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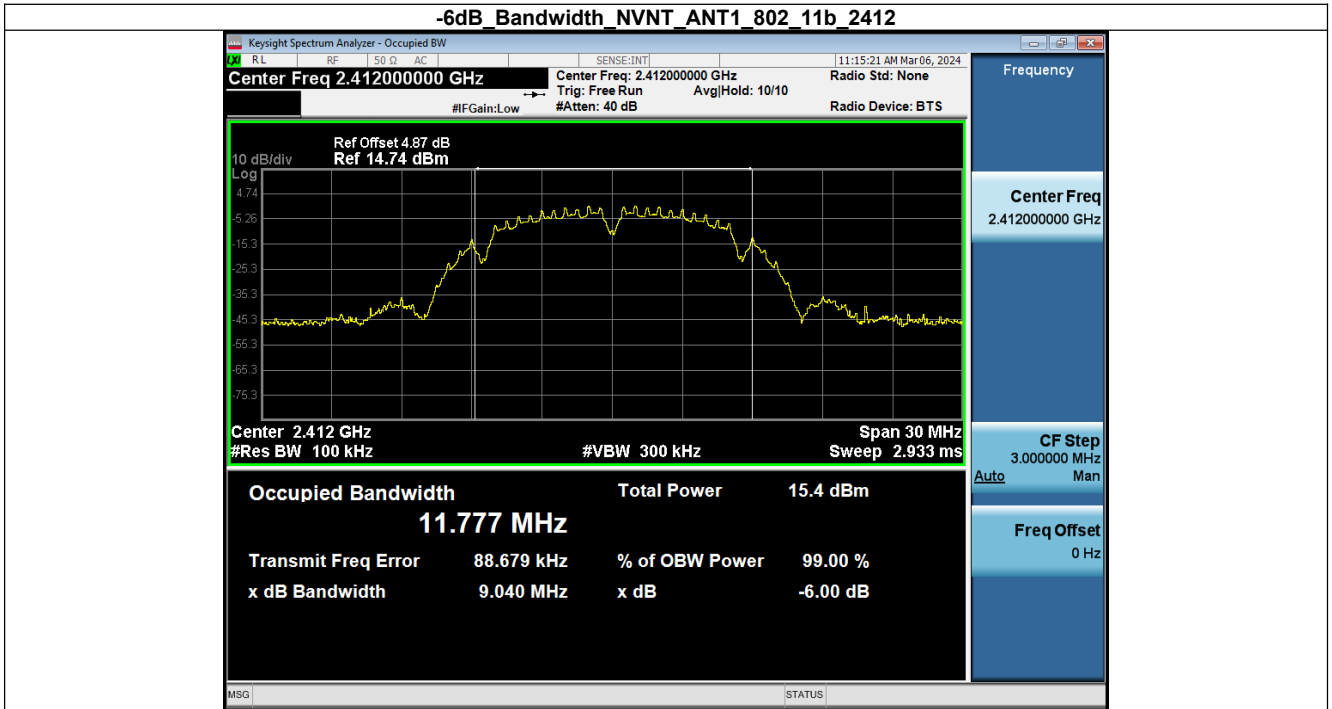
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# FCC ID:2ARPE-SSM

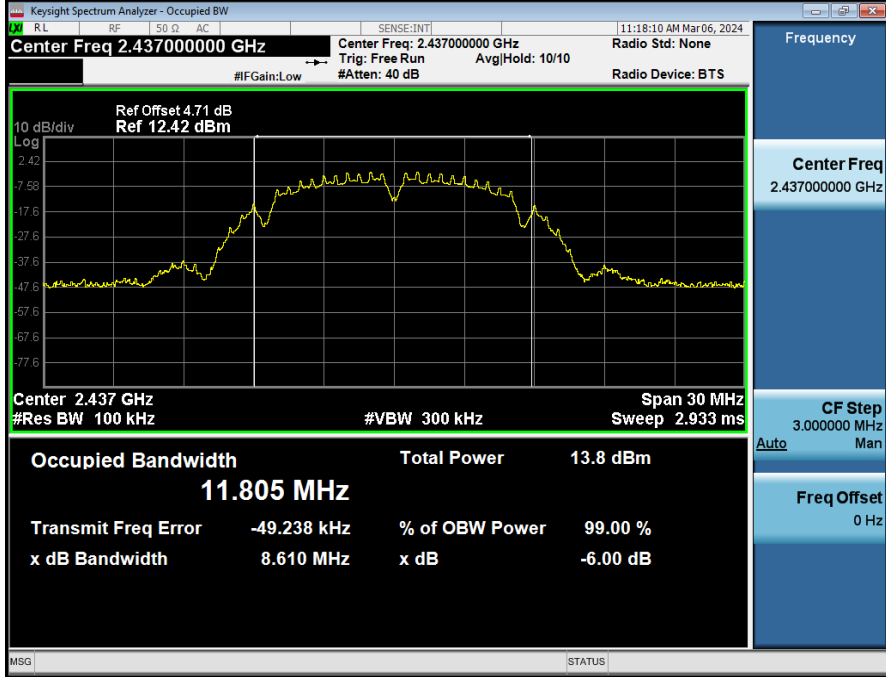
## FCC\_2.4G\_WIFI (Part15.247) Test Data

### 1. -6dB Bandwidth

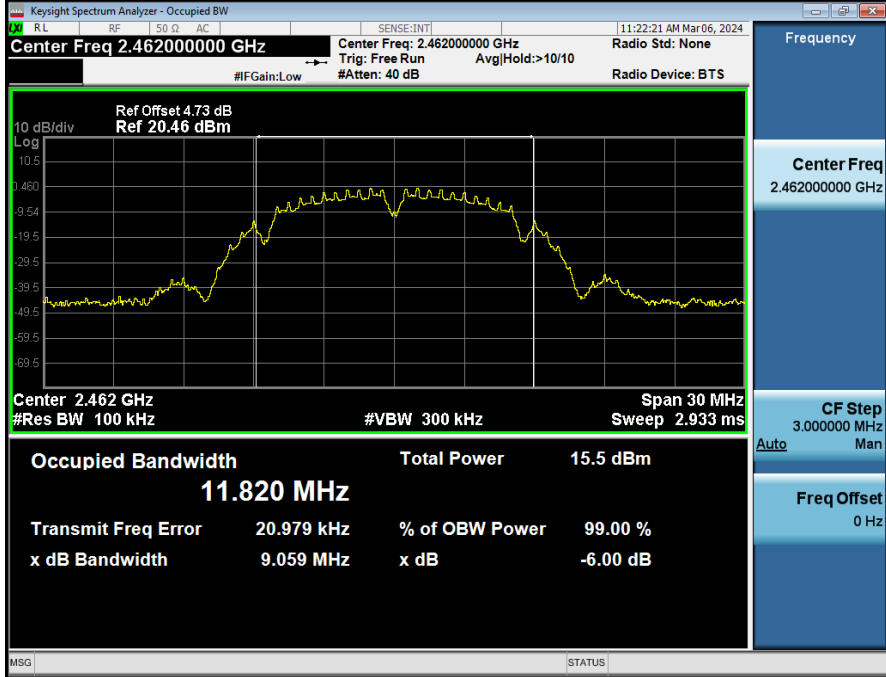
Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	9.04	500	Pass
NVNT	ANT1	802.11b	2437.00	8.61	500	Pass
NVNT	ANT1	802.11b	2462.00	9.06	500	Pass
NVNT	ANT1	802.11g	2412.00	16.12	500	Pass
NVNT	ANT1	802.11g	2437.00	16.34	500	Pass
NVNT	ANT1	802.11g	2462.00	16.34	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	17.06	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	17.00	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	17.28	500	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	35.94	500	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	35.81	500	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	35.78	500	Pass



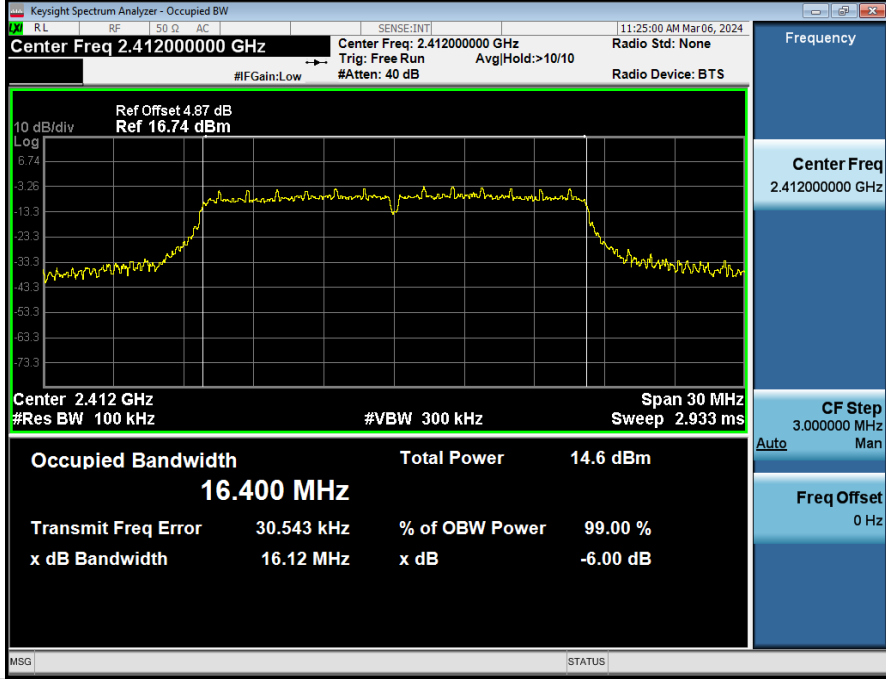
**-6dB Bandwidth\_NVNT\_ANT1\_802\_11b\_2437**



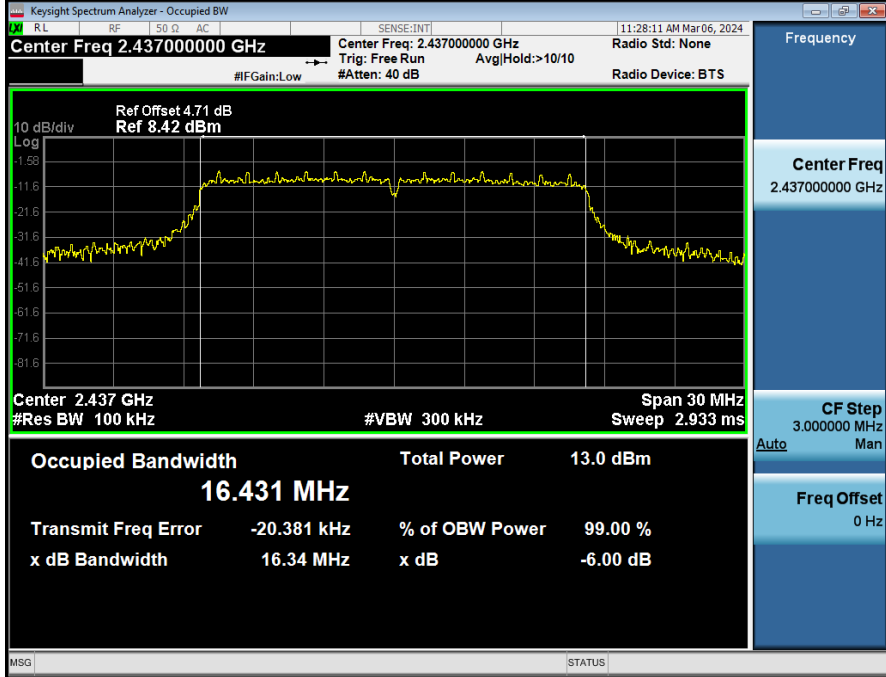
**-6dB Bandwidth\_NVNT\_ANT1\_802\_11b\_2462**



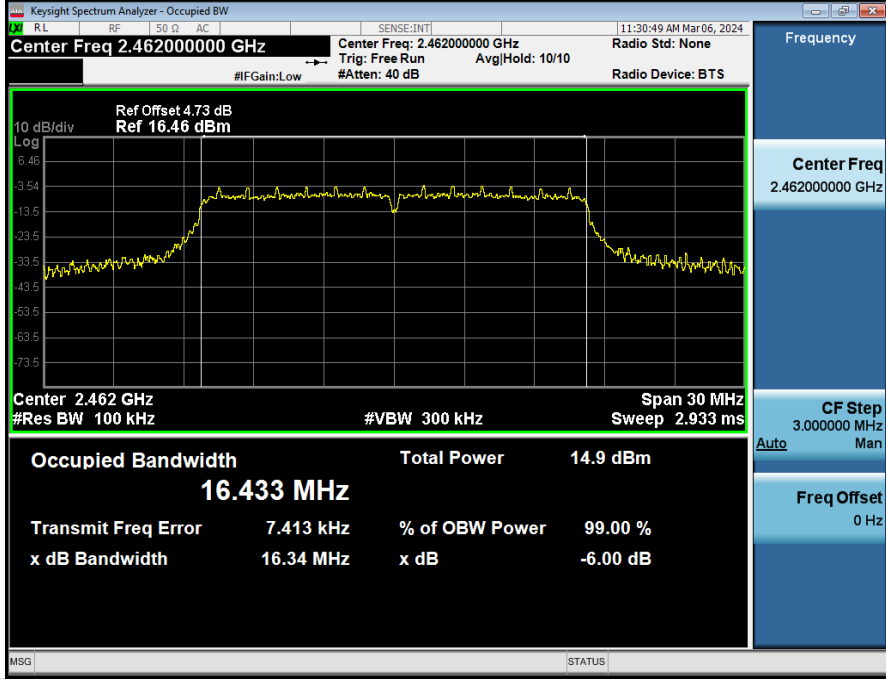
**-6dB Bandwidth\_NVNT\_ANT1\_802\_11g\_2412**



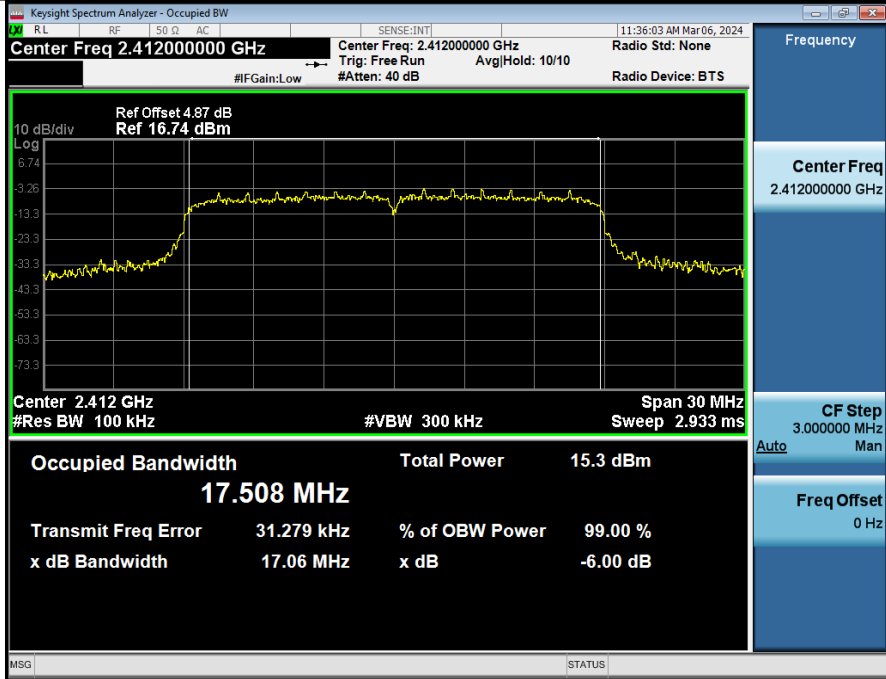
**-6dB Bandwidth\_NVNT ANT1\_802\_11g\_2437**



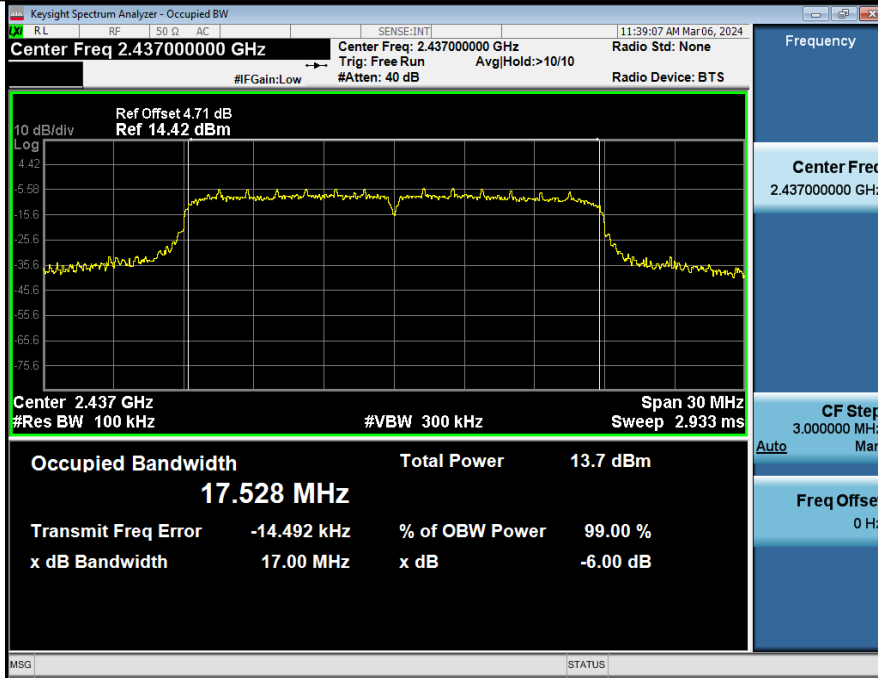
**-6dB Bandwidth\_NVNT\_ANT1\_802\_11g\_2462**



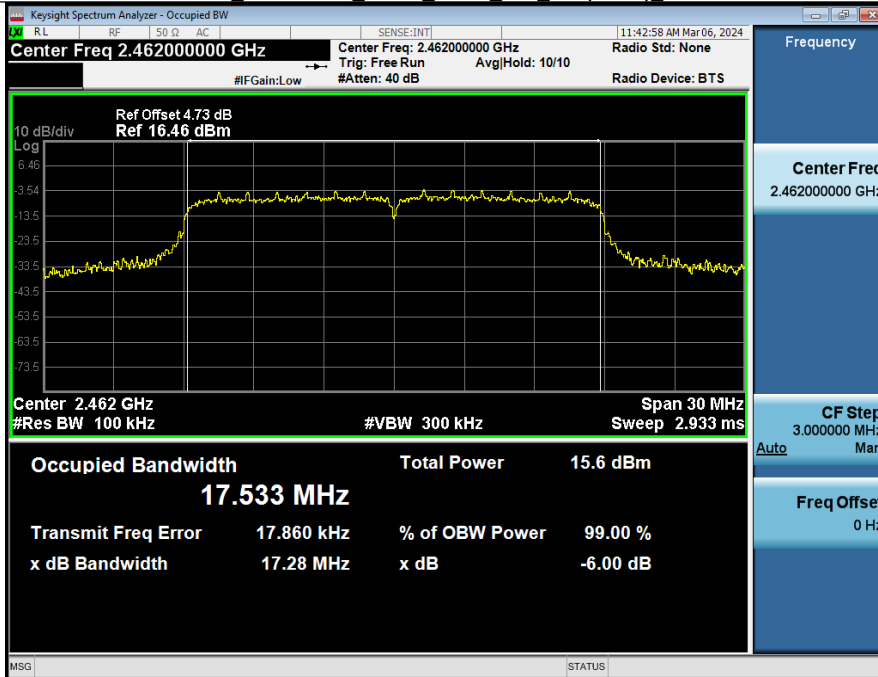
**-6dB Bandwidth\_NVNT\_ANT1\_802\_11n(HT20)\_2412**



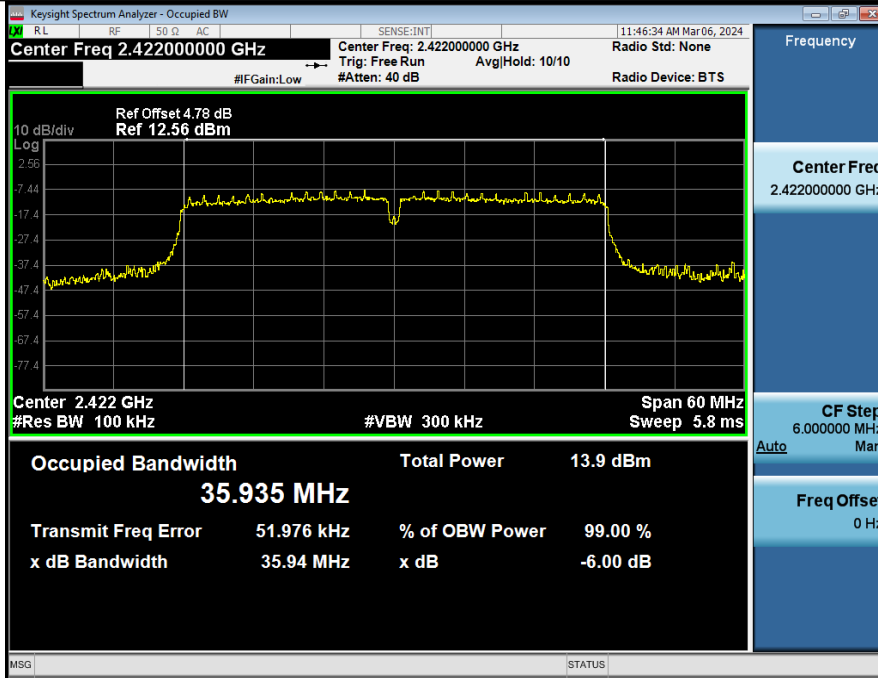
**-6dB Bandwidth\_NVNT\_ANT1\_802\_11n(HT20)\_2437**



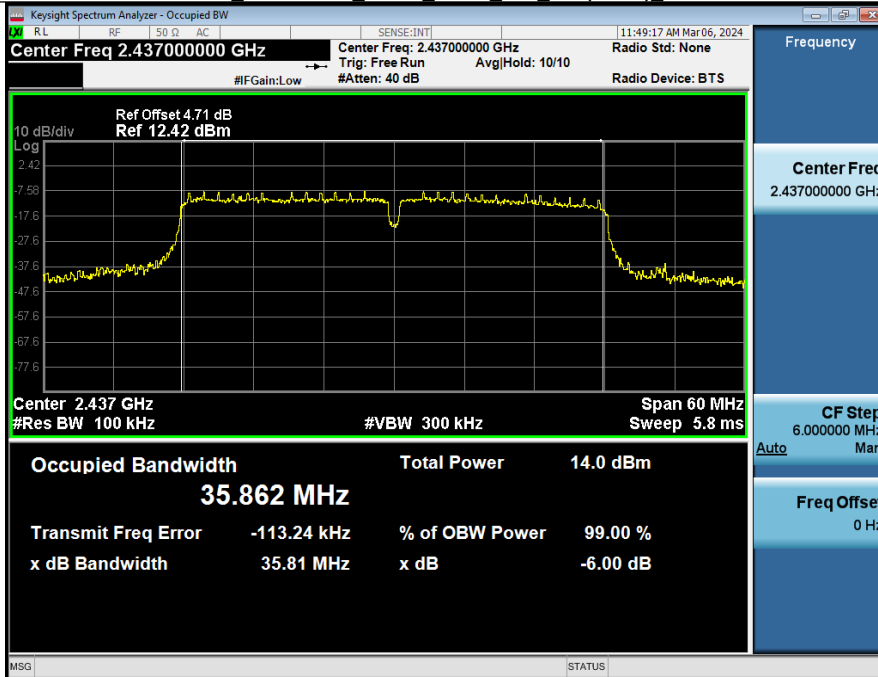
**-6dB Bandwidth\_NVNT\_ANT1\_802\_11n(HT20)\_2462**



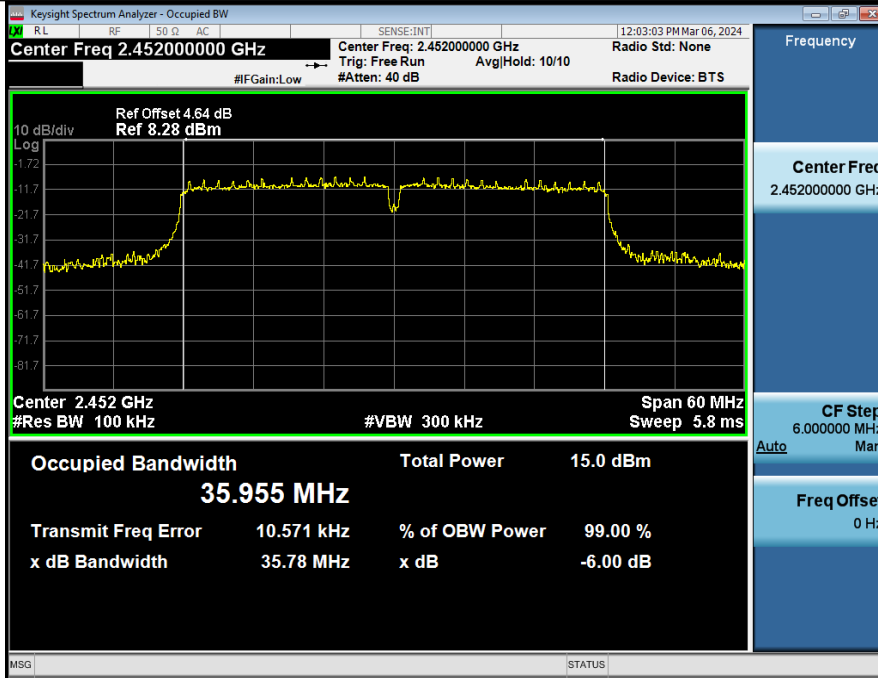
**-6dB Bandwidth\_NVNT\_ANT1\_802\_11n(HT40)\_2422**



