

Appendix

Test Data

for BTEK250415058A01E04

Start date	2025/5/9	Finish date	2025/5/9
Temperature	22.0℃	Humidity	69%
RF specifications	2.4G_WIFI	Test Engineer	Zora



Table of Contents

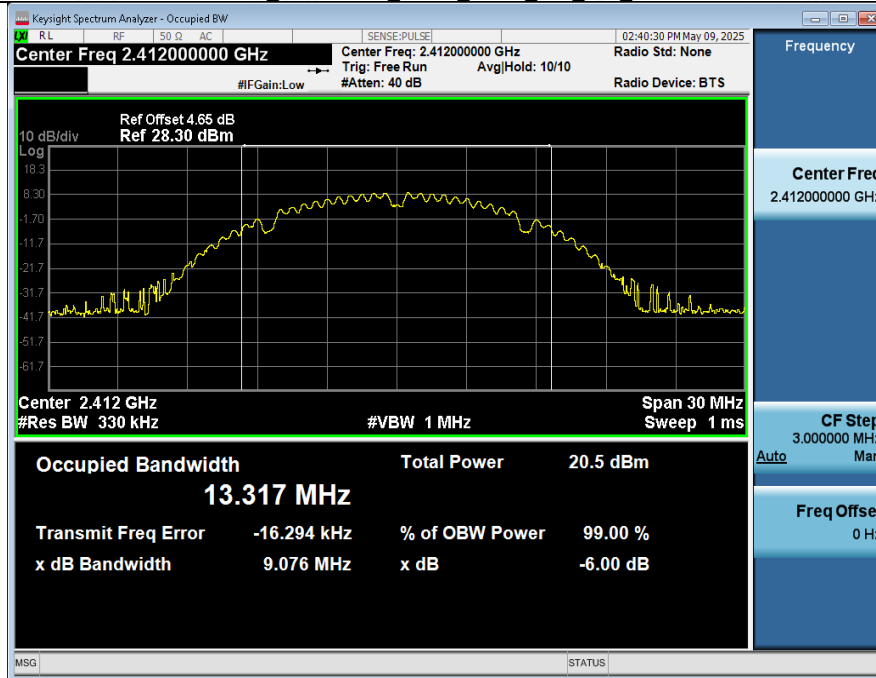
1. -6dB Bandwidth	3
2. 99% Occupied Bandwidth	9
3. Duty Cycle	15
4. MAX. Output Power	21
5. Power Spectral Density	27
6. Bandedge	34
7. Spurious Emission	42



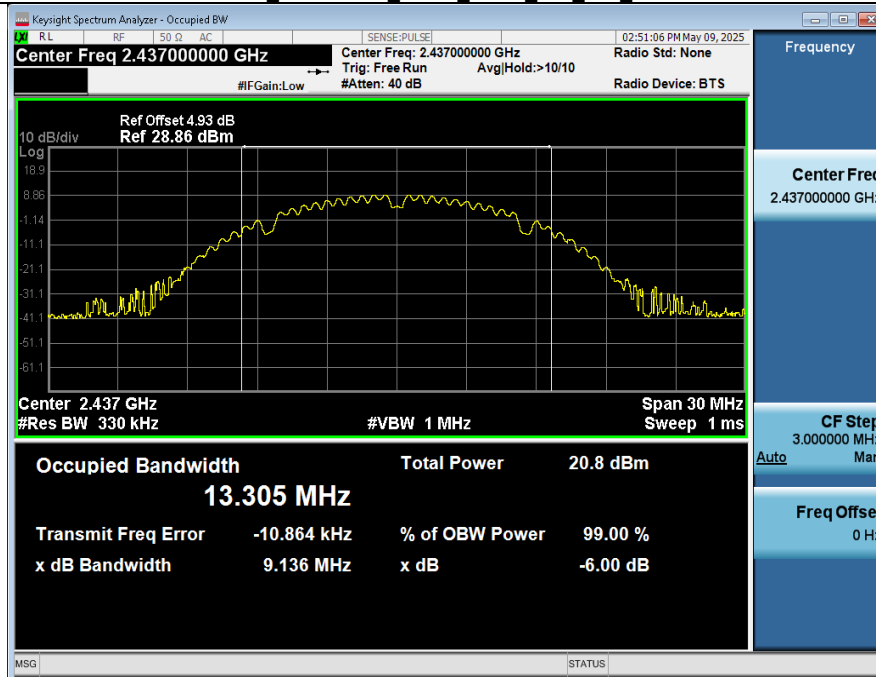
1. -6dB Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	9.08	500	Pass
NVNT	ANT1	802.11b	2437.00	9.14	500	Pass
NVNT	ANT1	802.11b	2462.00	9.12	500	Pass
NVNT	ANT1	802.11g	2412.00	16.50	500	Pass
NVNT	ANT1	802.11g	2437.00	16.55	500	Pass
NVNT	ANT1	802.11g	2462.00	16.56	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	17.65	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	17.58	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	17.60	500	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	36.01	500	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	36.03	500	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	36.01	500	Pass

-6dB Bandwidth_NVNT_ANT1_802_11b_2412

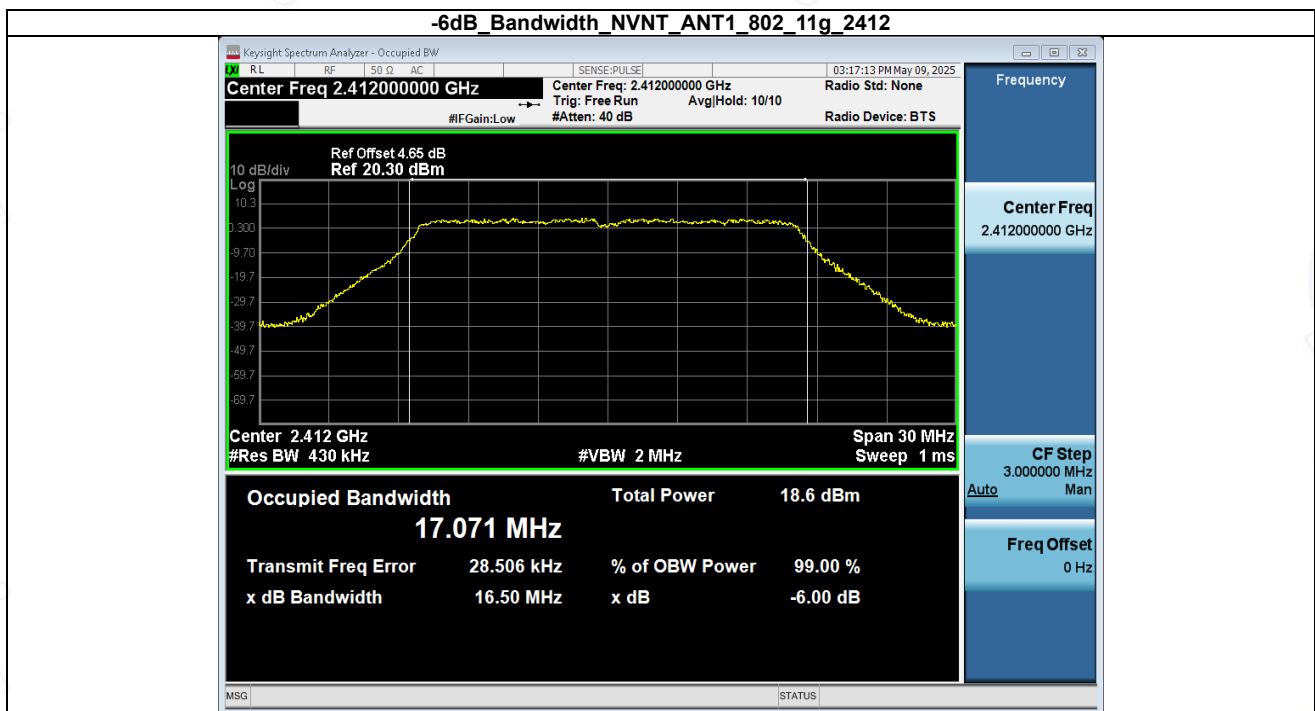
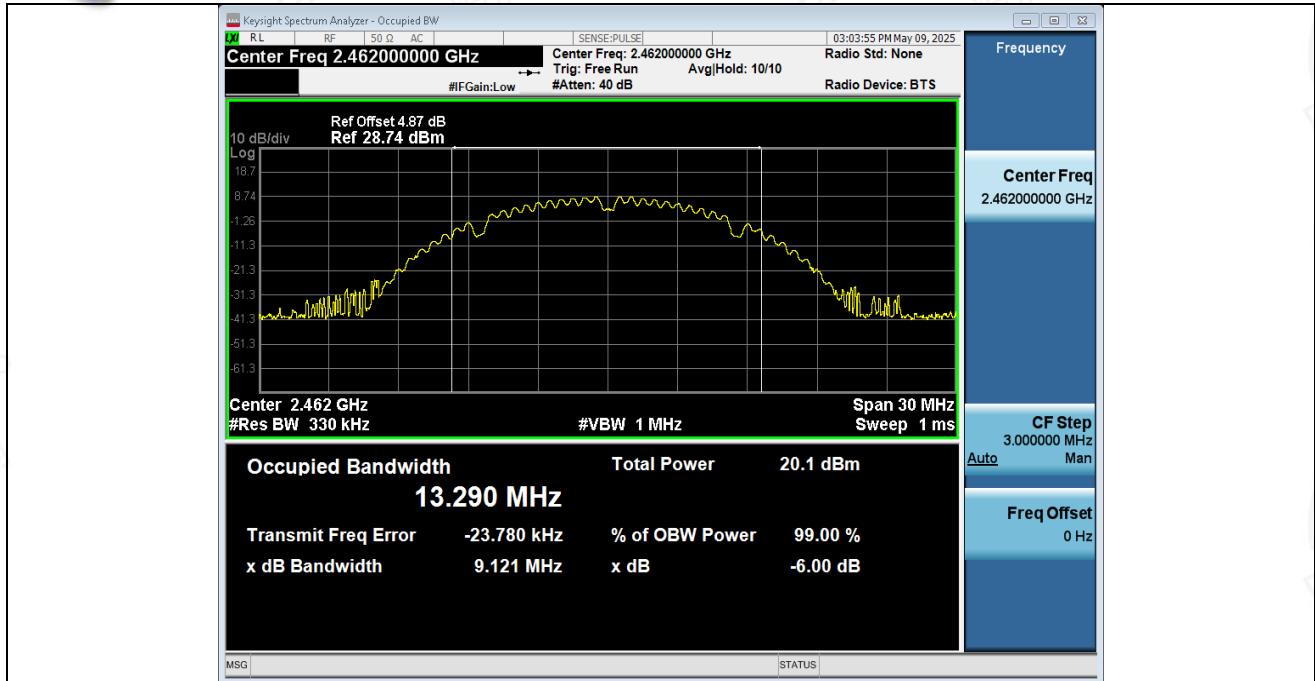


-6dB Bandwidth_NVNT_ANT1_802_11b_2437



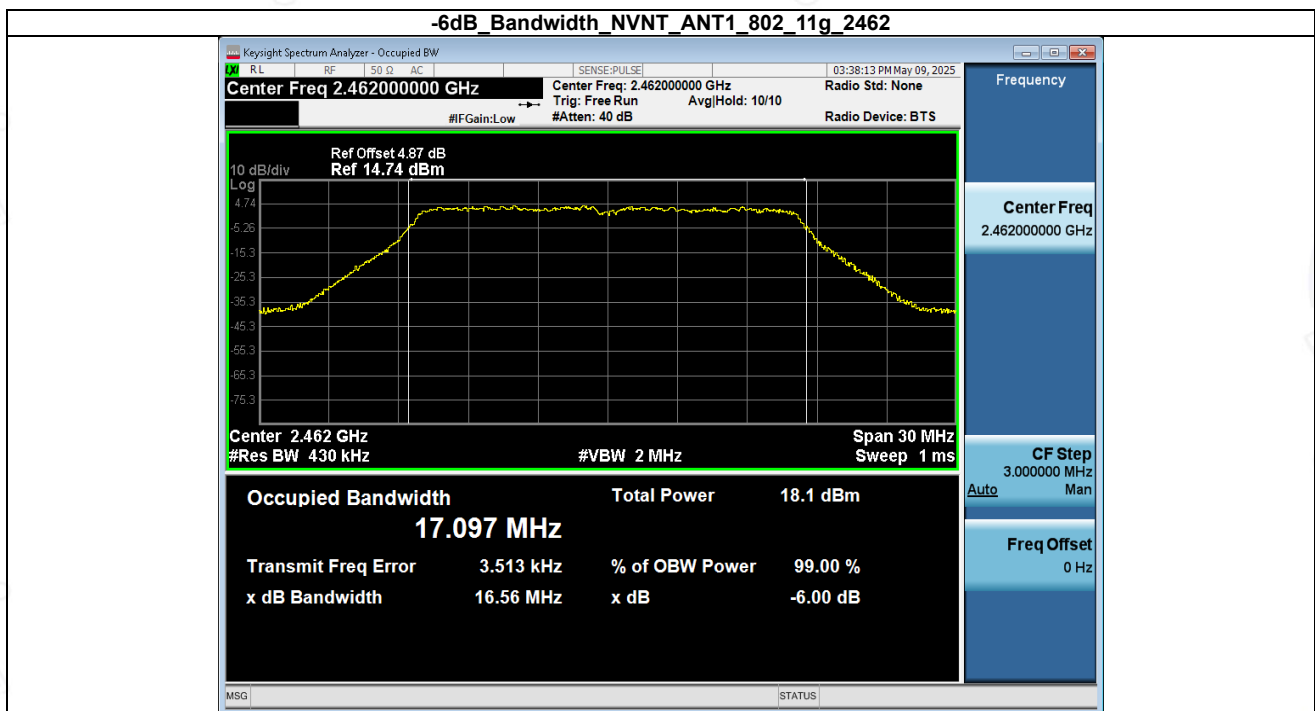
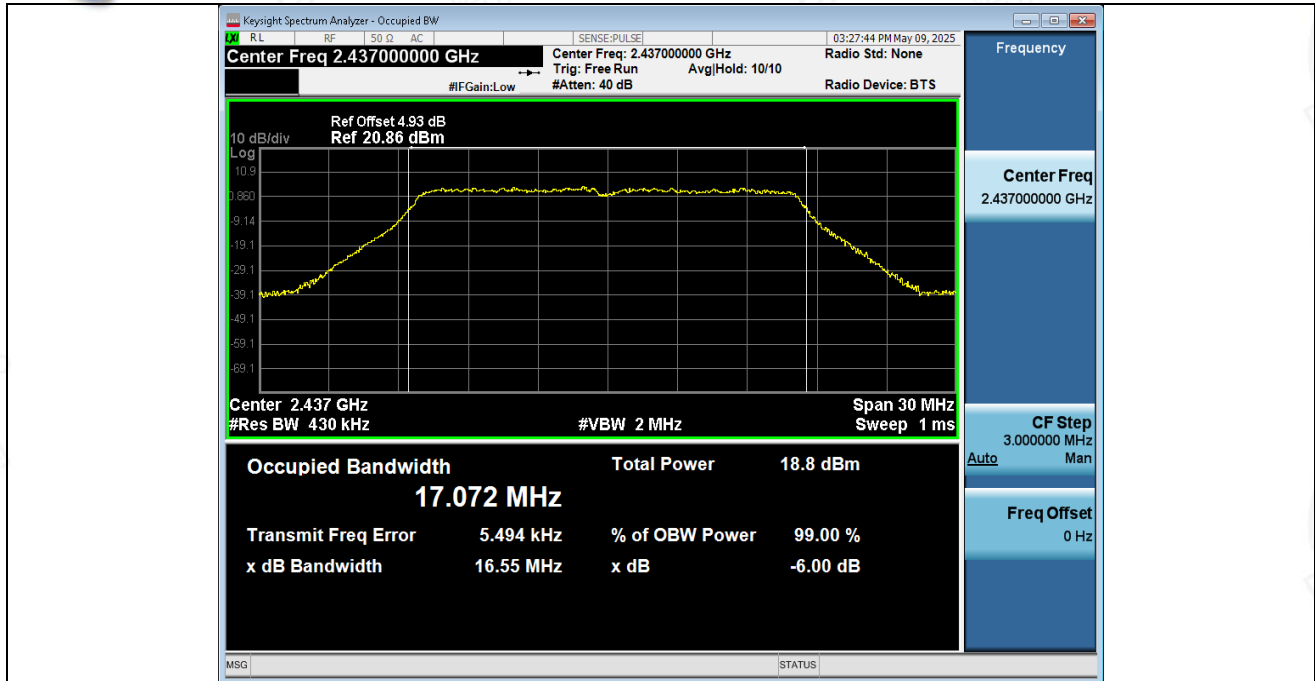
-6dB Bandwidth_NVNT_ANT1_802_11b_2462





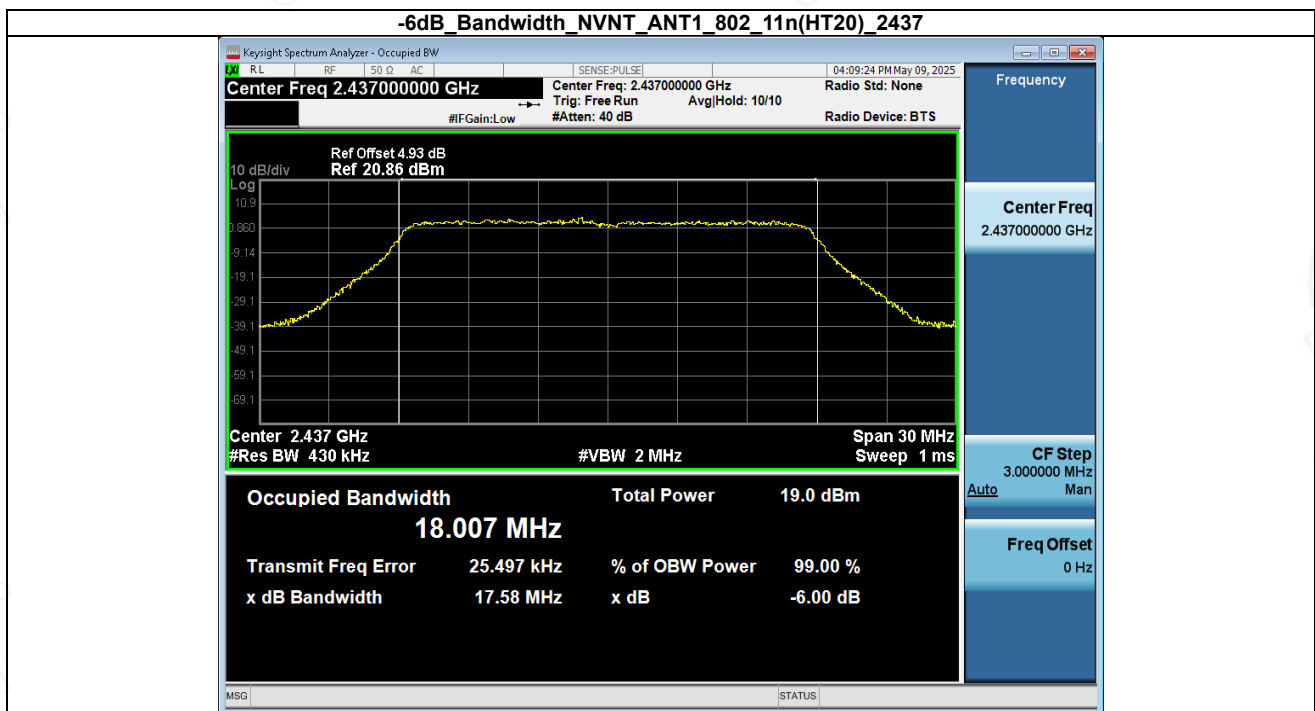
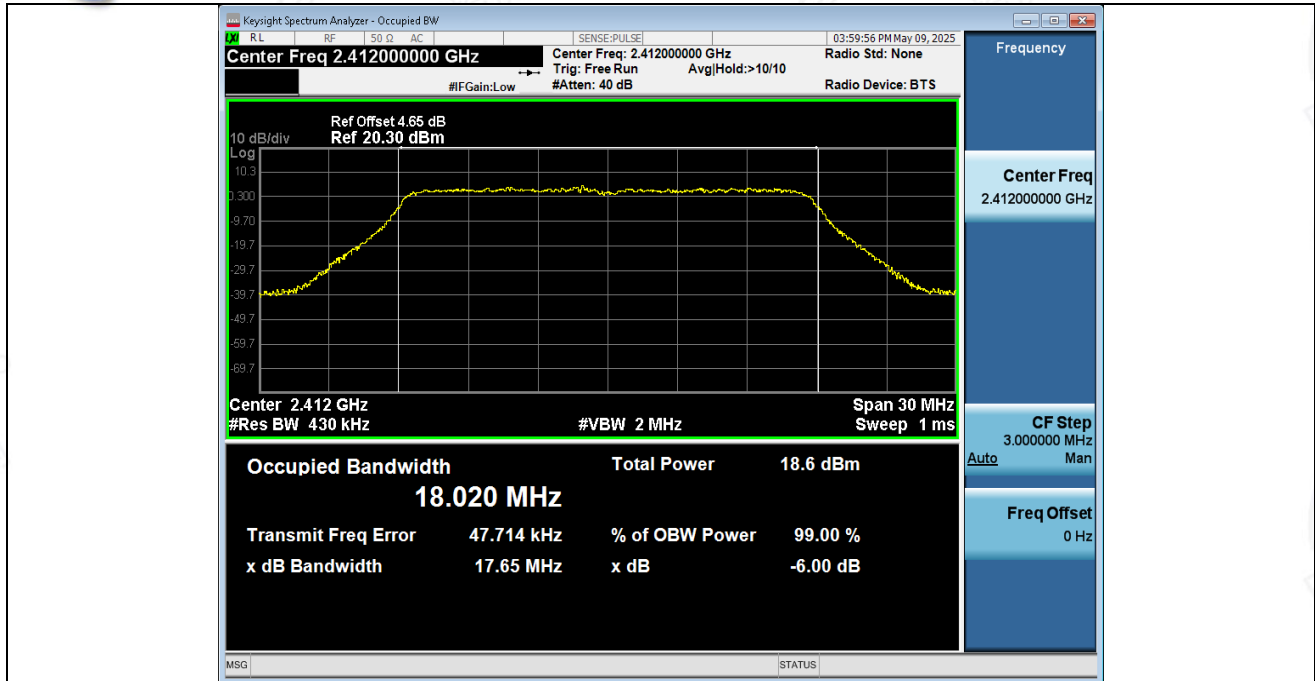
-6dB_Bandwidth_NVNT_ANT1_802_11g_2437





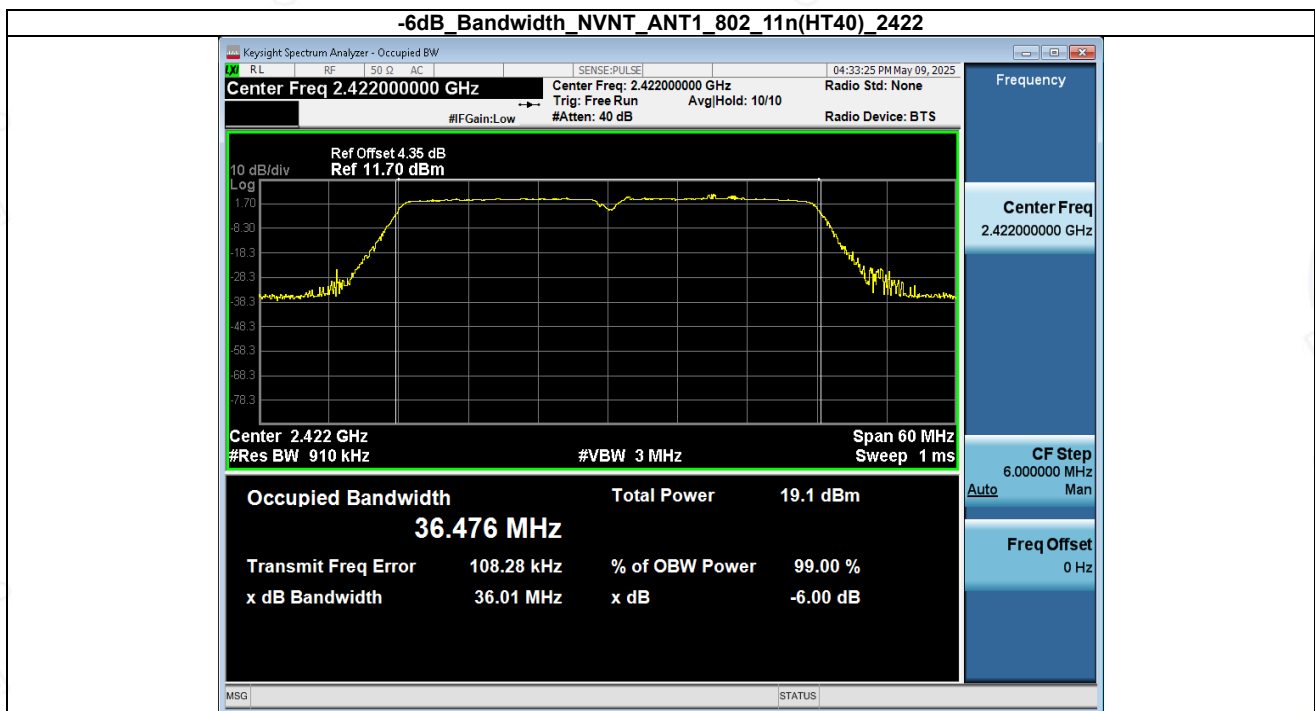
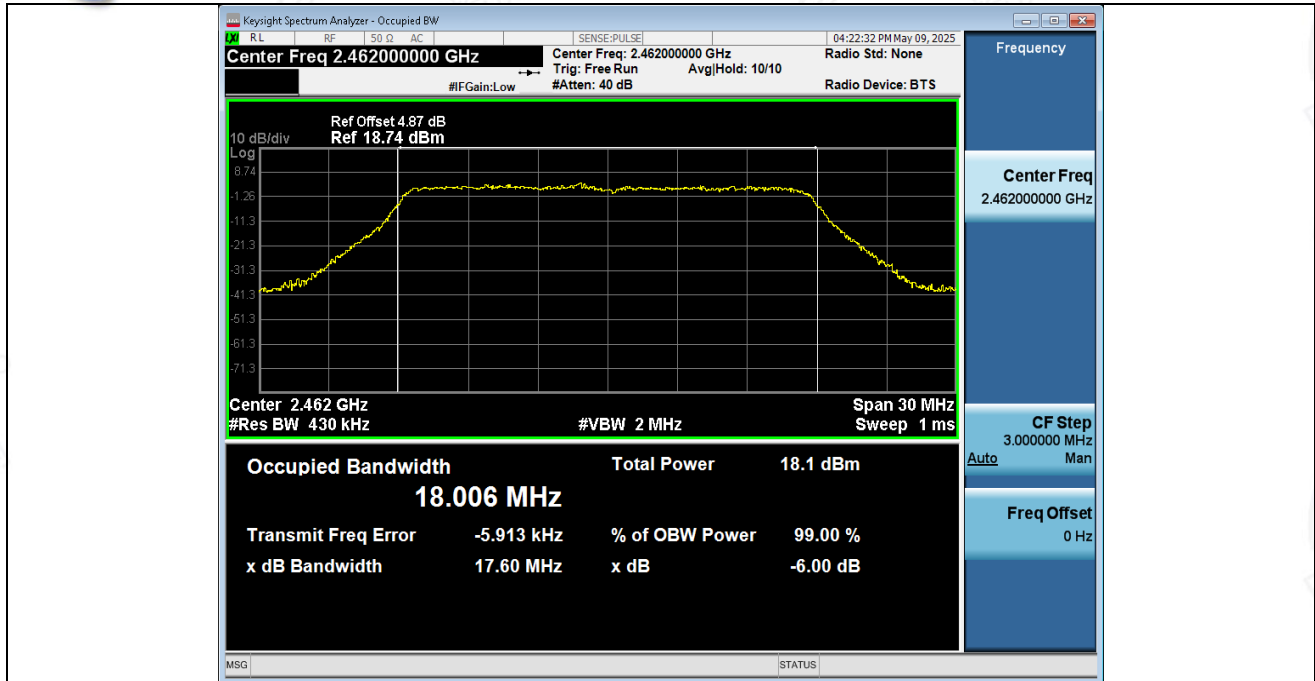
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2412





