

Table of Contents

FCC ID&IC ID WIFI2.4(Part15.247) Test Data	2
1. -6dB Bandwidth	2
2. 99% Occupied Bandwidth	7
3. Duty Cycle	12
4. MAX. Output Power	17
5. Power Spectral Density	18
6. Bandedge	23
7. Spurious Emission	29

Report No.: NCT250121248XE1-2

FCC ID:2BC96NI-8451

IC ID:31482-NI8451

FCC ID&IC ID WIFI2.4(Part15.247) Test Data

1. -6dB Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	9.19	500	Pass
NVNT	ANT1	802.11b	2437.00	9.18	500	Pass
NVNT	ANT1	802.11b	2462.00	9.22	500	Pass
NVNT	ANT1	802.11g	2412.00	16.35	500	Pass
NVNT	ANT1	802.11g	2437.00	16.46	500	Pass
NVNT	ANT1	802.11g	2462.00	16.42	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	17.20	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	17.43	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	17.29	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

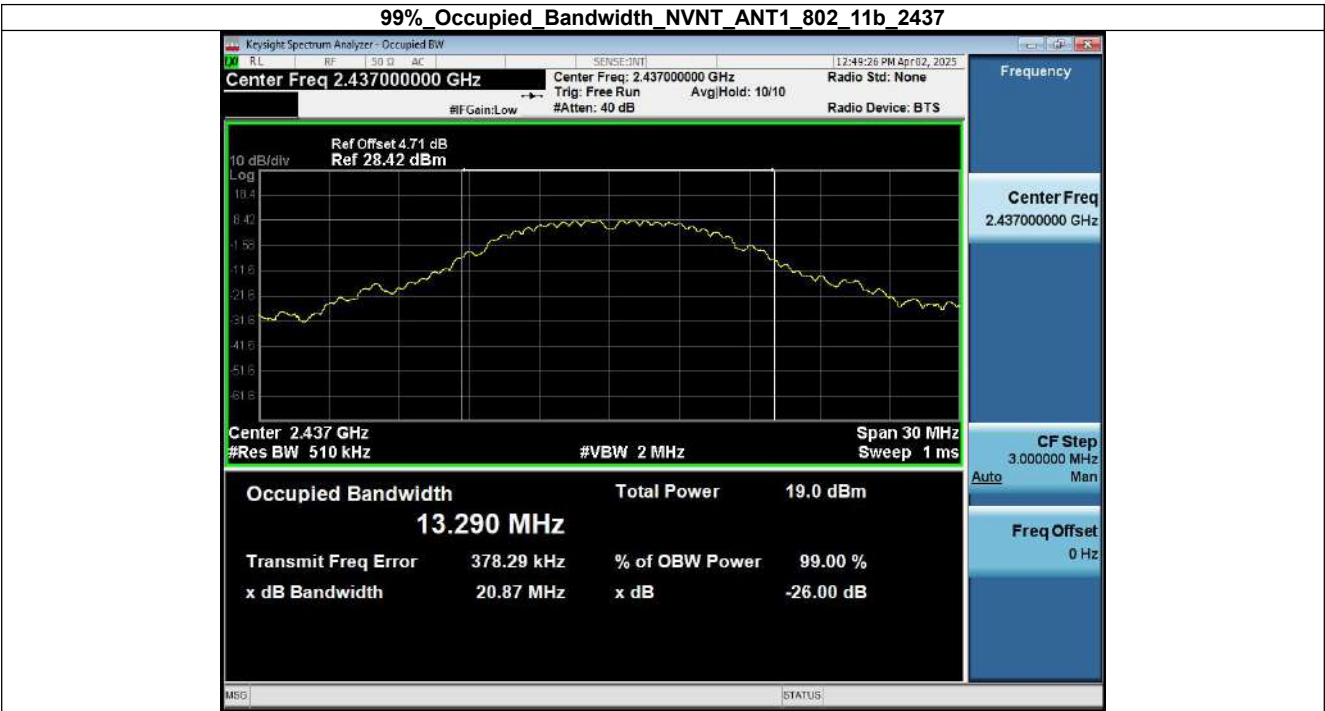
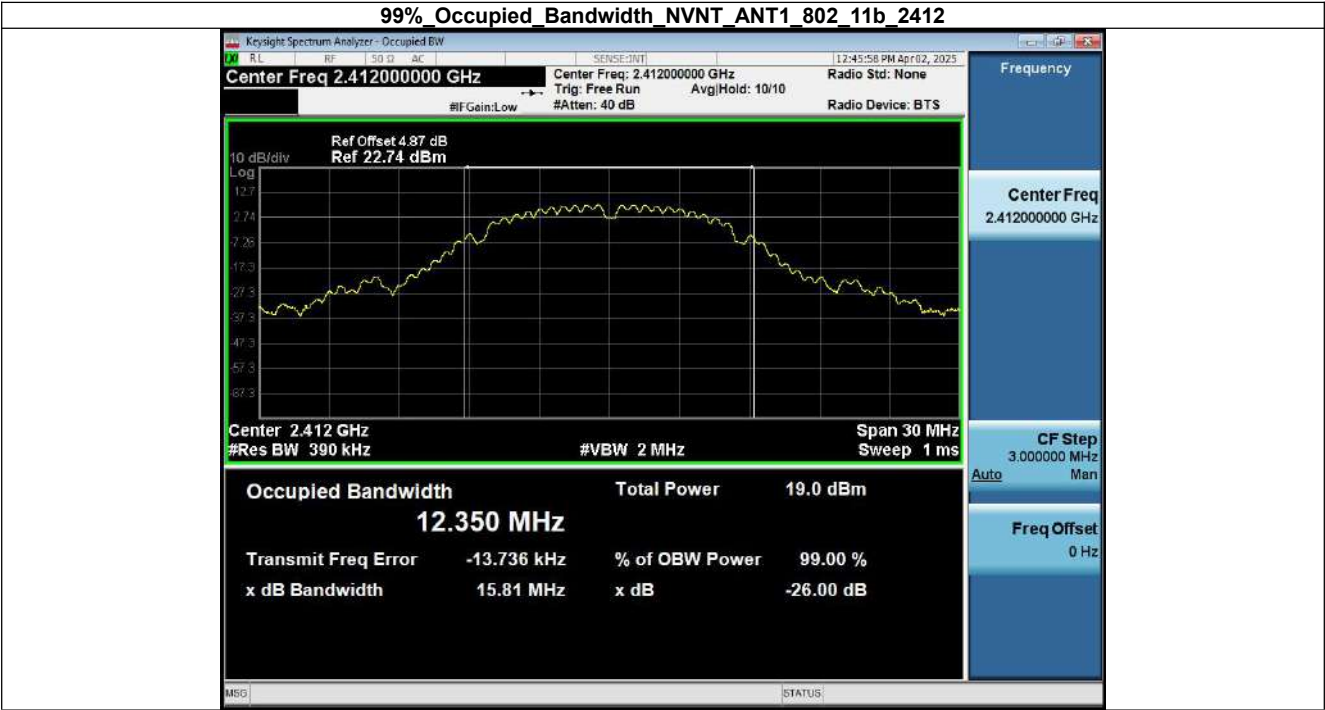


-6dB Bandwidth NVNT_ANT1_802_11n(HT20)_2462



2. 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99% BW(MHz)
NVNT	ANT1	802.11b	2412.00	12.350
NVNT	ANT1	802.11b	2437.00	13.290
NVNT	ANT1	802.11b	2462.00	12.556
NVNT	ANT1	802.11g	2412.00	17.094
NVNT	ANT1	802.11g	2437.00	17.366
NVNT	ANT1	802.11g	2462.00	17.129
NVNT	ANT1	802.11n(HT20)	2412.00	17.897
NVNT	ANT1	802.11n(HT20)	2437.00	17.840
NVNT	ANT1	802.11n(HT20)	2462.00	17.849



