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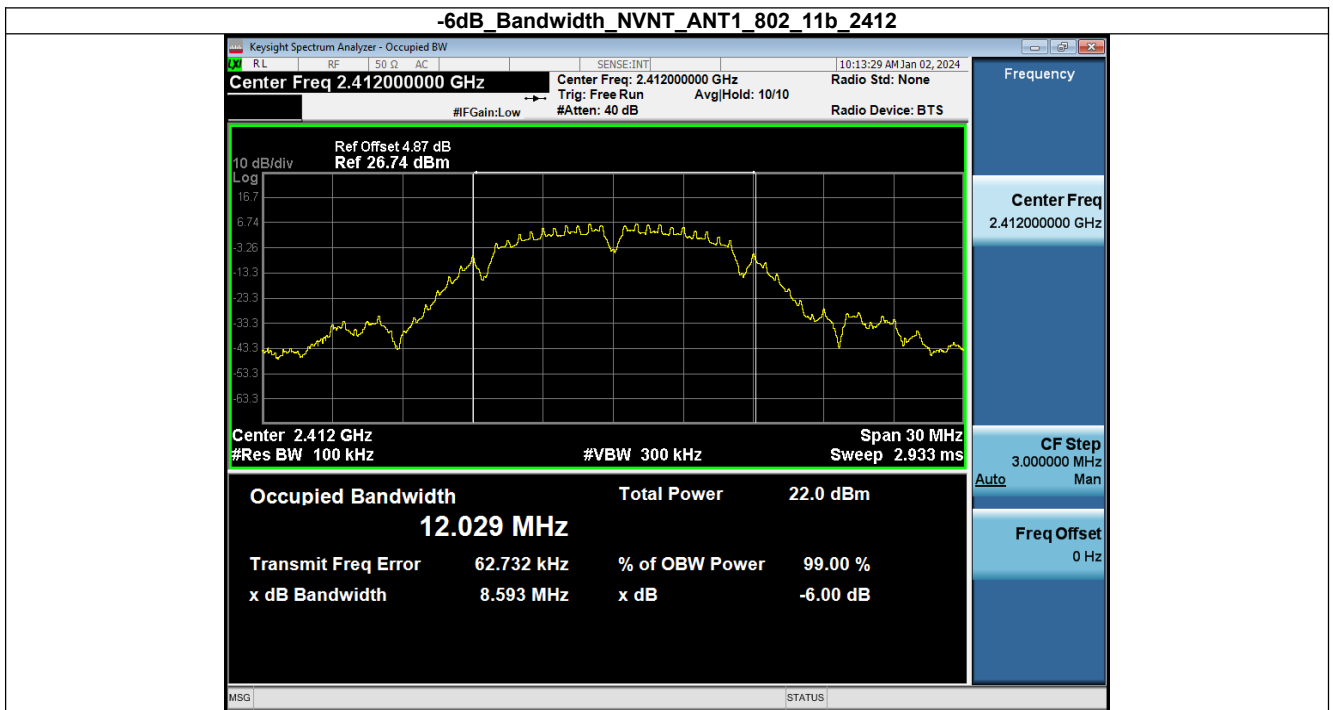
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# FCC ID WIFI2.4

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

### 1. -6dB Bandwidth

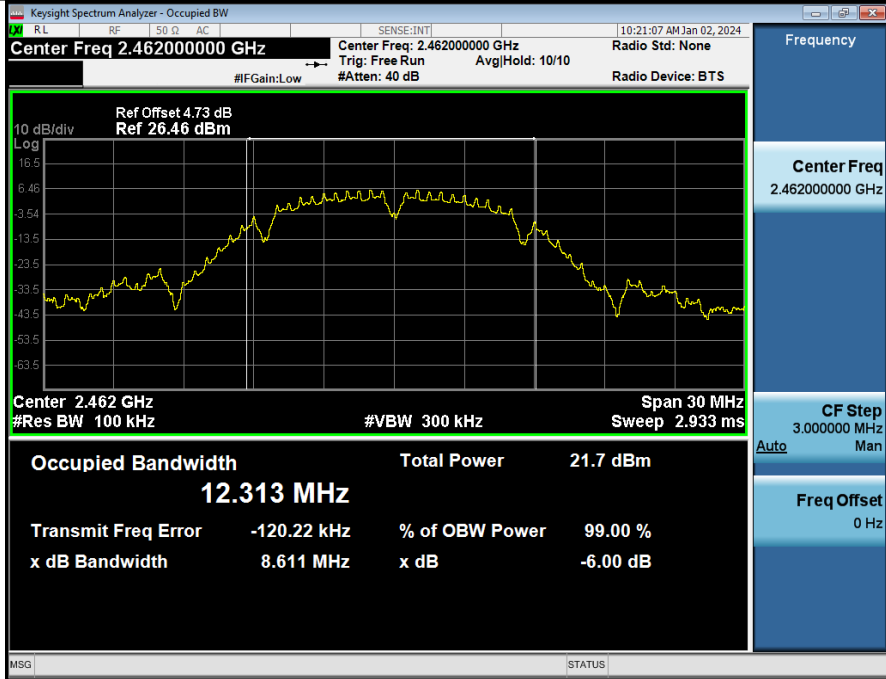
Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	8.59	500	Pass
NVNT	ANT1	802.11b	2437.00	8.56	500	Pass
NVNT	ANT1	802.11b	2462.00	8.61	500	Pass
NVNT	ANT1	802.11g	2412.00	15.92	500	Pass
NVNT	ANT1	802.11g	2437.00	16.08	500	Pass
NVNT	ANT1	802.11g	2462.00	16.10	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	16.48	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	16.86	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	16.79	500	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	35.70	500	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	35.57	500	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	35.23	500	Pass



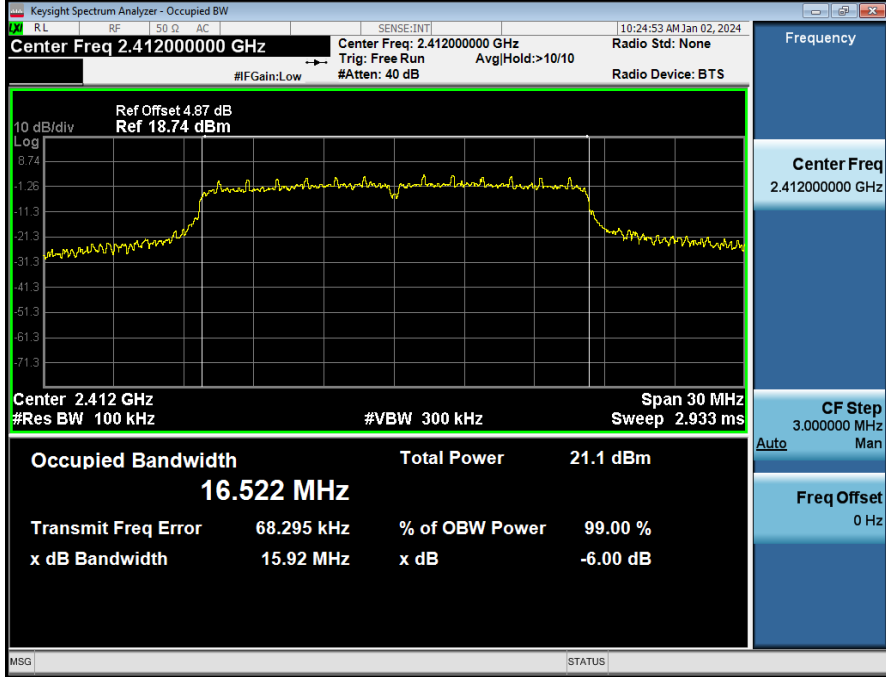
**-6dB Bandwidth\_NVNT\_ANT1\_802\_11b\_2437**



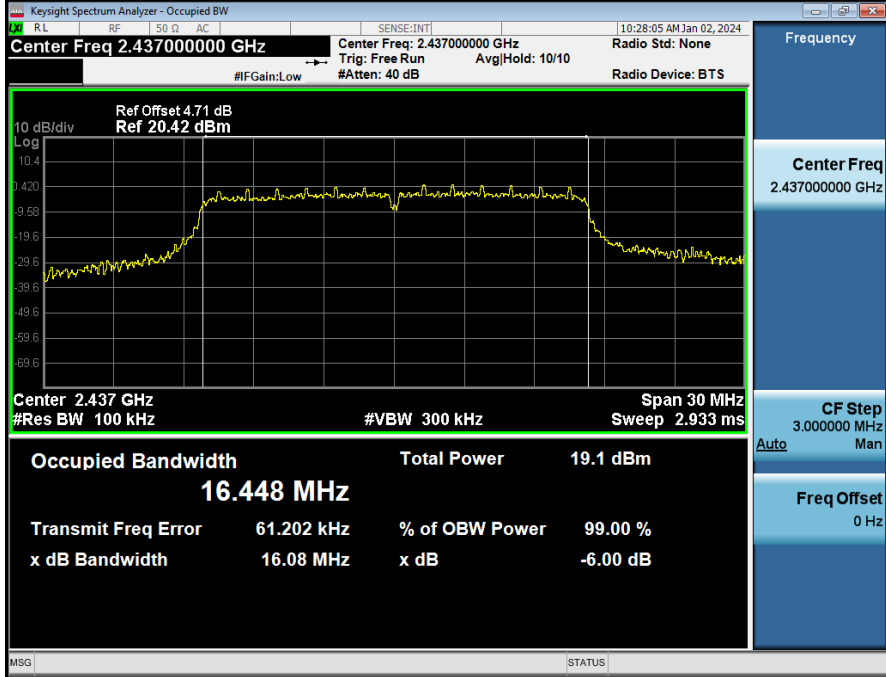
**-6dB Bandwidth\_NVNT\_ANT1\_802\_11b\_2462**



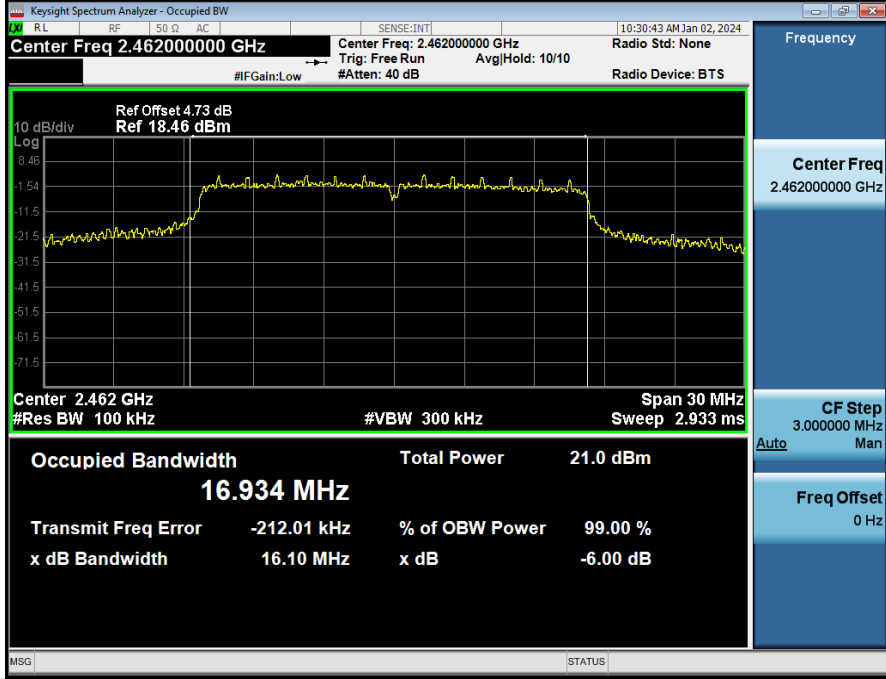
**-6dB Bandwidth\_NVNT\_ANT1\_802\_11g\_2412**



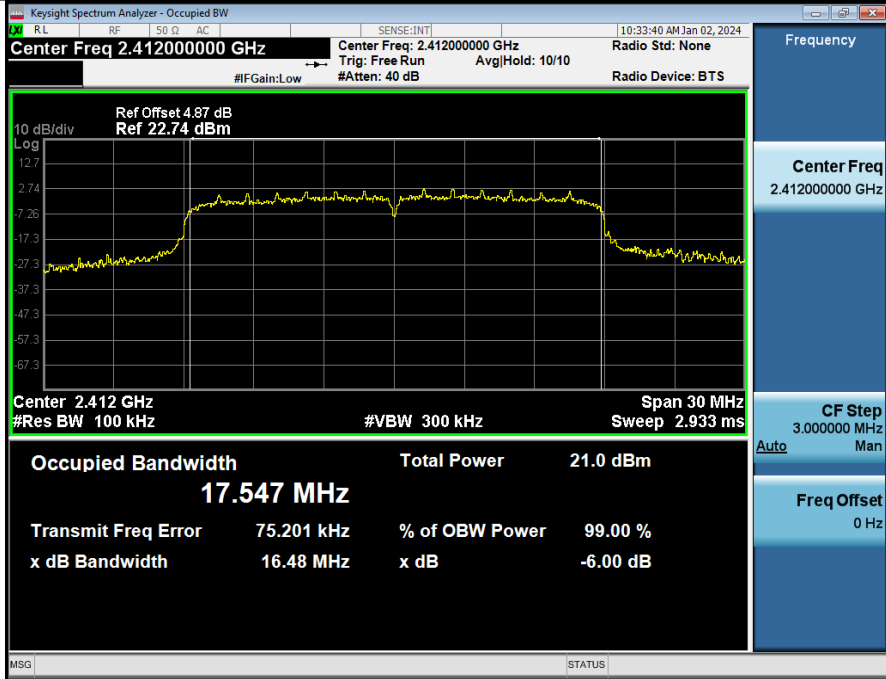
**-6dB Bandwidth\_NVNT\_ANT1\_802\_11g\_2437**



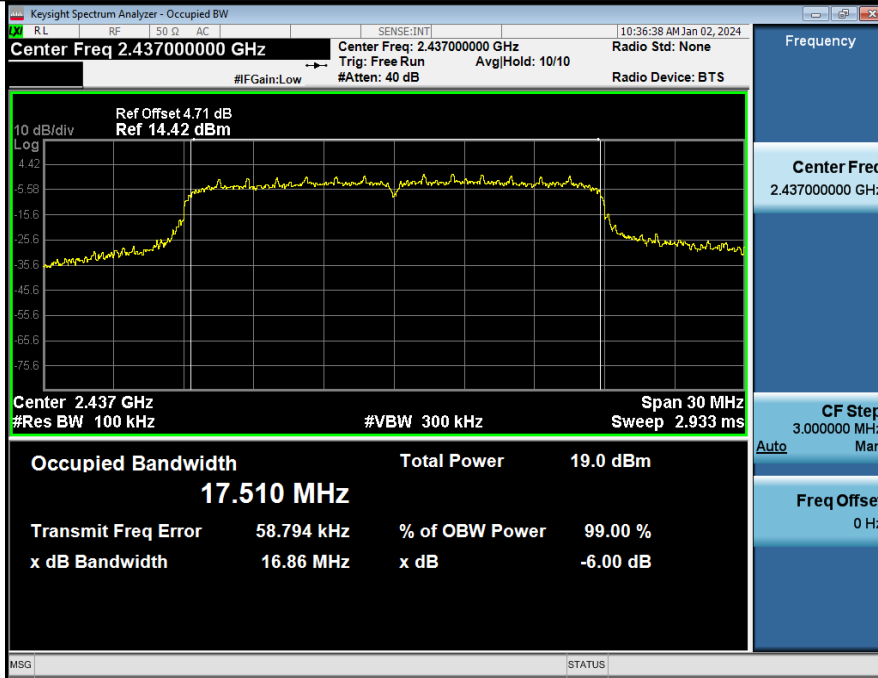
**-6dB Bandwidth\_NVNT\_ANT1\_802\_11g\_2462**



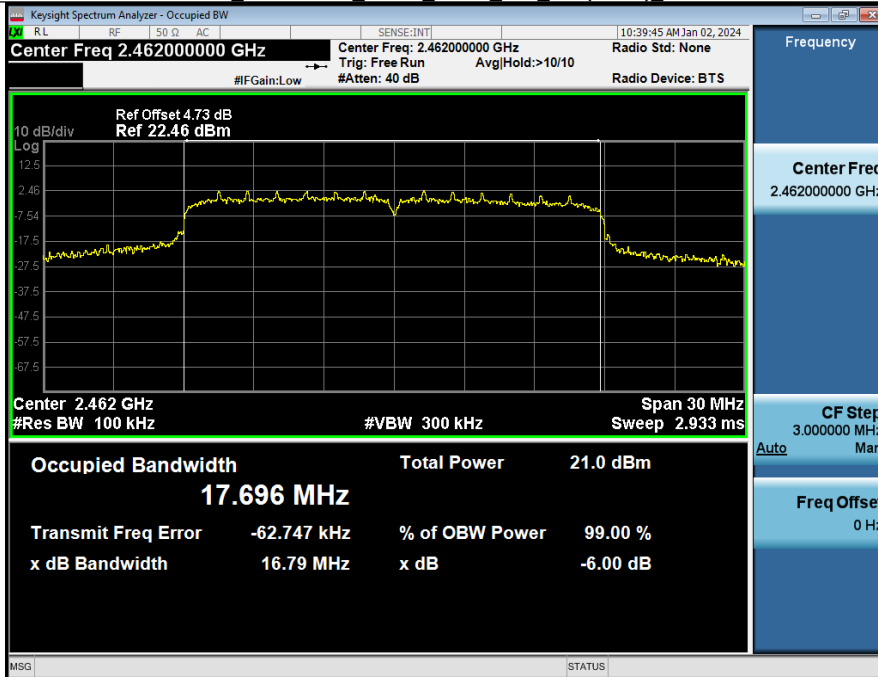
**-6dB Bandwidth\_NVNT\_ANT1\_802\_11n(HT20)\_2412**



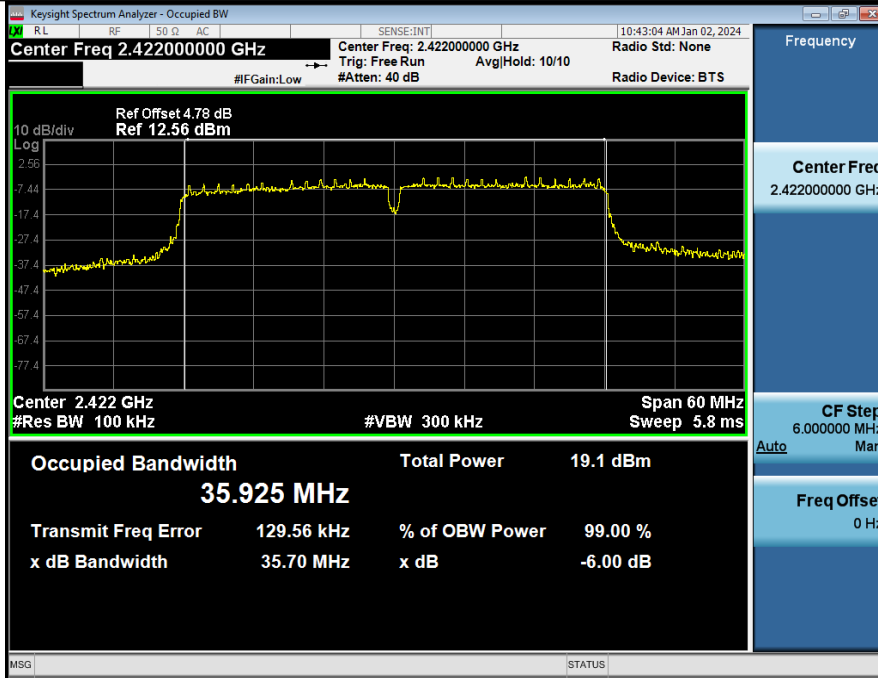
**-6dB Bandwidth\_NVNT\_ANT1\_802\_11n(HT20)\_2437**



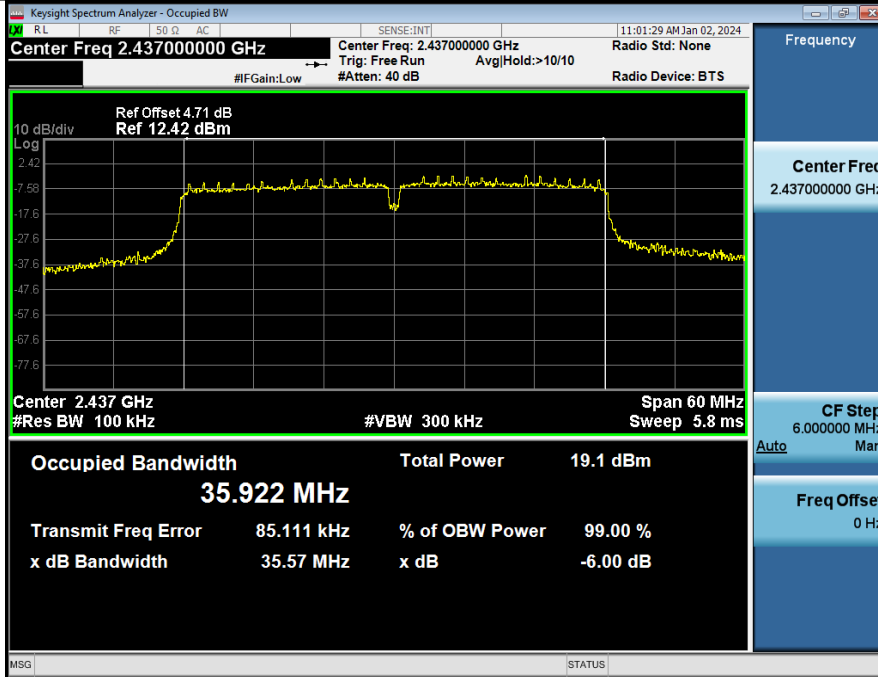
**-6dB Bandwidth\_NVNT\_ANT1\_802\_11n(HT20)\_2462**



