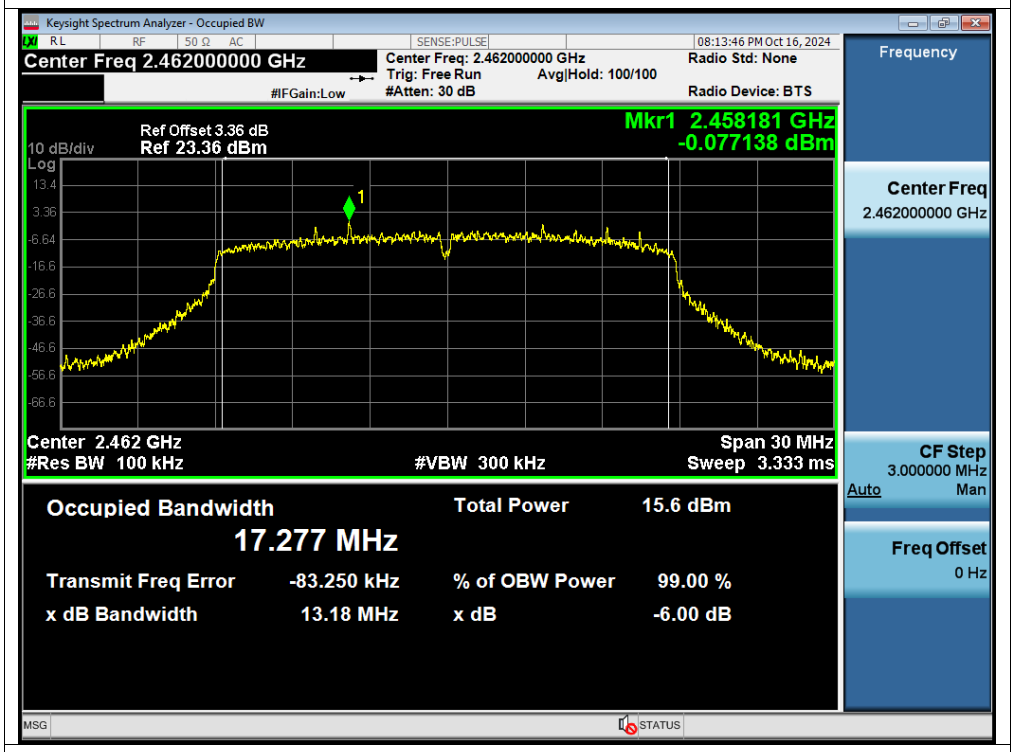
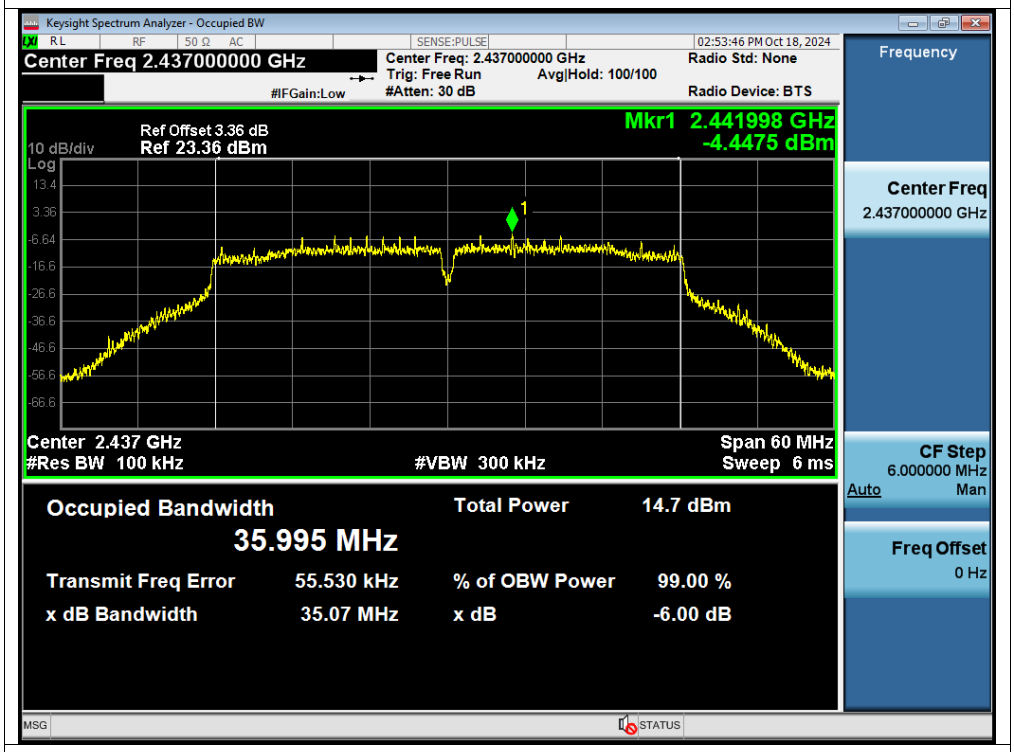
-6dB Bandwidth NVNT n20 2462MHz

