

Report No.: NCT26011429XE1-2
FCC ID:2BUXG-AL4MP402W
FCC_2.4G_WIFI (Part15.247) Test Data

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1. -6dB Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	9.06	500	Pass
NVNT	ANT1	802.11b	2437.00	9.14	500	Pass
NVNT	ANT1	802.11b	2462.00	9.44	500	Pass
NVNT	ANT1	802.11g	2412.00	16.35	500	Pass
NVNT	ANT1	802.11g	2437.00	16.19	500	Pass
NVNT	ANT1	802.11g	2462.00	16.29	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	17.65	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	17.42	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	17.52	500	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	18.94	500	Pass
NVNT	ANT1	802.11ax(HE20)	2437.00	18.55	500	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	18.74	500	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	36.26	500	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	35.87	500	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	36.11	500	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	37.62	500	Pass
NVNT	ANT1	802.11ax(HE40)	2437.00	37.39	500	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	37.97	500	Pass

-6dB_Bandwidth_NVNT_ANT1_802_11b_2412



-6dB_Bandwidth_NVNT_ANT1_802_11b_2437



-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



-6dB_Bandwidth_NVNT_ANT1_802_11ax(HE20)_2412



-6dB_Bandwidth_NVNT_ANT1_802_11ax(HE20)_2437



-6dB_Bandwidth_NVNT_ANT1_802_11ax(HE20)_2462



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2422



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2437



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2452



-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	13.117
NVNT	ANT1	802.11b	2437.00	13.164
NVNT	ANT1	802.11b	2462.00	13.134
NVNT	ANT1	802.11g	2412.00	17.412
NVNT	ANT1	802.11g	2437.00	16.958
NVNT	ANT1	802.11g	2462.00	17.037
NVNT	ANT1	802.11n(HT20)	2412.00	21.040
NVNT	ANT1	802.11n(HT20)	2437.00	19.108
NVNT	ANT1	802.11n(HT20)	2462.00	19.097
NVNT	ANT1	802.11ax(HE20)	2412.00	20.347
NVNT	ANT1	802.11ax(HE20)	2437.00	19.354
NVNT	ANT1	802.11ax(HE20)	2462.00	19.336
NVNT	ANT1	802.11n(HT40)	2422.00	36.966
NVNT	ANT1	802.11n(HT40)	2437.00	36.678
NVNT	ANT1	802.11n(HT40)	2452.00	36.733
NVNT	ANT1	802.11ax(HE40)	2422.00	38.284
NVNT	ANT1	802.11ax(HE40)	2437.00	38.184
NVNT	ANT1	802.11ax(HE40)	2452.00	38.345

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



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

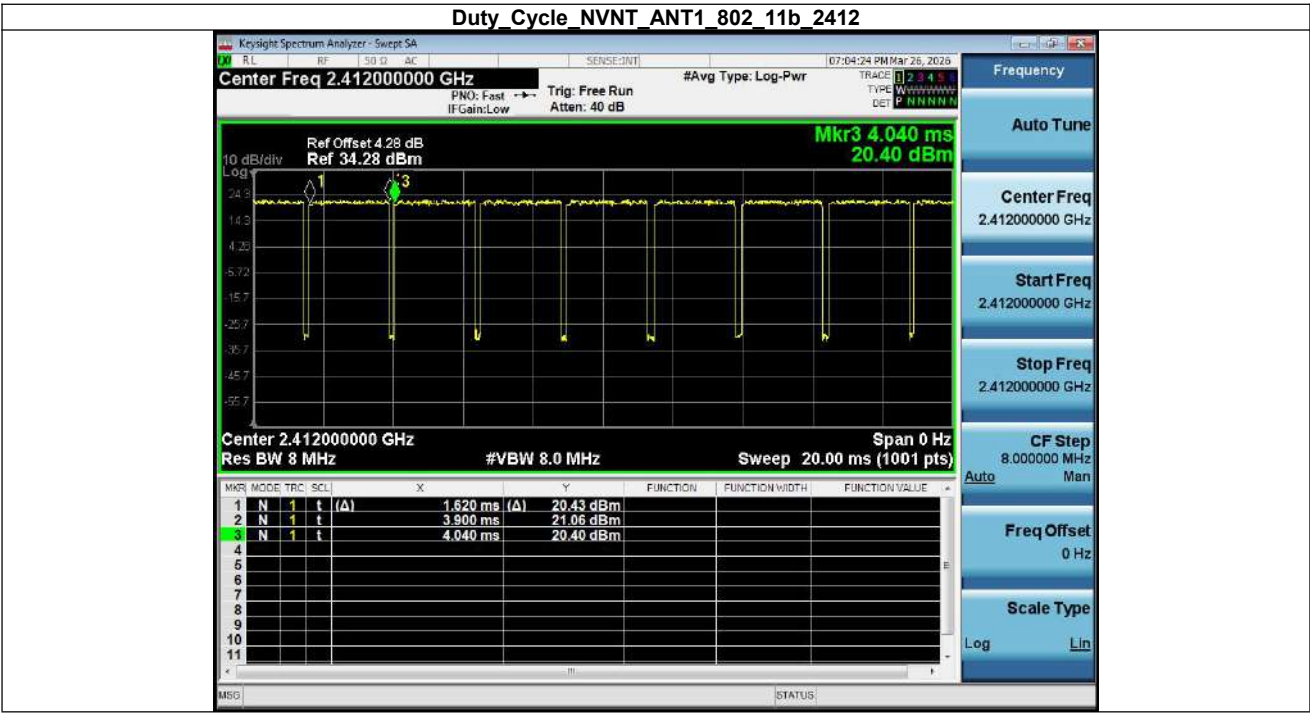


99% Occupied Bandwidth NVNT_ANT1_802_11ax(HE40)_2452

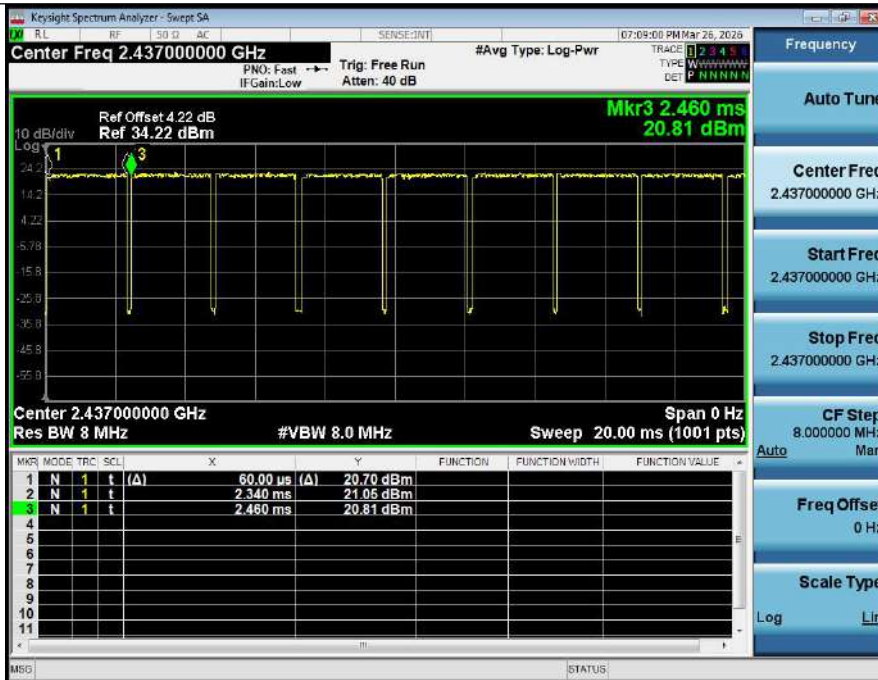


3. Duty Cycle

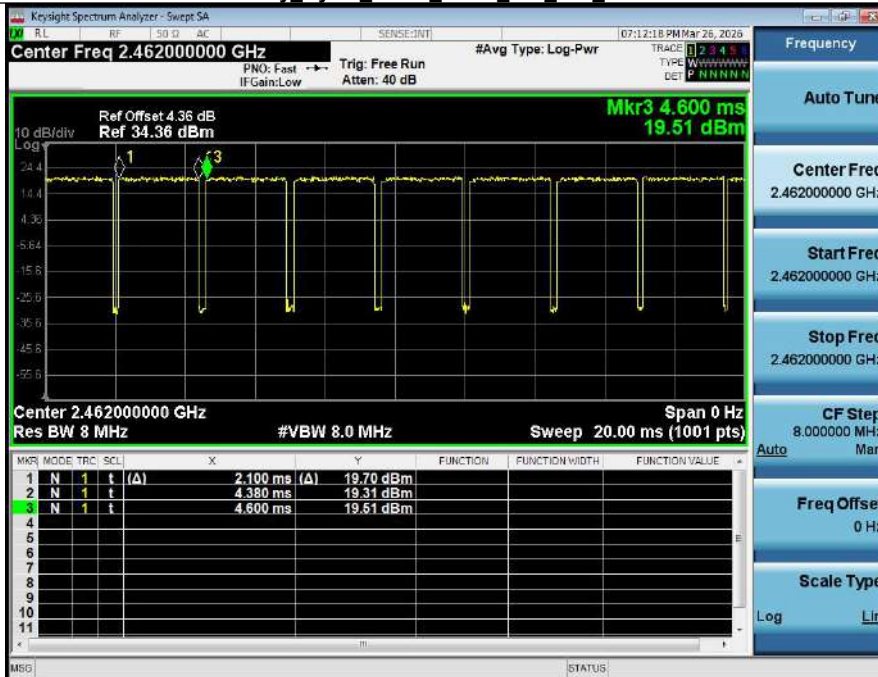
Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty factor(dB)
NVNT	ANT1	802.11b	2412.00	95.04	0.22
NVNT	ANT1	802.11b	2437.00	95.00	0.22
NVNT	ANT1	802.11b	2462.00	92.00	0.36
NVNT	ANT1	802.11g	2412.00	74.19	1.30
NVNT	ANT1	802.11g	2437.00	43.40	3.63
NVNT	ANT1	802.11g	2462.00	68.57	1.64
NVNT	ANT1	802.11n(HT20)	2412.00	97.41	0.11
NVNT	ANT1	802.11n(HT20)	2437.00	97.41	0.11
NVNT	ANT1	802.11n(HT20)	2462.00	97.41	0.11
NVNT	ANT1	802.11ax(HE20)	2412.00	96.00	0.18
NVNT	ANT1	802.11ax(HE20)	2437.00	95.36	0.21
NVNT	ANT1	802.11ax(HE20)	2462.00	95.36	0.21
NVNT	ANT1	802.11n(HT40)	2422.00	70.59	1.51
NVNT	ANT1	802.11n(HT40)	2437.00	66.67	1.76
NVNT	ANT1	802.11n(HT40)	2452.00	63.16	2.00
NVNT	ANT1	802.11ax(HE40)	2422.00	61.54	2.11
NVNT	ANT1	802.11ax(HE40)	2437.00	50.00	3.01
NVNT	ANT1	802.11ax(HE40)	2452.00	57.14	2.43



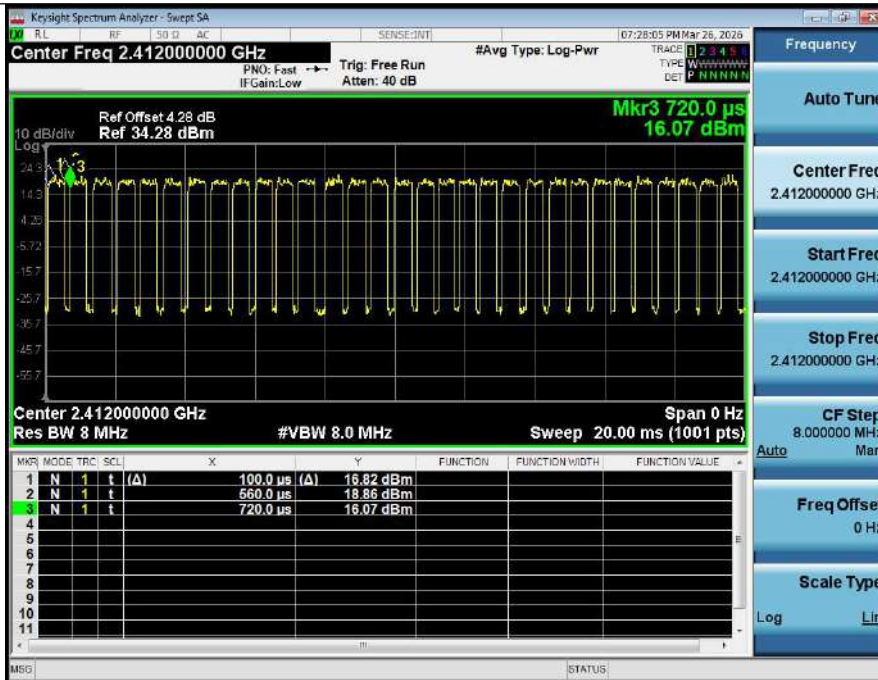
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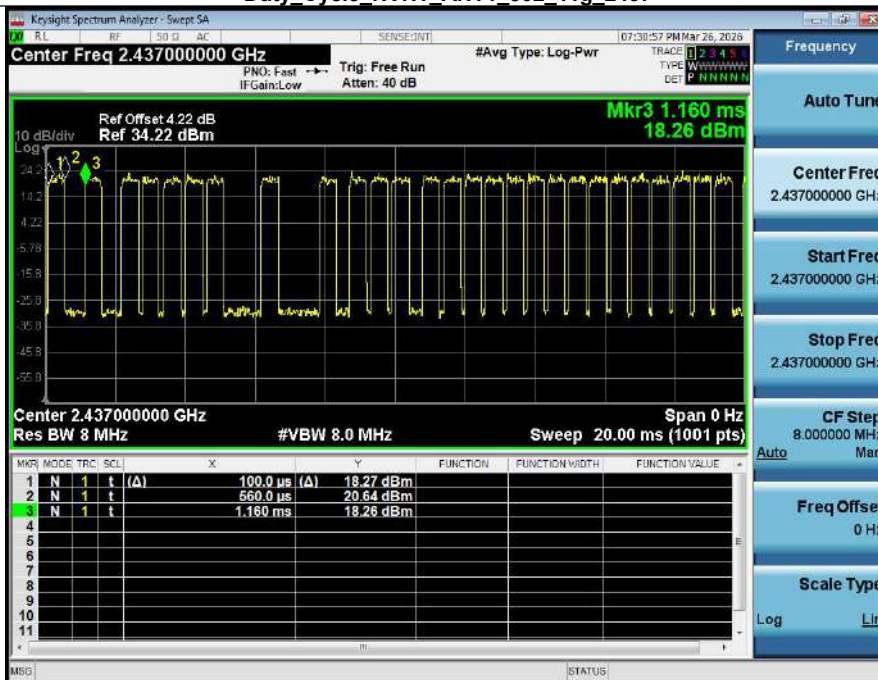
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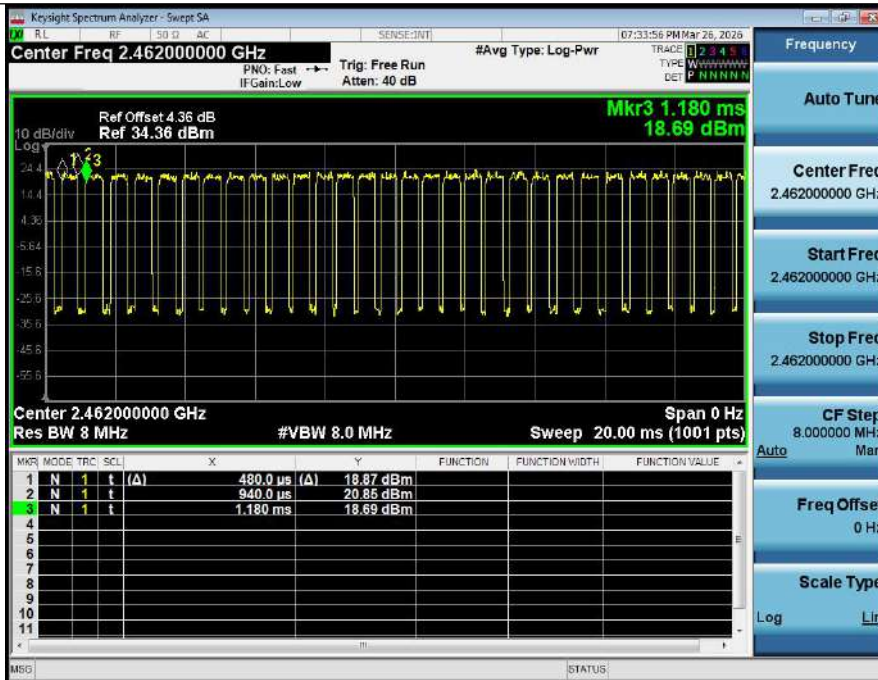
Duty_Cycle_NVNT_ANT1_802_11g_2412



