

4. Power Spectral Density

Condition	Antenna	Modulation	Frequency (MHz)	SA_PSD (dBm/30kHz)	limit(dBm/3kHz)	Result
NVNT	ANT1	802.11b	2412.00	7.82	8.00	Pass
NVNT	ANT2	802.11b	2412.00	8.38	8.00	Pass
NVNT	ANT1	802.11b	2437.00	6.81	8.00	Pass
NVNT	ANT2	802.11b	2437.00	7.46	8.00	Pass
NVNT	ANT1	802.11b	2462.00	7.47	8.00	Pass
NVNT	ANT2	802.11b	2462.00	7.61	8.00	Pass
NVNT	ANT1	802.11g	2412.00	-2.62	8.00	Pass
NVNT	ANT2	802.11g	2412.00	-1.18	8.00	Pass
NVNT	ANT1	802.11g	2437.00	-2.77	8.00	Pass
NVNT	ANT2	802.11g	2437.00	-1.81	8.00	Pass
NVNT	ANT1	802.11g	2462.00	-2.77	8.00	Pass
NVNT	ANT2	802.11g	2462.00	-1.93	8.00	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-3.25	8.00	Pass
NVNT	ANT2	802.11n(HT20)	2412.00	-2.52	8.00	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-3.19	8.00	Pass
NVNT	ANT2	802.11n(HT20)	2437.00	-2.56	8.00	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-3.30	8.00	Pass
NVNT	ANT2	802.11n(HT20)	2462.00	-2.65	8.00	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	-7.08	8.00	Pass
NVNT	ANT2	802.11n(HT40)	2422.00	-6.12	8.00	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	-6.55	8.00	Pass
NVNT	ANT2	802.11n(HT40)	2437.00	-6.35	8.00	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	-6.95	8.00	Pass
NVNT	ANT2	802.11n(HT40)	2452.00	-5.25	8.00	Pass

Power_Spectral_Density_NVNT_ANT1_802_11b_2412



Power_Spectral_Density_NVNT_ANT2_802_11b_2412



Power_Spectral_Density_NVNT_ANT1_802_11b_2437



Power_Spectral_Density_NVNT_ANT2_802_11b_2437



Power_Spectral_Density_NVNT_ANT1_802_11b_2462



Power_Spectral_Density_NVNT_ANT2_802_11b_2462



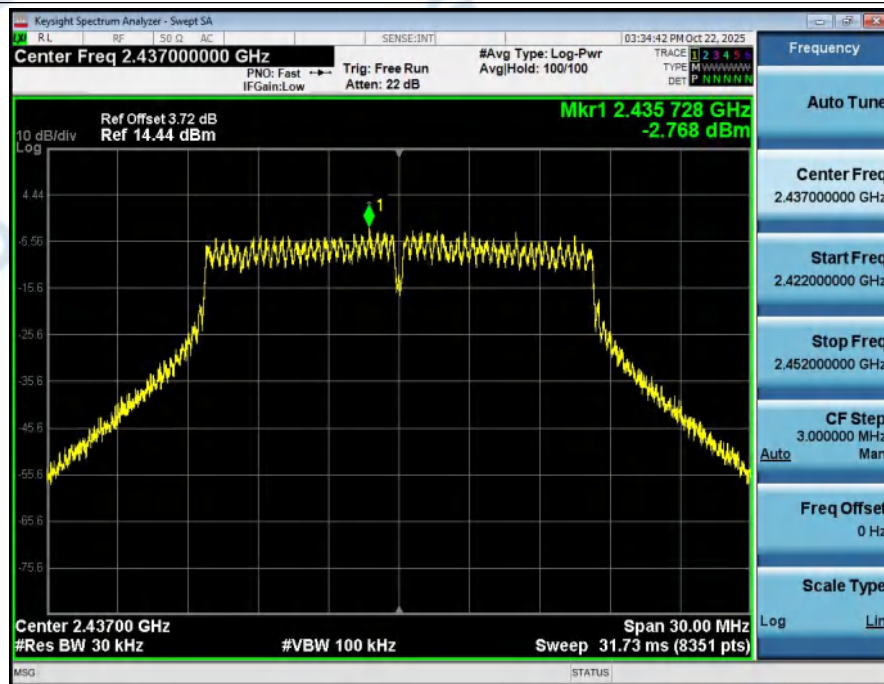
Power_Spectral_Density_NVNT_ANT1_802_11g_2412



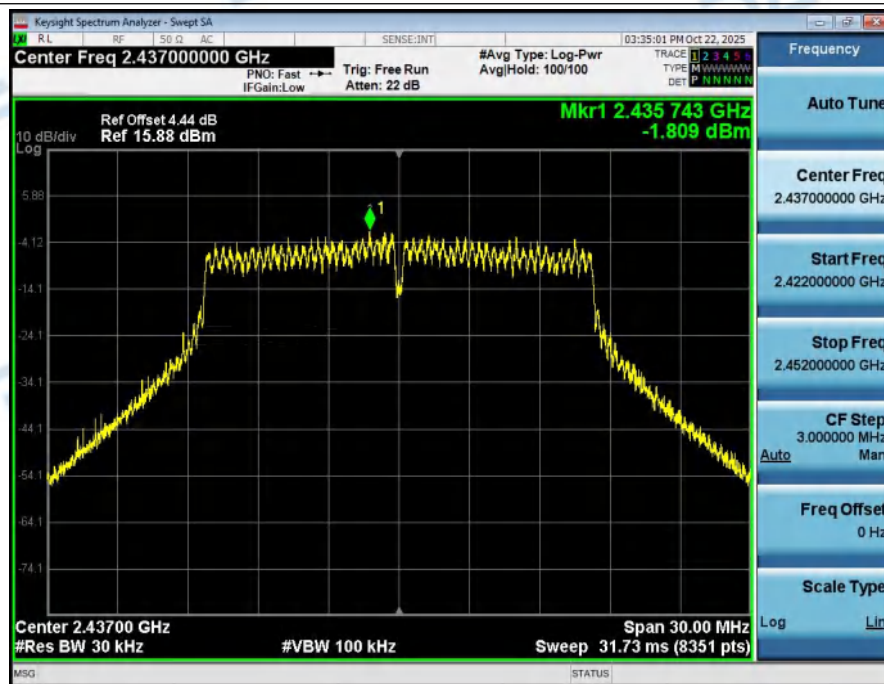
Power_Spectral_Density_NVNT_ANT2_802_11g_2412



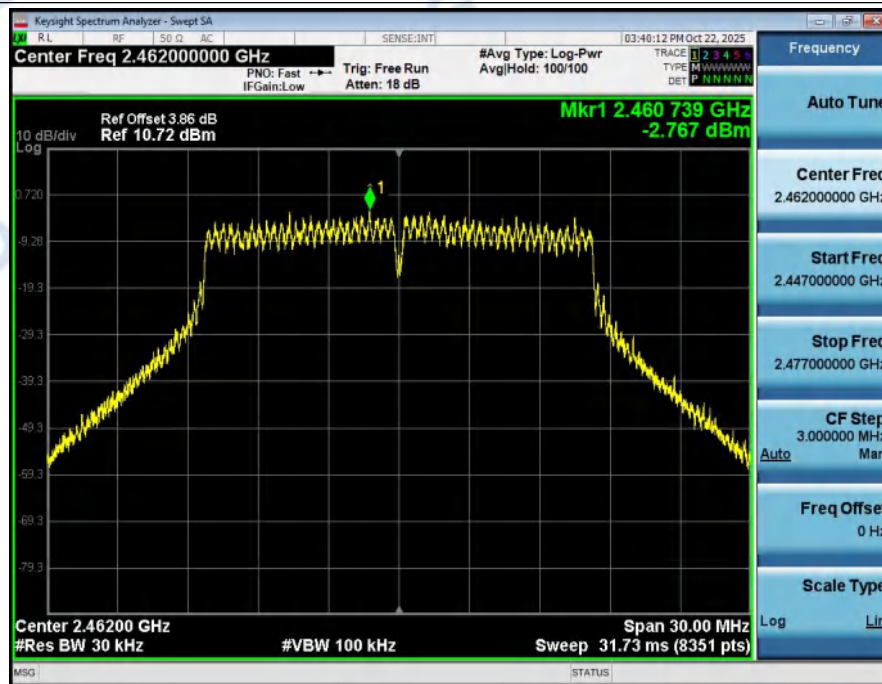
Power_Spectral_Density_NVNT_ANT1_802_11g_2437



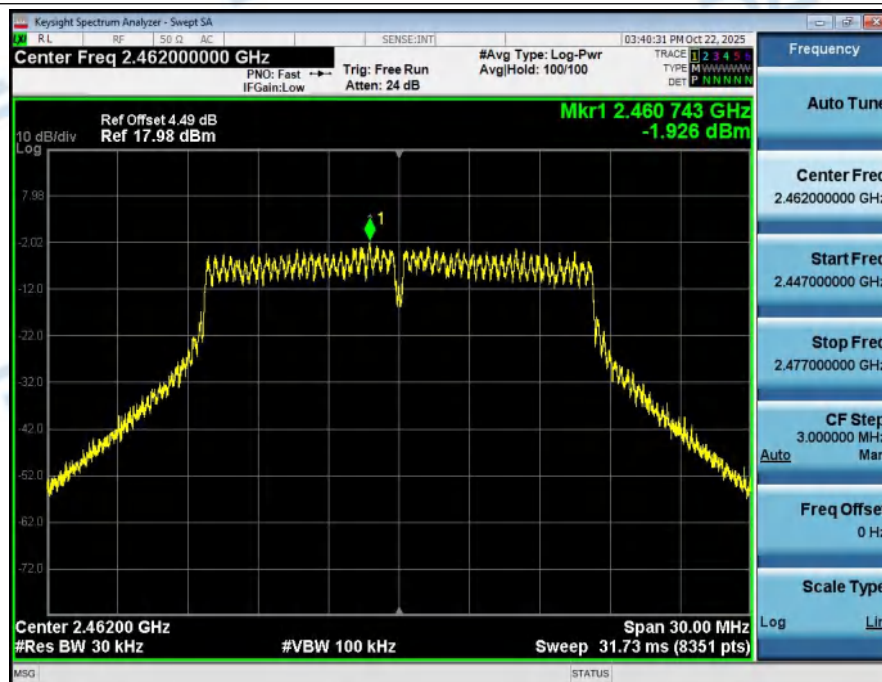
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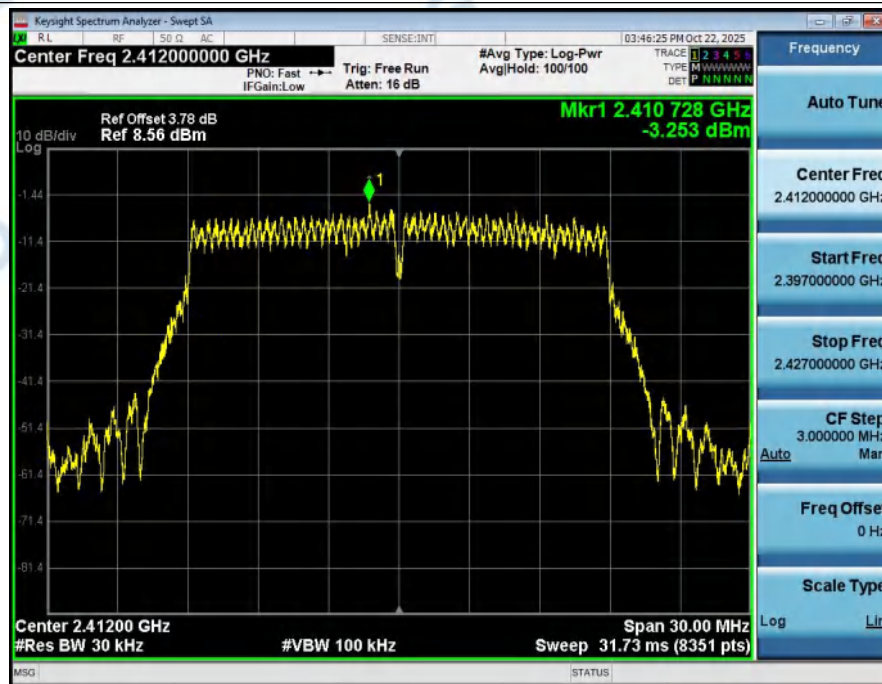
Power_Spectral_Density_NVNT_ANT1_802_11g_2462



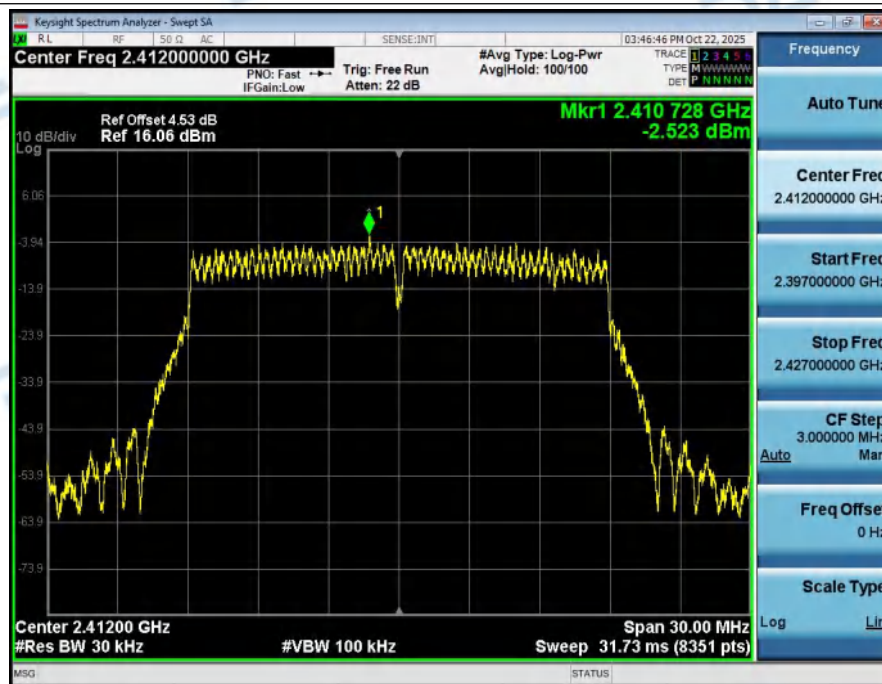
Power_Spectral_Density_NVNT_ANT2_802_11g_2462



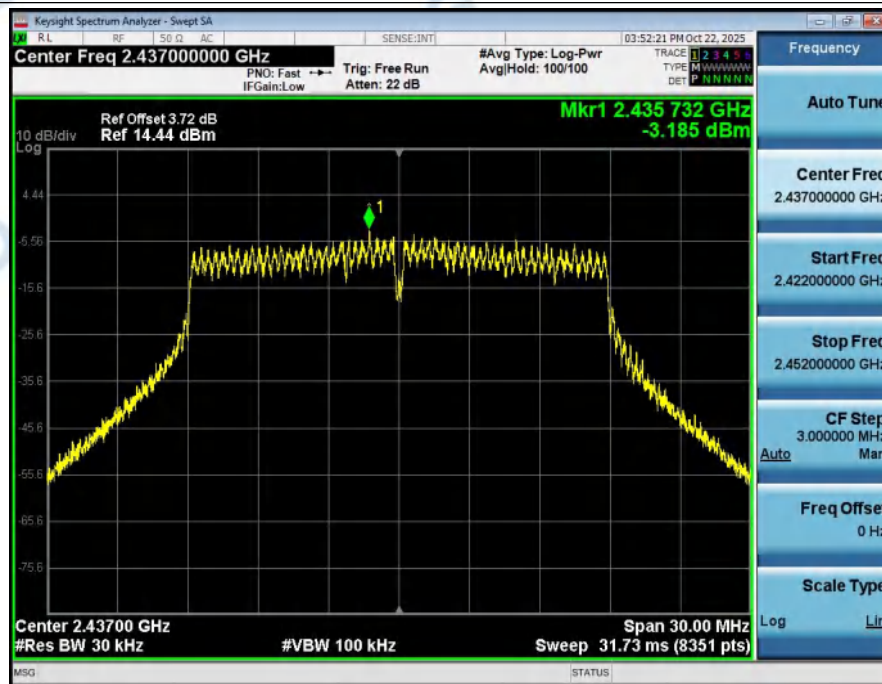
Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2412



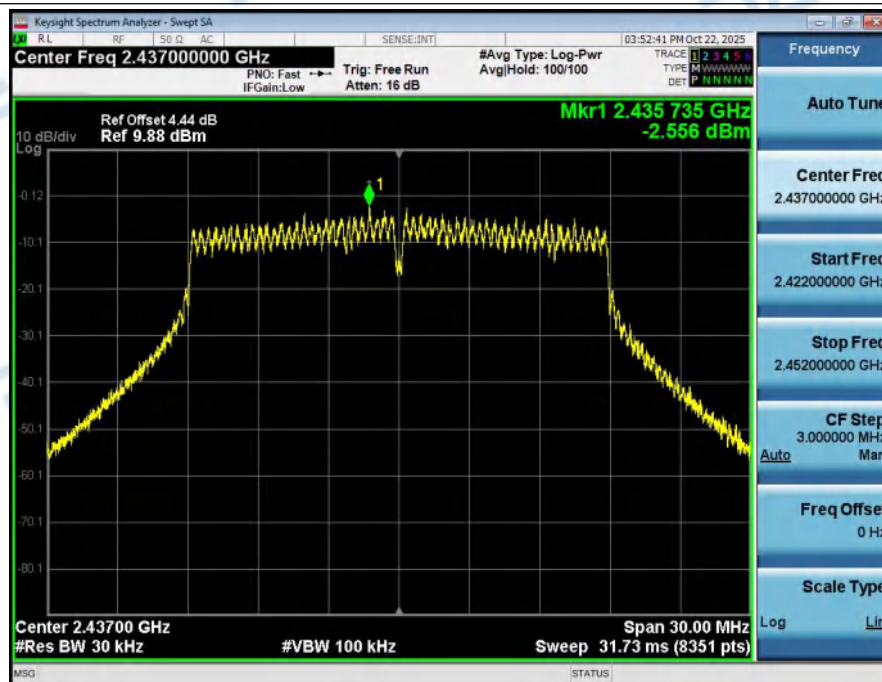
Power_Spectral_Density_NVNT_ANT2_802_11n(HT20)_2412