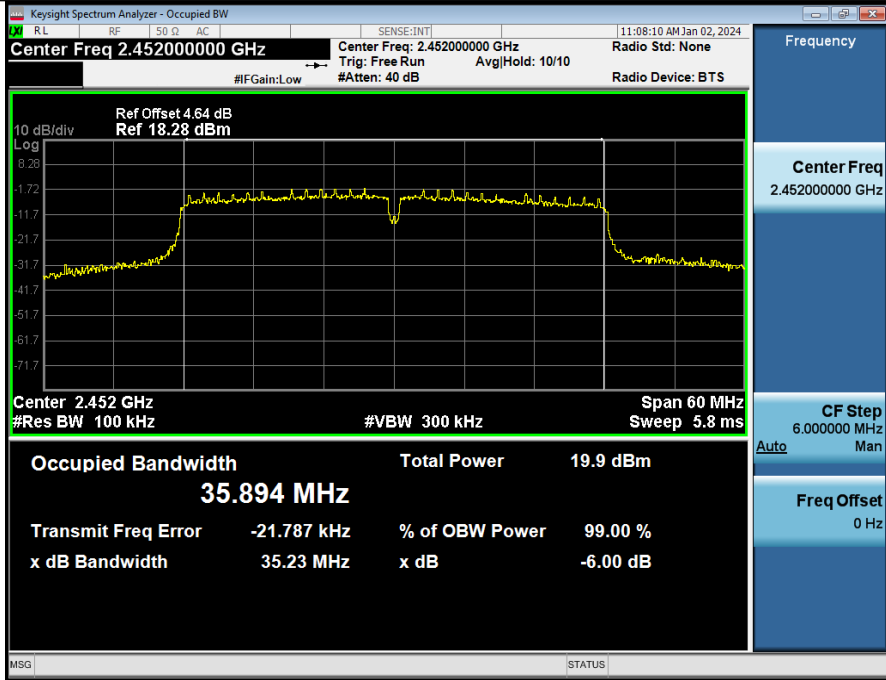
**-6dB Bandwidth NVNT\_ANT1\_802\_11n(HT40)\_2422**



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



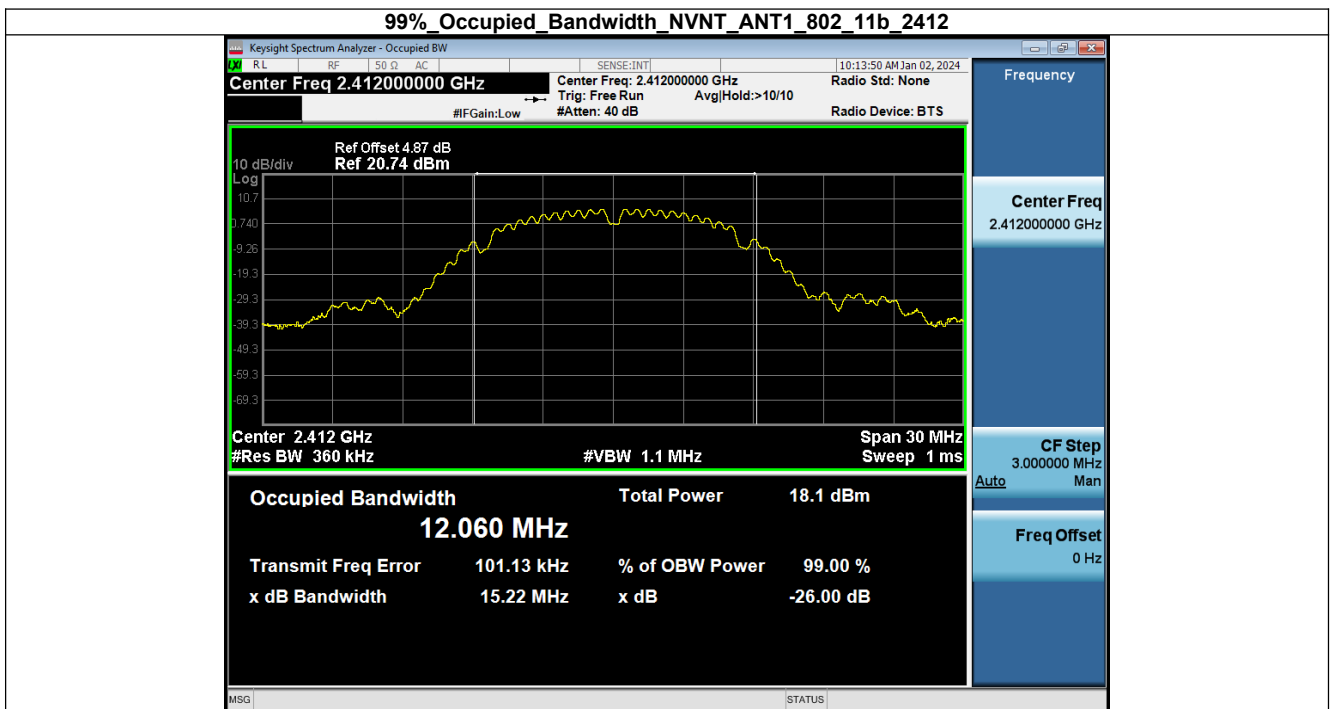
**-6dB Bandwidth NVNT\_ANT1\_802\_11n(HT40)\_2452**





## 2. 99% Occupied Bandwidth

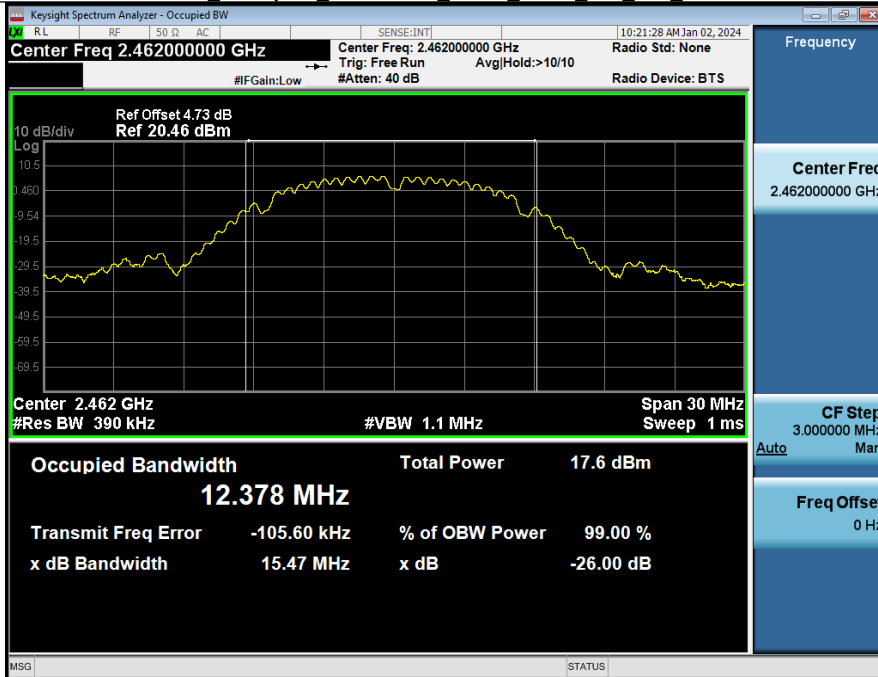
Condition	Antenna	Modulation	Frequency (MHz)	99% BW (MHz)
NVNT	ANT1	802.11b	2412.00	12.060
NVNT	ANT1	802.11b	2437.00	11.891
NVNT	ANT1	802.11b	2462.00	12.378
NVNT	ANT1	802.11g	2412.00	17.757
NVNT	ANT1	802.11g	2437.00	17.327
NVNT	ANT1	802.11g	2462.00	18.634
NVNT	ANT1	802.11n(HT20)	2412.00	17.917
NVNT	ANT1	802.11n(HT20)	2437.00	17.875
NVNT	ANT1	802.11n(HT20)	2462.00	18.464
NVNT	ANT1	802.11n(HT40)	2422.00	36.512
NVNT	ANT1	802.11n(HT40)	2437.00	36.374
NVNT	ANT1	802.11n(HT40)	2452.00	36.293



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



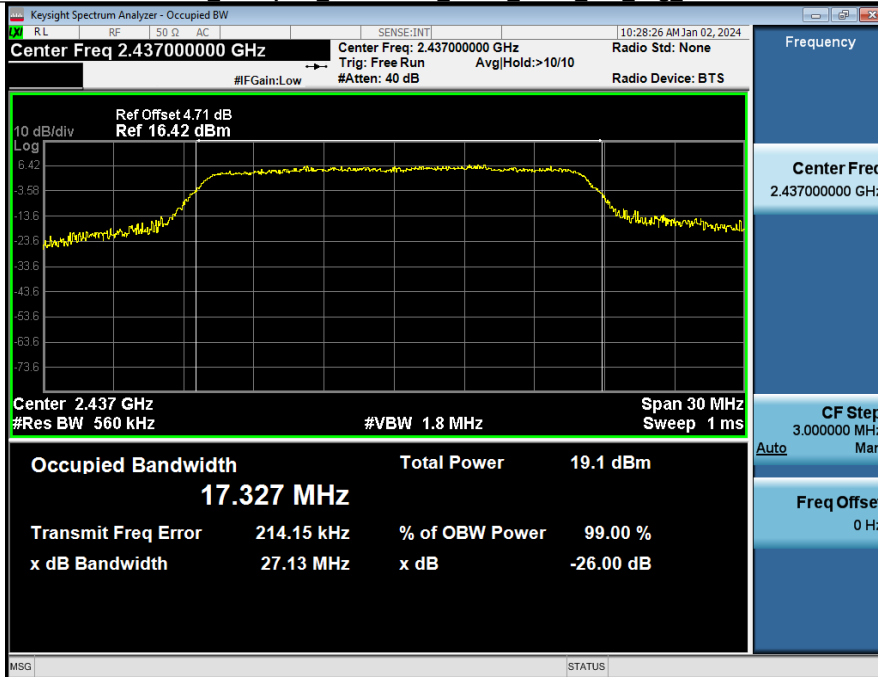
99% Occupied Bandwidth NVNT\_ANT1\_802\_11b\_2462



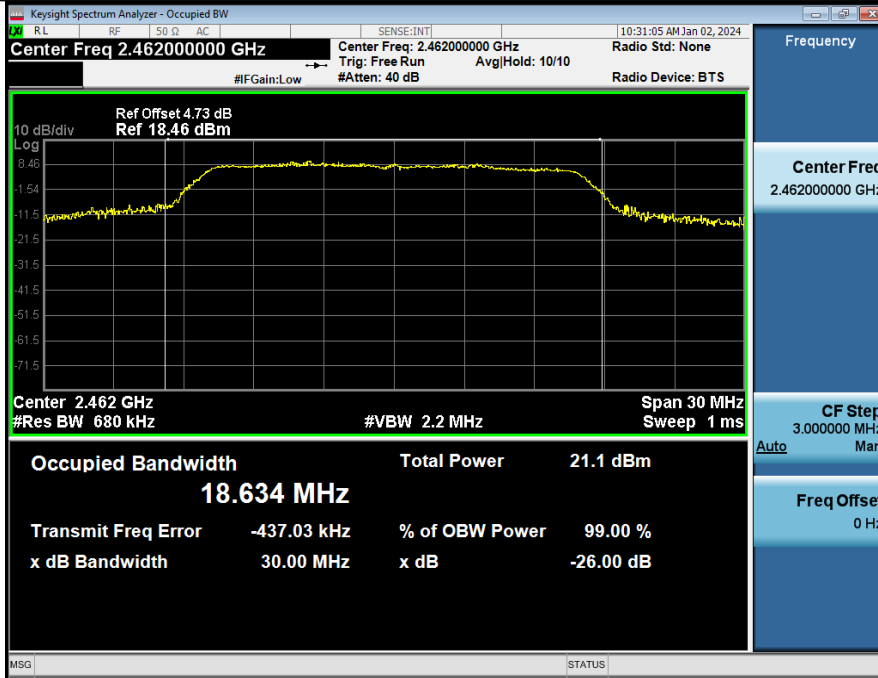
99% Occupied Bandwidth NVNT\_ANT1\_802\_11g\_2412



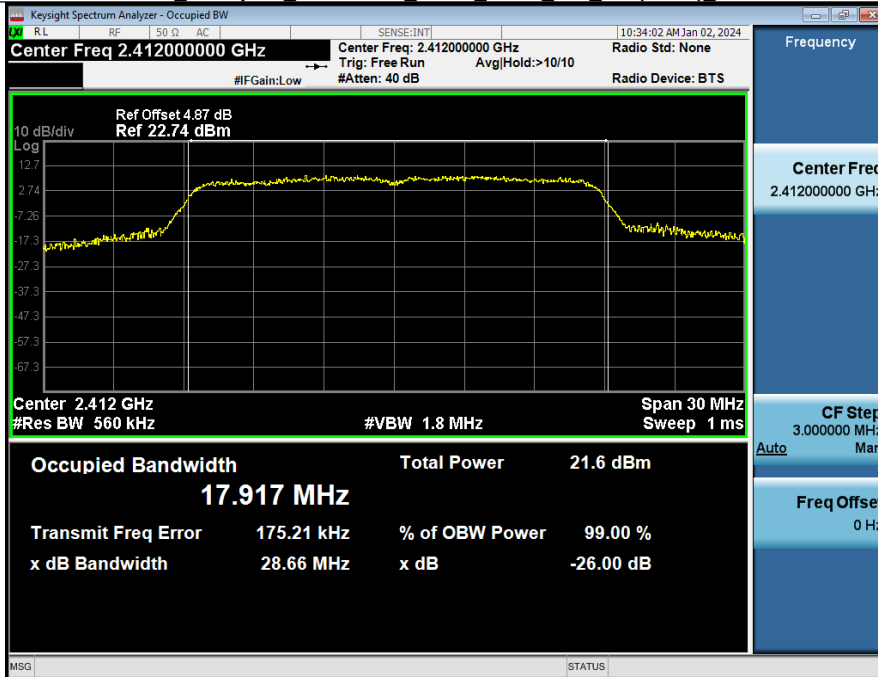
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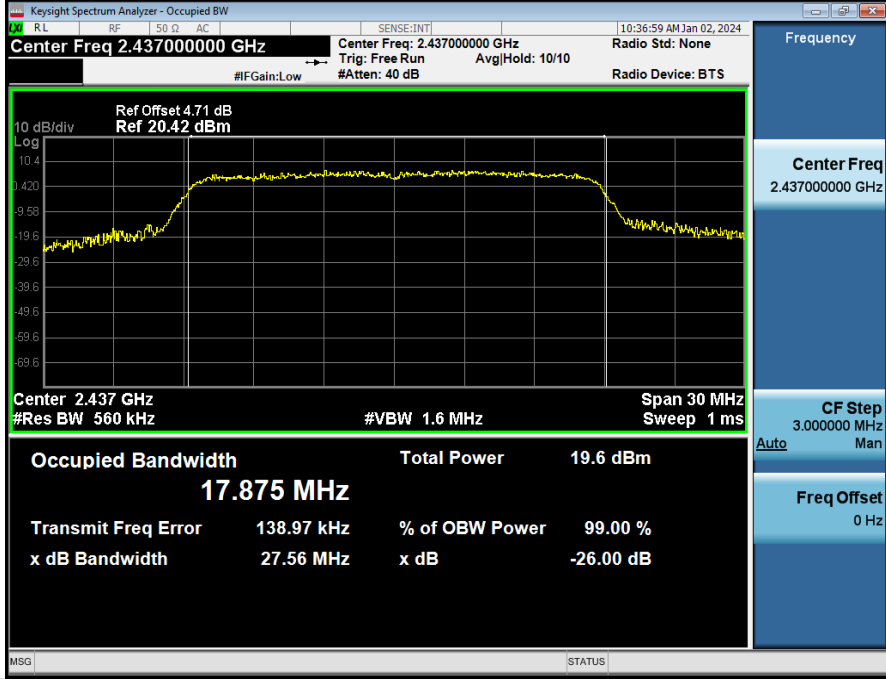
99% Occupied Bandwidth NVNT\_ANT1\_802\_11g\_2462



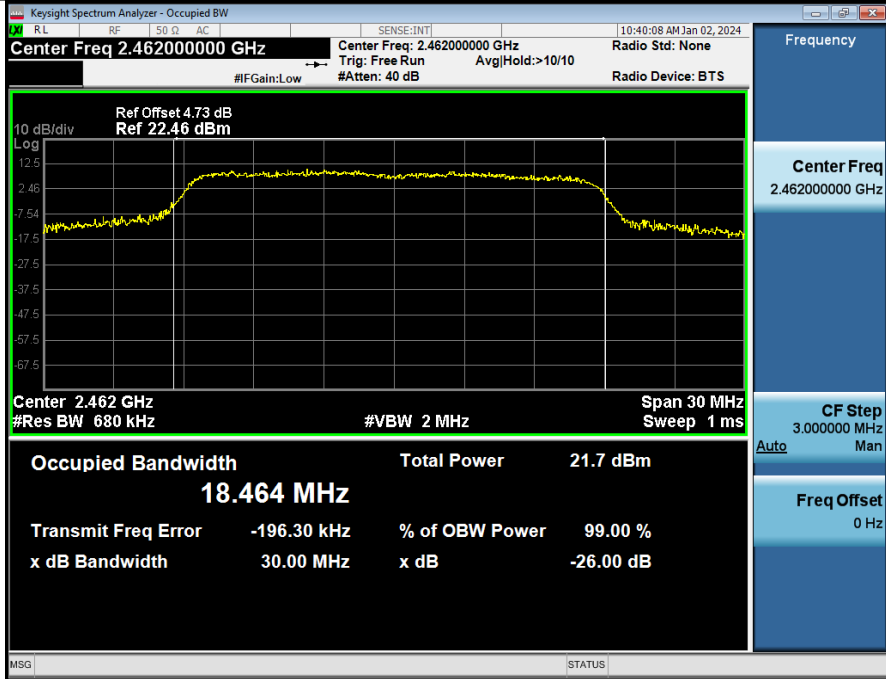
99% Occupied Bandwidth NVNT\_ANT1\_802\_11n(HT20)\_2412



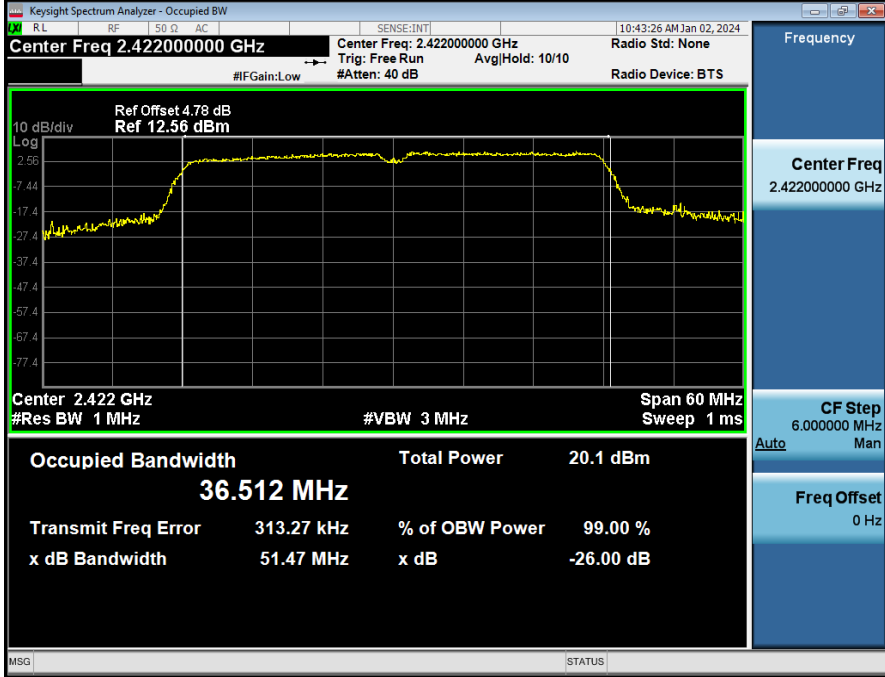
99% Occupied Bandwidth NVNT\_ANT1\_802\_11n(HT20)\_2437