**-6dB Bandwidth\_NVNT\_ANT1\_802\_11n(HT40)\_2437**



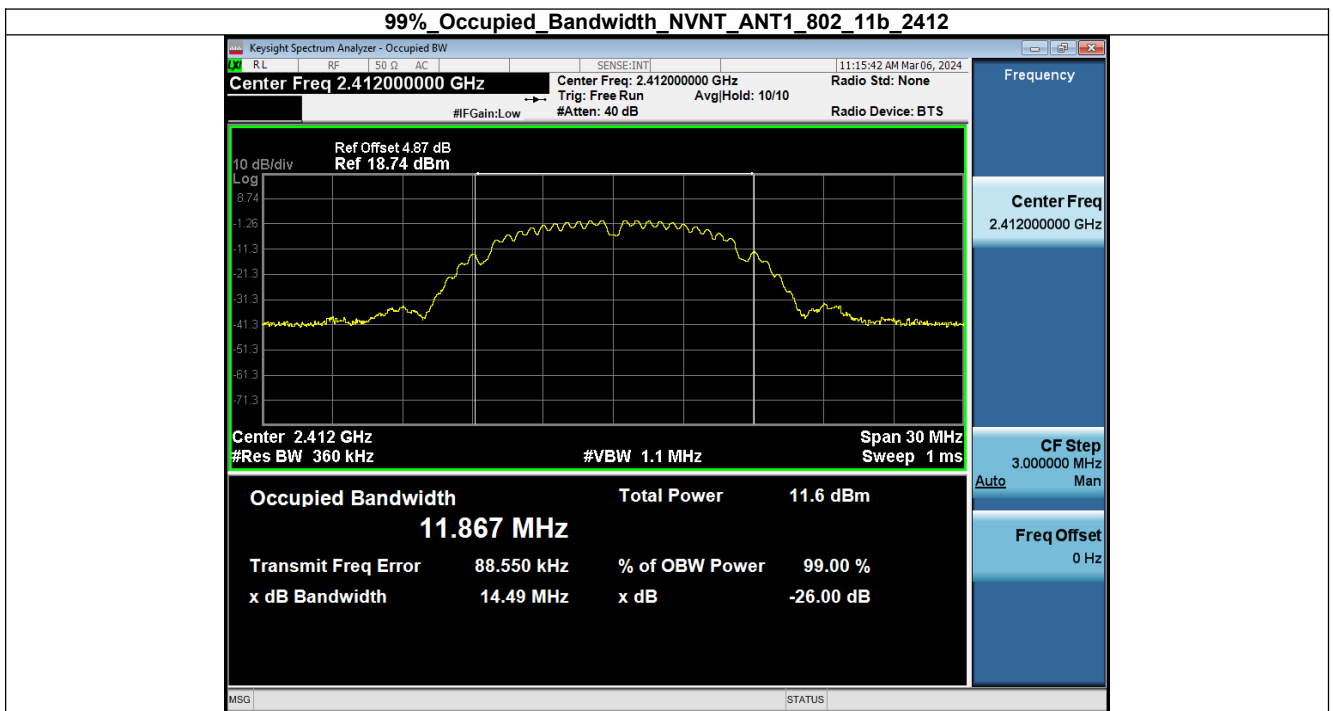
**-6dB Bandwidth NVNT\_ANT1\_802\_11n(HT40)\_2452**



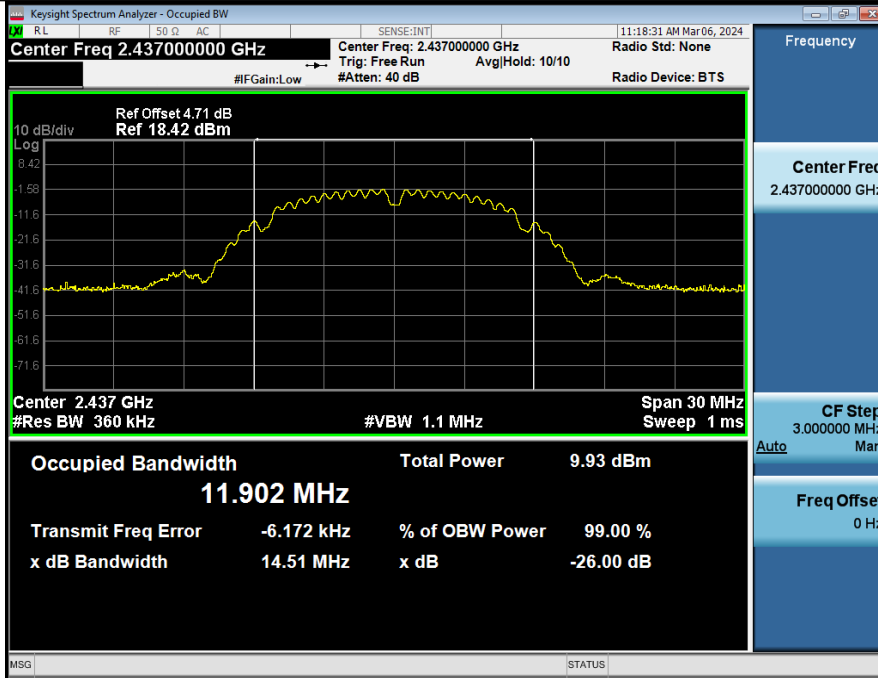


## 2. 99% Occupied Bandwidth

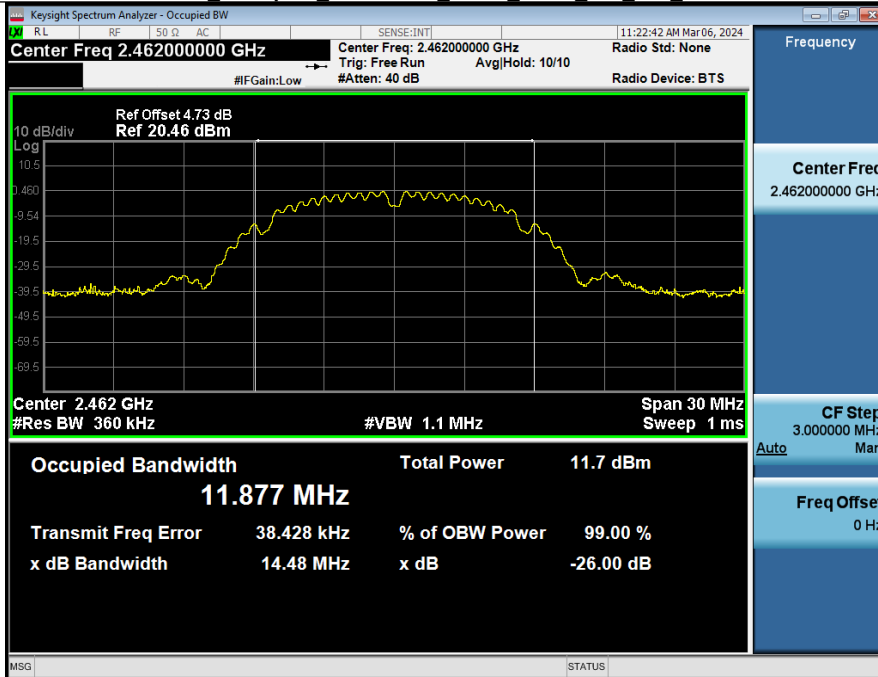
Condition	Antenna	Modulation	Frequency (MHz)	99% BW (MHz)
NVNT	ANT1	802.11b	2412.00	11.867
NVNT	ANT1	802.11b	2437.00	11.902
NVNT	ANT1	802.11b	2462.00	11.877
NVNT	ANT1	802.11g	2412.00	17.058
NVNT	ANT1	802.11g	2437.00	17.090
NVNT	ANT1	802.11g	2462.00	17.135
NVNT	ANT1	802.11n(HT20)	2412.00	17.792
NVNT	ANT1	802.11n(HT20)	2437.00	17.819
NVNT	ANT1	802.11n(HT20)	2462.00	17.865
NVNT	ANT1	802.11n(HT40)	2422.00	36.399
NVNT	ANT1	802.11n(HT40)	2437.00	36.332
NVNT	ANT1	802.11n(HT40)	2452.00	36.398



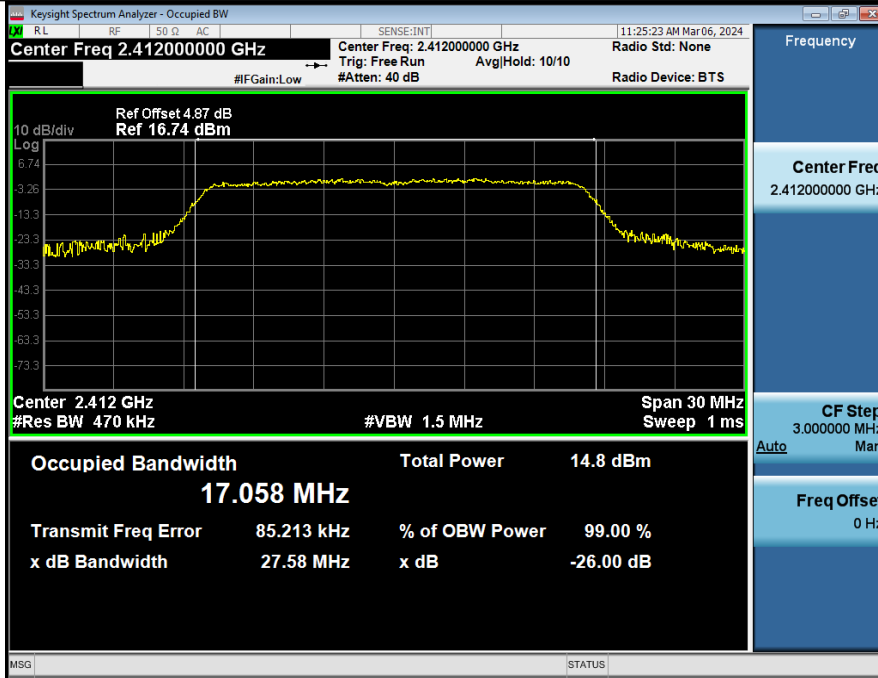
99% Occupied Bandwidth NVNT\_ANT1\_802\_11b\_2437



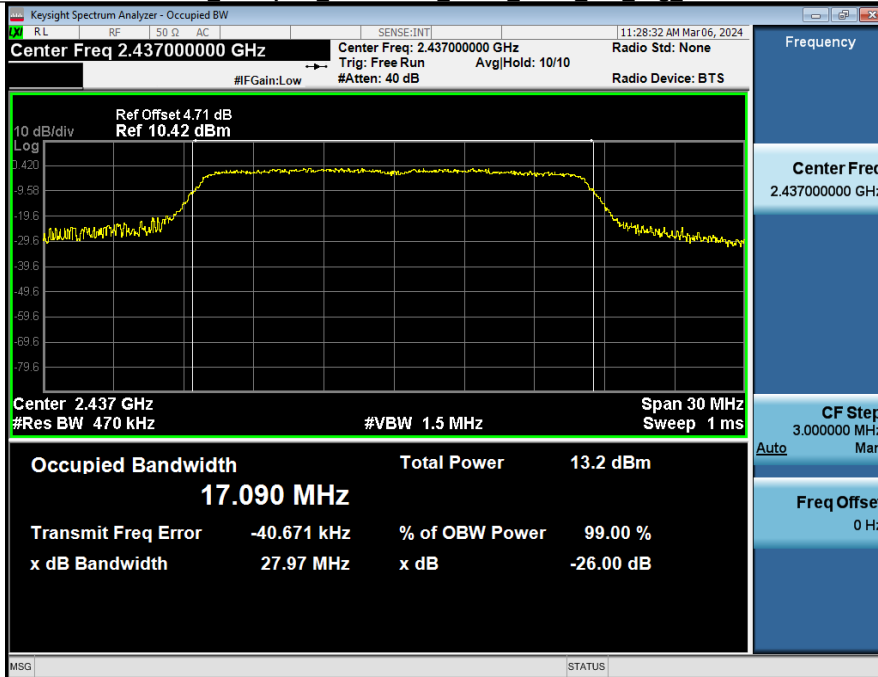
99% Occupied Bandwidth NVNT\_ANT1\_802\_11b\_2462



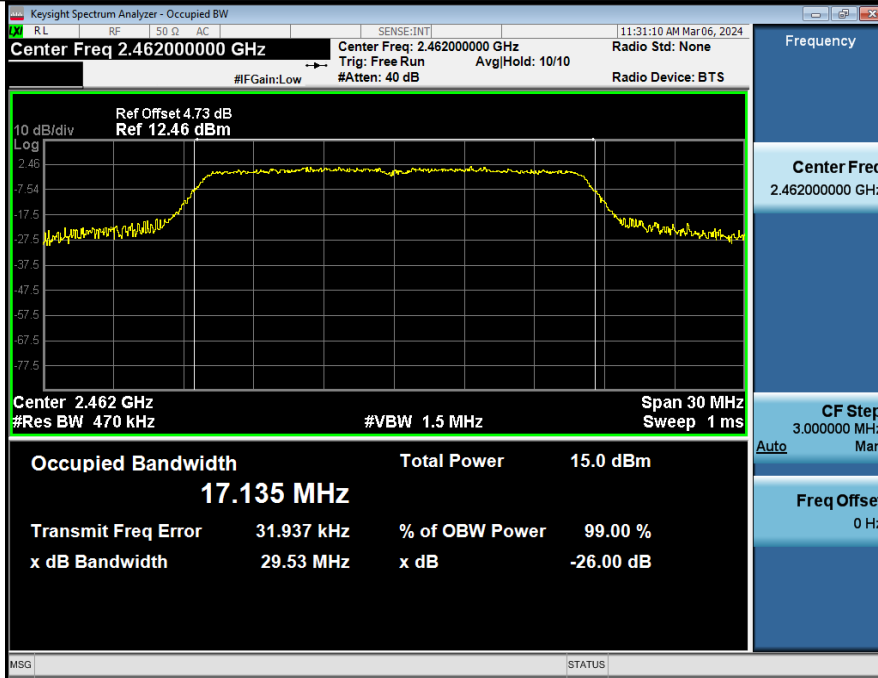
99% Occupied Bandwidth NVNT\_ANT1\_802\_11g\_2412



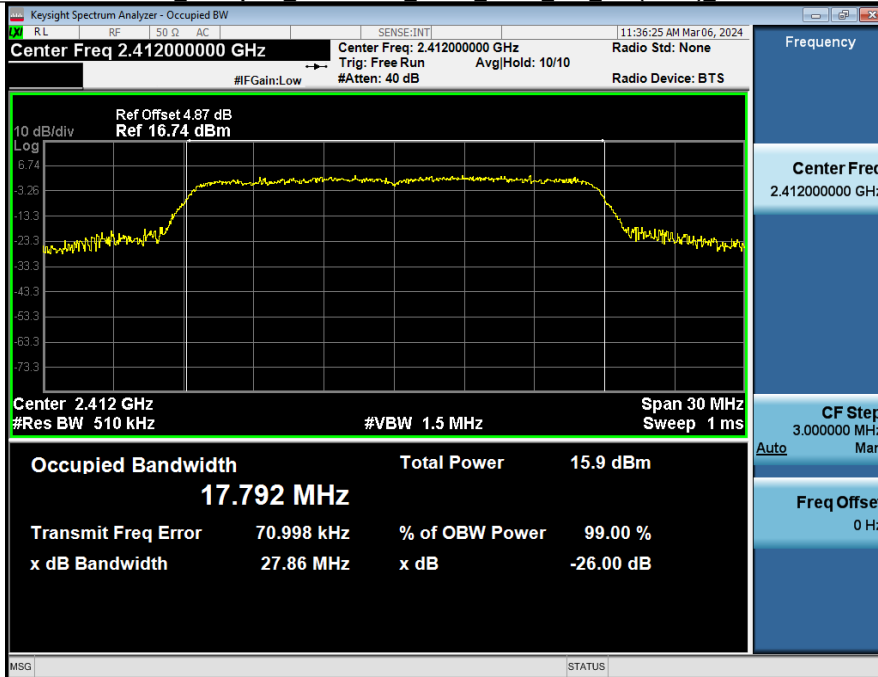
99% Occupied Bandwidth NVNT\_ANT1\_802\_11g\_2437



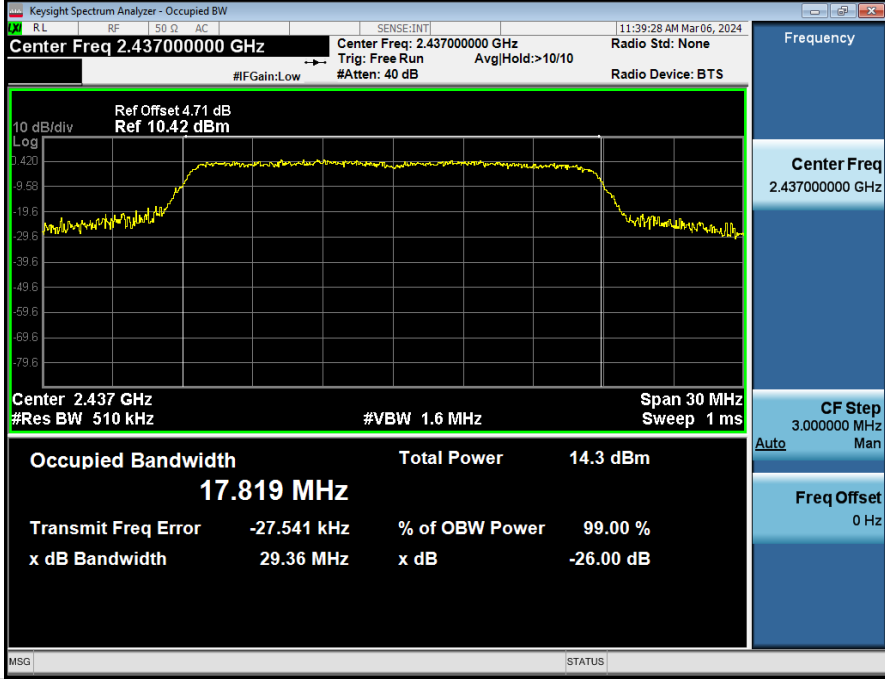
99% Occupied Bandwidth NVNT\_ANT1\_802\_11g\_2462



99% Occupied Bandwidth NVNT\_ANT1\_802\_11n(HT20)\_2412



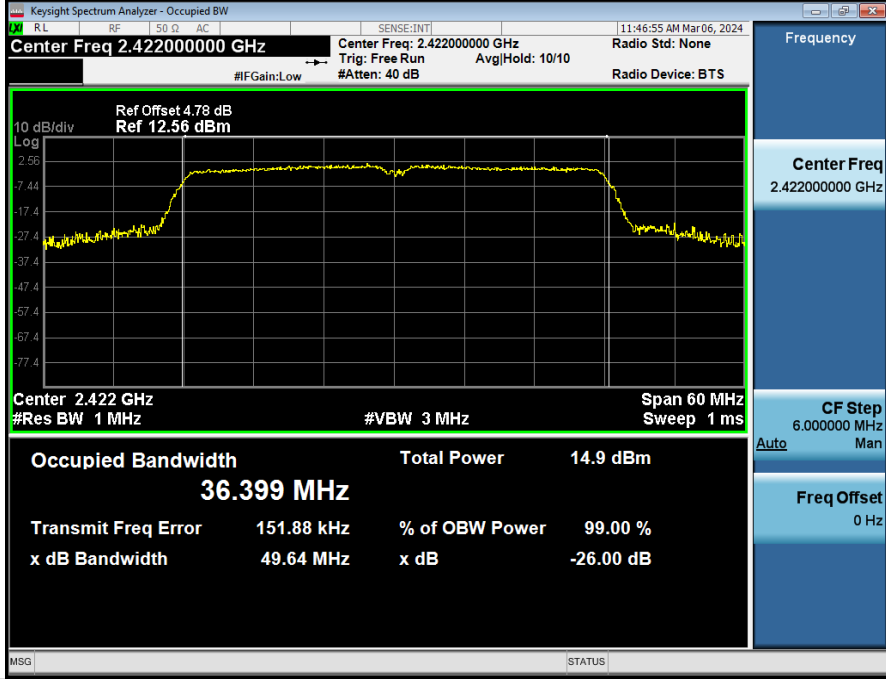
99% Occupied Bandwidth NVNT\_ANT1\_802\_11n(HT20)\_2437



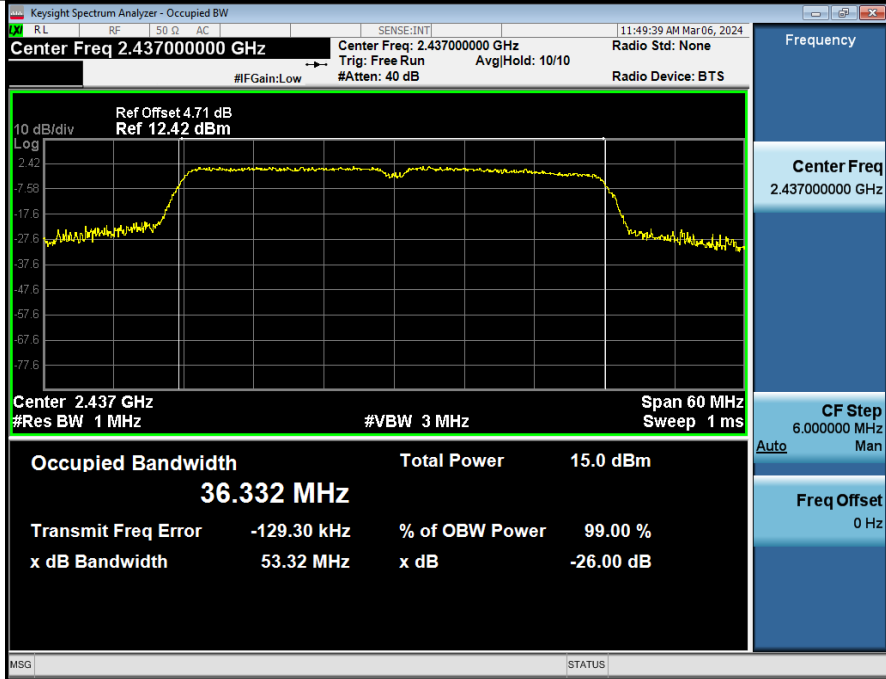
99% Occupied Bandwidth NVNT\_ANT1\_802\_11n(HT20)\_2462



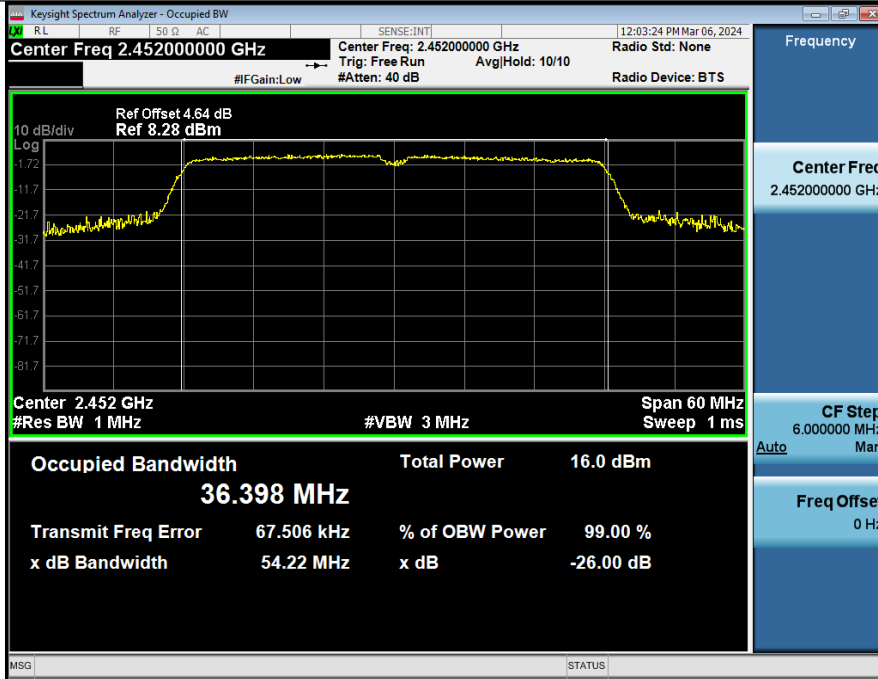
99% Occupied Bandwidth NVNT\_ANT1\_802\_11n(HT40)\_2422



99% Occupied Bandwidth NVNT\_ANT1\_802\_11n(HT40)\_2437

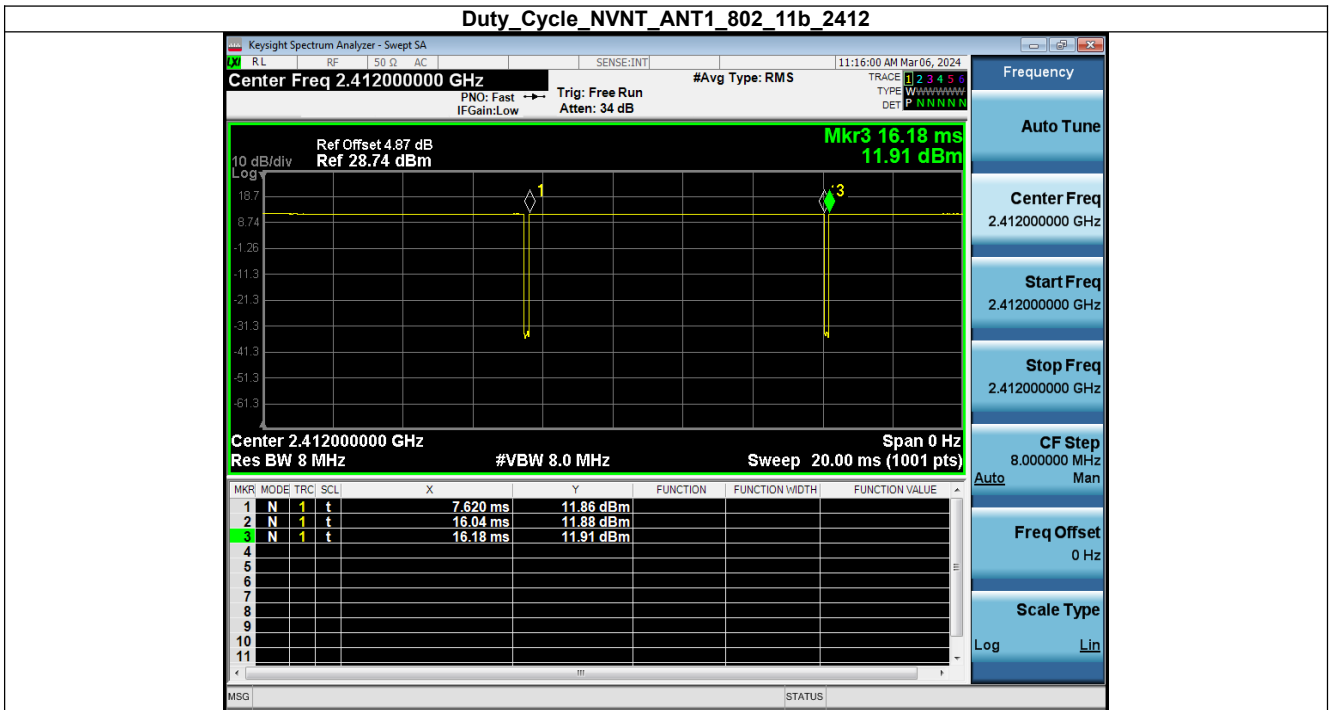


99% Occupied Bandwidth\_NVNT\_ANT1\_802\_11n(HT40)\_2452



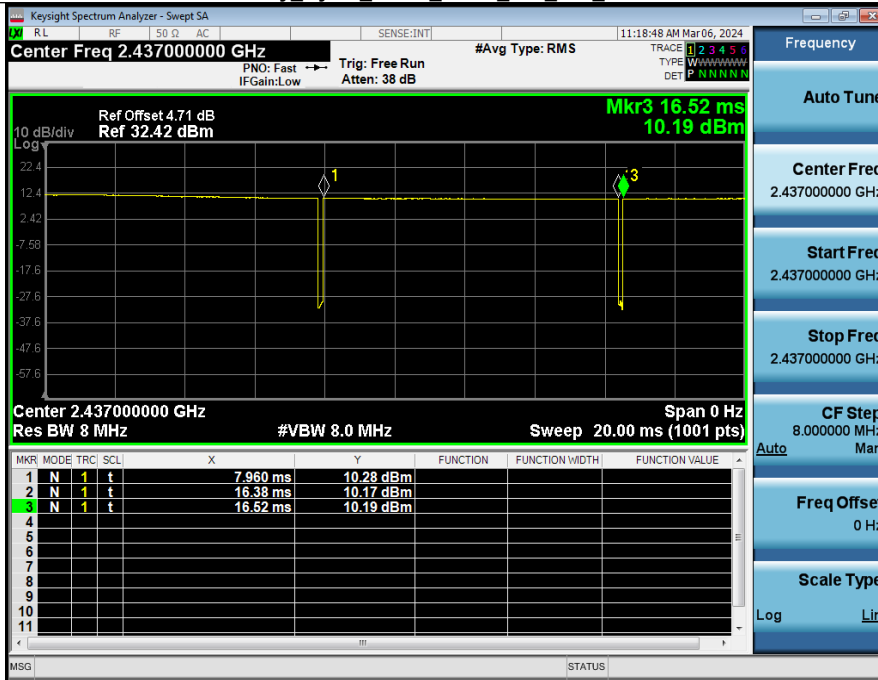
### 3. Duty Cycle

Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty factor(dB)
NVNT	ANT1	802.11b	2412.00	98.60	0.00
NVNT	ANT1	802.11b	2437.00	98.60	0.00
NVNT	ANT1	802.11b	2462.00	98.36	0.00
NVNT	ANT1	802.11g	2412.00	91.03	0.41
NVNT	ANT1	802.11g	2437.00	92.21	0.35
NVNT	ANT1	802.11g	2462.00	91.03	0.41
NVNT	ANT1	802.11n(HT20)	2412.00	89.55	0.48
NVNT	ANT1	802.11n(HT20)	2437.00	89.55	0.48
NVNT	ANT1	802.11n(HT20)	2462.00	89.55	0.48
NVNT	ANT1	802.11n(HT40)	2422.00	81.08	0.91
NVNT	ANT1	802.11n(HT40)	2437.00	83.78	0.77
NVNT	ANT1	802.11n(HT40)	2452.00	78.38	1.06

