

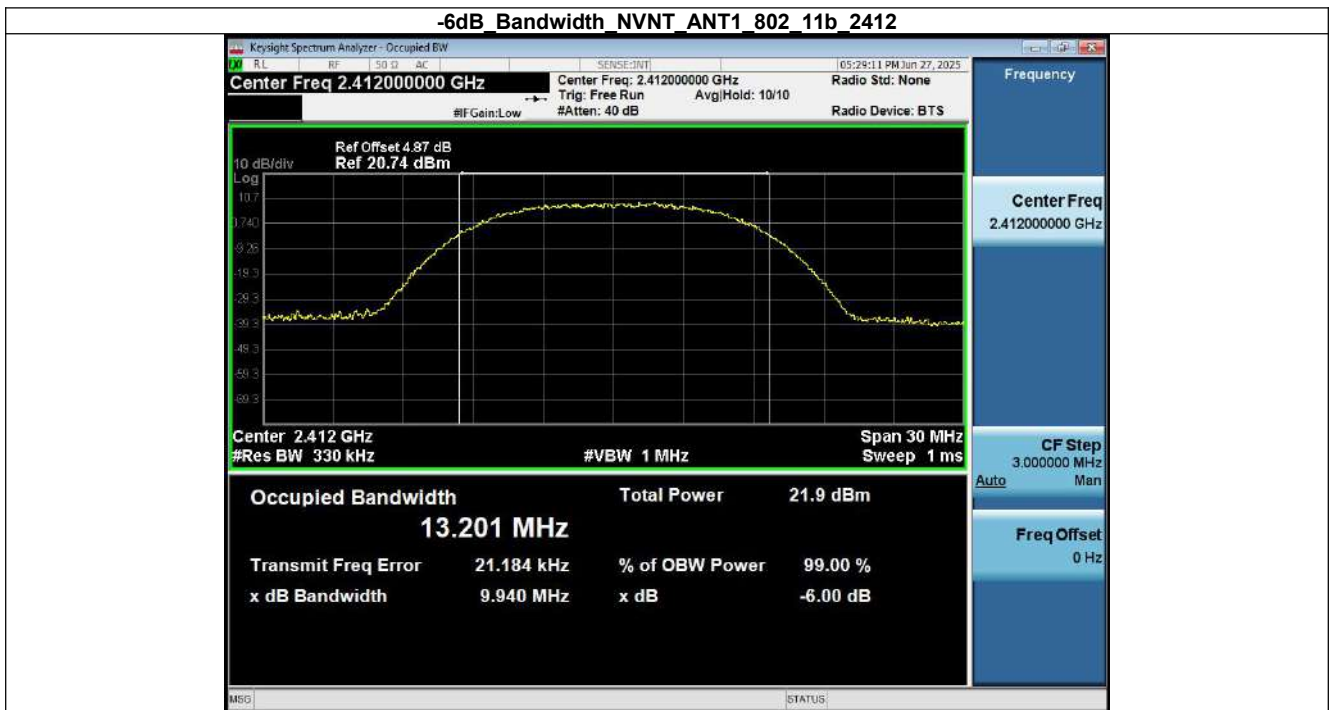
Report No.: NCT25025507XE1-2
FCC ID:2BC96NI-8321
FCC_2.4G_WIFI (Part15.247) Test Data

Table of Contents

1. -6dB Bandwidth	3
2. 99% Occupied Bandwidth	8
3. Duty Cycle	13
4. MAX. Output Power	18
5. Power Spectral Density	19
6. Bandedge	24
7. Spurious Emission	30

1. -6dB Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	9.94	500	Pass
NVNT	ANT1	802.11b	2437.00	10.26	500	Pass
NVNT	ANT1	802.11b	2462.00	10.22	500	Pass
NVNT	ANT1	802.11g	2412.00	16.63	500	Pass
NVNT	ANT1	802.11g	2437.00	16.56	500	Pass
NVNT	ANT1	802.11g	2462.00	16.58	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	17.40	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	17.42	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	17.38	500	Pass



-6dB_Bandwidth_NVNT_ANT1_802_11b_2437



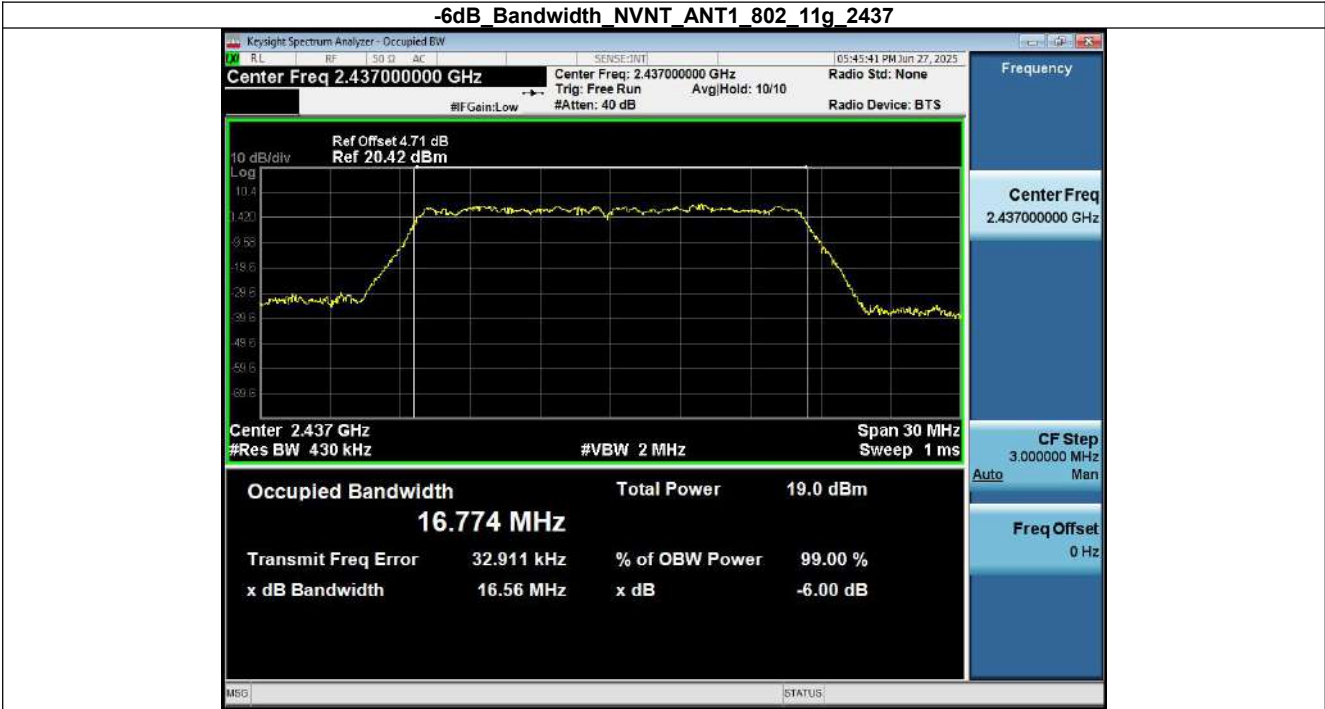
-6dB_Bandwidth_NVNT_ANT1_802_11b_2462



-6dB_Bandwidth_NVNT_ANT1_802_11g_2412



-6dB_Bandwidth_NVNT_ANT1_802_11g_2437



-6dB_Bandwidth_NVNT_ANT1_802_11g_2462



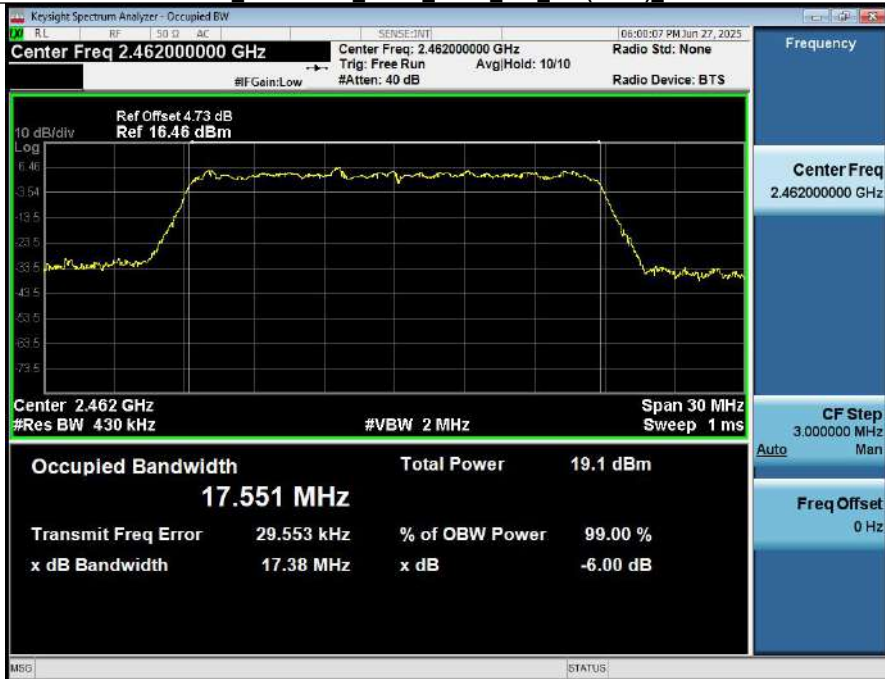
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2412



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2437

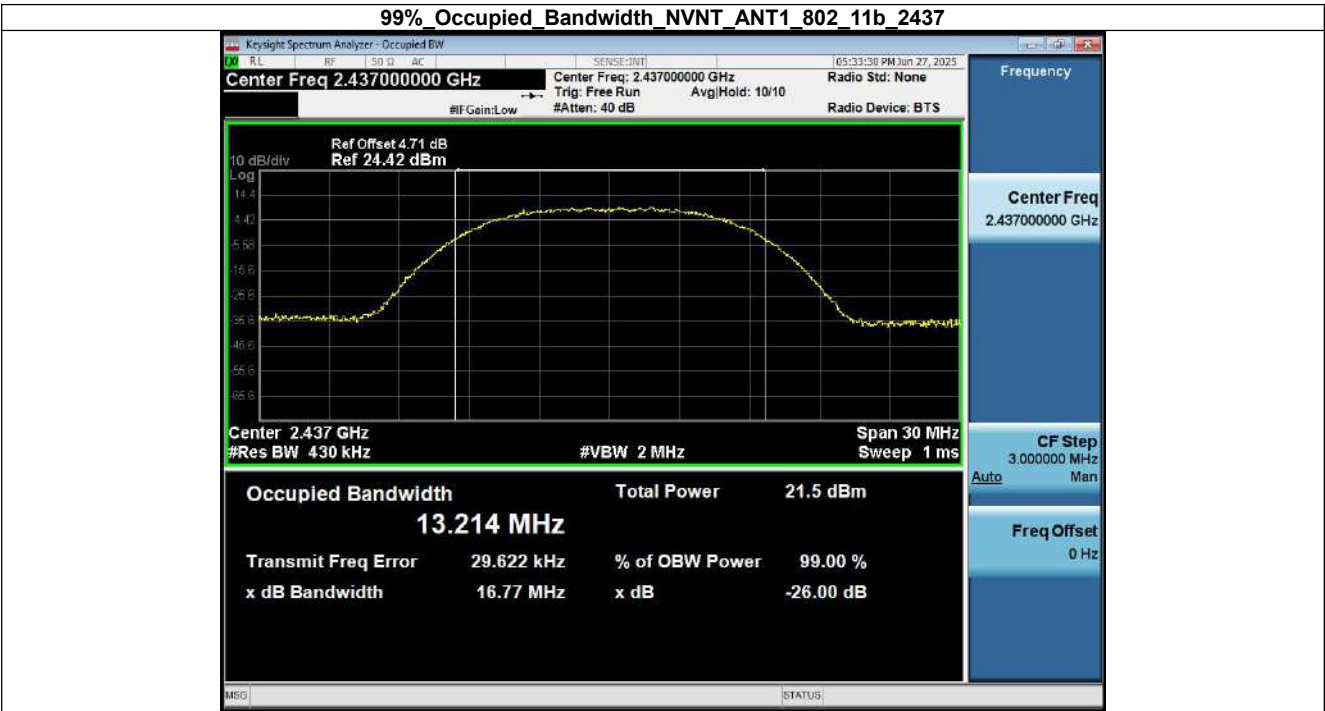
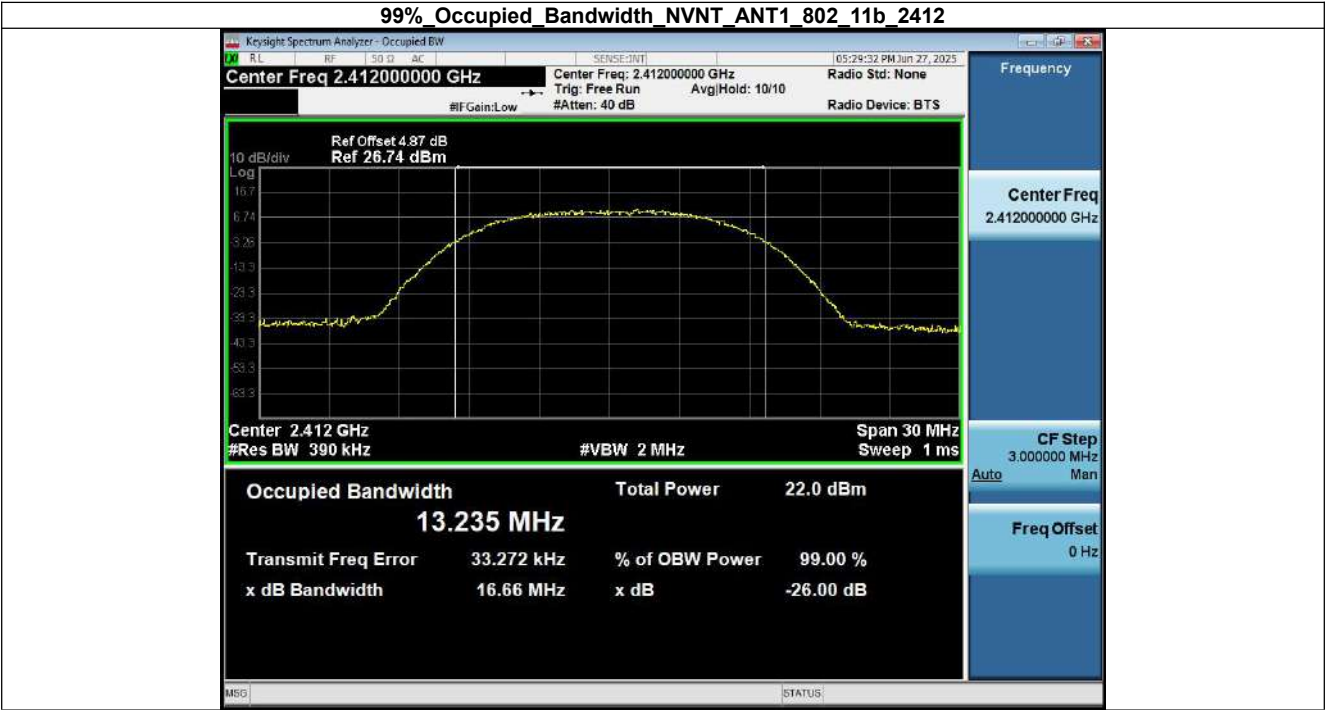