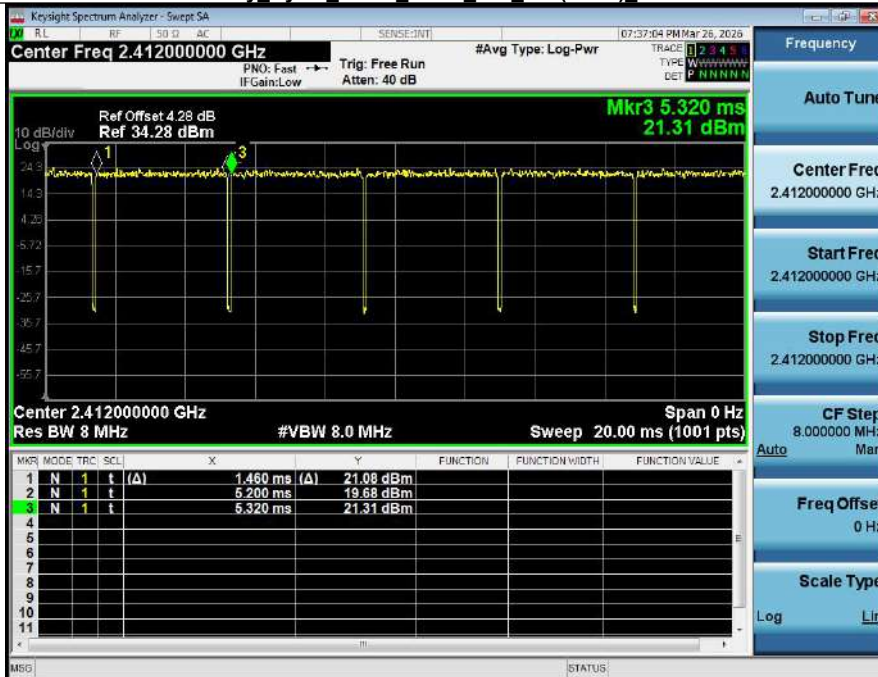
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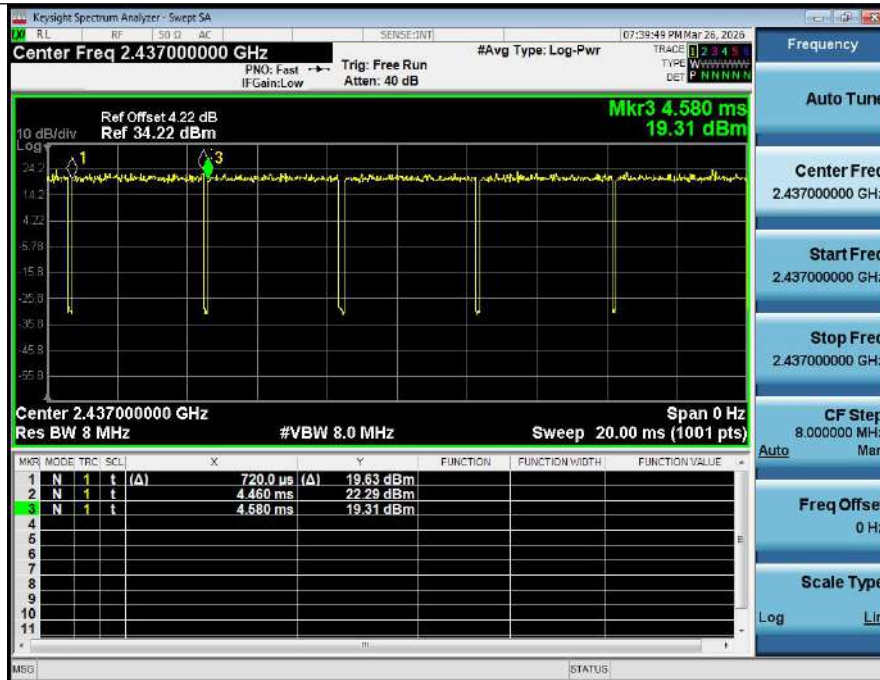
Duty_Cycle_NVNT_ANT1_802_11g_2462



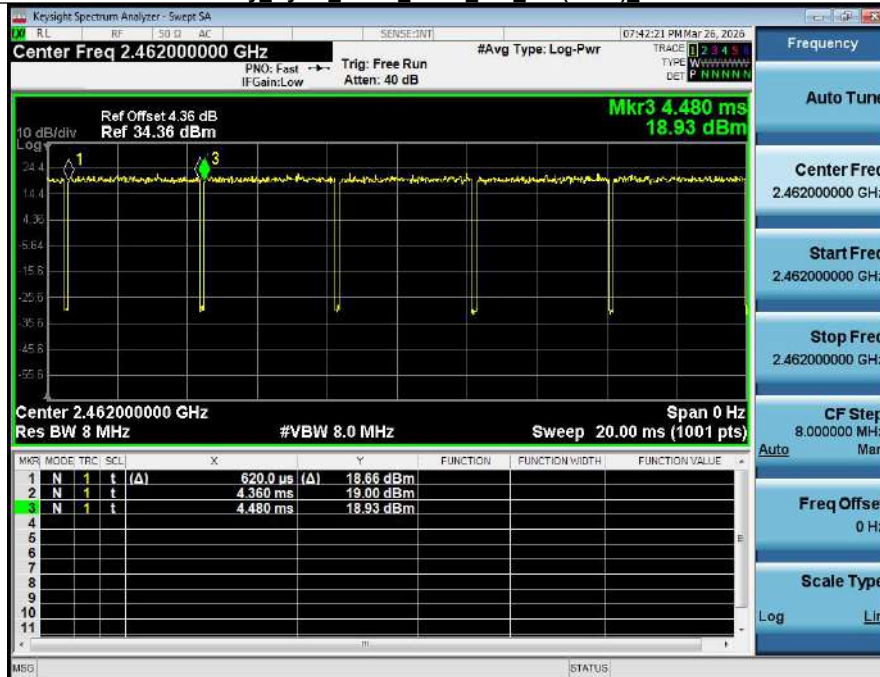
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2412



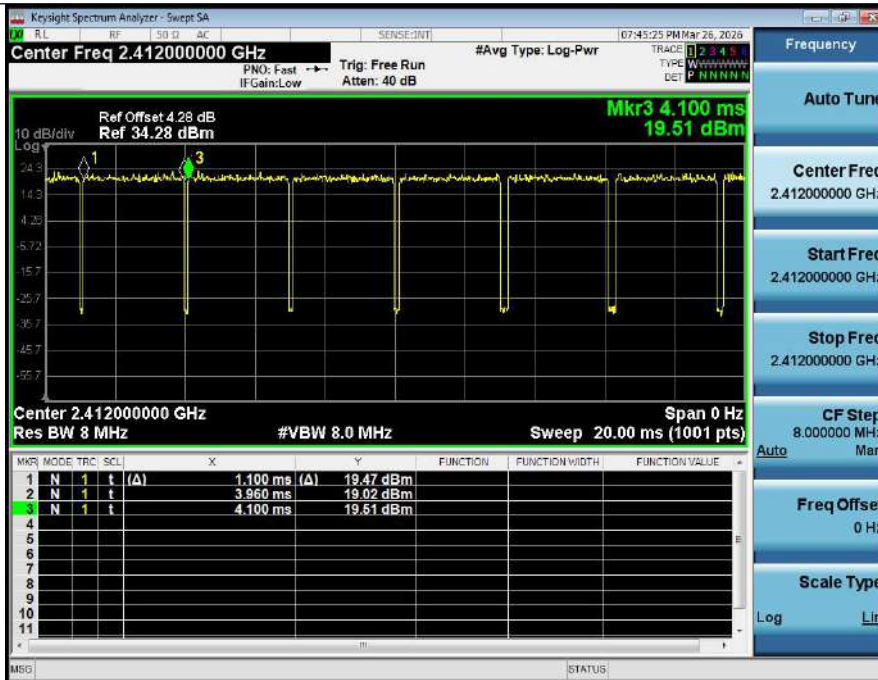
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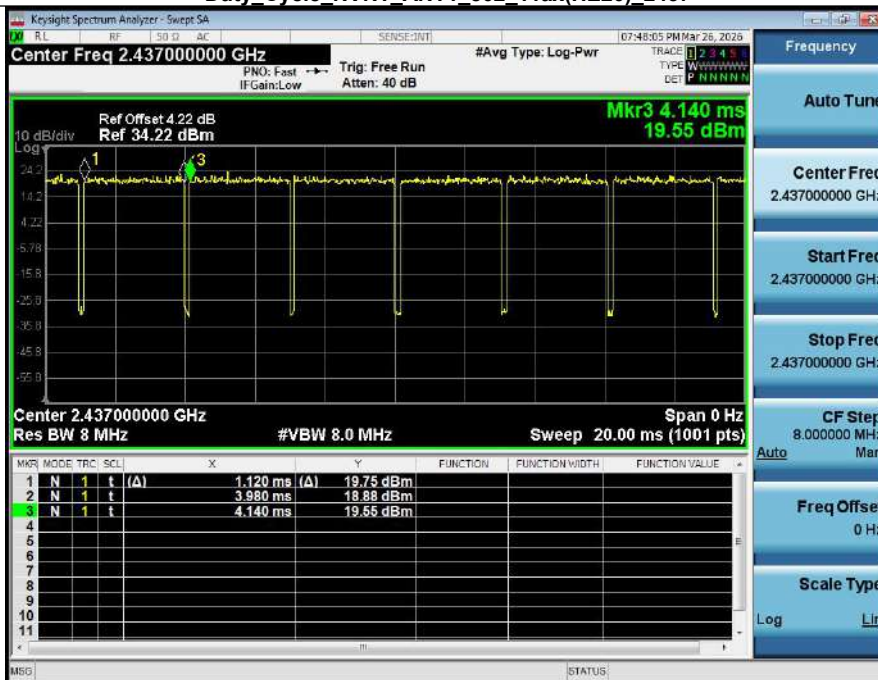
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2462



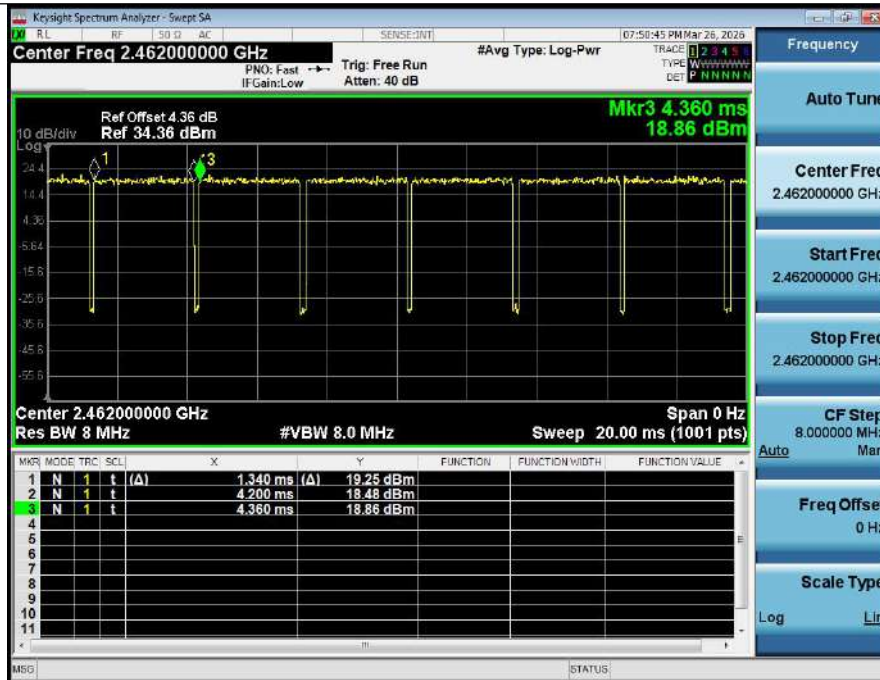
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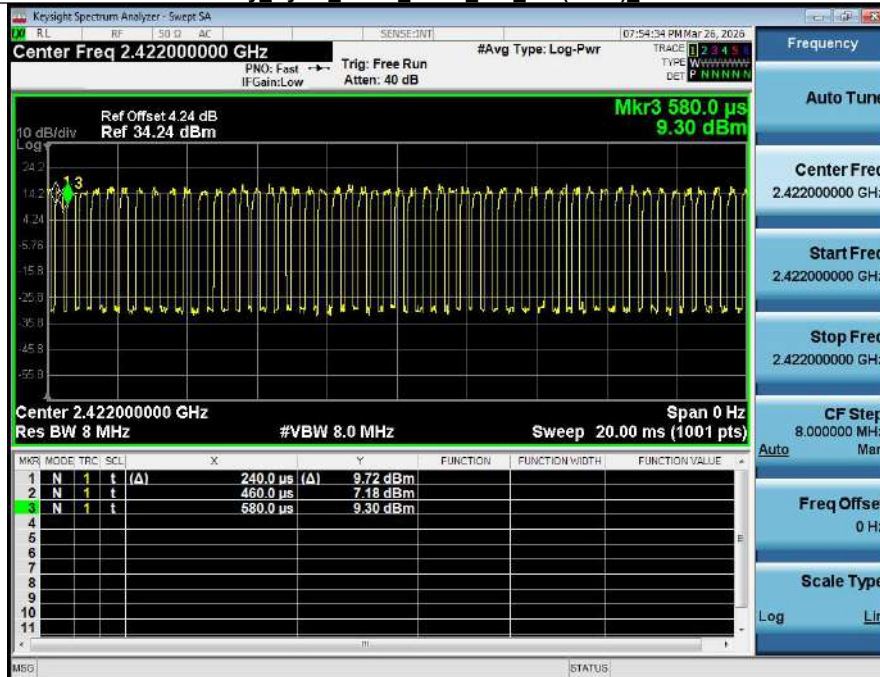
Duty Cycle_NVNT_ANT1_802_11ax(HE20)_2437



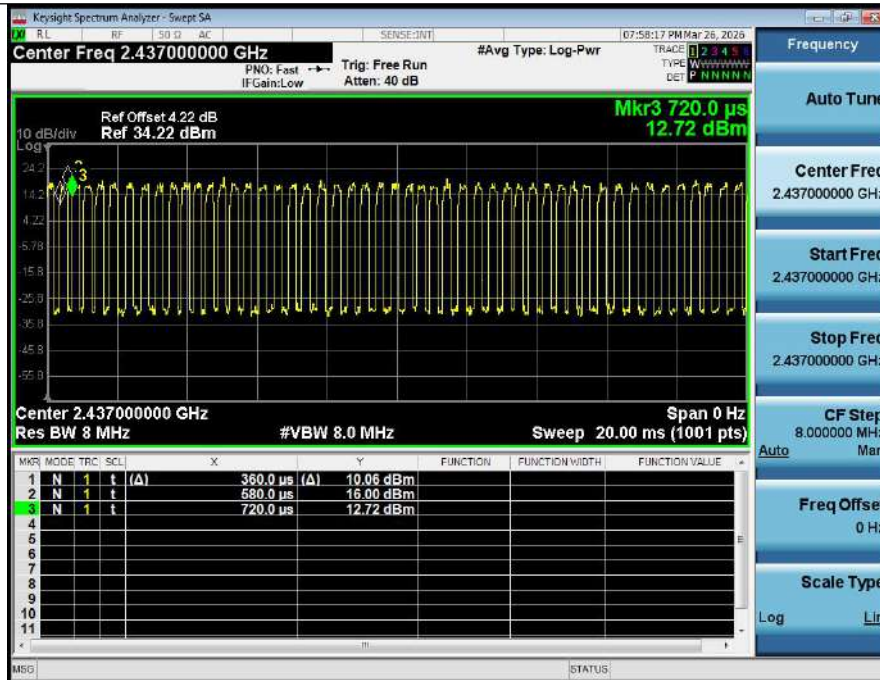
Duty Cycle_NVNT_ANT1_802_11ax(HE20)_2462