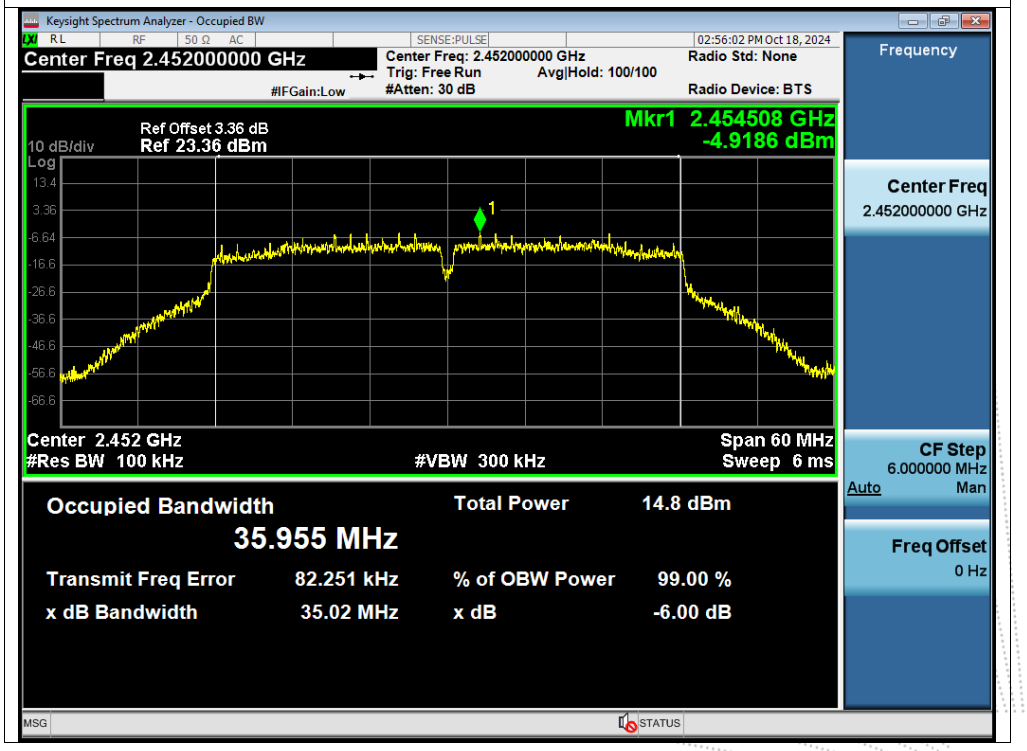


-6dB Bandwidth NVNT n40 2422MHz

-6dB Bandwidth NVNT n40 2437MHz



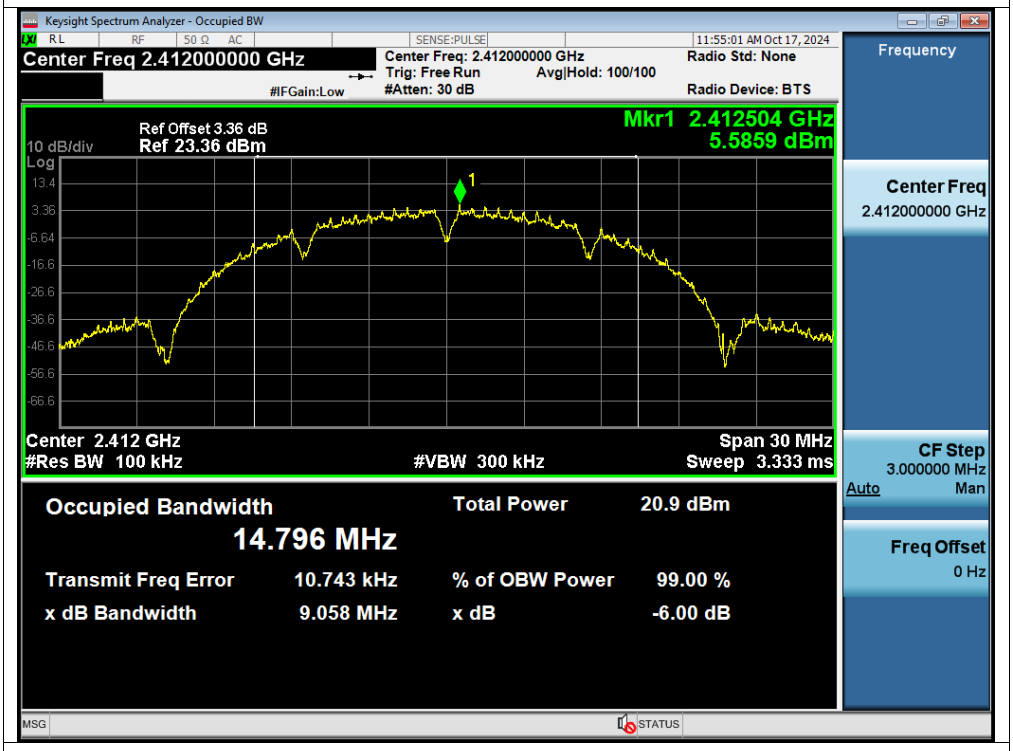
-6dB Bandwidth NVNT n40 2452MHz



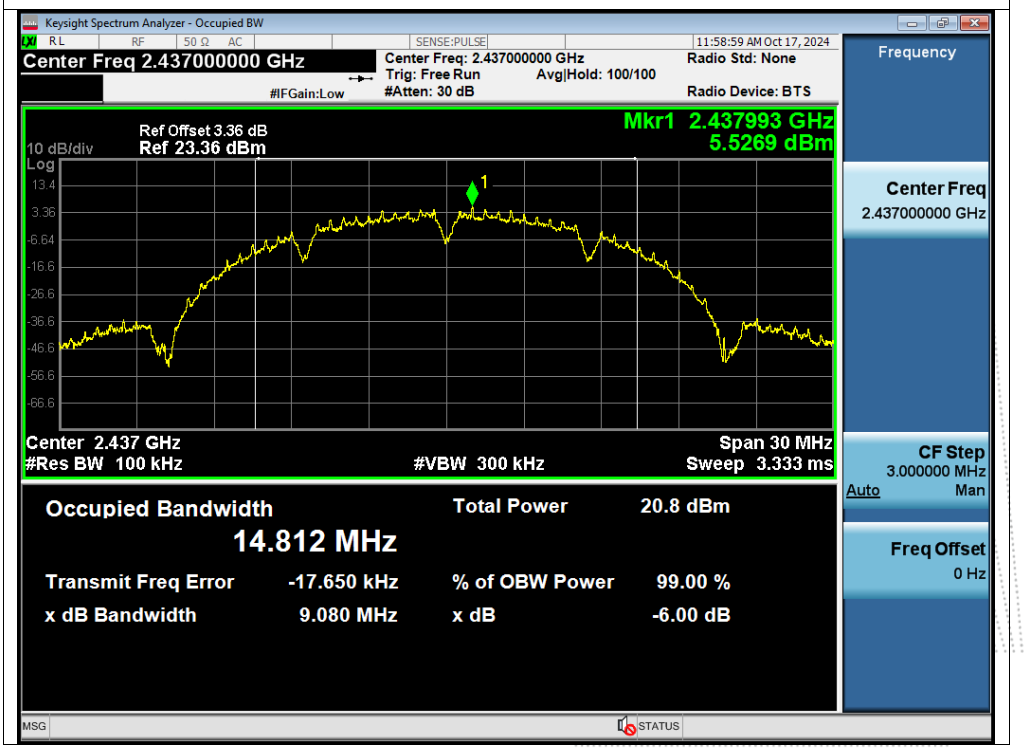
WIFI module 2:RTL8723DS

Test Graphs

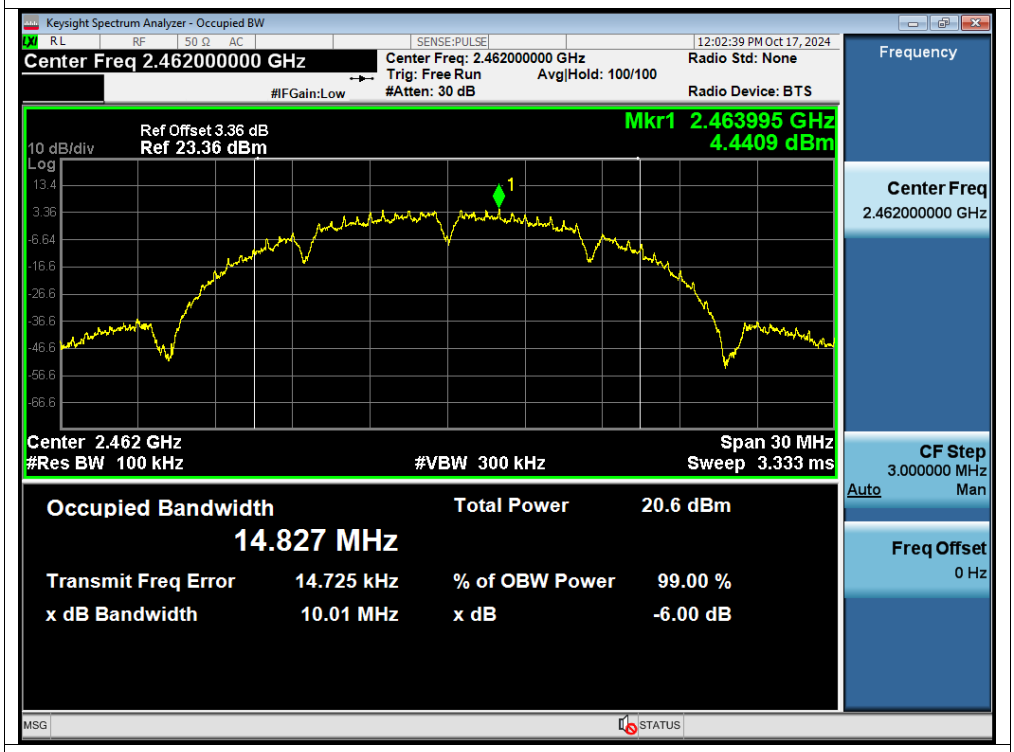
-6dB Bandwidth NVNT b 2412MHz



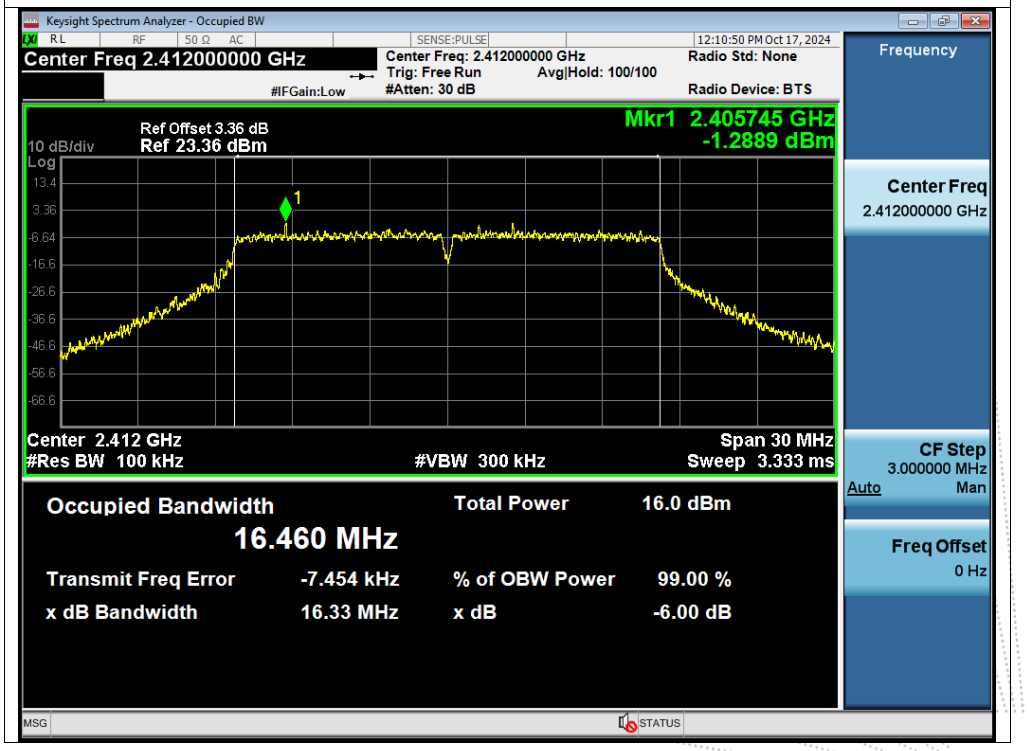
-6dB Bandwidth NVNT b 2437MHz



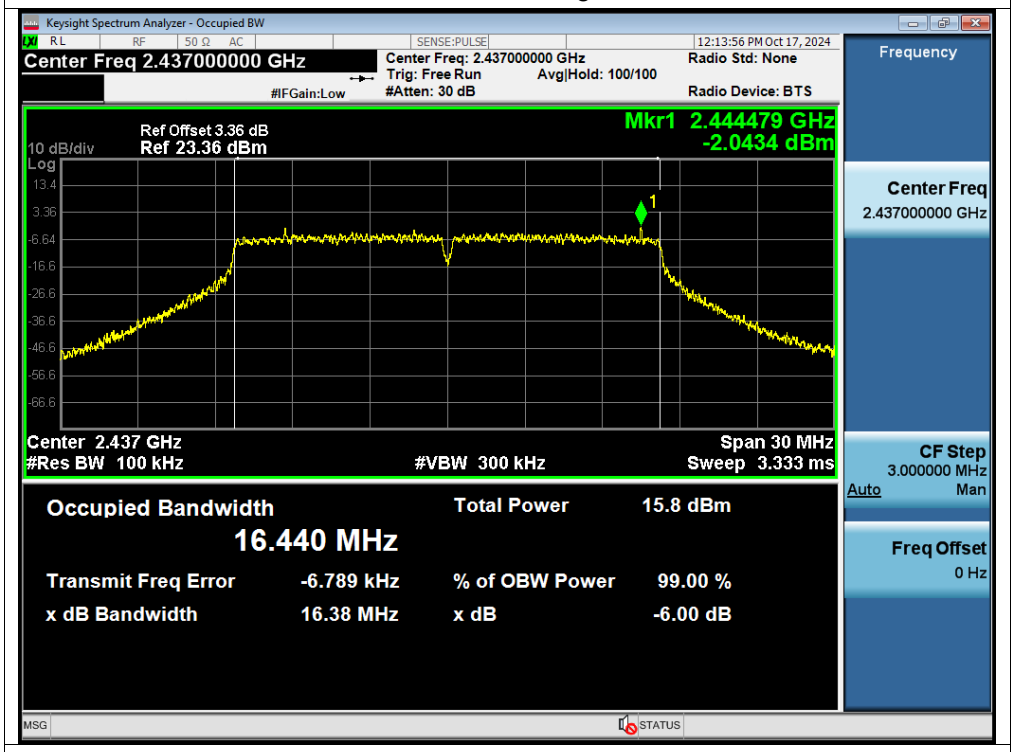
-6dB Bandwidth NVNT b 2462MHz



-6dB Bandwidth NVNT g 2412MHz

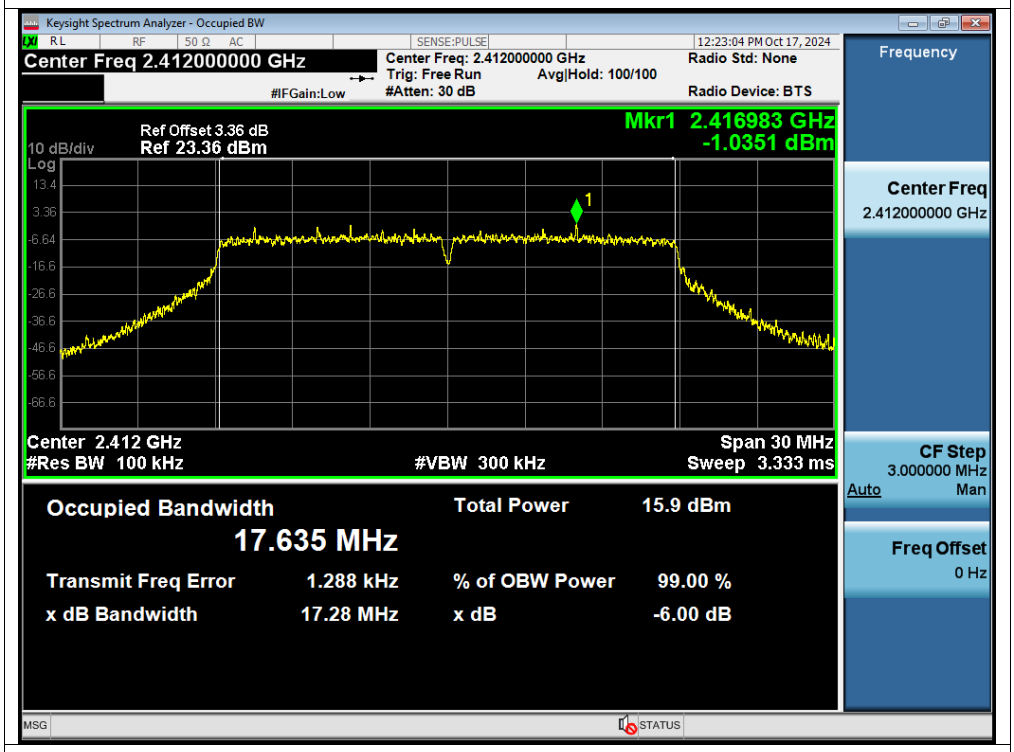


-6dB Bandwidth NVNT g 2437MHz

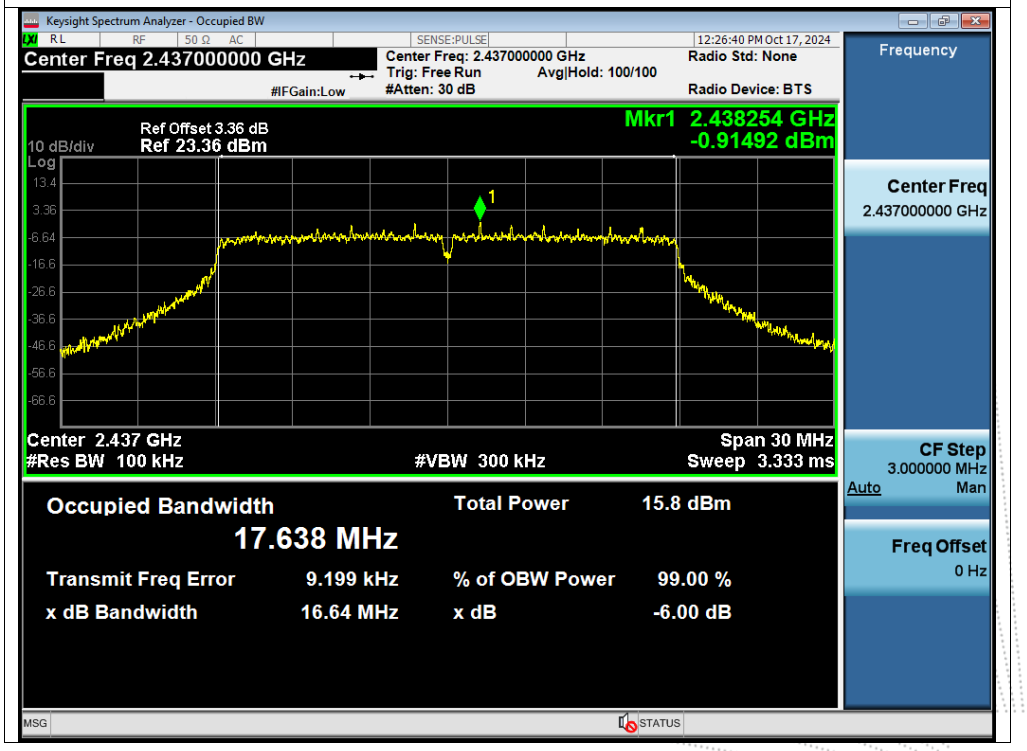


-6dB Bandwidth NVNT g 2462MHz

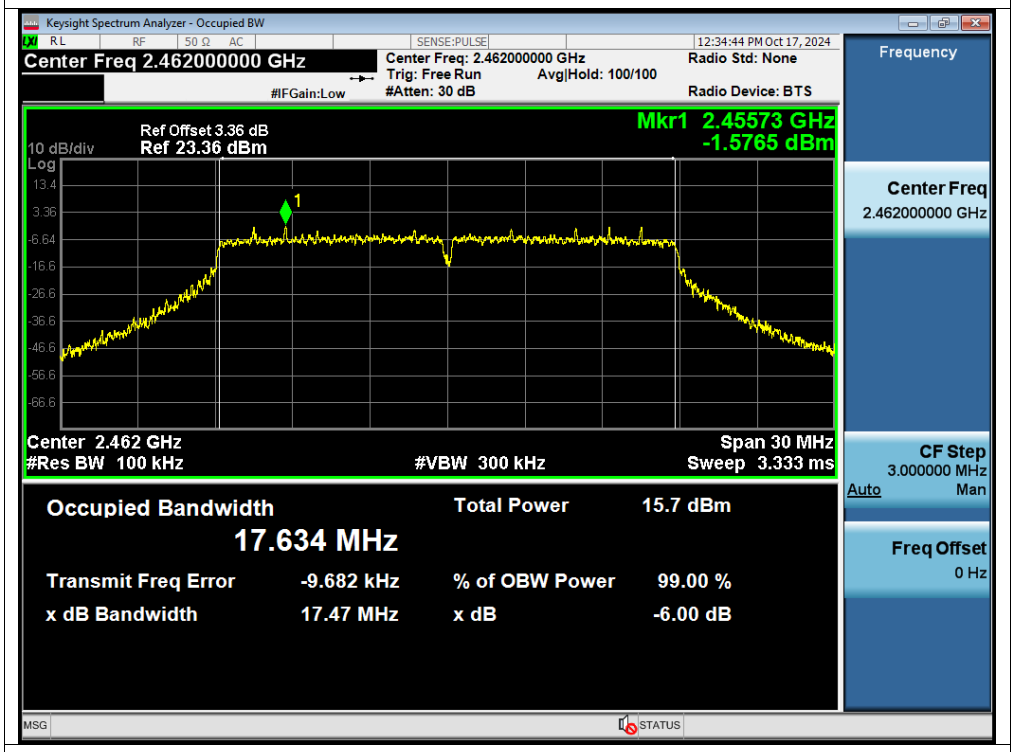
-6dB Bandwidth NVNT n20 2412MHz



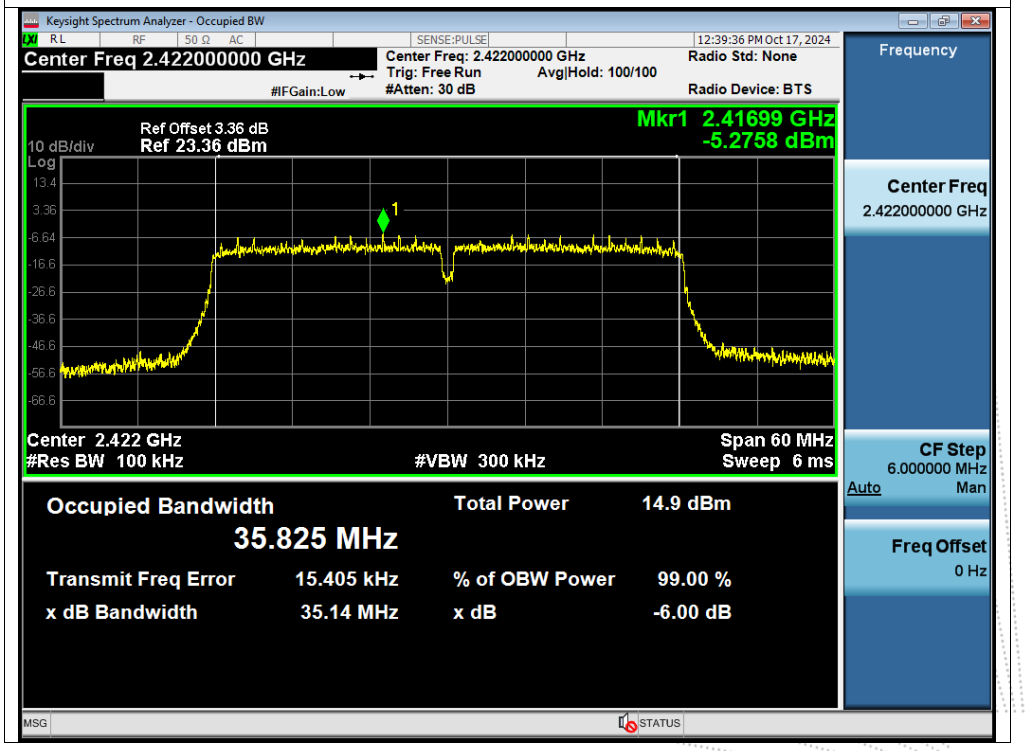
-6dB Bandwidth NVNT n20 2437MHz



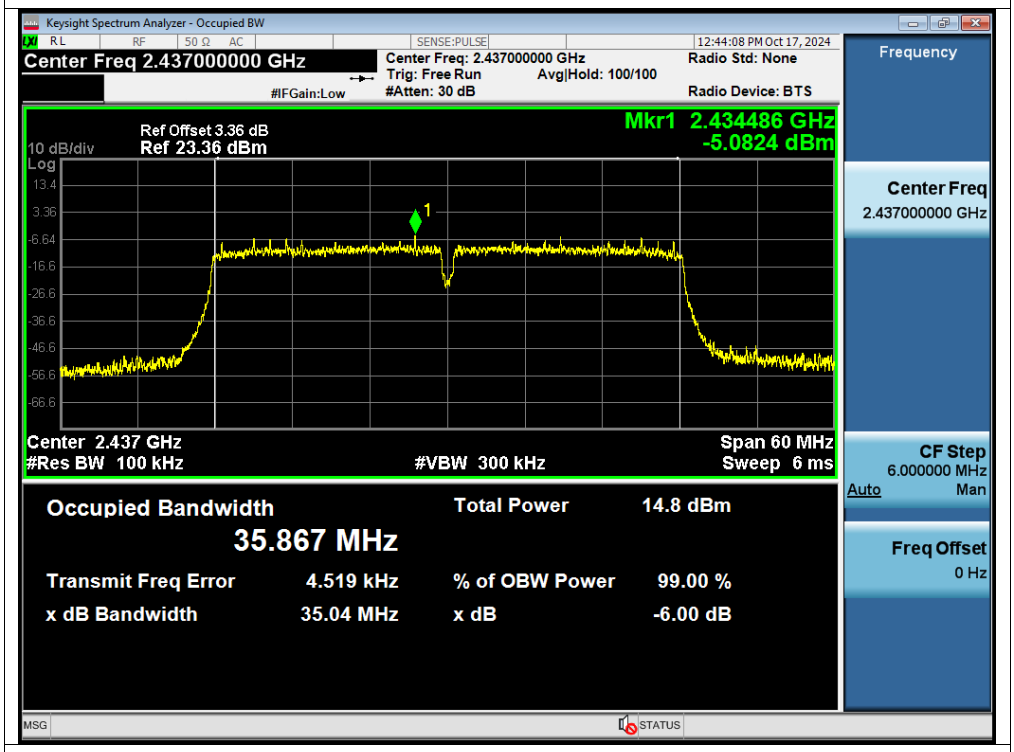
-6dB Bandwidth NVNT n20 2462MHz



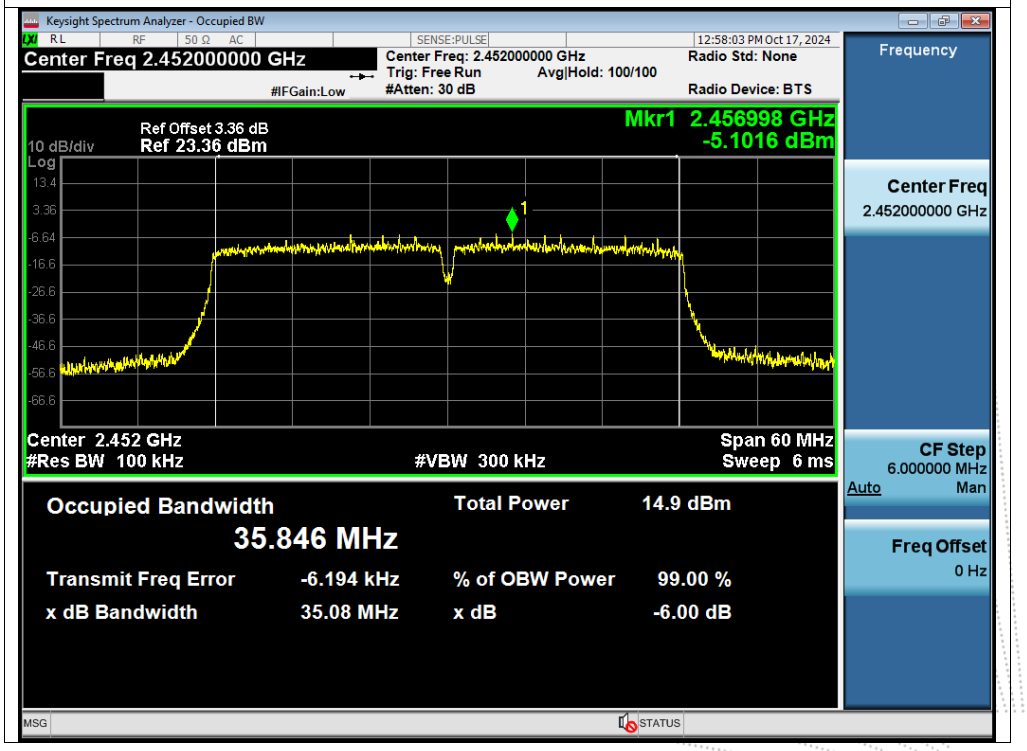
-6dB Bandwidth NVNT n40 2422MHz



-6dB Bandwidth NVNT n40 2437MHz



-6dB Bandwidth NVNT n40 2452MHz



11. Peak Output Power Test

11.1 Block Diagram Of Test Setup

11.2 Limit

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Peak Output Power	1 watt or 30dBm	2400-2483.5	PASS

11.3 Test Procedure

a. The EUT was directly connected to the Power meter

11.4 EUT Operating Conditions

The EUT tested system was configured as the statements of 4.6 Unless otherwise a special operating condition is specified in the follows during the testing.
Note: Power Spectral Density(dBm)=Reading+Cable Loss

11.5 Test Result

Temperature:	24℃	Relative Humidity:	50%
Pressure:	101KPa	Test Voltage:	AC120V/60Hz

WIFI module 1:QCA9531-BL3A

Test Mode	Frequency(MHz)	Ant A Maximum Conducted Output Power(PK) (dBm)	Ant B Maximum Conducted Output Power(PK) (dBm)	Limit (dBm)
802.11b	2412	15.05	15.2	30
	2437	15.51	15.28	30
	2462	15.18	15.02	30
802.11g	2412	14.18	14.44	30
	2437	14.49	14.41	30
	2462	14.2	14.5	30
802.11n20	2412	14.4	14.02	30
	2437	14.3	14.56	30
	2462	14.22	14.3	30
802.11n40	2422	13.29	13.28	30
	2437	13.32	13.18	30
	2452	13.1	13.32	30

For 2T2R

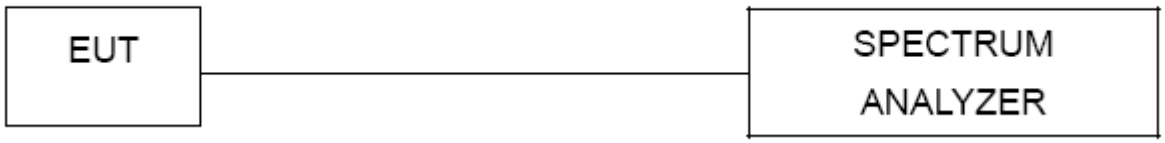
Test Mode	Frequency	Maximum Conducted Output Power(PK) (dBm)	Limit (dBm)	Result
802.11n20	2412 MHz	17.22	30	PASS
	2437 MHz	17.44	30	PASS
	2462 MHz	17.27	30	PASS
802.11n40	2422 MHz	16.30	30	PASS
	2437 MHz	16.26	30	PASS
	2452 MHz	16.22	30	PASS

WIFI module 2:RTL8723DS

Test Mode	Frequency(MHz)	Maximum Conducted Output Power(PK) (dBm)	Limit (dBm)
802.11b	2412	15.98	30
	2437	15.75	30
	2462	15.6	30
802.11g	2412	14.82	30
	2437	14.65	30
	2462	14.44	30
802.11n20	2412	14.84	30
	2437	14.54	30
	2462	14.38	30
802.11n40	2422	13.37	30
	2437	13.52	30
	2452	13.48	30

12. 100 kHz Bandwidth Of Frequency Band Edge

12.1 Block Diagram Of Test Setup



12.2 Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

12.3 Test Procedure

Using the following spectrum analyzer setting:
a) Set the RBW = 100KHz.
b) Set the VBW = 300KHz.
c) Sweep time = auto couple.
d) Detector function = peak.
e) Trace mode = max hold.
f) Allow trace to fully stabilize..

12.4 EUT Operating Conditions

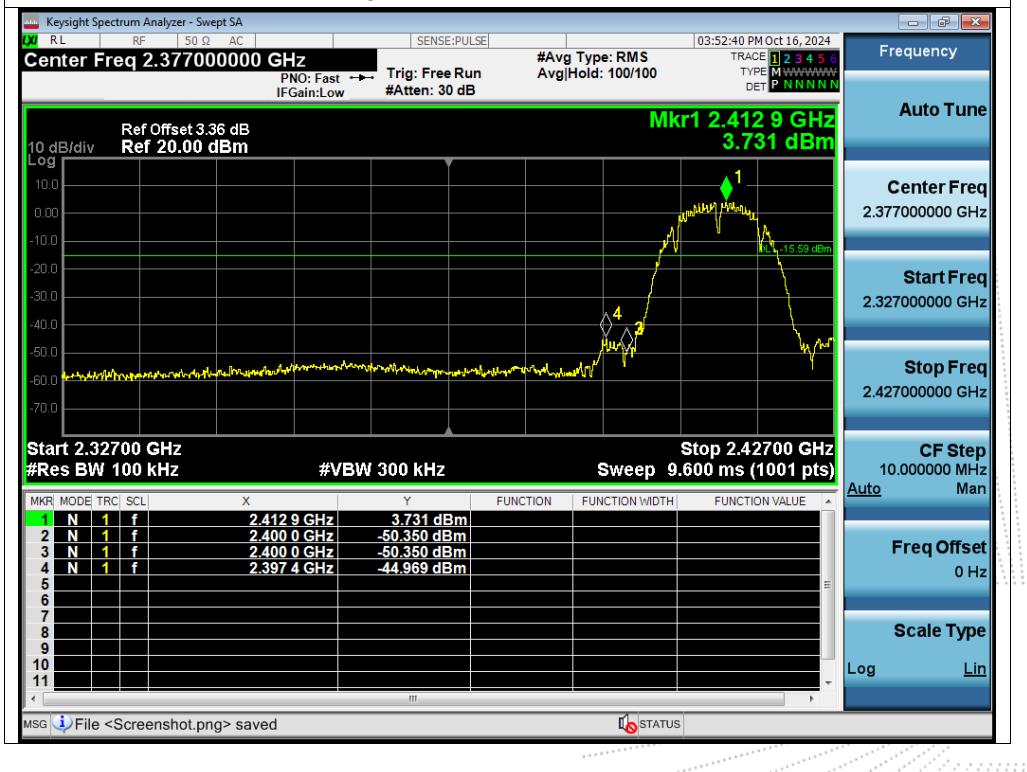
The EUT tested system was configured as the statements of 4.6 Unless otherwise a special operating condition is specified in the follows during the testing.
Note: Power Spectral Density(dBm)=Reading+Cable Loss

12.5 Test Result

WIFI module 1:QCA9531-BL3A,AntA

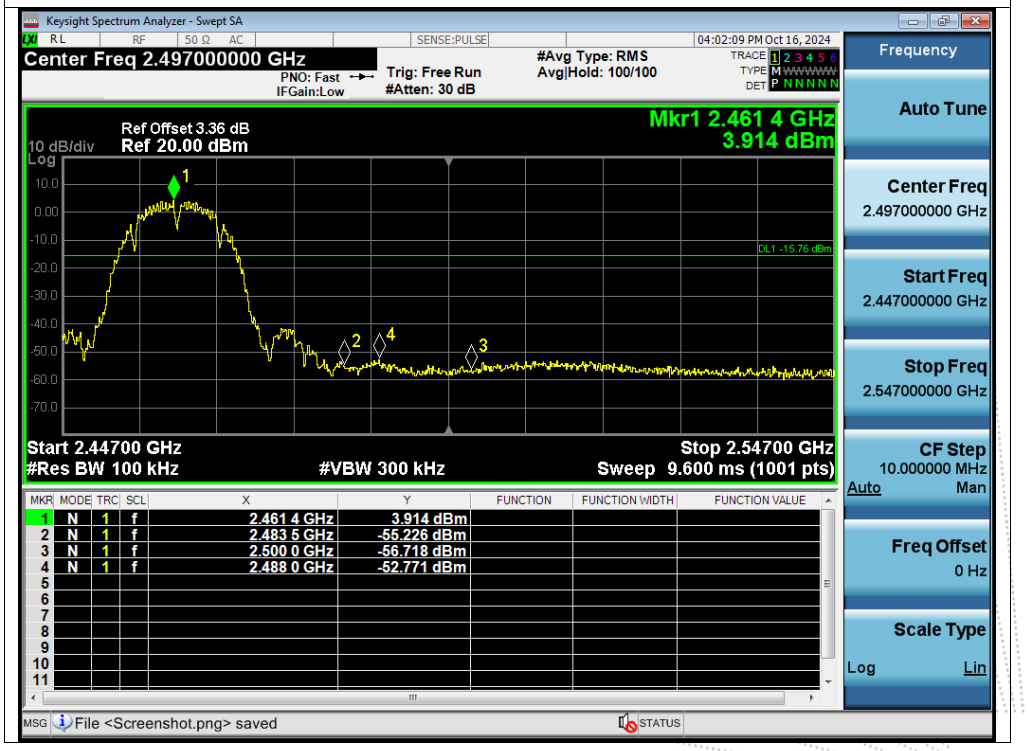
Test Graphs
Band Edge NVNT b 2412MHz Ref

