

REPORT FOR TEST DATA

FCC ID: 2BENR-DH-313

Product : DH Series of intelligent switches
Model Name : DH-313
Brand : N/A
Report No. : NCT23044243E-5

Prepared for

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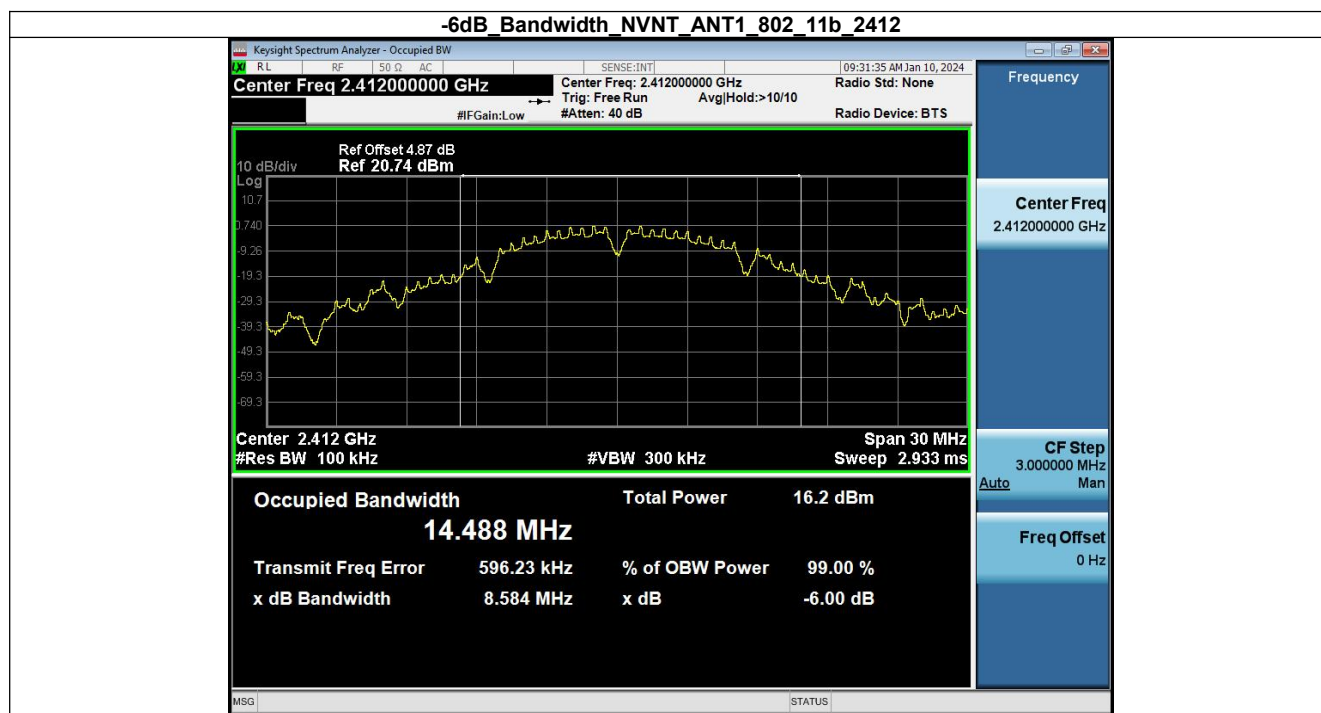
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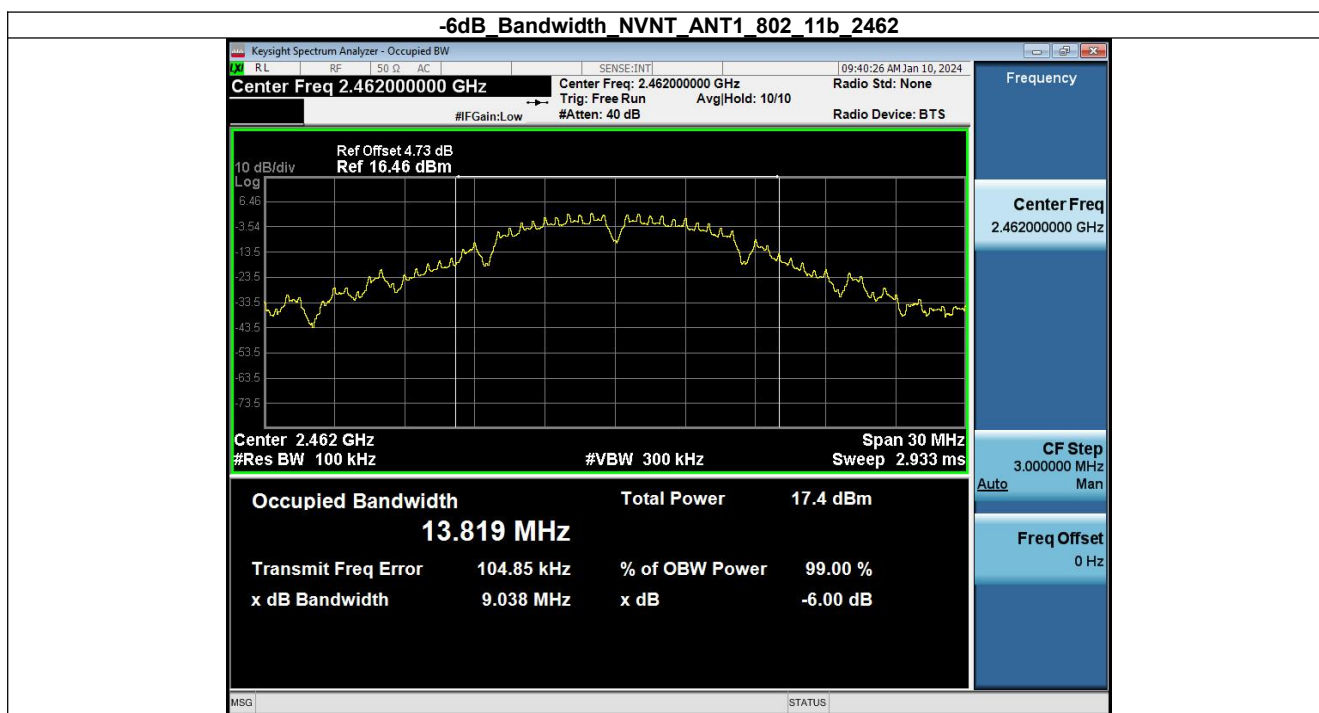
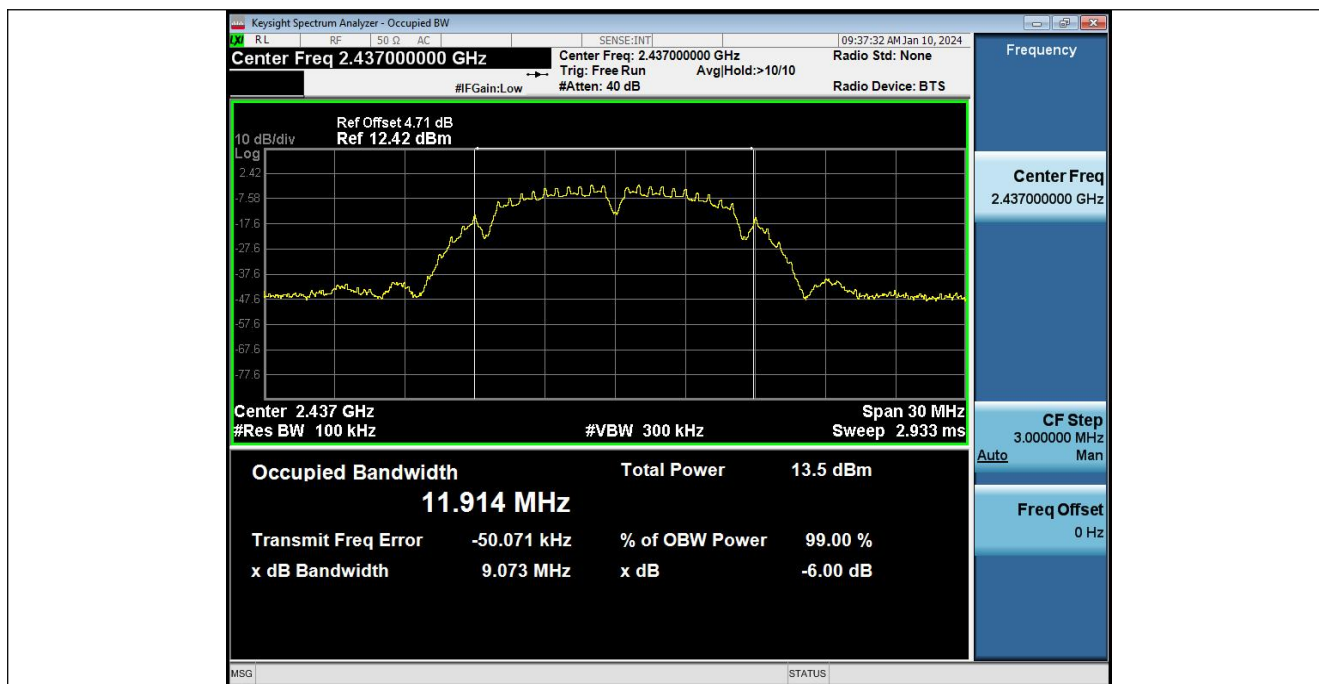
FCC_2.4G_WIFI (Part15.247) Test Data

1. -6dB Bandwidth

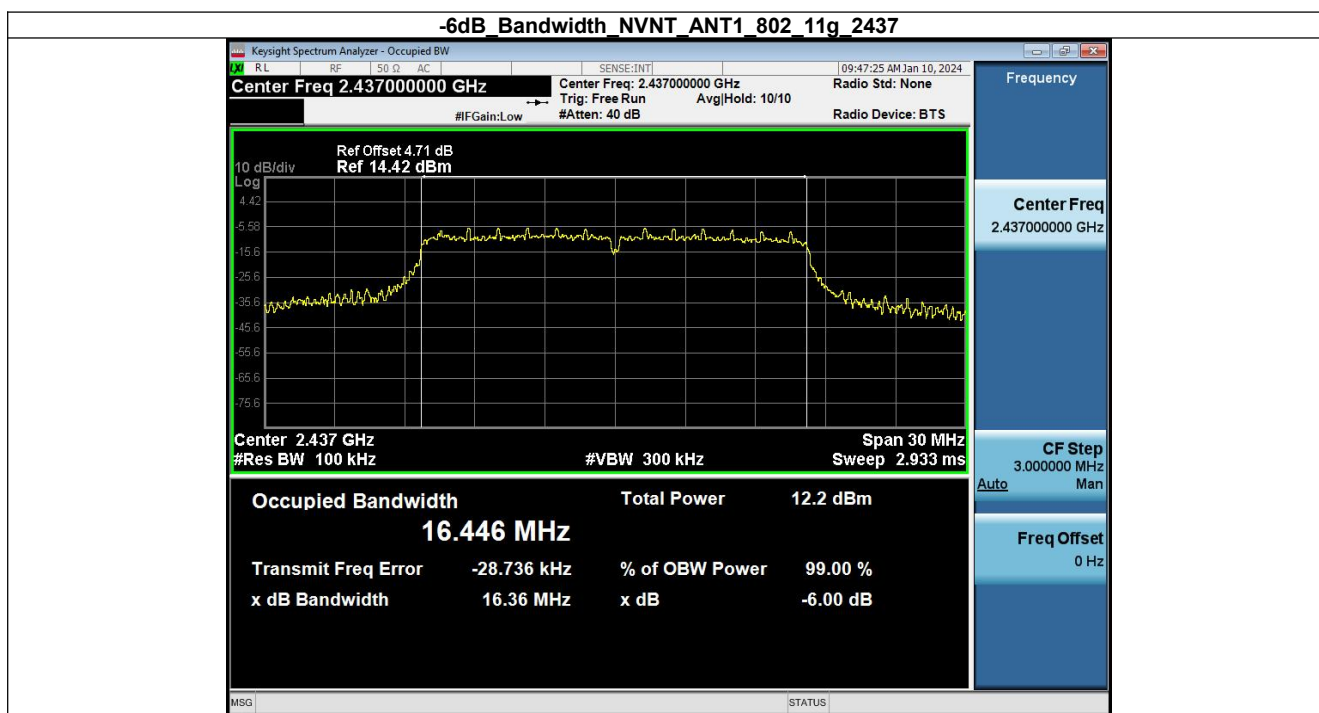
Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	8.58	500	Pass
NVNT	ANT1	802.11b	2437.00	9.07	500	Pass
NVNT	ANT1	802.11b	2462.00	9.04	500	Pass
NVNT	ANT1	802.11g	2412.00	15.15	500	Pass
NVNT	ANT1	802.11g	2437.00	16.36	500	Pass
NVNT	ANT1	802.11g	2462.00	15.50	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	15.59	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	17.02	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	16.29	500	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	35.06	500	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	36.21	500	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	35.21	500	Pass



