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FCC ID WIFI2.4-1

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	9.04	500	Pass
NVNT	ANT1	802.11b	2437.00	8.59	500	Pass
NVNT	ANT1	802.11b	2462.00	8.61	500	Pass
NVNT	ANT1	802.11g	2412.00	16.10	500	Pass
NVNT	ANT1	802.11g	2437.00	16.34	500	Pass
NVNT	ANT1	802.11g	2462.00	16.34	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	17.11	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	17.37	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	17.37	500	Pass





-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



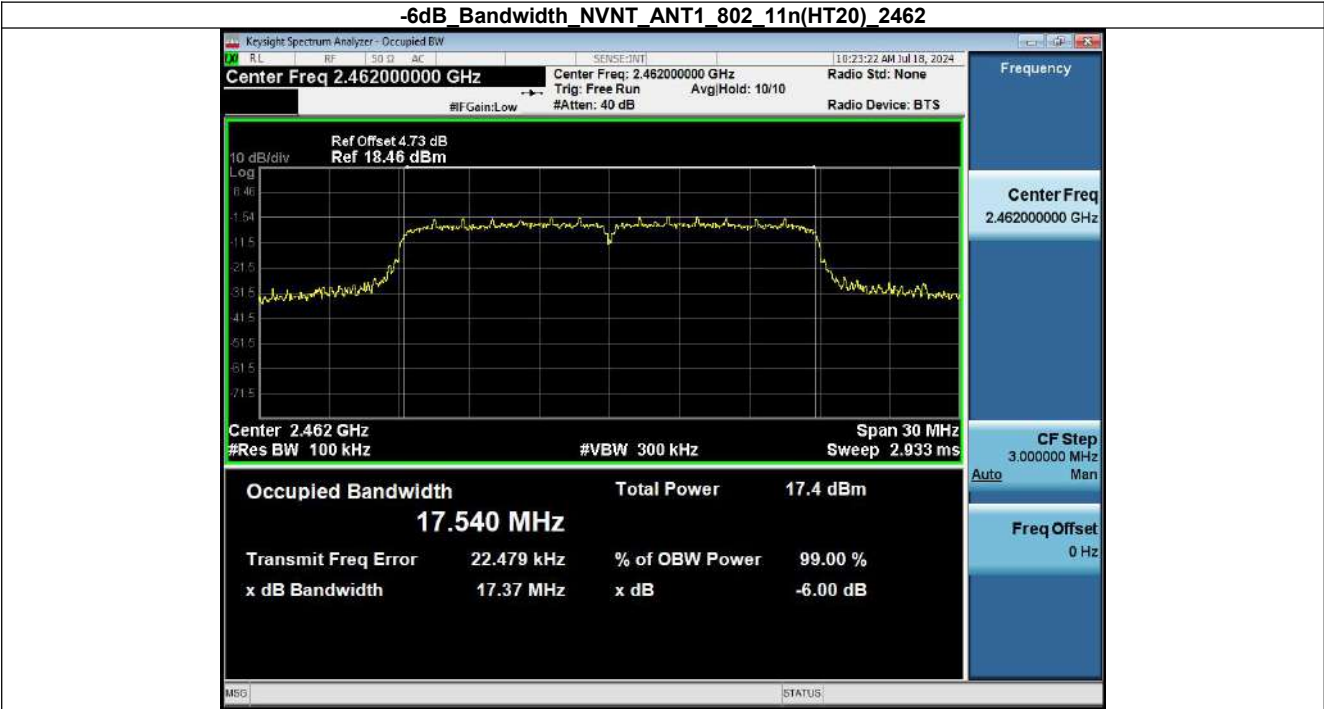
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2412



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2437

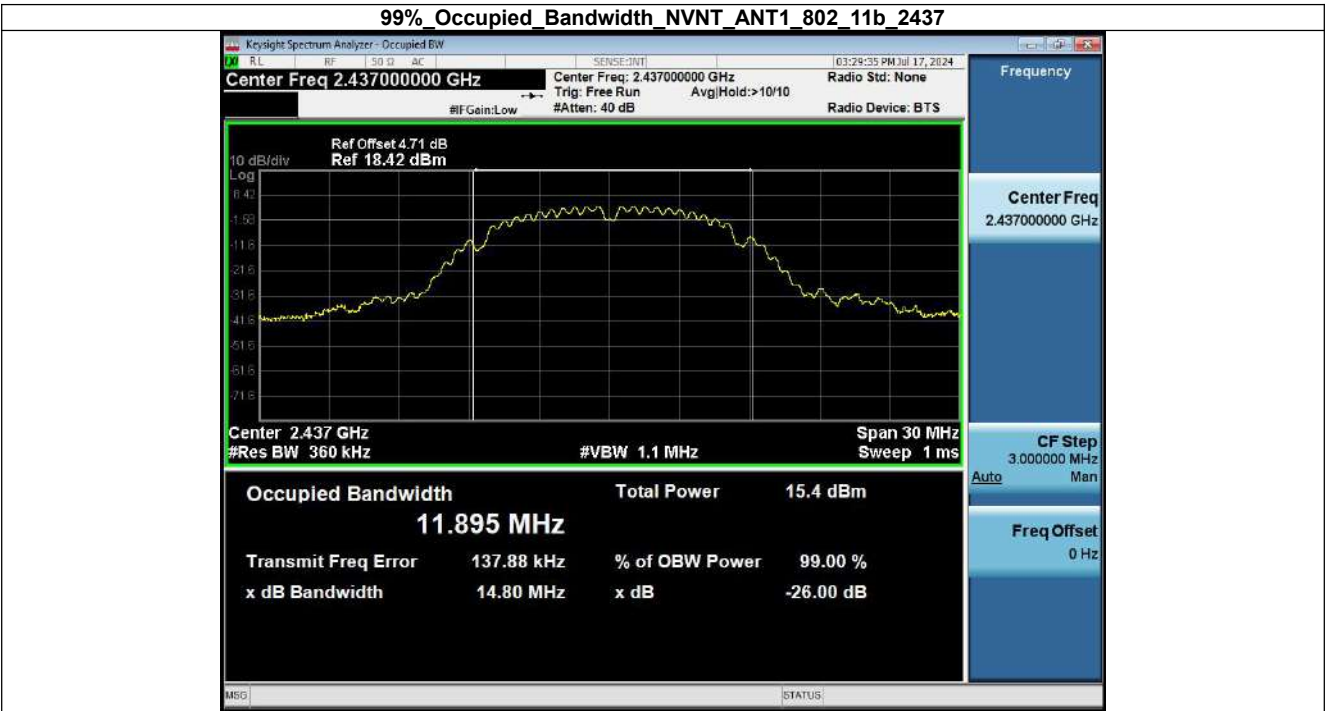
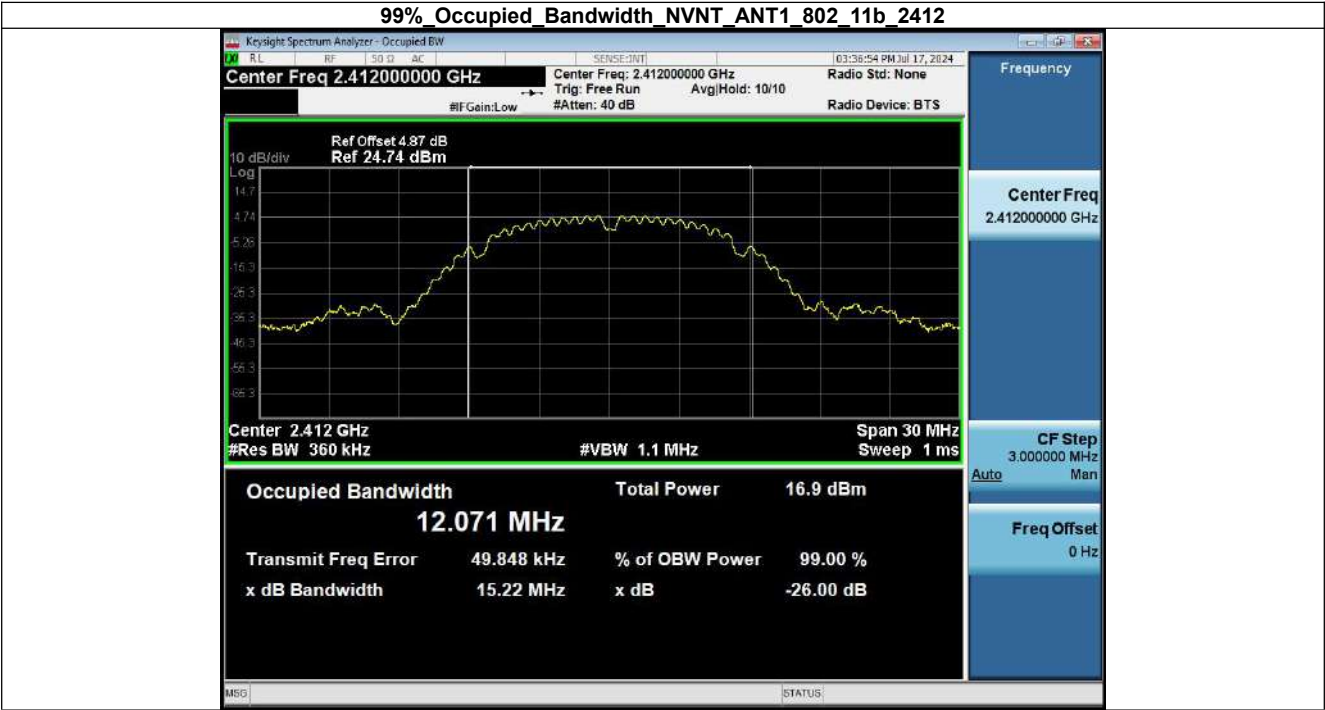


-6dB Bandwidth NVNT_ANT1_802_11n(HT20)_2462



2. 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99% BW(MHz)
NVNT	ANT1	802.11b	2412.00	12.071
NVNT	ANT1	802.11b	2437.00	11.895
NVNT	ANT1	802.11b	2462.00	12.366
NVNT	ANT1	802.11g	2412.00	17.075
NVNT	ANT1	802.11g	2437.00	17.100
NVNT	ANT1	802.11g	2462.00	17.195
NVNT	ANT1	802.11n(HT20)	2412.00	17.785
NVNT	ANT1	802.11n(HT20)	2437.00	17.887
NVNT	ANT1	802.11n(HT20)	2462.00	17.938



