

Appendix--ANT2

HT250729014--X5M Pro--2.4G--FCC-2

FCC_2.4G_WIFI (Part15.247) Test Data

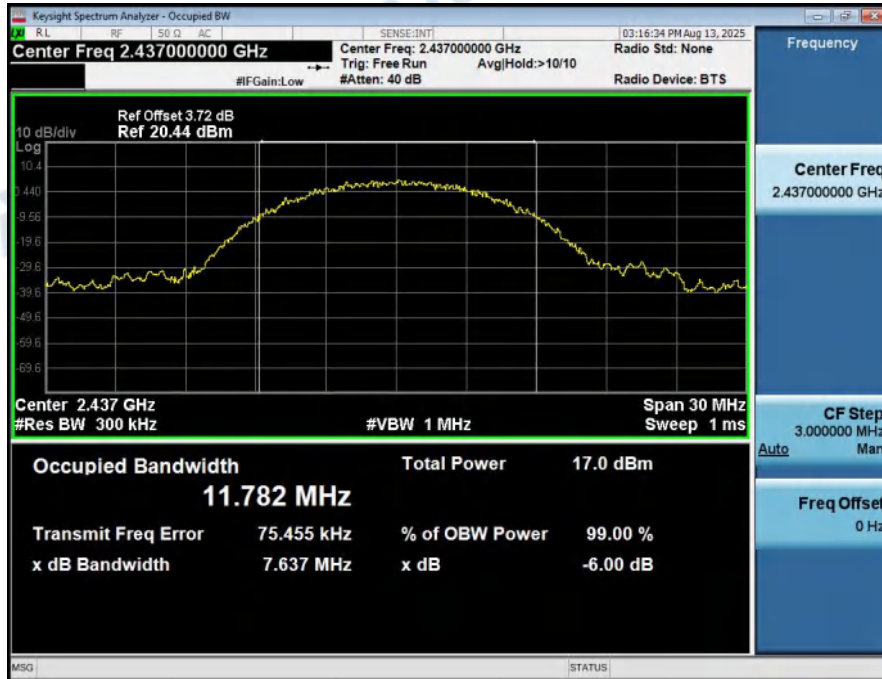
1. -6dB Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	7.70	500	Pass
NVNT	ANT1	802.11b	2437.00	7.64	500	Pass
NVNT	ANT1	802.11b	2462.00	7.48	500	Pass
NVNT	ANT1	802.11g	2412.00	16.19	500	Pass
NVNT	ANT1	802.11g	2437.00	15.41	500	Pass
NVNT	ANT1	802.11g	2462.00	15.86	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	17.33	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	17.20	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	17.32	500	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	18.71	500	Pass
NVNT	ANT1	802.11ax(HE20)	2437.00	18.60	500	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	18.74	500	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	35.18	500	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	35.67	500	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	34.56	500	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	37.29	500	Pass
NVNT	ANT1	802.11ax(HE40)	2437.00	37.71	500	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	37.10	500	Pass

-6dB_Bandwidth_NVNT_ANT1_802_11b_2412



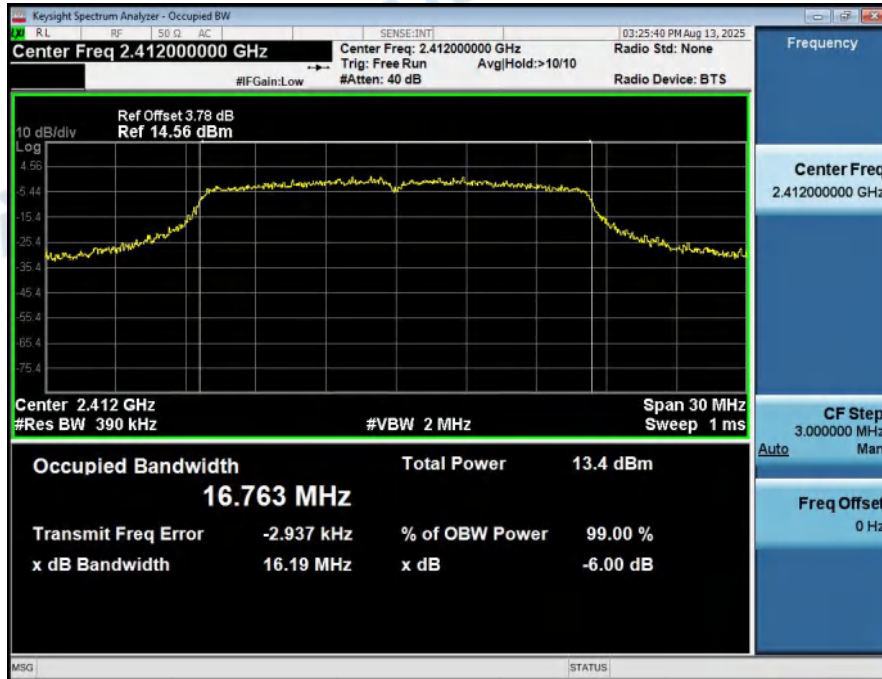
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-6dB_Bandwidth_NVNT_ANT1_802_11b_2462



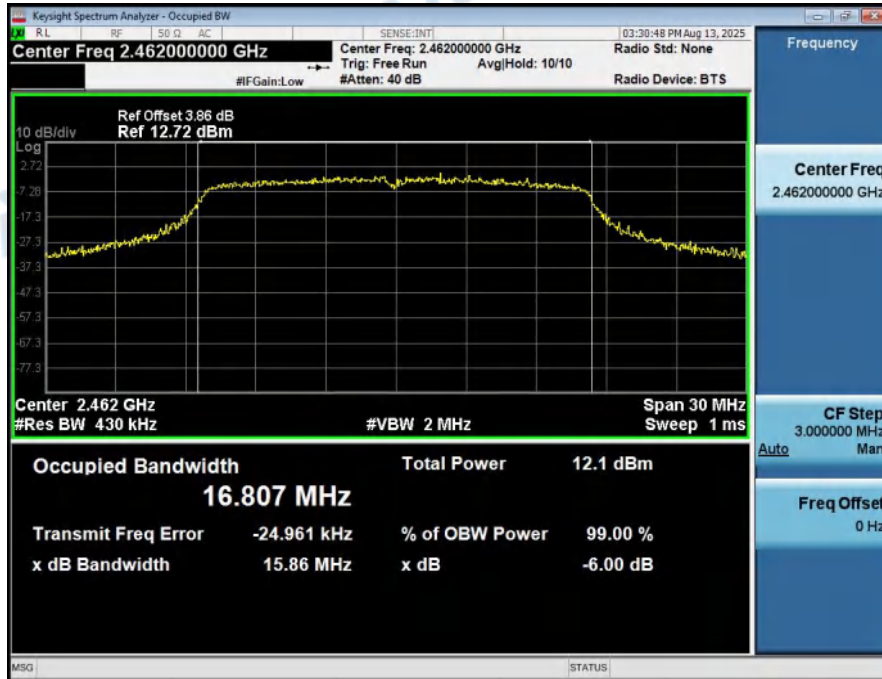
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-6dB_Bandwidth_NVNT_ANT1_802_11g_2437



-6dB_Bandwidth_NVNT_ANT1_802_11g_2462



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2412



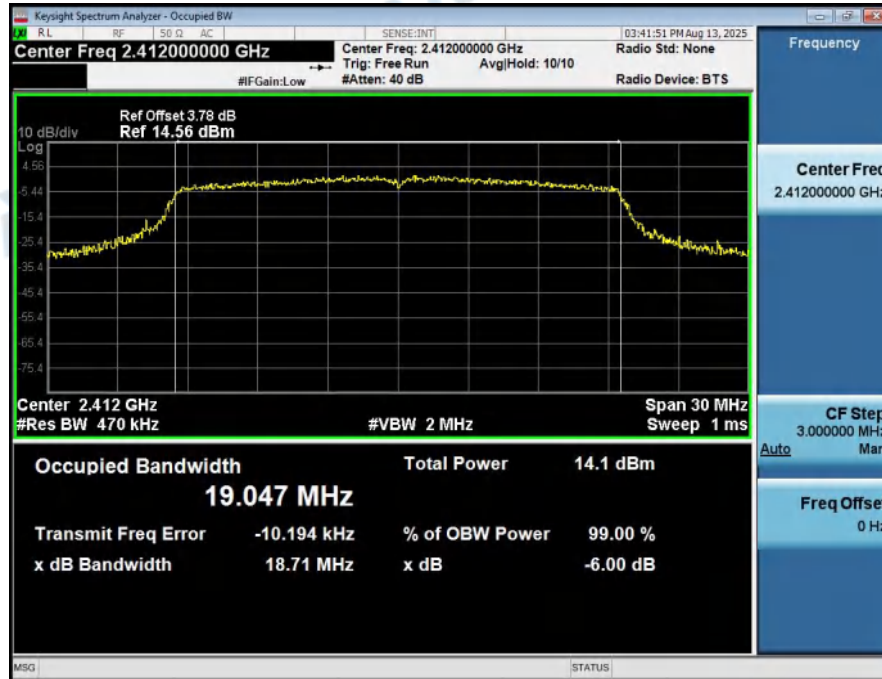
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-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462



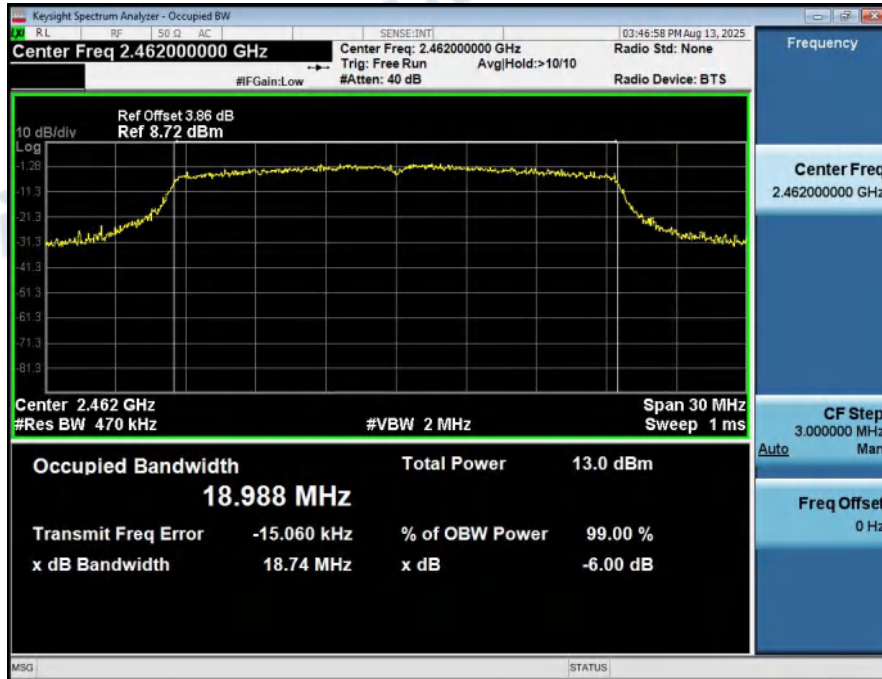
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-6dB_Bandwidth_NVNT_ANT1_802_11ax(HE20)_2437



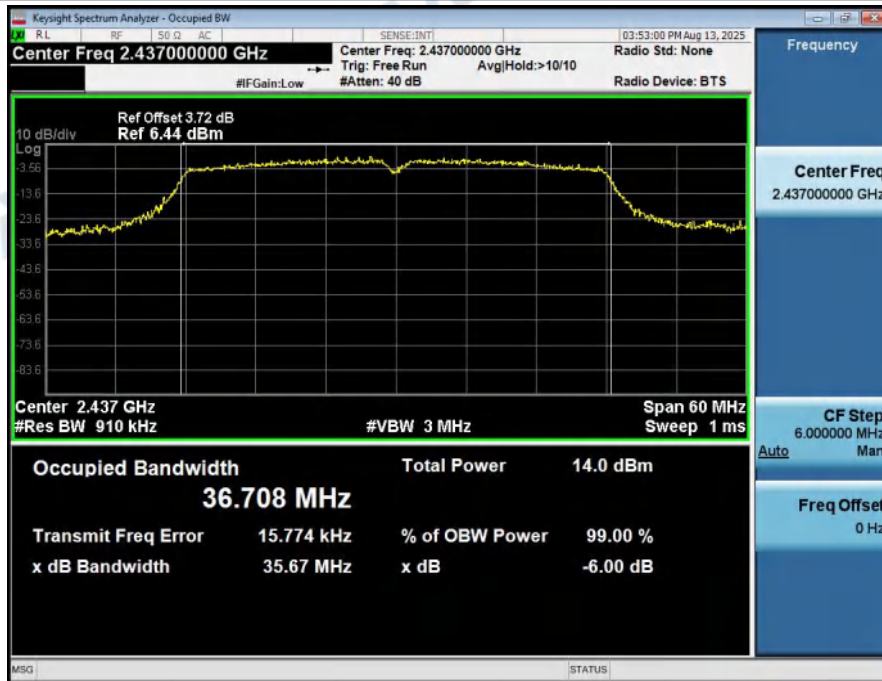
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-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2422



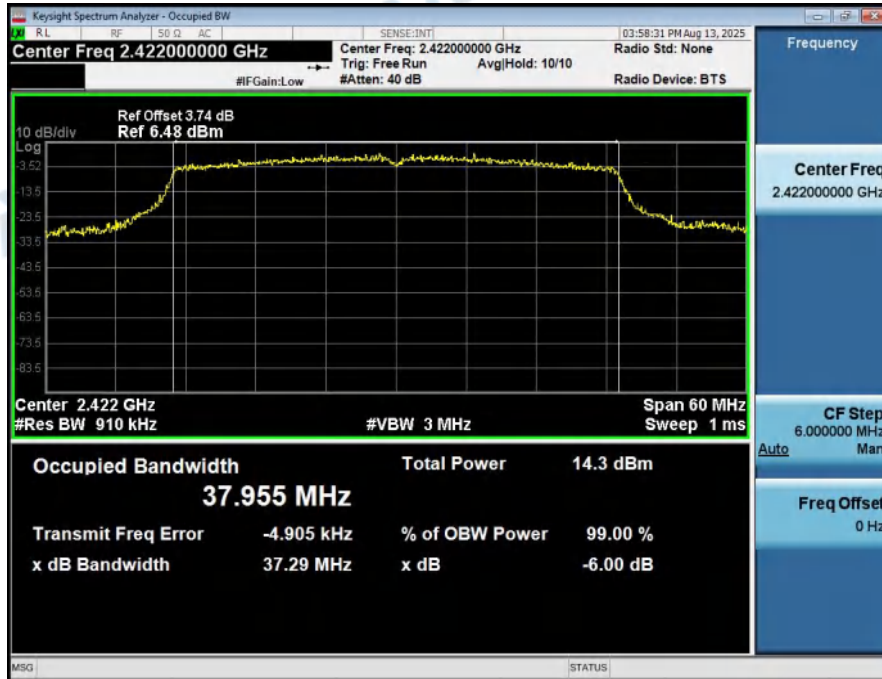
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-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2452