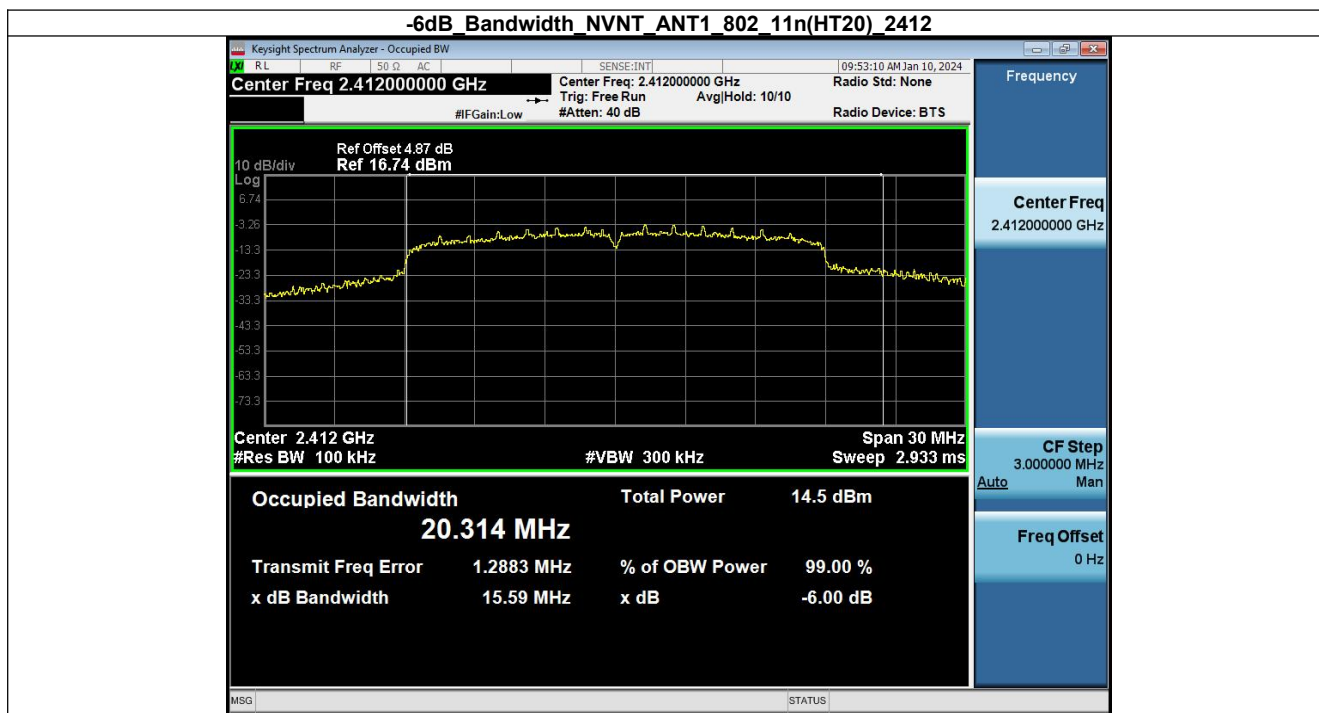
-6dB_Bandwidth_NVNT_ANT1_802_11b_2437



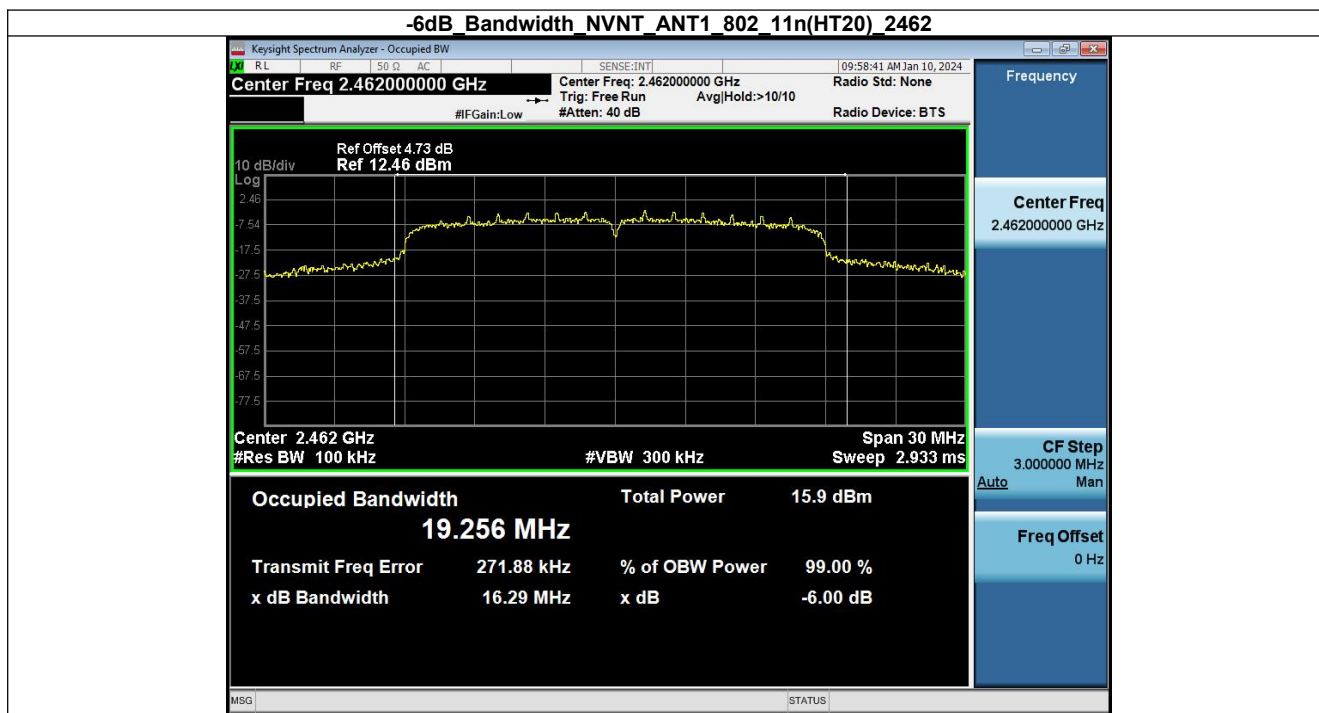
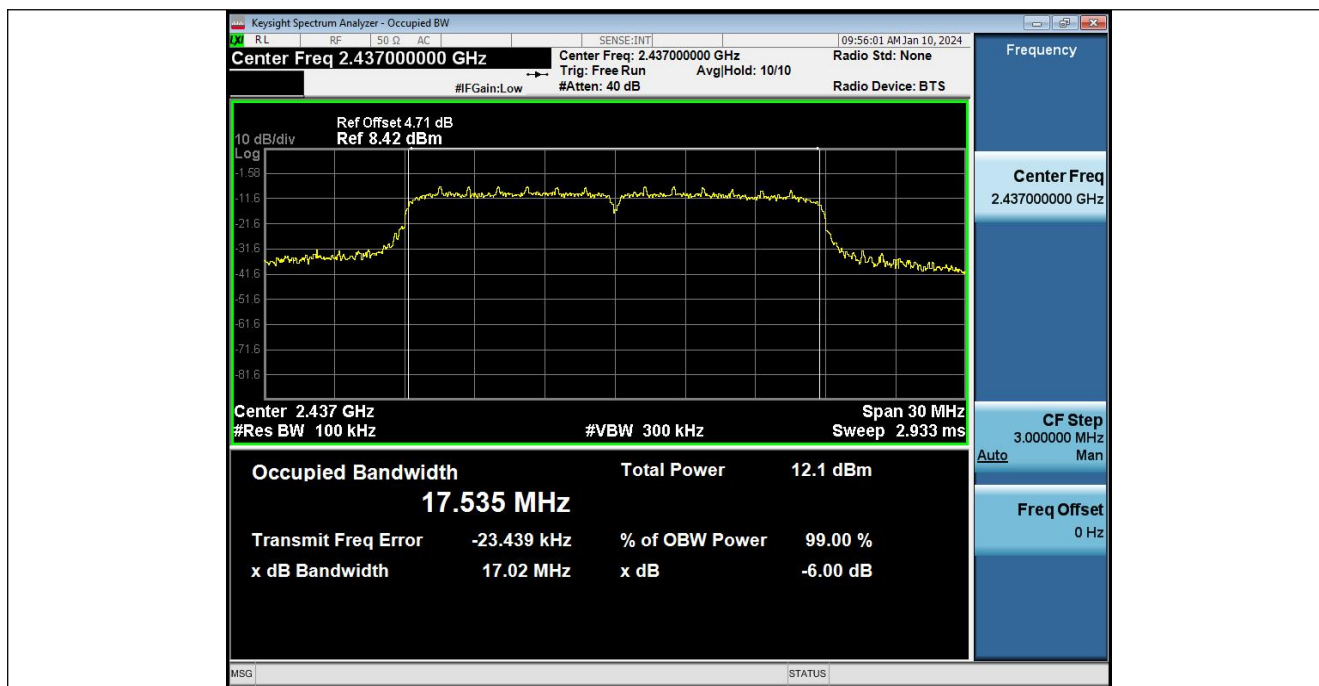
-6dB_Bandwidth_NVNT_ANT1_802_11g_2412



