

Table of Contents

1. -6dB Bandwidth	2
2. 99% Occupied Bandwidth	9
3. Duty Cycle	16
4. MAX. Output Power	23
5. Power Spectral Density	23
6. Bandedge	30
7. Spurious Emission	38

FCC ID:2BPZQ-SJSN

FCC_2.4G_WIFI (Part15.247) Test Data

1. -6dB Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	9.17	500	Pass
NVNT	ANT1	802.11b	2437.00	9.21	500	Pass
NVNT	ANT1	802.11b	2462.00	9.22	500	Pass
NVNT	ANT1	802.11g	2412.00	16.41	500	Pass
NVNT	ANT1	802.11g	2437.00	16.32	500	Pass
NVNT	ANT1	802.11g	2462.00	16.43	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	17.29	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	17.40	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	17.32	500	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	36.16	500	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	35.89	500	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	35.49	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



2. 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99%%BW(MHz)
NVNT	ANT1	802.11b	2412.00	12.247
NVNT	ANT1	802.11b	2437.00	13.374
NVNT	ANT1	802.11b	2462.00	12.514
NVNT	ANT1	802.11g	2412.00	17.290
NVNT	ANT1	802.11g	2437.00	17.849
NVNT	ANT1	802.11g	2462.00	17.691
NVNT	ANT1	802.11n(HT20)	2412.00	17.879
NVNT	ANT1	802.11n(HT20)	2437.00	18.384
NVNT	ANT1	802.11n(HT20)	2462.00	18.265
NVNT	ANT1	802.11n(HT40)	2422.00	37.001
NVNT	ANT1	802.11n(HT40)	2437.00	36.621
NVNT	ANT1	802.11n(HT40)	2452.00	36.576



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

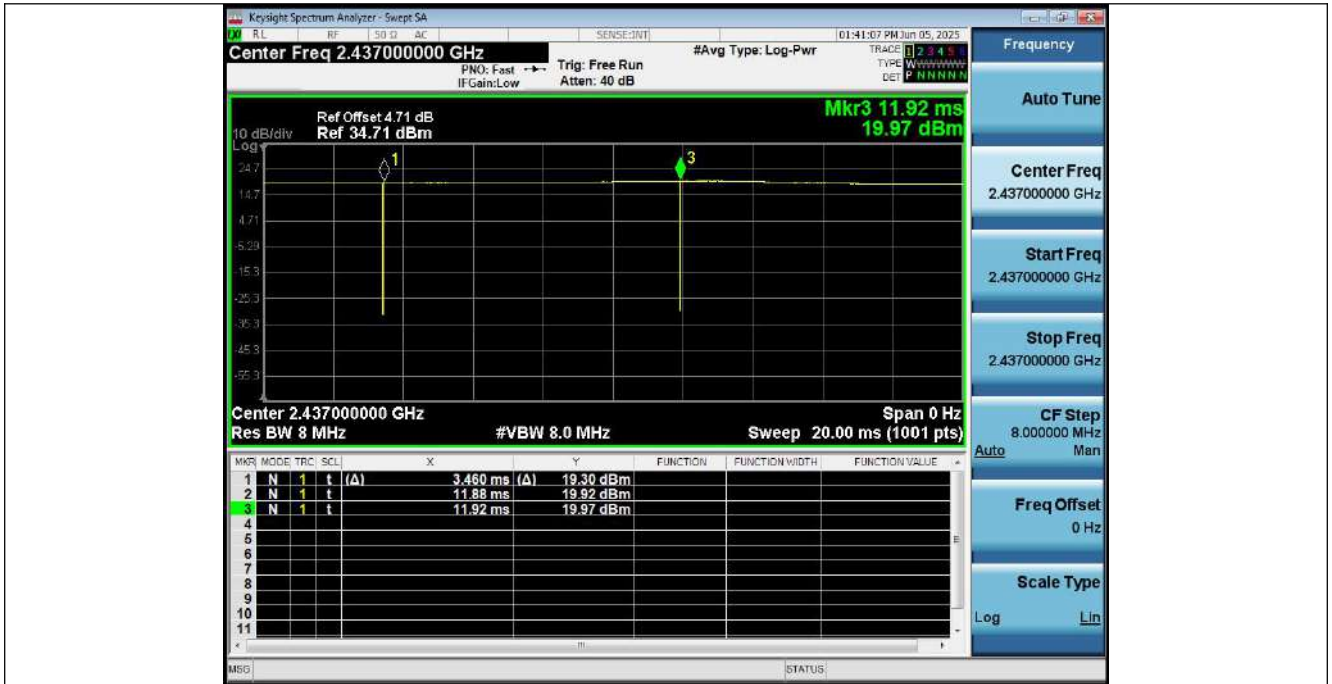


3. Duty Cycle

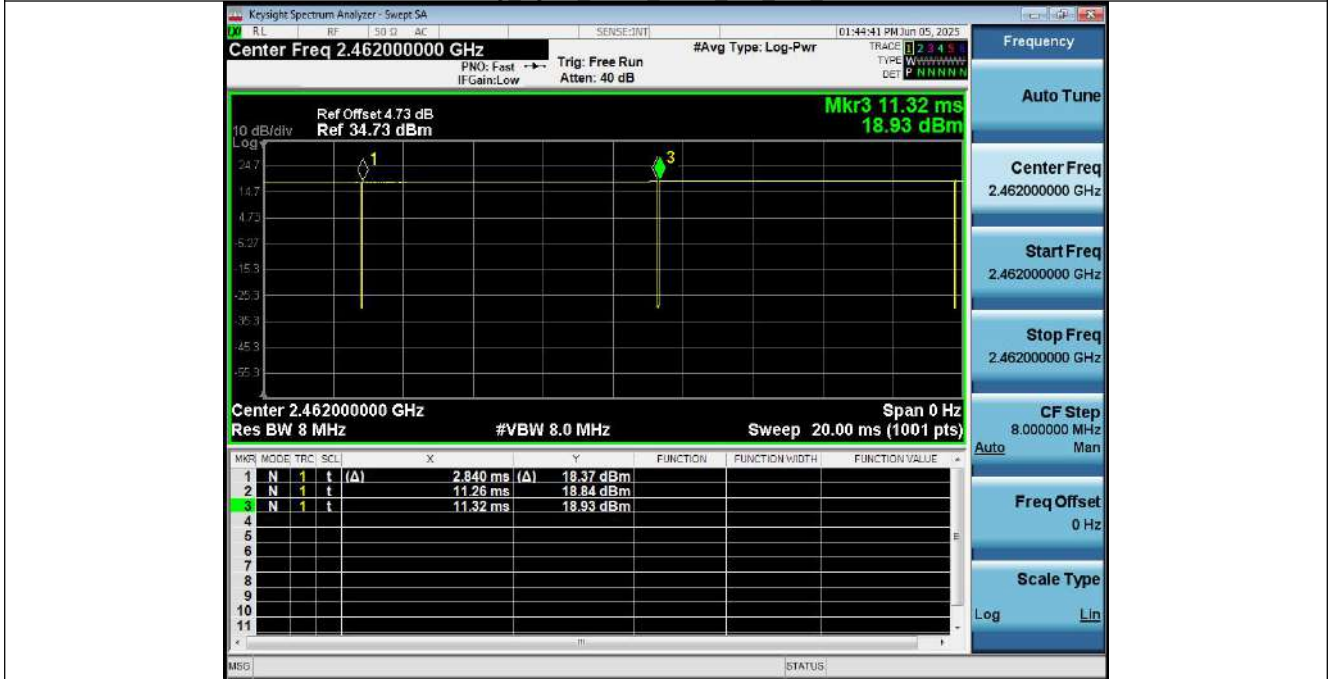
Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty factor(dB)
NVNT	ANT1	802.11b	2412.00	99.53	0.00
NVNT	ANT1	802.11b	2437.00	99.76	0.00
NVNT	ANT1	802.11b	2462.00	99.53	0.00
NVNT	ANT1	802.11g	2412.00	97.26	0.12
NVNT	ANT1	802.11g	2437.00	97.22	0.12
NVNT	ANT1	802.11g	2462.00	97.26	0.12
NVNT	ANT1	802.11n(HT20)	2412.00	96.77	0.14
NVNT	ANT1	802.11n(HT20)	2437.00	98.36	0.00
NVNT	ANT1	802.11n(HT20)	2462.00	96.77	0.14
NVNT	ANT1	802.11n(HT40)	2422.00	93.75	0.28
NVNT	ANT1	802.11n(HT40)	2437.00	96.88	0.14
NVNT	ANT1	802.11n(HT40)	2452.00	96.88	0.14



