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FCC ID:2AYE6-FP221
FCC_2.4G_WIFI (Part15.247) Test Data

1. -6dB Bandwidth

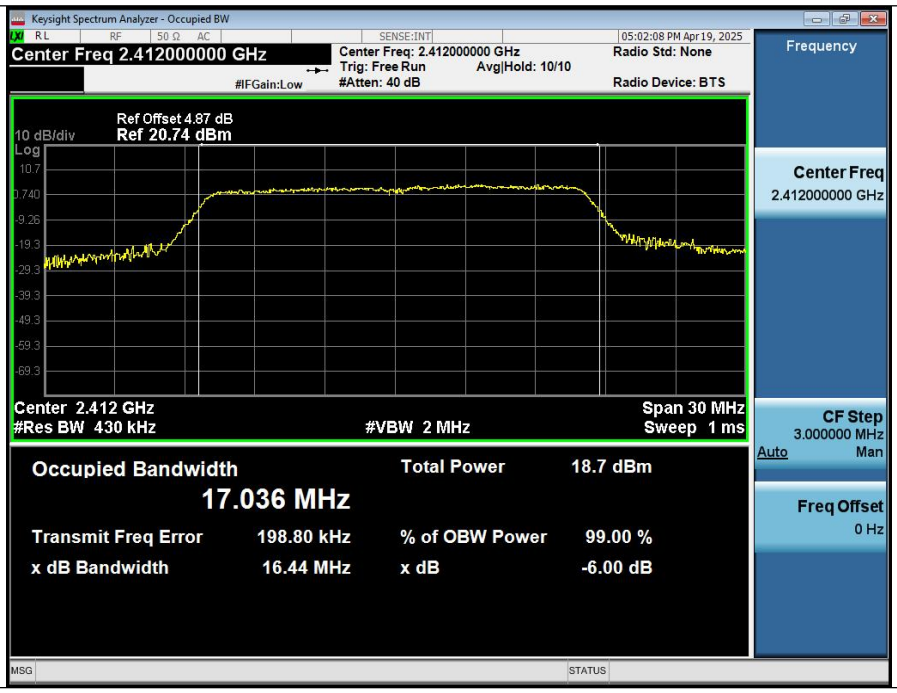
Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	9.19	500	Pass
NVNT	ANT1	802.11b	2437.00	9.15	500	Pass
NVNT	ANT1	802.11b	2462.00	9.22	500	Pass
NVNT	ANT1	802.11g	2412.00	16.44	500	Pass
NVNT	ANT1	802.11g	2437.00	16.50	500	Pass
NVNT	ANT1	802.11g	2462.00	16.35	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	17.32	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	17.41	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	17.19	500	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	36.29	500	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	36.20	500	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	36.39	500	Pass