-6dB_Bandwidth_NVNT_ANT1_802_11ax(HE40)_2422



-6dB_Bandwidth_NVNT_ANT1_802_11ax(HE40)_2437



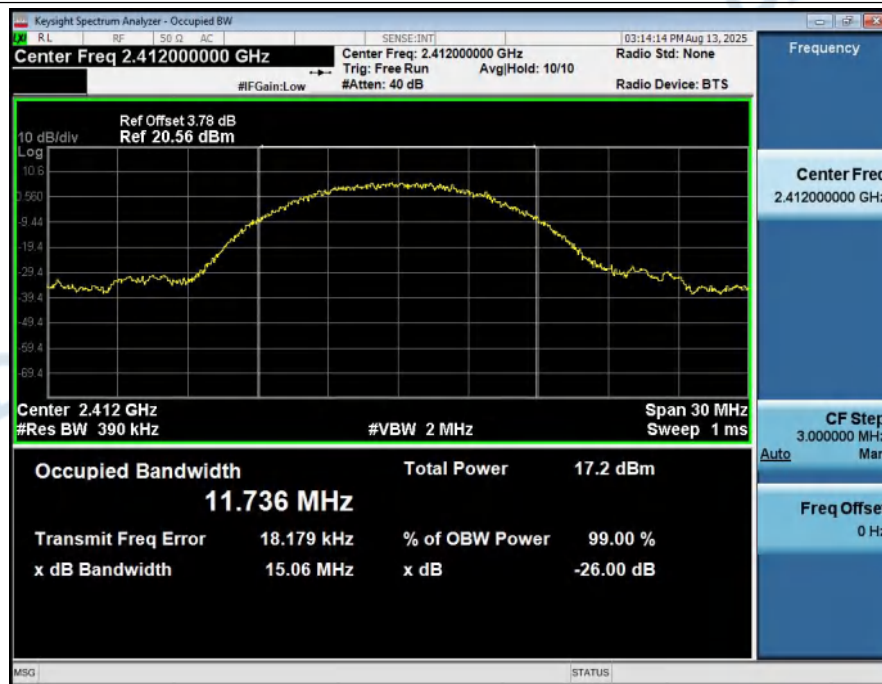
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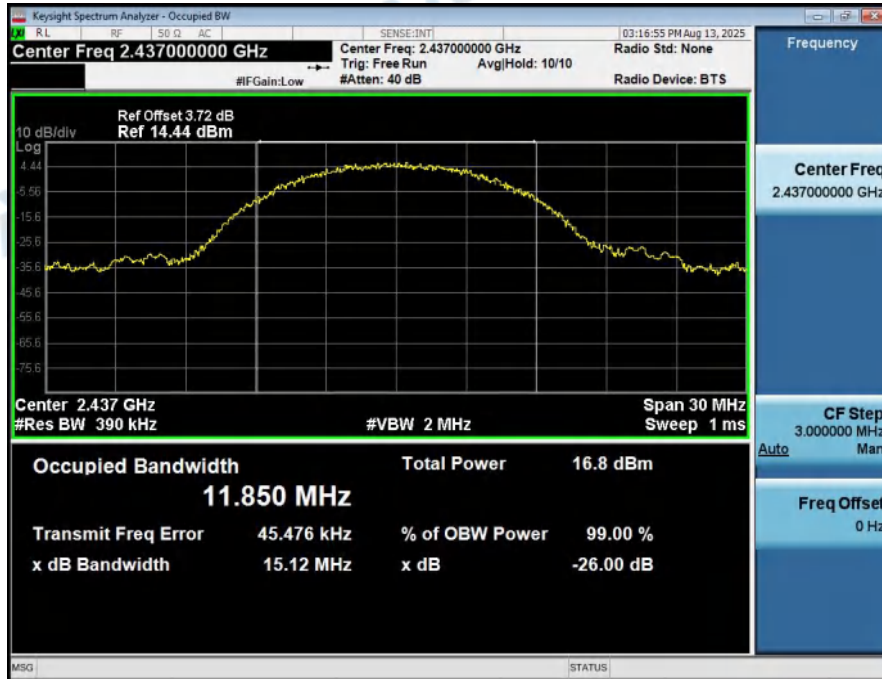
2. 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99% BW (MHz)
NVNT	ANT1	802.11b	2412.00	11.736
NVNT	ANT1	802.11b	2437.00	11.850
NVNT	ANT1	802.11b	2462.00	11.430
NVNT	ANT1	802.11g	2412.00	16.997
NVNT	ANT1	802.11g	2437.00	16.961
NVNT	ANT1	802.11g	2462.00	16.874
NVNT	ANT1	802.11n(HT20)	2412.00	18.047
NVNT	ANT1	802.11n(HT20)	2437.00	18.104
NVNT	ANT1	802.11n(HT20)	2462.00	18.034
NVNT	ANT1	802.11ax(HE20)	2412.00	19.034
NVNT	ANT1	802.11ax(HE20)	2437.00	19.062
NVNT	ANT1	802.11ax(HE20)	2462.00	19.051
NVNT	ANT1	802.11n(HT40)	2422.00	36.686
NVNT	ANT1	802.11n(HT40)	2437.00	36.658
NVNT	ANT1	802.11n(HT40)	2452.00	36.850
NVNT	ANT1	802.11ax(HE40)	2422.00	38.028
NVNT	ANT1	802.11ax(HE40)	2437.00	38.065
NVNT	ANT1	802.11ax(HE40)	2452.00	38.009

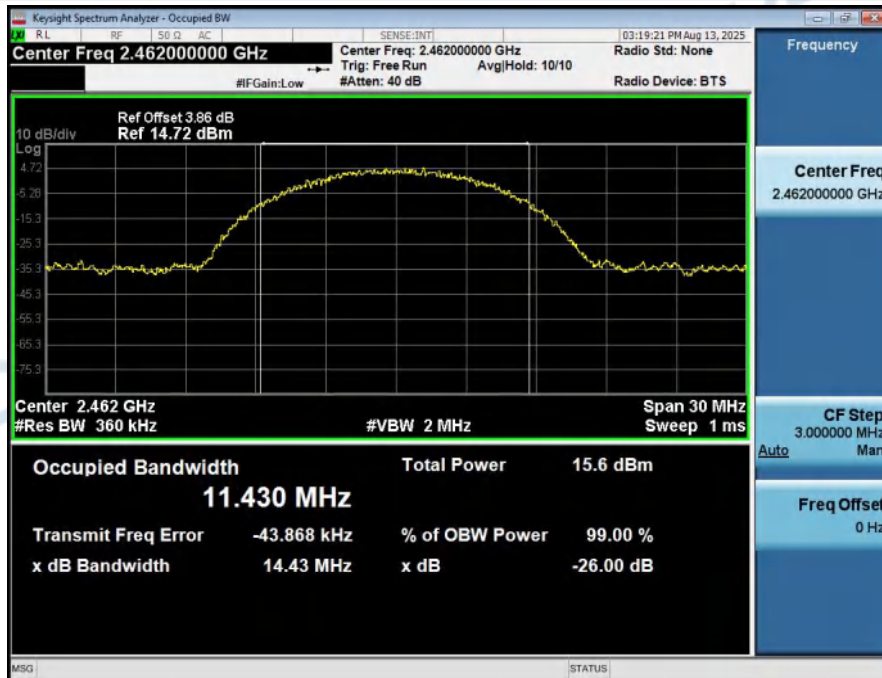
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99%_Occupied_Bandwidth_NVNT_ANT1_802_11b_2437



99%_Occupied_Bandwidth_NVNT_ANT1_802_11b_2462



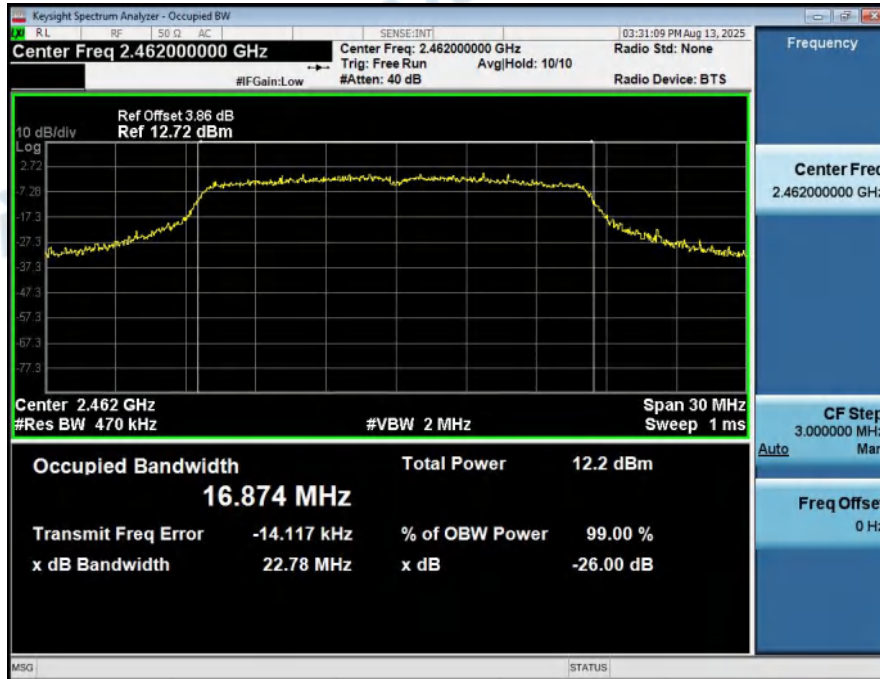
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99%_Occupied_Bandwidth_NVNT_ANT1_802_11g_2437



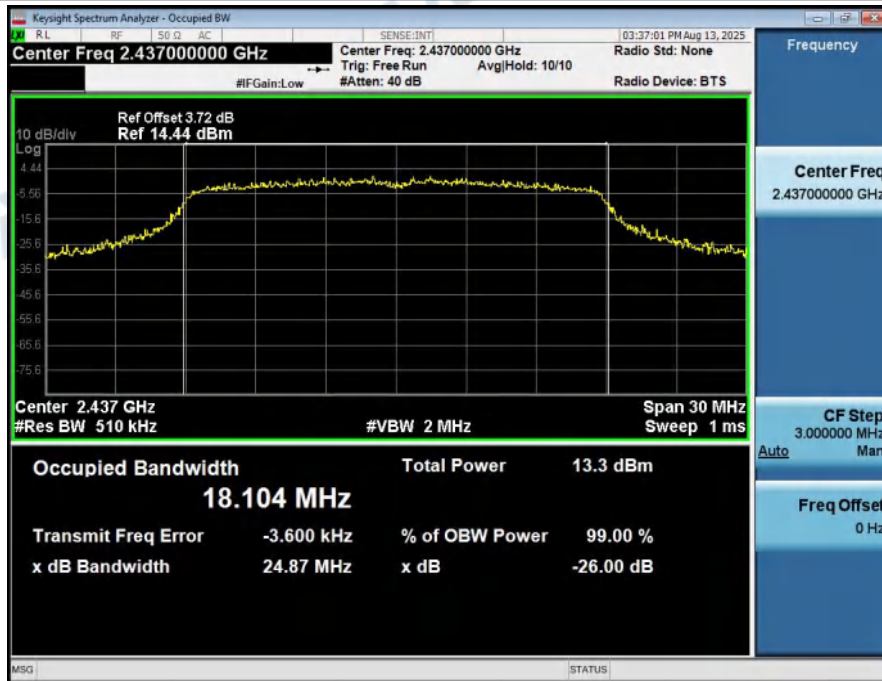
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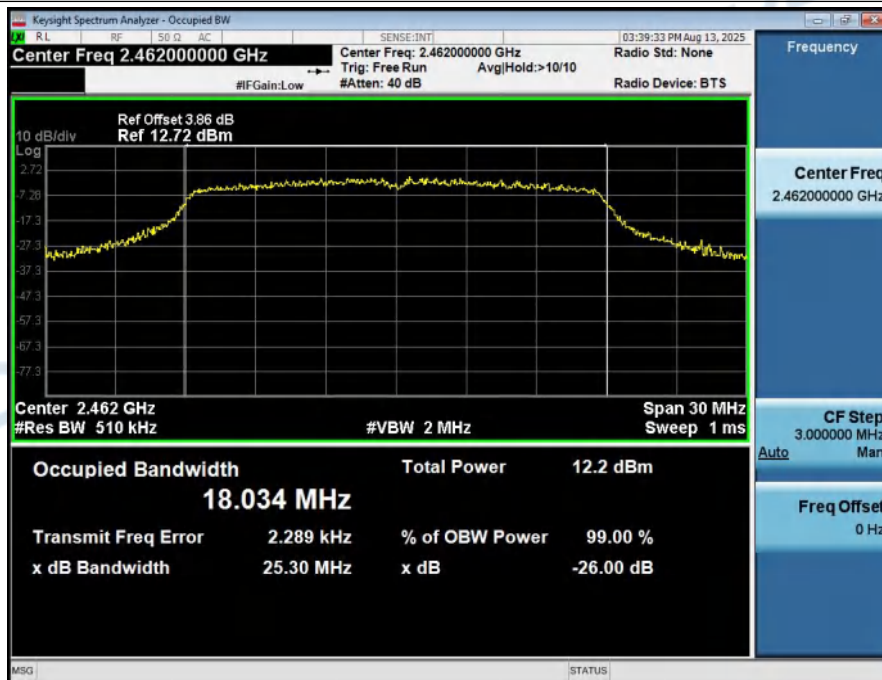
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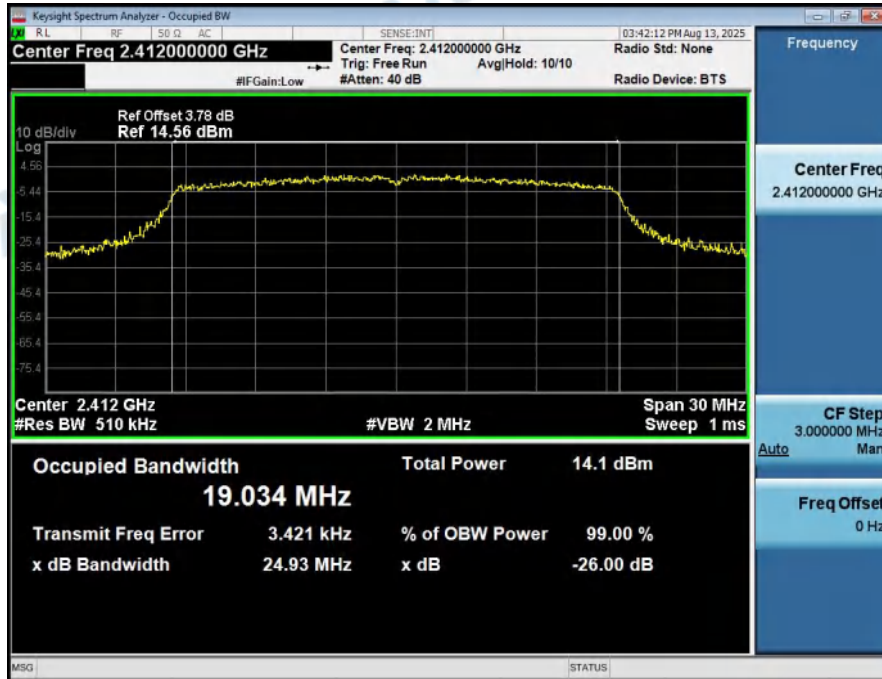
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99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462



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_11n(HT40)_2437



99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT40)_2452



99%_Occupied_Bandwidth_NVNT_ANT1_802_11ax(HE40)_2422



99%_Occupied_Bandwidth_NVNT_ANT1_802_11ax(HE40)_2437



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	35.48	4.50
NVNT	ANT1	802.11b	2437.00	37.50	4.26
NVNT	ANT1	802.11b	2462.00	35.48	4.50
NVNT	ANT1	802.11g	2412.00	27.59	5.59
NVNT	ANT1	802.11g	2437.00	30.00	5.23
NVNT	ANT1	802.11g	2462.00	30.00	5.23
NVNT	ANT1	802.11n(HT20)	2412.00	27.59	5.59
NVNT	ANT1	802.11n(HT20)	2437.00	28.57	5.44
NVNT	ANT1	802.11n(HT20)	2462.00	27.59	5.59
NVNT	ANT1	802.11ax(HE20)	2412.00	43.24	3.64
NVNT	ANT1	802.11ax(HE20)	2437.00	45.95	3.38
NVNT	ANT1	802.11ax(HE20)	2462.00	43.24	3.64
NVNT	ANT1	802.11n(HT40)	2422.00	36.36	4.39
NVNT	ANT1	802.11n(HT40)	2437.00	41.18	3.85
NVNT	ANT1	802.11n(HT40)	2452.00	38.24	4.18
NVNT	ANT1	802.11ax(HE40)	2422.00	45.95	3.38
NVNT	ANT1	802.11ax(HE40)	2437.00	43.24	3.64
NVNT	ANT1	802.11ax(HE40)	2452.00	43.24	3.64

4. MAX. Output Power

Condition	Antenna	Modulation	Frequency (MHz)	Detector	Conducted Power(dBm)	Duty factor(dB)	Total Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	Peak	16.23	N/A	16.23	30	Pass
NVNT	ANT1	802.11b	2437.00	Peak	15.84	N/A	15.84	30	Pass
NVNT	ANT1	802.11b	2462.00	Peak	14.68	N/A	14.68	30	Pass
NVNT	ANT1	802.11g	2412.00	Peak	13.08	N/A	13.08	30	Pass
NVNT	ANT1	802.11g	2437.00	Peak	12.85	N/A	12.85	30	Pass
NVNT	ANT1	802.11g	2462.00	Peak	11.60	N/A	11.60	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	Peak	12.62	N/A	12.62	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	Peak	12.54	N/A	12.54	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	Peak	11.43	N/A	11.43	30	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	Peak	13.45	N/A	13.45	30	Pass
NVNT	ANT1	802.11ax(HE20)	2437.00	Peak	13.47	N/A	13.47	30	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	Peak	12.41	N/A	12.41	30	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	Peak	12.57	N/A	12.57	30	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	Peak	12.88	N/A	12.88	30	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	Peak	12.58	N/A	12.58	30	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	Peak	13.30	N/A	13.30	30	Pass
NVNT	ANT1	802.11ax(HE40)	2437.00	Peak	13.51	N/A	13.51	30	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	Peak	8.61	N/A	8.61	30	Pass

5. Power Spectral Density

Condition	Antenna	Modulation	Frequency (MHz)	SA_PSD(dBm/30kHz)	limit(dBm/3kHz)	Result
NVNT	ANT1	802.11b	2412.00	-2.83	8	Pass
NVNT	ANT1	802.11b	2437.00	-2.97	8	Pass
NVNT	ANT1	802.11b	2462.00	-4.46	8	Pass
NVNT	ANT1	802.11g	2412.00	-8.95	8	Pass
NVNT	ANT1	802.11g	2437.00	-9.18	8	Pass
NVNT	ANT1	802.11g	2462.00	-10.63	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-8.99	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-8.88	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-10.20	8	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	-10.39	8	Pass
NVNT	ANT1	802.11ax(HE20)	2437.00	-10.22	8	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	-11.52	8	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	-13.14	8	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	-12.93	8	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	-12.77	8	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	-13.43	8	Pass
NVNT	ANT1	802.11ax(HE40)	2437.00	-13.21	8	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	-18.37	8	Pass