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

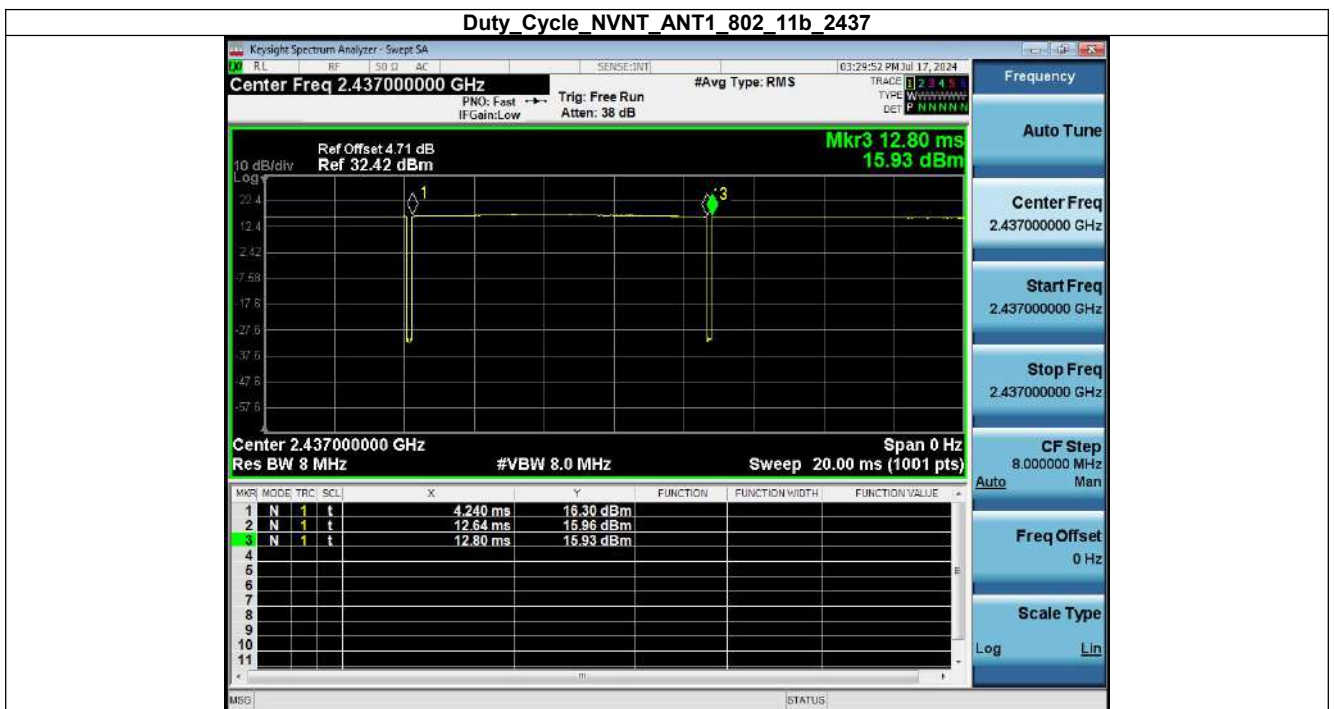
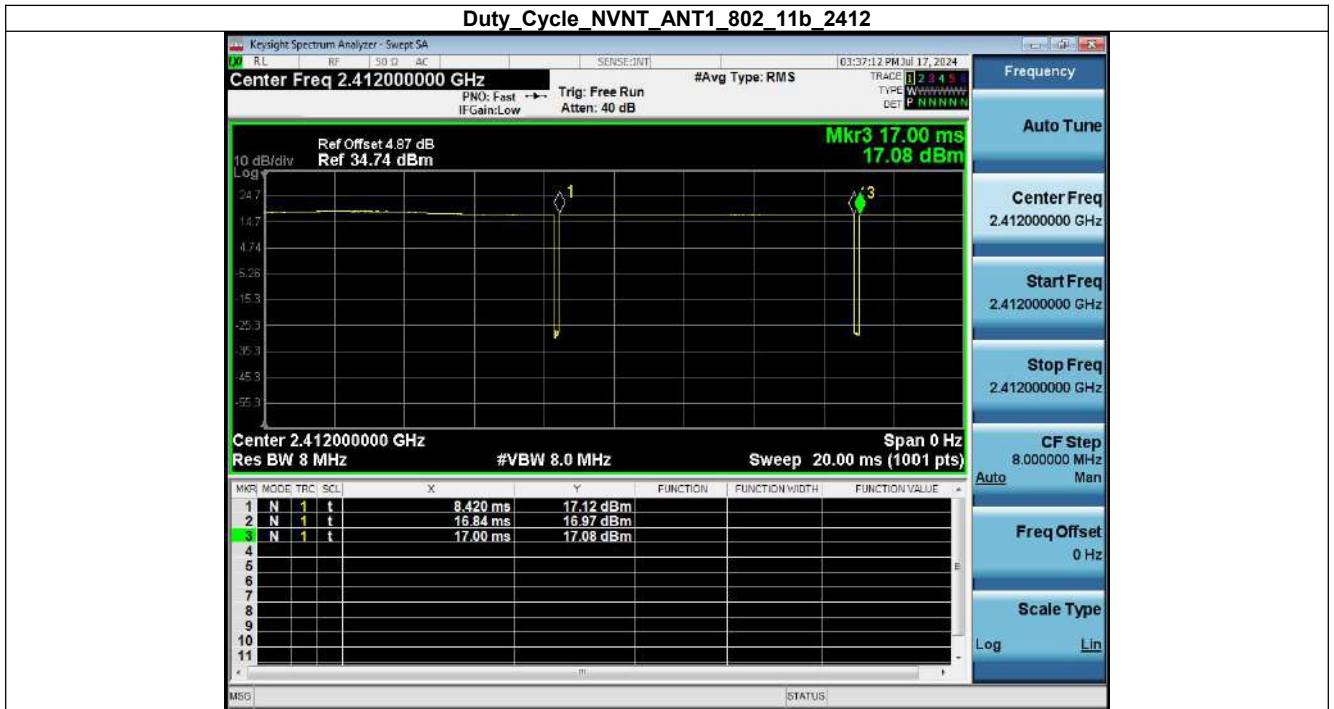


99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462

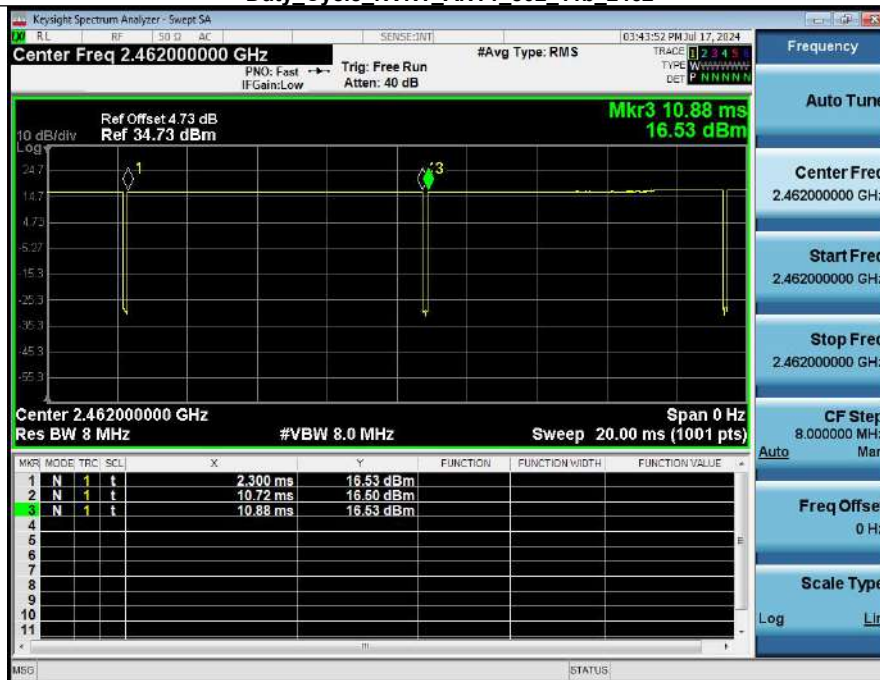


3. Duty Cycle

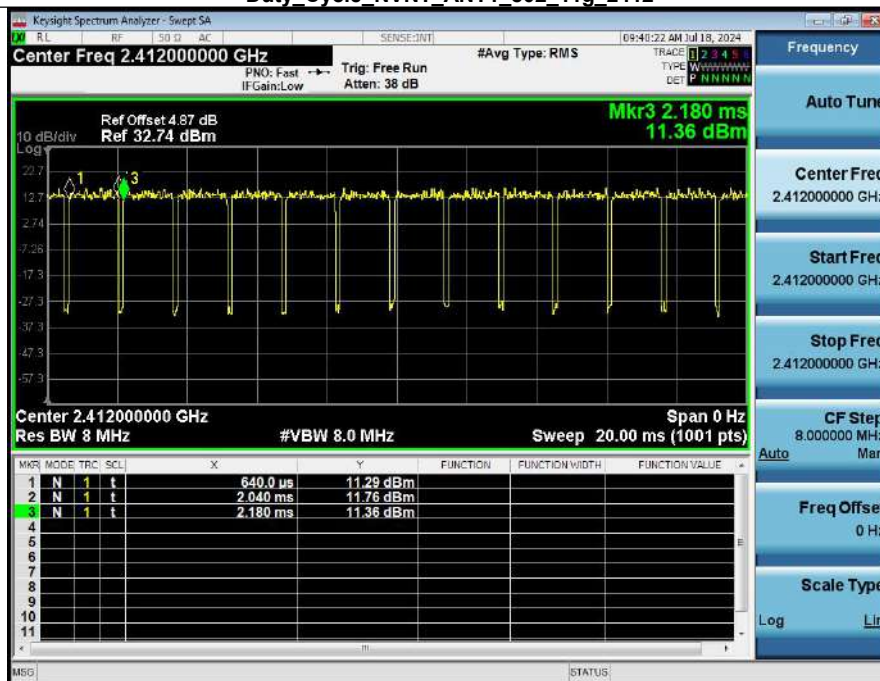
Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty factor(dB)
NVNT	ANT1	802.11b	2412.00	98.37	0.00
NVNT	ANT1	802.11b	2437.00	98.36	0.00
NVNT	ANT1	802.11b	2462.00	98.37	0.00
NVNT	ANT1	802.11g	2412.00	92.21	0.35
NVNT	ANT1	802.11g	2437.00	92.21	0.35
NVNT	ANT1	802.11g	2462.00	91.03	0.41
NVNT	ANT1	802.11n(HT20)	2412.00	90.91	0.41
NVNT	ANT1	802.11n(HT20)	2437.00	89.55	0.48
NVNT	ANT1	802.11n(HT20)	2462.00	90.91	0.41