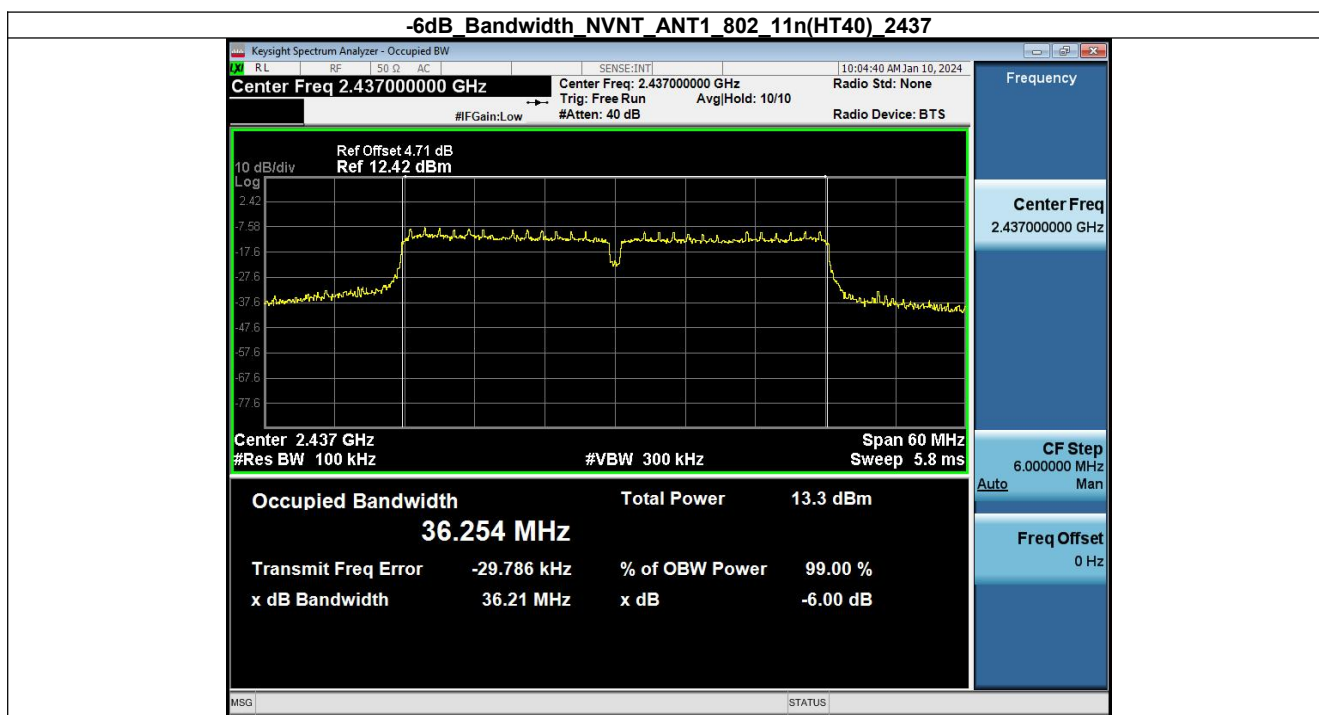
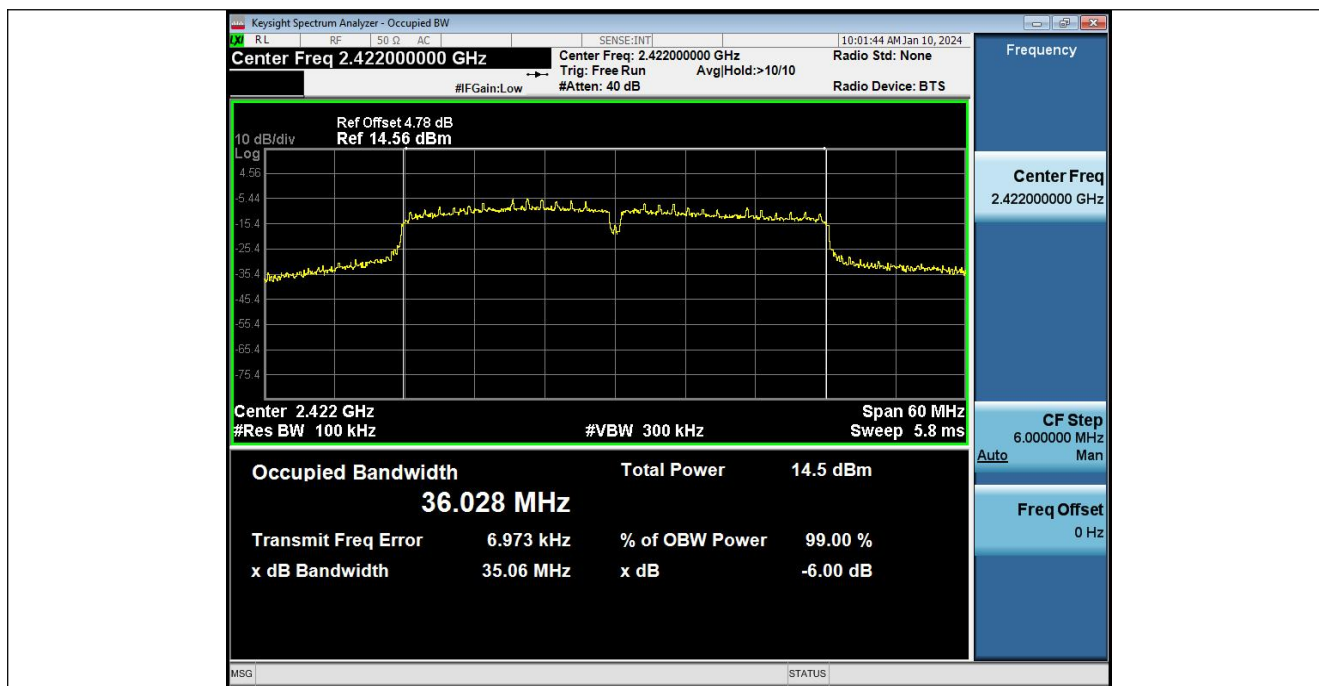
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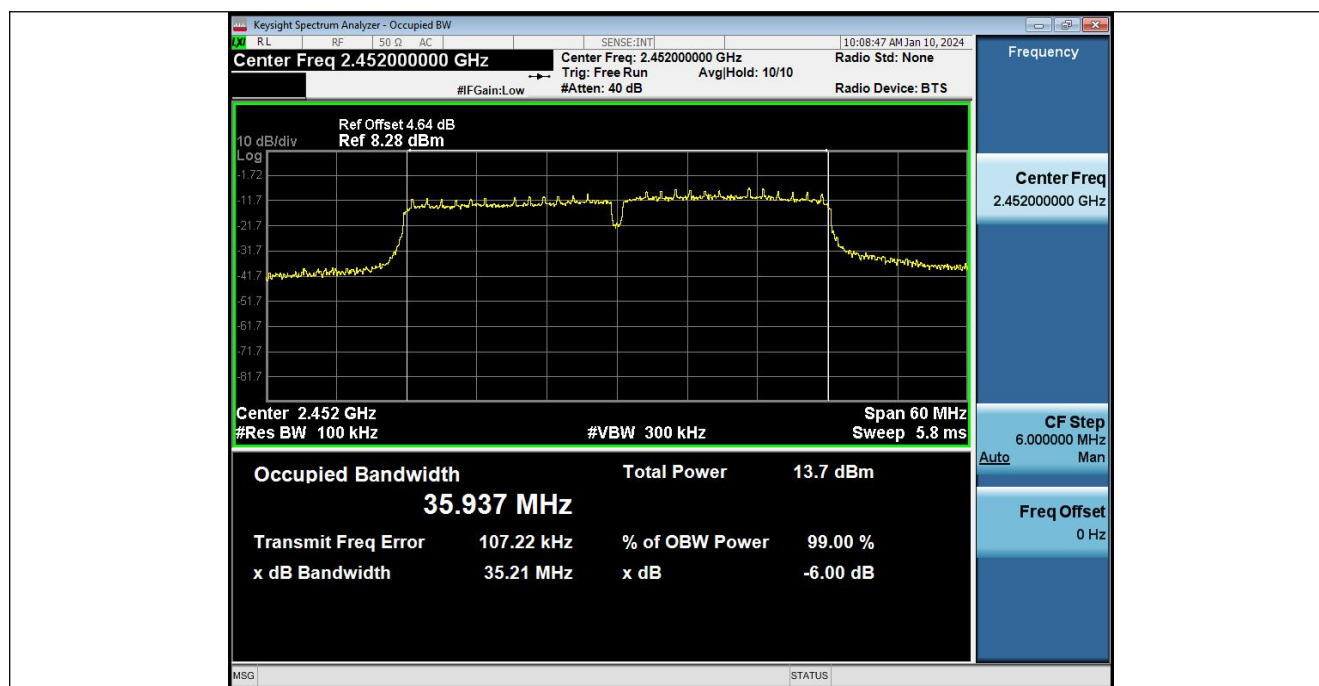
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2437



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2422



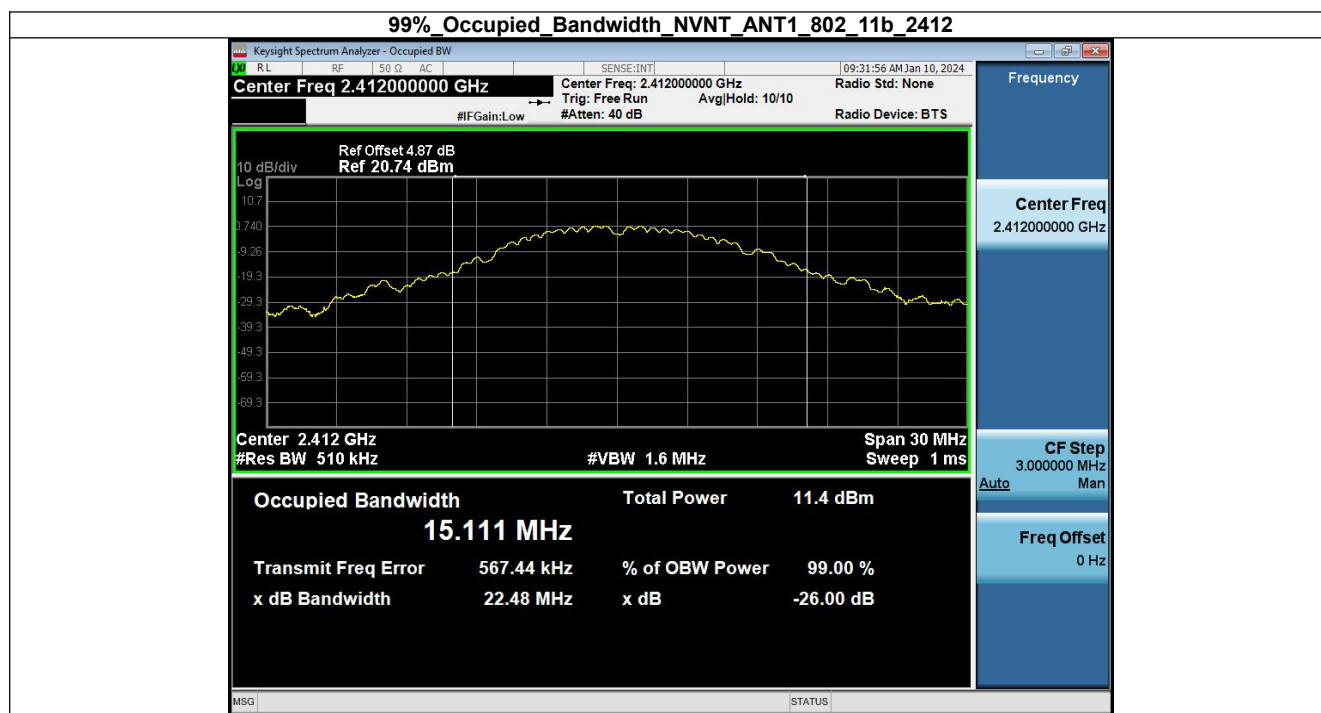
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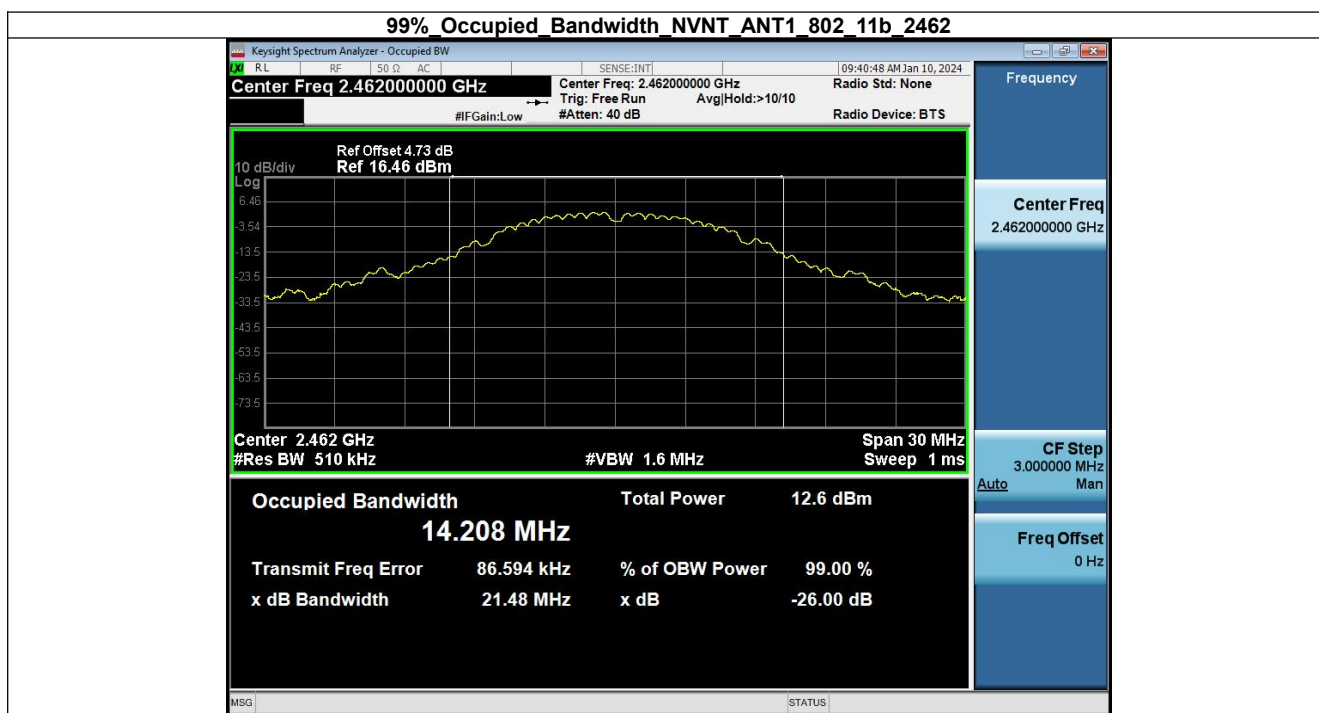
2. 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99%%BW(MHz)
NVNT	ANT1	802.11b	2412.00	15.111
NVNT	ANT1	802.11b	2437.00	11.999
NVNT	ANT1	802.11b	2462.00	14.208
NVNT	ANT1	802.11g	2412.00	22.258
NVNT	ANT1	802.11g	2437.00	17.280
NVNT	ANT1	802.11g	2462.00	21.578
NVNT	ANT1	802.11n(HT20)	2412.00	21.220
NVNT	ANT1	802.11n(HT20)	2437.00	17.982
NVNT	ANT1	802.11n(HT20)	2462.00	20.142
NVNT	ANT1	802.11n(HT40)	2422.00	36.609
NVNT	ANT1	802.11n(HT40)	2437.00	37.332
NVNT	ANT1	802.11n(HT40)	2452.00	36.510

