

Table of Contents

1. -6dB Bandwidth2

2. 99% Occupied Bandwidth9

3. Duty Cycle16

5. Power Spectral Density23

6. Bandedge30

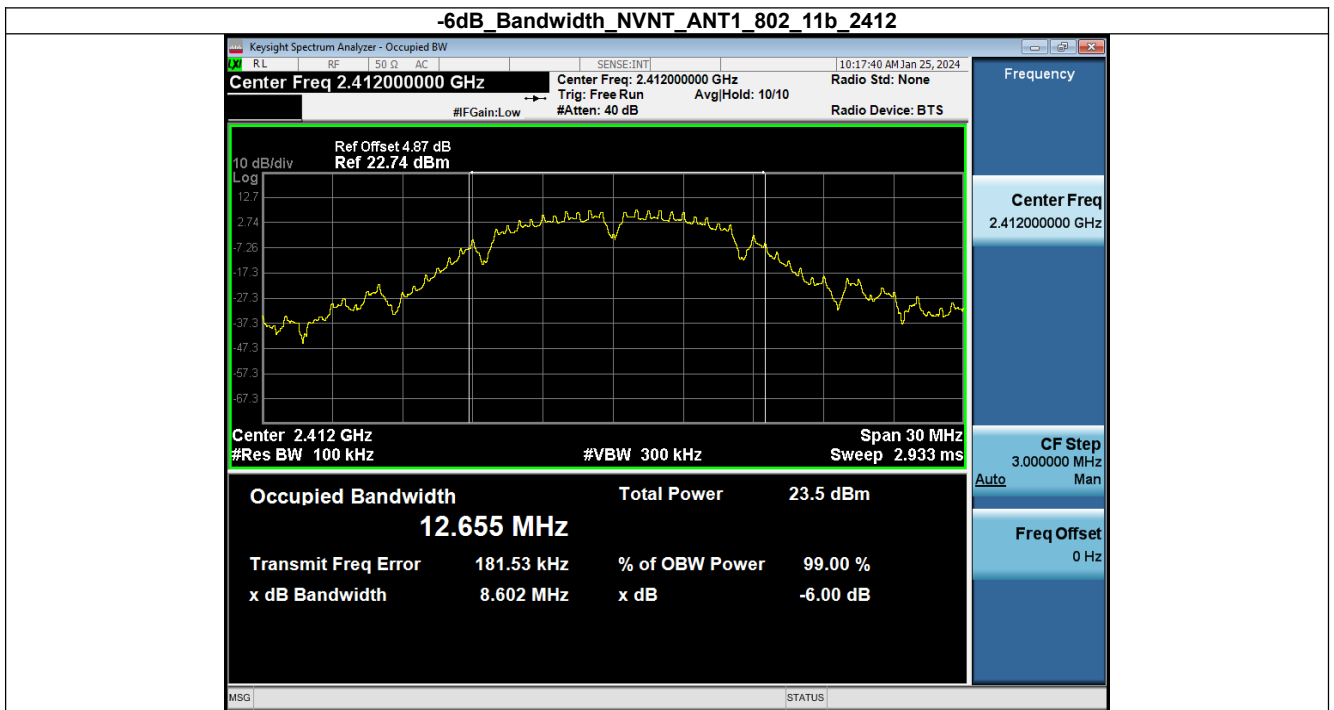
7. Spurious Emission38

FCC ID:2BENR-DH-902

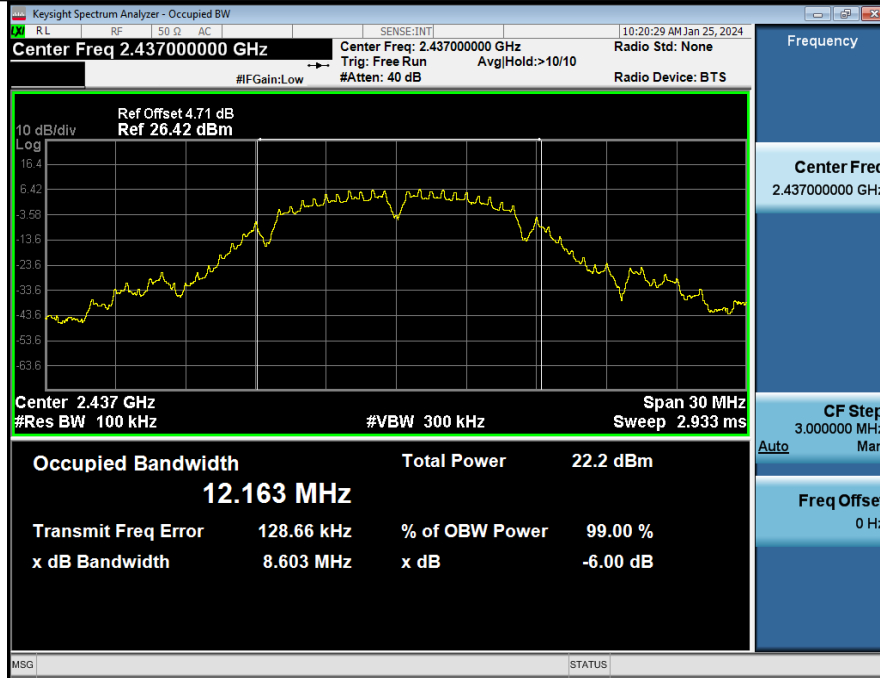
FCC_2.4G_WIFI (Part15.247) Test Data

1. -6dB Bandwidth

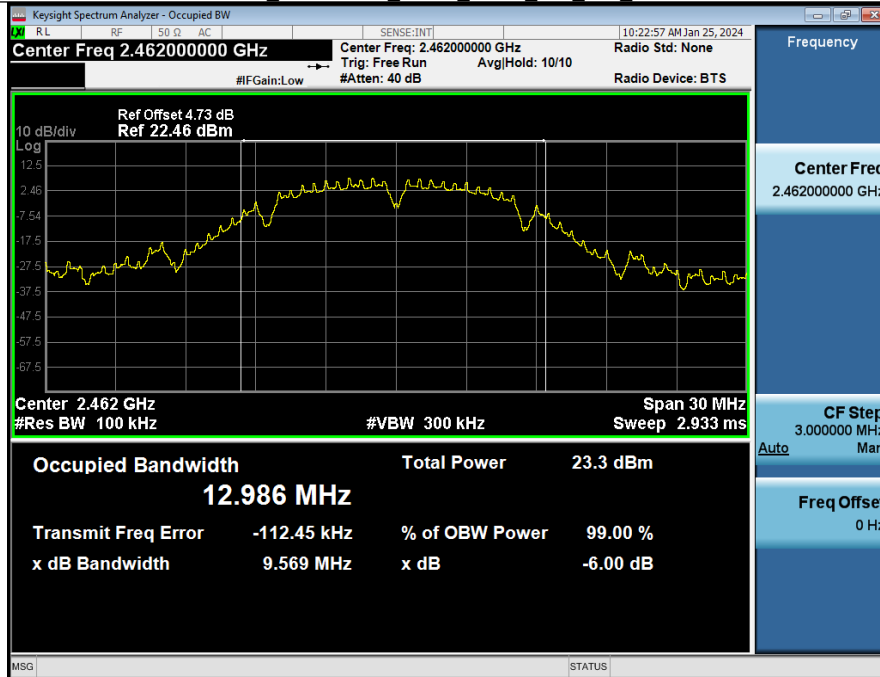
Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	8.60	500	Pass
NVNT	ANT1	802.11b	2437.00	8.60	500	Pass
NVNT	ANT1	802.11b	2462.00	9.57	500	Pass
NVNT	ANT1	802.11g	2412.00	15.75	500	Pass
NVNT	ANT1	802.11g	2437.00	15.94	500	Pass
NVNT	ANT1	802.11g	2462.00	16.08	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	16.73	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	16.74	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	16.76	500	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	35.78	500	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	35.58	500	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	35.38	500	Pass



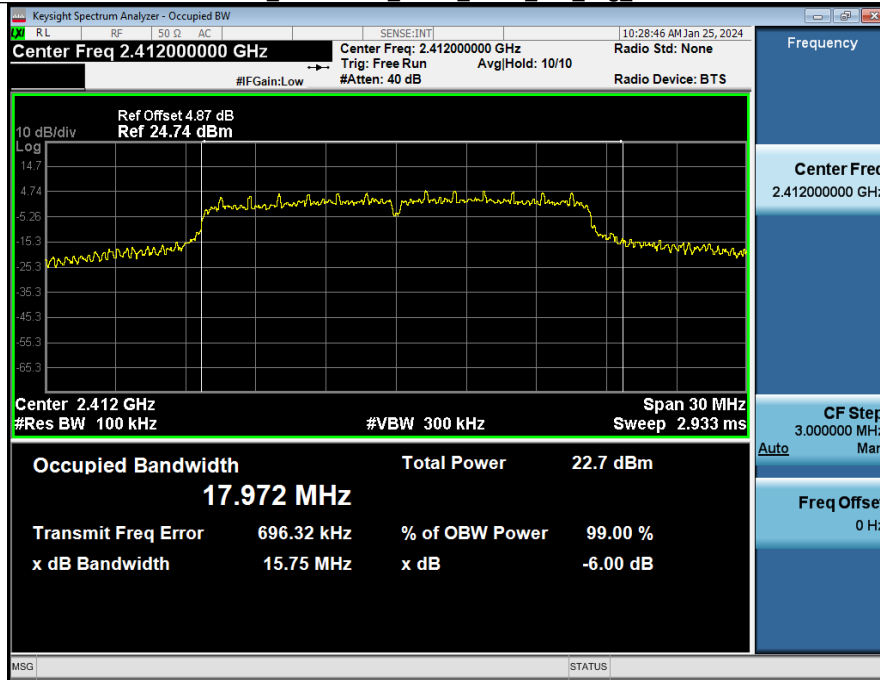
-6dB Bandwidth_NVNT_ANT1_802_11b_2437



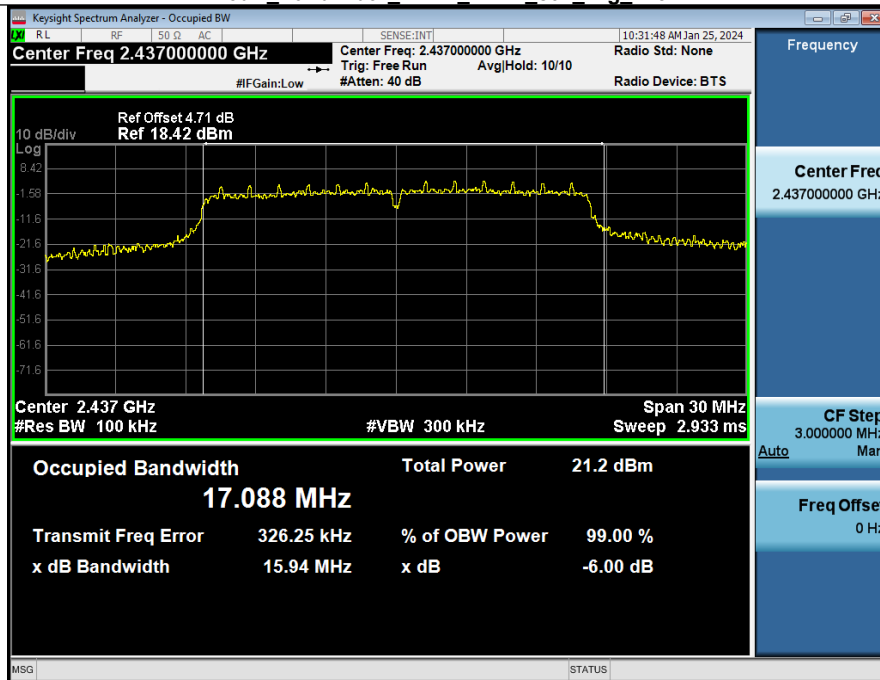
-6dB Bandwidth_NVNT_ANT1_802_11b_2462



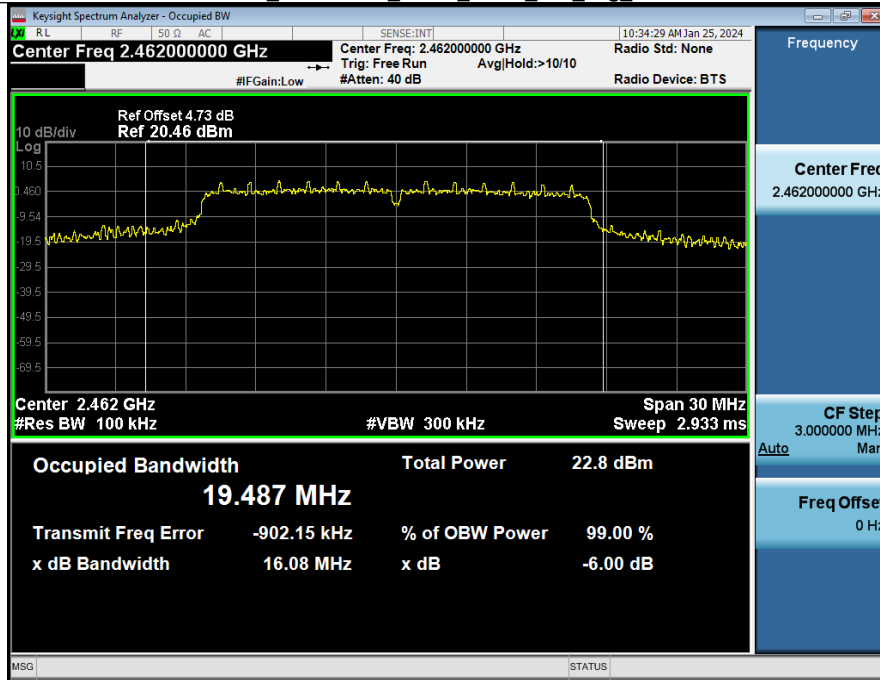
-6dB Bandwidth NVNT_ANT1_802_11g_2412



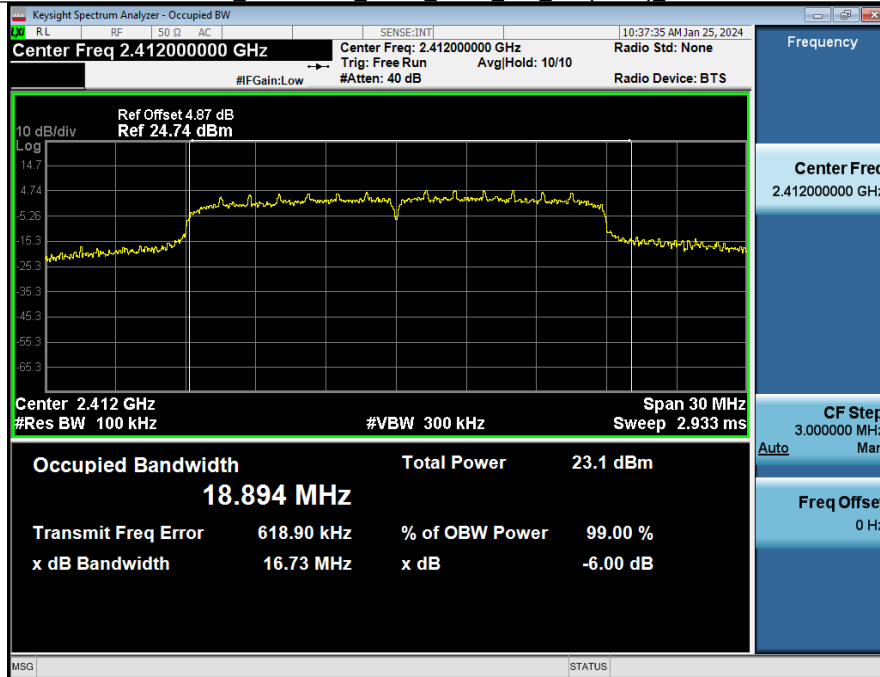
-6dB Bandwidth NVNT_ANT1_802_11g_2437



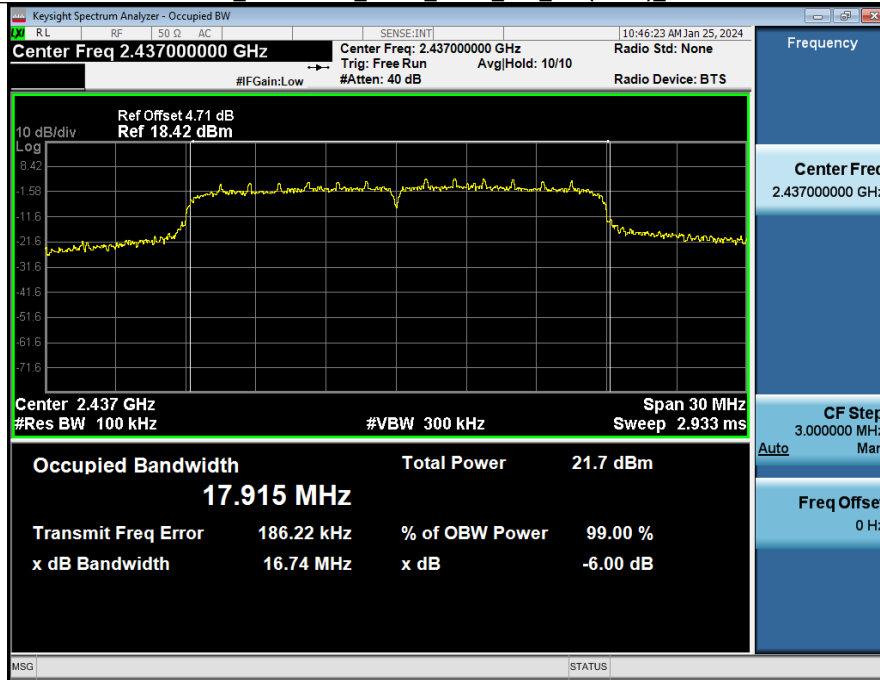
-6dB_Bandwidth_NVNT_ANT1_802_11g_2462



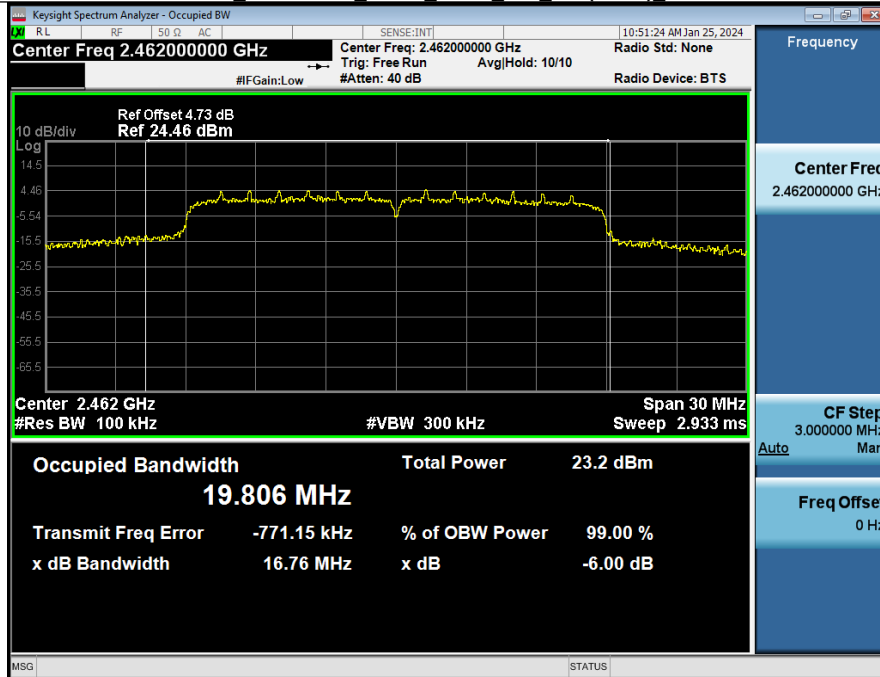
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2412



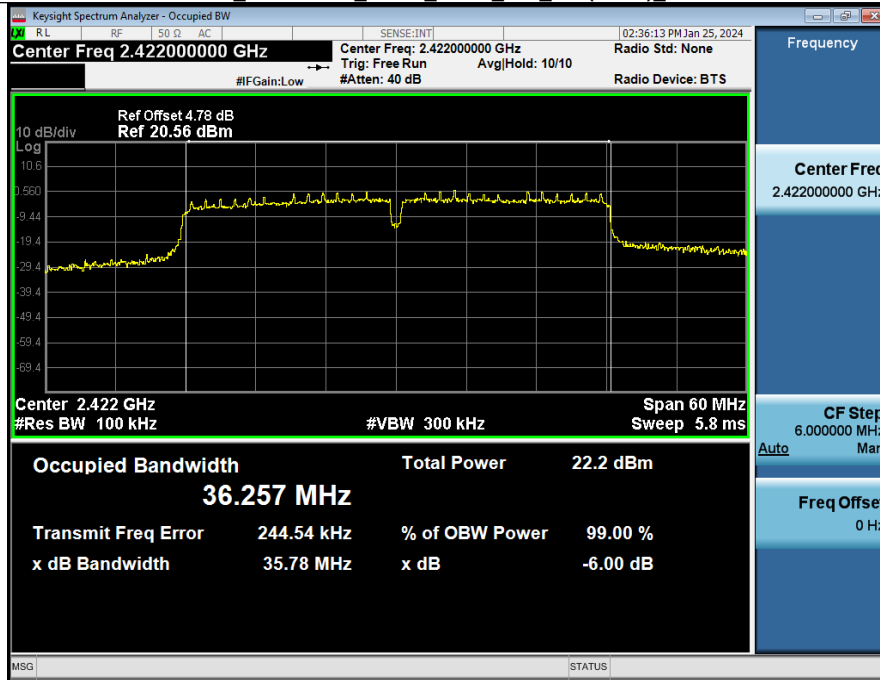
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2437



