

## Table of Contents

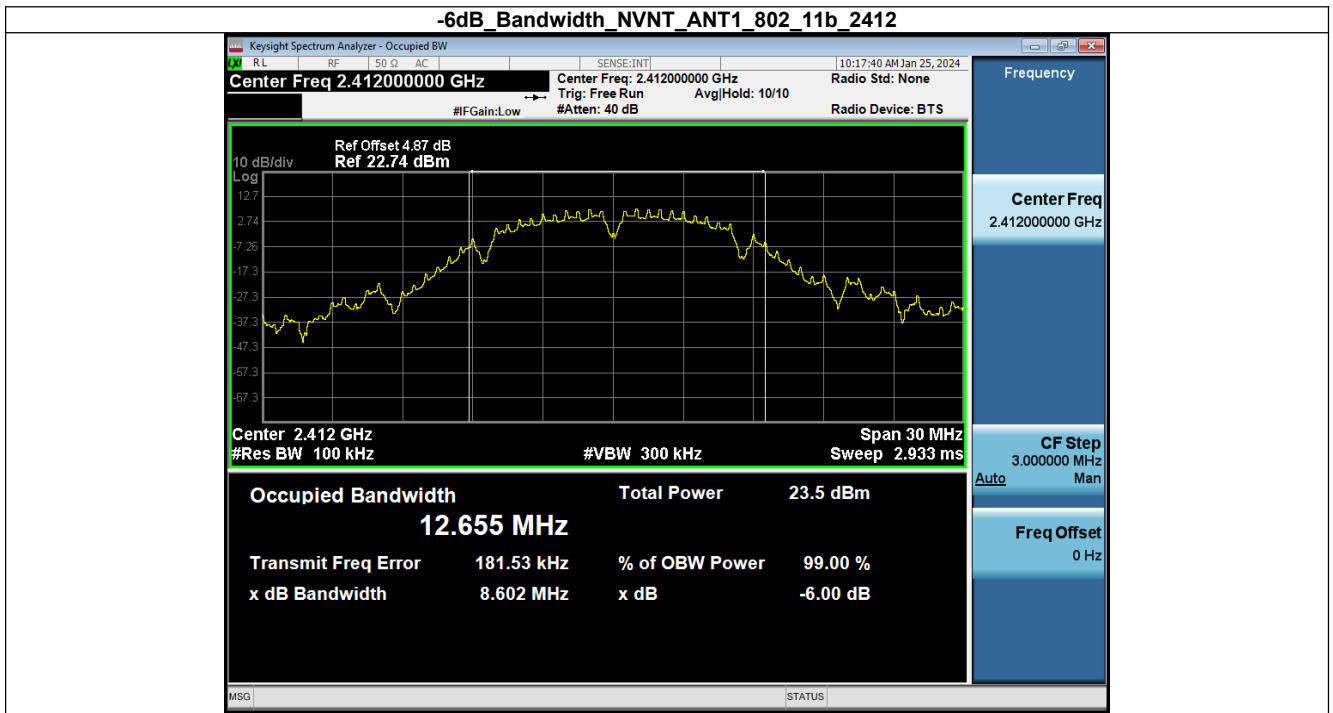
1. -6dB Bandwidth .....	2
2. 99% Occupied Bandwidth .....	9
3. Duty Cycle .....	16
5. Power Spectral Density .....	23
6. Bandedge .....	30
7. Spurious Emission .....	38

# FCC ID: 2A7HI-S7

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

### 1. -6dB Bandwidth

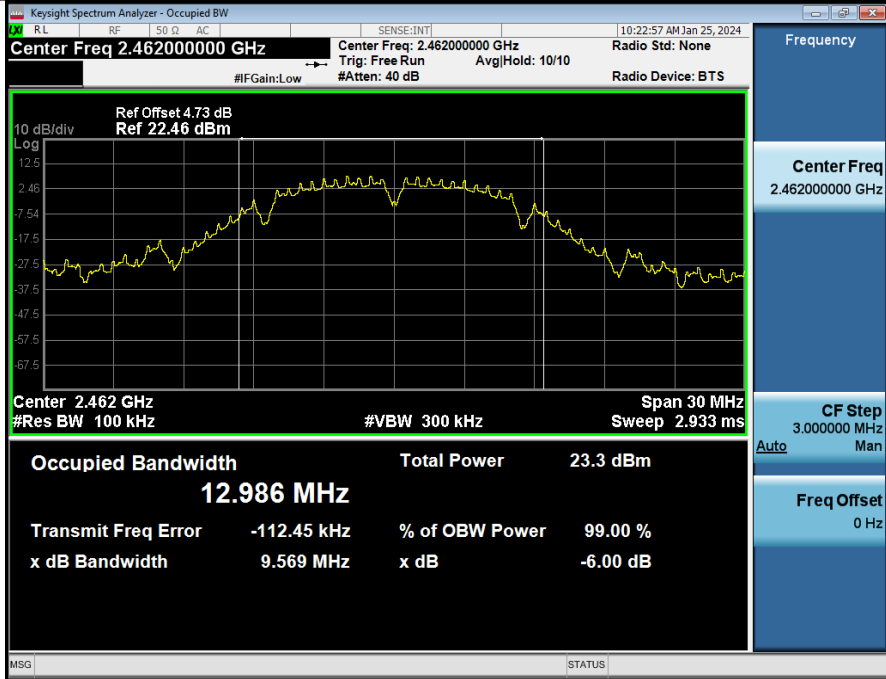
Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	8.60	500	Pass
NVNT	ANT1	802.11b	2437.00	8.60	500	Pass
NVNT	ANT1	802.11b	2462.00	9.57	500	Pass
NVNT	ANT1	802.11g	2412.00	15.75	500	Pass
NVNT	ANT1	802.11g	2437.00	15.94	500	Pass
NVNT	ANT1	802.11g	2462.00	16.08	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	16.73	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	16.74	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	16.76	500	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	35.78	500	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	35.58	500	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	35.38	500	Pass



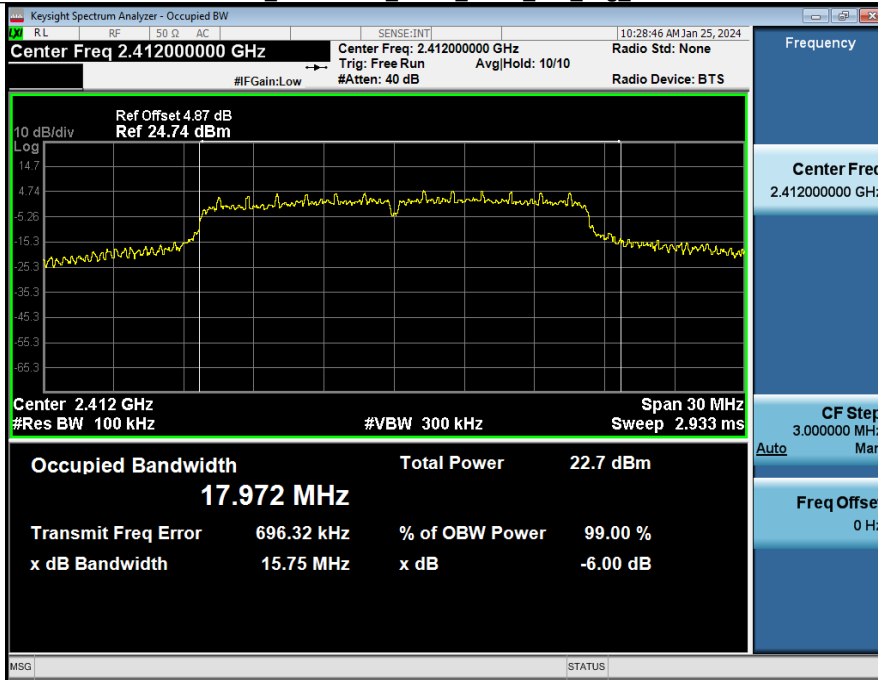
**-6dB Bandwidth\_NVNT\_ANT1\_802\_11b\_2437**



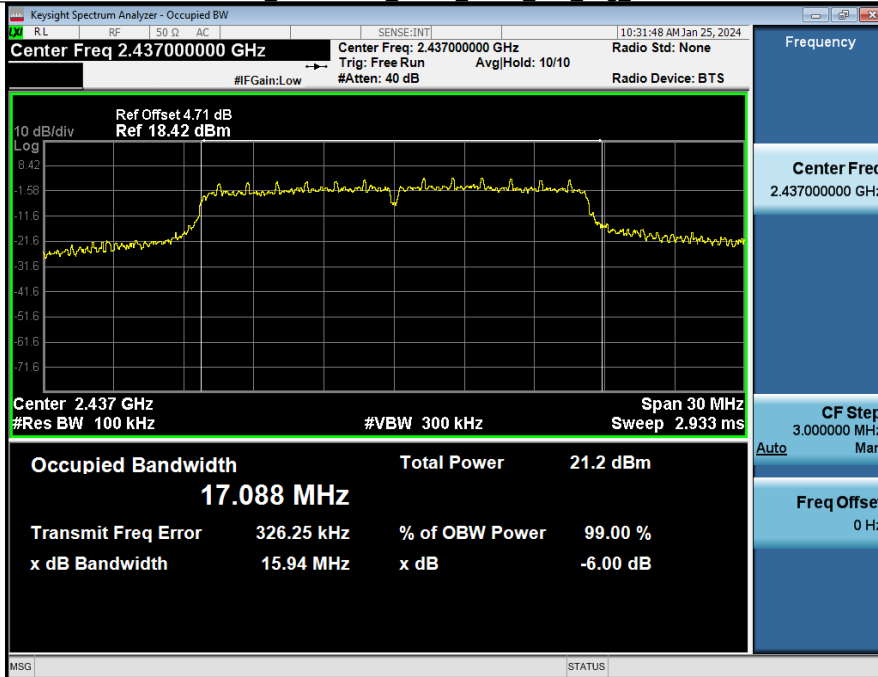
**-6dB Bandwidth\_NVNT ANT1\_802\_11b\_2462**



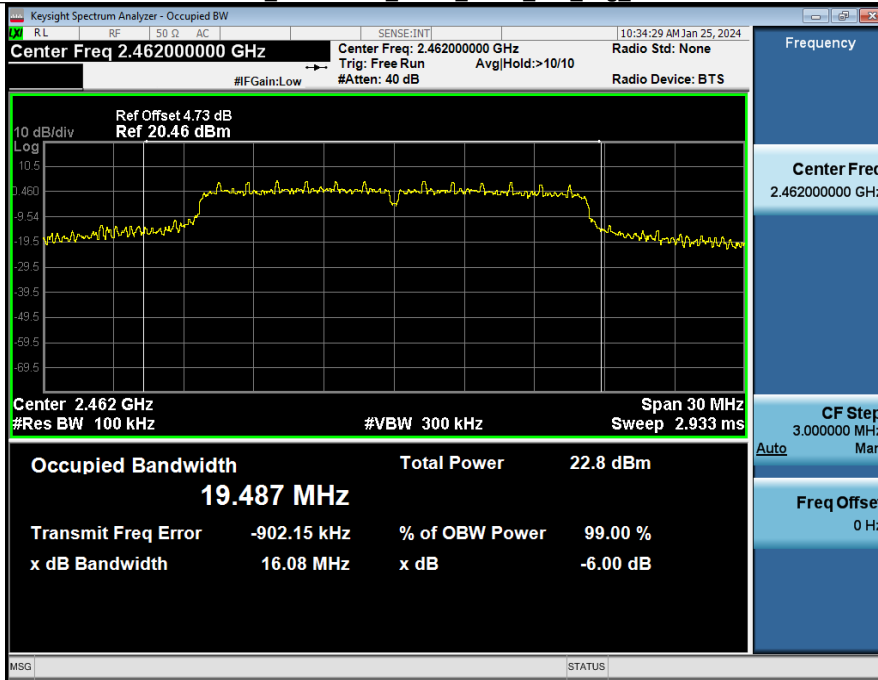
**-6dB Bandwidth\_NVNT\_ANT1\_802\_11g\_2412**



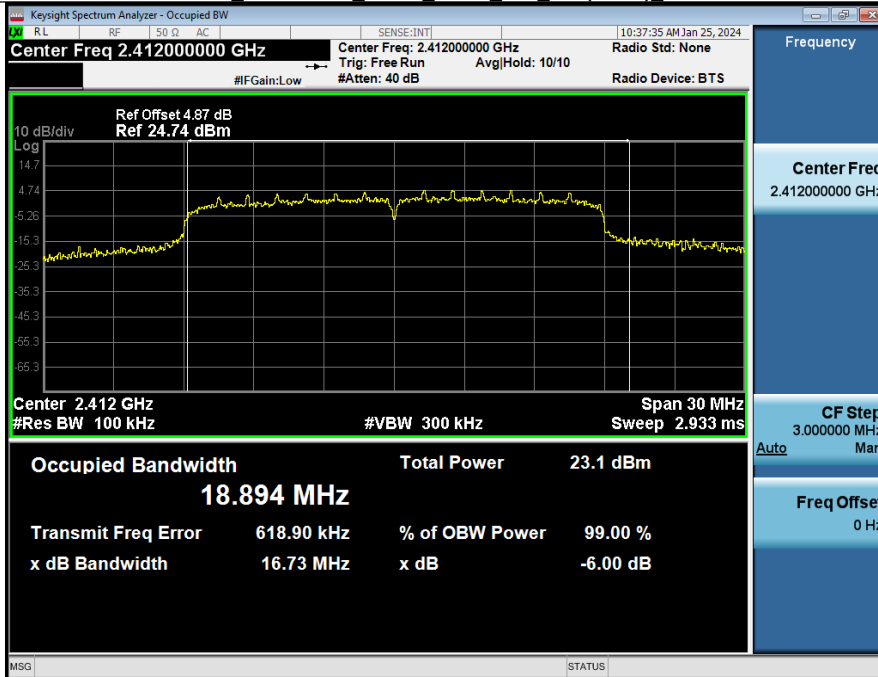
**-6dB Bandwidth\_NVNT ANT1\_802\_11g\_2437**



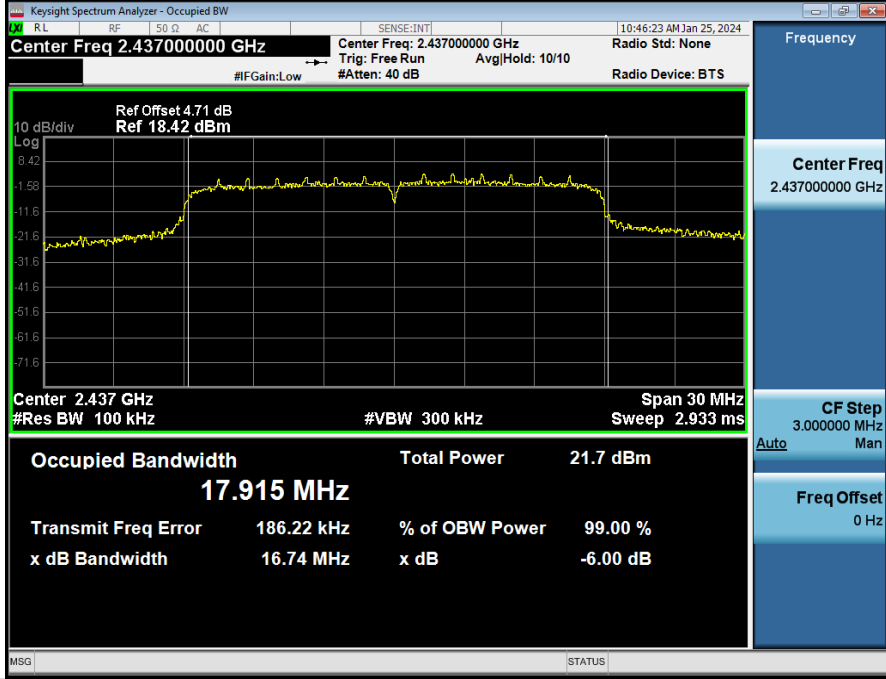
**-6dB Bandwidth\_NVNT\_ANT1\_802\_11g\_2462**



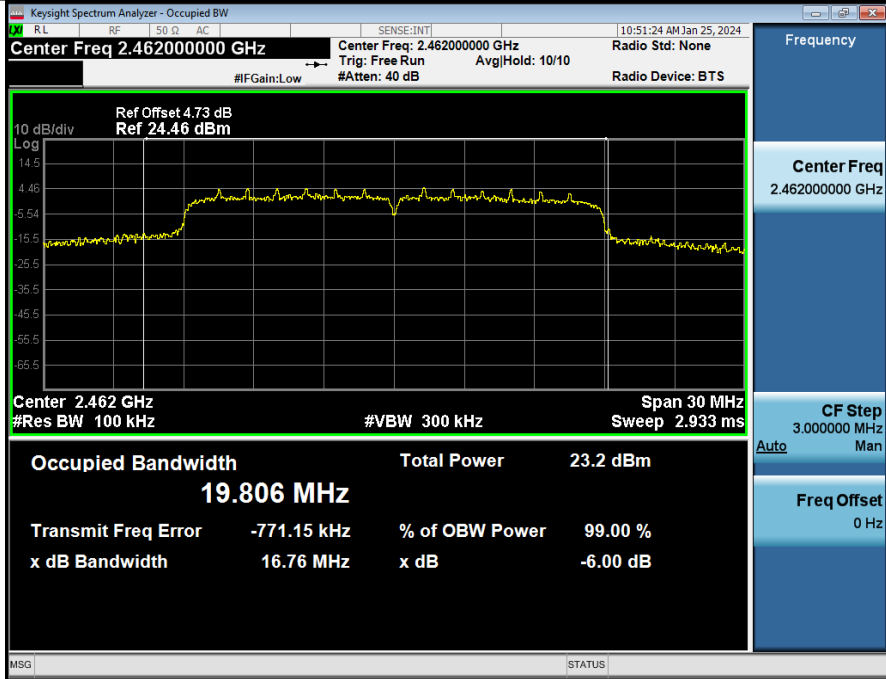
**-6dB Bandwidth\_NVNT\_ANT1\_802\_11n(HT20)\_2412**



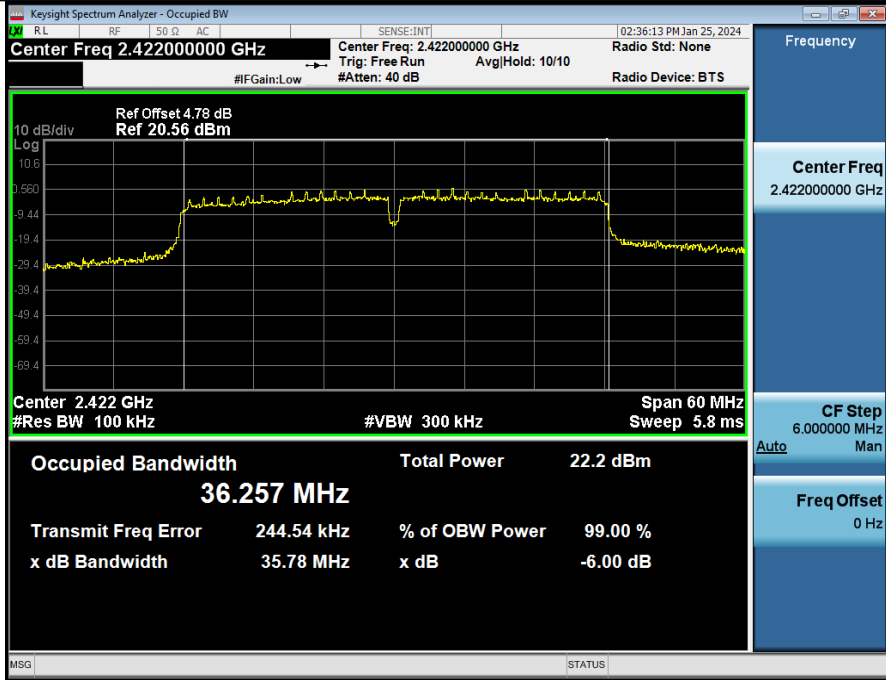
**-6dB Bandwidth NVNT\_ANT1\_802\_11n(HT20)\_2437**



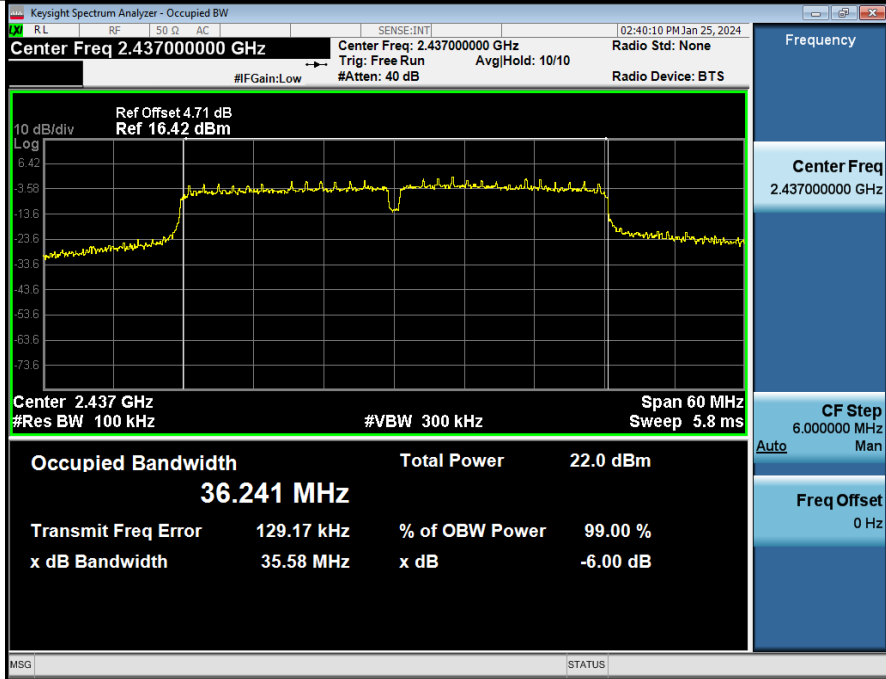
**-6dB Bandwidth NVNT\_ANT1\_802\_11n(HT20)\_2462**



