

Appendix

2.4G_WIFI Test Data for BTEK240507003AE



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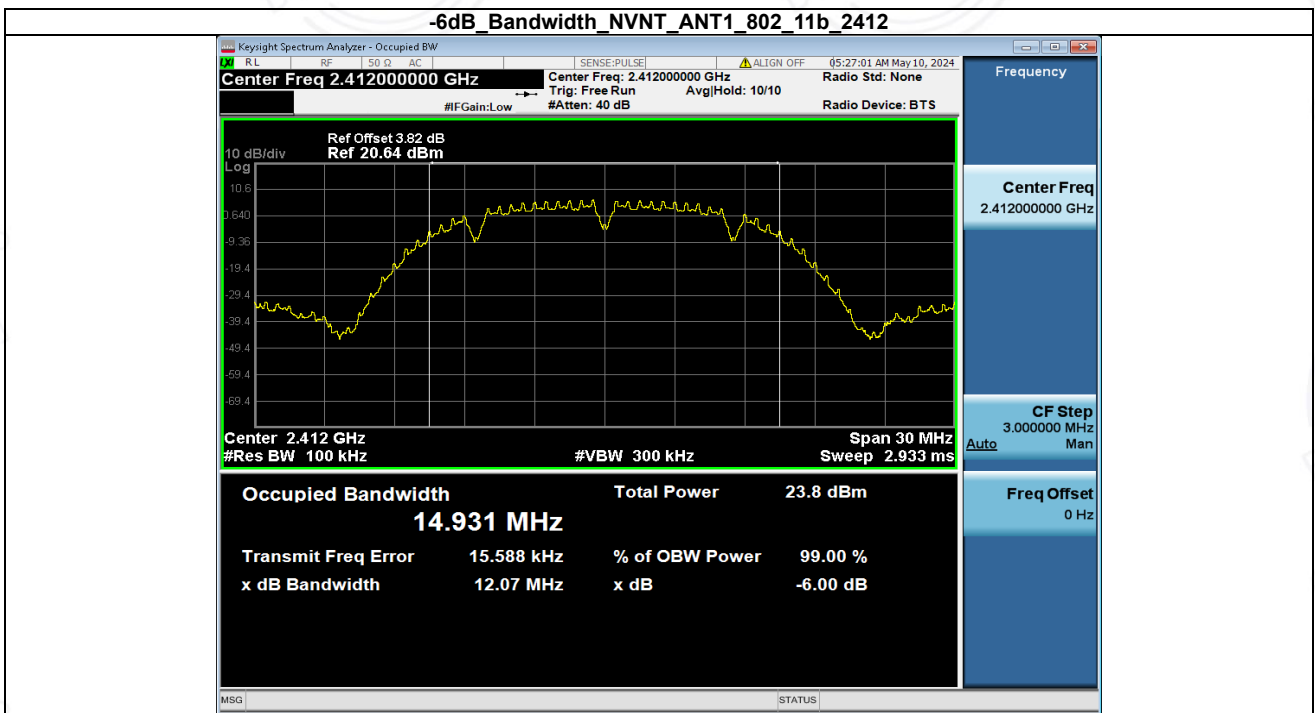
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FCC_2.4G_WIFI (Part15.247) Test Data

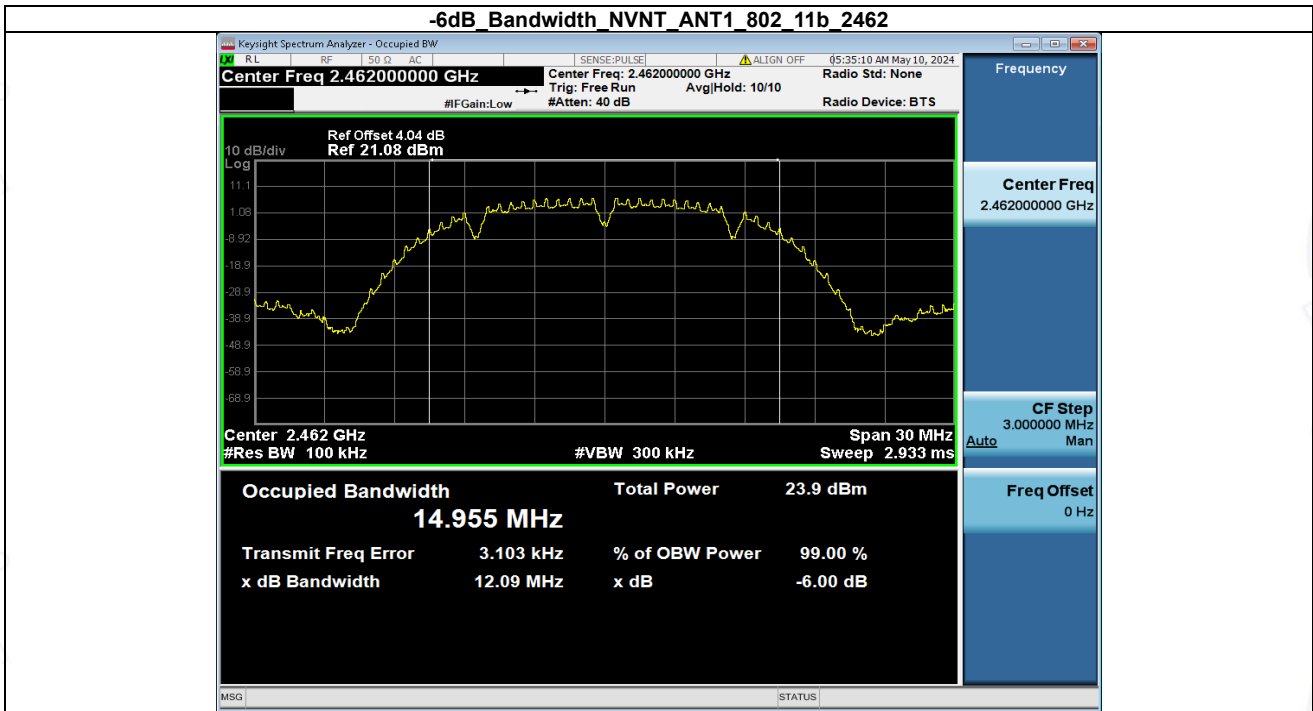
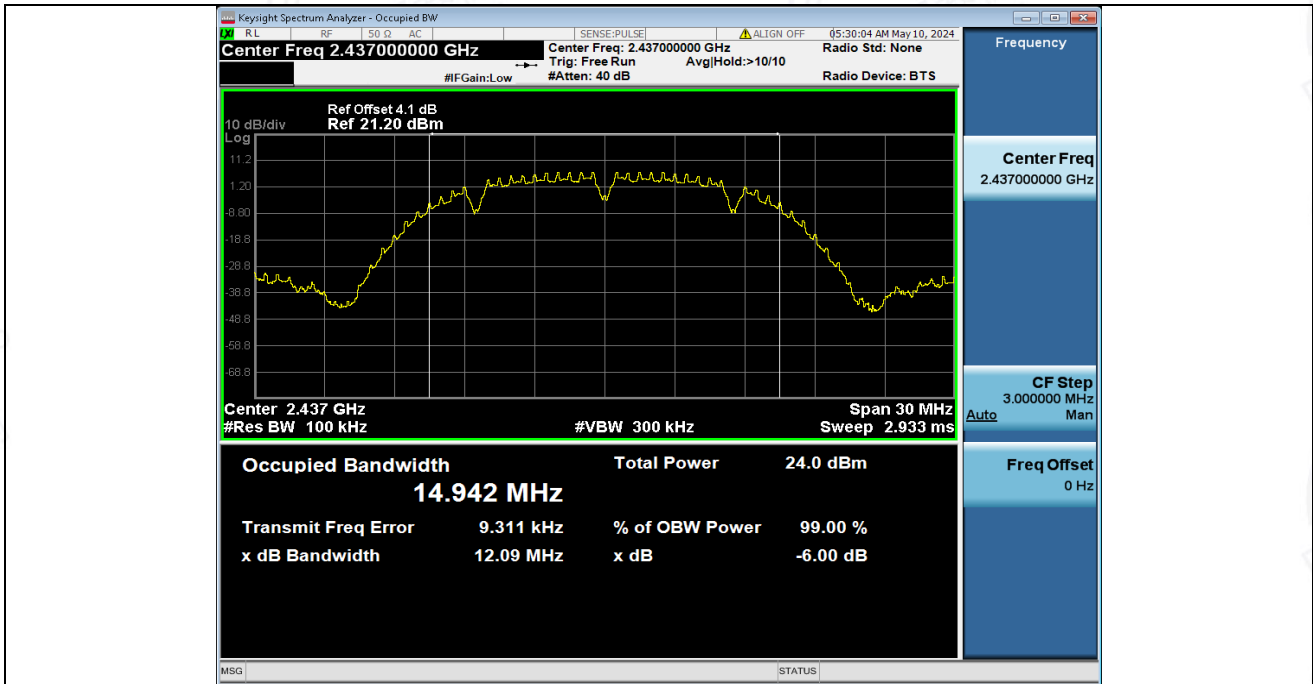
1. -6dB Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	12.07	500	Pass
NVNT	ANT1	802.11b	2437.00	12.09	500	Pass
NVNT	ANT1	802.11b	2462.00	12.09	500	Pass
NVNT	ANT1	802.11g	2412.00	15.15	500	Pass
NVNT	ANT1	802.11g	2437.00	15.13	500	Pass
NVNT	ANT1	802.11g	2462.00	15.14	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	11.33	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	12.59	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	10.12	500	Pass



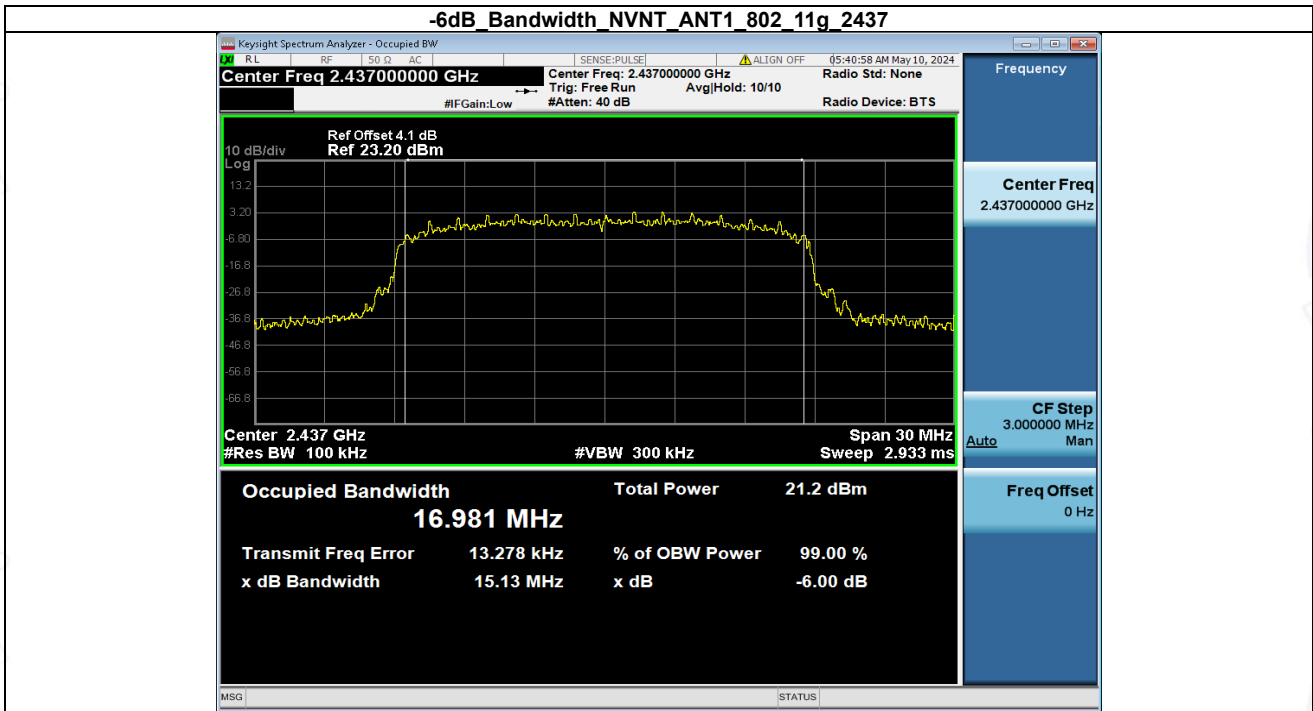
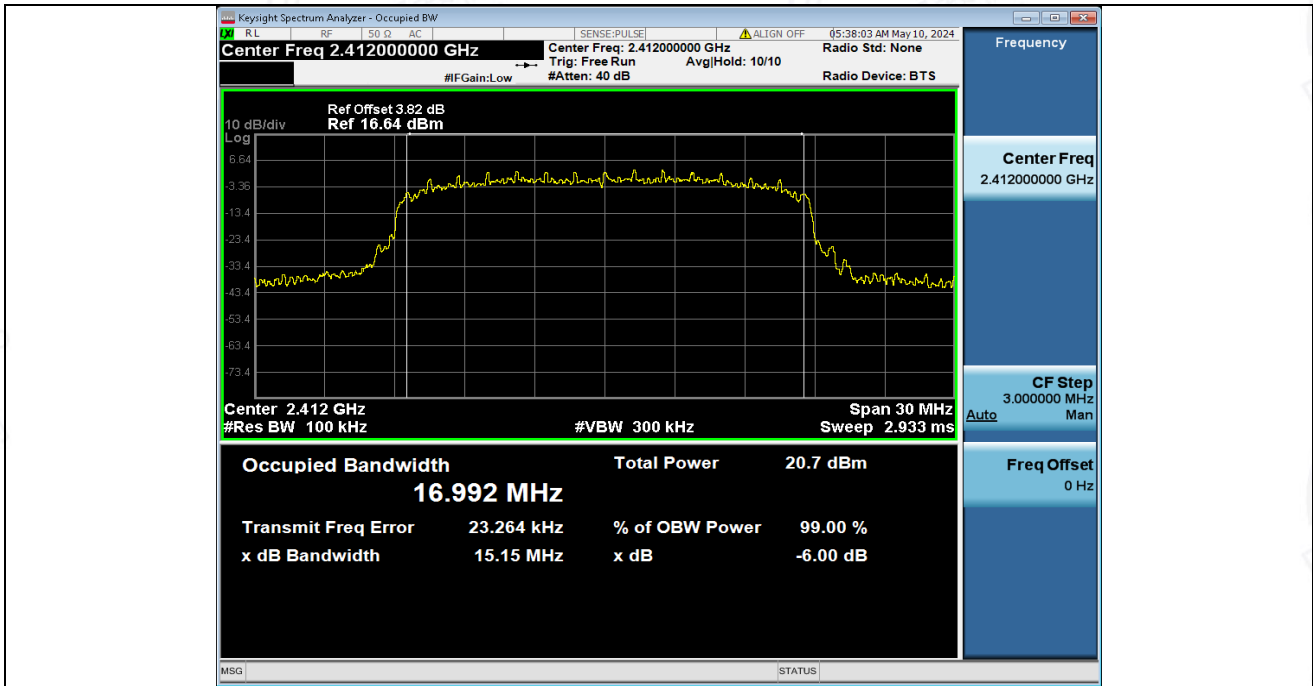
-6dB Bandwidth_NVNT_ANT1_802_11b_2437





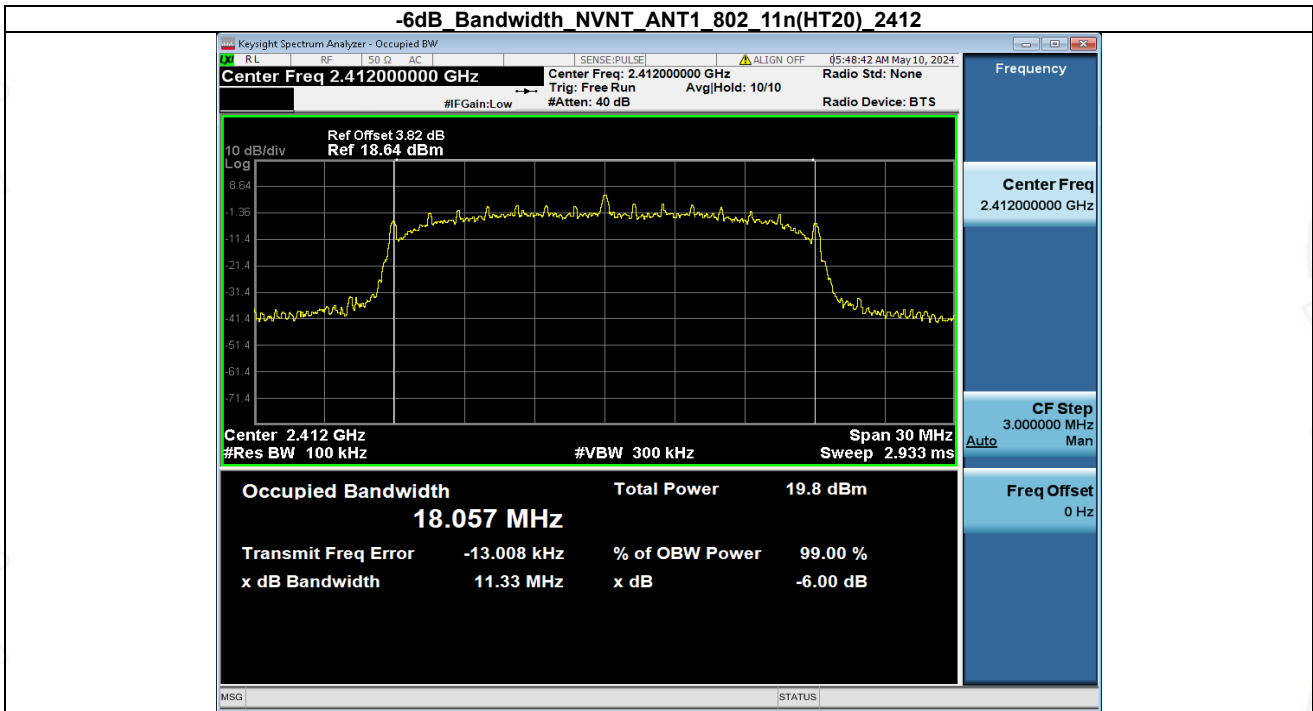
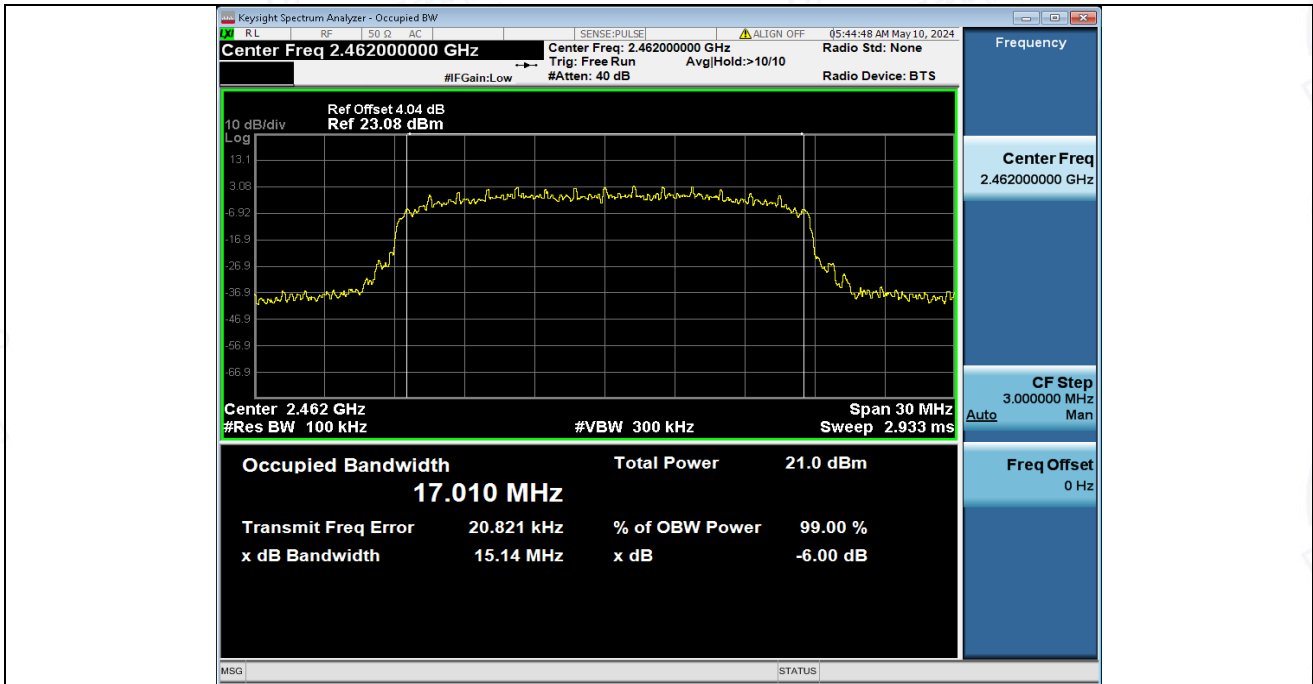
-6dB Bandwidth_NVNT_ANT1_802_11g_2412





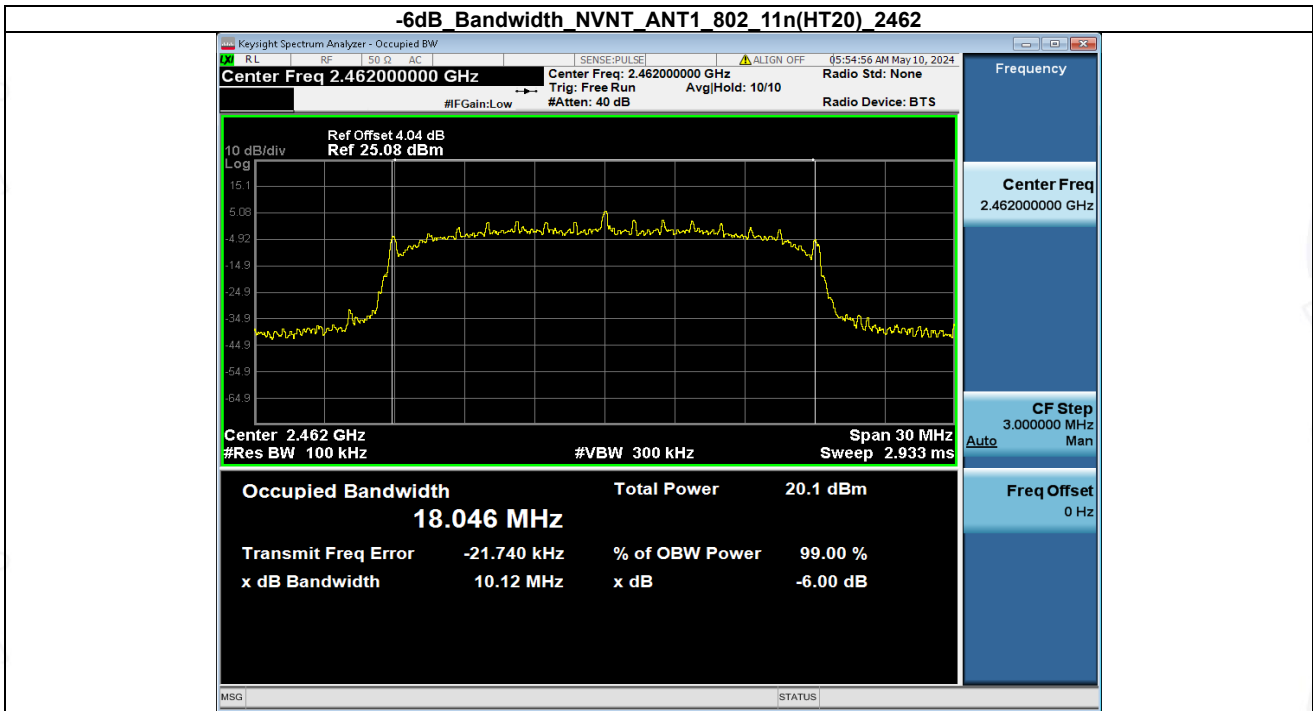
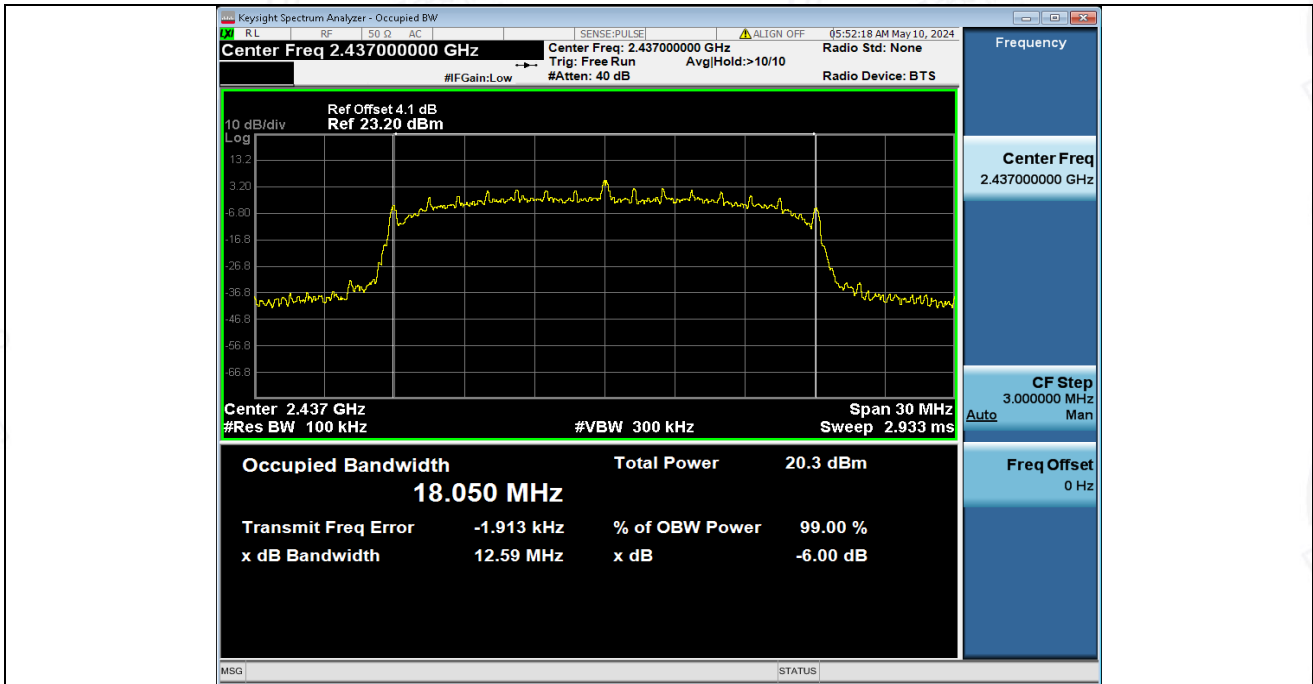
-6dB Bandwidth_NVNT_ANT1_802_11g_2462





