

5 TEST SETUP PHOTOS

Please refer to Setup Photo file

6 PHOTOS OF THE EUT

Please refer to external photos file and internal photos file

Appendix--ANT1

HT250729014--X5M Pro--2.4G--FCC-1

FCC_2.4G_WIFI (Part15.247) Test Data

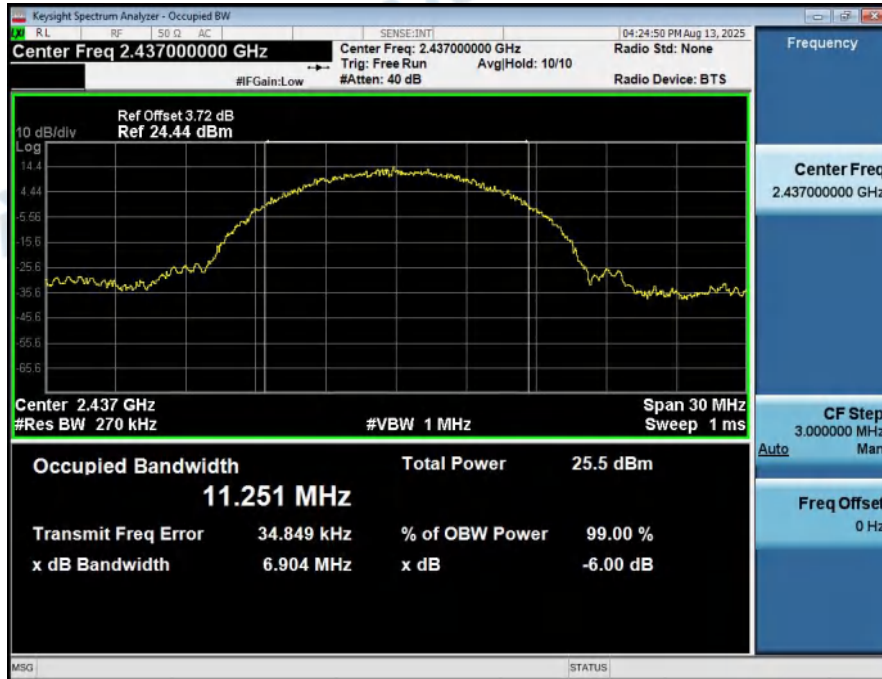
1. -6dB Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	7.07	500	Pass
NVNT	ANT1	802.11b	2437.00	6.90	500	Pass
NVNT	ANT1	802.11b	2462.00	7.10	500	Pass
NVNT	ANT1	802.11g	2412.00	16.26	500	Pass
NVNT	ANT1	802.11g	2437.00	16.00	500	Pass
NVNT	ANT1	802.11g	2462.00	15.93	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	17.21	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	17.42	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	17.18	500	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	18.47	500	Pass
NVNT	ANT1	802.11ax(HE20)	2437.00	18.71	500	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	18.52	500	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	35.19	500	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	35.41	500	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	34.29	500	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	36.96	500	Pass
NVNT	ANT1	802.11ax(HE40)	2437.00	37.25	500	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	37.21	500	Pass

-6dB_Bandwidth_NVNT_ANT1_802_11b_2412



-6dB_Bandwidth_NVNT_ANT1_802_11b_2437



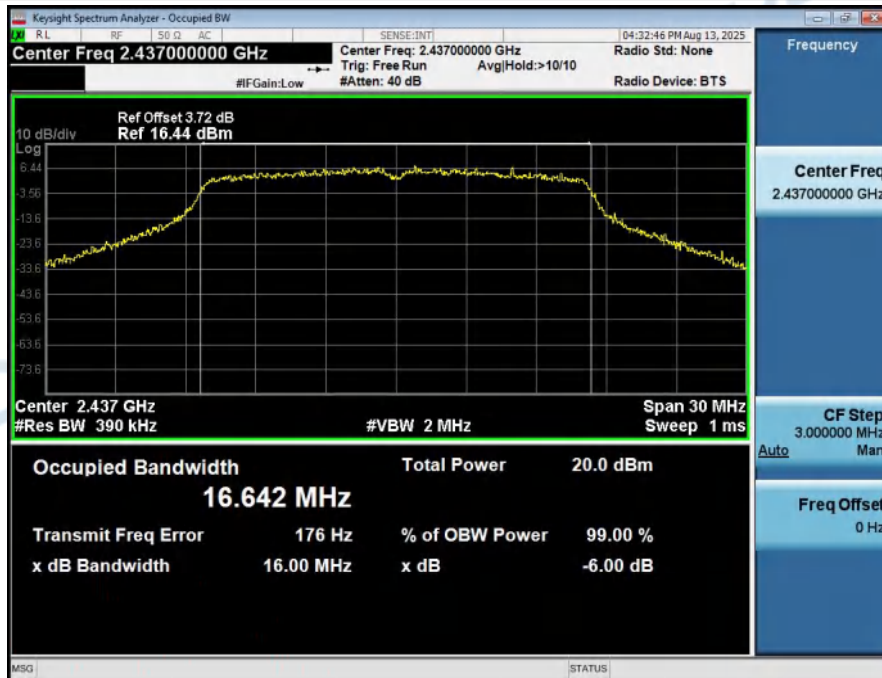
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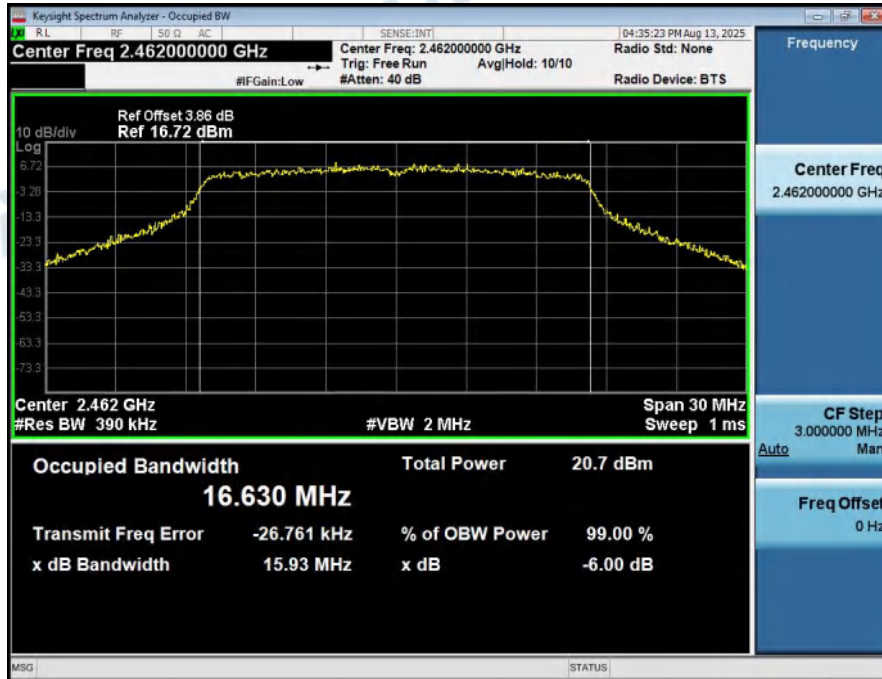
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-6dB_Bandwidth_NVNT_ANT1_802_11g_2437



-6dB_Bandwidth_NVNT_ANT1_802_11g_2462



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2412



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2437



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462



-6dB_Bandwidth_NVNT_ANT1_802_11ax(HE20)_2412



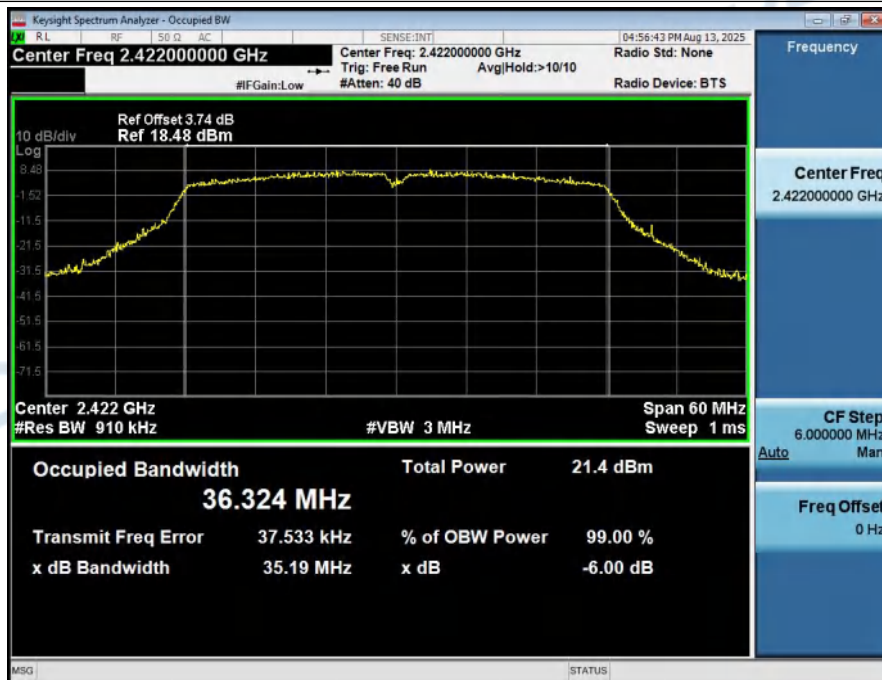
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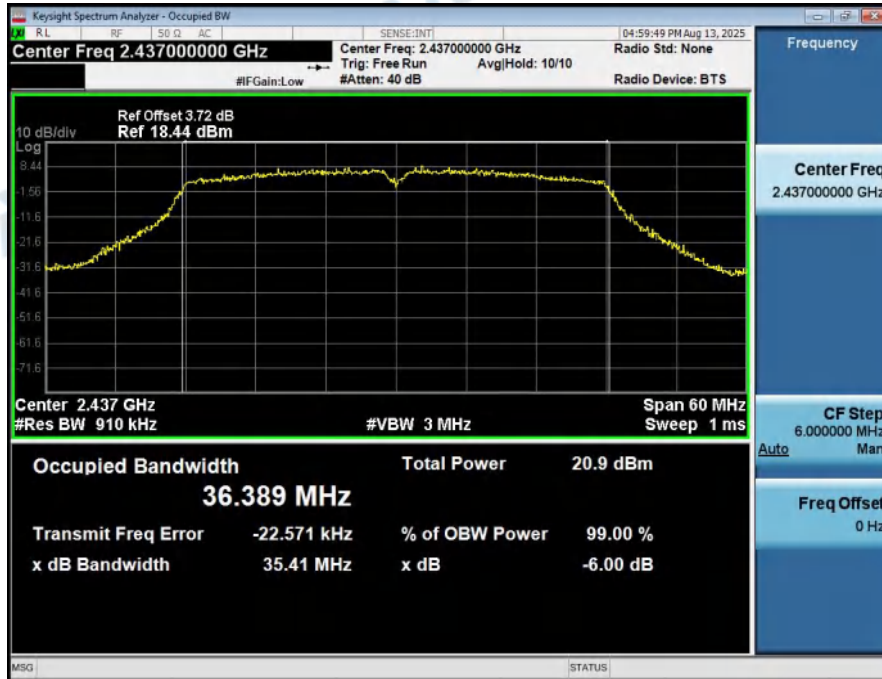
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-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2422



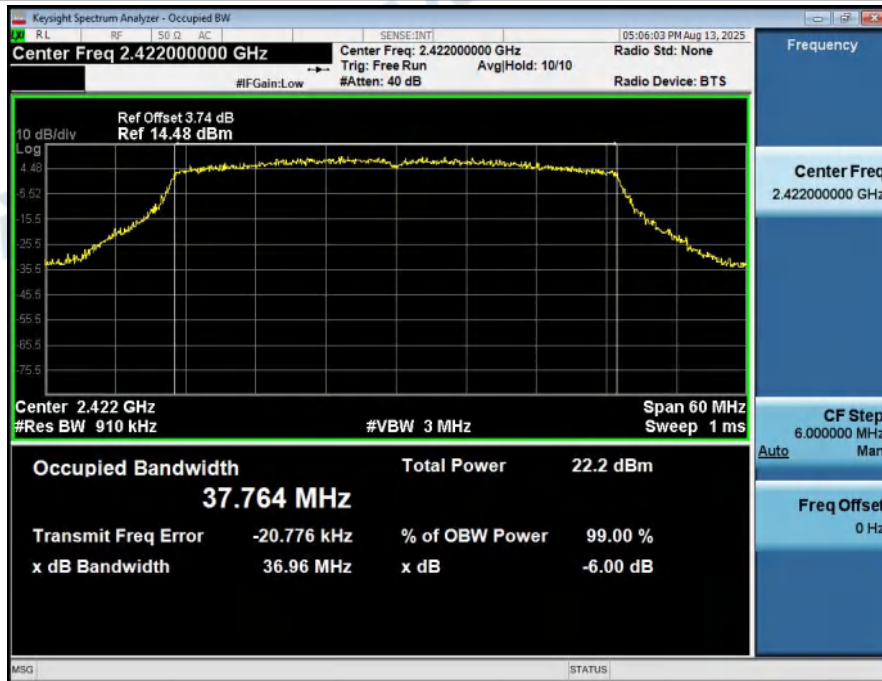
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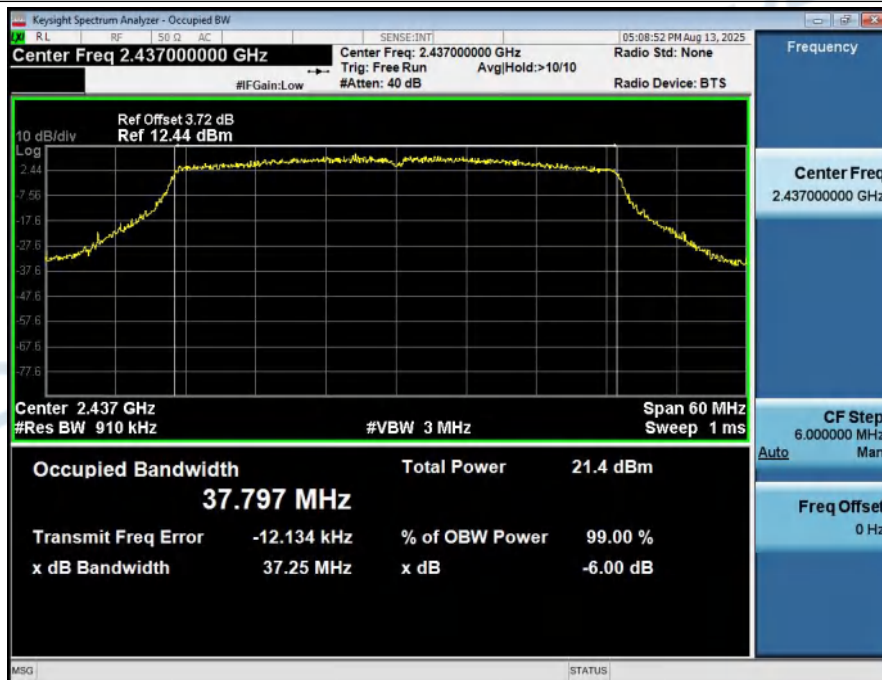
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-6dB_Bandwidth_NVNT_ANT1_802_11ax(HE40)_2422



-6dB_Bandwidth_NVNT_ANT1_802_11ax(HE40)_2437



-6dB_Bandwidth_NVNT_ANT1_802_11ax(HE40)_2452



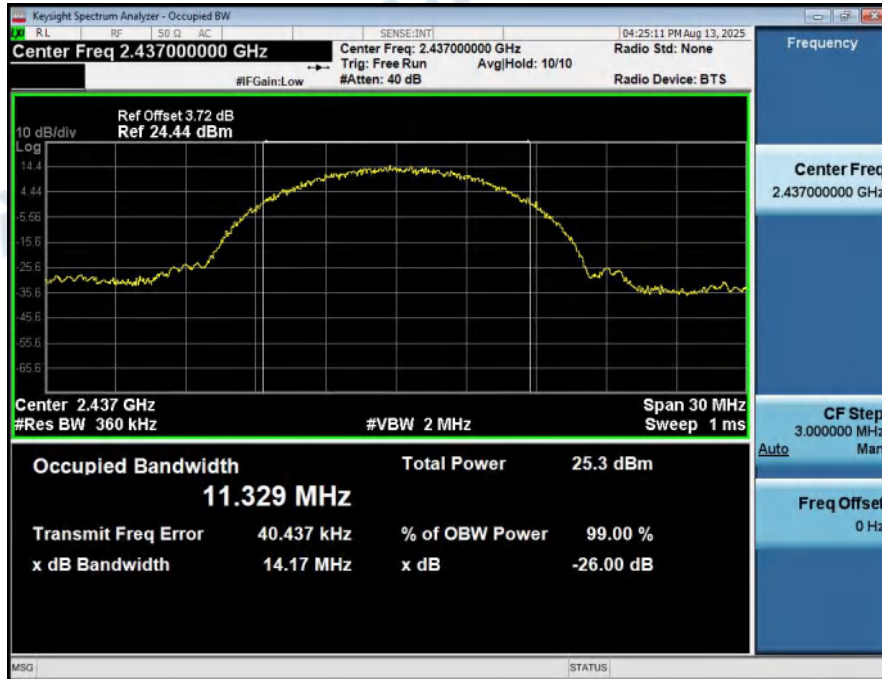
2. 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99% BW (MHz)
NVNT	ANT1	802.11b	2412.00	11.274
NVNT	ANT1	802.11b	2437.00	11.329
NVNT	ANT1	802.11b	2462.00	11.312
NVNT	ANT1	802.11g	2412.00	16.804
NVNT	ANT1	802.11g	2437.00	16.799
NVNT	ANT1	802.11g	2462.00	16.768
NVNT	ANT1	802.11n(HT20)	2412.00	17.915
NVNT	ANT1	802.11n(HT20)	2437.00	17.924
NVNT	ANT1	802.11n(HT20)	2462.00	17.912
NVNT	ANT1	802.11ax(HE20)	2412.00	18.986
NVNT	ANT1	802.11ax(HE20)	2437.00	19.029
NVNT	ANT1	802.11ax(HE20)	2462.00	18.986
NVNT	ANT1	802.11n(HT40)	2422.00	36.482
NVNT	ANT1	802.11n(HT40)	2437.00	36.452
NVNT	ANT1	802.11n(HT40)	2452.00	36.447
NVNT	ANT1	802.11ax(HE40)	2422.00	37.910
NVNT	ANT1	802.11ax(HE40)	2437.00	37.948
NVNT	ANT1	802.11ax(HE40)	2452.00	37.744