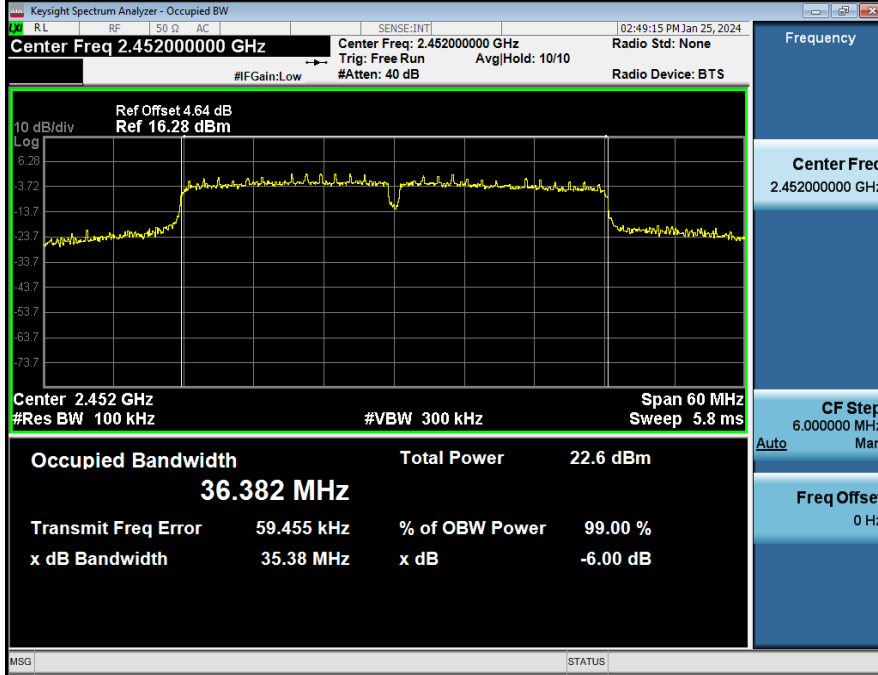
**-6dB Bandwidth\_NVNT\_ANT1\_802\_11n(HT40)\_2422**



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



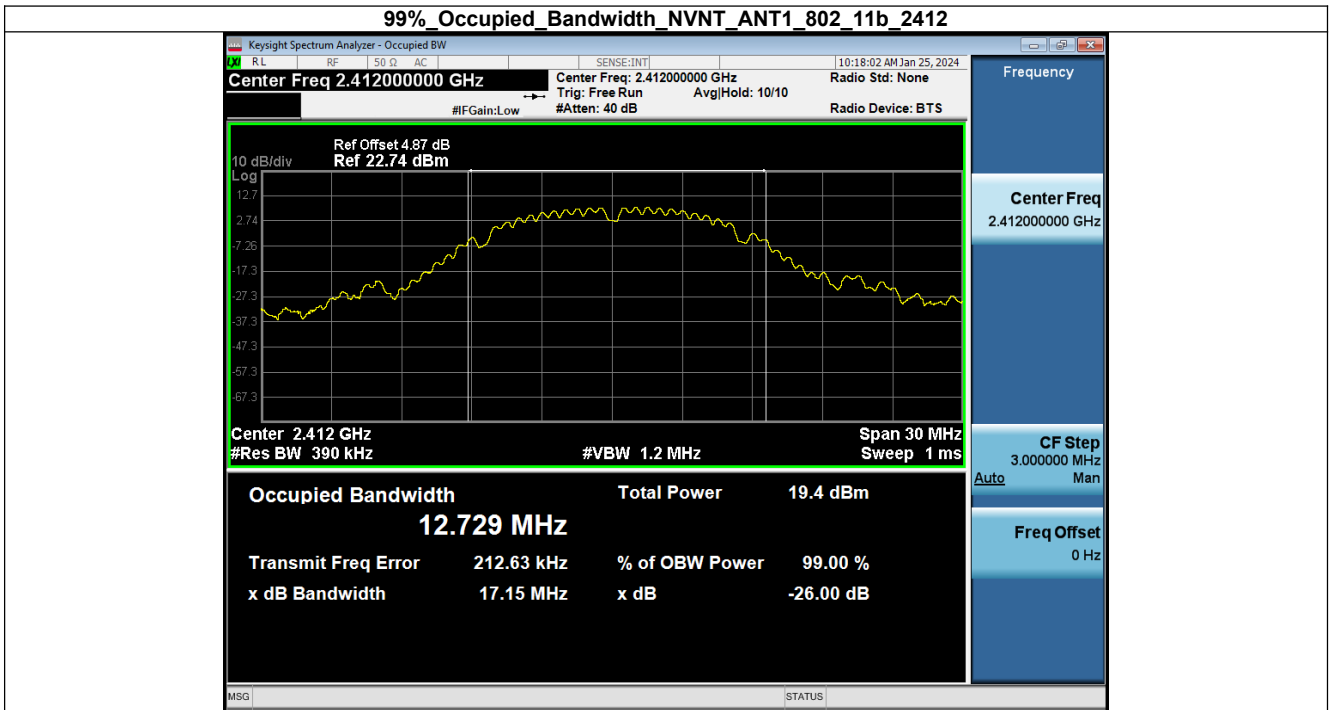
**-6dB Bandwidth NVNT\_ANT1\_802\_11n(HT40)\_2452**





## 2. 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99% BW (MHz)
NVNT	ANT1	802.11b	2412.00	12.729
NVNT	ANT1	802.11b	2437.00	12.189
NVNT	ANT1	802.11b	2462.00	13.087
NVNT	ANT1	802.11g	2412.00	19.760
NVNT	ANT1	802.11g	2437.00	18.946
NVNT	ANT1	802.11g	2462.00	21.041
NVNT	ANT1	802.11n(HT20)	2412.00	19.905
NVNT	ANT1	802.11n(HT20)	2437.00	19.071
NVNT	ANT1	802.11n(HT20)	2462.00	20.763
NVNT	ANT1	802.11n(HT40)	2422.00	37.503
NVNT	ANT1	802.11n(HT40)	2437.00	37.143
NVNT	ANT1	802.11n(HT40)	2452.00	37.388



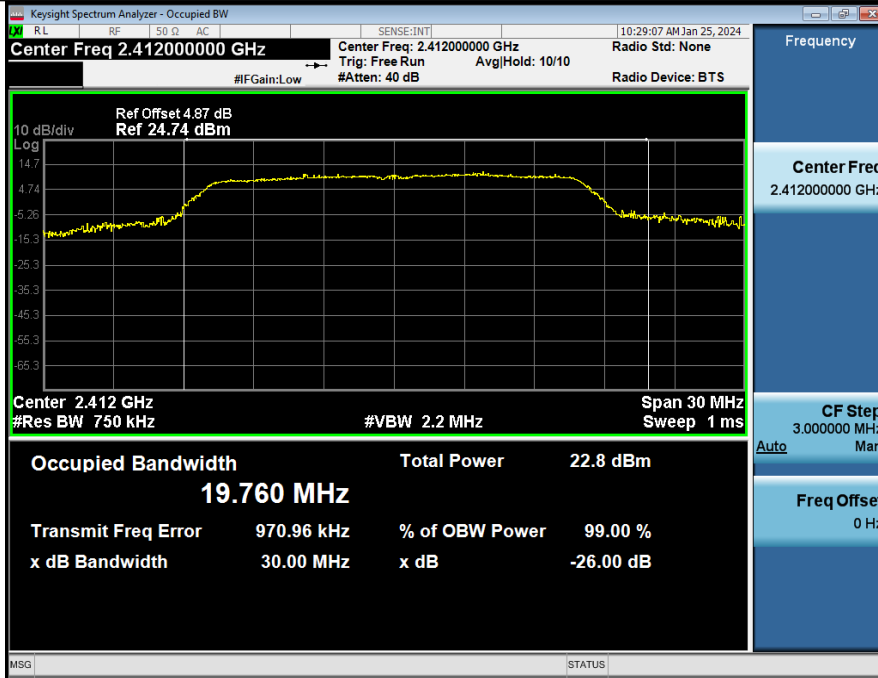
99% Occupied Bandwidth NVNT\_ANT1\_802\_11b\_2437



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



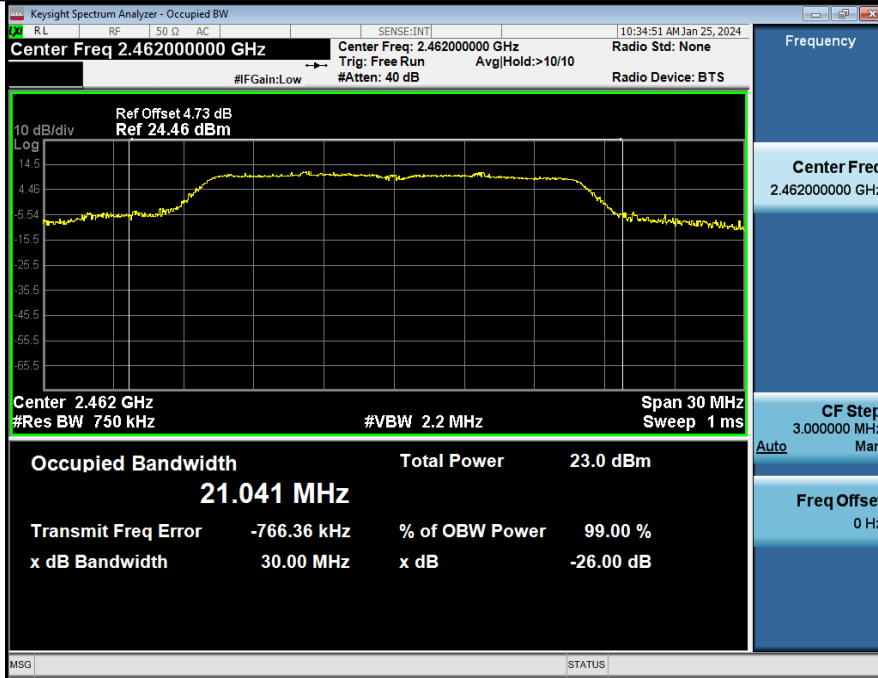
99% Occupied Bandwidth NVNT\_ANT1\_802\_11g\_2412



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



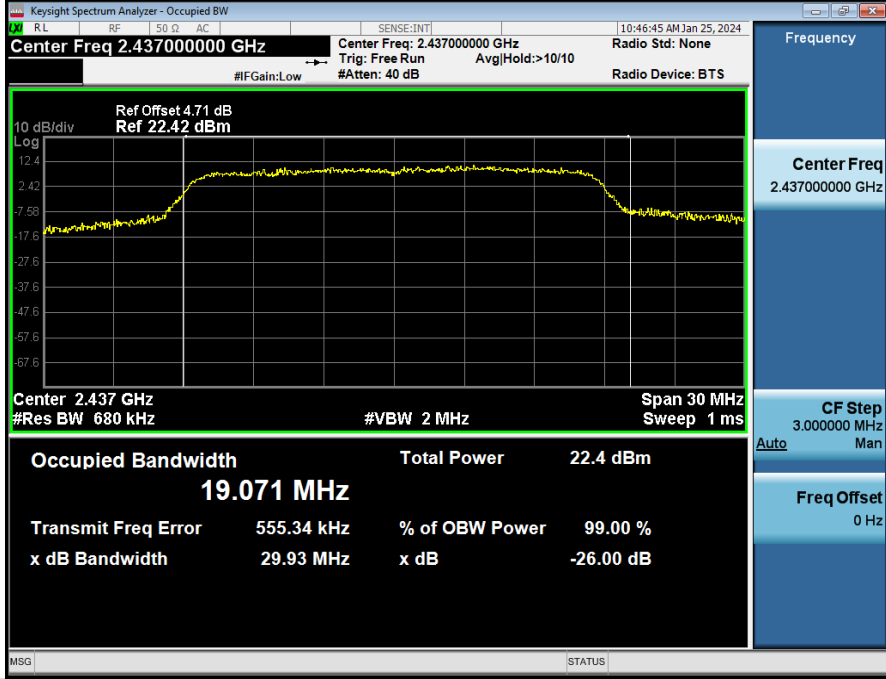
99% Occupied Bandwidth NVNT\_ANT1\_802\_11g\_2462



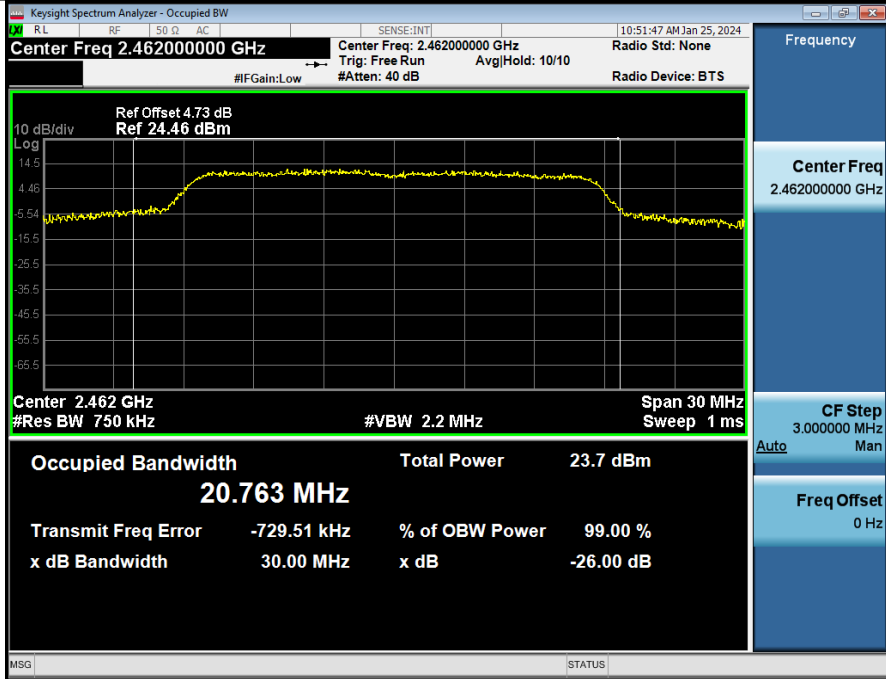
99% Occupied Bandwidth NVNT\_ANT1\_802\_11n(HT20)\_2412



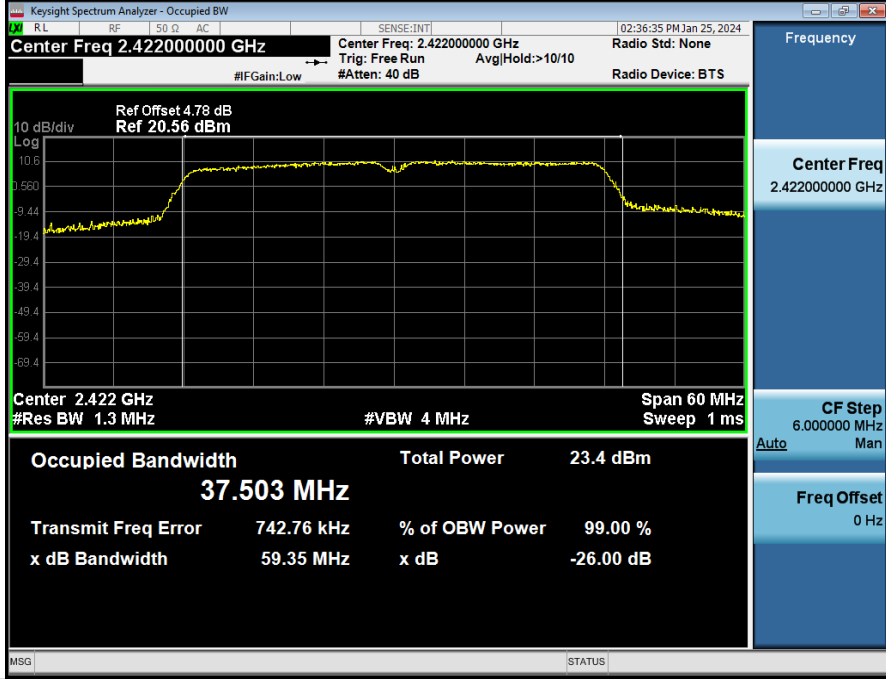
99% Occupied Bandwidth NVNT\_ANT1\_802\_11n(HT20)\_2437



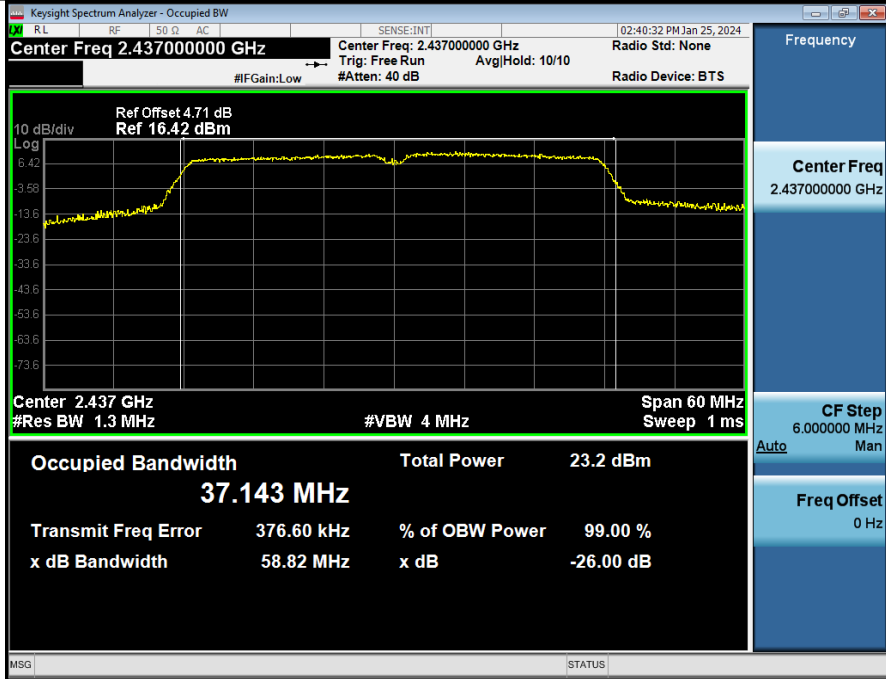
99% Occupied Bandwidth NVNT\_ANT1\_802\_11n(HT20)\_2462



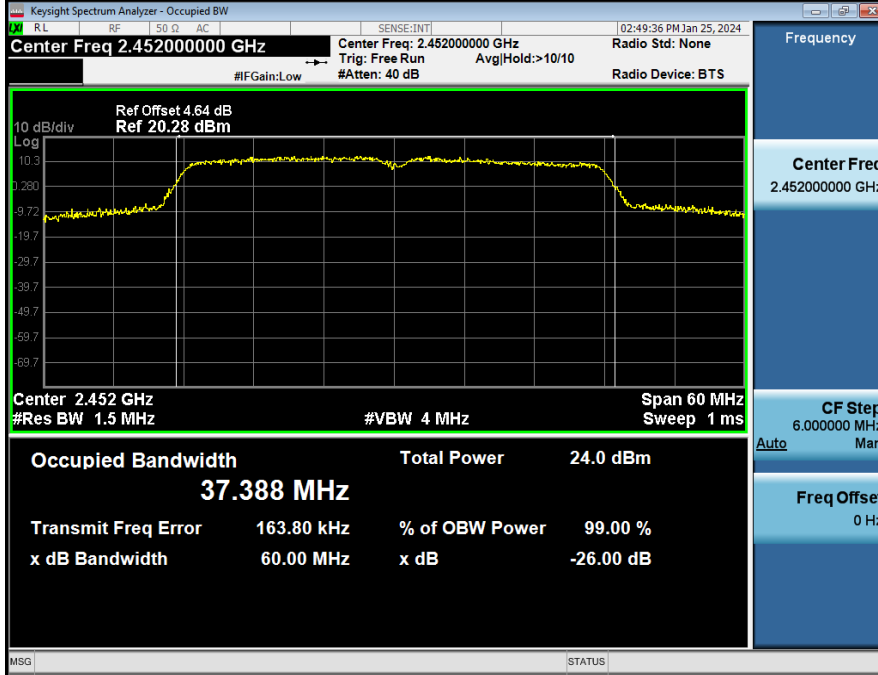
99% Occupied Bandwidth NVNT\_ANT1\_802\_11n(HT40)\_2422



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

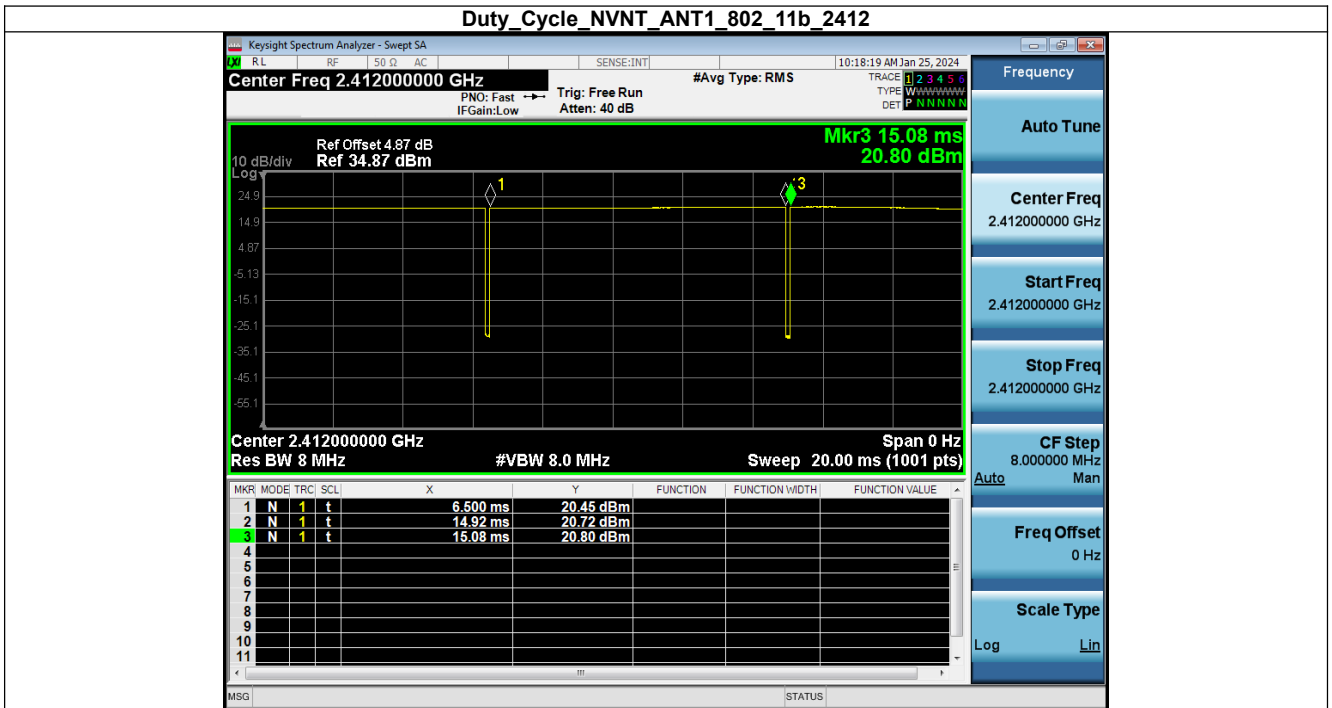


99% Occupied Bandwidth\_NVNT\_ANT1\_802\_11n(HT40)\_2452



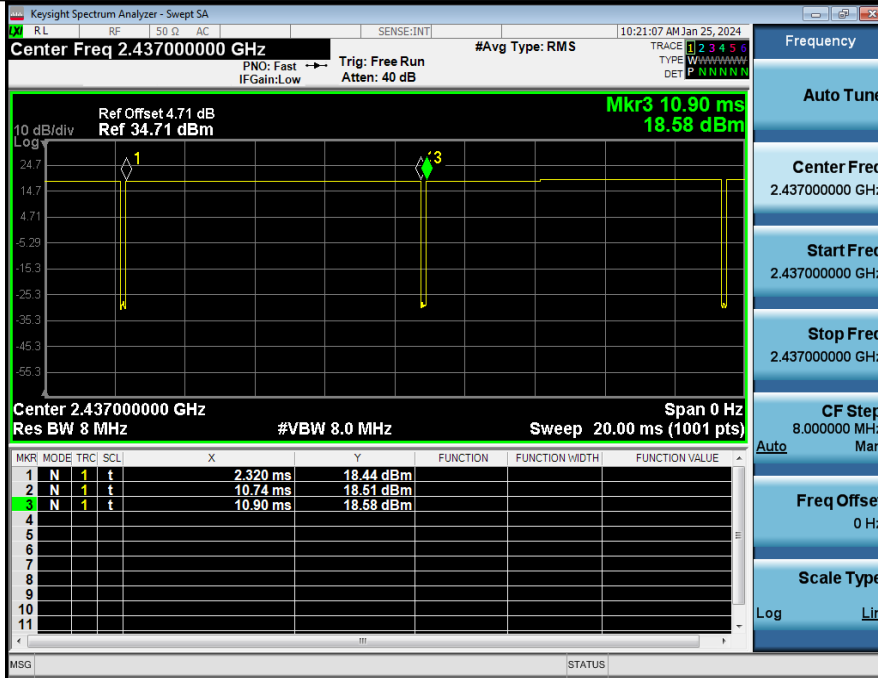
### 3. Duty Cycle

Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty factor(dB)
NVNT	ANT1	802.11b	2412.00	98.37	0.00
NVNT	ANT1	802.11b	2437.00	98.37	0.00
NVNT	ANT1	802.11b	2462.00	98.37	0.00
NVNT	ANT1	802.11g	2412.00	92.21	0.35
NVNT	ANT1	802.11g	2437.00	92.21	0.35
NVNT	ANT1	802.11g	2462.00	90.91	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	81.08	0.91
NVNT	ANT1	802.11n(HT40)	2452.00	81.08	0.91

