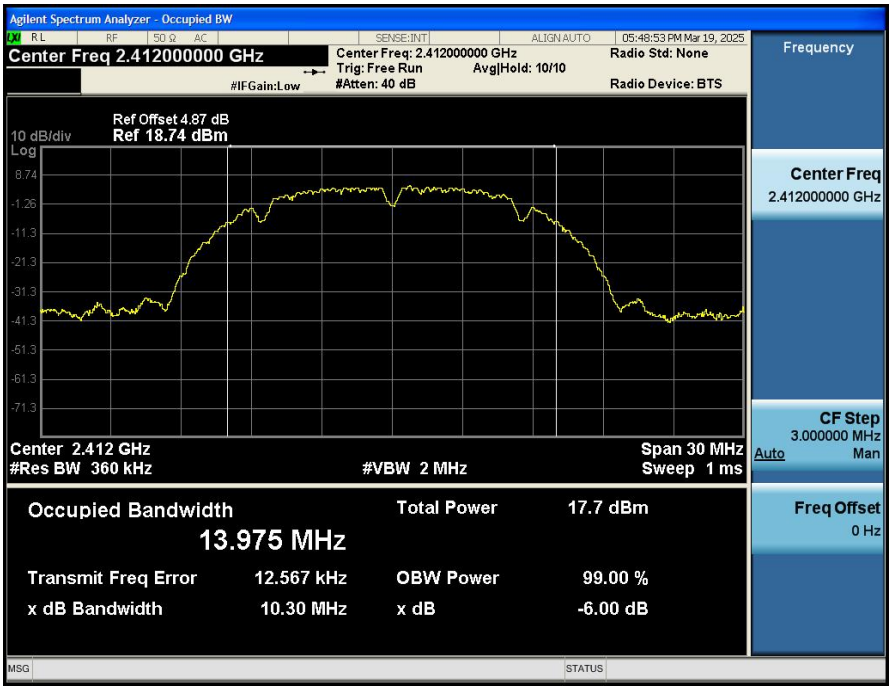
Appendix Test Data

Report No.:	1814C50078412501	Test Sample No.:	1-2-2
Start Test Date:	2025.3.18	Finish Test Date:	2025.3.19
Test Engineer:	Qiangfei Yang	Auditor:	Justin Feng
Temperature:	19.7℃	Relative Humidity:	32%
Pressure:	101kPa		

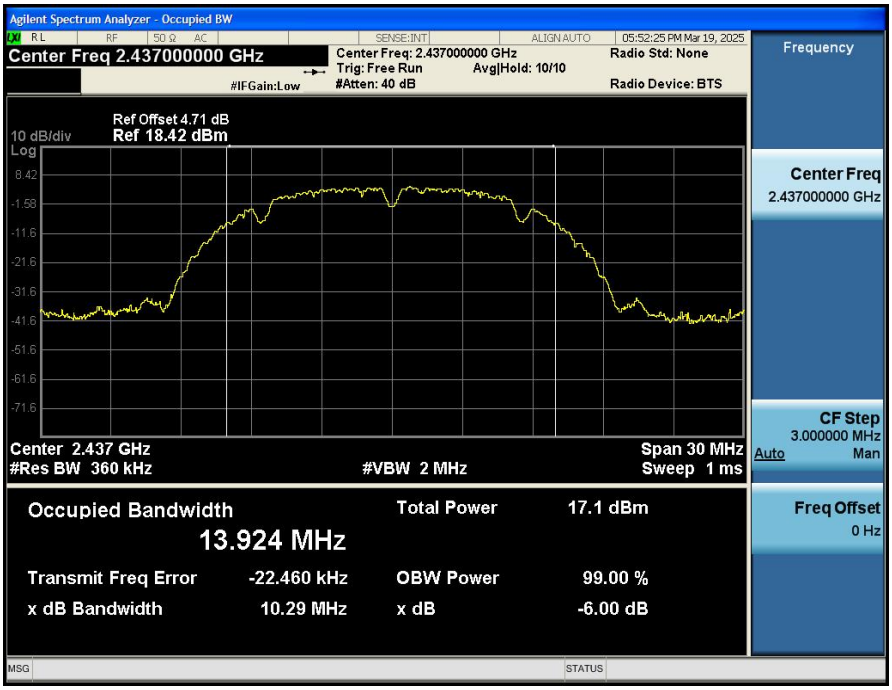
Appendix A: -6dB Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	10.30	500	Pass
NVNT	ANT1	802.11b	2437.00	10.29	500	Pass
NVNT	ANT1	802.11b	2462.00	10.28	500	Pass
NVNT	ANT1	802.11g	2412.00	14.98	500	Pass
NVNT	ANT1	802.11g	2437.00	15.14	500	Pass
NVNT	ANT1	802.11g	2462.00	14.97	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	16.08	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	16.07	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	16.02	500	Pass