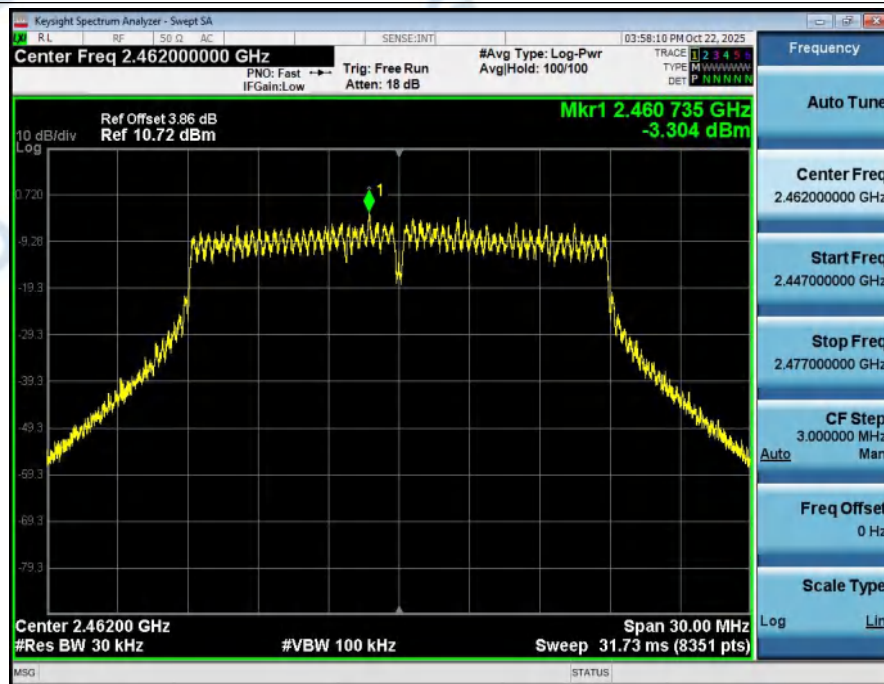
Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2437



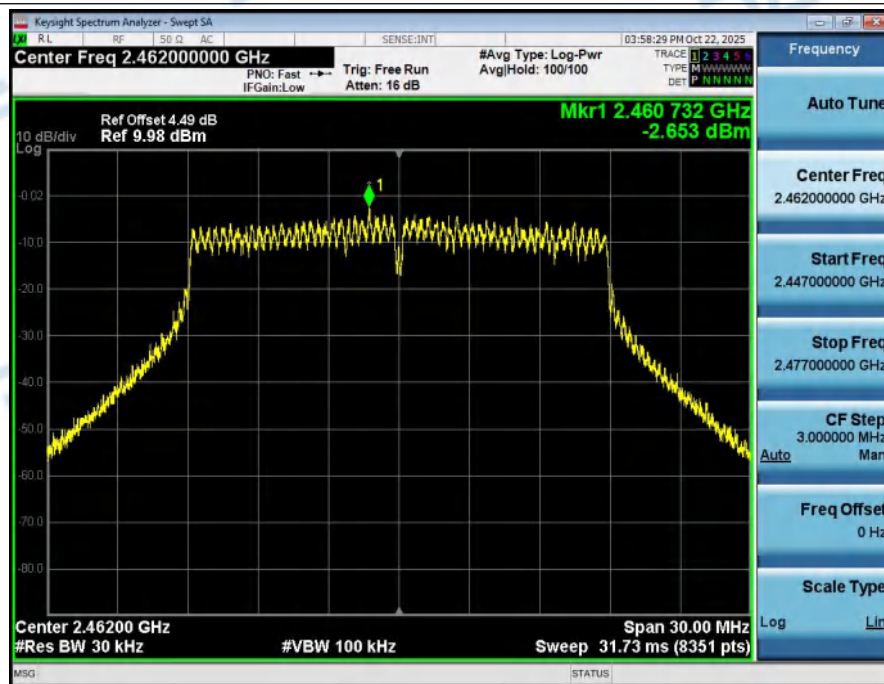
Power_Spectral_Density_NVNT_ANT2_802_11n(HT20)_2437



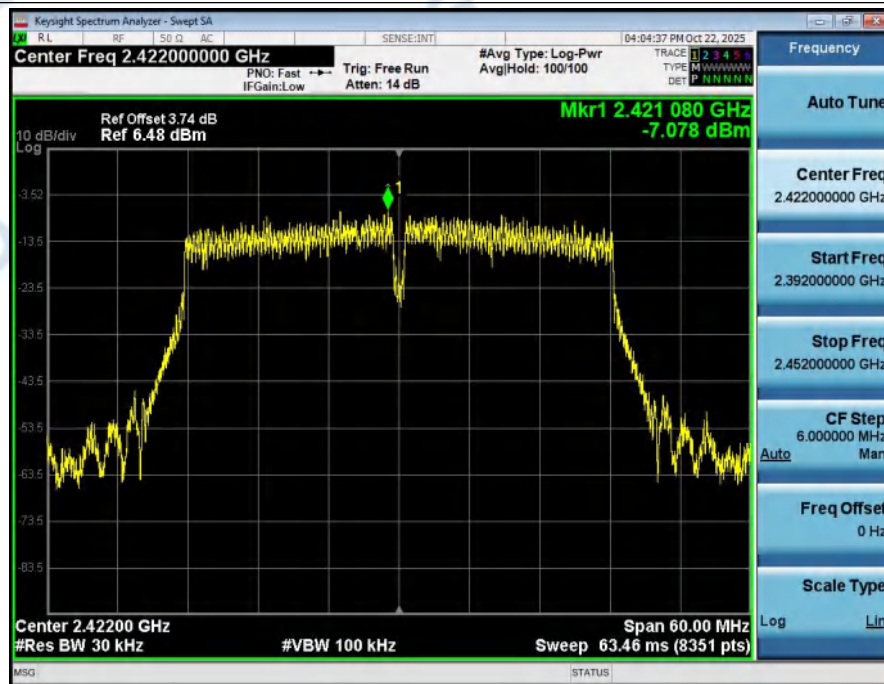
Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2462



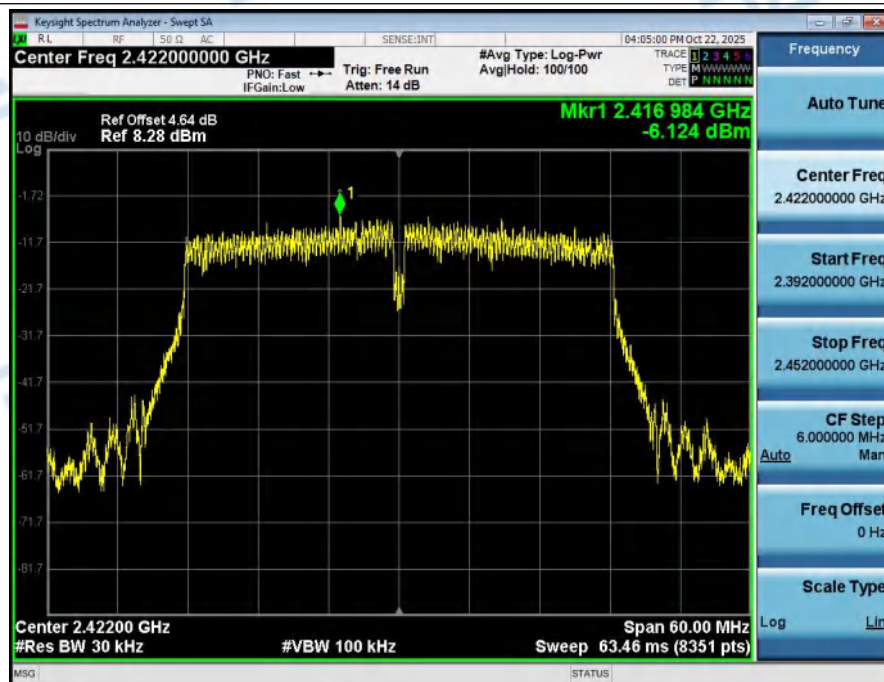
Power_Spectral_Density_NVNT_ANT2_802_11n(HT20)_2462



Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2422



Power_Spectral_Density_NVNT_ANT2_802_11n(HT40)_2422



Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2437



Power_Spectral_Density_NVNT_ANT2_802_11n(HT40)_2437



Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2452



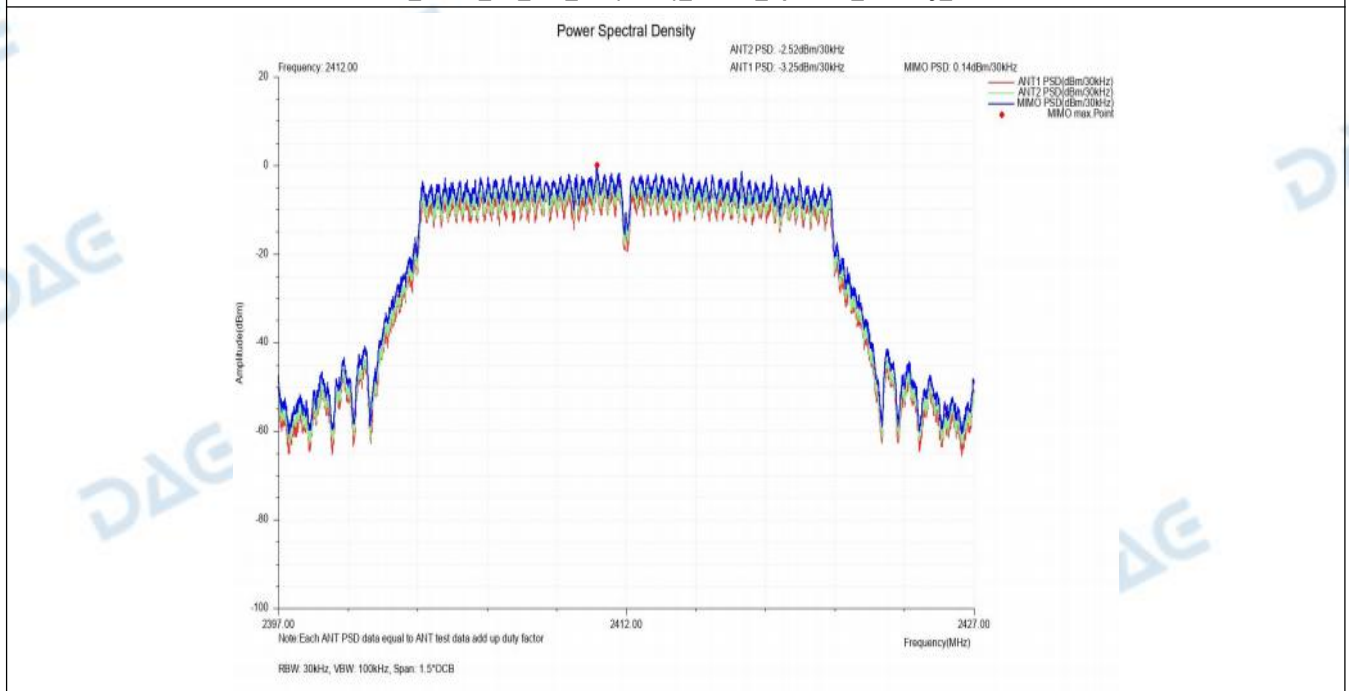
Power_Spectral_Density_NVNT_ANT2_802_11n(HT40)_2452



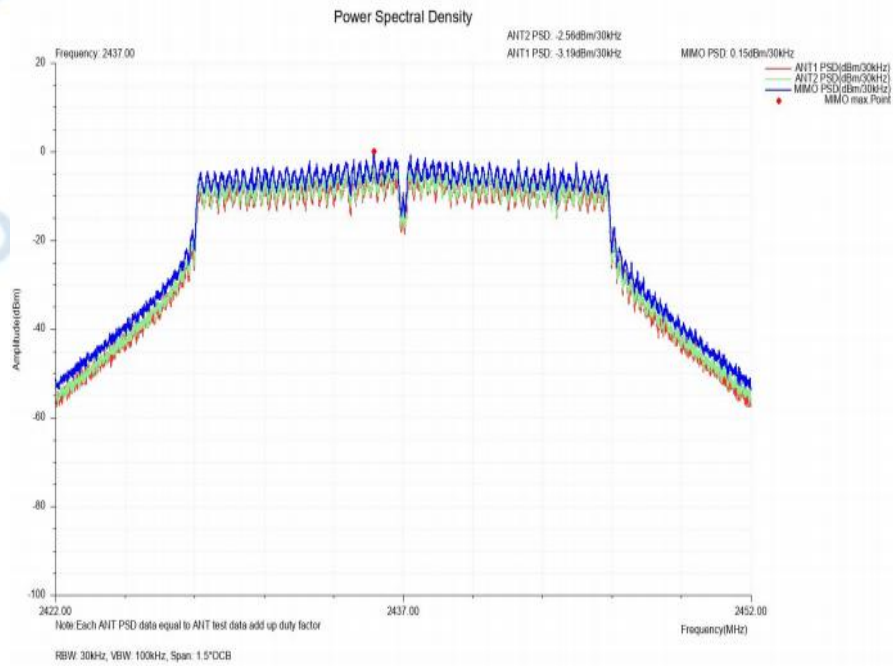
Condition	Antenna	Modulation	Frequency (MHz)	SA_MIMO_PSD (dBm/30kHz)	limit(dBm/3kHz)	Result
NVNT	MIMO_TX	802.11n(HT20)	2412.00	0.14	8	Pass
NVNT	MIMO_TX	802.11n(HT20)	2437.00	0.15	8	Pass
NVNT	MIMO_TX	802.11n(HT20)	2462.00	0.04	8	Pass
NVNT	MIMO_TX	802.11n(HT40)	2422.00	-3.61	8	Pass
NVNT	MIMO_TX	802.11n(HT40)	2437.00	-3.67	8	Pass
NVNT	MIMO_TX	802.11n(HT40)	2452.00	-3.69	8	Pass

MIMO Gain= $10 \cdot \log[(10G1/20+10G2/20+\dots)/Nant]$, so mimo gain is 5.84dBi<6.0dBi, So MIMO limit is 8.0dBm

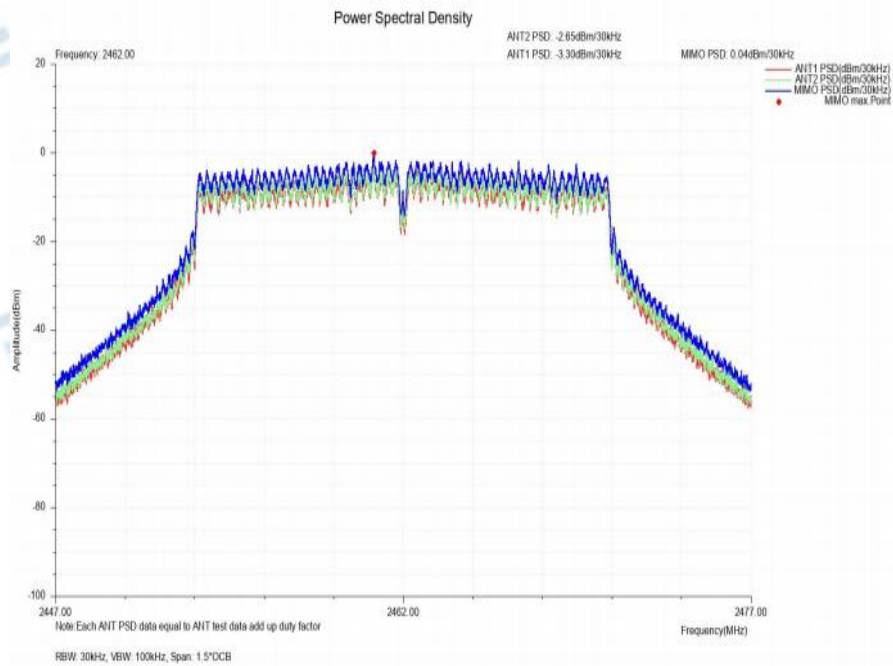
NVNT_MIMO_TX_802_11n(HT20)_Power_Spectral_Density_2412



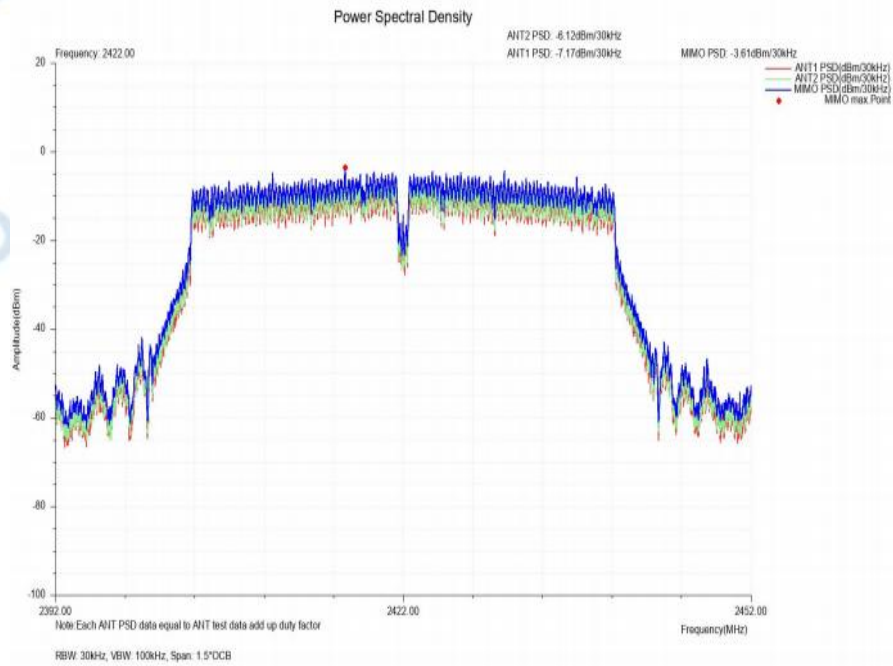
NVNT_MIMO_TX_802_11n(HT20)_Power_Spectral_Density_2437



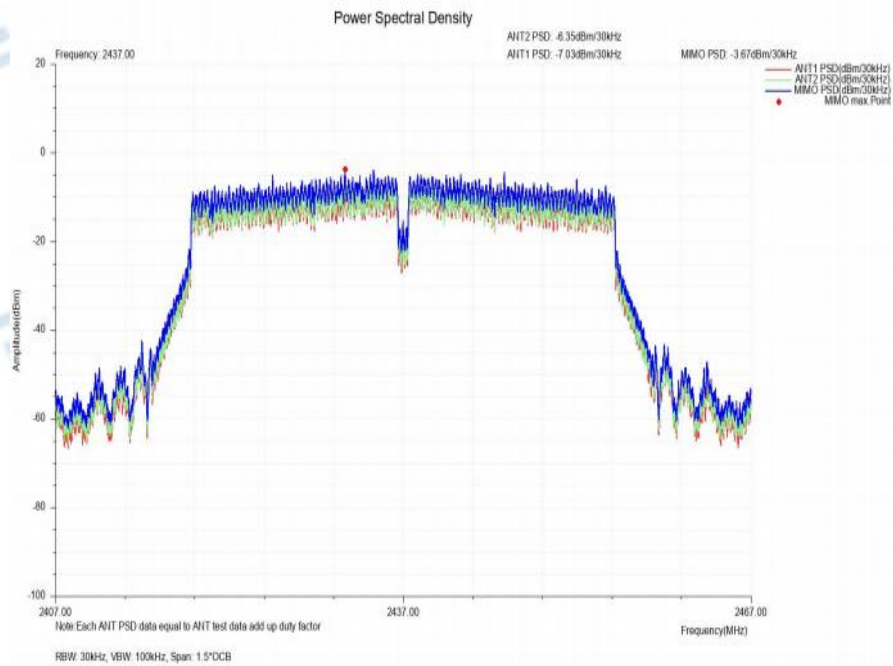
NVNT_MIMO_TX_802_11n(HT20)_Power_Spectral_Density_2462