99%_Occupied_Bandwidth_NVNT_ANT1_802_11b_2412



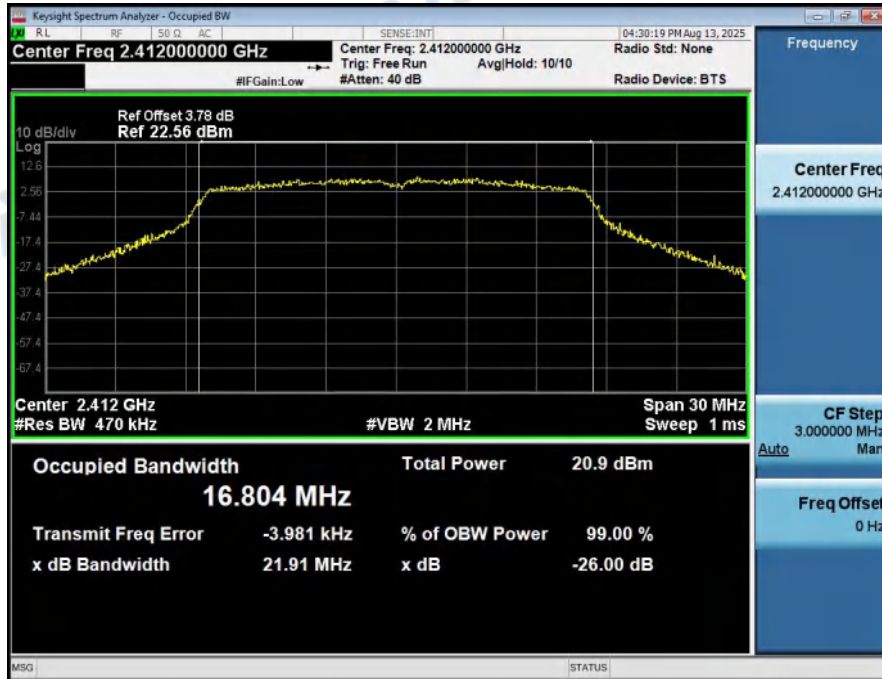
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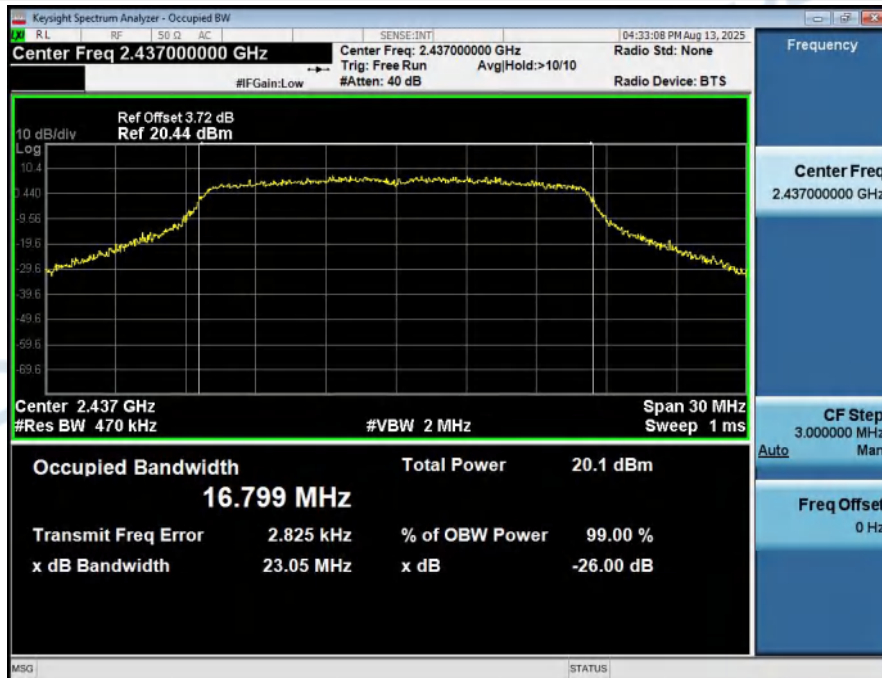
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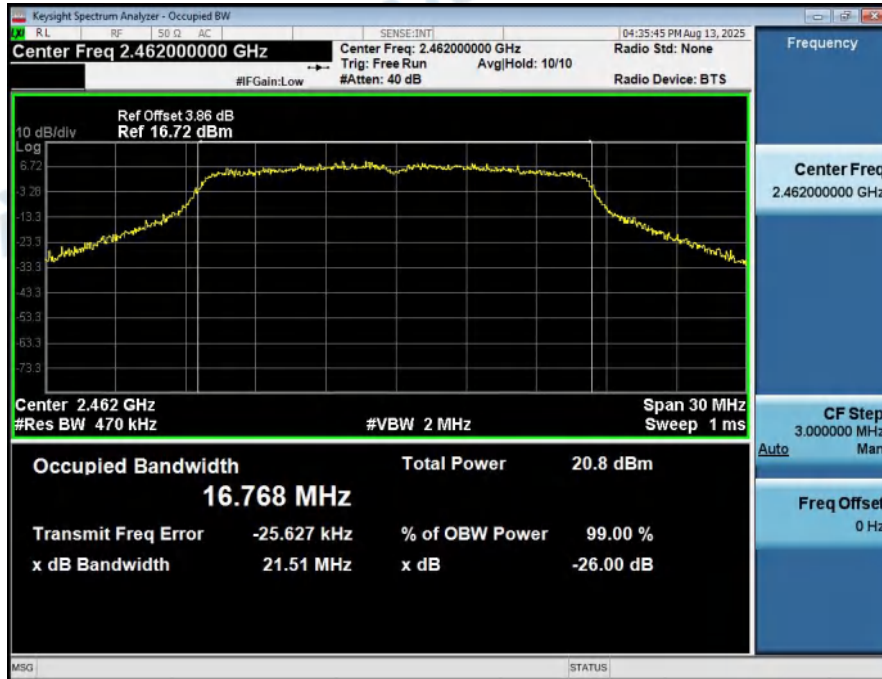
99%_Occupied_Bandwidth_NVNT_ANT1_802_11g_2412



99%_Occupied_Bandwidth_NVNT_ANT1_802_11g_2437



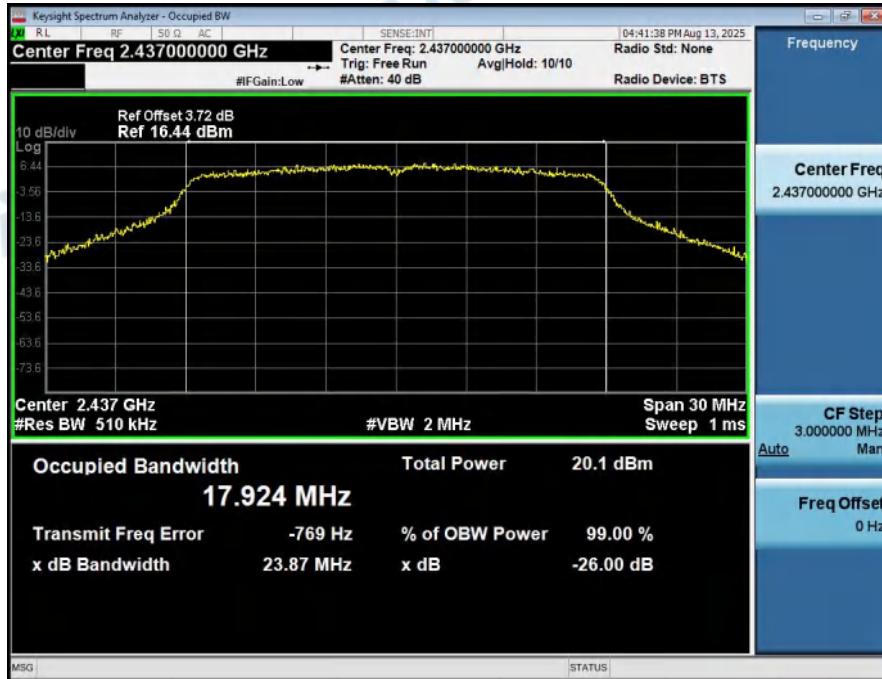
99%_Occupied_Bandwidth_NVNT_ANT1_802_11g_2462



99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2412



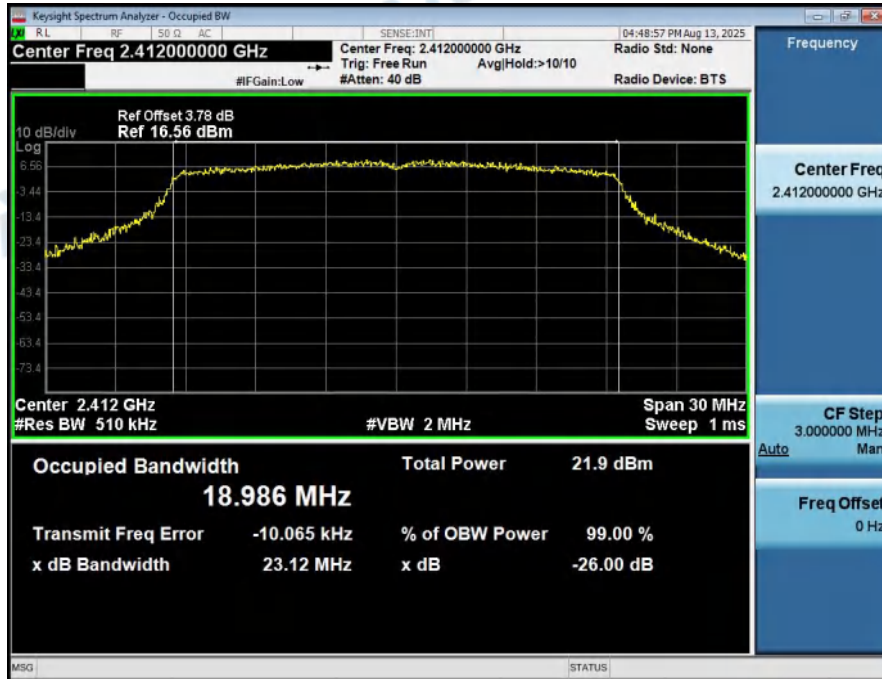
99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2437



99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462



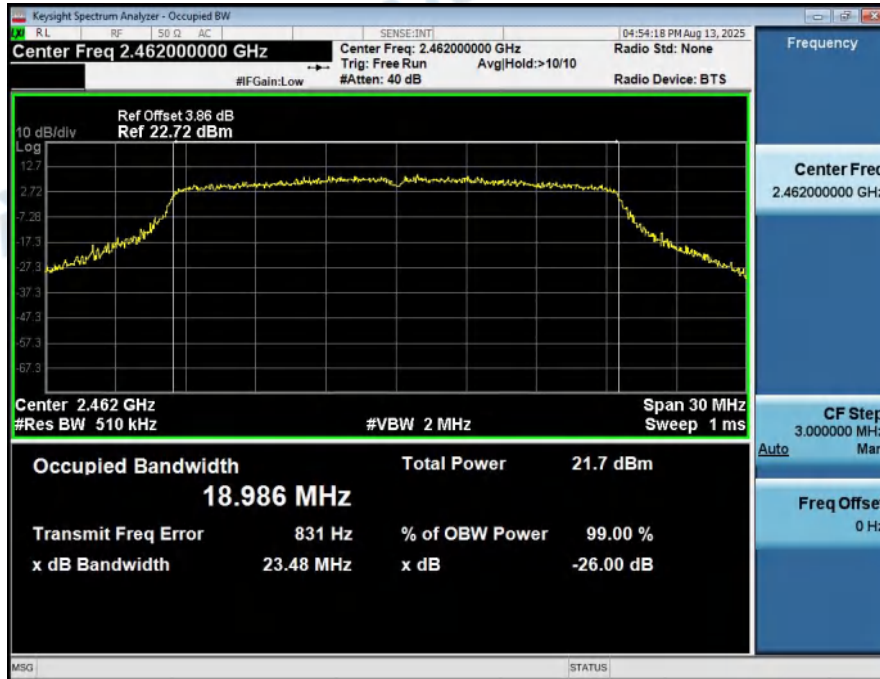
99%_Occupied_Bandwidth_NVNT_ANT1_802_11ax(HE20)_2412



99%_Occupied_Bandwidth_NVNT_ANT1_802_11ax(HE20)_2437



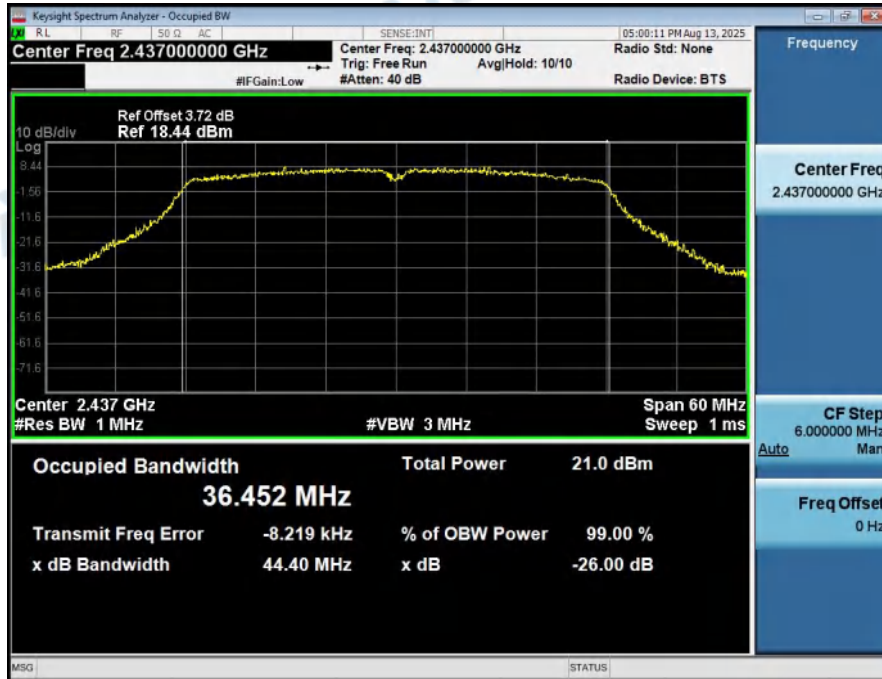
99%_Occupied_Bandwidth_NVNT_ANT1_802_11ax(HE20)_2462



99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT40)_2422



99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT40)_2437



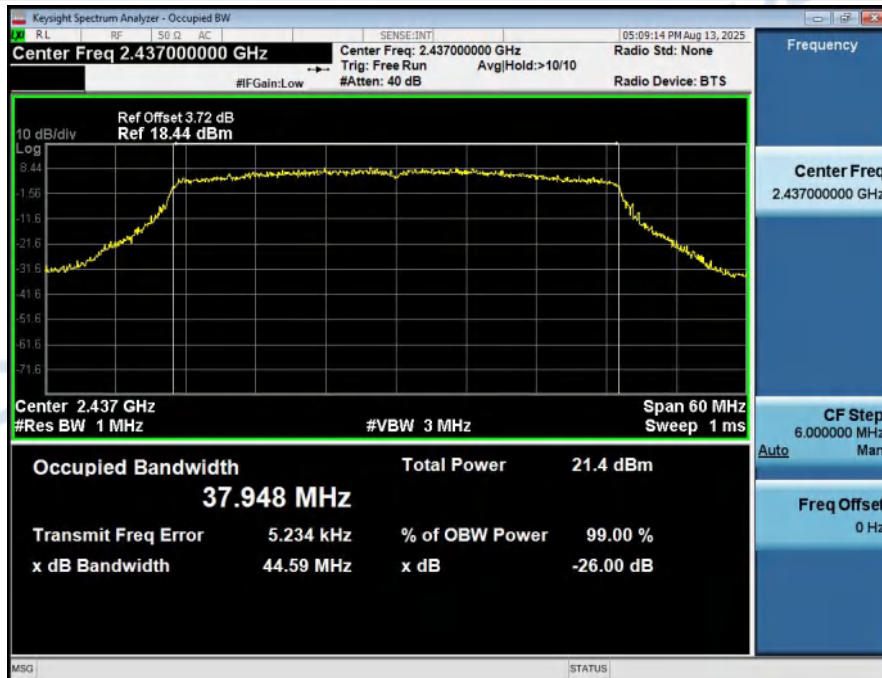
99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT40)_2452



