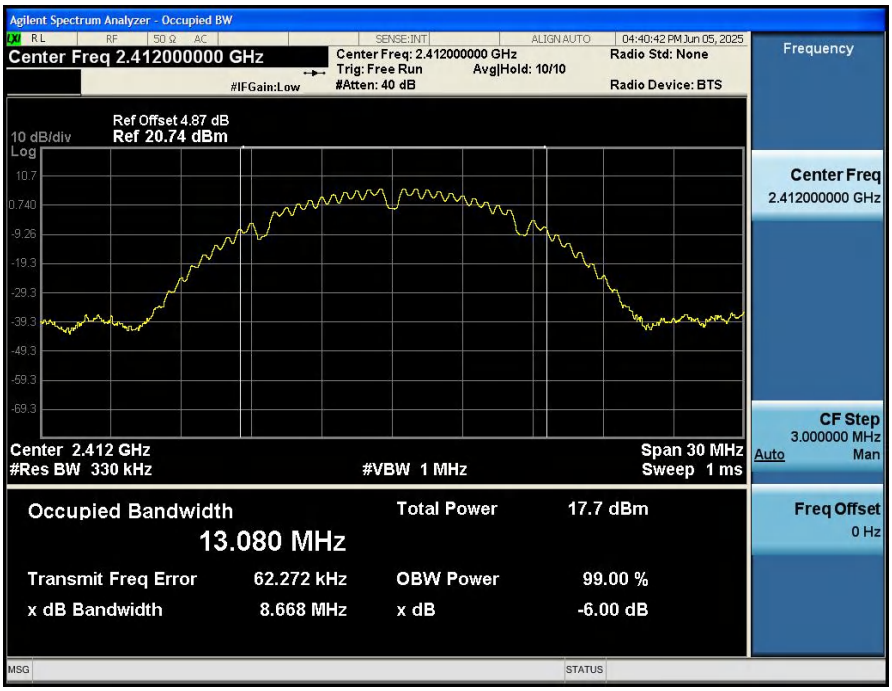
Appendix Test Data

Report No.:	1812C50255912502	Test Sample No.:	1-2-2
Start Test Date:	2025.5.28	Finish Test Date:	2025.6.5
Test Engineer:	Qiangfei Yang	Auditor:	Justin Feng
Temperature:	21.5℃	Relative Humidity:	56%
Pressure:	101kPa		

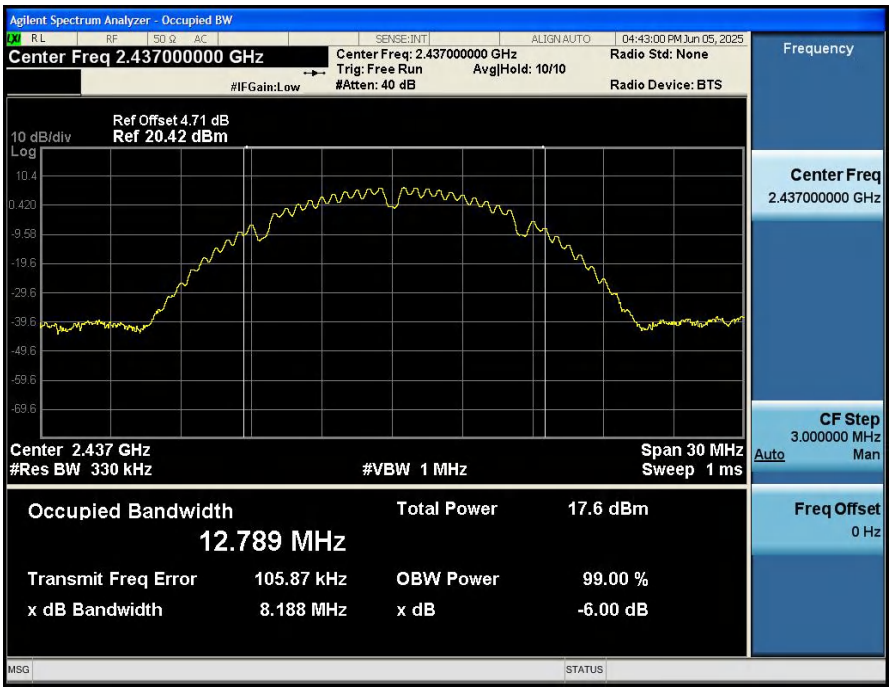
Appendix A: -6dB Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	8.67	500	Pass
NVNT	ANT1	802.11b	2437.00	8.19	500	Pass
NVNT	ANT1	802.11b	2462.00	8.19	500	Pass
NVNT	ANT1	802.11g	2412.00	16.23	500	Pass
NVNT	ANT1	802.11g	2437.00	16.07	500	Pass
NVNT	ANT1	802.11g	2462.00	16.15	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	17.53	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	17.30	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	17.03	500	Pass