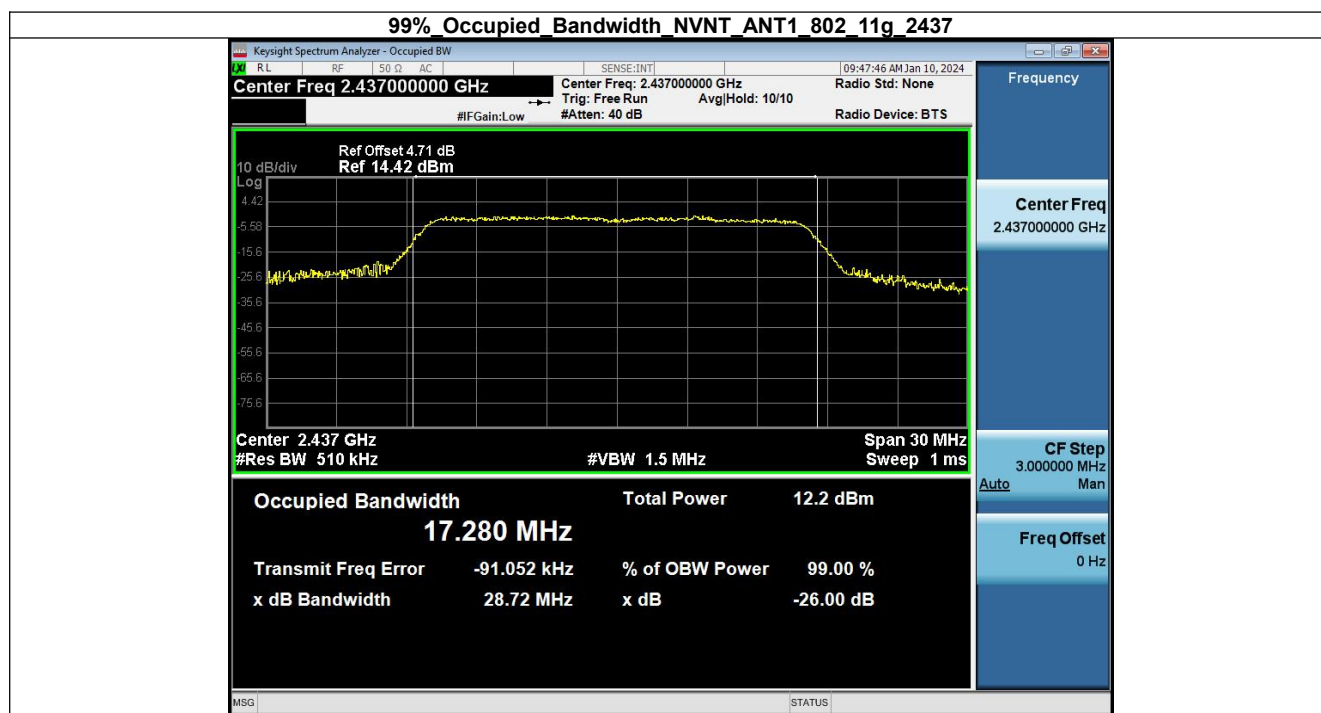
99%_Occupied_Bandwidth_NVNT_ANT1_802_11b_2412



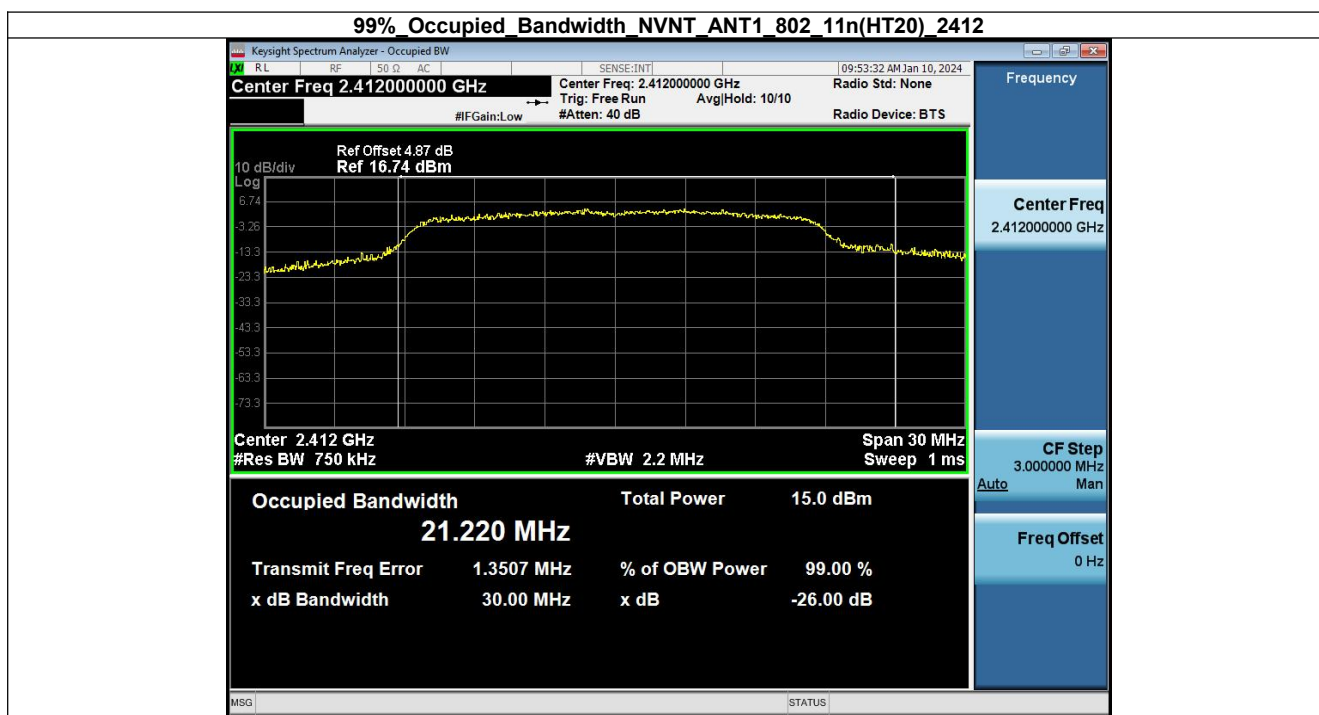
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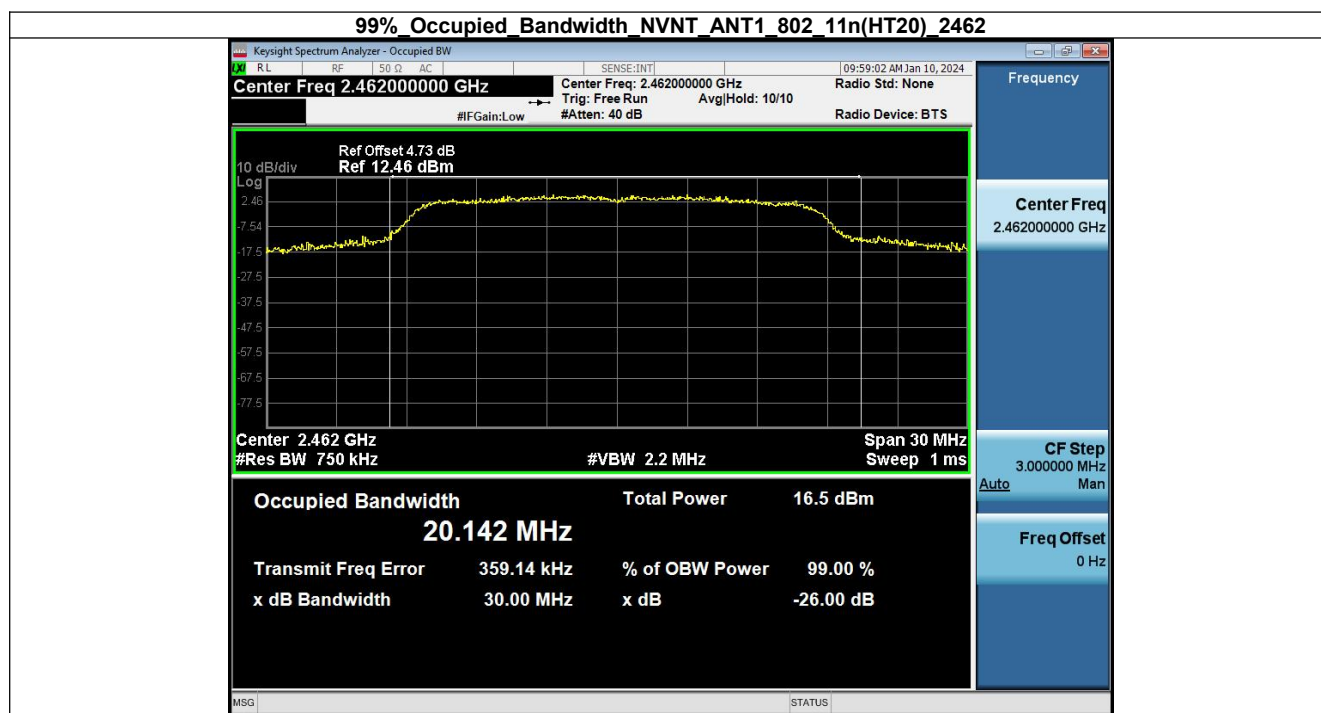
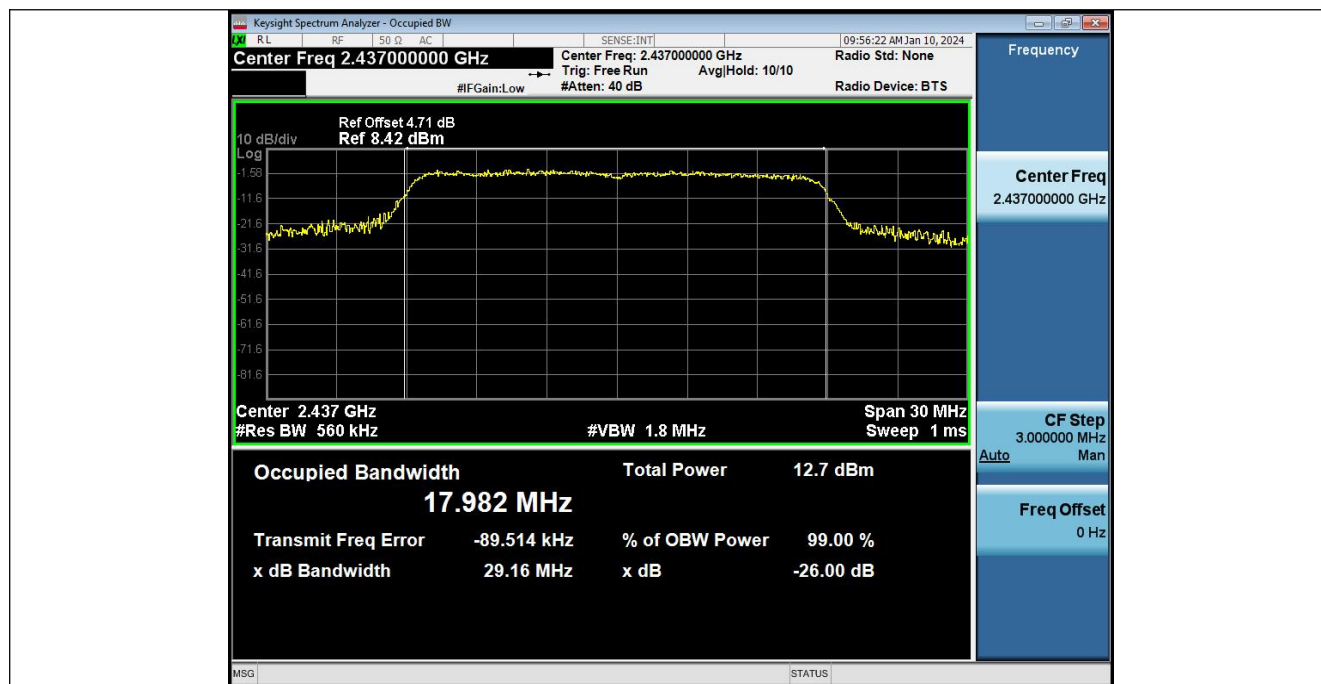
99%_Occupied_Bandwidth_NVNT_ANT1_802_11g_2412