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

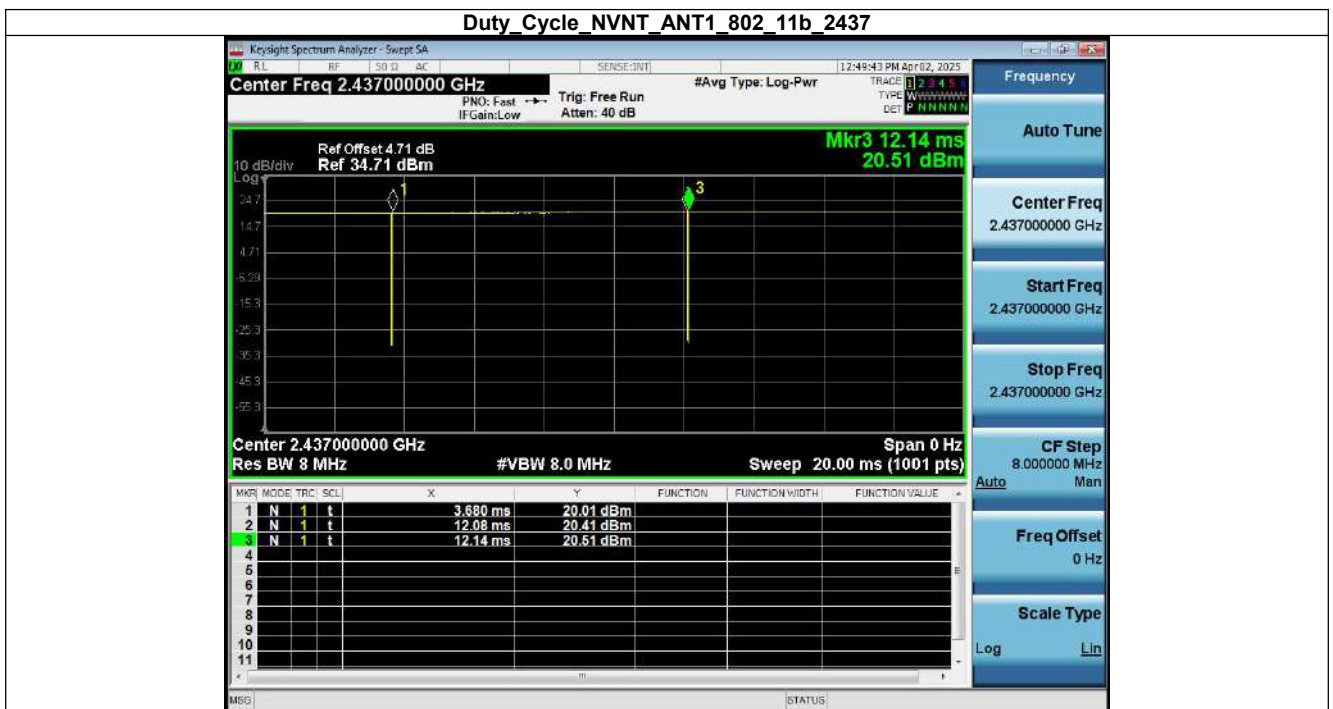
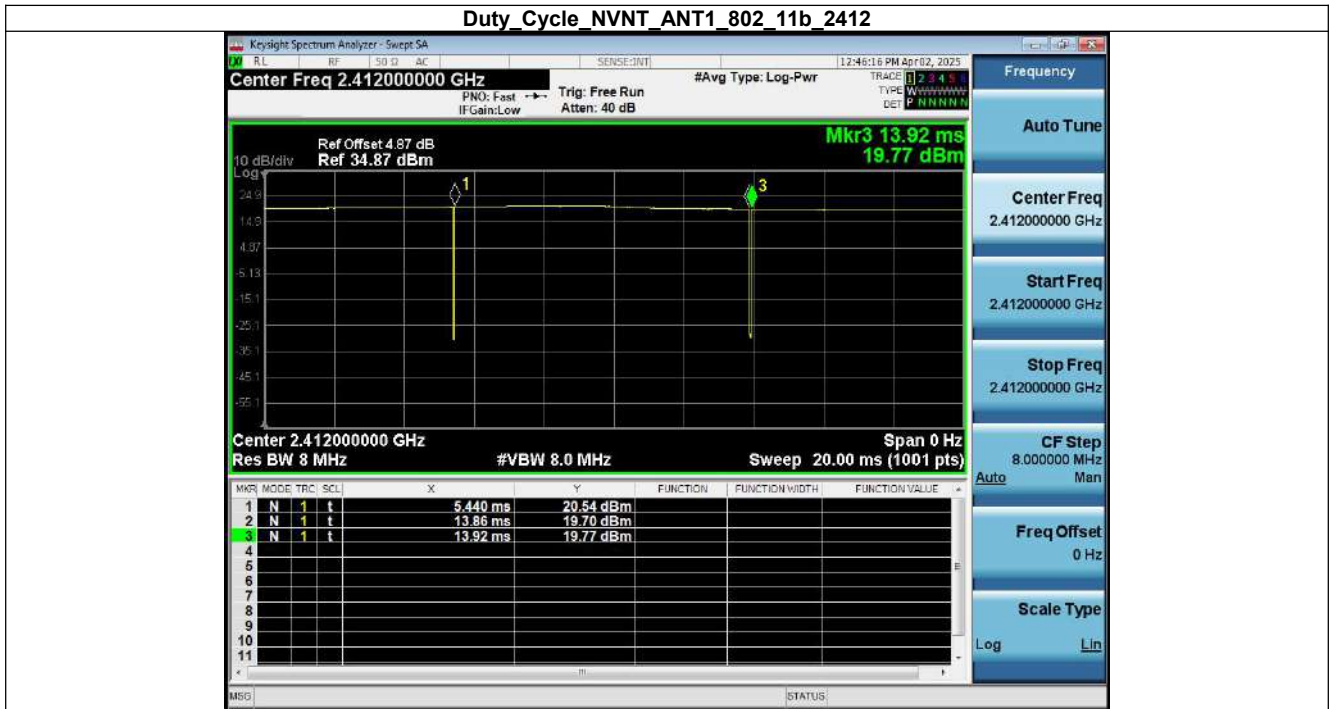


99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462

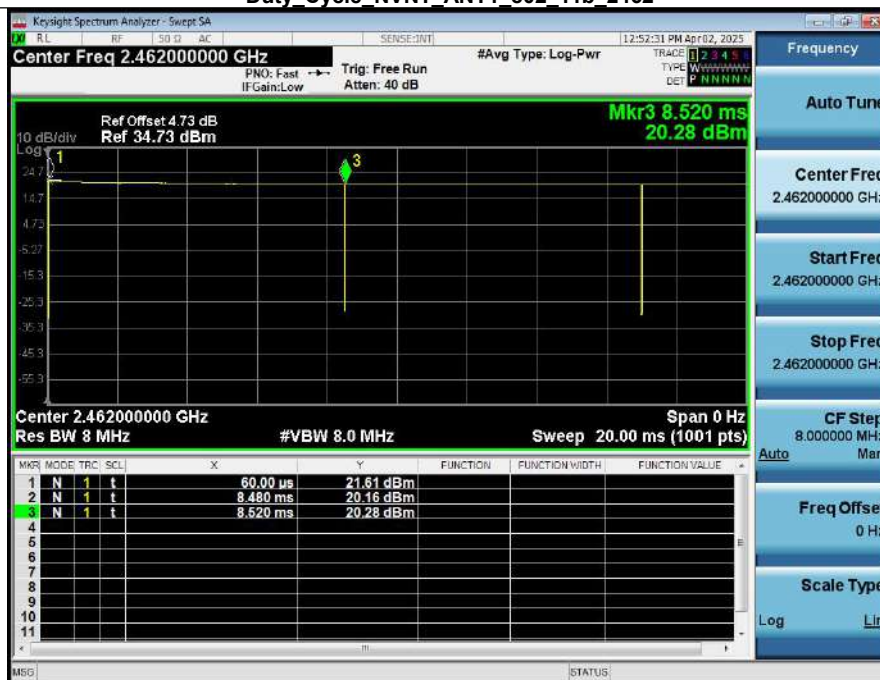


3. Duty Cycle

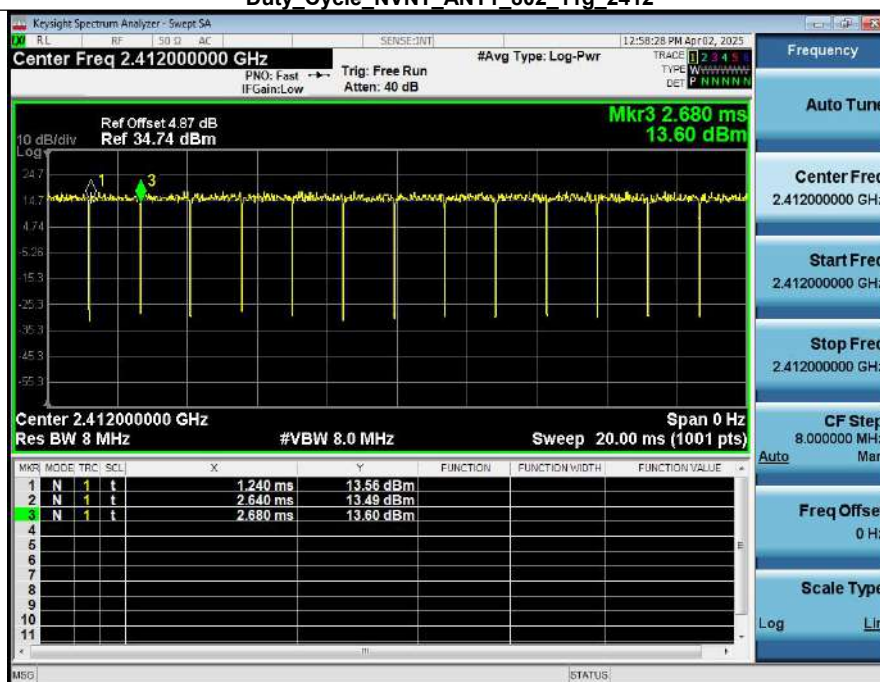
Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty factor(dB)
NVNT	ANT1	802.11b	2412.00	99.53	0.00
NVNT	ANT1	802.11b	2437.00	99.53	0.00
NVNT	ANT1	802.11b	2462.00	99.76	0.00
NVNT	ANT1	802.11g	2412.00	98.61	0.00
NVNT	ANT1	802.11g	2437.00	98.61	0.00
NVNT	ANT1	802.11g	2462.00	97.26	0.12
NVNT	ANT1	802.11n(HT20)	2412.00	96.77	0.14
NVNT	ANT1	802.11n(HT20)	2437.00	96.77	0.14
NVNT	ANT1	802.11n(HT20)	2462.00	98.36	0.00