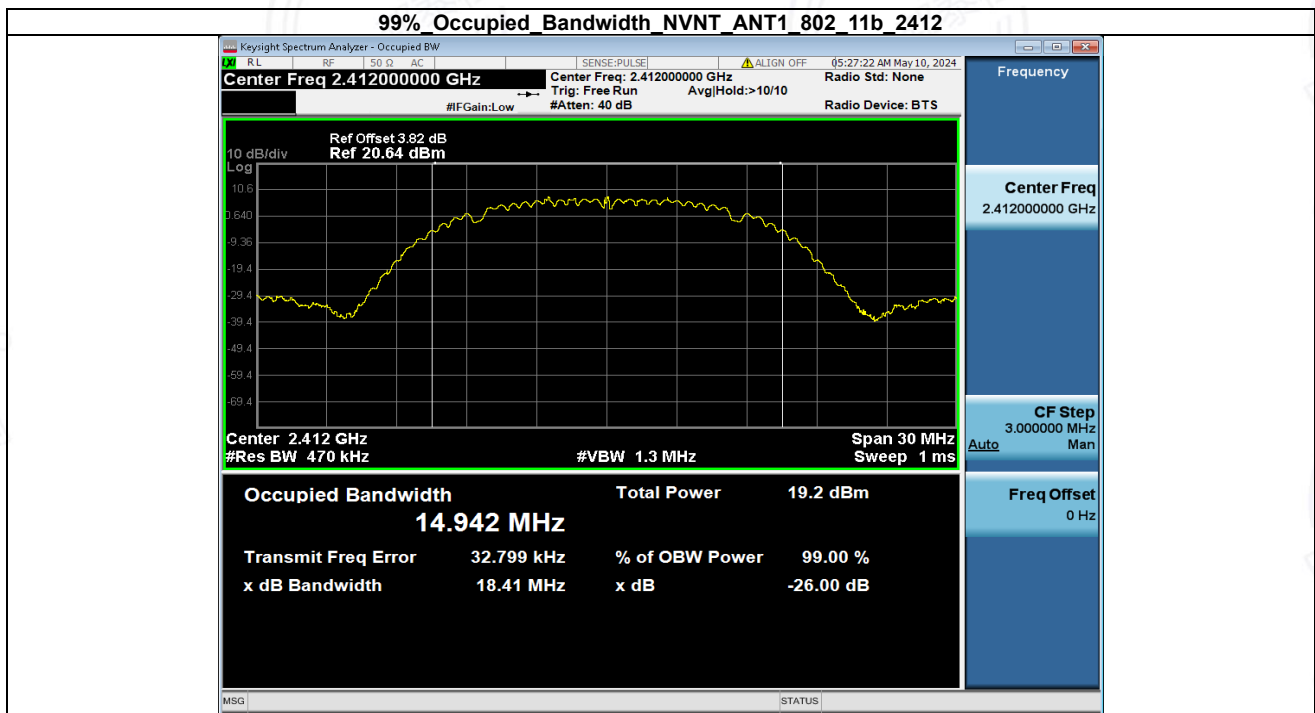
-6dB Bandwidth NVNT_ANT1_802_11n(HT20)_2437





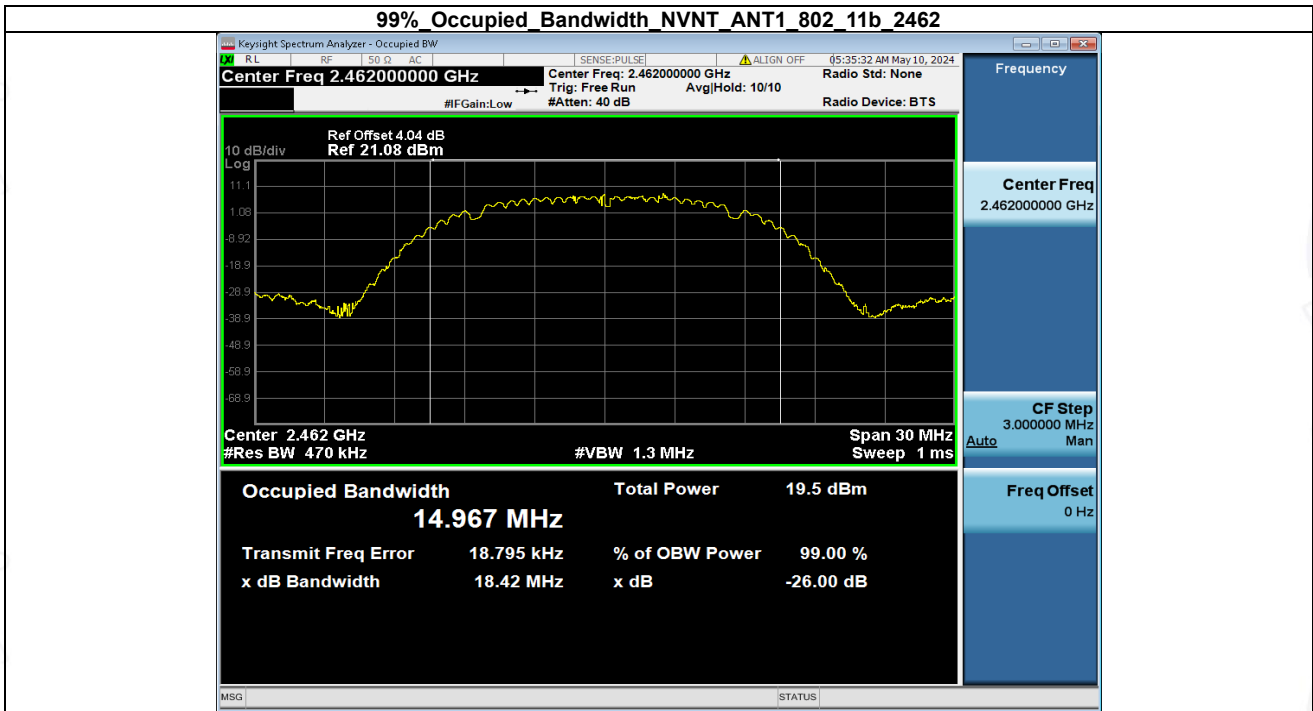
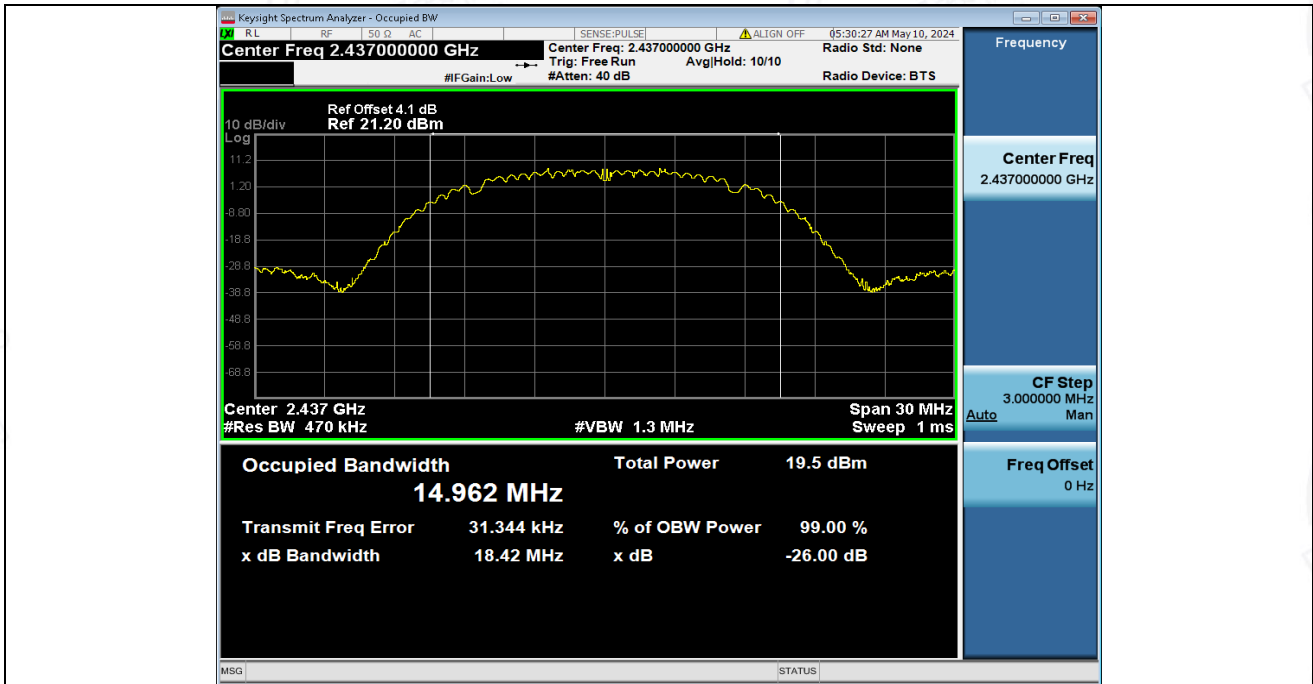
2. 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99% BW (MHz)
NVNT	ANT1	802.11b	2412.00	14.942
NVNT	ANT1	802.11b	2437.00	14.962
NVNT	ANT1	802.11b	2462.00	14.967
NVNT	ANT1	802.11g	2412.00	17.379
NVNT	ANT1	802.11g	2437.00	17.373
NVNT	ANT1	802.11g	2462.00	17.368
NVNT	ANT1	802.11n(HT20)	2412.00	18.220
NVNT	ANT1	802.11n(HT20)	2437.00	18.246
NVNT	ANT1	802.11n(HT20)	2462.00	18.247



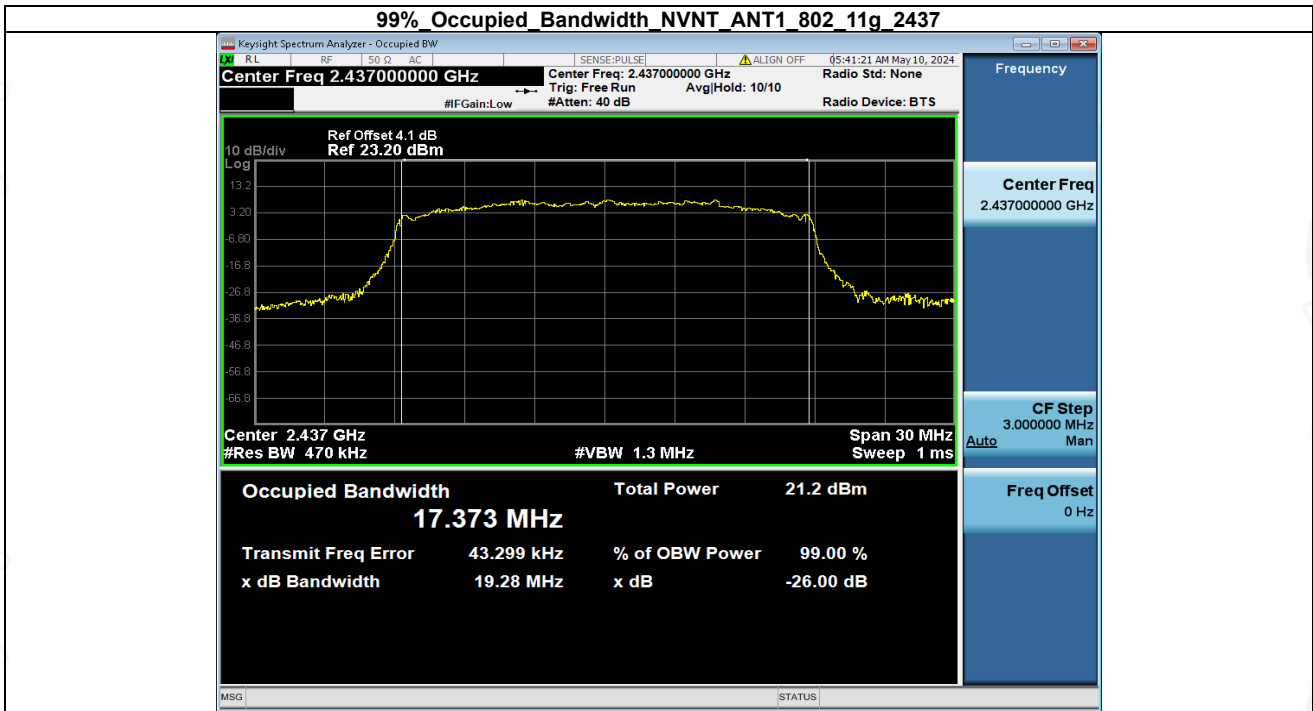
99% Occupied Bandwidth_NVNT_ANT1_802_11b_2437





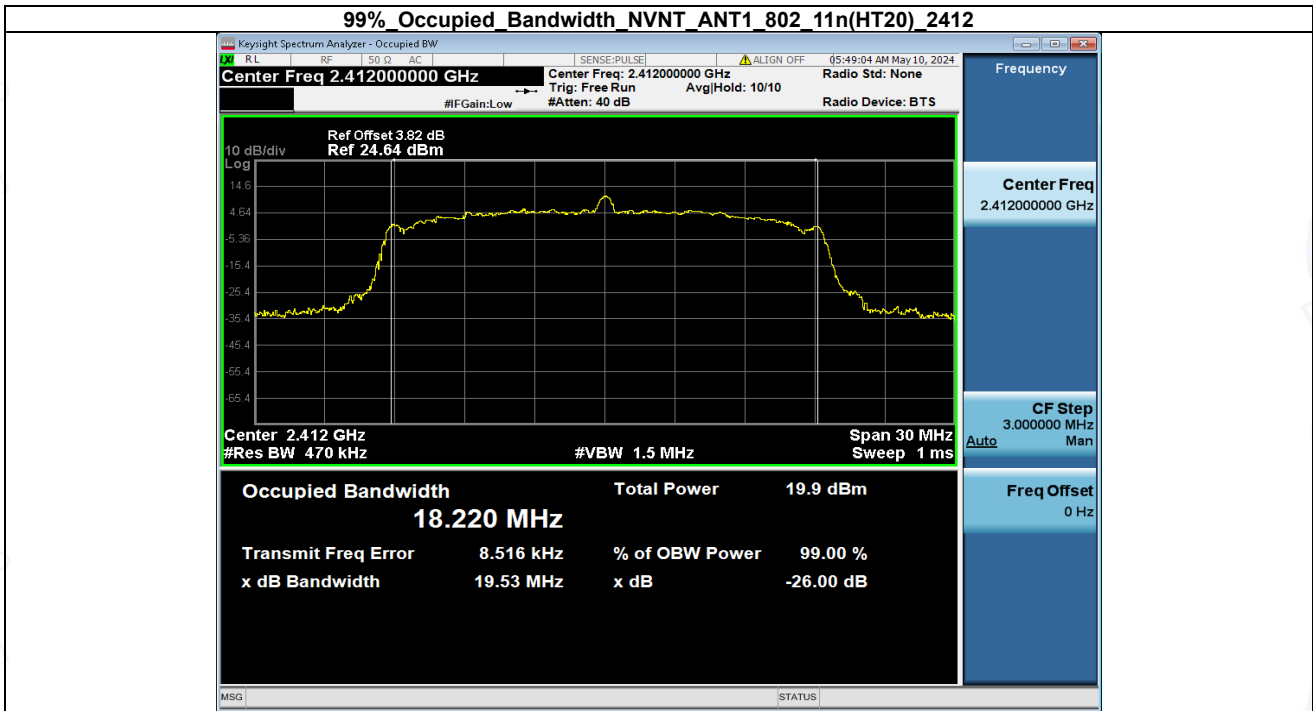
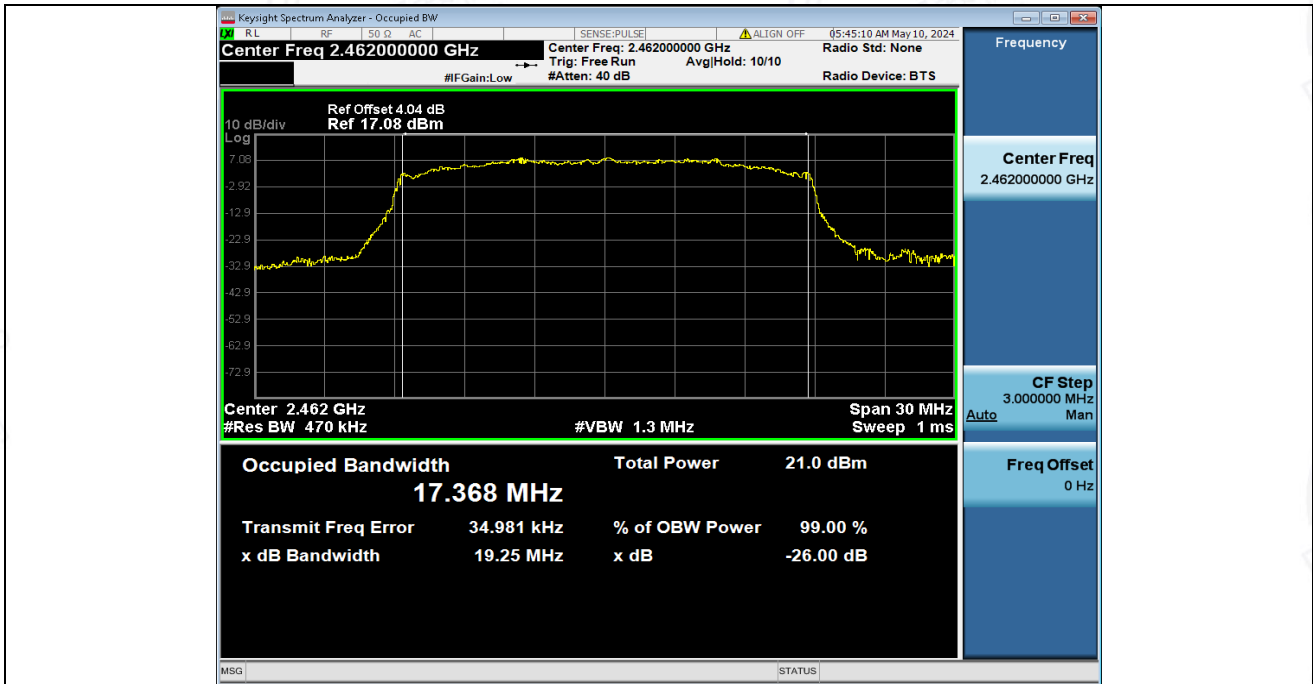
99% Occupied Bandwidth NVNT ANT1_802_11g_2412





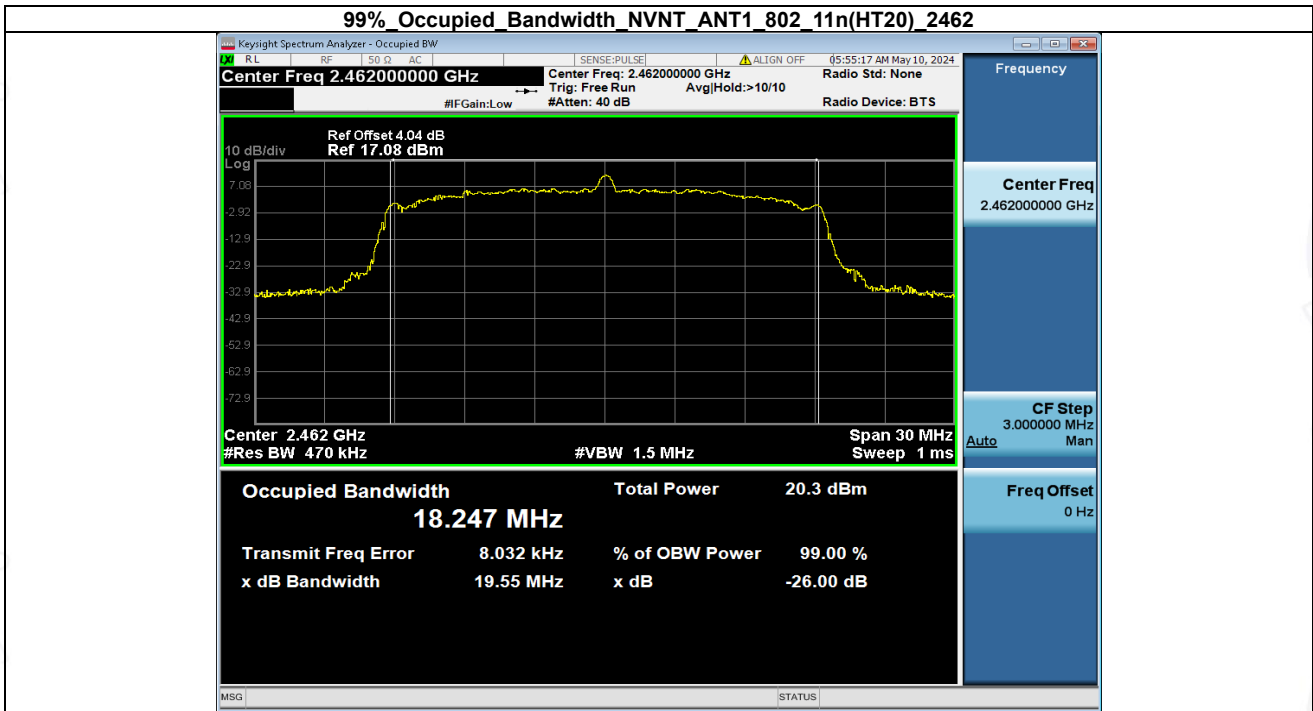
99% Occupied Bandwidth NVNT_ANT1_802_11g_2462





