00	67.86	1.68
NVNT	ANT1	802.11n(HT20)	2412.00	66.67	1.76
NVNT	ANT1	802.11n(HT20)	2437.00	66.67	1.76
NVNT	ANT1	802.11n(HT20)	2462.00	65.38	1.85
NVNT	ANT1	802.11n(HT40)	2422.00	66.67	1.76
NVNT	ANT1	802.11n(HT40)	2437.00	65.38	1.85
NVNT	ANT1	802.11n(HT40)	2452.00	62.96	2.01

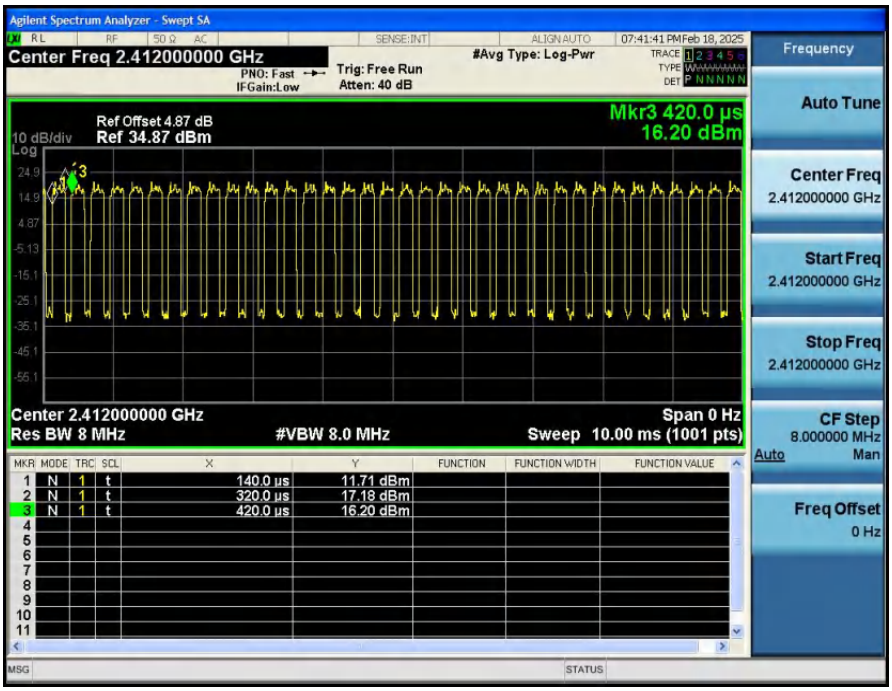
Duty_Cycle_NVNT_ANT1_802_11b_2412


Duty_Cycle_NVNT_ANT1_802_11b_2437


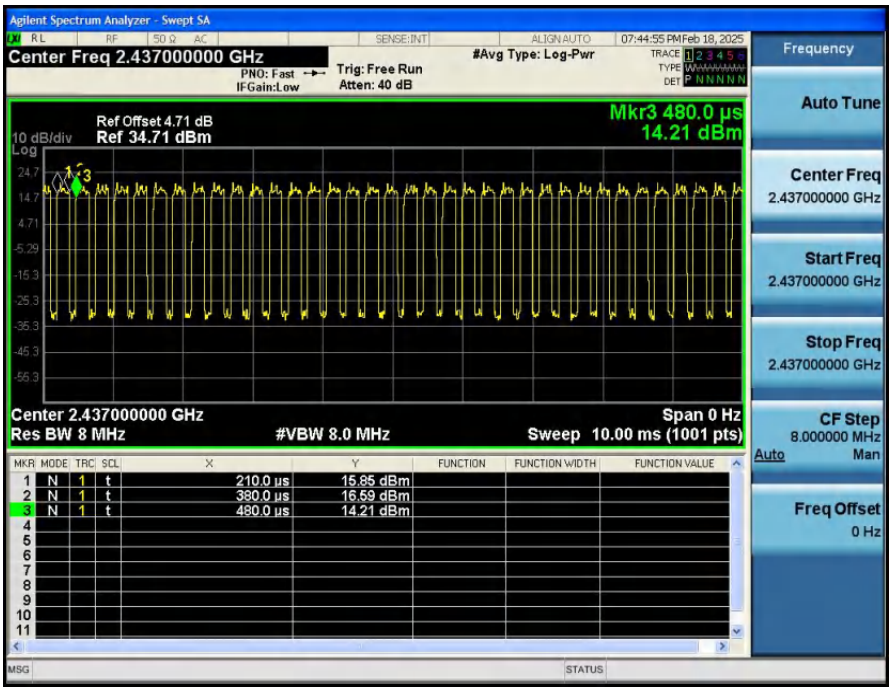
Duty_Cycle_NVNT_ANT1_802_11b_2462



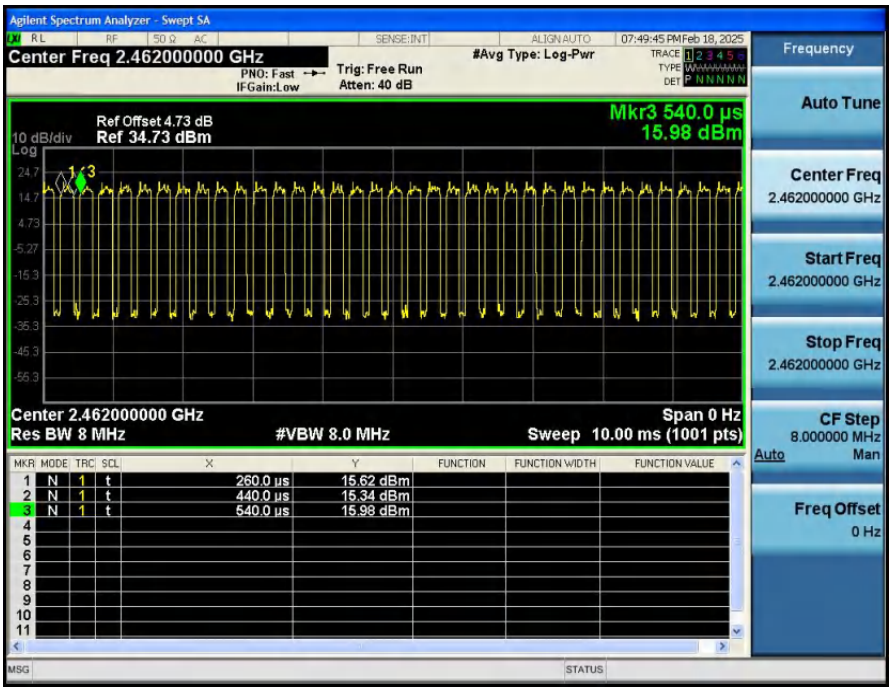
Duty_Cycle_NVNT_ANT1_802_11g_2412



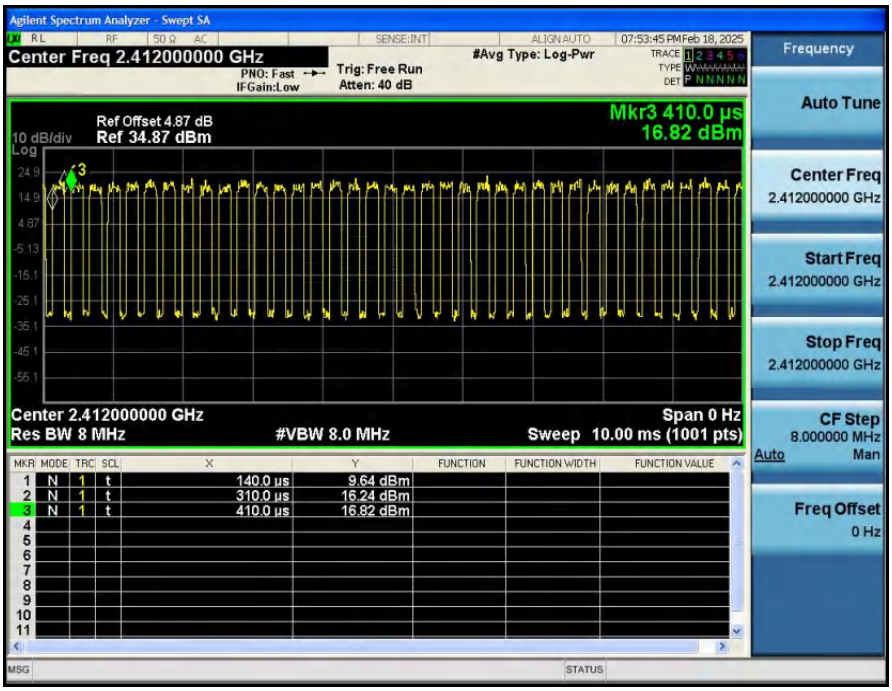
Duty_Cycle_NVNT_ANT1_802_11g_2437



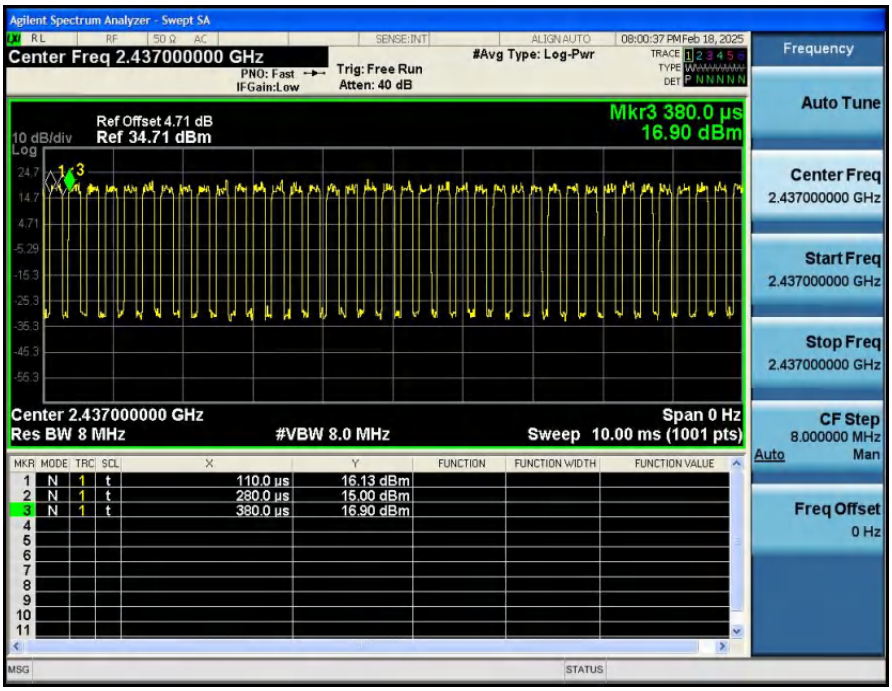
Duty_Cycle_NVNT_ANT1_802_11g_2462



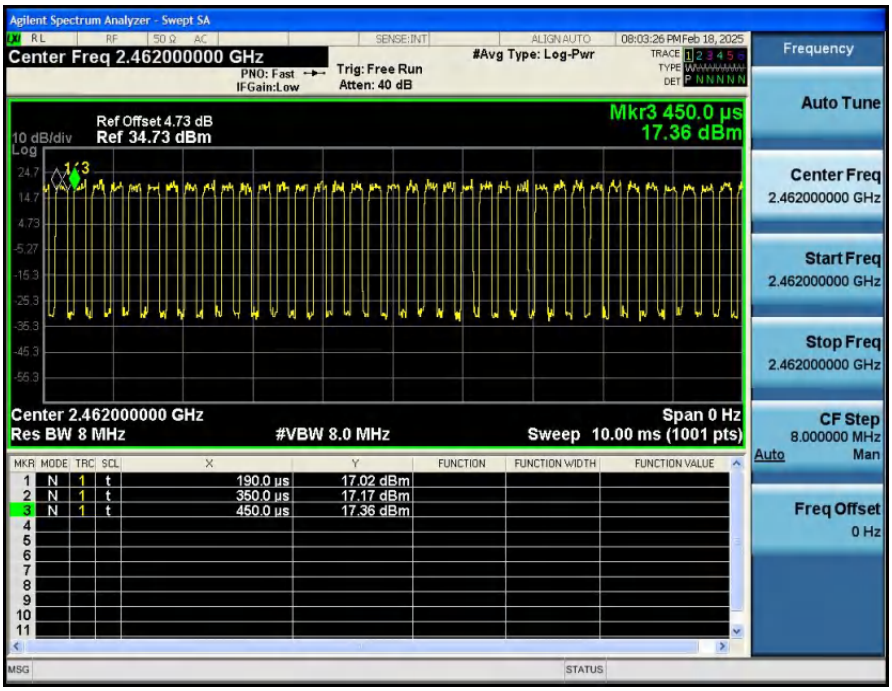
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2412