Band Edge NVNT b 2412MHz Emission

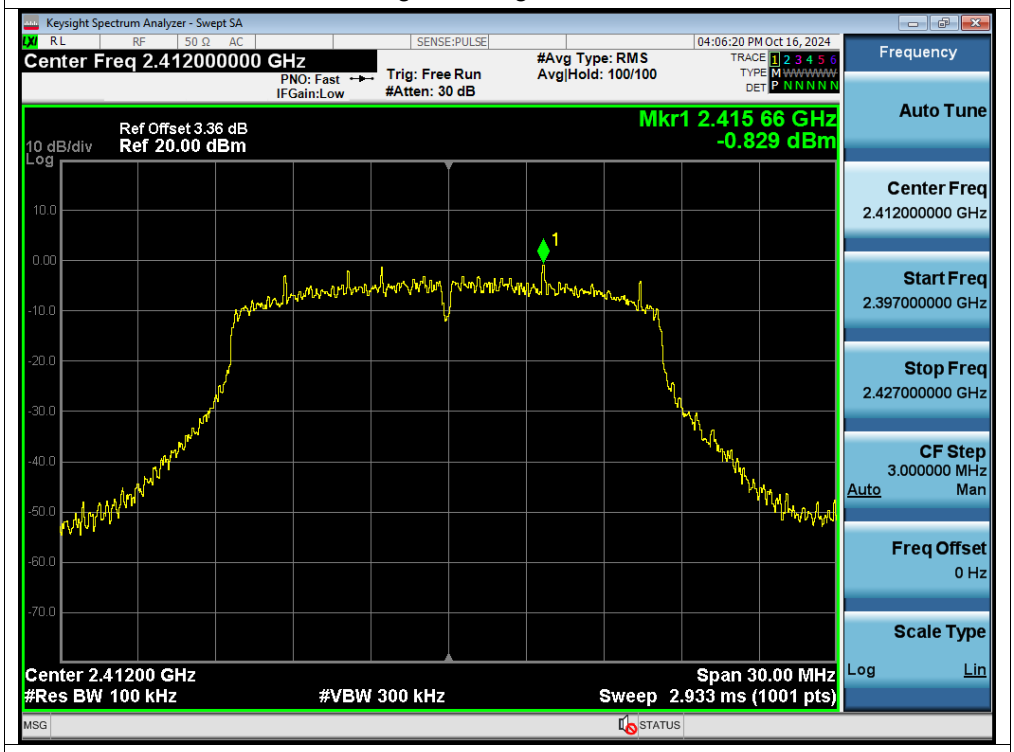


Band Edge NVNT b 2462MHz Ref

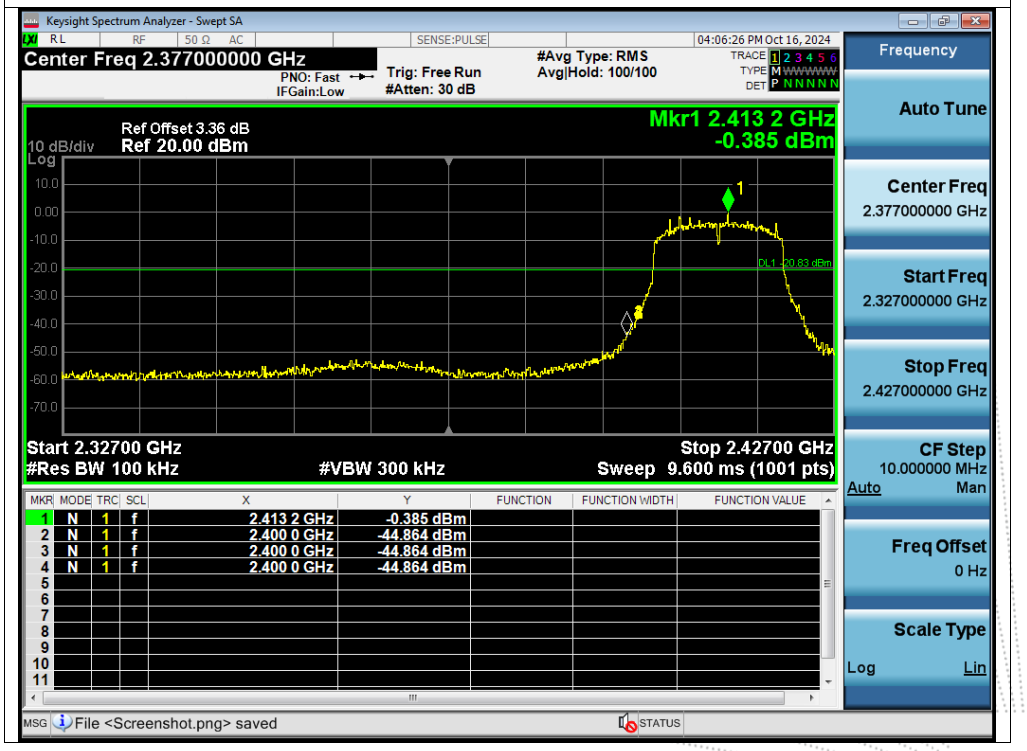
Band Edge NVNT b 2462MHz Emission



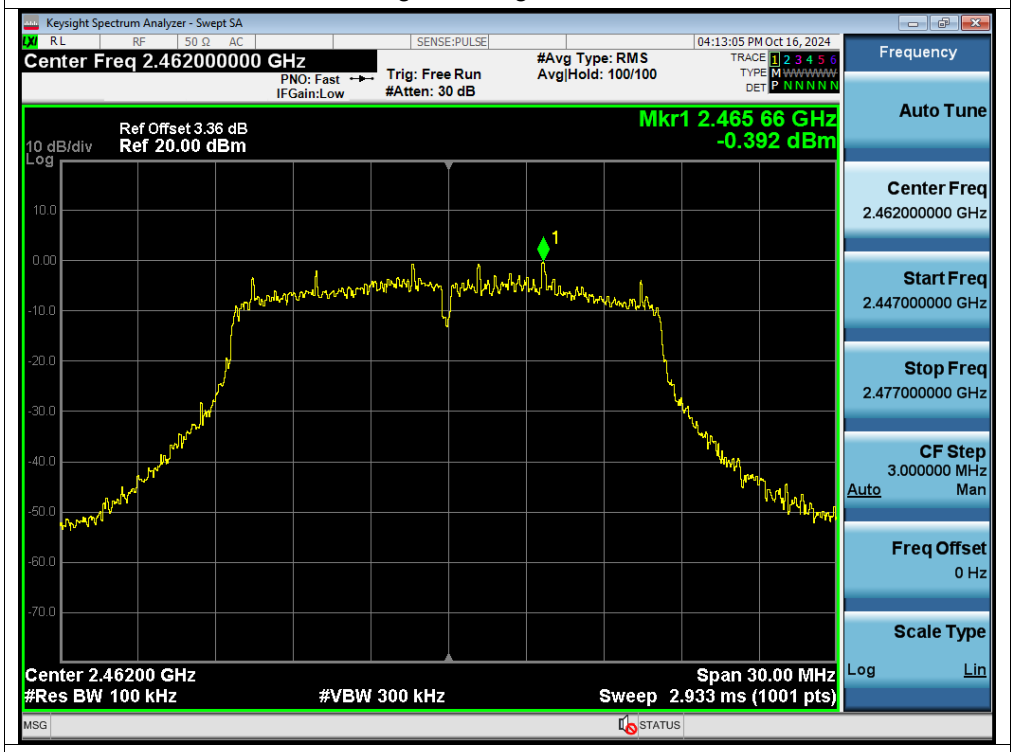
Band Edge NVNT g 2412MHz Ref



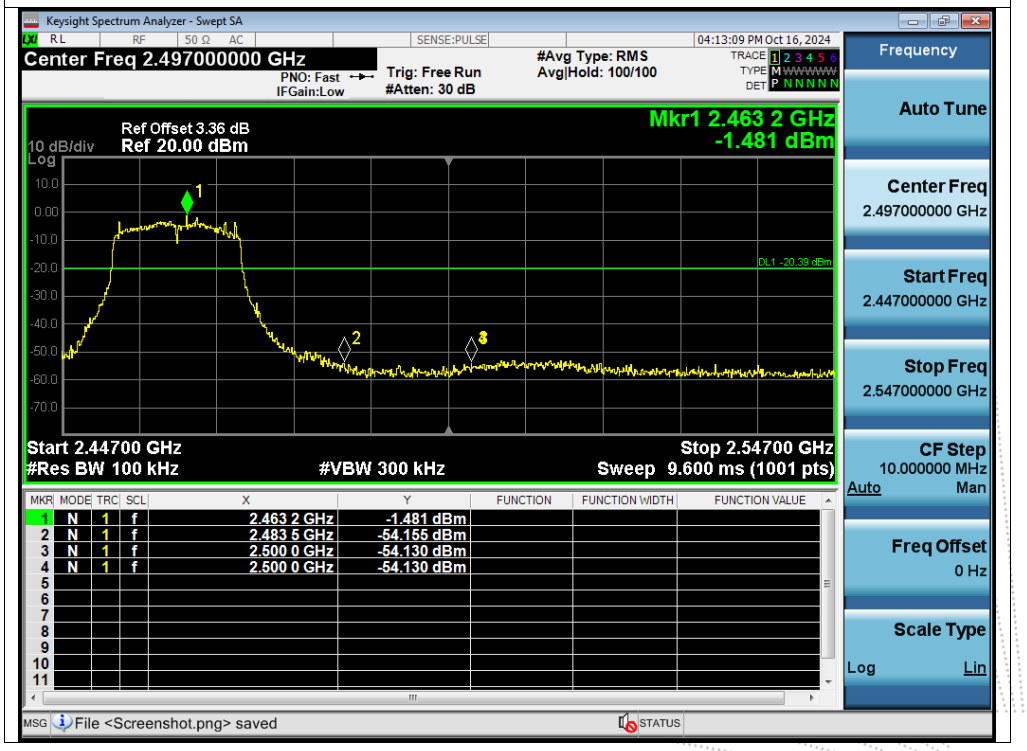
Band Edge NVNT g 2412MHz Emission



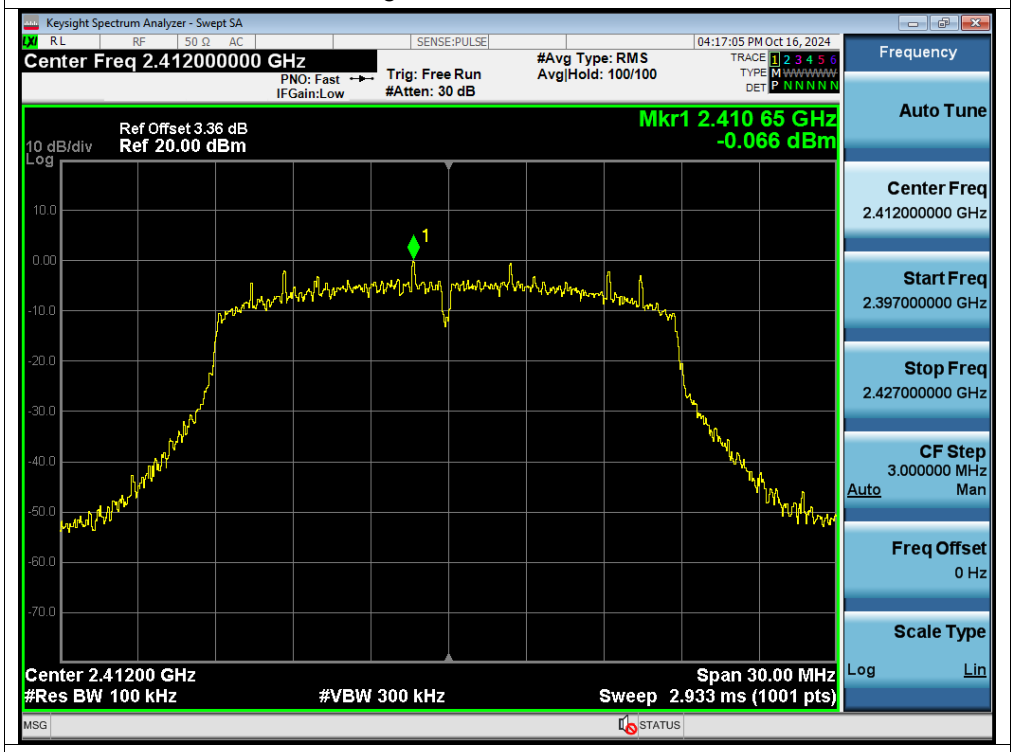
Band Edge NVNT g 2462MHz Ref



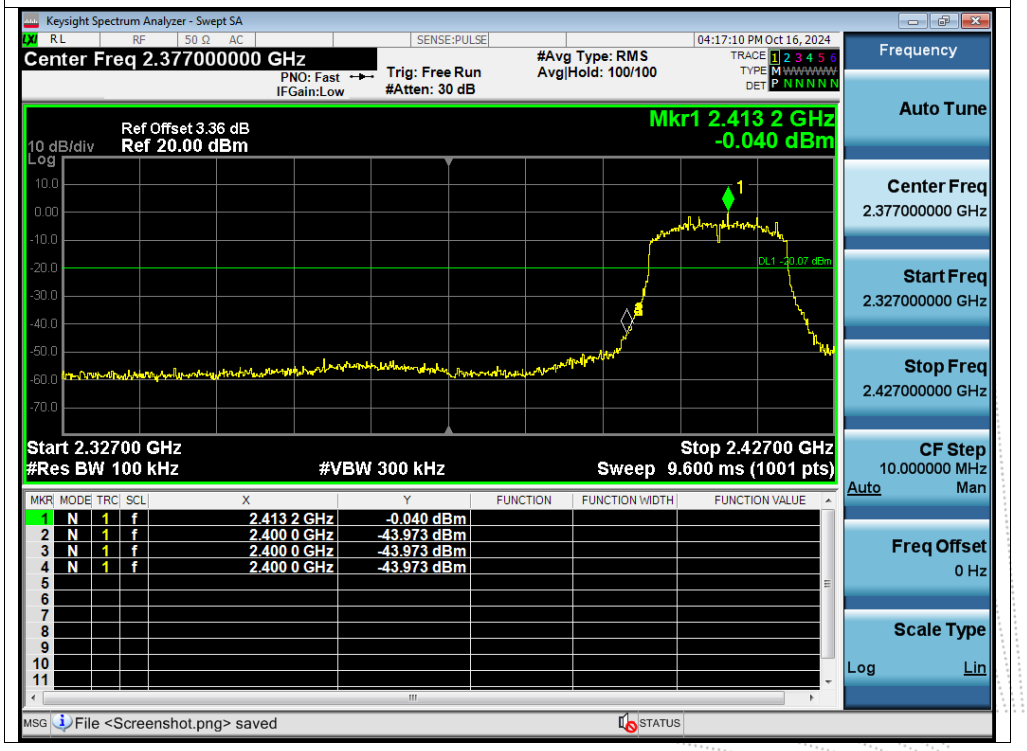
Band Edge NVNT g 2462MHz Emission



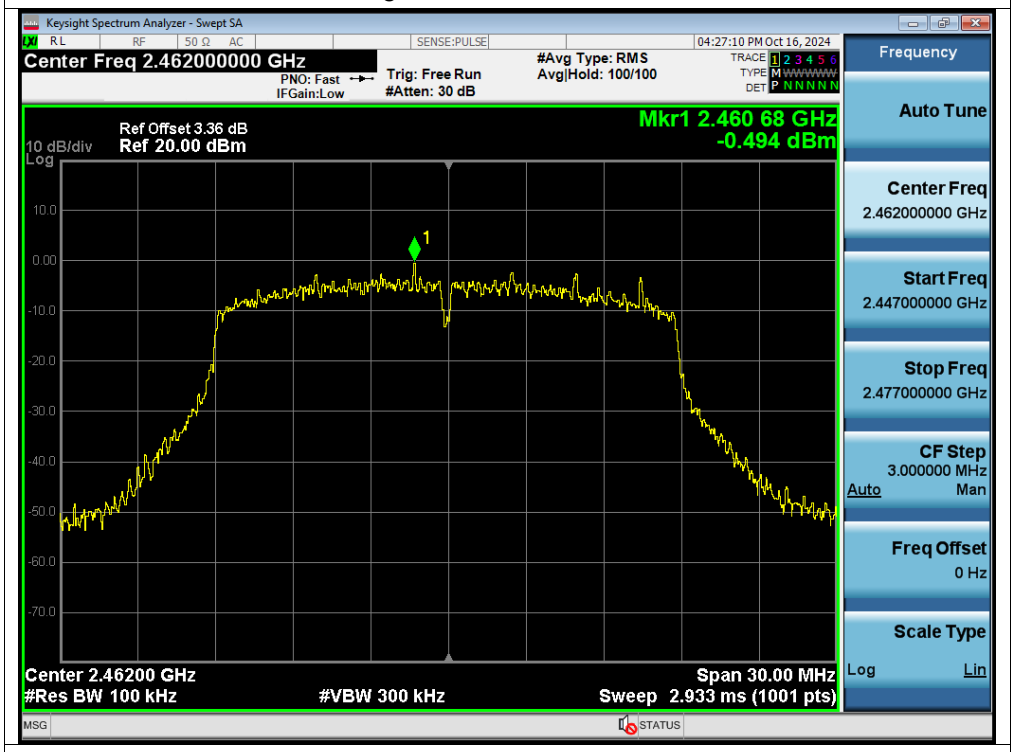
Band Edge NVNT n20 2412MHz Ref



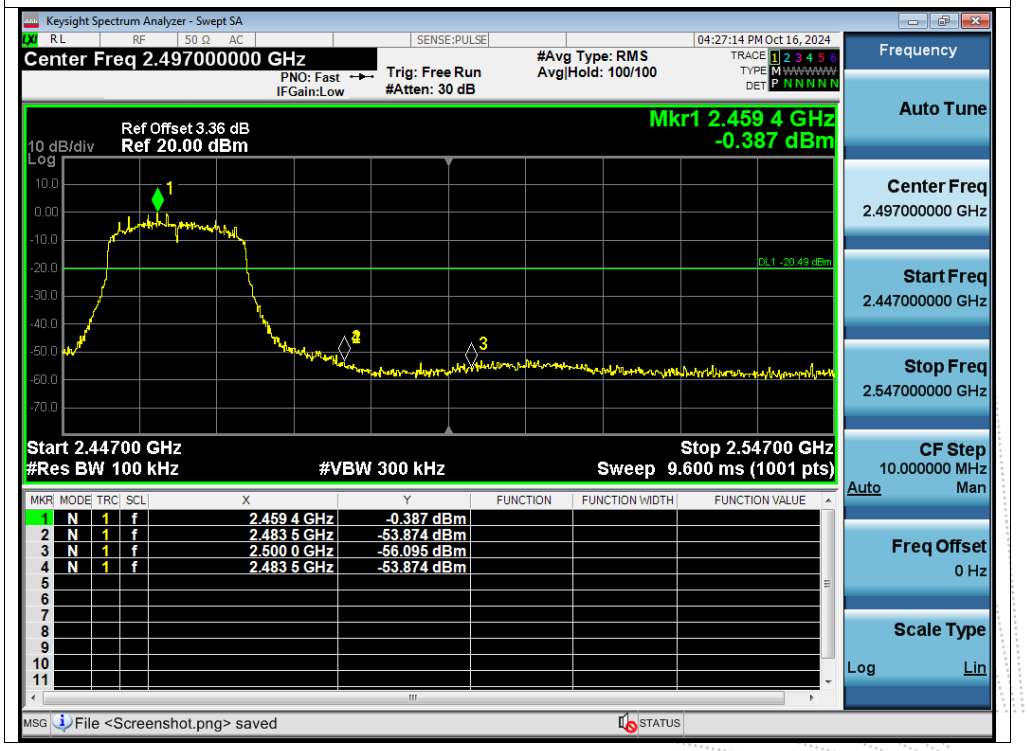
Band Edge NVNT n20 2412MHz Emission



Band Edge NVNT n20 2462MHz Ref

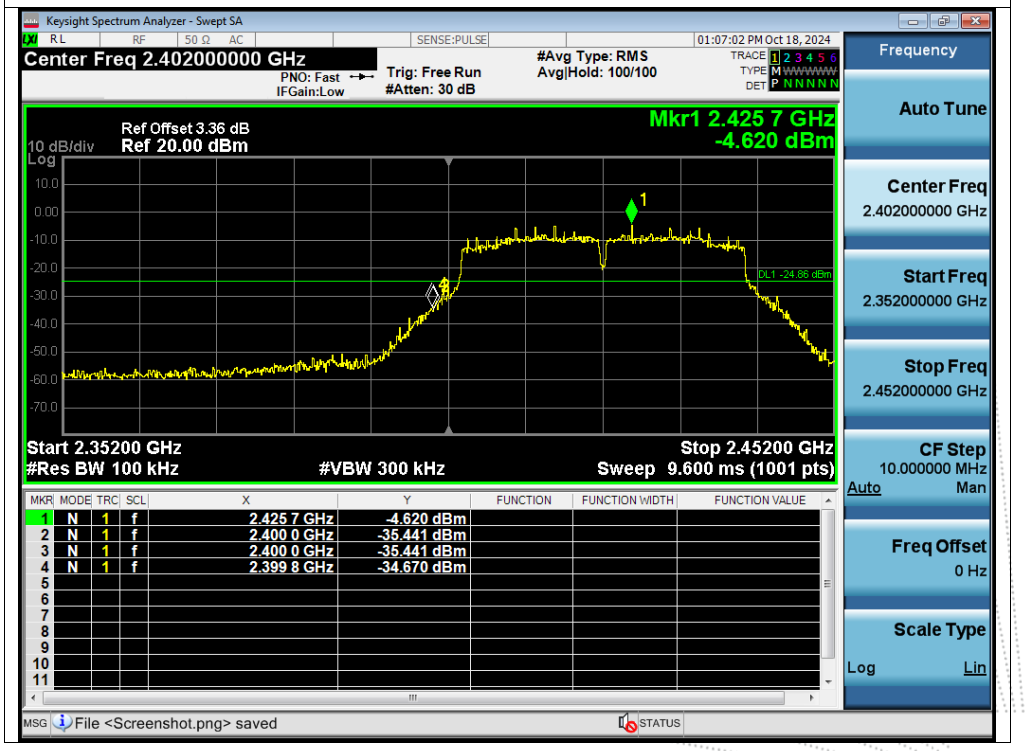


Band Edge NVNT n20 2462MHz Emission