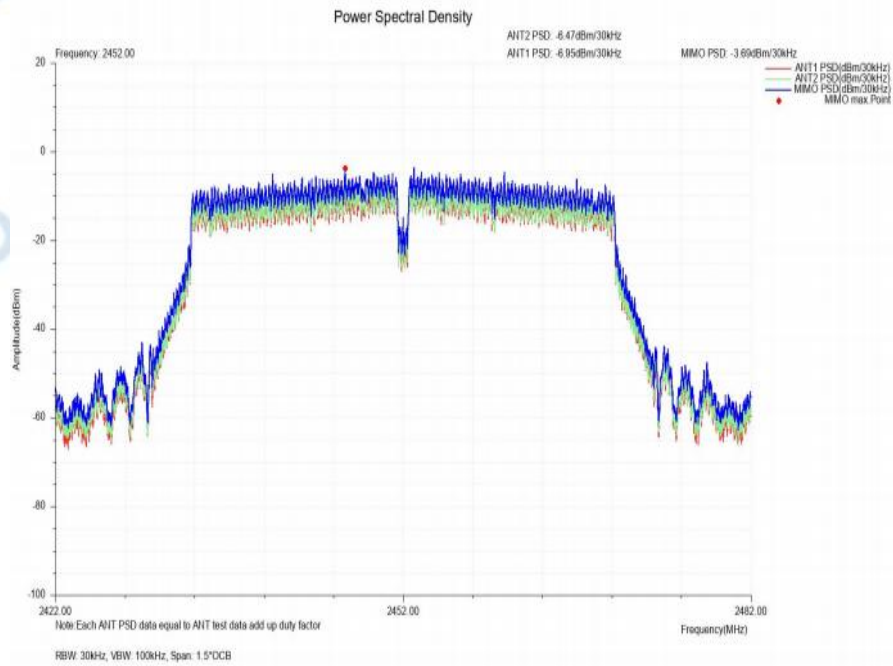
NVNT_MIMO_TX_802_11n(HT40)_Power_Spectral_Density_2422



NVNT_MIMO_TX_802_11n(HT40)_Power_Spectral_Density_2437



NVNT_MIMO_TX_802_11n(HT40)_Power_Spectral_Density_2452



5. 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	2398.480	8.398	-44.334	-11.602	Pass
NVNT	ANT2	802.11b	2412.00	2398.480	8.398	-42.208	-11.602	Pass
NVNT	ANT1	802.11b	2462.00	2484.448	8.091	-52.400	-11.909	Pass
NVNT	ANT2	802.11b	2462.00	2485.840	8.091	-51.765	-11.909	Pass
NVNT	ANT1	802.11g	2412.00	2399.824	2.121	-42.367	-17.879	Pass
NVNT	ANT2	802.11g	2412.00	2399.824	2.121	-42.162	-17.879	Pass
NVNT	ANT1	802.11g	2462.00	2490.736	1.832	-53.601	-18.168	Pass
NVNT	ANT2	802.11g	2462.00	2491.984	1.832	-51.364	-18.168	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2399.936	1.061	-43.562	-18.939	Pass
NVNT	ANT2	802.11n(HT20)	2412.00	2399.824	1.061	-42.385	-18.939	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2483.632	1.120	-52.898	-18.880	Pass
NVNT	ANT2	802.11n(HT20)	2462.00	2489.488	1.120	-52.572	-18.880	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	2399.496	-2.287	-39.773	-22.287	Pass
NVNT	ANT2	802.11n(HT40)	2422.00	2399.496	-2.287	-39.990	-22.287	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	2485.720	-2.300	-53.037	-22.300	Pass
NVNT	ANT2	802.11n(HT40)	2452.00	2485.788	-2.300	-51.493	-22.300	Pass

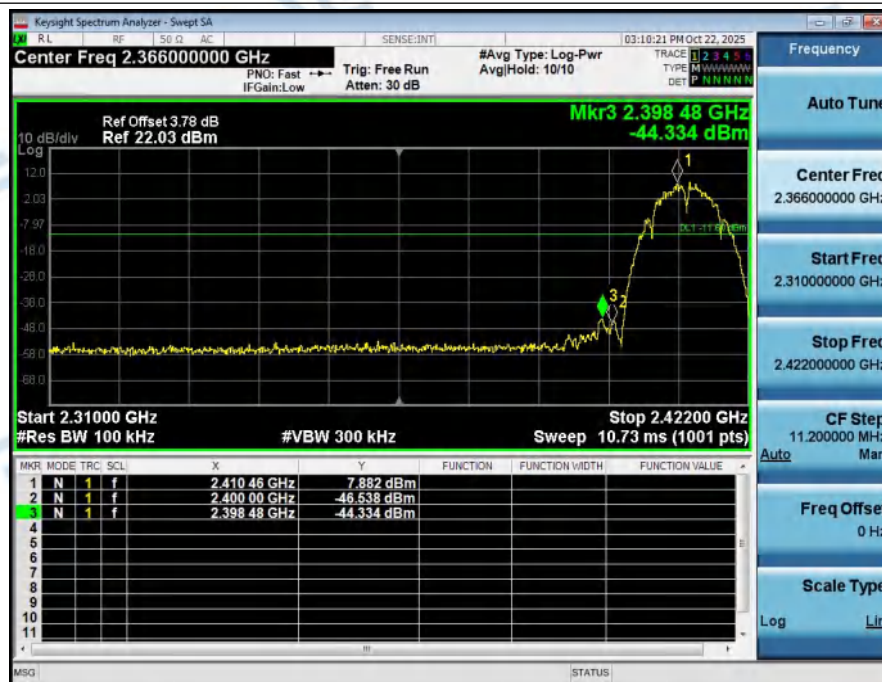
1_Reference_Level_NVNT_ANT1_802_11b_2412



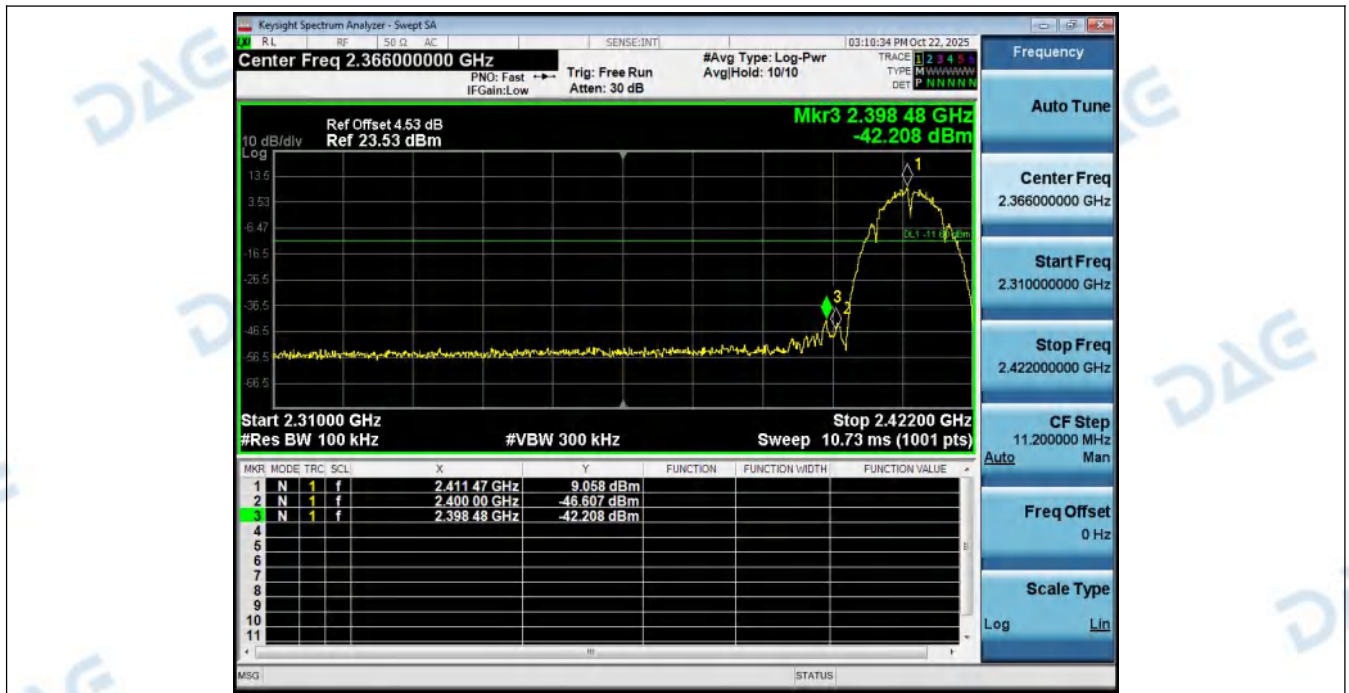
1_Reference_Level_NVNT_ANT2_802_11b_2412



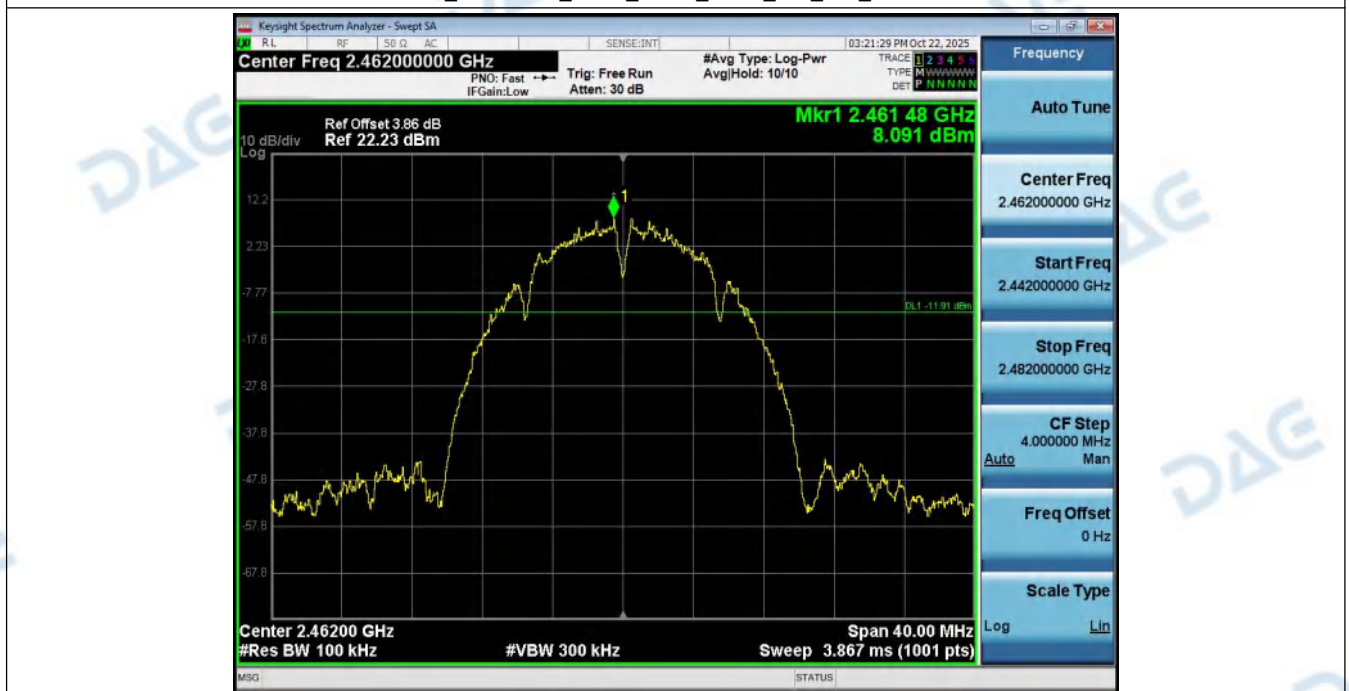
2_Bandedge_NVNT_ANT1_802_11b_2412



2_Bandedge_NVNT_ANT2_802_11b_2412



1_Reference_Level_NVNT_ANT1_802_11b_2462



1_Reference_Level_NVNT_ANT2_802_11b_2462



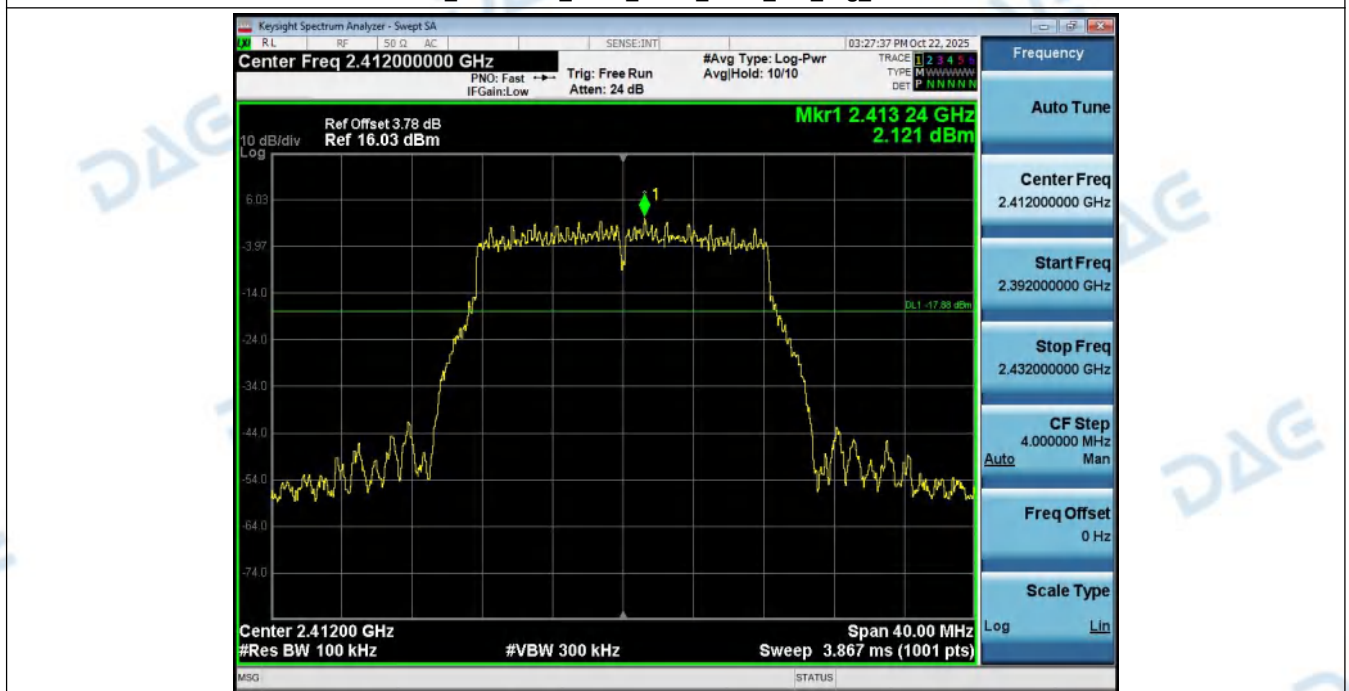
2_Bandedge_NVNT_ANT1_802_11b_2462



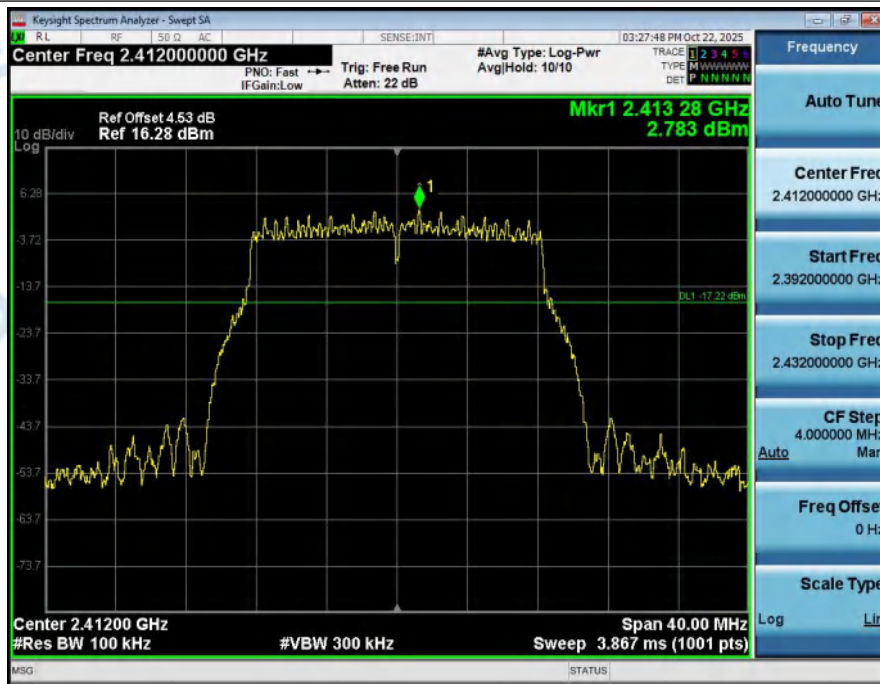
2_Bandedge_NVNT_ANT2_802_11b_2462



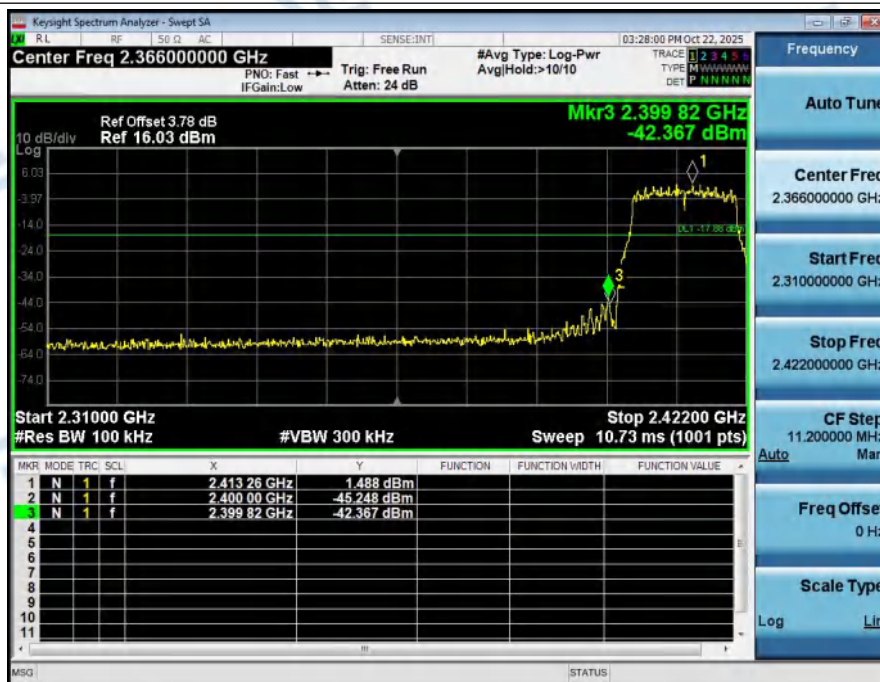
1_Reference_Level_NVNT_ANT1_802_11g_2412