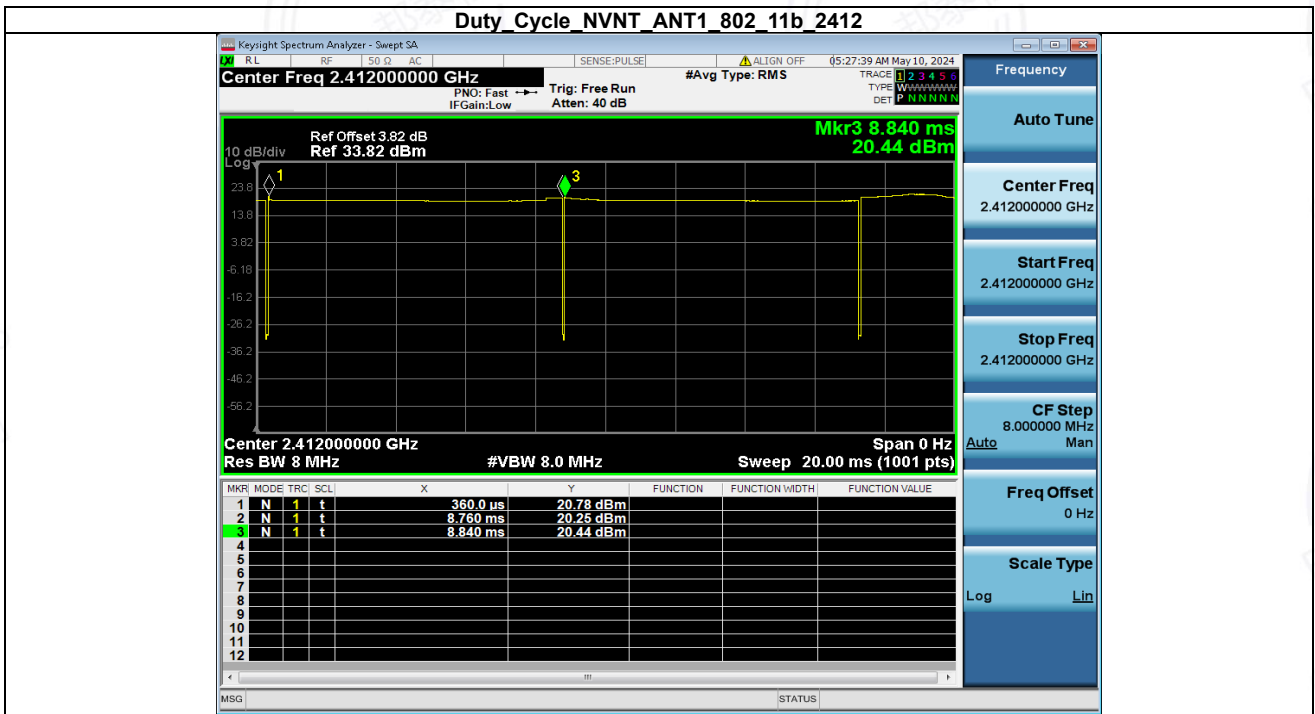
99% Occupied Bandwidth NVNT_ANT1_802_11n(HT20)_2437





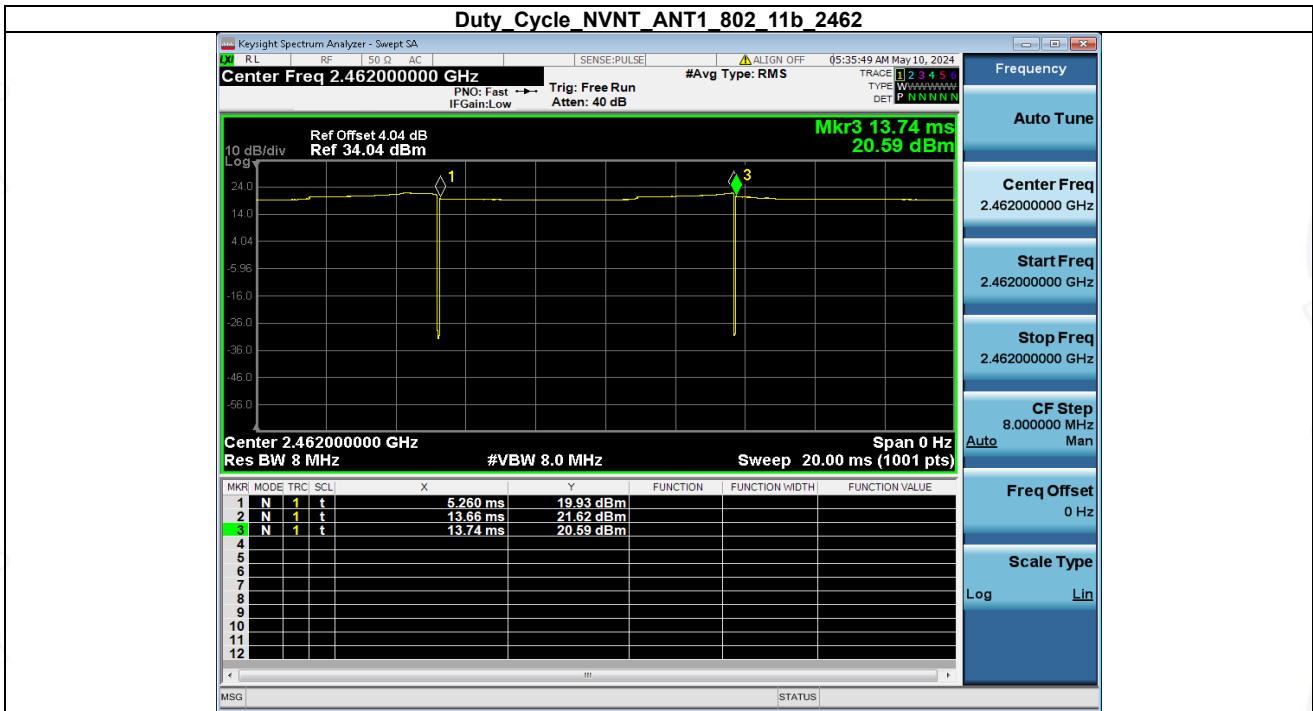
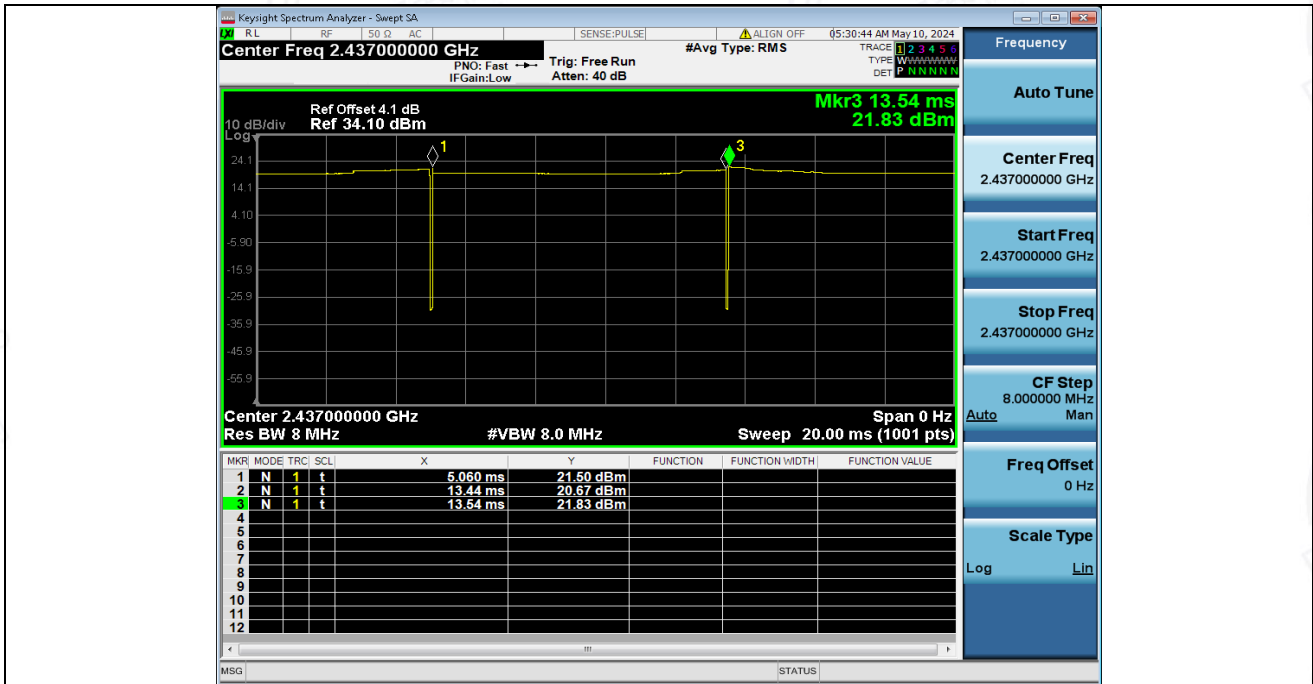
3. Duty Cycle

Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty factor(dB)
NVNT	ANT1	802.11b	2412.00	99.29	0.00
NVNT	ANT1	802.11b	2437.00	99.06	0.00
NVNT	ANT1	802.11b	2462.00	99.29	0.00
NVNT	ANT1	802.11g	2412.00	100	0.00
NVNT	ANT1	802.11g	2437.00	100	0.00
NVNT	ANT1	802.11g	2462.00	100	0.00
NVNT	ANT1	802.11n(HT20)	2412.00	100	0.00
NVNT	ANT1	802.11n(HT20)	2437.00	100	0.00
NVNT	ANT1	802.11n(HT20)	2462.00	100	0.00



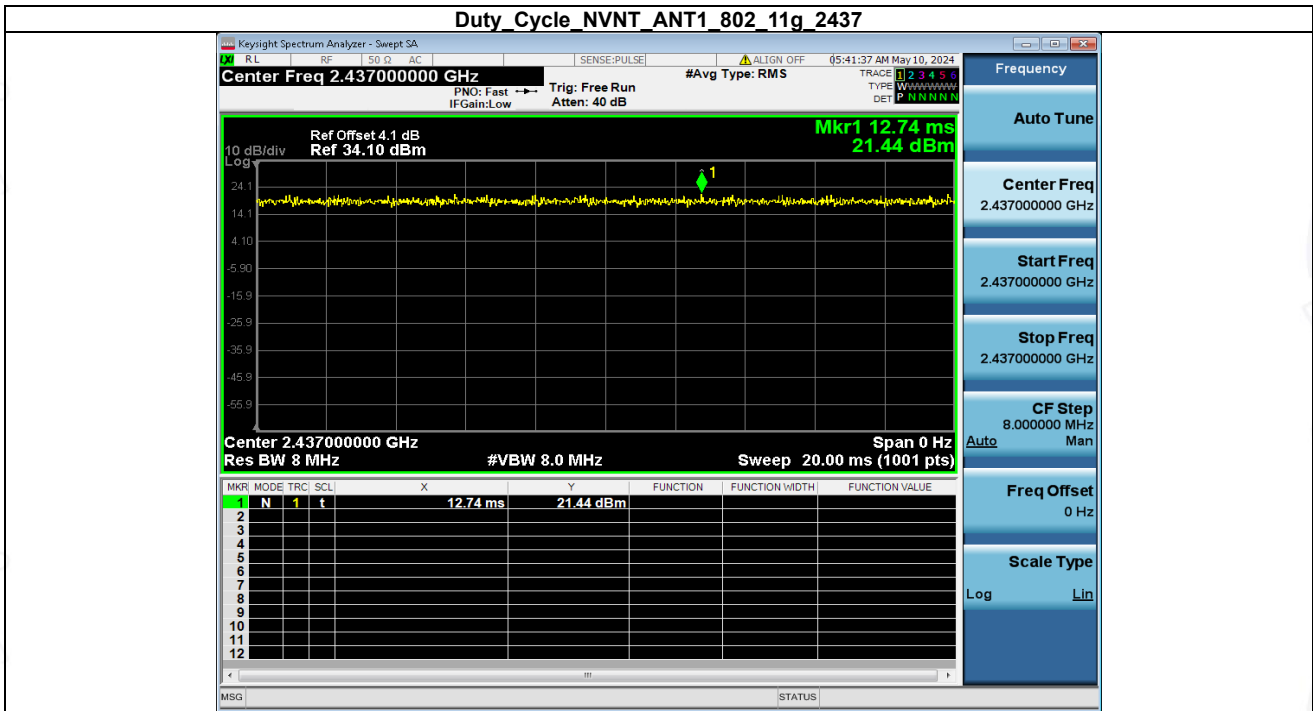
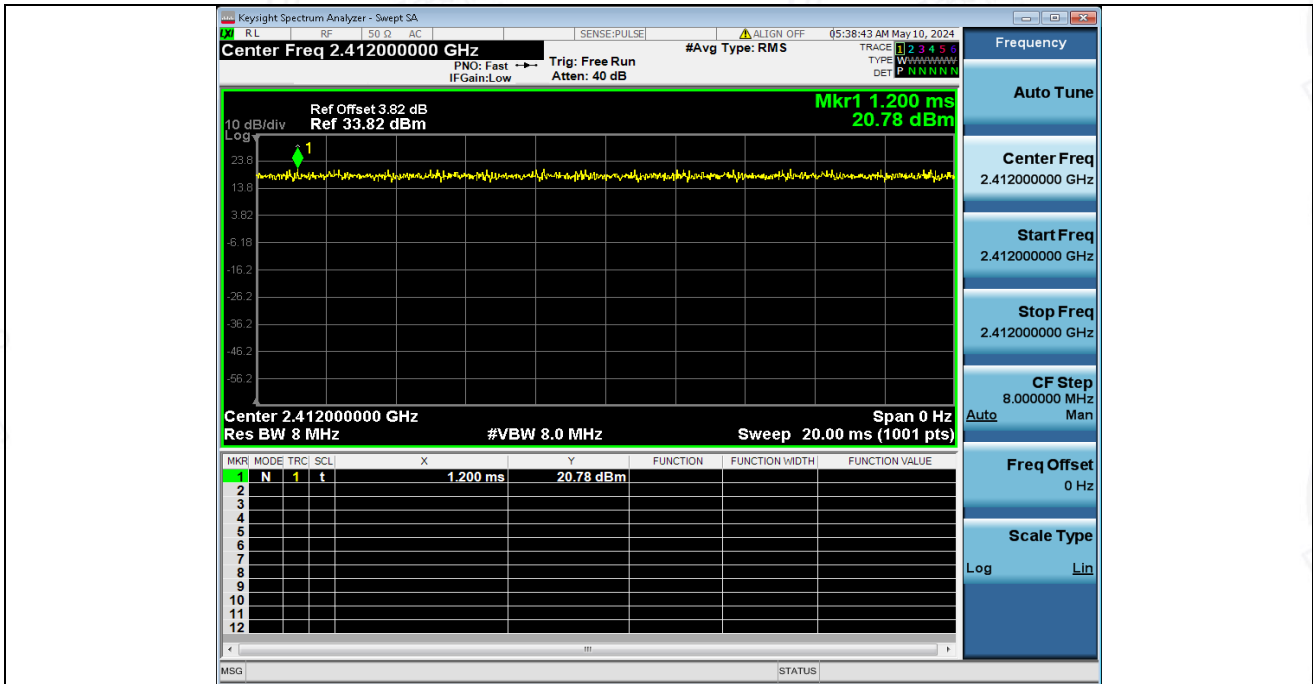
Duty Cycle NVNT ANT1 802_11b 2437





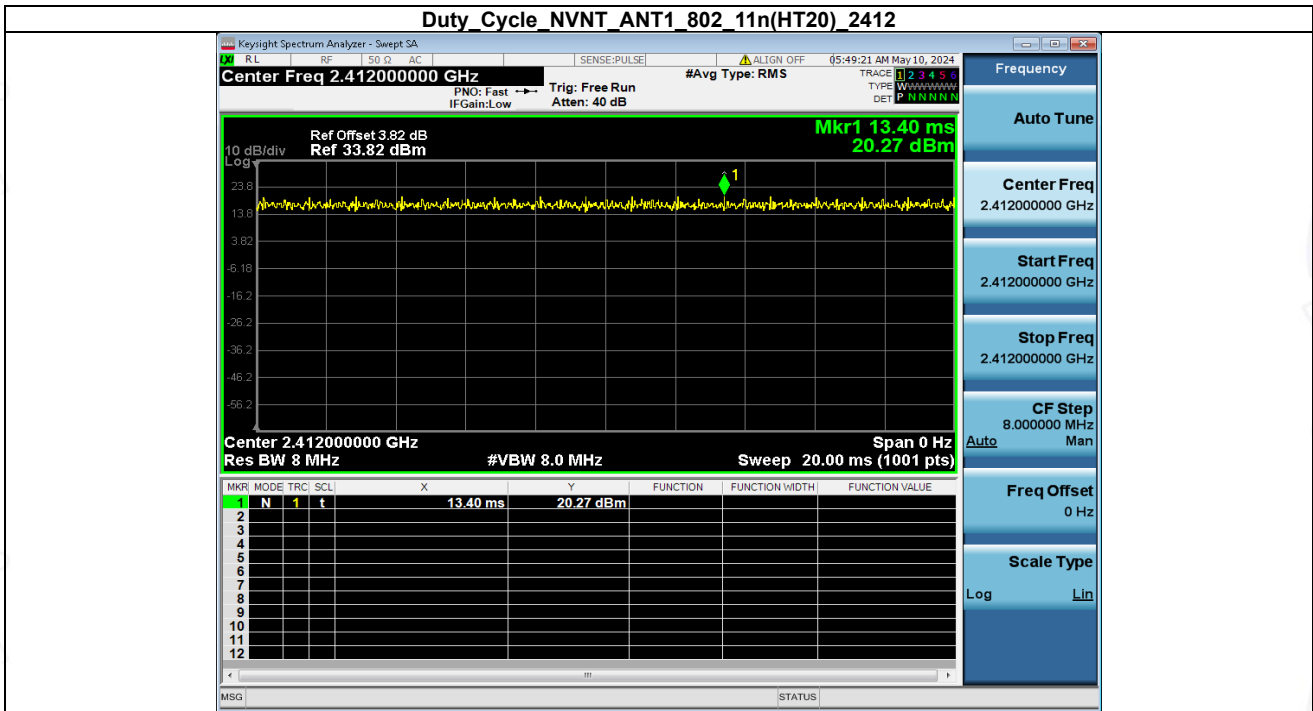
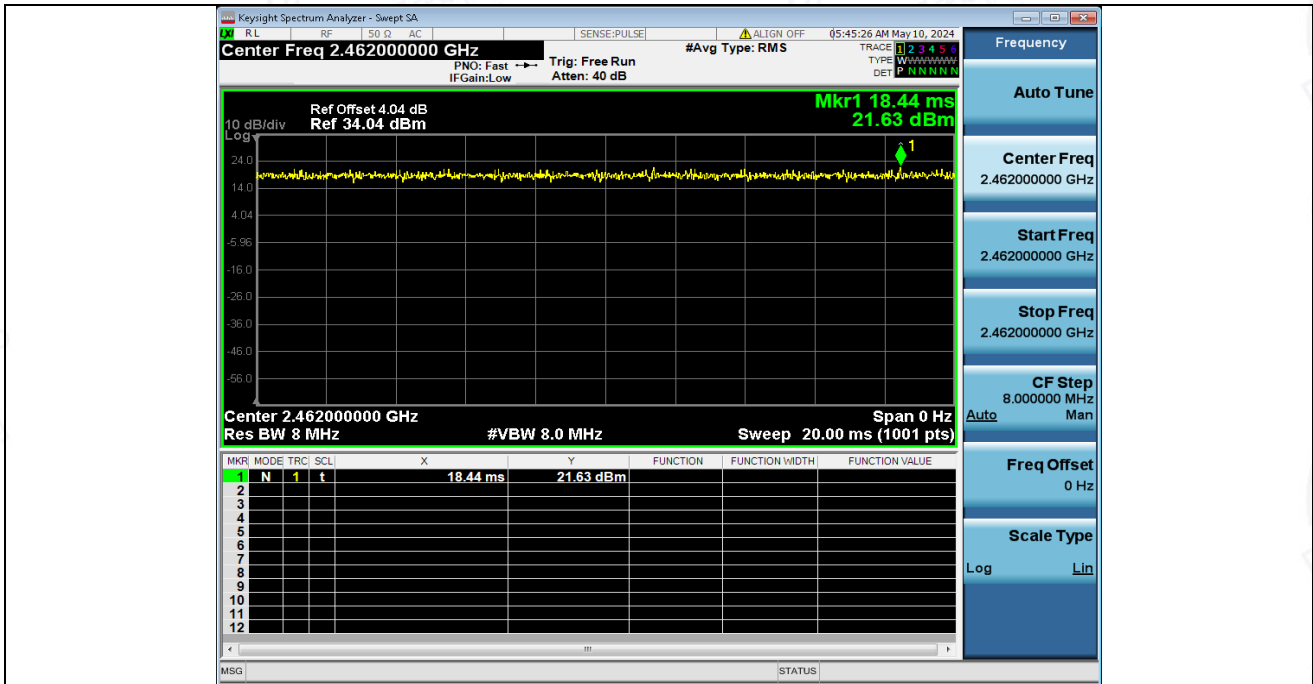
Duty Cycle NVNT_ANT1_802_11g_2412





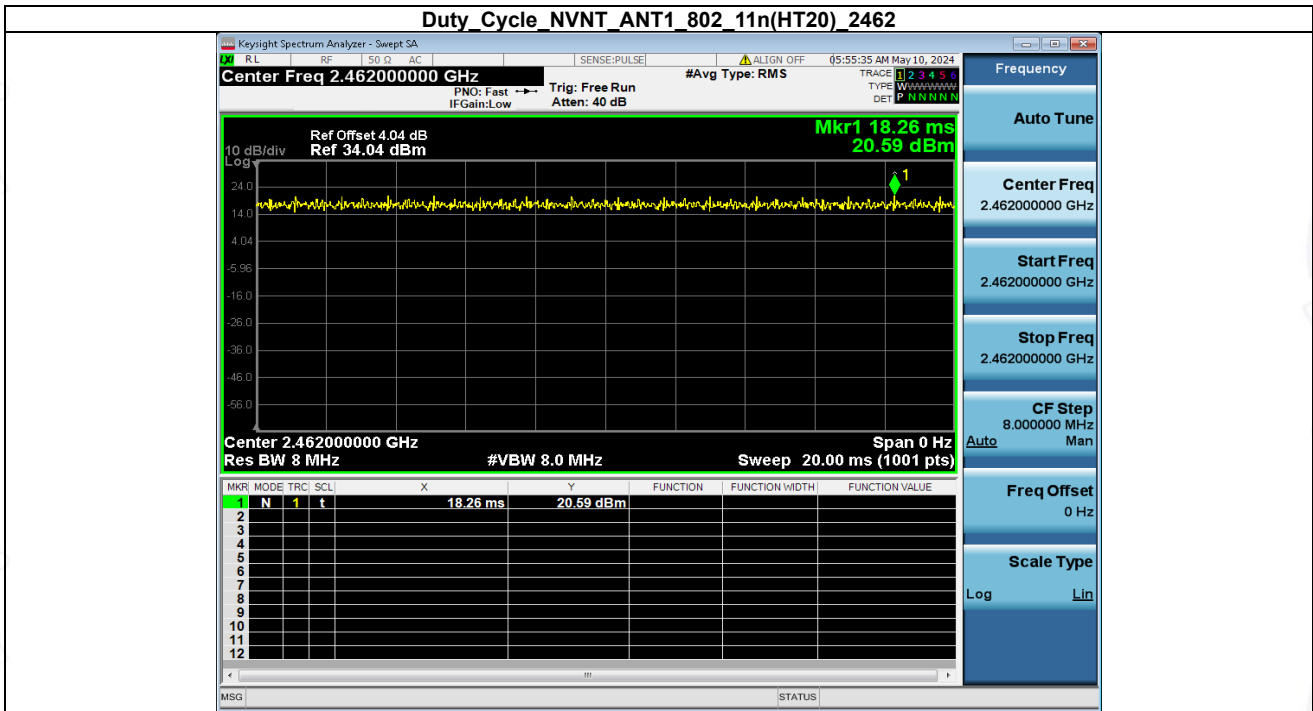
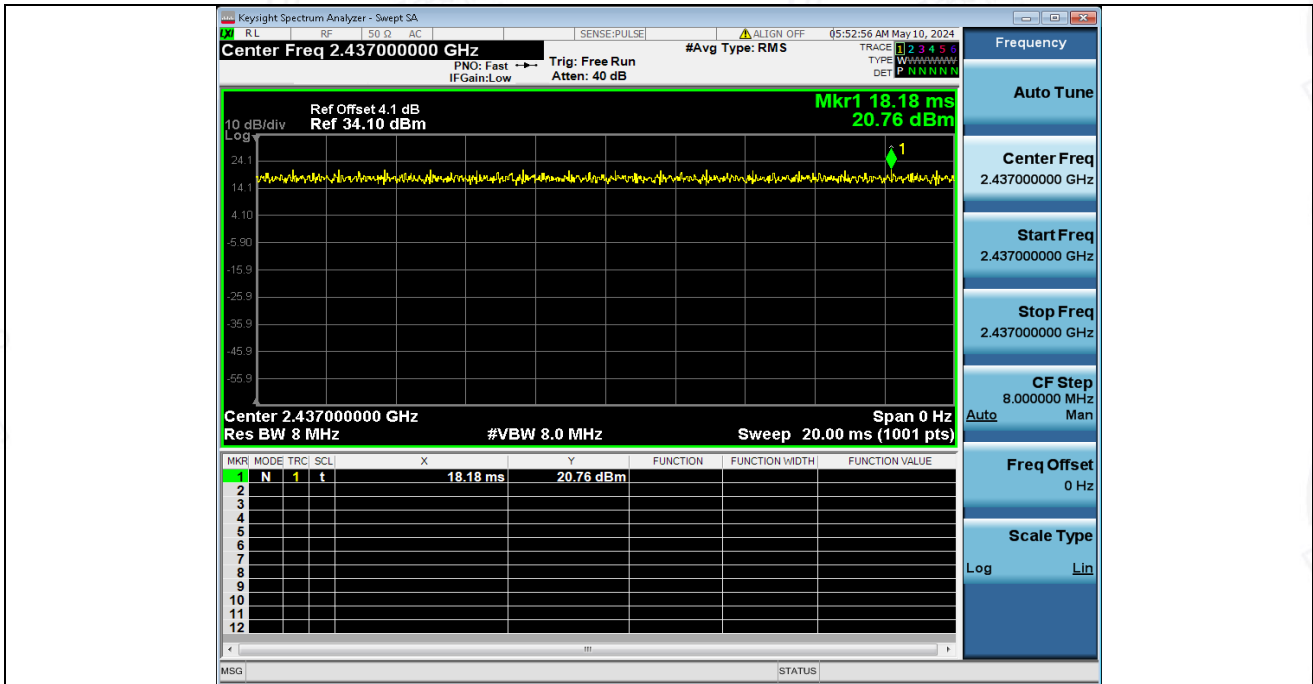
Duty Cycle NVNT ANT1_802_11g_2462