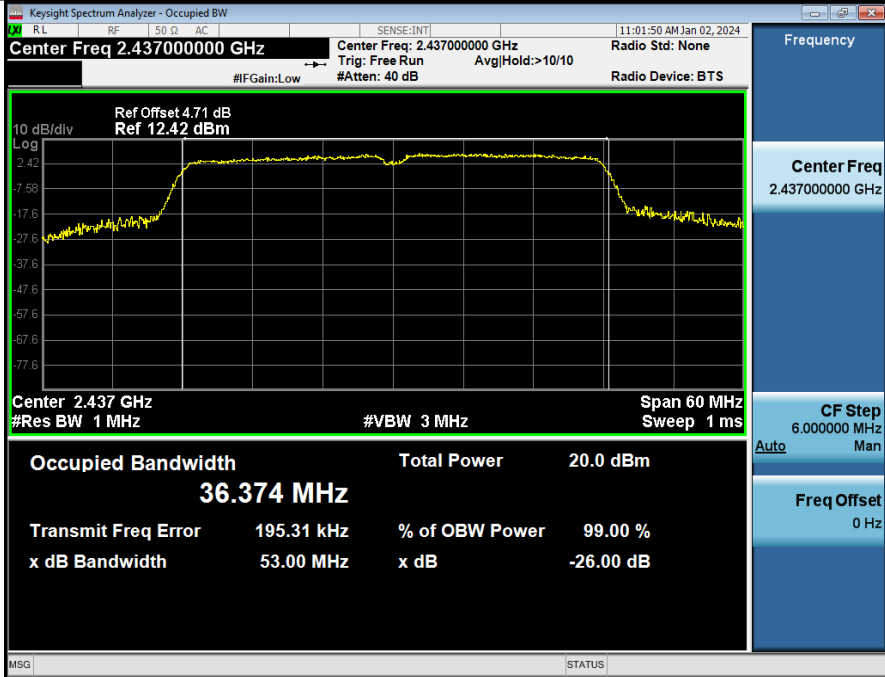
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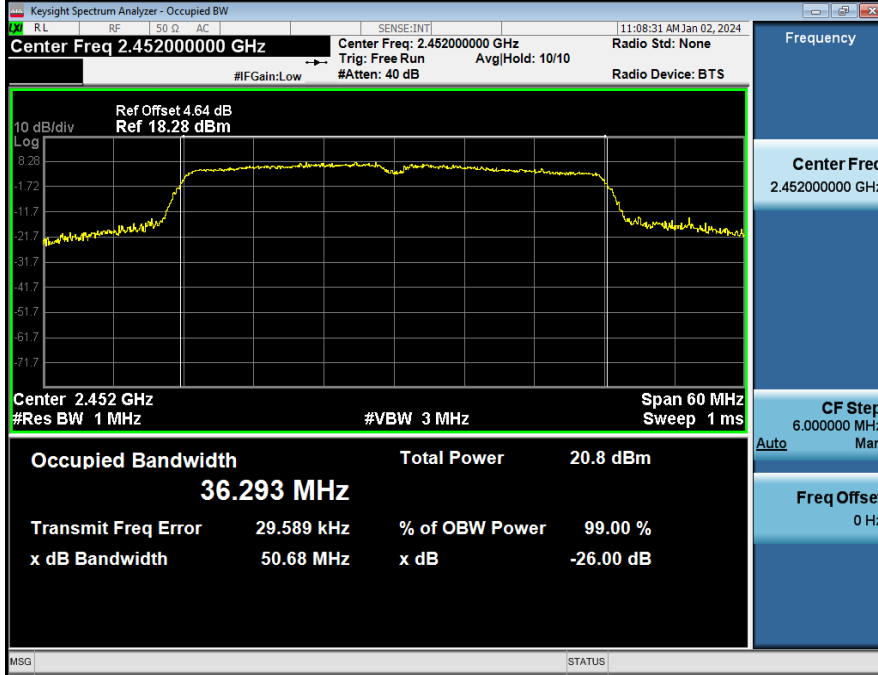
99% Occupied Bandwidth NVNT\_ANT1\_802\_11n(HT40)\_2422



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

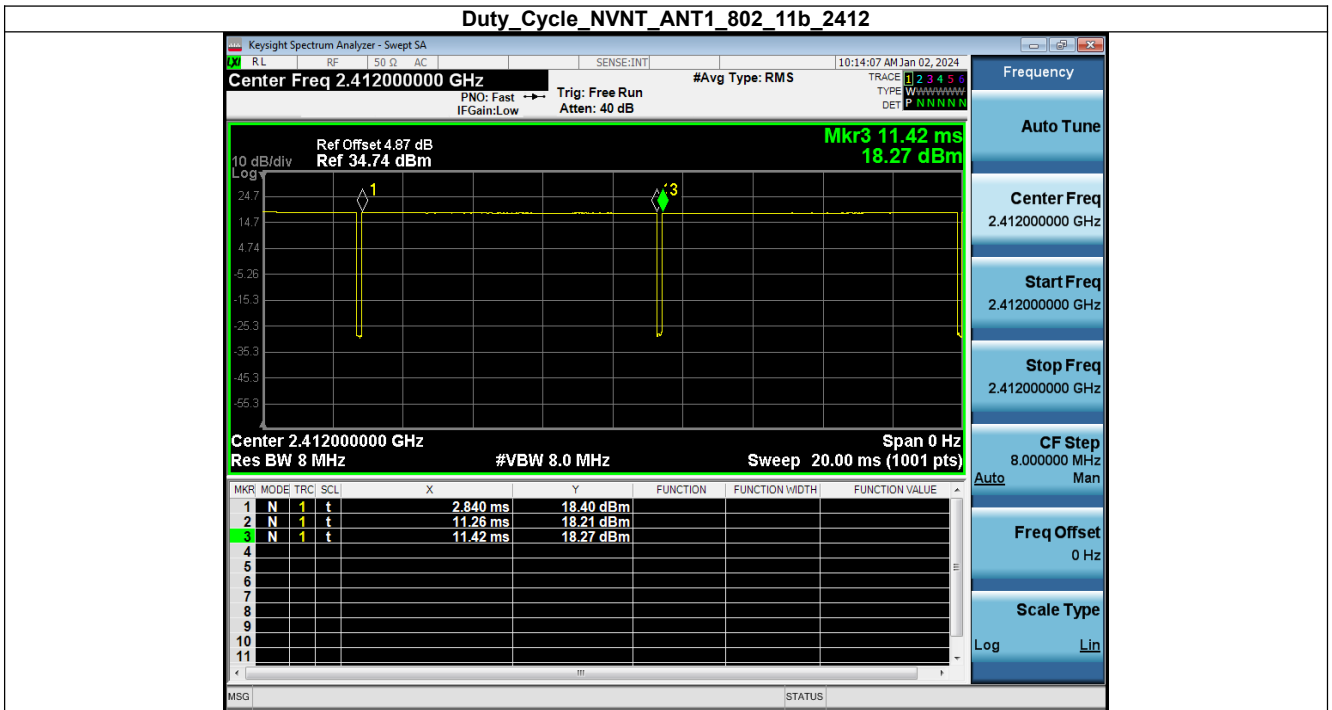


99% Occupied Bandwidth\_NVNT\_ANT1\_802\_11n(HT40)\_2452



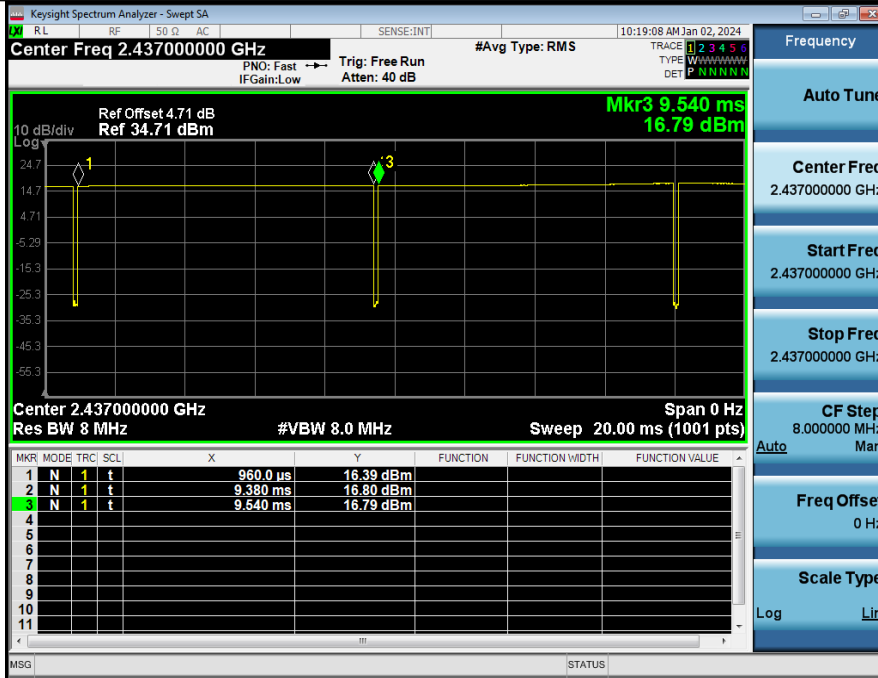
### 3. Duty Cycle

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	83.78	0.77

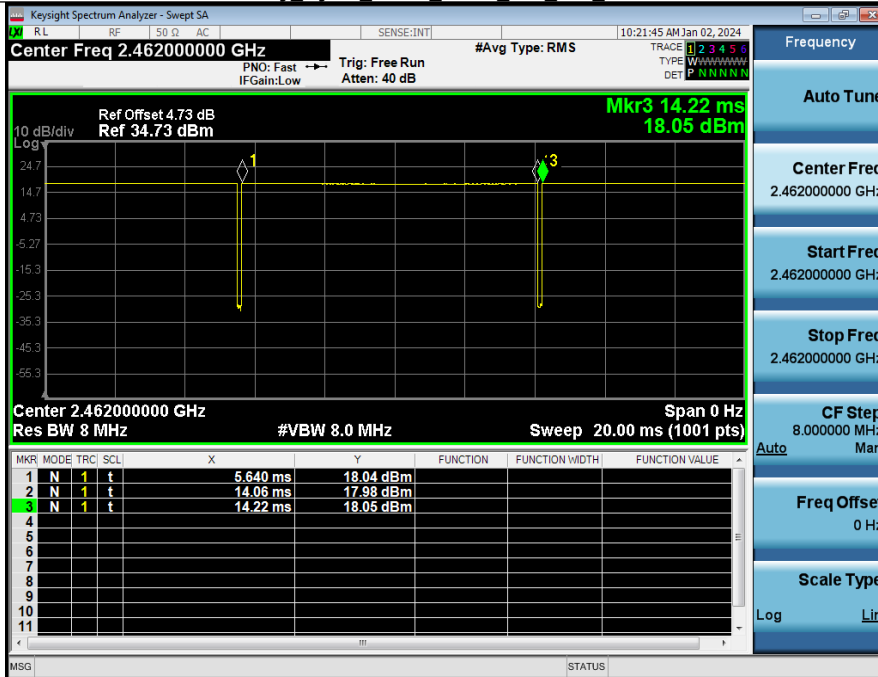




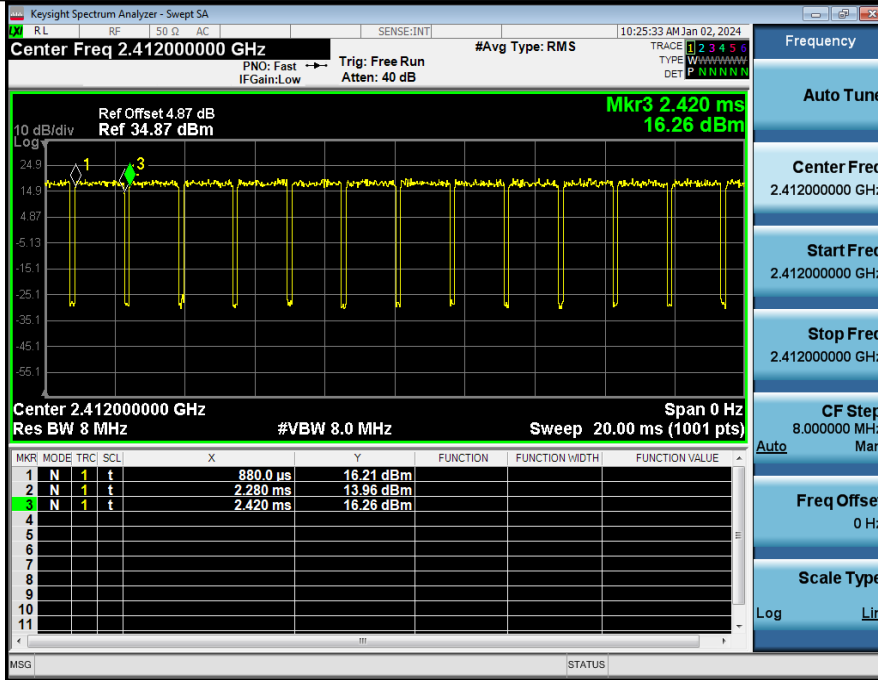
### Duty Cycle NVNT ANT1\_802\_11b\_2437



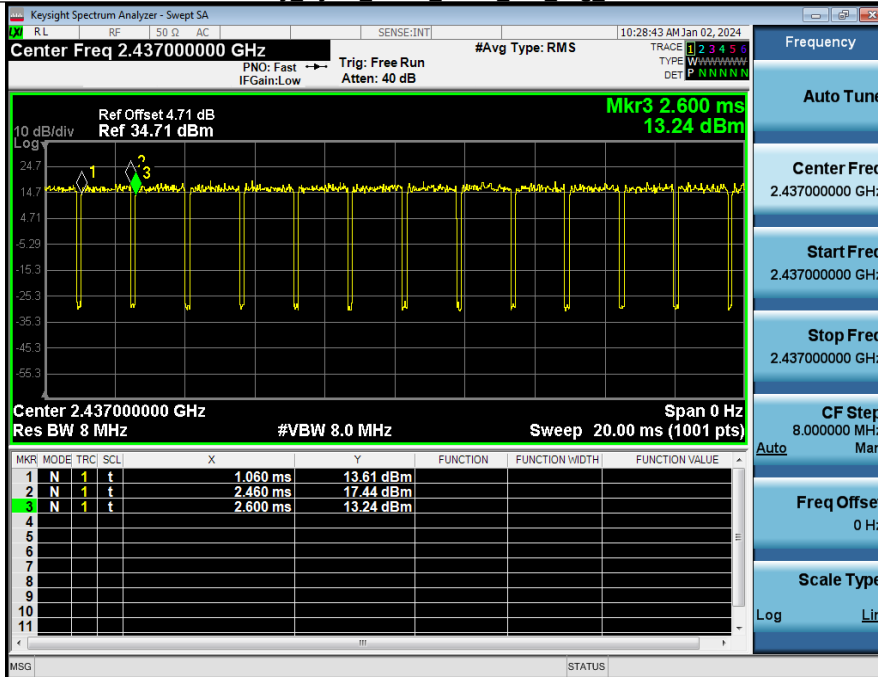
### Duty Cycle NVNT ANT1\_802\_11b\_2462



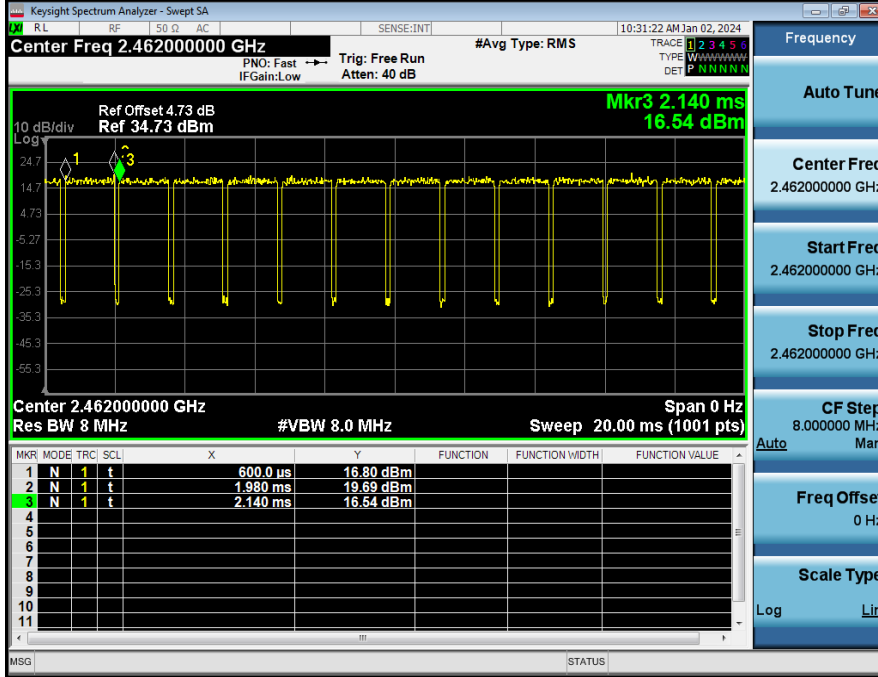
### Duty Cycle NVNT ANT1\_802\_11g\_2412



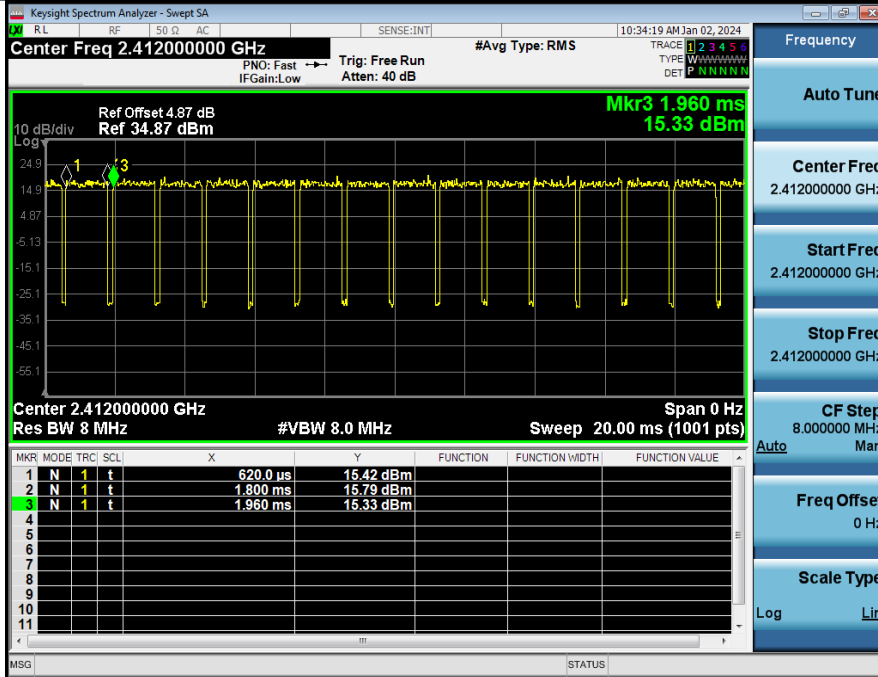
### Duty Cycle NVNT ANT1\_802\_11g\_2437



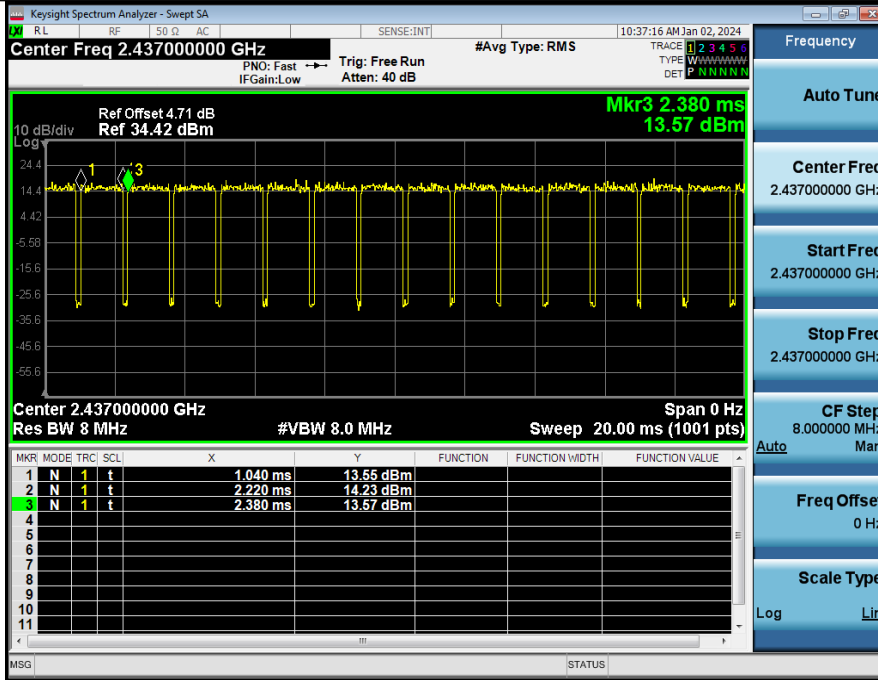
Duty Cycle NVNT\_ANT1\_802\_11g\_2462



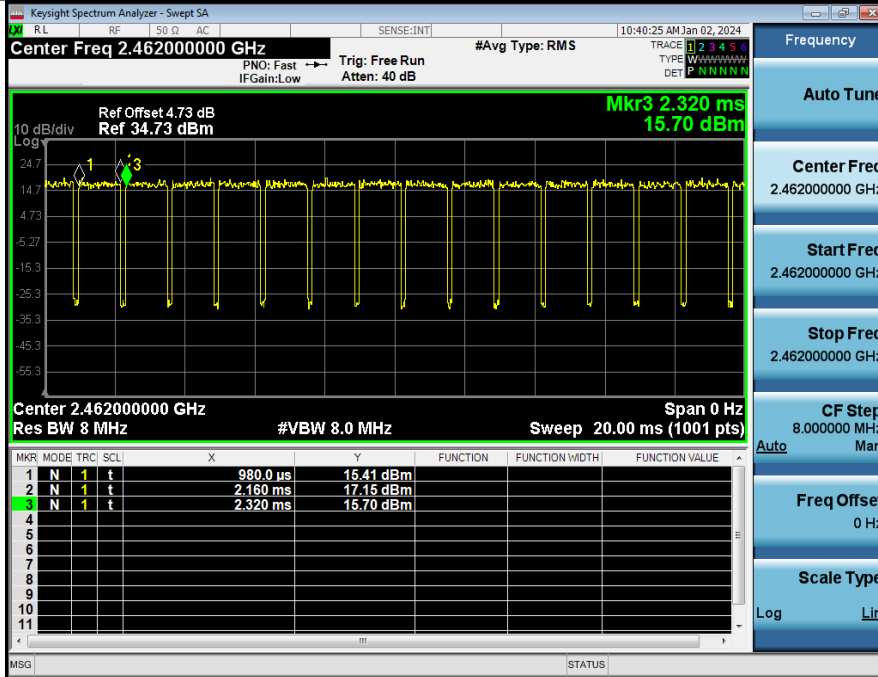
Duty Cycle NVNT\_ANT1\_802\_11n(HT20)\_2412