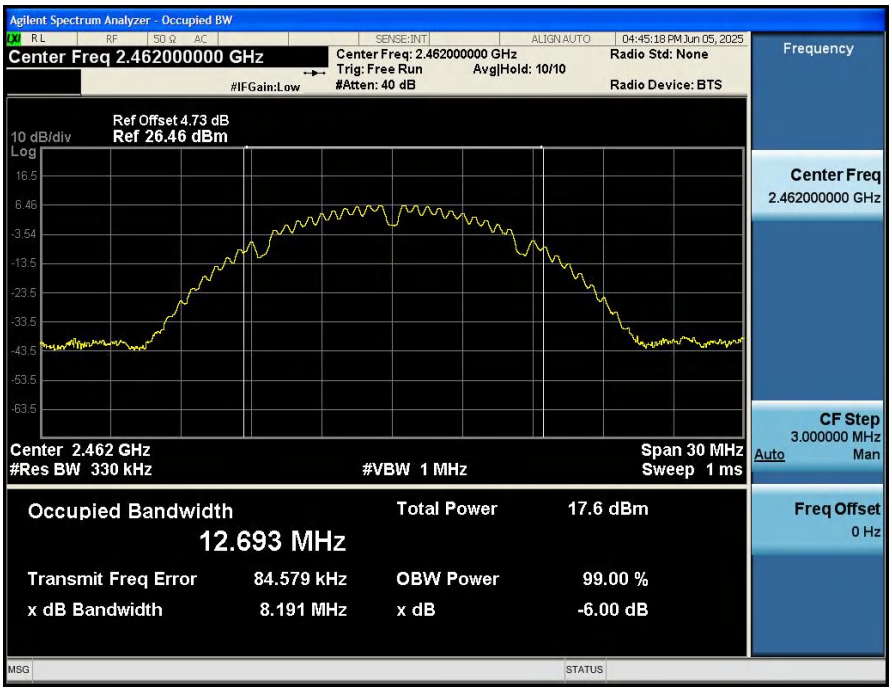
-6dB_Bandwidth_NVNT_ANT1_802_11b_2412



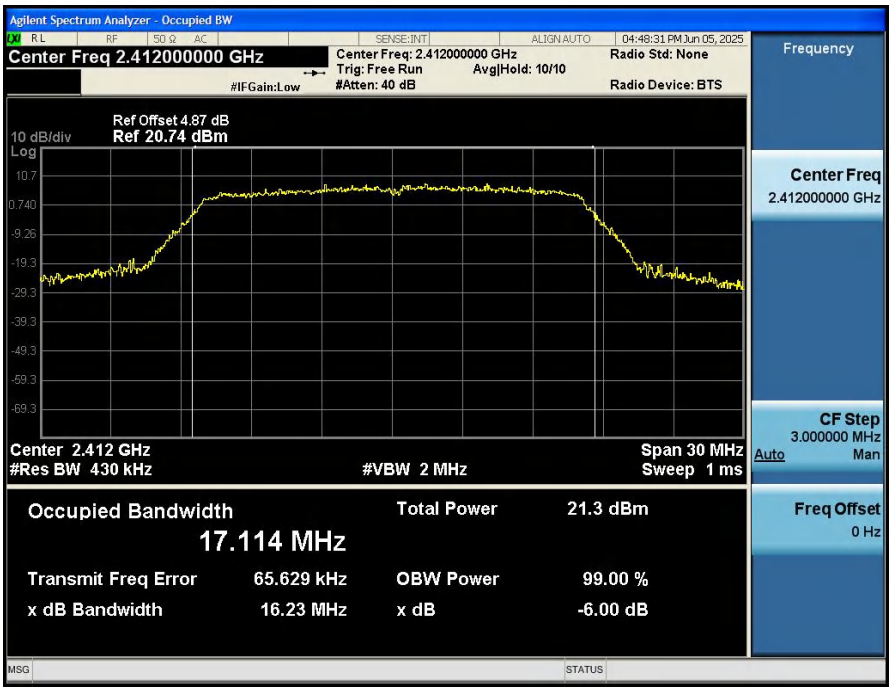
-6dB_Bandwidth_NVNT_ANT1_802_11b_2437



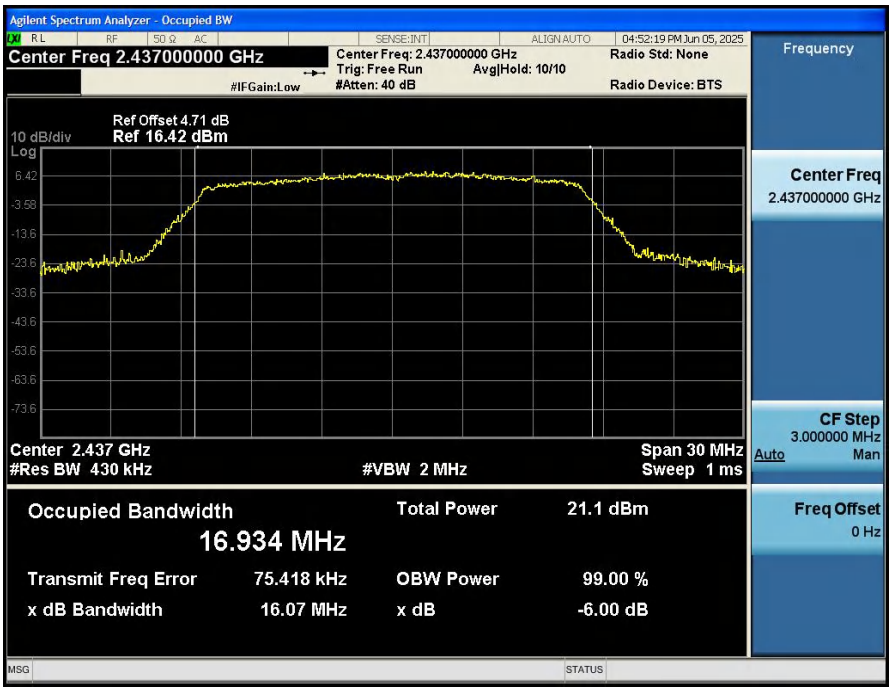
-6dB_Bandwidth_NVNT_ANT1_802_11b_2462



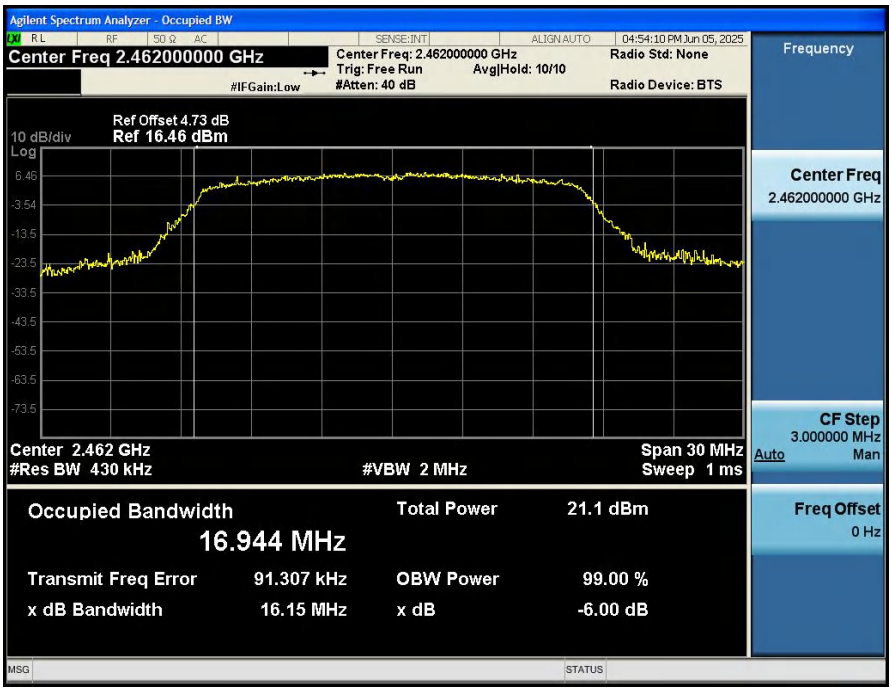
-6dB_Bandwidth_NVNT_ANT1_802_11g_2412



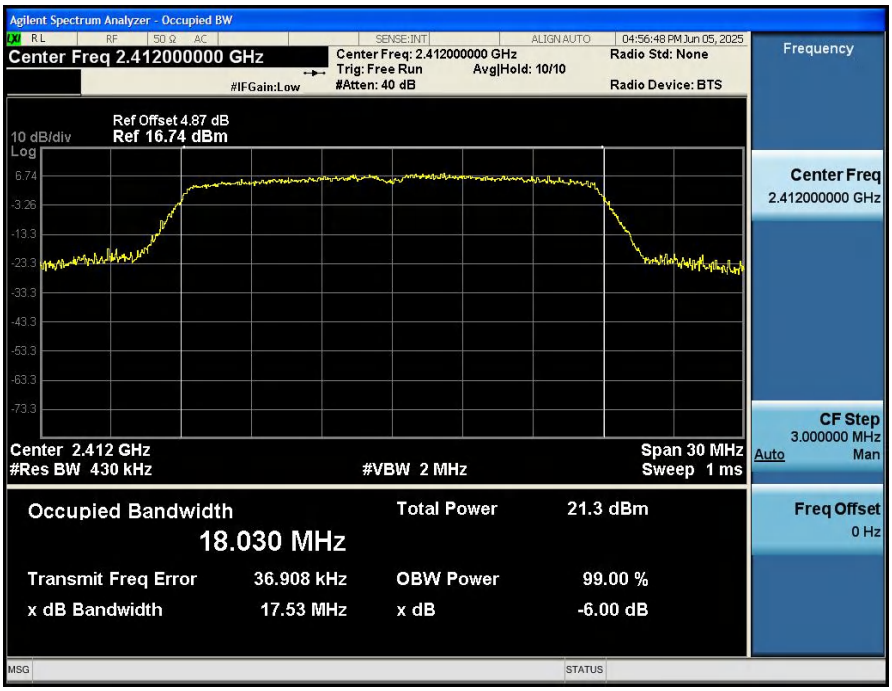
-6dB_Bandwidth_NVNT_ANT1_802_11g_2437



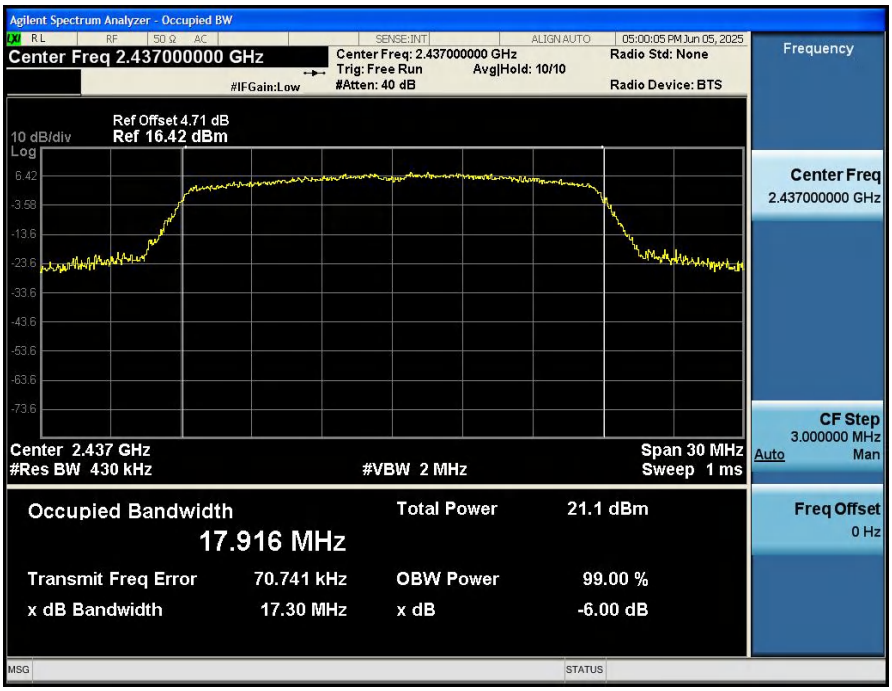
-6dB_Bandwidth_NVNT_ANT1_802_11g_2462



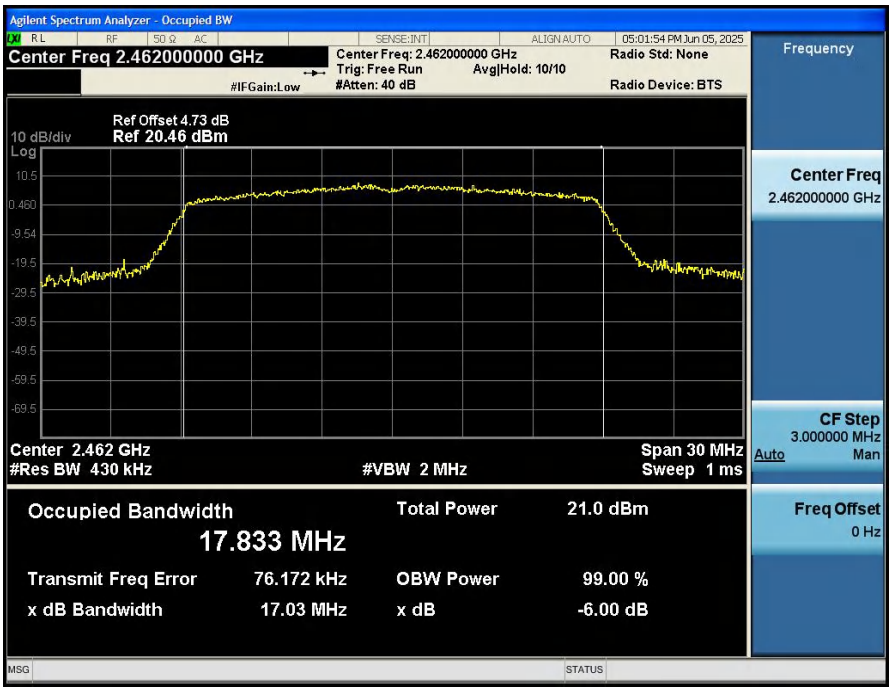
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2412