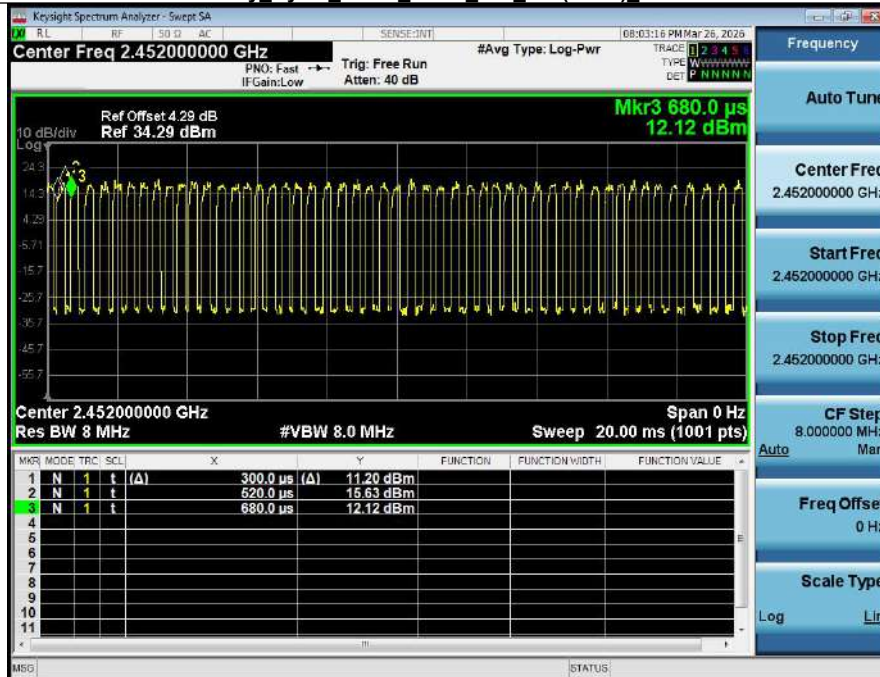
Duty_Cycle_NVNT_ANT1_802_11n(HT40)_2422



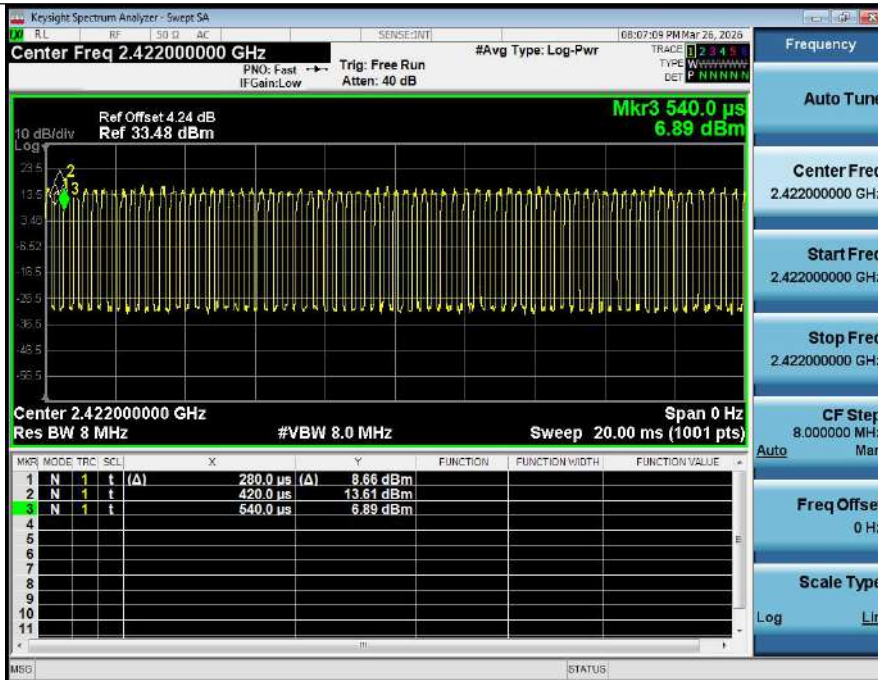
Duty_Cycle_NVNT_ANT1_802_11n(HT40)_2437



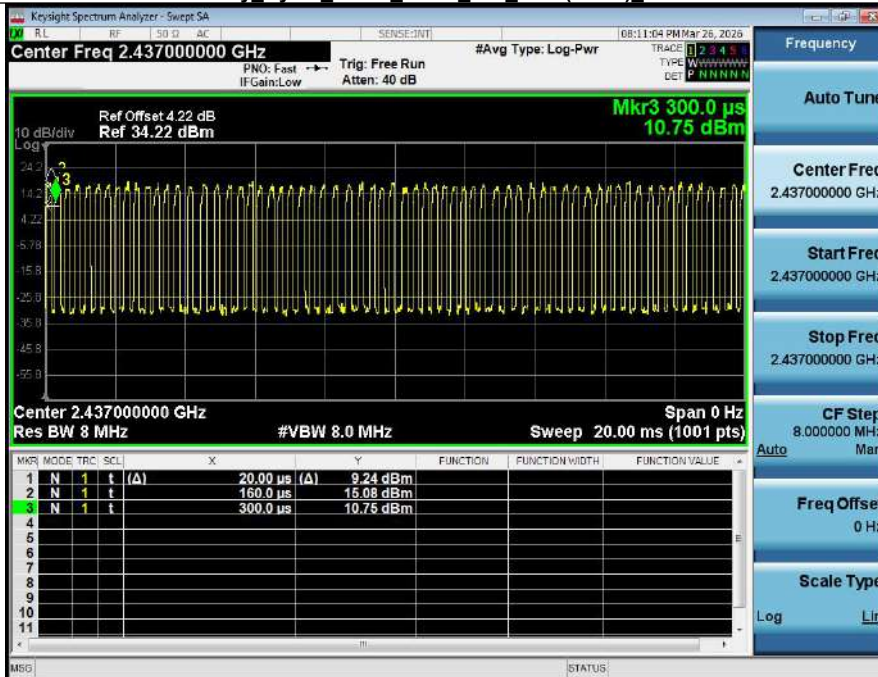
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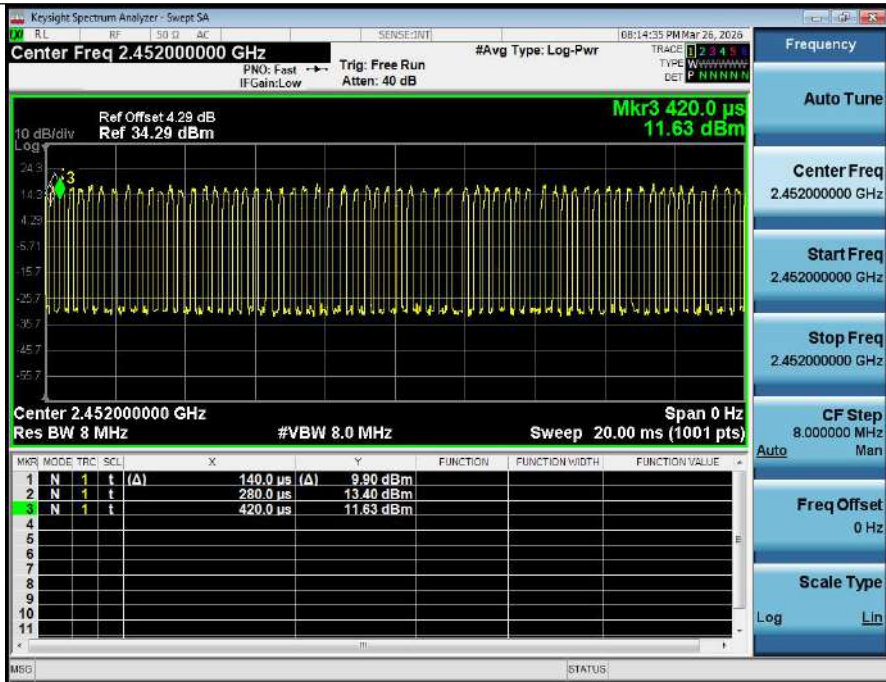
Duty_Cycle_NVNT_ANT1_802_11ax(HE40)_2422



Duty Cycle_NVNT_ANT1_802_11ax(HE40)_2437



Duty Cycle_NVNT_ANT1_802_11ax(HE40)_2452



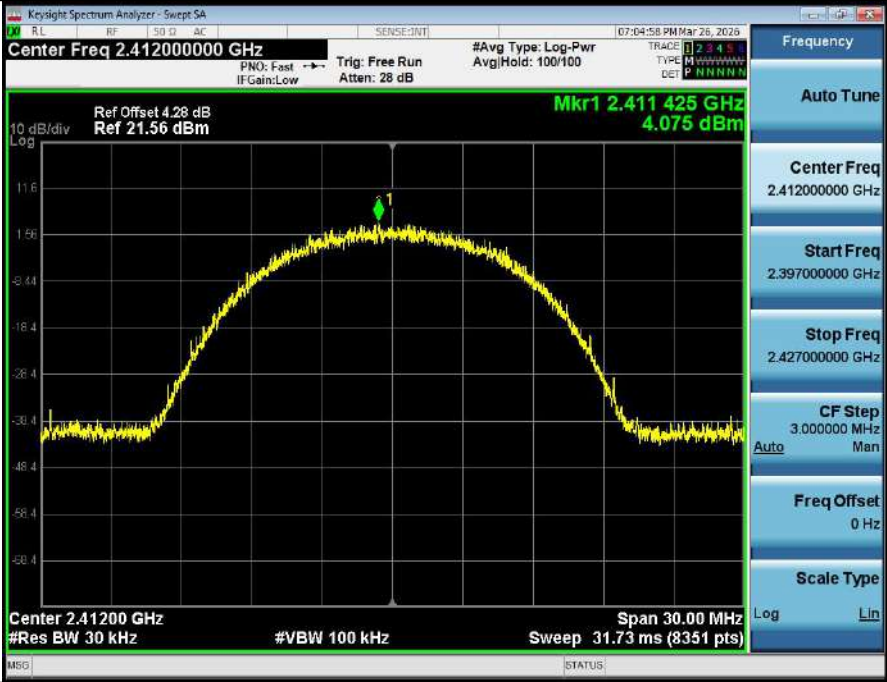
4. MAX. Output Power

Condition	Antenna	Modulation	Frequency (MHz)	Detector	Conducted Power(dBm)	Total Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	Peak	24.07	24.07	30	Pass
NVNT	ANT1	802.11b	2437.00	Peak	24.40	24.40	30	Pass
NVNT	ANT1	802.11b	2462.00	Peak	22.72	22.72	30	Pass
NVNT	ANT1	802.11g	2412.00	Peak	21.87	21.87	30	Pass
NVNT	ANT1	802.11g	2437.00	Peak	23.51	23.51	30	Pass
NVNT	ANT1	802.11g	2462.00	Peak	24.31	24.31	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	Peak	25.40	25.40	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	Peak	23.89	23.89	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	Peak	23.12	23.12	30	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	Peak	25.11	25.11	30	Pass
NVNT	ANT1	802.11ax(HE20)	2437.00	Peak	25.23	25.23	30	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	Peak	24.46	24.46	30	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	Peak	21.28	21.28	30	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	Peak	23.25	23.25	30	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	Peak	22.96	22.96	30	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	Peak	20.78	20.78	30	Pass
NVNT	ANT1	802.11ax(HE40)	2437.00	Peak	22.86	22.86	30	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	Peak	22.48	22.48	30	Pass

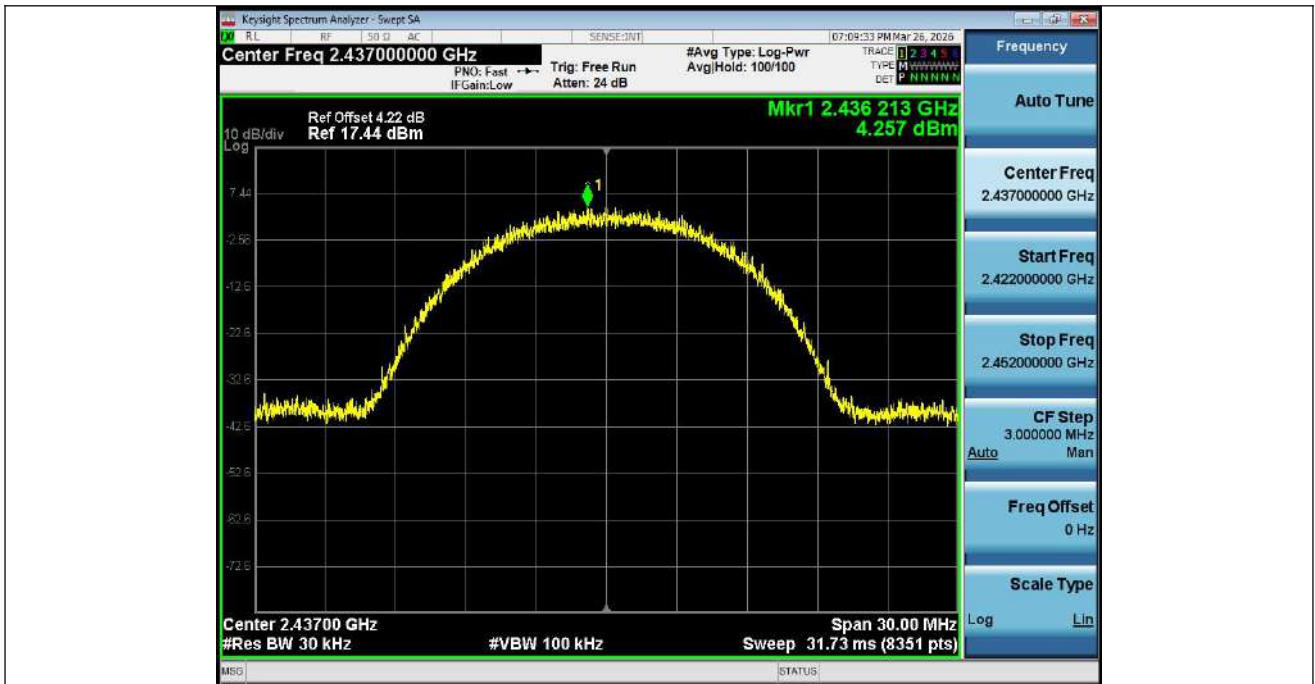
5. Power Spectral Density

Condition	Antenna	Modulation	Frequency (MHz)	SA_PSD(dBm/30kHz)	limit(dBm/3kHz)	Result
NVNT	ANT1	802.11b	2412.00	4.08	8	Pass
NVNT	ANT1	802.11b	2437.00	4.26	8	Pass
NVNT	ANT1	802.11b	2462.00	3.66	8	Pass
NVNT	ANT1	802.11g	2412.00	-0.70	8	Pass
NVNT	ANT1	802.11g	2437.00	1.59	8	Pass
NVNT	ANT1	802.11g	2462.00	1.86	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2.84	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	1.48	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	0.78	8	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	2.21	8	Pass
NVNT	ANT1	802.11ax(HE20)	2437.00	2.26	8	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	0.66	8	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	-3.86	8	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	-1.38	8	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	-2.03	8	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	-4.62	8	Pass
NVNT	ANT1	802.11ax(HE40)	2437.00	-2.40	8	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	-2.75	8	Pass

