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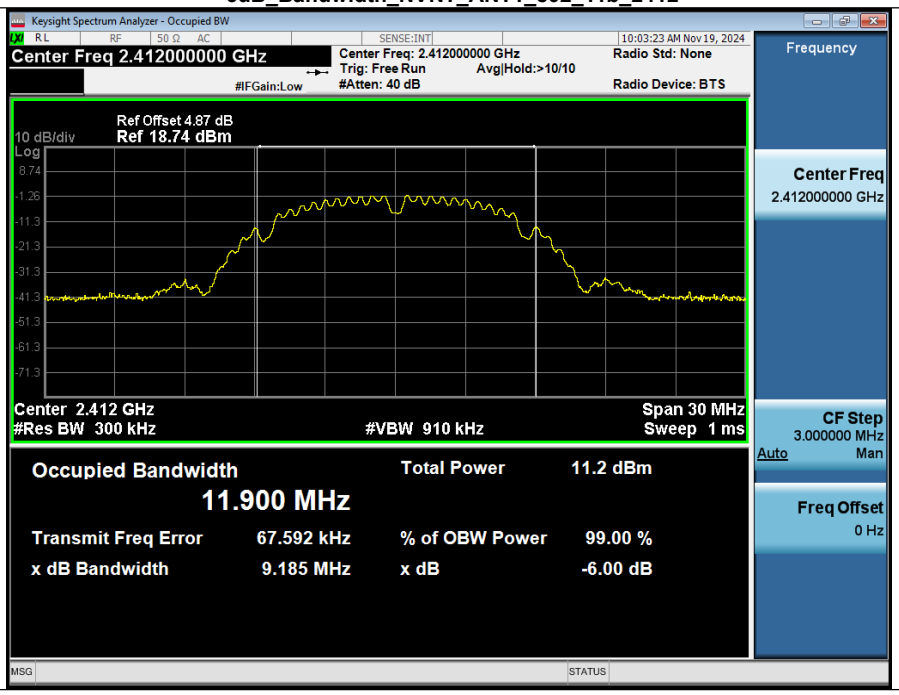
FCC ID: 2BHF6-MTABPRO2700
FCC_2.4G_WIFI (Part15.247) Test Data

1. -6dB Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	9.18	500	Pass
NVNT	ANT1	802.11b	2437.00	9.18	500	Pass
NVNT	ANT1	802.11b	2462.00	9.20	500	Pass
NVNT	ANT1	802.11g	2412.00	16.34	500	Pass
NVNT	ANT1	802.11g	2437.00	16.36	500	Pass
NVNT	ANT1	802.11g	2462.00	16.46	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	17.32	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	17.34	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	17.30	500	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	17.25	500	Pass
NVNT	ANT1	802.11ax(HE20)	2437.00	17.27	500	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	17.34	500	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	36.09	500	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	35.69	500	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	35.79	500	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	36.17	500	Pass
NVNT	ANT1	802.11ax(HE40)	2437.00	35.82	500	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	35.72	500	Pass

-6dB_Bandwidth_NVNT_ANT1_802_11b_2412



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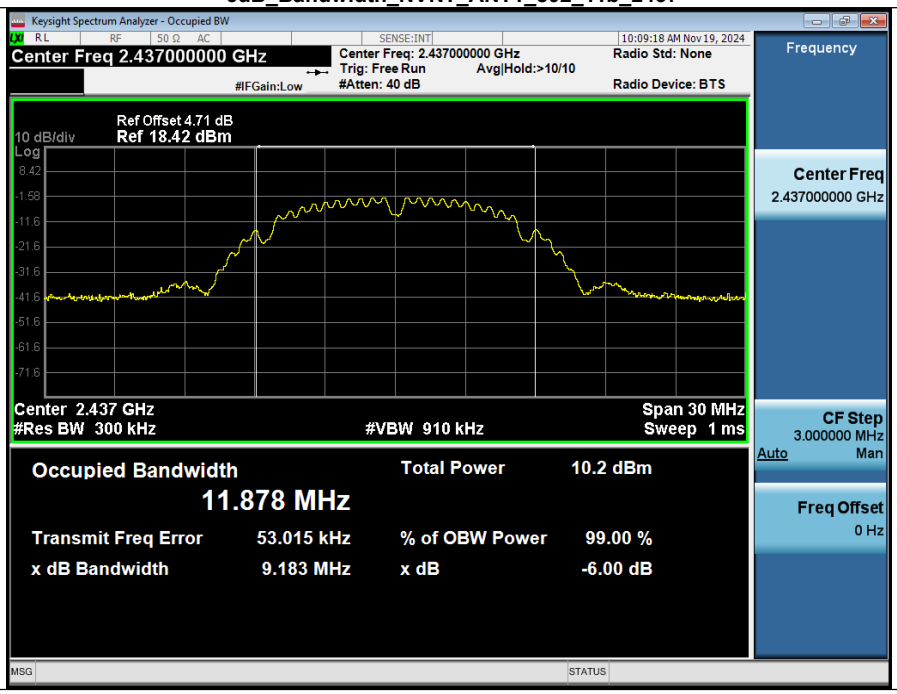
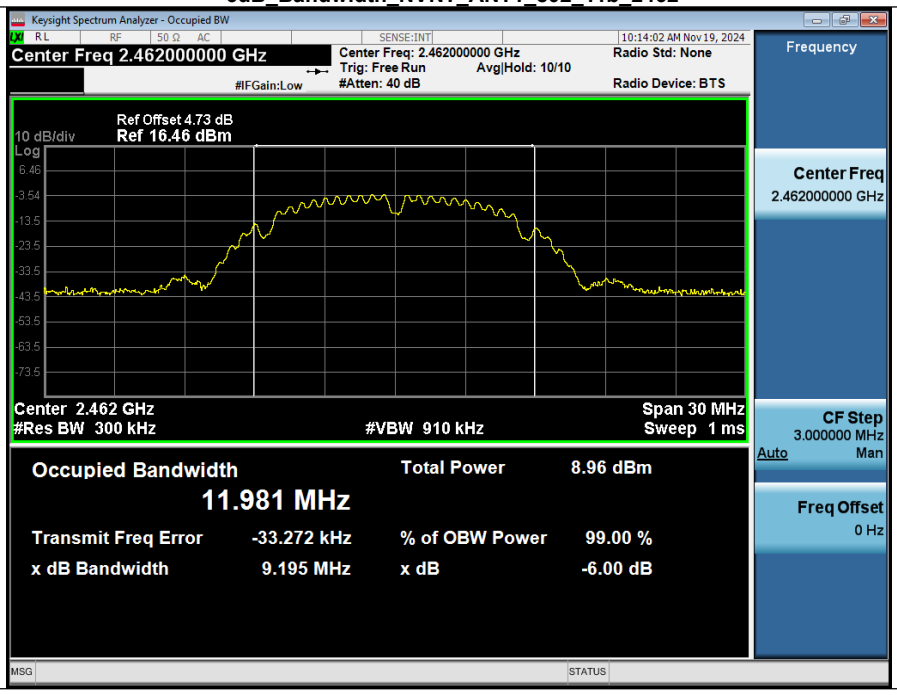
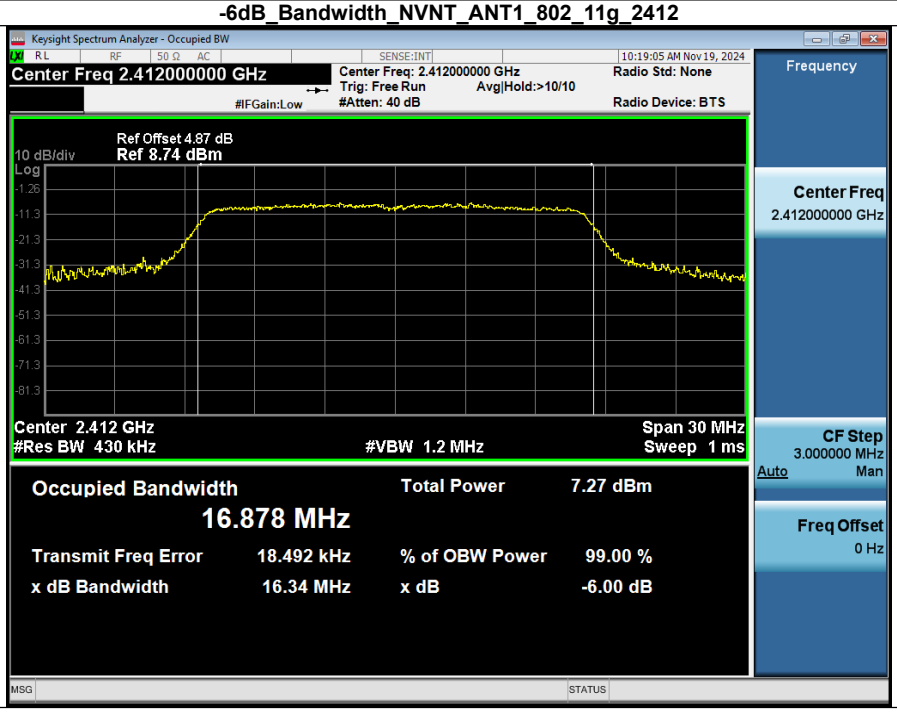


-6dB_Bandwidth_NVNT_ANT1_802_11b_2462



-6dB_Bandwidth_NVNT_ANT1_802_11g_2412



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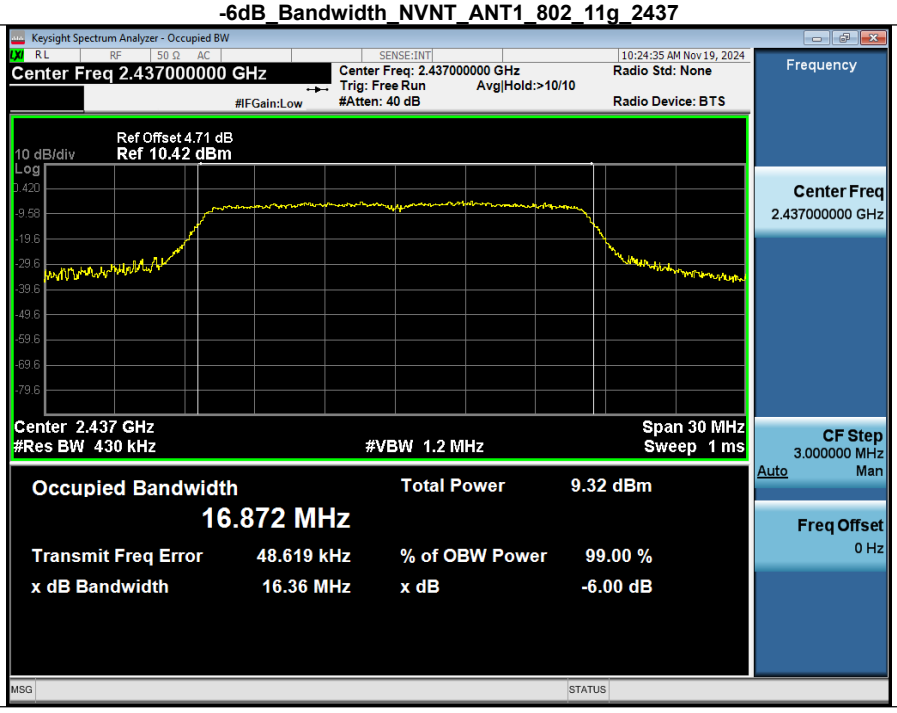
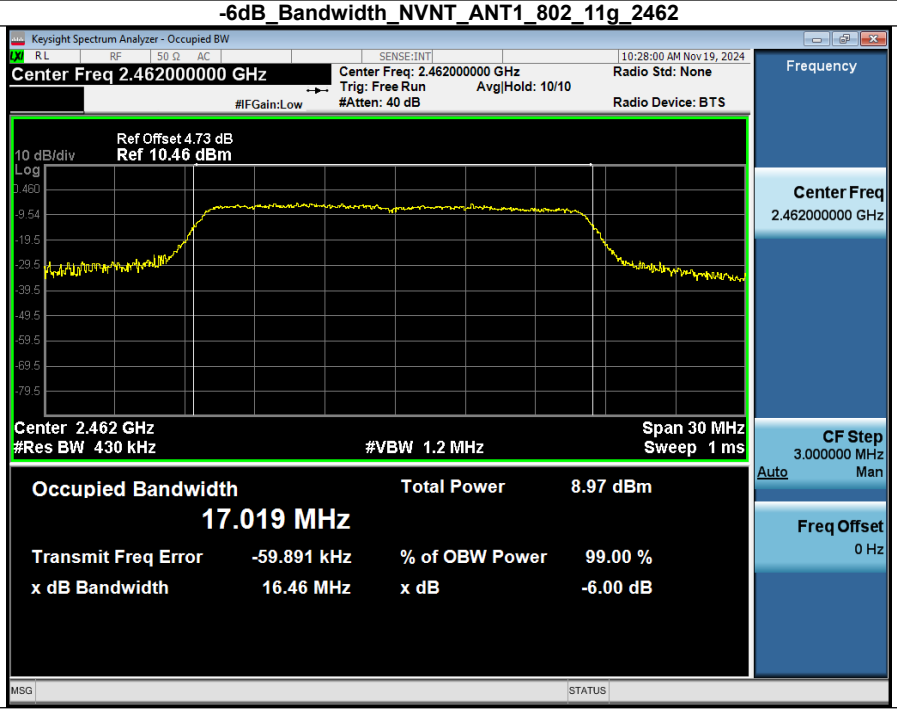


-6dB_Bandwidth_NVNT_ANT1_802_11g_2462



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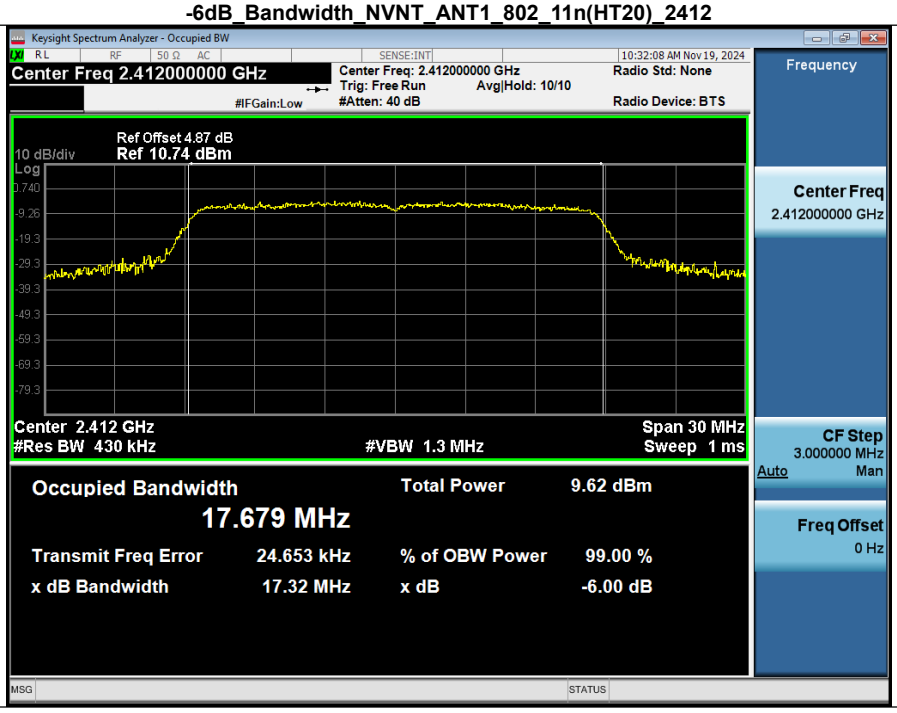

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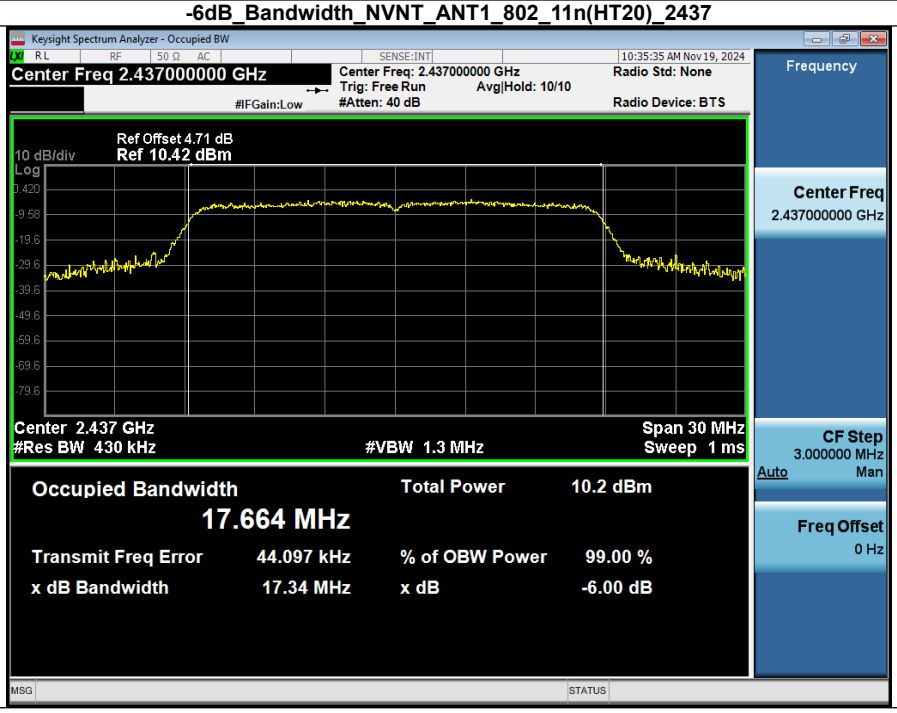
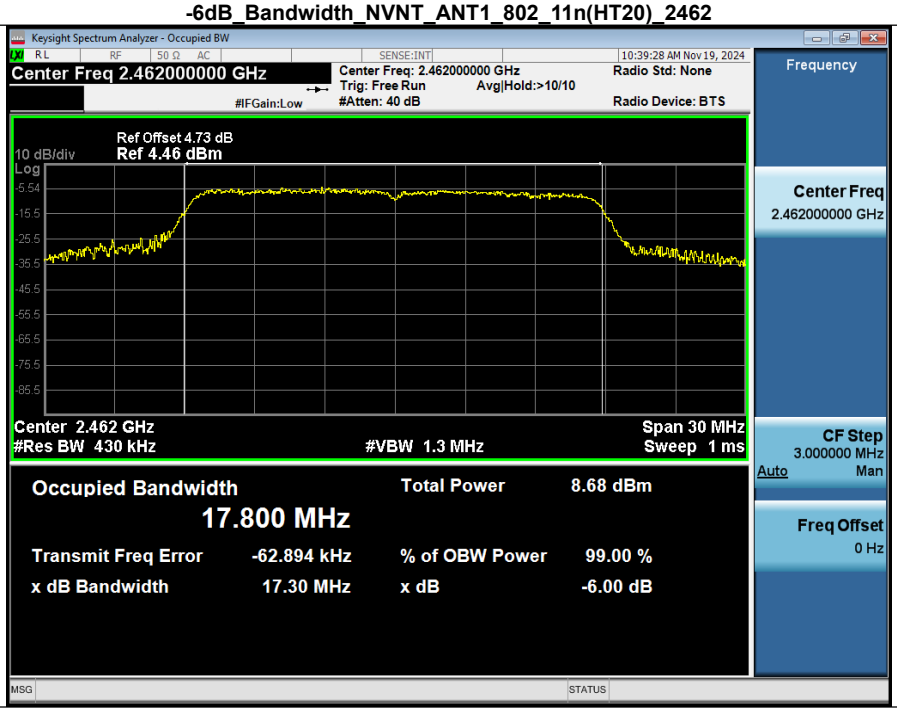
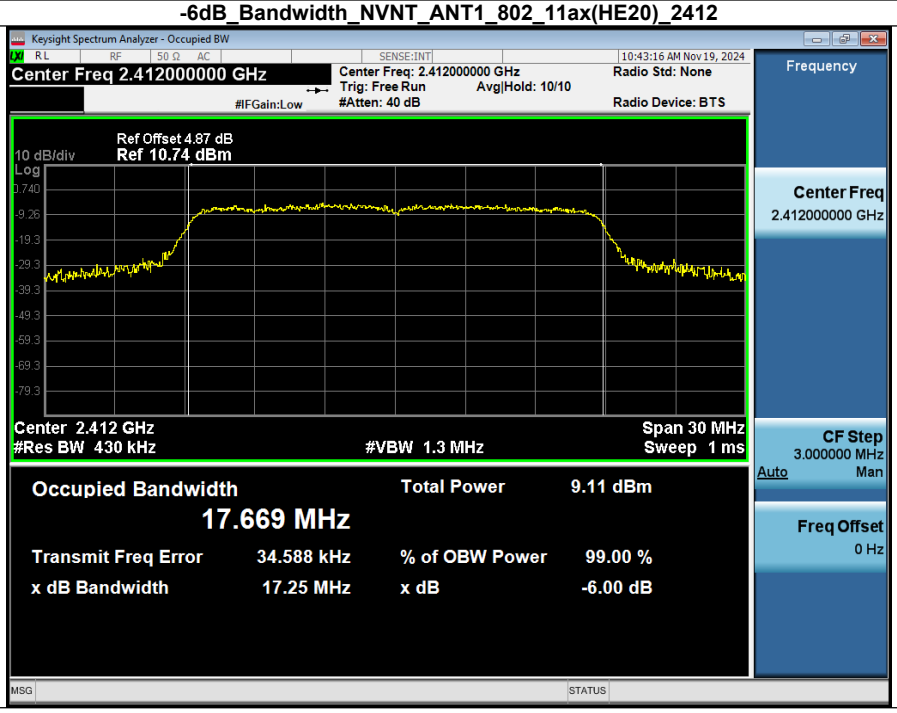


-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462



-6dB_Bandwidth_NVNT_ANT1_802_11ax(HE20)_2412



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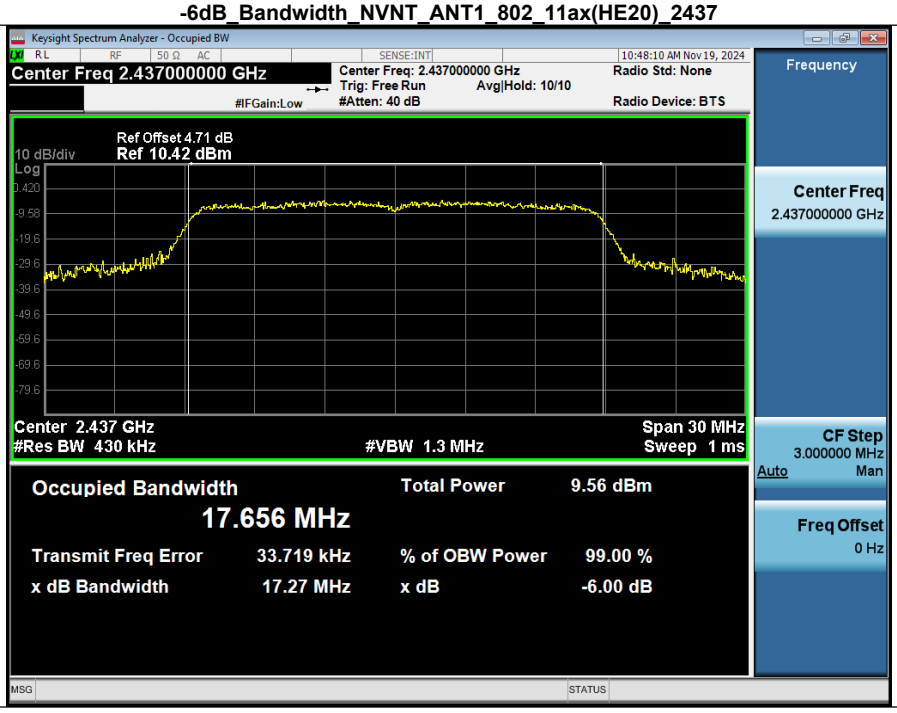

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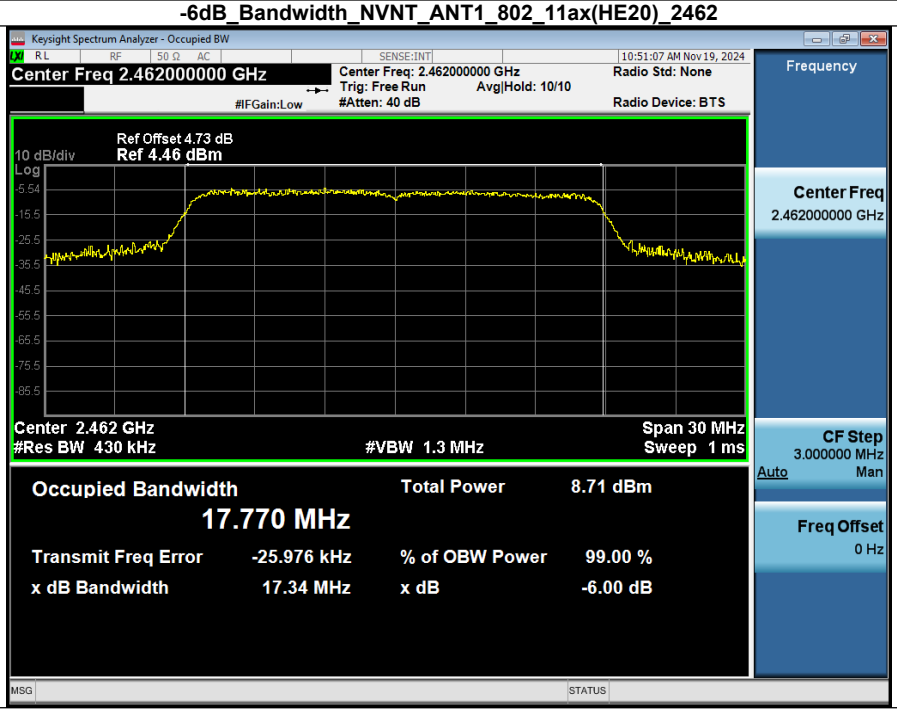
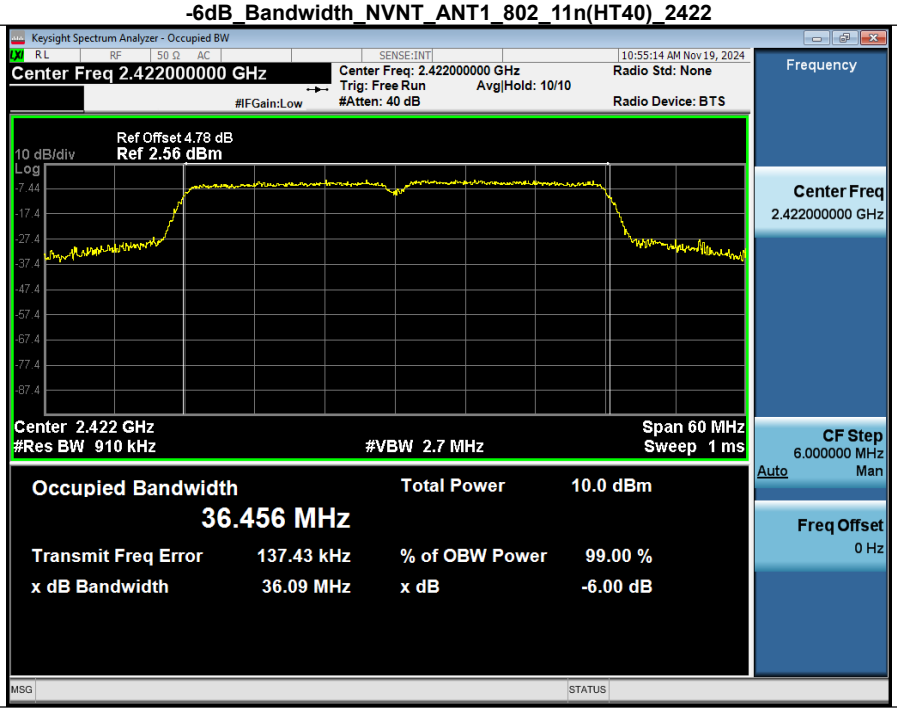
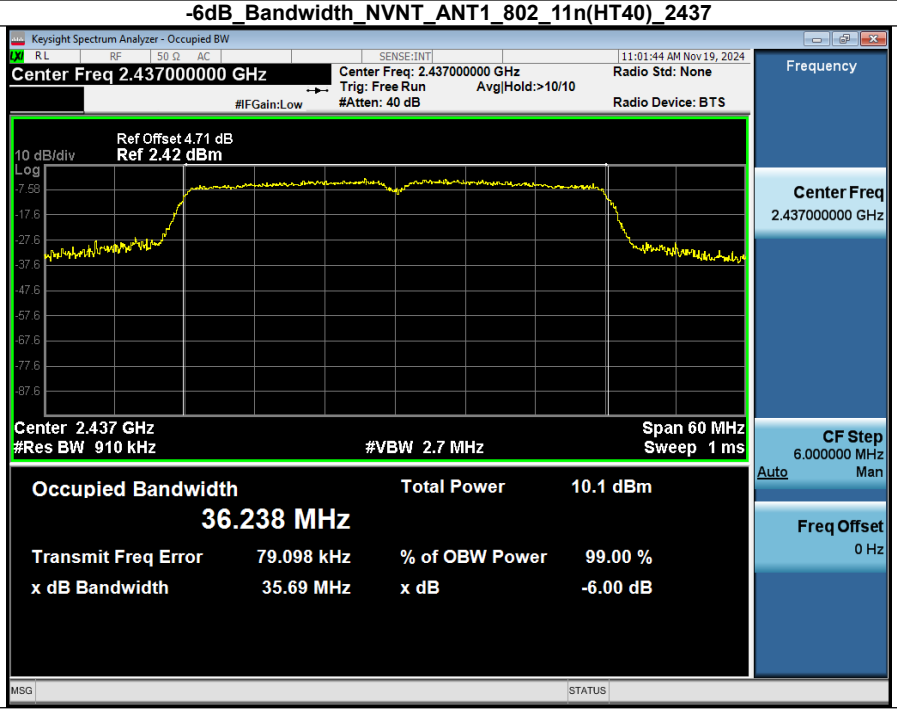