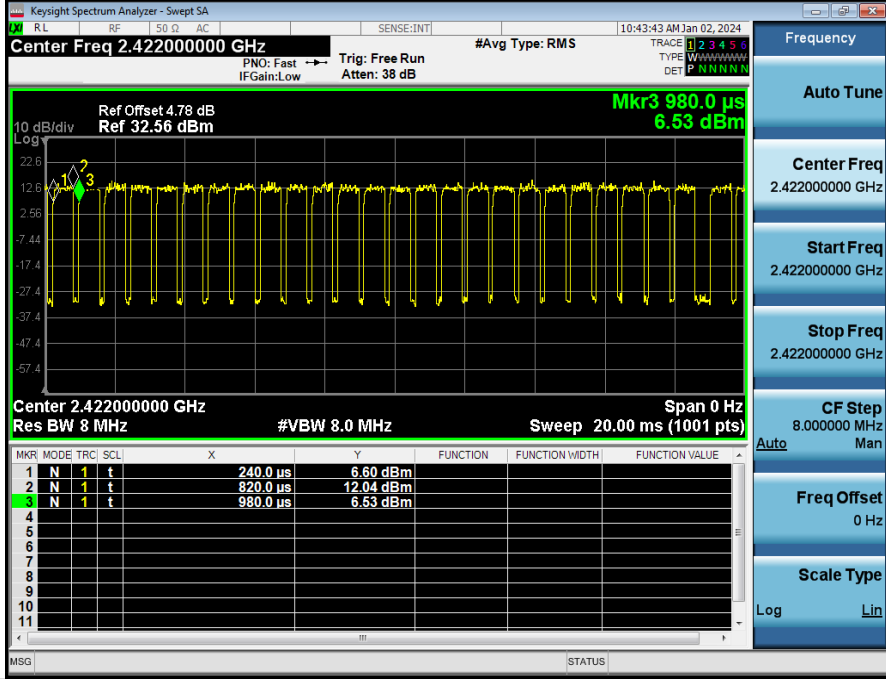
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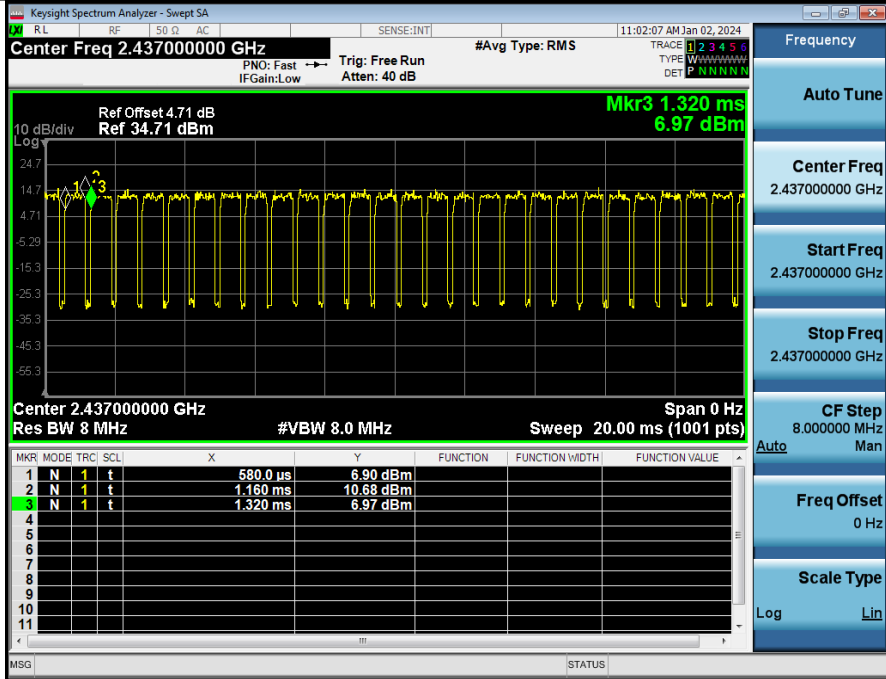
### Duty Cycle NVNT\_ANT1\_802\_11n(HT20)\_2462



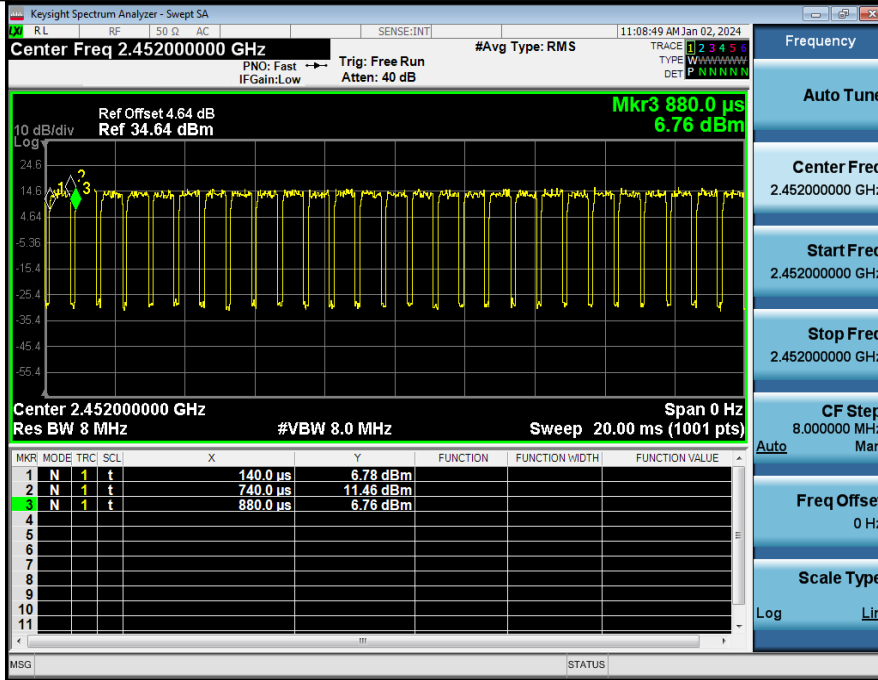
Duty Cycle NVNT\_ANT1\_802\_11n(HT40)\_2422



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	3.76	-10.00	-6.24	8	Pass
NVNT	ANT1	802.11b	2437.00	-0.01	-10.00	-10.01	8	Pass
NVNT	ANT1	802.11b	2462.00	1.76	-10.00	-8.24	8	Pass
NVNT	ANT1	802.11g	2412.00	-1.34	-10.00	-11.34	8	Pass
NVNT	ANT1	802.11g	2437.00	-2.73	-10.00	-12.73	8	Pass
NVNT	ANT1	802.11g	2462.00	-1.97	-10.00	-11.97	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-2.35	-10.00	-12.36	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-3.56	-10.00	-13.56	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-2.35	-10.00	-12.35	8	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	-7.80	-10.00	-17.80	8	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	-7.53	-10.00	-17.53	8	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	-6.15	-10.00	-16.15	8	Pass



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

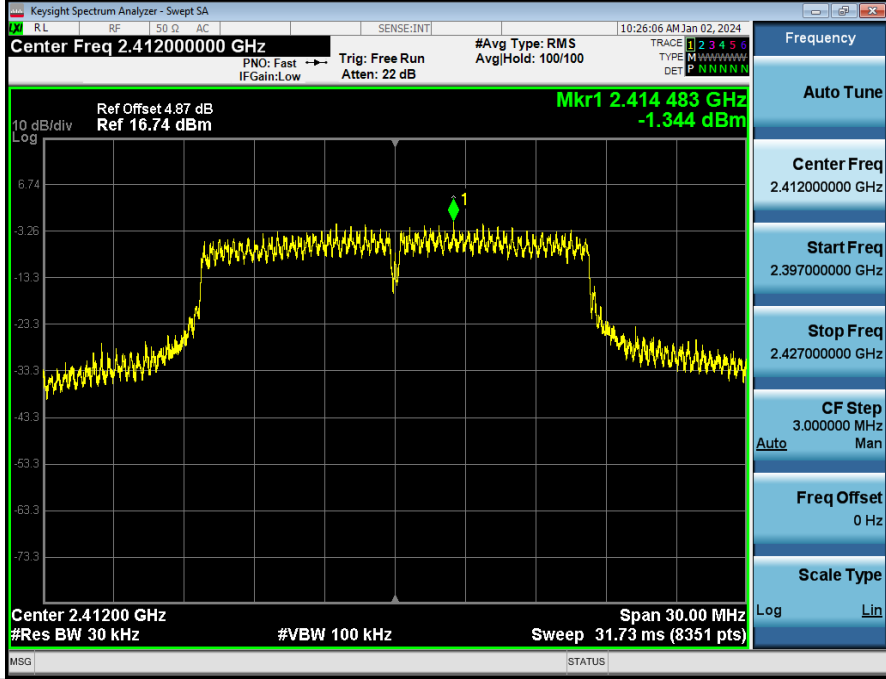


Power Spectral Density NVNT\_ANT1\_802\_11b\_2462

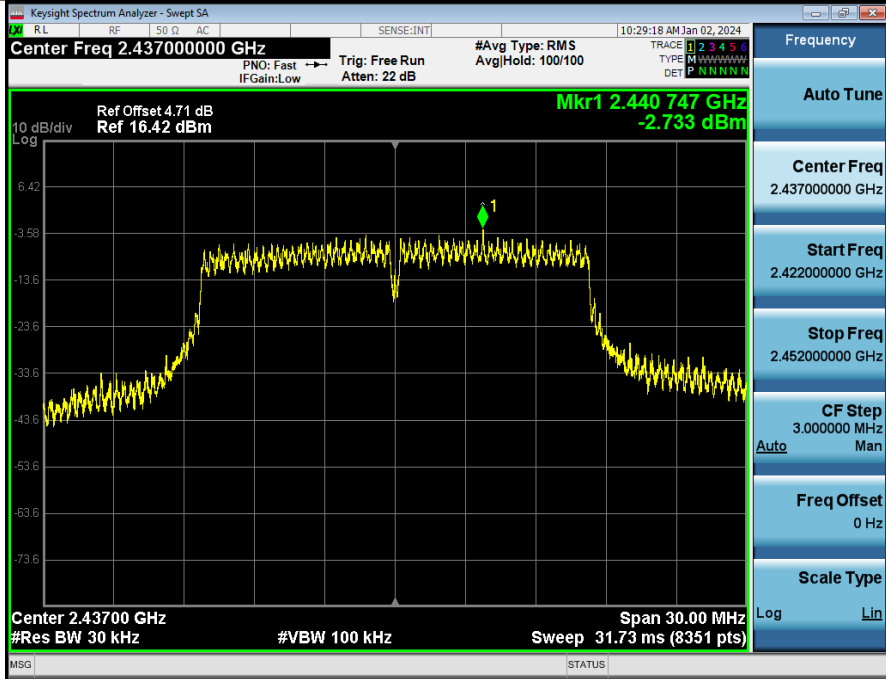




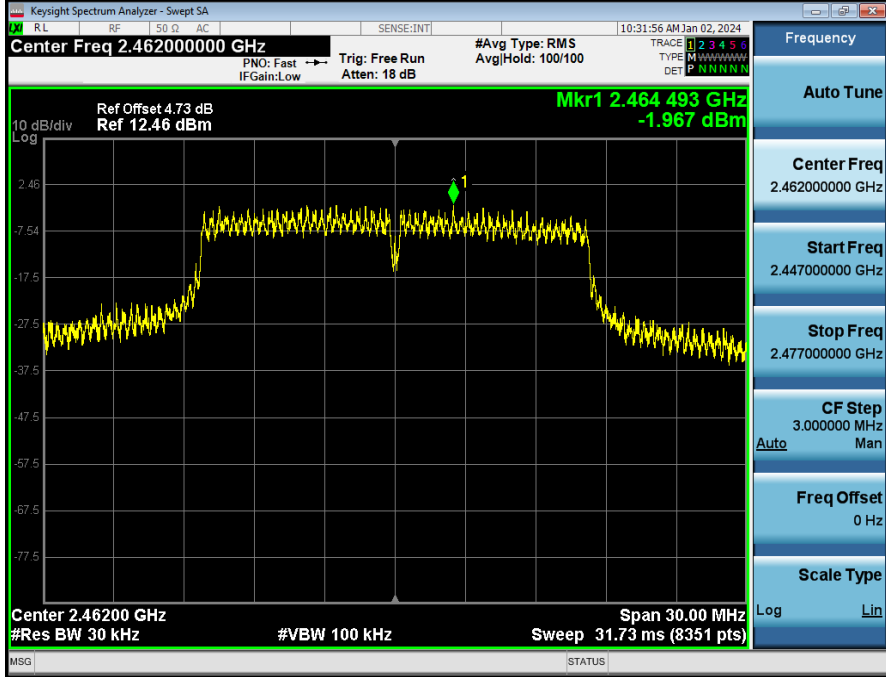
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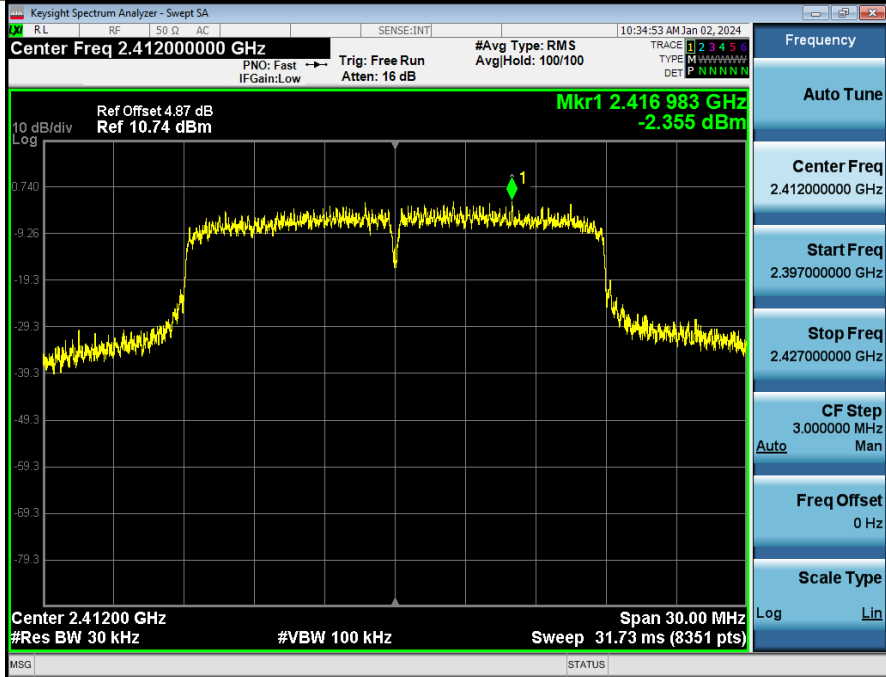
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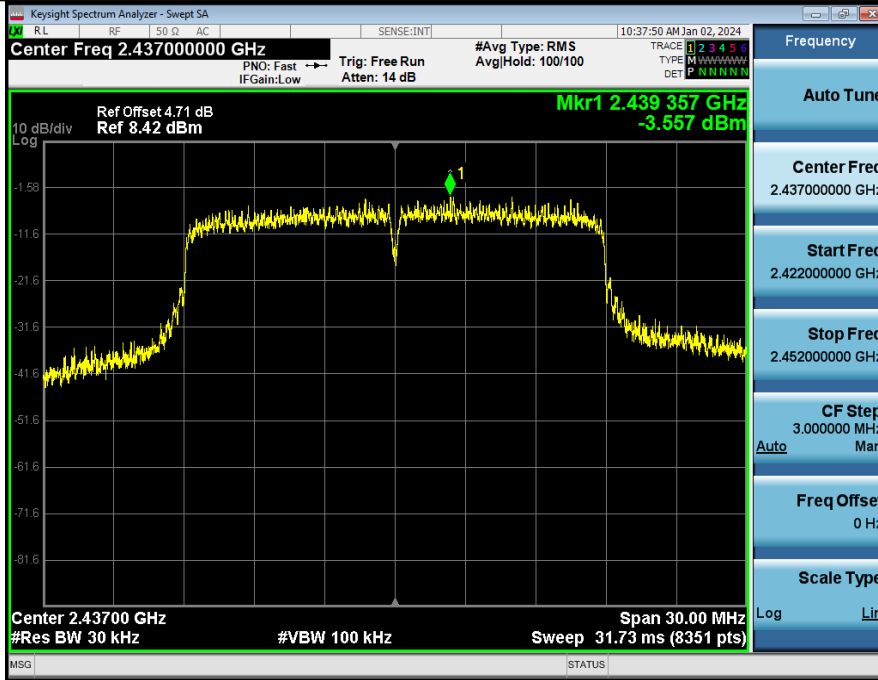
Power Spectral Density NVNT\_ANT1\_802\_11g\_2462



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



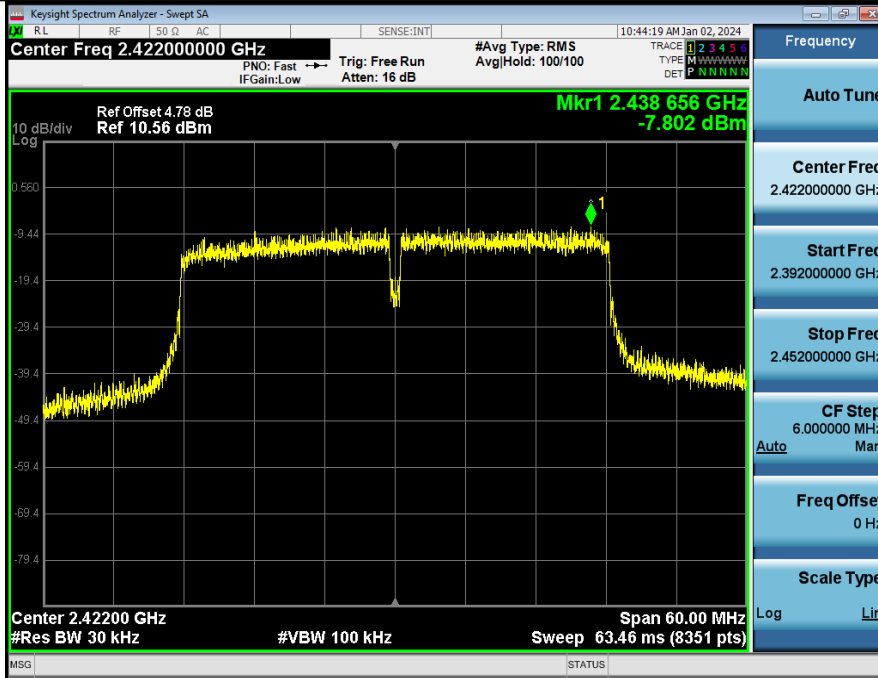
Power Spectral Density NVNT\_ANT1\_802\_11n(HT20)\_2437



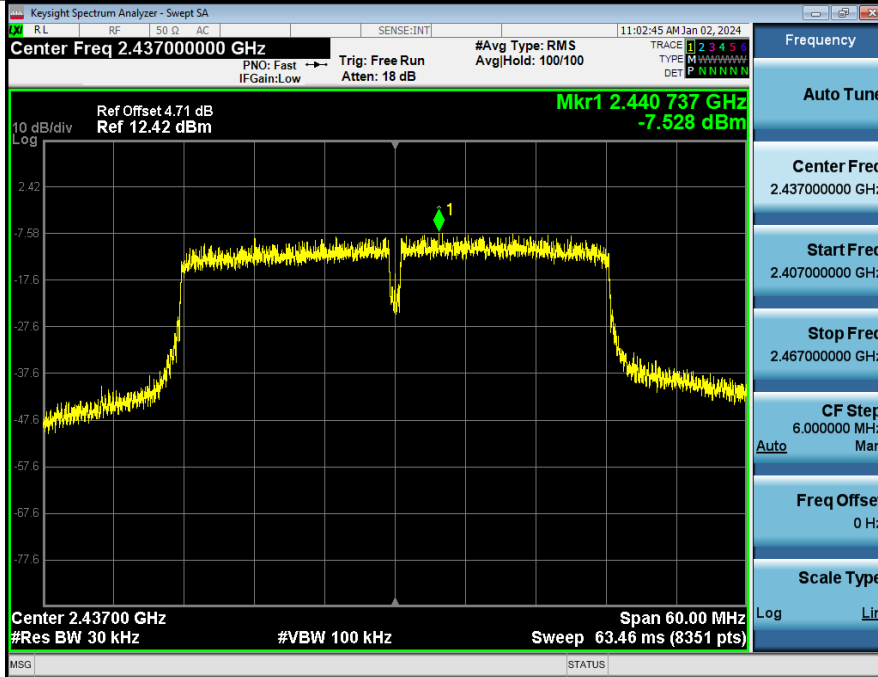
Power Spectral Density NVNT\_ANT1\_802\_11n(HT20)\_2462