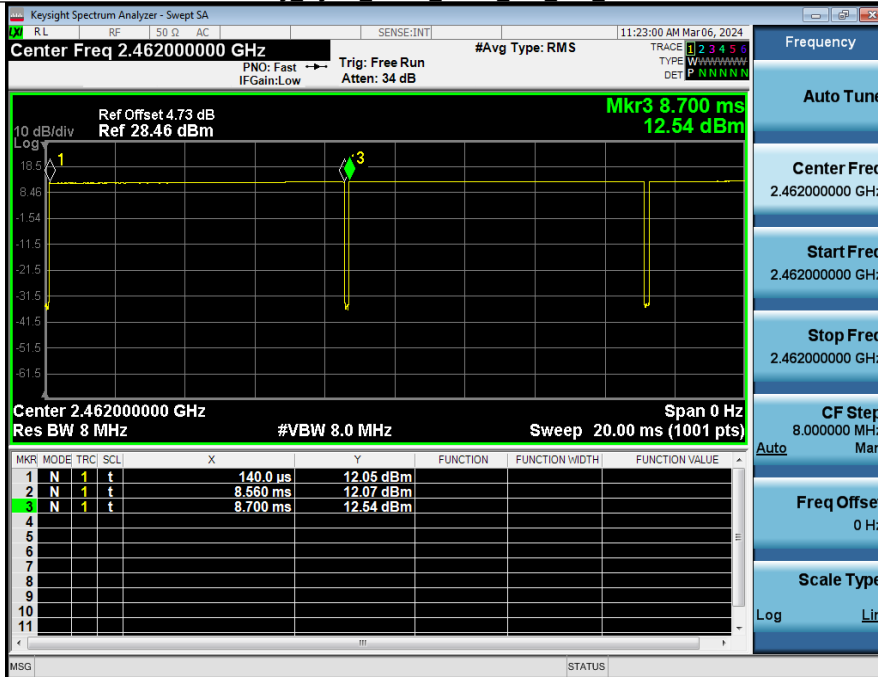




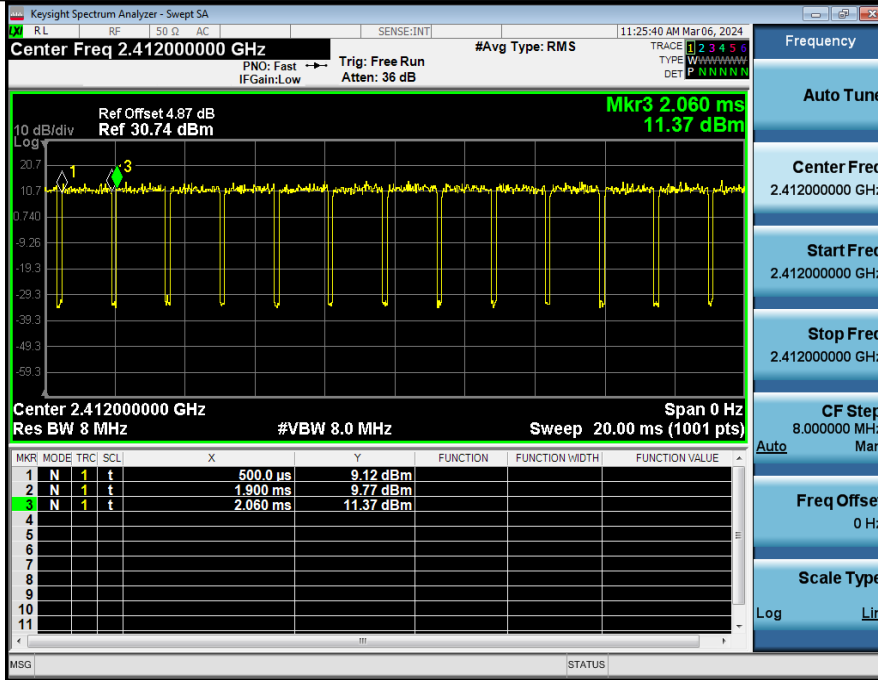
### Duty Cycle NVNT ANT1\_802\_11b\_2437



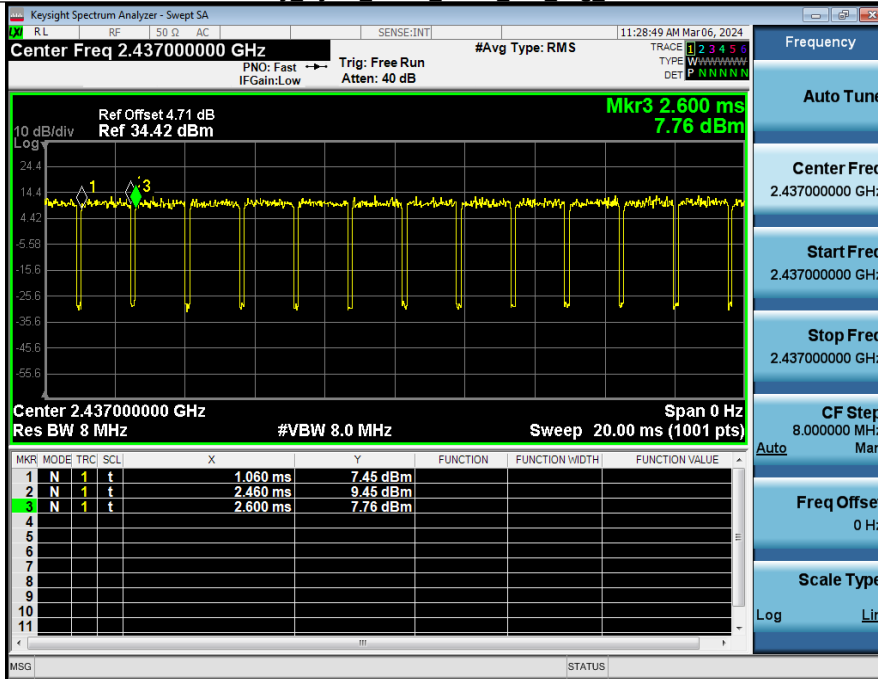
### Duty Cycle NVNT ANT1\_802\_11b\_2462



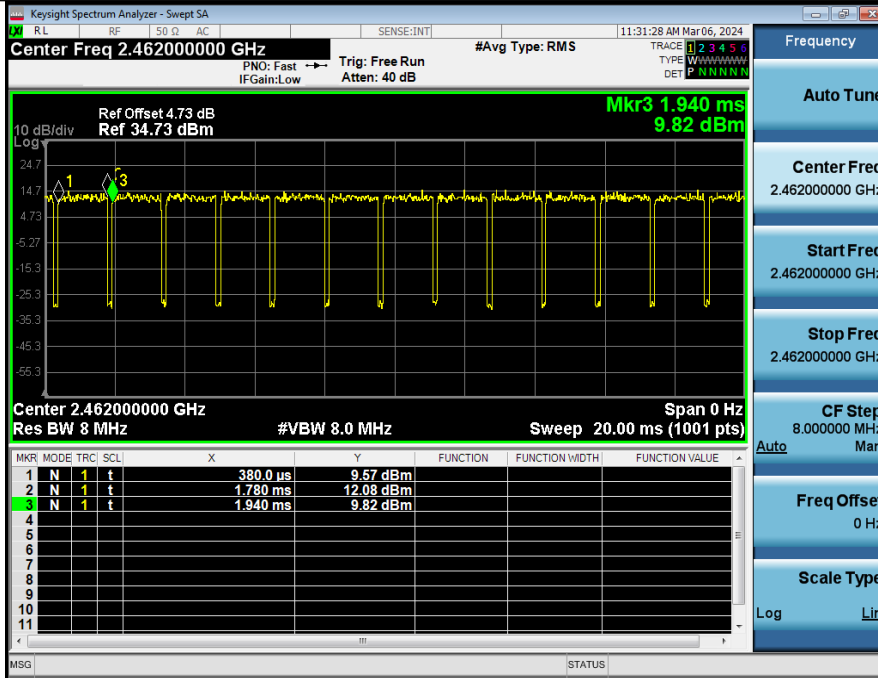
### Duty Cycle NVNT ANT1\_802\_11g\_2412



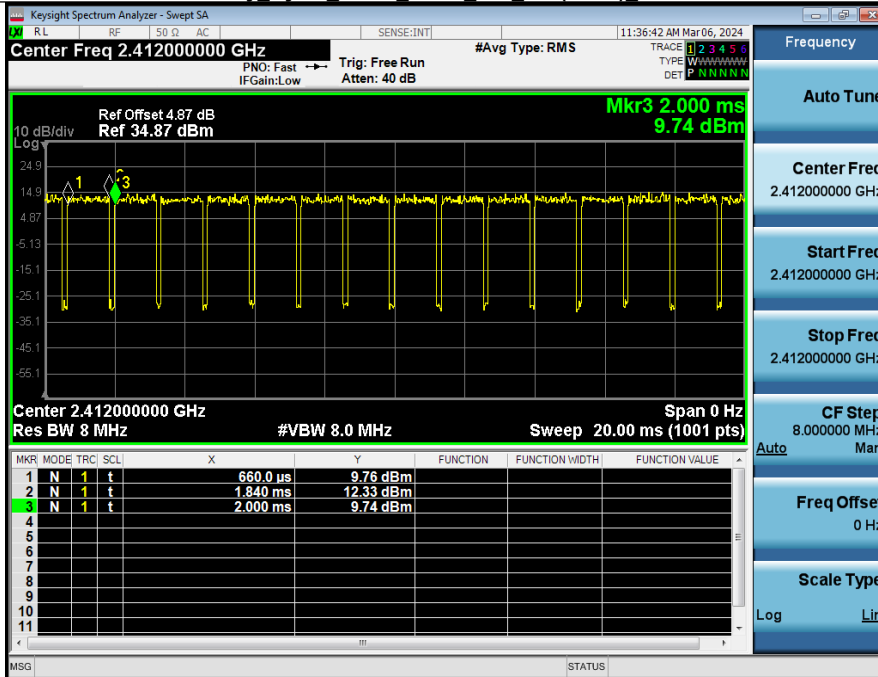
### Duty Cycle NVNT ANT1\_802\_11g\_2437



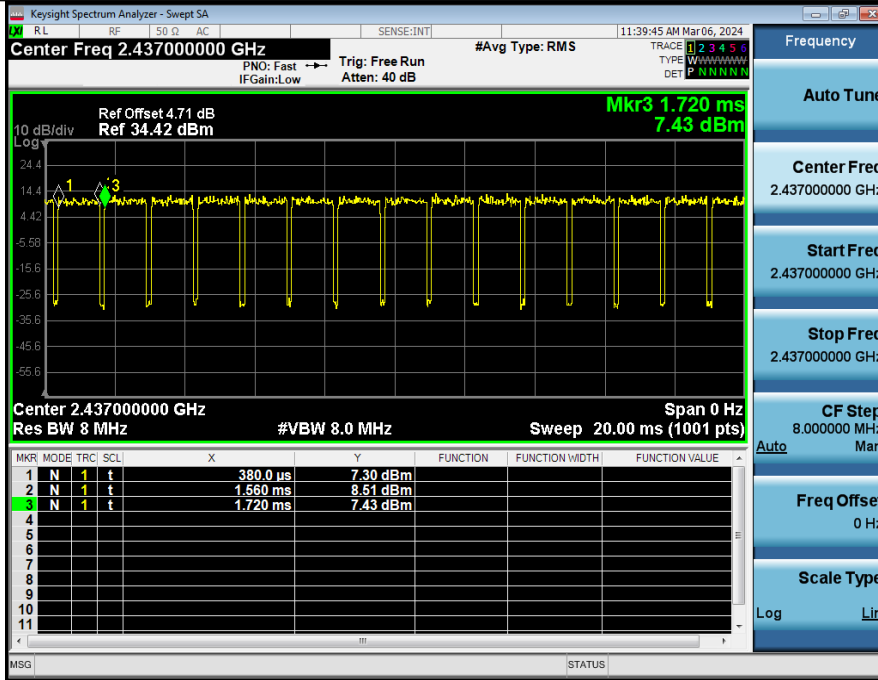
### Duty Cycle NVNT\_ANT1\_802\_11g\_2462



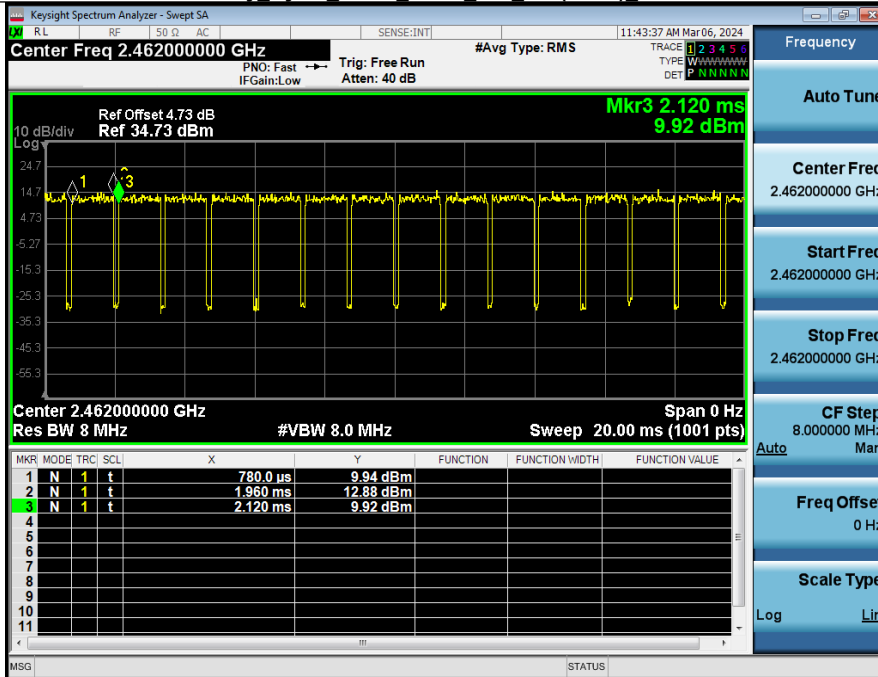
### Duty Cycle NVNT\_ANT1\_802\_11n(HT20)\_2412



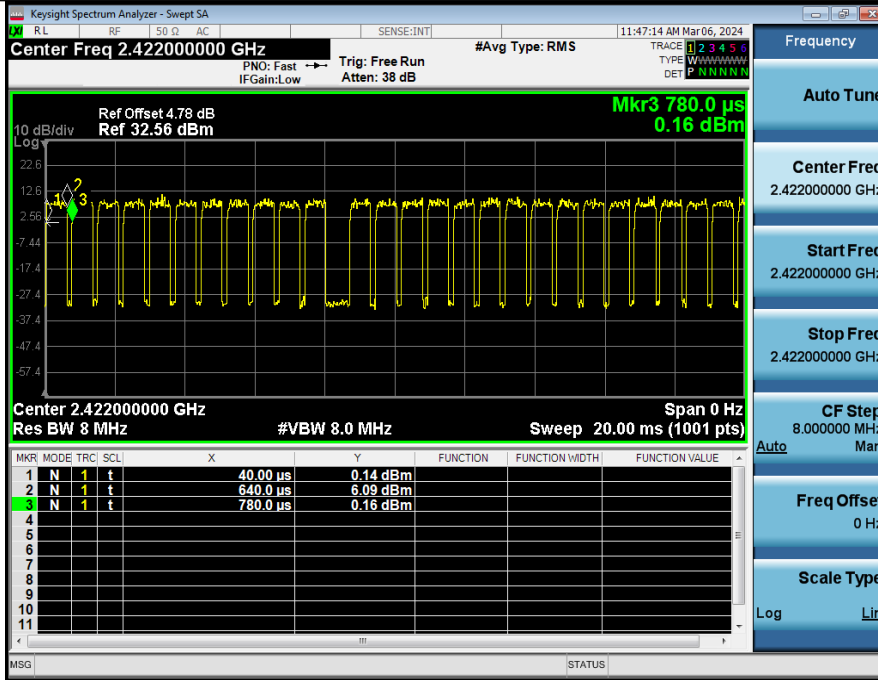
### Duty Cycle NVNT\_ANT1\_802\_11n(HT20)\_2437



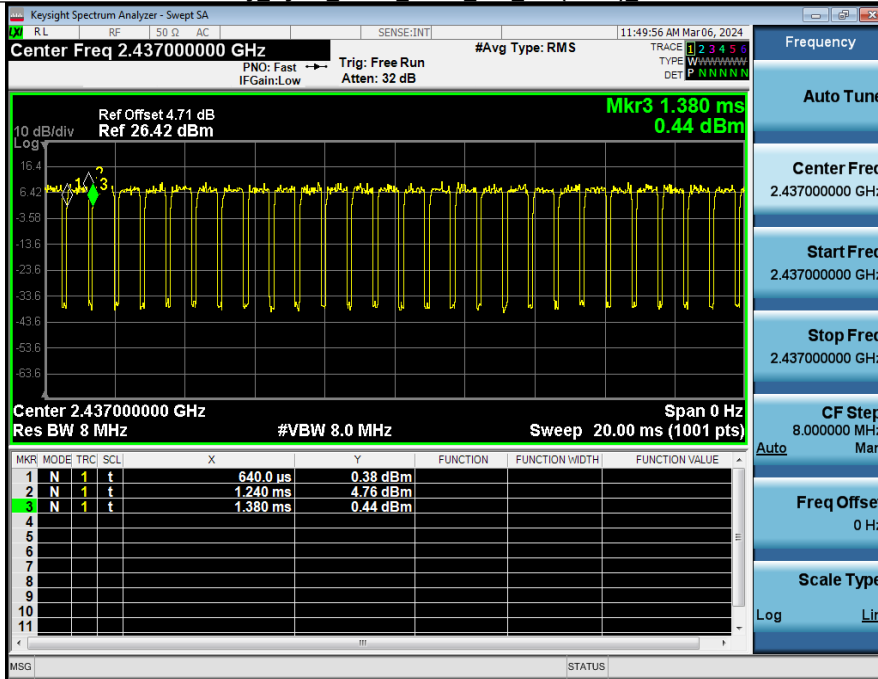
### Duty Cycle NVNT\_ANT1\_802\_11n(HT20)\_2462



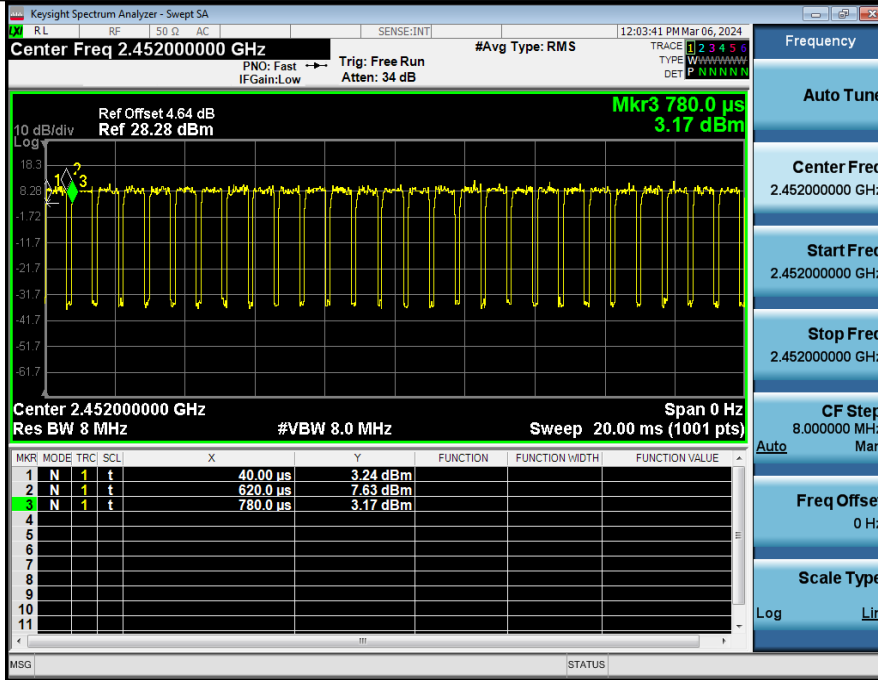
Duty Cycle NVNT\_ANT1\_802\_11n(HT40)\_2422



Duty Cycle NVNT\_ANT1\_802\_11n(HT40)\_2437

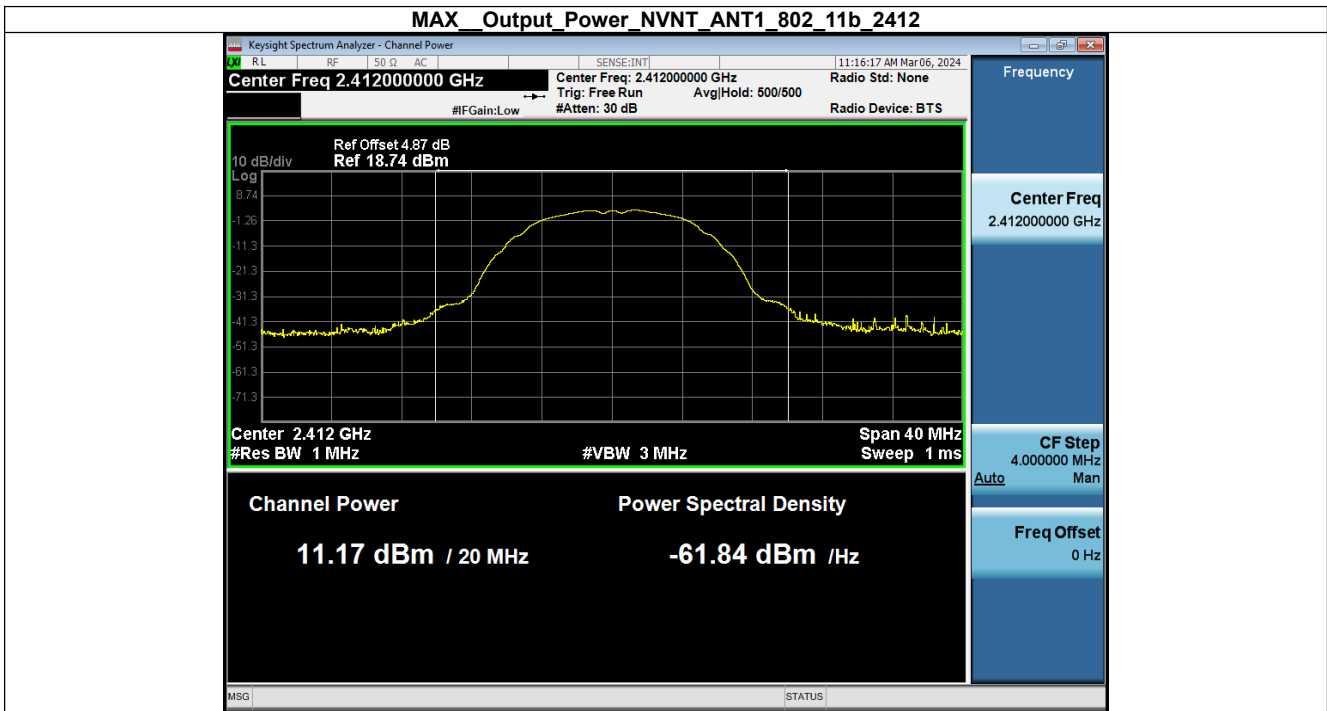


Duty Cycle NVNT\_ANT1\_802\_11n(HT40)\_2452

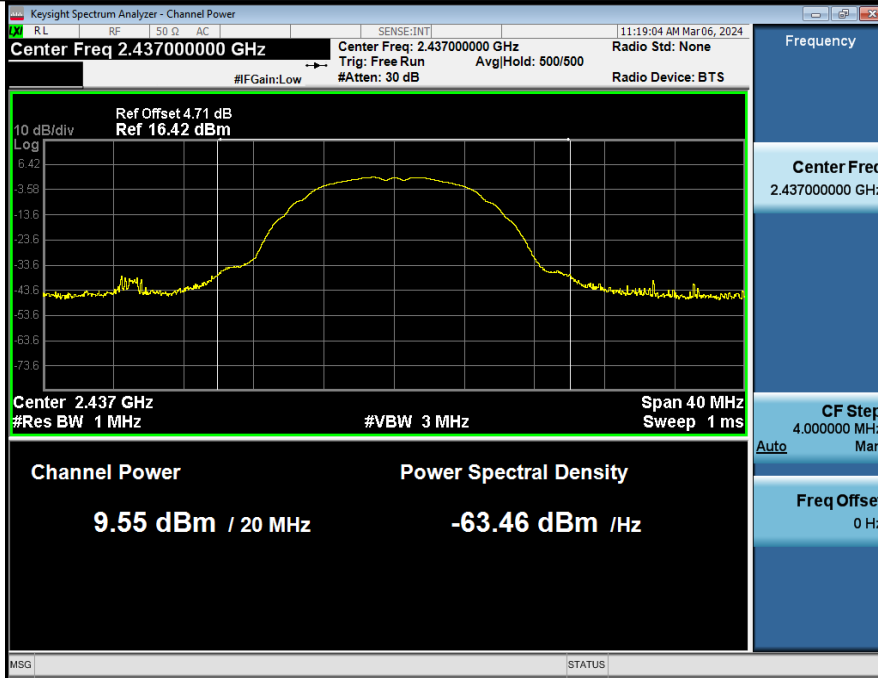


### 4. MAX. Output Power

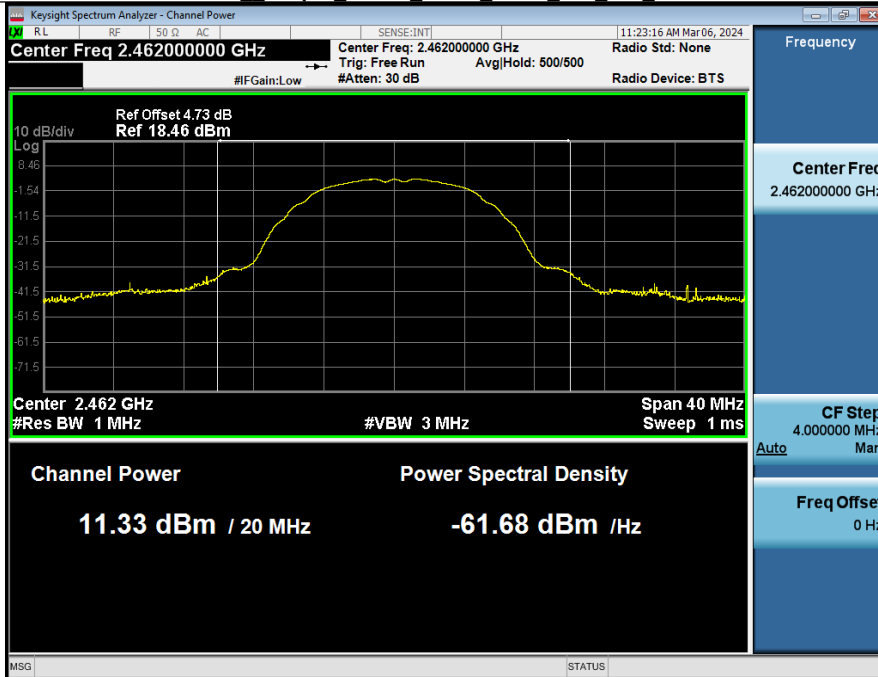
Condition	Antenna	Modulation	Frequency (MHz)	Detector	Conducted Power(dBm)	Duty factor(dB)	Total Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	Peak	11.17	N/A	11.17	30	Pass
NVNT	ANT1	802.11b	2437.00	Peak	9.55	N/A	9.55	30	Pass
NVNT	ANT1	802.11b	2462.00	Peak	11.33	N/A	11.33	30	Pass
NVNT	ANT1	802.11g	2412.00	Peak	15.47	N/A	15.47	30	Pass
NVNT	ANT1	802.11g	2437.00	Peak	13.81	N/A	13.81	30	Pass
NVNT	ANT1	802.11g	2462.00	Peak	15.76	N/A	15.76	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	Peak	15.99	N/A	15.99	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	Peak	14.38	N/A	14.38	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	Peak	16.32	N/A	16.32	30	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	Peak	14.55	N/A	14.55	30	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	Peak	14.64	N/A	14.64	30	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	Peak	15.67	N/A	15.67	30	Pass