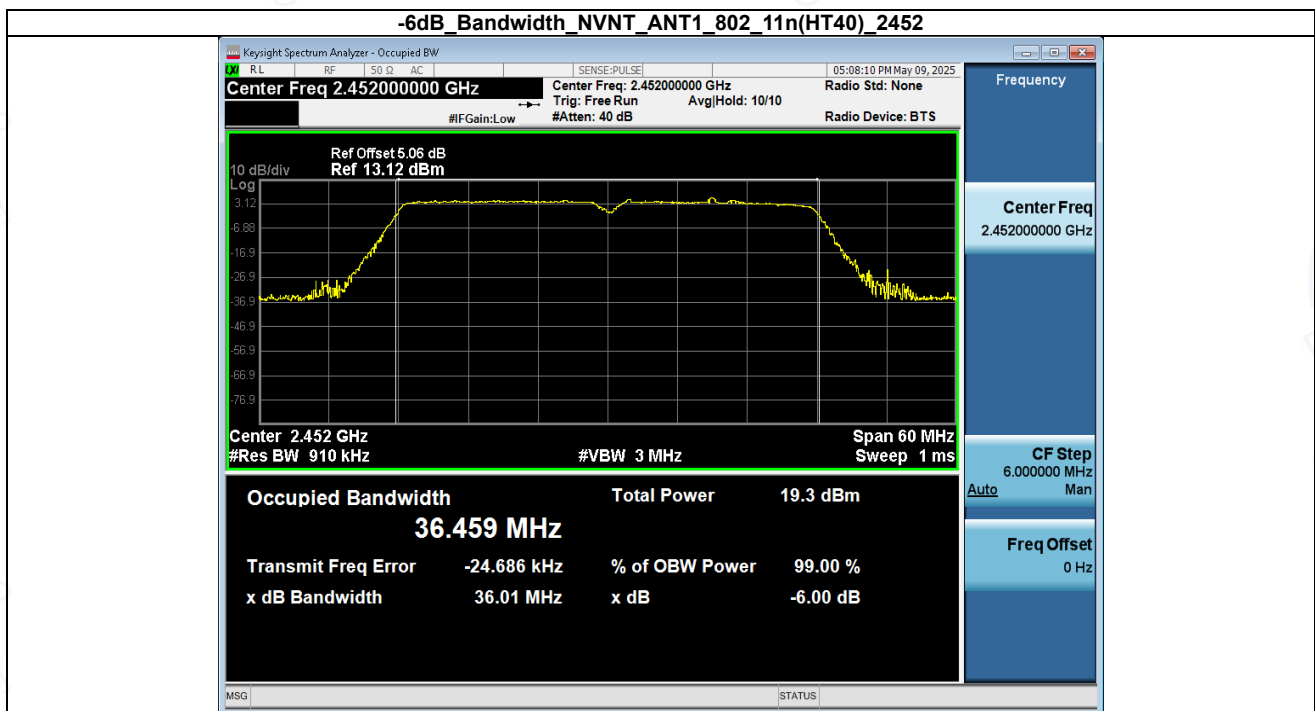
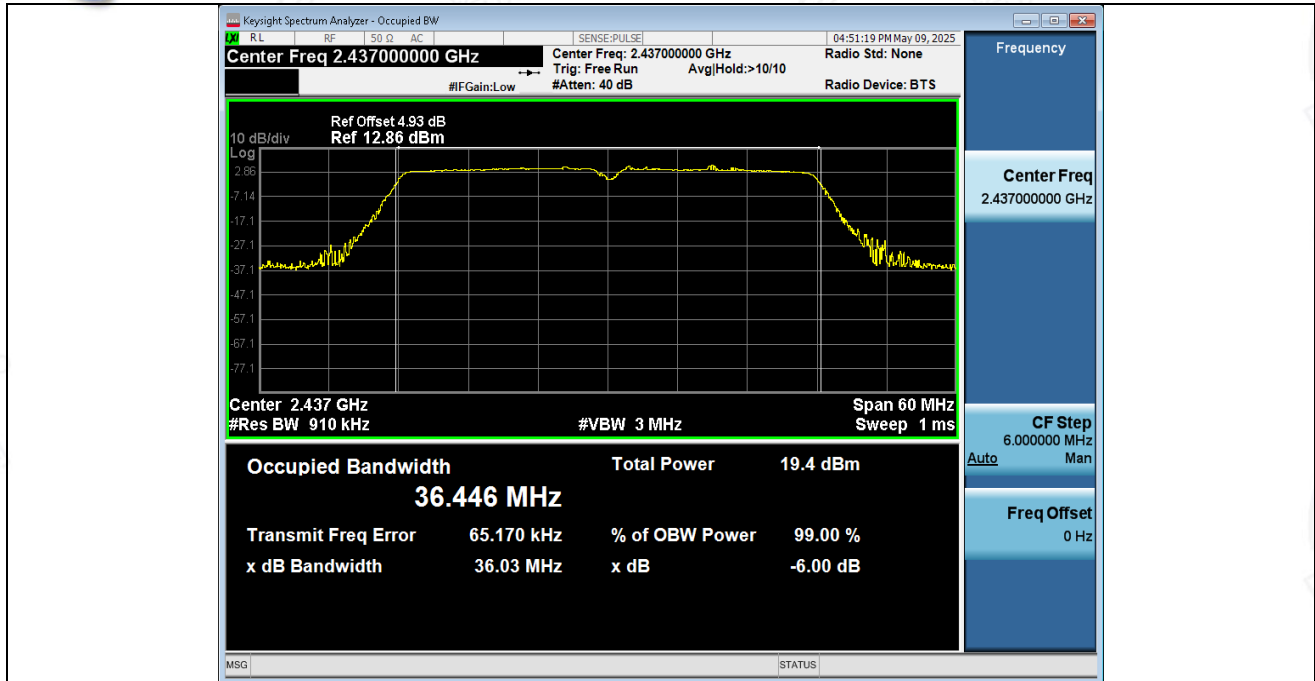
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462





-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2437

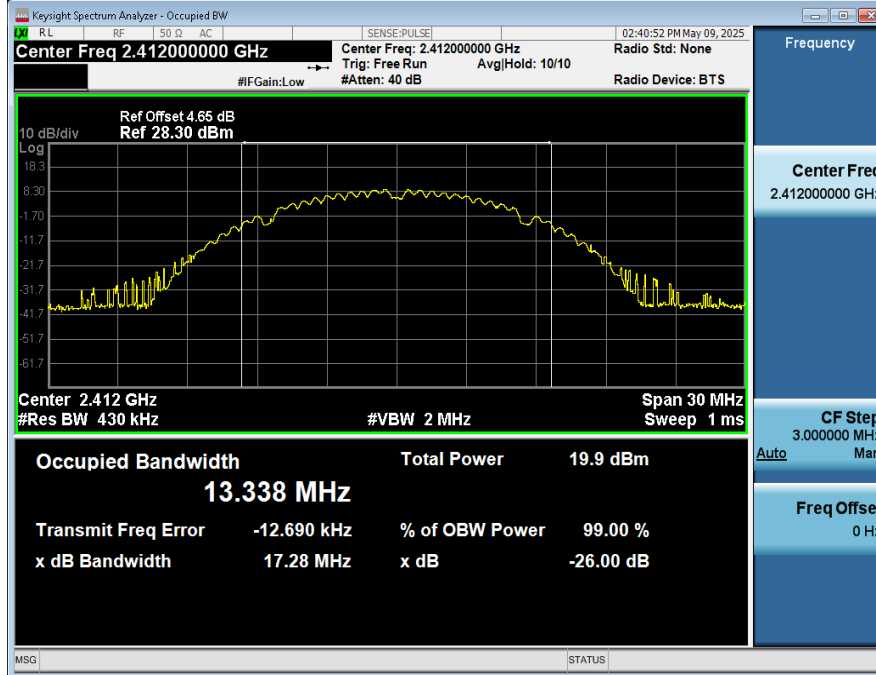




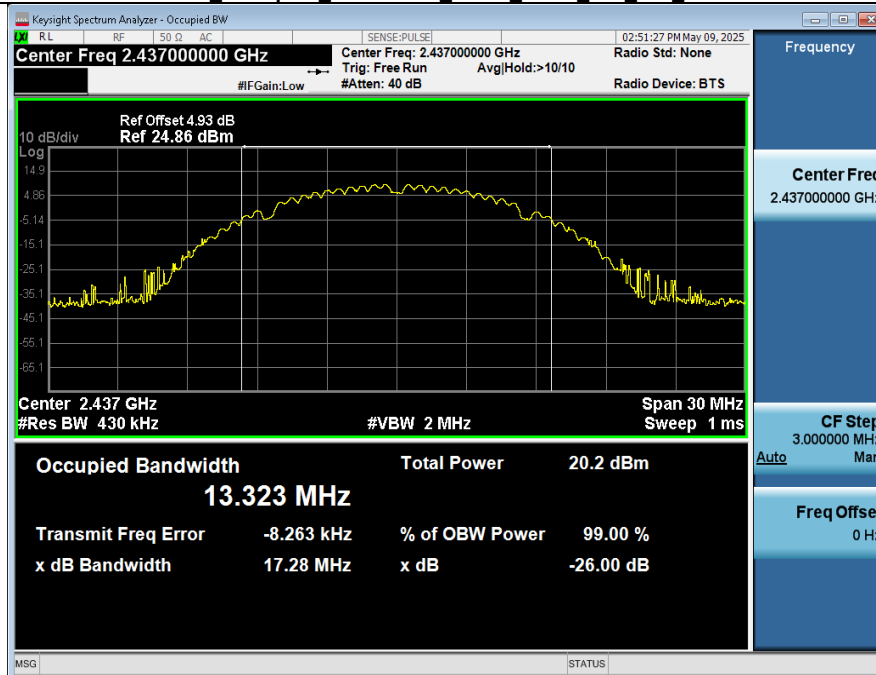
2. 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99% BW (MHz)
NVNT	ANT1	802.11b	2412.00	13.338
NVNT	ANT1	802.11b	2437.00	13.323
NVNT	ANT1	802.11b	2462.00	13.301
NVNT	ANT1	802.11g	2412.00	17.182
NVNT	ANT1	802.11g	2437.00	17.162
NVNT	ANT1	802.11g	2462.00	17.184
NVNT	ANT1	802.11n(HT20)	2412.00	18.194
NVNT	ANT1	802.11n(HT20)	2437.00	18.153
NVNT	ANT1	802.11n(HT20)	2462.00	18.170
NVNT	ANT1	802.11n(HT40)	2422.00	36.477
NVNT	ANT1	802.11n(HT40)	2437.00	36.454
NVNT	ANT1	802.11n(HT40)	2452.00	36.497

99% Occupied Bandwidth NVNT ANT1 802_11b 2412

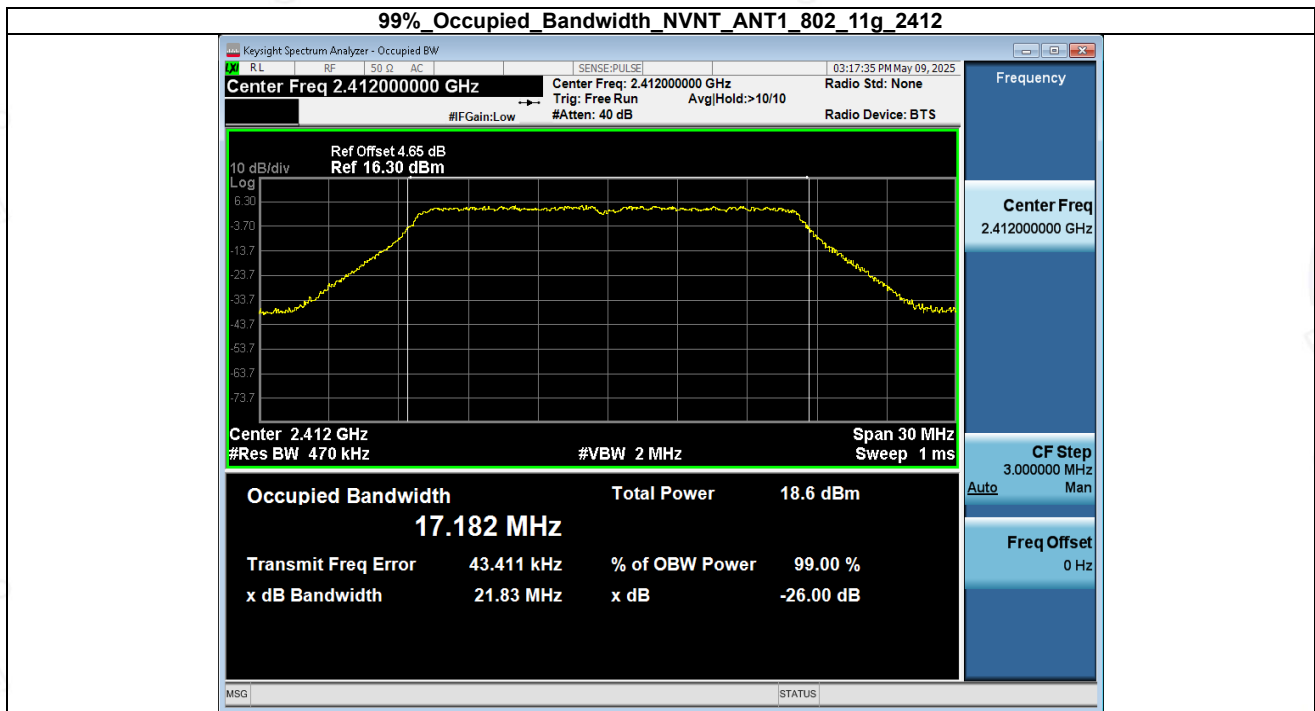
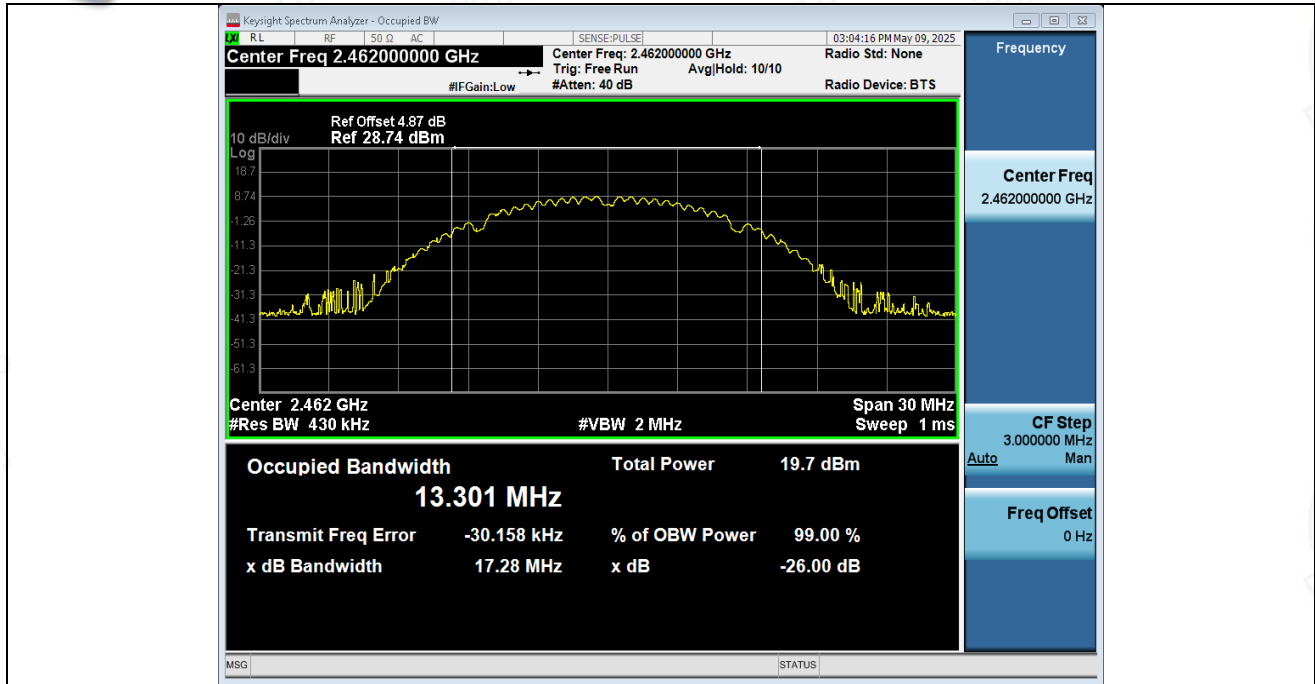


99% Occupied Bandwidth NVNT ANT1 802_11b 2437



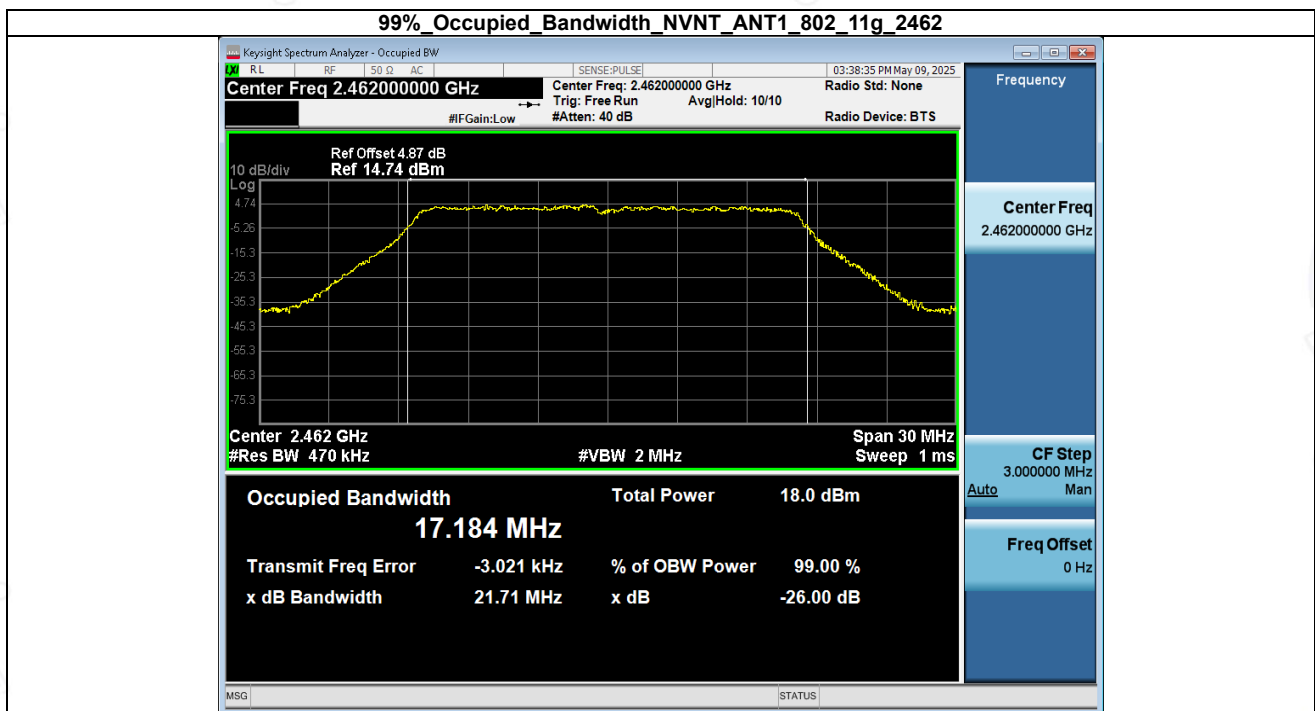
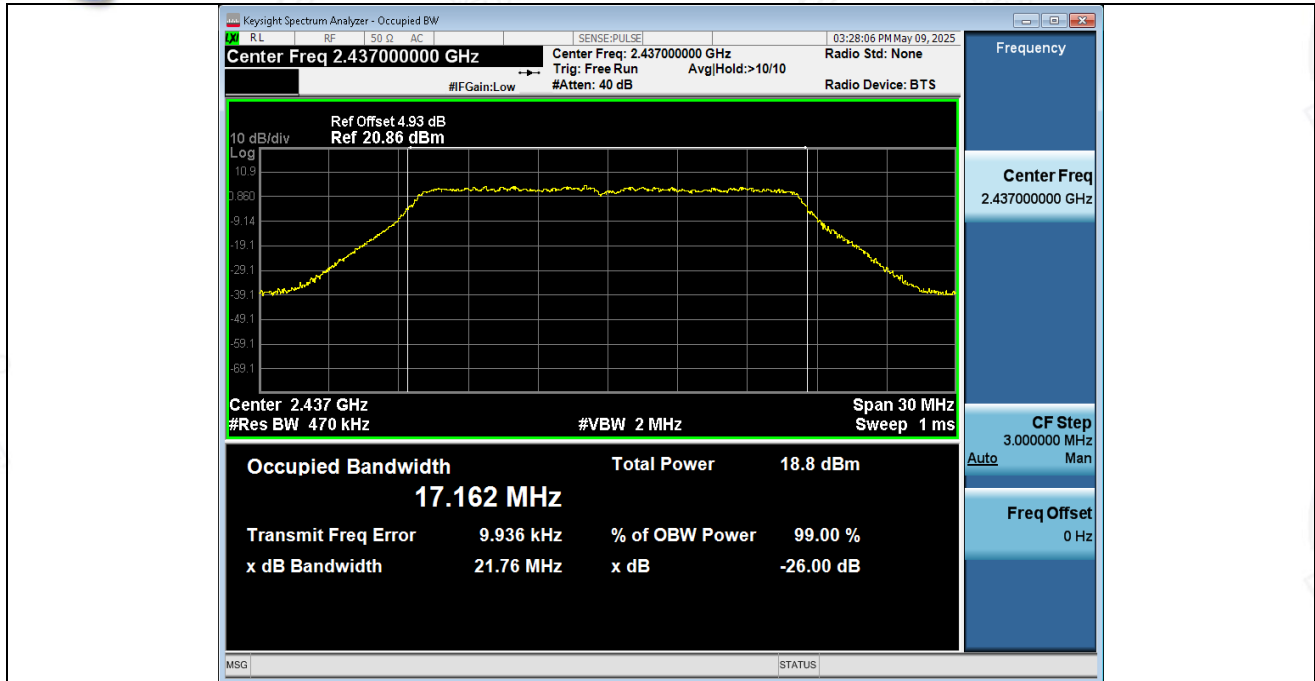
99% Occupied Bandwidth NVNT ANT1 802_11b 2462





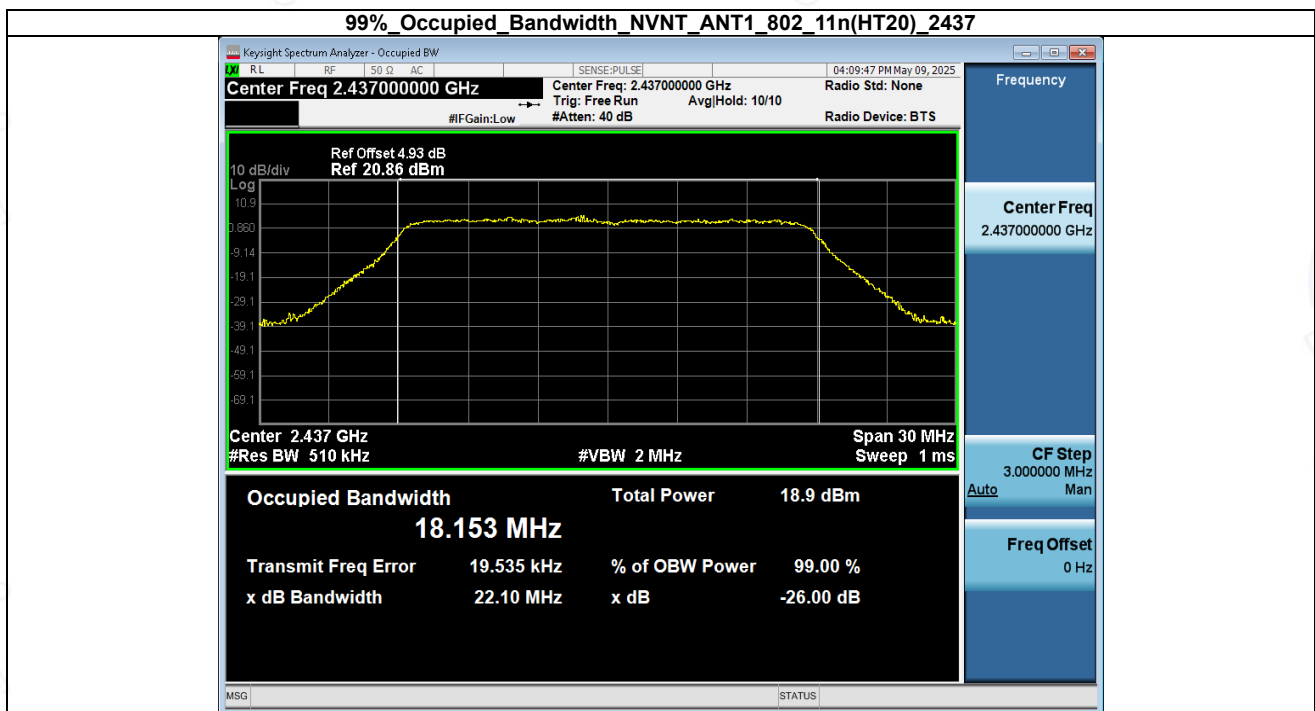
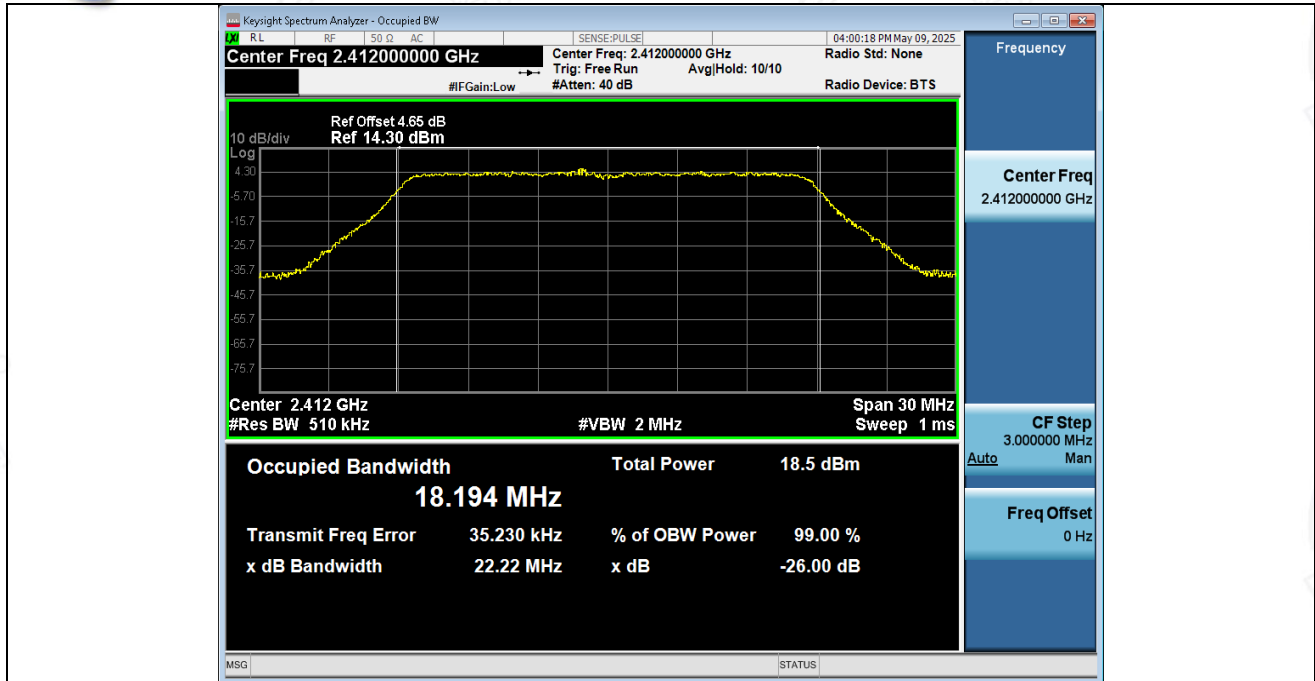
99%_Occupied_Bandwidth_NVNT_ANT1_802_11g_2437