1_Reference_Level_NVNT_ANT2_802_11g_2412



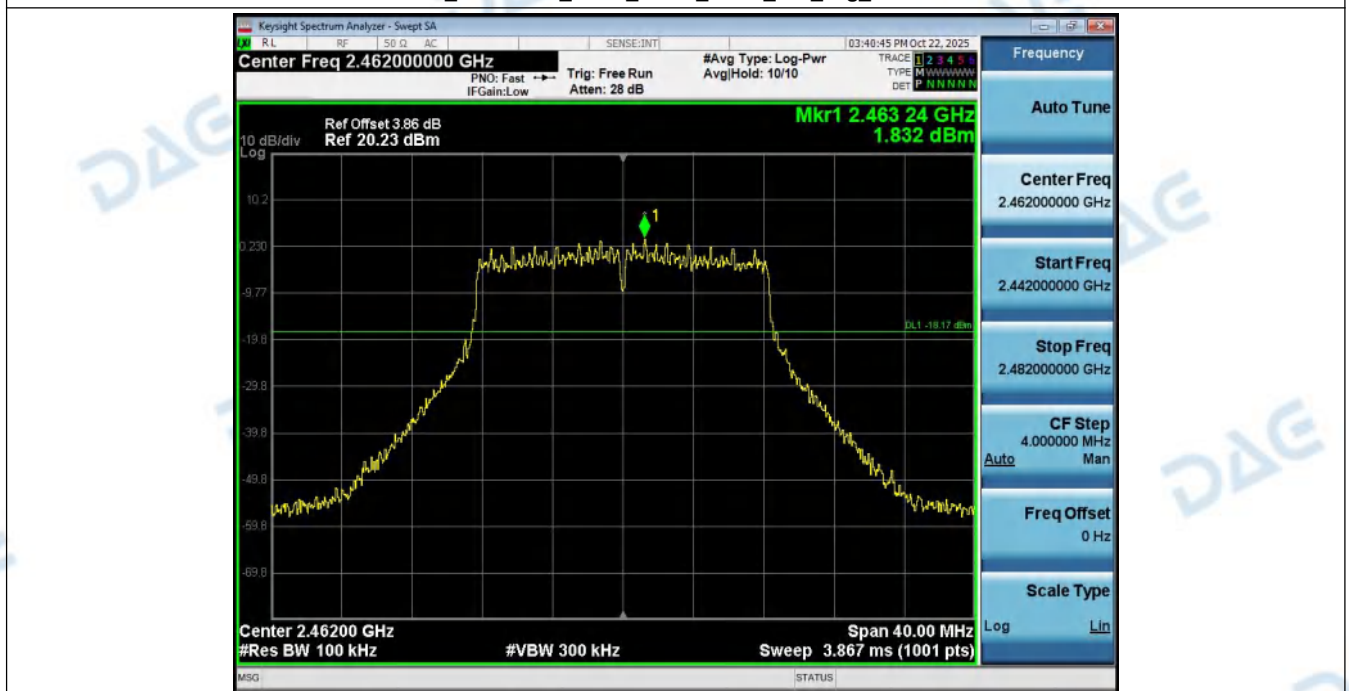
2_Bandedge_NVNT_ANT1_802_11g_2412



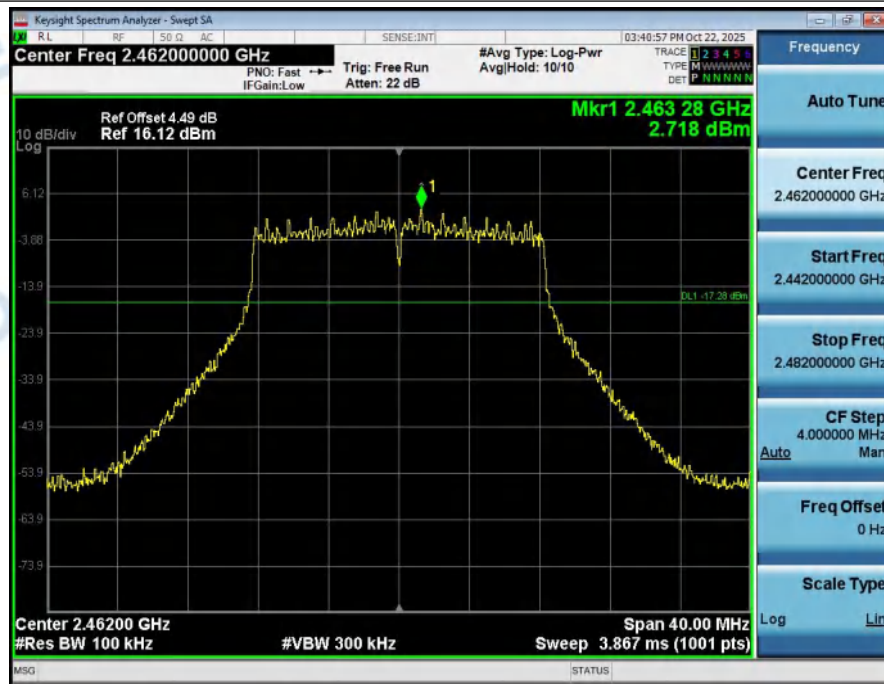
2_Bandedge_NVNT_ANT2_802_11g_2412



1_Reference_Level_NVNT_ANT1_802_11g_2462



1_Reference_Level_NVNT_ANT2_802_11g_2462



2_Bandedge_NVNT_ANT1_802_11g_2462



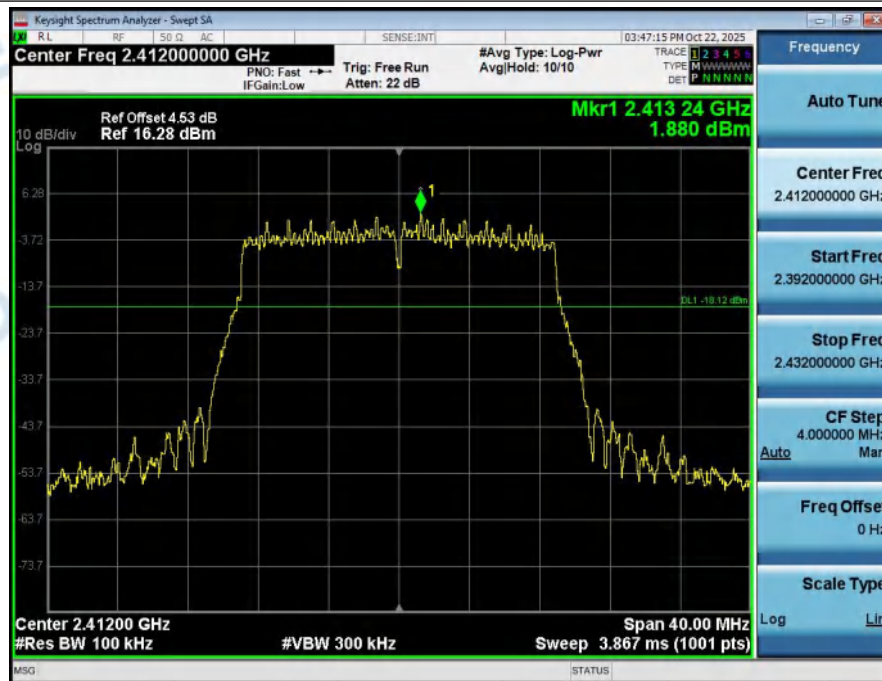
2_Bandedge_NVNT_ANT2_802_11g_2462



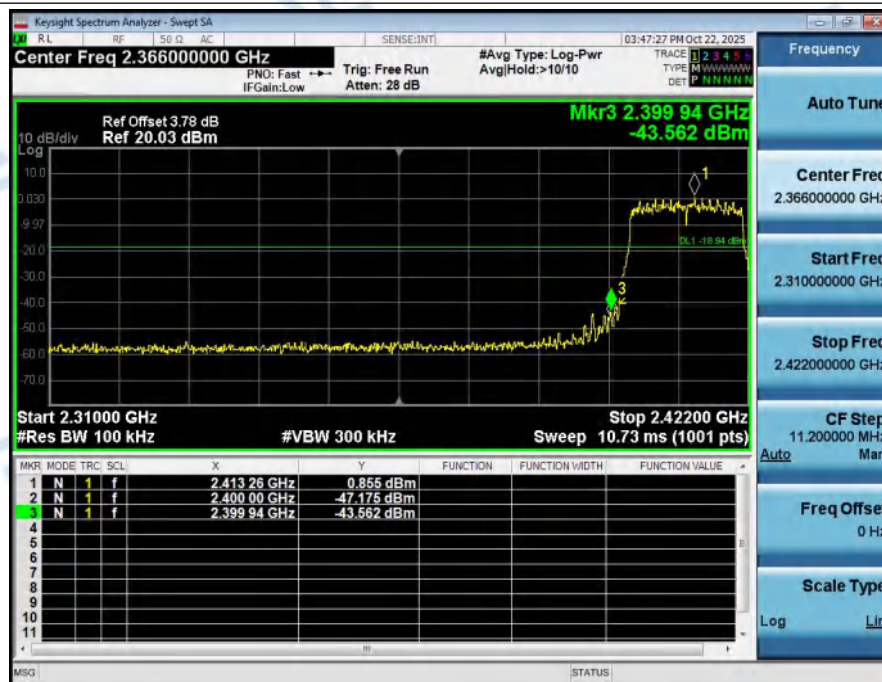
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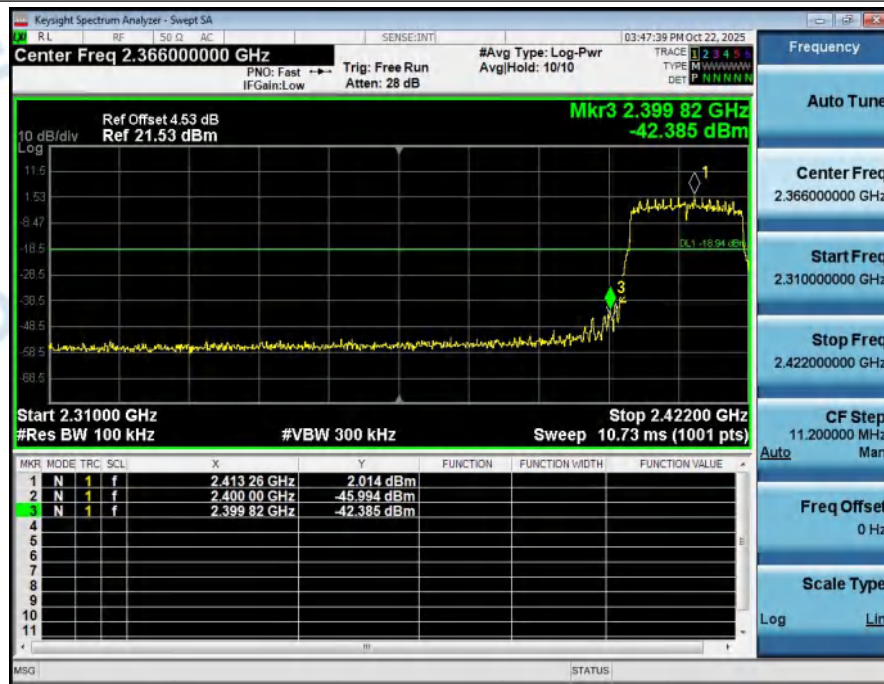
1_Reference_Level_NVNT_ANT2_802_11n(HT20)_2412



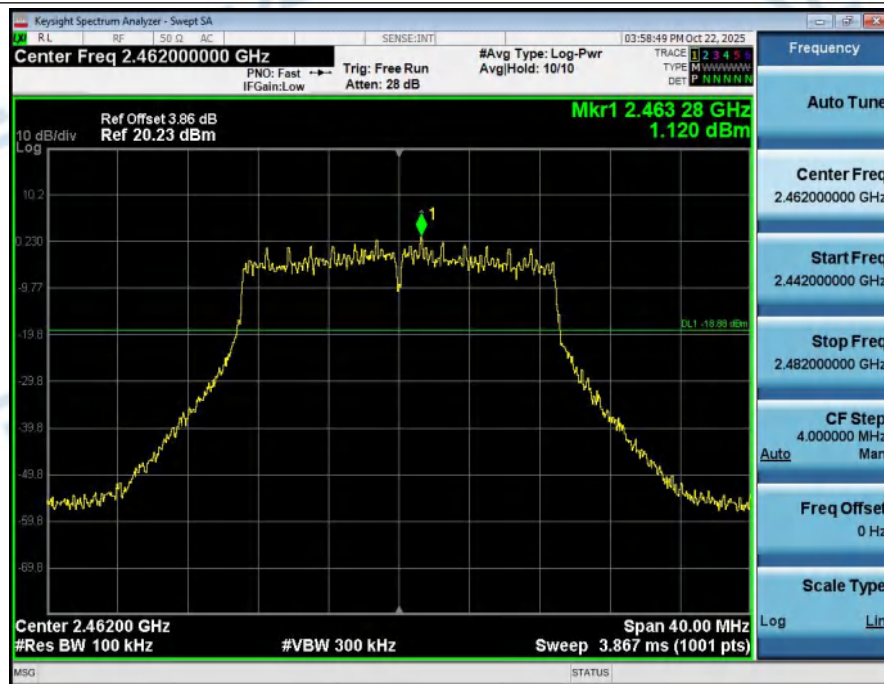
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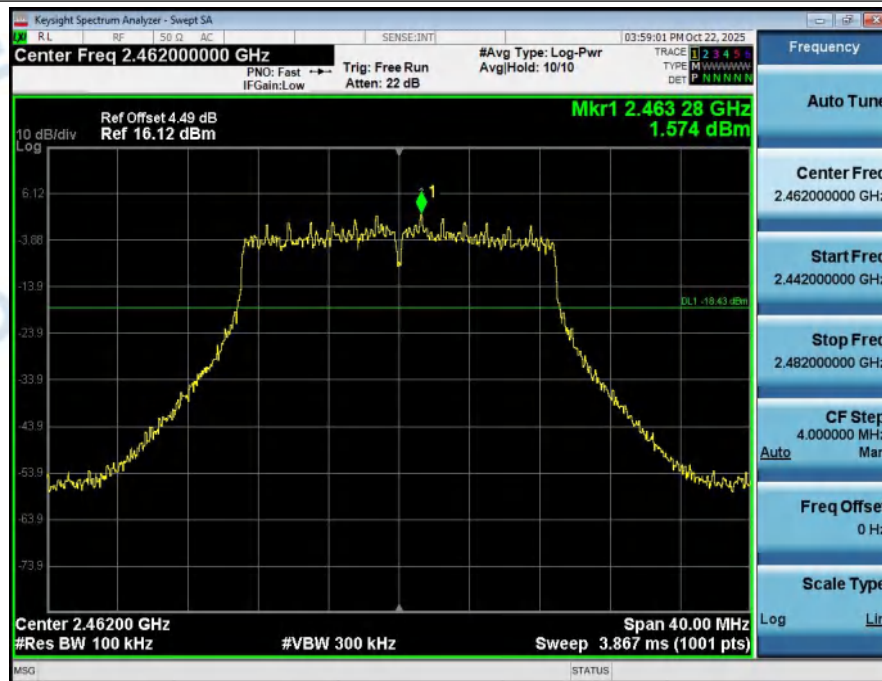
2_Bandedge_NVNT_ANT2_802_11n(HT20)_2412



1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2462



1_Reference_Level_NVNT_ANT2_802_11n(HT20)_2462



2_Bandedge_NVNT_ANT1_802_11n(HT20)_2462



2_Bandedge_NVNT_ANT2_802_11n(HT20)_2462



1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2422



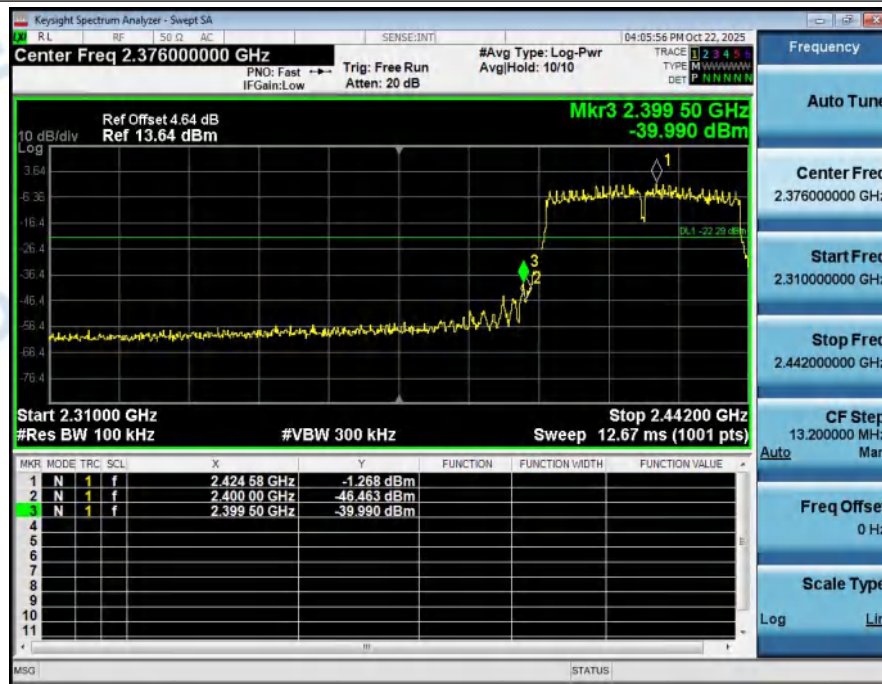
1_Reference_Level_NVNT_ANT2_802_11n(HT40)_2422