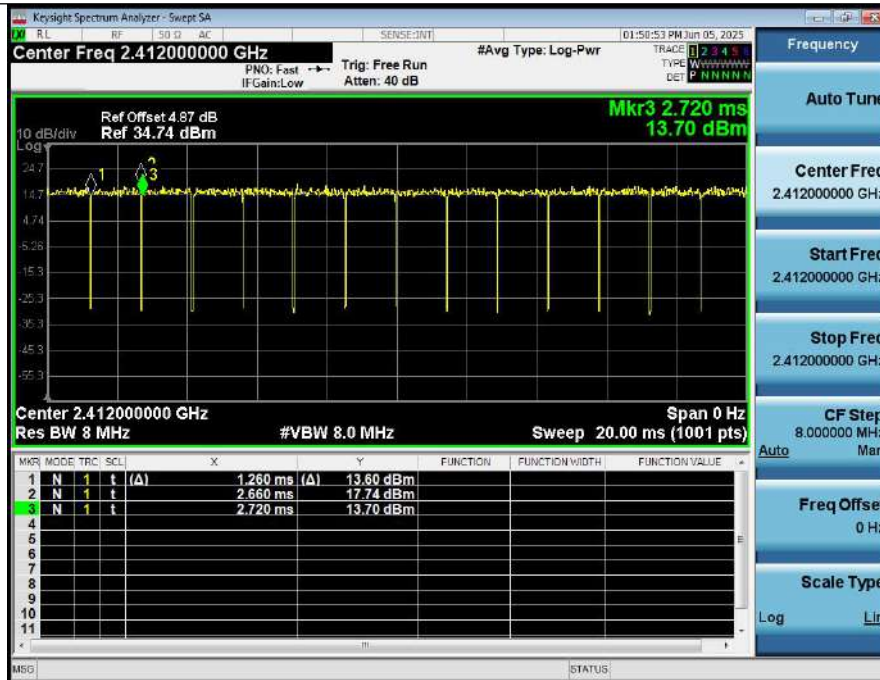
Duty Cycle NVNT ANT1 802 11b 2437



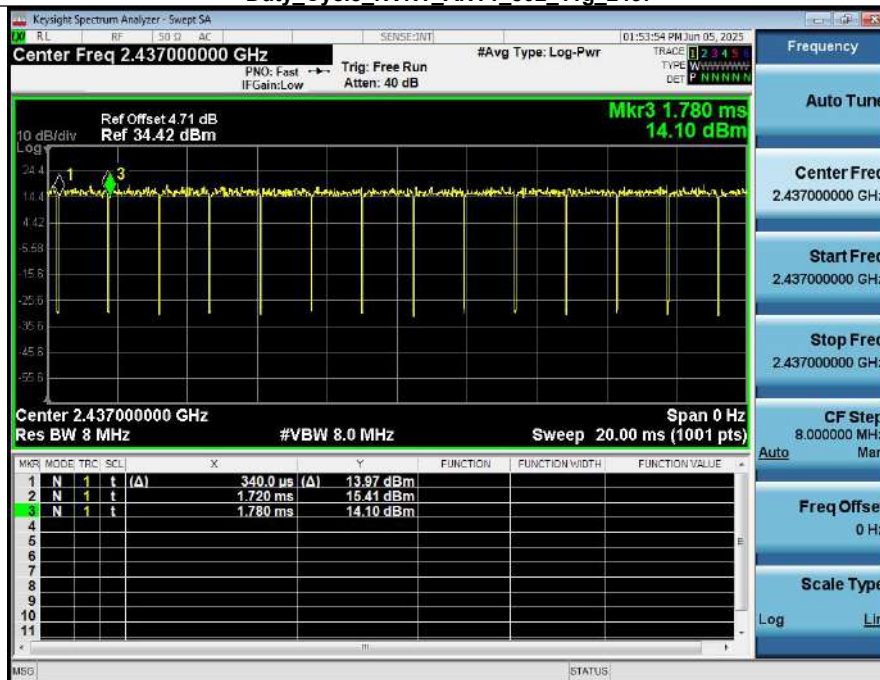
Duty_Cycle_NVNT_ANT1_802_11b_2462



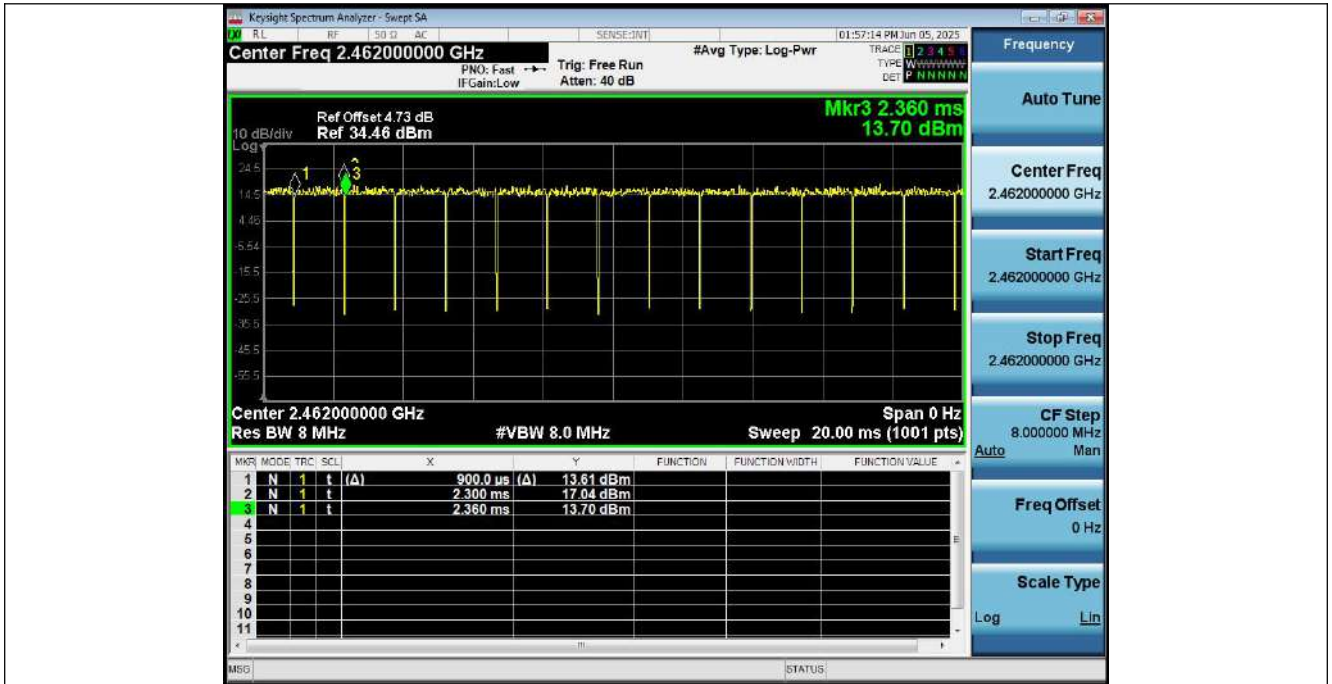
Duty_Cycle_NVNT_ANT1_802_11g_2412



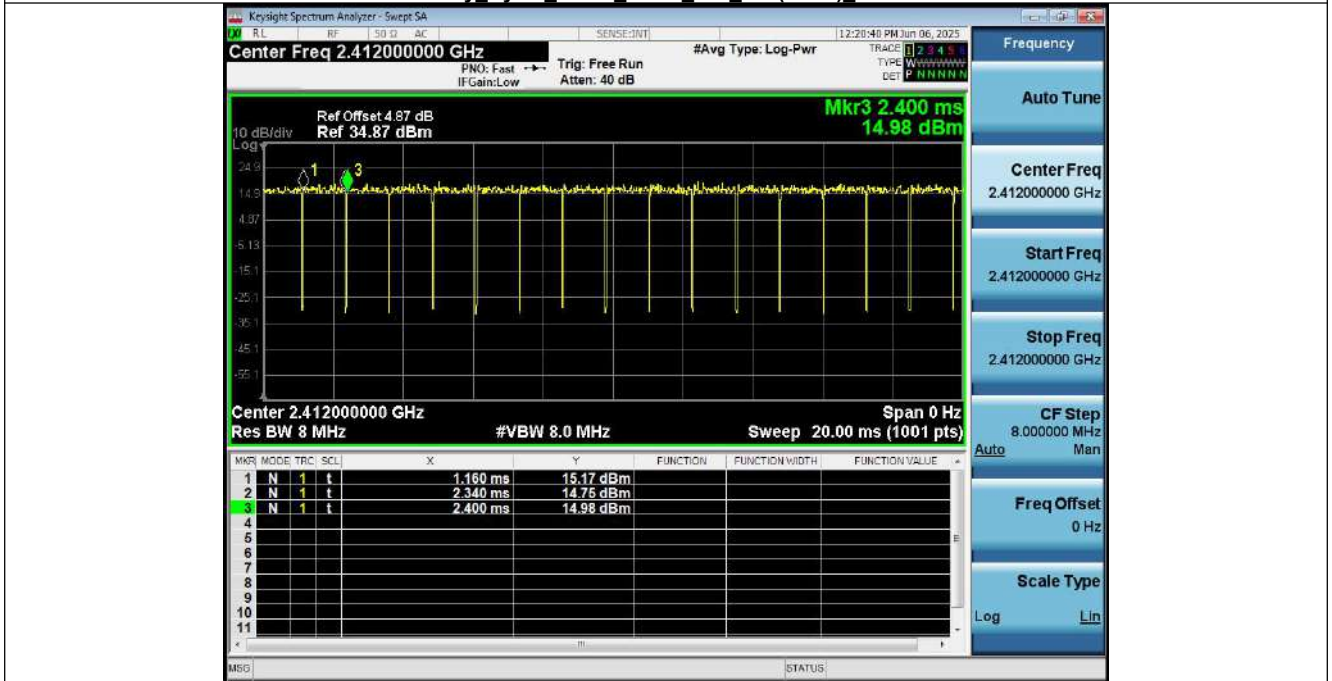
Duty_Cycle_NVNT_ANT1_802_11g_2437



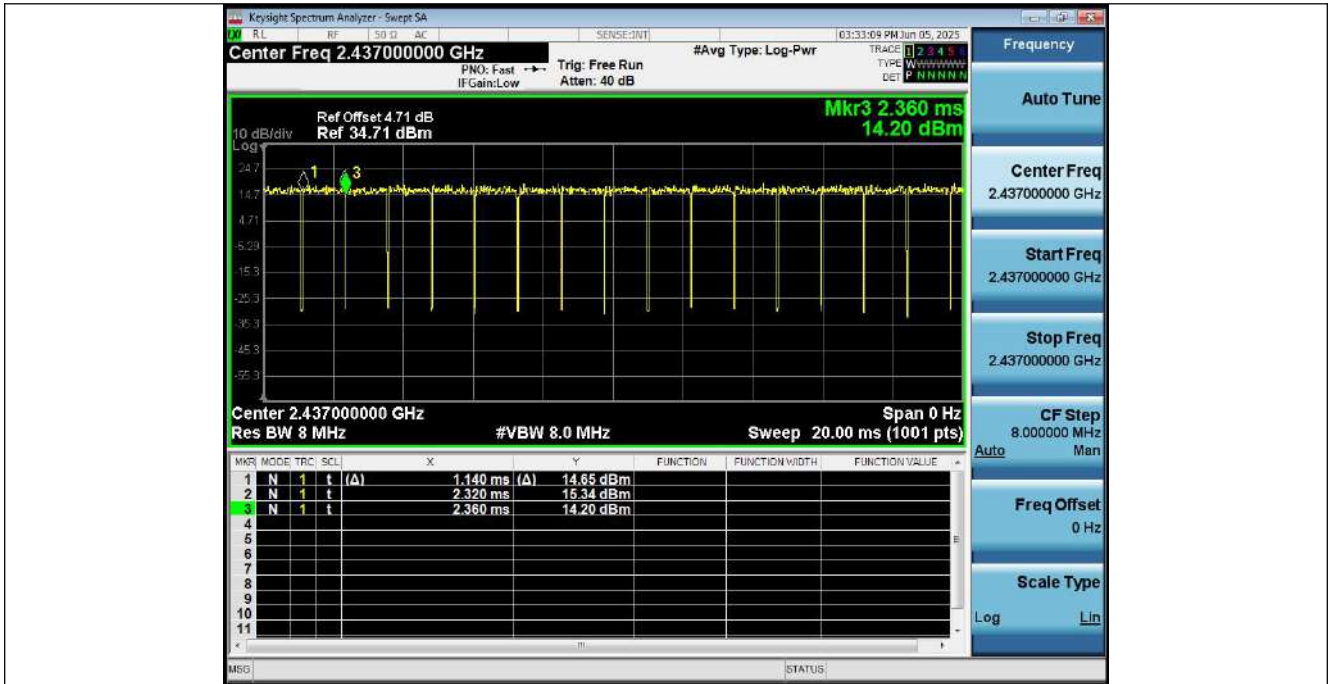
Duty_Cycle_NVNT_ANT1_802_11g_2462



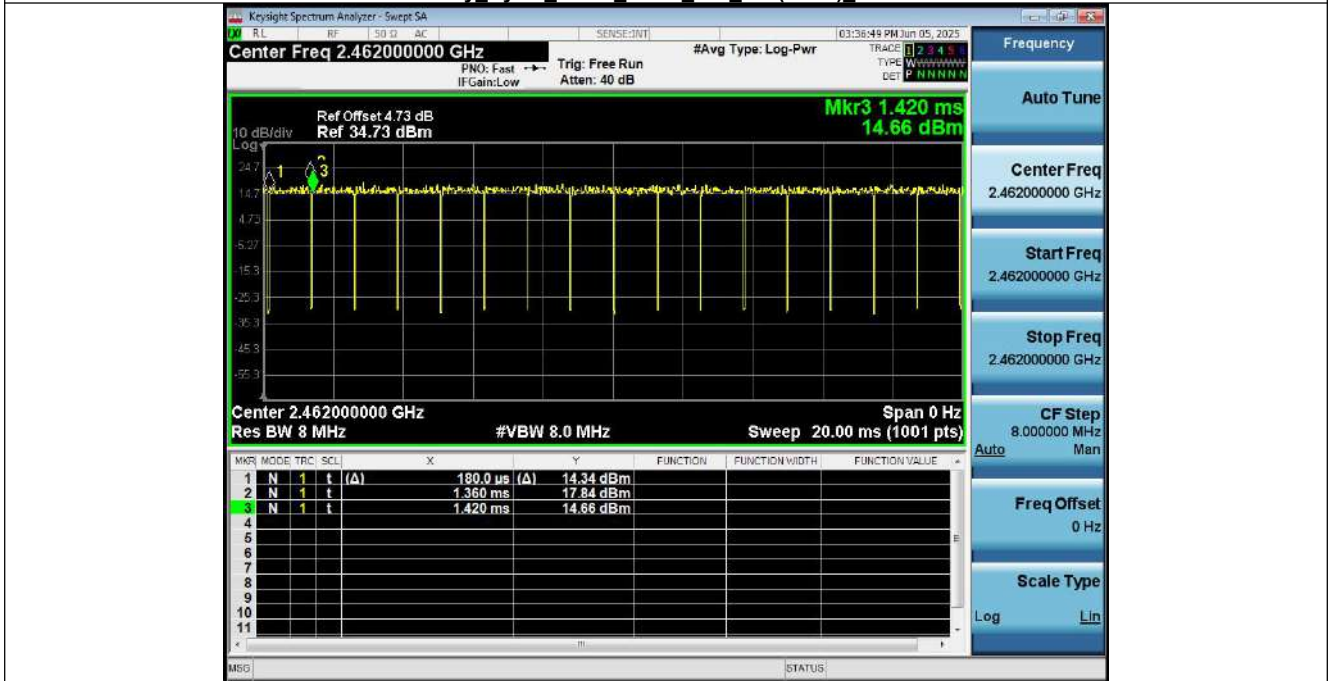
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2412