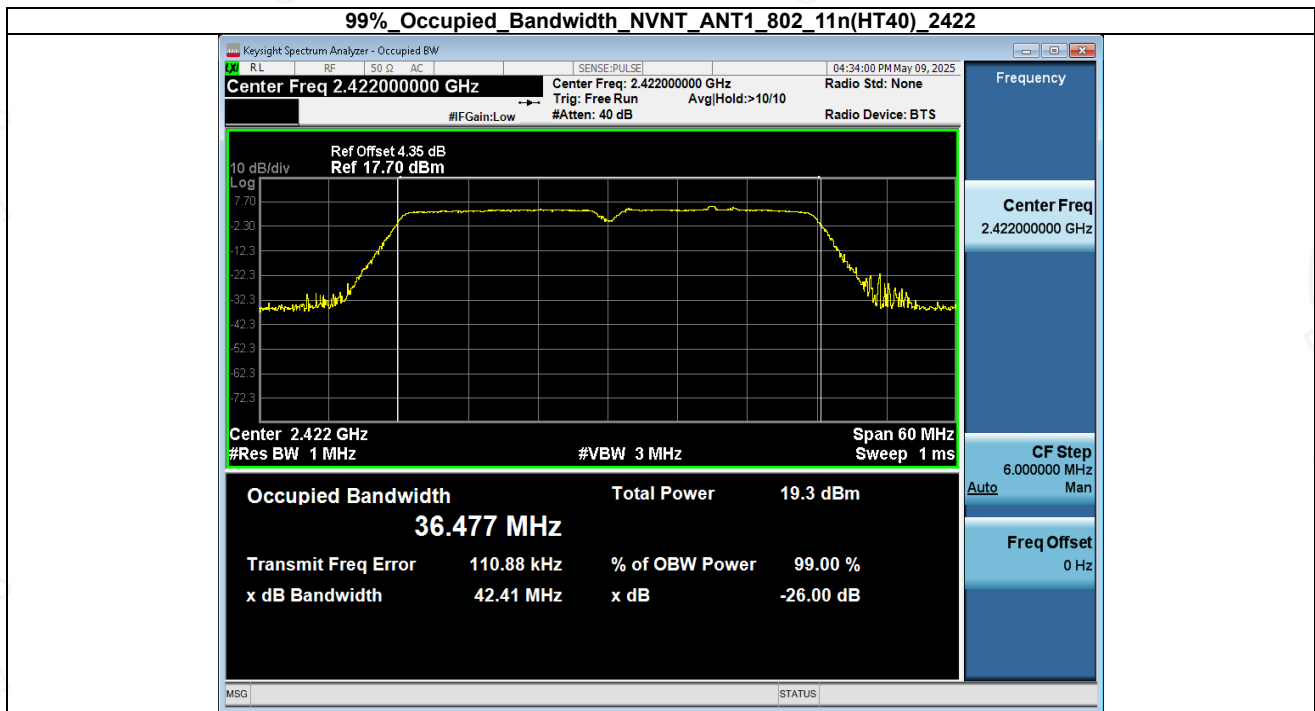
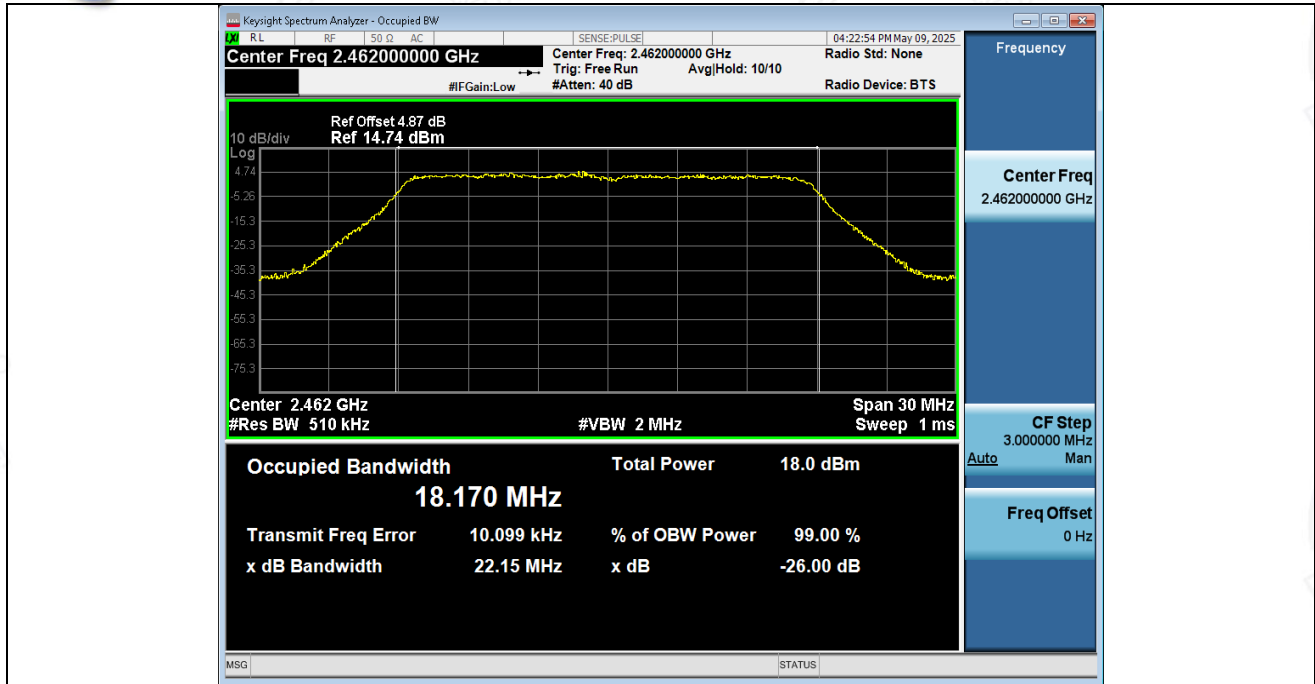
99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2412





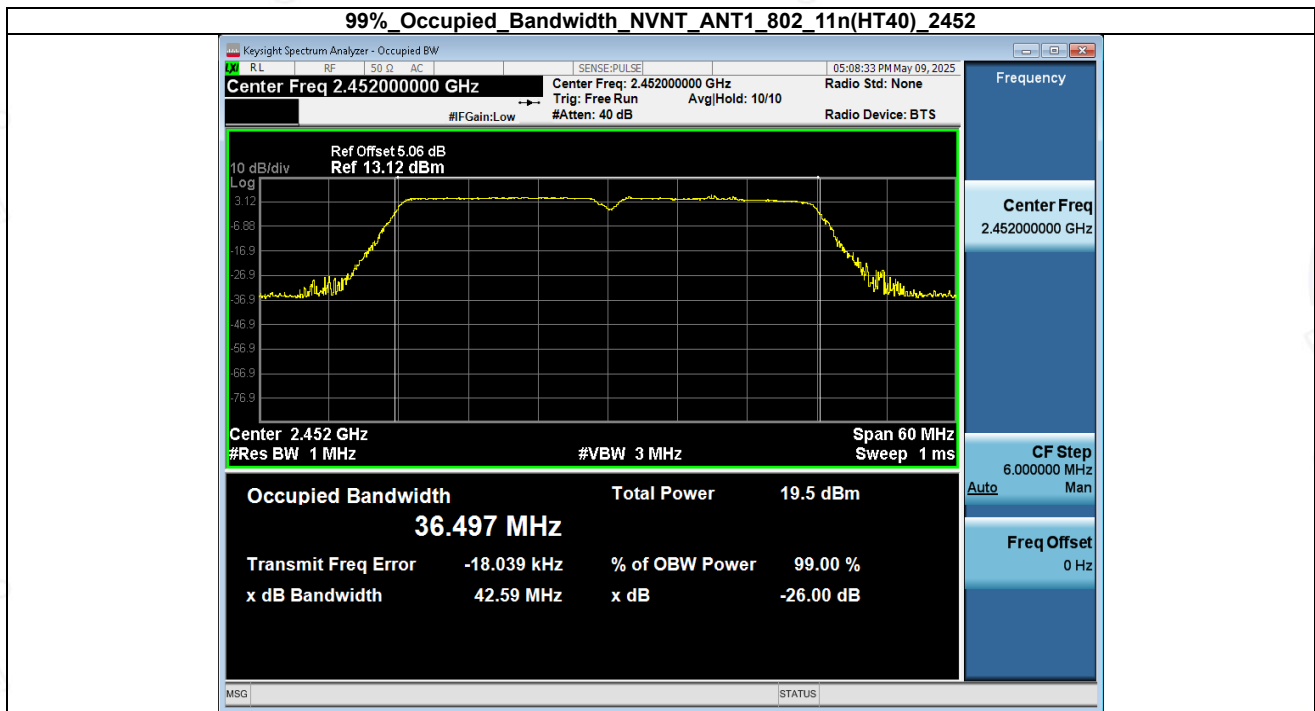
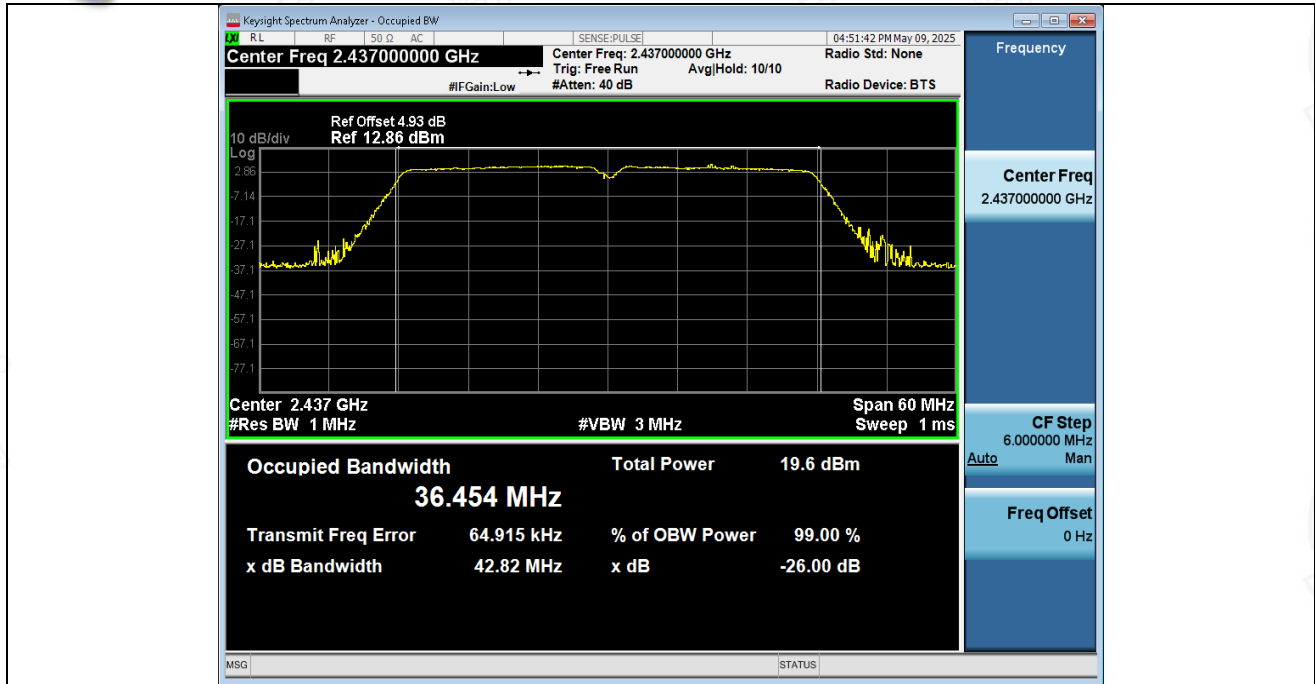
99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462





99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT40)_2437

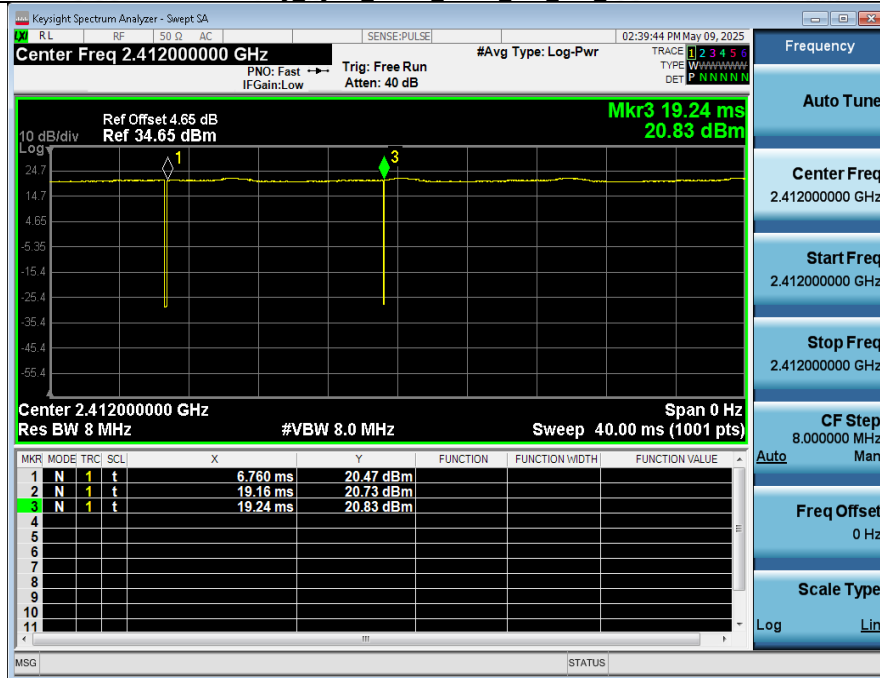




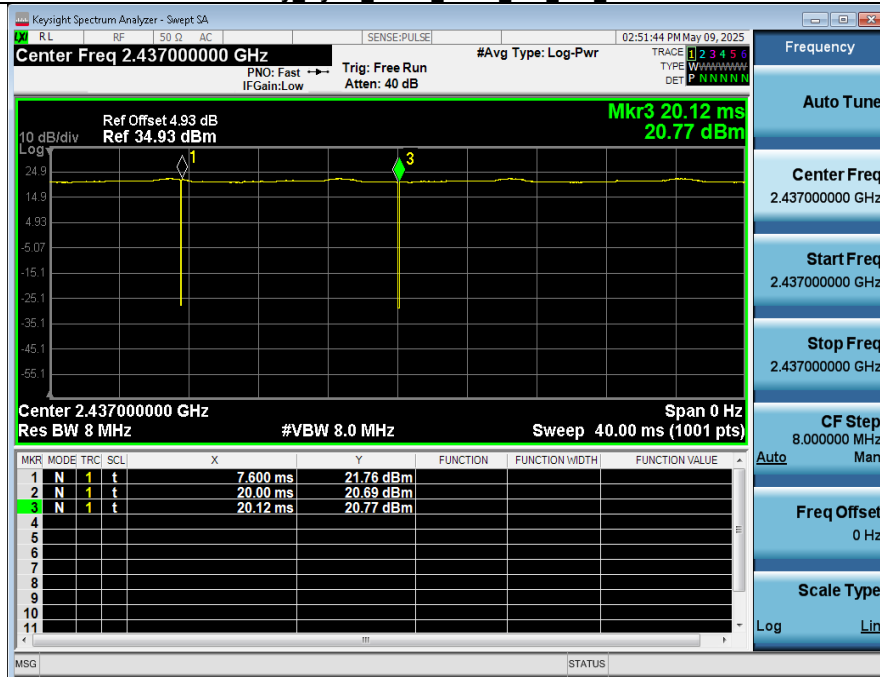
3. Duty Cycle

Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty factor(dB)
NVNT	ANT1	802.11b	2412.00	99.68	0.00
NVNT	ANT1	802.11b	2437.00	99.36	0.00
NVNT	ANT1	802.11b	2462.00	99.68	0.00
NVNT	ANT1	802.11g	2412.00	96.33	0.16
NVNT	ANT1	802.11g	2437.00	92.86	0.32
NVNT	ANT1	802.11g	2462.00	95.41	0.20
NVNT	ANT1	802.11n(HT20)	2412.00	97.00	0.13
NVNT	ANT1	802.11n(HT20)	2437.00	96.04	0.18
NVNT	ANT1	802.11n(HT20)	2462.00	95.10	0.22
NVNT	ANT1	802.11n(HT40)	2422.00	90.57	0.43
NVNT	ANT1	802.11n(HT40)	2437.00	97.96	0.09
NVNT	ANT1	802.11n(HT40)	2452.00	90.38	0.44

Duty Cycle NVNT ANT1 802 11b 2412

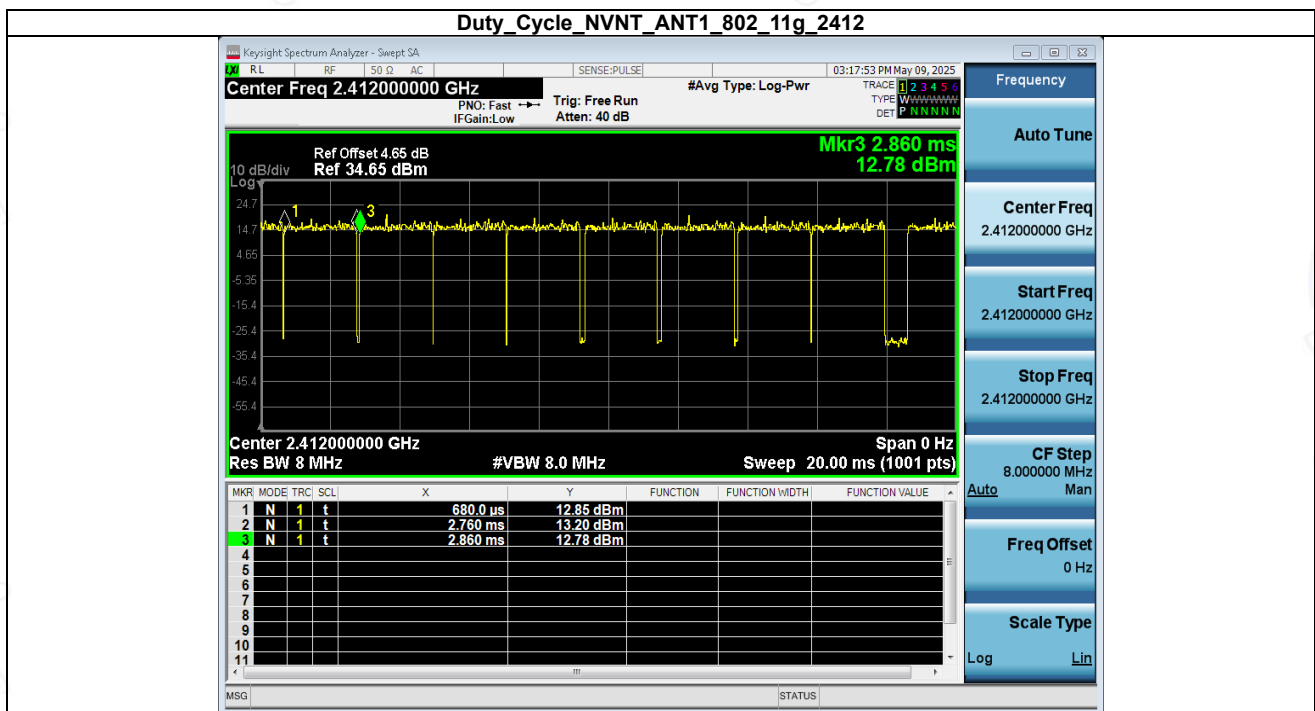
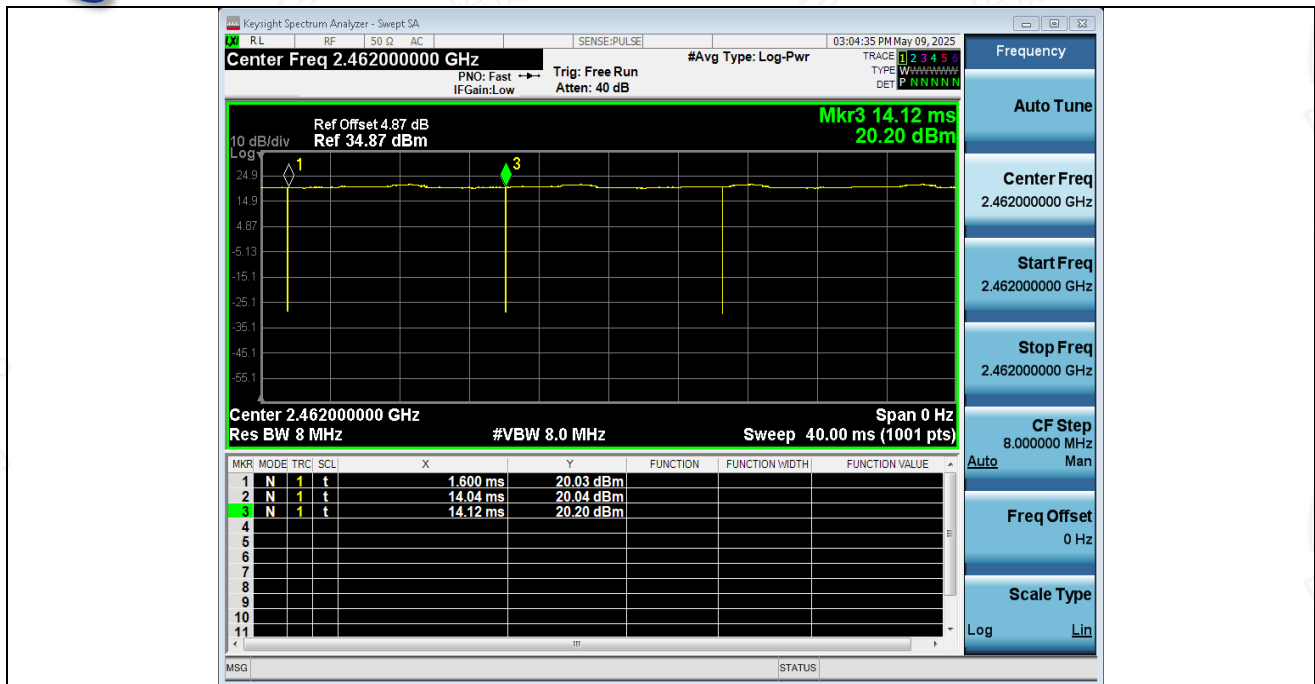


Duty Cycle NVNT ANT1 802 11b 2437



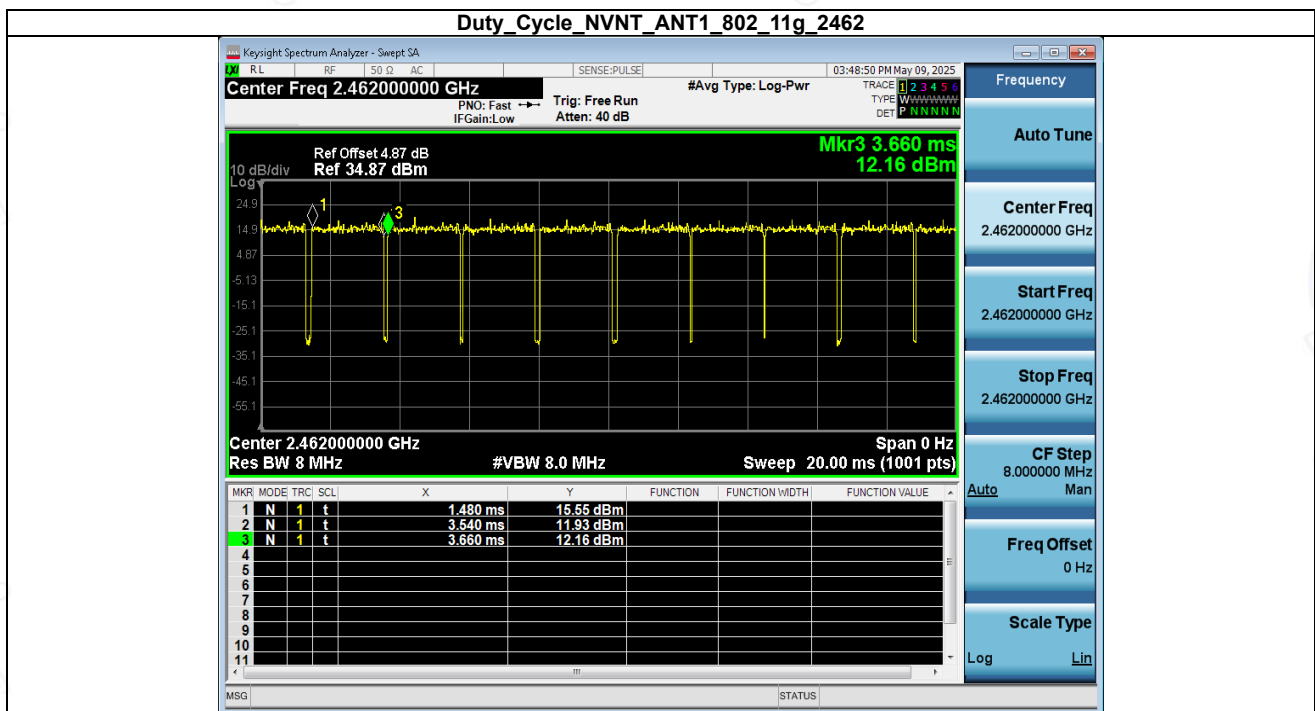
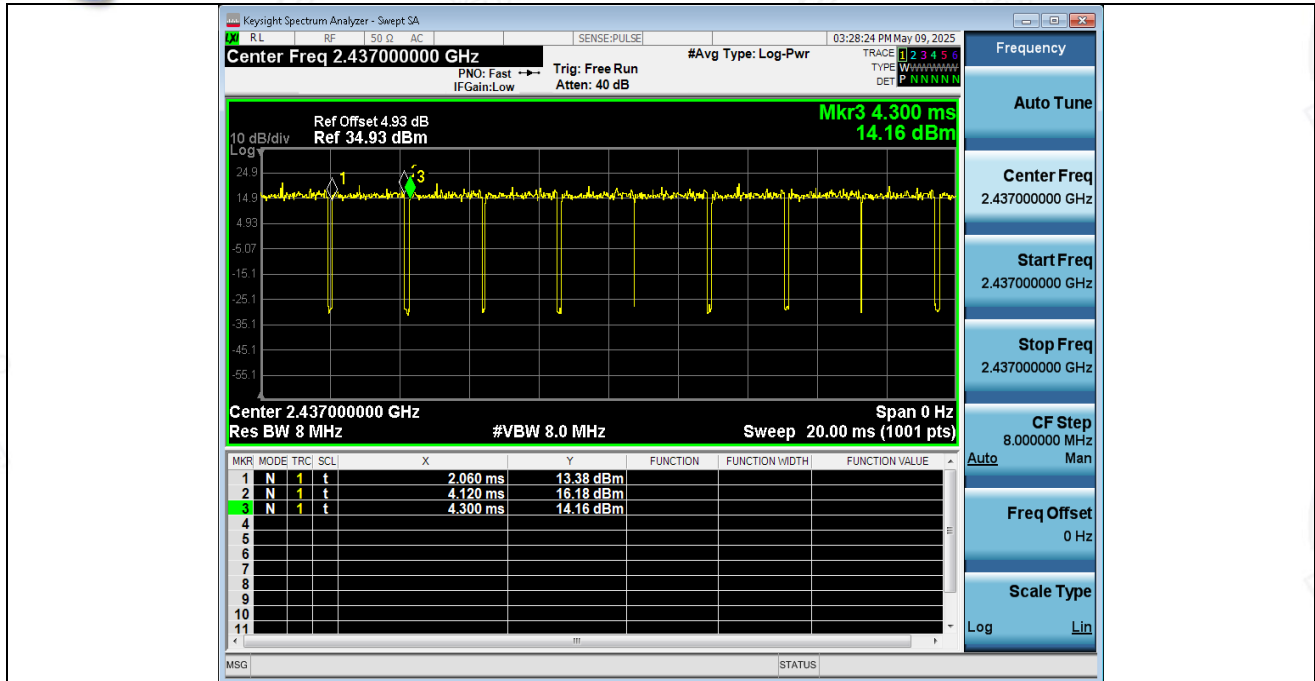
Duty Cycle NVNT ANT1 802 11b 2462





