

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	24
6. Bandedge	31
7. Spurious Emission	39

FCC ID WIFI2.4

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	8.59	500	Pass
NVNT	ANT1	802.11b	2437.00	9.06	500	Pass
NVNT	ANT1	802.11b	2462.00	8.62	500	Pass
NVNT	ANT1	802.11g	2412.00	16.07	500	Pass
NVNT	ANT1	802.11g	2437.00	16.31	500	Pass
NVNT	ANT1	802.11g	2462.00	16.34	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	16.74	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	16.85	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	17.29	500	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	35.70	500	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	35.34	500	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	35.58	500	Pass



-6dB_Bandwidth_NVNT_ANT1_802_11b_2437





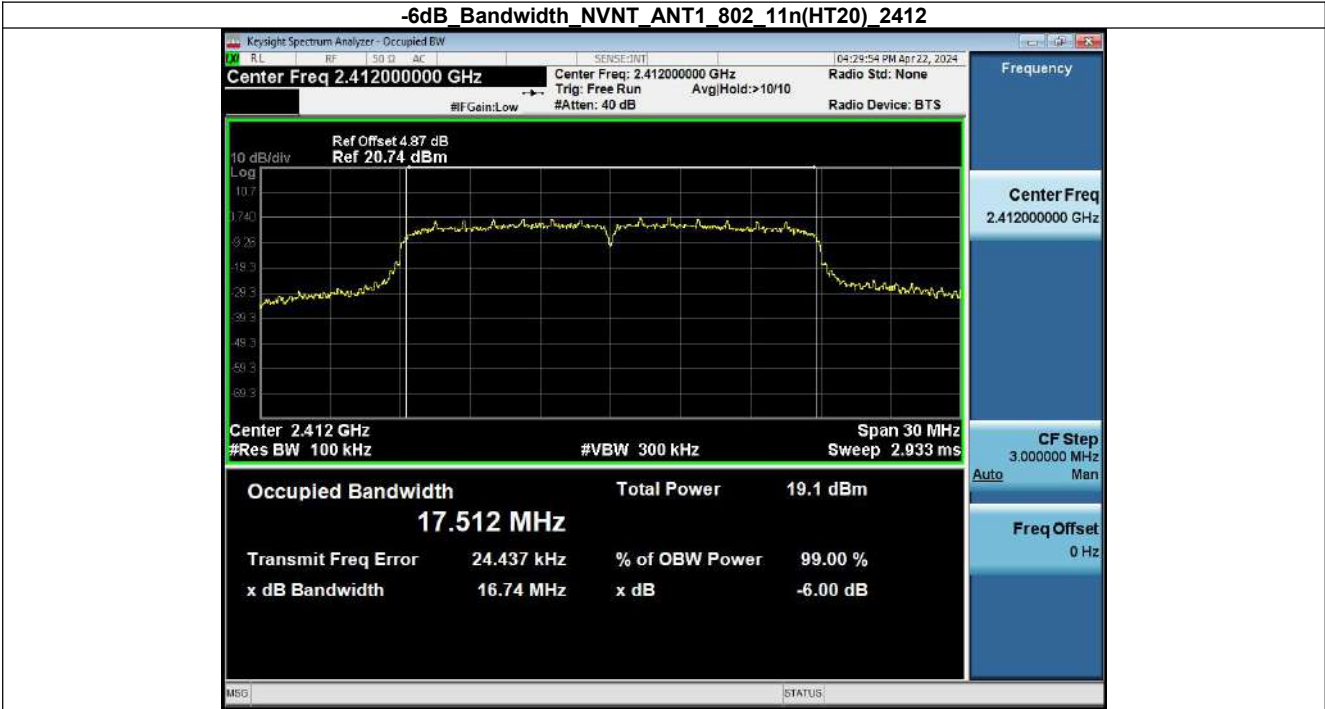
-6dB_Bandwidth_NVNT_ANT1_802_11g_2437



-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	11.934
NVNT	ANT1	802.11b	2437.00	12.094
NVNT	ANT1	802.11b	2462.00	12.098
NVNT	ANT1	802.11g	2412.00	17.359
NVNT	ANT1	802.11g	2437.00	18.027
NVNT	ANT1	802.11g	2462.00	17.906
NVNT	ANT1	802.11n(HT20)	2412.00	17.772
NVNT	ANT1	802.11n(HT20)	2437.00	17.956
NVNT	ANT1	802.11n(HT20)	2462.00	18.118
NVNT	ANT1	802.11n(HT40)	2422.00	36.761
NVNT	ANT1	802.11n(HT40)	2437.00	36.438
NVNT	ANT1	802.11n(HT40)	2452.00	36.573