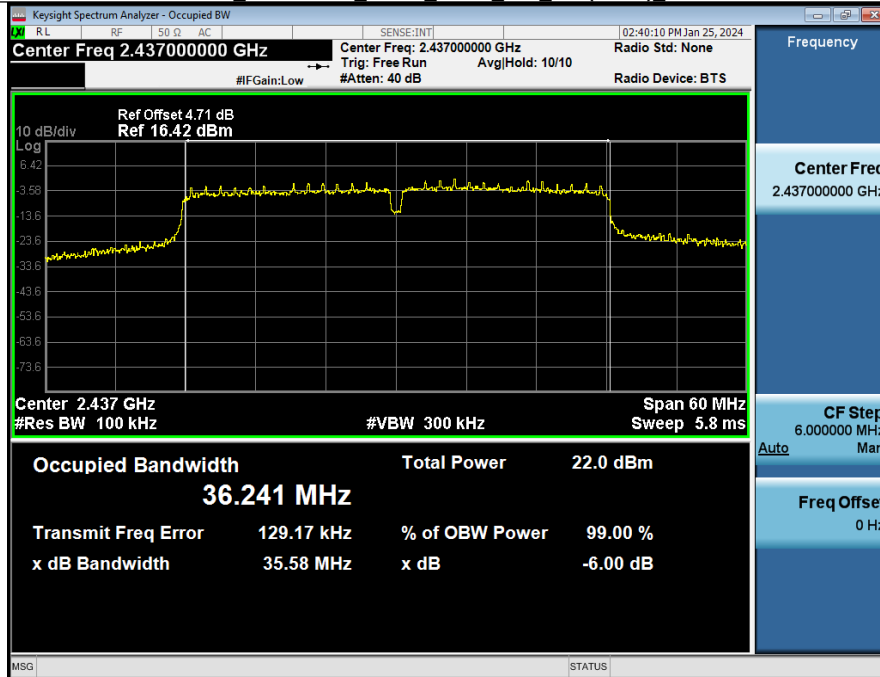
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462



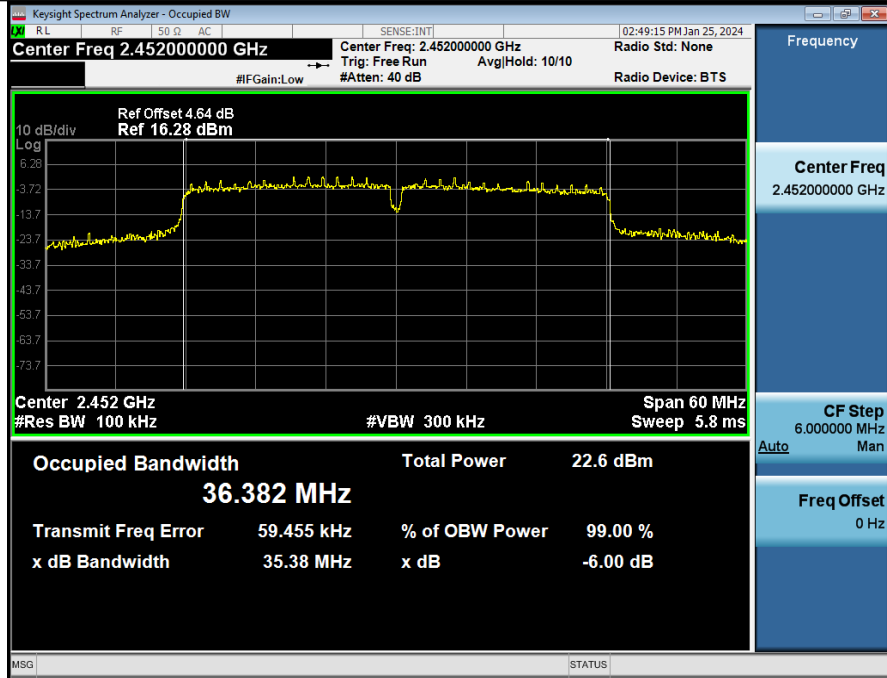
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2422



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2437

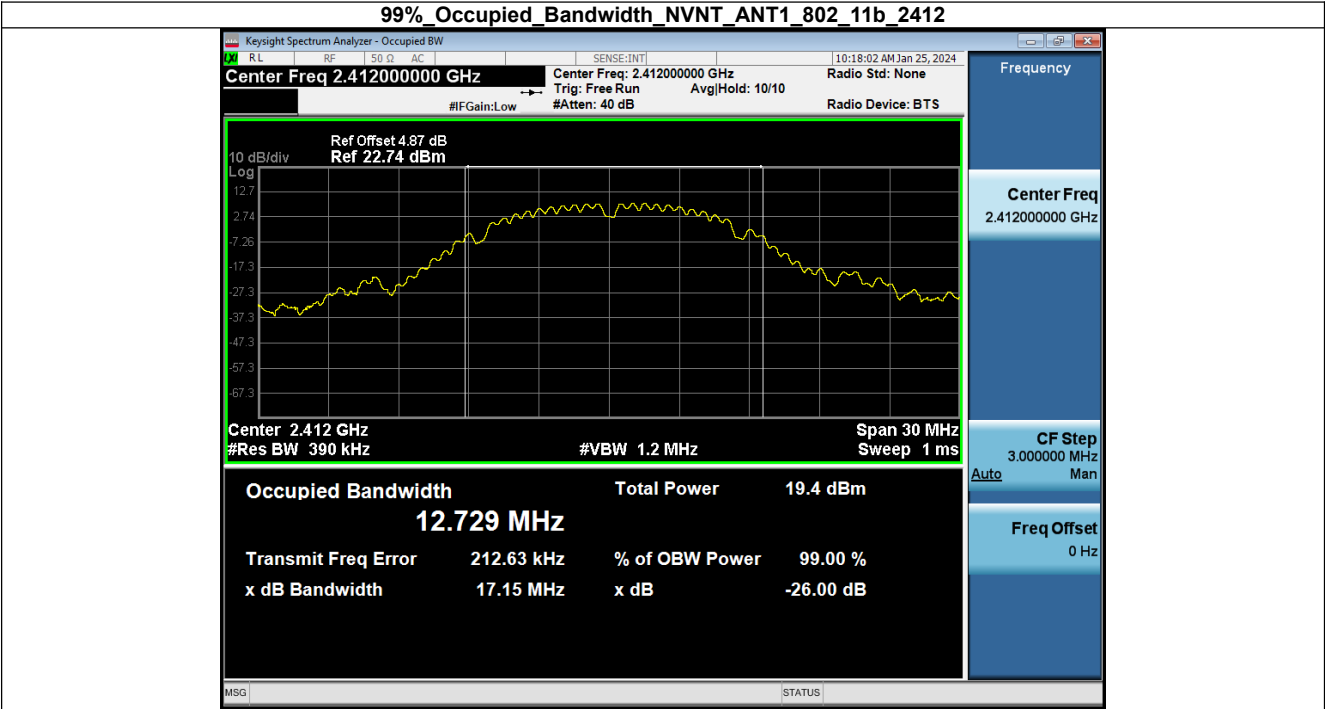


-6dB Bandwidth NVNT_ANT1_802_11n(HT40)_2452

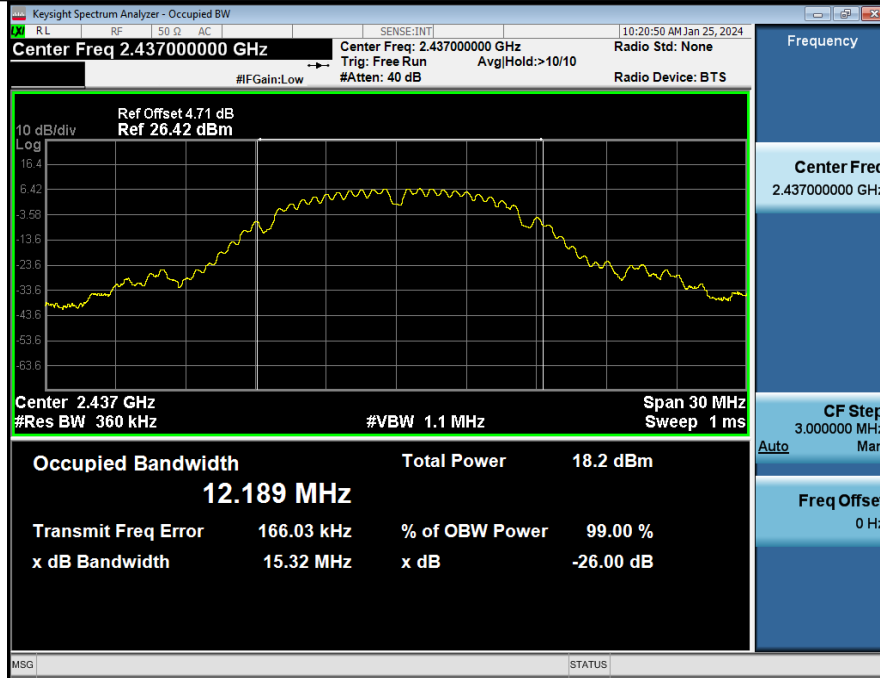


2. 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99%%BW(MHz)
NVNT	ANT1	802.11b	2412.00	12.729
NVNT	ANT1	802.11b	2437.00	12.189
NVNT	ANT1	802.11b	2462.00	13.087
NVNT	ANT1	802.11g	2412.00	19.760
NVNT	ANT1	802.11g	2437.00	18.946
NVNT	ANT1	802.11g	2462.00	21.041
NVNT	ANT1	802.11n(HT20)	2412.00	19.905
NVNT	ANT1	802.11n(HT20)	2437.00	19.071
NVNT	ANT1	802.11n(HT20)	2462.00	20.763
NVNT	ANT1	802.11n(HT40)	2422.00	37.503
NVNT	ANT1	802.11n(HT40)	2437.00	37.143
NVNT	ANT1	802.11n(HT40)	2452.00	37.388



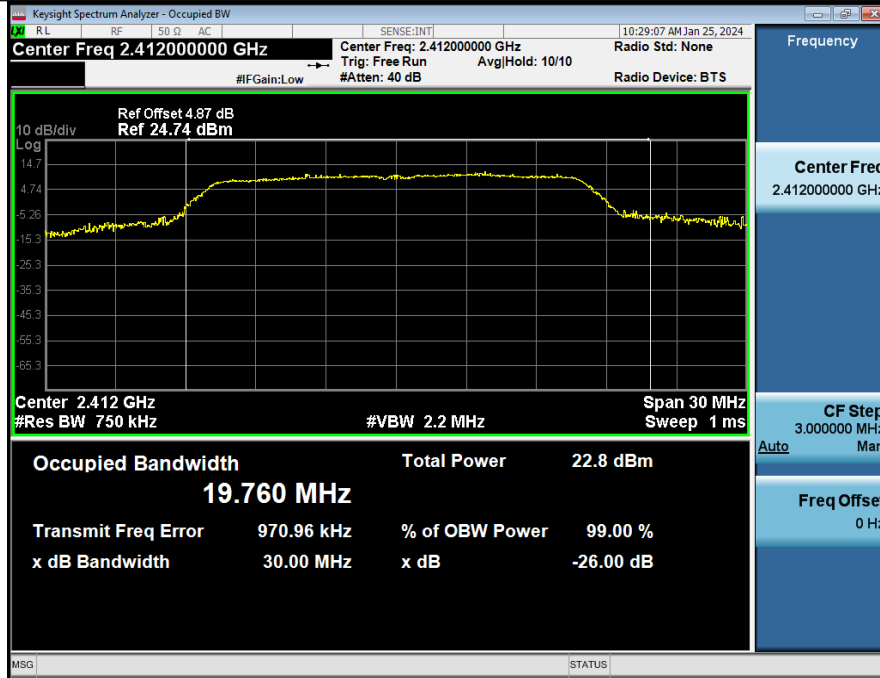
99% Occupied Bandwidth NVNT_ANT1_802_11b_2437



99% Occupied Bandwidth NVNT_ANT1_802_11b_2462



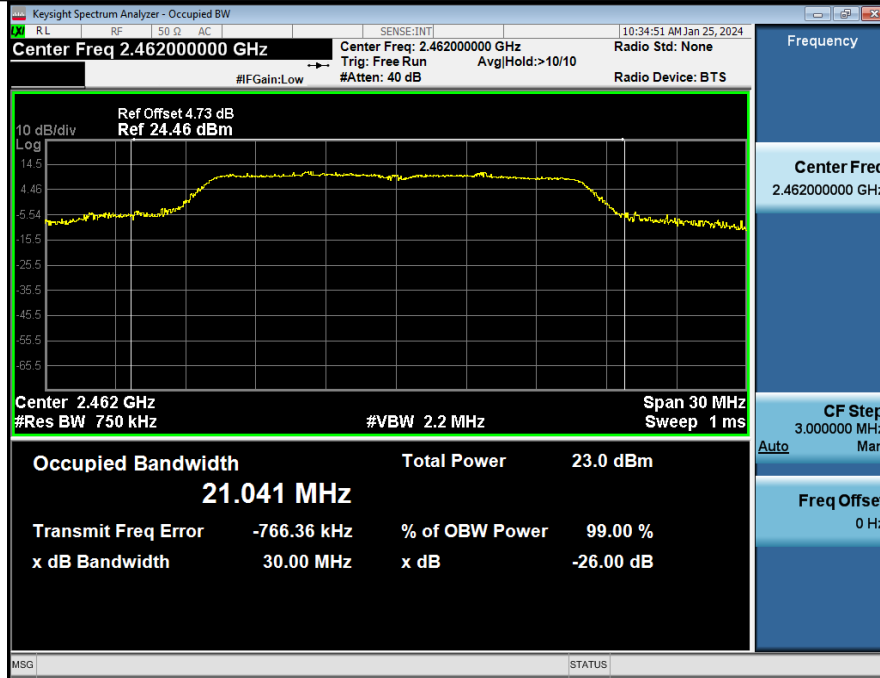
99% Occupied Bandwidth NVNT_ANT1_802_11g_2412



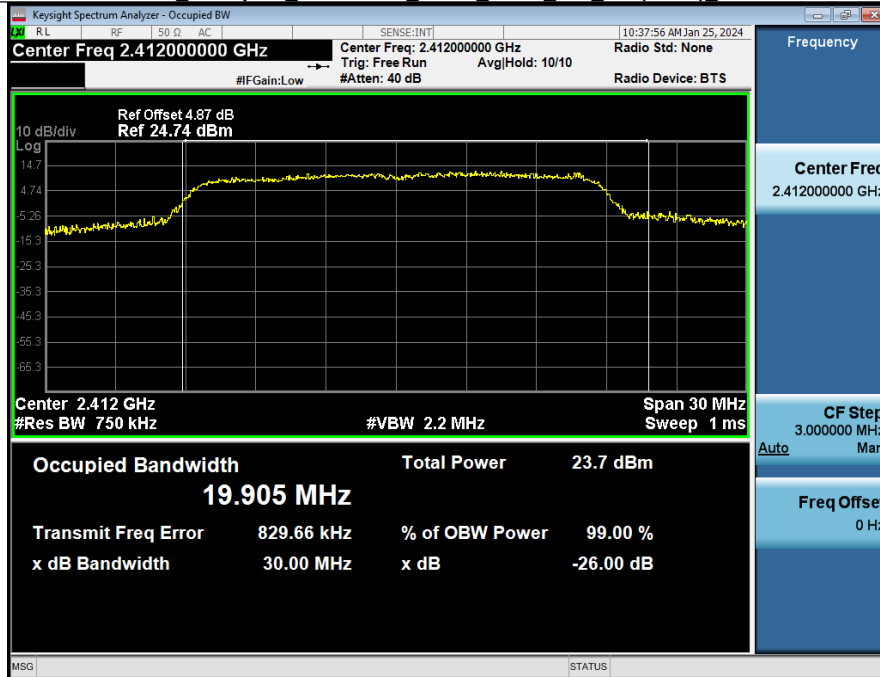
99% Occupied Bandwidth NVNT_ANT1_802_11g_2437



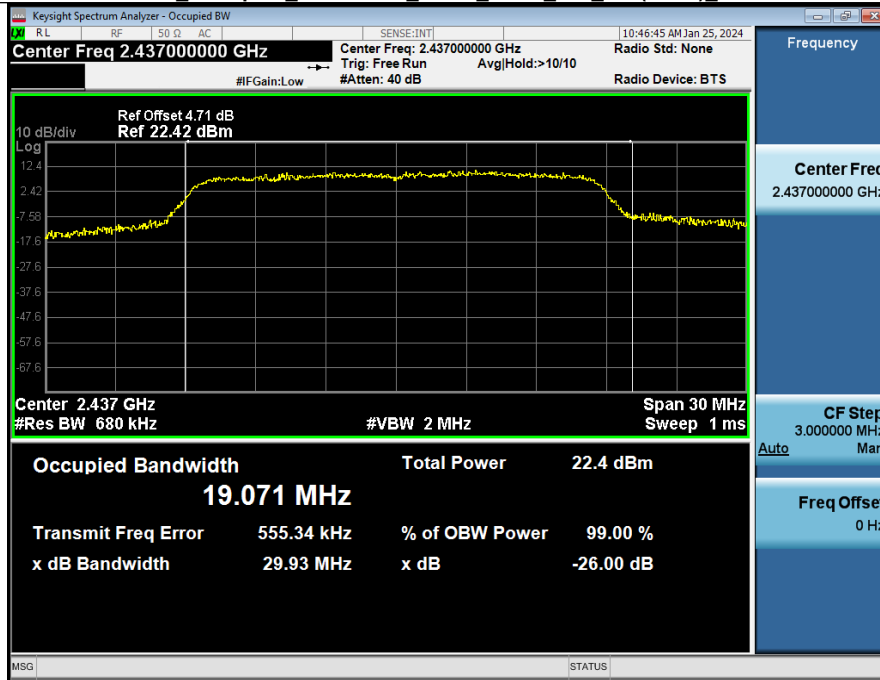
99% Occupied Bandwidth NVNT_ANT1_802_11g_2462



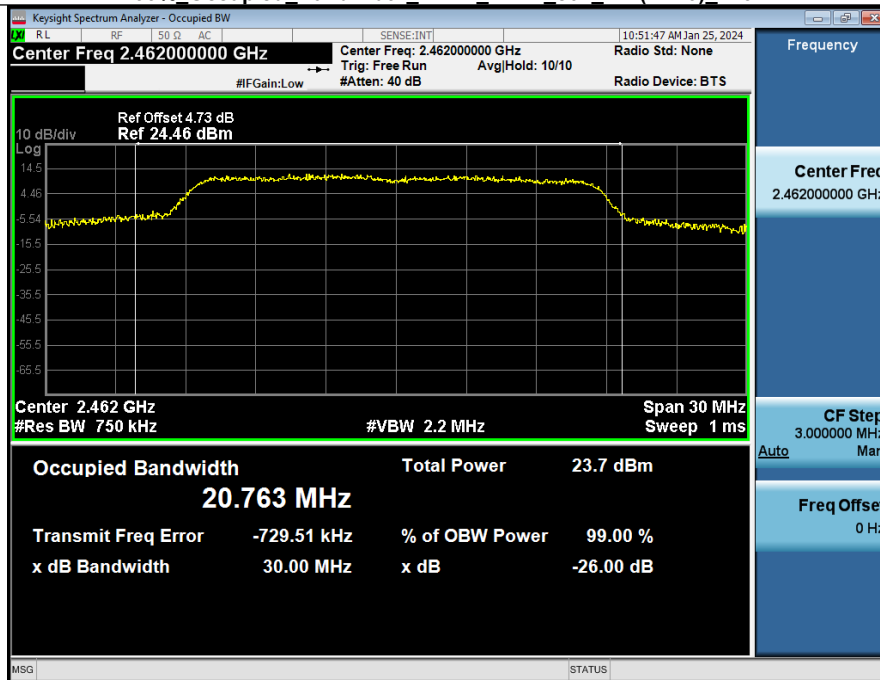
99% Occupied Bandwidth NVNT_ANT1_802_11n(HT20)_2412



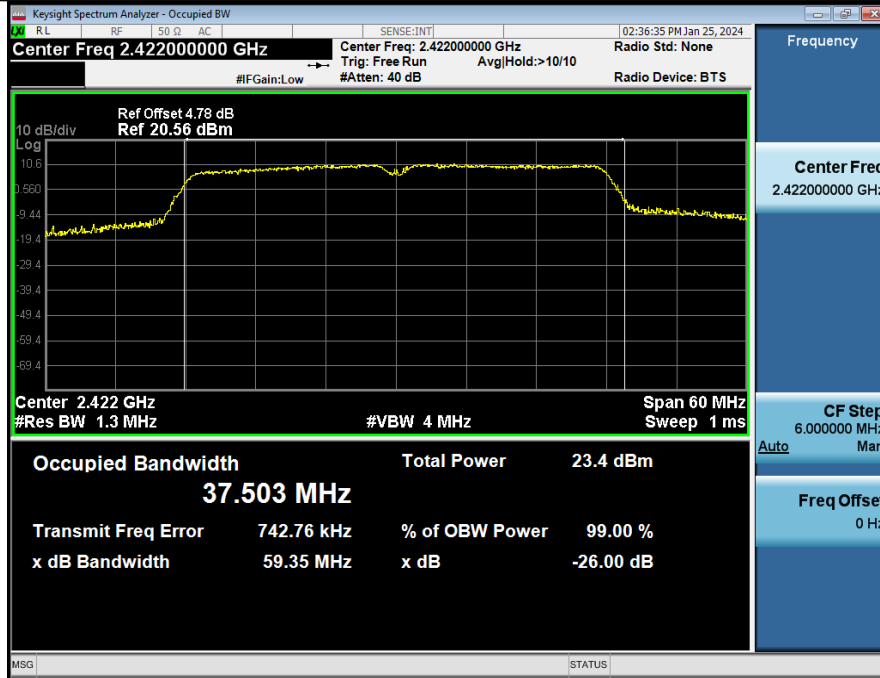
99% Occupied Bandwidth NVNT_ANT1_802_11n(HT20)_2437