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



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





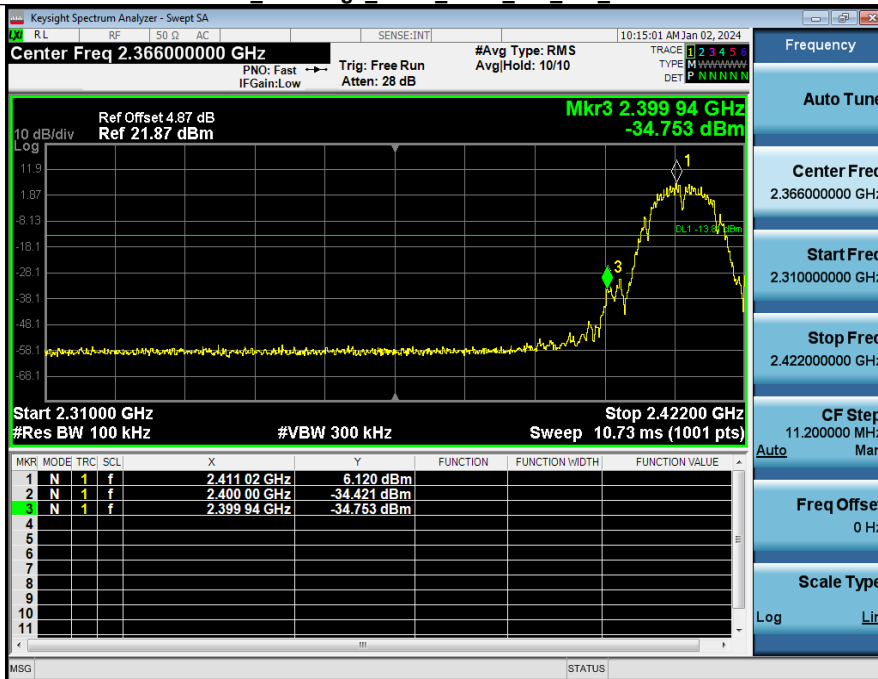
## 6. Bandedge

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	2399.936	-34.753	-13.808	Pass
NVNT	ANT1	802.11b	2462.00	2486.224	-55.592	-14.207	Pass
NVNT	ANT1	802.11g	2412.00	2399.152	-24.220	-16.956	Pass
NVNT	ANT1	802.11g	2462.00	2483.680	-36.013	-16.980	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2398.032	-26.009	-17.826	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2483.536	-33.943	-17.399	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	2399.496	-33.690	-22.594	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	2483.884	-33.337	-20.882	Pass

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



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



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



Frequency

Auto Tune

Center Freq  
2.46200000 GHz

Start Freq  
2.442000000 GHz

Stop Freq  
2.482000000 GHz

CF Step  
4.000000 MHz  
Auto Man

Freq Offset  
0 Hz

Scale Type  
Log Lin

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



Frequency

Auto Tune

Center Freq  
2.476000000 GHz

Start Freq  
2.452000000 GHz

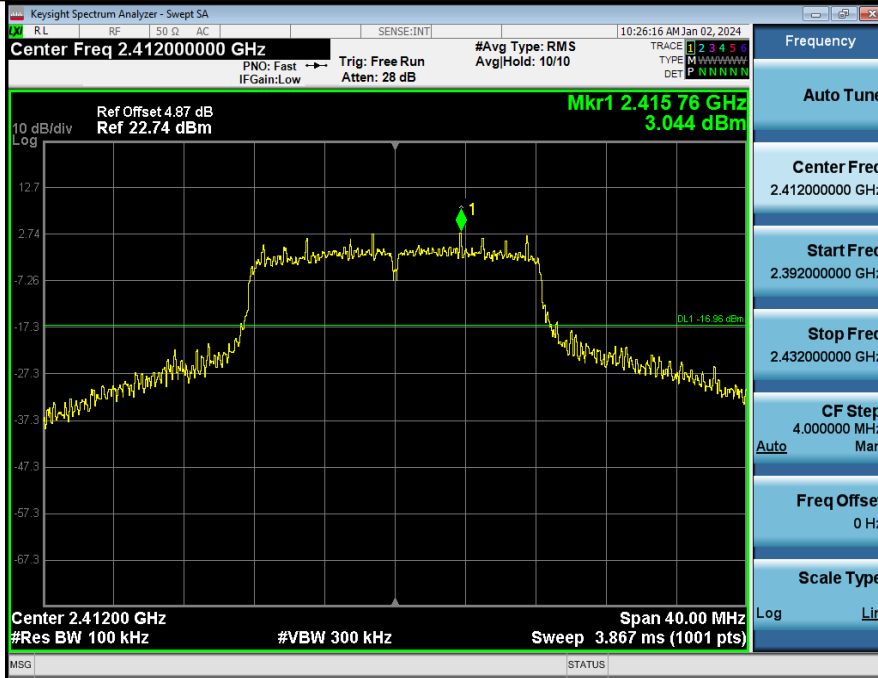
Stop Freq  
2.500000000 GHz

CF Step  
4.800000 MHz  
Auto Man

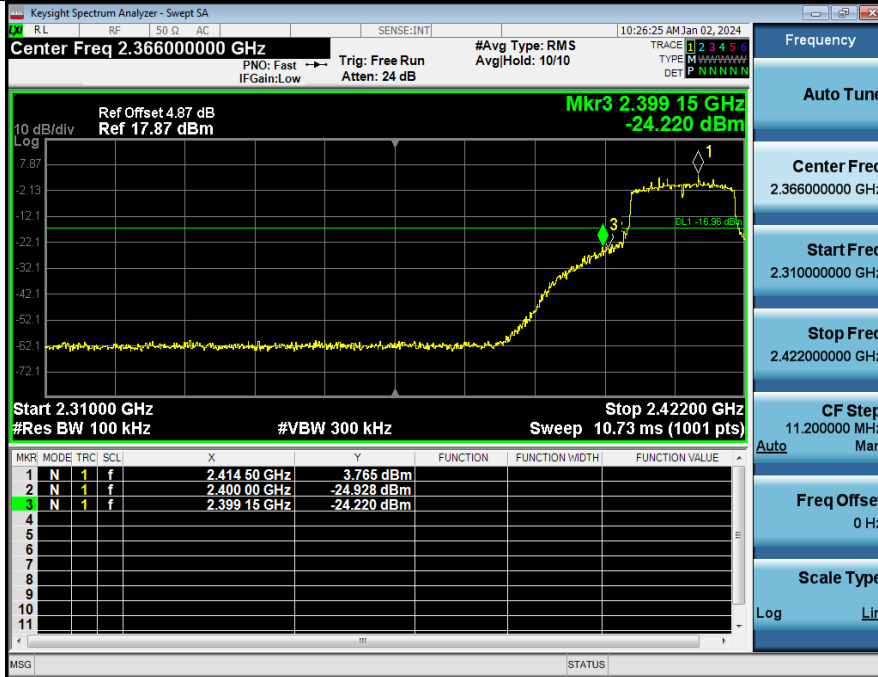
Freq Offset  
0 Hz

Scale Type  
Log Lin

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

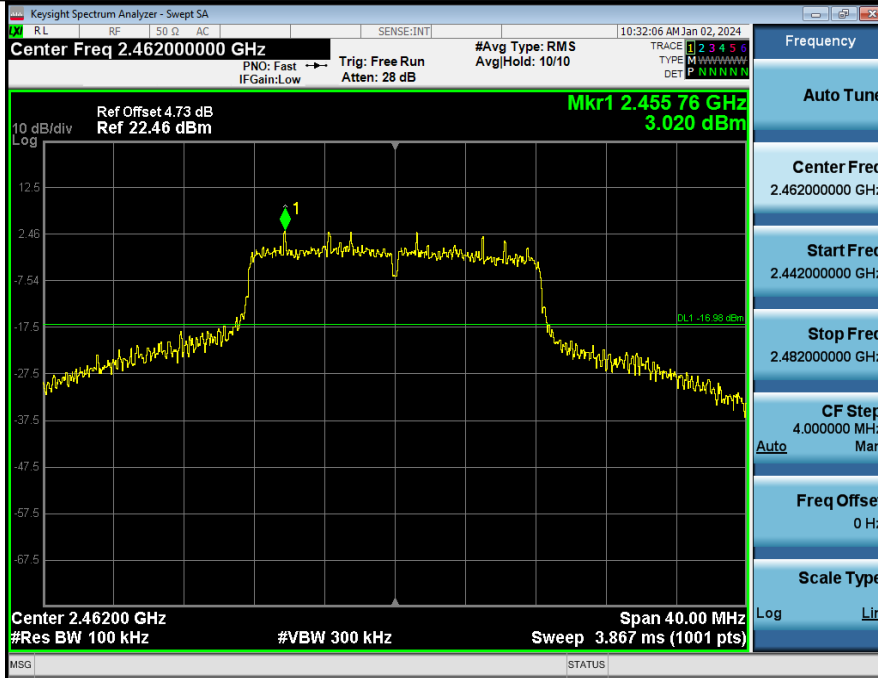


### 2 Bandedge NVNT\_ANT1\_802\_11g\_2412





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



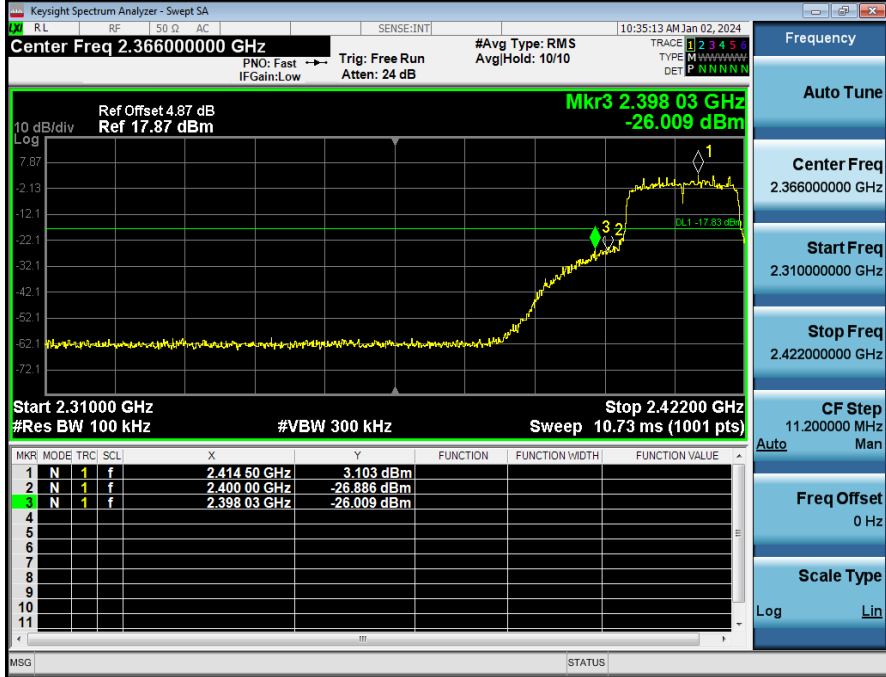
### 2 Bandedge NVNT\_ANT1\_802\_11g\_2462



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



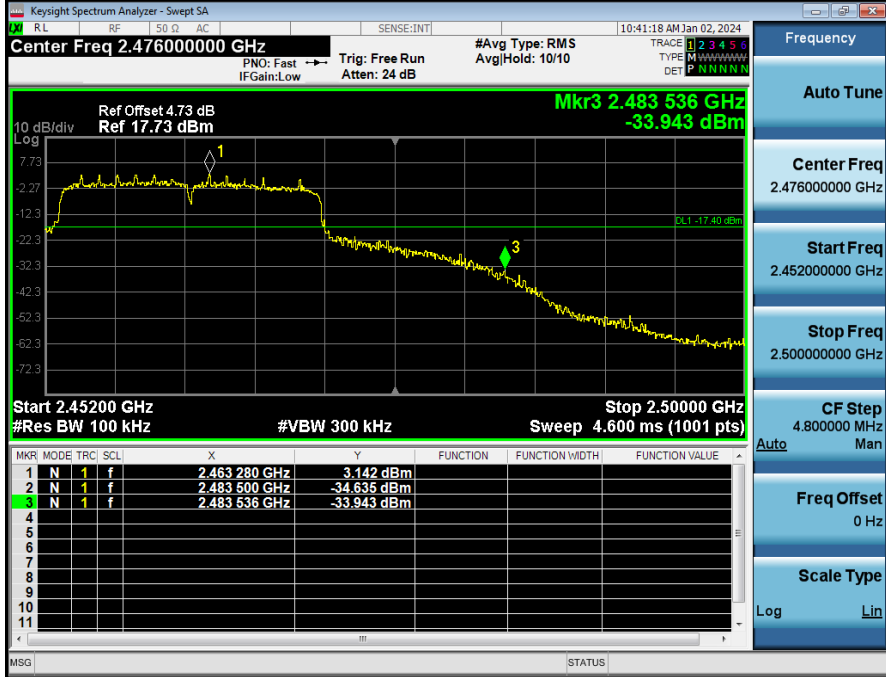
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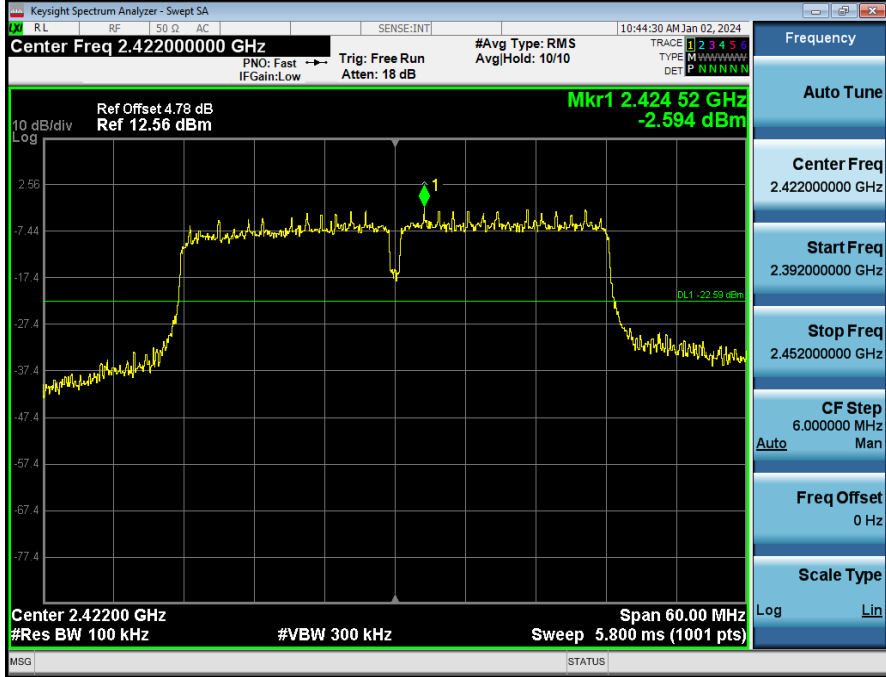
1 Reference Level\_NVNT\_ANT1\_802\_11n(HT20)\_2462



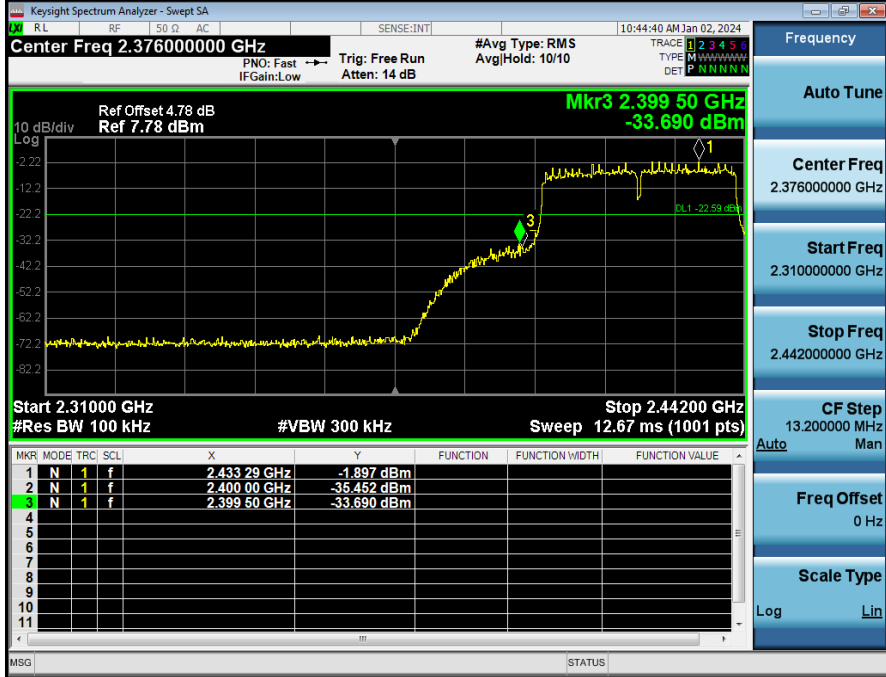
2 Bandedge\_NVNT\_ANT1\_802\_11n(HT20)\_2462



