

Appendix

Test Data

for BTEK250417069A01E02

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



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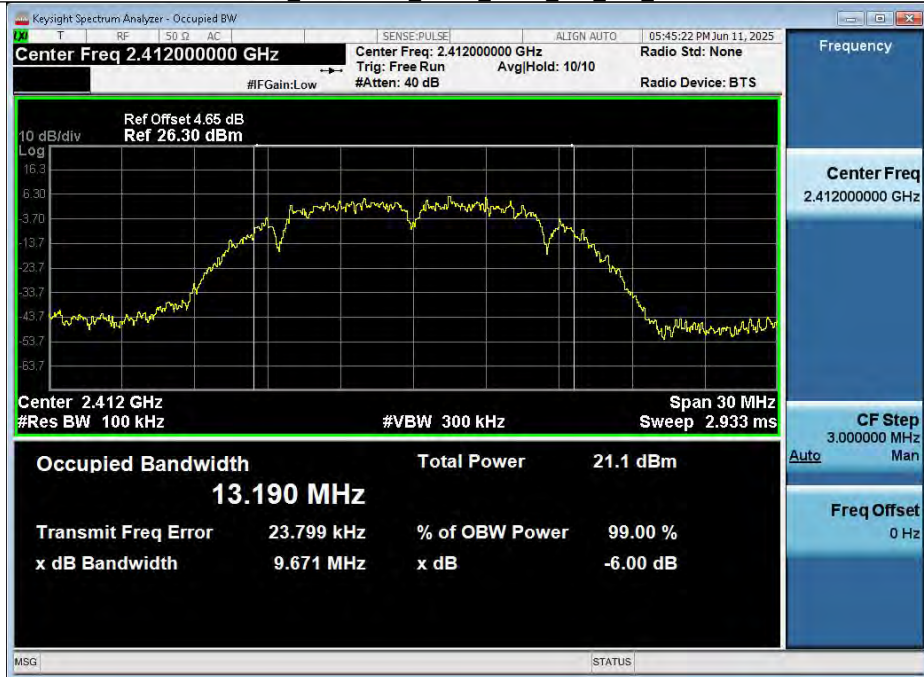
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1. -6dB Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	9.671	500	Pass
NVNT	ANT1	802.11b	2437.00	9.685	500	Pass
NVNT	ANT1	802.11b	2462.00	10.06	500	Pass
NVNT	ANT1	802.11g	2412.00	16.49	500	Pass
NVNT	ANT1	802.11g	2437.00	16.46	500	Pass
NVNT	ANT1	802.11g	2462.00	16.46	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	17.81	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	17.79	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	17.82	500	Pass

-6dB_Bandwidth_NVNT_ANT1_802_11b_2412



-6dB_Bandwidth_NVNT_ANT1_802_11b_2437

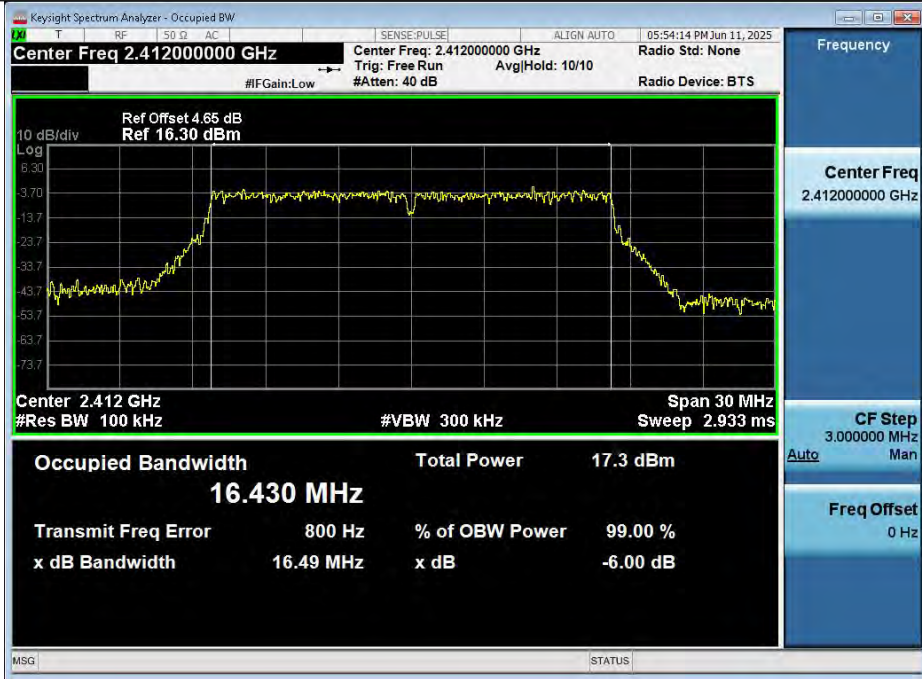


-6dB_Bandwidth_NVNT_ANT1_802_11b_2462



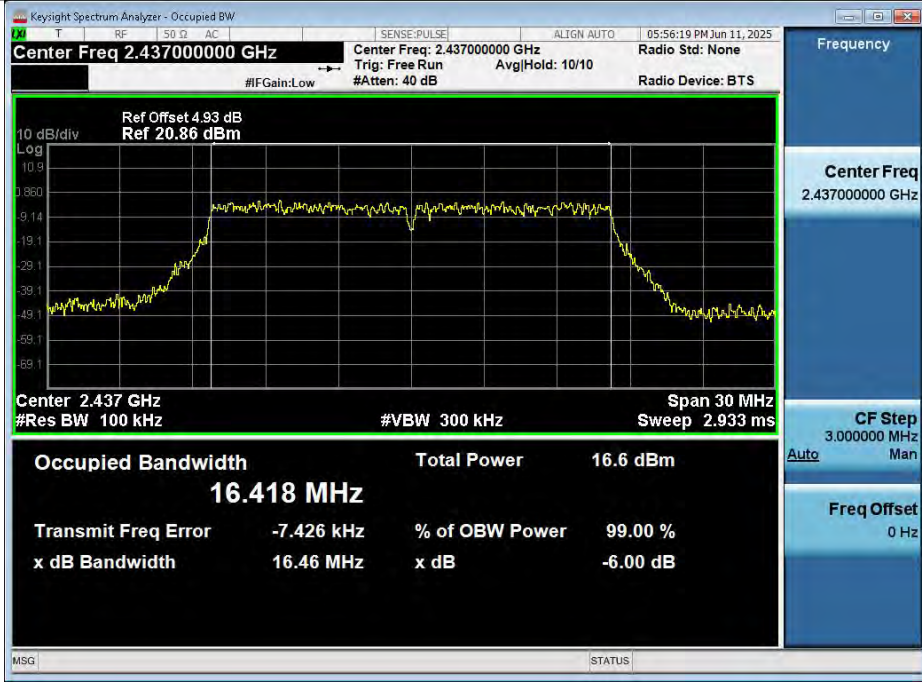


-6dB_Bandwidth_NVNT_ANT1_802_11g_2412

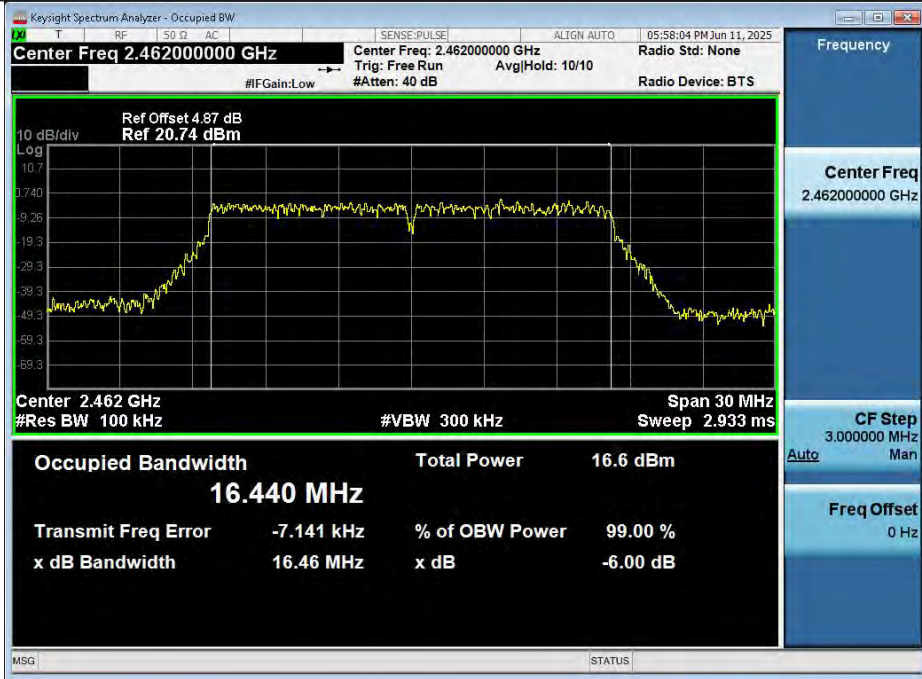


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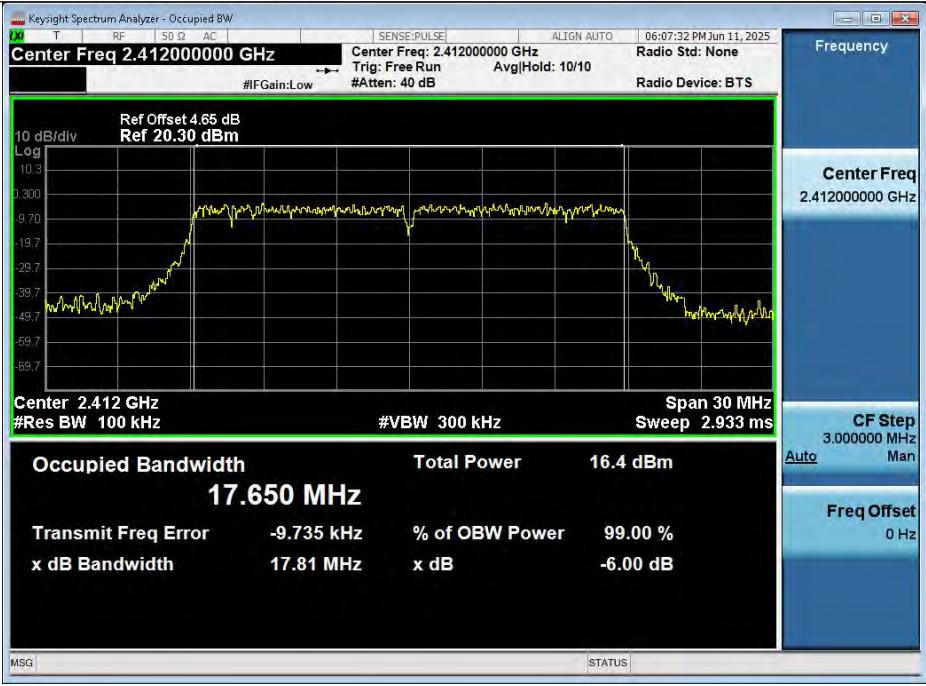


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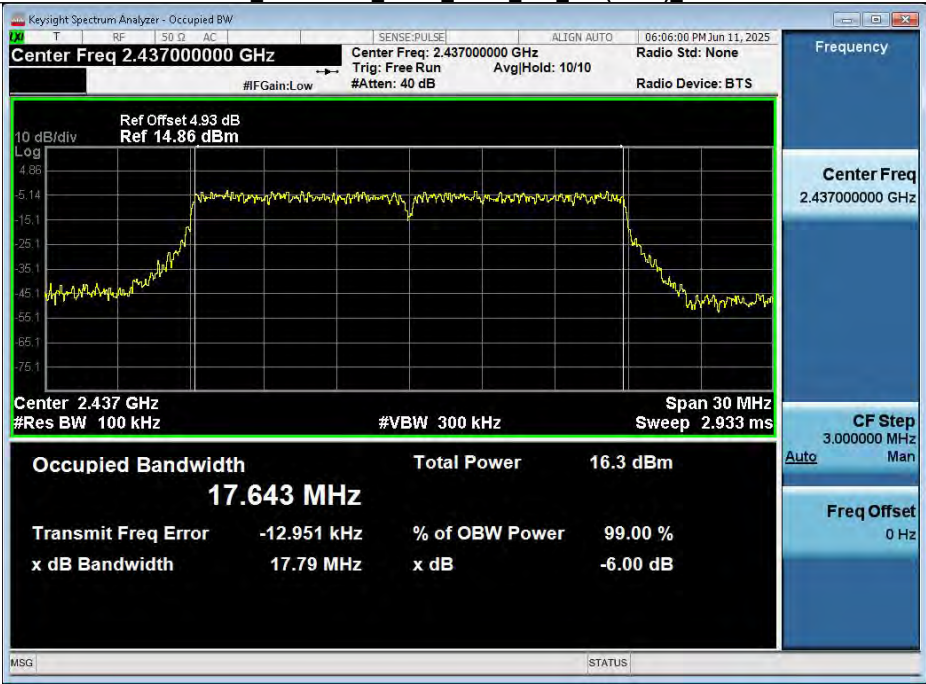