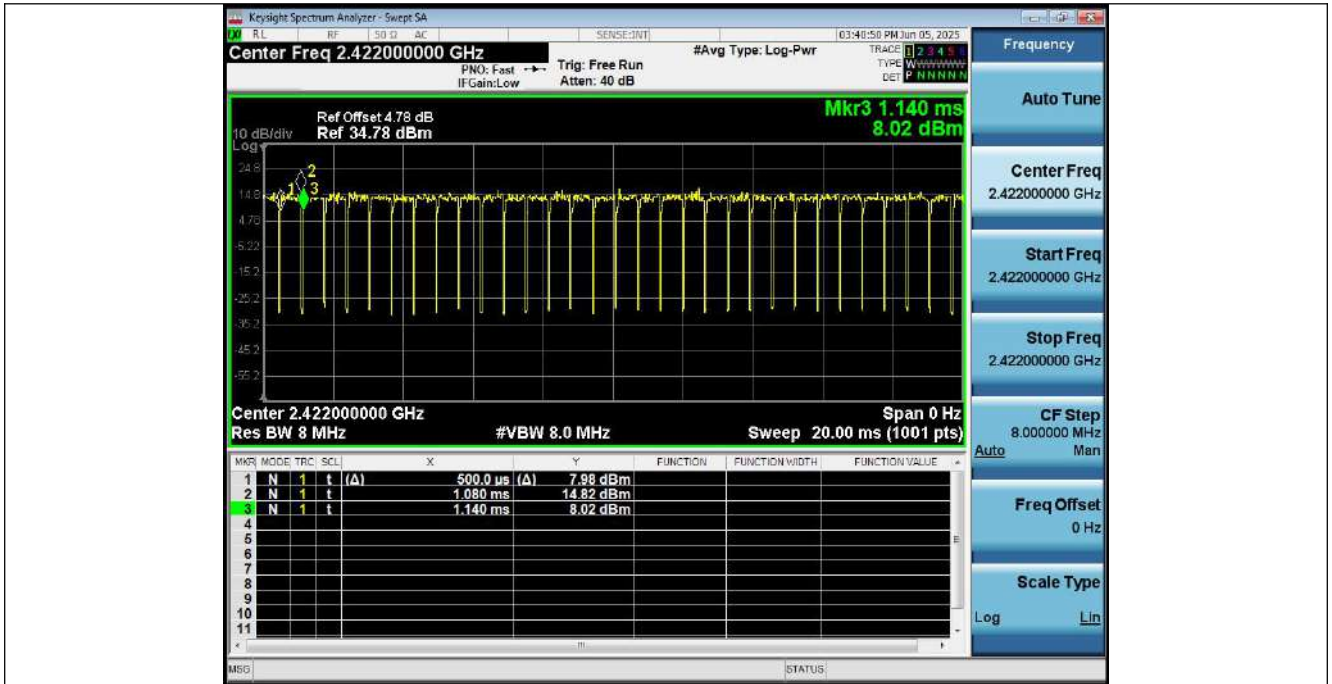
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2437



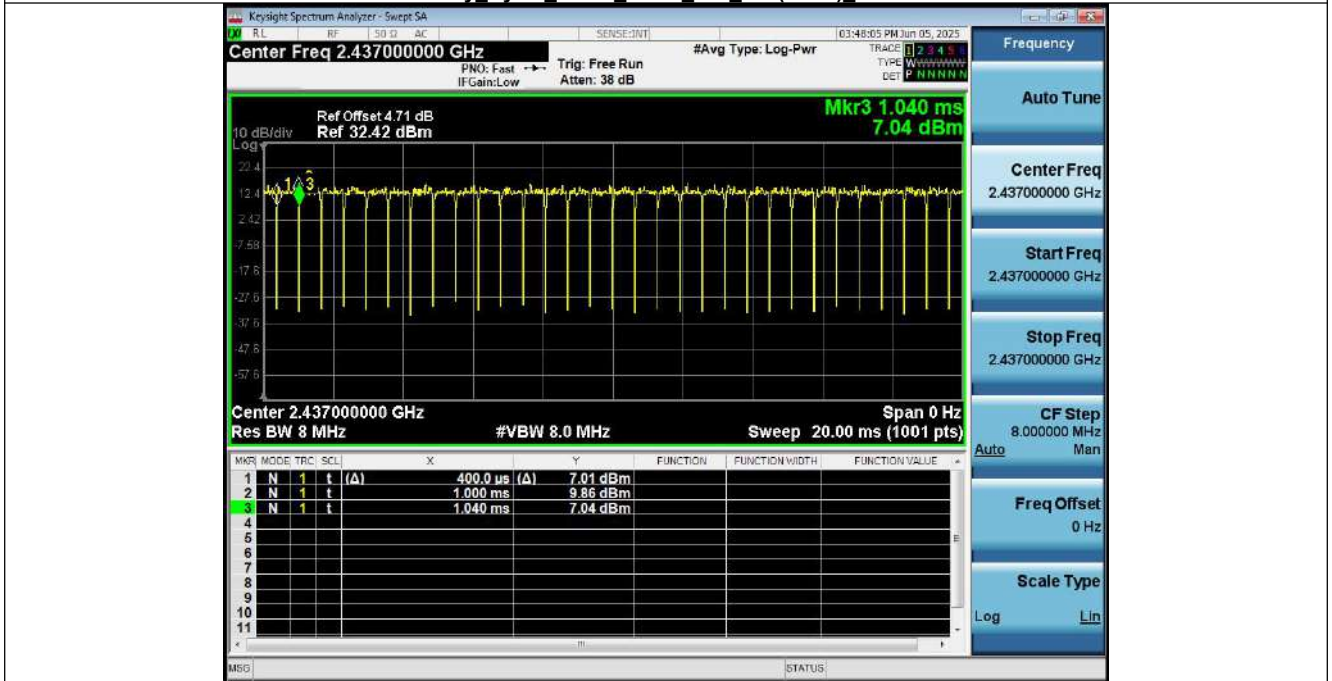
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2462



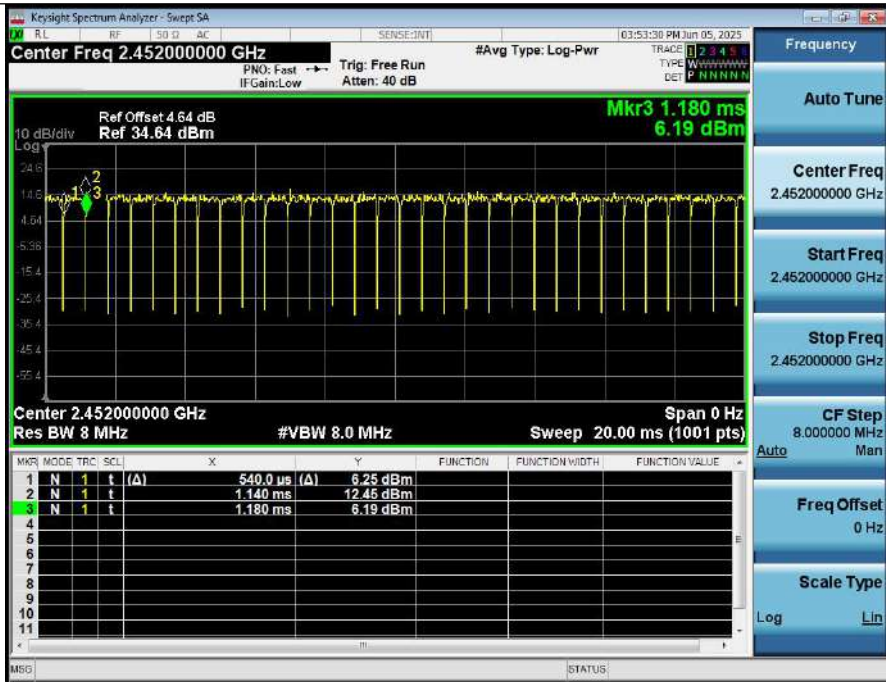
Duty_Cycle_NVNT_ANT1_802_11n(HT40)_2422



Duty_Cycle_NVNT_ANT1_802_11n(HT40)_2437



Duty_Cycle_NVNT_ANT1_802_11n(HT40)_2452



4. MAX. Output Power

Condition	Antenna	Modulation	Frequency (MHz)	Detector	Conducted Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	Peak	9.28	30	Pass
NVNT	ANT1	802.11b	2437.00	Peak	9.19	30	Pass
NVNT	ANT1	802.11b	2462.00	Peak	9.47	30	Pass
NVNT	ANT1	802.11g	2412.00	Peak	9.09	30	Pass
NVNT	ANT1	802.11g	2437.00	Peak	9.06	30	Pass
NVNT	ANT1	802.11g	2462.00	Peak	9.21	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	Peak	8.68	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	Peak	8.44	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	Peak	8.79	30	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	Peak	7.44	30	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	Peak	7.65	30	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	Peak	7.37	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	2.67	-10.00	-7.33	8	Pass
NVNT	ANT1	802.11b	2437.00	5.59	-10.00	-4.41	8	Pass

NVNT	ANT1	802.11b	2462.00	2.52	-10.00	-7.48	8	Pass
NVNT	ANT1	802.11g	2412.00	-3.73	-10.00	-13.73	8	Pass
NVNT	ANT1	802.11g	2437.00	-3.47	-10.00	-13.47	8	Pass
NVNT	ANT1	802.11g	2462.00	-3.89	-10.00	-13.89	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-3.16	-10.00	-13.16	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-3.09	-10.00	-13.09	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-3.46	-10.00	-13.46	8	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	-6.08	-10.00	-16.08	8	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	-6.58	-10.00	-16.58	8	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	-5.89	-10.00	-15.89	8	Pass