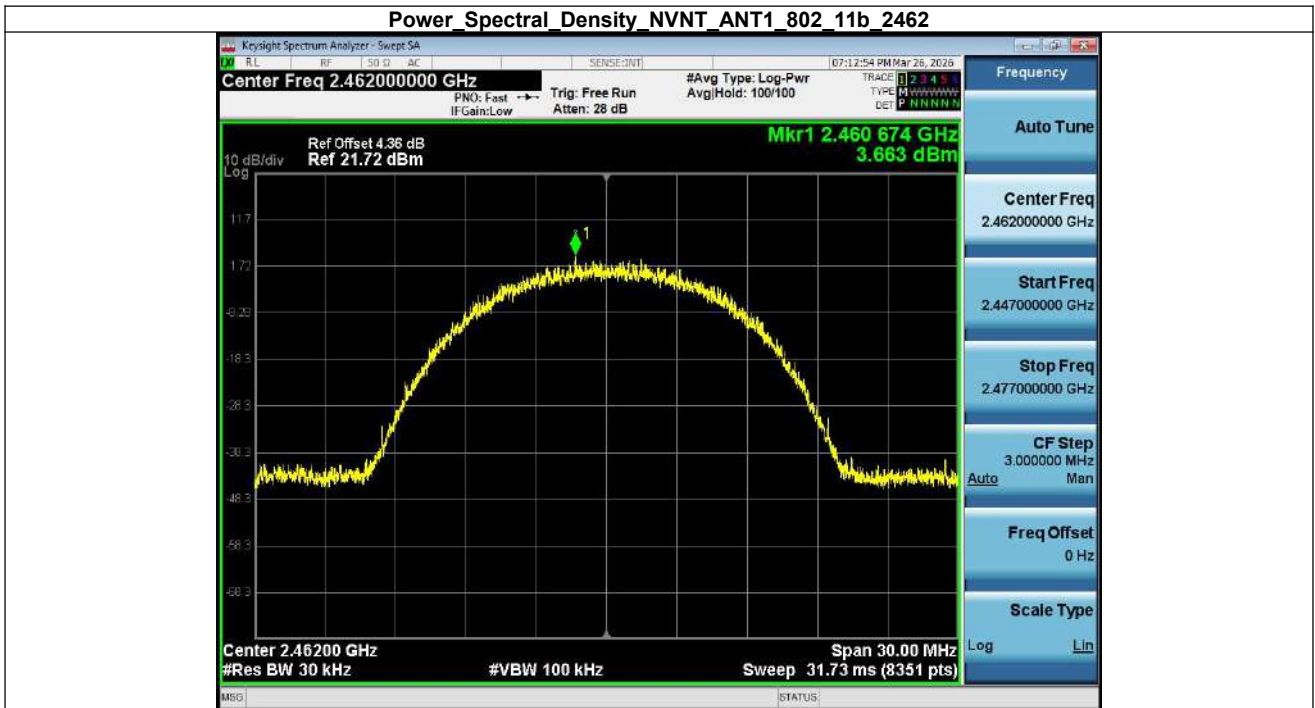
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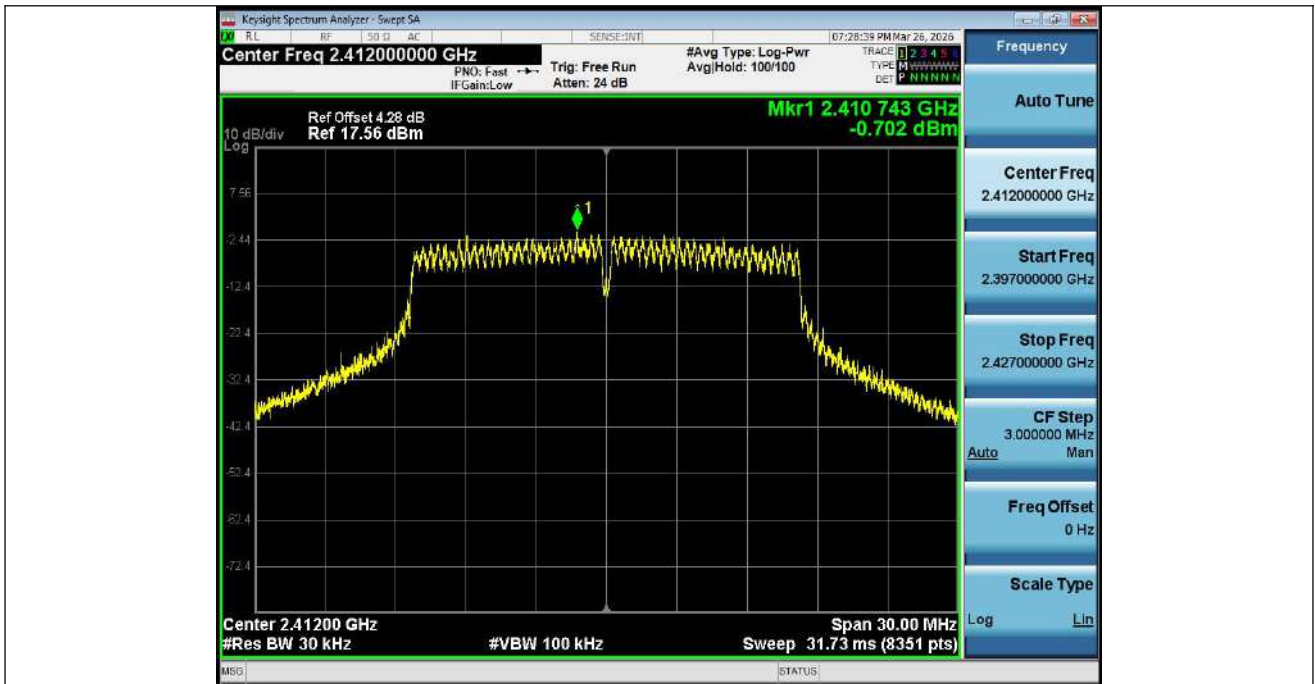
Power_Spectral_Density_NVNT_ANT1_802_11b_2437



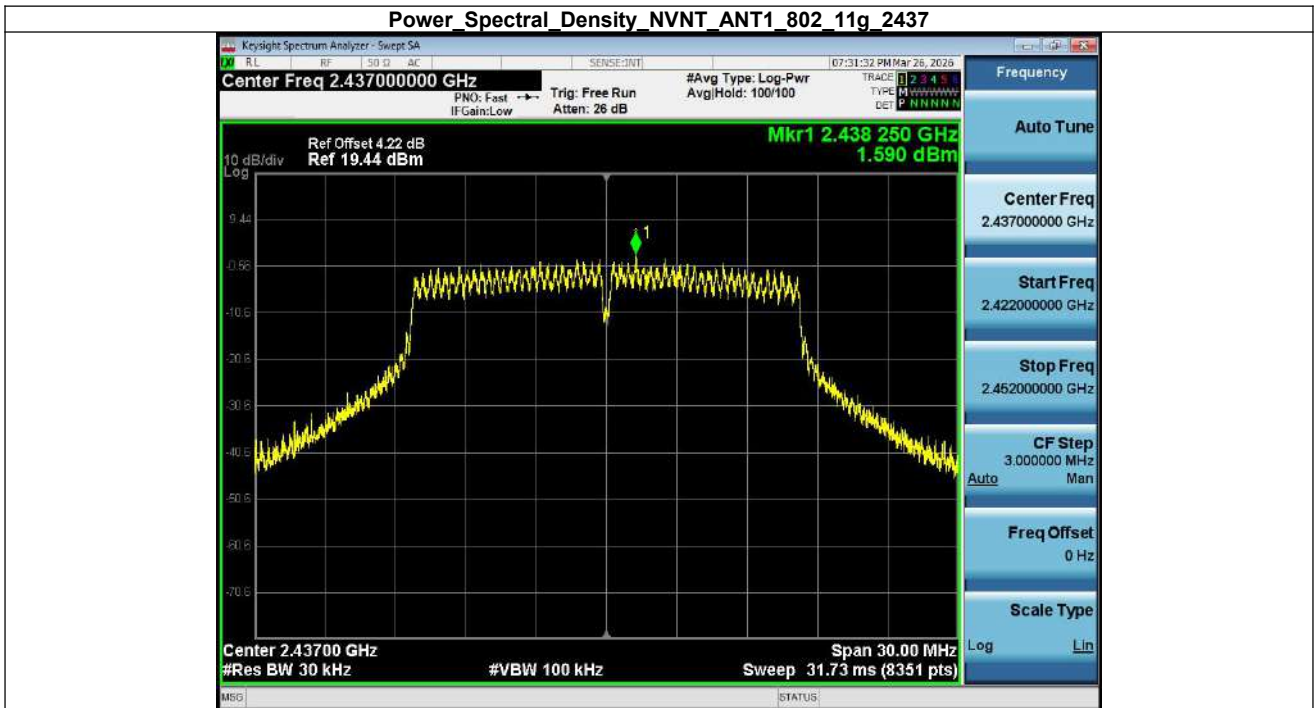
Power_Spectral_Density_NVNT_ANT1_802_11b_2462



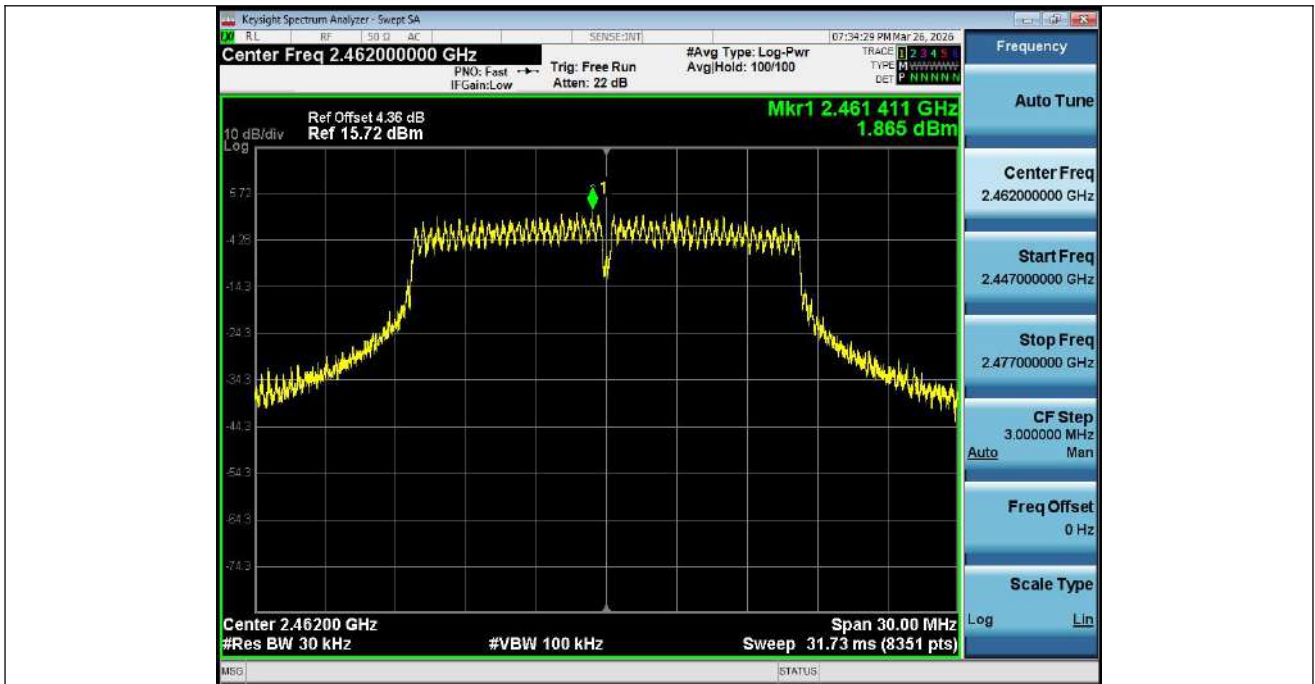
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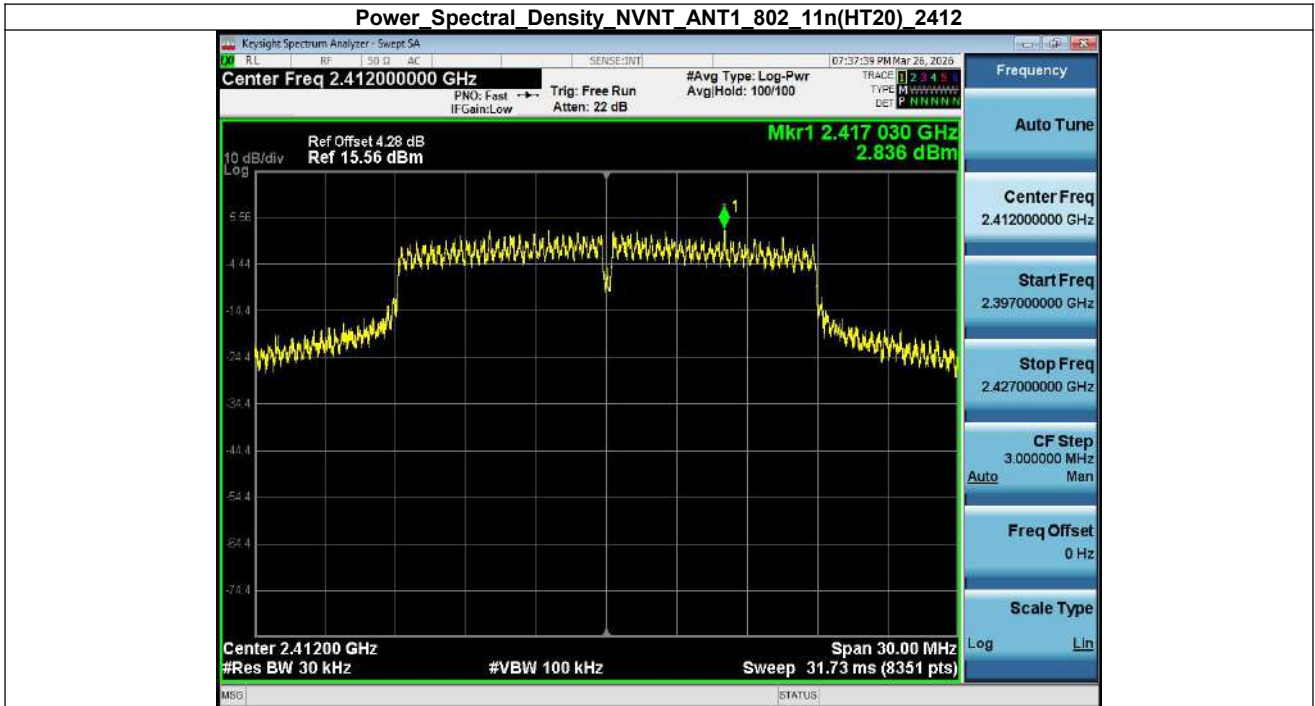
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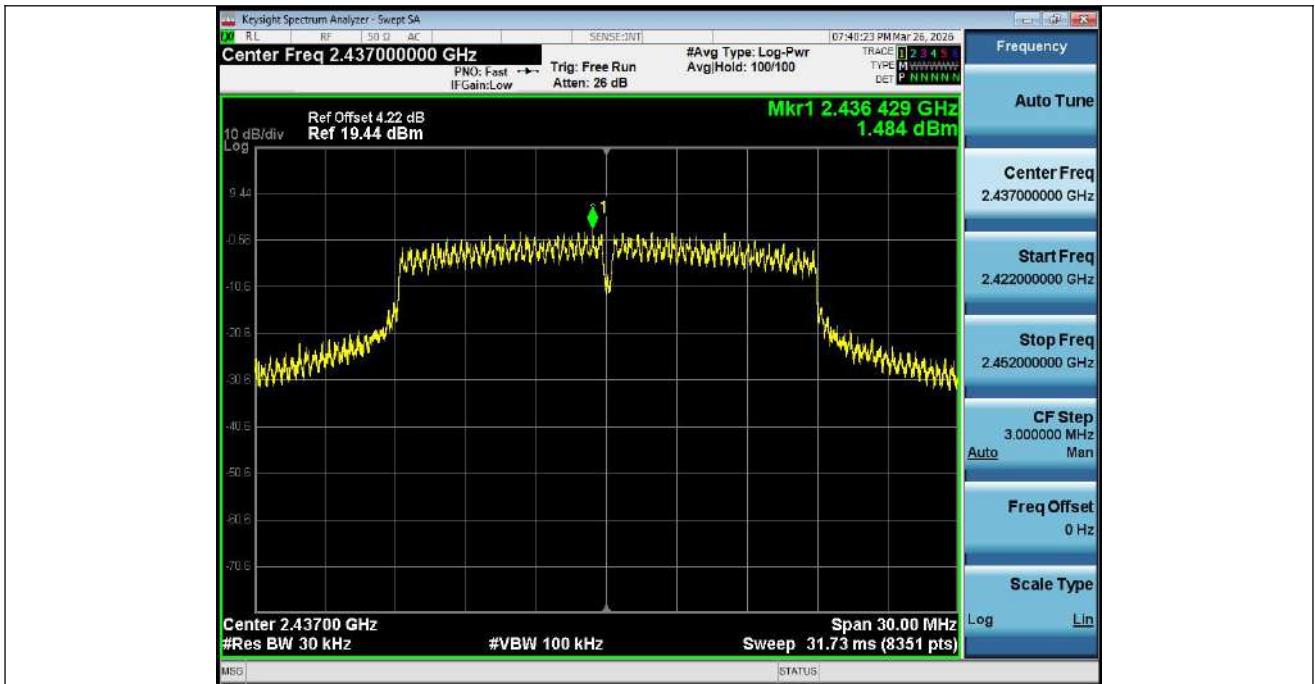
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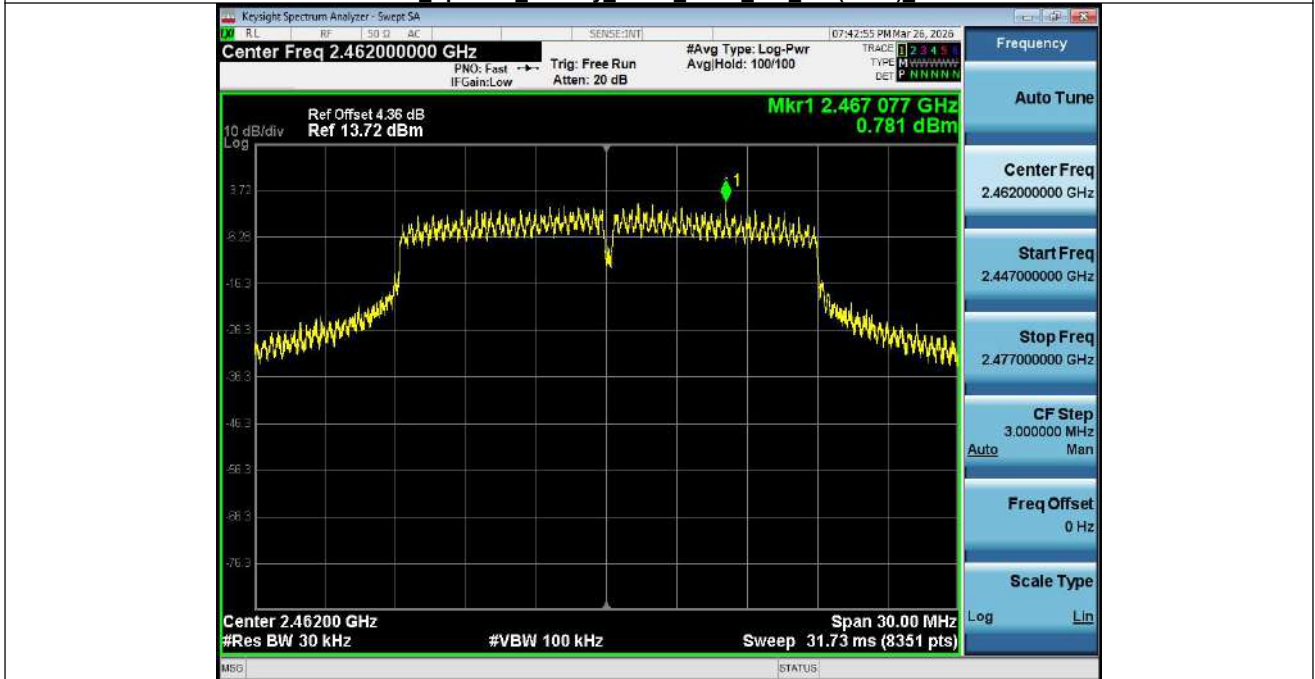
Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2412