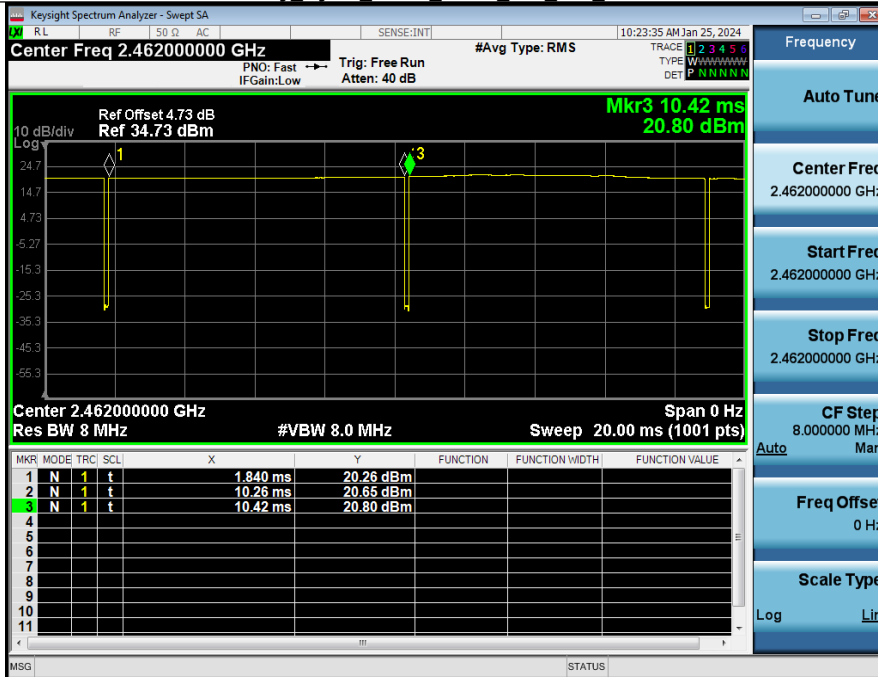




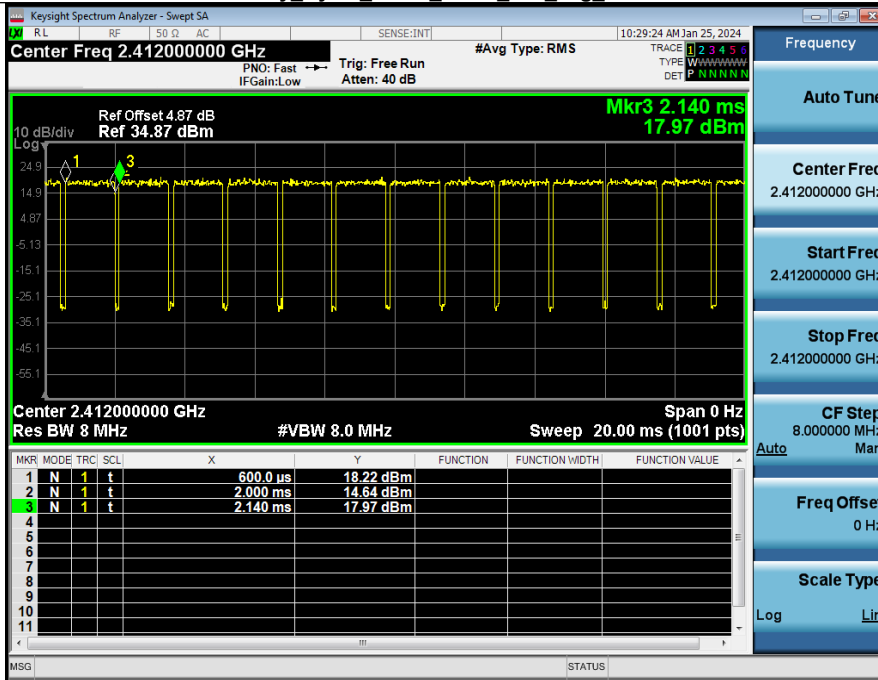
### Duty Cycle NVNT ANT1\_802\_11b\_2437



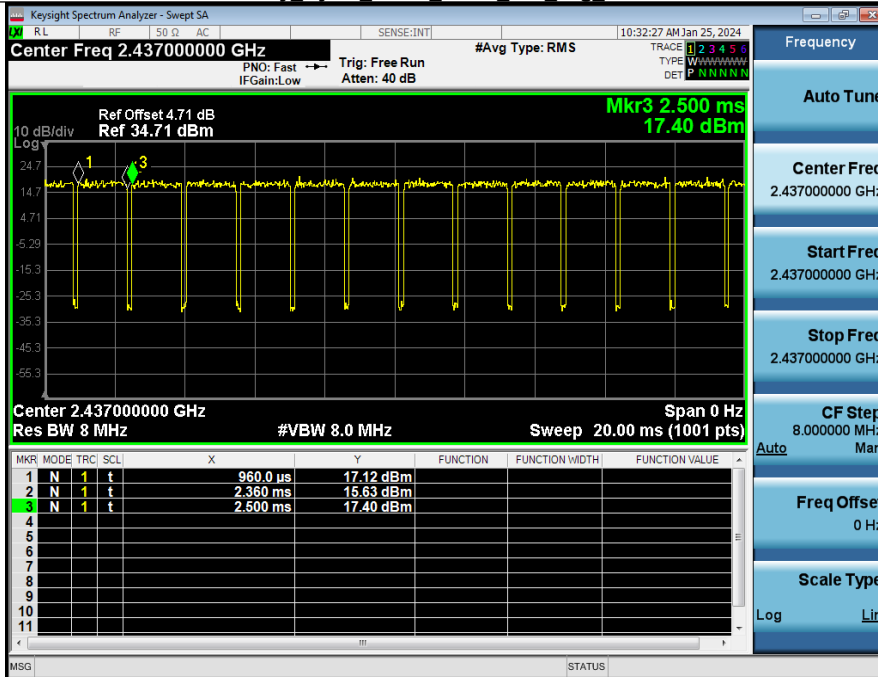
### Duty Cycle NVNT ANT1\_802\_11b\_2462



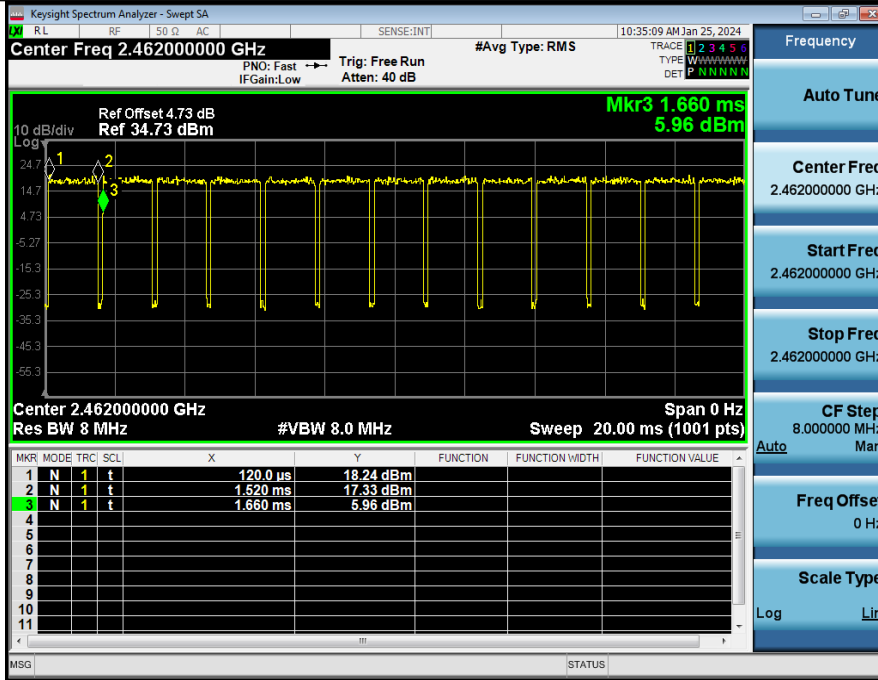
### Duty Cycle NVNT ANT1\_802\_11g\_2412



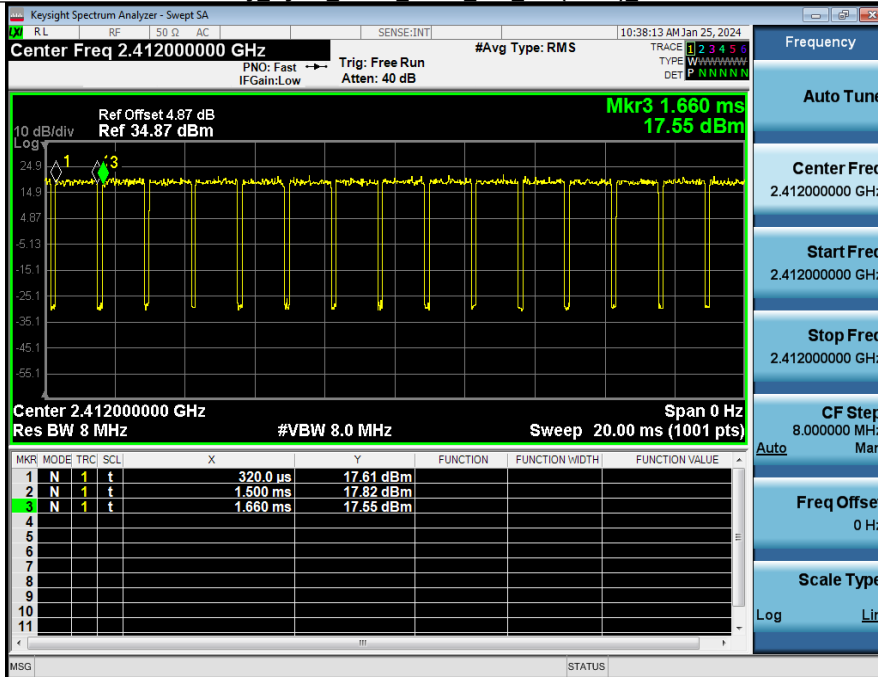
### Duty Cycle NVNT ANT1\_802\_11g\_2437



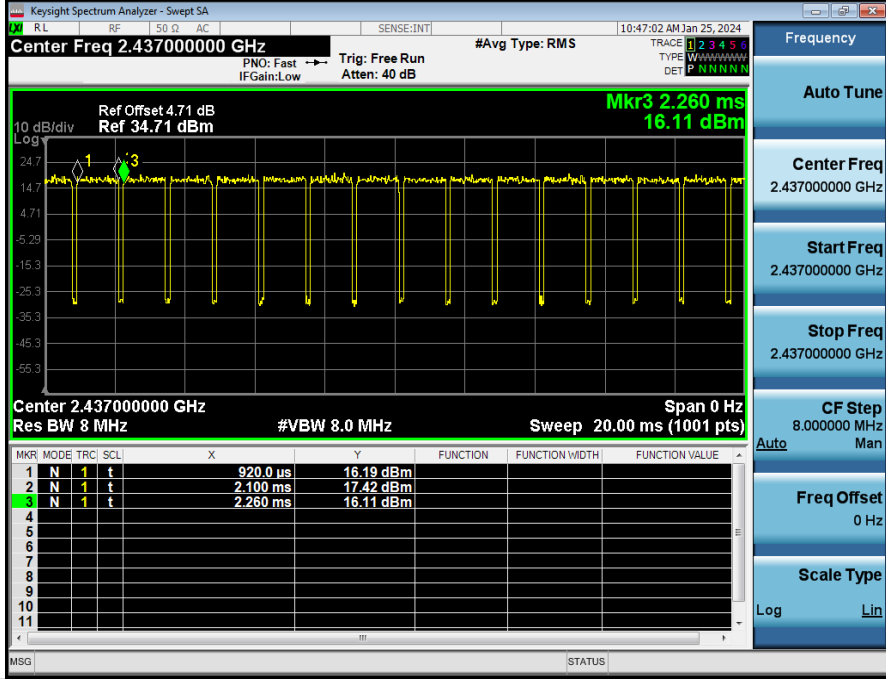
### Duty Cycle NVNT\_ANT1\_802\_11g\_2462



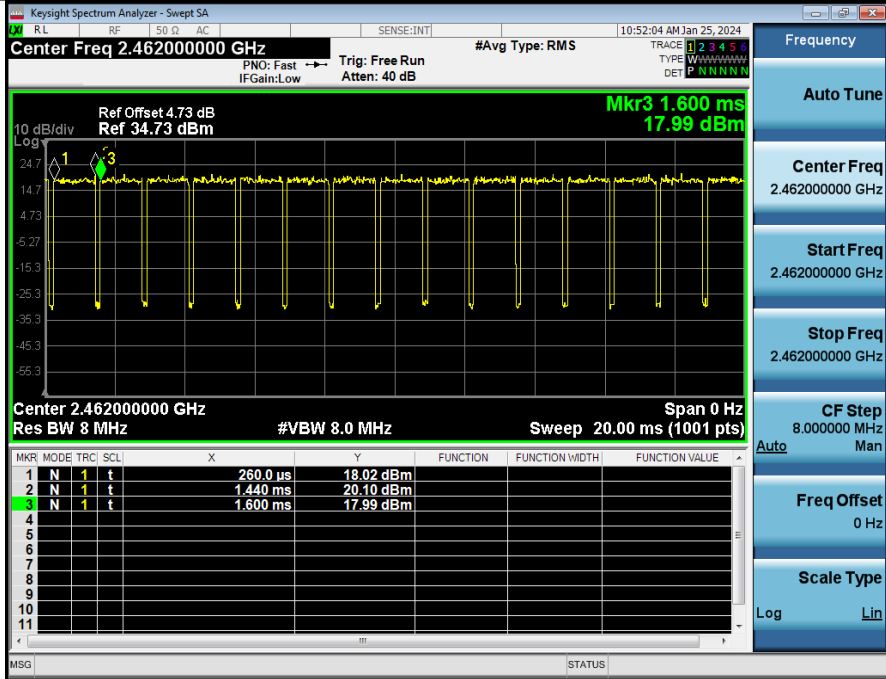
### Duty Cycle NVNT\_ANT1\_802\_11n(HT20)\_2412



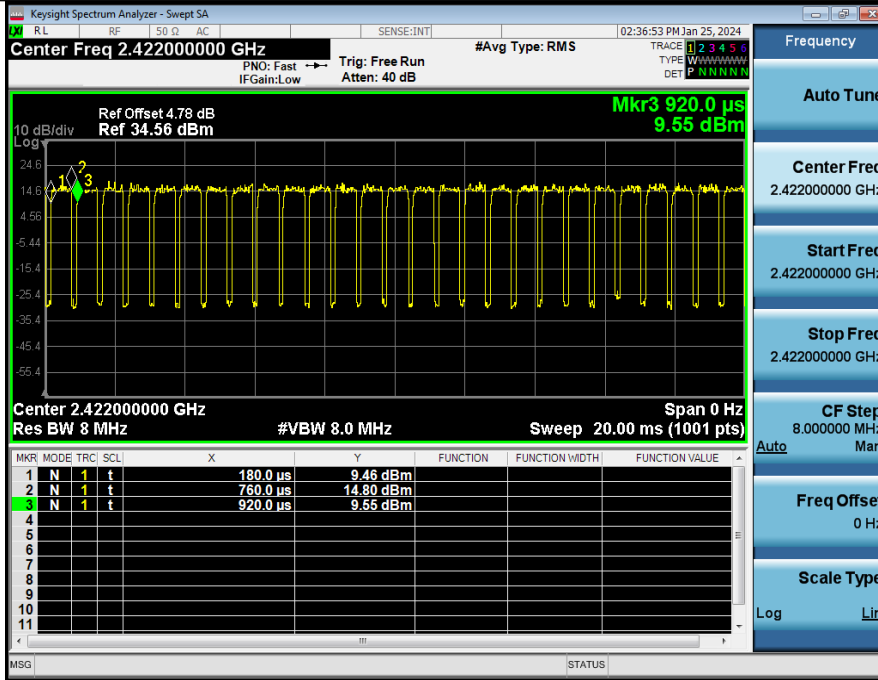
Duty Cycle NVNT\_ANT1\_802\_11n(HT20)\_2437



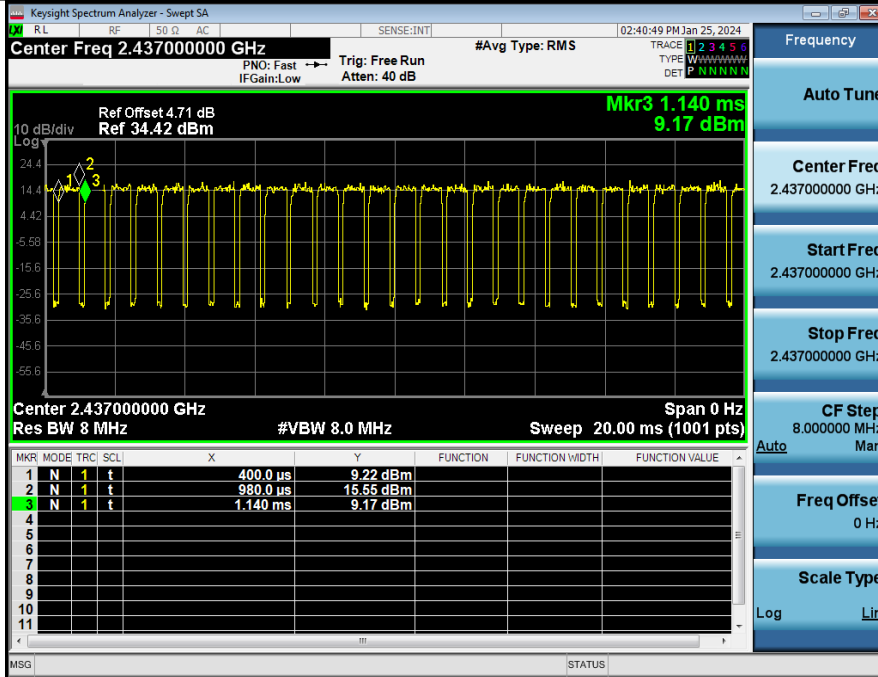
Duty Cycle NVNT\_ANT1\_802\_11n(HT20)\_2462



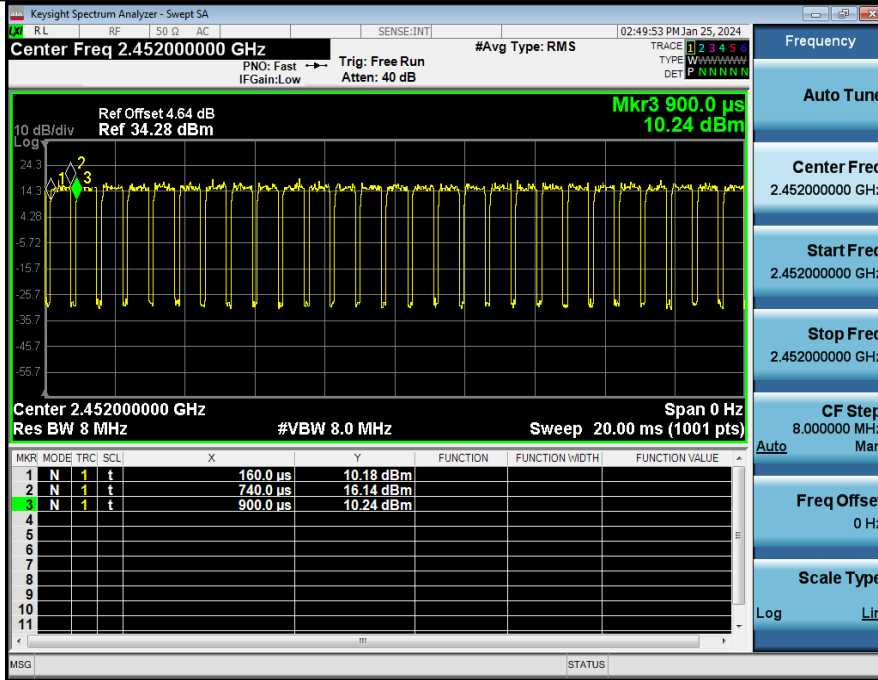
Duty Cycle NVNT\_ANT1\_802\_11n(HT40)\_2422