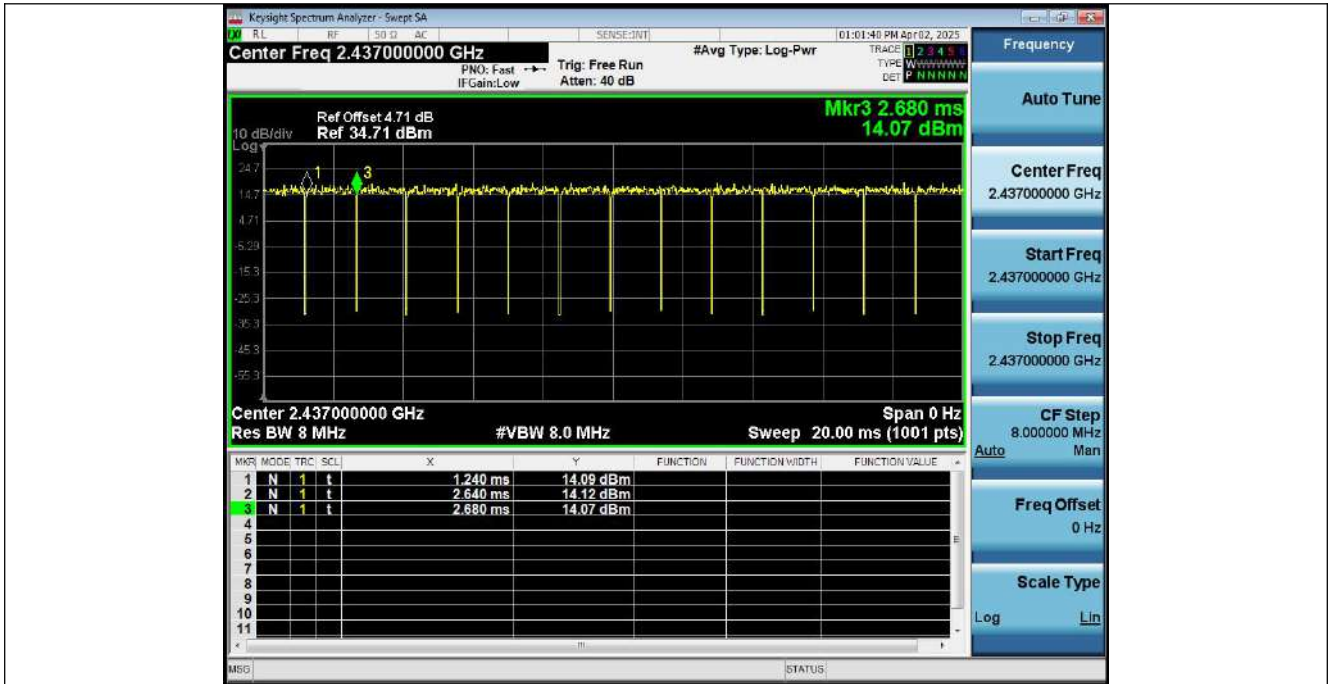
Duty Cycle NVNT_ANT1_802_11b_2462



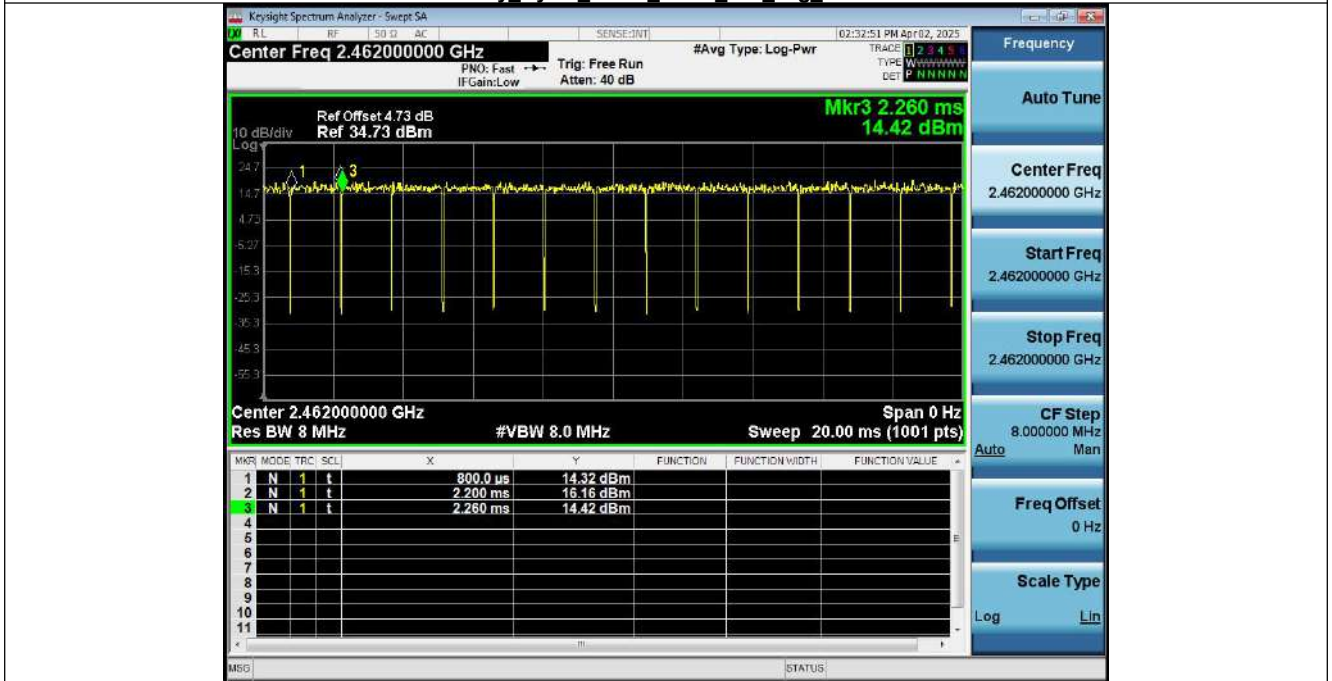
Duty Cycle NVNT_ANT1_802_11g_2412



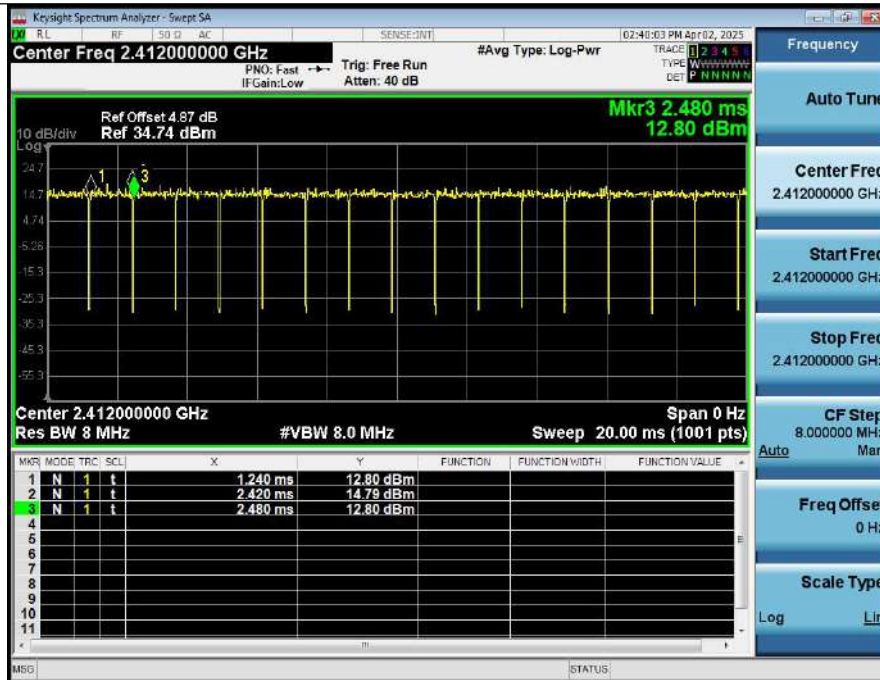
Duty Cycle NVNT_ANT1_802_11g_2437



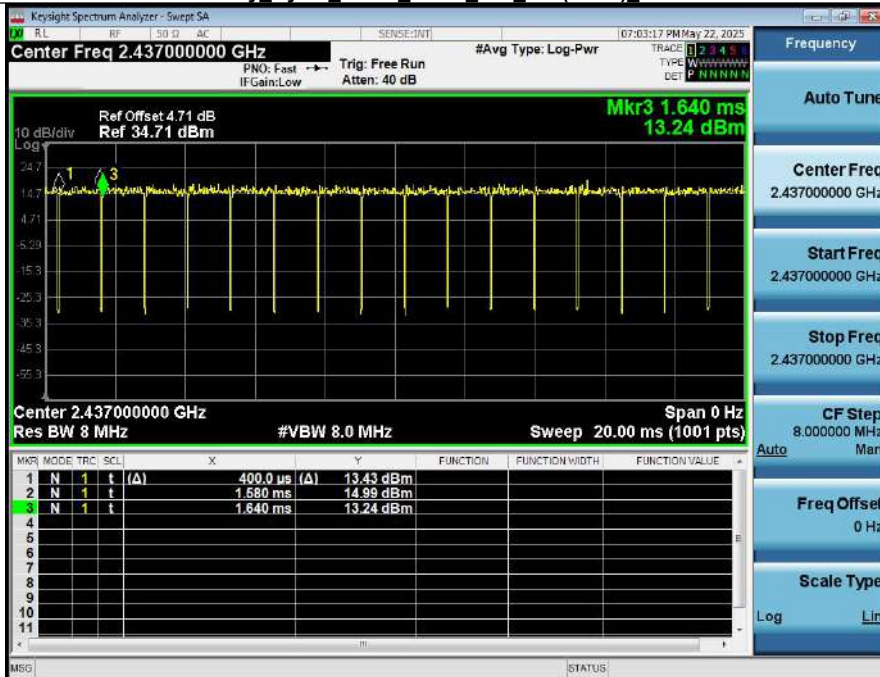
Duty_Cycle_NVNT_ANT1_802_11g_2462



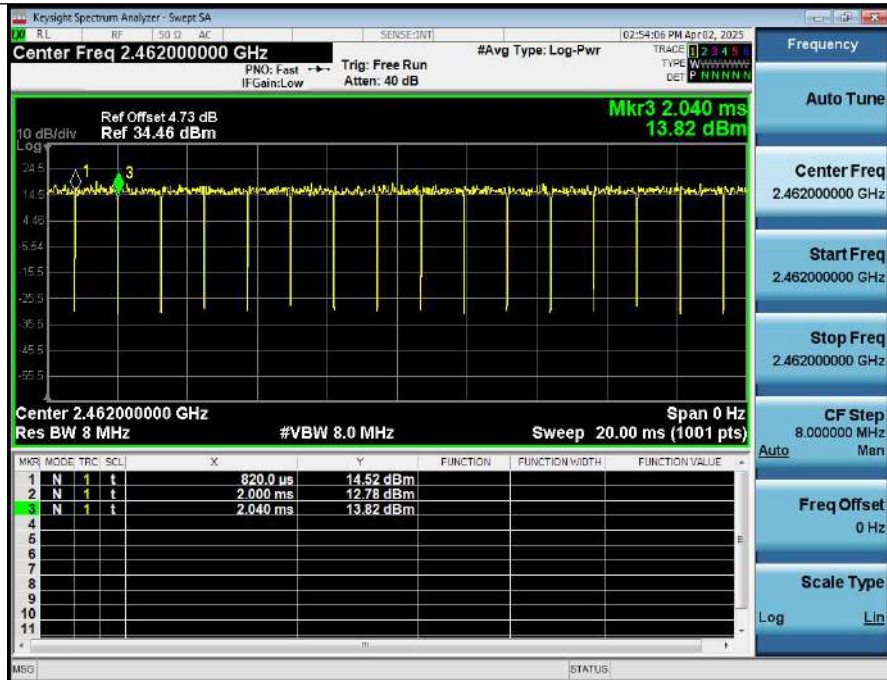
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2412



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)	limit(dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
NVNT	ANT1	802.11b	2412.00	Peak	18.42	30	4.15	22.57	36	Pass
NVNT	ANT1	802.11b	2437.00	Peak	18.99	30	4.15	24.14	36	Pass
NVNT	ANT1	802.11b	2462.00	Peak	19.29	30	4.15	25.44	36	Pass
NVNT	ANT1	802.11g	2412.00	Peak	18.44	30	4.15	22.59	36	Pass
NVNT	ANT1	802.11g	2437.00	Peak	18.98	30	4.15	24.13	36	Pass
NVNT	ANT1	802.11g	2462.00	Peak	19.43	30	4.15	25.58	36	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	Peak	18.46	30	4.15	22.61	36	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	Peak	18.90	30	4.15	24.05	36	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	Peak	19.42	30	4.15	25.57	36	Pass