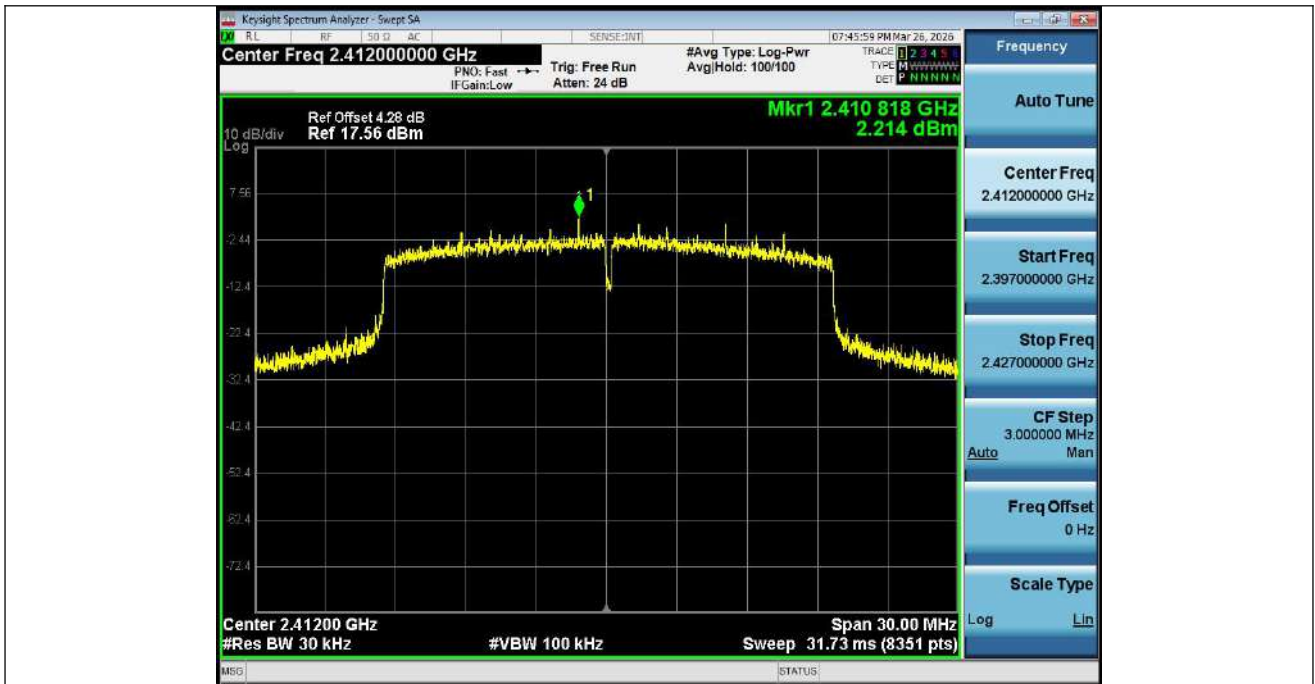
Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2437



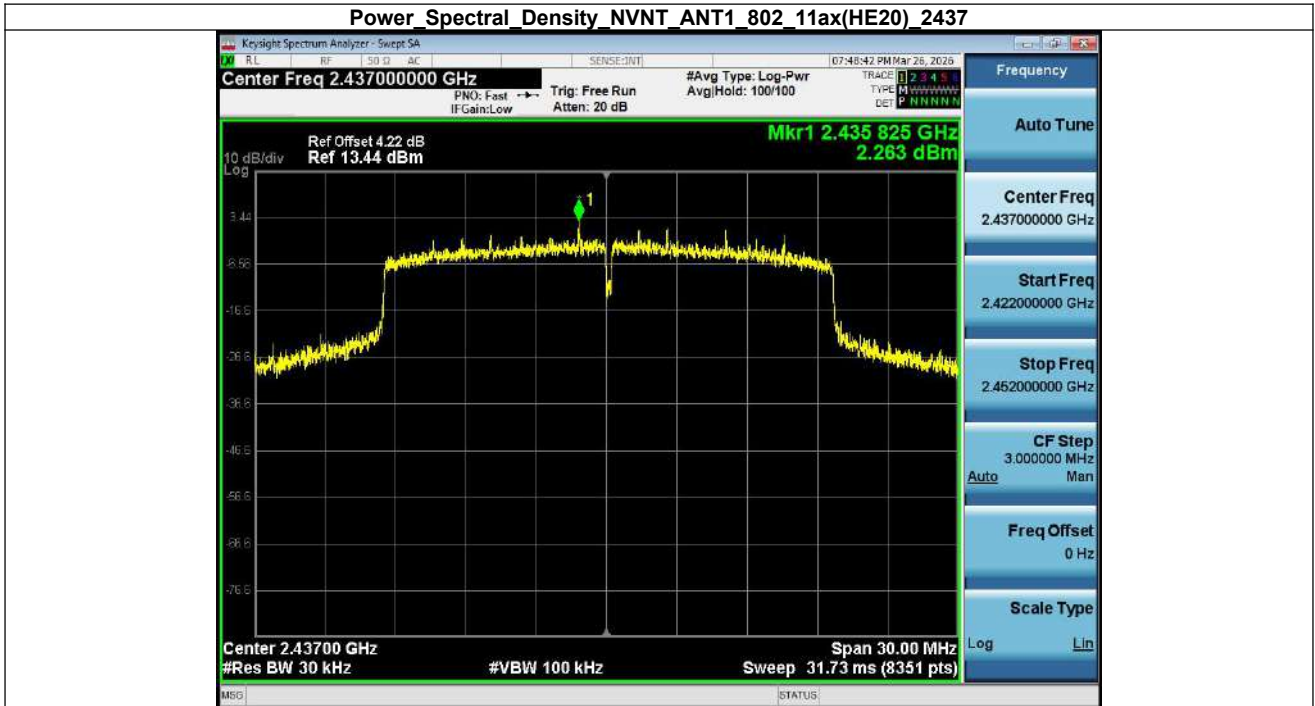
Power Spectral Density_NVNT_ANT1_802_11n(HT20)_2462



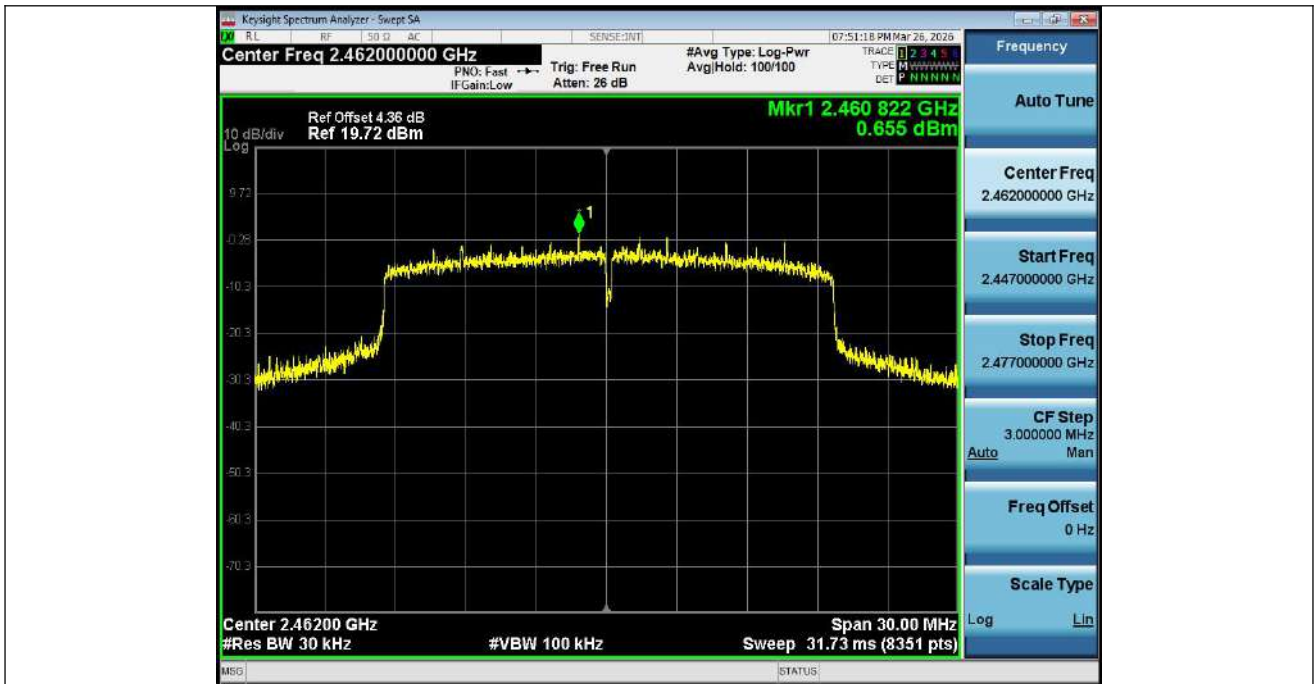
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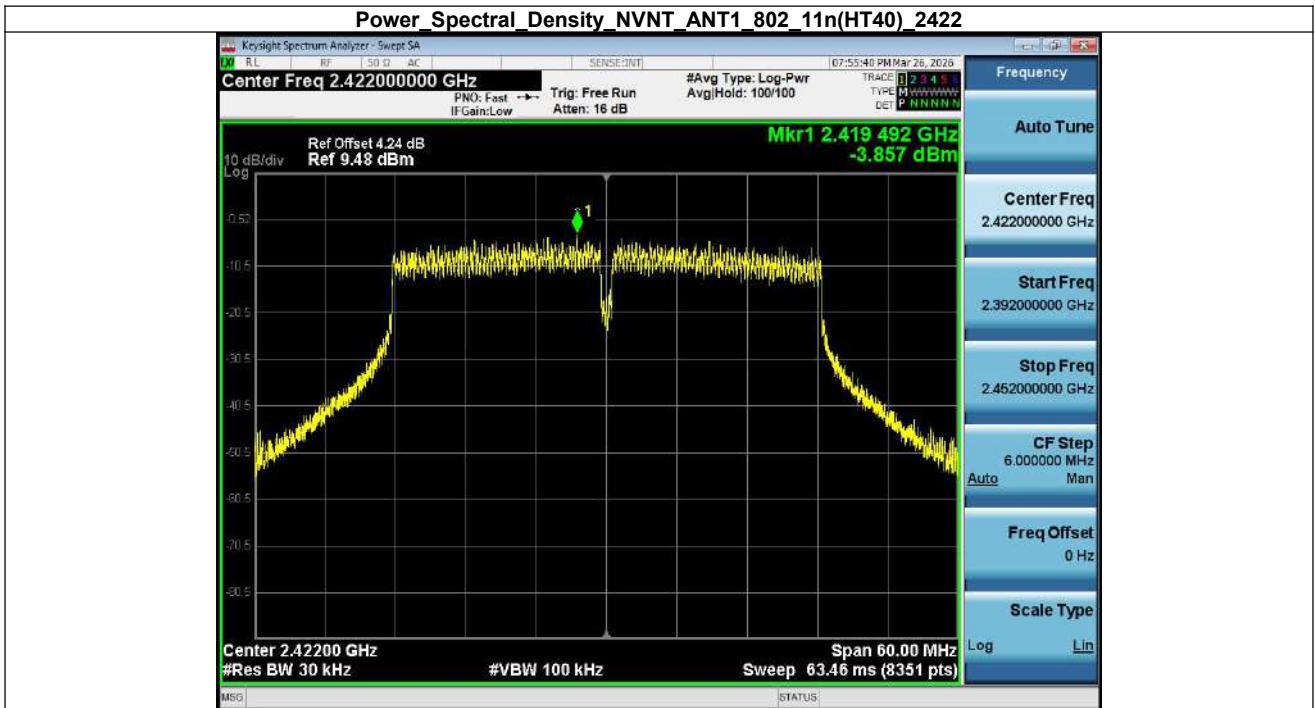
Power Spectral Density_NVNT_ANT1_802_11ax(HE20)_2437



Power Spectral Density_NVNT_ANT1_802_11ax(HE20)_2462



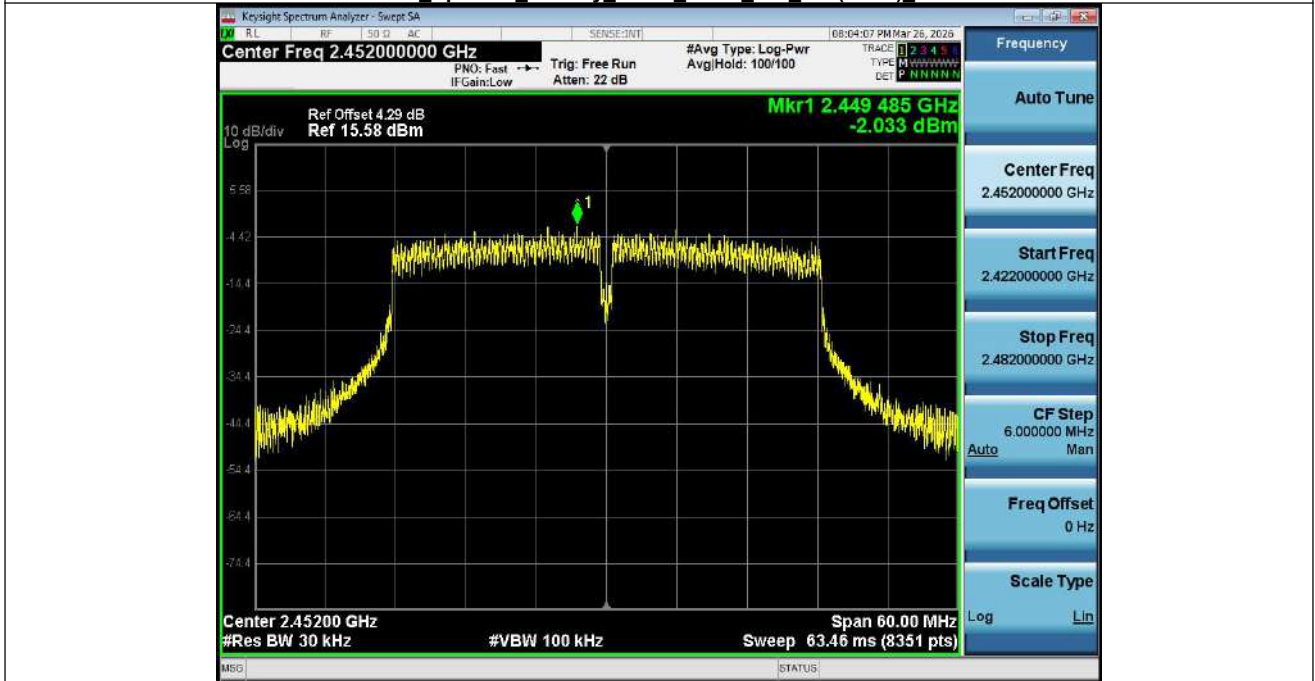
Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2422



