

Appendix

Test Data

for BTEK250620088A02-T05

Start date	2025/7/3	Finish date	2025/7/3
Temperature	23.8℃	Humidity	45%
RF specifications	2.4G WIFI	Test Engineer	Zora



Table of Contents

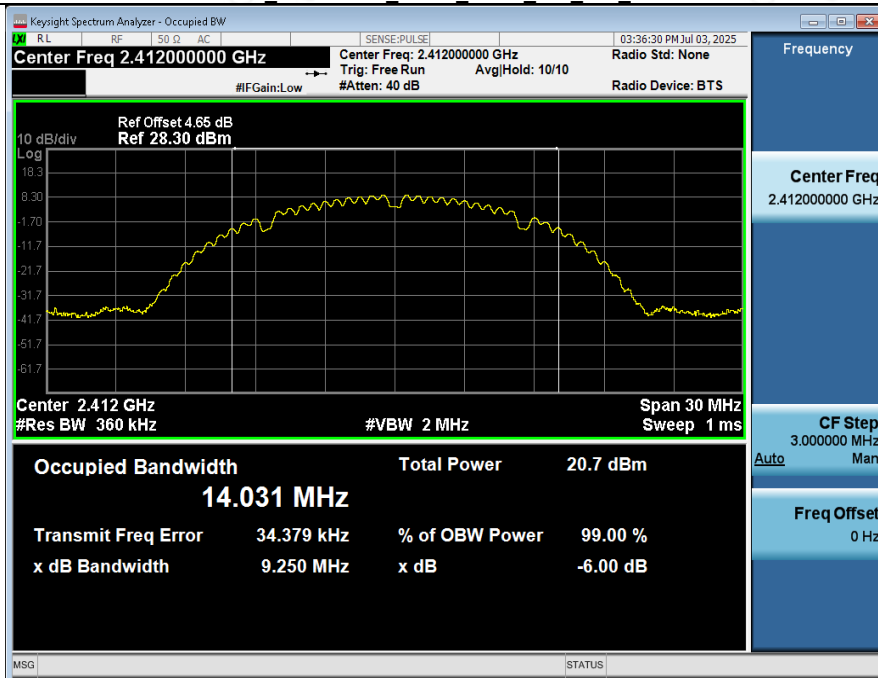
1. -6dB Bandwidth.....	3
2. 99% Occupied Bandwidth	8
3. Duty Cycle.....	13
4. MAX. Output Power	18
5. Power Spectral Density.....	23
6. Bandedge.....	28
7. Spurious Emission.....	34



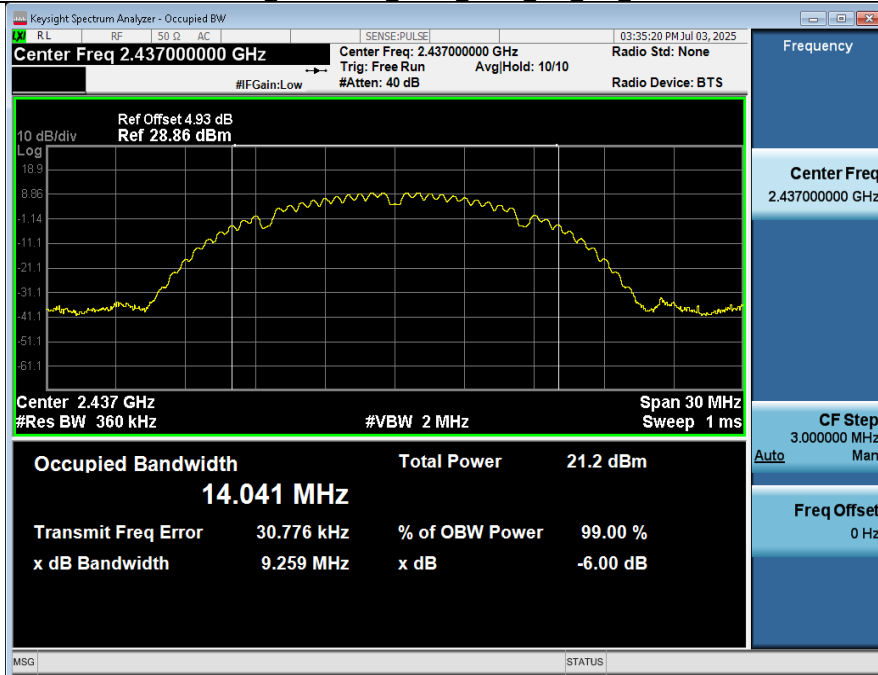
1. -6dB Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	9.25	500	Pass
NVNT	ANT1	802.11b	2437.00	9.26	500	Pass
NVNT	ANT1	802.11b	2462.00	9.26	500	Pass
NVNT	ANT1	802.11g	2412.00	16.53	500	Pass
NVNT	ANT1	802.11g	2437.00	16.53	500	Pass
NVNT	ANT1	802.11g	2462.00	16.54	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	17.72	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	17.71	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	17.72	500	Pass