MAX Output Power NVNT\_ANT1\_802\_11b\_2437

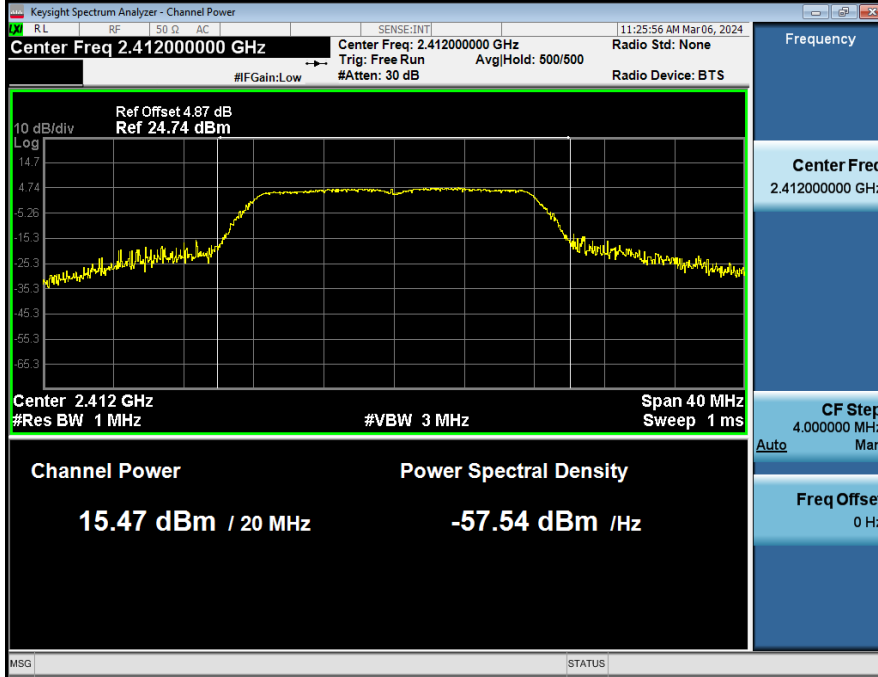


MAX Output Power NVNT\_ANT1\_802\_11b\_2462

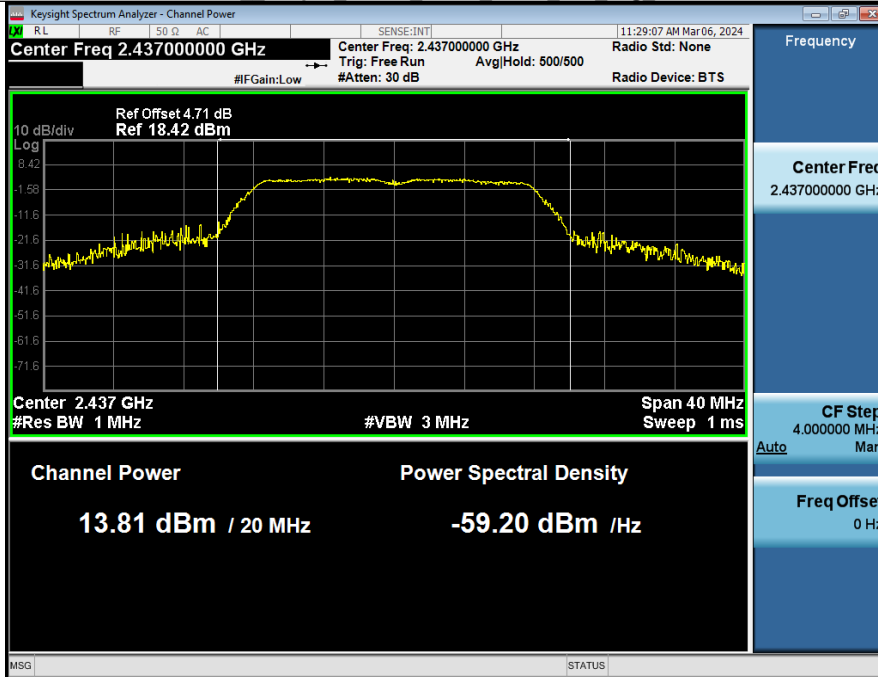




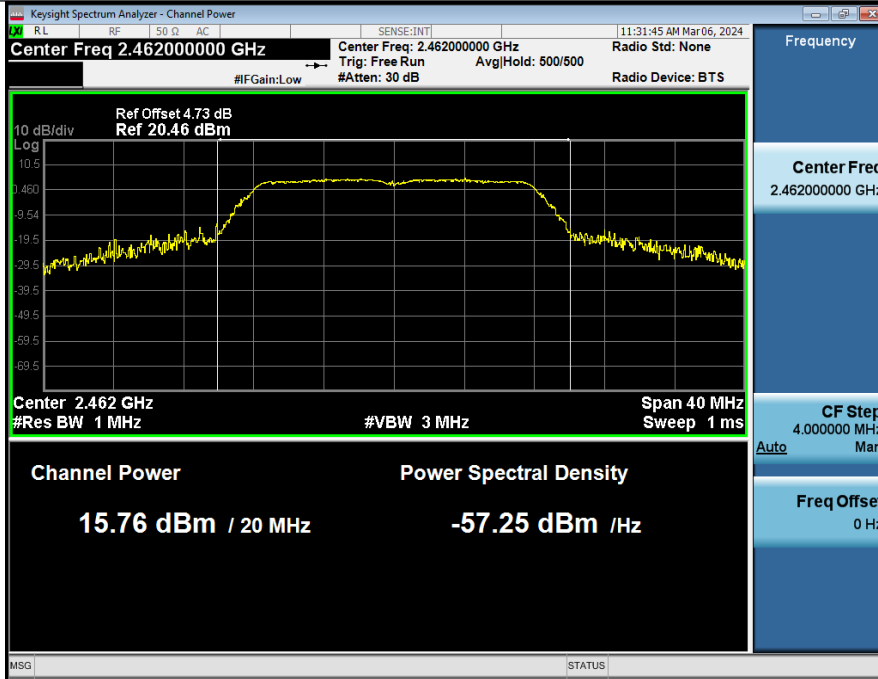
**MAX Output Power NVNT\_ANT1\_802\_11g\_2412**



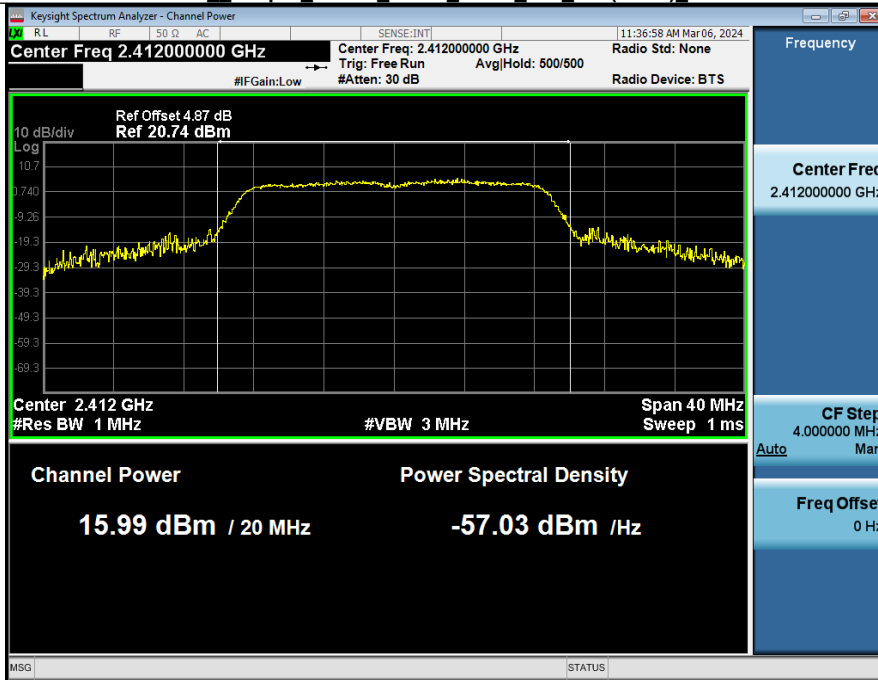
**MAX Output Power NVNT\_ANT1\_802\_11g\_2437**



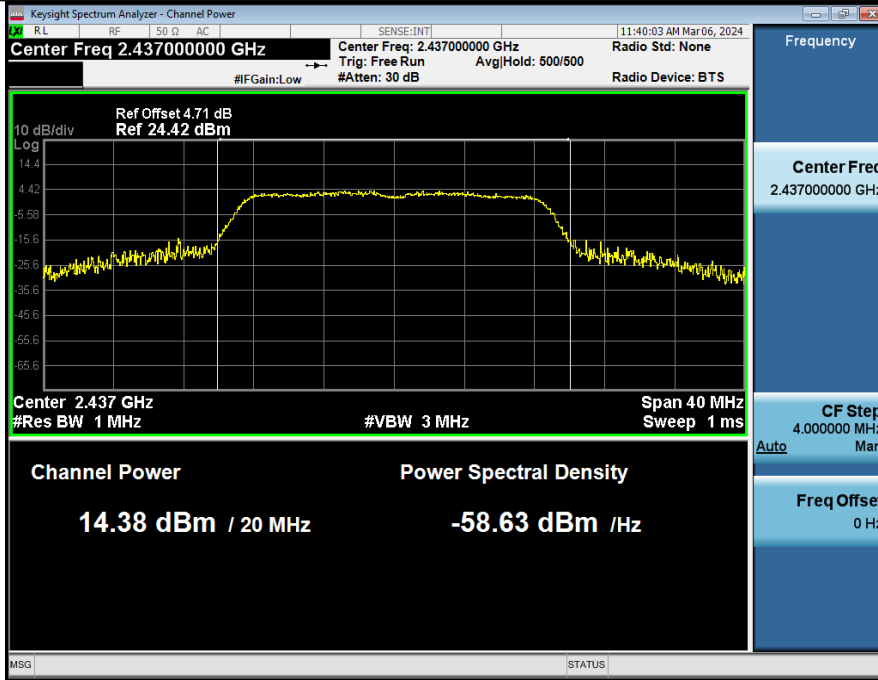
MAX Output Power NVNT\_ANT1\_802\_11g\_2462



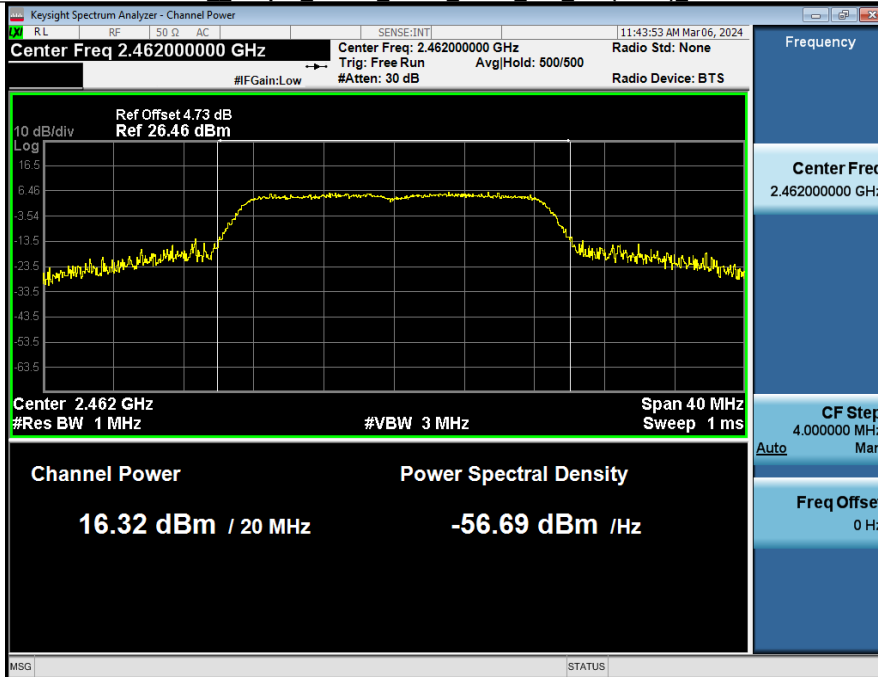
MAX Output Power NVNT\_ANT1\_802\_11n(HT20)\_2412



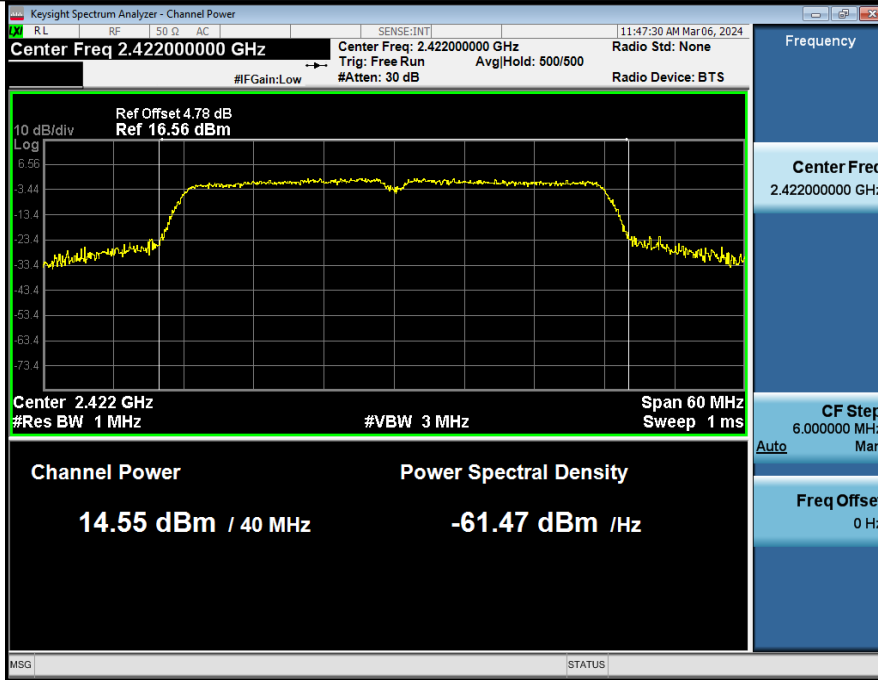
MAX Output Power NVNT\_ANT1\_802\_11n(HT20)\_2437



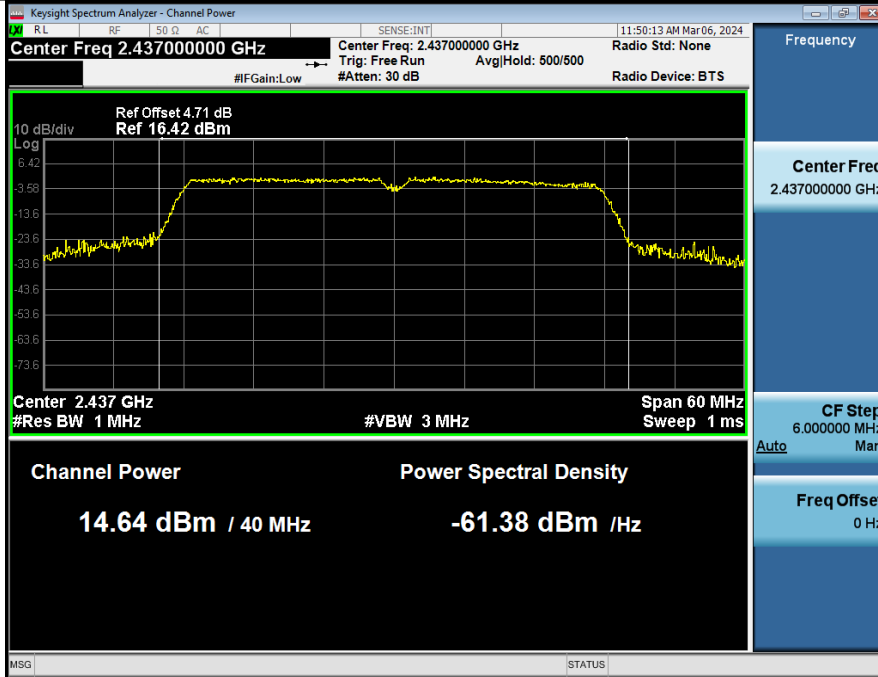
MAX Output Power NVNT\_ANT1\_802\_11n(HT20)\_2462



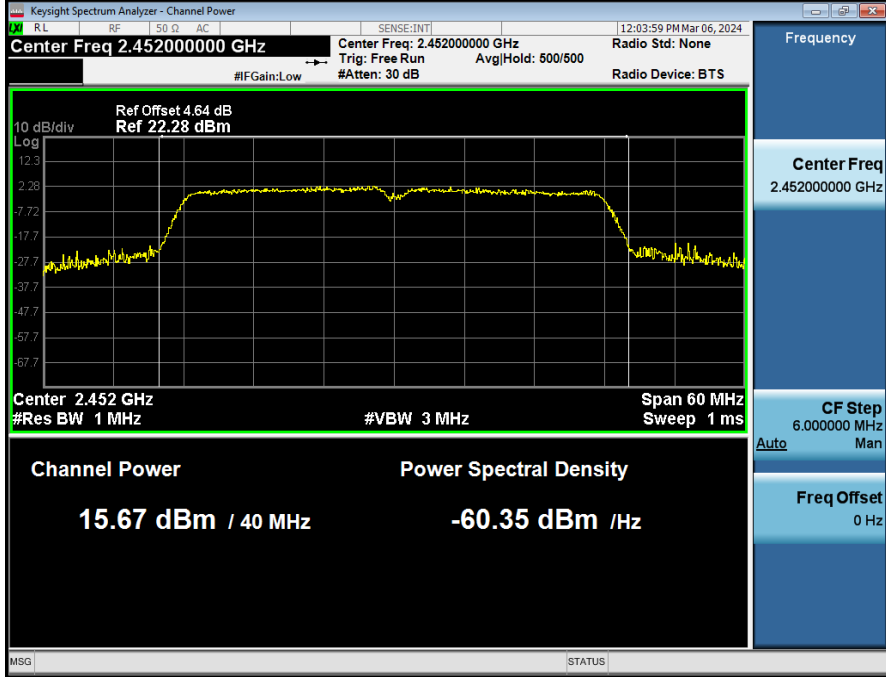
**MAX Output Power NVNT\_ANT1\_802\_11n(HT40)\_2422**



**MAX Output Power NVNT\_ANT1\_802\_11n(HT40)\_2437**

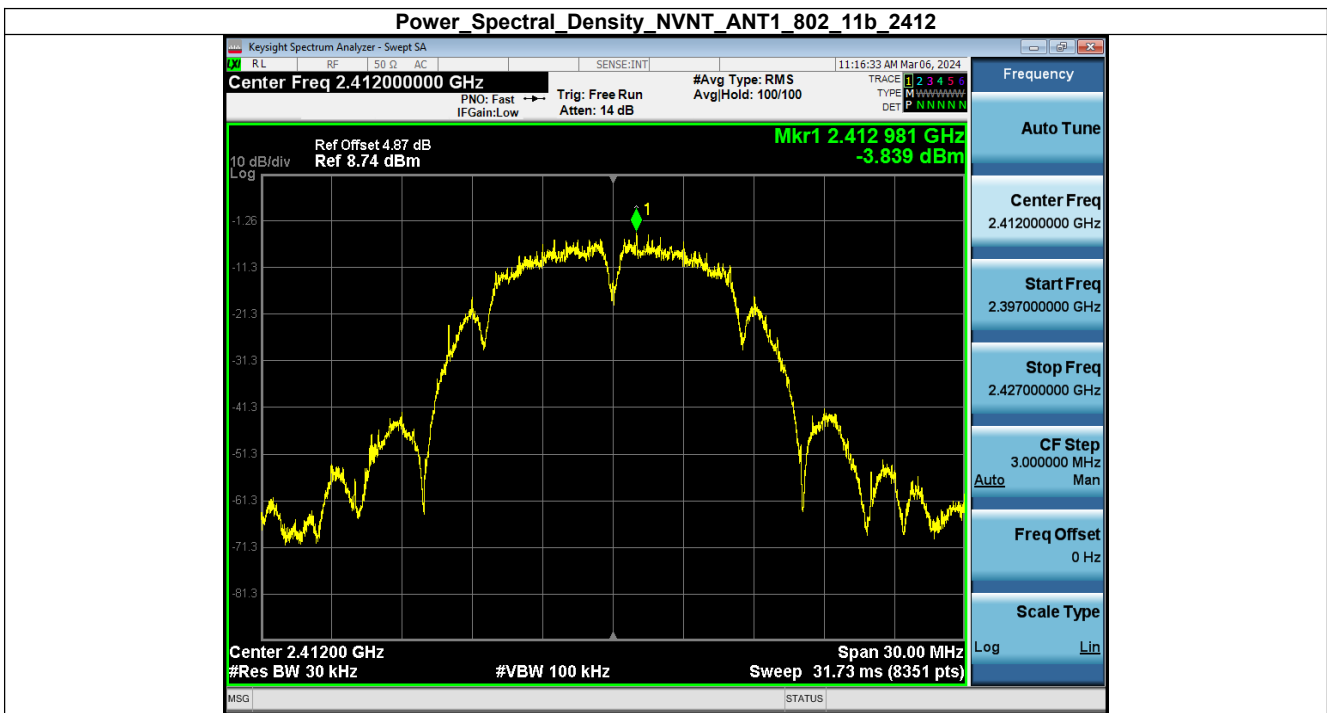


MAX Output Power NVNT ANT1\_802\_11n(HT40)\_2452



## 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	-3.84	-10.00	-13.84	8	Pass
NVNT	ANT1	802.11b	2437.00	-2.95	-10.00	-12.95	8	Pass
NVNT	ANT1	802.11b	2462.00	-4.28	-10.00	-14.28	8	Pass
NVNT	ANT1	802.11g	2412.00	-8.52	-10.00	-18.52	8	Pass
NVNT	ANT1	802.11g	2437.00	-9.50	-10.00	-19.50	8	Pass
NVNT	ANT1	802.11g	2462.00	-7.96	-10.00	-17.96	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-8.10	-10.00	-18.10	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-9.69	-10.00	-19.69	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-7.80	-10.00	-17.80	8	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	-12.67	-10.00	-22.67	8	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	-12.74	-10.00	-22.74	8	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	-11.44	-10.00	-21.44	8	Pass



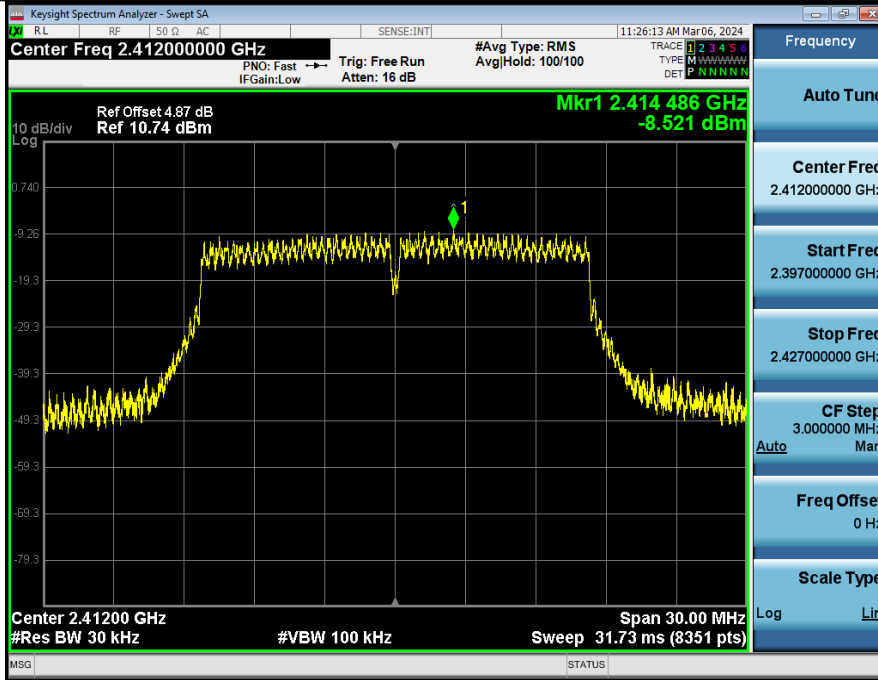
Power Spectral Density NVNT\_ANT1\_802\_11b\_2437