Duty Cycle NVNT_ANT1_802_11n(HT20)_2437

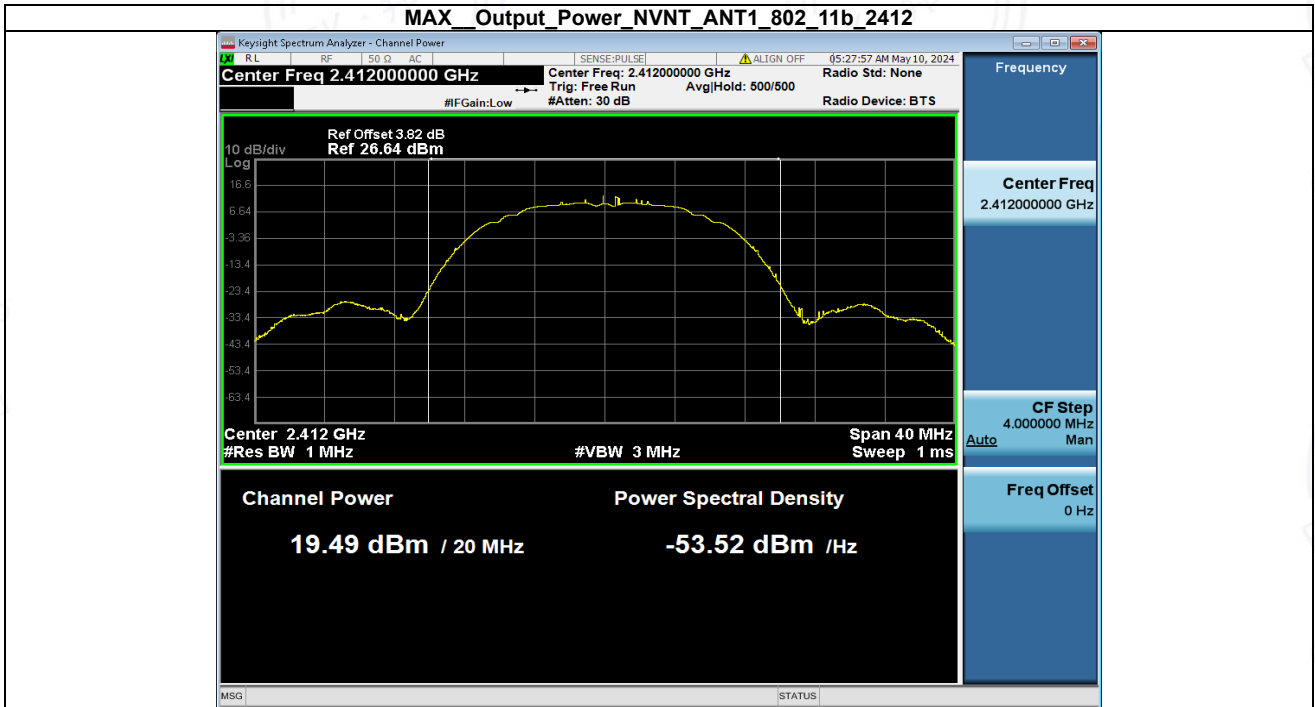




4. MAX. Output Power

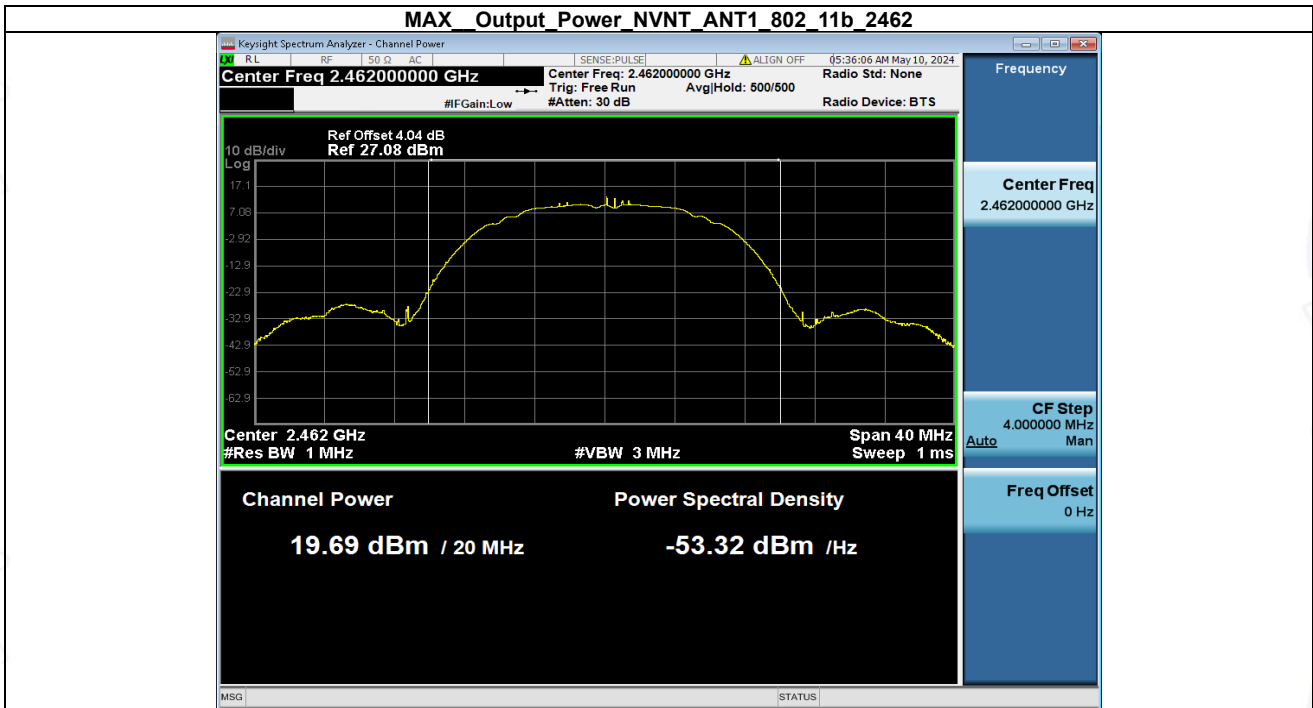
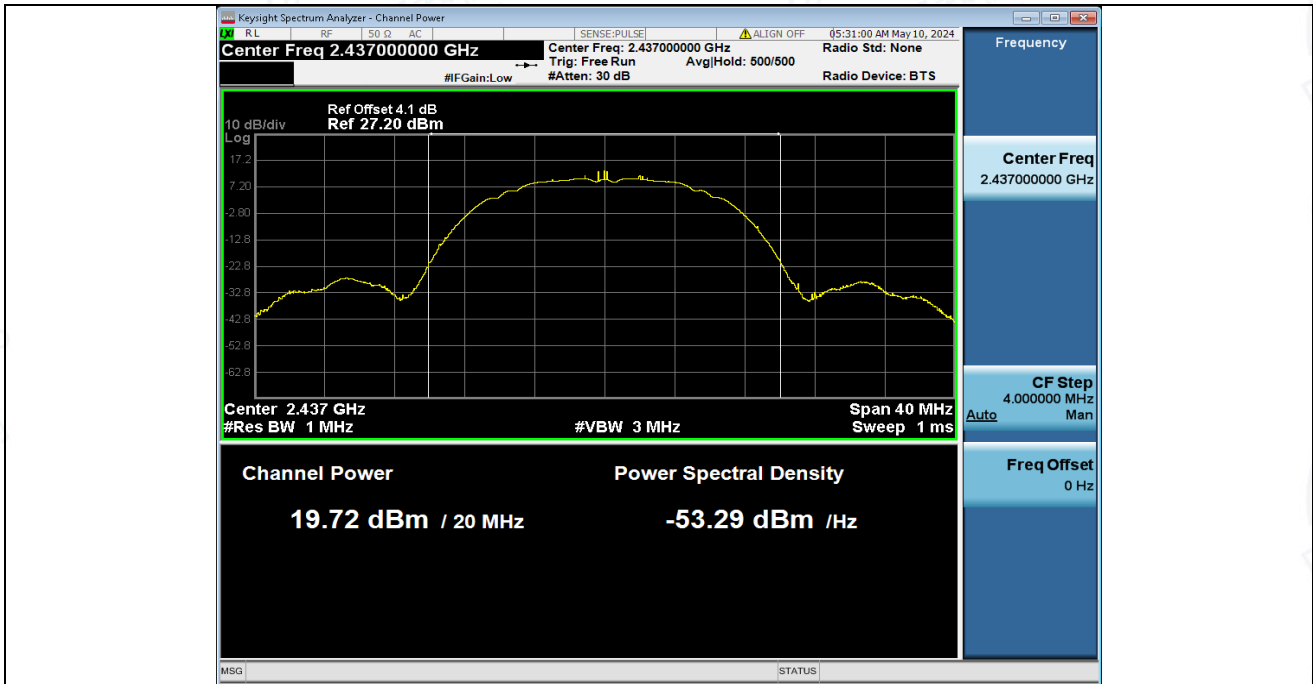
Condition	Antenna	Modulation	Frequency (MHz)	Detector	Conducted Power(dBm)	Duty factor(dB)	Total Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	Peak	19.49	N/A	19.49	30	Pass
NVNT	ANT1	802.11b	2437.00	Peak	19.72	N/A	19.72	30	Pass
NVNT	ANT1	802.11b	2462.00	Peak	19.69	N/A	19.69	30	Pass
NVNT	ANT1	802.11g	2412.00	Peak	21.42	N/A	21.42	30	Pass
NVNT	ANT1	802.11g	2437.00	Peak	21.98	N/A	21.98	30	Pass
NVNT	ANT1	802.11g	2462.00	Peak	21.90	N/A	21.90	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	Peak	20.48	N/A	20.48	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	Peak	21.00	N/A	21.00	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	Peak	20.90	N/A	20.90	30	Pass

MAX_Output Power_NVNT_ANT1_802_11b_2412



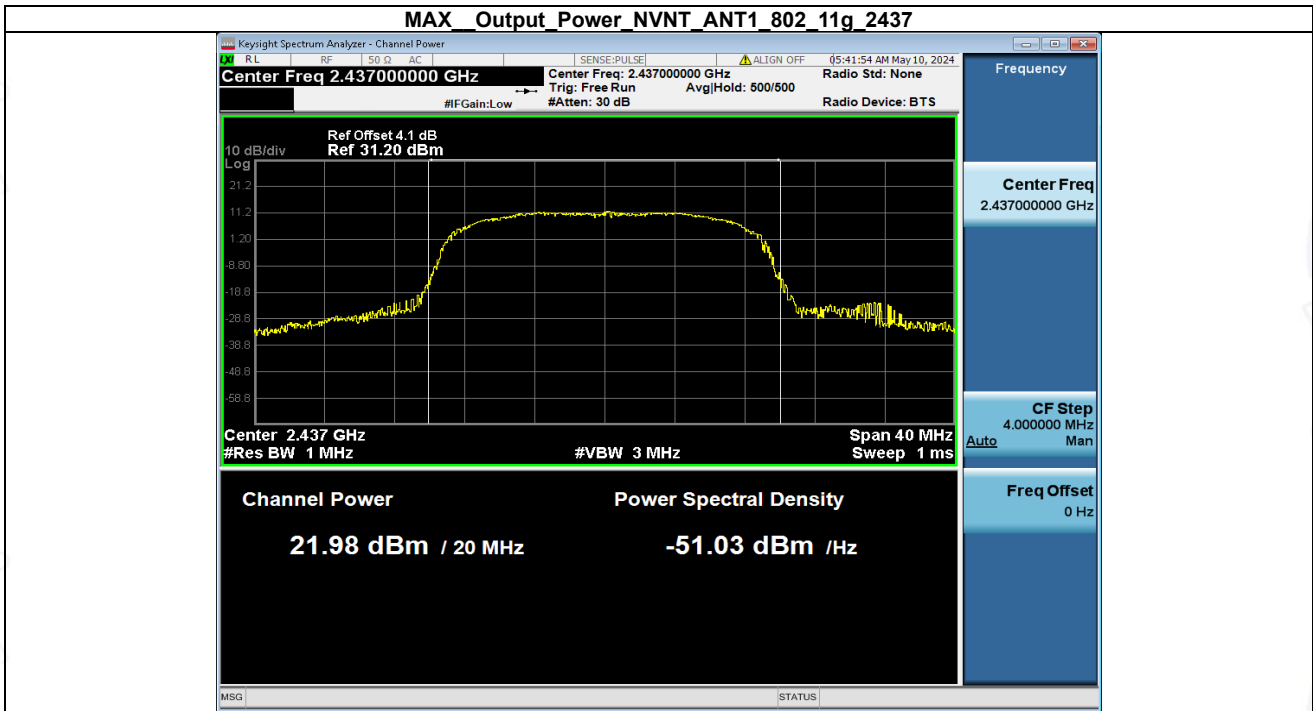
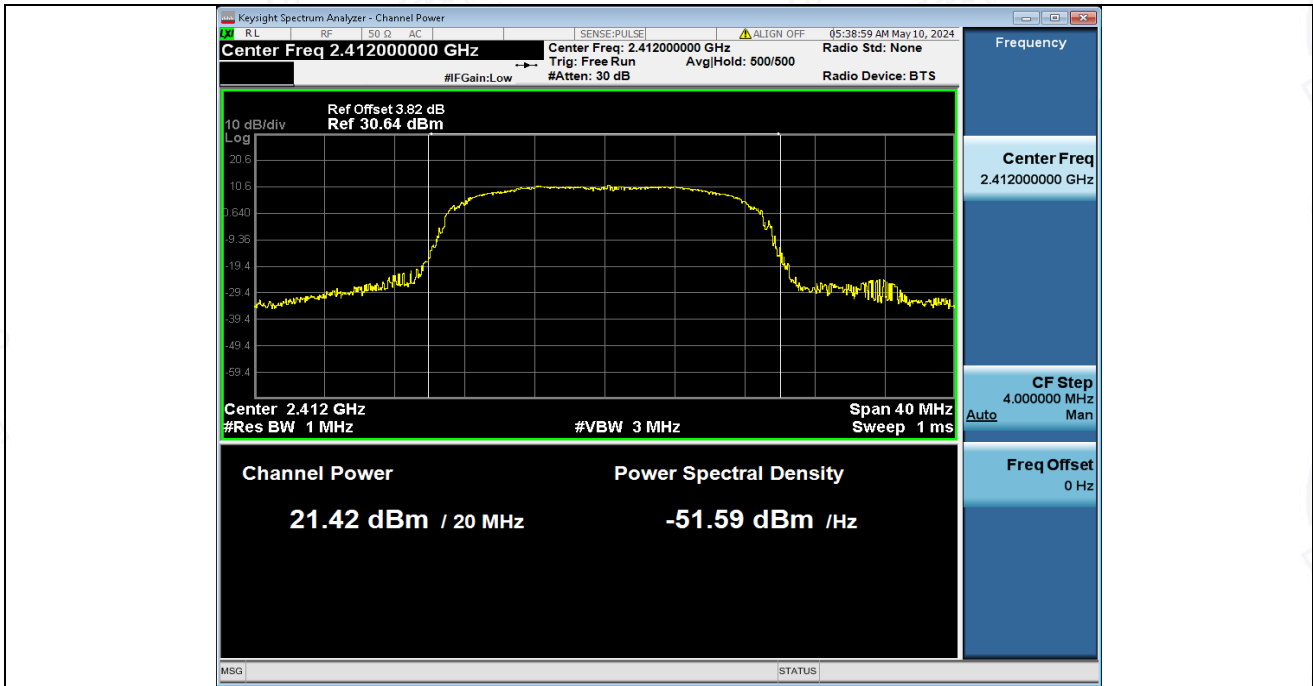
MAX_Output Power_NVNT_ANT1_802_11b_2437





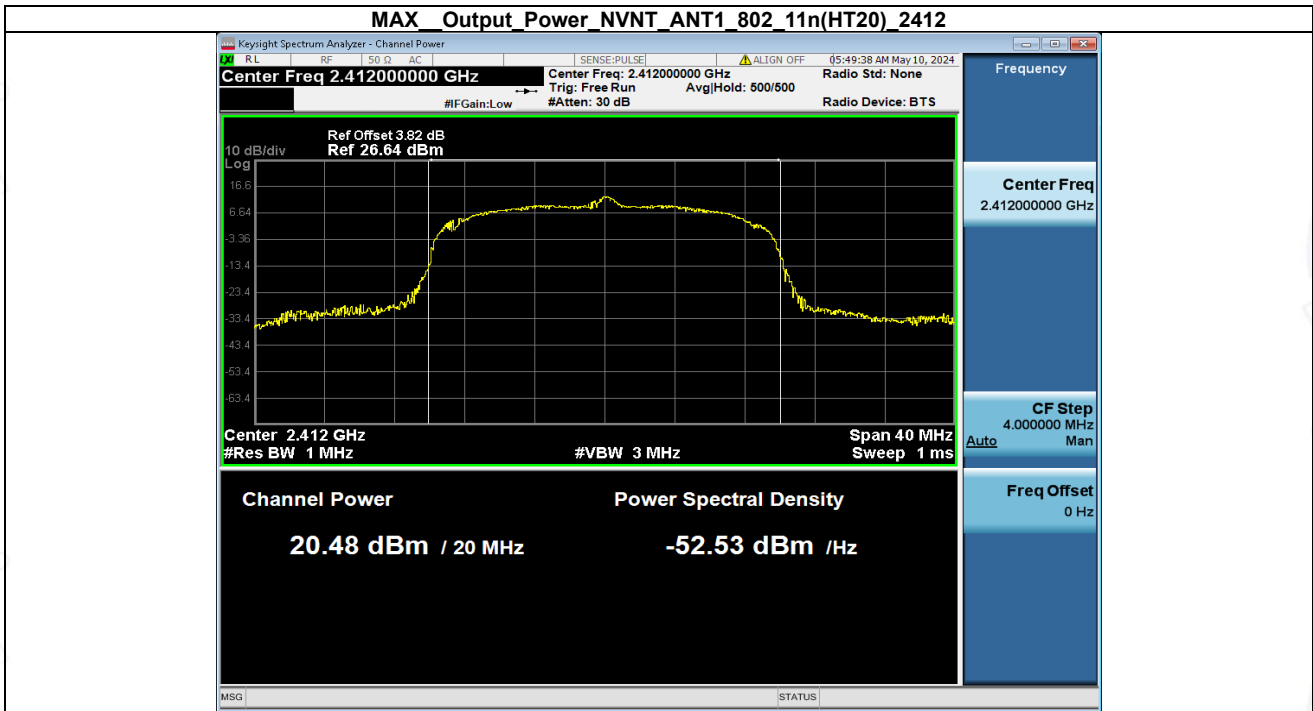
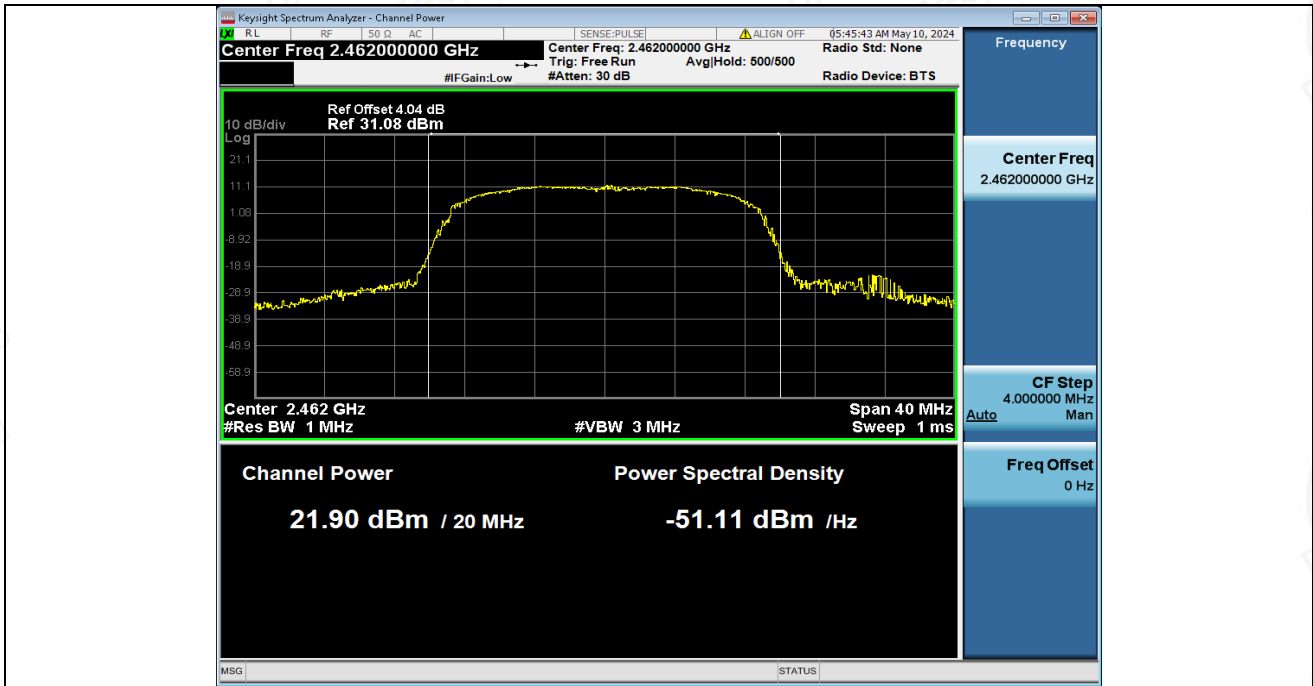
MAX Output Power NVNT ANT1 802 11g 2412