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

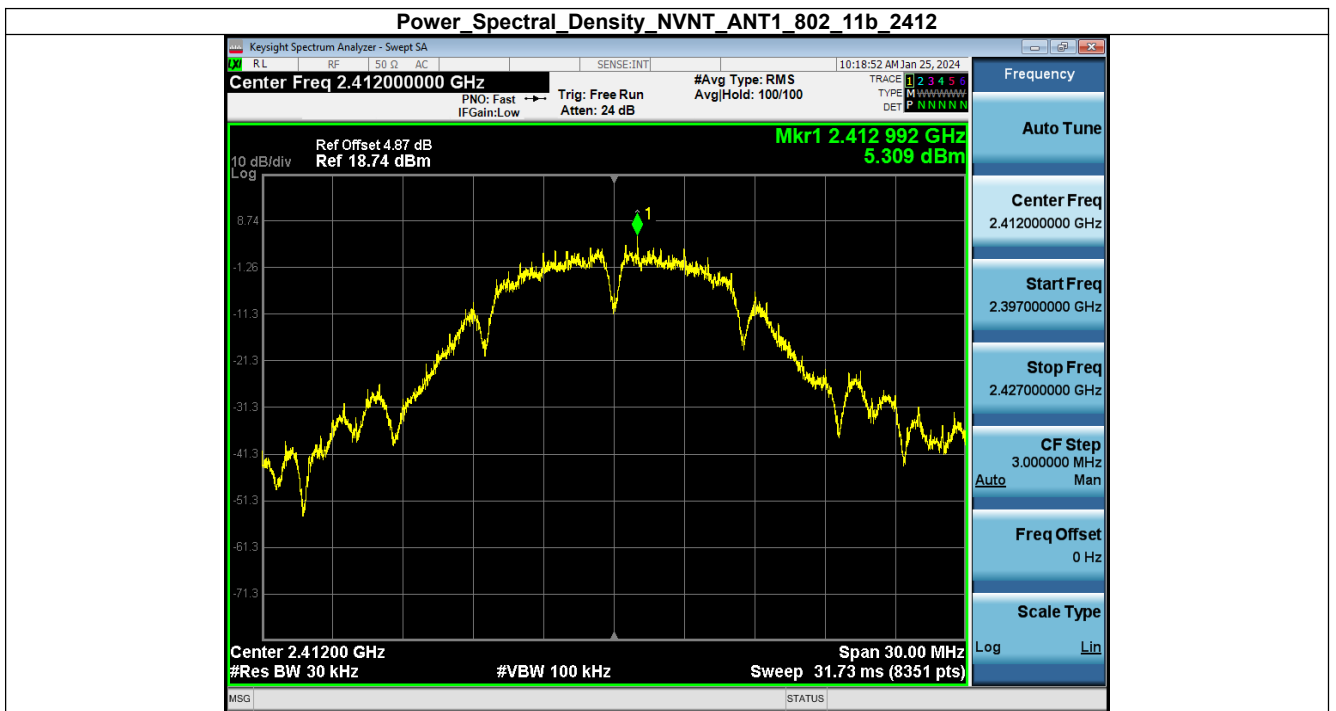


Duty Cycle NVNT\_ANT1\_802\_11n(HT40)\_2452



## 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	5.31	-10.00	-4.69	8	Pass
NVNT	ANT1	802.11b	2437.00	2.43	-10.00	-7.57	8	Pass
NVNT	ANT1	802.11b	2462.00	3.35	-10.00	-6.65	8	Pass
NVNT	ANT1	802.11g	2412.00	0.96	-10.00	-9.04	8	Pass
NVNT	ANT1	802.11g	2437.00	-1.59	-10.00	-11.59	8	Pass
NVNT	ANT1	802.11g	2462.00	-0.15	-10.00	-10.15	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	0.28	-10.00	-9.72	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-1.28	-10.00	-11.28	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-0.42	-10.00	-10.42	8	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	-4.61	-10.00	-14.61	8	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	-4.57	-10.00	-14.57	8	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	-3.31	-10.00	-13.31	8	Pass



**Power\_Spectral\_Density\_NVNT\_ANT1\_802\_11b\_2437**

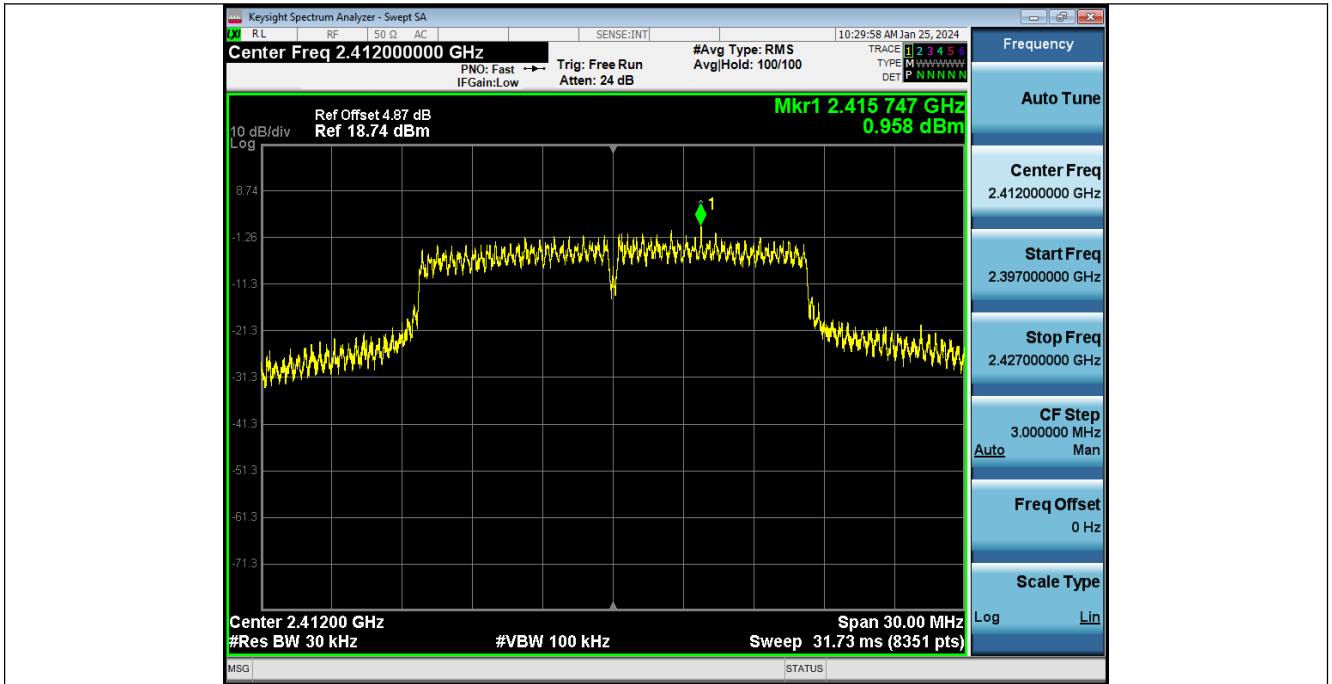


Power\_Spectral\_Density\_NVNT\_ANT1\_802\_11b\_2462

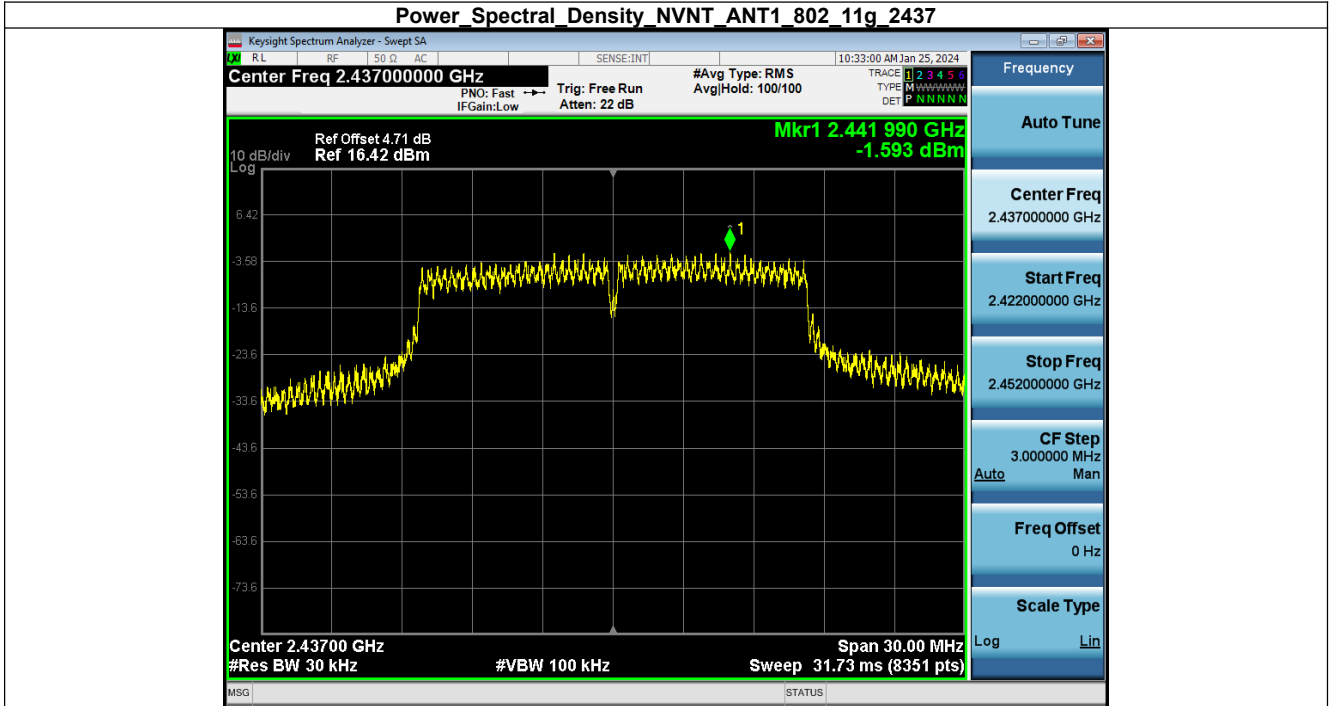


Power\_Spectral\_Density\_NVNT\_ANT1\_802\_11g\_2412





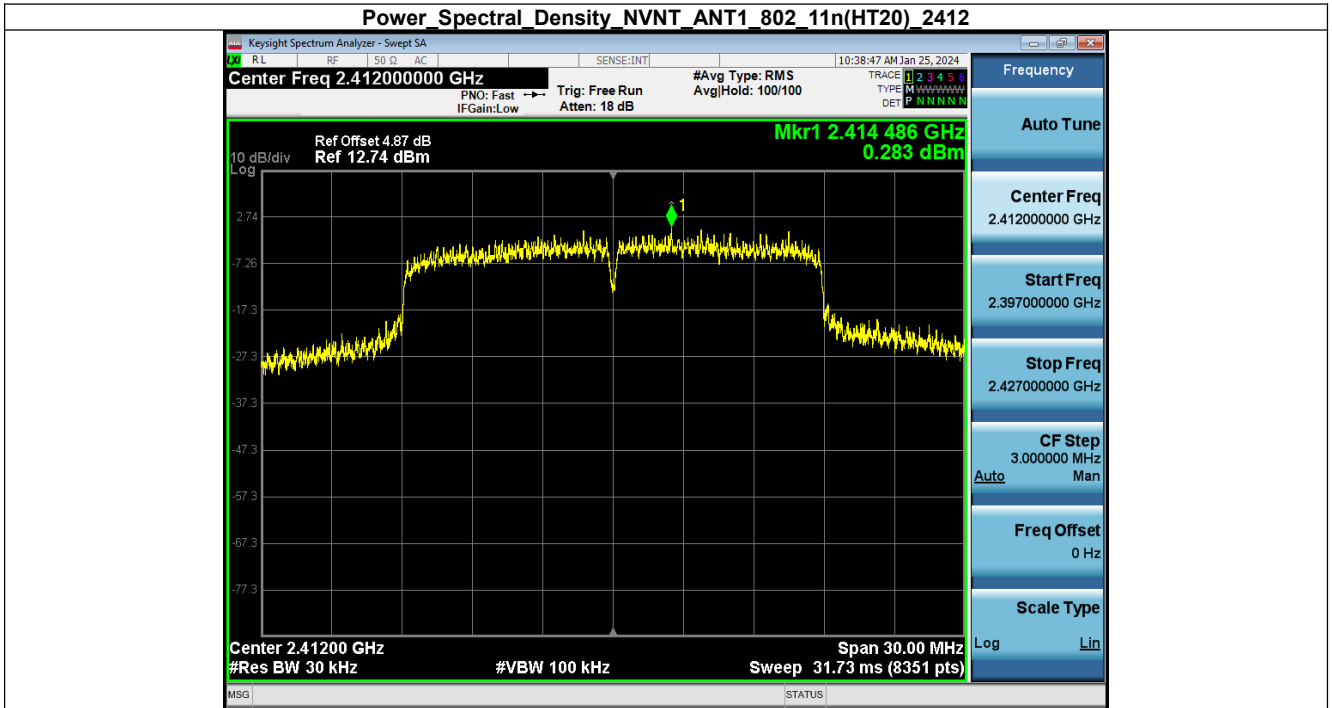
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Power\_Spectral\_Density\_NVNT\_ANT1\_802\_11g\_2462



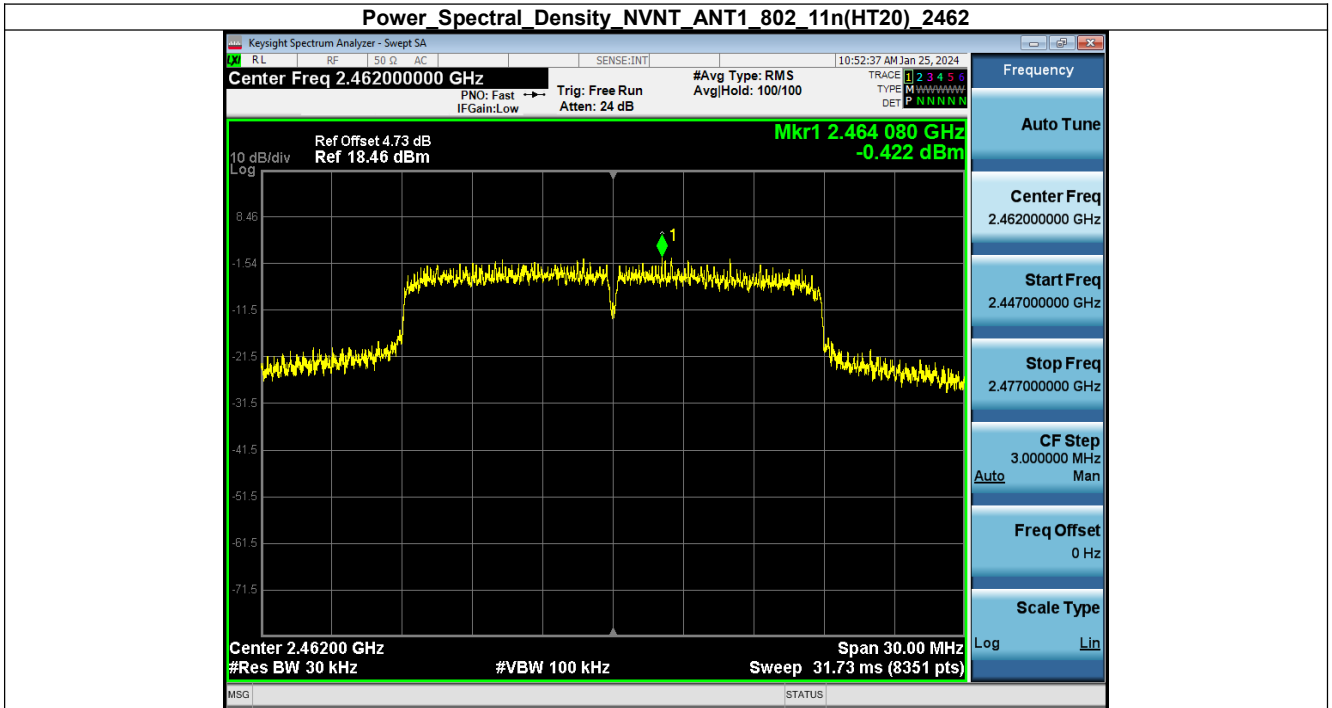
Power Spectral Density\_NVNT\_ANT1\_802\_11n(HT20)\_2412



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



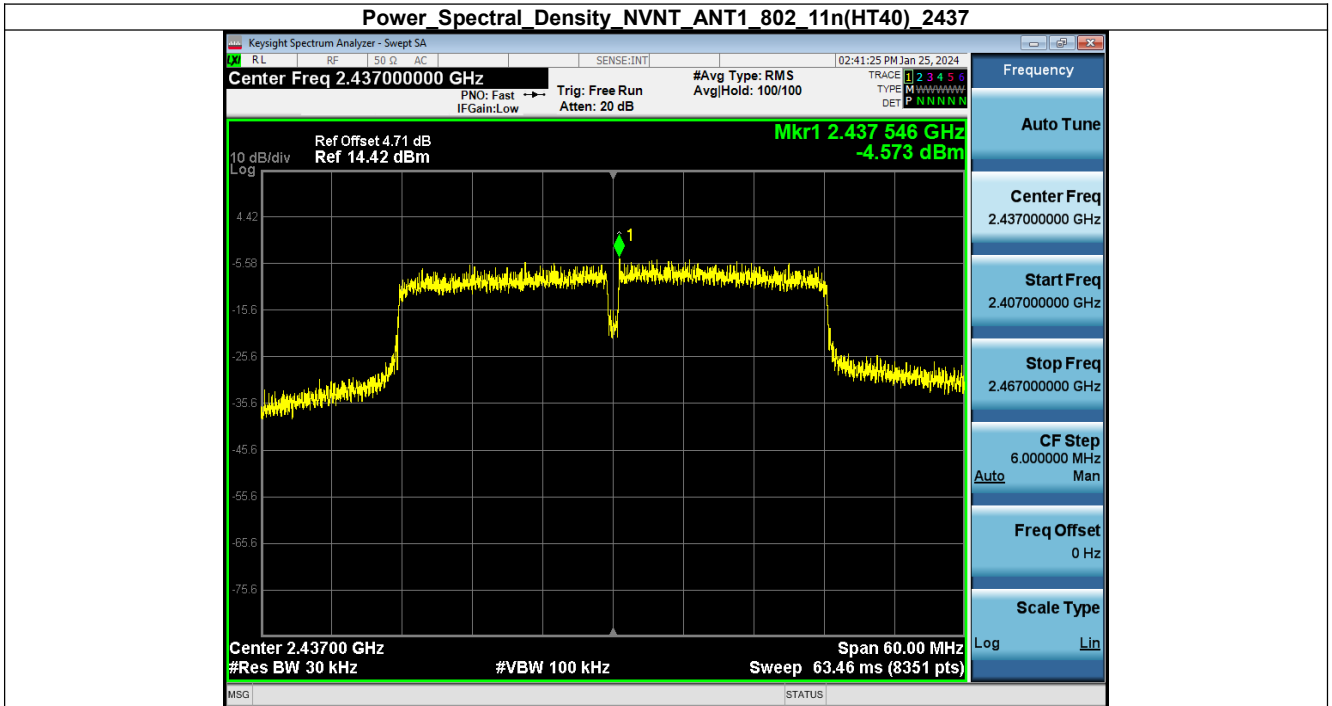
Power Spectral Density\_NVNT\_ANT1\_802\_11n(HT20)\_2462



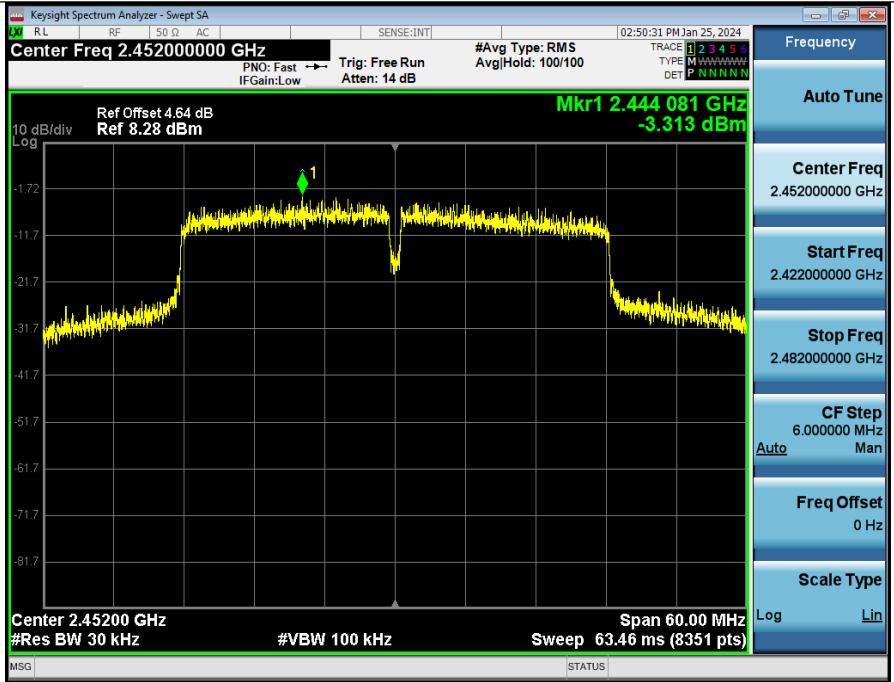
Power Spectral Density\_NVNT\_ANT1\_802\_11n(HT40)\_2422