-6dB_Bandwidth_NVNT_ANT1_802_11b_2412

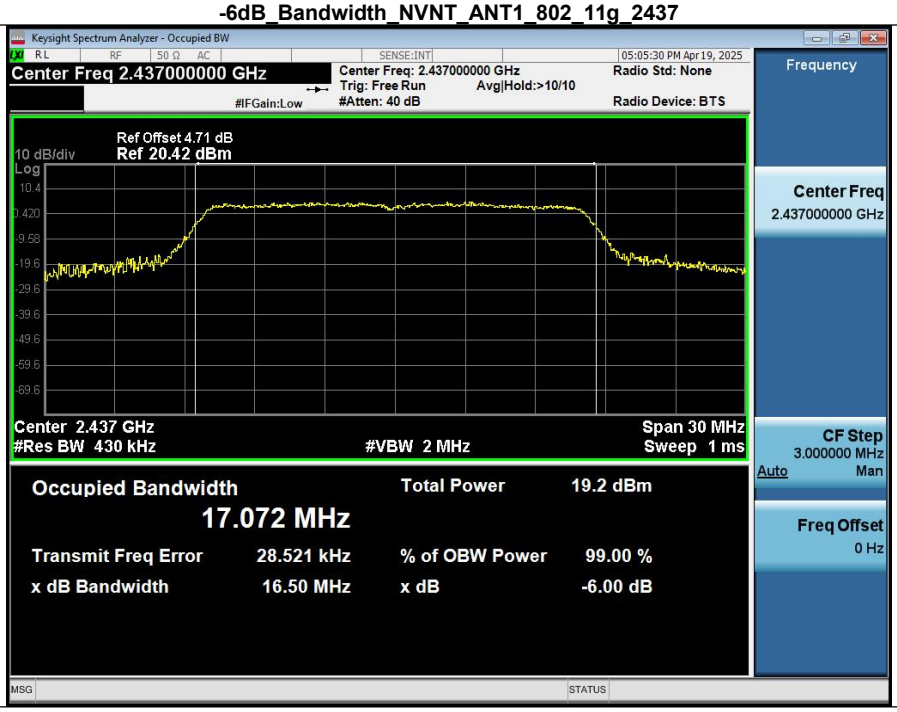
-6dB_Bandwidth_NVNT_ANT1_802_11b_2437

-6dB_Bandwidth_NVNT_ANT1_802_11b_2462

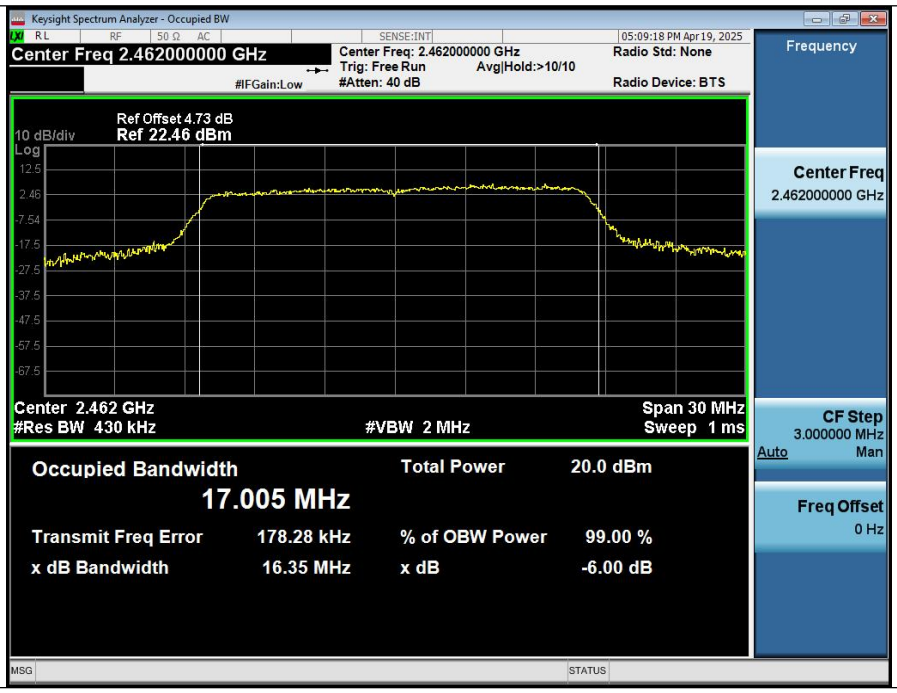
-6dB_Bandwidth_NVNT_ANT1_802_11g_2412



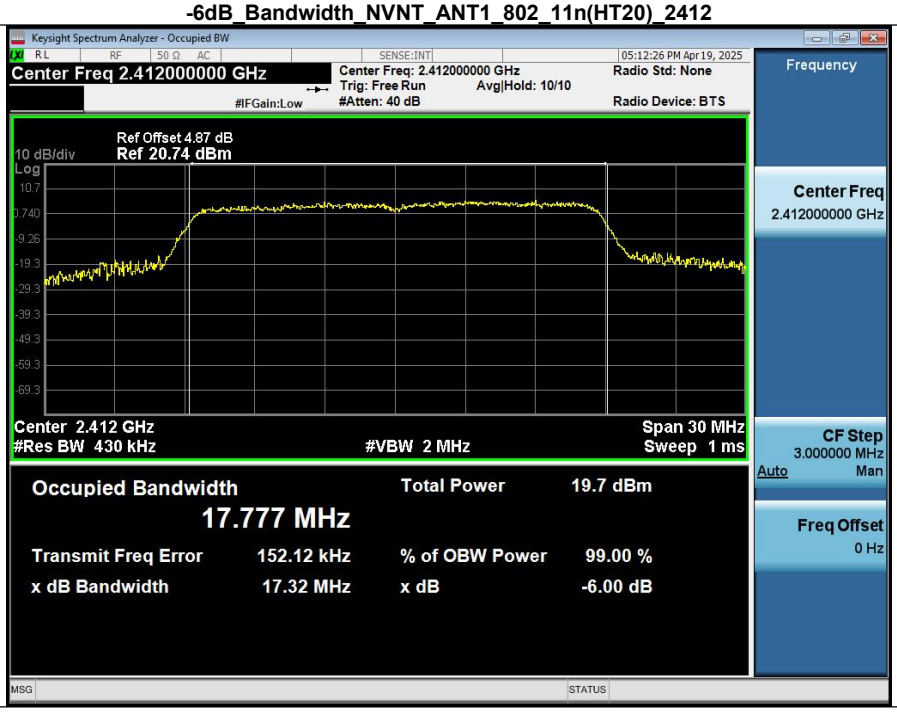
-6dB_Bandwidth_NVNT_ANT1_802_11g_2437



-6dB_Bandwidth_NVNT_ANT1_802_11g_2462



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2412



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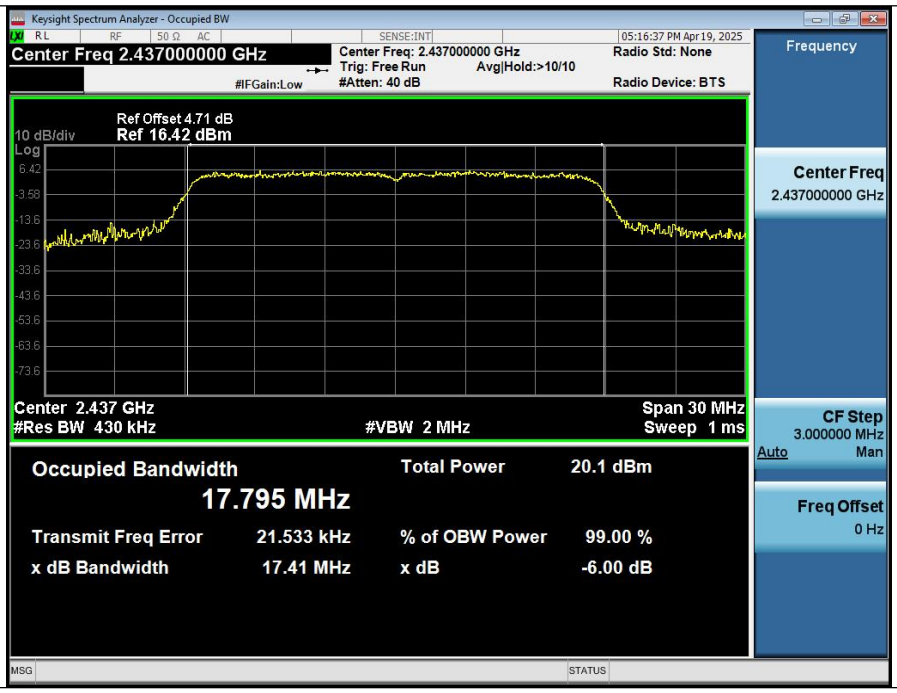
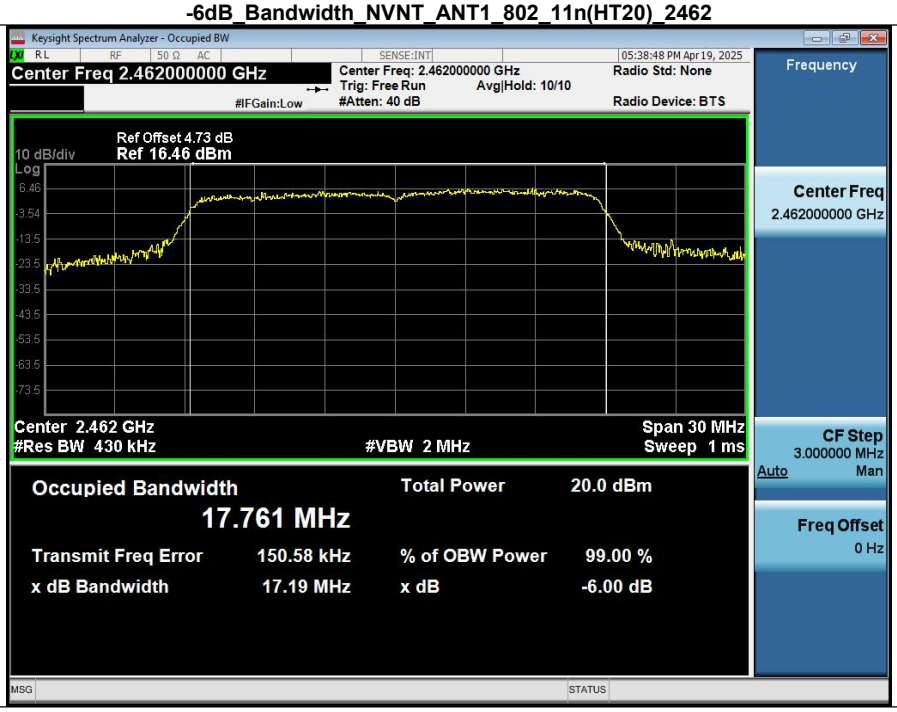
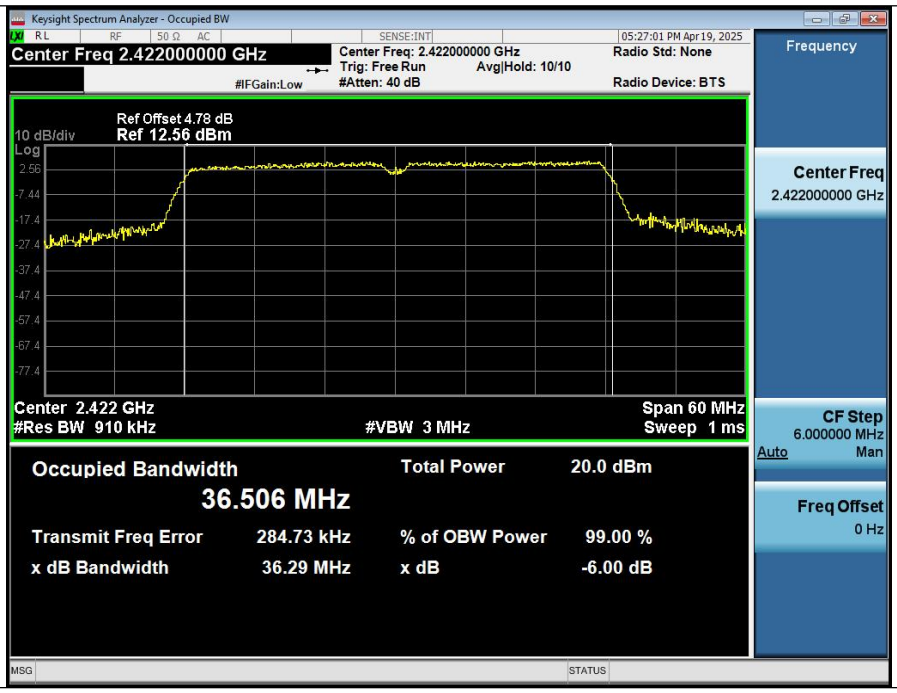


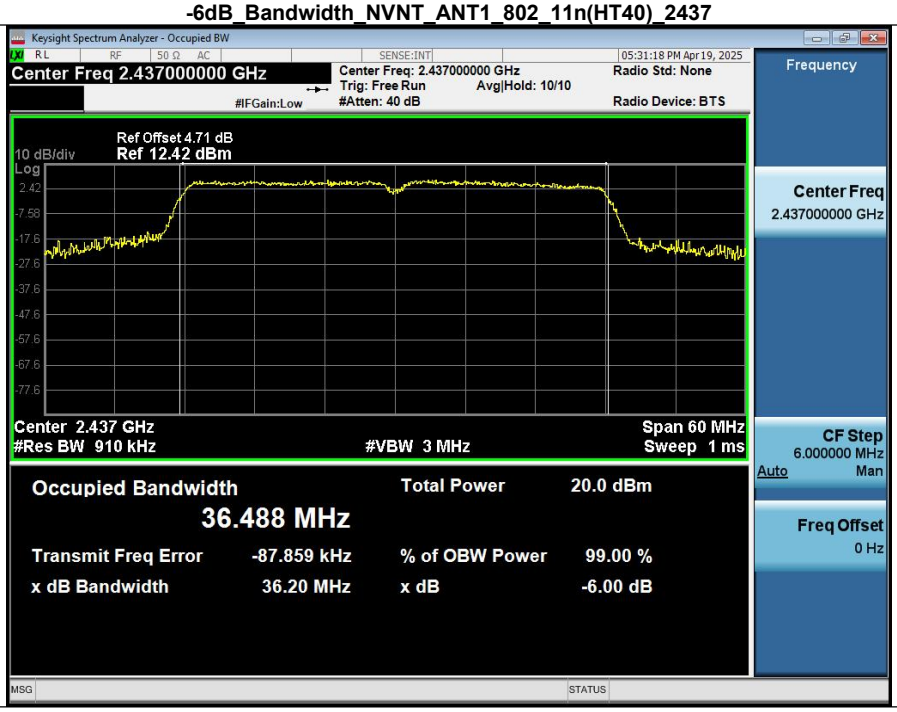
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462