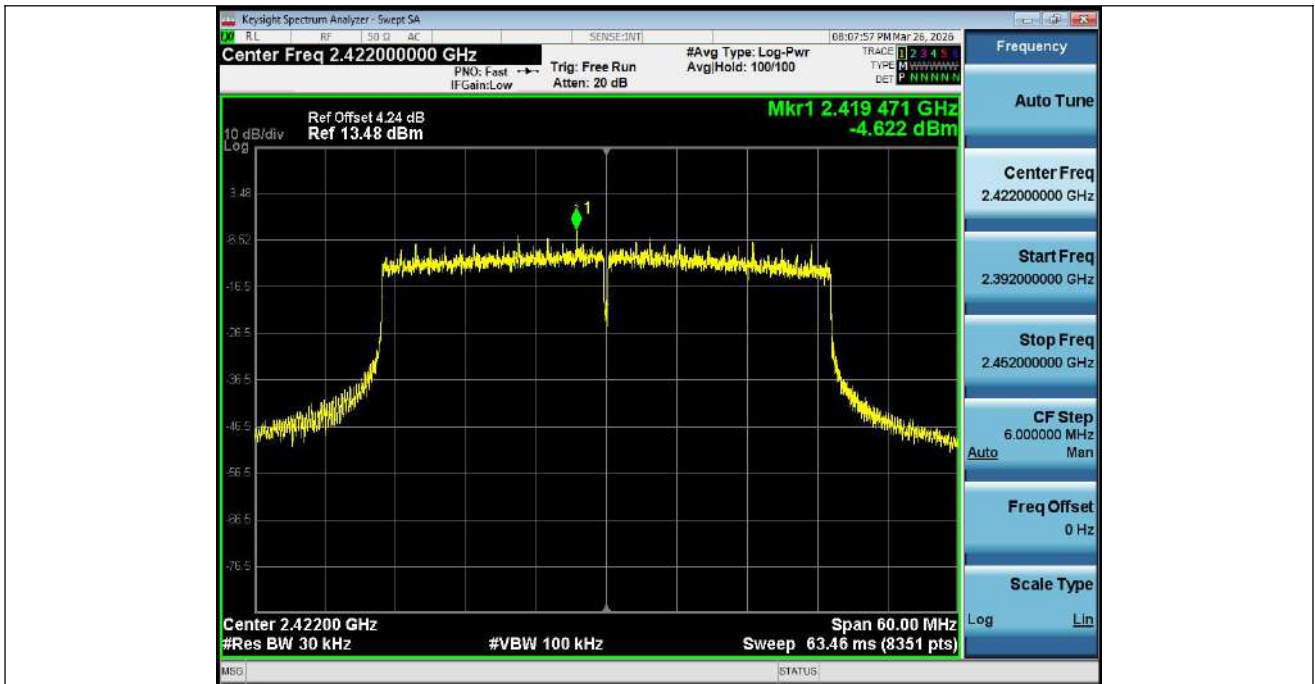
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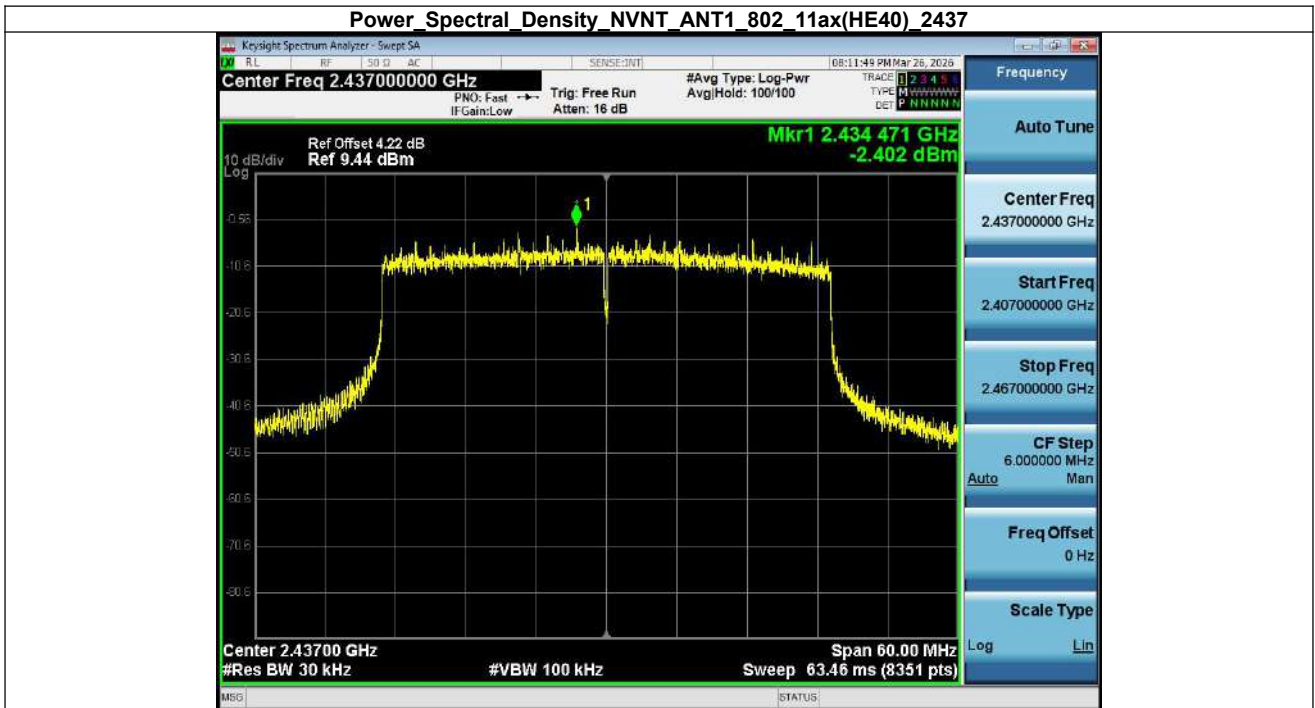
Power Spectral Density NVNT ANT1 802_11n(HT40)_2452



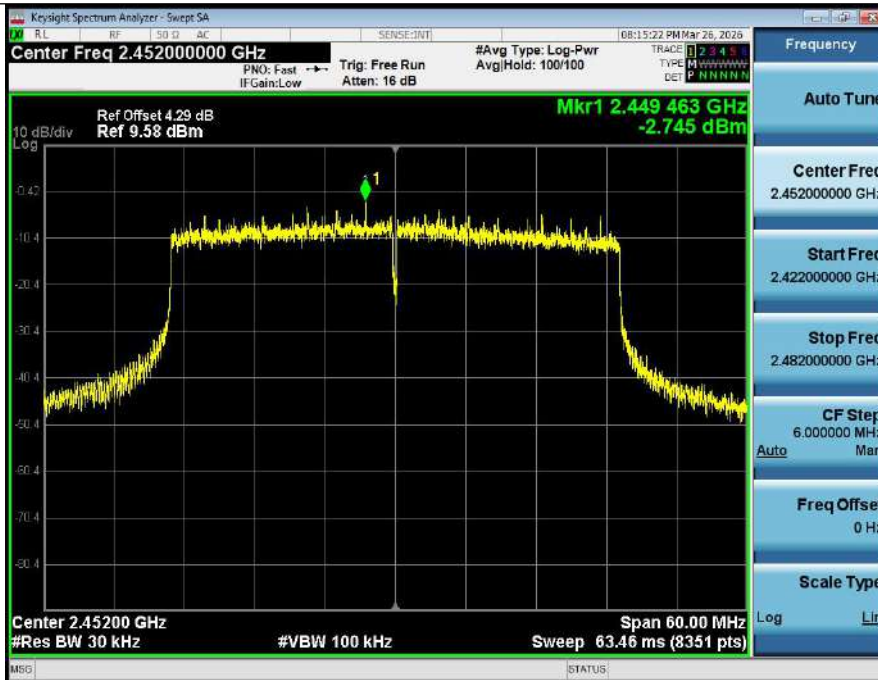
Power Spectral Density NVNT ANT1 802_11ax(HE40)_2422



Power Spectral Density_NVNT_ANT1_802_11ax(HE40)_2437



Power Spectral Density_NVNT_ANT1_802_11ax(HE40)_2452



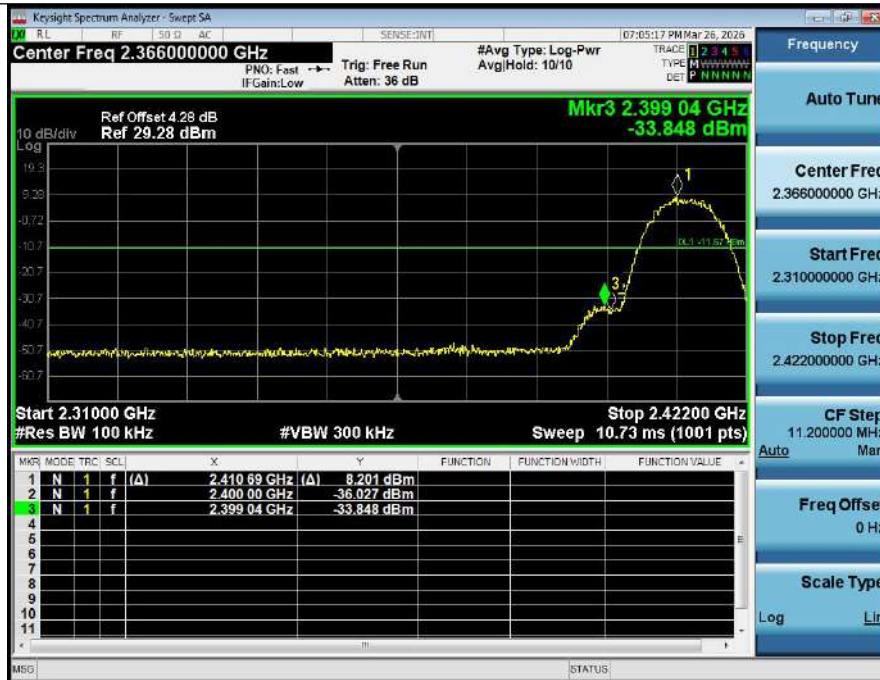
6. Bandedge

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	2399.040	8.332	-33.848	-11.668	Pass
NVNT	ANT1	802.11b	2462.00	2496.544	7.811	-48.371	-12.189	Pass
NVNT	ANT1	802.11g	2412.00	2398.928	3.784	-27.708	-16.216	Pass
NVNT	ANT1	802.11g	2462.00	2484.208	5.891	-35.311	-14.109	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2399.600	7.198	-14.663	-12.802	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2483.536	4.949	-33.983	-15.051	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	2399.824	6.949	-20.466	-13.051	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	2483.632	5.473	-32.222	-14.527	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	2399.496	0.426	-32.486	-19.574	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	2487.624	2.159	-35.346	-17.841	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	2399.496	-0.859	-31.374	-20.859	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	2484.972	1.281	-38.780	-18.719	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



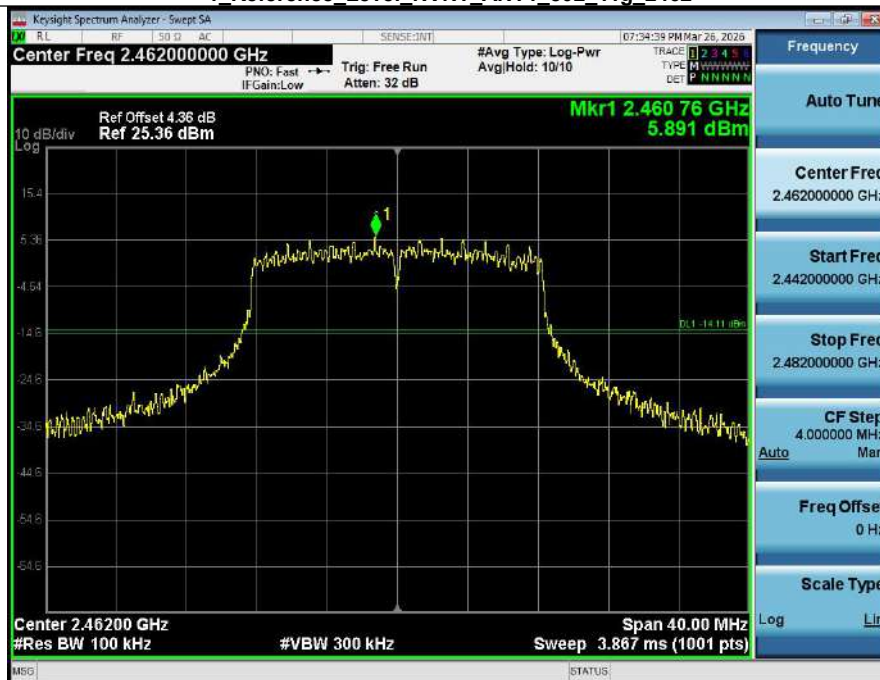
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2 Bandedge_NVNT_ANT1_802_11g_2412



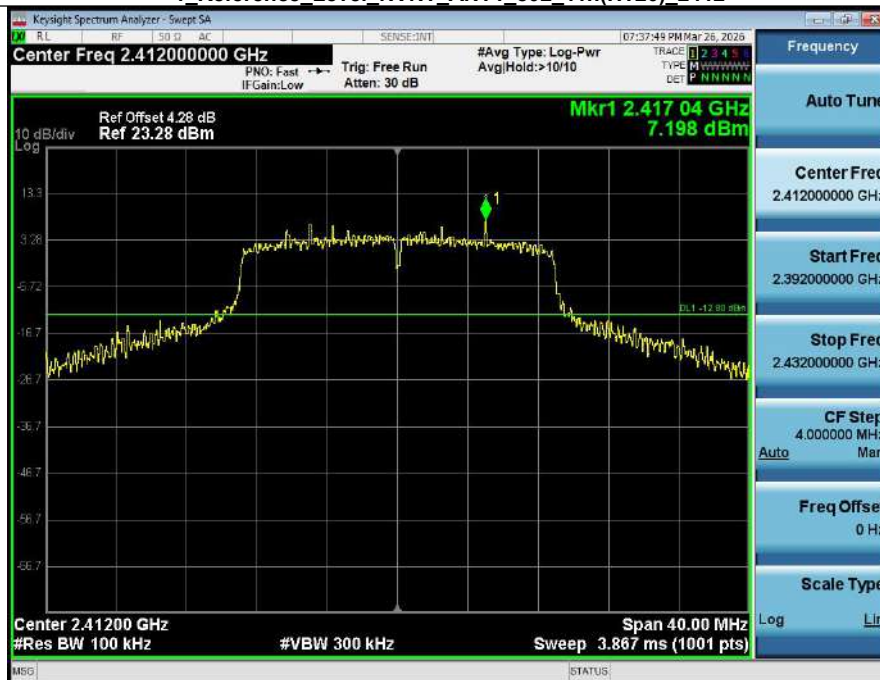
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2_Bandedge_NVNT_ANT1_802_11g_2462



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



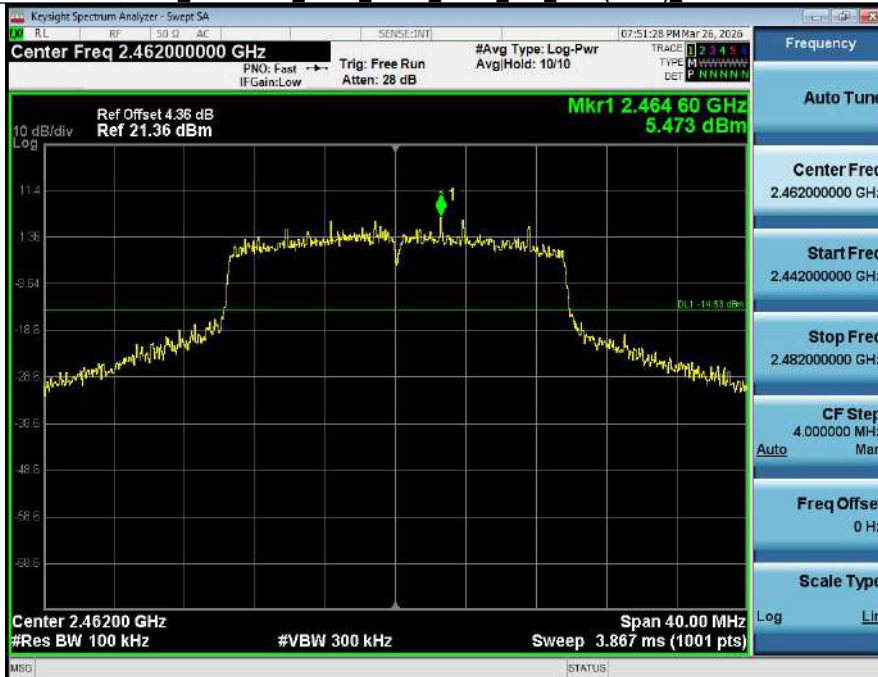
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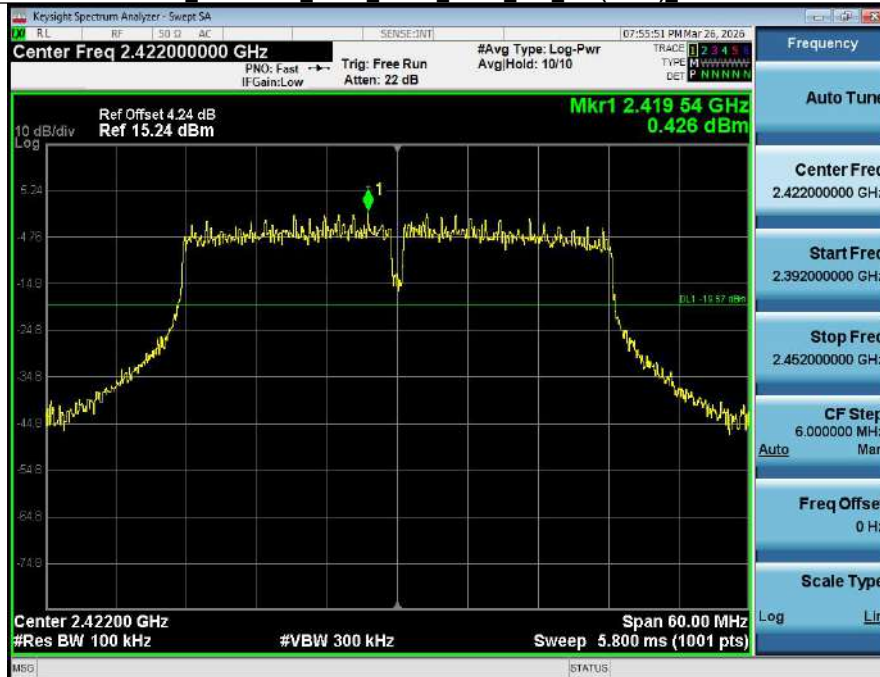
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2 Bandedge NVNT ANT1_802_11ax(HE20)_2462