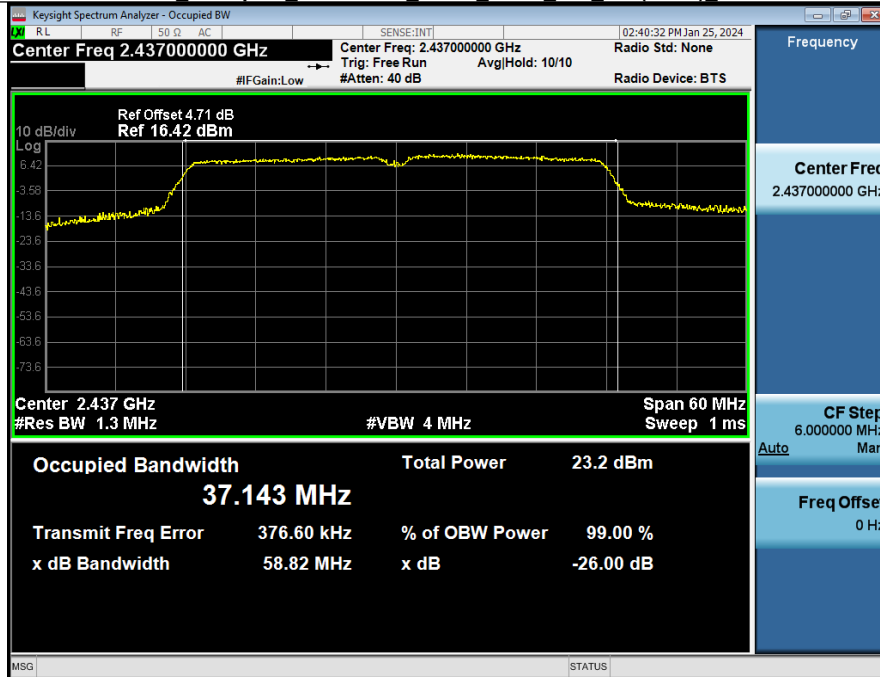
99% Occupied Bandwidth NVNT_ANT1_802_11n(HT20)_2462

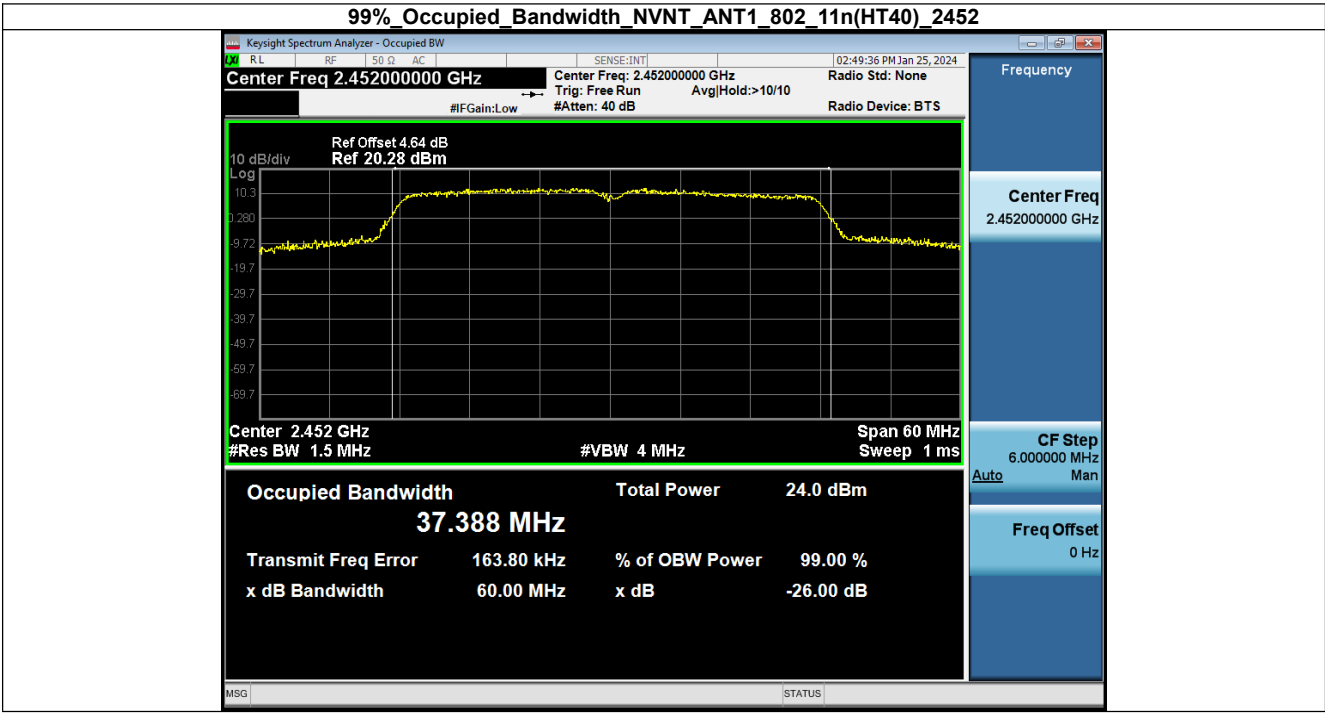


99% Occupied Bandwidth NVNT_ANT1_802_11n(HT40)_2422



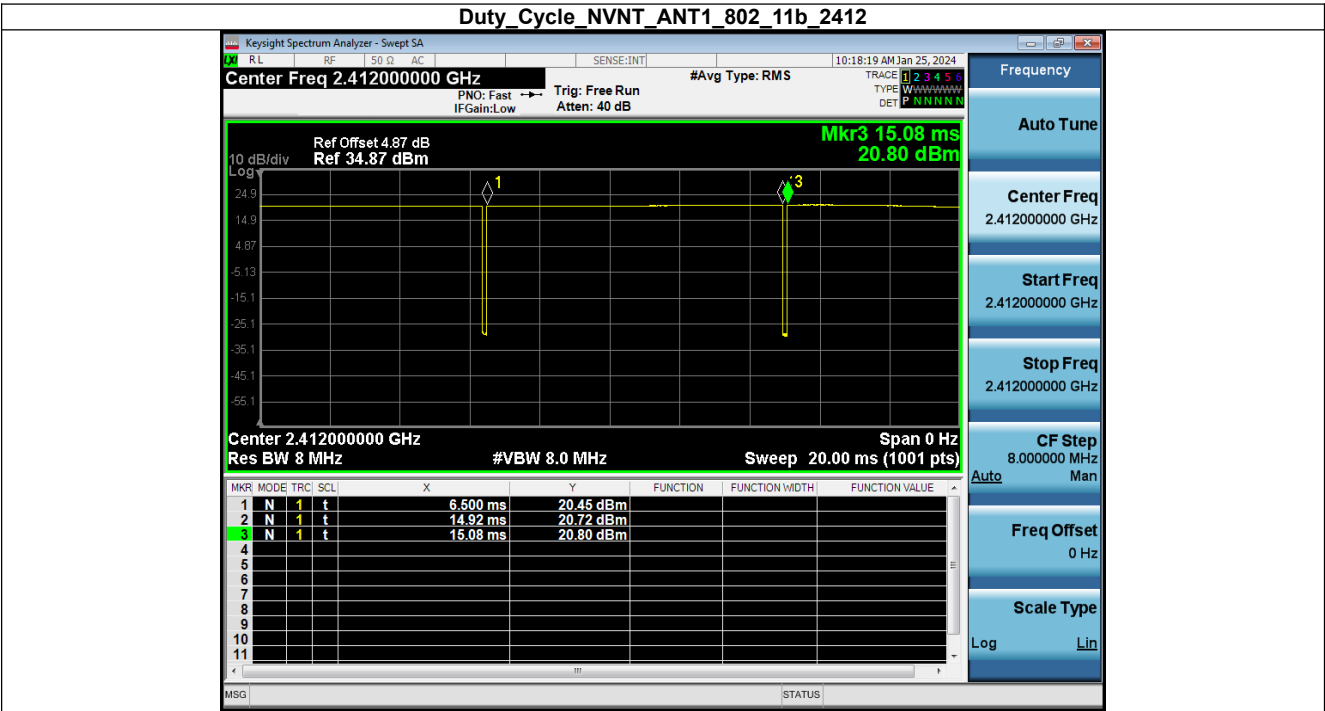
99% Occupied Bandwidth NVNT_ANT1_802_11n(HT40)_2437



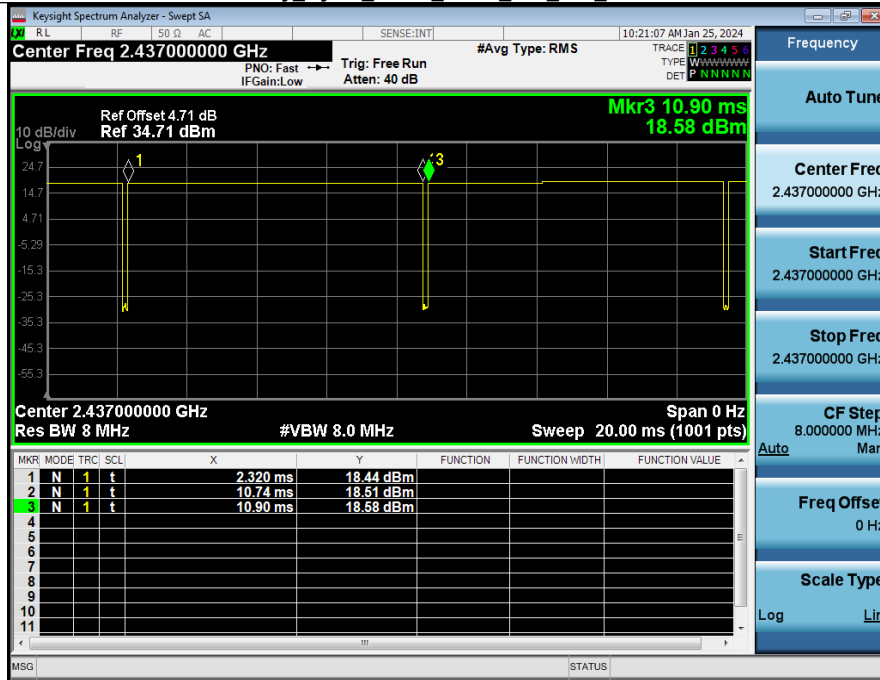


3. Duty Cycle

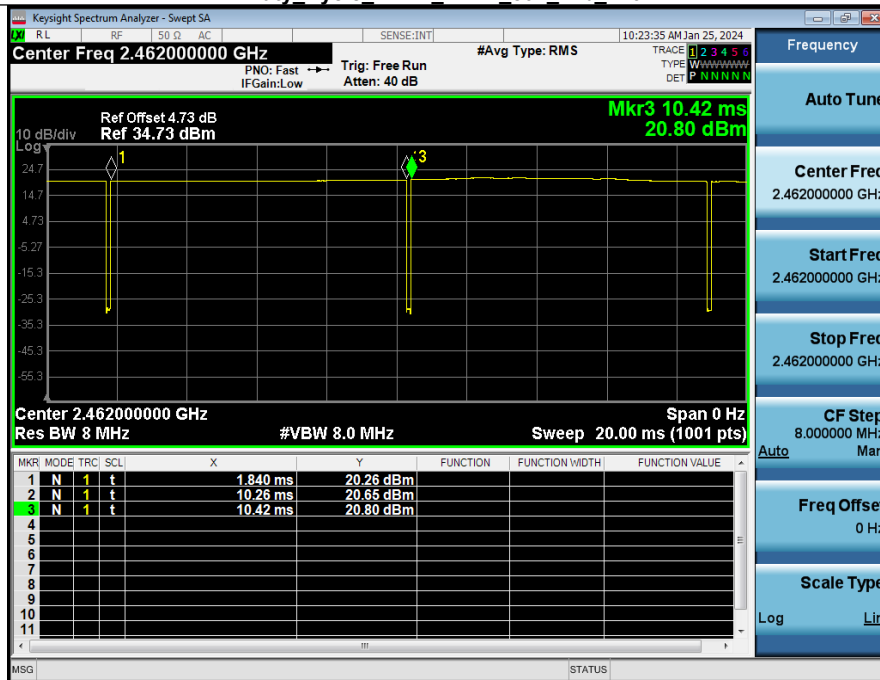
Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty factor(dB)
NVNT	ANT1	802.11b	2412.00	98.37	0.00
NVNT	ANT1	802.11b	2437.00	98.37	0.00
NVNT	ANT1	802.11b	2462.00	98.37	0.00
NVNT	ANT1	802.11g	2412.00	92.21	0.35
NVNT	ANT1	802.11g	2437.00	92.21	0.35
NVNT	ANT1	802.11g	2462.00	90.91	0.41
NVNT	ANT1	802.11n(HT20)	2412.00	89.55	0.48
NVNT	ANT1	802.11n(HT20)	2437.00	89.55	0.48
NVNT	ANT1	802.11n(HT20)	2462.00	89.55	0.48
NVNT	ANT1	802.11n(HT40)	2422.00	81.08	0.91
NVNT	ANT1	802.11n(HT40)	2437.00	81.08	0.91
NVNT	ANT1	802.11n(HT40)	2452.00	81.08	0.91