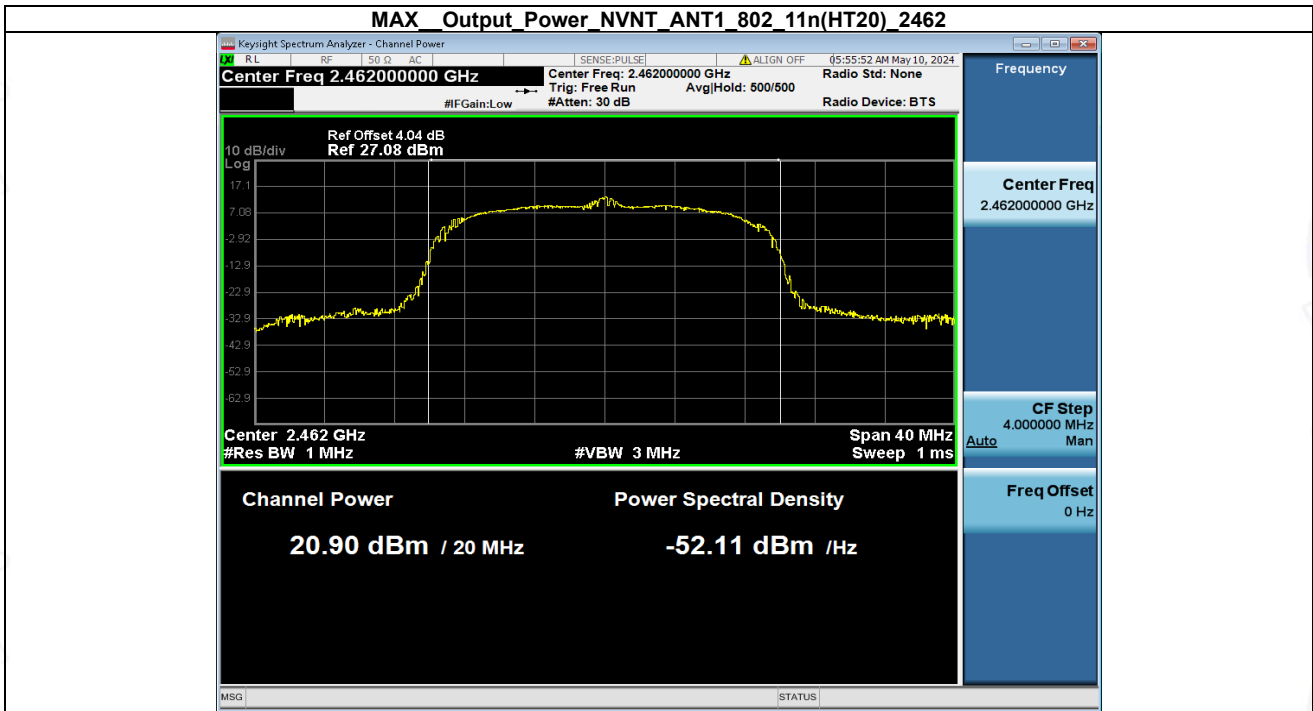
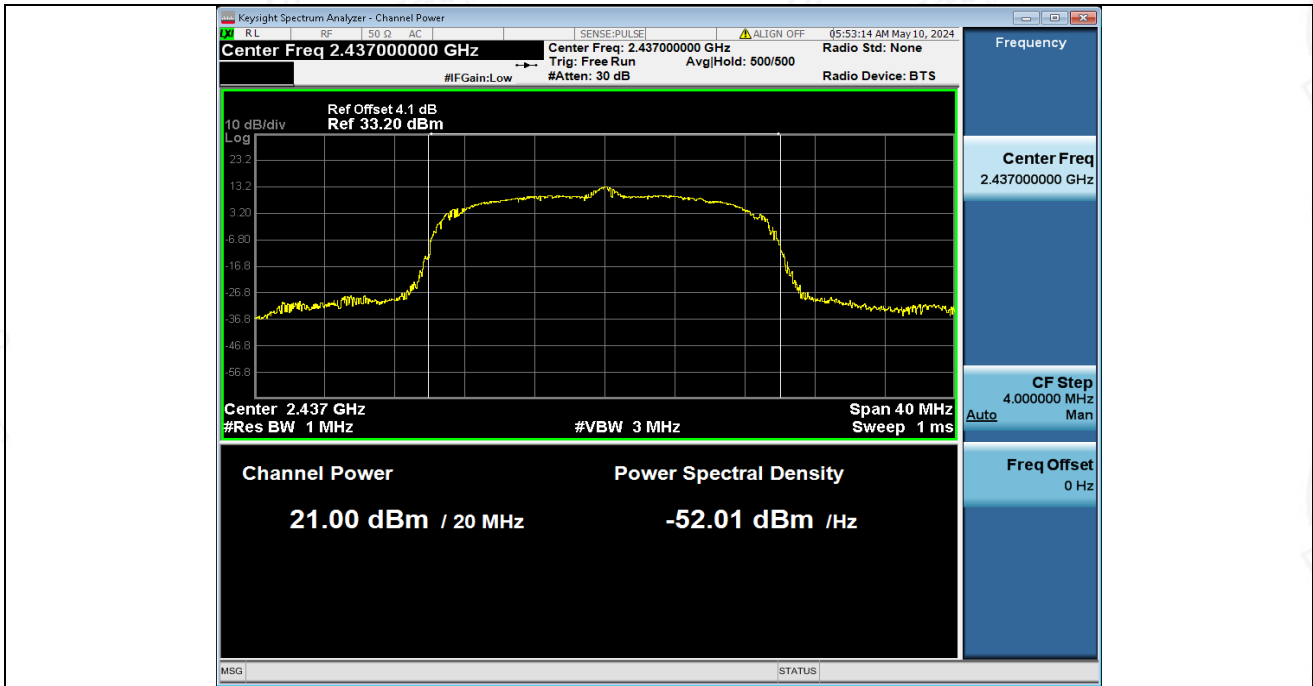
MAX Output Power NVNT ANT1 802 11g 2462





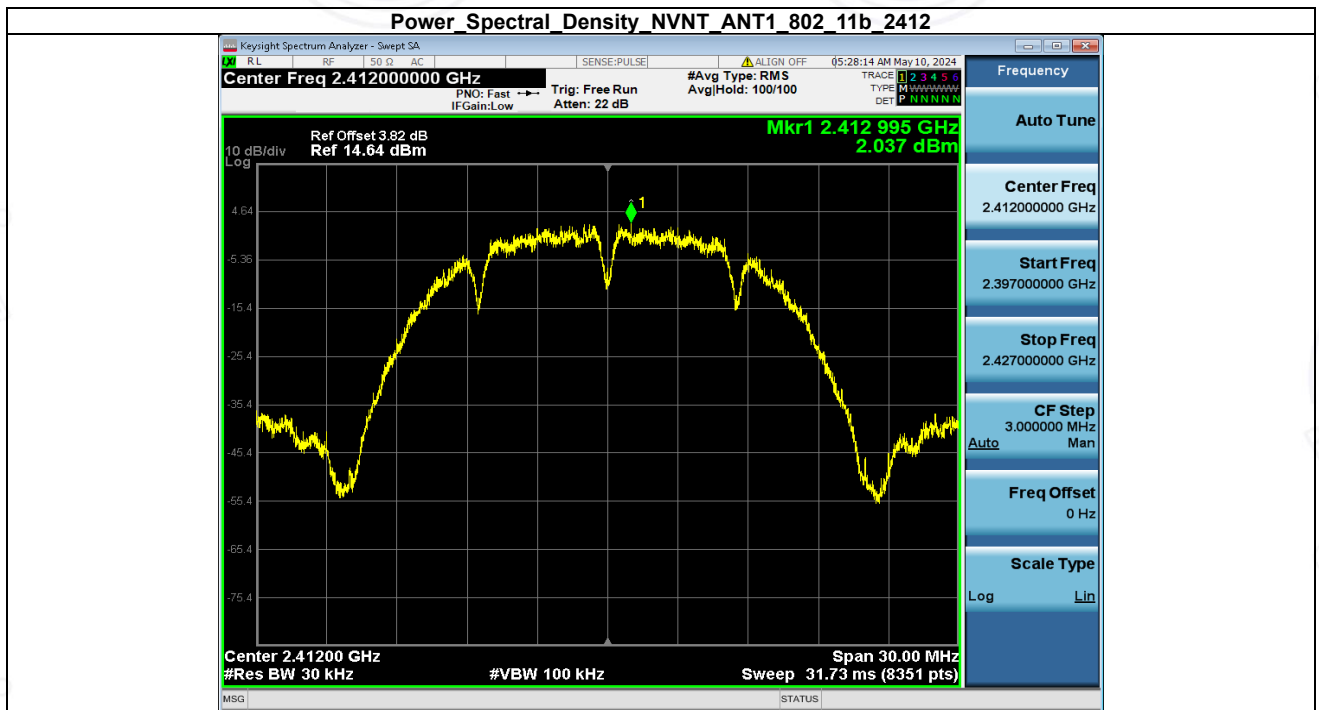
MAX Output Power NVNT ANT1_802_11n(HT20)_2437





5. Power Spectral Density

Condition	Antenna	Modulation	Frequency (MHz)	PSD(dBm/30kHz)	Duty factor(dB)	RB factor(dB)	PSD(dBm/3kHz)	limit(dBm/3kHz)	Result
NVNT	ANT1	802.11b	2412.00	2.04	N/A	-10.00	-7.96	8	Pass
NVNT	ANT1	802.11b	2437.00	2.31	N/A	-10.00	-7.69	8	Pass
NVNT	ANT1	802.11b	2462.00	2.17	N/A	-10.00	-7.83	8	Pass
NVNT	ANT1	802.11g	2412.00	-1.58	N/A	-10.00	-11.58	8	Pass
NVNT	ANT1	802.11g	2437.00	-1.11	N/A	-10.00	-11.11	8	Pass
NVNT	ANT1	802.11g	2462.00	-1.20	N/A	-10.00	-11.20	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-2.88	N/A	-10.00	-12.88	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-2.35	N/A	-10.00	-12.35	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-2.39	N/A	-10.00	-12.39	8	Pass



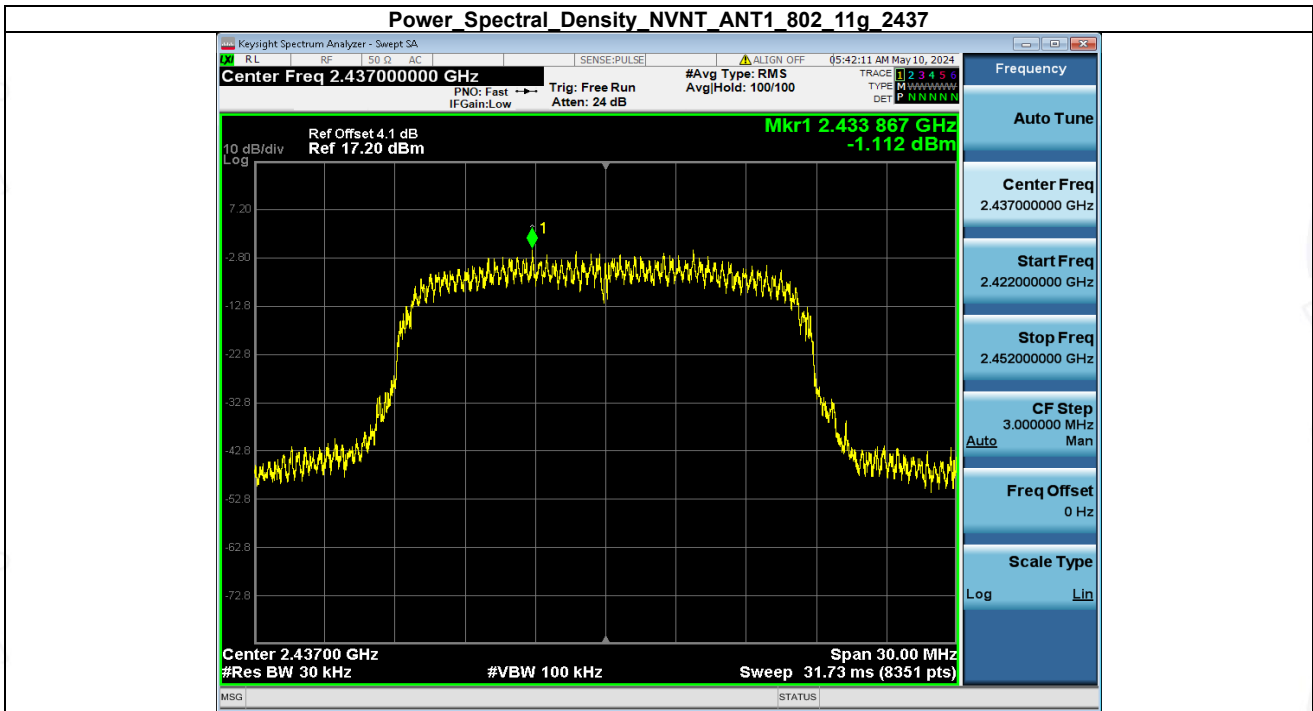
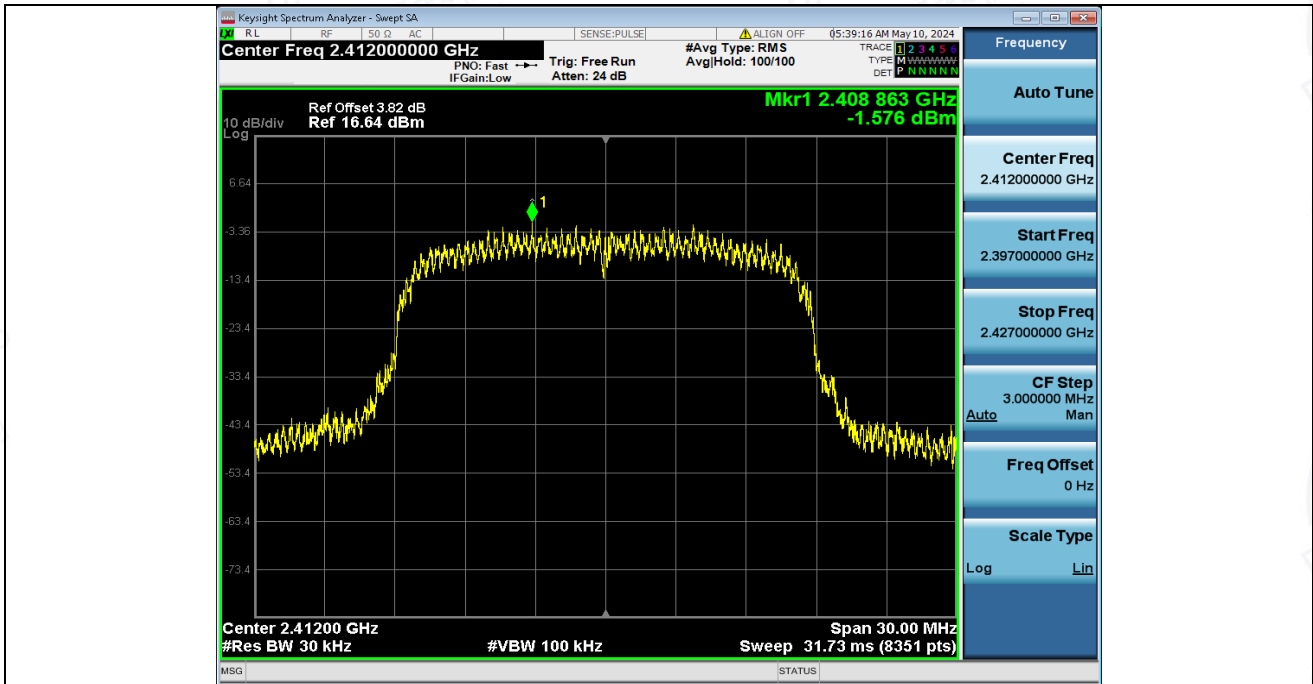
Power Spectral Density_NVNT_ANT1_802_11b_2437





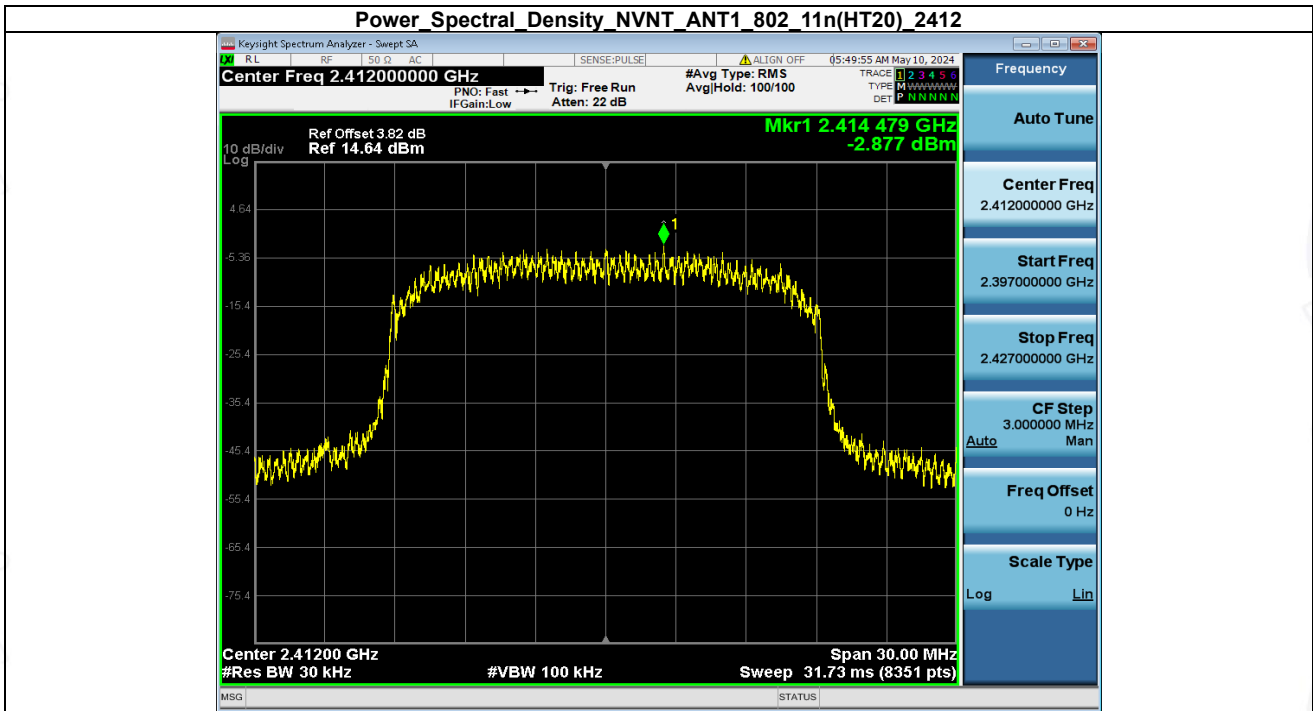
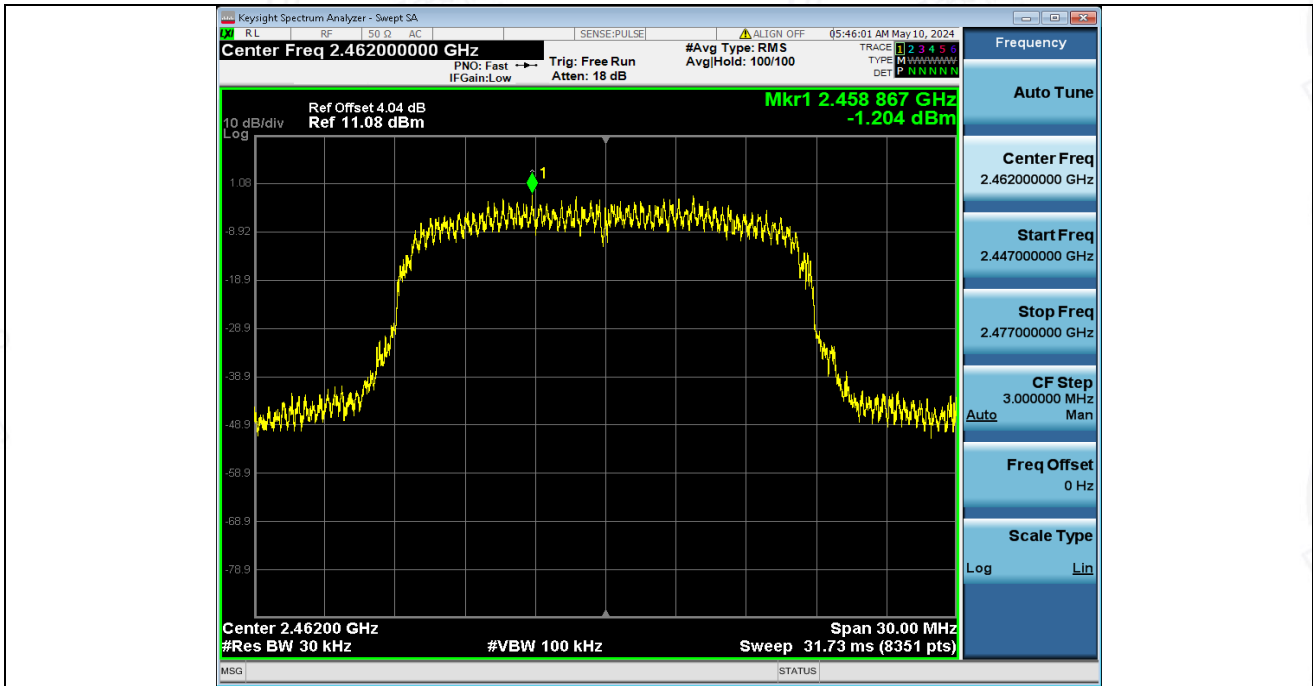
Power Spectral Density NVNT_ANT1_802_11g_2412

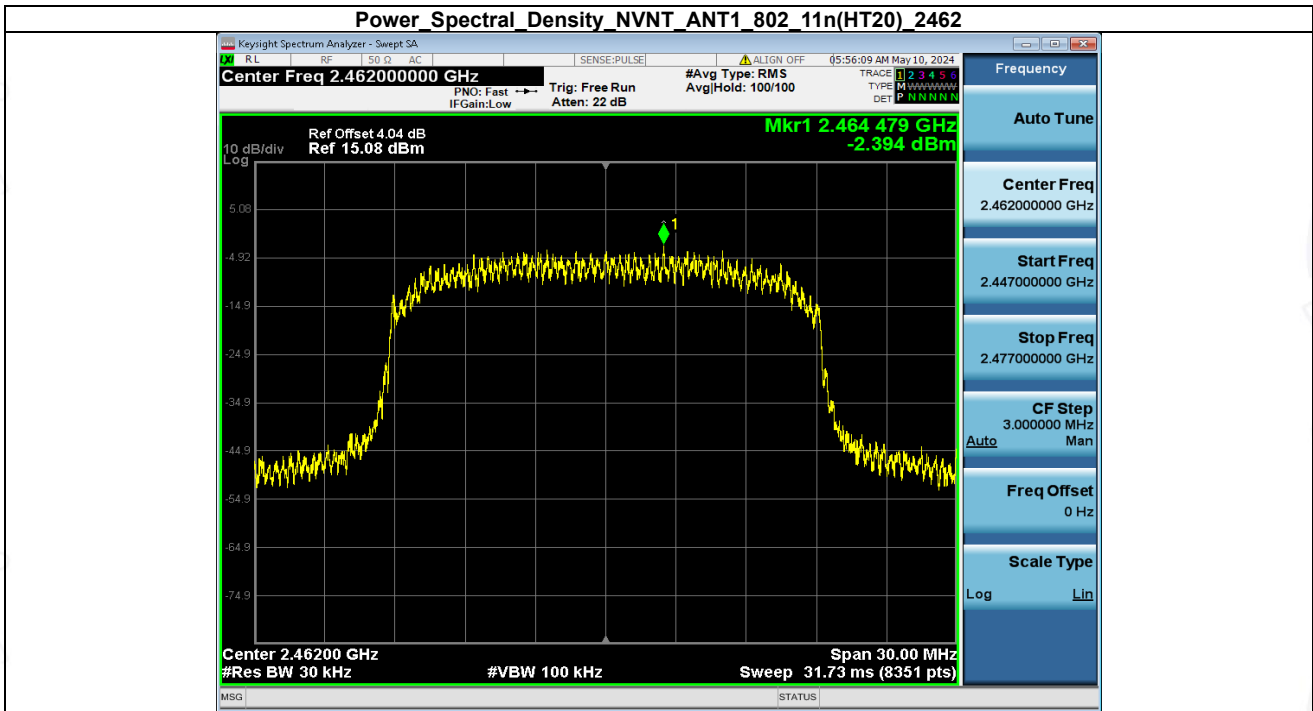
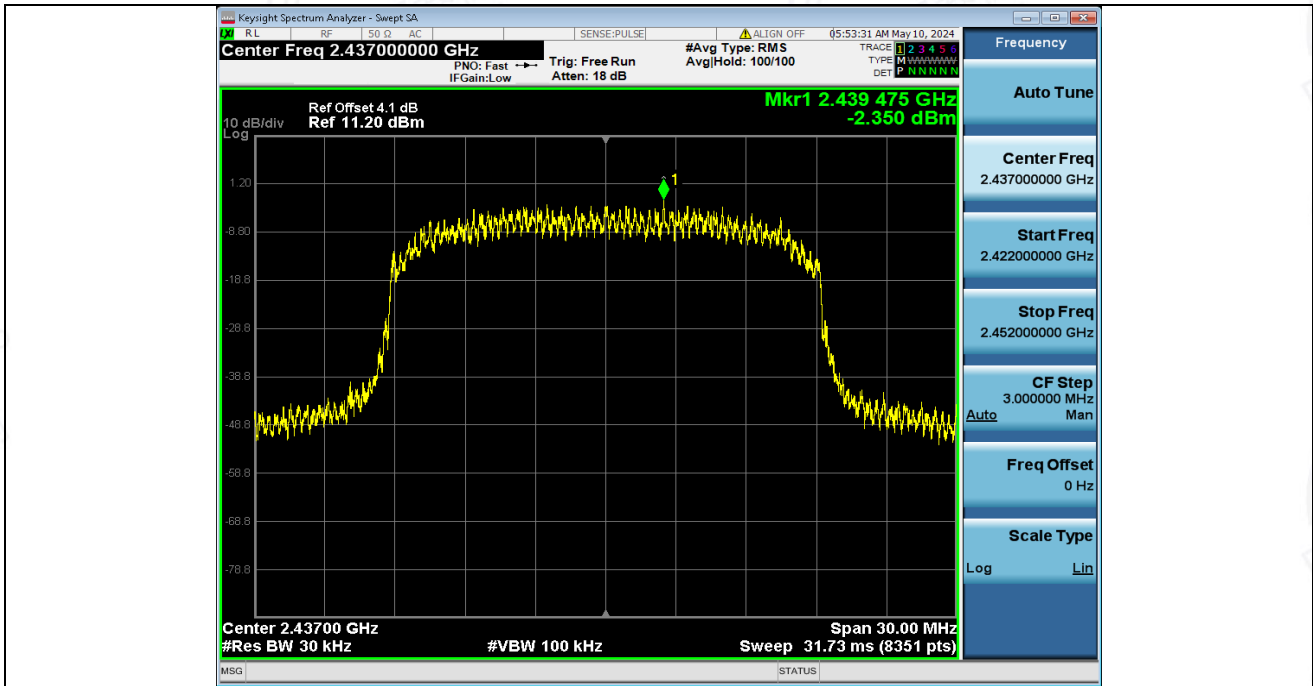