-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2422



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2437



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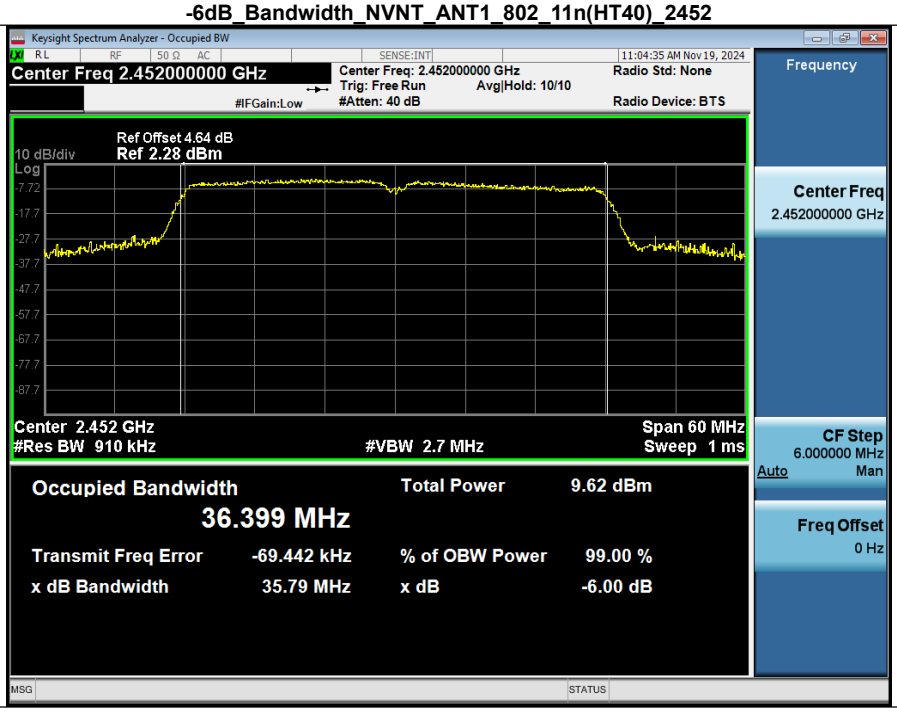
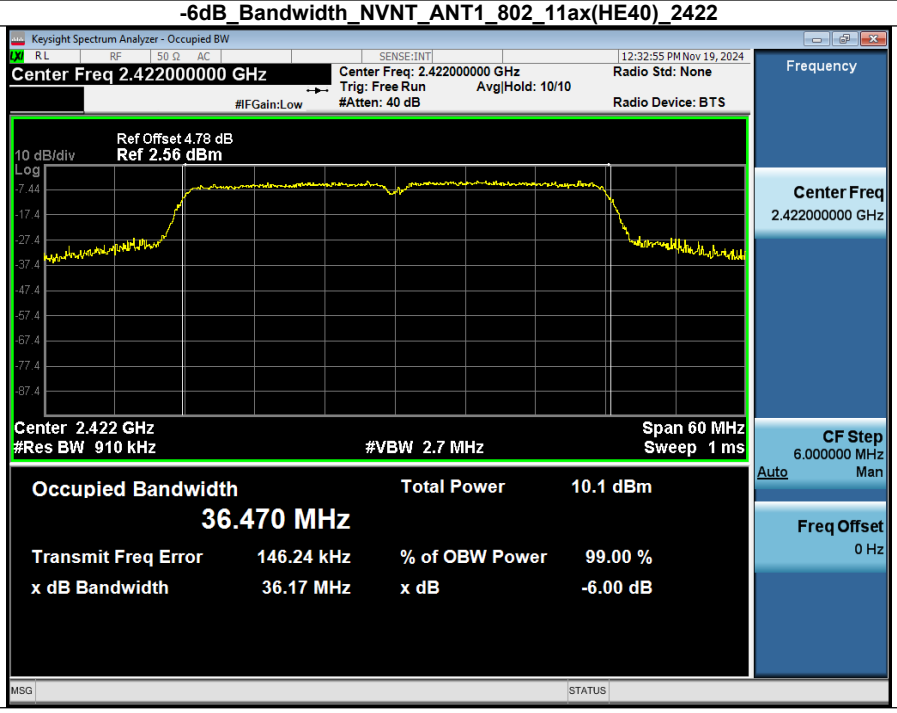
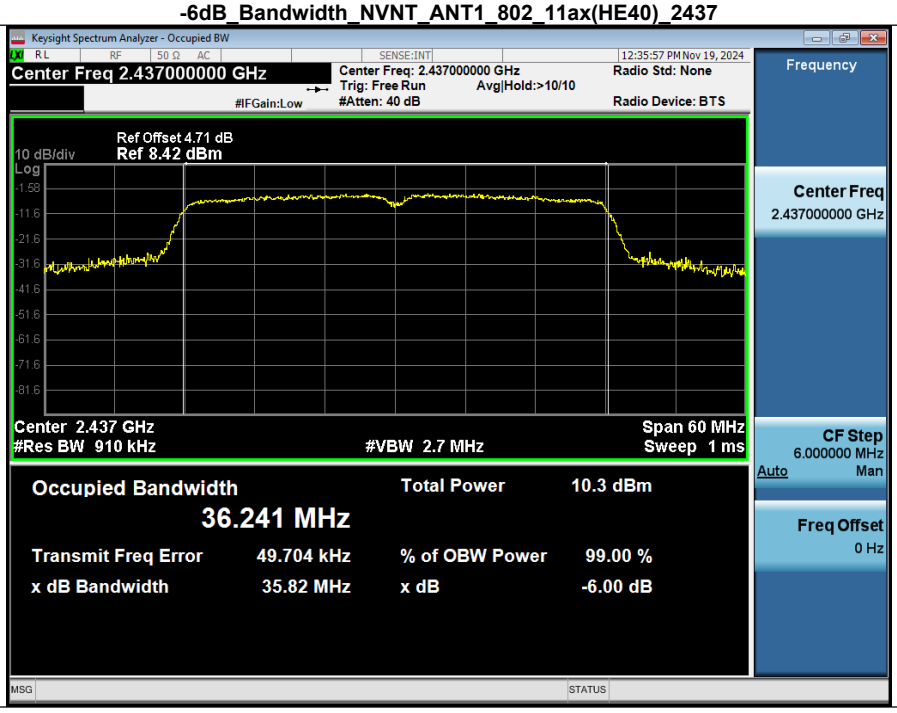


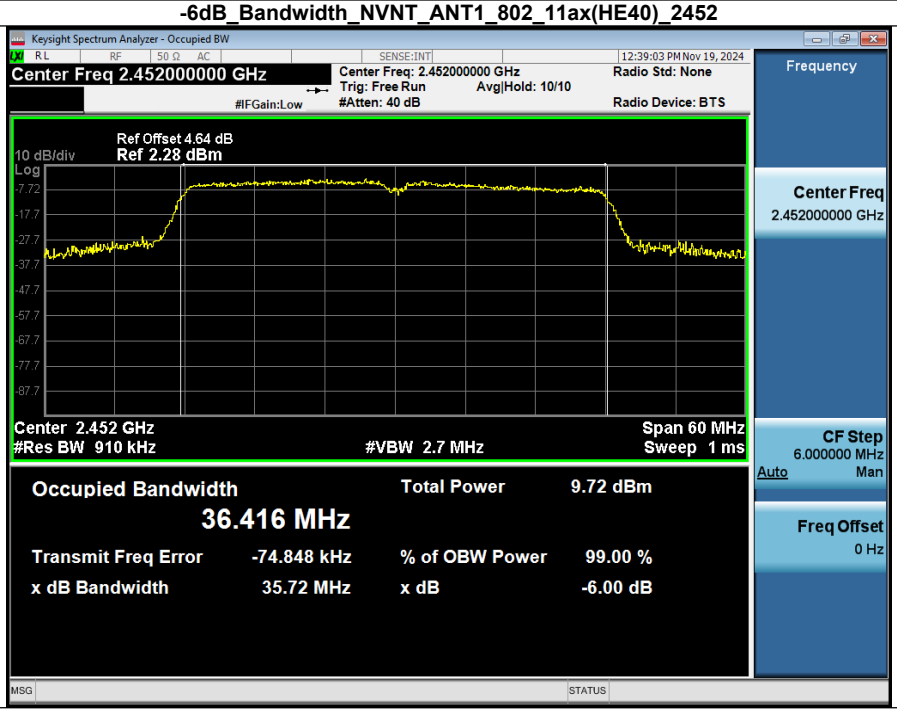
-6dB_Bandwidth_NVNT_ANT1_802_11ax(HE40)_2422



-6dB_Bandwidth_NVNT_ANT1_802_11ax(HE40)_2437



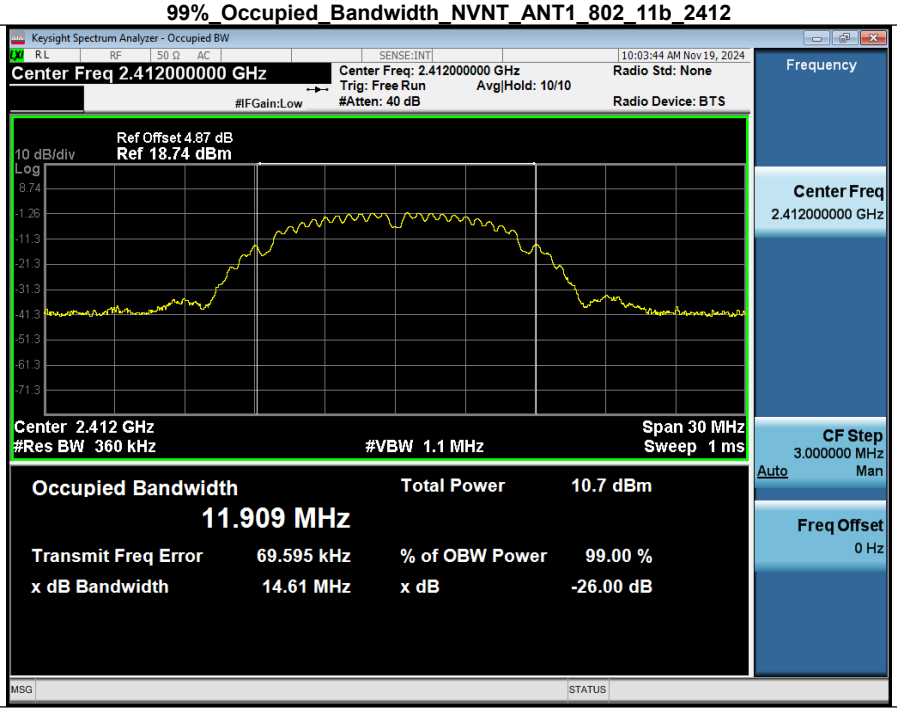
-6dB_Bandwidth_NVNT_ANT1_802_11ax(HE40)_2452



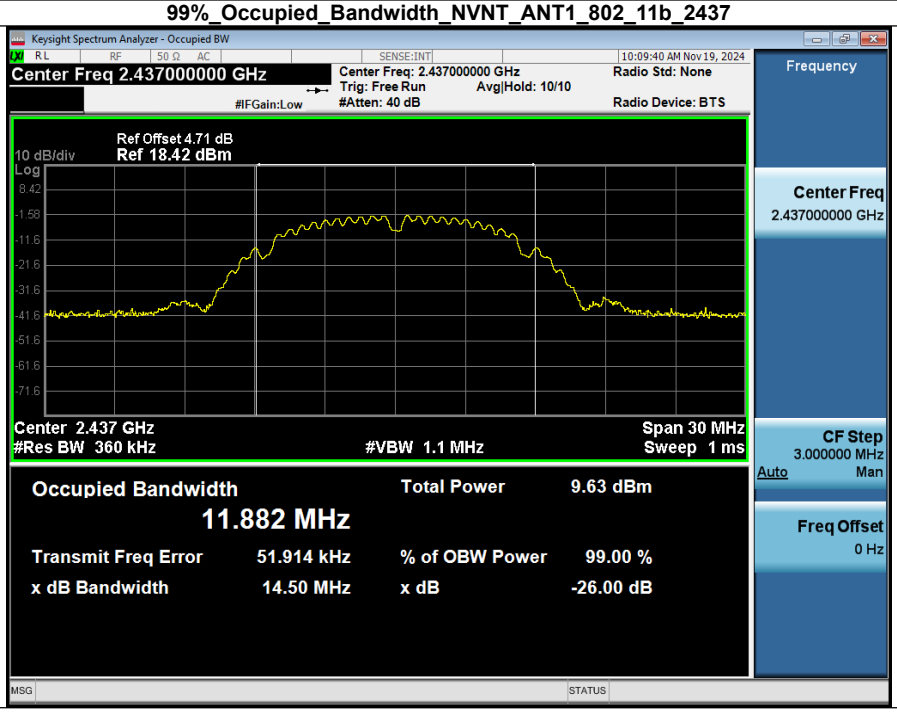
2. 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99%%BW(MHz)
NVNT	ANT1	802.11b	2412.00	11.909
NVNT	ANT1	802.11b	2437.00	11.882
NVNT	ANT1	802.11b	2462.00	11.999
NVNT	ANT1	802.11g	2412.00	16.987
NVNT	ANT1	802.11g	2437.00	16.973
NVNT	ANT1	802.11g	2462.00	17.209
NVNT	ANT1	802.11n(HT20)	2412.00	17.728
NVNT	ANT1	802.11n(HT20)	2437.00	17.701
NVNT	ANT1	802.11n(HT20)	2462.00	17.842
NVNT	ANT1	802.11ax(HE20)	2412.00	17.707
NVNT	ANT1	802.11ax(HE20)	2437.00	17.699
NVNT	ANT1	802.11ax(HE20)	2462.00	17.920
NVNT	ANT1	802.11n(HT40)	2422.00	36.517
NVNT	ANT1	802.11n(HT40)	2437.00	36.260
NVNT	ANT1	802.11n(HT40)	2452.00	36.391
NVNT	ANT1	802.11ax(HE40)	2422.00	36.488
NVNT	ANT1	802.11ax(HE40)	2437.00	36.271
NVNT	ANT1	802.11ax(HE40)	2452.00	36.412

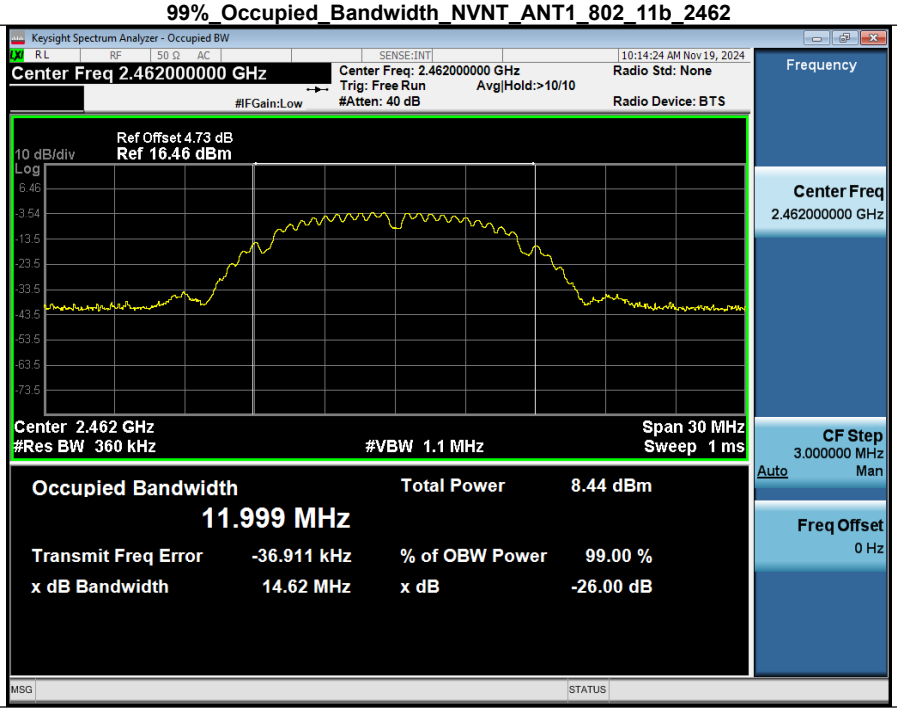
99%_Occupied_Bandwidth_NVNT_ANT1_802_11b_2412



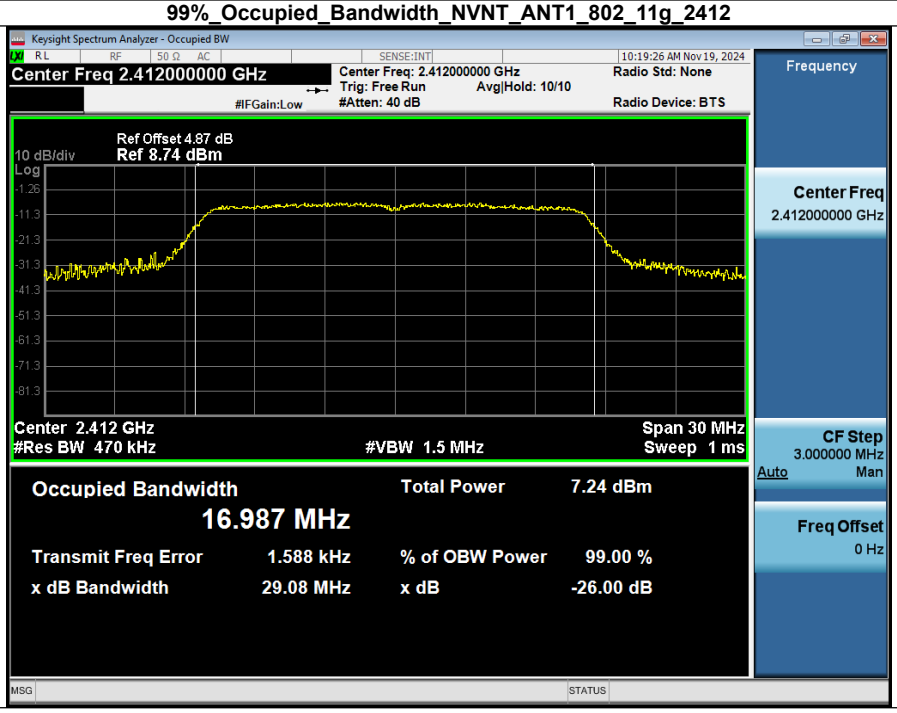
99%_Occupied_Bandwidth_NVNT_ANT1_802_11b_2437



99%_Occupied_Bandwidth_NVNT_ANT1_802_11b_2462



99%_Occupied_Bandwidth_NVNT_ANT1_802_11g_2412



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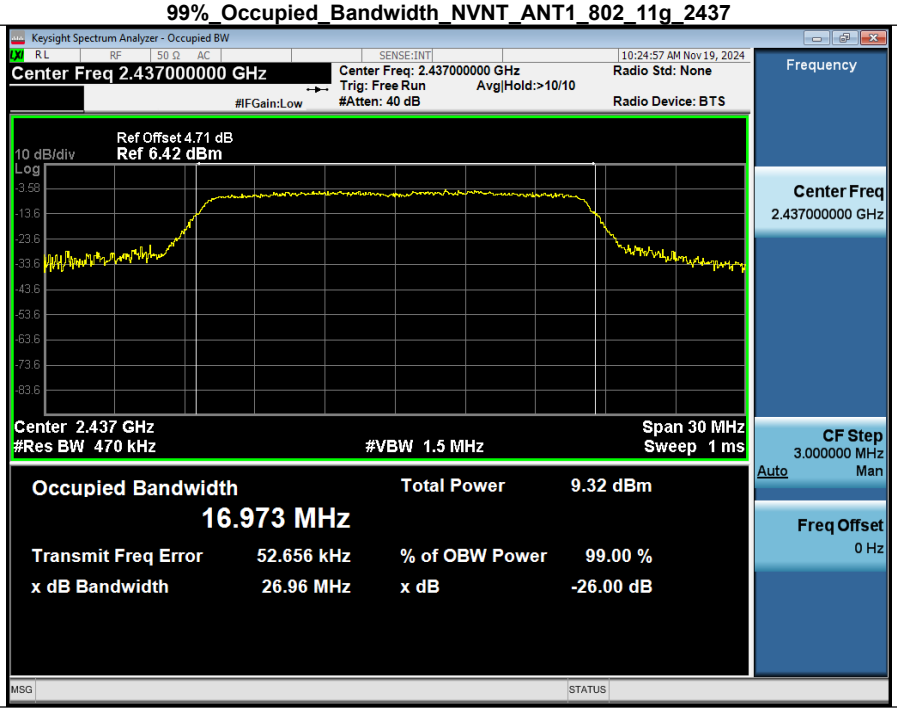
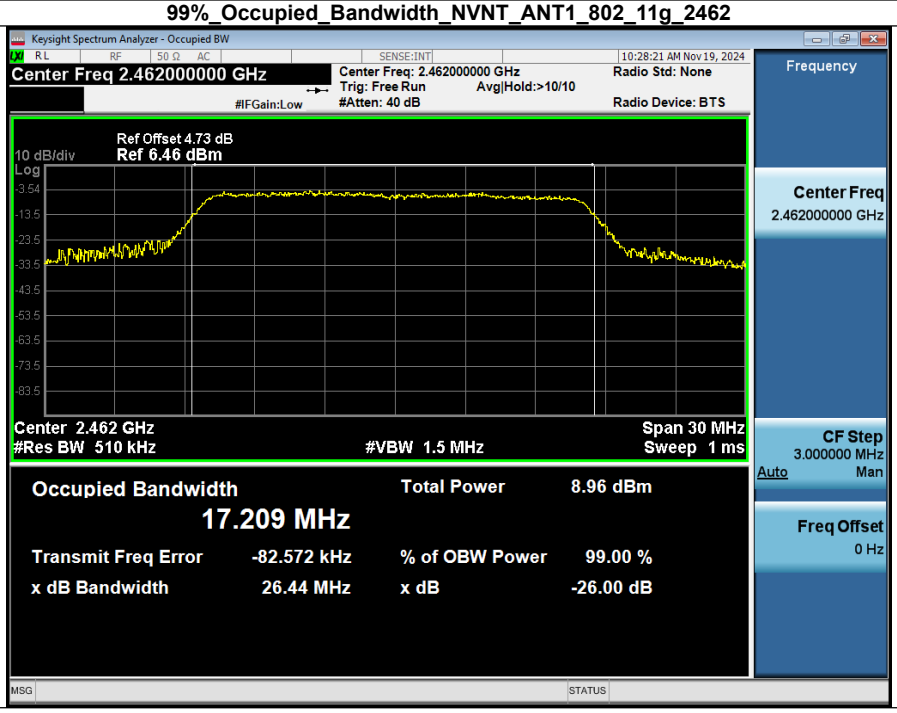
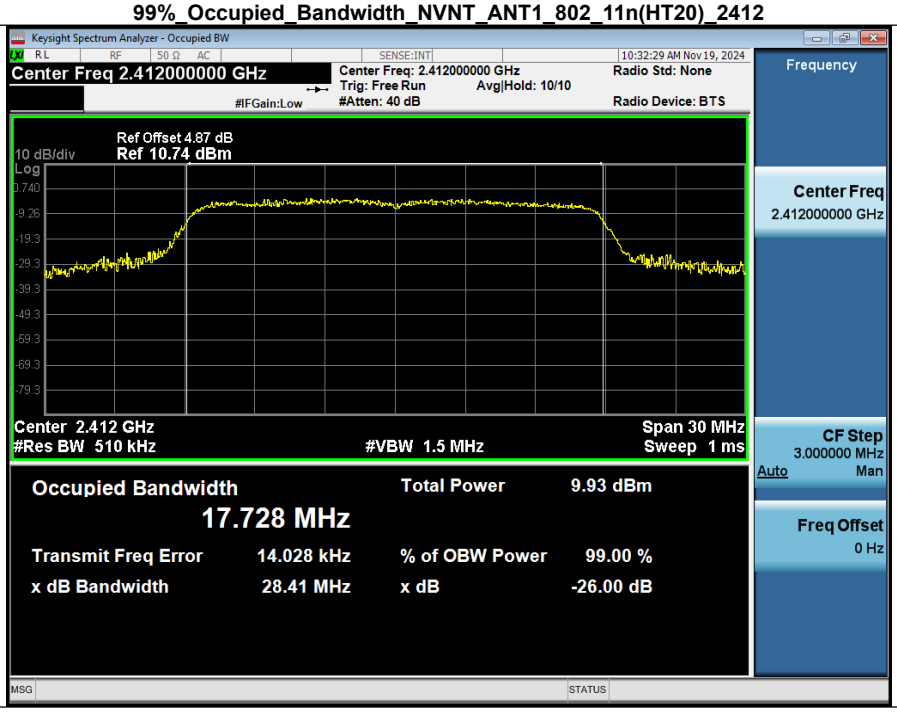


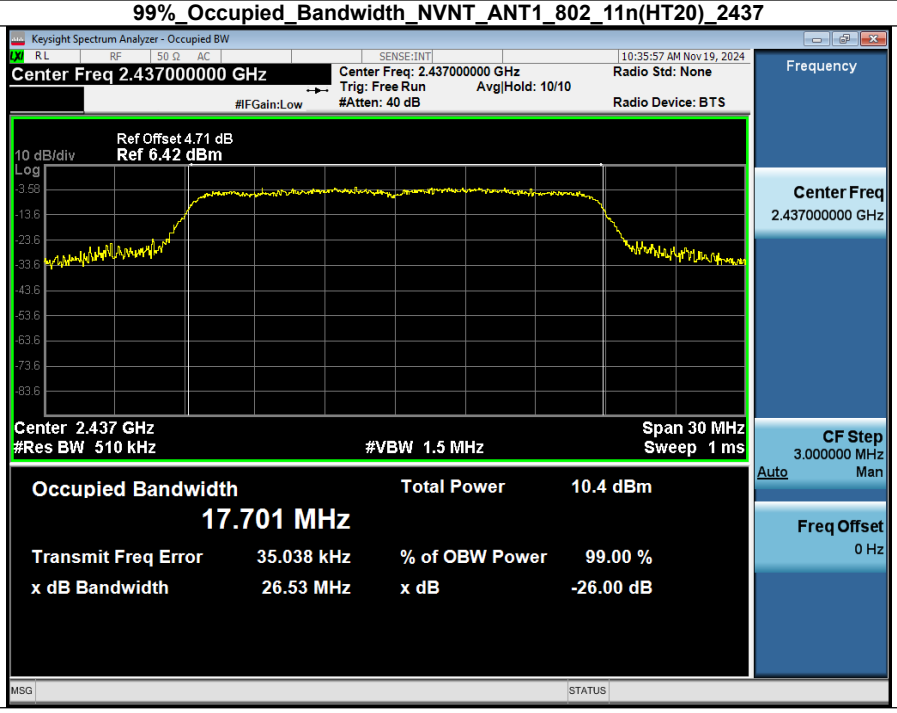
99%_Occupied_Bandwidth_NVNT_ANT1_802_11g_2462



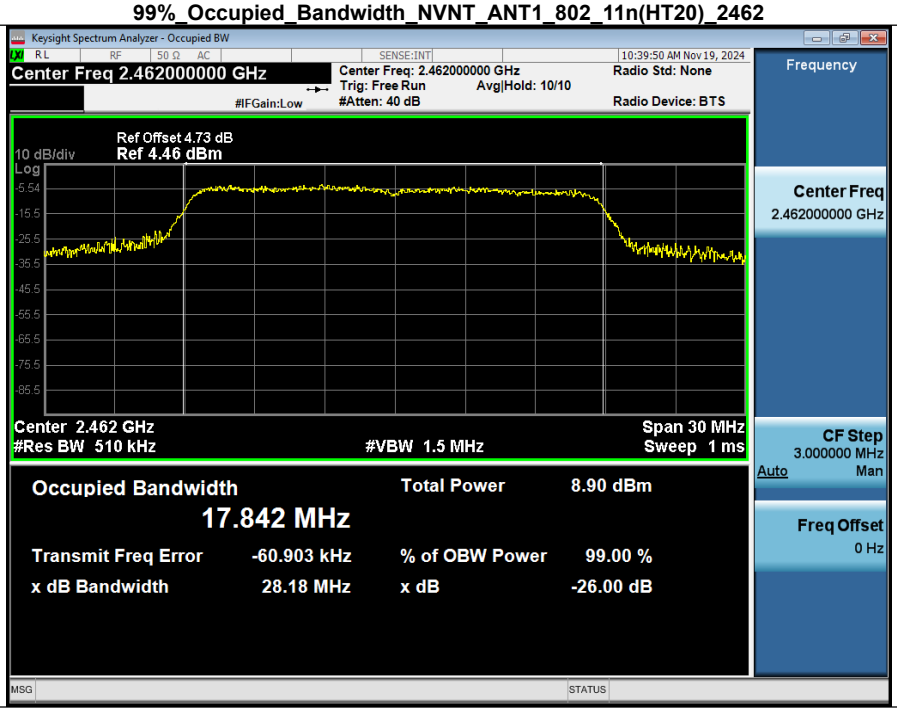
99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2412



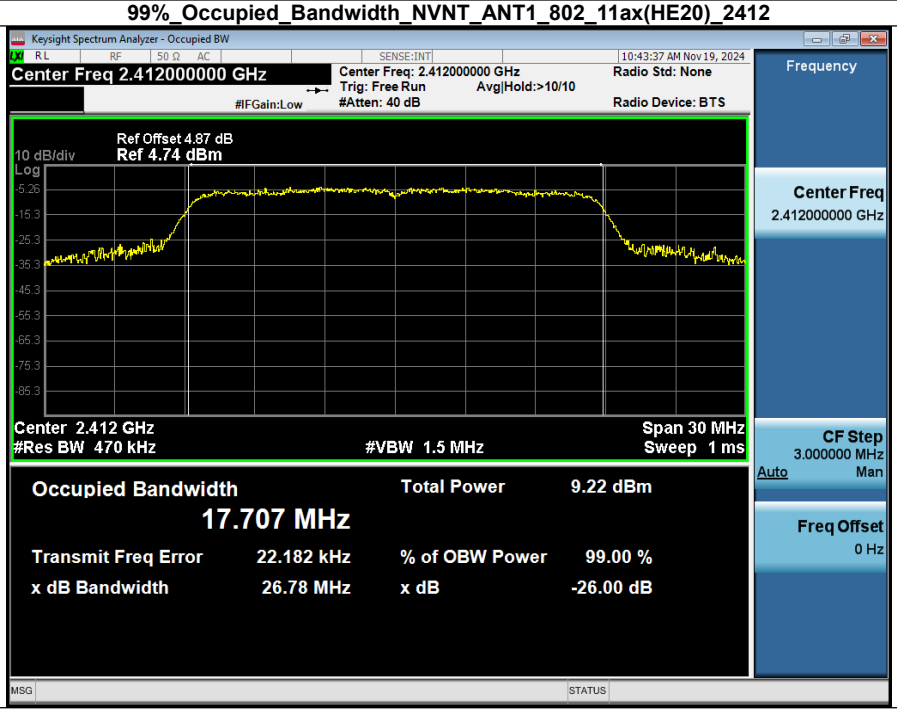
99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2437



99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462



99%_Occupied_Bandwidth_NVNT_ANT1_802_11ax(HE20)_2412



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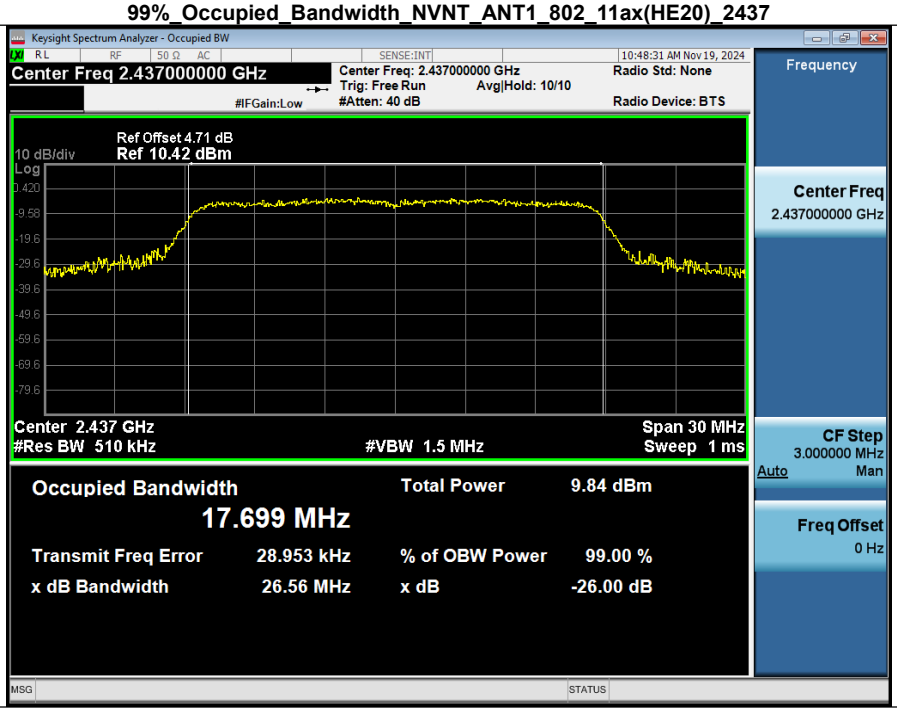

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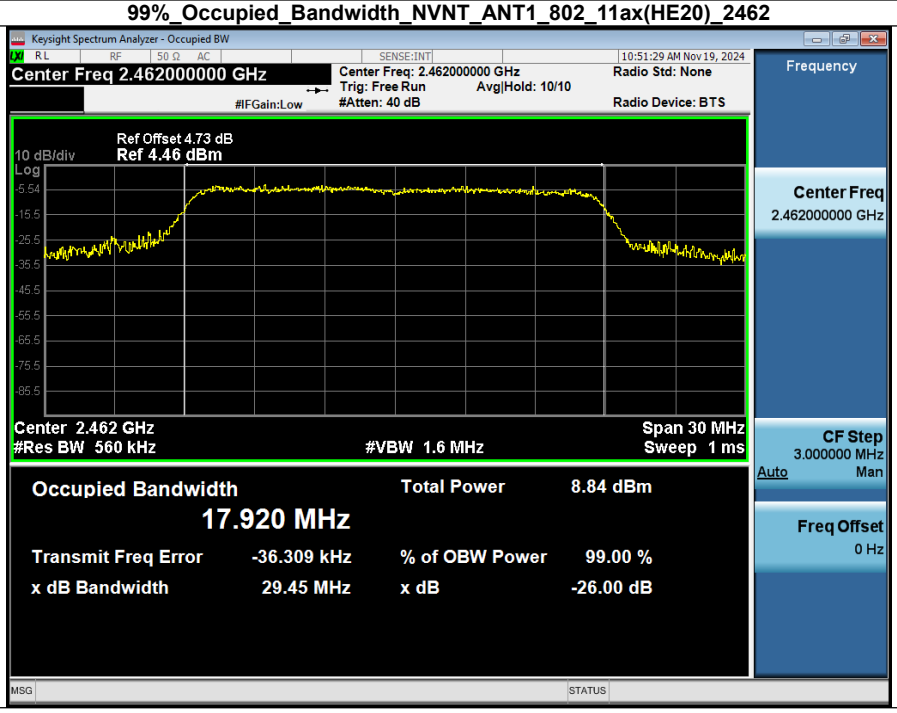
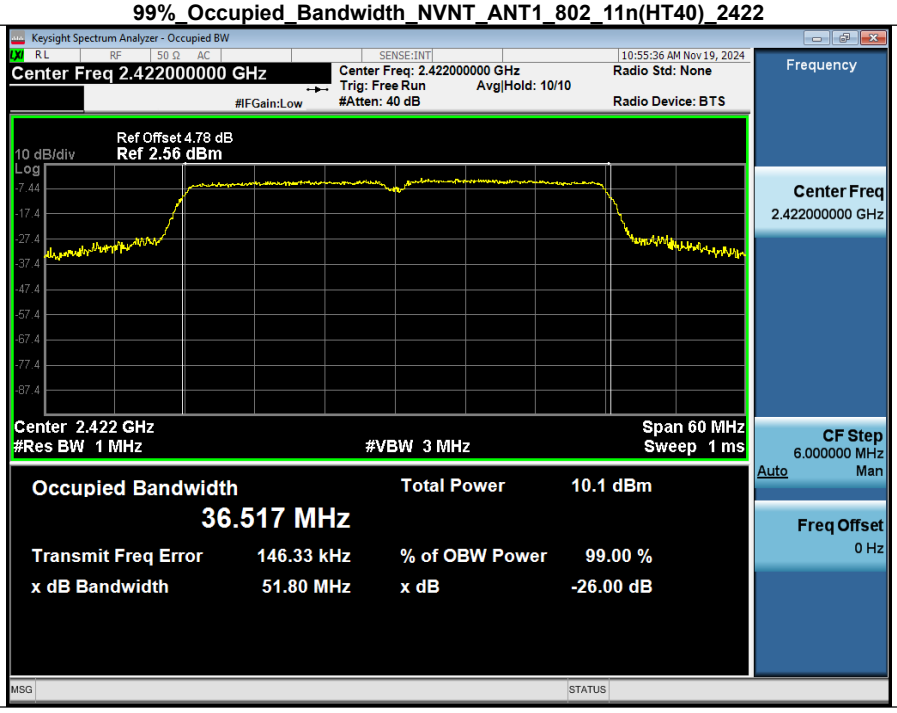