5. Power Spectral Density

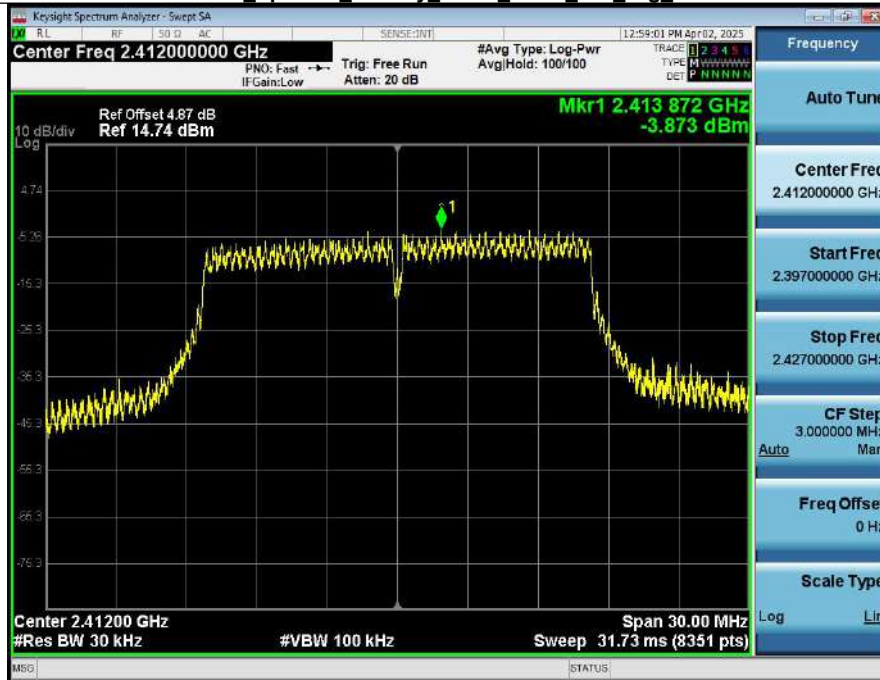
Condition	Antenna	Modulation	Frequency (MHz)	SA_PSD(dBm/30kHz)	RB factor(dB)	PSD(dBm/3kHz)	limit(dBm/3kHz)	Result
NVNT	ANT1	802.11b	2412.00	4.05	-10.00	-5.95	8	Pass
NVNT	ANT1	802.11b	2437.00	4.15	-10.00	-5.85	8	Pass
NVNT	ANT1	802.11b	2462.00	5.32	-10.00	-4.68	8	Pass
NVNT	ANT1	802.11g	2412.00	-3.87	-10.00	-13.87	8	Pass
NVNT	ANT1	802.11g	2437.00	-3.37	-10.00	-13.37	8	Pass
NVNT	ANT1	802.11g	2462.00	-2.86	-10.00	-12.86	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-4.45	-10.00	-14.45	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-4.79	-10.00	-14.79	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-3.44	-10.00	-13.44	8	Pass



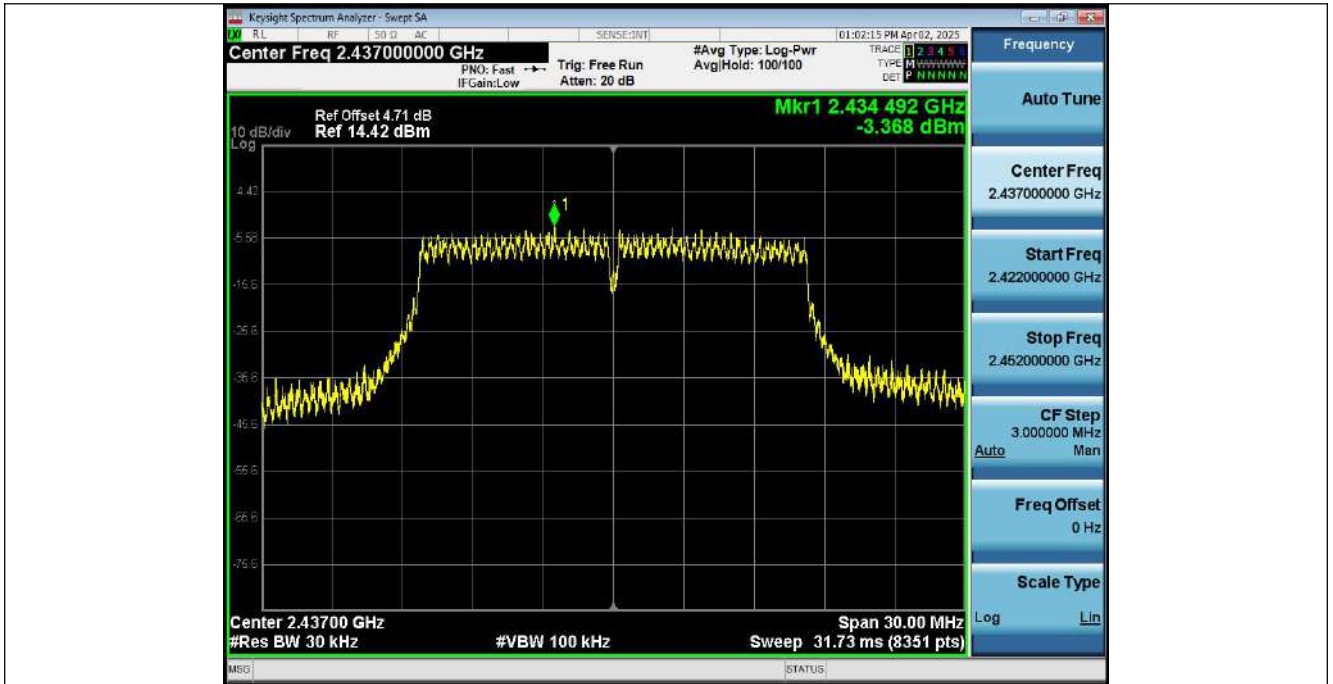
Power Spectral Density NVNT_ANT1_802_11b_2462



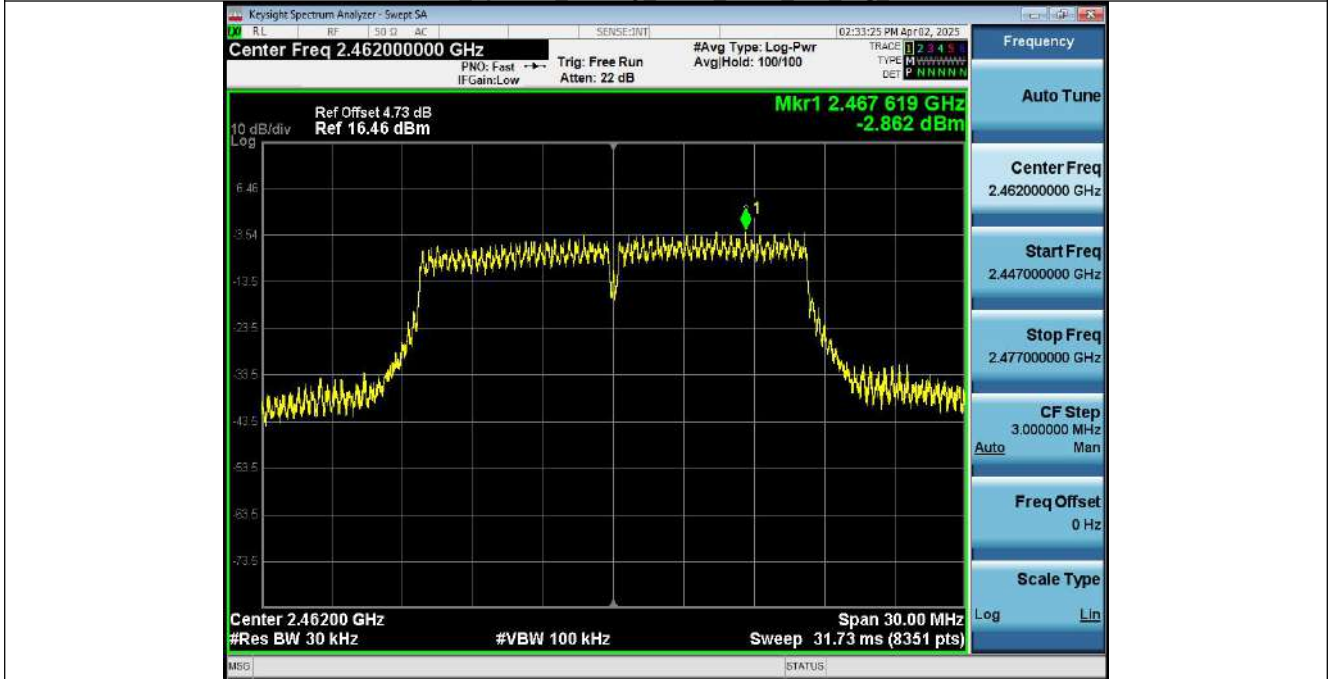
Power Spectral Density NVNT_ANT1_802_11g_2412