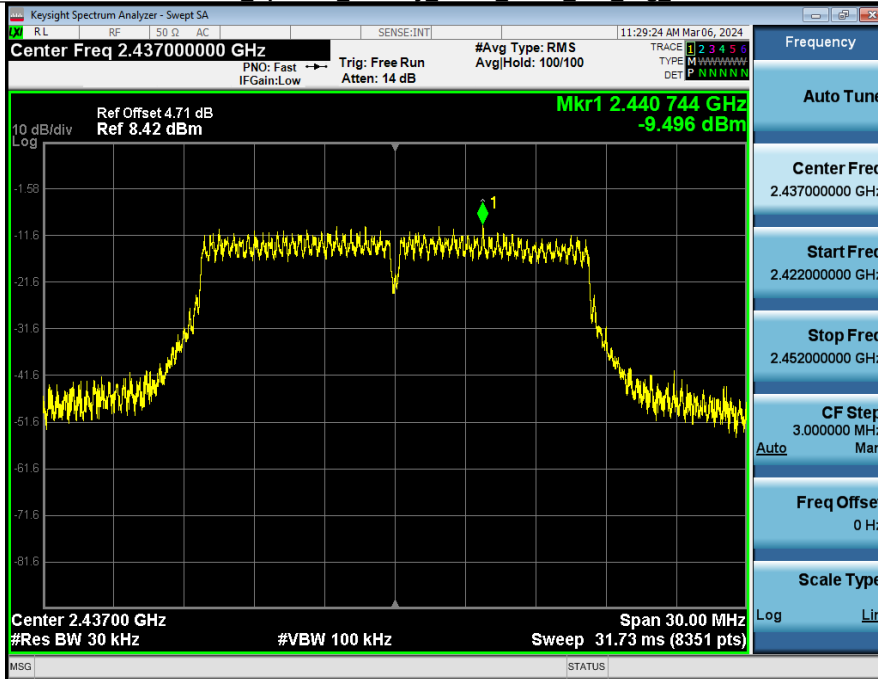
Power Spectral Density NVNT\_ANT1\_802\_11b\_2462



Power Spectral Density NVNT\_ANT1\_802\_11g\_2412

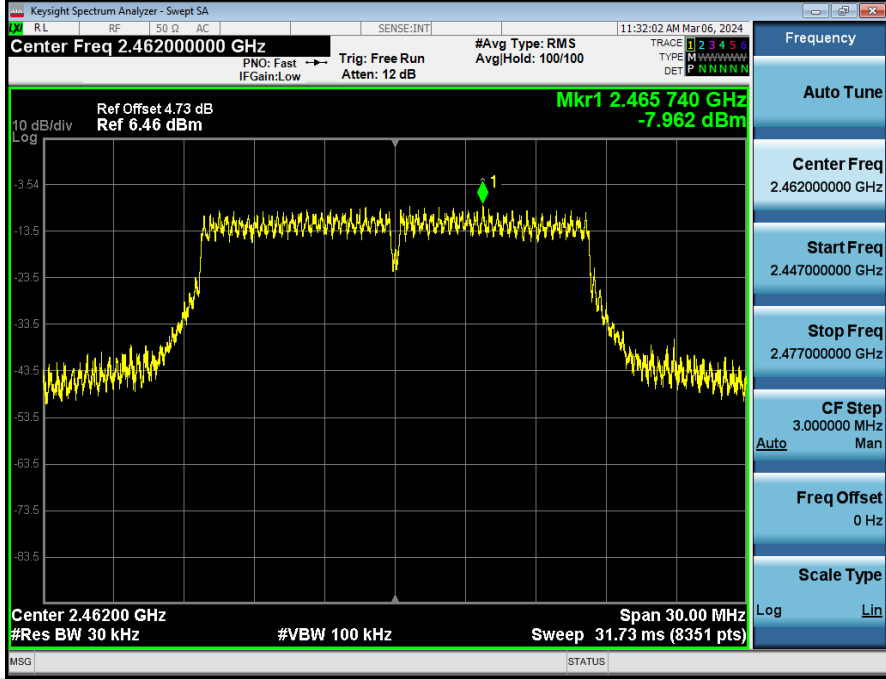


Power Spectral Density NVNT\_ANT1\_802\_11g\_2437

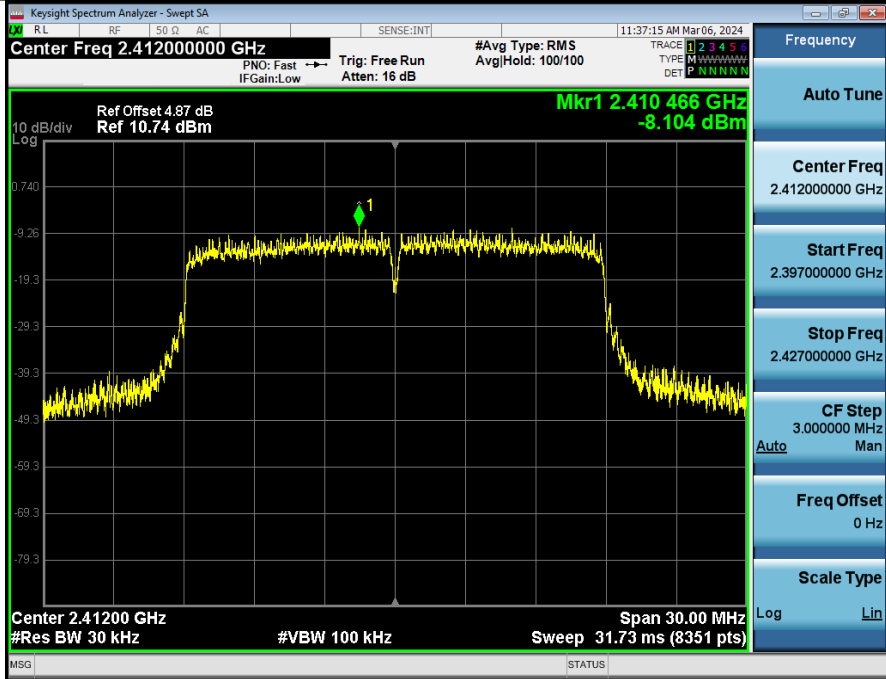




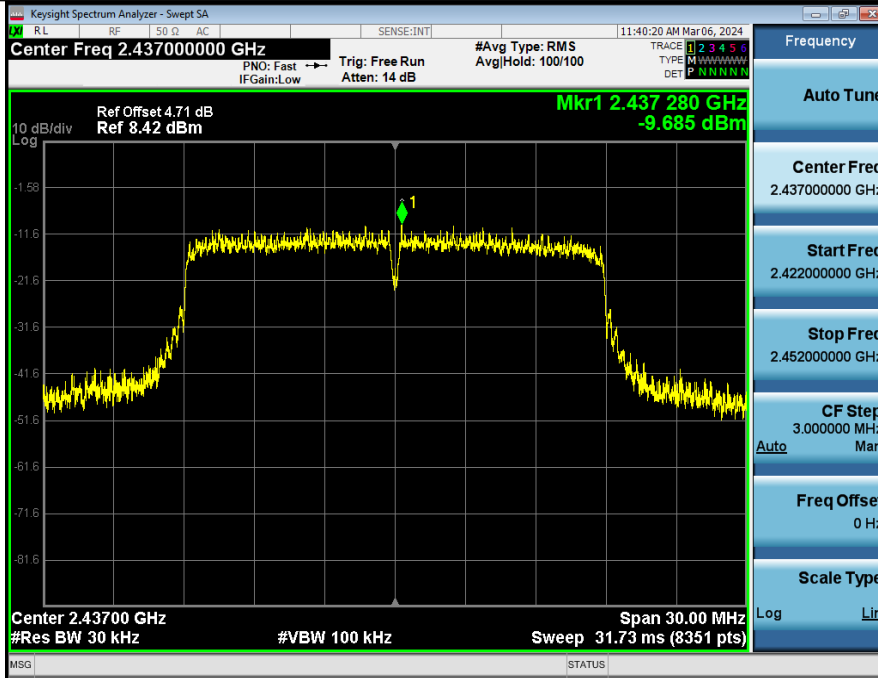
Power Spectral Density NVNT\_ANT1\_802\_11g\_2462



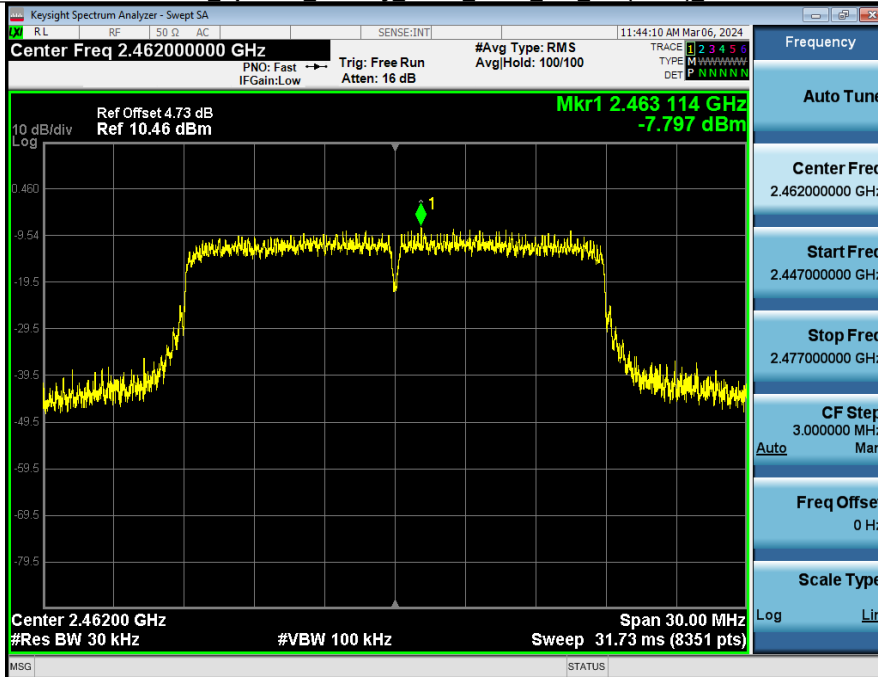
Power Spectral Density NVNT\_ANT1\_802\_11n(HT20)\_2412



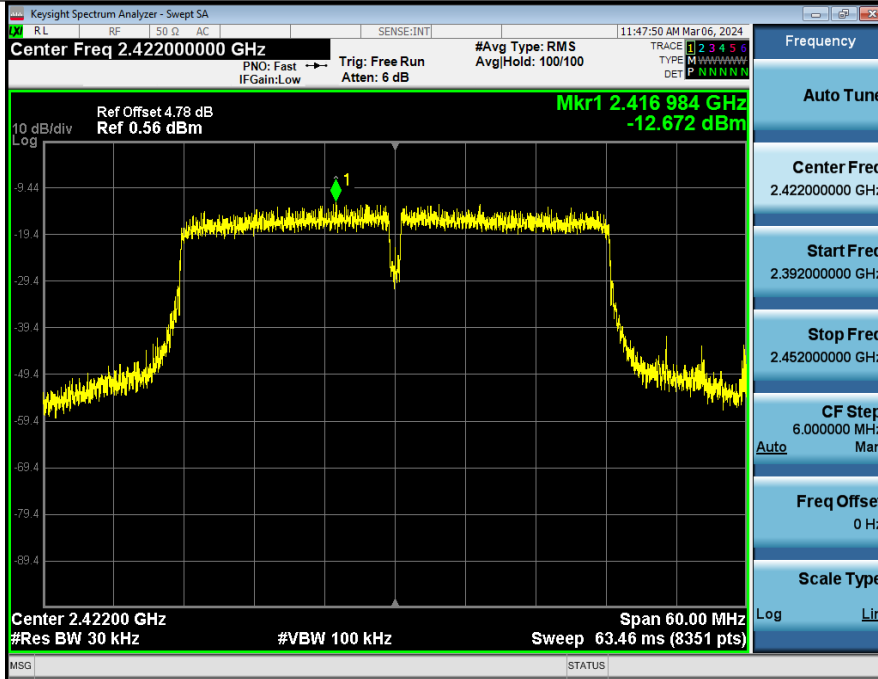
Power Spectral Density NVNT\_ANT1\_802\_11n(HT20)\_2437



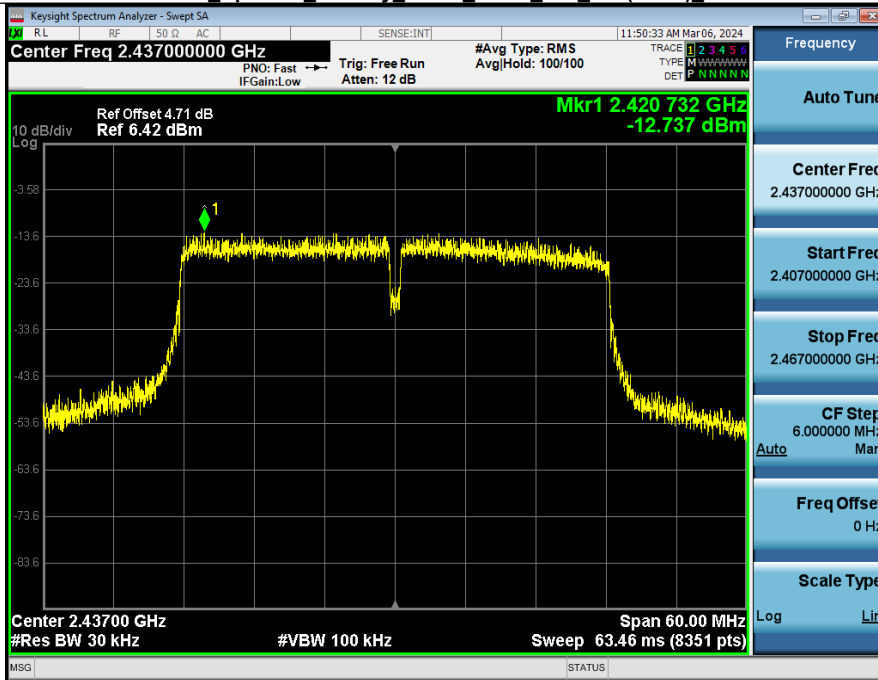
Power Spectral Density NVNT\_ANT1\_802\_11n(HT20)\_2462



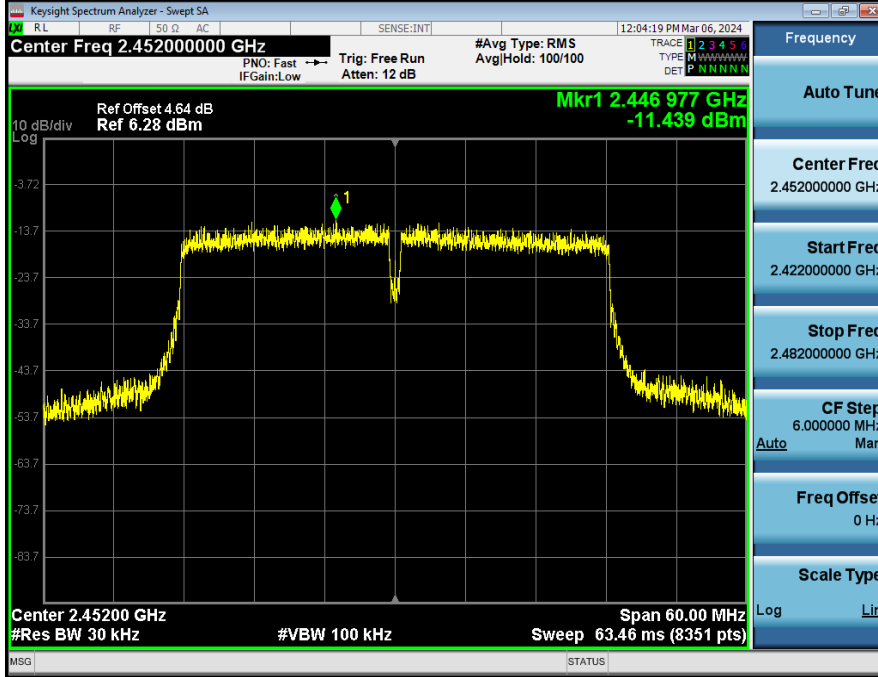
Power Spectral Density\_NVNT\_ANT1\_802\_11n(HT40)\_2422



Power Spectral Density\_NVNT\_ANT1\_802\_11n(HT40)\_2437



Power Spectral Density\_NVNT\_ANT1\_802\_11n(HT40)\_2452



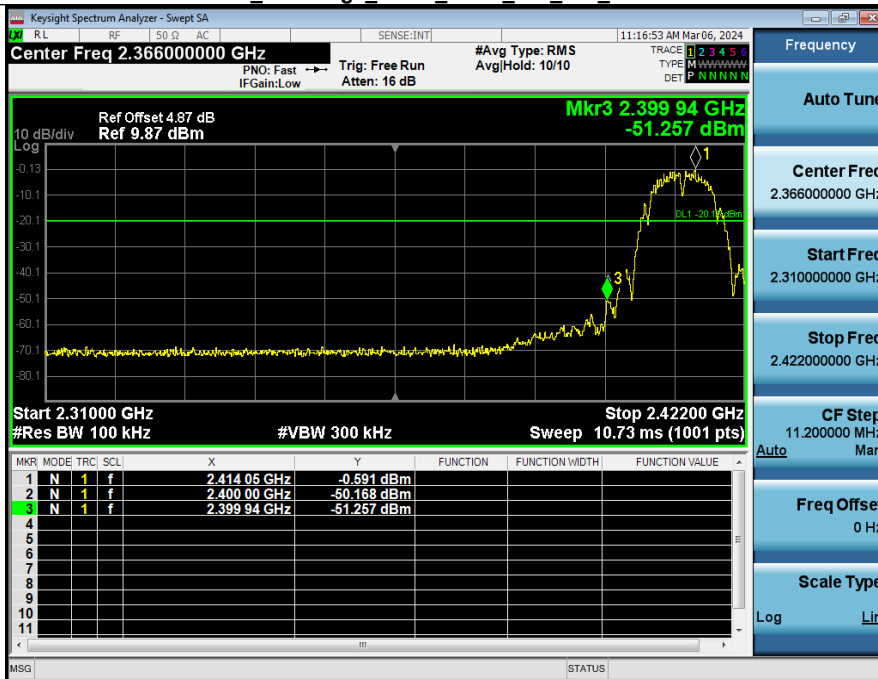
## 6. Bandedge

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	2399.936	-51.257	-20.148	Pass
NVNT	ANT1	802.11b	2462.00	2483.536	-57.612	-20.512	Pass
NVNT	ANT1	802.11g	2412.00	2398.928	-35.486	-23.937	Pass
NVNT	ANT1	802.11g	2462.00	2483.728	-45.413	-23.452	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2399.824	-31.909	-23.294	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2483.824	-43.872	-23.255	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	2399.760	-38.898	-27.679	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	2484.496	-43.225	-26.918	Pass

1 Reference Level NVNT\_ANT1\_802\_11b\_2412



2 Bandedge\_NVNT\_ANT1\_802\_11b\_2412



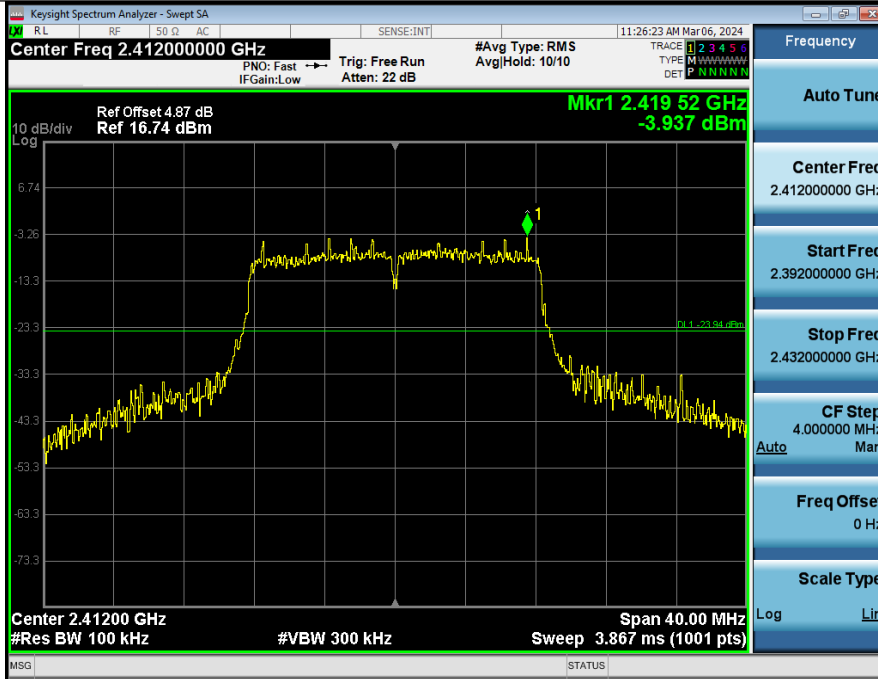
### 1 Reference Level\_NVNT\_ANT1\_802\_11b\_2462



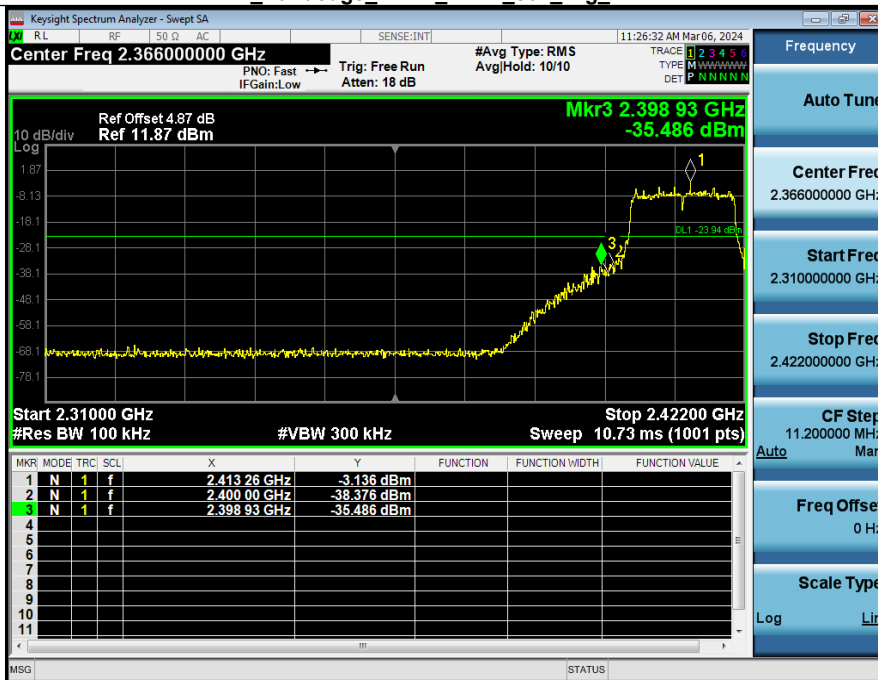
### 2 Bandedge\_NVNT\_ANT1\_802\_11b\_2462



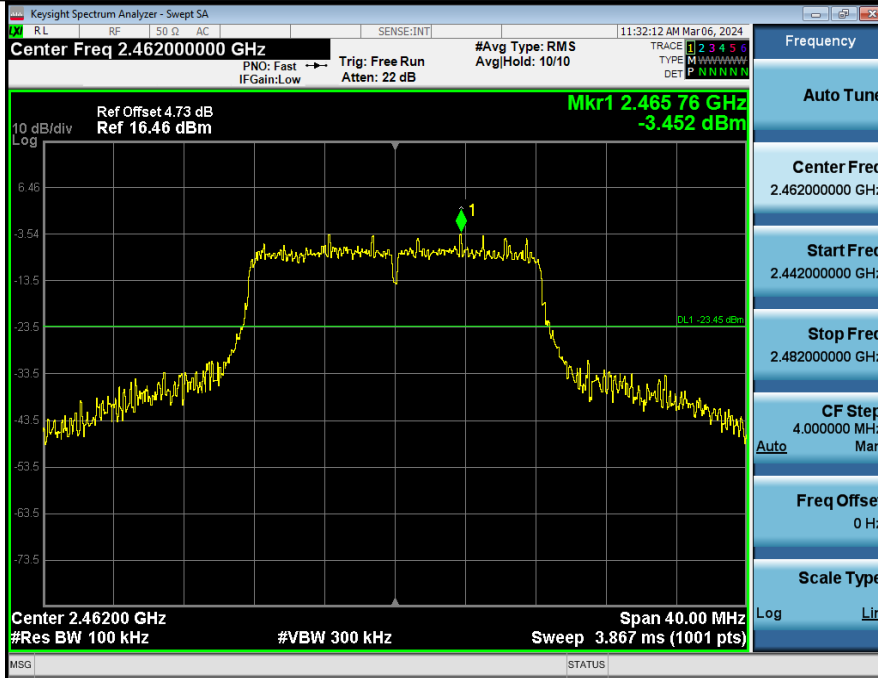
### 1 Reference\_Level\_NVNT\_ANT1\_802\_11g\_2412



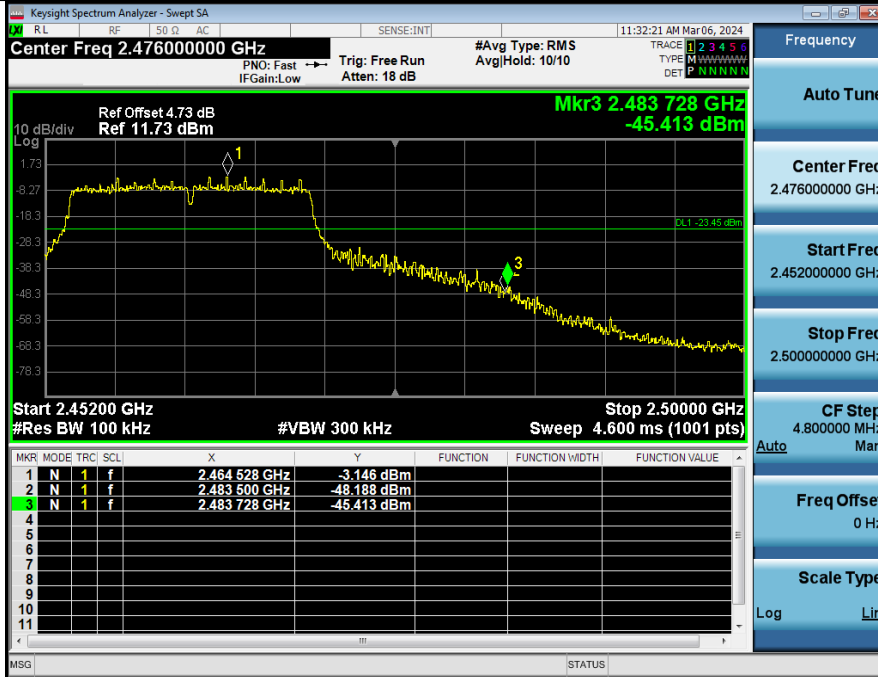
### 2 Bandedge\_NVNT\_ANT1\_802\_11g\_2412