-6dB_Bandwidth_NVNT_ANT1_802_11b_2412

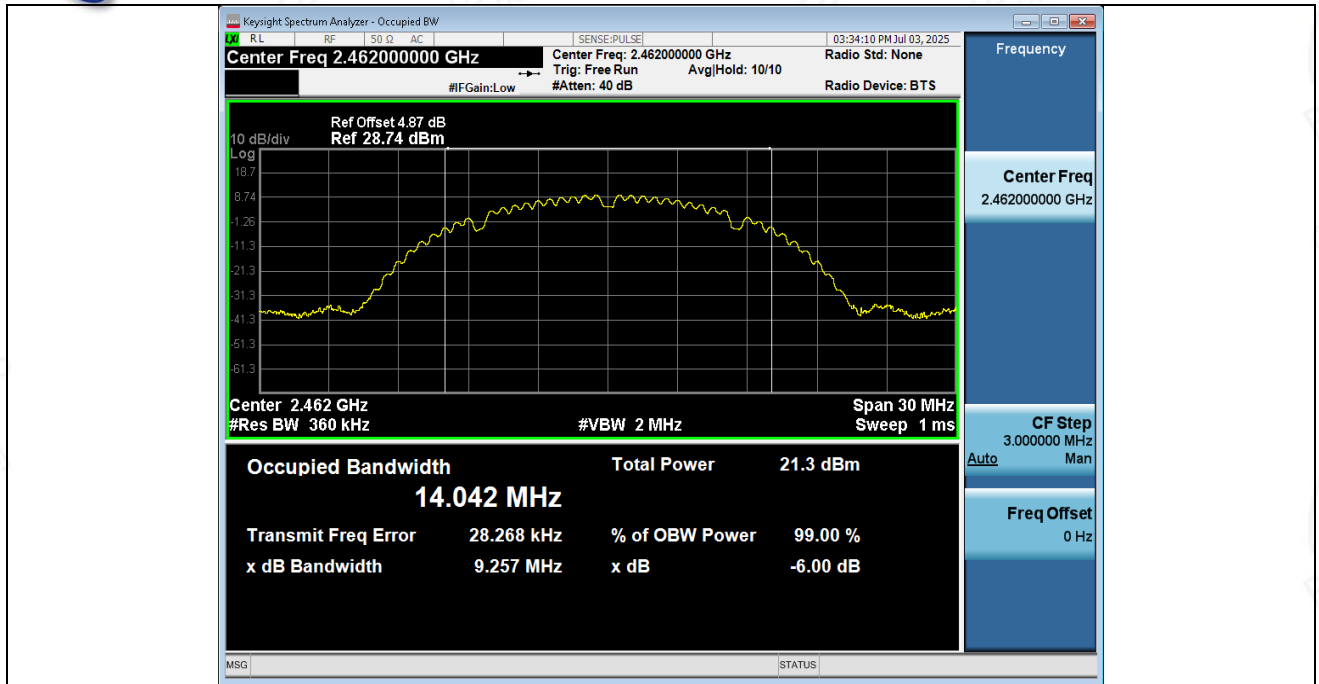


-6dB_Bandwidth_NVNT_ANT1_802_11b_2437

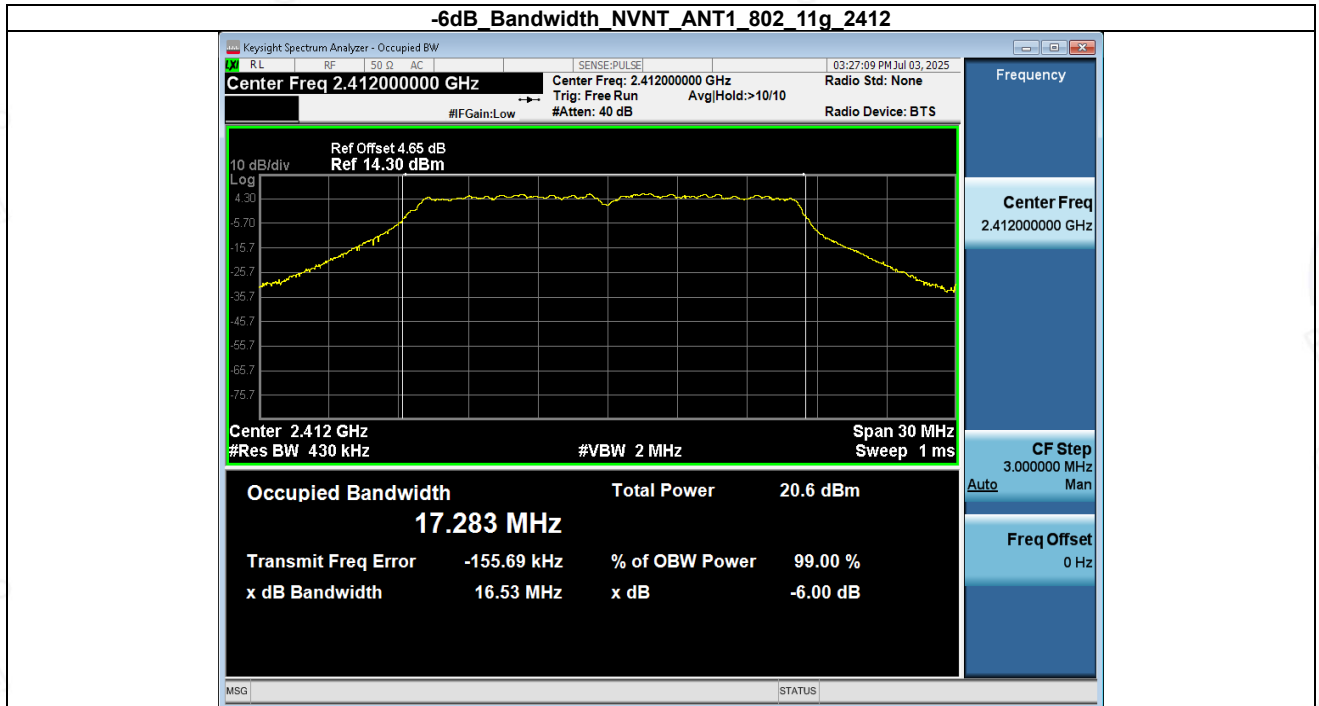


-6dB_Bandwidth_NVNT_ANT1_802_11b_2462



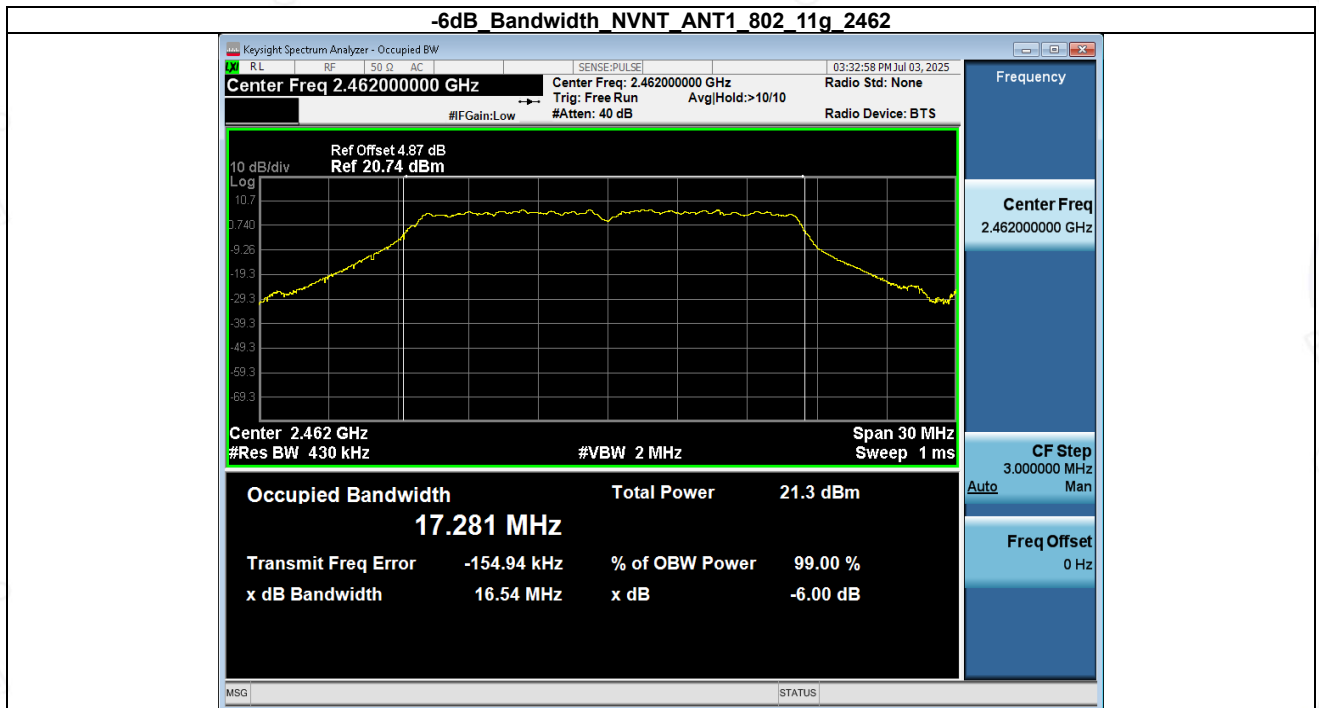


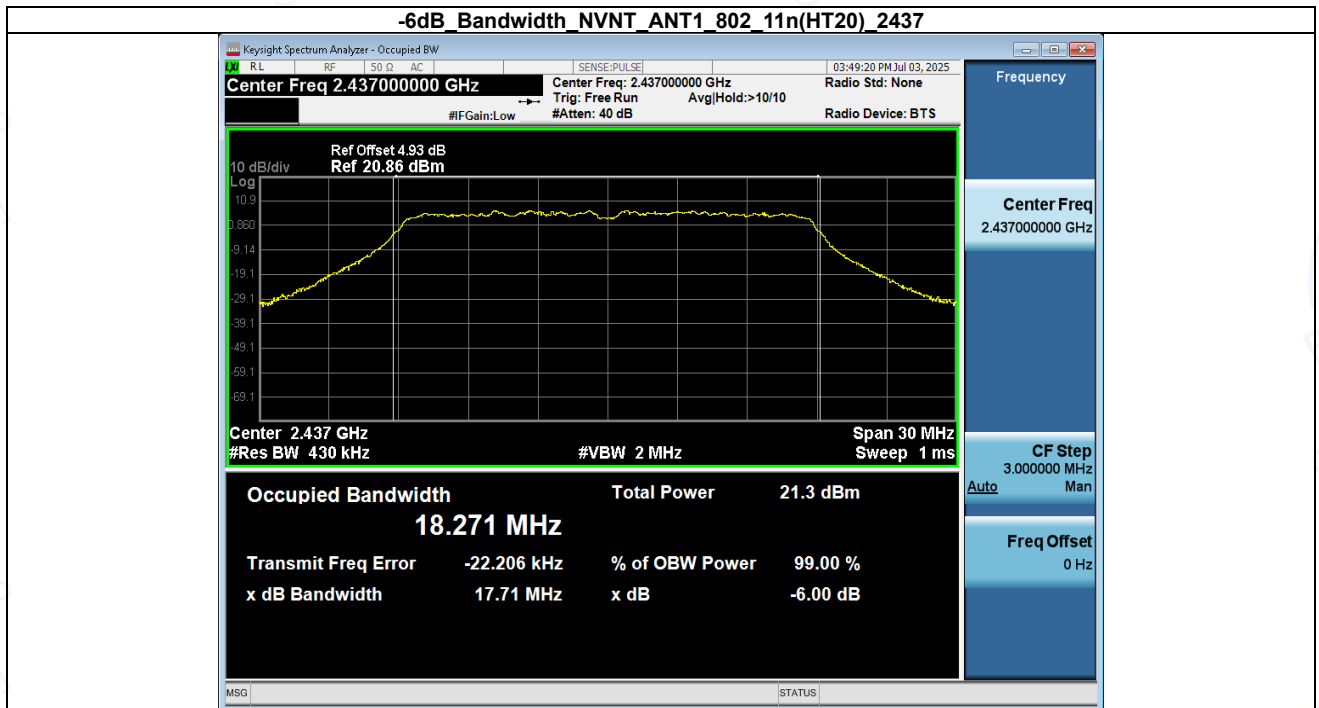
-6dB Bandwidth_NVNT_ANT1_802_11g_2412



-6dB Bandwidth_NVNT_ANT1_802_11g_2437







-6dB Bandwidth NVNT_ANT1_802_11n(HT20)_2462

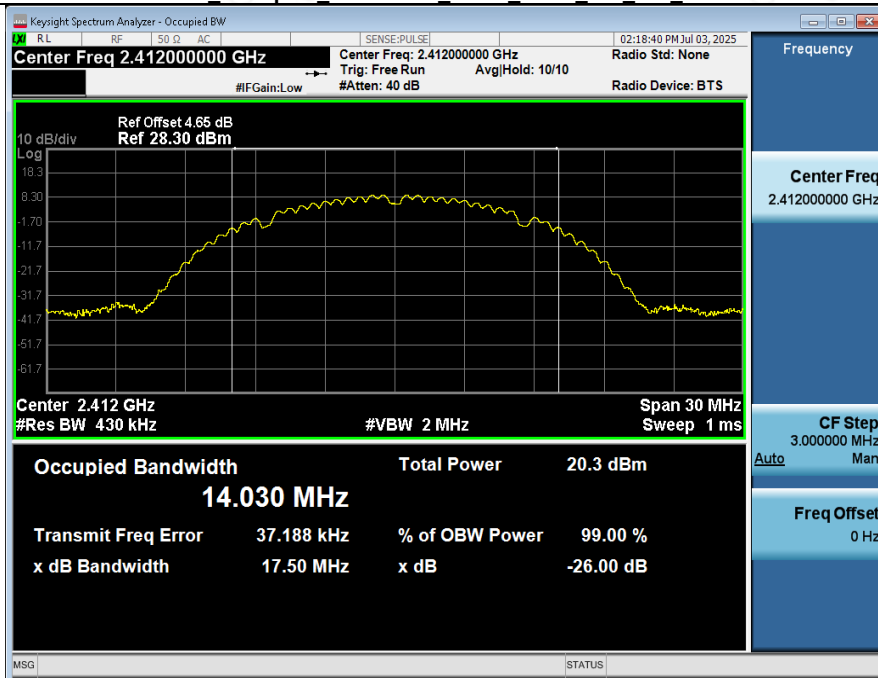




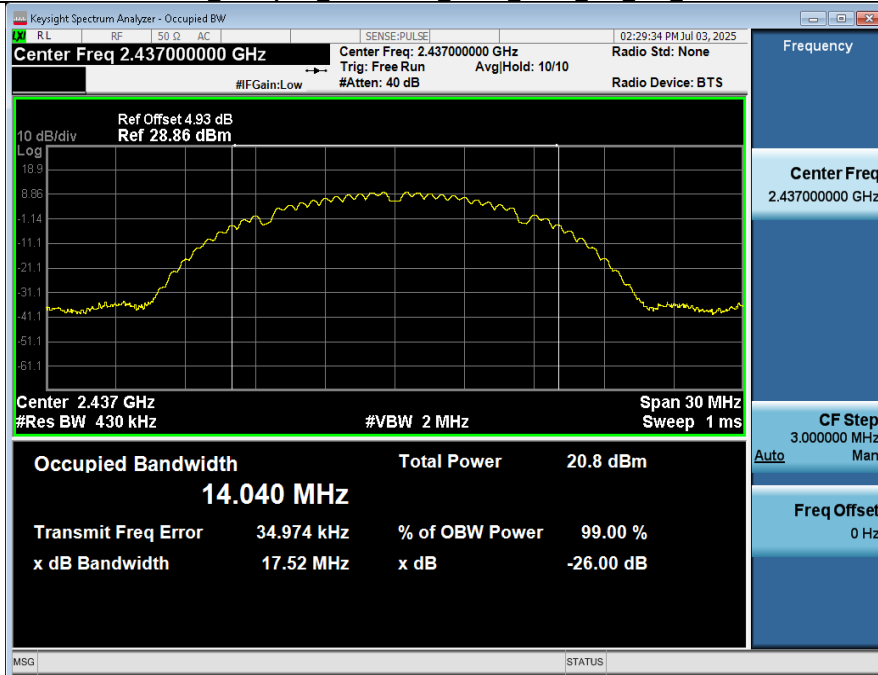
2. 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99% BW (MHz)
NVNT	ANT1	802.11b	2412.00	14.030
NVNT	ANT1	802.11b	2437.00	14.040
NVNT	ANT1	802.11b	2462.00	14.044
NVNT	ANT1	802.11g	2412.00	17.669
NVNT	ANT1	802.11g	2437.00	17.536
NVNT	ANT1	802.11g	2462.00	17.521
NVNT	ANT1	802.11n(HT20)	2412.00	18.585
NVNT	ANT1	802.11n(HT20)	2437.00	18.582
NVNT	ANT1	802.11n(HT20)	2462.00	18.590

99% Occupied Bandwidth NVNT ANT1 802_11b 2412

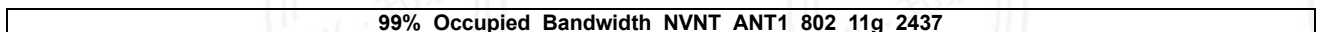
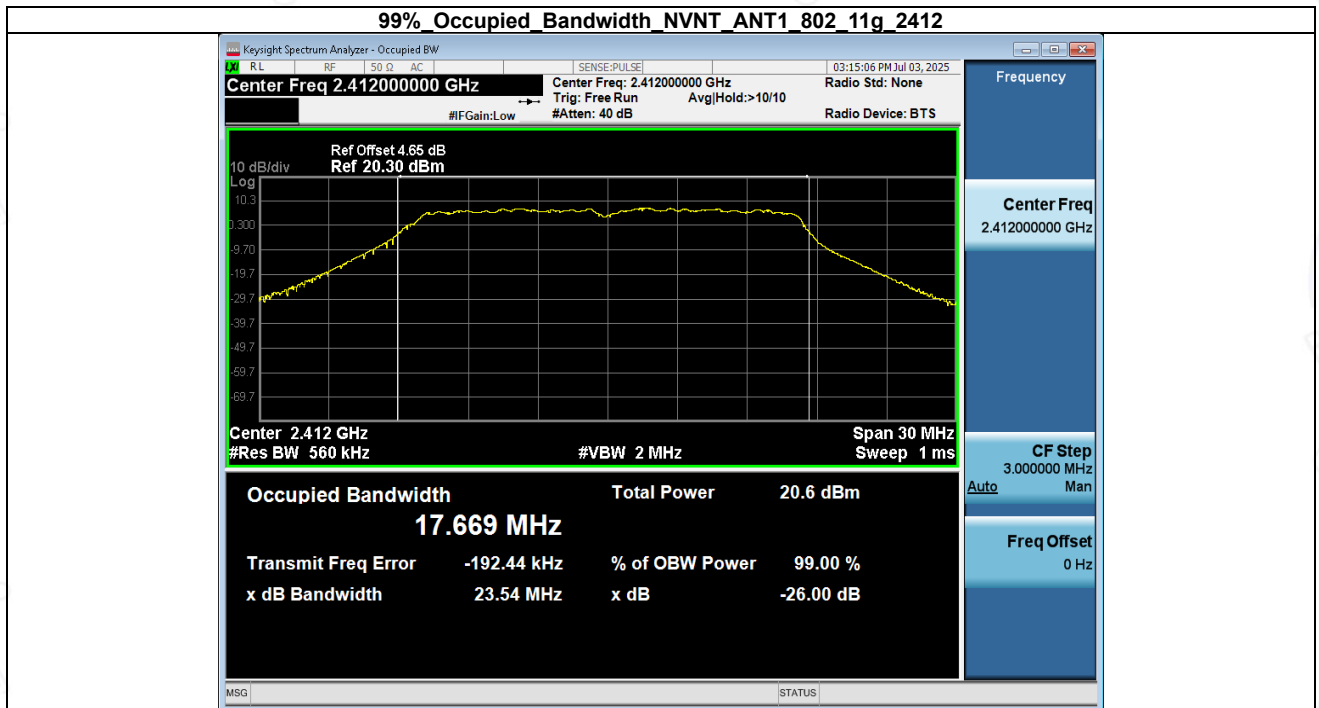
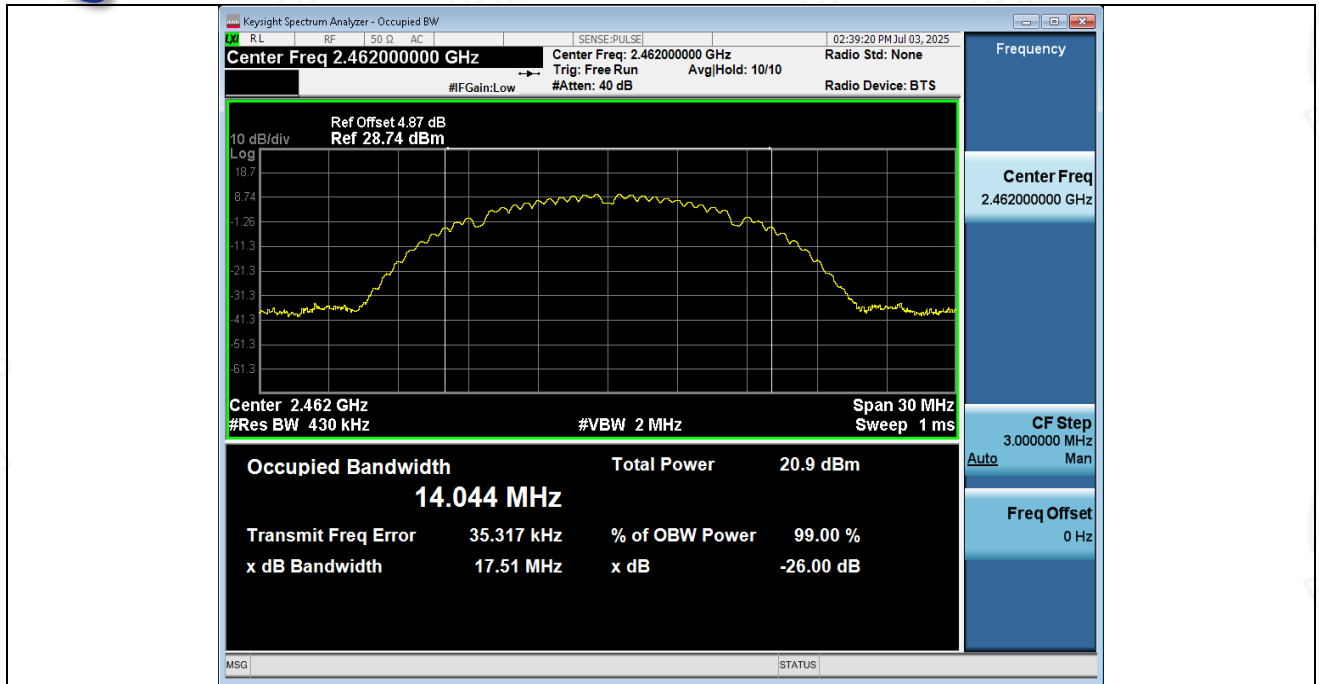


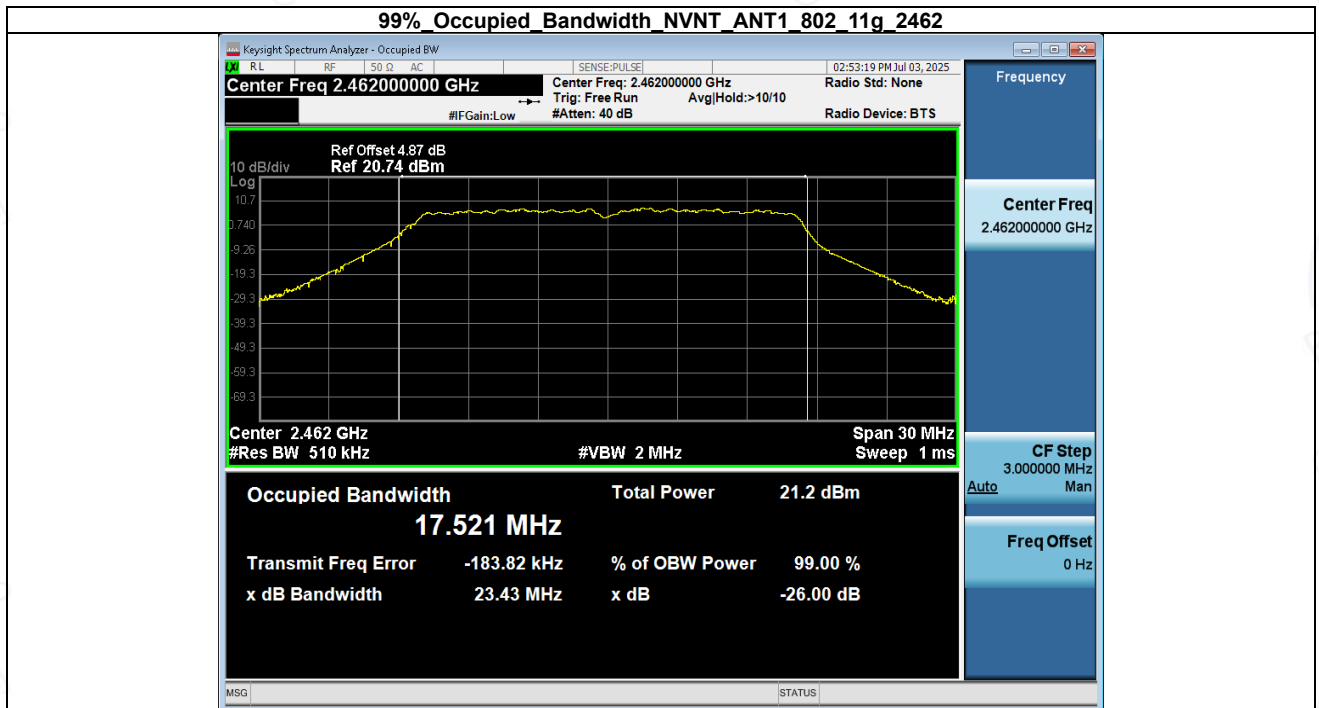
99% Occupied Bandwidth NVNT ANT1 802_11b 2437



99% Occupied Bandwidth NVNT ANT1 802_11b 2462

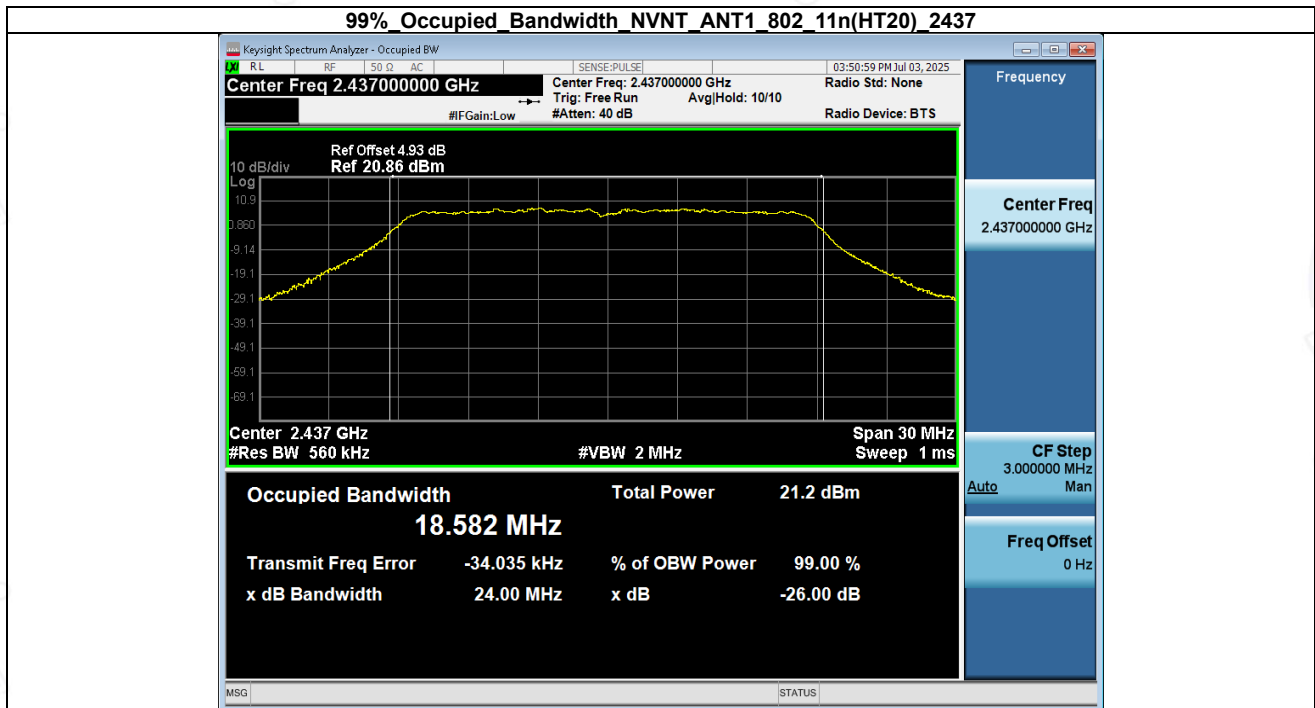
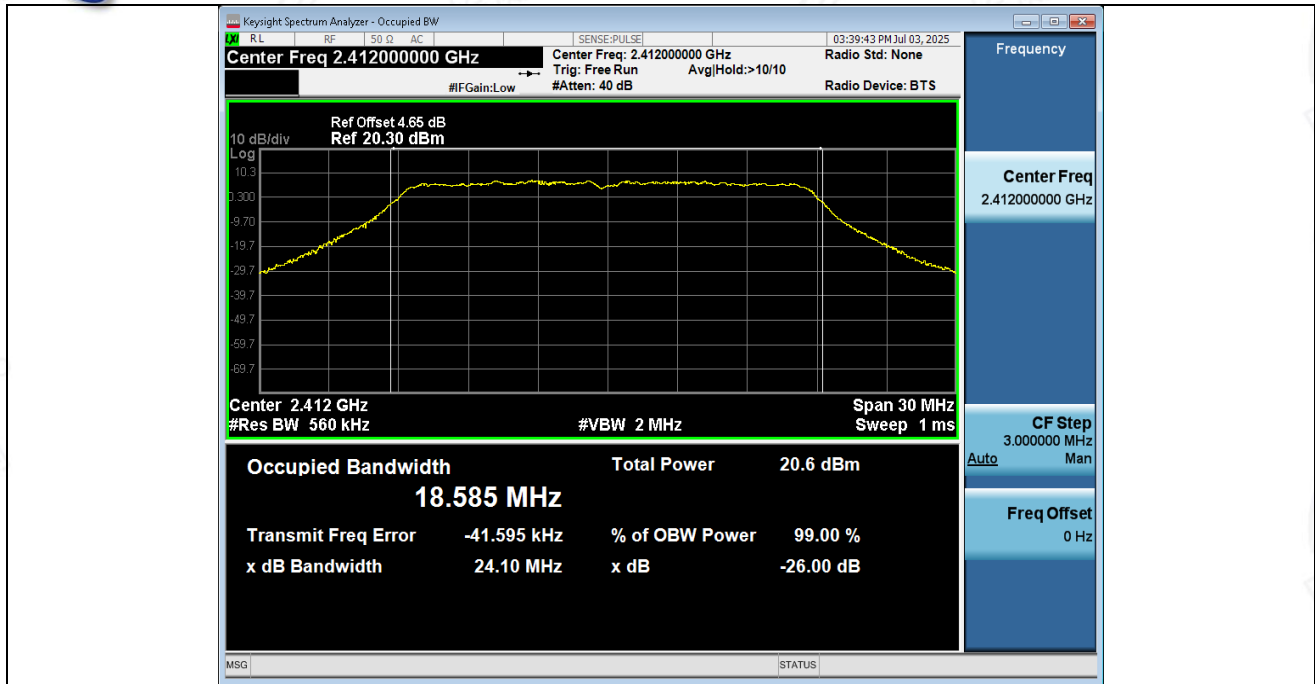