Power\_Spectral\_Density\_NVNT\_ANT1\_802\_11n(HT40)\_2437

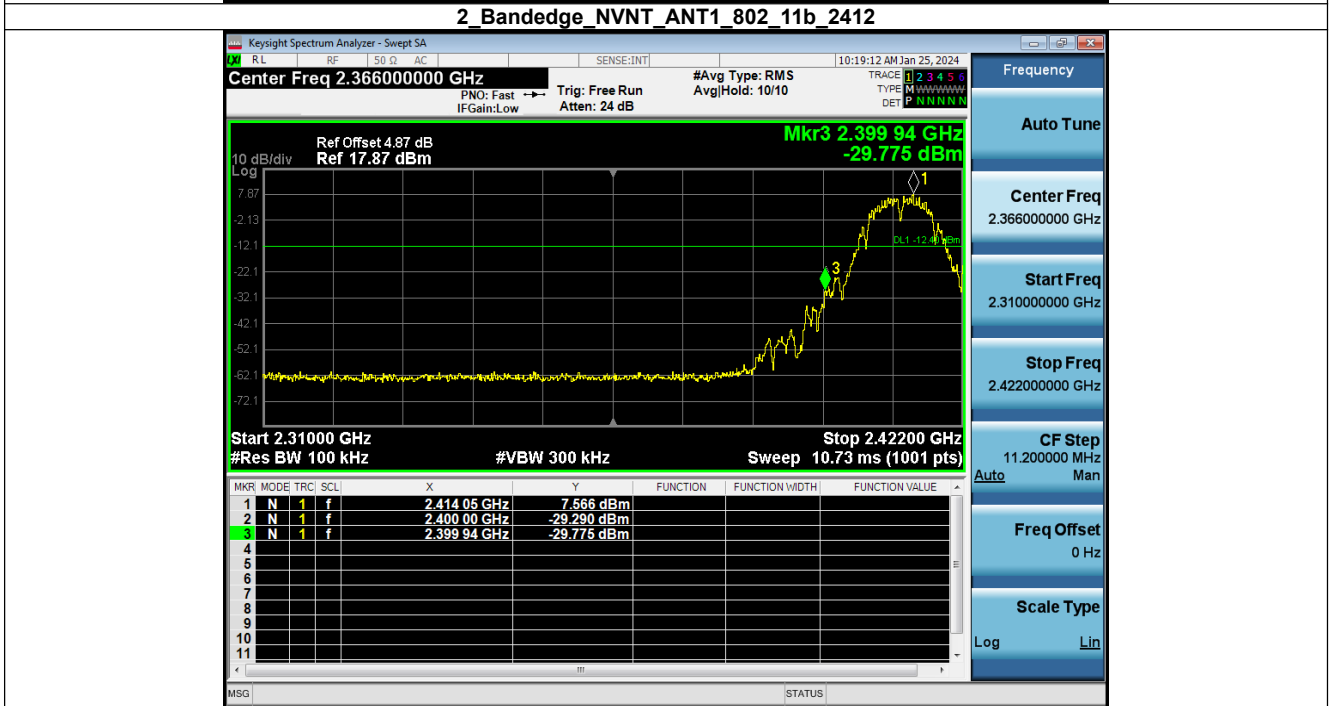


Power\_Spectral\_Density\_NVNT\_ANT1\_802\_11n(HT40)\_2452

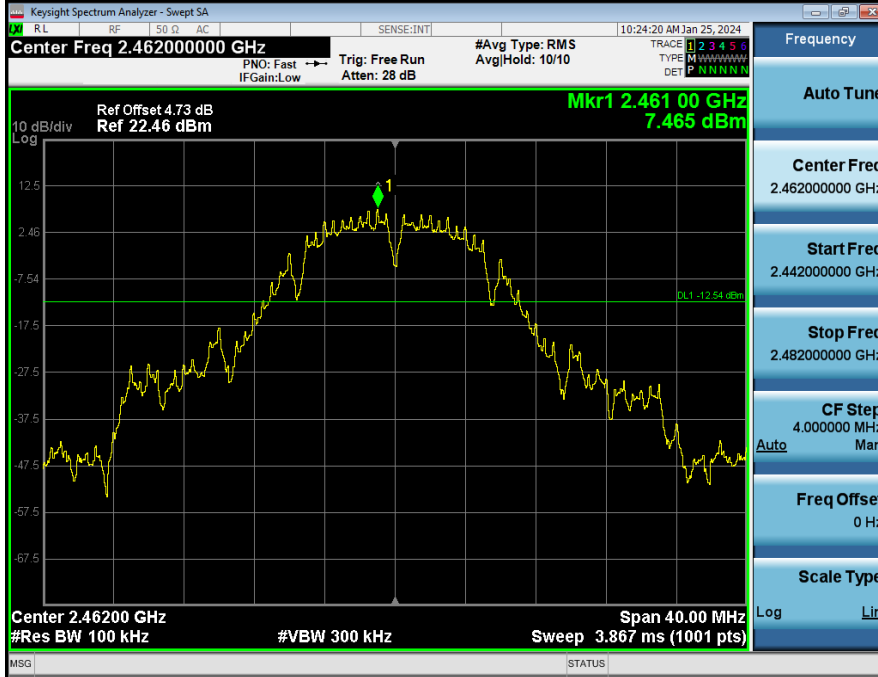


## 6. Bandedge

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	2399.936	-29.775	-12.404	Pass
NVNT	ANT1	802.11b	2462.00	2486.032	-50.885	-12.535	Pass
NVNT	ANT1	802.11g	2412.00	2399.824	-20.602	-15.439	Pass
NVNT	ANT1	802.11g	2462.00	2483.776	-30.929	-14.819	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2399.824	-18.297	-15.719	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2483.824	-29.113	-15.180	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	2399.892	-26.194	-19.252	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	2484.496	-23.097	-18.645	Pass



1 Reference\_Level\_NVNT\_ANT1\_802\_11b\_2462



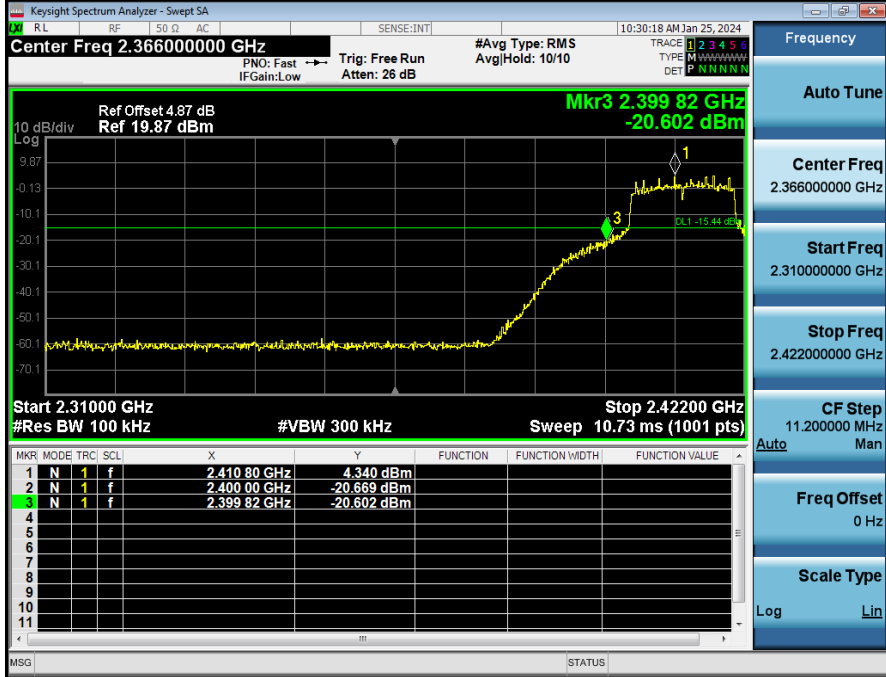
2 Bandedge\_NVNT\_ANT1\_802\_11b\_2462



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

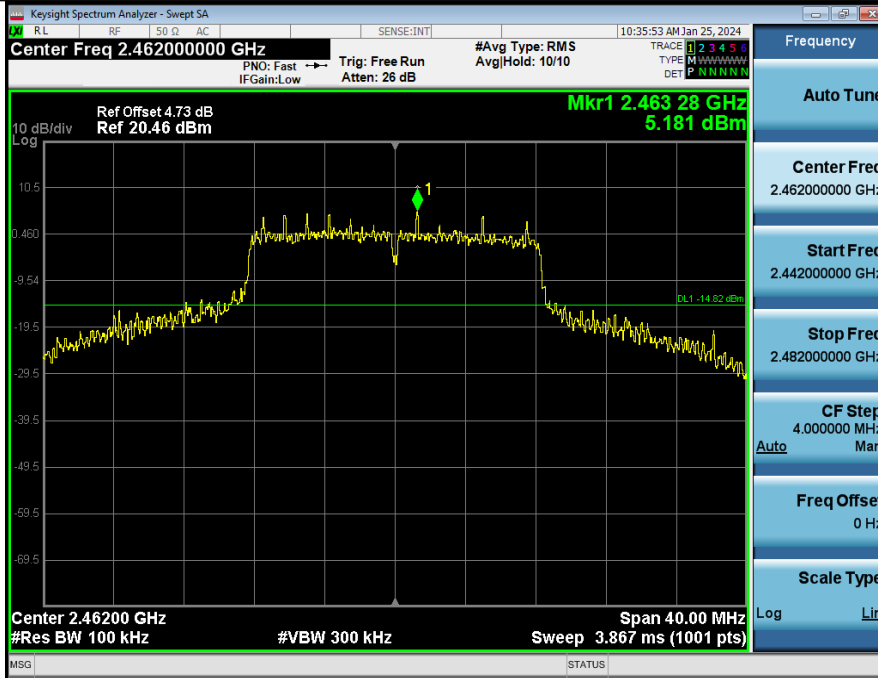


2 Bandedge NVNT\_ANT1\_802\_11g\_2412

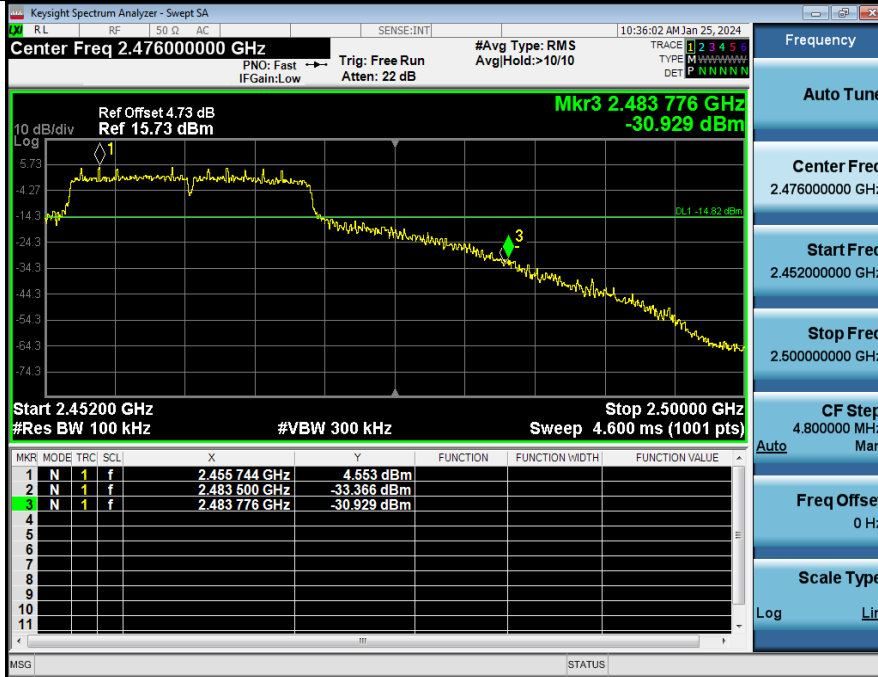




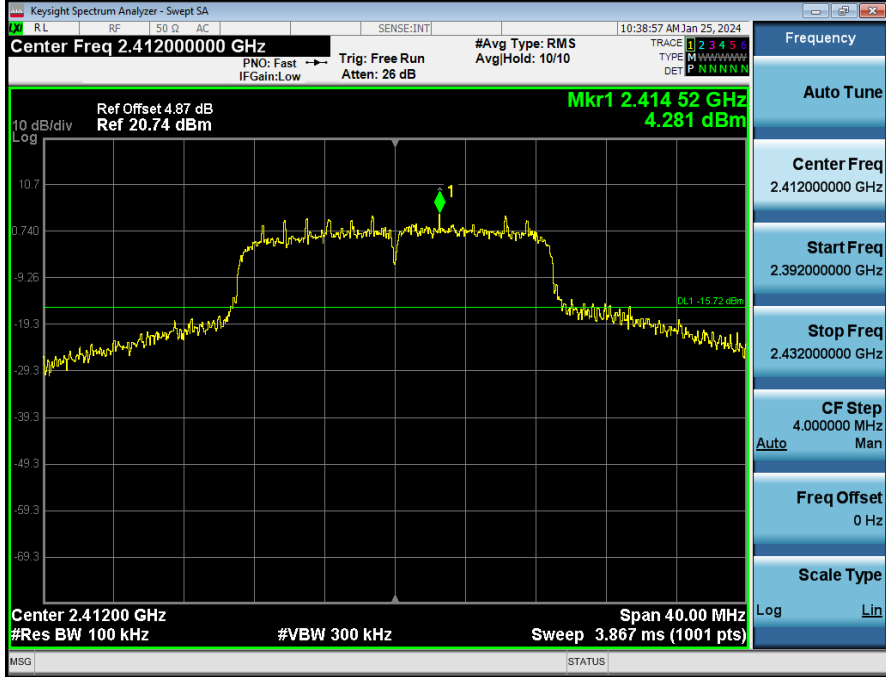
### 1 Reference Level NVNT\_ANT1\_802\_11g\_2462



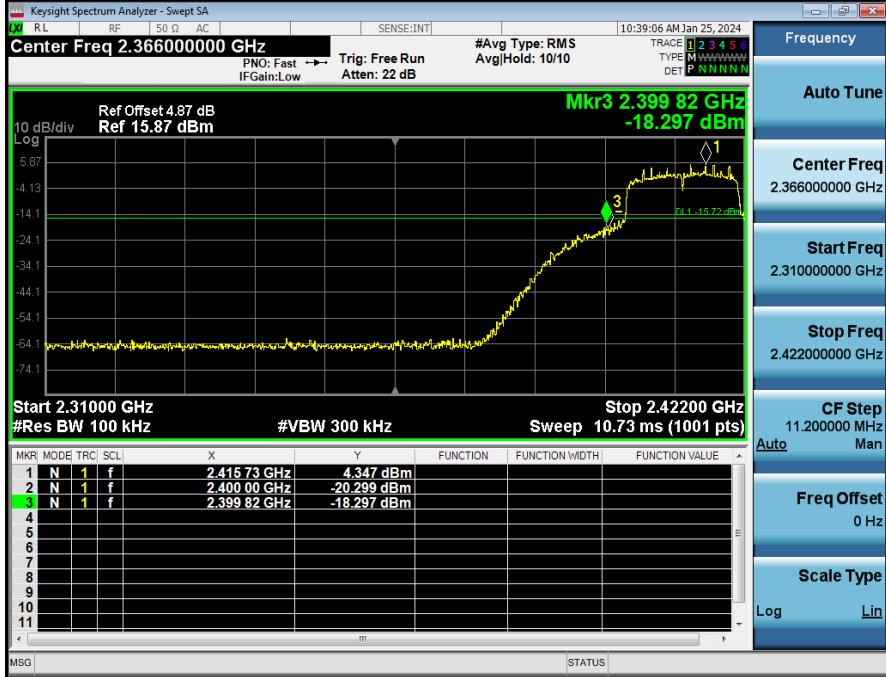
### 2 Bandedge NVNT\_ANT1\_802\_11g\_2462



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



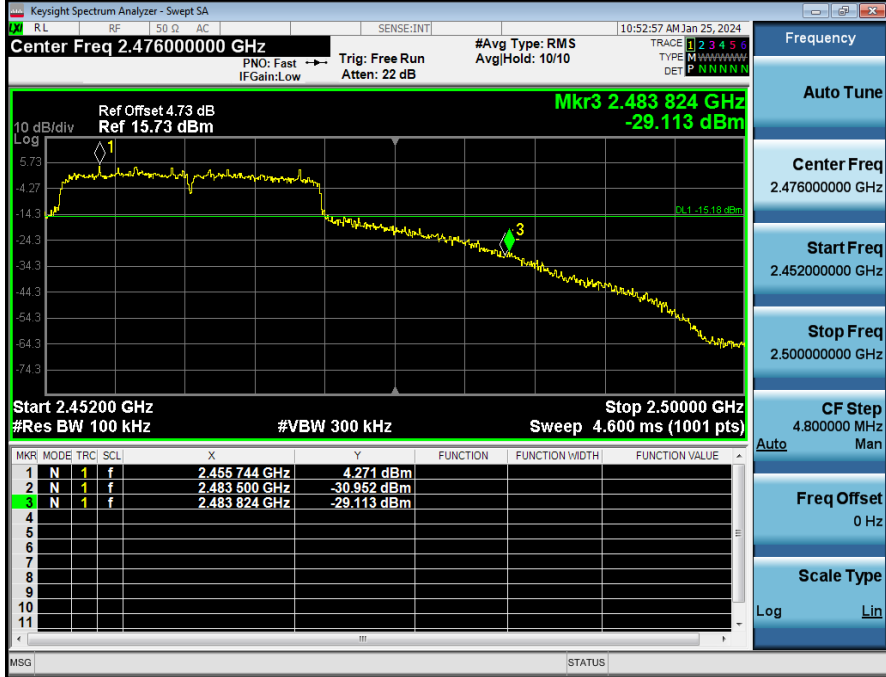
2 Bandedge\_NVNT\_ANT1\_802\_11n(HT20)\_2412



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



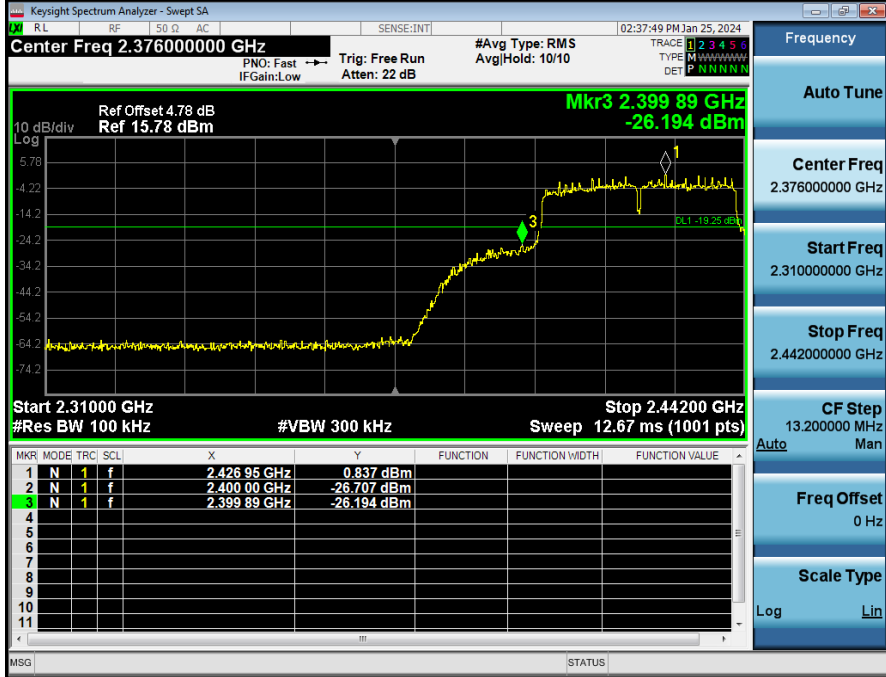
2 Bandedge\_NVNT\_ANT1\_802\_11n(HT20)\_2462



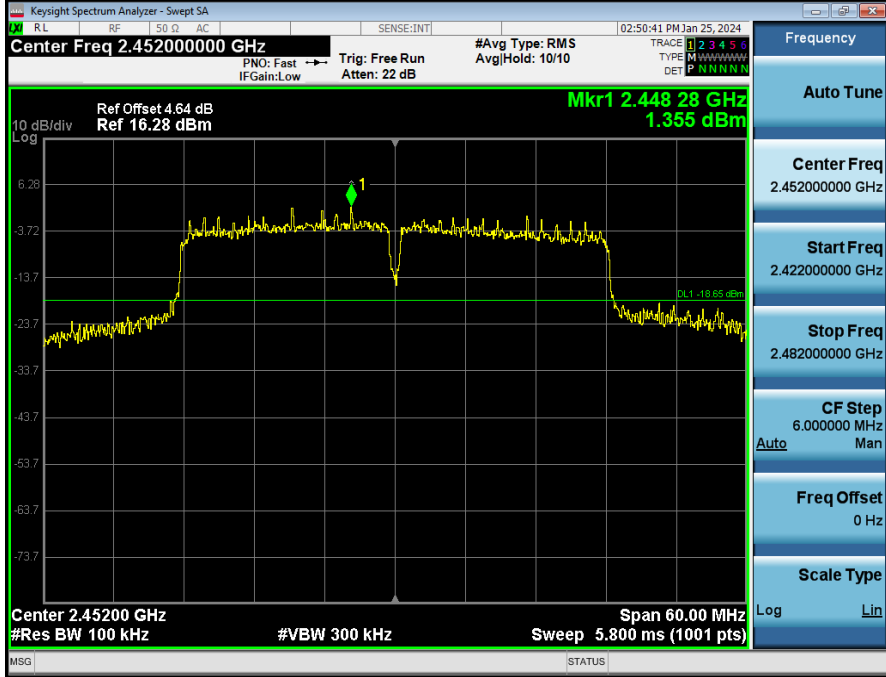
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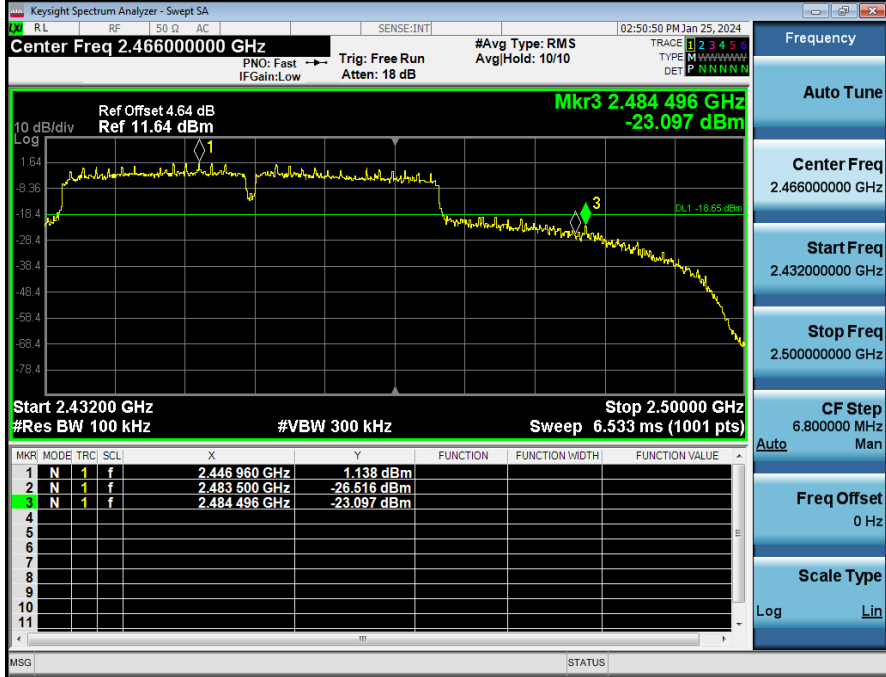
2 Bandedge\_NVNT\_ANT1\_802\_11n(HT40)\_2422