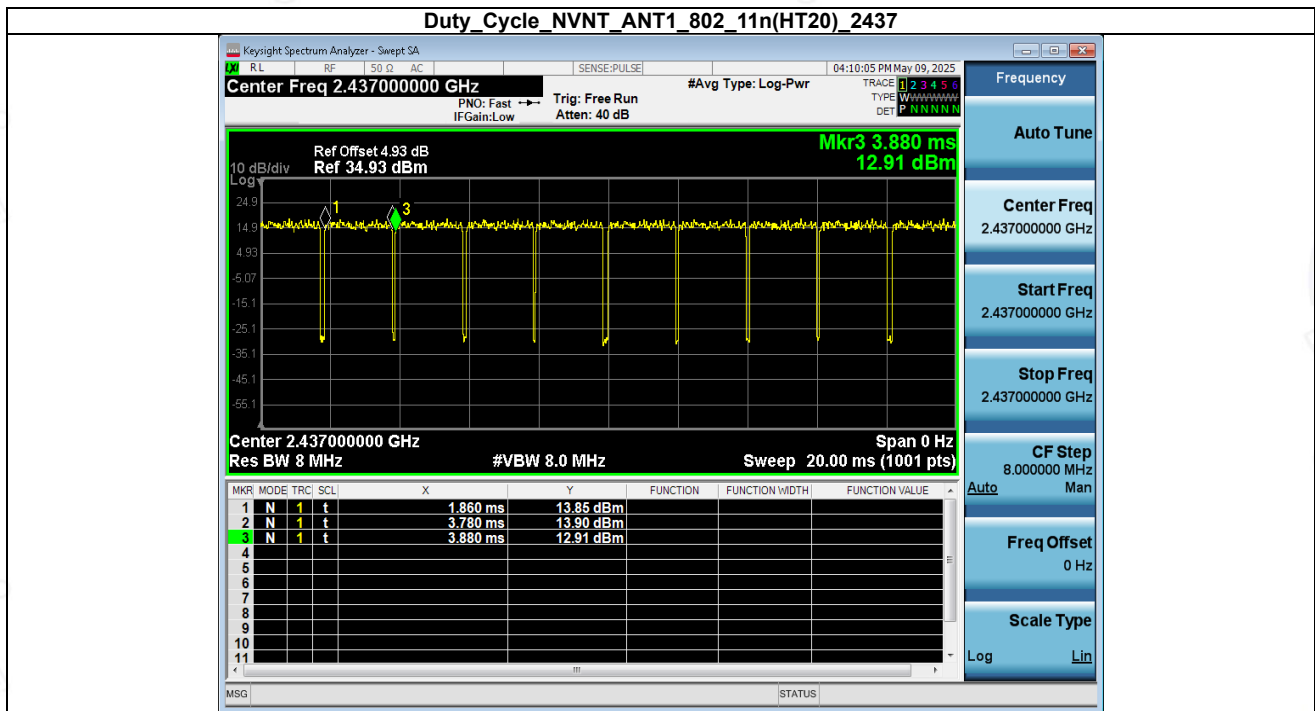
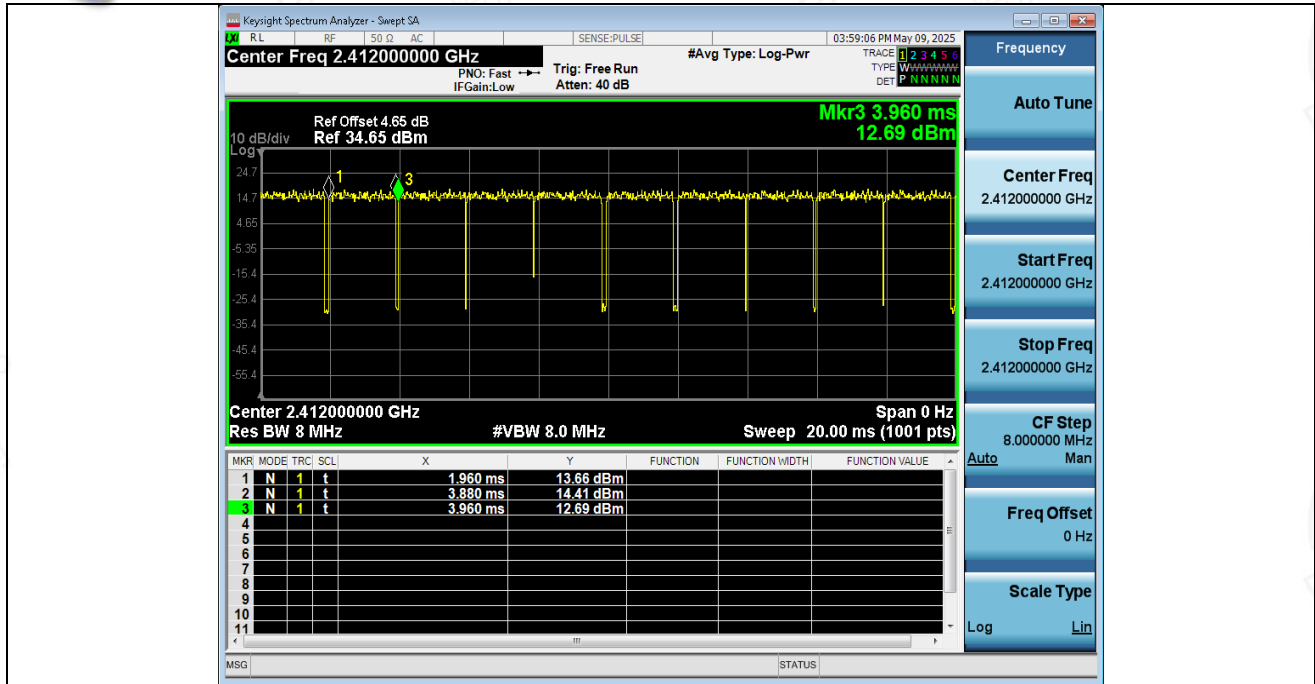
Duty Cycle NVNT_ANT1_802_11g_2437





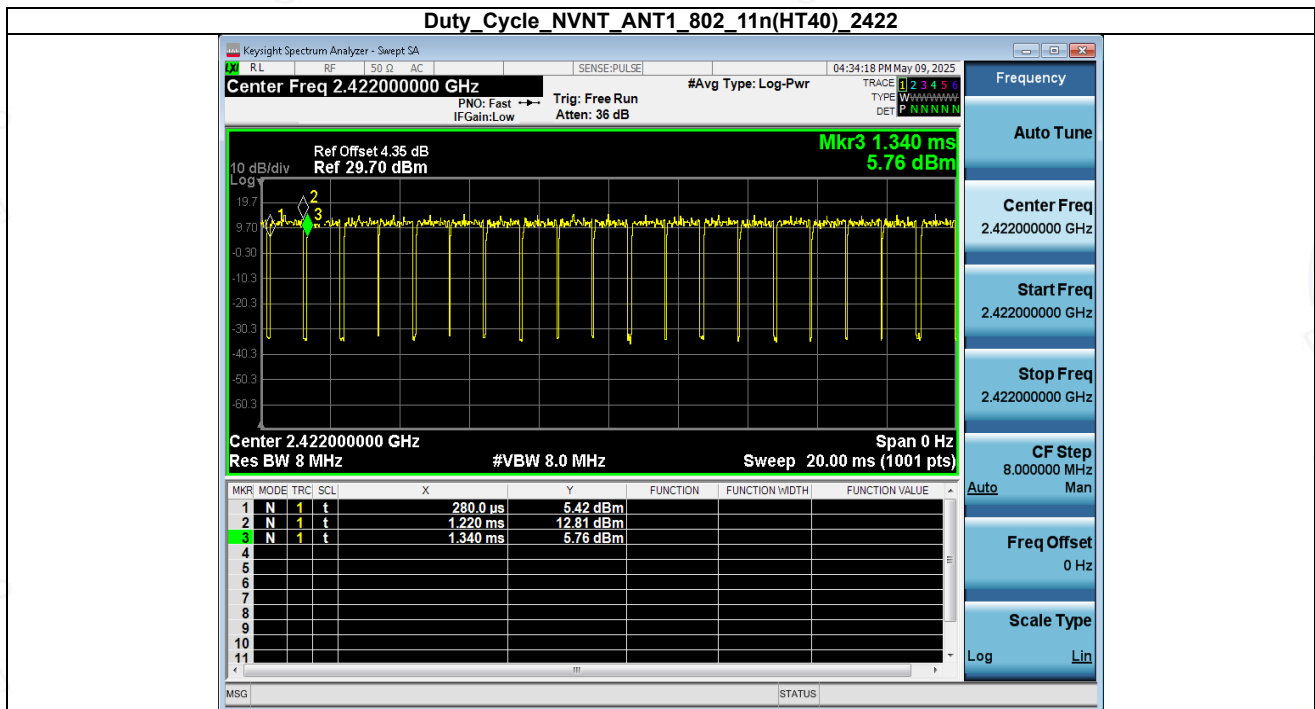
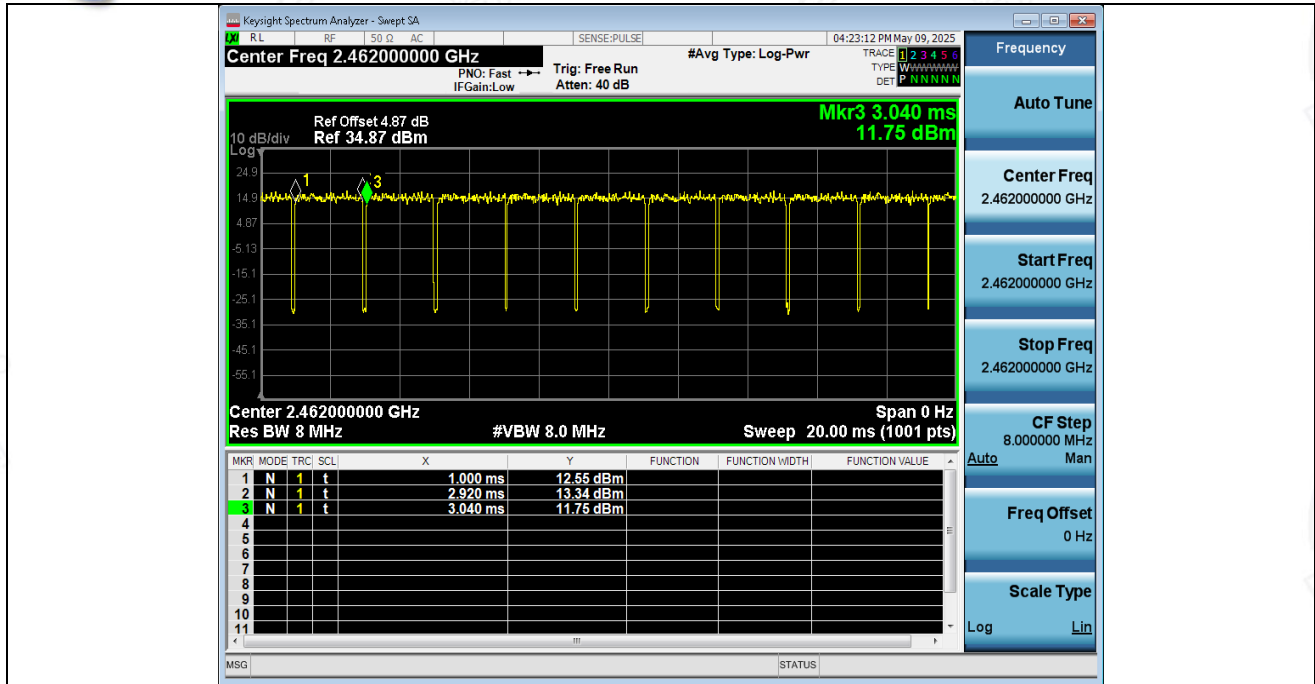
Duty Cycle NVNT_ANT1_802_11n(HT20)_2412





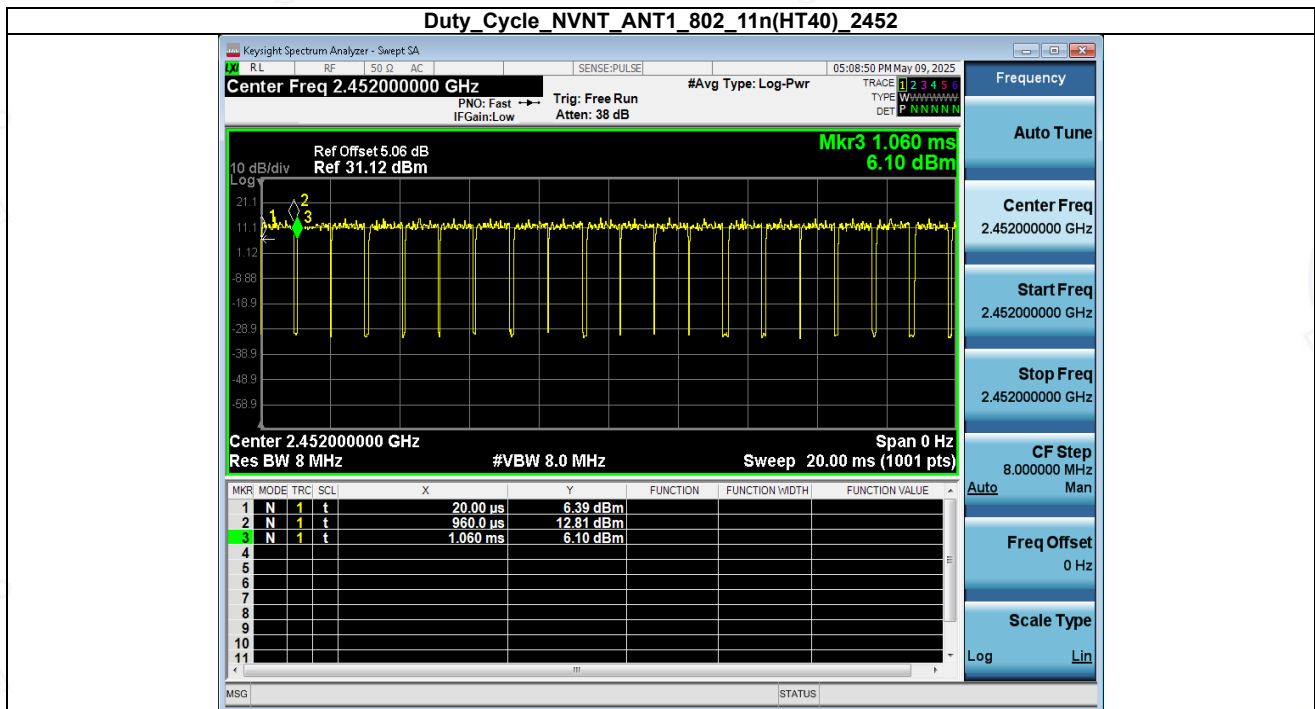
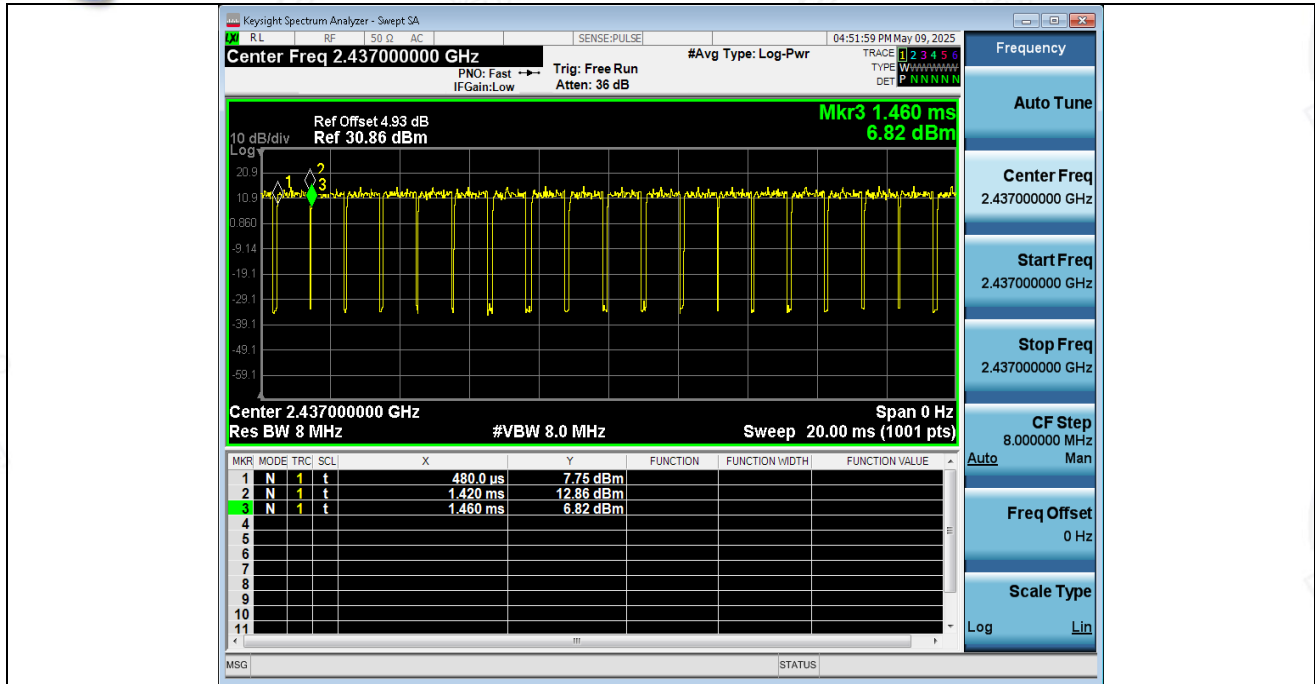
Duty Cycle NVNT_ANT1_802_11n(HT20)_2462





Duty Cycle_NVNT_ANT1_802_11n(HT40)_2437

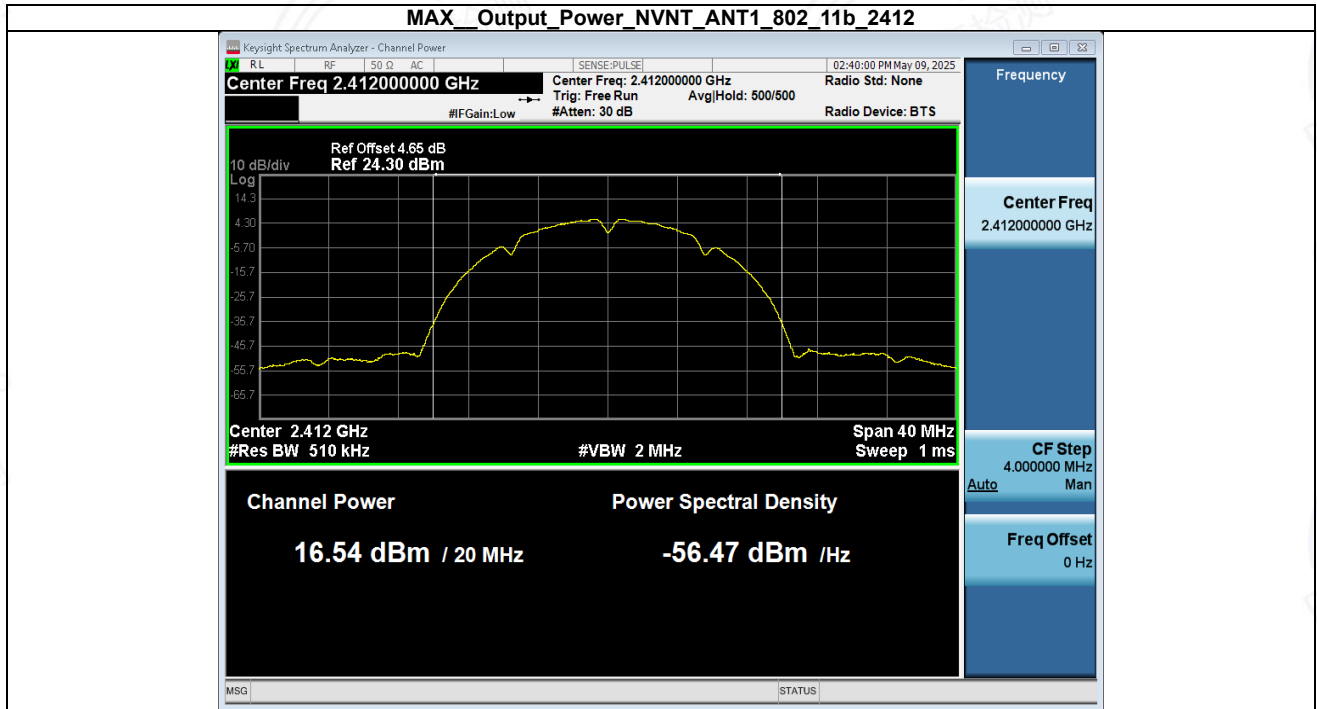




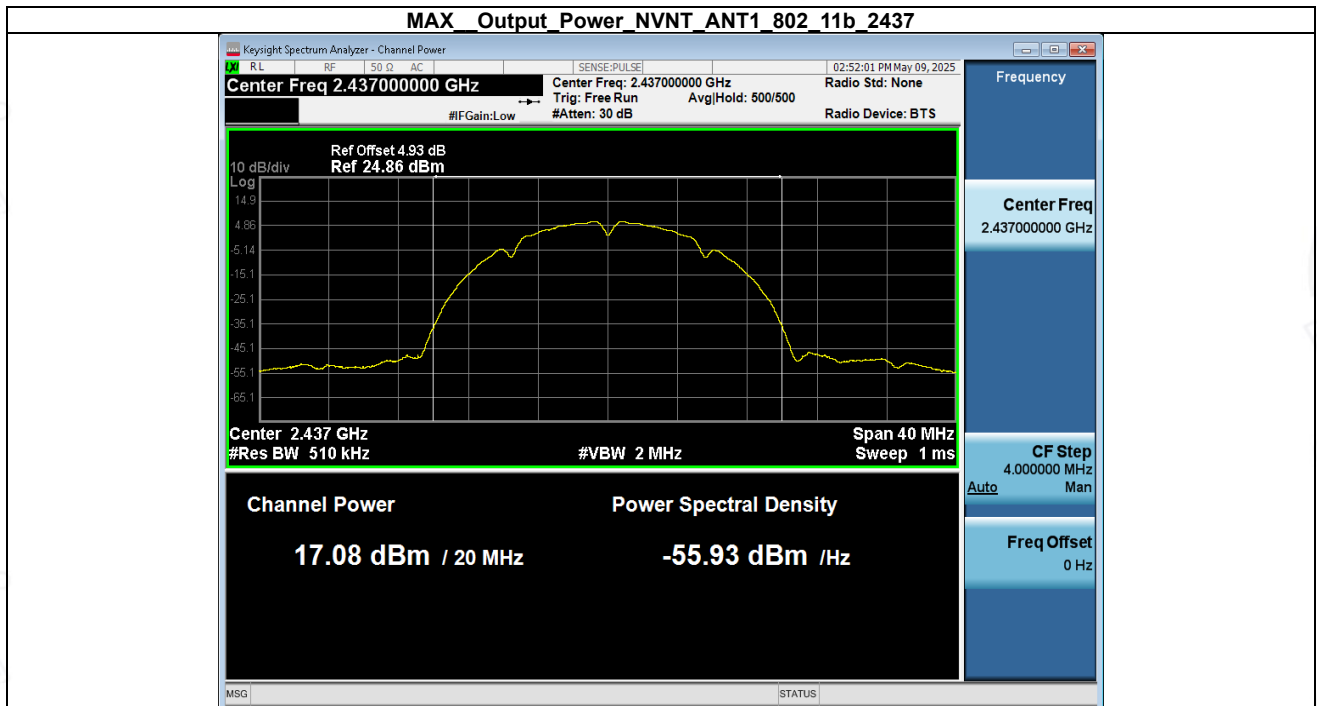
4. MAX. Output Power

Condition	Antenna	Modulation	Frequency (MHz)	Detector	Conducted Power(dBm)	Duty factor(dB)	Total Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	RMS	16.54	0.00	16.54	30	Pass
NVNT	ANT1	802.11b	2437.00	RMS	17.08	0.00	17.08	30	Pass
NVNT	ANT1	802.11b	2462.00	RMS	16.38	0.00	16.38	30	Pass
NVNT	ANT1	802.11g	2412.00	RMS	11.23	0.16	11.39	30	Pass
NVNT	ANT1	802.11g	2437.00	RMS	11.52	0.32	11.84	30	Pass
NVNT	ANT1	802.11g	2462.00	RMS	10.71	0.20	10.91	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	RMS	11.18	0.13	11.31	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	RMS	11.60	0.18	11.78	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	RMS	10.70	0.22	10.92	30	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	RMS	10.86	0.43	11.29	30	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	RMS	11.24	0.09	11.33	30	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	RMS	11.00	0.44	11.44	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

ShenZhen BANTEK Testing Co.,Ltd.