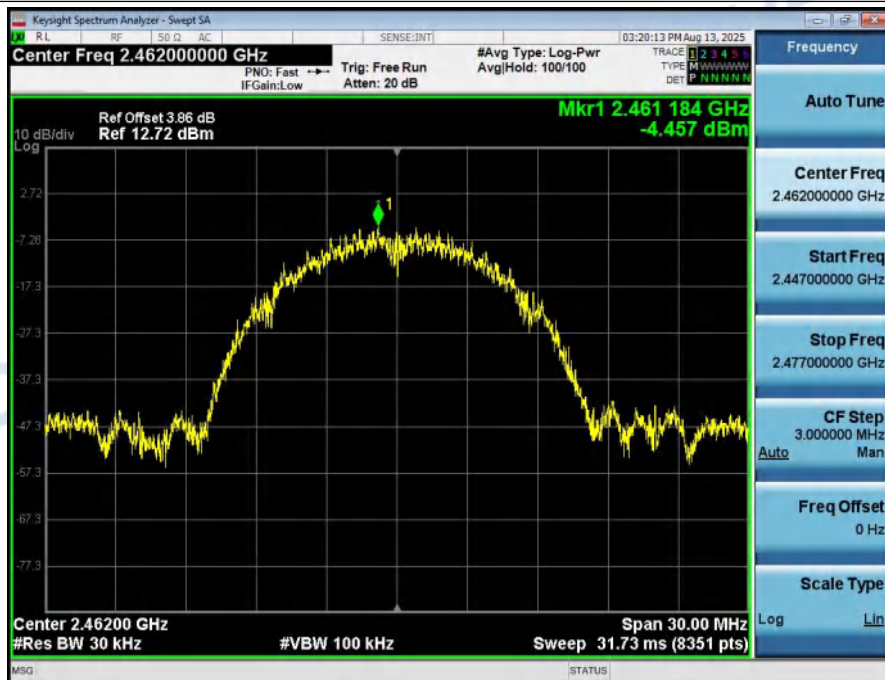
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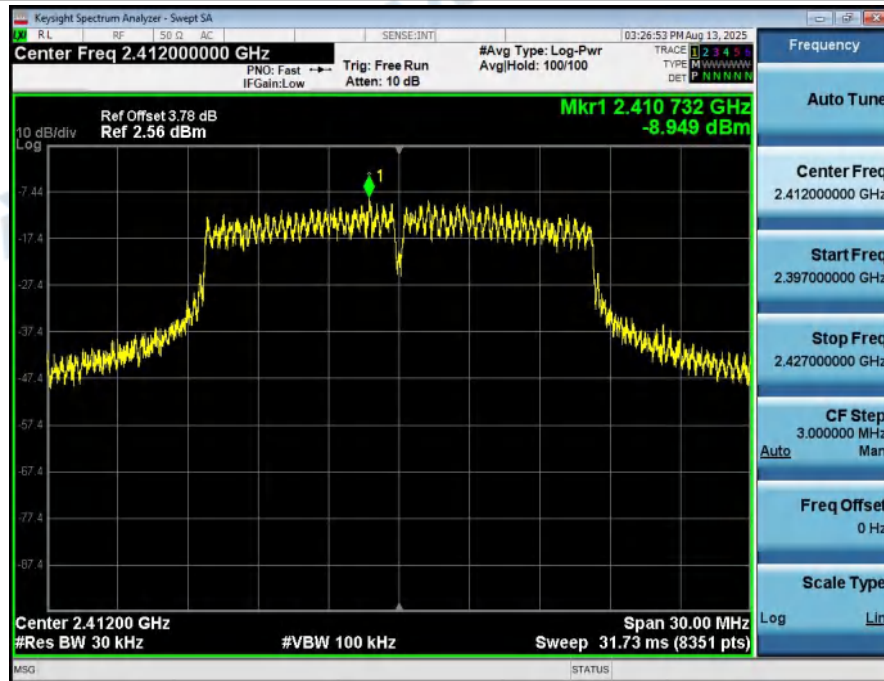
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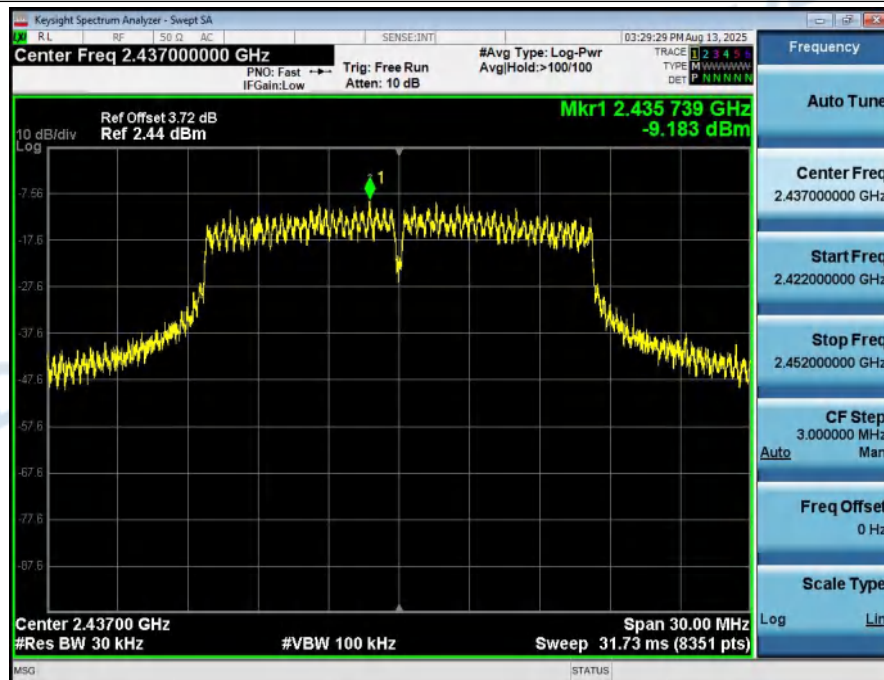
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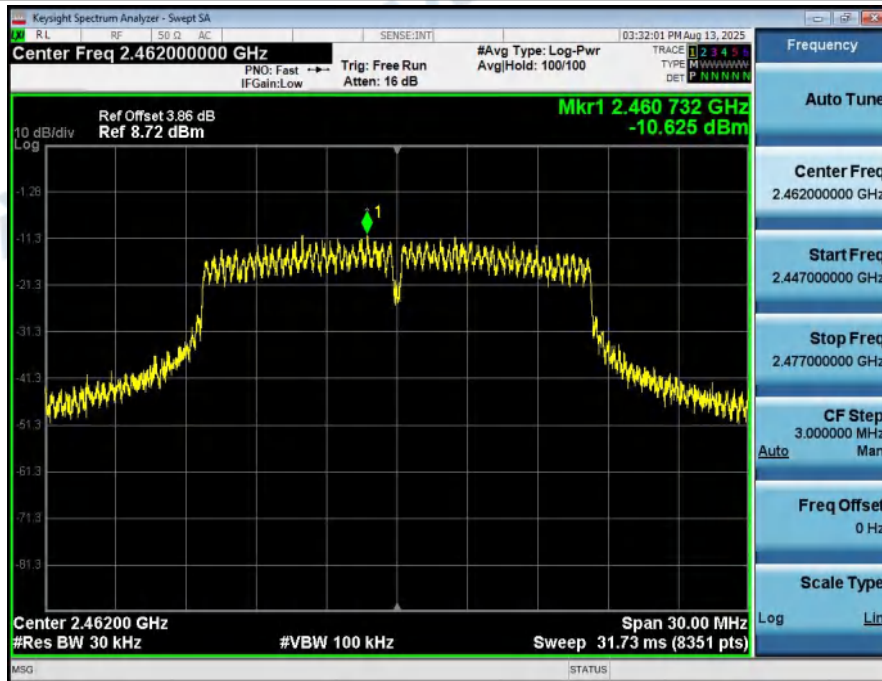
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Power_Spectral_Density_NVNT_ANT1_802_11g_2437



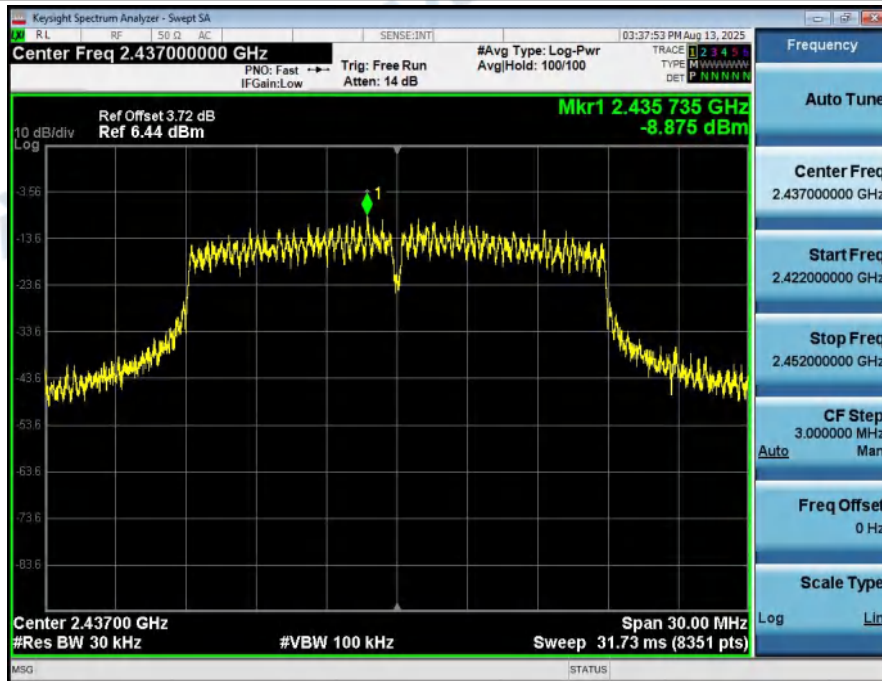
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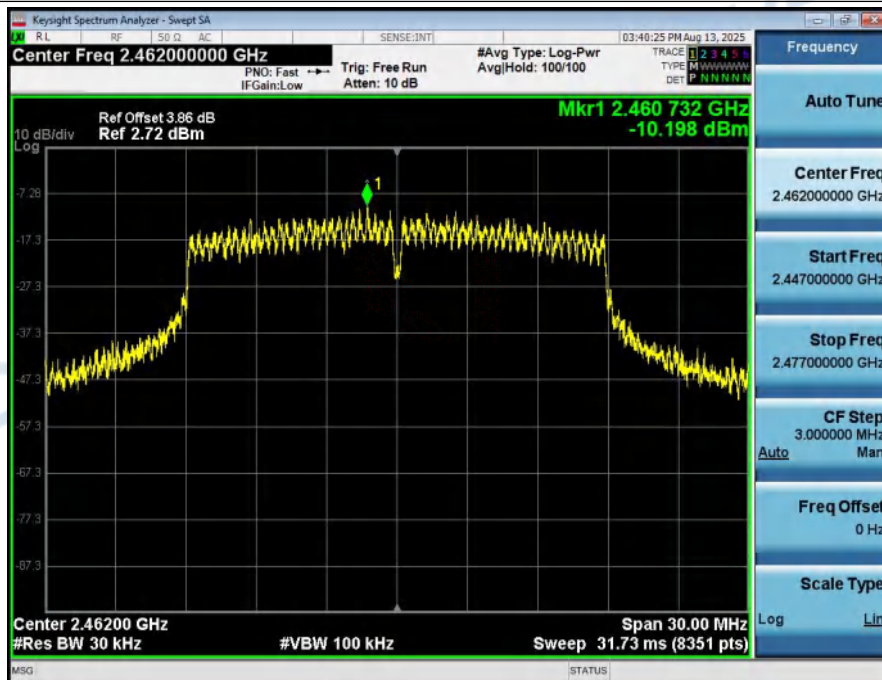
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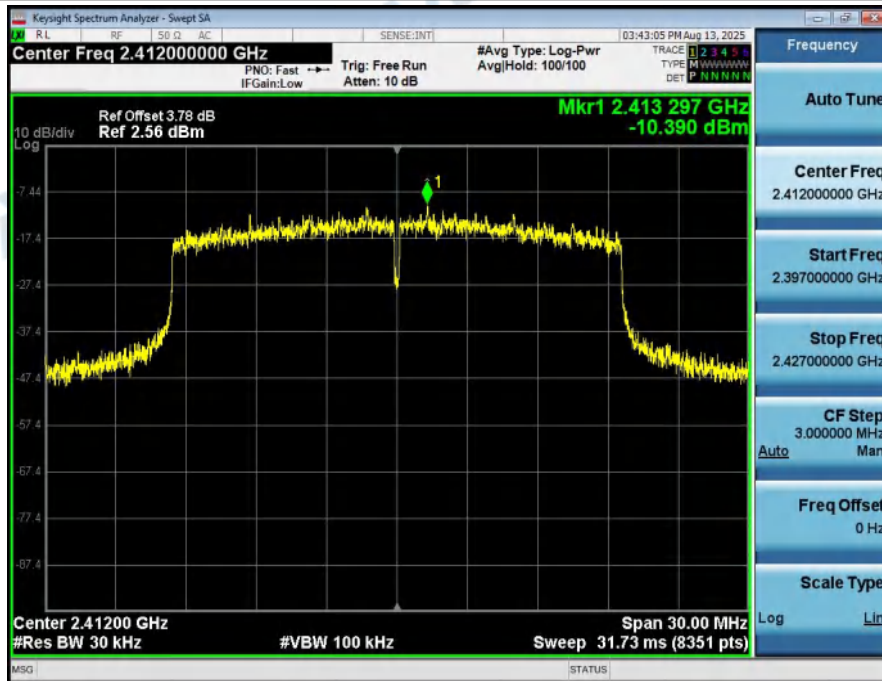
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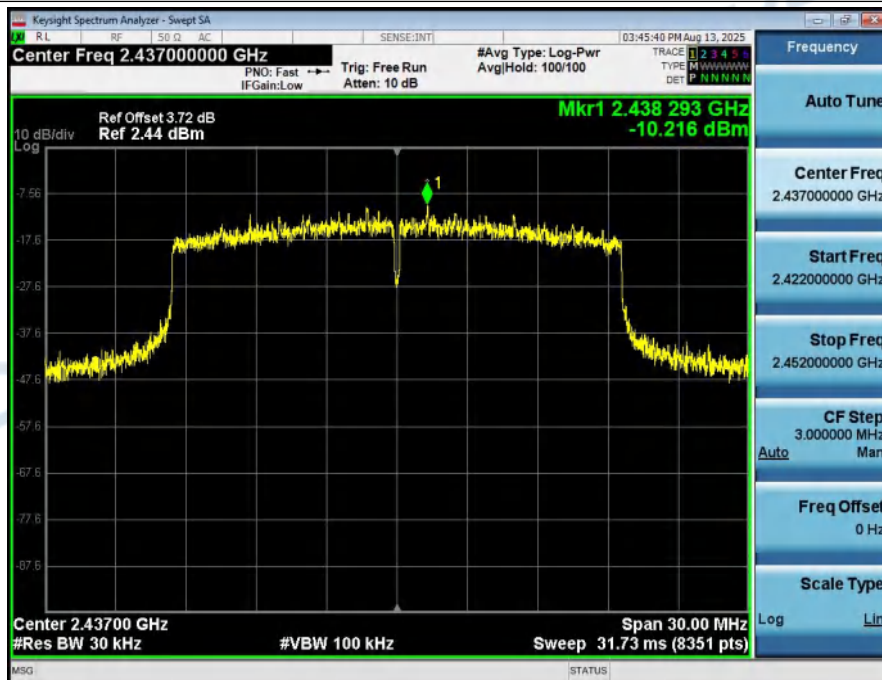
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Power_Spectral_Density_NVNT_ANT1_802_11ax(HE20)_2412