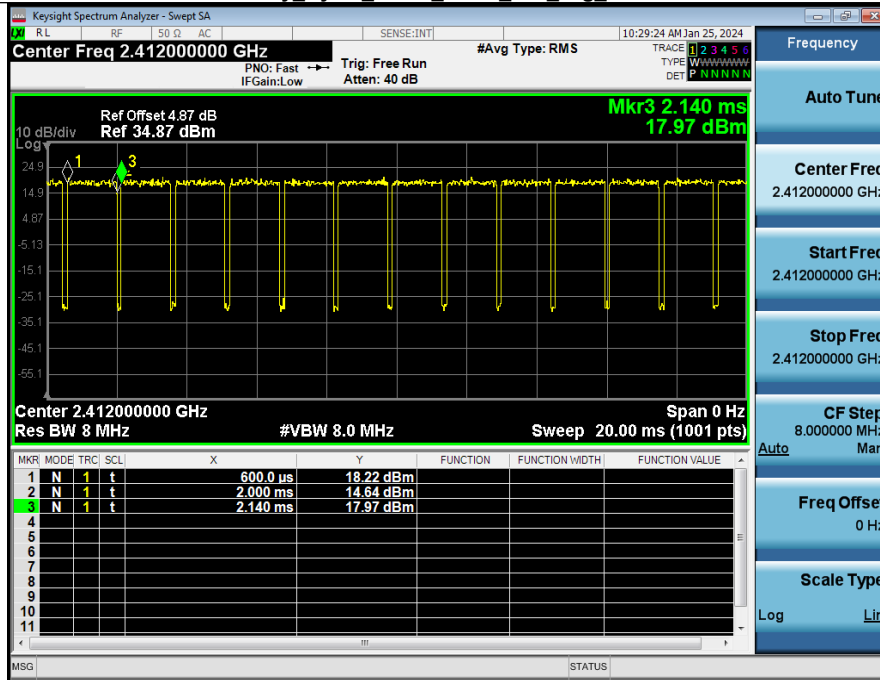
Duty Cycle NVNT ANT1_802_11b_2437



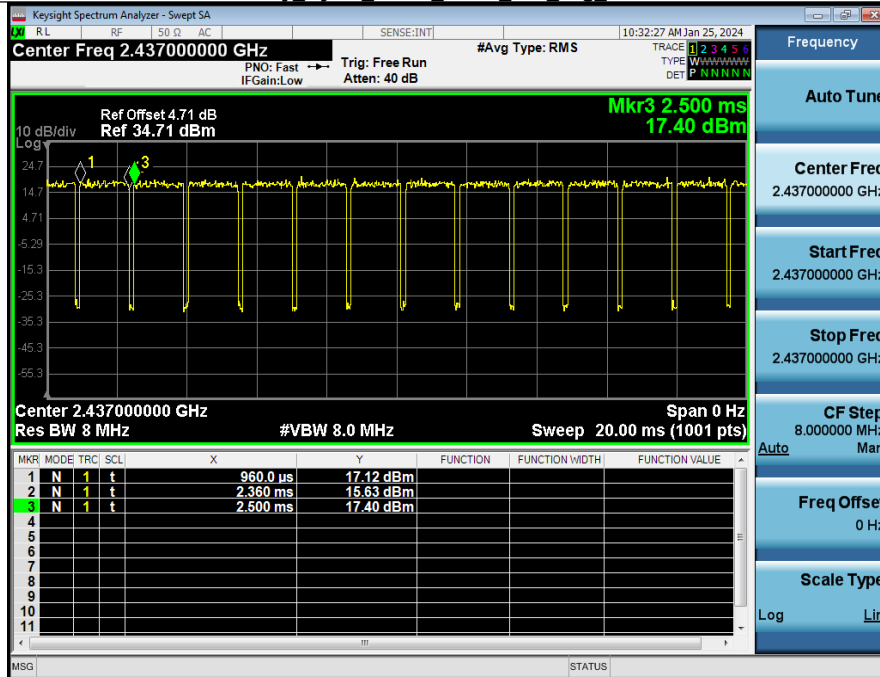
Duty Cycle NVNT ANT1_802_11b_2462



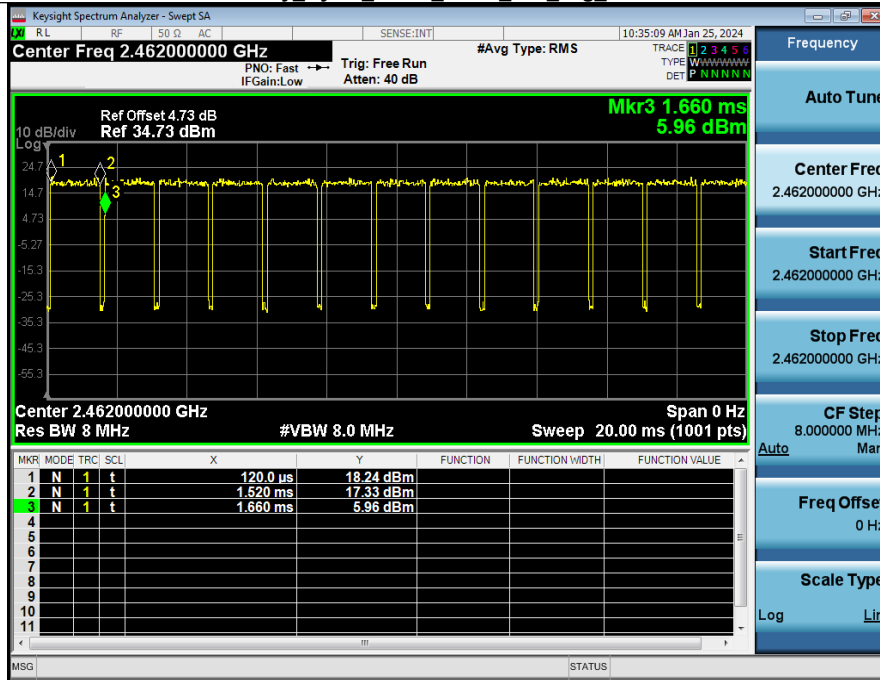
Duty Cycle NVNT ANT1_802_11g_2412



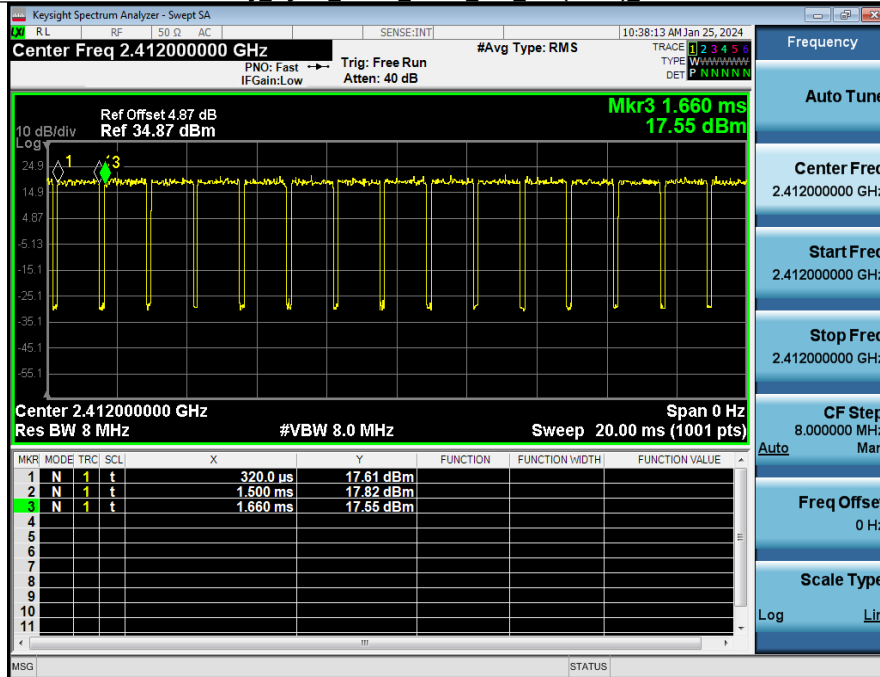
Duty Cycle NVNT ANT1_802_11g_2437



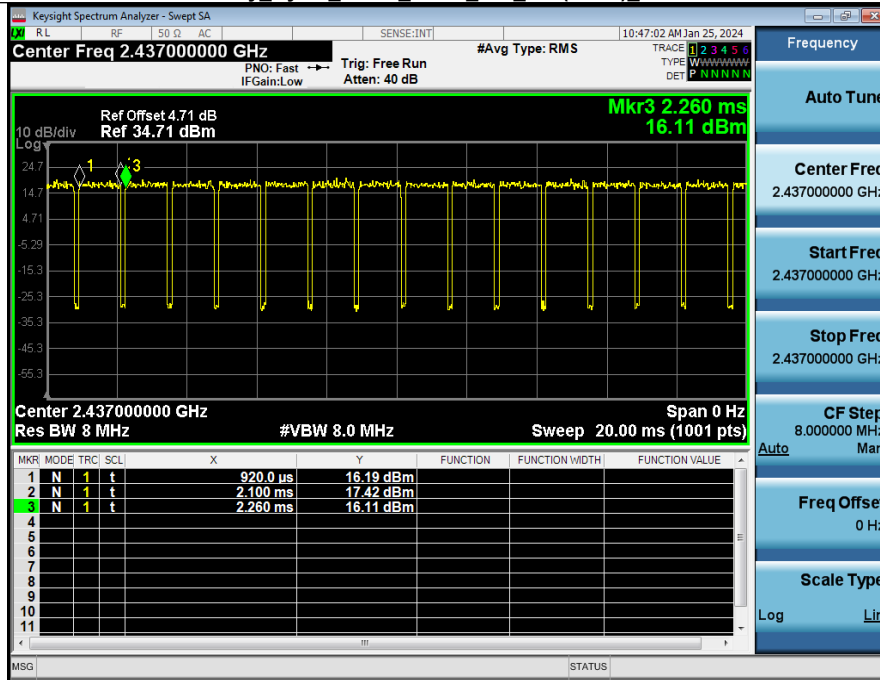
Duty Cycle NVNT_ANT1_802_11g_2462



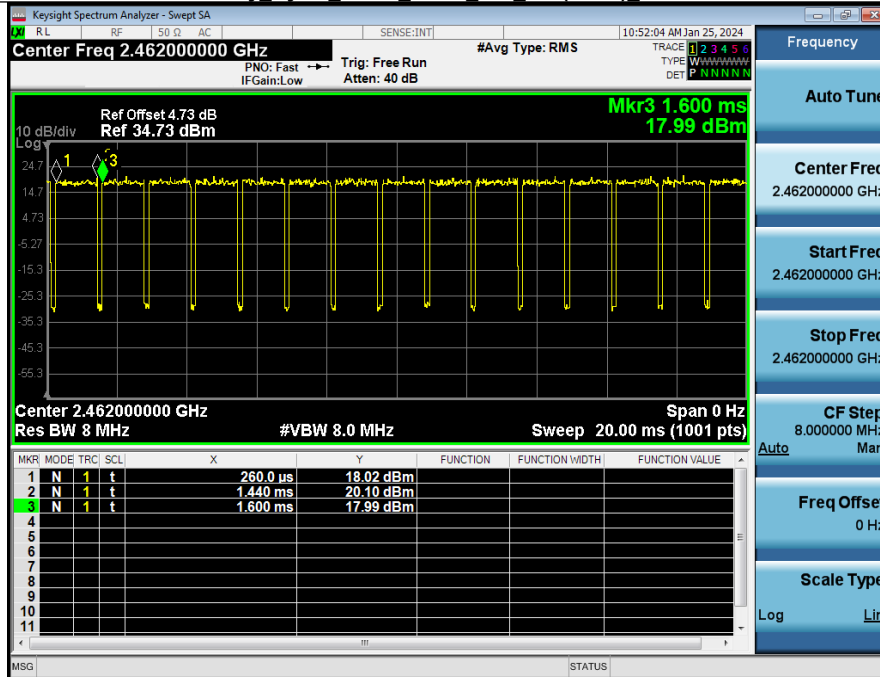
Duty Cycle NVNT_ANT1_802_11n(HT20)_2412



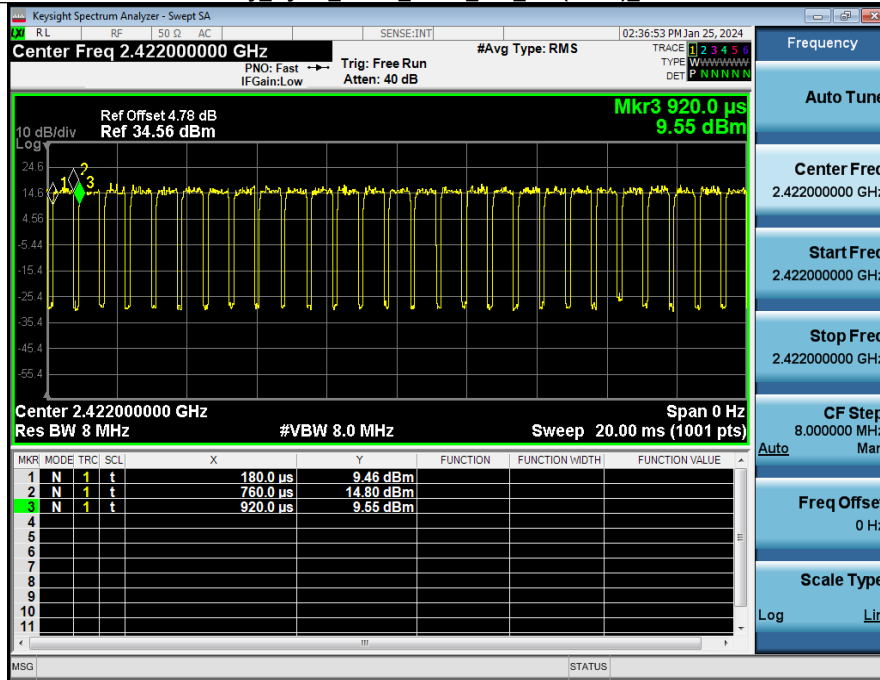
Duty Cycle NVNT_ANT1_802_11n(HT20)_2437



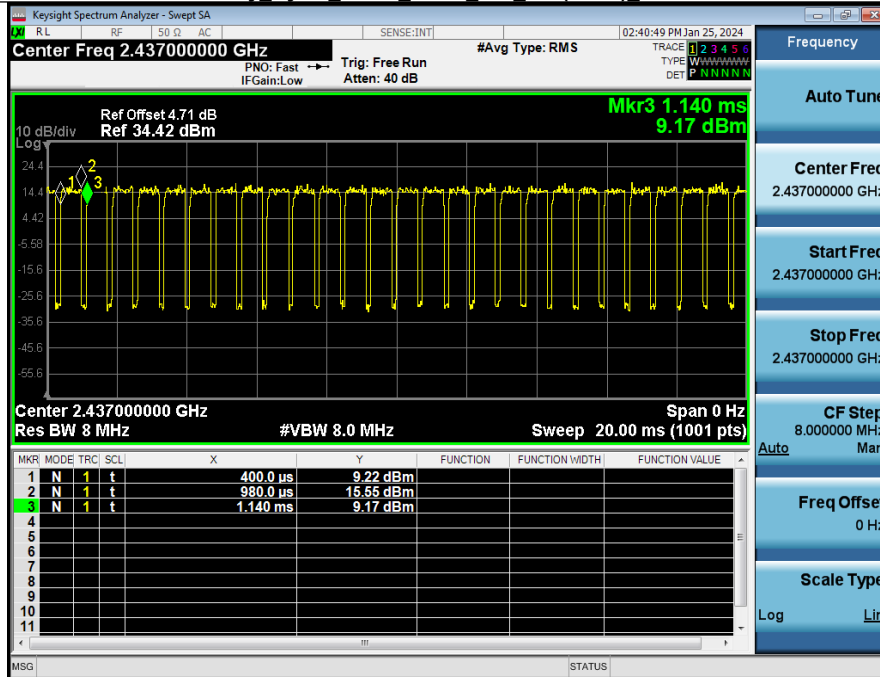
Duty Cycle NVNT_ANT1_802_11n(HT20)_2462



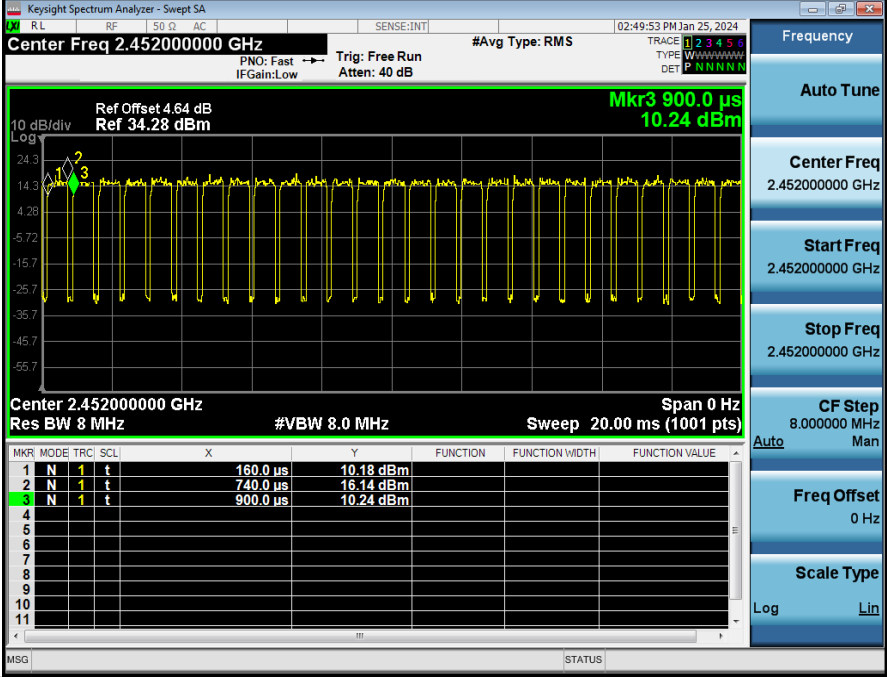
Duty Cycle NVNT_ANT1_802_11n(HT40)_2422



Duty Cycle NVNT_ANT1_802_11n(HT40)_2437



Duty Cycle NVNT_ANT1_802_11n(HT40)_2452



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	5.31	-10.00	-4.69	8	Pass
NVNT	ANT1	802.11b	2437.00	2.43	-10.00	-7.57	8	Pass
NVNT	ANT1	802.11b	2462.00	3.35	-10.00	-6.65	8	Pass
NVNT	ANT1	802.11g	2412.00	0.96	-10.00	-9.04	8	Pass
NVNT	ANT1	802.11g	2437.00	-1.59	-10.00	-11.59	8	Pass
NVNT	ANT1	802.11g	2462.00	-0.15	-10.00	-10.15	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	0.28	-10.00	-9.72	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-1.28	-10.00	-11.28	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-0.42	-10.00	-10.42	8	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	-4.61	-10.00	-14.61	8	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	-4.57	-10.00	-14.57	8	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	-3.31	-10.00	-13.31	8	Pass



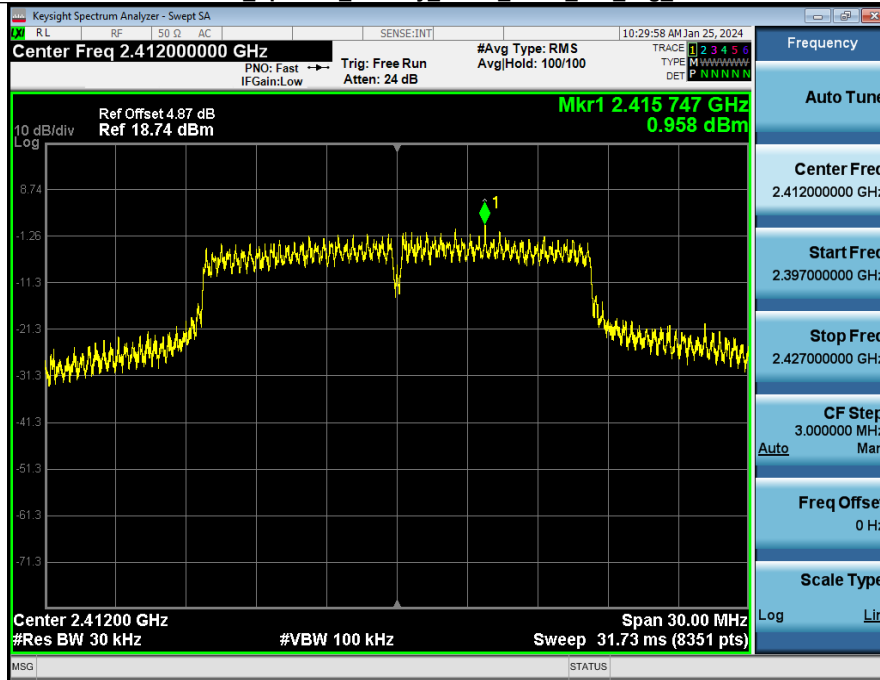
Power Spectral Density NVNT_ANT1_802_11b_2437



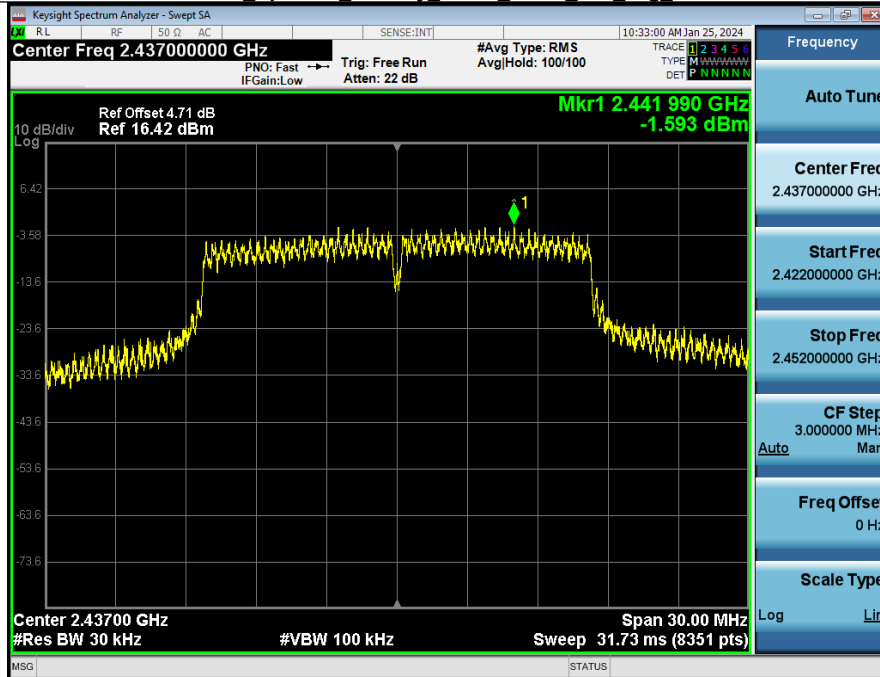
Power Spectral Density NVNT_ANT1_802_11b_2462



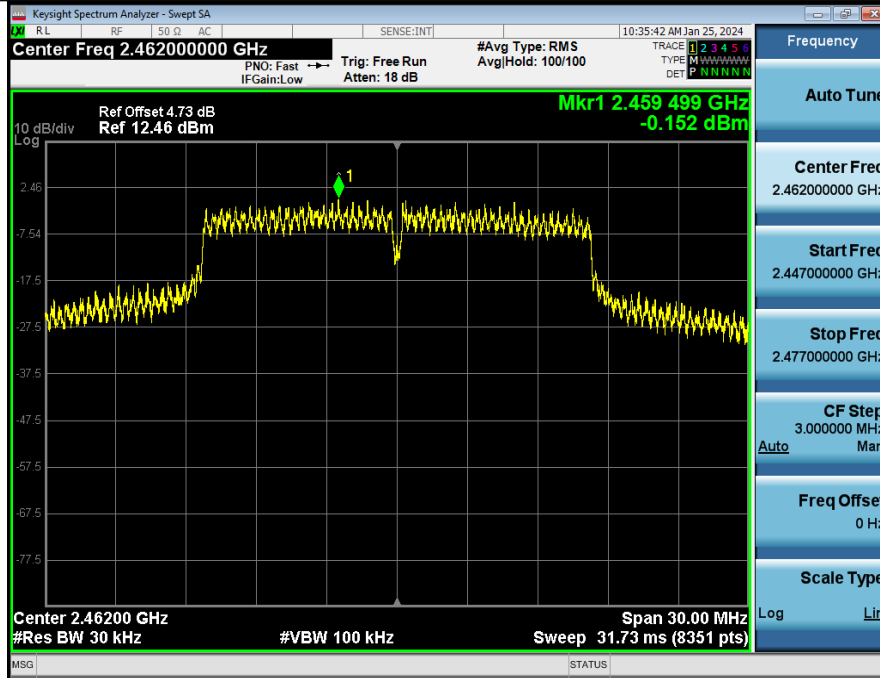
Power Spectral Density NVNT_ANT1_802_11g_2412



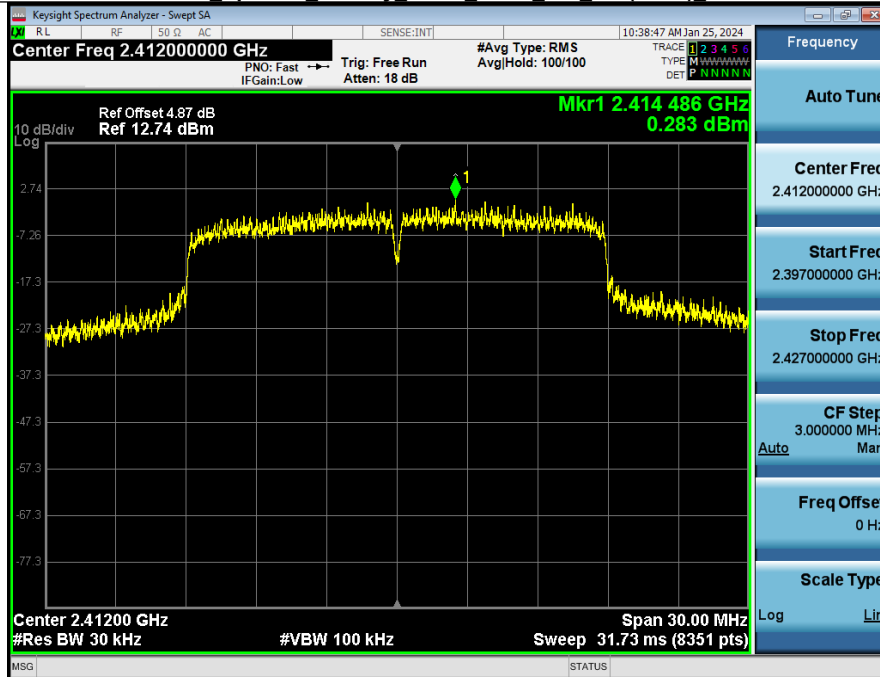
Power Spectral Density NVNT_ANT1_802_11g_2437



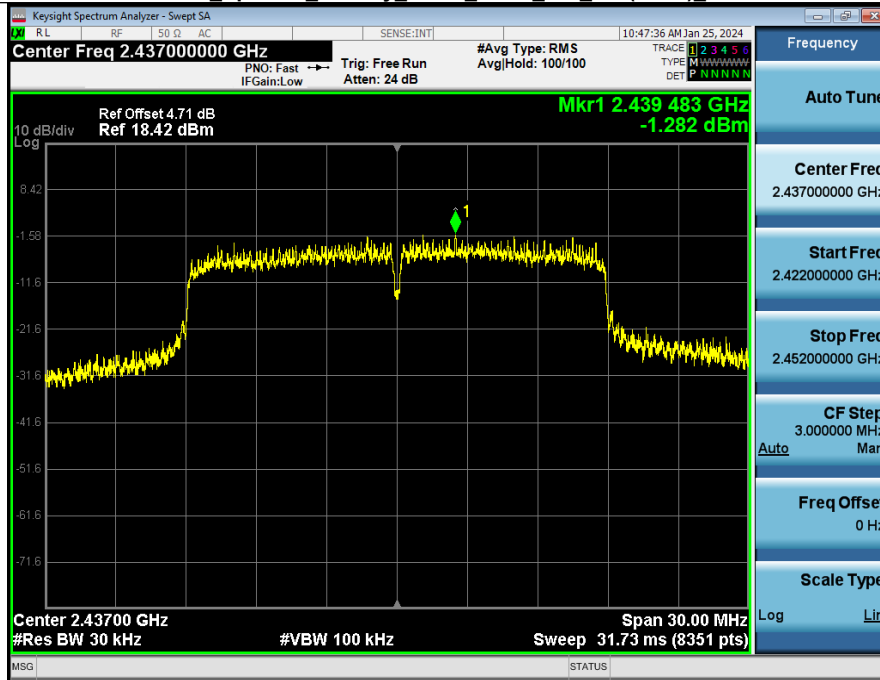
Power Spectral Density NVNT_ANT1_802_11g_2462



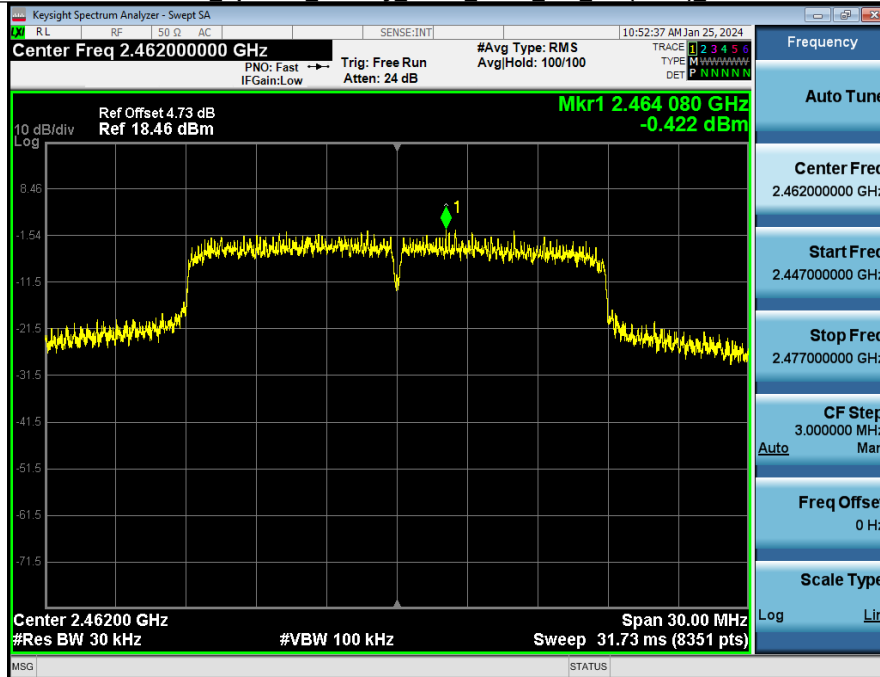
Power Spectral Density NVNT_ANT1_802_11n(HT20)_2412



Power Spectral Density NVNT_ANT1_802_11n(HT20)_2437



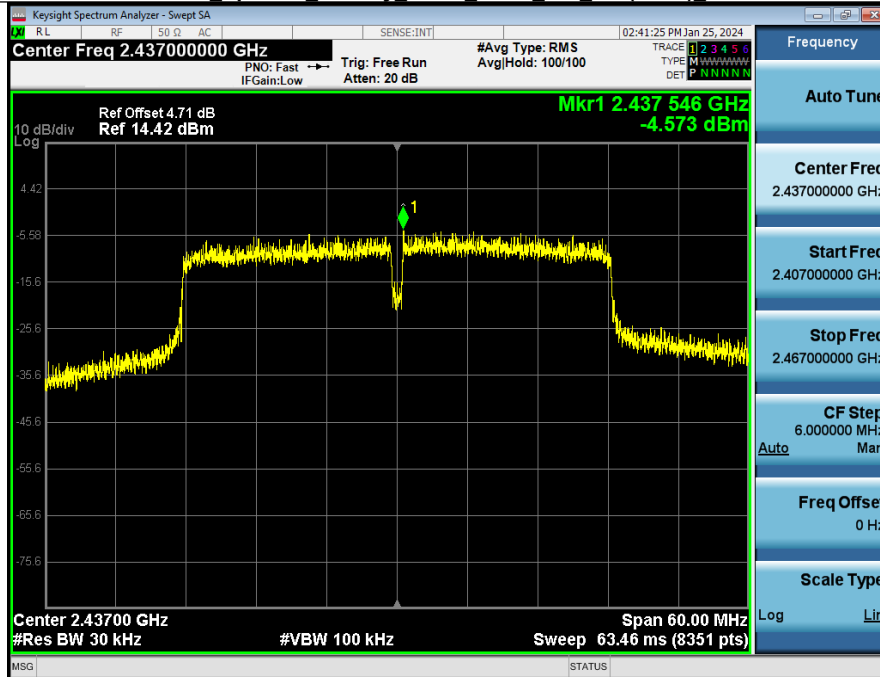
Power Spectral Density NVNT_ANT1_802_11n(HT20)_2462