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	32.26	4.91
NVNT	ANT1	802.11b	2462.00	37.50	4.26
NVNT	ANT1	802.11g	2412.00	33.33	4.77
NVNT	ANT1	802.11g	2437.00	33.33	4.77
NVNT	ANT1	802.11g	2462.00	34.48	4.62
NVNT	ANT1	802.11n(HT20)	2412.00	31.03	5.08
NVNT	ANT1	802.11n(HT20)	2437.00	27.59	5.59
NVNT	ANT1	802.11n(HT20)	2462.00	31.03	5.08
NVNT	ANT1	802.11ax(HE20)	2412.00	43.24	3.64
NVNT	ANT1	802.11ax(HE20)	2437.00	43.24	3.64
NVNT	ANT1	802.11ax(HE20)	2462.00	43.24	3.64
NVNT	ANT1	802.11n(HT40)	2422.00	39.39	4.05
NVNT	ANT1	802.11n(HT40)	2437.00	42.42	3.72
NVNT	ANT1	802.11n(HT40)	2452.00	38.24	4.18
NVNT	ANT1	802.11ax(HE40)	2422.00	43.24	3.64
NVNT	ANT1	802.11ax(HE40)	2437.00	43.24	3.64
NVNT	ANT1	802.11ax(HE40)	2452.00	47.22	3.26

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	24.50	N/A	24.50	30	Pass
NVNT	ANT1	802.11b	2437.00	Peak	24.40	N/A	24.40	30	Pass
NVNT	ANT1	802.11b	2462.00	Peak	24.61	N/A	24.61	30	Pass
NVNT	ANT1	802.11g	2412.00	Peak	20.37	N/A	20.37	30	Pass
NVNT	ANT1	802.11g	2437.00	Peak	19.57	N/A	19.57	30	Pass
NVNT	ANT1	802.11g	2462.00	Peak	20.15	N/A	20.15	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	Peak	20.03	N/A	20.03	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	Peak	19.44	N/A	19.44	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	Peak	19.88	N/A	19.88	30	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	Peak	21.23	N/A	21.23	30	Pass
NVNT	ANT1	802.11ax(HE20)	2437.00	Peak	20.31	N/A	20.31	30	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	Peak	21.03	N/A	21.03	30	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	Peak	20.26	N/A	20.26	30	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	Peak	19.81	N/A	19.81	30	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	Peak	20.06	N/A	20.06	30	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	Peak	21.07	N/A	21.07	30	Pass
NVNT	ANT1	802.11ax(HE40)	2437.00	Peak	20.37	N/A	20.37	30	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	Peak	20.34	N/A	20.34	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	6.46	8	Pass
NVNT	ANT1	802.11b	2437.00	5.30	8	Pass
NVNT	ANT1	802.11b	2462.00	6.64	8	Pass
NVNT	ANT1	802.11g	2412.00	-1.76	8	Pass
NVNT	ANT1	802.11g	2437.00	-2.70	8	Pass
NVNT	ANT1	802.11g	2462.00	-1.72	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-1.25	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-2.11	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-1.70	8	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	-2.58	8	Pass
NVNT	ANT1	802.11ax(HE20)	2437.00	-3.60	8	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	-2.85	8	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	-5.47	8	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	-5.67	8	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	-5.48	8	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	-5.62	8	Pass
NVNT	ANT1	802.11ax(HE40)	2437.00	-6.27	8	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	-6.19	8	Pass

Power_Spectral_Density_NVNT_ANT1_802_11b_2412



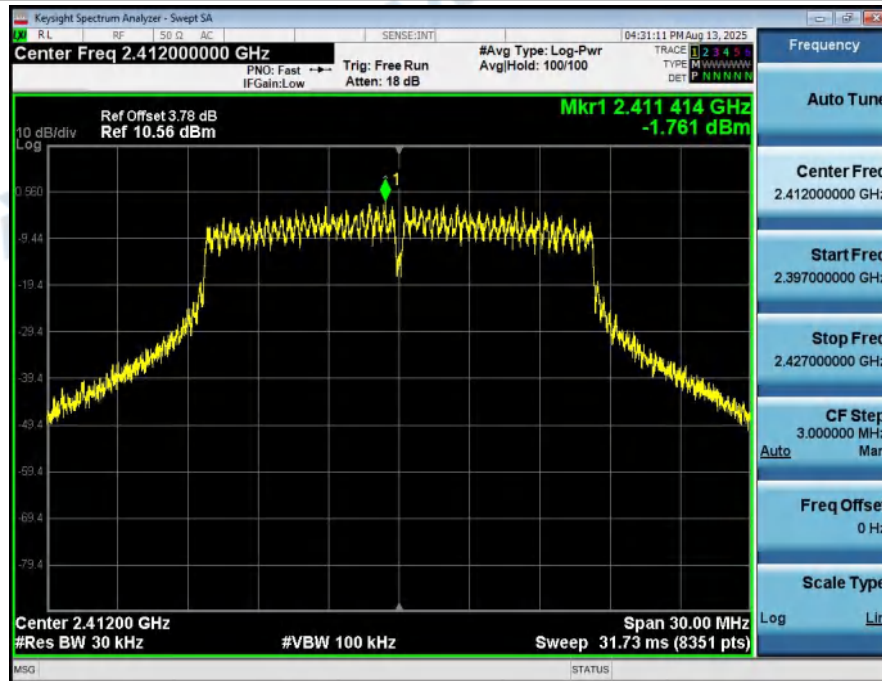
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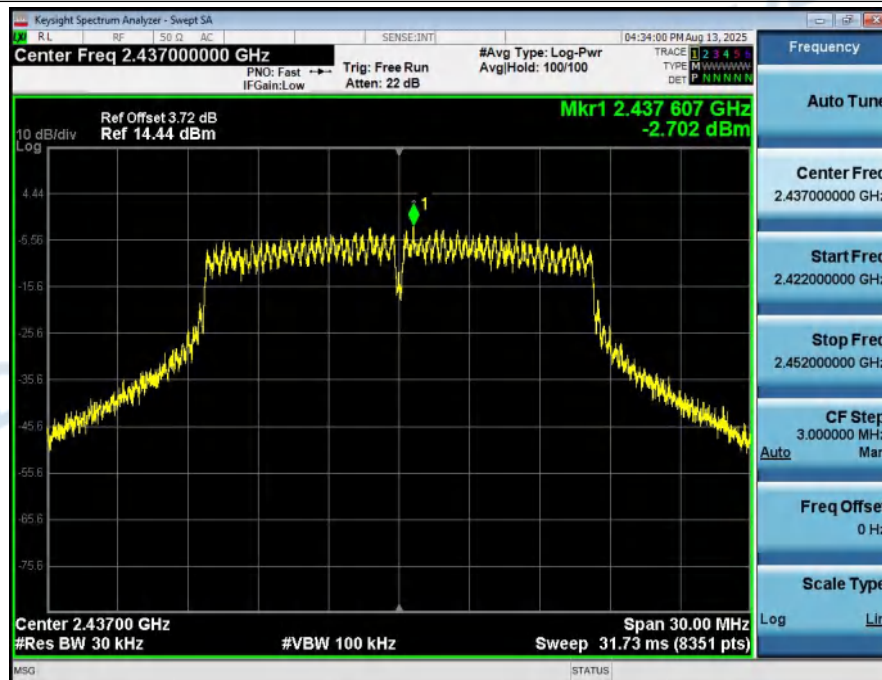
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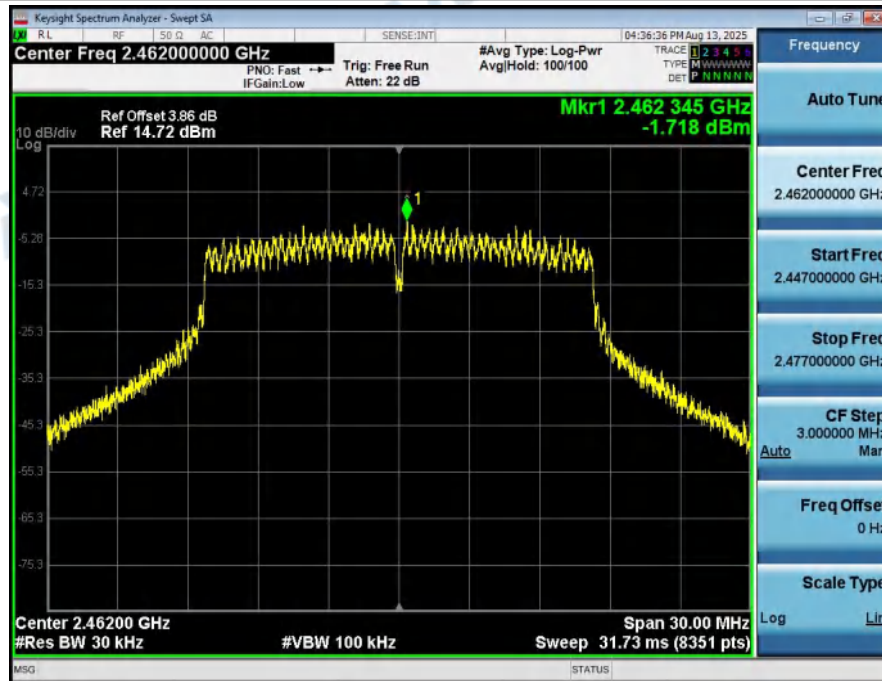
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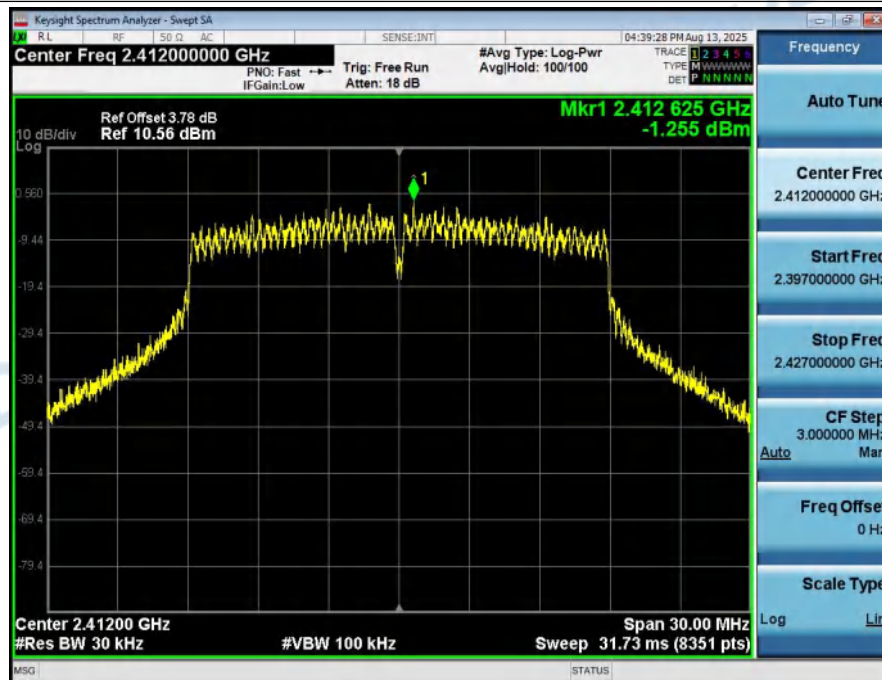
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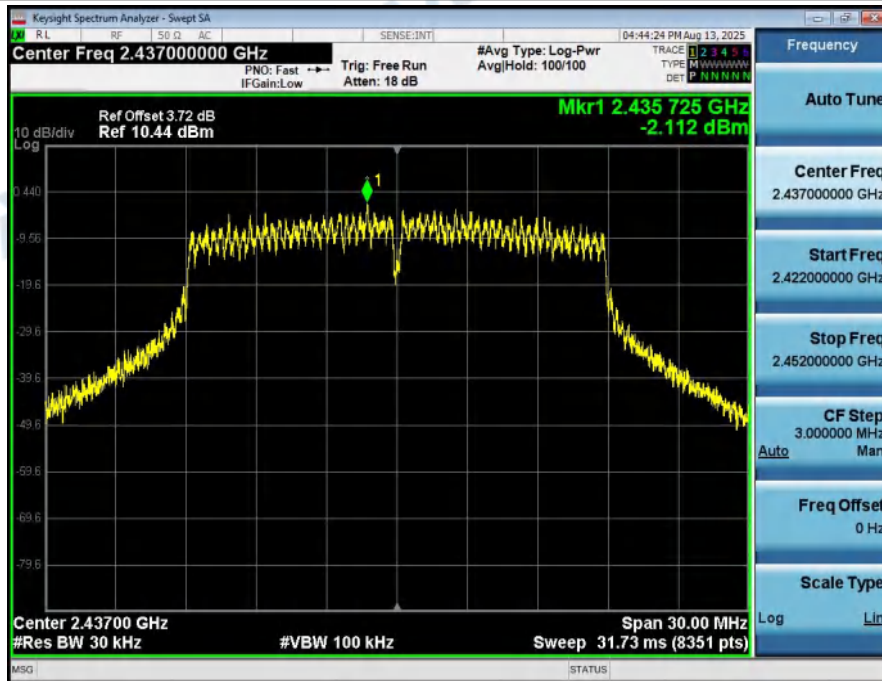
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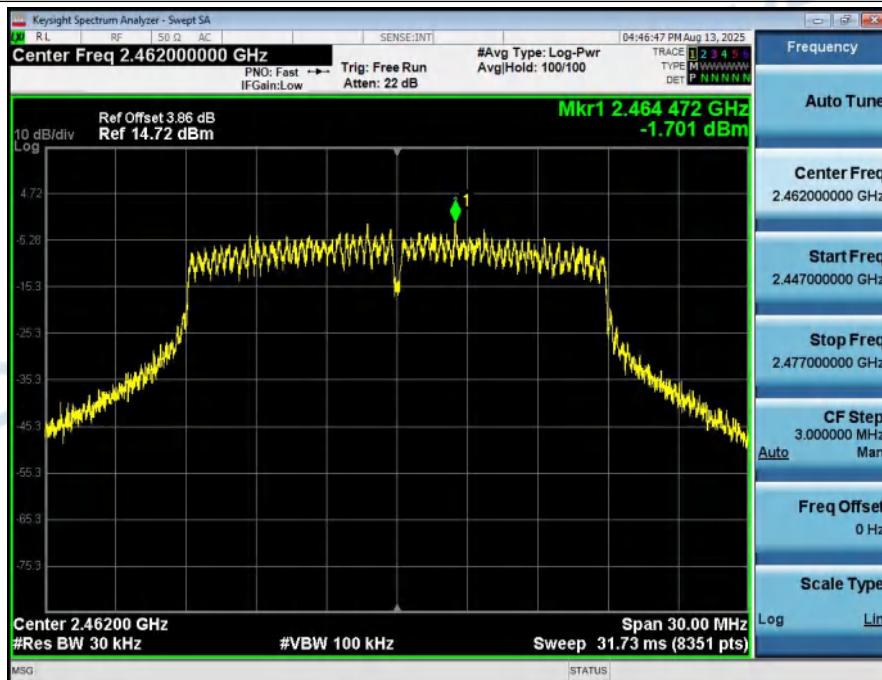
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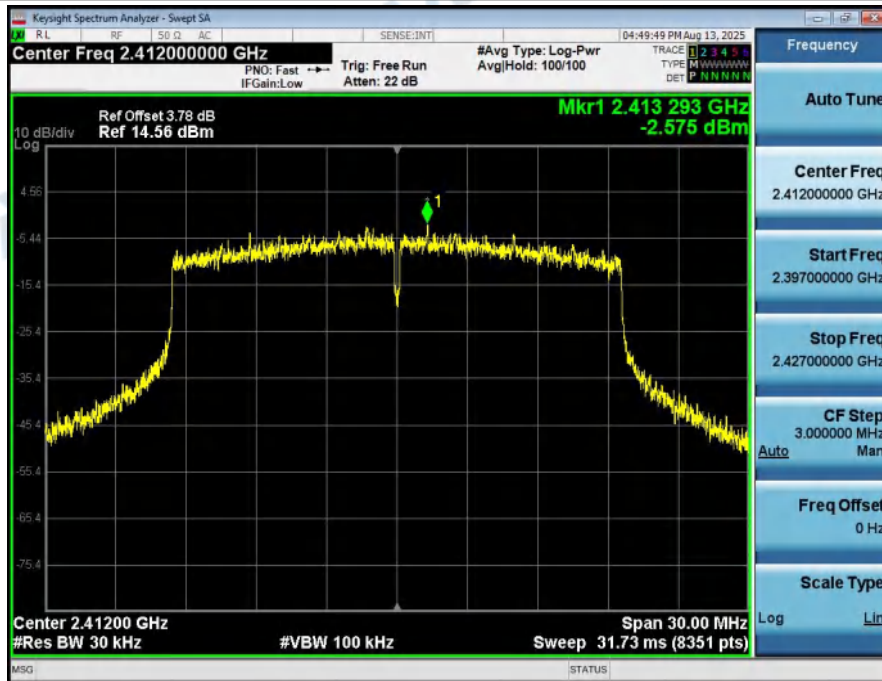
Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2437