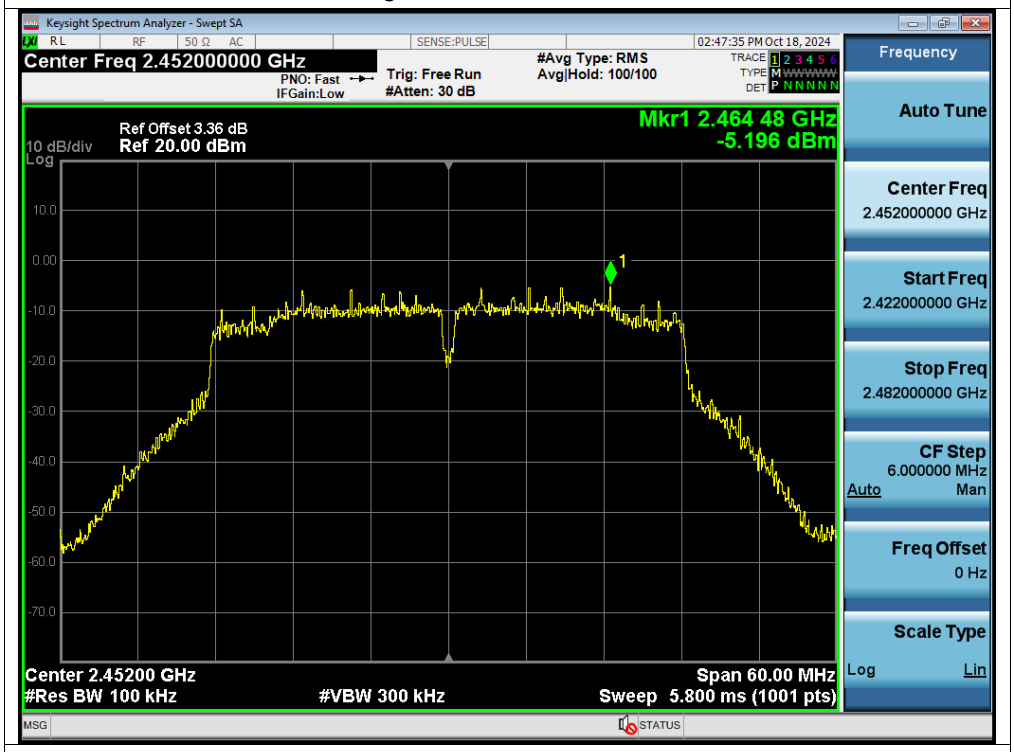


Band Edge NVNT n40 2422MHz Ref

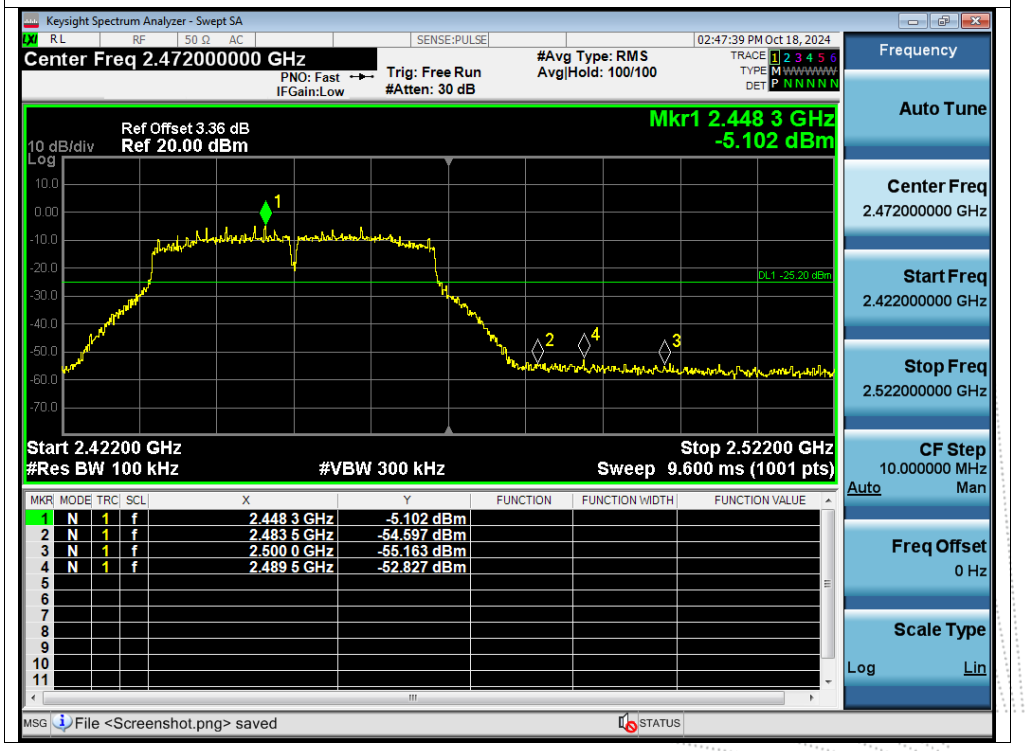
Band Edge NVNT n40 2422MHz Emission



Band Edge NVNT n40 2452MHz Ref



Band Edge NVNT n40 2452MHz Emission

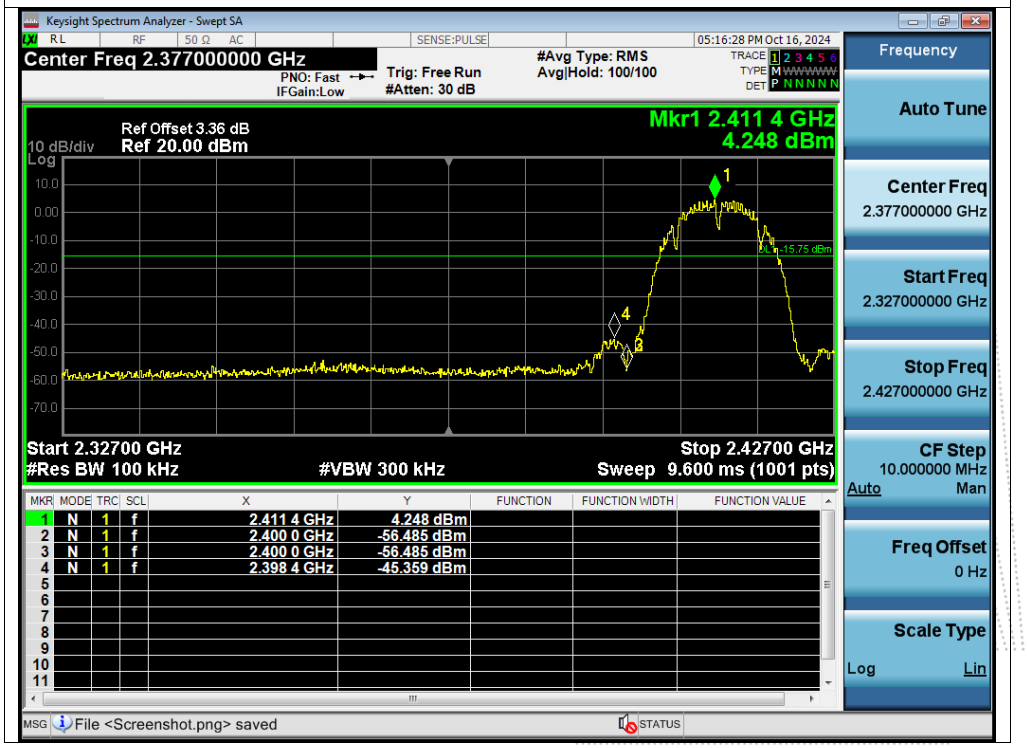


WIFI module 1:QCA9531-BL3A,AntB

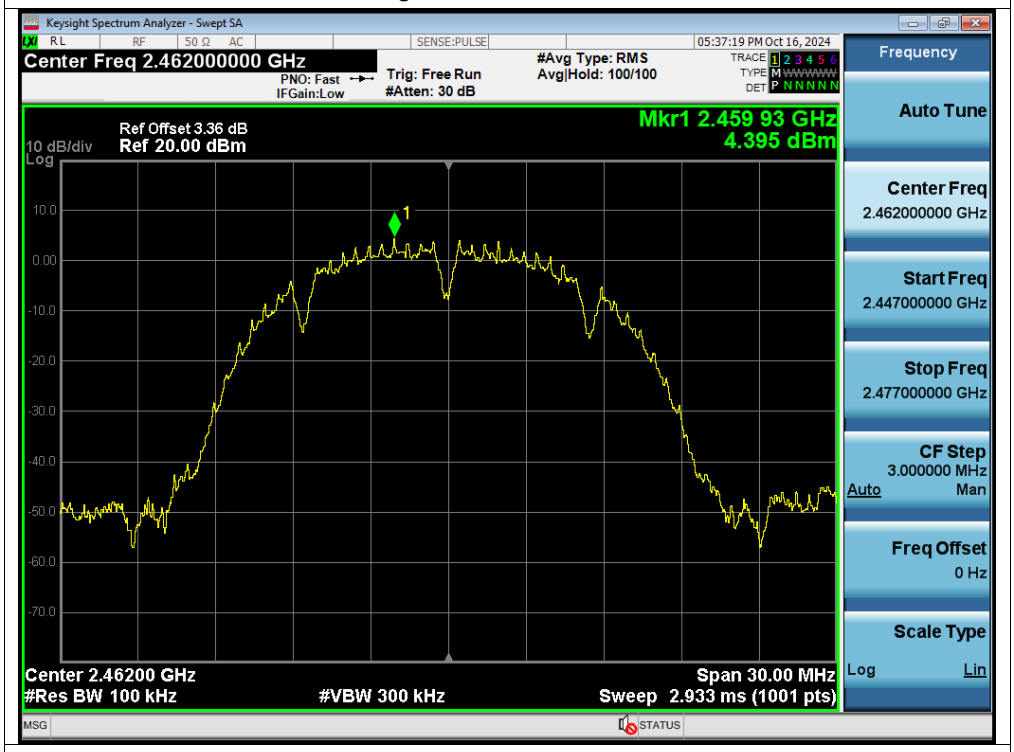
Test Graphs

Band Edge NVNT b 2412MHz Ref

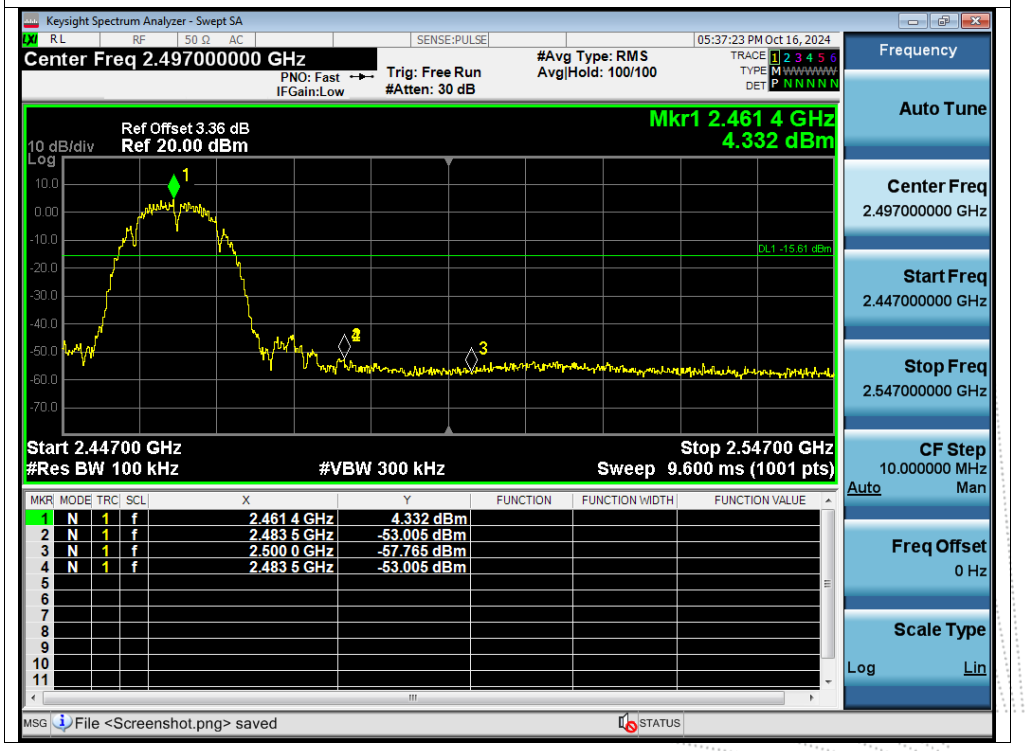
Band Edge NVNT b 2412MHz Emission



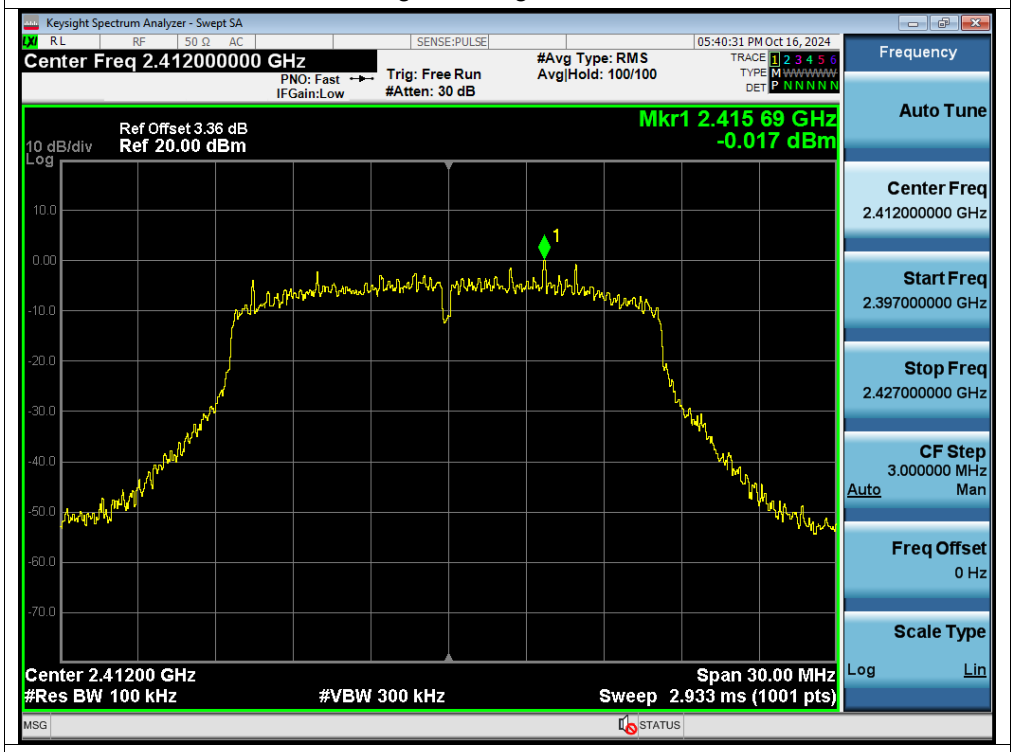
Band Edge NVNT b 2462MHz Ref



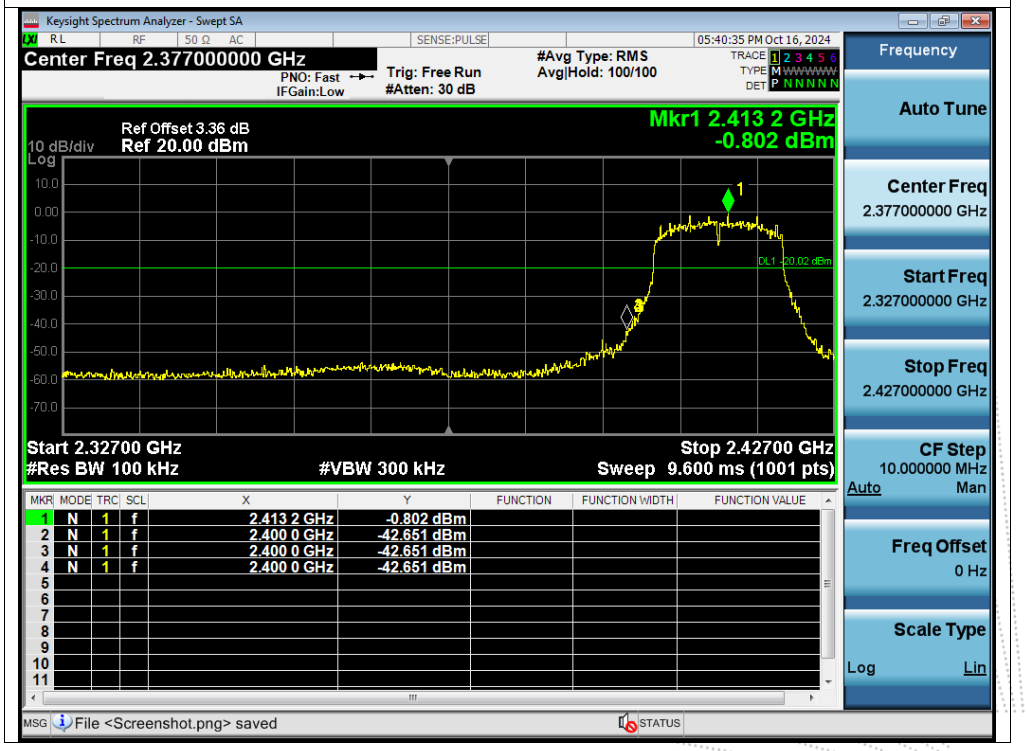
Band Edge NVNT b 2462MHz Emission



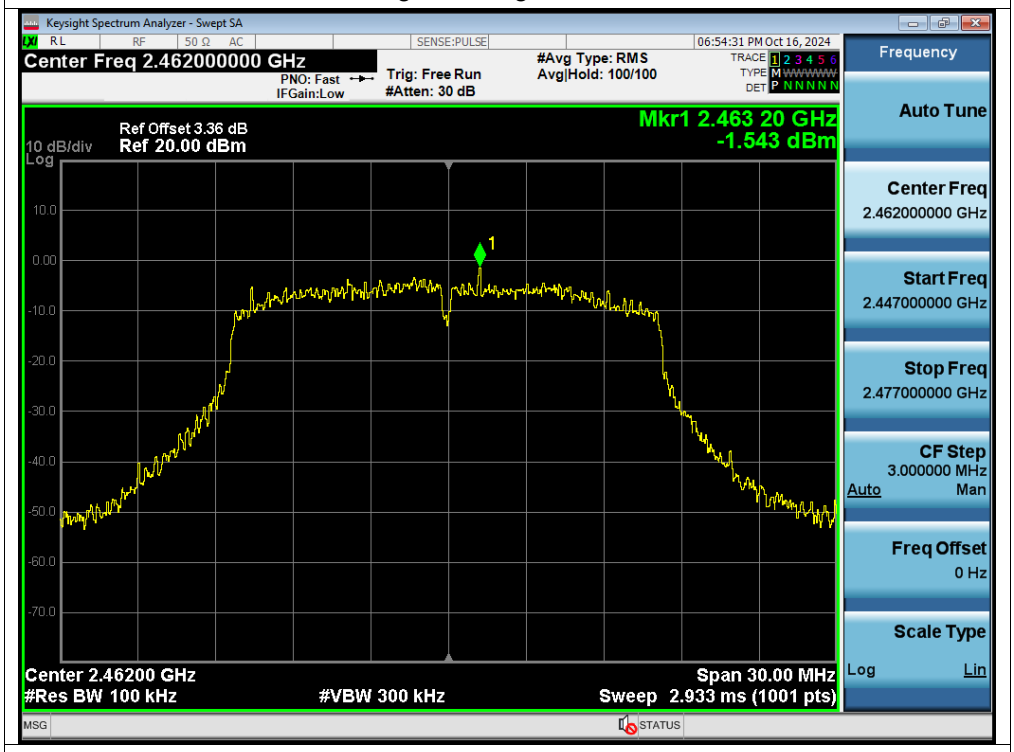
Band Edge NVNT g 2412MHz Ref



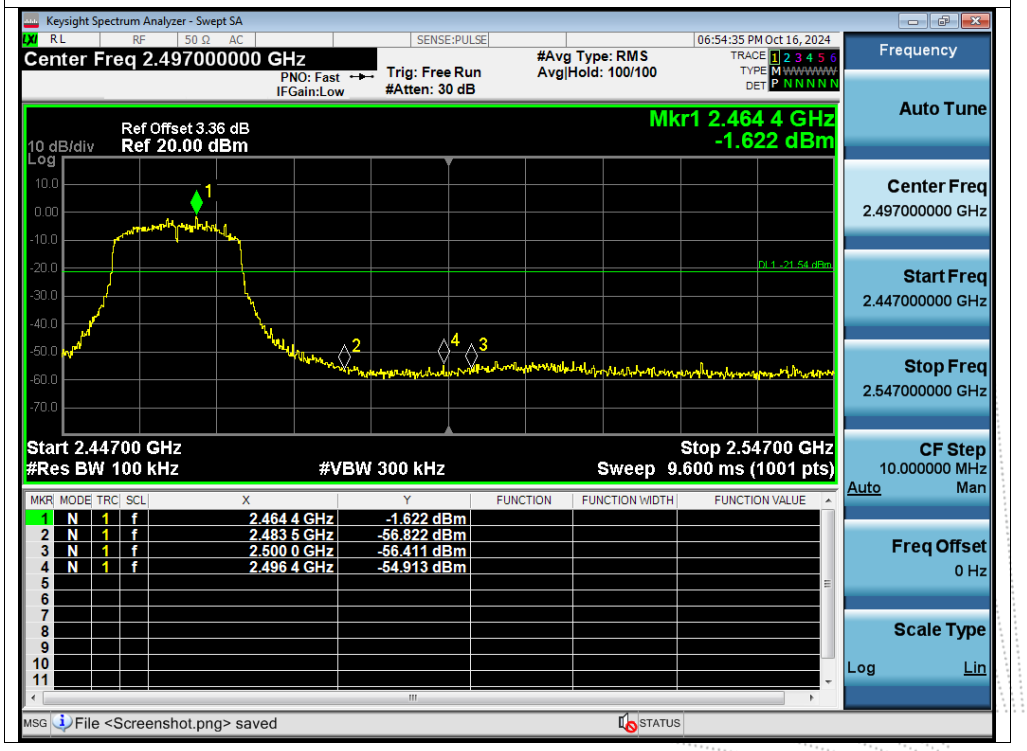
Band Edge NVNT g 2412MHz Emission