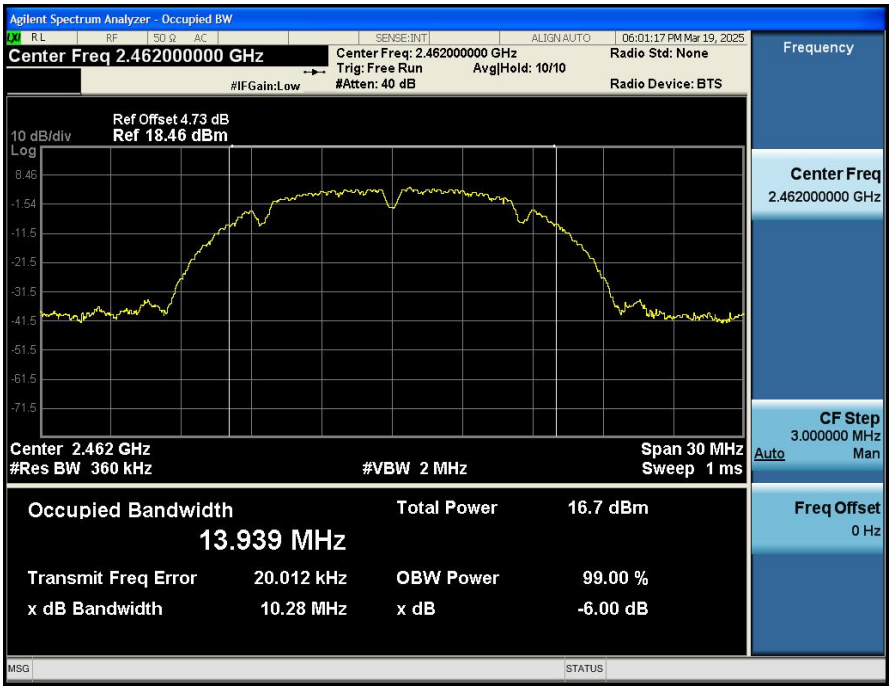
-6dB_Bandwidth_NVNT_ANT1_802_11b_2412



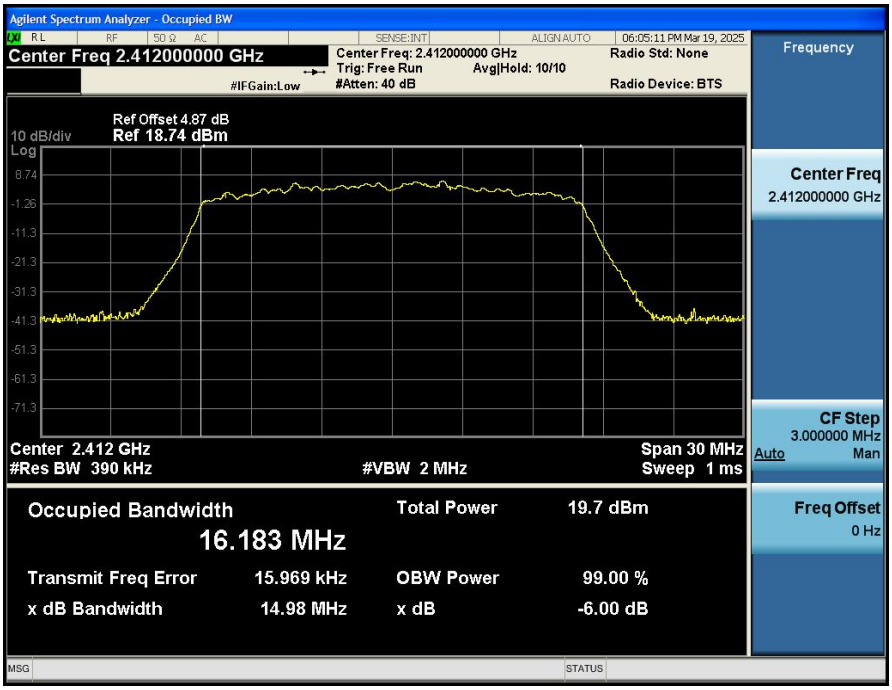
-6dB_Bandwidth_NVNT_ANT1_802_11b_2437



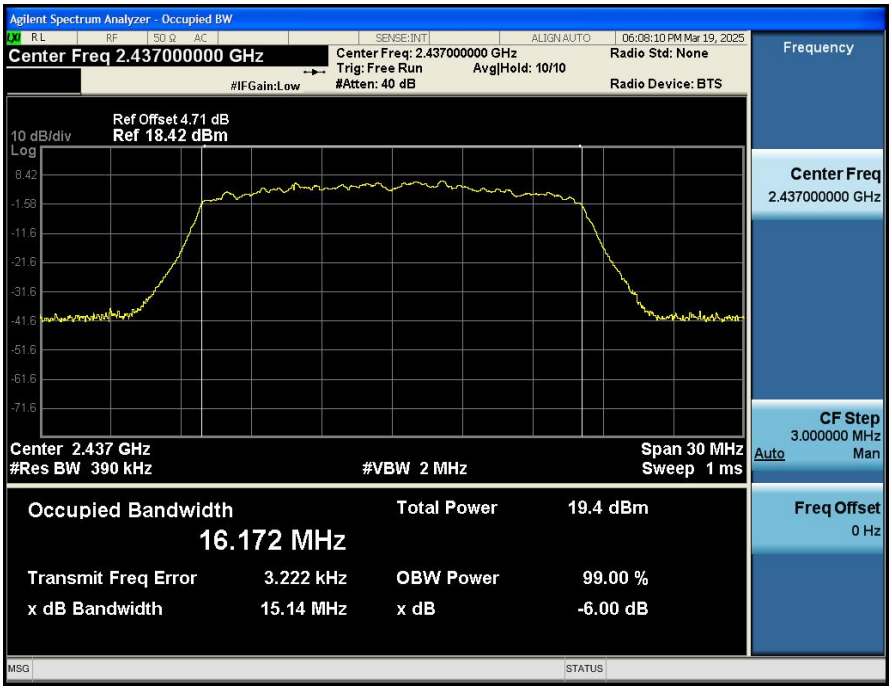
-6dB_Bandwidth_NVNT_ANT1_802_11b_2462



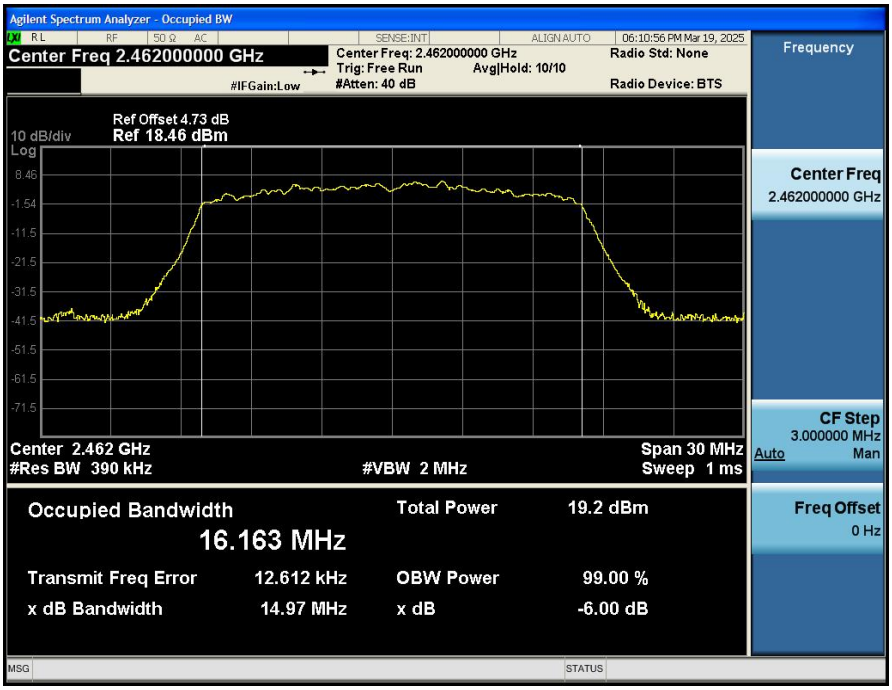
-6dB_Bandwidth_NVNT_ANT1_802_11g_2412



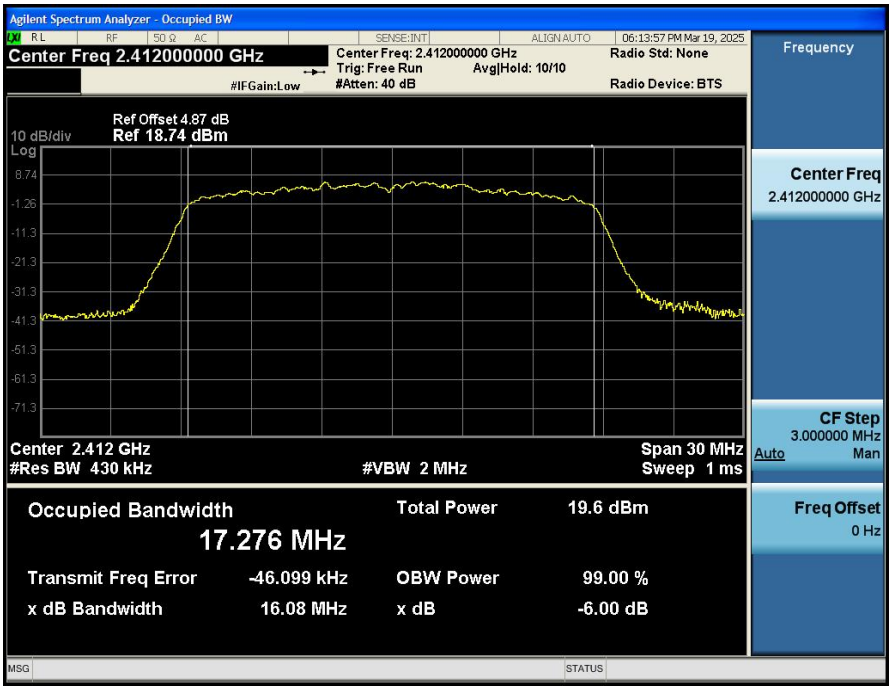
-6dB_Bandwidth_NVNT_ANT1_802_11g_2437



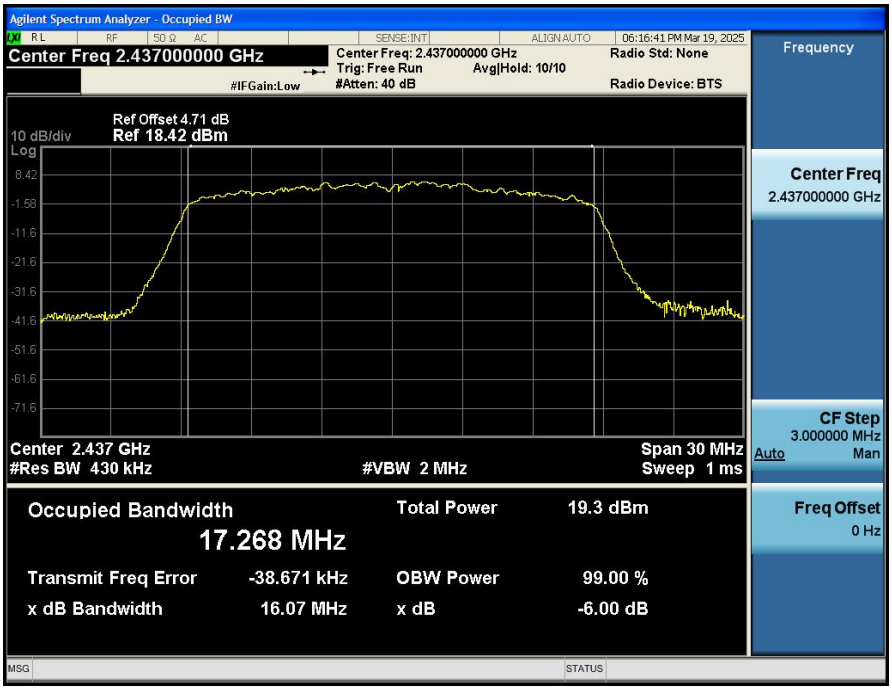
-6dB_Bandwidth_NVNT_ANT1_802_11g_2462



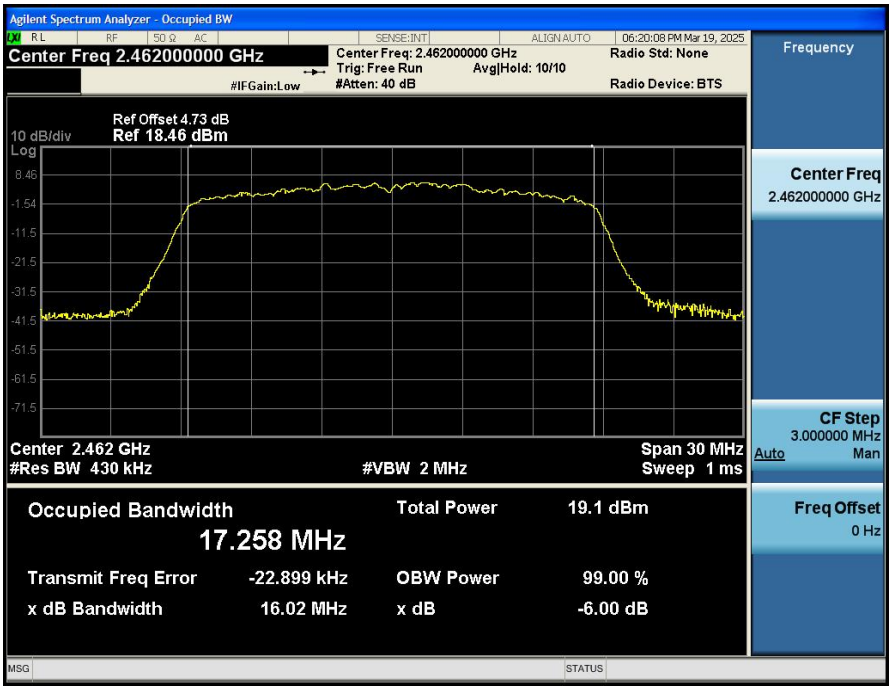
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2412