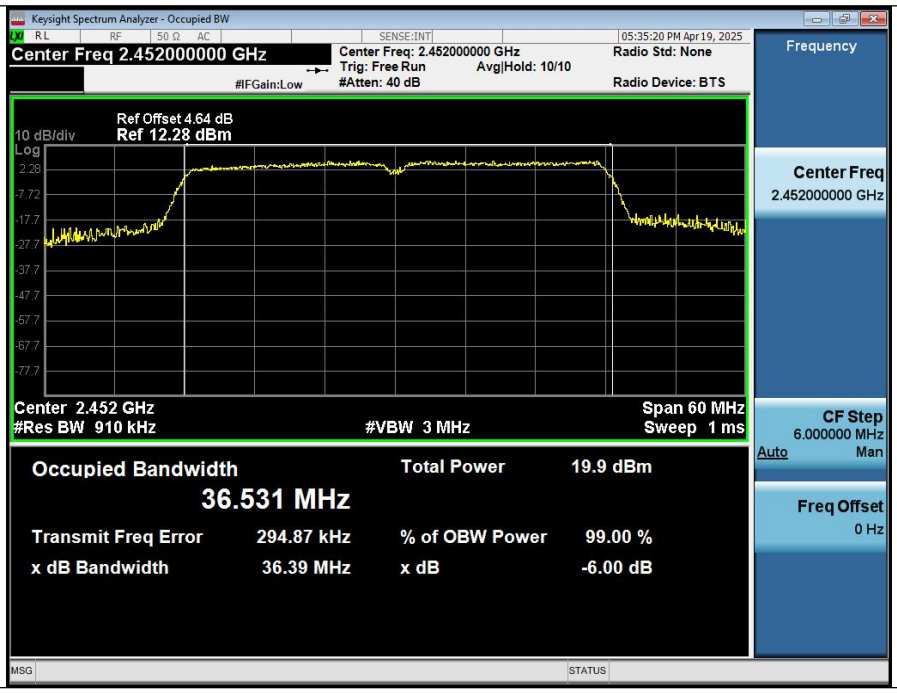
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2422



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2437



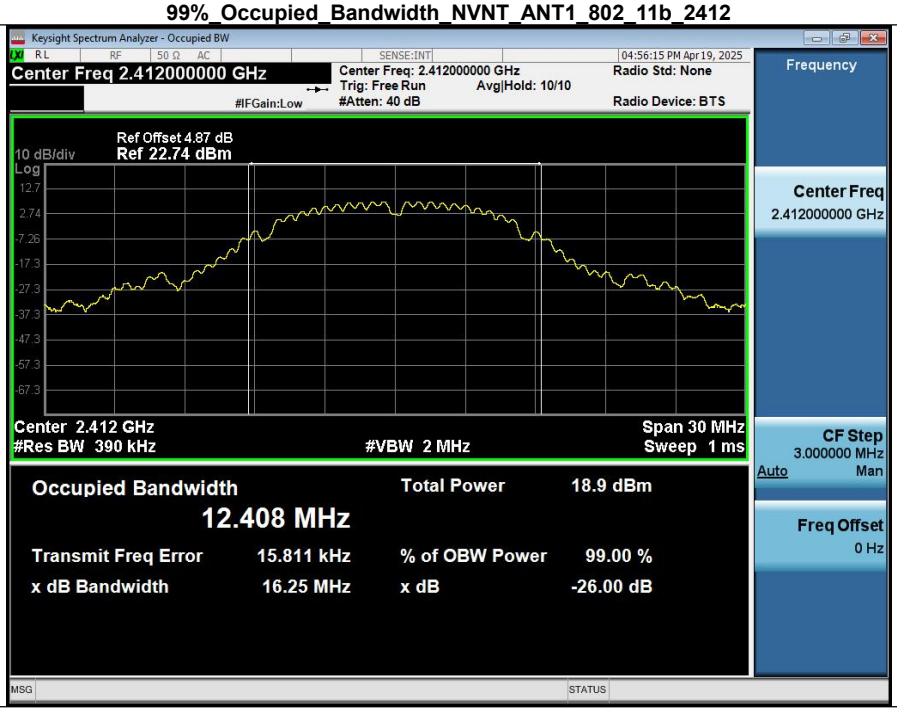
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2452


Keysight Spectrum Analyzer - Occupied BW
Center Freq 2.452000000 GHz
Center Freq: 2.452000000 GHz
Trig: Free Run
Avg|Hold: 10/10
#Atten: 40 dB
Radio Std: None
Radio Device: BTS
05:35:20 PM Apr 19, 2025
Frequency
Ref Offset 4.64 dB
10 dB/div
Ref 12.28 dBm
Center Freq
2.452000000 GHz
Center 2.452 GHz
#Res BW 910 kHz
#VBW 3 MHz
Span 60 MHz
Sweep 1 ms
CF Step
6.000000 MHz
Auto
Man
Occupied Bandwidth
36.531 MHz
Total Power 19.9 dBm
Transmit Freq Error 294.87 kHz
% of OBW Power 99.00 %
x dB Bandwidth 36.39 MHz
x dB -6.00 dB
Freq Offset
0 Hz

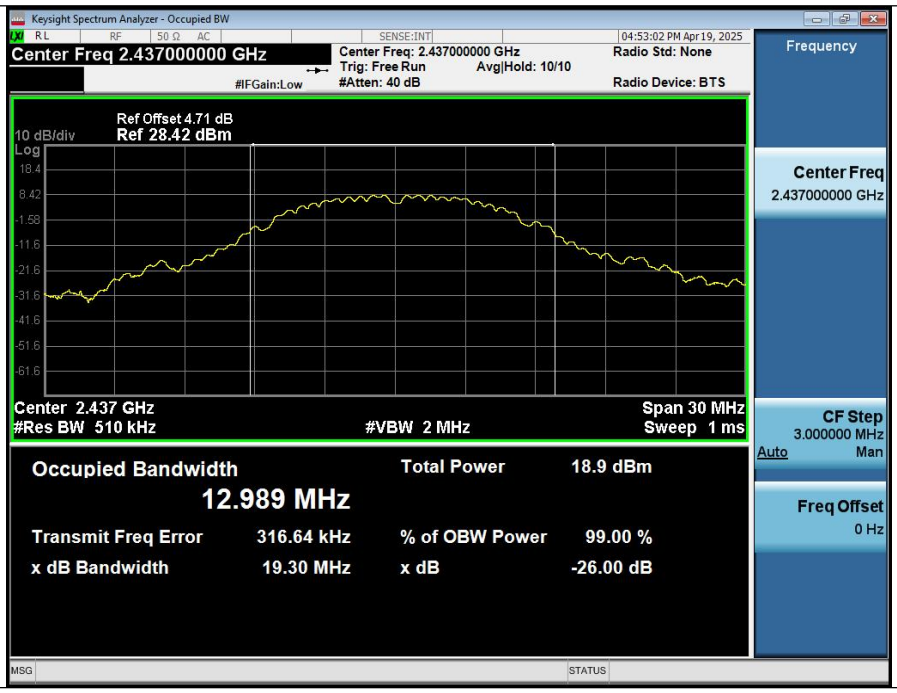
2. 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99%%BW(MHz)
NVNT	ANT1	802.11b	2412.00	12.408
NVNT	ANT1	802.11b	2437.00	12.989
NVNT	ANT1	802.11b	2462.00	12.609
NVNT	ANT1	802.11g	2412.00	17.191
NVNT	ANT1	802.11g	2437.00	17.157
NVNT	ANT1	802.11g	2462.00	17.197
NVNT	ANT1	802.11n(HT20)	2412.00	17.915
NVNT	ANT1	802.11n(HT20)	2437.00	17.906
NVNT	ANT1	802.11n(HT20)	2462.00	17.776
NVNT	ANT1	802.11n(HT40)	2422.00	36.558
NVNT	ANT1	802.11n(HT40)	2437.00	36.548
NVNT	ANT1	802.11n(HT40)	2452.00	36.513