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



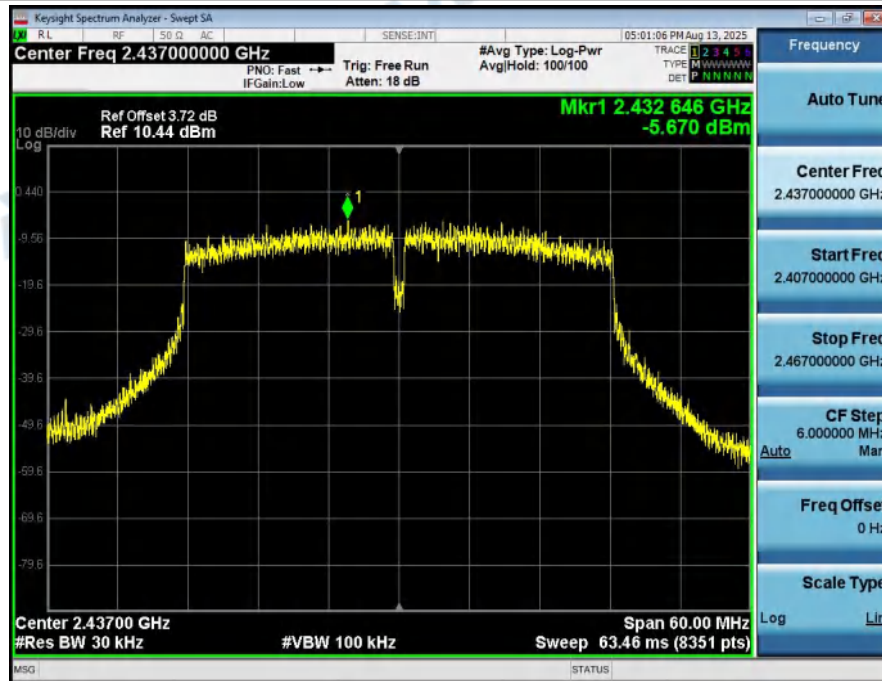
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Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2422



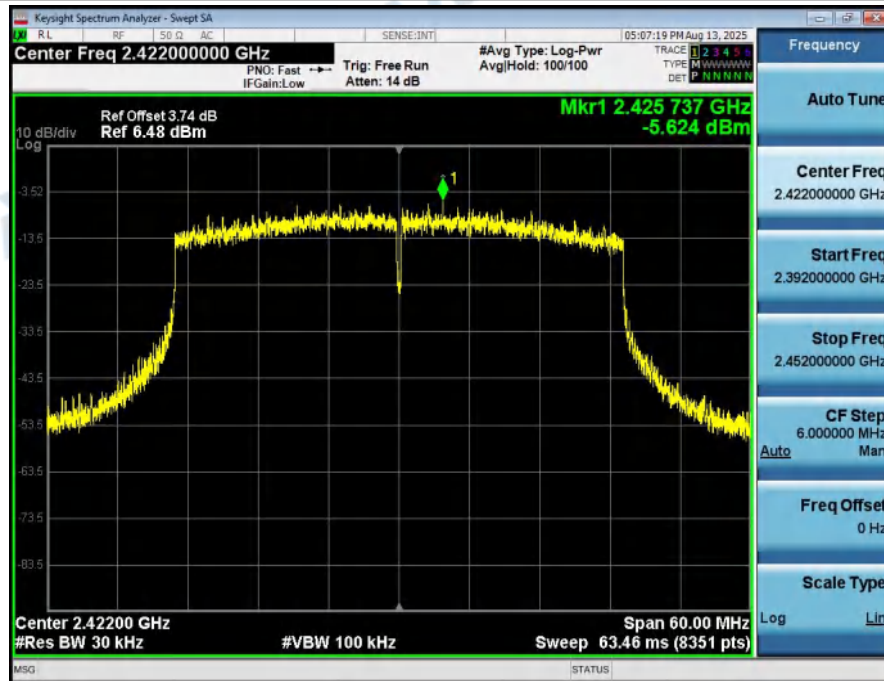
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Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2452



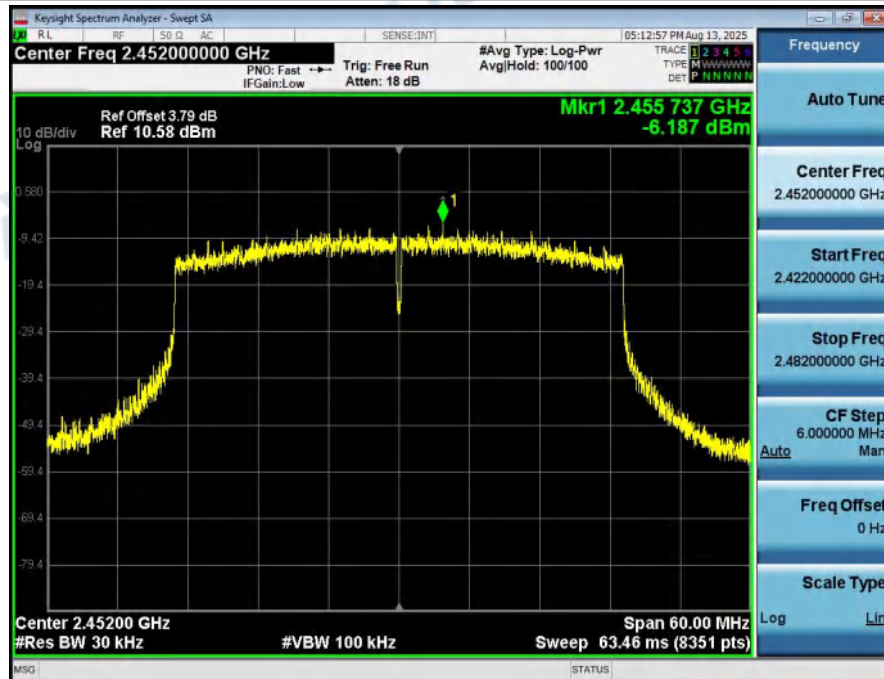
Power_Spectral_Density_NVNT_ANT1_802_11ax(HE40)_2422



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_freq(MHz)	Ref_level(dBm)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	2398.032	10.125	-31.995	-9.875	Pass
NVNT	ANT1	802.11b	2462.00	2490.016	10.189	-41.057	-9.811	Pass
NVNT	ANT1	802.11g	2412.00	2399.712	2.922	-33.217	-17.078	Pass
NVNT	ANT1	802.11g	2462.00	2483.536	2.532	-49.587	-17.468	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2399.824	2.931	-28.971	-17.069	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2483.536	2.259	-50.183	-17.741	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	2399.824	2.661	-33.197	-17.339	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	2483.920	2.982	-47.073	-17.018	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	2399.892	-0.478	-34.558	-20.478	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	2484.564	-0.549	-47.447	-20.549	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	2399.232	-0.519	-35.677	-20.519	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	2487.012	-1.149	-45.726	-21.149	Pass

1_Reference_Level_NVNT_ANT1_802_11b_2412



2_Bandedge_NVNT_ANT1_802_11b_2412



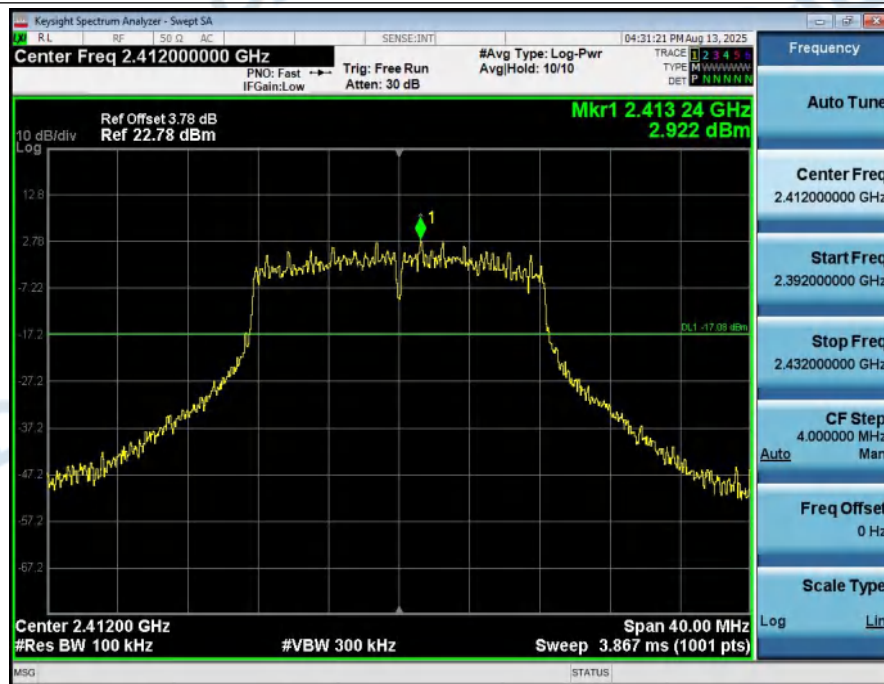
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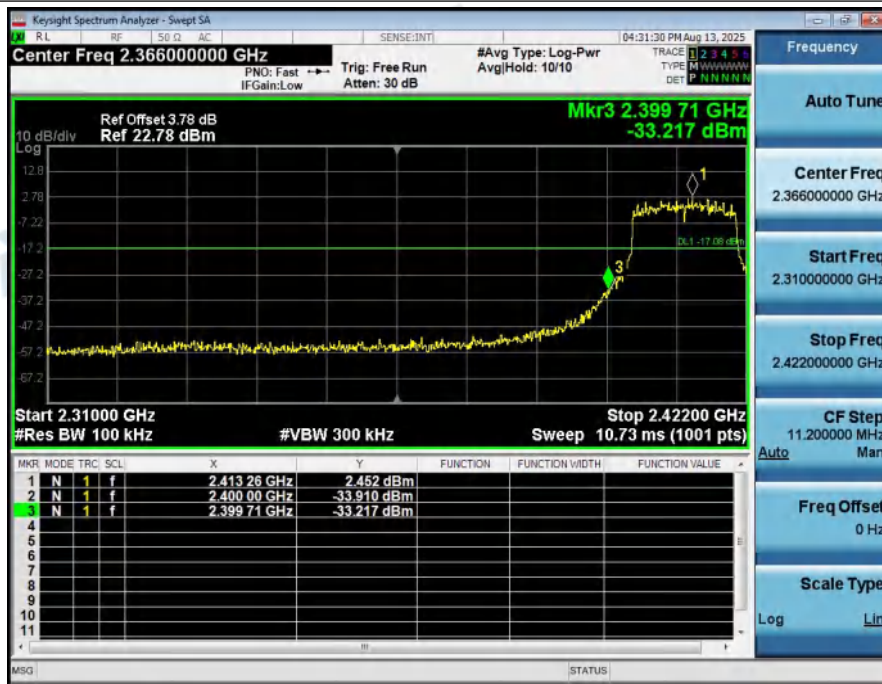
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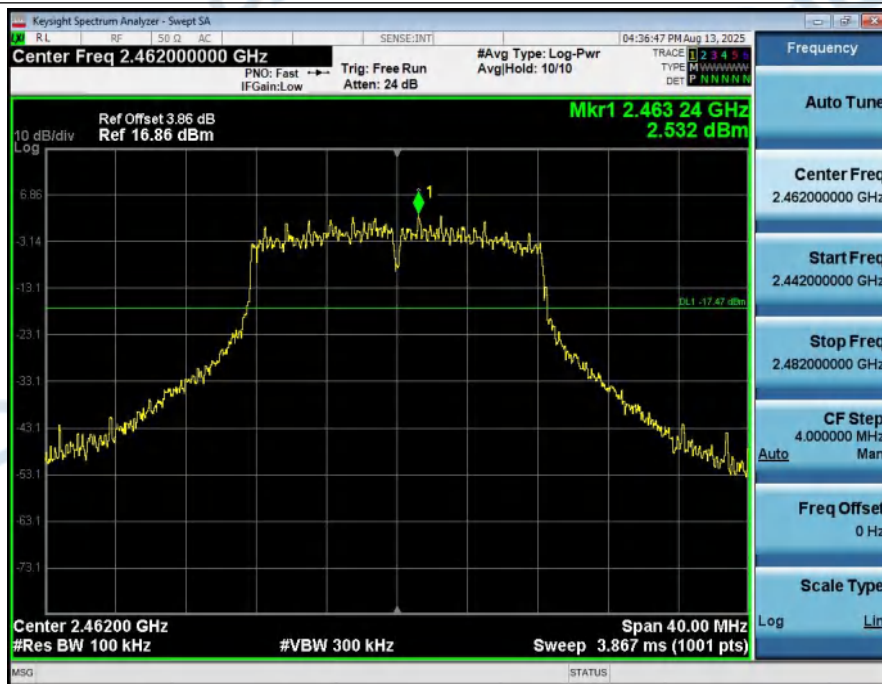
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2_Bandedge_NVNT_ANT1_802_11g_2412



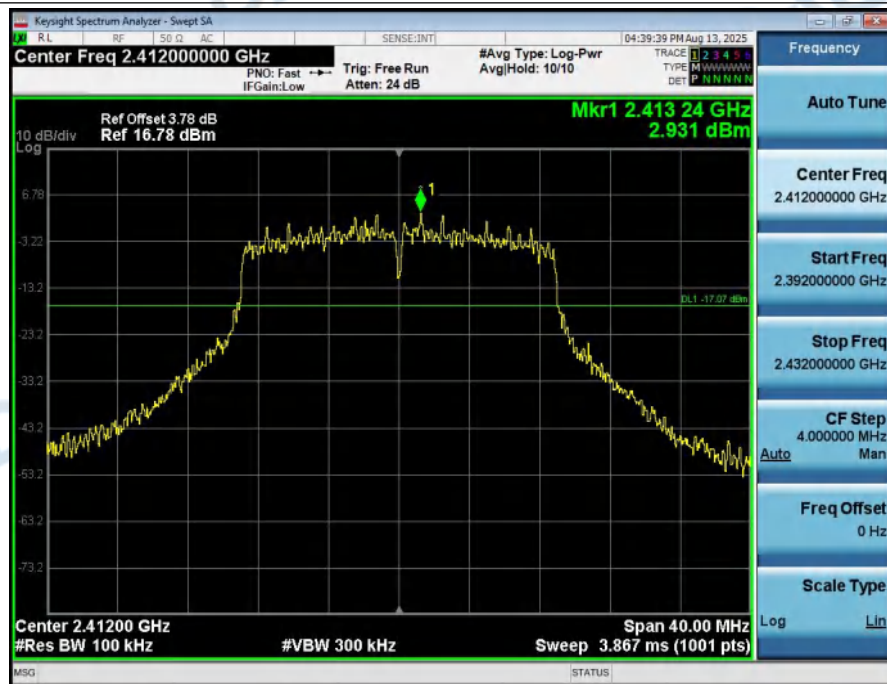
1_Reference_Level_NVNT_ANT1_802_11g_2462



2_Bandedge_NVNT_ANT1_802_11g_2462



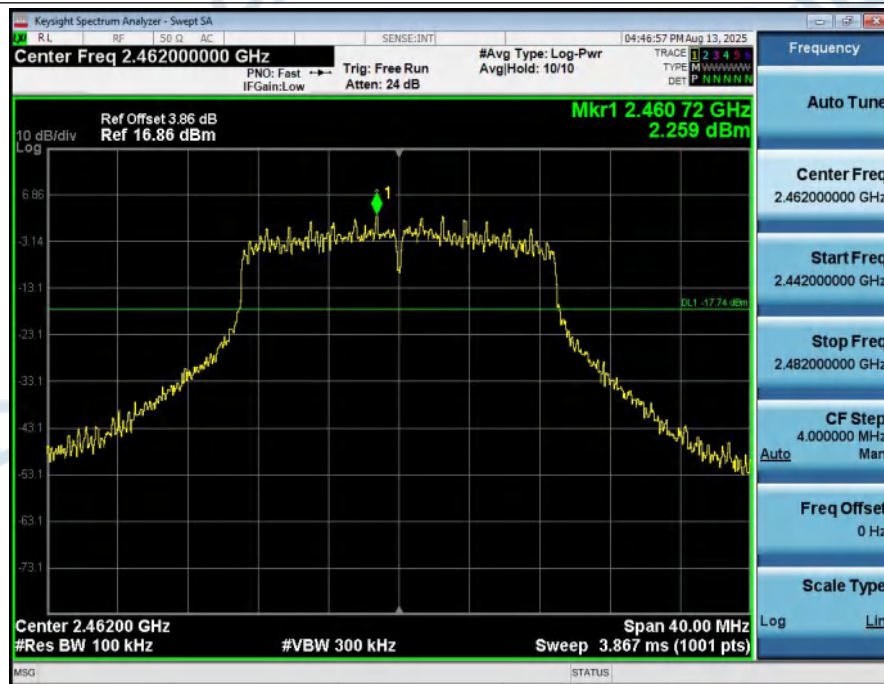
1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2412