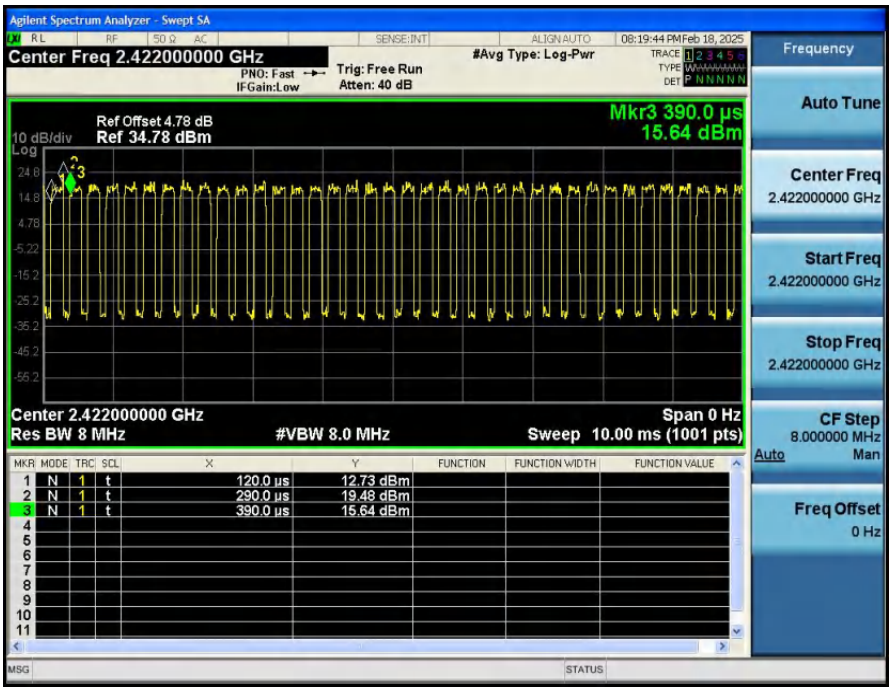
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2437



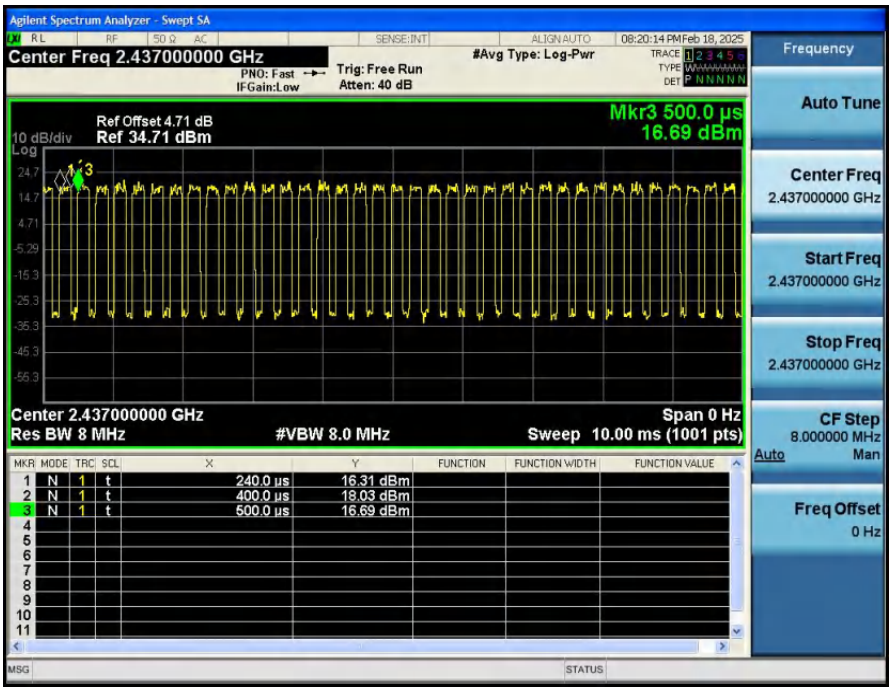
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2462



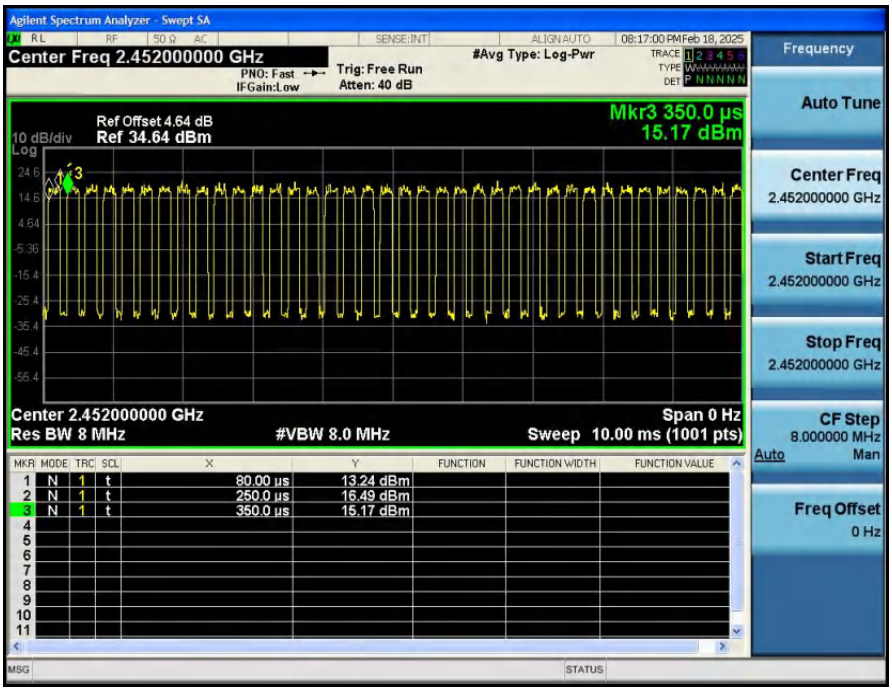
Duty_Cycle_NVNT_ANT1_802_11n(HT40)_2422



Duty_Cycle_NVNT_ANT1_802_11n(HT40)_2437



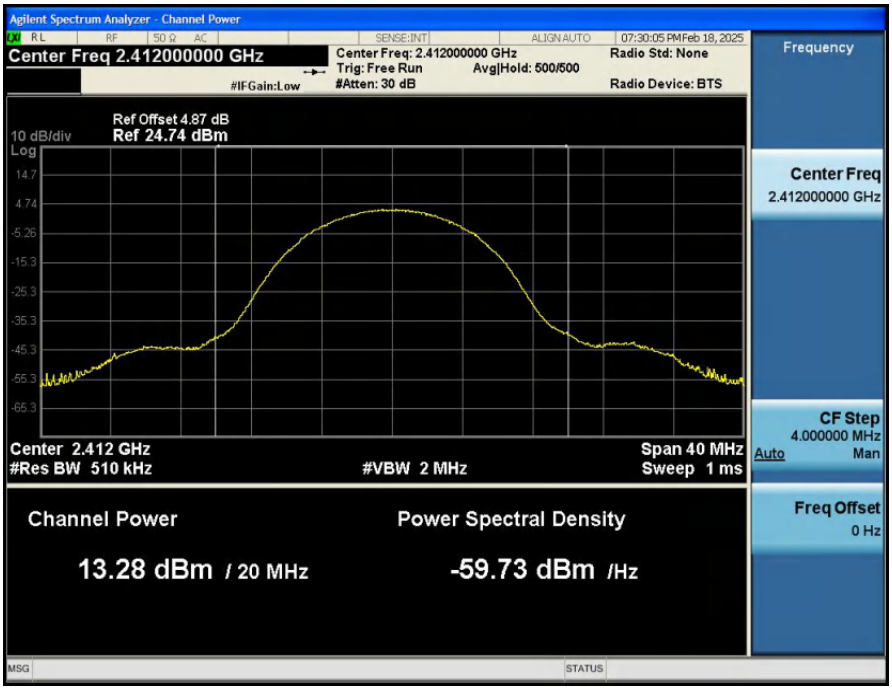
Duty_Cycle_NVNT_ANT1_802_11n(HT40)_2452

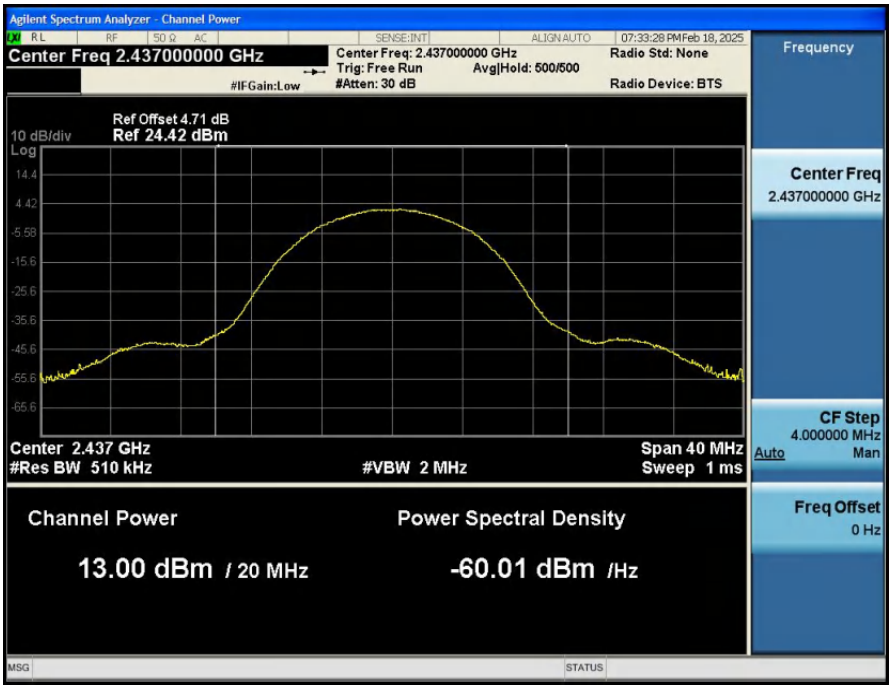


Appendix D: MAX. Output Power

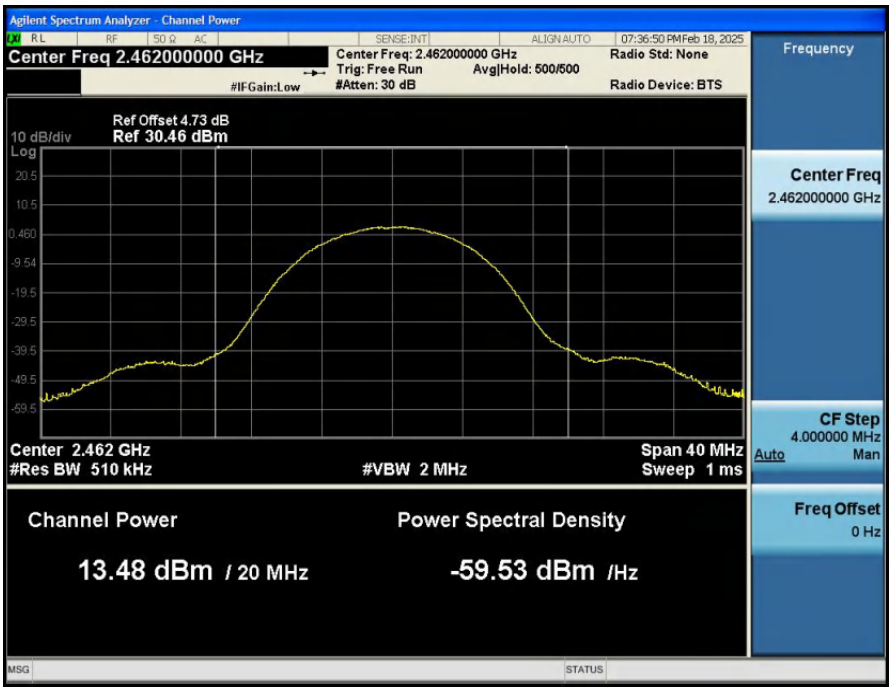
Condition	Antenna	Modulation	Frequency (MHz)	Detector	Conducted Power(dBm)	Duty factor(dB)	Total Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	RMS	13.28	0.39	13.67	30	Pass
NVNT	ANT1	802.11b	2437.00	RMS	13.00	0.29	13.29	30	Pass
NVNT	ANT1	802.11b	2462.00	RMS	13.48	0.29	13.77	30	Pass
NVNT	ANT1	802.11g	2412.00	RMS	12.49	1.68	14.17	30	Pass
NVNT	ANT1	802.11g	2437.00	RMS	11.92	1.76	13.68	30	Pass
NVNT	ANT1	802.11g	2462.00	RMS	12.33	1.68	14.01	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	RMS	13.27	1.76	**15.03**	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	RMS	12.54	1.76	14.30	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	RMS	13.17	1.85	15.02	30	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	RMS	12.65	1.76	14.41	30	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	RMS	12.61	1.85	14.46	30	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	RMS	12.37	2.01	14.38	30	Pass

Note：The cable loss are compensated in the graph.