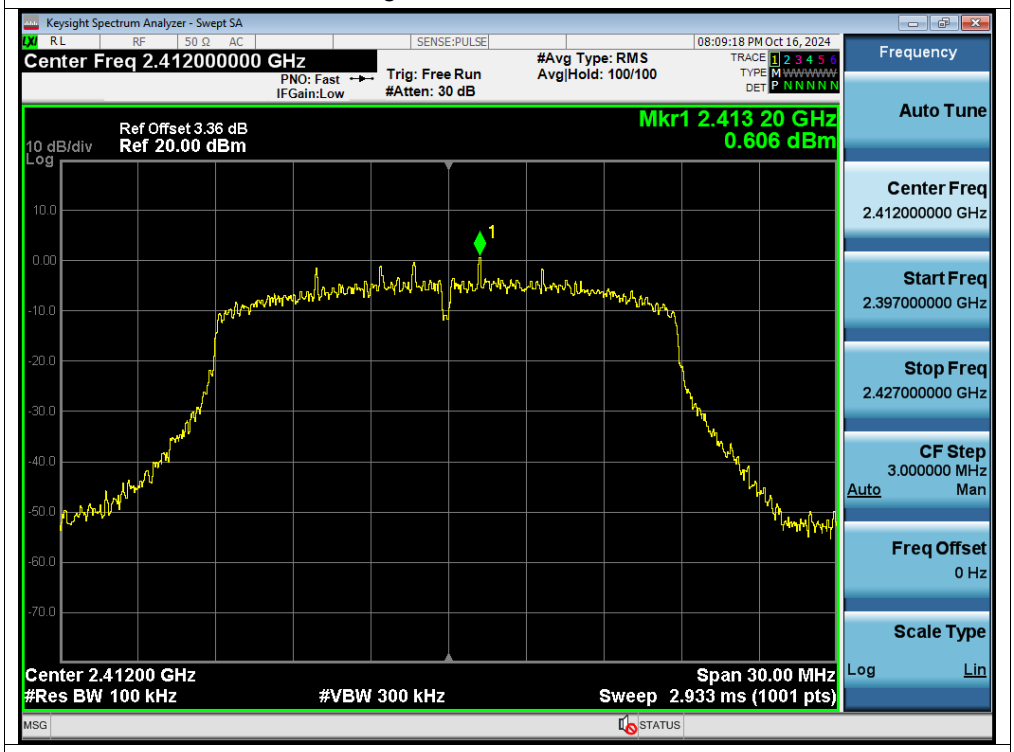
Band Edge NVNT g 2462MHz Ref



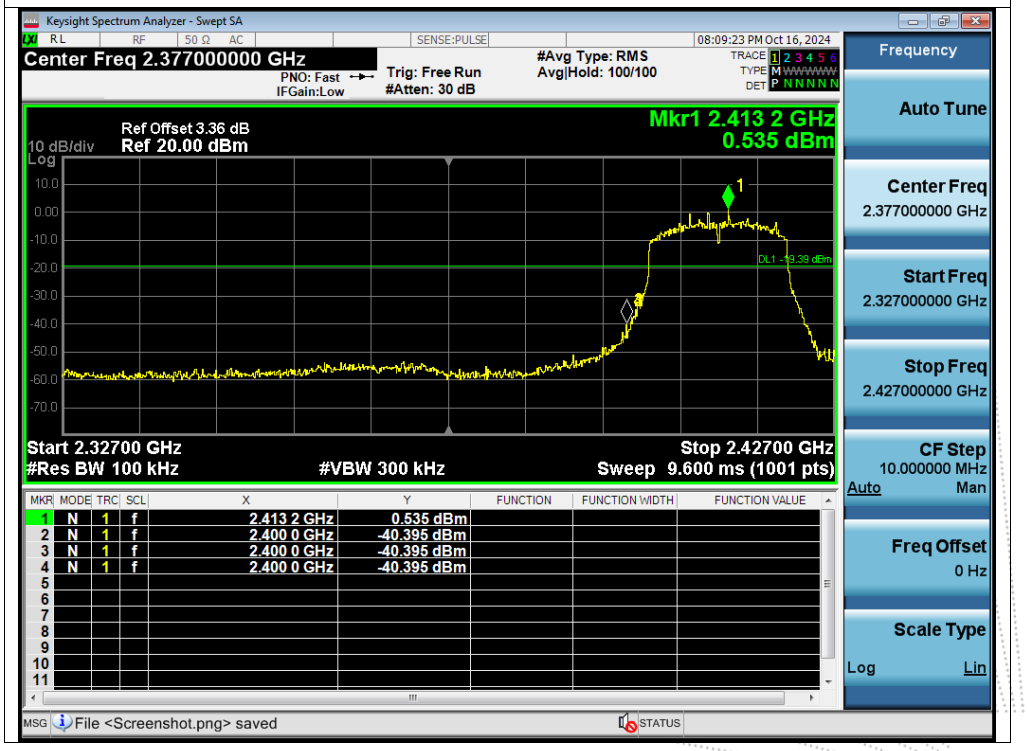
Band Edge NVNT g 2462MHz Emission



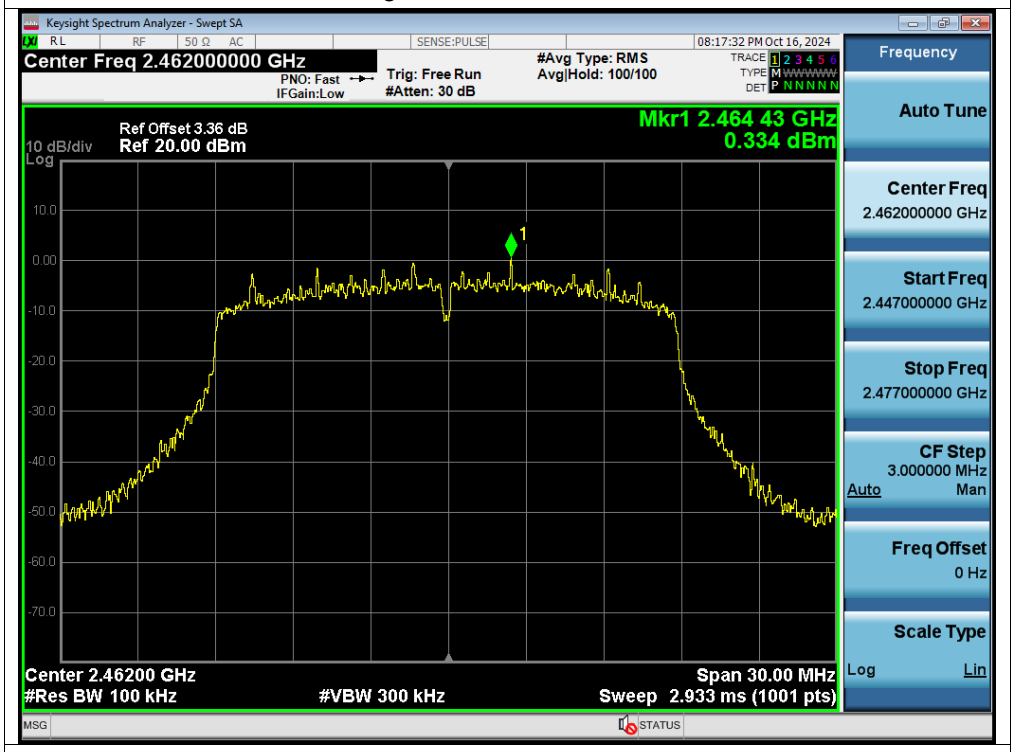
Band Edge NVNT n20 2412MHz Ref



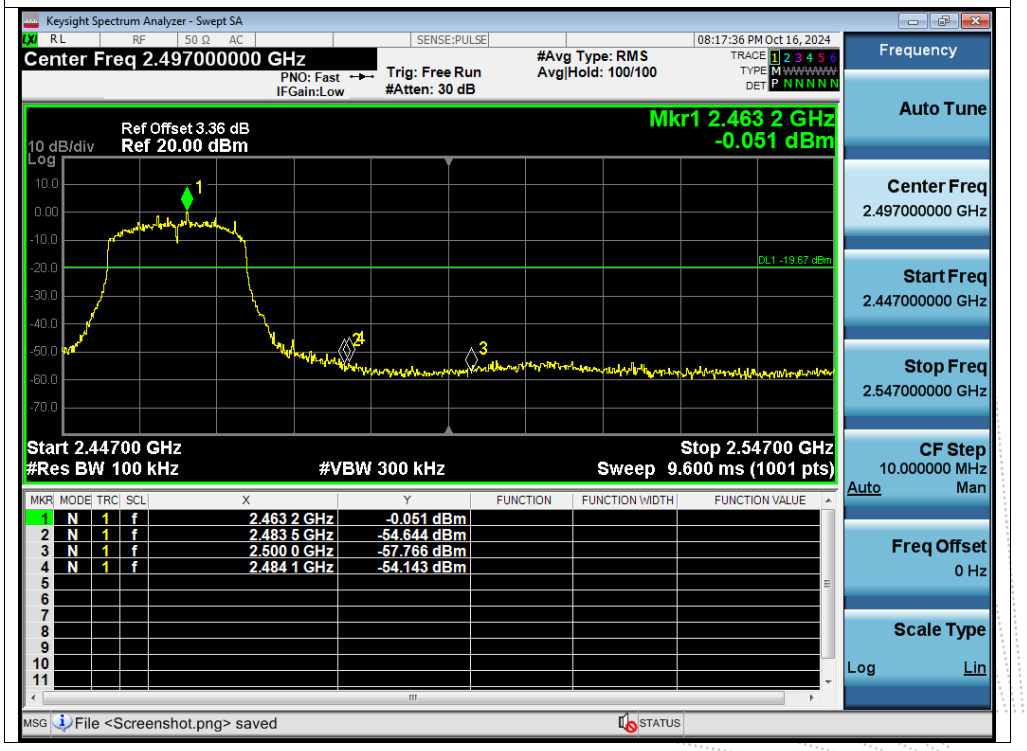
Band Edge NVNT n20 2412MHz Emission



Band Edge NVNT n20 2462MHz Ref

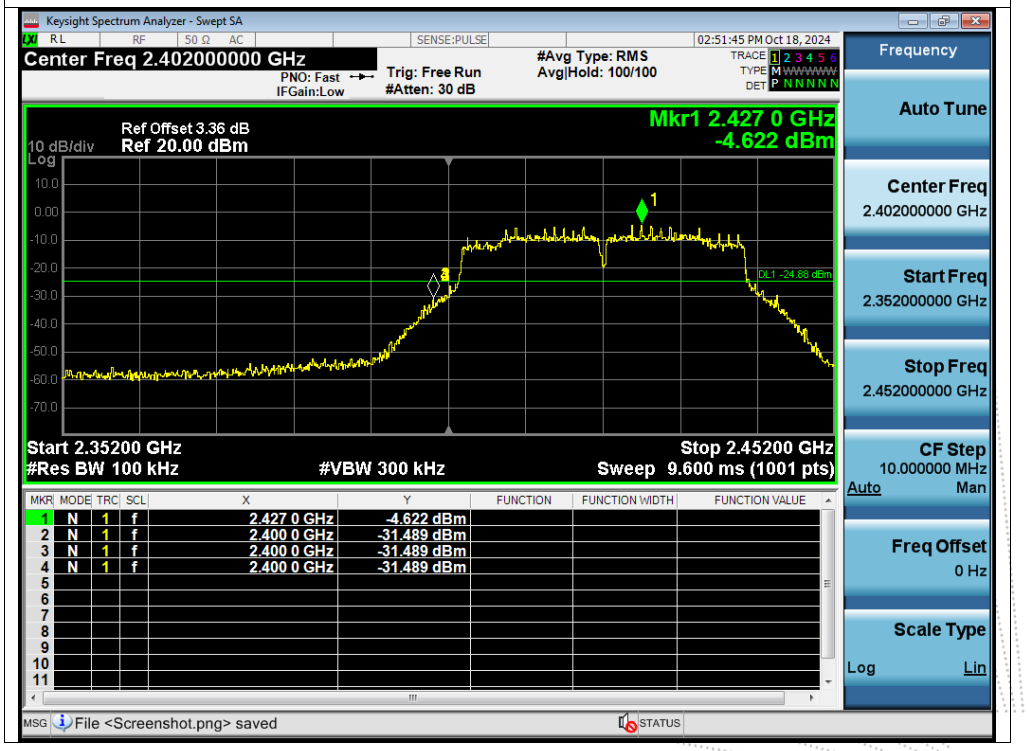


Band Edge NVNT n20 2462MHz Emission



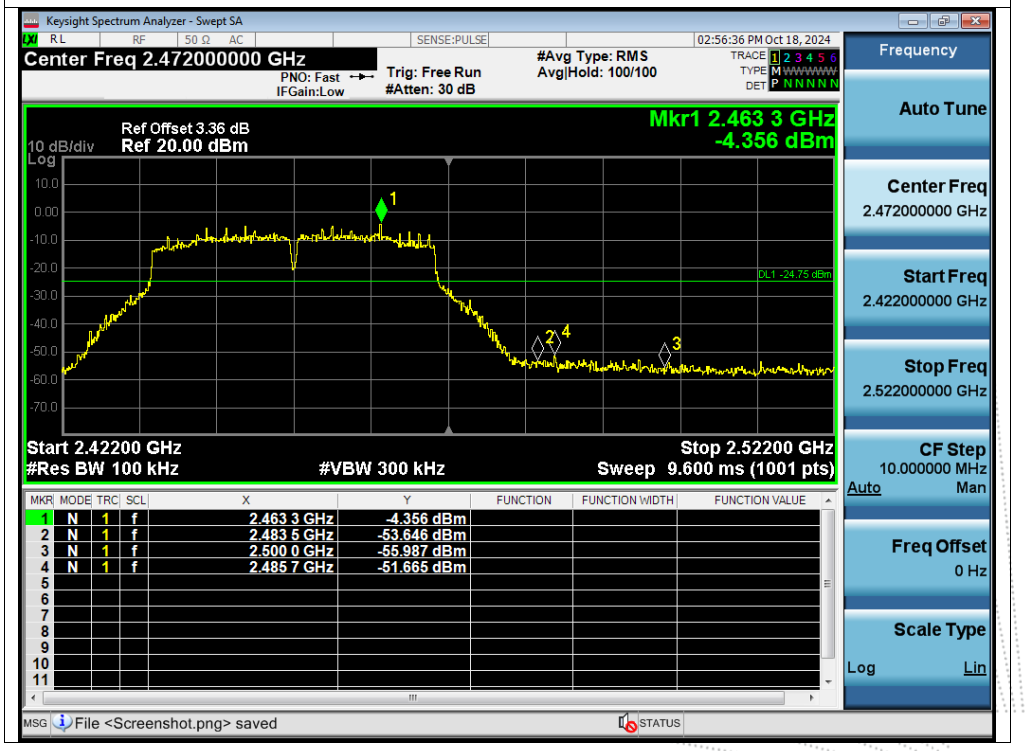
Band Edge NVNT n40 2422MHz Ref

Band Edge NVNT n40 2422MHz Emission



Band Edge NVNT n40 2452MHz Ref

Band Edge NVNT n40 2452MHz Emission

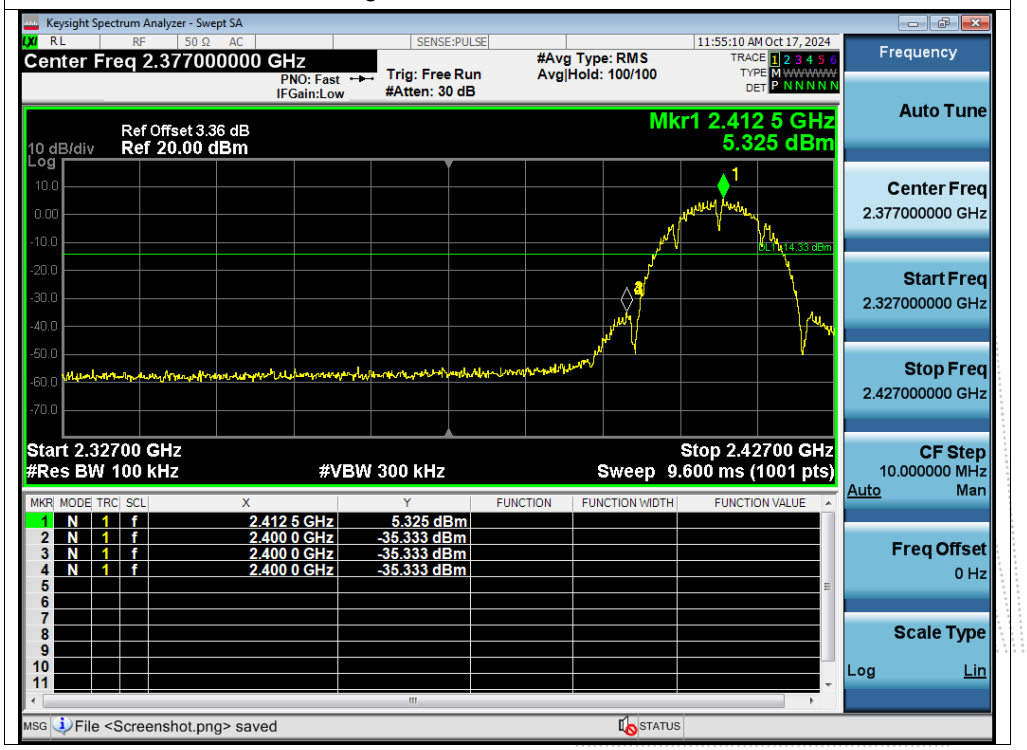


WIFI module 2:RTL8723DS

Test Graphs

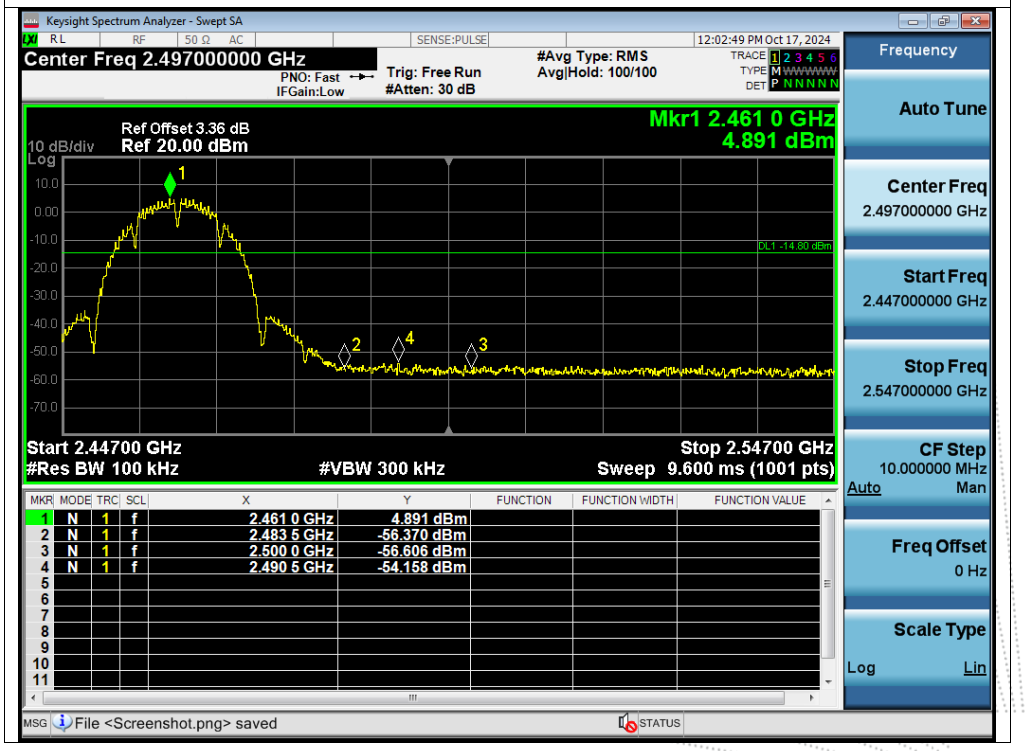
Band Edge NVNT b 2412MHz Ref

Band Edge NVNT b 2412MHz Emission