### 1 Reference Level NVNT\_ANT1\_802\_11g\_2462

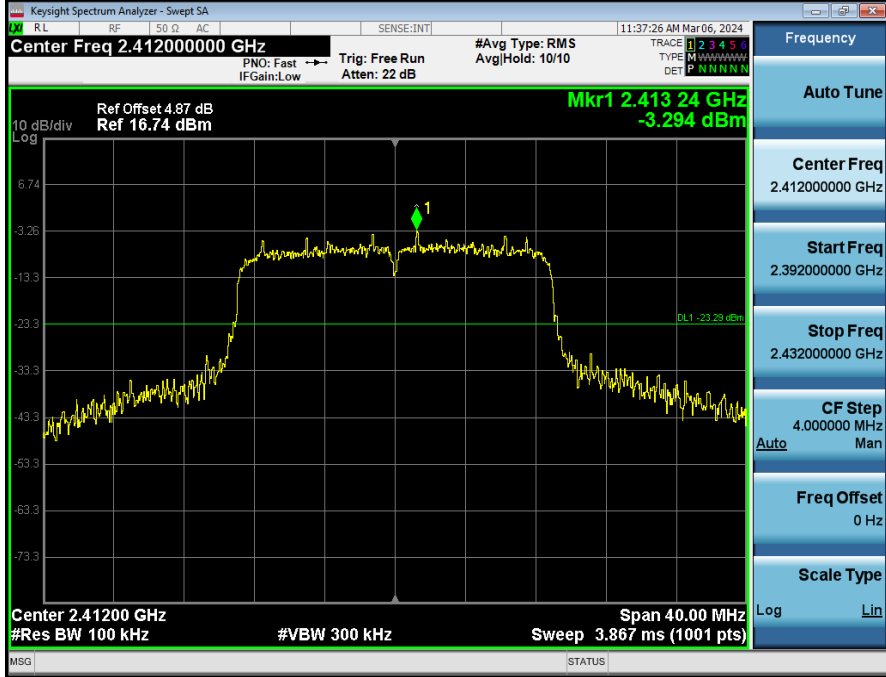


### 2 Bandedge NVNT\_ANT1\_802\_11g\_2462

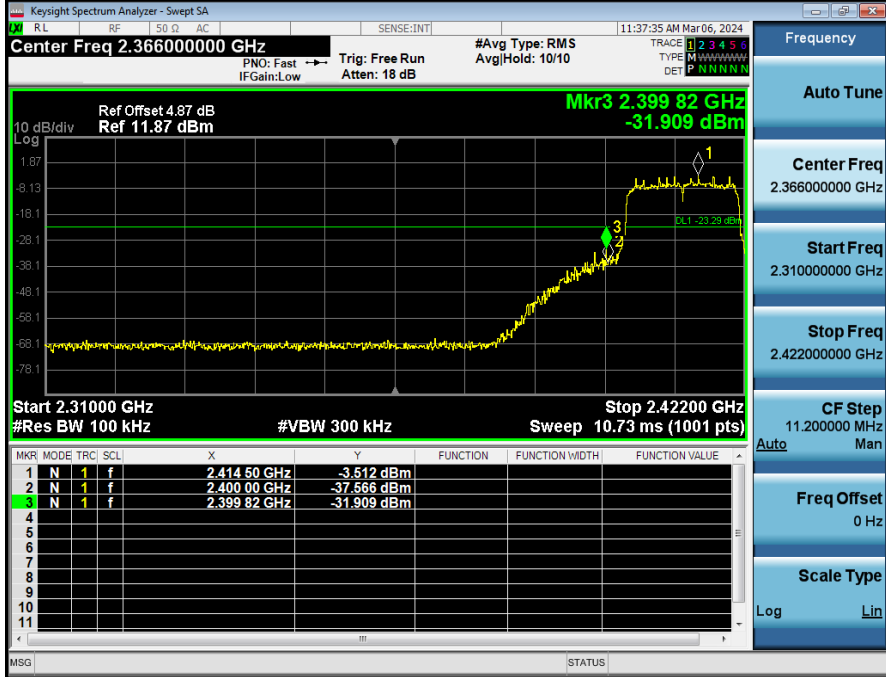




1 Reference Level\_NVNT\_ANT1\_802\_11n(HT20)\_2412



2 Bandedge\_NVNT\_ANT1\_802\_11n(HT20)\_2412



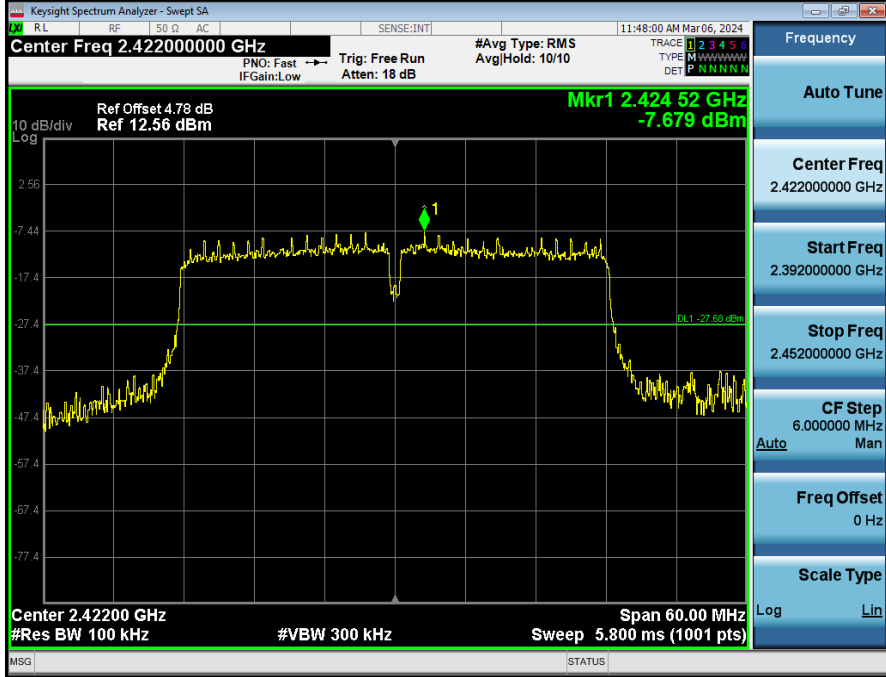
1 Reference Level\_NVNT\_ANT1\_802\_11n(HT20)\_2462



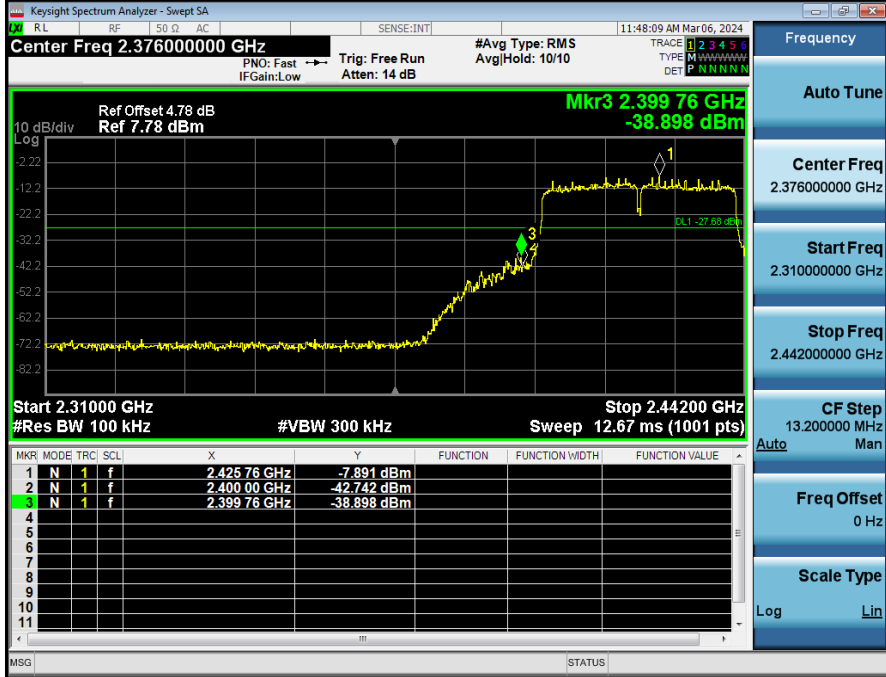
2 Bandedge\_NVNT\_ANT1\_802\_11n(HT20)\_2462



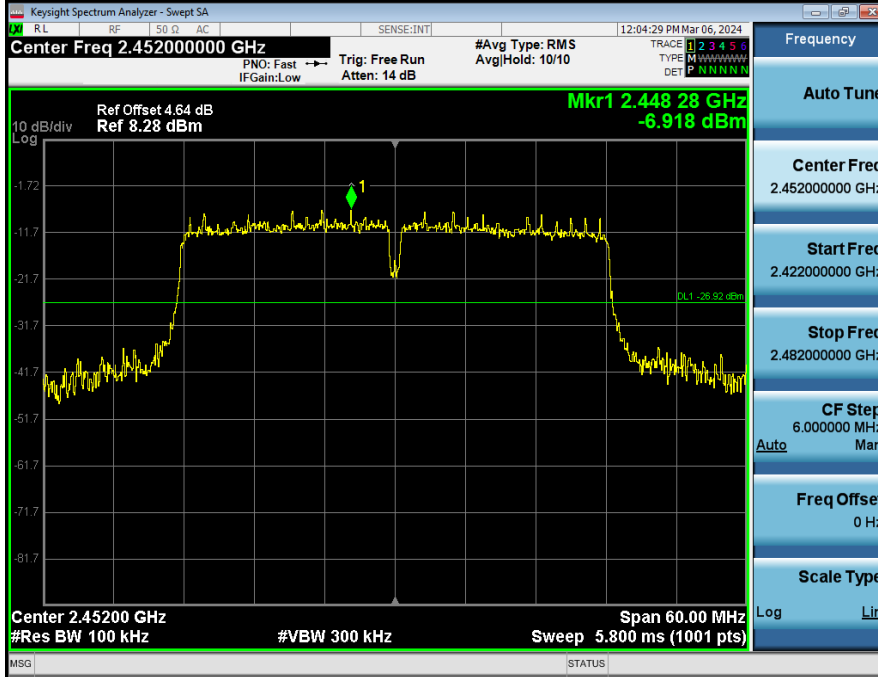
1 Reference Level\_NVNT\_ANT1\_802\_11n(HT40)\_2422



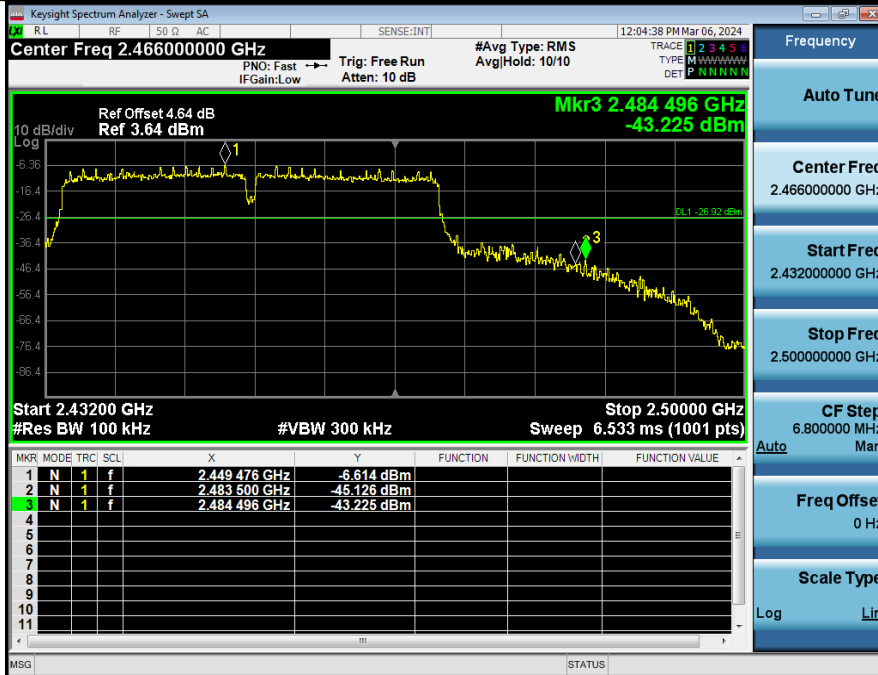
2 Bandedge\_NVNT\_ANT1\_802\_11n(HT40)\_2422



### 1 Reference Level\_NVNT\_ANT1\_802\_11n(HT40)\_2452

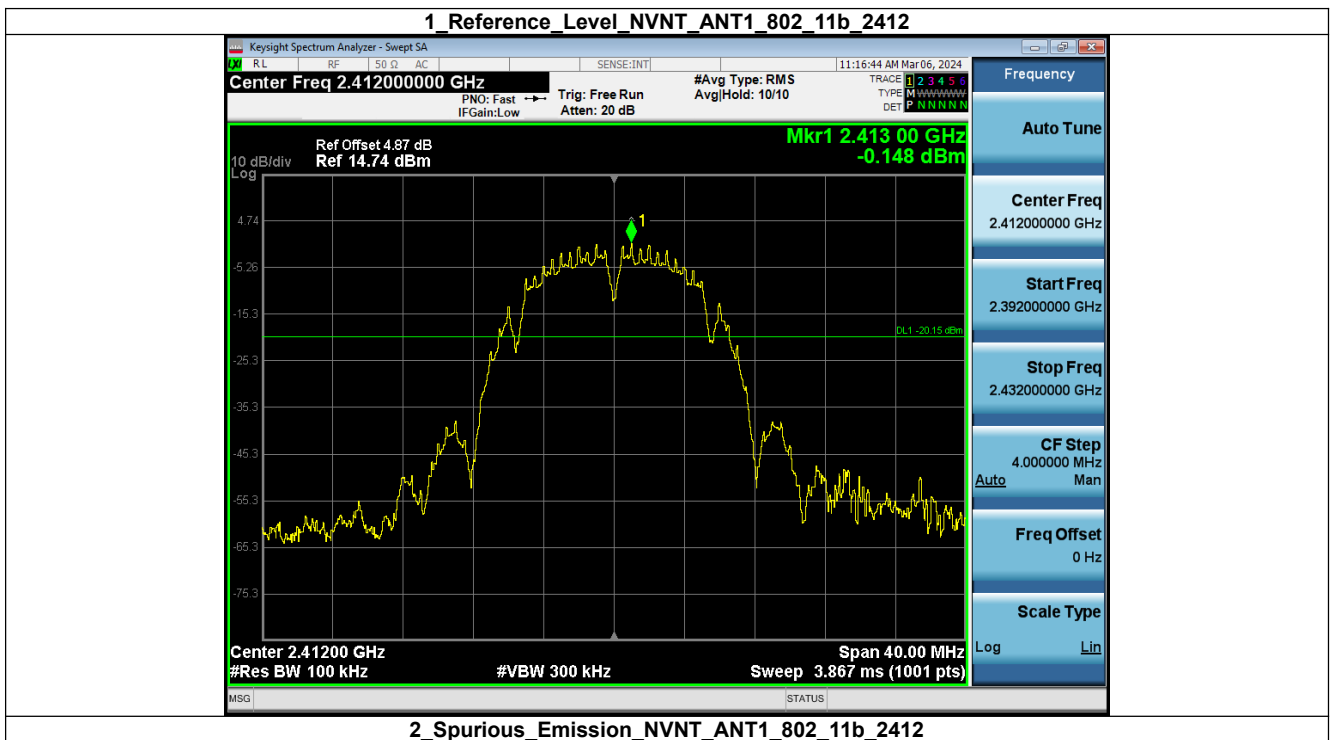


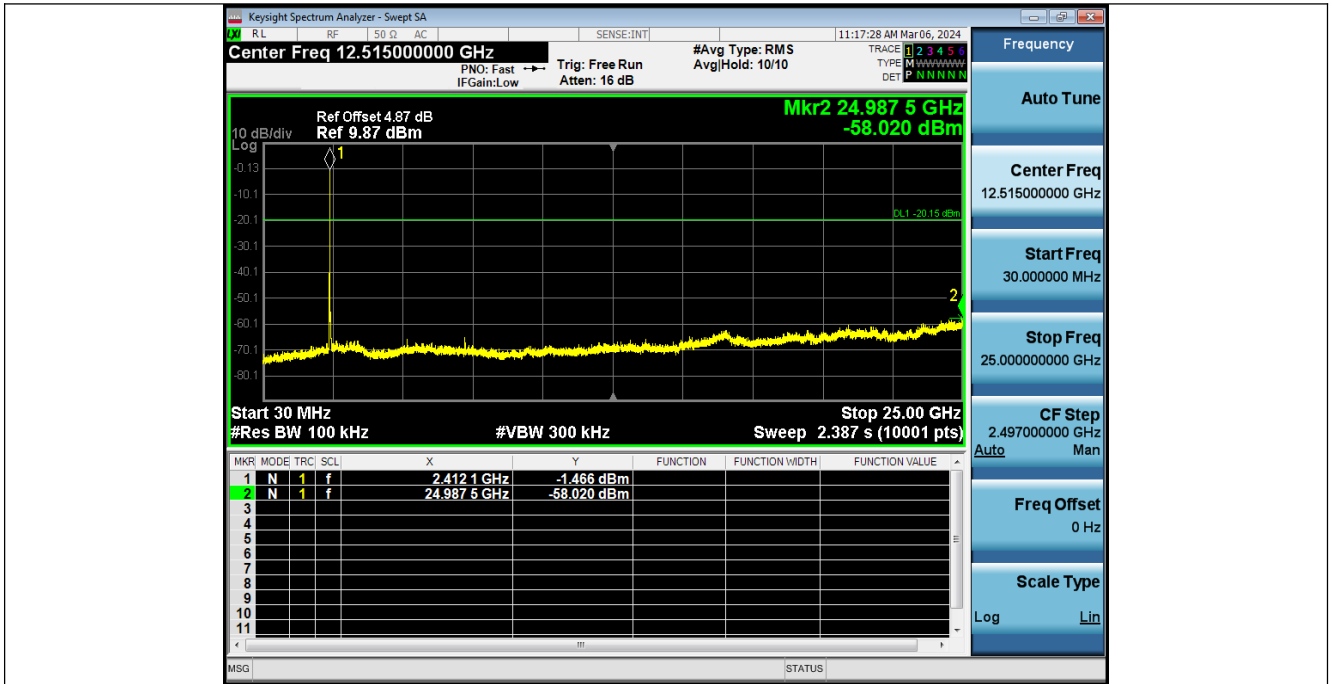
### 2 Bandedge\_NVNT\_ANT1\_802\_11n(HT40)\_2452



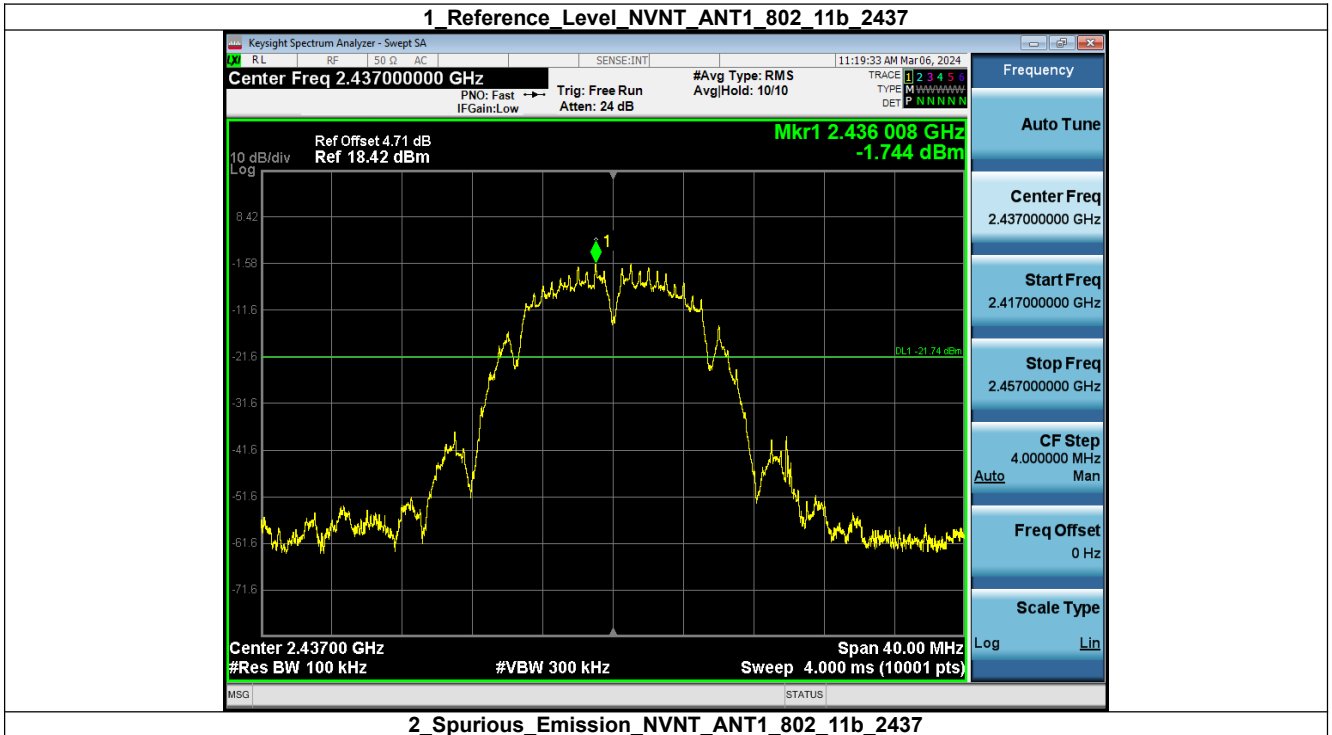
## 7. Spurious Emission

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	24987.515	-58.020	-20.148	Pass
NVNT	ANT1	802.11b	2437.00	25000.000	-54.179	-21.744	Pass
NVNT	ANT1	802.11b	2462.00	24533.061	-58.189	-20.512	Pass
NVNT	ANT1	802.11g	2412.00	24887.635	-56.032	-23.937	Pass
NVNT	ANT1	802.11g	2437.00	911.441	-48.936	-25.479	Pass
NVNT	ANT1	802.11g	2462.00	24955.054	-55.464	-23.452	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	24972.533	-56.381	-23.294	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	24997.503	-62.985	-25.792	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	24942.569	-54.142	-23.255	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	24960.048	-60.215	-27.679	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	24965.042	-60.260	-27.879	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	5221.263	-64.076	-26.918	Pass

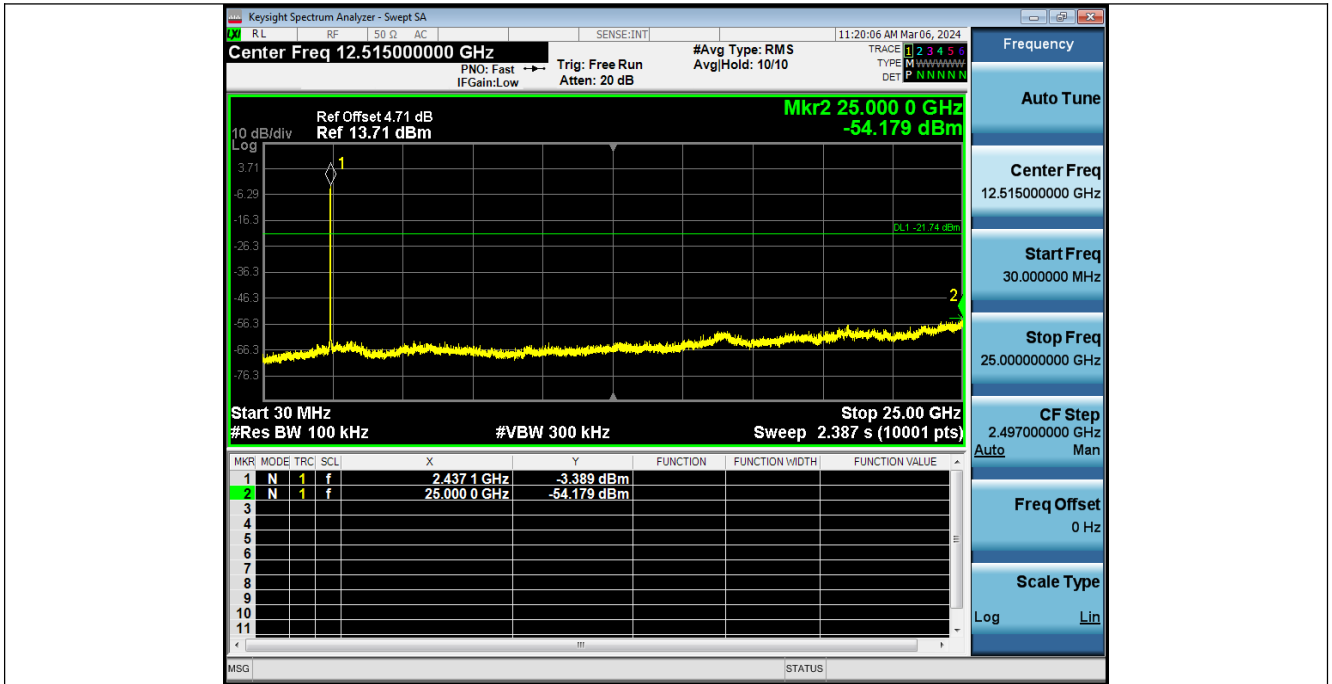




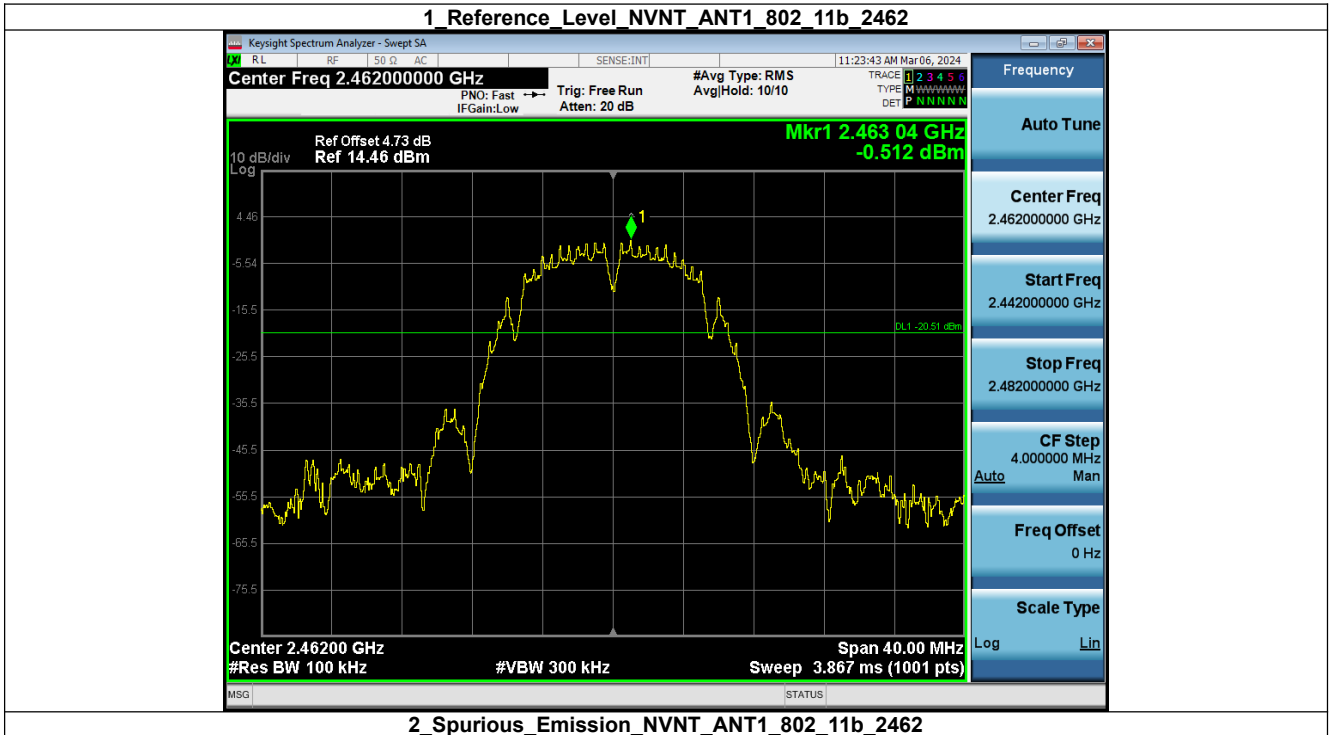
1 Reference Level NVNT\_ANT1\_802\_11b\_2437