1 Reference Level NVNT_ANT1_802_11n(HT40)_2422



2 Bandedge NVNT_ANT1_802_11n(HT40)_2422



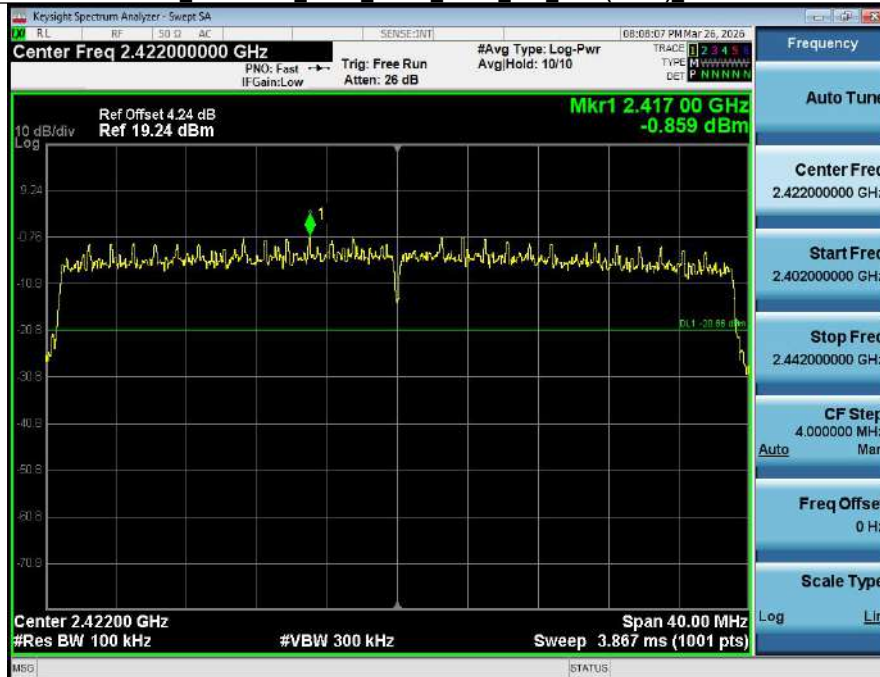
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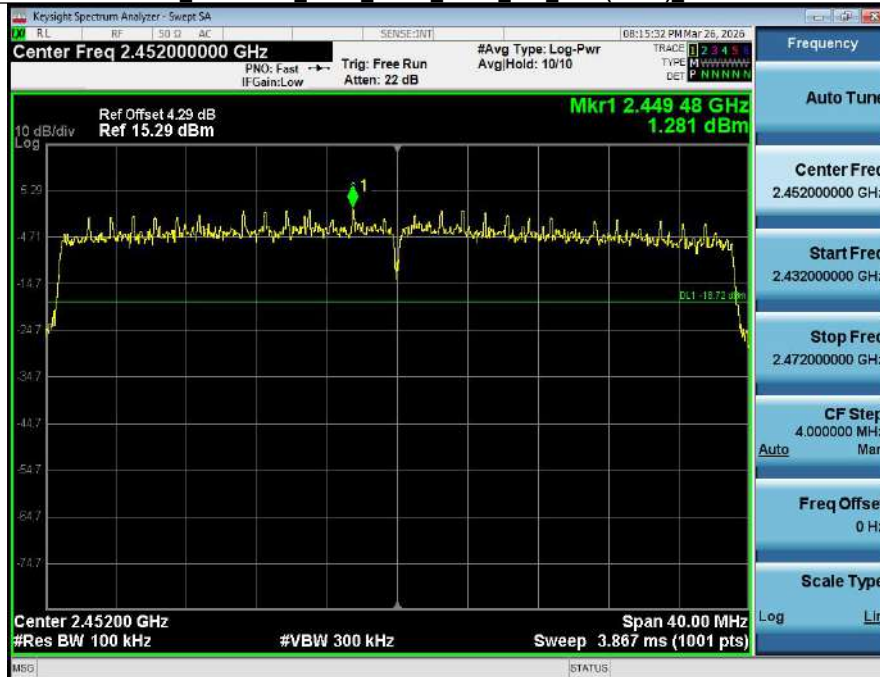
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2 Bandedge NVNT ANT1_802_11ax(HE40)_2422



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	24937.575	8.332	-34.242	-11.668	Pass
NVNT	ANT1	802.11b	2437.00	24263.385	9.071	-41.531	-10.929	Pass
NVNT	ANT1	802.11b	2462.00	24243.409	7.811	-37.145	-12.189	Pass
NVNT	ANT1	802.11g	2412.00	25000.000	3.784	-41.675	-16.216	Pass
NVNT	ANT1	802.11g	2437.00	24393.229	5.516	-45.557	-14.484	Pass
NVNT	ANT1	802.11g	2462.00	24847.683	5.891	-40.040	-14.109	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	25000.000	7.198	-42.067	-12.802	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	24977.527	5.879	-36.874	-14.121	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	24965.042	4.949	-39.527	-15.051	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	24985.018	6.949	-39.202	-13.051	Pass
NVNT	ANT1	802.11ax(HE20)	2437.00	24970.036	7.067	-39.408	-12.933	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	24453.157	5.473	-42.776	-14.527	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	24985.018	0.426	-49.185	-19.574	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	2502.030	2.332	-44.076	-17.668	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	24935.078	2.159	-43.578	-17.841	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	24967.539	-0.859	-44.091	-20.859	Pass
NVNT	ANT1	802.11ax(HE40)	2437.00	24992.509	1.490	-43.768	-18.510	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	4904.144	1.281	-46.505	-18.719	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



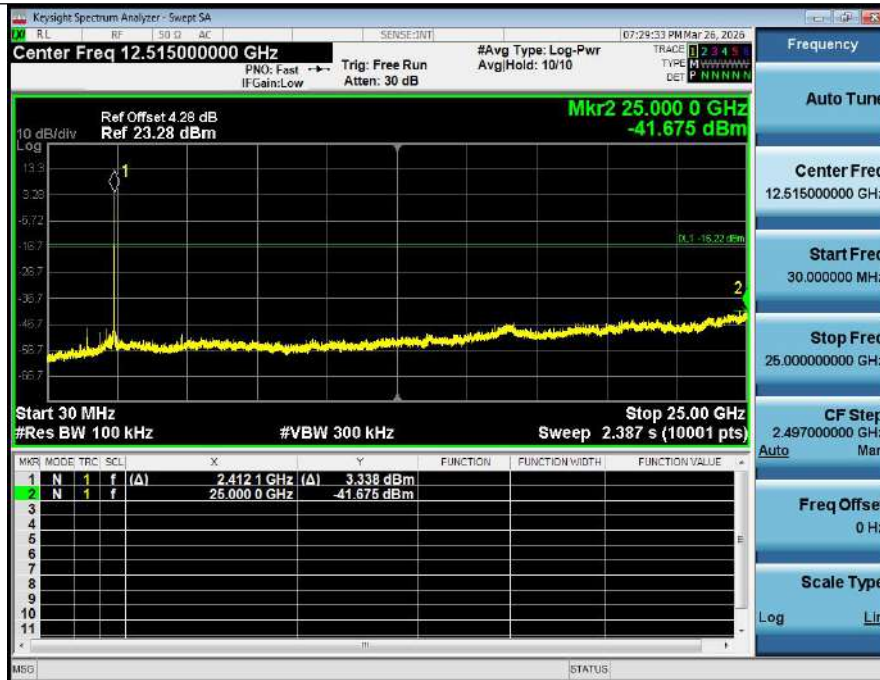
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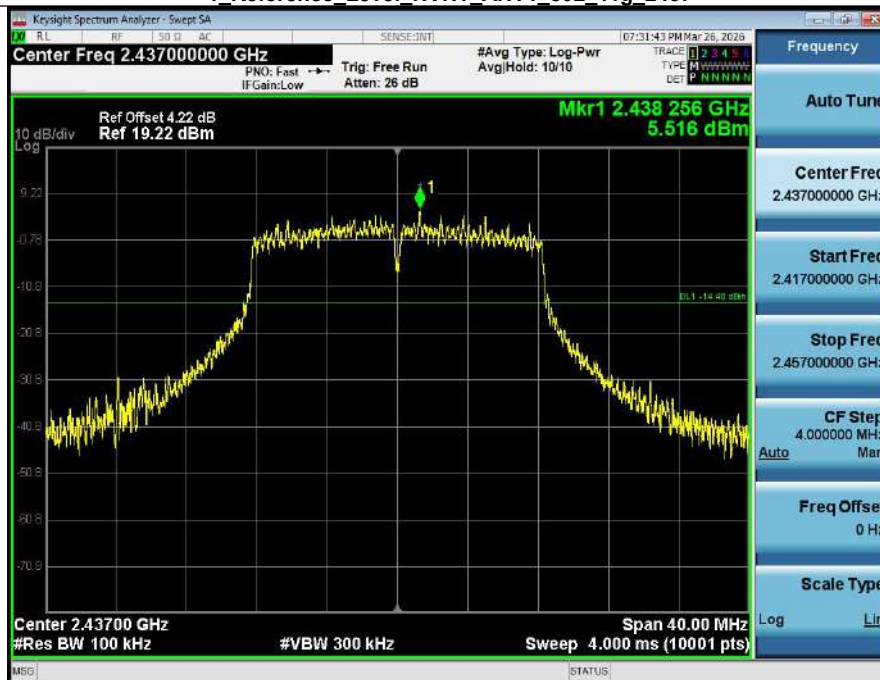
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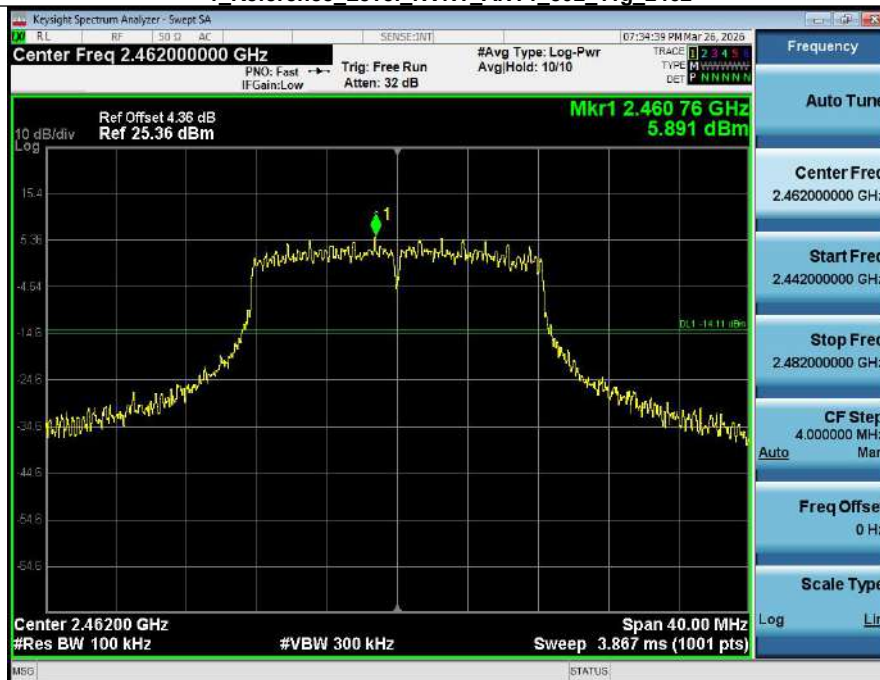
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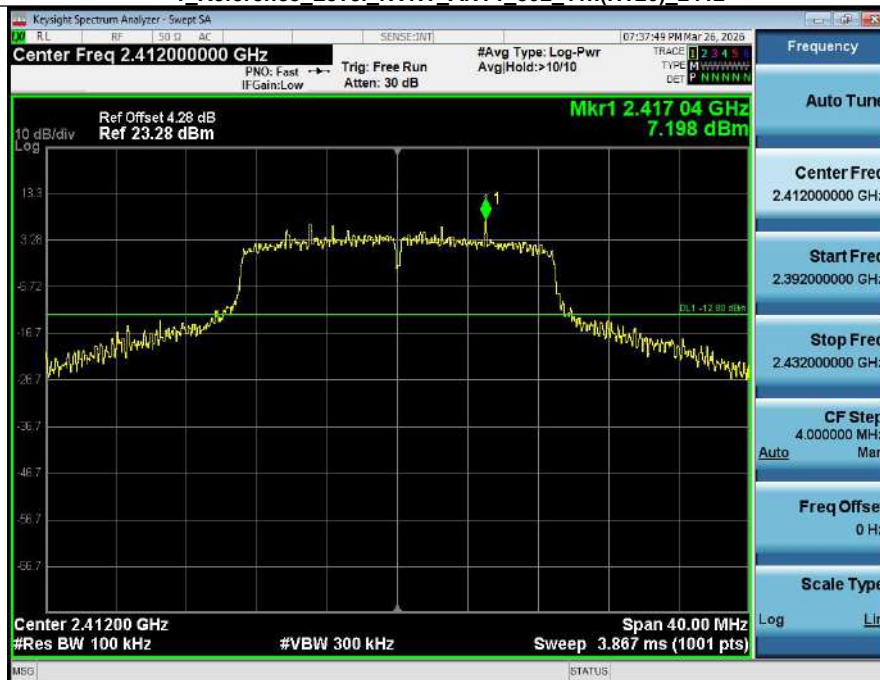
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2 Spurious Emission NVNT_ANT1_802_11g_2462



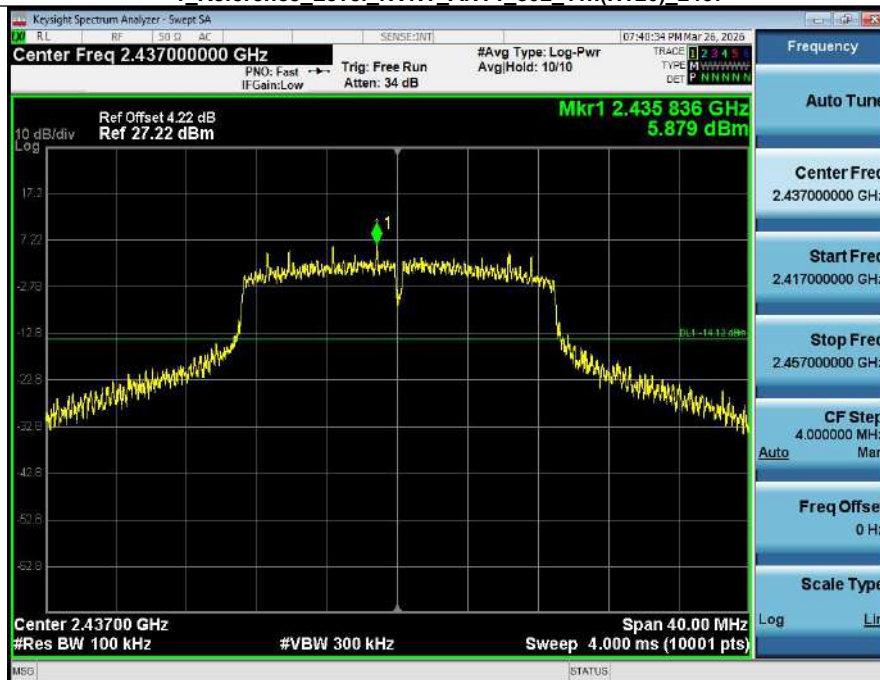
1 Reference Level NVNT ANT1 802 11n(HT20) 2412