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2437



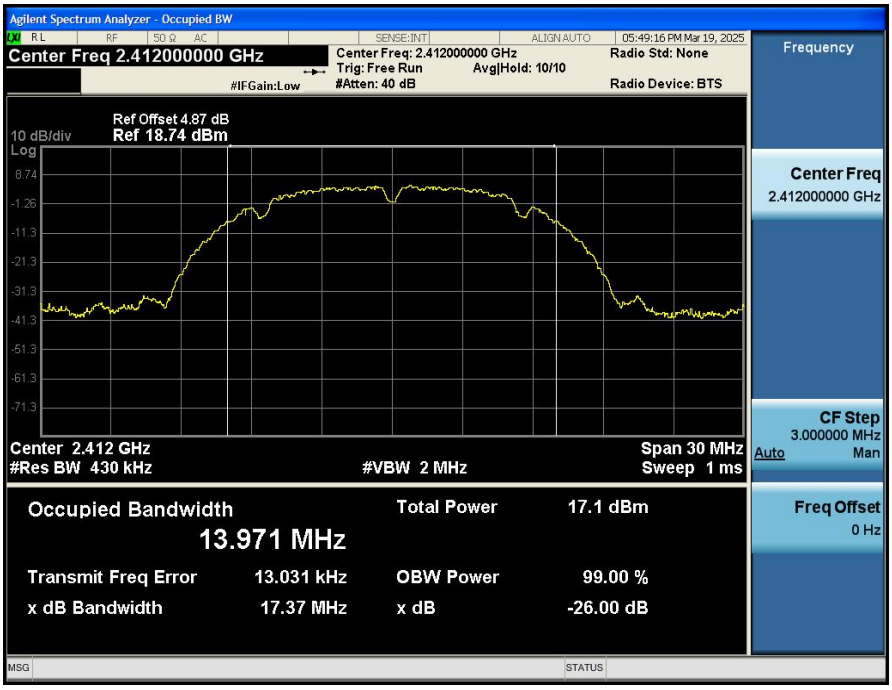
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462


Agilent Spectrum Analyzer - Occupied BW
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:20:08 PM Mar 19, 2025
Center Freq 2.462000000 GHz
Center Freq: 2.462000000 GHz
Trig: Free Run
Avg|Hold: 10/10
#IFGain:Low
#Atten: 40 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 4.73 dB
10 dB/div
Ref 18.46 dBm
Log
8.46
-1.54
-11.5
-21.5
-31.5
-41.5
-51.5
-61.5
-71.5
Center Freq
2.462000000 GHz
Center 2.462 GHz
#Res BW 430 kHz
#VBW 2 MHz
Span 30 MHz
Sweep 1 ms
CF Step
3.000000 MHz
Auto
Man
Occupied Bandwidth
17.258 MHz
Total Power
19.1 dBm
Transmit Freq Error
-22.899 kHz
OBW Power
99.00 %
x dB Bandwidth
16.02 MHz
x dB
-6.00 dB
Freq Offset
0 Hz
MSG
STATUS

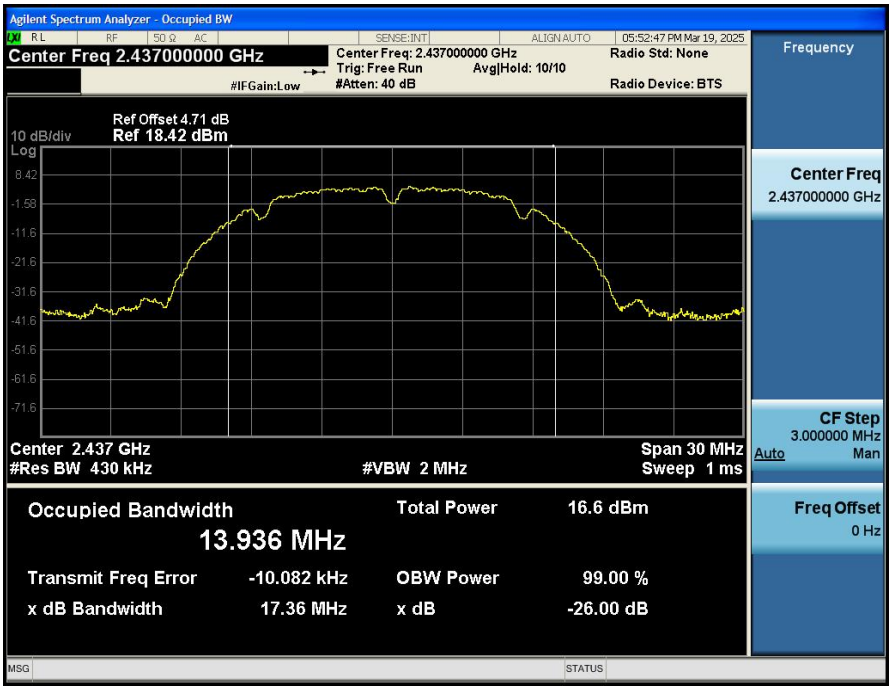
Appendix B: 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99%BW(MHz)
NVNT	ANT1	802.11b	2412.00	13.971
NVNT	ANT1	802.11b	2437.00	13.936
NVNT	ANT1	802.11b	2462.00	13.925
NVNT	ANT1	802.11g	2412.00	16.207
NVNT	ANT1	802.11g	2437.00	16.185
NVNT	ANT1	802.11g	2462.00	16.184
NVNT	ANT1	802.11n(HT20)	2412.00	17.288
NVNT	ANT1	802.11n(HT20)	2437.00	17.283
NVNT	ANT1	802.11n(HT20)	2462.00	17.268

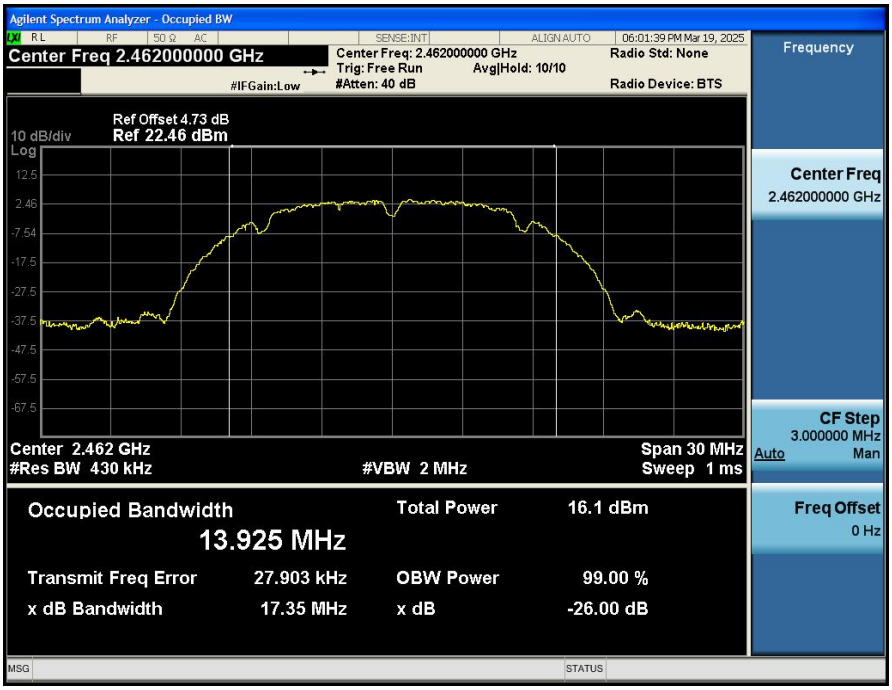
99%_Occupied_Bandwidth_NVNT_ANT1_802_11b_2412



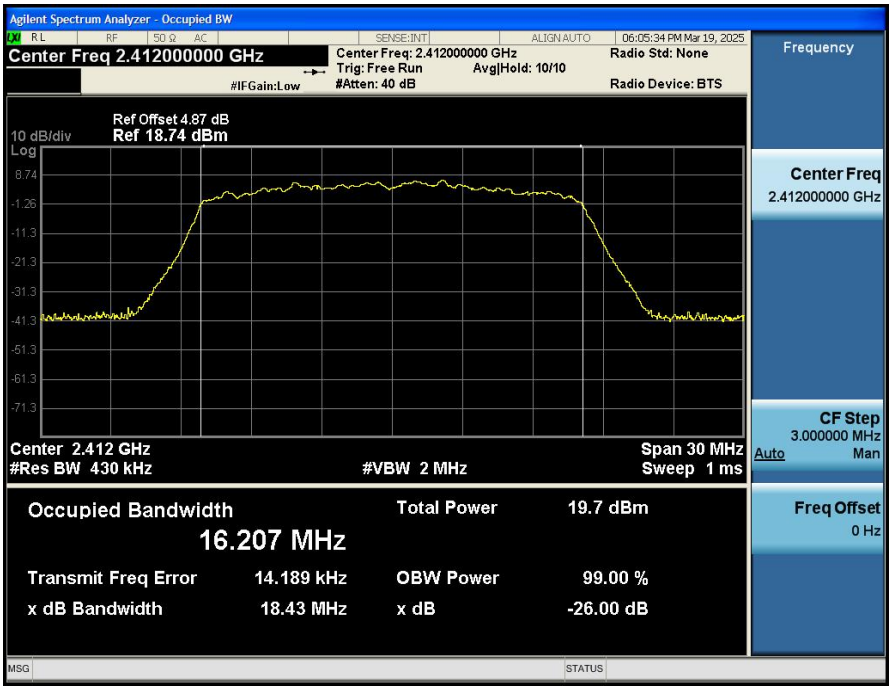
99%_Occupied_Bandwidth_NVNT_ANT1_802_11b_2437