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2437



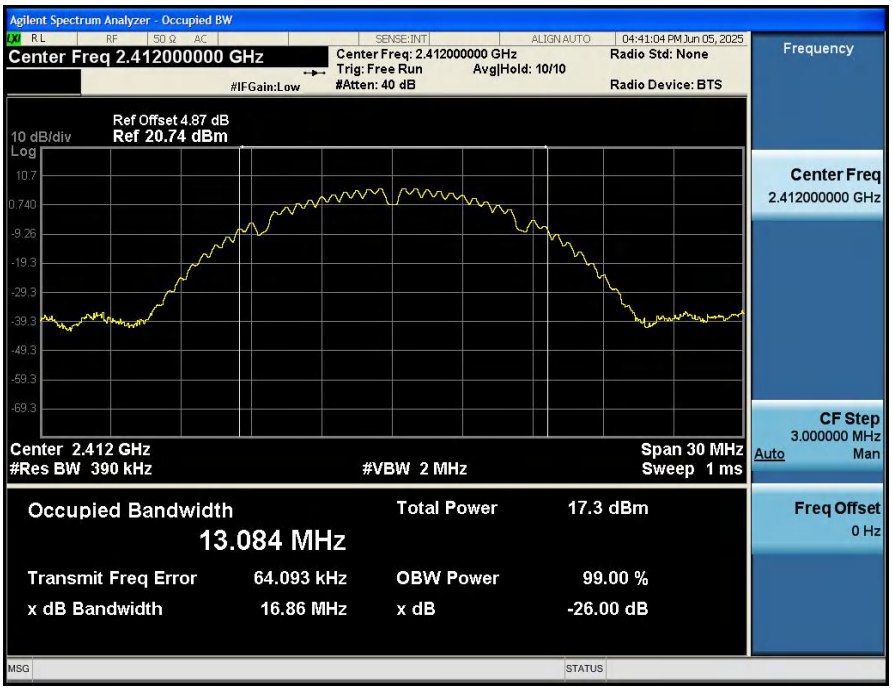
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462


Agilent Spectrum Analyzer - Occupied BW
Center Freq 2.462000000 GHz
Center Freq: 2.462000000 GHz
Trig: Free Run
Avg|Hold: 10/10
#Atten: 40 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
05:01:54 PM Jun 05, 2025
Ref Offset 4.73 dB
10 dB/div
Ref 20.46 dBm
Log
Center 2.462 GHz
#Res BW 430 kHz
#VBW 2 MHz
Span 30 MHz
Sweep 1 ms
Occupied Bandwidth
17.833 MHz
Total Power 21.0 dBm
Transmit Freq Error 76.172 kHz
OBW Power 99.00 %
x dB Bandwidth 17.03 MHz
x dB -6.00 dB
Frequency
Center Freq
2.462000000 GHz
CF Step
3.000000 MHz
Auto Man
Freq Offset
0 Hz
MSG
STATUS

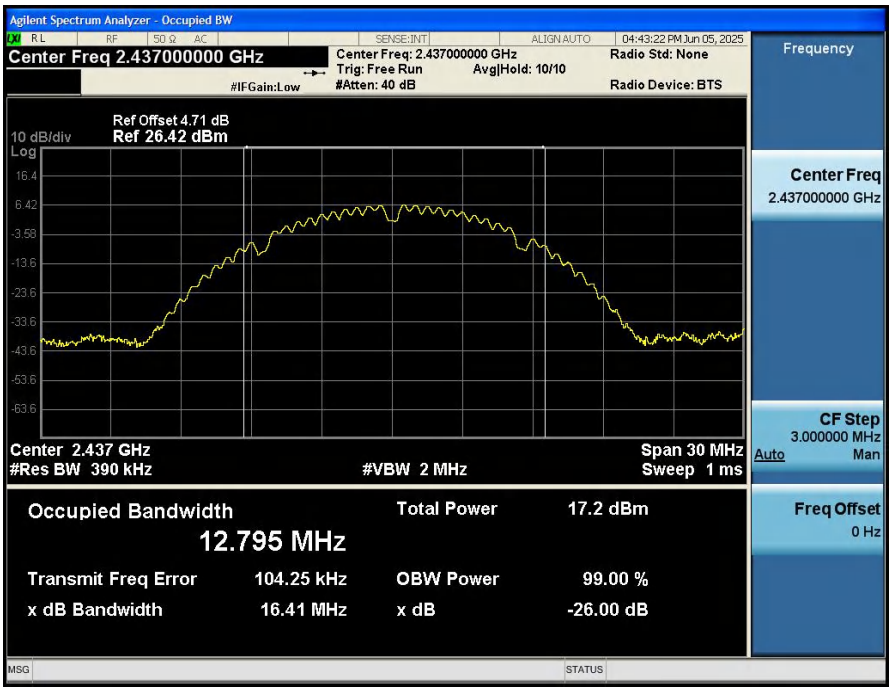
Appendix B: 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99%BW(MHz)
NVNT	ANT1	802.11b	2412.00	13.084
NVNT	ANT1	802.11b	2437.00	12.795
NVNT	ANT1	802.11b	2462.00	12.695
NVNT	ANT1	802.11g	2412.00	17.330
NVNT	ANT1	802.11g	2437.00	17.155
NVNT	ANT1	802.11g	2462.00	17.081
NVNT	ANT1	802.11n(HT20)	2412.00	18.178
NVNT	ANT1	802.11n(HT20)	2437.00	18.003
NVNT	ANT1	802.11n(HT20)	2462.00	18.030

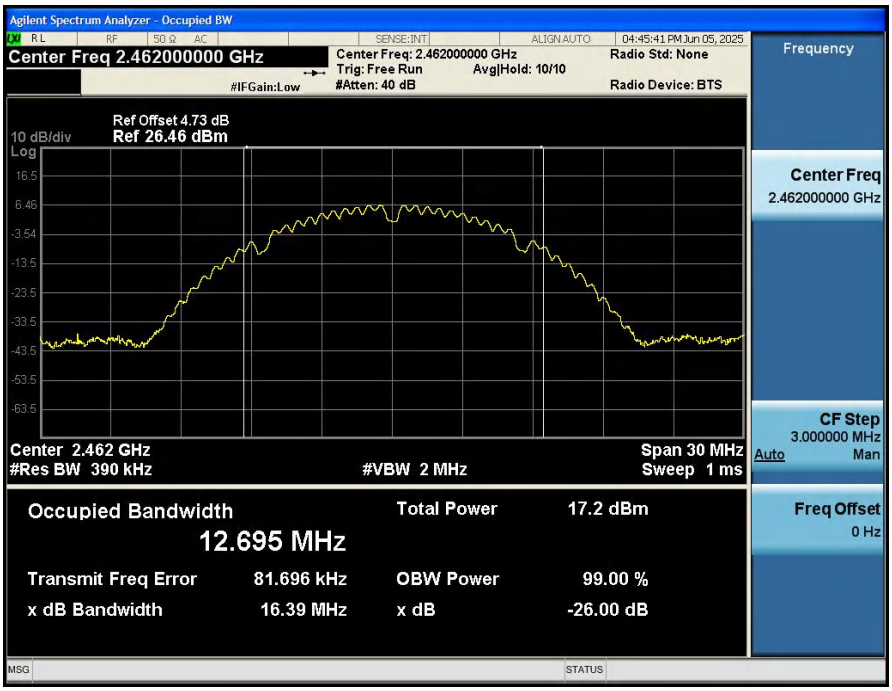
99%_Occupied_Bandwidth_NVNT_ANT1_802_11b_2412