99% Occupied Bandwidth NVNT_ANT1_802_11n(HT20)_2412





99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462

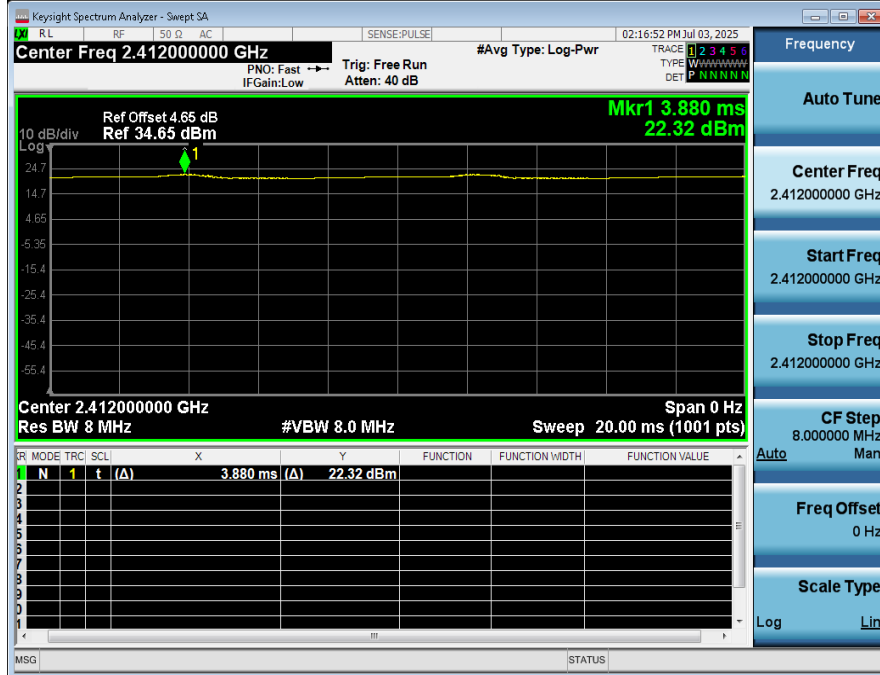




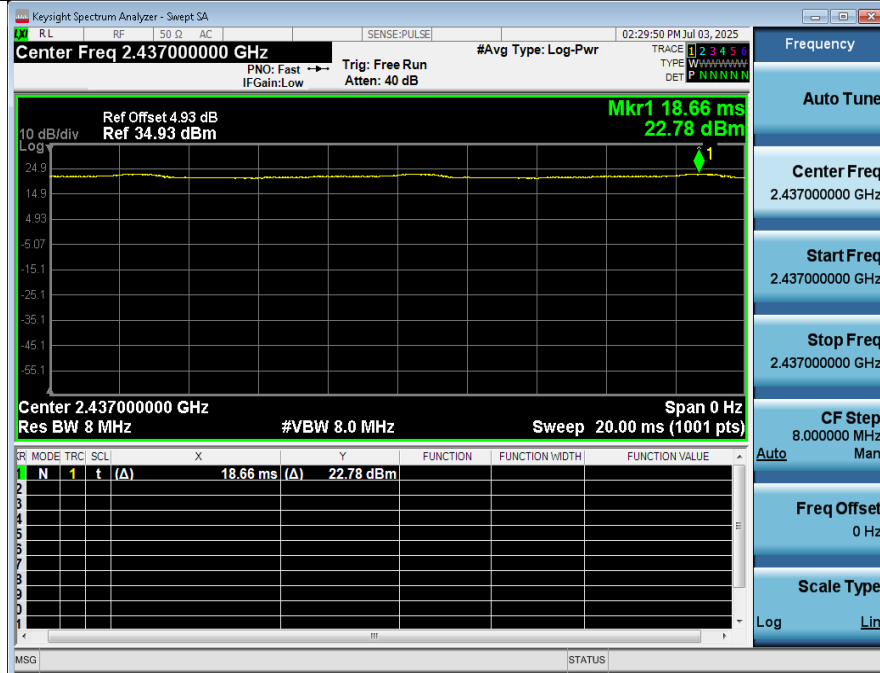
3. Duty Cycle

Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty factor(dB)
NVNT	ANT1	802.11b	2412.00	100	0.00
NVNT	ANT1	802.11b	2437.00	100	0.00
NVNT	ANT1	802.11b	2462.00	100	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_2412

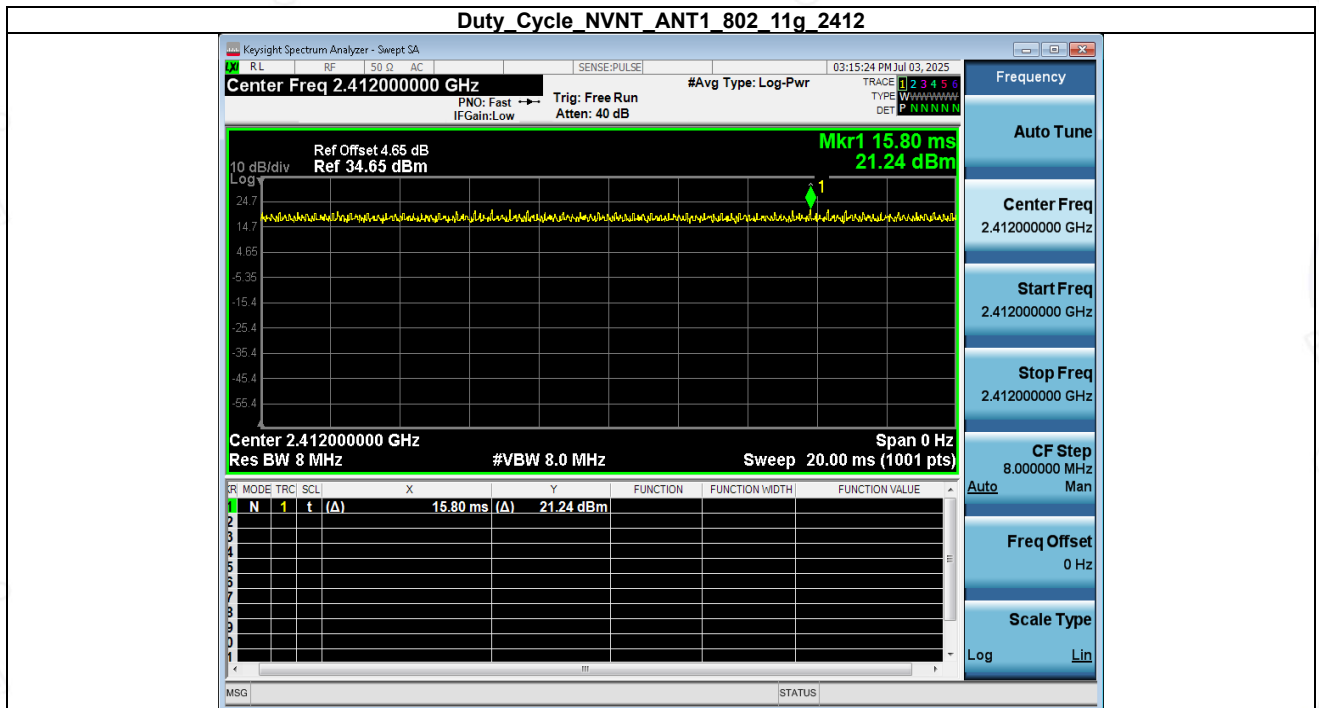
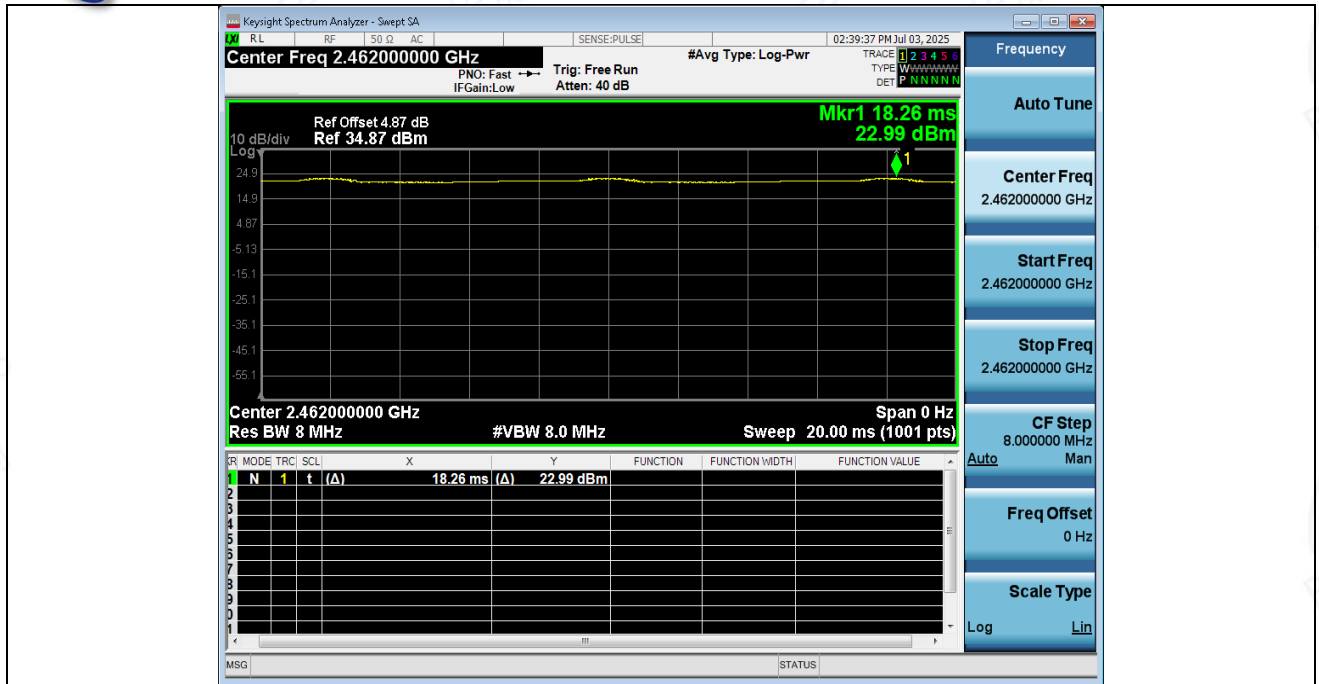


Duty_Cycle_NVNT_ANT1_802_11b_2437



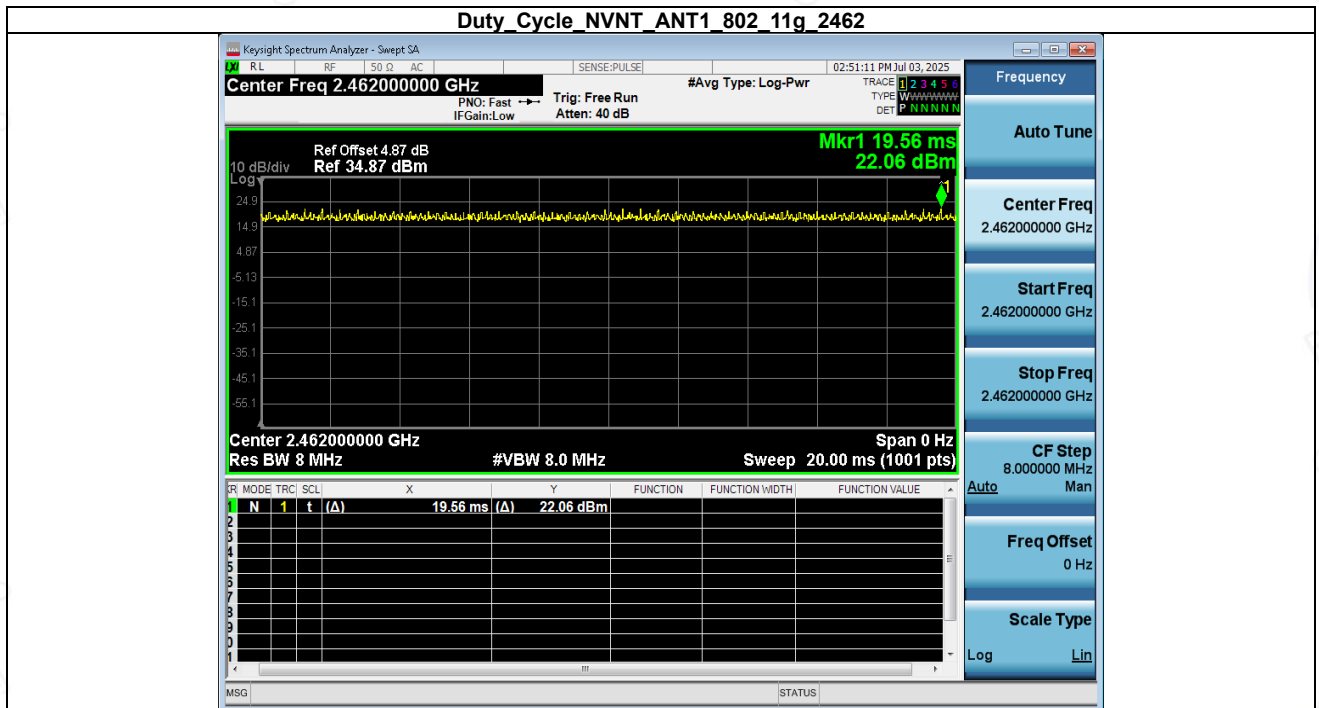
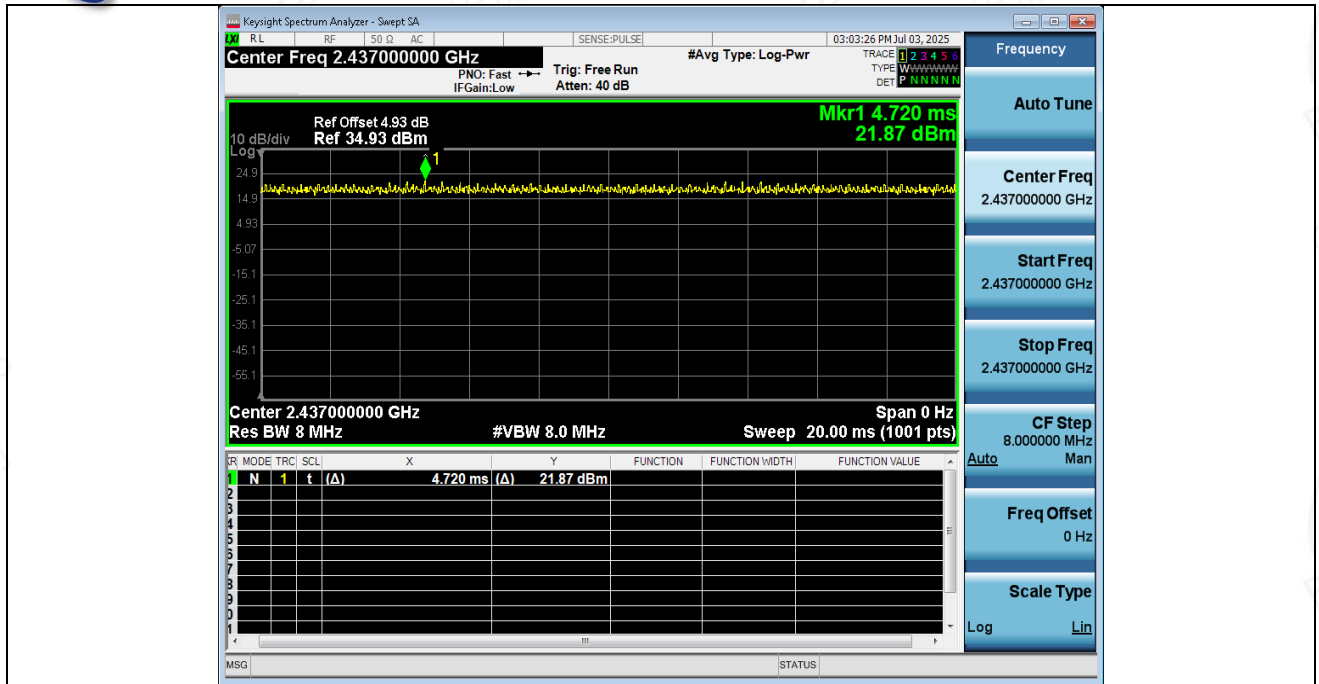
Duty_Cycle_NVNT_ANT1_802_11b_2462





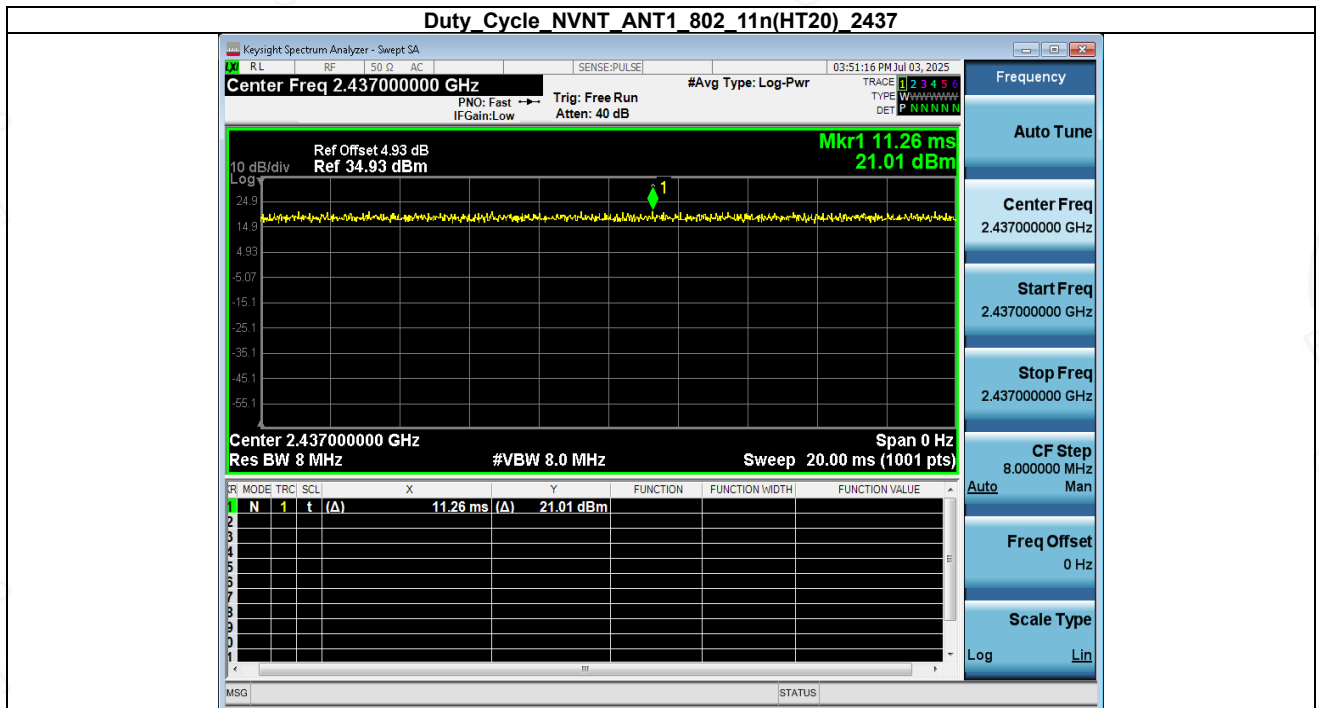
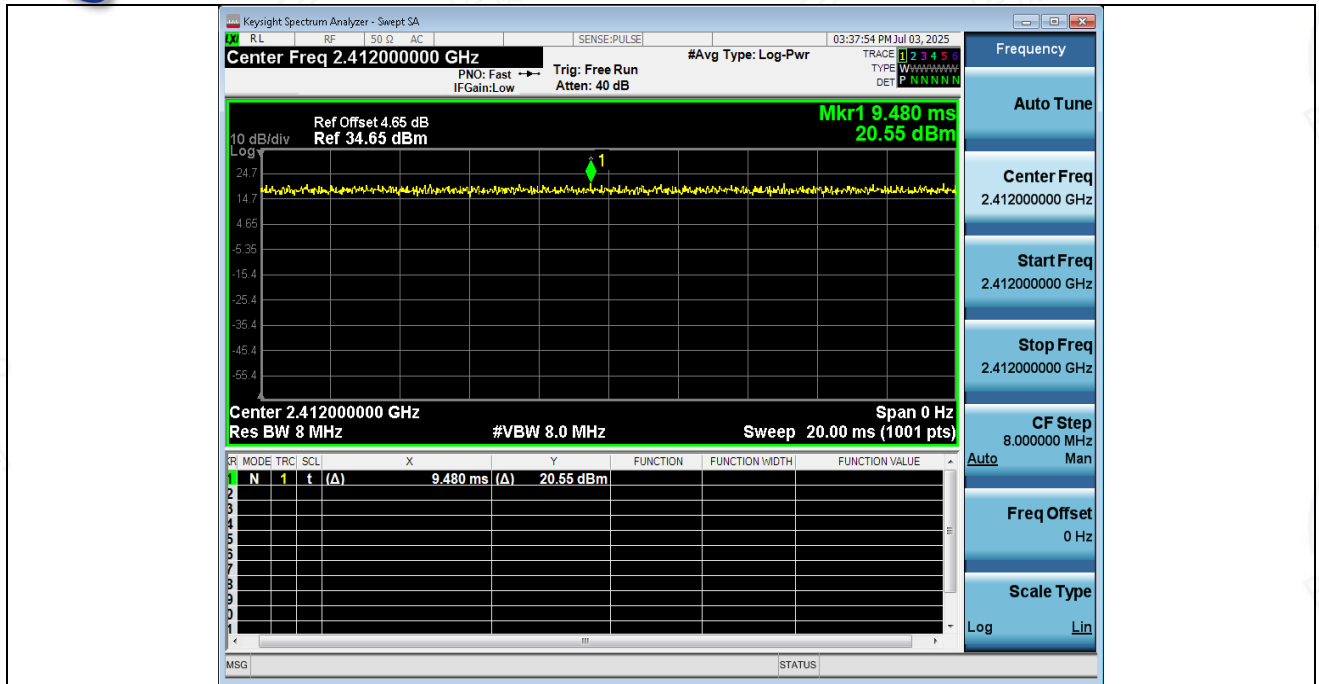
Duty_Cycle_NVNT_ANT1_802_11g_2437