2_Bandedge_NVNT_ANT1_802_11n(HT40)_2422



2_Bandedge_NVNT_ANT2_802_11n(HT40)_2422



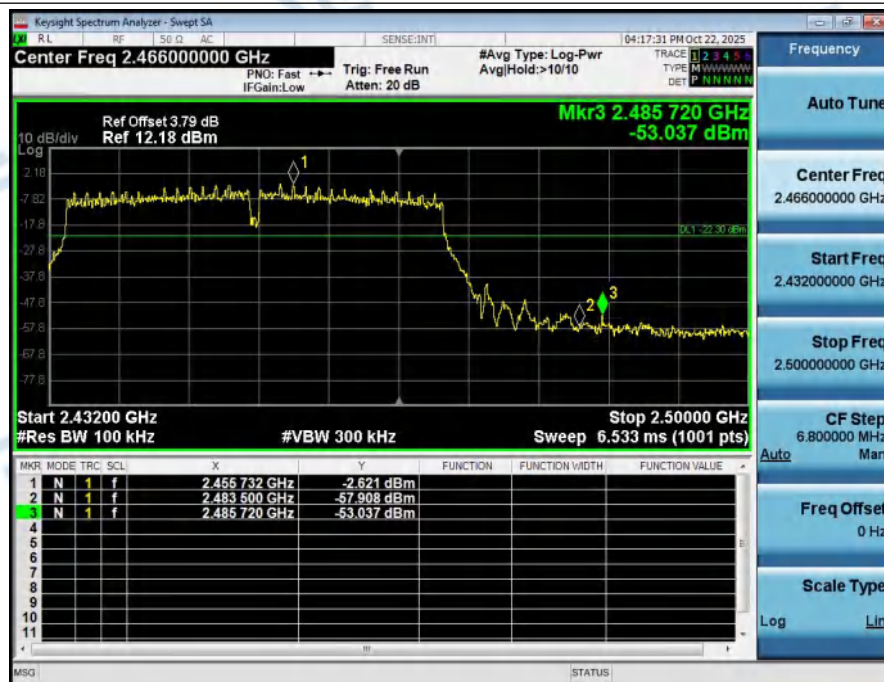
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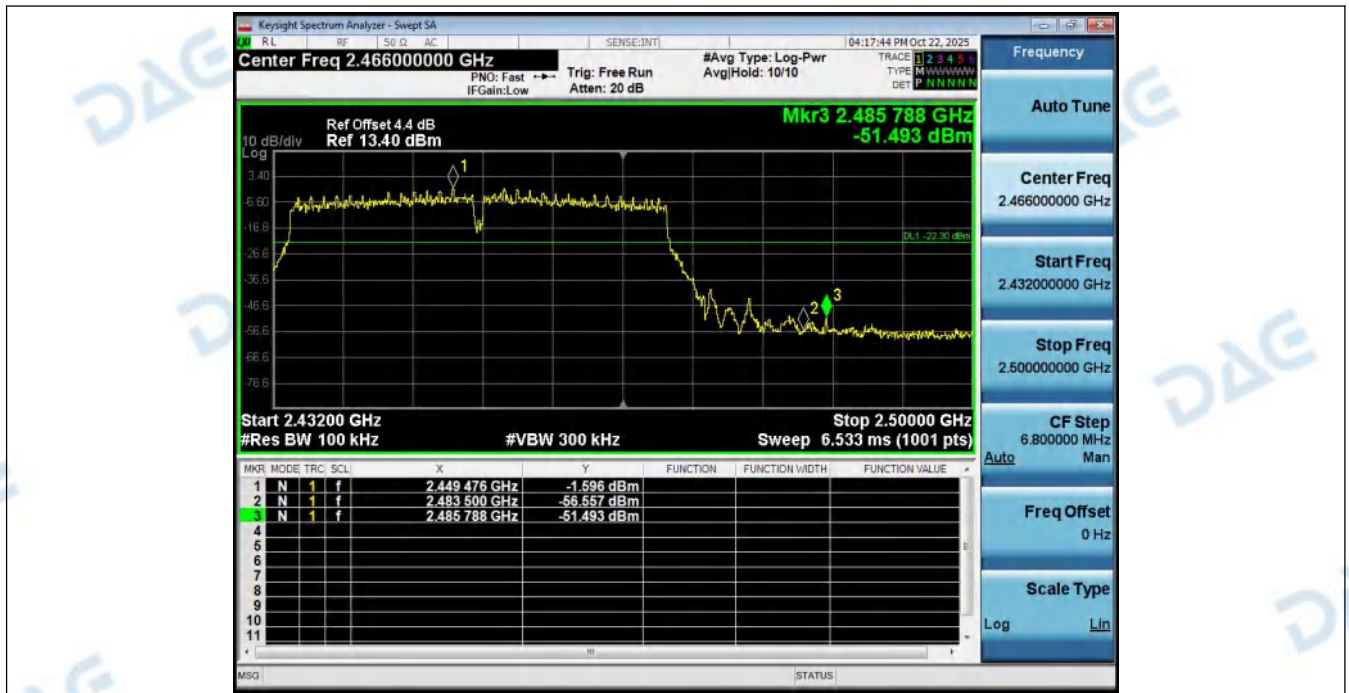
1_Reference_Level_NVNT_ANT2_802_11n(HT40)_2452



2_Bandedge_NVNT_ANT1_802_11n(HT40)_2452



2_Bandedge_NVNT_ANT2_802_11n(HT40)_2452



6. 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	24560.528	8.398	-39.873	-11.602	Pass
NVNT	ANT2	802.11b	2412.00	24962.545	8.398	-38.473	-11.602	Pass
NVNT	ANT1	802.11b	2437.00	24935.078	7.994	-39.147	-12.006	Pass
NVNT	ANT2	802.11b	2437.00	24930.084	7.994	-39.665	-12.006	Pass
NVNT	ANT1	802.11b	2462.00	24900.120	8.091	-39.868	-11.909	Pass
NVNT	ANT2	802.11b	2462.00	24520.576	8.091	-39.378	-11.909	Pass
NVNT	ANT1	802.11g	2412.00	24997.503	2.121	-45.447	-17.879	Pass
NVNT	ANT2	802.11g	2412.00	24970.036	2.121	-45.629	-17.879	Pass
NVNT	ANT1	802.11g	2437.00	24972.533	2.092	-45.264	-17.908	Pass
NVNT	ANT2	802.11g	2437.00	24952.557	2.092	-45.764	-17.908	Pass
NVNT	ANT1	802.11g	2462.00	24987.515	1.832	-41.646	-18.168	Pass
NVNT	ANT2	802.11g	2462.00	24972.533	1.832	-40.251	-18.168	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	24995.006	1.061	-41.875	-18.939	Pass
NVNT	ANT2	802.11n(HT20)	2412.00	24443.169	1.061	-41.434	-18.939	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	24992.509	0.702	-41.950	-19.298	Pass
NVNT	ANT2	802.11n(HT20)	2437.00	24493.109	0.702	-41.441	-19.298	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	24965.042	1.120	-41.625	-18.880	Pass
NVNT	ANT2	802.11n(HT20)	2462.00	24980.024	1.120	-40.980	-18.880	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	24975.030	-2.287	-49.789	-22.287	Pass
NVNT	ANT2	802.11n(HT40)	2422.00	24997.503	-2.287	-48.930	-22.287	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	24490.612	-2.149	-49.439	-22.149	Pass
NVNT	ANT2	802.11n(HT40)	2437.00	24985.018	-2.149	-48.857	-22.149	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	24458.151	-2.300	-49.780	-22.300	Pass
NVNT	ANT2	802.11n(HT40)	2452.00	24952.557	-2.300	-48.945	-22.300	Pass

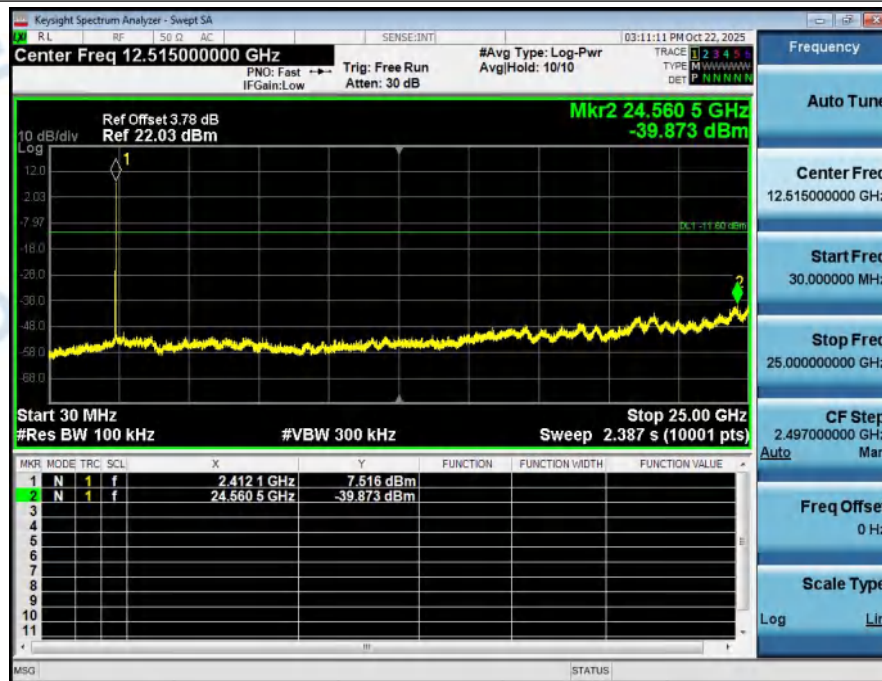
1_Reference_Level_NVNT_ANT1_802_11b_2412



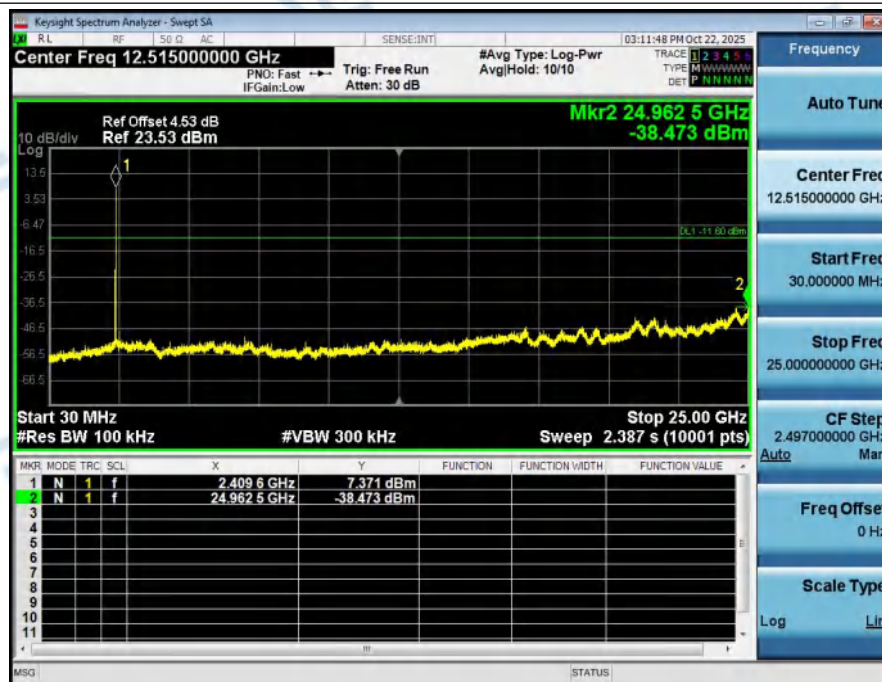
1_Reference_Level_NVNT_ANT2_802_11b_2412



2_Spurious_Emission_NVNT_ANT1_802_11b_2412



2_Spurious_Emission_NVNT_ANT2_802_11b_2412



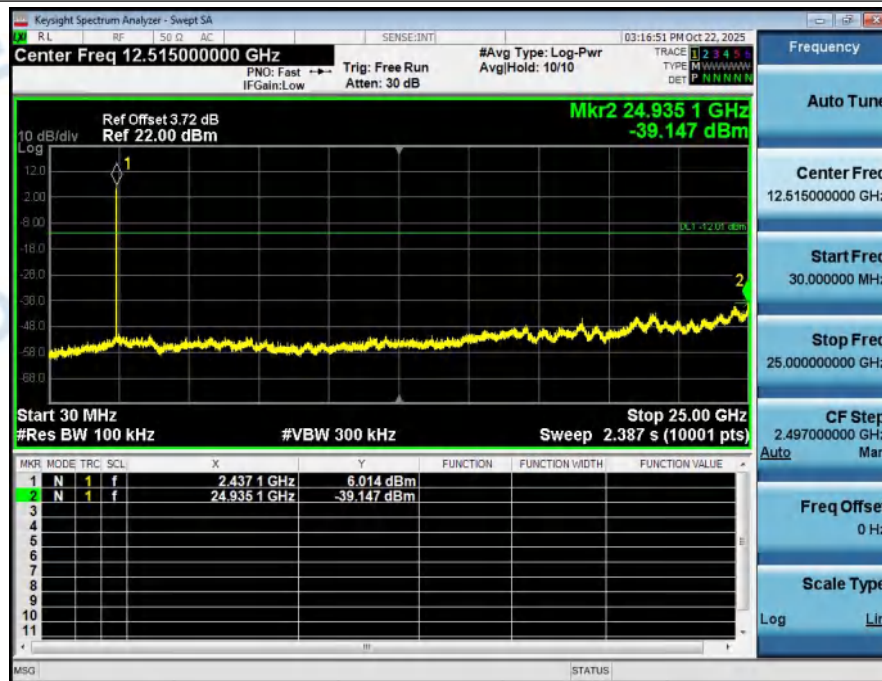
1_Reference_Level_NVNT_ANT1_802_11b_2437



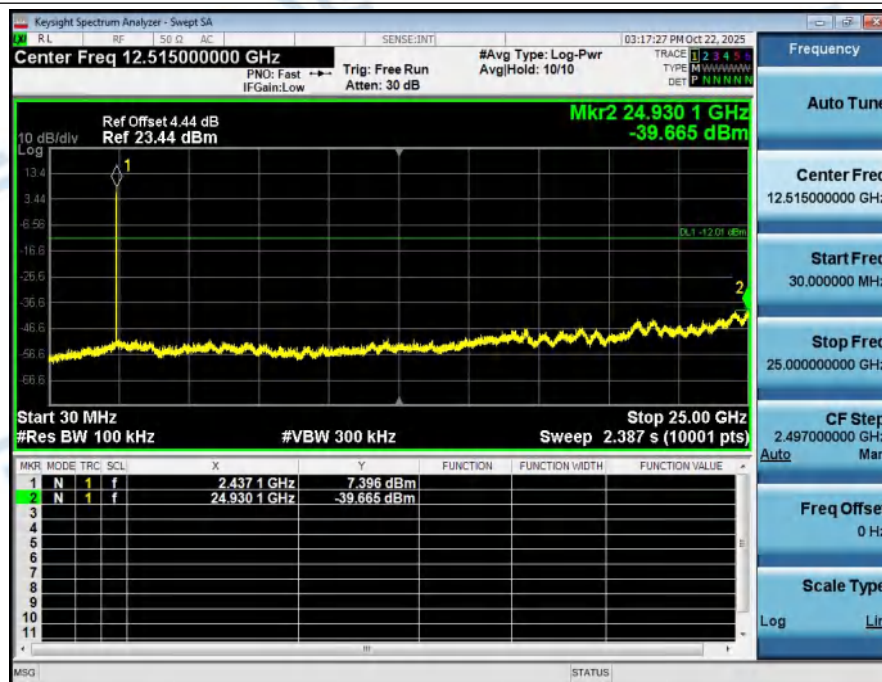
1_Reference_Level_NVNT_ANT2_802_11b_2437



2_Spurious_Emission_NVNT_ANT1_802_11b_2437



2_Spurious_Emission_NVNT_ANT2_802_11b_2437



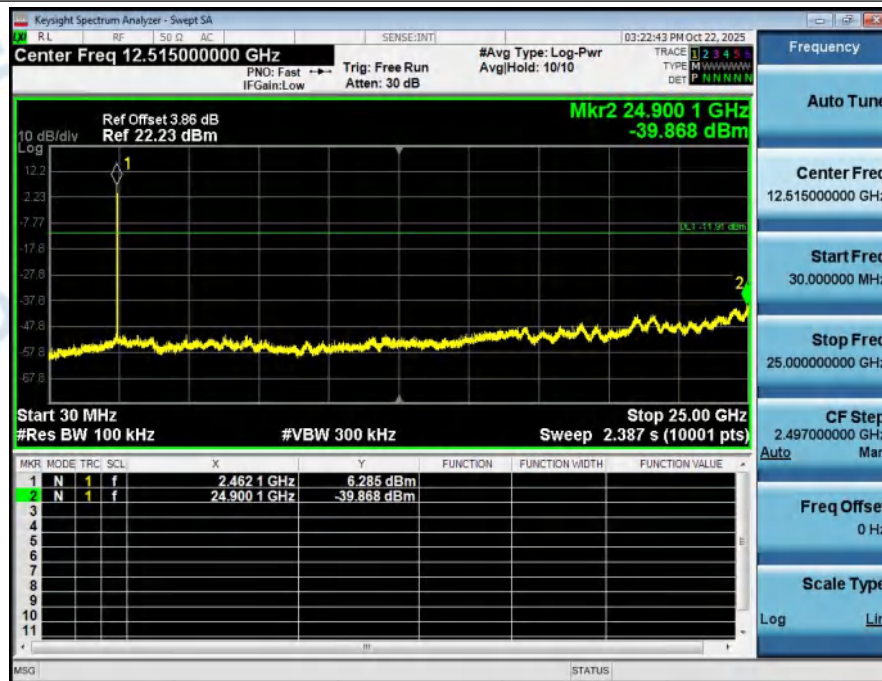
1_Reference_Level_NVNT_ANT1_802_11b_2462



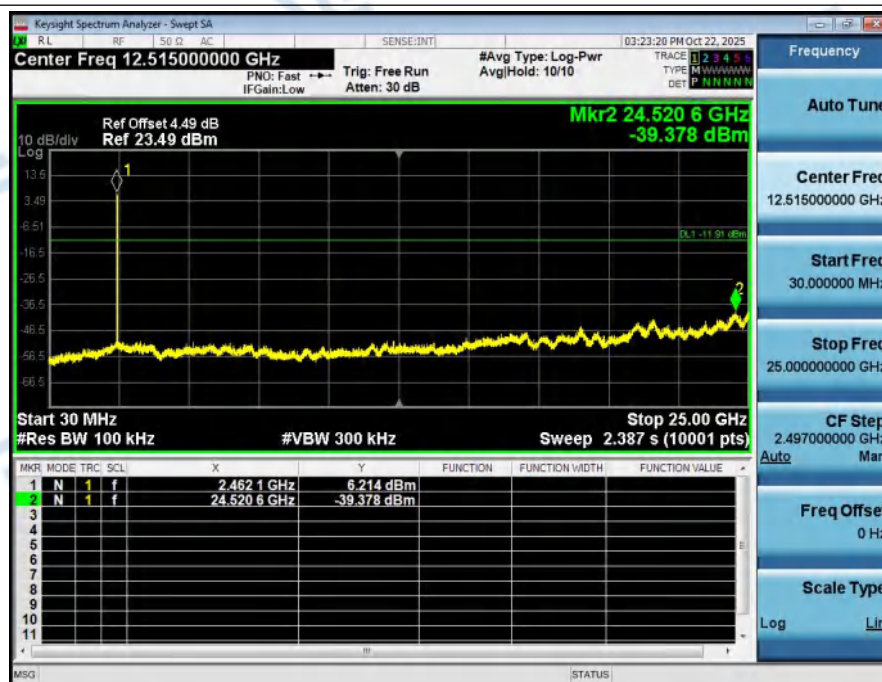
1_Reference_Level_NVNT_ANT2_802_11b_2462