Power_Spectral_Density_NVNT_ANT1_802_11b_2412



Power_Spectral_Density_NVNT_ANT1_802_11b_2437



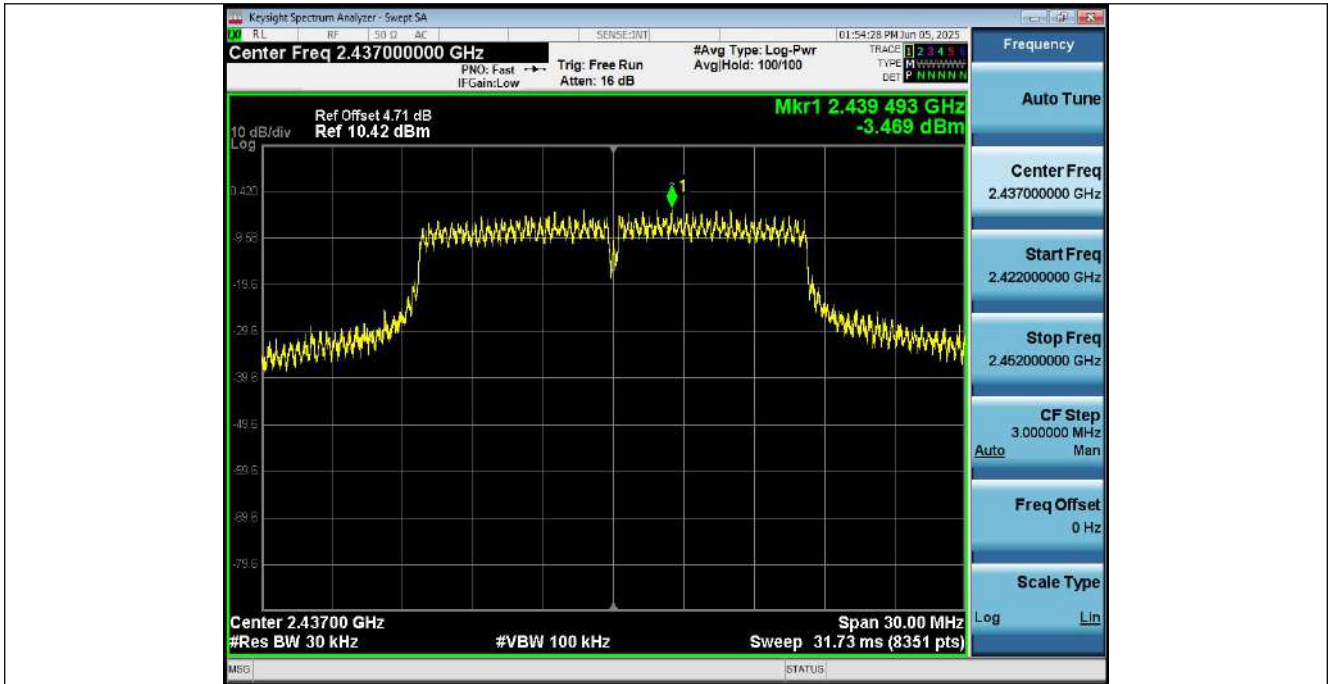
Power_Spectral_Density_NVNT_ANT1_802_11b_2462



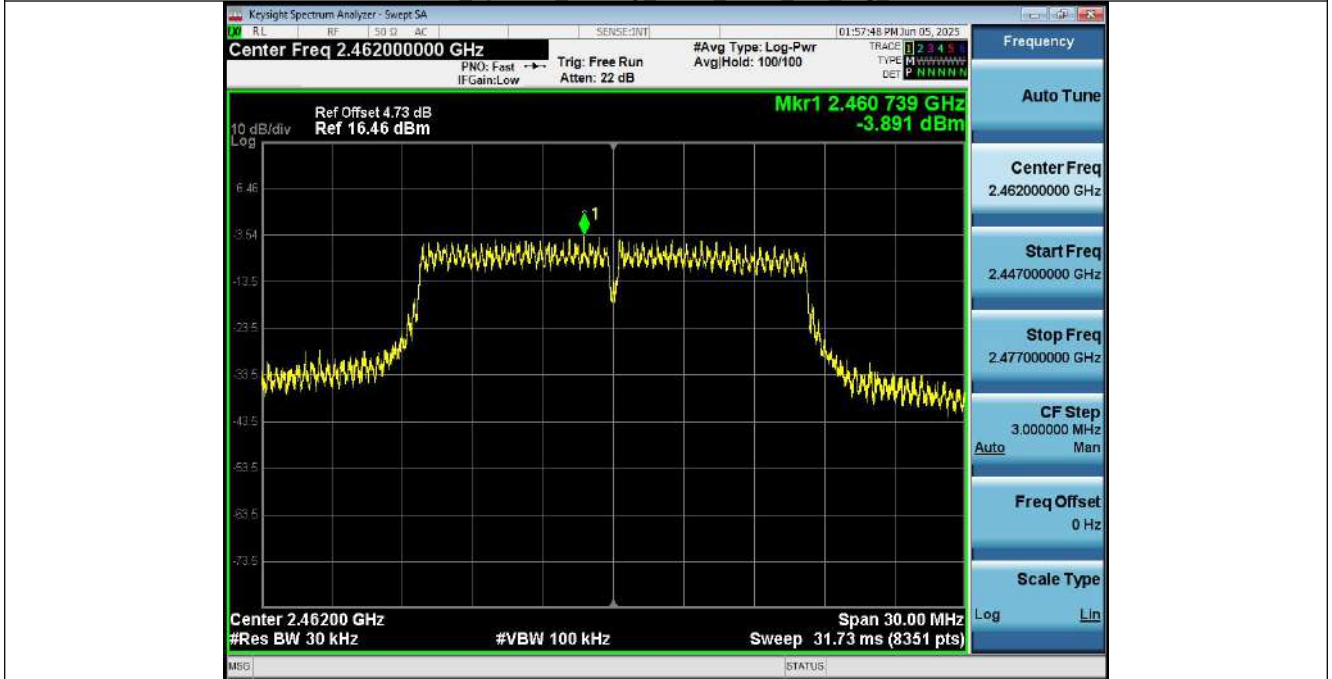
Power_Spectral_Density_NVNT_ANT1_802_11g_2412



Power_Spectral_Density_NVNT_ANT1_802_11g_2437



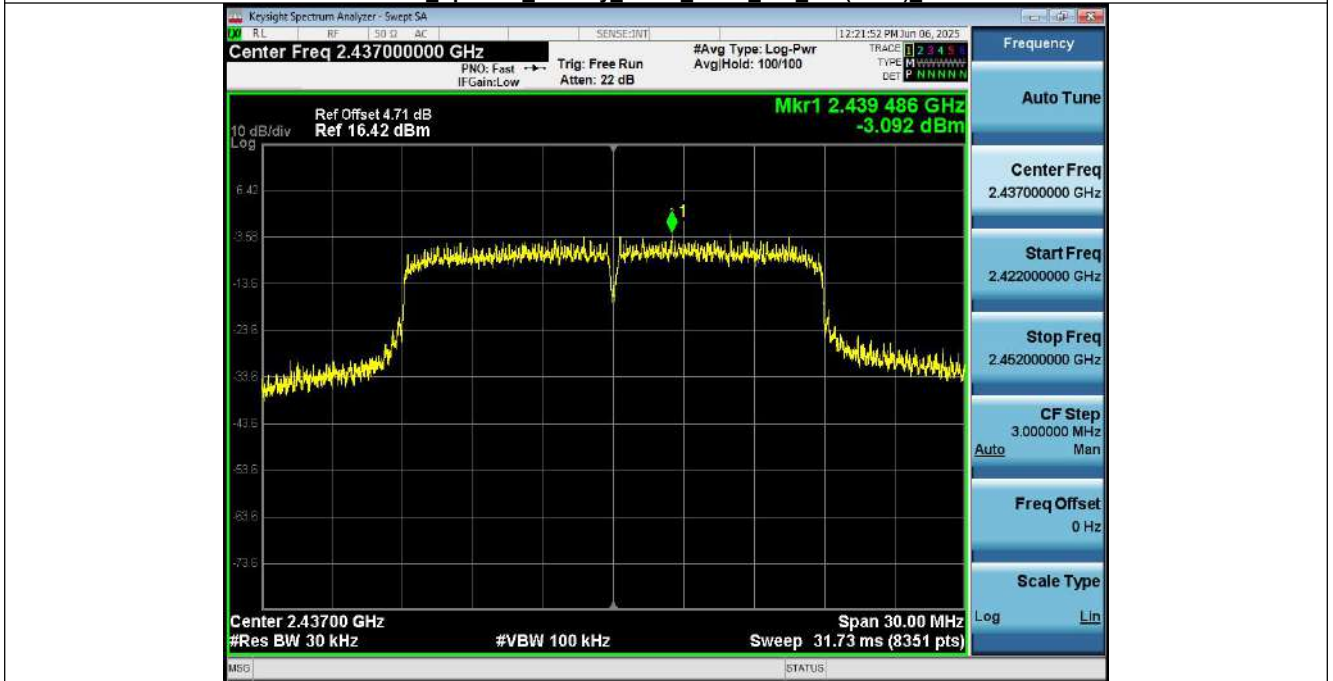
Power_Spectral_Density_NVNT_ANT1_802_11g_2462



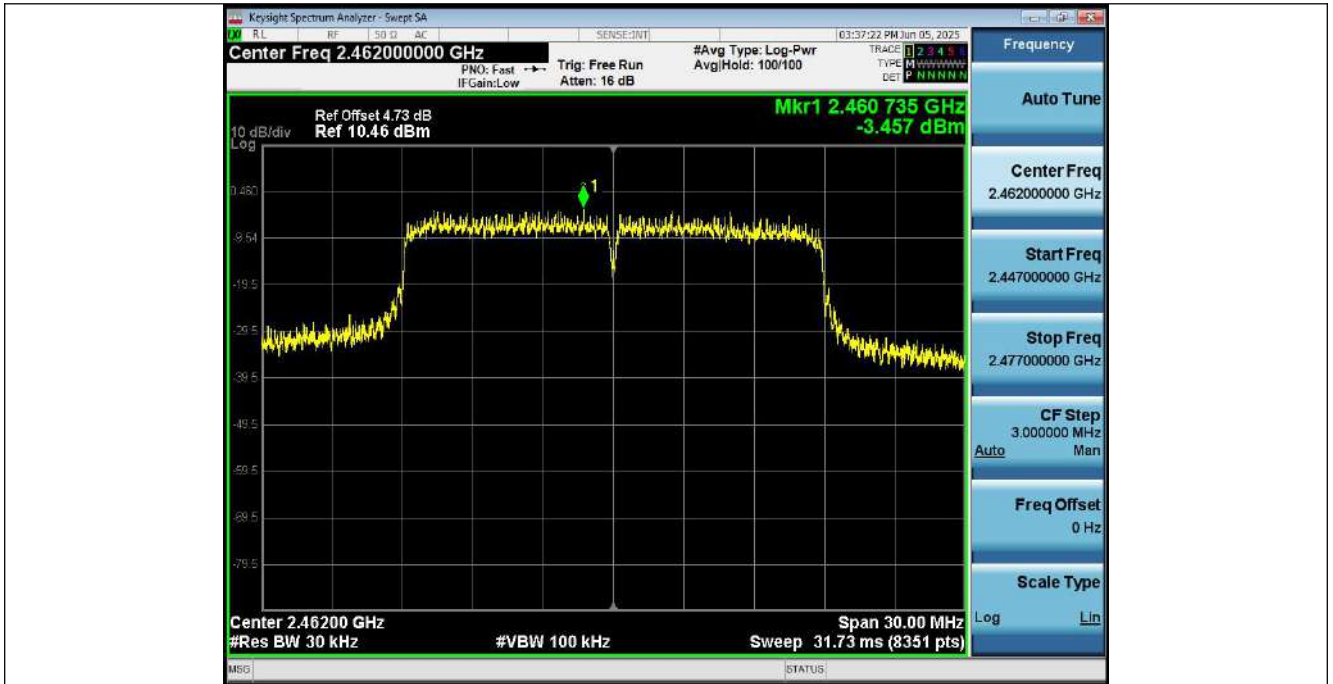
Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2412