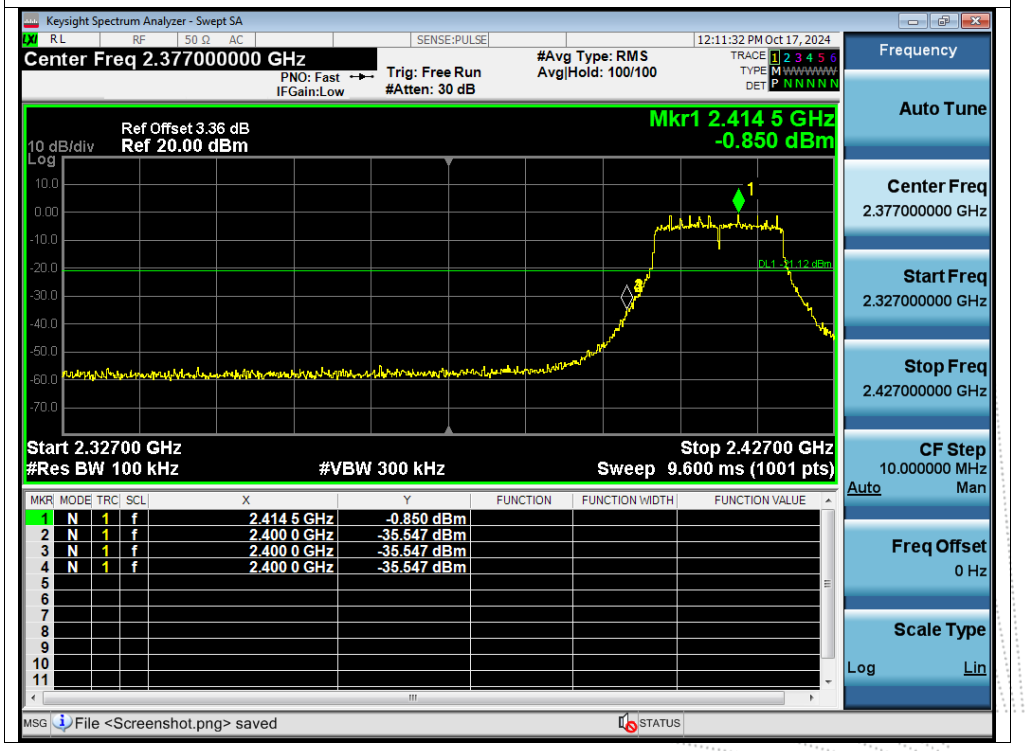
Band Edge NVNT b 2462MHz Ref

Band Edge NVNT b 2462MHz Emission

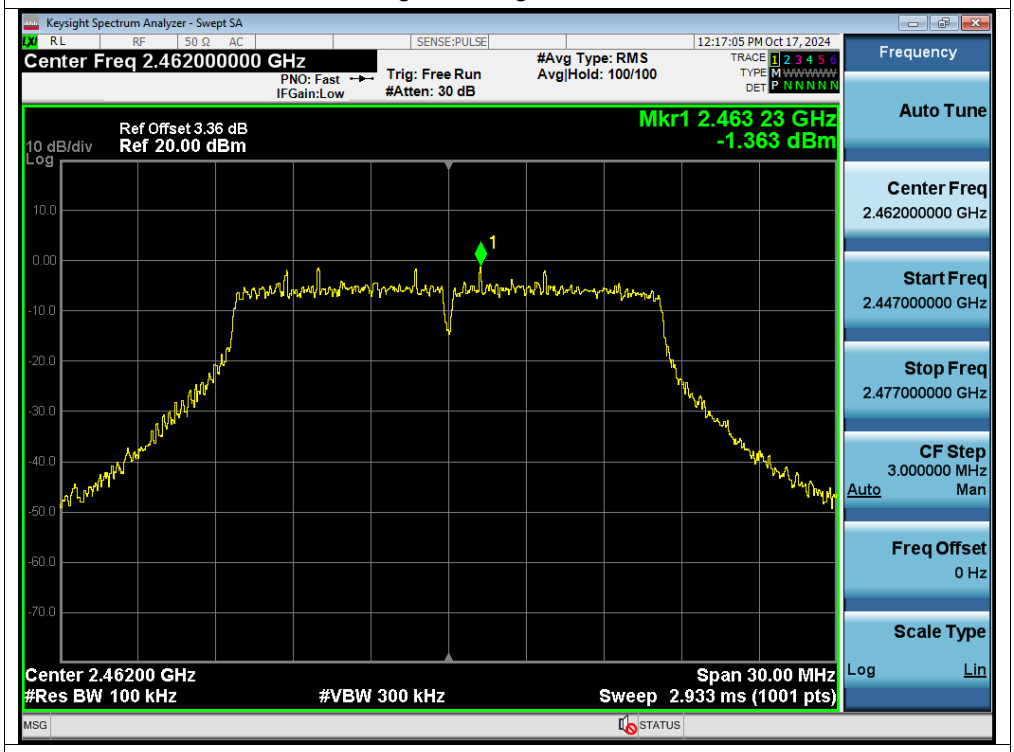


Band Edge NVNT g 2412MHz Ref

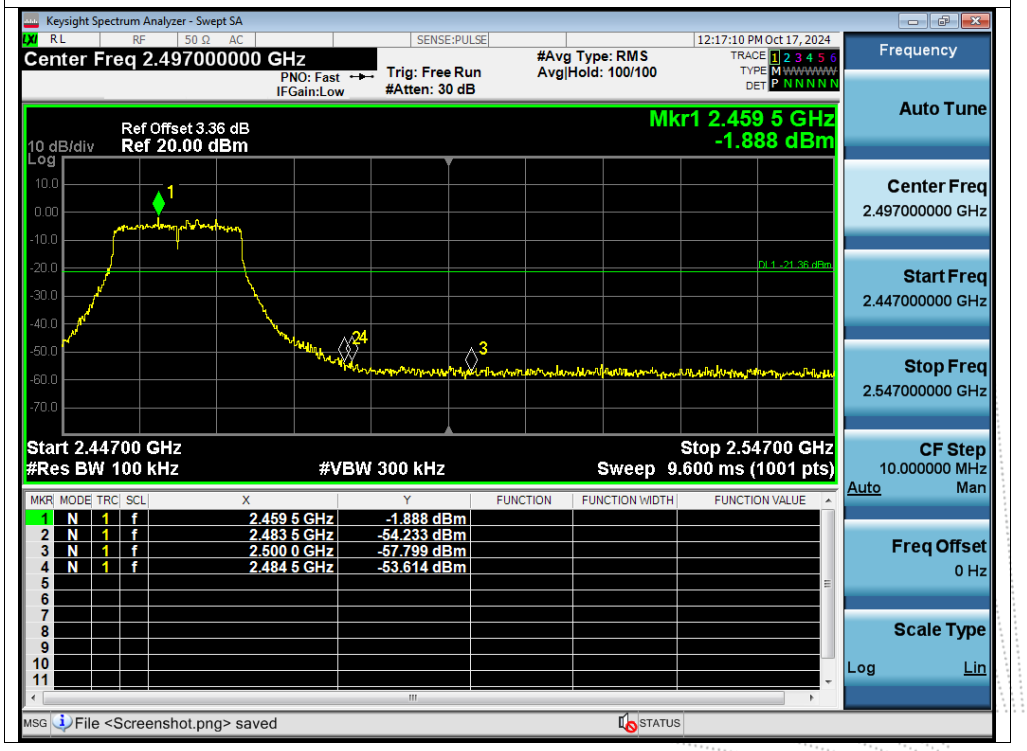
Band Edge NVNT g 2412MHz Emission



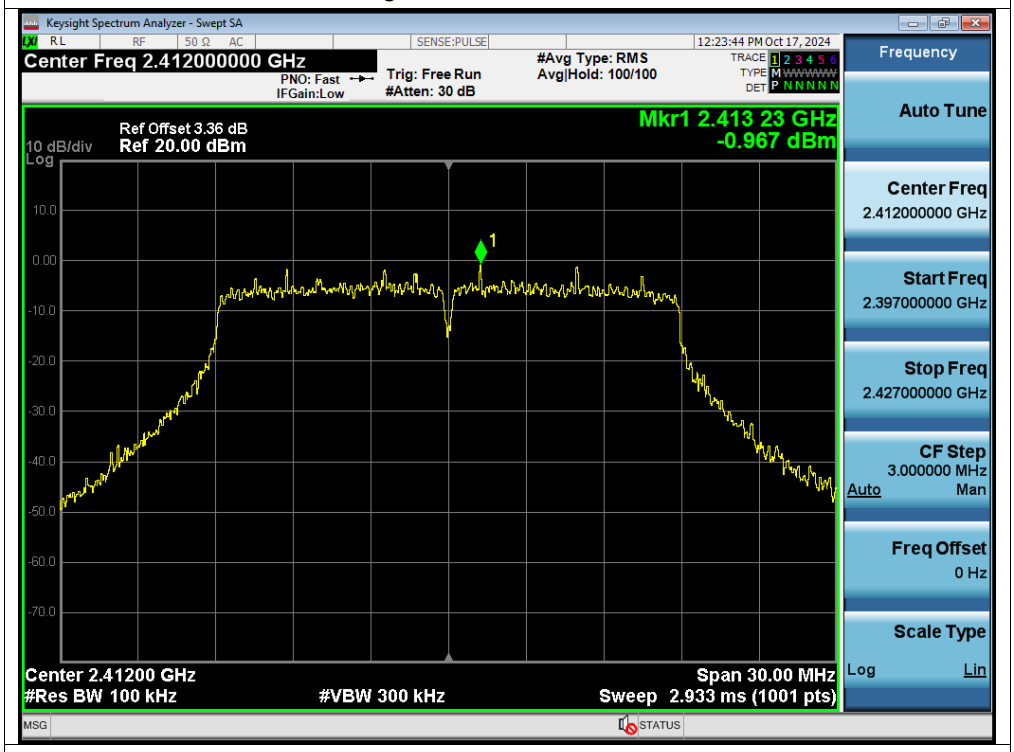
Band Edge NVNT g 2462MHz Ref



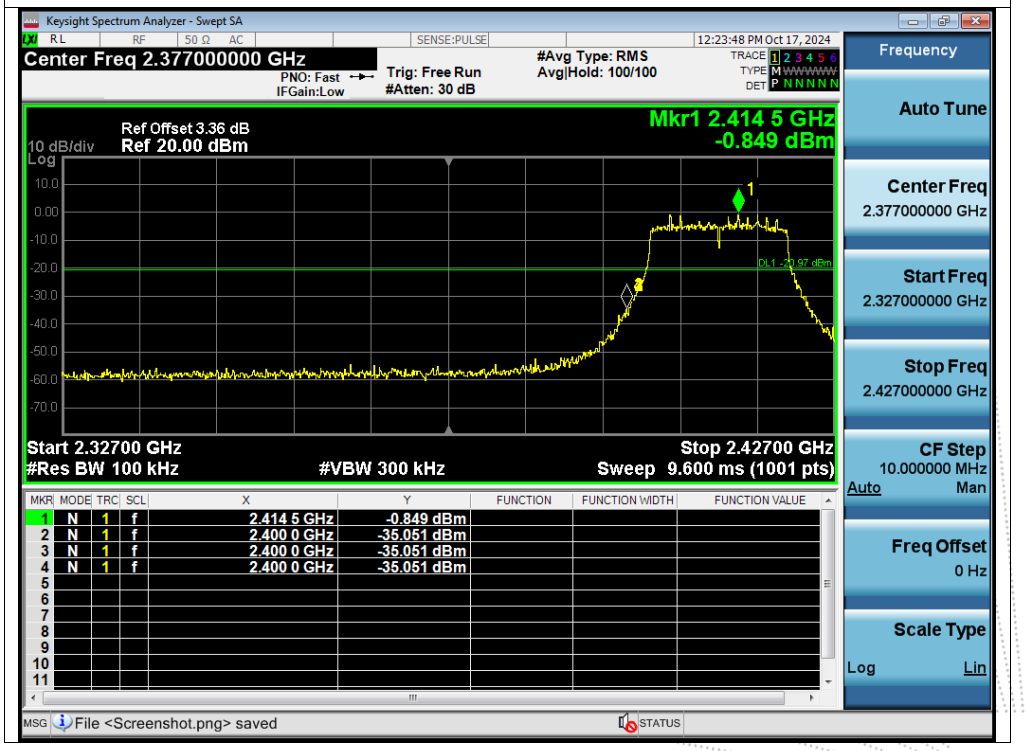
Band Edge NVNT g 2462MHz Emission



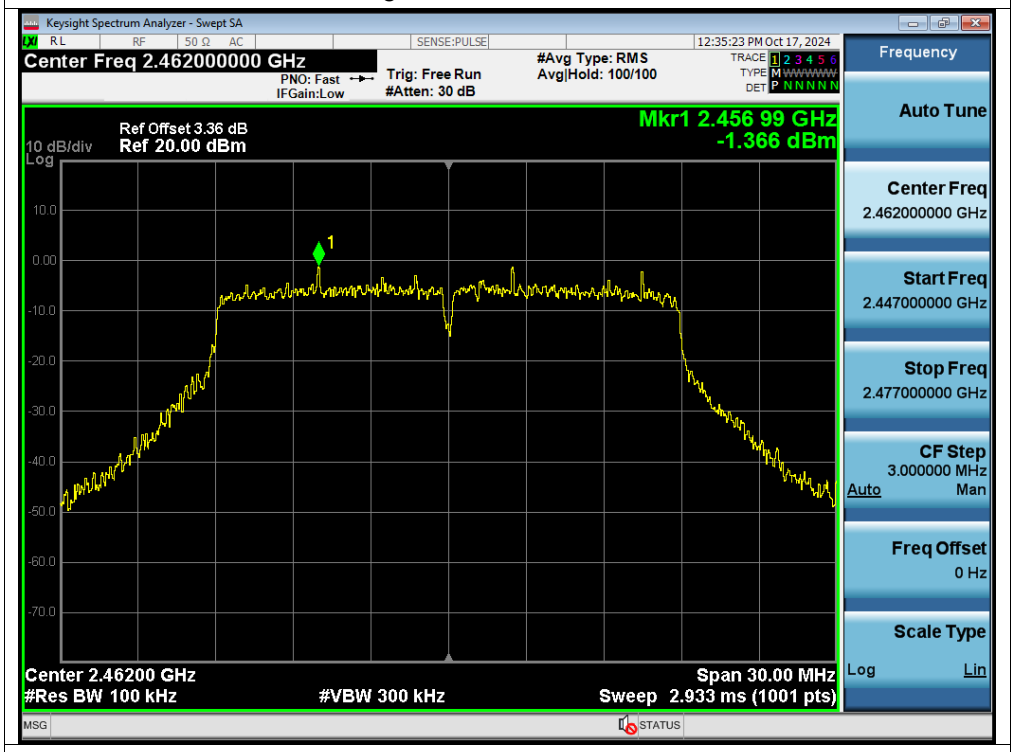
Band Edge NVNT n20 2412MHz Ref



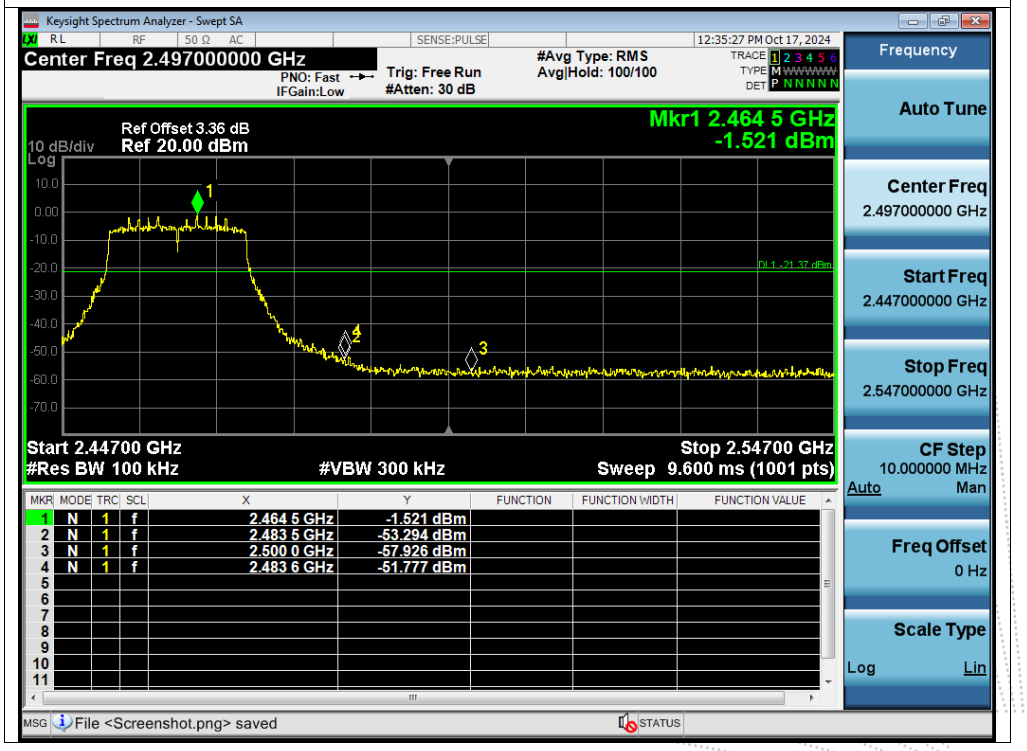
Band Edge NVNT n20 2412MHz Emission



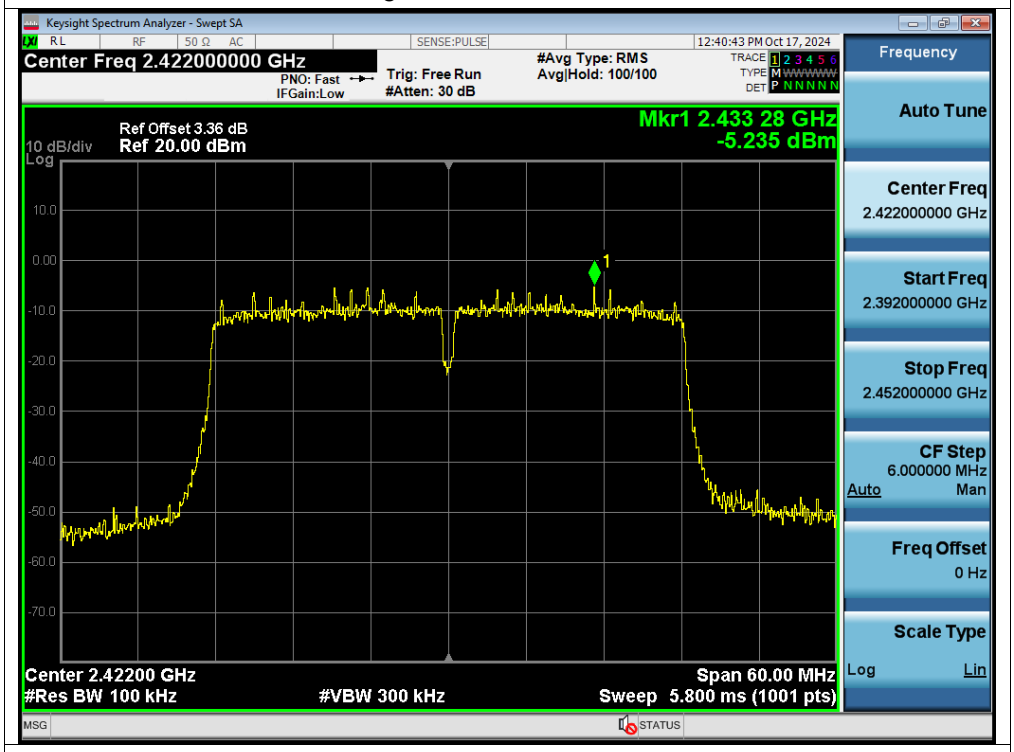
Band Edge NVNT n20 2462MHz Ref



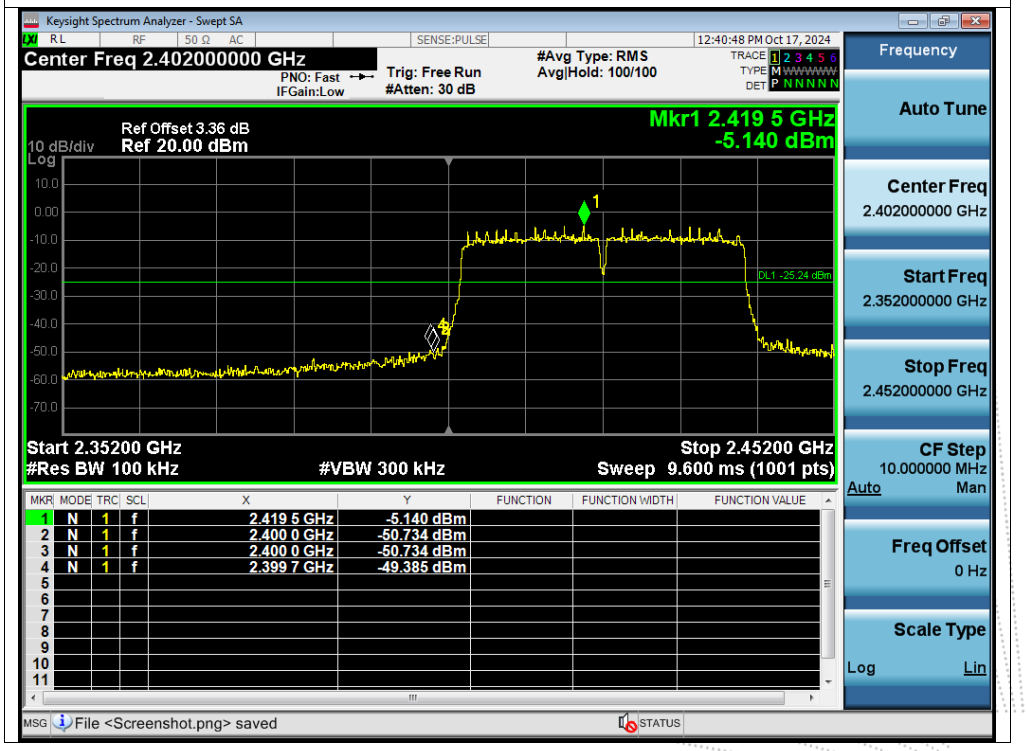
Band Edge NVNT n20 2462MHz Emission



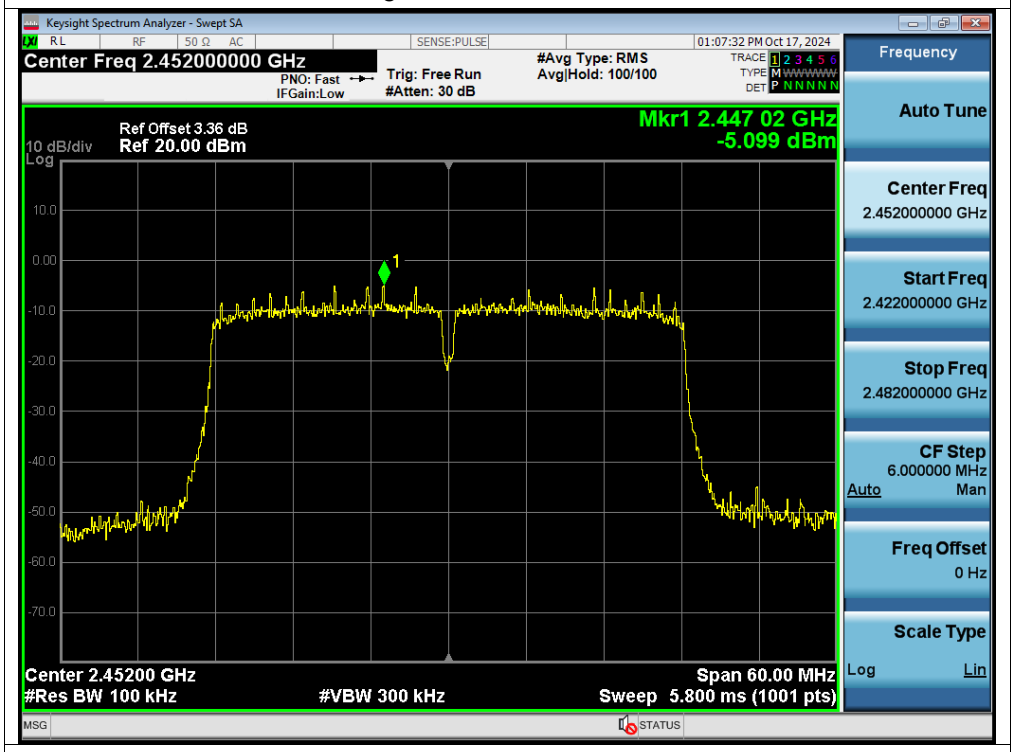