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

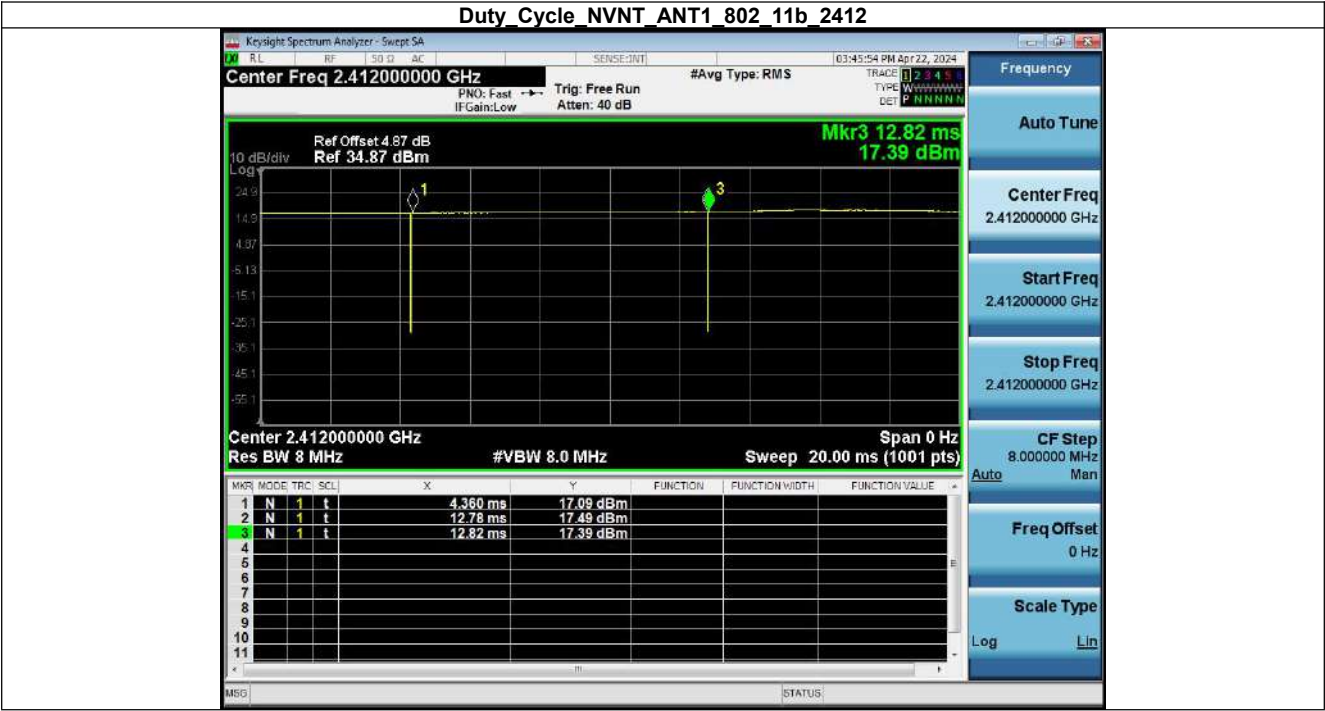


99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT40)_2452

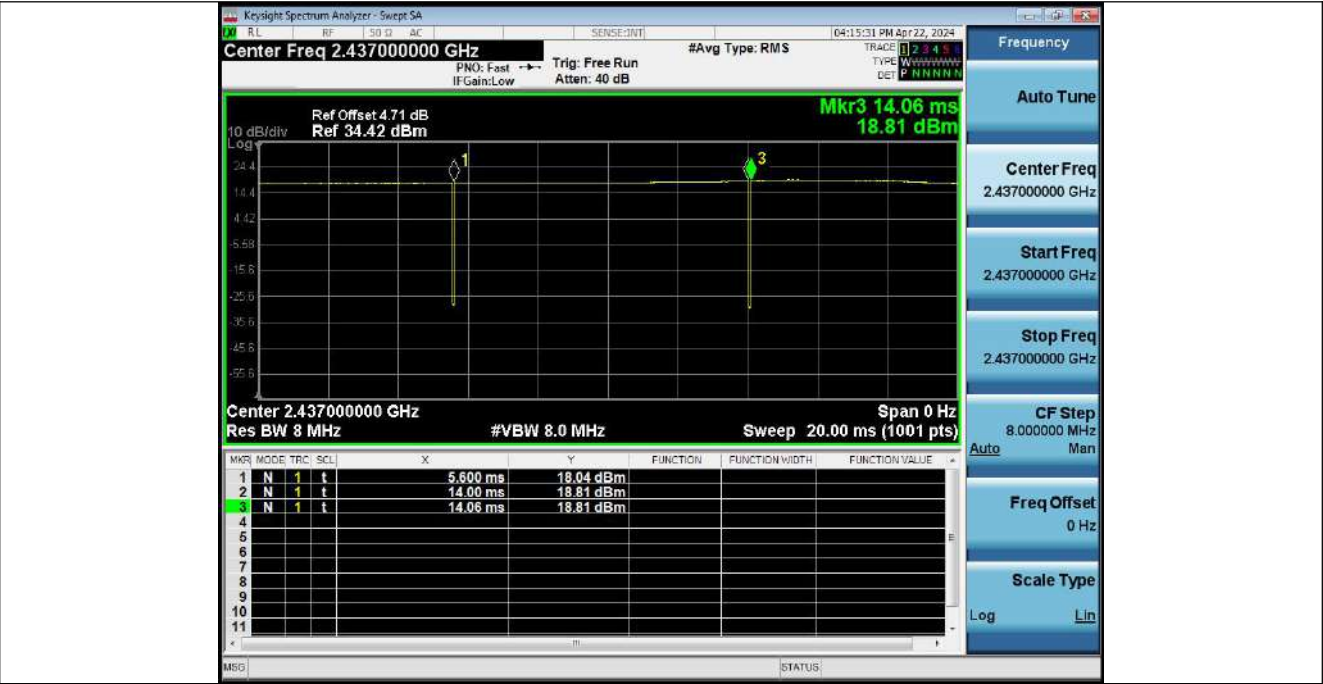


3. Duty Cycle

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



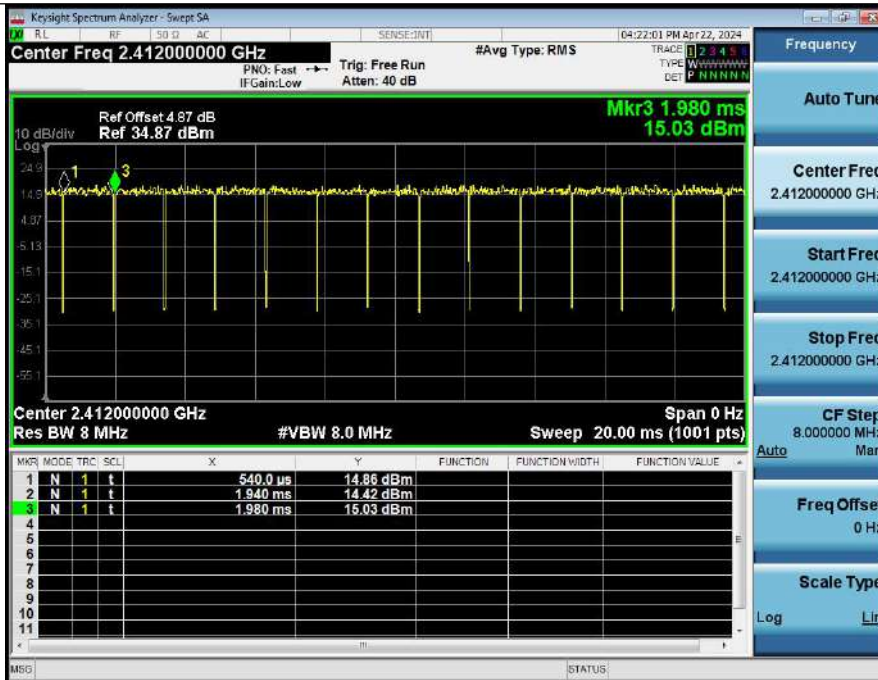
Duty Cycle NVNT ANT1 802 11b 2437



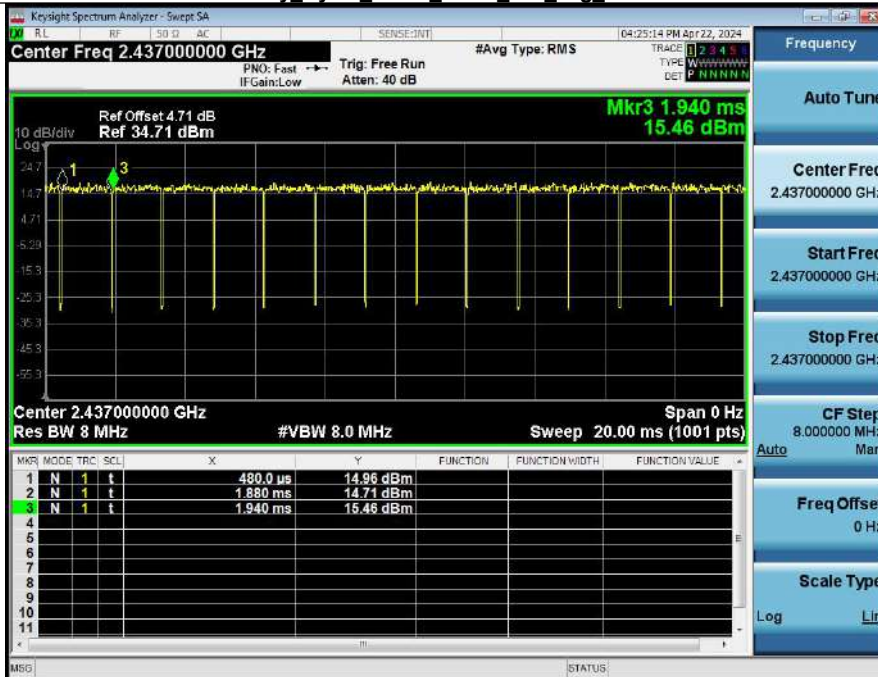
Duty_Cycle_NVNT_ANT1_802_11b_2462



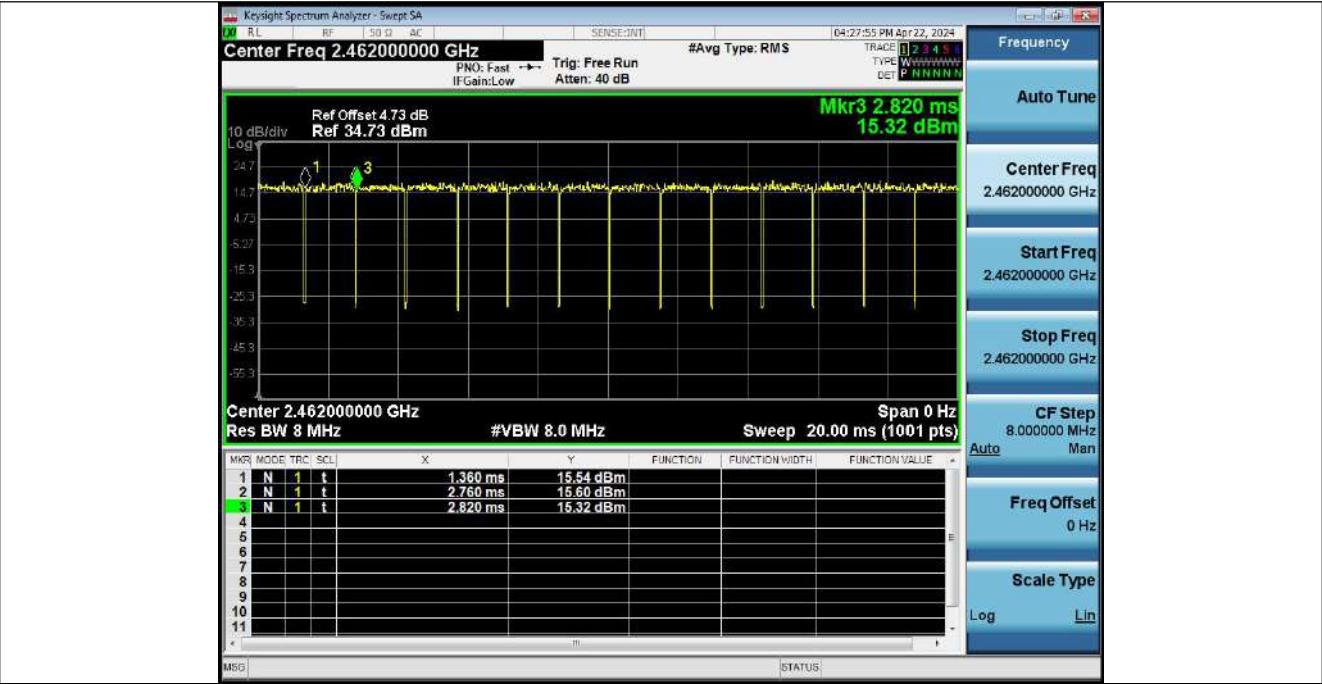
Duty_Cycle_NVNT_ANT1_802_11g_2412



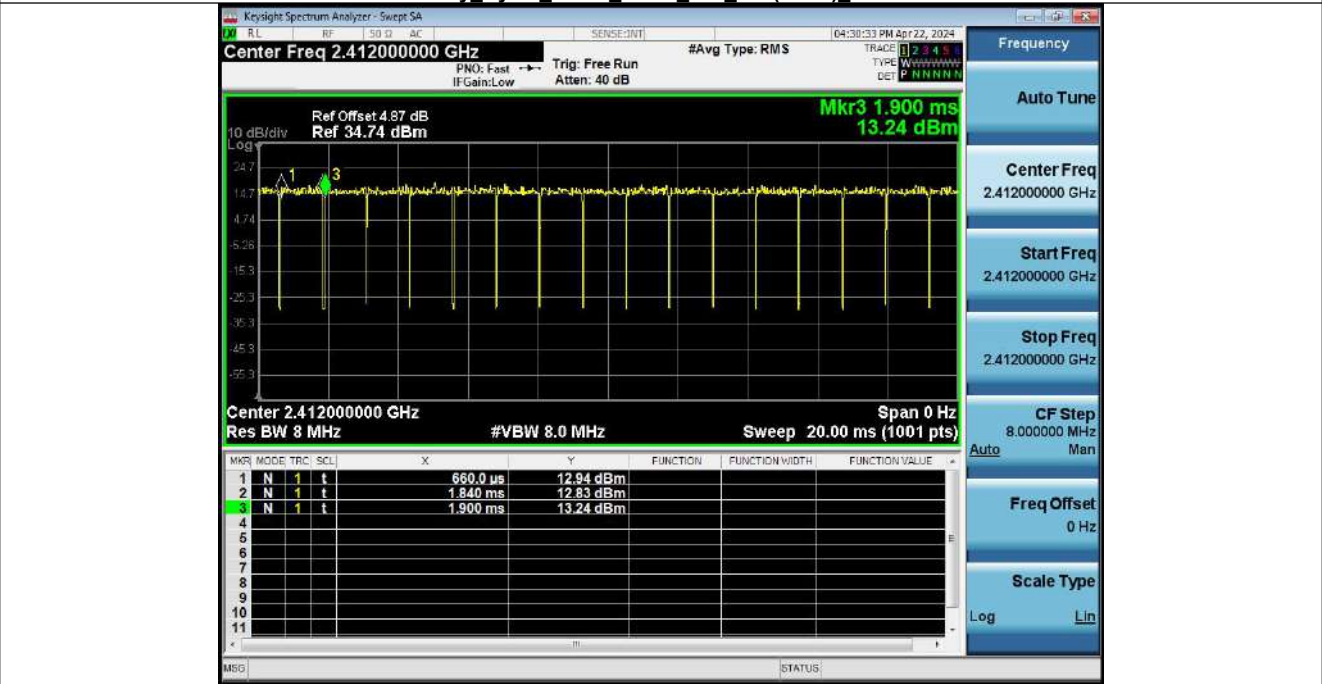
Duty_Cycle_NVNT_ANT1_802_11g_2437



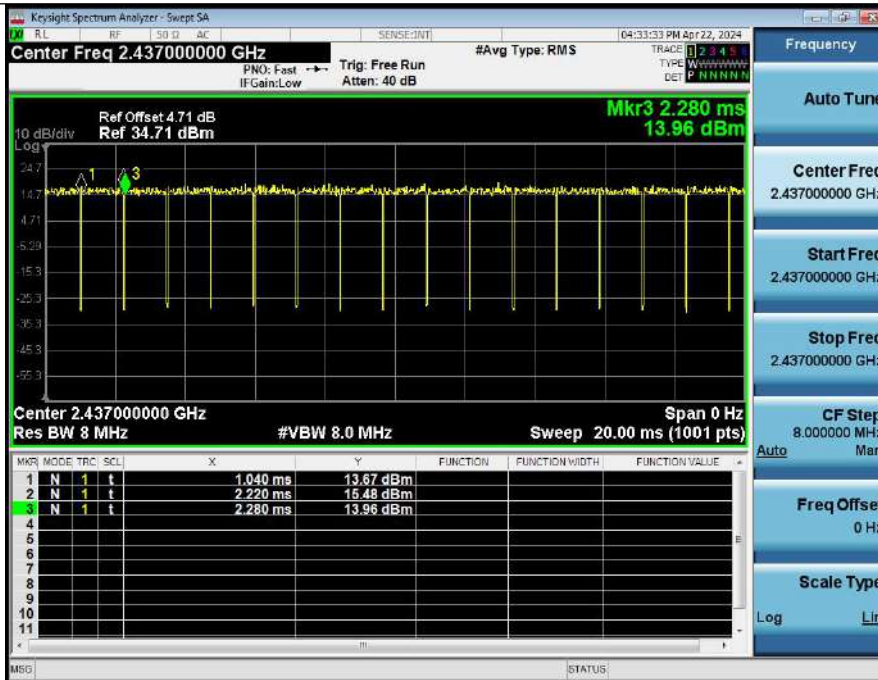
Duty_Cycle_NVNT_ANT1_802_11g_2462



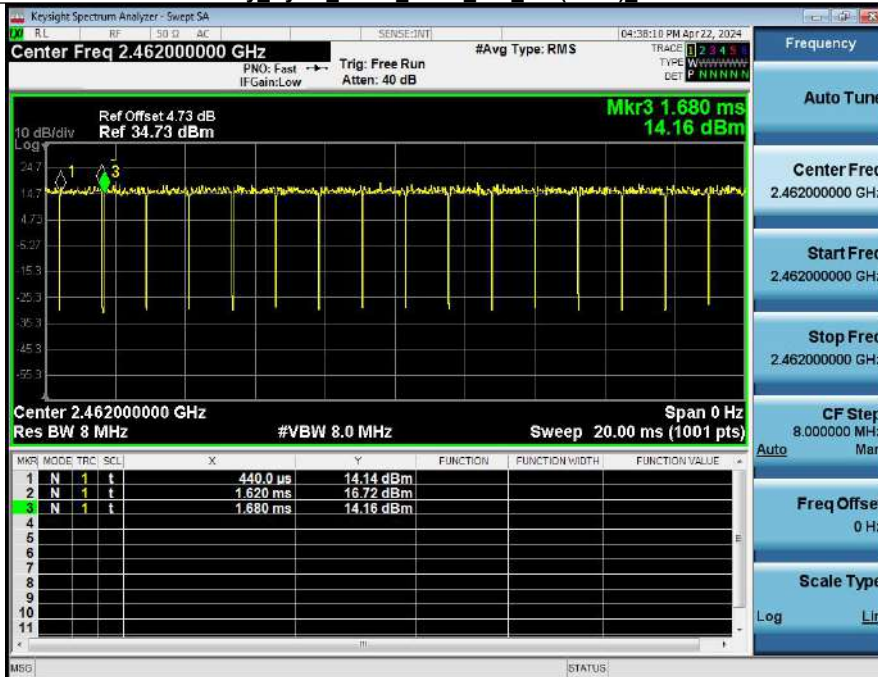
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2412