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

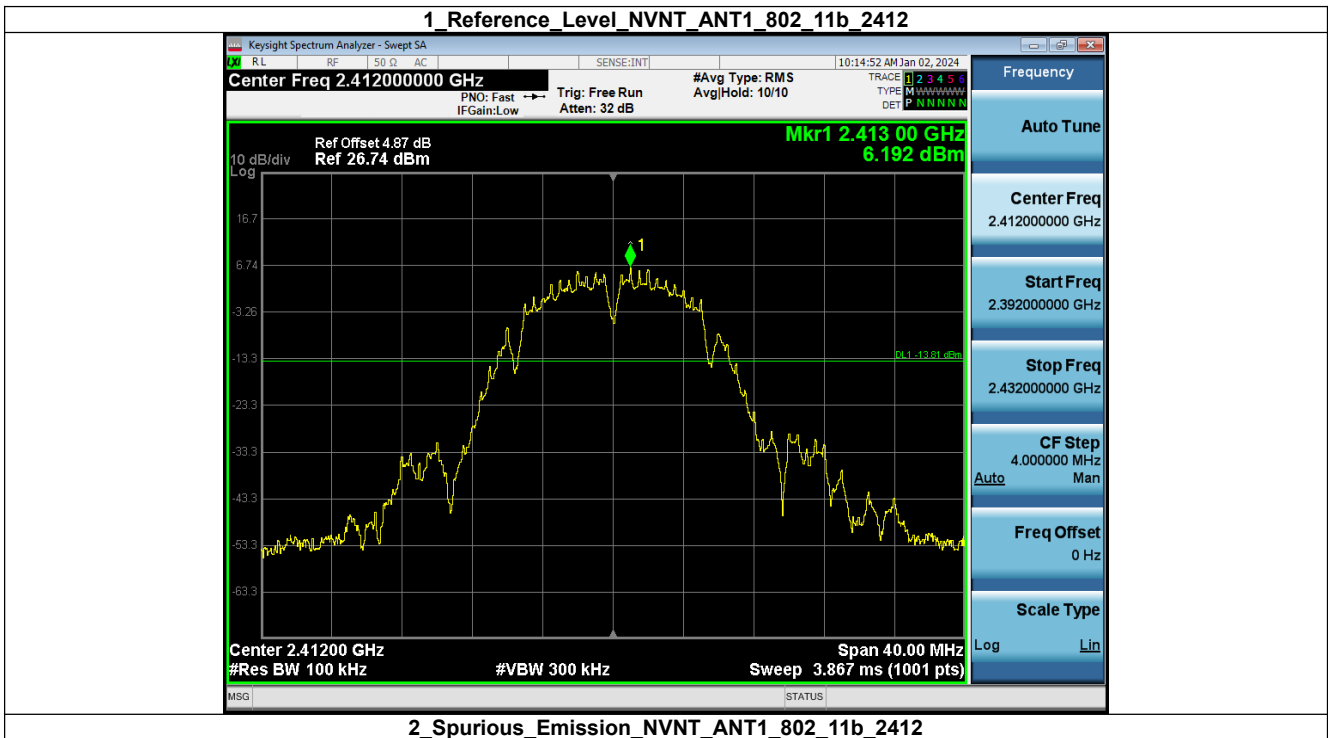


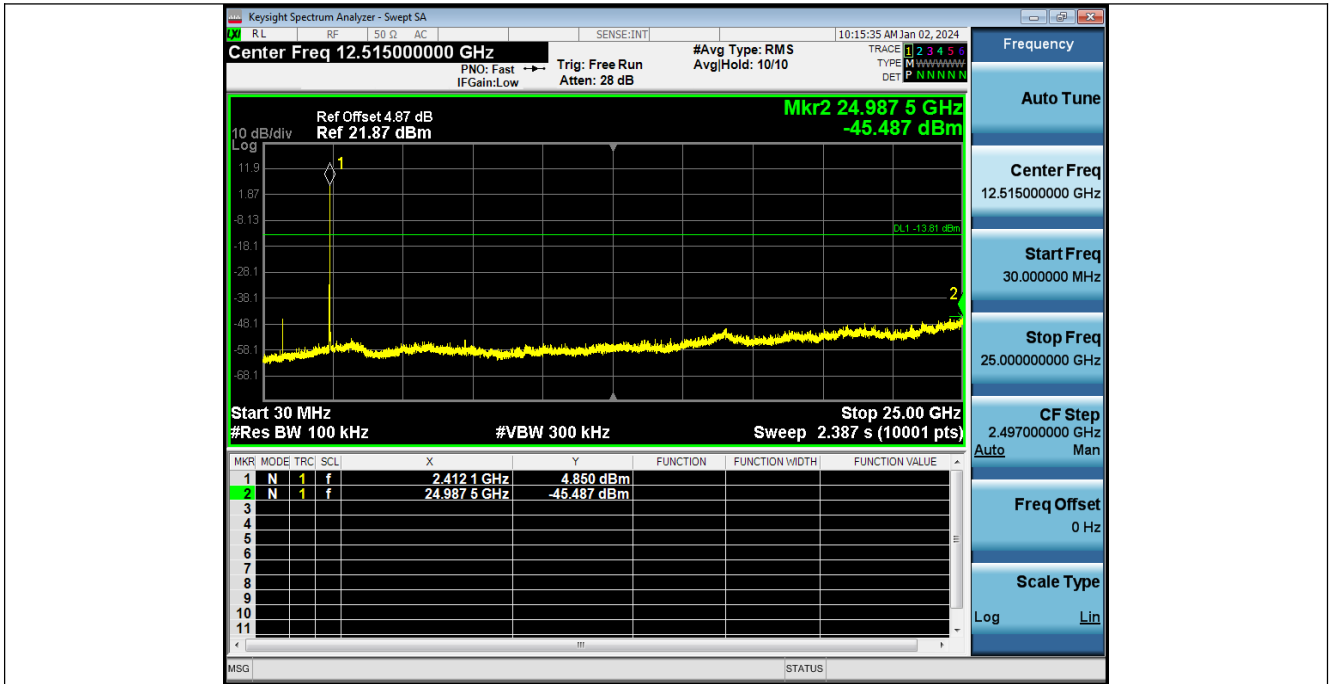
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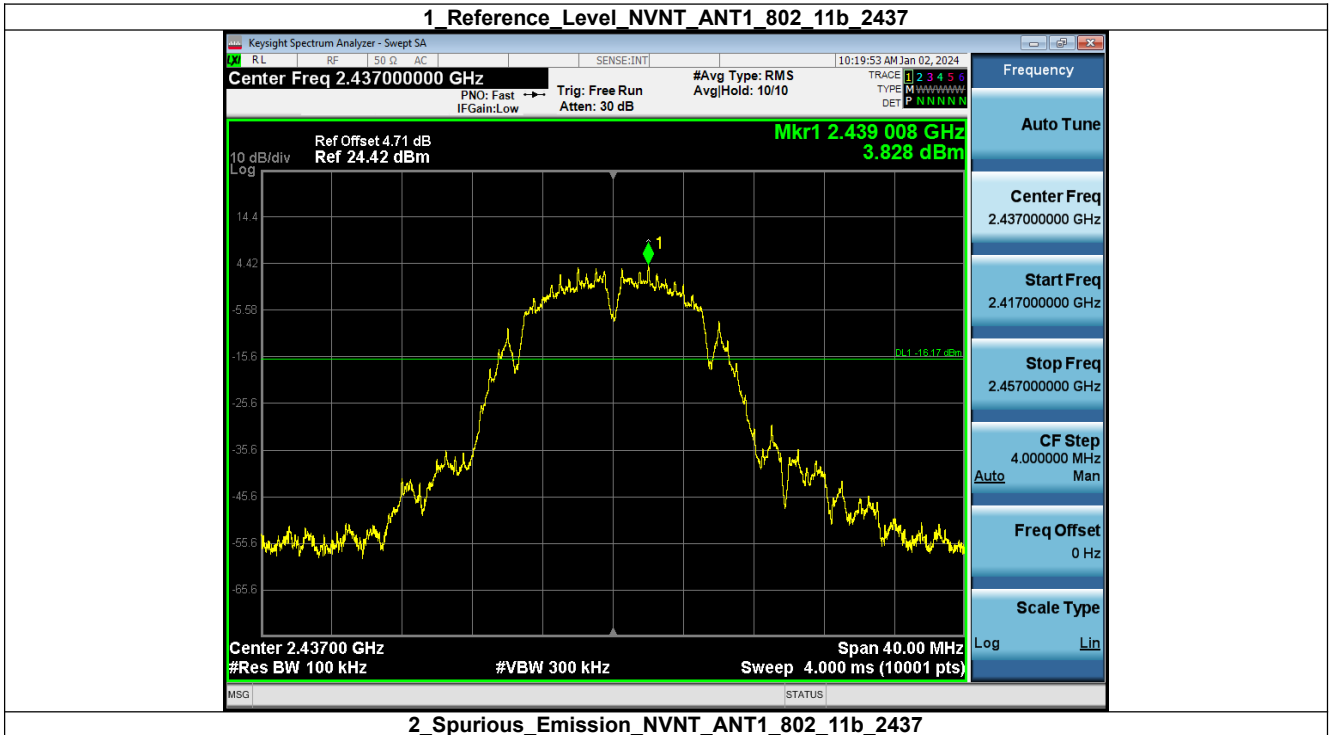
# 7. Spurious Emission

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	24987.515	-45.487	-13.808	Pass
NVNT	ANT1	802.11b	2437.00	2576.940	-47.441	-16.172	Pass
NVNT	ANT1	802.11b	2462.00	24955.054	-48.291	-14.207	Pass
NVNT	ANT1	802.11g	2412.00	726.663	-35.963	-16.956	Pass
NVNT	ANT1	802.11g	2437.00	704.190	-33.676	-19.402	Pass
NVNT	ANT1	802.11g	2462.00	24952.557	-49.383	-16.980	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	724.166	-43.861	-17.826	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	24960.048	-52.638	-19.980	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	24972.533	-49.297	-17.399	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	2674.323	-41.590	-22.594	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	24982.521	-59.873	-22.570	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	24960.048	-55.087	-20.882	Pass

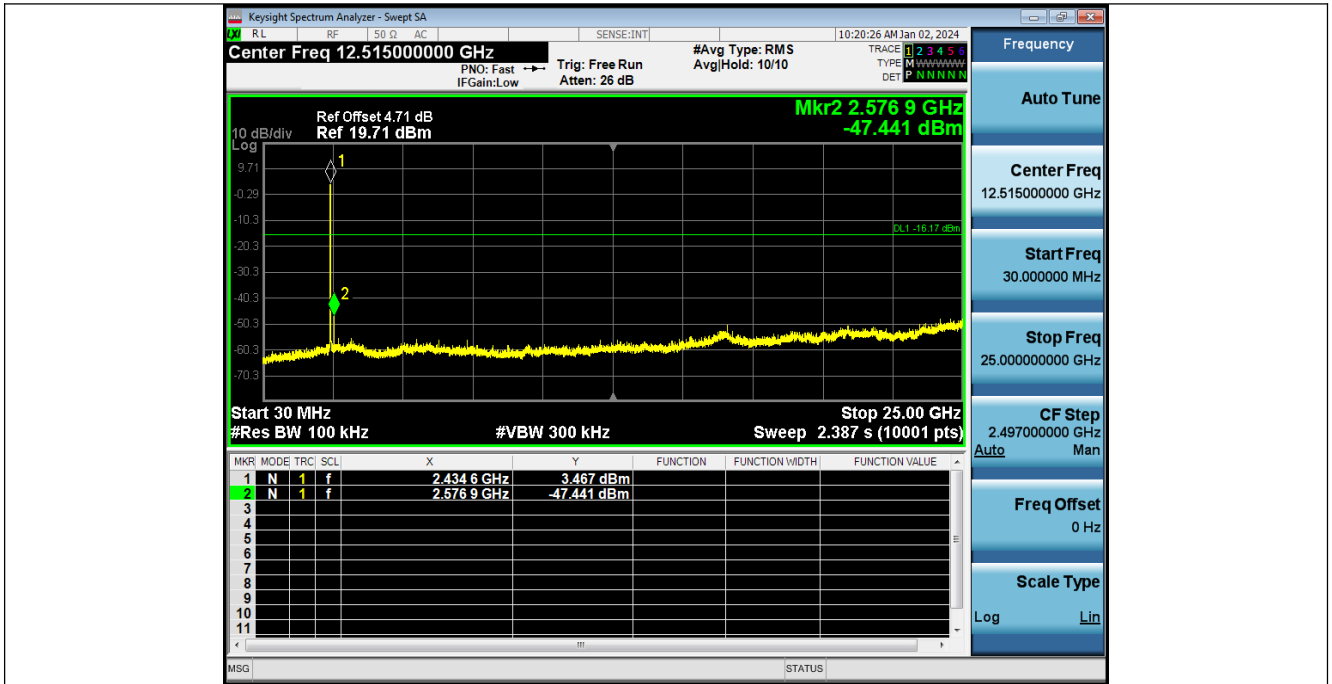




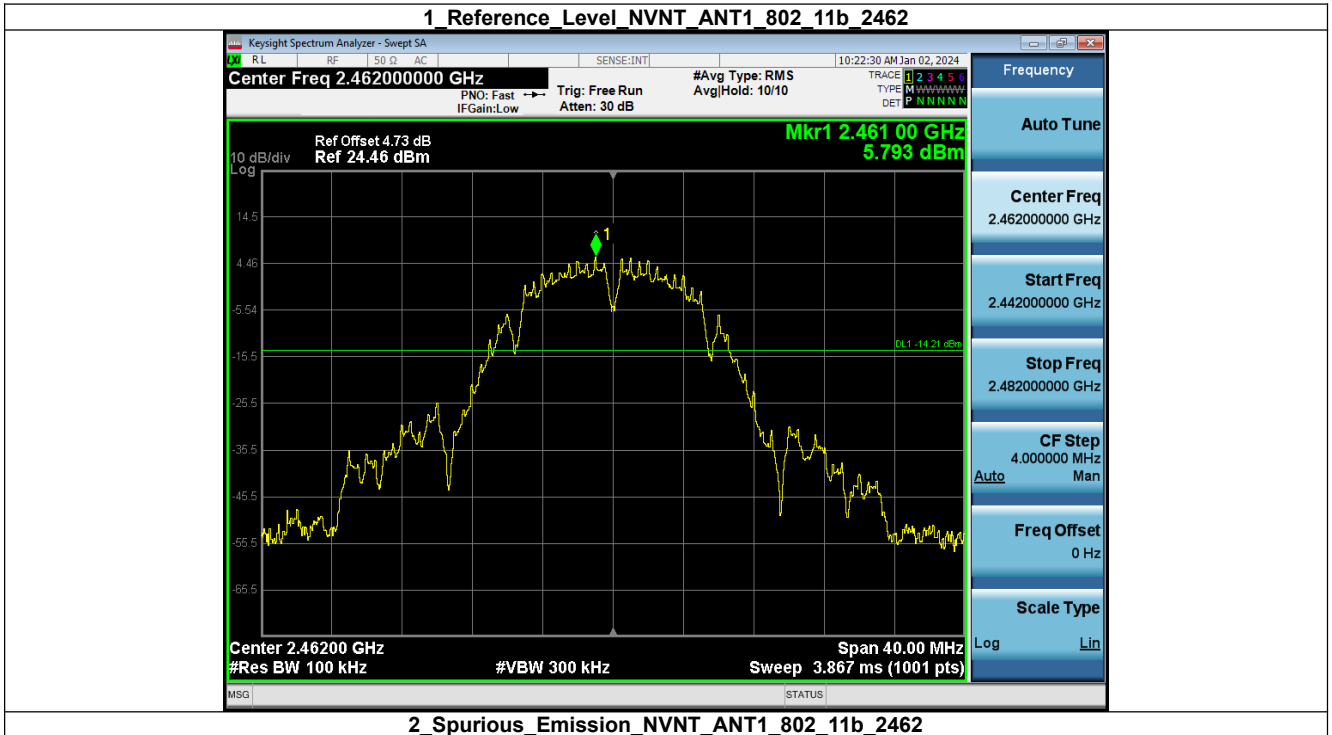
1 Reference Level NVNT\_ANT1\_802\_11b\_2437