99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT40)_2422



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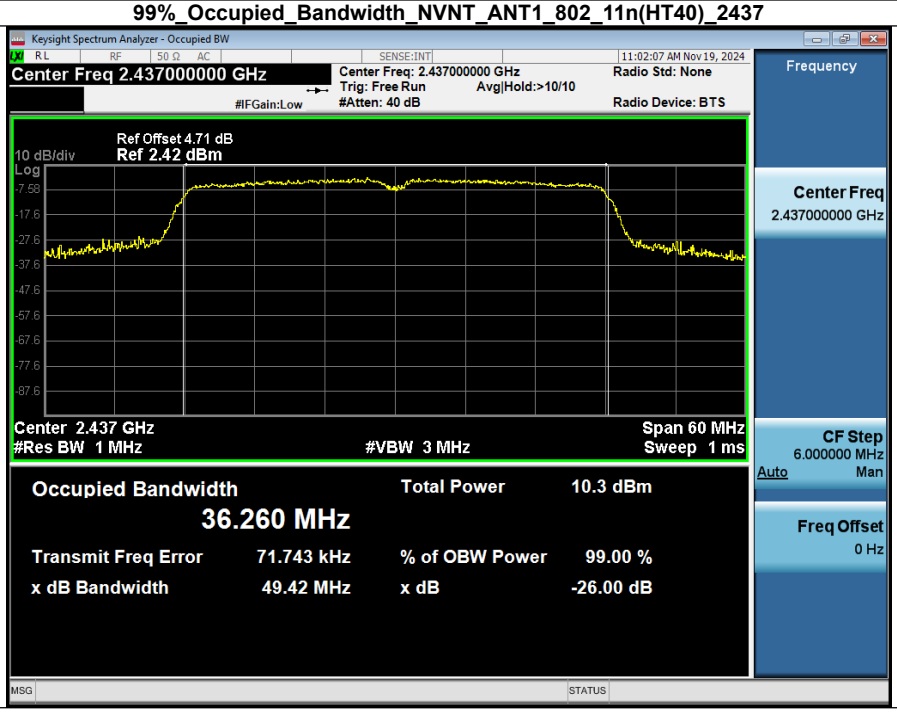
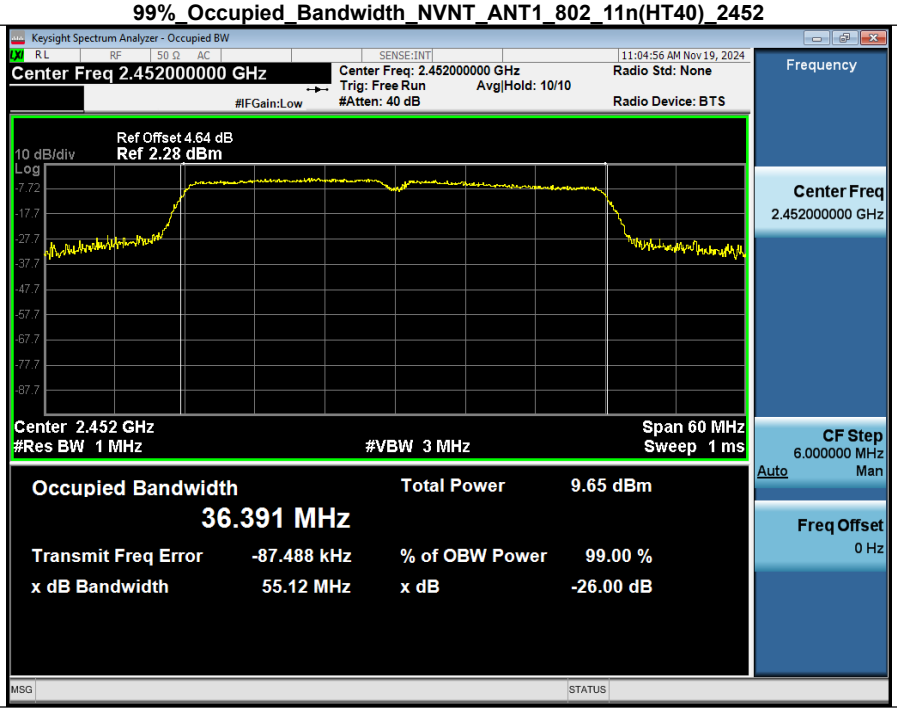
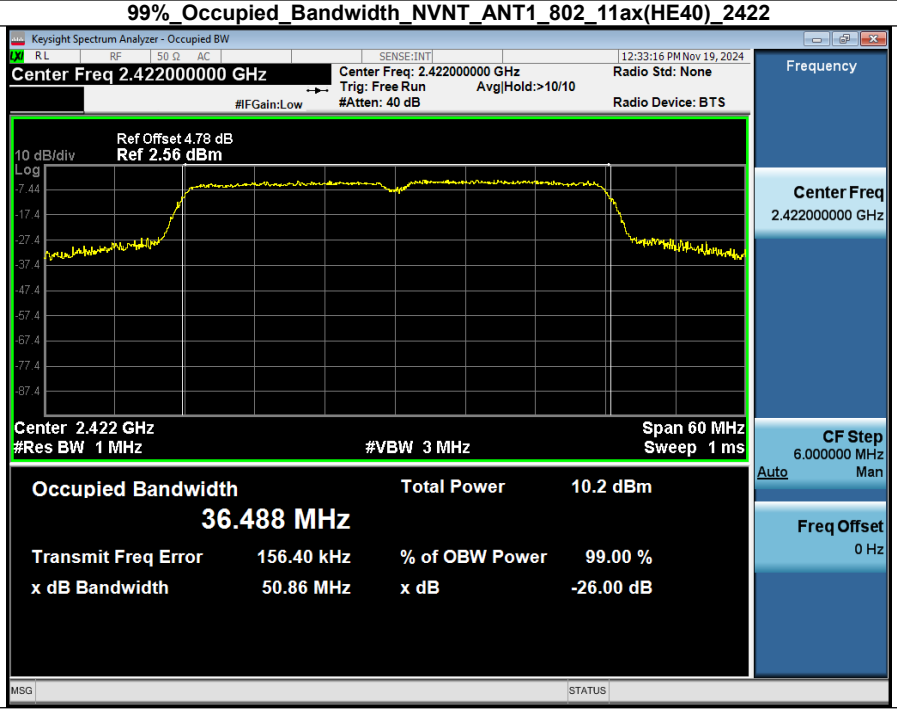


99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT40)_2452



99%_Occupied_Bandwidth_NVNT_ANT1_802_11ax(HE40)_2422



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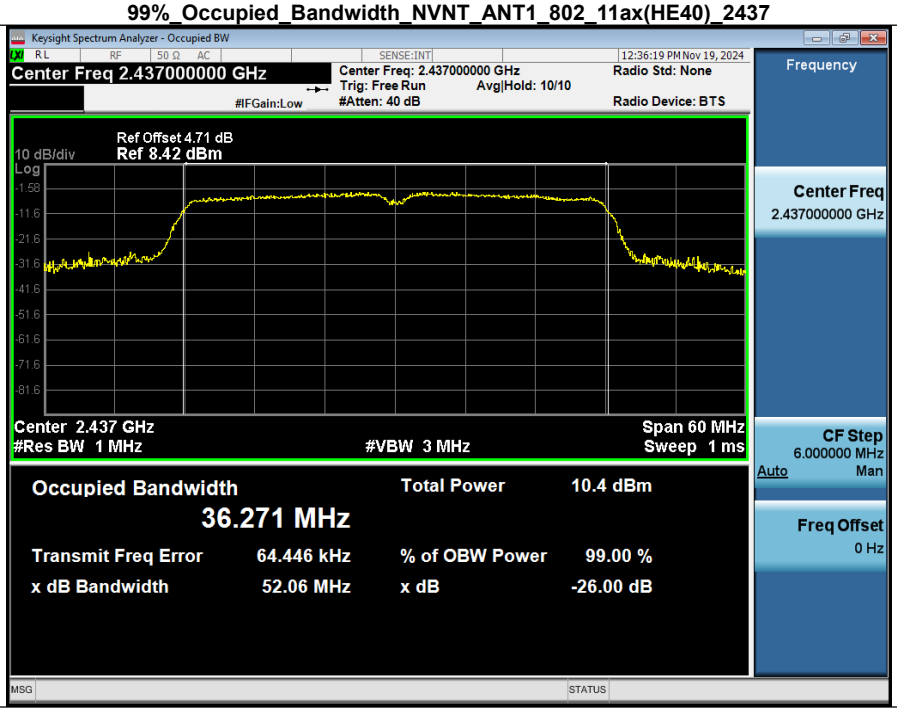
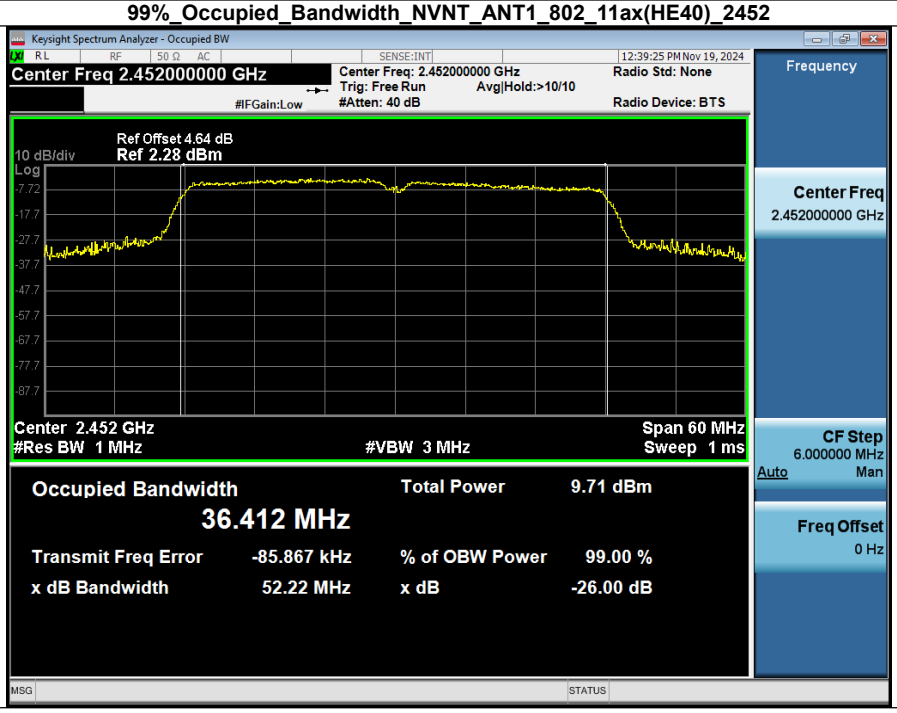


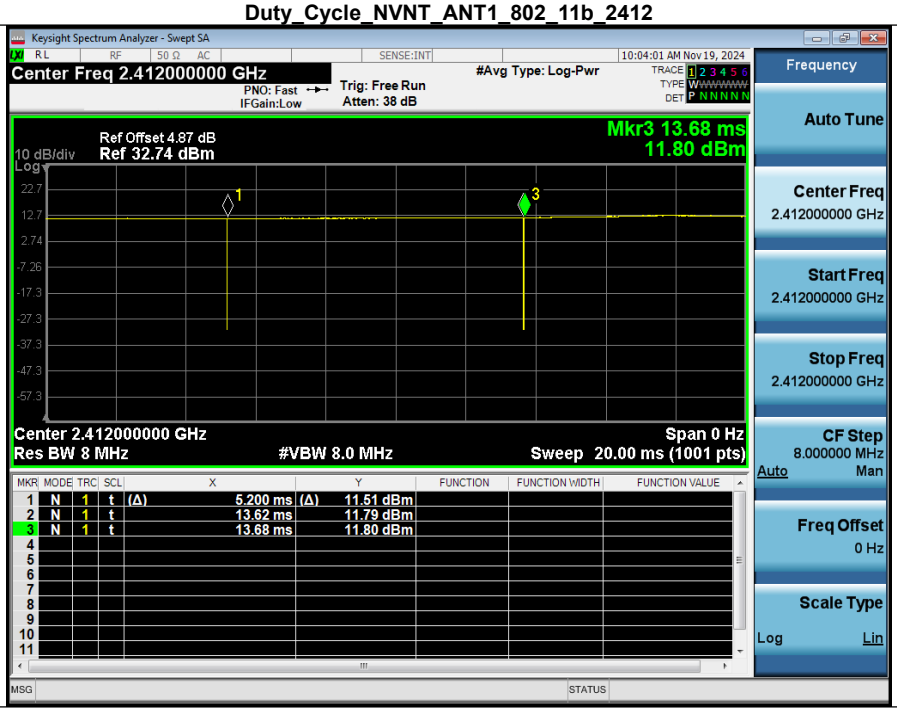
99%_Occupied_Bandwidth_NVNT_ANT1_802_11ax(HE40)_2452



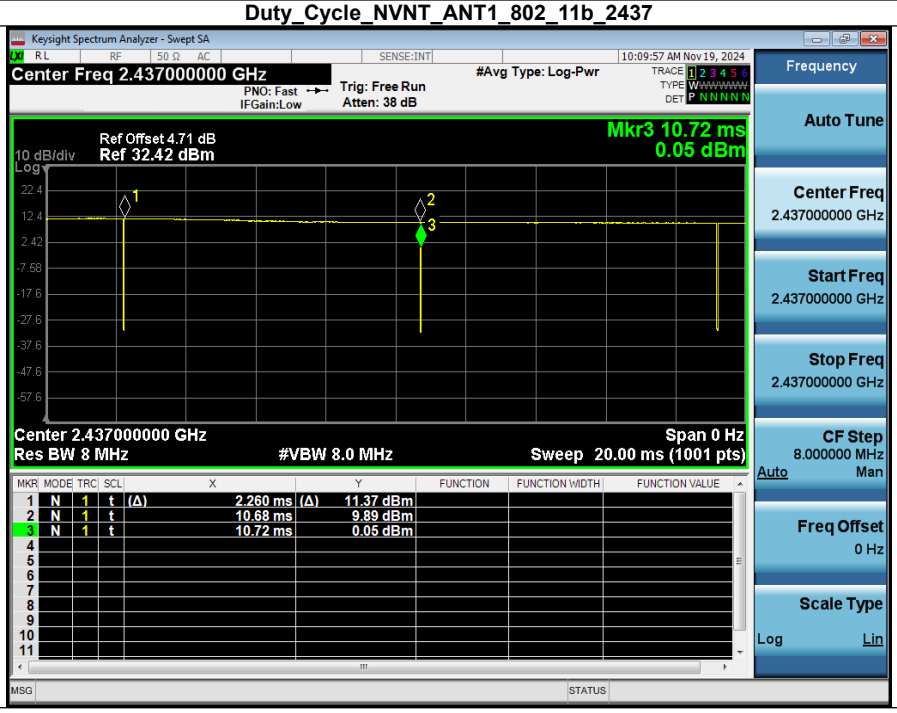
3. Duty Cycle

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	98.61	0.00
NVNT	ANT1	802.11g	2462.00	98.61	0.00
NVNT	ANT1	802.11n(HT20)	2412.00	98.36	0.00
NVNT	ANT1	802.11n(HT20)	2437.00	96.77	0.14
NVNT	ANT1	802.11n(HT20)	2462.00	98.36	0.00
NVNT	ANT1	802.11ax(HE20)	2412.00	76.92	1.14
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	90.63	0.43
NVNT	ANT1	802.11ax(HE40)	2437.00	93.75	0.28
NVNT	ANT1	802.11ax(HE40)	2452.00	96.88	0.14

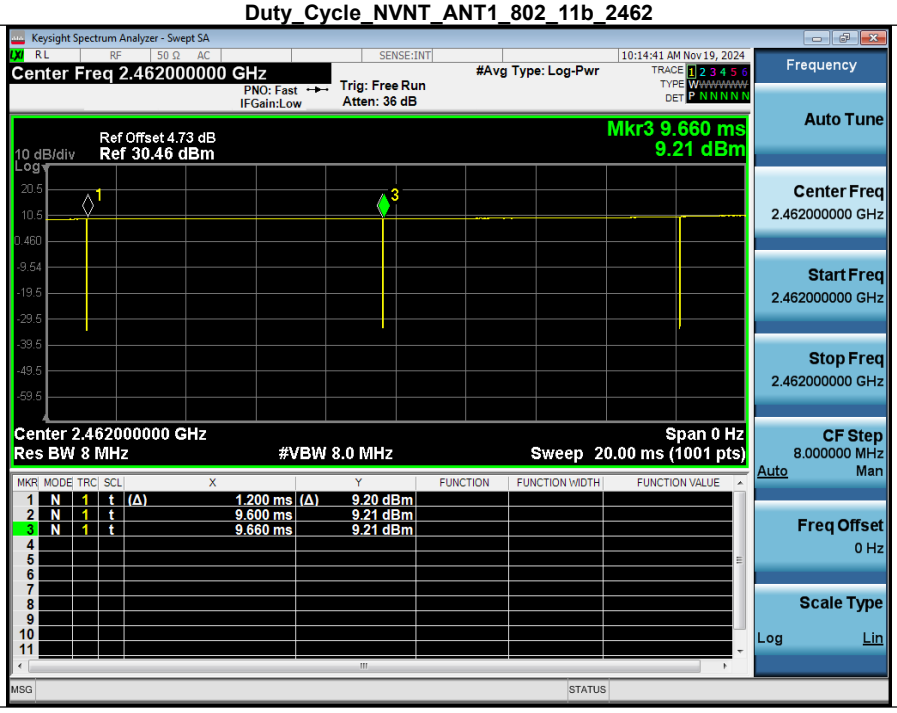
Duty_Cycle_NVNT_ANT1_802_11b_2412



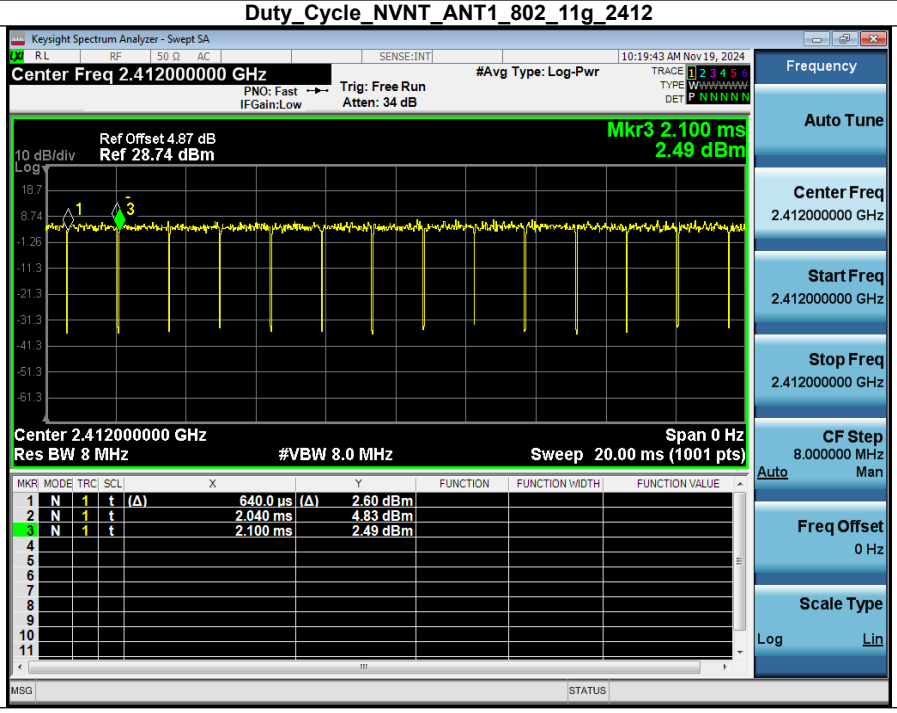
Duty_Cycle_NVNT_ANT1_802_11b_2437



Duty_Cycle_NVNT_ANT1_802_11b_2462



Duty_Cycle_NVNT_ANT1_802_11g_2412



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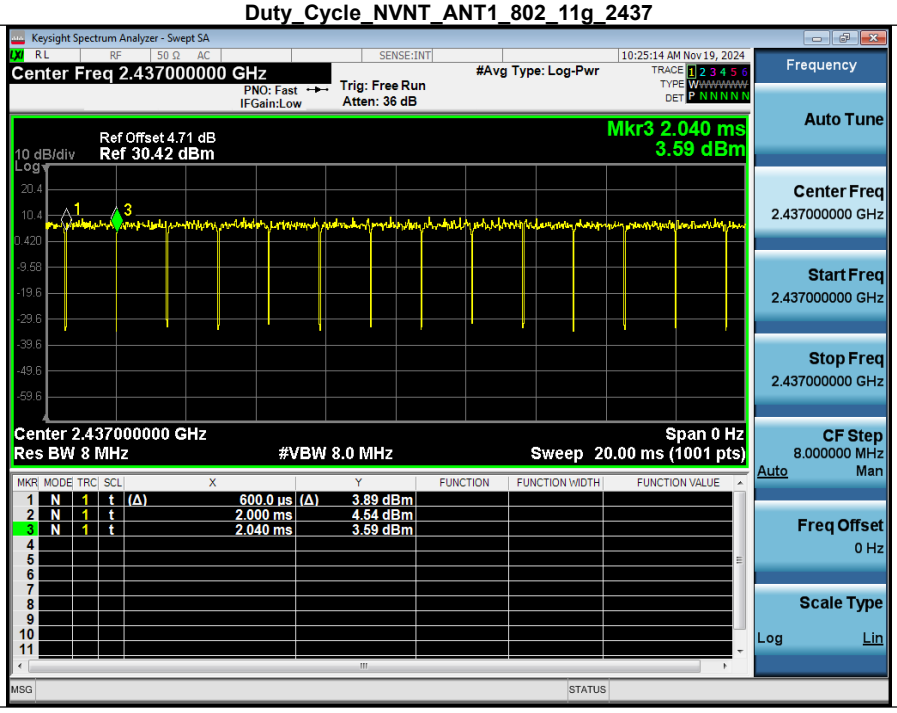

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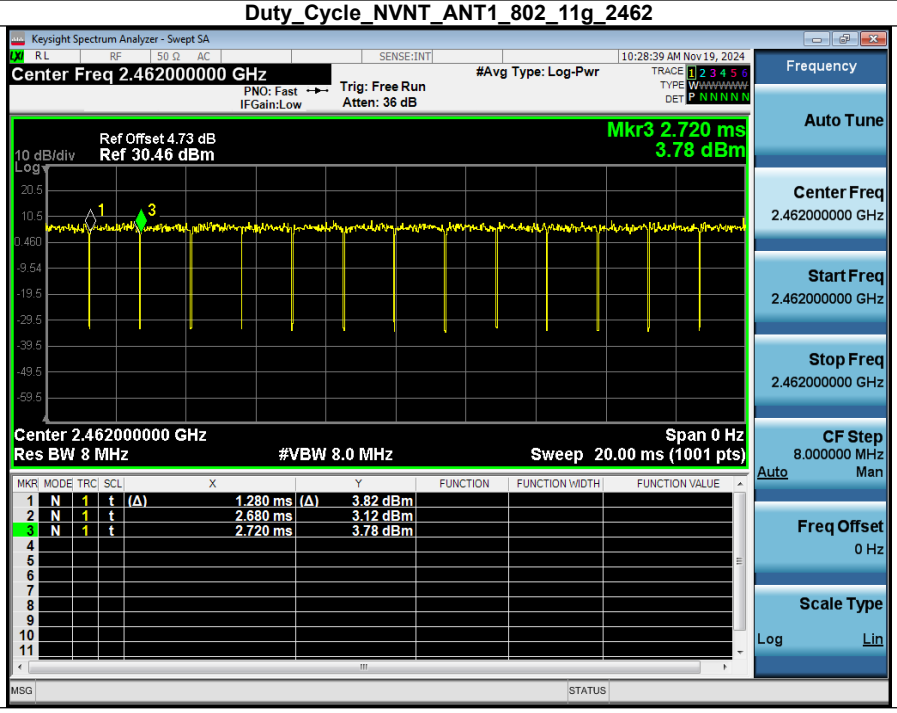
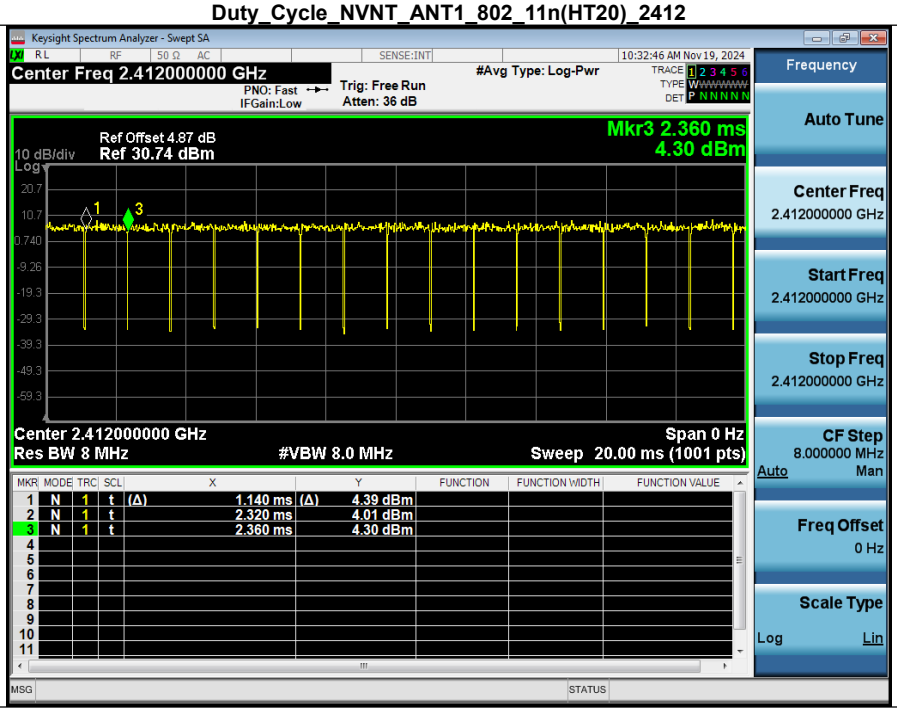


Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2412



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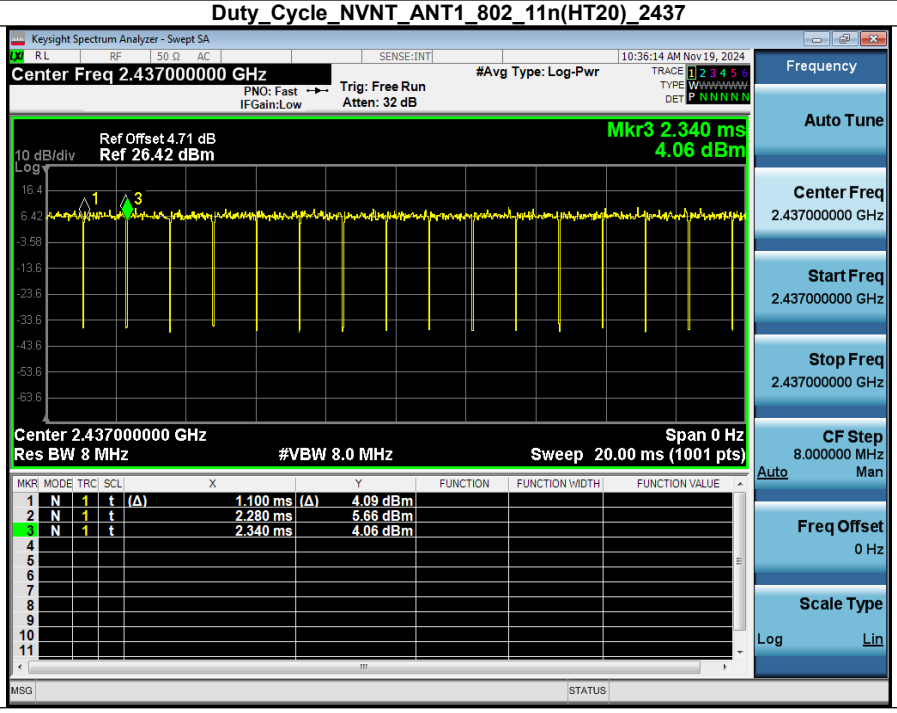

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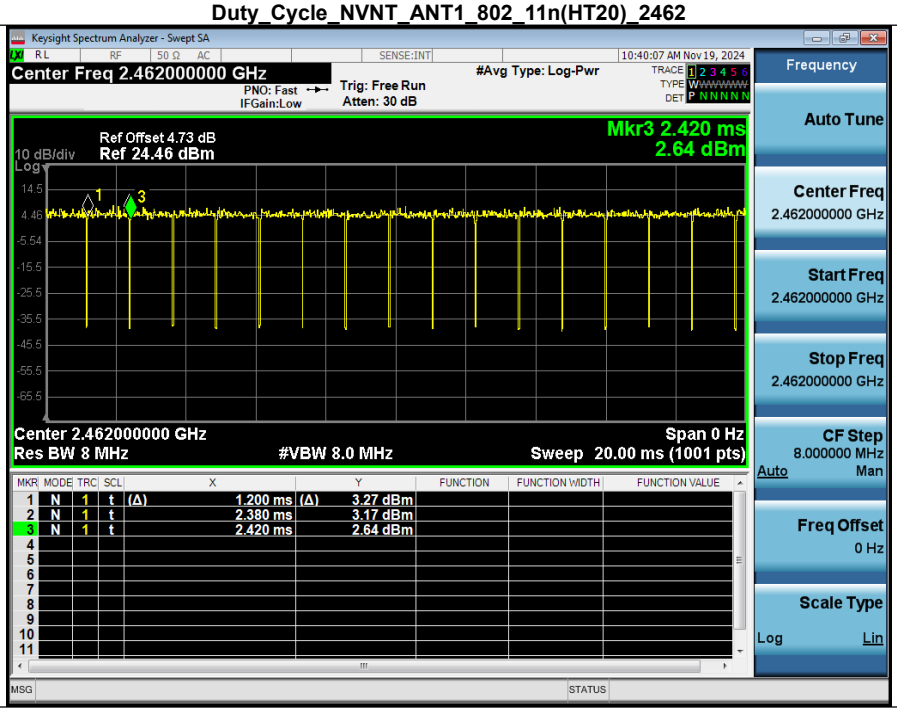
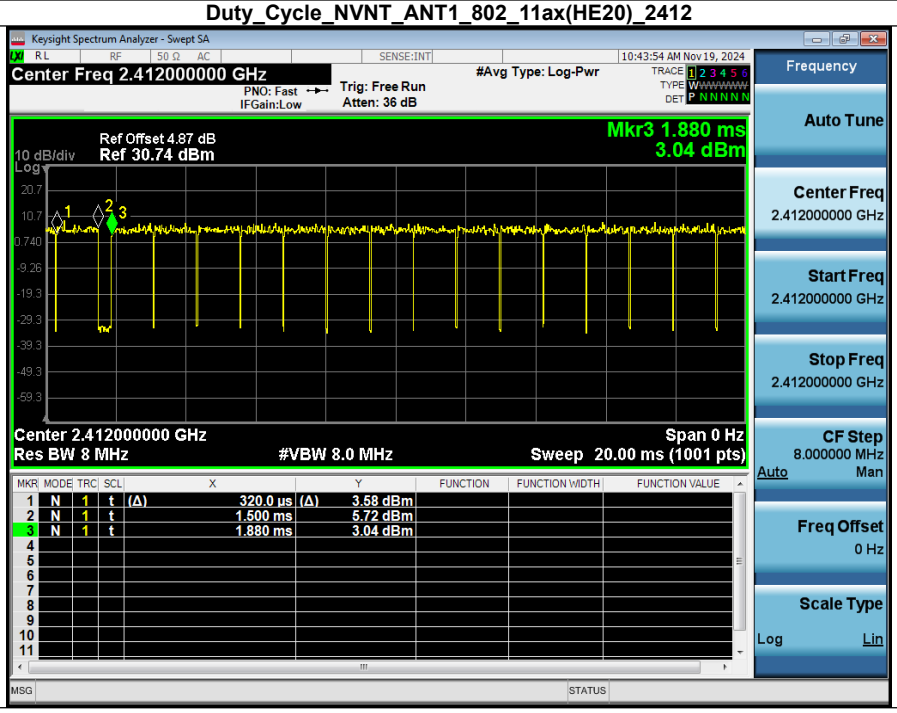