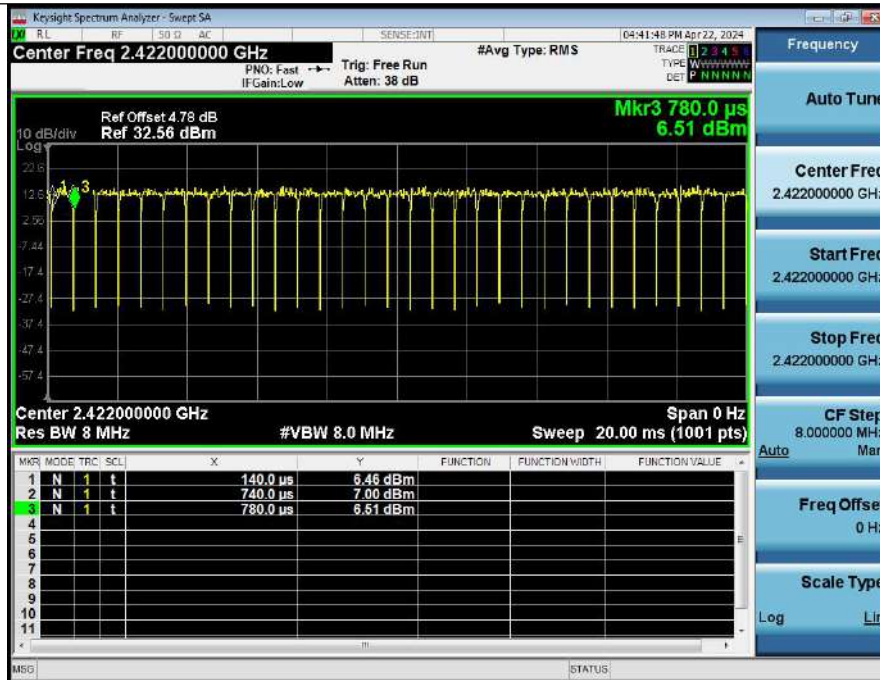
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2437



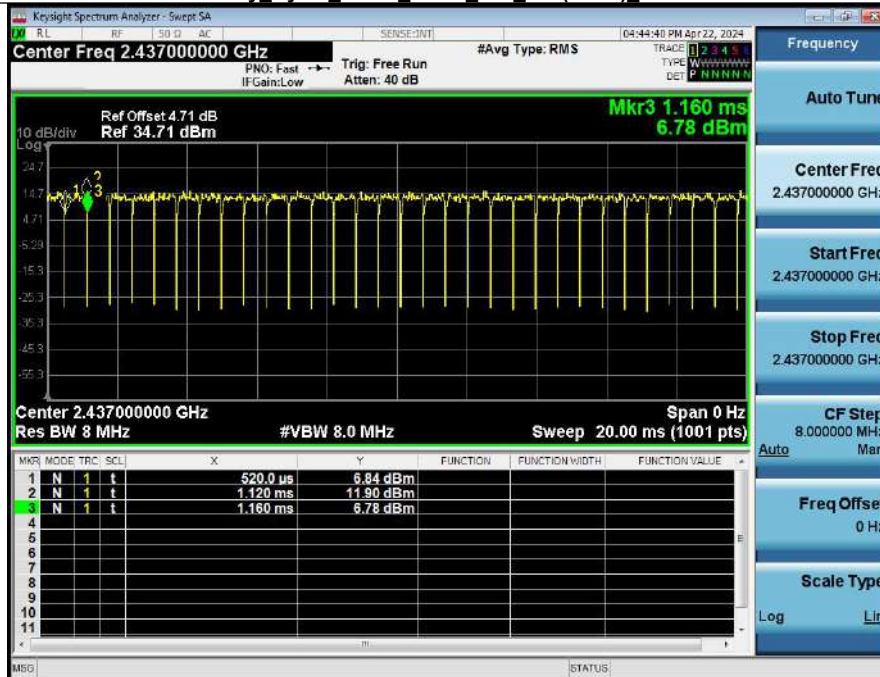
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2462



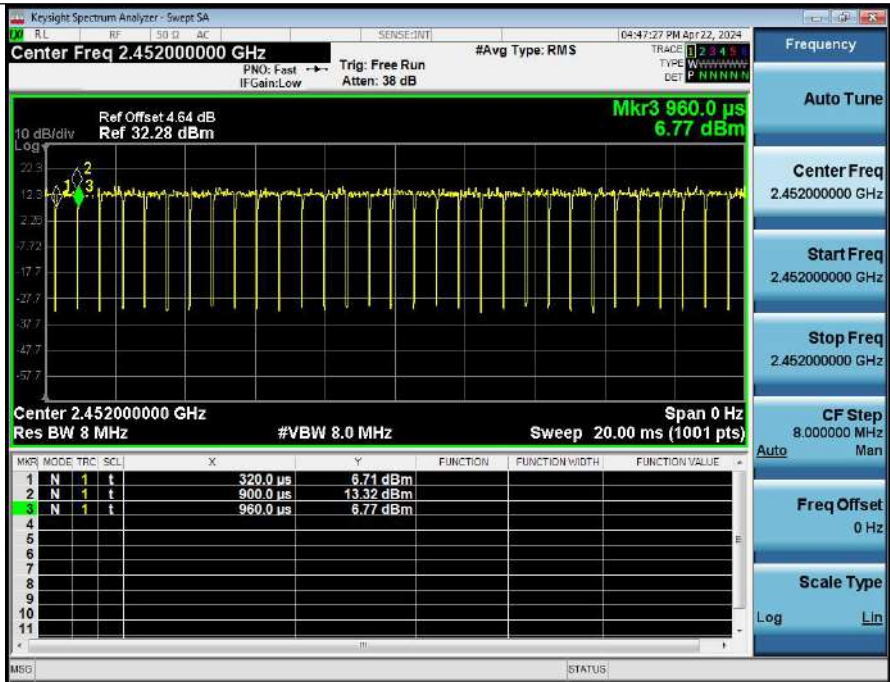
Duty_Cycle_NVNT_ANT1_802_11n(HT40)_2422



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)	Total Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	Peak	15.91	15.91	30	Pass
NVNT	ANT1	802.11b	2437.00	Peak	16.80	16.80	30	Pass
NVNT	ANT1	802.11b	2462.00	Peak	16.83	16.83	30	Pass
NVNT	ANT1	802.11g	2412.00	Peak	19.86	19.86	30	Pass
NVNT	ANT1	802.11g	2437.00	Peak	20.50	20.50	30	Pass
NVNT	ANT1	802.11g	2462.00	Peak	20.58	20.58	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	Peak	19.70	19.70	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	Peak	20.36	20.36	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	Peak	20.24	20.24	30	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	Peak	20.63	20.63	30	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	Peak	20.44	20.44	30	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	Peak	19.91	19.91	30	Pass

5. Power Spectral Density

Condition	Antenna	Modulation	Frequency (MHz)	PSD(dBm/30kHz)	RB factor(dB)	PSD(dBm/3kHz)	limit(dBm/3kHz)	Result
NVNT	ANT1	802.11b	2412.00	1.68	-10.00	-8.32	8	Pass
NVNT	ANT1	802.11b	2437.00	1.39	-10.00	-8.61	8	Pass
NVNT	ANT1	802.11b	2462.00	1.38	-10.00	-8.63	8	Pass
NVNT	ANT1	802.11g	2412.00	-2.95	-10.00	-12.95	8	Pass
NVNT	ANT1	802.11g	2437.00	-2.34	-10.00	-12.34	8	Pass
NVNT	ANT1	802.11g	2462.00	-2.47	-10.00	-12.47	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-4.19	-10.00	-14.19	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-3.51	-10.00	-13.51	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-3.81	-10.00	-13.81	8	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	-6.35	-10.00	-16.35	8	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	-6.71	-10.00	-16.71	8	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	-6.81	-10.00	-16.81	8	Pass



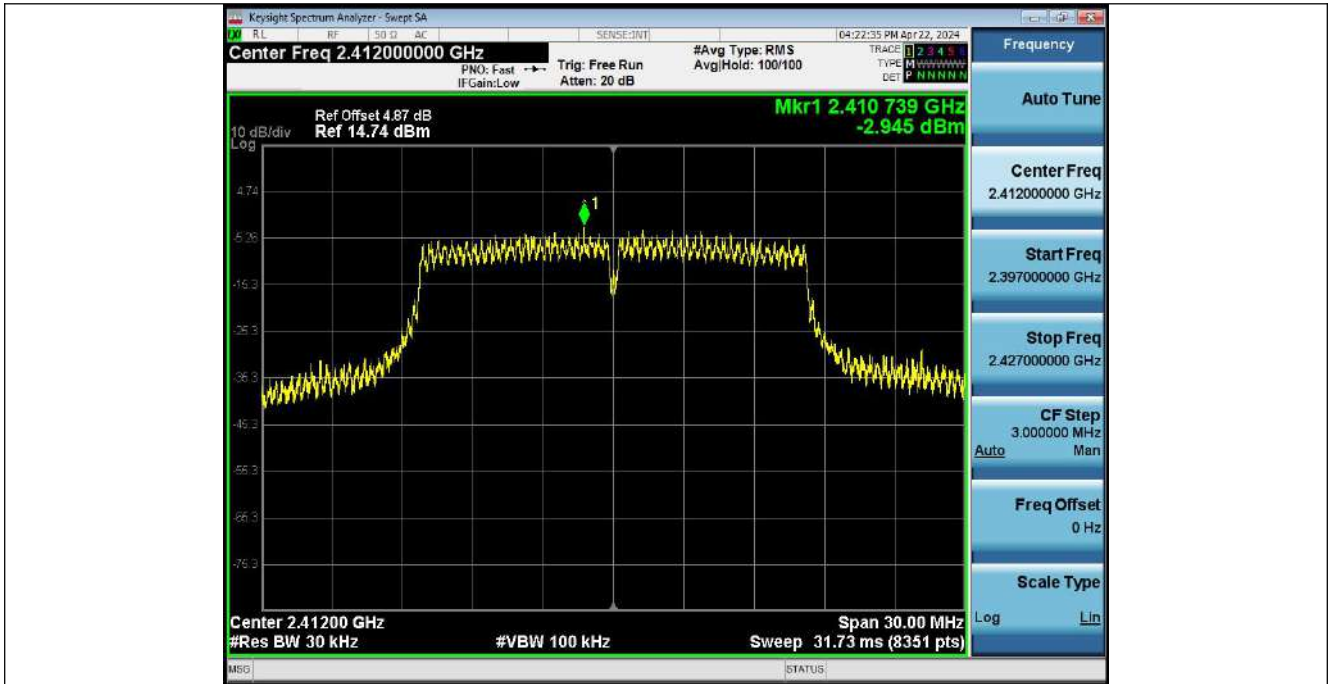
Power_Spectral_Density_NVNT_ANT1_802_11b_2437



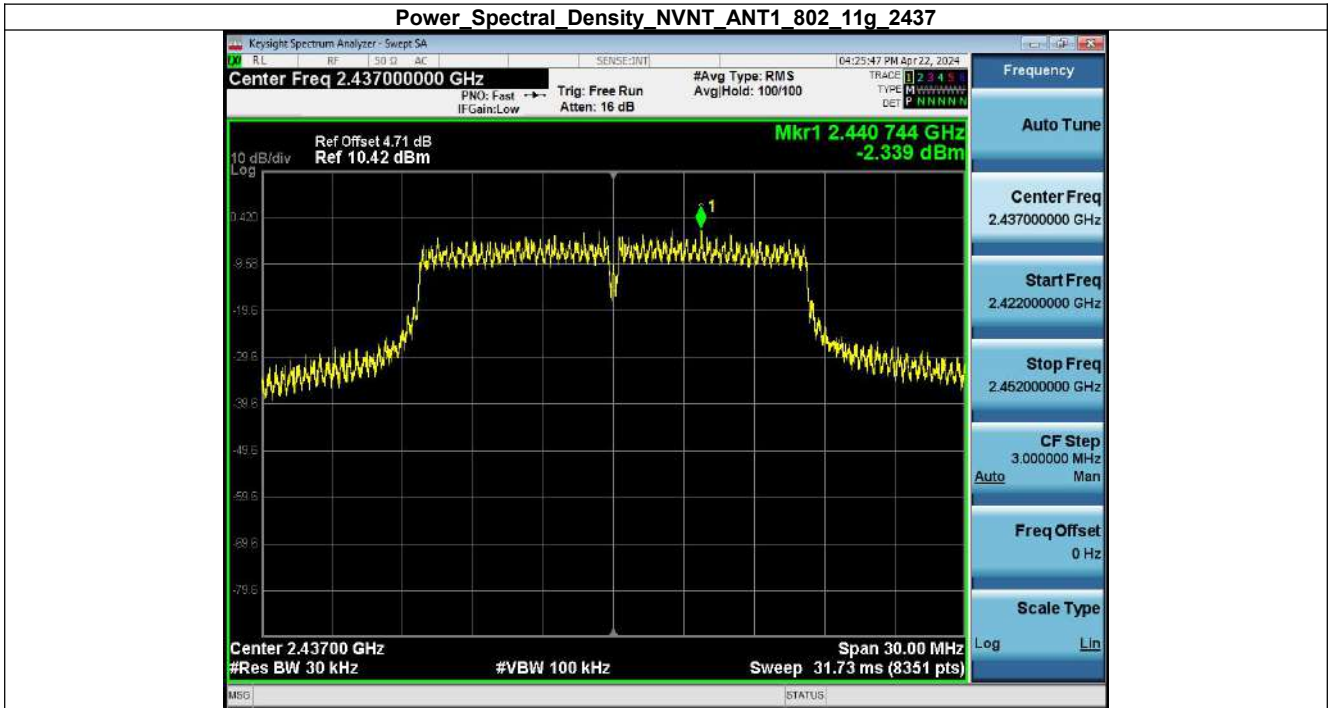
Power_Spectral_Density_NVNT_ANT1_802_11b_2462