2 Spurious Emission NVNT ANT1 802 11n(HT20) 2412



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



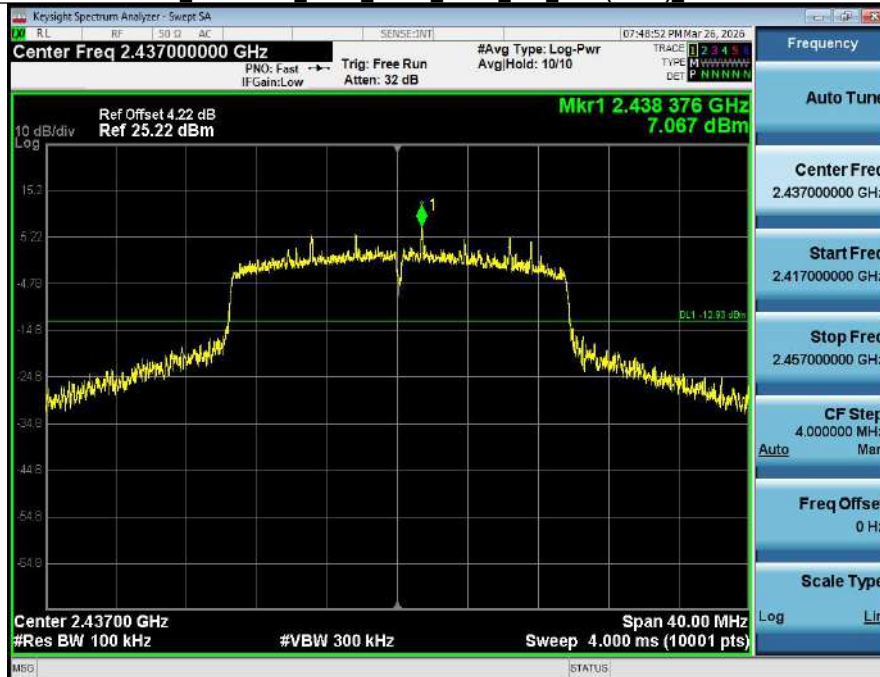
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2_Spurious_Emission_NVNT_ANT1_802_11ax(HE20)_2412



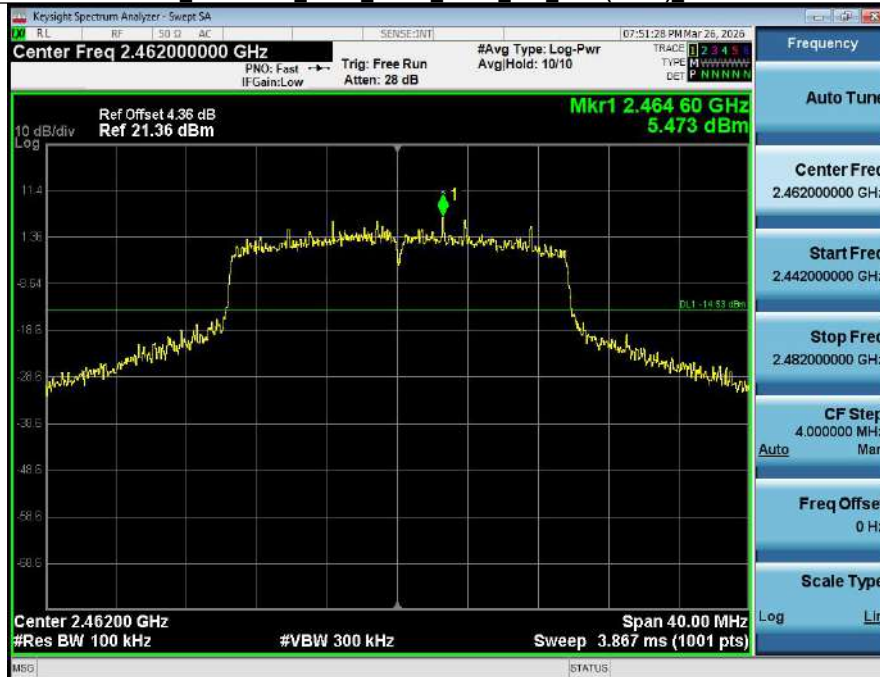
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2 Spurious Emission NVNT ANT1_802_11ax(HE20)_2437



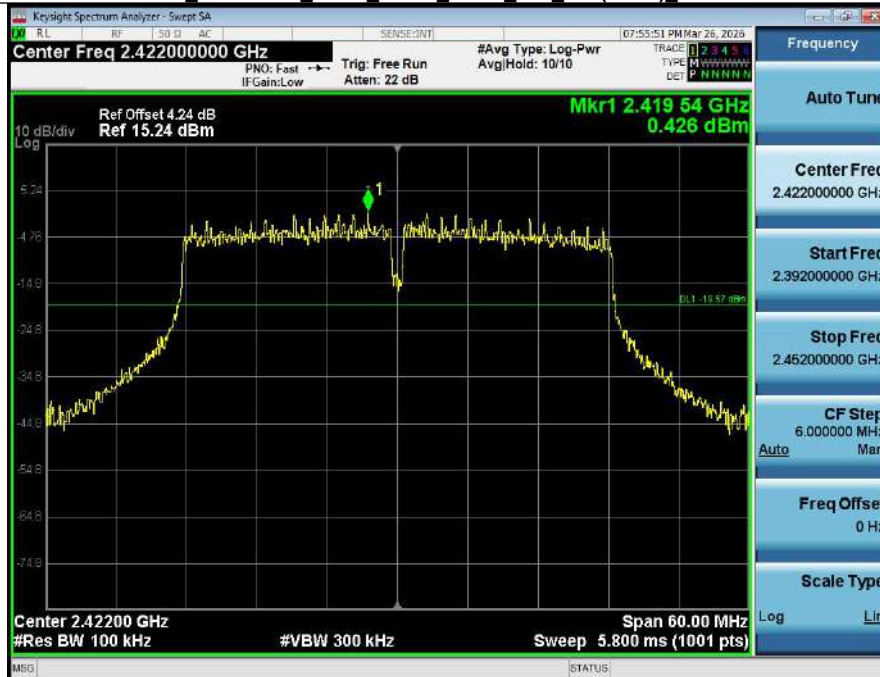
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2_Spurious_Emission_NVNT_ANT1_802_11ax(HE20)_2462



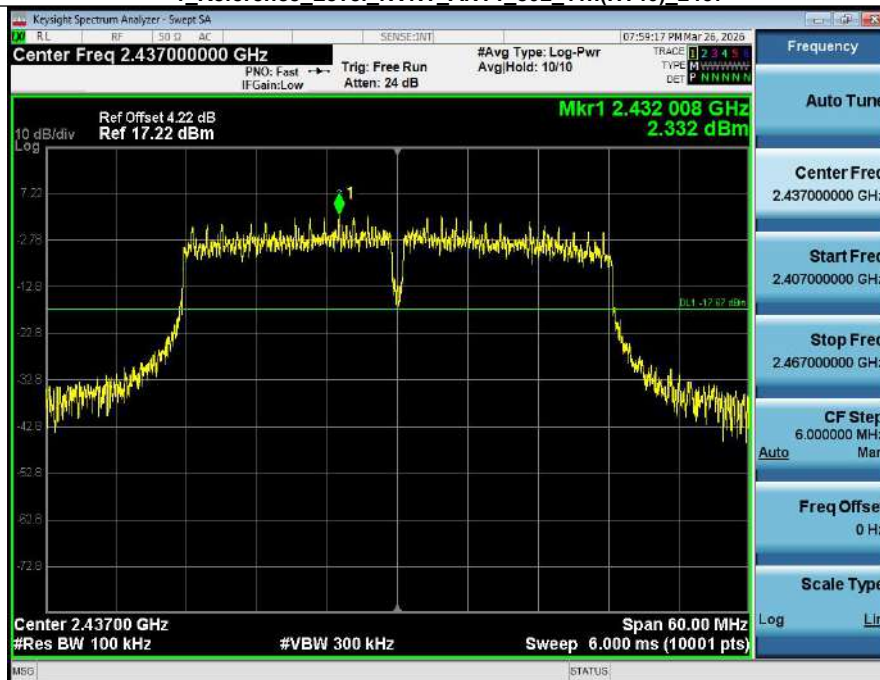
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2 Spurious Emission NVNT_ANT1_802_11n(HT40)_2422



1 Reference Level NVNT_ANT1_802_11n(HT40)_2437



2 Spurious Emission NVNT_ANT1_802_11n(HT40)_2437



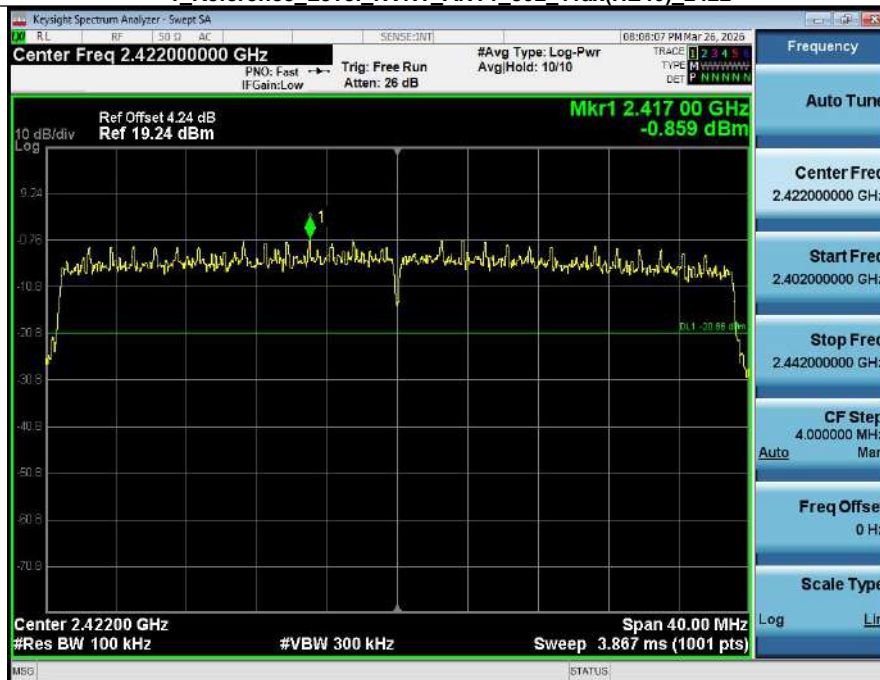
1 Reference Level NVNT_ANT1_802_11n(HT40)_2452



2 Spurious Emission NVNT_ANT1_802_11n(HT40)_2452



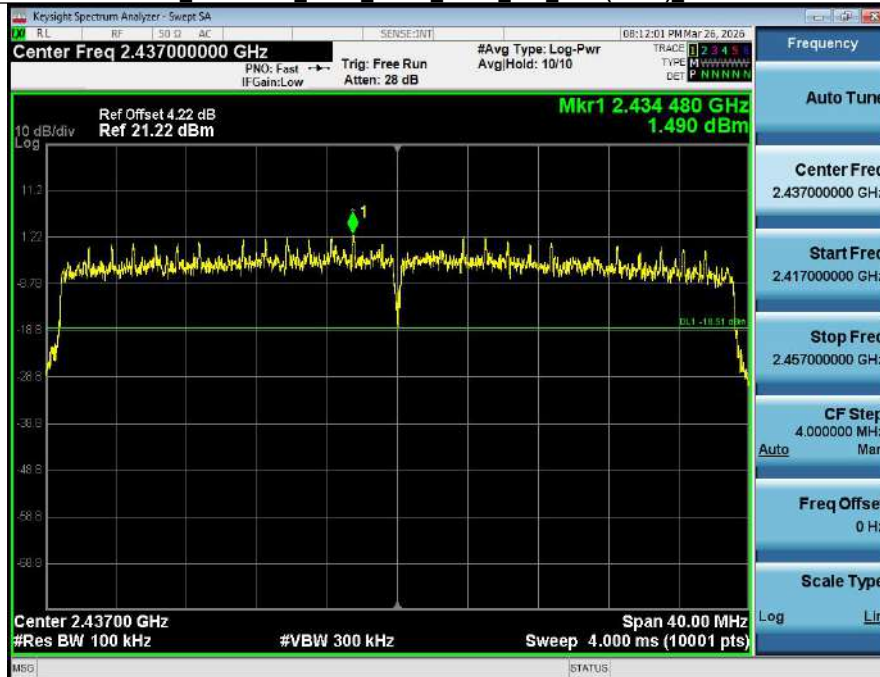
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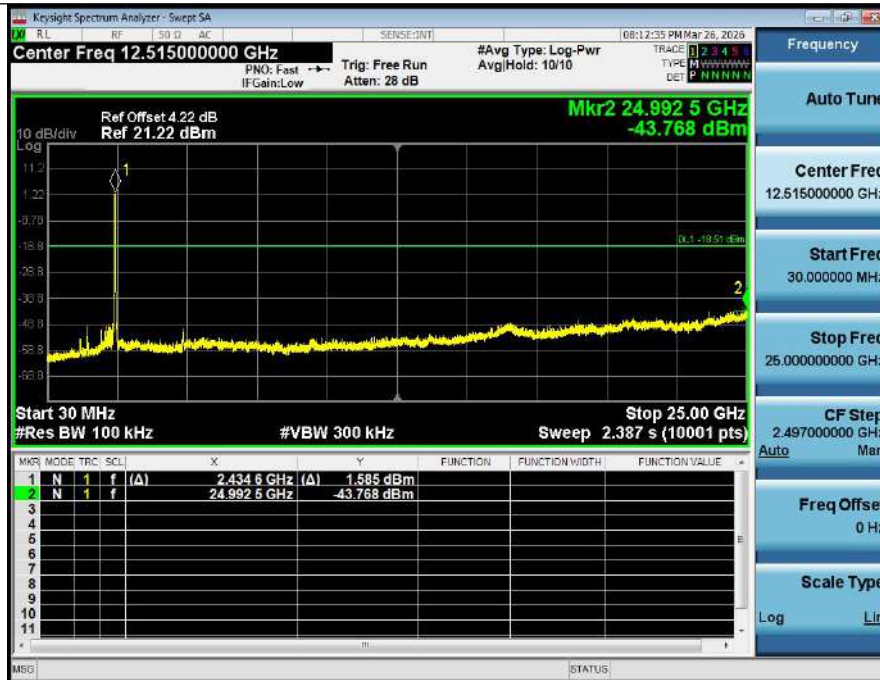
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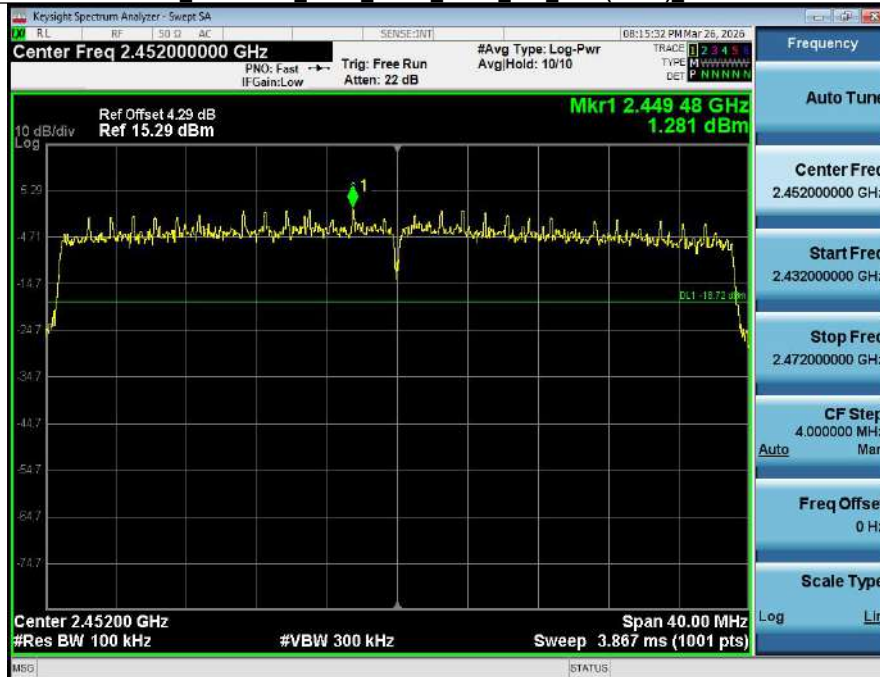
1_Reference_Level_NVNT_ANT1_802_11ax(HE40)_2437



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