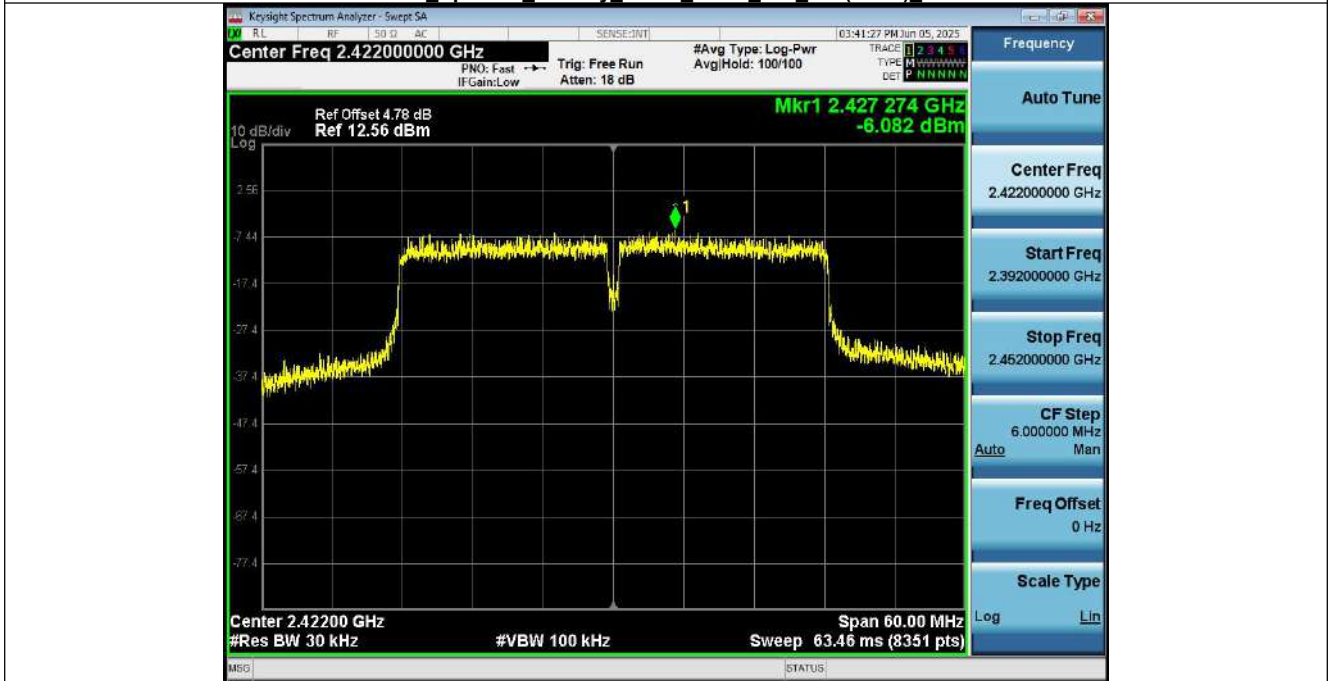
Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2437



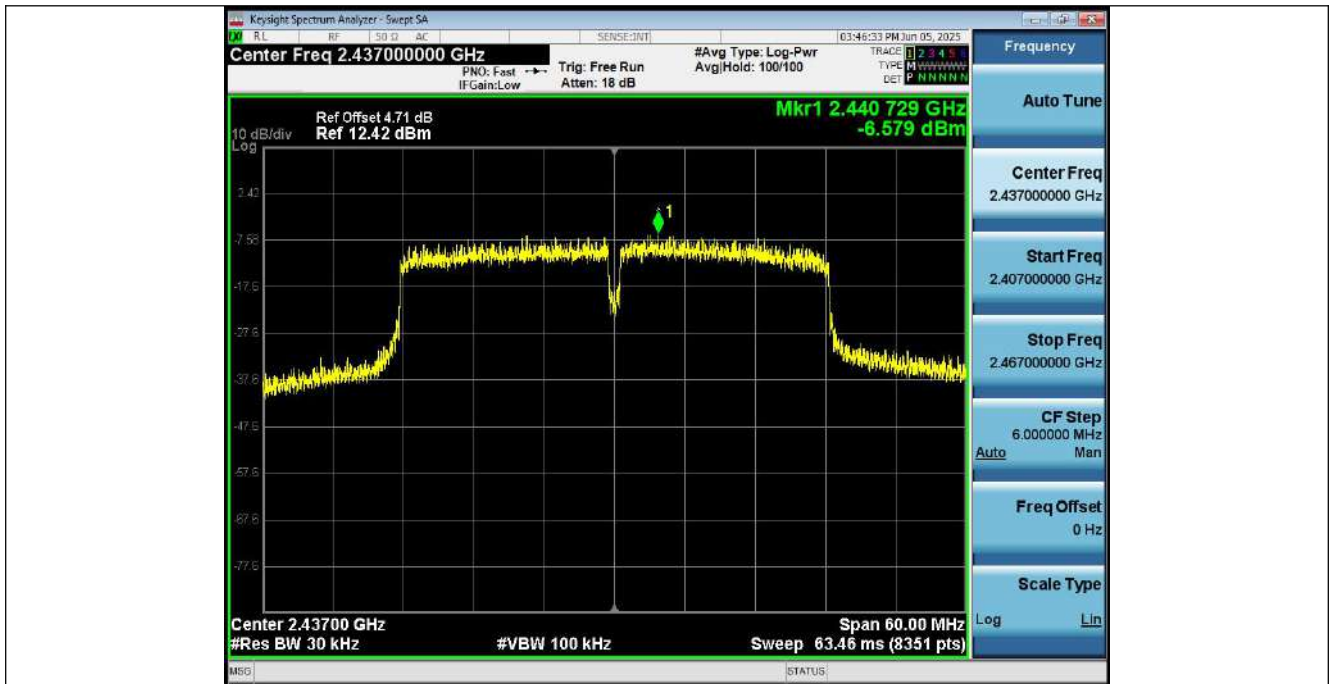
Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2462



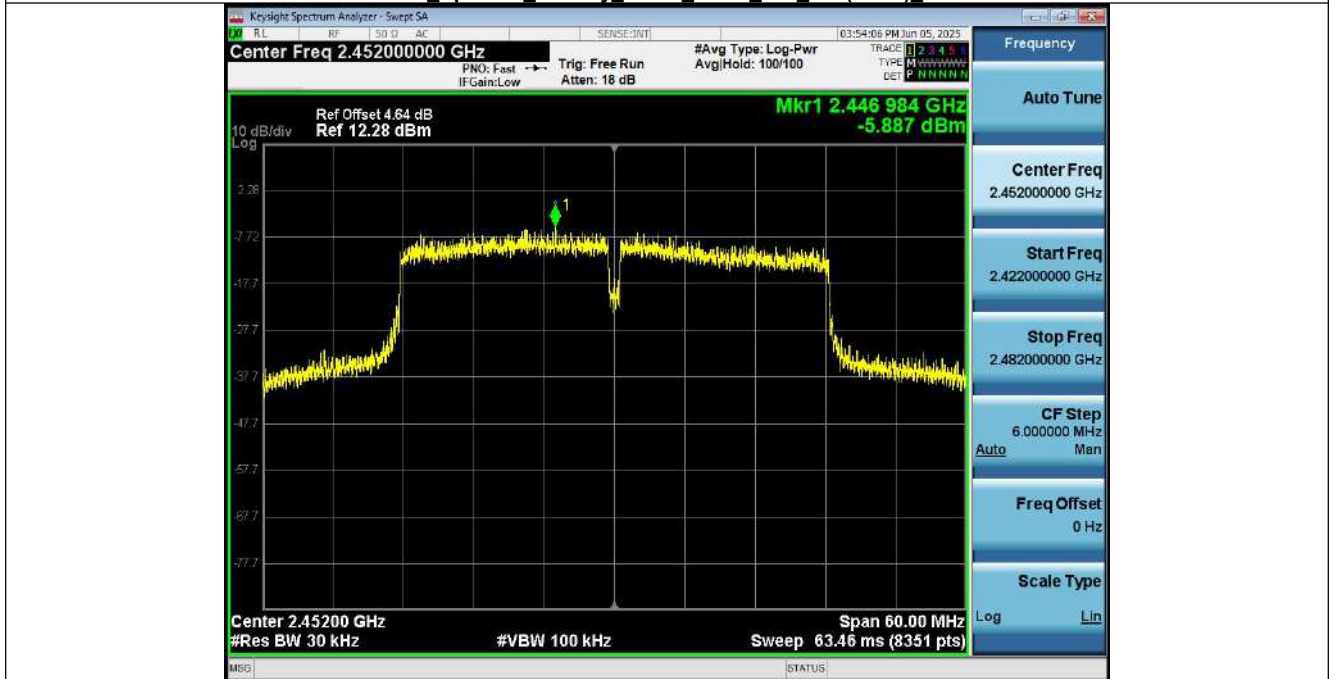
Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2422



Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2437



Power Spectral Density NVNT ANT1 802_11n(HT40)_2452



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	6.252	-31.663	-13.748	Pass
NVNT	ANT1	802.11b	2462.00	2483.536	6.328	-46.173	-13.672	Pass
NVNT	ANT1	802.11g	2412.00	2399.824	0.612	-28.899	-19.388	Pass
NVNT	ANT1	802.11g	2462.00	2483.632	0.768	-41.385	-19.232	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2398.256	1.057	-27.363	-18.943	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2483.536	1.341	-37.127	-18.659	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	2399.364	-1.461	-27.430	-21.461	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	2483.952	-1.032	-33.306	-21.032	Pass



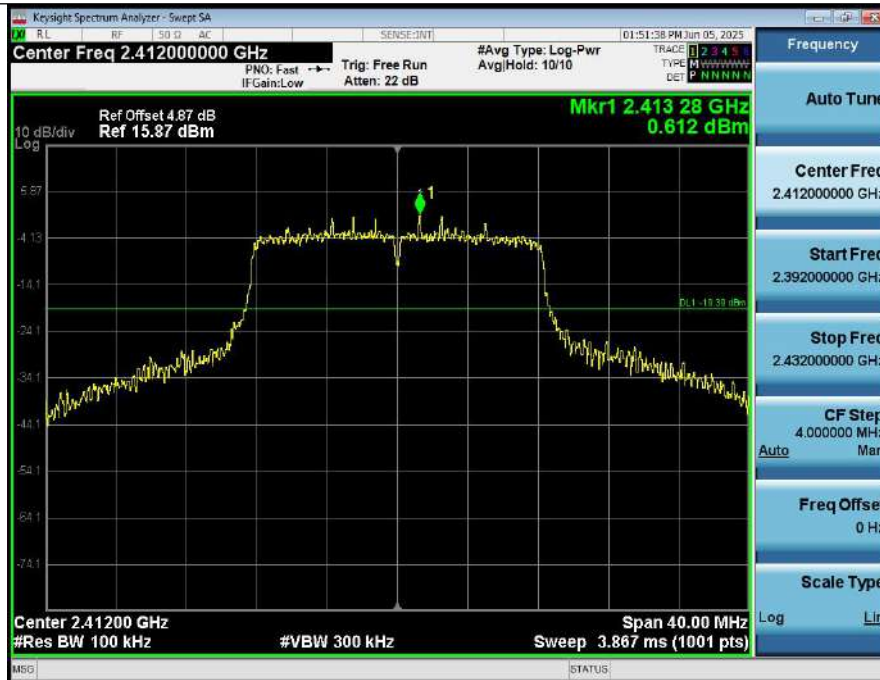
1 Reference_Level_NVNT_ANT1_802_11b_2462