Power_Spectral_Density_NVNT_ANT1_802_11g_2412



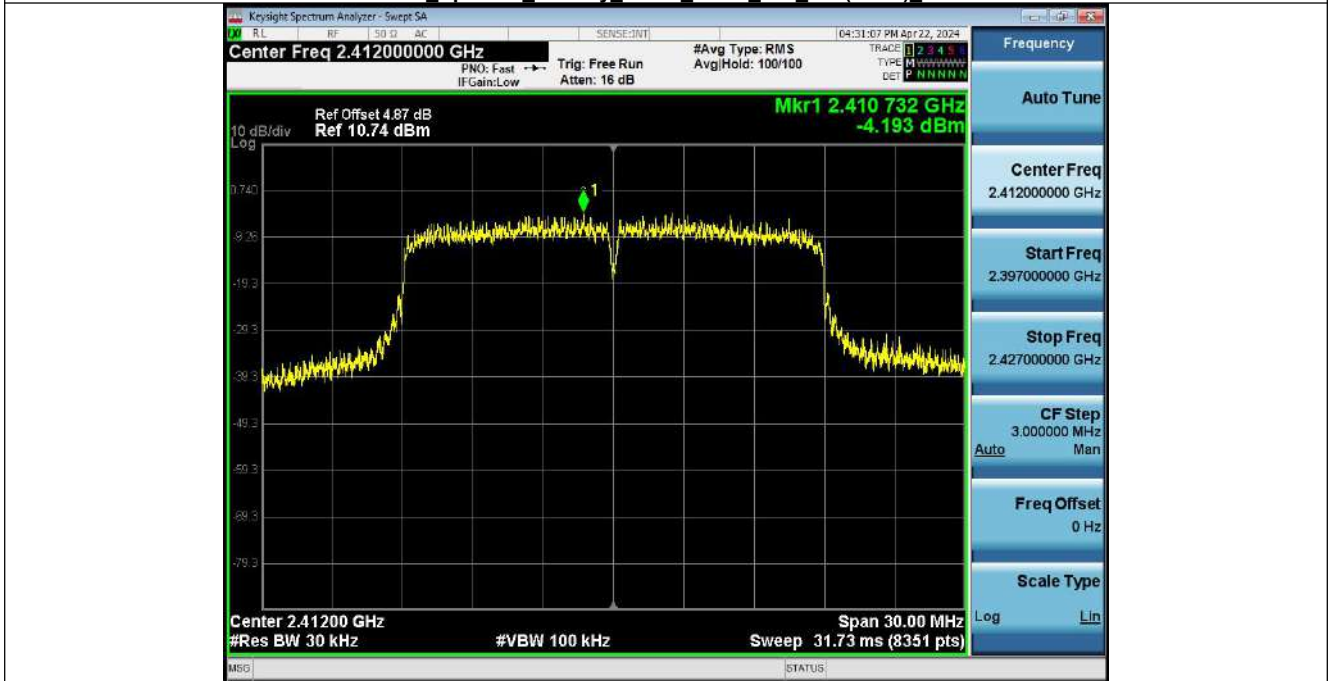
Power_Spectral_Density_NVNT_ANT1_802_11g_2437



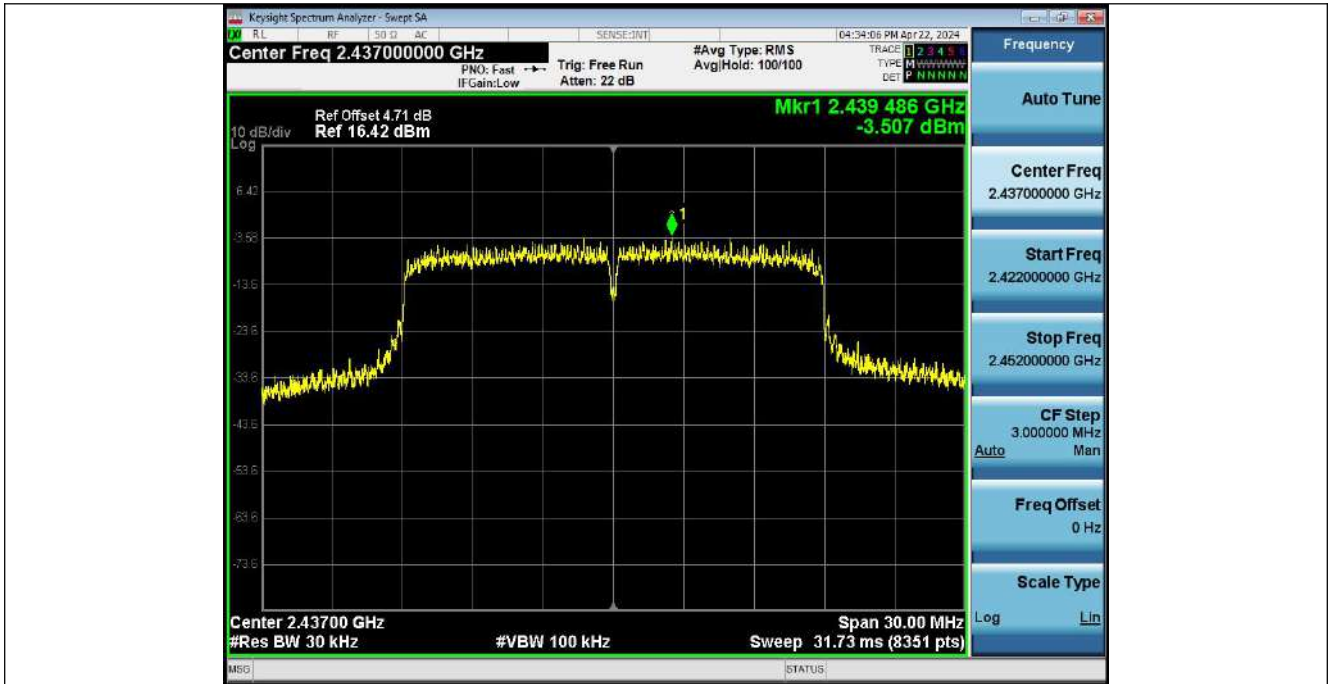
Power_Spectral_Density_NVNT_ANT1_802_11g_2462



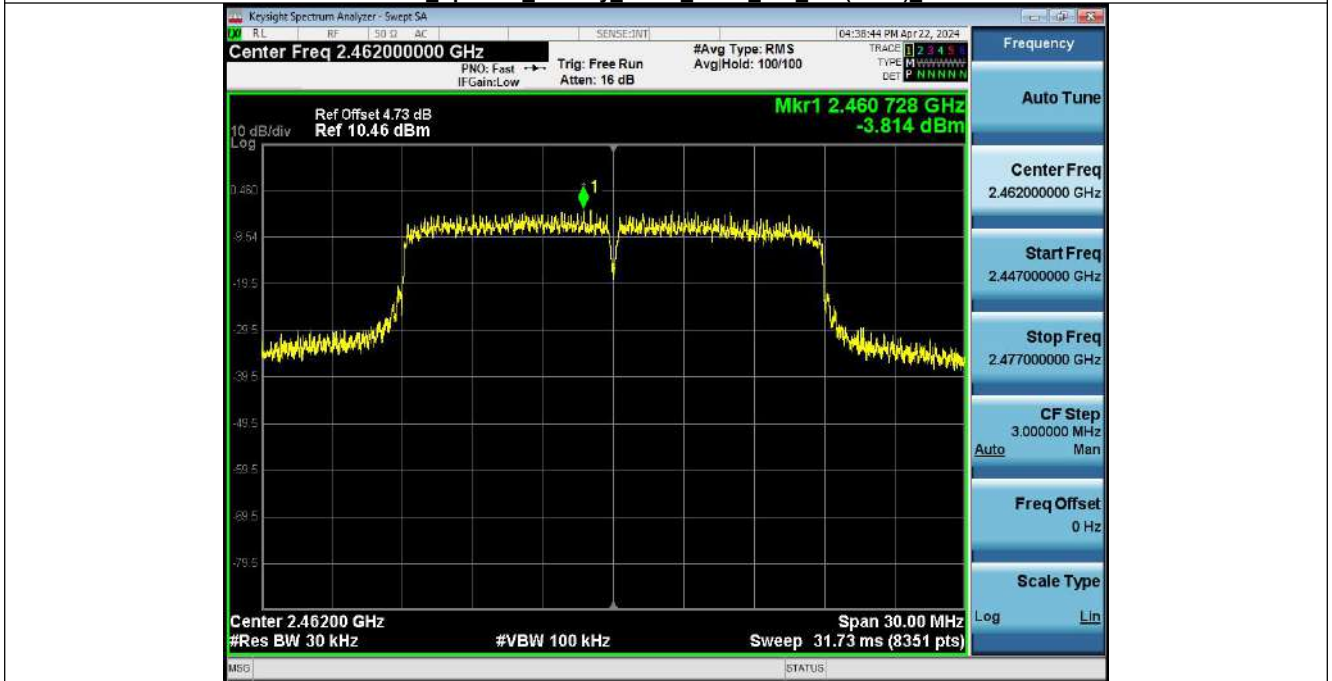
Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2412



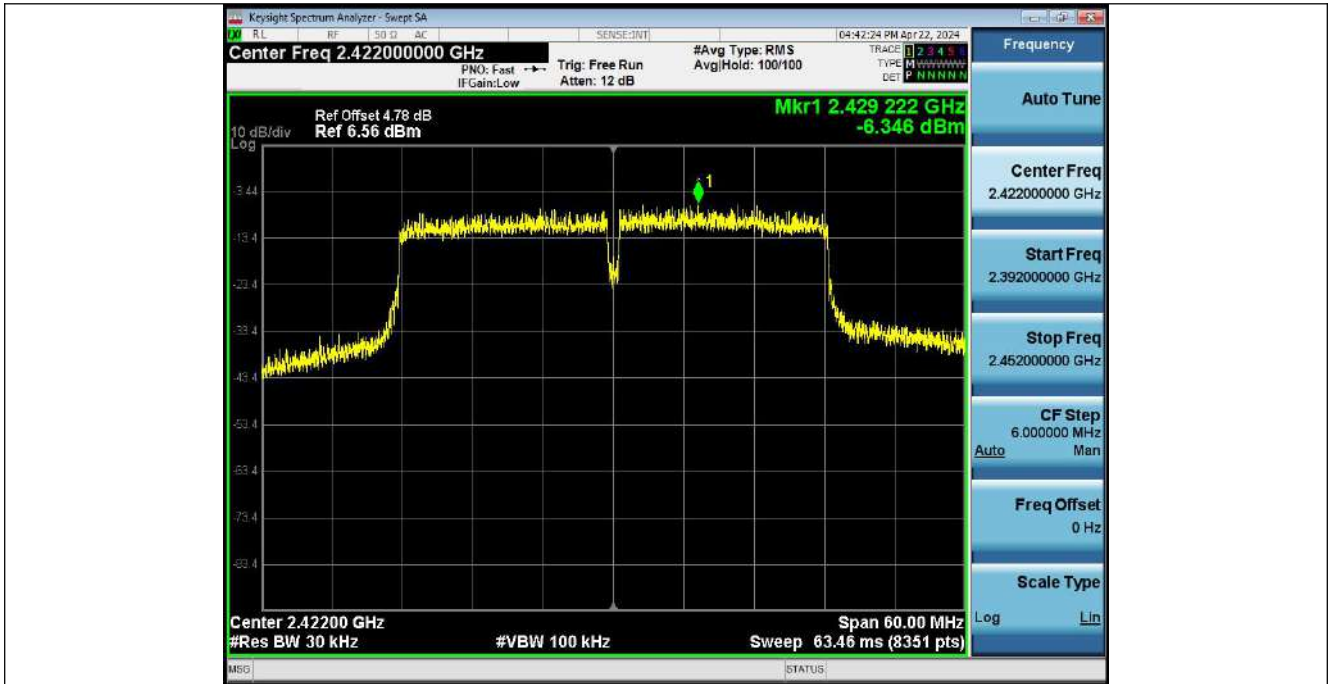
Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2437