Power Spectral Density NVNT_ANT1_802_11g_2437



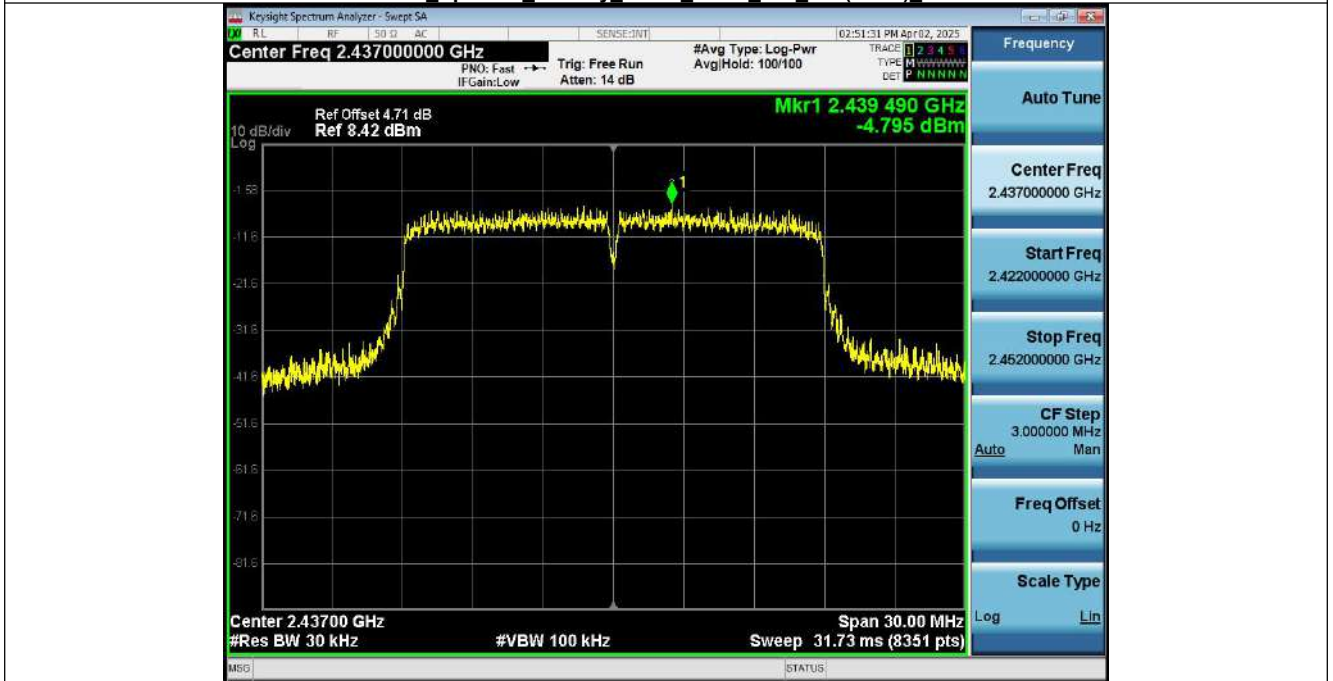
Power_Spectral_Density_NVNT_ANT1_802_11g_2462



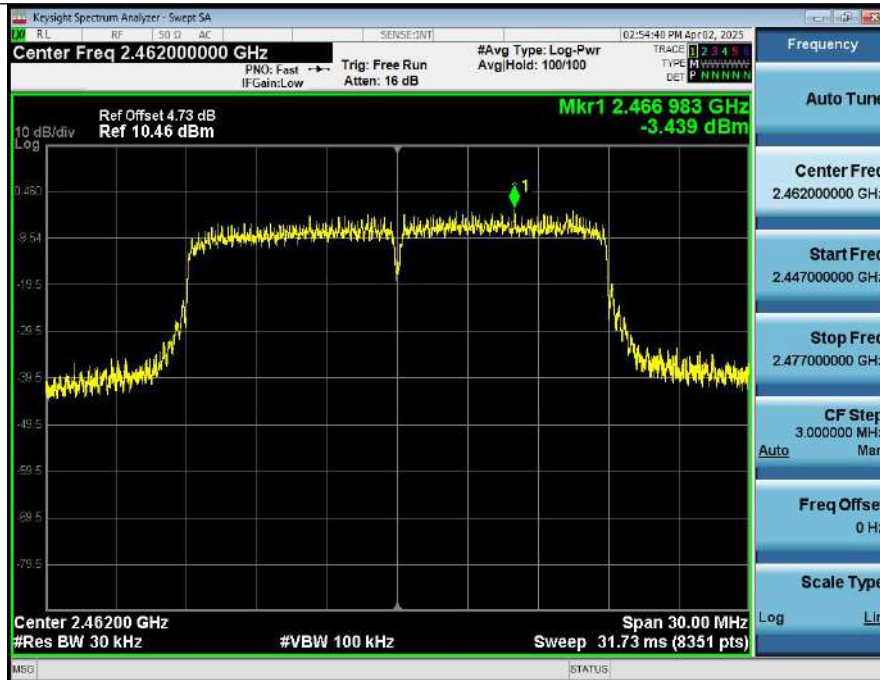
Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2412



Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2437



Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2462



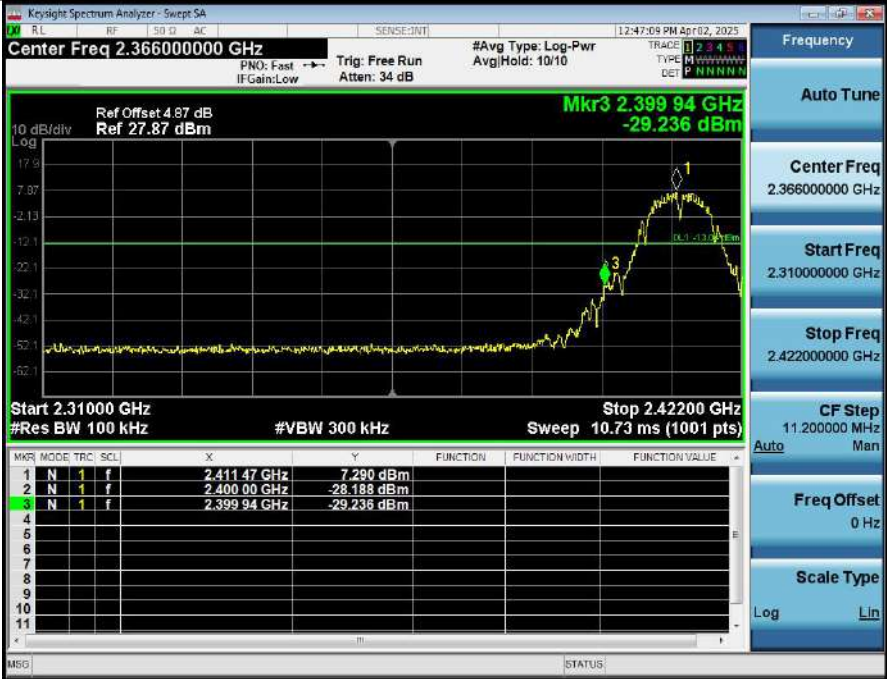
6. Bandedge

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	2399.936	6.963	-29.236	-13.037	Pass
NVNT	ANT1	802.11b	2462.00	2483.536	7.893	-42.701	-12.107	Pass
NVNT	ANT1	802.11g	2412.00	2399.824	1.073	-30.355	-18.927	Pass
NVNT	ANT1	802.11g	2462.00	2483.632	2.159	-33.825	-17.841	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2399.824	-0.359	-32.633	-20.359	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2483.536	0.588	-39.178	-19.412	Pass

1 Reference Level NVNT ANT1 802 11b 2412



2 Bandedge NVNT ANT1 802 11b 2412



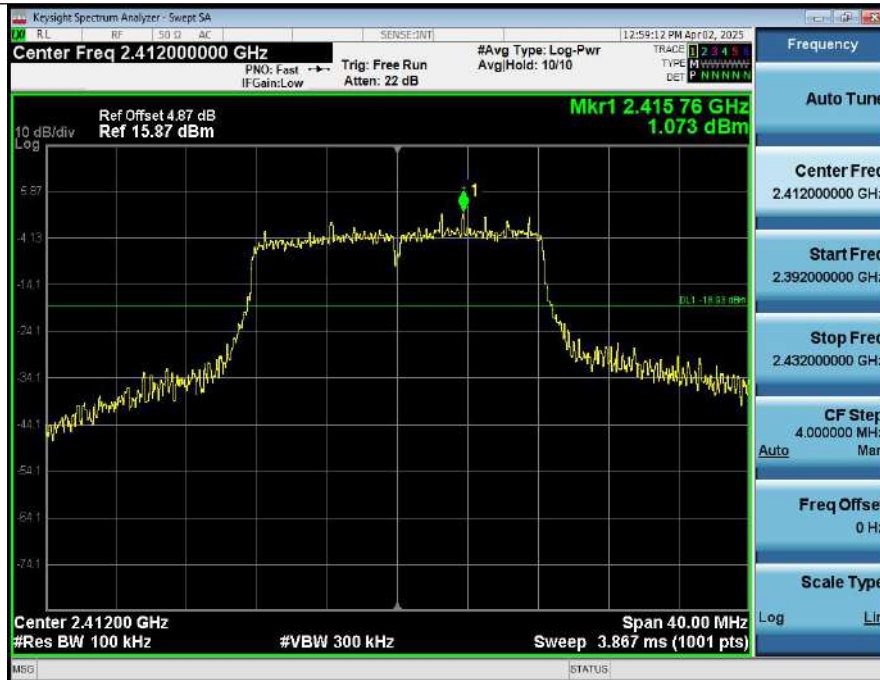
1 Reference Level NVNT ANT1 802 11b 2462



2_Bandedge_NVNT_ANT1_802_11b_2462



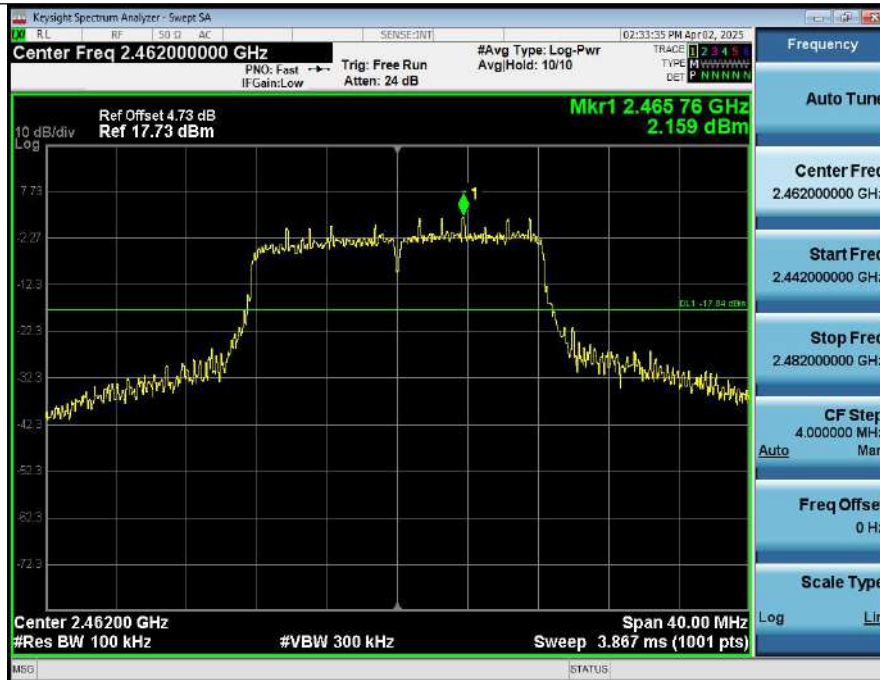
1_Reference_Level_NVNT_ANT1_802_11g_2412