-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2412



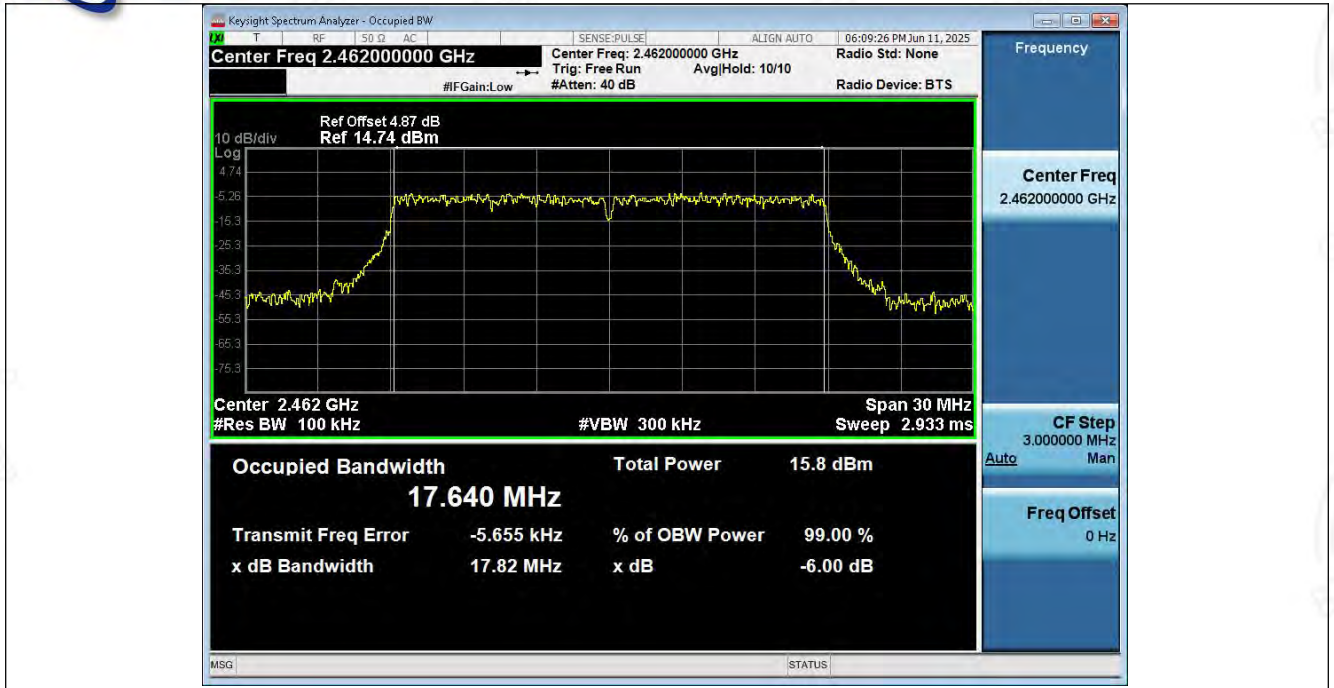


-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2437



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462

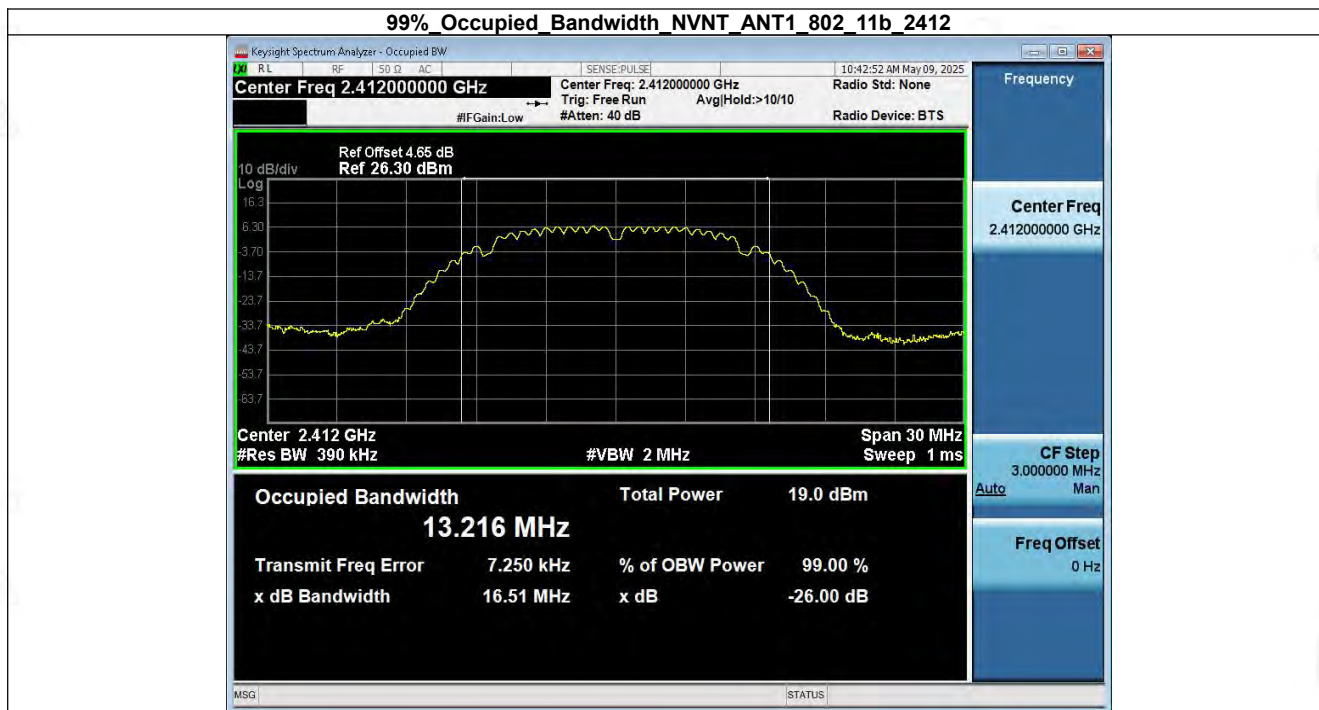




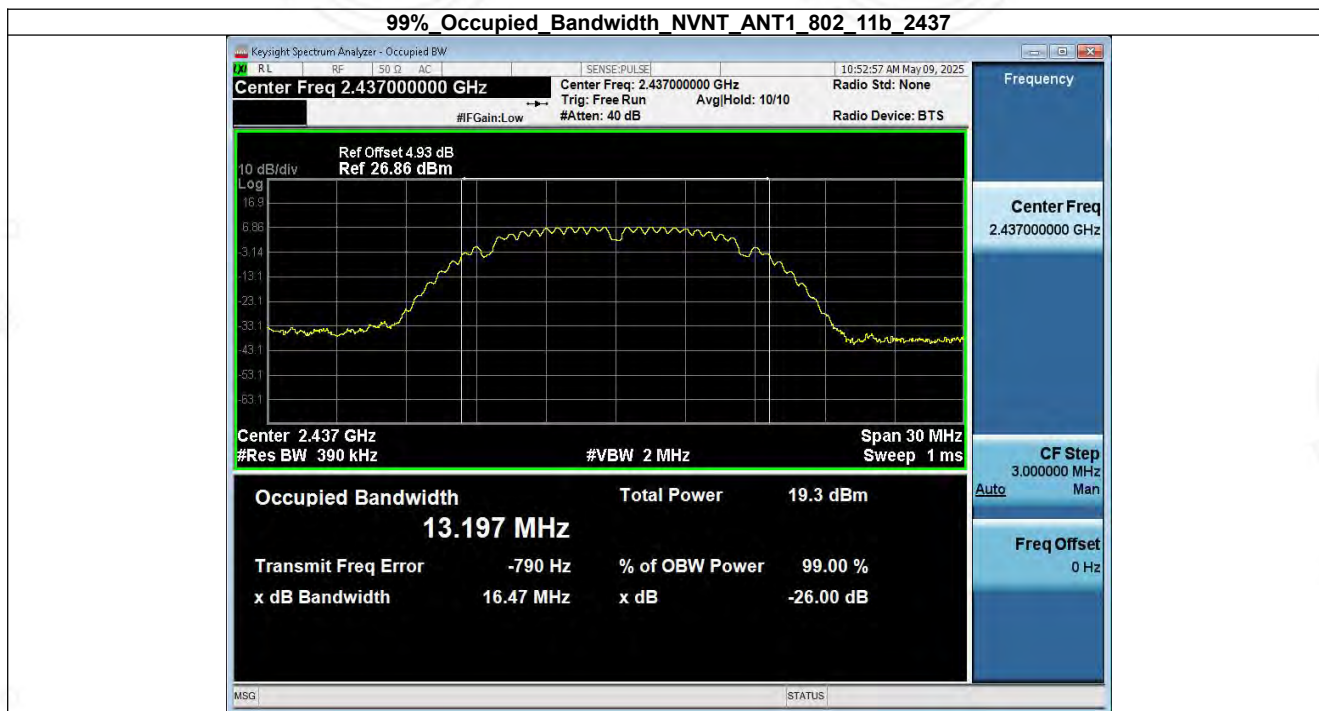
2. 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99% BW(MHz)
NVNT	ANT1	802.11b	2412.00	13.216
NVNT	ANT1	802.11b	2437.00	13.197
NVNT	ANT1	802.11b	2462.00	13.200
NVNT	ANT1	802.11g	2412.00	16.967
NVNT	ANT1	802.11g	2437.00	16.958
NVNT	ANT1	802.11g	2462.00	16.961
NVNT	ANT1	802.11n(HT20)	2412.00	17.860
NVNT	ANT1	802.11n(HT20)	2437.00	17.901
NVNT	ANT1	802.11n(HT20)	2462.00	17.848

99% Occupied Bandwidth_NVNT_ANT1_802_11b_2412

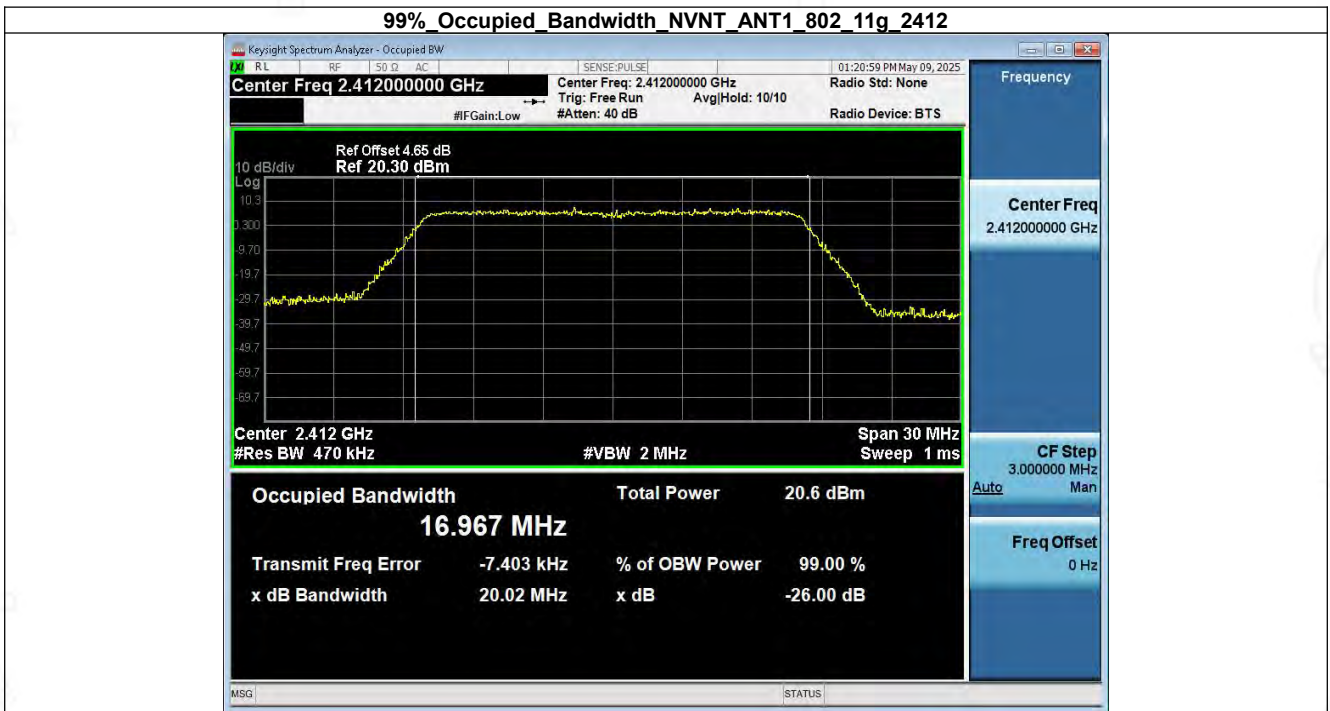


99% Occupied Bandwidth_NVNT_ANT1_802_11b_2437



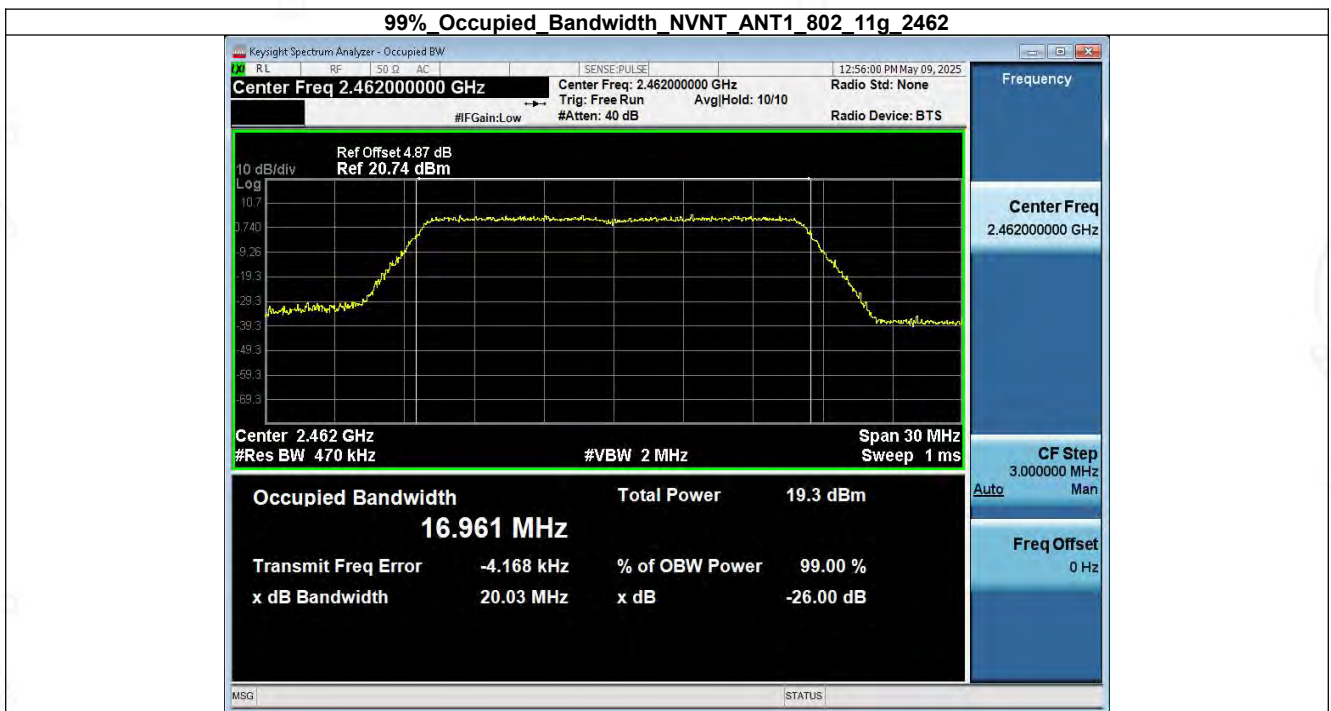
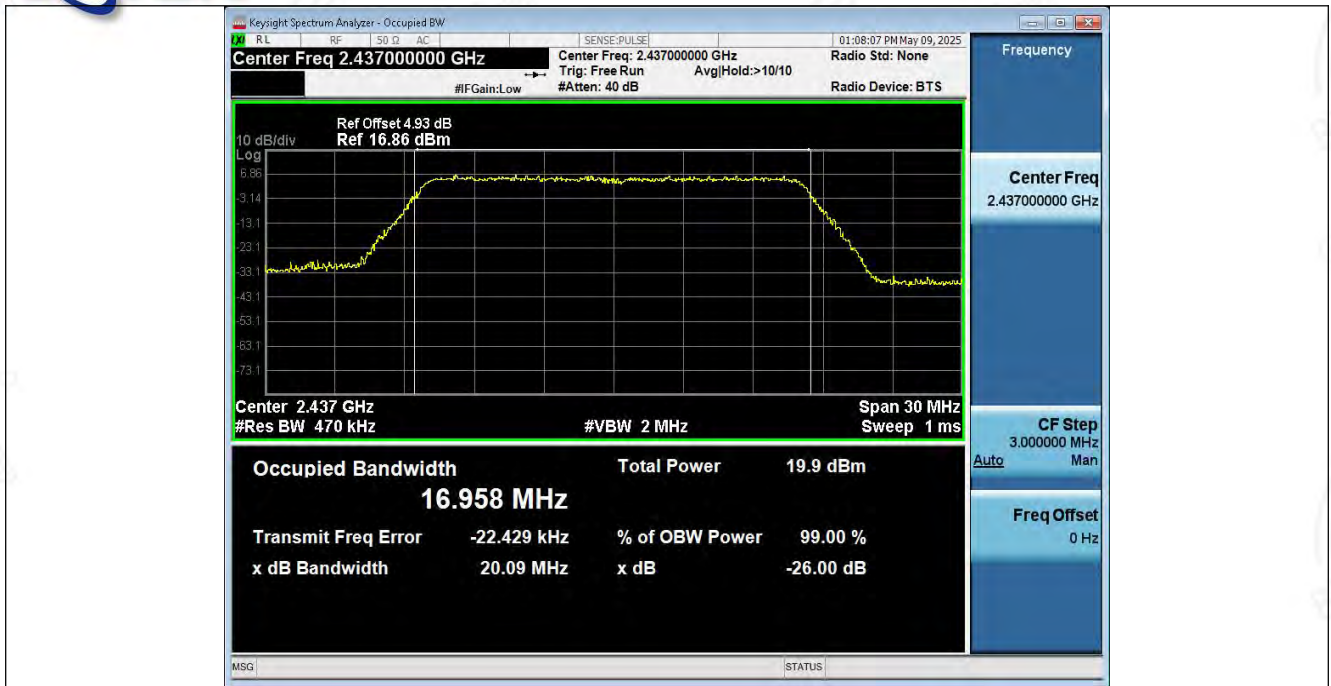
99% Occupied Bandwidth_NVNT_ANT1_802_11b_2462