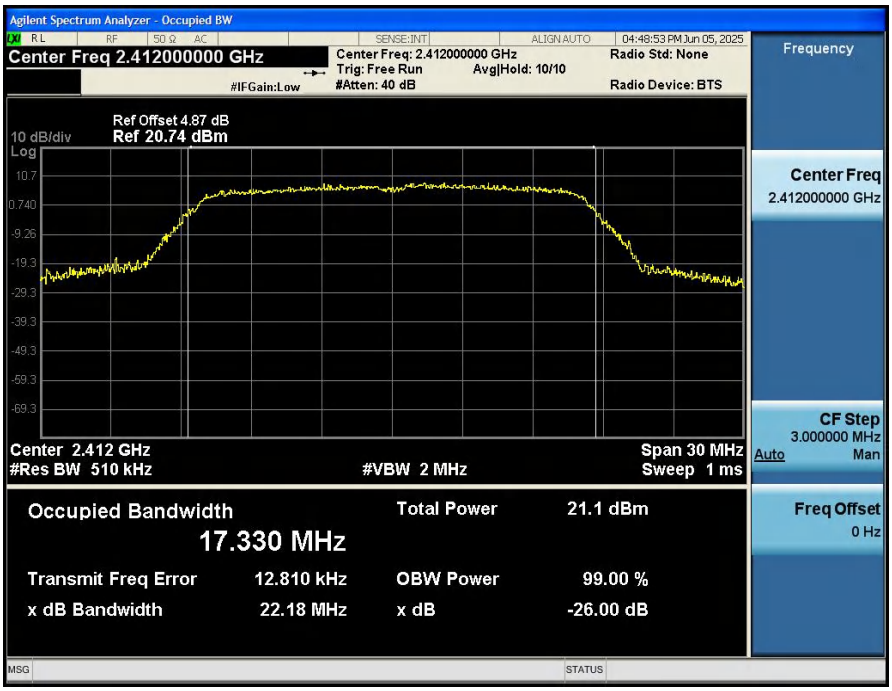
99%_Occupied_Bandwidth_NVNT_ANT1_802_11b_2437



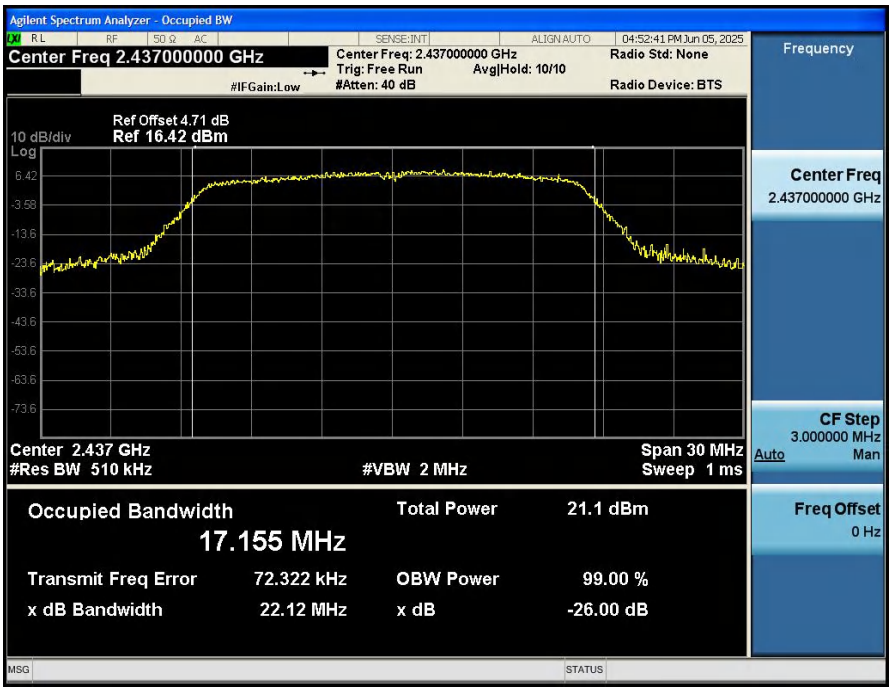
99%_Occupied_Bandwidth_NVNT_ANT1_802_11b_2462



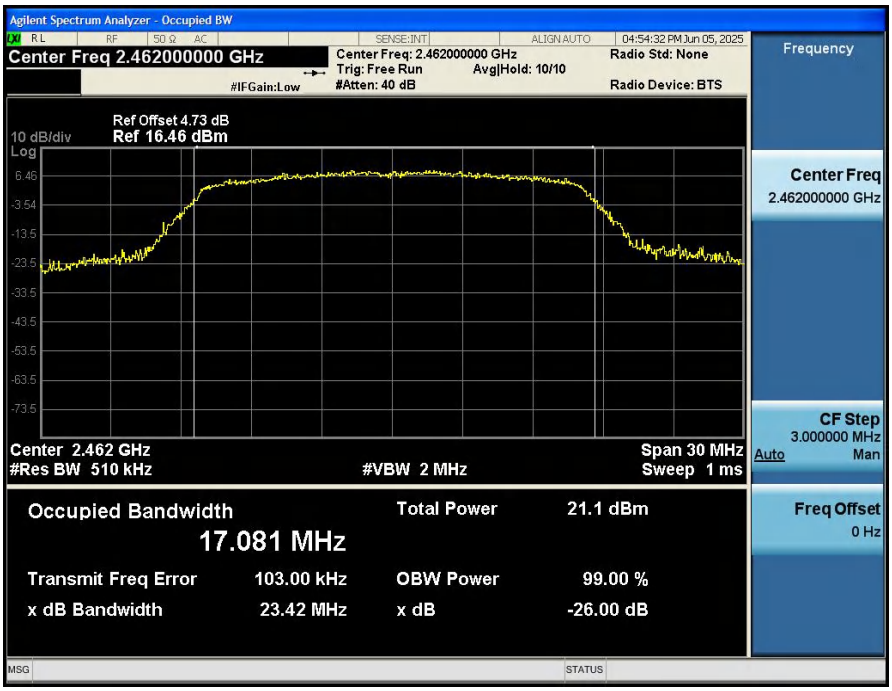
99%_Occupied_Bandwidth_NVNT_ANT1_802_11g_2412



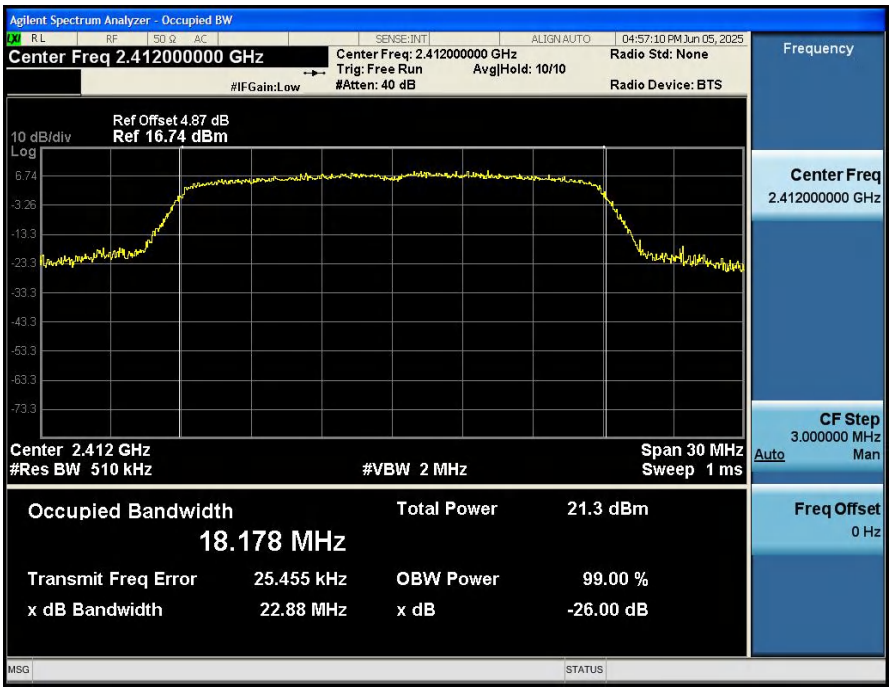
99%_Occupied_Bandwidth_NVNT_ANT1_802_11g_2437