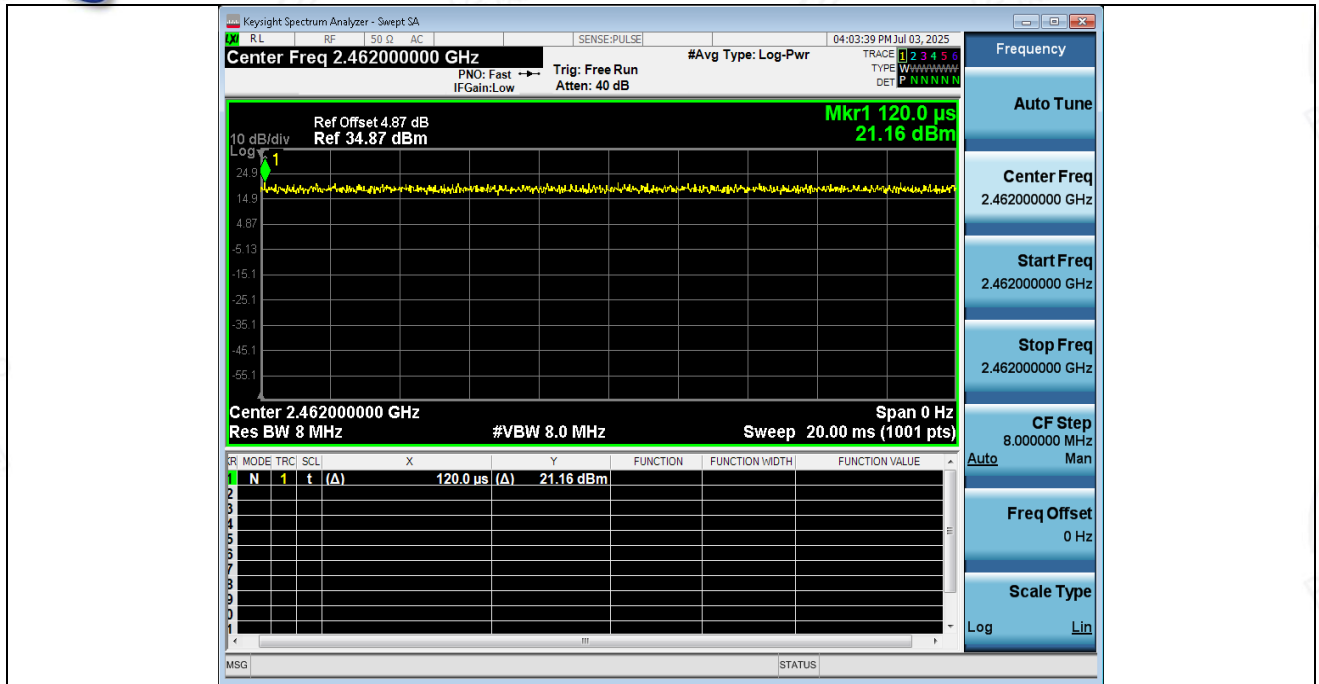
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2412





Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2462

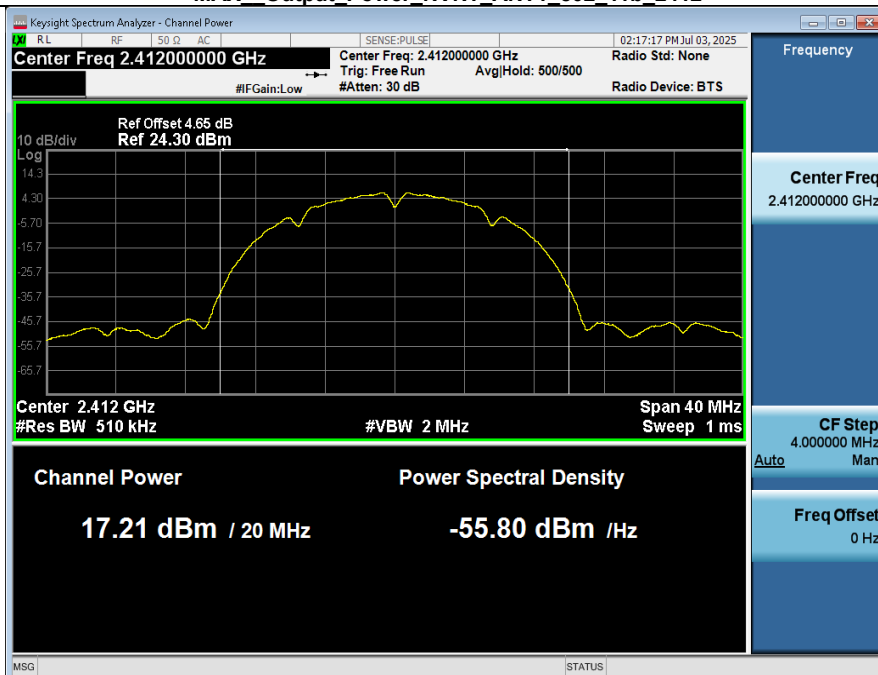




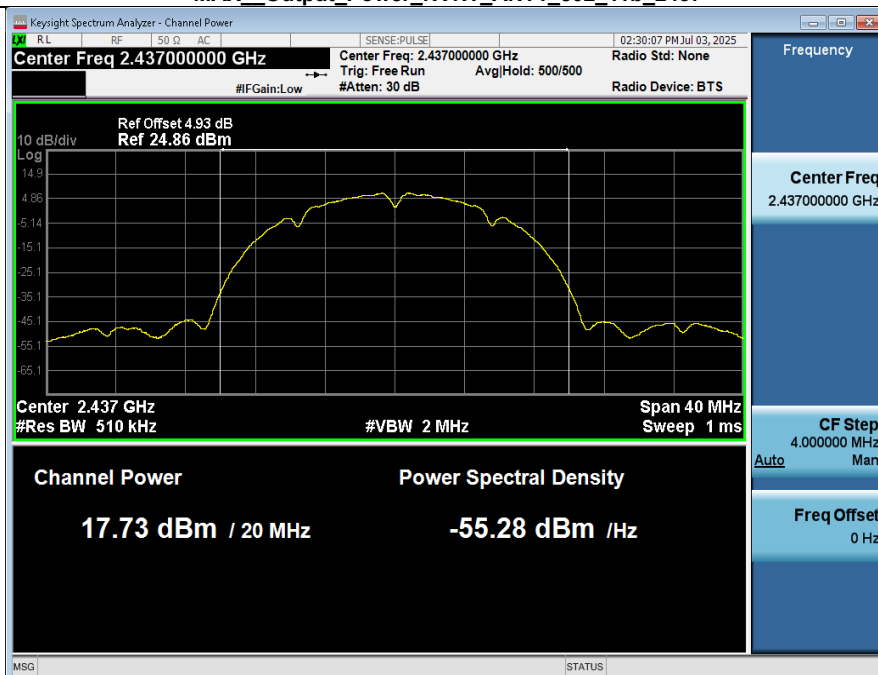
4. MAX. Output Power

Condition	Antenna	Modulation	Frequency (MHz)	Detector	Conducted Power(dBm)	Duty factor(dB)	Total Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	RMS	17.21	0.00	17.21	30	Pass
NVNT	ANT1	802.11b	2437.00	RMS	17.73	0.00	17.73	30	Pass
NVNT	ANT1	802.11b	2462.00	RMS	17.94	0.00	17.94	30	Pass
NVNT	ANT1	802.11g	2412.00	RMS	13.90	0.00	13.90	30	Pass
NVNT	ANT1	802.11g	2437.00	RMS	14.43	0.00	14.43	30	Pass
NVNT	ANT1	802.11g	2462.00	RMS	14.63	0.00	14.63	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	RMS	13.76	0.00	13.76	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	RMS	14.32	0.00	14.32	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	RMS	14.57	0.00	14.57	30	Pass

MAX Output Power NVNT ANT1 802 11b 2412

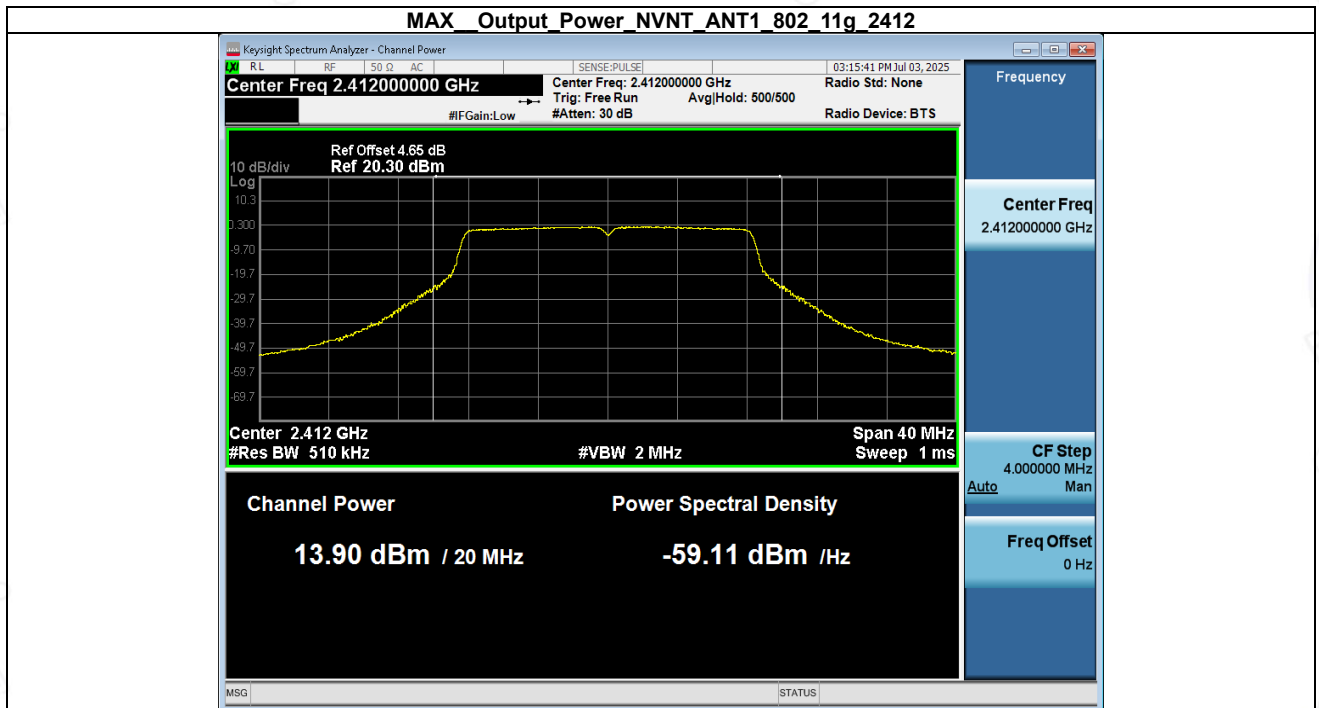
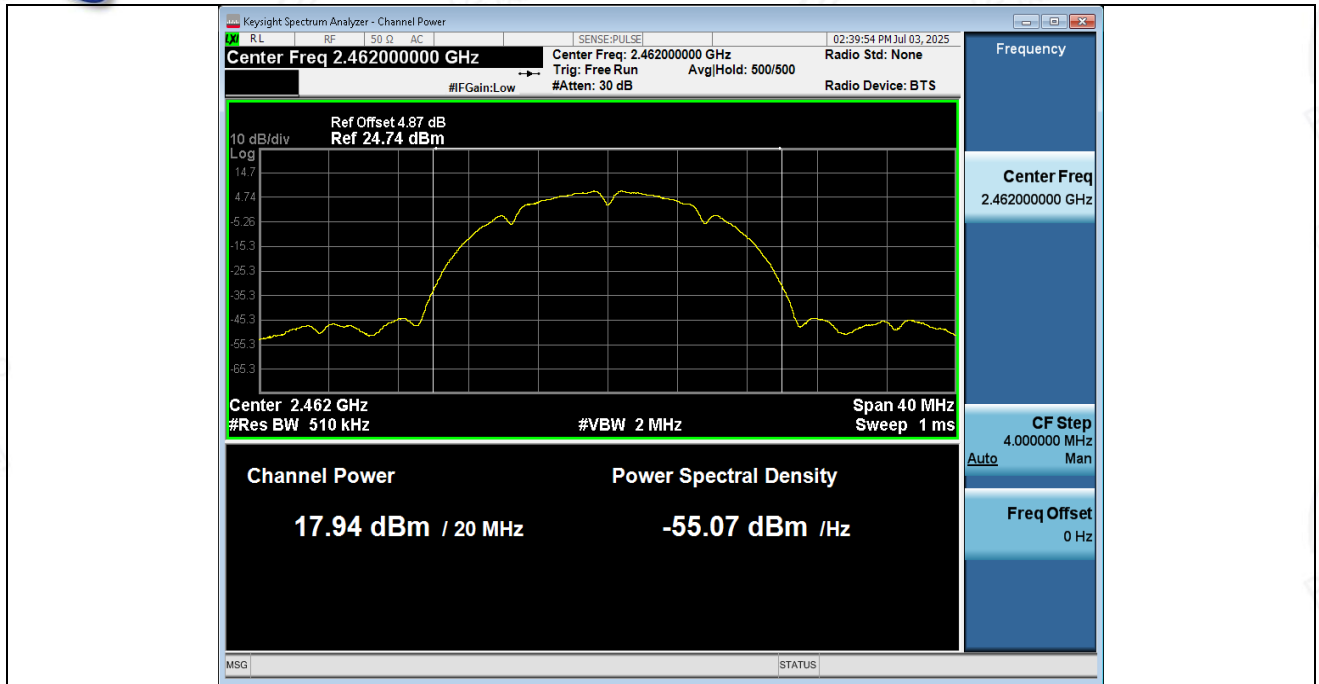