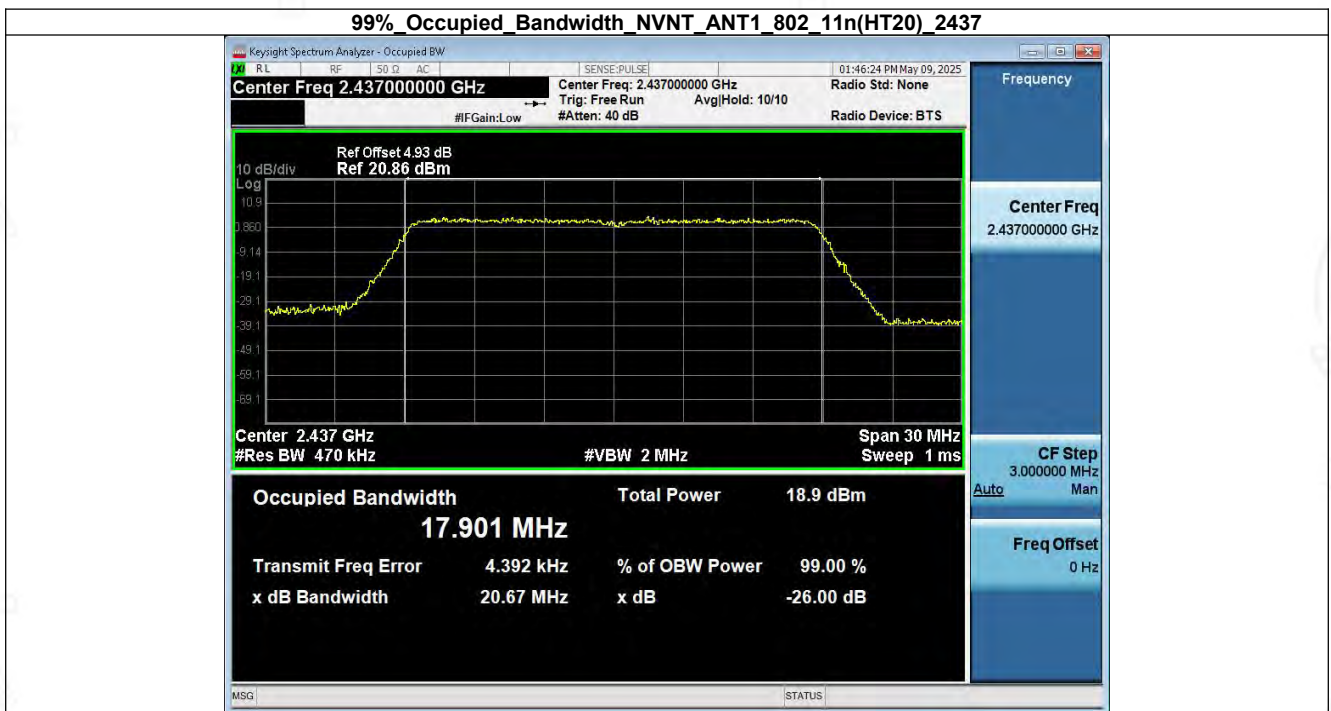
99% Occupied Bandwidth NVNT_ANT1_802_11g_2437





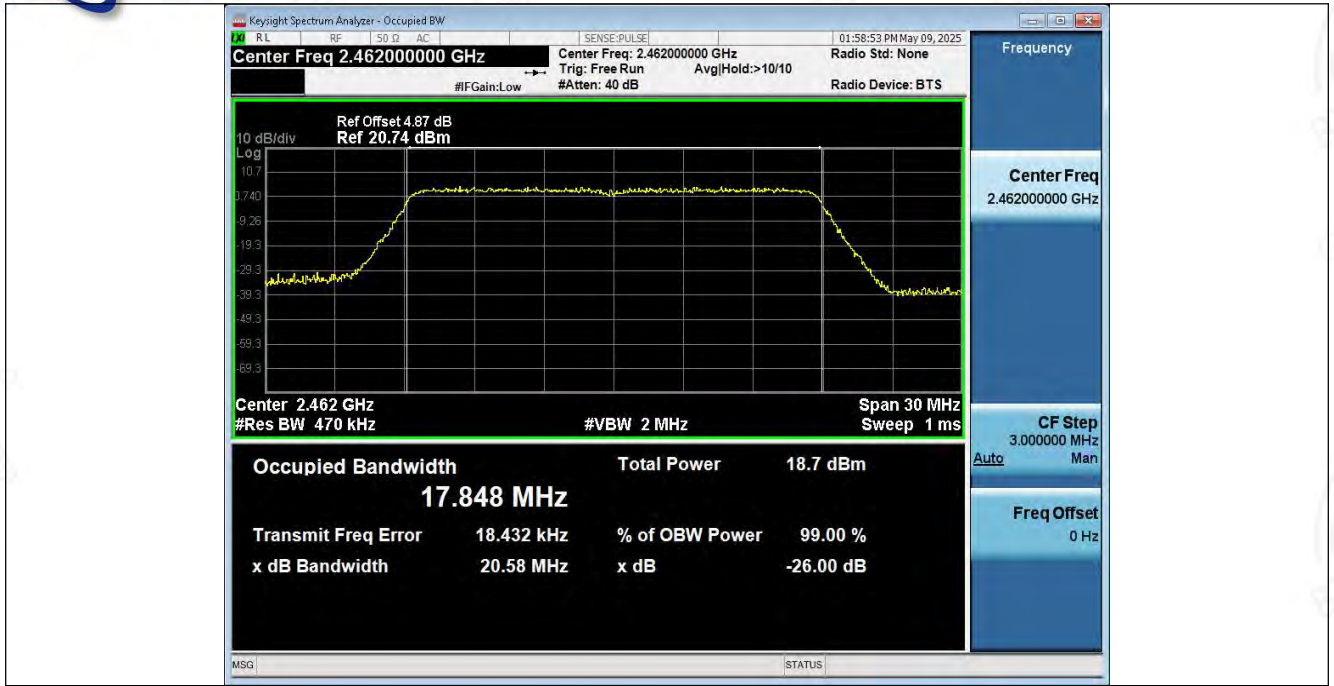
99% Occupied Bandwidth_NVNT_ANT1_802_11n(HT20)_2412





99% Occupied Bandwidth_NVNT_ANT1_802_11n(HT20)_2462

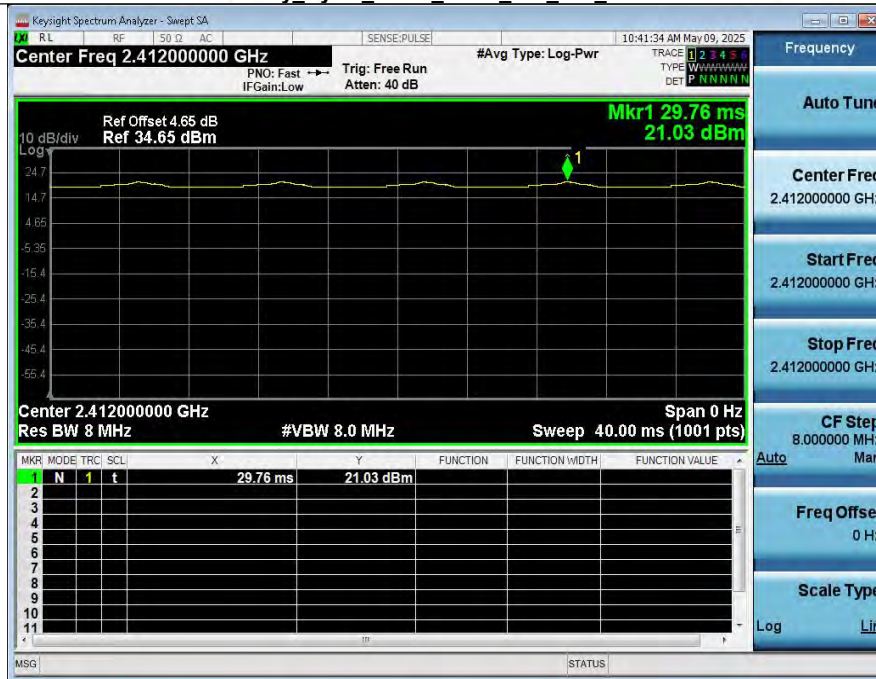




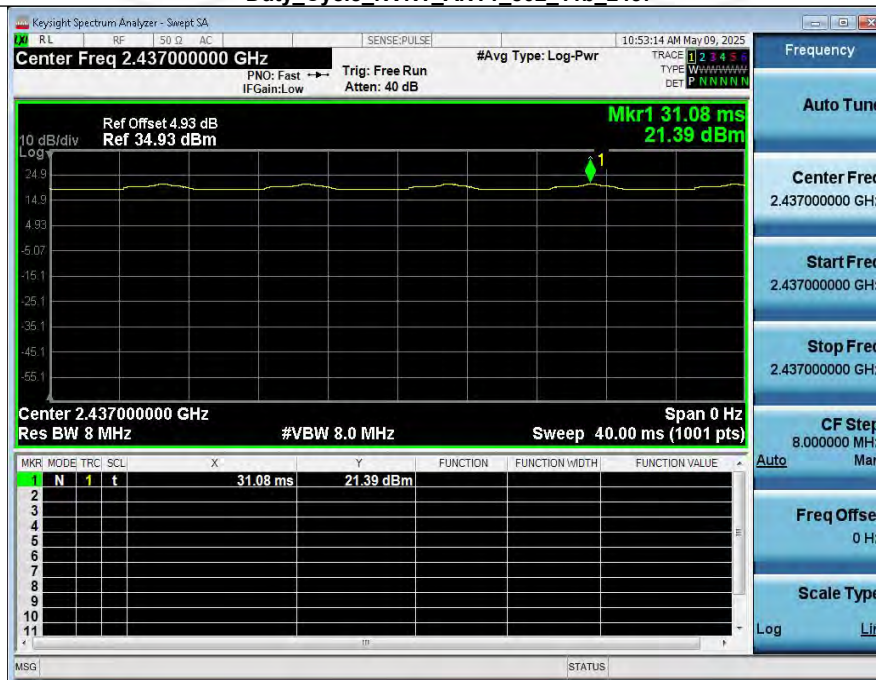
3. Duty Cycle

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	99.28	0.00
NVNT	ANT1	802.11g	2437.00	99.28	0.00
NVNT	ANT1	802.11g	2462.00	99.64	0.00
NVNT	ANT1	802.11n(HT20)	2412.00	99.22	0.00
NVNT	ANT1	802.11n(HT20)	2437.00	99.22	0.00
NVNT	ANT1	802.11n(HT20)	2462.00	99.22	0.00