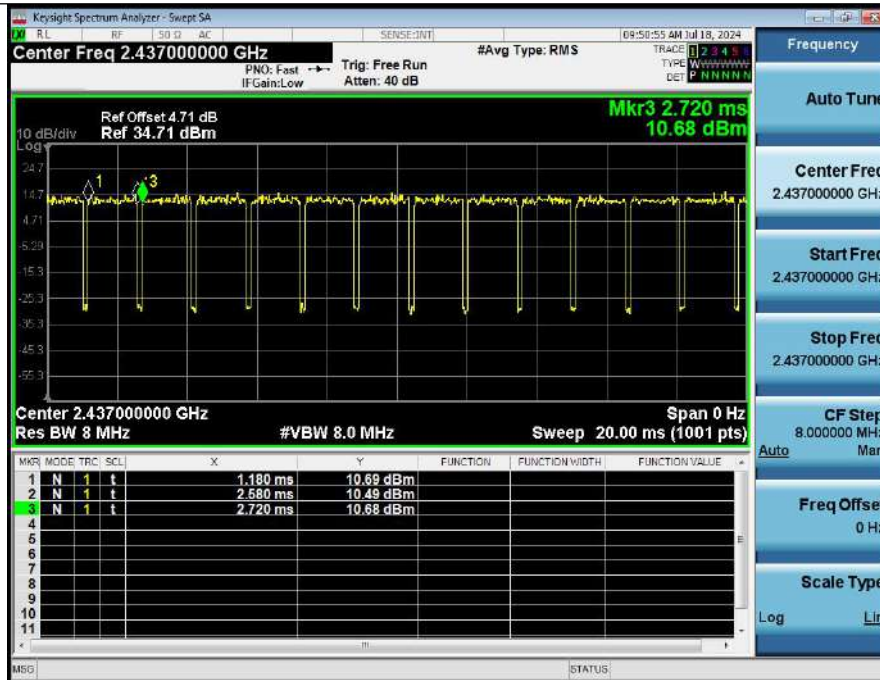
Duty Cycle NVNT_ANT1_802_11b_2462



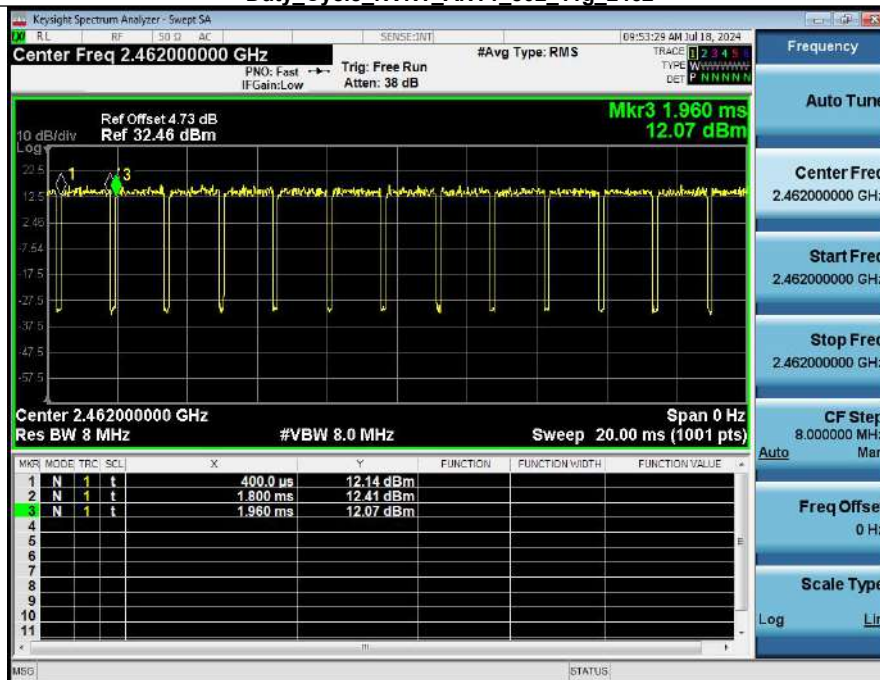
Duty Cycle NVNT_ANT1_802_11g_2412



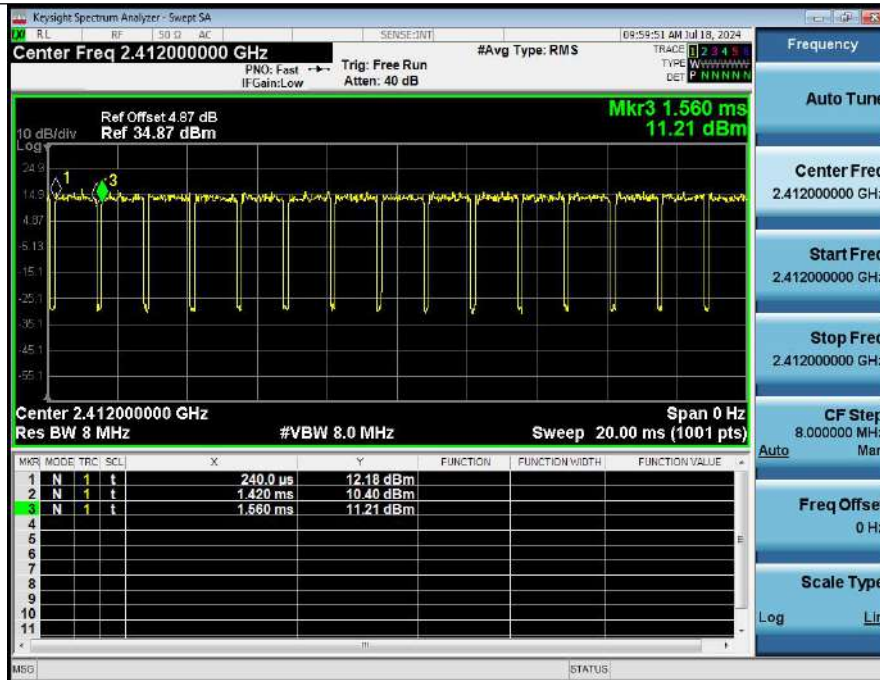
Duty Cycle NVNT_ANT1_802_11g_2437



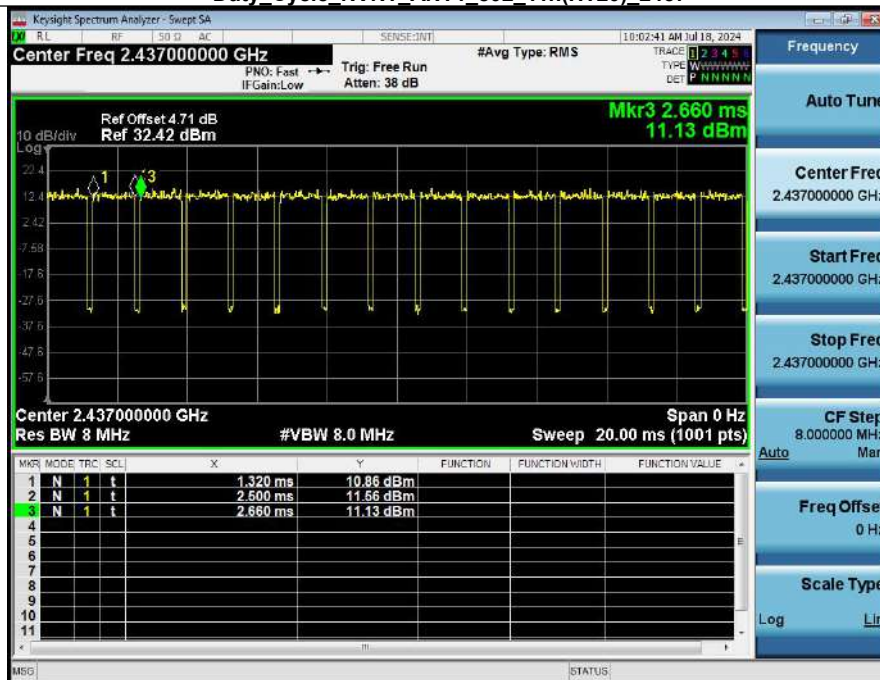
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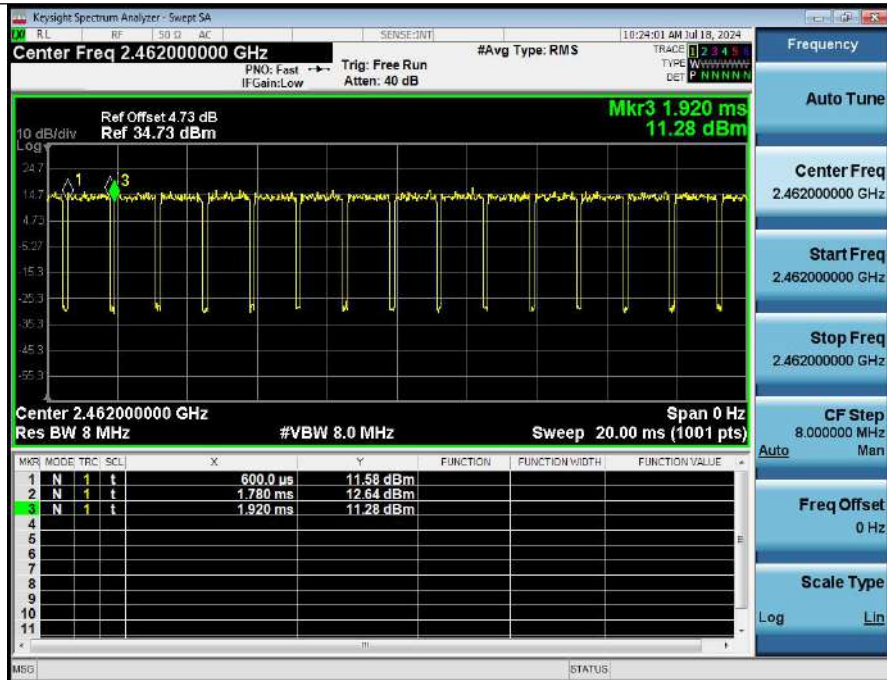
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2412



Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2437



Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2462



4. MAX. Output Power

Condition	Antenna	Modulation	Frequency (MHz)	Detector	Conducted Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	Peak	16.48	30	Pass
NVNT	ANT1	802.11b	2437.00	Peak	14.97	30	Pass
NVNT	ANT1	802.11b	2462.00	Peak	15.97	30	Pass
NVNT	ANT1	802.11g	2412.00	Peak	17.09	30	Pass
NVNT	ANT1	802.11g	2437.00	Peak	16.13	30	Pass
NVNT	ANT1	802.11g	2462.00	Peak	17.47	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	Peak	17.67	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	Peak	16.65	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	Peak	18.11	30	Pass

5. Power Spectral Density

Condition	Antenna	Modulation	Frequency (MHz)	PSD(dBm/30kHz)	RB factor(dB)	PSD(dBm/3kHz)	limit(dBm/3kHz)	Result
NVNT	ANT1	802.11b	2412.00	1.28	-10.00	-8.72	8	Pass
NVNT	ANT1	802.11b	2437.00	0.26	-10.00	-9.74	8	Pass
NVNT	ANT1	802.11b	2462.00	0.59	-10.00	-9.41	8	Pass
NVNT	ANT1	802.11g	2412.00	-6.27	-10.00	-16.27	8	Pass
NVNT	ANT1	802.11g	2437.00	-7.37	-10.00	-17.37	8	Pass
NVNT	ANT1	802.11g	2462.00	-5.17	-10.00	-15.16	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-6.33	-10.00	-16.32	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-7.54	-10.00	-17.54	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-5.80	-10.00	-15.80	8	Pass