MAX Output Power NVNT ANT1 802 11b 2437



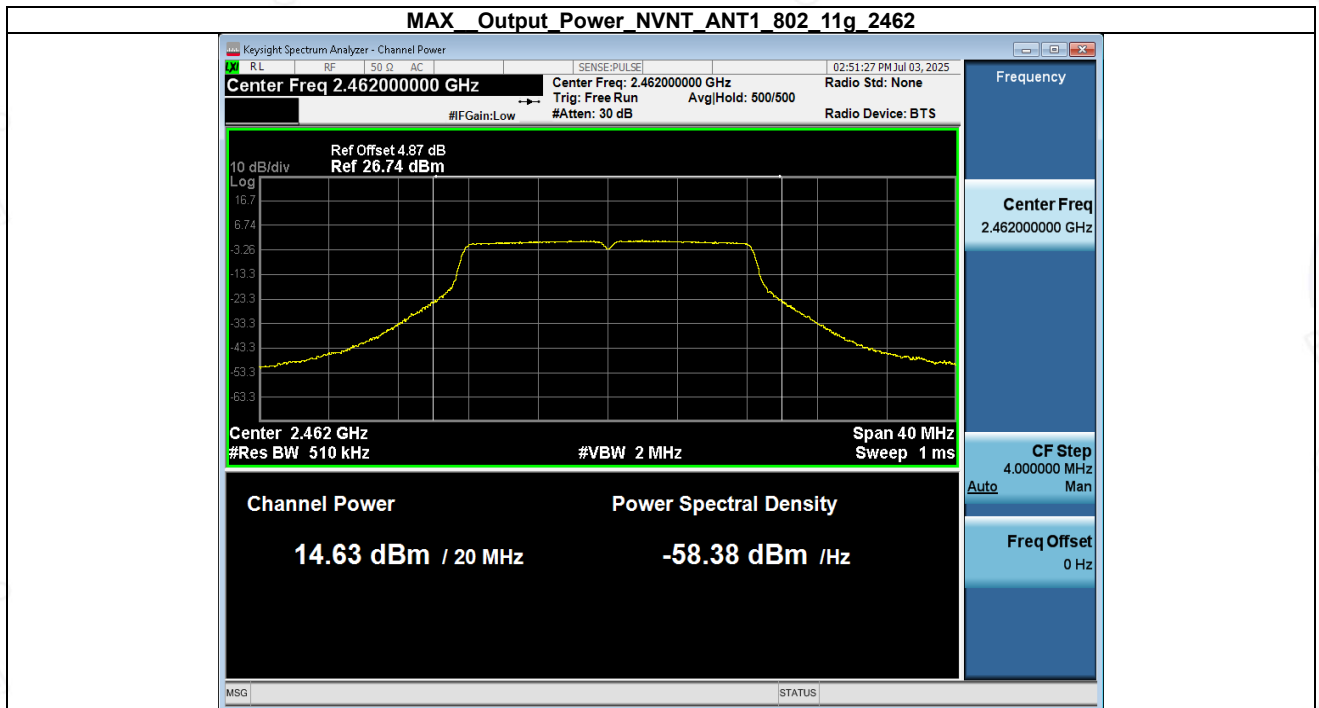
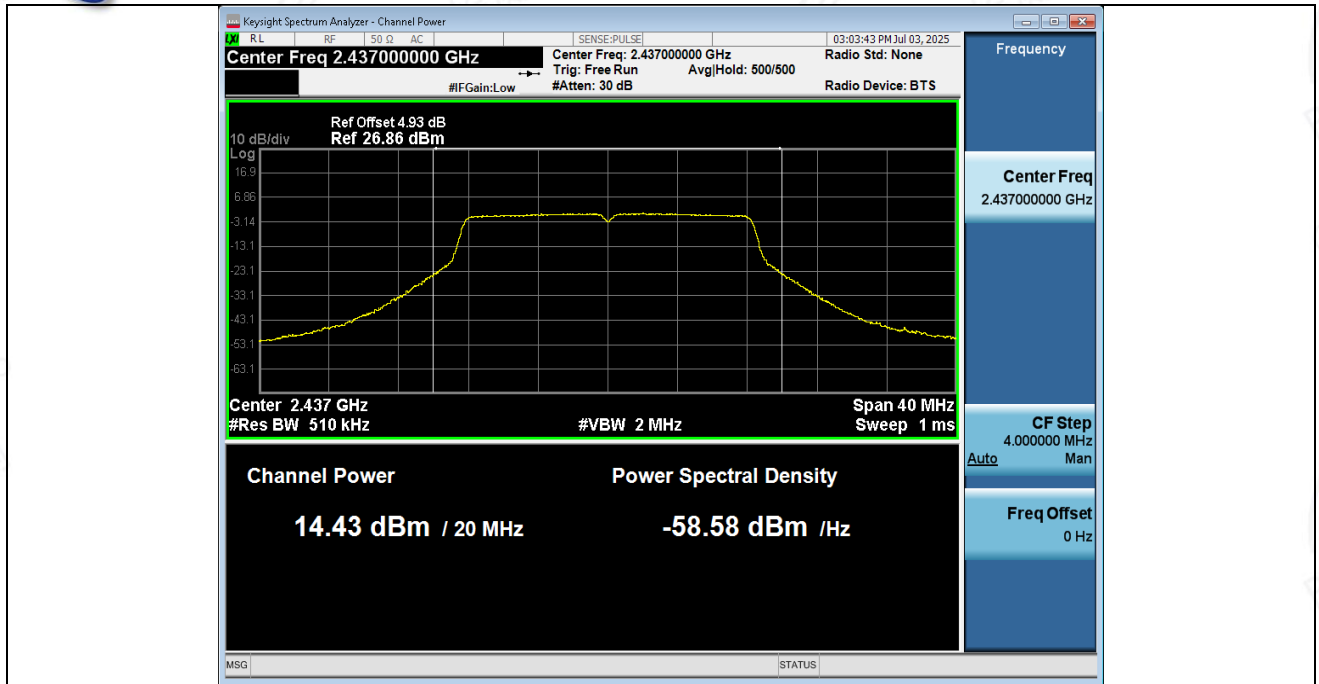
MAX Output Power NVNT ANT1 802 11b 2462





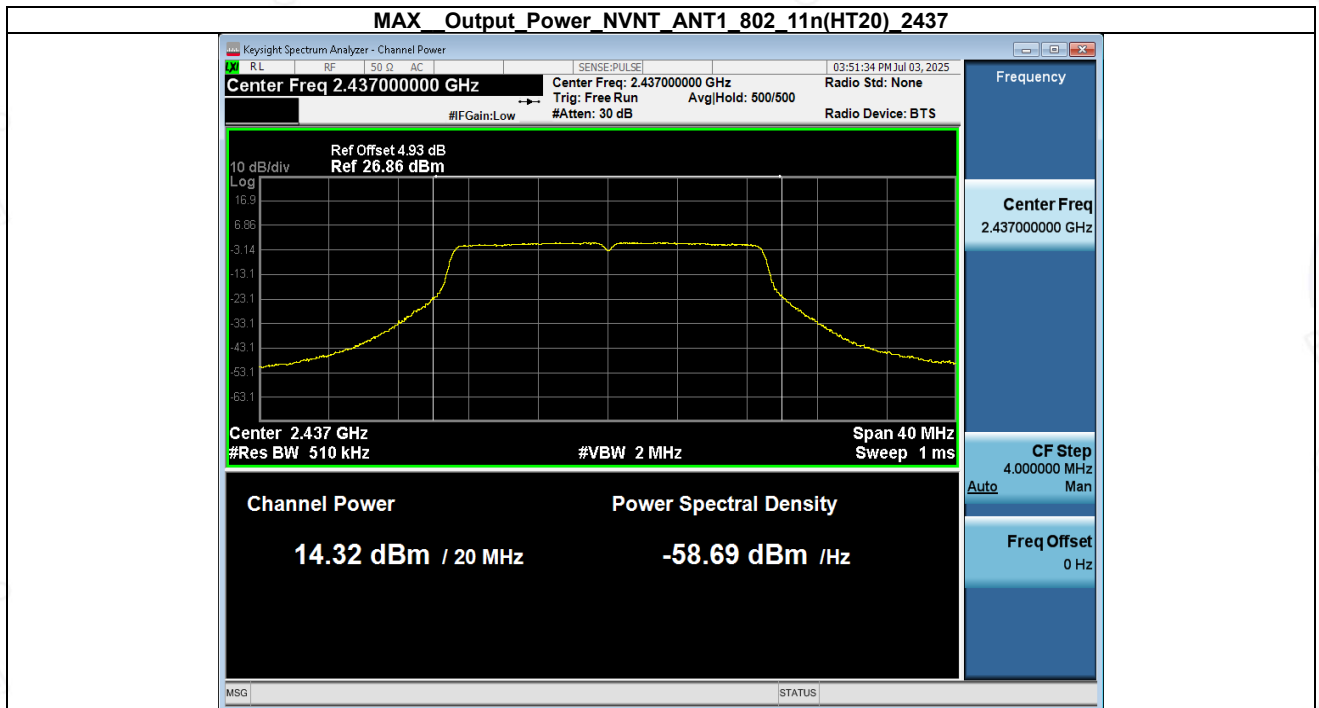
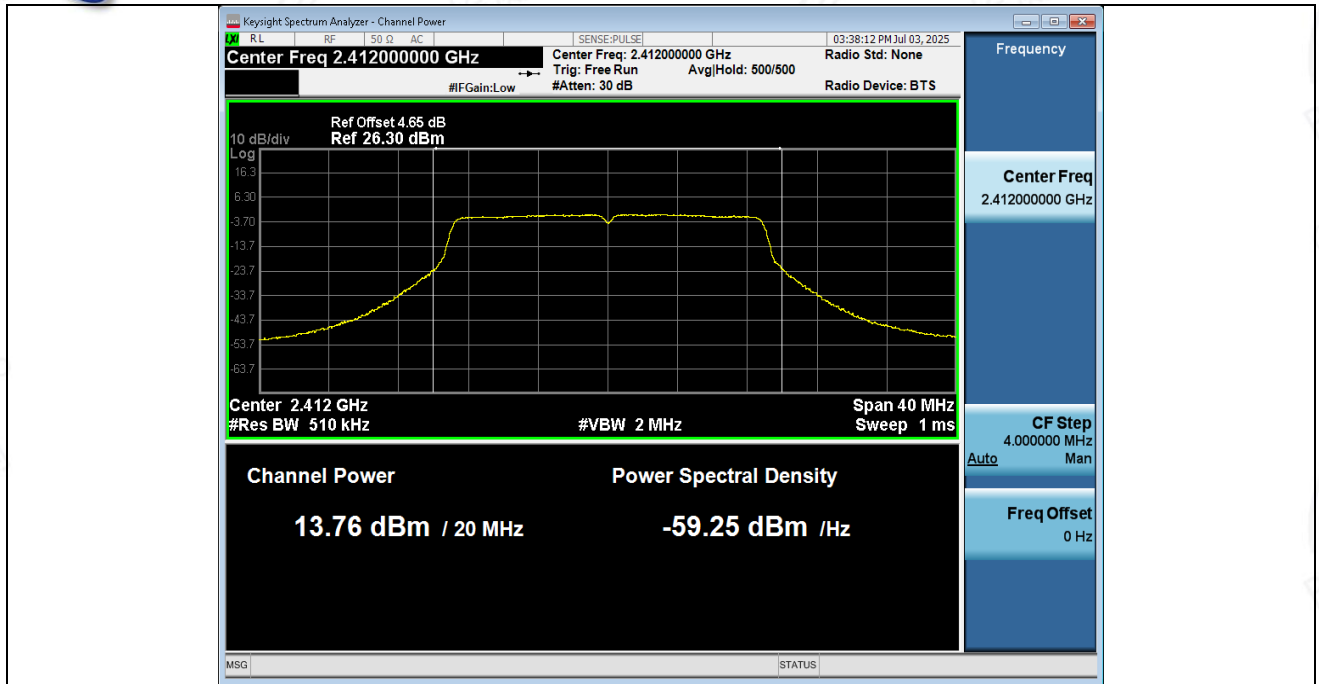
MAX Output Power NVNT ANT1_802_11g_2437





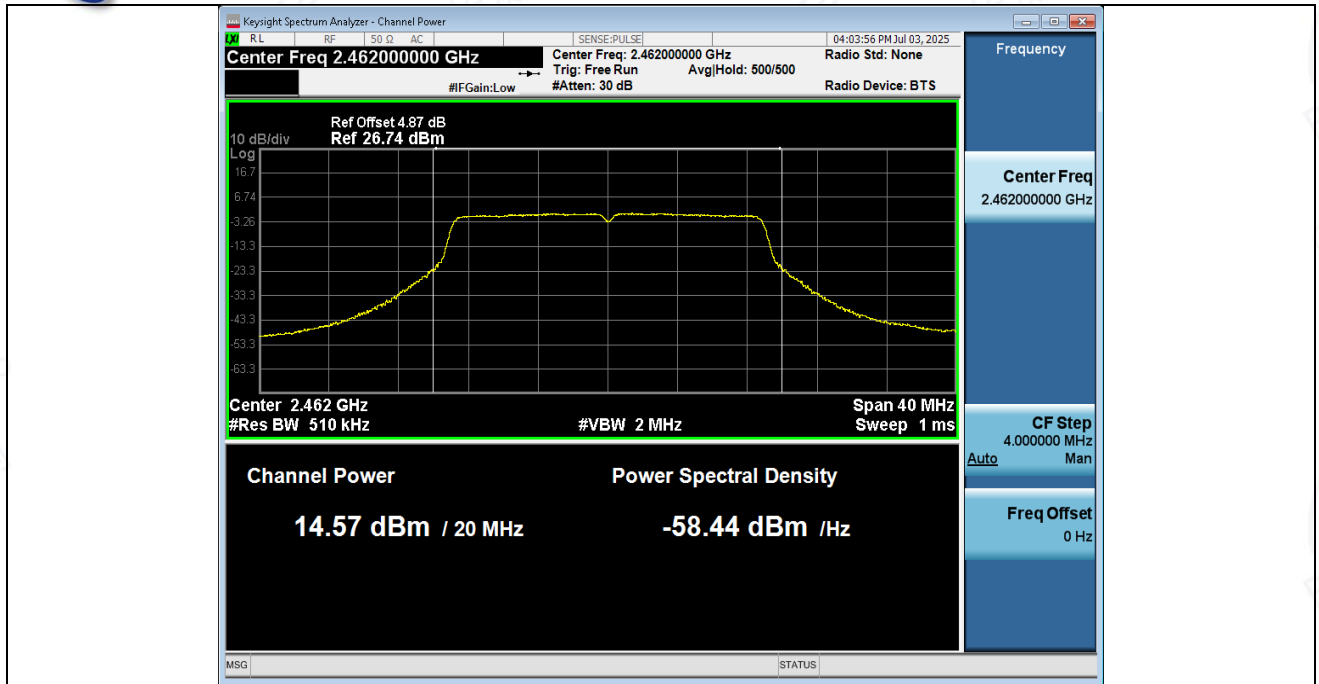
MAX Output Power NVNT_ANT1_802_11n(HT20)_2412





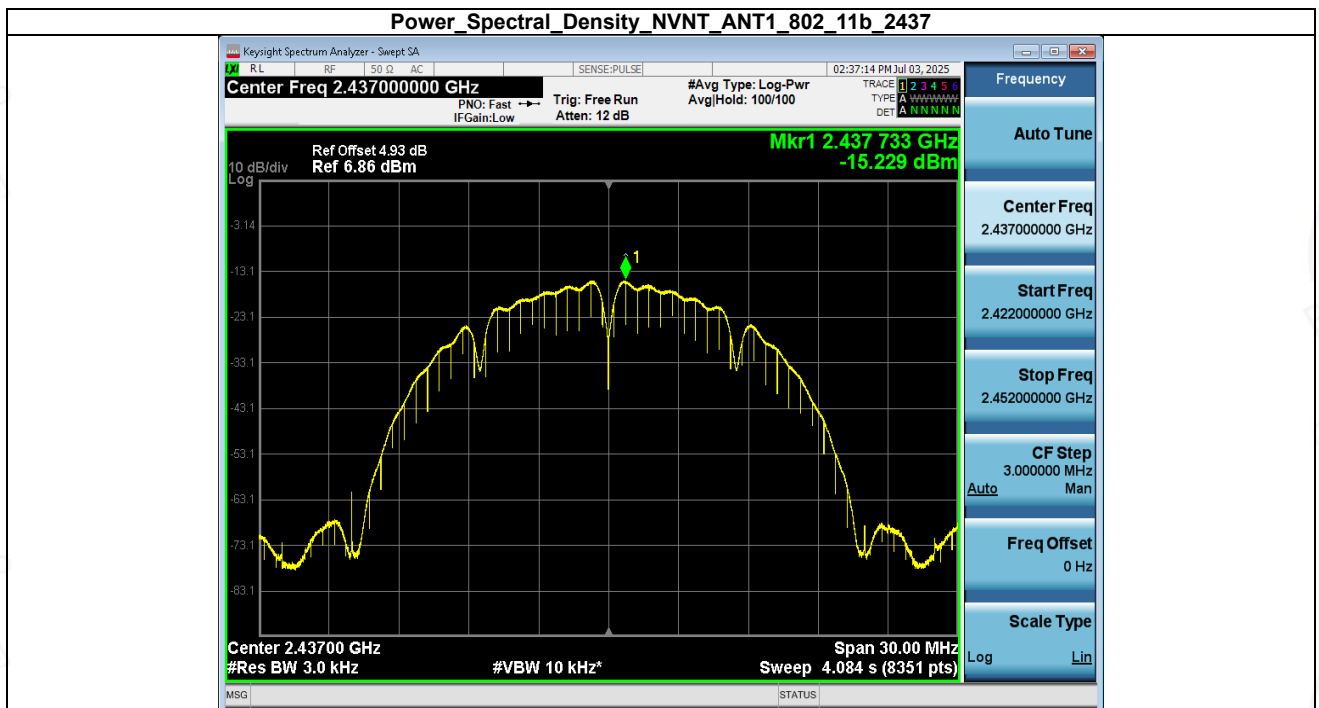
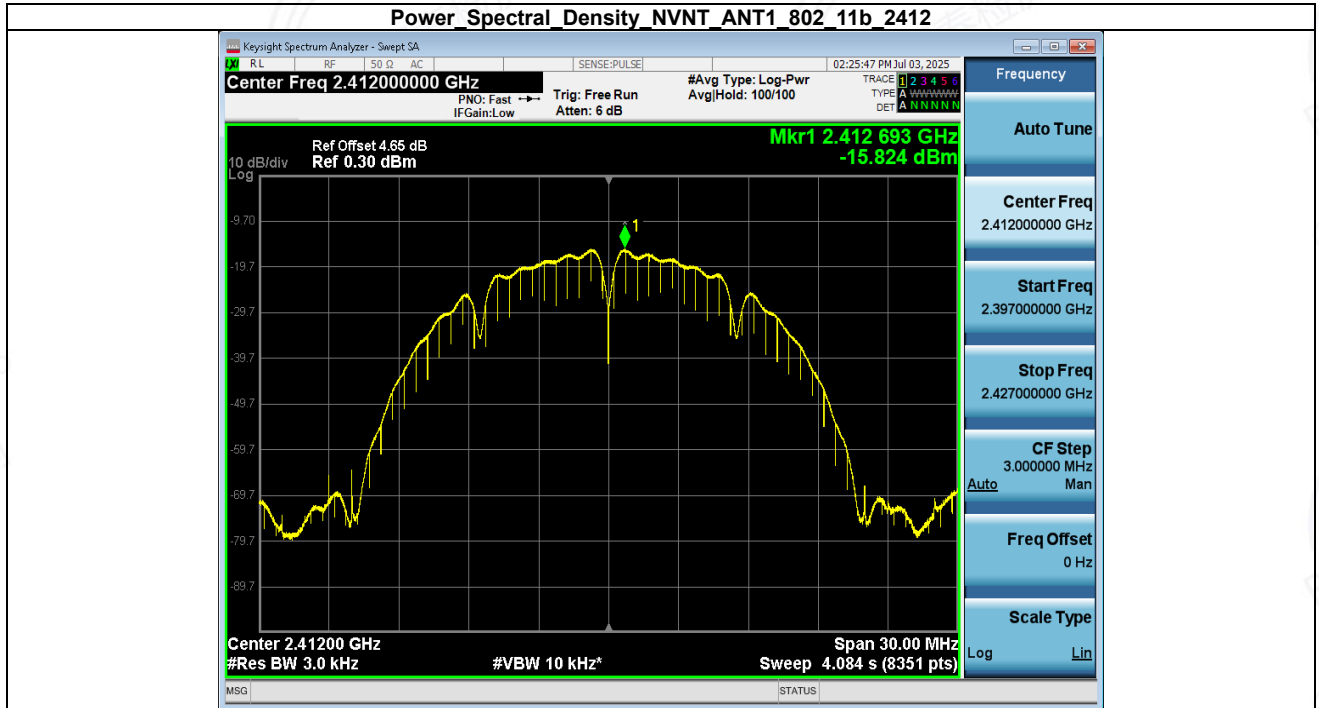
MAX Output Power NVNT_ANT1_802_11n(HT20)_2462