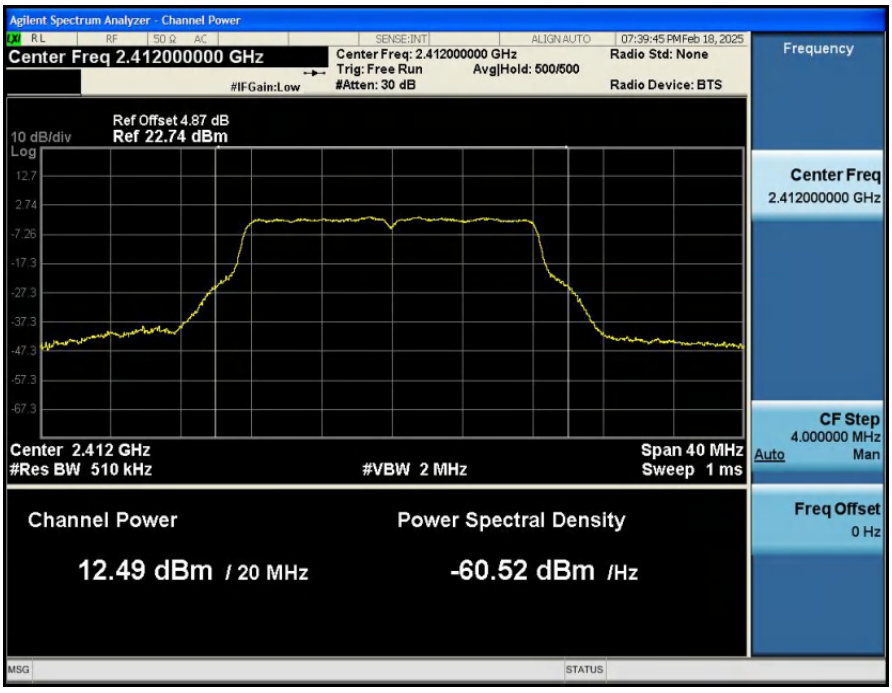
MAX__Output_Power_NVNT_ANT1_802_11b_2412


MAX__Output_Power_NVNT_ANT1_802_11b_2437


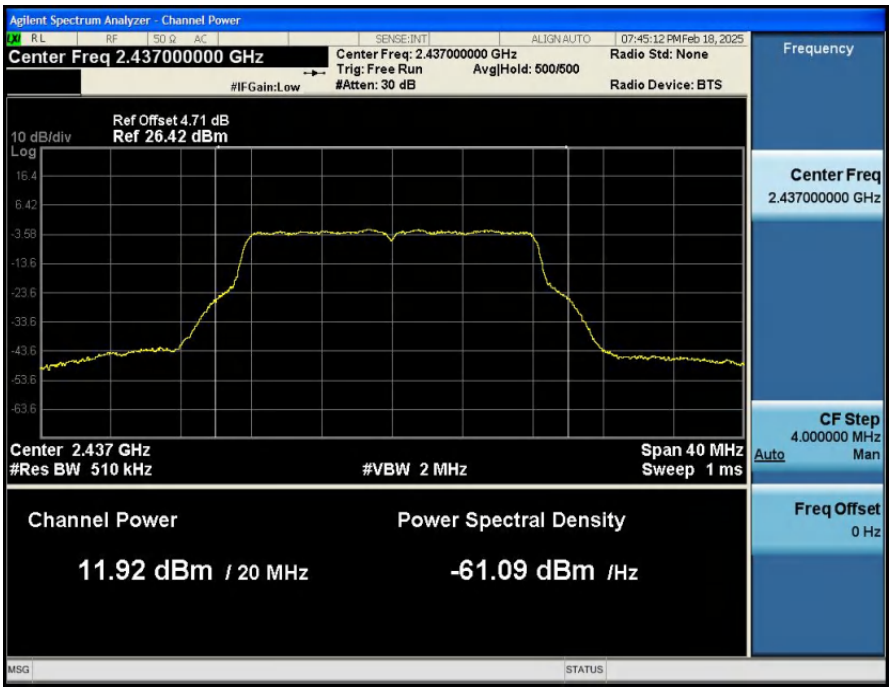
MAX__Output_Power_NVNT_ANT1_802_11b_2462



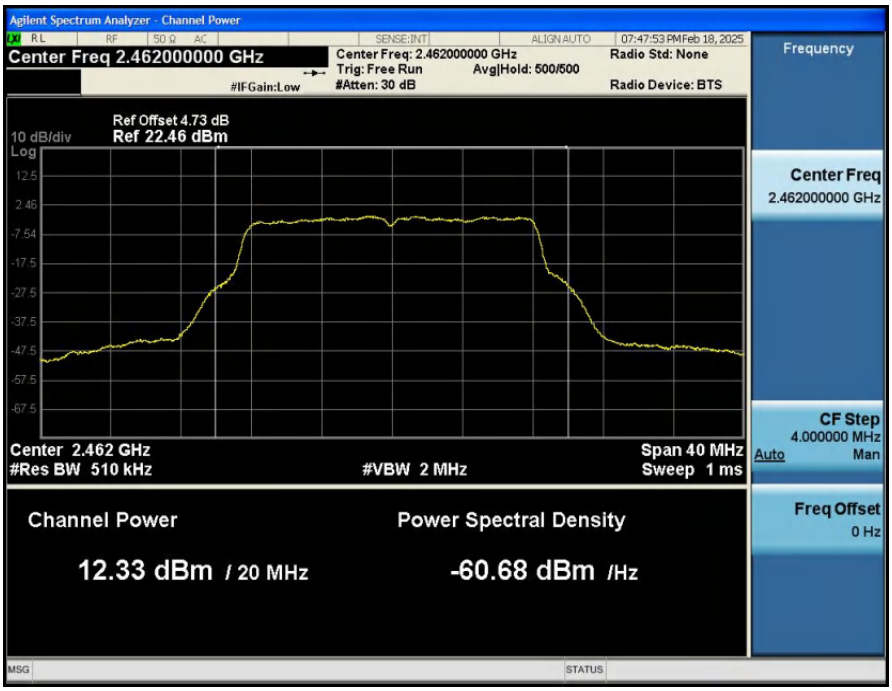
MAX__Output_Power_NVNT_ANT1_802_11g_2412



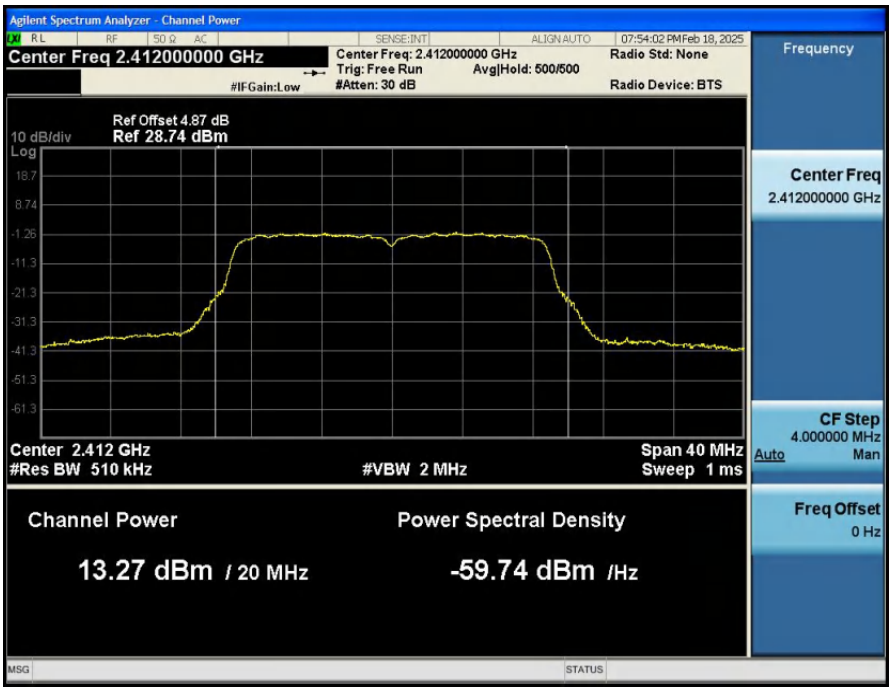
MAX__Output_Power_NVNT_ANT1_802_11g_2437



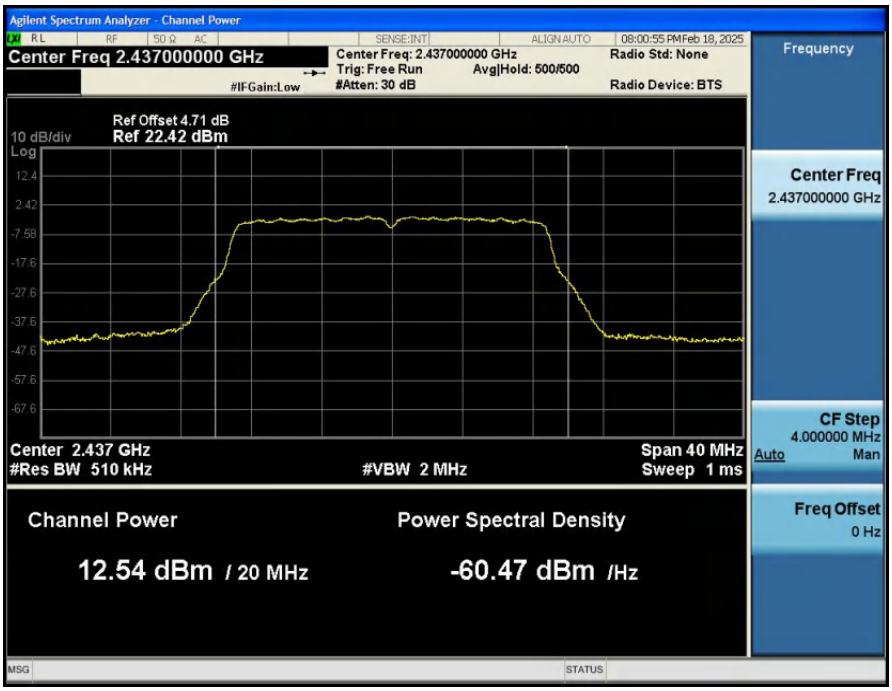
MAX__Output_Power_NVNT_ANT1_802_11g_2462



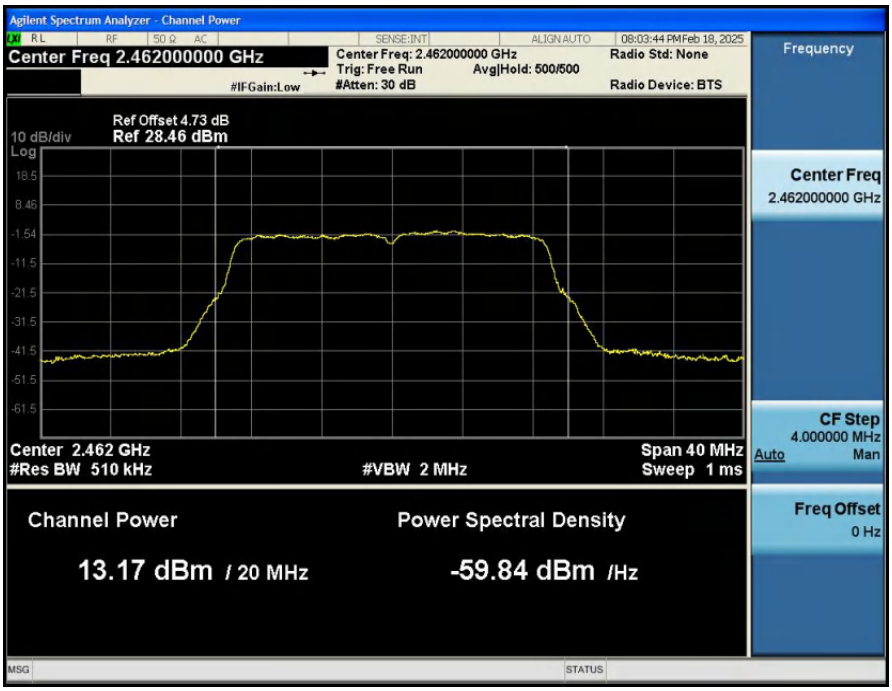
MAX__Output_Power_NVNT_ANT1_802_11n(HT20)_2412



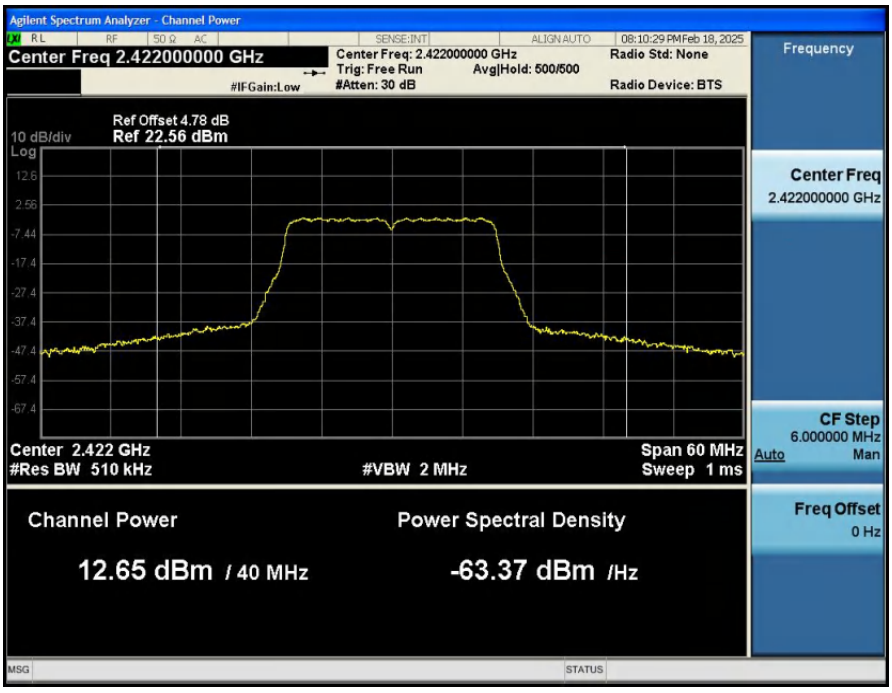
MAX__Output_Power_NVNT_ANT1_802_11n(HT20)_2437