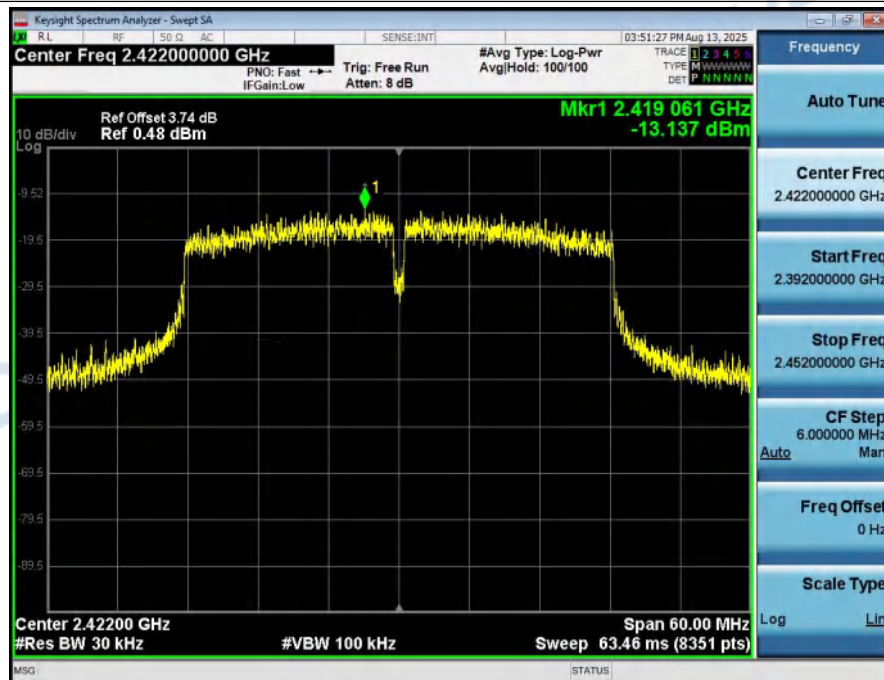
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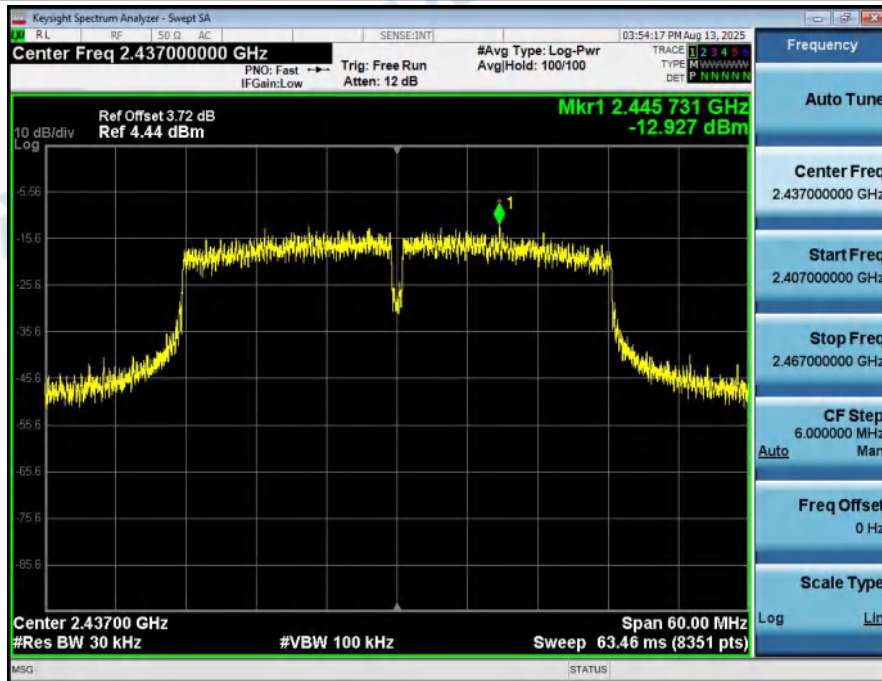
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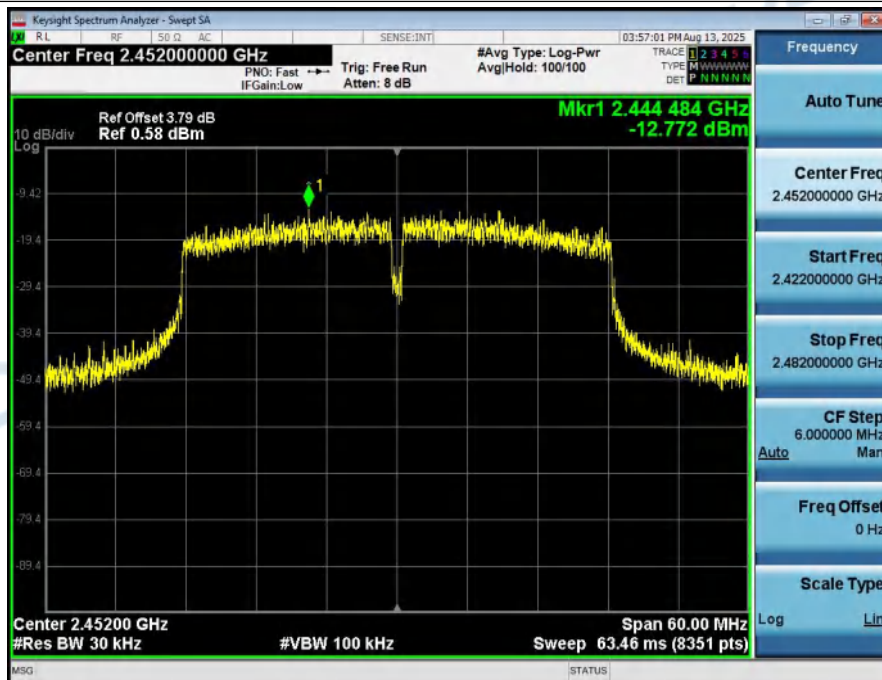
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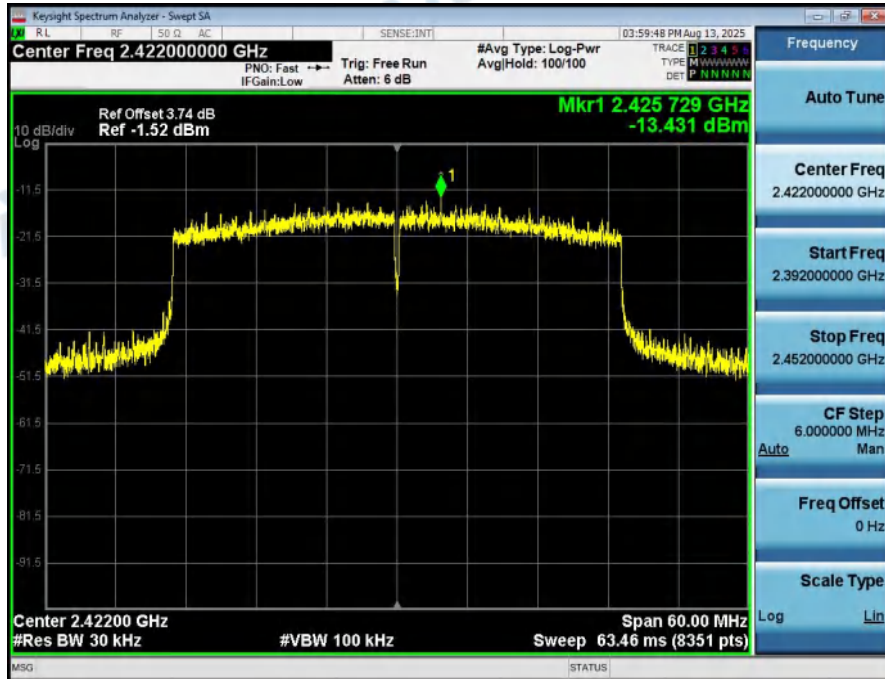
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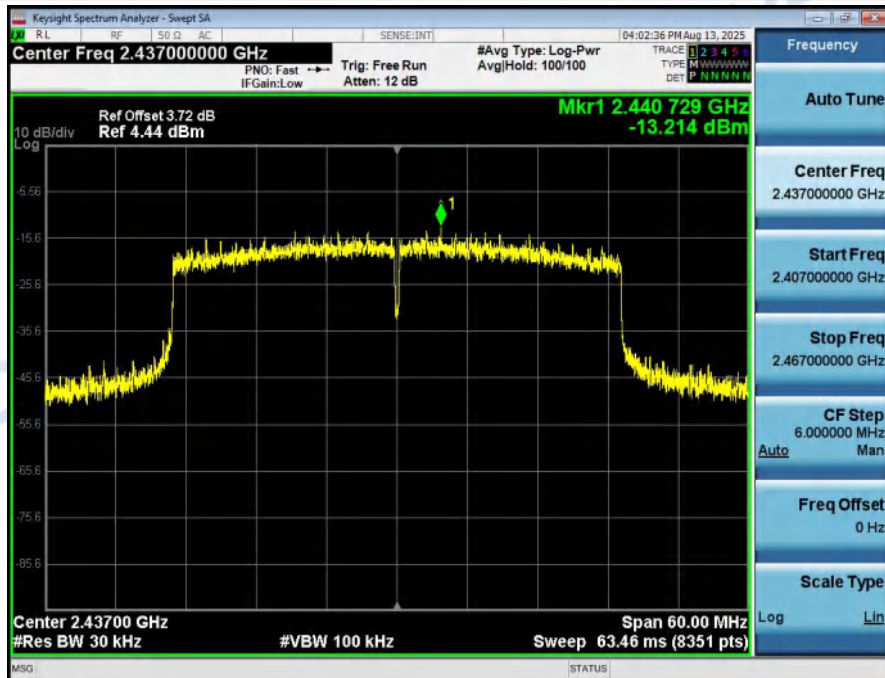
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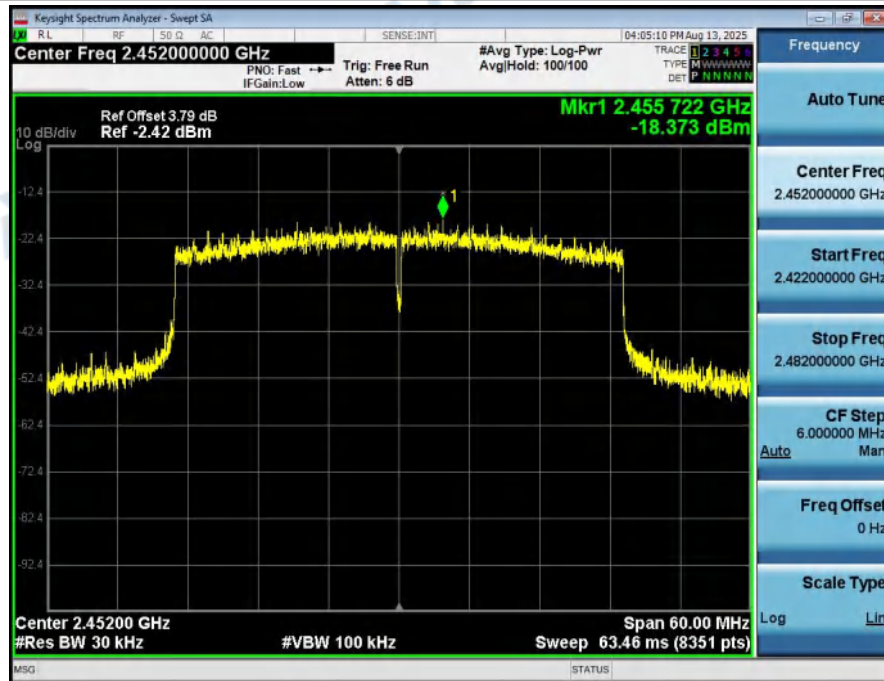
Power_Spectral_Density_NVNT_ANT1_802_11ax(HE40)_2422



Power_Spectral_Density_NVNT_ANT1_802_11ax(HE40)_2437



Power_Spectral_Density_NVNT_ANT1_802_11ax(HE40)_2452



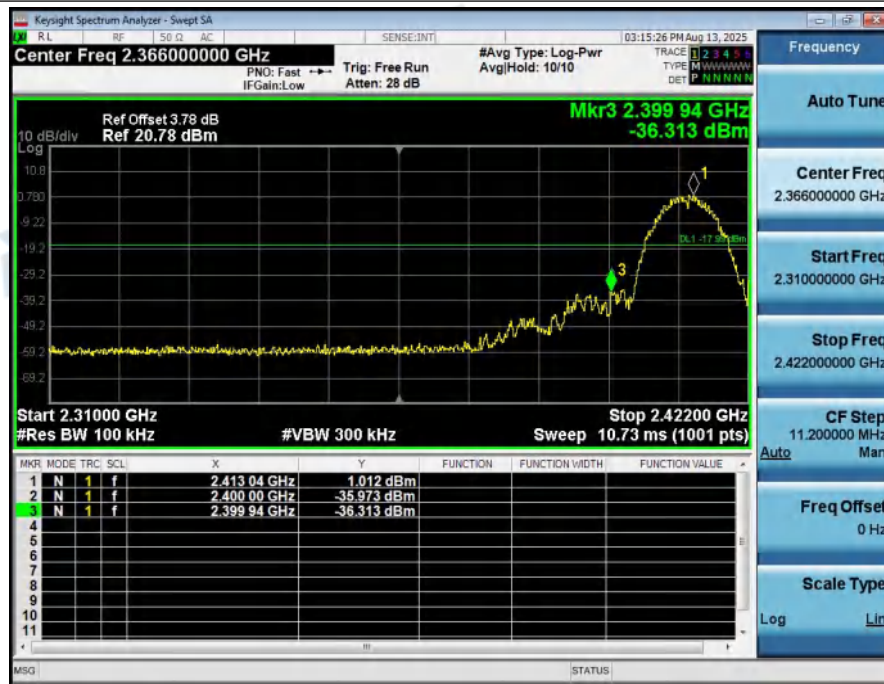
6. Bandedge

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_freq(MHz)	Ref_level(dBm)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	2399.936	2.006	-36.313	-17.994	Pass
NVNT	ANT1	802.11b	2462.00	2483.536	0.339	-51.263	-19.661	Pass
NVNT	ANT1	802.11g	2412.00	2397.024	-4.715	-34.395	-24.715	Pass
NVNT	ANT1	802.11g	2462.00	2484.208	-5.776	-46.158	-25.776	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2399.488	-4.548	-35.592	-24.548	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2483.584	-5.795	-46.796	-25.795	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	2395.792	-5.171	-37.013	-25.171	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	2483.680	-5.962	-45.291	-25.962	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	2396.988	-7.956	-35.324	-27.956	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	2486.944	-7.887	-38.307	-27.887	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	2395.800	-8.071	-35.557	-28.071	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	2497.960	-12.769	-45.804	-32.769	Pass

1_Reference_Level_NVNT_ANT1_802_11b_2412



2_Bandedge_NVNT_ANT1_802_11b_2412



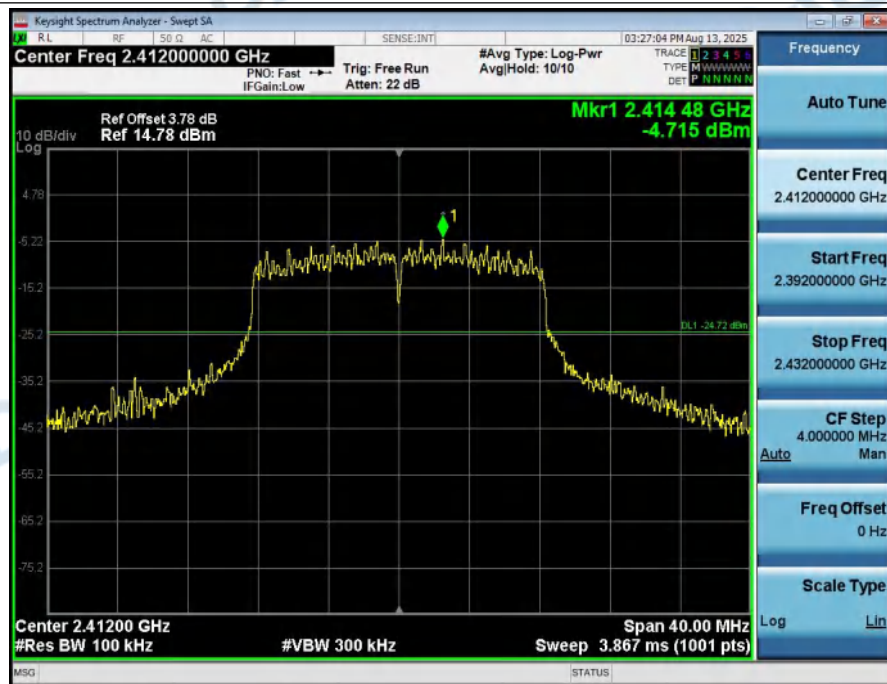
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2_Bandedge_NVNT_ANT1_802_11b_2462