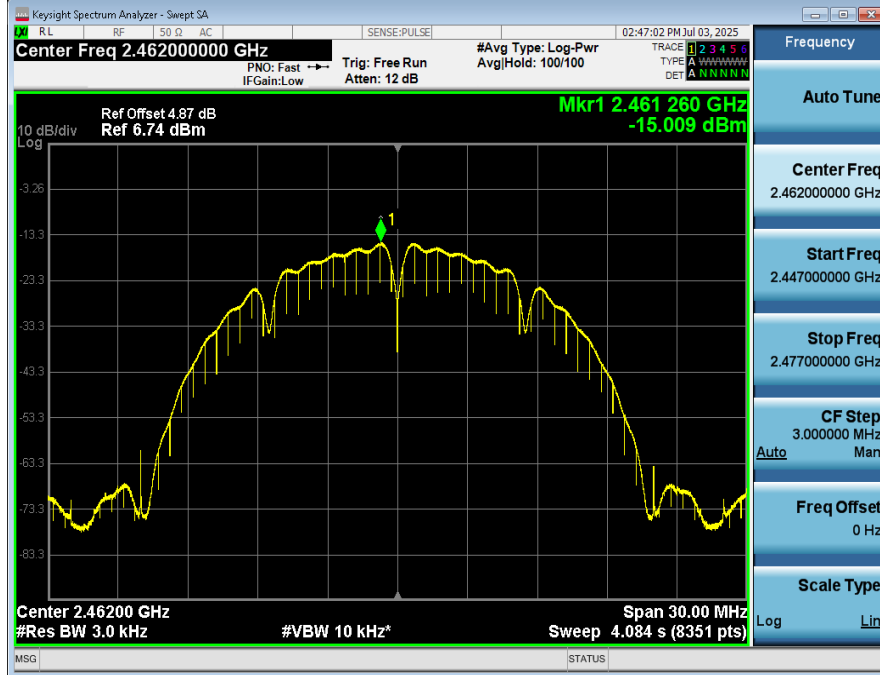


5. Power Spectral Density

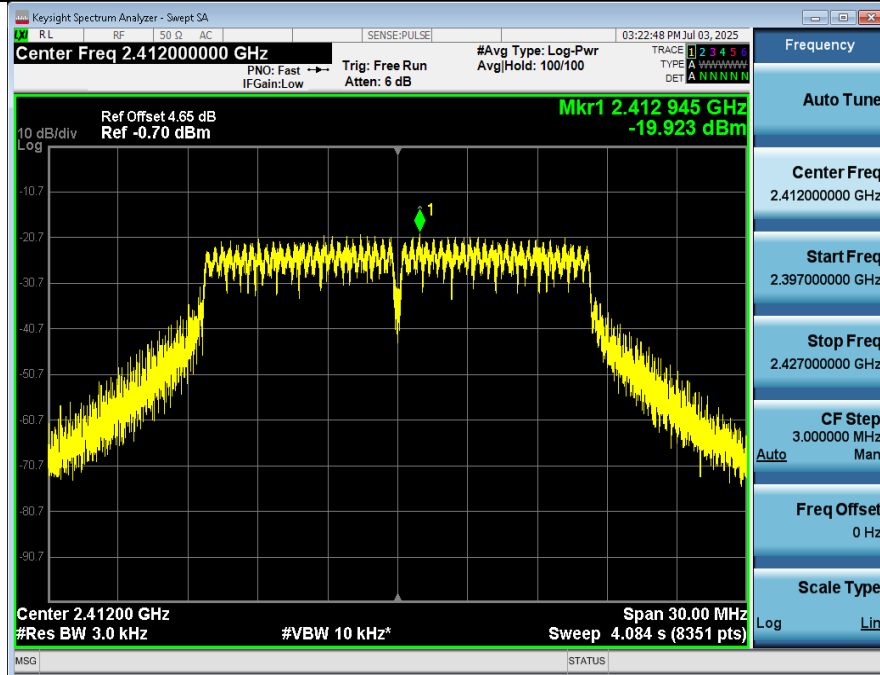
Condition	Antenna	Modulation	Frequency (MHz)	SA_PSD(dBm/3kHz)	Duty factor(dB)	RB factor(dB)	PSD(dBm/3kHz)	limit(dBm/3kHz)	Result
NVNT	ANT1	802.11b	2412.00	-15.82	0.00	0.00	-15.82	8	Pass
NVNT	ANT1	802.11b	2437.00	-15.23	0.00	0.00	-15.23	8	Pass
NVNT	ANT1	802.11b	2462.00	-15.01	0.00	0.00	-15.01	8	Pass
NVNT	ANT1	802.11g	2412.00	-19.92	0.00	0.00	-19.92	8	Pass
NVNT	ANT1	802.11g	2437.00	-19.54	0.00	0.00	-19.54	8	Pass
NVNT	ANT1	802.11g	2462.00	-19.67	0.00	0.00	-19.67	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-20.81	0.00	0.00	-20.81	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-20.04	0.00	0.00	-20.04	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-20.04	0.00	0.00	-20.04	8	Pass



Power Spectral Density NVNT_ANT1_802_11b_2462

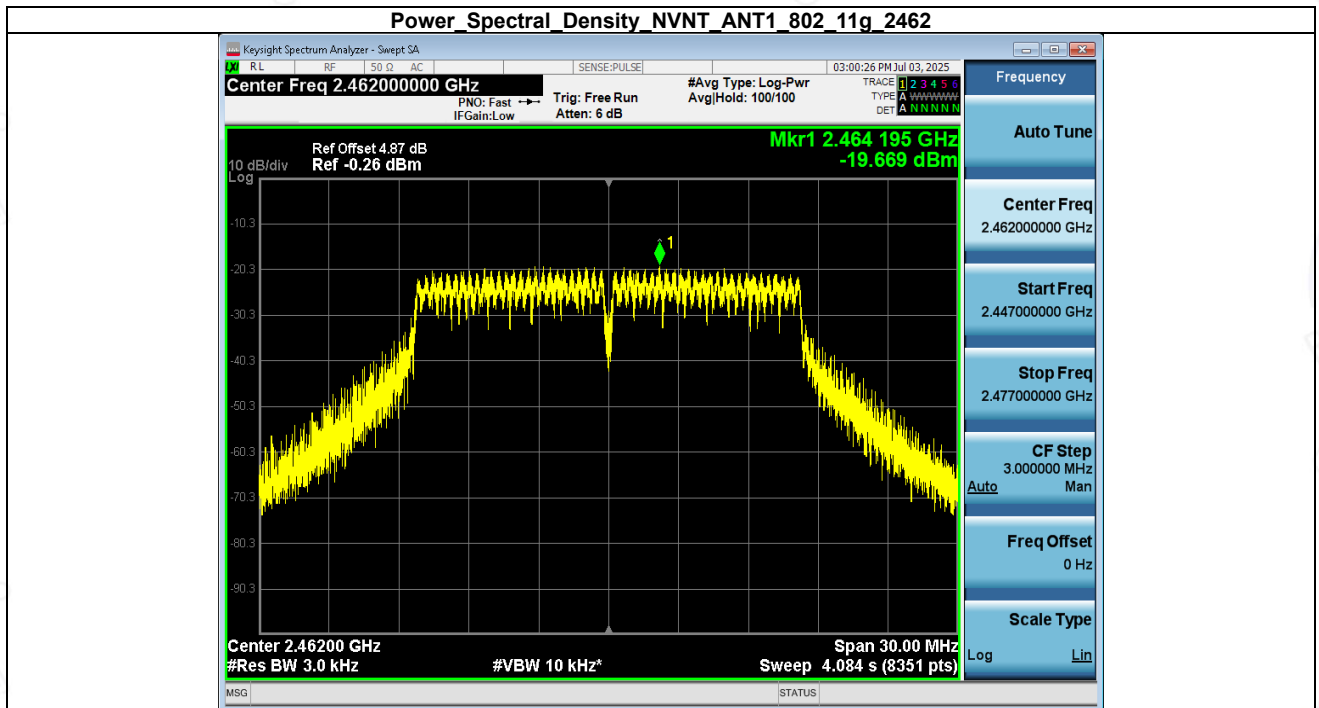
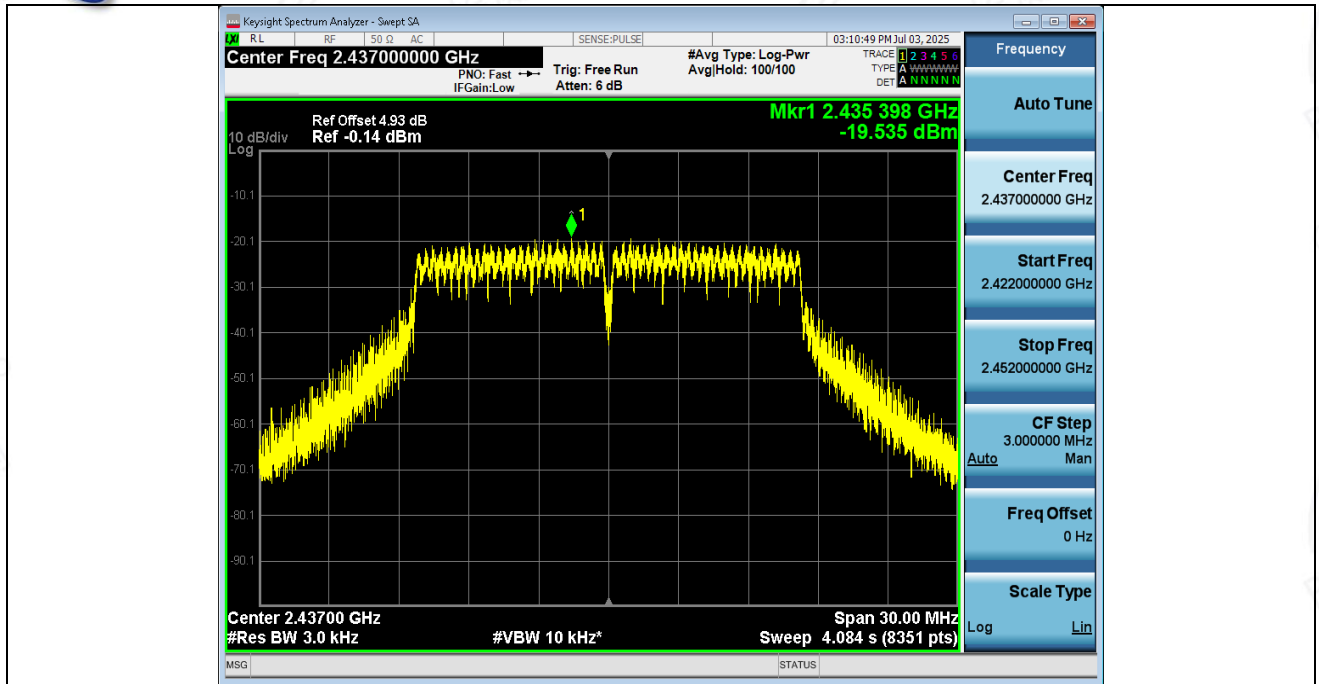


Power Spectral Density NVNT_ANT1_802_11g_2412



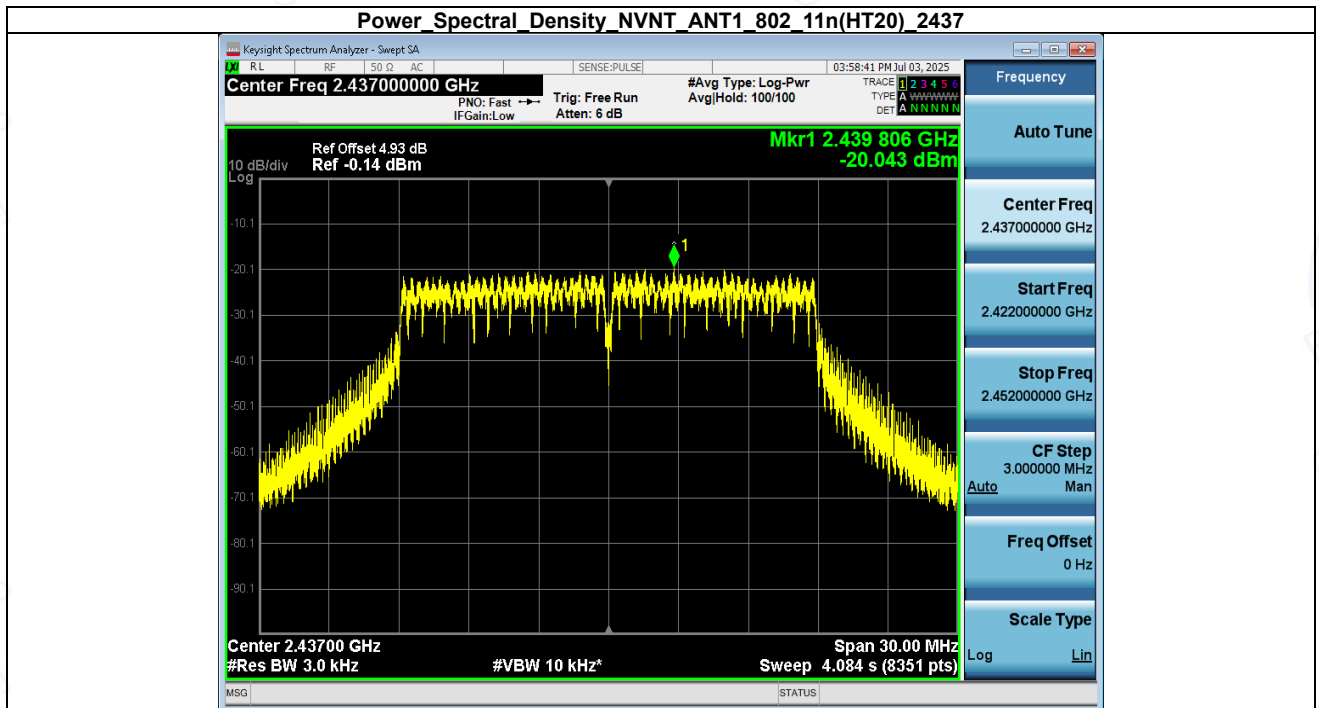
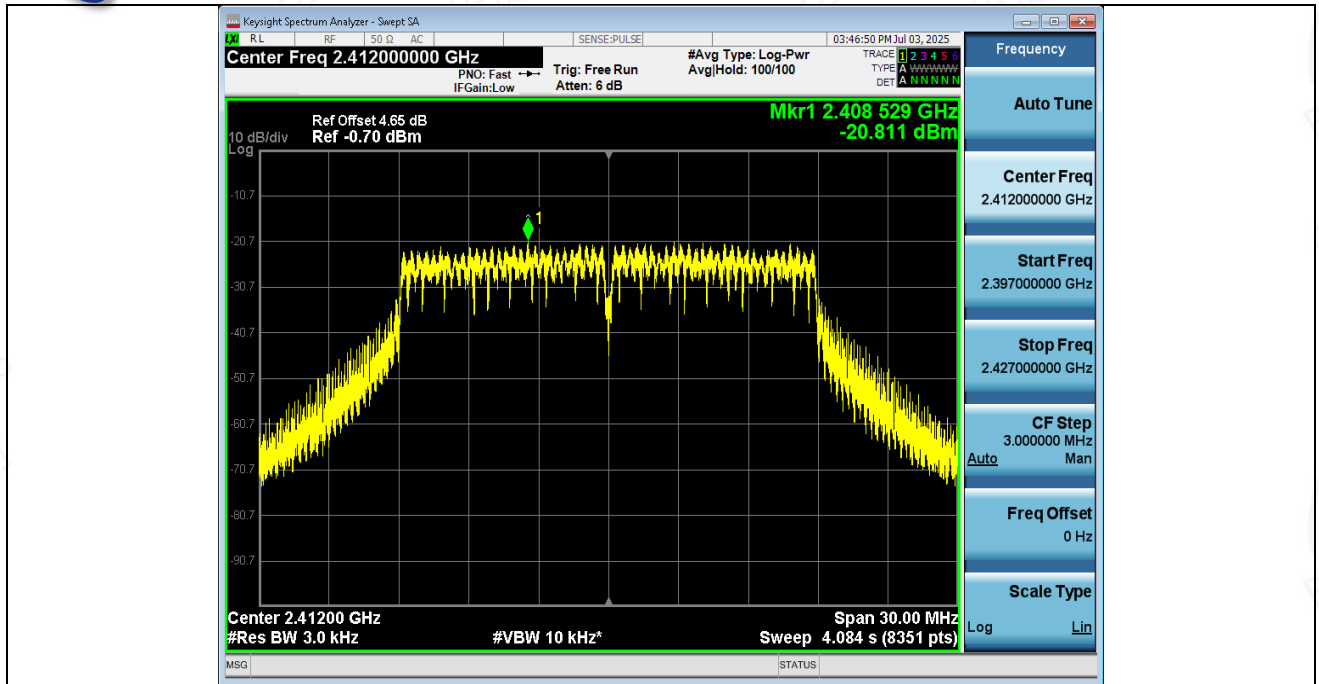
Power Spectral Density NVNT_ANT1_802_11g_2437