2_Bandedge_NVNT_ANT1_802_11g_2412



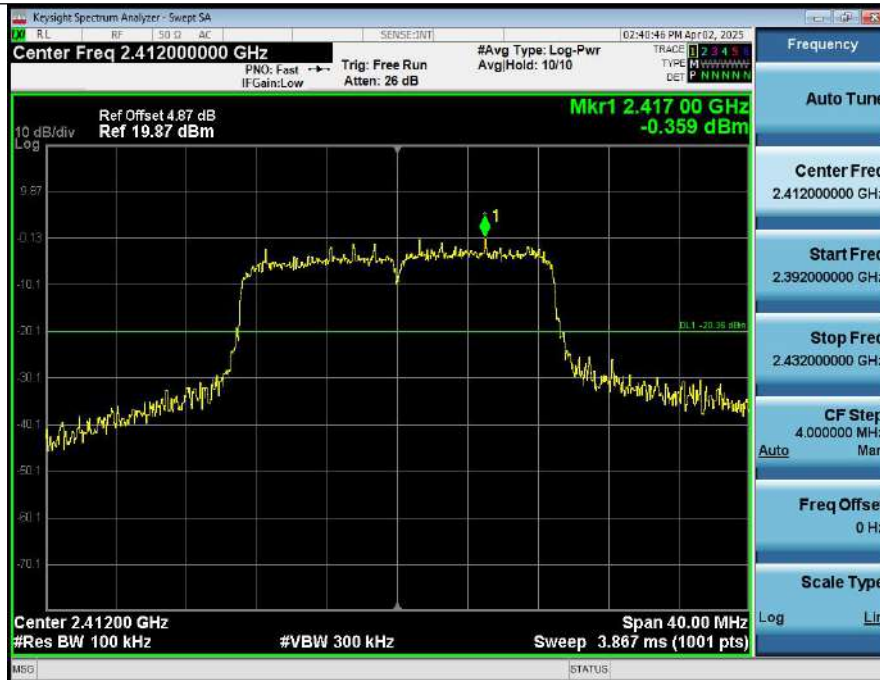
1_Reference_Level_NVNT_ANT1_802_11g_2462



2_Bandedge_NVNT_ANT1_802_11g_2462



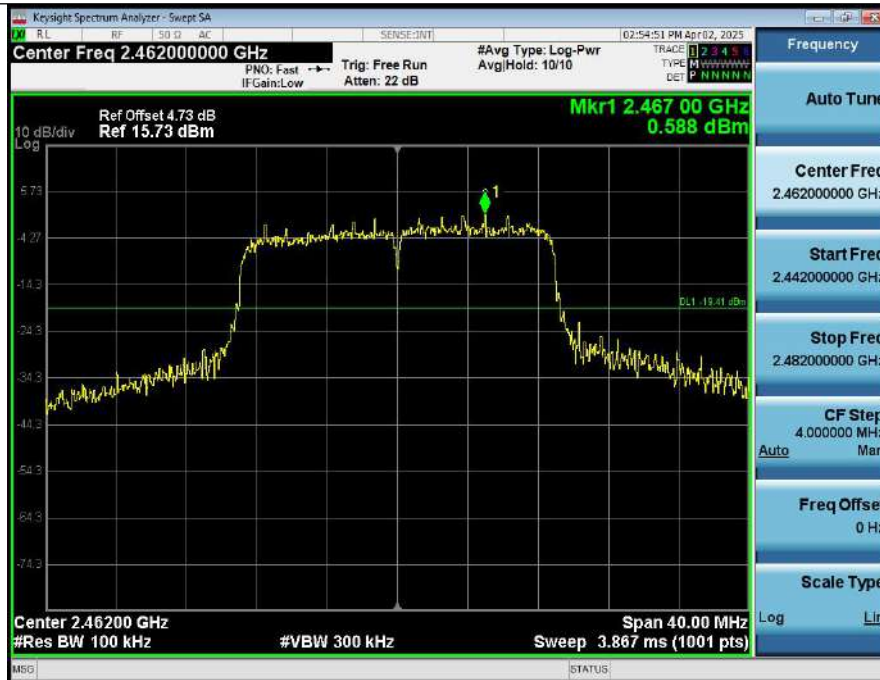
1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2412



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



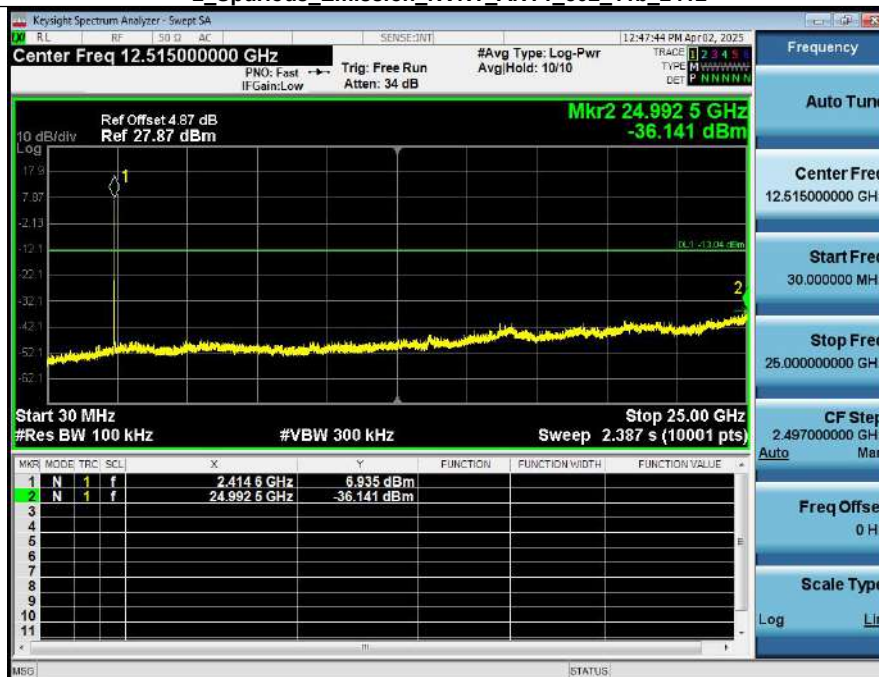
7. Spurious Emission

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	24992.509	6.963	-36.141	-13.037	Pass
NVNT	ANT1	802.11b	2437.00	24957.551	3.671	-51.237	-16.329	Pass
NVNT	ANT1	802.11b	2462.00	24473.133	7.893	-37.029	-12.107	Pass
NVNT	ANT1	802.11g	2412.00	24957.551	1.073	-49.031	-18.927	Pass
NVNT	ANT1	802.11g	2437.00	24960.048	0.604	-42.444	-19.396	Pass
NVNT	ANT1	802.11g	2462.00	704.190	2.159	-42.203	-17.841	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	24977.527	-0.359	-44.819	-20.359	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	24485.618	-0.293	-45.123	-20.293	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	24947.563	0.588	-48.688	-19.412	Pass

1_Reference_Level_NVNT_ANT1_802_11b_2412



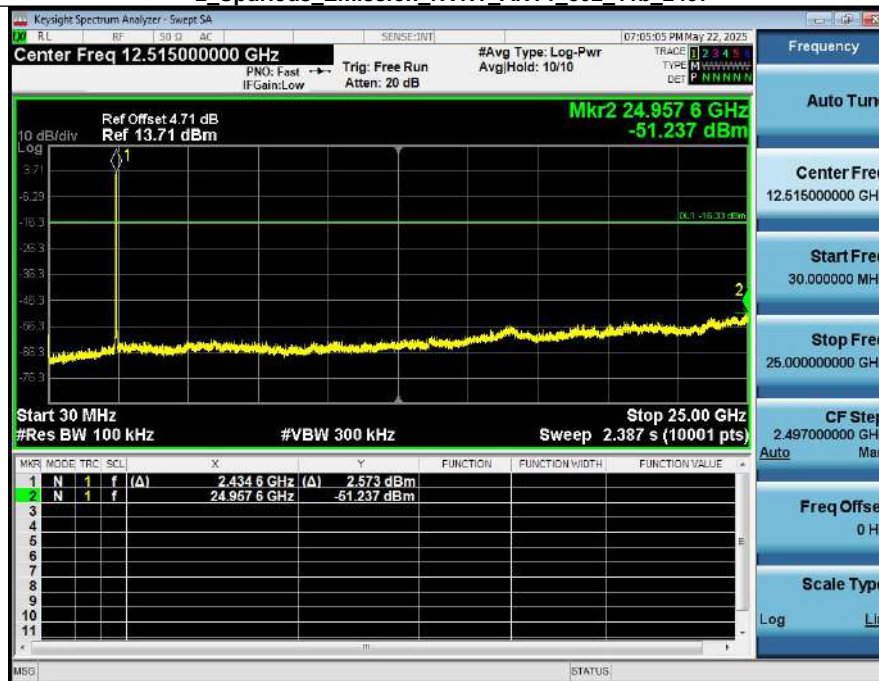
2_Spurious Emission_NVNT_ANT1_802_11b_2412



1 Reference Level NVNT_ANT1_802_11b_2437



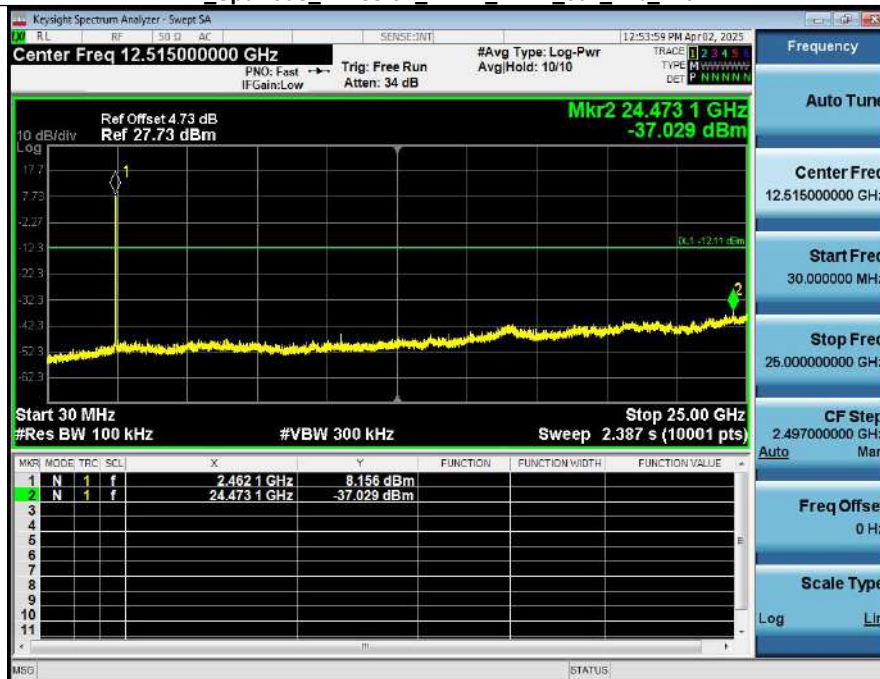
2 Spurious_Emission_NVNT_ANT1_802_11b_2437