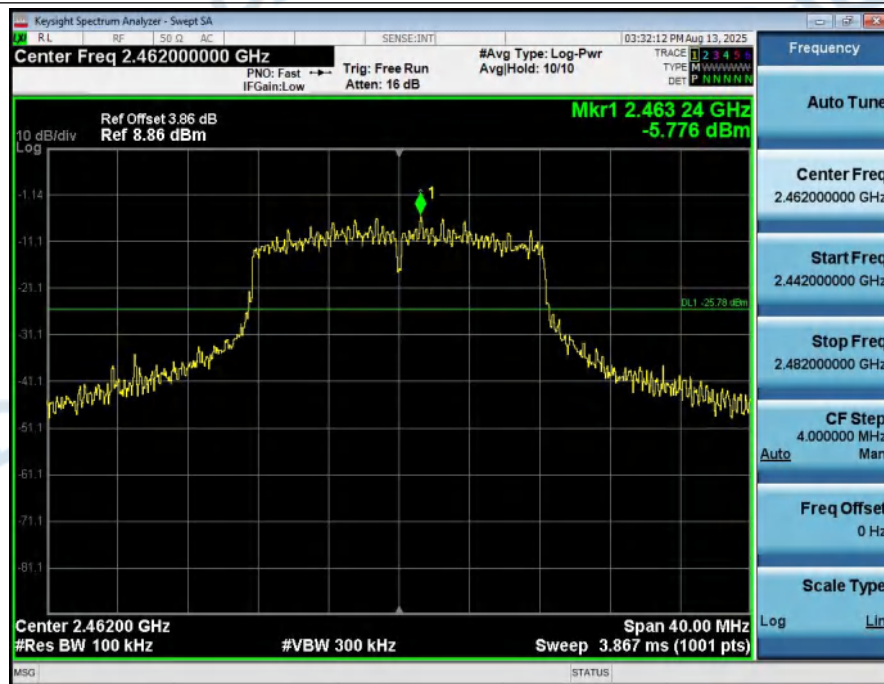
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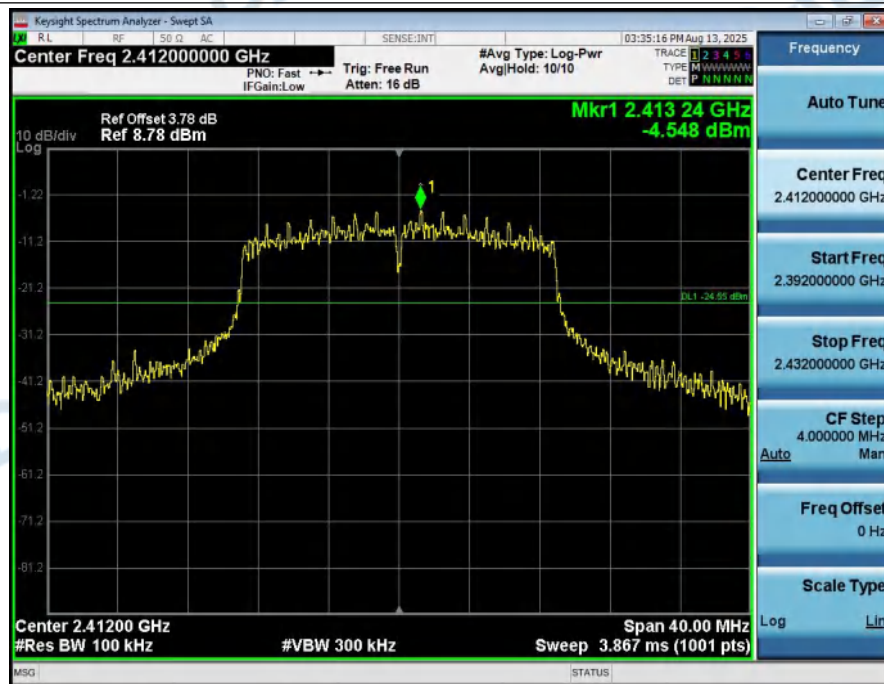
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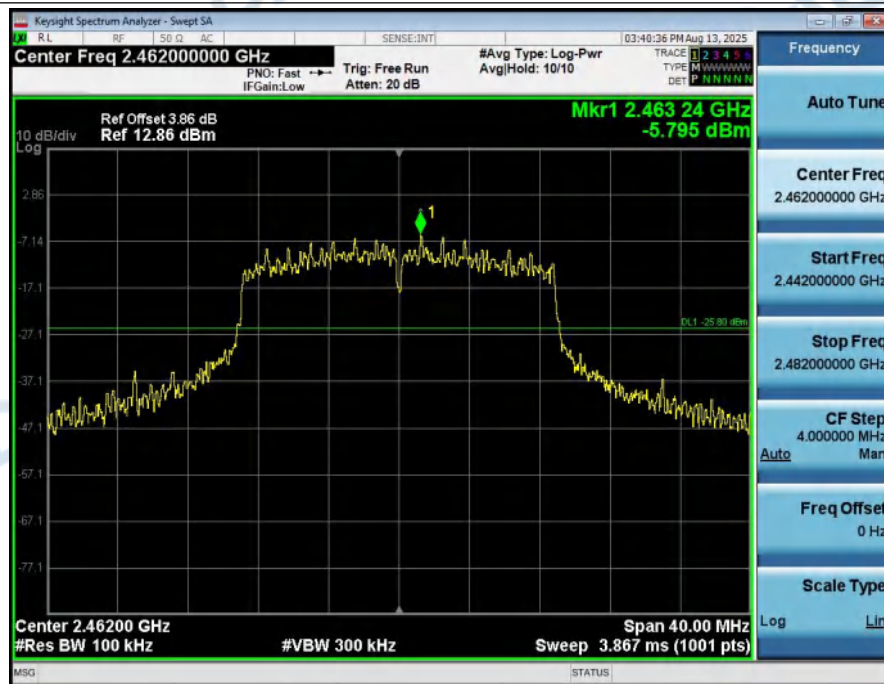
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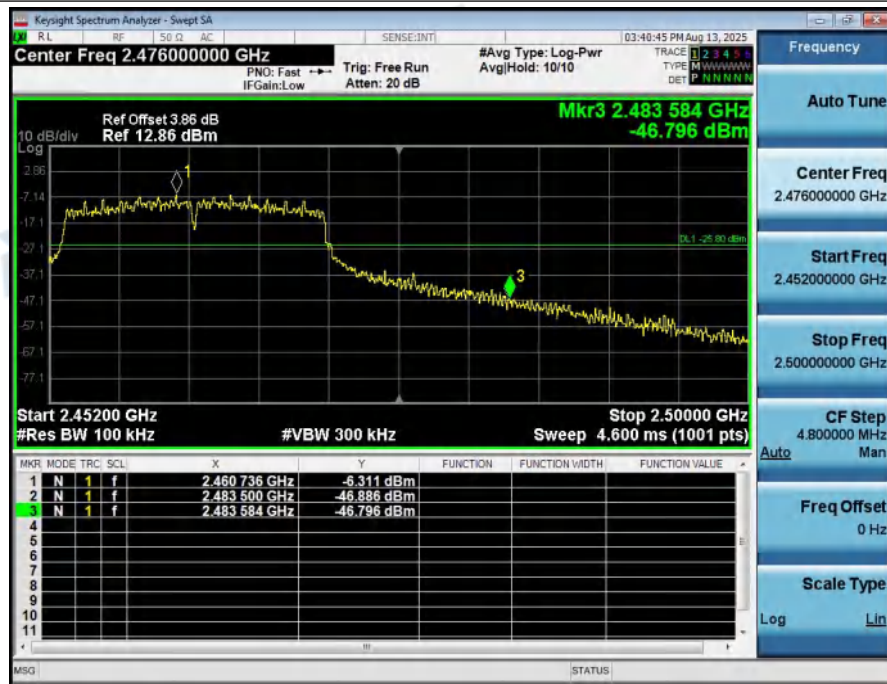
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1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2462



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



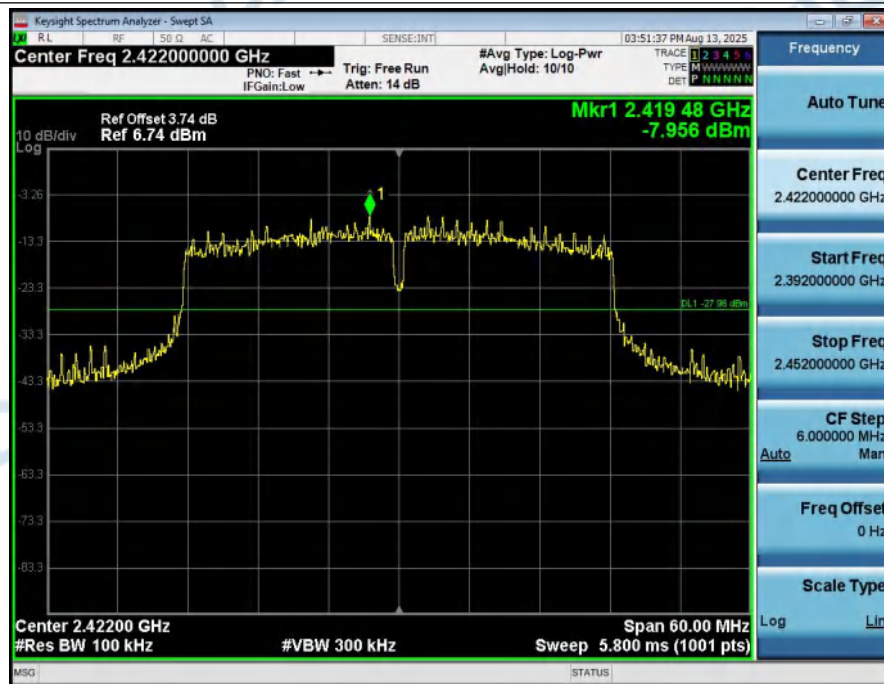
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2_Bandedge_NVNT_ANT1_802_11ax(HE20)_2462



1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2422



2_Bandedge_NVNT_ANT1_802_11n(HT40)_2422



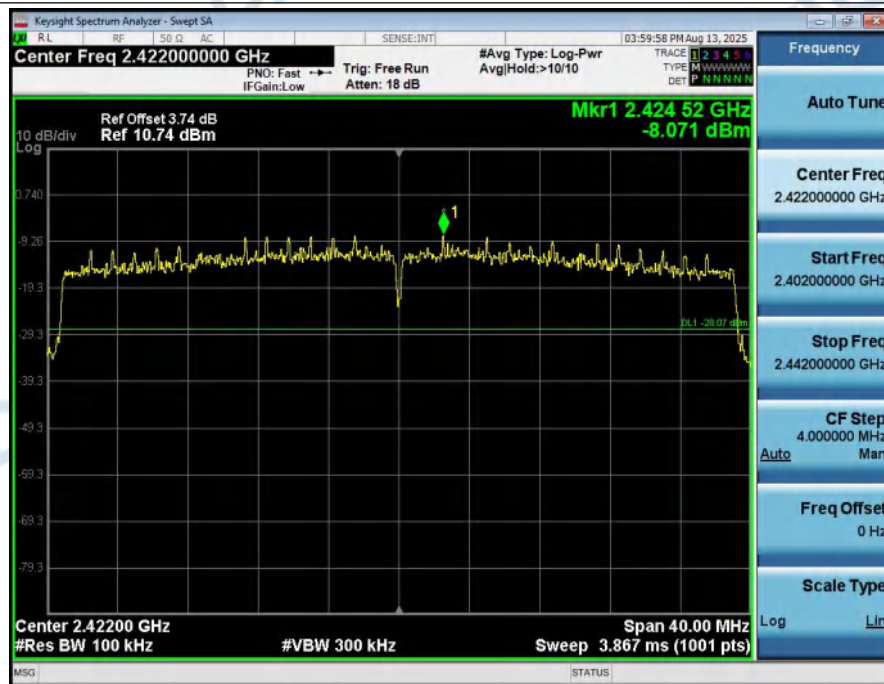
1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2452



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



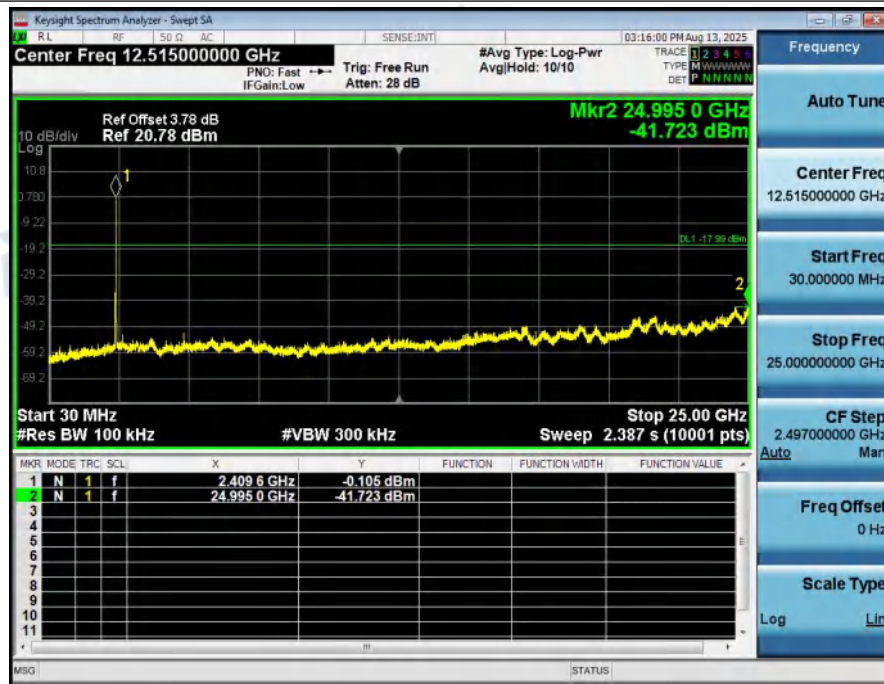
7. Spurious Emission

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_freq(MHz)	Ref_level(dBm)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	24995.006	2.006	-41.723	-17.994	Pass
NVNT	ANT1	802.11b	2437.00	24465.642	0.901	-48.595	-19.099	Pass
NVNT	ANT1	802.11b	2462.00	24992.509	0.339	-47.612	-19.661	Pass
NVNT	ANT1	802.11g	2412.00	24997.503	-4.715	-47.897	-24.715	Pass
NVNT	ANT1	802.11g	2437.00	24997.503	-5.175	-47.799	-25.175	Pass
NVNT	ANT1	802.11g	2462.00	24977.527	-5.776	-53.796	-25.776	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	24975.030	-4.548	-53.432	-24.548	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	24982.521	-4.360	-48.291	-24.360	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	24990.012	-5.795	-49.839	-25.795	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	24997.503	-5.171	-52.420	-25.171	Pass
NVNT	ANT1	802.11ax(HE20)	2437.00	24528.067	-4.736	-47.789	-24.736	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	24972.533	-5.962	-49.097	-25.962	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	24967.539	-7.956	-53.951	-27.956	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	2502.030	-8.002	-54.124	-28.002	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	2509.521	-7.887	-47.670	-27.887	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	24952.557	-8.071	-51.962	-28.071	Pass
NVNT	ANT1	802.11ax(HE40)	2437.00	24970.036	-8.061	-51.095	-28.061	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	2504.527	-12.769	-51.446	-32.769	Pass

1_Reference_Level_NVNT_ANT1_802_11b_2412



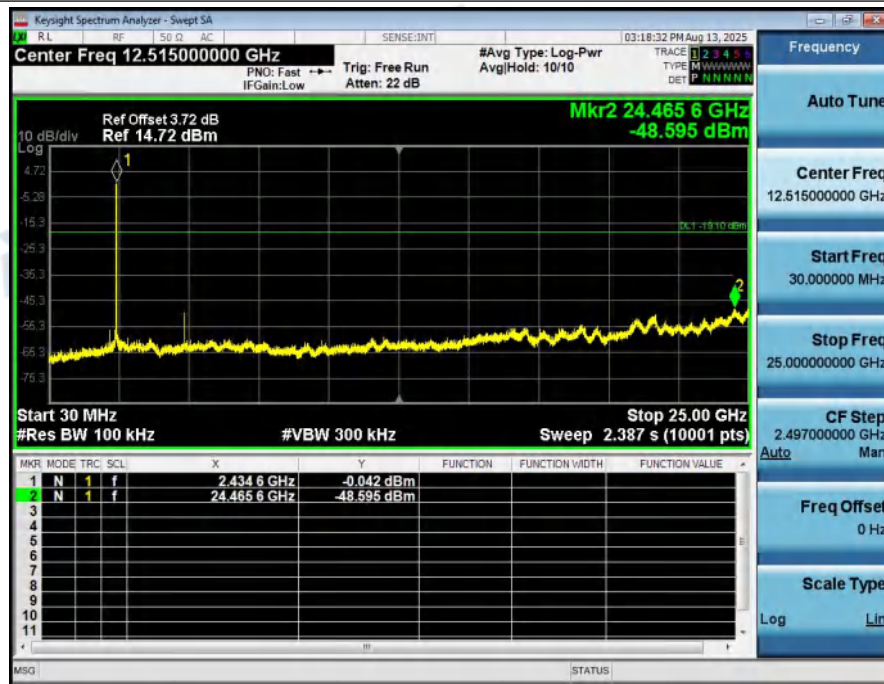
2_Spurious_Emission_NVNT_ANT1_802_11b_2412