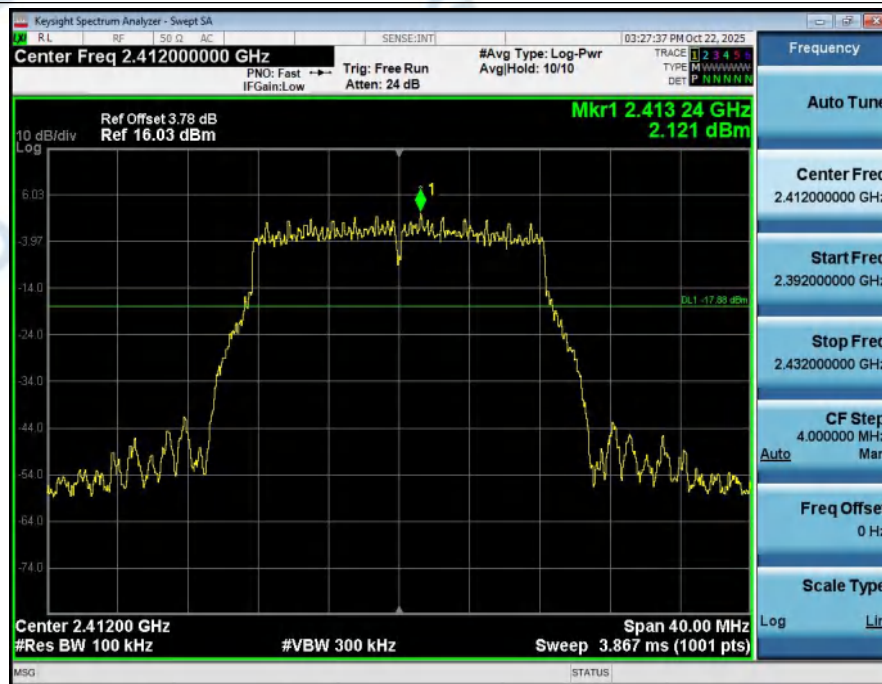
2_Spurious_Emission_NVNT_ANT1_802_11b_2462



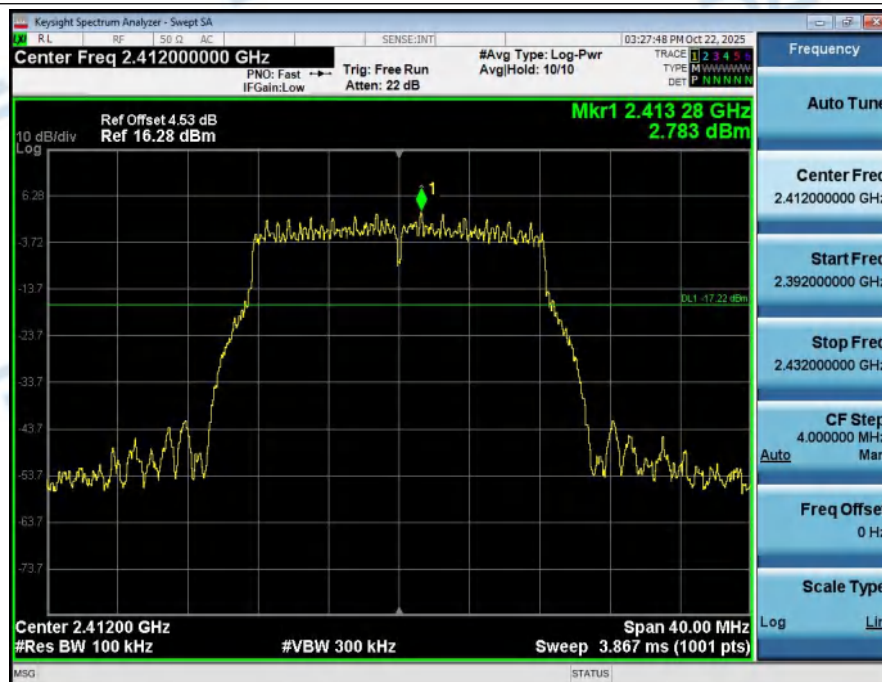
2_Spurious_Emission_NVNT_ANT2_802_11b_2462



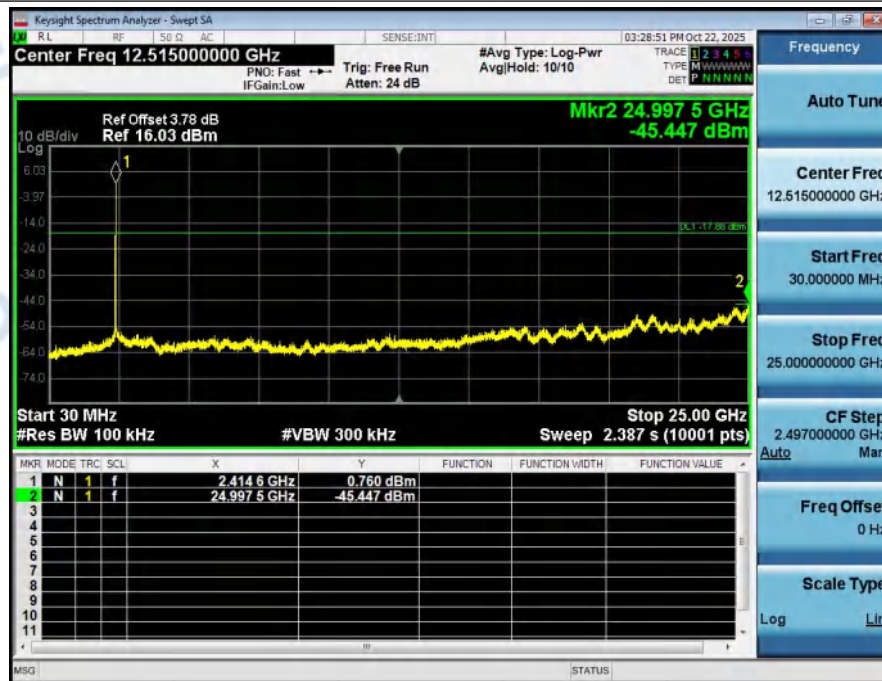
1_Reference_Level_NVNT_ANT1_802_11g_2412



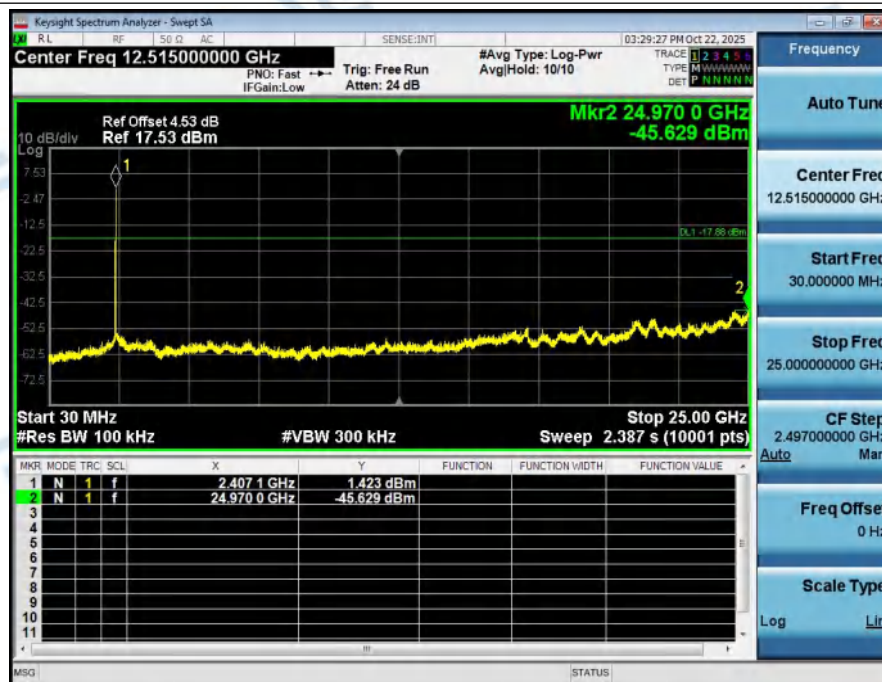
1_Reference_Level_NVNT_ANT2_802_11g_2412



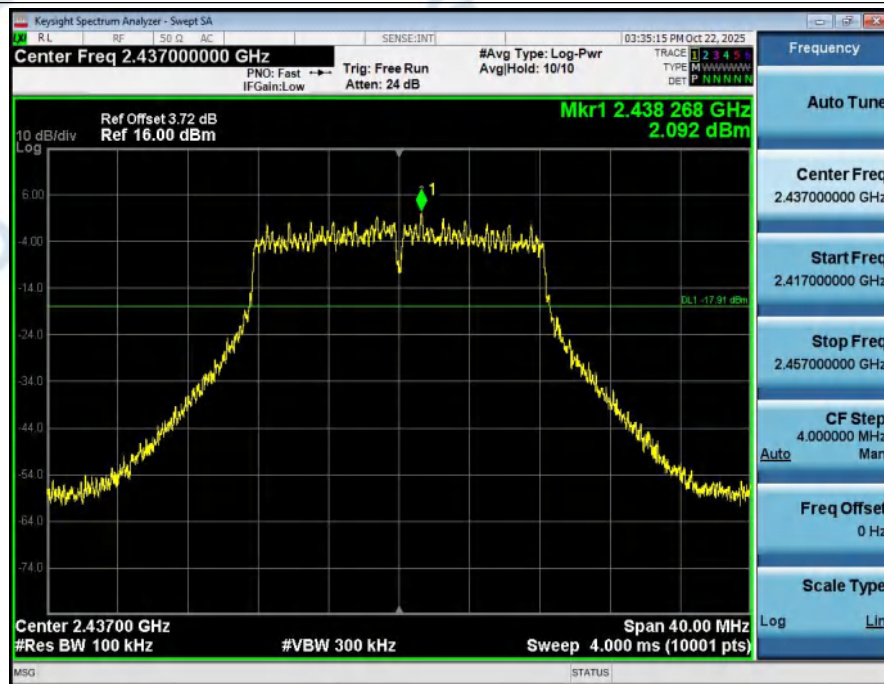
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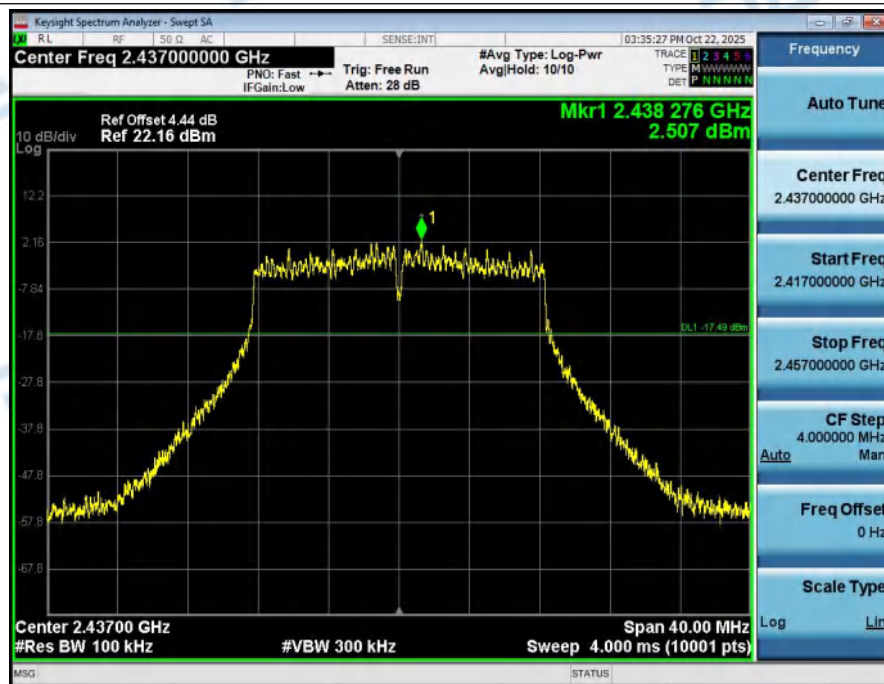
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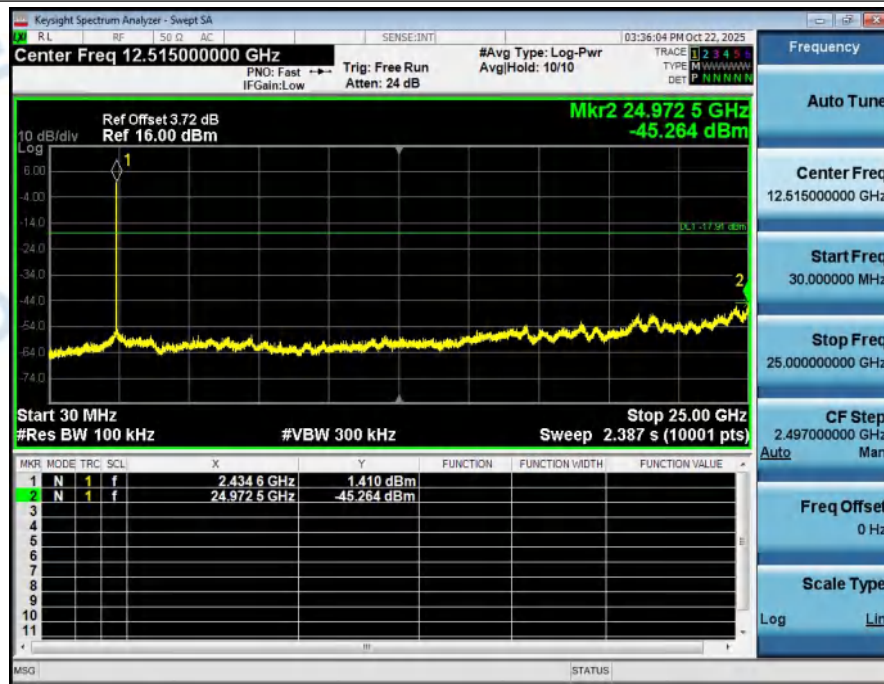
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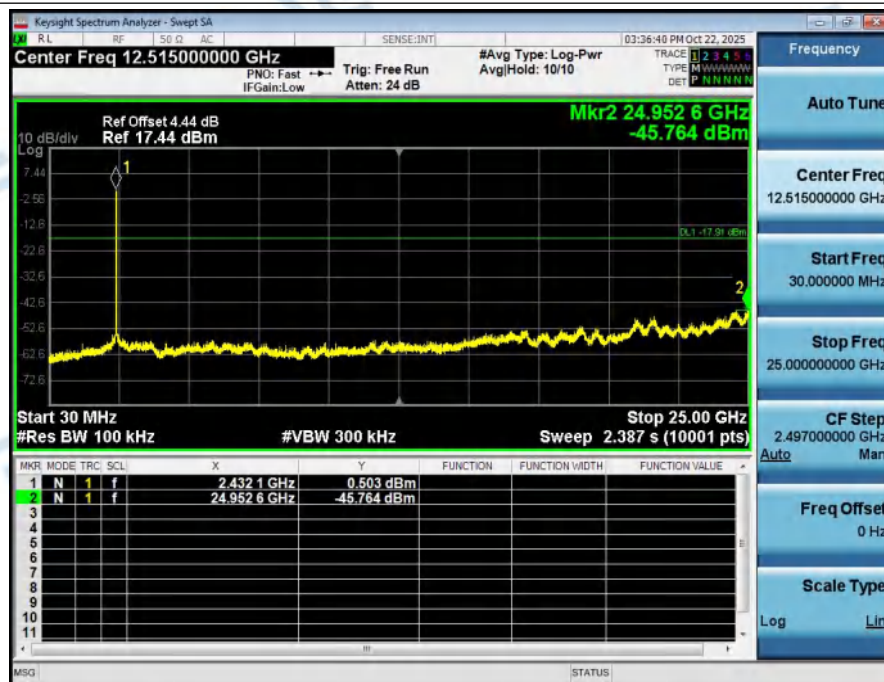
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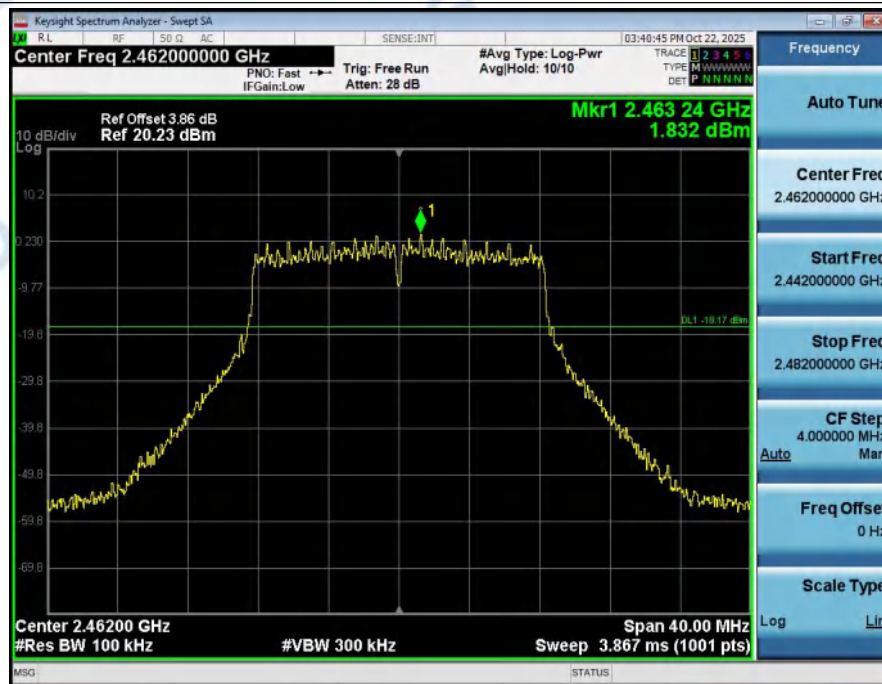
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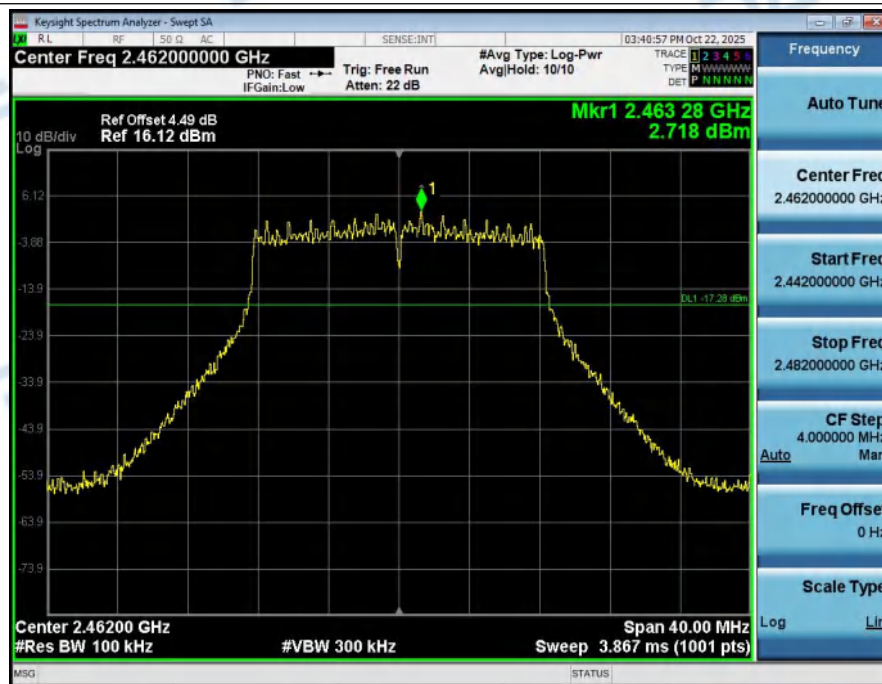
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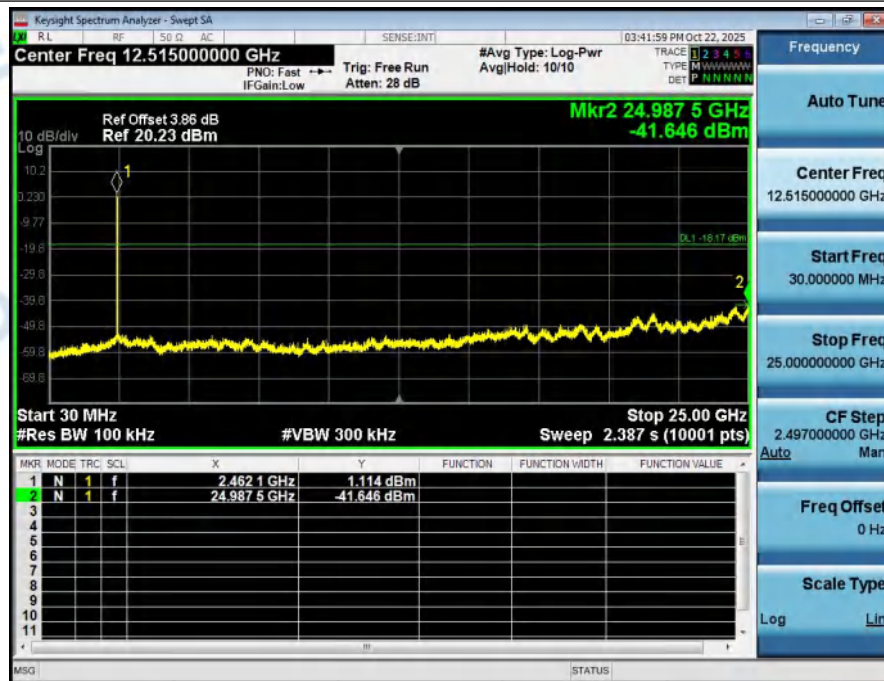
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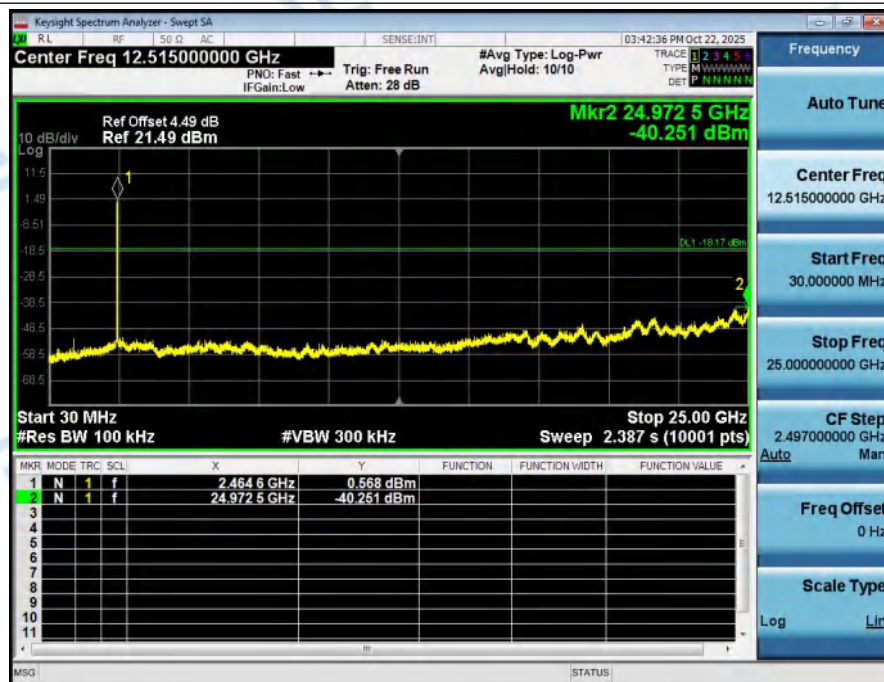
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2_Spurious_Emission_NVNT_ANT1_802_11g_2462