Power_Spectral_Density_NVNT_ANT1_802_11b_2437



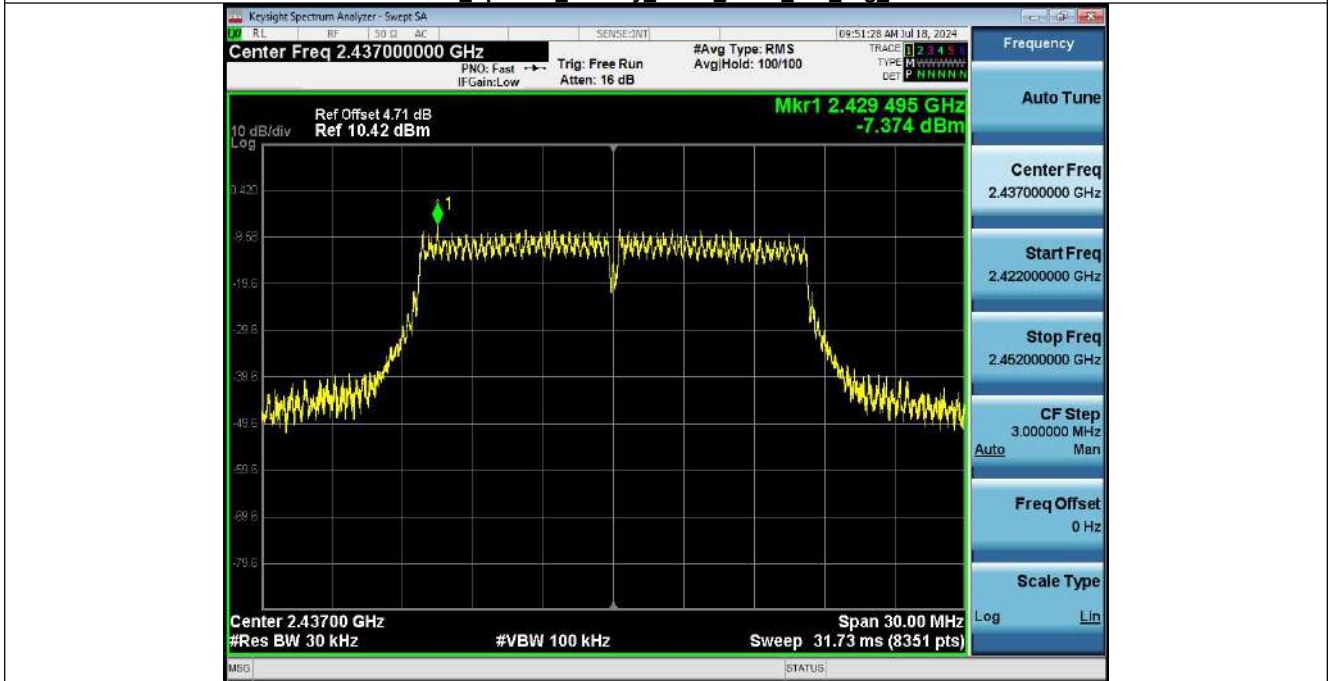
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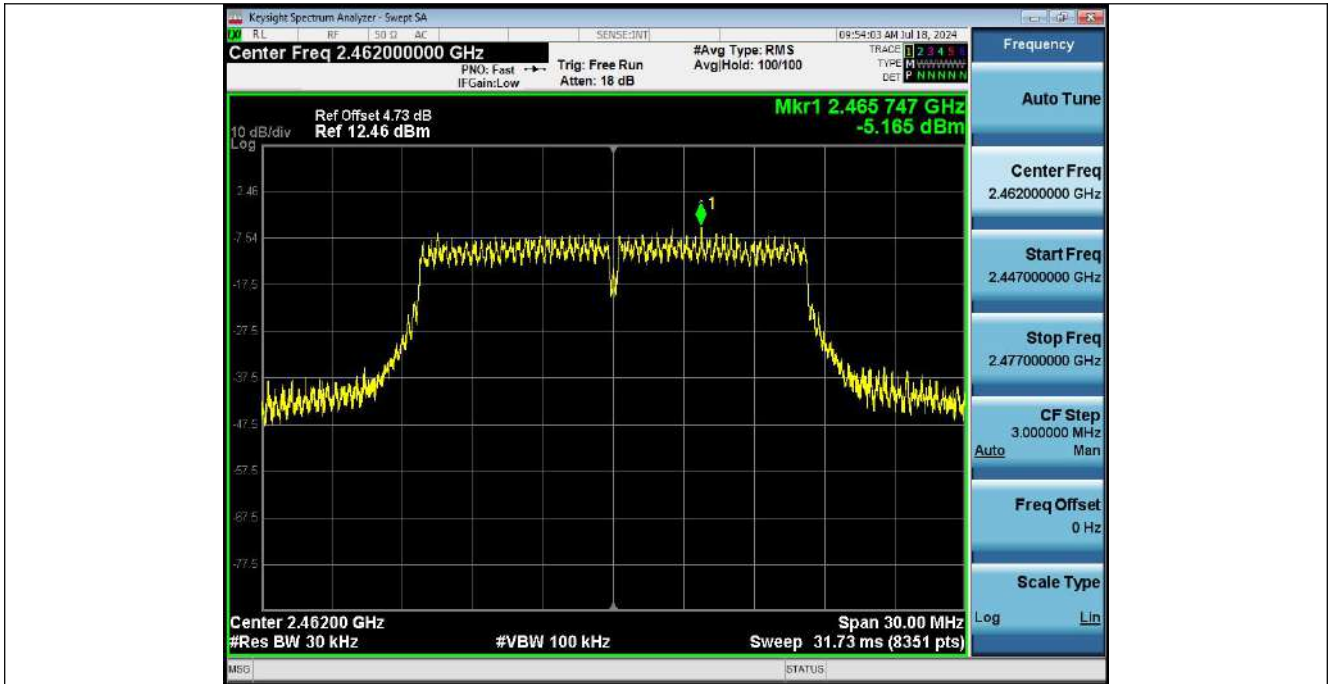
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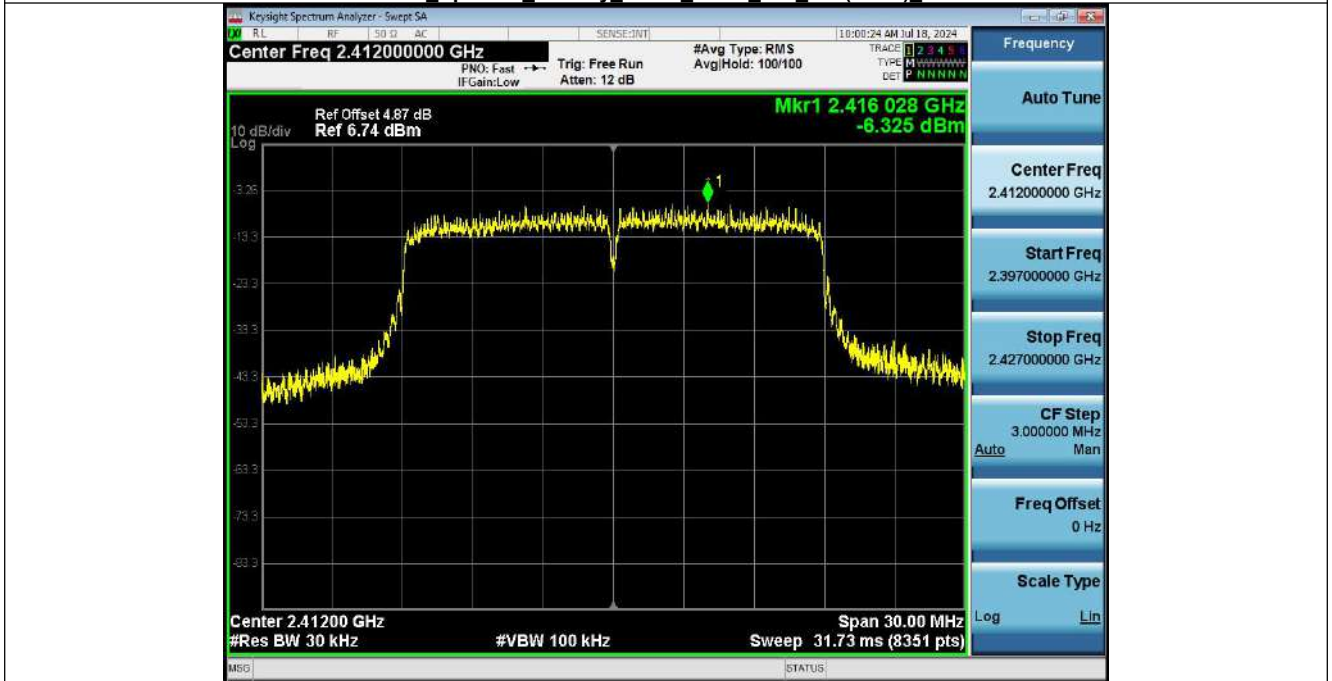
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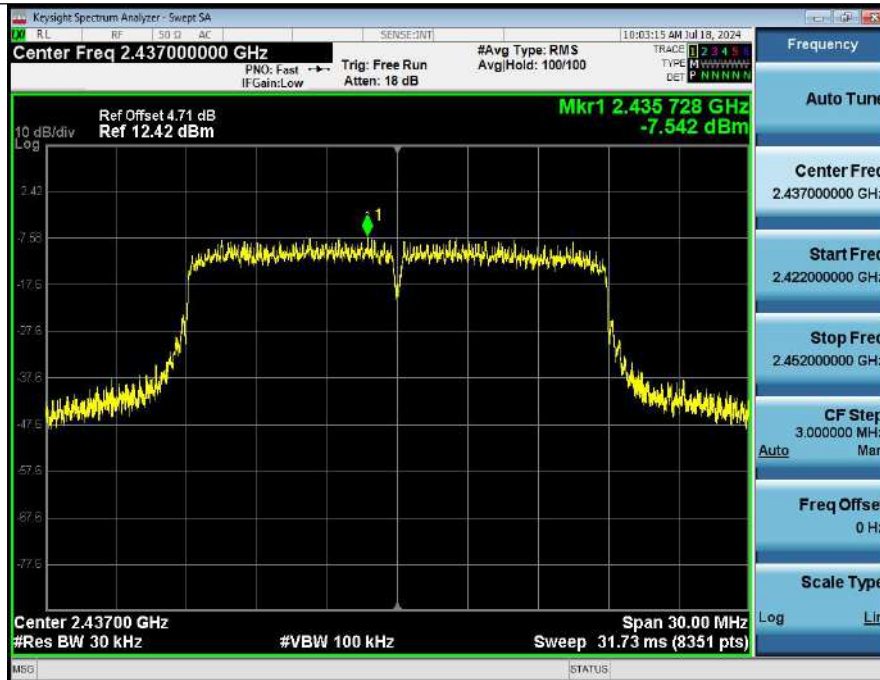
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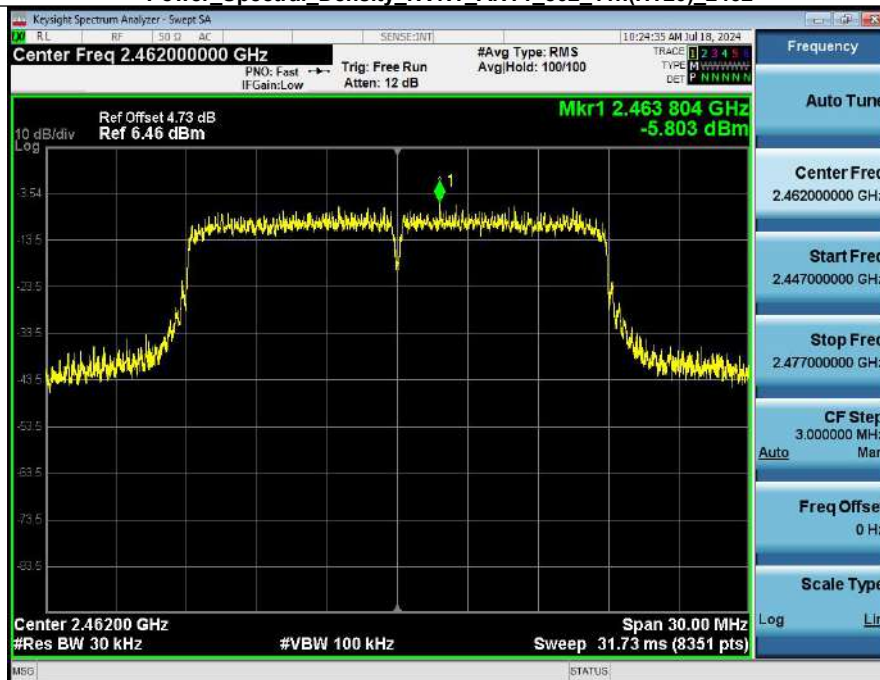
Power Spectral Density NVNT ANT1 802_11n(HT20)_2412