2_Bandedge_NVNT_ANT1_802_11b_2462



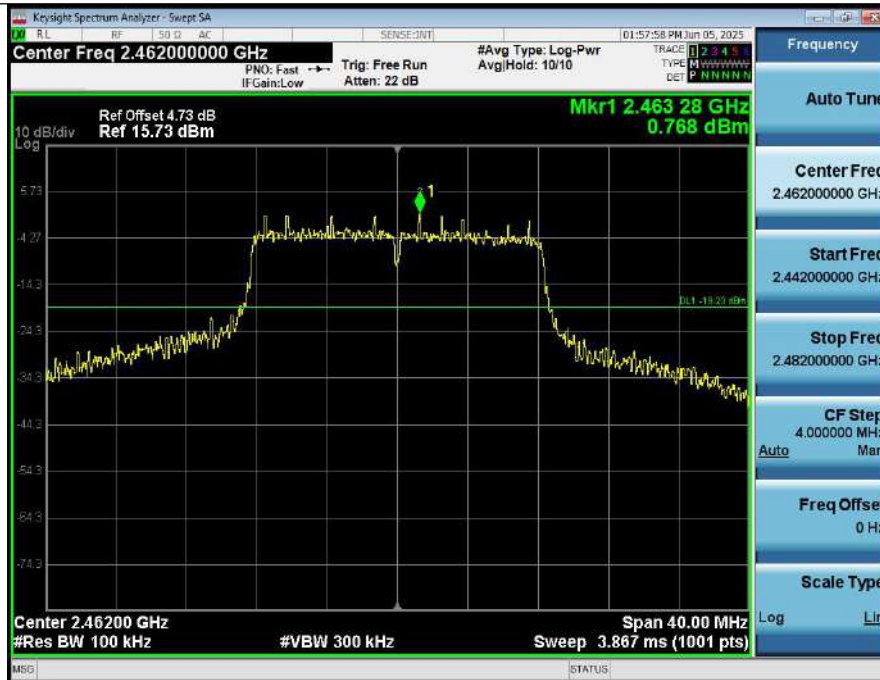
1_Reference_Level_NVNT_ANT1_802_11g_2412



2_Bandedge_NVNT_ANT1_802_11g_2412



1_Reference_Level_NVNT_ANT1_802_11g_2462



2_Bandedge_NVNT_ANT1_802_11g_2462



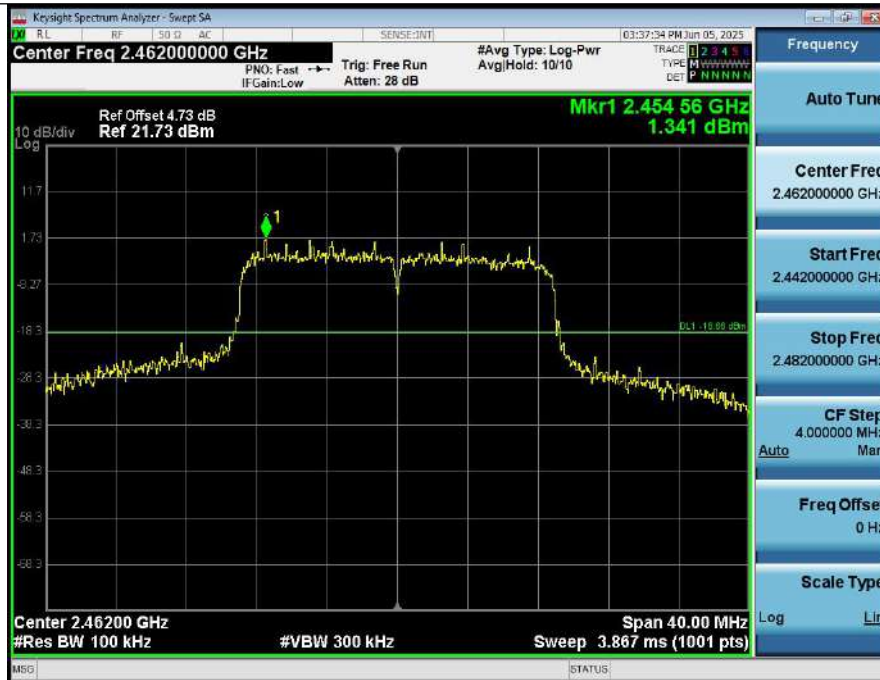
1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2412



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



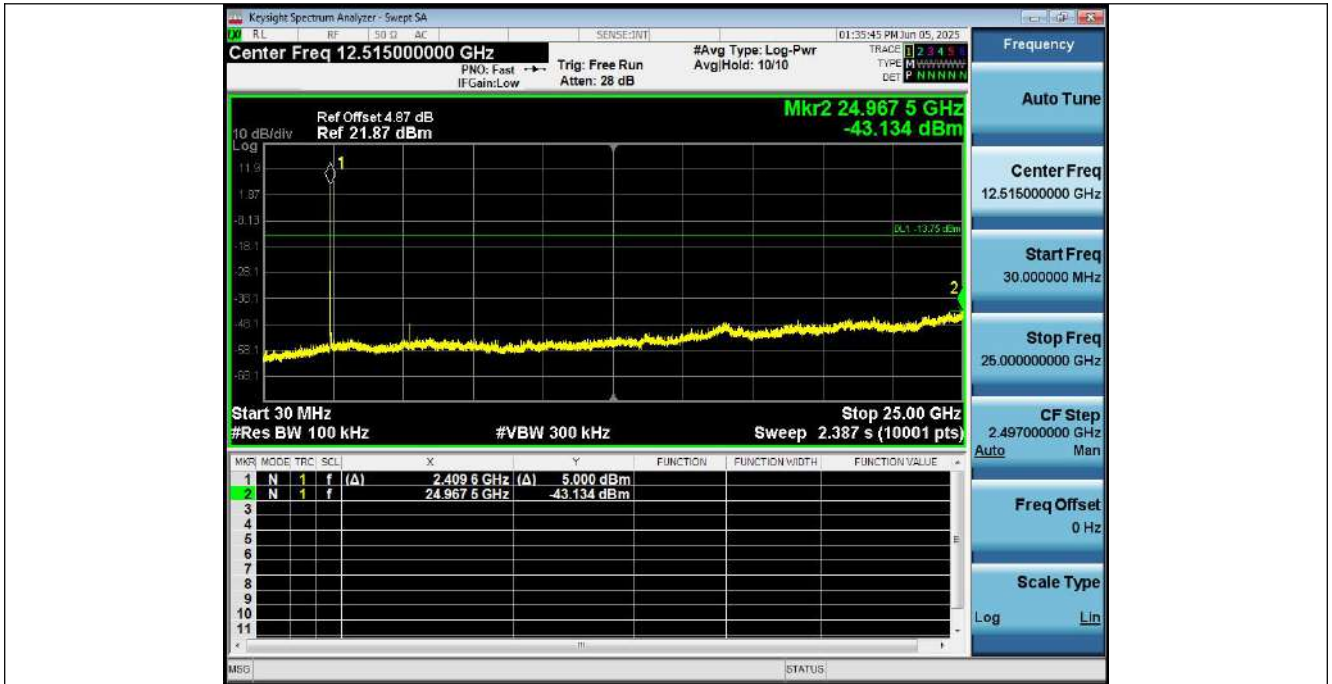
2_Bandedge_NVNT_ANT1_802_11n(HT40)_2452



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	24967.539	6.252	-43.134	-13.748	Pass
NVNT	ANT1	802.11b	2437.00	913.938	6.788	-37.213	-13.212	Pass
NVNT	ANT1	802.11b	2462.00	911.441	6.328	-29.493	-13.672	Pass
NVNT	ANT1	802.11g	2412.00	24970.036	0.612	-48.638	-19.388	Pass
NVNT	ANT1	802.11g	2437.00	24975.030	0.532	-43.425	-19.468	Pass
NVNT	ANT1	802.11g	2462.00	24987.515	0.768	-49.558	-19.232	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	25000.000	0.448	-49.312	-19.552	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	24977.527	1.193	-42.907	-18.807	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	24965.042	1.341	-43.108	-18.659	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	24992.509	-1.461	-51.693	-21.461	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	24877.647	-1.668	-51.414	-21.668	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	24985.018	-1.032	-51.408	-21.032	Pass

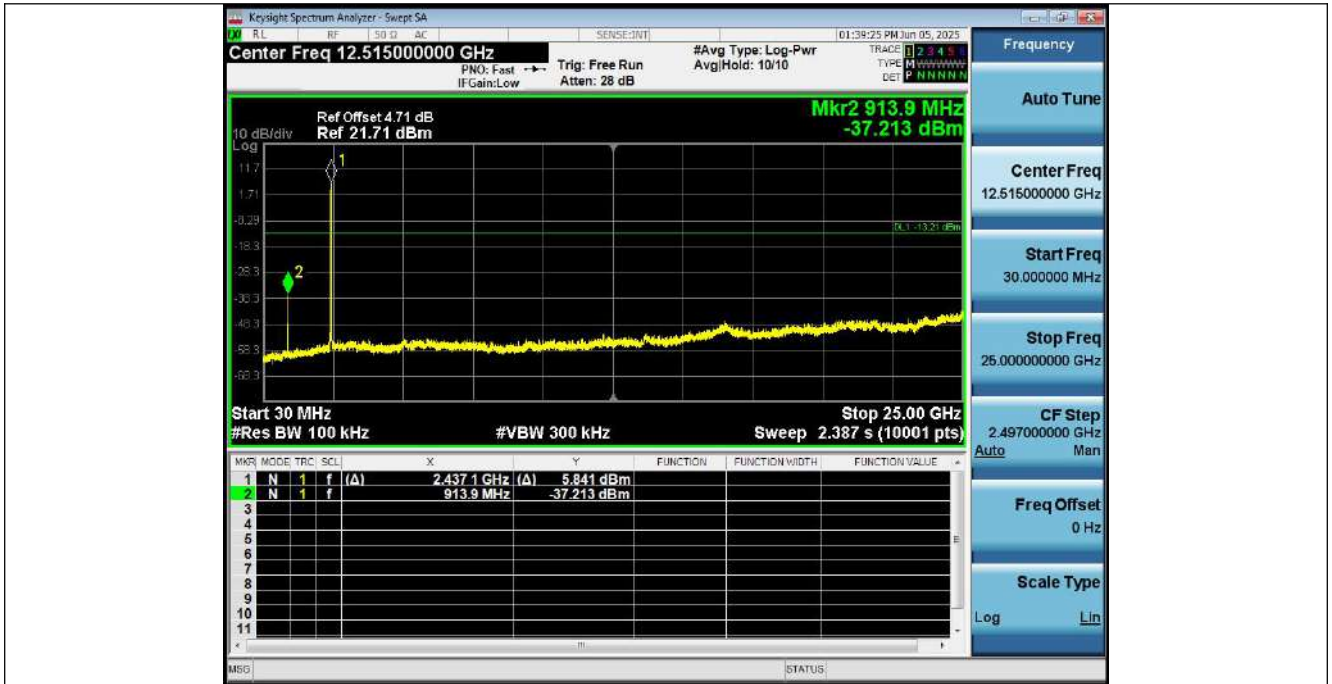




1 Reference Level NVNT_ANT1_802_11b_2437



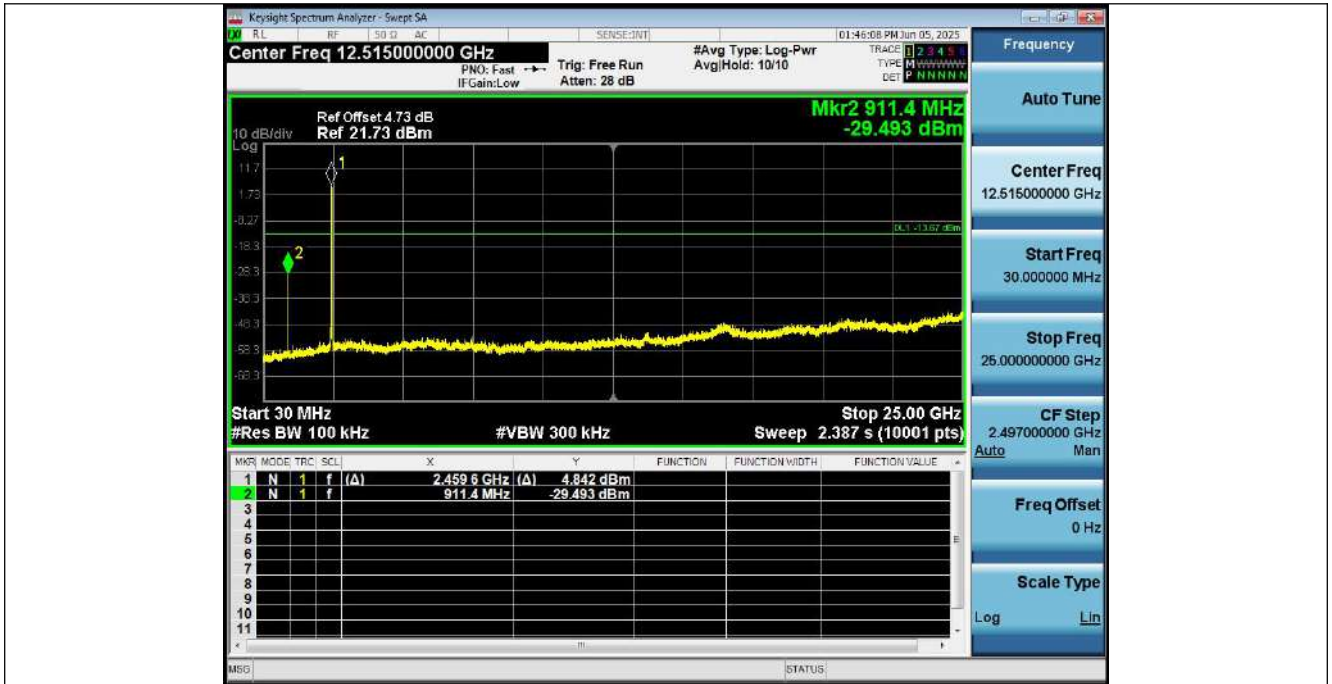
2 Spurious Emission NVNT_ANT1_802_11b_2437