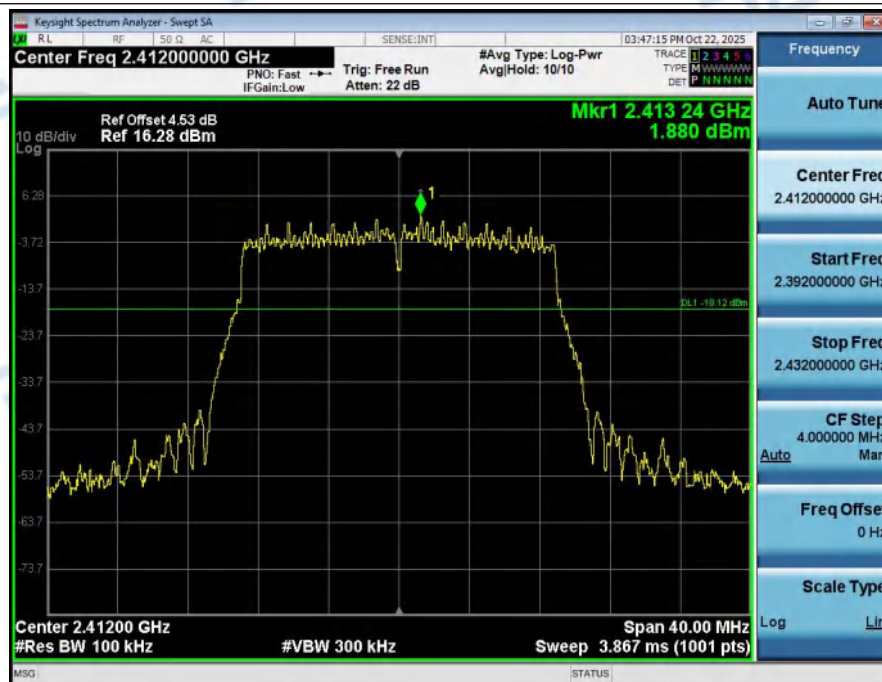
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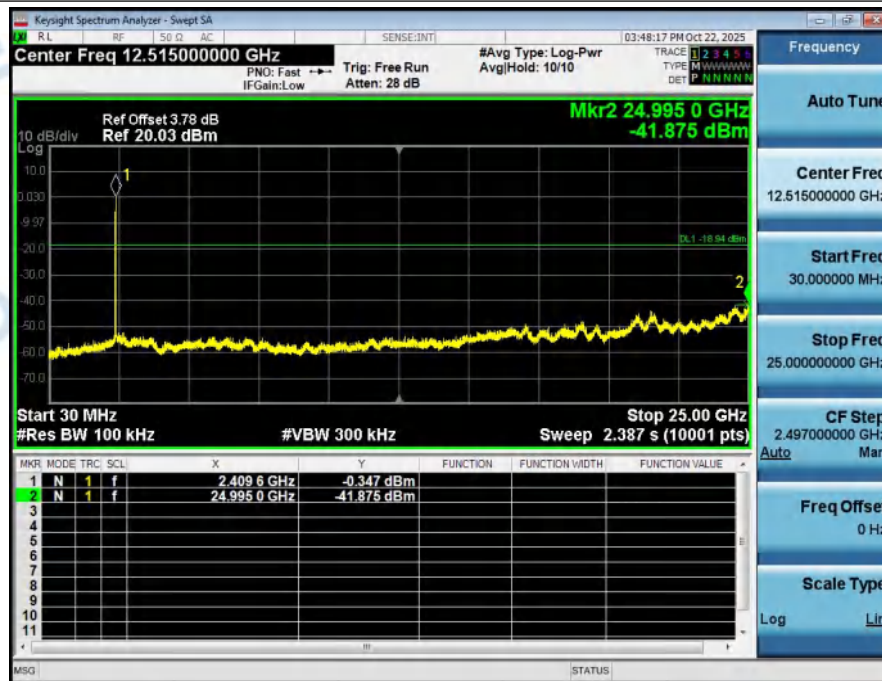
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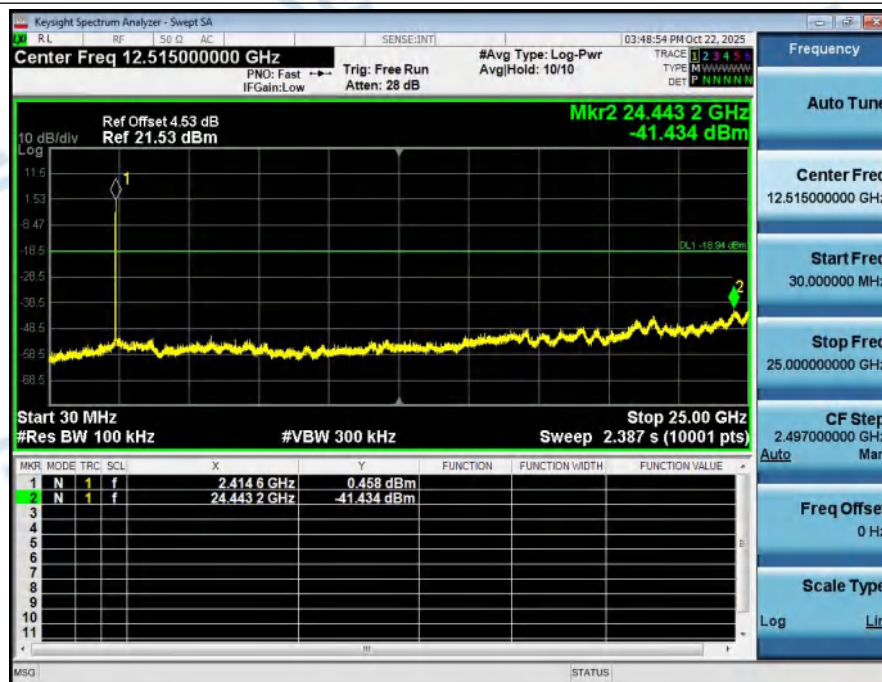
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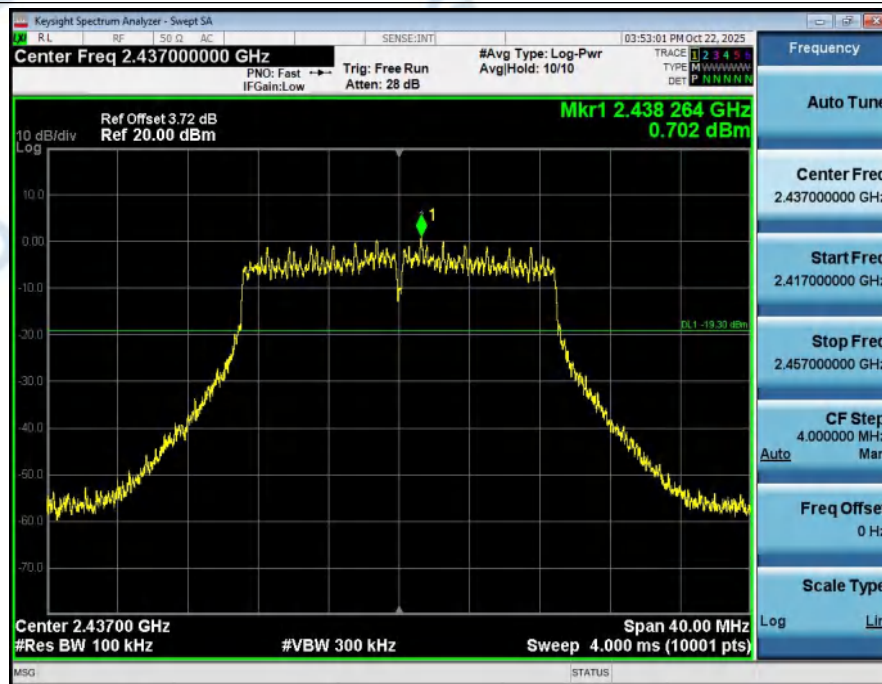
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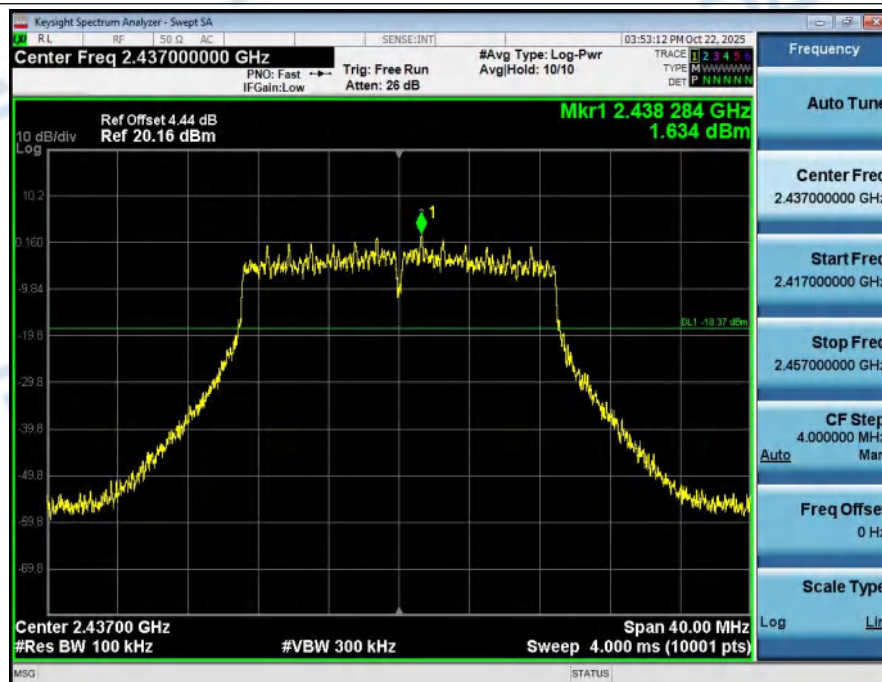
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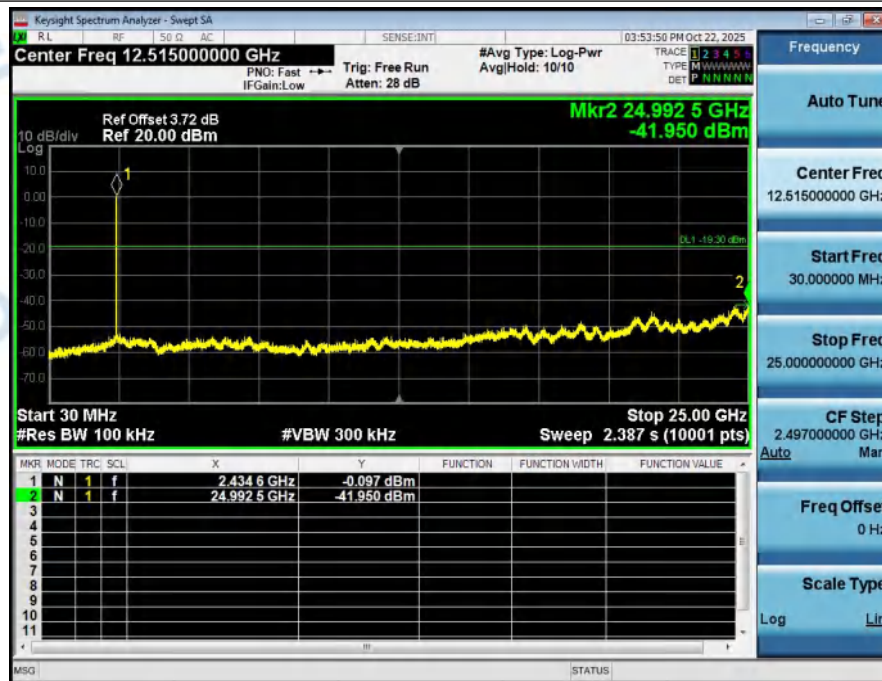
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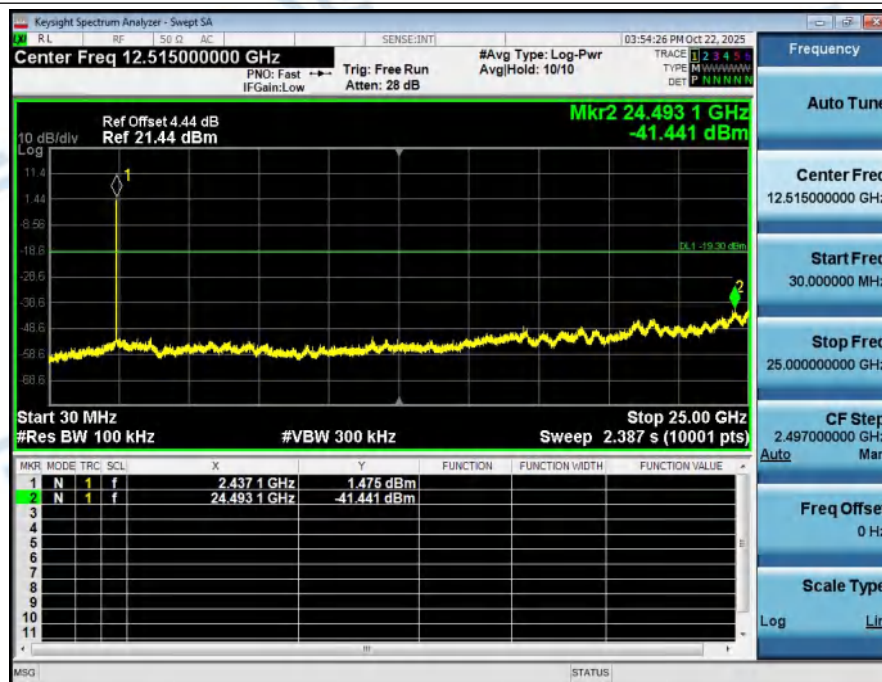
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2_Spurious_Emission_NVNT_ANT1_802_11n(HT20)_2437