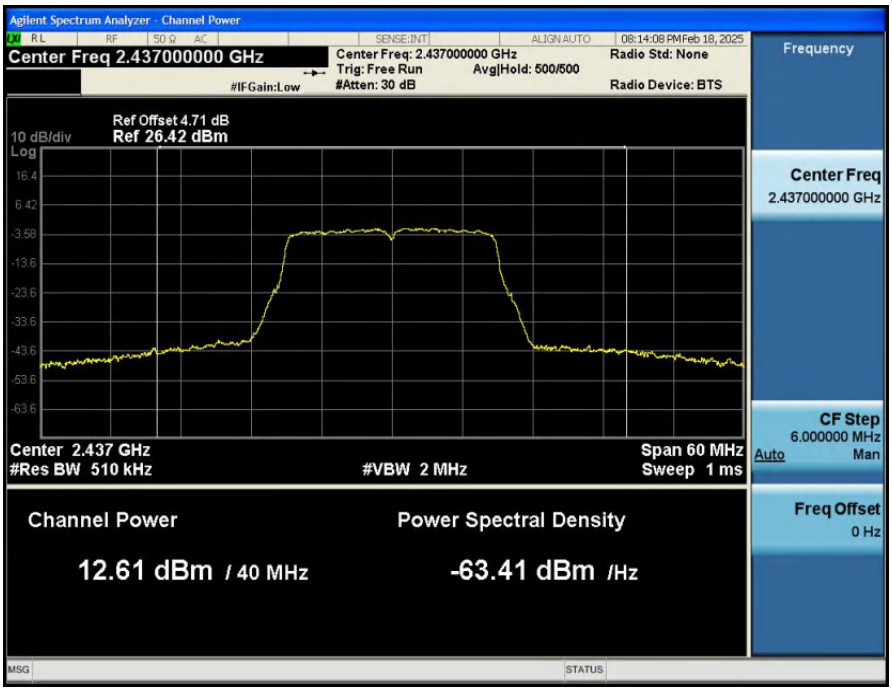
MAX__Output_Power_NVNT_ANT1_802_11n(HT20)_2462



MAX__Output_Power_NVNT_ANT1_802_11n(HT40)_2422



MAX__Output_Power_NVNT_ANT1_802_11n(HT40)_2437



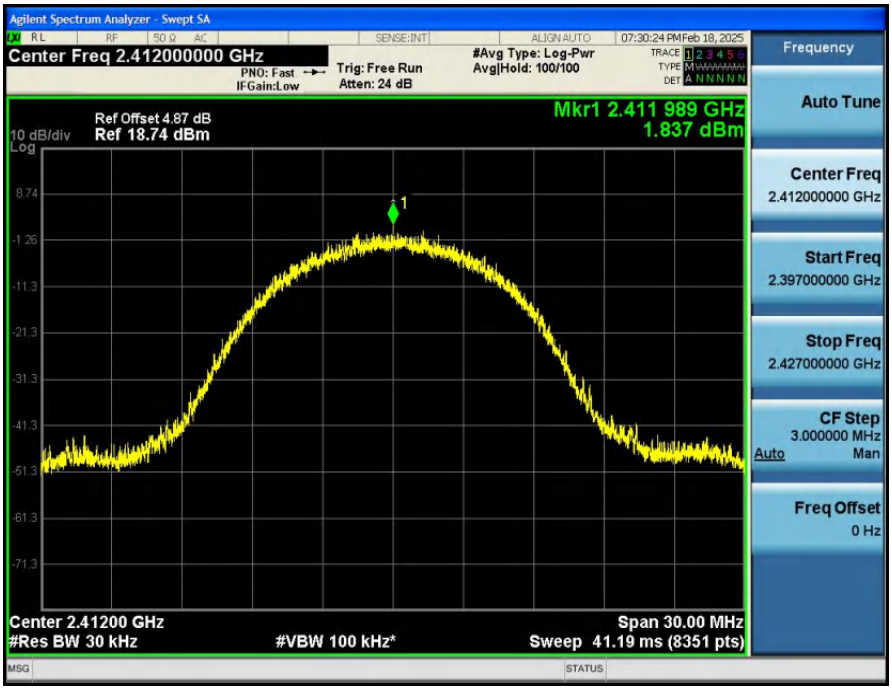
MAX__Output_Power_NVNT_ANT1_802_11n(HT40)_2452

Appendix E: Power Spectral Density

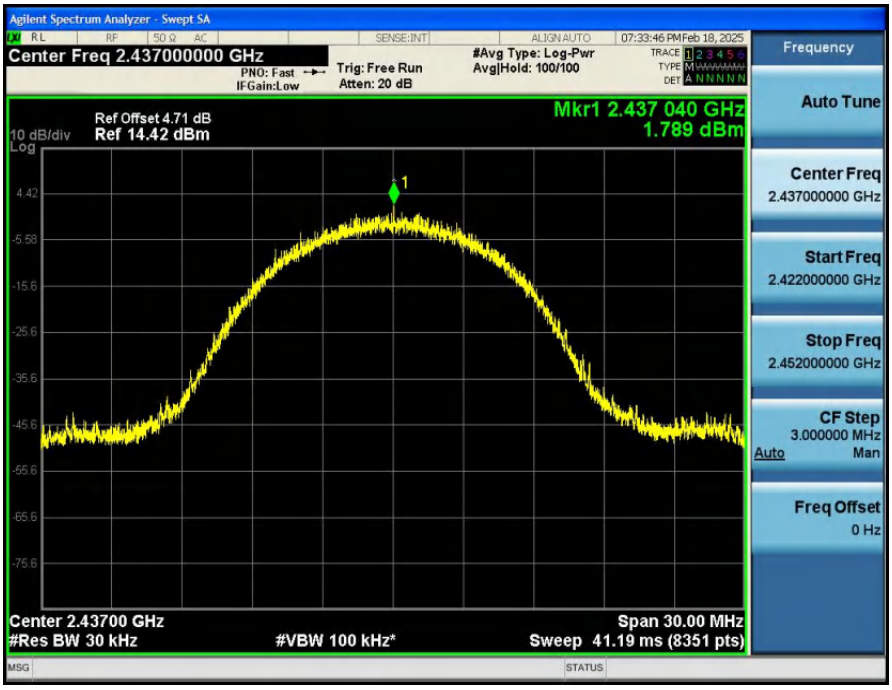
Condition	Antenna	Modulation	Frequency (MHz)	SA_PSD(dBm/30kHz)	Duty factor(dB)	RB factor(dB)	PSD(dBm/3kHz)	limit(dBm/3kHz)	Result
NVNT	ANT1	802.11b	2412.00	1.84	0.39	-10.00	-7.77	8	Pass
NVNT	ANT1	802.11b	2437.00	1.79	0.29	-10.00	-7.92	8	Pass
NVNT	ANT1	802.11b	2462.00	1.39	0.29	-10.00	-8.32	8	Pass
NVNT	ANT1	802.11g	2412.00	-2.99	1.68	-10.00	-11.31	8	Pass
NVNT	ANT1	802.11g	2437.00	-3.55	1.76	-10.00	-11.79	8	Pass
NVNT	ANT1	802.11g	2462.00	-3.39	1.68	-10.00	-11.71	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-1.05	1.76	-10.00	-9.29	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-0.72	1.76	-10.00	-8.96	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-0.96	1.85	-10.00	-9.11	8	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	-1.65	1.76	-10.00	-9.89	8	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	-2.35	1.85	-10.00	-10.50	8	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	-1.32	2.01	-10.00	-9.31	8	Pass

Note：The cable loss are compensated in the graph.

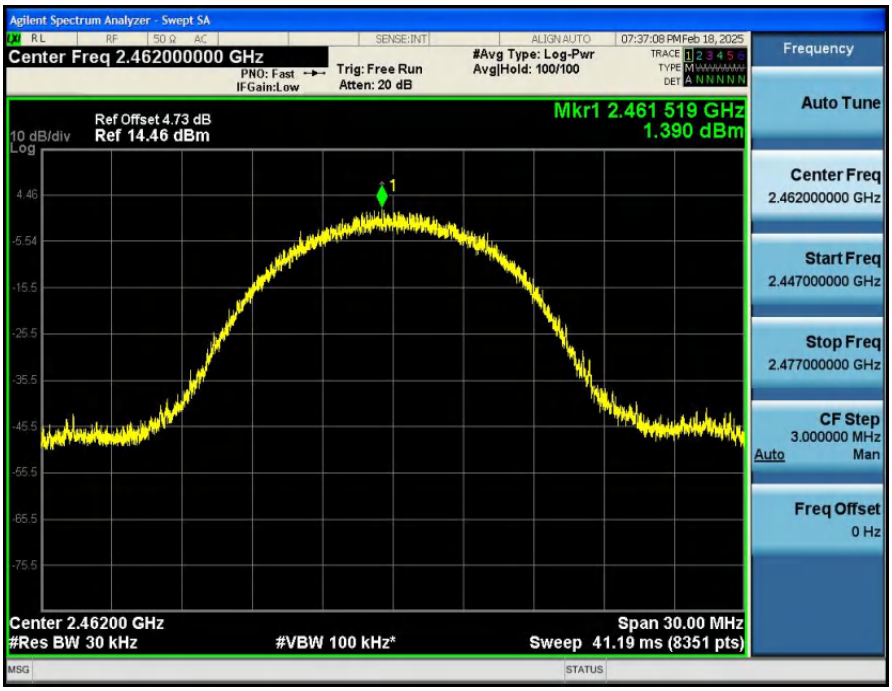
Power_Spectral_Density_NVNT_ANT1_802_11b_2412



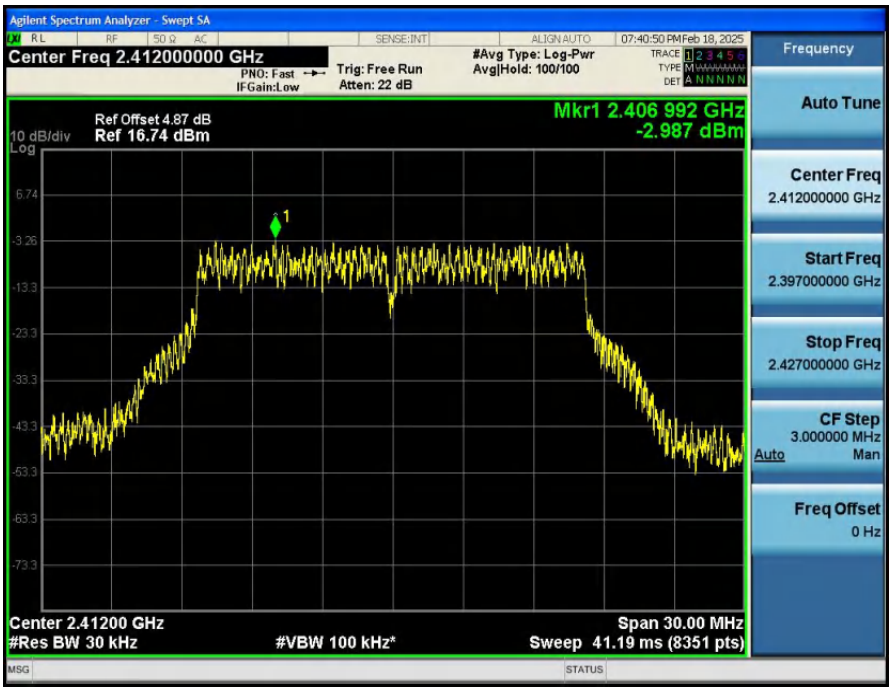
Power_Spectral_Density_NVNT_ANT1_802_11b_2437



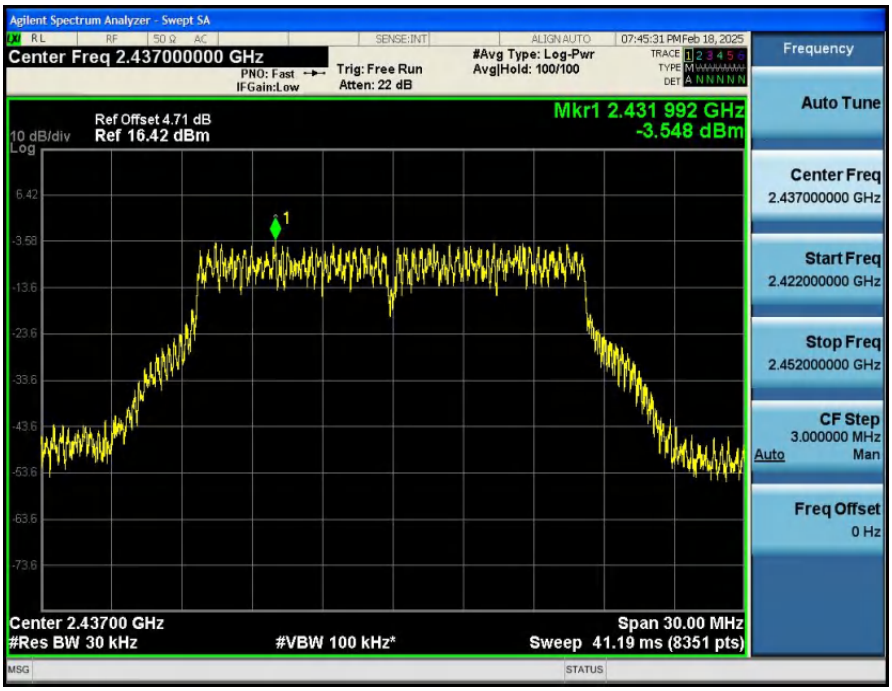
Power_Spectral_Density_NVNT_ANT1_802_11b_2462