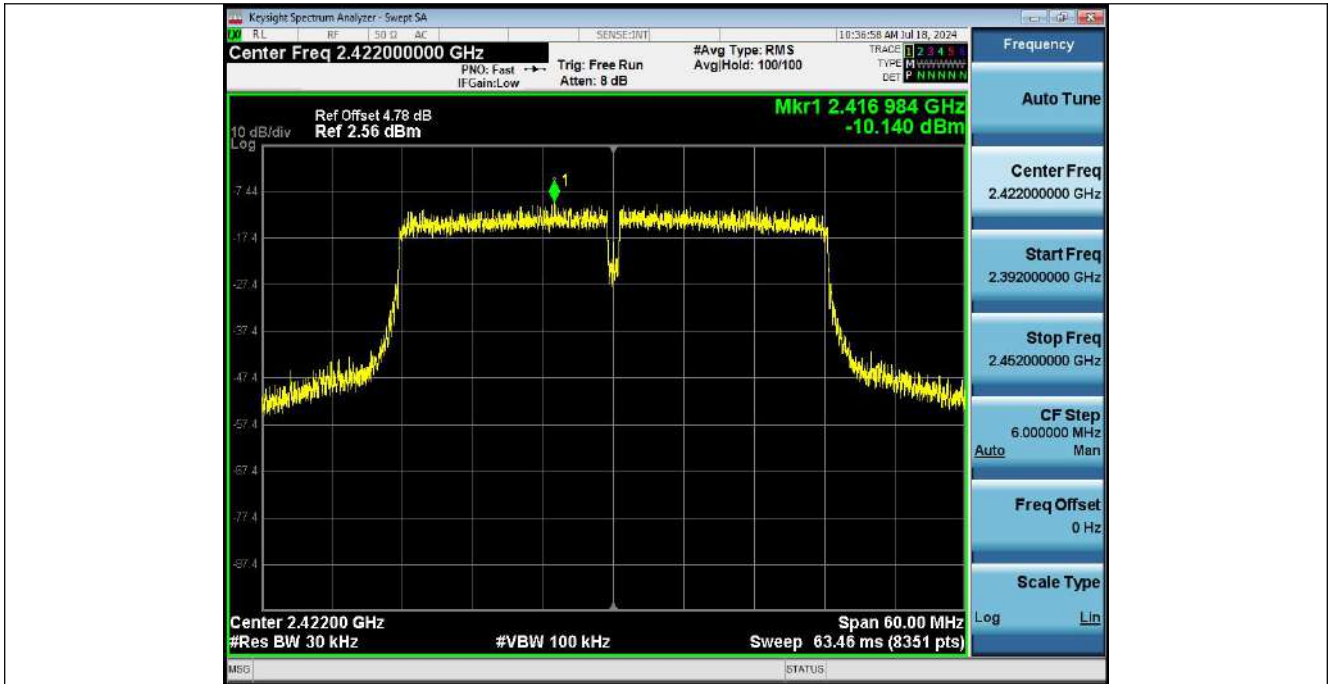
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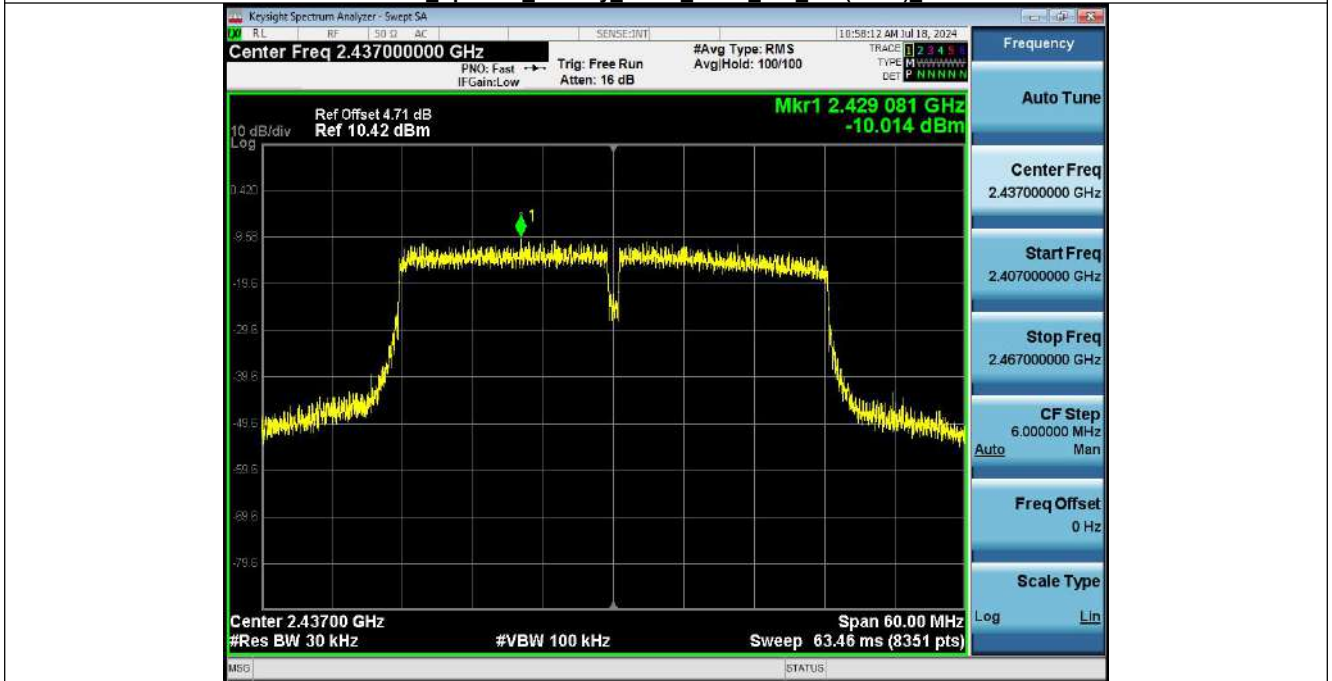
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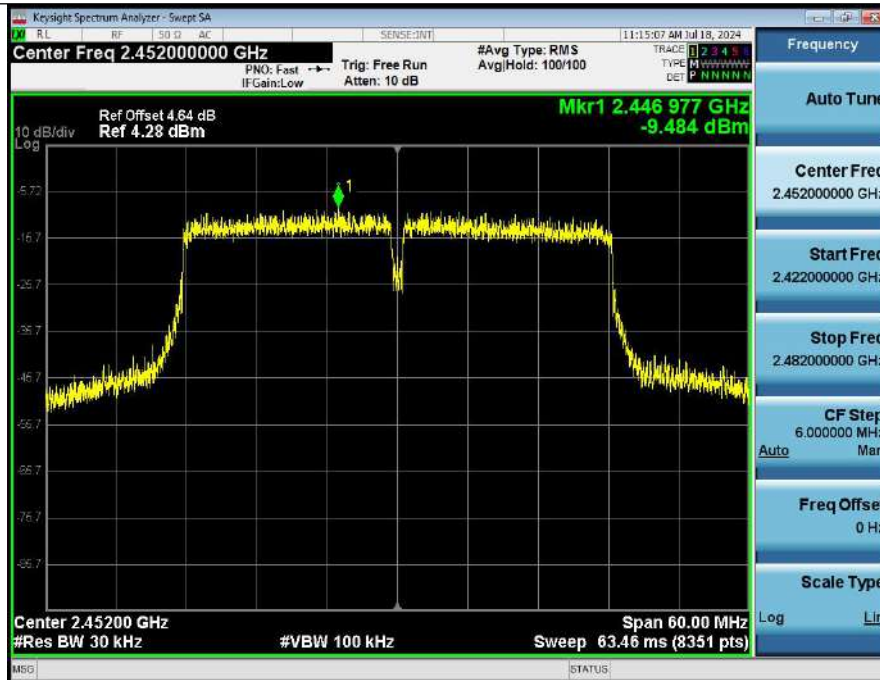
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Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2437



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	-35.204	-14.951	Pass
NVNT	ANT1	802.11b	2462.00	2487.520	-55.252	-15.500	Pass
NVNT	ANT1	802.11g	2412.00	2398.816	-34.333	-21.597	Pass
NVNT	ANT1	802.11g	2462.00	2483.872	-42.671	-21.910	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2398.928	-33.276	-21.693	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2484.016	-41.791	-21.827	Pass



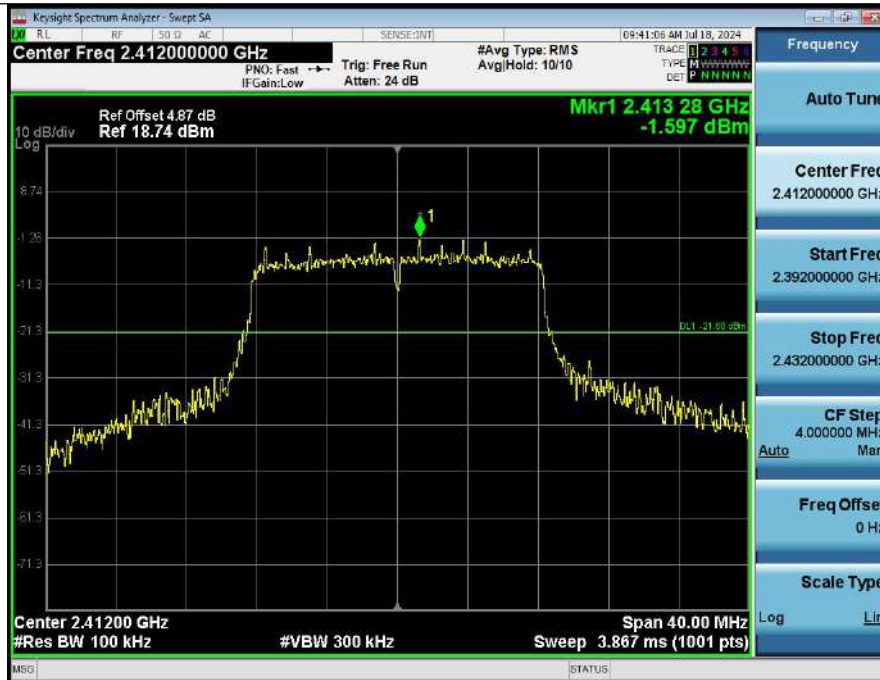
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2 Bandedge NVNT_ANT1_802_11b_2462



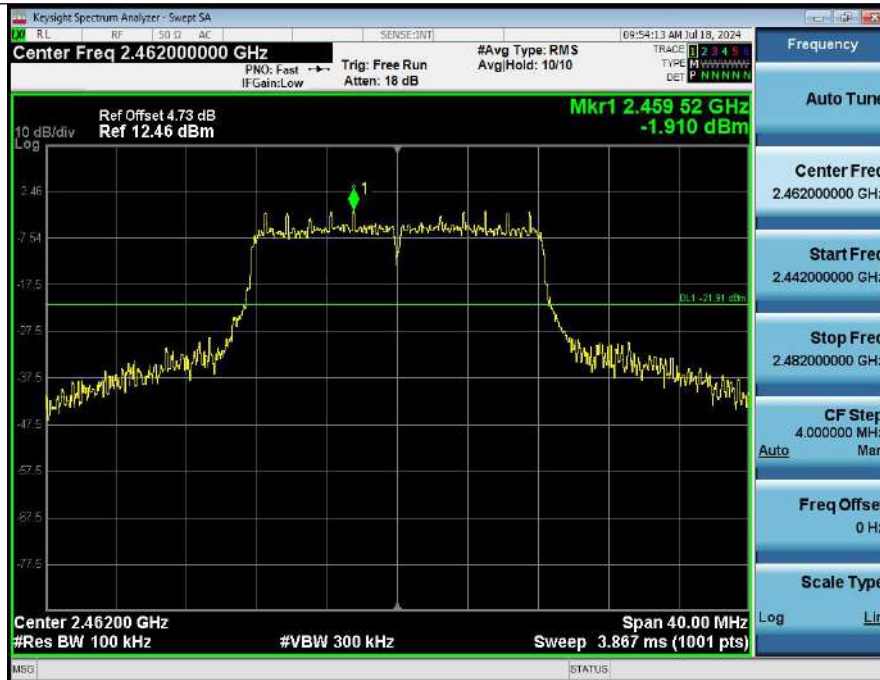
1 Reference Level NVNT_ANT1_802_11g_2412