-6dB Bandwidth NVNT_ANT1_802_11n(HT20)_2462



2. 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99% BW (MHz)
NVNT	ANT1	802.11b	2412.00	13.235
NVNT	ANT1	802.11b	2437.00	13.214
NVNT	ANT1	802.11b	2462.00	13.198
NVNT	ANT1	802.11g	2412.00	16.810
NVNT	ANT1	802.11g	2437.00	16.818
NVNT	ANT1	802.11g	2462.00	16.786
NVNT	ANT1	802.11n(HT20)	2412.00	17.556
NVNT	ANT1	802.11n(HT20)	2437.00	17.572
NVNT	ANT1	802.11n(HT20)	2462.00	17.571



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



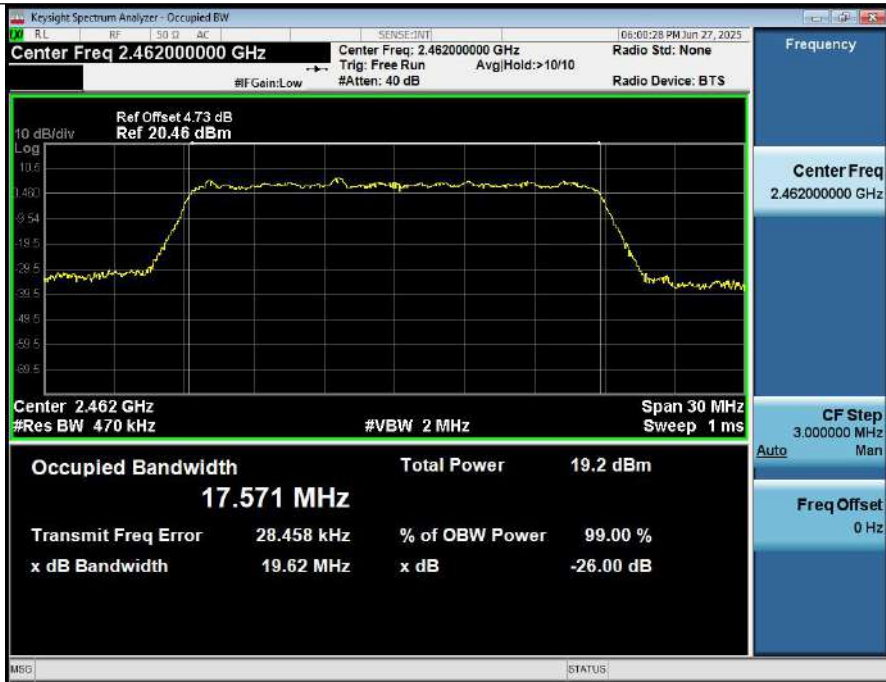
99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2412



99% Occupied Bandwidth_NVNT_ANT1_802_11n(HT20)_2437

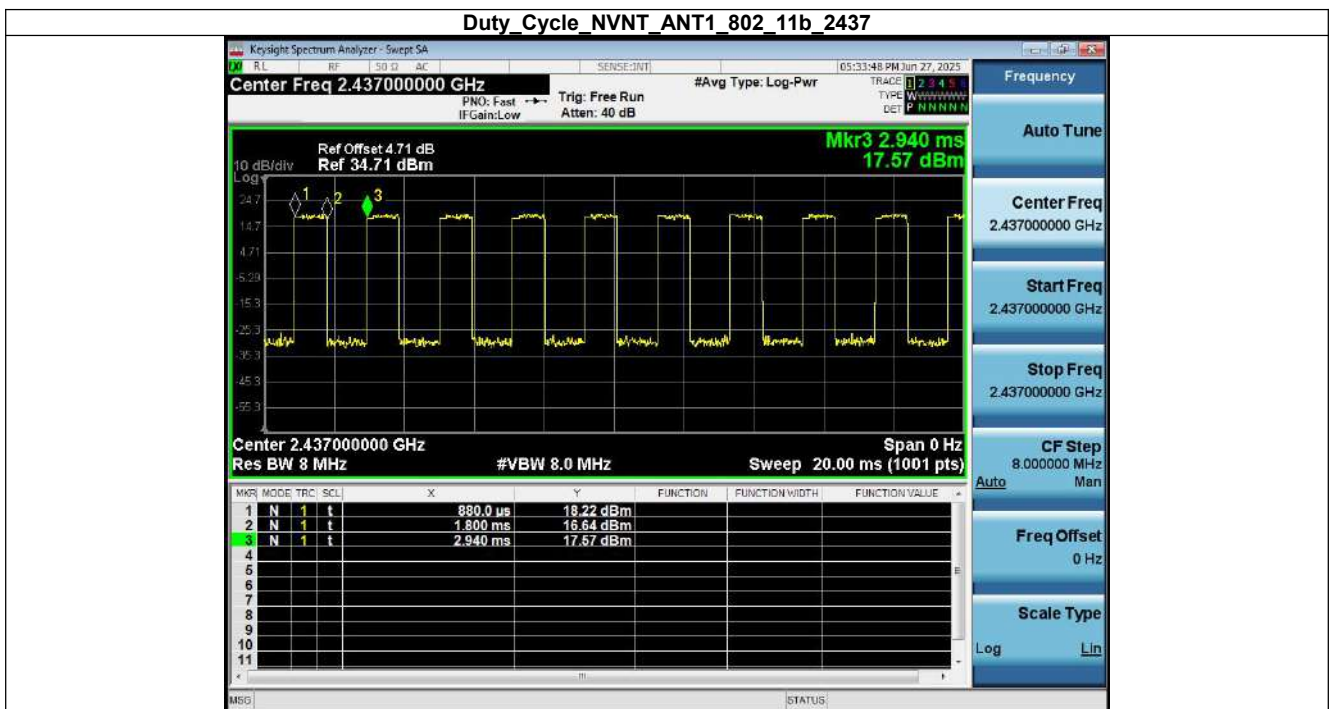
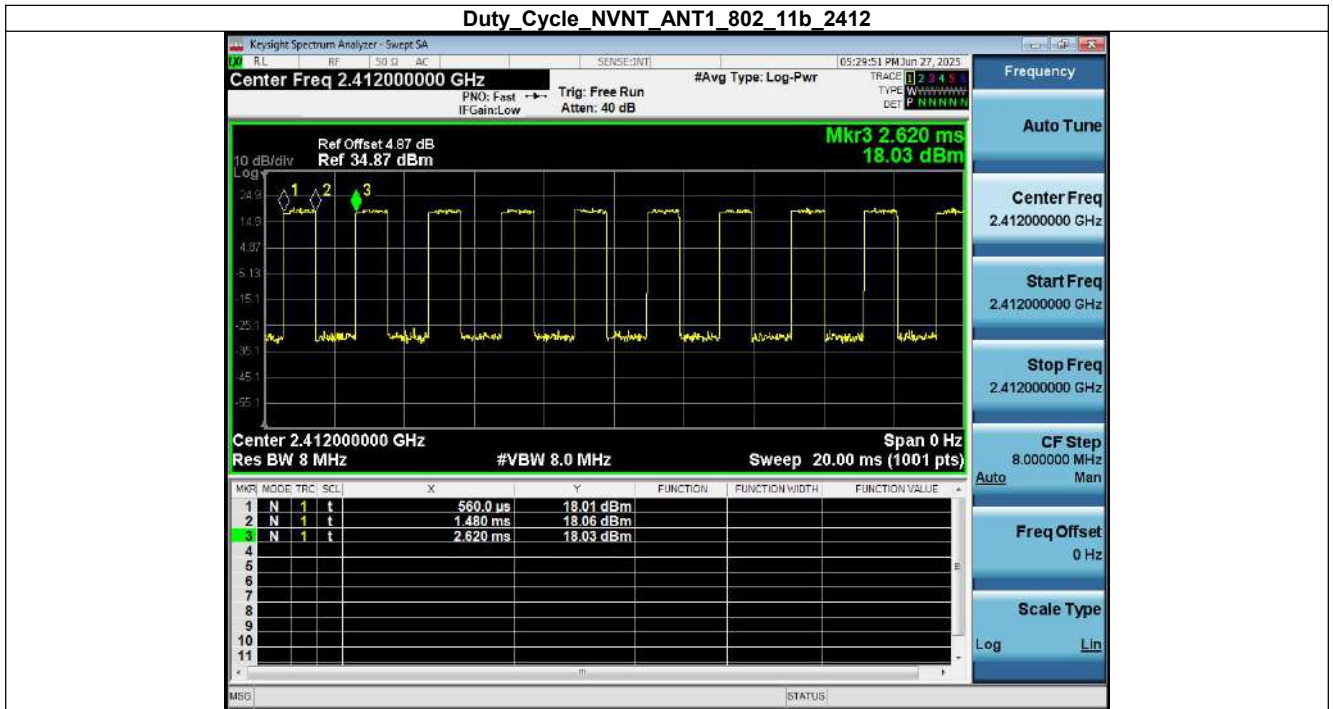