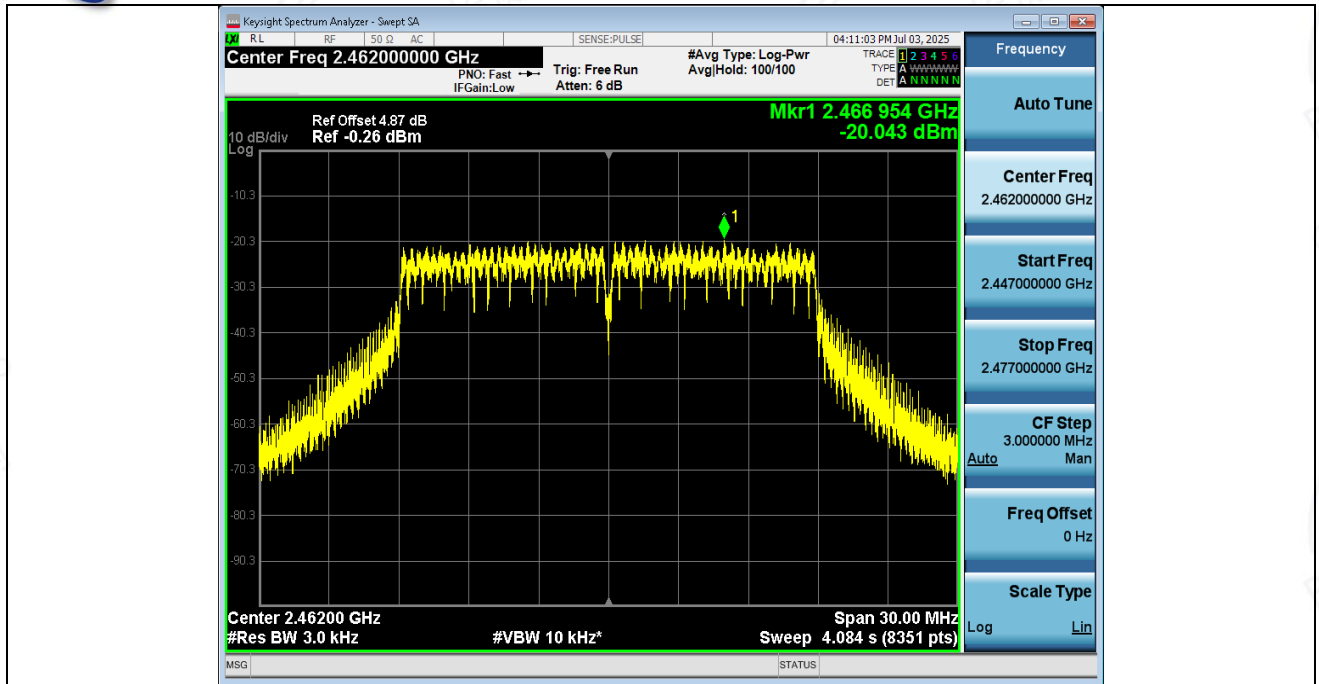




Power Spectral Density NVNT_ANT1_802_11n(HT20)_2412







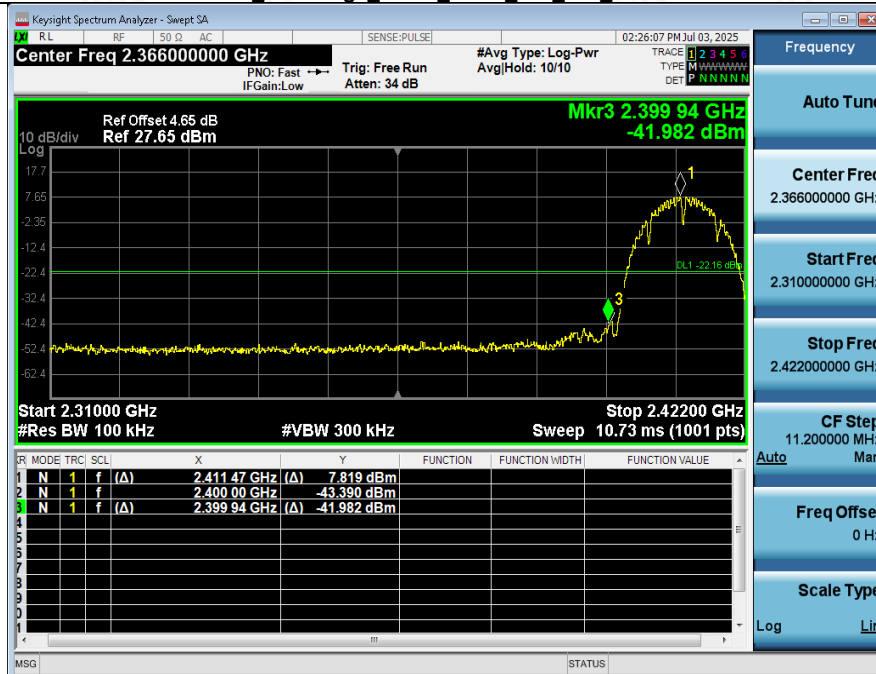
6. Bandedge

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	7.845	-41.982	-22.155	Pass
NVNT	ANT1	802.11b	2462.00	2486.992	8.531	-49.008	-21.469	Pass
NVNT	ANT1	802.11g	2412.00	2399.600	-0.308	-33.021	-30.308	Pass
NVNT	ANT1	802.11g	2462.00	2483.824	0.311	-45.548	-29.689	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2399.936	-0.674	-32.474	-30.674	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2484.400	0.781	-43.930	-29.219	Pass

1 Reference Level NVNT ANT1 802 11b 2412



2 Bandedge NVNT ANT1 802 11b 2412



1 Reference Level NVNT ANT1 802 11b 2462



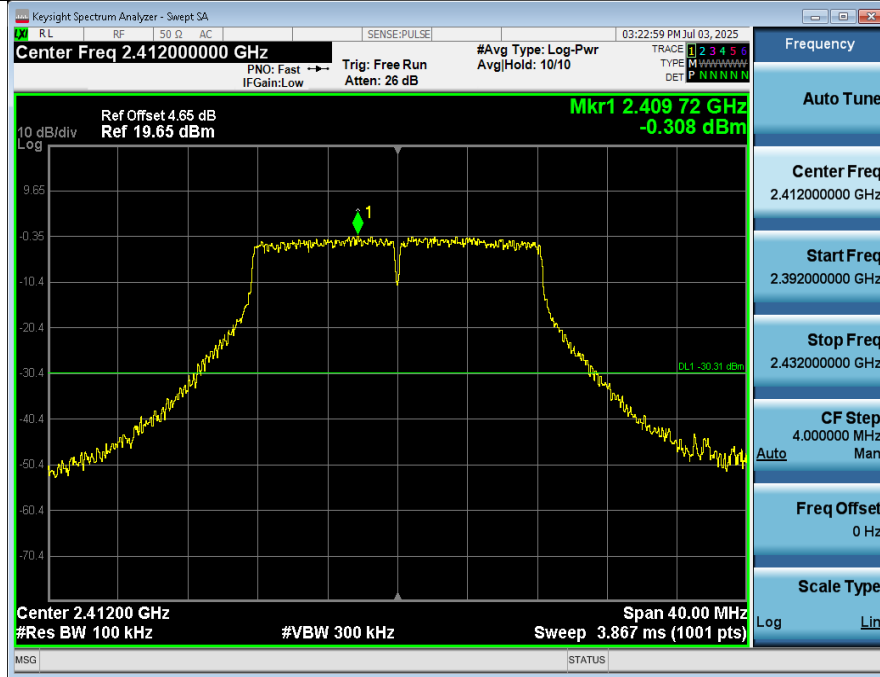


2_Bandedge_NVNT_ANT1_802_11b_2462

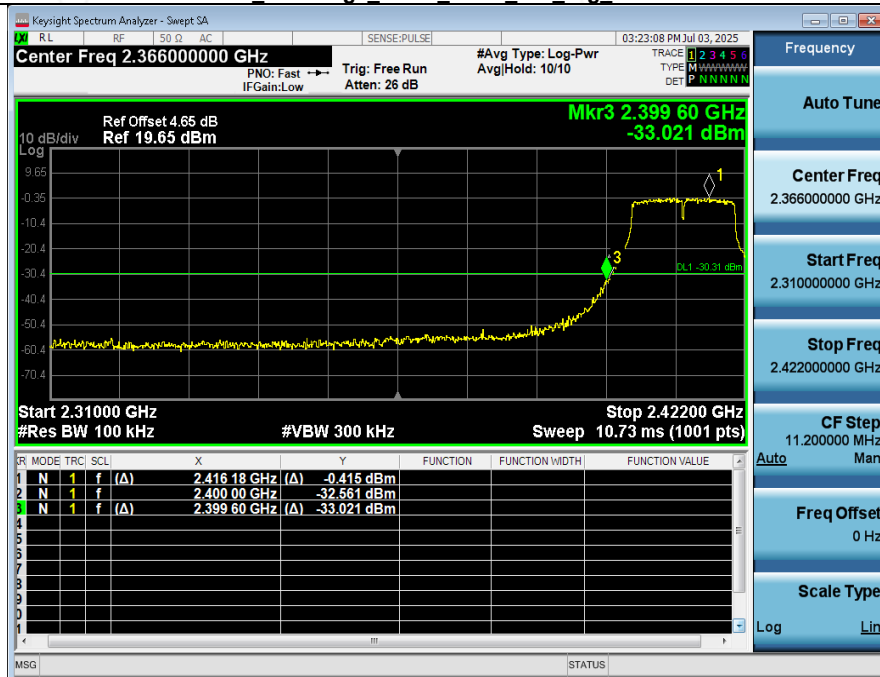


1_Reference_Level_NVNT_ANT1_802_11g_2412





2_Bandedge_NVNT_ANT1_802_11g_2412



1_Reference_Level_NVNT_ANT1_802_11g_2462



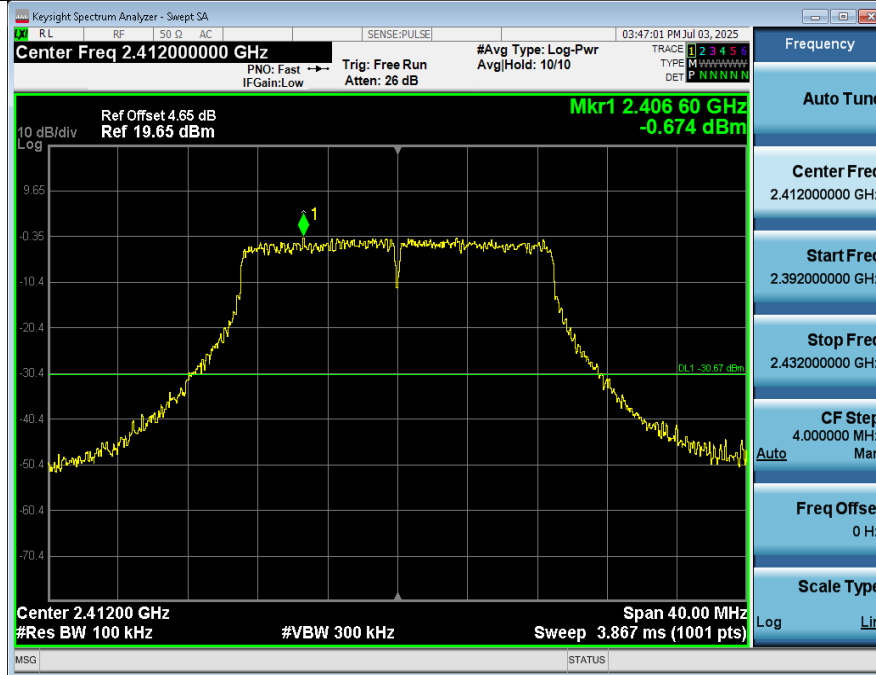


2_Bandedge_NVNT_ANT1_802_11g_2462

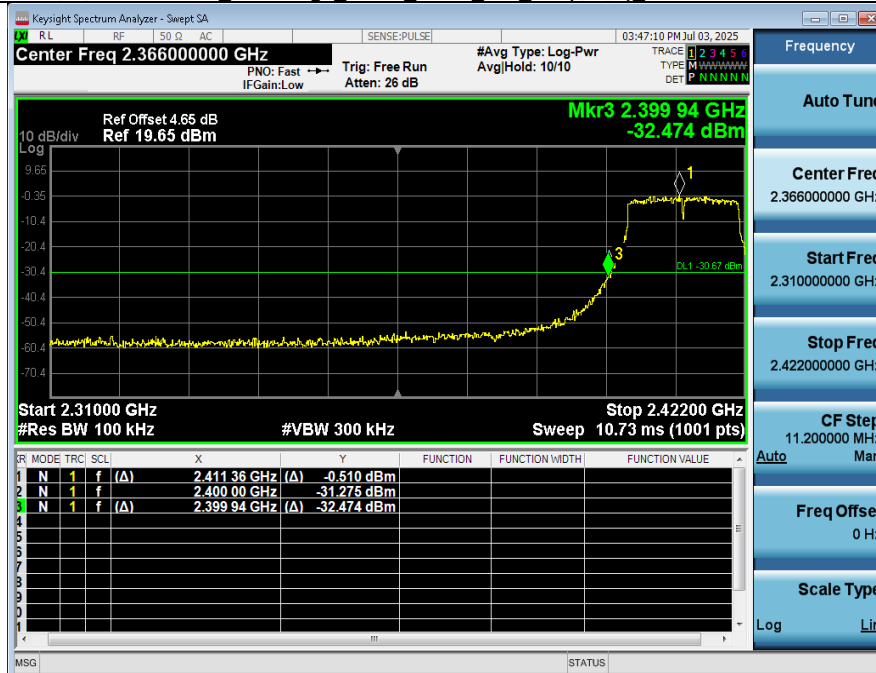


1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2412



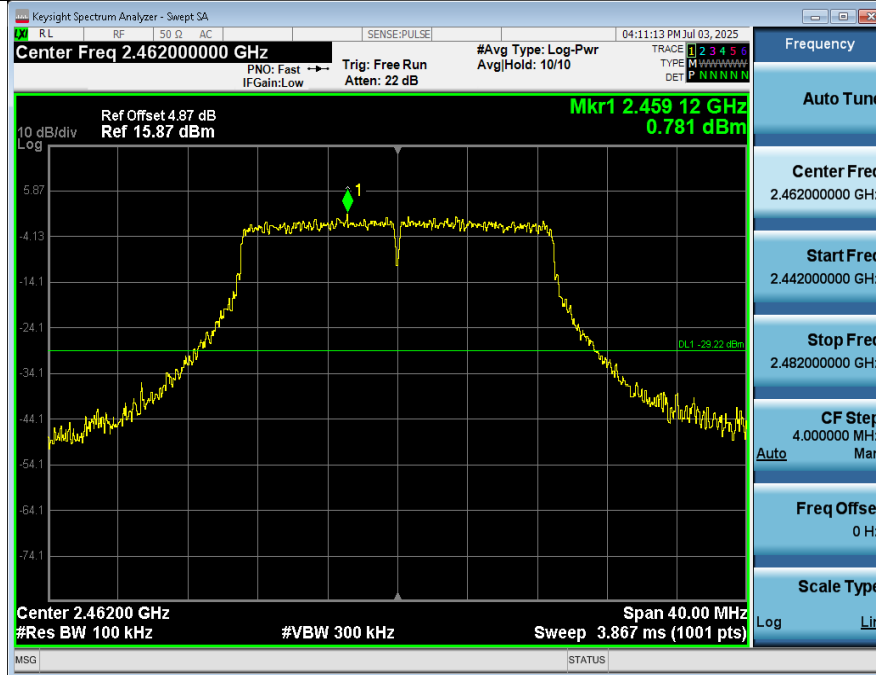


2_Bandedge_NVNT_ANT1_802_11n(HT20)_2412

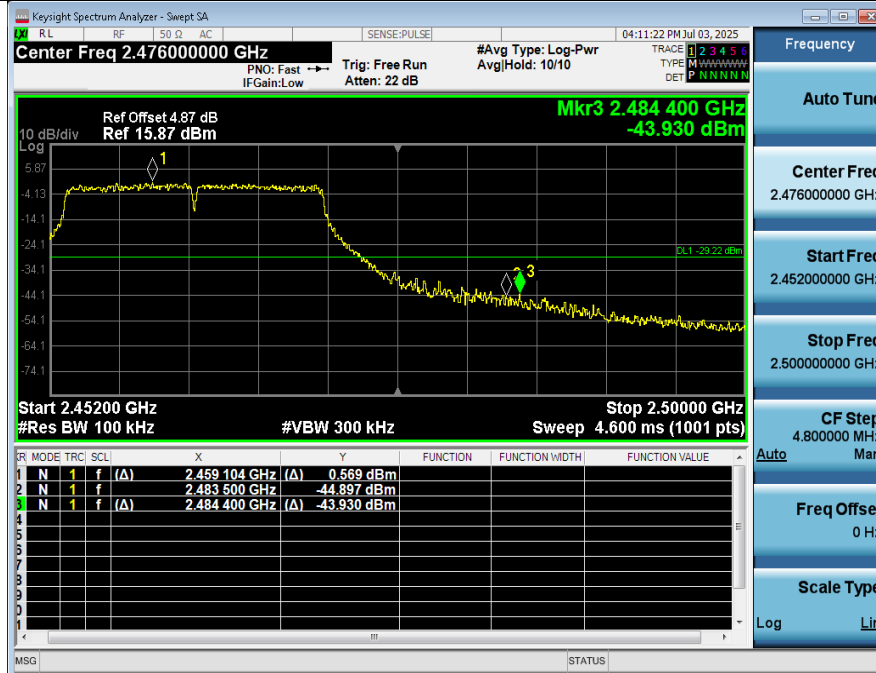


1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2462





2_Bandedge_NVNT_ANT1_802_11n(HT20)_2462



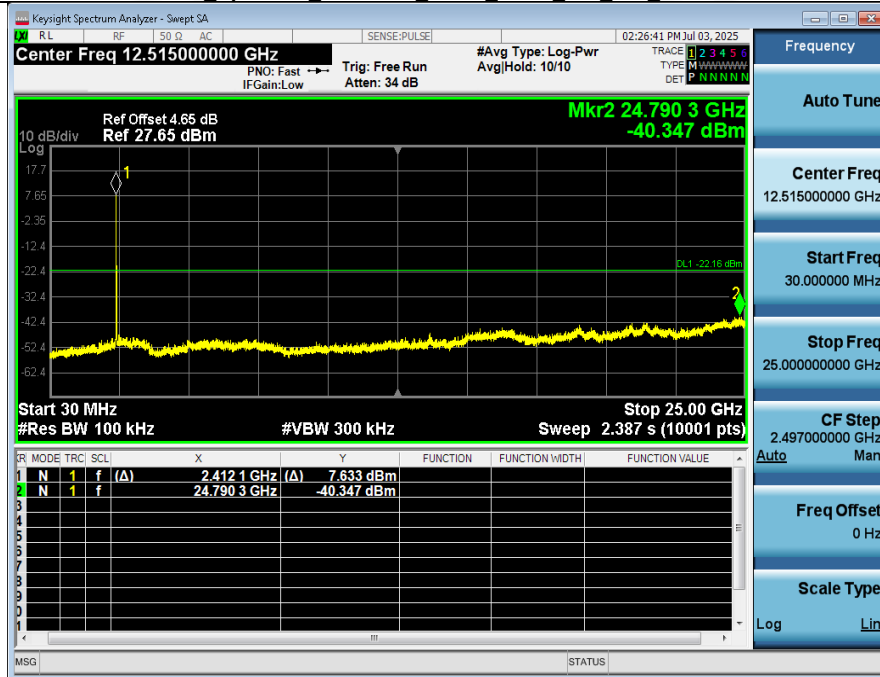
7. Spurious Emission

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_freq(MHz)	Ref_level(dBm)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	24790.252	7.845	-40.347	-22.155	Pass
NVNT	ANT1	802.11b	2437.00	24767.779	8.232	-43.129	-21.768	Pass
NVNT	ANT1	802.11b	2462.00	24730.324	8.531	-43.960	-21.469	Pass
NVNT	ANT1	802.11g	2412.00	24687.875	-0.308	-48.597	-30.308	Pass
NVNT	ANT1	802.11g	2437.00	24760.288	-0.074	-51.956	-30.074	Pass
NVNT	ANT1	802.11g	2462.00	24707.851	0.311	-52.048	-29.689	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	24660.408	-0.674	-48.568	-30.674	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	24750.300	0.462	-51.341	-29.538	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	24817.719	0.781	-51.988	-29.219	Pass