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

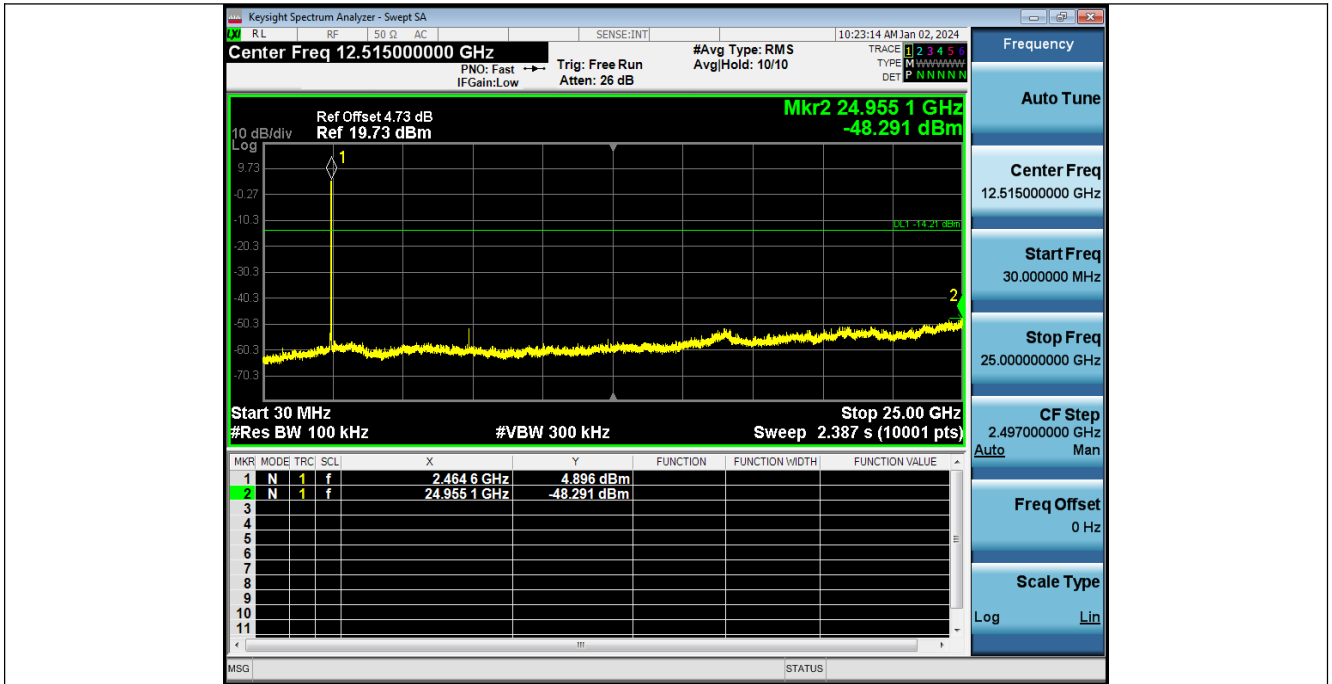


1 Reference Level NVNT\_ANT1\_802\_11b\_2462

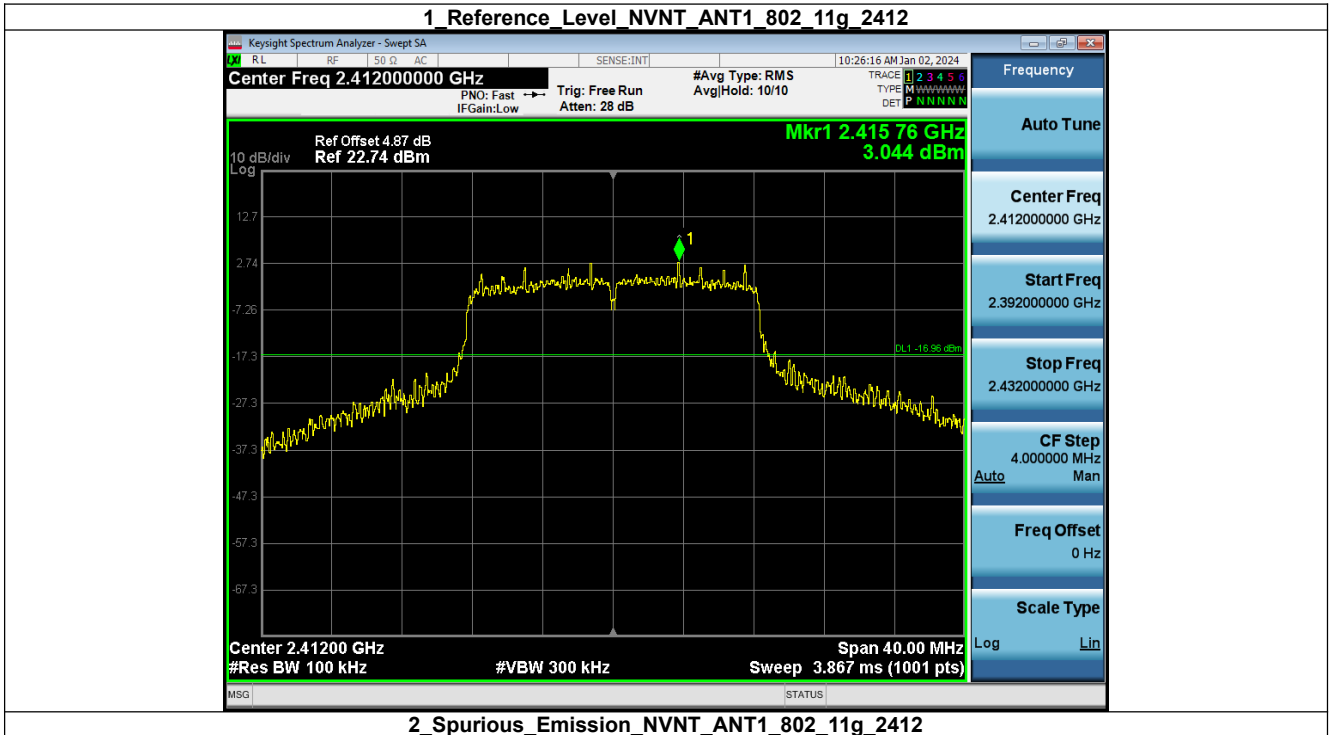


2 Spurious Emission\_NVNT\_ANT1\_802\_11b\_2462

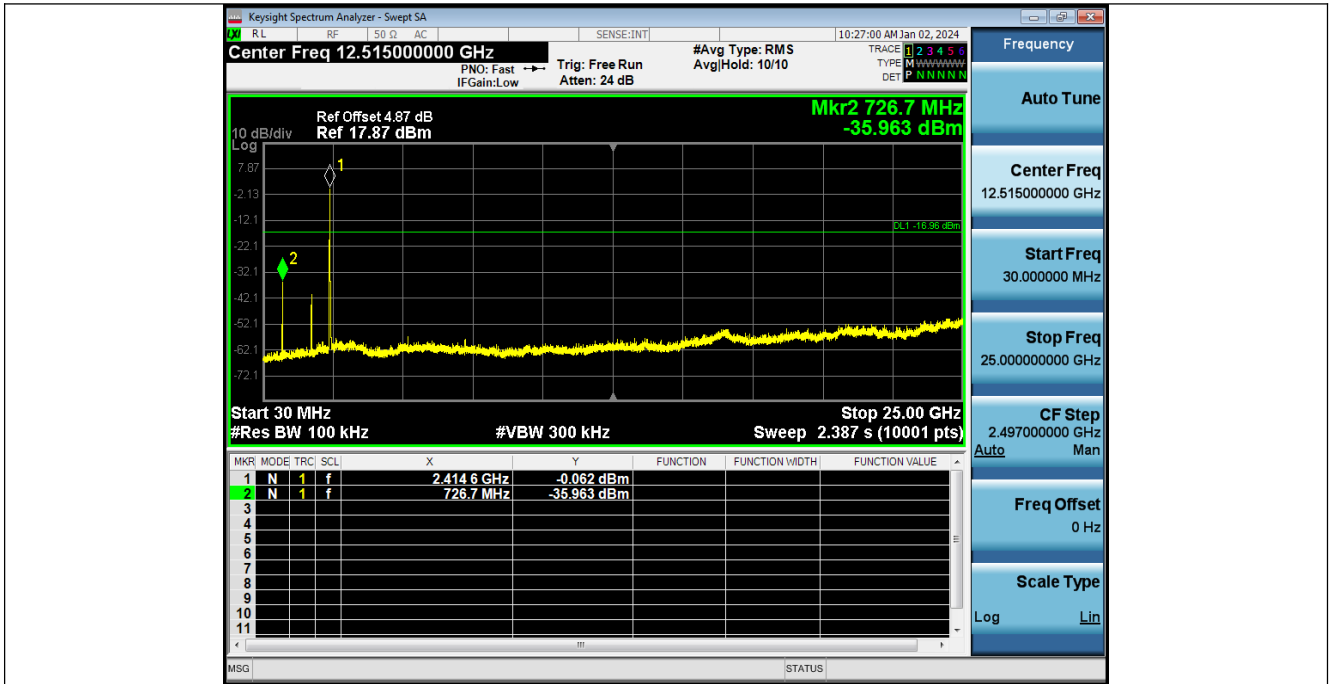




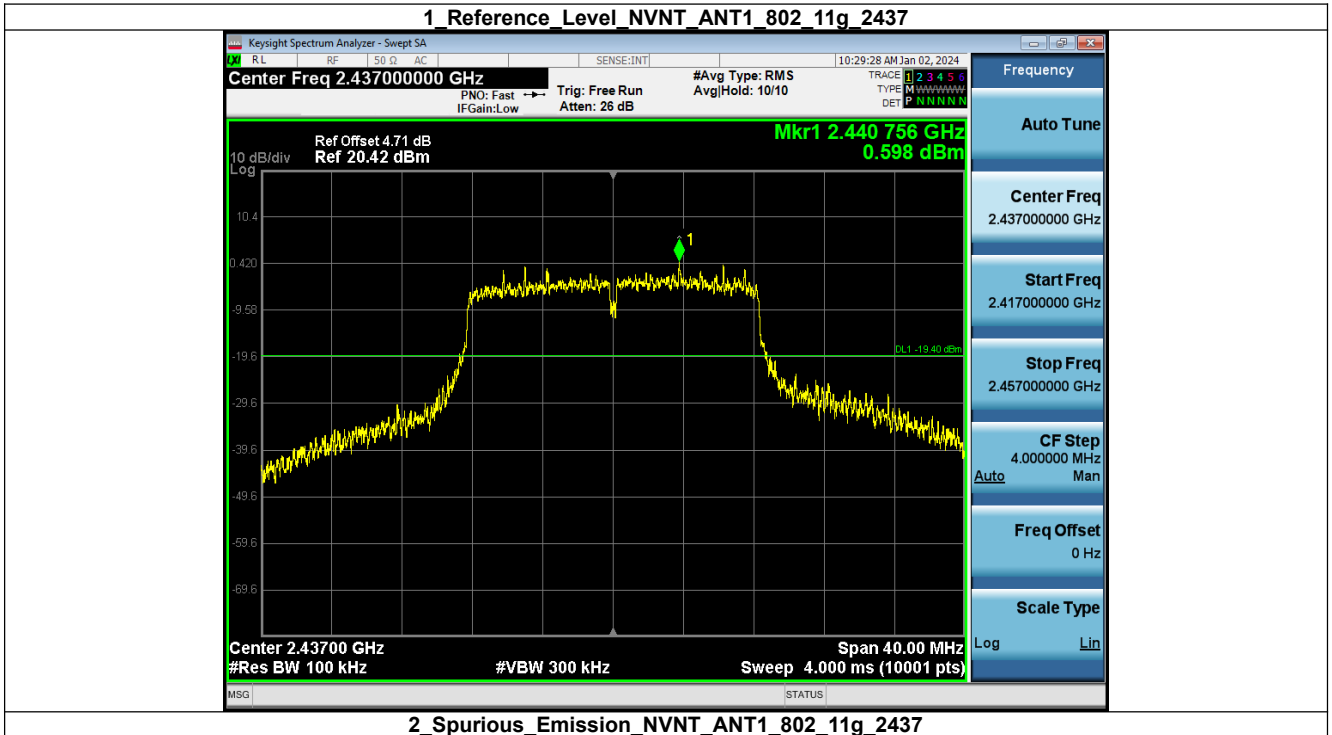
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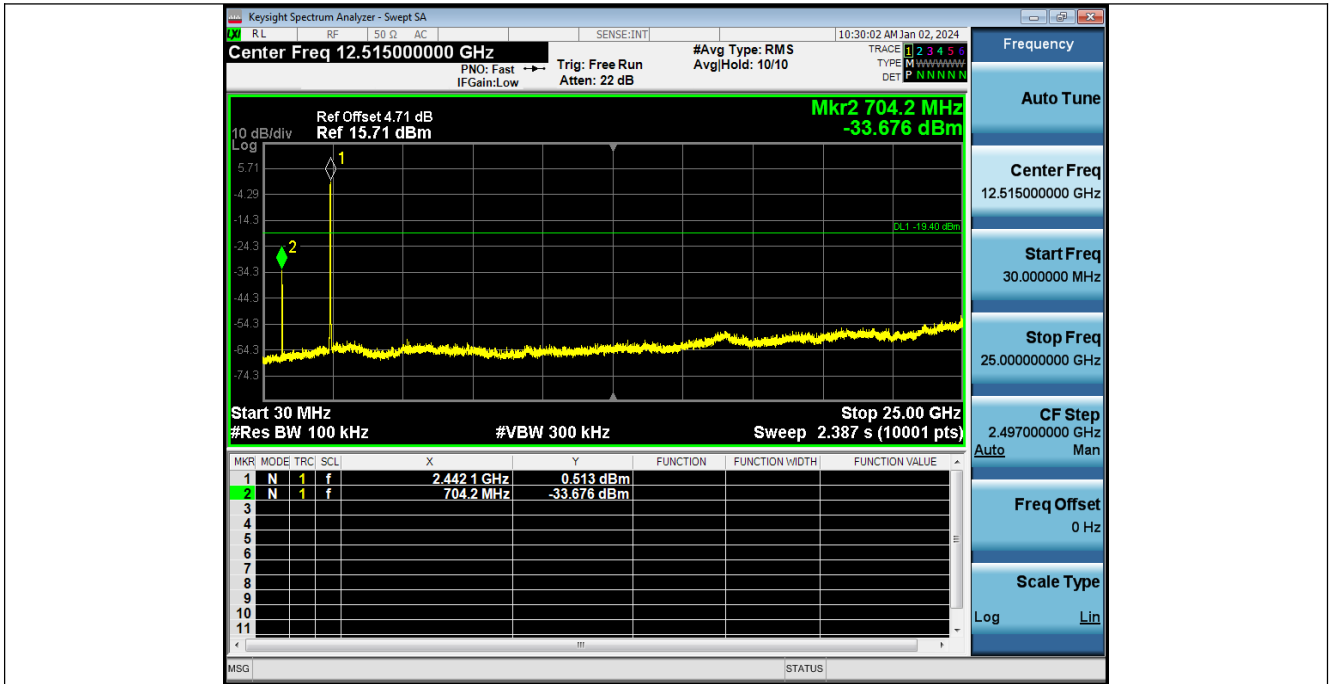
2 Spurious Emission\_NVNT\_ANT1\_802\_11g\_2412



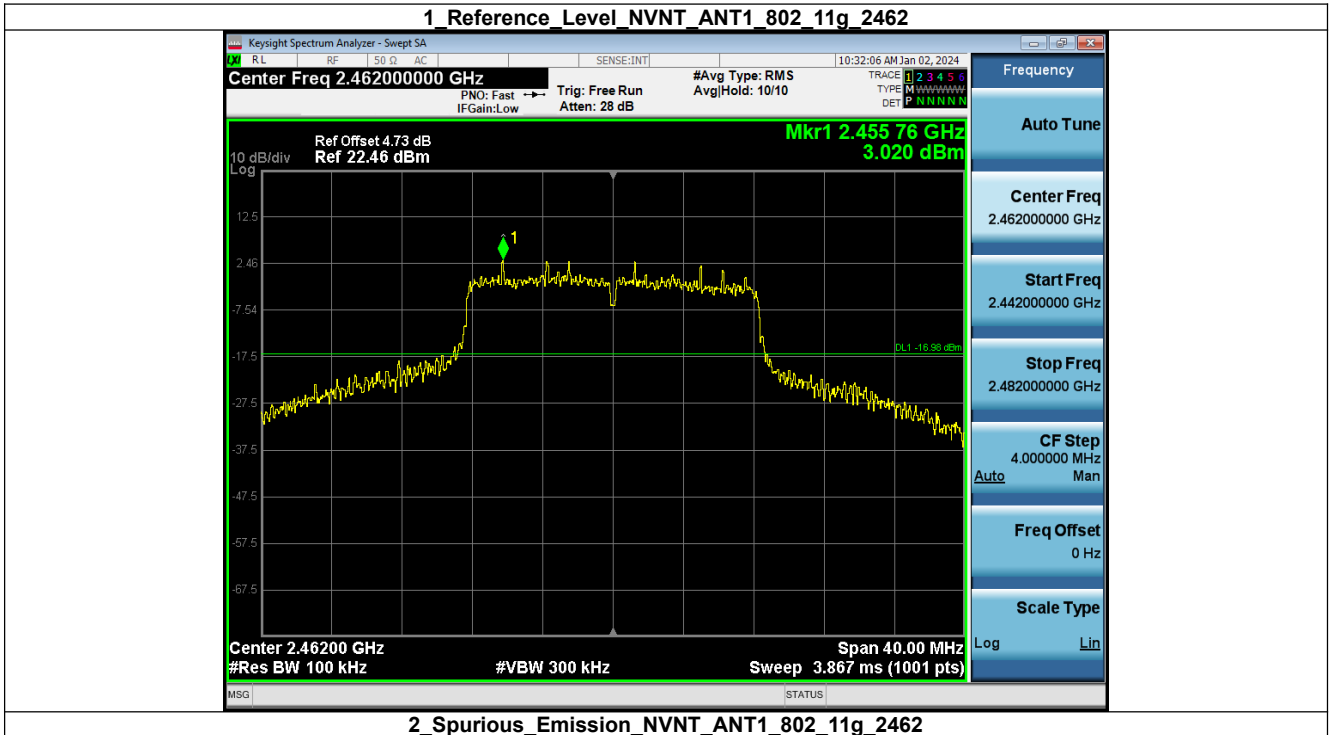
1 Reference Level NVNT\_ANT1\_802\_11g\_2437