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



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



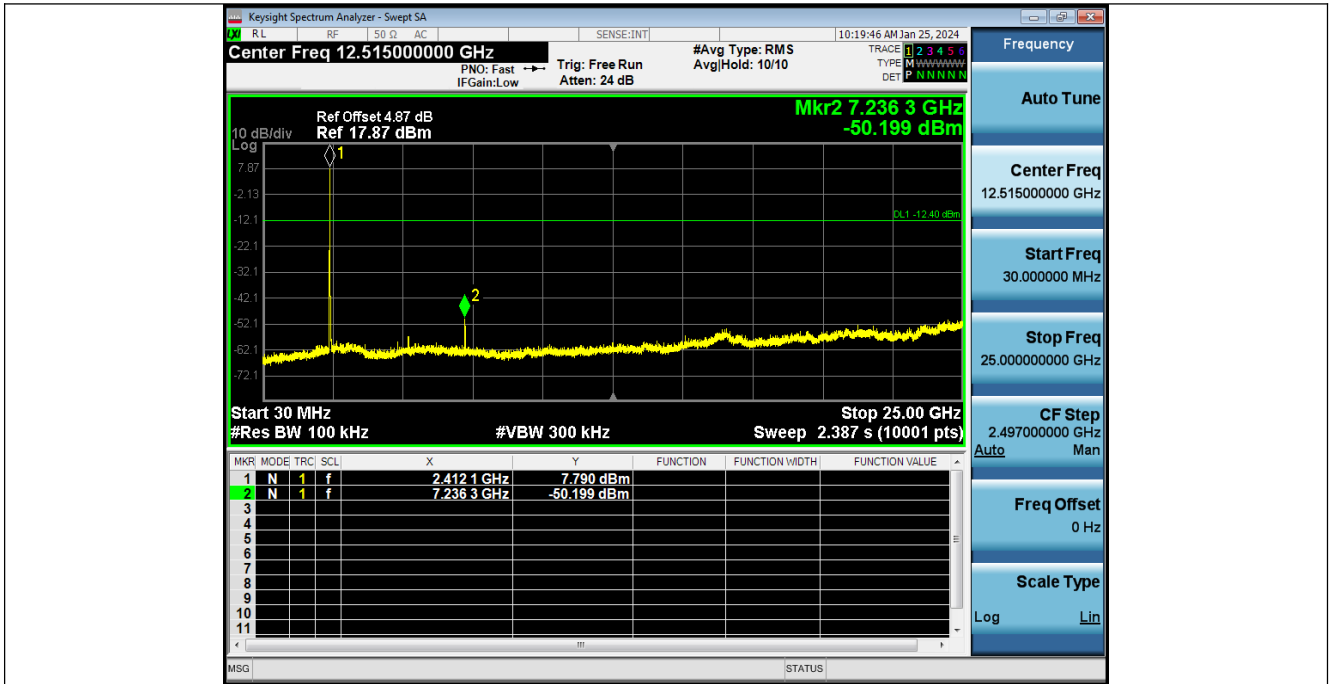
## 7. Spurious Emission

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	7236.342	-50.199	-12.404	Pass
NVNT	ANT1	802.11b	2437.00	24558.031	-47.000	-13.886	Pass
NVNT	ANT1	802.11b	2462.00	24925.090	-49.647	-12.535	Pass
NVNT	ANT1	802.11g	2412.00	24423.193	-48.075	-15.439	Pass
NVNT	ANT1	802.11g	2437.00	24952.557	-50.689	-16.643	Pass
NVNT	ANT1	802.11g	2462.00	24975.030	-52.423	-14.819	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	24967.539	-52.742	-15.719	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	24955.054	-54.416	-16.828	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	24303.337	-52.586	-15.180	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	24925.090	-52.710	-19.252	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	5188.802	-49.647	-19.622	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	24975.030	-56.656	-18.645	Pass

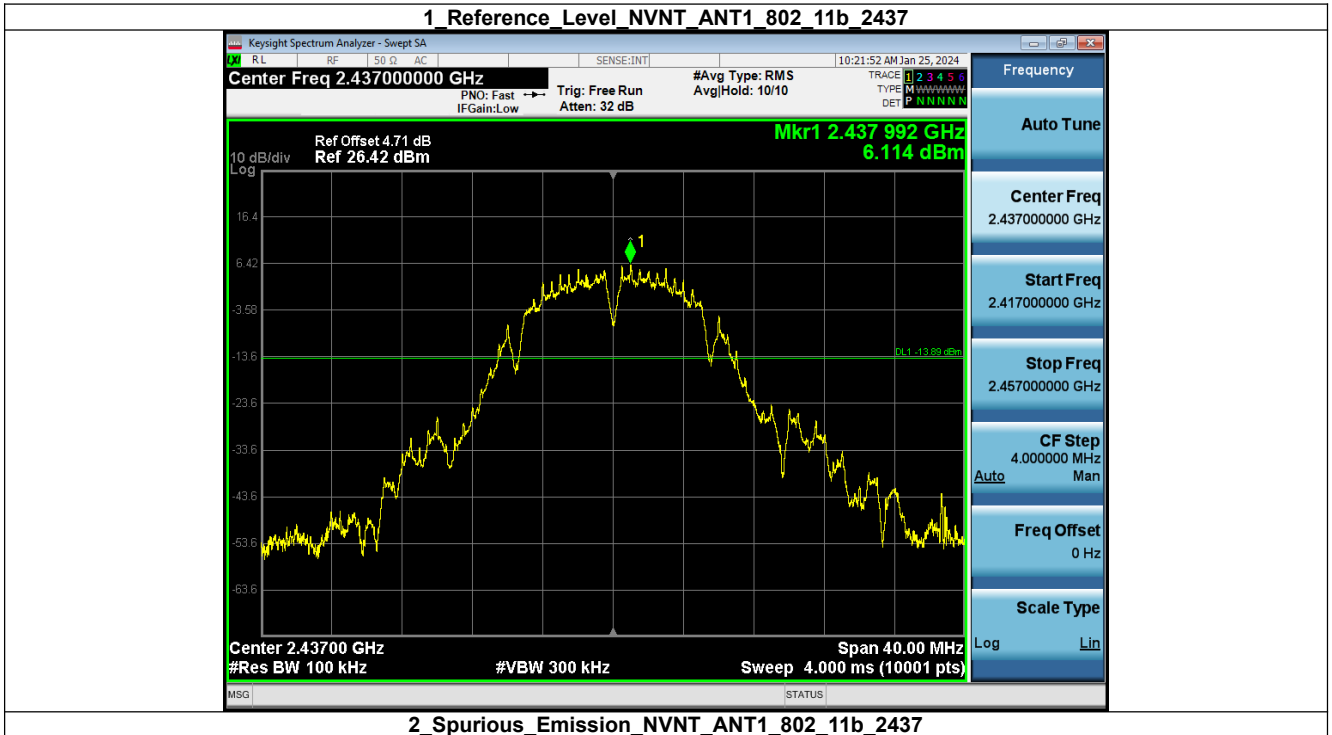
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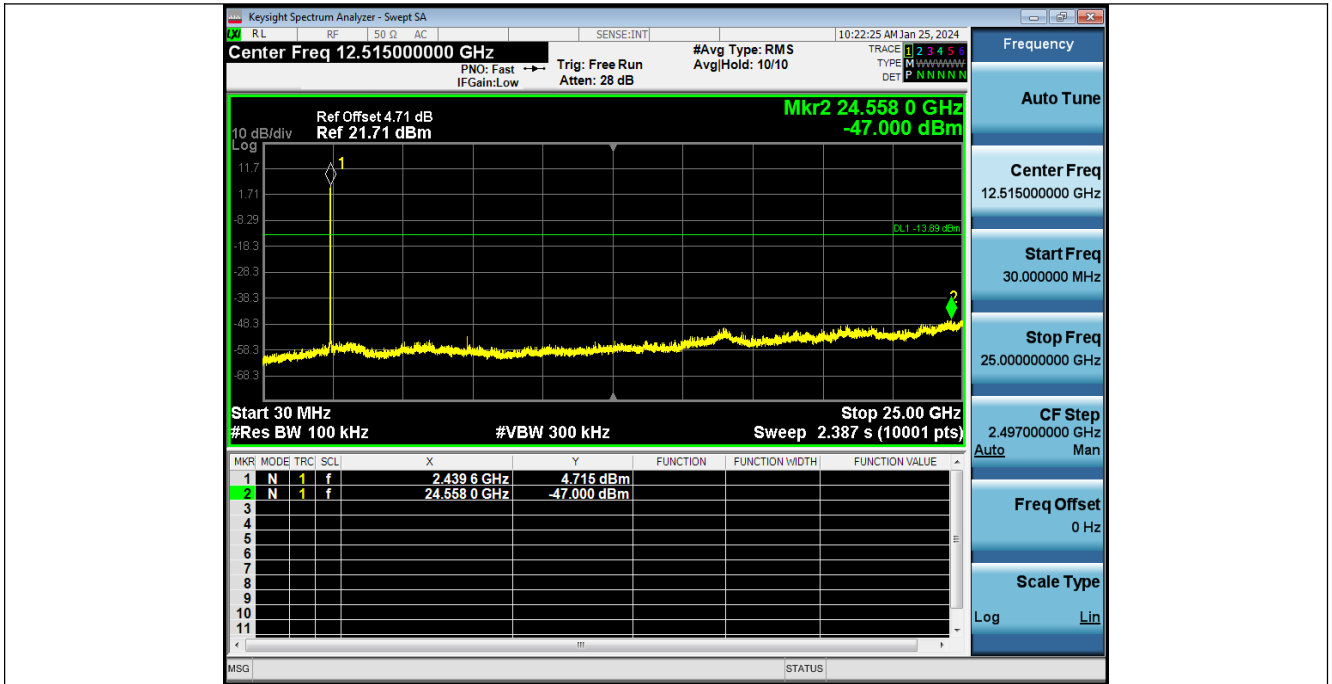
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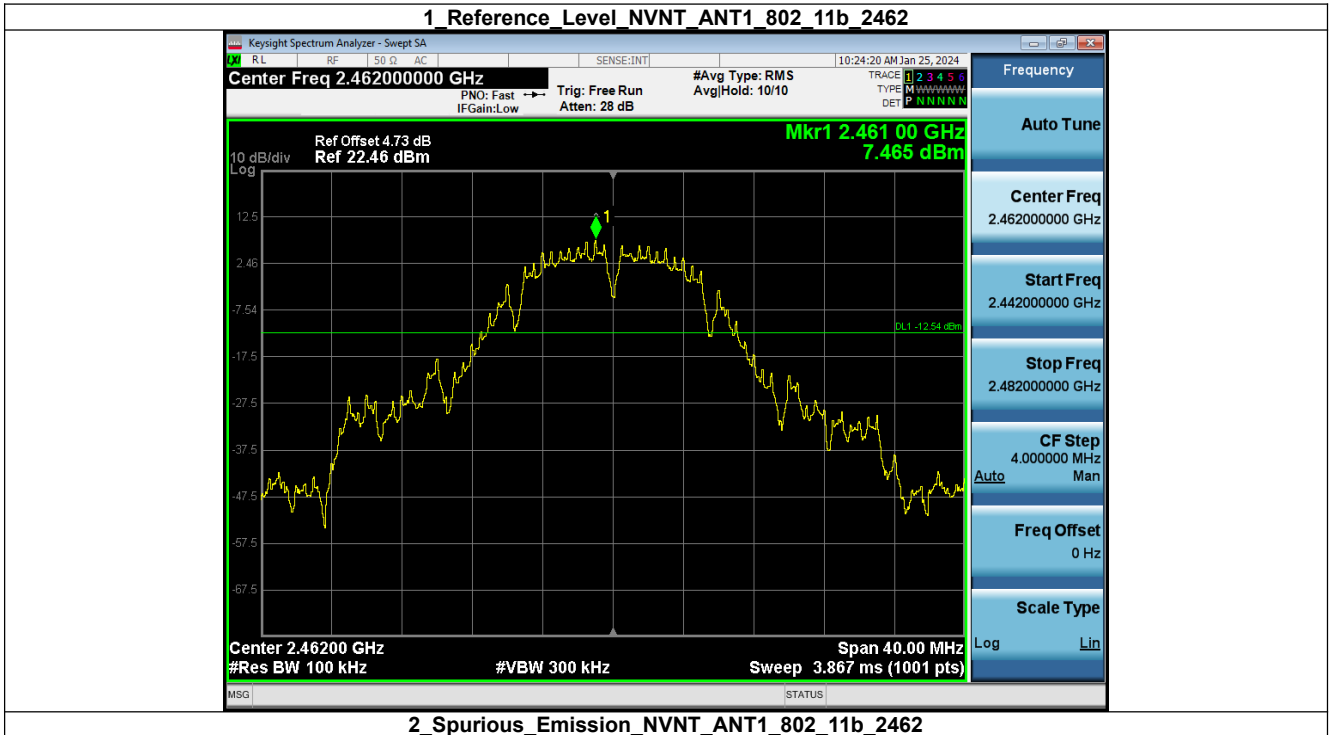
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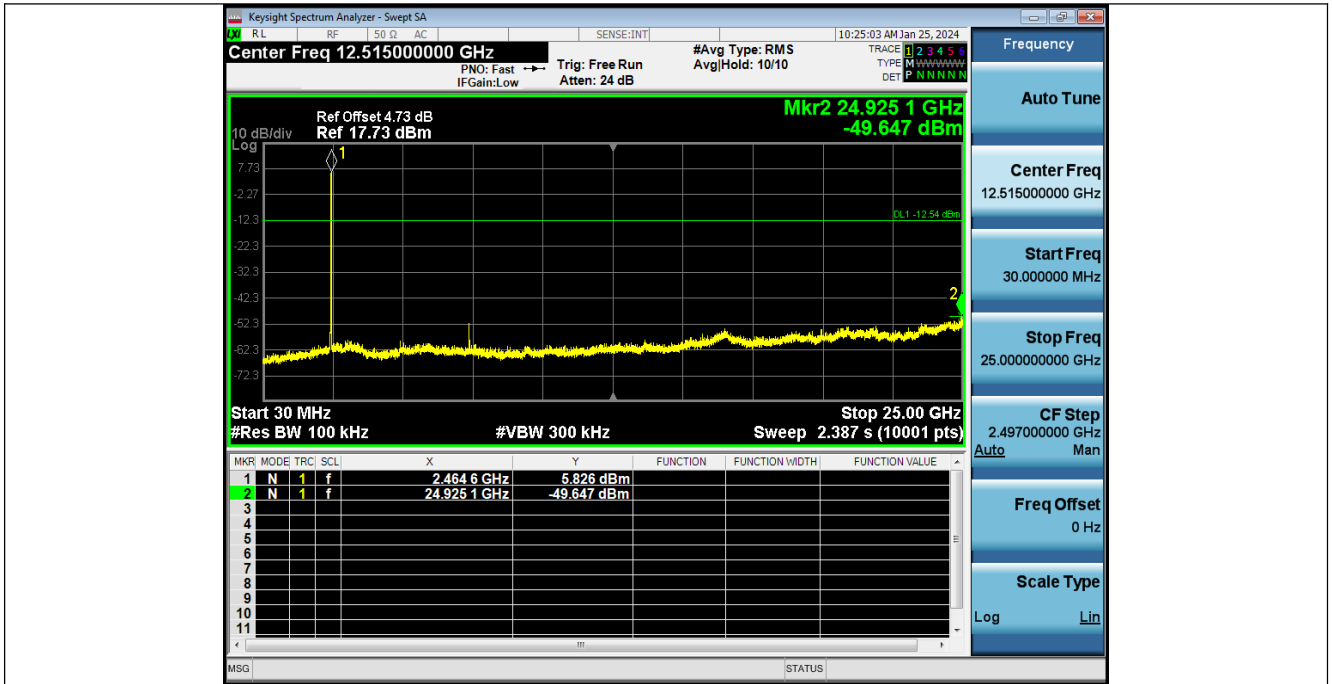


1 Reference Level NVNT\_ANT1\_802\_11b\_2462

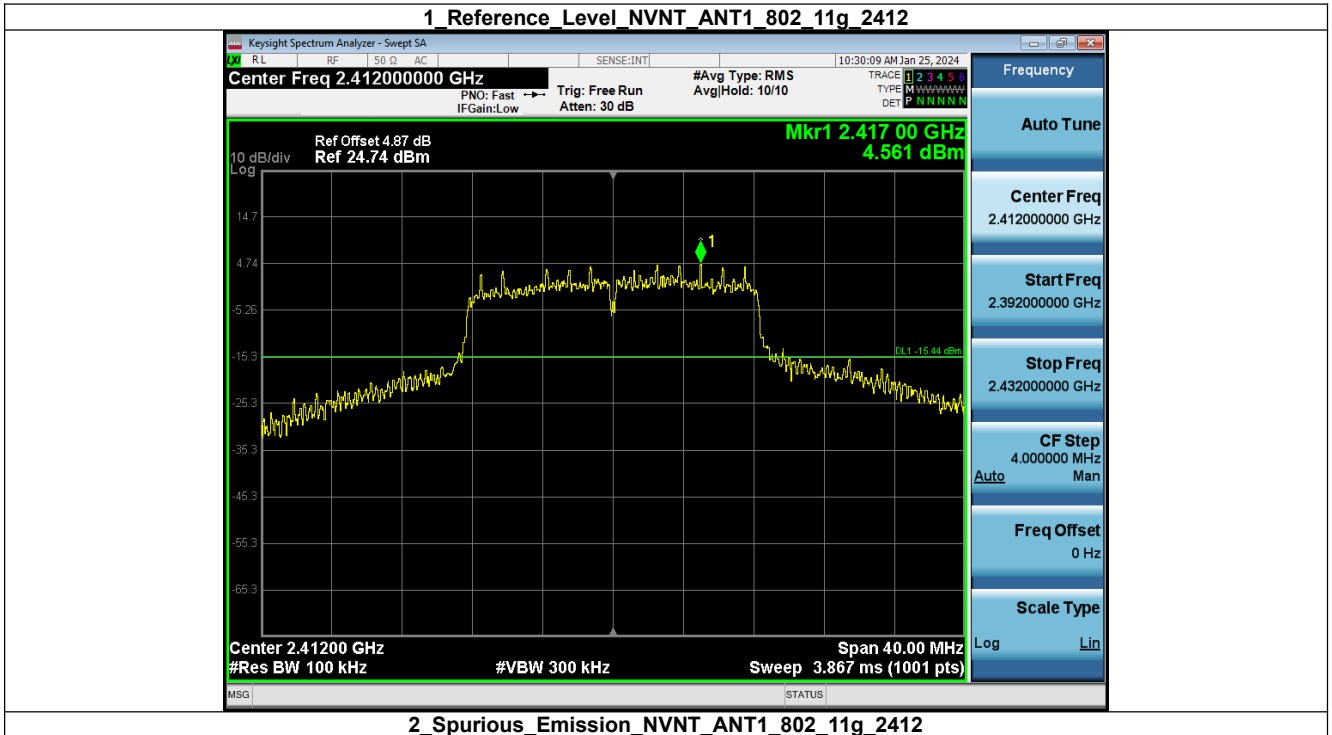


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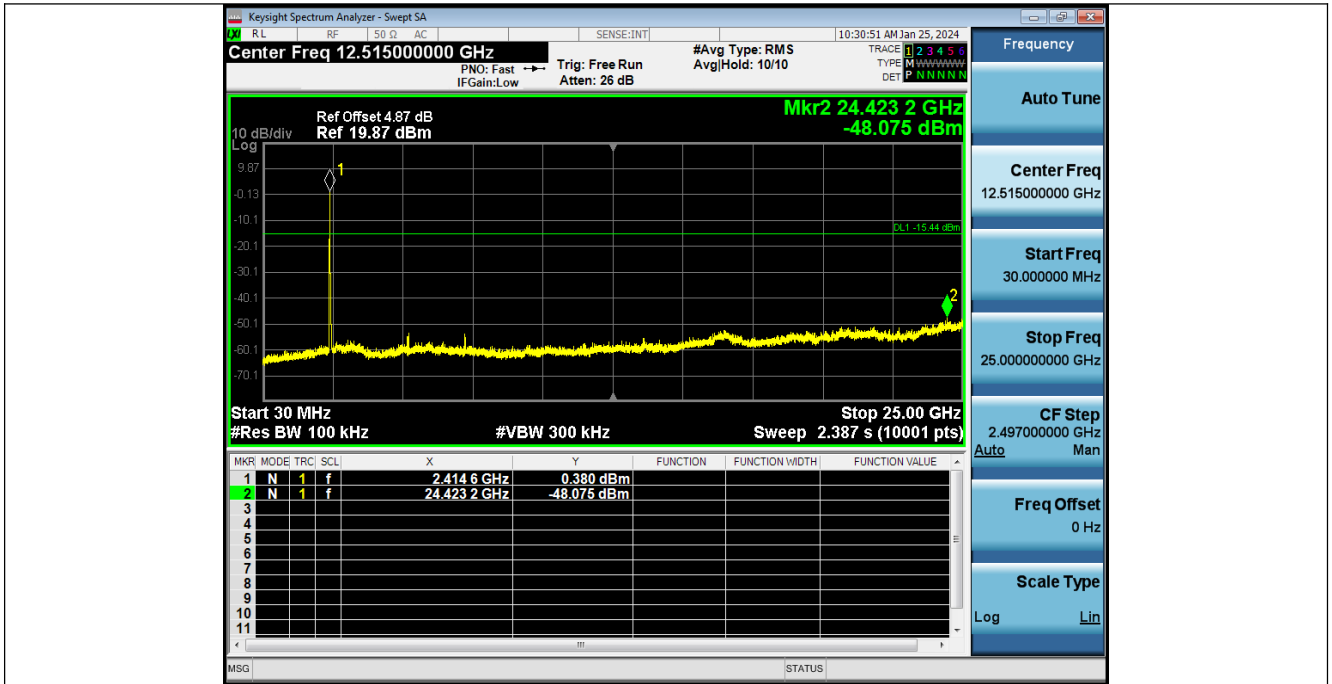