Power Spectral Density NVNT ANT1_802_11g_2462



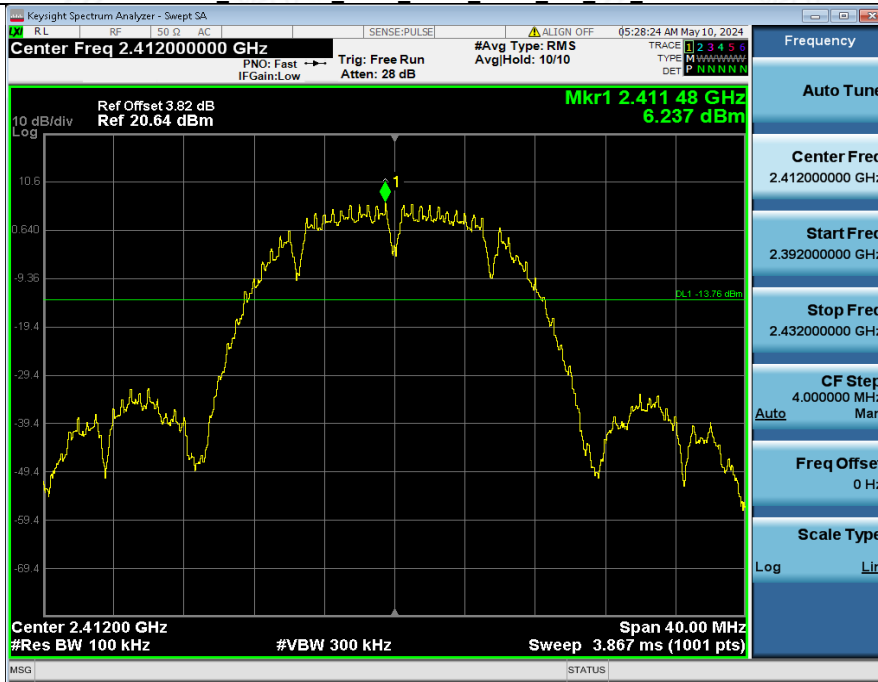




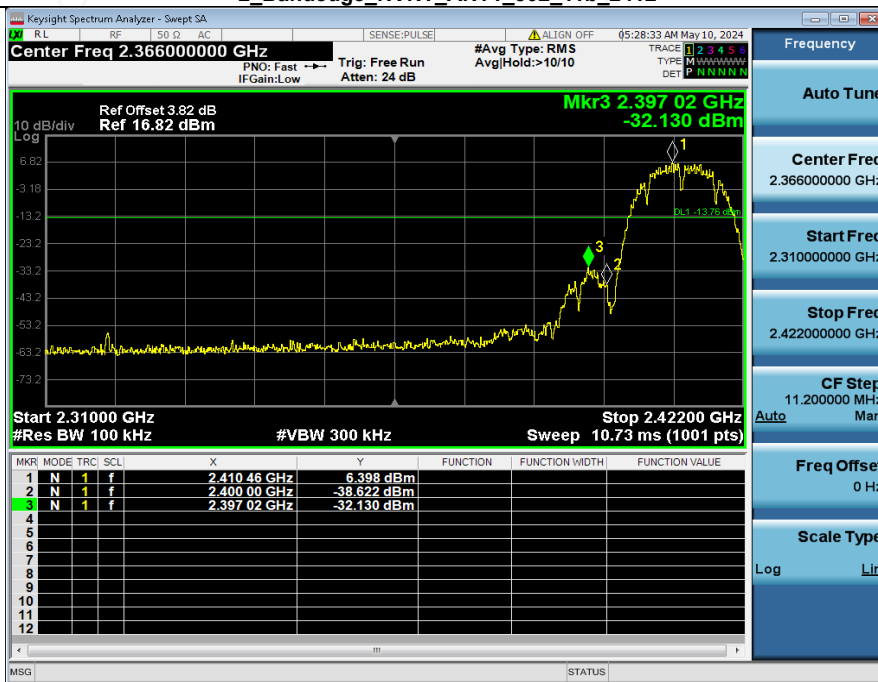
6. Bandedge

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	2397.024	-32.130	-13.763	Pass
NVNT	ANT1	802.11b	2462.00	2487.760	-50.291	-13.307	Pass
NVNT	ANT1	802.11g	2412.00	2399.712	-38.383	-17.815	Pass
NVNT	ANT1	802.11g	2462.00	2483.920	-46.880	-17.096	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2399.824	-38.510	-17.781	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2483.584	-46.656	-14.755	Pass