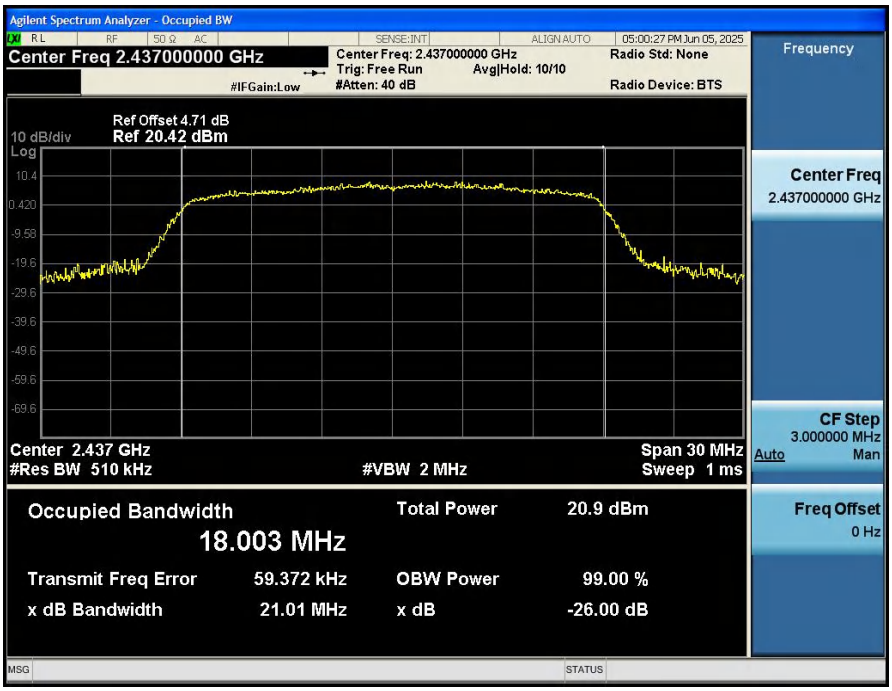
99%_Occupied_Bandwidth_NVNT_ANT1_802_11g_2462



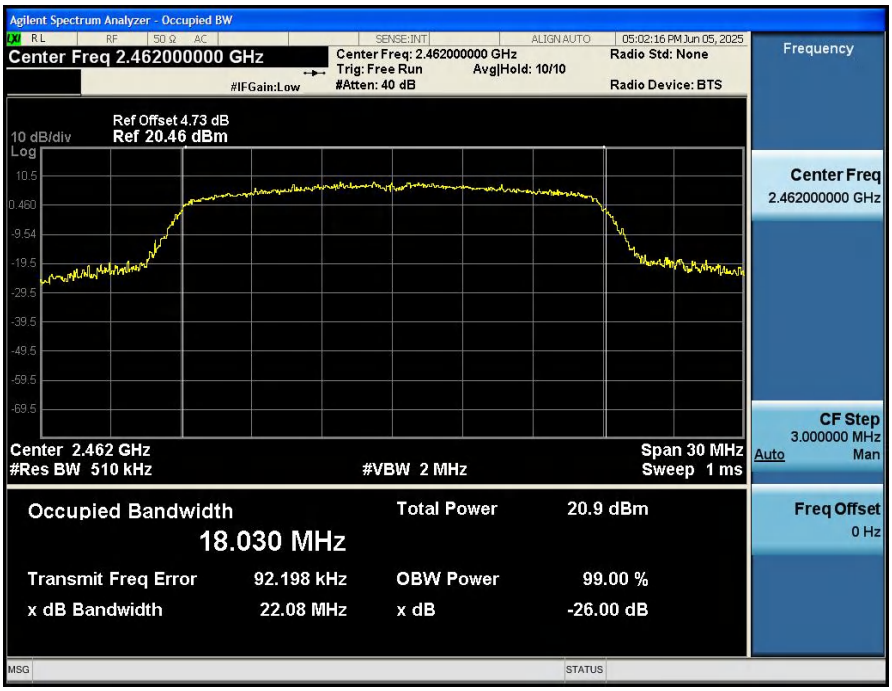
99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2412



99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2437



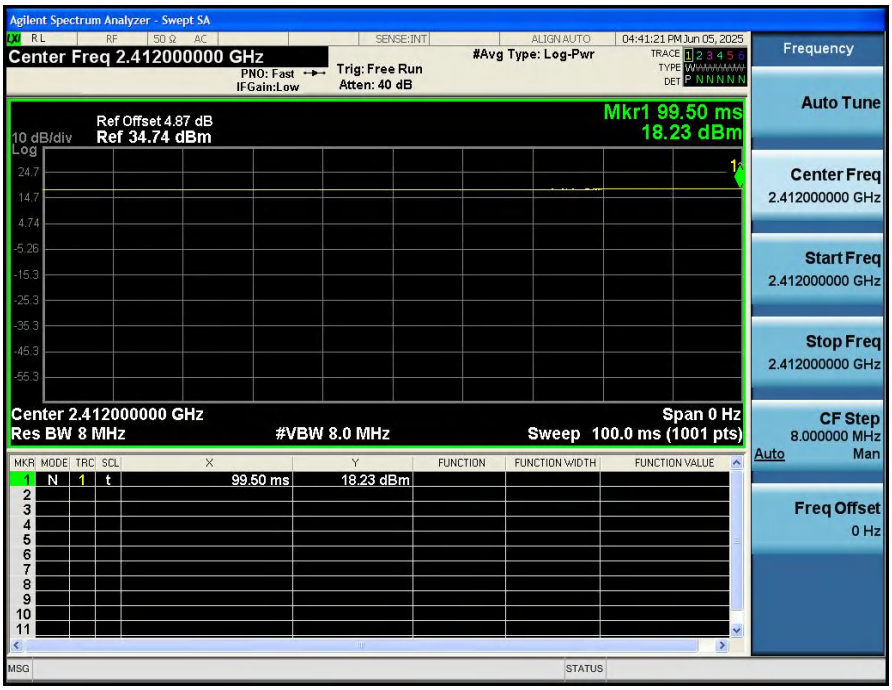
99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462