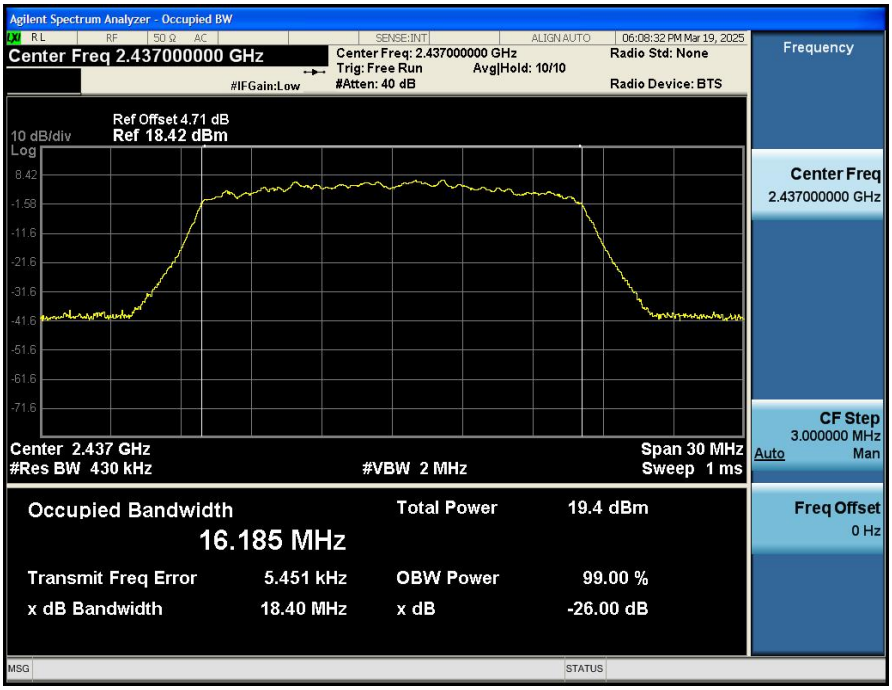
99%_Occupied_Bandwidth_NVNT_ANT1_802_11b_2462



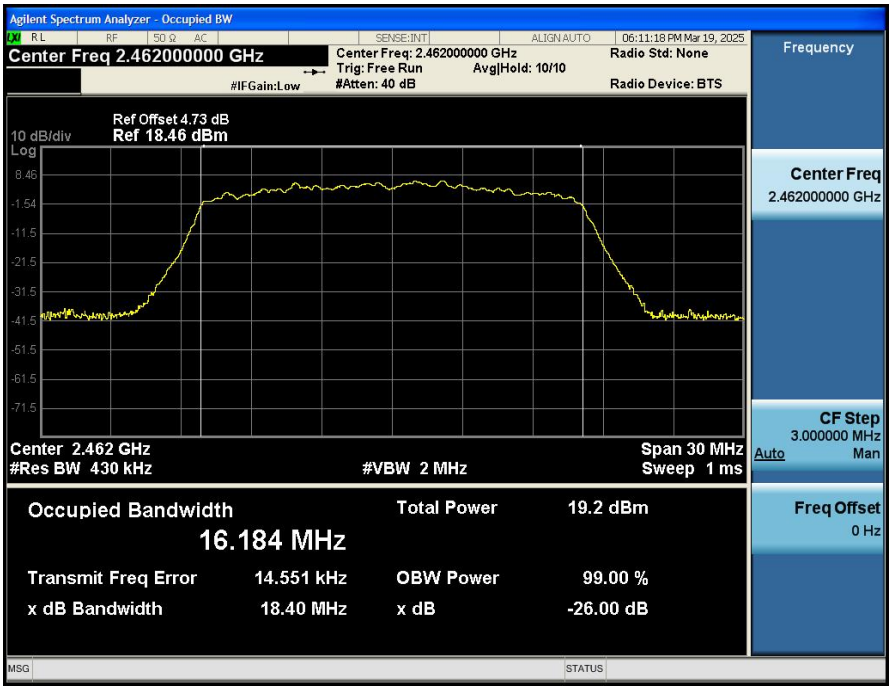
99%_Occupied_Bandwidth_NVNT_ANT1_802_11g_2412



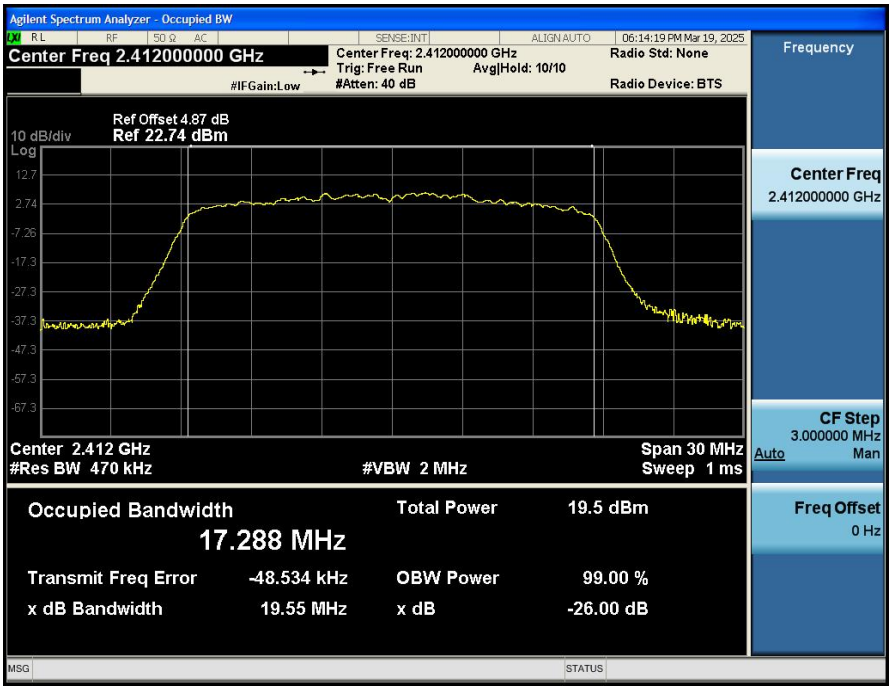
99%_Occupied_Bandwidth_NVNT_ANT1_802_11g_2437



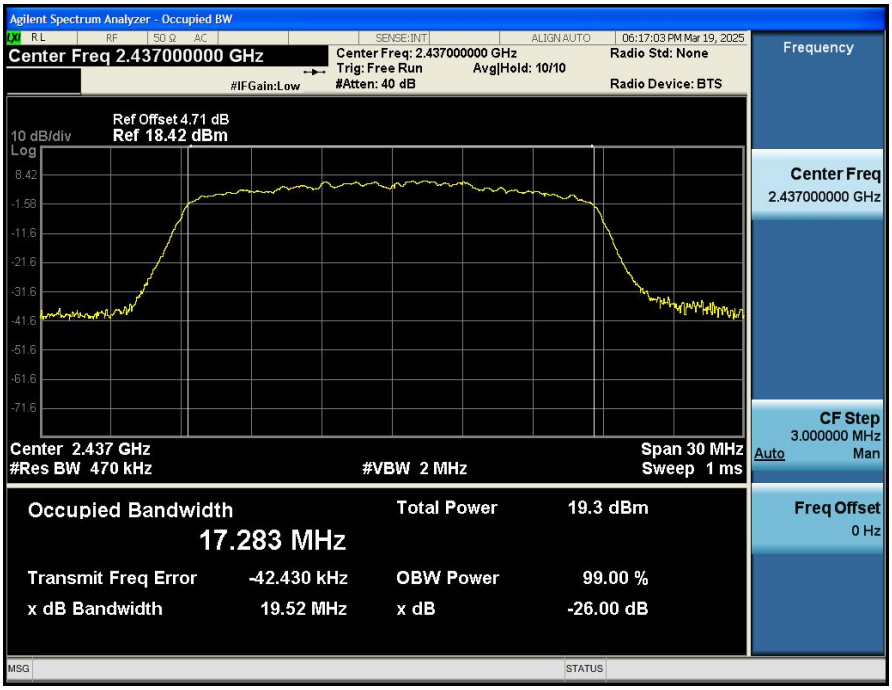
99%_Occupied_Bandwidth_NVNT_ANT1_802_11g_2462



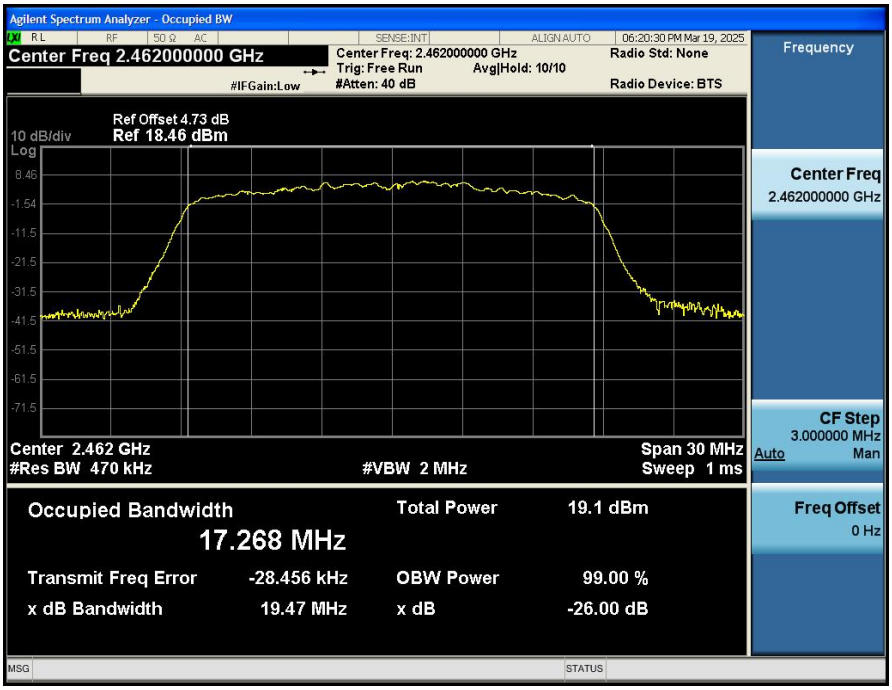
99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2412