Duty_Cycle_NVNT_ANT1_802_11ax(HE20)_2412



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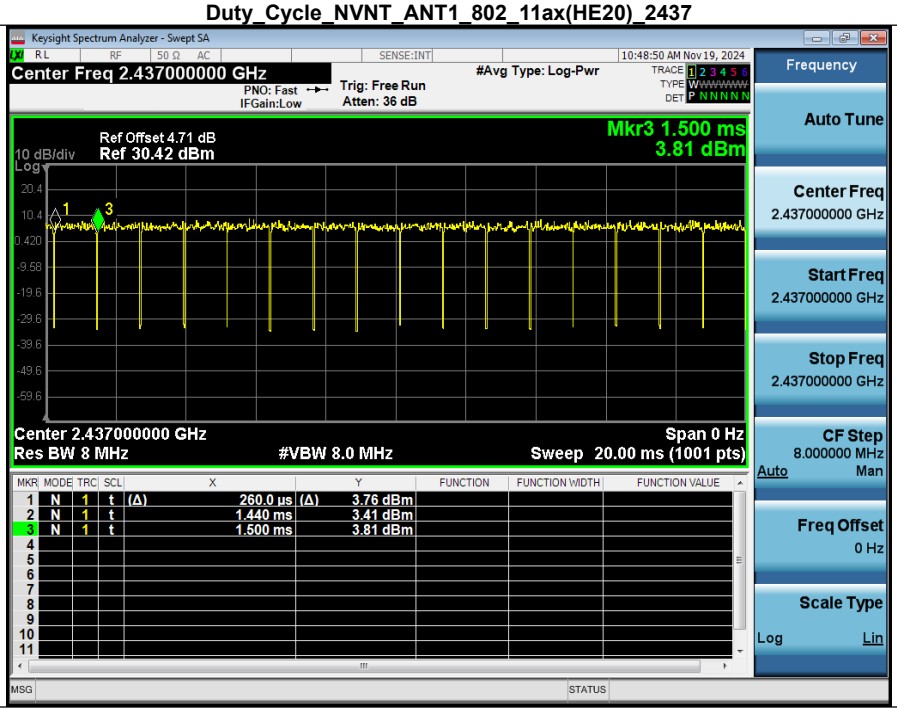

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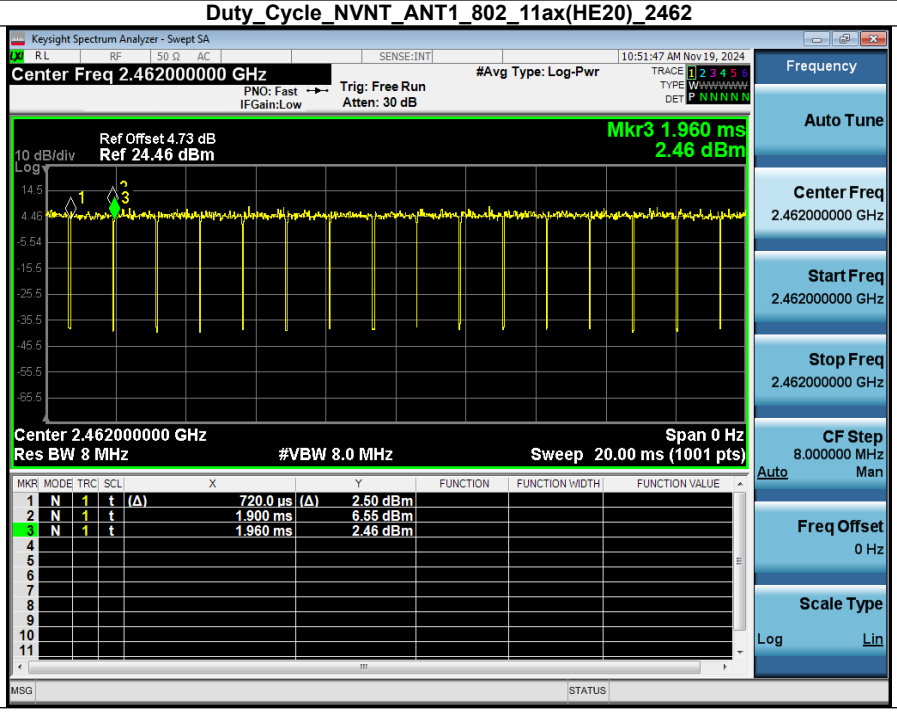
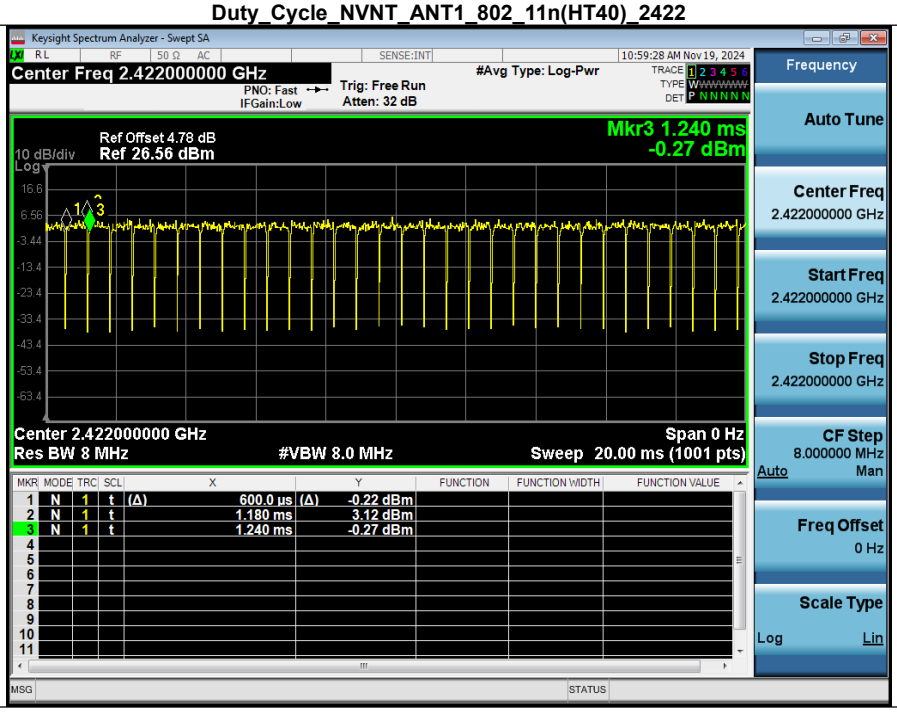
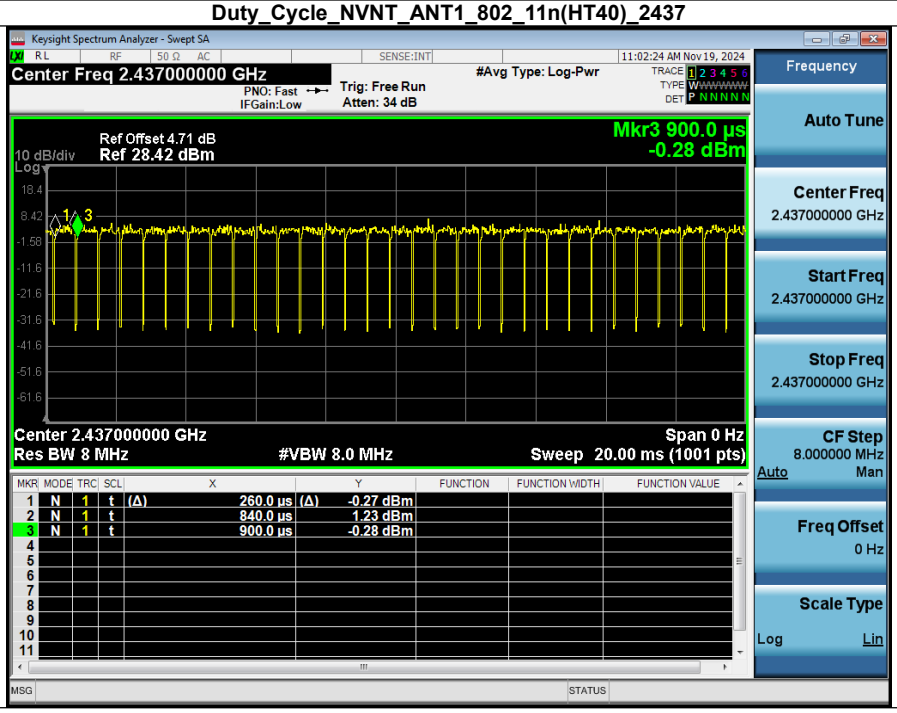


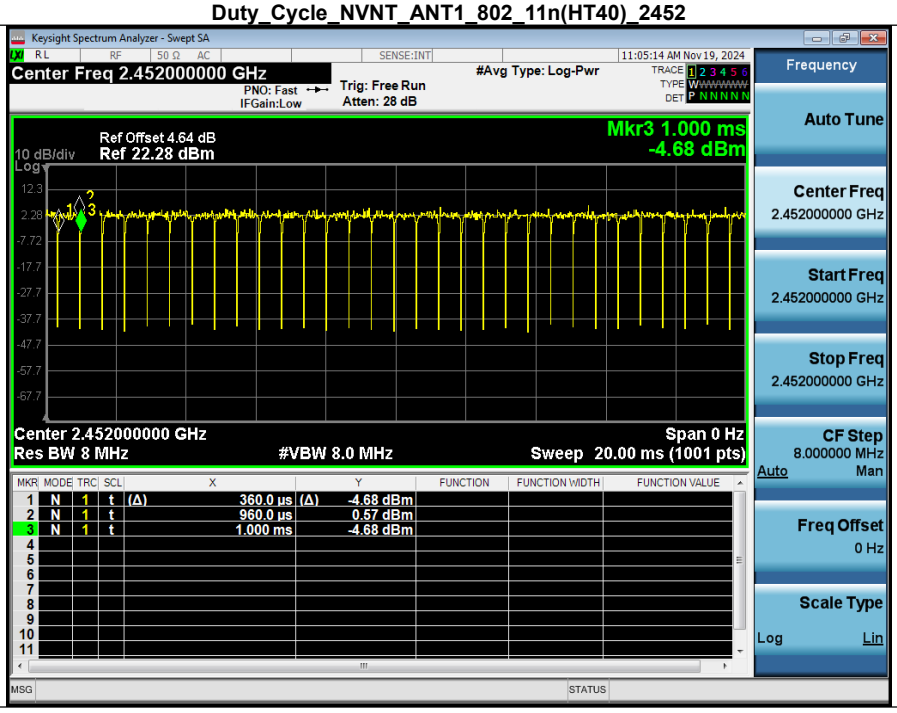
Duty_Cycle_NVNT_ANT1_802_11n(HT40)_2422



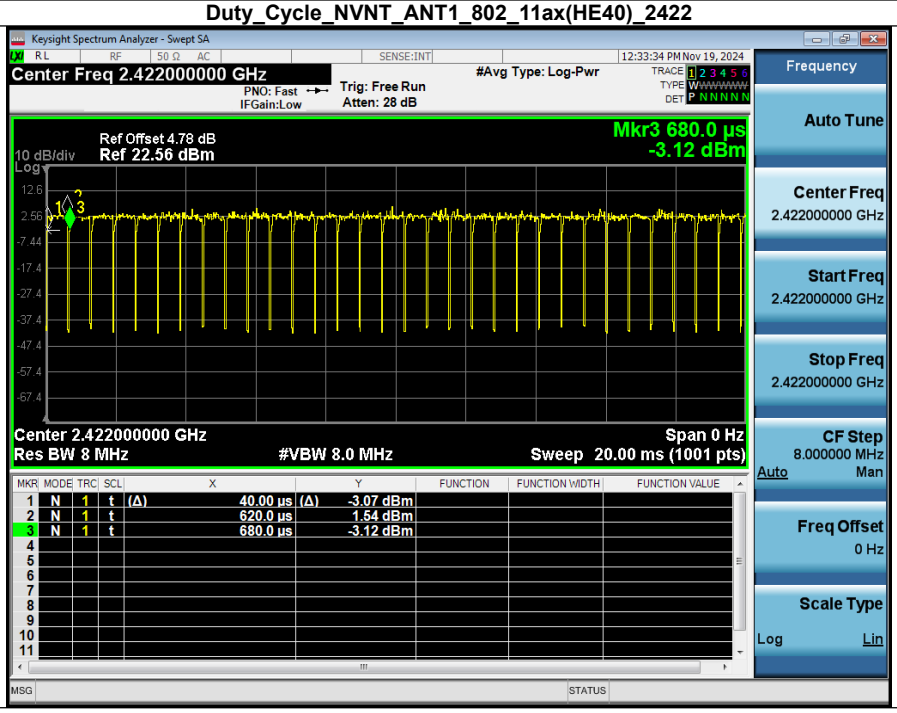
Duty_Cycle_NVNT_ANT1_802_11n(HT40)_2437



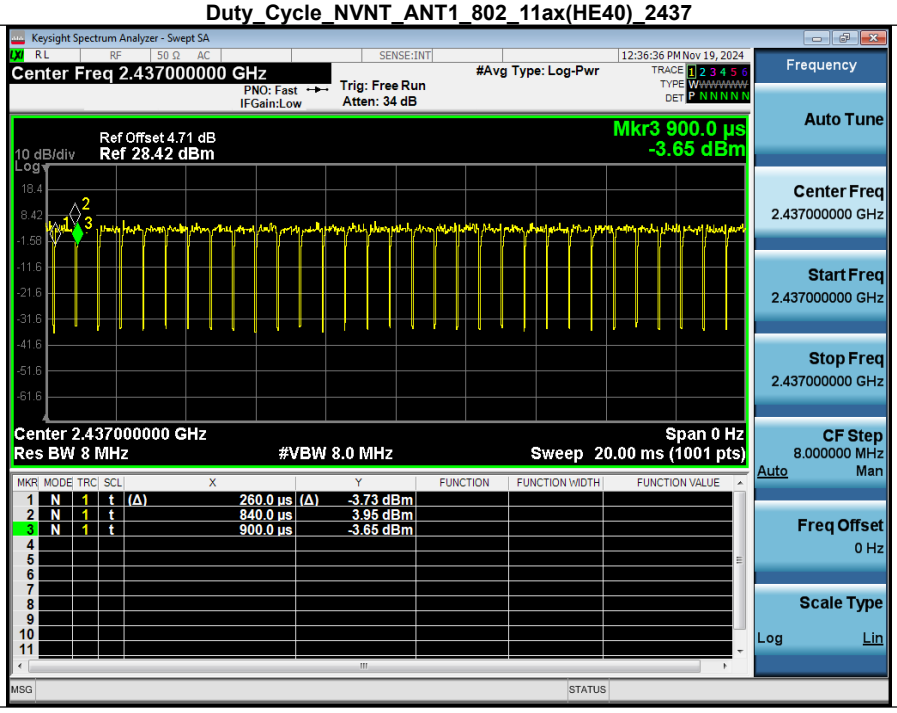
Duty_Cycle_NVNT_ANT1_802_11n(HT40)_2452



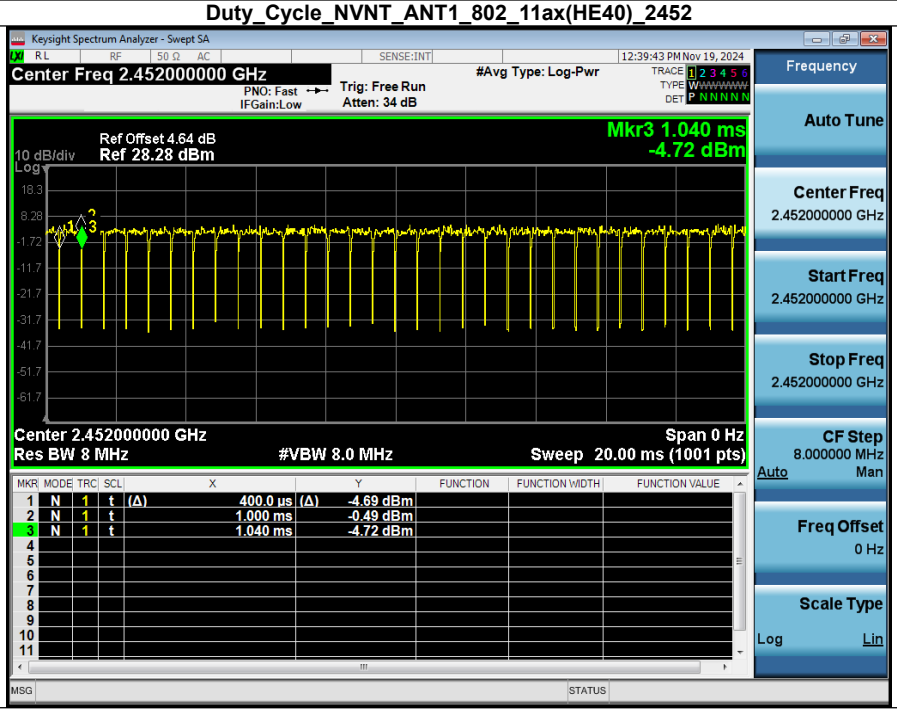
Duty_Cycle_NVNT_ANT1_802_11ax(HE40)_2422



Duty_Cycle_NVNT_ANT1_802_11ax(HE40)_2437



Duty_Cycle_NVNT_ANT1_802_11ax(HE40)_2452



4. MAX. Output Power

Condition	Antenna	Modulation	Frequency (MHz)	Detector	Conducted Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	Peak	7.28	30	Pass
NVNT	ANT1	802.11b	2437.00	Peak	7.78	30	Pass
NVNT	ANT1	802.11b	2462.00	Peak	6.61	30	Pass
NVNT	ANT1	802.11g	2412.00	Peak	7.33	30	Pass
NVNT	ANT1	802.11g	2437.00	Peak	7.93	30	Pass
NVNT	ANT1	802.11g	2462.00	Peak	7.59	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	Peak	8.28	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	Peak	7.91	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	Peak	7.38	30	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	Peak	7.83	30	Pass
NVNT	ANT1	802.11ax(HE20)	2437.00	Peak	8.25	30	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	Peak	7.35	30	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	Peak	7.99	30	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	Peak	8.24	30	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	Peak	7.71	30	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	Peak	8.14	30	Pass
NVNT	ANT1	802.11ax(HE40)	2437.00	Peak	8.35	30	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	Peak	8.85	30	Pass

5. Power Spectral Density

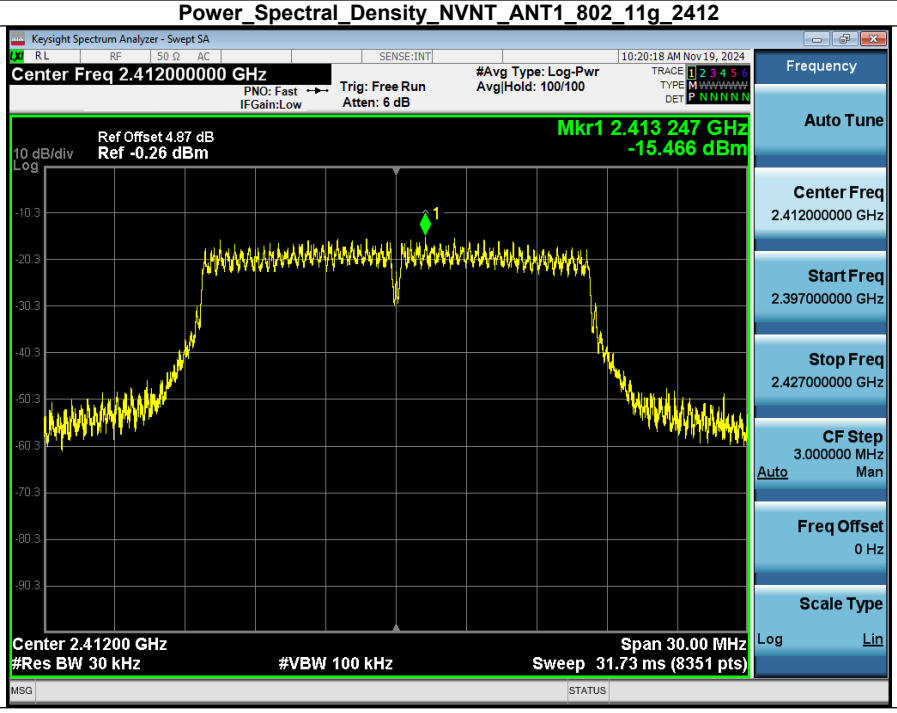
Condition	Antenna	Modulation	Frequency (MHz)	SA_PSD(dBm/30kHz)	RB factor(dB)	PSD(dBm/3kHz)	limit(dBm/3kHz)	Result
NVNT	ANT1	802.11b	2412.00	-1.30	-10.00	-11.30	8	Pass
NVNT	ANT1	802.11b	2437.00	-6.19	-10.00	-16.19	8	Pass
NVNT	ANT1	802.11b	2462.00	-7.23	-10.00	-17.23	8	Pass
NVNT	ANT1	802.11g	2412.00	-15.47	-10.00	-25.47	8	Pass
NVNT	ANT1	802.11g	2437.00	-13.18	-10.00	-23.18	8	Pass
NVNT	ANT1	802.11g	2462.00	-13.97	-10.00	-23.97	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-14.05	-10.00	-24.05	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-13.63	-10.00	-23.63	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-15.24	-10.00	-25.24	8	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	-14.22	-10.00	-24.22	8	Pass
NVNT	ANT1	802.11ax(HE20)	2437.00	-13.94	-10.00	-23.94	8	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	-15.26	-10.00	-25.26	8	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	-17.41	-10.00	-27.41	8	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	-17.16	-10.00	-27.16	8	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	-17.29	-10.00	-27.29	8	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	-17.30	-10.00	-27.30	8	Pass
NVNT	ANT1	802.11ax(HE40)	2437.00	-17.11	-10.00	-27.11	8	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	-17.18	-10.00	-27.18	8	Pass

Power_Spectral_Density_NVNT_ANT1_802_11b_2412

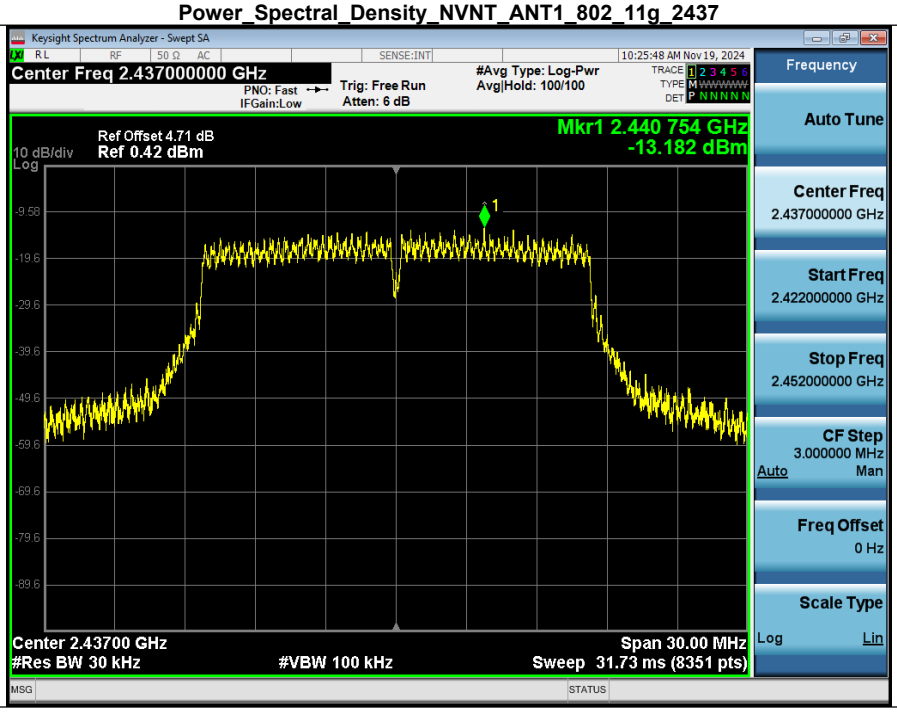
Power_Spectral_Density_NVNT_ANT1_802_11b_2437

Power_Spectral_Density_NVNT_ANT1_802_11b_2462

Power_Spectral_Density_NVNT_ANT1_802_11g_2412



Power_Spectral_Density_NVNT_ANT1_802_11g_2437



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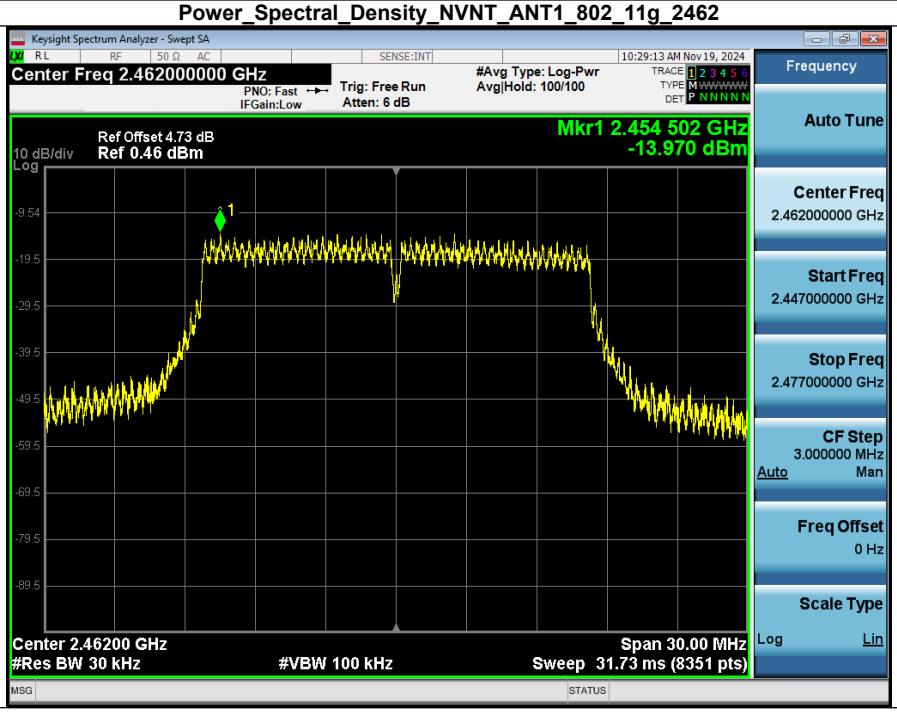
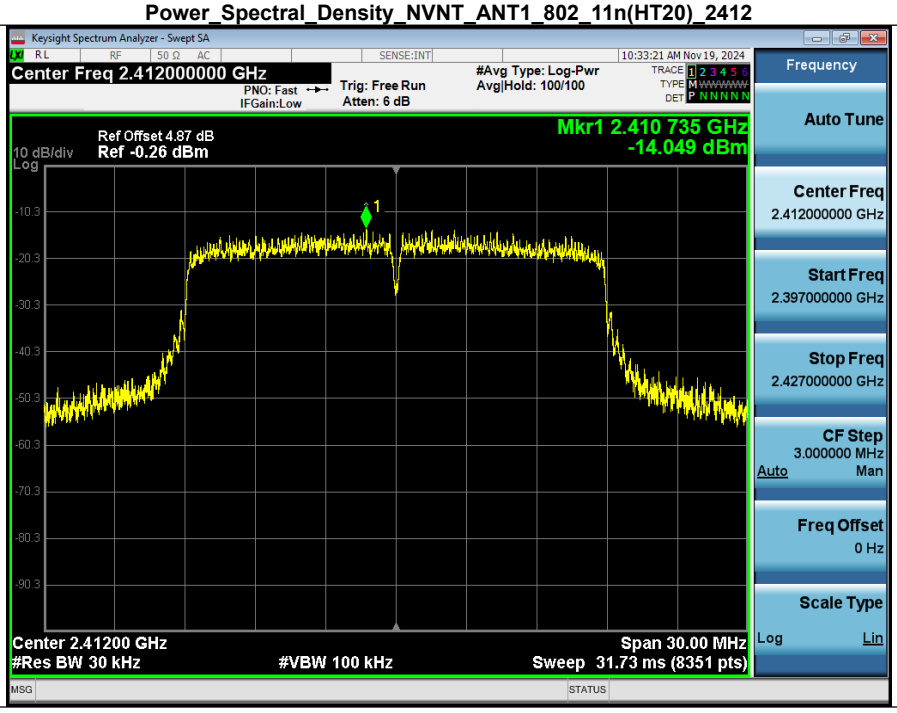


Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2412



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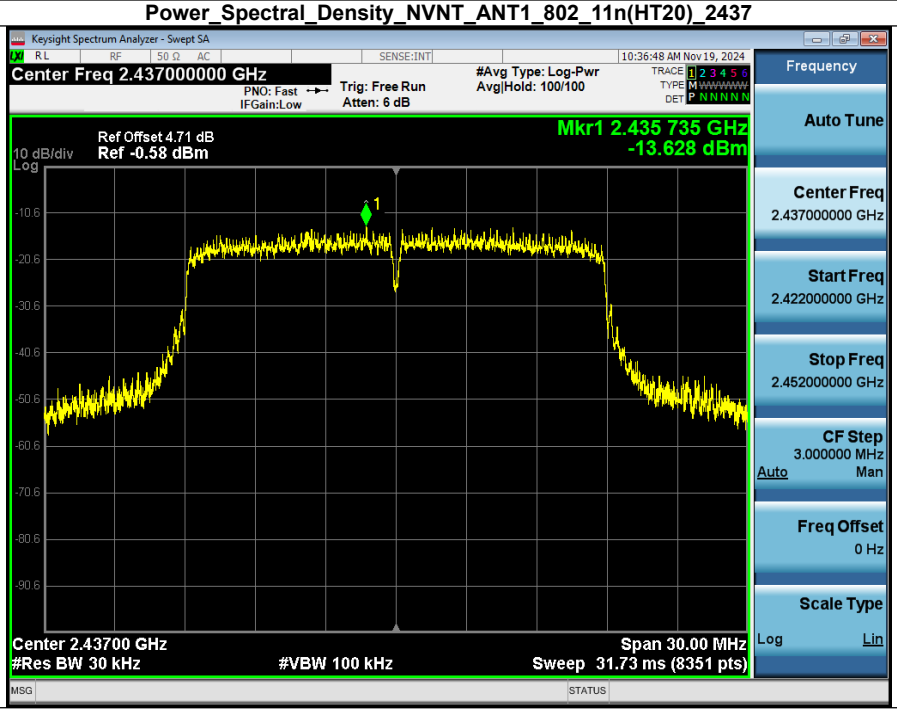
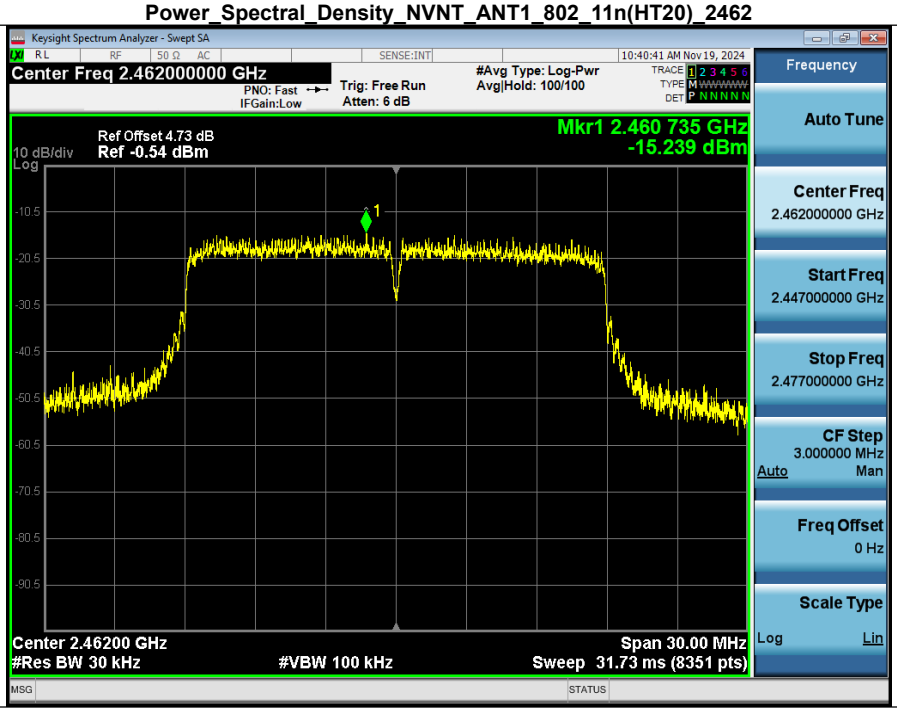
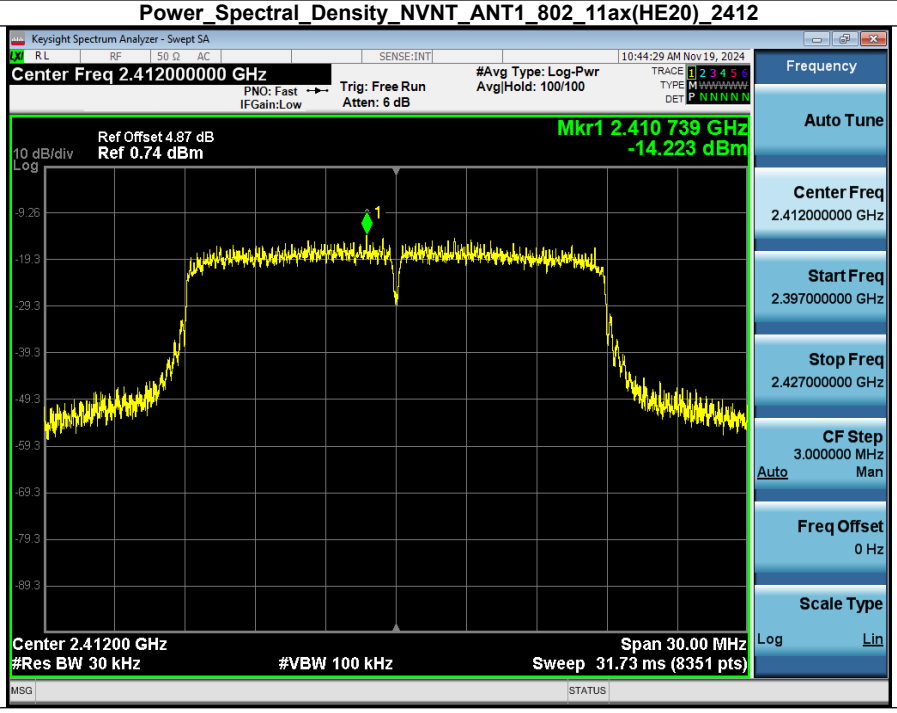


Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2462



Power_Spectral_Density_NVNT_ANT1_802_11ax(HE20)_2412



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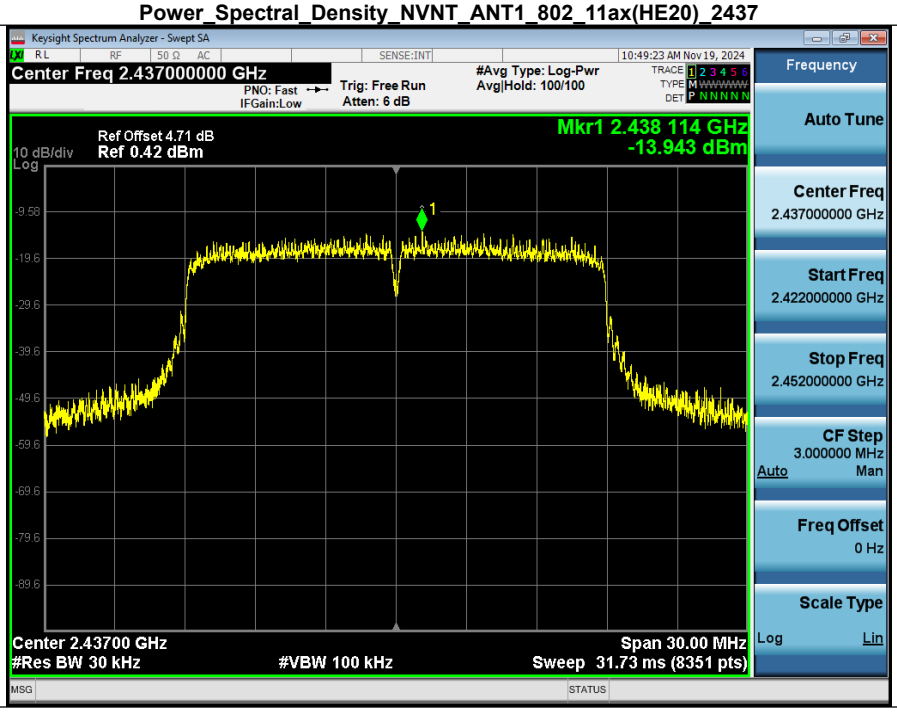

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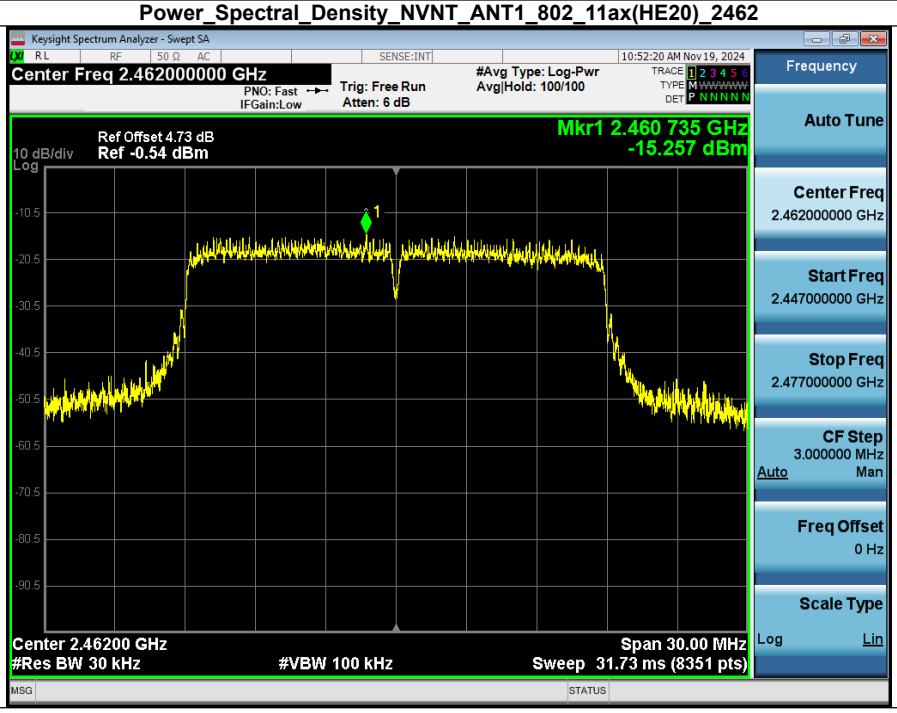
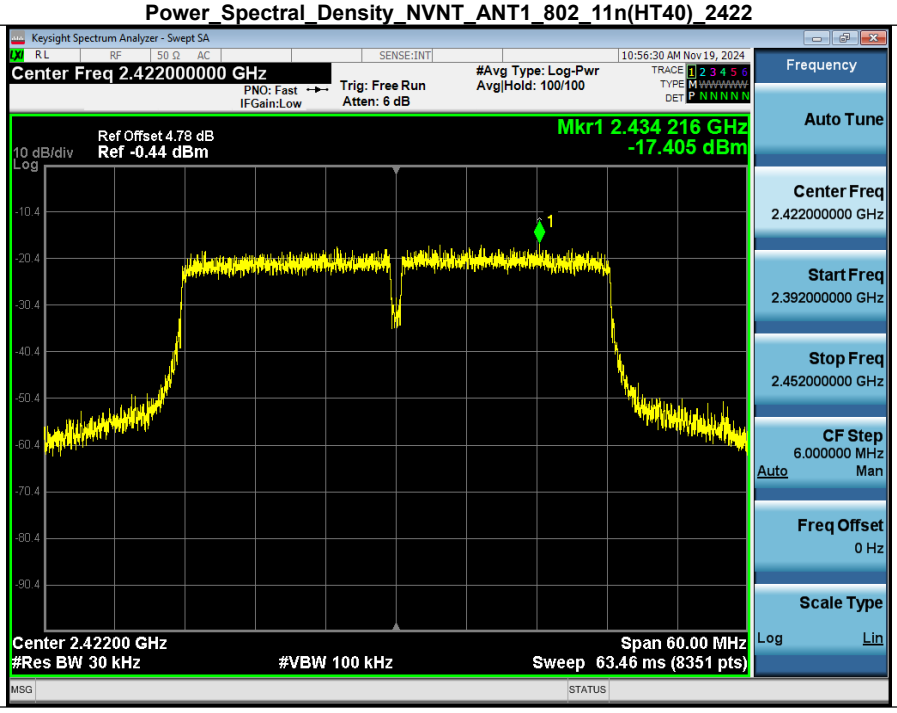
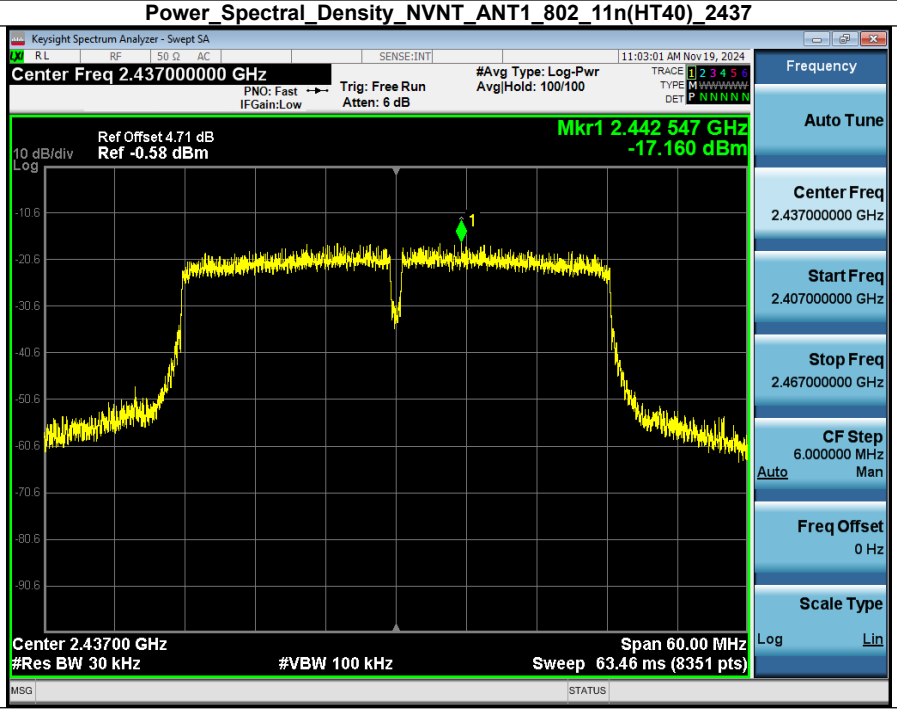


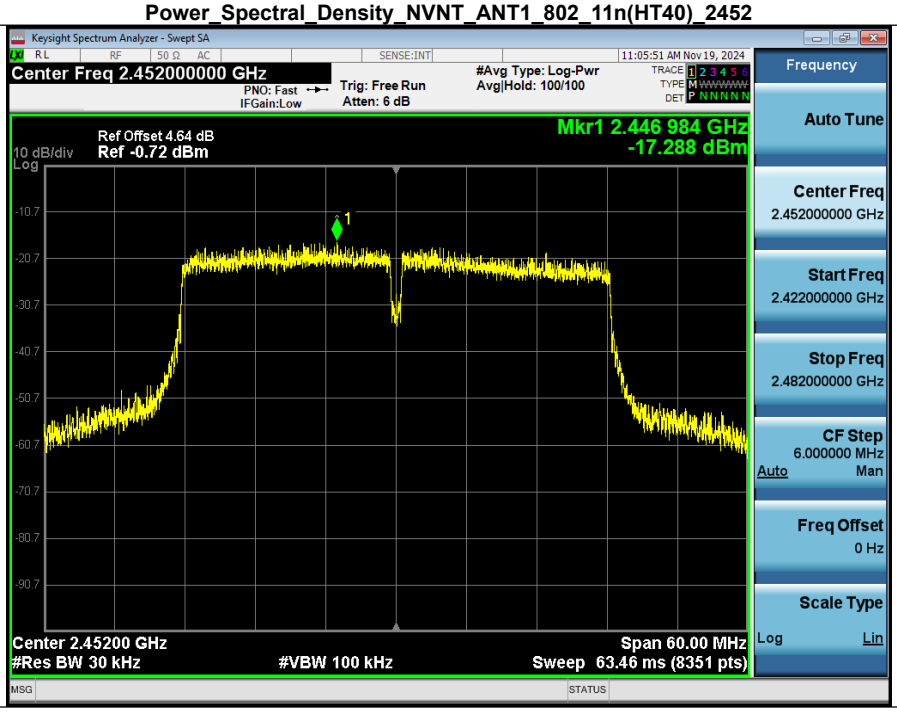
Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2422



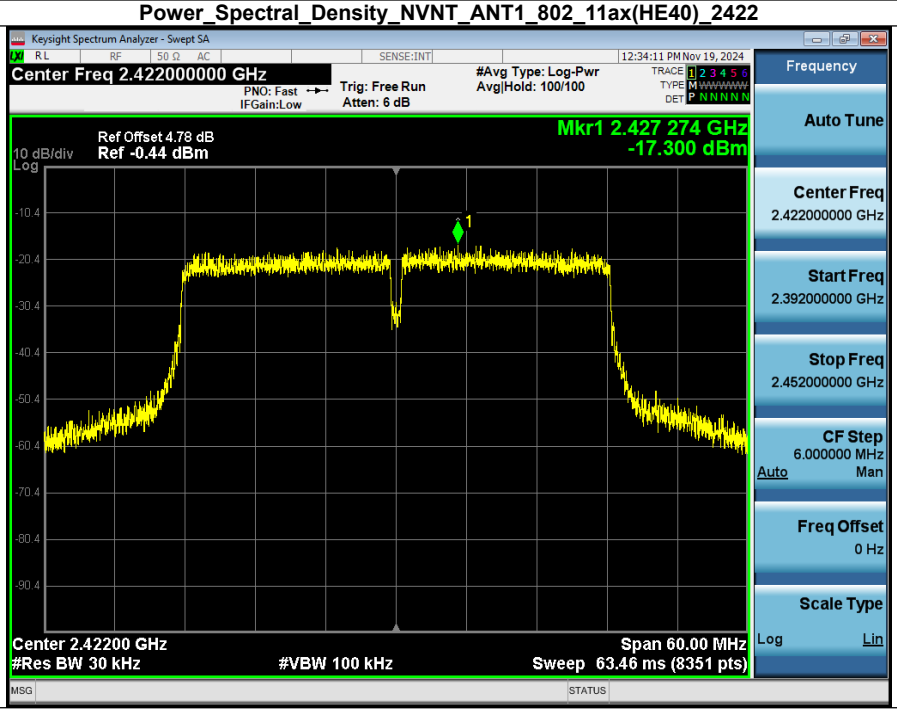
Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2437



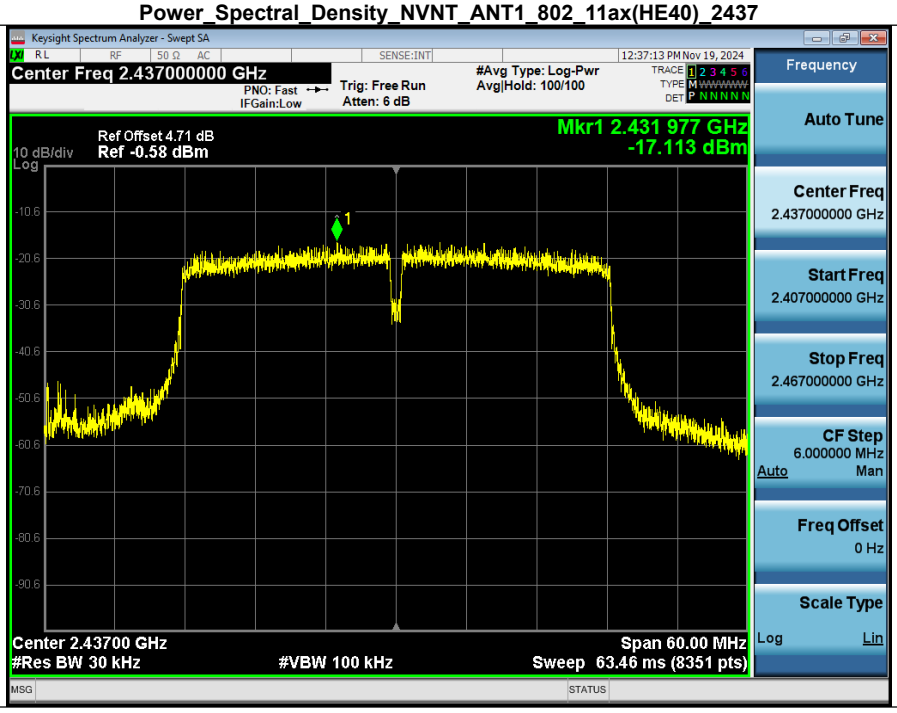
Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2452



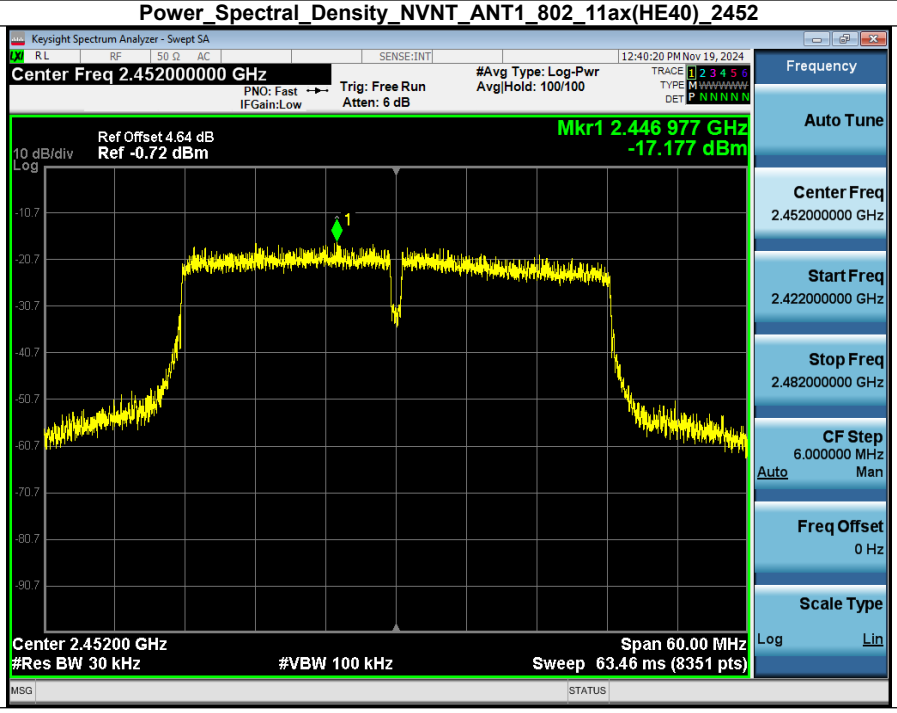
Power_Spectral_Density_NVNT_ANT1_802_11ax(HE40)_2422



Power_Spectral_Density_NVNT_ANT1_802_11ax(HE40)_2437



Power_Spectral_Density_NVNT_ANT1_802_11ax(HE40)_2452

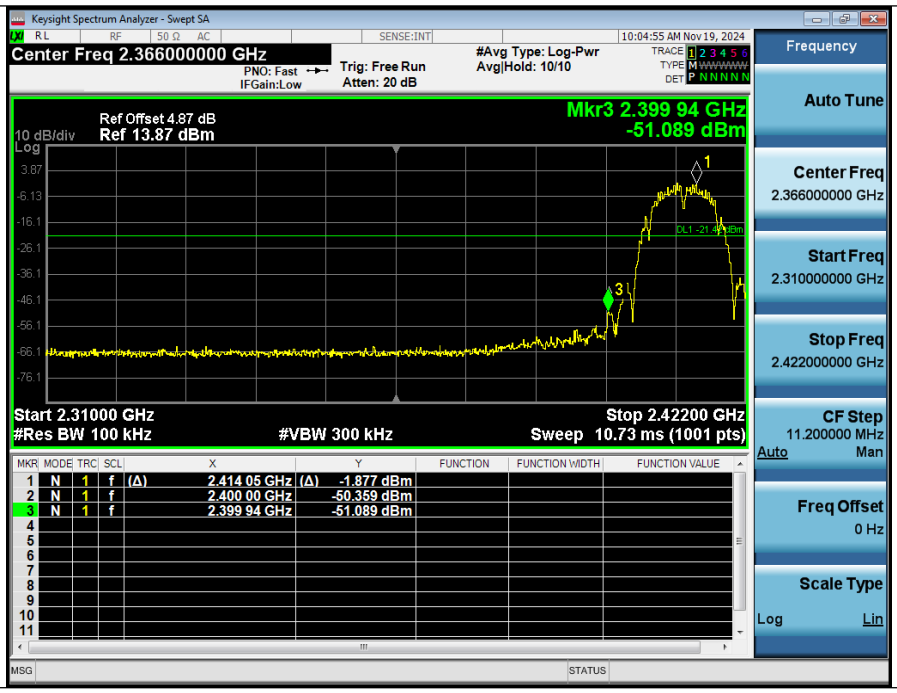


6. Bandedge

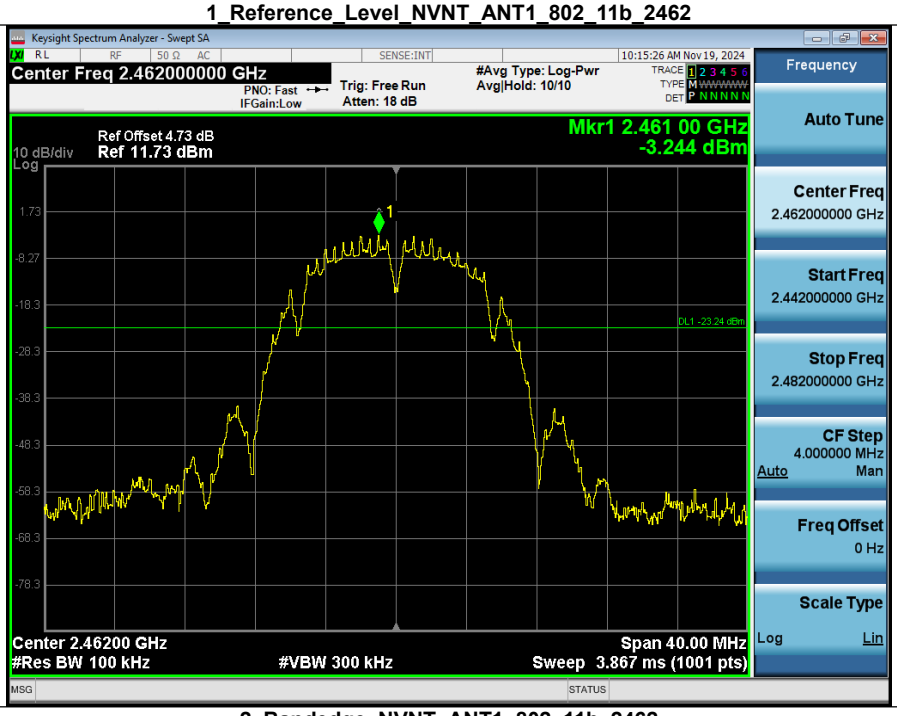
Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	2399.936	-51.089	-21.416	Pass
NVNT	ANT1	802.11b	2462.00	2485.984	-62.561	-23.244	Pass
NVNT	ANT1	802.11g	2412.00	2399.824	-41.393	-31.355	Pass
NVNT	ANT1	802.11g	2462.00	2483.920	-54.888	-29.375	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2398.816	-41.670	-29.255	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2484.256	-53.654	-30.591	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	2399.712	-38.945	-29.958	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	2483.824	-53.995	-30.539	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	2399.760	-42.669	-32.721	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	2483.544	-52.899	-32.554	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	2399.760	-43.377	-32.700	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	2483.544	-52.085	-32.453	Pass

1_Reference_Level_NVNT_ANT1_802_11b_2412

2_Bandedge_NVNT_ANT1_802_11b_2412

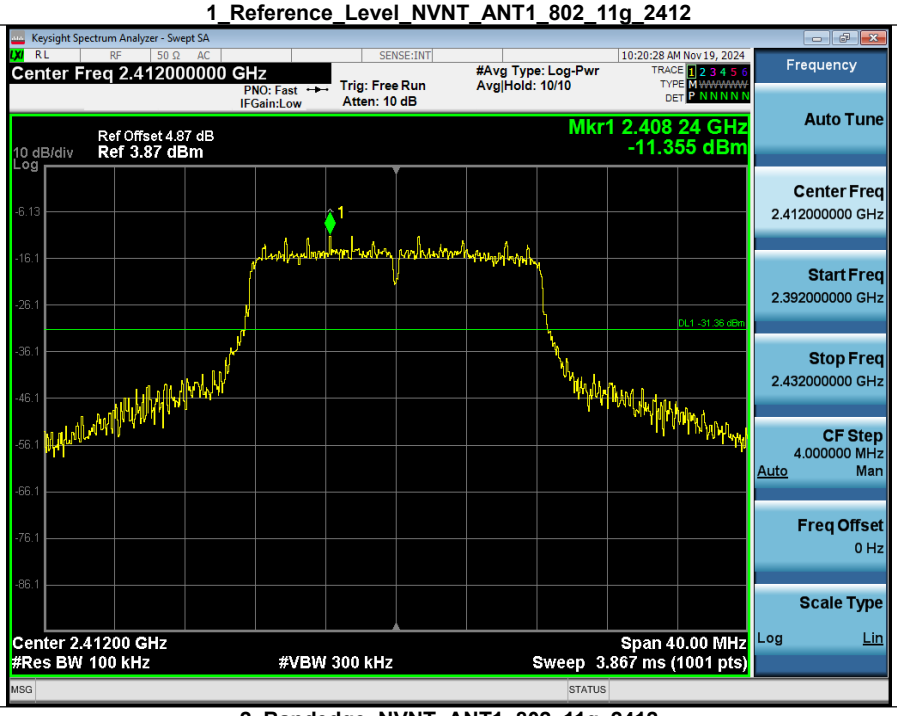


1_Reference_Level_NVNT_ANT1_802_11b_2462

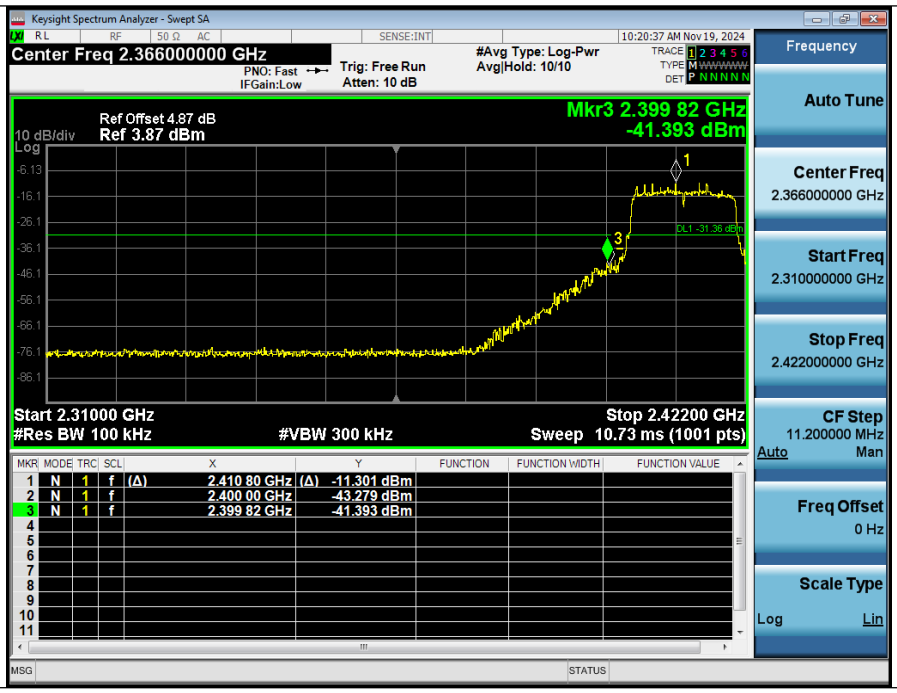


2_Bandedge_NVNT_ANT1_802_11b_2462

1_Reference_Level_NVNT_ANT1_802_11g_2412



2_Bandedge_NVNT_ANT1_802_11g_2412



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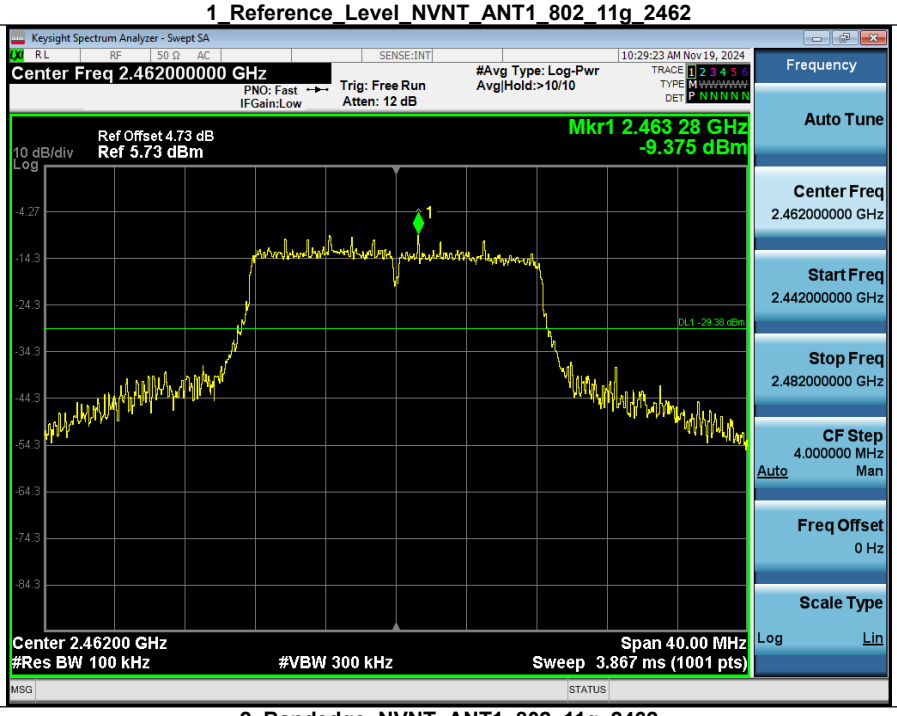

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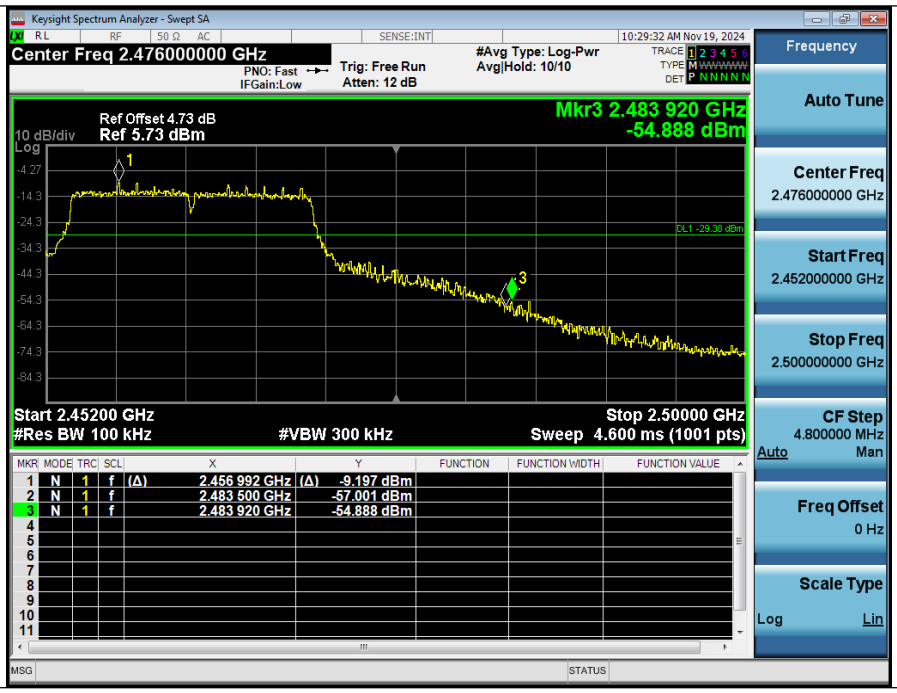
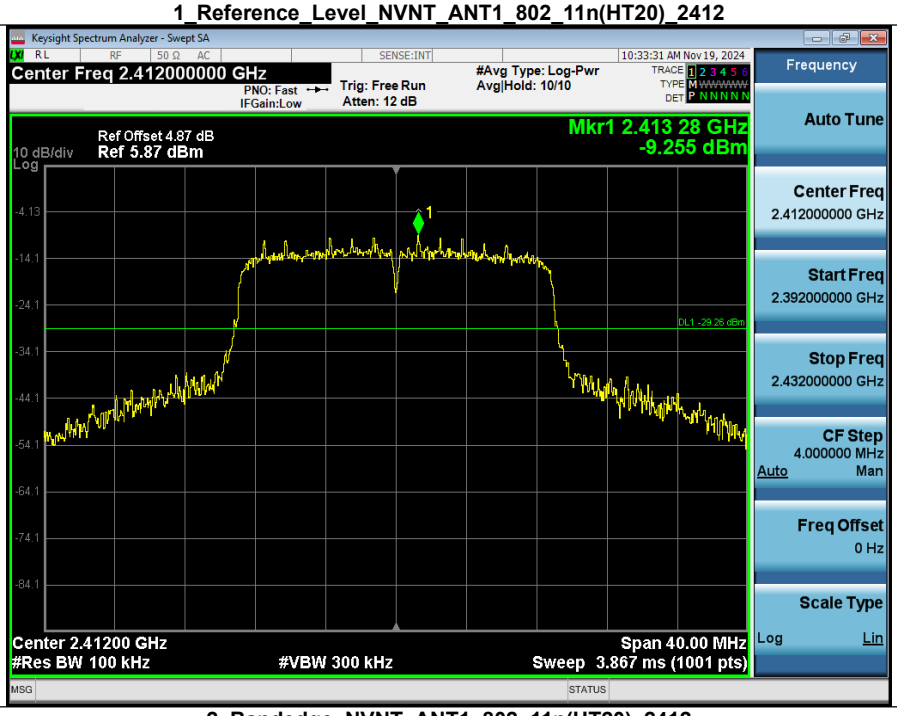
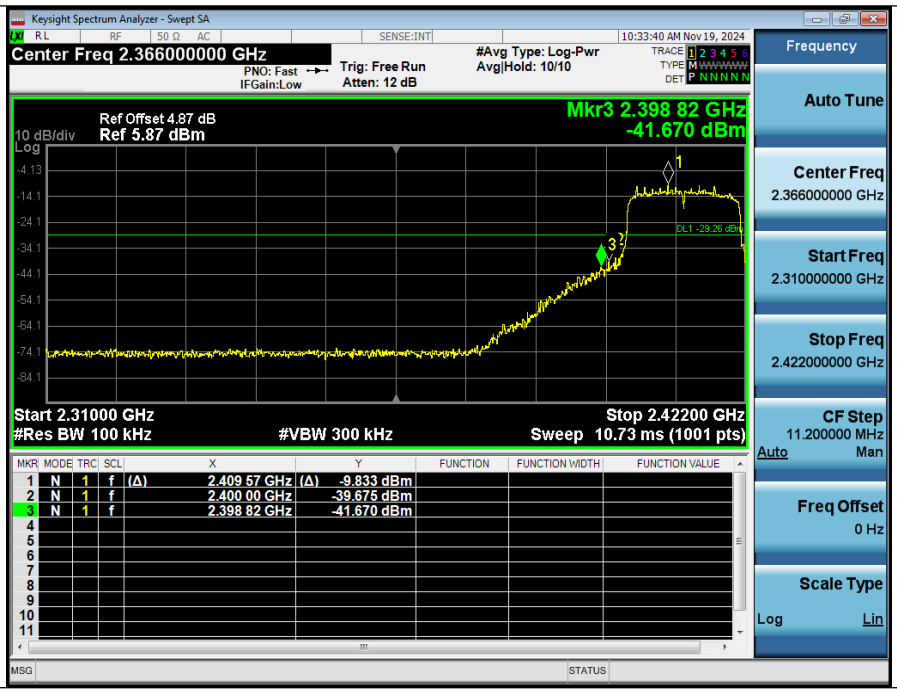