1_Reference_Level_NVNT_ANT1_802_11b_2437



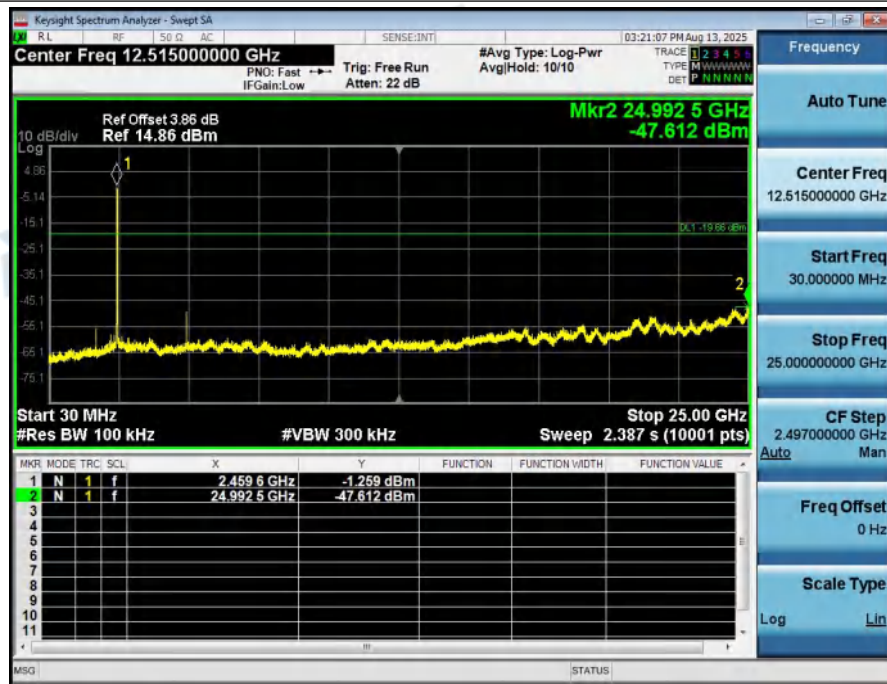
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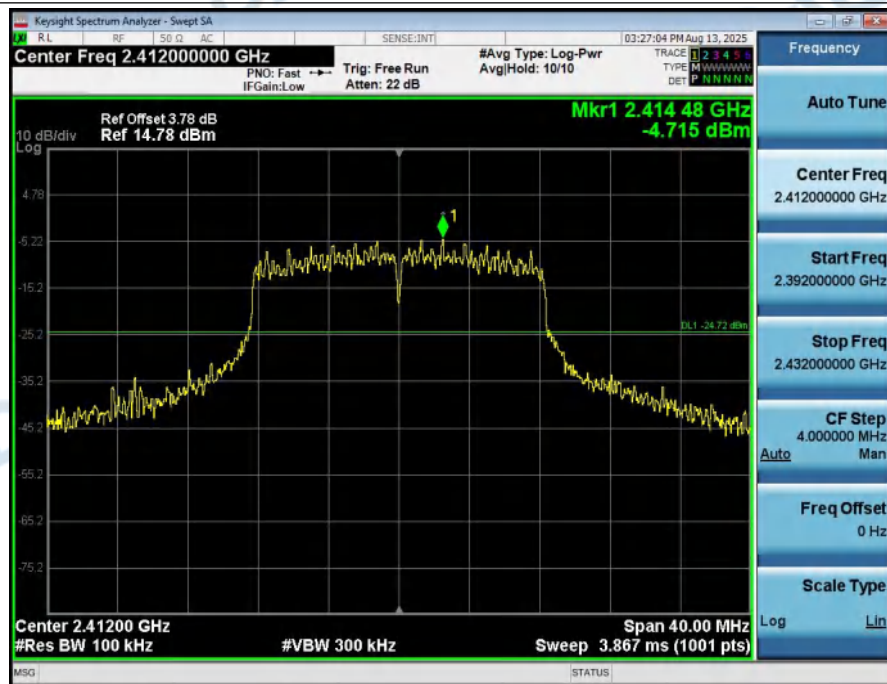
1_Reference_Level_NVNT_ANT1_802_11b_2462



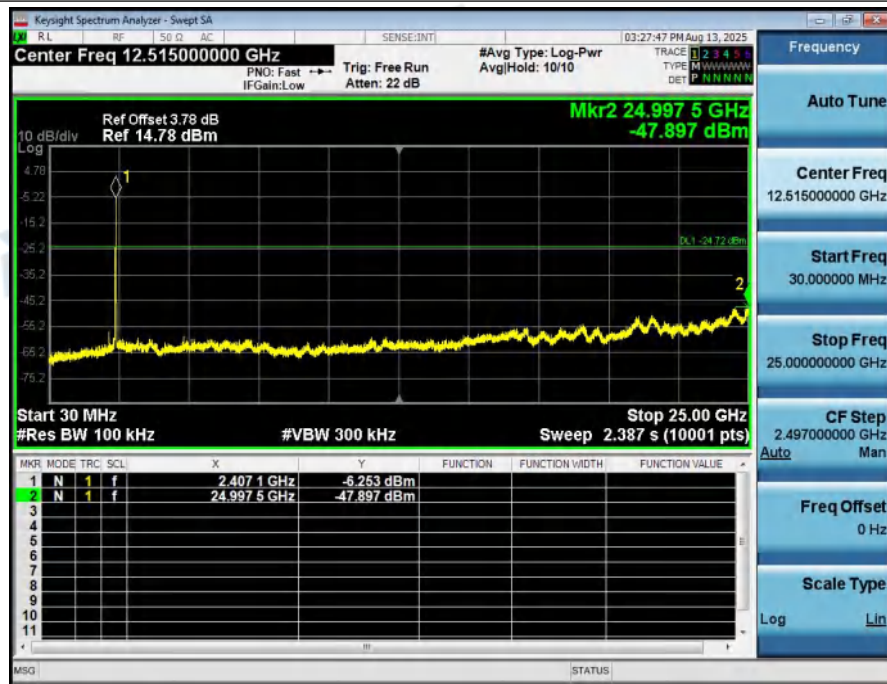
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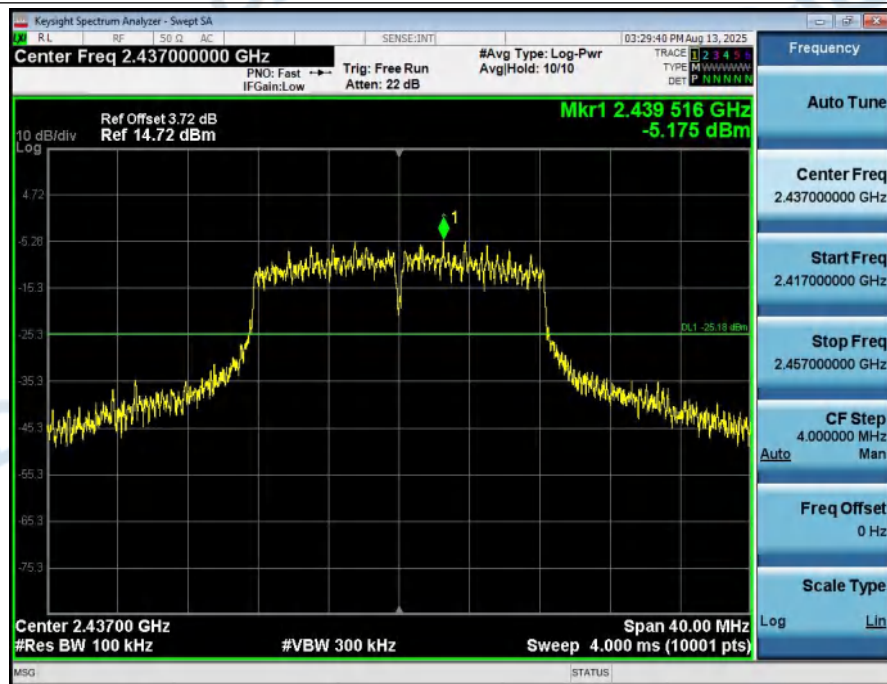
1_Reference_Level_NVNT_ANT1_802_11g_2412



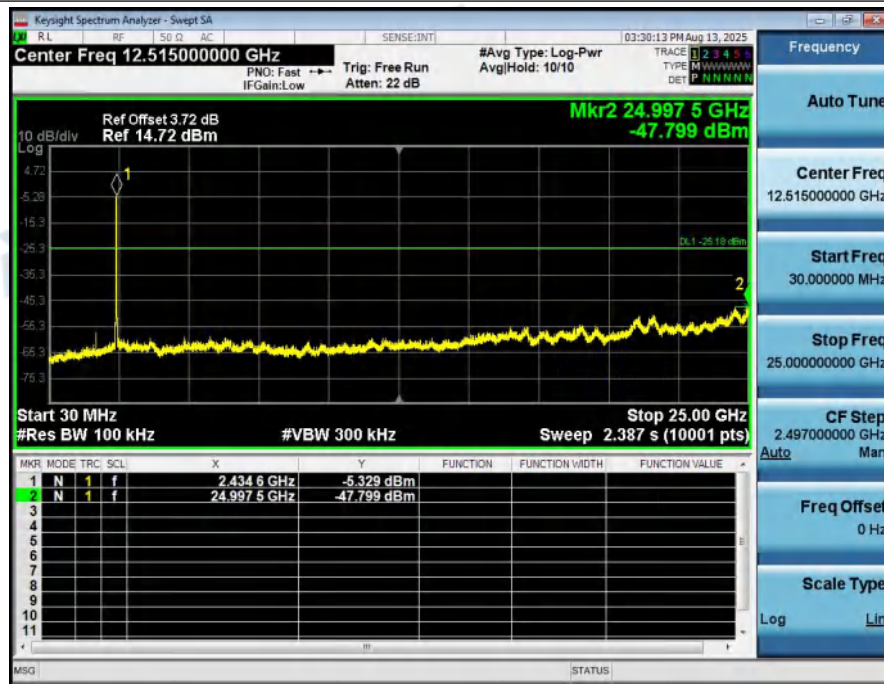
2_Spurious_Emission_NVNT_ANT1_802_11g_2412



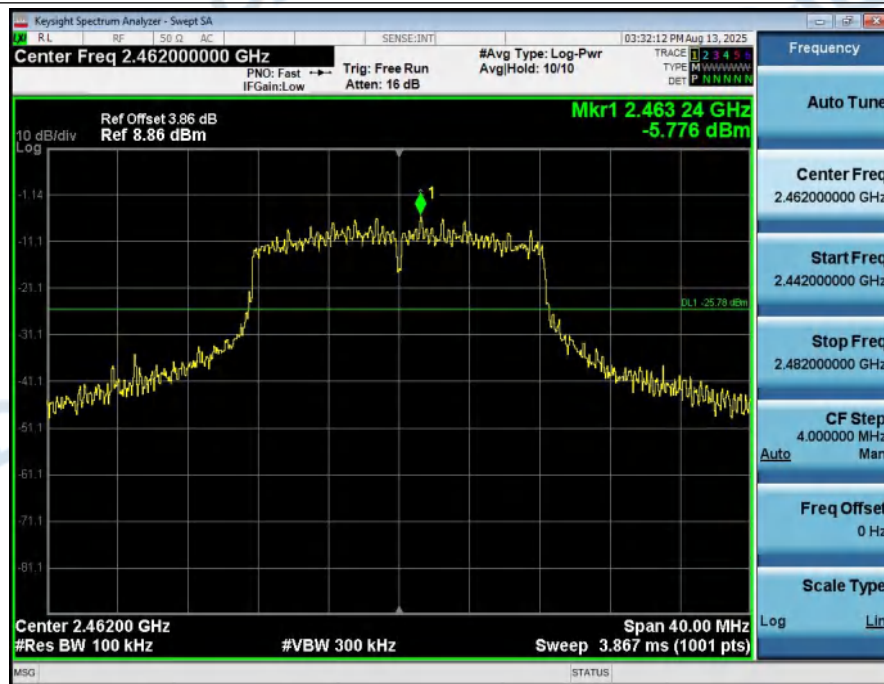
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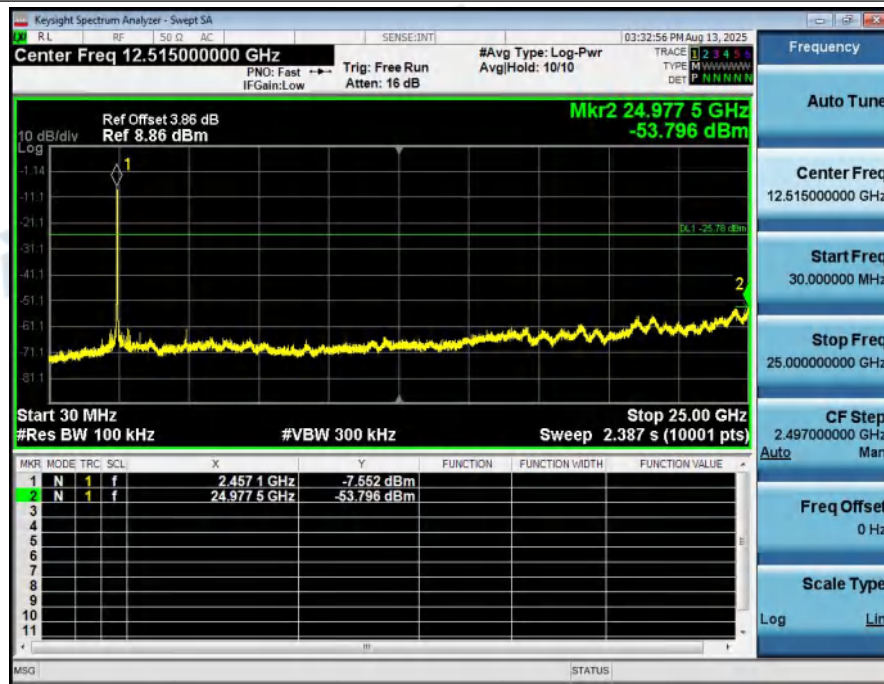
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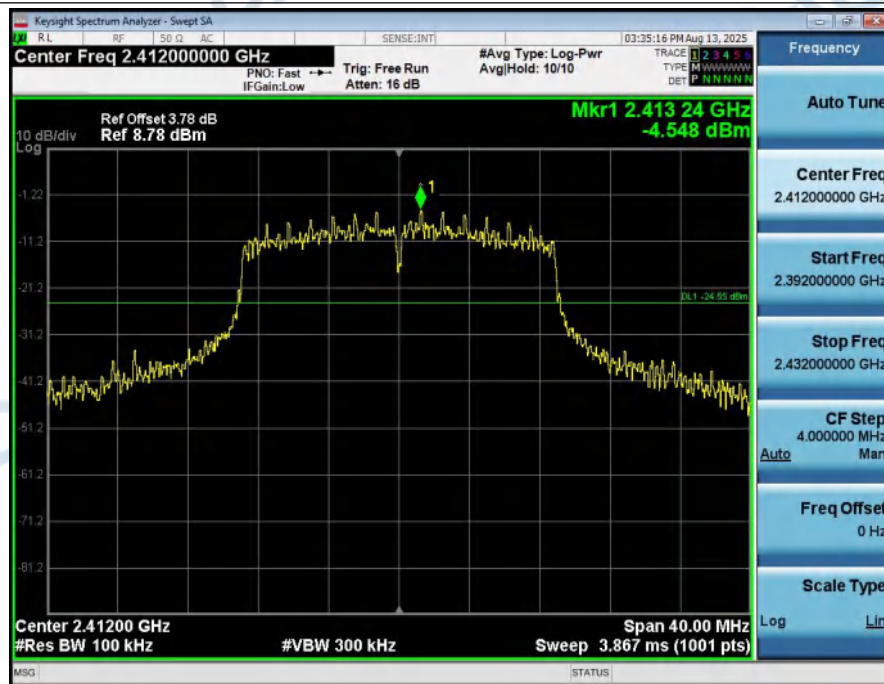
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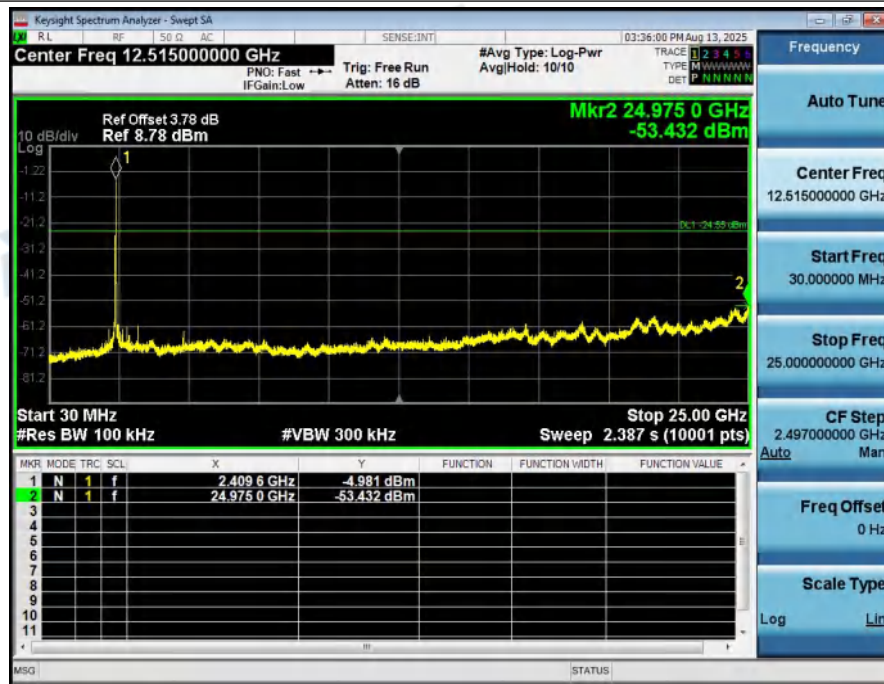
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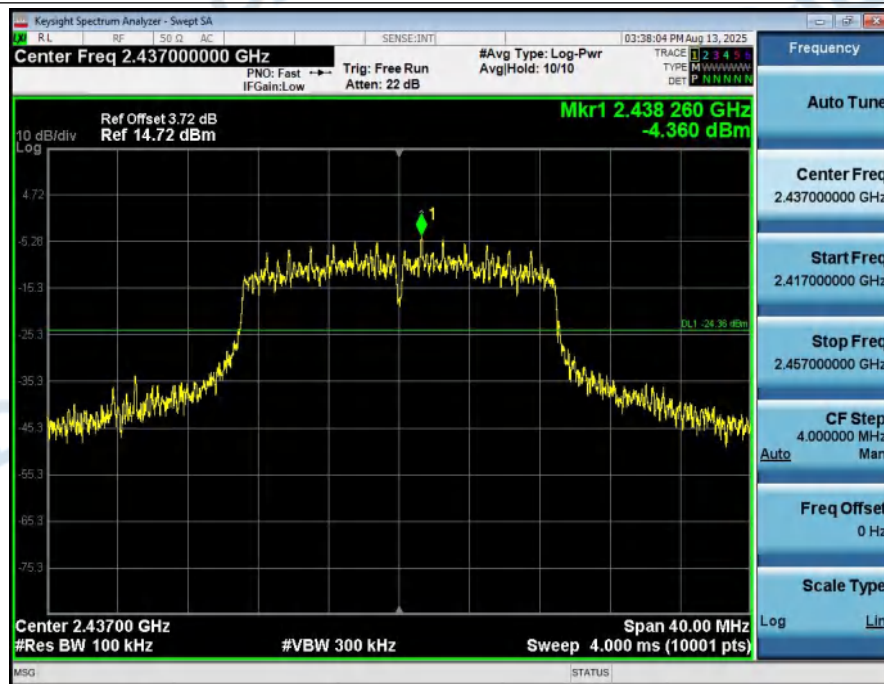
1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2412