99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2437



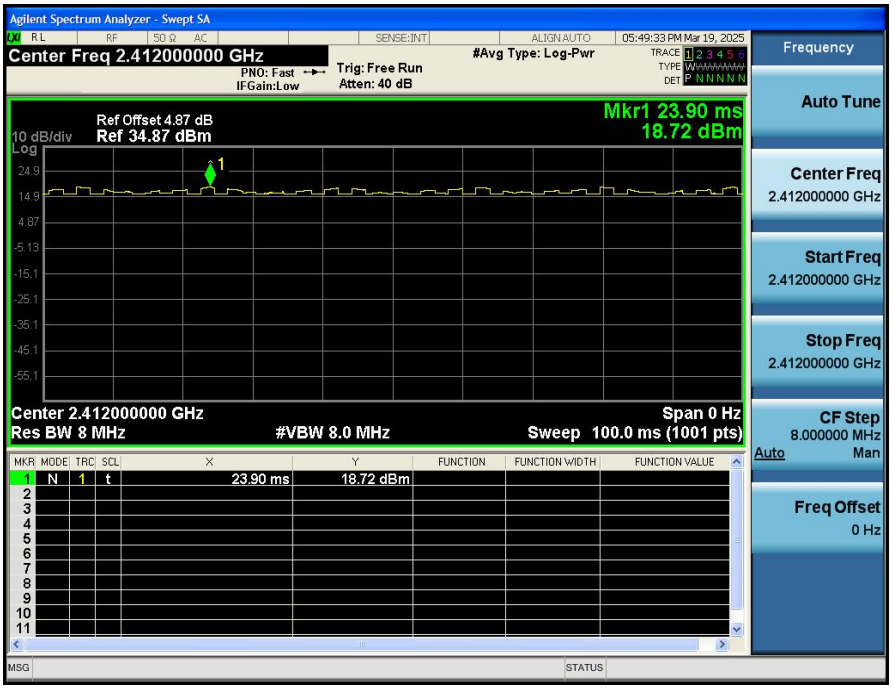
99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462