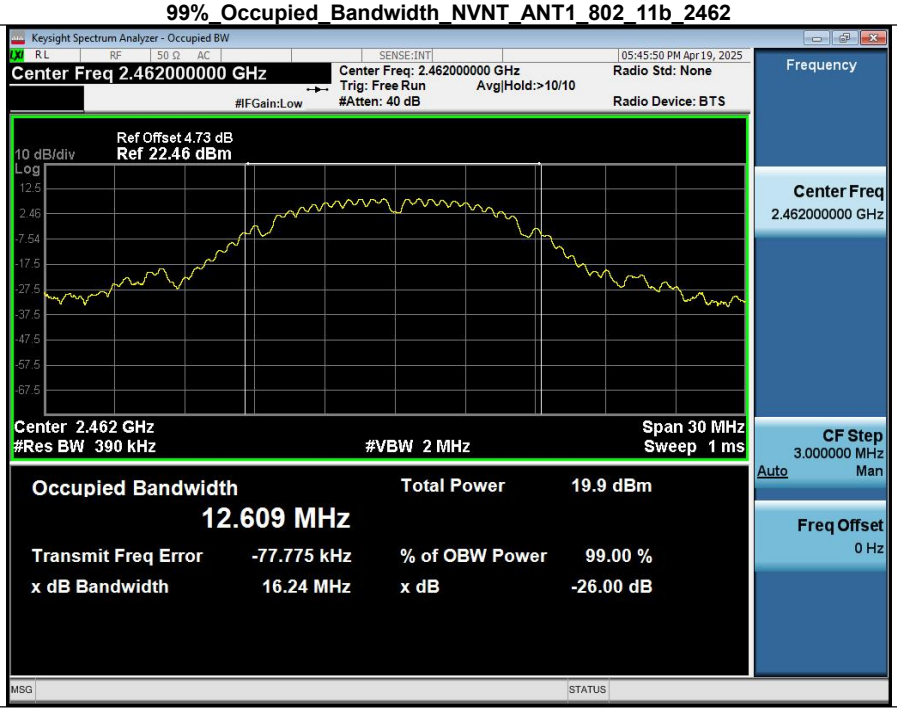
99%_Occupied_Bandwidth_NVNT_ANT1_802_11b_2412



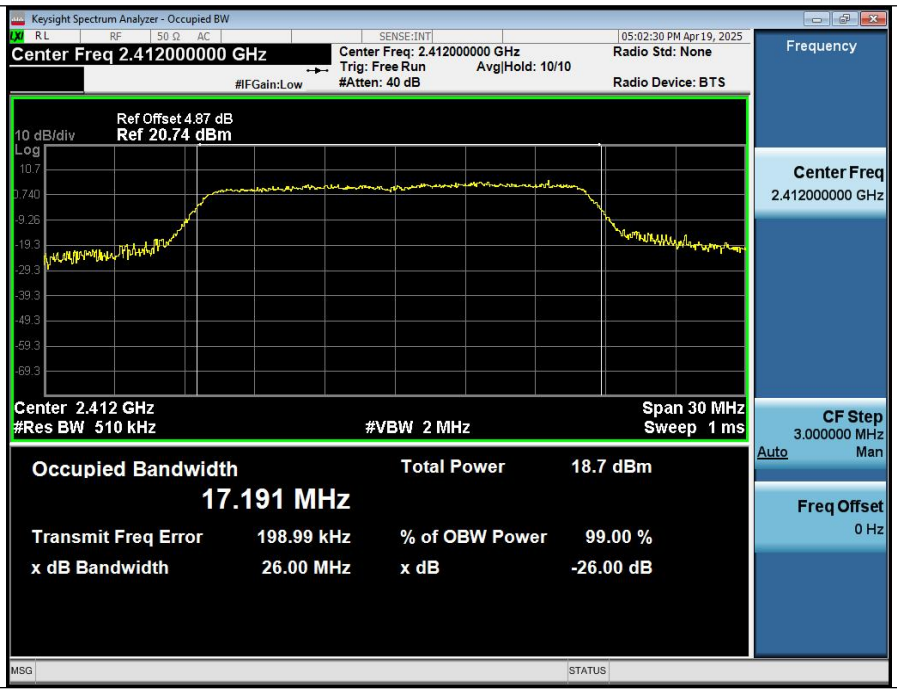
99%_Occupied_Bandwidth_NVNT_ANT1_802_11b_2437



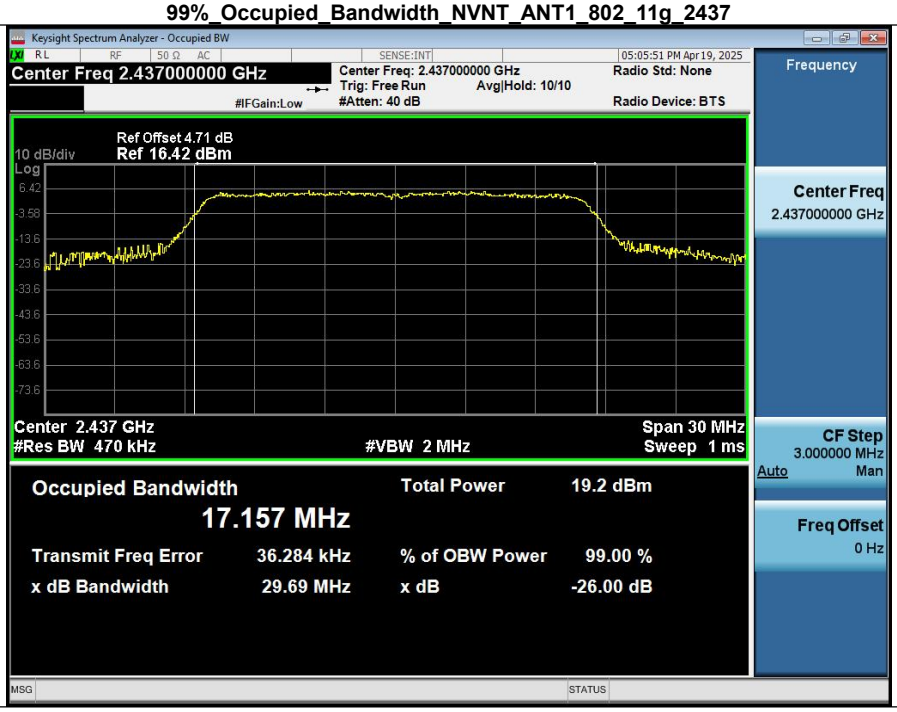
99%_Occupied_Bandwidth_NVNT_ANT1_802_11b_2462



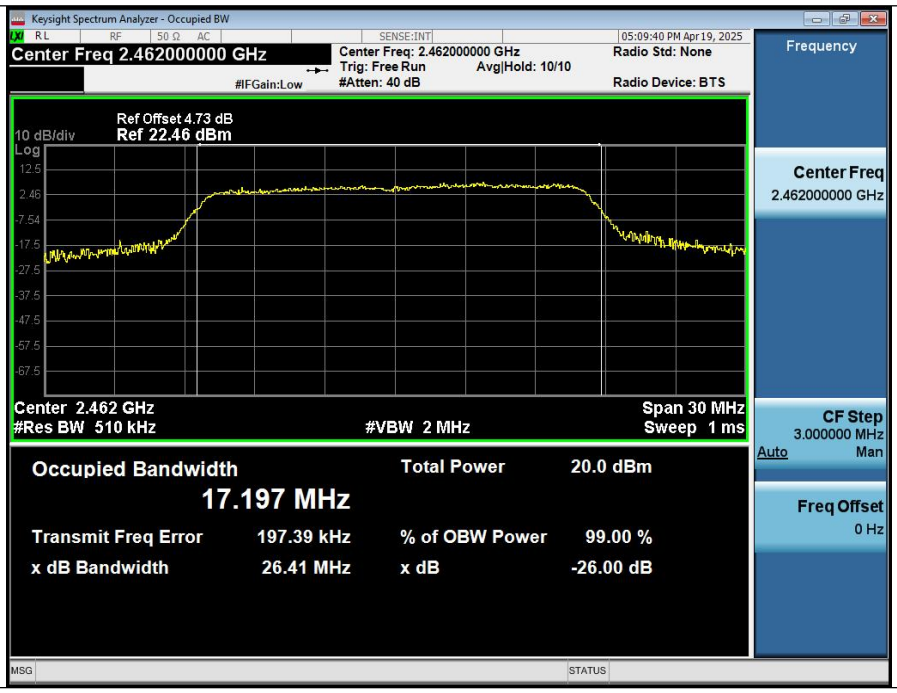
99%_Occupied_Bandwidth_NVNT_ANT1_802_11g_2412