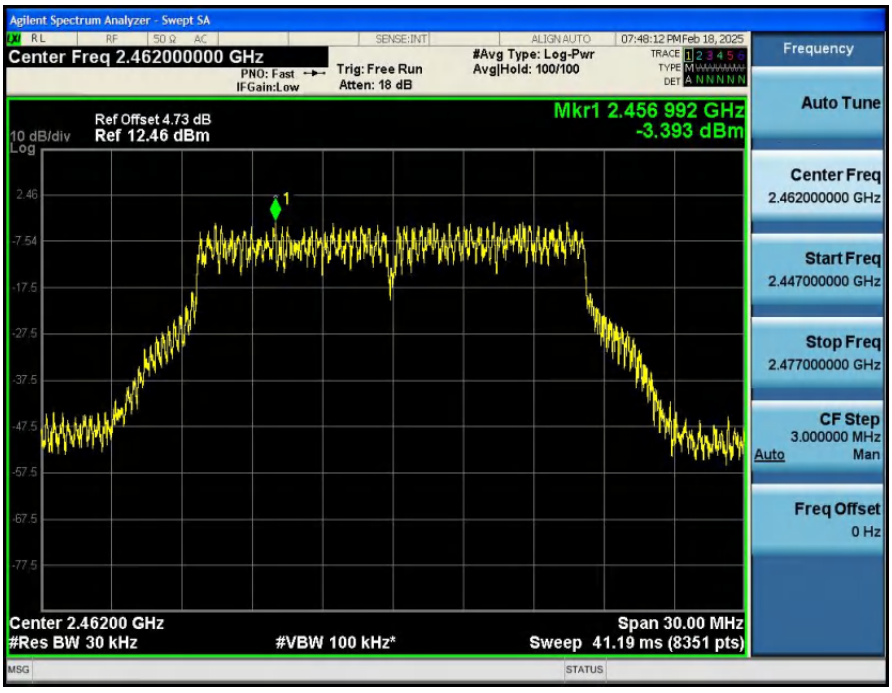
Power_Spectral_Density_NVNT_ANT1_802_11g_2412



Power_Spectral_Density_NVNT_ANT1_802_11g_2437

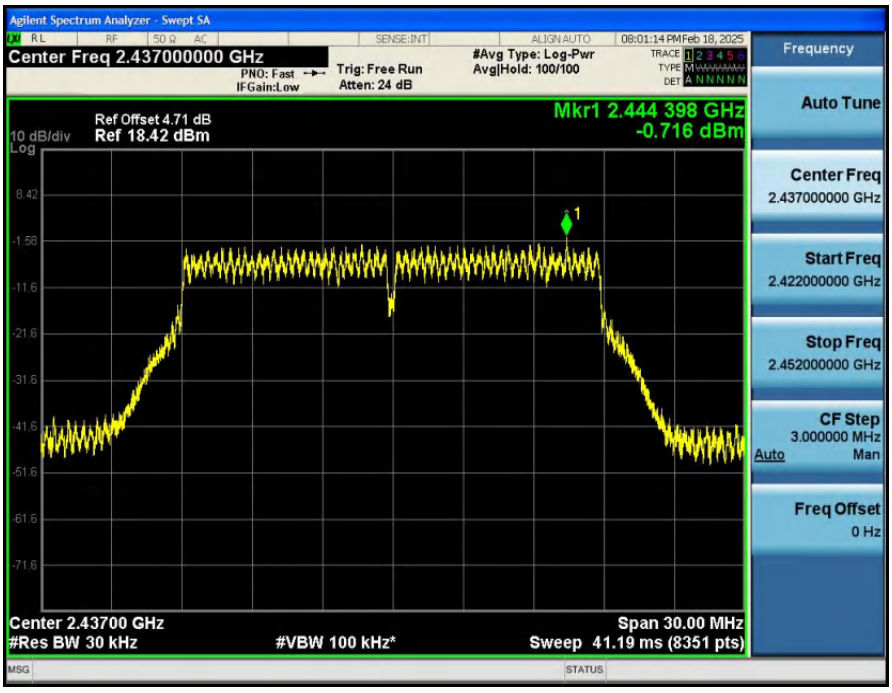


Power_Spectral_Density_NVNT_ANT1_802_11g_2462



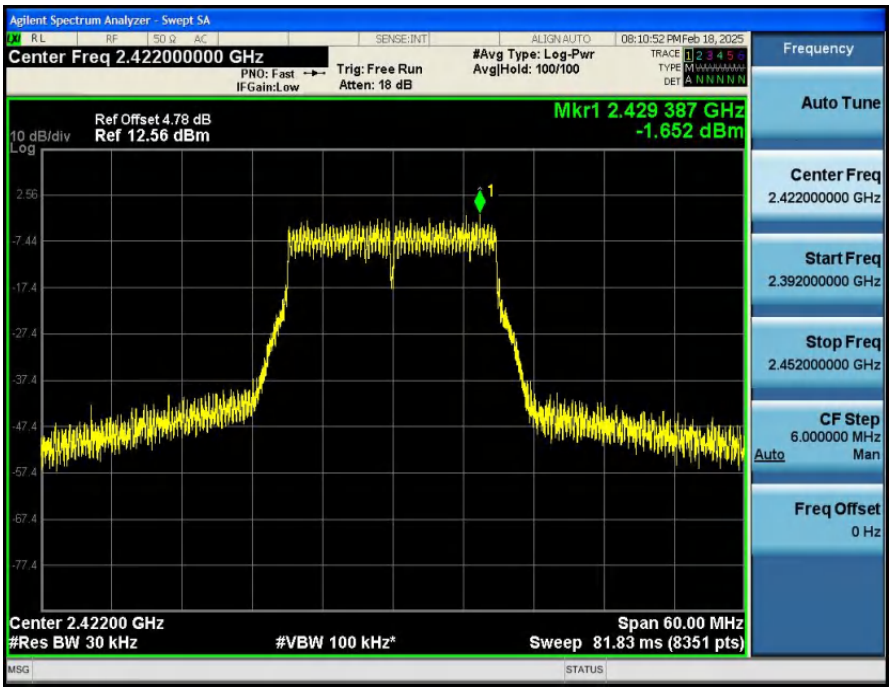
Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2412

Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2437

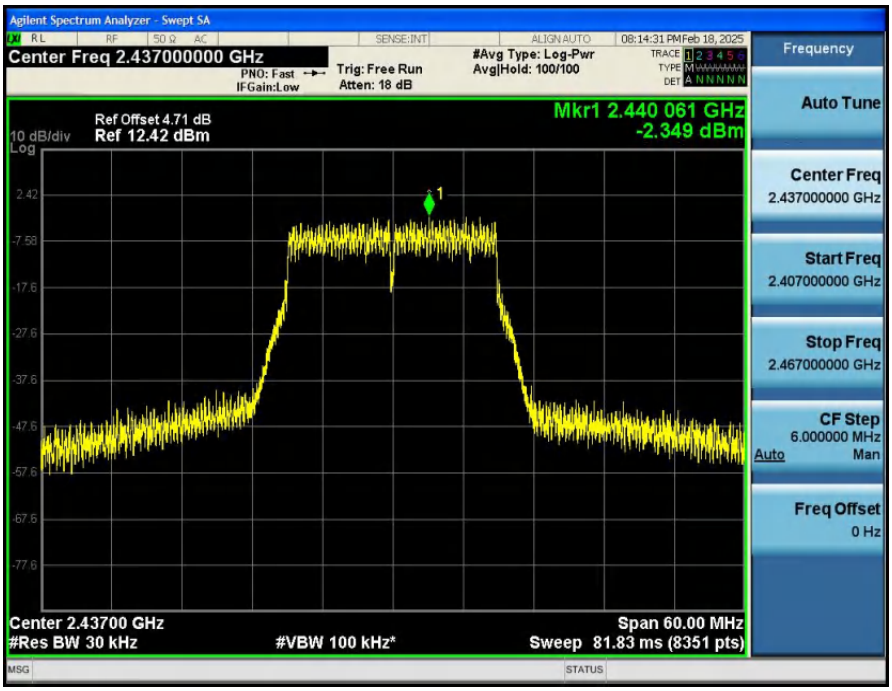


Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2462

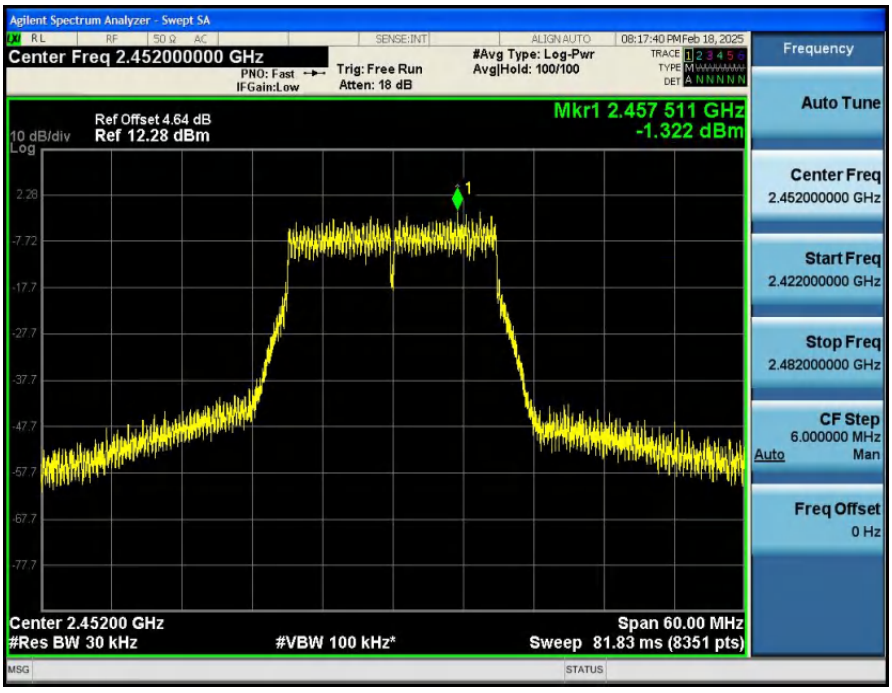
Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2422



Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2437



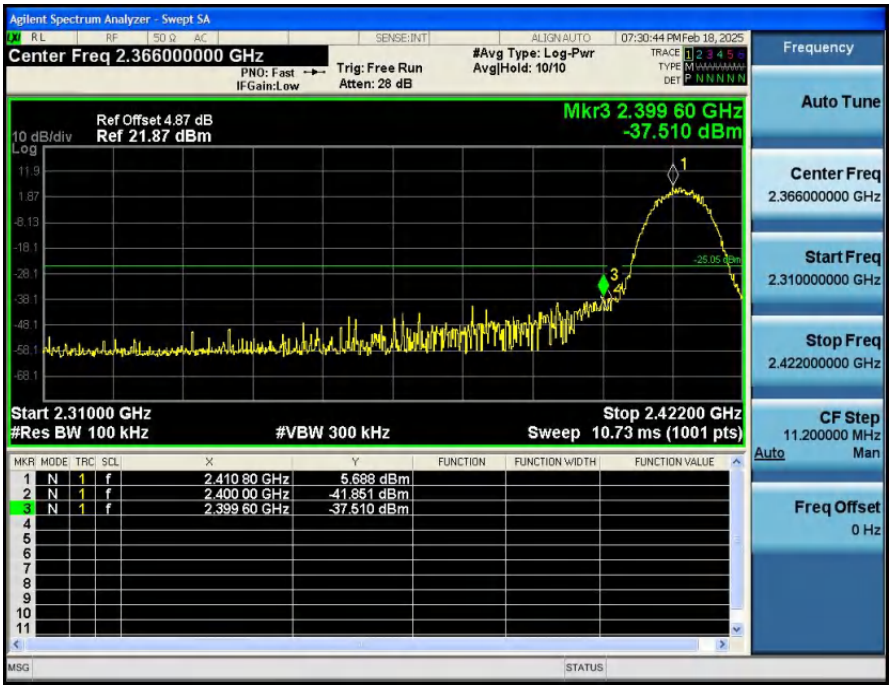
Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2452