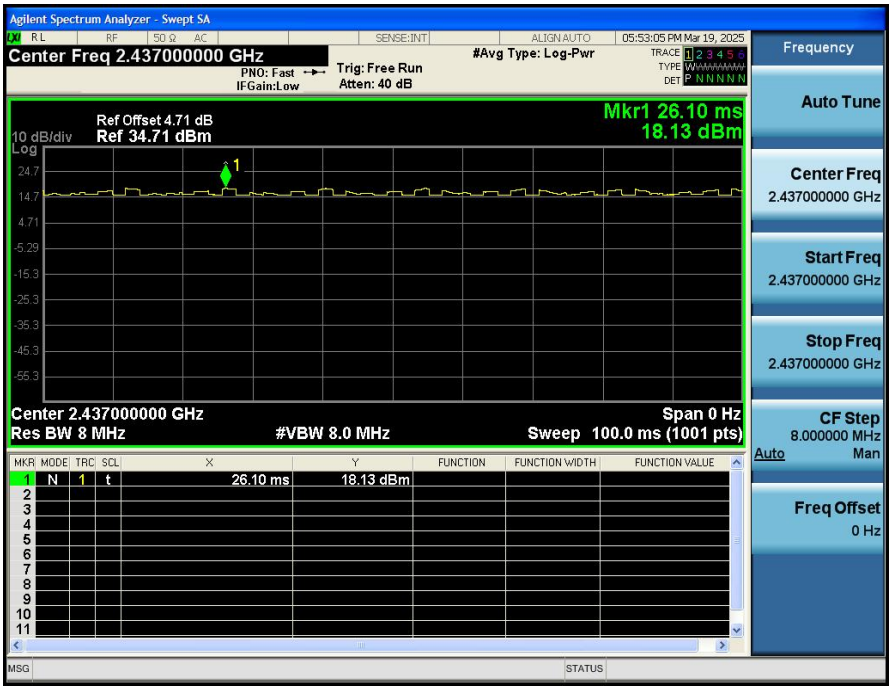
Appendix C: Duty Cycle

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

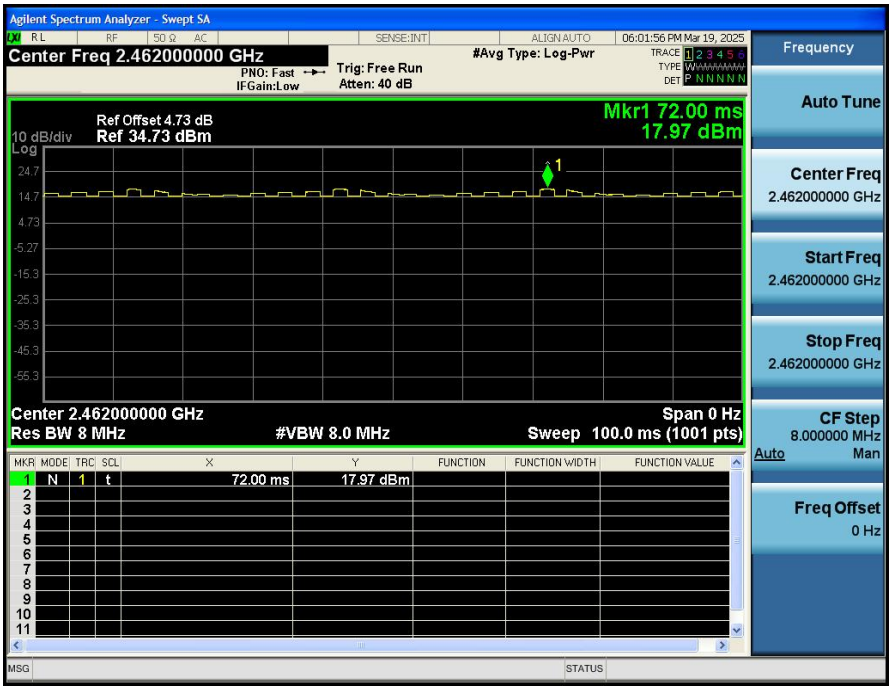
Duty_Cycle_NVNT_ANT1_802_11b_2412



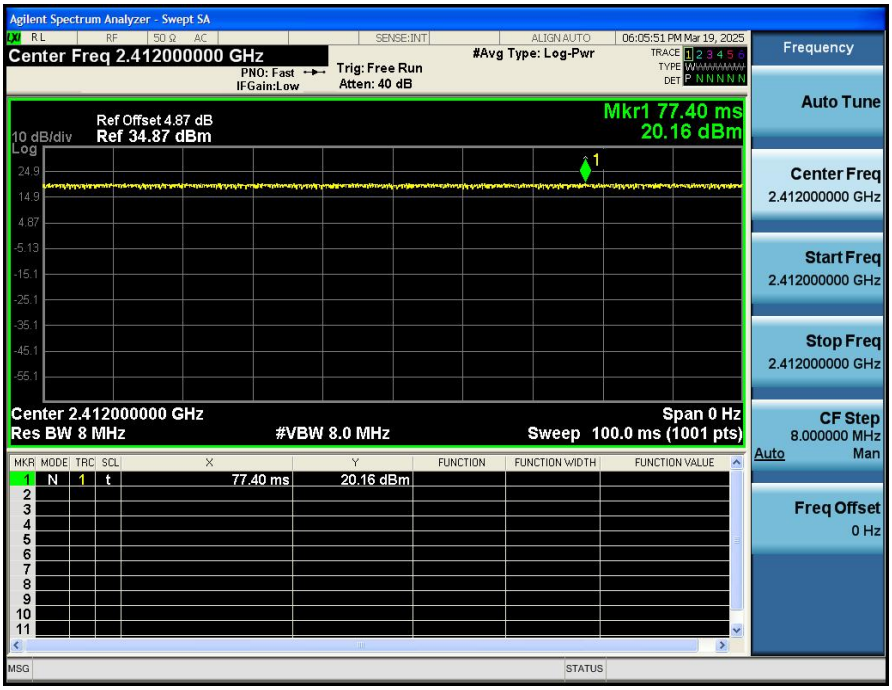
Duty_Cycle_NVNT_ANT1_802_11b_2437



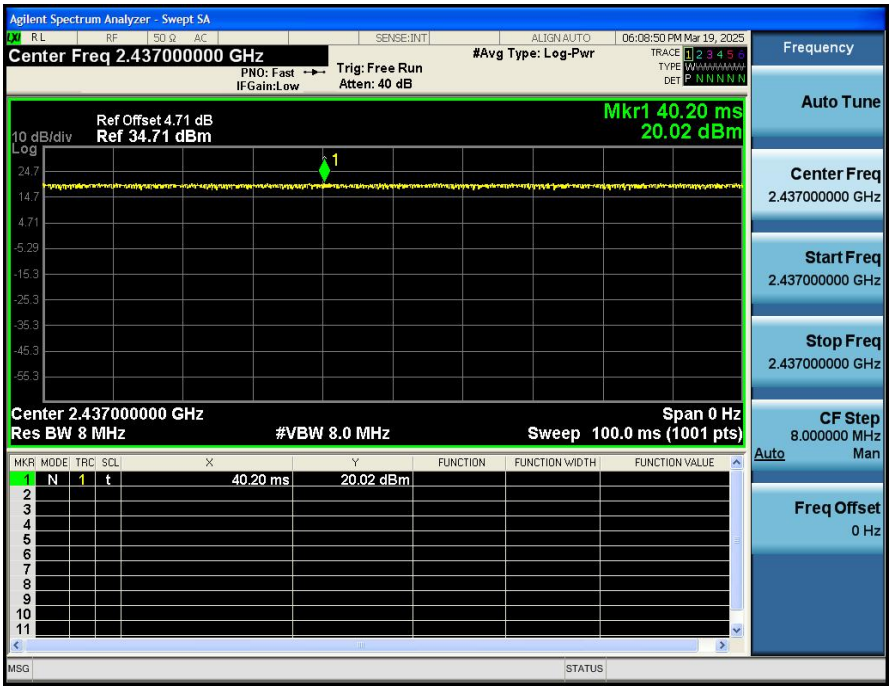
Duty_Cycle_NVNT_ANT1_802_11b_2462



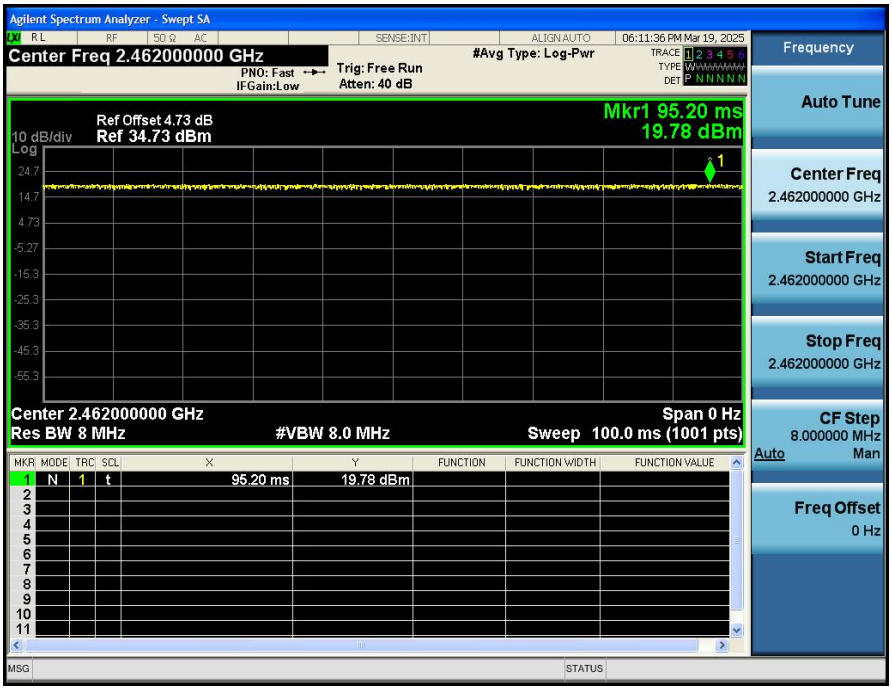
Duty_Cycle_NVNT_ANT1_802_11g_2412



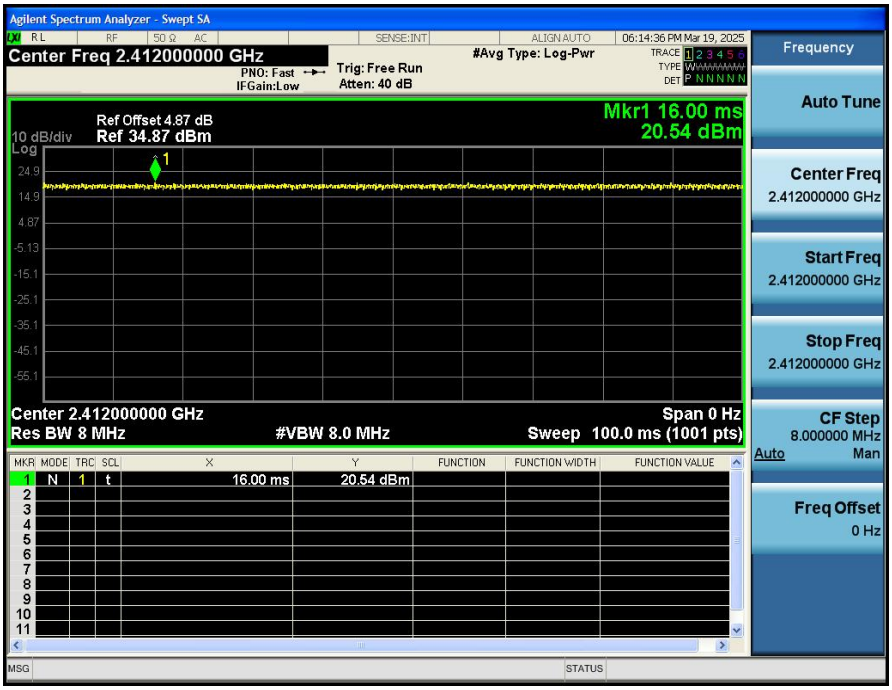
Duty_Cycle_NVNT_ANT1_802_11g_2437



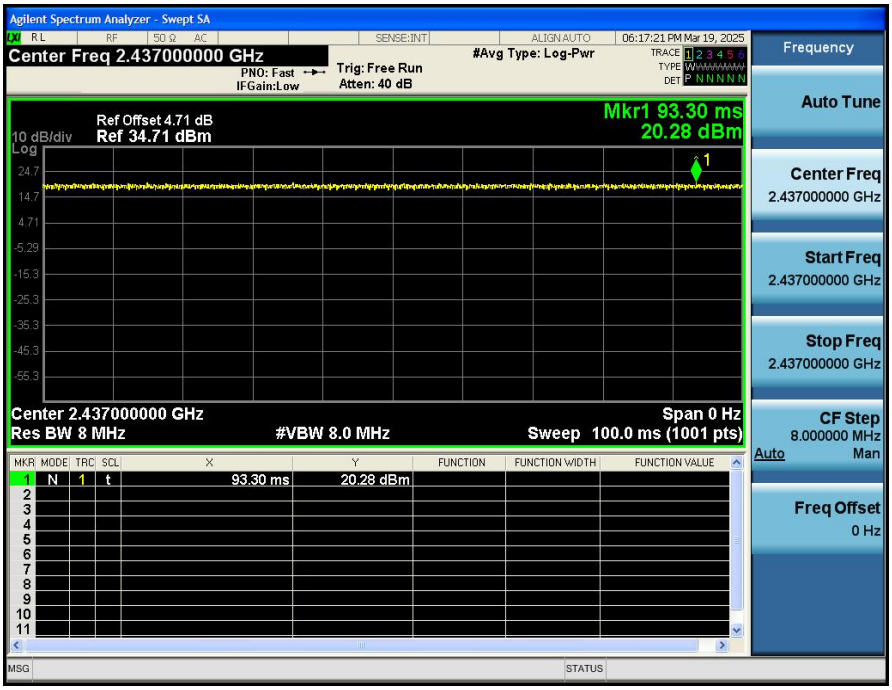
Duty_Cycle_NVNT_ANT1_802_11g_2462



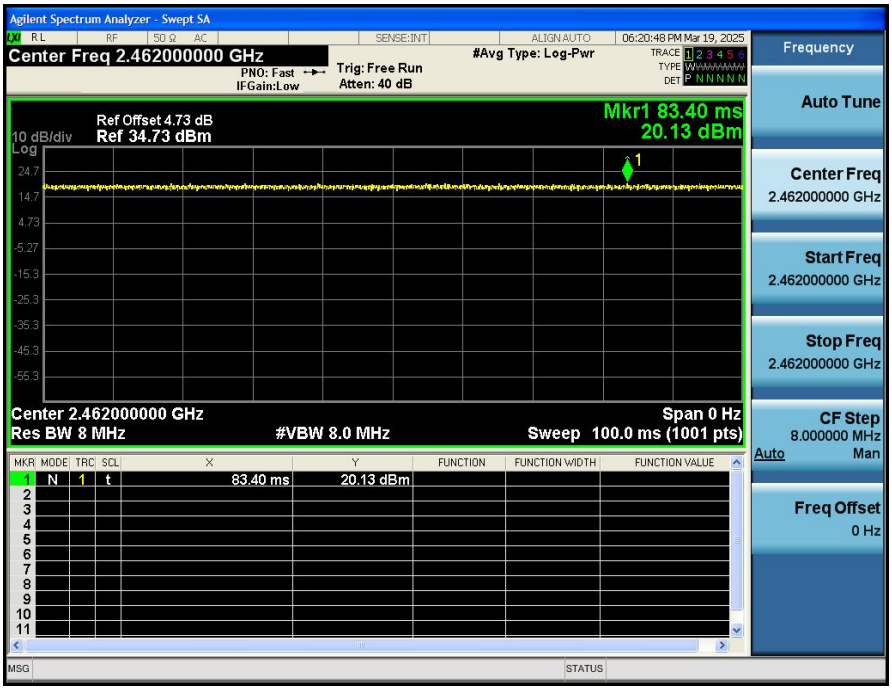
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2412



Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2437



Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2462

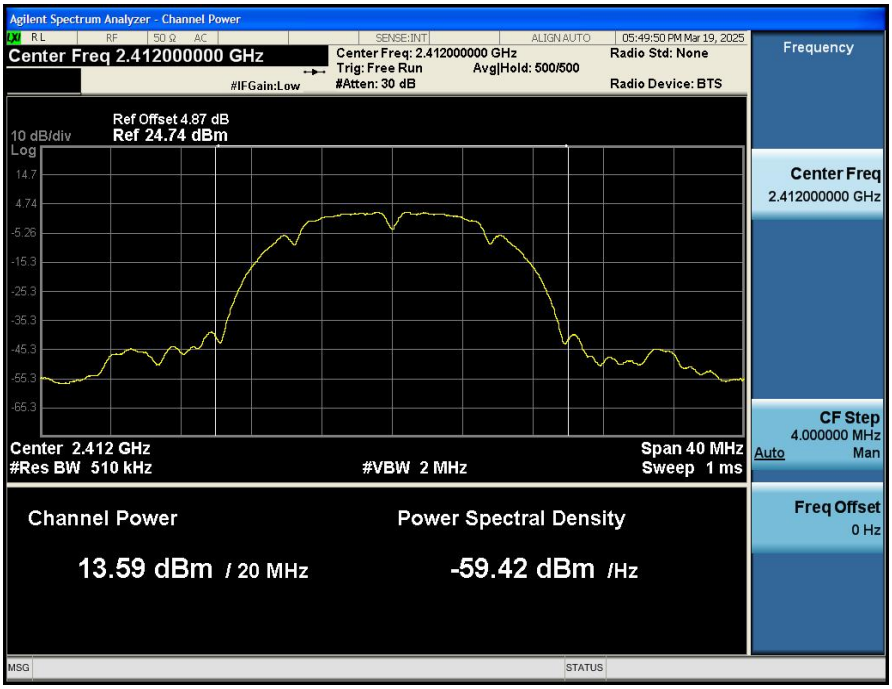


Appendix D: MAX. Output Power

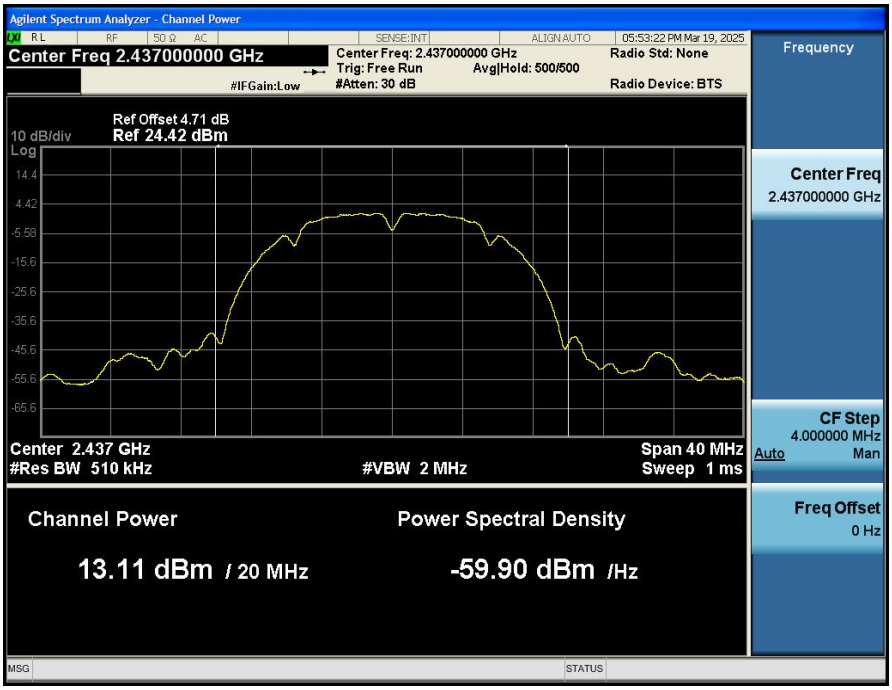
Condition	Antenna	Modulation	Frequency (MHz)	Detector	Conducted Power (dBm)	Duty factor (dB)	Total Power (dBm)	Limit (dBm)	Result
NVNT	ANT1	802.11b	2412.00	RMS	13.59	0.00	13.59	30	Pass
NVNT	ANT1	802.11b	2437.00	RMS	13.11	0.00	13.11	30	Pass
NVNT	ANT1	802.11b	2462.00	RMS	12.73	0.00	12.73	30	Pass
NVNT	ANT1	802.11g	2412.00	RMS	13.09	0.00	13.09	30	Pass
NVNT	ANT1	802.11g	2437.00	RMS	12.82	0.00	12.82	30	Pass
NVNT	ANT1	802.11g	2462.00	RMS	12.66	0.00	12.66	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	RMS	12.89	0.00	12.89	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	RMS	12.68	0.00	12.68	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	RMS	12.46	0.00	12.46	30	Pass

Note：1.The cable loss are compensated in the graph.

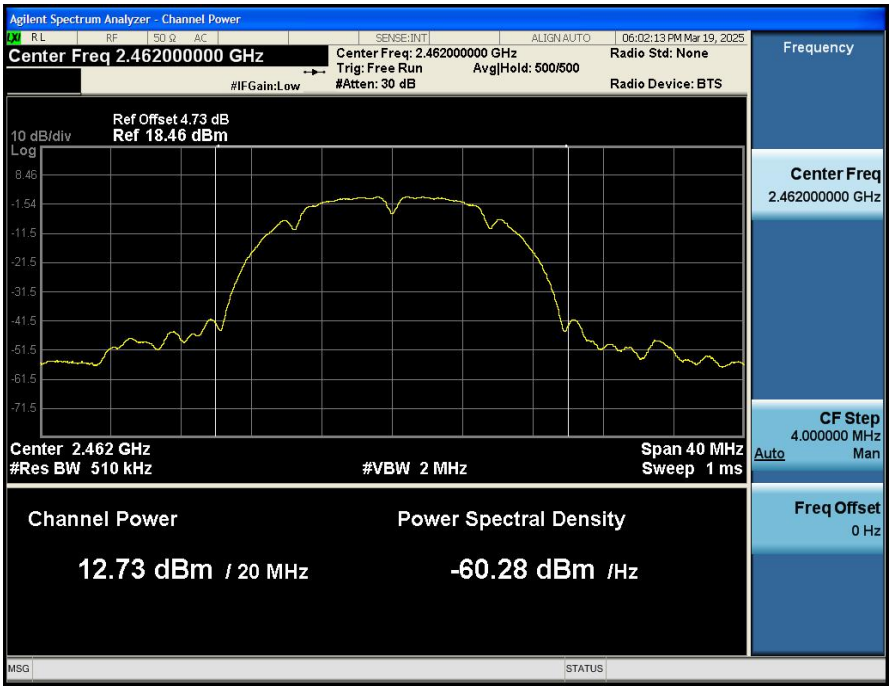
MAX__Output_Power_NVNT_ANT1_802_11b_2412



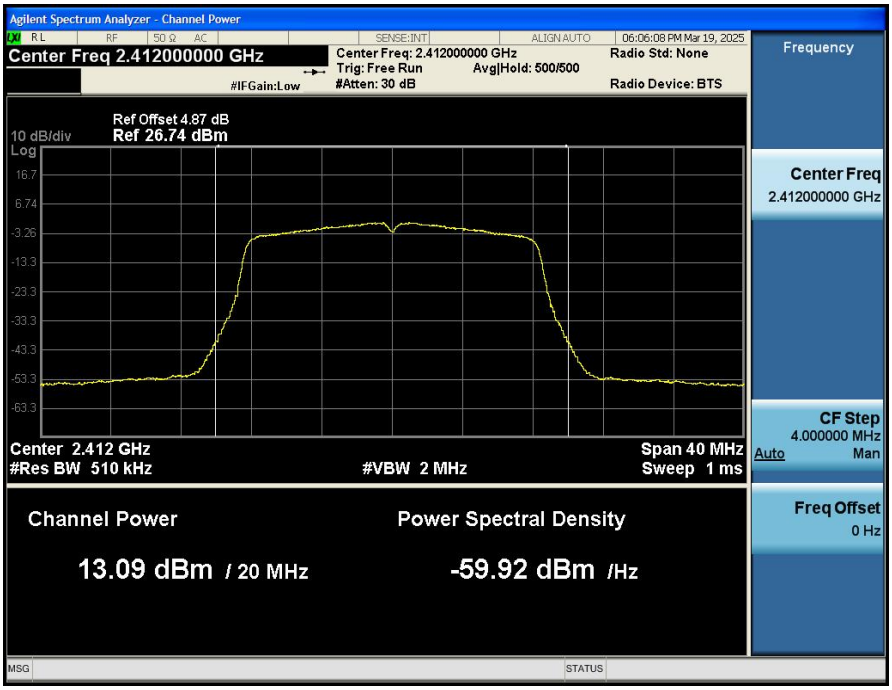
MAX__Output_Power_NVNT_ANT1_802_11b_2437



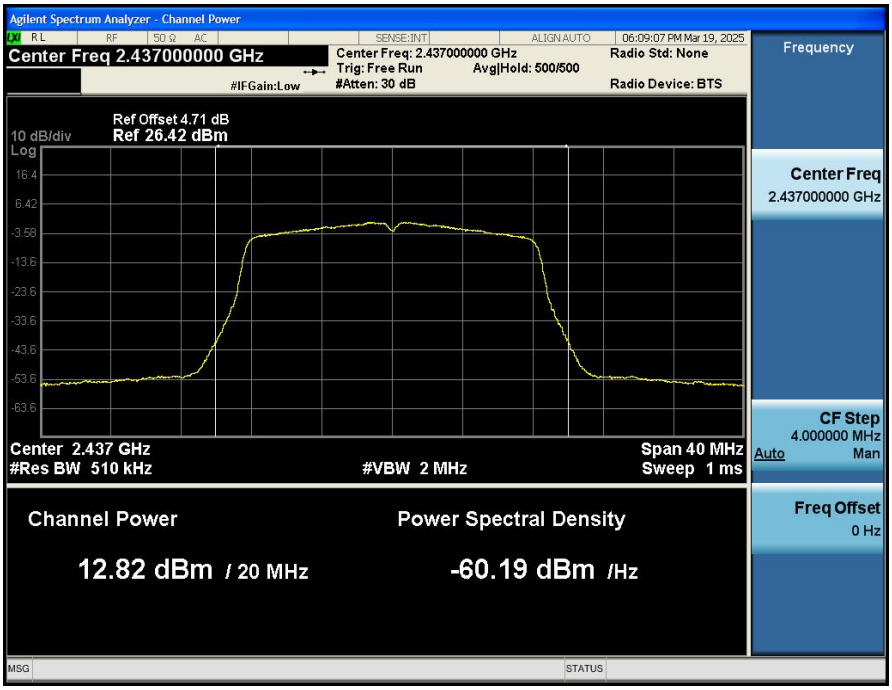
MAX__Output_Power_NVNT_ANT1_802_11b_2462