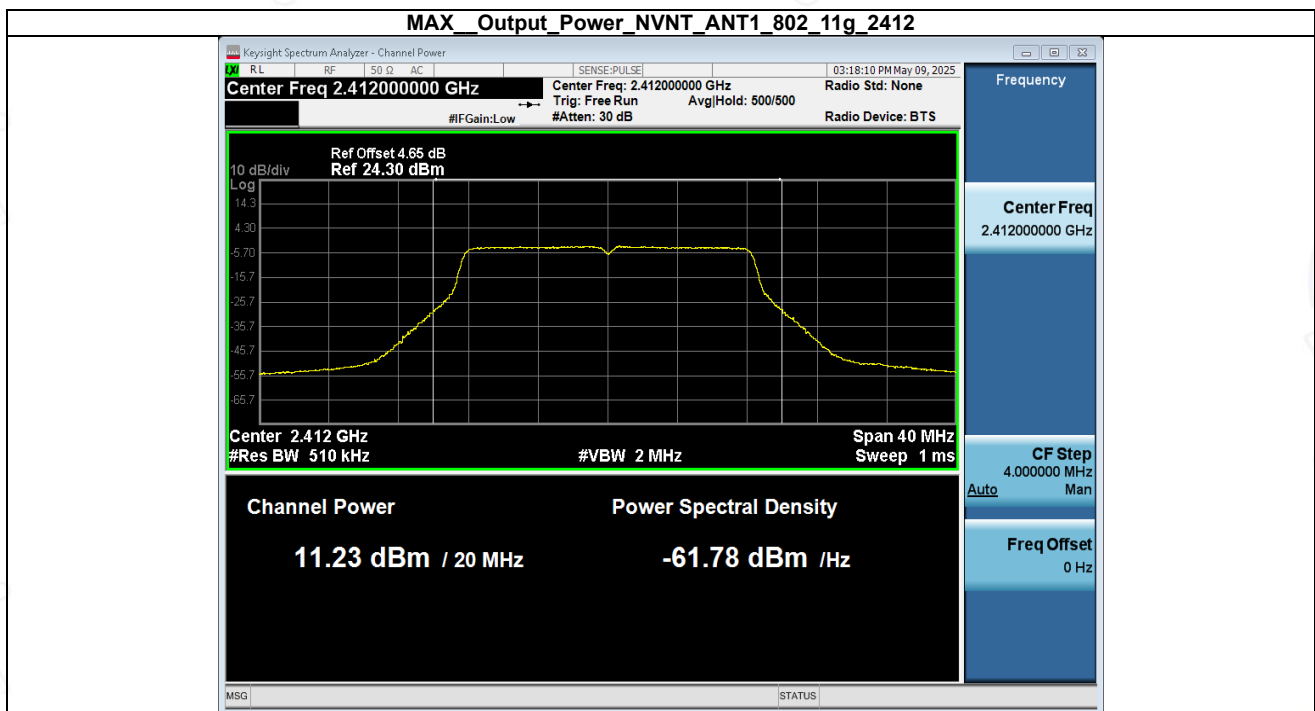
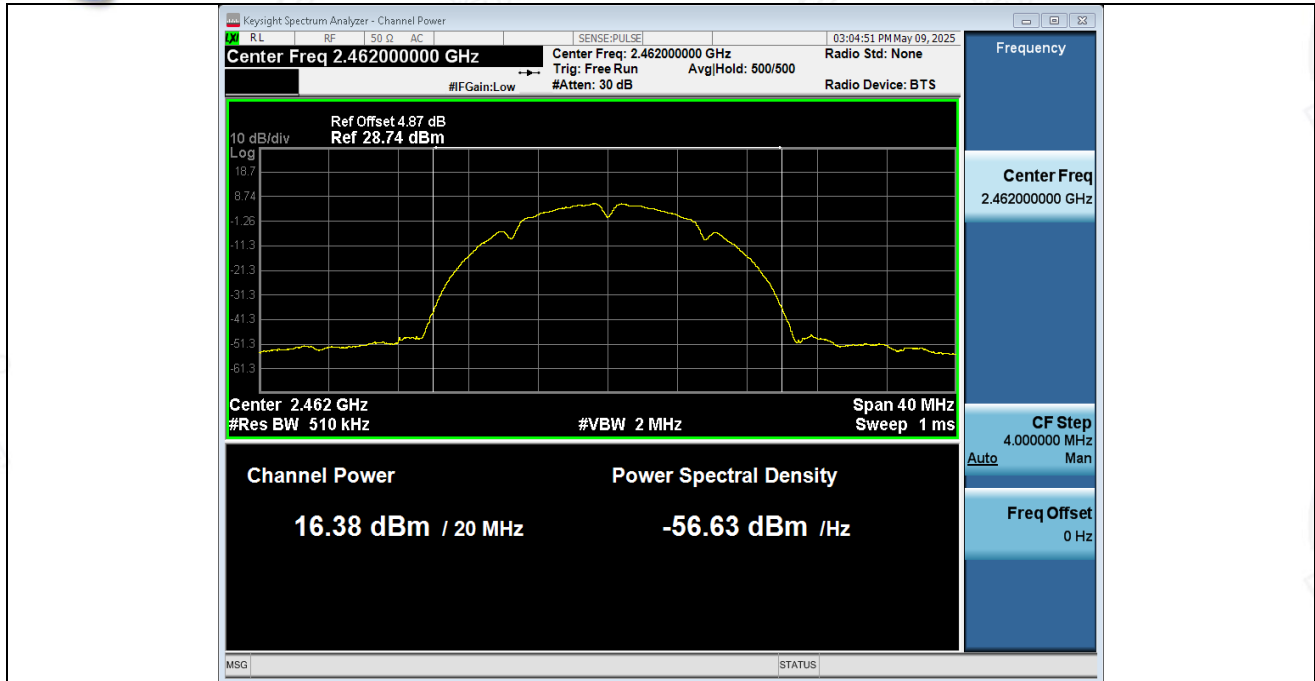
Add : A5&A6, Building B1&B2, No.45 Gangtou Road, Bogang Community, Shajing Street
Bao'an District, Shenzhen, Guangdong, China 518104

Tel : +(86)755-2334 4200

E-mail : Service@btek-lab.com

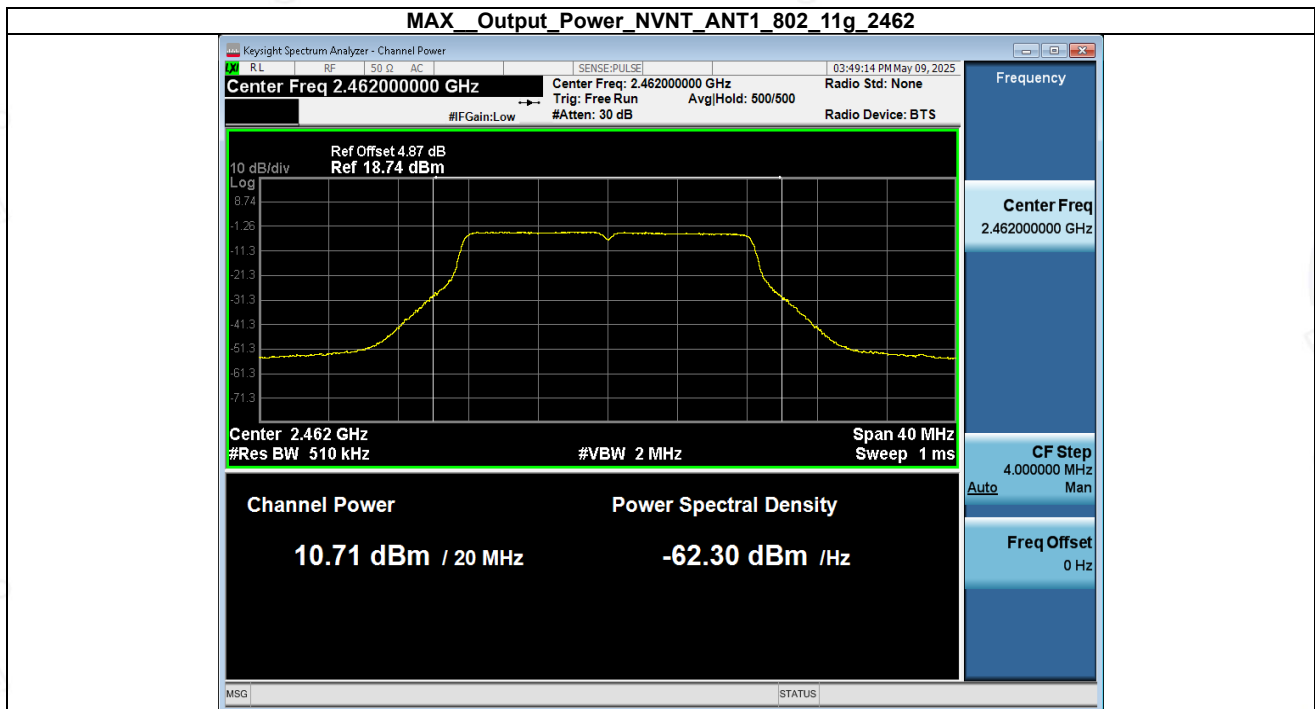
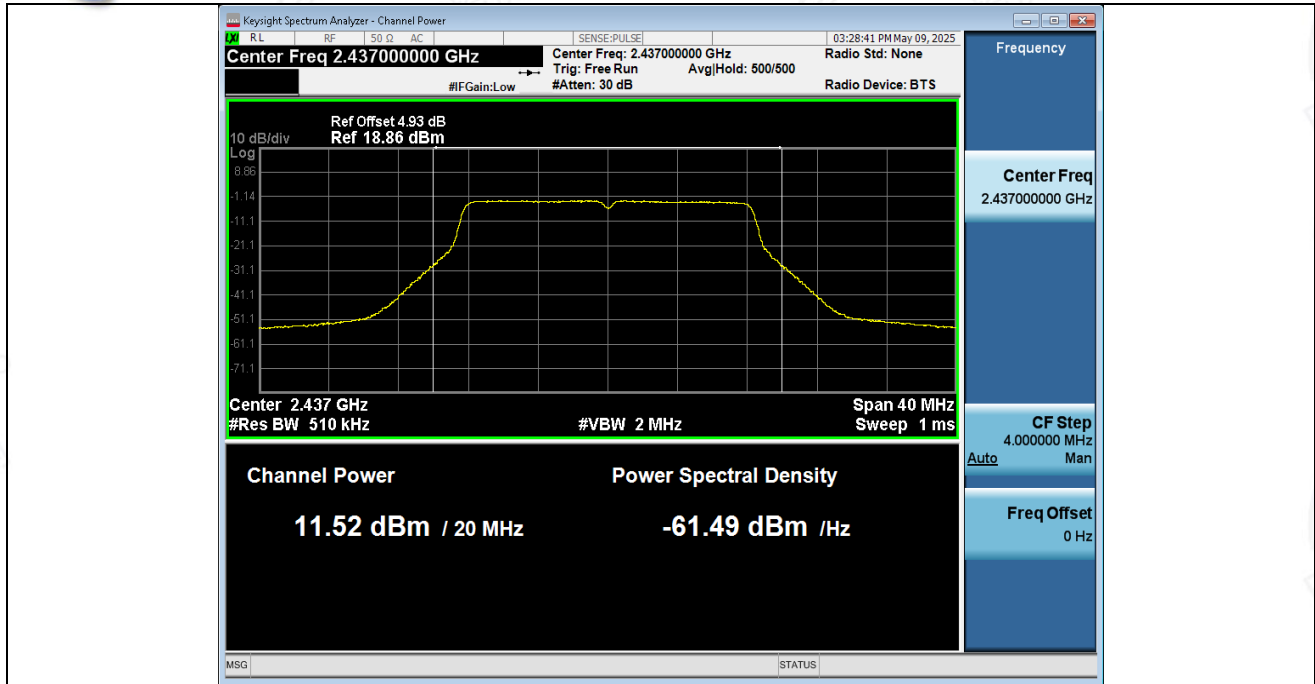
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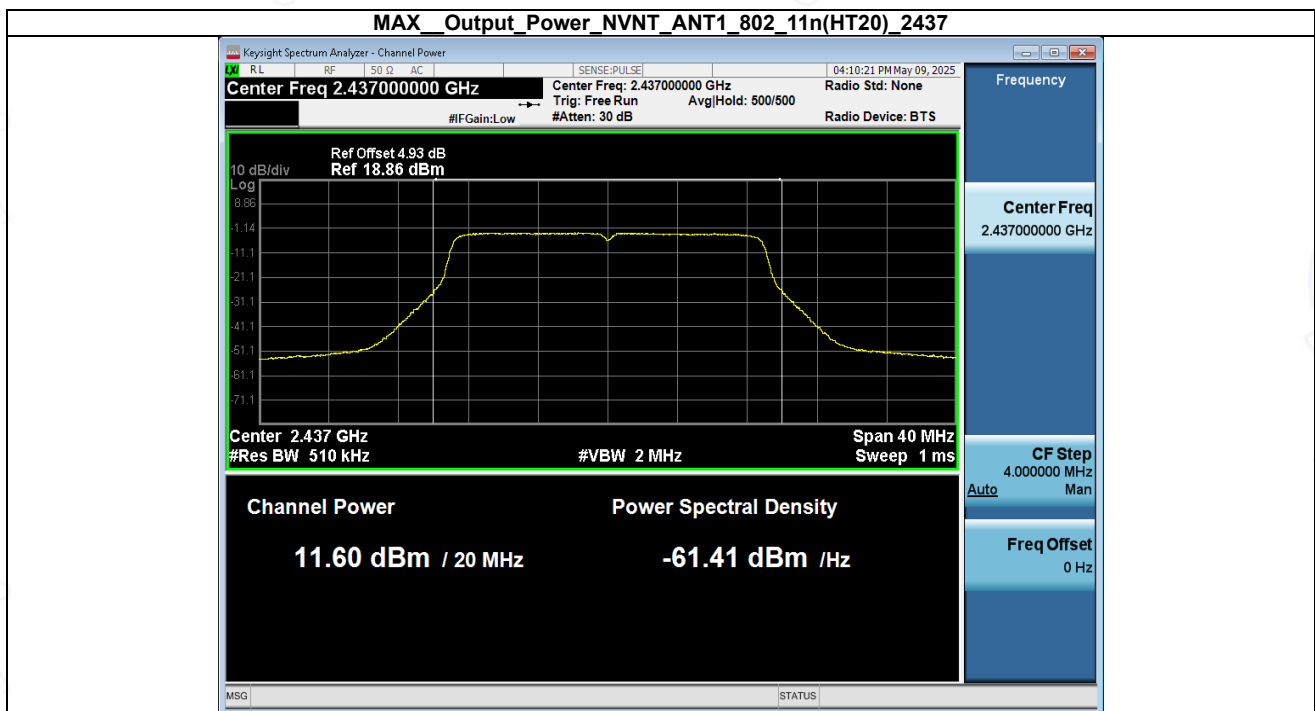
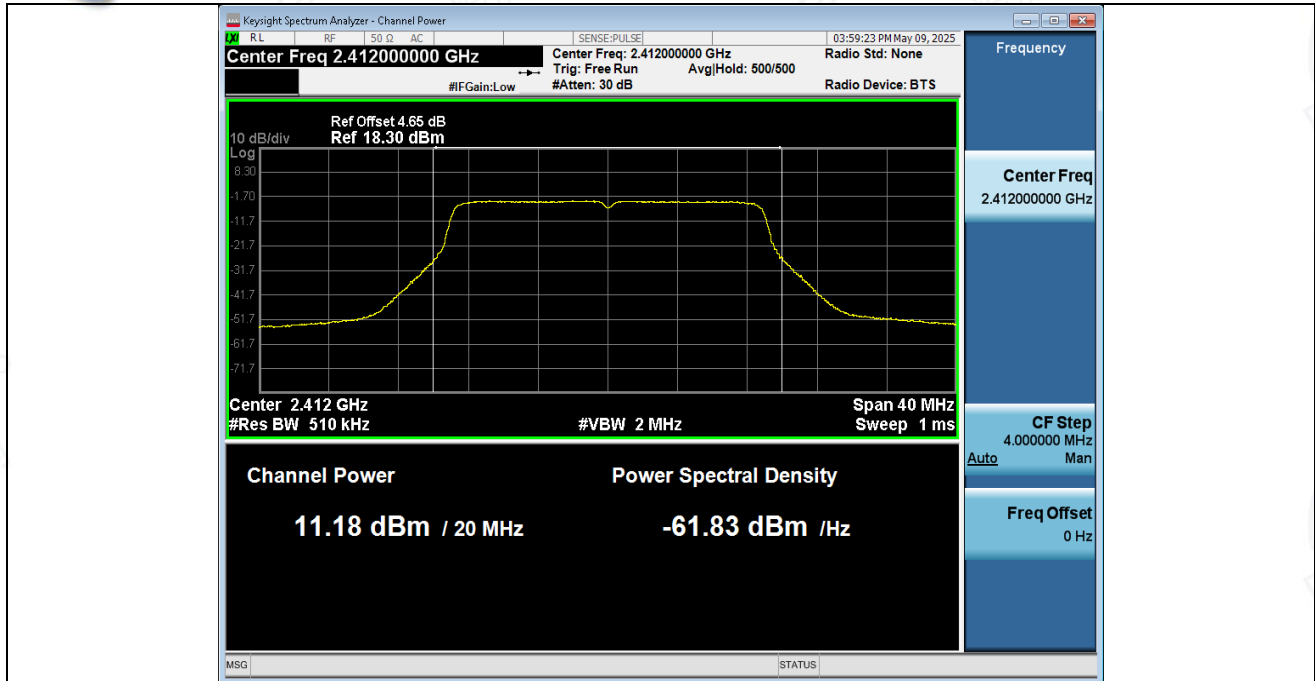
MAX Output Power_NVNT_ANT1_802_11g_2437





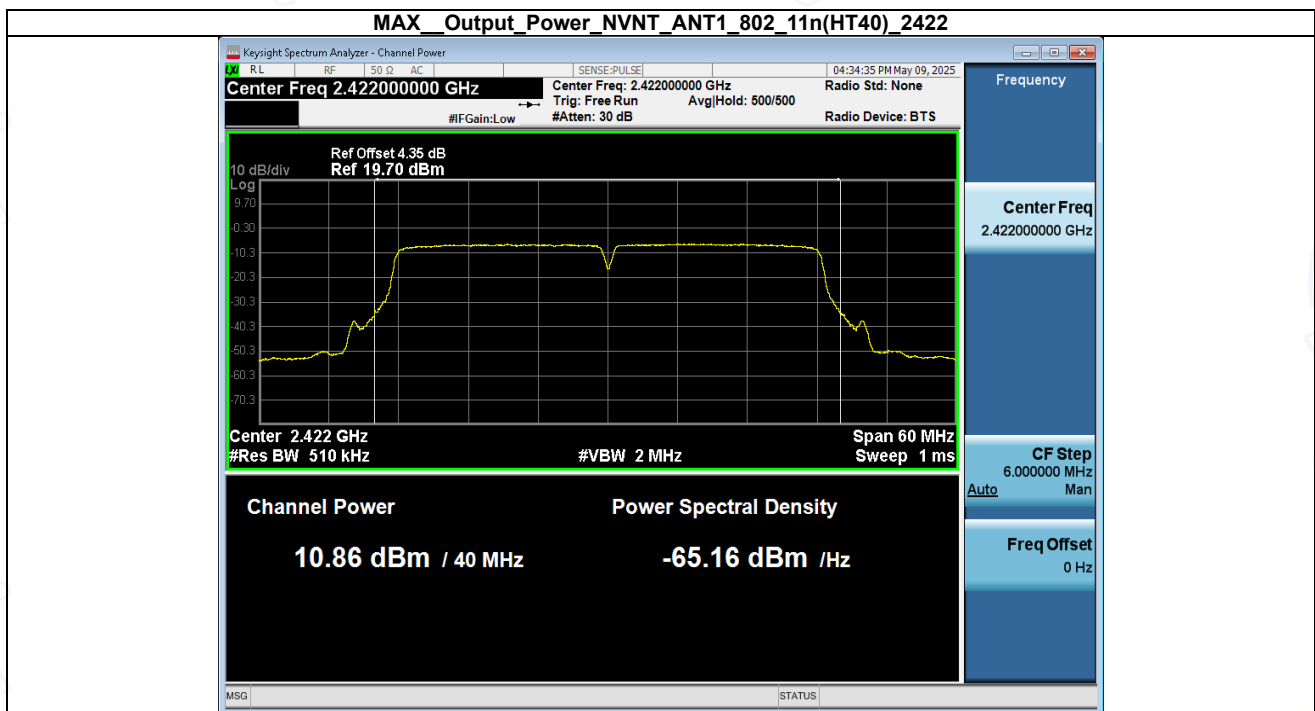
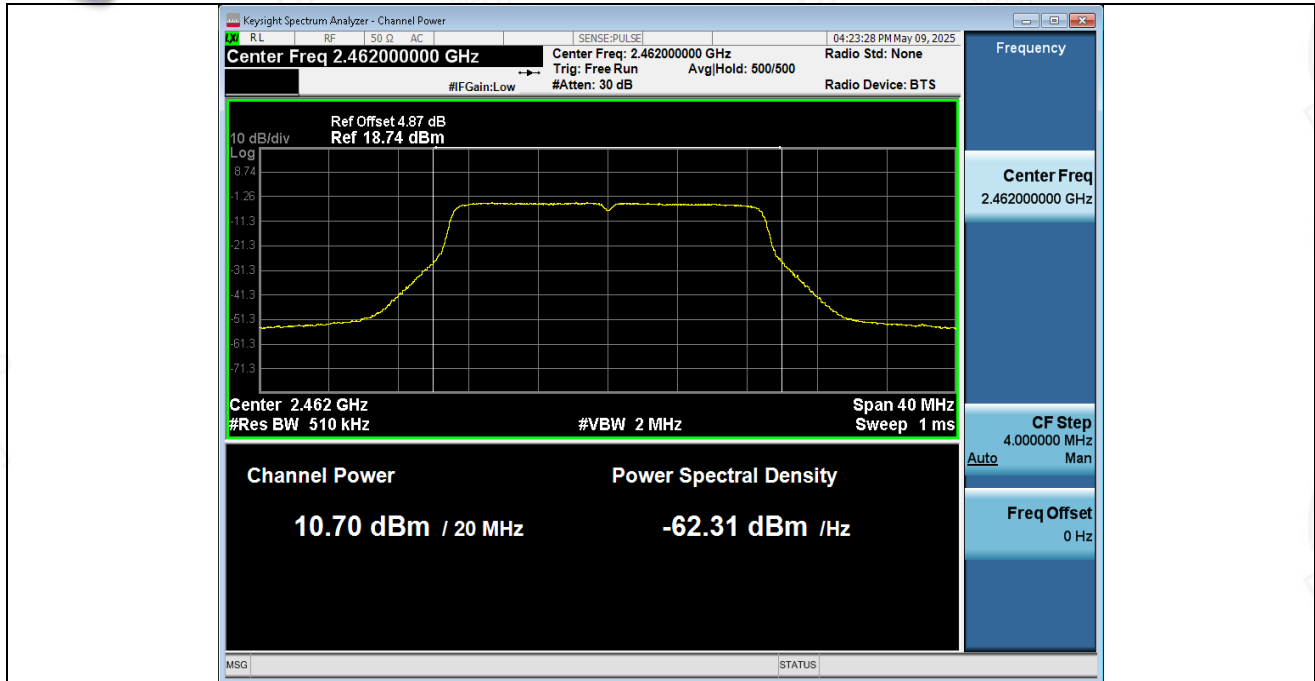
MAX Output Power_NVNT_ANT1_802_11n(HT20)_2412





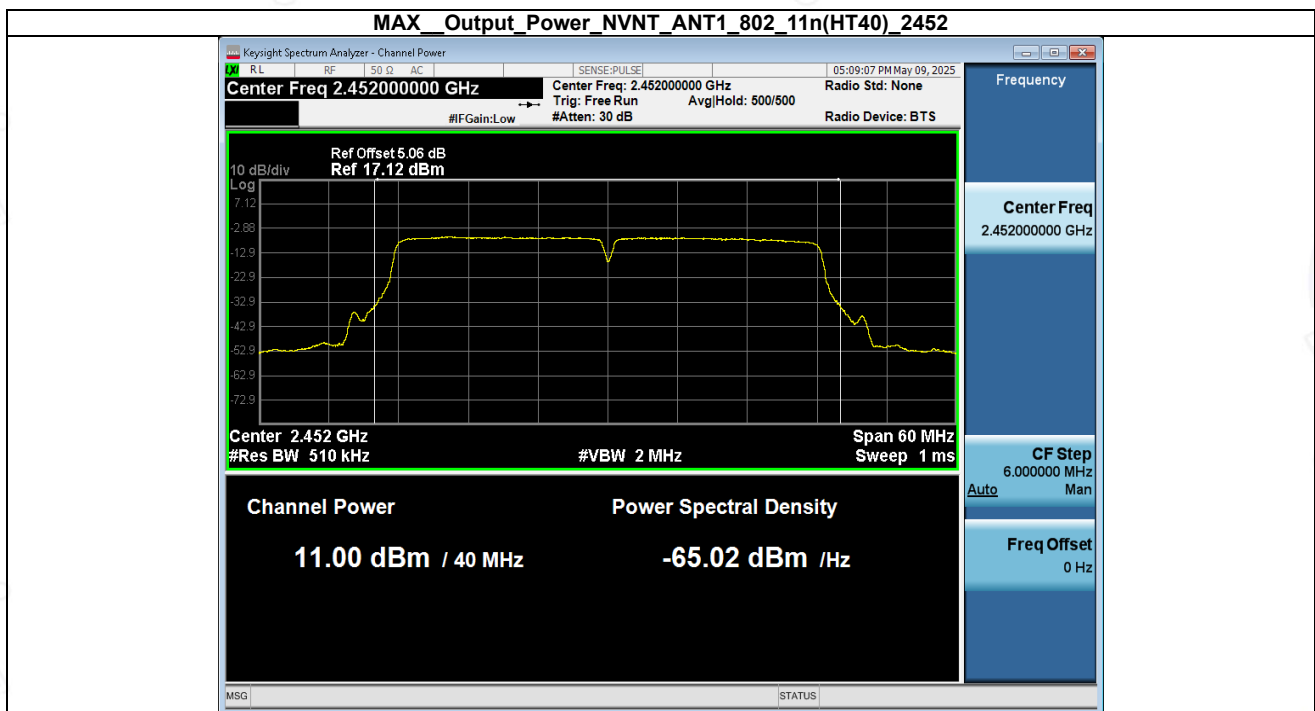
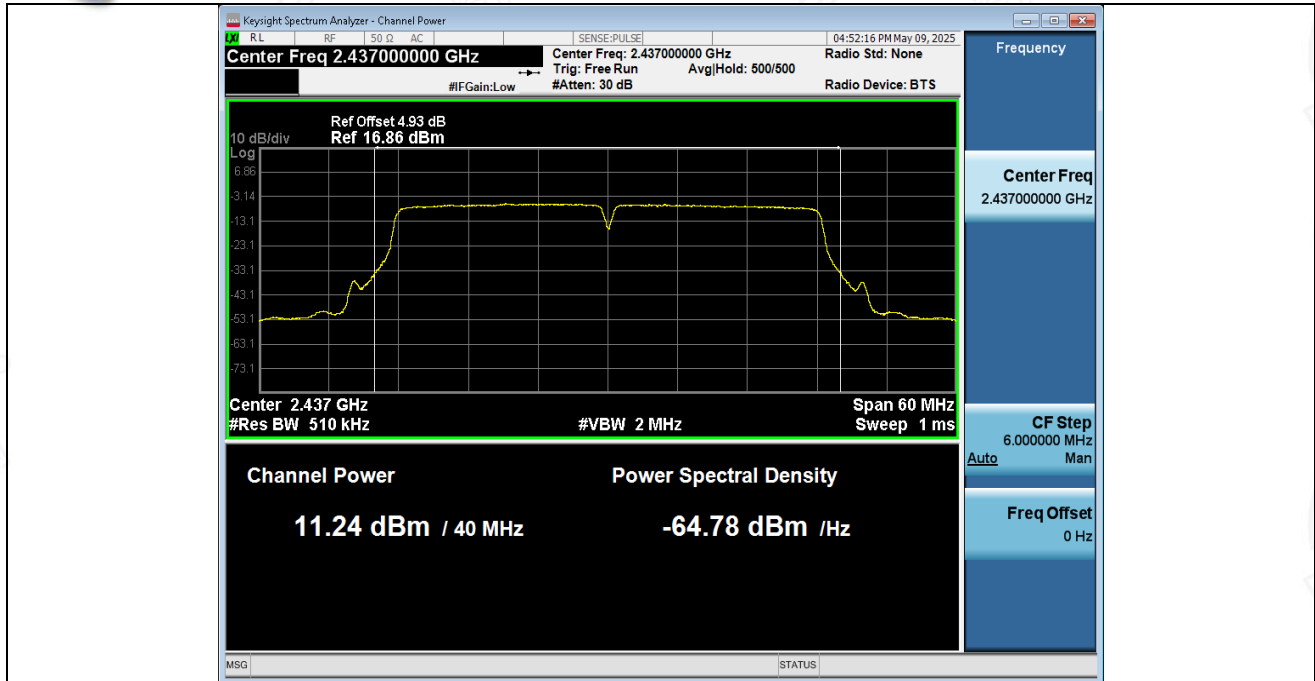
MAX Output Power_NVNT_ANT1_802_11n(HT20)_2462