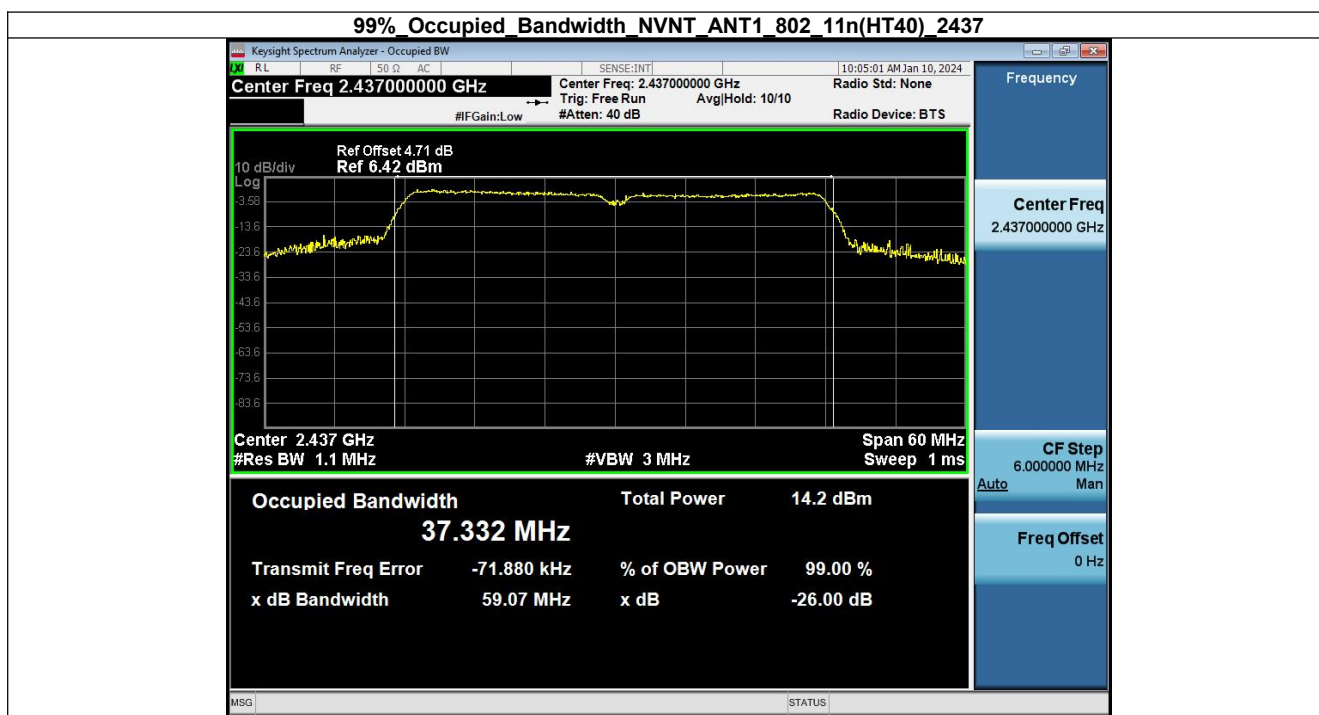
99%_Occupied_Bandwidth_NVNT_ANT1_802_11g_2462



99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2437



99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT40)_2422

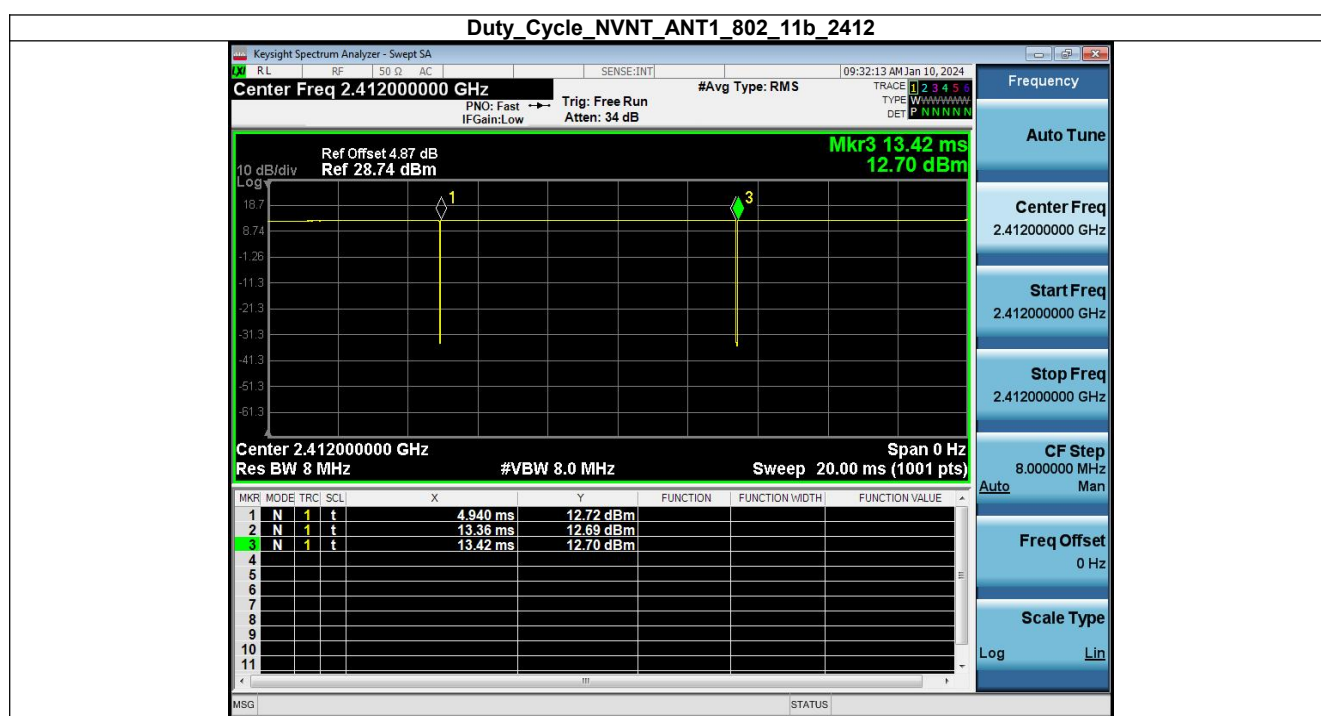


99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT40)_2452

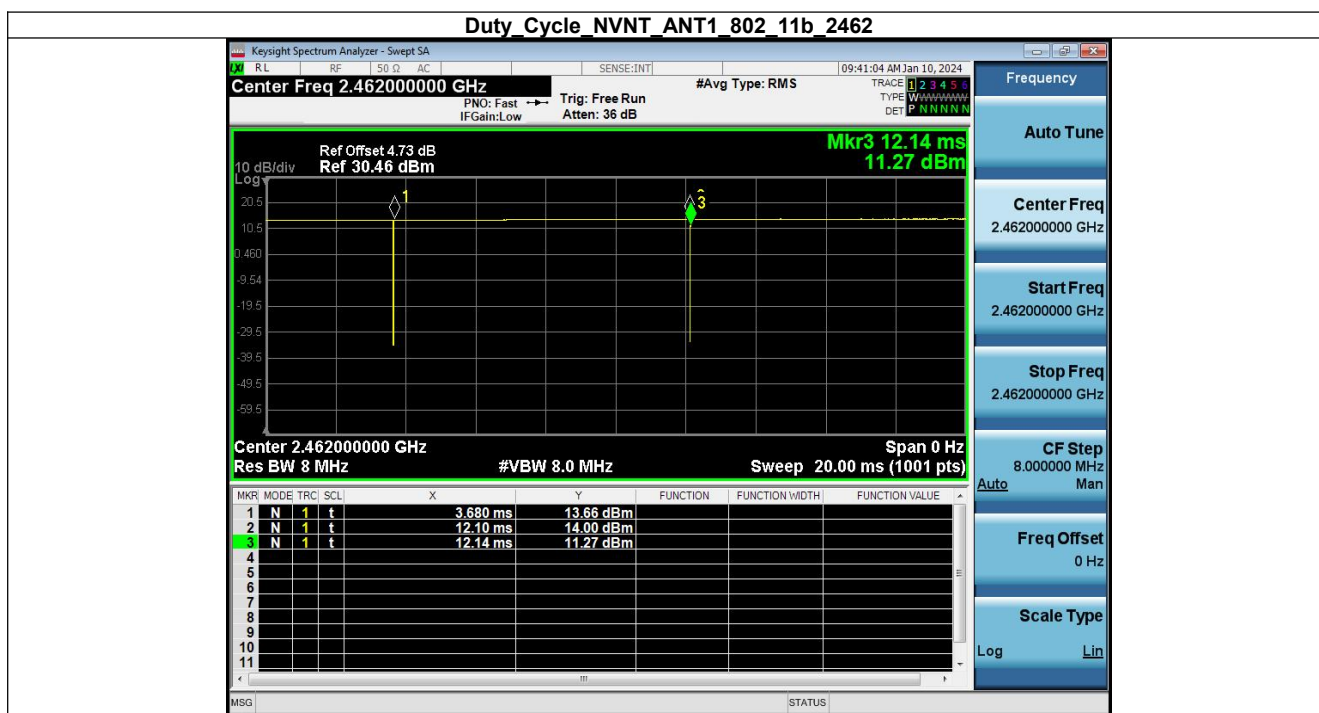
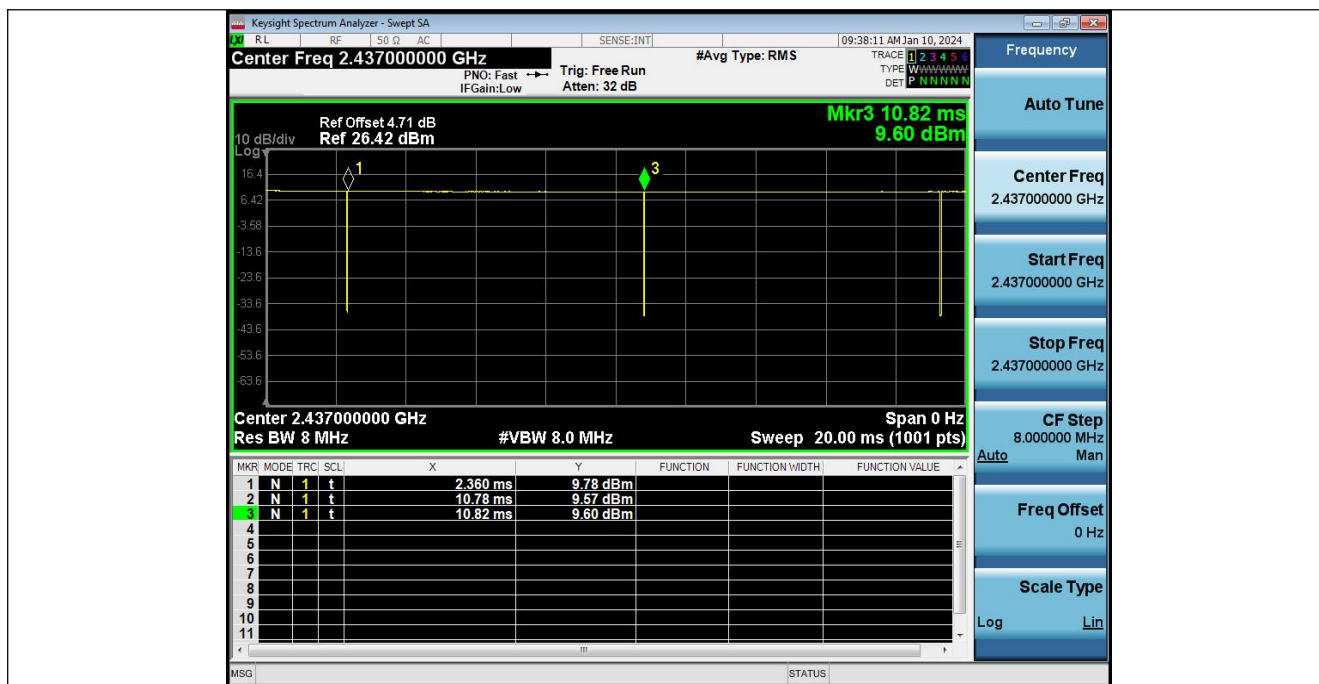