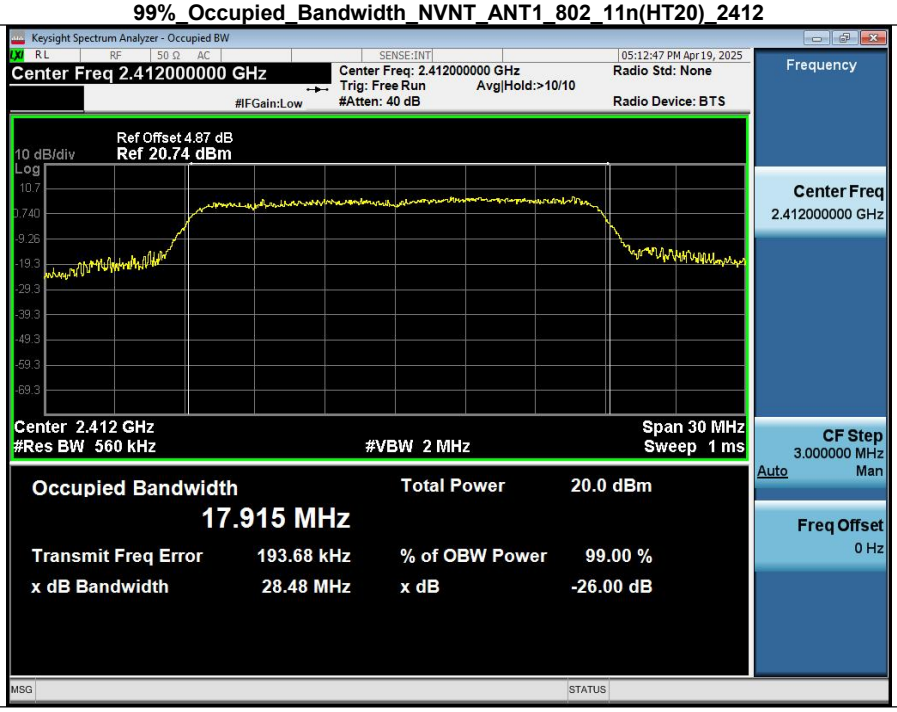
99%_Occupied_Bandwidth_NVNT_ANT1_802_11g_2437



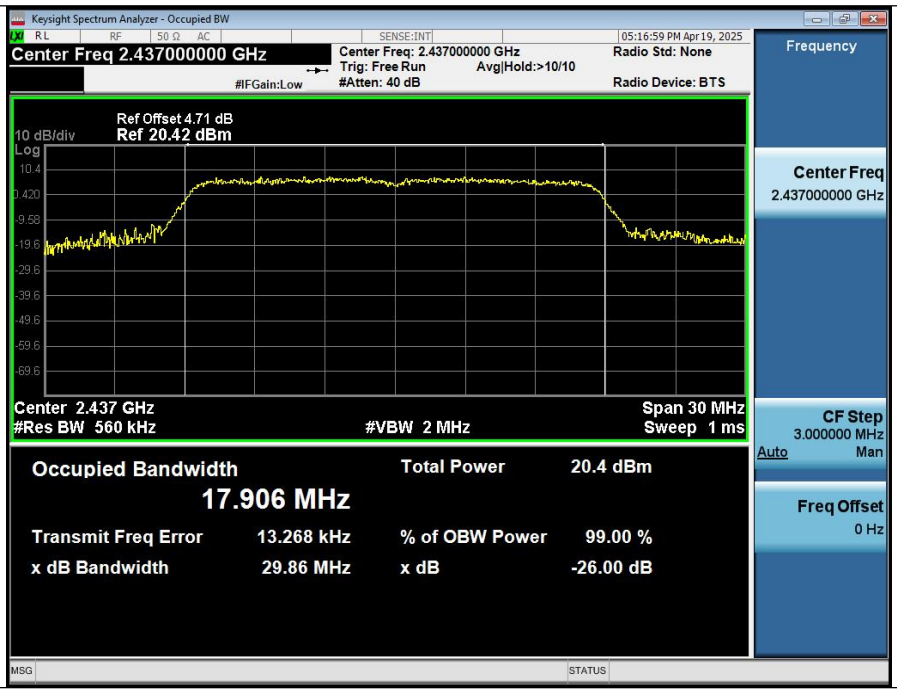
99%_Occupied_Bandwidth_NVNT_ANT1_802_11g_2462



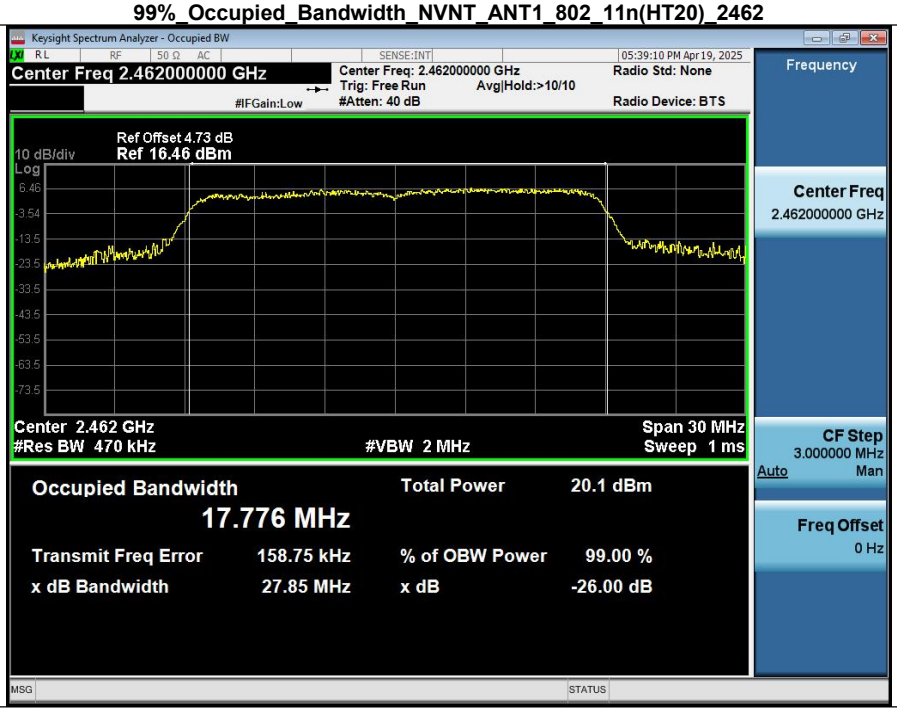
99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2412



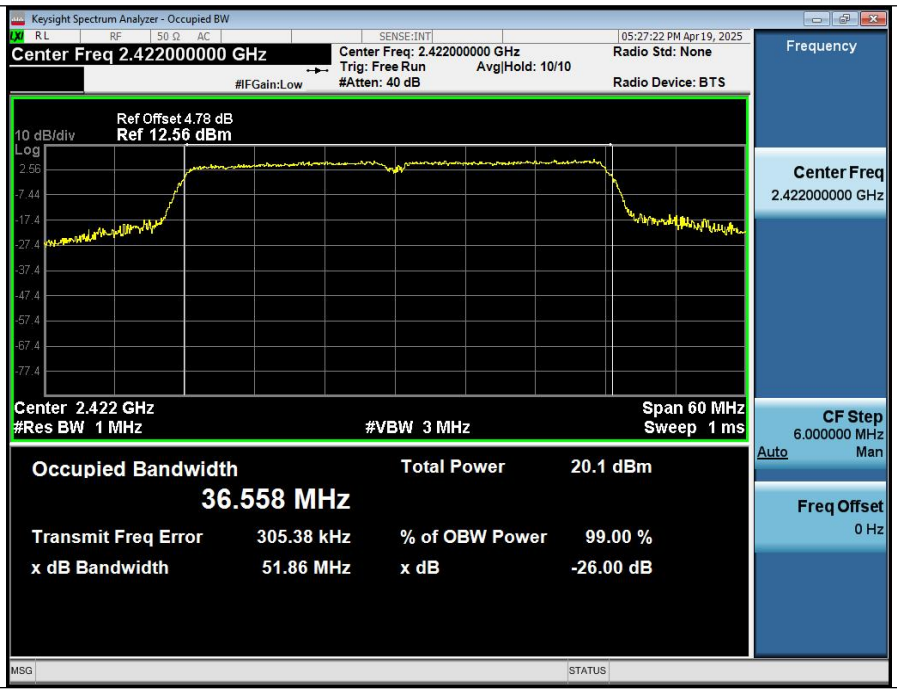
99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2437