Duty_Cycle_NVNT_ANT1_802_11b_2412

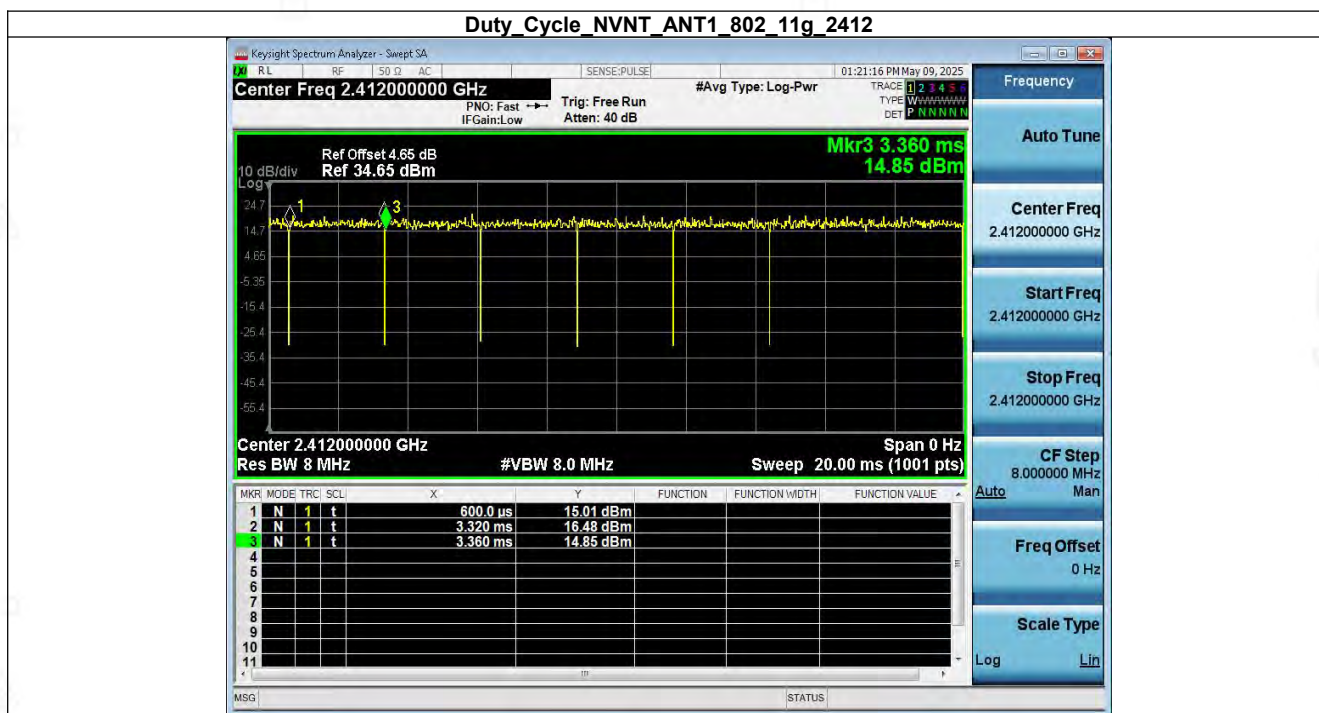
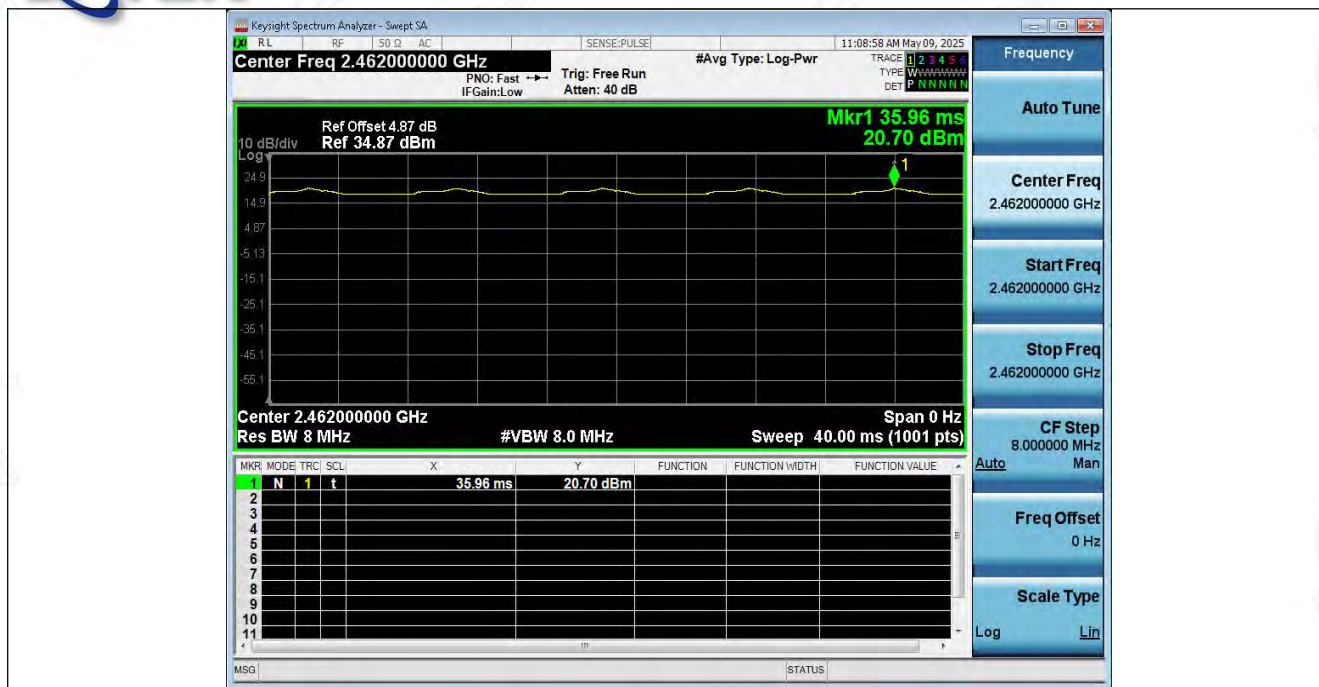


Duty_Cycle_NVNT_ANT1_802_11b_2437



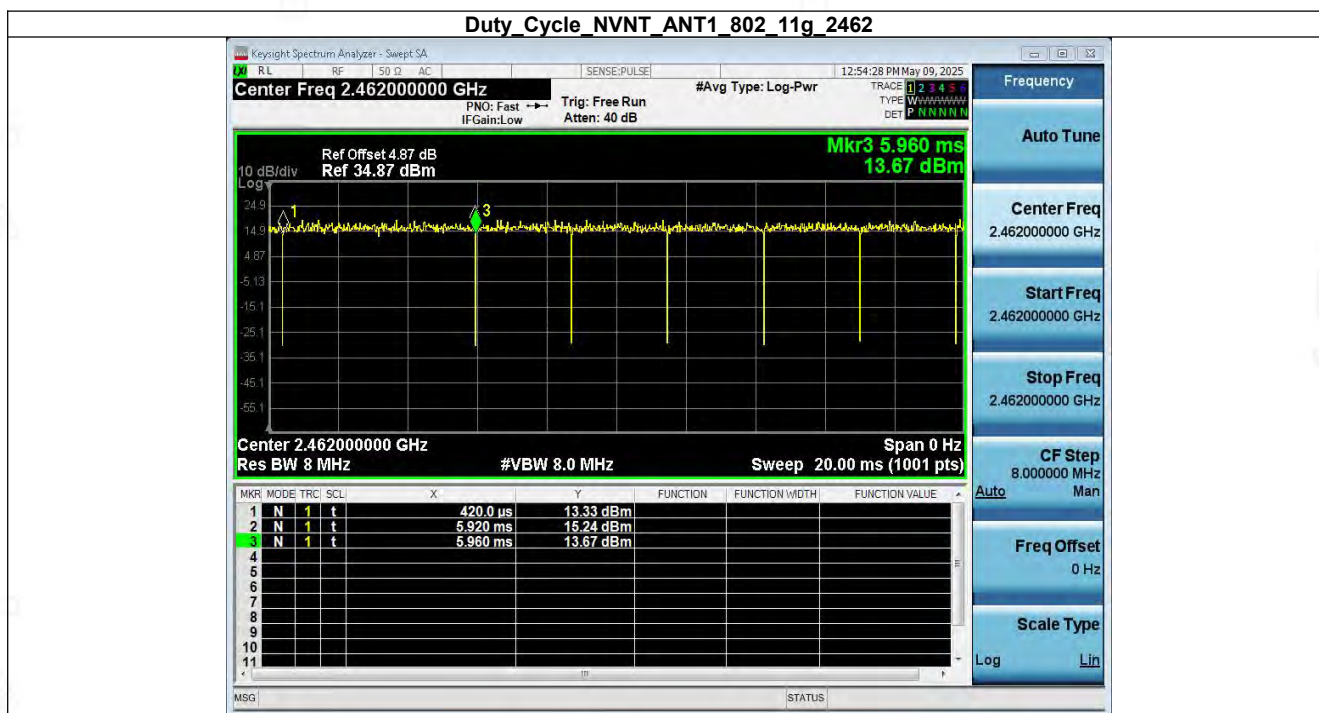
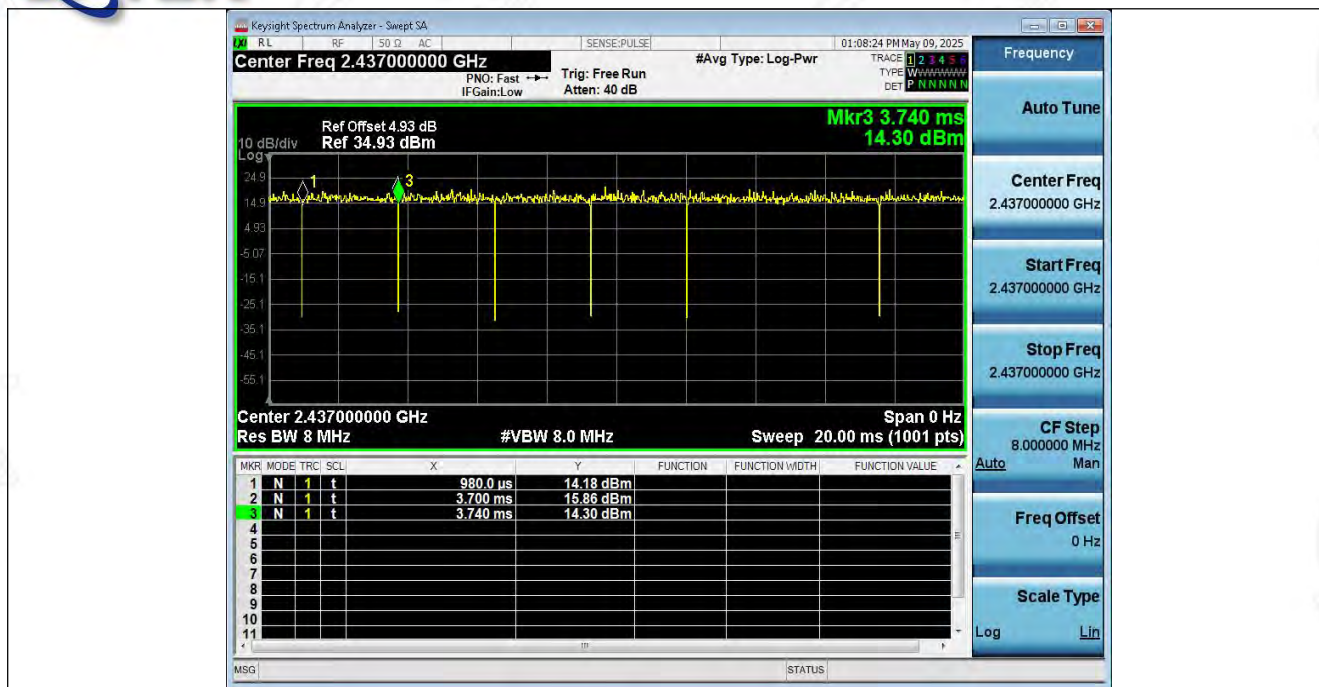
Duty_Cycle_NVNT_ANT1_802_11b_2462





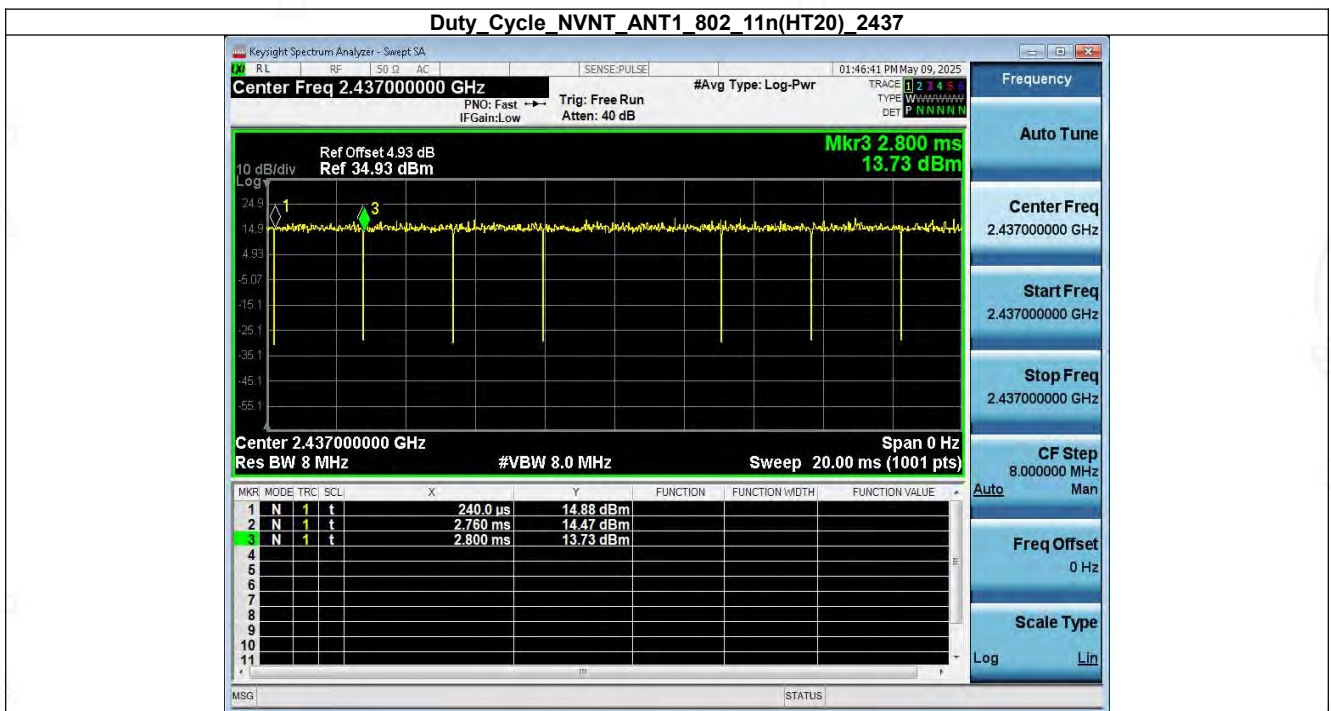
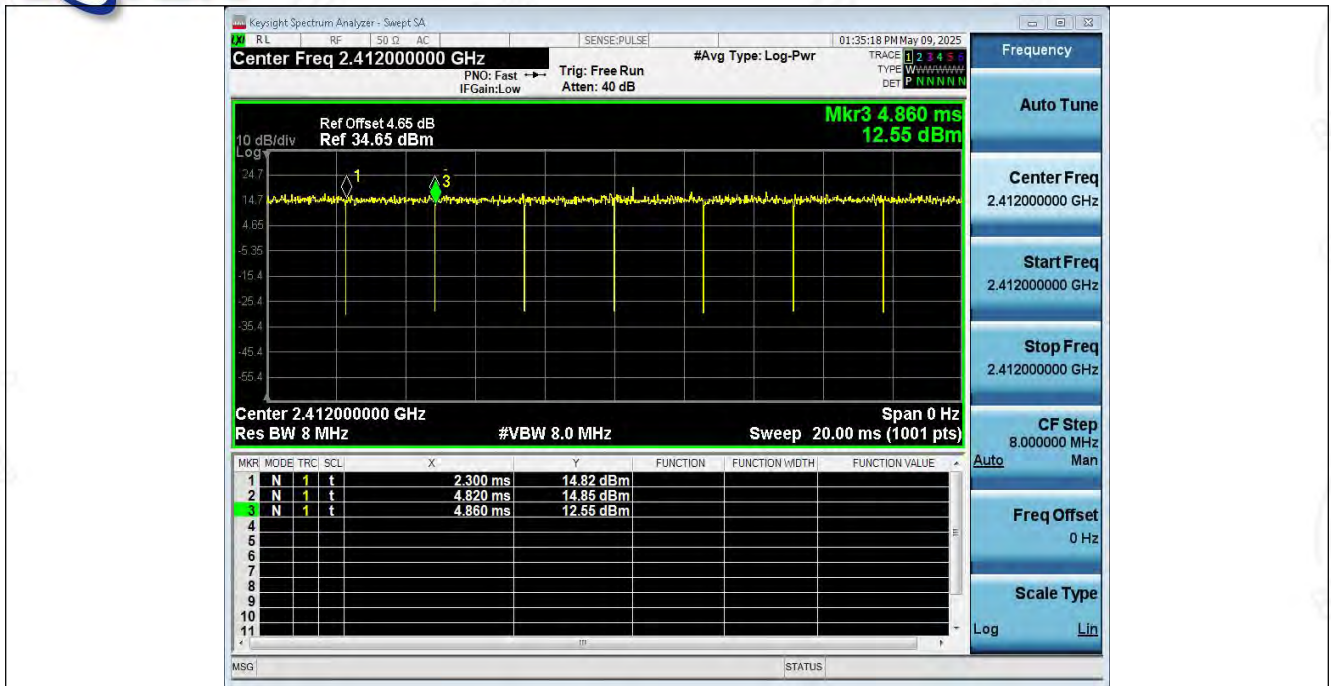
Duty Cycle NVNT_ANT1_802_11g_2437