2_Bandedge_NVNT_ANT1_802_11g_2412



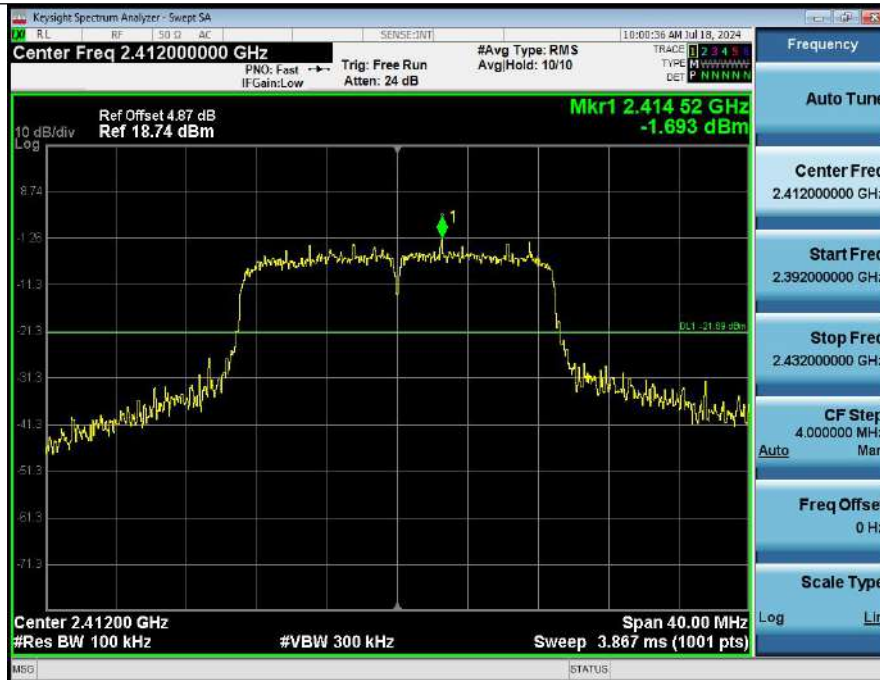
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2_Bandedge_NVNT_ANT1_802_11g_2462



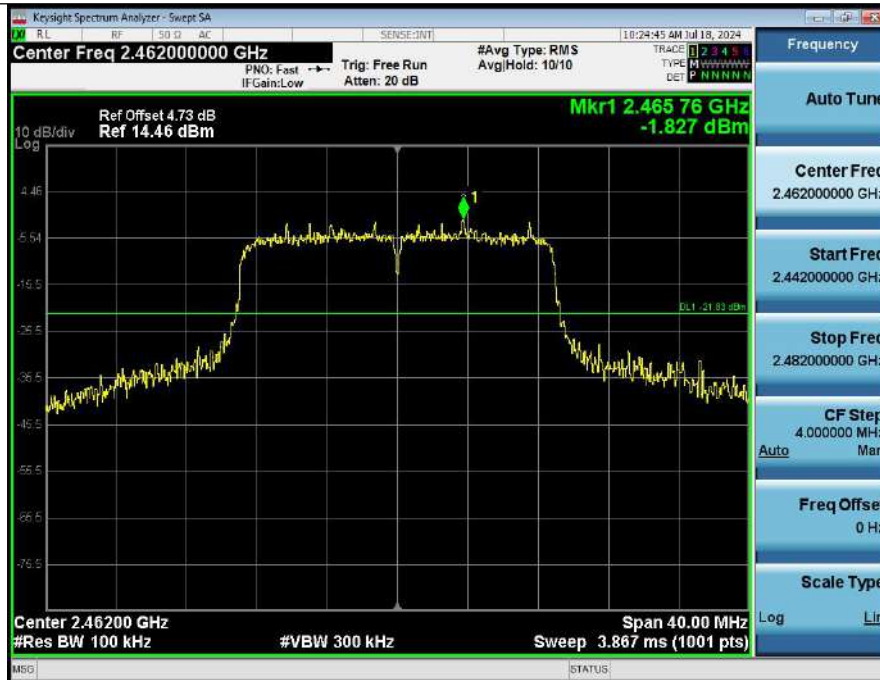
1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2412



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



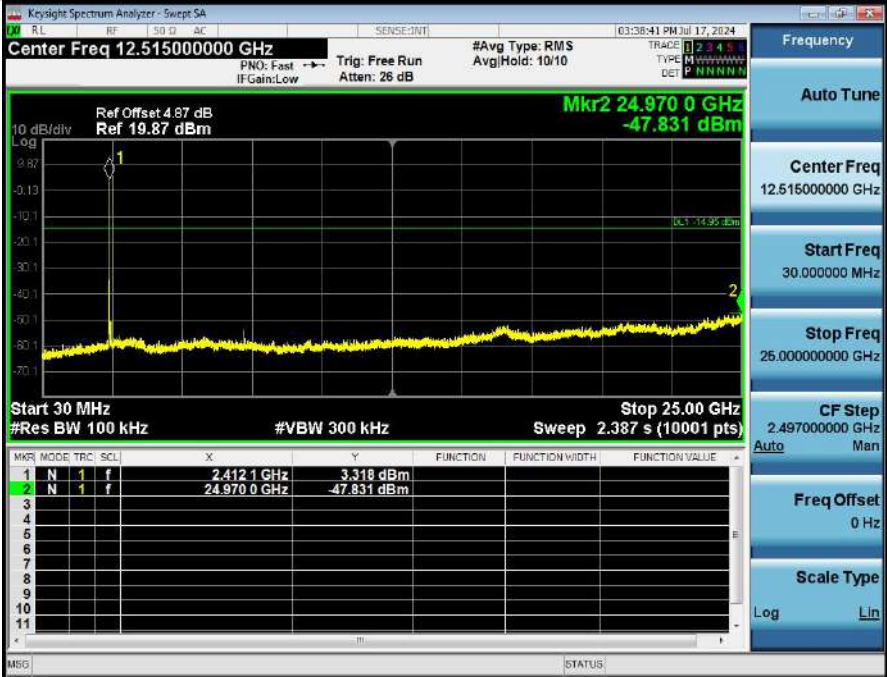
7. Spurious Emission

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	24970.036	-47.831	-14.951	Pass
NVNT	ANT1	802.11b	2437.00	913.938	-42.972	-17.285	Pass
NVNT	ANT1	802.11b	2462.00	24987.515	-48.745	-15.500	Pass
NVNT	ANT1	802.11g	2412.00	24992.509	-54.203	-21.597	Pass
NVNT	ANT1	802.11g	2437.00	24997.503	-55.660	-23.094	Pass
NVNT	ANT1	802.11g	2462.00	24967.539	-60.495	-21.910	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	24917.599	-54.338	-21.693	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	24892.629	-59.060	-23.634	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	24982.521	-57.377	-21.827	Pass