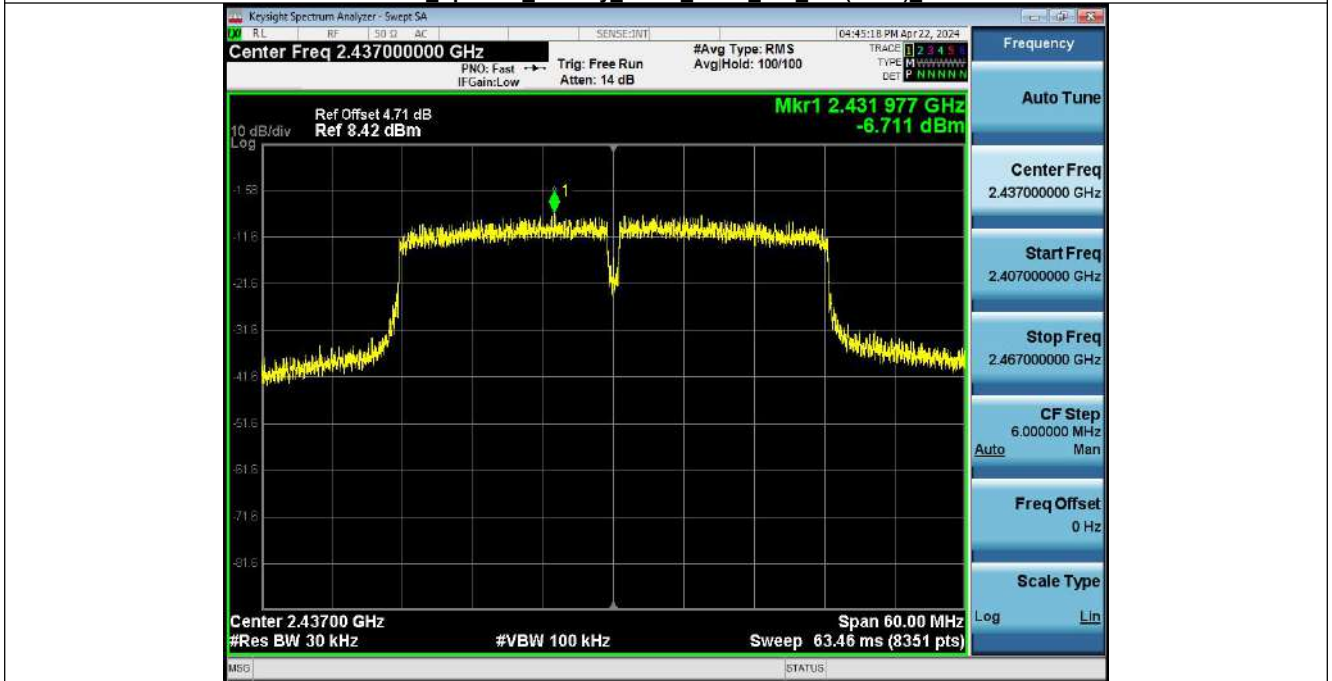
Power Spectral Density NVNT ANT1 802_11n(HT20)_2462



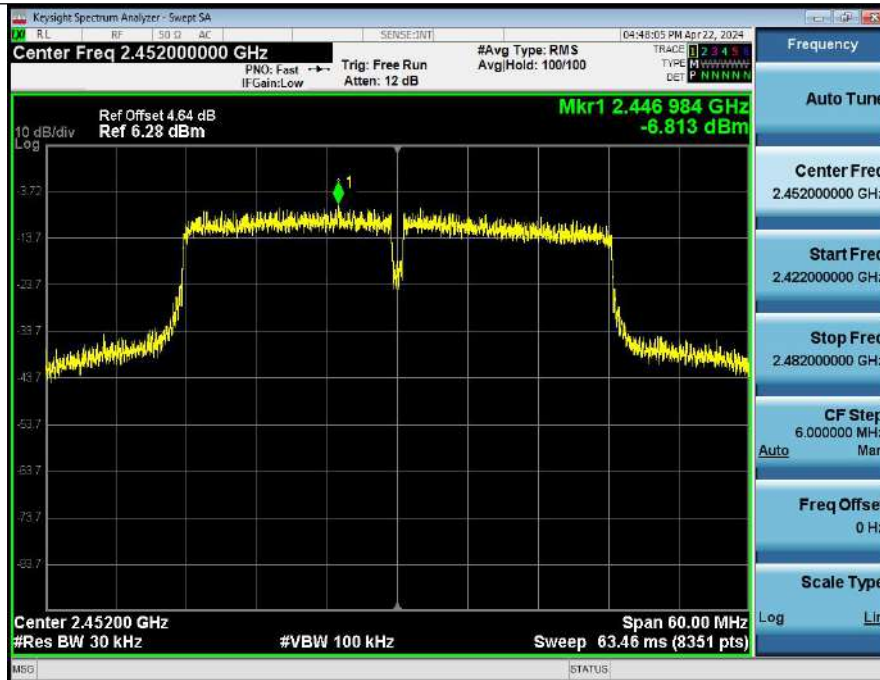
Power Spectral Density NVNT ANT1 802_11n(HT40)_2422



Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2437



Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2452

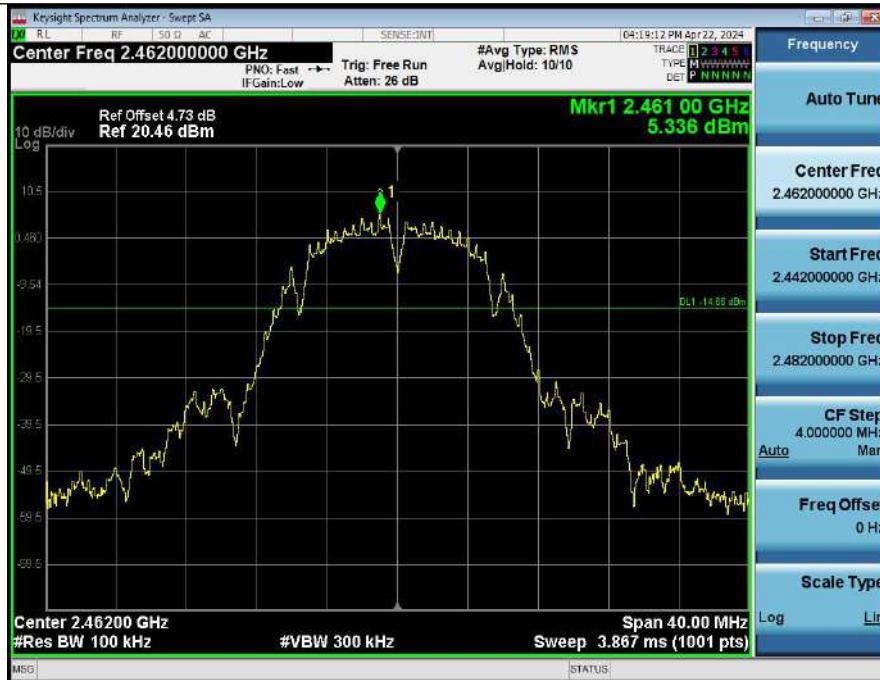


6. Bandedge

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	2399.936	-38.840	-15.420	Pass
NVNT	ANT1	802.11b	2462.00	2484.256	-56.583	-14.664	Pass
NVNT	ANT1	802.11g	2412.00	2399.488	-26.825	-19.142	Pass
NVNT	ANT1	802.11g	2462.00	2483.872	-39.331	-18.319	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2399.264	-28.336	-19.205	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2483.584	-36.569	-19.170	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	2399.628	-30.148	-21.379	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	2483.612	-34.564	-21.865	Pass



1 Reference_Level_NVNT_ANT1_802_11b_2462



2_Bandedge_NVNT_ANT1_802_11b_2462



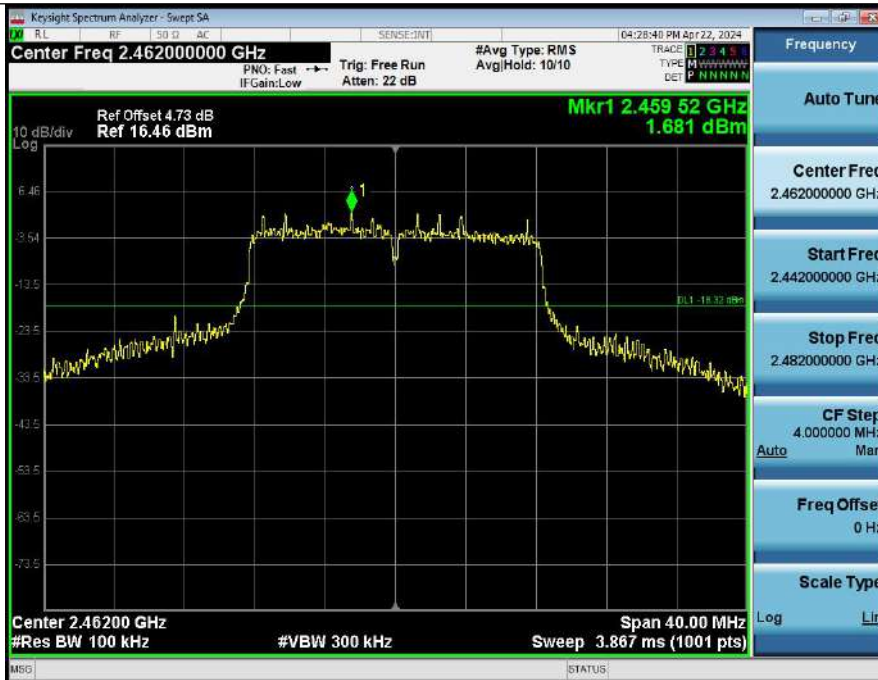
1_Reference_Level_NVNT_ANT1_802_11g_2412



2_Bandedge_NVNT_ANT1_802_11g_2412



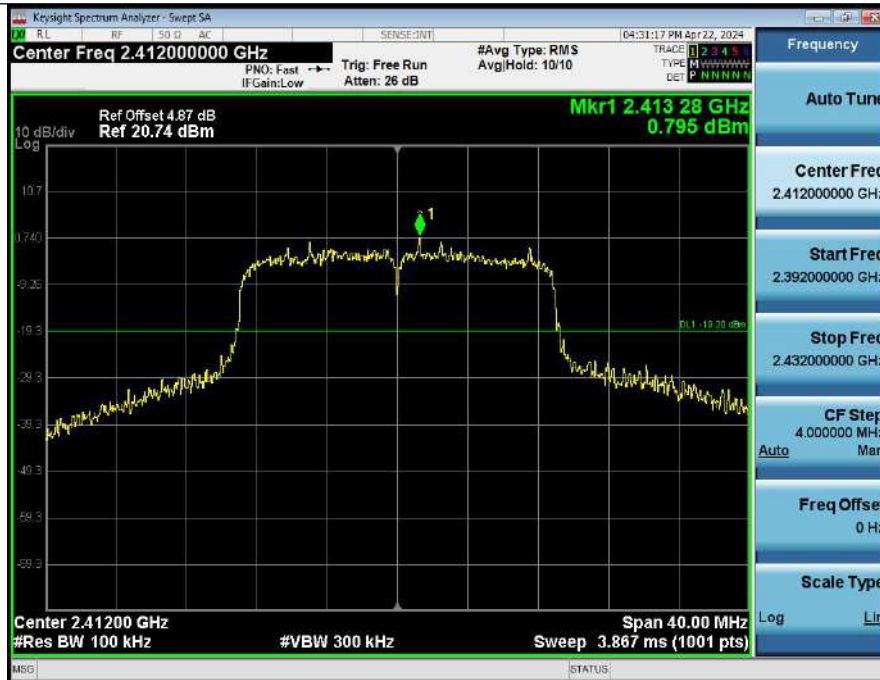
1_Reference_Level_NVNT_ANT1_802_11g_2462



2_Bandedge_NVNT_ANT1_802_11g_2462



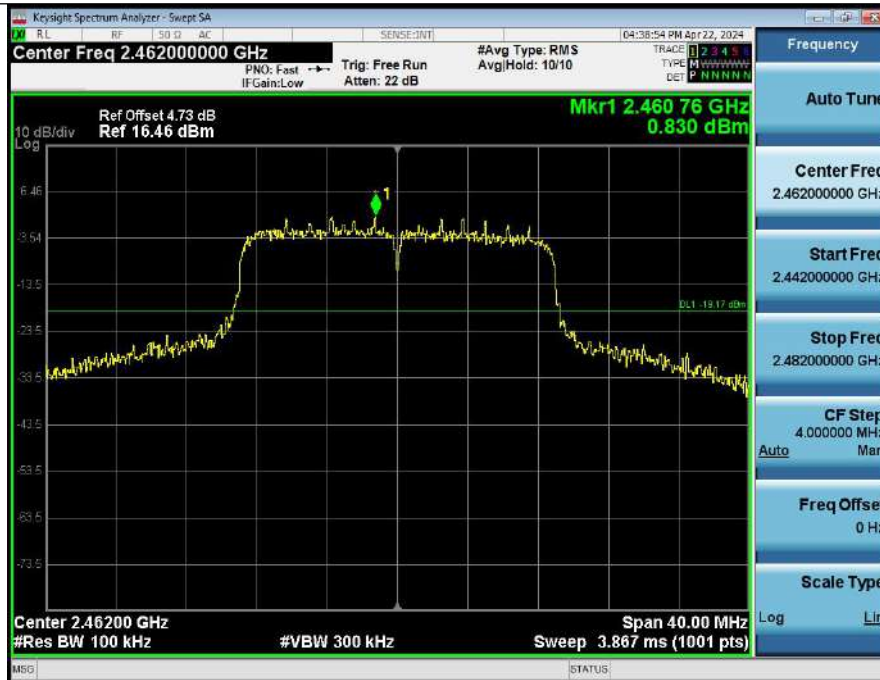
1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2412