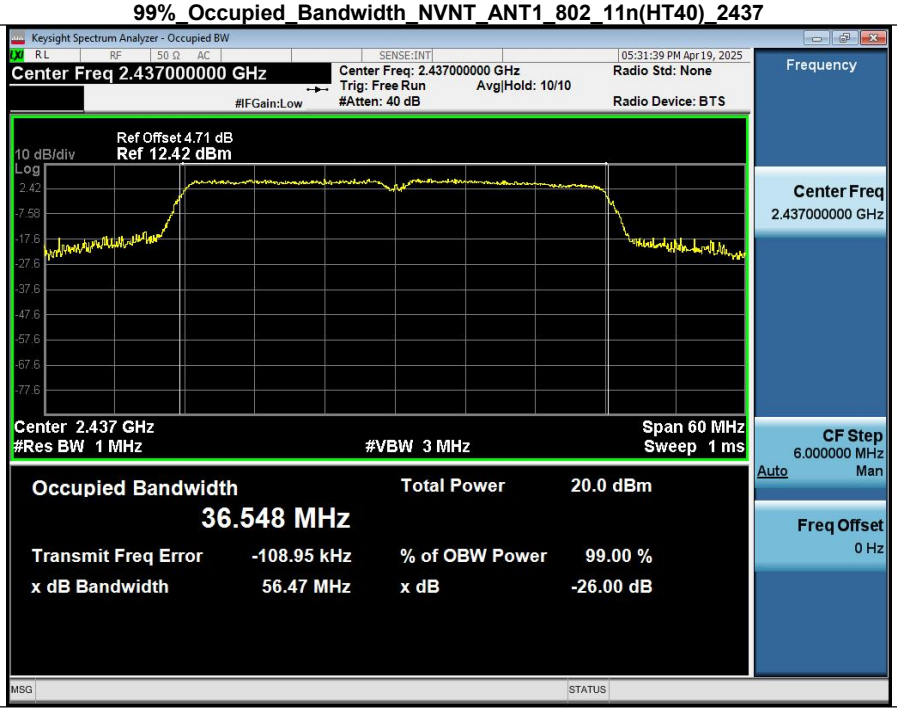
99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462



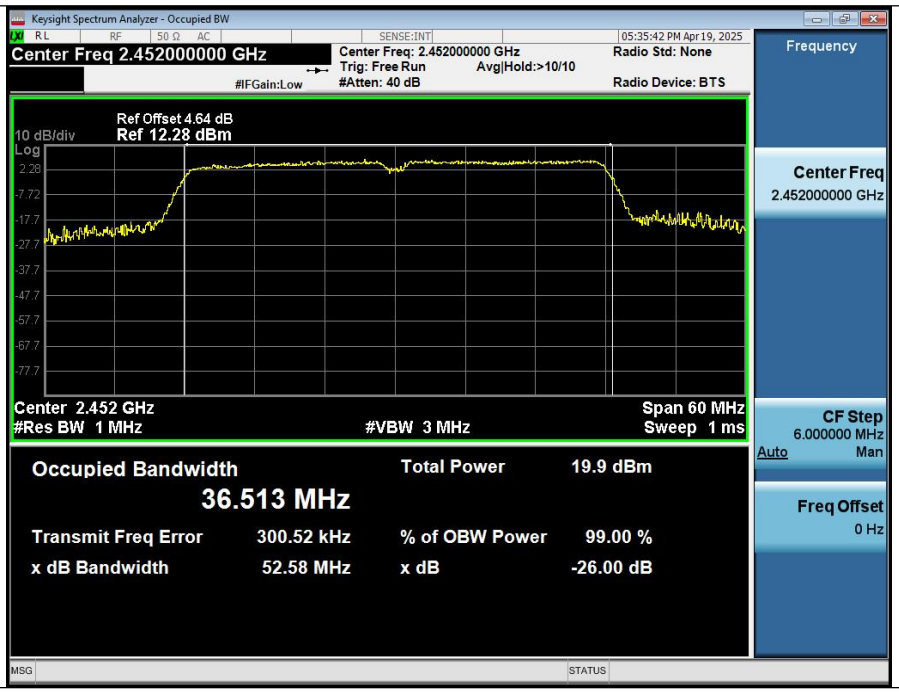
99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT40)_2422



99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT40)_2437



99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT40)_2452


Keysight Spectrum Analyzer - Occupied BW
Center Freq 2.452000000 GHz
Center Freq: 2.452000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 40 dB
Radio Std: None
Radio Device: BTS
05:35:42 PM Apr 19, 2025
#IFGain:Low
Ref Offset 4.64 dB
10 dB/div
Ref 12.28 dBm
Log
Center 2.452 GHz
#Res BW 1 MHz
#VBW 3 MHz
Span 60 MHz
Sweep 1 ms
Occupied Bandwidth
36.513 MHz
Total Power 19.9 dBm
Transmit Freq Error 300.52 kHz
% of OBW Power 99.00 %
x dB Bandwidth 52.58 MHz
x dB -26.00 dB
Frequency
Center Freq
2.452000000 GHz
CF Step
6.000000 MHz
Auto Man
Freq Offset
0 Hz
MSG
STATUS

3. MAX. Output Power

Condition	Antenna	Modulation	Frequency (MHz)	Detector	Conducted Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	Peak	18.25	30	Pass
NVNT	ANT1	802.11b	2437.00	Peak	18.91	30	Pass
NVNT	ANT1	802.11b	2462.00	Peak	19.16	30	Pass
NVNT	ANT1	802.11g	2412.00	Peak	18.28	30	Pass
NVNT	ANT1	802.11g	2437.00	Peak	18.72	30	Pass
NVNT	ANT1	802.11g	2462.00	Peak	19.57	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	Peak	19.31	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	Peak	19.73	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	Peak	19.64	30	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	Peak	19.09	30	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	Peak	19.02	30	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	Peak	18.98	30	Pass

4. Power Spectral Density

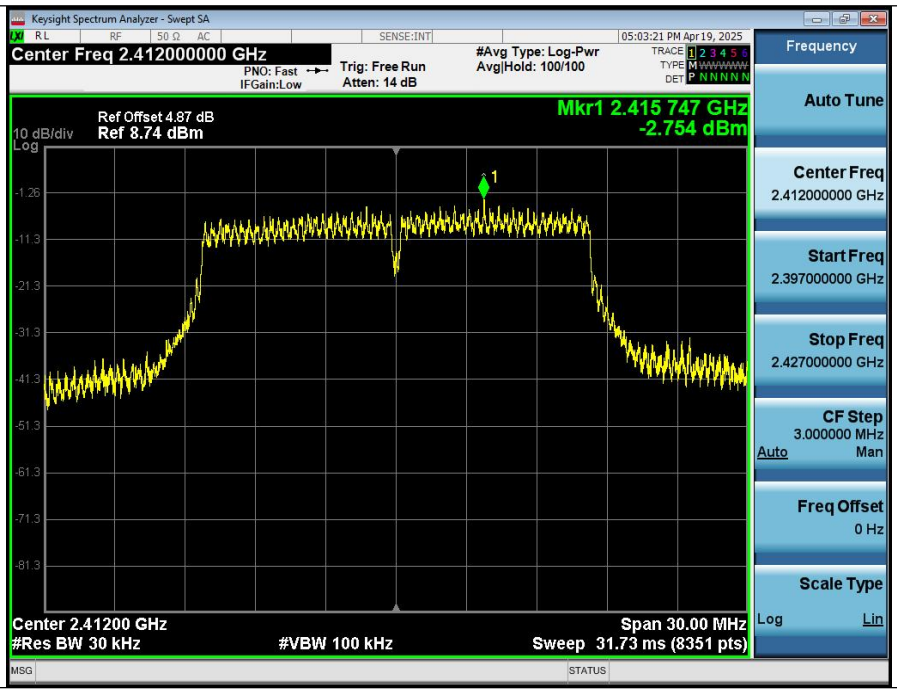
Condition	Antenna	Modulation	Frequency (MHz)	SA_PSD(dBm/30kHz)	RB factor(dB)	PSD(dBm/3kHz)	limit(dBm/3kHz)	Result
NVNT	ANT1	802.11b	2412.00	3.68	-10.00	-6.32	8	Pass
NVNT	ANT1	802.11b	2437.00	5.31	-10.00	-4.69	8	Pass
NVNT	ANT1	802.11b	2462.00	4.15	-10.00	-5.85	8	Pass
NVNT	ANT1	802.11g	2412.00	-2.75	-10.00	-12.75	8	Pass
NVNT	ANT1	802.11g	2437.00	-3.71	-10.00	-13.71	8	Pass
NVNT	ANT1	802.11g	2462.00	-2.27	-10.00	-12.27	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-3.66	-10.00	-13.66	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-3.44	-10.00	-13.44	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-3.35	-10.00	-13.35	8	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	-7.41	-10.00	-17.41	8	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	-7.47	-10.00	-17.47	8	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	-7.63	-10.00	-17.63	8	Pass