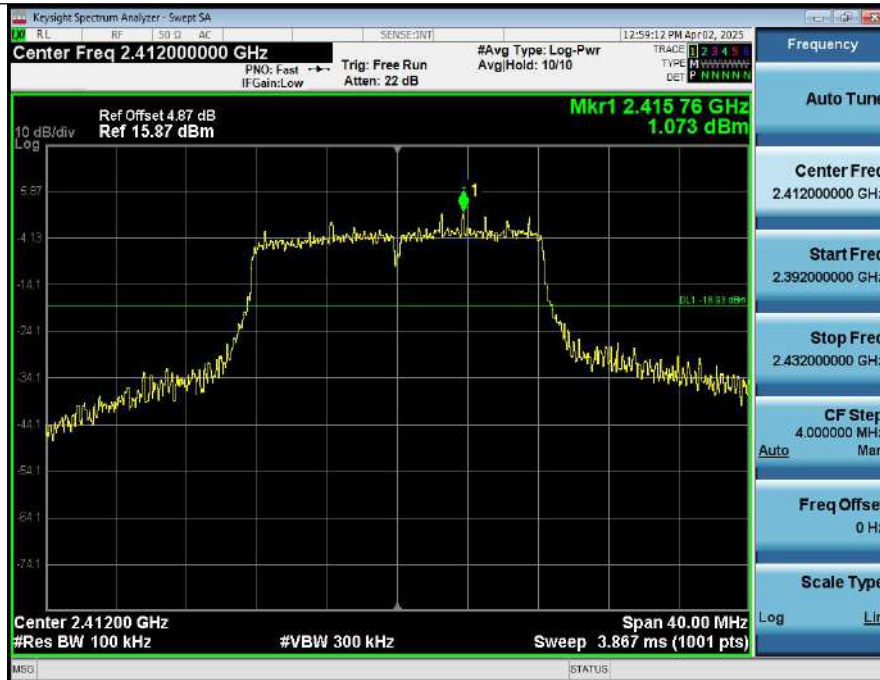
1 Reference_Level_NVNT_ANT1_802_11b_2462



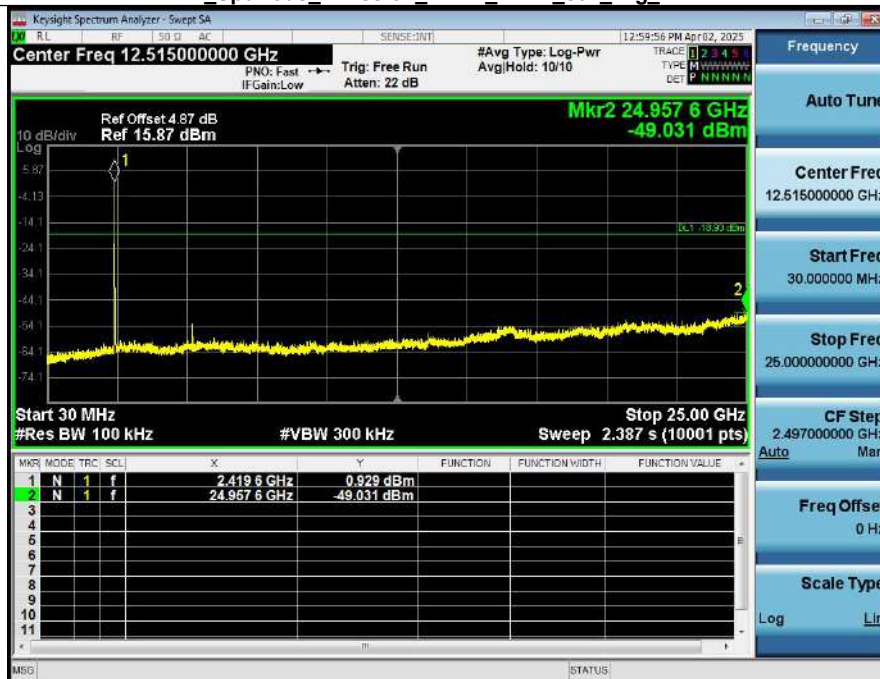
2_Spurious_Emission_NVNT_ANT1_802_11b_2462



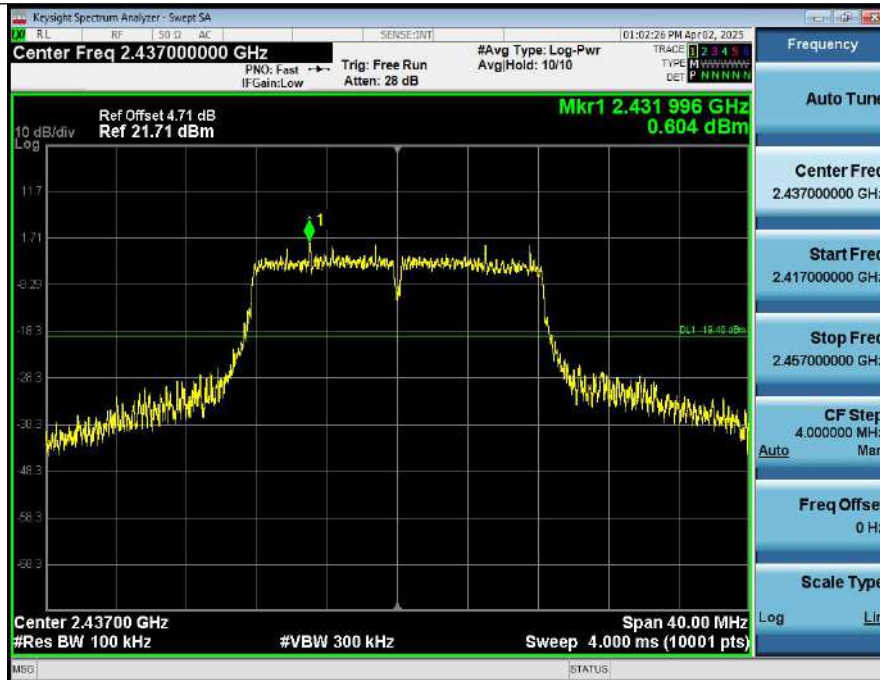
1_Reference_Level_NVNT_ANT1_802_11g_2412



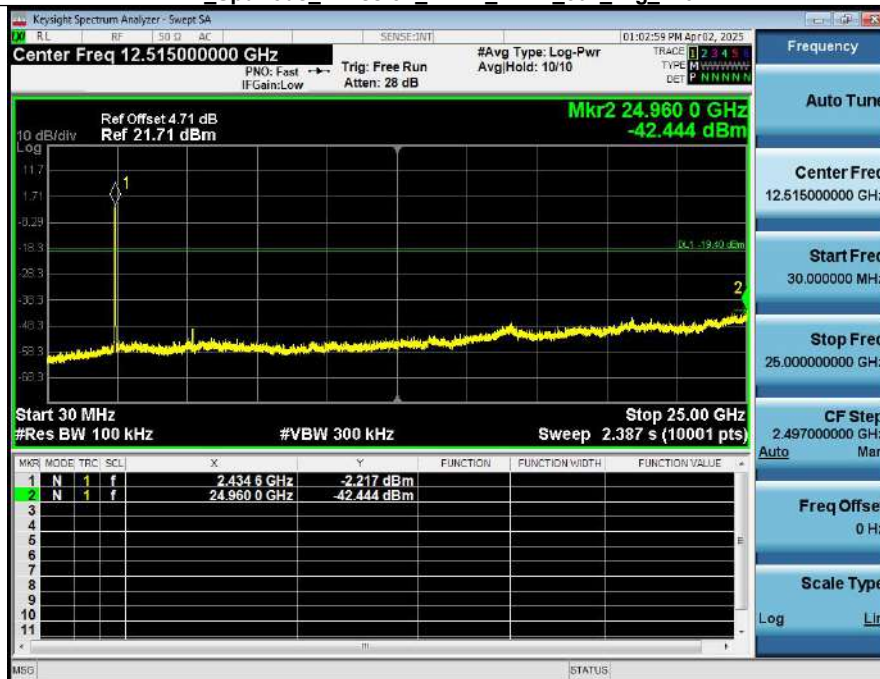
2_Spurious_Emission_NVNT_ANT1_802_11g_2412



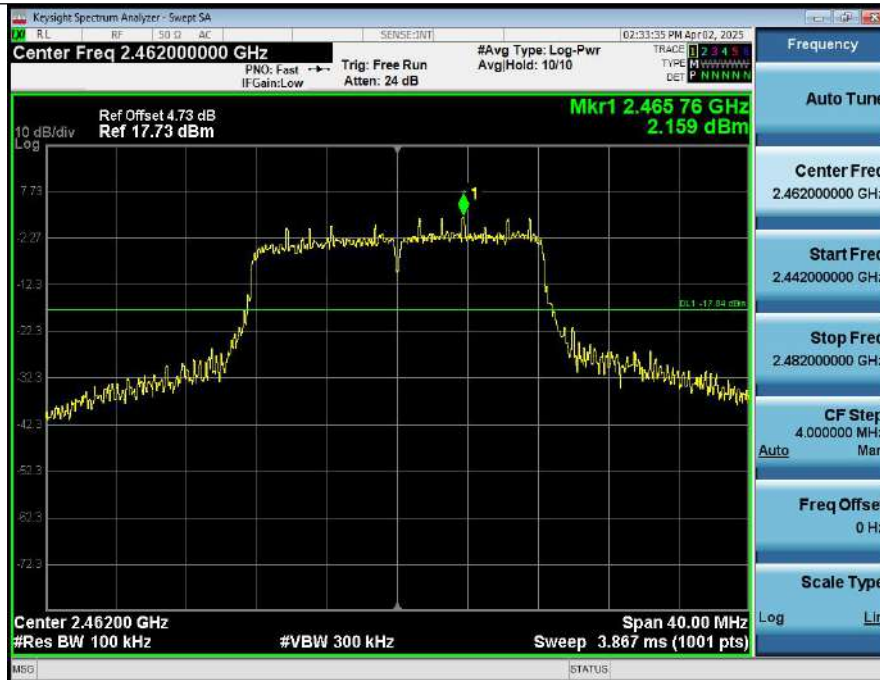
1_Reference_Level_NVNT_ANT1_802_11g_2437