2_Bandedge_NVNT_ANT1_802_11n(HT20)_2412



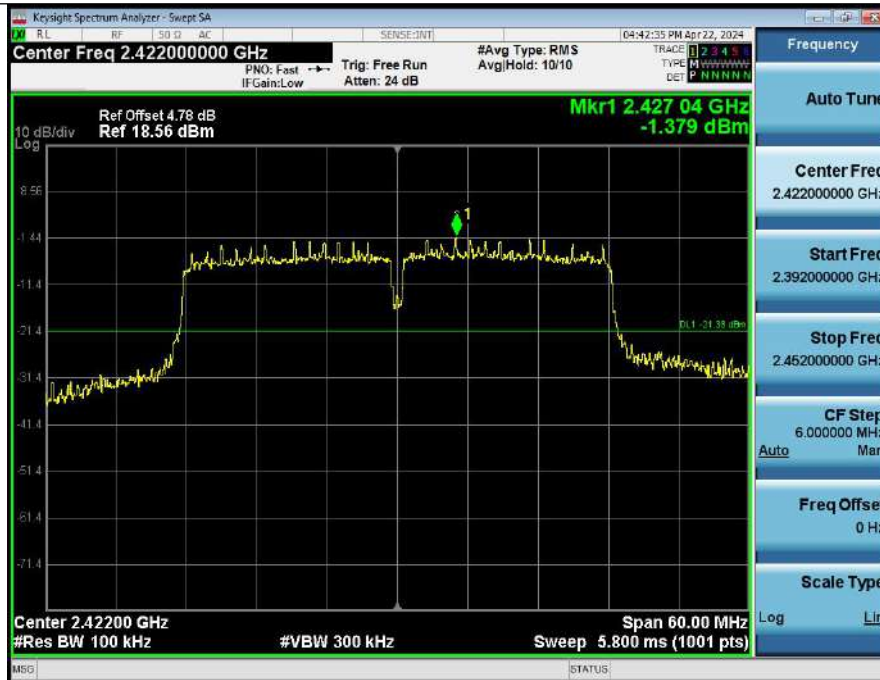
1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2462



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_frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	24955.054	-47.991	-15.420	Pass
NVNT	ANT1	802.11b	2437.00	24992.509	-48.282	-14.794	Pass
NVNT	ANT1	802.11b	2462.00	24997.503	-51.779	-14.664	Pass
NVNT	ANT1	802.11g	2412.00	24970.036	-51.393	-19.142	Pass
NVNT	ANT1	802.11g	2437.00	24453.157	-56.169	-18.378	Pass
NVNT	ANT1	802.11g	2462.00	24960.048	-56.021	-18.319	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	24945.066	-51.534	-19.205	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	2591.922	-54.334	-18.744	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	589.328	-46.563	-19.170	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	24980.024	-53.973	-21.379	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	24882.641	-54.183	-21.694	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	24972.533	-54.359	-21.865	Pass

1 Reference_Level_NVNT_ANT1_802_11b_2412



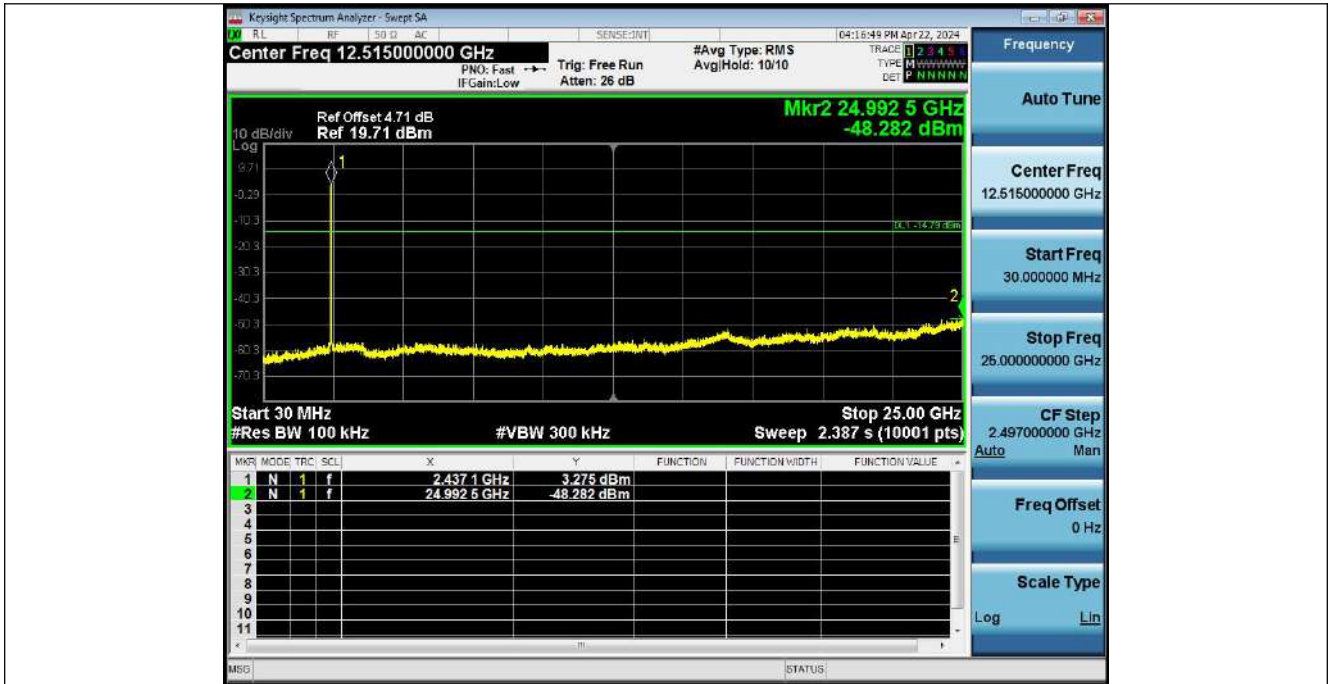
2 Spurious Emission_NVNT_ANT1_802_11b_2412



1 Reference Level NVNT_ANT1_802_11b_2437



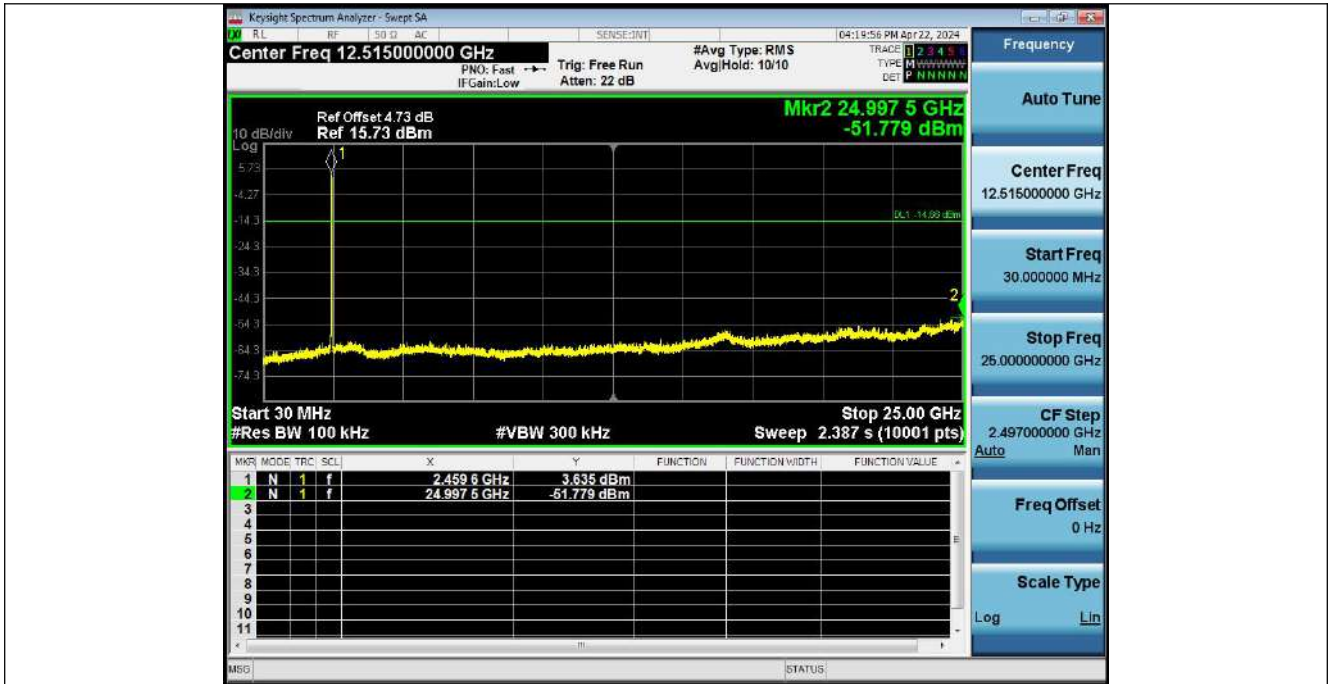
2 Spurious Emission NVNT_ANT1_802_11b_2437



1 Reference Level NVNT ANT1 802 11b 2462



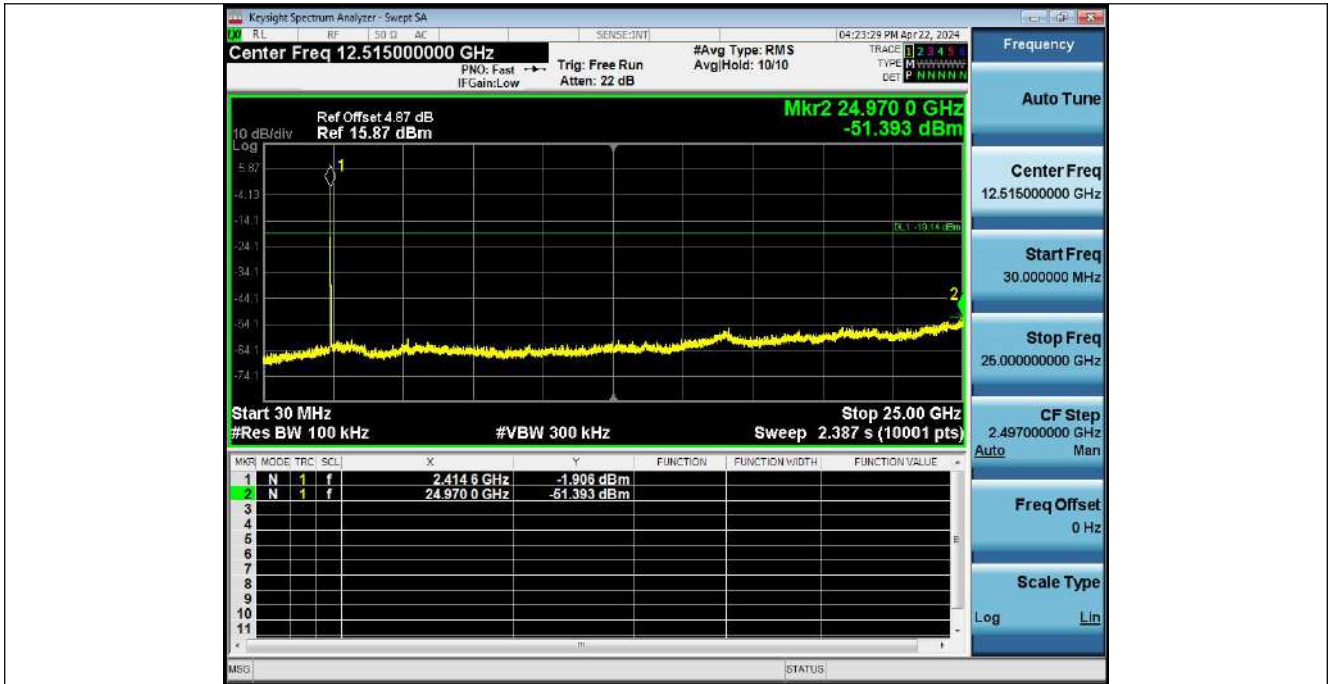
2 Spurious Emission NVNT ANT1 802 11b 2462