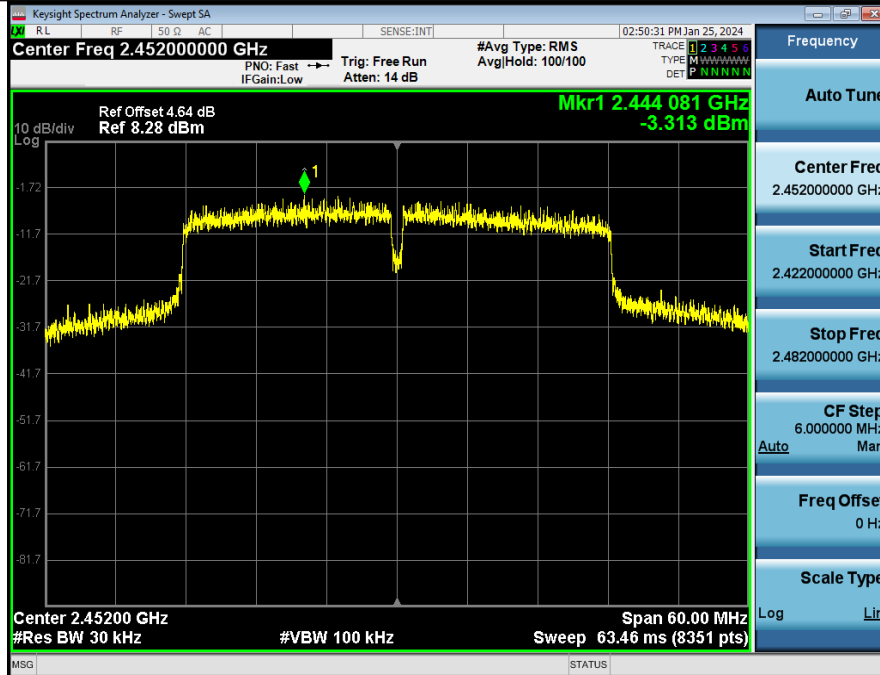
Power Spectral Density NVNT_ANT1_802_11n(HT40)_2422



Power Spectral Density NVNT_ANT1_802_11n(HT40)_2437

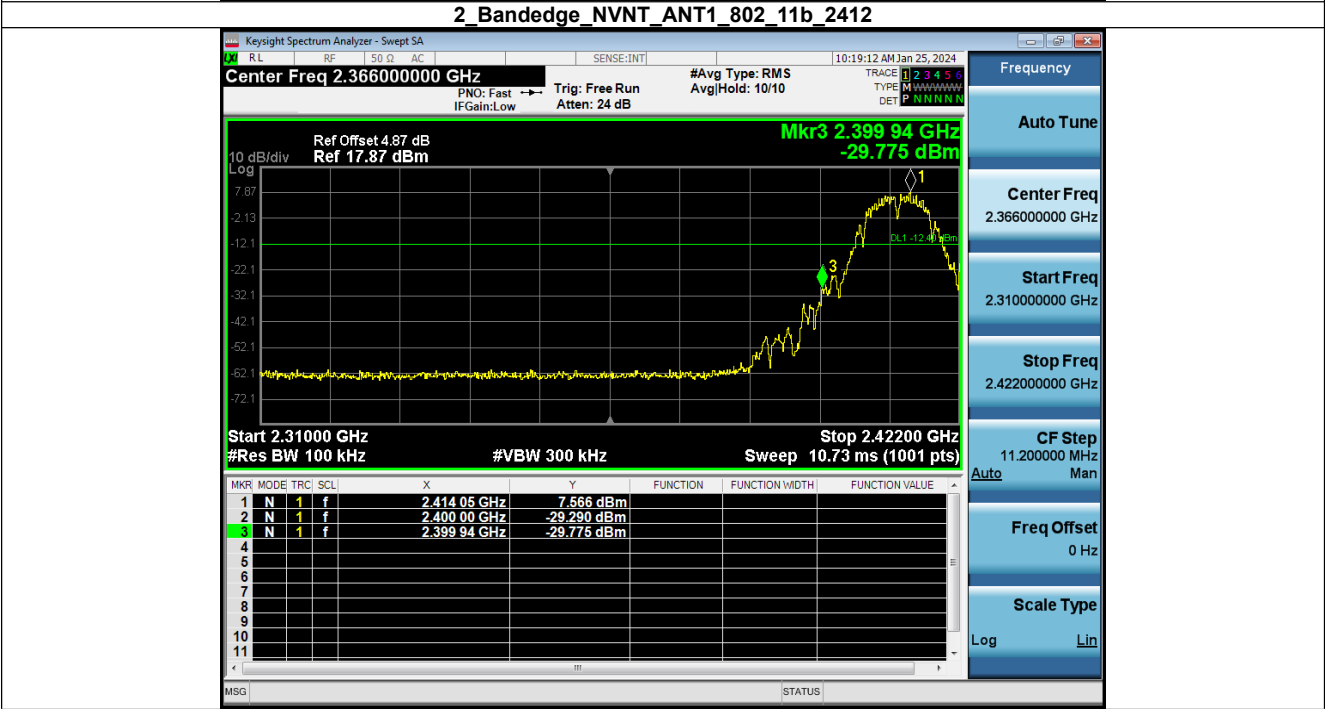


Power Spectral Density NVNT_ANT1_802_11n(HT40)_2452

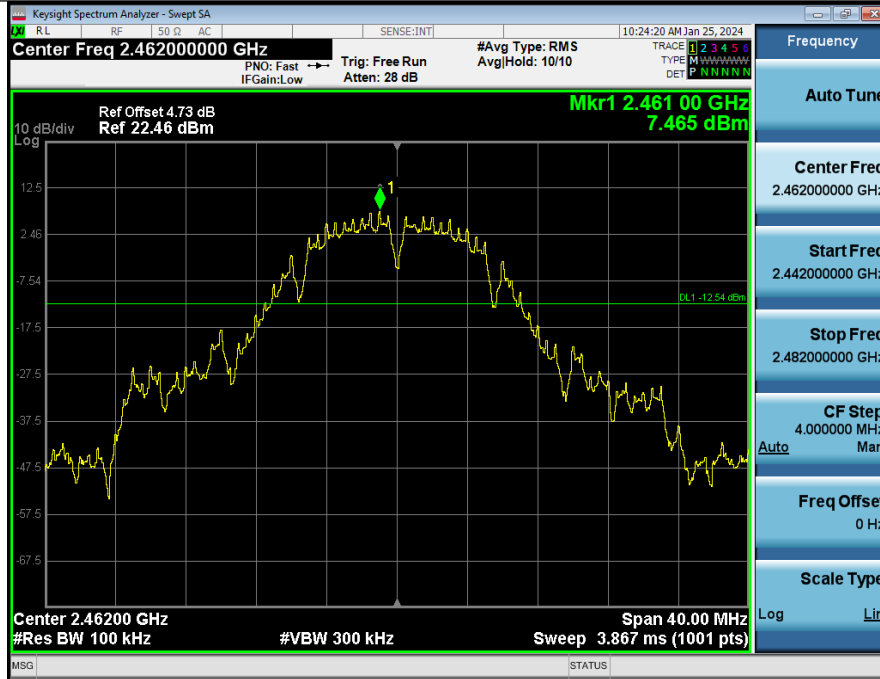


6. Bandedge

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	2399.936	-29.775	-12.404	Pass
NVNT	ANT1	802.11b	2462.00	2486.032	-50.885	-12.535	Pass
NVNT	ANT1	802.11g	2412.00	2399.824	-20.602	-15.439	Pass
NVNT	ANT1	802.11g	2462.00	2483.776	-30.929	-14.819	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2399.824	-18.297	-15.719	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2483.824	-29.113	-15.180	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	2399.892	-26.194	-19.252	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	2484.496	-23.097	-18.645	Pass



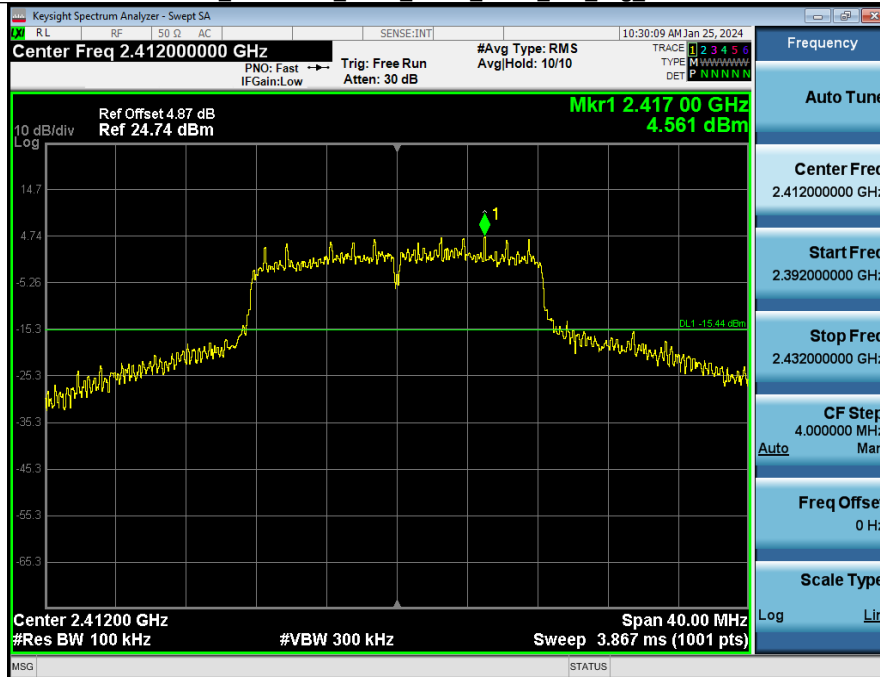
1_Reference_Level_NVNT_ANT1_802_11b_2462



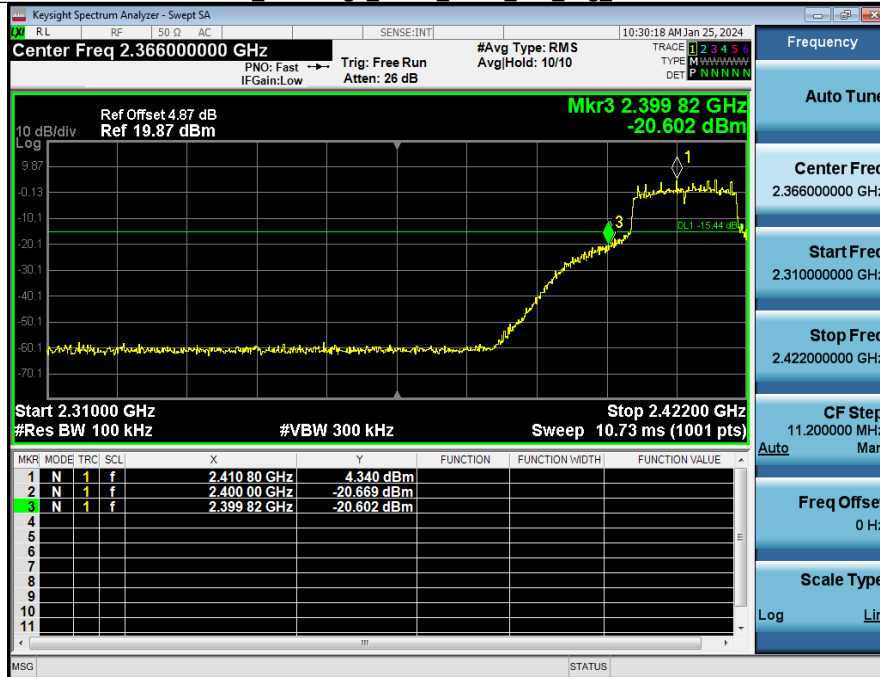
2_Bandedge_NVNT_ANT1_802_11b_2462



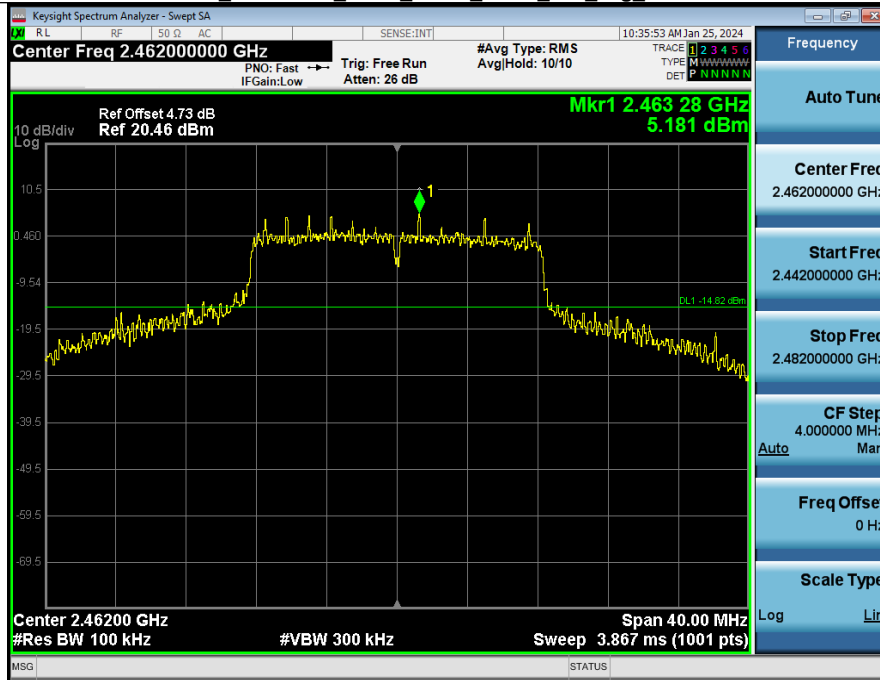
1 Reference Level_NVNT_ANT1_802_11g_2412



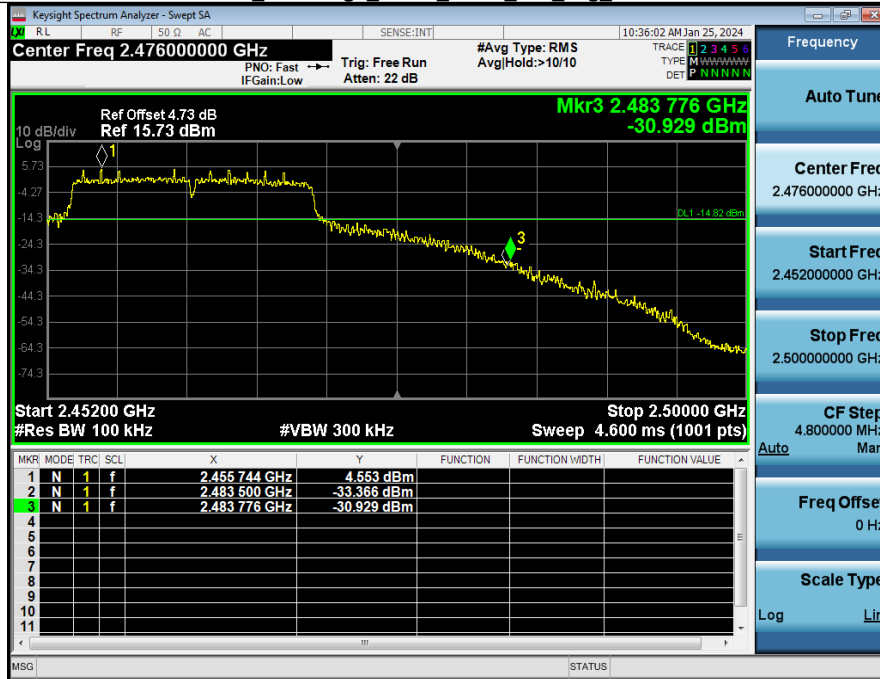
2 Bandedge_NVNT_ANT1_802_11g_2412



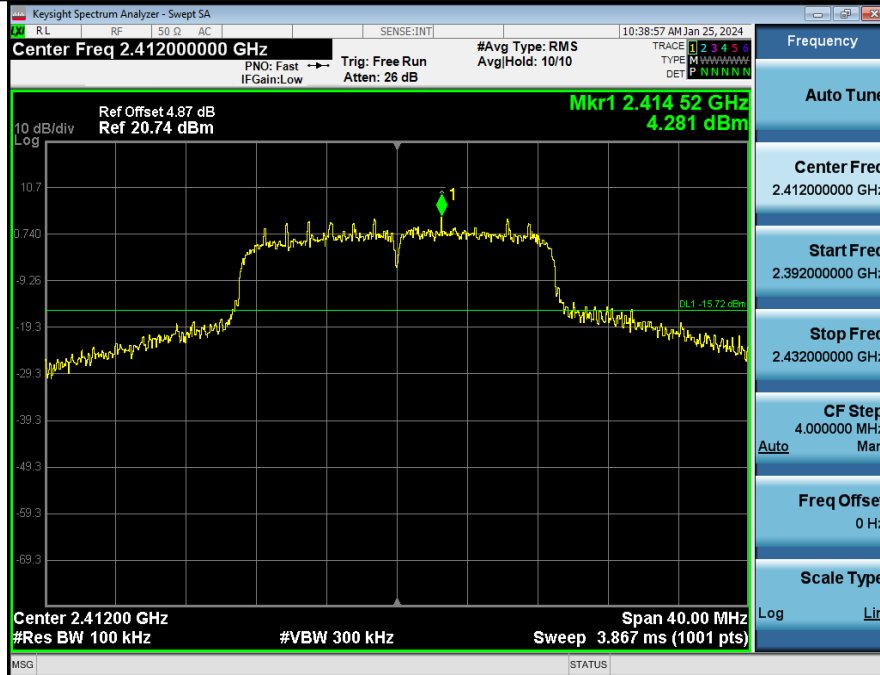
1_Reference_Level_NVNT_ANT1_802_11g_2462



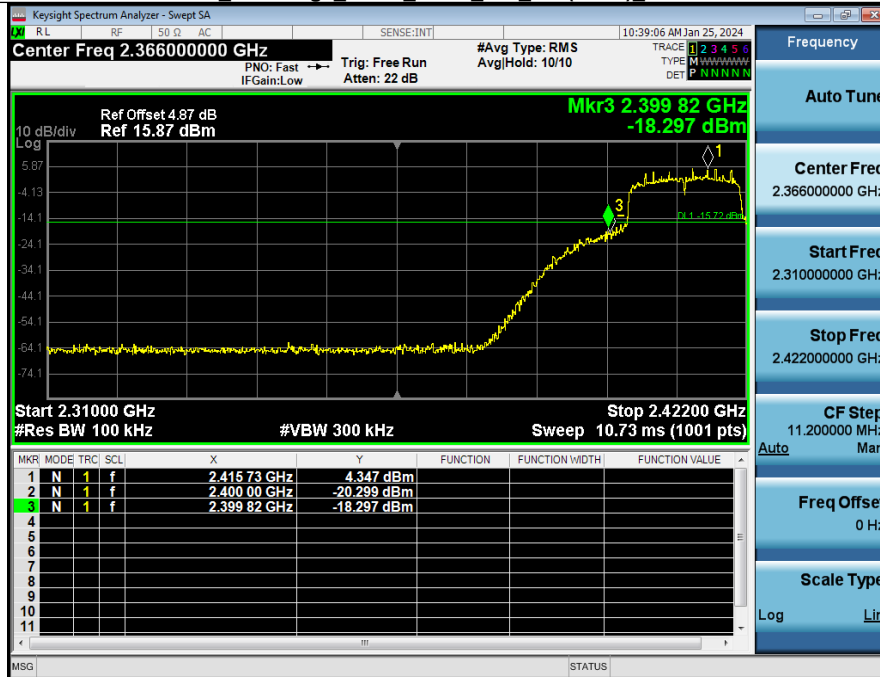
2_Bandedge_NVNT_ANT1_802_11g_2462



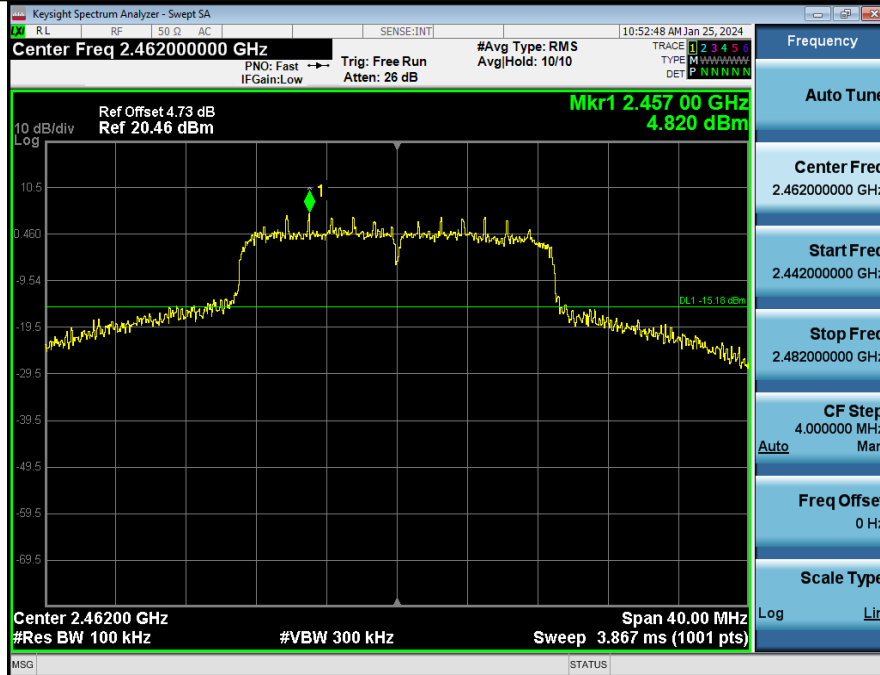
1 Reference Level_NVNT_ANT1_802_11n(HT20)_2412



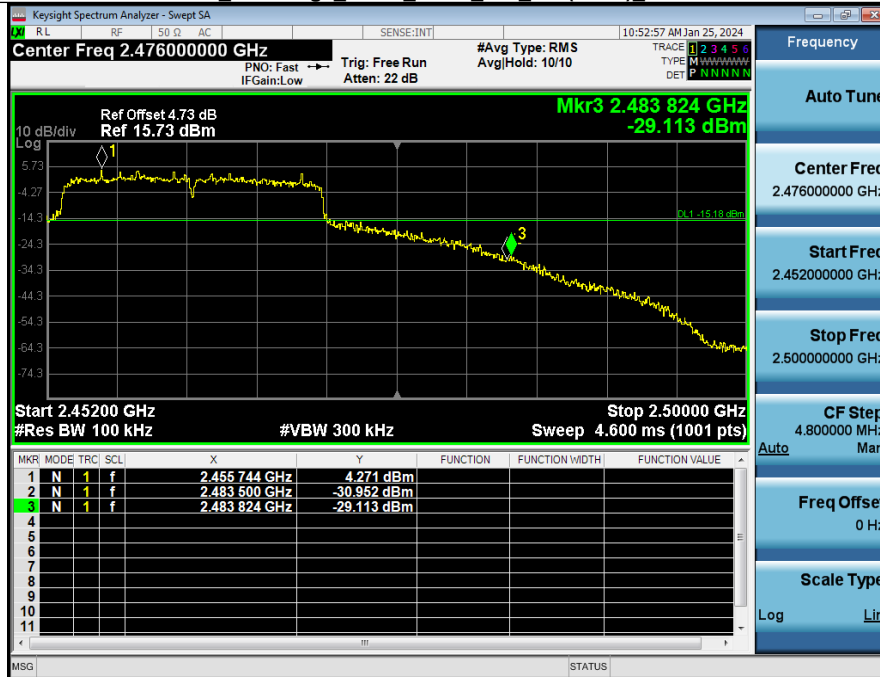
2 Bandedge_NVNT_ANT1_802_11n(HT20)_2412



1 Reference Level_NVNT_ANT1_802_11n(HT20)_2462



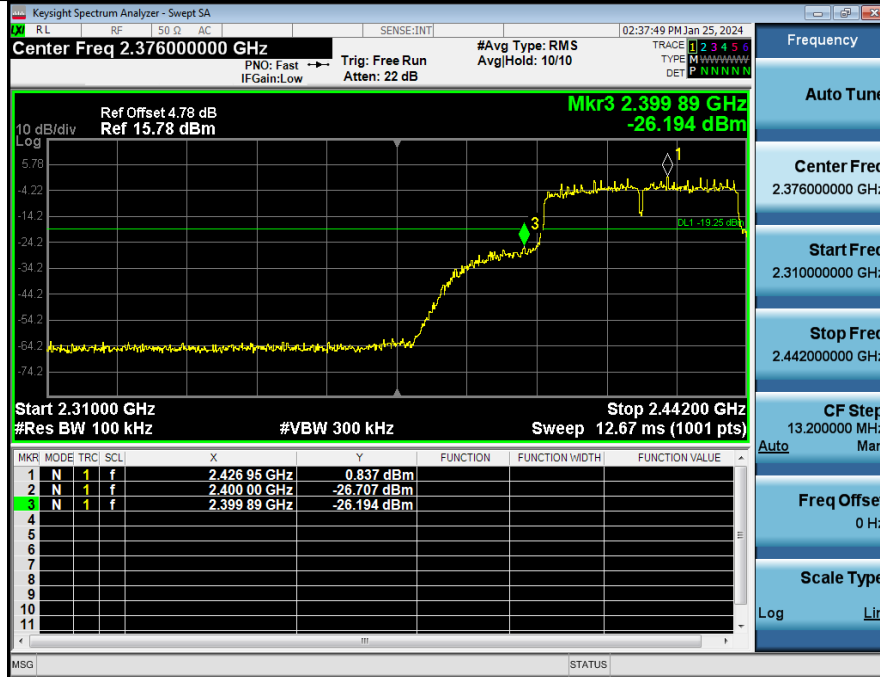
2 Bandedge_NVNT_ANT1_802_11n(HT20)_2462



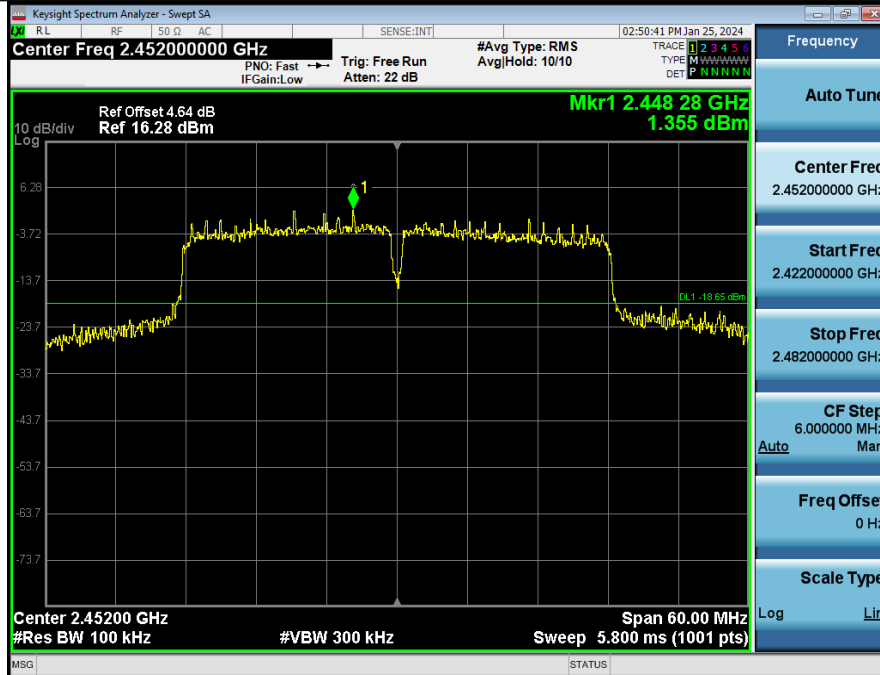
1 Reference Level_NVNT_ANT1_802_11n(HT40)_2422



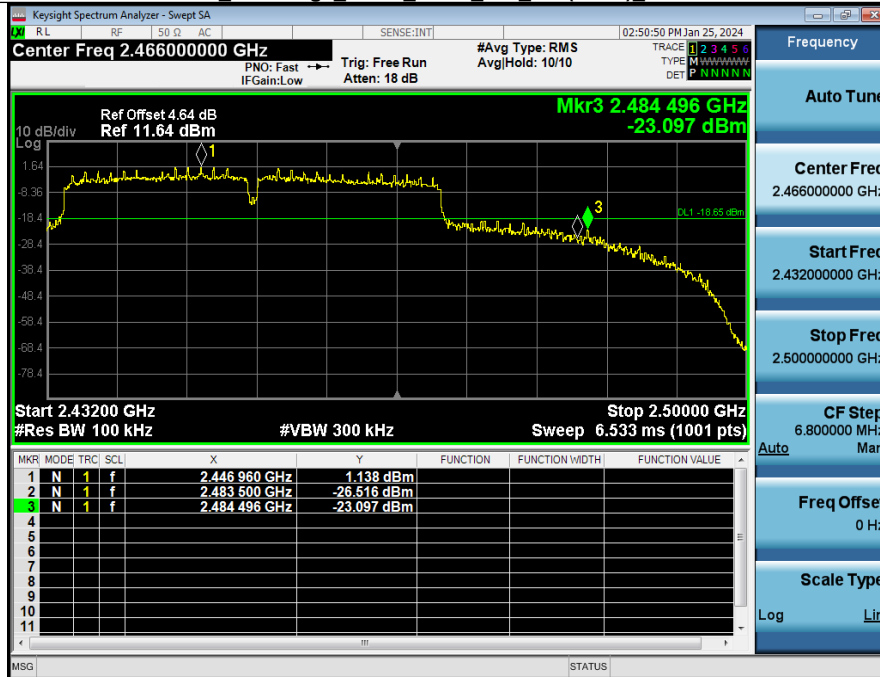
2 Bandedge_NVNT_ANT1_802_11n(HT40)_2422



1 Reference Level_NVNT_ANT1_802_11n(HT40)_2452

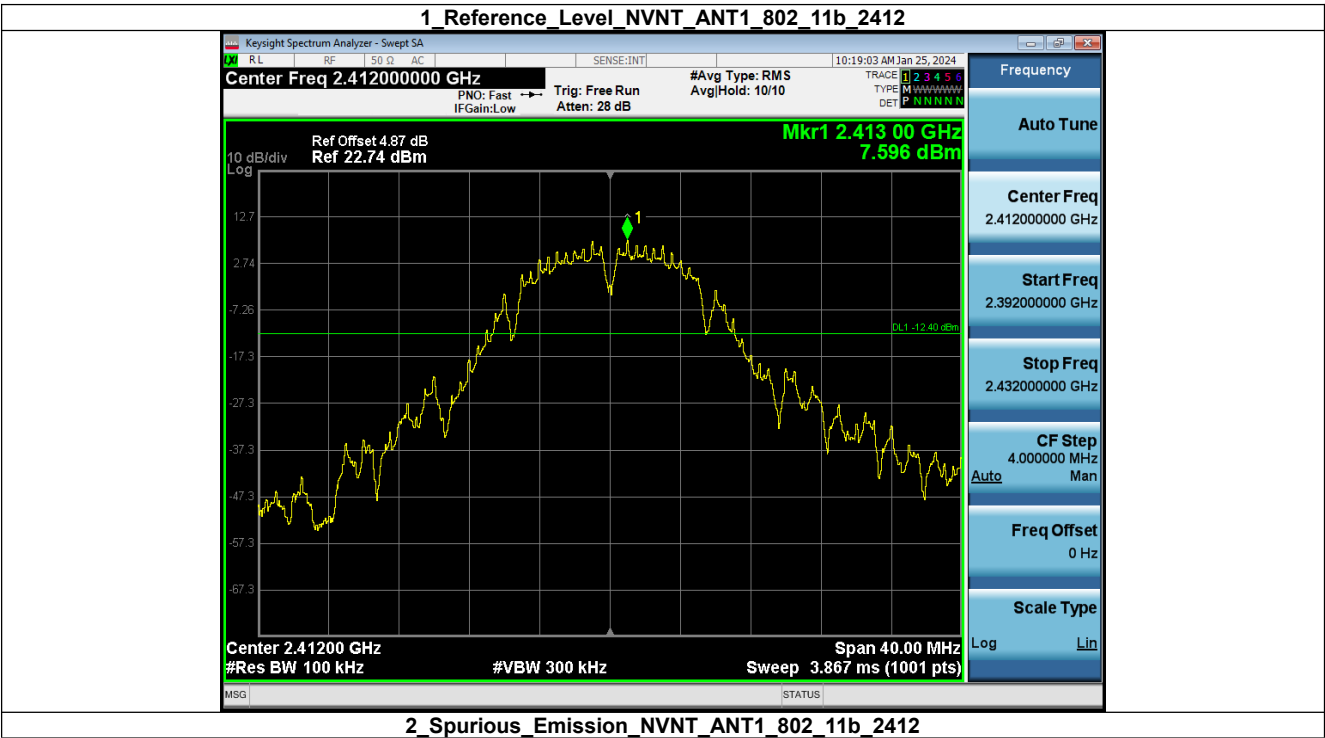


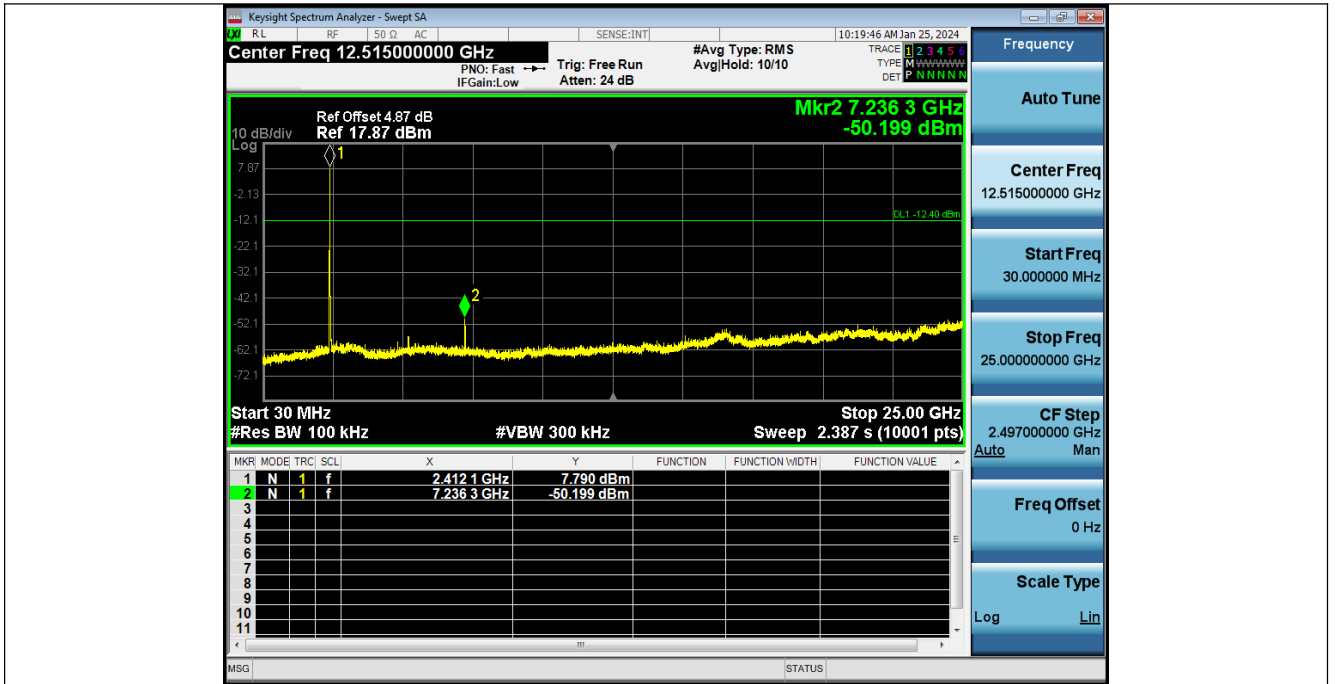
2 Bandedge_NVNT_ANT1_802_11n(HT40)_2452



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	7236.342	-50.199	-12.404	Pass
NVNT	ANT1	802.11b	2437.00	24558.031	-47.000	-13.886	Pass
NVNT	ANT1	802.11b	2462.00	24925.090	-49.647	-12.535	Pass
NVNT	ANT1	802.11g	2412.00	24423.193	-48.075	-15.439	Pass
NVNT	ANT1	802.11g	2437.00	24952.557	-50.689	-16.643	Pass
NVNT	ANT1	802.11g	2462.00	24975.030	-52.423	-14.819	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	24967.539	-52.742	-15.719	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	24955.054	-54.416	-16.828	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	24303.337	-52.586	-15.180	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	24925.090	-52.710	-19.252	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	5188.802	-49.647	-19.622	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	24975.030	-56.656	-18.645	Pass

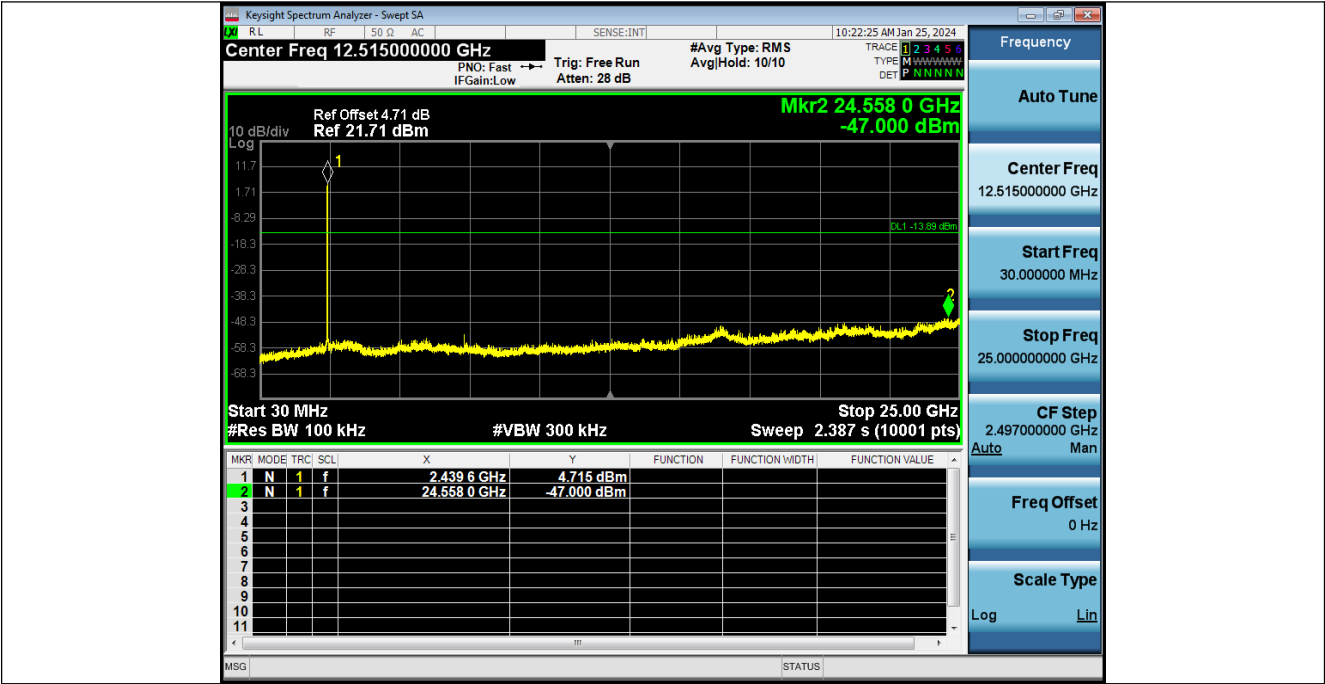




1 Reference Level NVNT_ANT1_802_11b_2437



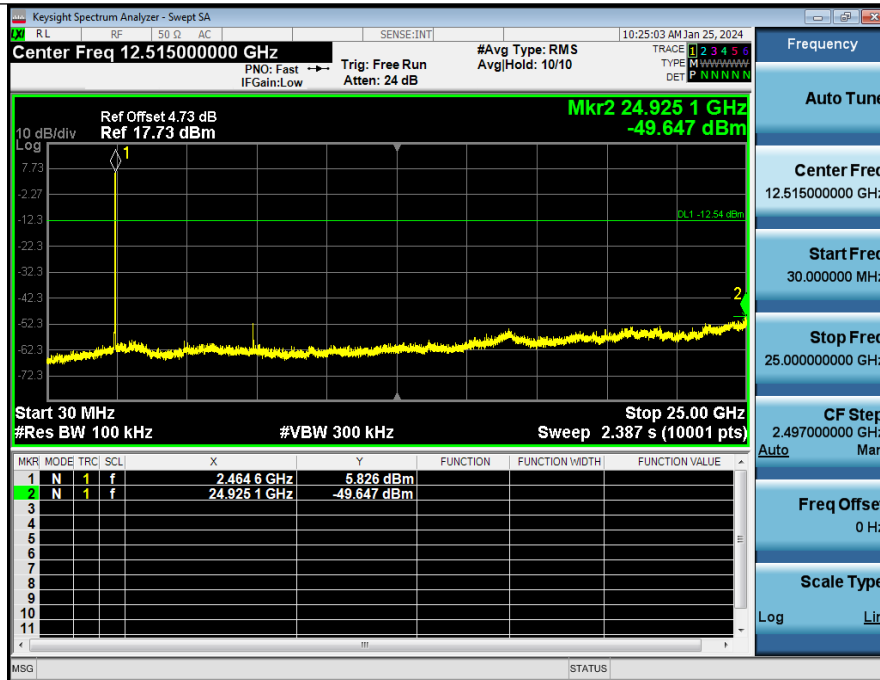
2 Spurious_Emission_NVNT_ANT1_802_11b_2437



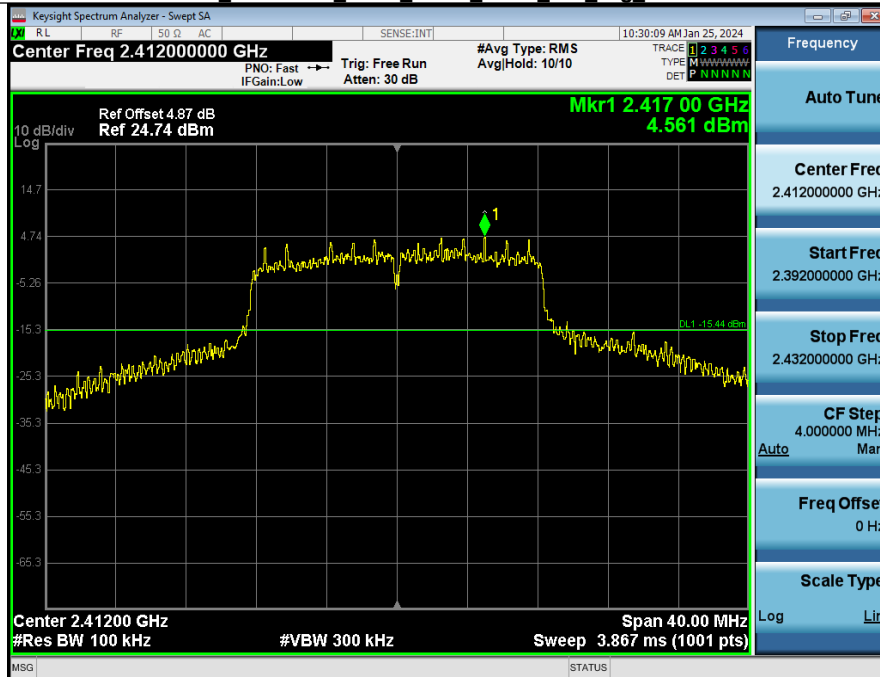
1 Reference Level NVNT_ANT1_802_11b_2462



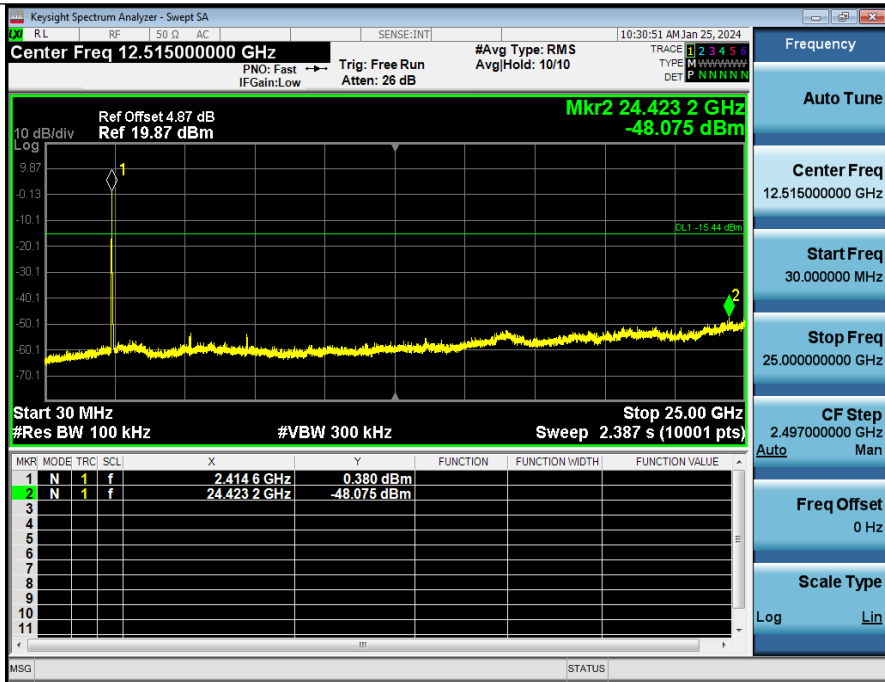
2 Spurious_Emission_NVNT_ANT1_802_11b_2462



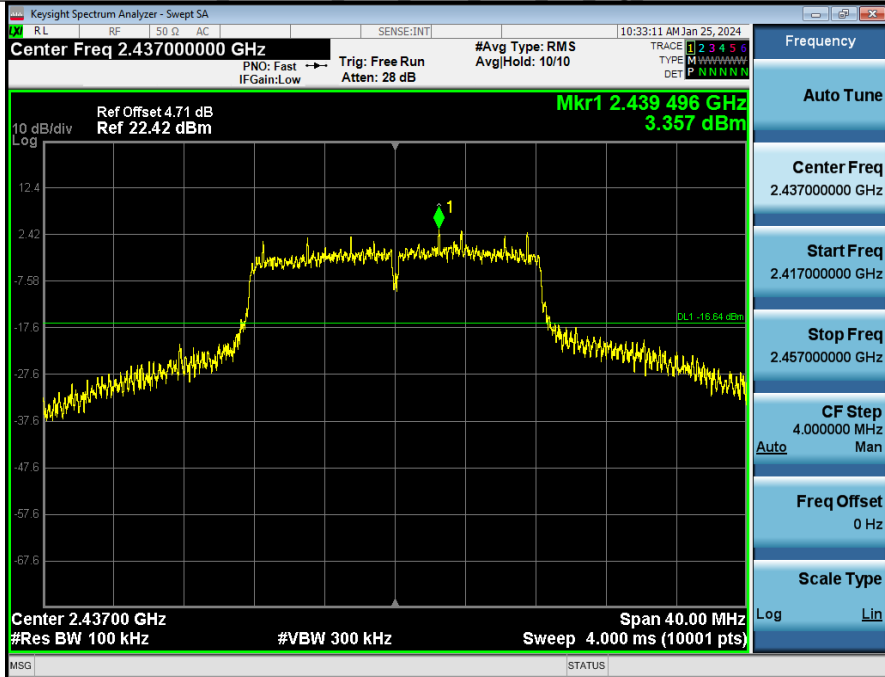
1 Reference Level NVNT_ANT1_802_11g_2412



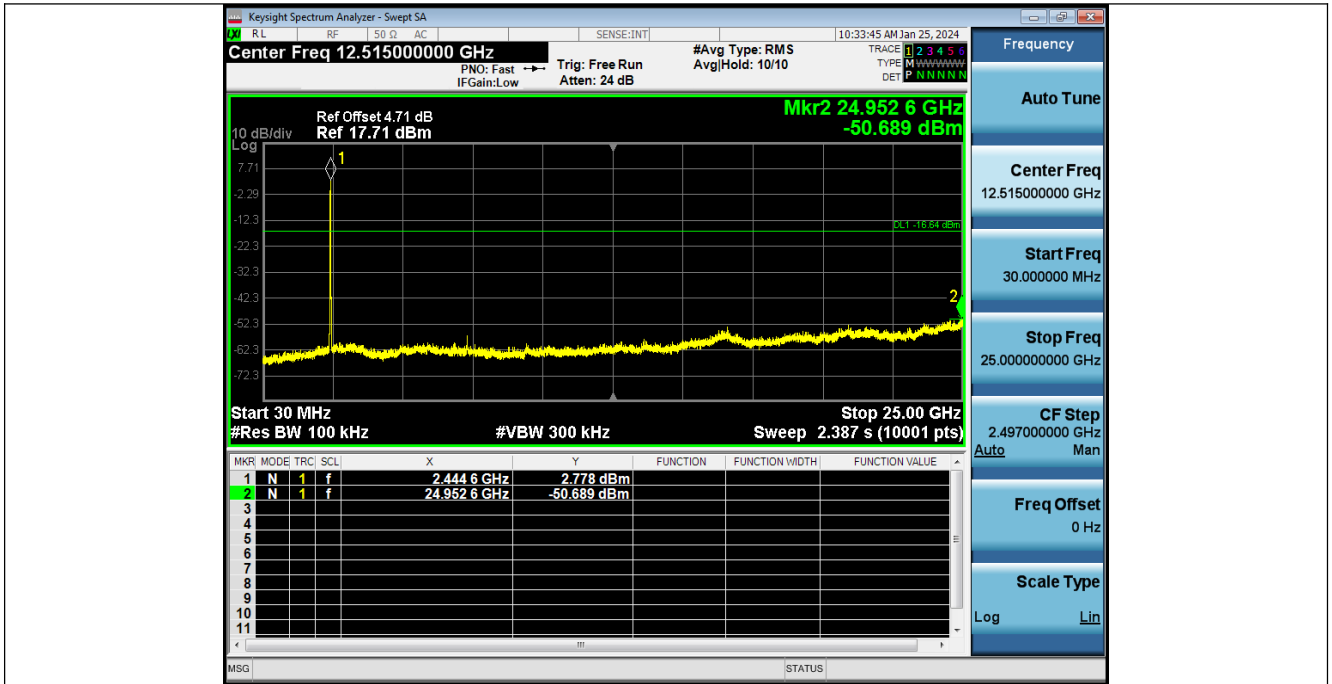
2 Spurious_Emission_NVNT_ANT1_802_11g_2412



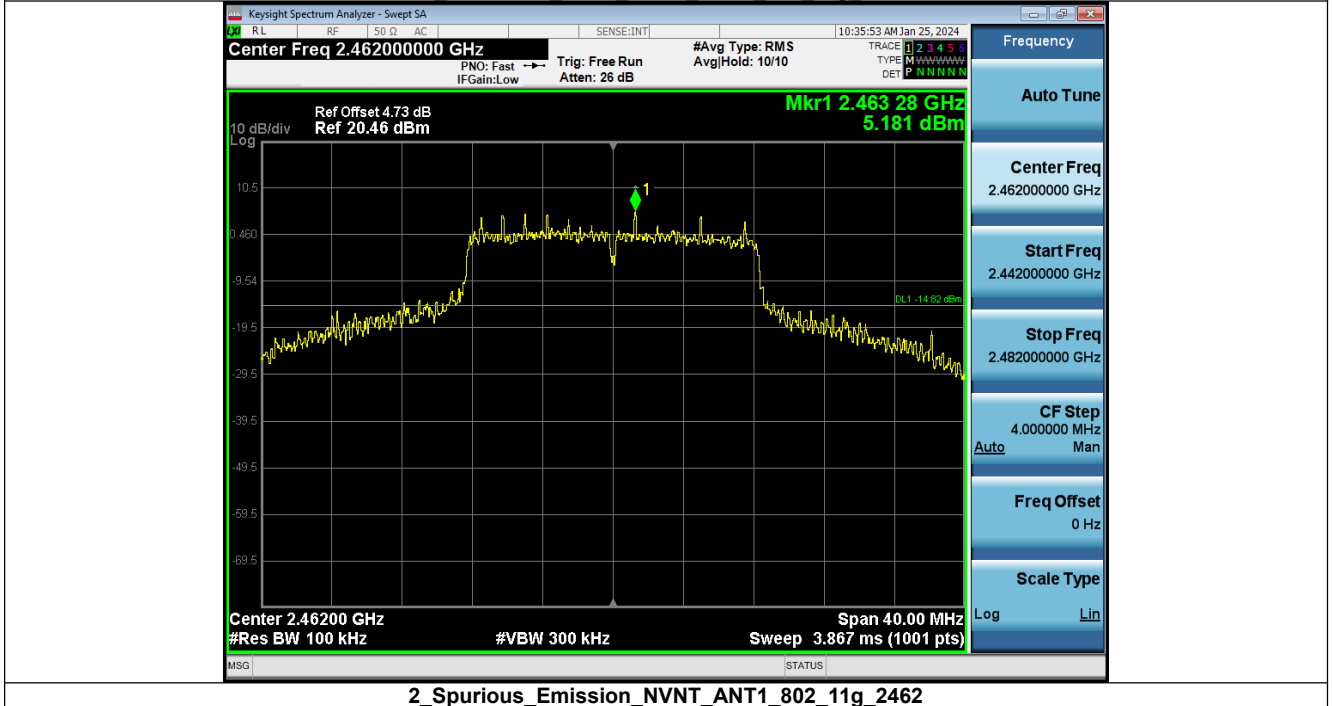
1 Reference Level NVNT_ANT1_802_11g_2437



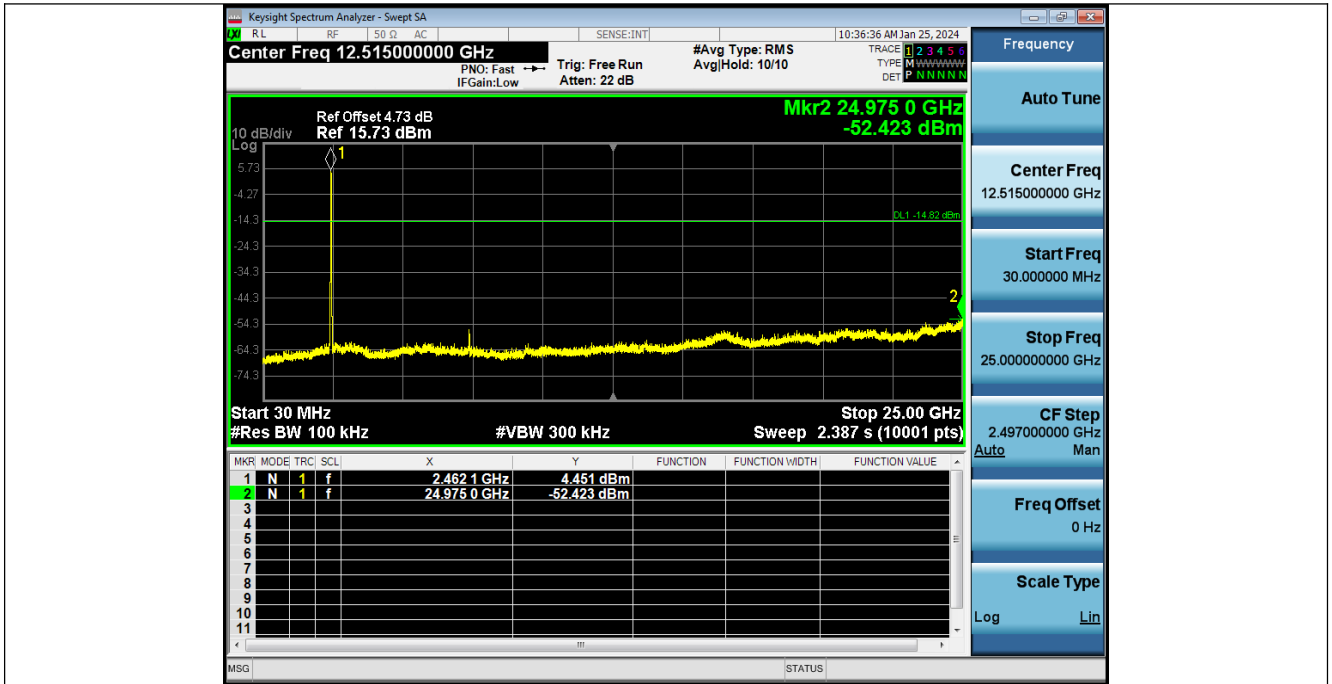
2 Spurious Emission NVNT_ANT1_802_11g_2437



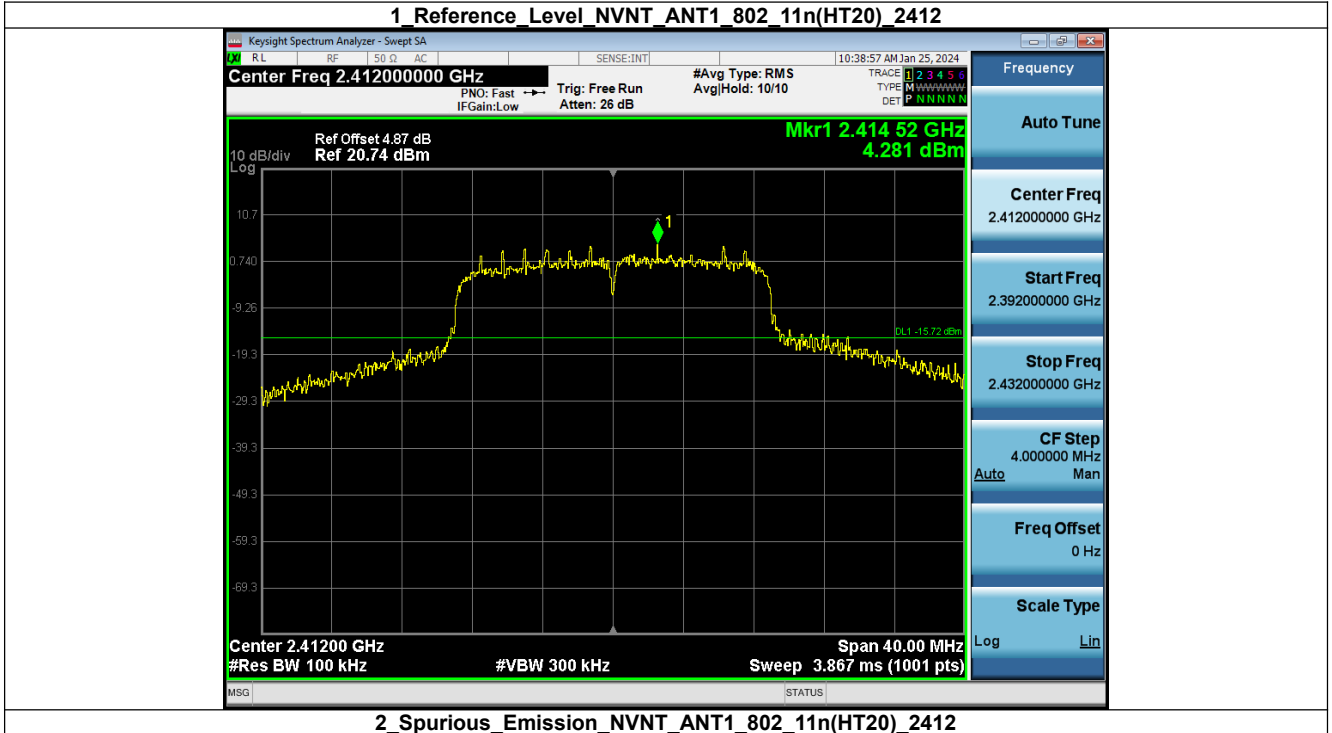
1 Reference Level NVNT_ANT1_802_11g_2462



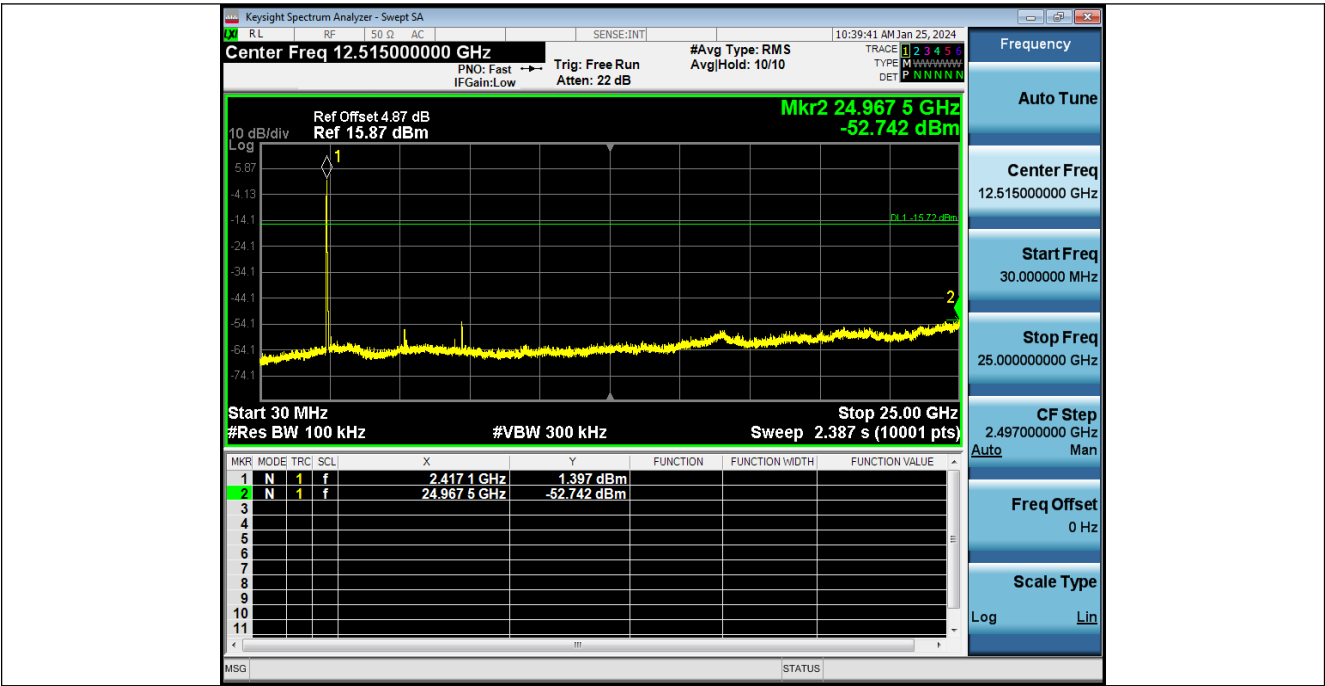
2 Spurious_Emission_NVNT_ANT1_802_11g_2462



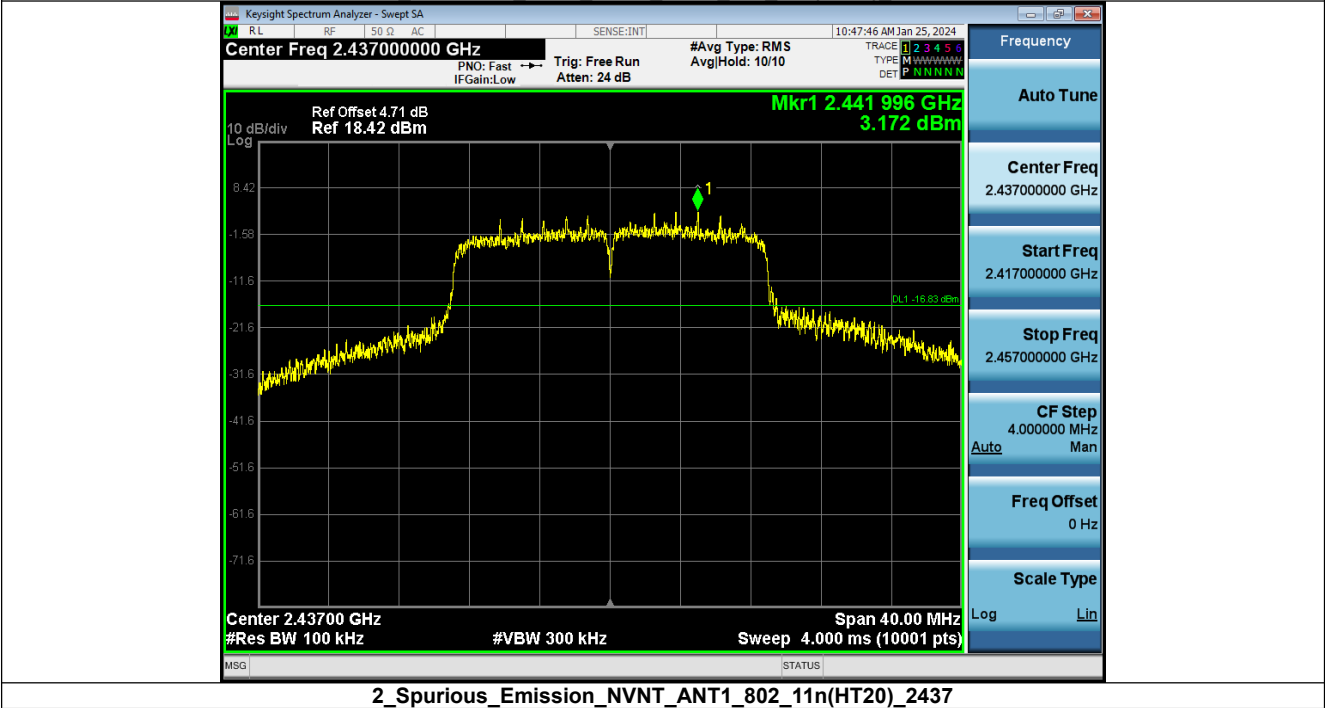
1 Reference Level NVNT_ANT1_802_11n(HT20)_2412



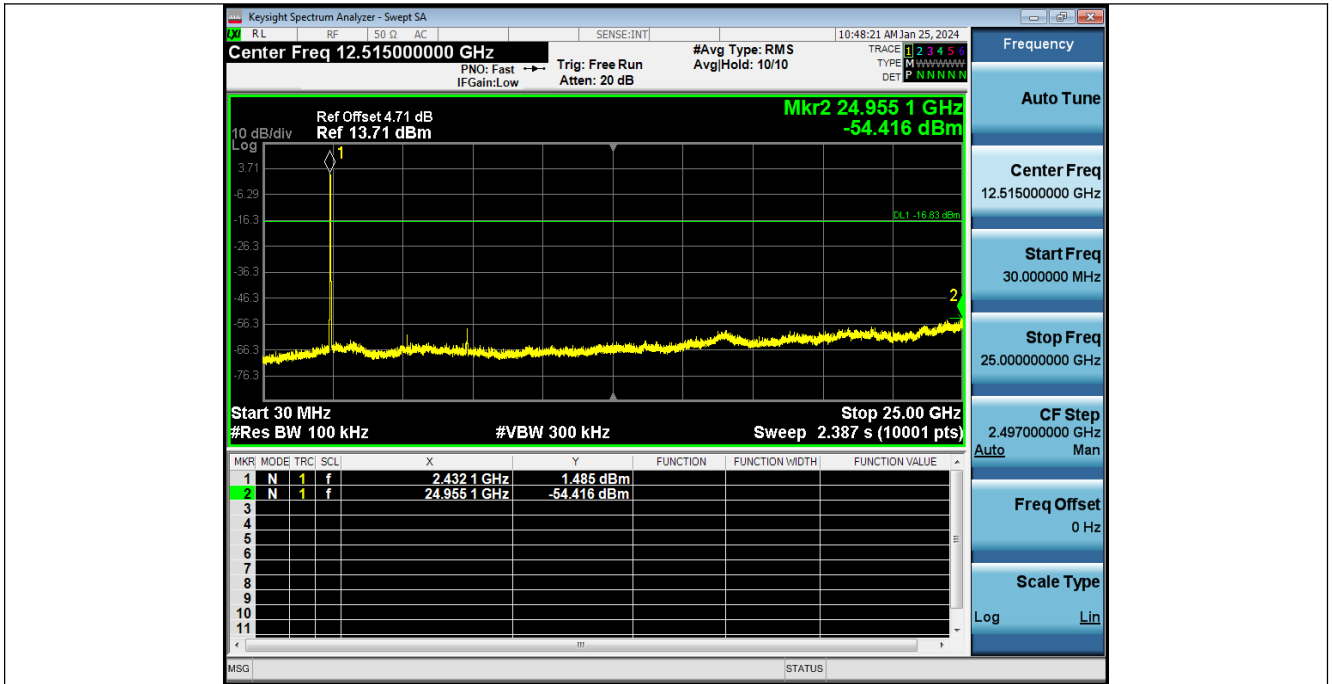
2 Spurious Emission NVNT_ANT1_802_11n(HT20)_2412



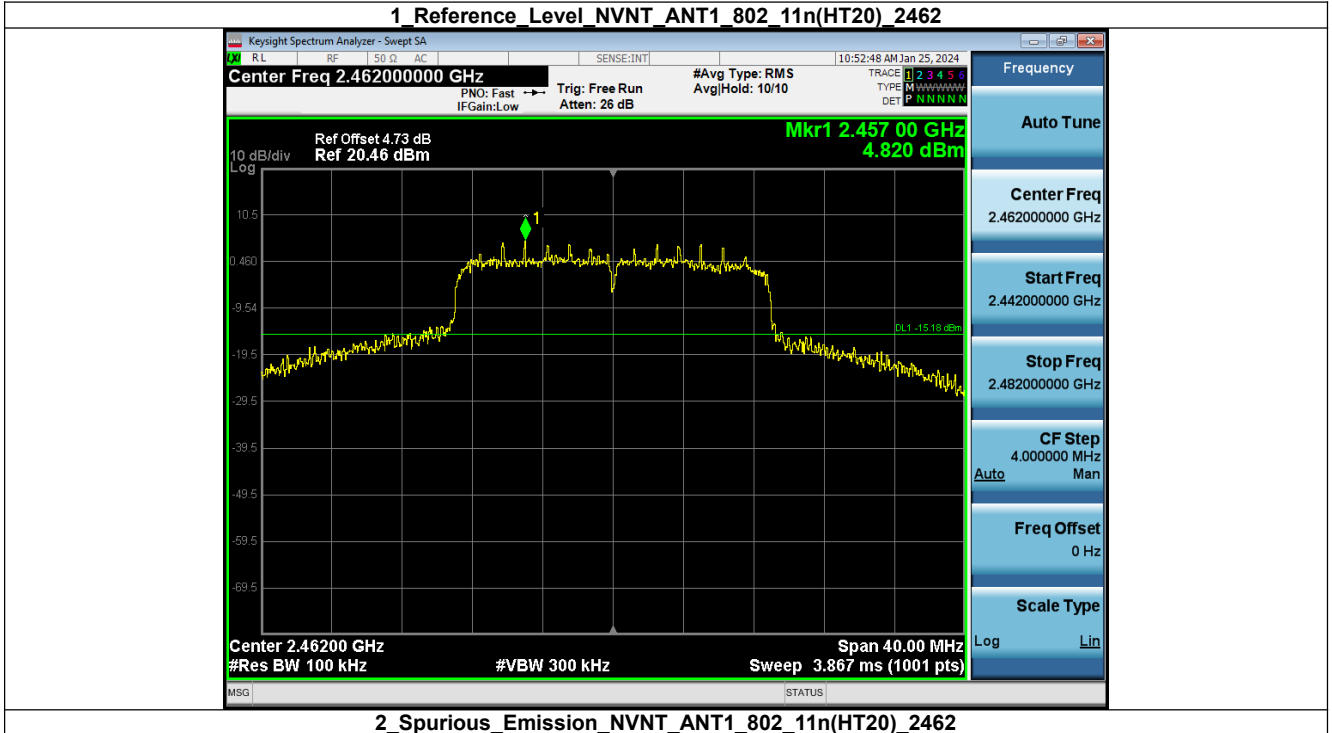
1 Reference Level NVNT_ANT1_802_11n(HT20)_2437

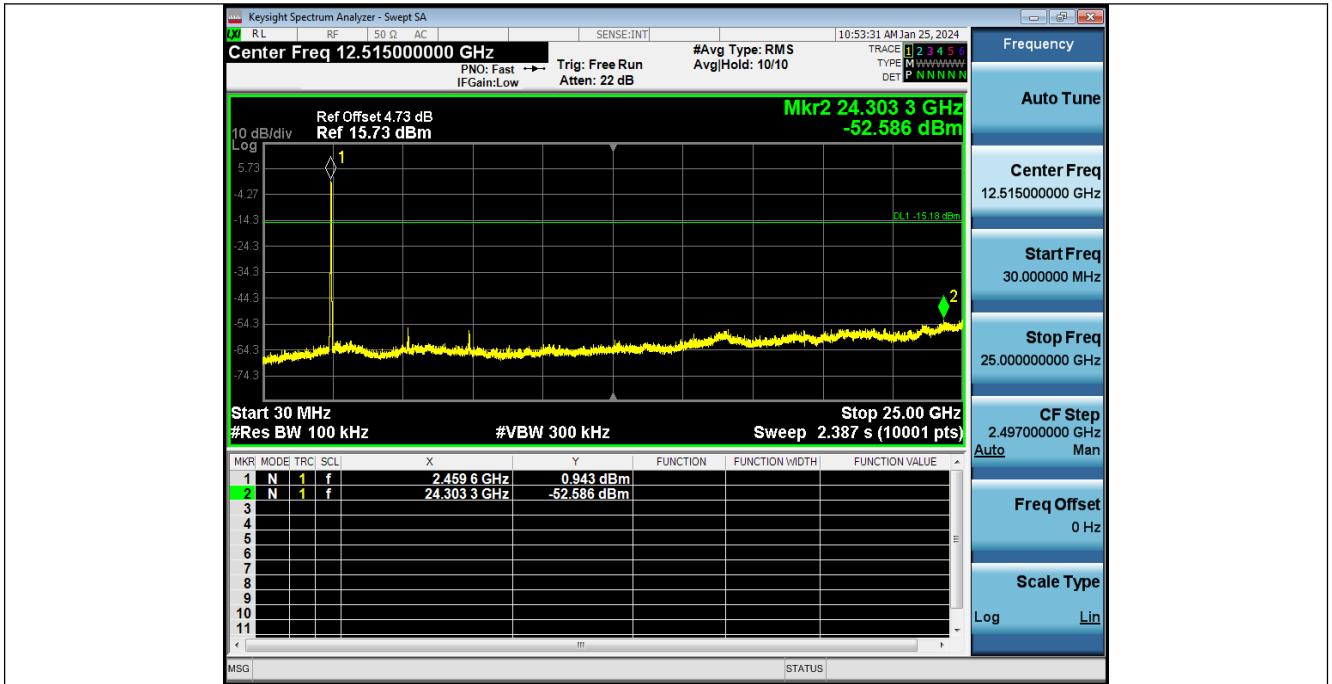


2 Spurious Emission NVNT_ANT1_802_11n(HT20)_2437

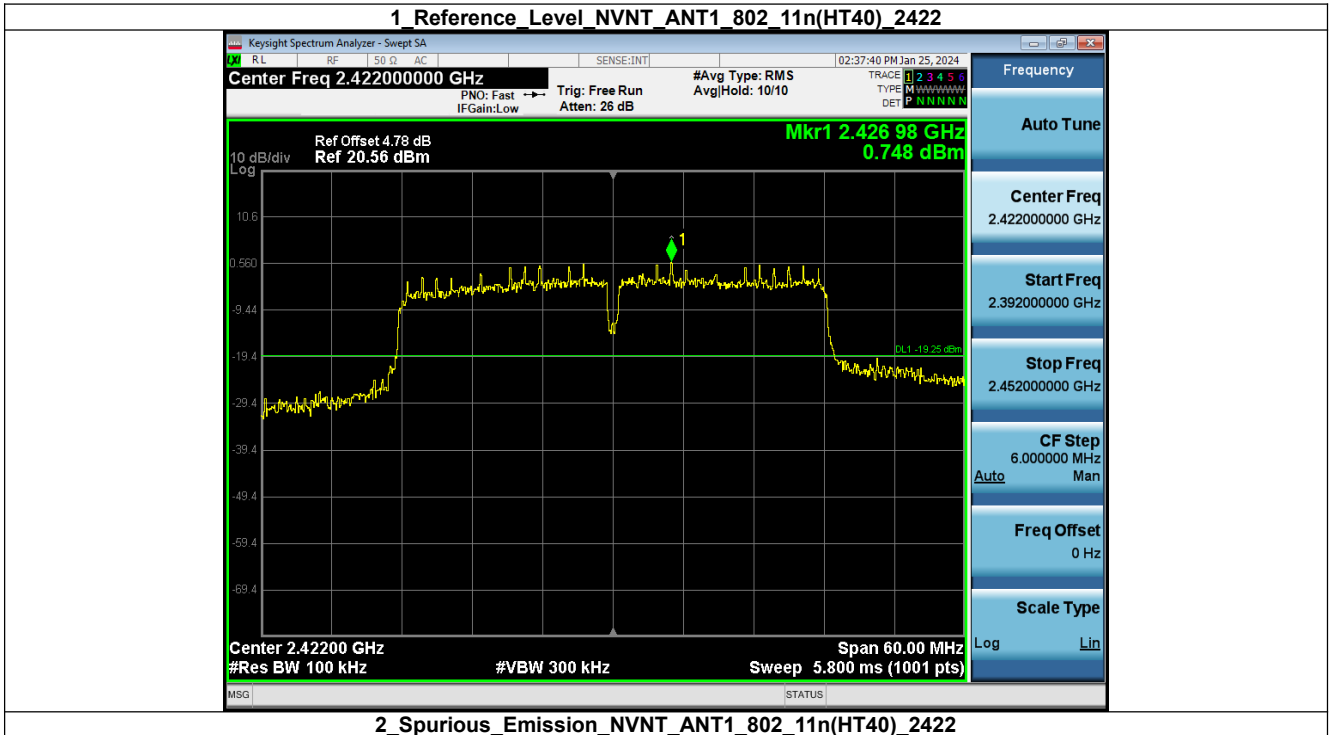


1 Reference Level NVNT_ANT1_802_11n(HT20)_2462

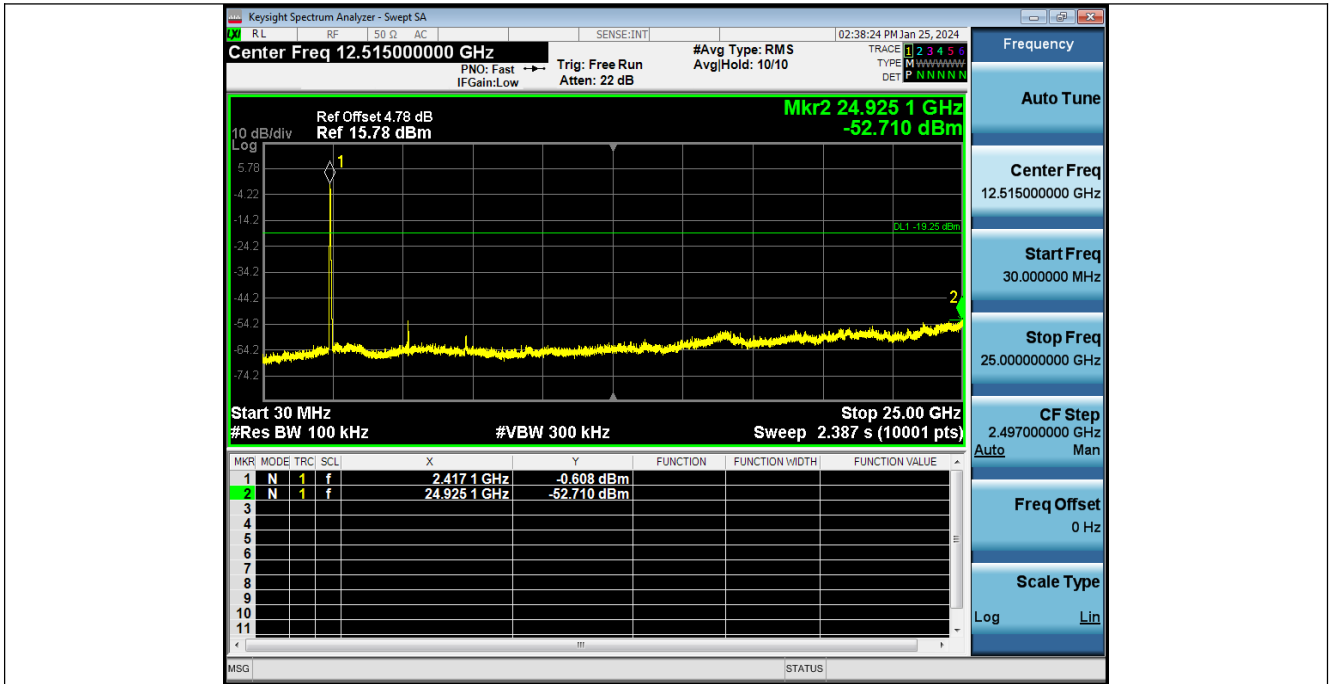




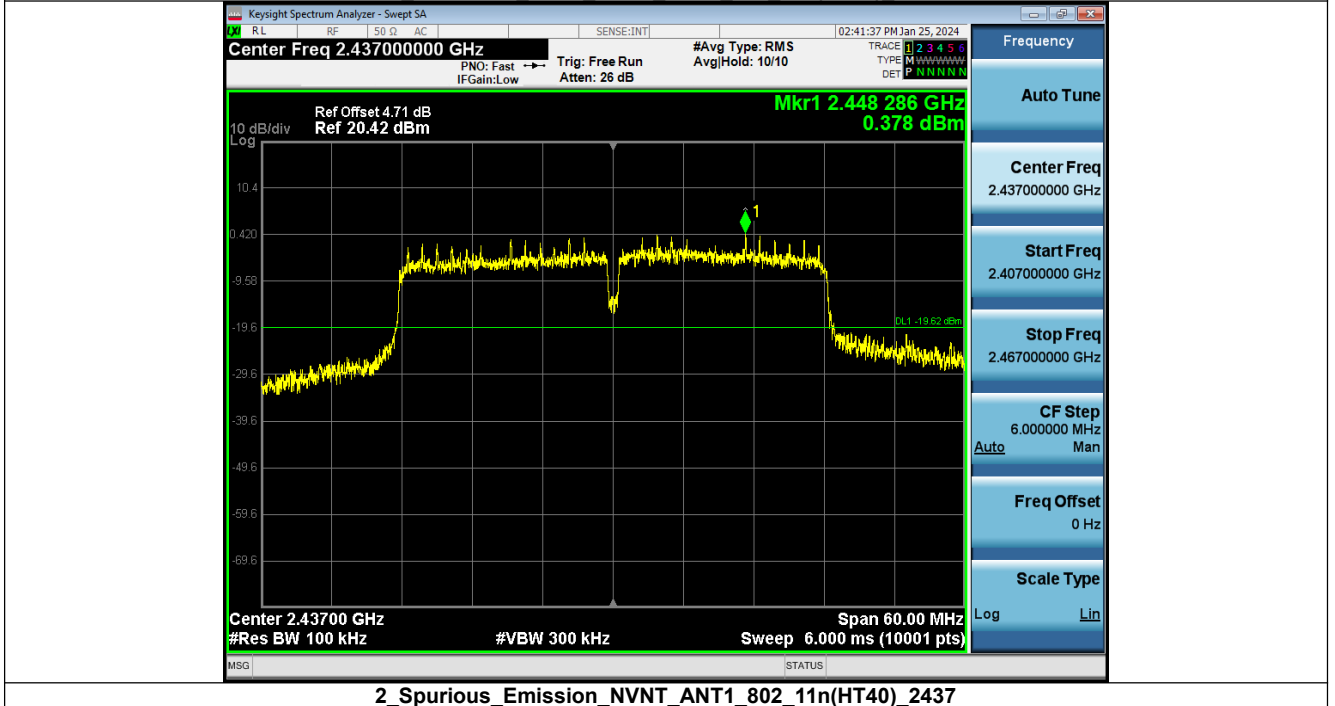
1 Reference Level NVNT_ANT1_802_11n(HT40)_2422



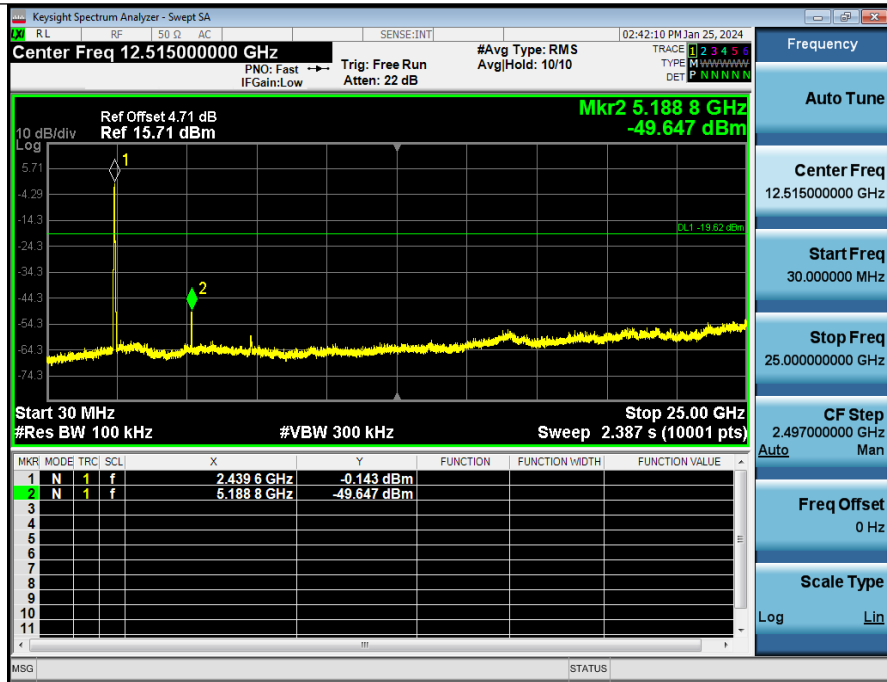
2 Spurious Emission NVNT_ANT1_802_11n(HT40)_2422



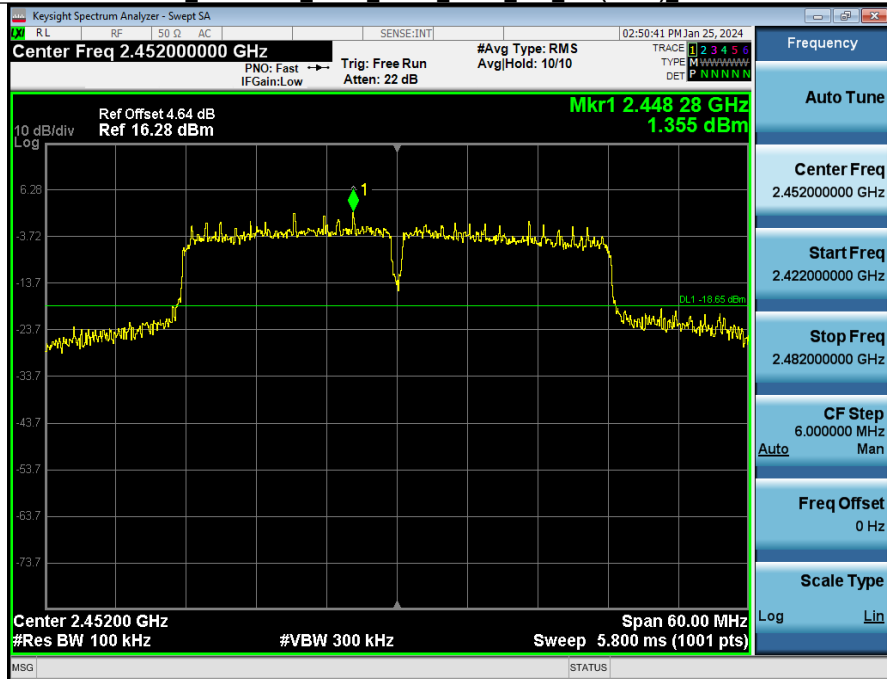
1 Reference Level_NVNT_ANT1_802_11n(HT40)_2437



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