Power_Spectral_Density_NVNT_ANT1_802_11b_2412

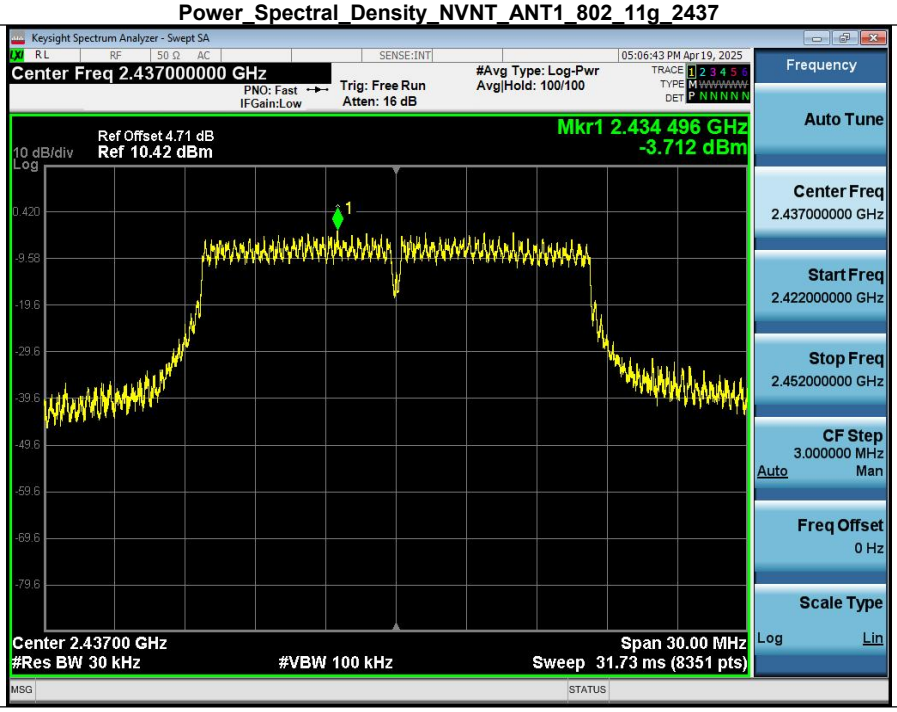
Power_Spectral_Density_NVNT_ANT1_802_11b_2437

Power_Spectral_Density_NVNT_ANT1_802_11b_2462

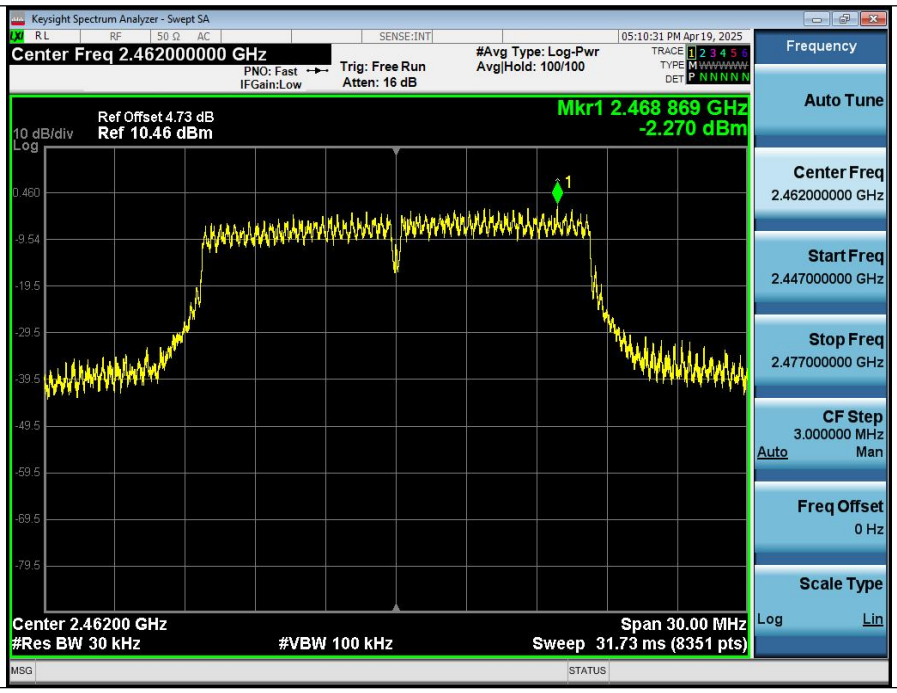
Power_Spectral_Density_NVNT_ANT1_802_11g_2412



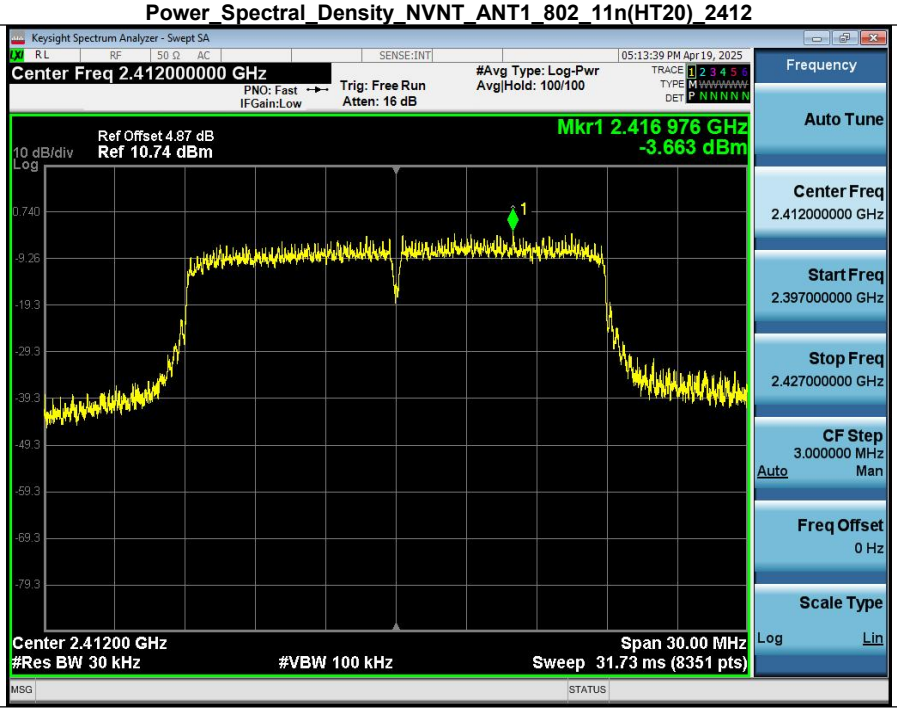
Power_Spectral_Density_NVNT_ANT1_802_11g_2437