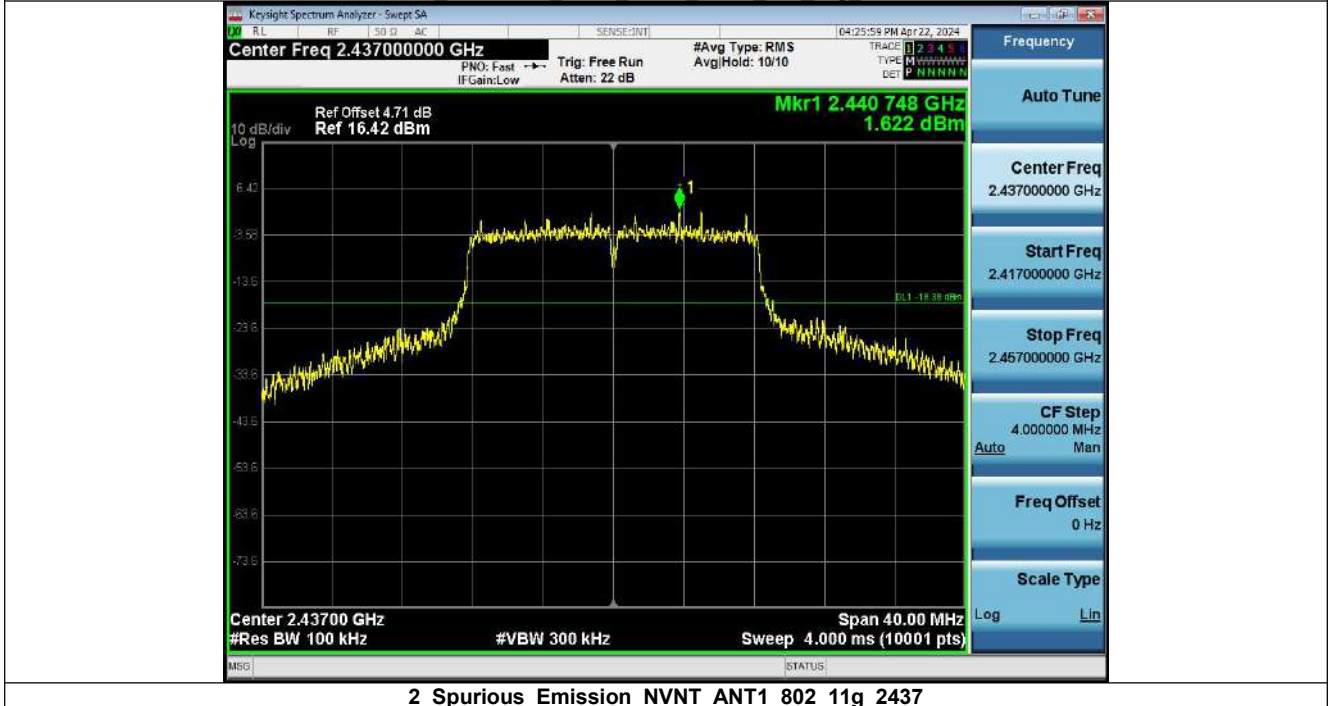
1 Reference Level NVNT_ANT1_802_11g_2412



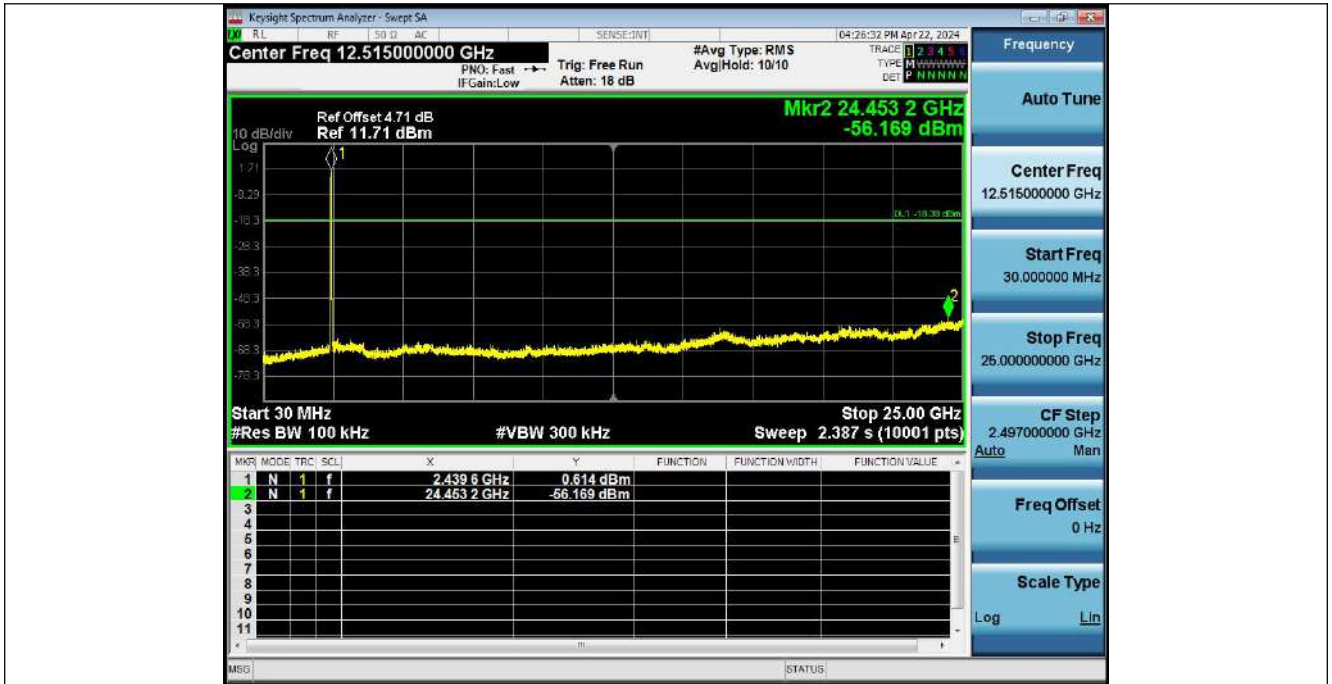
2 Spurious Emission NVNT_ANT1_802_11g_2412



1 Reference Level NVNT_ANT1_802_11g_2437



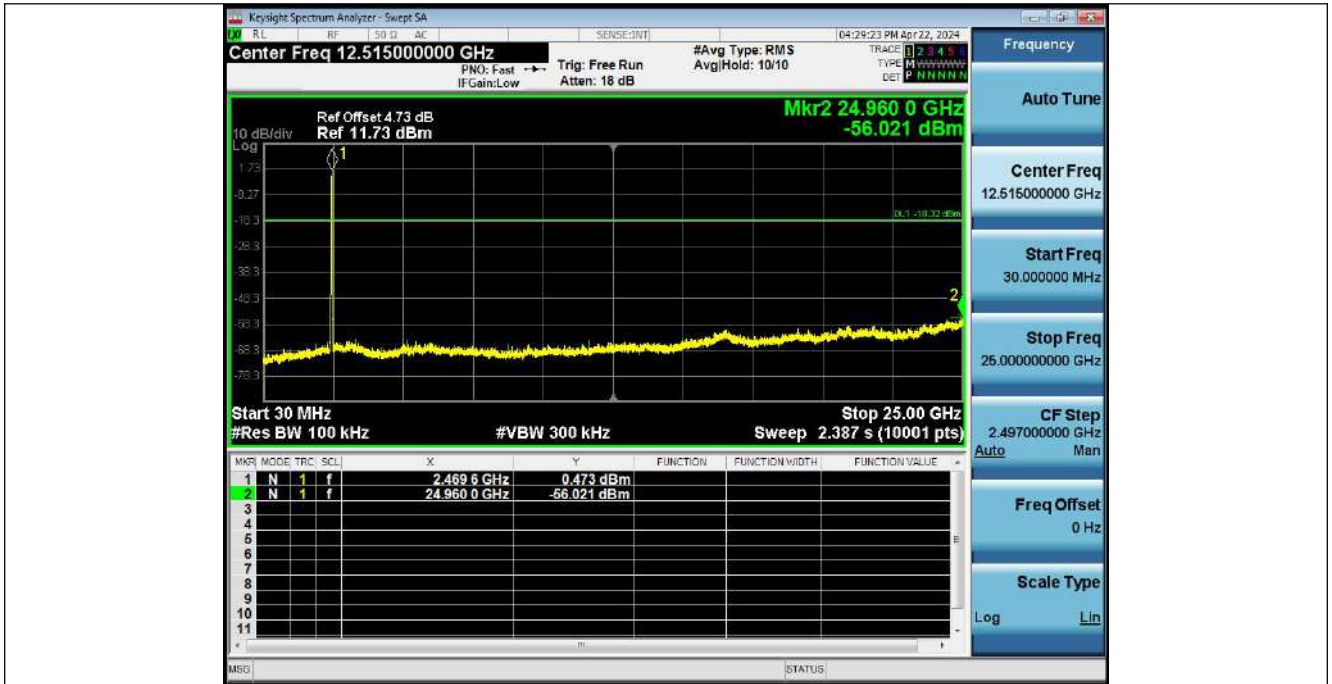
2 Spurious Emission_NVNT_ANT1_802_11g_2437



1 Reference Level NVNT_ANT1_802_11g_2462



2 Spurious Emission NVNT_ANT1_802_11g_2462



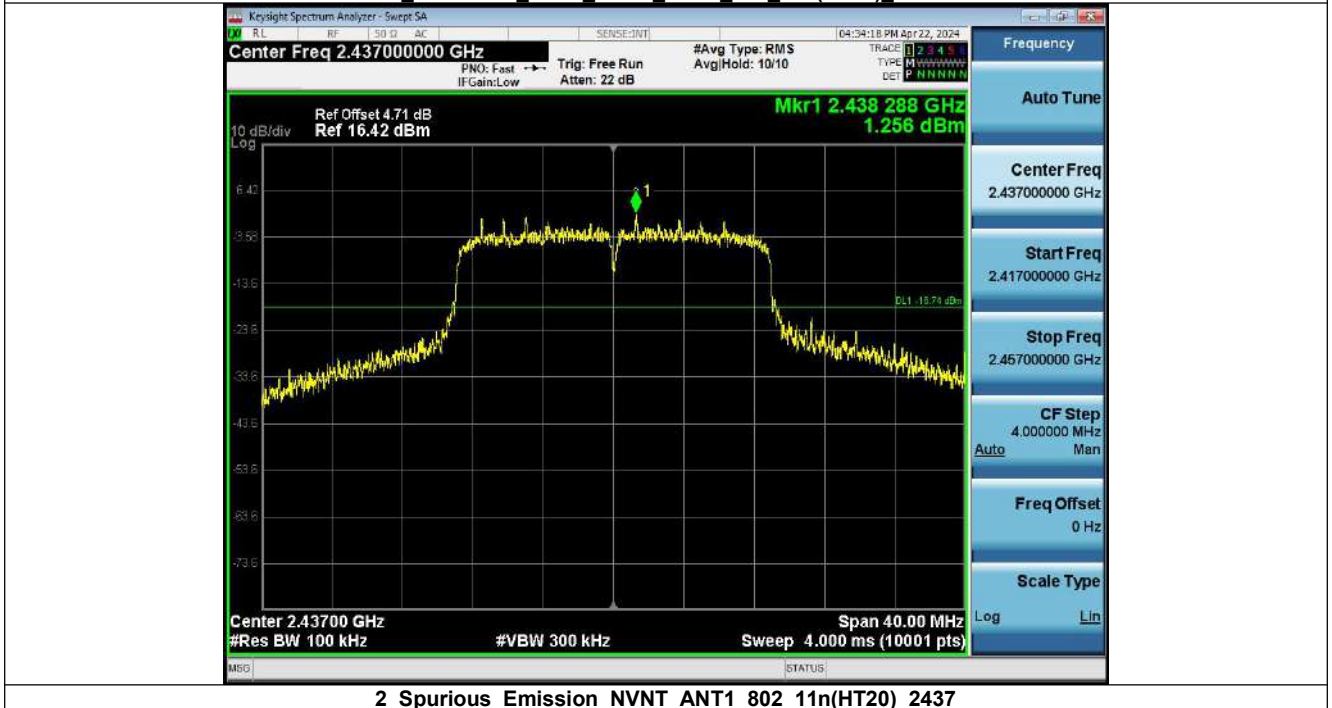
1 Reference Level NVNT_ANT1_802_11n(HT20)_2412