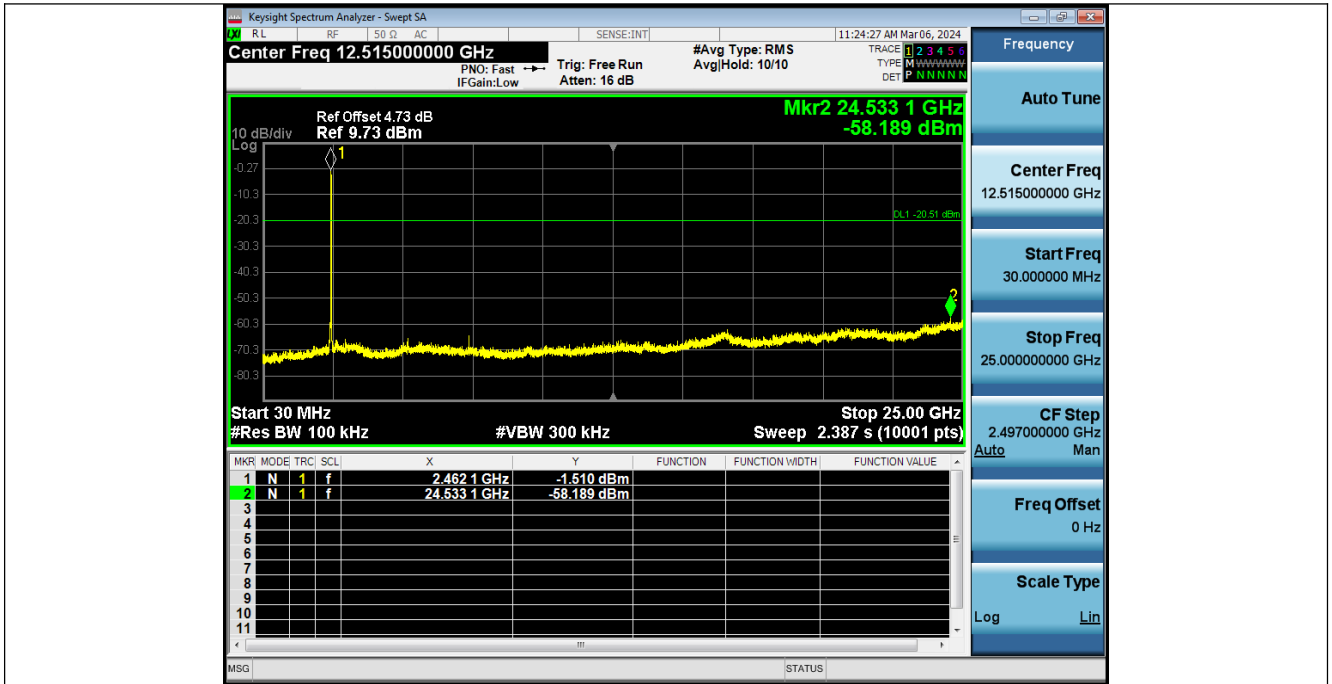
2 Spurious Emission\_NVNT\_ANT1\_802\_11b\_2437



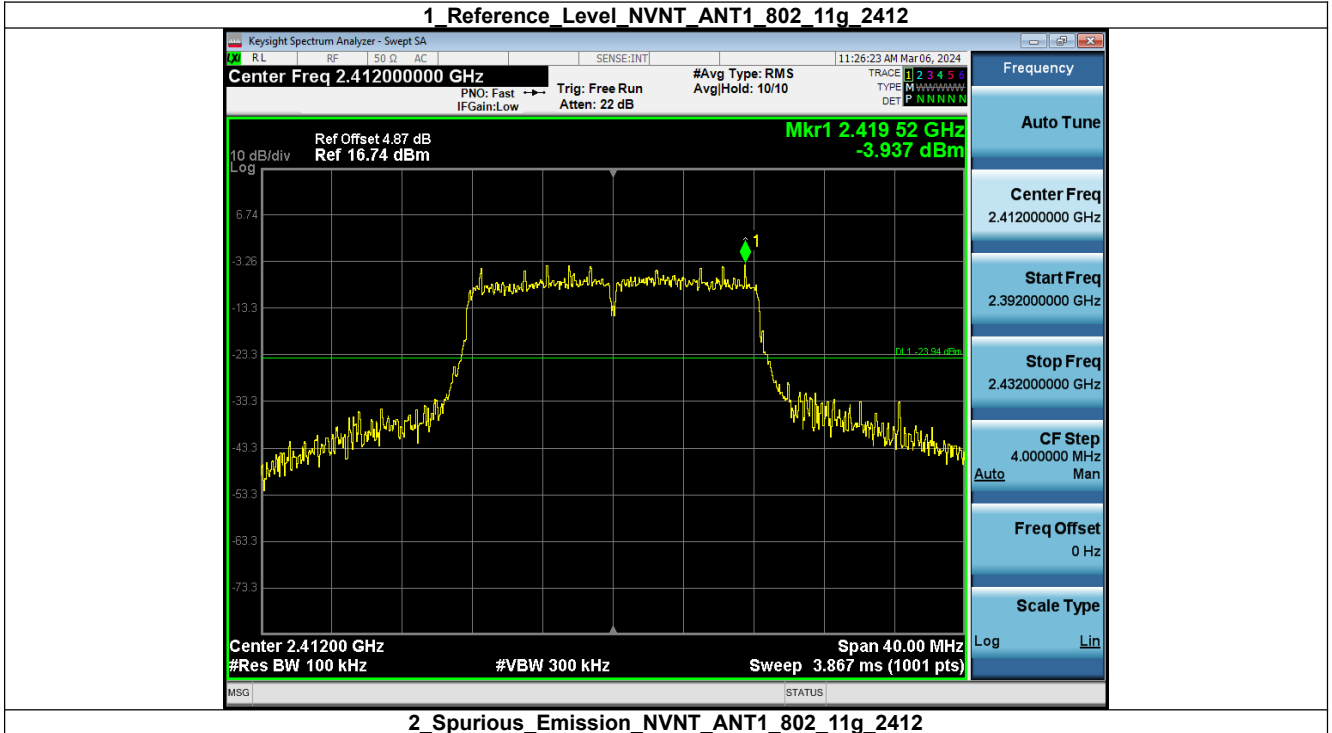
1 Reference Level NVNT\_ANT1\_802\_11b\_2462



2 Spurious Emission\_NVNT\_ANT1\_802\_11b\_2462

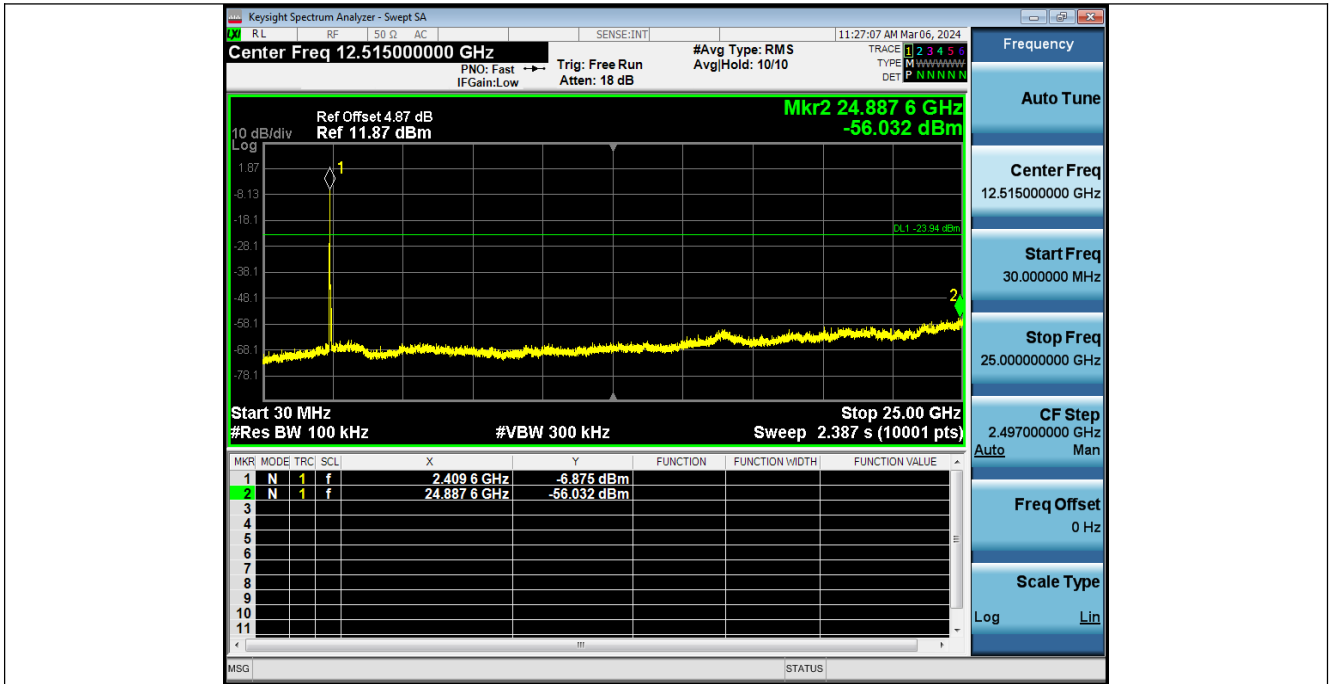


1 Reference Level NVNT\_ANT1\_802\_11g\_2412

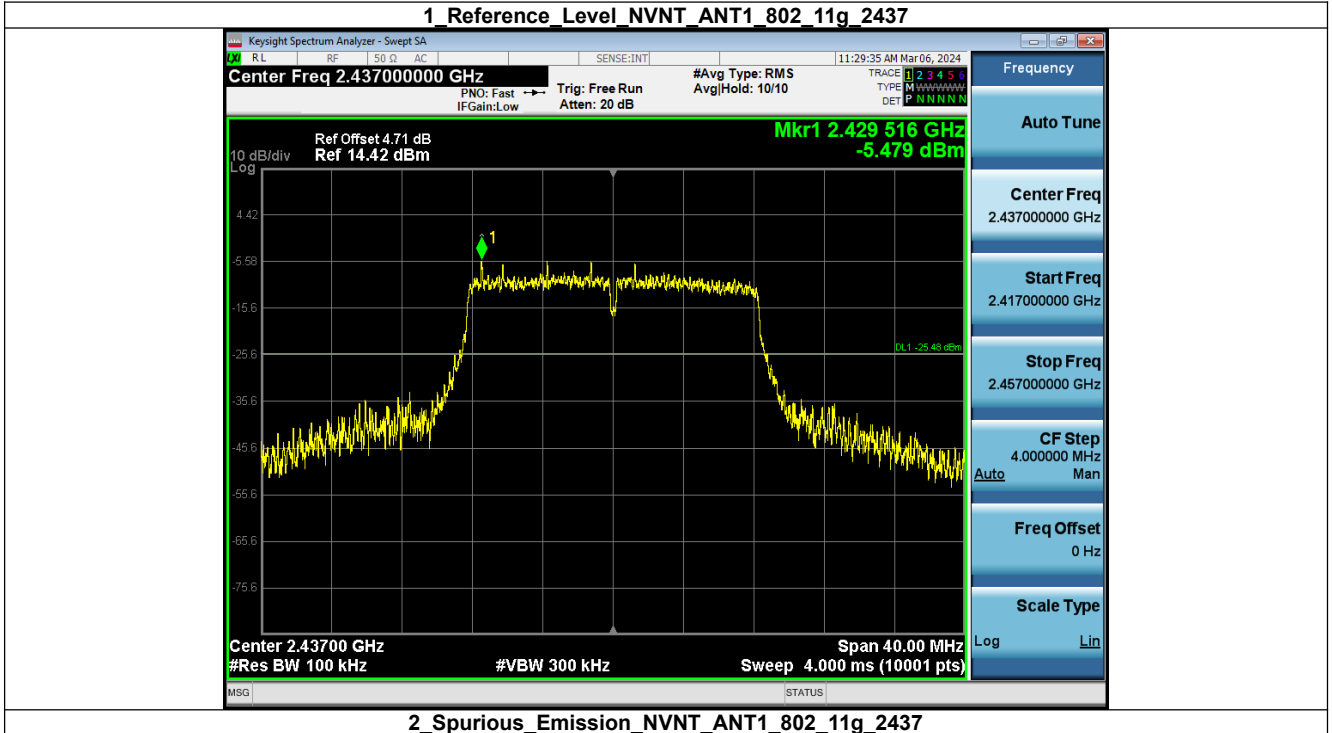


2 Spurious Emission\_NVNT\_ANT1\_802\_11g\_2412

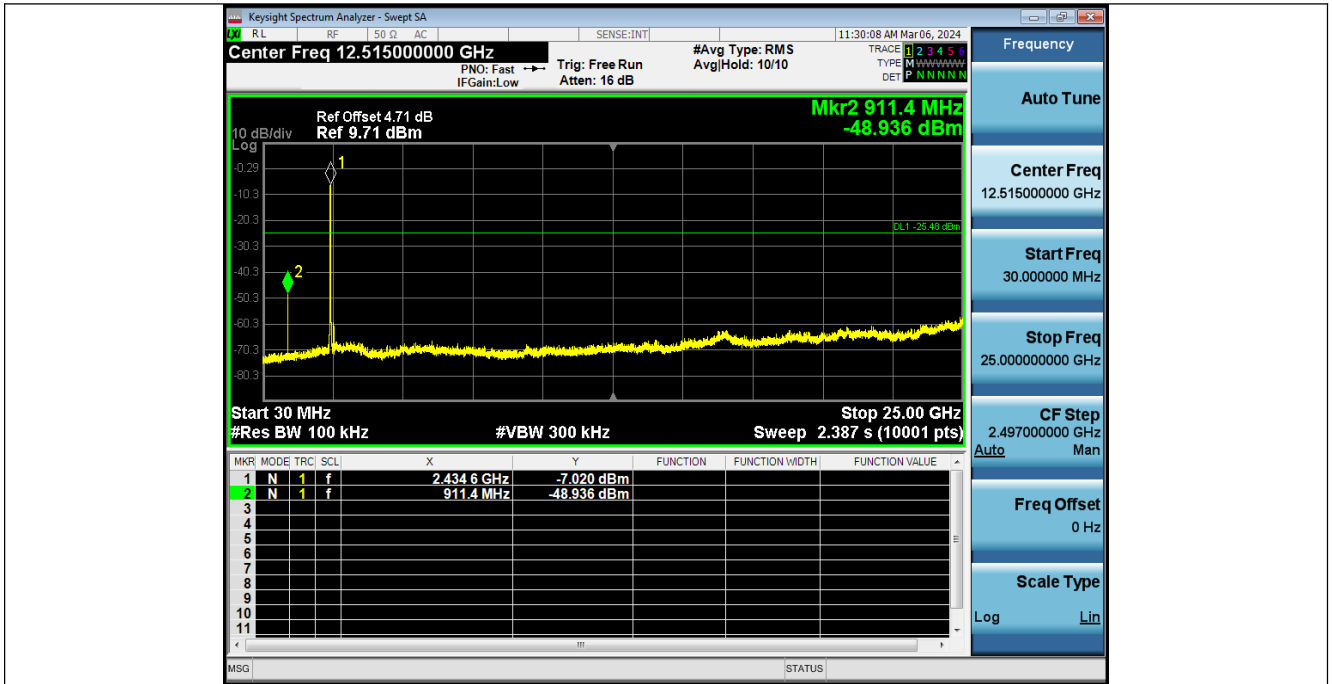




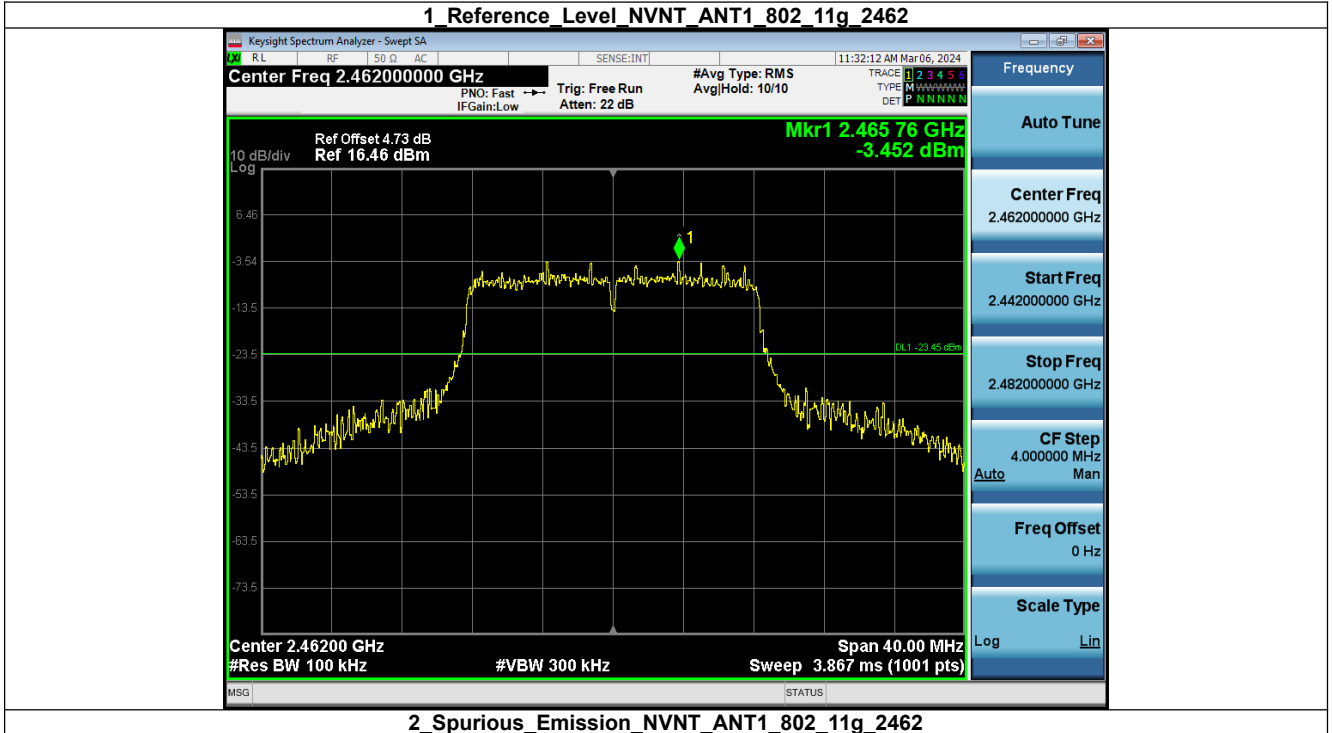
1 Reference Level NVNT\_ANT1\_802\_11g\_2437



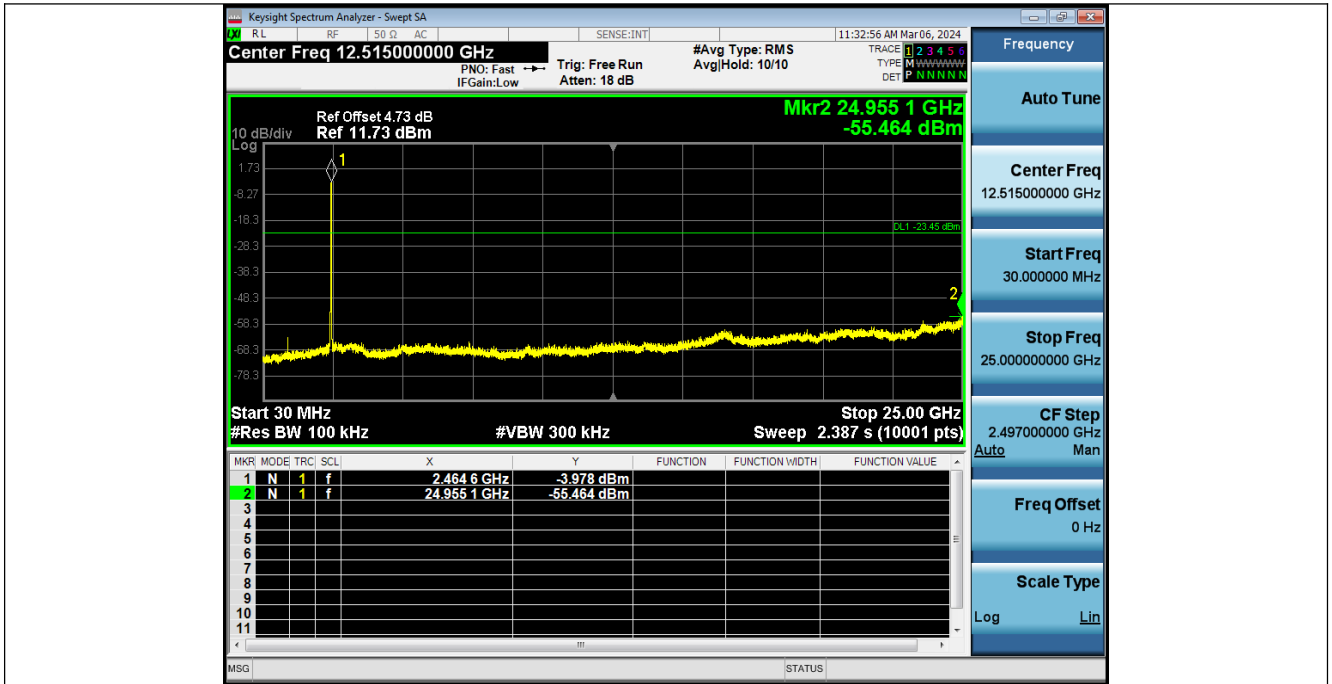
2 Spurious Emission\_NVNT\_ANT1\_802\_11g\_2437



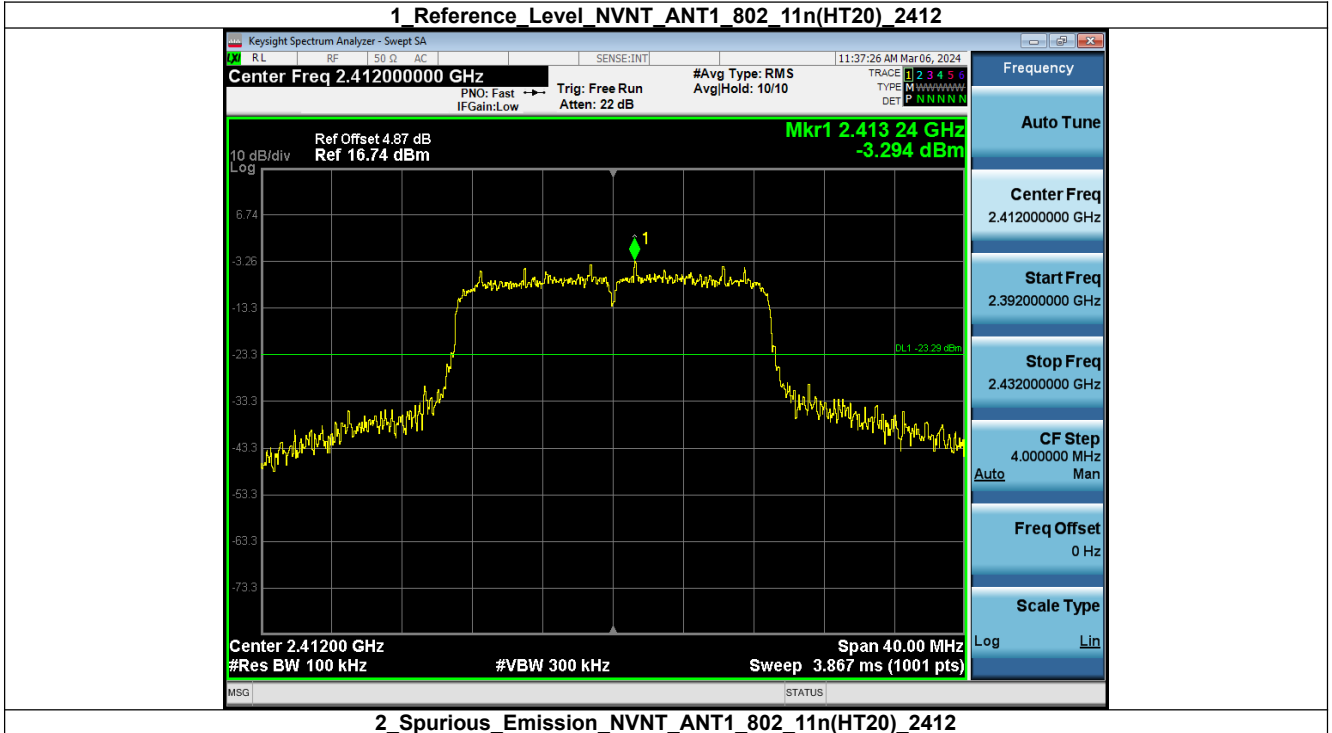
1 Reference Level NVNT\_ANT1\_802\_11g\_2462