Band Edge NVNT n40 2422MHz Ref



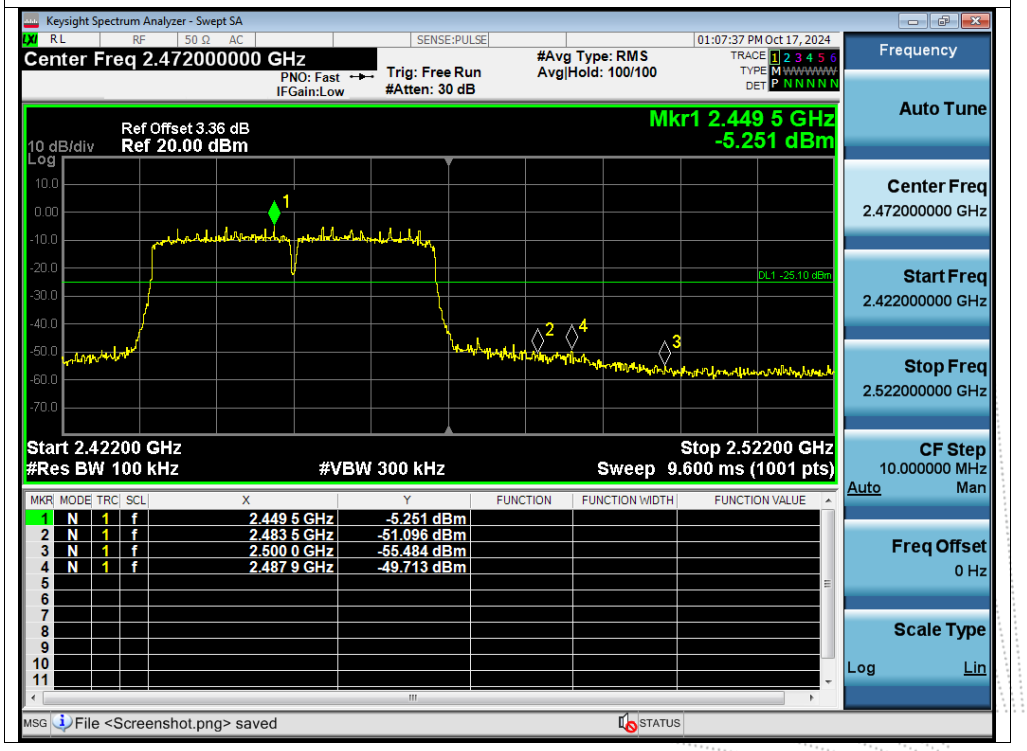
Band Edge NVNT n40 2422MHz Emission



Band Edge NVNT n40 2452MHz Ref



Band Edge NVNT n40 2452MHz Emission



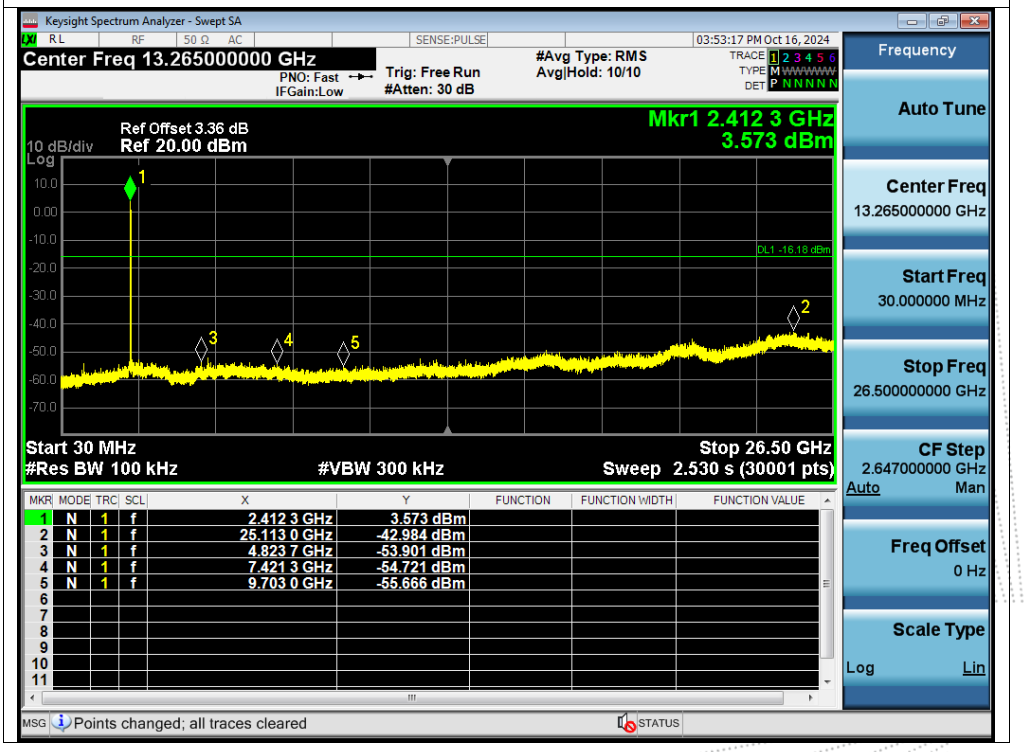
Conducted RF Spurious Emission

WIFI module 1:QCA9531-BL3A,AntA

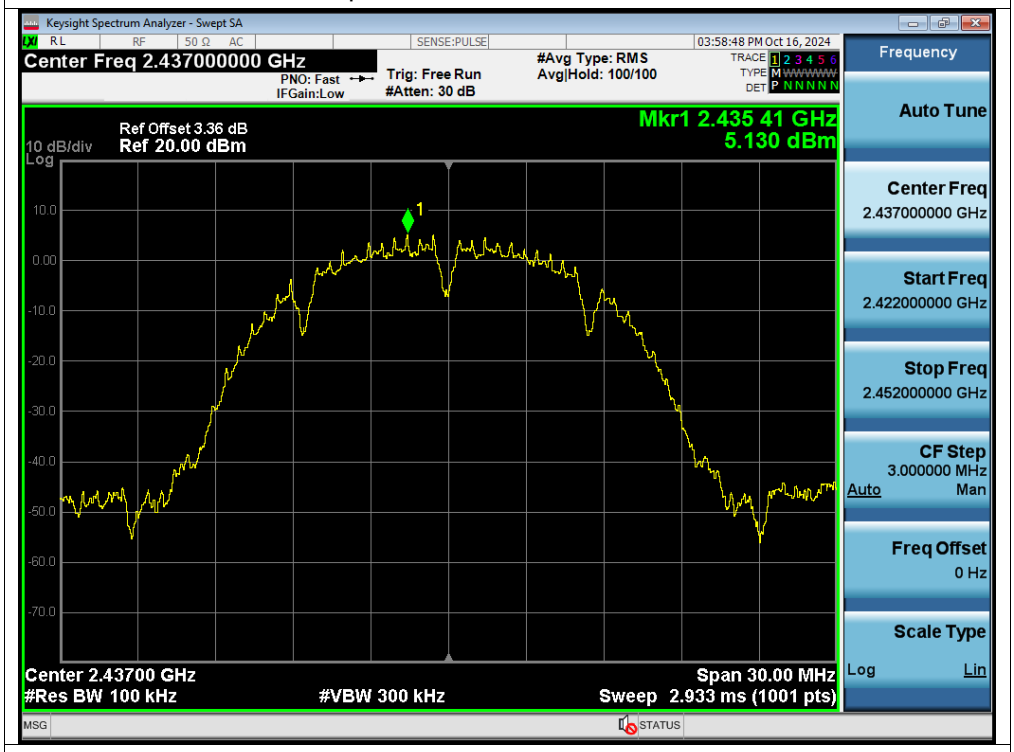
Test Graphs

Tx. Spurious NVNT b 2412MHz Ref

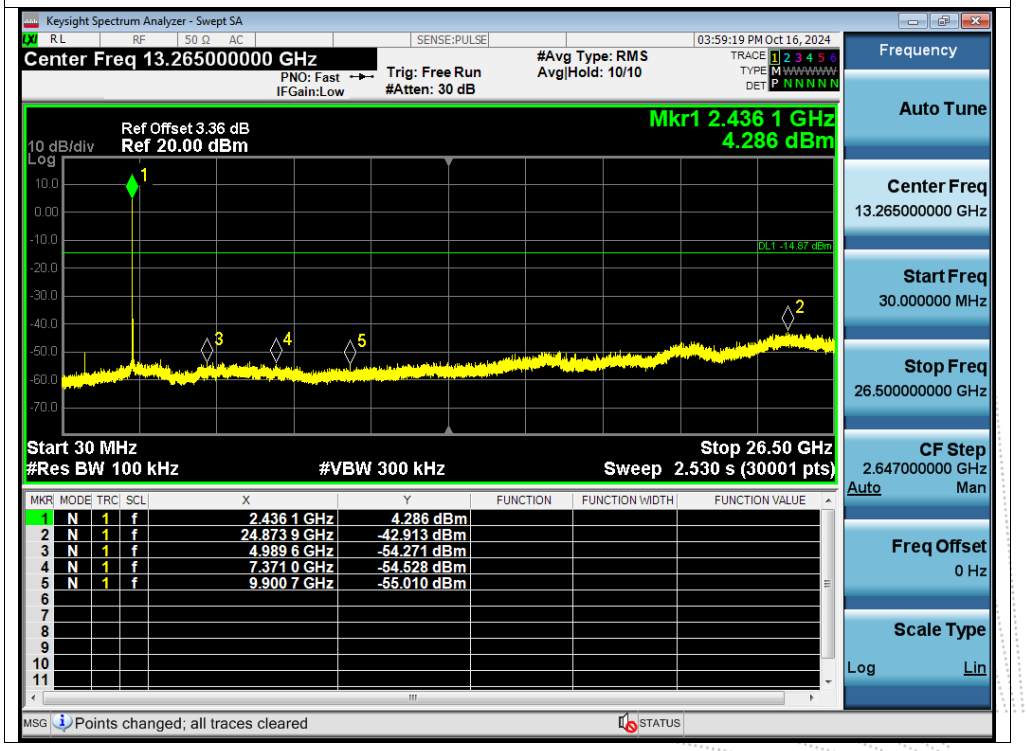
Tx. Spurious NVNT b 2412MHz Emission



Tx. Spurious NVNT b 2437MHz Ref

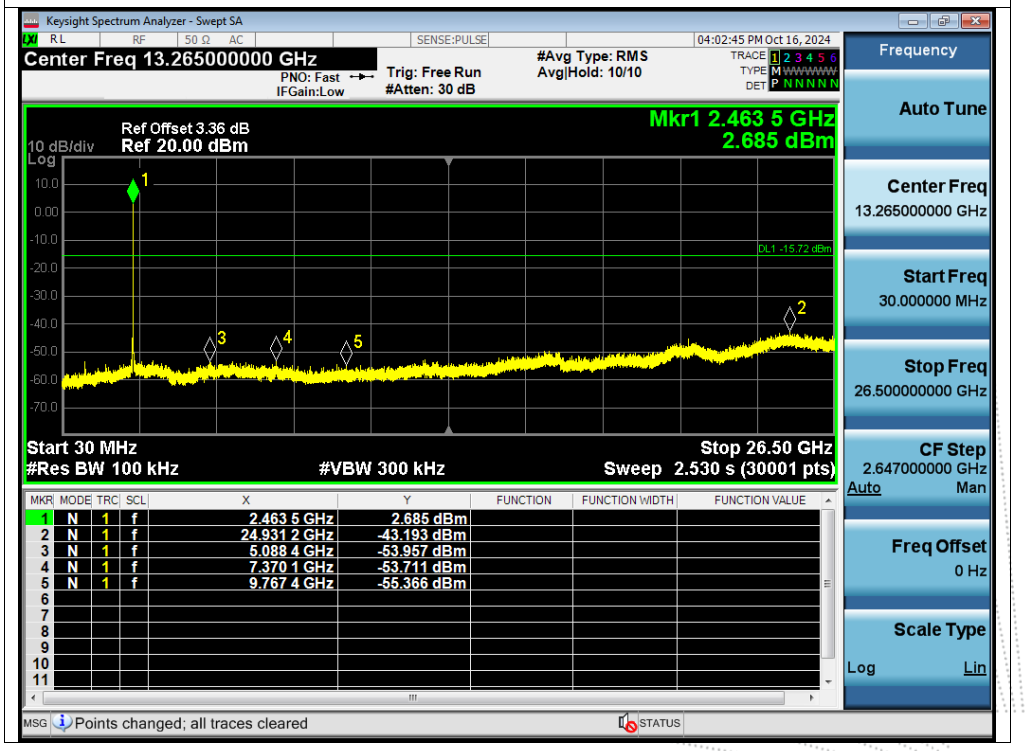


Tx. Spurious NVNT b 2437MHz Emission

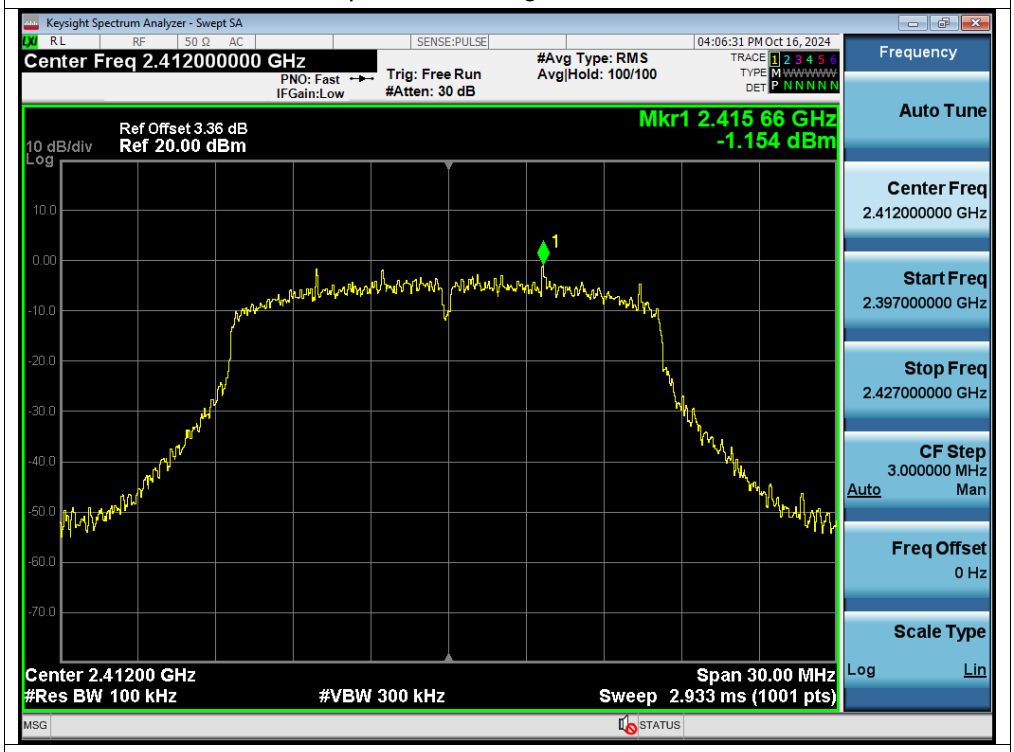


Tx. Spurious NVNT b 2462MHz Ref

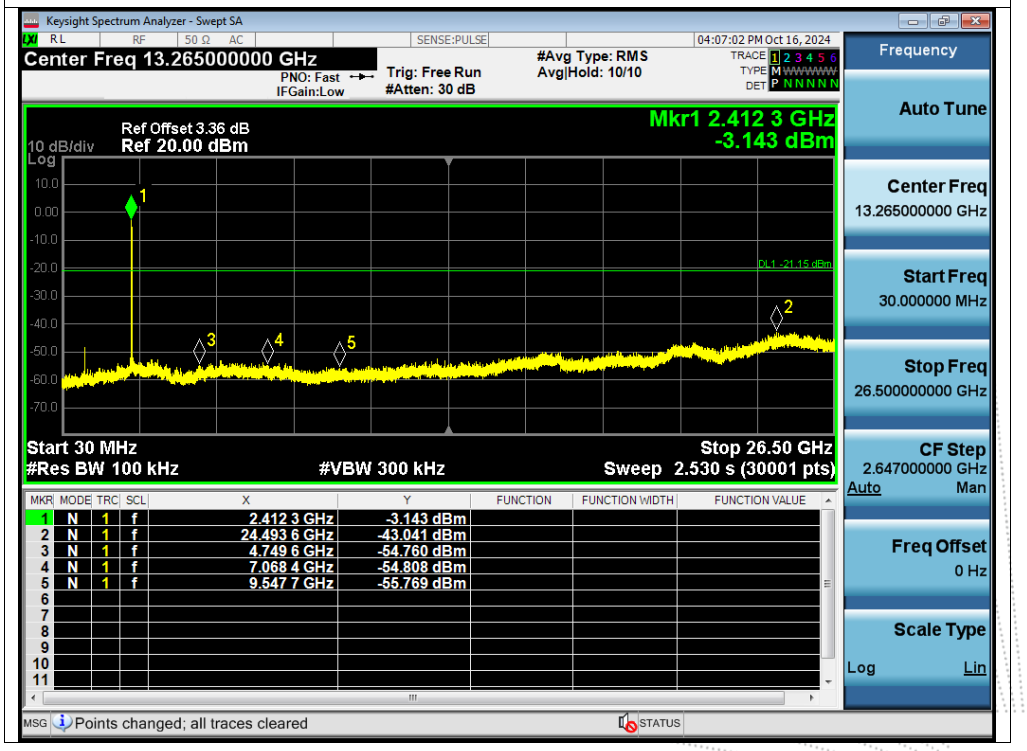
Tx. Spurious NVNT b 2462MHz Emission



Tx. Spurious NVNT g 2412MHz Ref