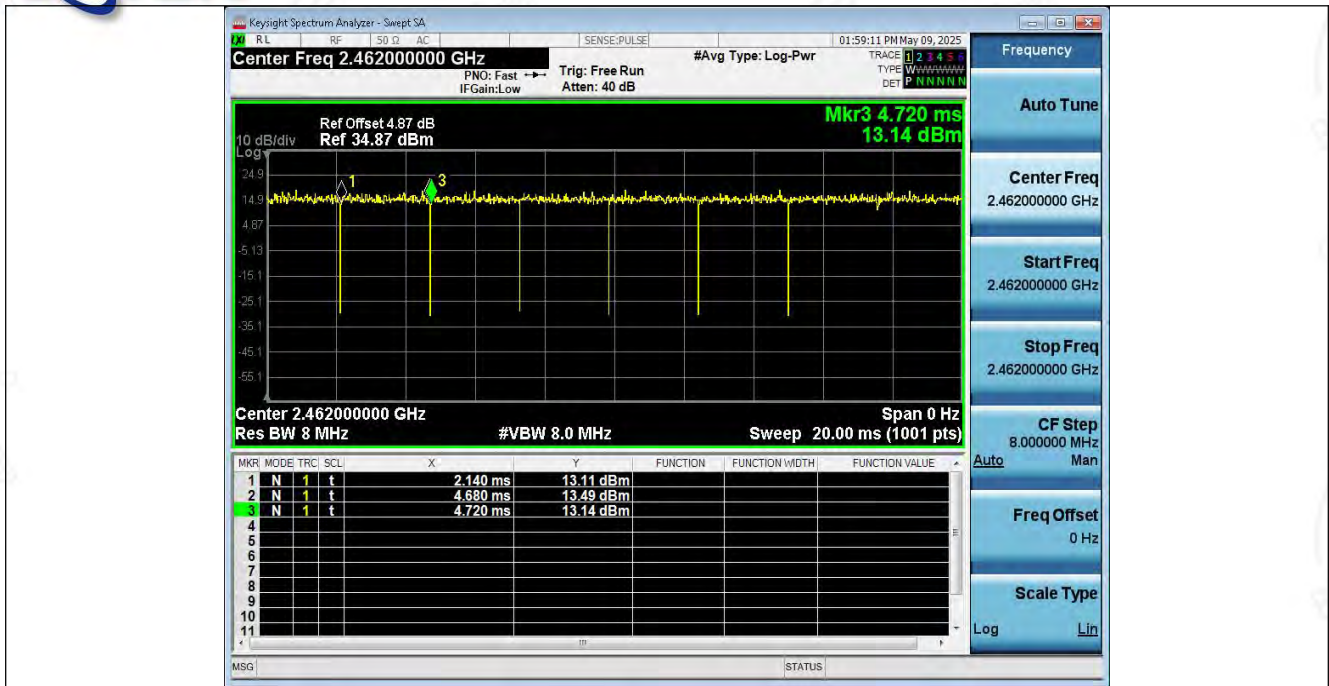
Duty Cycle NVNT_ANT1_802_11n(HT20)_2412





Duty Cycle NVNT_ANT1_802_11n(HT20)_2462

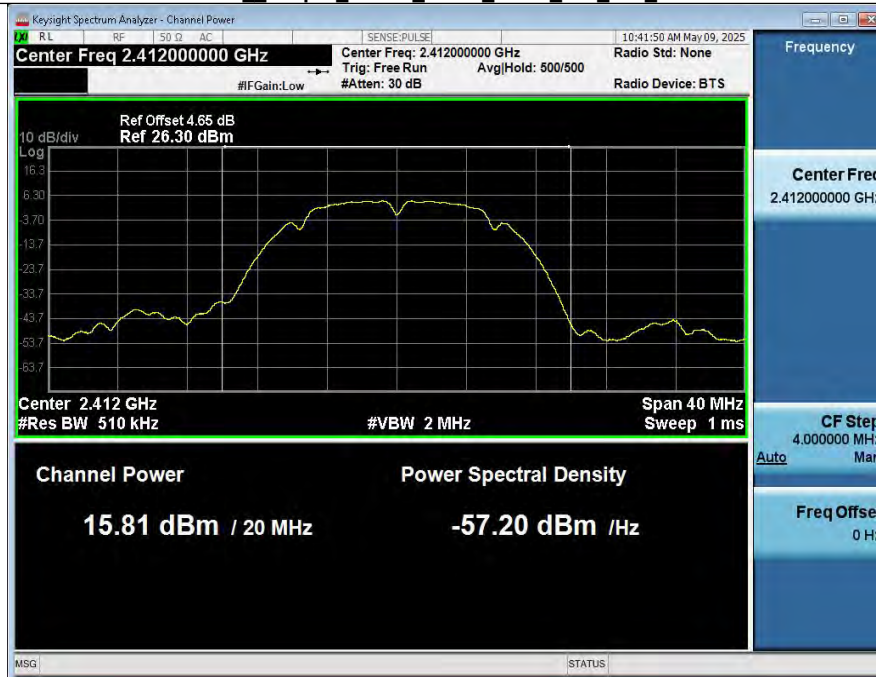




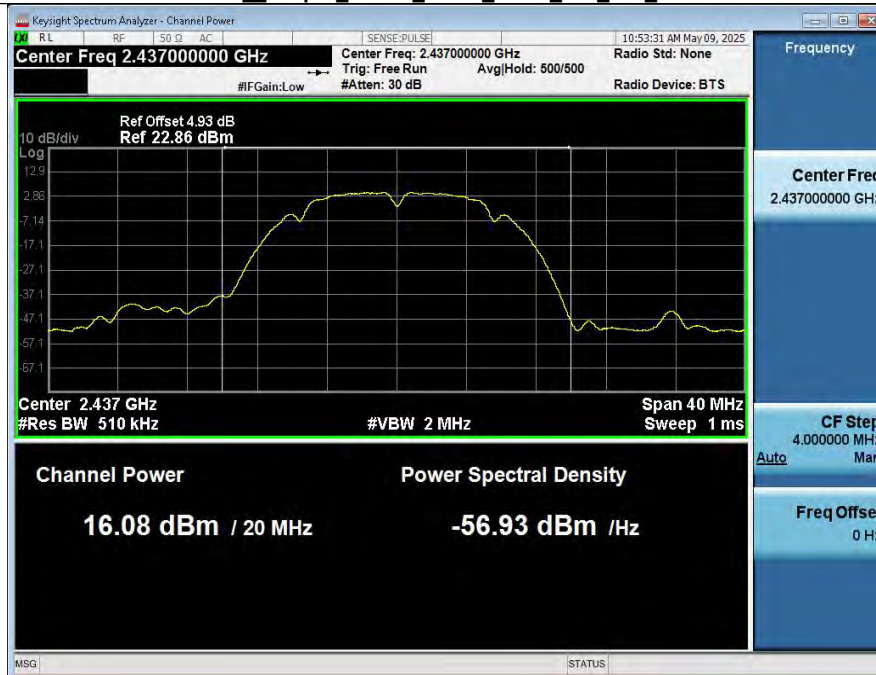
4. MAX. Output Power

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	15.81	0.00	15.81	30	Pass
NVNT	ANT1	802.11b	2437.00	RMS	16.08	0.00	16.08	30	Pass
NVNT	ANT1	802.11b	2462.00	RMS	15.35	0.00	15.35	30	Pass
NVNT	ANT1	802.11g	2412.00	RMS	13.41	0.00	13.41	30	Pass
NVNT	ANT1	802.11g	2437.00	RMS	12.69	0.00	12.69	30	Pass
NVNT	ANT1	802.11g	2462.00	RMS	12.10	0.00	12.10	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	RMS	10.92	0.00	10.92	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	RMS	11.71	0.00	11.71	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	RMS	11.54	0.00	11.54	30	Pass

MAX_Output_Power_NVNT_ANT1_802_11b_2412

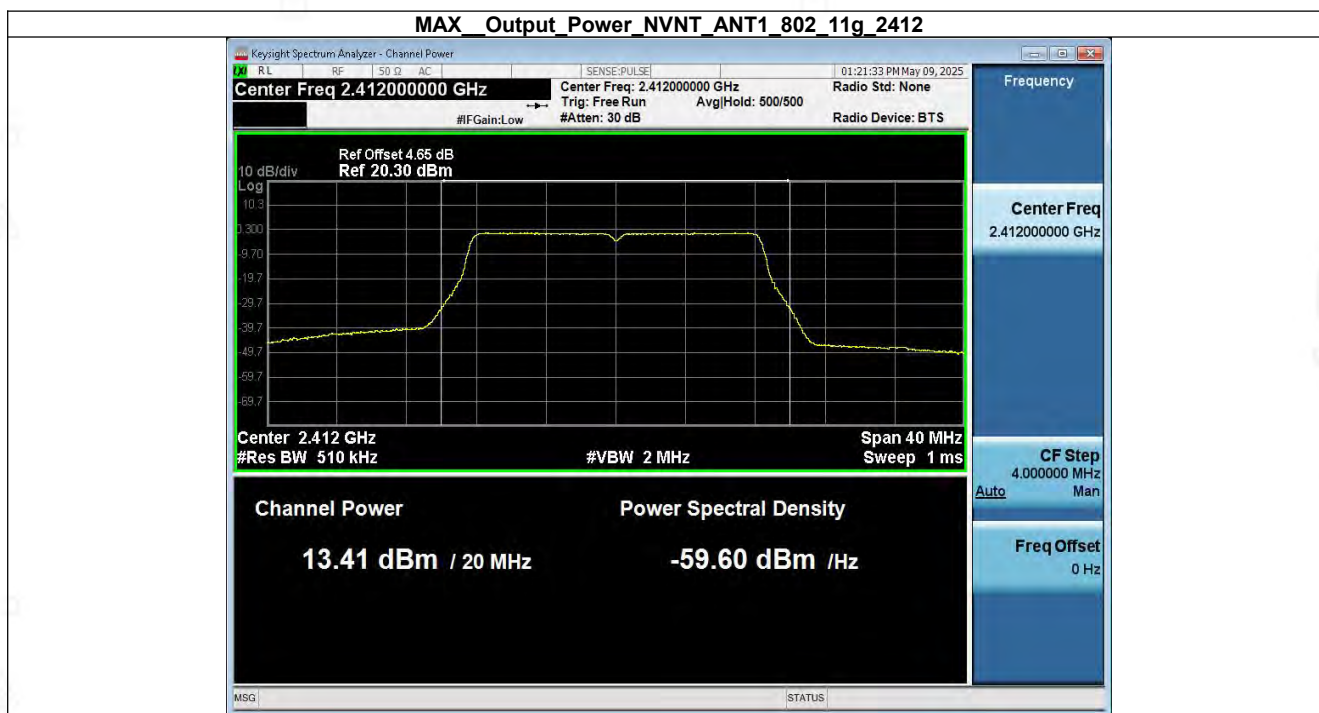
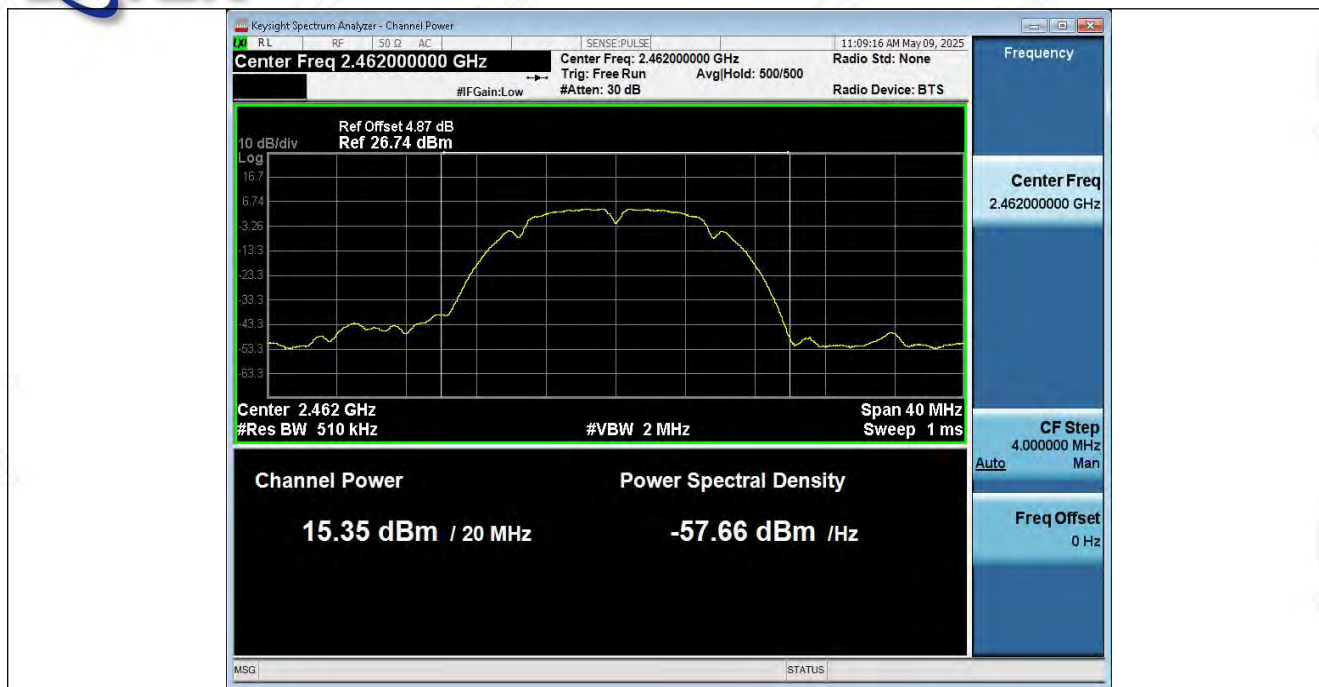