2_Bandedge_NVNT_ANT1_802_11n(HT20)_2412



1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2462



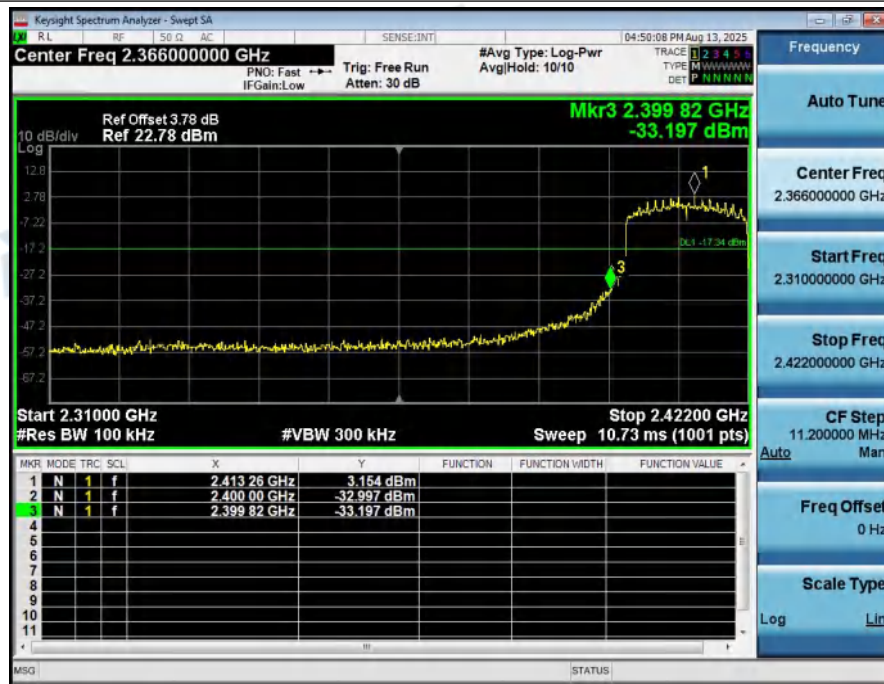
2_Bandedge_NVNT_ANT1_802_11n(HT20)_2462



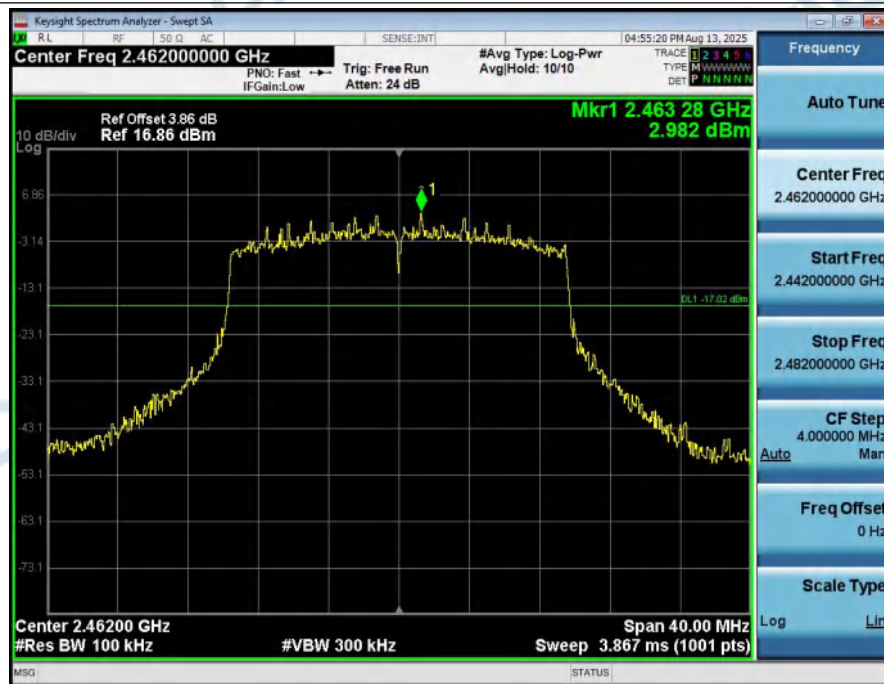
1_Reference_Level_NVNT_ANT1_802_11ax(HE20)_2412



2_Bandedge_NVNT_ANT1_802_11ax(HE20)_2412



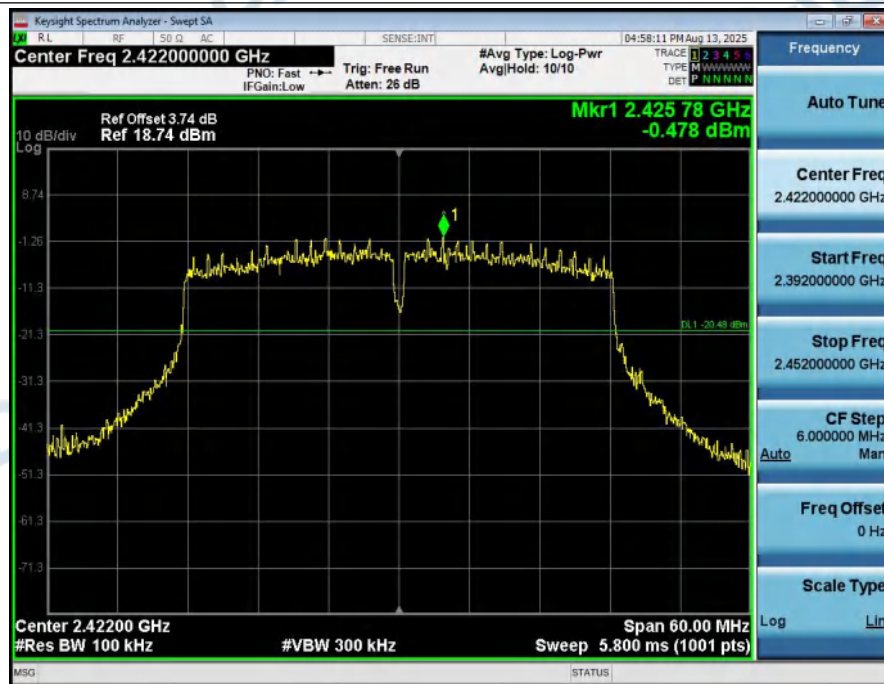
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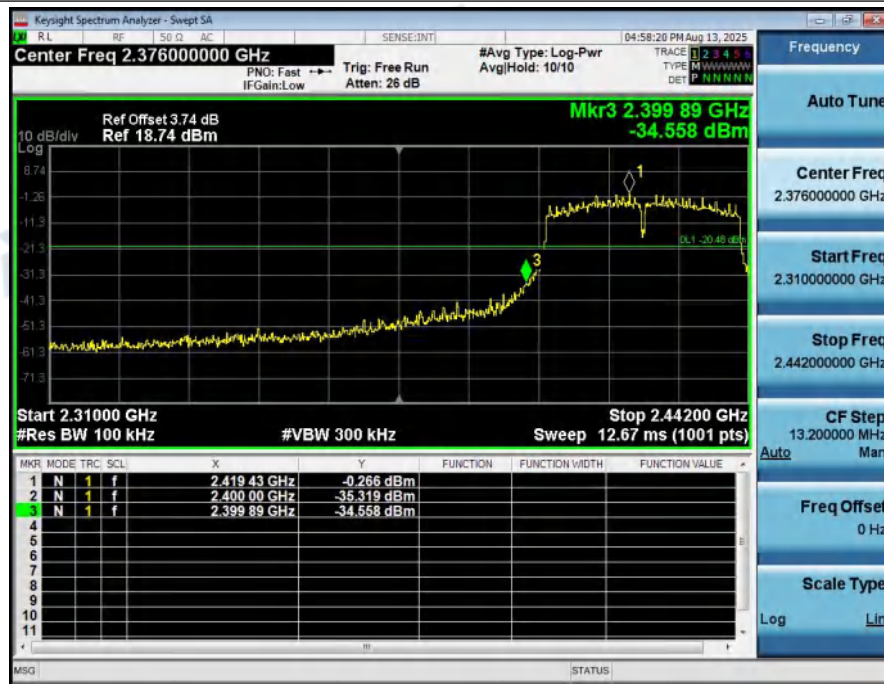
2_Bandedge_NVNT_ANT1_802_11ax(HE20)_2462



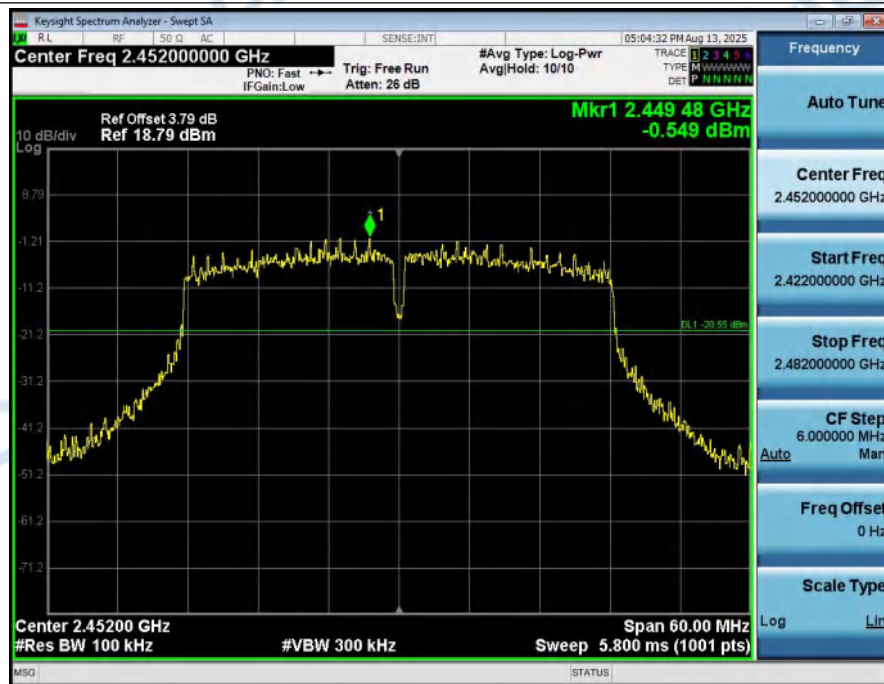
1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2422



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



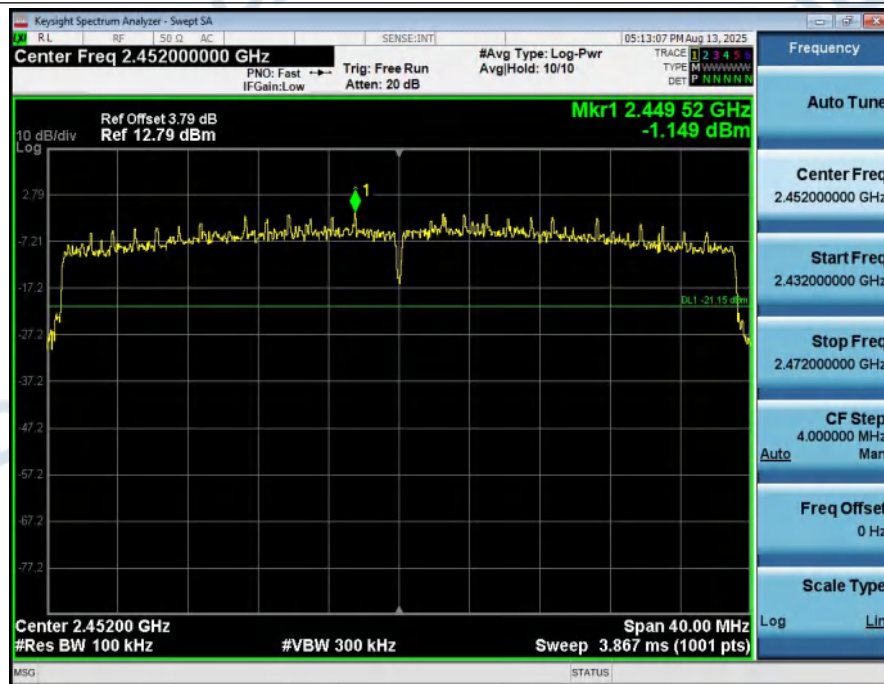
1_Reference_Level_NVNT_ANT1_802_11ax(HE40)_2422



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



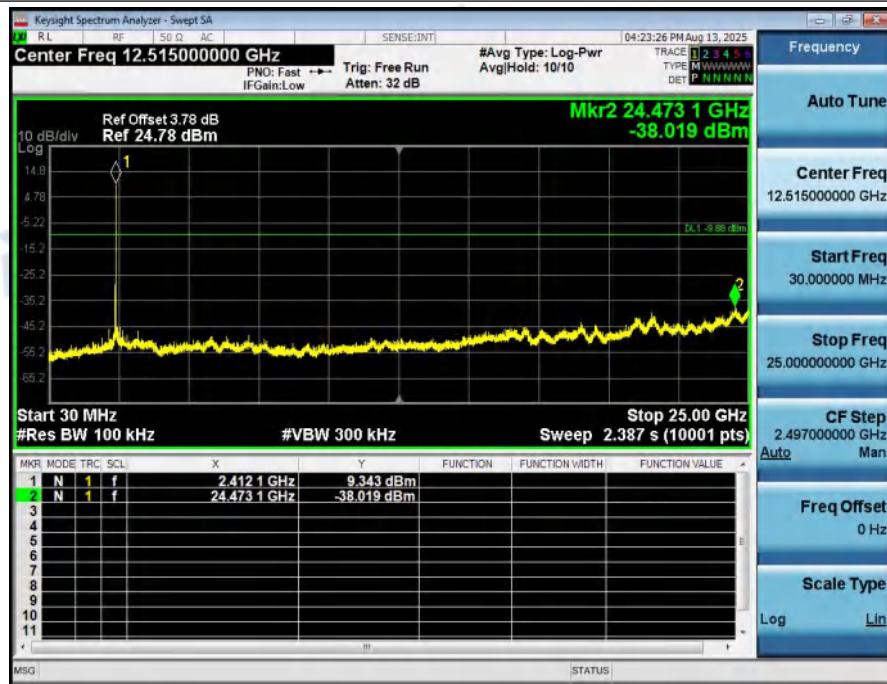
7. Spurious Emission

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	24473.133	10.125	-38.019	-9.875	Pass
NVNT	ANT1	802.11b	2437.00	24972.533	9.769	-33.974	-10.231	Pass
NVNT	ANT1	802.11b	2462.00	24965.042	10.189	-31.390	-9.811	Pass
NVNT	ANT1	802.11g	2412.00	24425.690	2.922	-40.188	-17.078	Pass
NVNT	ANT1	802.11g	2437.00	24980.024	1.622	-42.267	-18.378	Pass
NVNT	ANT1	802.11g	2462.00	24972.533	2.532	-45.696	-17.468	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	24992.509	2.931	-45.972	-17.069	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	24957.551	2.225	-45.493	-17.775	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	24975.030	2.259	-44.356	-17.741	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	24975.030	2.661	-39.464	-17.339	Pass
NVNT	ANT1	802.11ax(HE20)	2437.00	24967.539	2.298	-45.893	-17.702	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	24483.121	2.982	-45.991	-17.018	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	24478.127	-0.478	-43.069	-20.478	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	24975.030	-0.916	-43.592	-20.916	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	24990.012	-0.549	-43.383	-20.549	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	24525.570	-0.519	-43.709	-20.519	Pass
NVNT	ANT1	802.11ax(HE40)	2437.00	24515.582	-1.241	-48.962	-21.241	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	24972.533	-1.149	-50.041	-21.149	Pass

1_Reference_Level_NVNT_ANT1_802_11b_2412



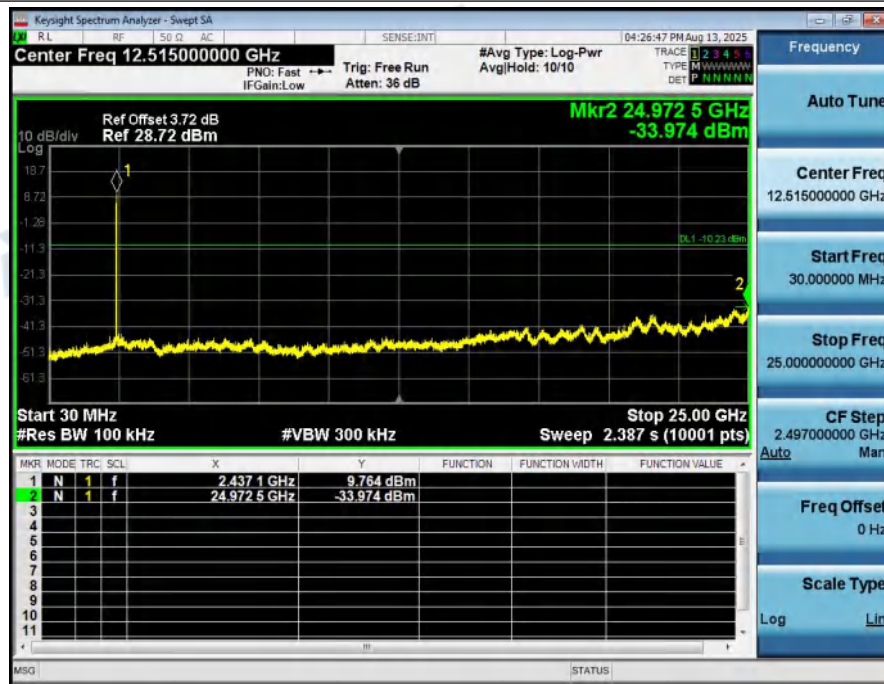
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1_Reference_Level_NVNT_ANT1_802_11b_2437