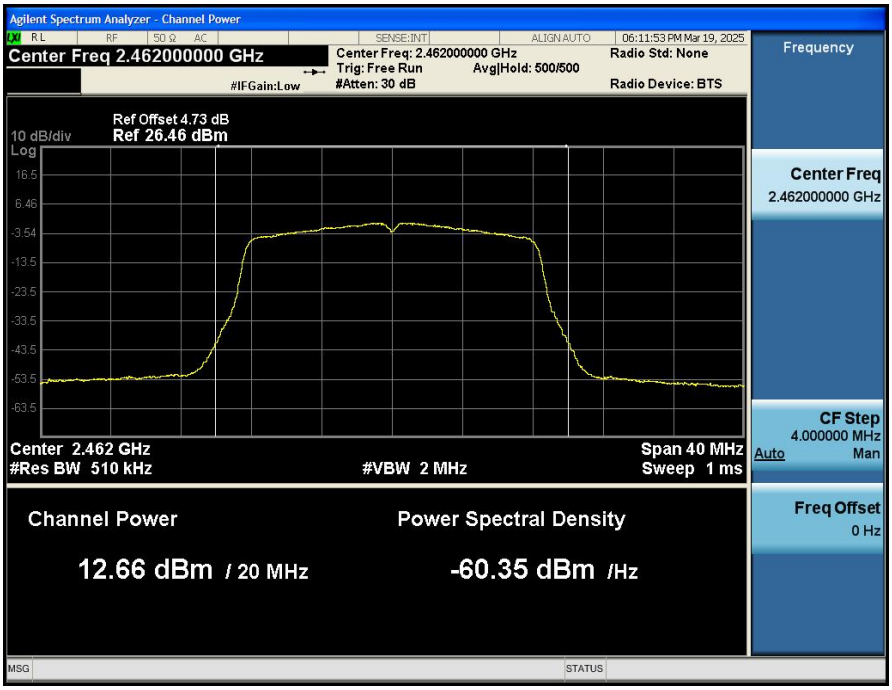
MAX__Output_Power_NVNT_ANT1_802_11g_2412



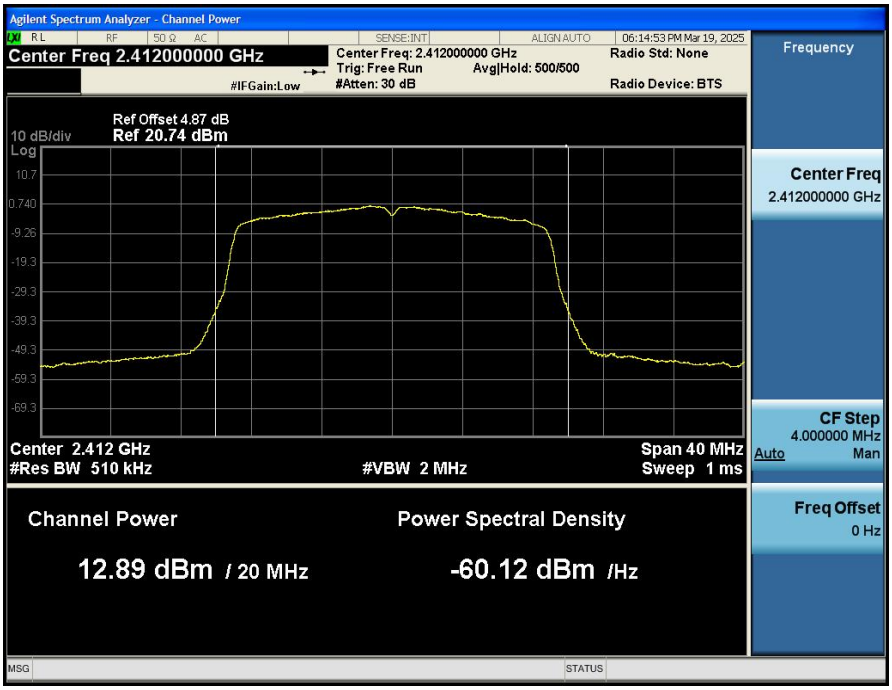
MAX__Output_Power_NVNT_ANT1_802_11g_2437



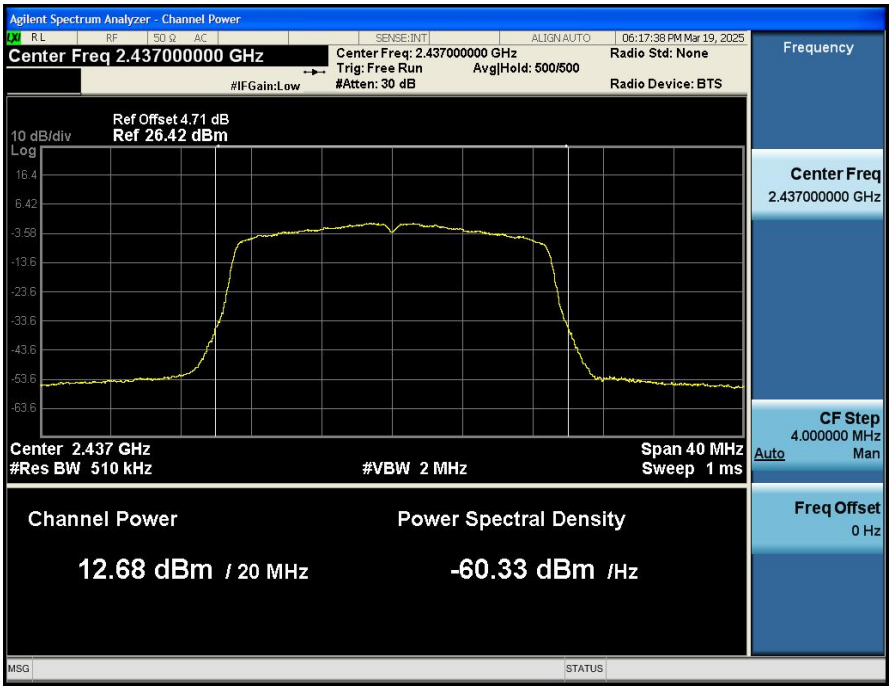
MAX__Output_Power_NVNT_ANT1_802_11g_2462



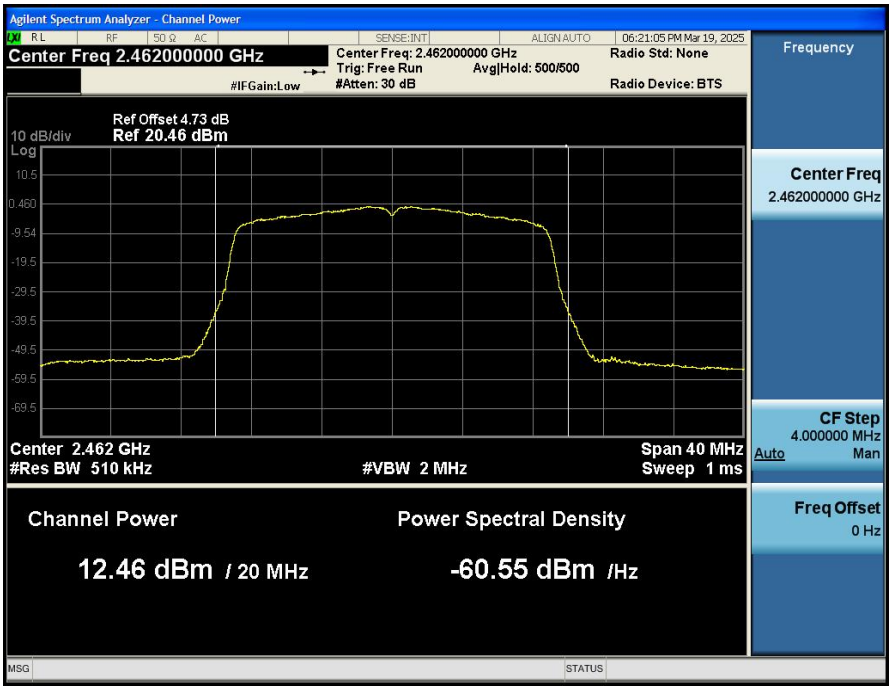
MAX__Output_Power_NVNT_ANT1_802_11n(HT20)_2412



MAX__Output_Power_NVNT_ANT1_802_11n(HT20)_2437



MAX__Output_Power_NVNT_ANT1_802_11n(HT20)_2462



Appendix E: Power Spectral Density

Condition	Antenna	Modulation	Frequency (MHz)	SA_PSD (dBm/30kHz)	Duty factor (dB)	RB factor (dB)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
NVNT	ANT1	802.11b	2412.00	-0.74	0.00	-10.00	-10.74	8	Pass
NVNT	ANT1	802.11b	2437.00	-1.18	0.00	-10.00	-11.18	8	Pass
NVNT	ANT1	802.11b	2462.00	-1.48	0.00	-10.00	-11.48	8	Pass
NVNT	ANT1	802.11g	2412.00	-1.19	0.00	-10.00	-11.19	8	Pass
NVNT	ANT1	802.11g	2437.00	-1.51	0.00	-10.00	-11.51	8	Pass
NVNT	ANT1	802.11g	2462.00	-1.57	0.00	-10.00	-11.57	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-1.65	0.00	-10.00	-11.65	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-1.97	0.00	-10.00	-11.97	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-2.00	0.00	-10.00	-12.00	8	Pass

Note：1.The cable loss are compensated in the graph.

2. PSD(dBm/3kHz)= PSD(dBm/30kHz)- (10*log(30/3)).

Power_Spectral_Density_NVNT_ANT1_802_11b_2412

Power_Spectral_Density_NVNT_ANT1_802_11b_2437