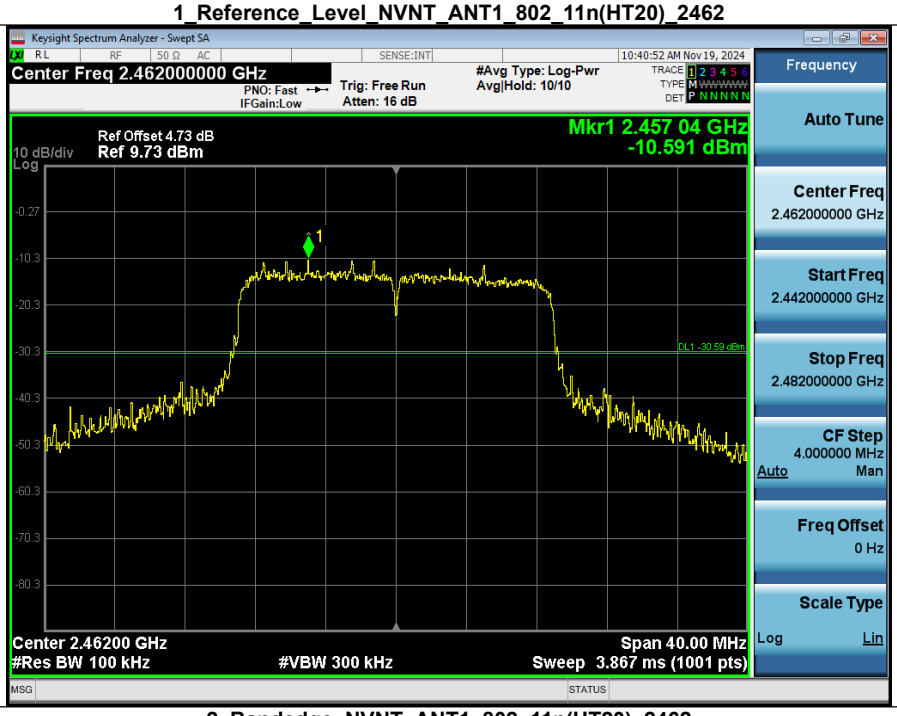
1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2412



2_Bandedge_NVNT_ANT1_802_11n(HT20)_2412

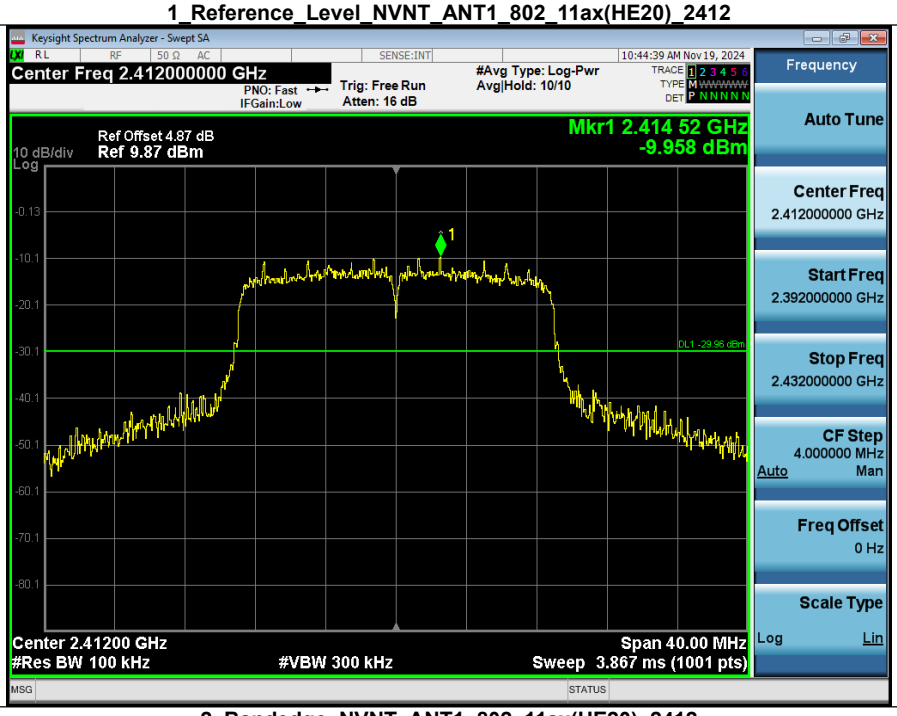


1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2462

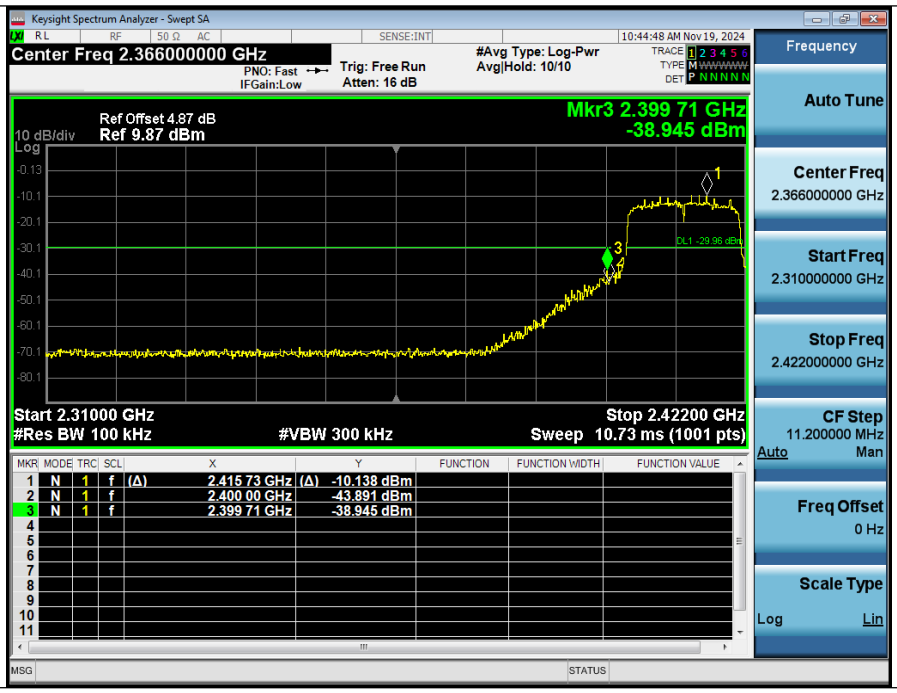


2_Bandedge_NVNT_ANT1_802_11n(HT20)_2462

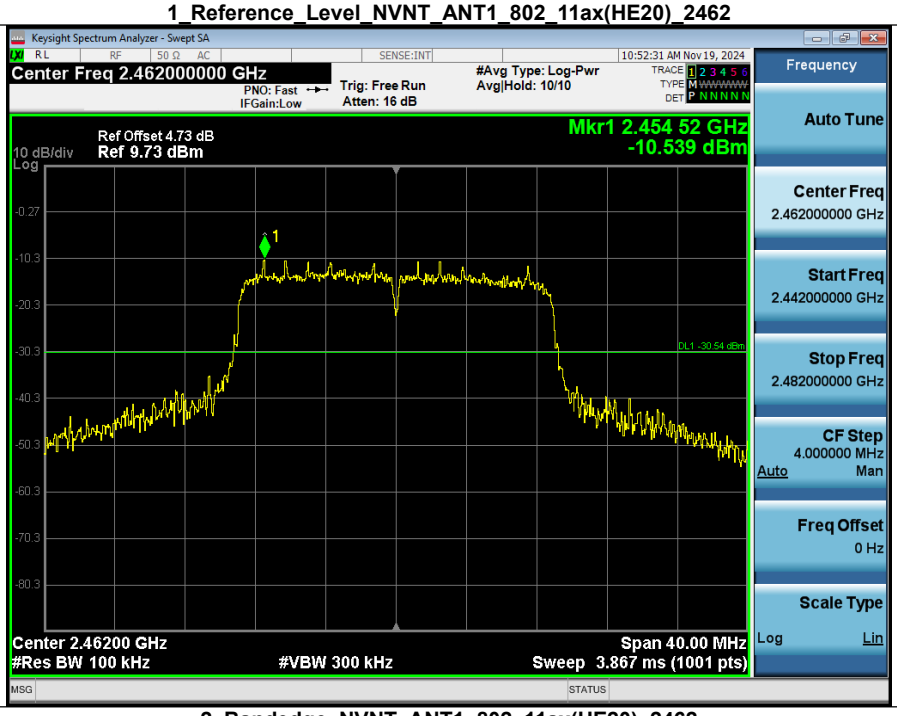
1_Reference_Level_NVNT_ANT1_802_11ax(HE20)_2412



2_Bandedge_NVNT_ANT1_802_11ax(HE20)_2412

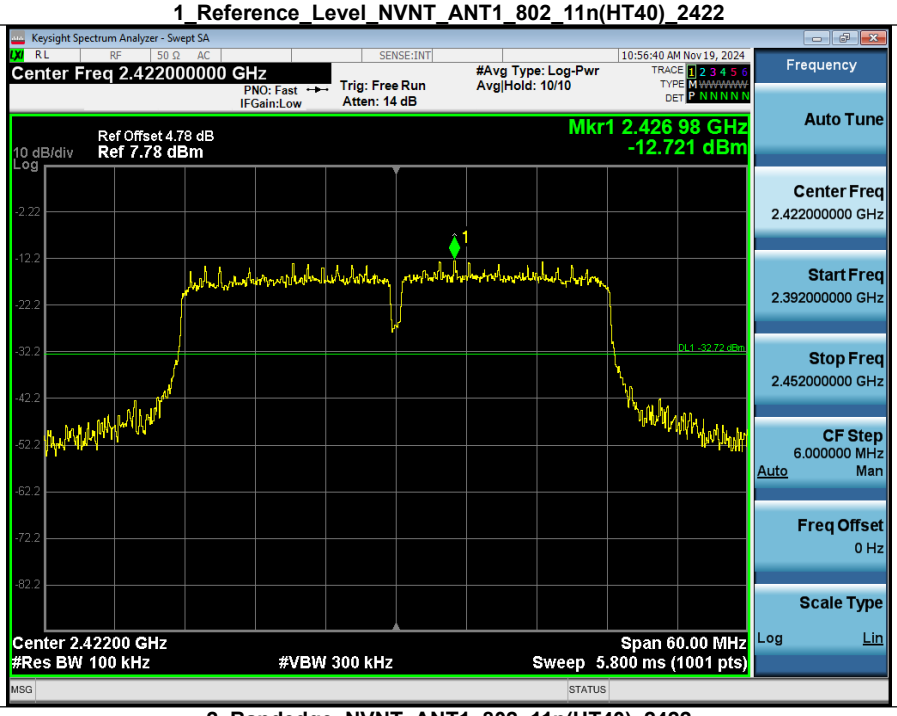


1_Reference_Level_NVNT_ANT1_802_11ax(HE20)_2462



2_Bandedge_NVNT_ANT1_802_11ax(HE20)_2462

1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2422



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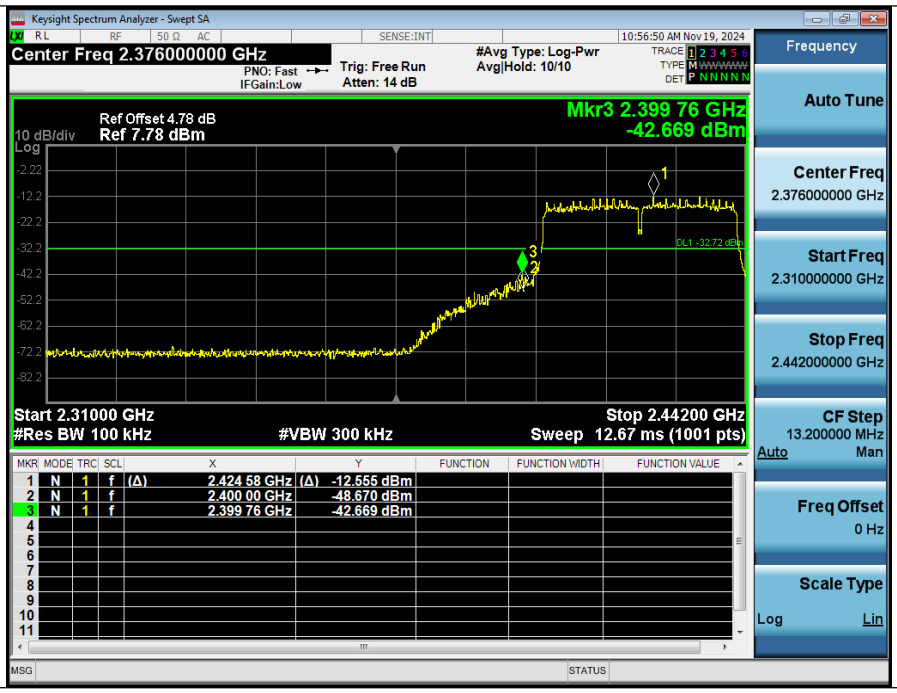

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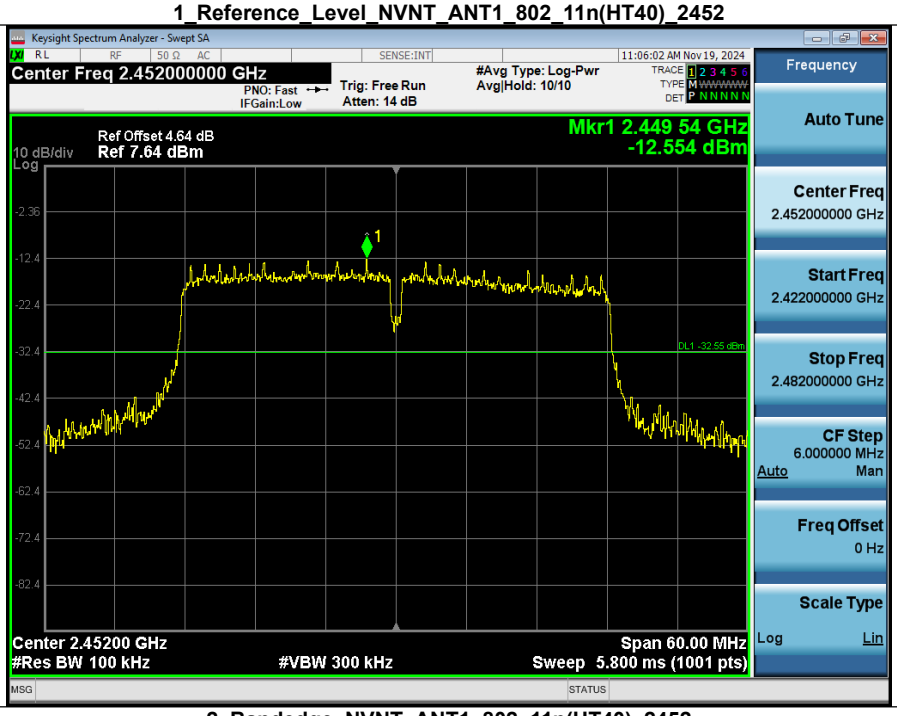
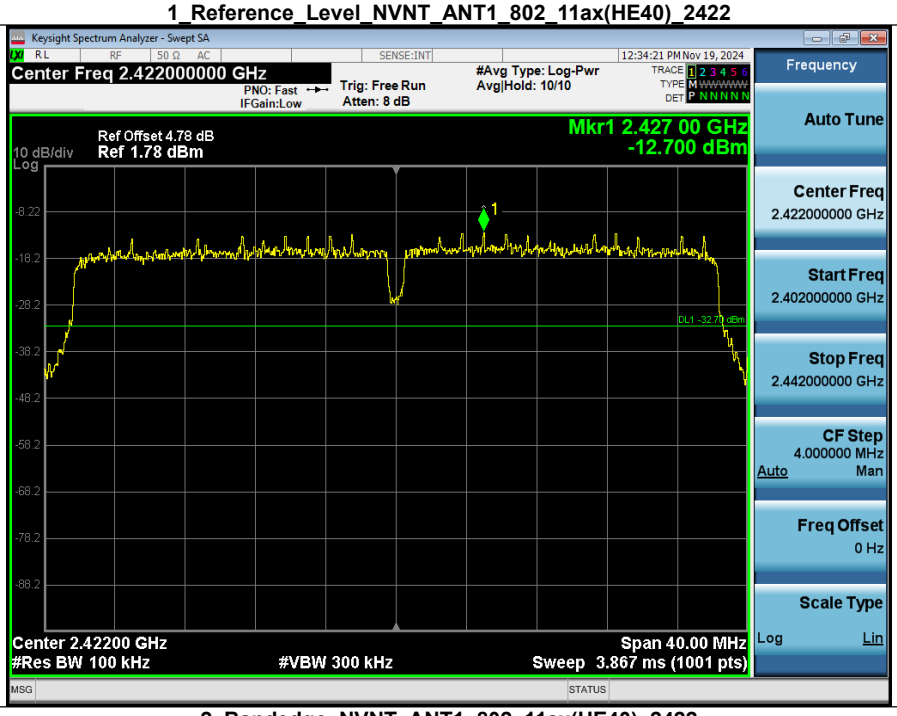


2_Bandedge_NVNT_ANT1_802_11n(HT40)_2452

1_Reference_Level_NVNT_ANT1_802_11ax(HE40)_2422



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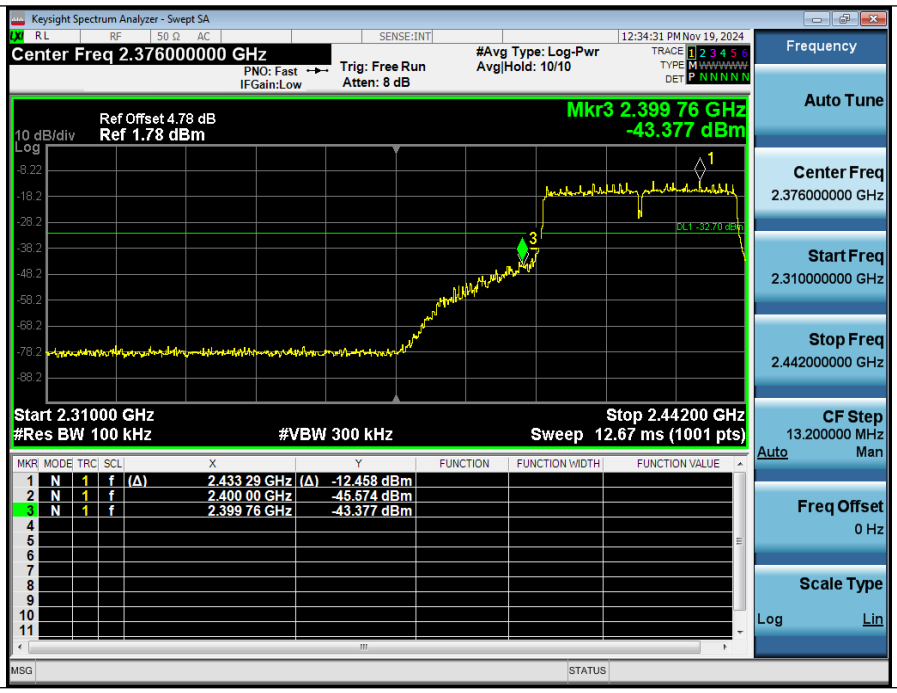
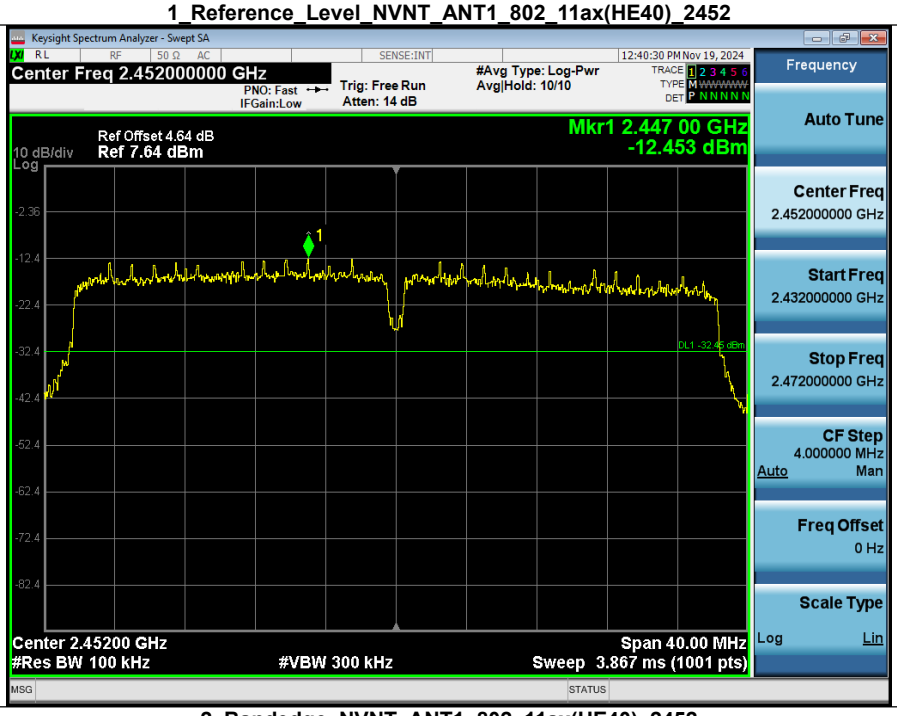


1_Reference_Level_NVNT_ANT1_802_11ax(HE40)_2452



2_Bandedge_NVNT_ANT1_802_11ax(HE40)_2452

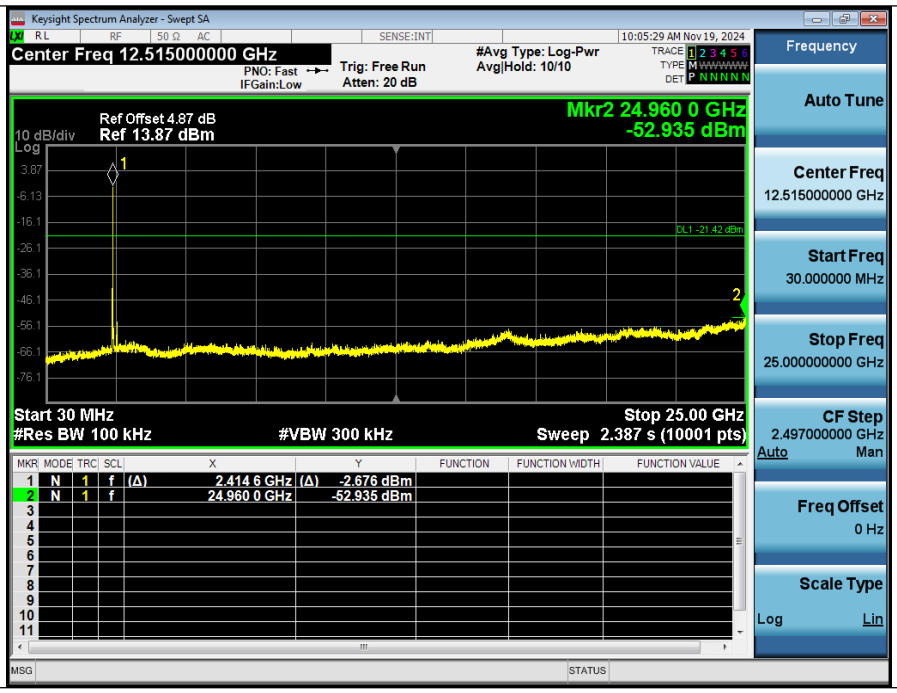
Keysight Spectrum Analyzer - Swept SA
Center Freq 2.466000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 14 dB
#Avg Type: Log-Pwr
Avg|Hold: 10/10
12:40:39 PM Nov 19, 2024
Ref Offset 4.64 dB
10 dB/div
Ref 7.64 dBm
Mkr3 2.483 544 GHz
-52.085 dBm
DL1 -32.45 dBm
Start 2.43200 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.50000 GHz
Sweep 6.533 ms (1001 pts)
1 N 1 f (Δ) 2.445 736 GHz (Δ) -12.516 dBm
2 N 1 f 2.483 500 GHz -55.475 dBm
3 N 1 f 2.483 544 GHz -52.085 dBm
Frequency
Auto Tune
Center Freq
2.466000000 GHz
Start Freq
2.432000000 GHz
Stop Freq
2.500000000 GHz
CF Step
6.800000 MHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin

7. Spurious Emission

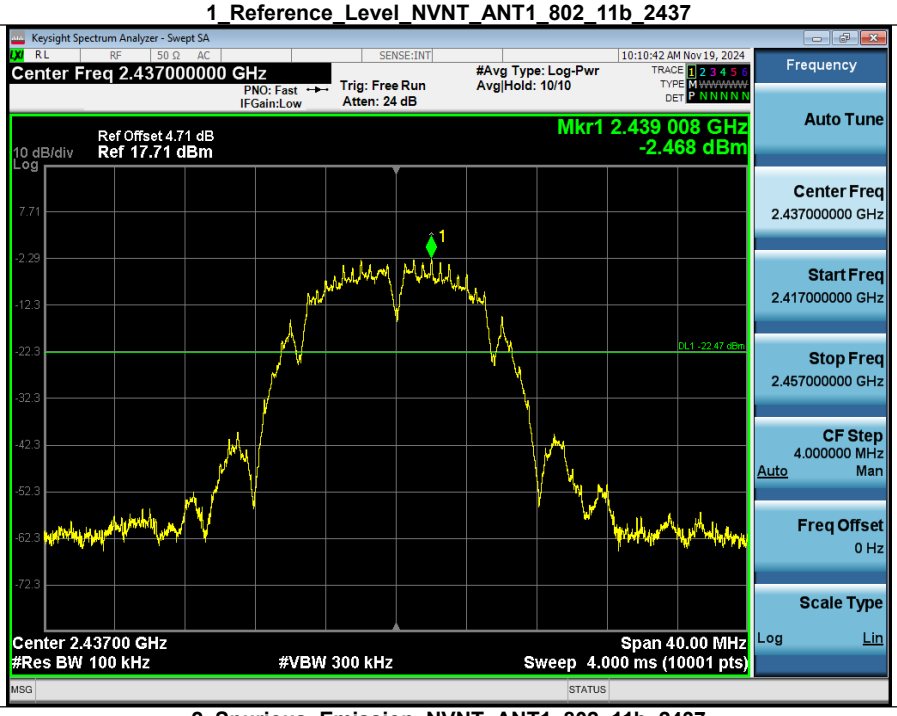
Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	24960.048	-52.935	-21.416	Pass
NVNT	ANT1	802.11b	2437.00	24745.306	-49.167	-22.468	Pass
NVNT	ANT1	802.11b	2462.00	24897.623	-54.657	-23.244	Pass
NVNT	ANT1	802.11g	2412.00	24990.012	-63.538	-31.355	Pass
NVNT	ANT1	802.11g	2437.00	24992.509	-55.065	-28.943	Pass
NVNT	ANT1	802.11g	2462.00	24742.809	-61.616	-29.375	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	24977.527	-61.095	-29.255	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	24922.593	-54.926	-29.350	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	24992.509	-57.204	-30.591	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	24922.593	-56.135	-29.958	Pass
NVNT	ANT1	802.11ax(HE20)	2437.00	24605.474	-57.200	-30.088	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	2522.006	-45.442	-30.539	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	714.178	-43.476	-32.721	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	24922.593	-59.258	-32.240	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	24967.539	-58.234	-32.554	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	711.681	-53.949	-32.700	Pass
NVNT	ANT1	802.11ax(HE40)	2437.00	726.663	-52.325	-32.157	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	704.190	-36.474	-32.453	Pass

1_Reference_Level_NVNT_ANT1_802_11b_2412

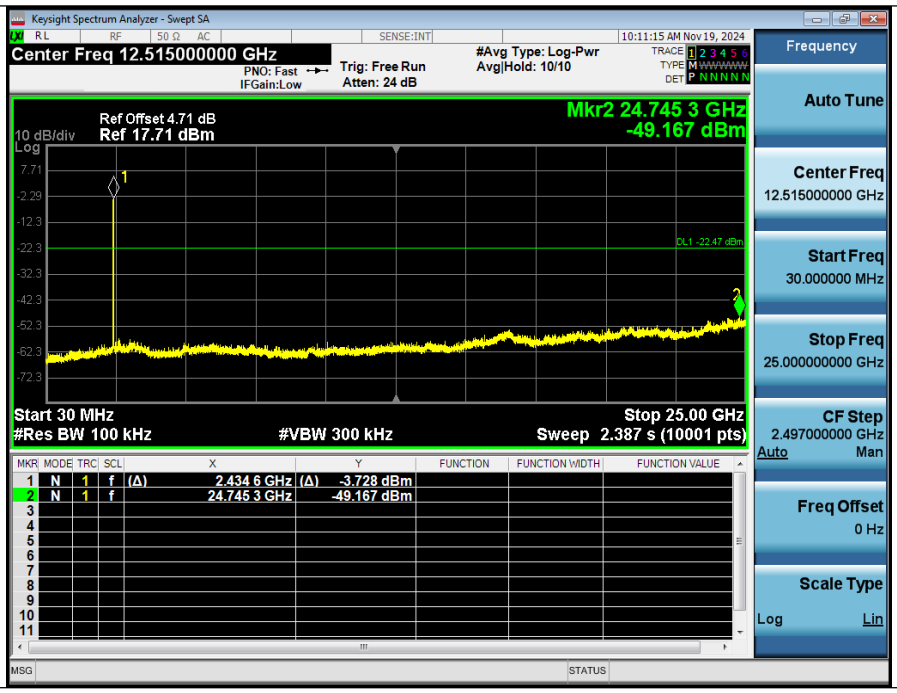
2_Spurious_Emission_NVNT_ANT1_802_11b_2412



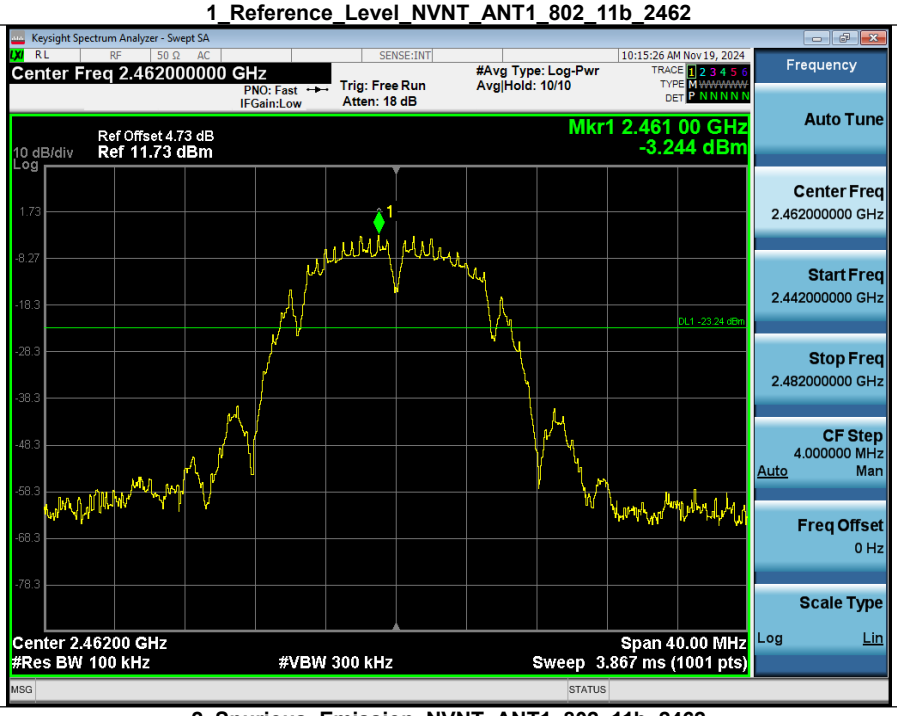
1_Reference_Level_NVNT_ANT1_802_11b_2437