1 Reference_Level_NVNT_ANT1_802_11b_2412



2 Spurious_Emission_NVNT_ANT1_802_11b_2412

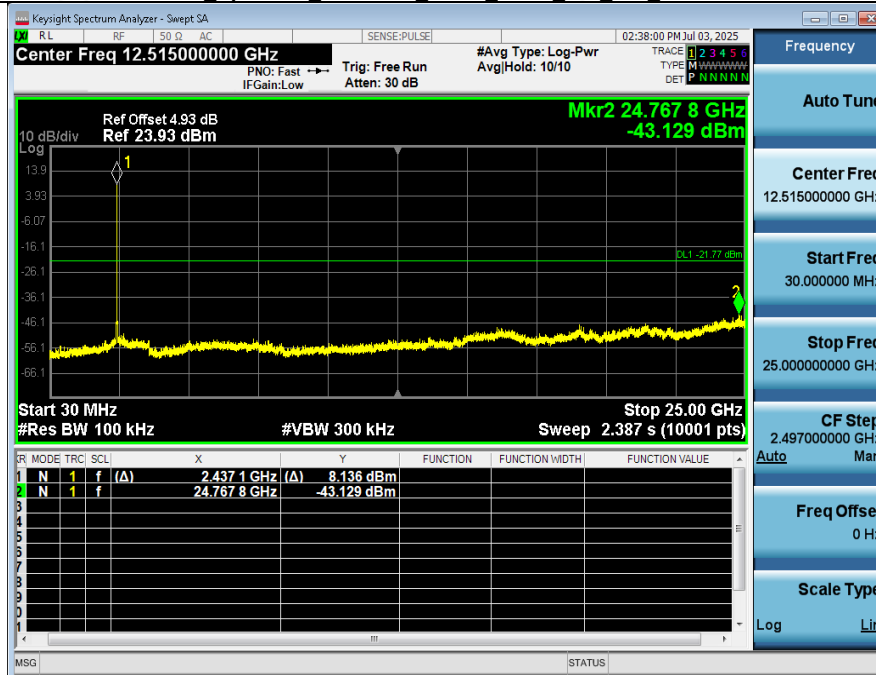


1 Reference_Level_NVNT_ANT1_802_11b_2437





2_Spurious_Emission_NVNT_ANT1_802_11b_2437

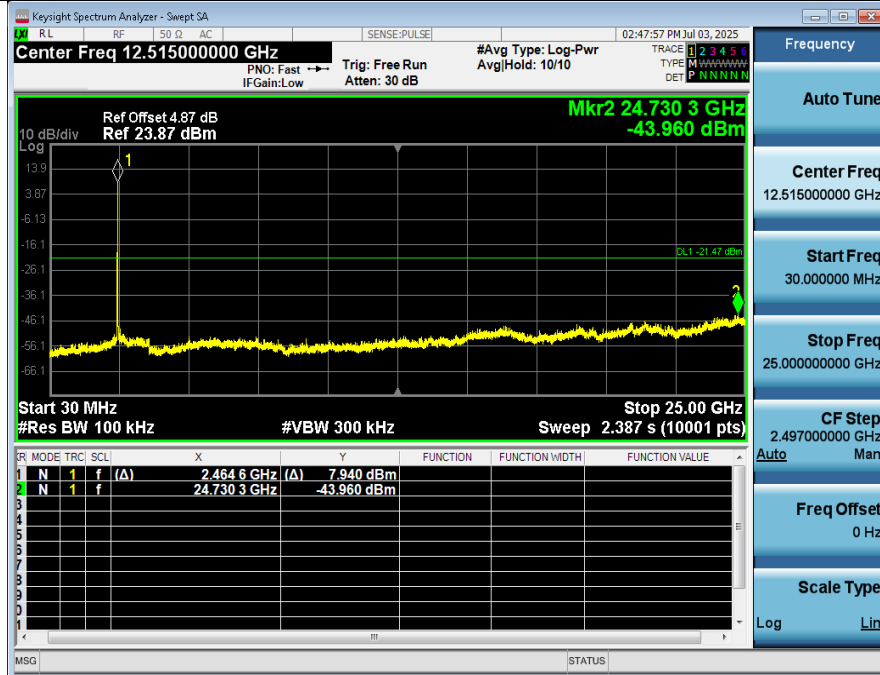


1_Reference_Level_NVNT_ANT1_802_11b_2462



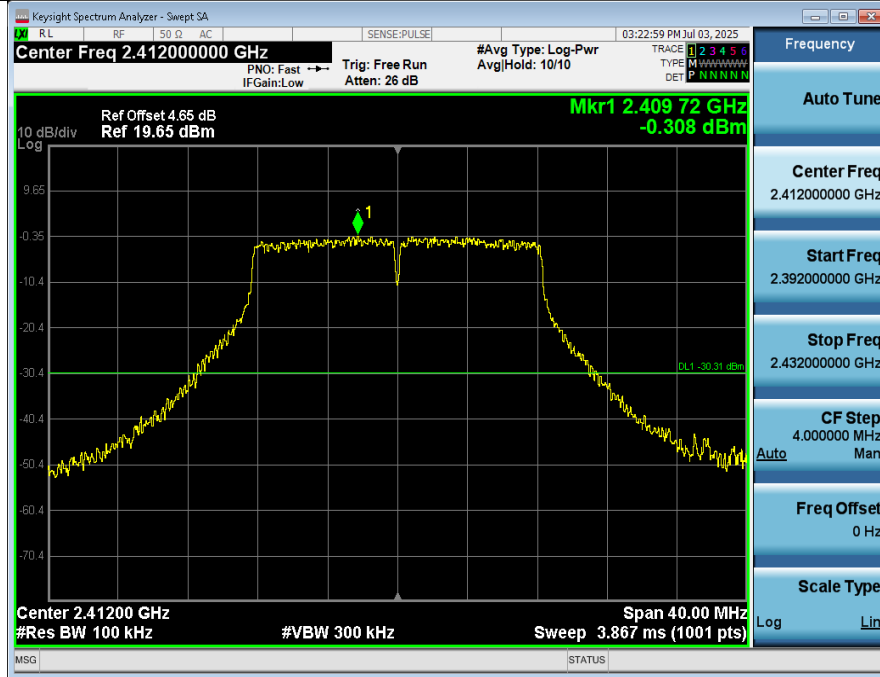


2_Spurious_Emission_NVNT_ANT1_802_11b_2462

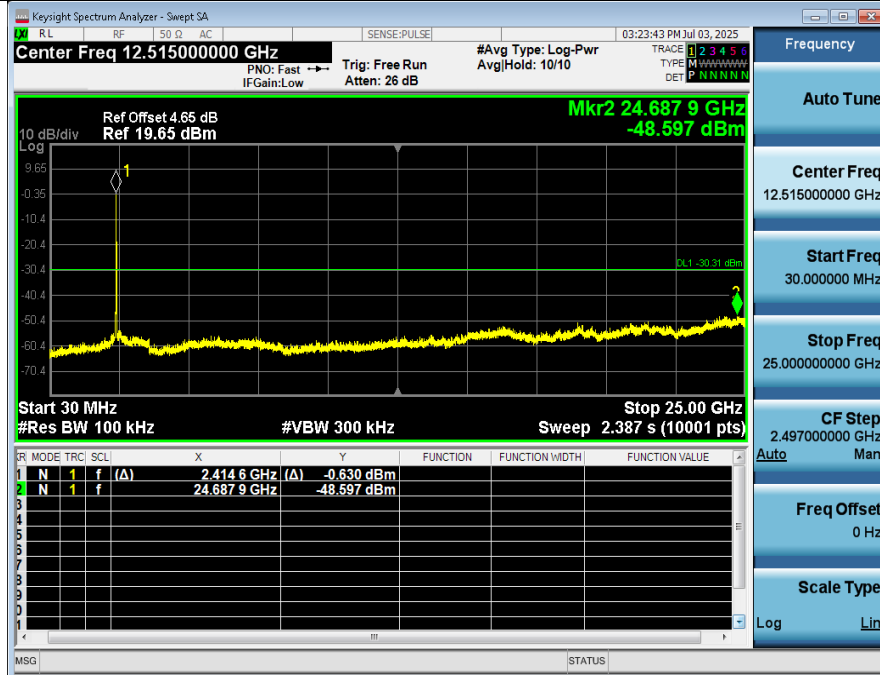


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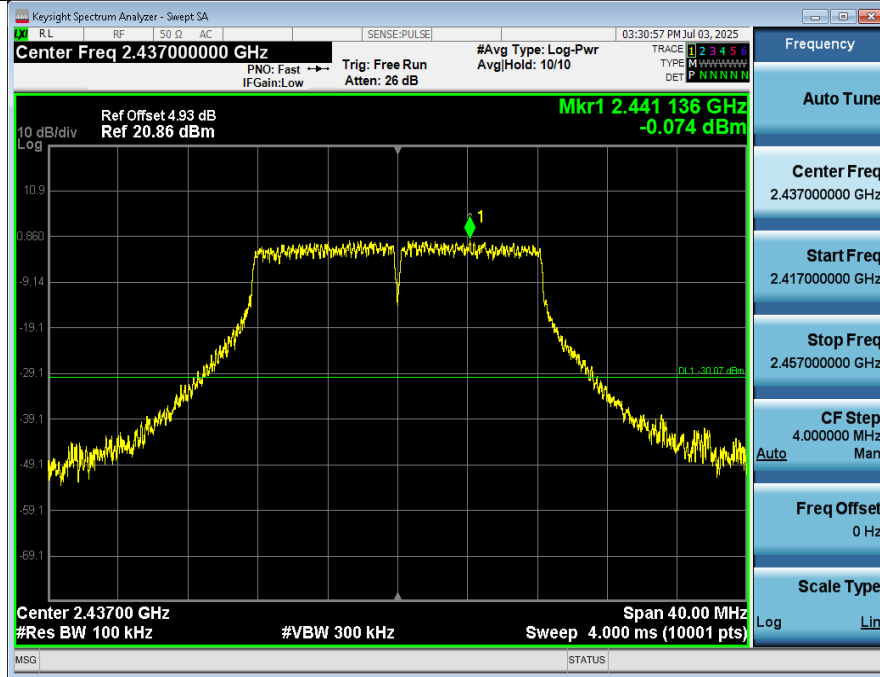


2_Spurious_Emission_NVNT_ANT1_802_11g_2412

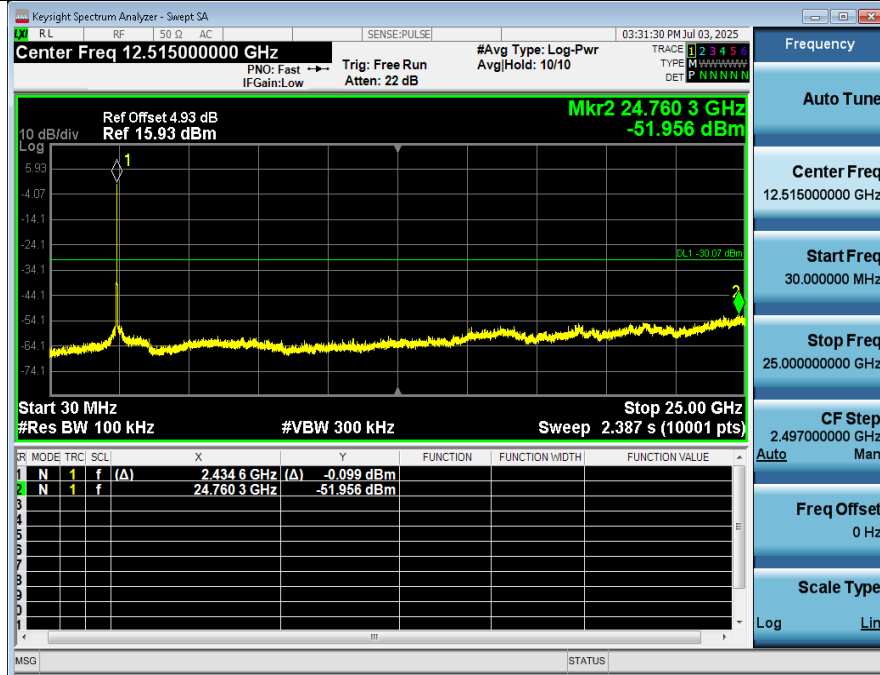


1_Reference_Level_NVNT_ANT1_802_11g_2437





2_Spurious_Emission_NVNT_ANT1_802_11g_2437

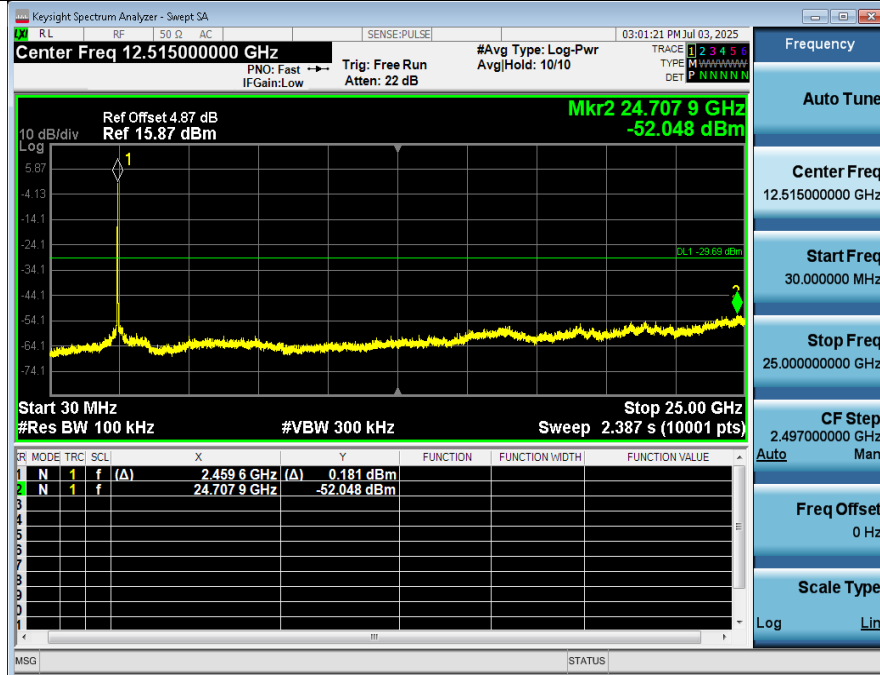


1_Reference_Level_NVNT_ANT1_802_11g_2462





2_Spurious_Emission_NVNT_ANT1_802_11g_2462

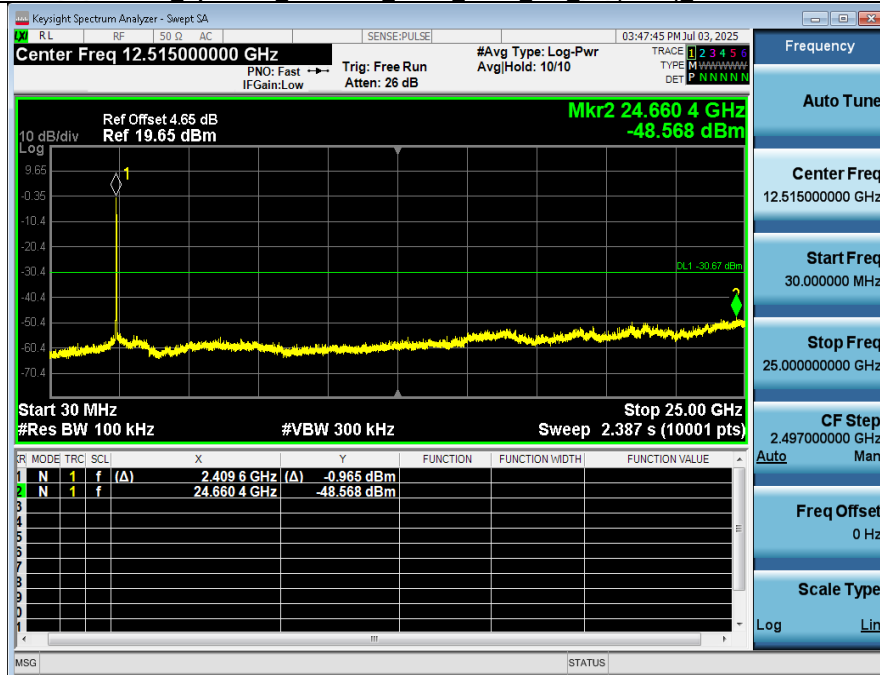


1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2412





2_Spurious_Emission_NVNT_ANT1_802_11n(HT20)_2412

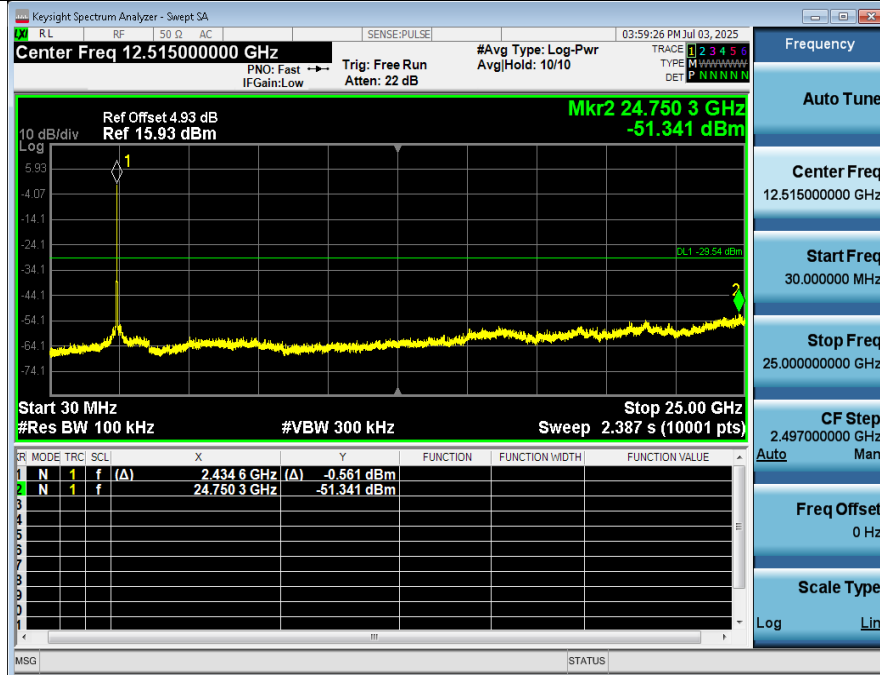


1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2437





2_Spurious_Emission_NVNT_ANT1_802_11n(HT20)_2437



1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2462





2 Spurious Emission NVNT ANT1_802_11n(HT20)_2462