MAX_Output_Power_NVNT_ANT1_802_11b_2437



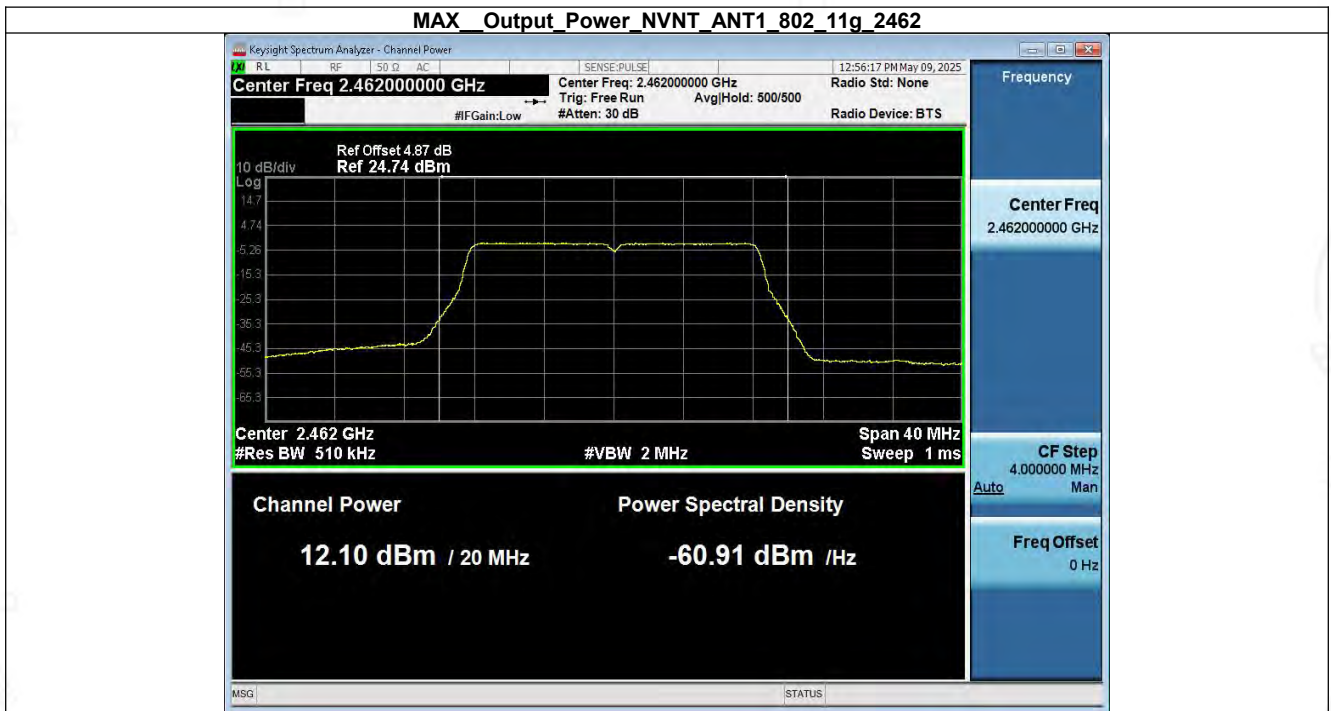
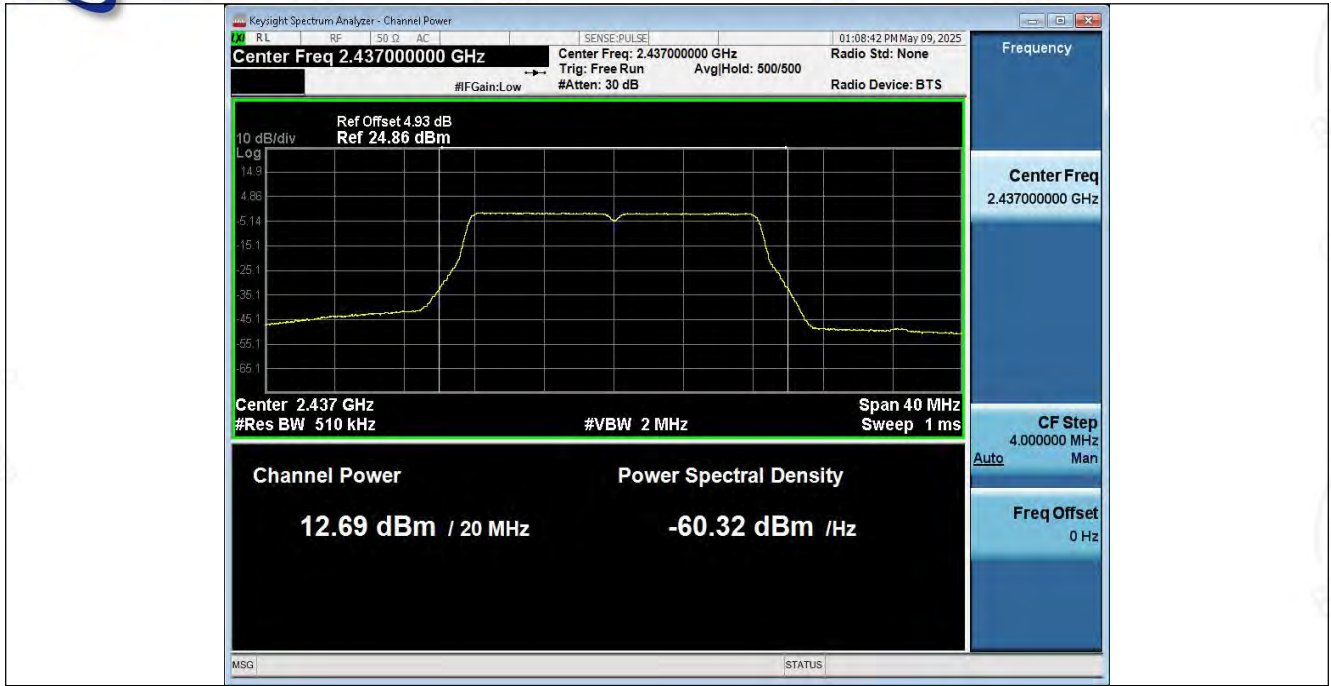
MAX_Output_Power_NVNT_ANT1_802_11b_2462





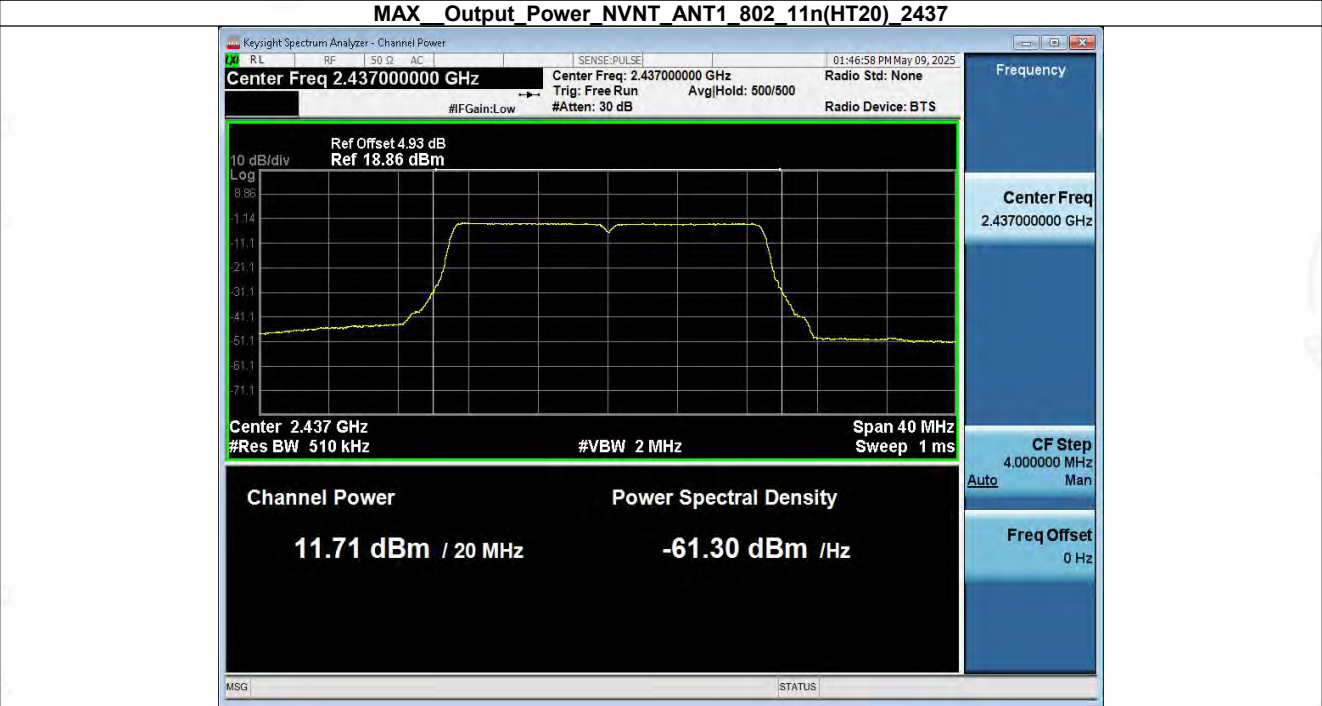
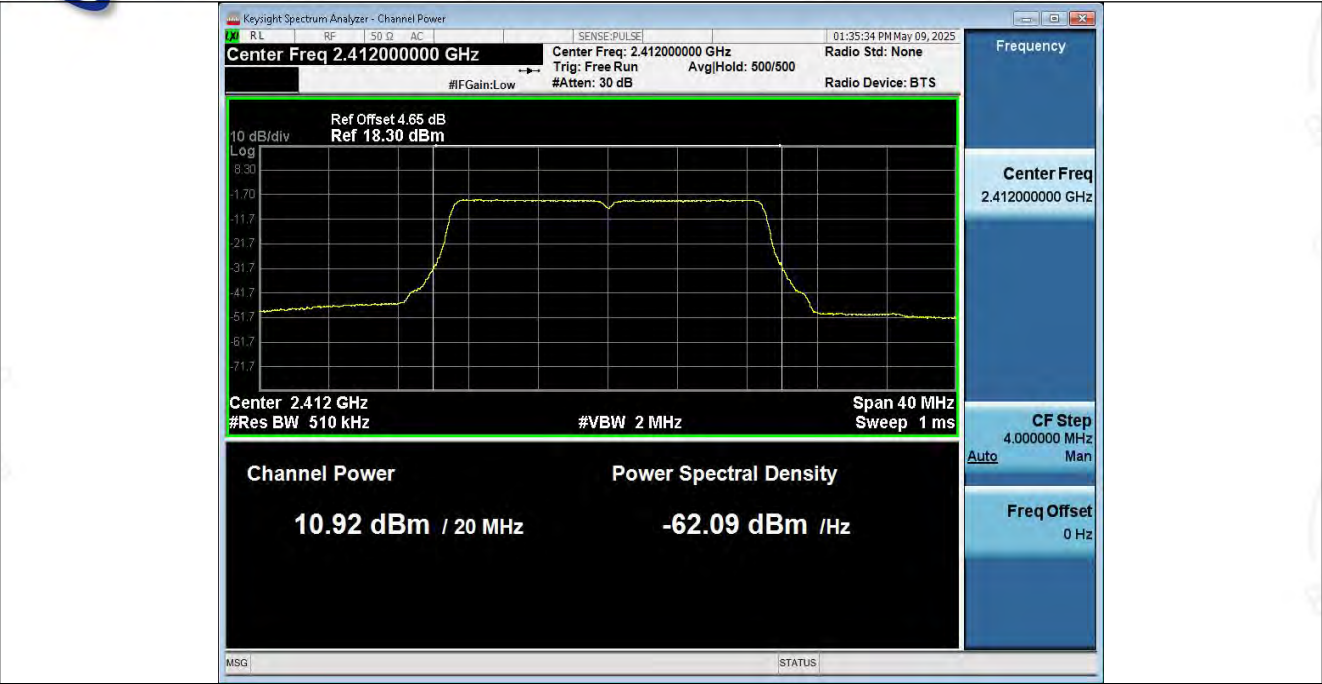
MAX Output Power_NVNT_ANT1_802_11g_2437





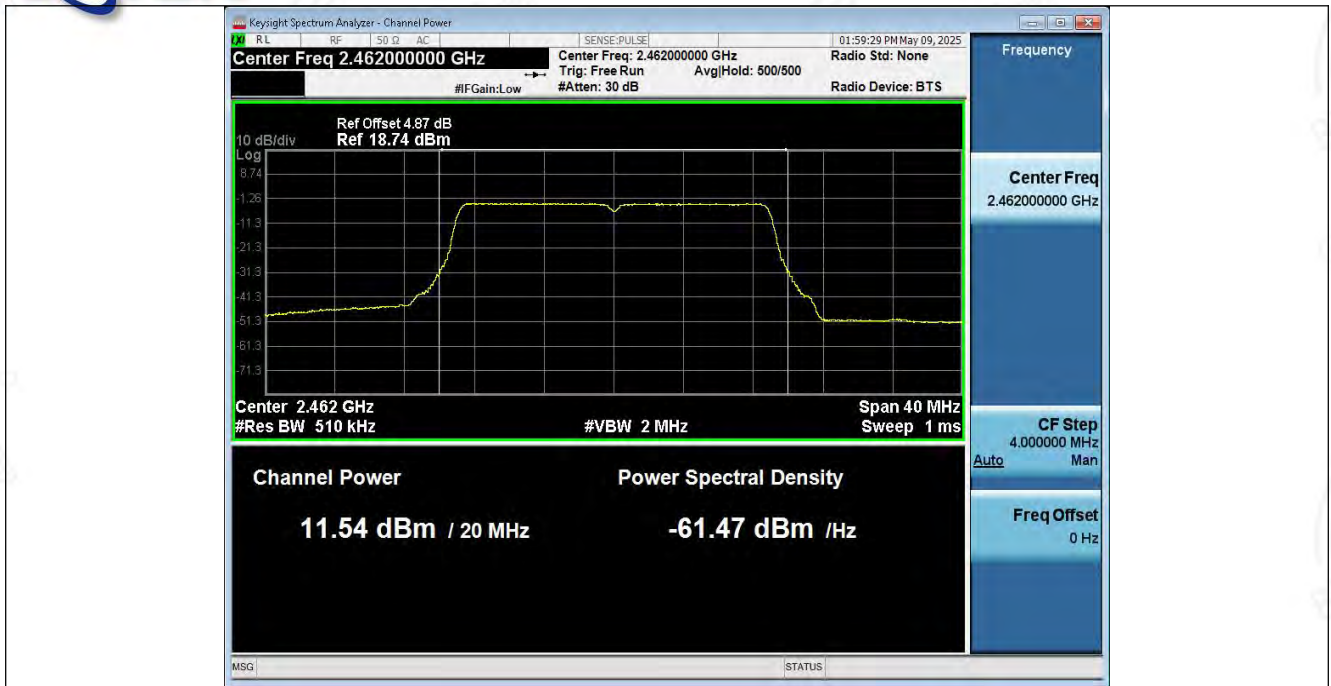
MAX Output Power NVNT_ANT1_802_11n(HT20)_2412