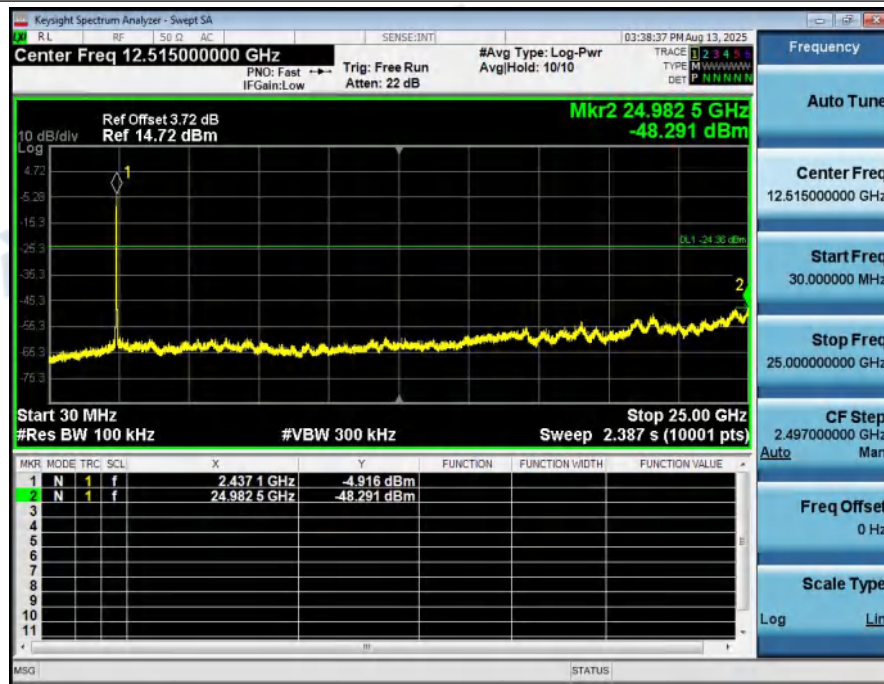
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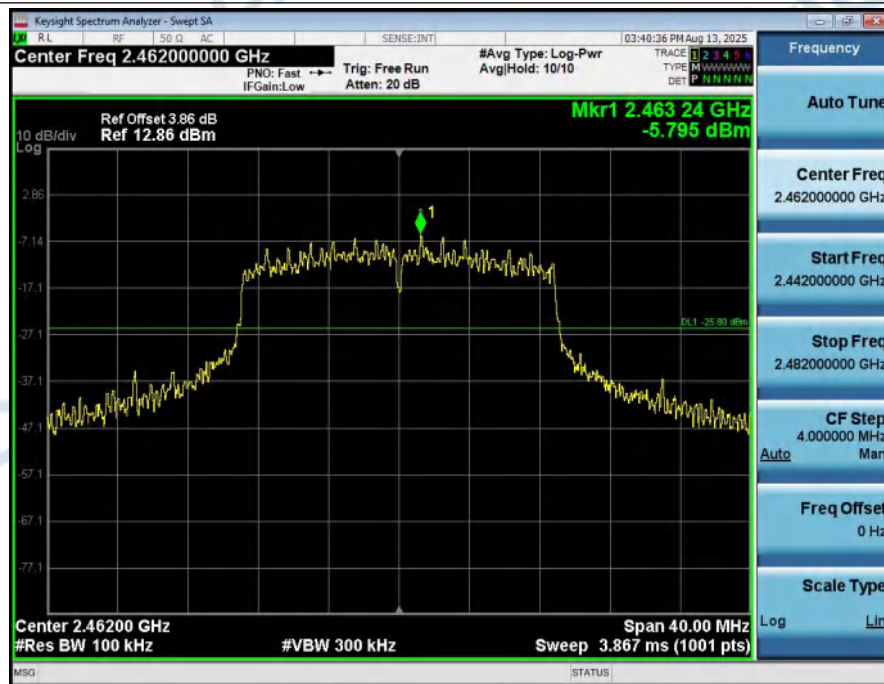
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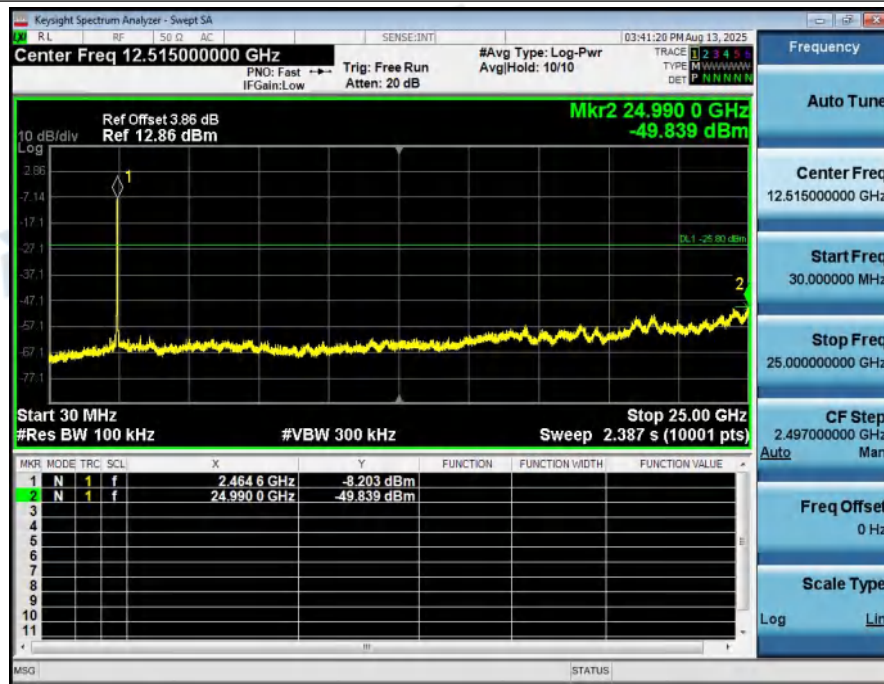
2_Spurious_Emission_NVNT_ANT1_802_11n(HT20)_2437



1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2462



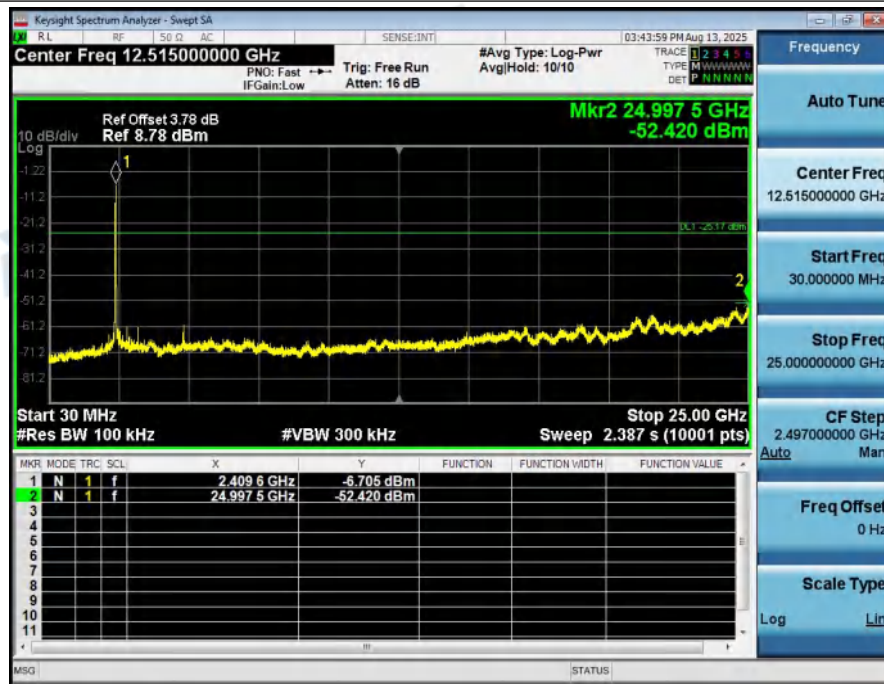
2_Spurious_Emission_NVNT_ANT1_802_11n(HT20)_2462



1_Reference_Level_NVNT_ANT1_802_11ax(HE20)_2412



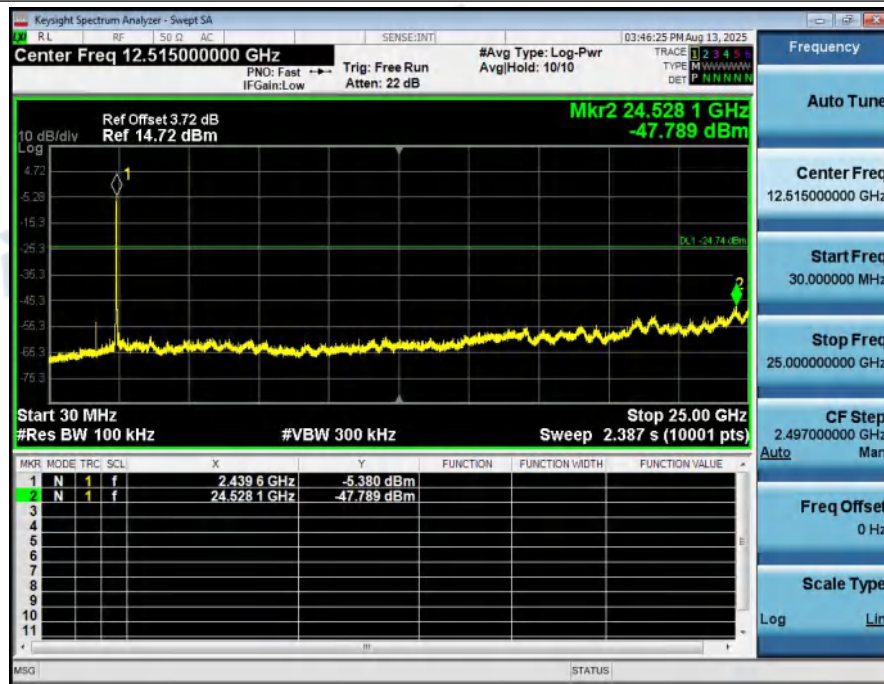
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1_Reference_Level_NVNT_ANT1_802_11ax(HE20)_2437



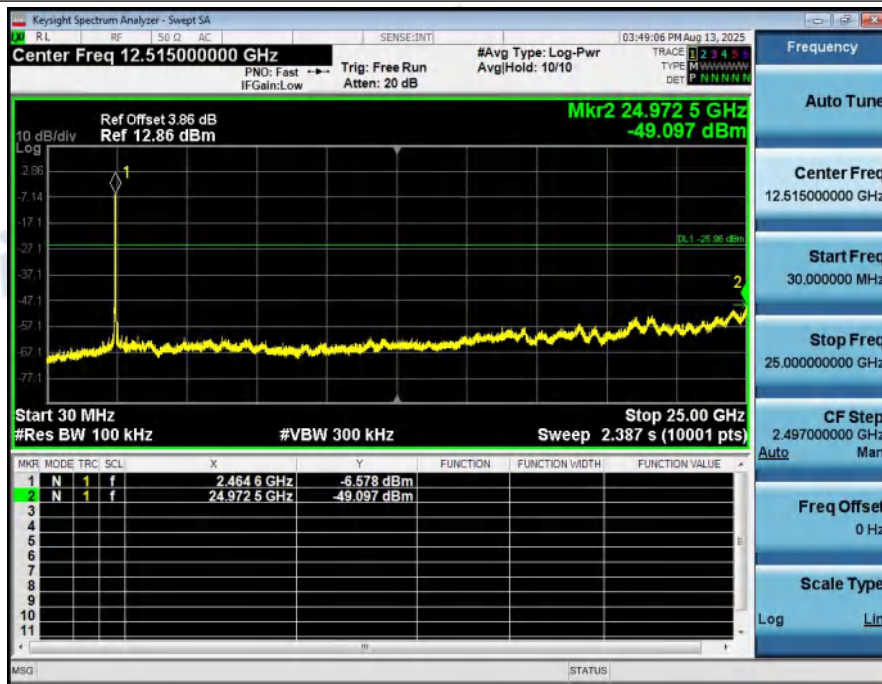
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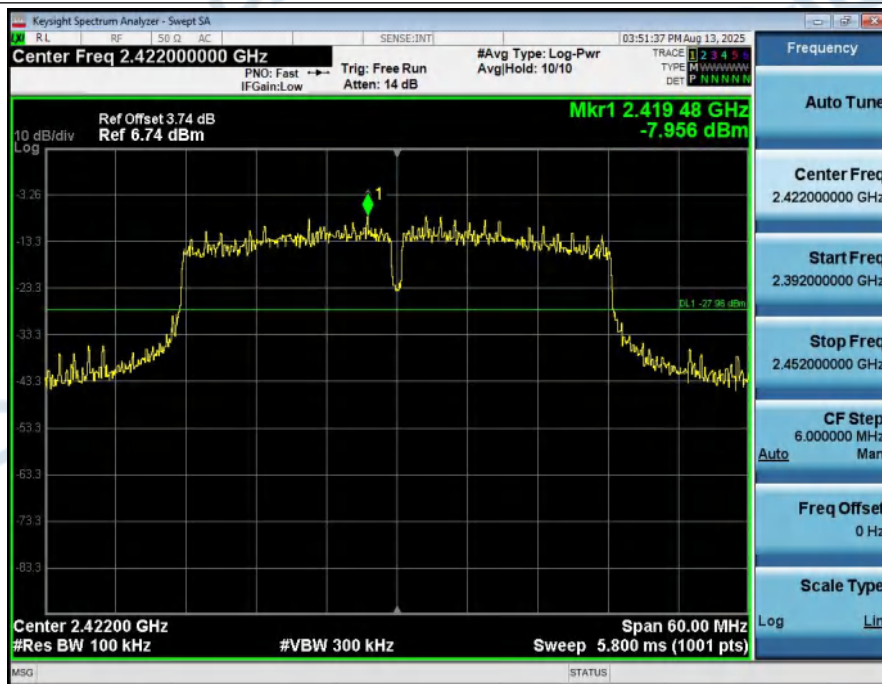
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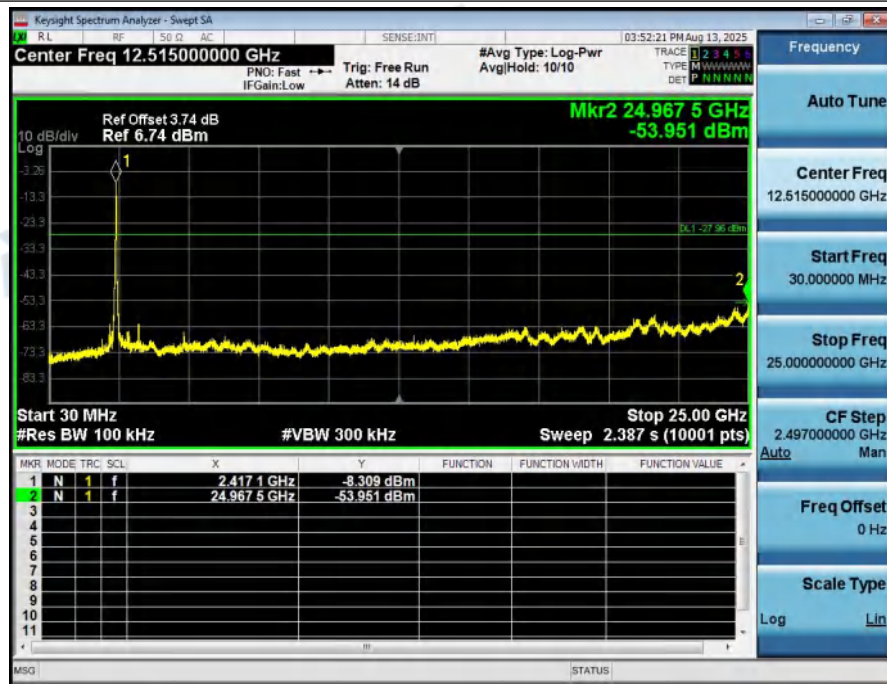
2_Spurious_Emission_NVNT_ANT1_802_11ax(HE20)_2462