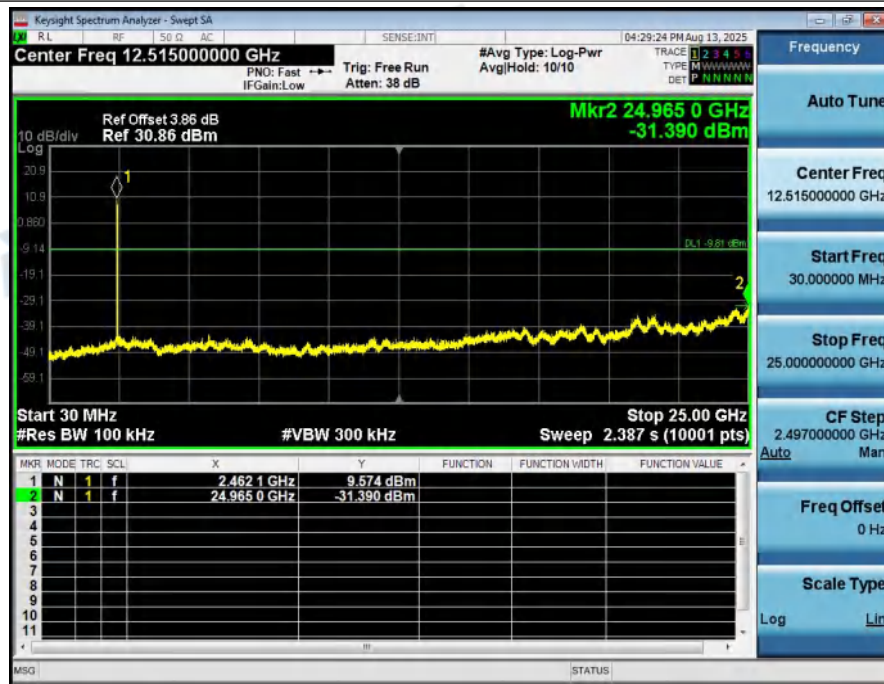
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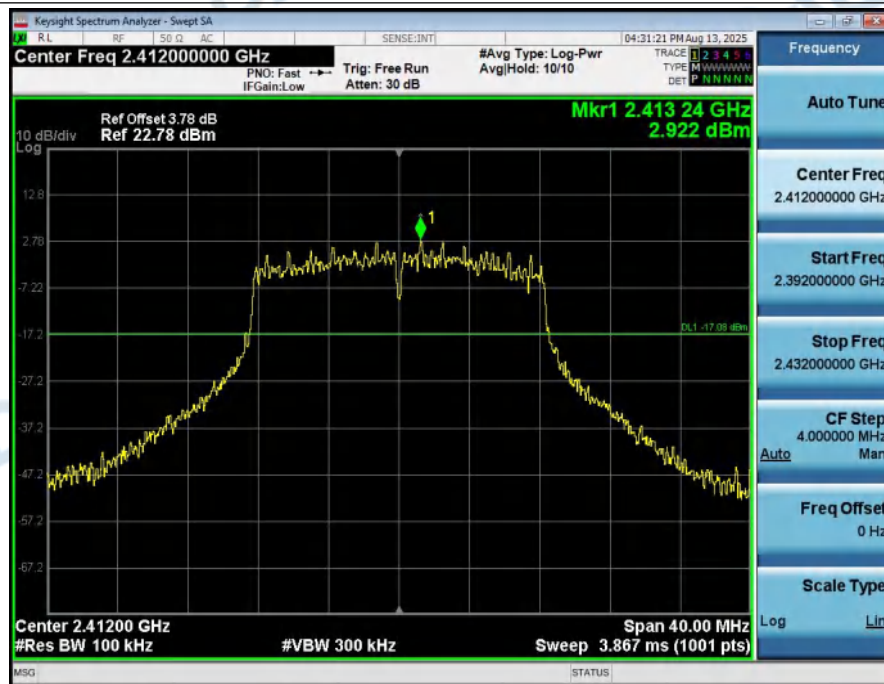
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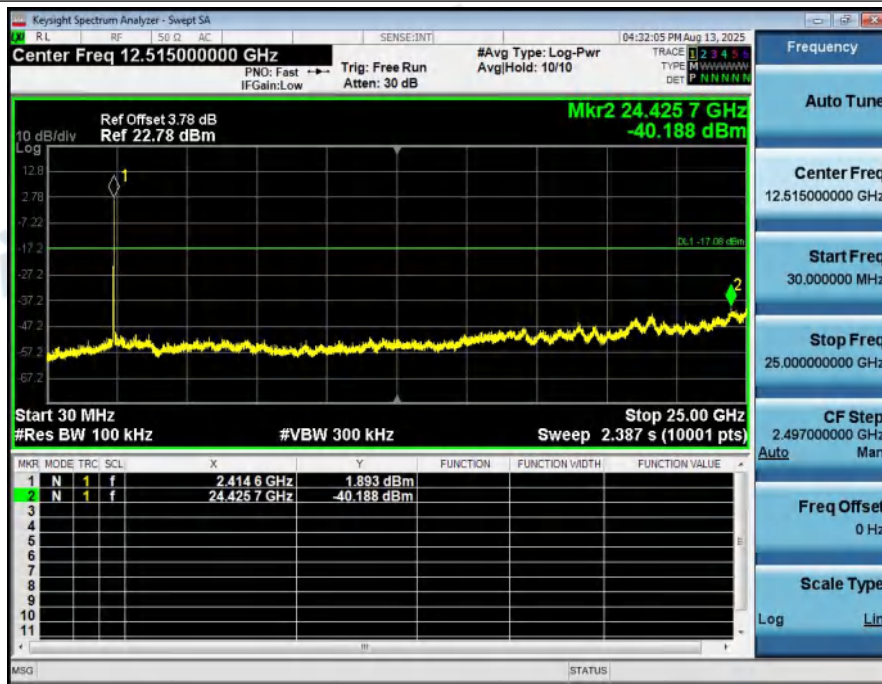
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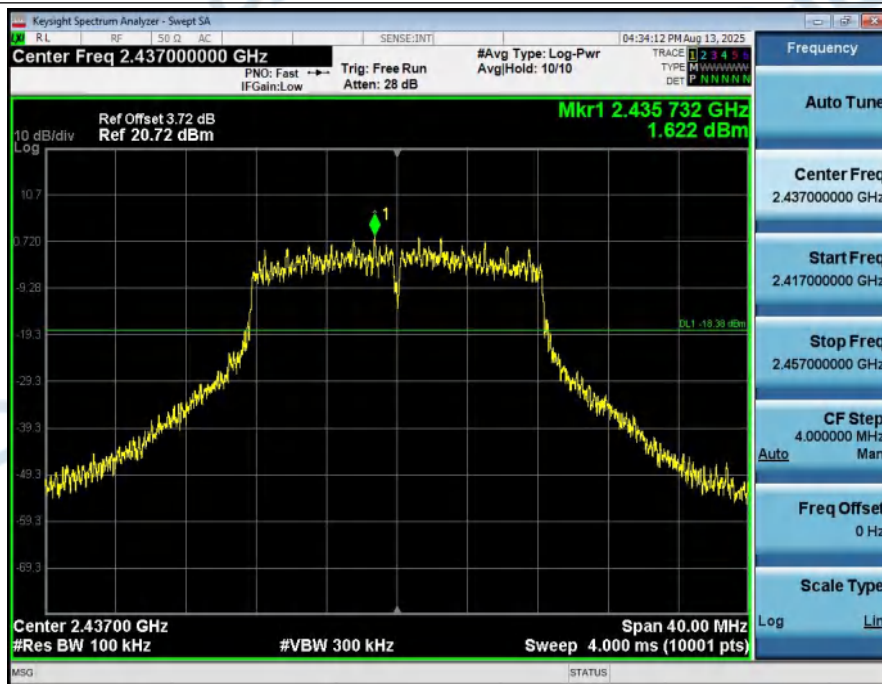
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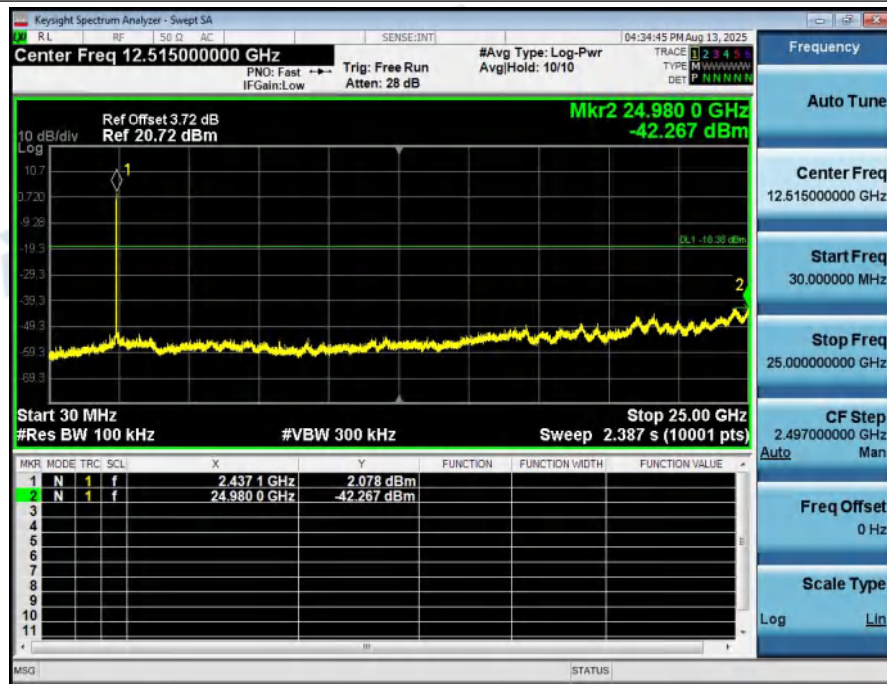
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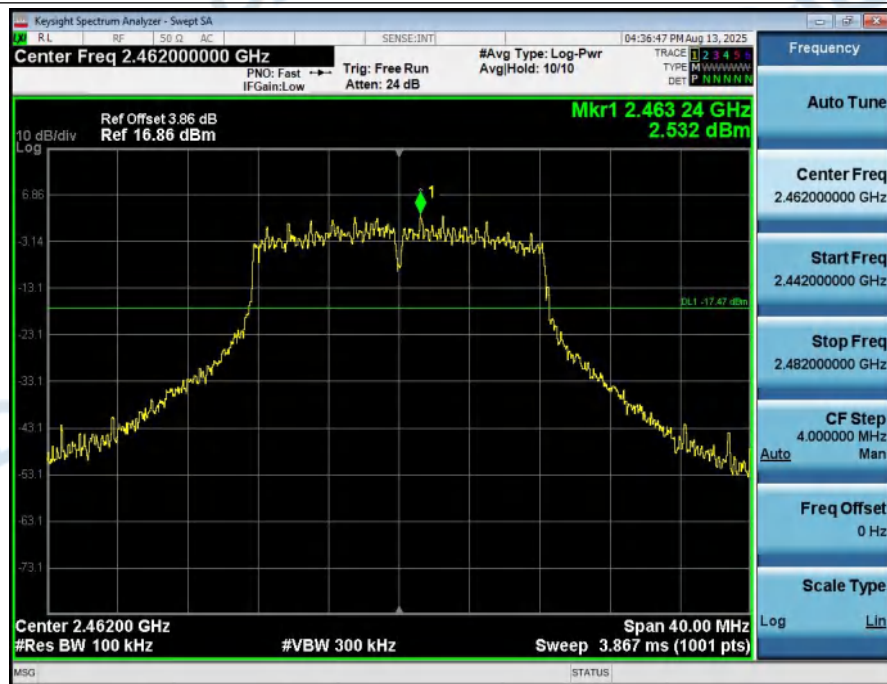
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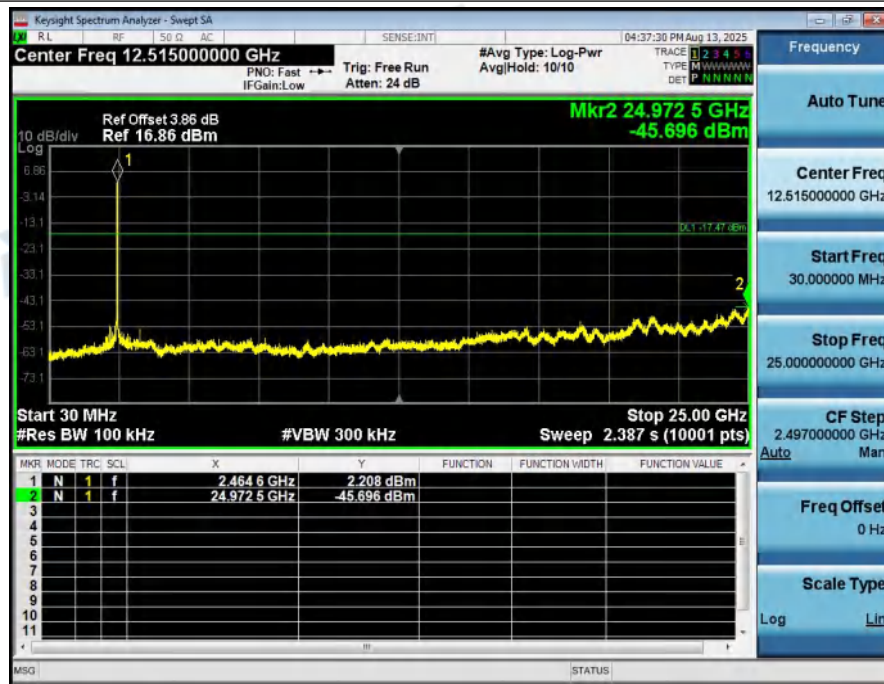
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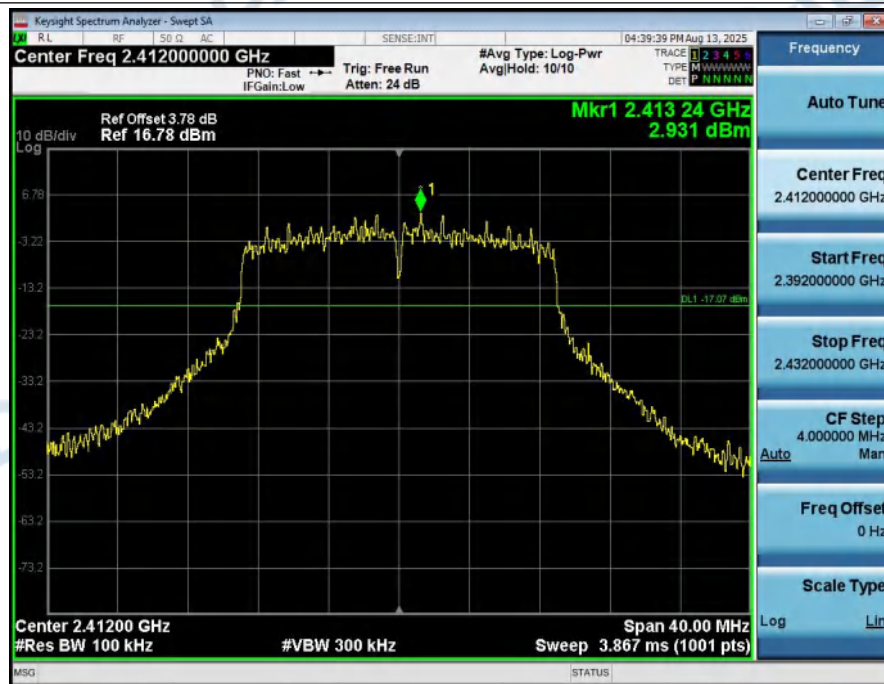
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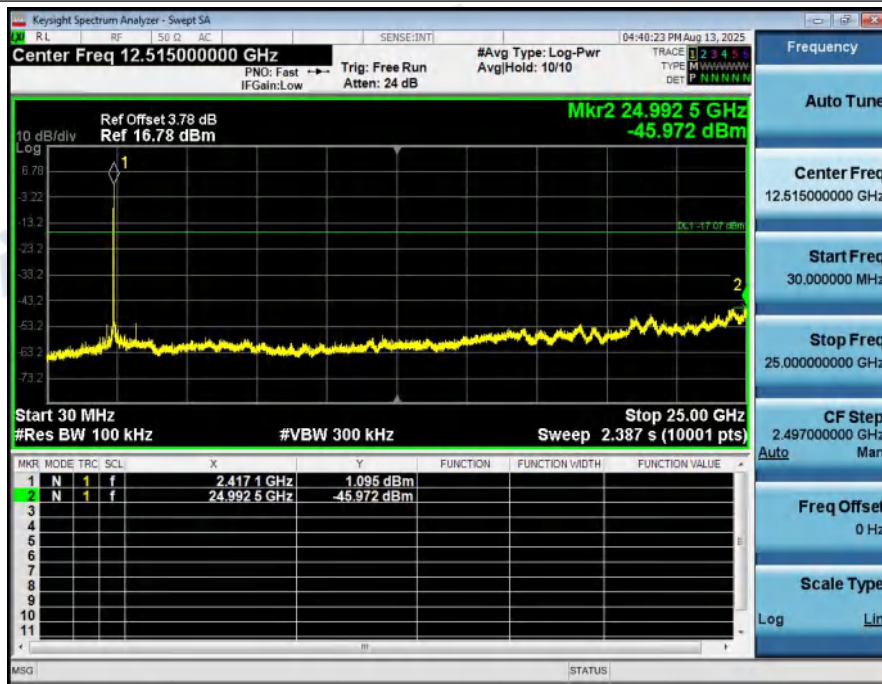
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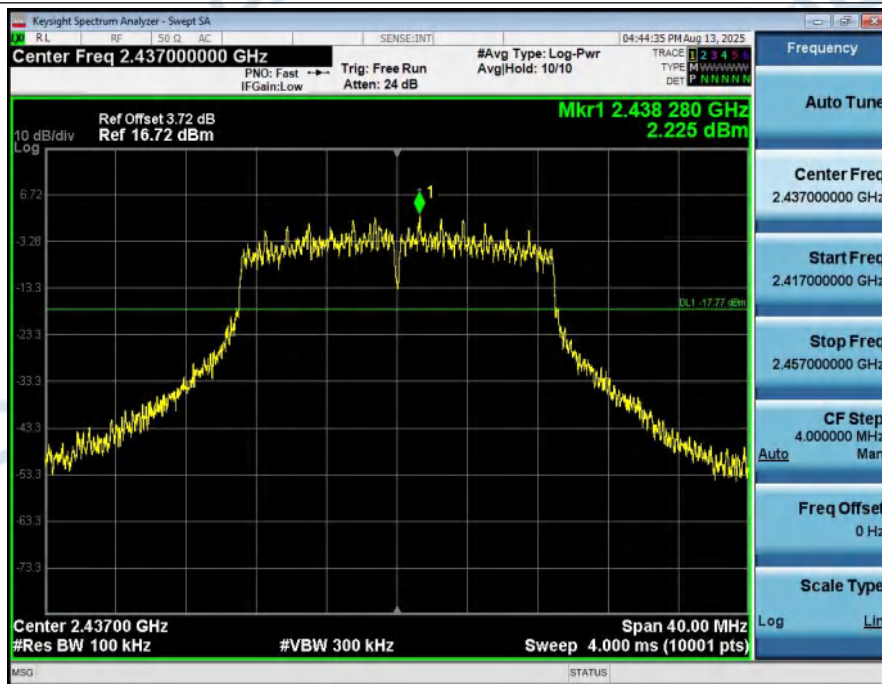
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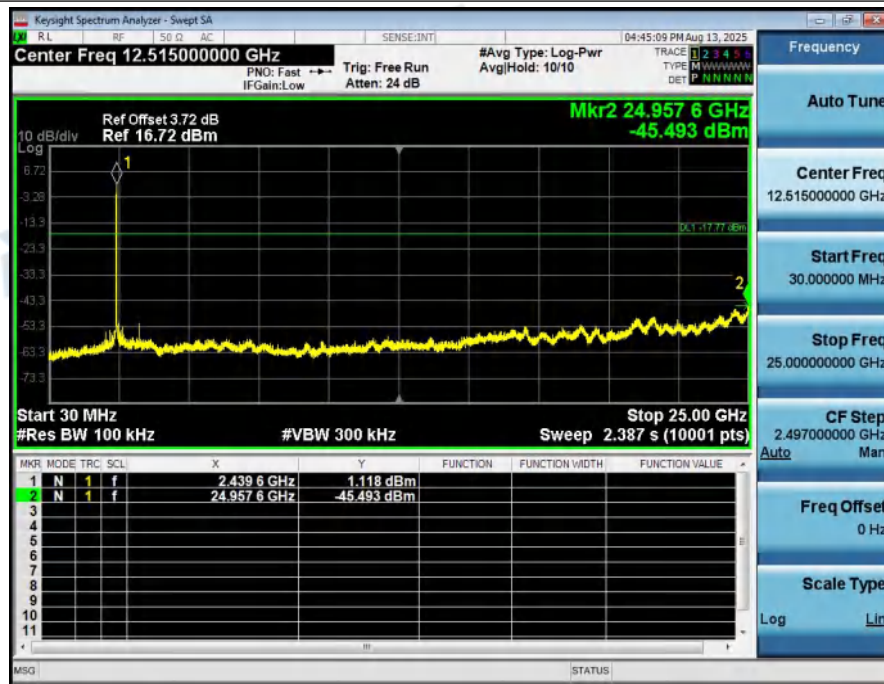
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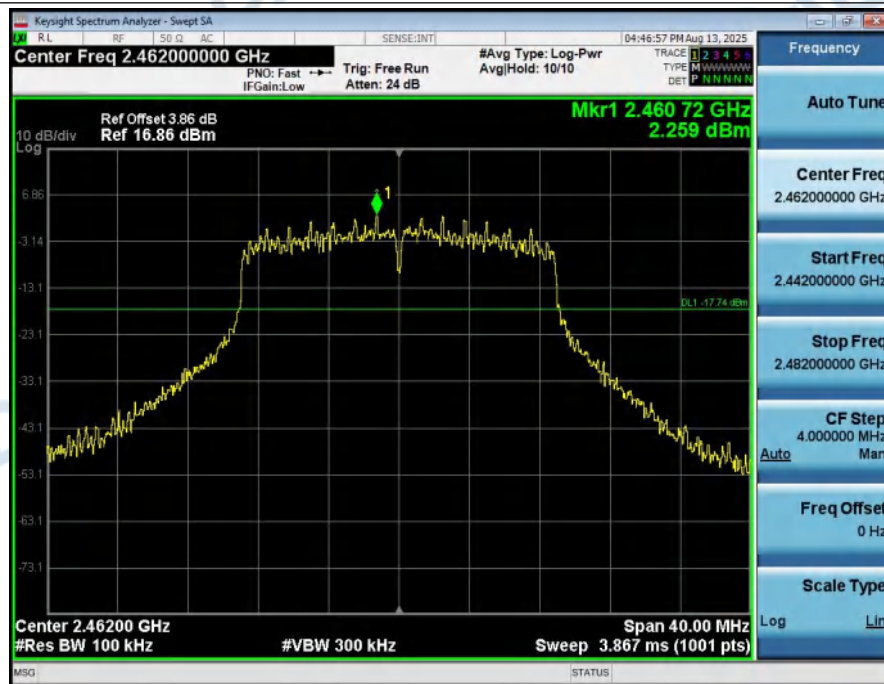
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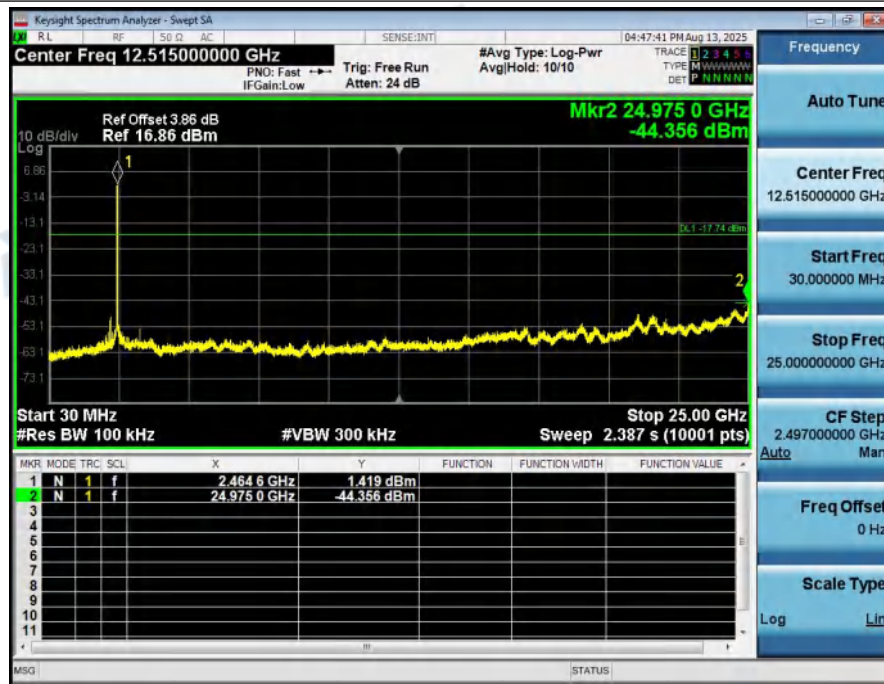
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1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2462