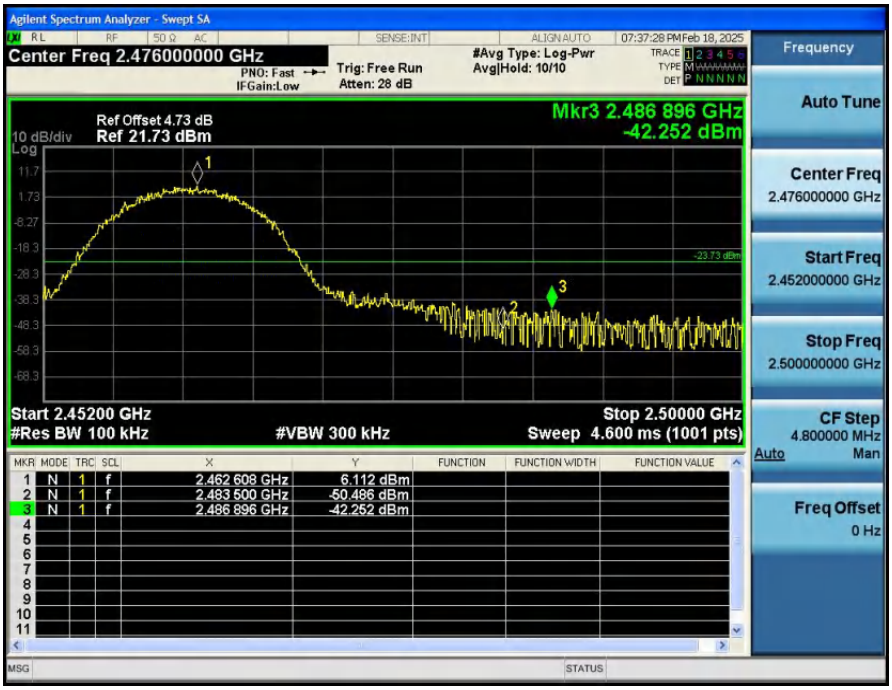
Appendix F: Bandedge

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_freq(MHz)	Ref_level(dBm)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	2399.600	4.951	-37.510	-25.049	Pass
NVNT	ANT1	802.11b	2462.00	2486.896	6.268	-42.252	-23.732	Pass
NVNT	ANT1	802.11g	2412.00	2398.592	2.304	-32.974	-27.696	Pass
NVNT	ANT1	802.11g	2462.00	2483.680	2.703	-47.657	-27.297	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2399.488	2.537	-31.249	-27.463	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2484.736	3.716	-36.771	-26.284	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	2399.760	2.763	-34.033	-27.237	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	2484.700	2.584	-43.448	-27.416	Pass

1_Reference_Level_NVNT_ANT1_802_11b_2412

2_Bandedge_NVNT_ANT1_802_11b_2412

1_Reference_Level_NVNT_ANT1_802_11b_2462

2_Bandedge_NVNT_ANT1_802_11b_2462



1_Reference_Level_NVNT_ANT1_802_11g_2412

2_Bandedge_NVNT_ANT1_802_11g_2412

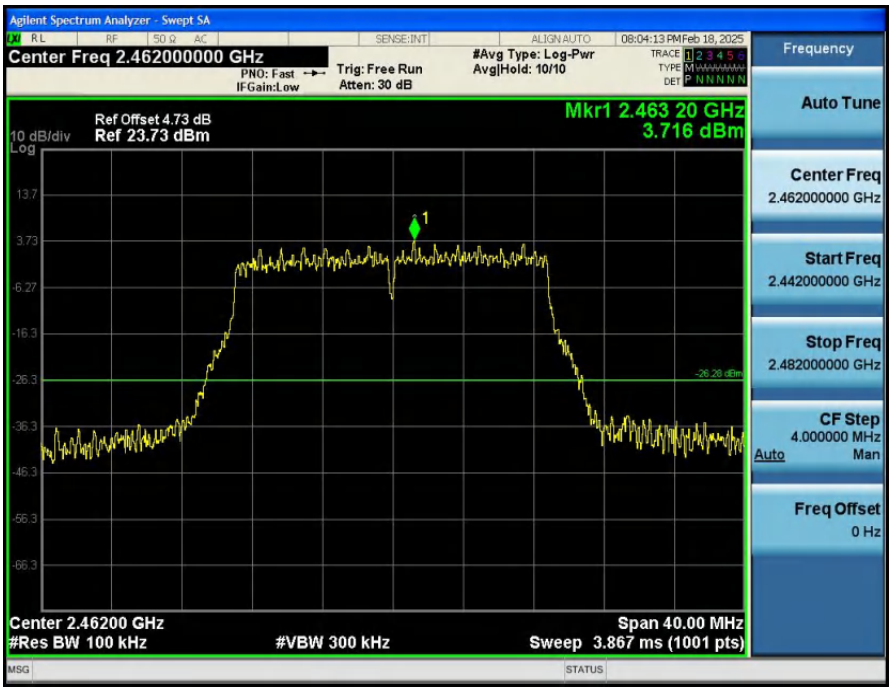
1_Reference_Level_NVNT_ANT1_802_11g_2462

2_Bandedge_NVNT_ANT1_802_11g_2462

1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2412

2_Bandedge_NVNT_ANT1_802_11n(HT20)_2412

1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2462



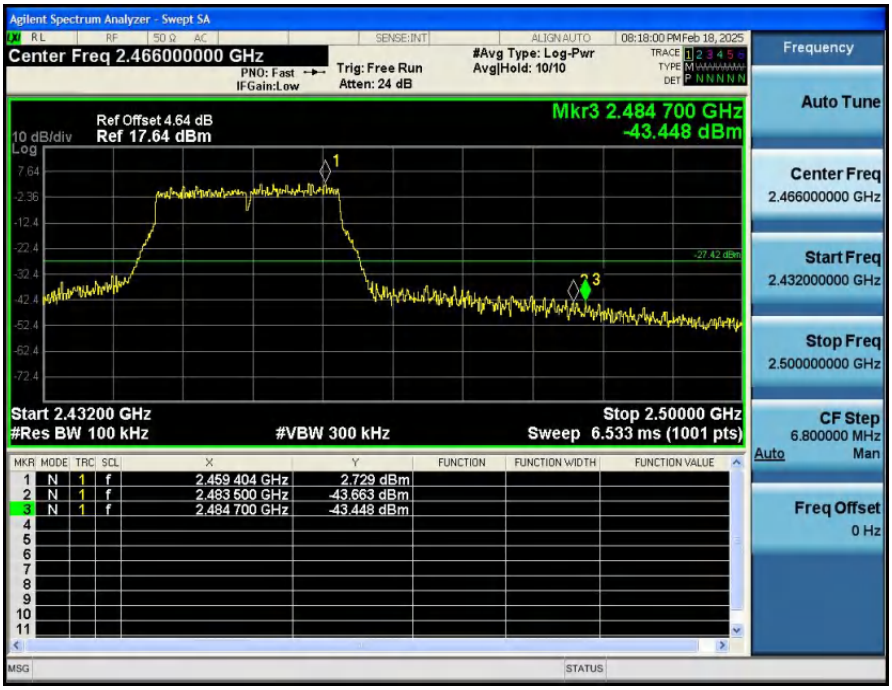
2_Bandedge_NVNT_ANT1_802_11n(HT20)_2462

1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2422

2_Bandedge_NVNT_ANT1_802_11n(HT40)_2422

1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2452

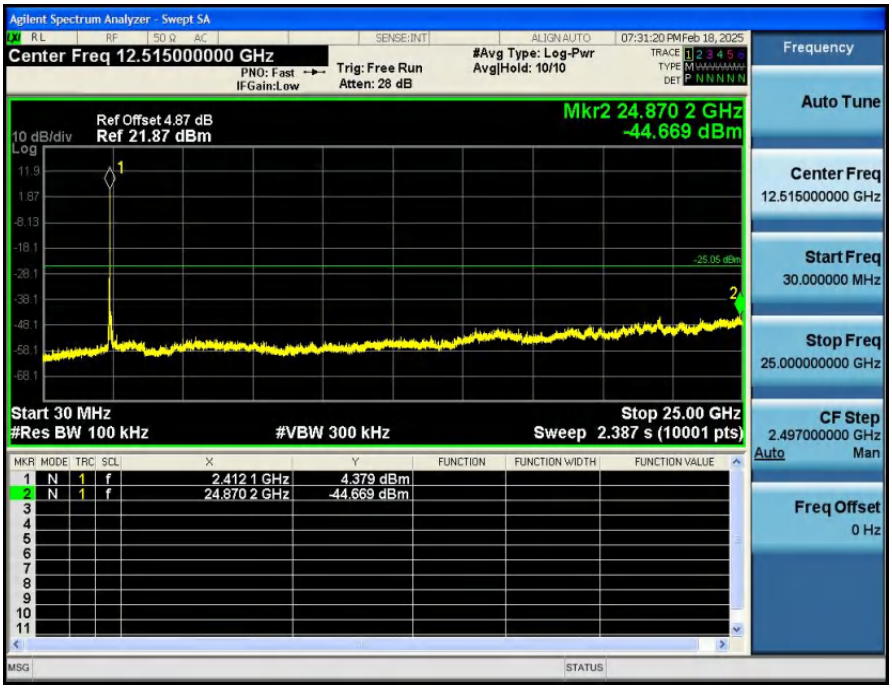
2_Bandedge_NVNT_ANT1_802_11n(HT40)_2452



Appendix G: Spurious Emission

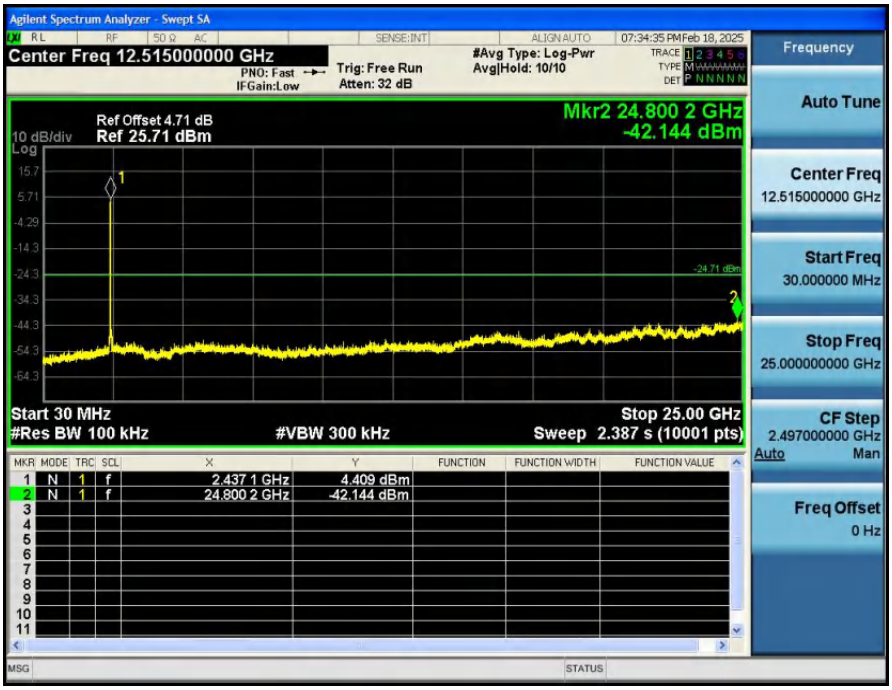
Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_freq(MHz)	Ref_level(dBm)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	24870.156	4.951	-44.669	-25.049	Pass
NVNT	ANT1	802.11b	2437.00	24800.240	5.286	-42.144	-24.714	Pass
NVNT	ANT1	802.11b	2462.00	24860.168	6.268	-45.152	-23.732	Pass
NVNT	ANT1	802.11g	2412.00	24310.828	2.437	-48.141	-27.563	Pass
NVNT	ANT1	802.11g	2437.00	24967.539	1.796	-48.823	-28.204	Pass
NVNT	ANT1	802.11g	2462.00	24740.312	2.703	-48.332	-27.297	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	24942.569	2.537	-49.008	-27.463	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	24360.768	2.319	-48.893	-27.681	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2507.024	3.716	-44.625	-26.284	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	24862.665	2.763	-48.919	-27.237	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	24825.210	2.462	-48.998	-27.538	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	893.962	2.584	-38.534	-27.416	Pass

1_Reference_Level_NVNT_ANT1_802_11b_2412


2_Spurious_Emission_NVNT_ANT1_802_11b_2412


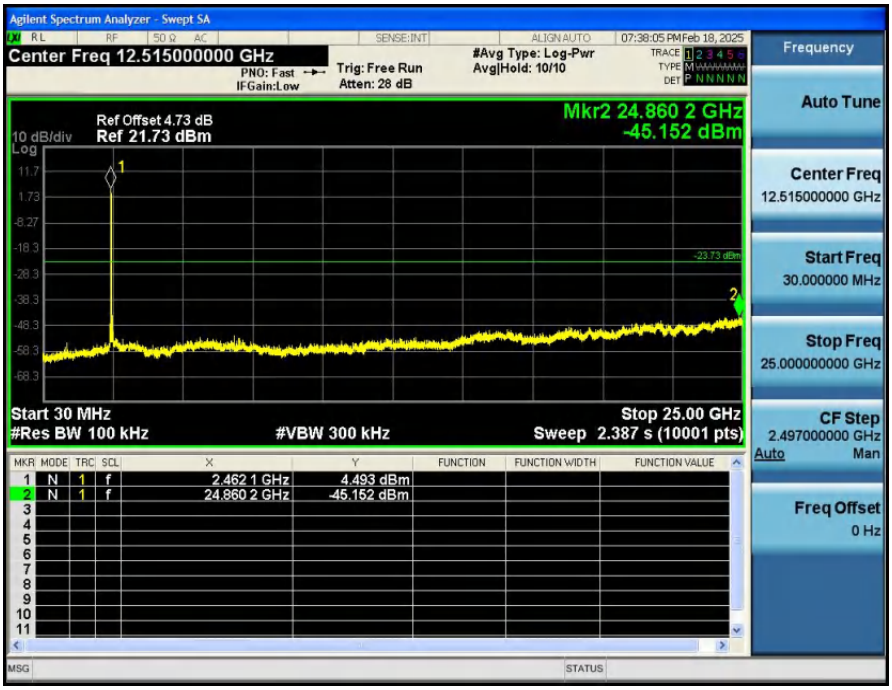
1_Reference_Level_NVNT_ANT1_802_11b_2437