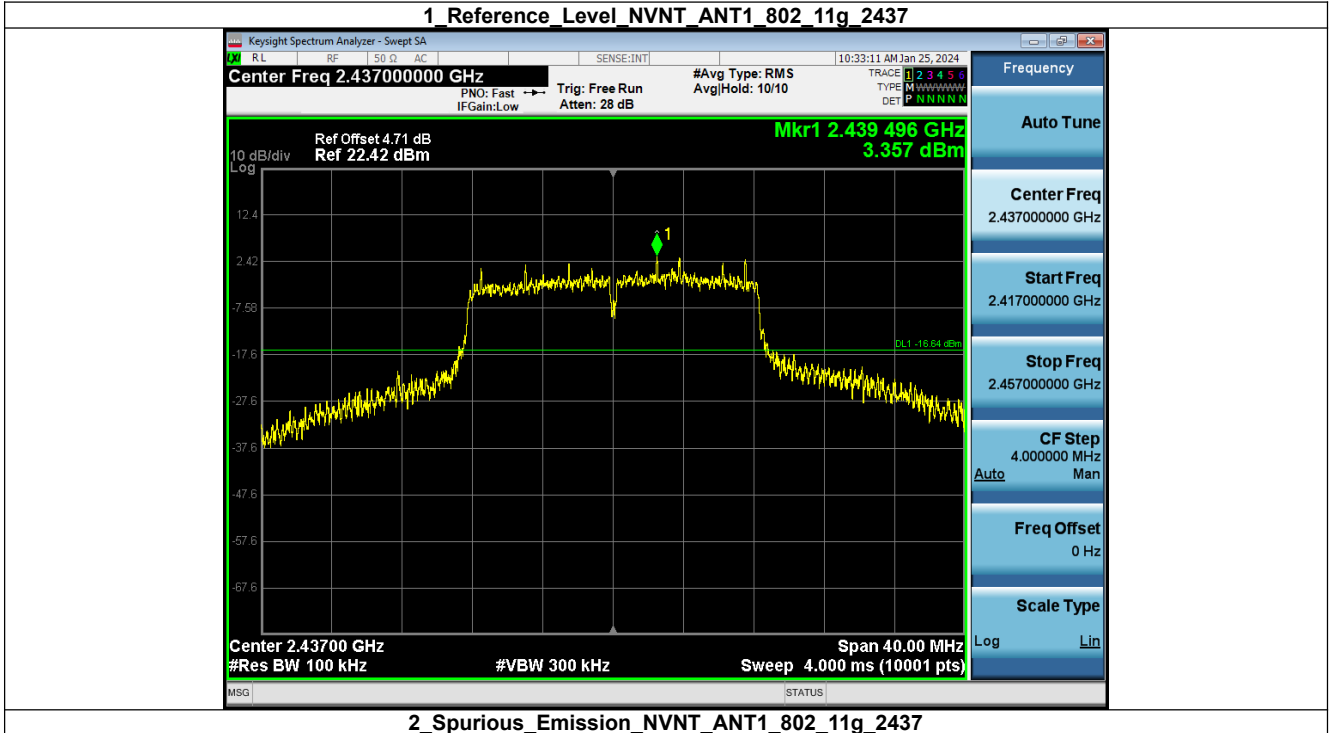
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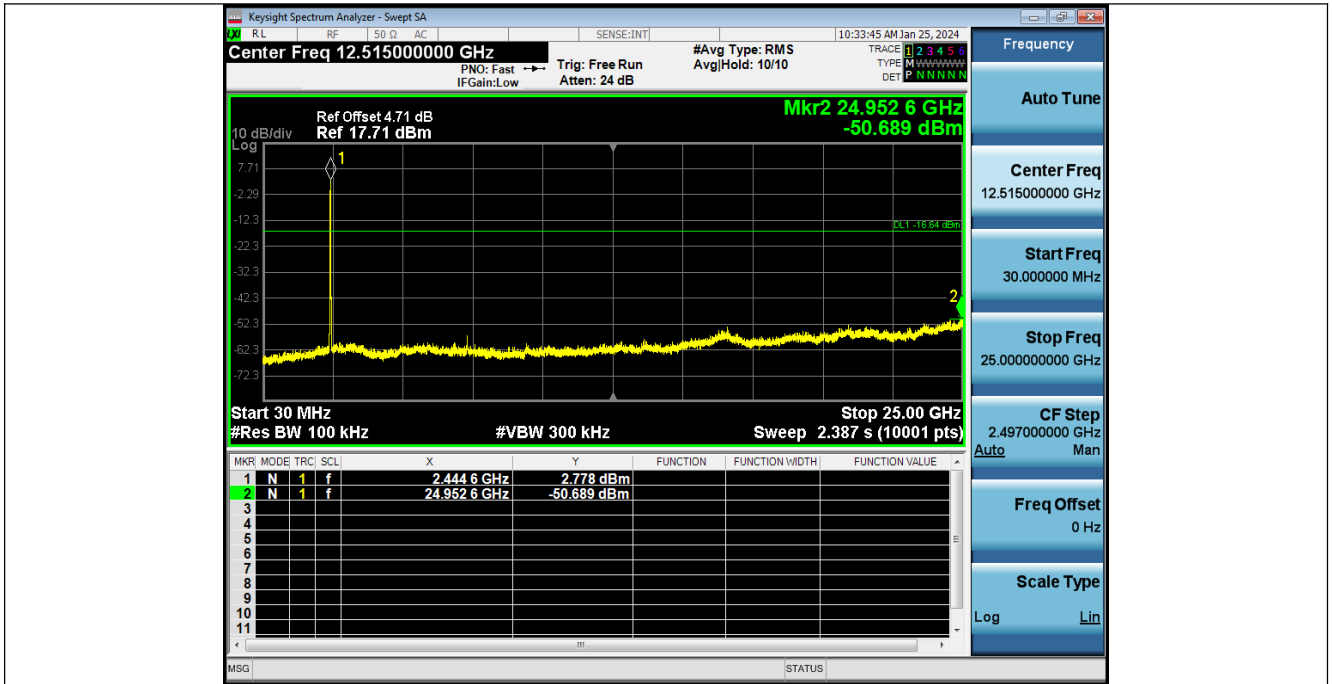
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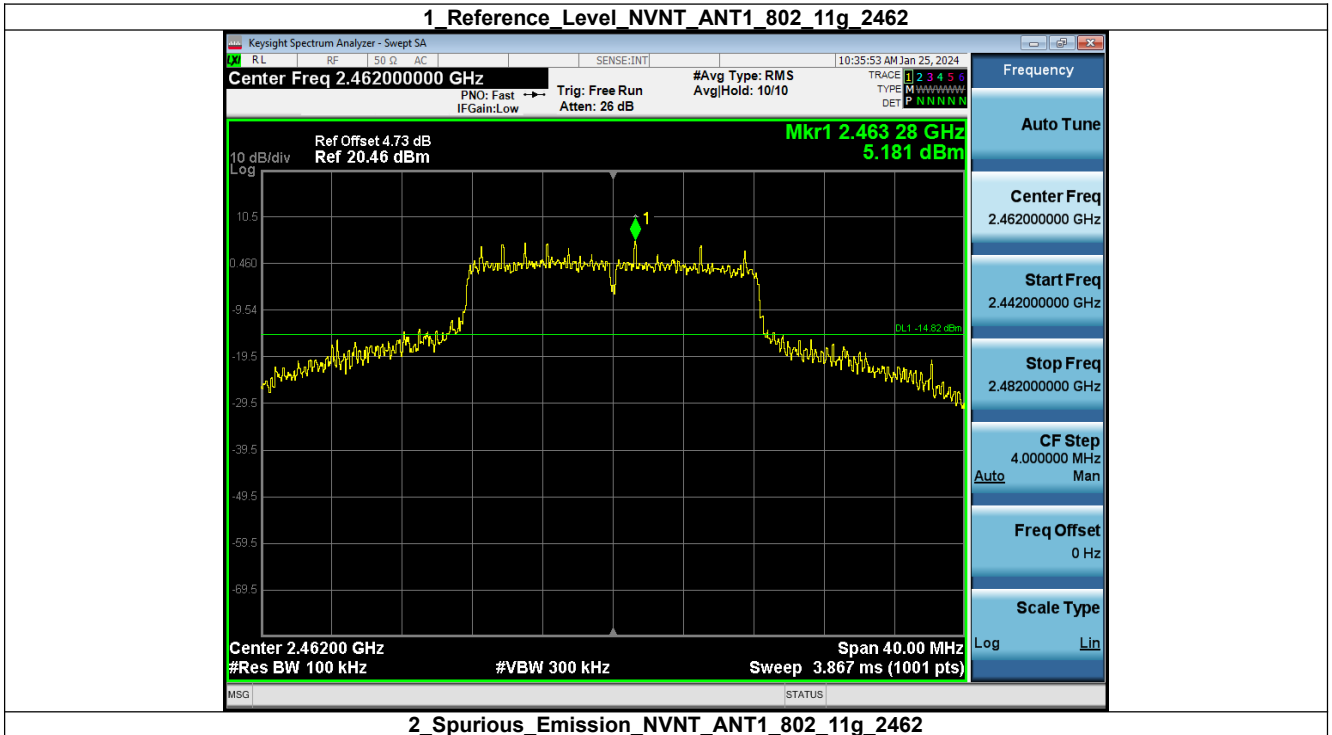
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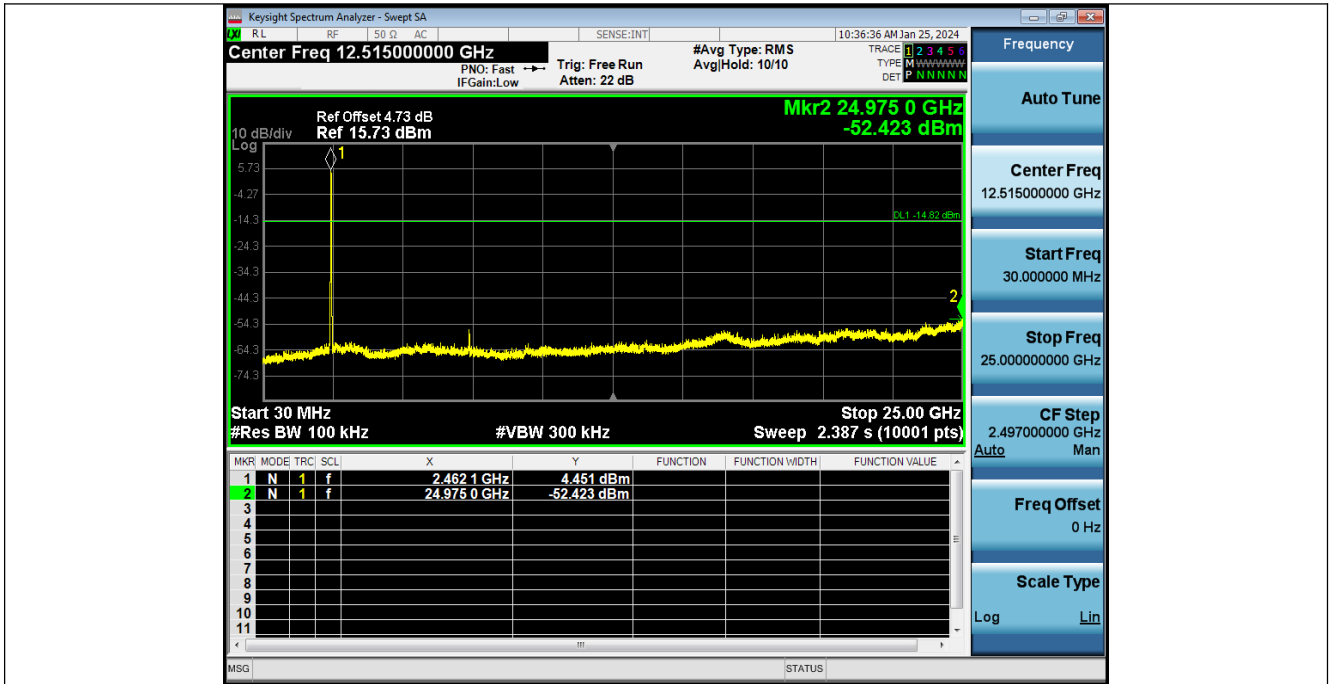
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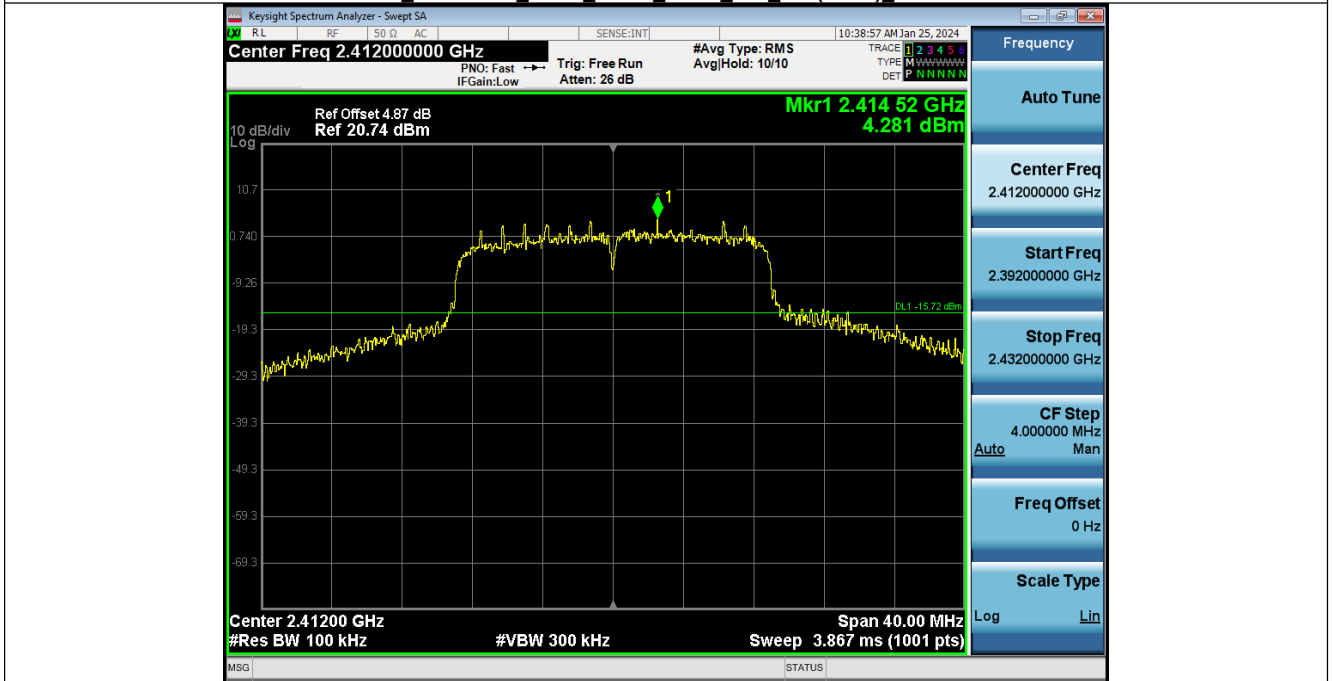
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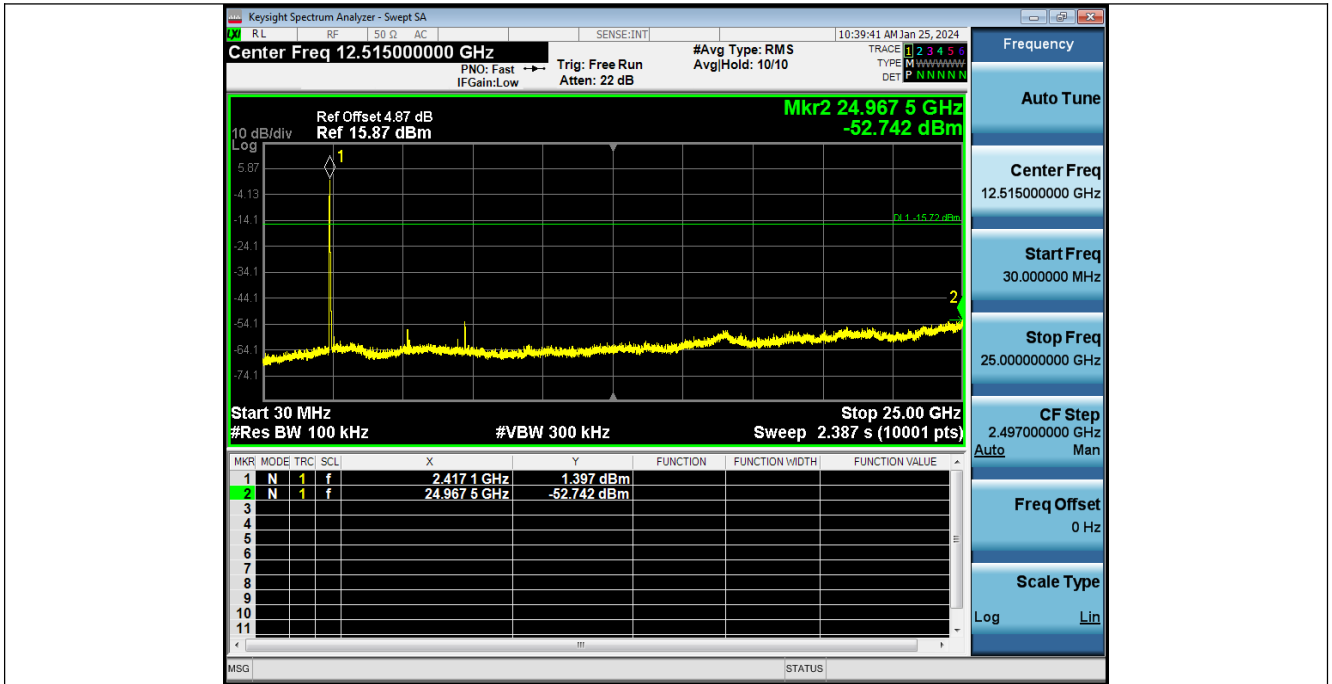
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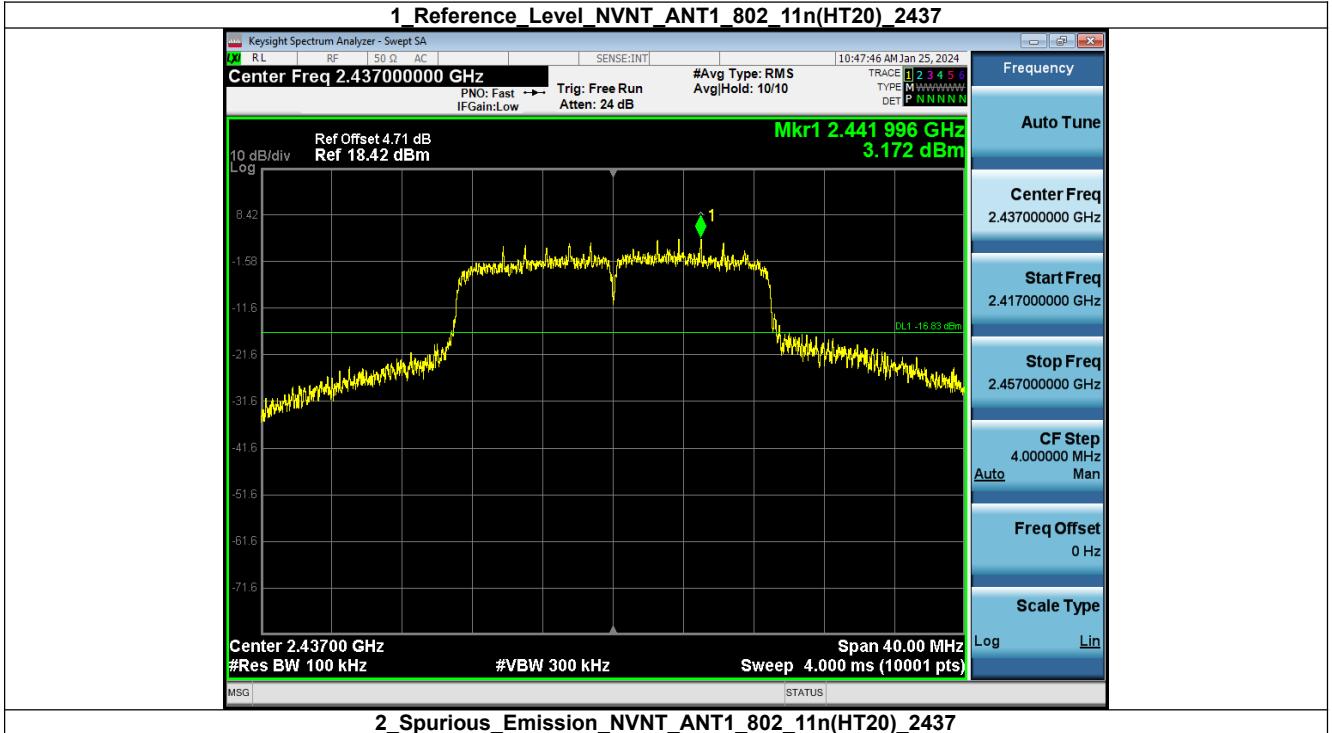
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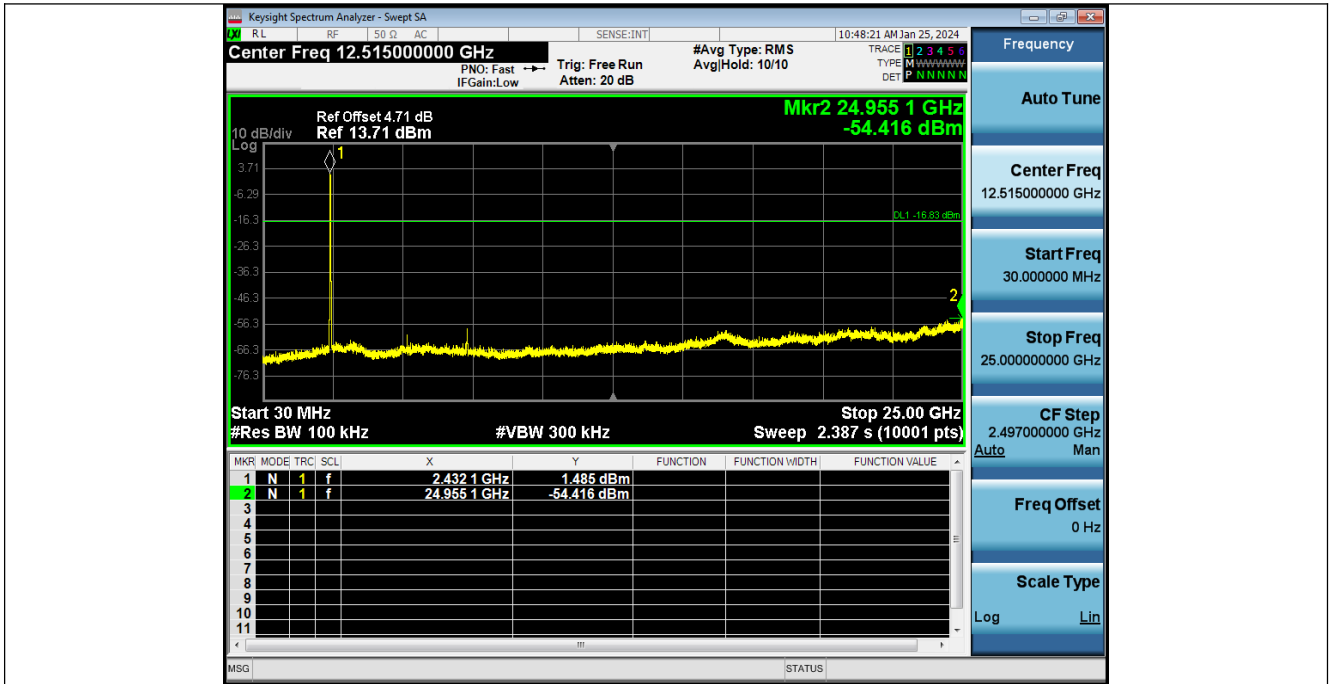
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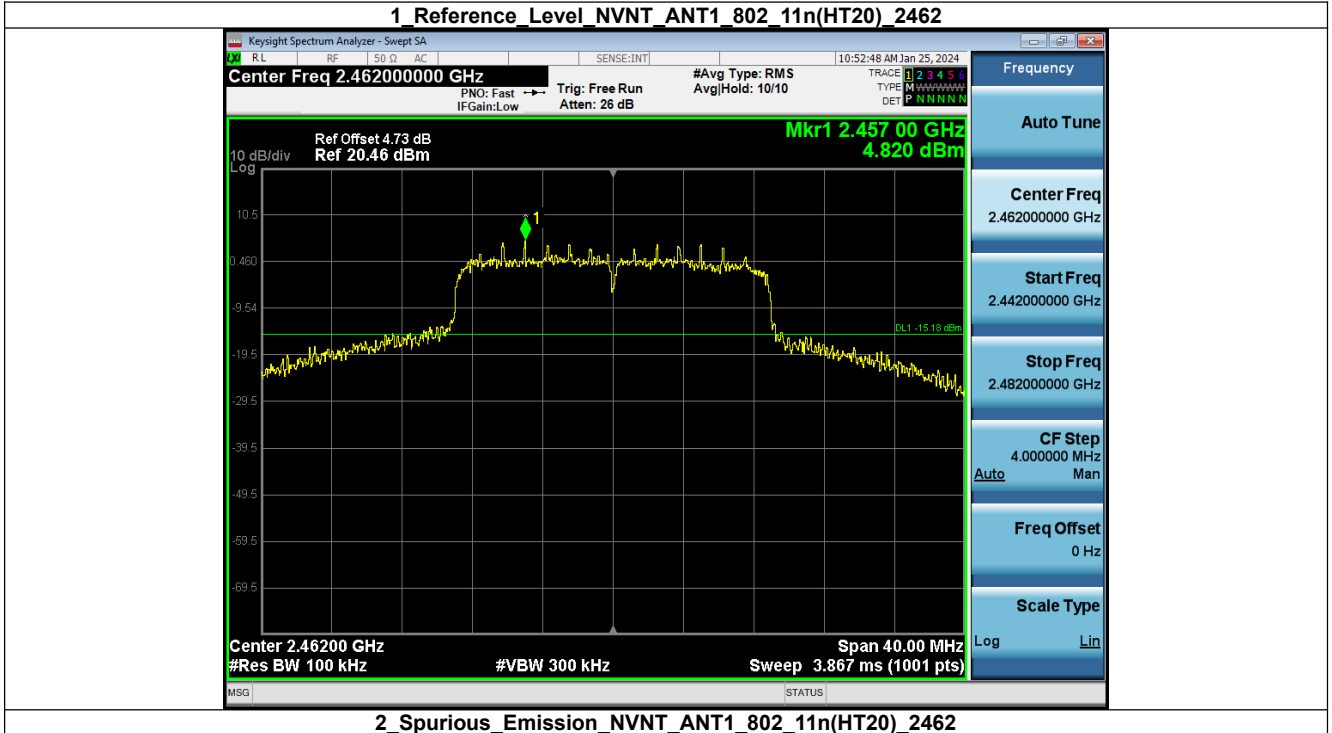
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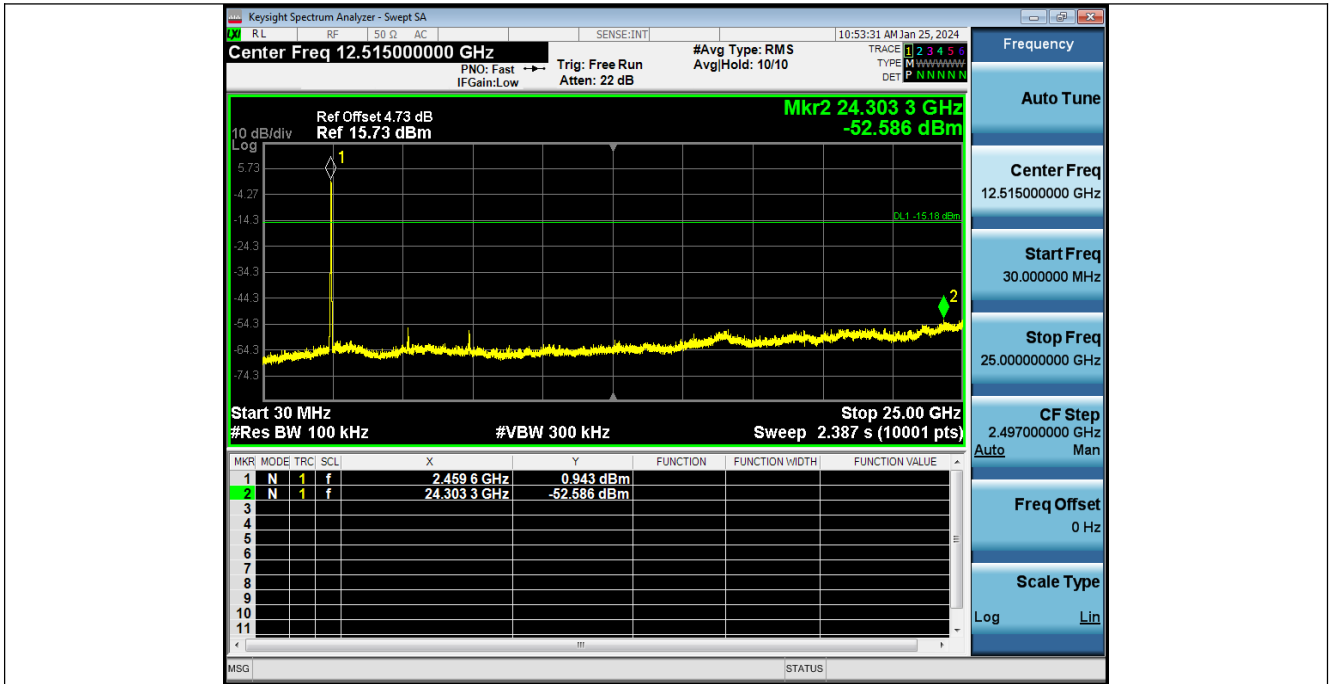
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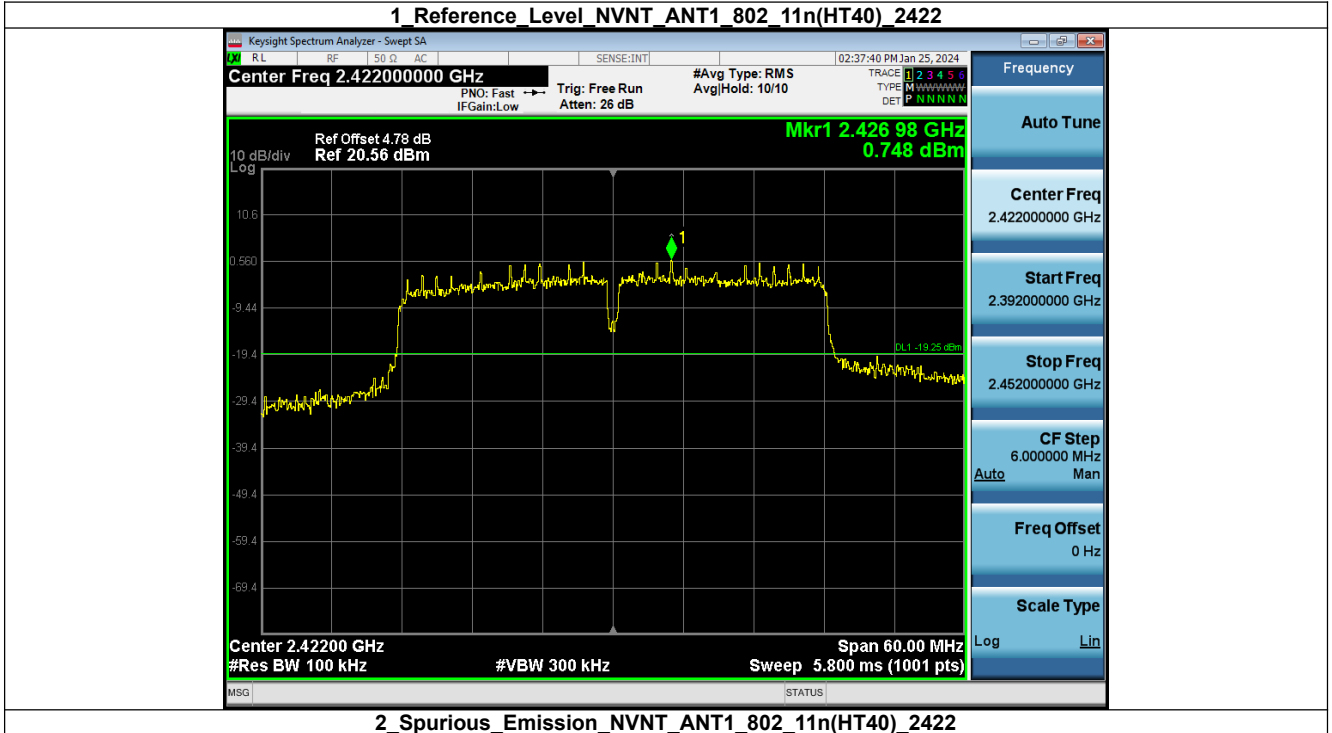
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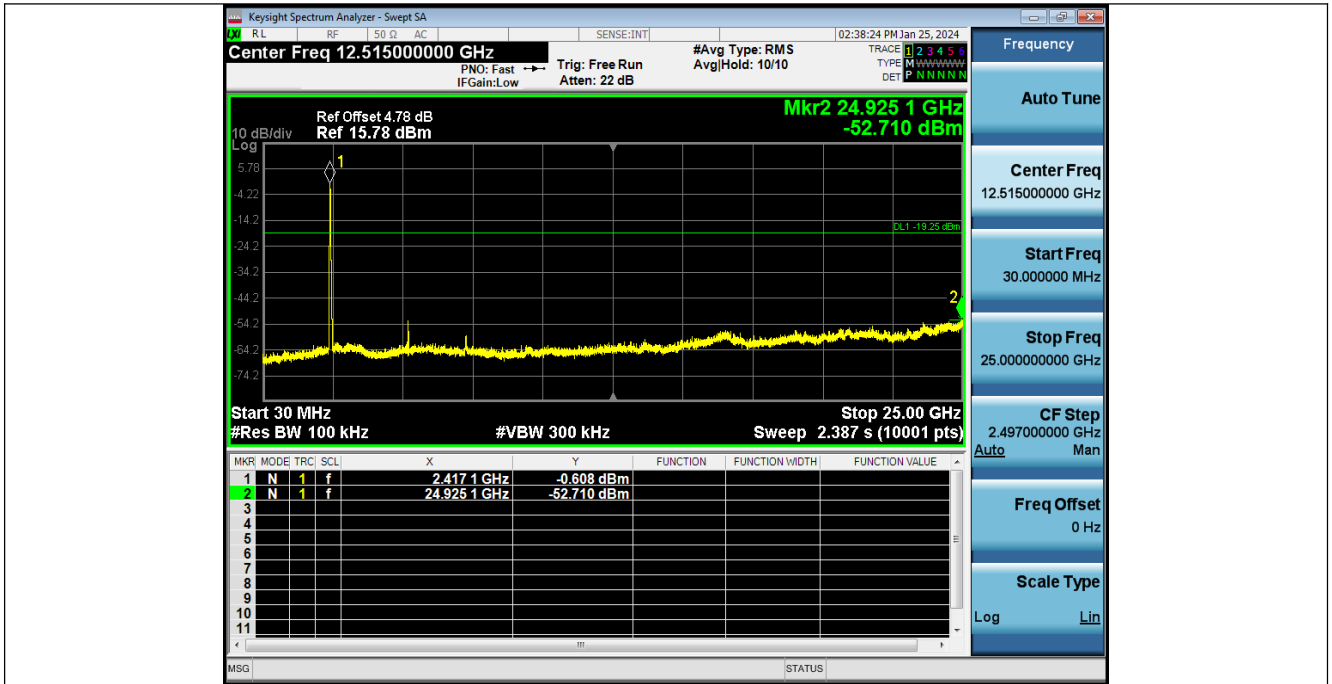
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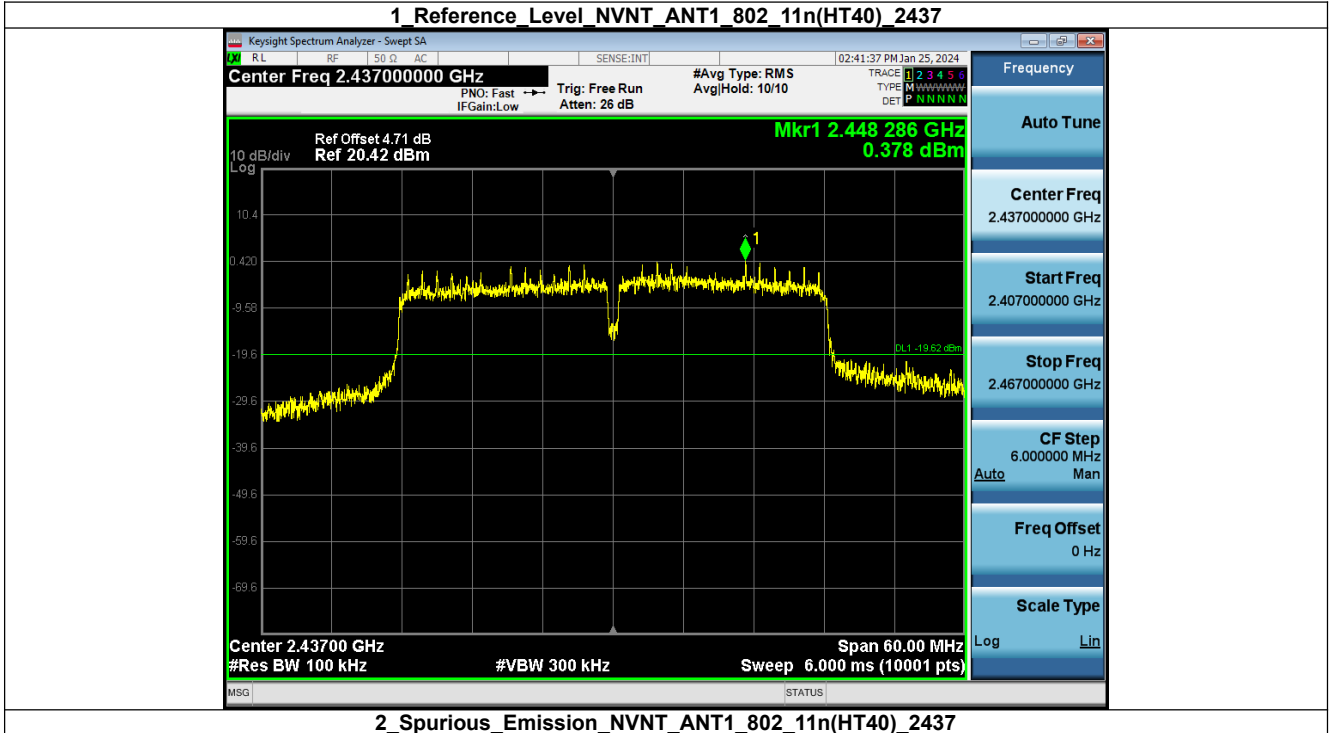
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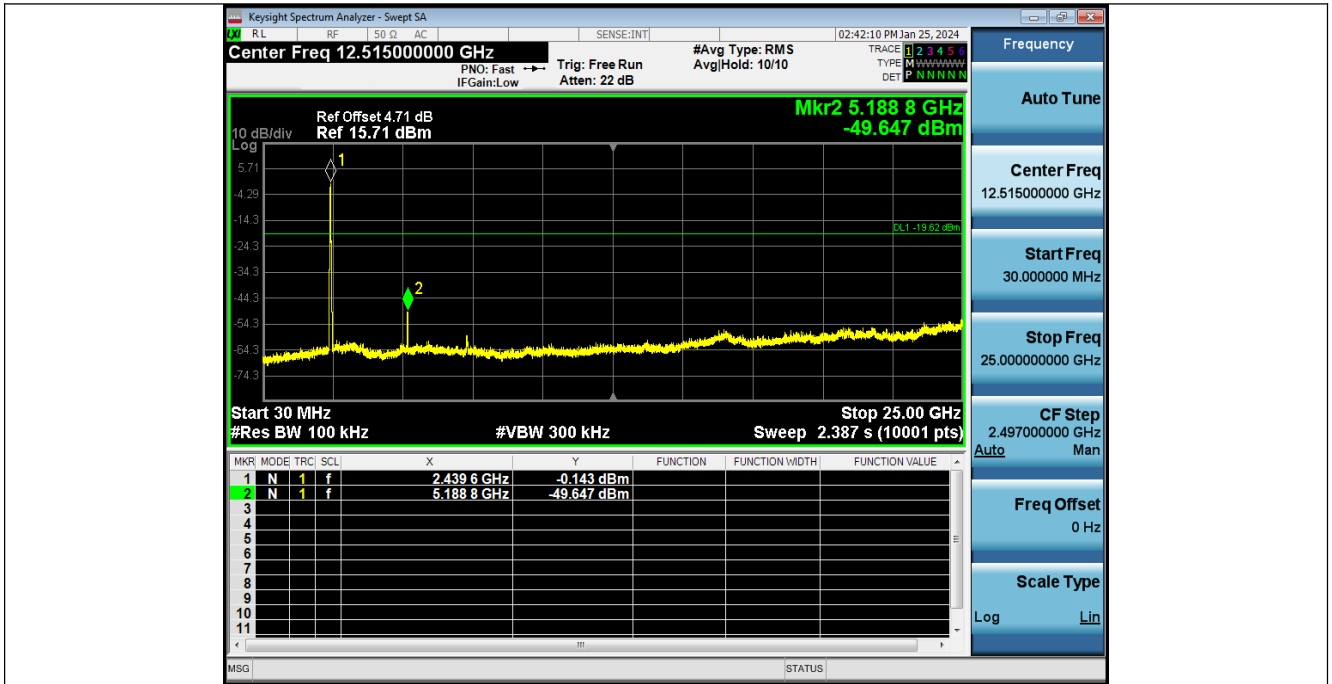