99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462

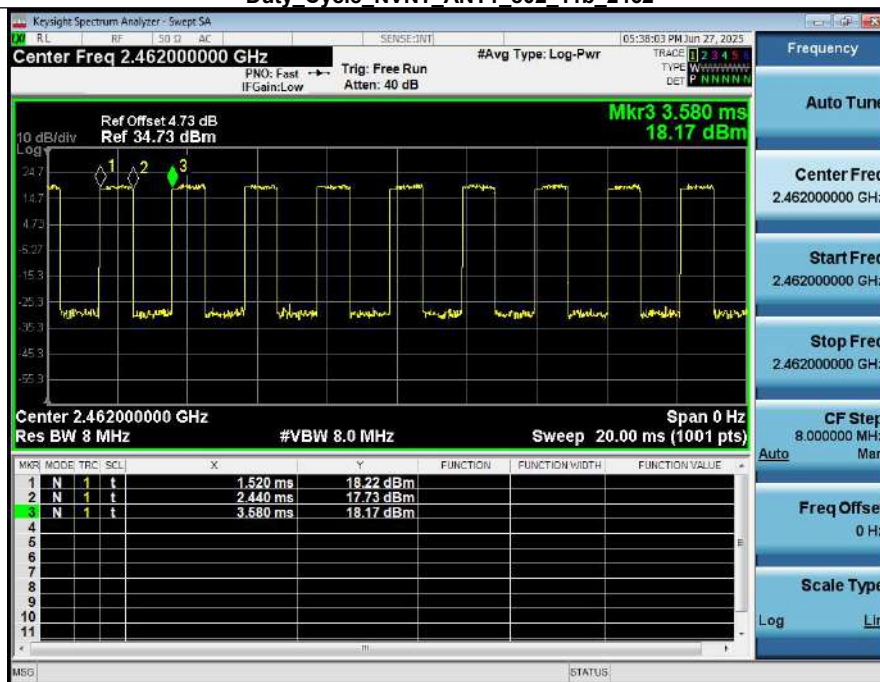


3. Duty Cycle

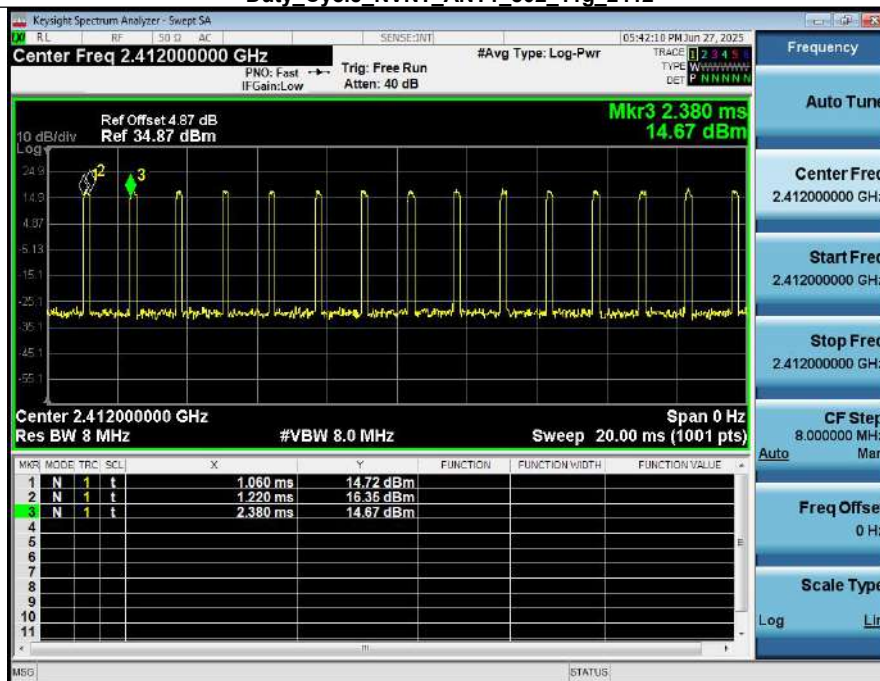
Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty factor(dB)
NVNT	ANT1	802.11b	2412.00	44.66	3.50
NVNT	ANT1	802.11b	2437.00	44.66	3.50
NVNT	ANT1	802.11b	2462.00	45.63	3.41
NVNT	ANT1	802.11g	2412.00	12.12	9.16
NVNT	ANT1	802.11g	2437.00	13.64	8.65
NVNT	ANT1	802.11g	2462.00	13.64	8.65
NVNT	ANT1	802.11n(HT20)	2412.00	10.77	9.68
NVNT	ANT1	802.11n(HT20)	2437.00	10.94	9.61
NVNT	ANT1	802.11n(HT20)	2462.00	10.77	9.68