2_Spurious_Emission_NVNT_ANT1_802_11b_2437

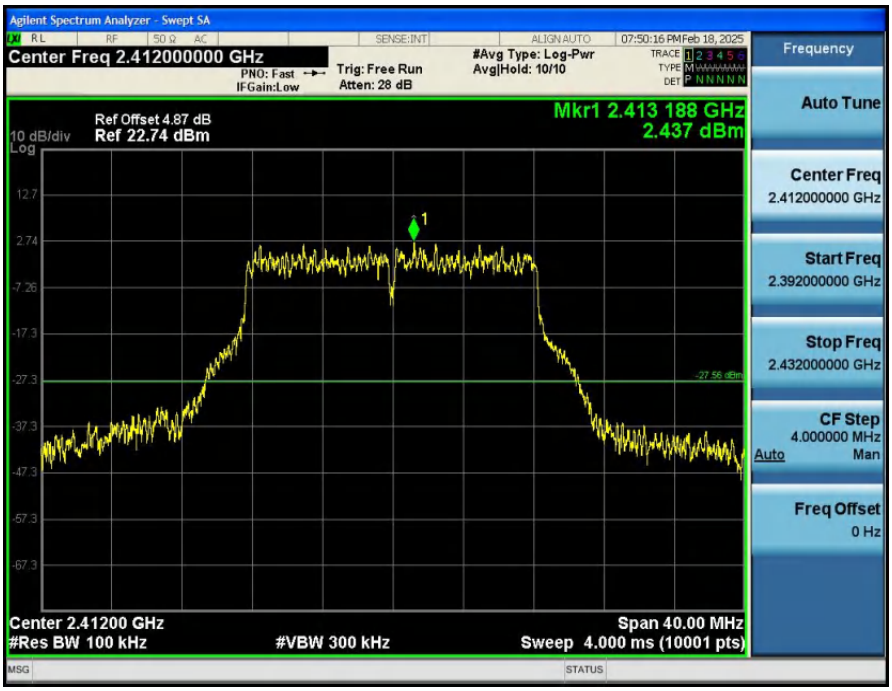


1_Reference_Level_NVNT_ANT1_802_11b_2462

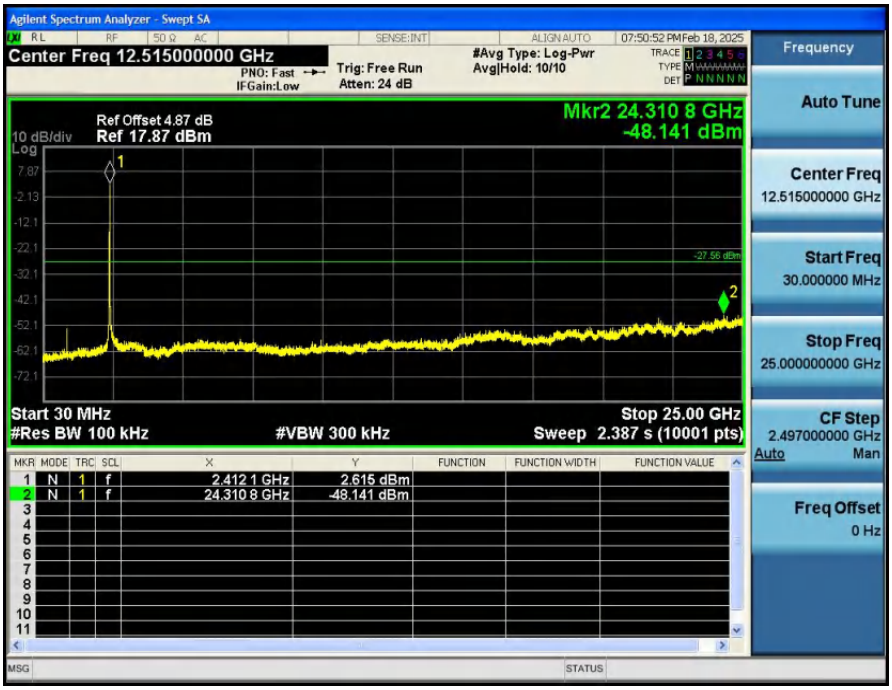
2_Spurious_Emission_NVNT_ANT1_802_11b_2462



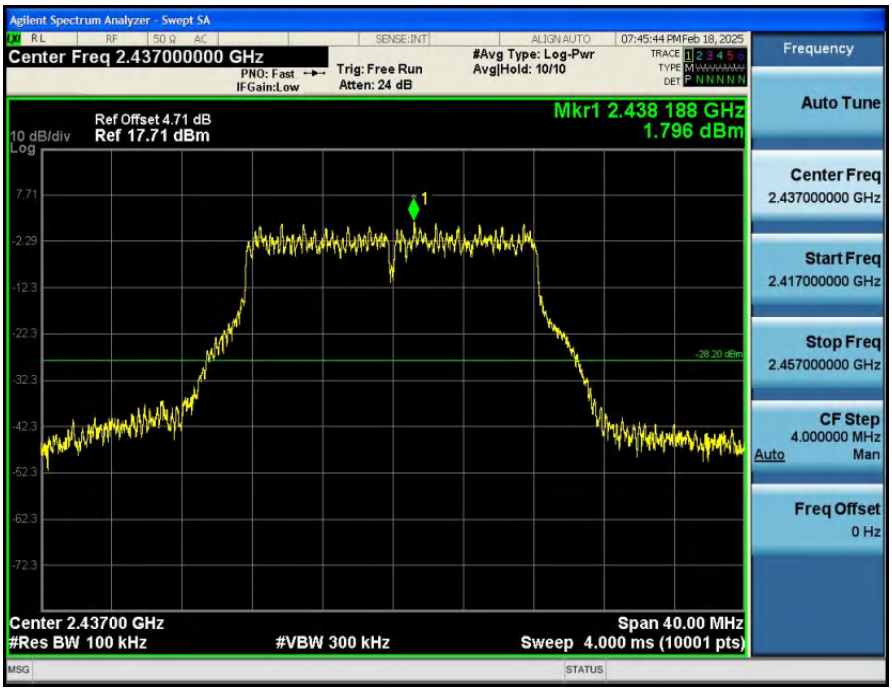
1_Reference_Level_NVNT_ANT1_802_11g_2412



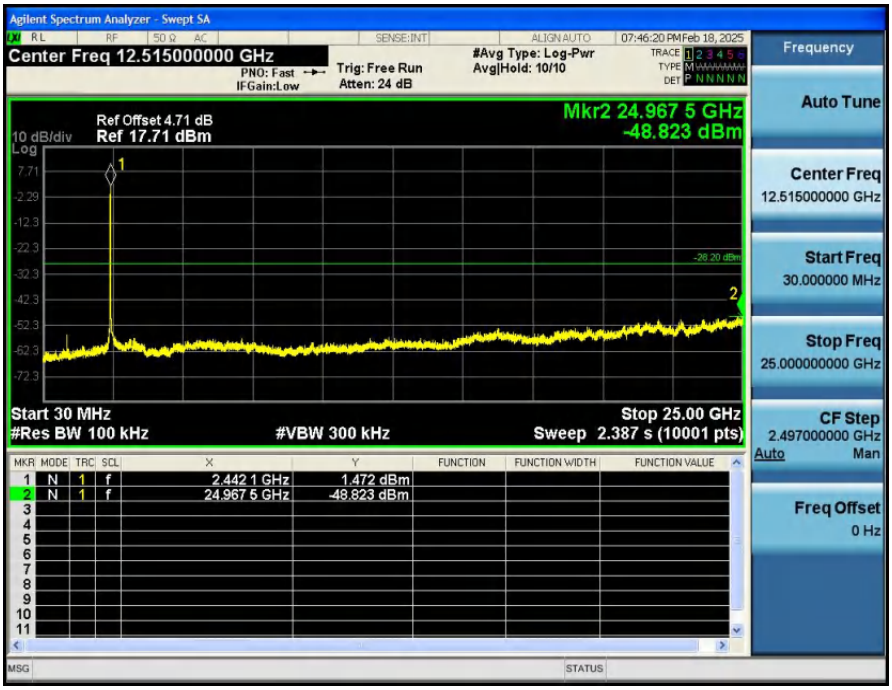
2_Spurious_Emission_NVNT_ANT1_802_11g_2412



1_Reference_Level_NVNT_ANT1_802_11g_2437

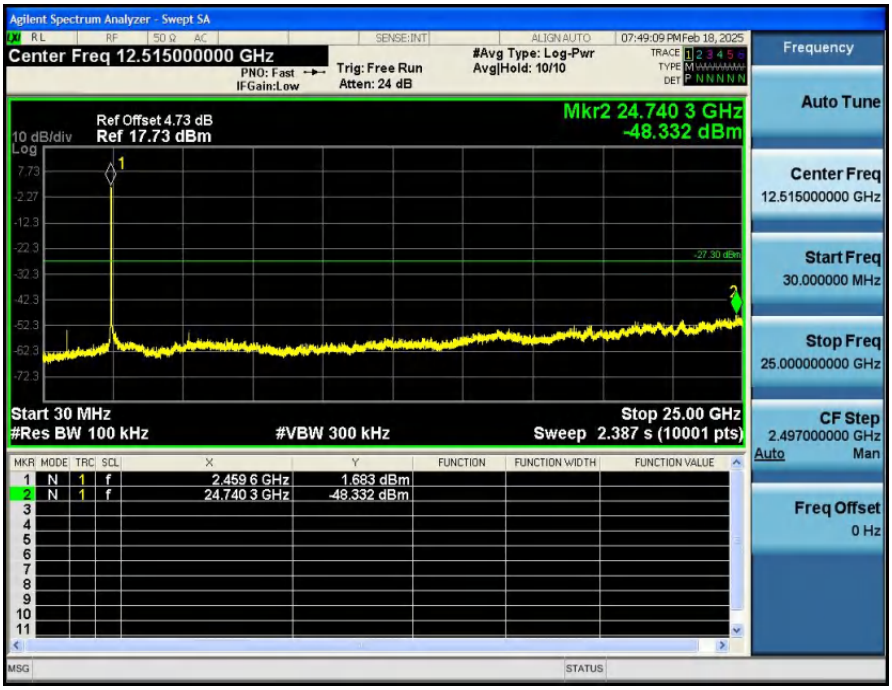


2_Spurious_Emission_NVNT_ANT1_802_11g_2437



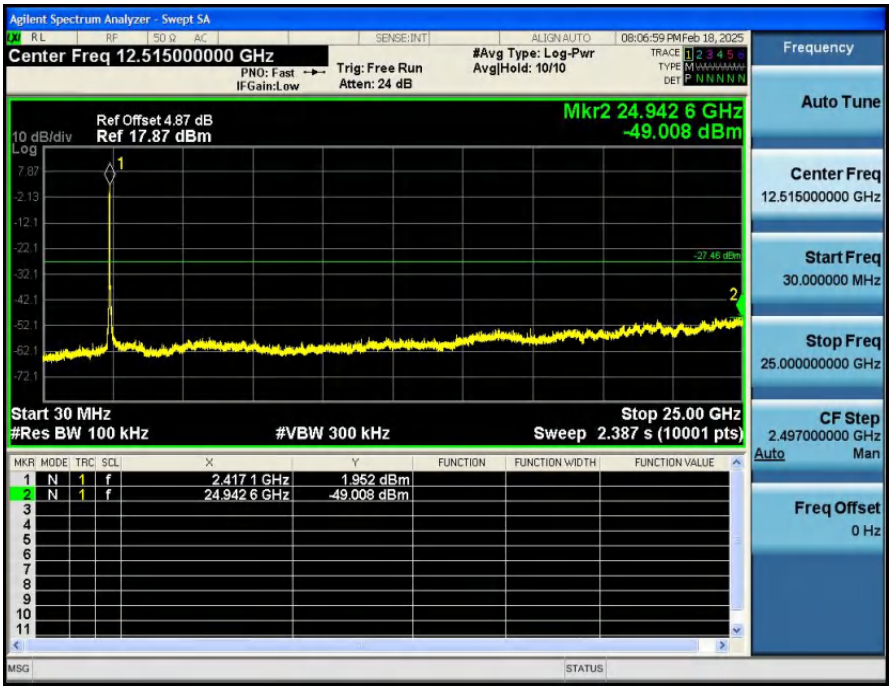
1_Reference_Level_NVNT_ANT1_802_11g_2462