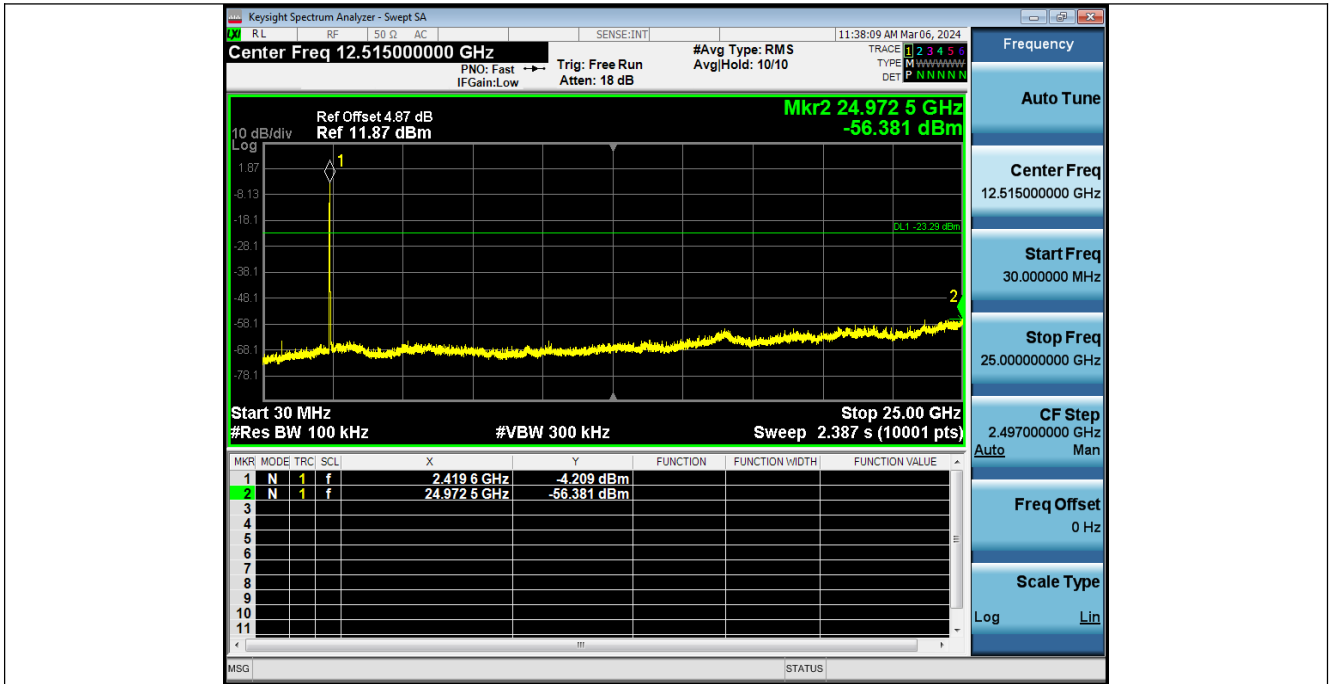
2 Spurious Emission\_NVNT\_ANT1\_802\_11g\_2462



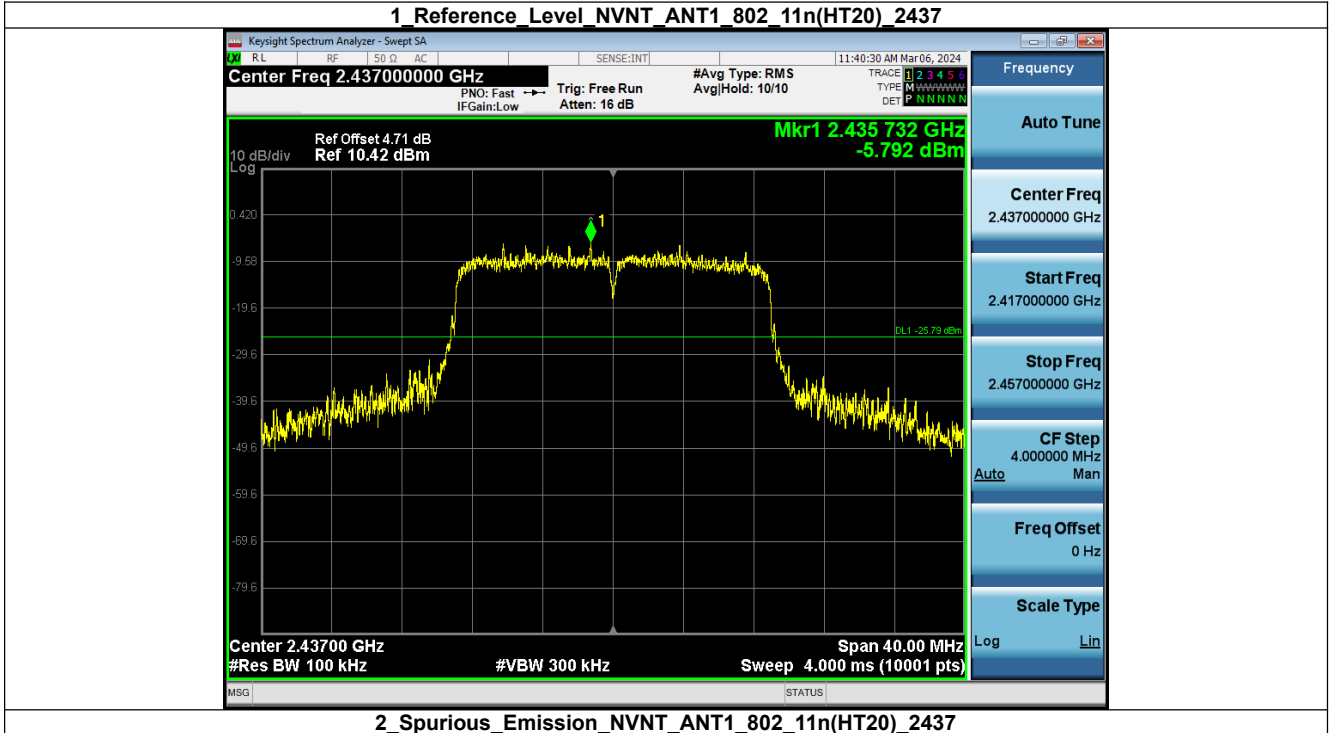
1 Reference Level NVNT\_ANT1\_802\_11n(HT20)\_2412



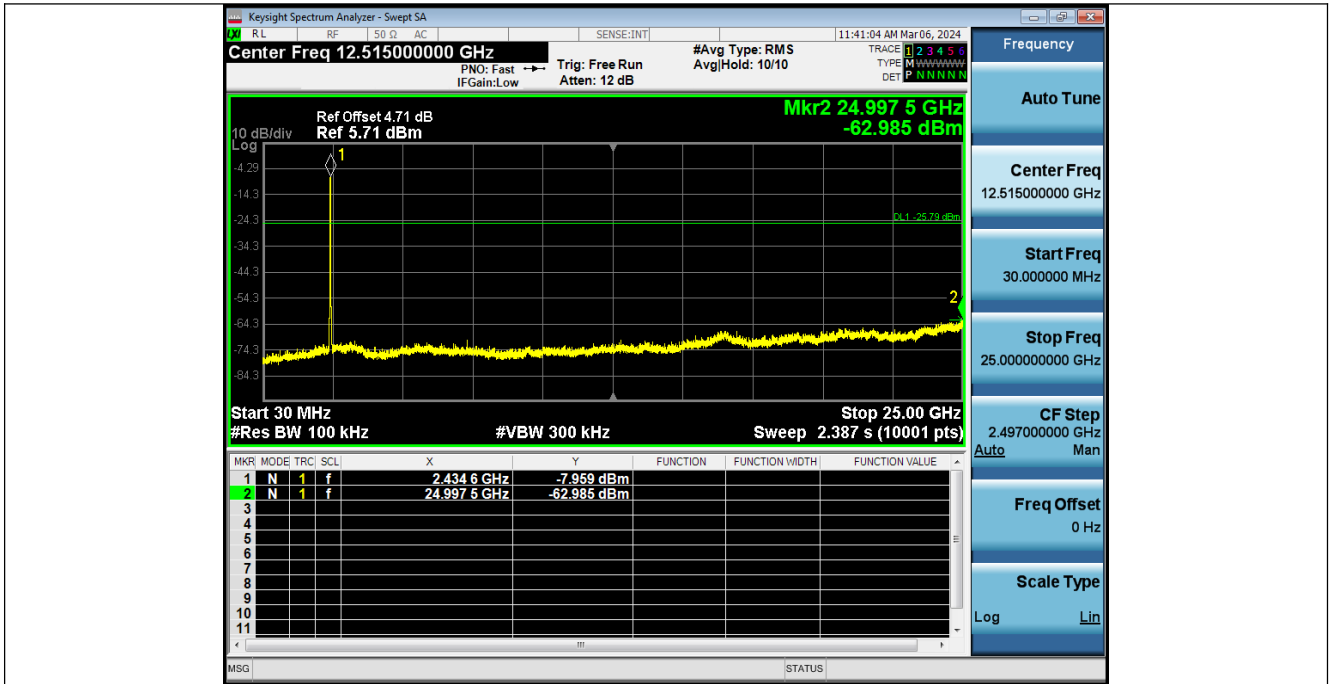
2 Spurious Emission NVNT\_ANT1\_802\_11n(HT20)\_2412



1 Reference Level\_NVNT\_ANT1\_802\_11n(HT20)\_2437



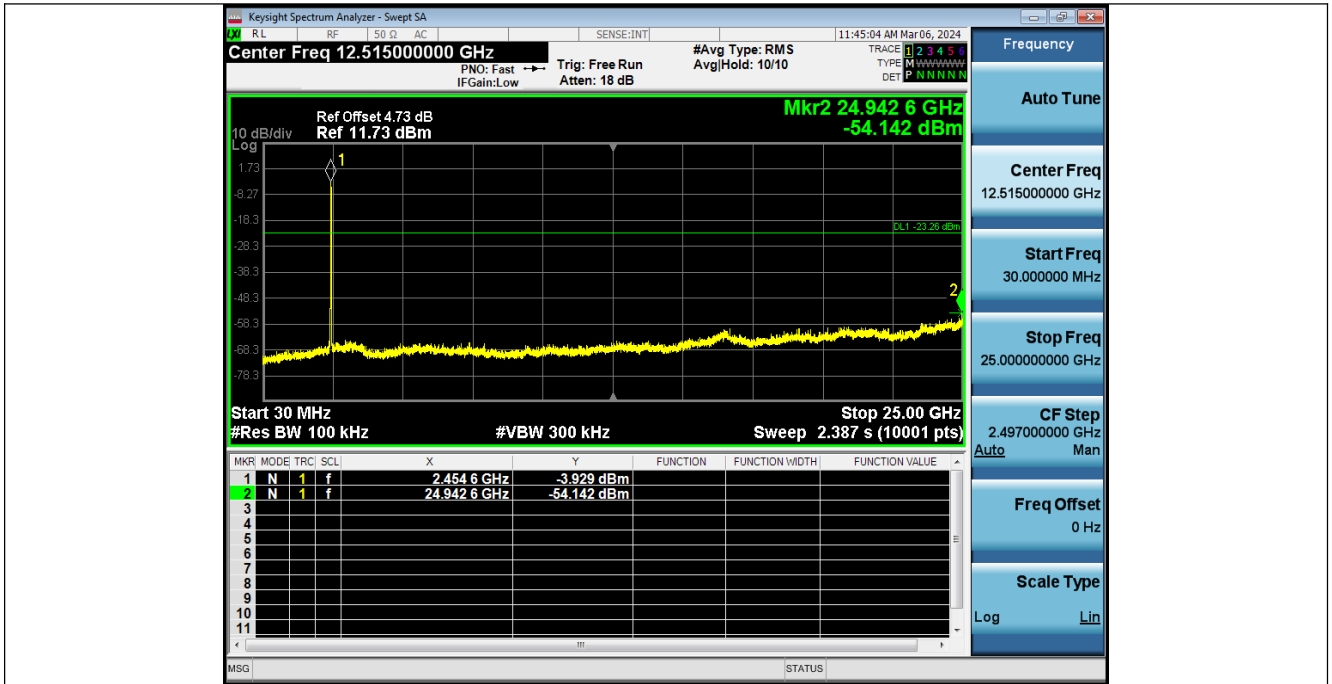
2\_Spurious\_Emission\_NVNT\_ANT1\_802\_11n(HT20)\_2437



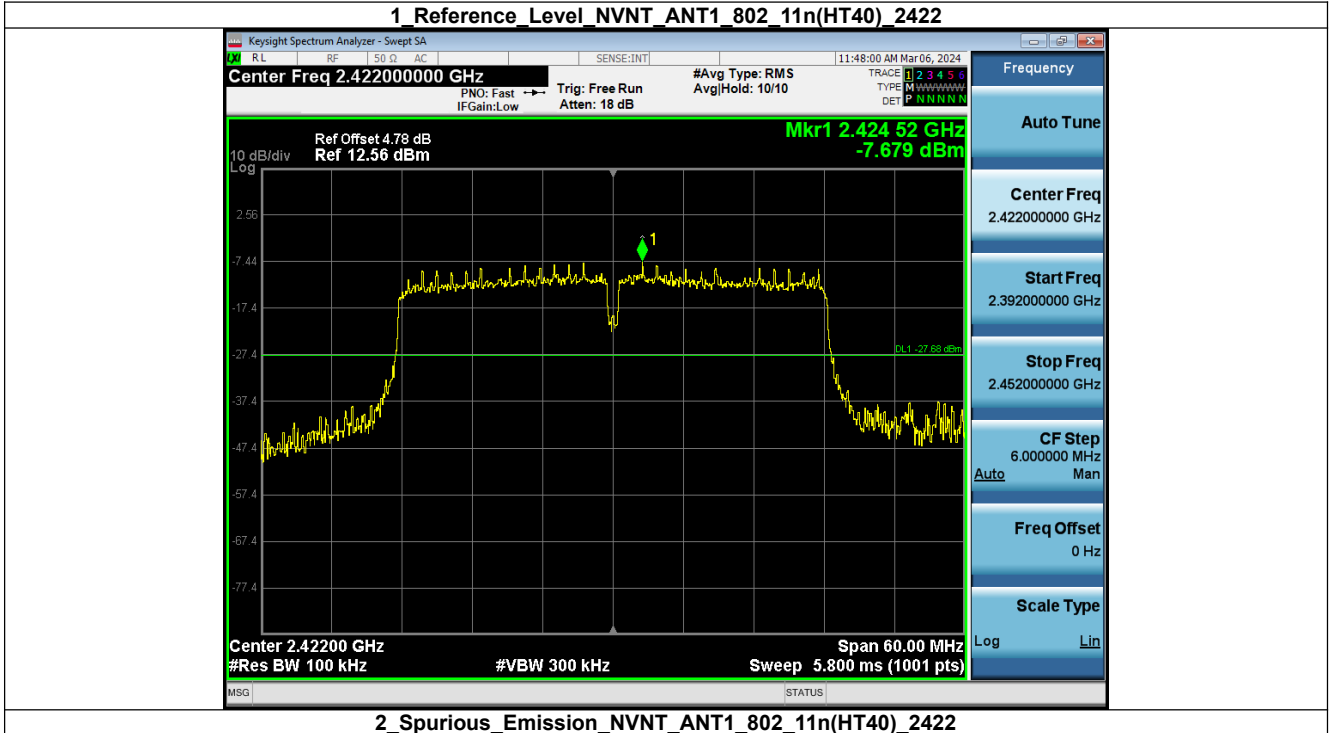
1 Reference Level\_NVNT\_ANT1\_802\_11n(HT20)\_2462



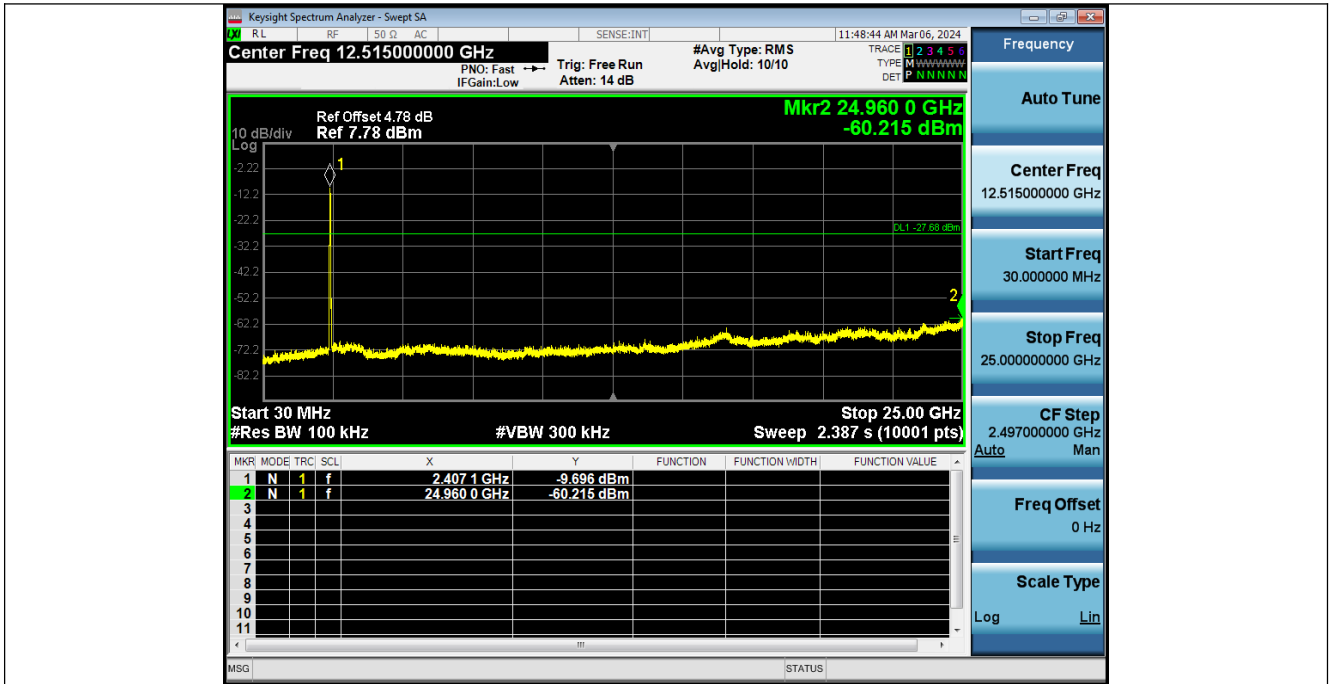
2\_Spurious\_Emission\_NVNT\_ANT1\_802\_11n(HT20)\_2462



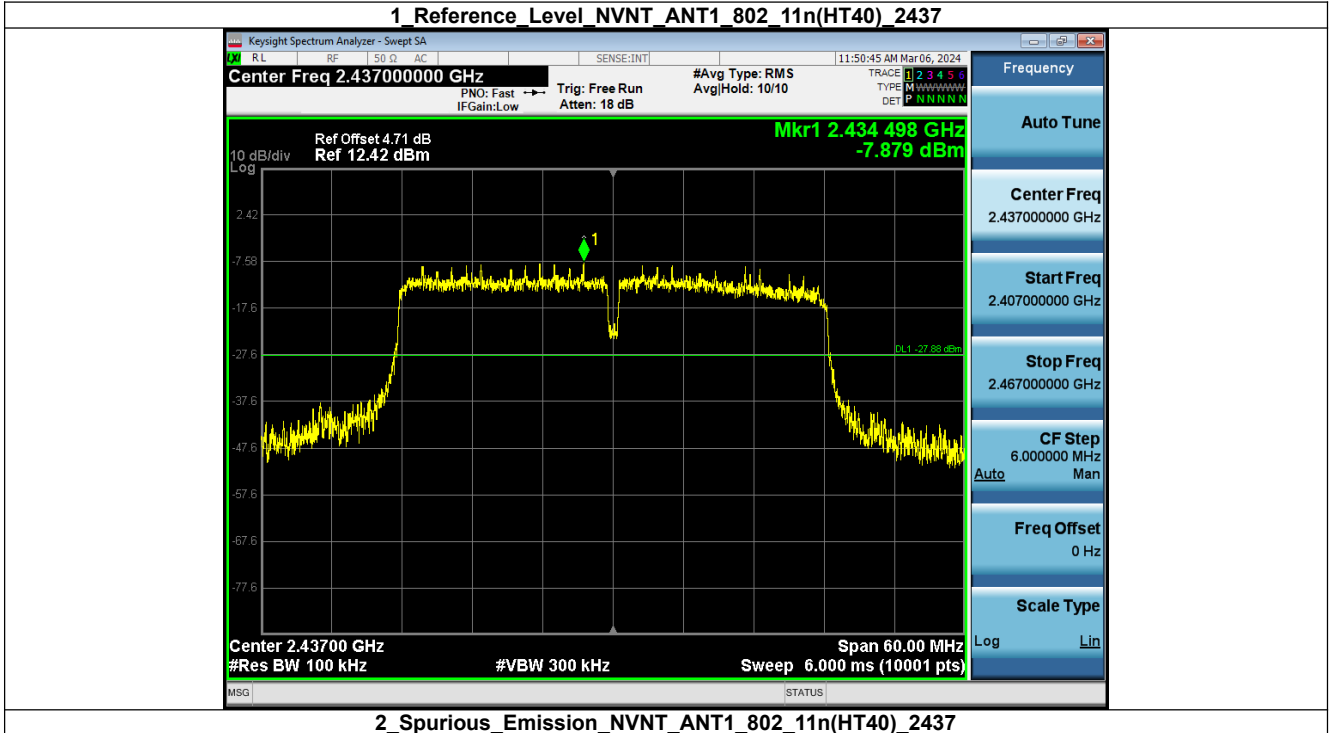
1 Reference Level\_NVNT\_ANT1\_802\_11n(HT40)\_2422



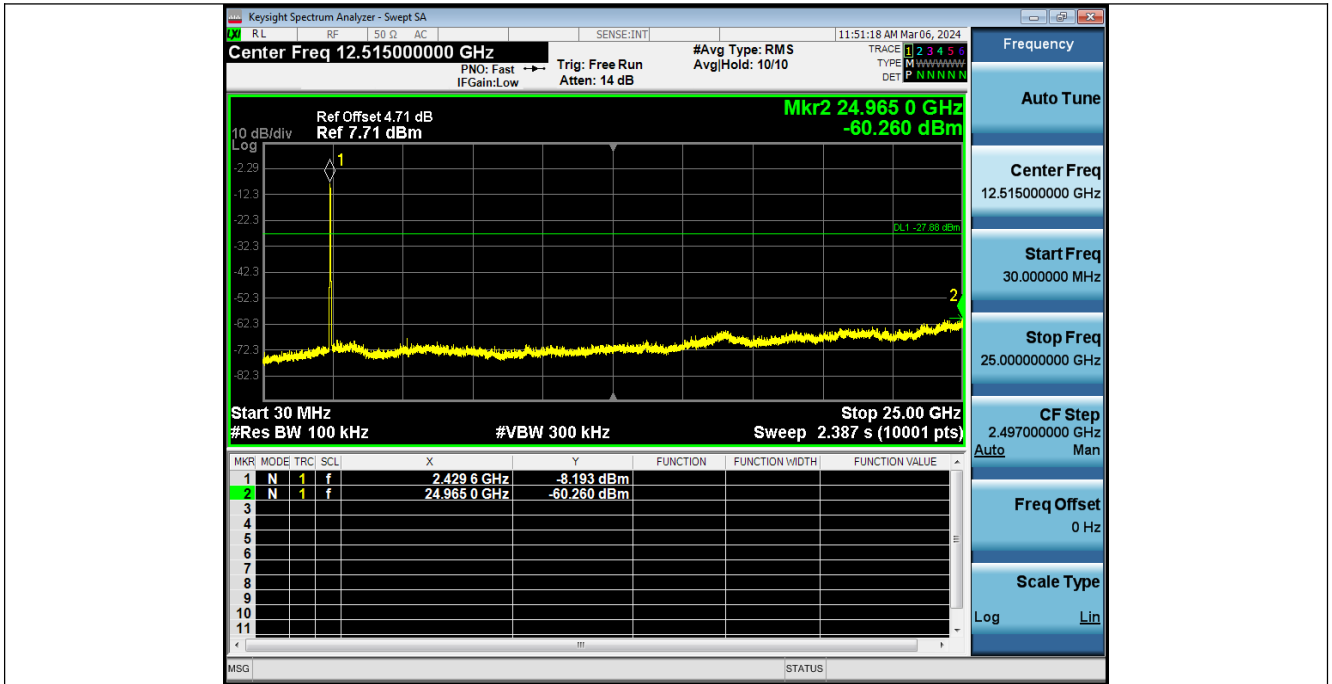
2\_Spurious\_Emission\_NVNT\_ANT1\_802\_11n(HT40)\_2422



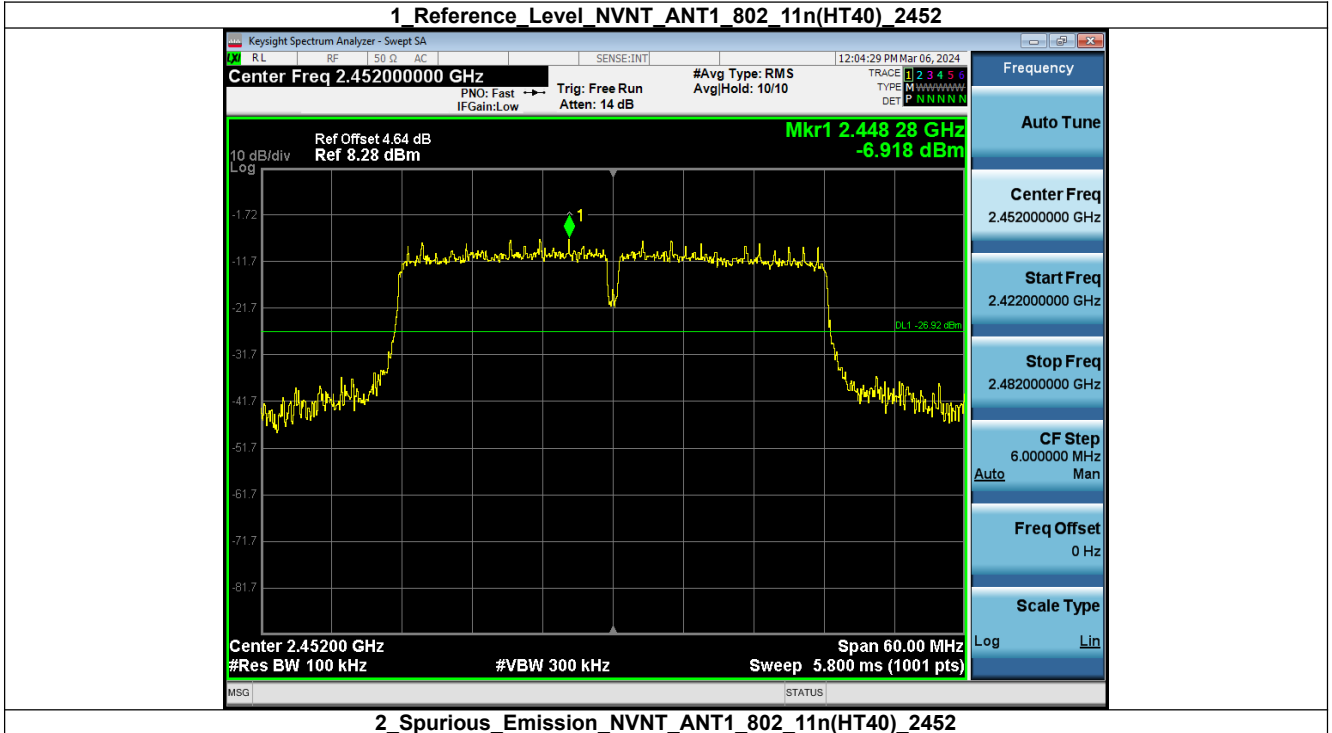
1 Reference Level\_NVNT\_ANT1\_802\_11n(HT40)\_2437



2\_Spurious\_Emission\_NVNT\_ANT1\_802\_11n(HT40)\_2437



1 Reference Level NVNT\_ANT1\_802\_11n(HT40)\_2452



2 Spurious Emission NVNT\_ANT1\_802\_11n(HT40)\_2452