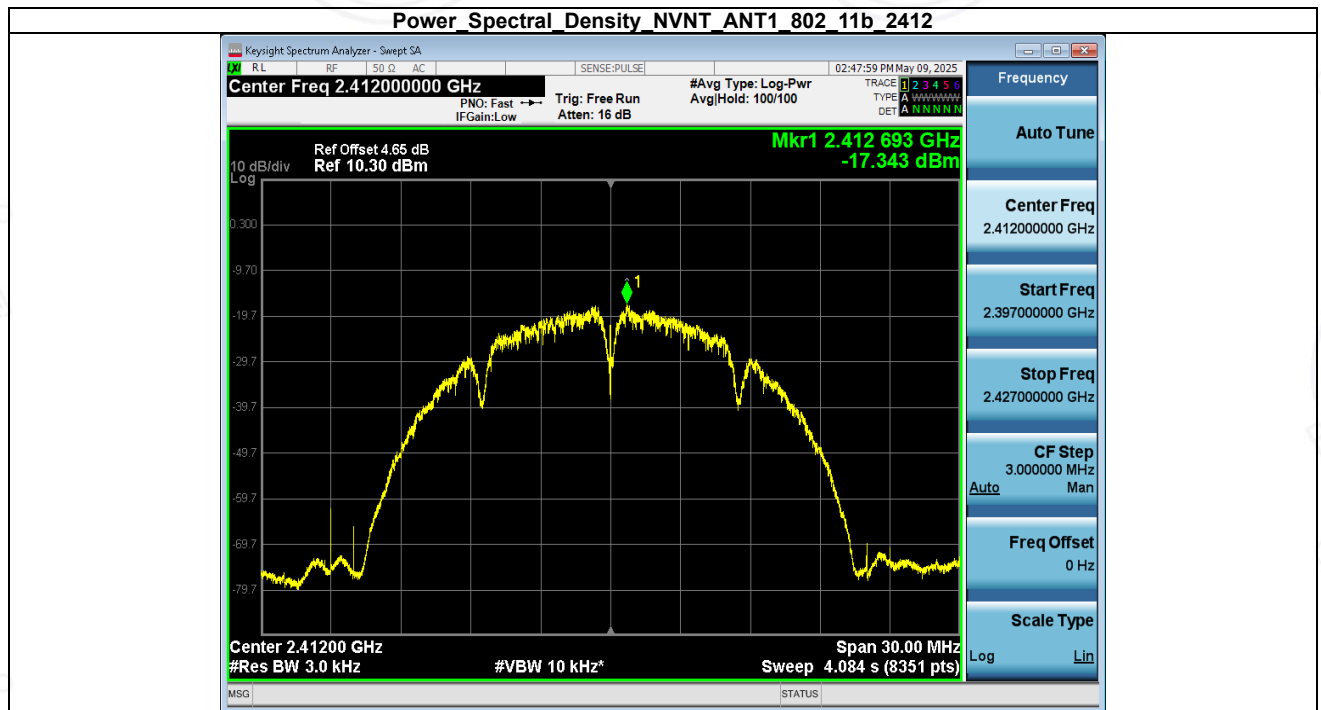
MAX Output Power_NVNT_ANT1_802_11n(HT40)_2437





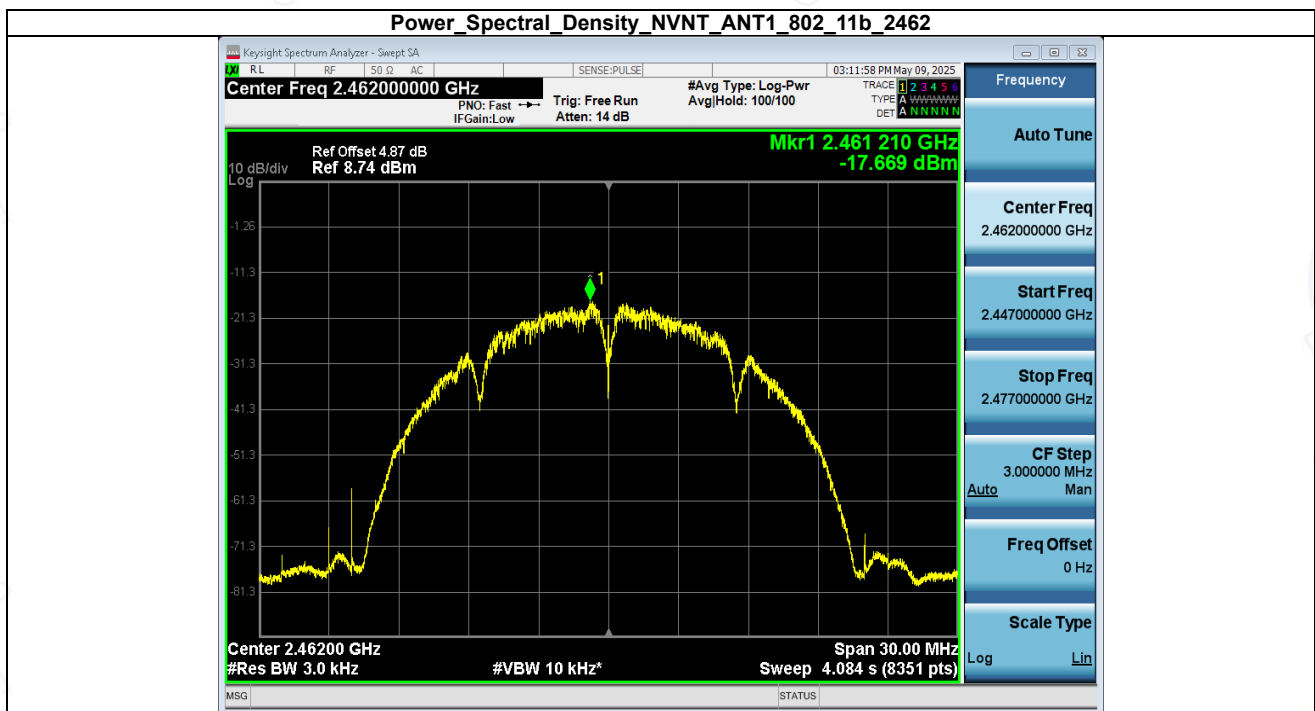
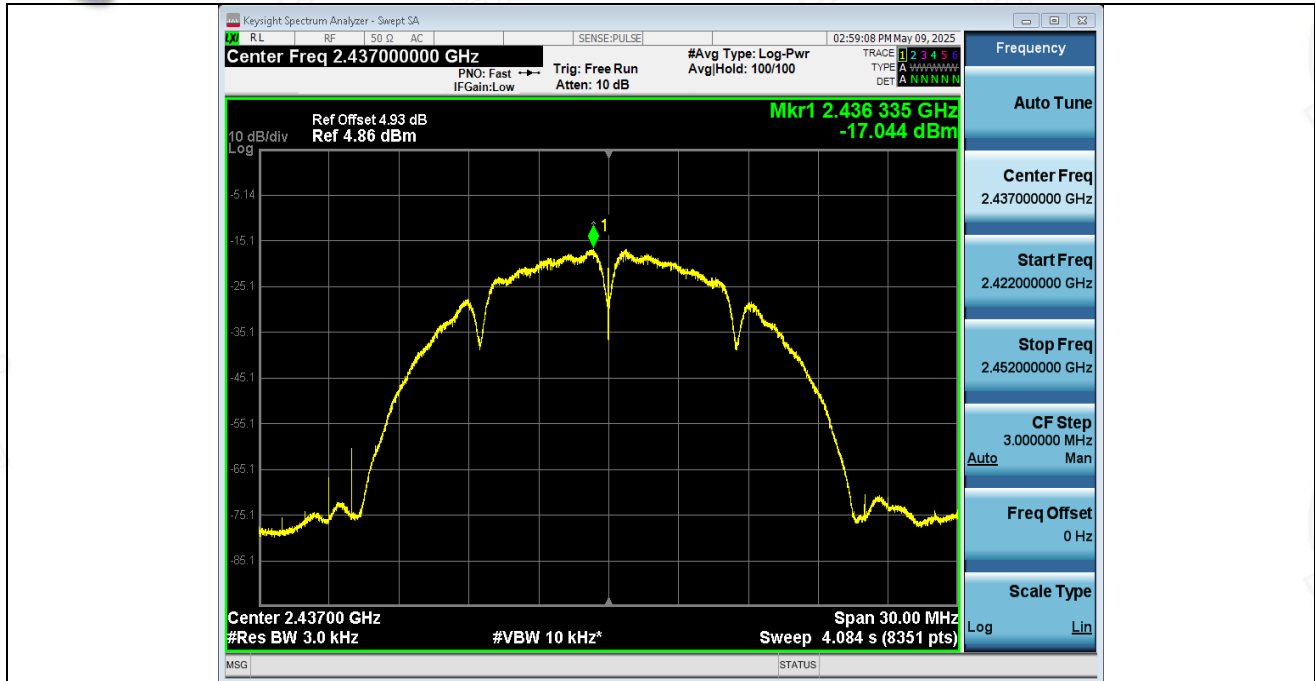
5. Power Spectral Density

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	-17.34	0.00	0.00	-17.34	8	Pass
NVNT	ANT1	802.11b	2437.00	-17.04	0.00	0.00	-17.04	8	Pass
NVNT	ANT1	802.11b	2462.00	-17.67	0.00	0.00	-17.67	8	Pass
NVNT	ANT1	802.11g	2412.00	-23.91	0.16	0.00	-23.75	8	Pass
NVNT	ANT1	802.11g	2437.00	-22.05	0.32	0.00	-21.73	8	Pass
NVNT	ANT1	802.11g	2462.00	-23.28	0.20	0.00	-23.08	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-24.45	0.13	0.00	-24.32	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-22.26	0.18	0.00	-22.08	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-24.38	0.22	0.00	-24.16	8	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	-25.96	0.43	0.00	-25.54	8	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	-25.69	0.09	0.00	-25.60	8	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	-25.00	0.44	0.00	-24.56	8	Pass



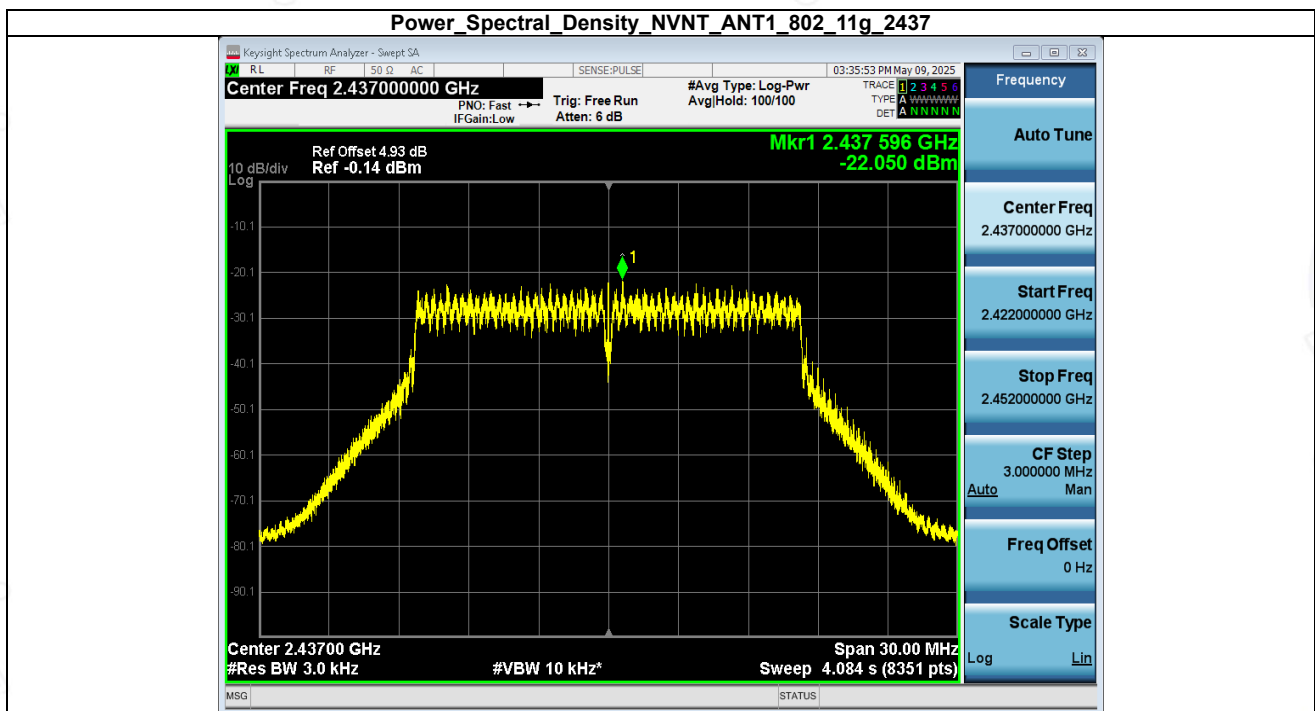
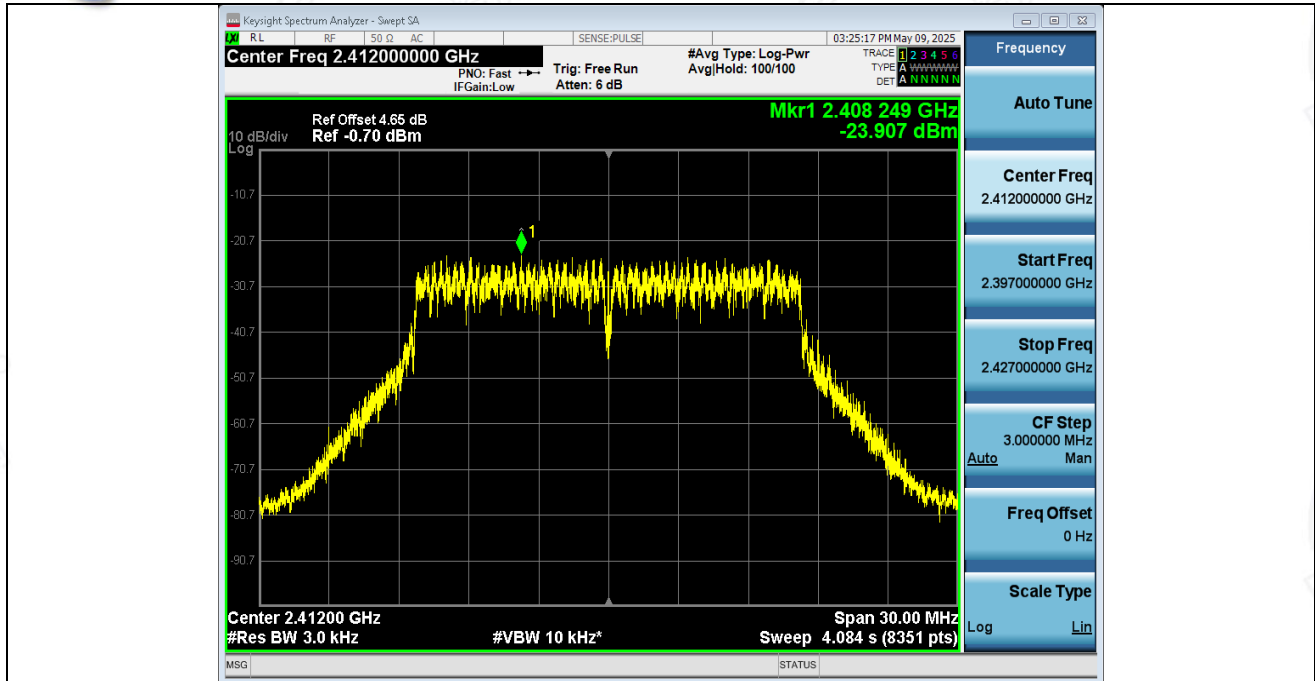
Power Spectral Density NVNT_ANT1_802_11b_2437





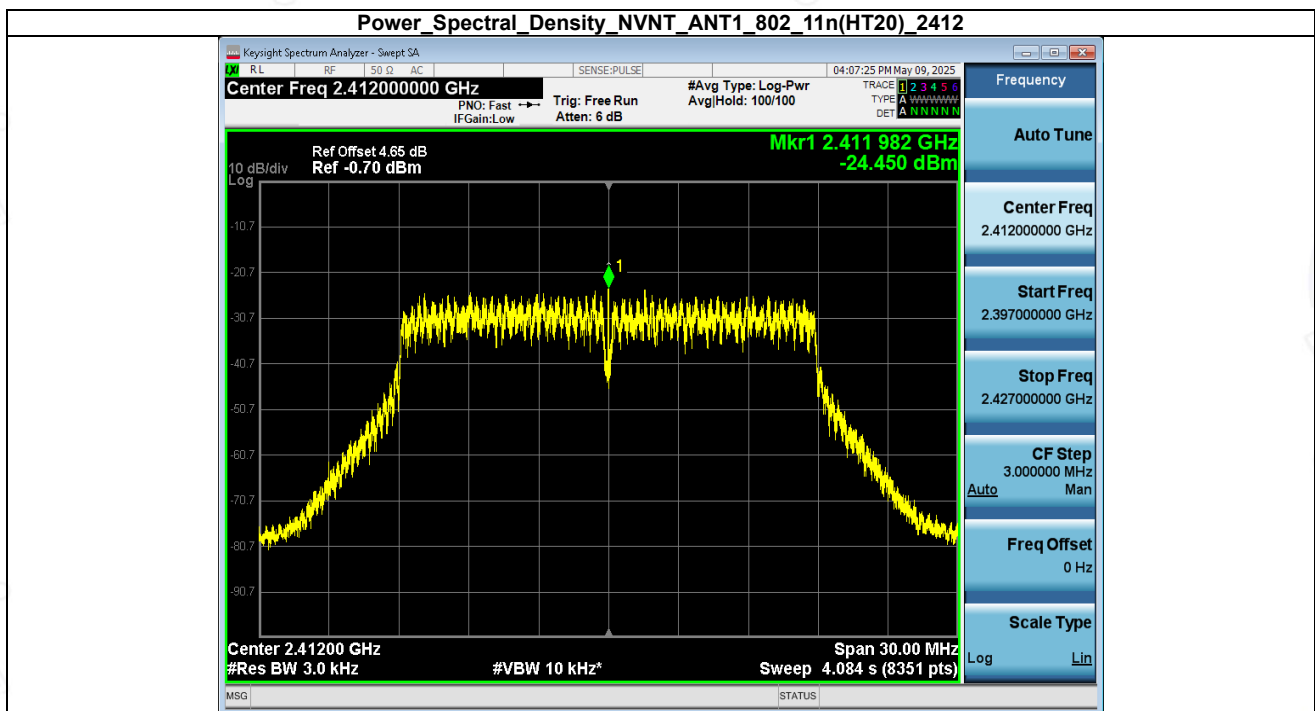
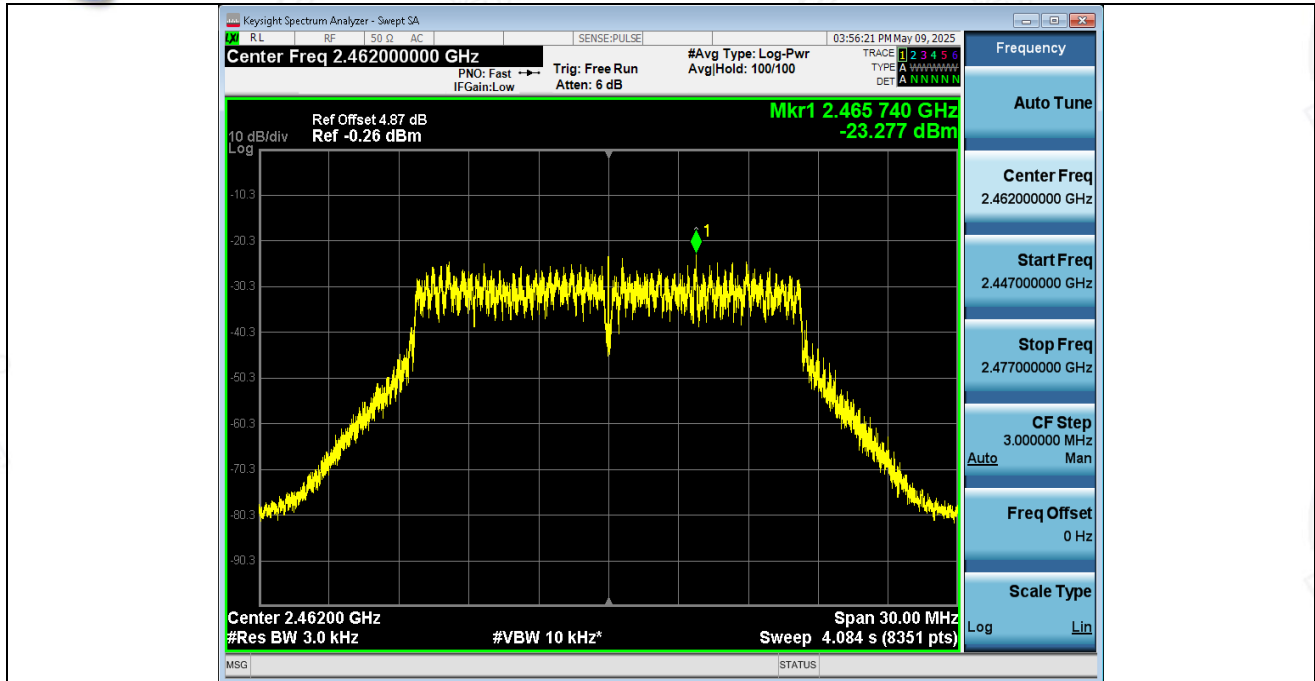
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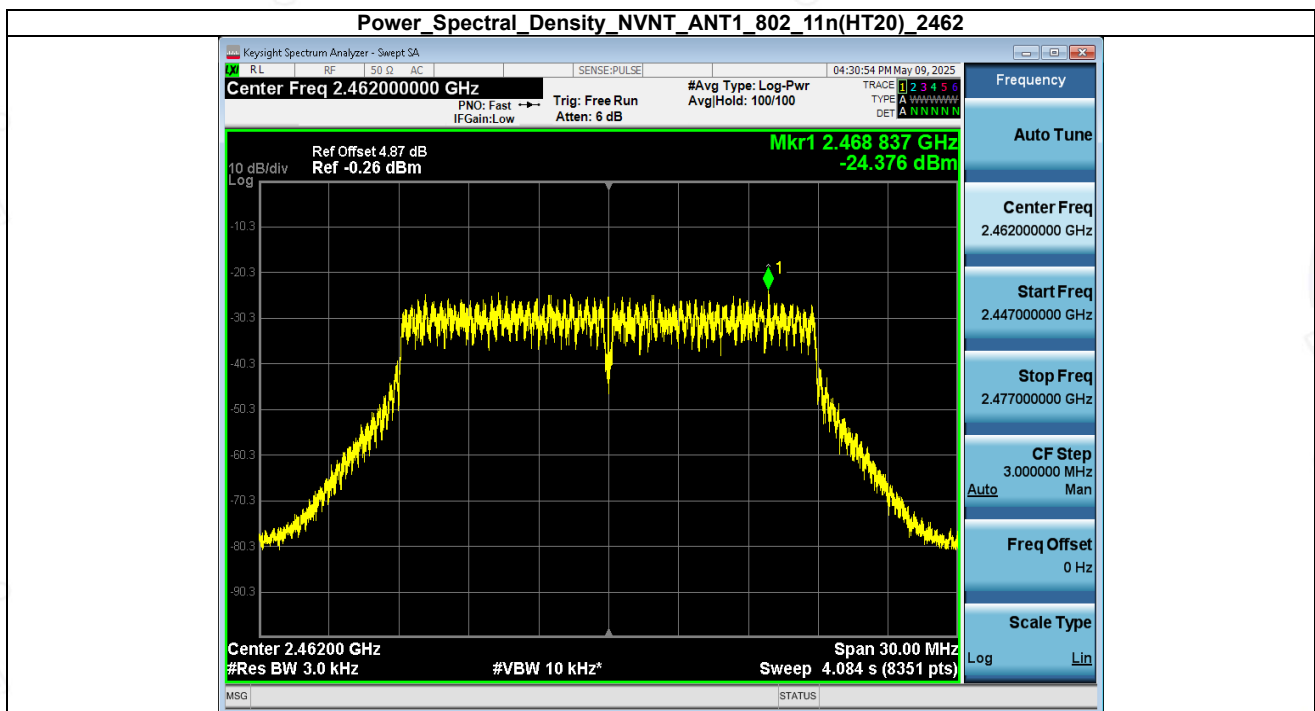
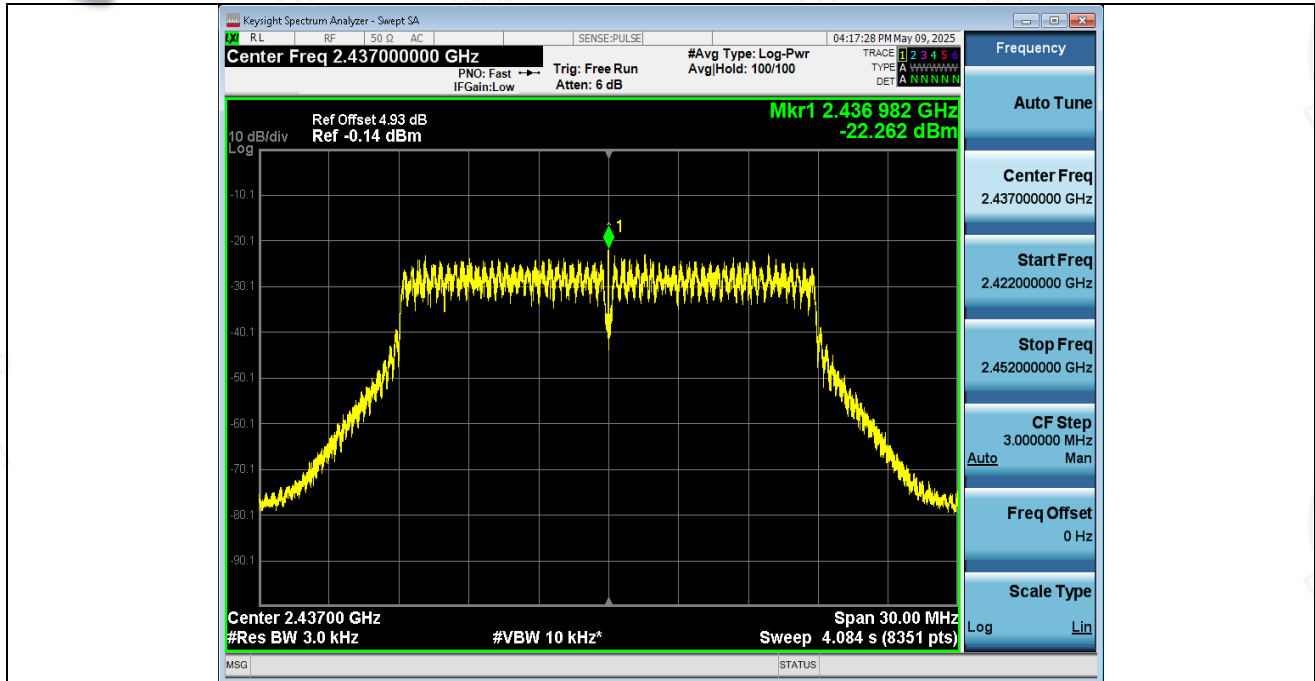
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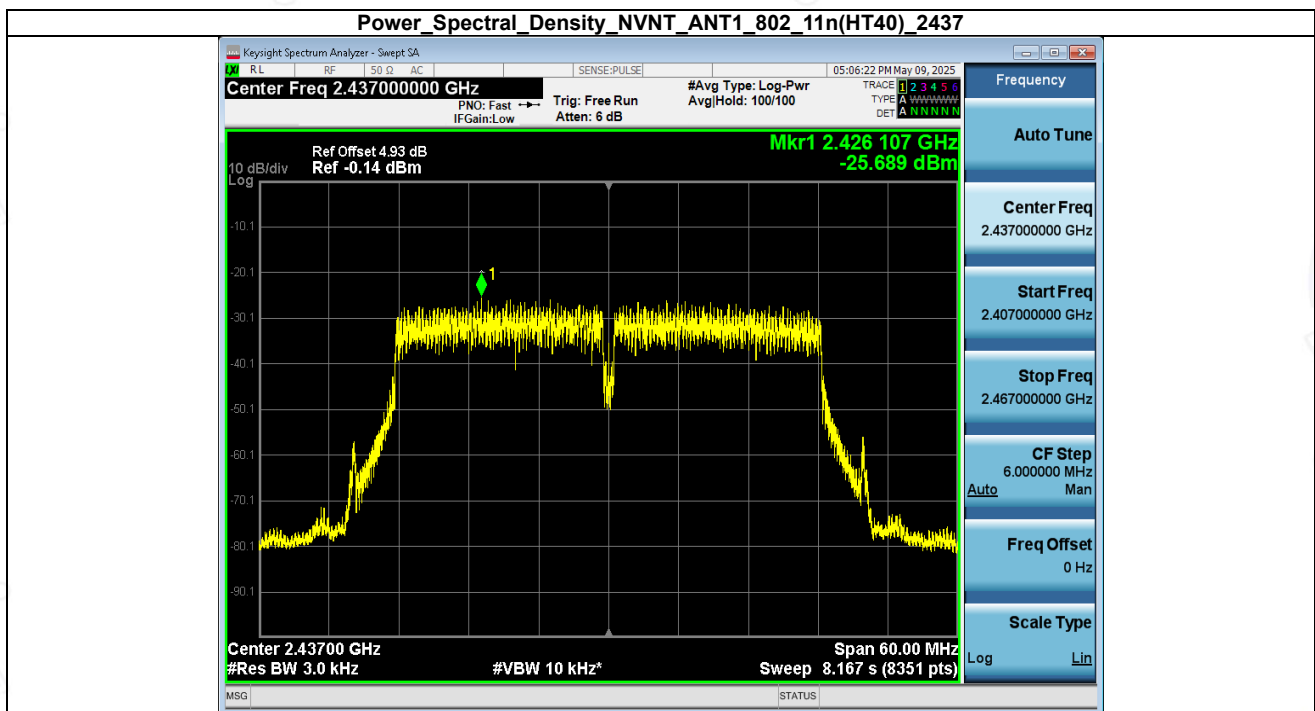
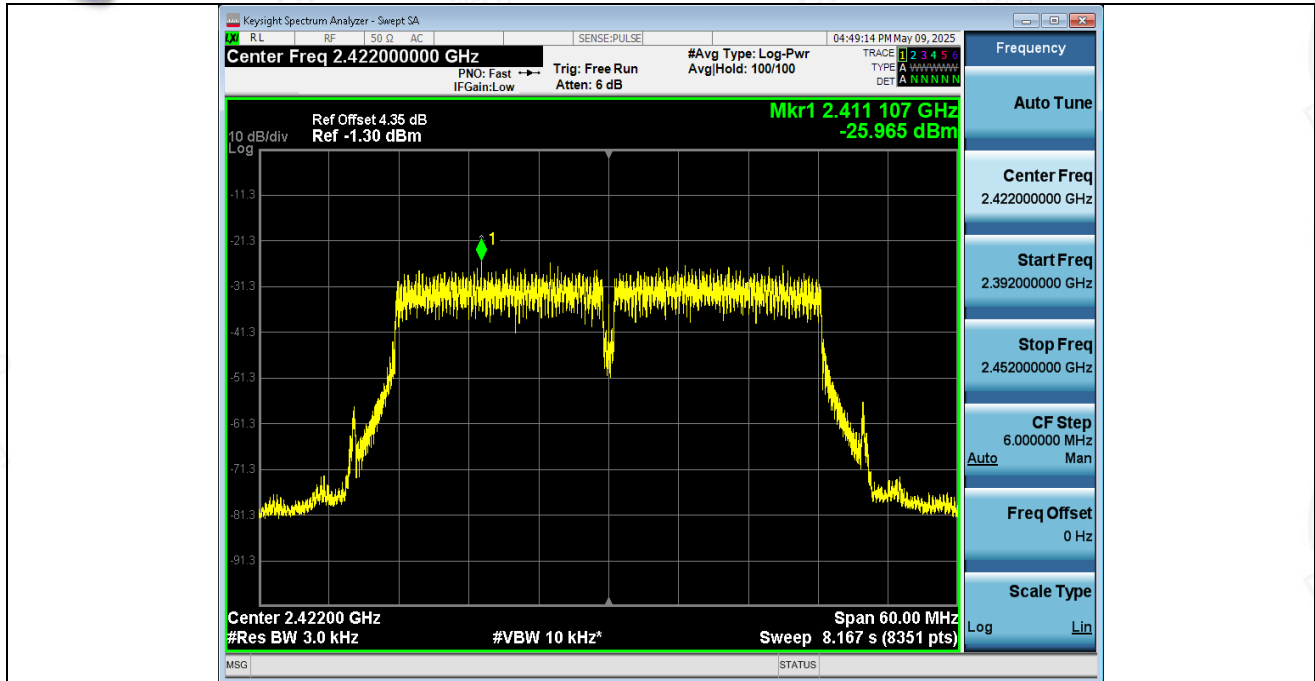
Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2437