2_Spurious_Emission_NVNT_ANT1_802_11g_2462

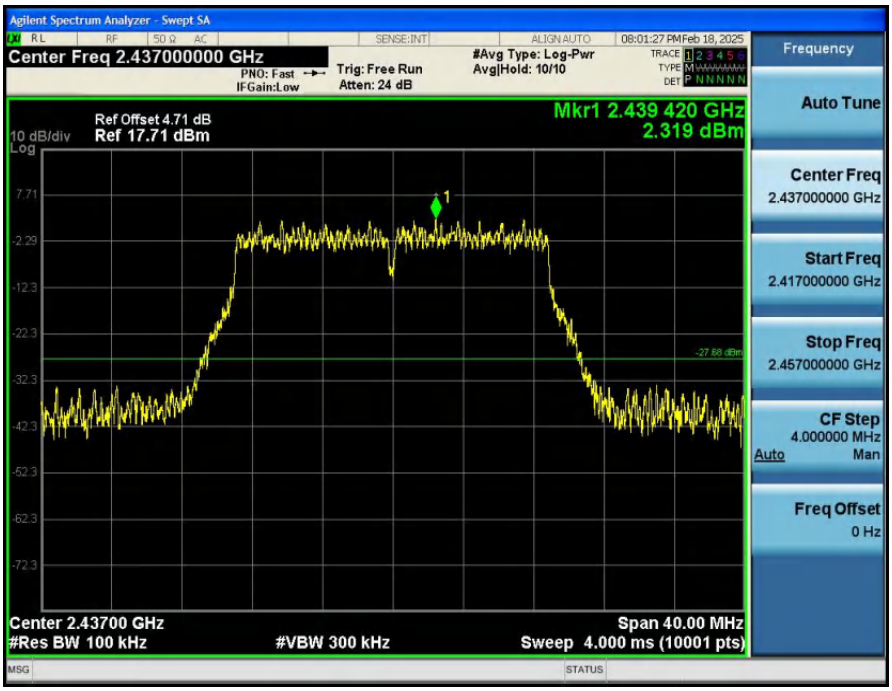


1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2412

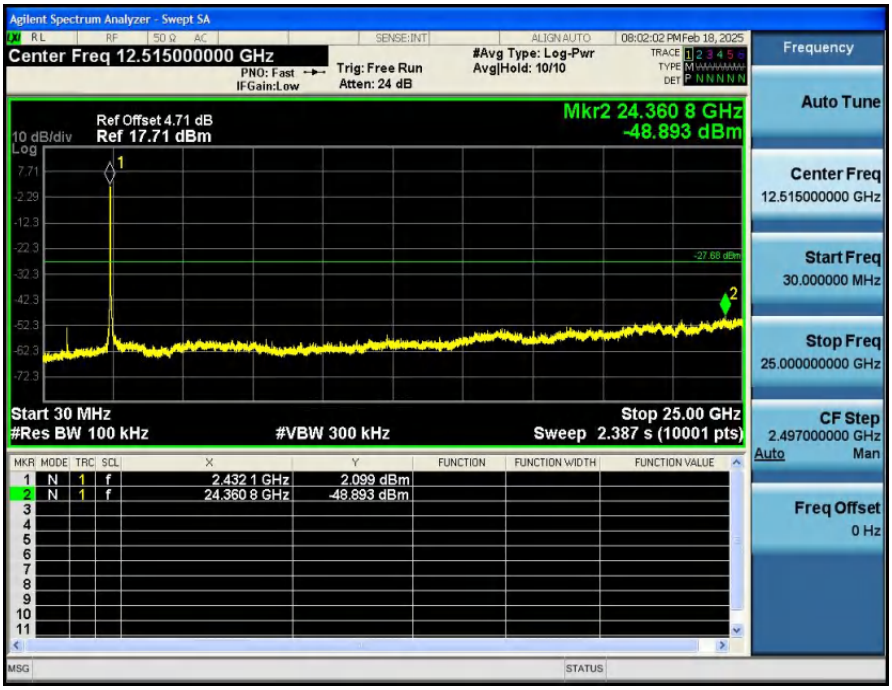
2_Spurious_Emission_NVNT_ANT1_802_11n(HT20)_2412



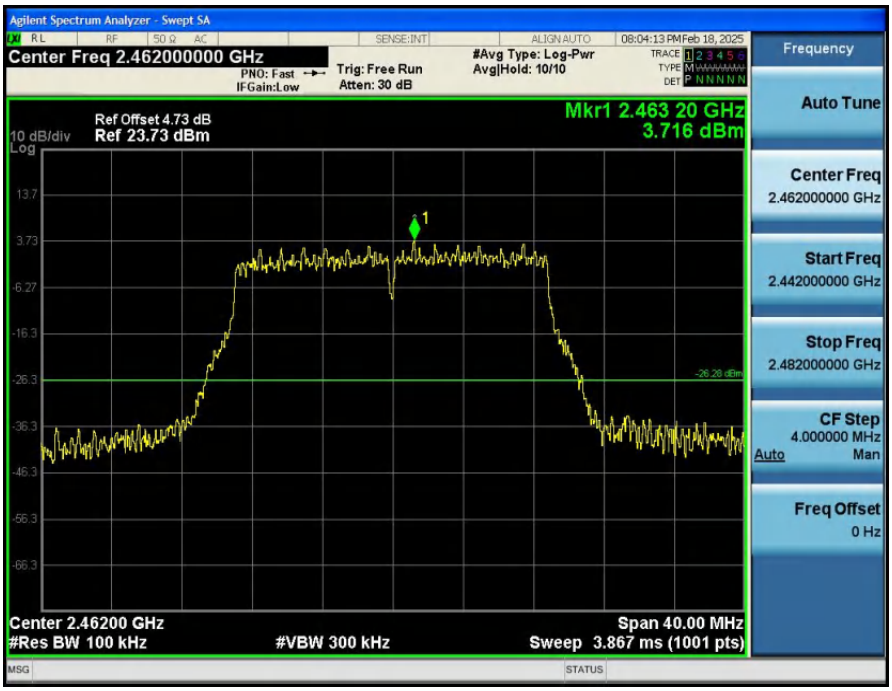
1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2437



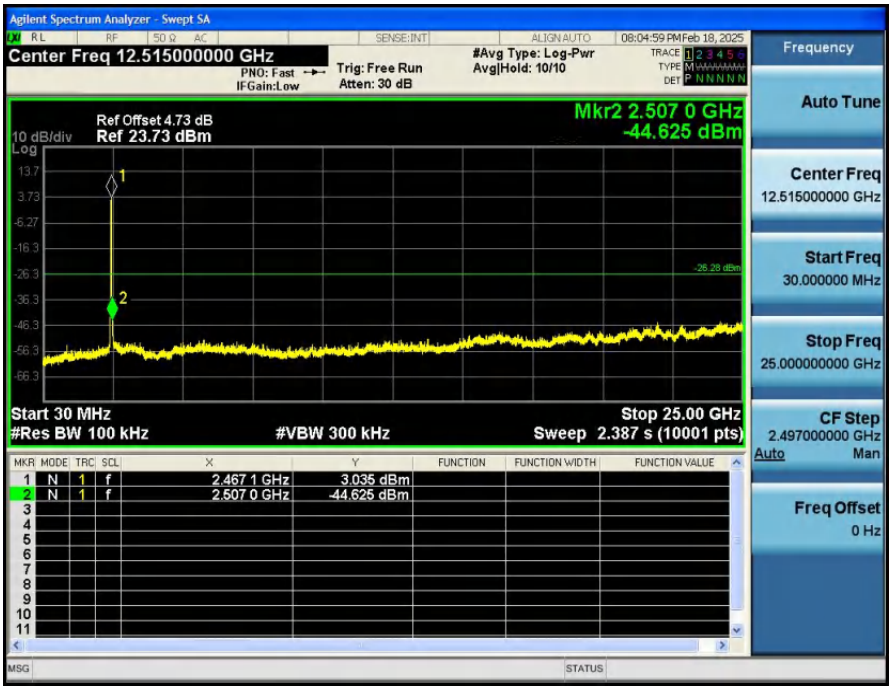
2_Spurious_Emission_NVNT_ANT1_802_11n(HT20)_2437



1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2462

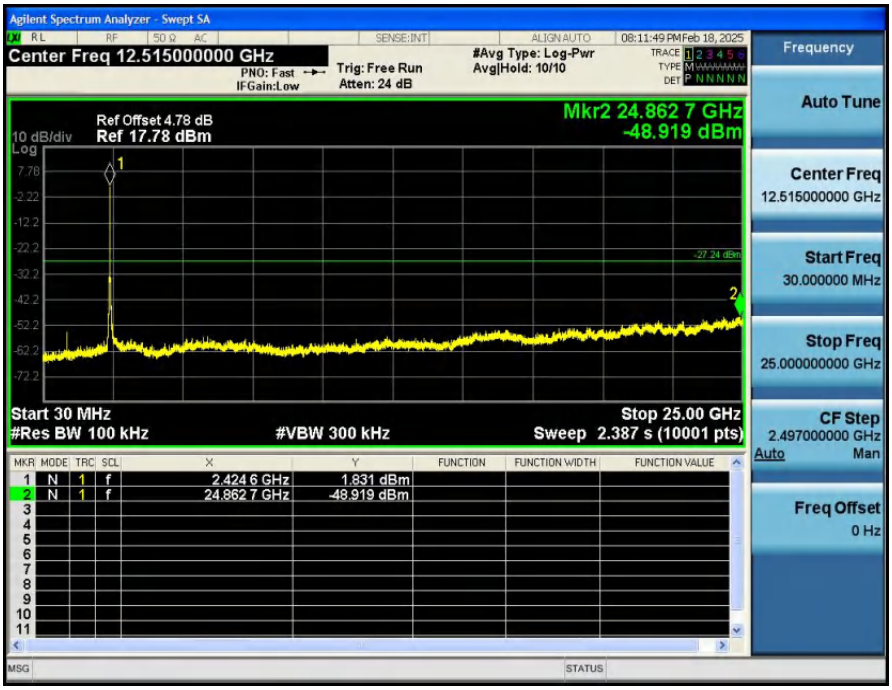


2_Spurious_Emission_NVNT_ANT1_802_11n(HT20)_2462



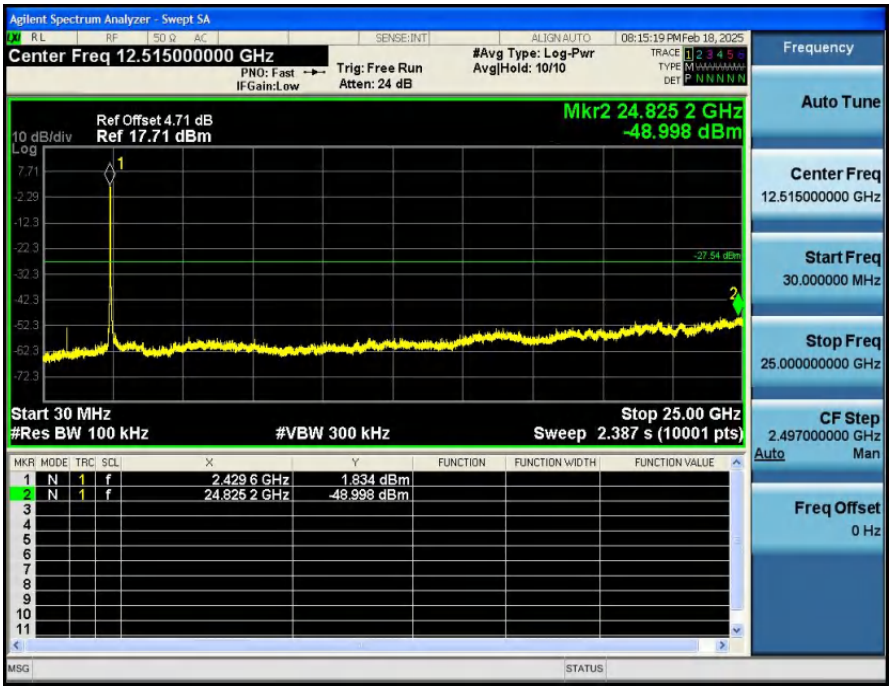
1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2422

2_Spurious_Emission_NVNT_ANT1_802_11n(HT40)_2422



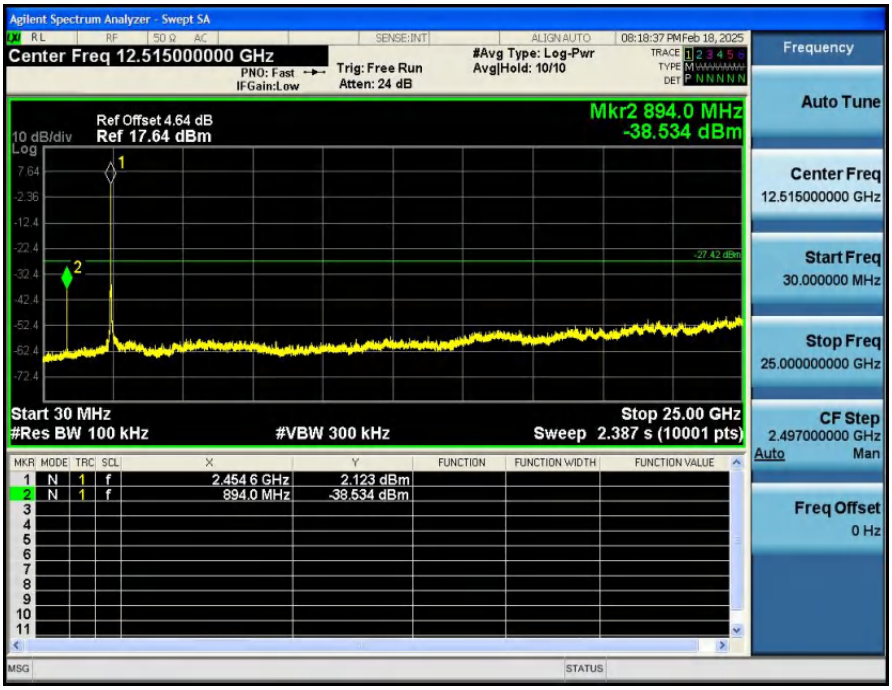
1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2437

2_Spurious_Emission_NVNT_ANT1_802_11n(HT40)_2437



1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2452

2_Spurious_Emission_NVNT_ANT1_802_11n(HT40)_2452



---END---