3. Duty Cycle

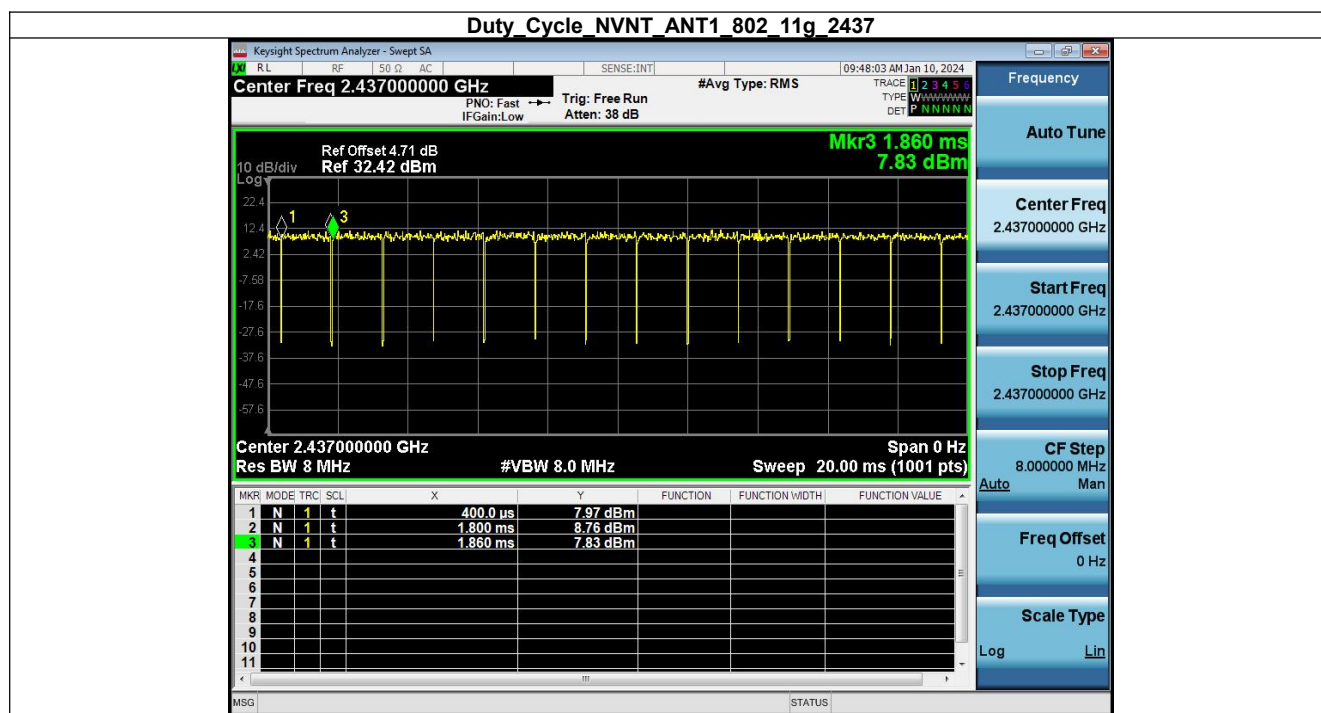
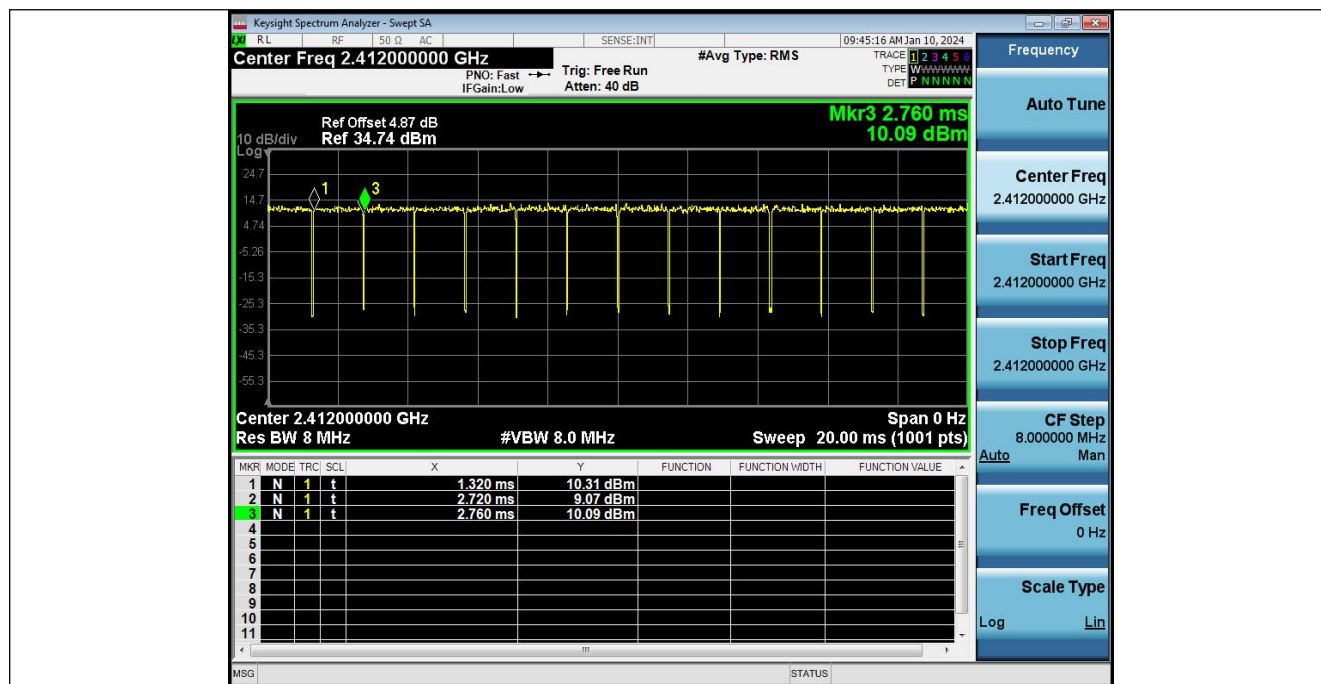
Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty factor(dB)
NVNT	ANT1	802.11b	2412.00	99.53	0.00
NVNT	ANT1	802.11b	2437.00	99.76	0.00
NVNT	ANT1	802.11b	2462.00	99.76	0.00
NVNT	ANT1	802.11g	2412.00	98.61	0.00
NVNT	ANT1	802.11g	2437.00	97.26	0.12
NVNT	ANT1	802.11g	2462.00	97.26	0.12
NVNT	ANT1	802.11n(HT20)	2412.00	96.77	0.14
NVNT	ANT1	802.11n(HT20)	2437.00	96.77	0.14
NVNT	ANT1	802.11n(HT20)	2462.00	96.77	0.14
NVNT	ANT1	802.11n(HT40)	2422.00	93.75	0.28
NVNT	ANT1	802.11n(HT40)	2437.00	93.75	0.28
NVNT	ANT1	802.11n(HT40)	2452.00	96.88	0.14



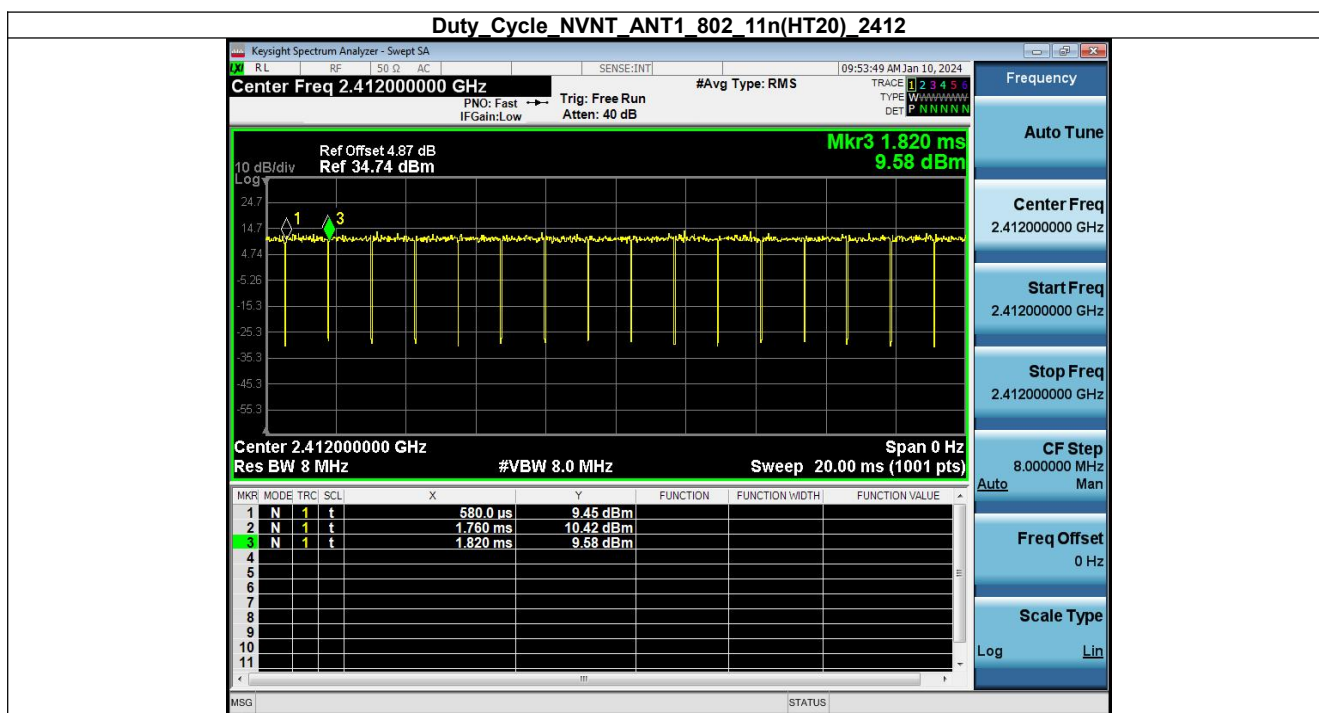
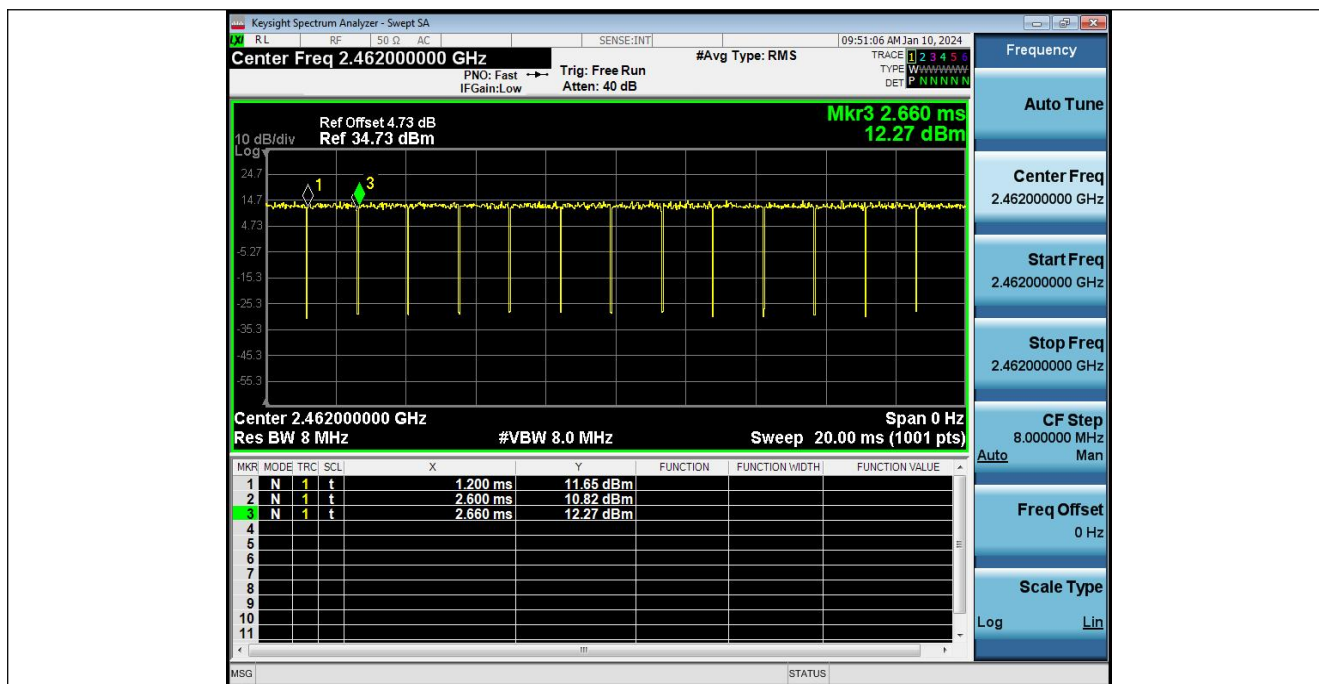
Duty Cycle_NVNT_ANT1_802_11b_2437