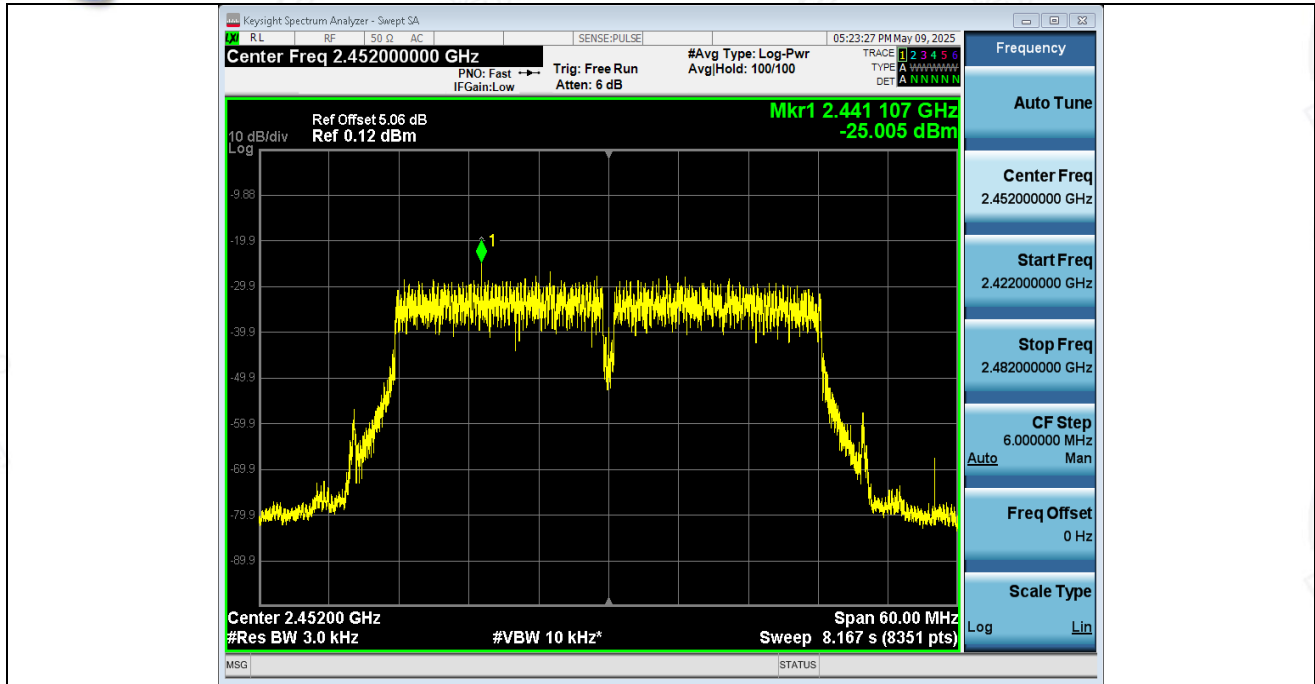
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Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2452





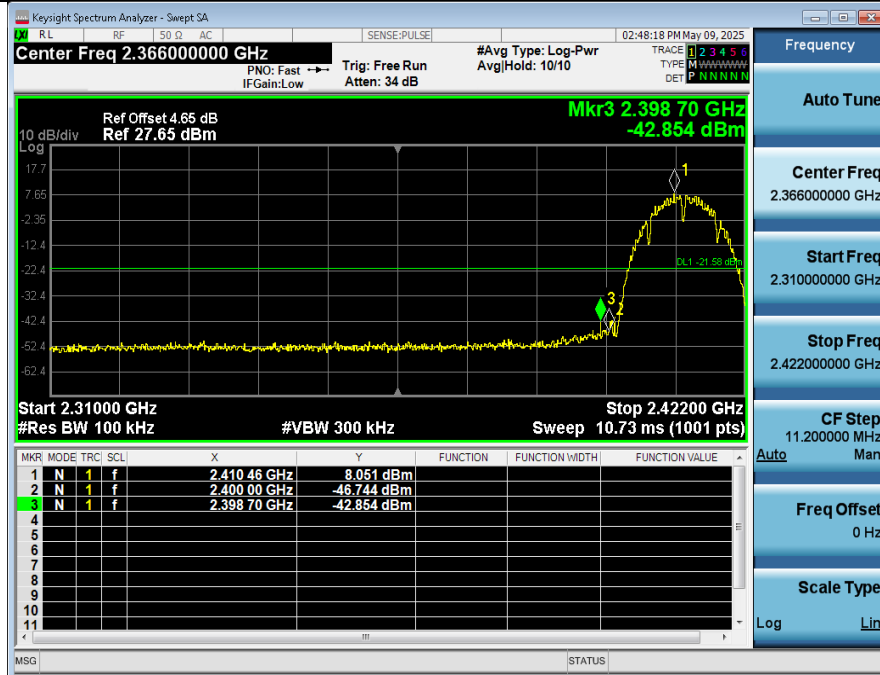
6. Bandedge

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	2398.704	8.417	-42.854	-21.583	Pass
NVNT	ANT1	802.11b	2462.00	2497.648	7.425	-49.585	-22.575	Pass
NVNT	ANT1	802.11g	2412.00	2399.936	0.265	-40.227	-29.735	Pass
NVNT	ANT1	802.11g	2462.00	2485.072	-0.738	-52.884	-30.738	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2399.936	0.508	-40.685	-29.492	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2486.128	-0.001	-53.672	-30.001	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	2399.892	-2.788	-41.384	-32.788	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	2484.156	-2.466	-52.653	-32.466	Pass

1 Reference Level NVNT_ANT1_802_11b_2412



2 Bandedge NVNT_ANT1_802_11b_2412

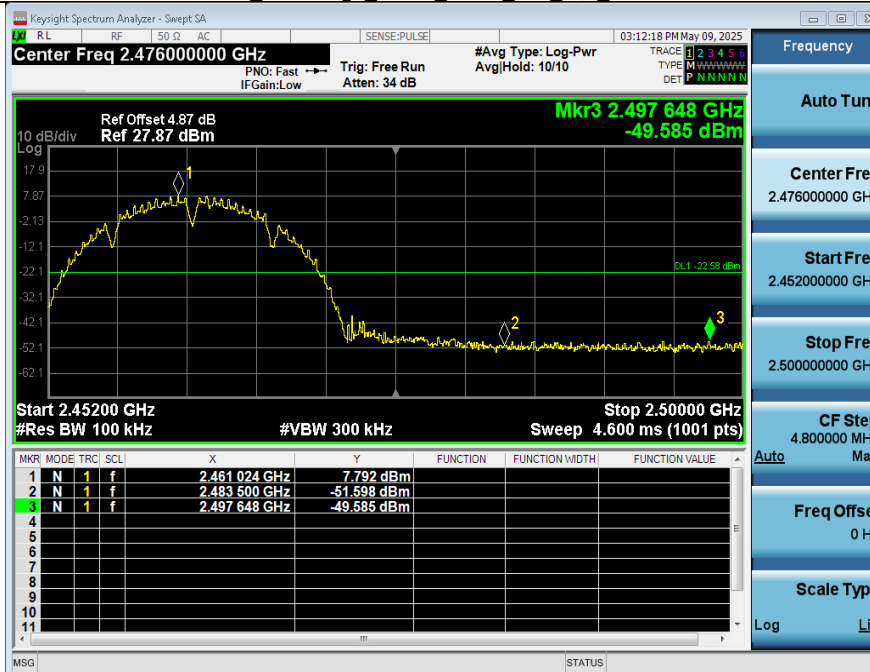


1 Reference Level NVNT_ANT1_802_11b_2462



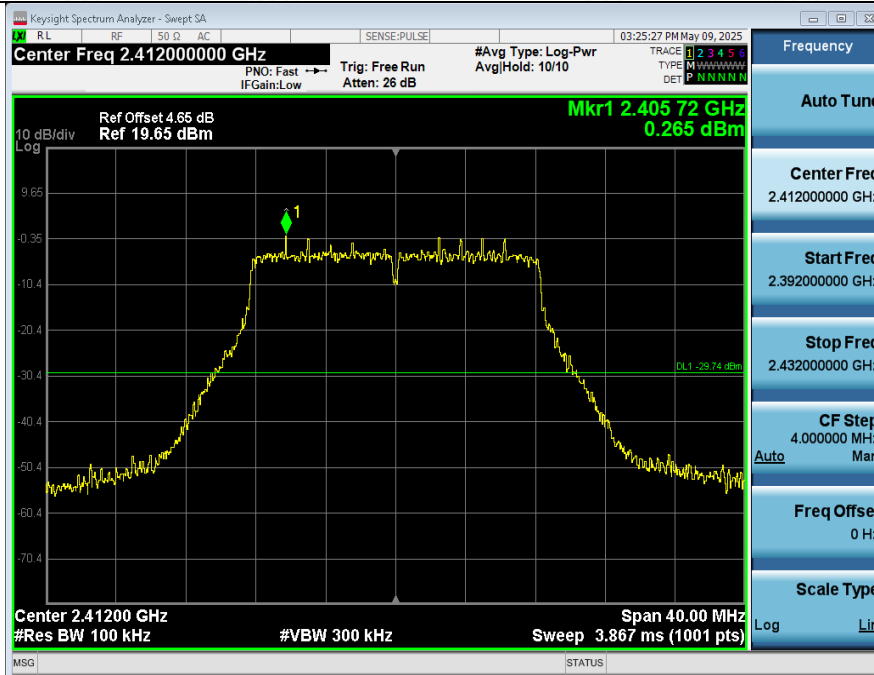


2_Bandedge_NVNT_ANT1_802_11b_2462

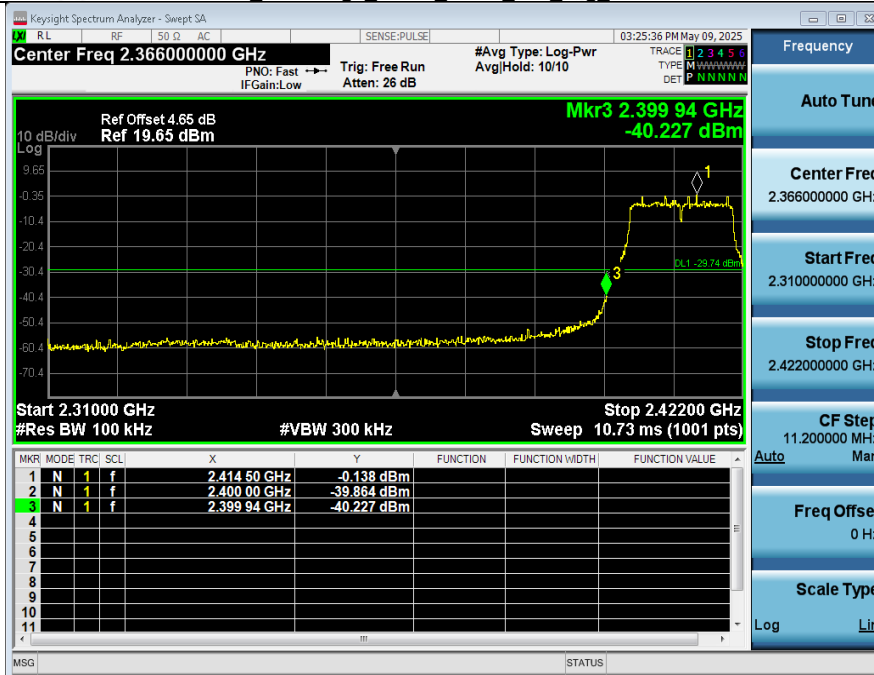


1_Reference_Level_NVNT_ANT1_802_11g_2412





2_Bandedge_NVNT_ANT1_802_11g_2412



1_Reference_Level_NVNT_ANT1_802_11g_2462





2_Bandedge_NVNT_ANT1_802_11g_2462

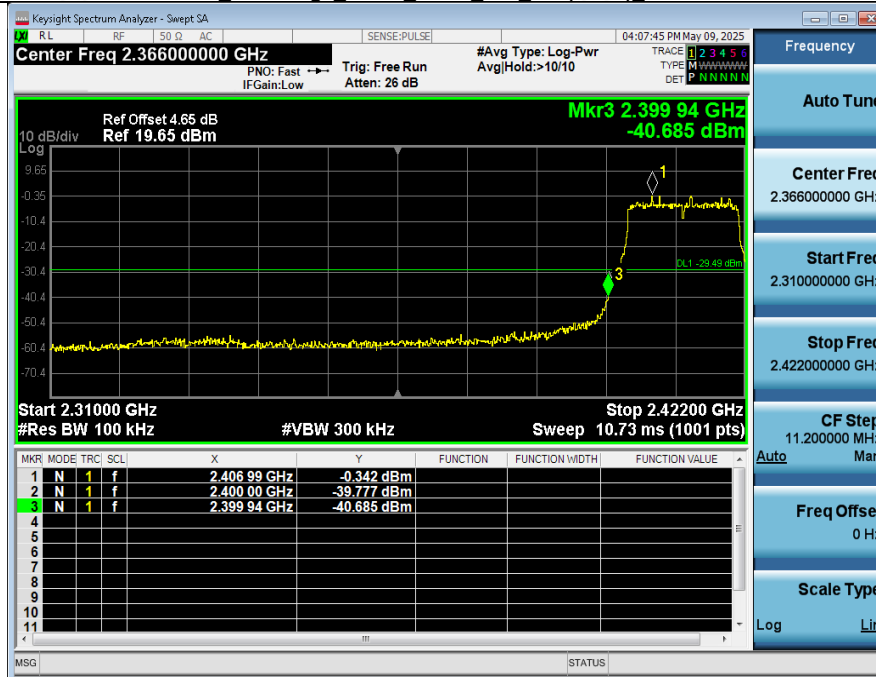


1 Reference Level NVNT_ANT1_802_11n(HT20) 2412





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

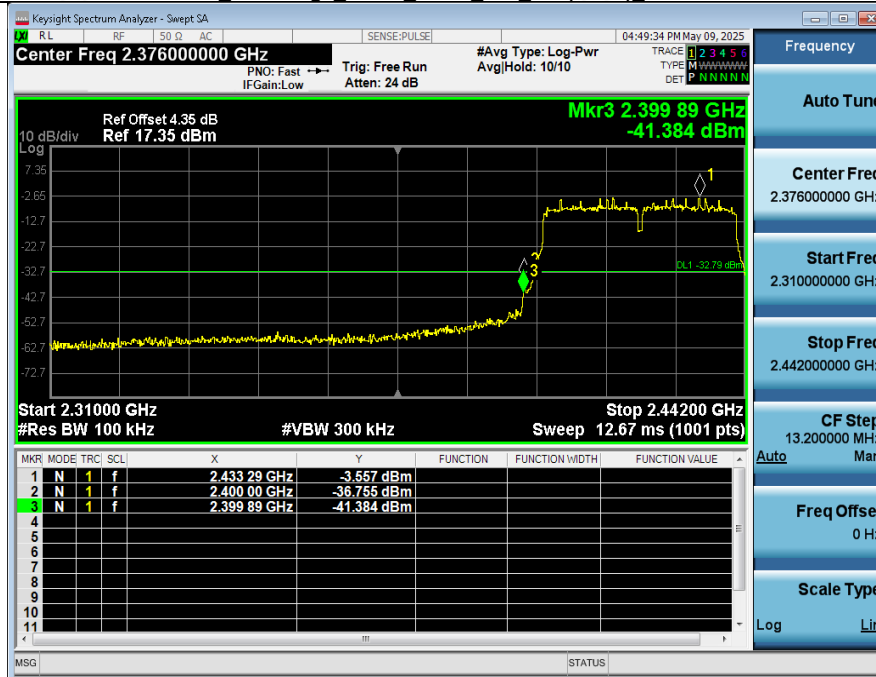


1 Reference Level NVNT_ANT1_802_11n(HT40)_2422





2_Bandedge_NVNT_ANT1_802_11n(HT40)_2422

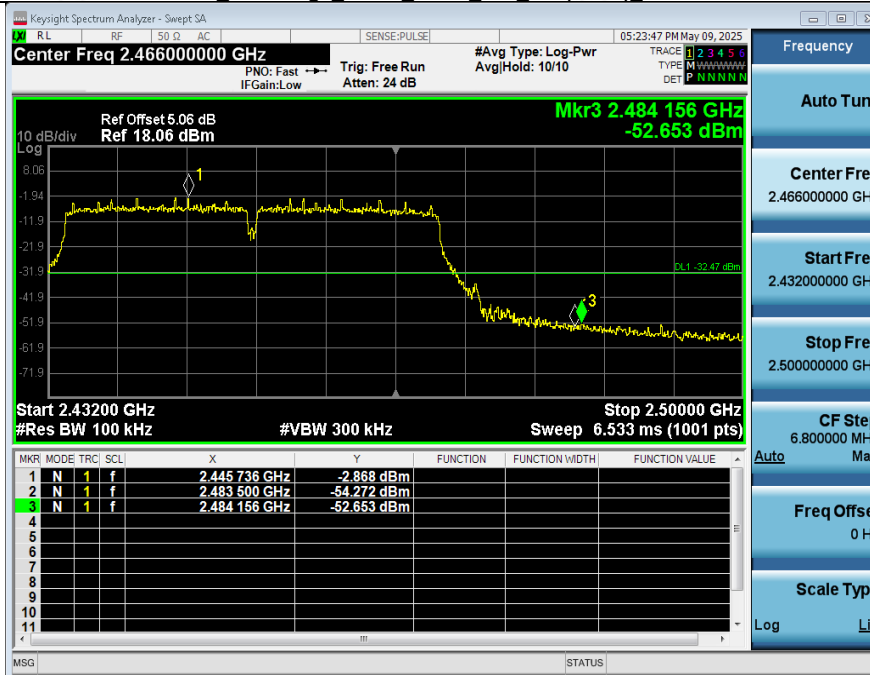


1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2452





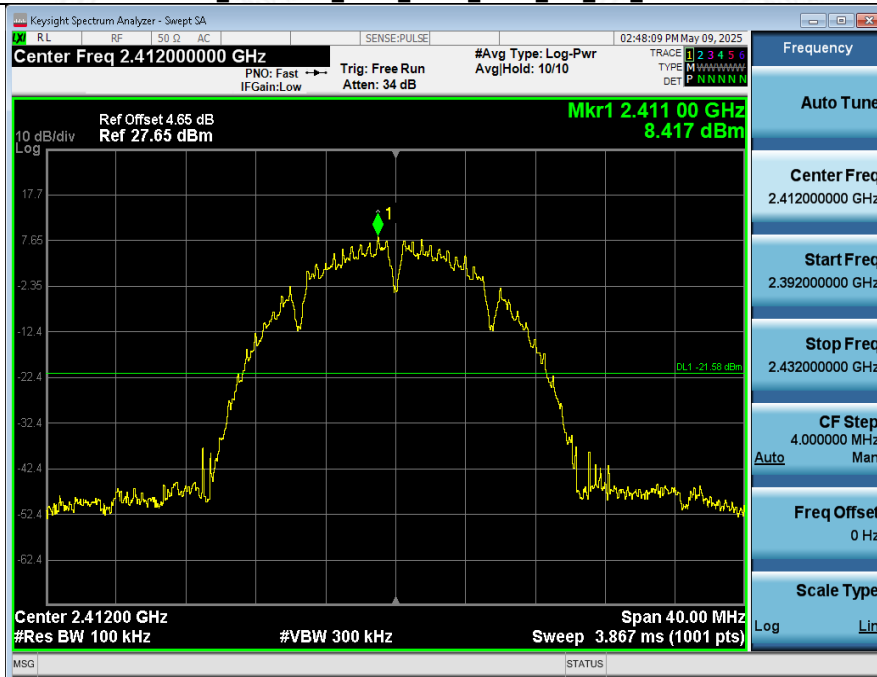
2_Bandedge_NVNT_ANT1_802_11n(HT40)_2452



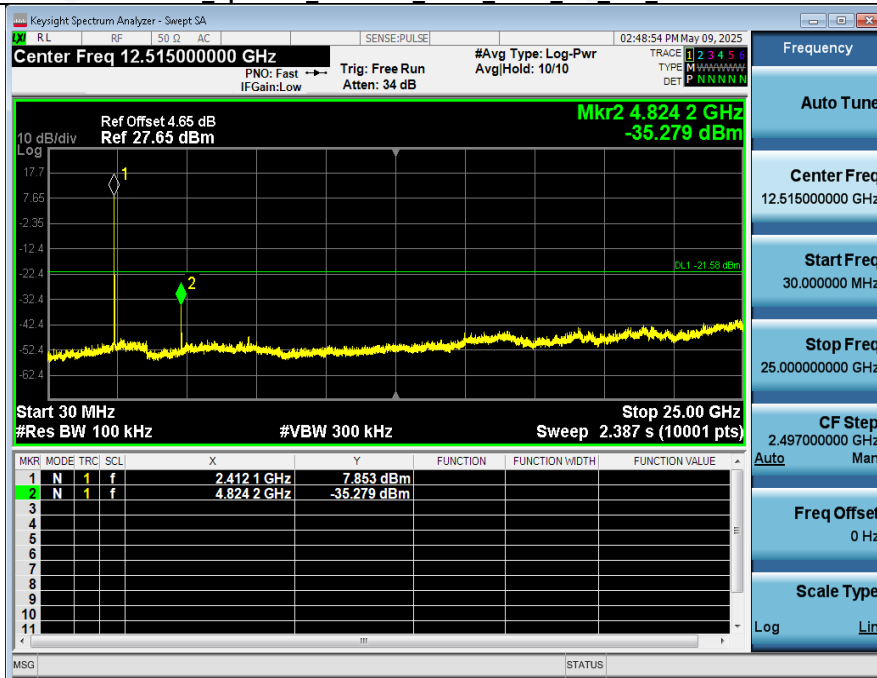
7. Spurious Emission

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	4824.240	8.417	-35.279	-21.583	Pass
NVNT	ANT1	802.11b	2437.00	4874.180	8.325	-36.938	-21.675	Pass
NVNT	ANT1	802.11b	2462.00	24770.276	7.425	-38.825	-22.575	Pass
NVNT	ANT1	802.11g	2412.00	24325.810	0.265	-48.188	-29.735	Pass
NVNT	ANT1	802.11g	2437.00	24578.007	0.634	-48.202	-29.366	Pass
NVNT	ANT1	802.11g	2462.00	24982.521	-0.738	-48.309	-30.738	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	24917.599	0.508	-48.605	-29.492	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	24767.779	0.247	-51.735	-29.753	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	24940.072	-0.001	-48.060	-30.001	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	24228.427	-2.788	-50.594	-32.788	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	24837.695	-2.371	-50.173	-32.371	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	24807.731	-2.466	-50.309	-32.466	Pass