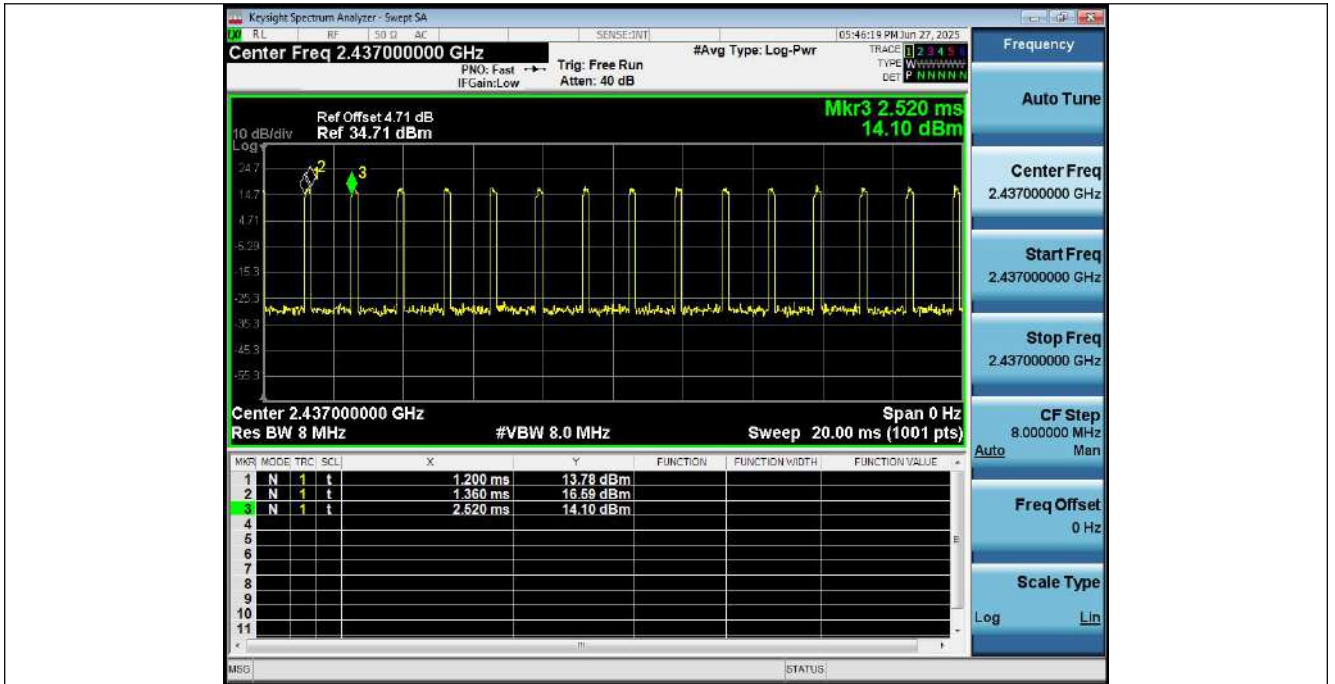
Duty Cycle NVNT_ANT1_802_11b_2462



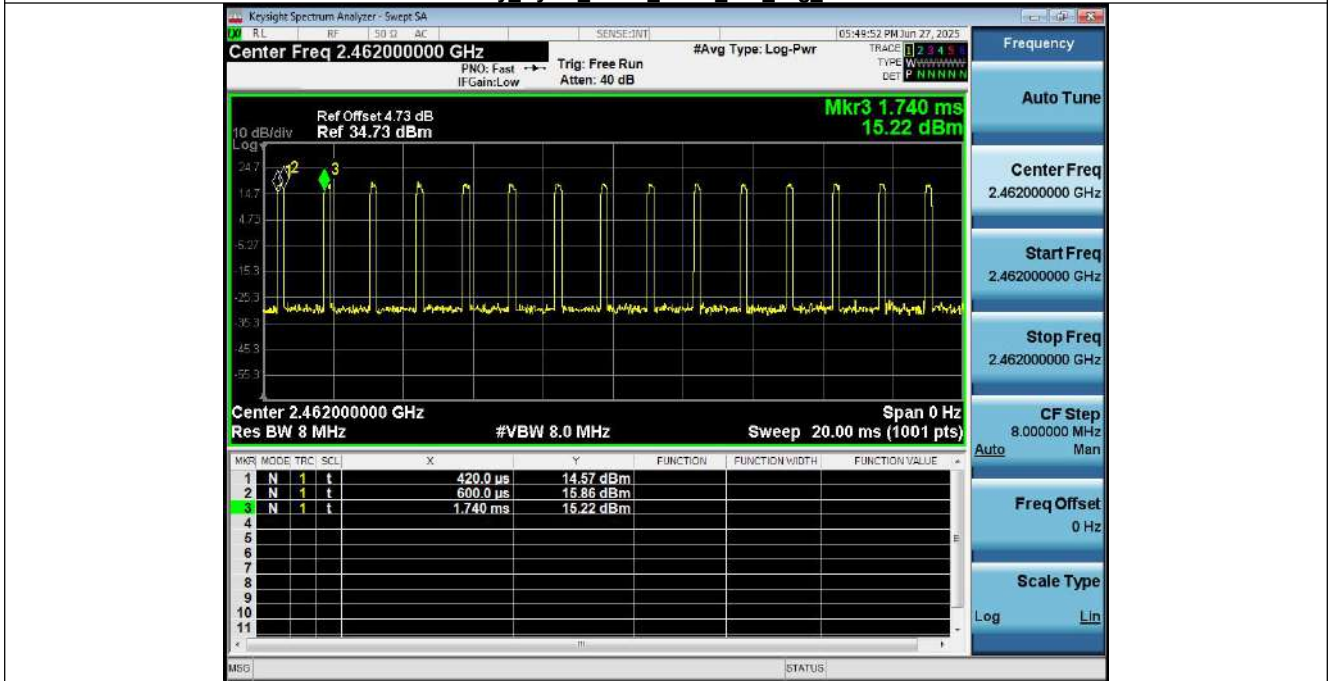
Duty Cycle NVNT_ANT1_802_11g_2412



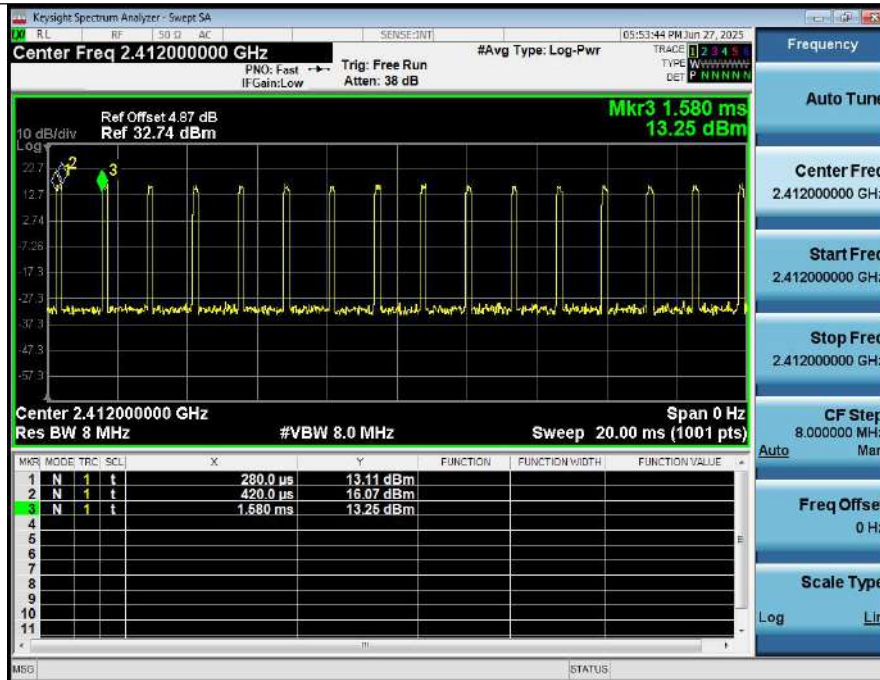
Duty Cycle NVNT_ANT1_802_11g_2437



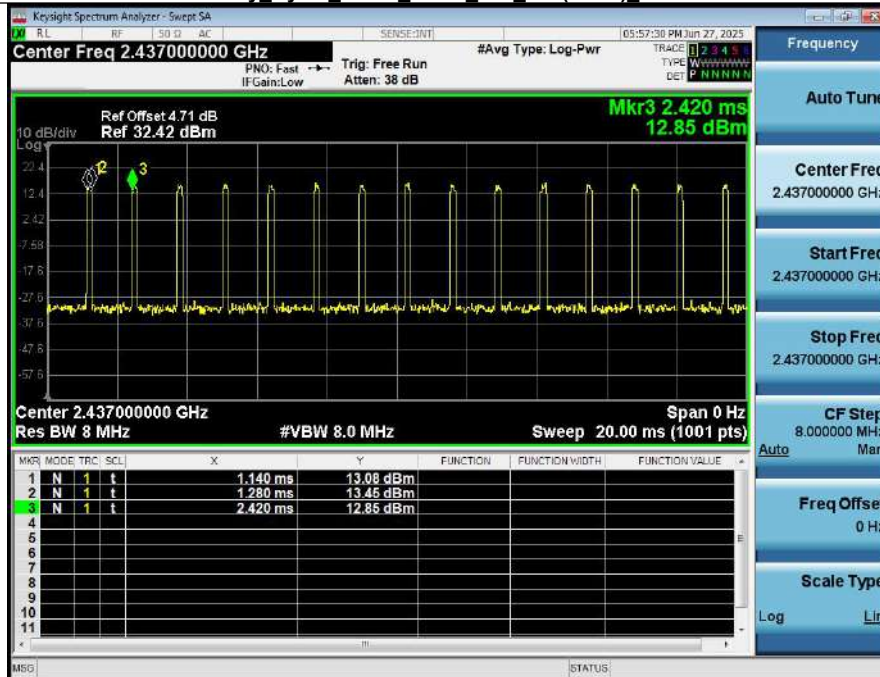
Duty_Cycle_NVNT_ANT1_802_11g_2462



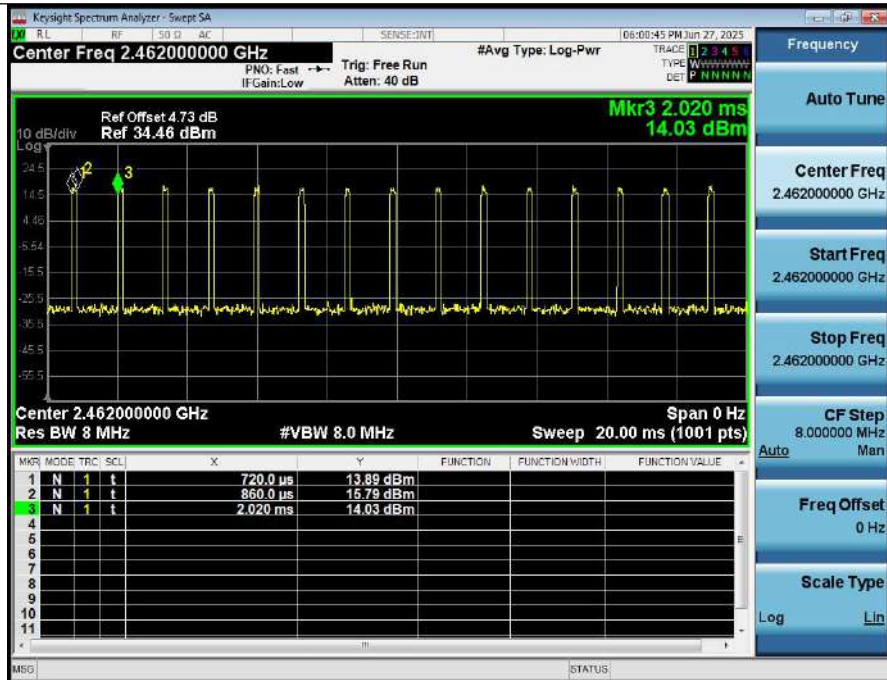
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2412



Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2437



Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2462

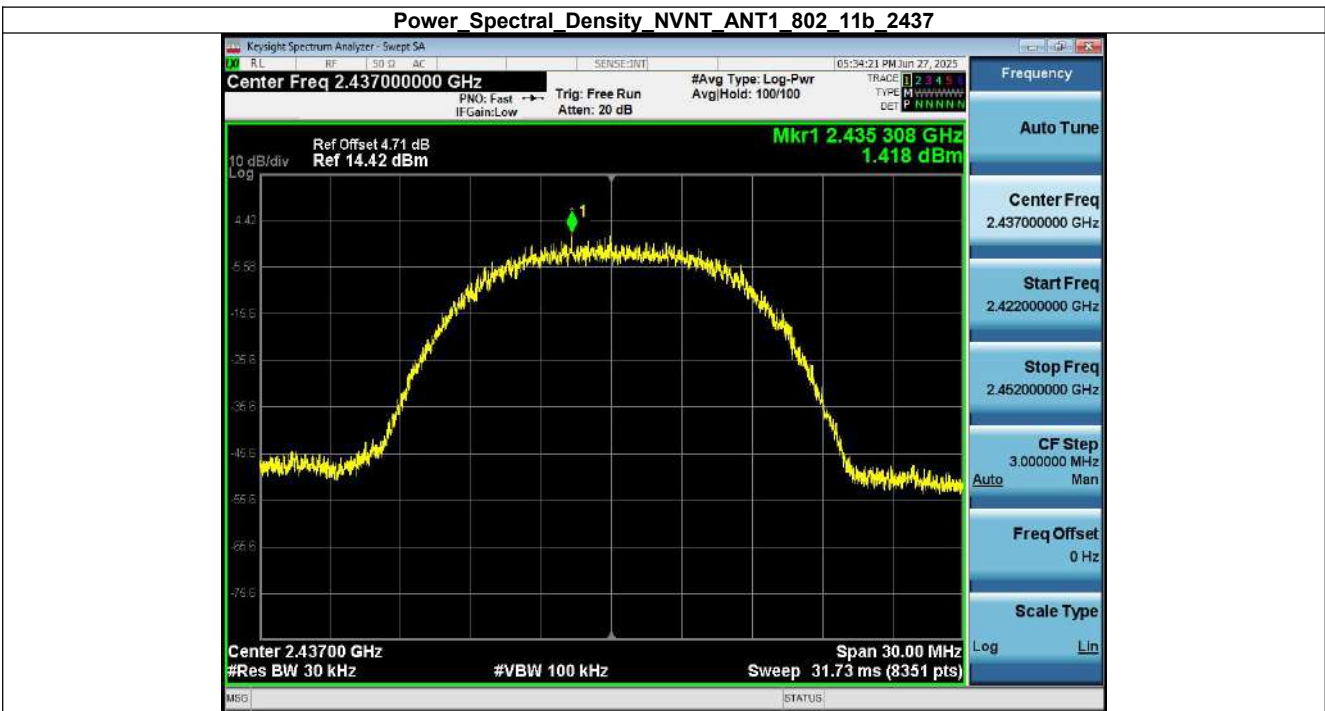
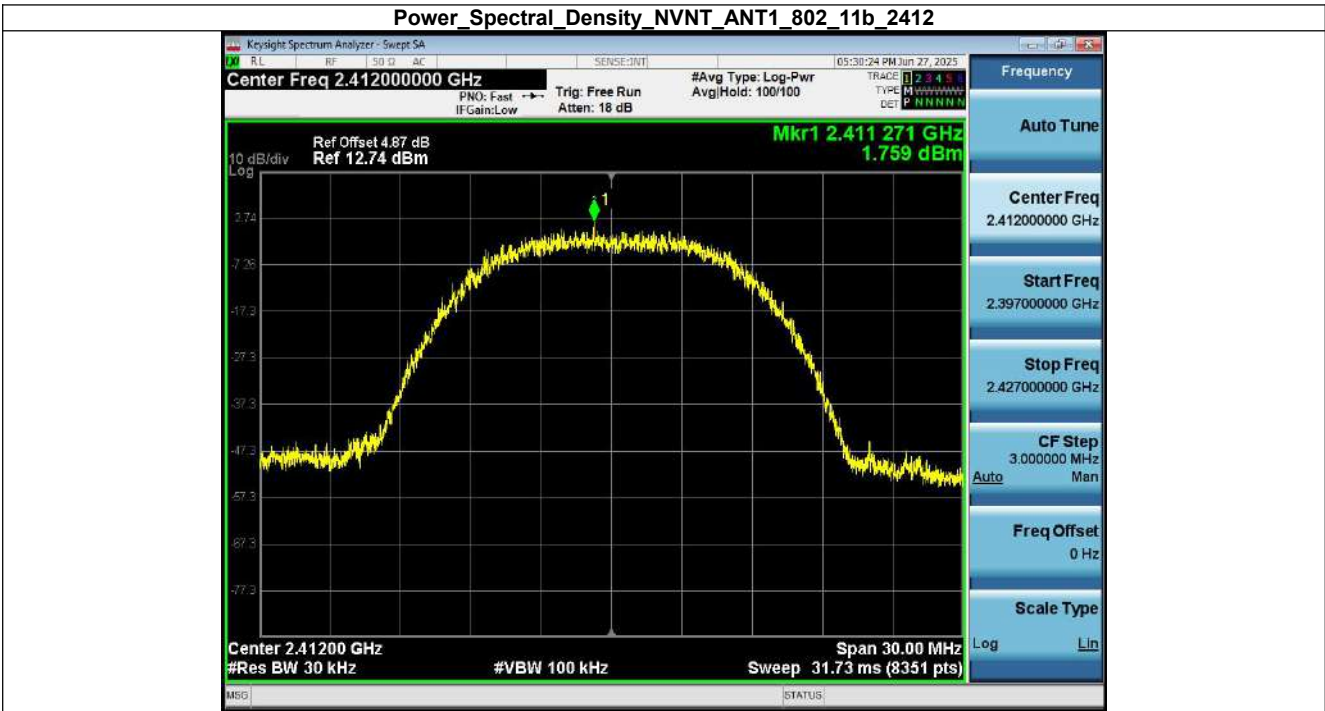


4. MAX. Output Power

Condition	Antenna	Modulation	Frequency (MHz)	Detector	Conducted Power(dBm)	Total Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	Peak	21.34	21.34	30	Pass
NVNT	ANT1	802.11b	2437.00	Peak	20.98	20.98	30	Pass
NVNT	ANT1	802.11b	2462.00	Peak	21.47	21.47	30	Pass
NVNT	ANT1	802.11g	2412.00	Peak	19.08	19.08	30	Pass
NVNT	ANT1	802.11g	2437.00	Peak	18.85	18.85	30	Pass
NVNT	ANT1	802.11g	2462.00	Peak	20.12	20.12	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	Peak	18.02	18.02	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	Peak	17.69	17.69	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	Peak	18.92	18.92	30	Pass

5. Power Spectral Density

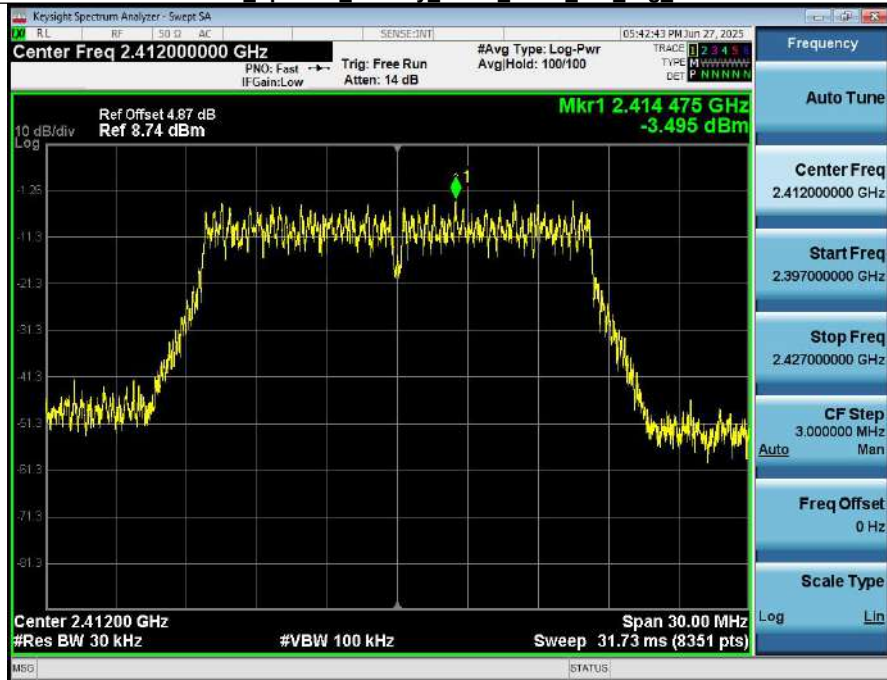
Condition	Antenna	Modulation	Frequency (MHz)	SA_PSD(dBm/30kHz)	RB factor(dB)	PSD(dBm/3kHz)	limit(dBm/3kHz)	Result
NVNT	ANT1	802.11b	2412.00	1.76	-10.00	-8.24	8	Pass
NVNT	ANT1	802.11b	2437.00	1.42	-10.00	-8.58	8	Pass
NVNT	ANT1	802.11b	2462.00	1.68	-10.00	-8.32	8	Pass
NVNT	ANT1	802.11g	2412.00	-3.50	-10.00	-13.50	8	Pass
NVNT	ANT1	802.11g	2437.00	-3.73	-10.00	-13.72	8	Pass
NVNT	ANT1	802.11g	2462.00	-2.58	-10.00	-12.58	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-4.81	-10.00	-14.81	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-5.27	-10.00	-15.27	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-3.83	-10.00	-13.83	8	Pass