1_Reference_Level_NVNT_ANT1_802_11b_2412



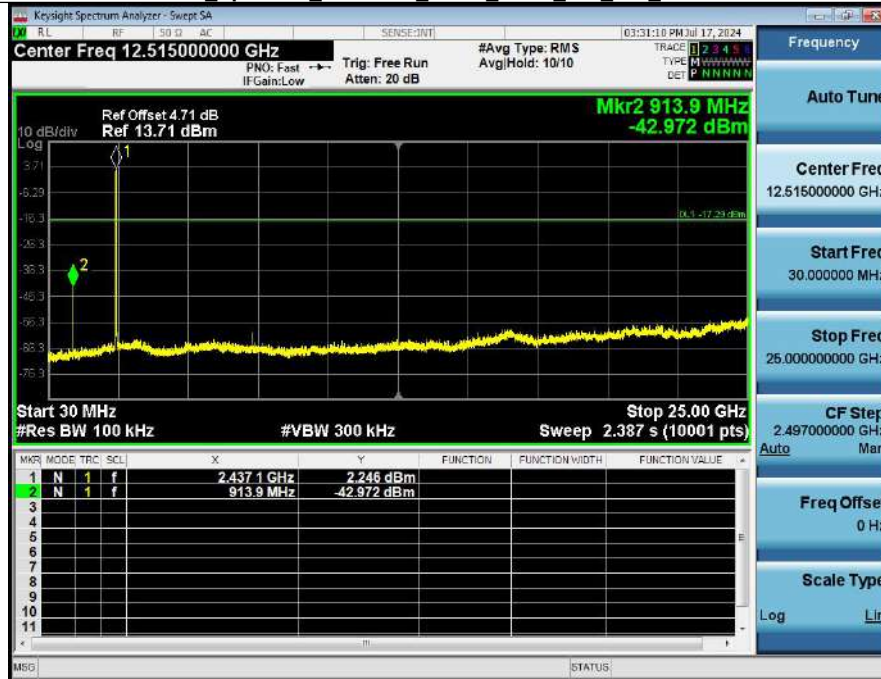
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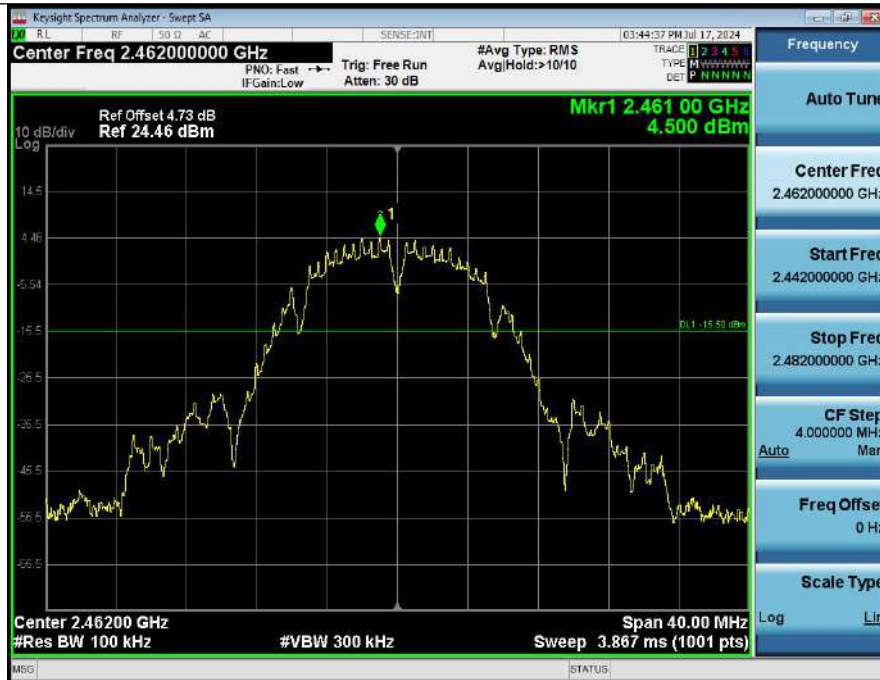
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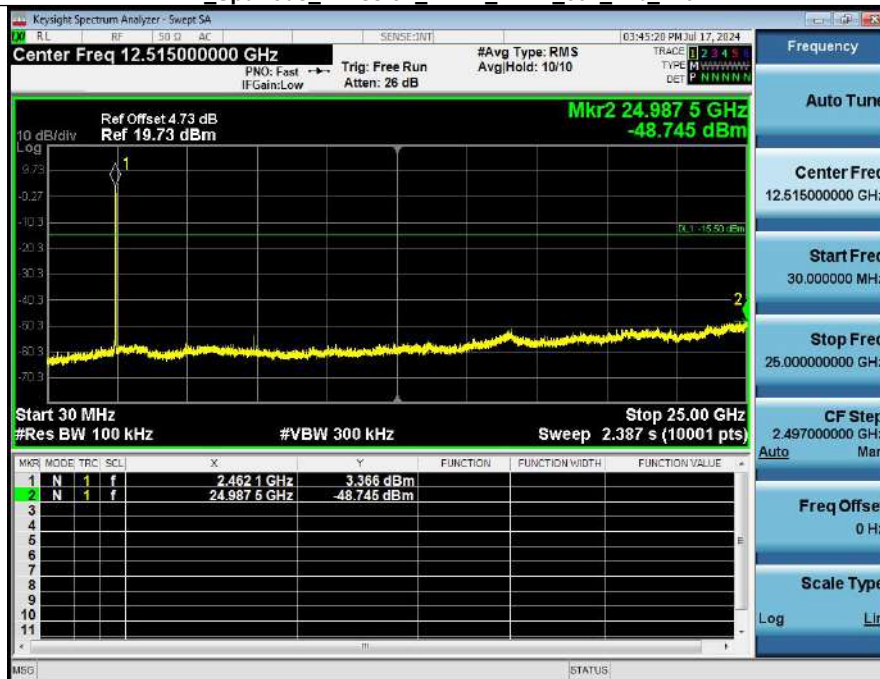
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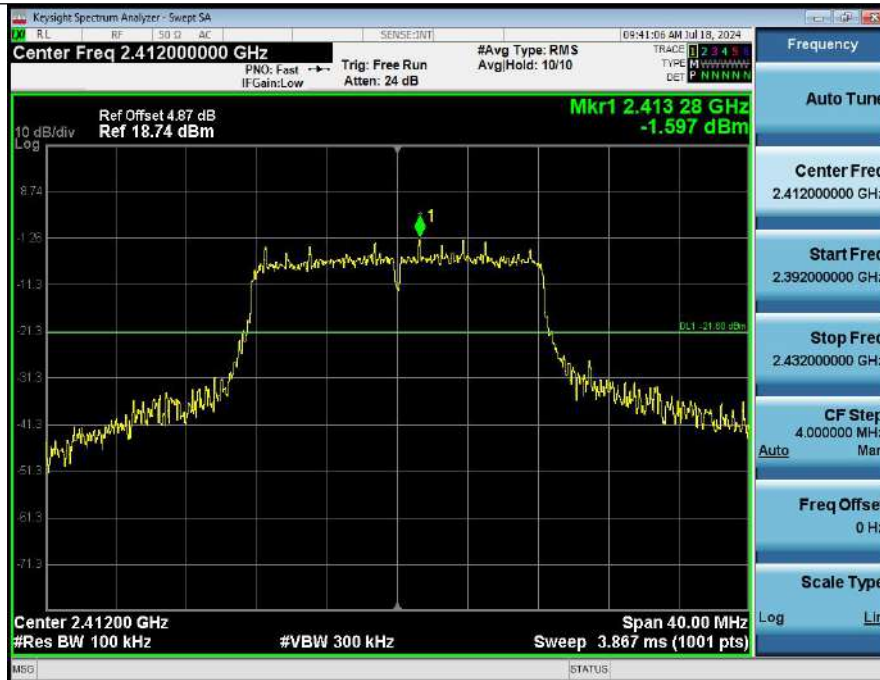
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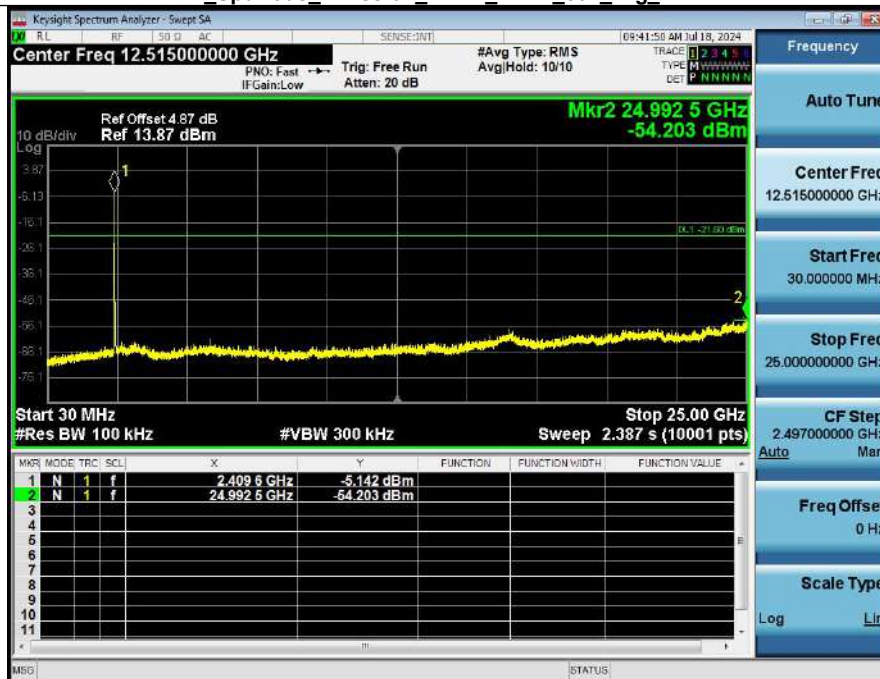
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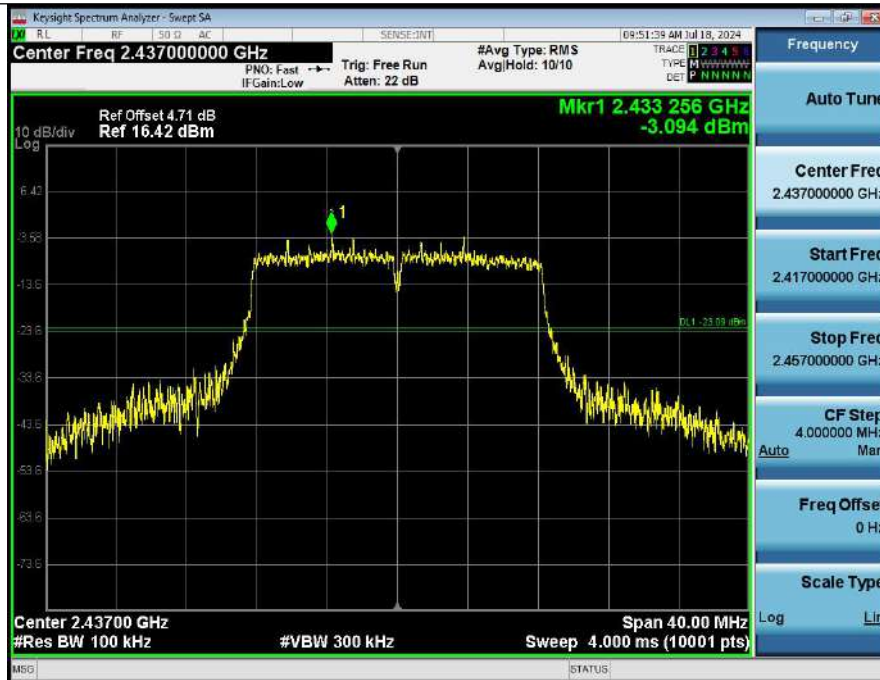
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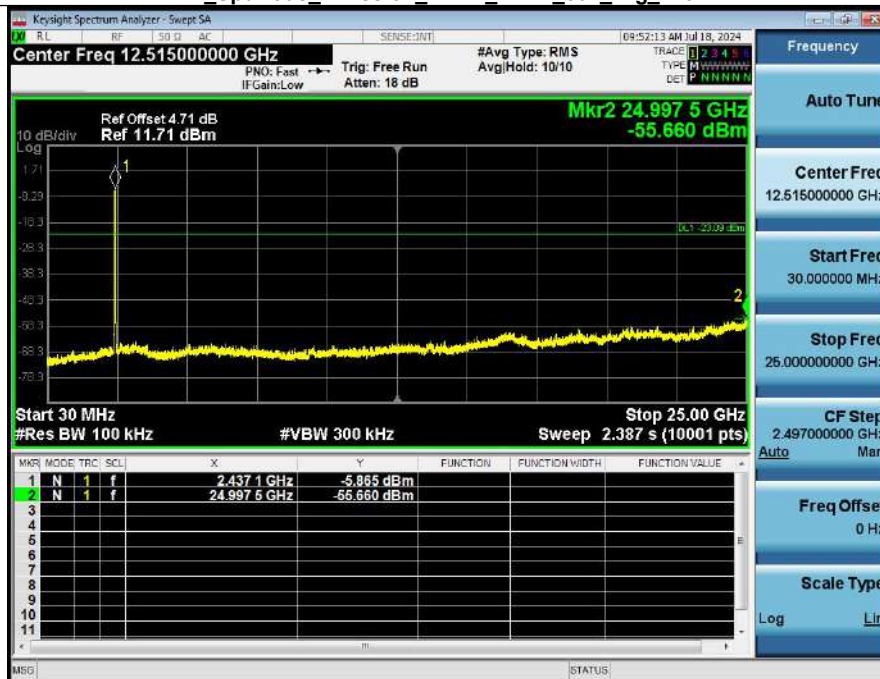
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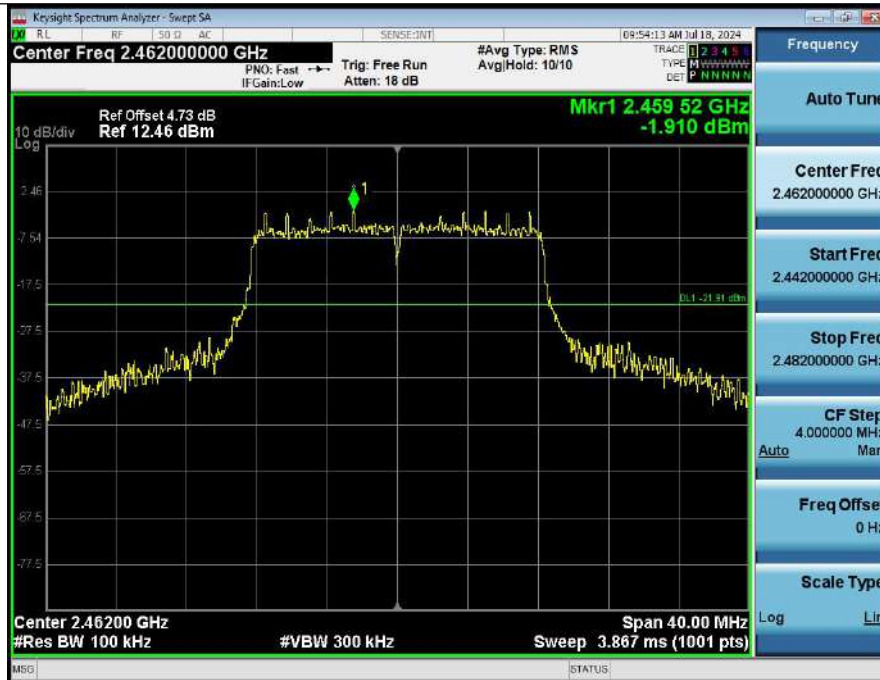