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

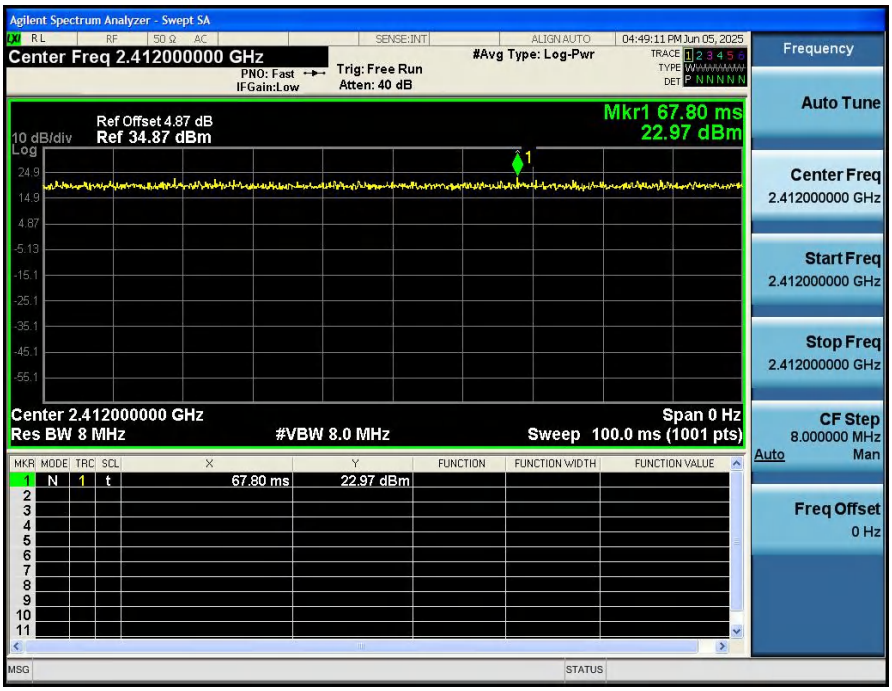
Duty_Cycle_NVNT_ANT1_802_11b_2412



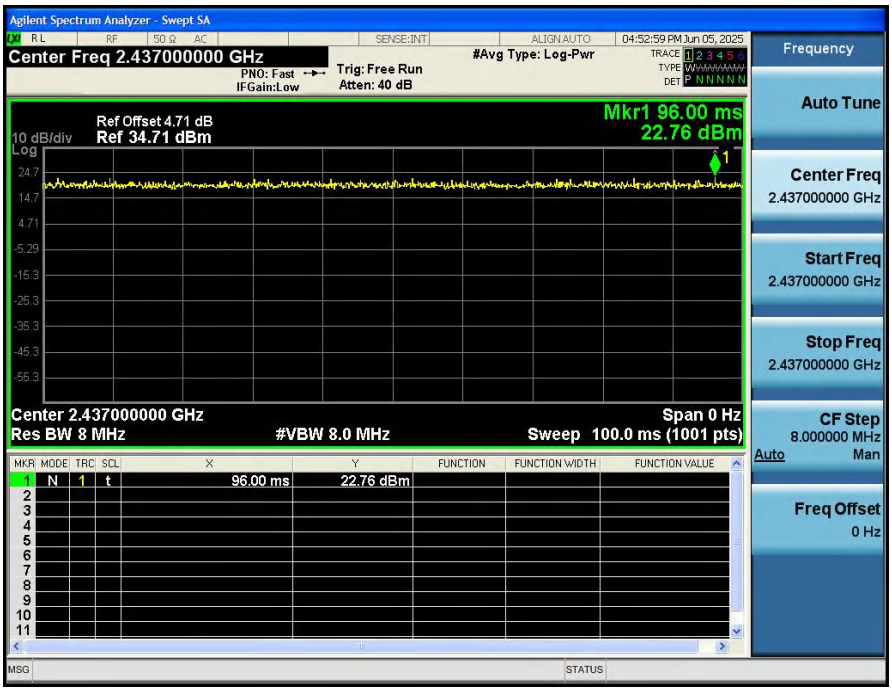
Duty_Cycle_NVNT_ANT1_802_11b_2437

Duty_Cycle_NVNT_ANT1_802_11b_2462

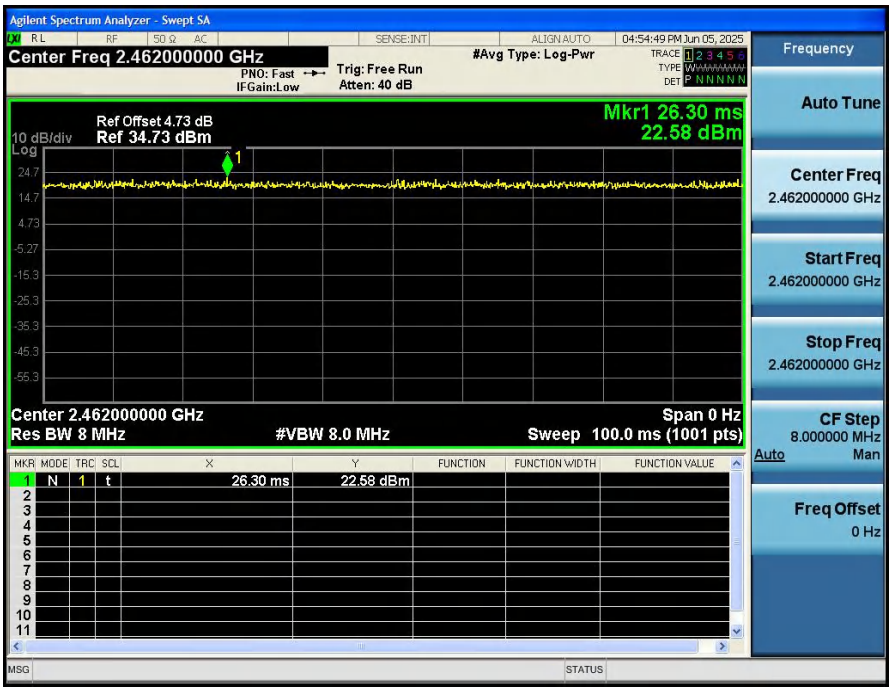
Duty_Cycle_NVNT_ANT1_802_11g_2412



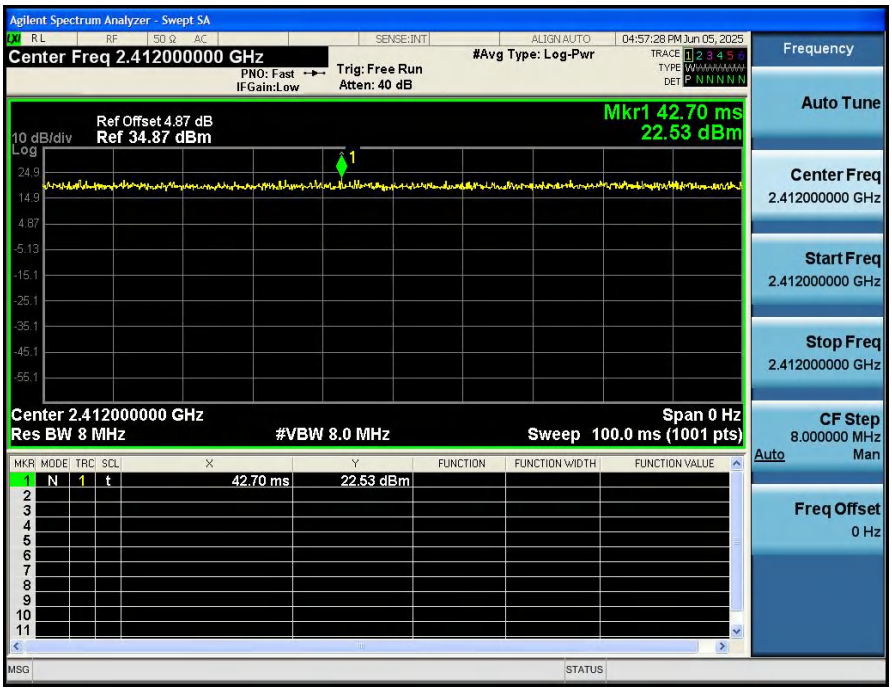
Duty_Cycle_NVNT_ANT1_802_11g_2437



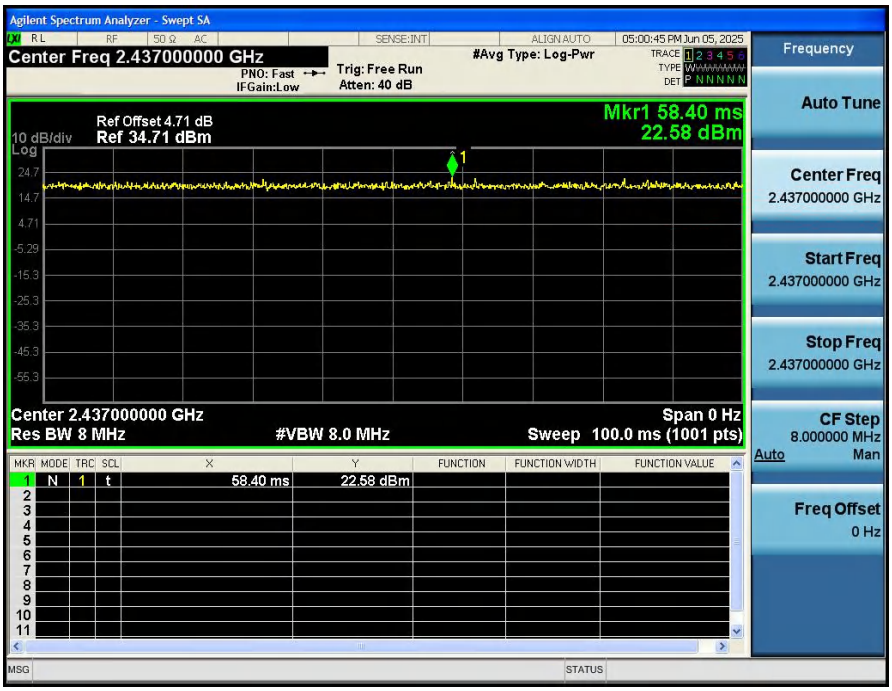
Duty_Cycle_NVNT_ANT1_802_11g_2462



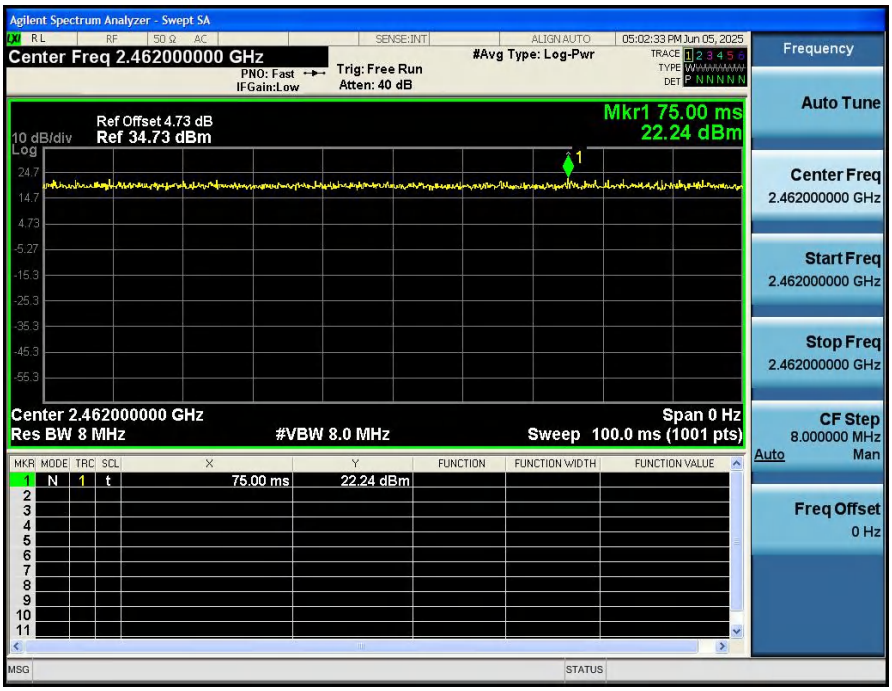
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2412



Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2437



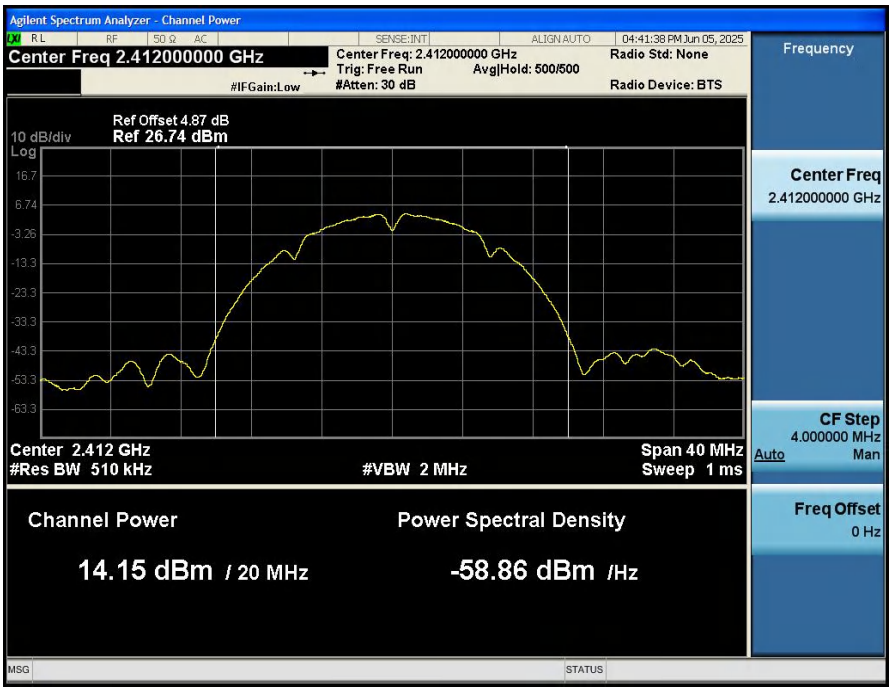
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2462



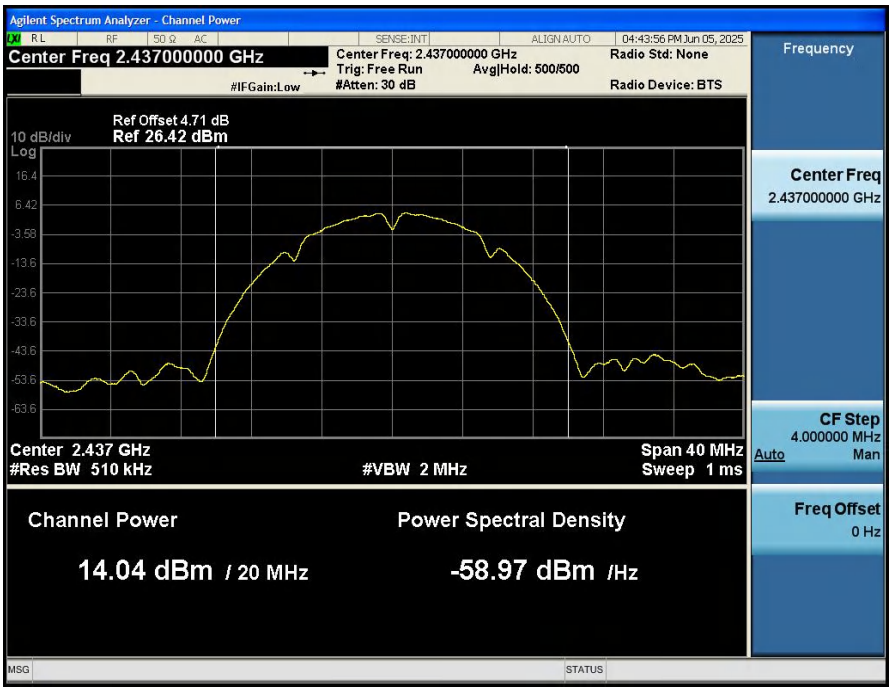
Appendix D: MAX. Output Power

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	14.15	0.00	14.15	30	Pass
NVNT	ANT1	802.11b	2437.00	RMS	14.04	0.00	14.04	30	Pass
NVNT	ANT1	802.11b	2462.00	RMS	14.09	0.00	14.09	30	Pass
NVNT	ANT1	802.11g	2412.00	RMS	14.09	0.00	14.09	30	Pass
NVNT	ANT1	802.11g	2437.00	RMS	13.99	0.00	13.99	30	Pass
NVNT	ANT1	802.11g	2462.00	RMS	14.07	0.00	14.07	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	RMS	**14.21**	0.00	14.21	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	RMS	13.89	0.00	13.89	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	RMS	13.94	0.00	13.94	30	Pass

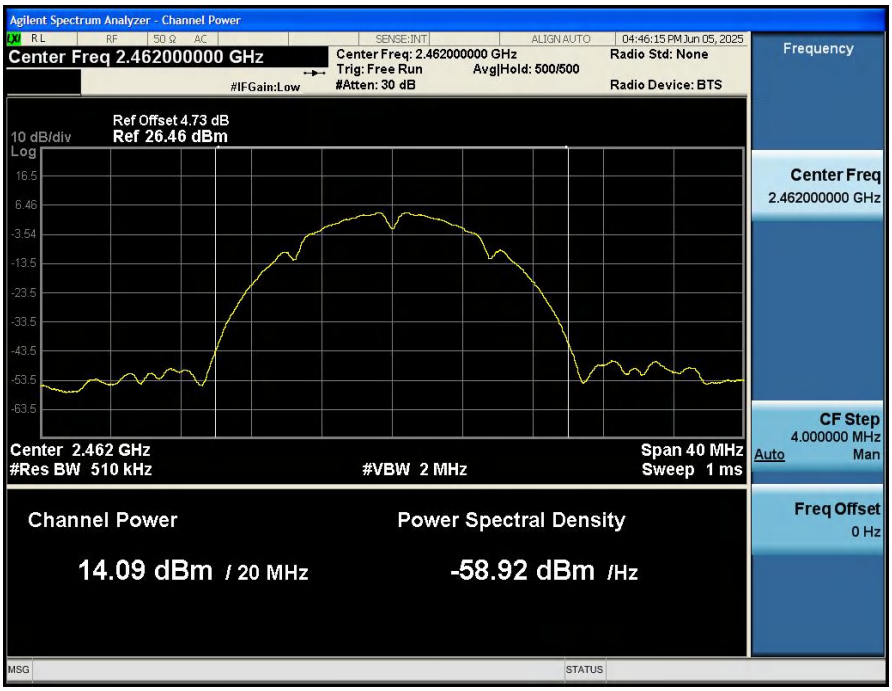
MAX__Output_Power_NVNT_ANT1_802_11b_2412



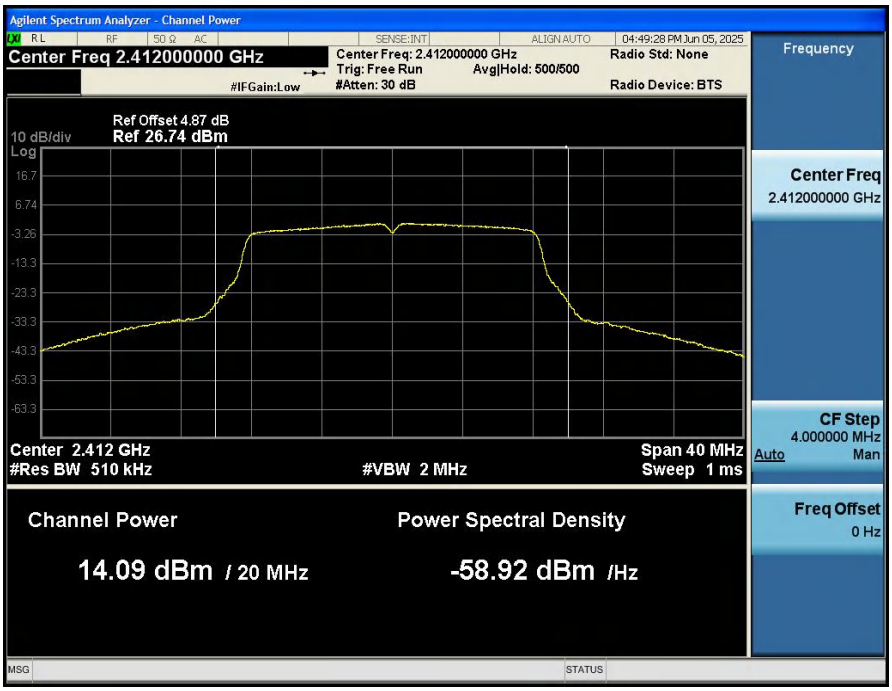
MAX__Output_Power_NVNT_ANT1_802_11b_2437