1 Reference Level NVNT_ANT1_802_11b_2462



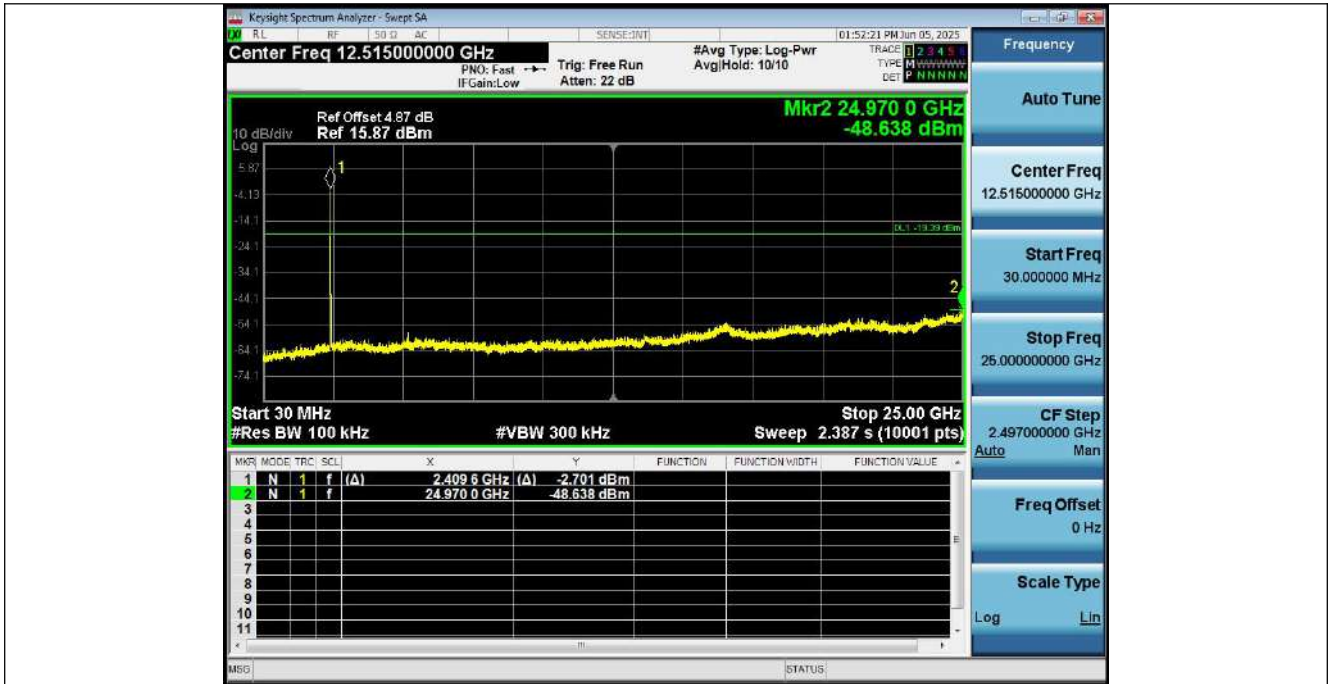
2 Spurious Emission_NVNT_ANT1_802_11b_2462



1 Reference Level NVNT_ANT1_802_11g_2412



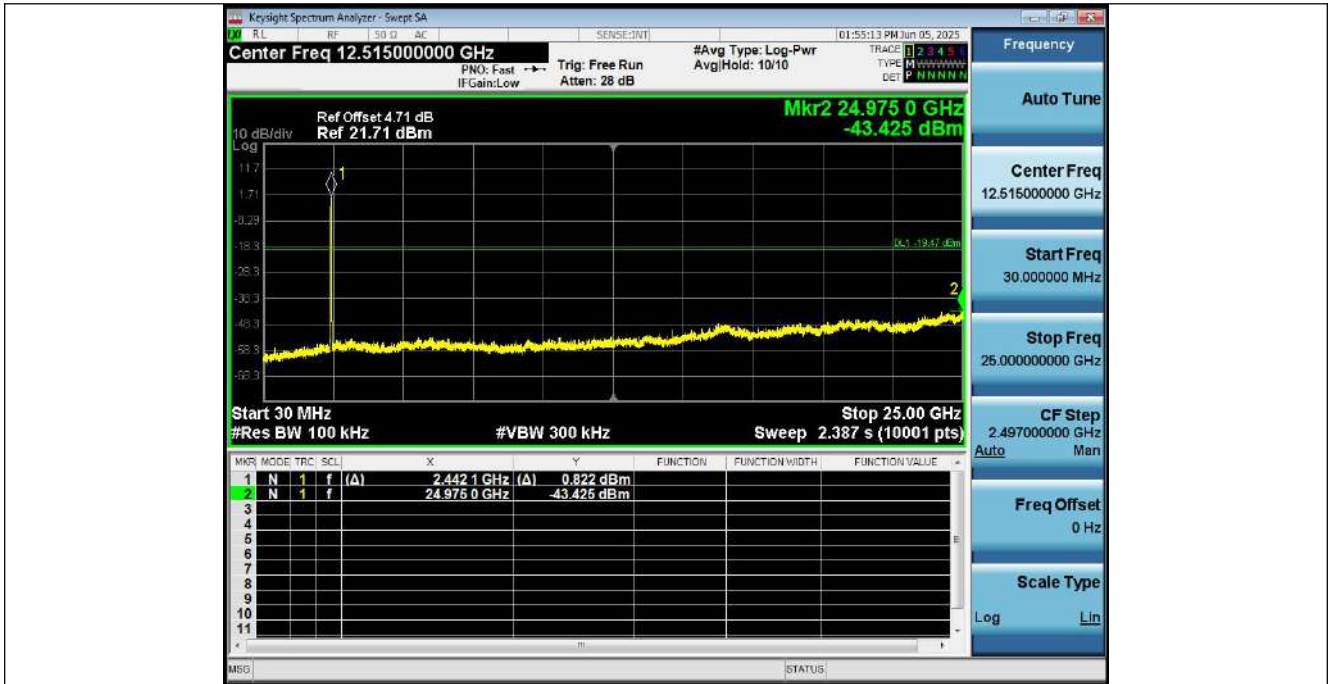
2 Spurious Emission NVNT_ANT1_802_11g_2412



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



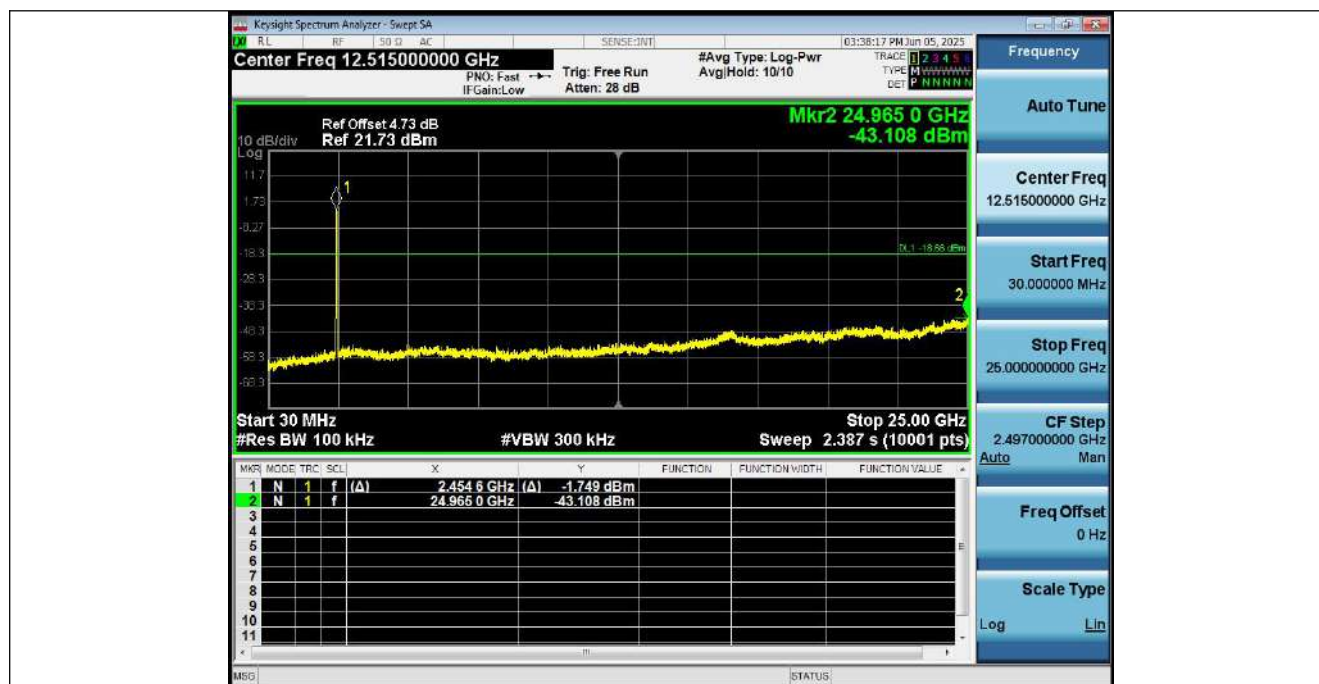
2 Spurious Emission NVNT_ANT1_802_11n(HT20)_2437