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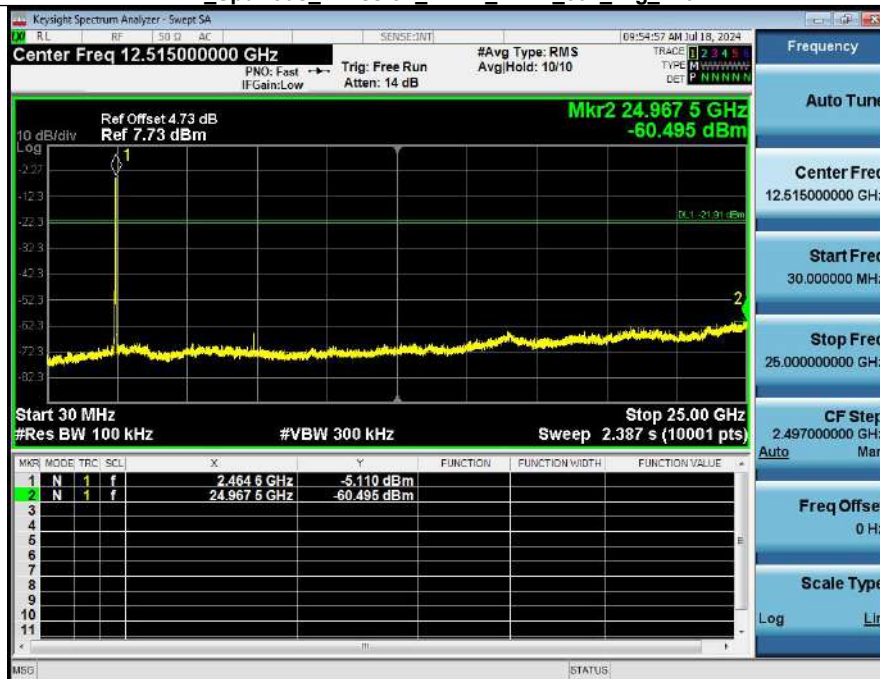
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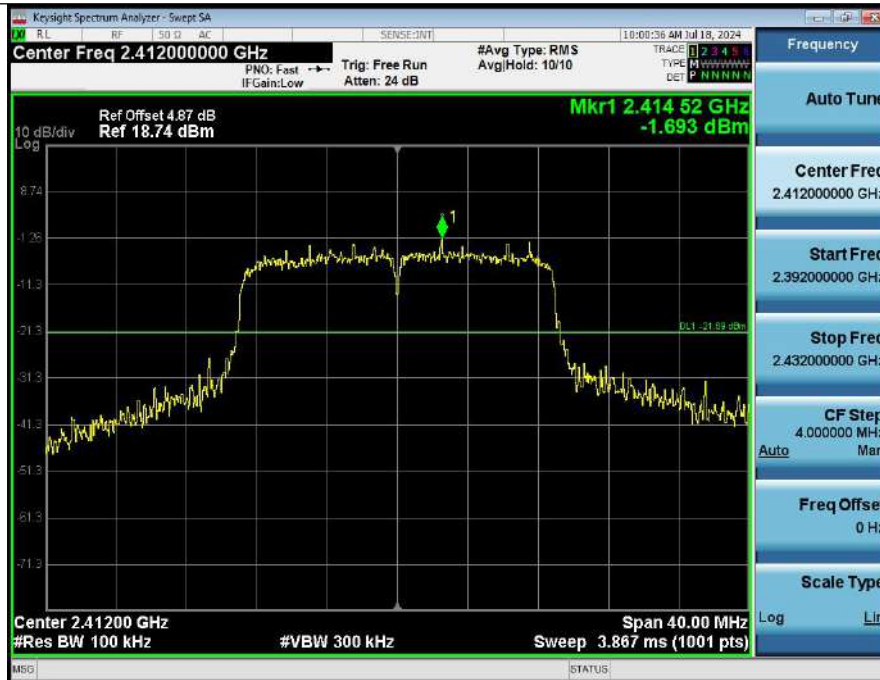
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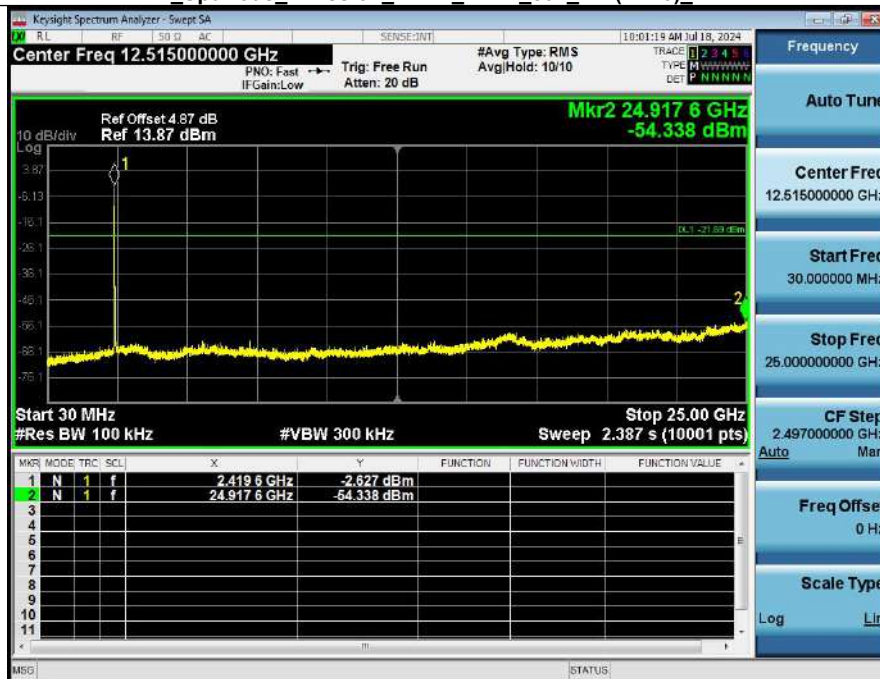
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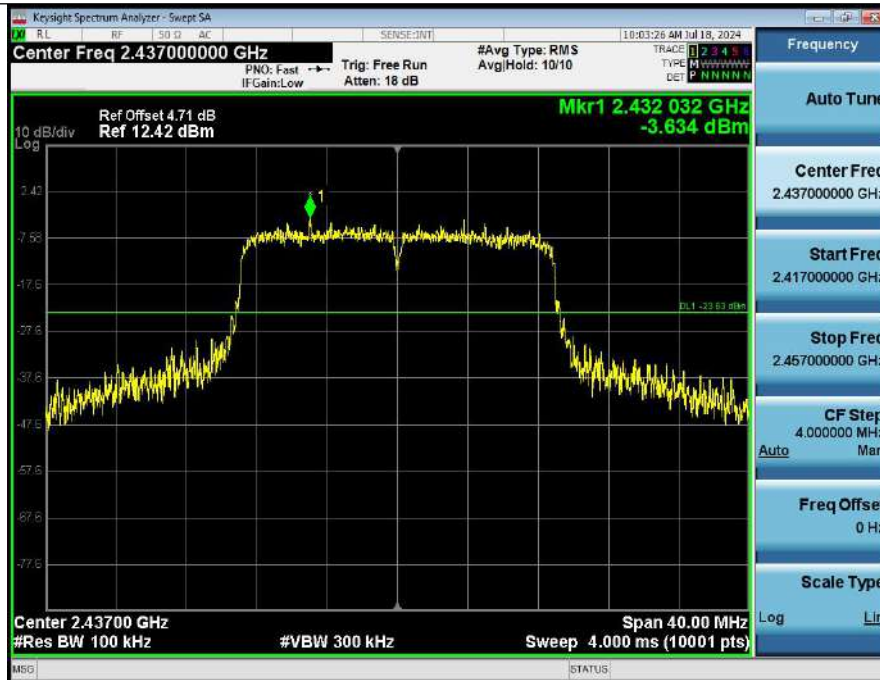
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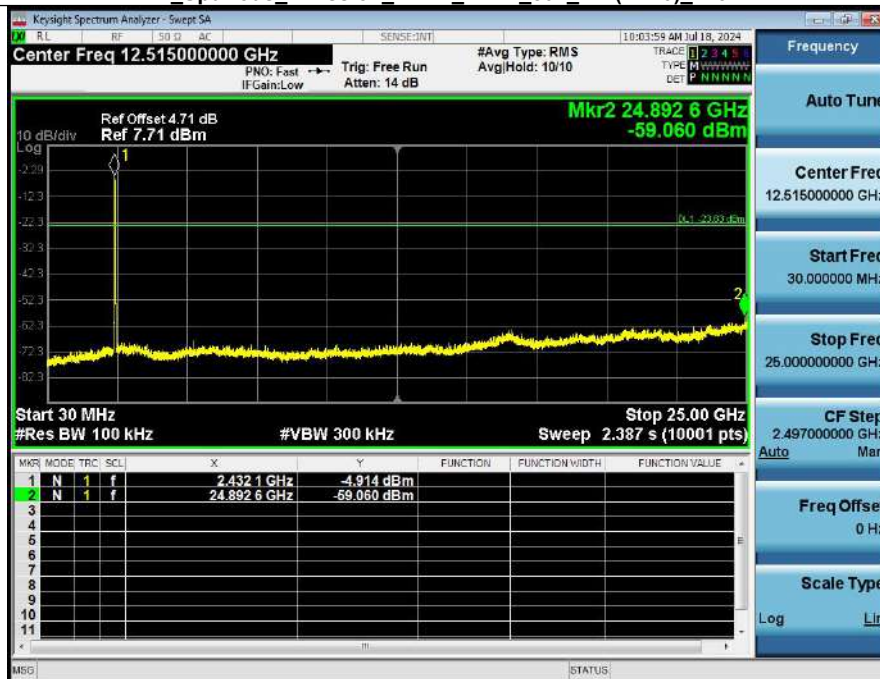
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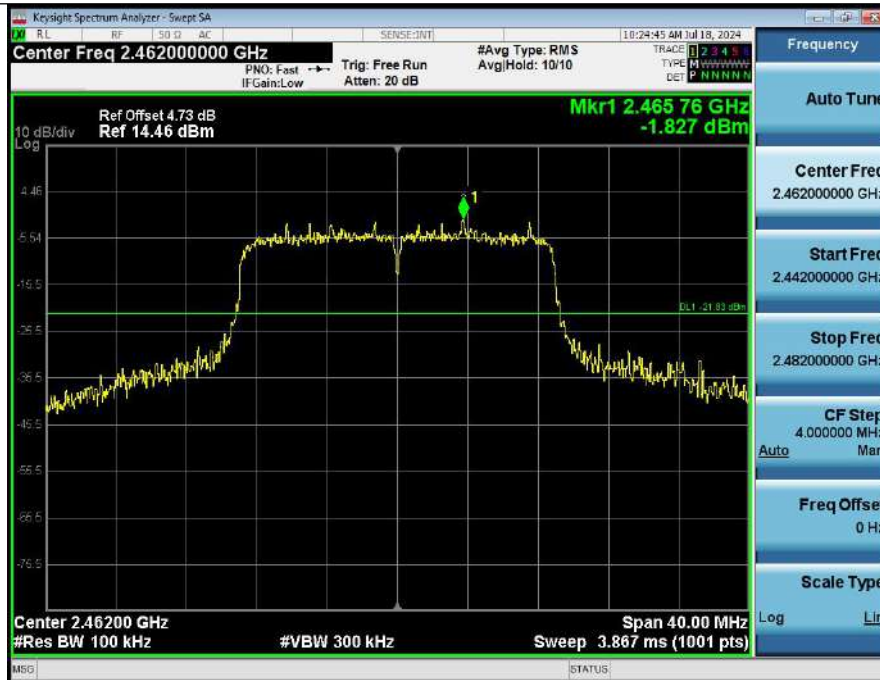
1 Reference_Level_NVNT_ANT1_802_11n(HT20)_2437



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