1 Reference Level NVNT ANT1 802 11b 2412

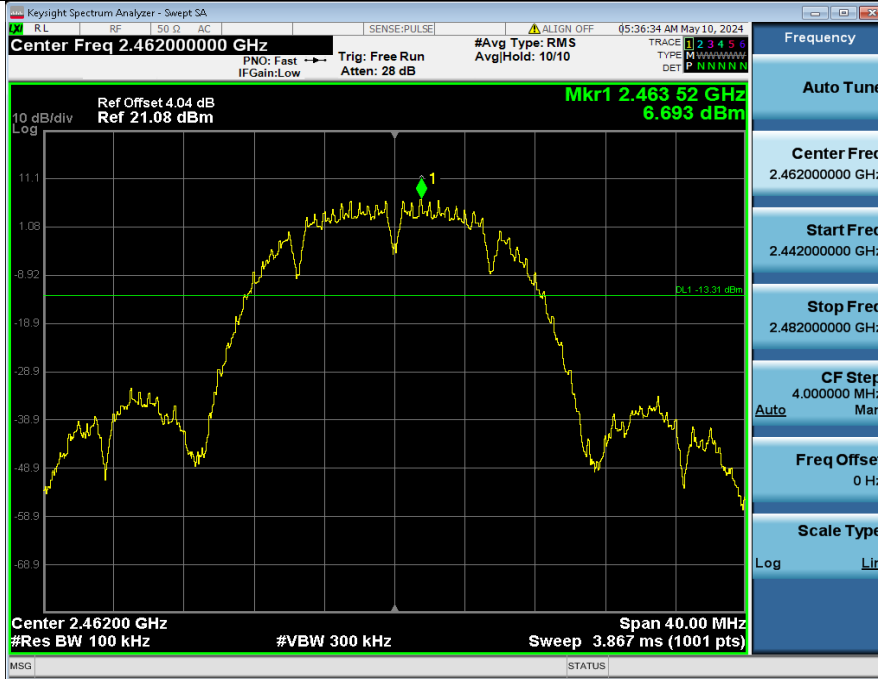


2 Bandedge_NVNT_ANT1_802_11b_2412



1 Reference Level NVNT ANT1 802 11b 2462



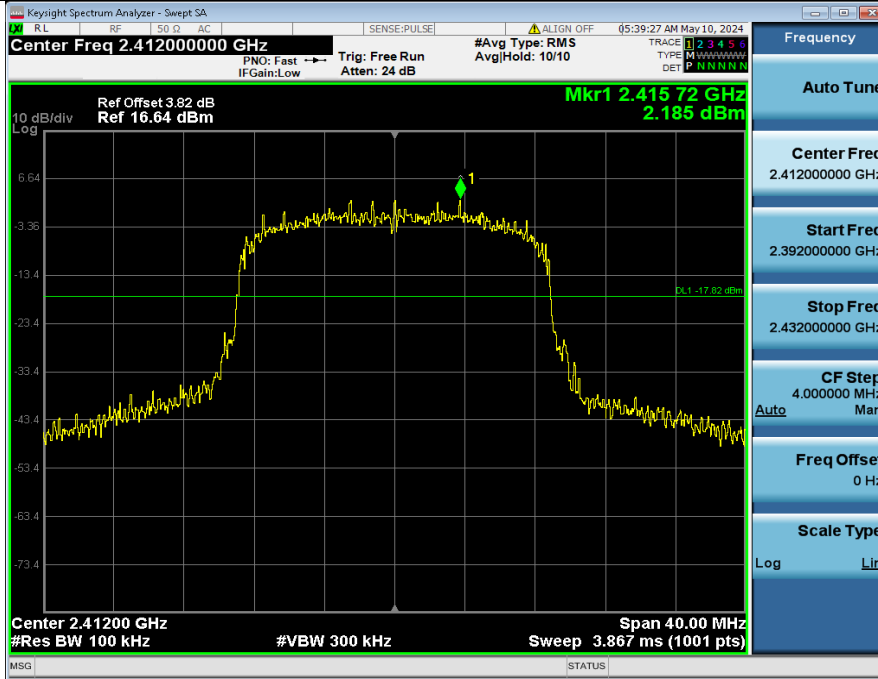


2_Bandedge_NVNT_ANT1_802_11b_2462

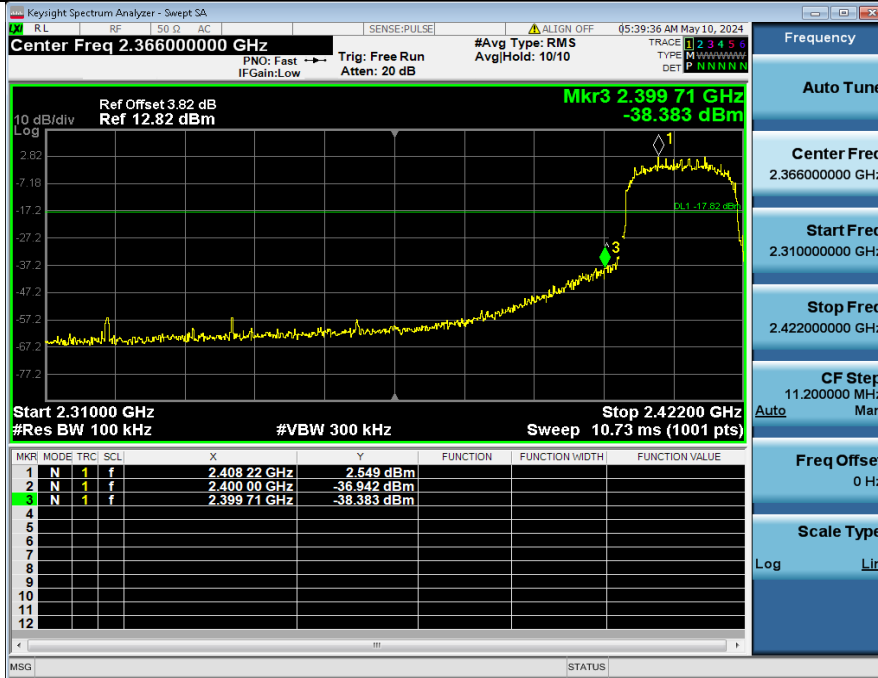


1_Reference_Level_NVNT_ANT1_802_11g_2412



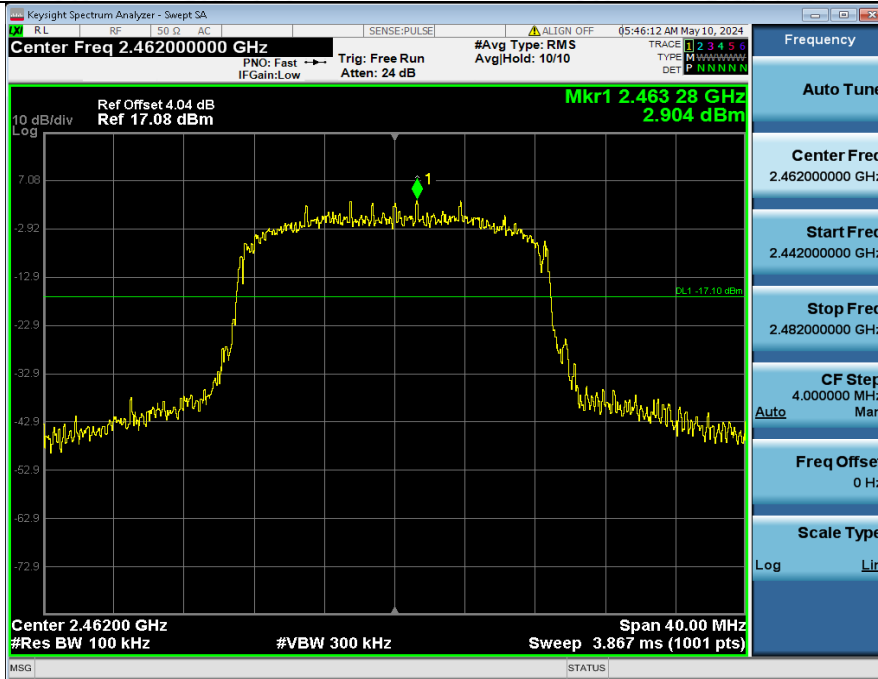


2_Bandedge_NVNT_ANT1_802_11g_2412



1_Reference_Level_NVNT_ANT1_802_11g_2462





2_Bandedge_NVNT_ANT1_802_11g_2462

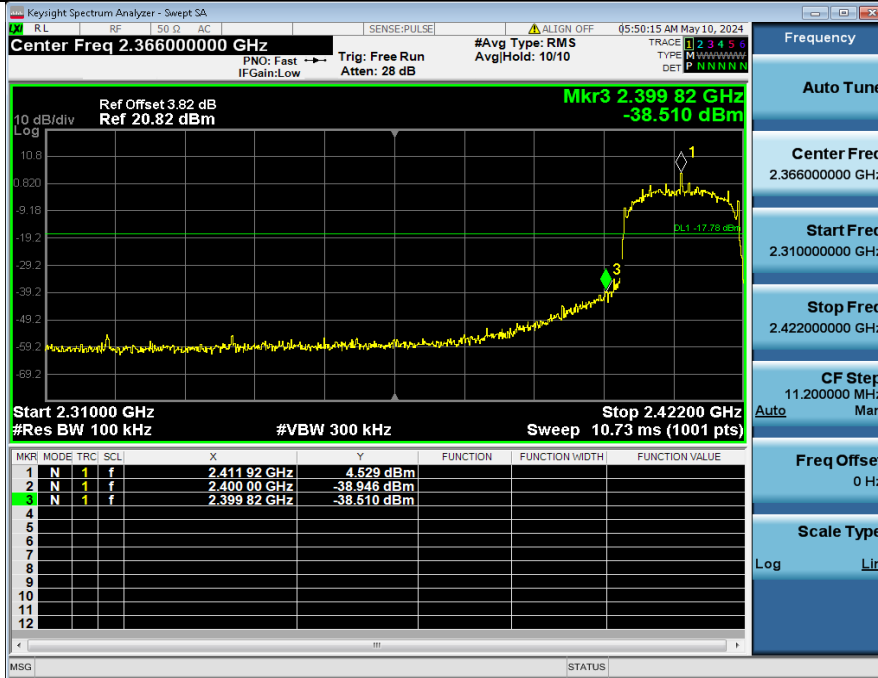


1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2412



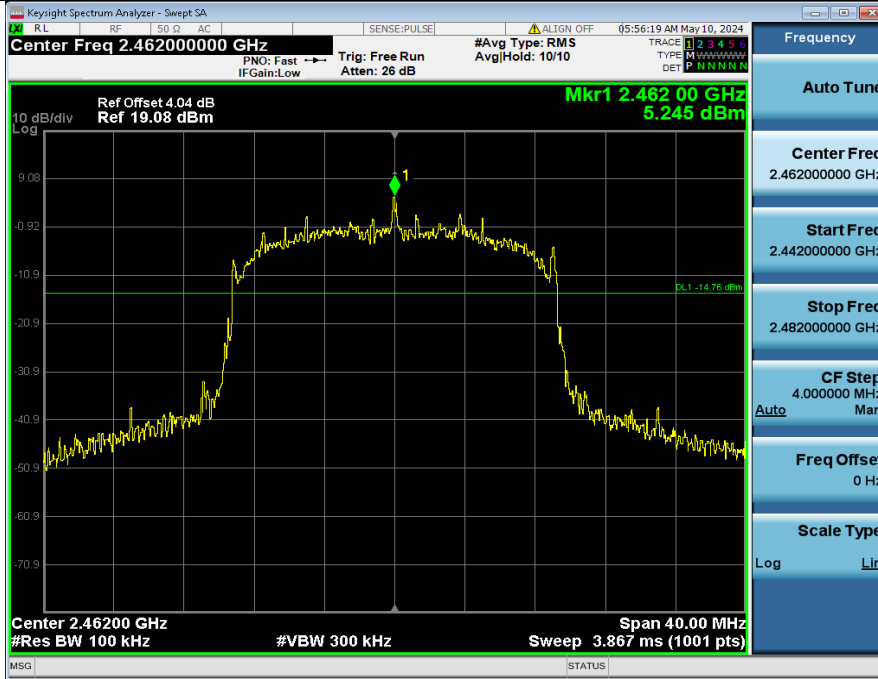


2_Bandedge_NVNT_ANT1_802_11n(HT20)_2412

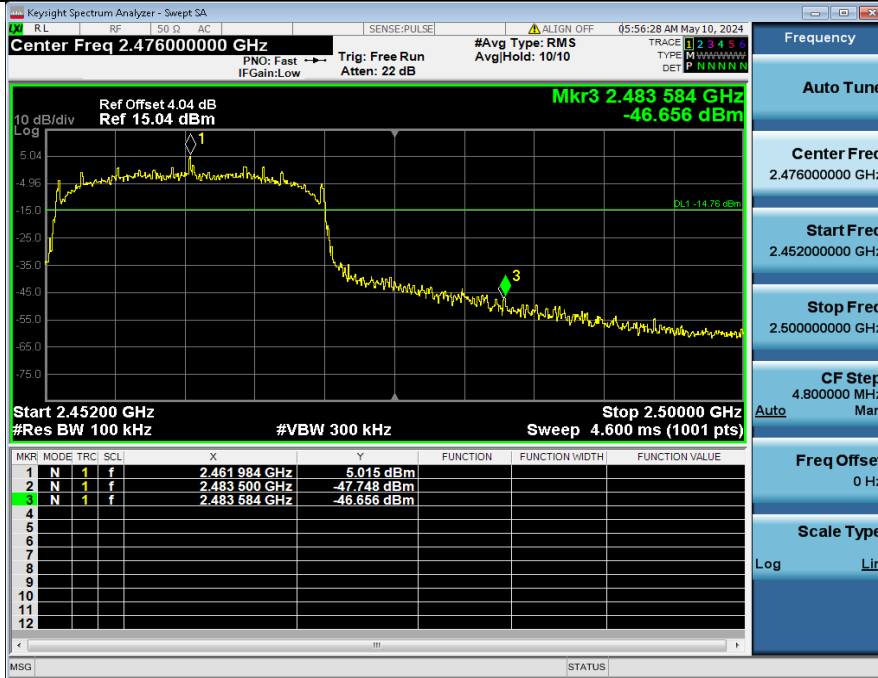


1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2462



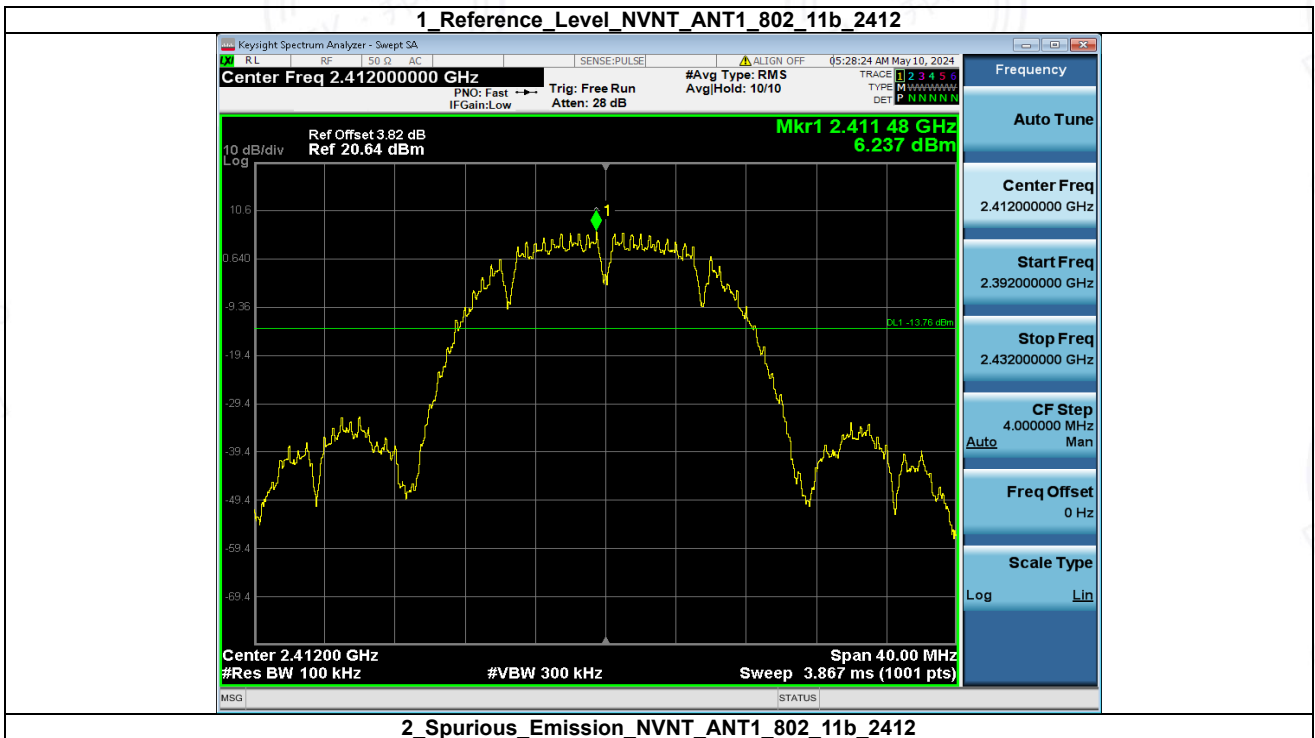


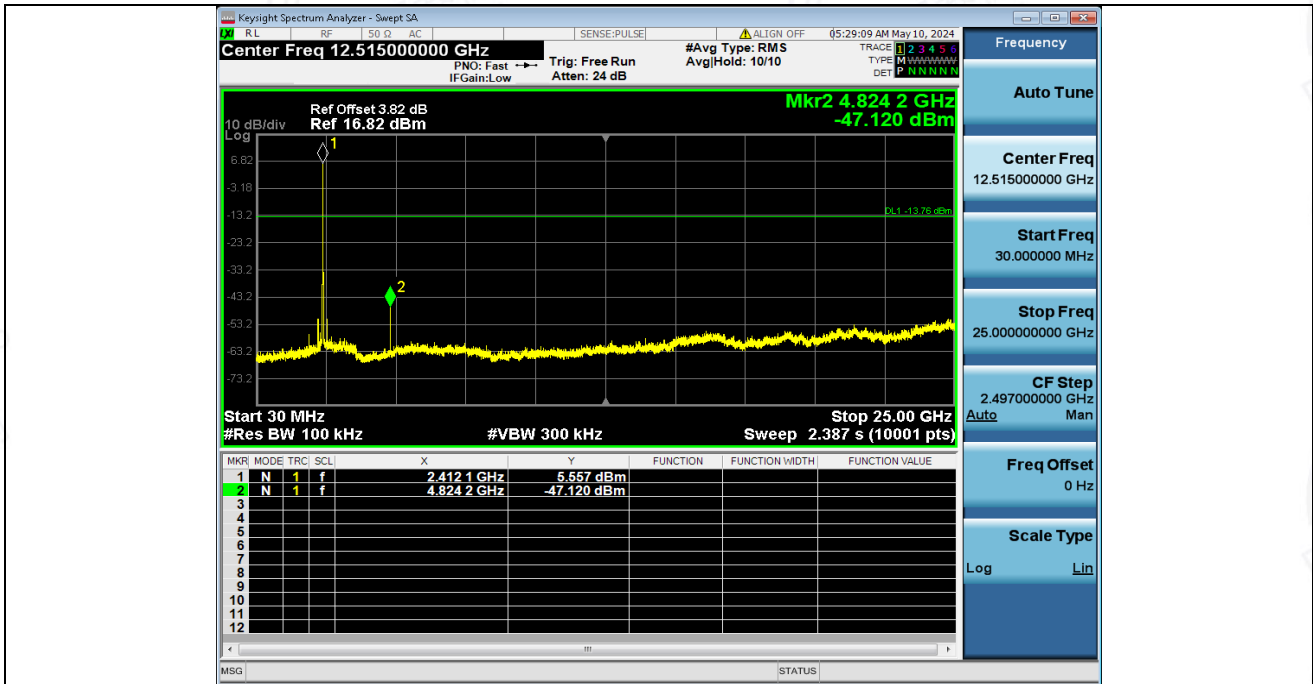
2_Bandedge_NVNT_ANT1_802_11n(HT20)_2462



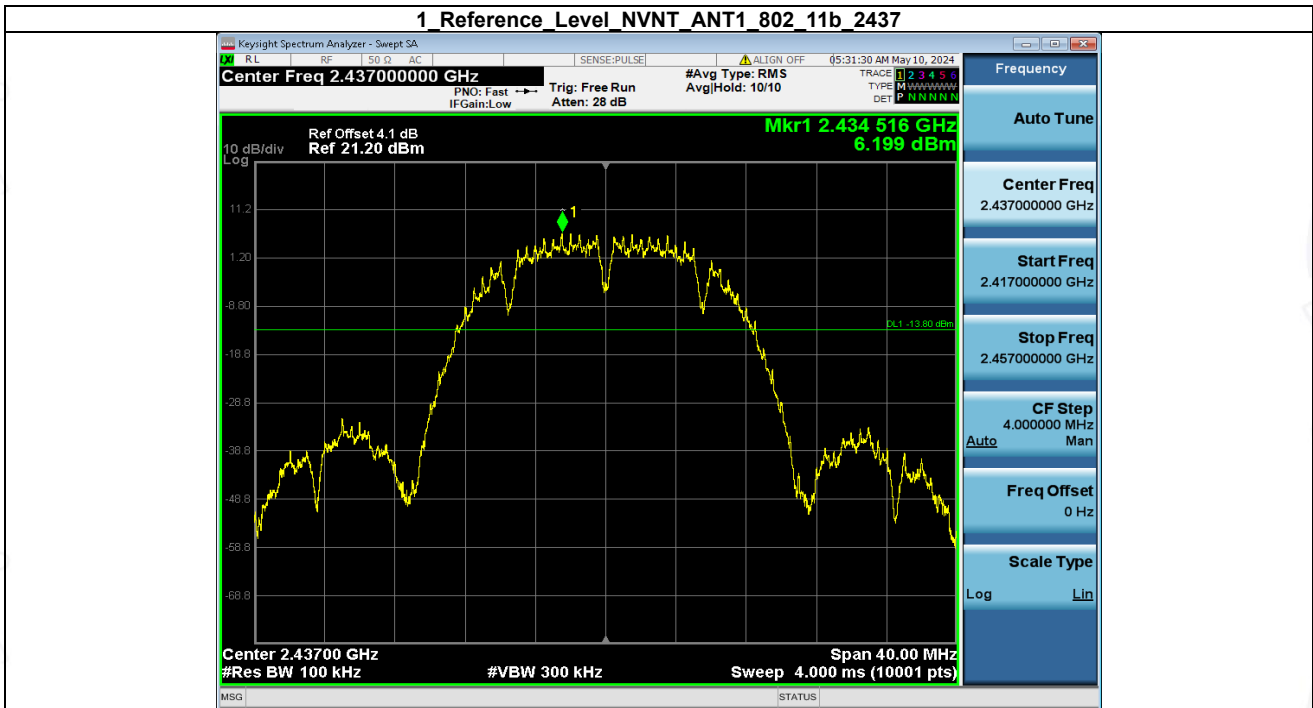
7. Spurious Emission

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	4824.240	-47.120	-13.763	Pass
NVNT	ANT1	802.11b	2437.00	4874.180	-46.443	-13.801	Pass
NVNT	ANT1	802.11b	2462.00	4924.120	-45.994	-13.307	Pass
NVNT	ANT1	802.11g	2412.00	2559.461	-51.397	-17.815	Pass
NVNT	ANT1	802.11g	2437.00	24742.809	-49.070	-16.625	Pass
NVNT	ANT1	802.11g	2462.00	2559.461	-50.310	-17.096	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	24255.894	-47.971	-17.781	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	24777.767	-46.720	-15.281	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2559.461	-49.073	-14.755	Pass