2_Spurious_Emission_NVNT_ANT1_802_11b_2437



1_Reference_Level_NVNT_ANT1_802_11b_2462



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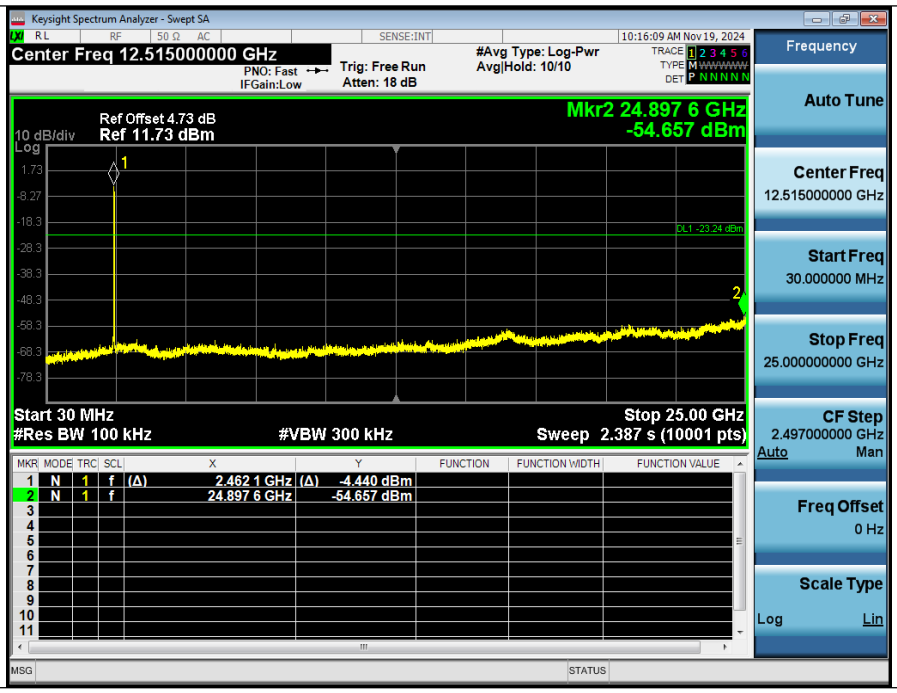
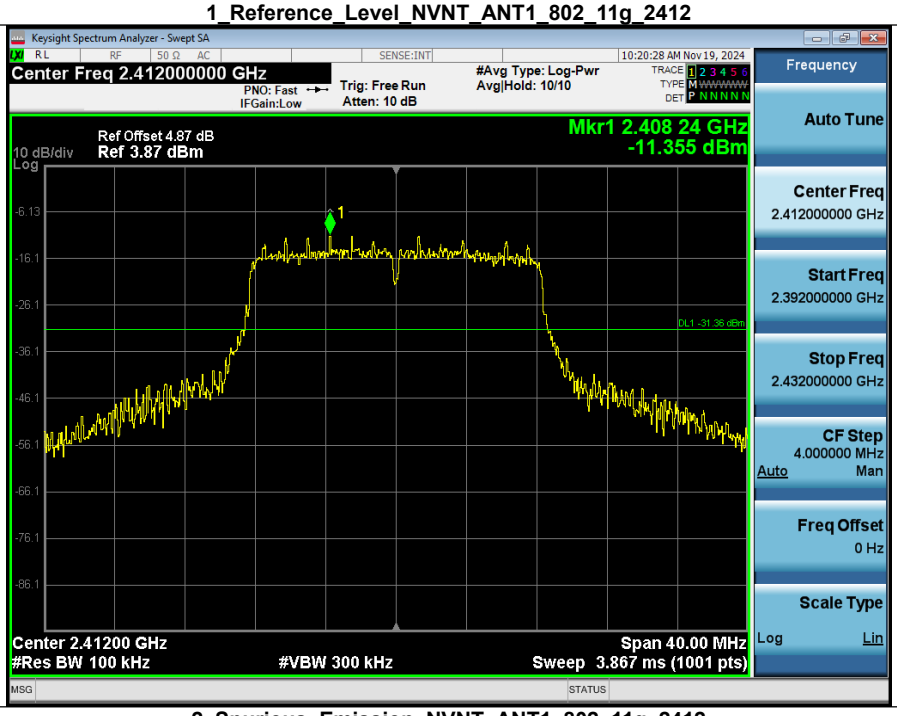
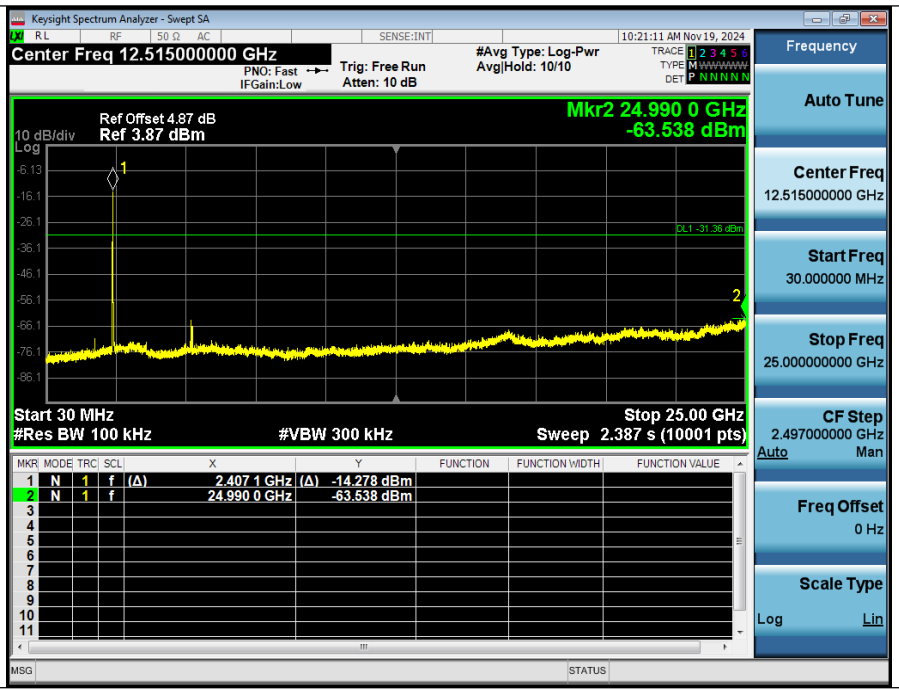


1_Reference_Level_NVNT_ANT1_802_11g_2412



2_Spurious_Emission_NVNT_ANT1_802_11g_2412



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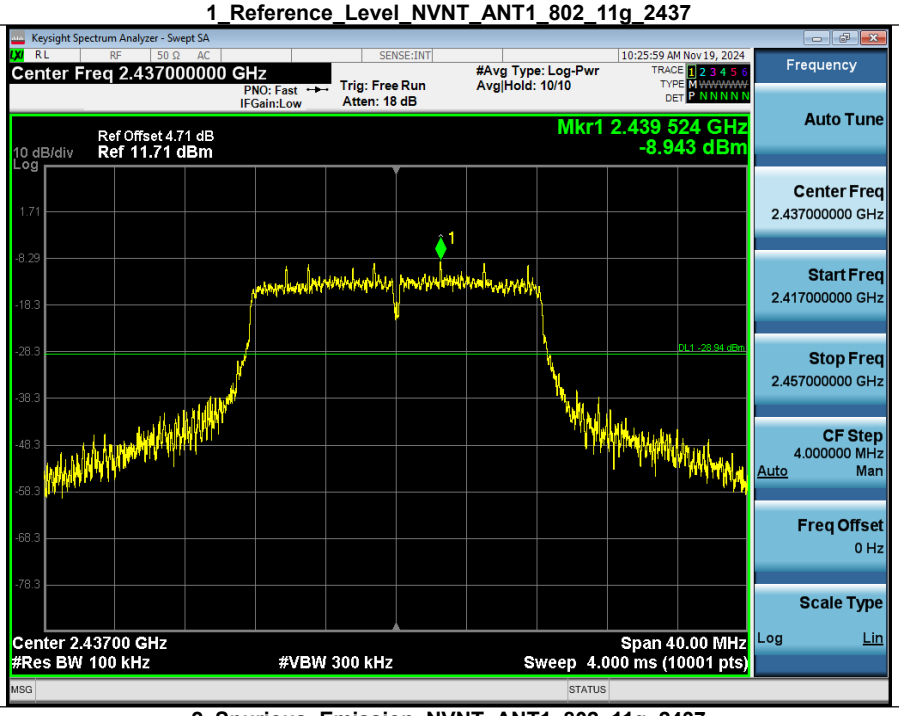

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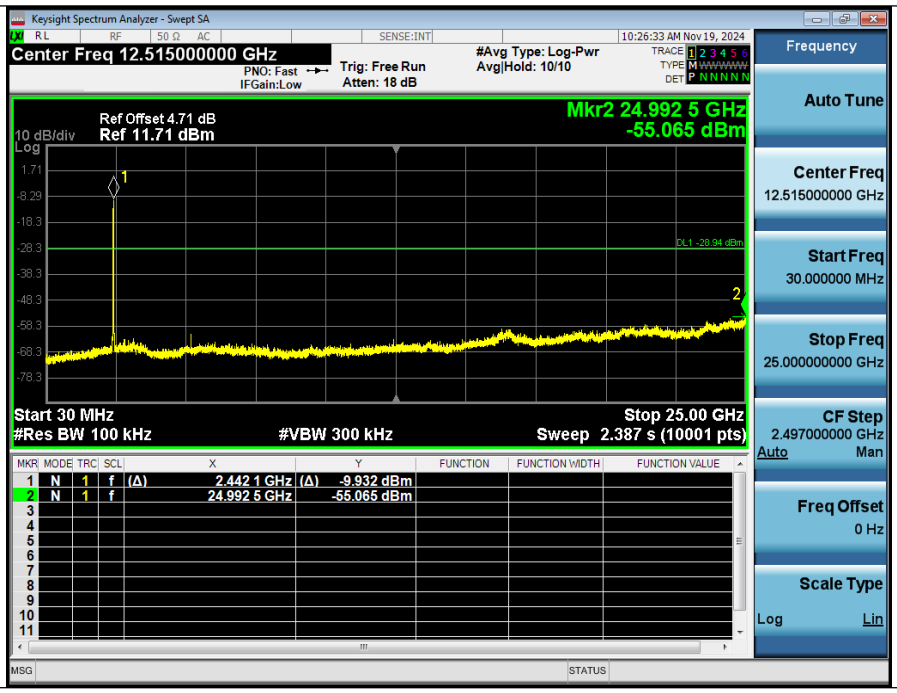
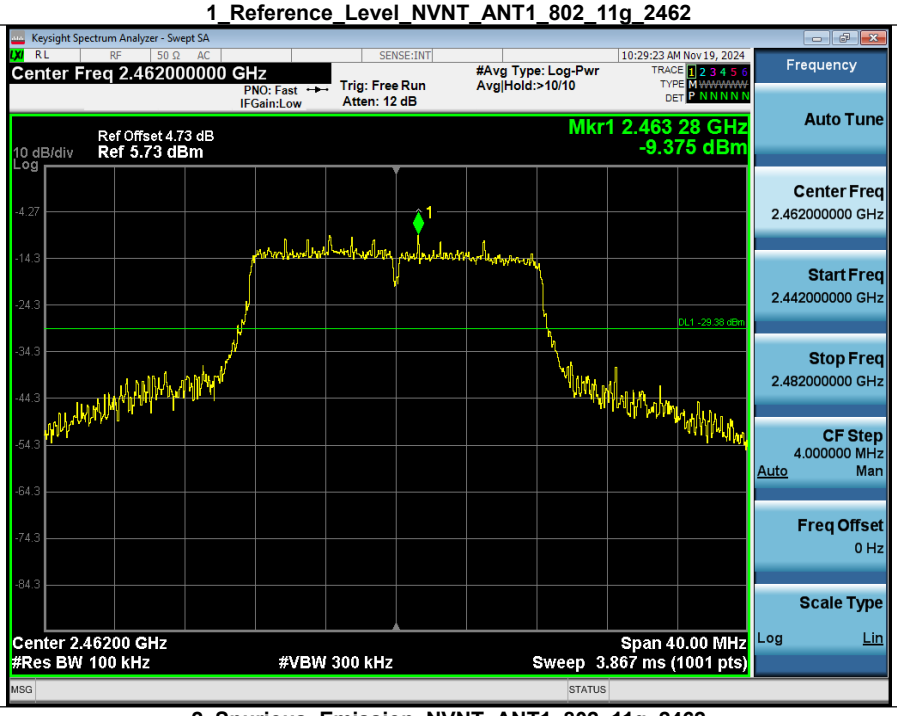


1_Reference_Level_NVNT_ANT1_802_11g_2462



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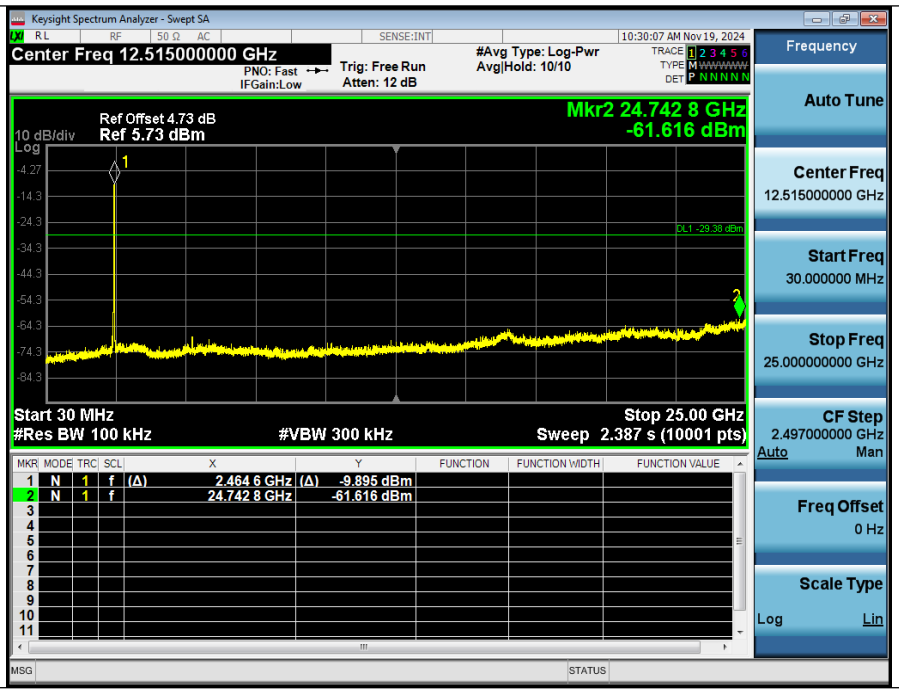
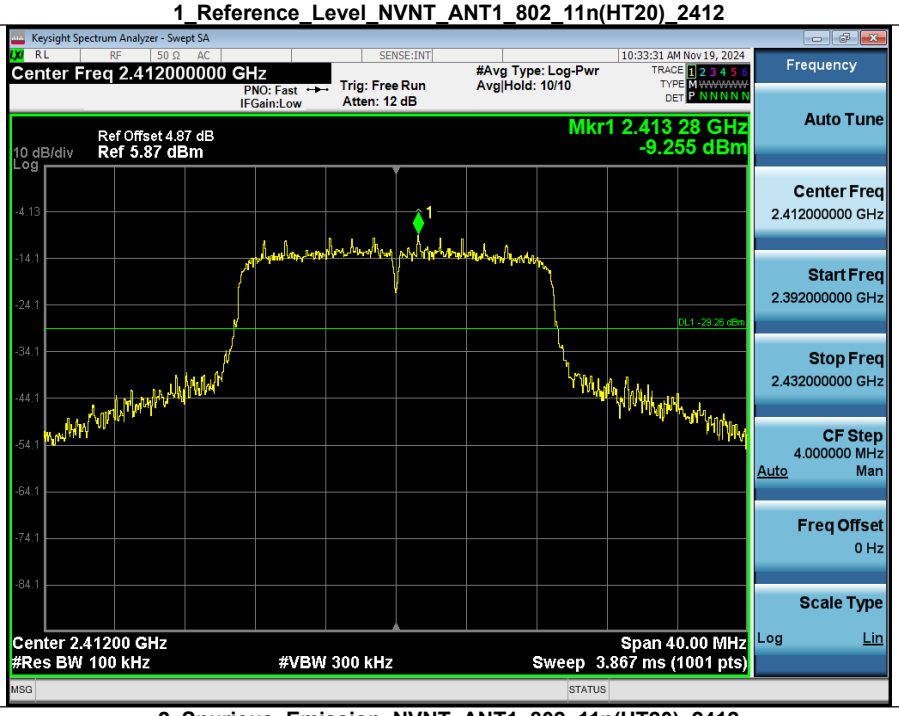


1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2412



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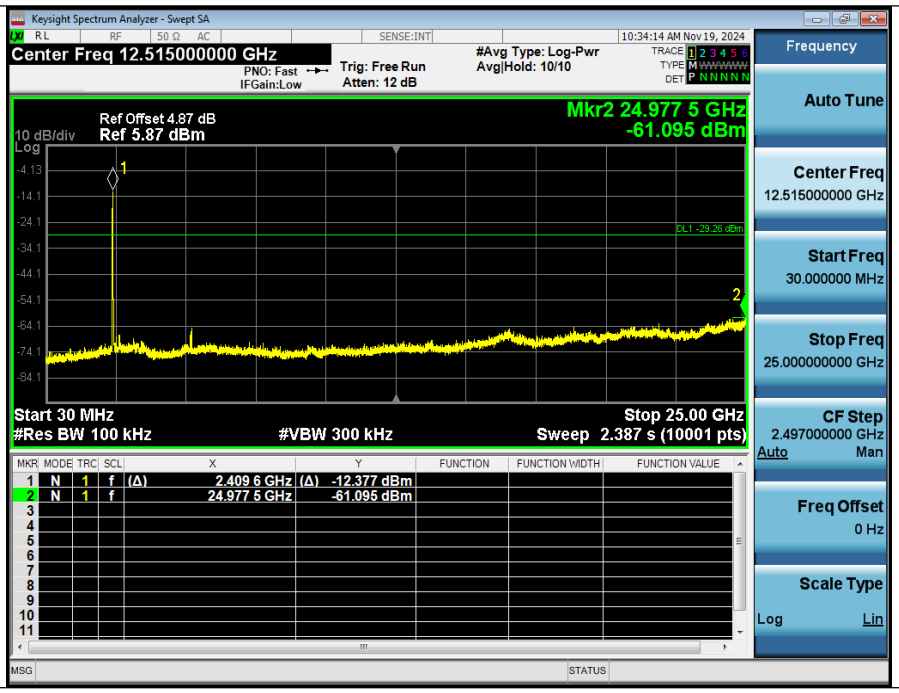

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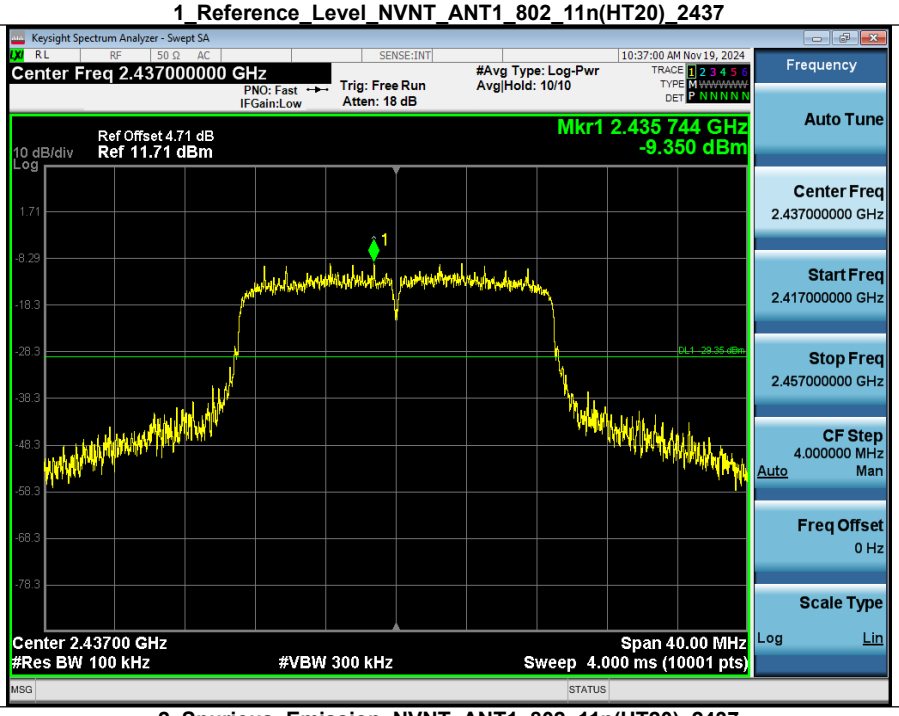

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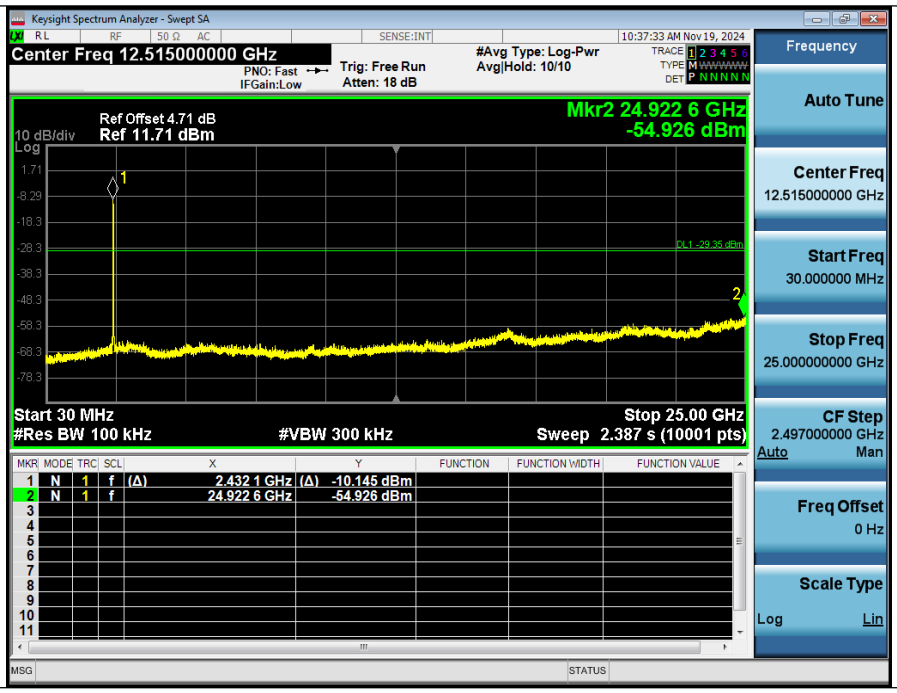
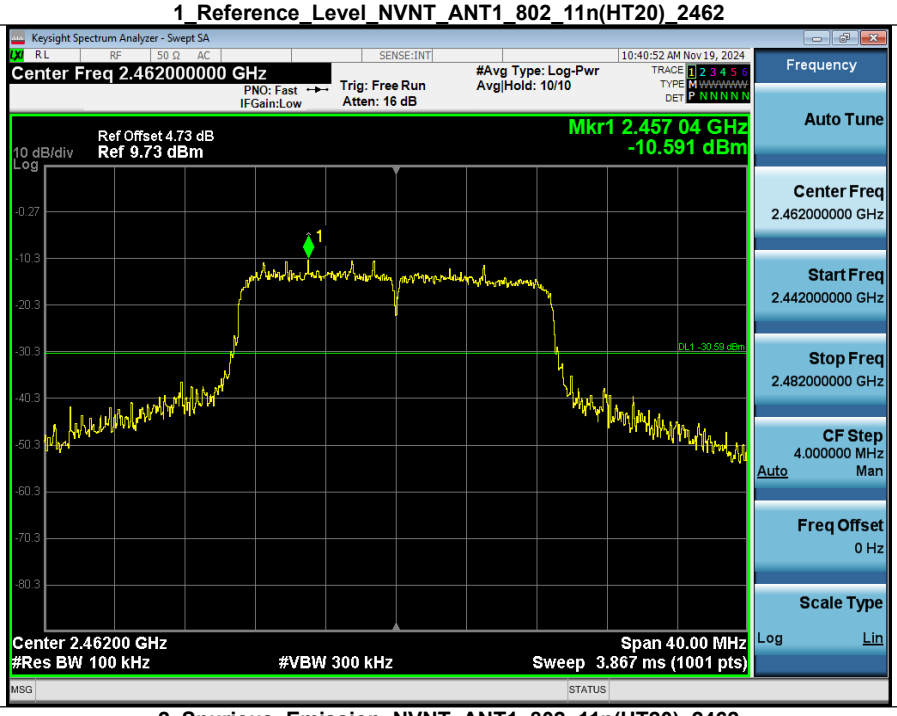


1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2462



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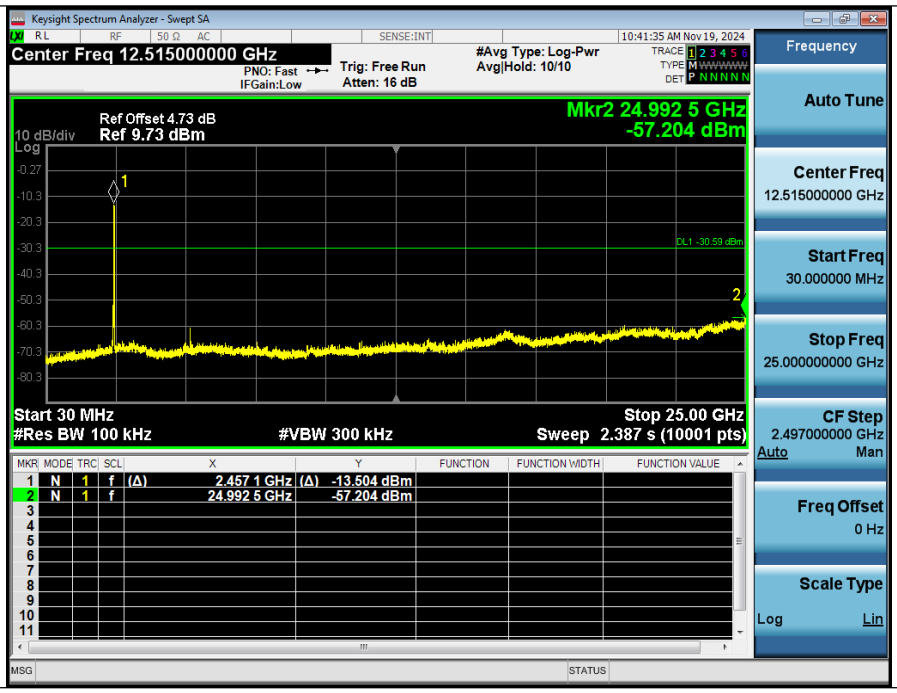
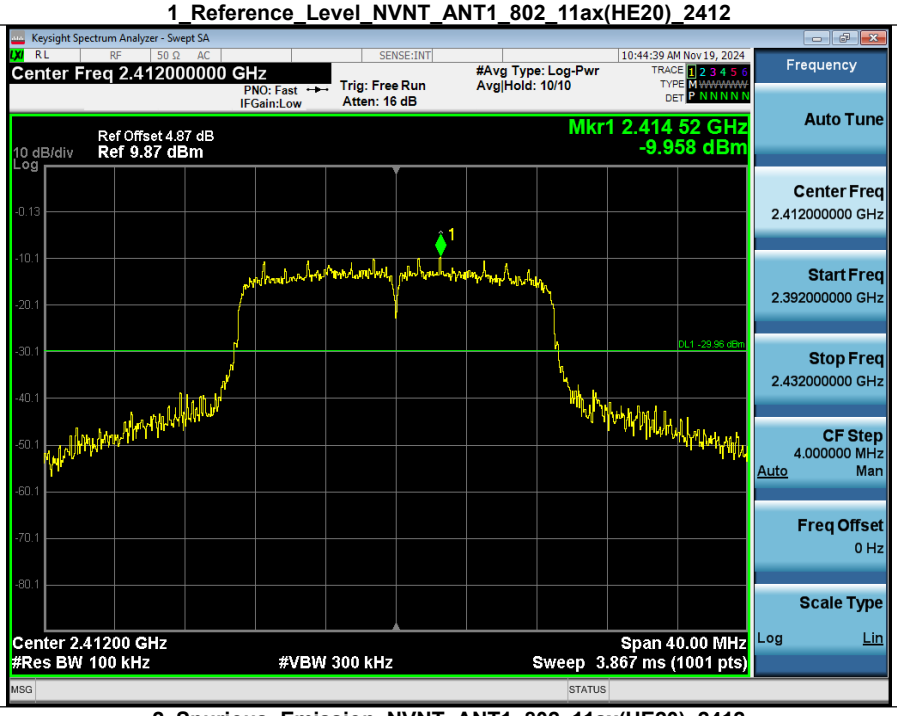
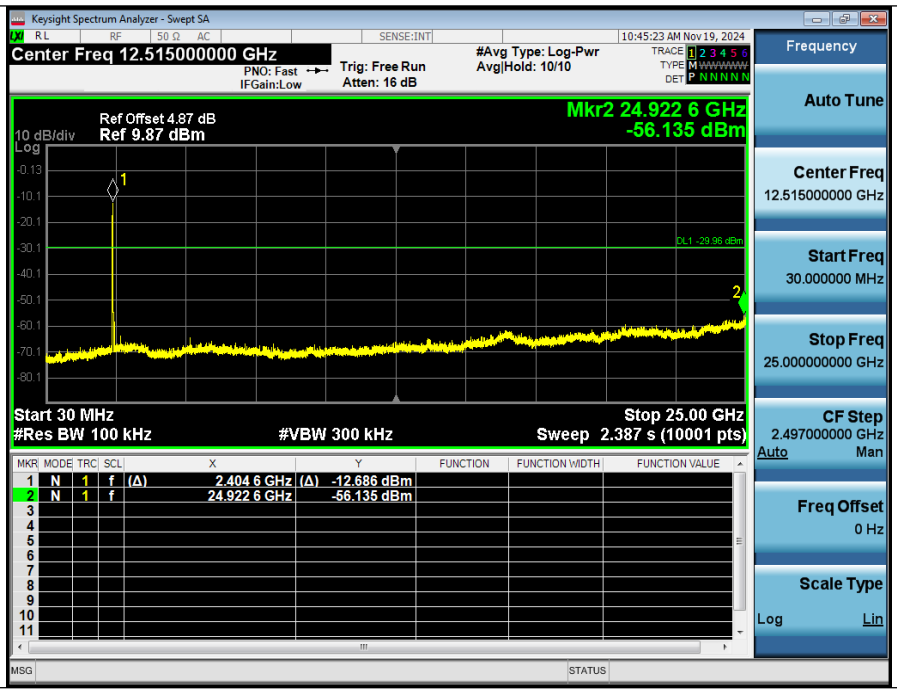