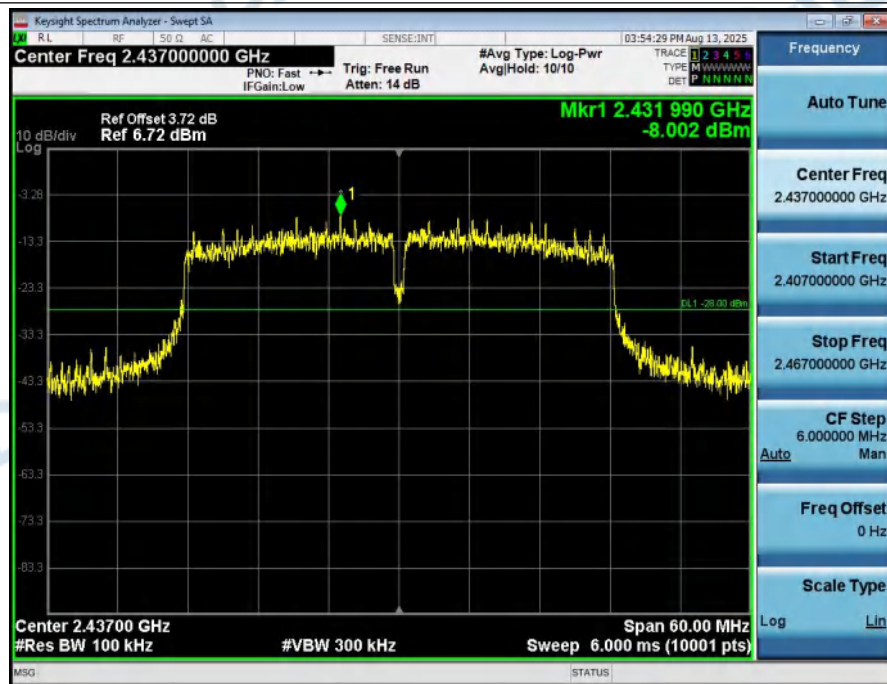
1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2422



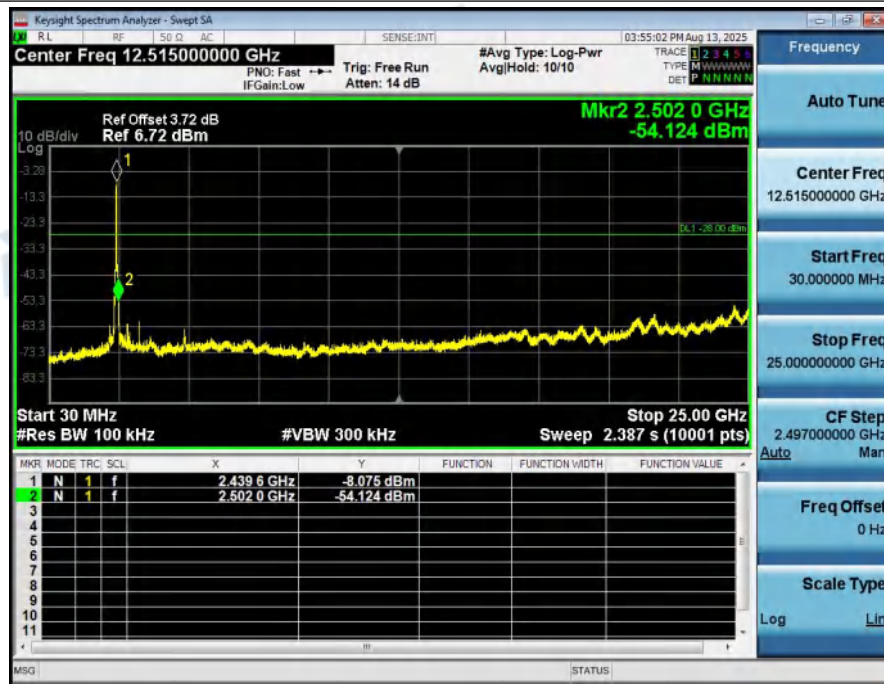
2_Spurious_Emission_NVNT_ANT1_802_11n(HT40)_2422



1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2437



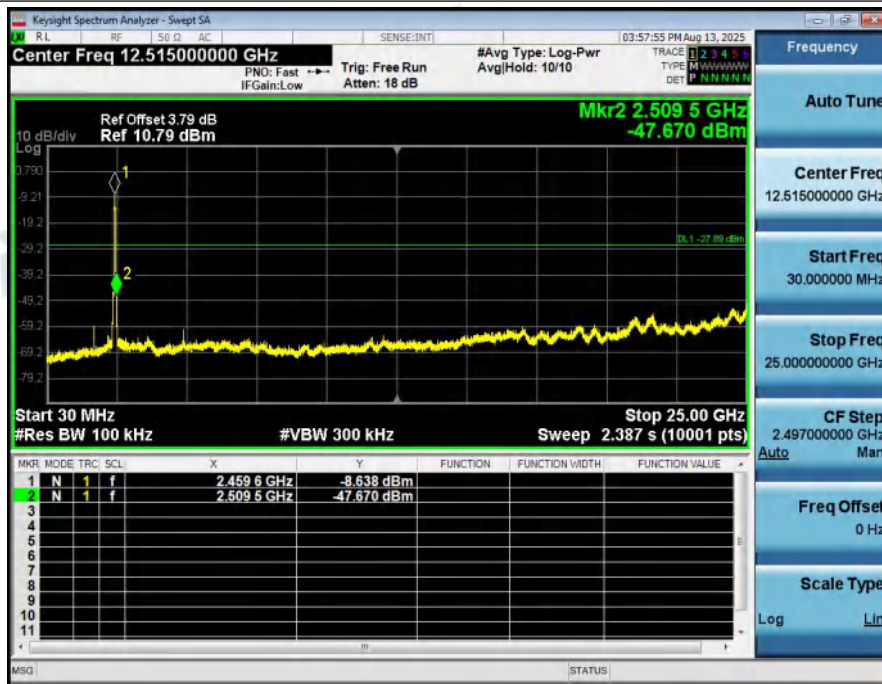
2_Spurious_Emission_NVNT_ANT1_802_11n(HT40)_2437



1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2452



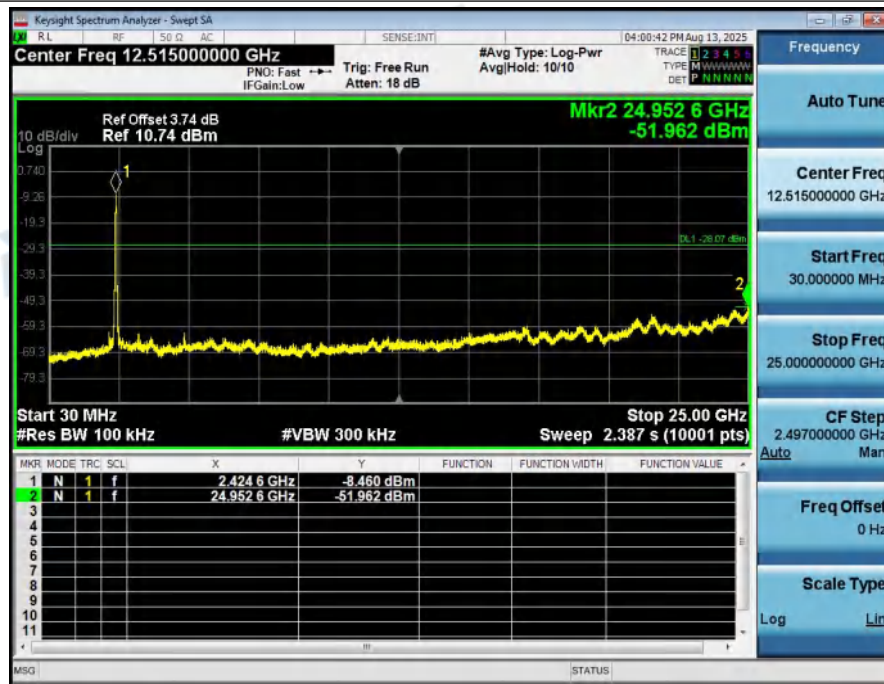
2_Spurious_Emission_NVNT_ANT1_802_11n(HT40)_2452



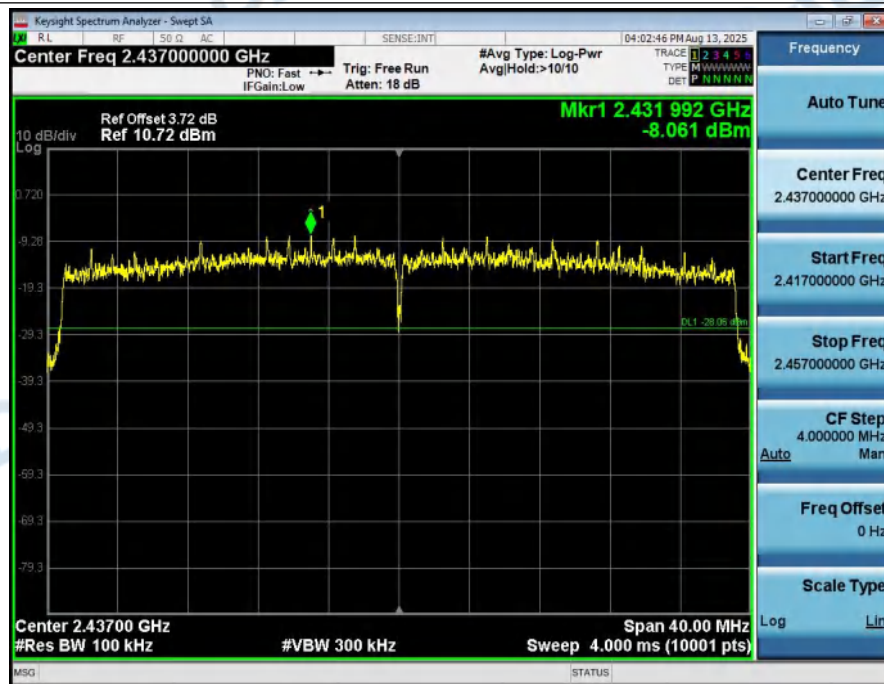
1_Reference_Level_NVNT_ANT1_802_11ax(HE40)_2422



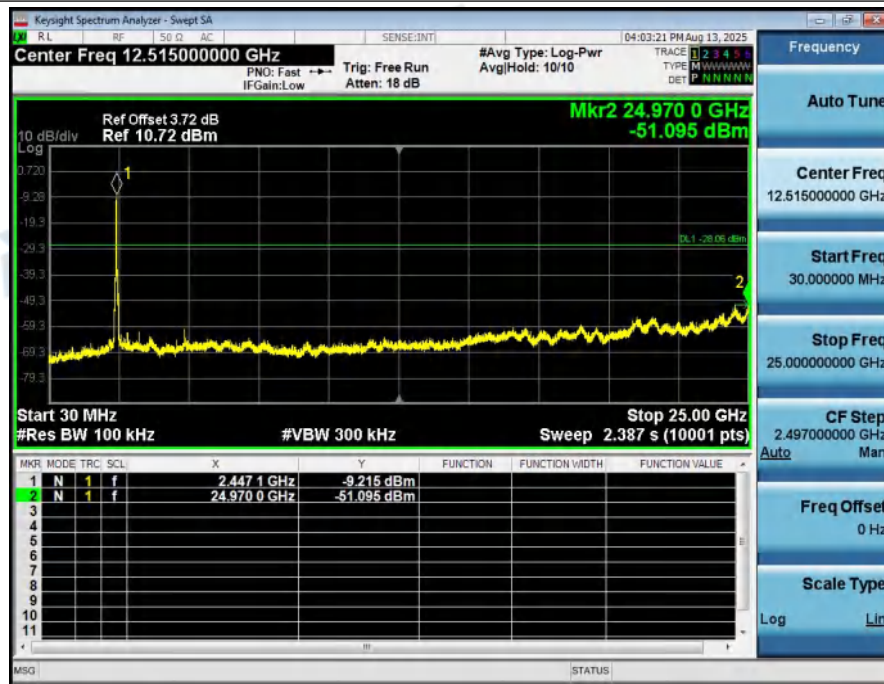
2_Spurious_Emission_NVNT_ANT1_802_11ax(HE40)_2422



1_Reference_Level_NVNT_ANT1_802_11ax(HE40)_2437



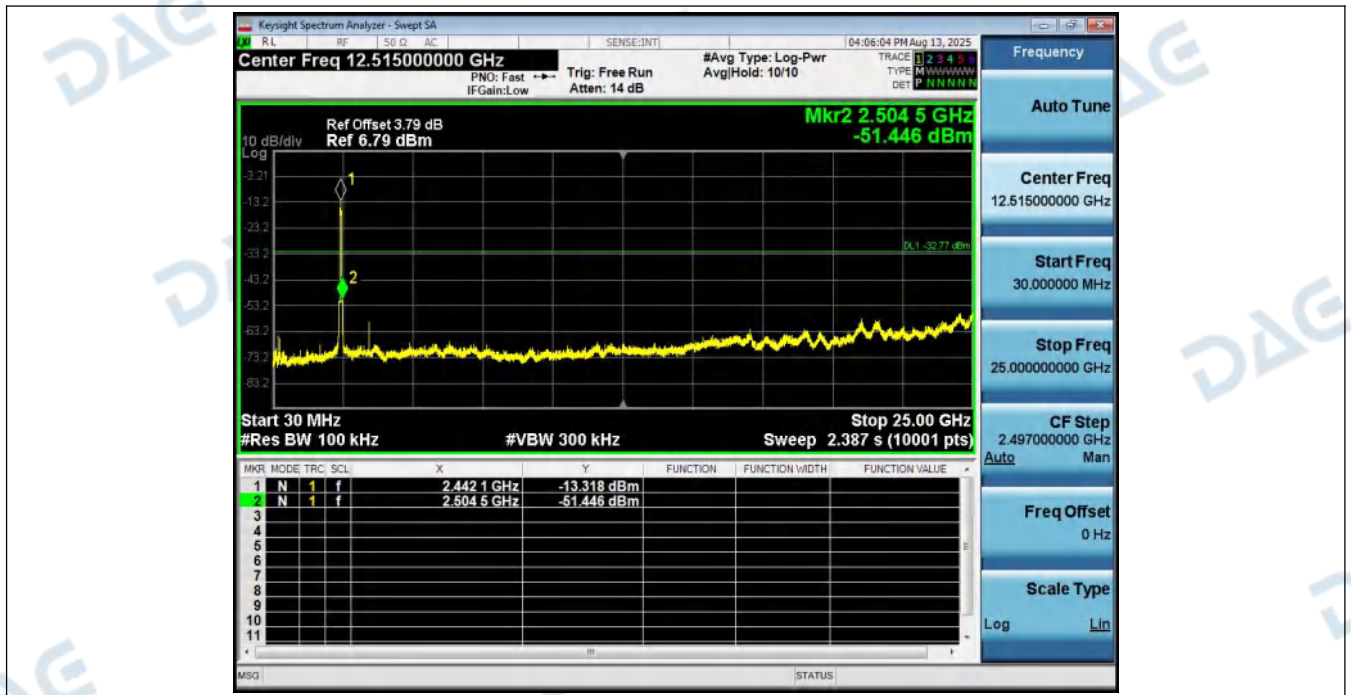
2_Spurious_Emission_NVNT_ANT1_802_11ax(HE40)_2437



1_Reference_Level_NVNT_ANT1_802_11ax(HE40)_2452



2_Spurious_Emission_NVNT_ANT1_802_11ax(HE40)_2452



***** End of Report *****