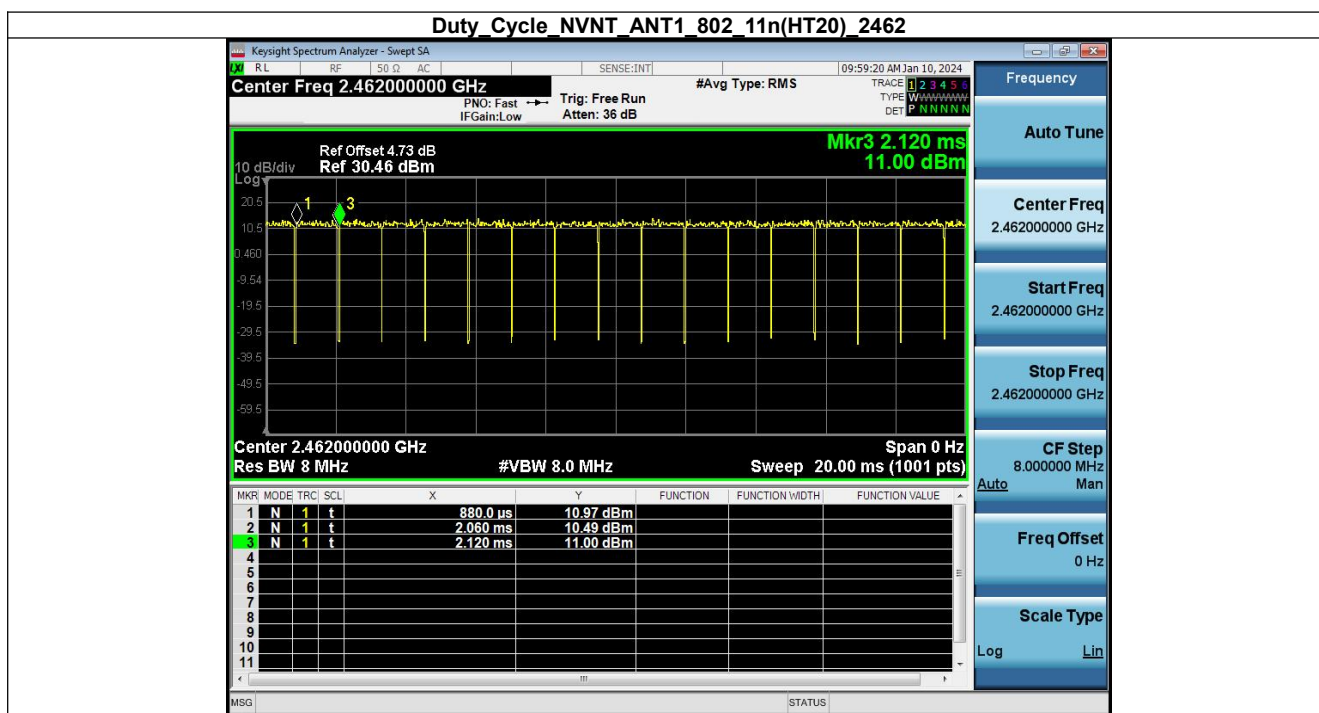
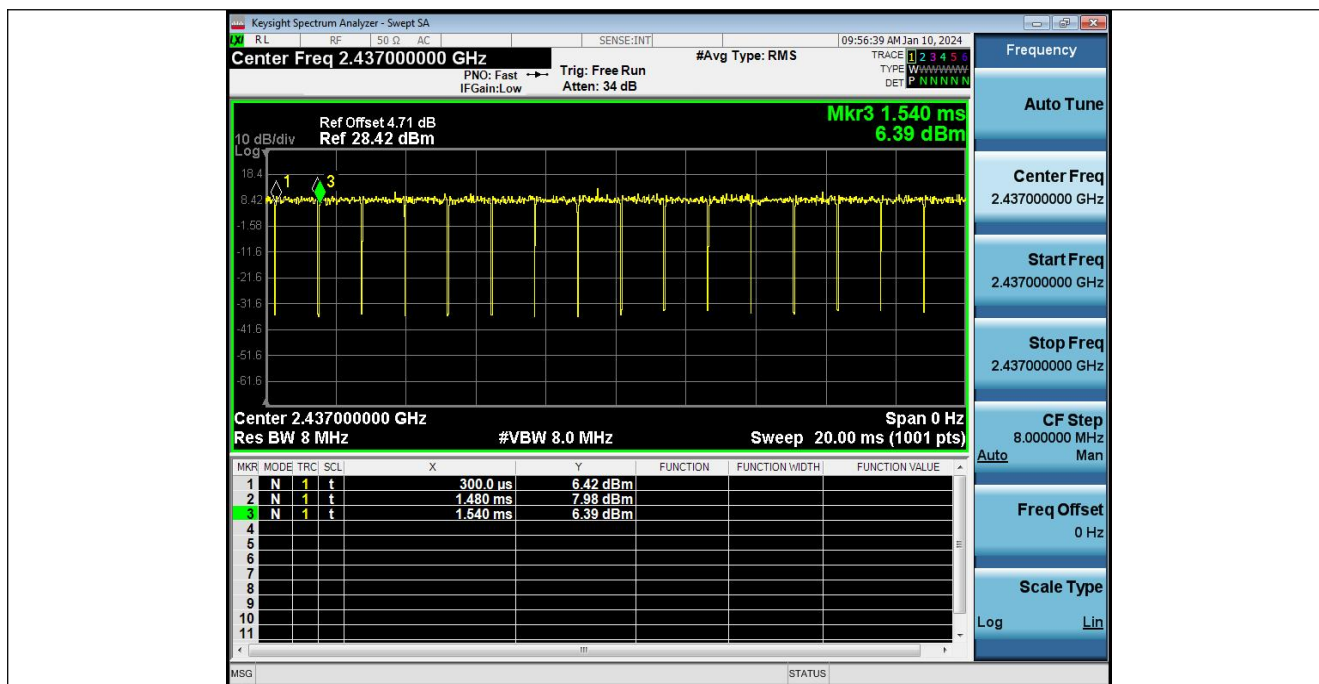
Duty Cycle NVNT ANT1_802_11g_2412



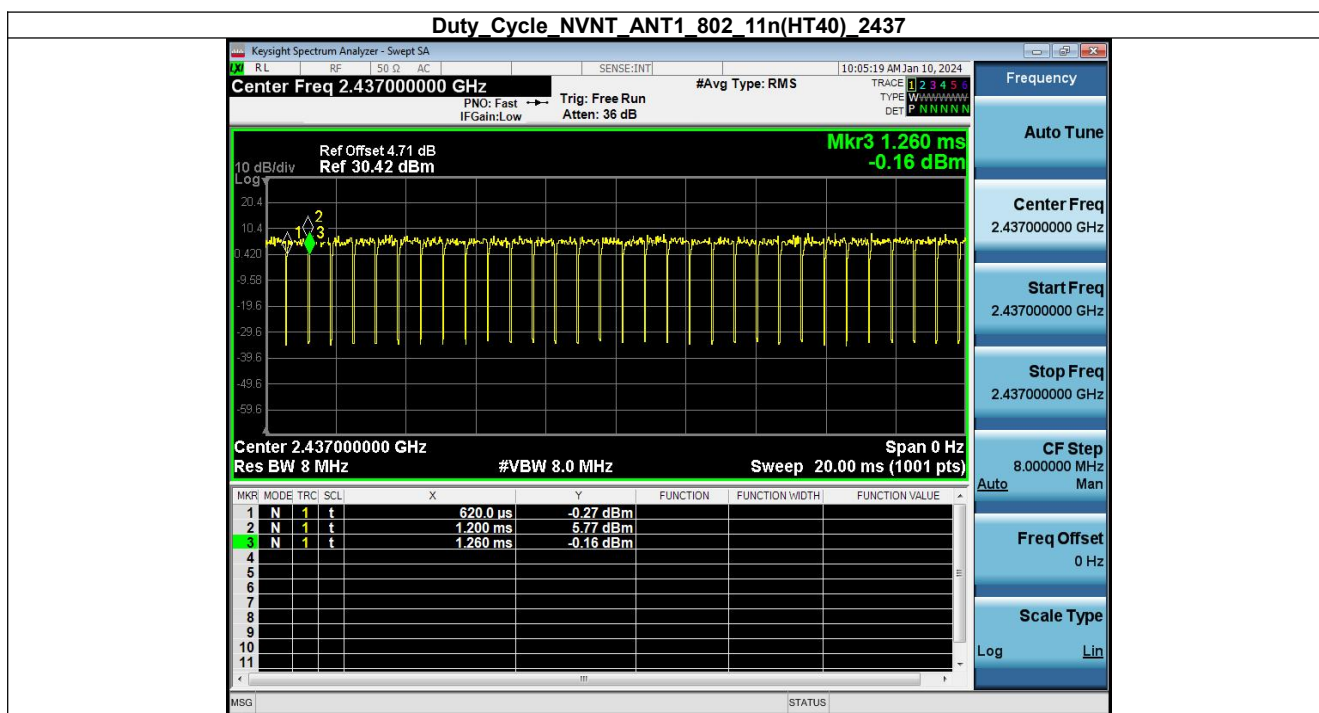
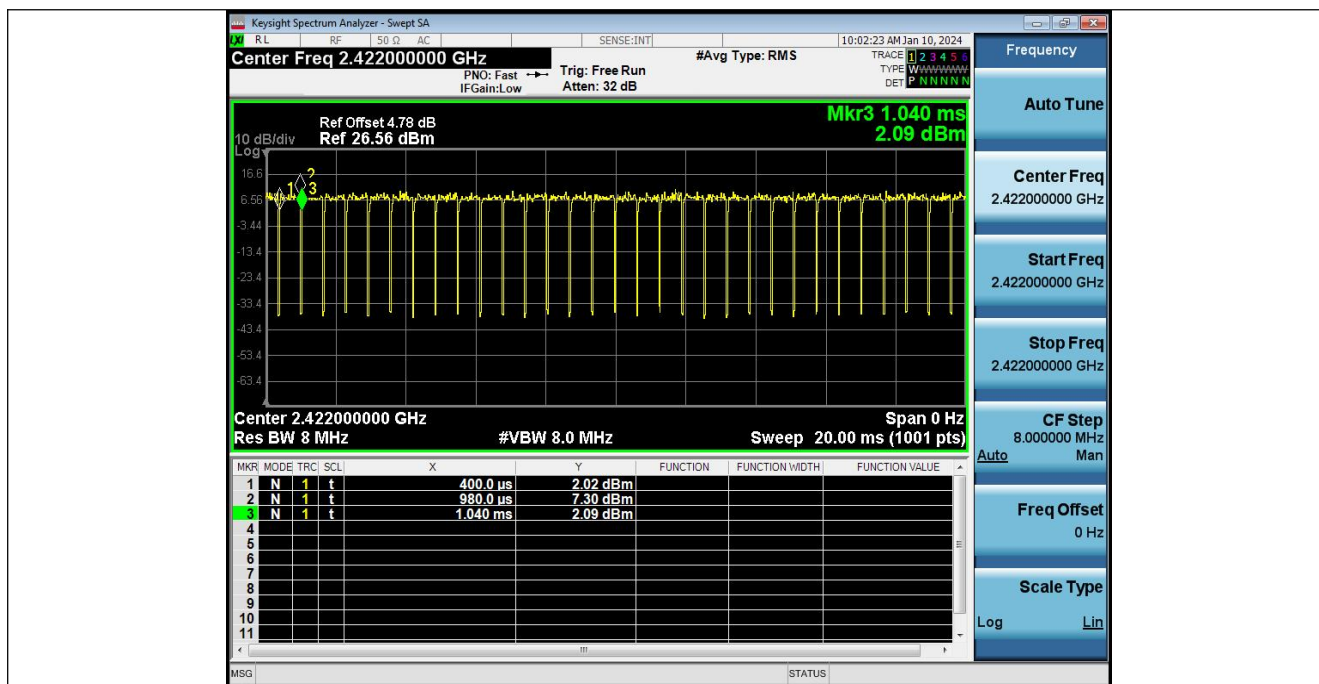
Duty Cycle NVNT ANT1_802_11g_2462