1_Reference_Level_NVNT_ANT1_802_11ax(HE20)_2412



2_Spurious_Emission_NVNT_ANT1_802_11ax(HE20)_2412



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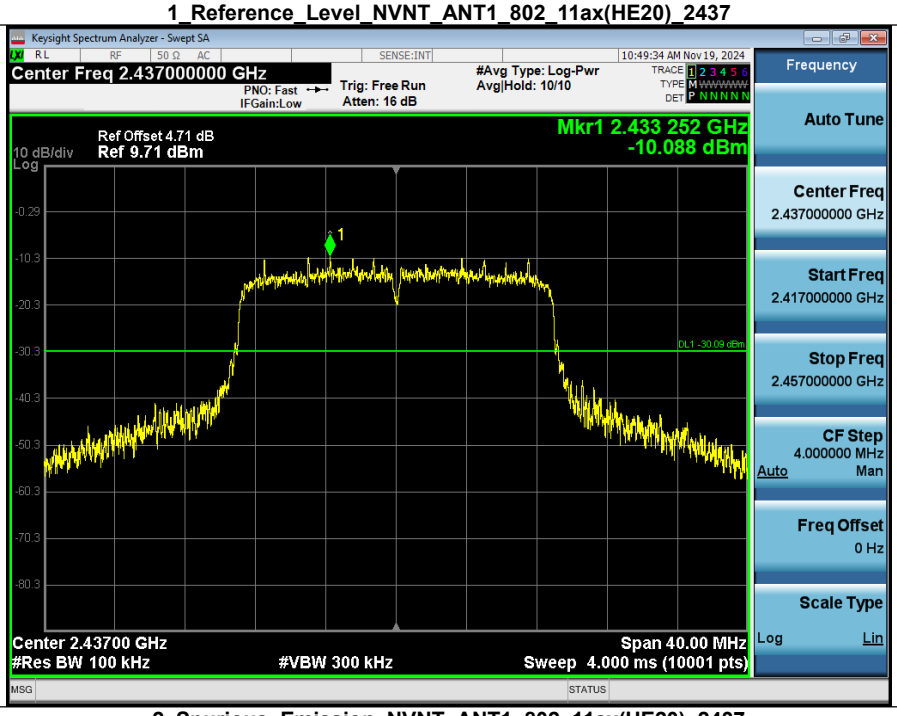
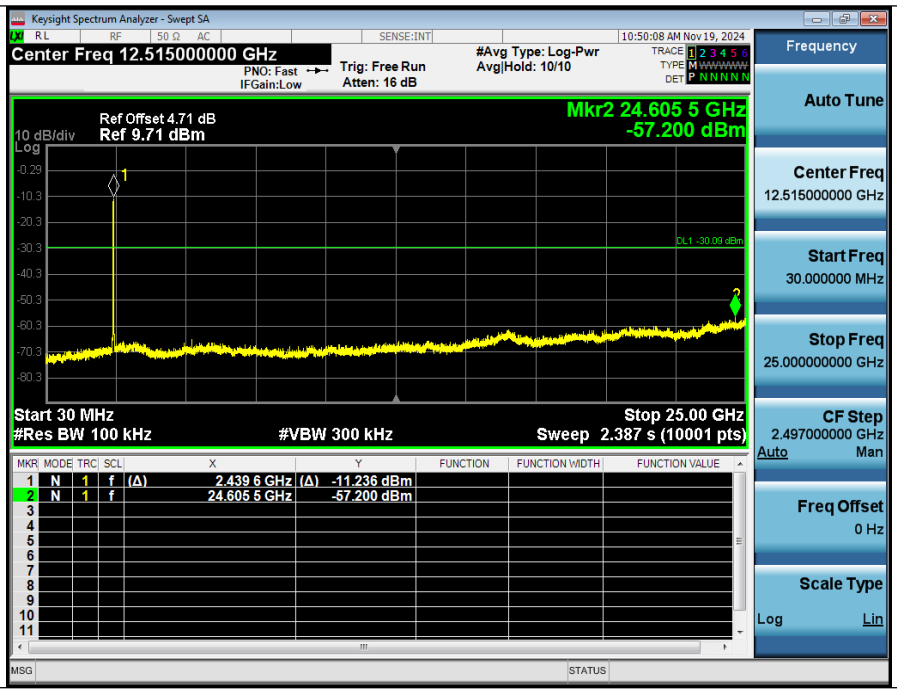
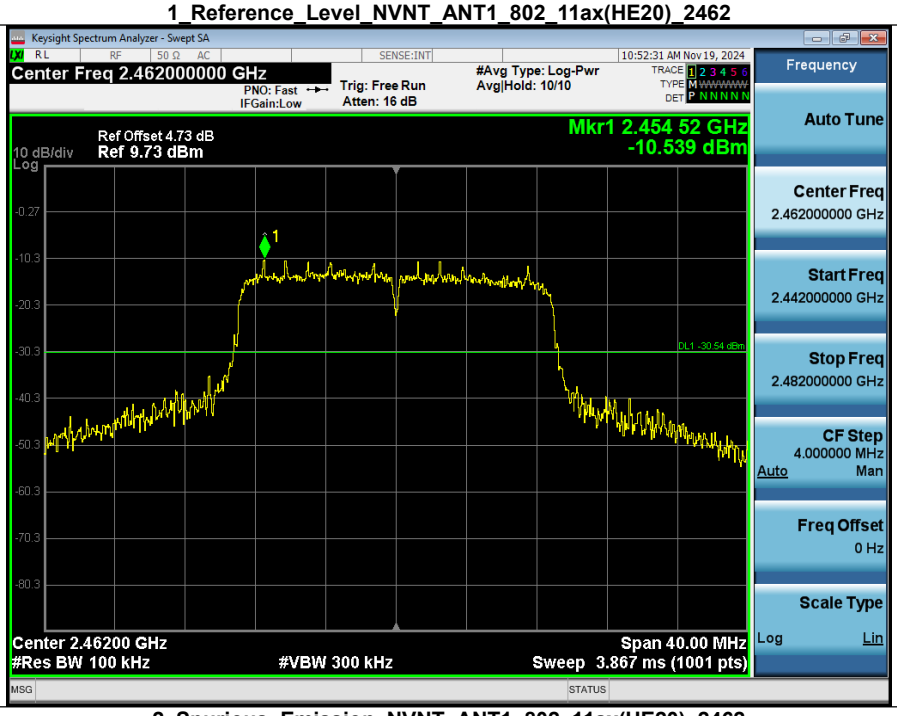


2_Spurious_Emission_NVNT_ANT1_802_11ax(HE20)_2437



1_Reference_Level_NVNT_ANT1_802_11ax(HE20)_2462



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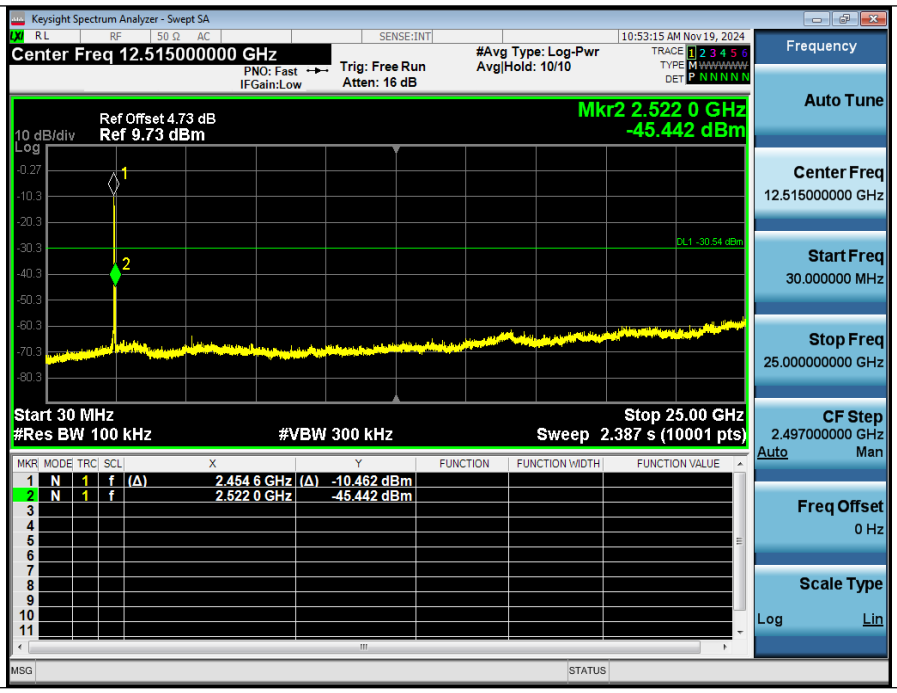
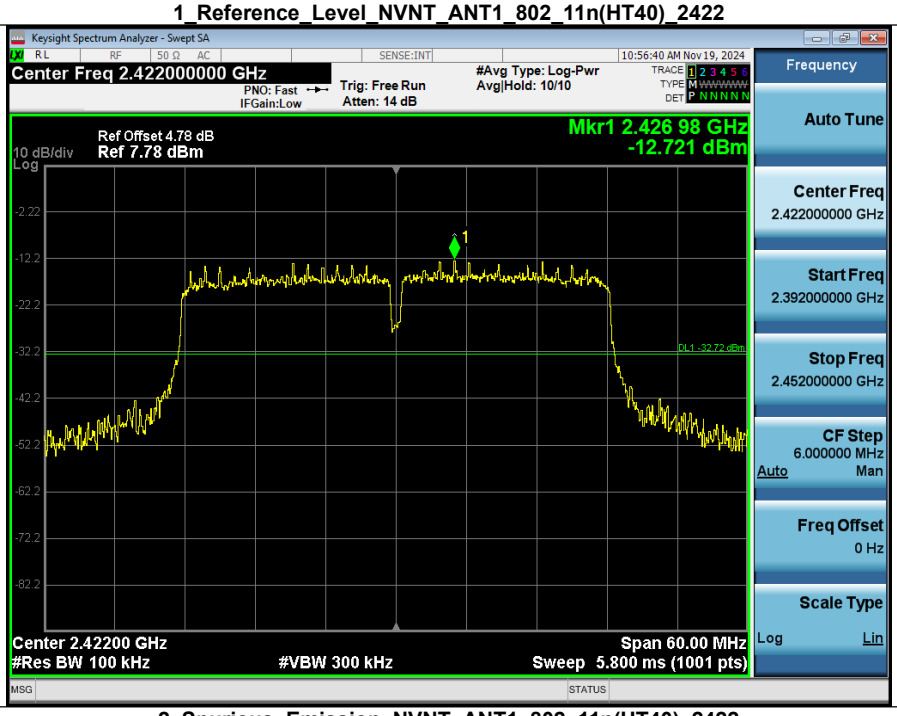
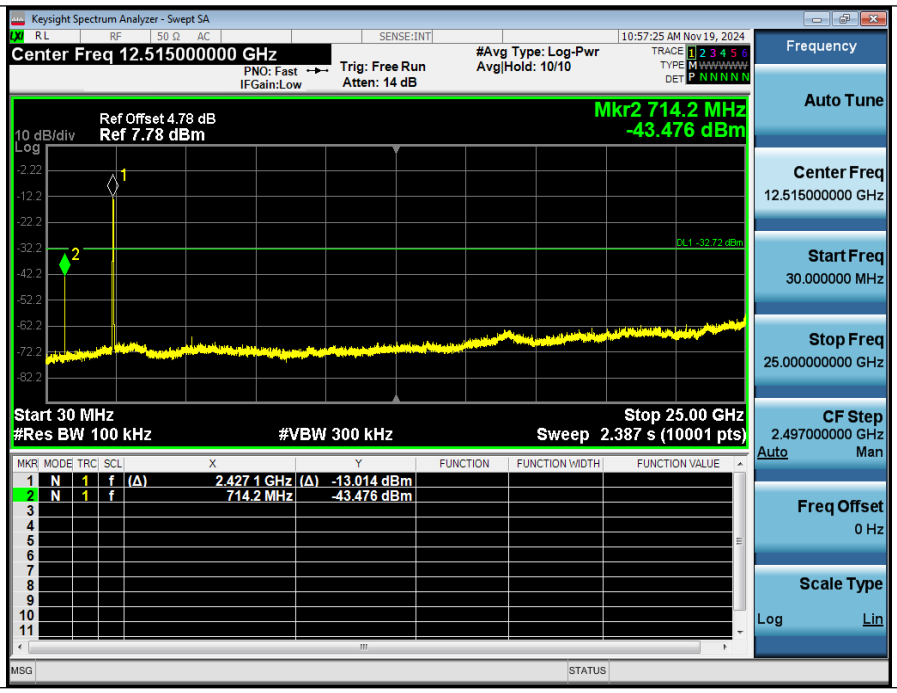


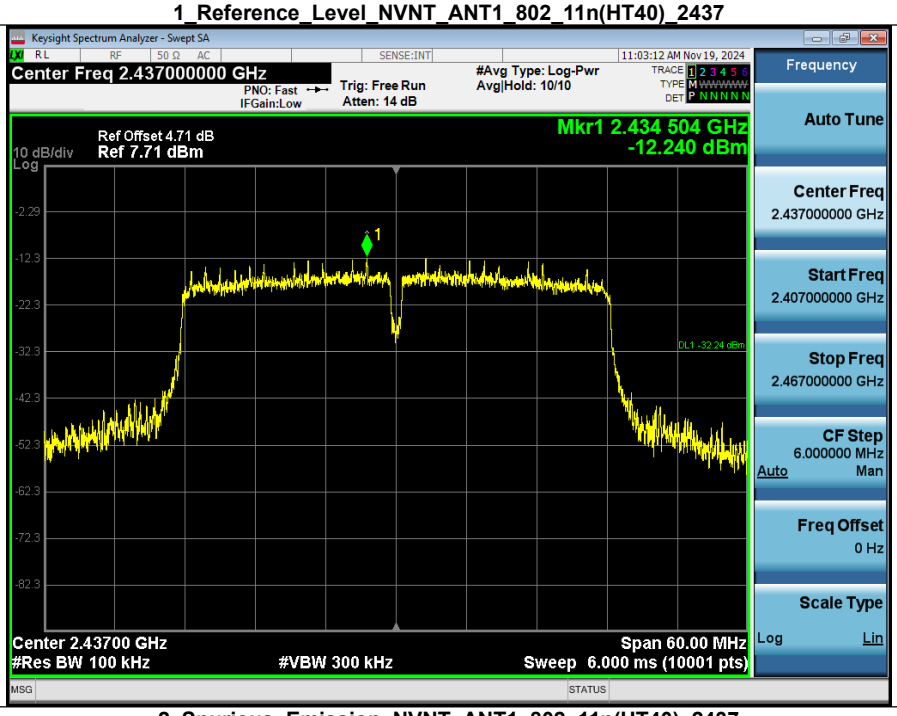
1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2422



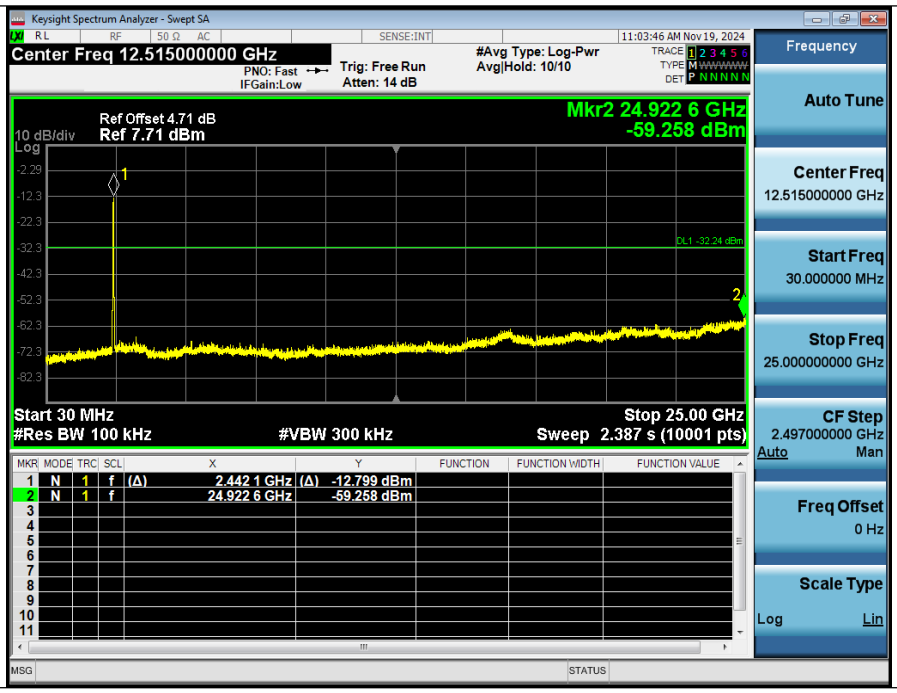
2_Spurious_Emission_NVNT_ANT1_802_11n(HT40)_2422



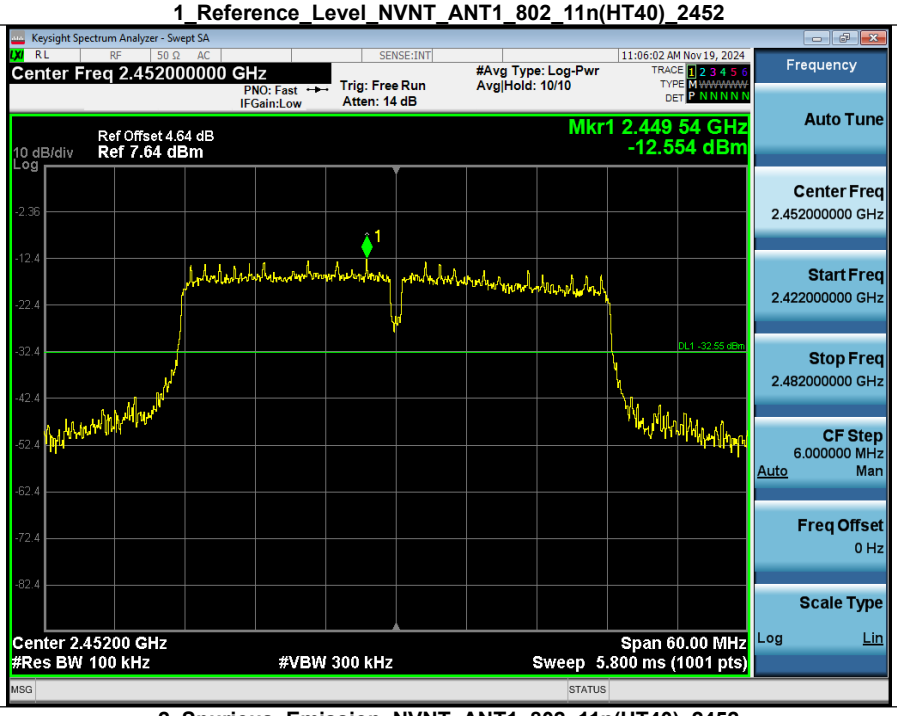
1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2437



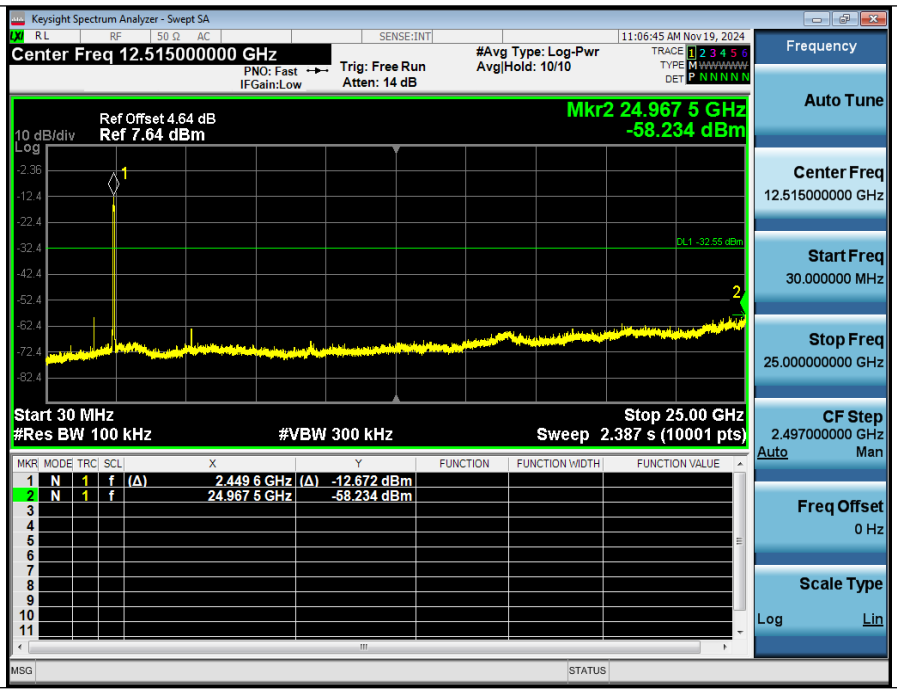
2_Spurious_Emission_NVNT_ANT1_802_11n(HT40)_2437



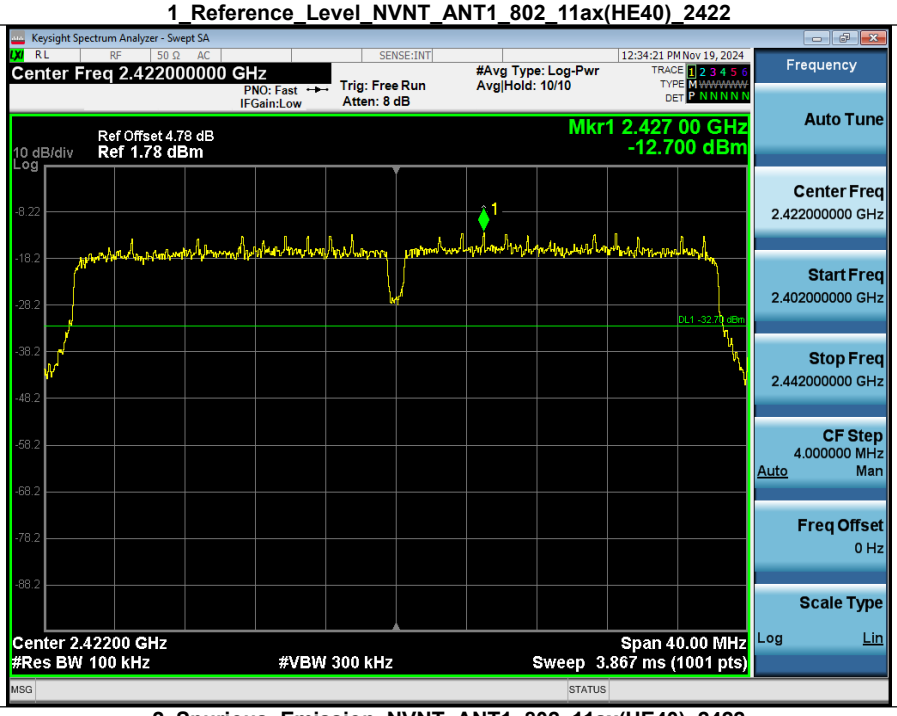
1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2452



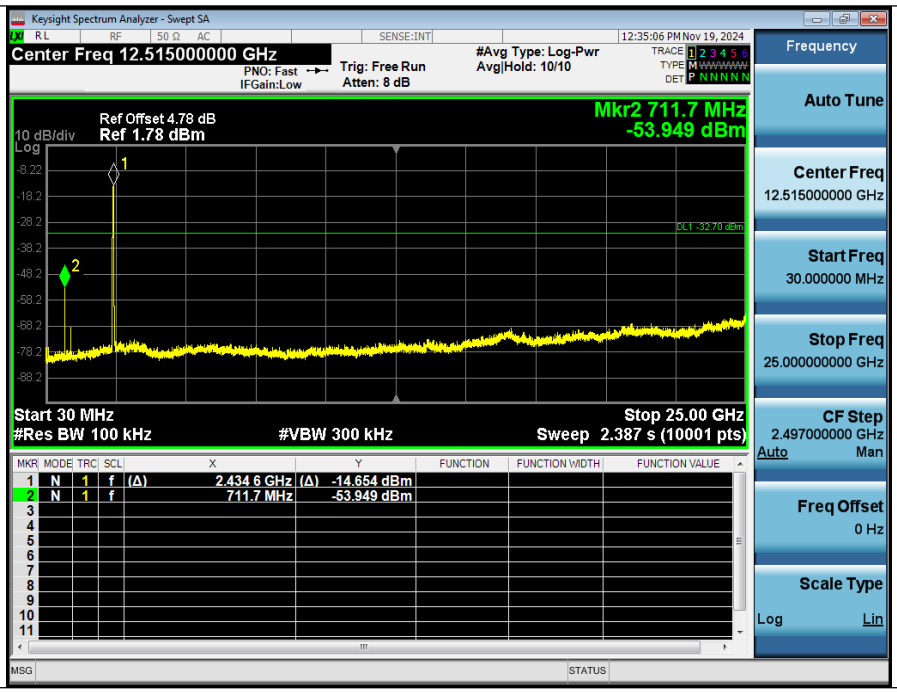
2_Spurious_Emission_NVNT_ANT1_802_11n(HT40)_2452



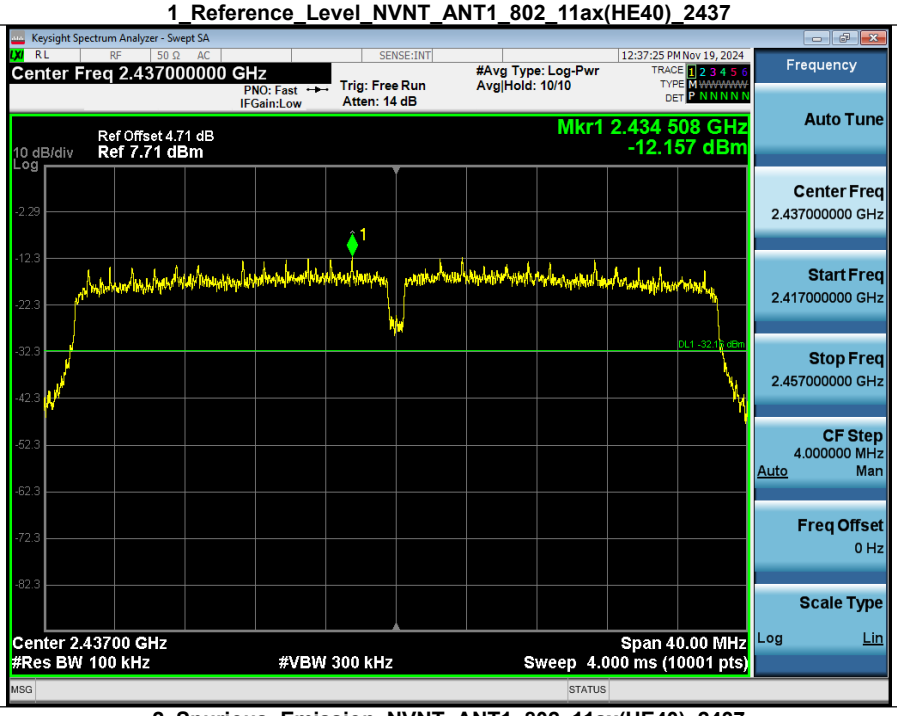
1_Reference_Level_NVNT_ANT1_802_11ax(HE40)_2422



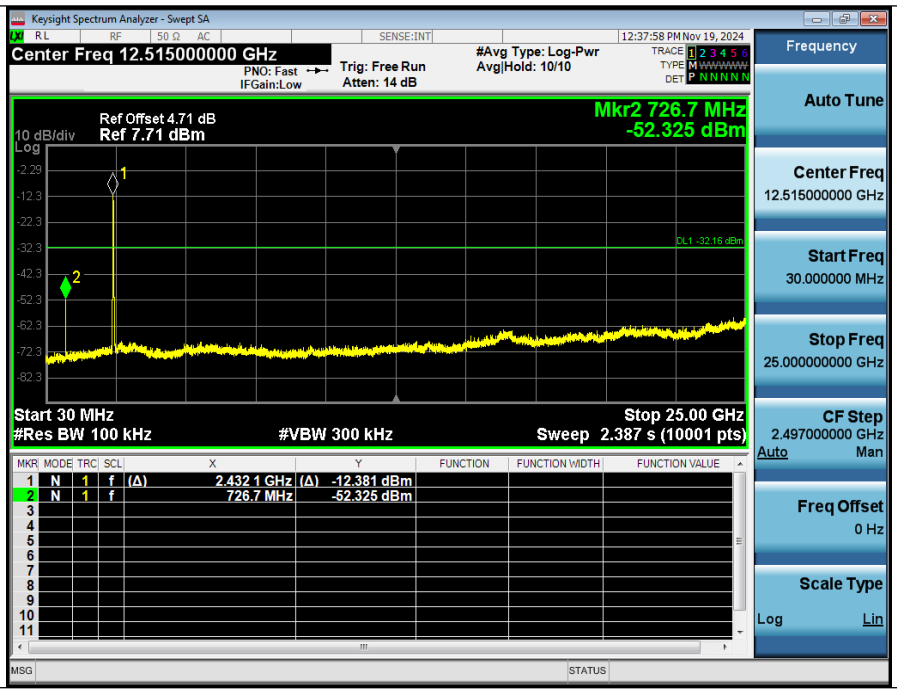
2_Spurious_Emission_NVNT_ANT1_802_11ax(HE40)_2422



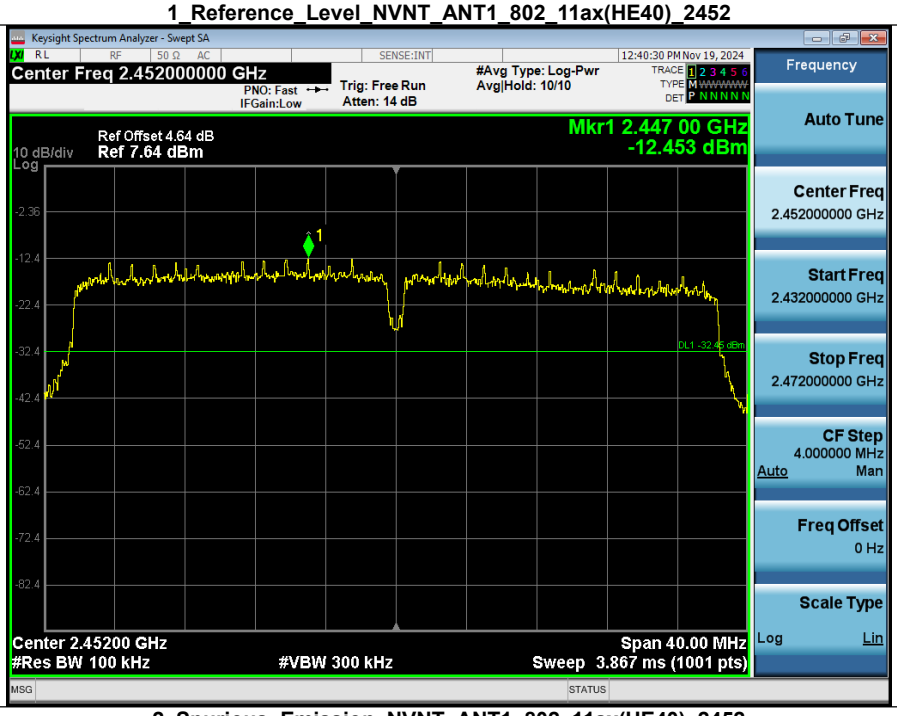
1_Reference_Level_NVNT_ANT1_802_11ax(HE40)_2437



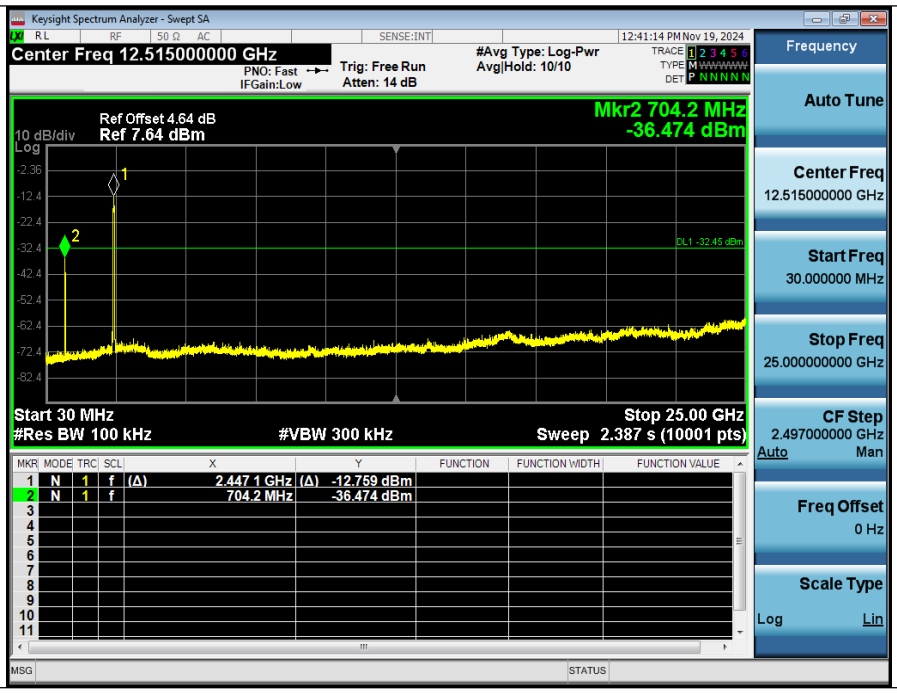
2_Spurious_Emission_NVNT_ANT1_802_11ax(HE40)_2437



1_Reference_Level_NVNT_ANT1_802_11ax(HE40)_2452



2_Spurious_Emission_NVNT_ANT1_802_11ax(HE40)_2452


Keysight Spectrum Analyzer - Swept SA
Center Freq 12.515000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 14 dB
#Avg Type: Log-Pwr
Avg|Hold: 10/10
12:41:14 PM Nov 19, 2024
Ref Offset 4.64 dB
10 dB/div
Ref 7.64 dBm
Mkr2 704.2 MHz
-36.474 dBm
DL1 -32.45 dBm
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.00 GHz
Sweep 2.387 s (10001 pts)
1 N 1 f (Δ) 2.447 1 GHz (Δ) -12.759 dBm
2 N 1 f 704.2 MHz -36.474 dBm
Frequency
Auto Tune
Center Freq
12.515000000 GHz
Start Freq
30.000000 MHz
Stop Freq
25.000000000 GHz
CF Step
2.497000000 GHz
Auto Man
Freq Offset
0 Hz
Scale Type
Log Lin