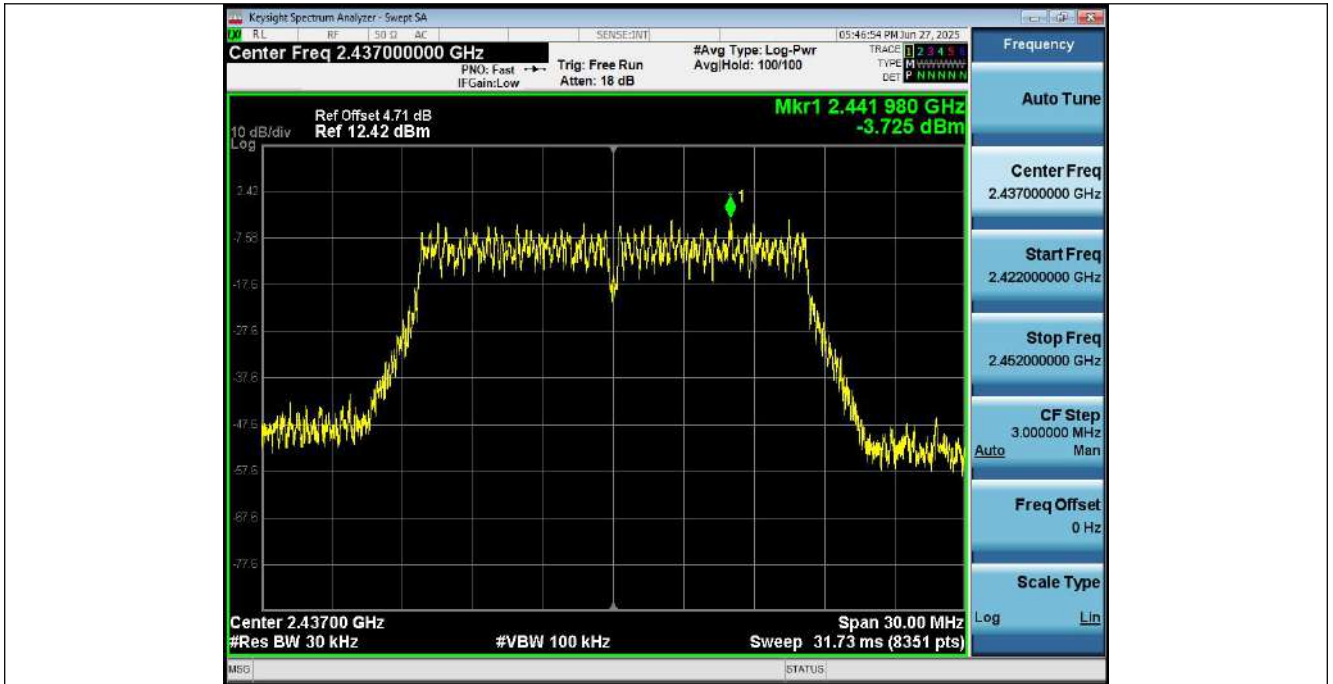
Power Spectral Density NVNT_ANT1_802_11b_2462



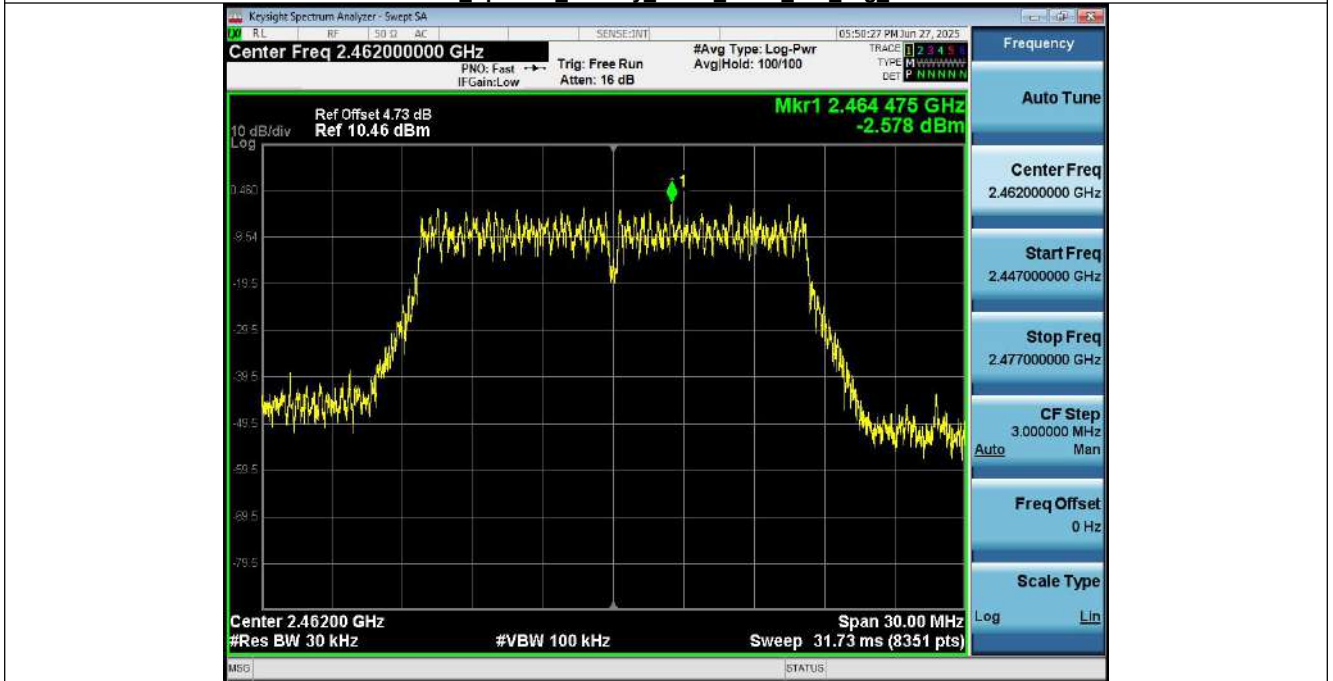
Power Spectral Density NVNT_ANT1_802_11g_2412



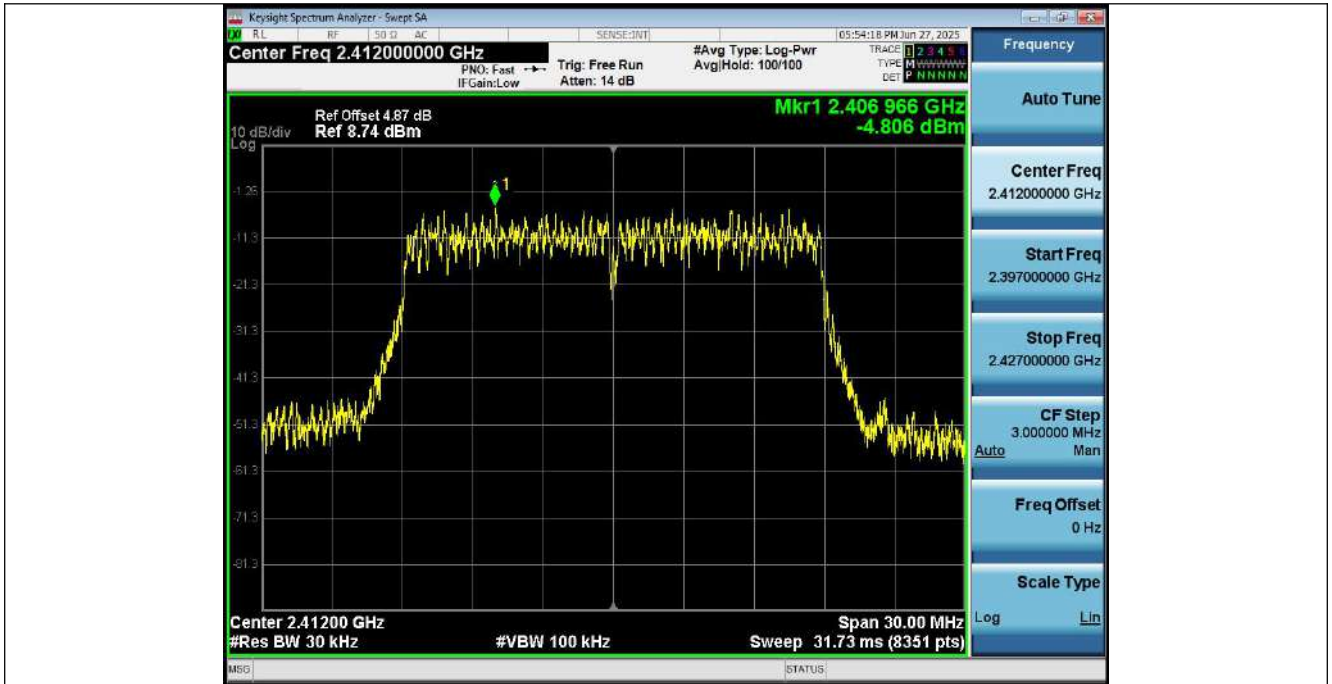
Power Spectral Density NVNT_ANT1_802_11g_2437



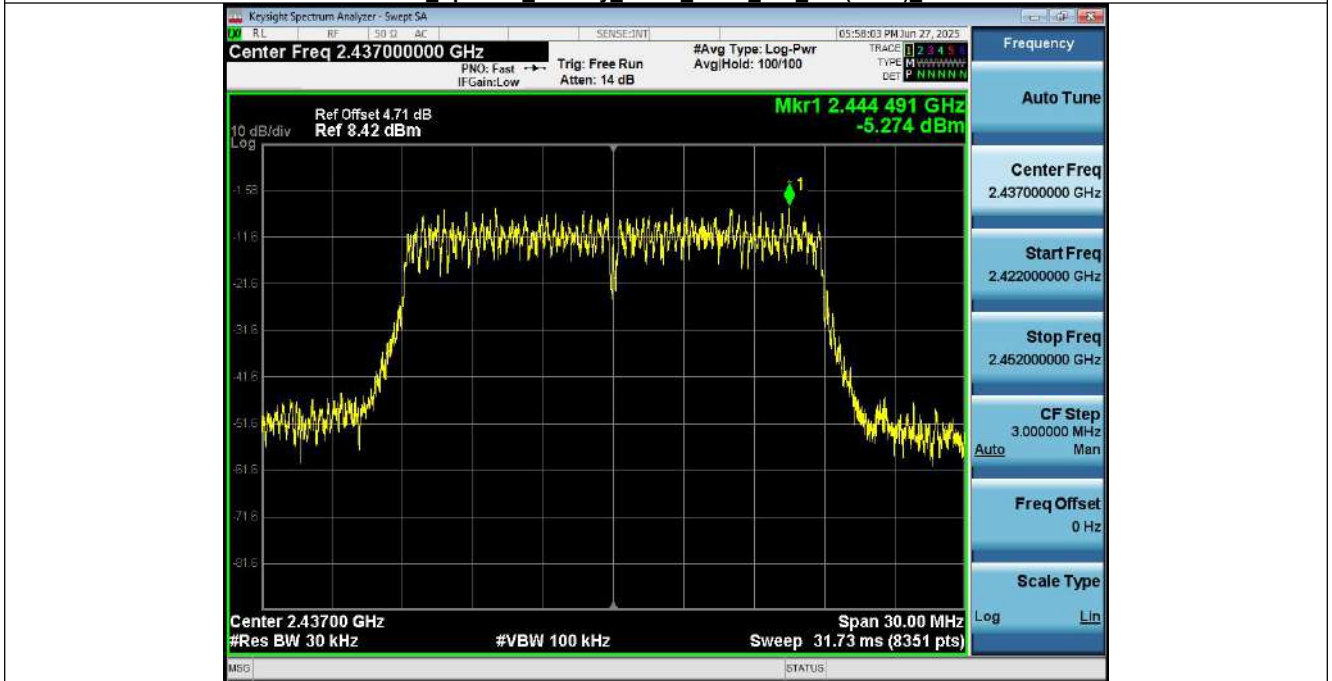
Power_Spectral_Density_NVNT_ANT1_802_11g_2462



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



6. 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	2397.920	5.775	-41.459	-14.225	Pass
NVNT	ANT1	802.11b	2462.00	2483.536	6.170	-44.500	-13.830	Pass
NVNT	ANT1	802.11g	2412.00	2398.256	1.322	-38.912	-18.678	Pass
NVNT	ANT1	802.11g	2462.00	2483.776	2.326	-48.619	-17.674	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2398.256	0.419	-40.830	-19.581	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2483.776	1.295	-50.230	-18.705	Pass