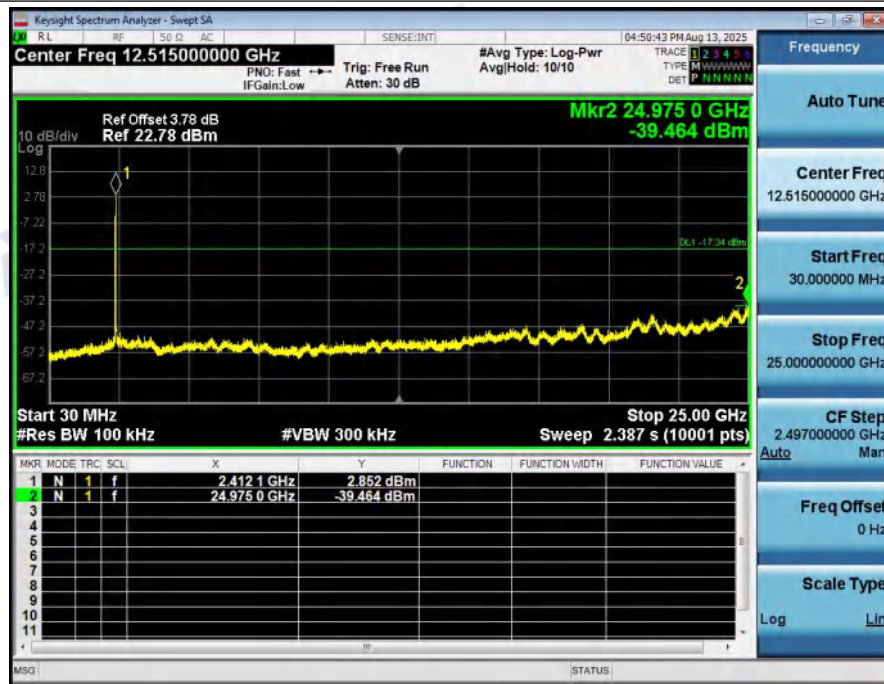
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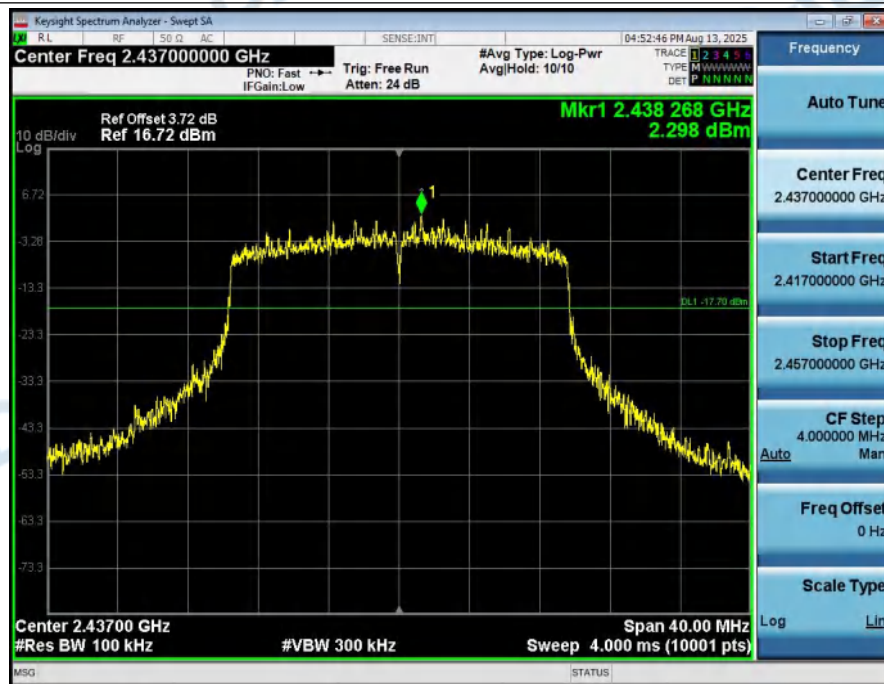
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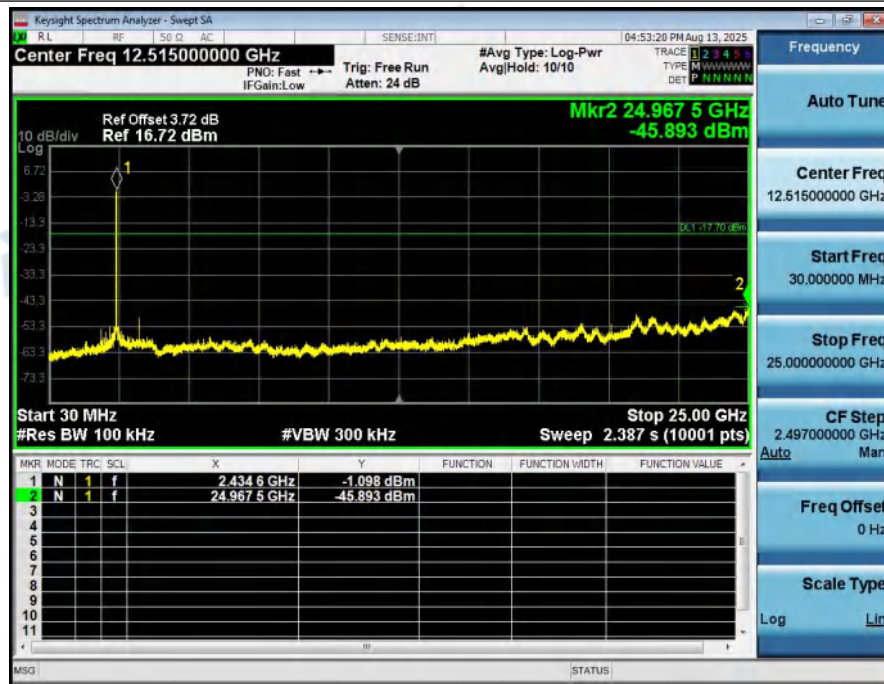
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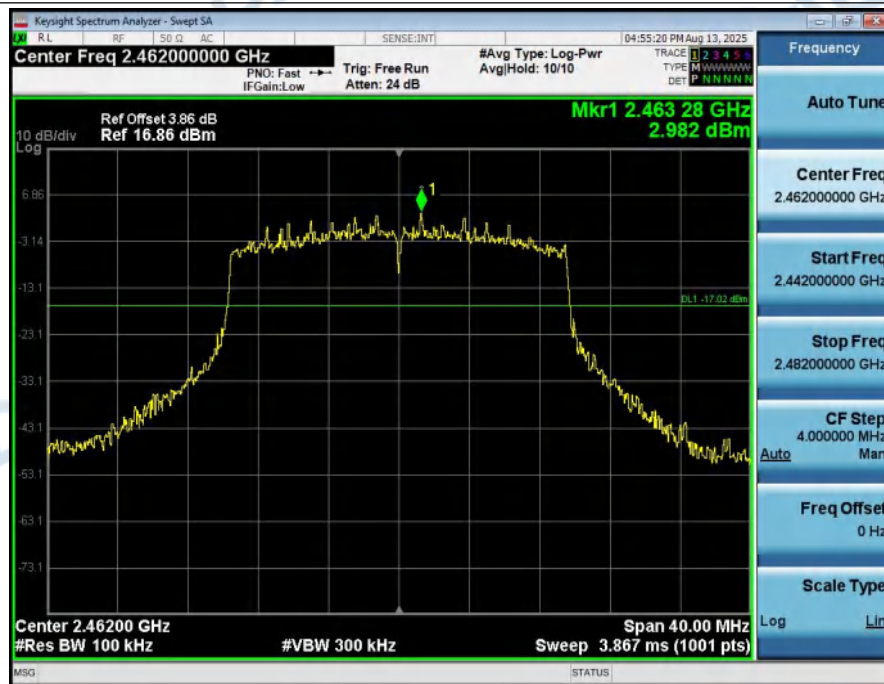
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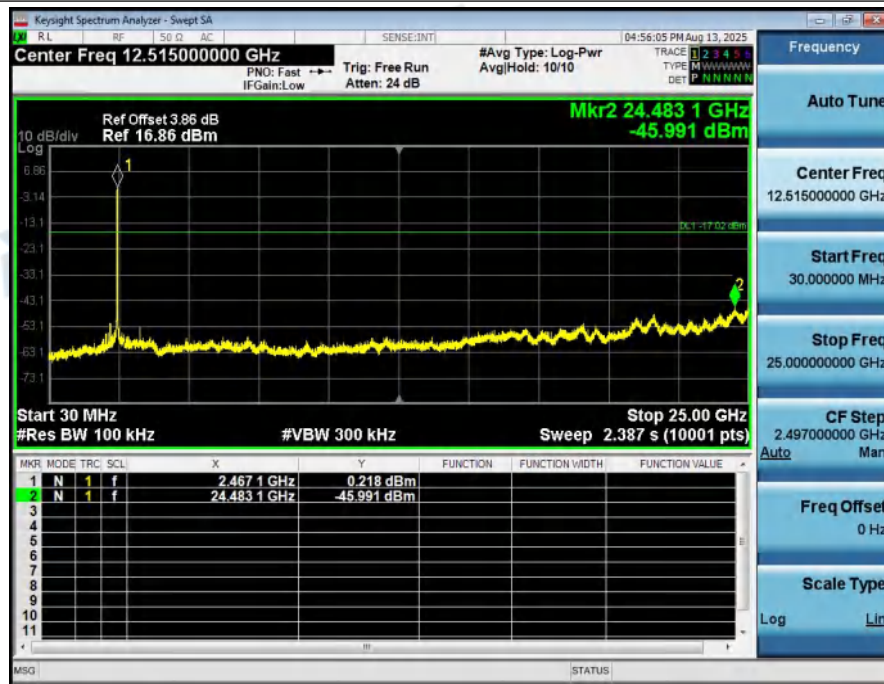
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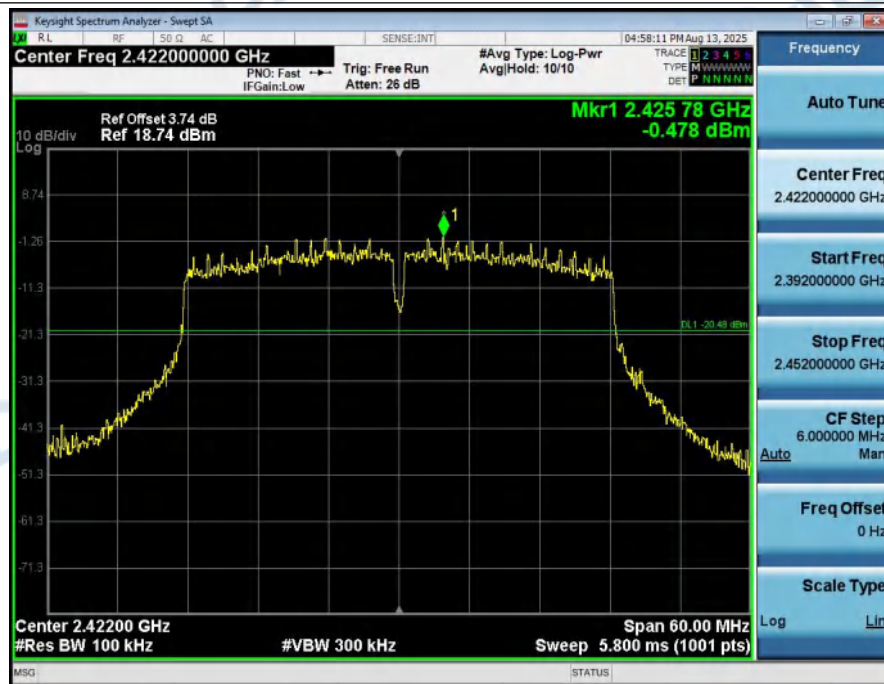
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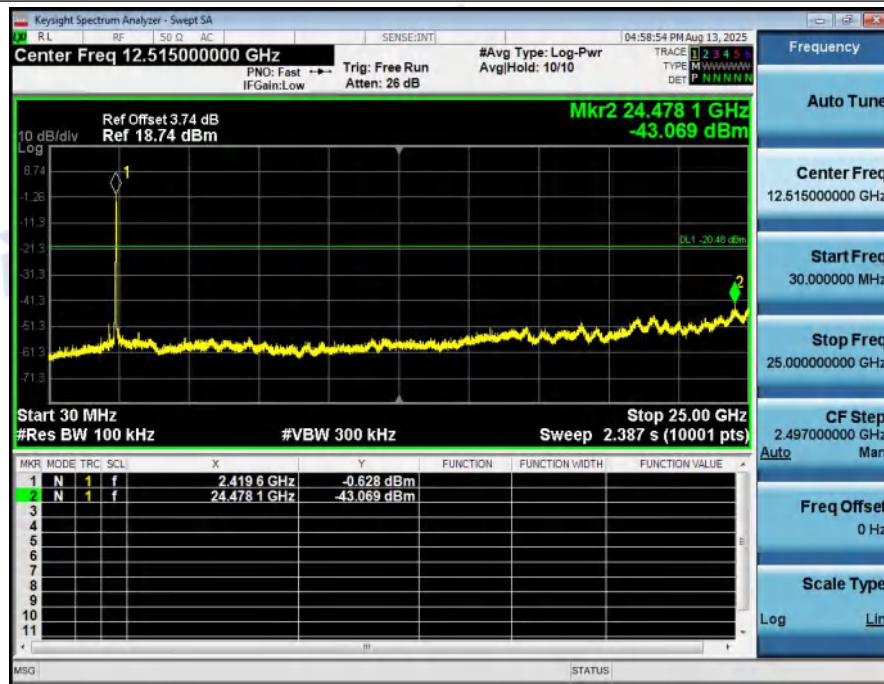
2_Spurious_Emission_NVNT_ANT1_802_11ax(HE20)_2462