2 Spurious Emission NVNT_ANT1_802_11n(HT20)_2412



1 Reference Level NVNT_ANT1_802_11n(HT20)_2437



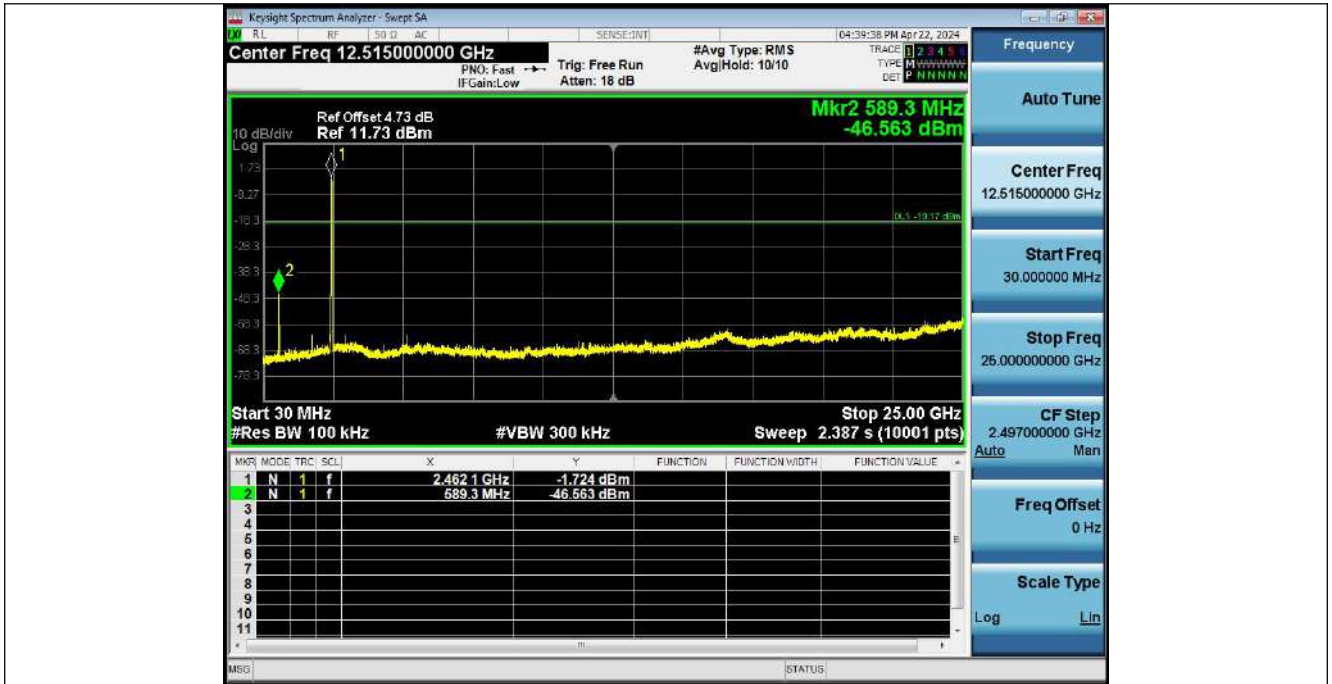
2 Spurious Emission NVNT_ANT1_802_11n(HT20)_2437



1 Reference Level NVNT_ANT1_802_11n(HT20)_2462



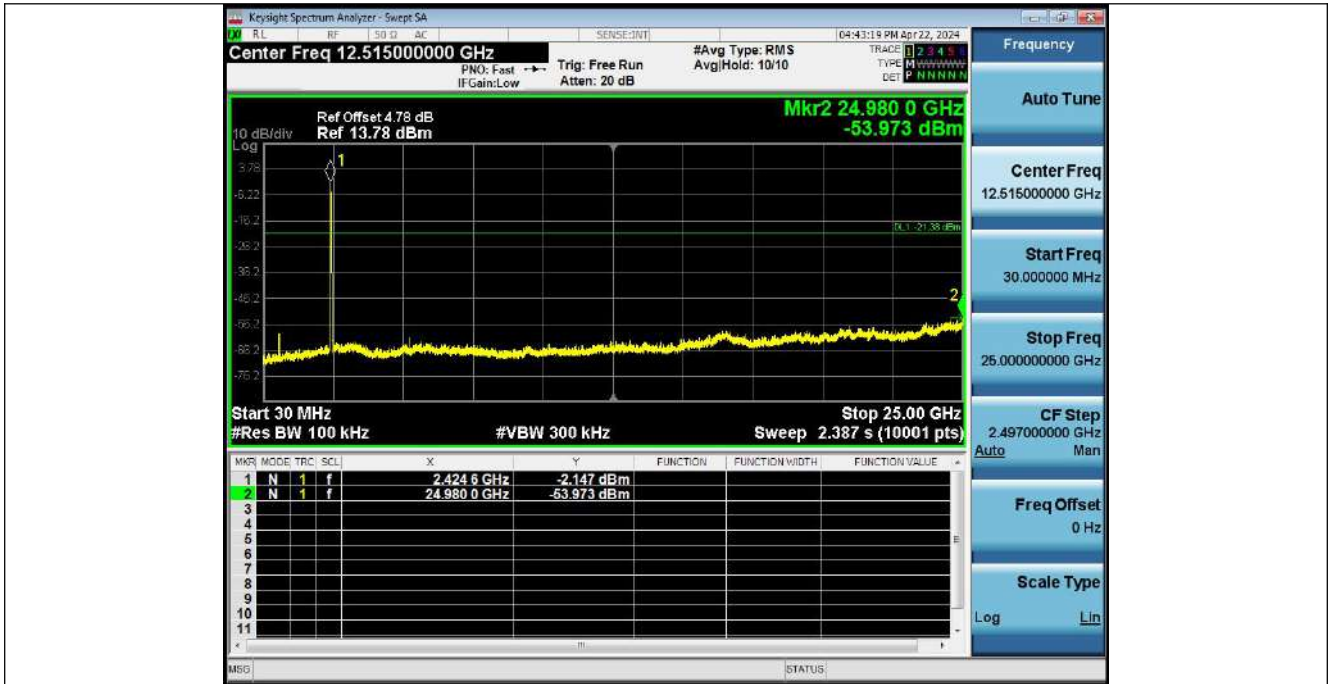
2 Spurious Emission NVNT_ANT1_802_11n(HT20)_2462



1 Reference Level NVNT_ANT1_802_11n(HT40)_2422



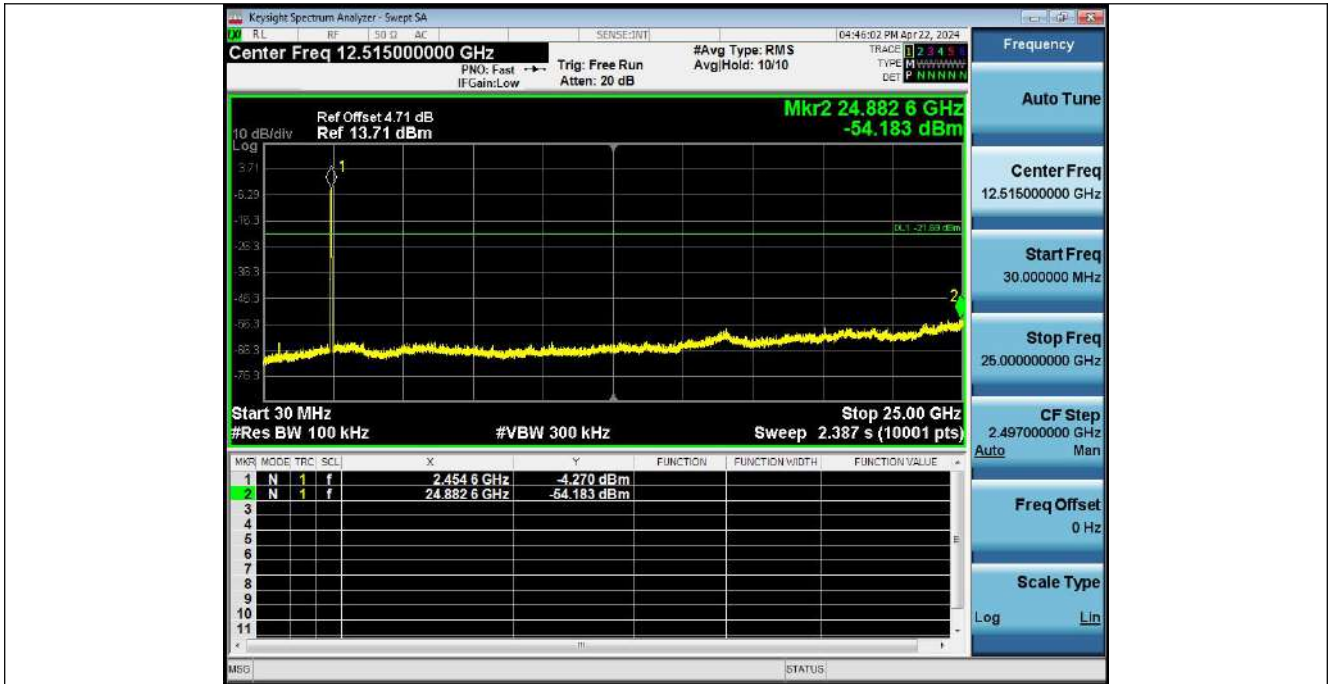
2 Spurious Emission NVNT_ANT1_802_11n(HT40)_2422



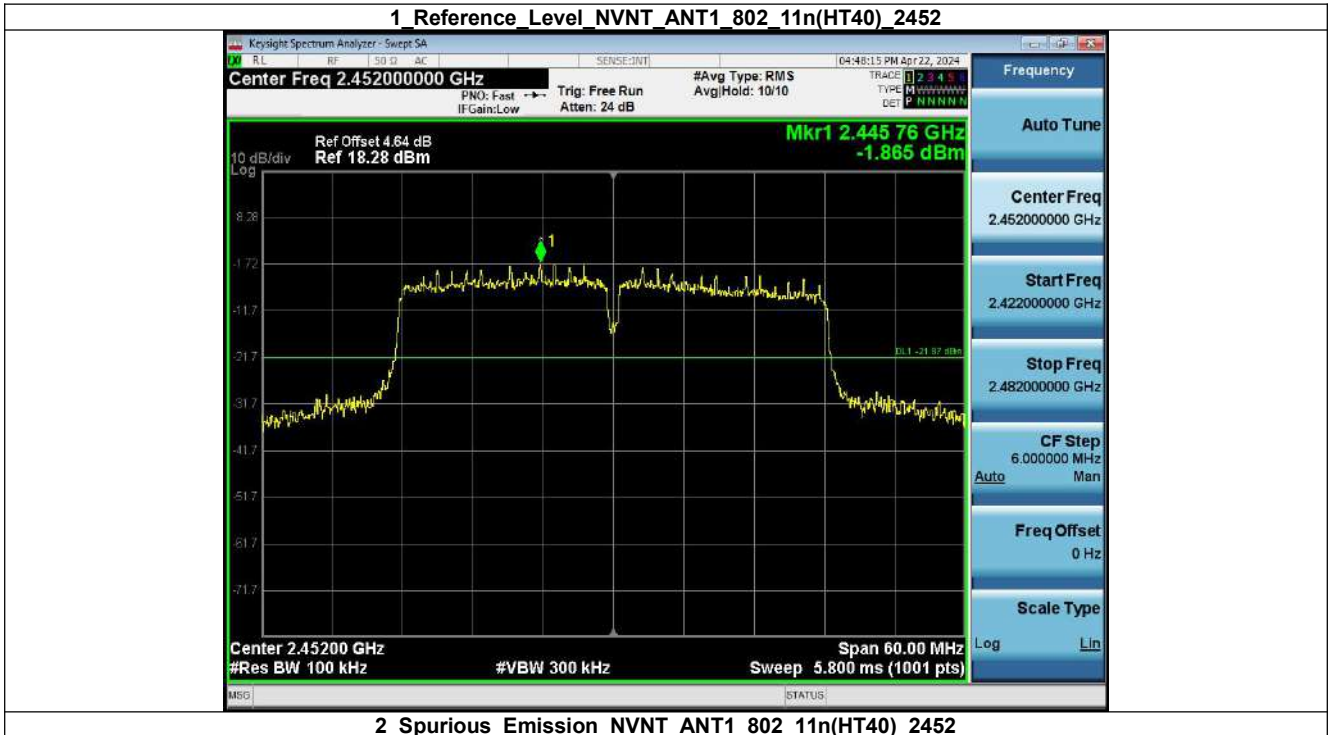
1 Reference Level NVNT_ANT1_802_11n(HT40)_2437



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