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	-18.48	0.00	0.00	-18.48	8	Pass
NVNT	ANT1	802.11b	2437.00	-18.22	0.00	0.00	-18.22	8	Pass
NVNT	ANT1	802.11b	2462.00	-18.81	0.00	0.00	-18.81	8	Pass
NVNT	ANT1	802.11g	2412.00	-18.40	0.00	0.00	-18.40	8	Pass
NVNT	ANT1	802.11g	2437.00	-23.63	0.00	0.00	-23.63	8	Pass
NVNT	ANT1	802.11g	2462.00	-24.24	0.00	0.00	-24.24	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-26.15	0.00	0.00	-26.15	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-25.36	0.00	0.00	-25.36	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-25.52	0.00	0.00	-25.52	8	Pass



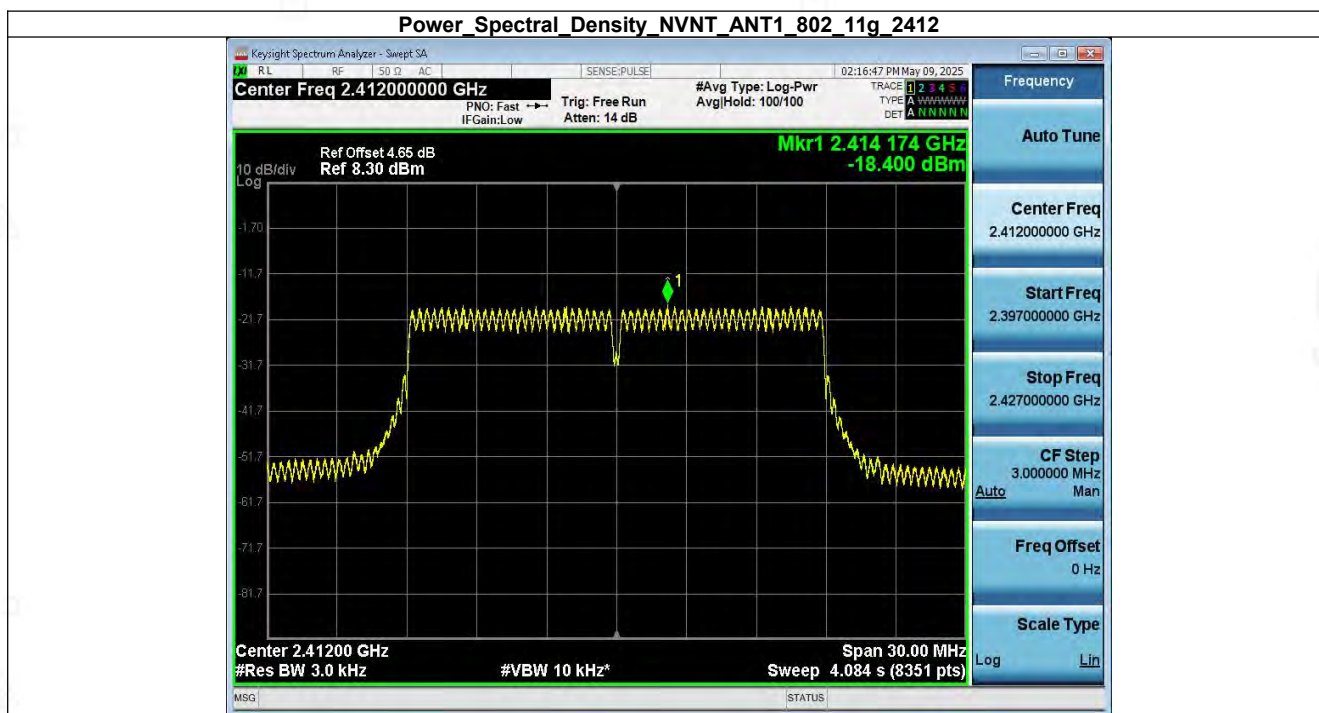
Power Spectral Density_NVNT_ANT1_802_11b_2462

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Bao'an District, Shenzhen, Guangdong, China 518104

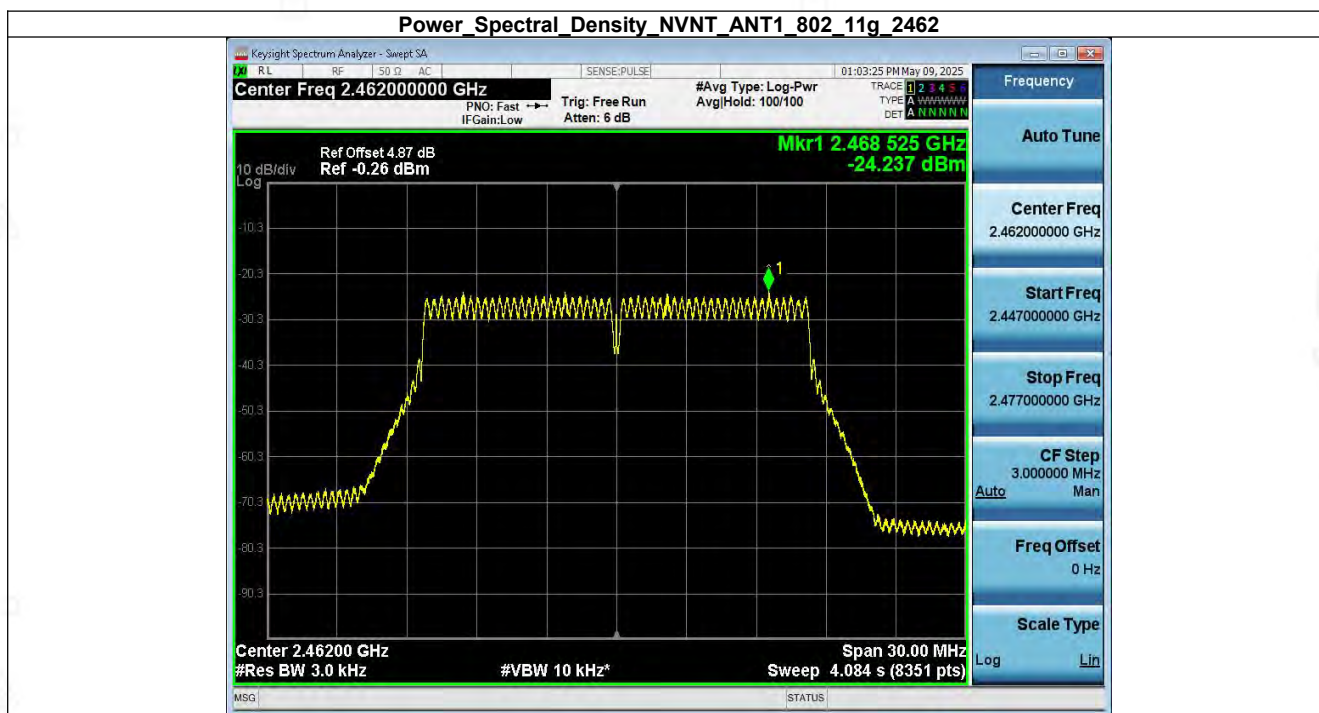
Tel : +(86)755-2334 4200 E-mail : Service@btek-lab.com Web : www.btek-lab.com





Power_Spectral_Density_NVNT_ANT1_802_11g_2437





Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2412





Power Spectral Density NVNT_ANT1_802_11n(HT20)_2462





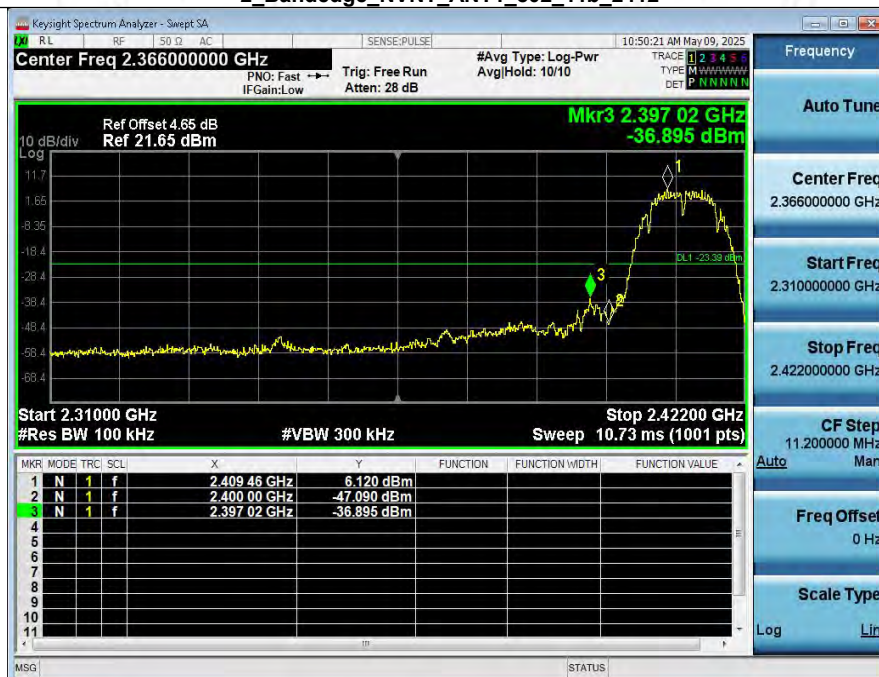
6. Bandedge

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	2397.024	6.612	-36.895	-23.388	Pass
NVNT	ANT1	802.11b	2462.00	2486.992	6.184	-47.419	-23.816	Pass
NVNT	ANT1	802.11g	2412.00	2399.488	1.856	-36.129	-28.144	Pass
NVNT	ANT1	802.11g	2462.00	2484.208	0.564	-49.213	-29.436	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2399.936	-1.329	-41.613	-31.329	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2485.072	-0.359	-48.658	-30.359	Pass

1 Reference Level NVNT_ANT1_802_11b_2412

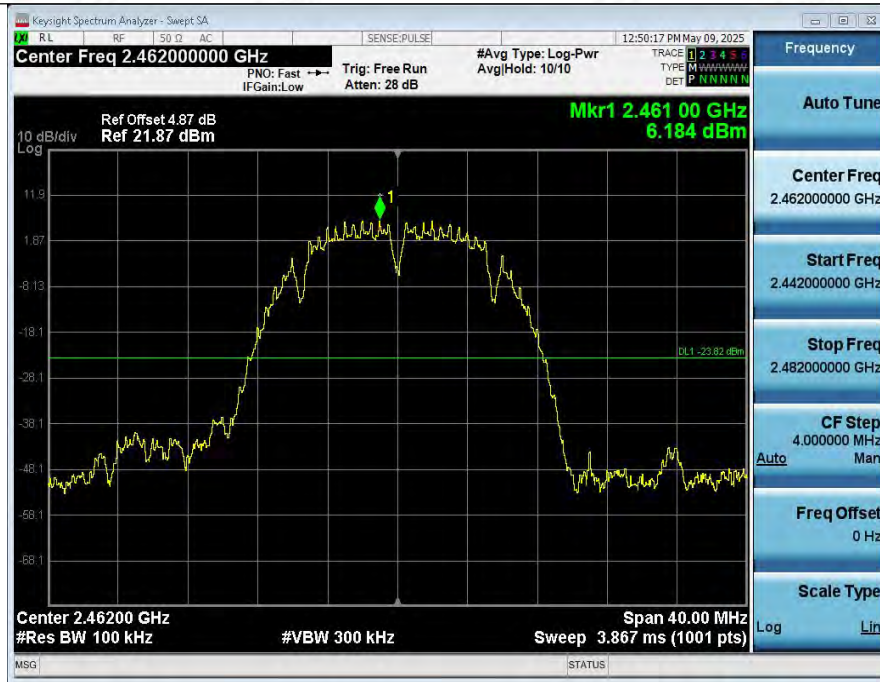


2 Bandedge NVNT_ANT1_802_11b_2412



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



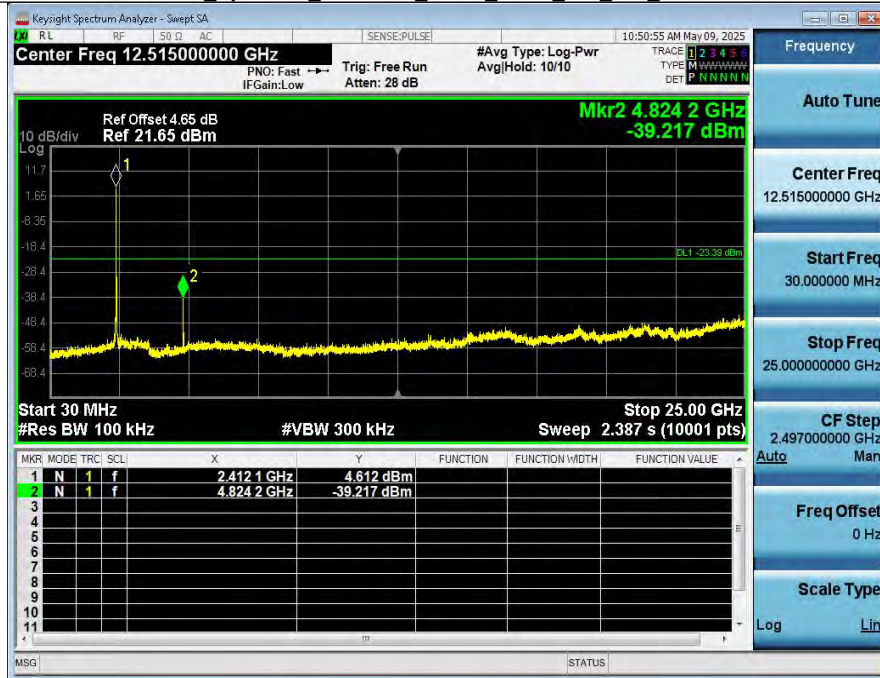
7. Spurious Emission

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	4824.240	6.612	-39.217	-23.388	Pass
NVNT	ANT1	802.11b	2437.00	4874.180	6.762	-40.556	-23.238	Pass
NVNT	ANT1	802.11b	2462.00	4924.120	6.184	-42.986	-23.816	Pass
NVNT	ANT1	802.11g	2412.00	24945.066	1.856	-46.880	-28.144	Pass
NVNT	ANT1	802.11g	2437.00	24680.384	1.027	-46.354	-28.973	Pass
NVNT	ANT1	802.11g	2462.00	1925.223	0.564	-43.575	-29.436	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	24143.529	-1.329	-48.548	-31.329	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	24555.534	-0.227	-52.239	-30.227	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	24770.276	-0.359	-51.757	-30.359	Pass