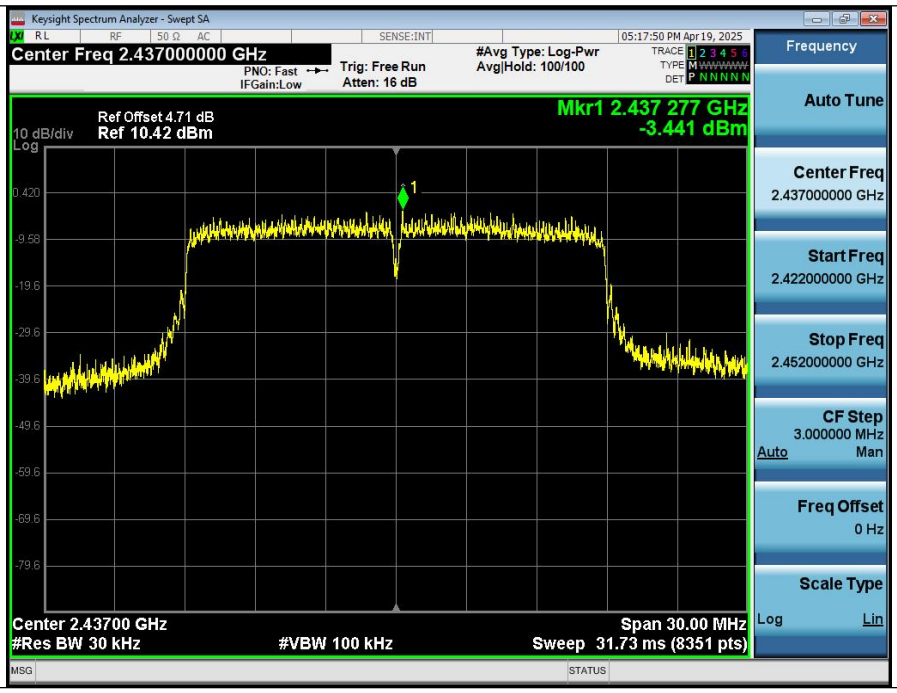
Power_Spectral_Density_NVNT_ANT1_802_11g_2462



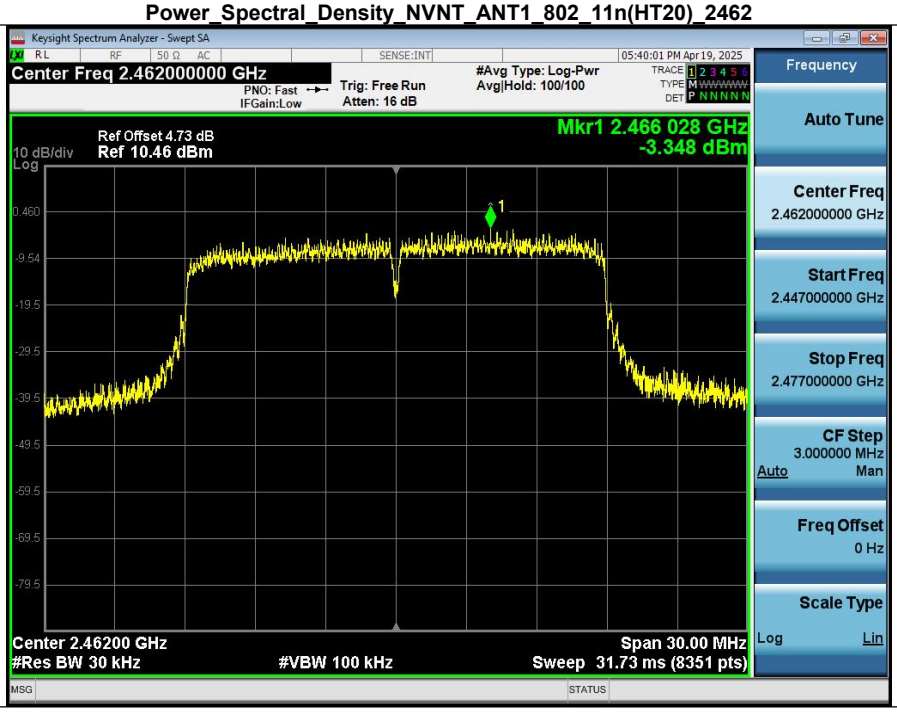
Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2412



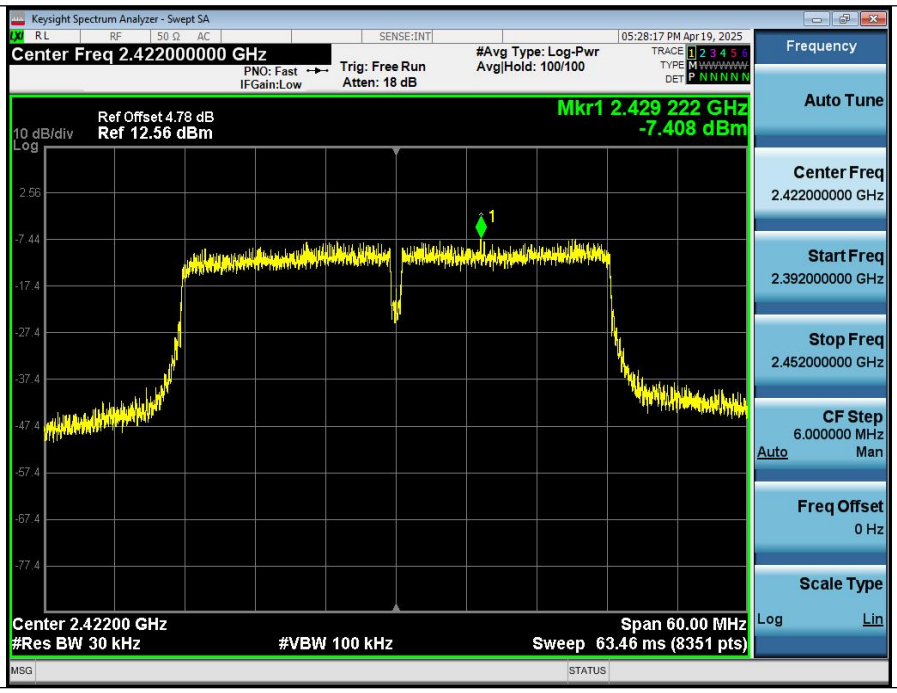
Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2437



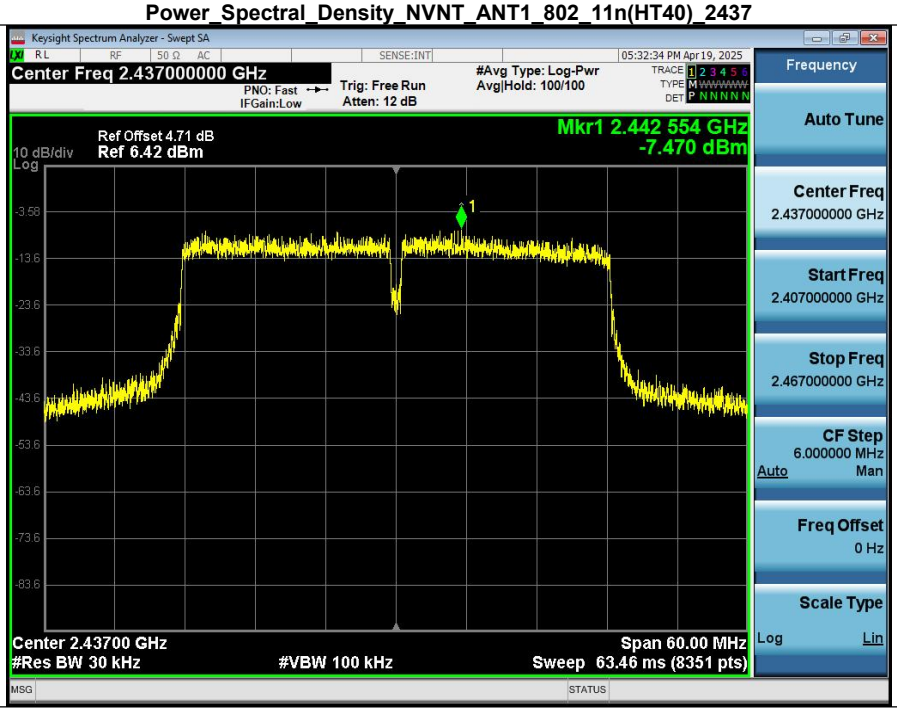
Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2462



Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2422



Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2437



Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2452

Keysight Spectrum Analyzer - Swept SA
Center Freq 2.452000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 18 dB
#Avg Type: Log-Pwr
Avg|Hold: 100/100
05:36:37 PM Apr 19, 2025
Ref Offset 4.64 dB
10 dB/div
Ref 12.28 dBm
Log
Mkr1 2.466 982 GHz
-7.626 dBm
Center 2.45200 GHz
#Res BW 30 kHz
#VBW 100 kHz
Span 60.00 MHz
Sweep 63.46 ms (8351 pts)
Frequency
Auto Tune
Center Freq
2.452000000 GHz
Start Freq
2.422000000 GHz
Stop Freq
2.482000000 GHz
CF Step
6.000000 MHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin