

Table of Contents

1. -6dB Bandwidth2

2. 99% Occupied Bandwidth12

3. Duty Cycle22

5. Power Spectral Density32

6. Bandedge42

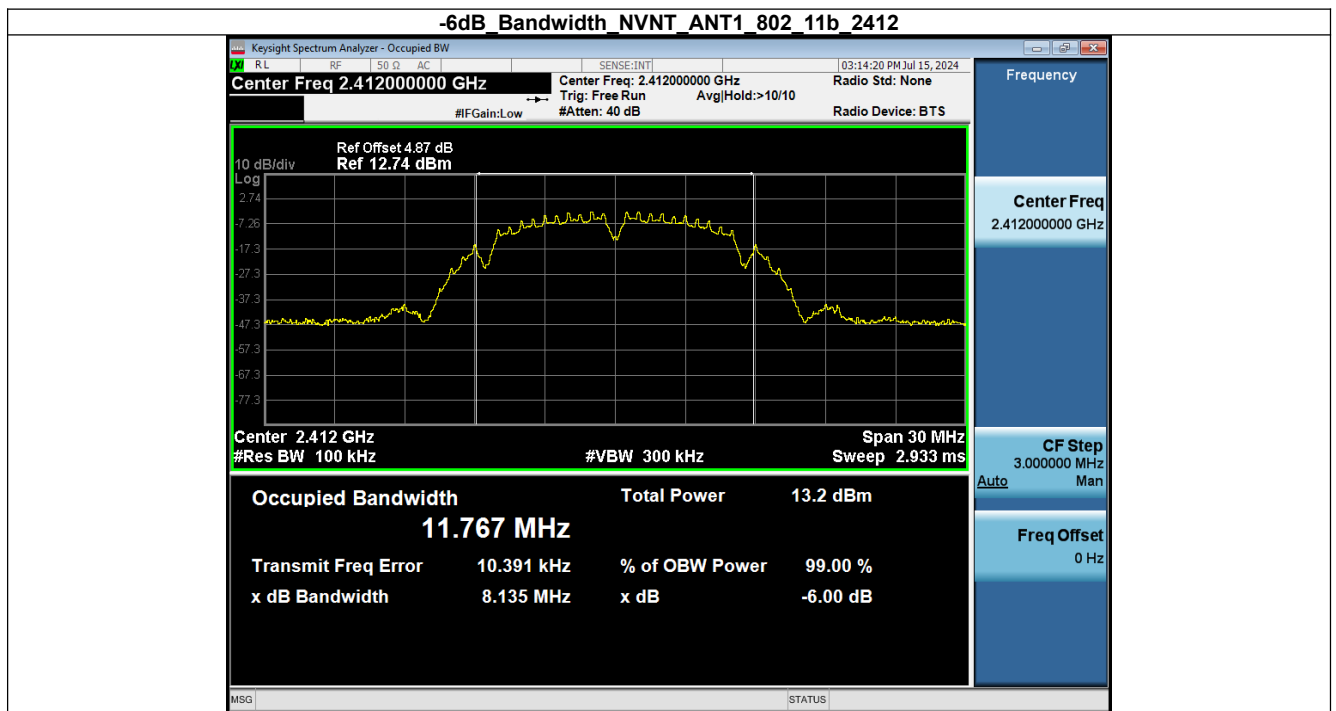
7. Spurious Emission55

FCC ID:2BCAX-HY320MINI

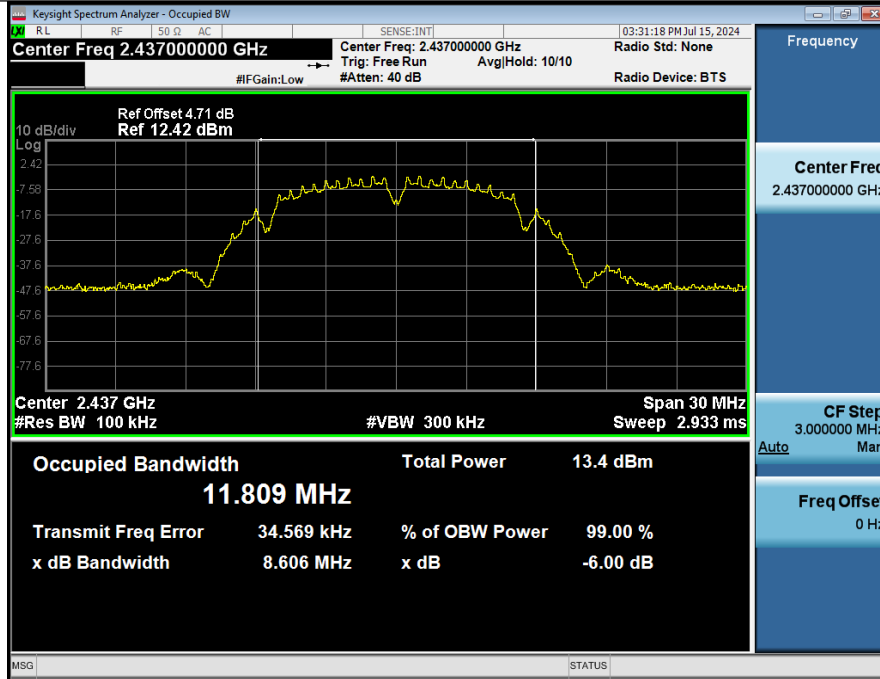
FCC_2.4G_WIFI (Part15.247) Test Data

1. -6dB Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	8.14	500	Pass
NVNT	ANT1	802.11b	2437.00	8.61	500	Pass
NVNT	ANT1	802.11b	2462.00	8.59	500	Pass
NVNT	ANT1	802.11g	2412.00	15.89	500	Pass
NVNT	ANT1	802.11g	2437.00	16.12	500	Pass
NVNT	ANT1	802.11g	2462.00	16.10	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	16.75	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	16.88	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	17.16	500	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	16.71	500	Pass
NVNT	ANT1	802.11ax(HE20)	2437.00	16.88	500	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	17.14	500	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	36.02	500	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	35.63	500	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	35.65	500	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	35.75	500	Pass
NVNT	ANT1	802.11ax(HE40)	2437.00	35.31	500	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	35.56	500	Pass



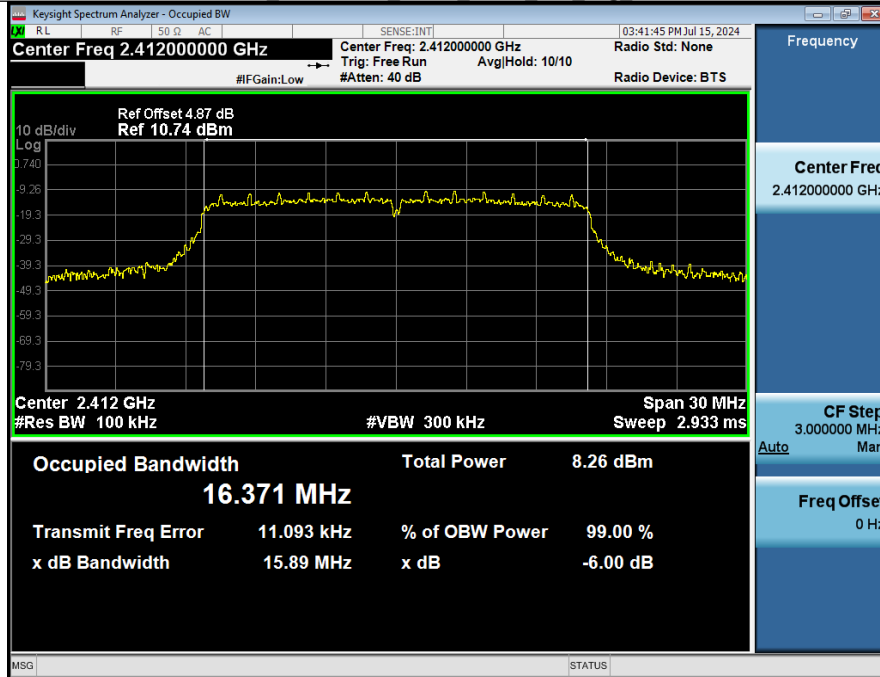
-6dB_Bandwidth_NVNT_ANT1_802_11b_2437



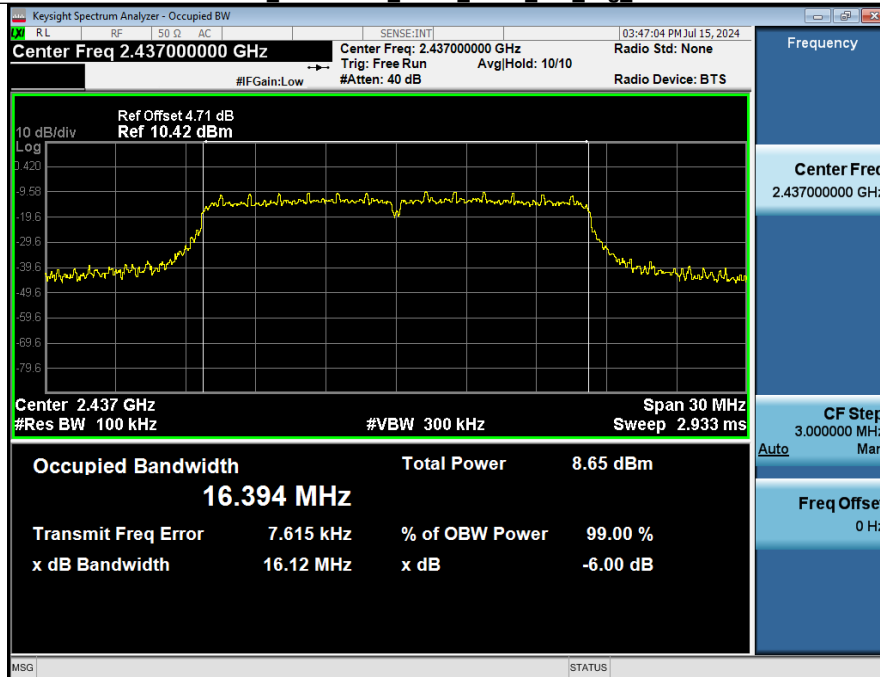
-6dB_Bandwidth_NVNT_ANT1_802_11b_2462



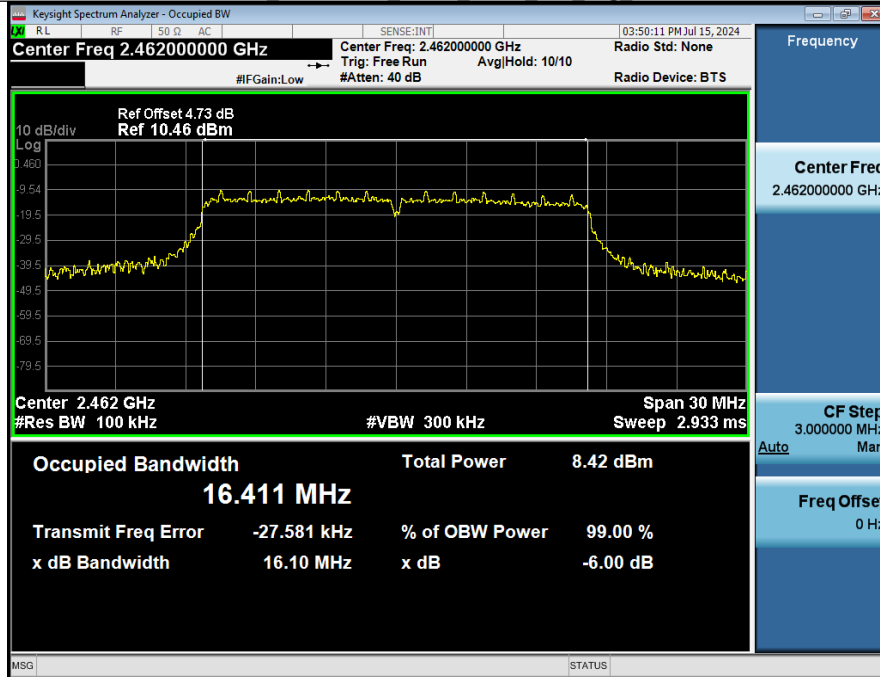
-6dB Bandwidth NVNT ANT1_802_11g_2412



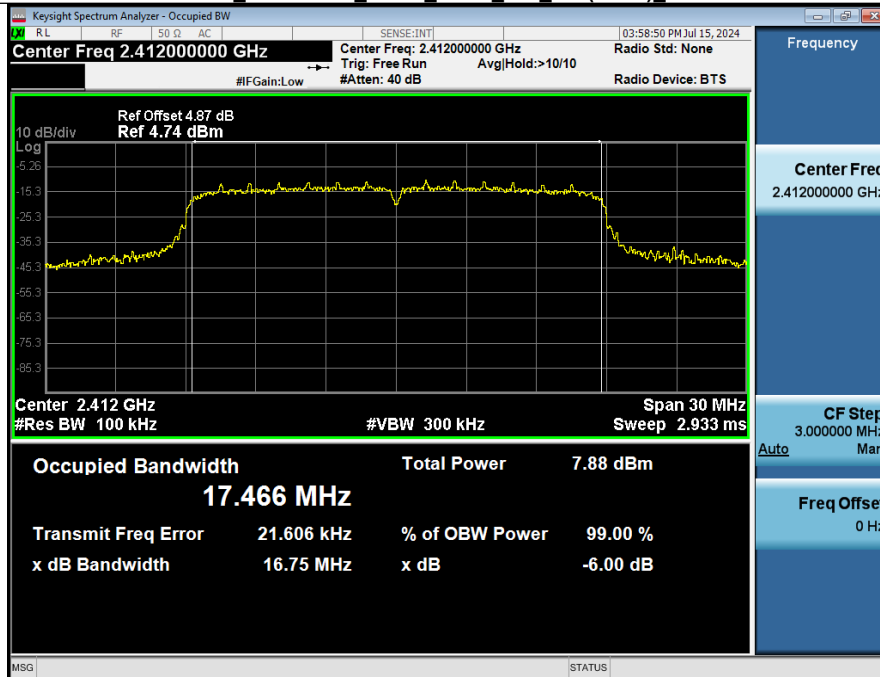
-6dB Bandwidth NVNT ANT1_802_11g_2437



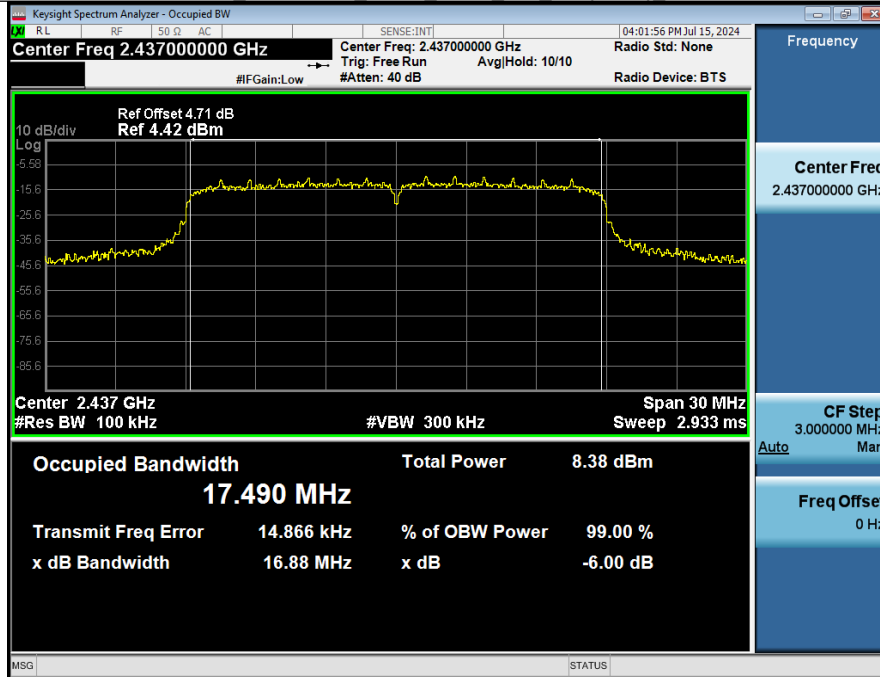
-6dB Bandwidth NVNT ANT1_802_11g_2462



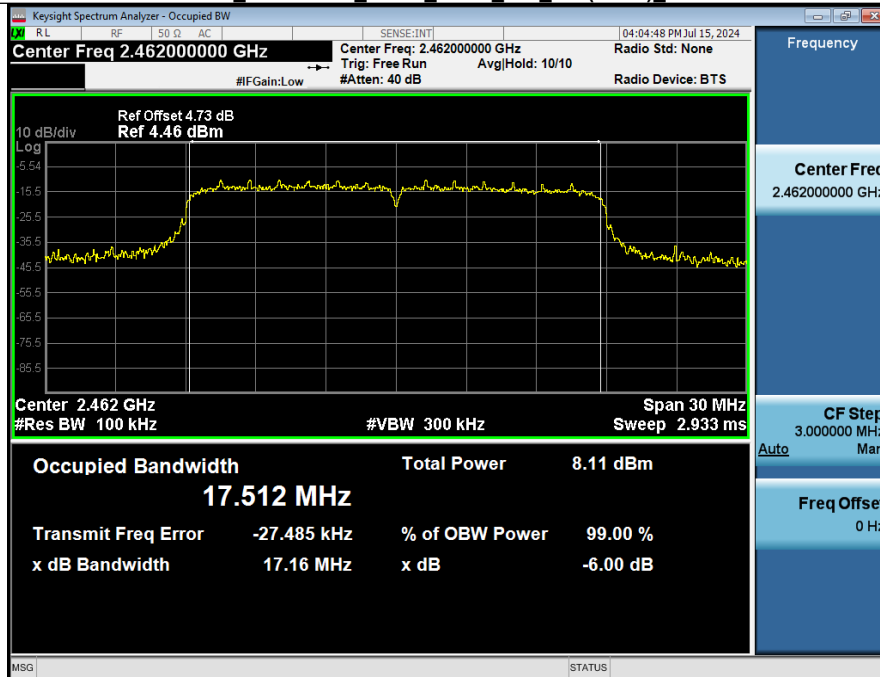
-6dB Bandwidth NVNT ANT1_802_11n(HT20)_2412



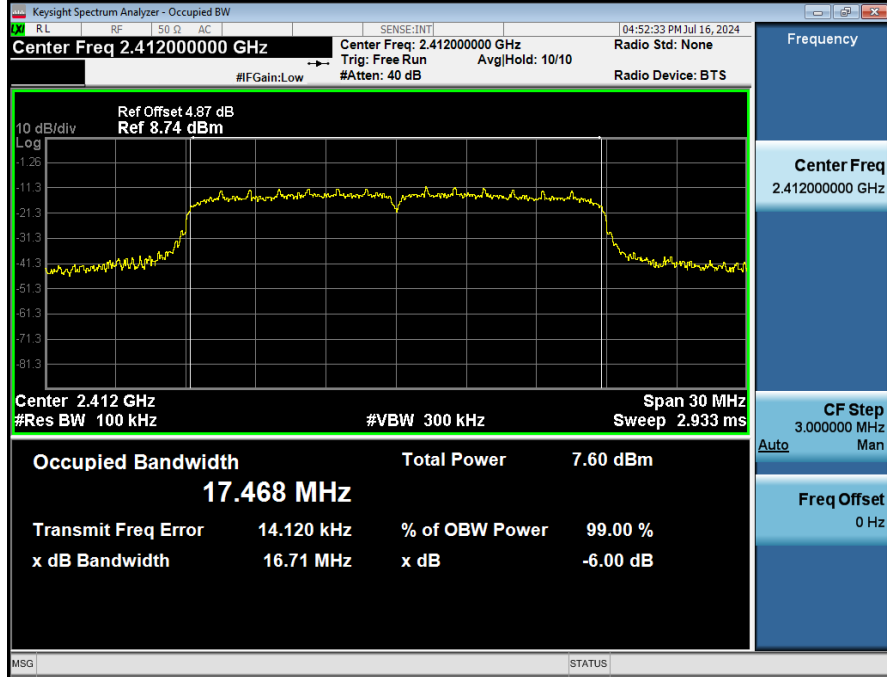
-6dB Bandwidth_NVNT_ANT1_802_11n(HT20)_2437



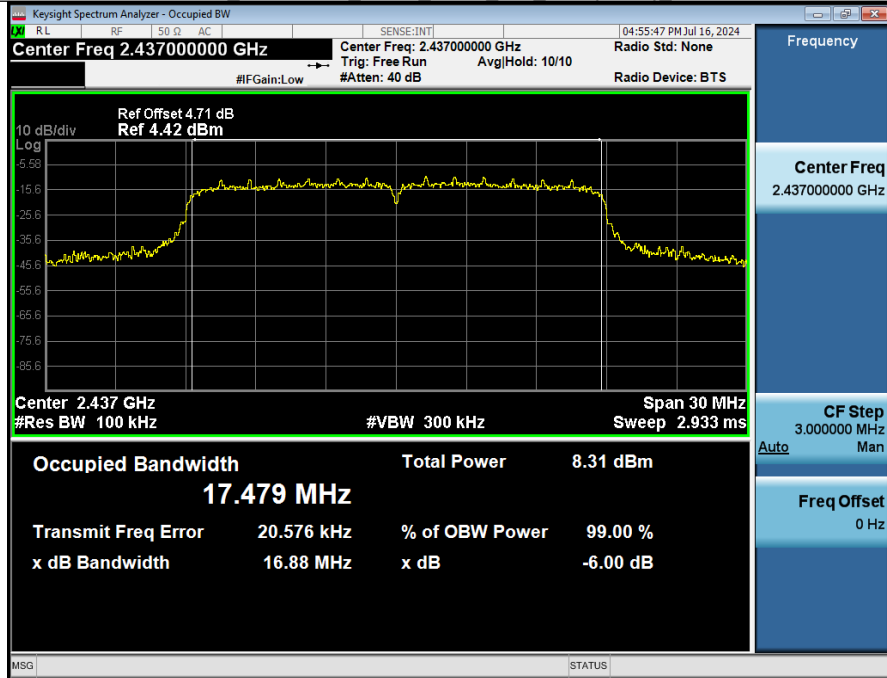
-6dB Bandwidth_NVNT_ANT1_802_11n(HT20)_2462



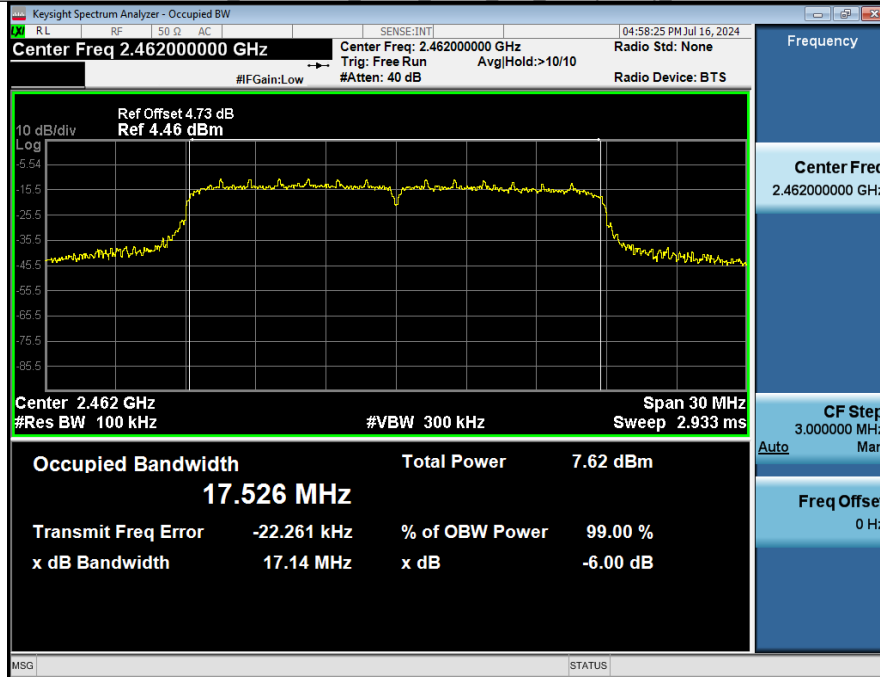
-6dB Bandwidth NVNT_ANT1_802_11ax(HE20)_2412



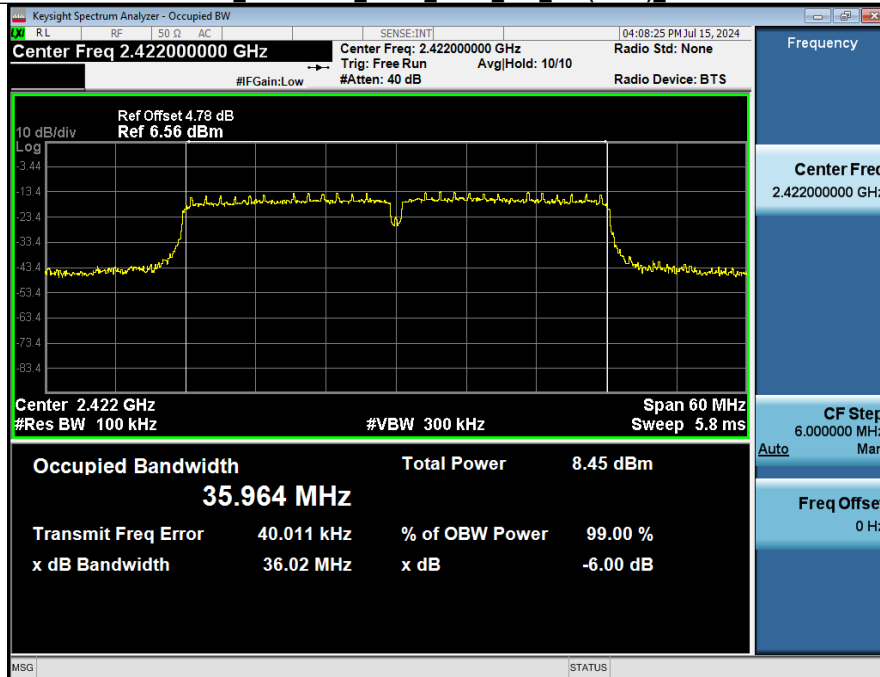
-6dB Bandwidth NVNT_ANT1_802_11ax(HE20)_2437



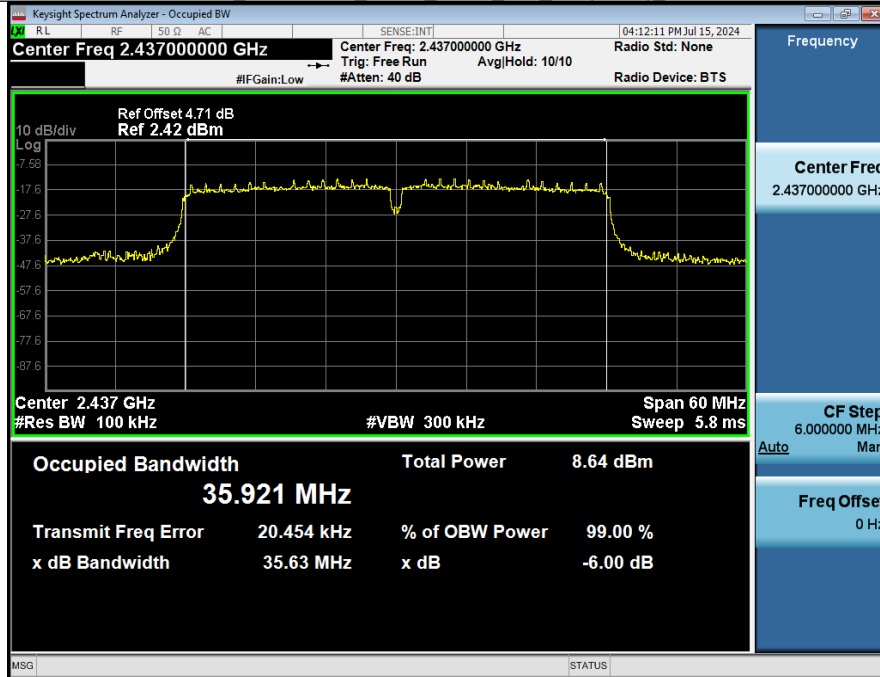
-6dB Bandwidth NVNT_ANT1_802_11ax(HE20)_2462



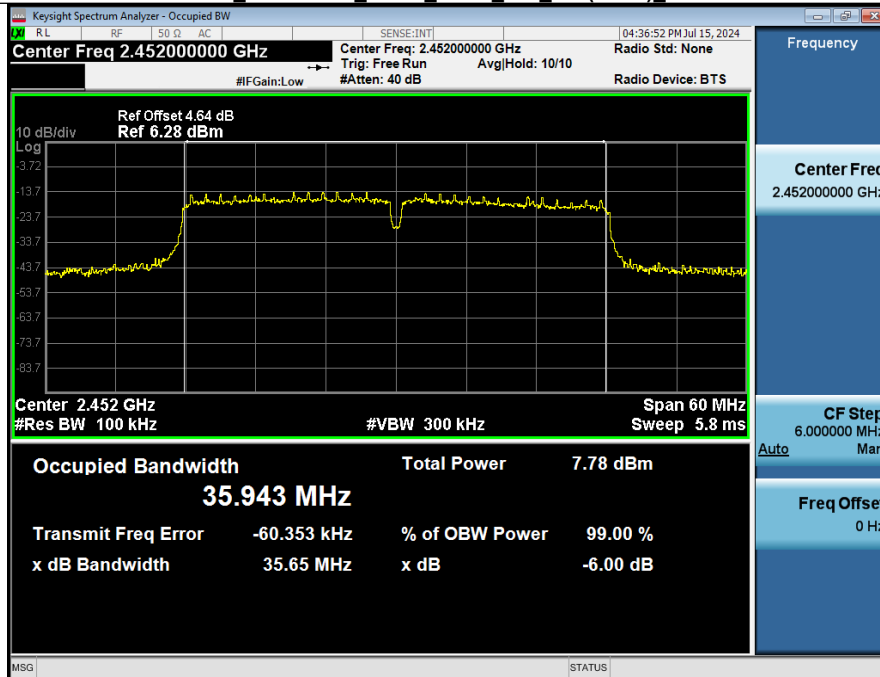
-6dB Bandwidth NVNT_ANT1_802_11n(HT40)_2422



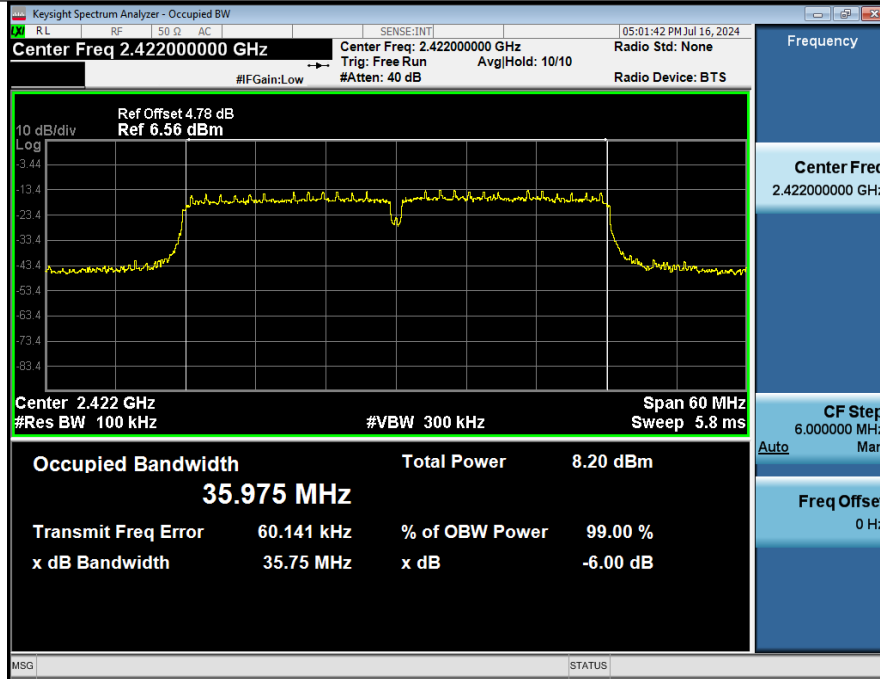
-6dB Bandwidth_NVNT_ANT1_802_11n(HT40)_2437



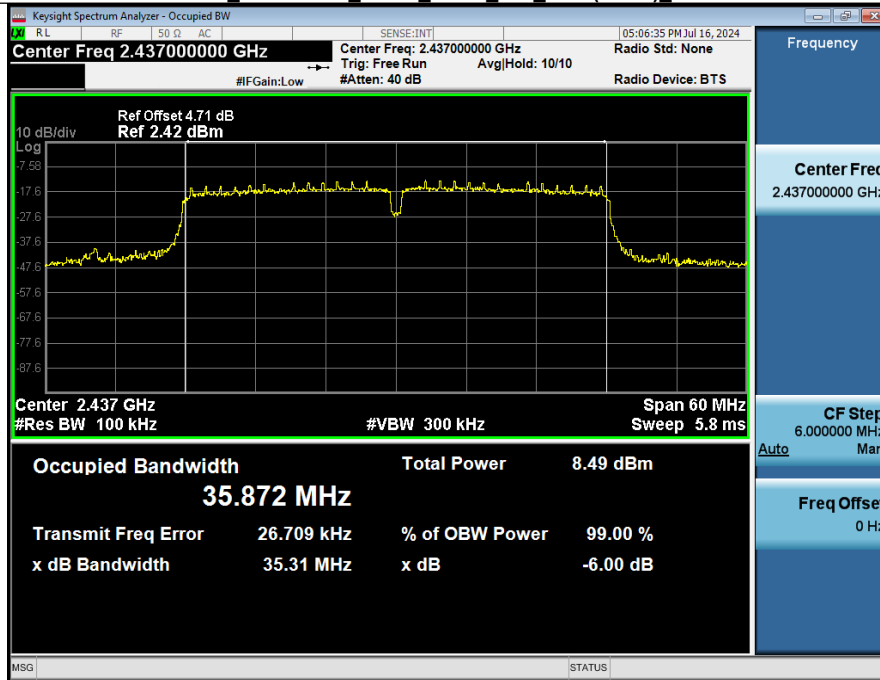
-6dB Bandwidth_NVNT_ANT1_802_11n(HT40)_2452



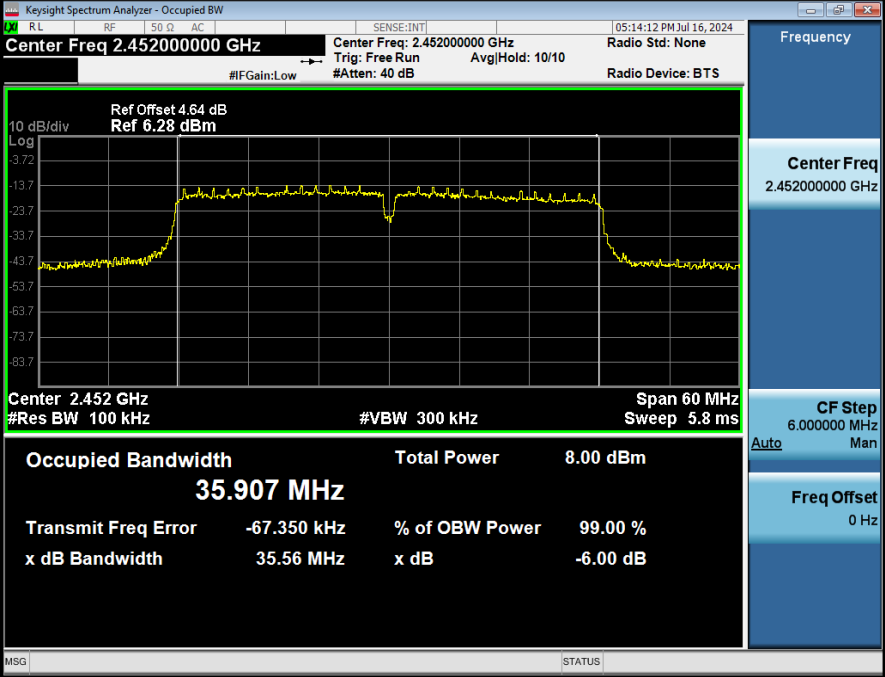
-6dB_Bandwidth_NVNT_ANT1_802_11ax(HE40)_2422



-6dB_Bandwidth_NVNT_ANT1_802_11ax(HE40)_2437

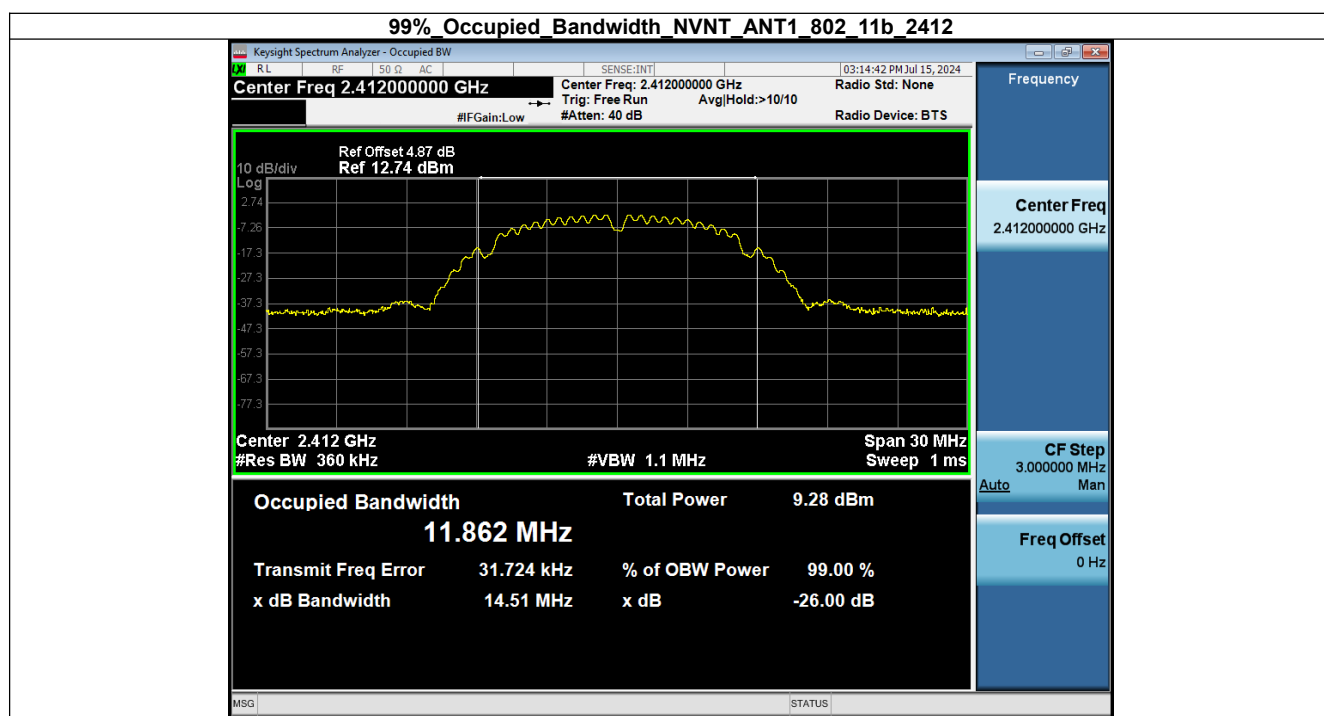


-6dB Bandwidth_NVNT_ANT1_802_11ax(HE40)_2452

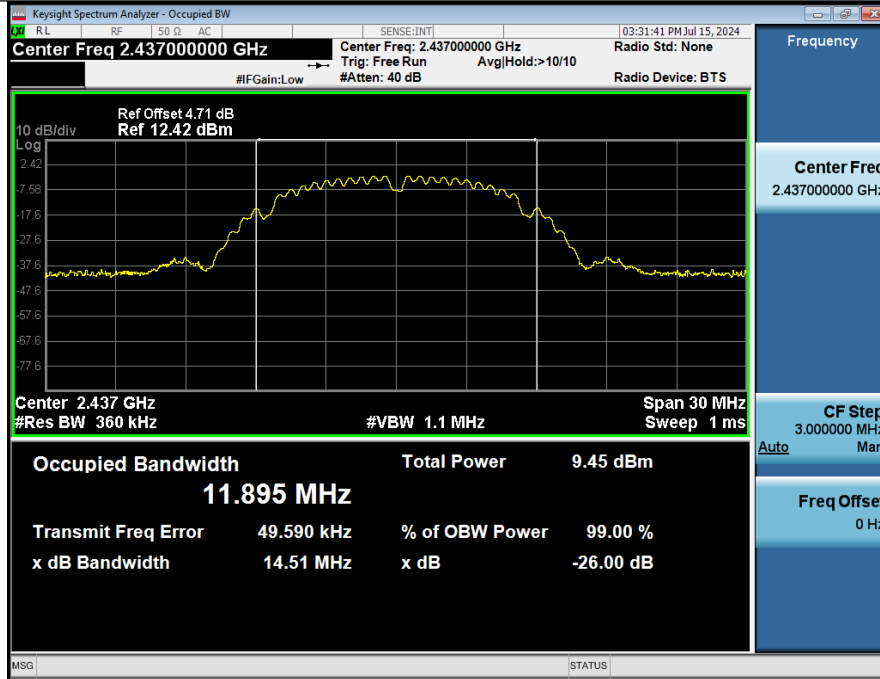


2. 99% Occupied Bandwidth

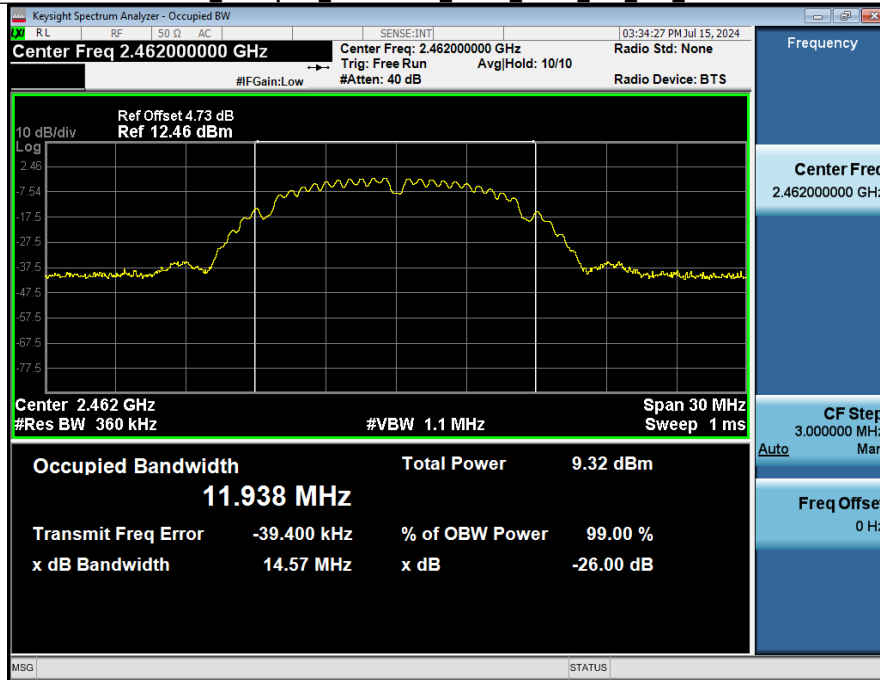
Condition	Antenna	Modulation	Frequency (MHz)	99%%BW(MHz)
NVNT	ANT1	802.11b	2412.00	11.862
NVNT	ANT1	802.11b	2437.00	11.895
NVNT	ANT1	802.11b	2462.00	11.938
NVNT	ANT1	802.11g	2412.00	16.943
NVNT	ANT1	802.11g	2437.00	16.995
NVNT	ANT1	802.11g	2462.00	17.084
NVNT	ANT1	802.11n(HT20)	2412.00	17.692
NVNT	ANT1	802.11n(HT20)	2437.00	17.750
NVNT	ANT1	802.11n(HT20)	2462.00	17.848
NVNT	ANT1	802.11ax(HE20)	2412.00	17.673
NVNT	ANT1	802.11ax(HE20)	2437.00	17.669
NVNT	ANT1	802.11ax(HE20)	2462.00	17.834
NVNT	ANT1	802.11n(HT40)	2422.00	36.417
NVNT	ANT1	802.11n(HT40)	2437.00	36.327
NVNT	ANT1	802.11n(HT40)	2452.00	36.405
NVNT	ANT1	802.11ax(HE40)	2422.00	36.539
NVNT	ANT1	802.11ax(HE40)	2437.00	36.229
NVNT	ANT1	802.11ax(HE40)	2452.00	36.382



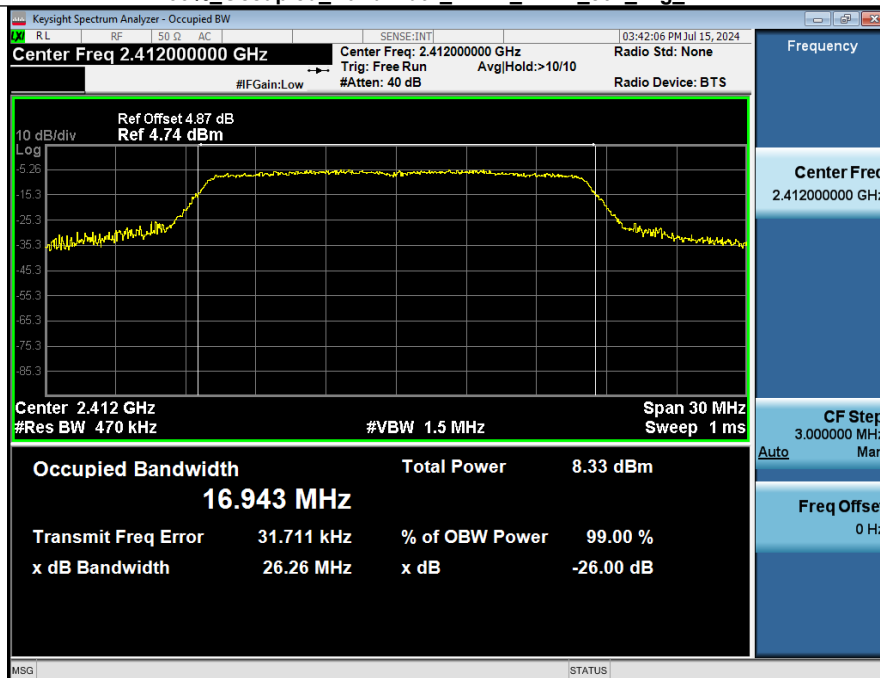
99% Occupied Bandwidth NVNT_ANT1_802_11b_2437



99% Occupied Bandwidth NVNT_ANT1_802_11b_2462



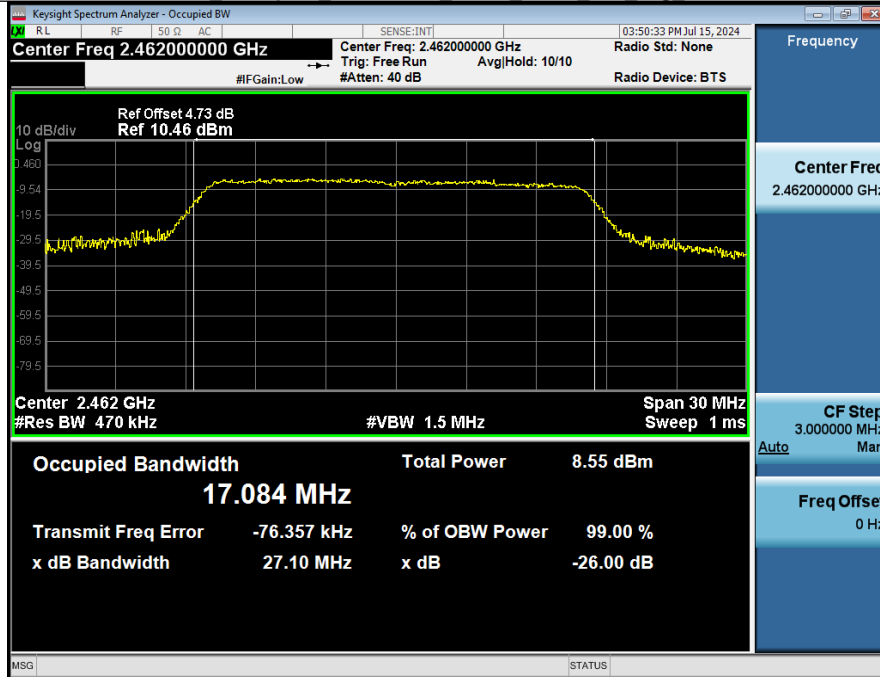
99% Occupied Bandwidth NVNT_ANT1_802_11g_2412



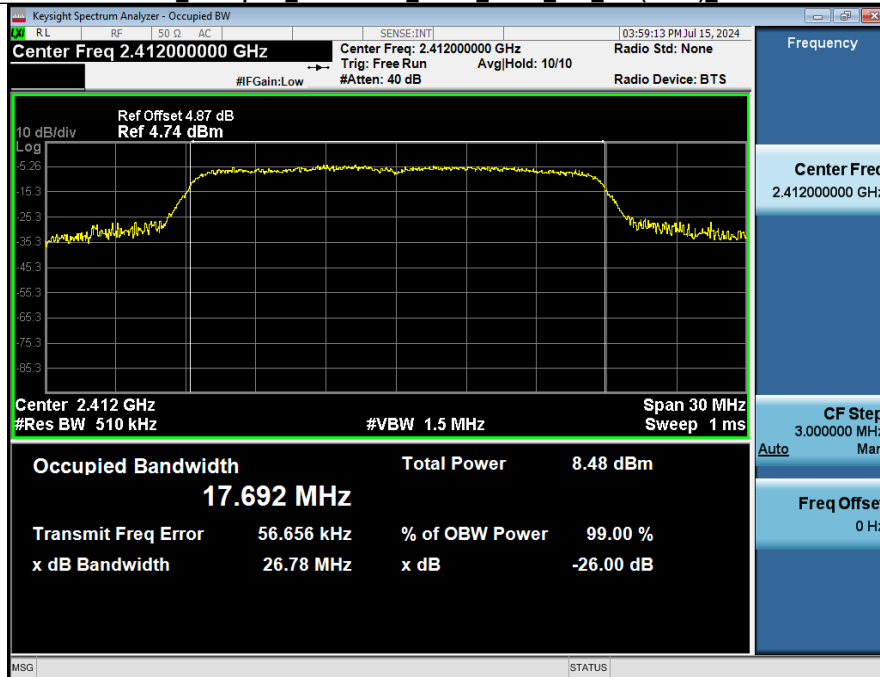
99% Occupied Bandwidth NVNT_ANT1_802_11g_2437



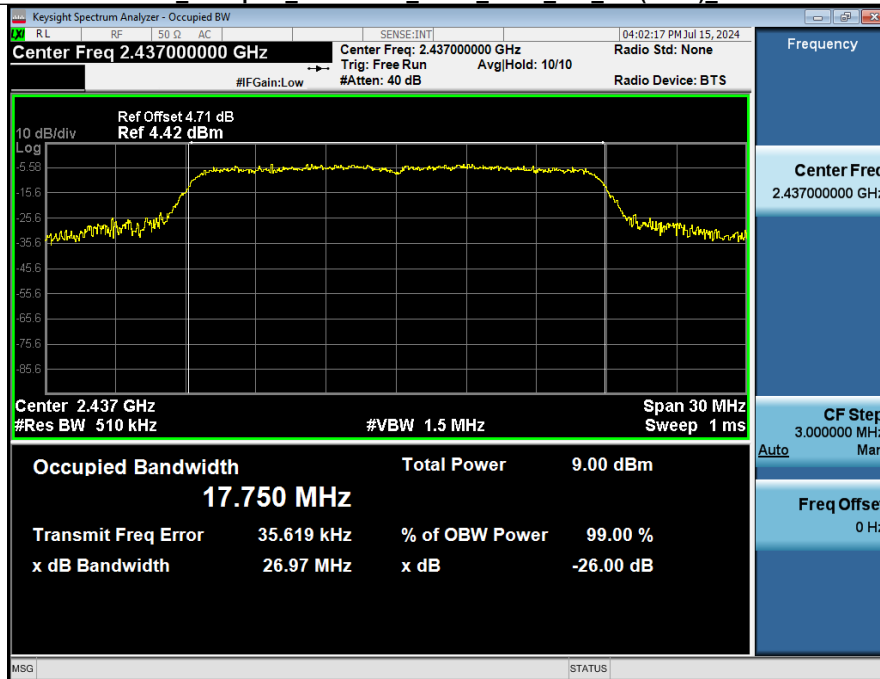
99% Occupied Bandwidth NVNT_ANT1_802_11g_2462



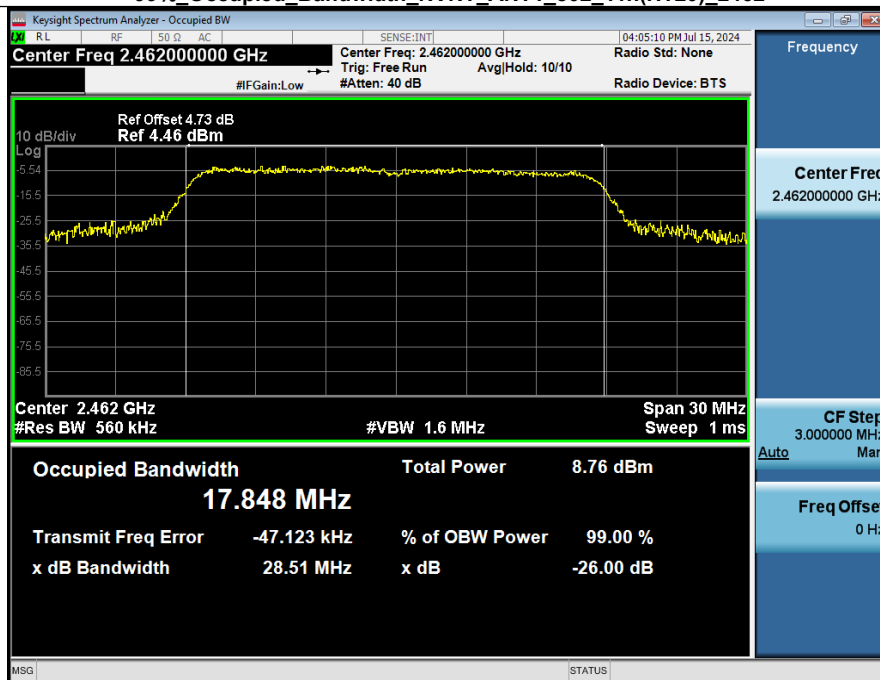
99% Occupied Bandwidth NVNT_ANT1_802_11n(HT20)_2412



99% Occupied Bandwidth_NVNT_ANT1_802_11n(HT20)_2437



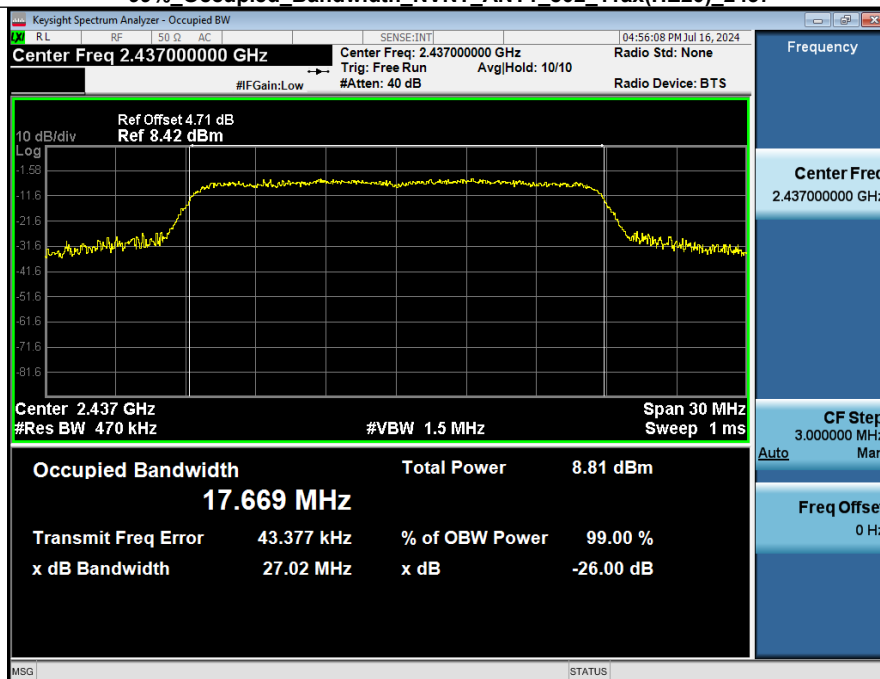
99% Occupied Bandwidth_NVNT_ANT1_802_11n(HT20)_2462



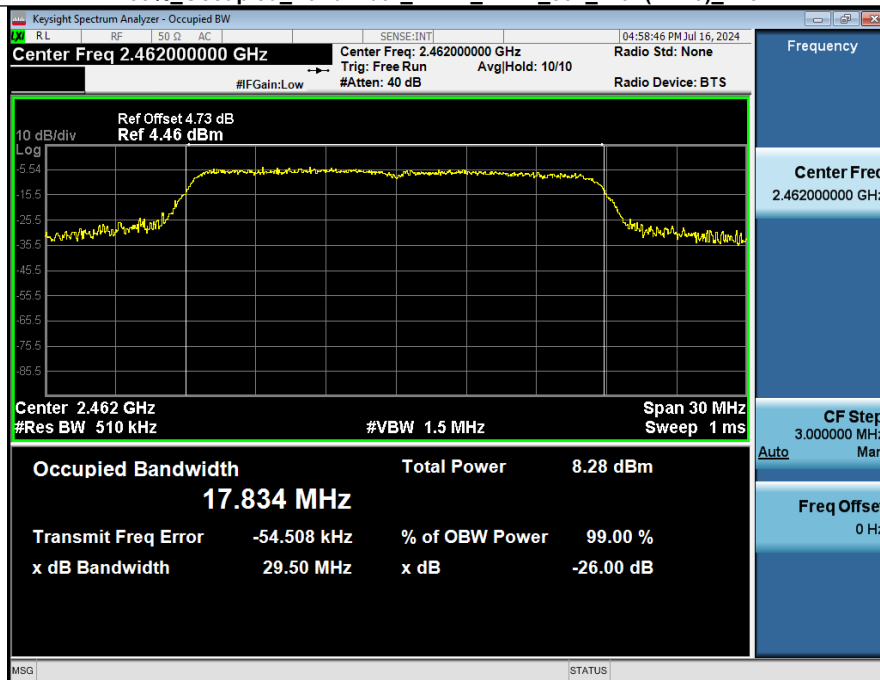
99% Occupied Bandwidth NVNT_ANT1_802_11ax(HE20)_2412



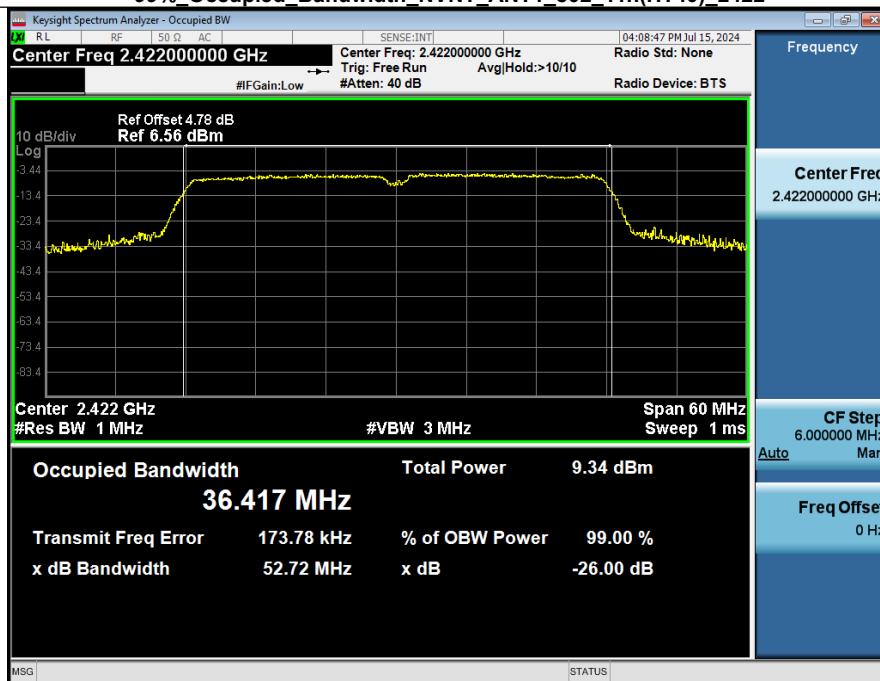
99% Occupied Bandwidth NVNT_ANT1_802_11ax(HE20)_2437

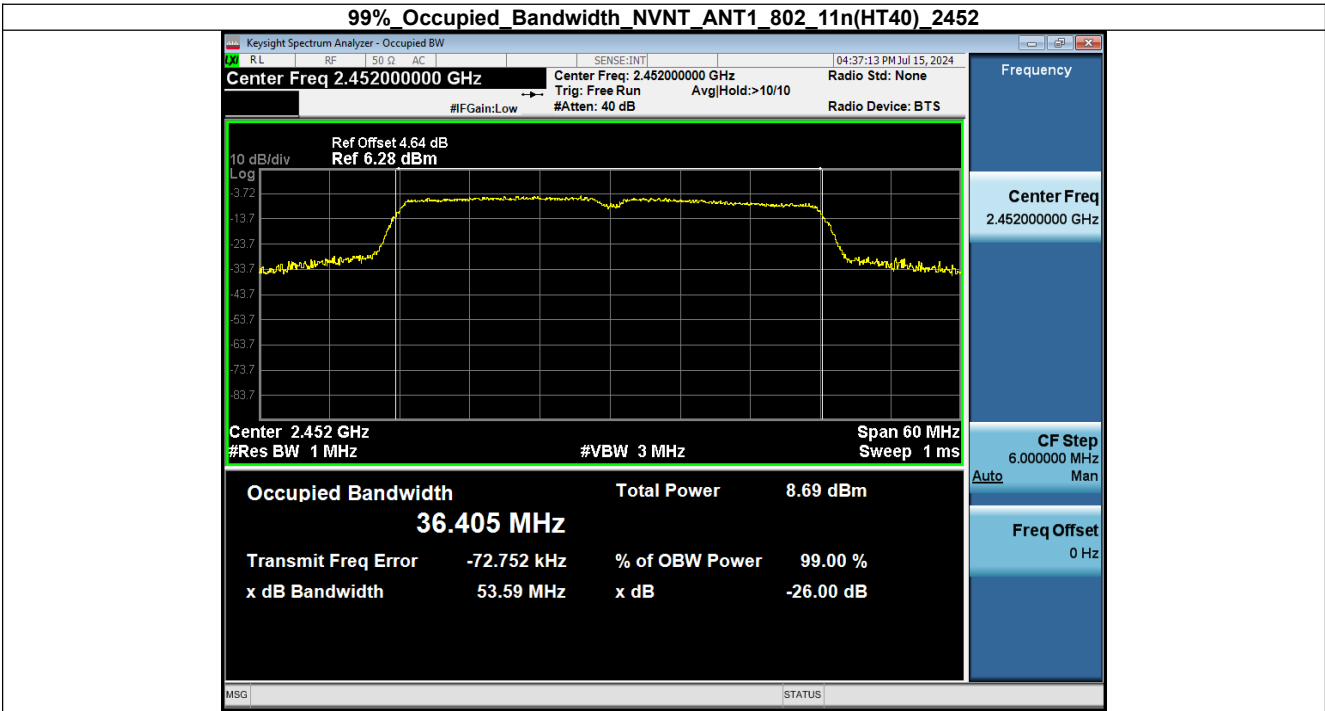
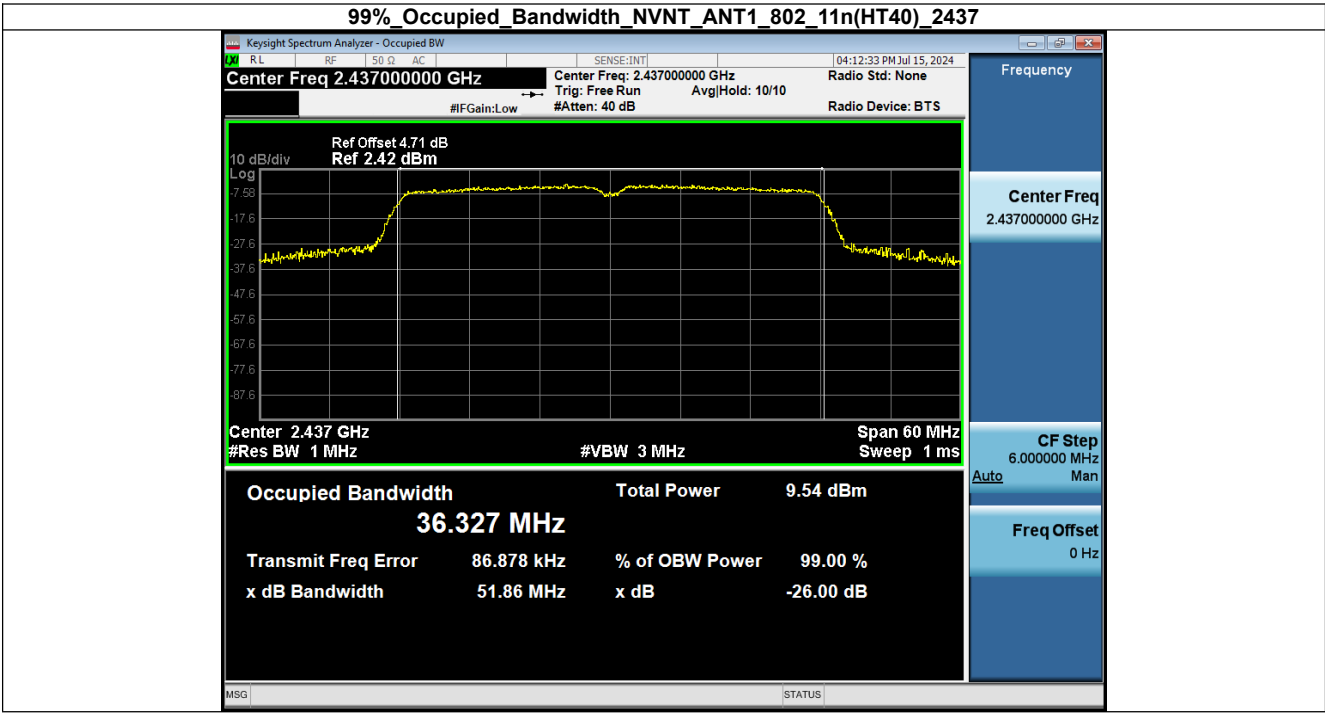


99% Occupied Bandwidth NVNT_ANT1_802_11ax(HE20)_2462

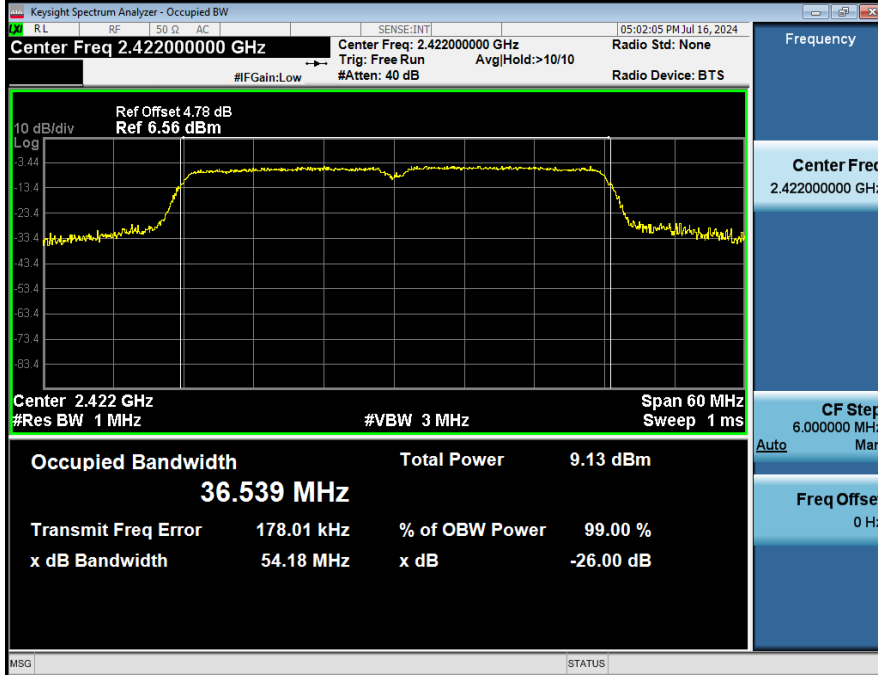


99% Occupied Bandwidth NVNT_ANT1_802_11n(HT40)_2422

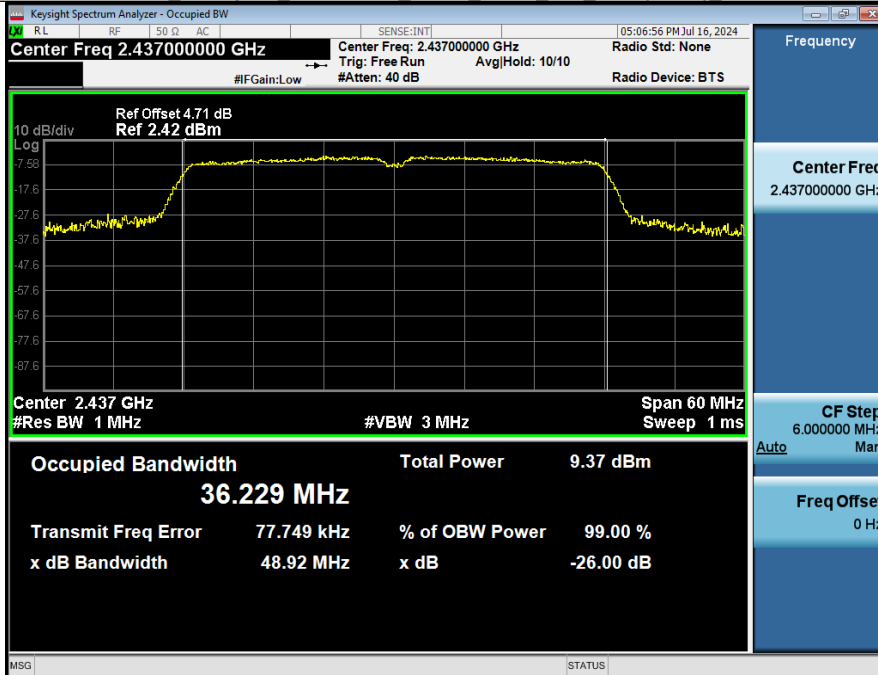


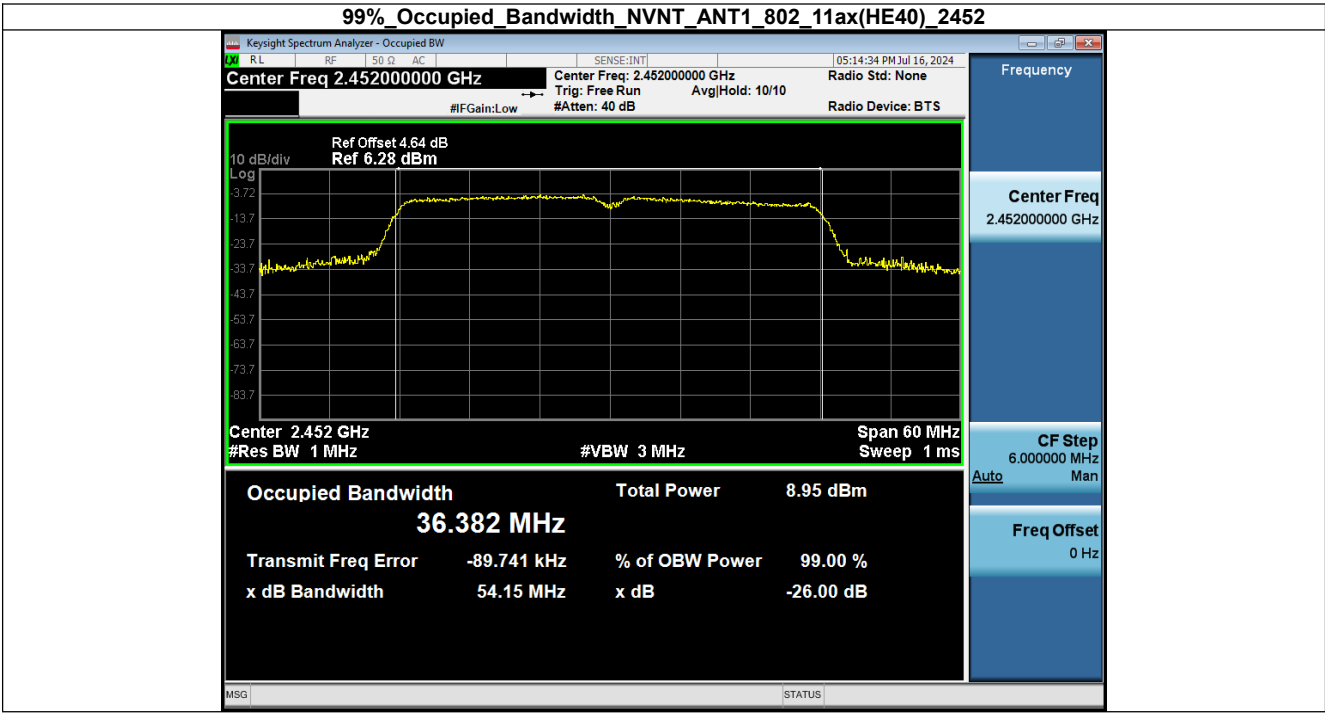


99% Occupied Bandwidth NVNT_ANT1_802_11ax(HE40)_2422



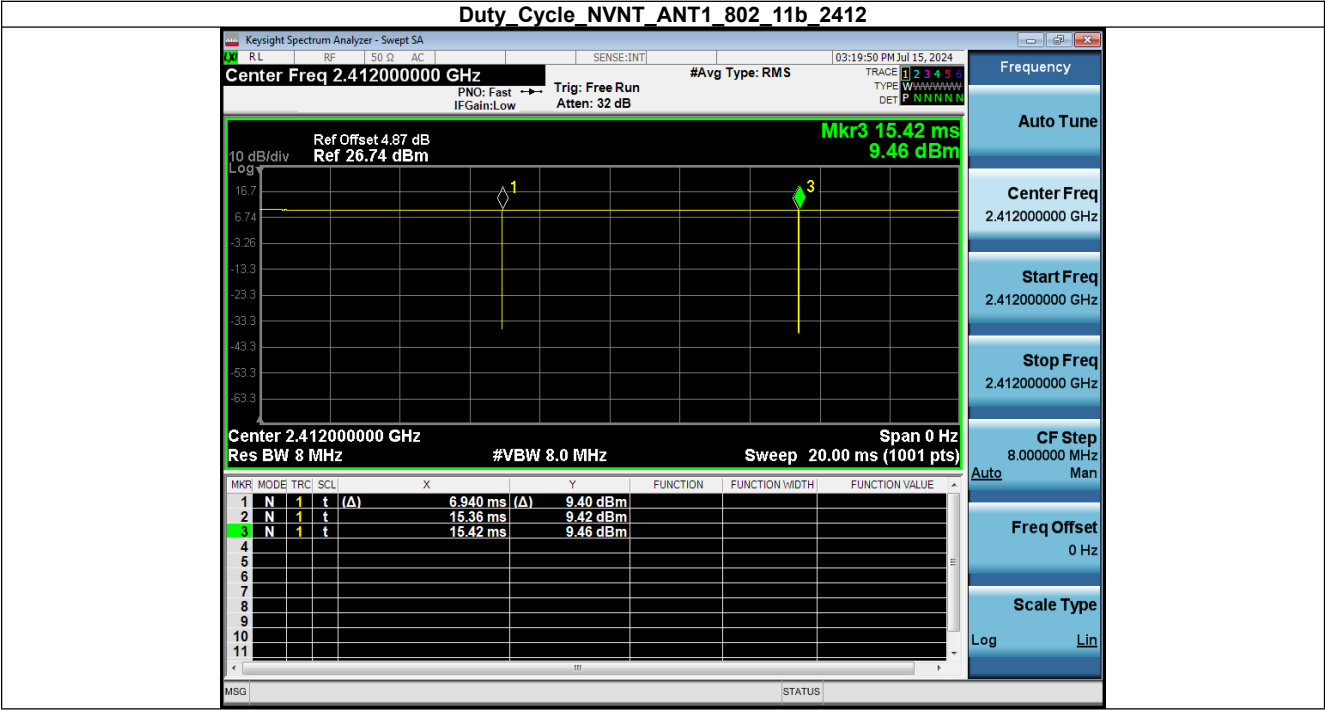
99% Occupied Bandwidth NVNT_ANT1_802_11ax(HE40)_2437



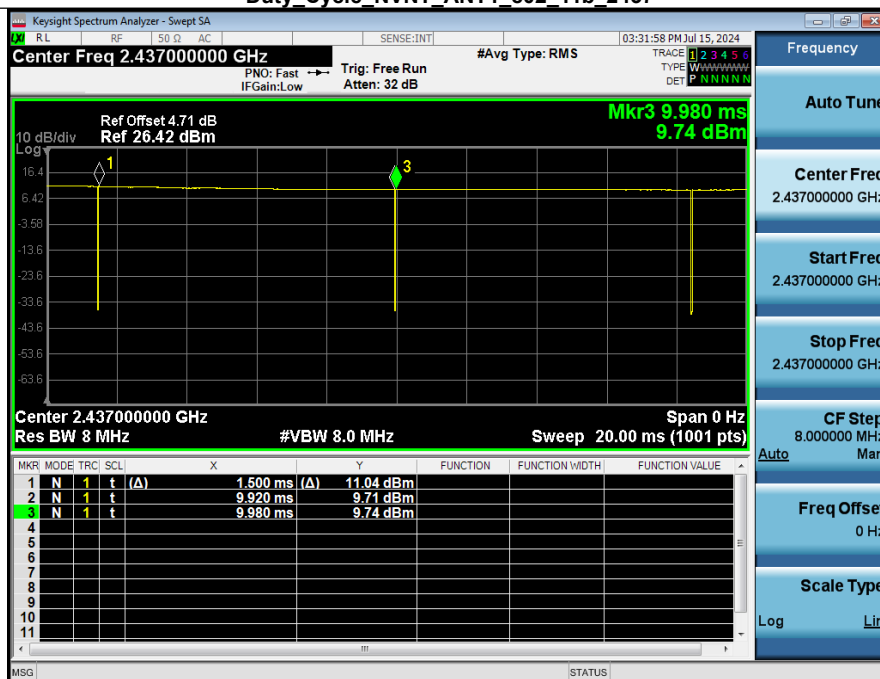


3. Duty Cycle

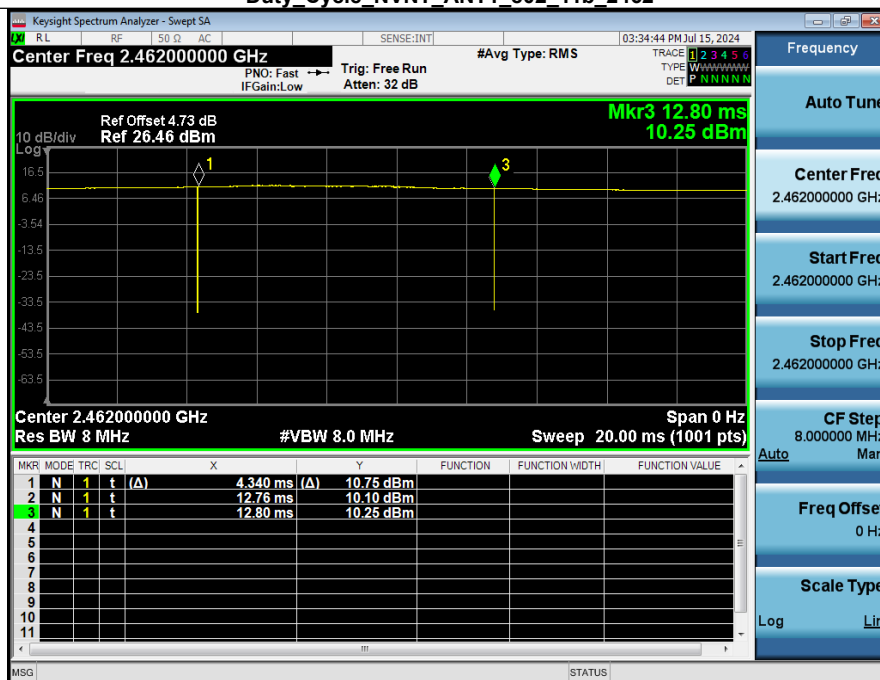
Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty factor(dB)
NVNT	ANT1	802.11b	2412.00	99.53	0.00
NVNT	ANT1	802.11b	2437.00	99.53	0.00
NVNT	ANT1	802.11b	2462.00	99.76	0.00
NVNT	ANT1	802.11g	2412.00	97.26	0.12
NVNT	ANT1	802.11g	2437.00	97.22	0.12
NVNT	ANT1	802.11g	2462.00	97.26	0.12
NVNT	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	802.11ax(HE20)	2412.00	96.77	0.14
NVNT	ANT1	802.11ax(HE20)	2437.00	96.77	0.14
NVNT	ANT1	802.11ax(HE20)	2462.00	96.77	0.14
NVNT	ANT1	802.11n(HT40)	2422.00	93.75	0.28
NVNT	ANT1	802.11n(HT40)	2437.00	93.75	0.28
NVNT	ANT1	802.11n(HT40)	2452.00	96.88	0.14
NVNT	ANT1	802.11ax(HE40)	2422.00	96.88	0.14
NVNT	ANT1	802.11ax(HE40)	2437.00	96.88	0.14
NVNT	ANT1	802.11ax(HE40)	2452.00	90.63	0.43



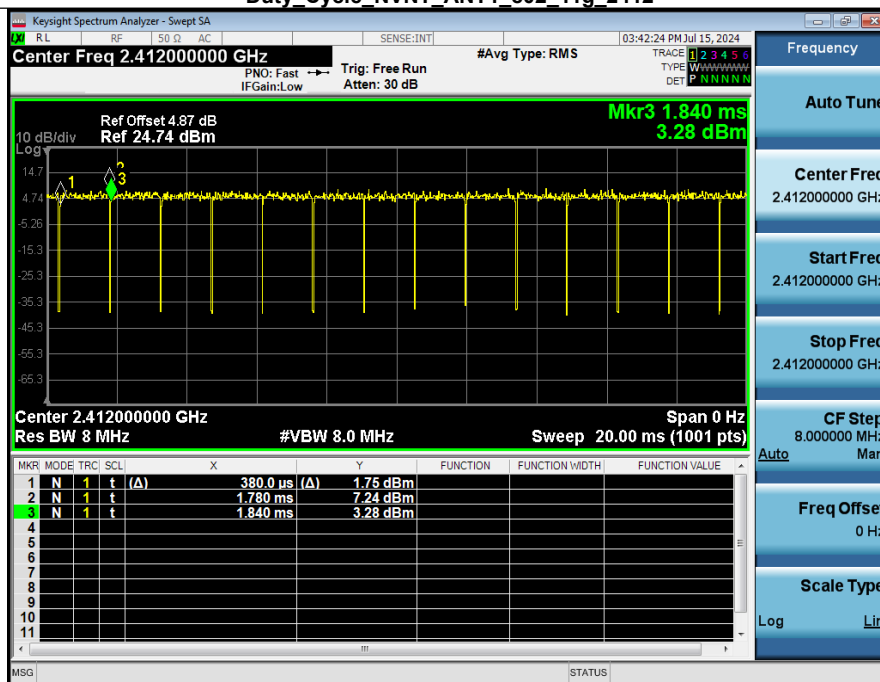
Duty Cycle NVNT_ANT1_802_11b_2437



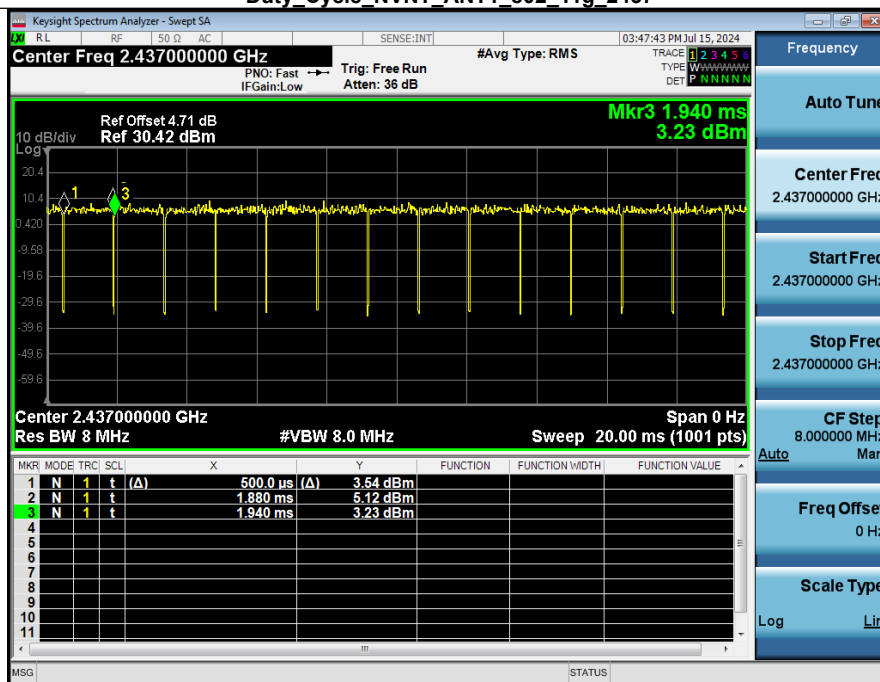
Duty Cycle NVNT_ANT1_802_11b_2462



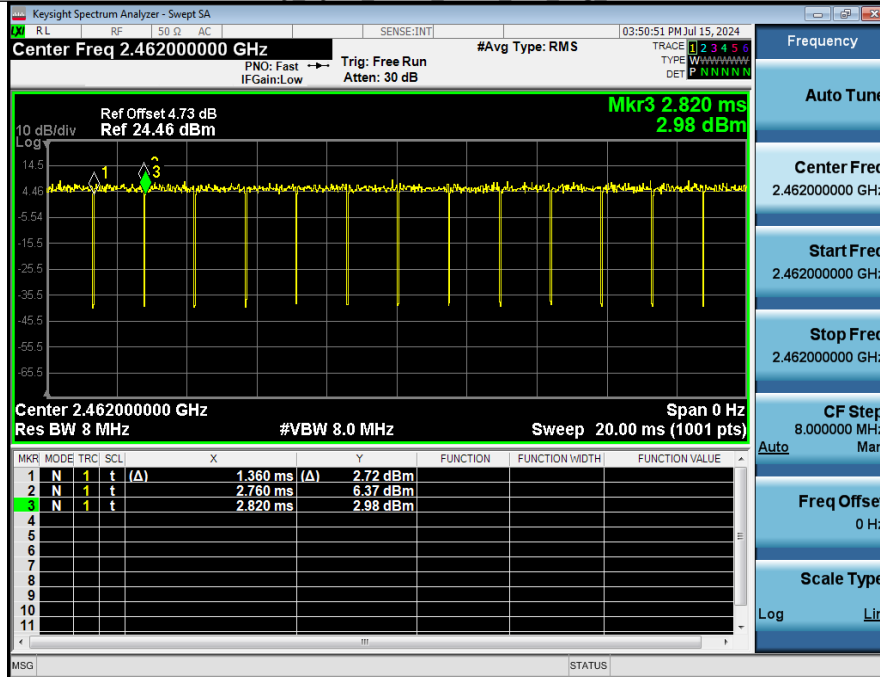
Duty Cycle NVNT_ANT1_802_11g_2412



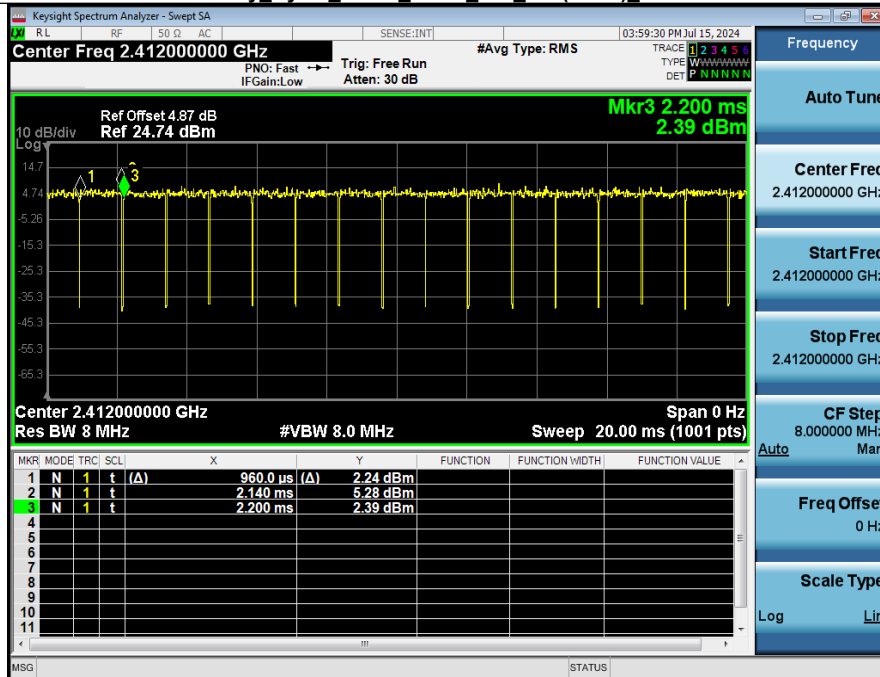
Duty Cycle NVNT_ANT1_802_11g_2437



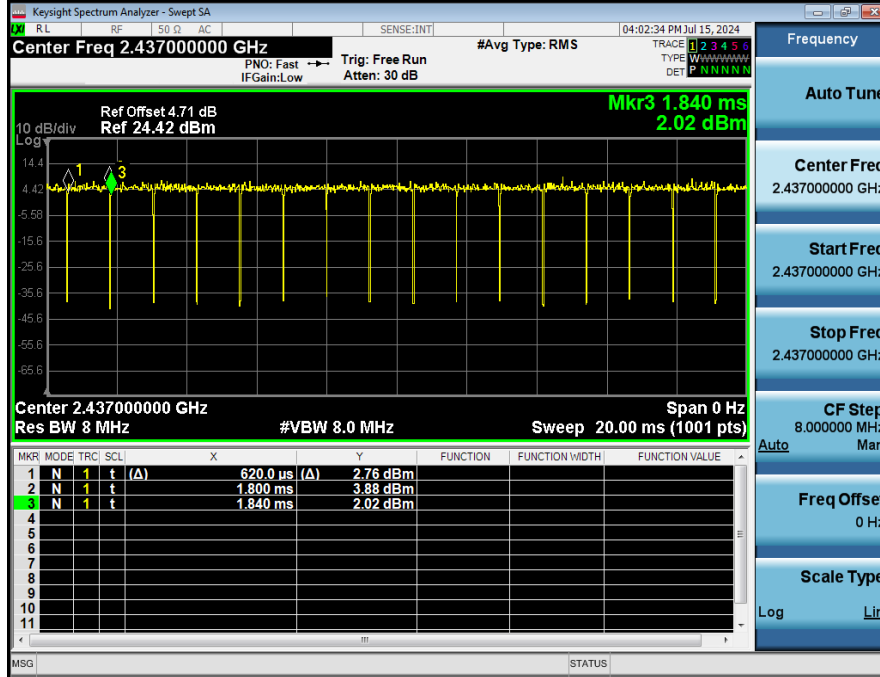
Duty Cycle NVNT_ANT1_802_11g_2462



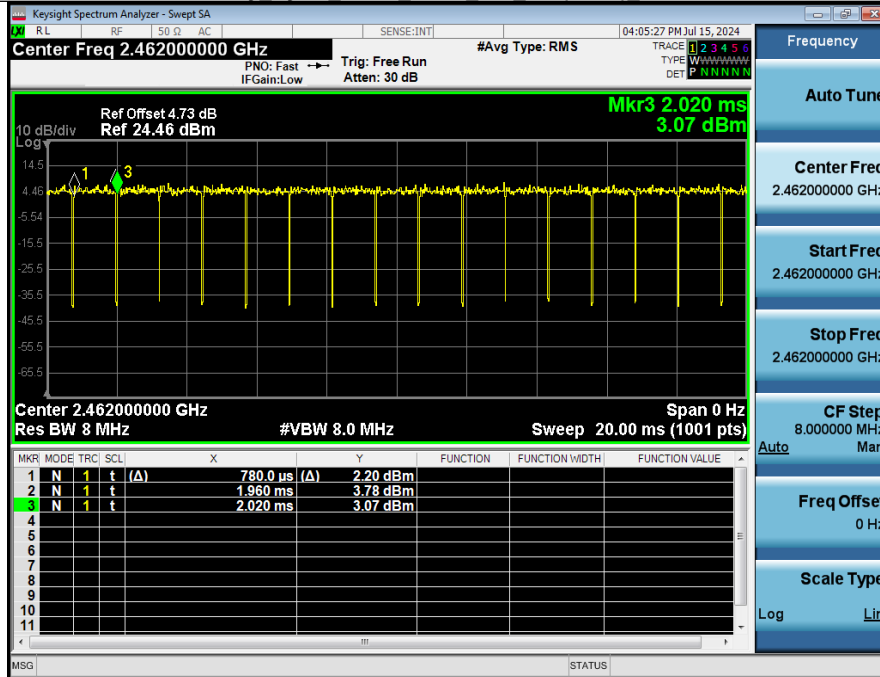
Duty Cycle NVNT_ANT1_802_11n(HT20)_2412



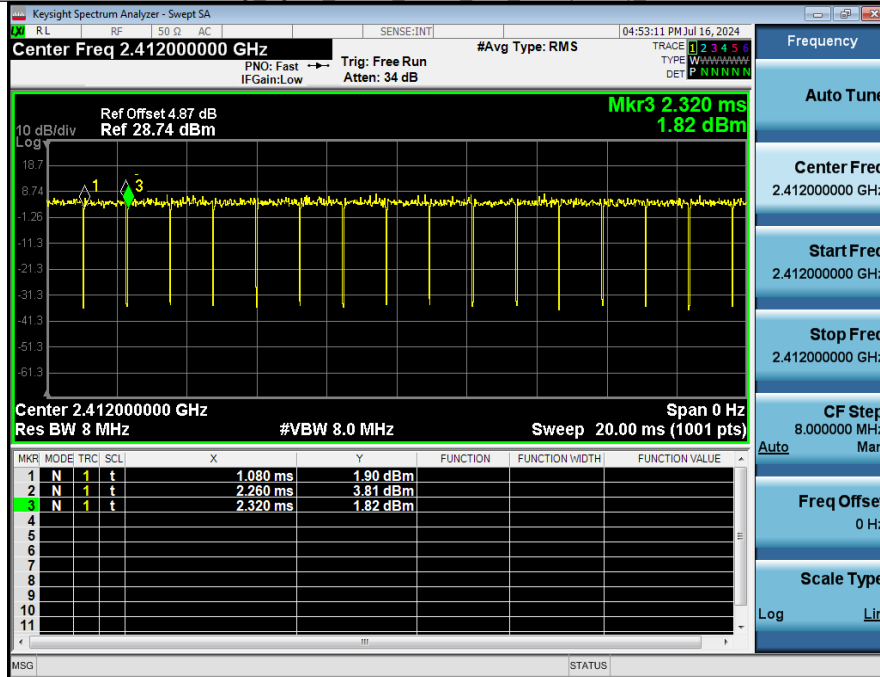
Duty Cycle NVNT_ANT1_802_11n(HT20)_2437



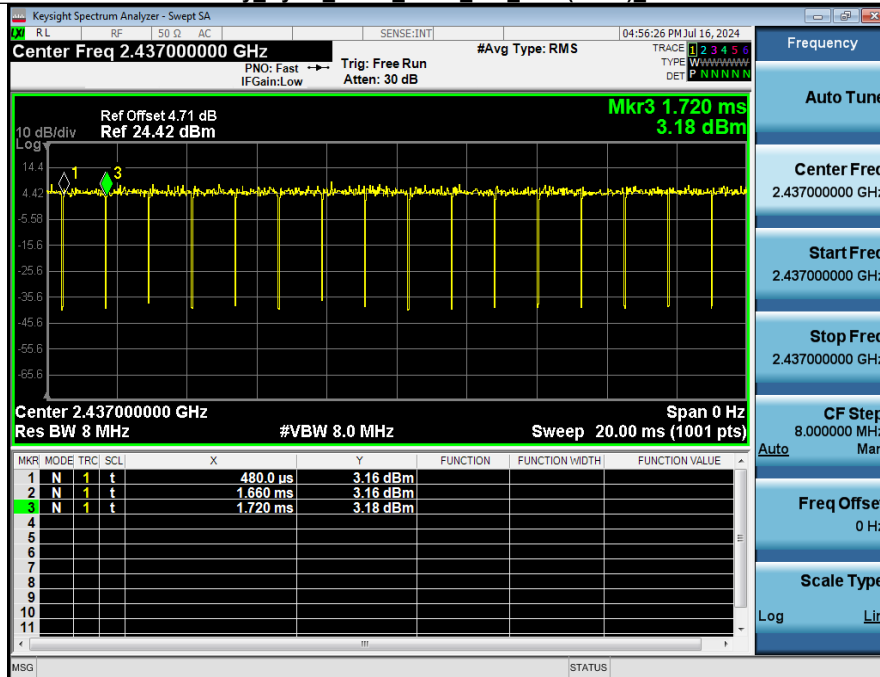
Duty Cycle NVNT_ANT1_802_11n(HT20)_2462



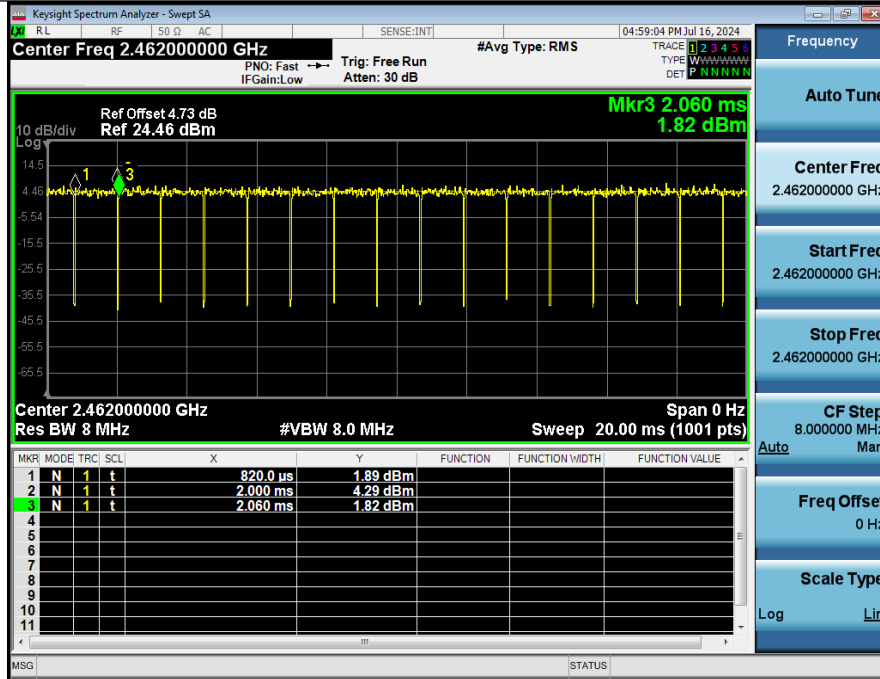
Duty Cycle_NVNT_ANT1_802_11ax(HE20)_2412



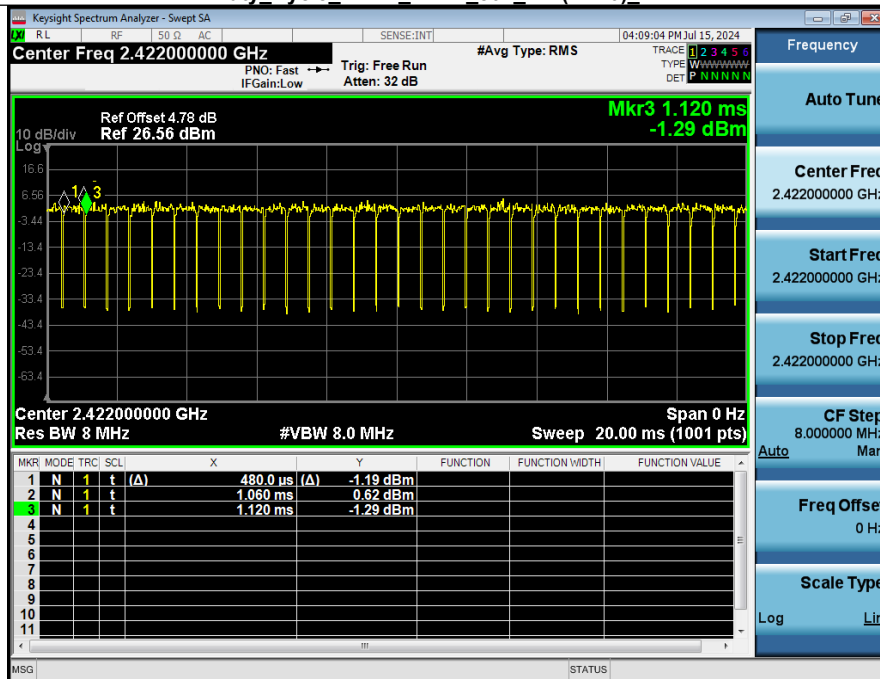
Duty Cycle_NVNT_ANT1_802_11ax(HE20)_2437



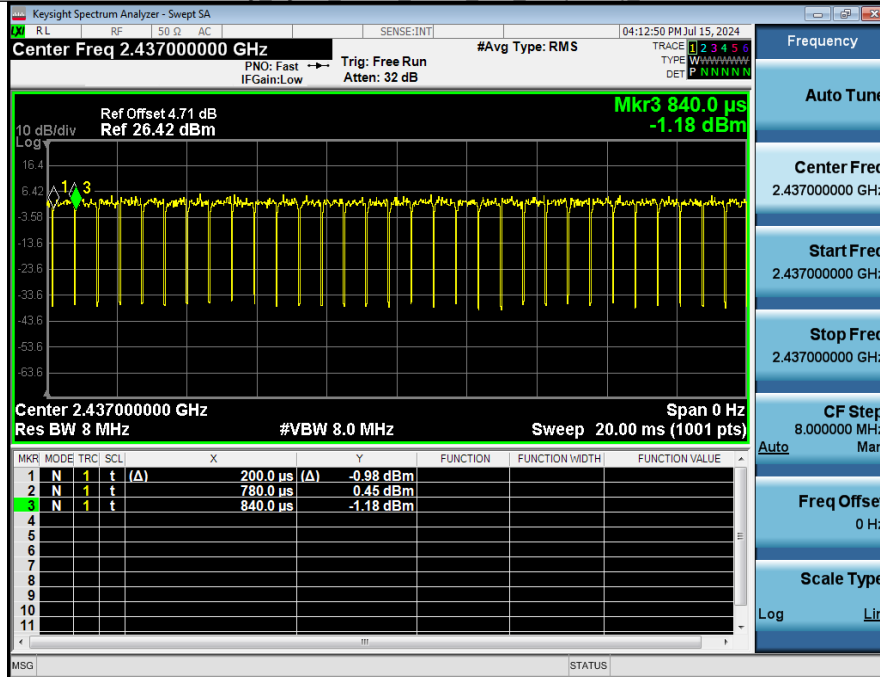
Duty Cycle NVNT_ANT1_802_11ax(HE20)_2462



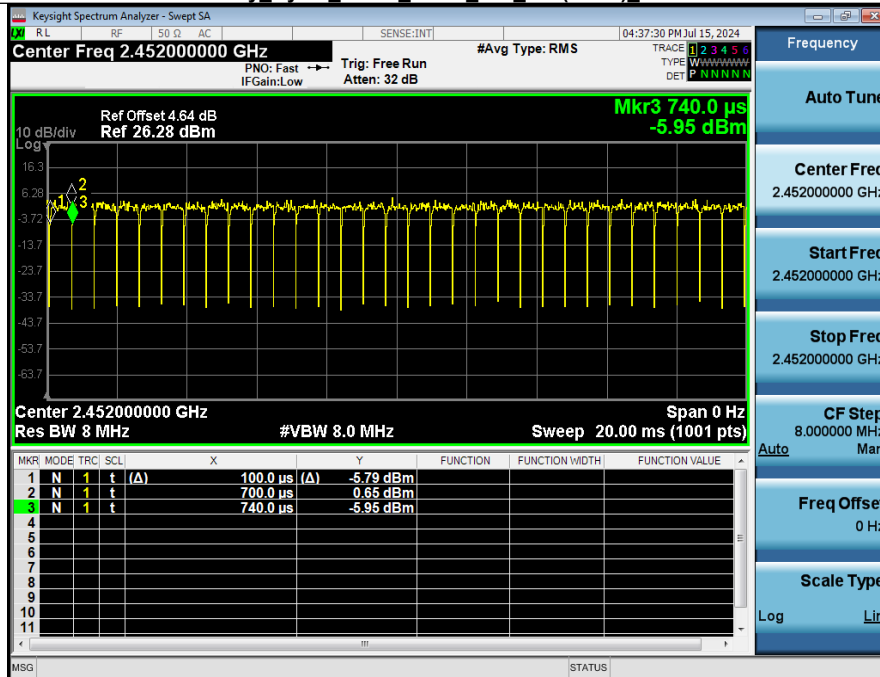
Duty Cycle NVNT_ANT1_802_11n(HT40)_2422



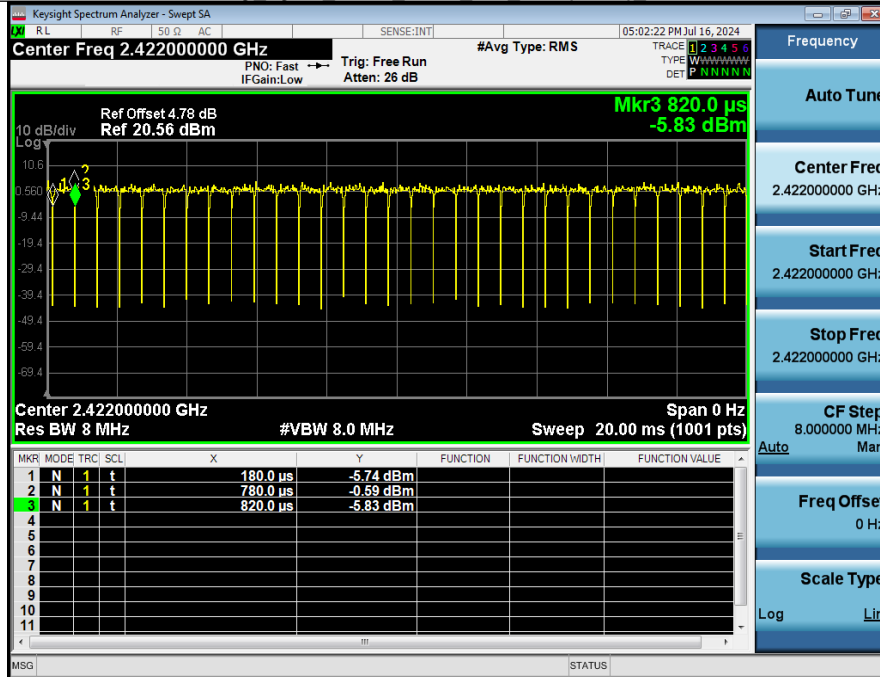
Duty Cycle NVNT_ANT1_802_11n(HT40)_2437



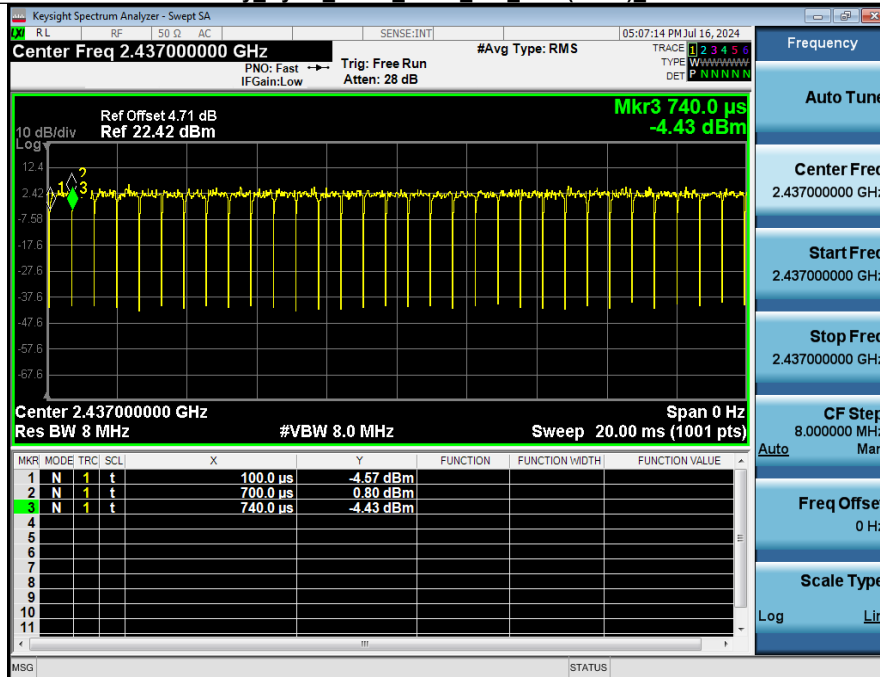
Duty Cycle NVNT_ANT1_802_11n(HT40)_2452



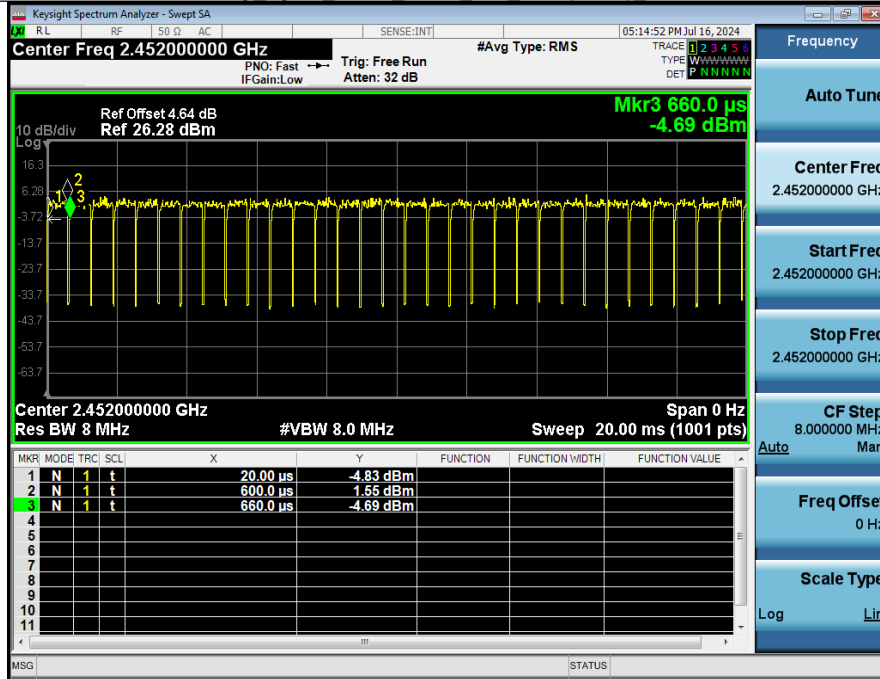
Duty Cycle_NVNT_ANT1_802_11ax(HE40)_2422



Duty Cycle_NVNT_ANT1_802_11ax(HE40)_2437

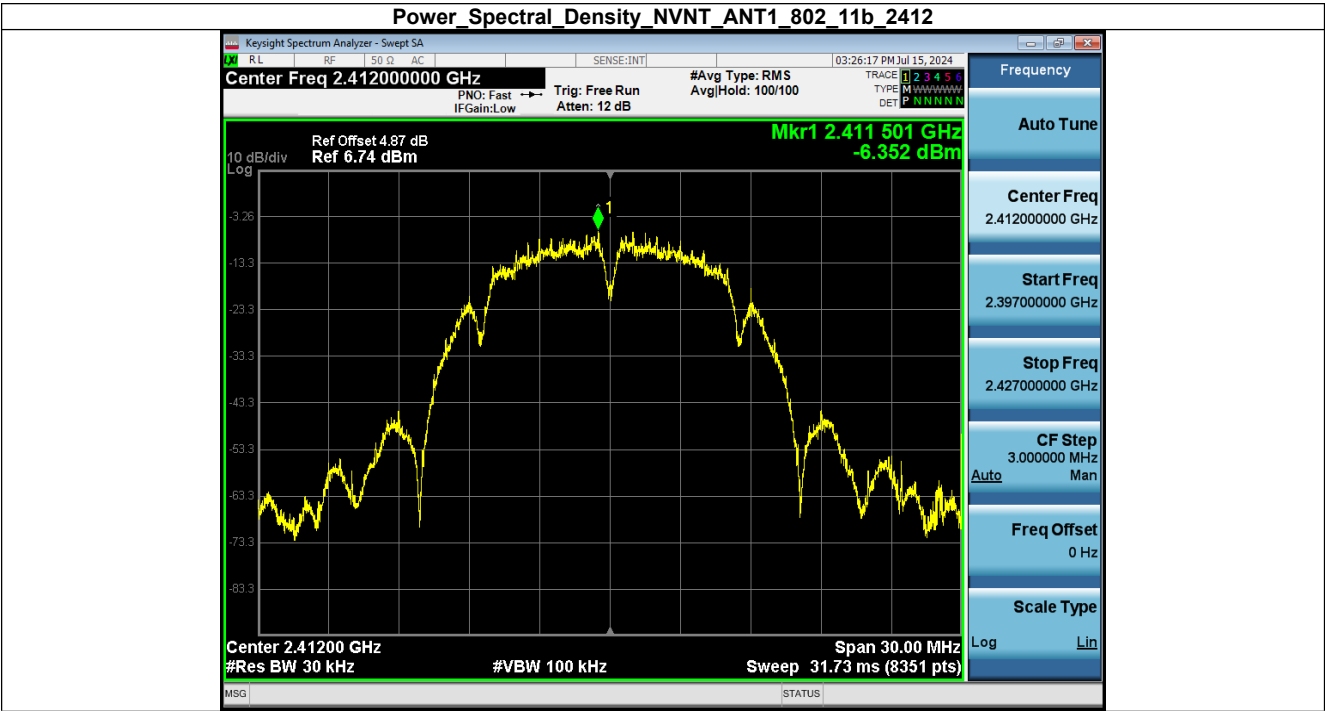


Duty Cycle NVNT_ANT1_802_11ax(HE40)_2452



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	-6.35	-10.00	-16.35	8	Pass
NVNT	ANT1	802.11b	2437.00	-2.83	-10.00	-12.82	8	Pass
NVNT	ANT1	802.11b	2462.00	-4.91	-10.00	-14.91	8	Pass
NVNT	ANT1	802.11g	2412.00	-14.04	-10.00	-24.04	8	Pass
NVNT	ANT1	802.11g	2437.00	-14.10	-10.00	-24.10	8	Pass
NVNT	ANT1	802.11g	2462.00	-14.42	-10.00	-24.42	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-15.01	-10.00	-25.01	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-15.01	-10.00	-25.01	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-15.09	-10.00	-25.09	8	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	-15.60	-10.00	-25.60	8	Pass
NVNT	ANT1	802.11ax(HE20)	2437.00	-15.12	-10.00	-25.12	8	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	-15.82	-10.00	-25.82	8	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	-18.45	-10.00	-28.45	8	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	-18.12	-10.00	-28.12	8	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	-18.65	-10.00	-28.65	8	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	-18.21	-10.00	-28.21	8	Pass
NVNT	ANT1	802.11ax(HE40)	2437.00	-18.03	-10.00	-28.03	8	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	-18.22	-10.00	-28.22	8	Pass



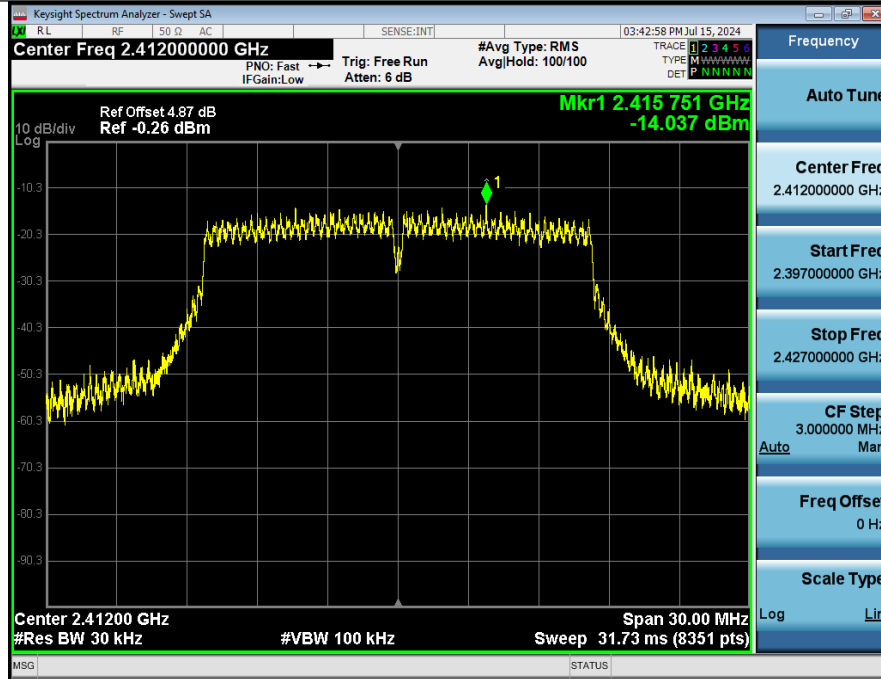
Power Spectral Density_NVNT_ANT1_802_11b_2437



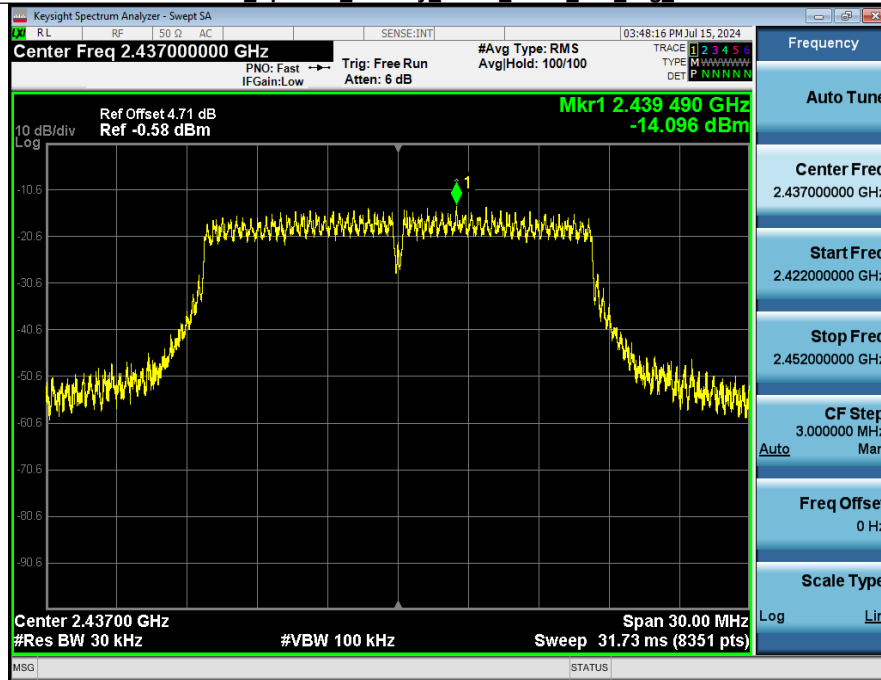
Power Spectral Density_NVNT_ANT1_802_11b_2462



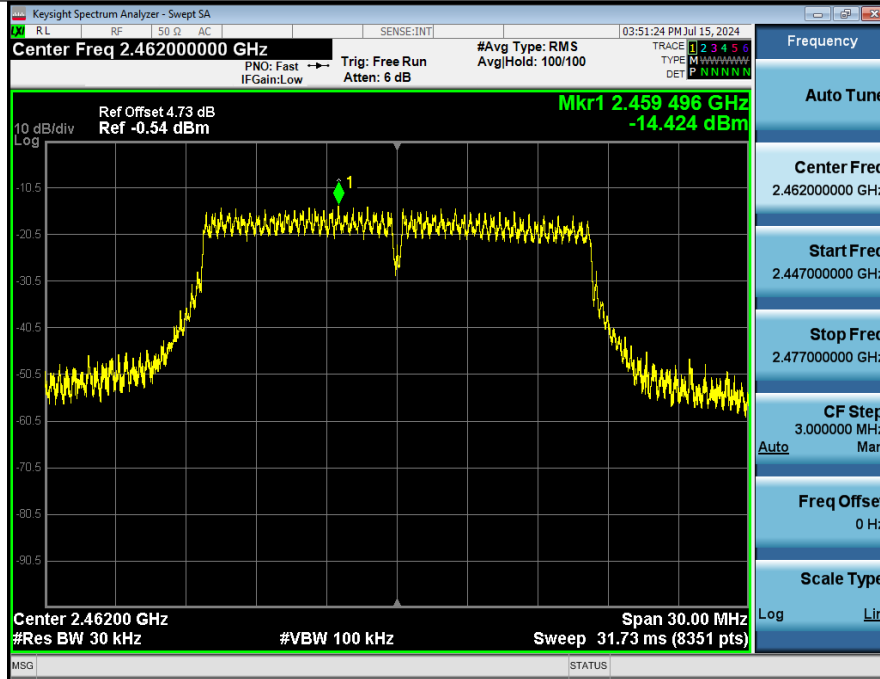
Power Spectral Density NVNT_ANT1_802_11g_2412



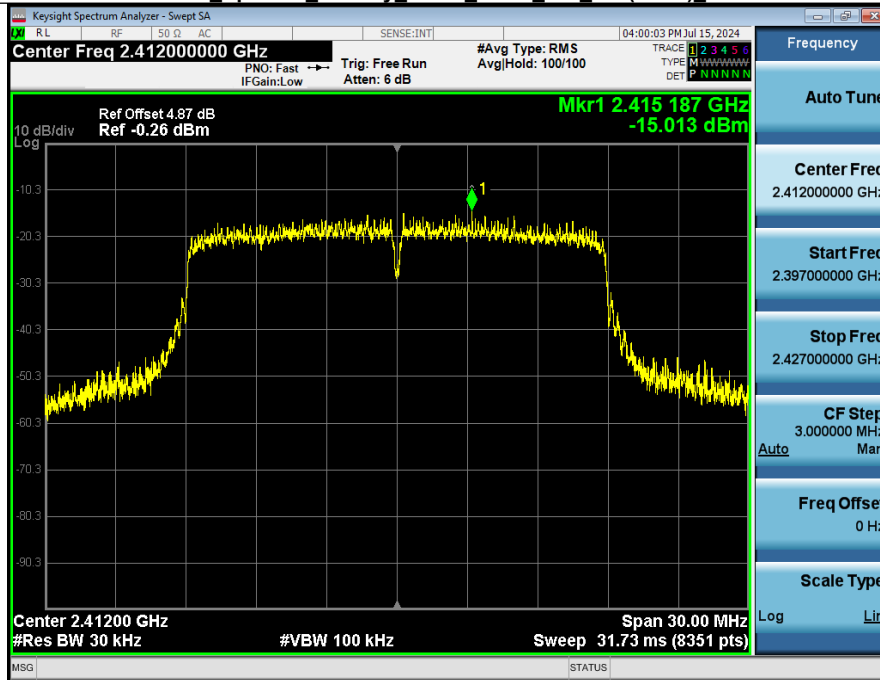
Power Spectral Density NVNT_ANT1_802_11g_2437



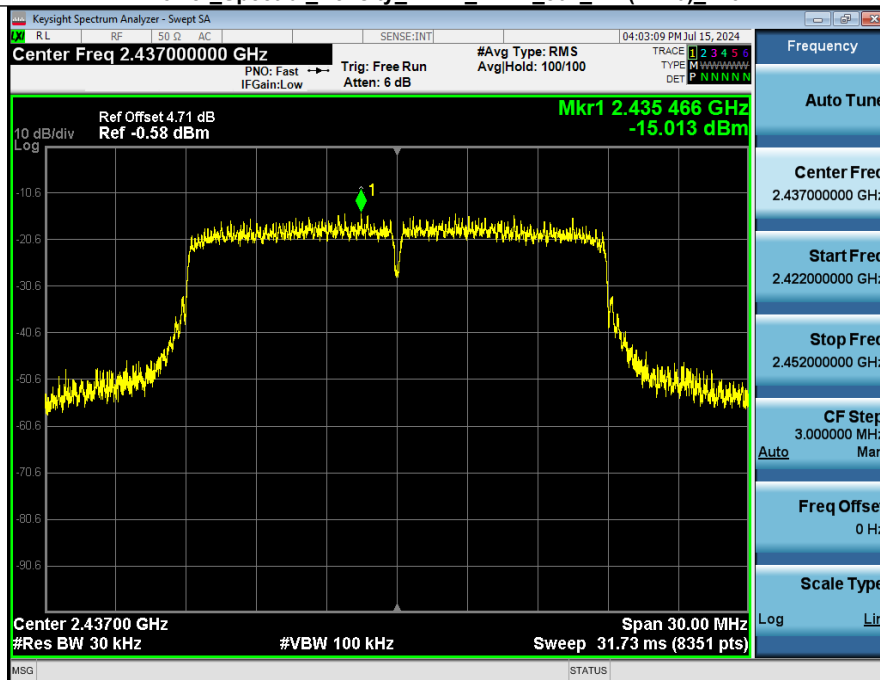
Power Spectral Density_NVNT_ANT1_802_11g_2462



Power Spectral Density_NVNT_ANT1_802_11n(HT20)_2412



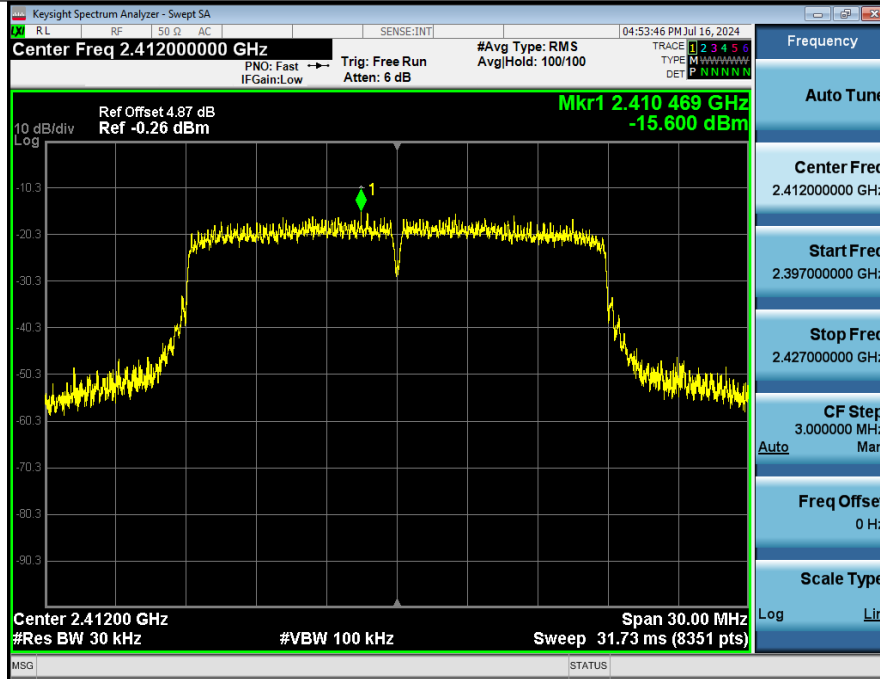
Power Spectral Density NVNT_ANT1_802_11n(HT20)_2437



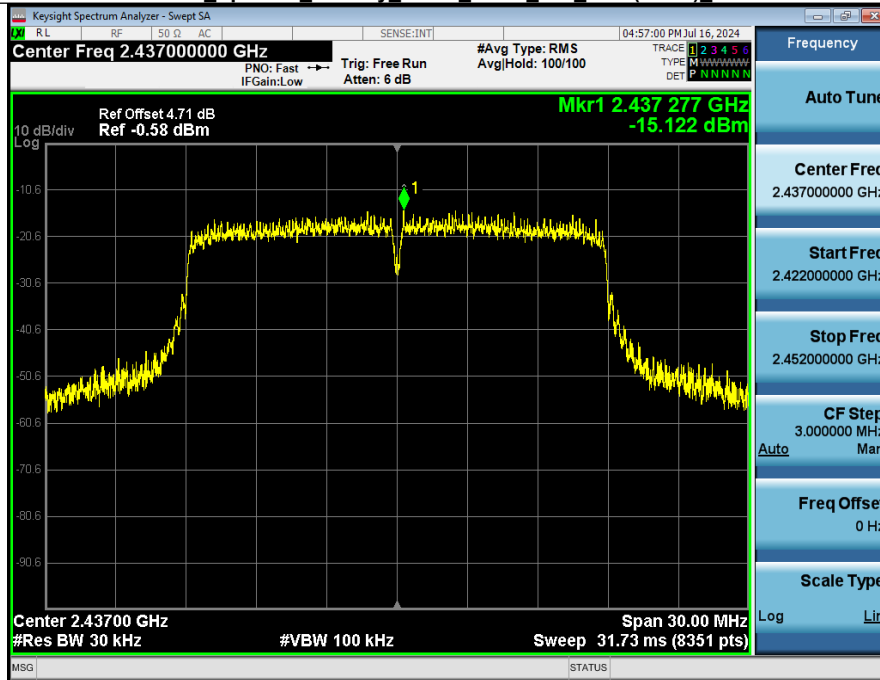
Power Spectral Density NVNT_ANT1_802_11n(HT20)_2462



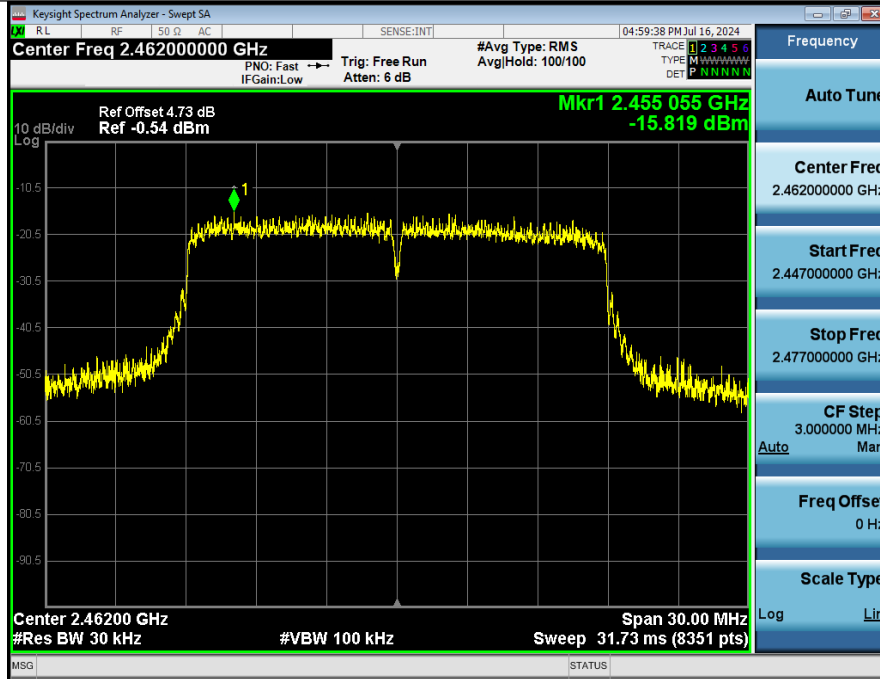
Power Spectral Density_NVNT_ANT1_802_11ax(HE20)_2412



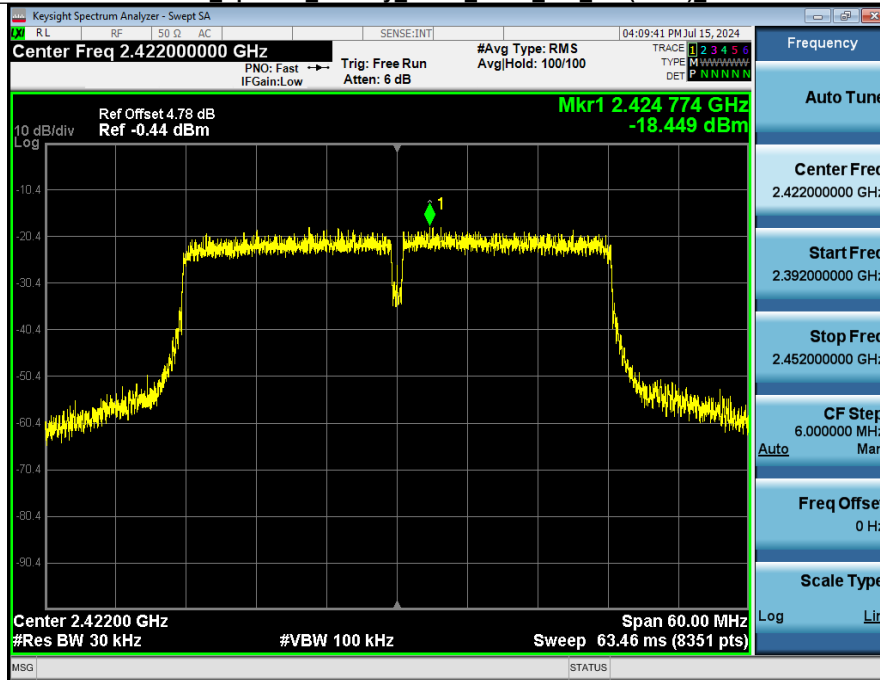
Power Spectral Density_NVNT_ANT1_802_11ax(HE20)_2437



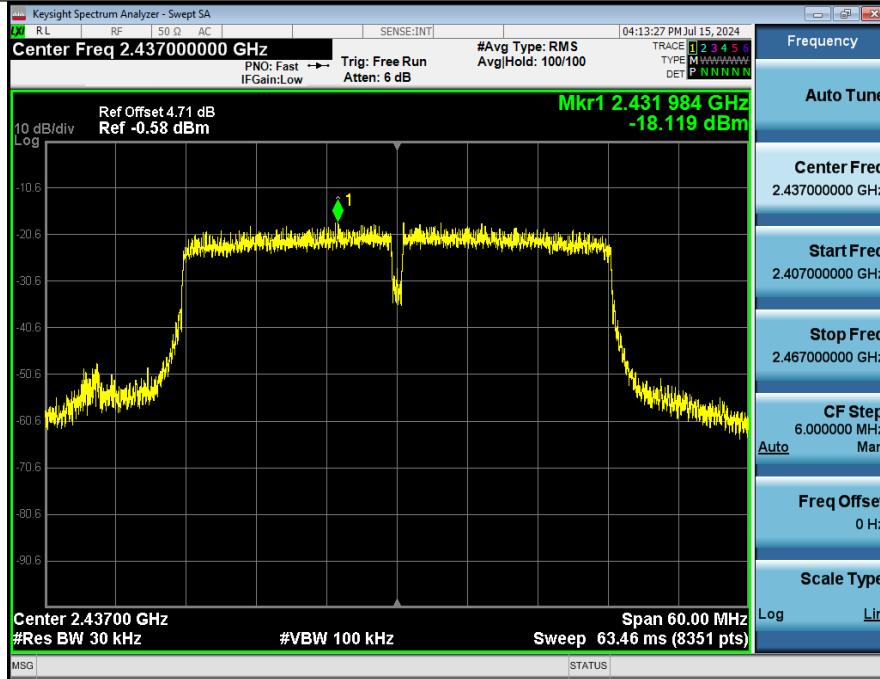
Power Spectral Density NVNT_ANT1_802_11ax(HE20)_2462



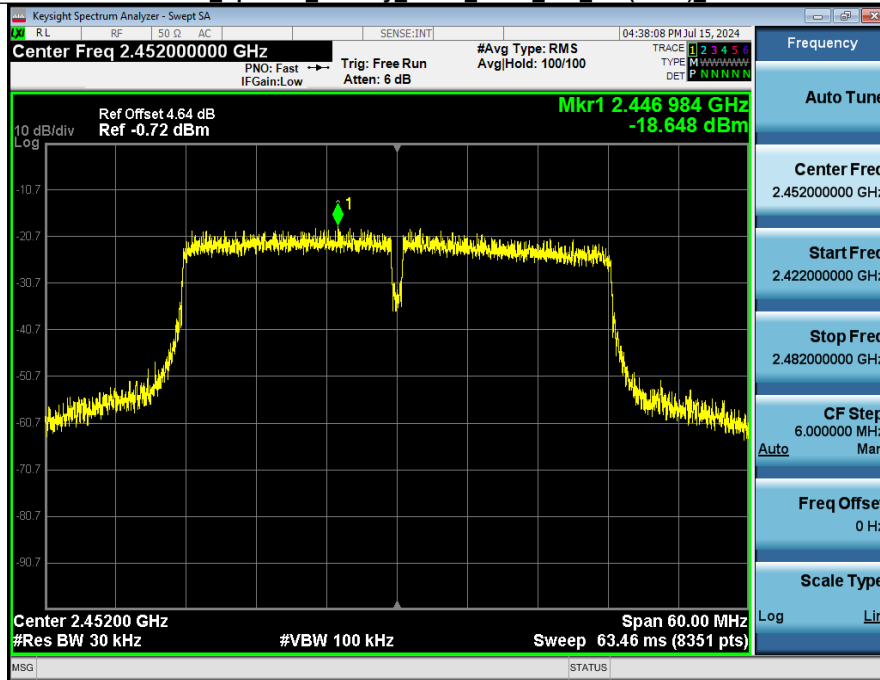
Power Spectral Density NVNT_ANT1_802_11n(HT40)_2422



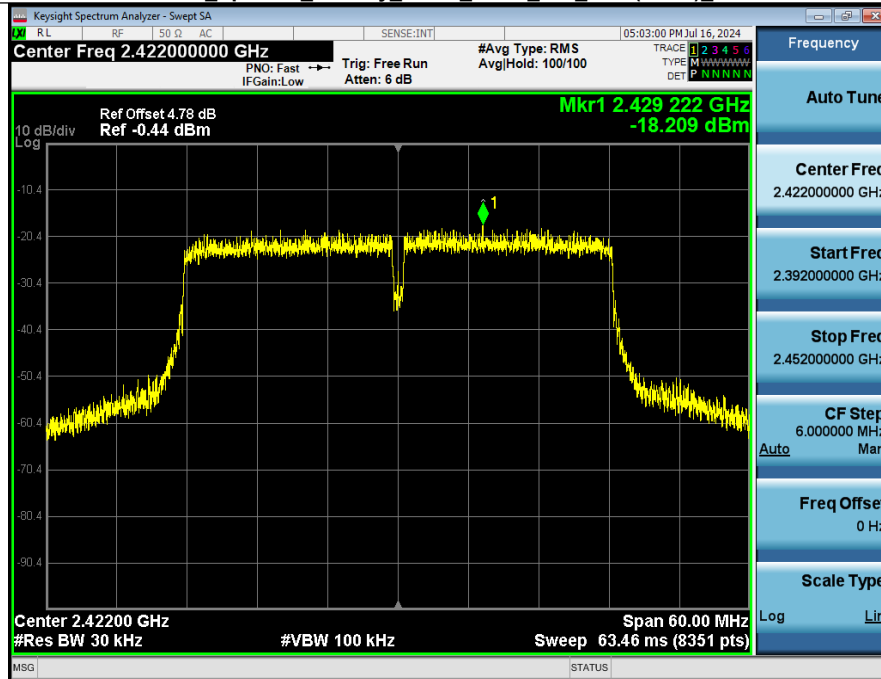
Power Spectral Density NVNT_ANT1_802_11n(HT40)_2437



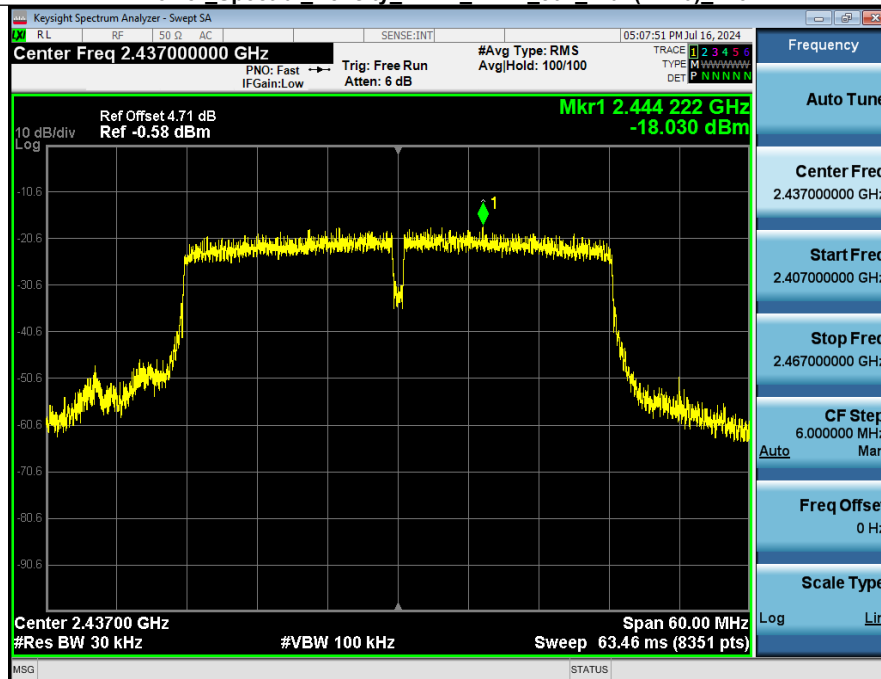
Power Spectral Density NVNT_ANT1_802_11n(HT40)_2452

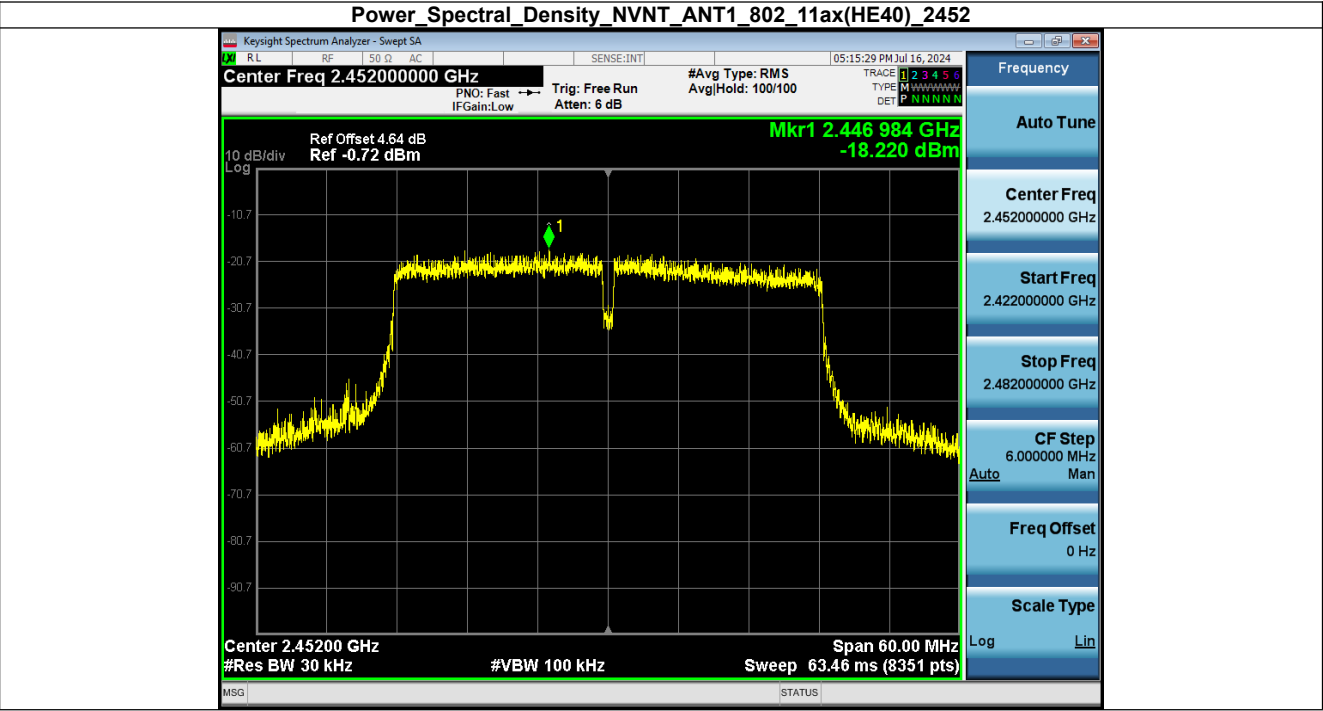


Power Spectral Density NVNT_ANT1_802_11ax(HE40)_2422



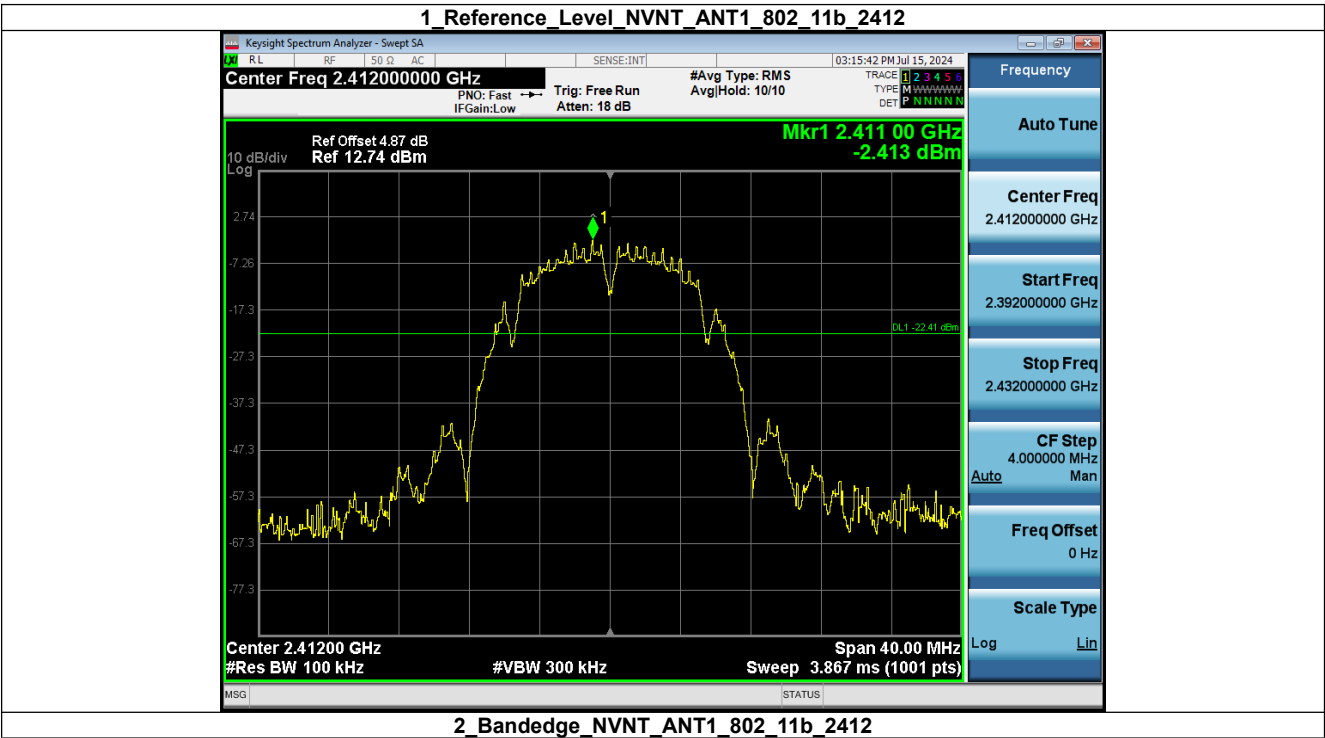
Power Spectral Density NVNT_ANT1_802_11ax(HE40)_2437

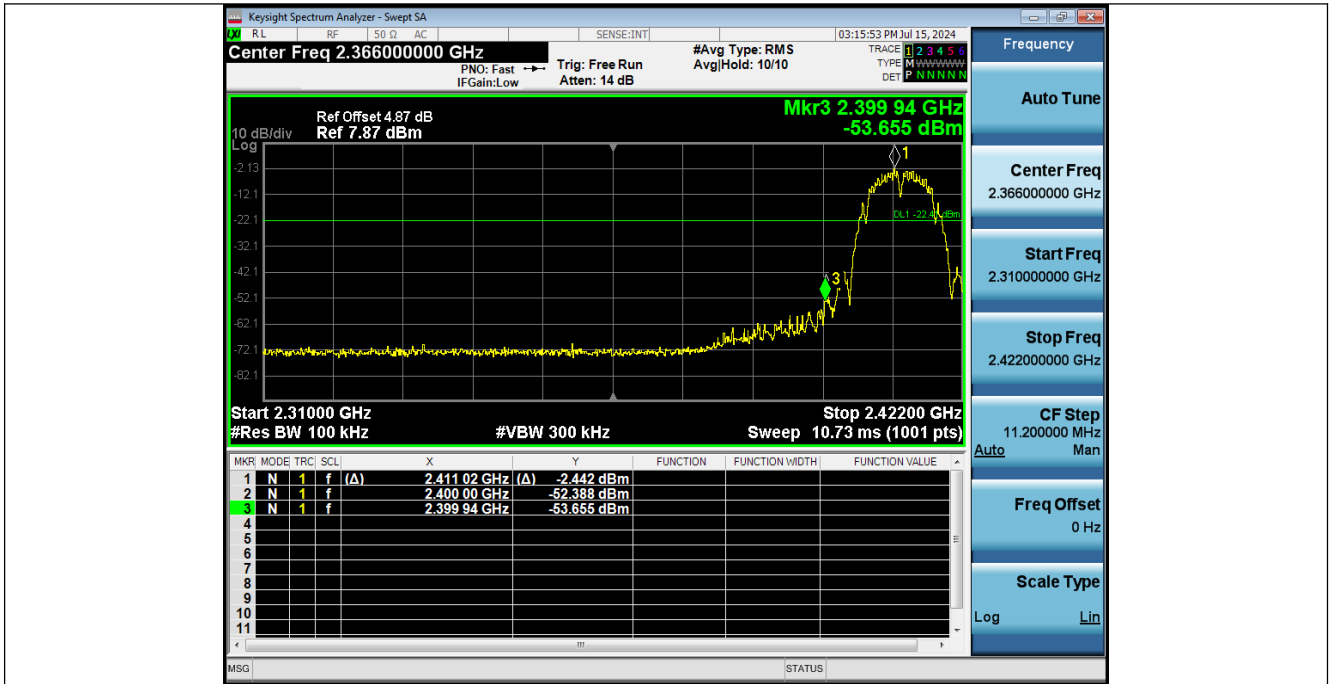




6. Bandedge

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	2399.936	-53.655	-22.413	Pass
NVNT	ANT1	802.11b	2462.00	2483.776	-61.590	-22.714	Pass
NVNT	ANT1	802.11g	2412.00	2398.592	-44.354	-30.190	Pass
NVNT	ANT1	802.11g	2462.00	2483.584	-54.934	-29.895	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2399.488	-41.833	-30.645	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2483.536	-54.699	-30.942	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	2399.936	-43.339	-30.879	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	2483.920	-53.683	-31.203	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	2398.572	-44.904	-33.444	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	2483.952	-54.045	-33.927	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	2399.760	-44.426	-33.608	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	2483.612	-52.959	-33.450	Pass





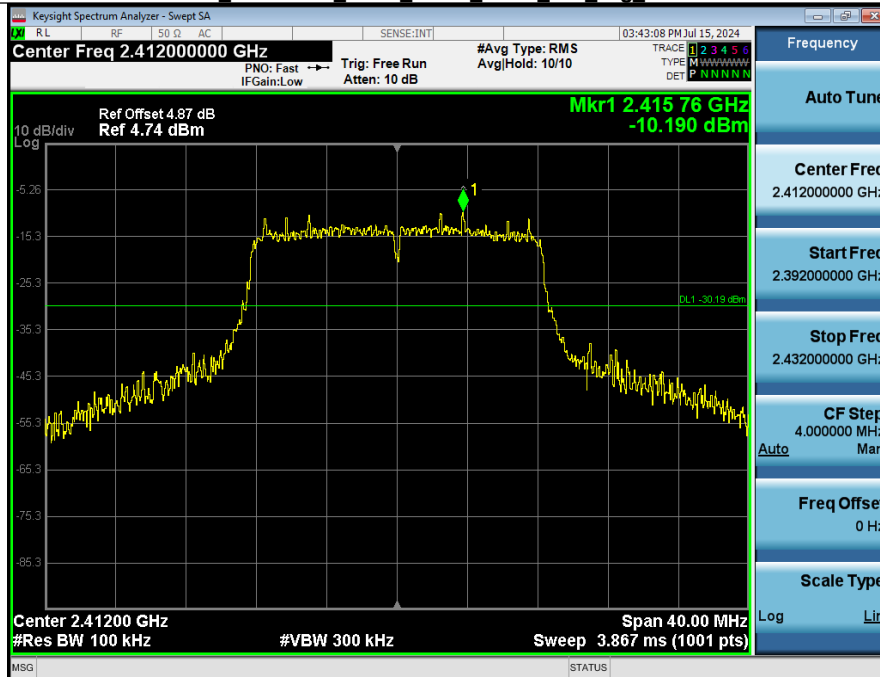
1 Reference Level NVNT_ANT1_802_11b_2462



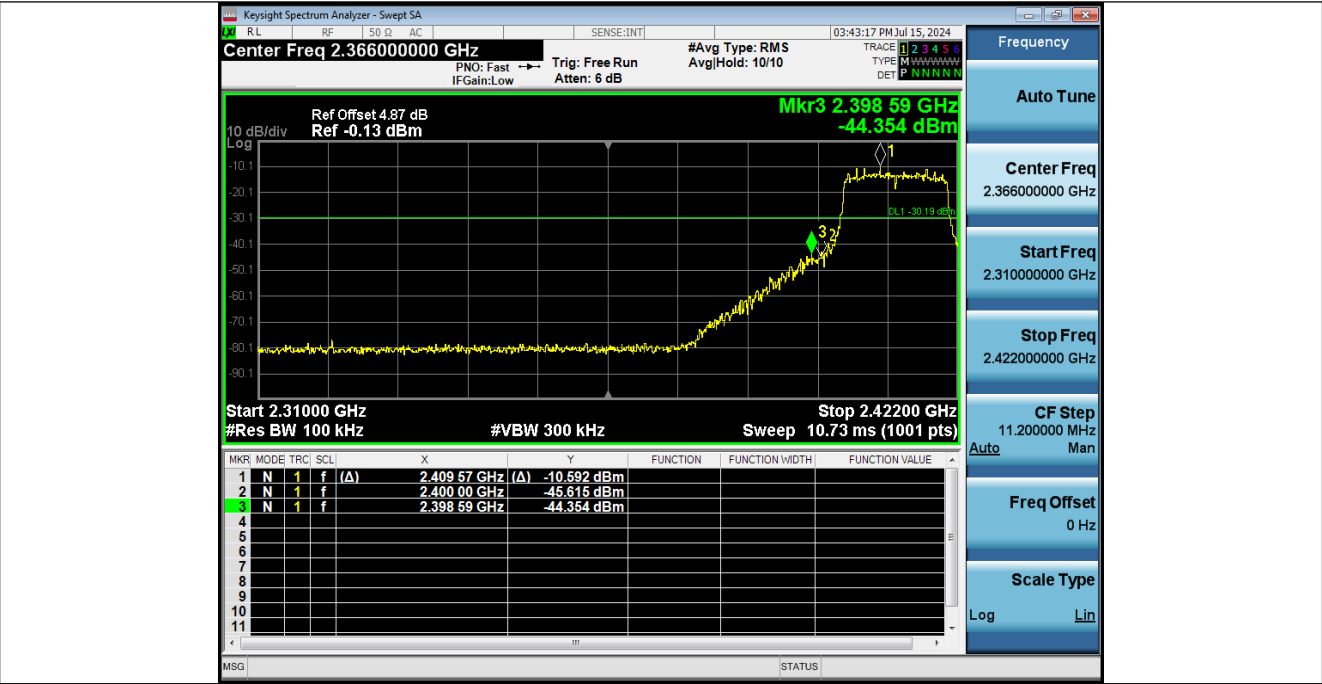
2_Bandedge_NVNT_ANT1_802_11b_2462



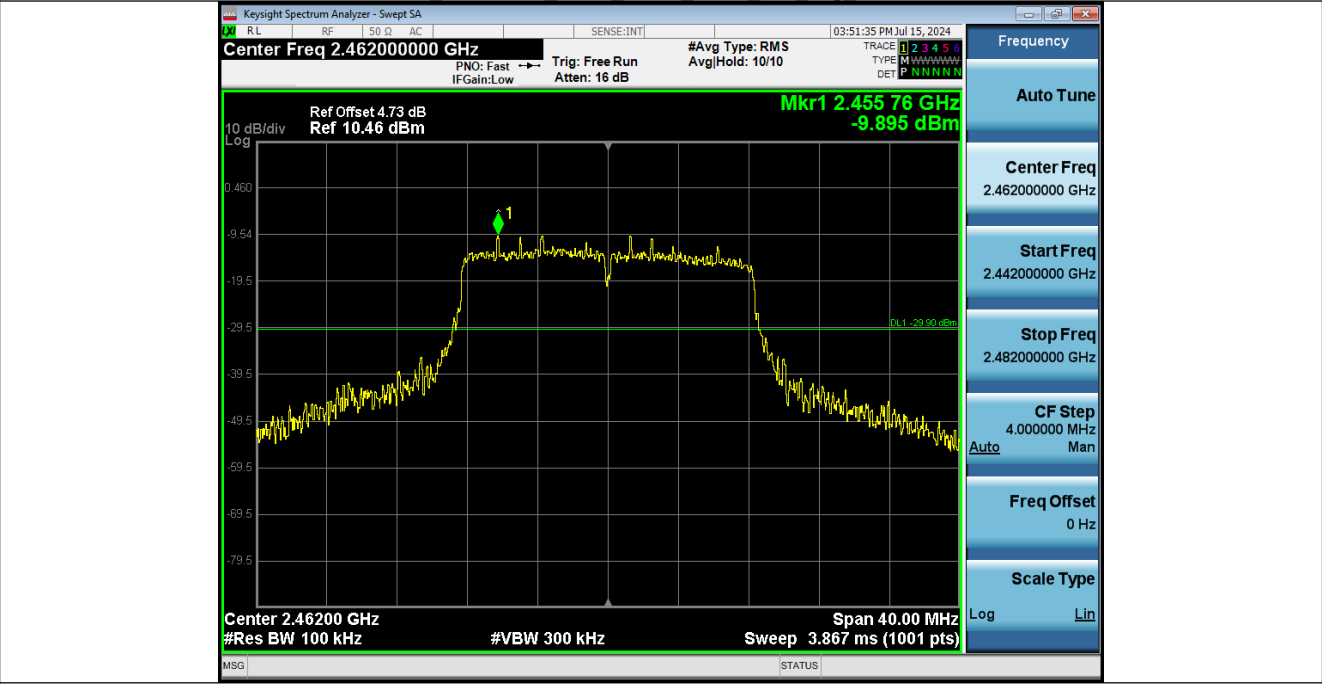
1 Reference Level NVNT_ANT1_802_11g_2412



2_Bandedge_NVNT_ANT1_802_11g_2412



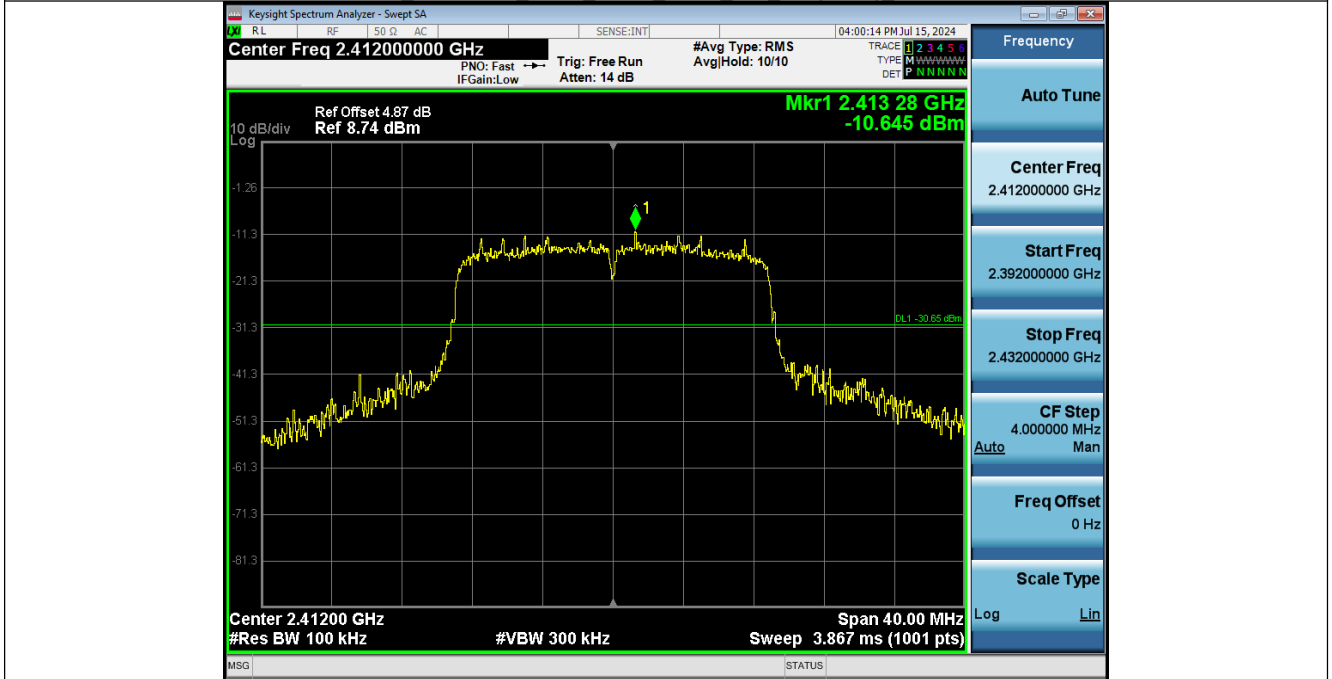
1 Reference Level NVNT_ANT1_802_11g_2462



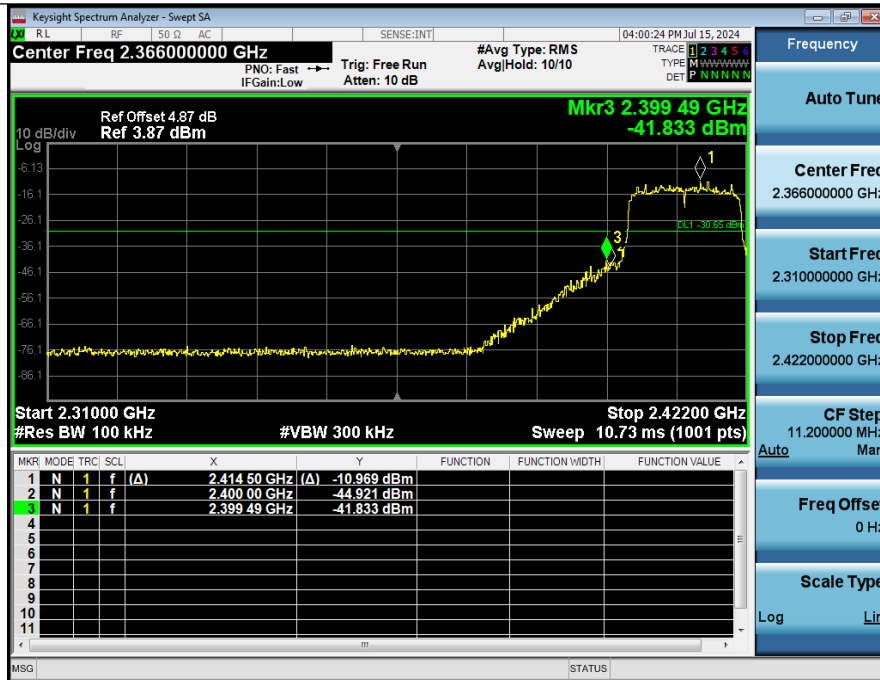
2_Bandedge_NVNT_ANT1_802_11g_2462



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



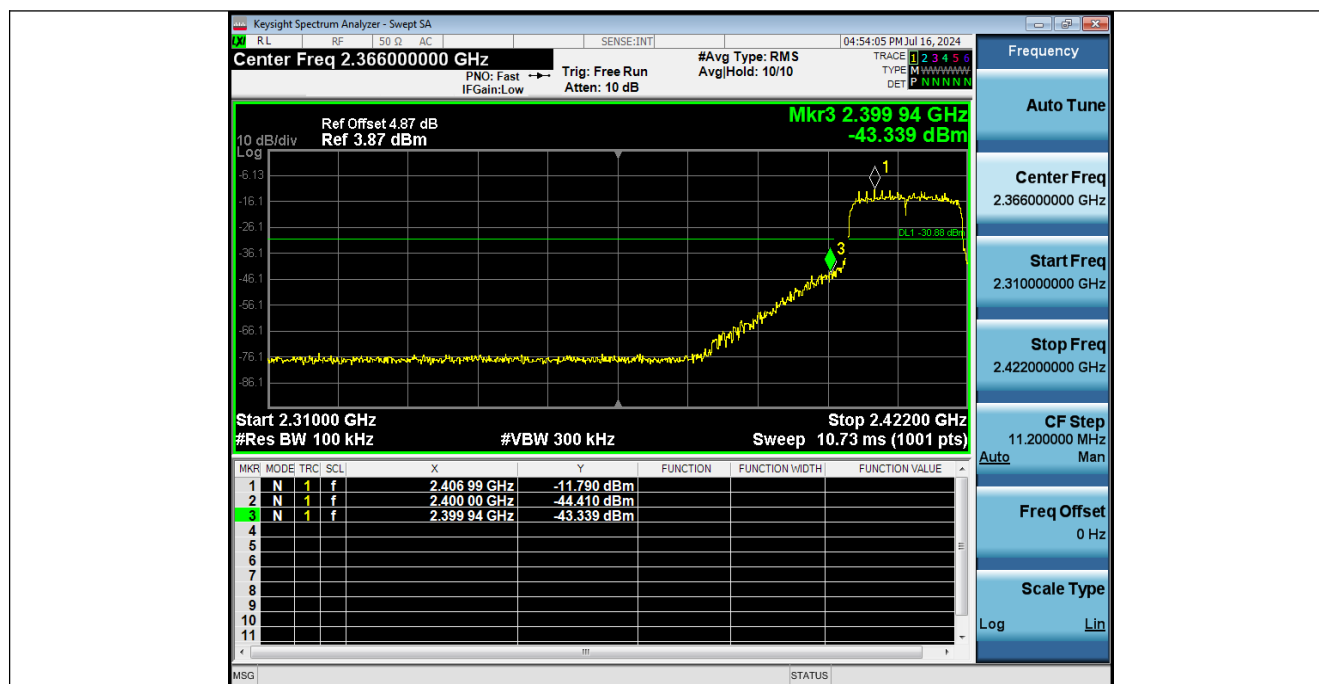
2_Bandedge_NVNT_ANT1_802_11n(HT20)_2462



1_Reference_Level_NVNT_ANT1_802_11ax(HE20)_2412



2_Bandedge_NVNT_ANT1_802_11ax(HE20)_2412



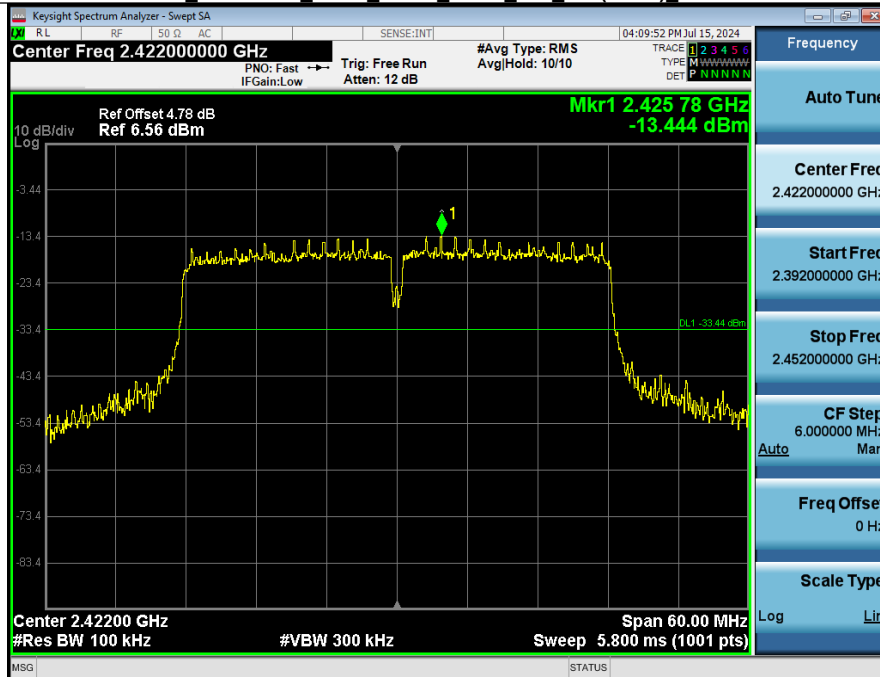
1_Reference_Level_NVNT_ANT1_802_11ax(HE20)_2462



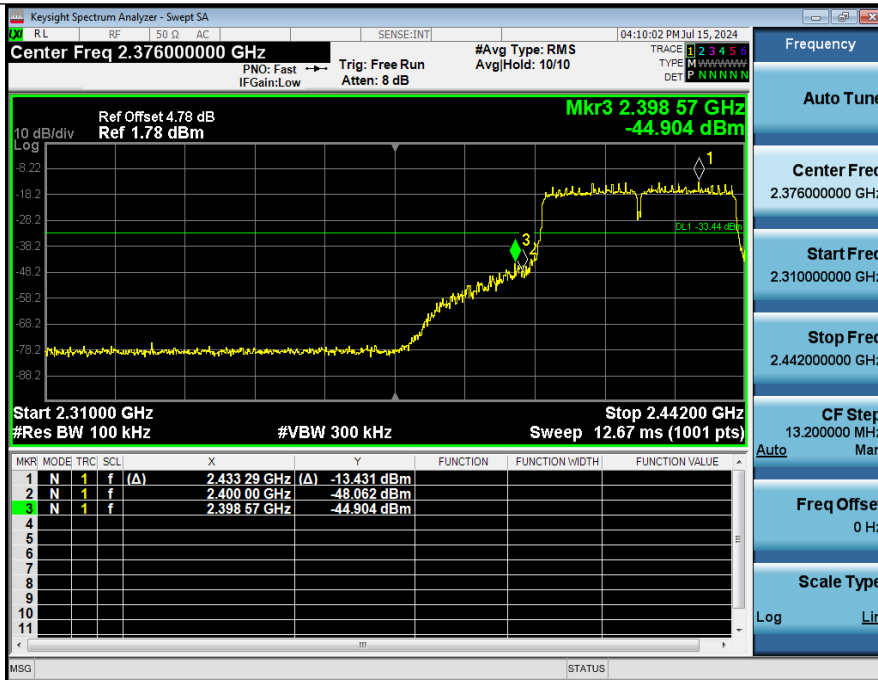
2_Bandedge_NVNT_ANT1_802_11ax(HE20)_2462



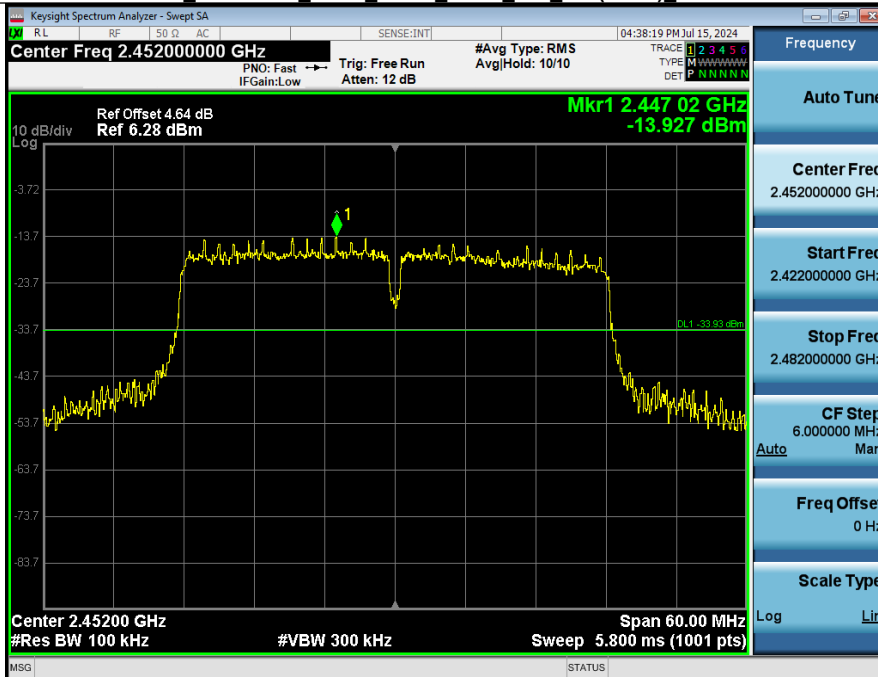
1 Reference Level_NVNT_ANT1_802_11n(HT40)_2422



2_Bandedge_NVNT_ANT1_802_11n(HT40)_2422



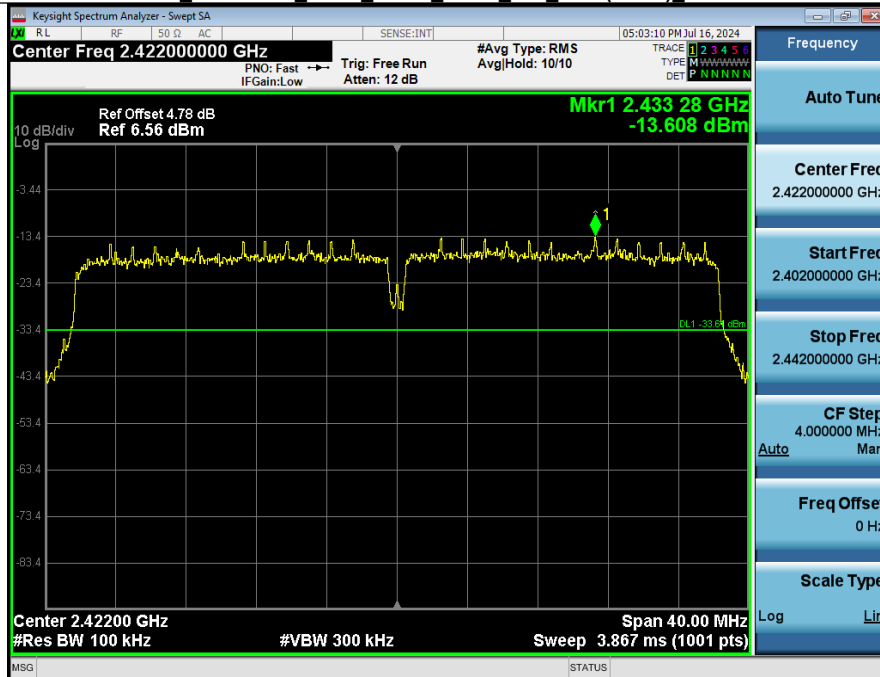
1 Reference Level NVNT_ANT1_802_11n(HT40)_2452



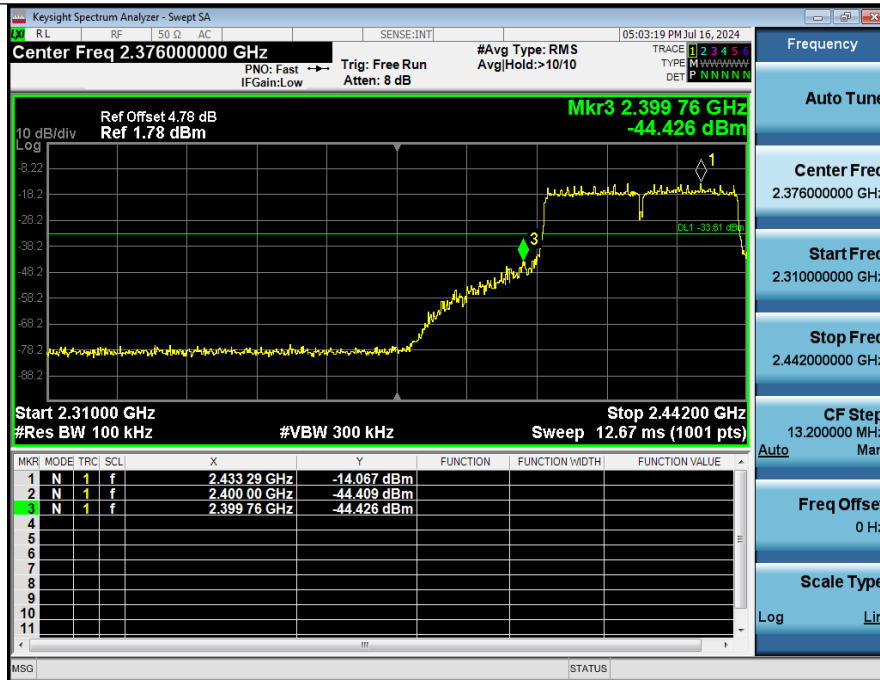
2_Bandedge_NVNT_ANT1_802_11n(HT40)_2452



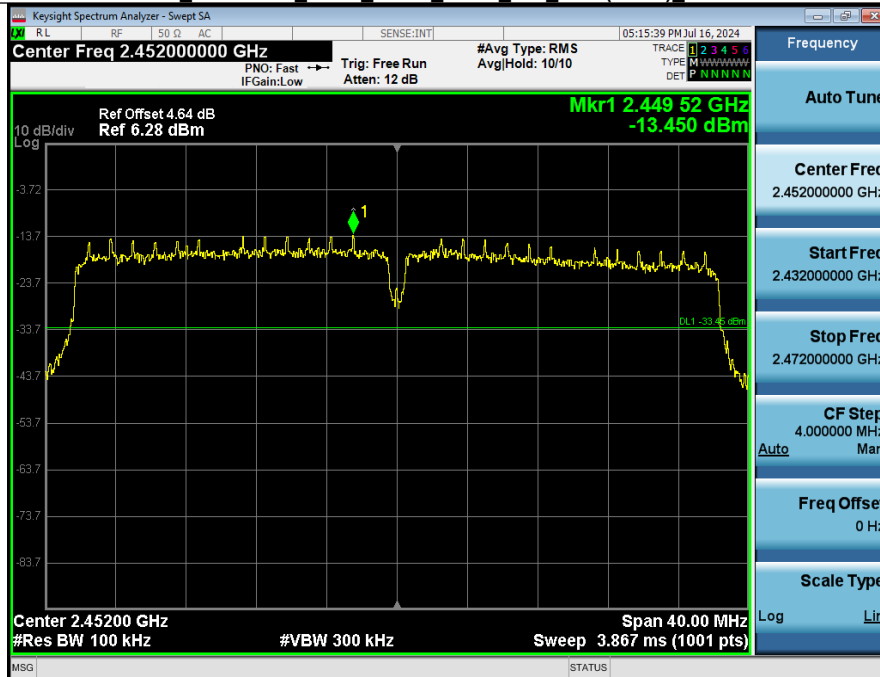
1_Reference_Level_NVNT_ANT1_802_11ax(HE40)_2422



2_Bandedge_NVNT_ANT1_802_11ax(HE40)_2422



1_Reference_Level_NVNT_ANT1_802_11ax(HE40)_2452



2_Bandedge_NVNT_ANT1_802_11ax(HE40)_2452



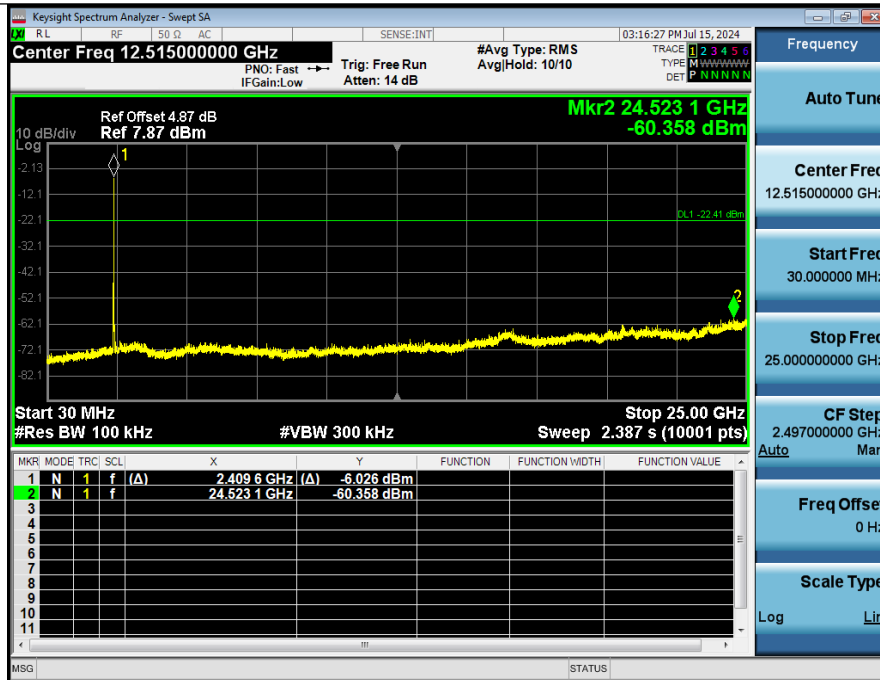
7. Spurious Emission

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	24523.073	-60.358	-22.413	Pass
NVNT	ANT1	802.11b	2437.00	24927.587	-53.831	-23.027	Pass
NVNT	ANT1	802.11b	2462.00	24992.509	-55.584	-22.714	Pass
NVNT	ANT1	802.11g	2412.00	24987.515	-66.977	-30.190	Pass
NVNT	ANT1	802.11g	2437.00	24980.024	-62.614	-30.229	Pass
NVNT	ANT1	802.11g	2462.00	5236.245	-60.105	-29.895	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	24990.012	-64.299	-30.645	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	911.441	-60.832	-30.700	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	5241.239	-67.134	-30.942	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	5223.760	-57.136	-30.879	Pass
NVNT	ANT1	802.11ax(HE20)	2437.00	5206.281	-64.330	-30.803	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	24955.054	-63.514	-31.203	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	24925.090	-65.029	-33.444	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	5238.742	-55.190	-33.103	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	24940.072	-65.688	-33.927	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	911.441	-45.874	-33.608	Pass
NVNT	ANT1	802.11ax(HE40)	2437.00	5201.287	-62.349	-33.243	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	911.441	-64.862	-33.450	Pass

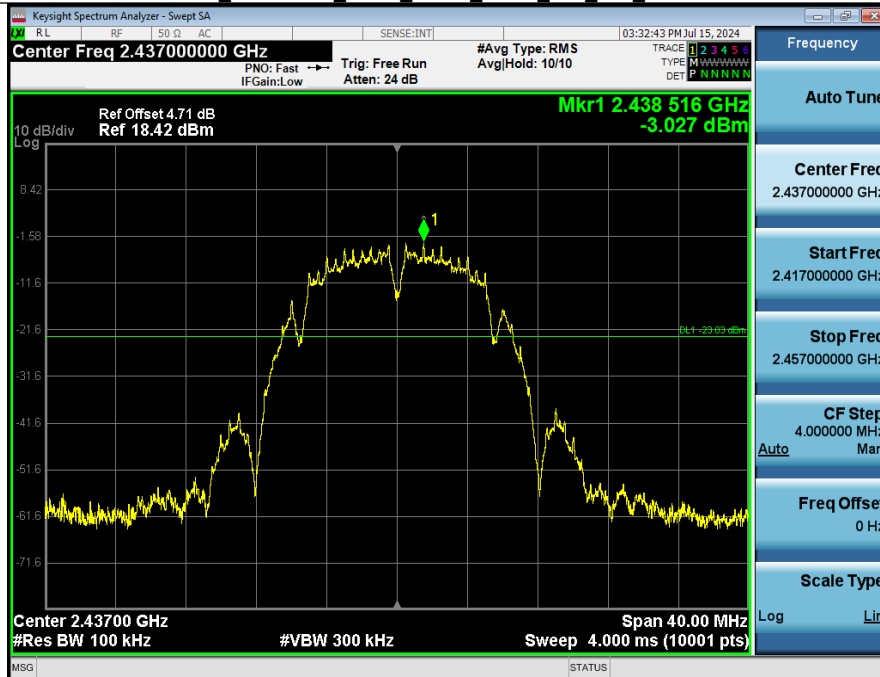
1 Reference_Level_NVNT_ANT1_802_11b_2412



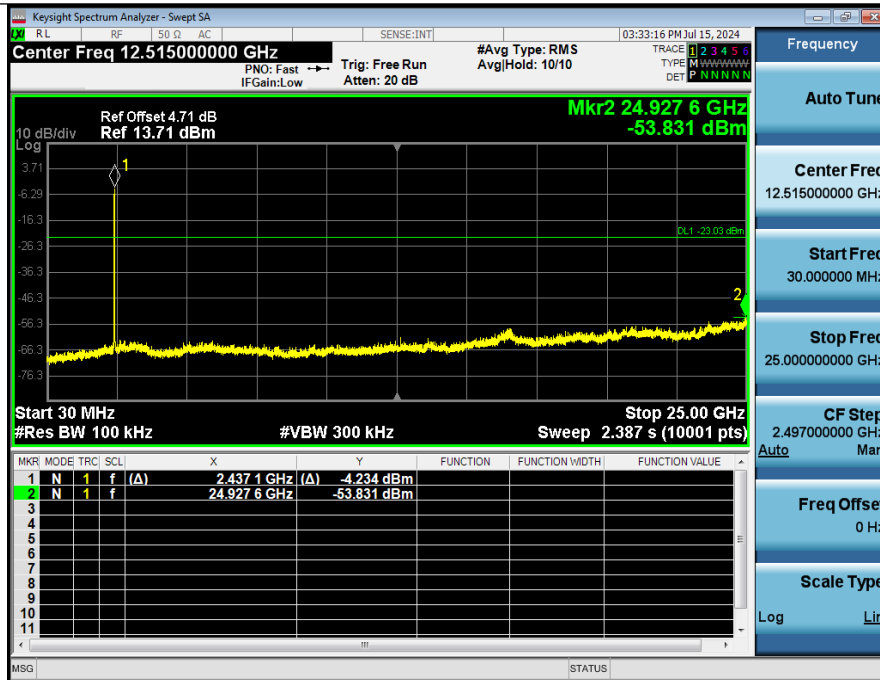
2 Spurious_Emission_NVNT_ANT1_802_11b_2412



1 Reference Level NVNT_ANT1_802_11b_2437



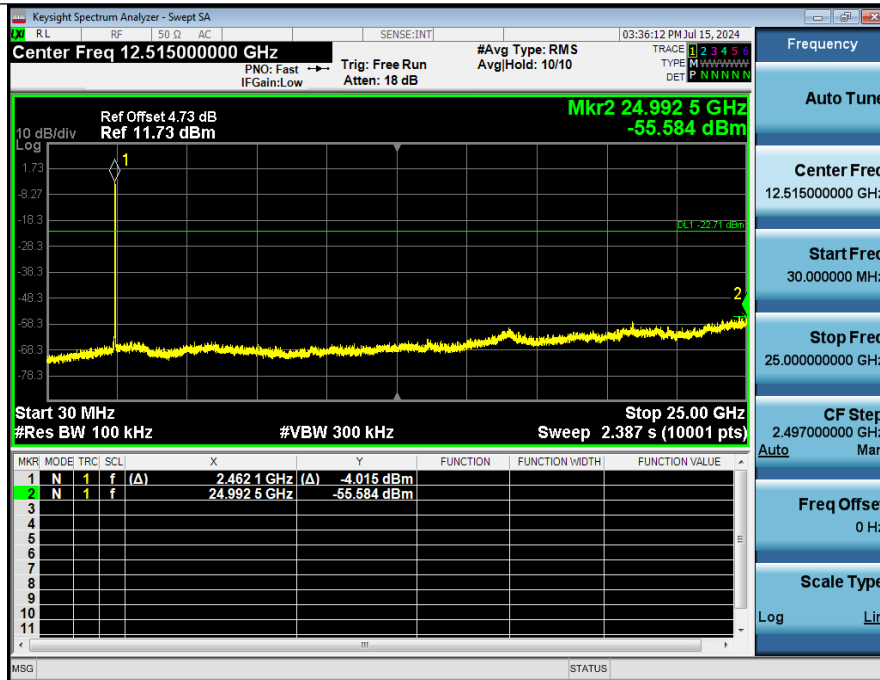
2 Spurious_Emission_NVNT_ANT1_802_11b_2437



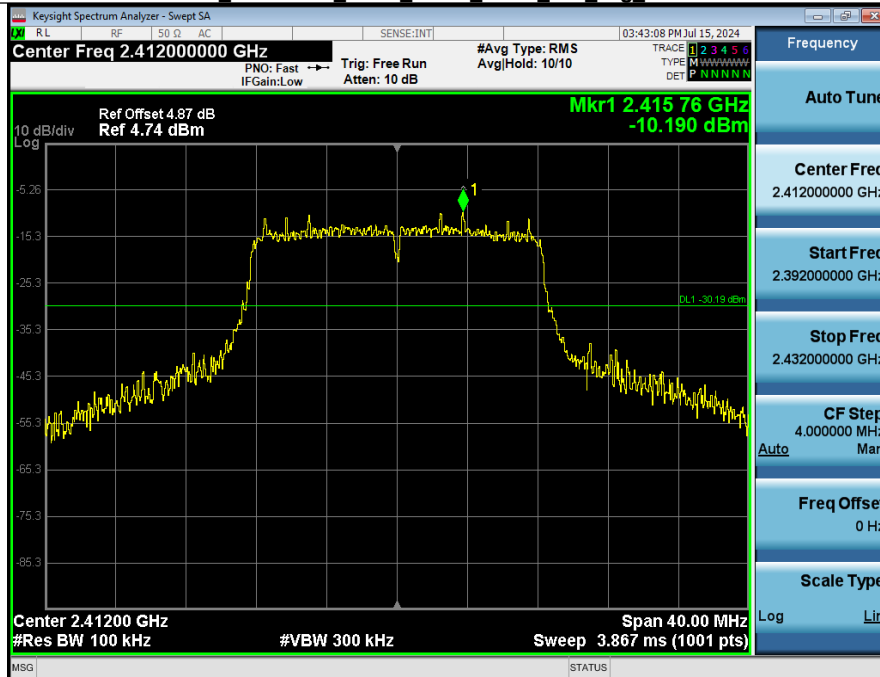
1 Reference Level NVNT_ANT1_802_11b_2462



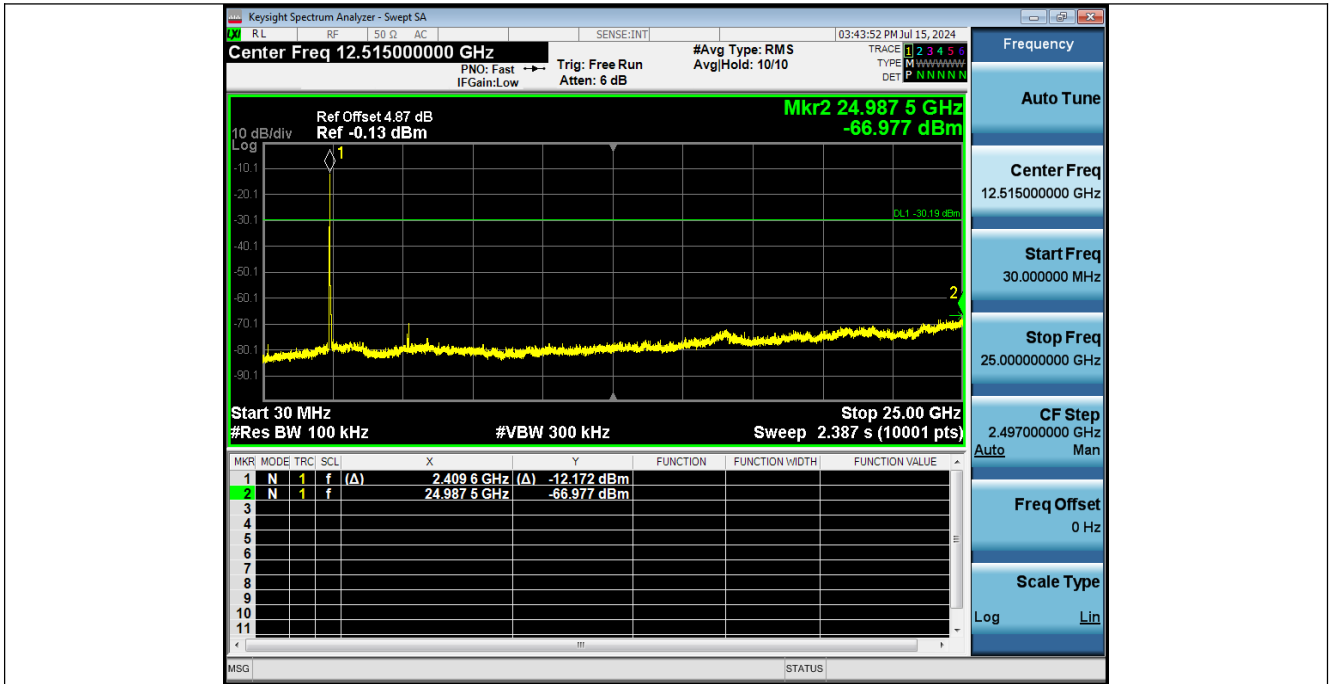
2 Spurious_Emission_NVNT_ANT1_802_11b_2462



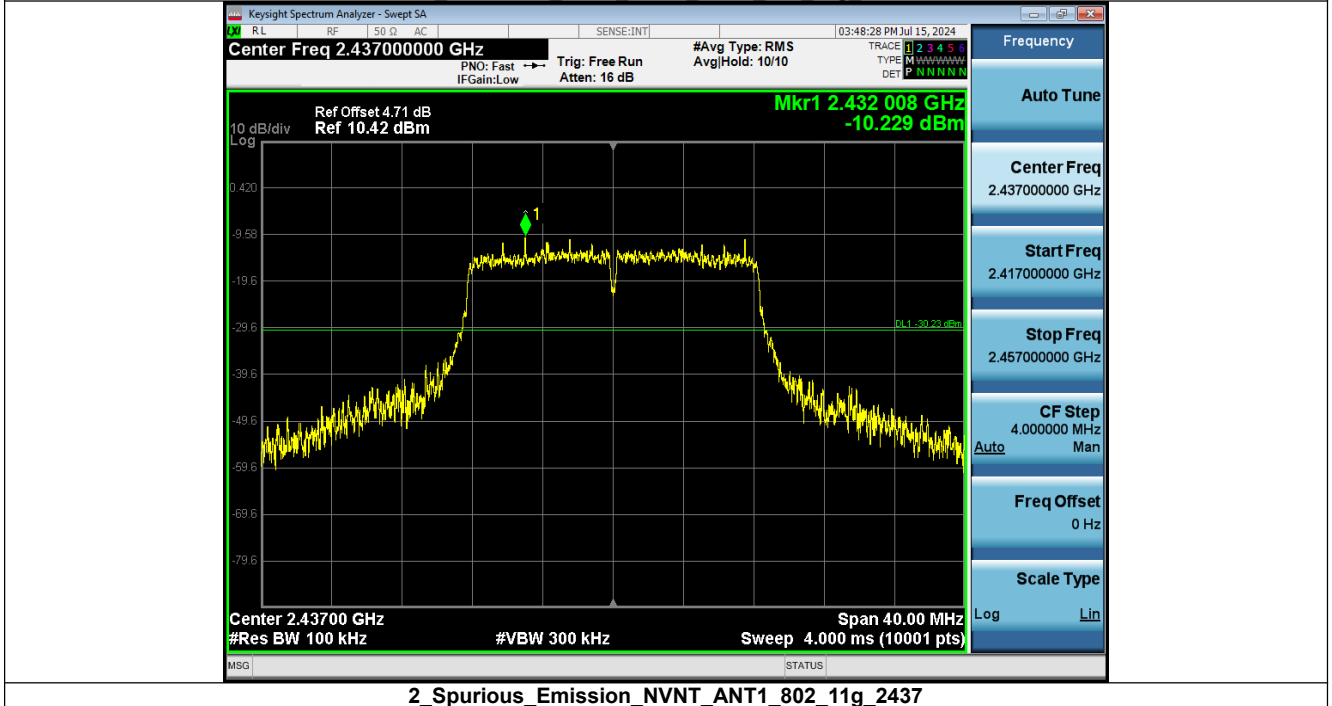
1 Reference Level NVNT_ANT1_802_11g_2412



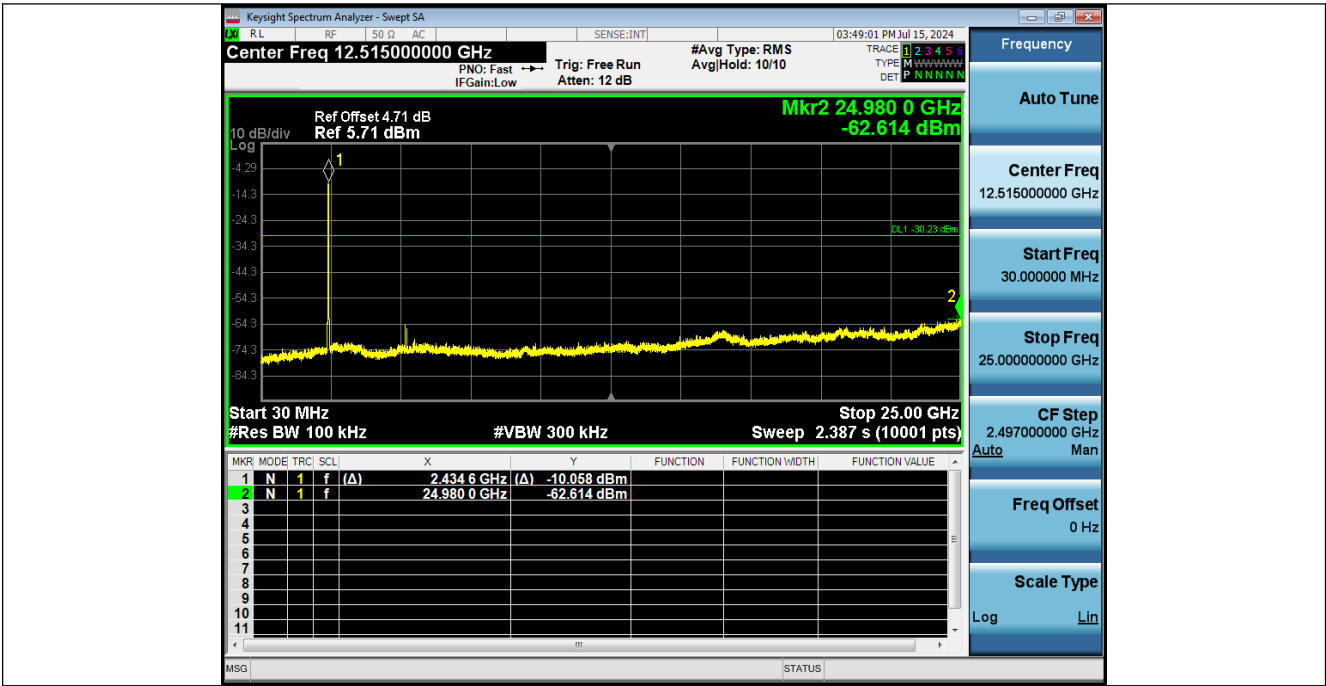
2 Spurious Emission NVNT_ANT1_802_11g_2412



1 Reference Level NVNT_ANT1_802_11g_2437



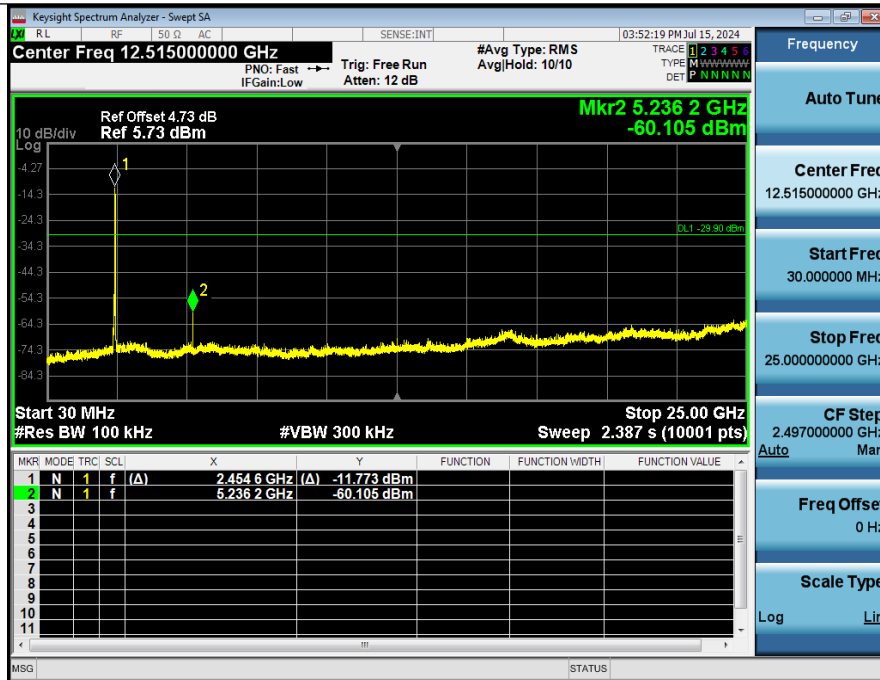
2 Spurious Emission NVNT_ANT1_802_11g_2437



1 Reference Level NVNT_ANT1_802_11g_2462



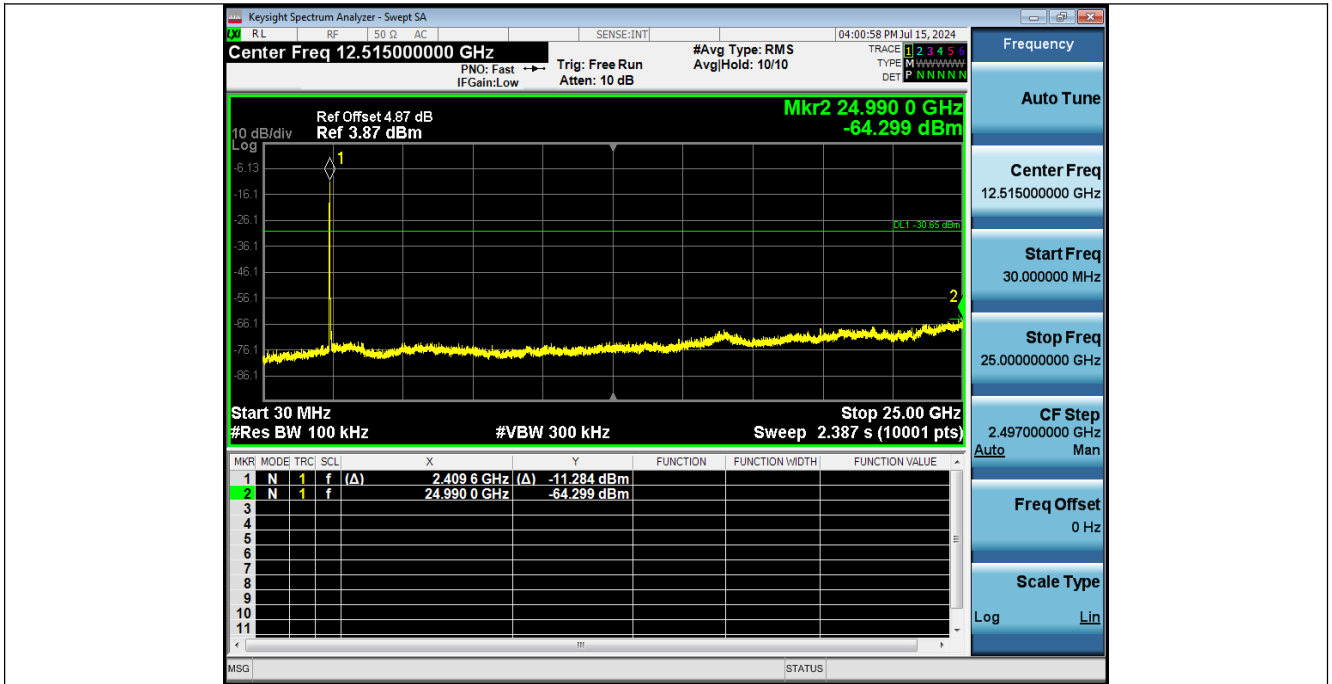
2 Spurious Emission NVNT_ANT1_802_11g_2462



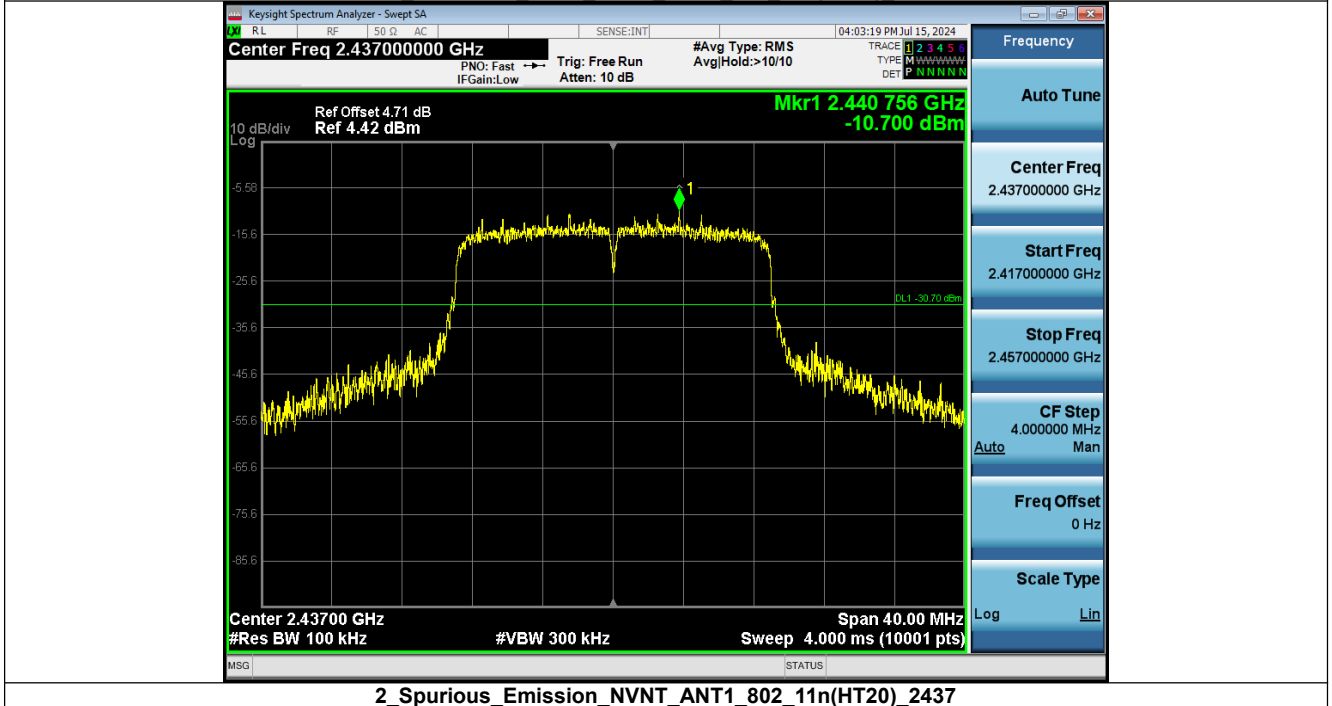
1 Reference Level_NVNT_ANT1_802_11n(HT20)_2412



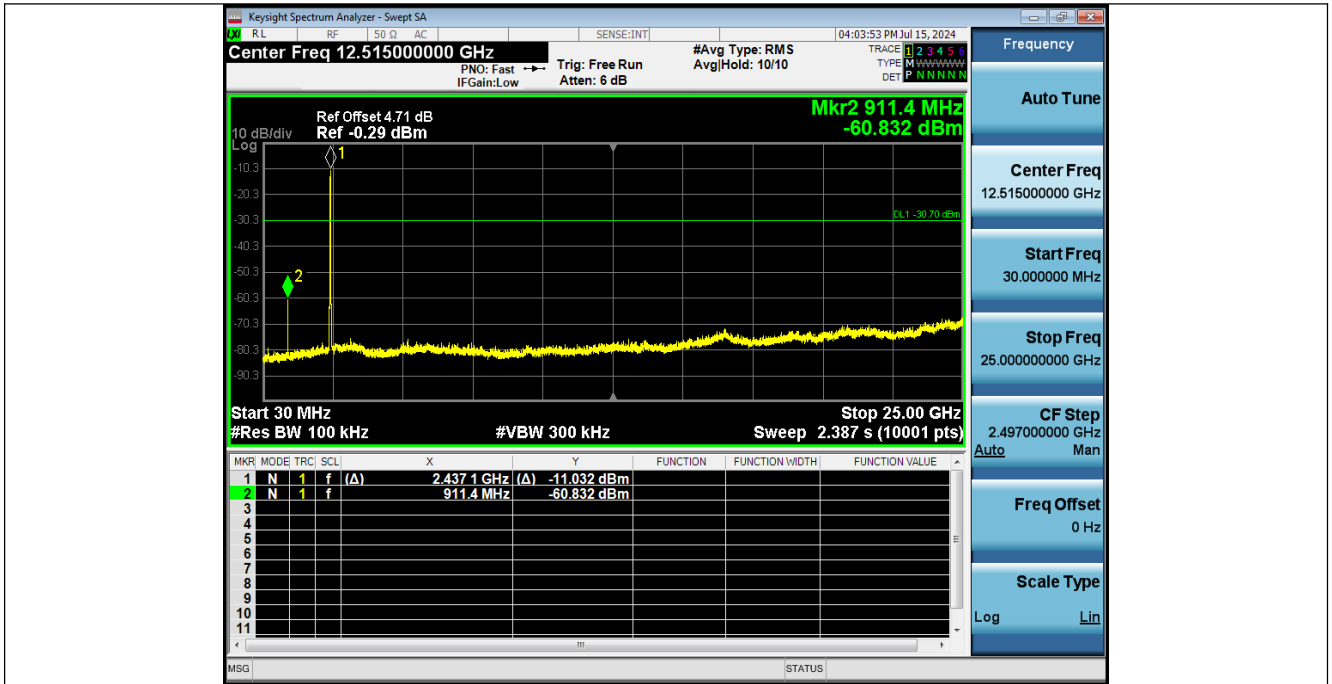
2 Spurious_Emission_NVNT_ANT1_802_11n(HT20)_2412



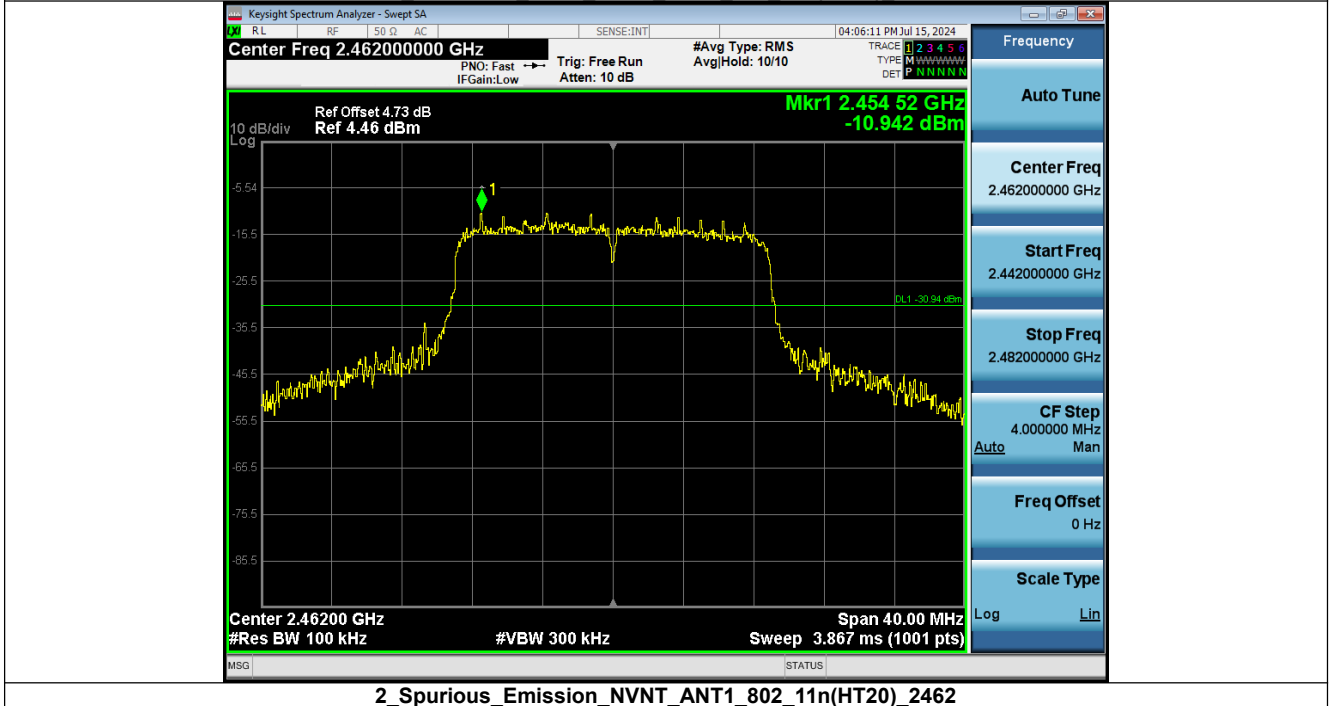
1 Reference Level NVNT_ANT1_802_11n(HT20)_2437



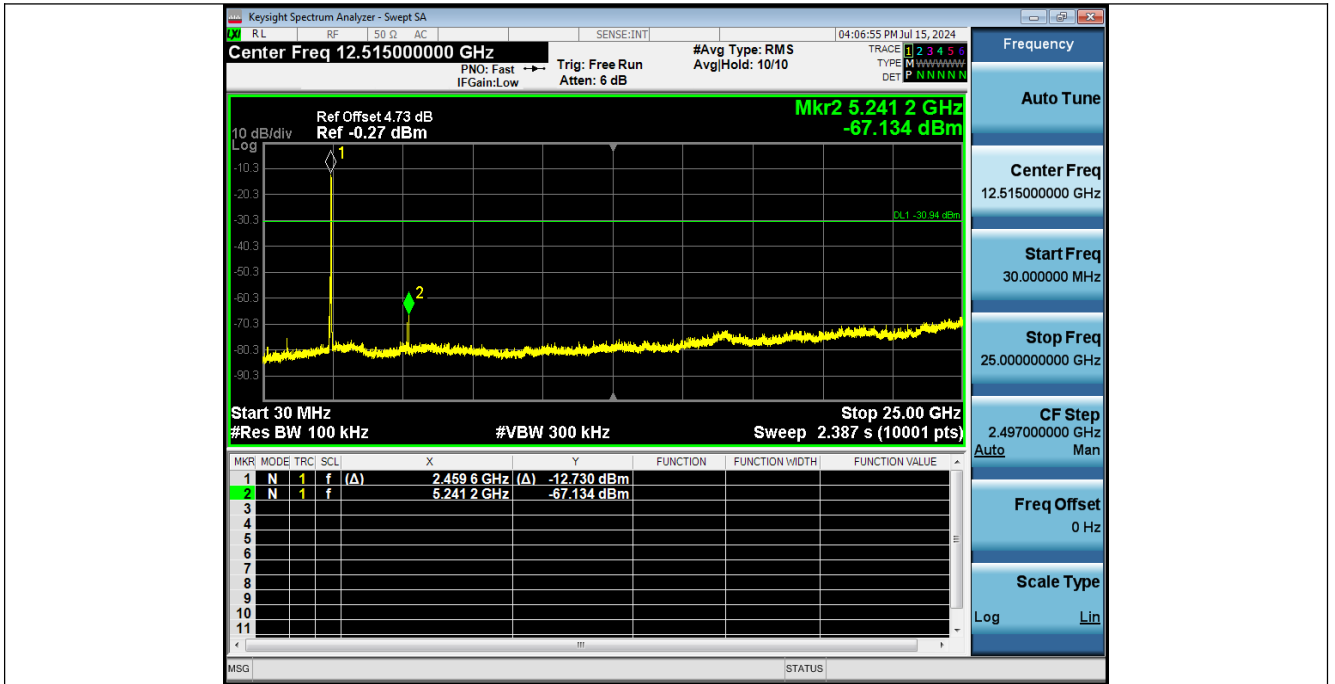
2 Spurious Emission NVNT_ANT1_802_11n(HT20)_2437



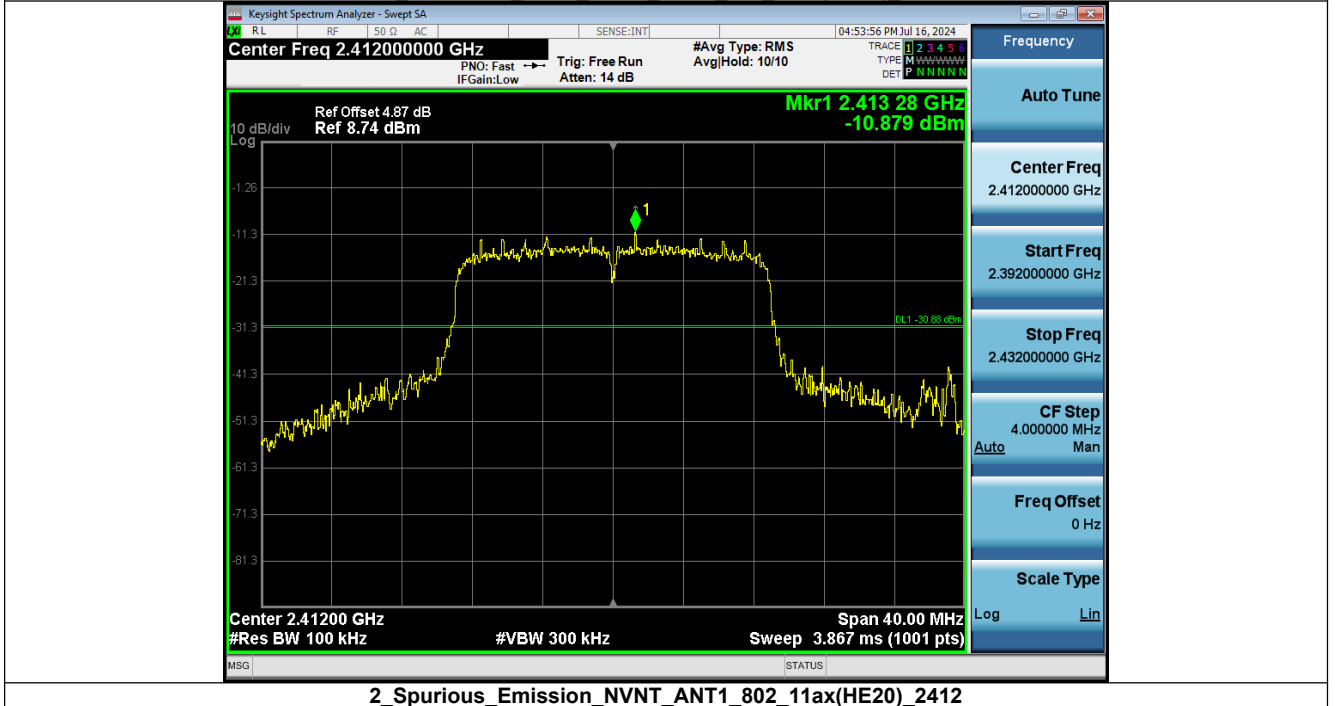
1 Reference Level NVNT_ANT1_802_11n(HT20)_2462



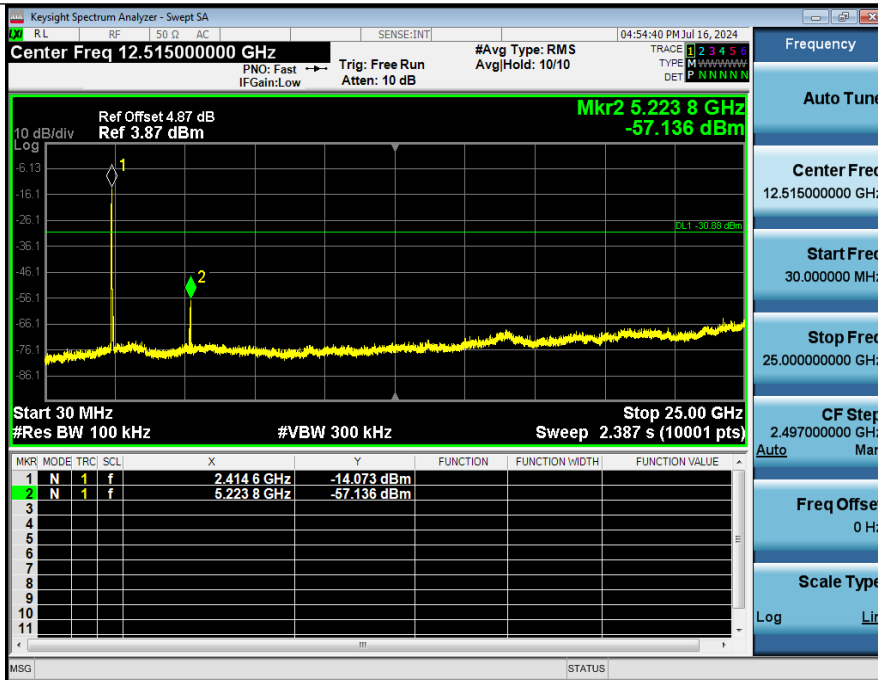
2 Spurious Emission NVNT_ANT1_802_11n(HT20)_2462



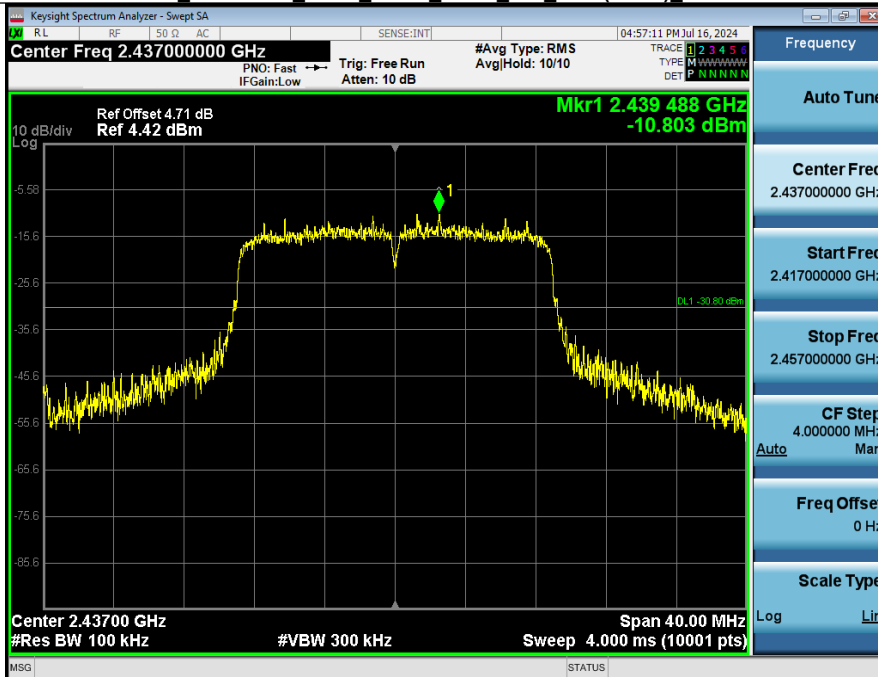
1_Reference_Level_NVNT_ANT1_802_11ax(HE20)_2412



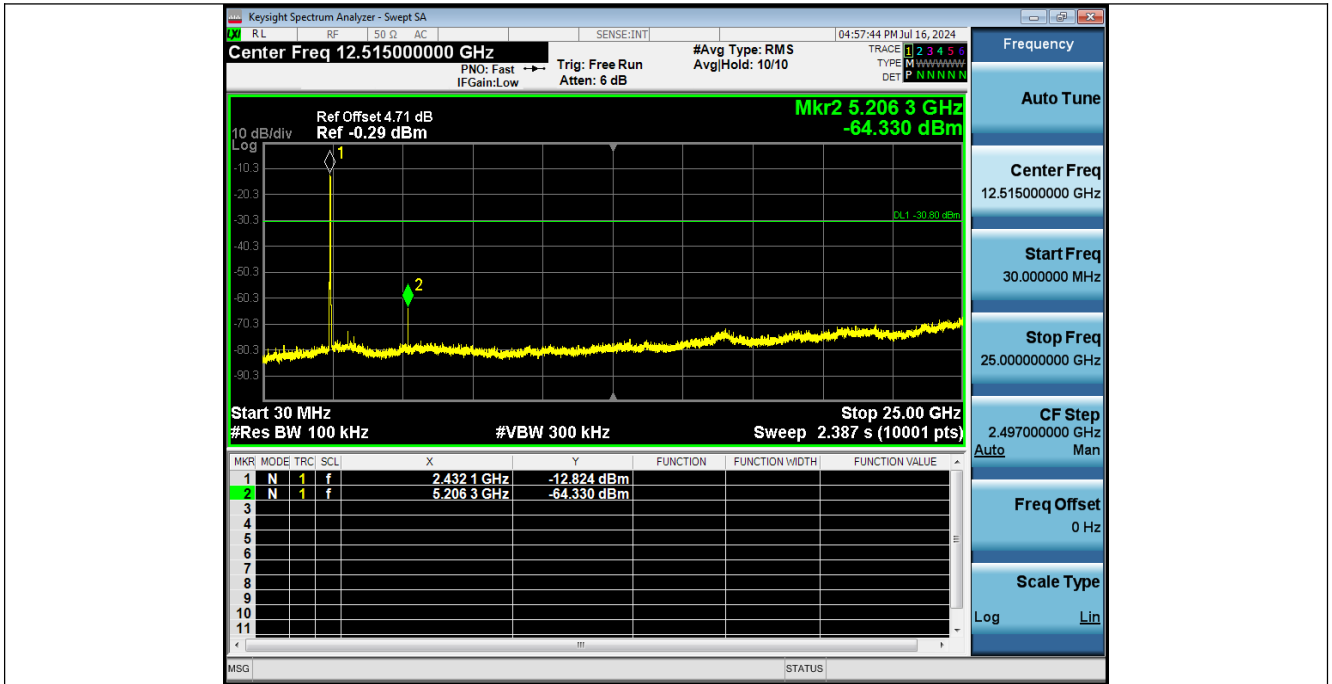
2_Spurious_Emission_NVNT_ANT1_802_11ax(HE20)_2412



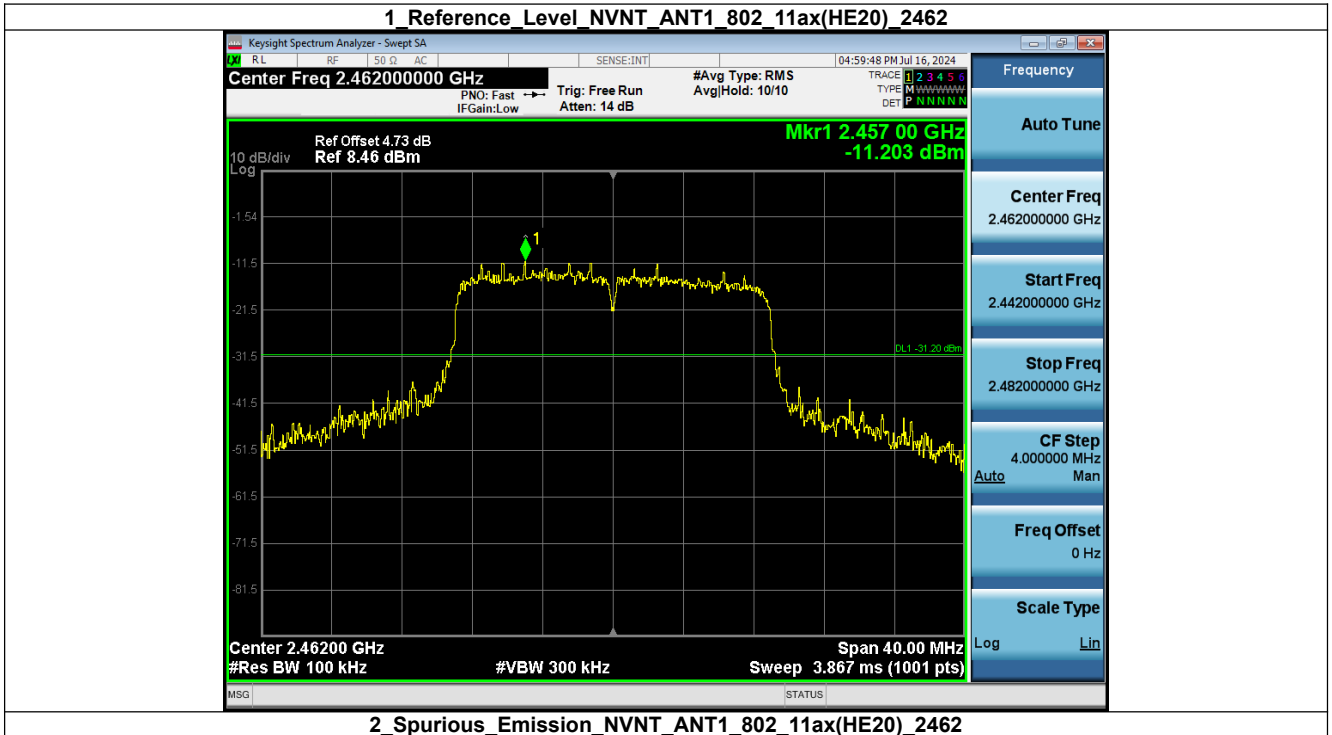
1_Reference_Level_NVNT_ANT1_802_11ax(HE20)_2437



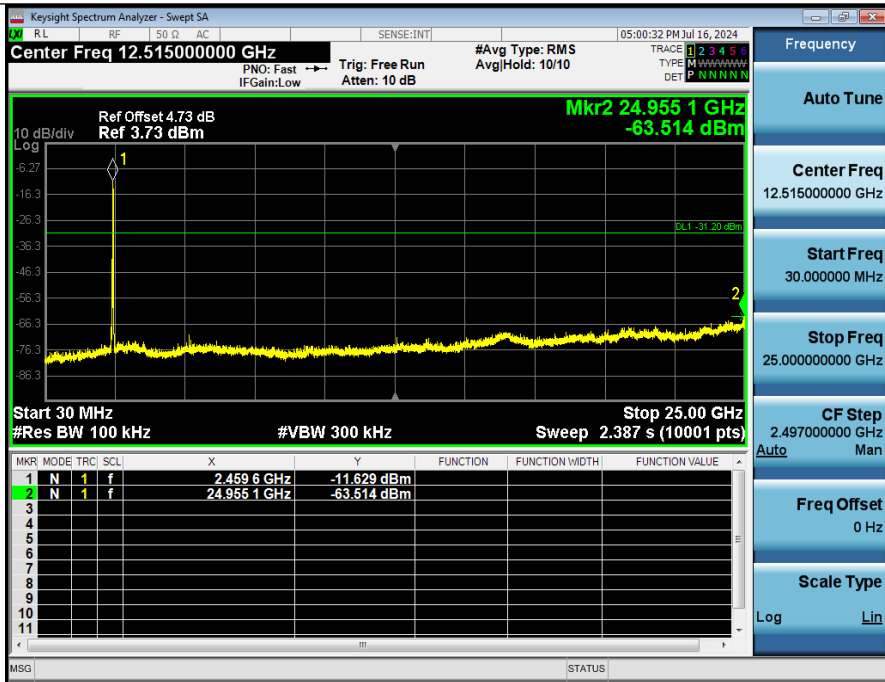
2_Spurious_Emission_NVNT_ANT1_802_11ax(HE20)_2437



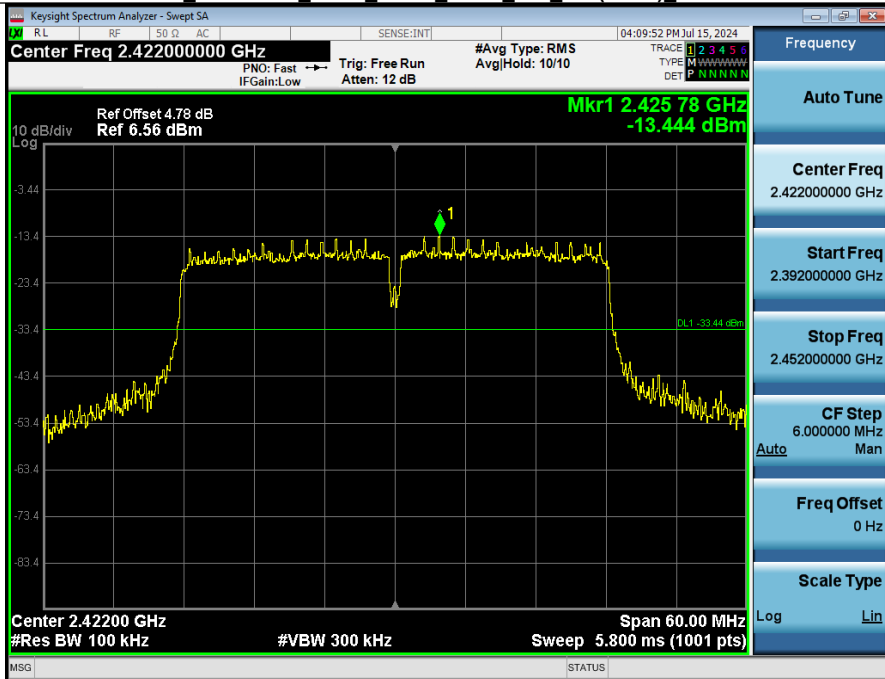
1_Reference_Level_NVNT_ANT1_802_11ax(HE20)_2462



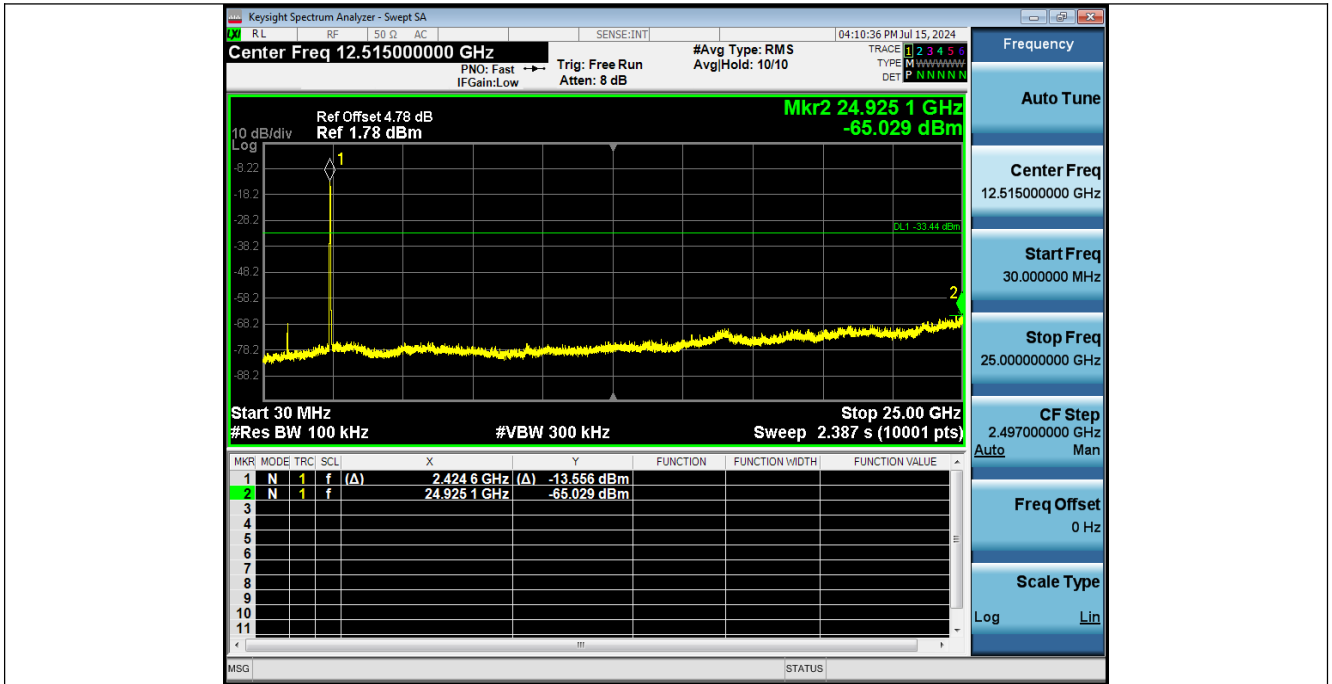
2_Spurious_Emission_NVNT_ANT1_802_11ax(HE20)_2462



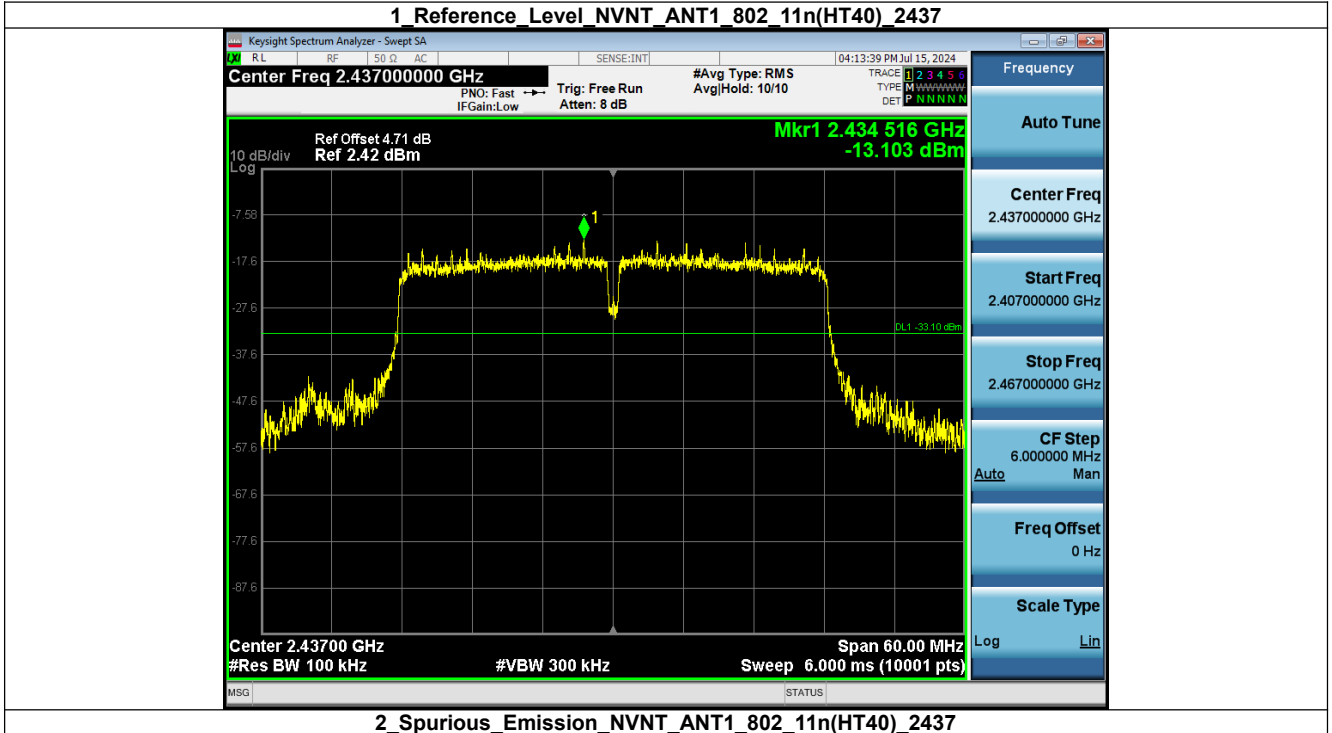
1 Reference Level_NVNT_ANT1_802_11n(HT40)_2422



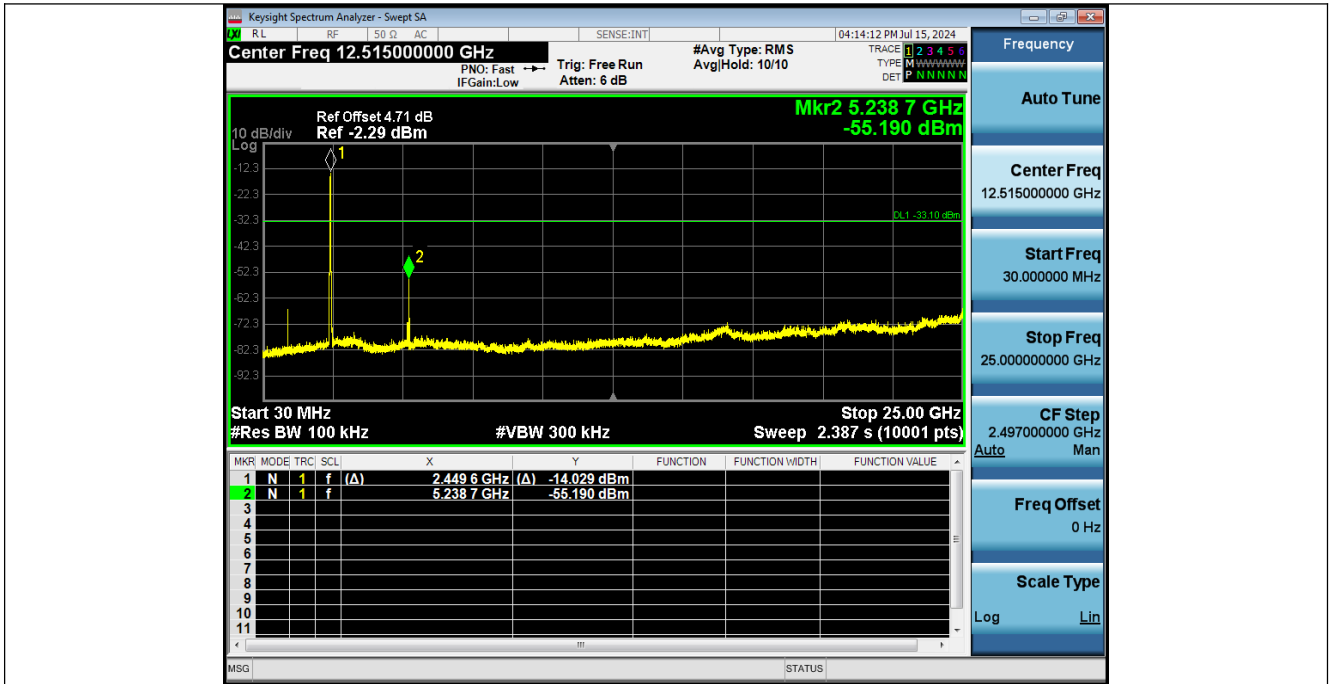
2 Spurious_Emission_NVNT_ANT1_802_11n(HT40)_2422



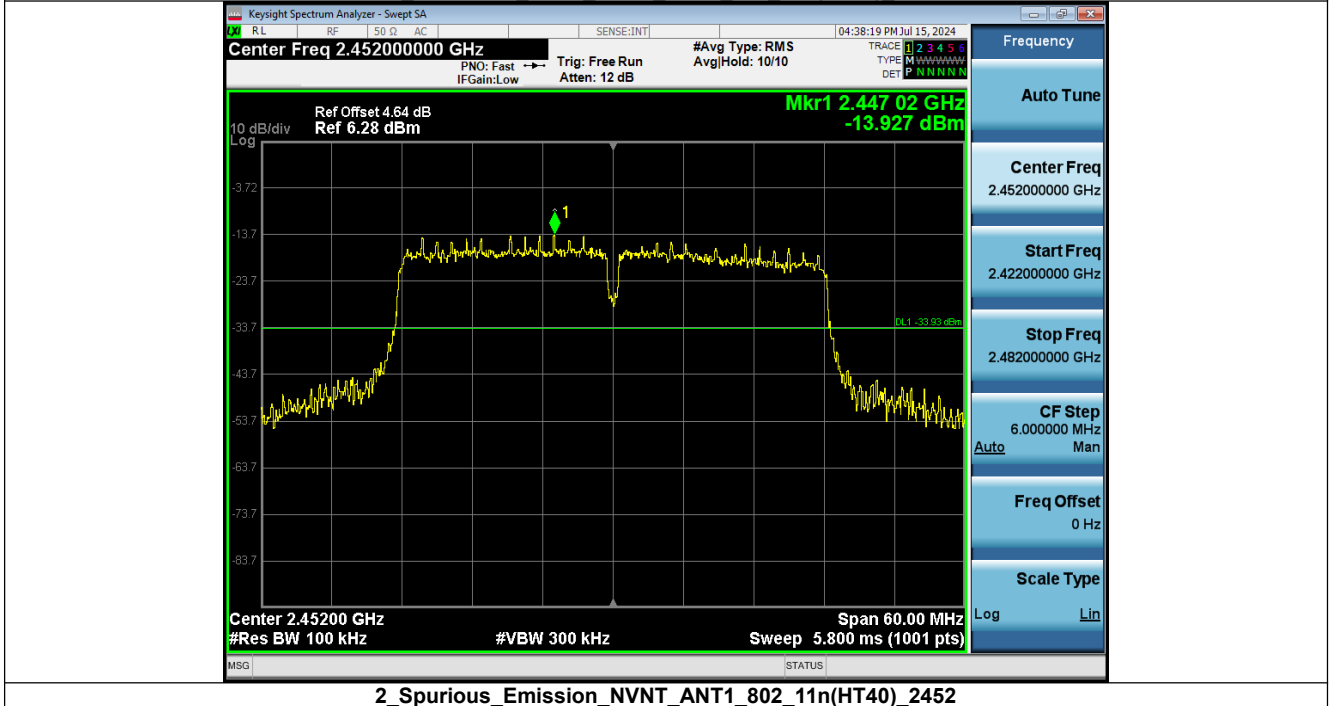
1 Reference Level NVNT_ANT1_802_11n(HT40)_2437



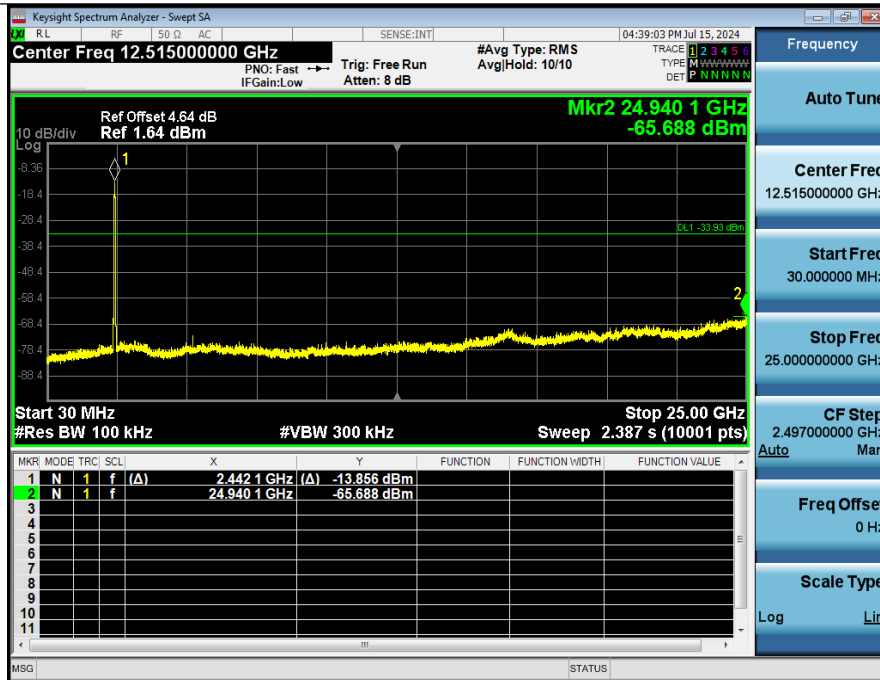
2 Spurious Emission NVNT_ANT1_802_11n(HT40)_2437



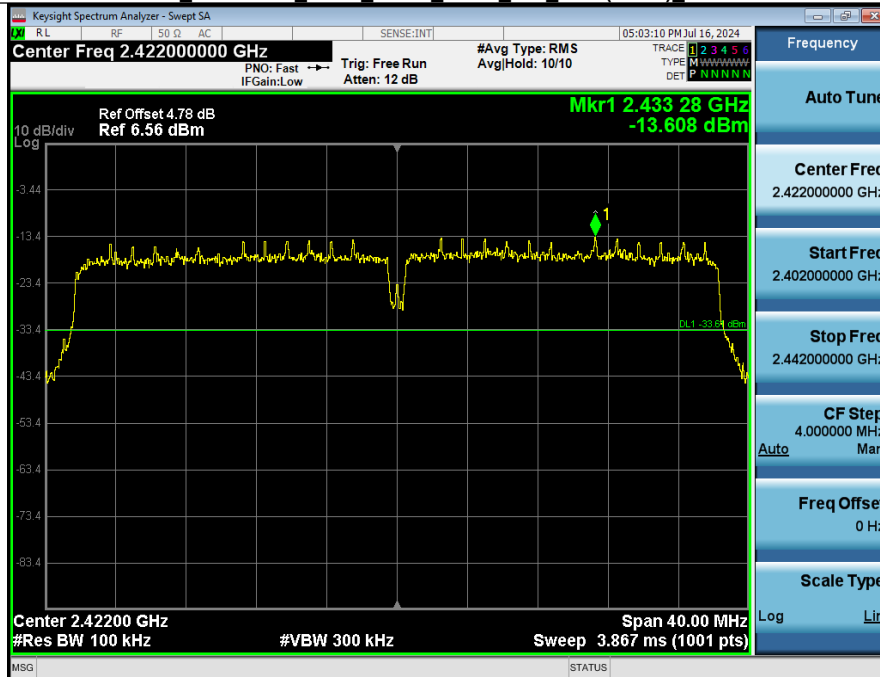
1 Reference Level NVNT_ANT1_802_11n(HT40)_2452



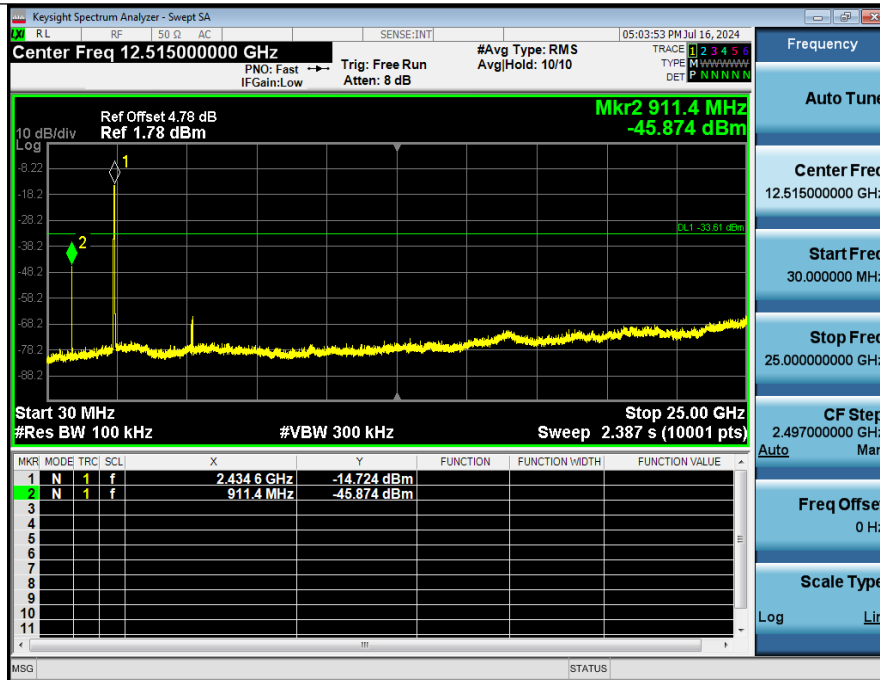
2 Spurious Emission NVNT_ANT1_802_11n(HT40)_2452



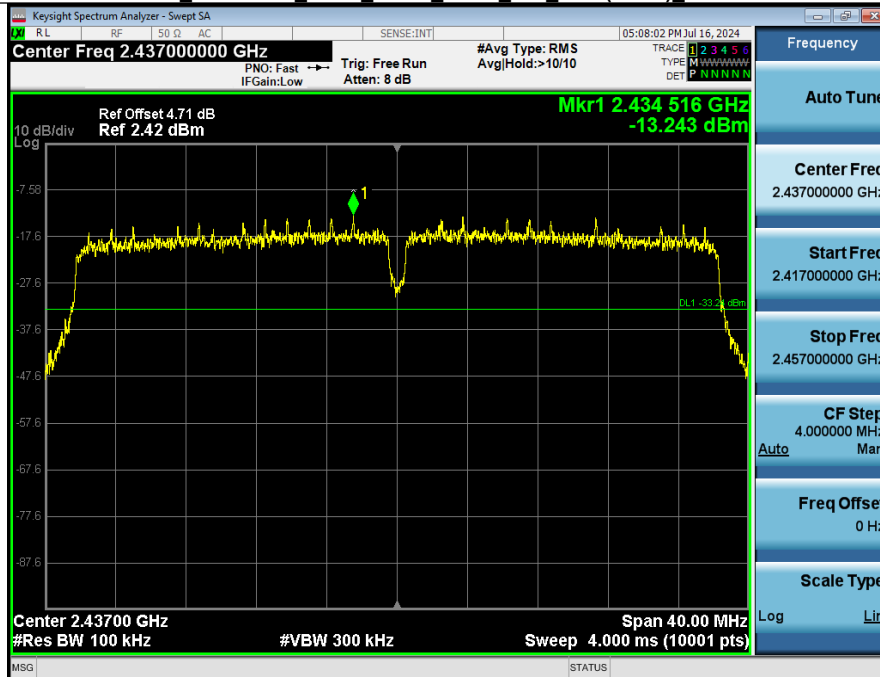
1_Reference_Level_NVNT_ANT1_802_11ax(HE40)_2422



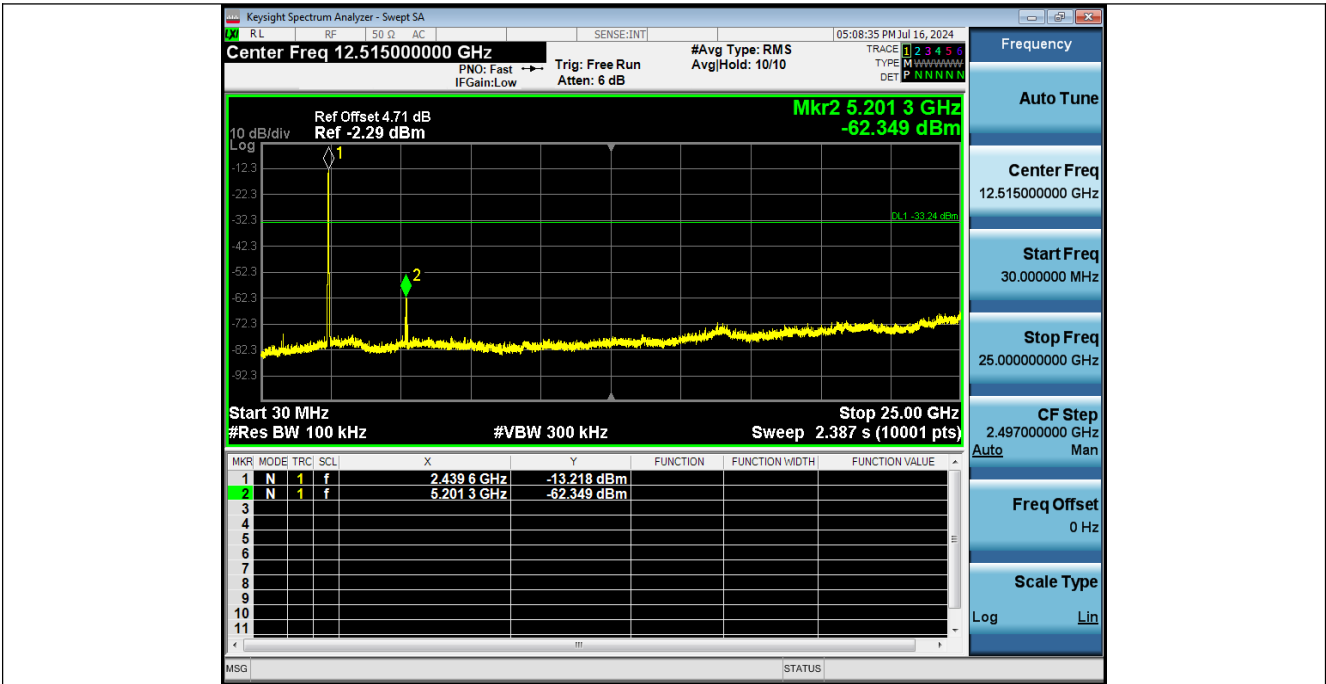
2_Spurious_Emission_NVNT_ANT1_802_11ax(HE40)_2422



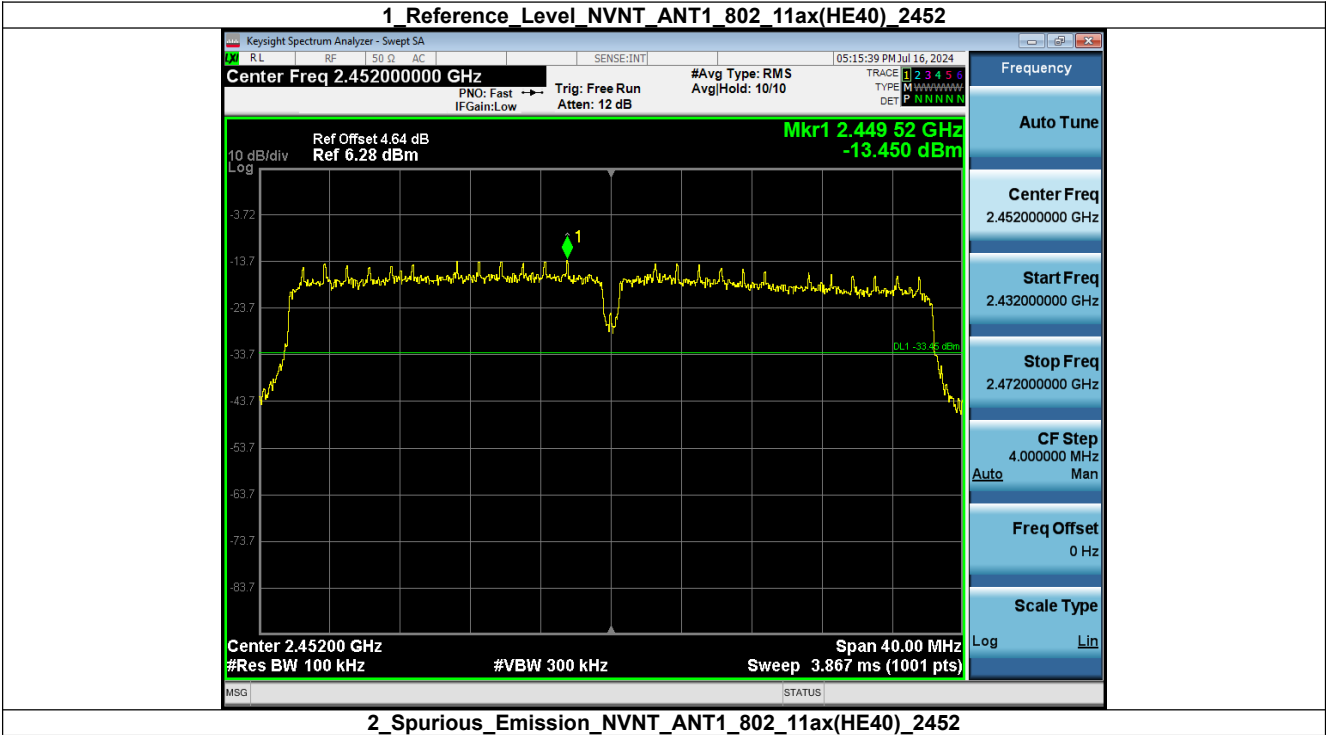
1_Reference_Level_NVNT_ANT1_802_11ax(HE40)_2437



2_Spurious_Emission_NVNT_ANT1_802_11ax(HE40)_2437



1_Reference_Level_NVNT_ANT1_802_11ax(HE40)_2452



2_Spurious_Emission_NVNT_ANT1_802_11ax(HE40)_2452