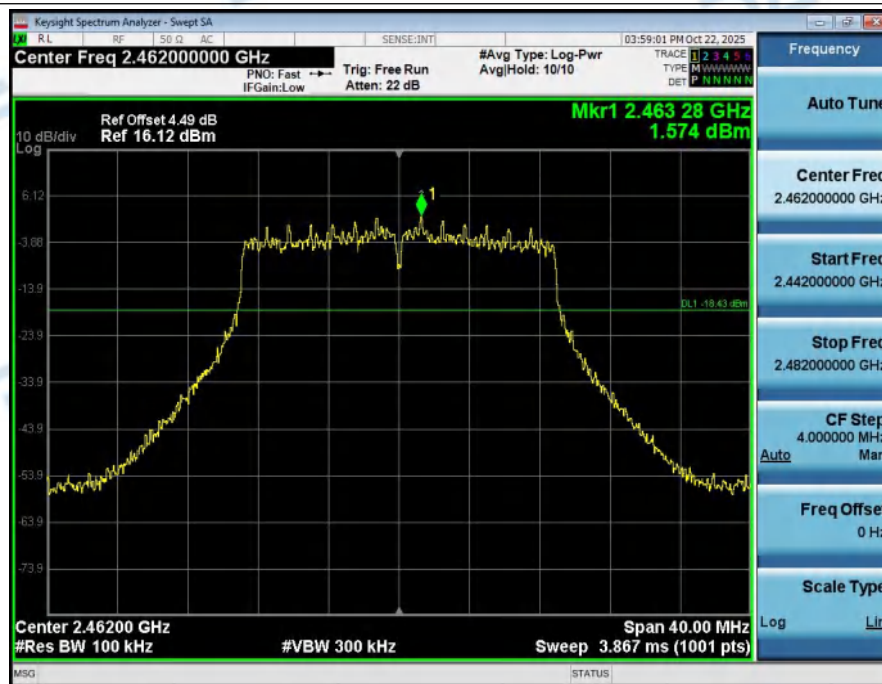
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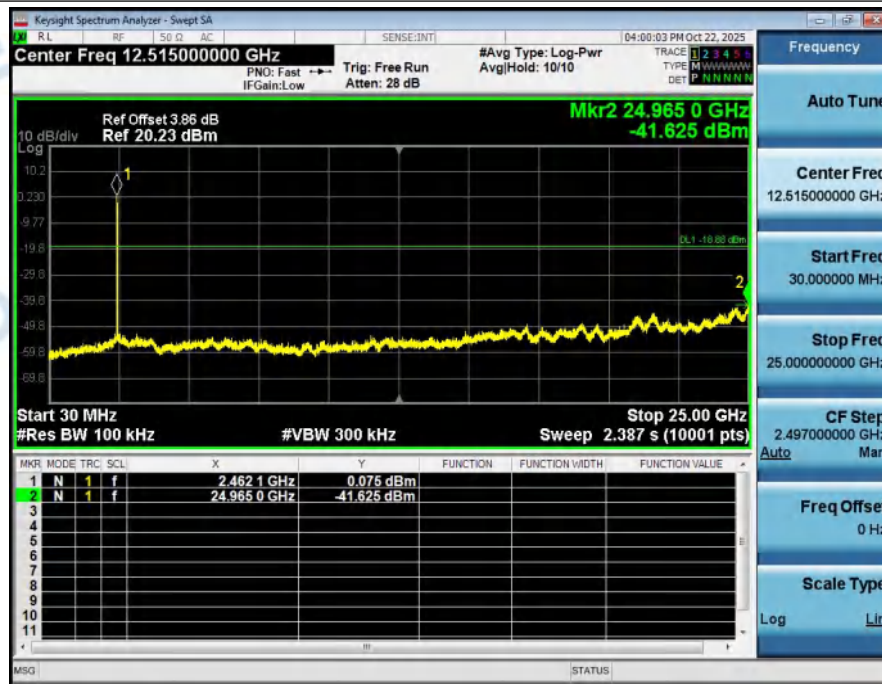
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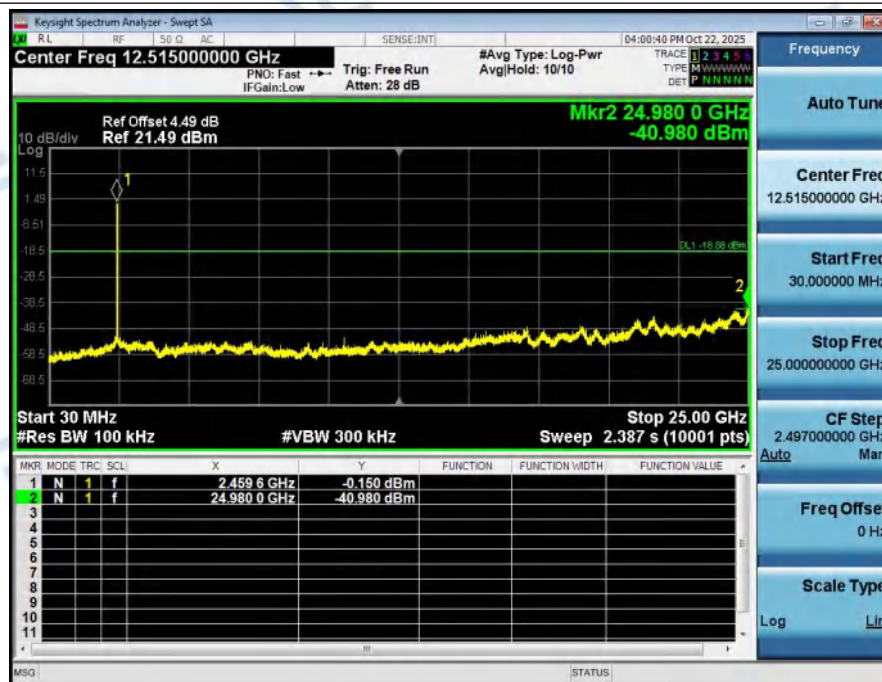
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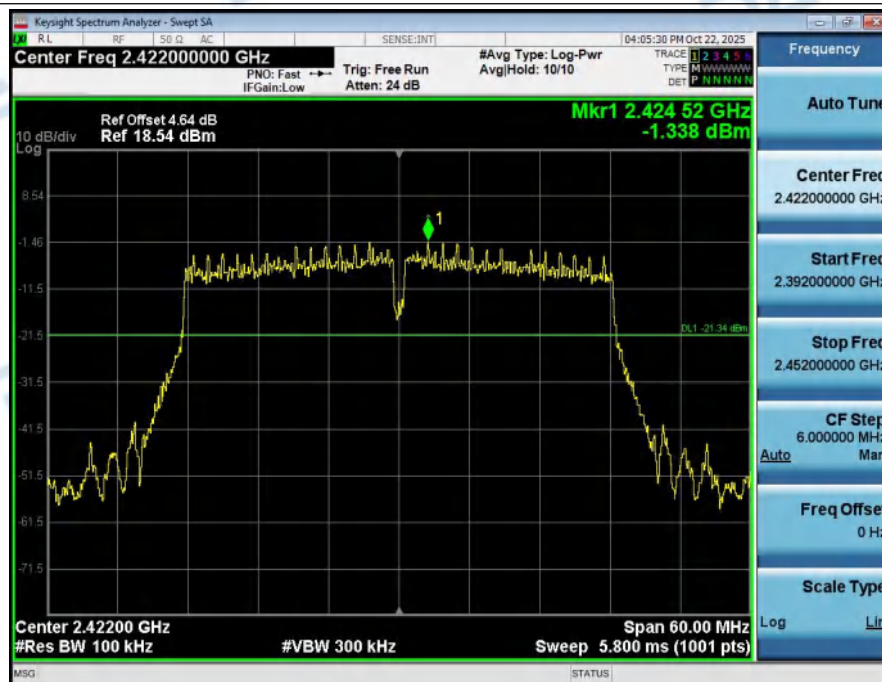
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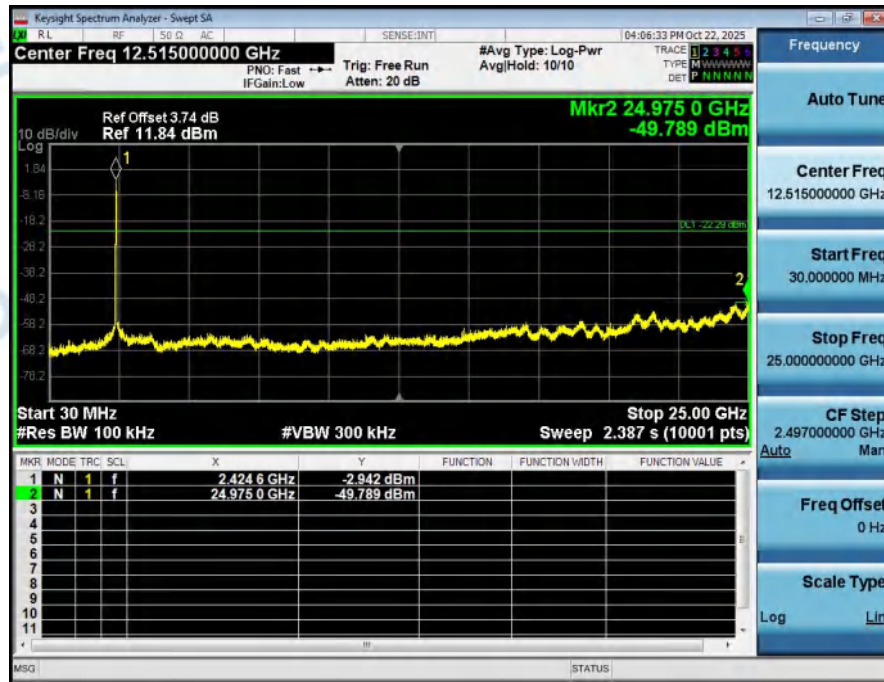
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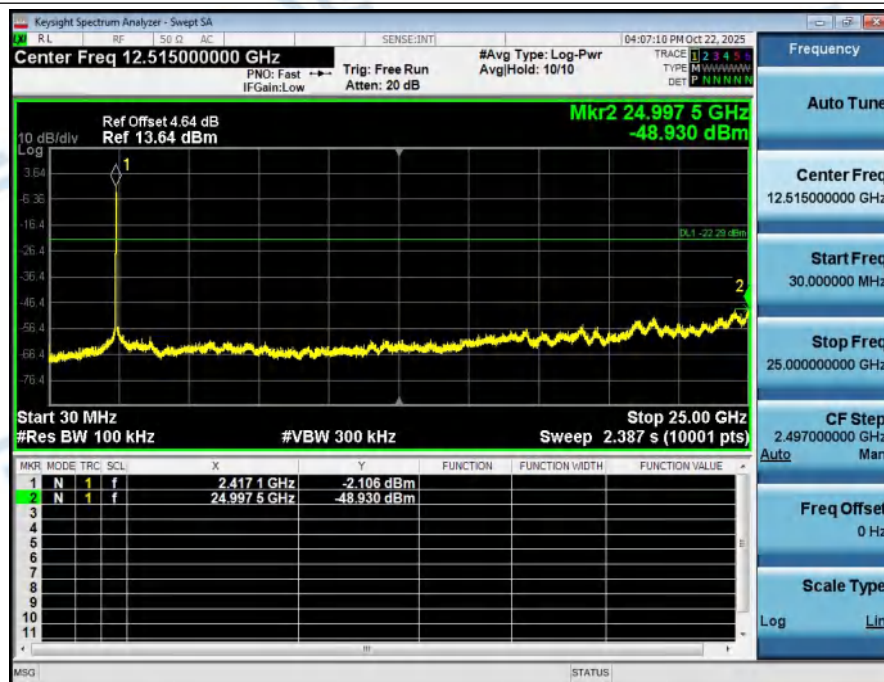
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2_Spurious_Emission_NVNT_ANT1_802_11n(HT40)_2422



2_Spurious_Emission_NVNT_ANT2_802_11n(HT40)_2422



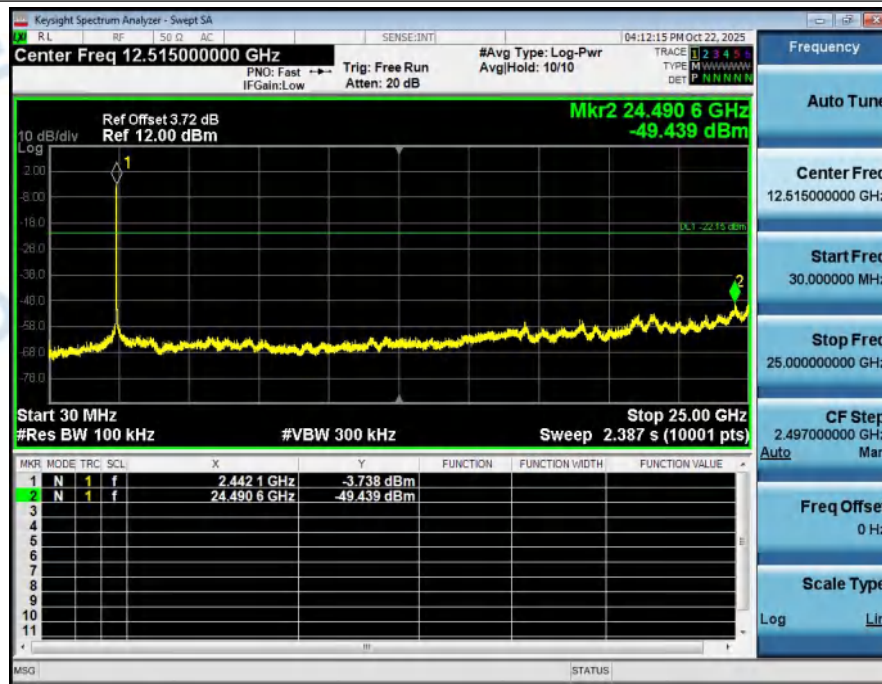
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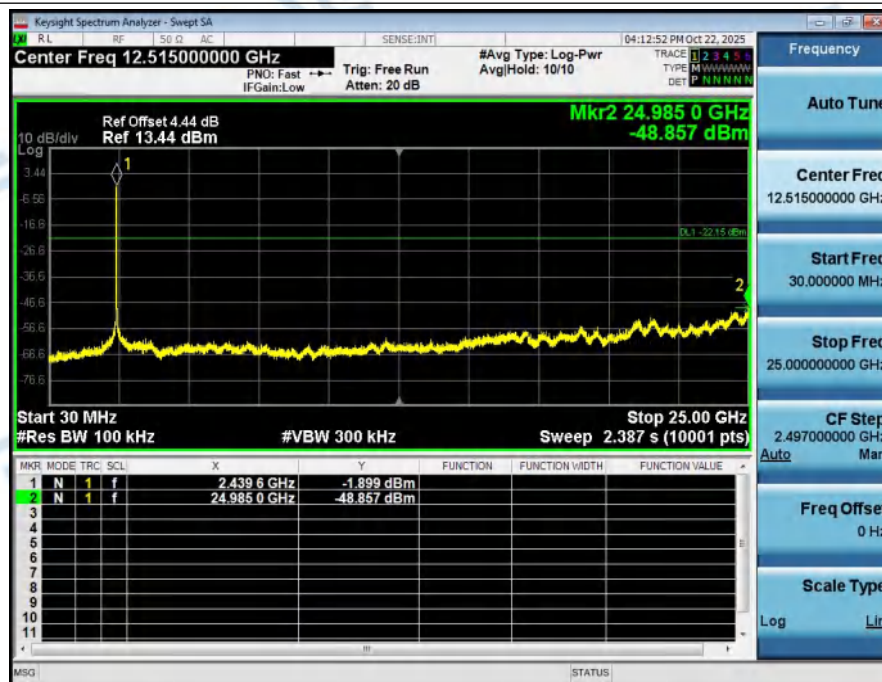
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2_Spurious_Emission_NVNT_ANT1_802_11n(HT40)_2437



2_Spurious_Emission_NVNT_ANT2_802_11n(HT40)_2437



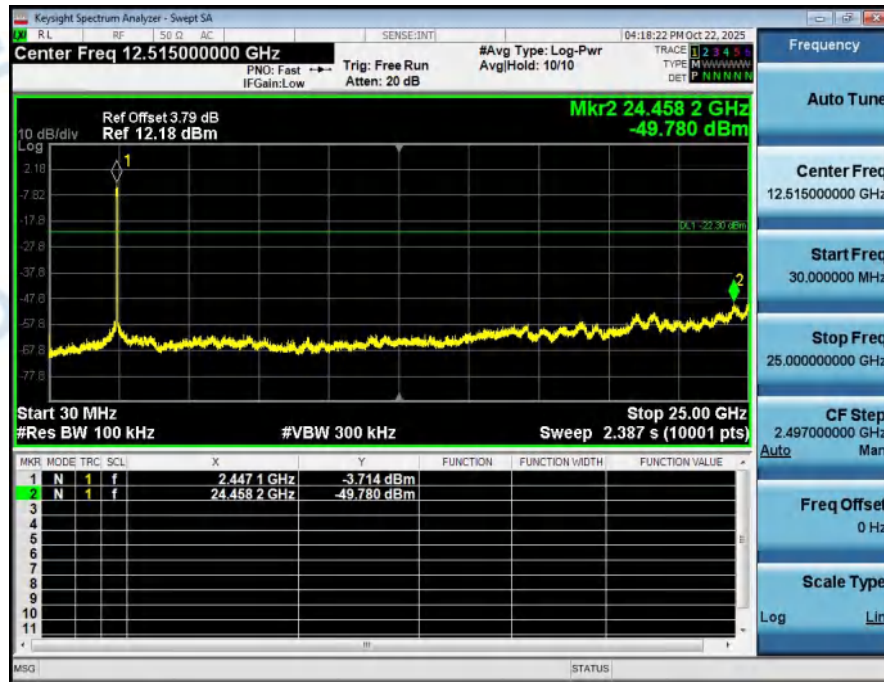
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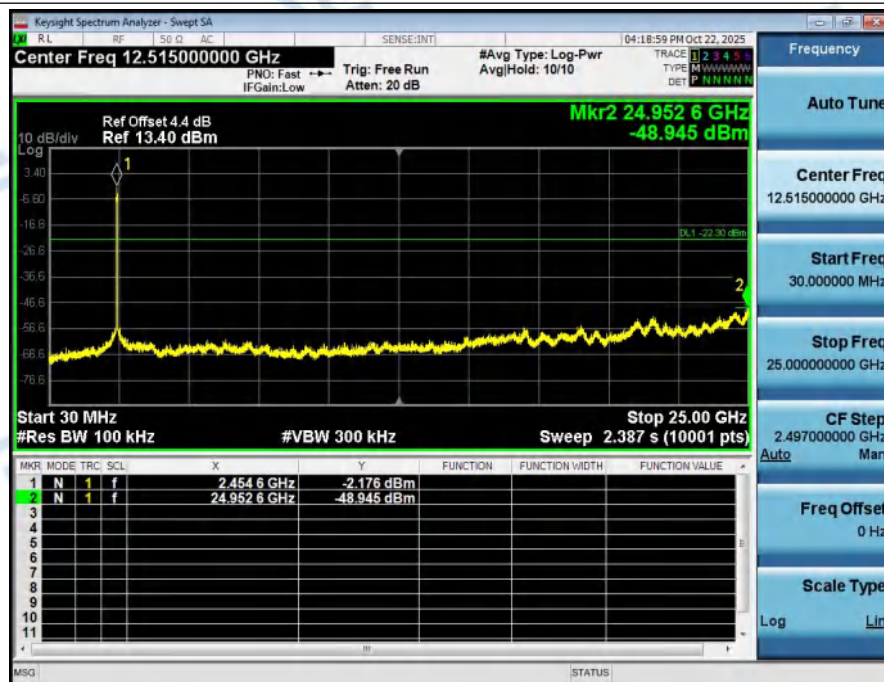
1_Reference_Level_NVNT_ANT2_802_11n(HT40)_2452



2_Spurious_Emission_NVNT_ANT1_802_11n(HT40)_2452



2_Spurious_Emission_NVNT_ANT2_802_11n(HT40)_2452



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