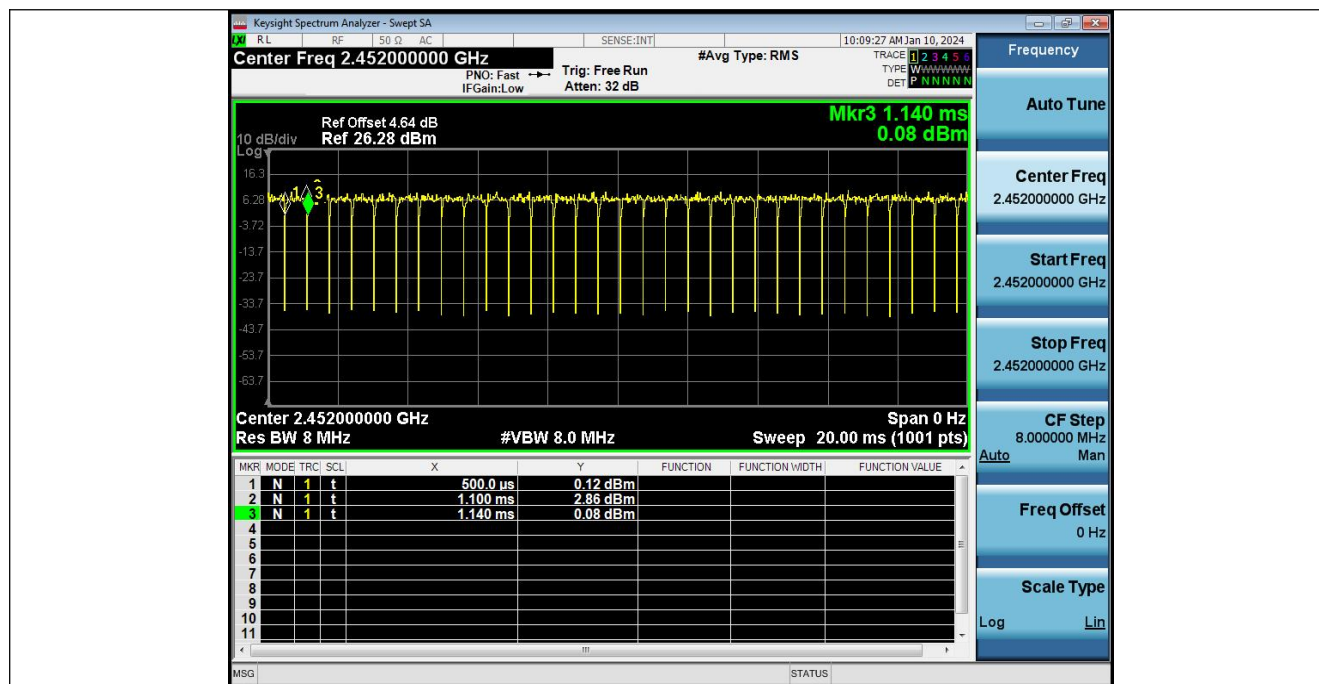
Duty Cycle NVNT ANT1_802_11n(HT20)_2437



Duty Cycle NVNT ANT1_802_11n(HT40)_2422



Duty_Cycle_NVNT_ANT1_802_11n(HT40)_2452



4. MAX. Output Power

Condition	Antenna	Modulation	Frequency (MHz)	Detector	Conducted Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	Peak	11.73	30	Pass
NVNT	ANT1	802.11b	2437.00	Peak	9.14	30	Pass
NVNT	ANT1	802.11b	2462.00	Peak	13.06	30	Pass
NVNT	ANT1	802.11g	2412.00	Peak	15.04	30	Pass
NVNT	ANT1	802.11g	2437.00	Peak	12.85	30	Pass
NVNT	ANT1	802.11g	2462.00	Peak	16.50	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	Peak	14.80	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	Peak	12.65	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	Peak	16.32	30	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	Peak	14.86	30	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	Peak	13.59	30	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	Peak	14.17	30	Pass

5. Power Spectral Density

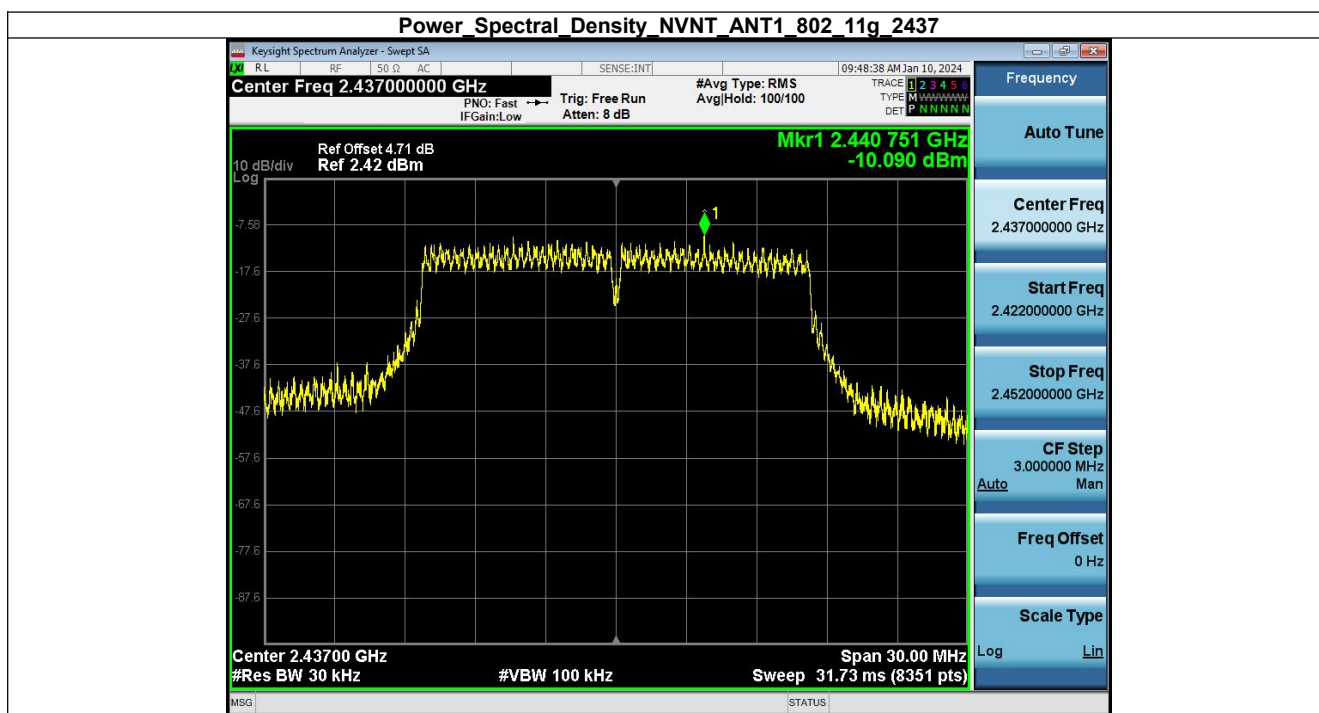
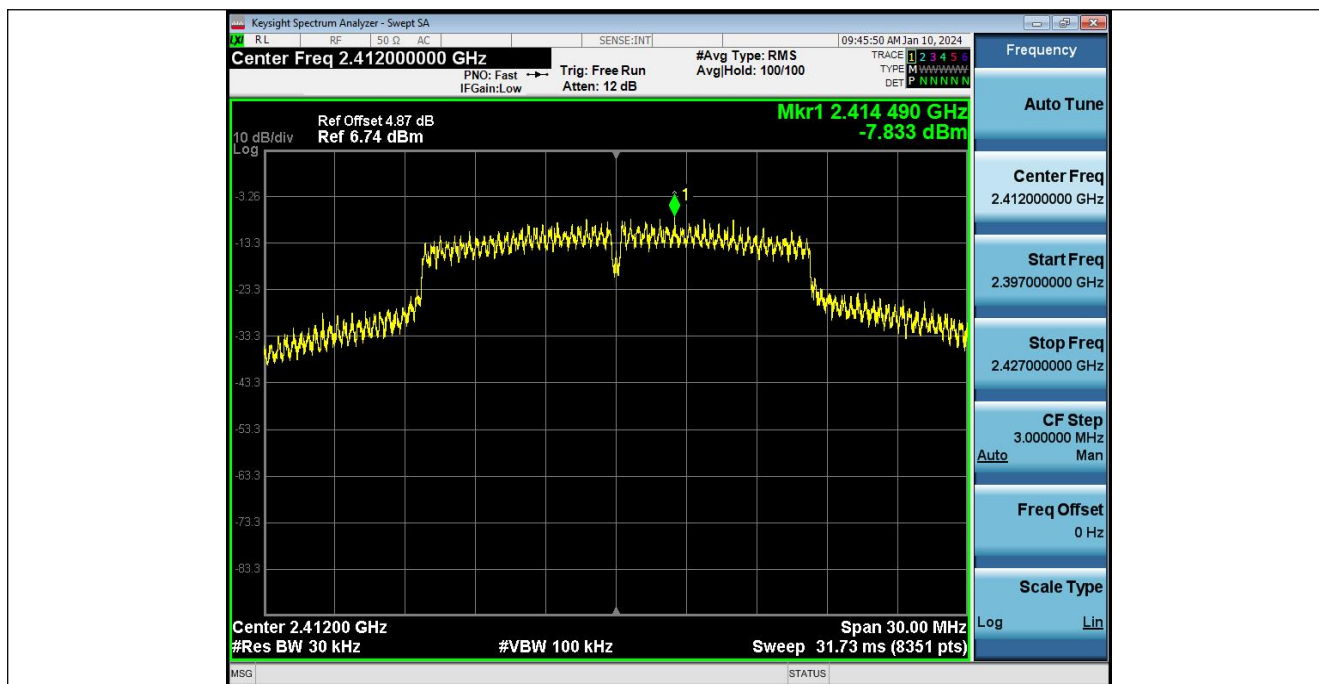
Condition	Antenna	Modulation	Frequency (MHz)	PSD(dBm/30kHz)	RB factor(dB)	PSD(dBm/3kHz)	limit(dBm/3kHz)	Result
NVNT	ANT1	802.11b	2412.00	-3.66	-10.00	-13.66	8	Pass
NVNT	ANT1	802.11b	2437.00	-4.87	-10.00	-14.87	8	Pass
NVNT	ANT1	802.11b	2462.00	-2.19	-10.00	-12.19	8	Pass
NVNT	ANT1	802.11g	2412.00	-7.83	-10.00	-17.83	8	Pass
NVNT	ANT1	802.11g	2437.00	-10.09	-10.00	-20.09	8	Pass
NVNT	ANT1	802.11g	2462.00	-6.04	-10.00	-16.04	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-8.23	-10.00	-18.23	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-11.53	-10.00	-21.53	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-6.75	-10.00	-16.75	8	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	-11.14	-10.00	-21.14	8	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	-12.99	-10.00	-22.99	8	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	-12.55	-10.00	-22.55	8	Pass



Power_Spectral_Density_NVNT_ANT1_802_11b_2437



Power_Spectral_Density_NVNT_ANT1_802_11g_2412



Power Spectral Density NVNT_ANT1_802_11g_2462