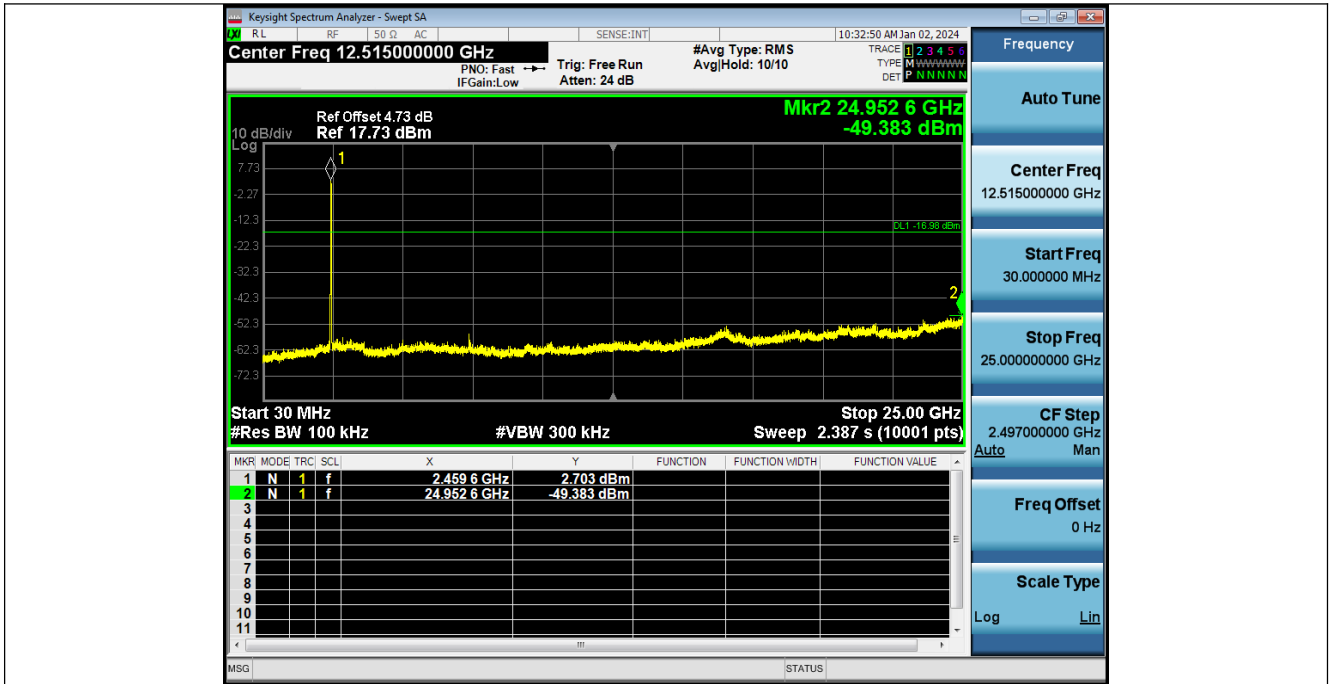
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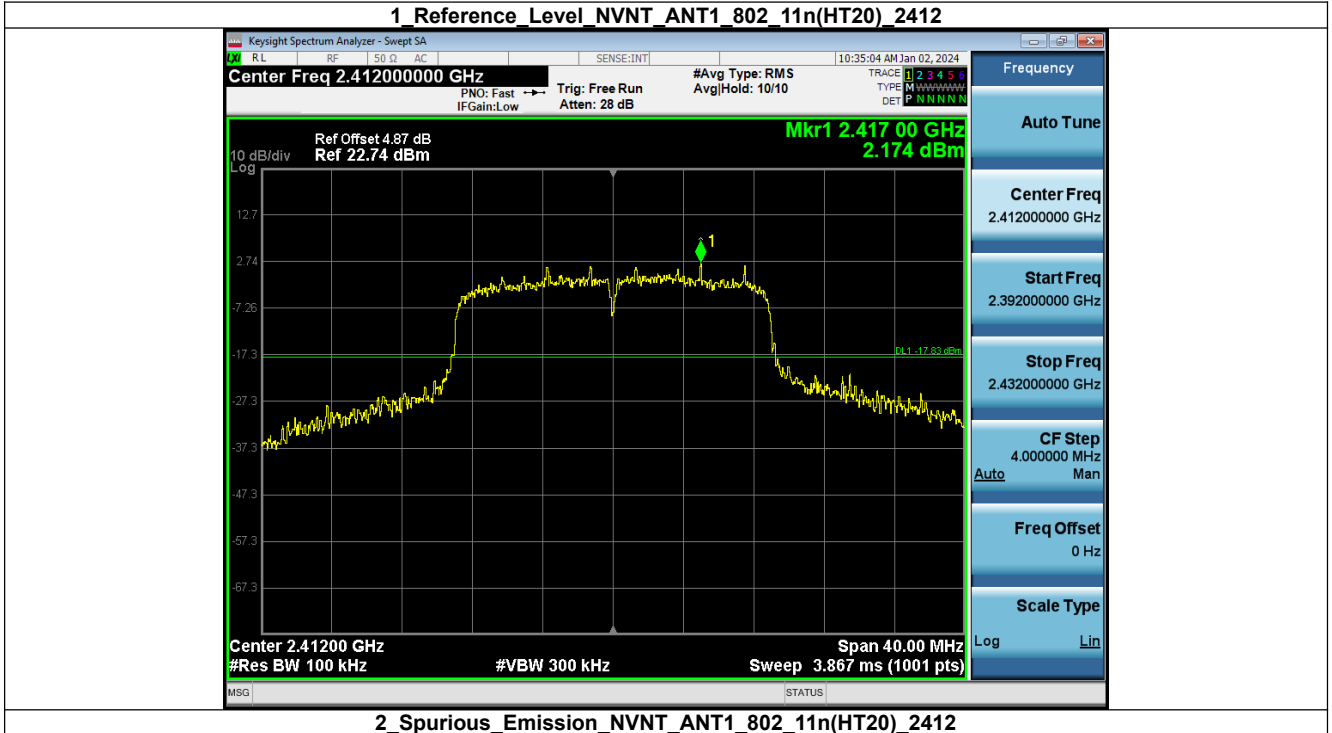
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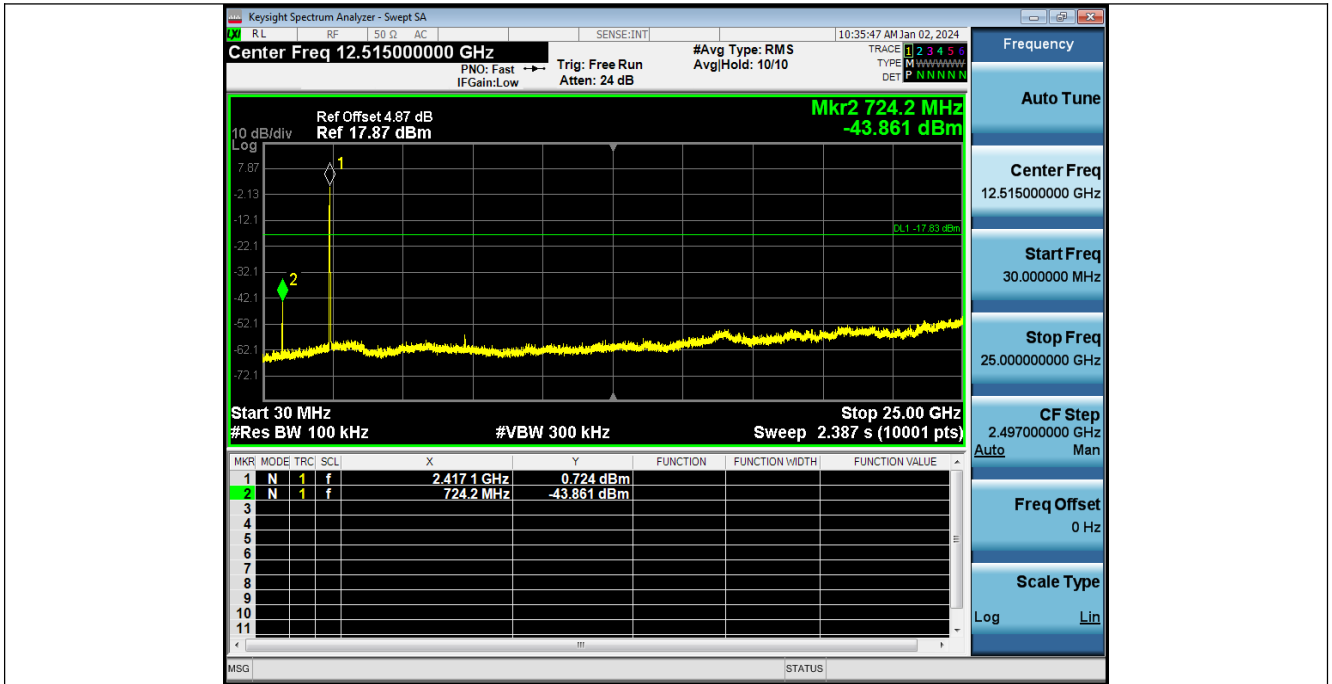
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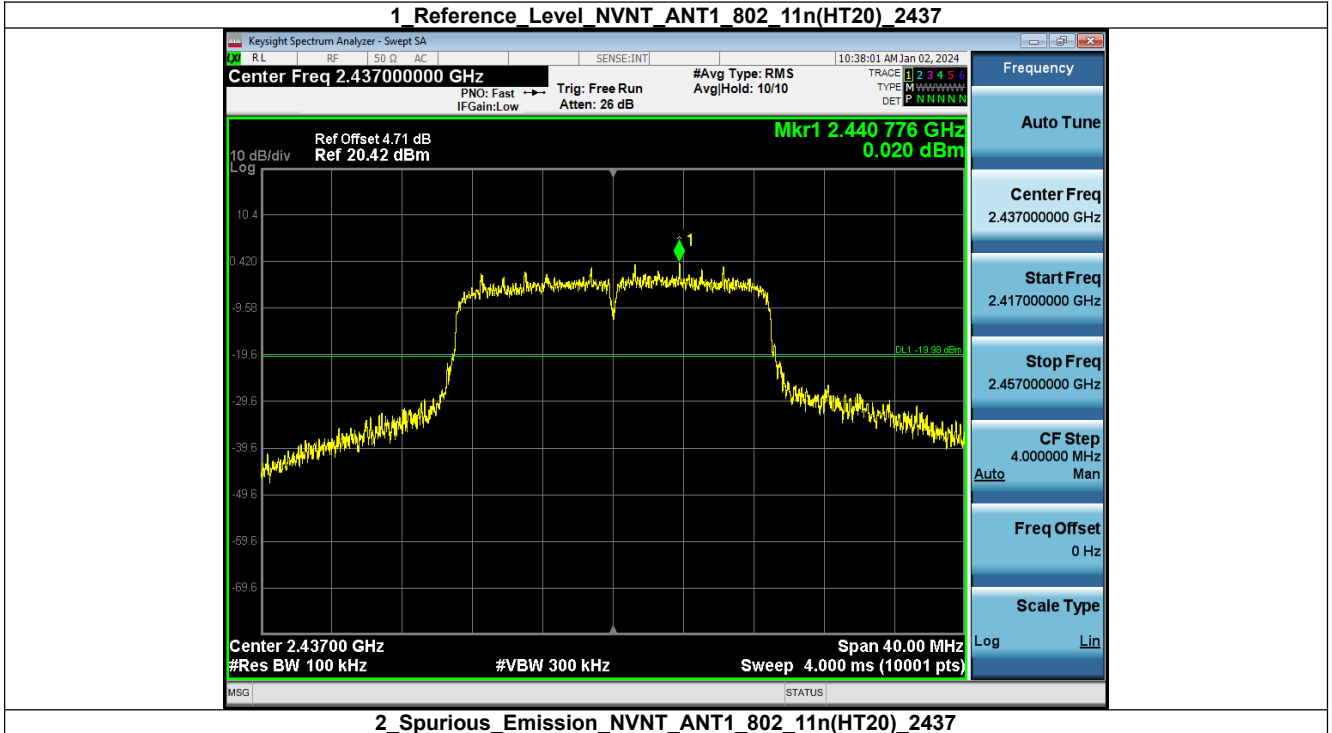
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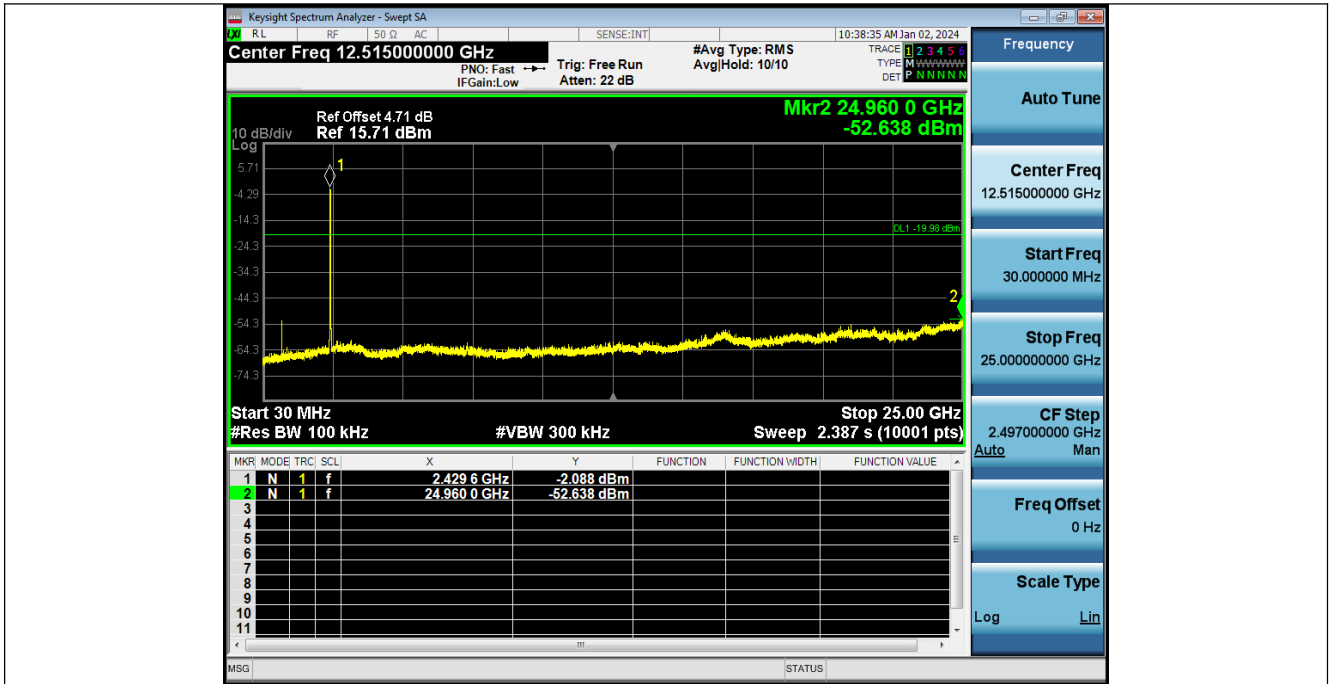
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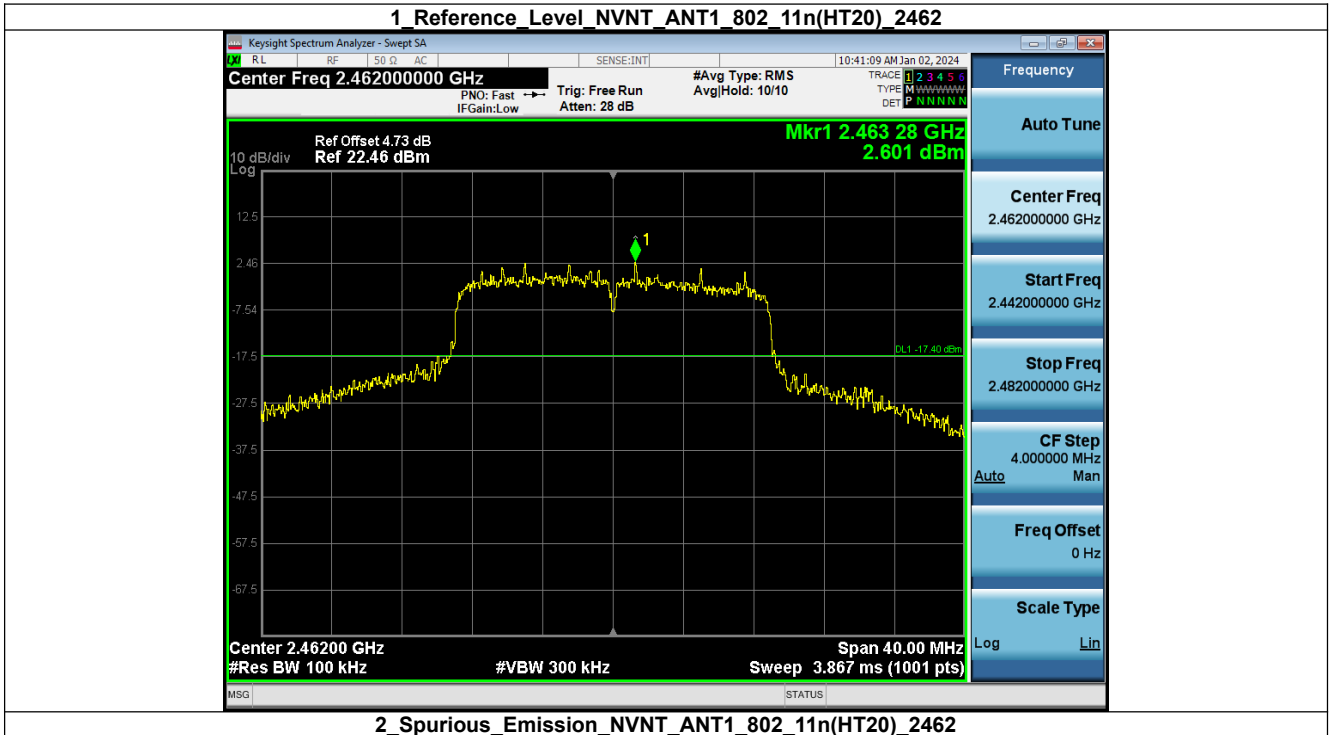
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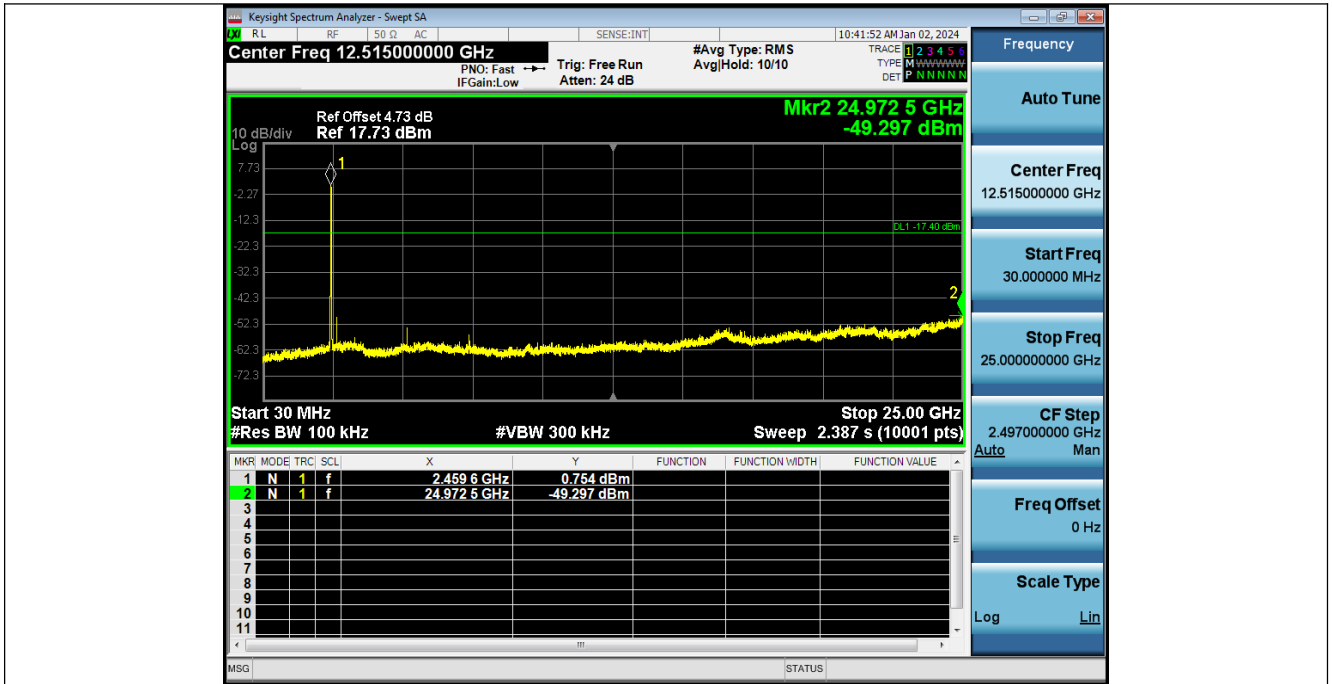
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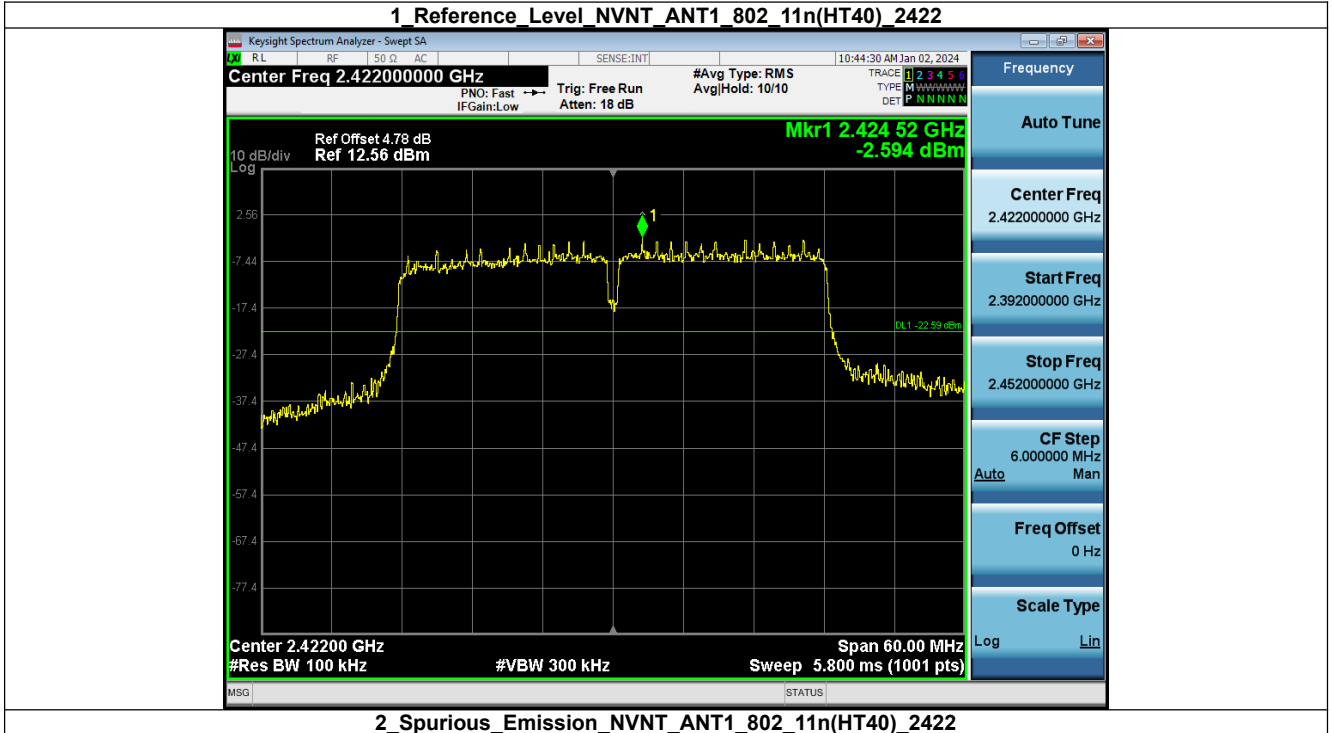
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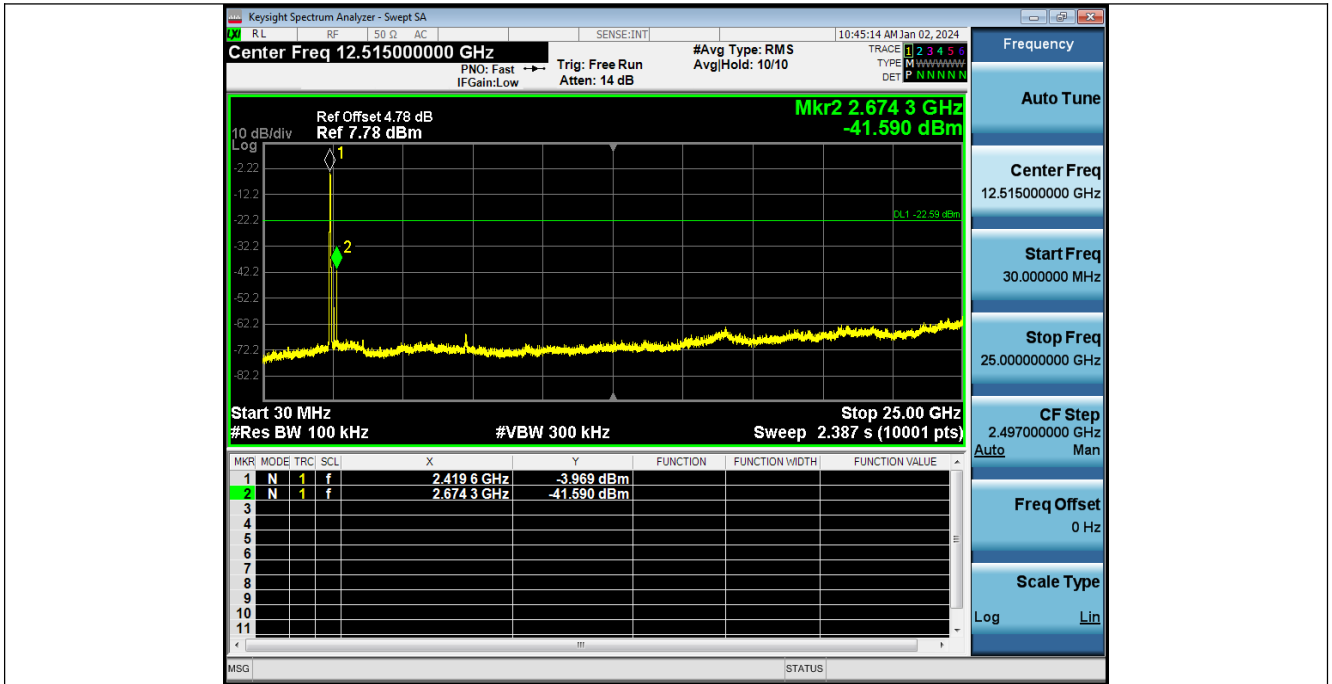
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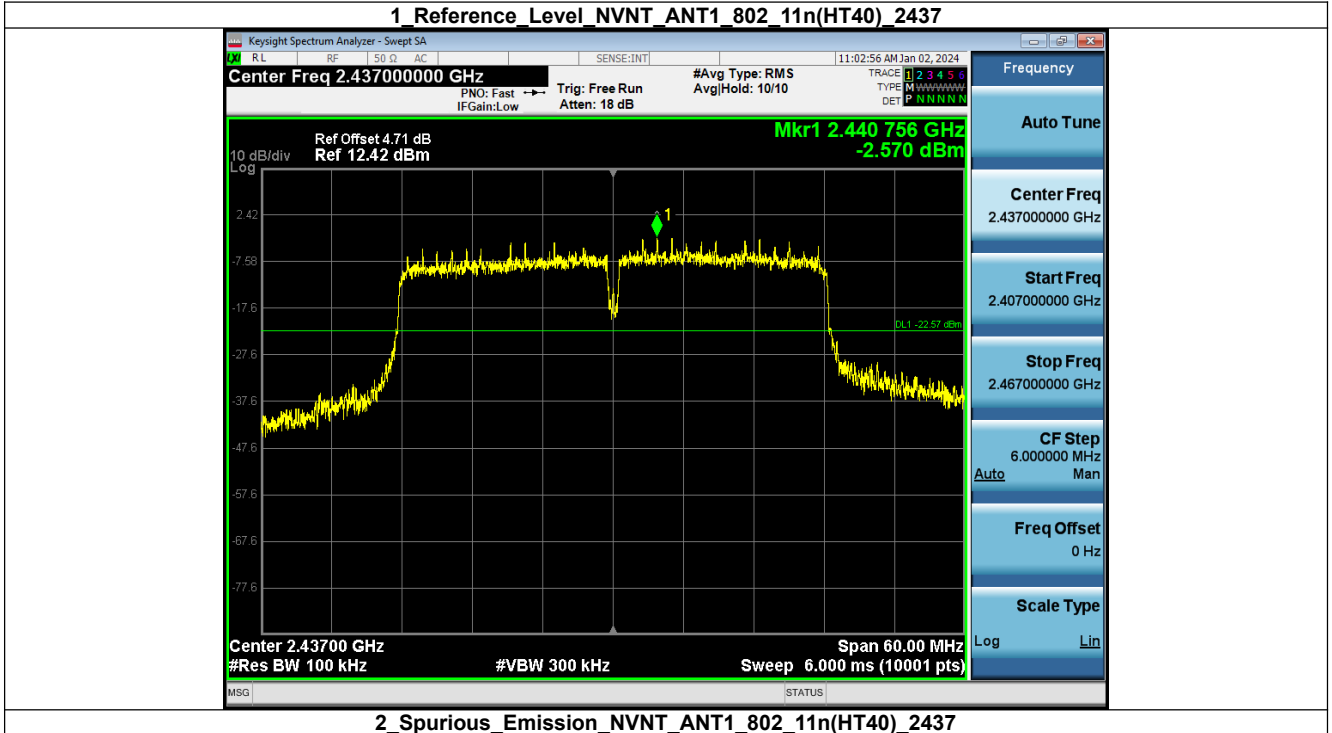
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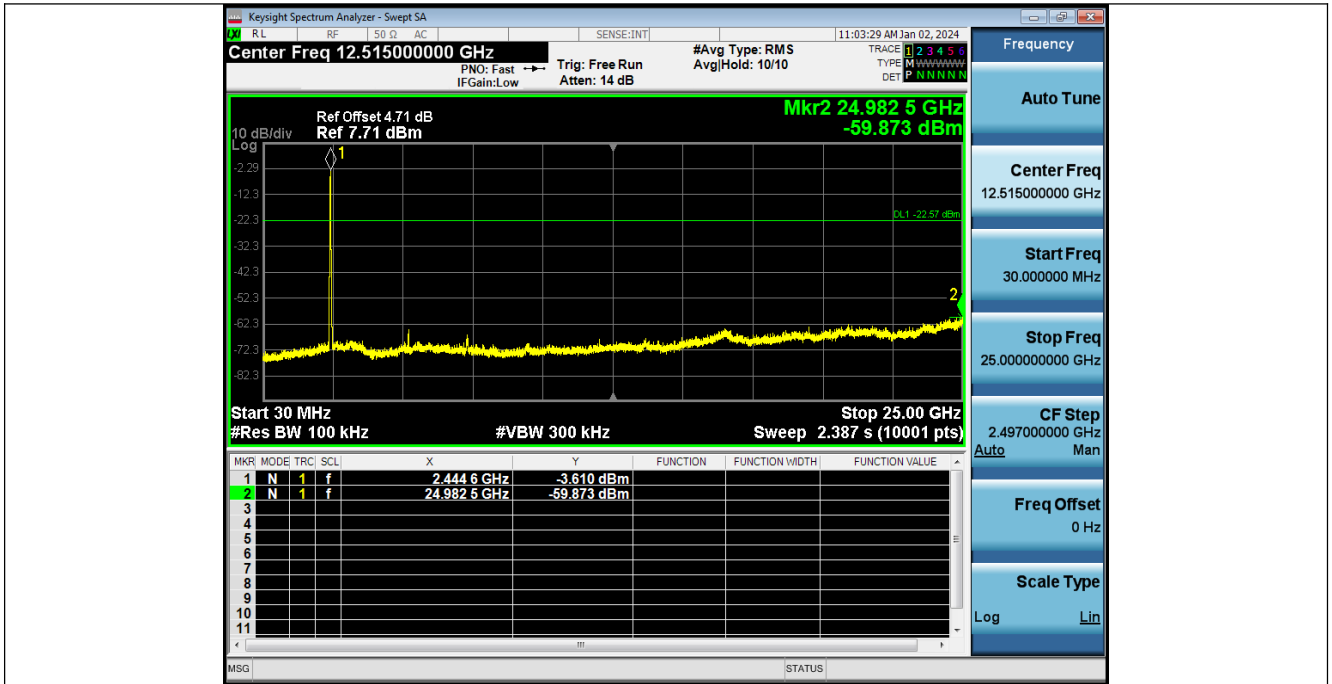


1 Reference Level NVNT\_ANT1\_802\_11n(HT40)\_2437



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