1 Reference Level NVNT ANT1 802_11b 2412



2 Bandedge NVNT ANT1 802_11b 2412



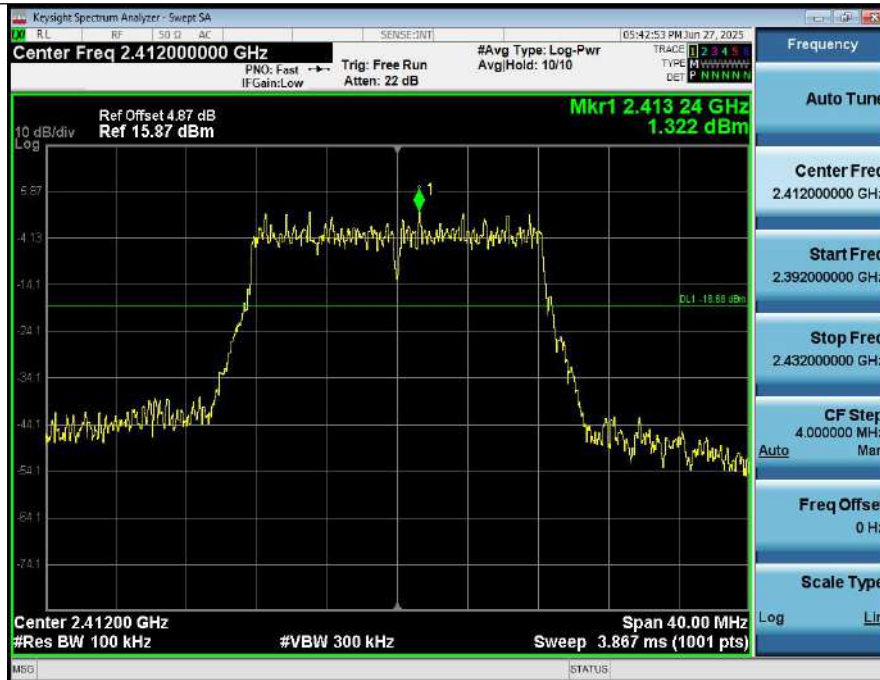
1 Reference Level NVNT ANT1 802_11b 2462



2_Bandedge_NVNT_ANT1_802_11b_2462



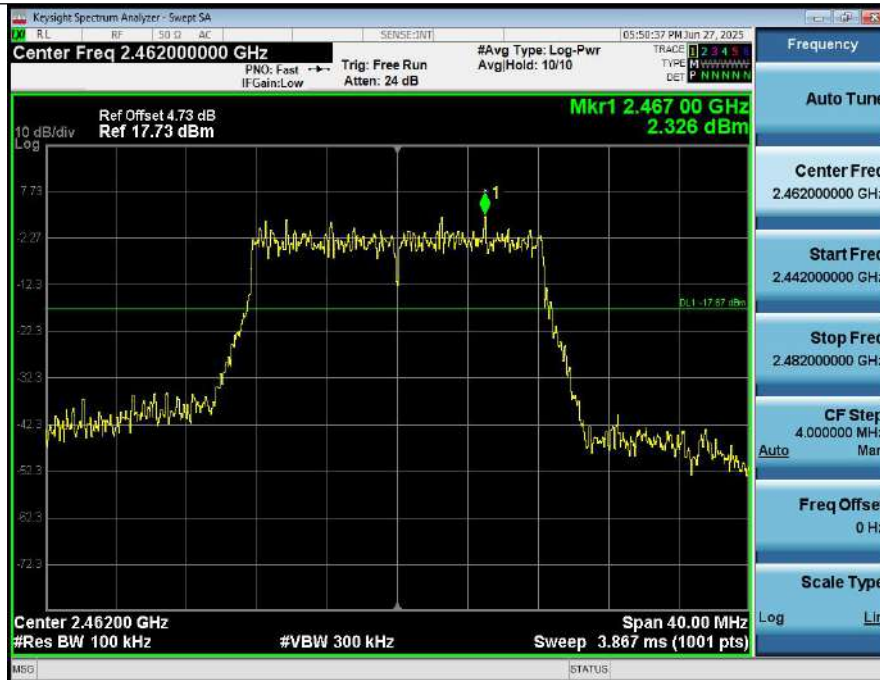
1_Reference_Level_NVNT_ANT1_802_11g_2412



2_Bandedge_NVNT_ANT1_802_11g_2412



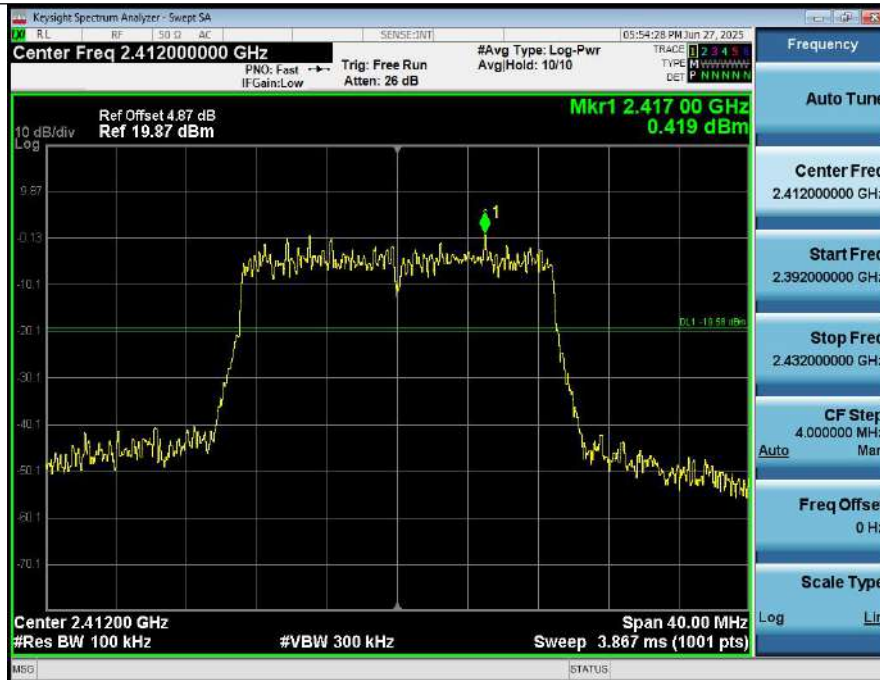
1_Reference_Level_NVNT_ANT1_802_11g_2462



2_Bandedge_NVNT_ANT1_802_11g_2462



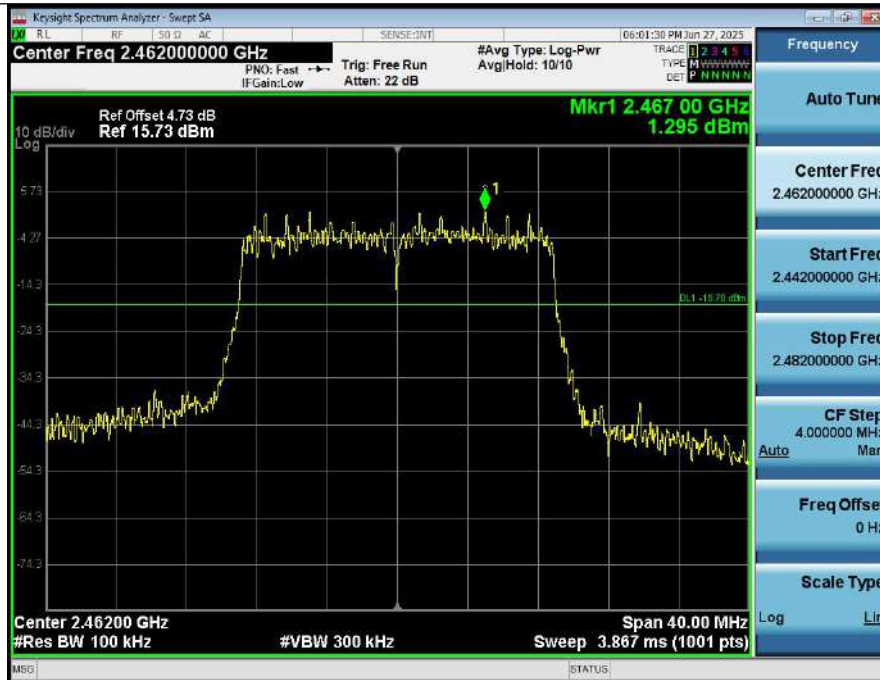
1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2412



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



7. Spurious Emission

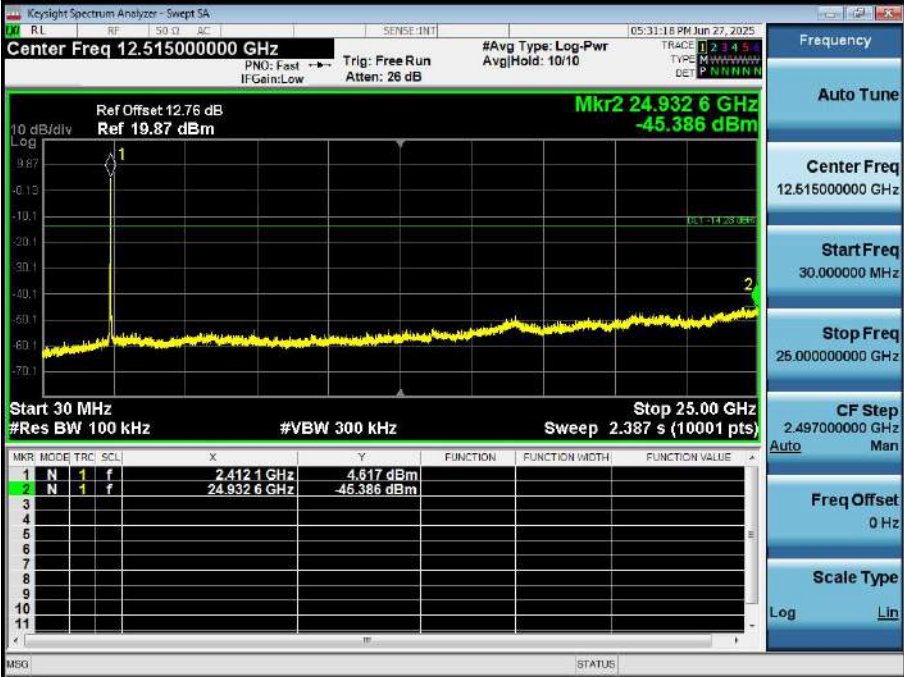
Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_freq(MHz)	Ref_level(dBm)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	24932.581	5.775	-45.386	-14.225	Pass
NVNT	ANT1	802.11b	2437.00	24992.509	5.094	-38.820	-14.906	Pass
NVNT	ANT1	802.11b	2462.00	24880.144	6.170	-39.301	-13.830	Pass
NVNT	ANT1	802.11g	2412.00	24962.545	1.322	-48.911	-18.678	Pass
NVNT	ANT1	802.11g	2437.00	24950.060	0.967	-49.272	-19.033	Pass
NVNT	ANT1	802.11g	2462.00	24935.078	2.326	-46.912	-17.674	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	24995.006	0.419	-43.889	-19.581	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	24950.060	0.171	-45.248	-19.829	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	24977.527	1.295	-48.469	-18.705	Pass

Note:The test diagram has integrated cable loss to Offset Settings. The cable loss is compensated in the test data.