1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2422



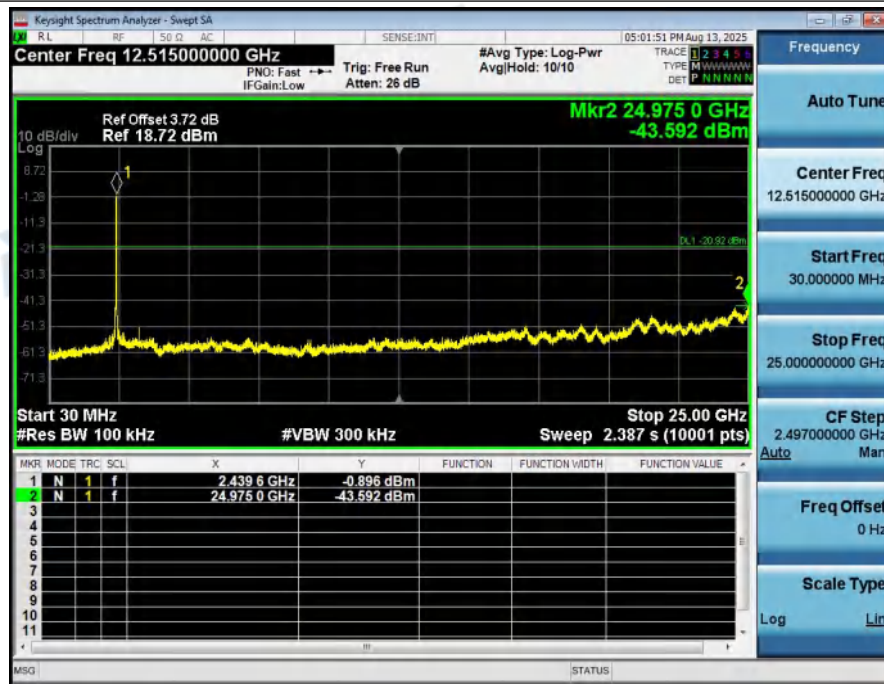
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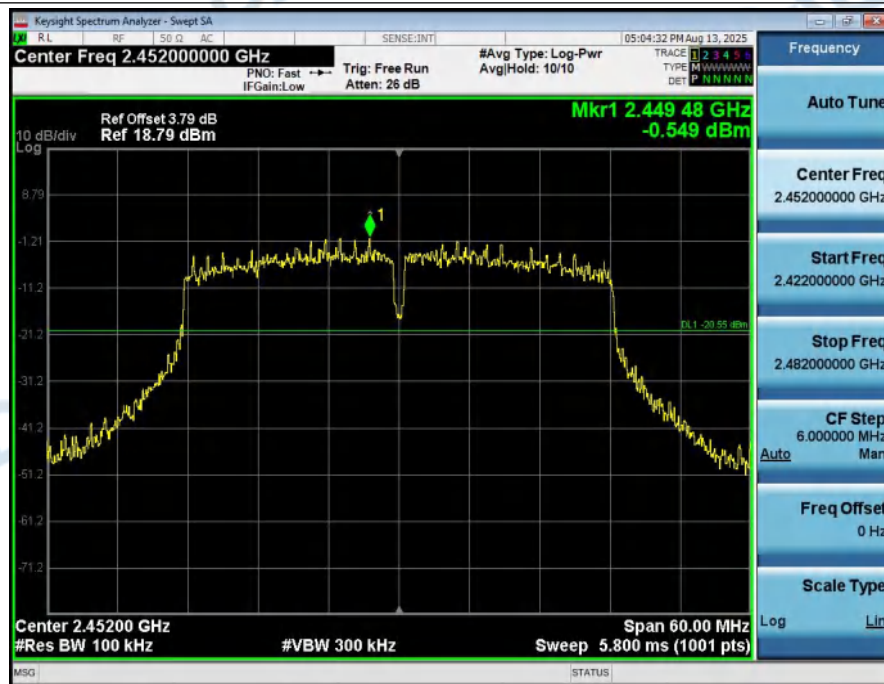
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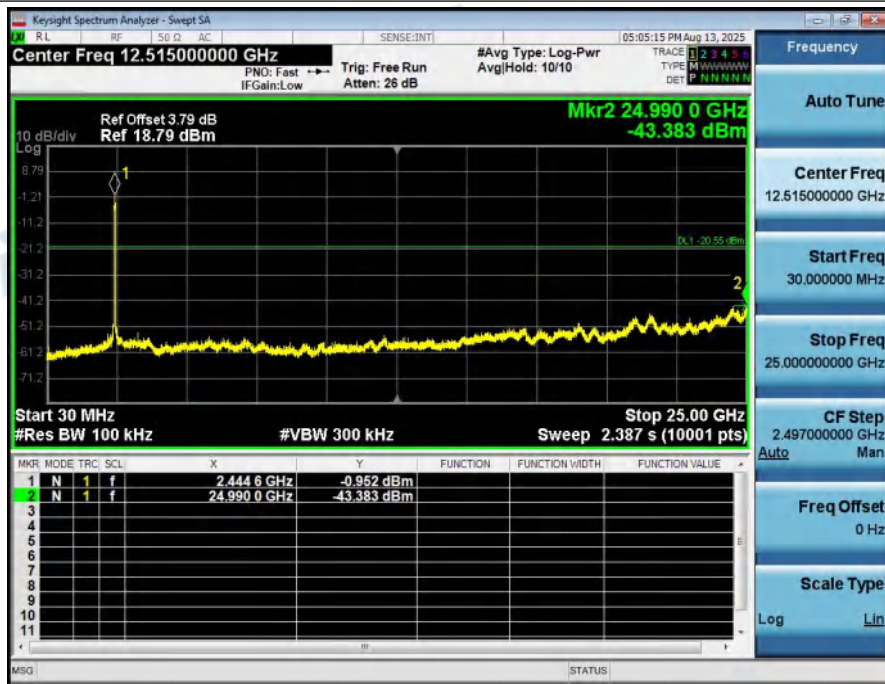
2_Spurious_Emission_NVNT_ANT1_802_11n(HT40)_2437



1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2452



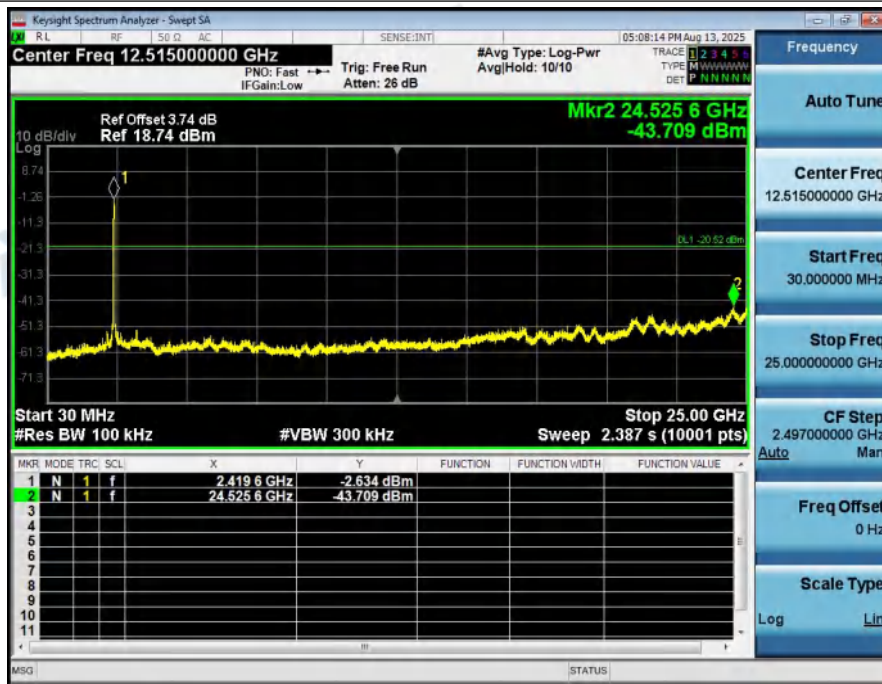
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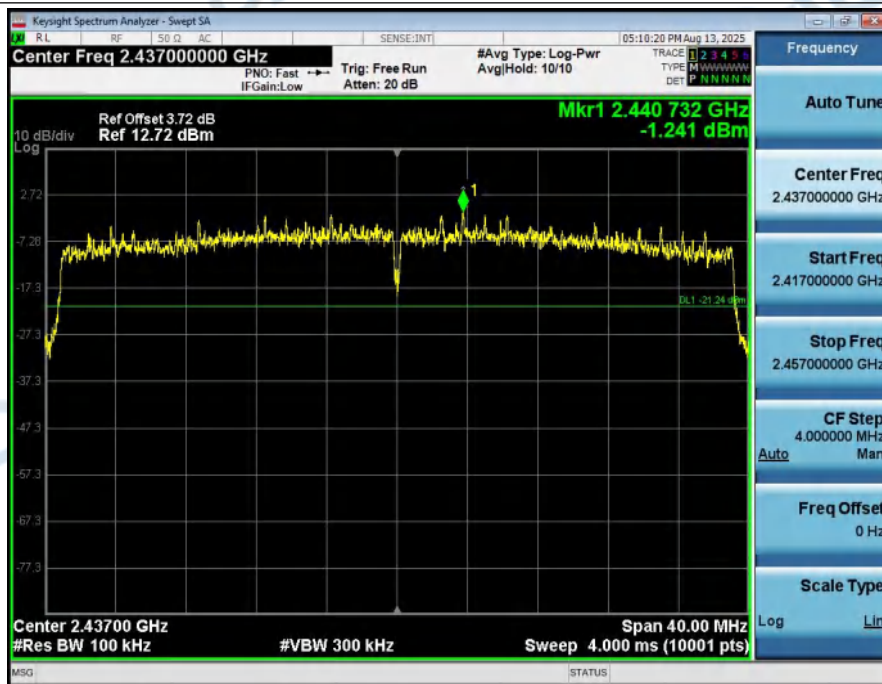
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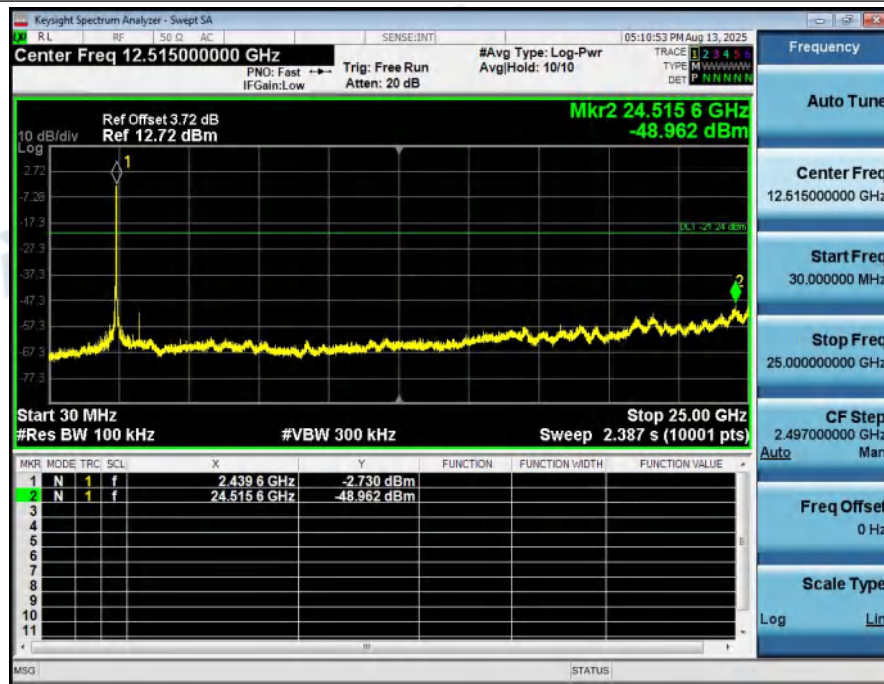
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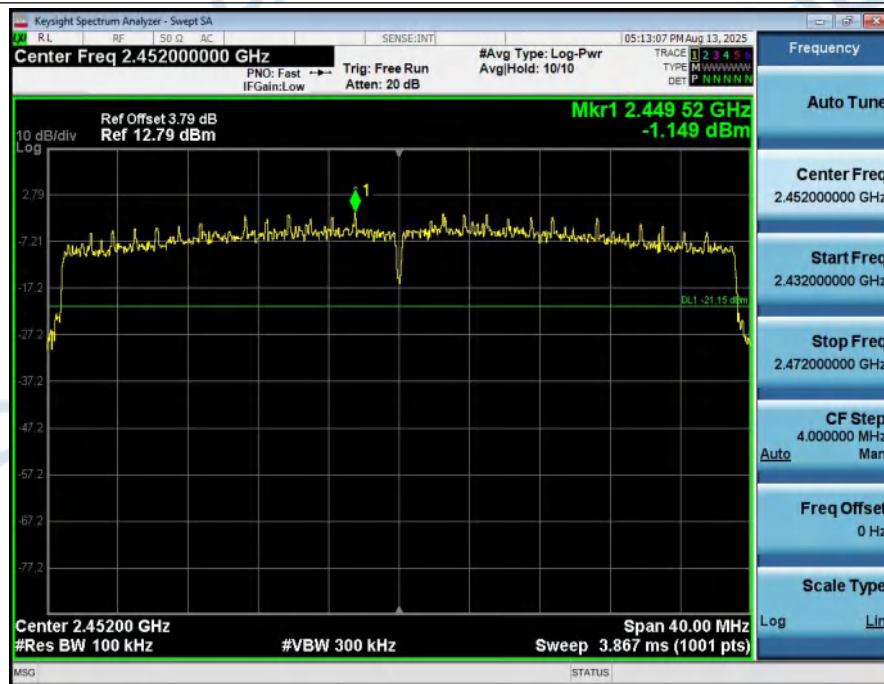
1_Reference_Level_NVNT_ANT1_802_11ax(HE40)_2437



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