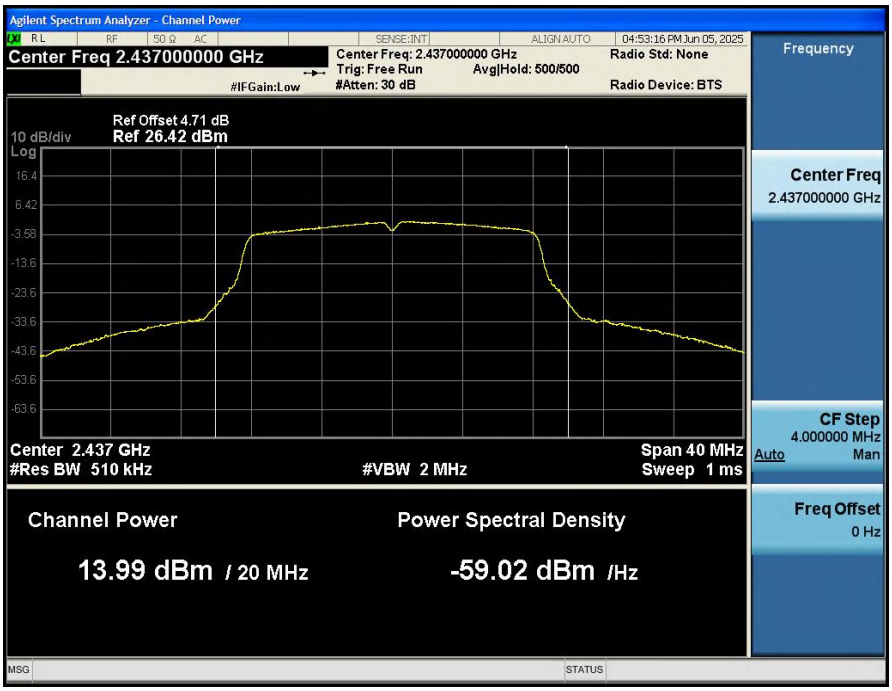
MAX__Output_Power_NVNT_ANT1_802_11b_2462



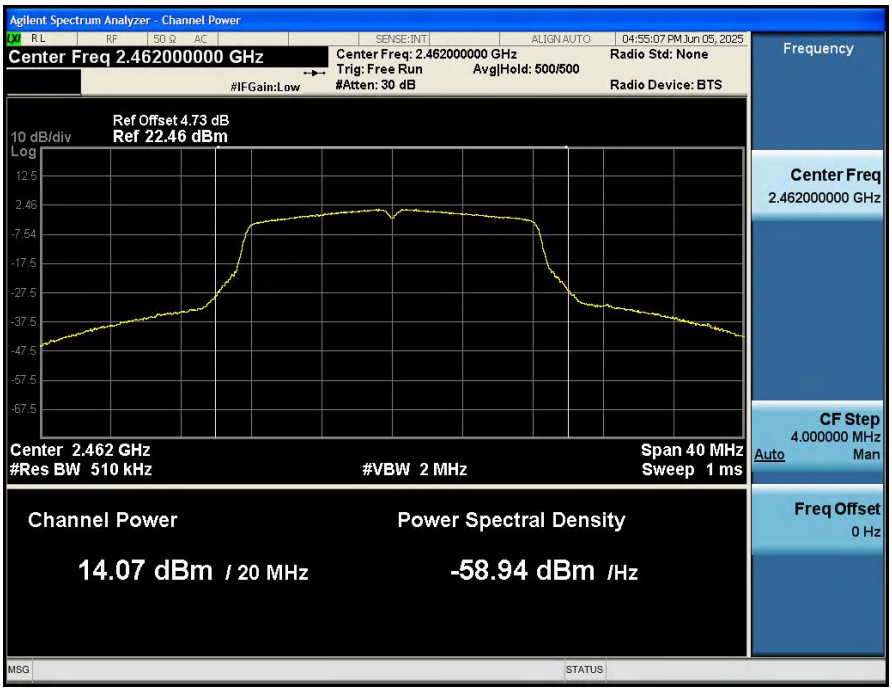
MAX__Output_Power_NVNT_ANT1_802_11g_2412



MAX__Output_Power_NVNT_ANT1_802_11g_2437

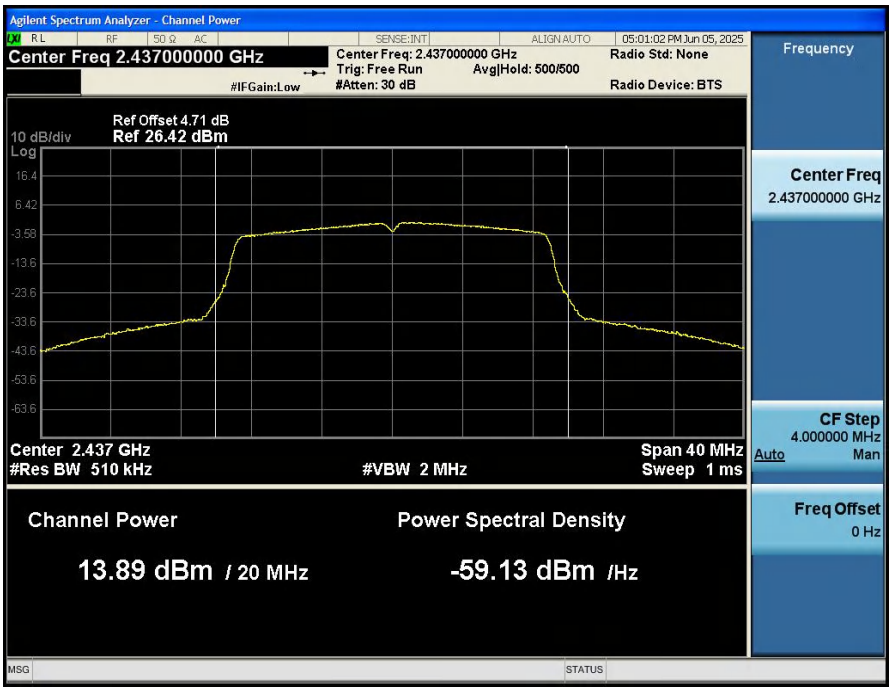


MAX__Output_Power_NVNT_ANT1_802_11g_2462

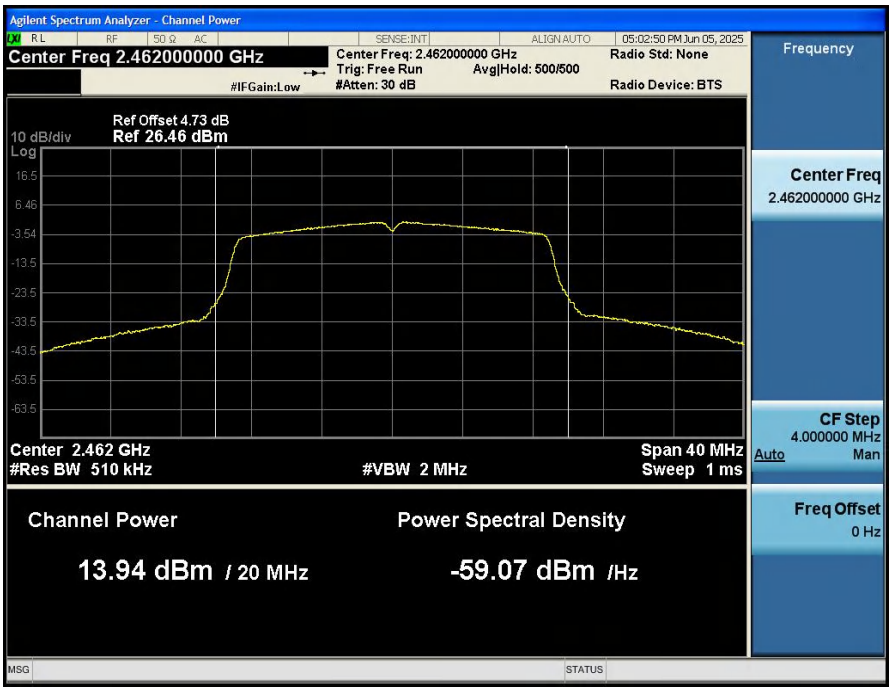


MAX__Output_Power_NVNT_ANT1_802_11n(HT20)_2412

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	2.17	0.00	-10.00	-7.83	8	Pass
NVNT	ANT1	802.11b	2437.00	1.91	0.00	-10.00	-8.09	8	Pass
NVNT	ANT1	802.11b	2462.00	1.65	0.00	-10.00	-8.35	8	Pass
NVNT	ANT1	802.11g	2412.00	-1.43	0.00	-10.00	-11.43	8	Pass
NVNT	ANT1	802.11g	2437.00	-1.69	0.00	-10.00	-11.69	8	Pass
NVNT	ANT1	802.11g	2462.00	-1.39	0.00	-10.00	-11.39	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-0.82	0.00	-10.00	-10.82	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-1.83	0.00	-10.00	-11.83	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-2.03	0.00	-10.00	-12.03	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