1_Reference_Level_NVNT_ANT1_802_11b_2412



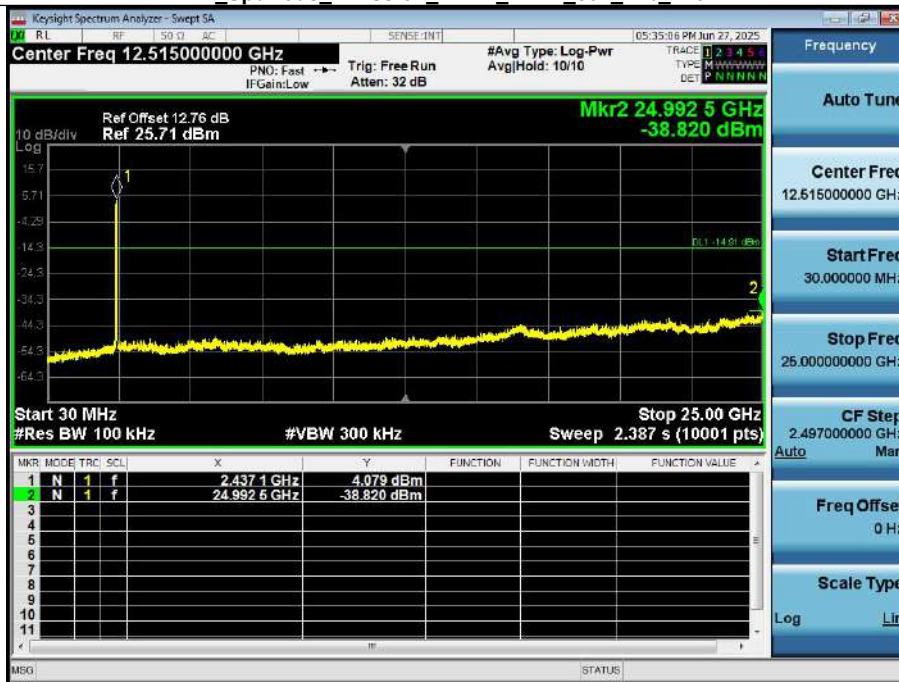
2_Spurious_Emission_NVNT_ANT1_802_11b_2412



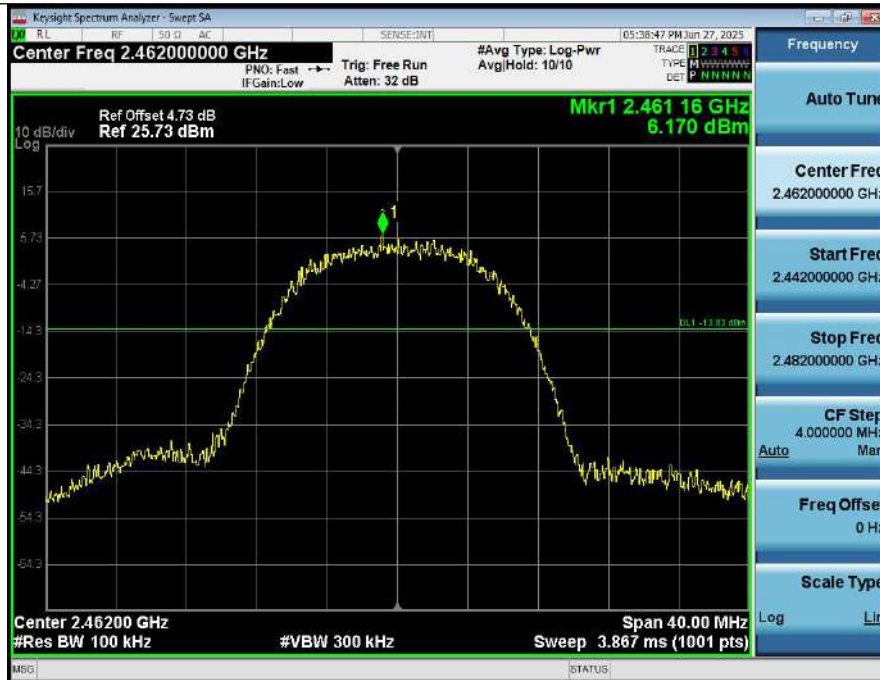
1 Reference Level NVNT_ANT1_802_11b_2437



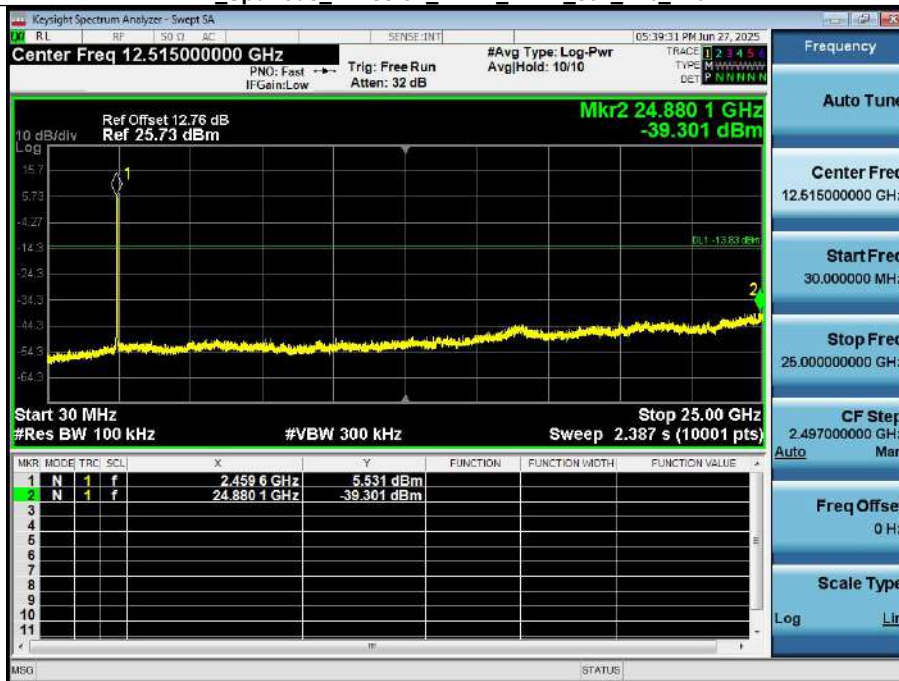
2 Spurious Emission NVNT_ANT1_802_11b_2437



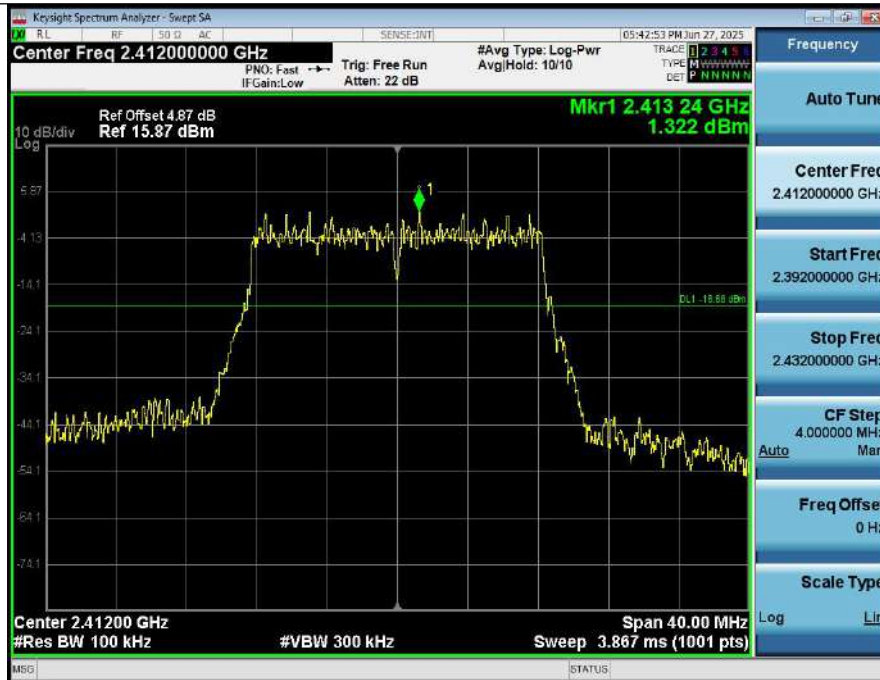
1 Reference Level NVNT_ANT1_802_11b_2462



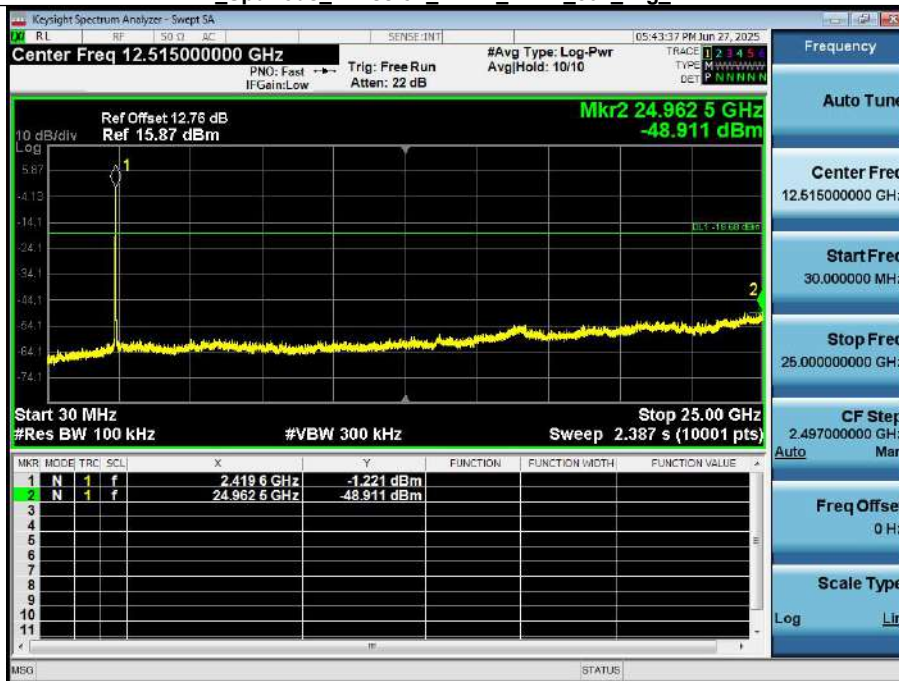
2_Spurious_Emission_NVNT_ANT1_802_11b_2462



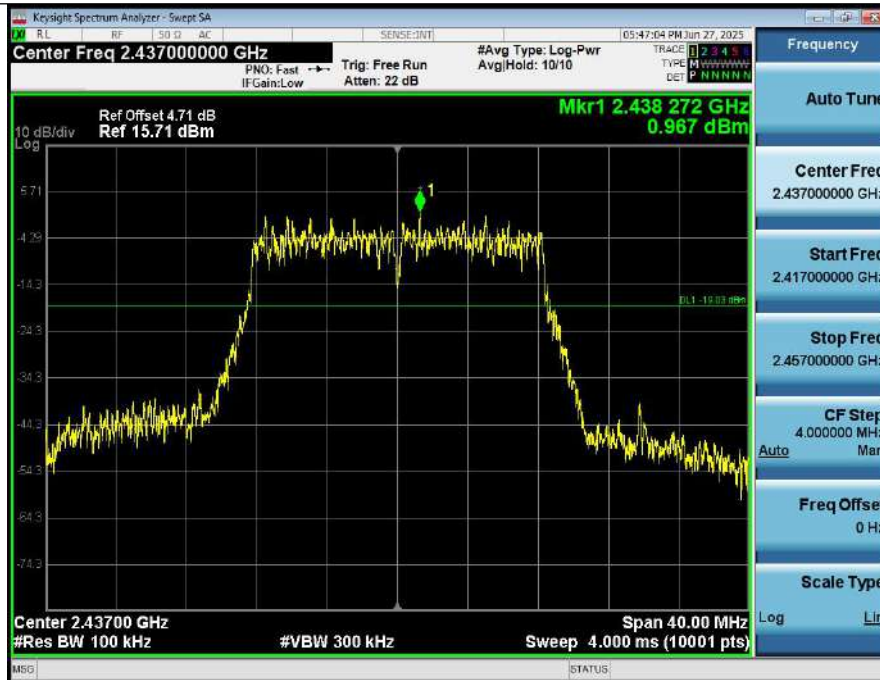
1_Reference_Level_NVNT_ANT1_802_11g_2412



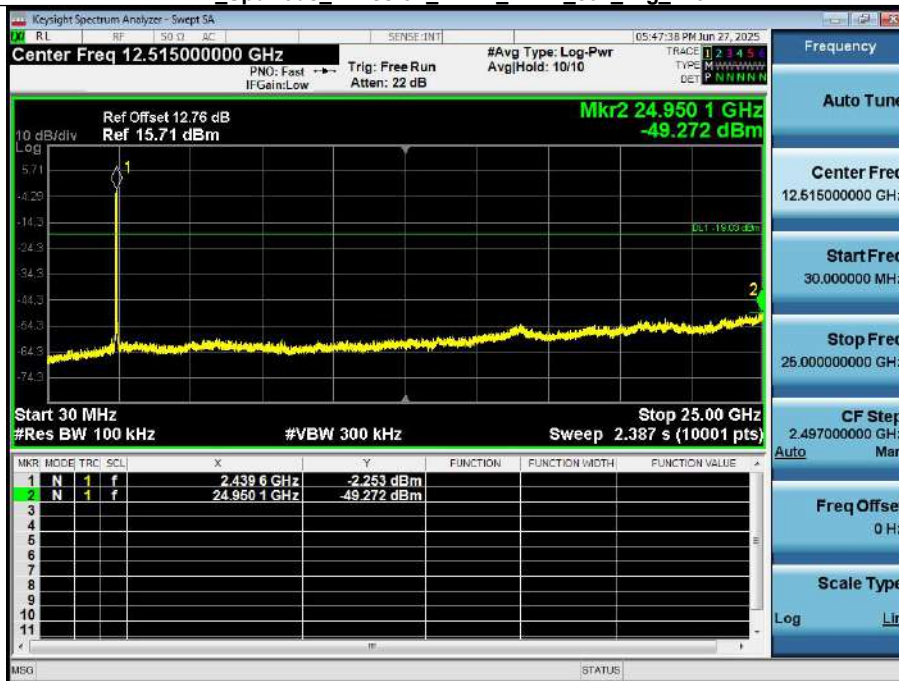
2_Spurious_Emission_NVNT_ANT1_802_11g_2412



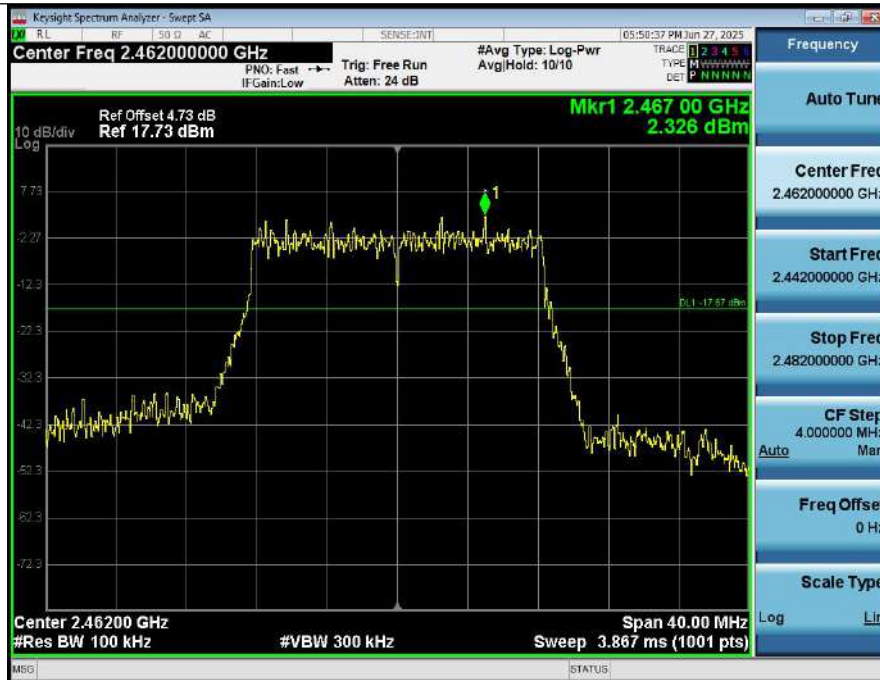
1_Reference_Level_NVNT_ANT1_802_11g_2437



2_Spurious_Emission_NVNT_ANT1_802_11g_2437



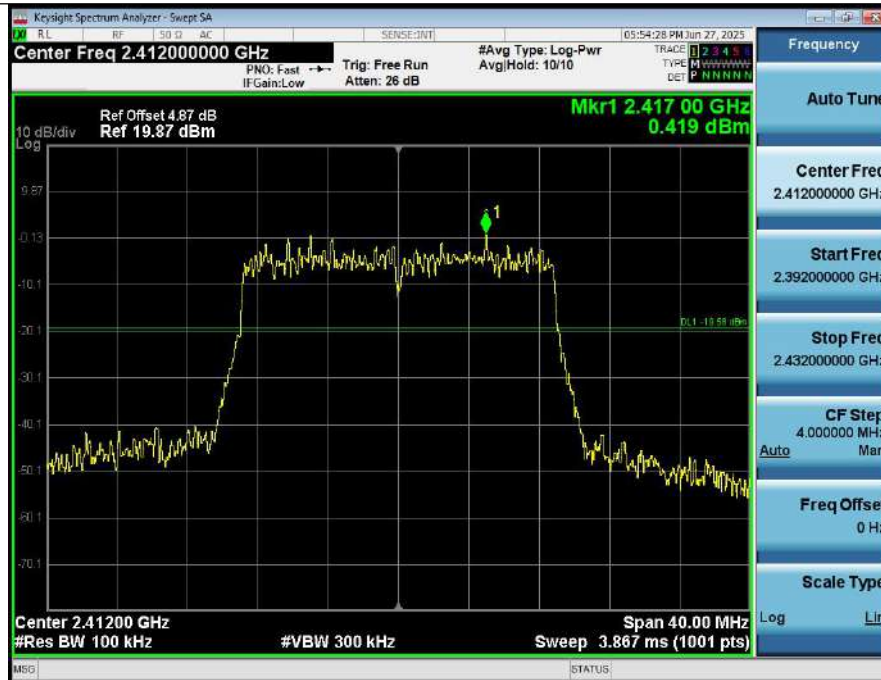
1_Reference_Level_NVNT_ANT1_802_11g_2462



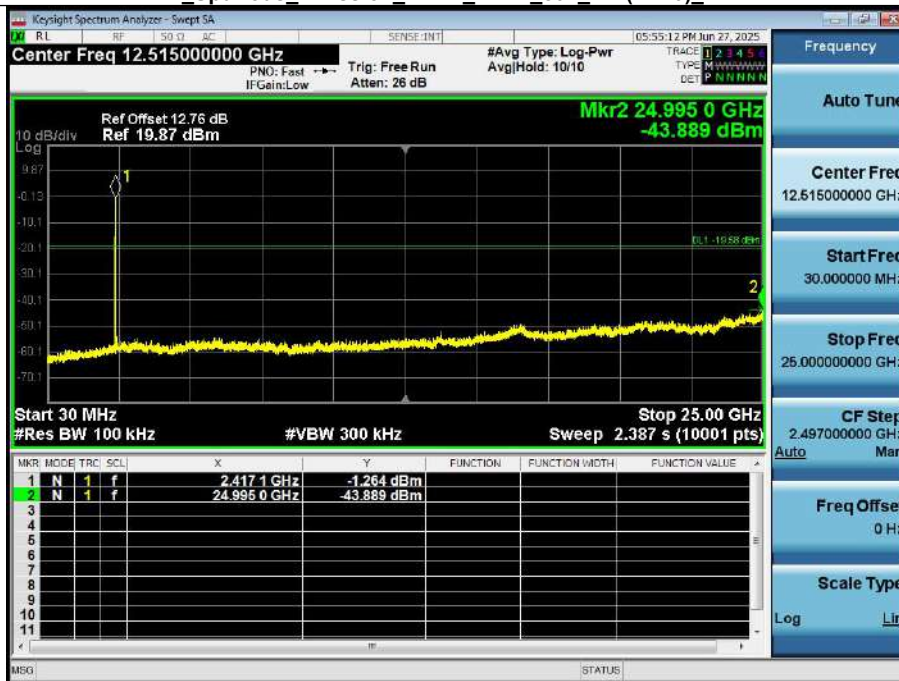
2_Spurious_Emission_NVNT_ANT1_802_11g_2462



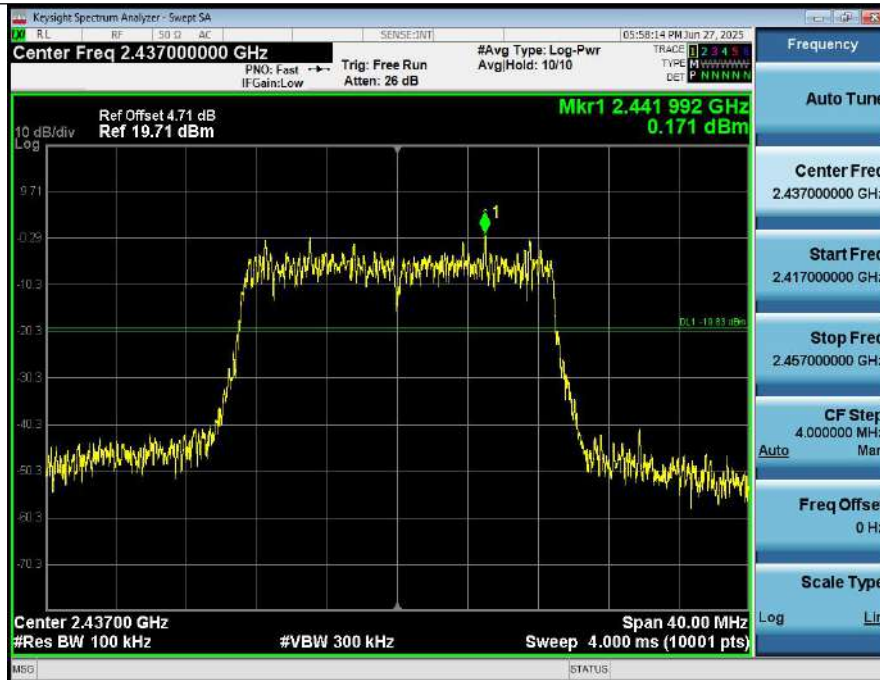
1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2412



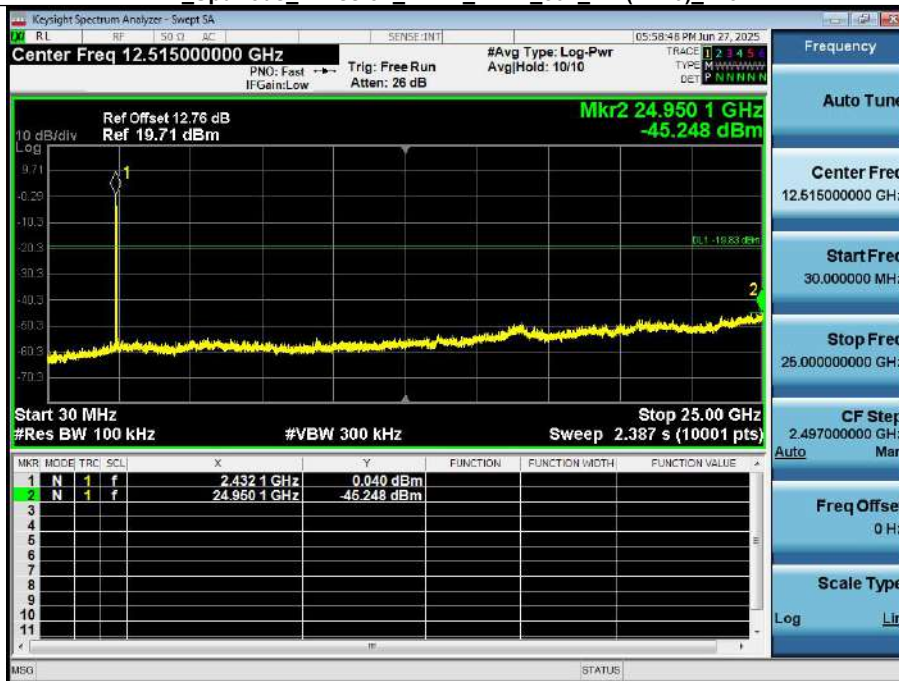
2 Spurious Emission_NVNT_ANT1_802_11n(HT20)_2412



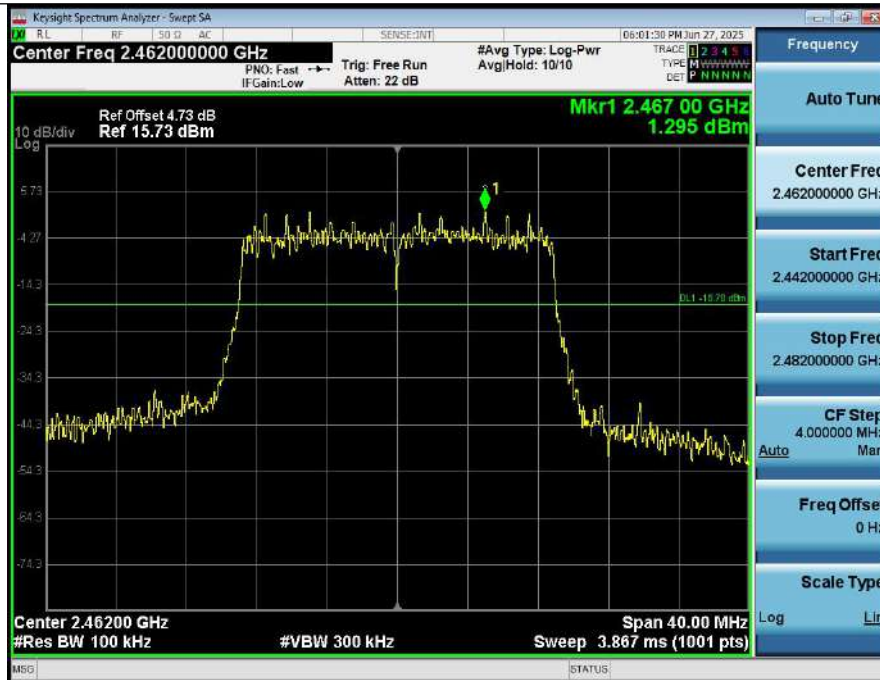
1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2437



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