1_Reference_Level_NVNT_ANT1_802_11b_2412



2_Spurious_Emission_NVNT_ANT1_802_11b_2412

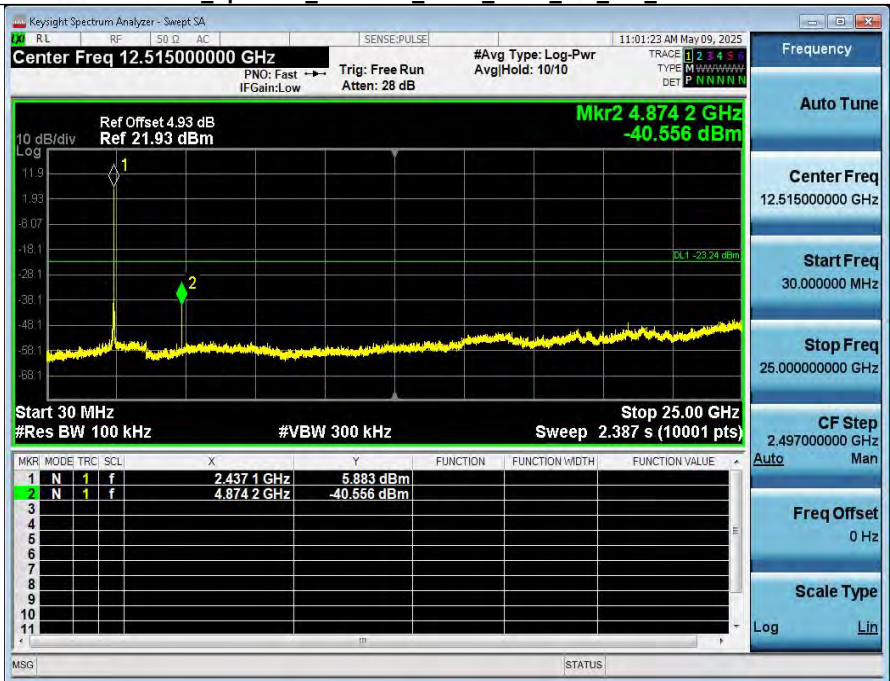


1_Reference_Level_NVNT_ANT1_802_11b_2437





2_Spurious Emission_NVNT_ANT1_802_11b_2437



1_Reference_Level_NVNT_ANT1_802_11b_2462





2_Spurious Emission_NVNT_ANT1_802_11b_2462

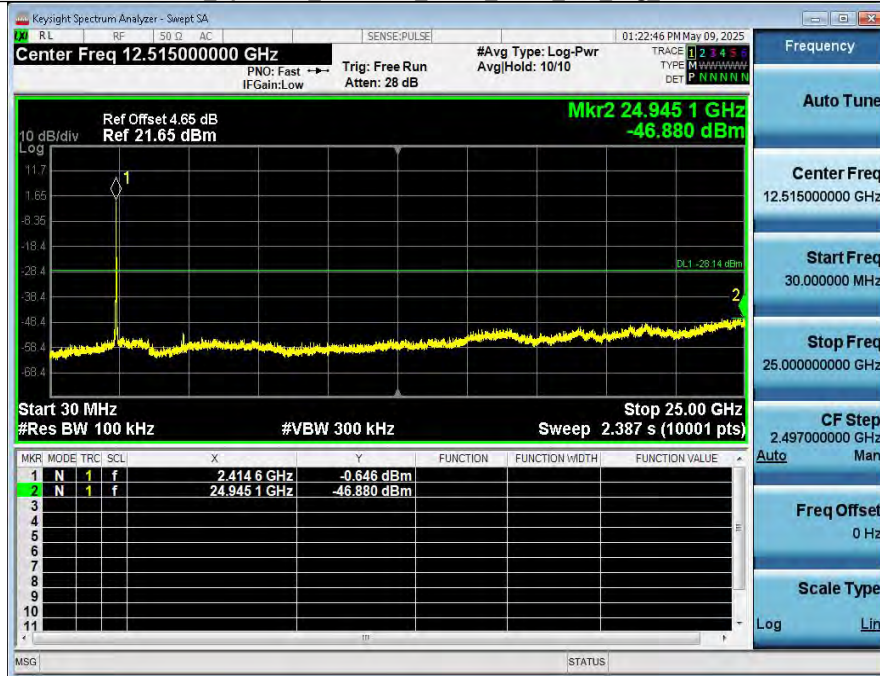


1_Reference_Level_NVNT_ANT1_802_11g_2412





2_Spurious_Emission_NVNT_ANT1_802_11g_2412

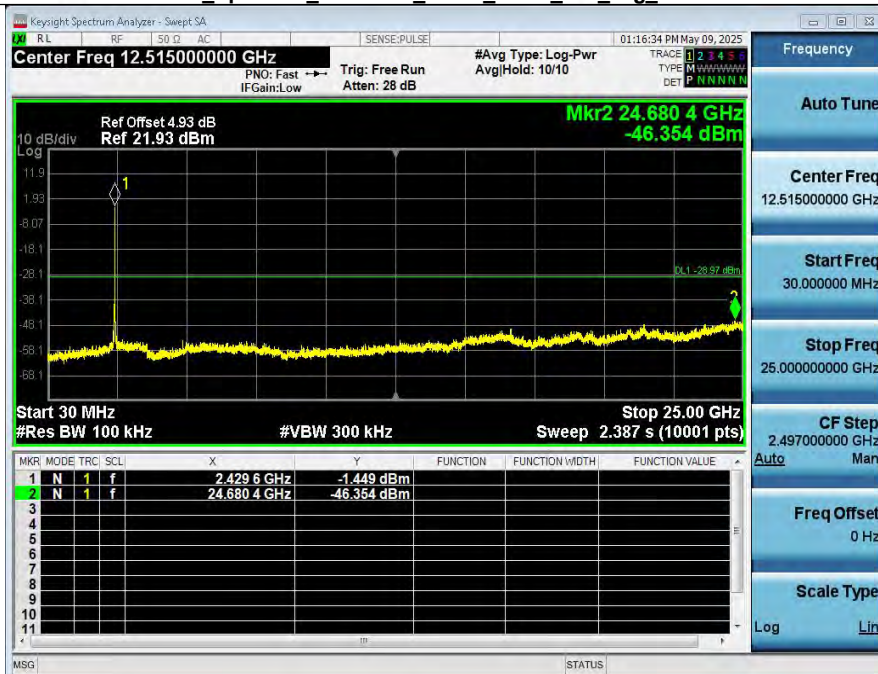


1_Reference_Level_NVNT_ANT1_802_11g_2437





2_Spurious_Emission_NVNT_ANT1_802_11g_2437

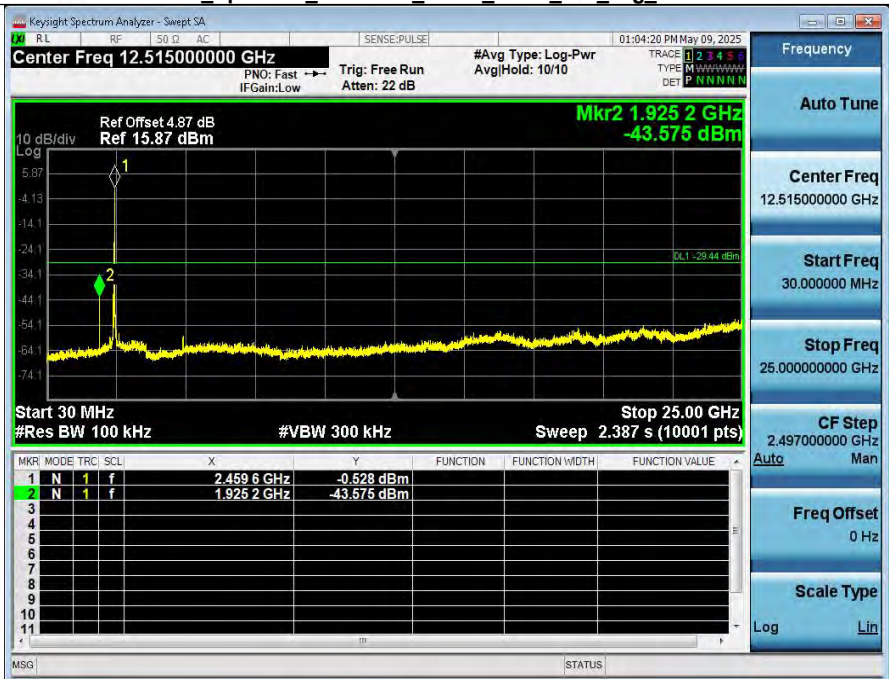


1_Reference_Level_NVNT_ANT1_802_11g_2462





2_Spurious Emission_NVNT_ANT1_802_11g_2462

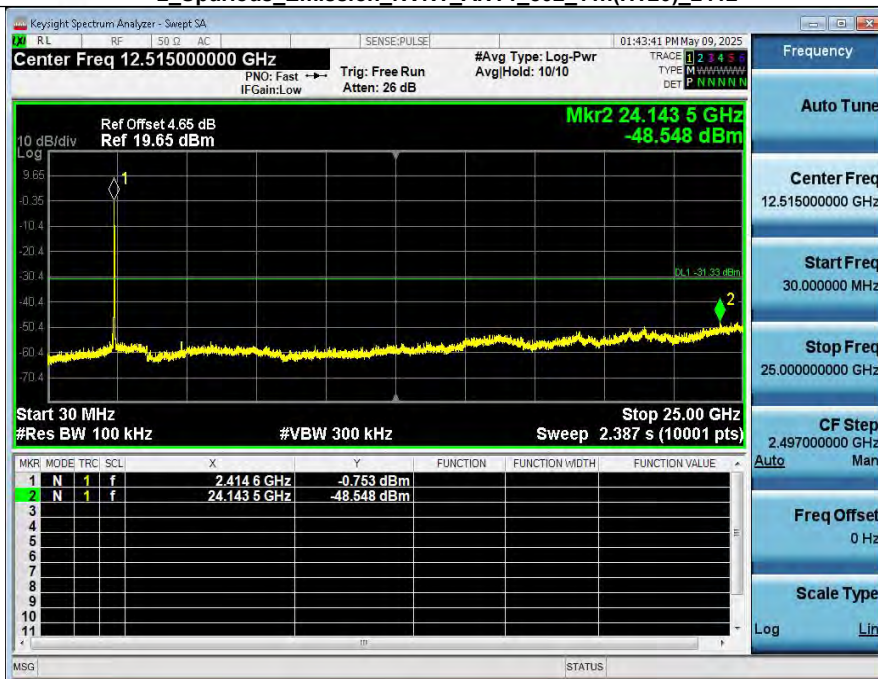


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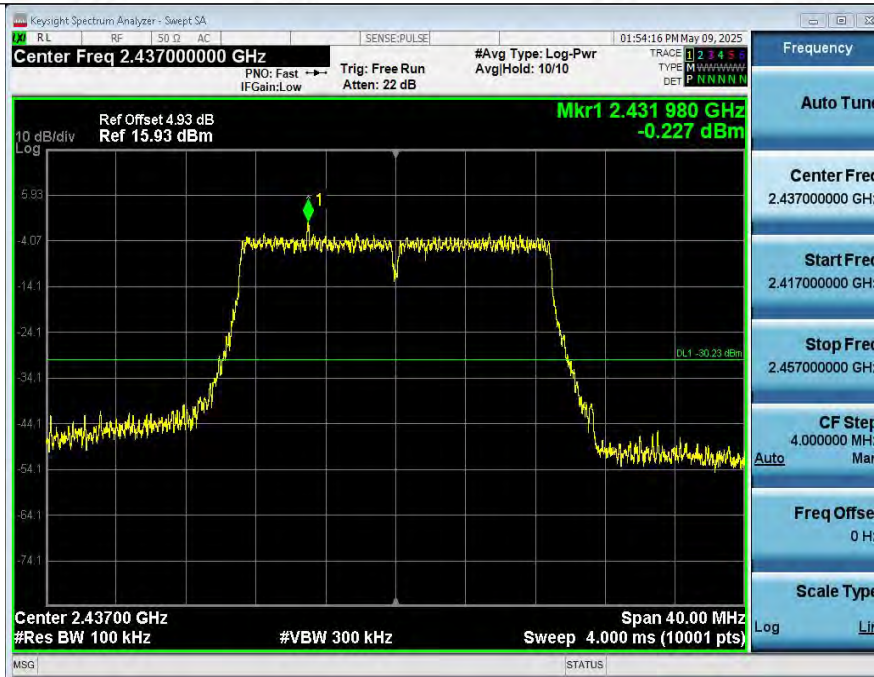


2_Spurious Emission_NVNT_ANT1_802_11n(HT20)_2412

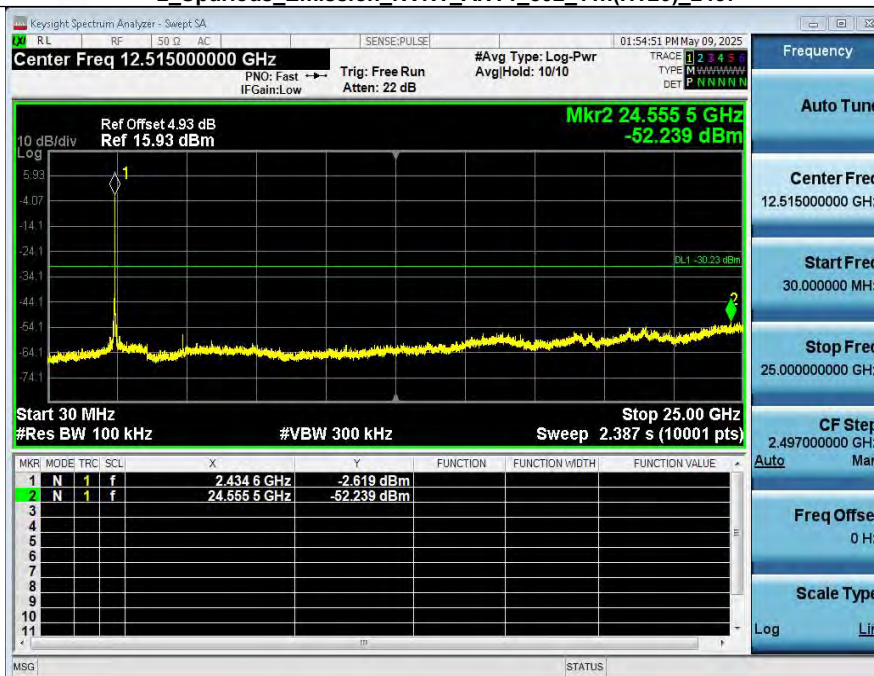


1_Reference Level_NVNT_ANT1_802_11n(HT20)_2437





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