1 Reference_Level_NVNT_ANT1_802_11b_2412

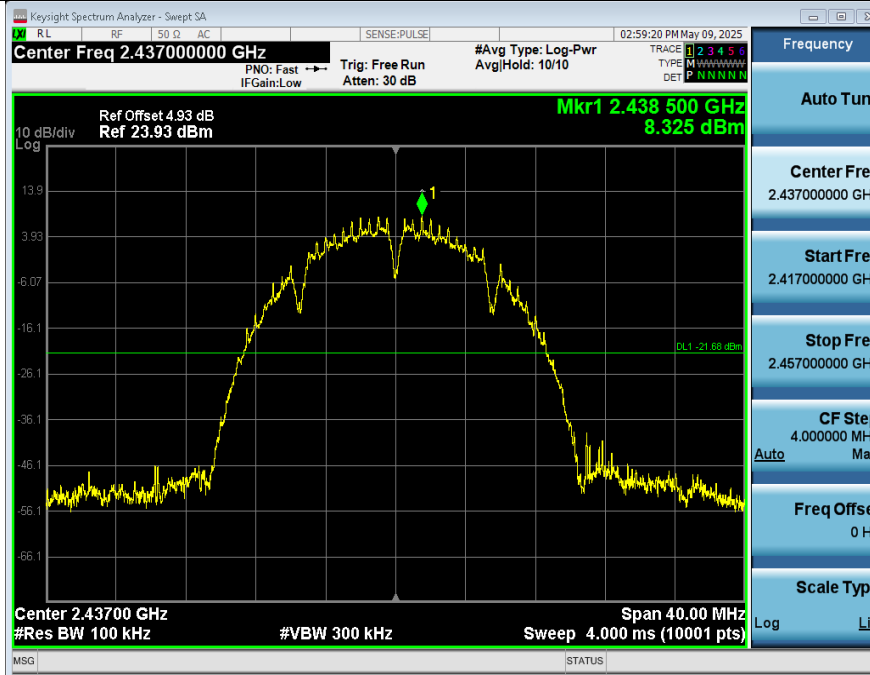


2 Spurious_Emission_NVNT_ANT1_802_11b_2412

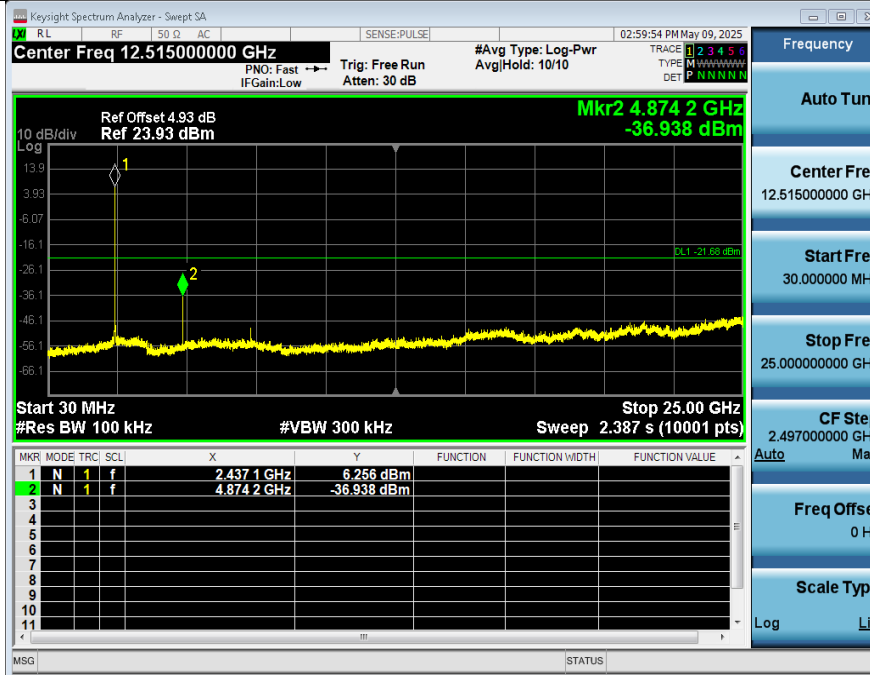


1 Reference_Level_NVNT_ANT1_802_11b_2437





2 Spurious Emission NVNT_ANT1_802_11b_2437

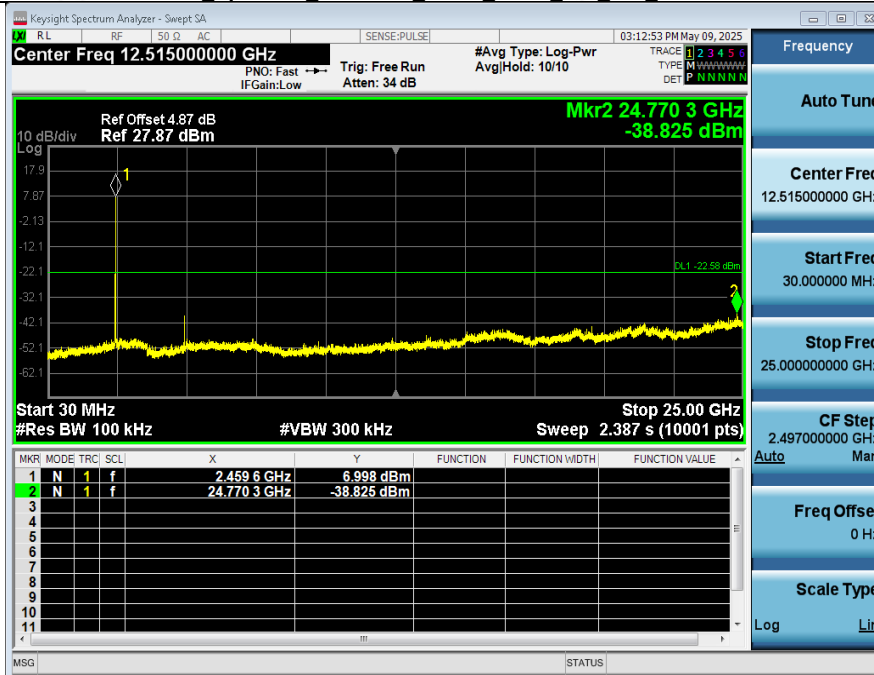


1 Reference Level NVNT_ANT1_802_11b_2462



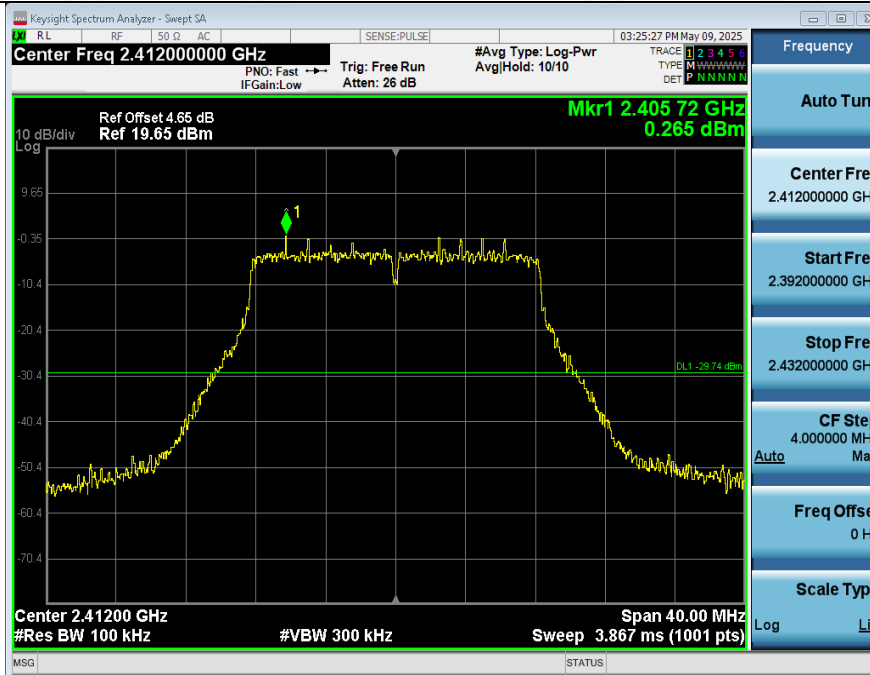


2 Spurious Emission NVNT_ANT1_802_11b_2462

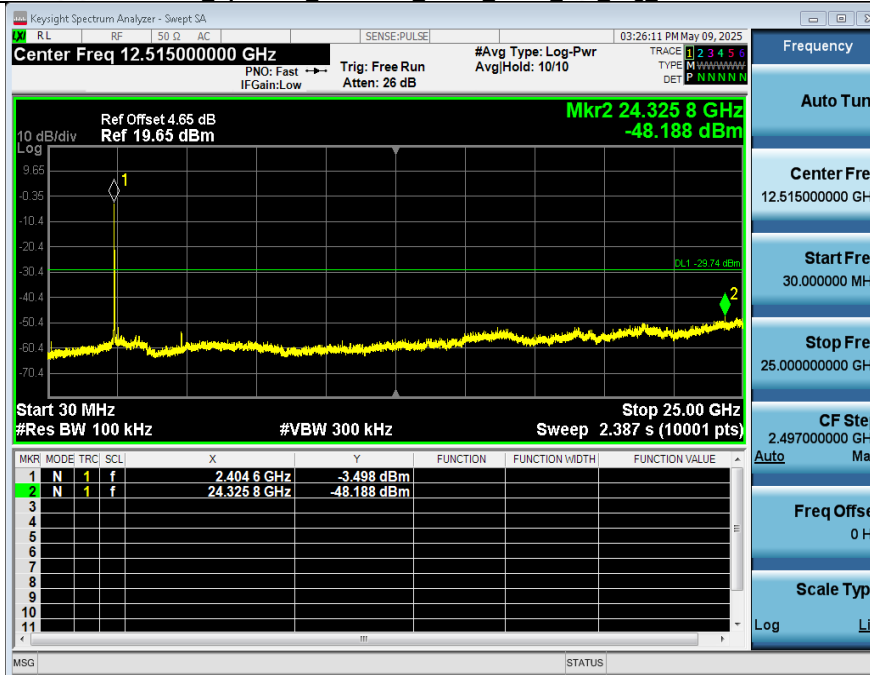


1 Reference Level NVNT_ANT1_802_11g_2412



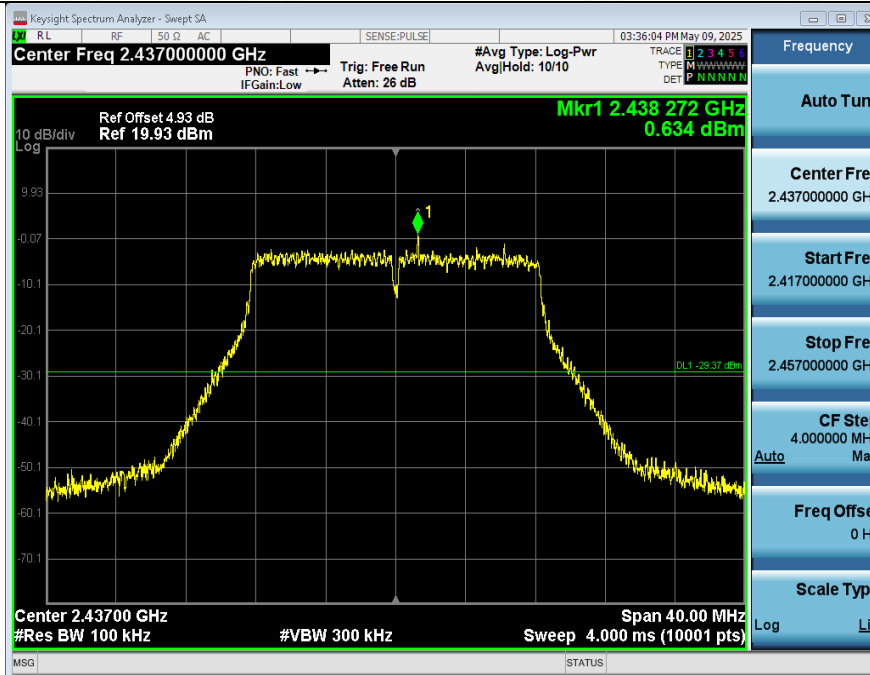


2 Spurious Emission NVNT_ANT1_802_11g_2412

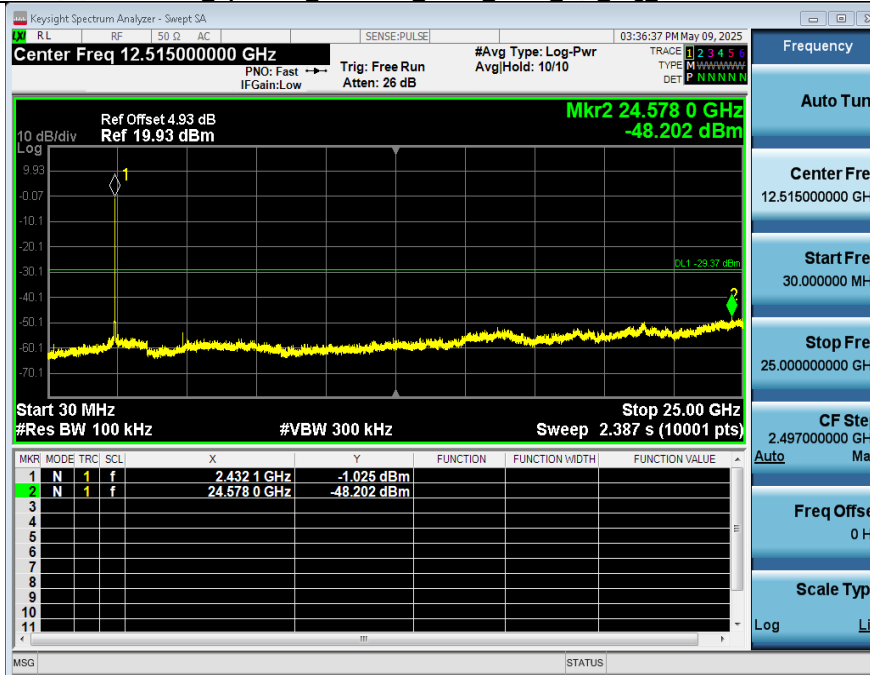


1 Reference Level NVNT_ANT1_802_11g_2437





2 Spurious Emission NVNT_ANT1_802_11g_2437

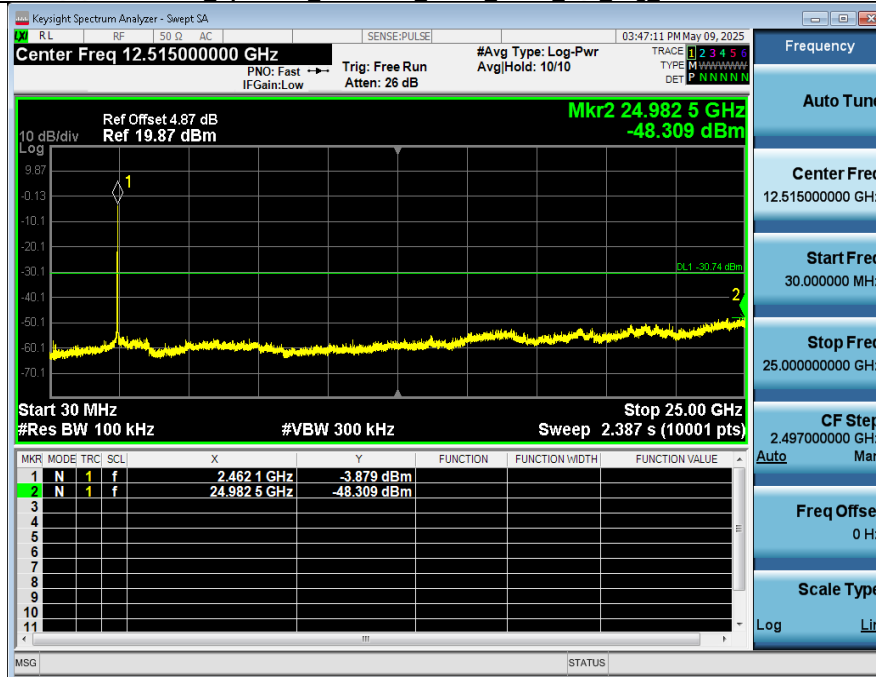


1 Reference Level NVNT_ANT1_802_11g_2462





2 Spurious Emission NVNT_ANT1_802_11g_2462

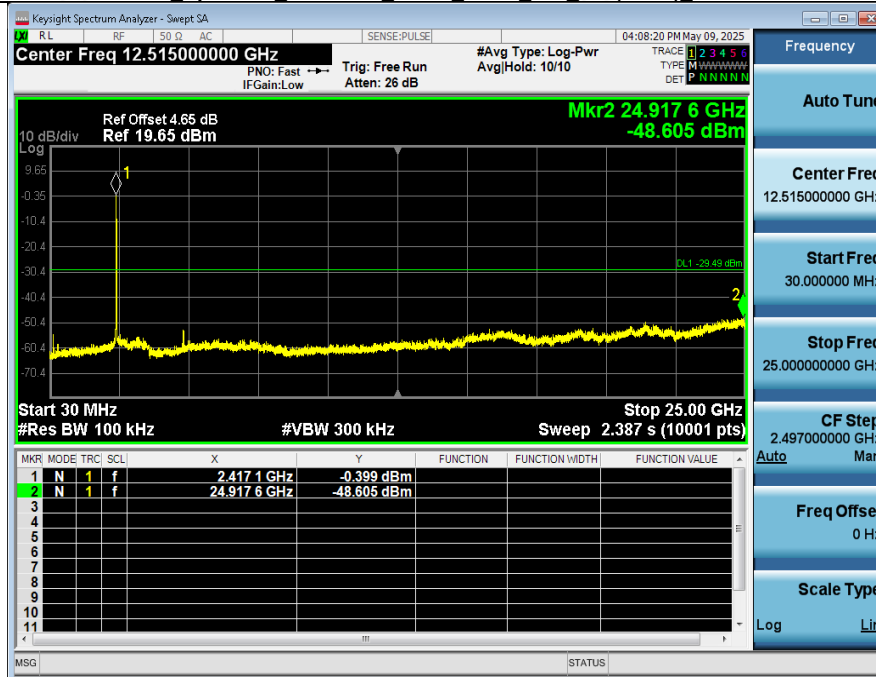


1 Reference Level NVNT_ANT1_802_11n(HT20)_2412



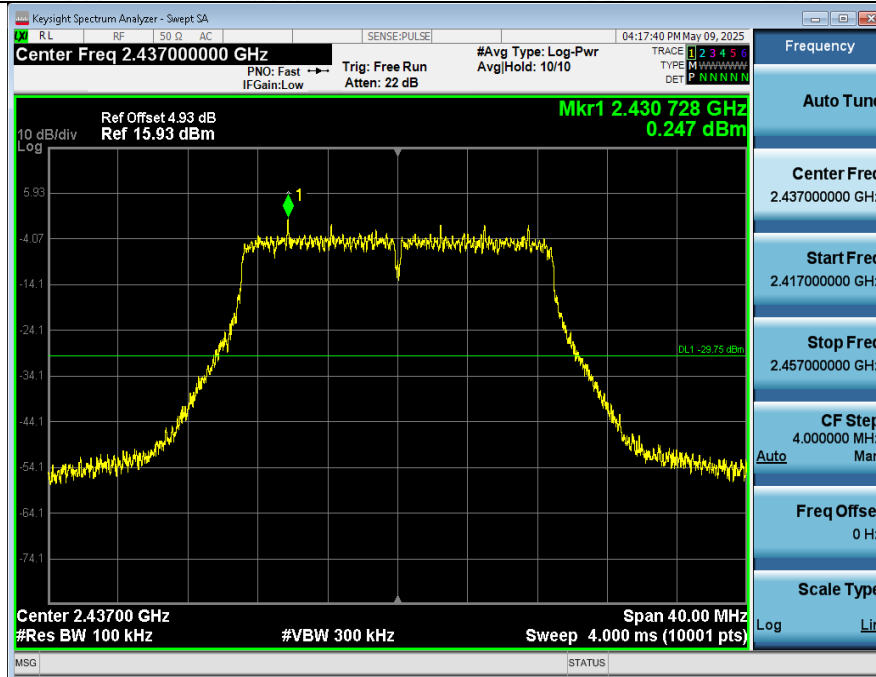


2 Spurious Emission NVNT_ANT1_802_11n(HT20)_2412

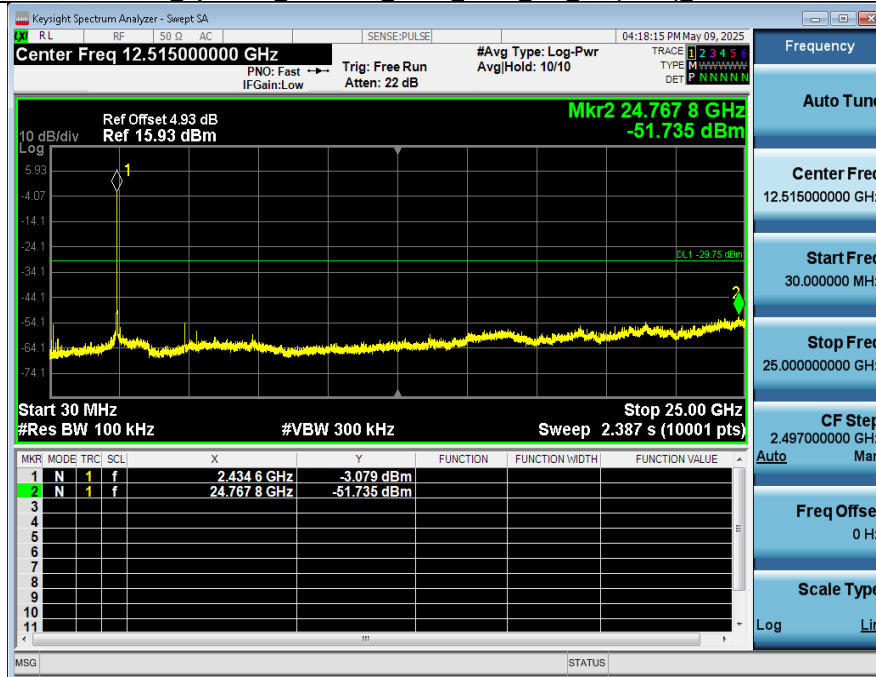


1 Reference Level NVNT_ANT1_802_11n(HT20)_2437





2 Spurious Emission NVNT_ANT1_802_11n(HT20)_2437

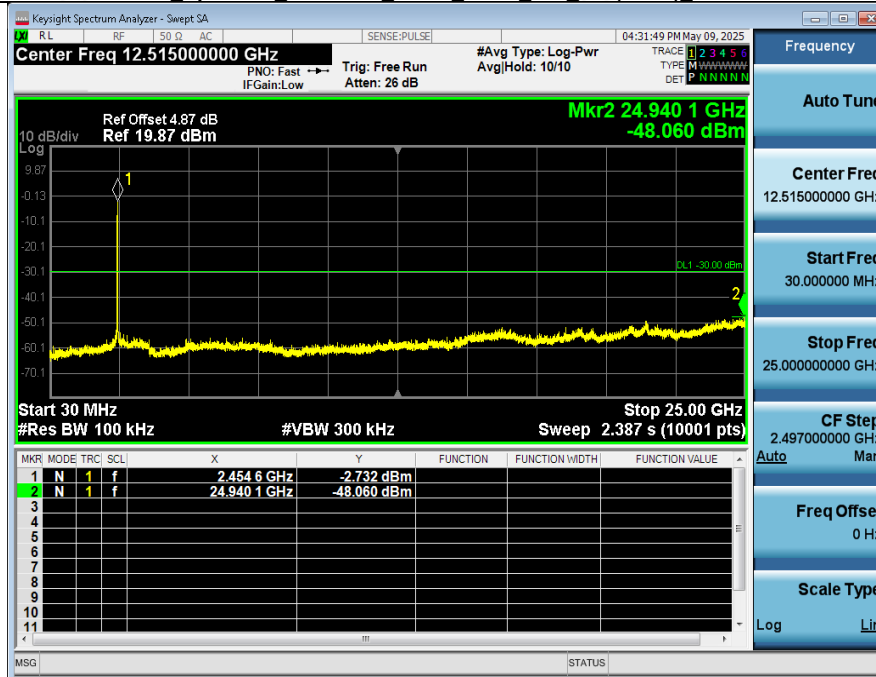


1 Reference Level NVNT_ANT1_802_11n(HT20)_2462





2 Spurious Emission NVNT_ANT1_802_11n(HT20) 2462

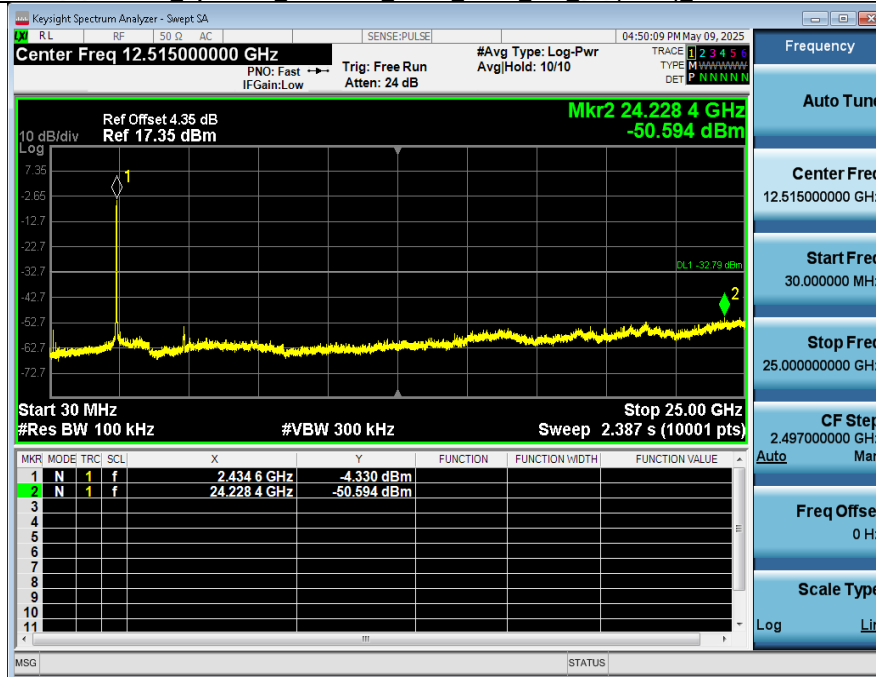


1 Reference Level NVNT_ANT1_802_11n(HT40) 2422





2 Spurious Emission NVNT_ANT1_802_11n(HT40)_2422

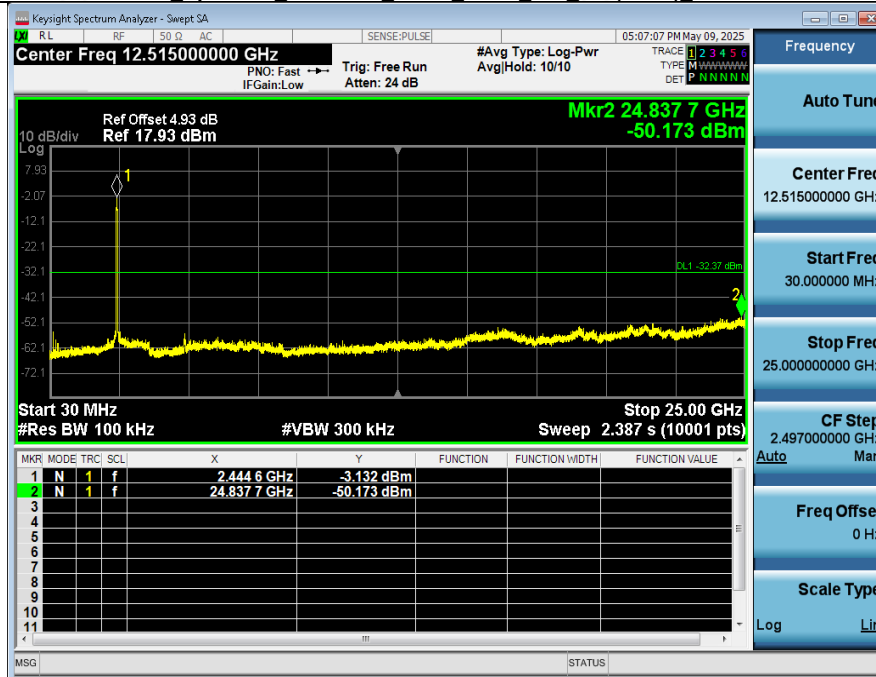


1 Reference Level NVNT_ANT1_802_11n(HT40)_2437





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