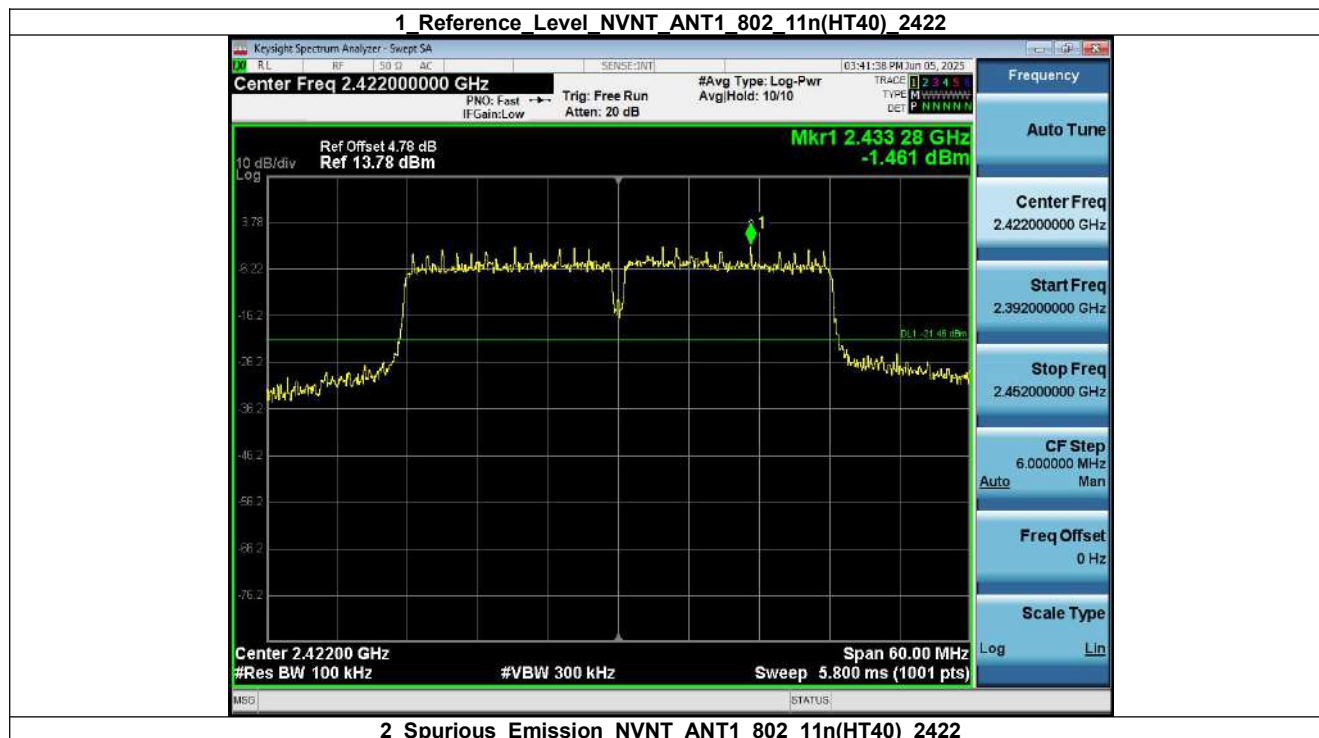
1 Reference Level NVNT ANT1 802 11n(HT20) 2462



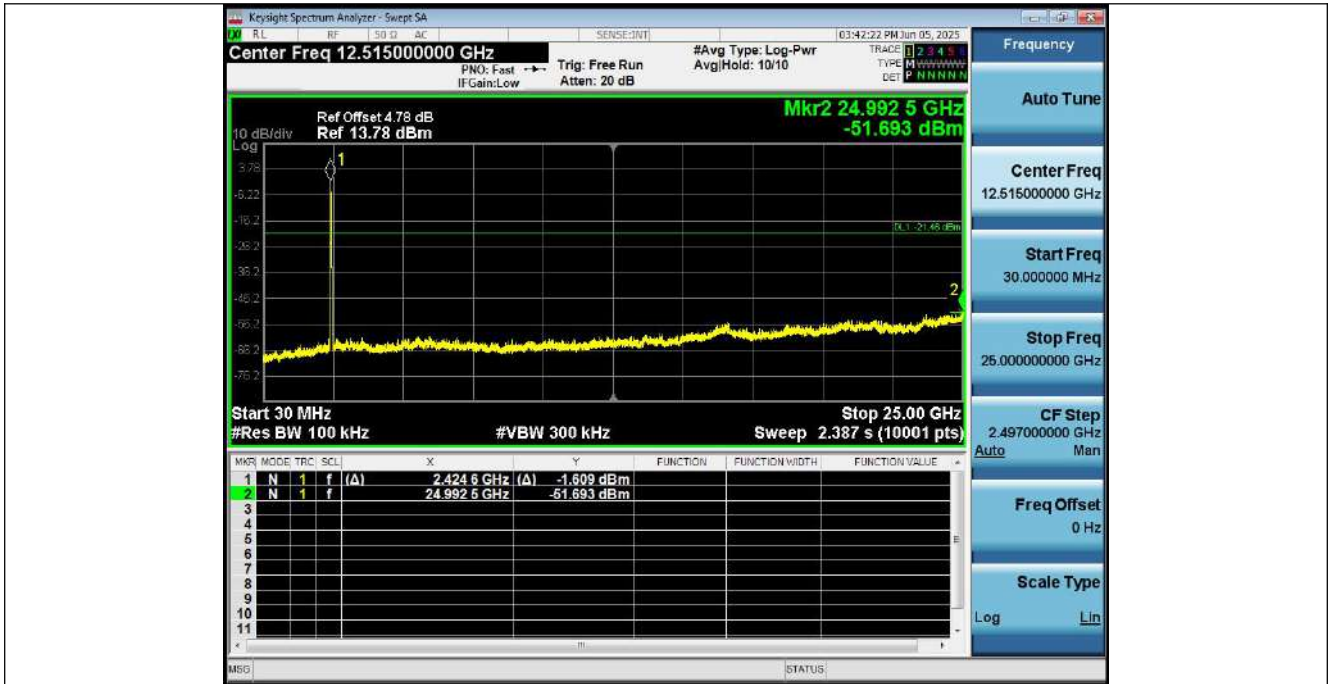
2 Spurious Emission NVNT ANT1 802 11n(HT20) 2462



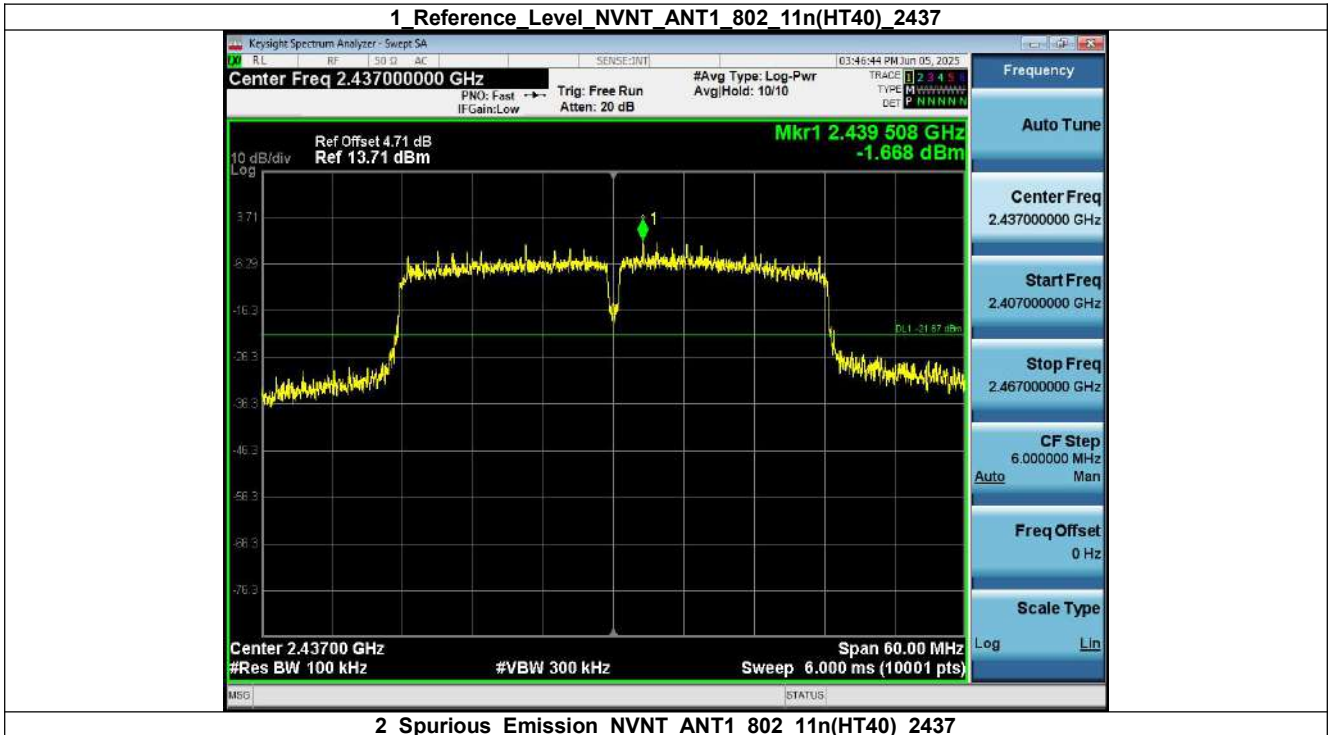
1 Reference Level NVNT_ANT1_802_11n(HT40)_2422



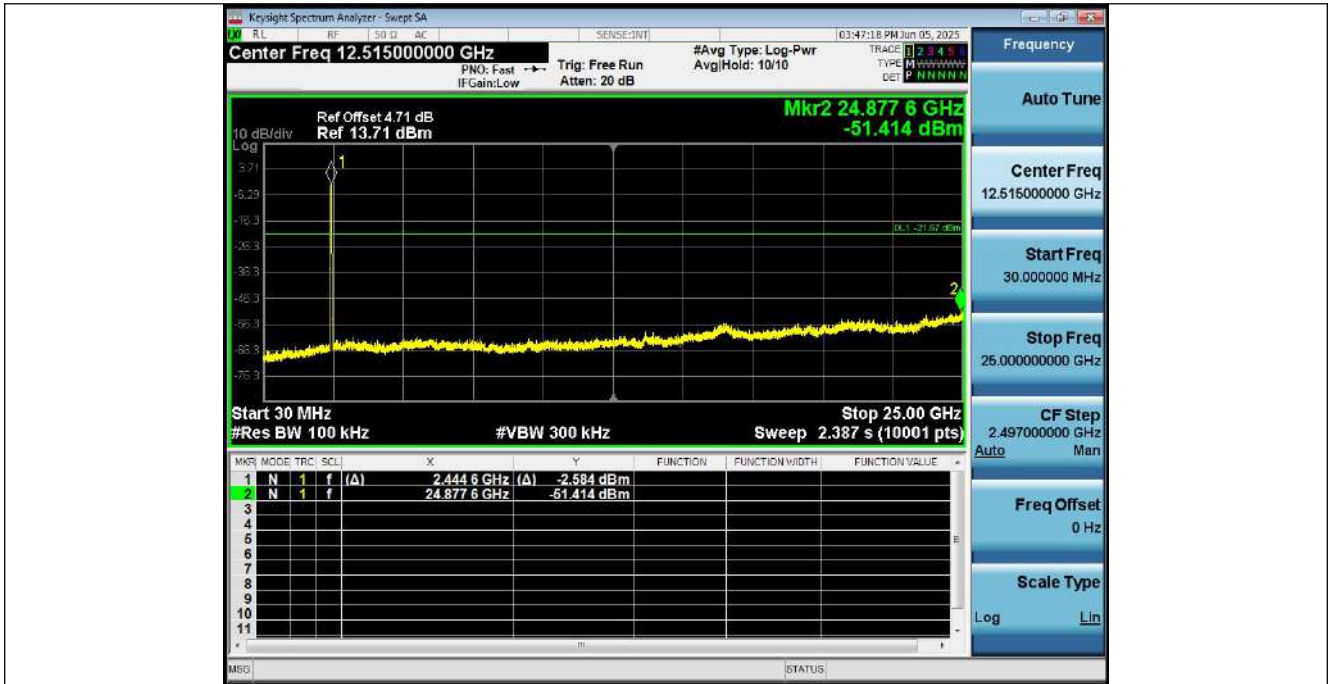
2 Spurious Emission NVNT_ANT1_802_11n(HT40)_2422



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