1 Reference Level\_NVNT\_ANT1\_802\_11n(HT40)\_2437

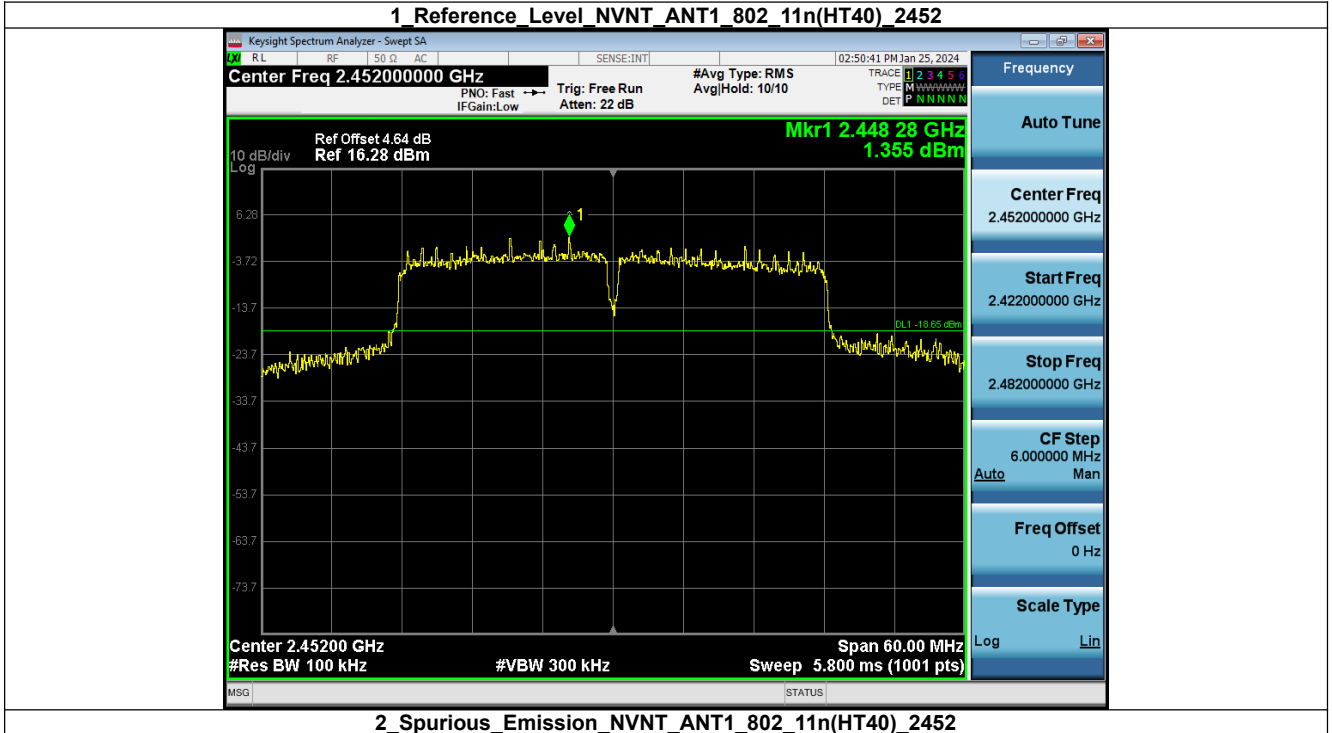


2\_Spurious\_Emission\_NVNT\_ANT1\_802\_11n(HT40)\_2437





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



2\_Spurious\_Emission\_NVNT\_ANT1\_802\_11n(HT40)\_2452