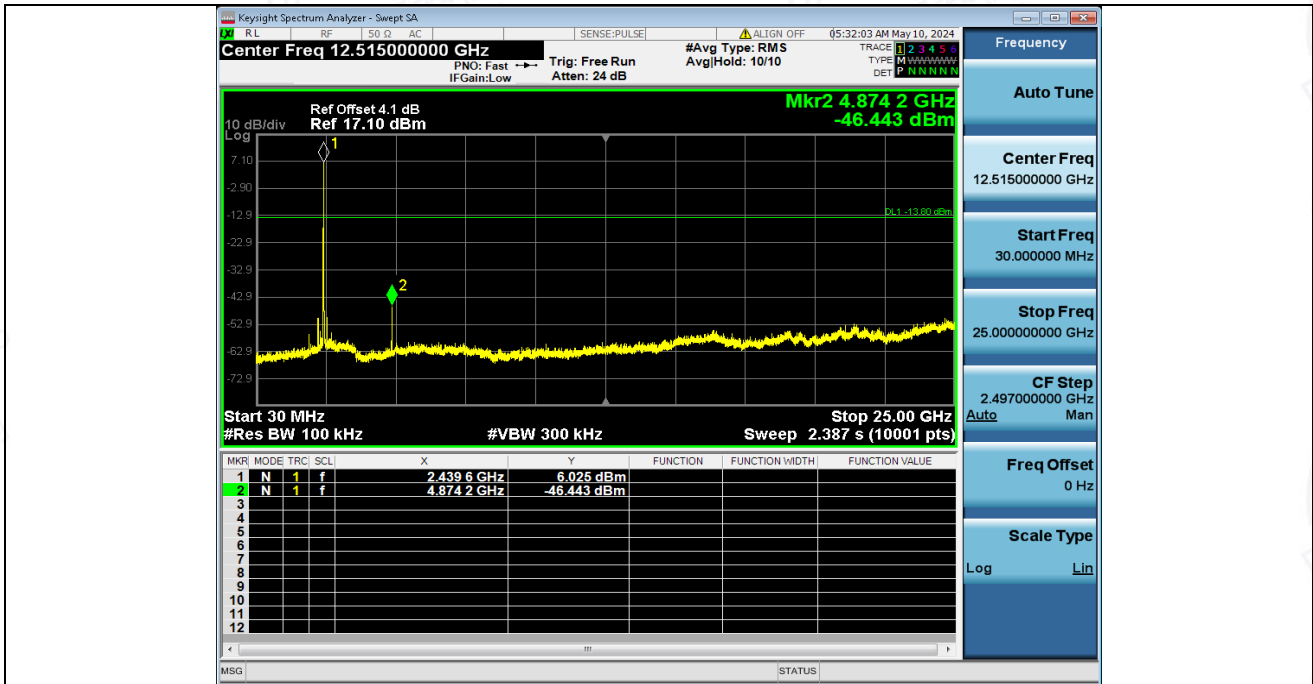


1 Reference Level NVNT_ANT1_802_11b_2437

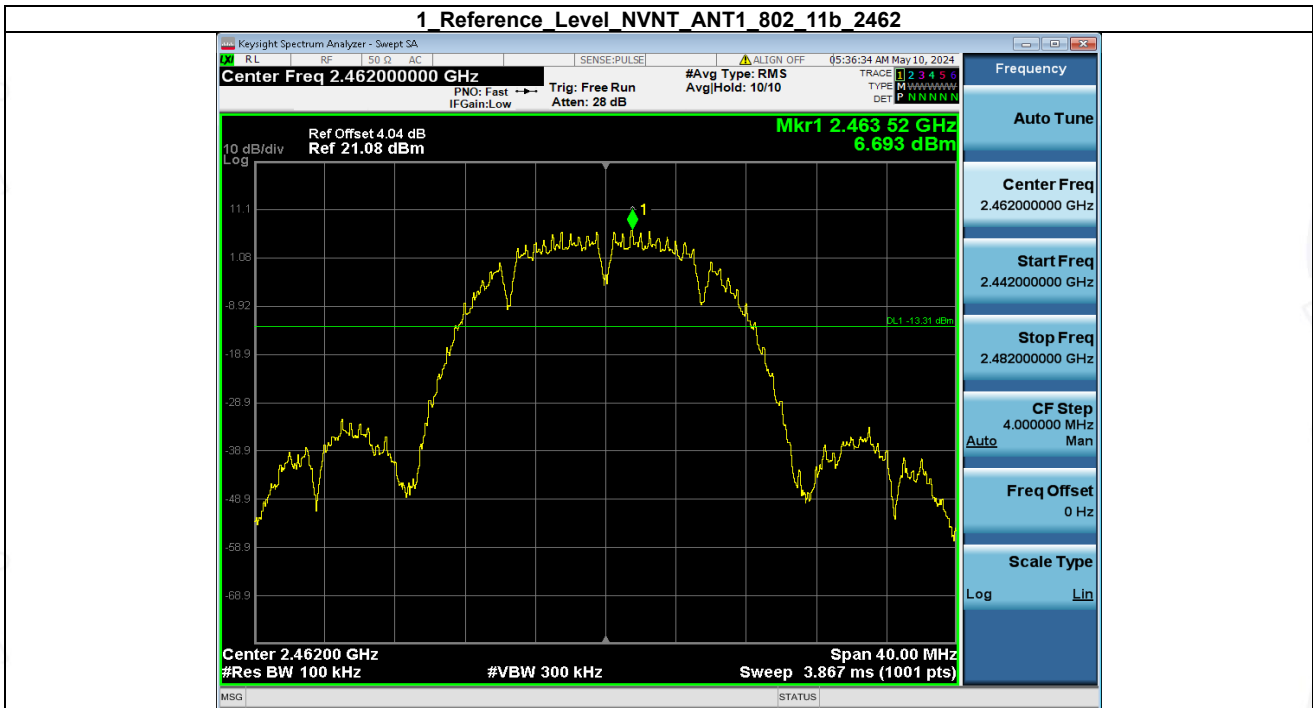


2_Spurious_Emission_NVNT_ANT1_802_11b_2437



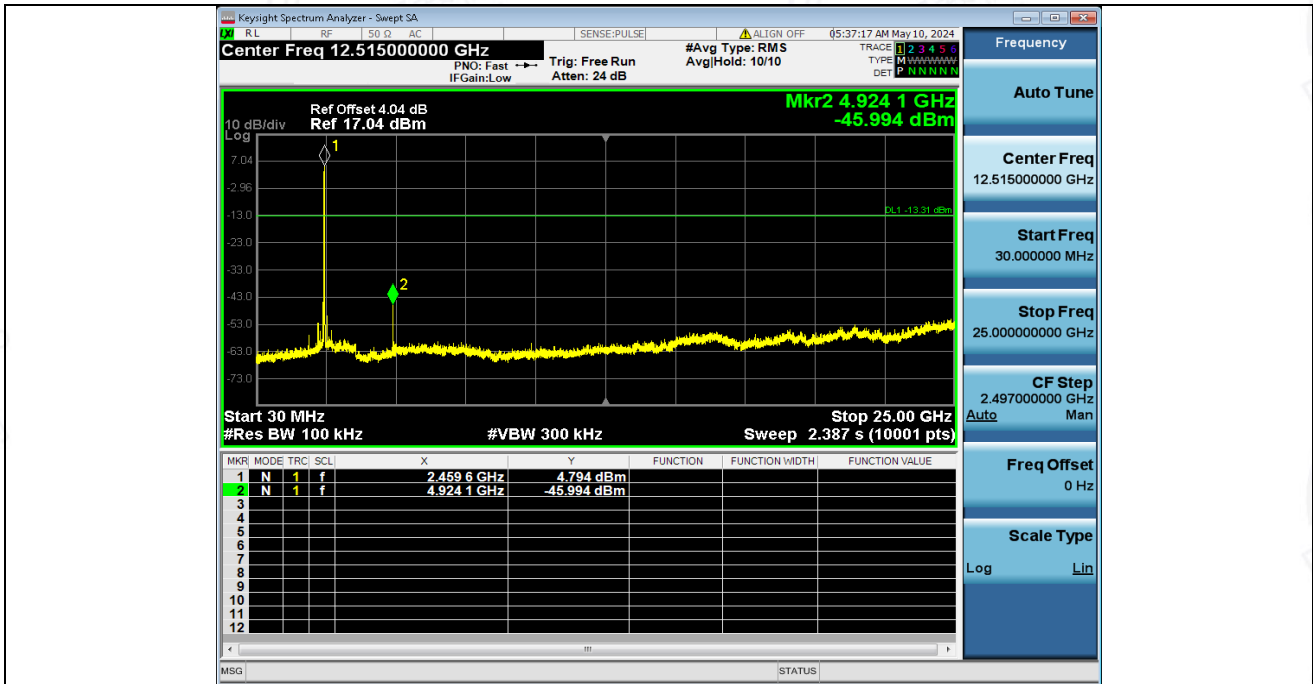


1 Reference Level NVNT_ANT1_802_11b_2462

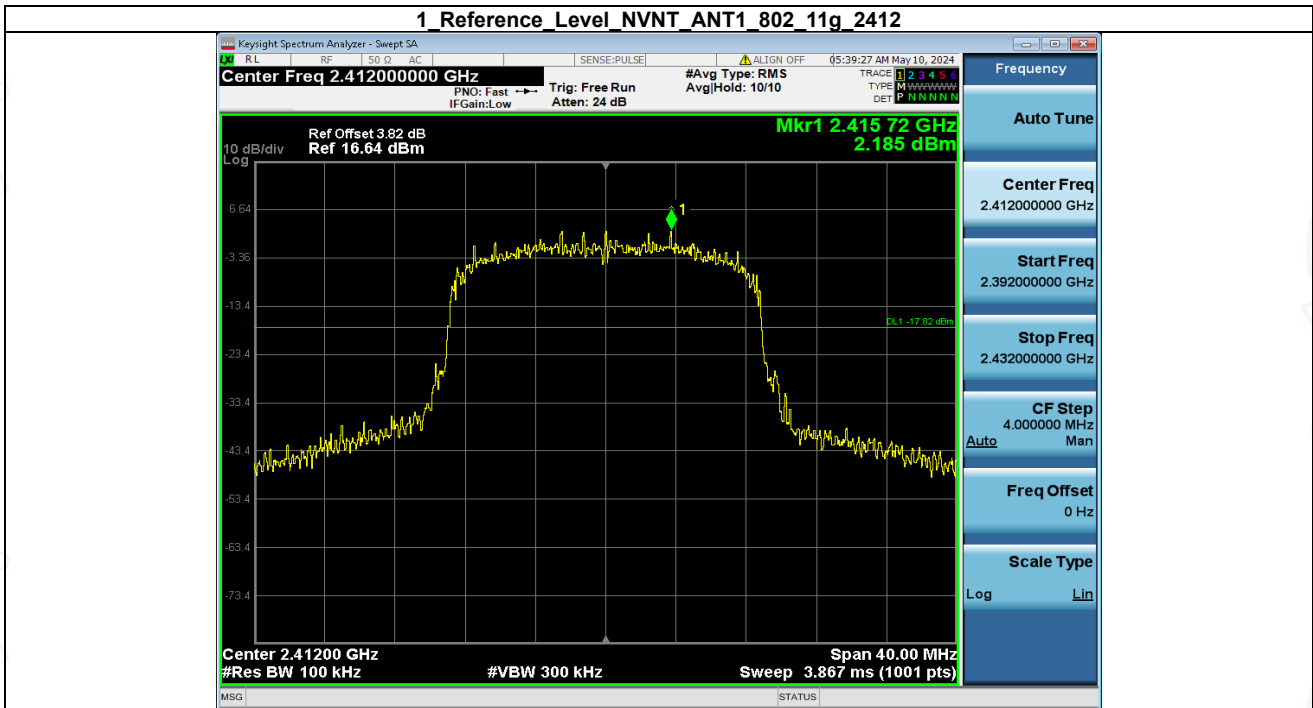


2 Spurious Emission_NVNT_ANT1_802_11b_2462



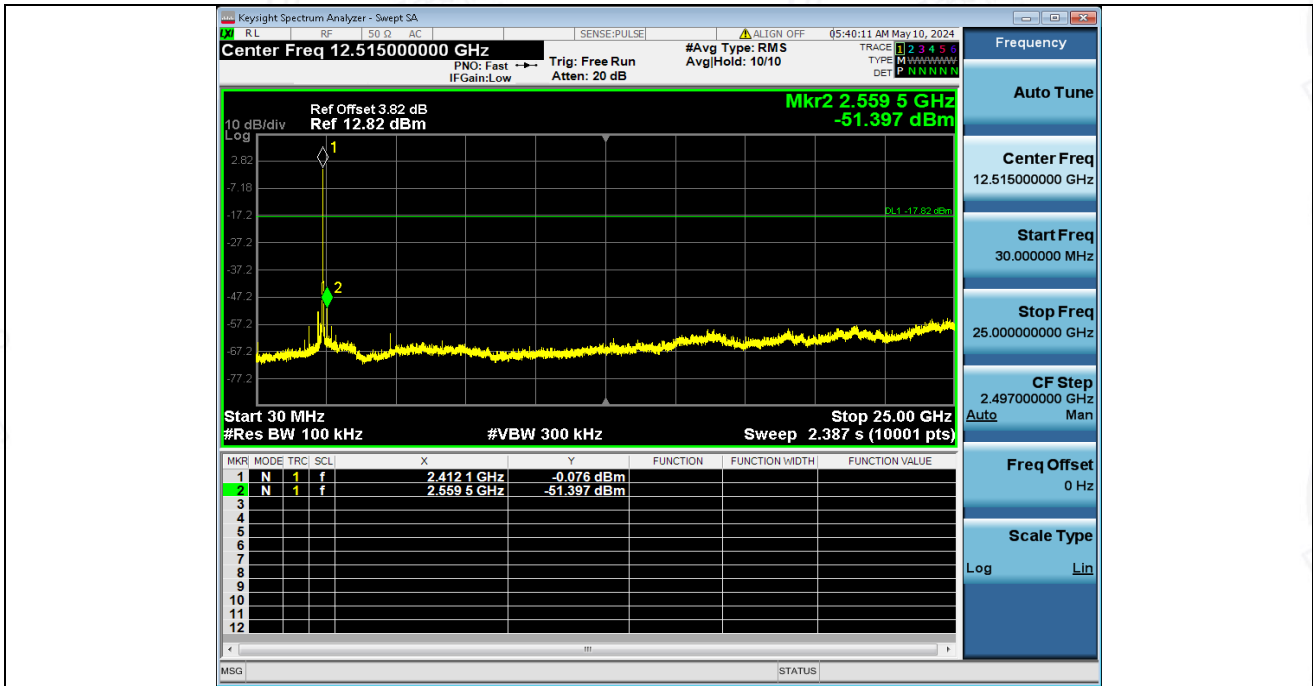


1 Reference Level NVNT_ANT1_802_11g_2412

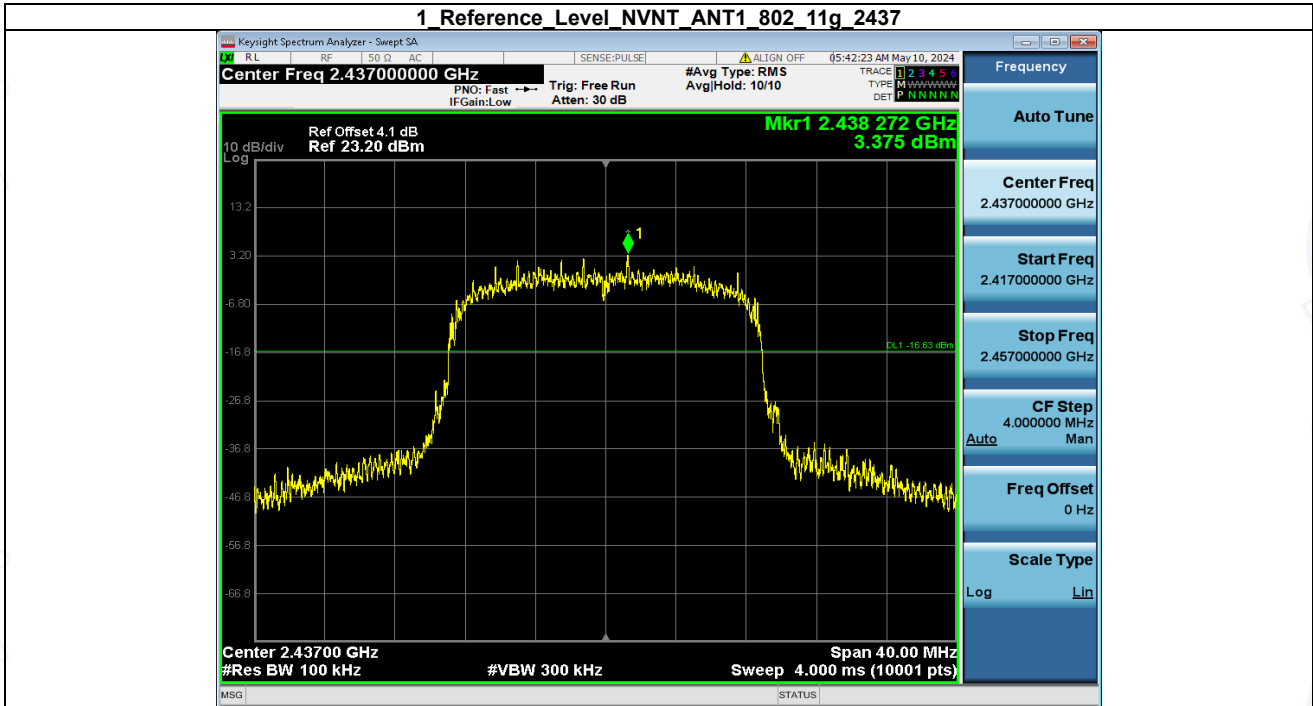


2 Spurious Emission_NVNT_ANT1_802_11g_2412



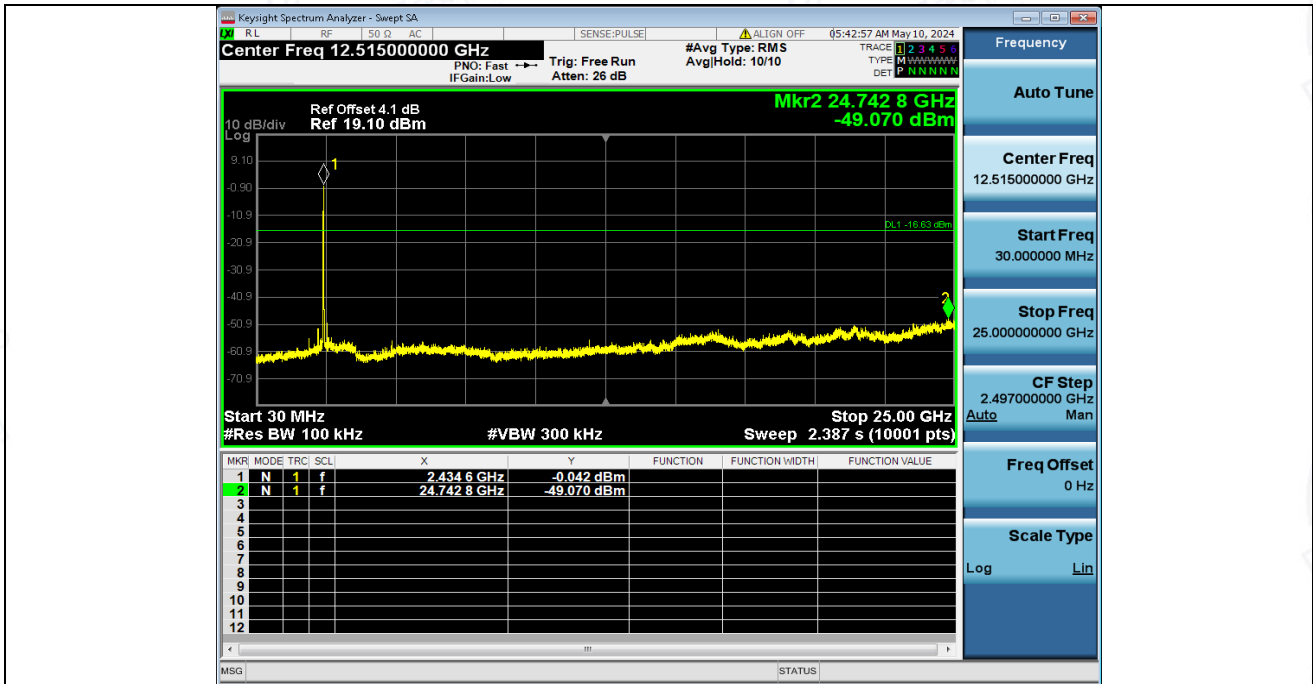


1 Reference Level NVNT_ANT1_802_11g_2437

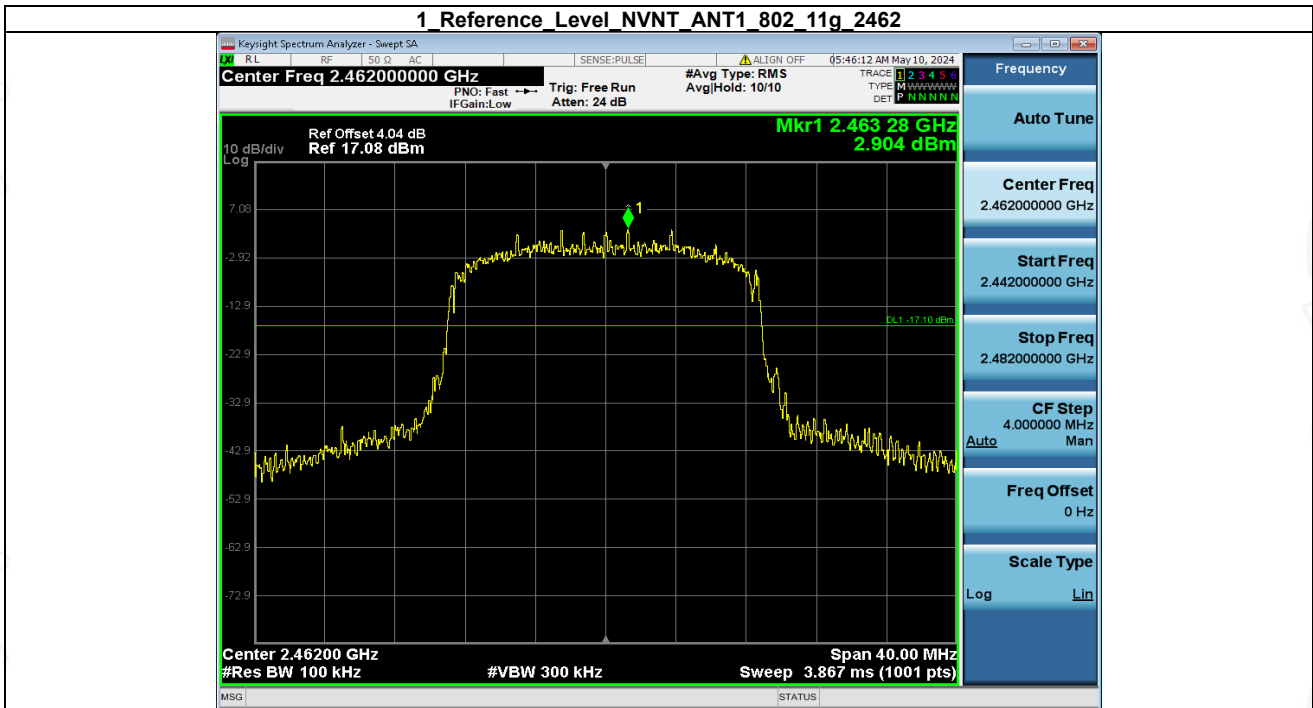


2 Spurious Emission_NVNT_ANT1_802_11g_2437



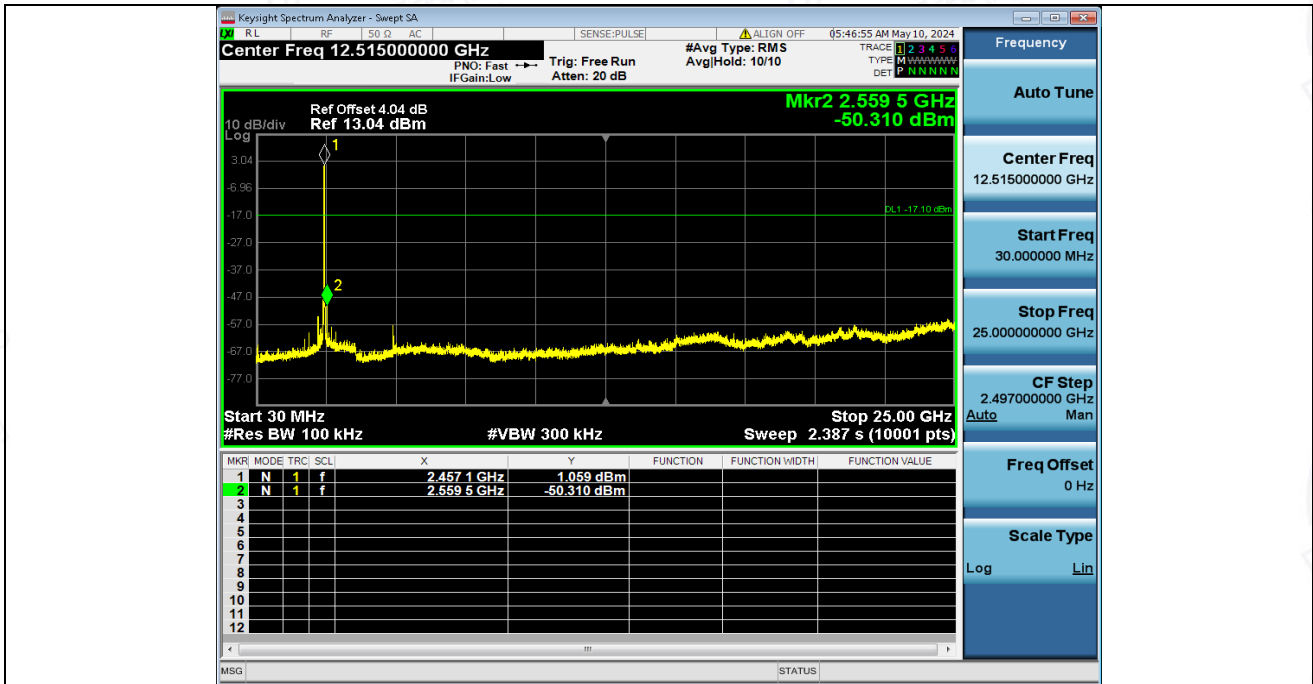


1 Reference Level NVNT_ANT1_802_11g_2462

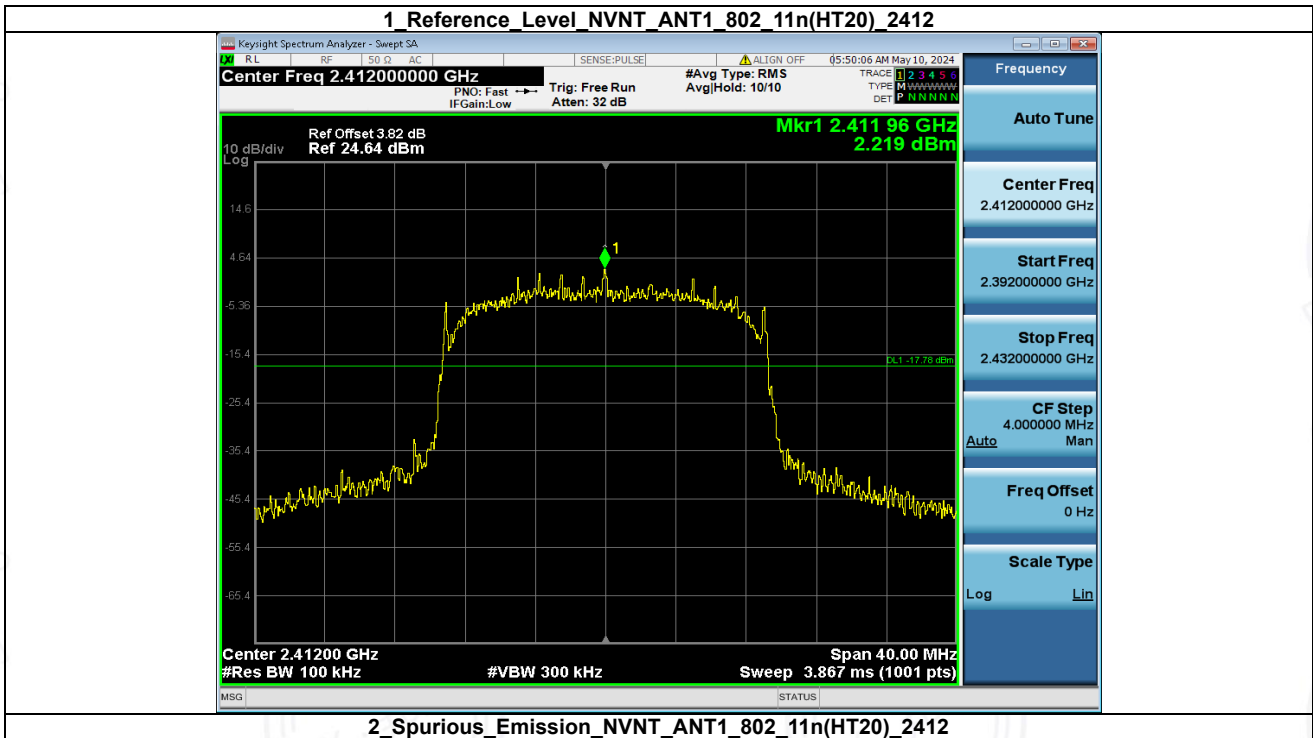


2 Spurious_Emission_NVNT_ANT1_802_11g_2462



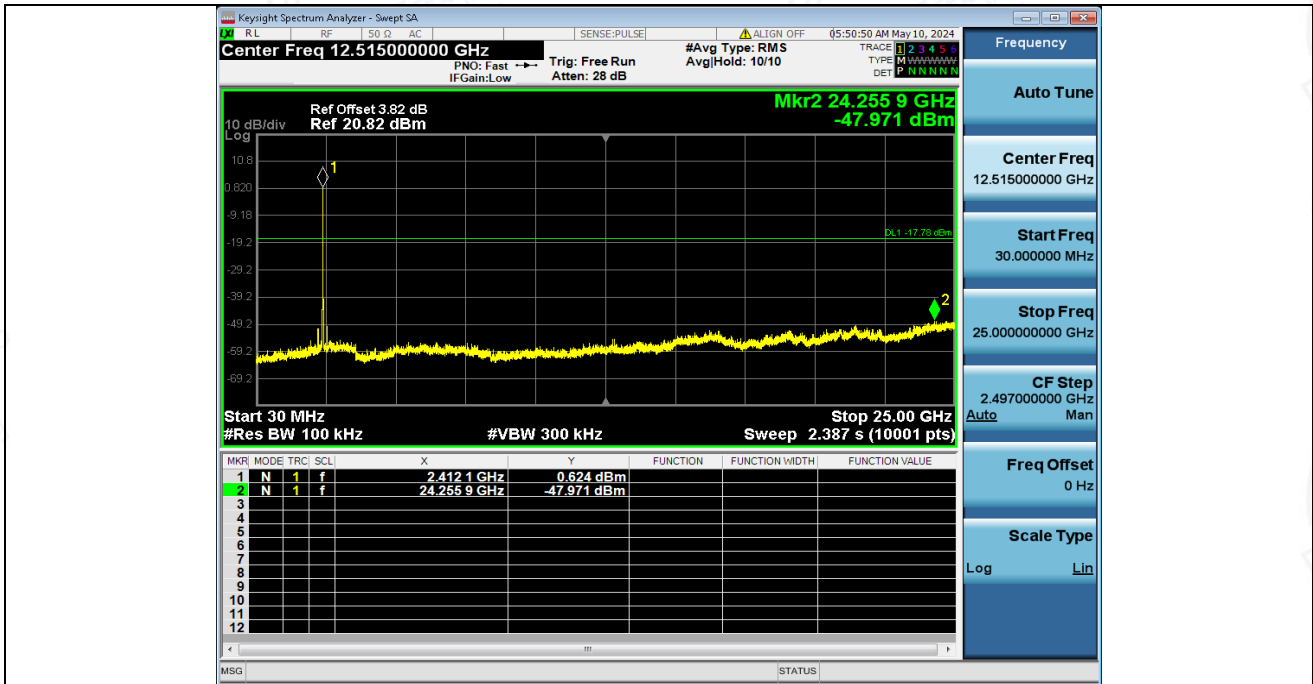


1 Reference Level NVNT_ANT1_802_11n(HT20)_2412

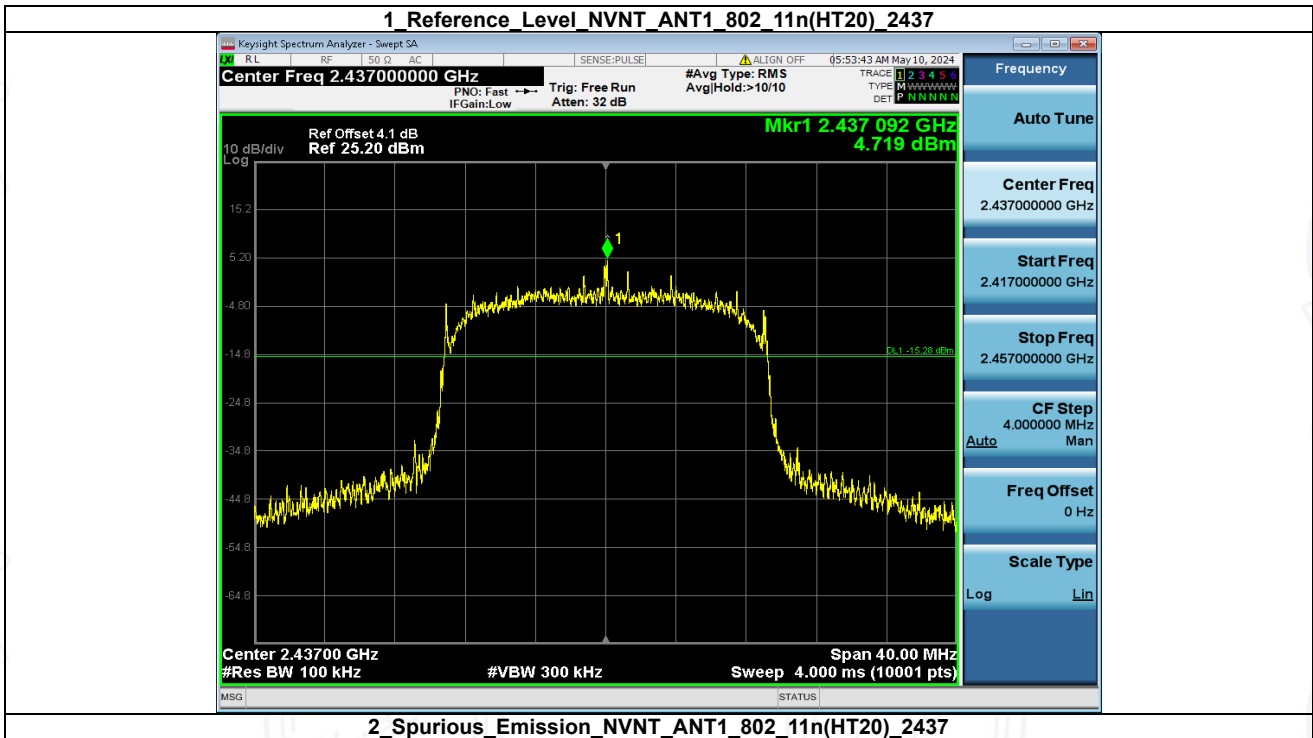


2 Spurious_Emission_NVNT_ANT1_802_11n(HT20)_2412



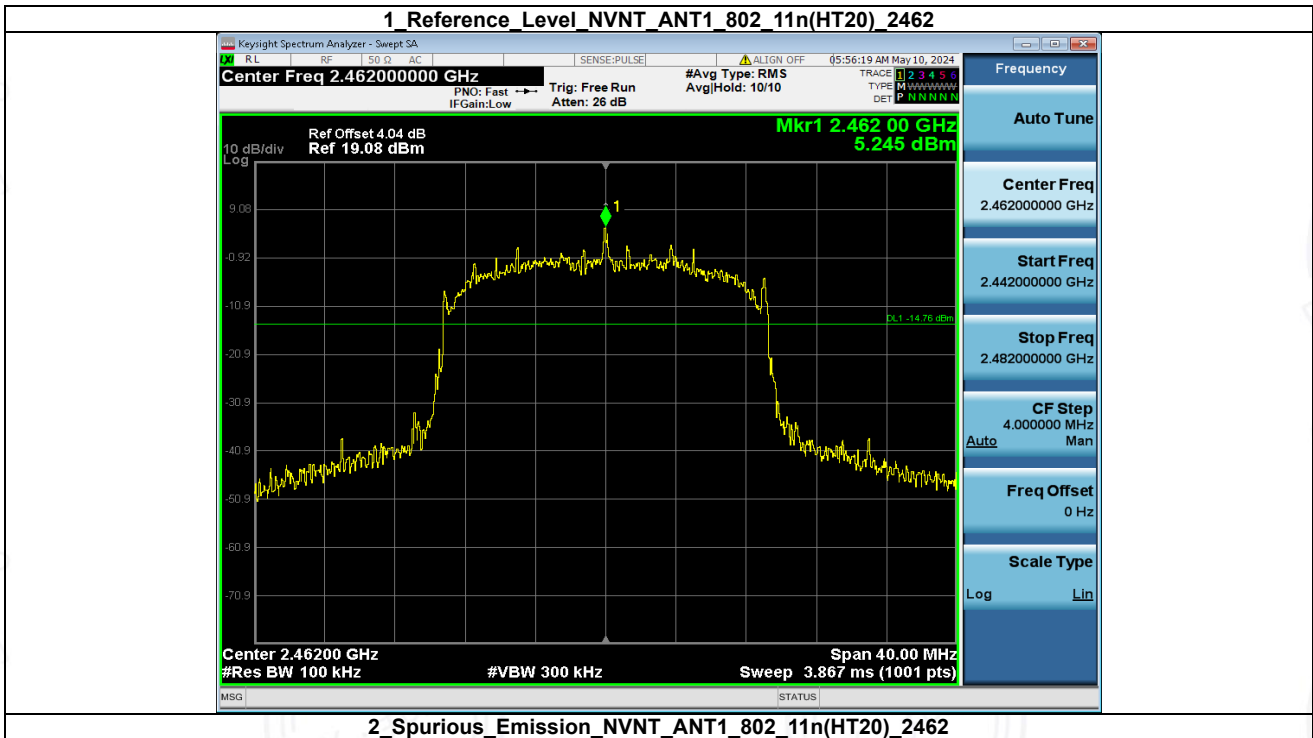
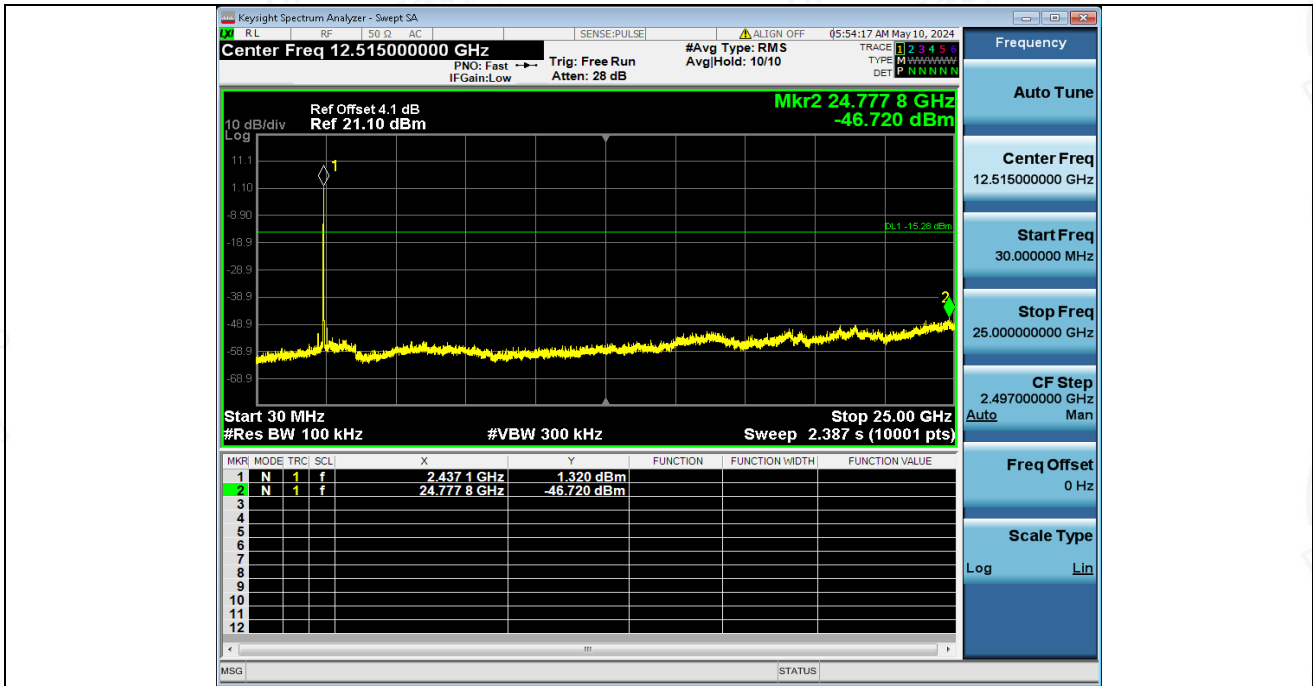


1 Reference Level NVNT_ANT1_802_11n(HT20)_2437



2 Spurious Emission_NVNT_ANT1_802_11n(HT20)_2437





2_Spurious_Emission_NVNT_ANT1_802_11n(HT20)_2462