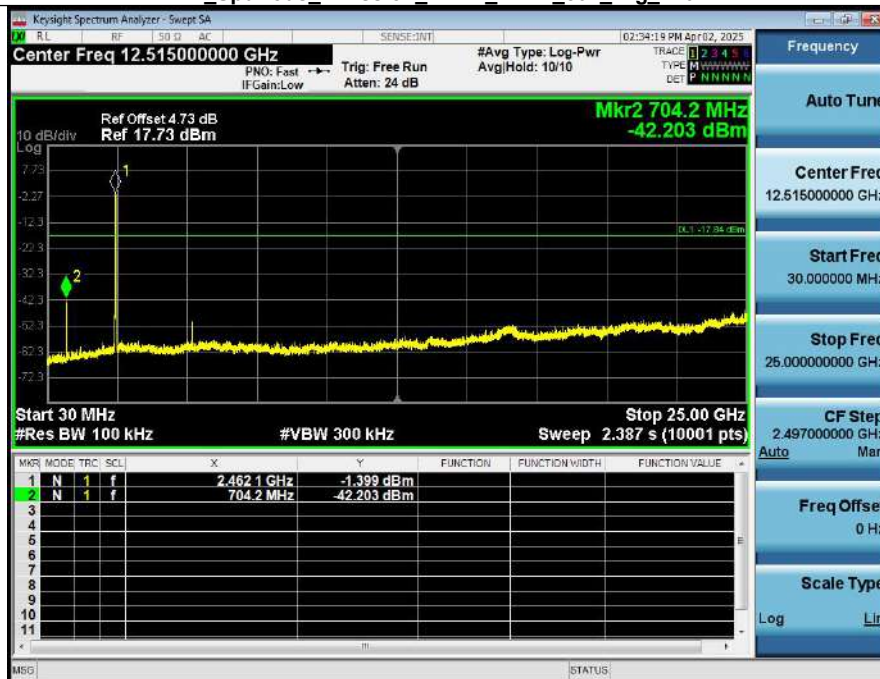
2_Spurious_Emission_NVNT_ANT1_802_11g_2437



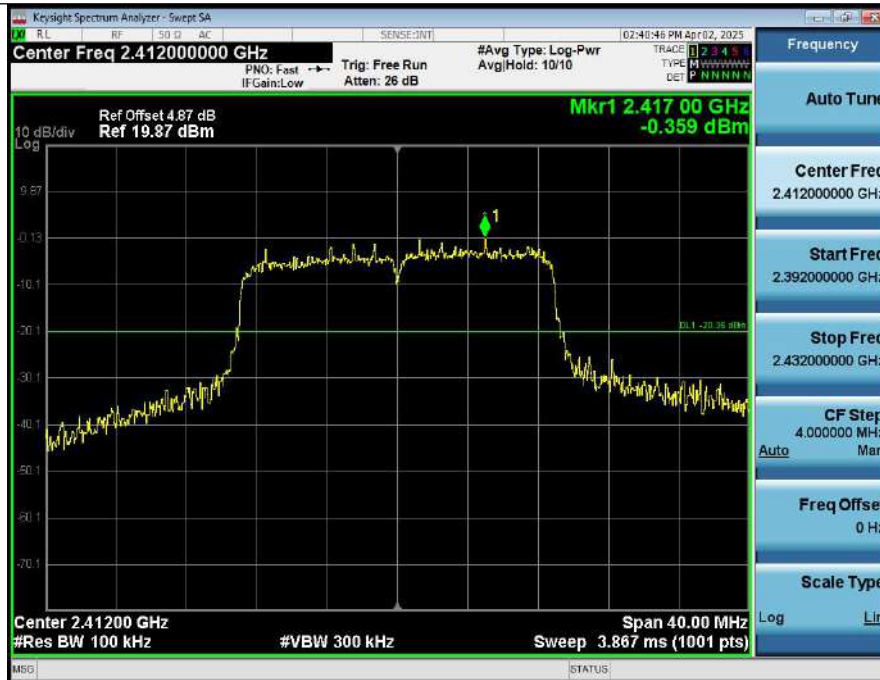
1_Reference_Level_NVNT_ANT1_802_11g_2462



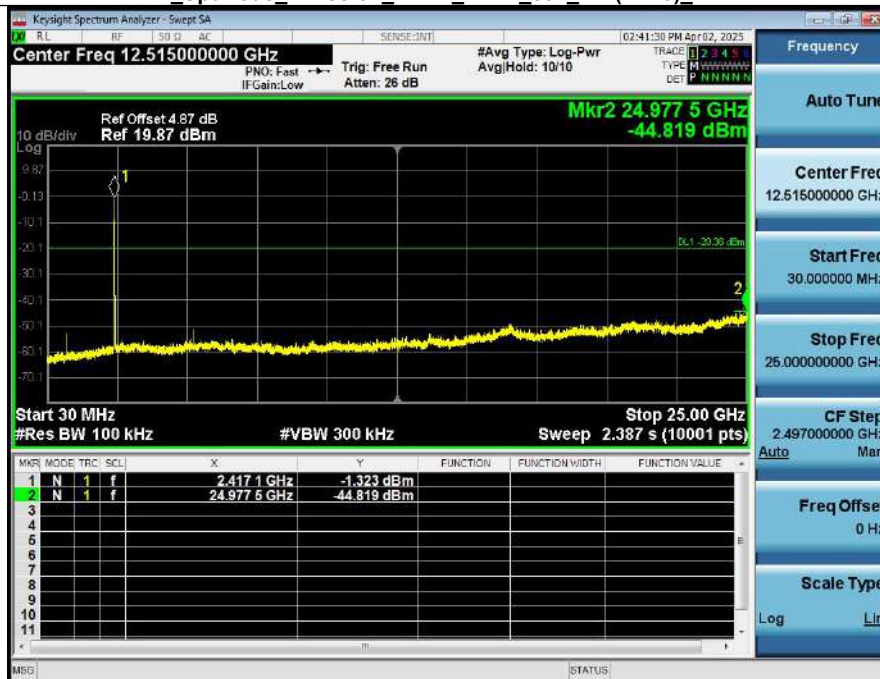
2_Spurious_Emission_NVNT_ANT1_802_11g_2462



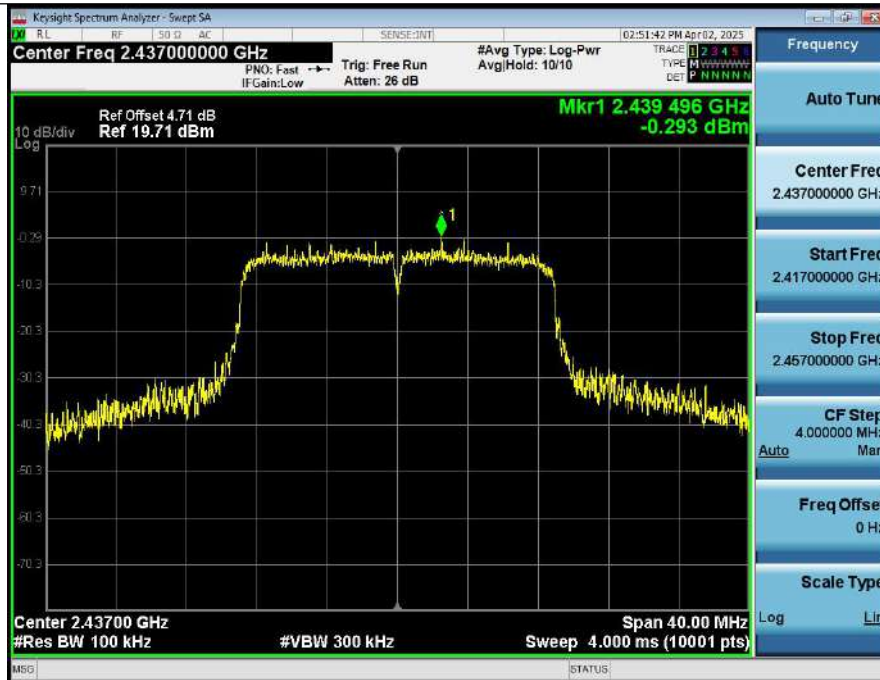
1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2412



2 Spurious Emission_NVNT_ANT1_802_11n(HT20)_2412



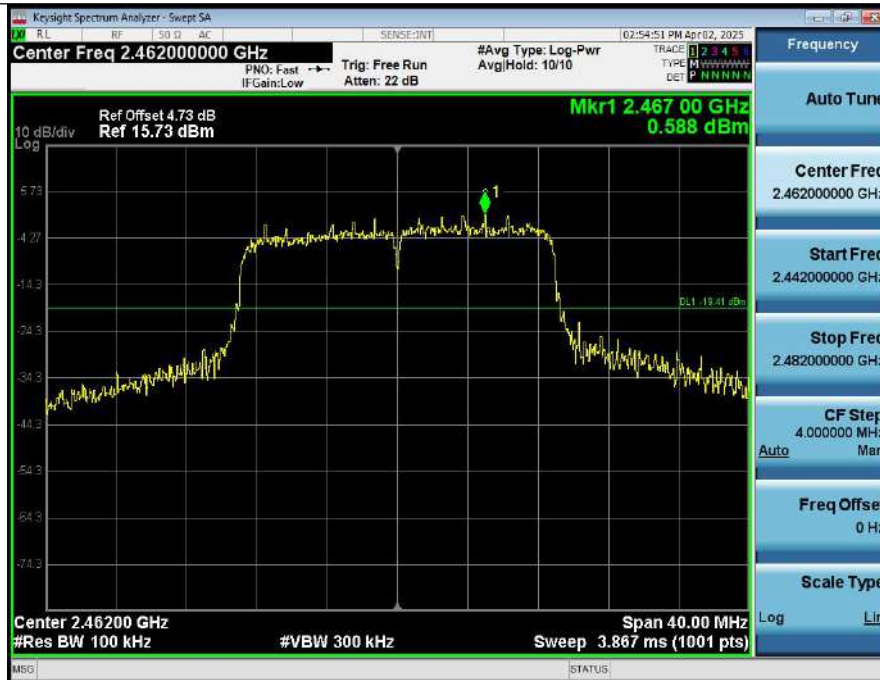
1 Reference_Level_NVNT_ANT1_802_11n(HT20)_2437



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