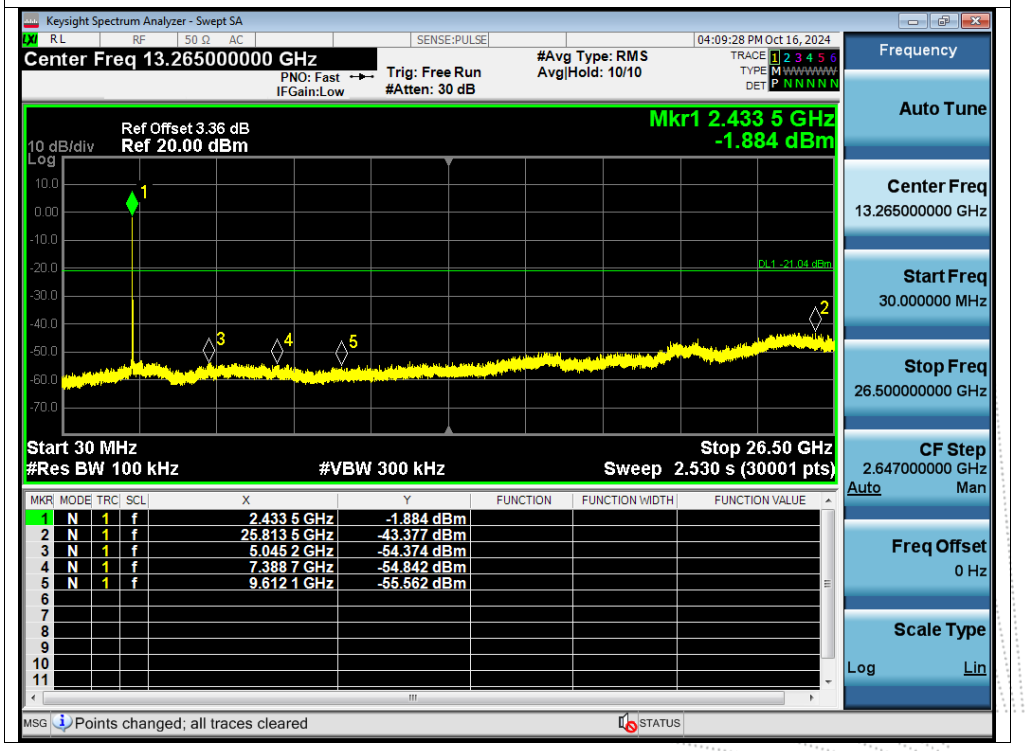


Tx. Spurious NVNT g 2412MHz Emission

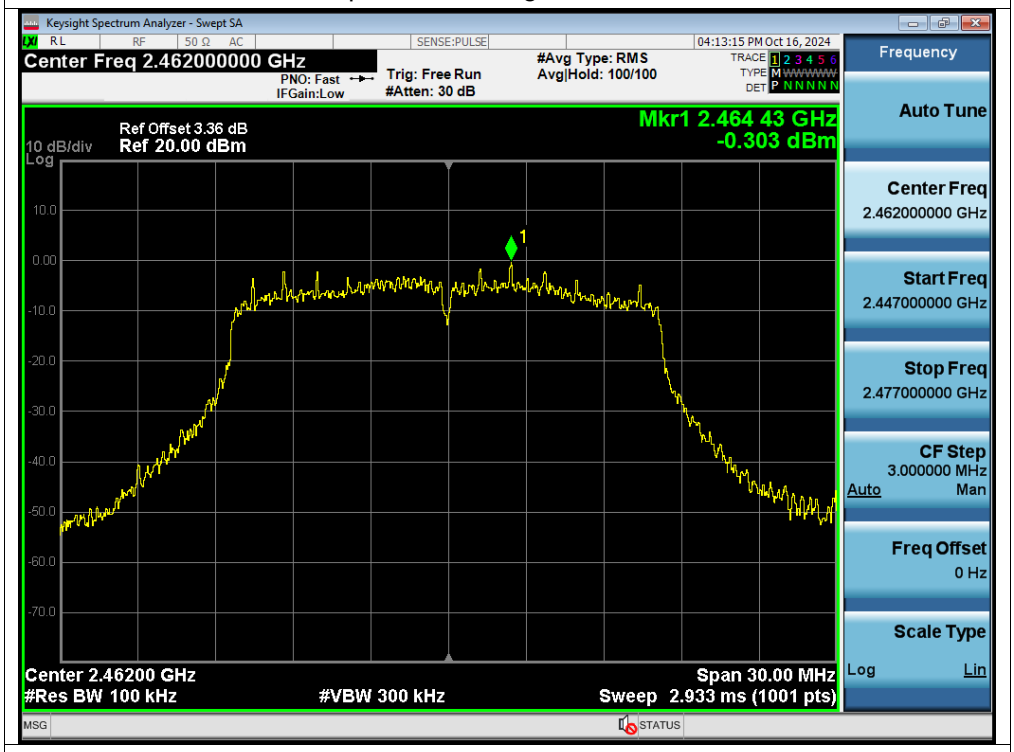


Tx. Spurious NVNT g 2437MHz Ref

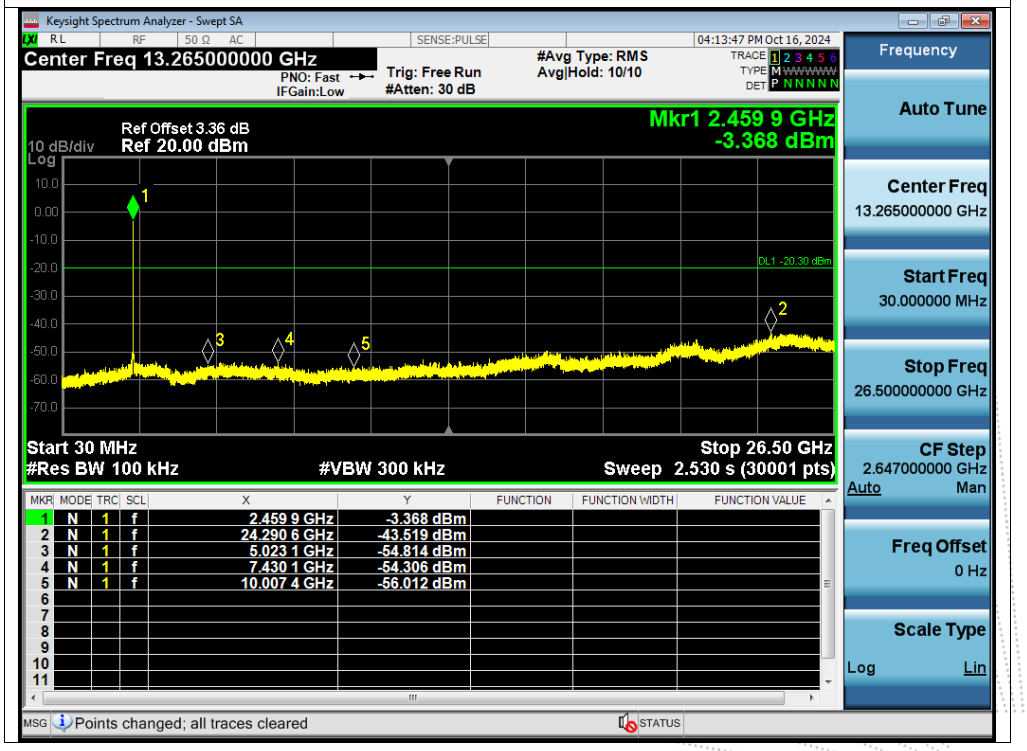
Tx. Spurious NVNT g 2437MHz Emission



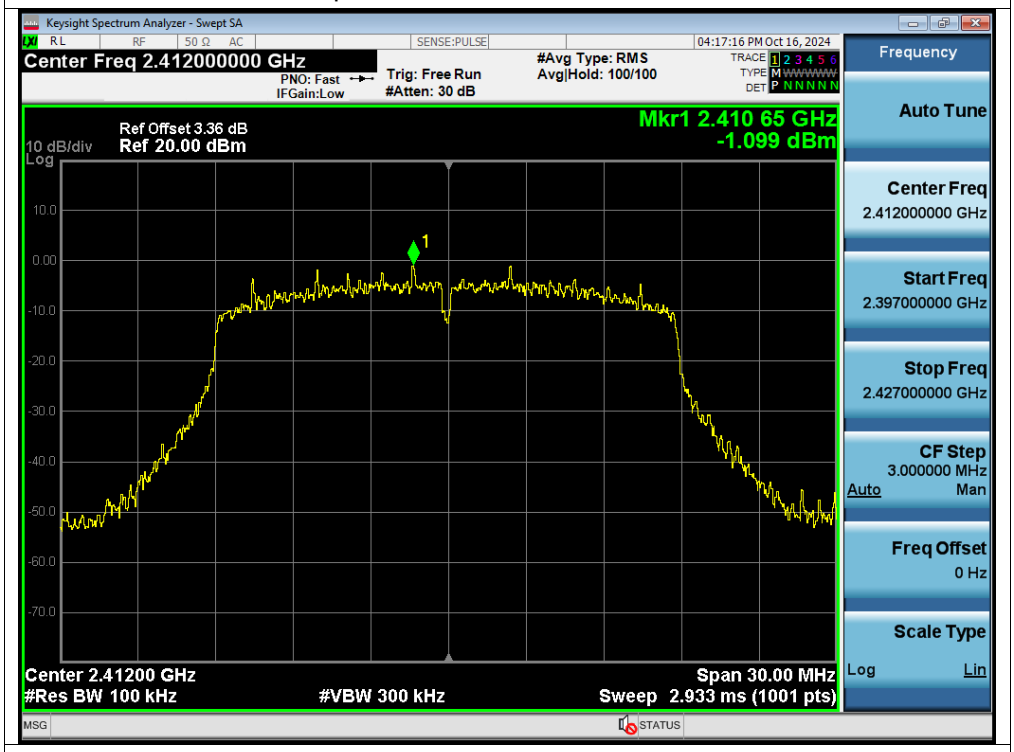
Tx. Spurious NVNT g 2462MHz Ref



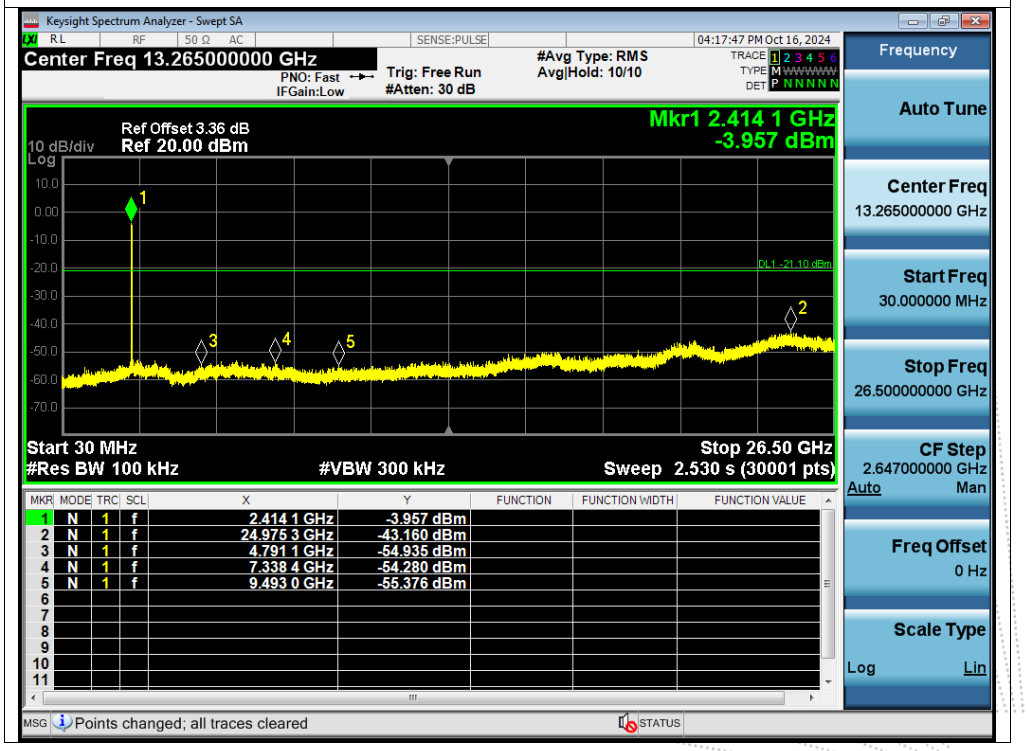
Tx. Spurious NVNT g 2462MHz Emission



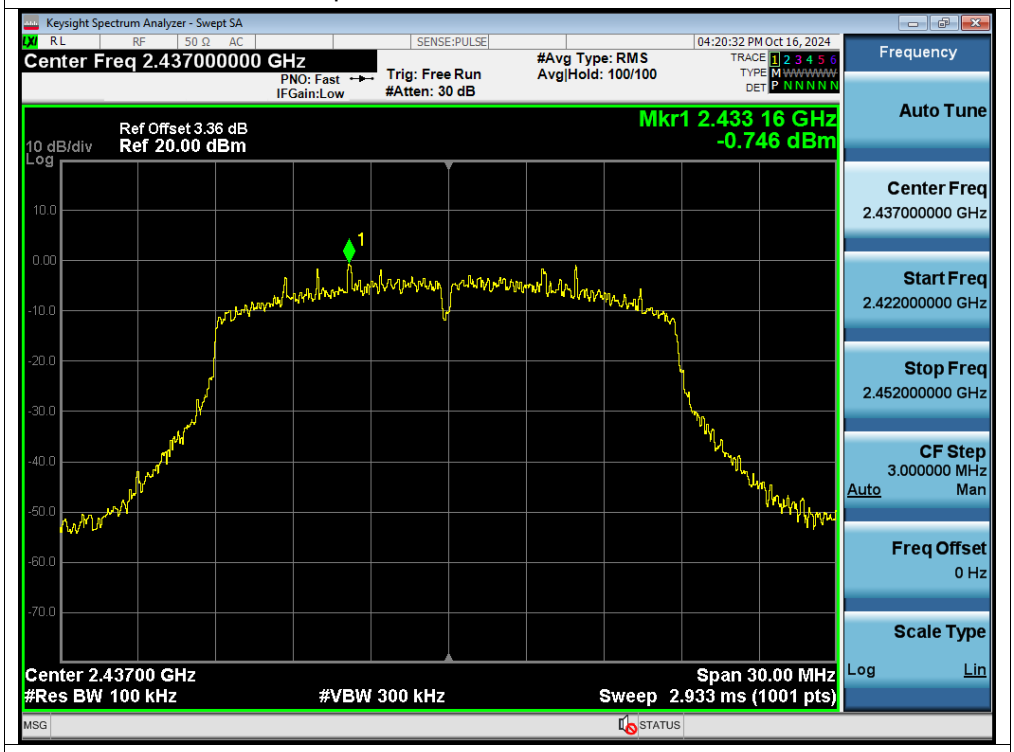
Tx. Spurious NVNT n20 2412MHz Ref



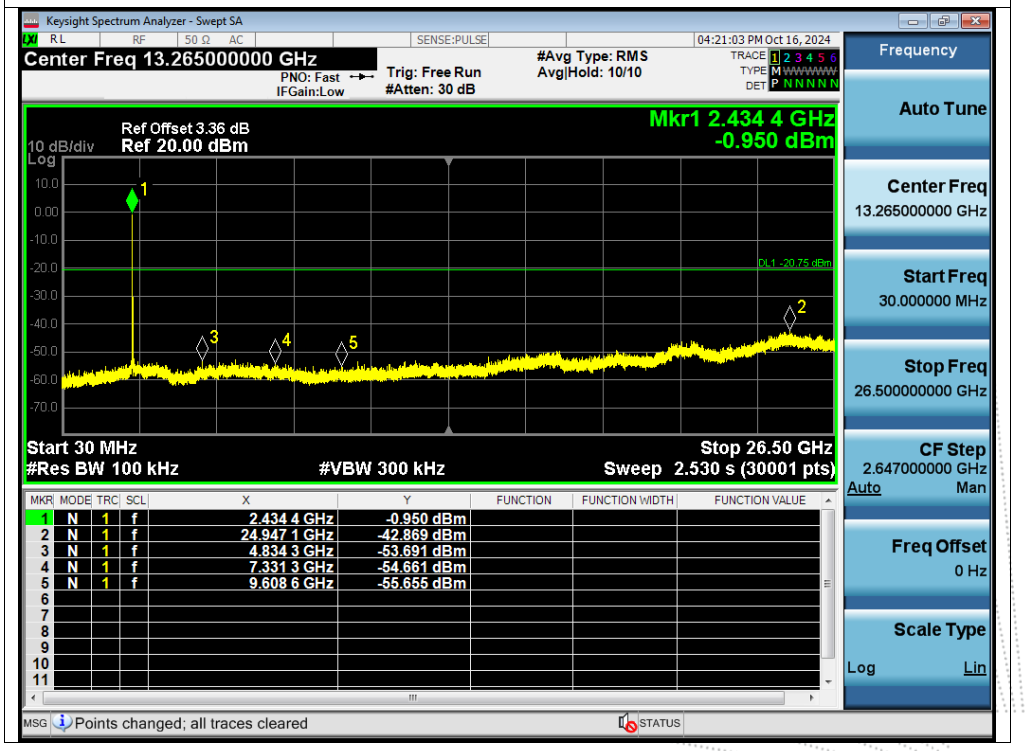
Tx. Spurious NVNT n20 2412MHz Emission



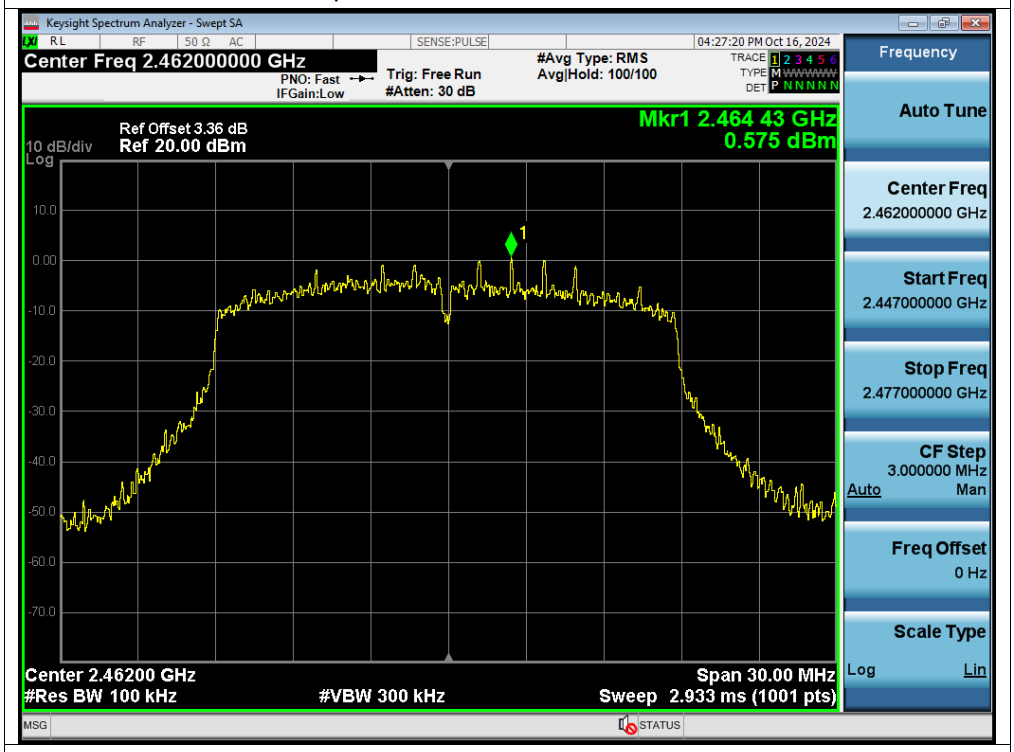
Tx. Spurious NVNT n20 2437MHz Ref



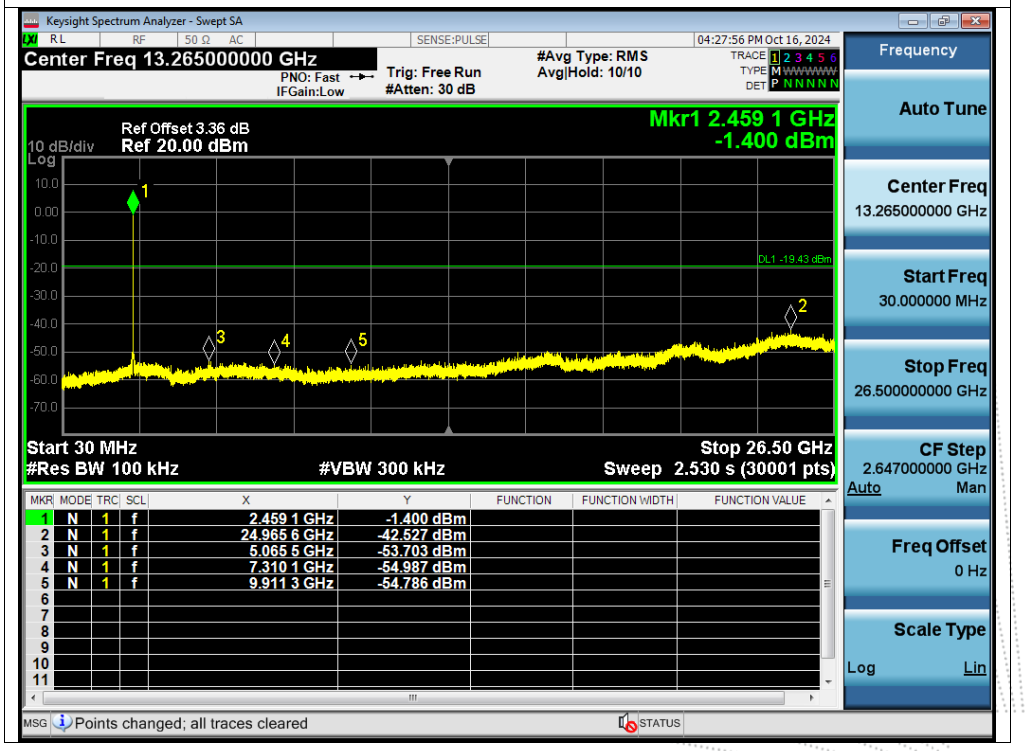
Tx. Spurious NVNT n20 2437MHz Emission



Tx. Spurious NVNT n20 2462MHz Ref

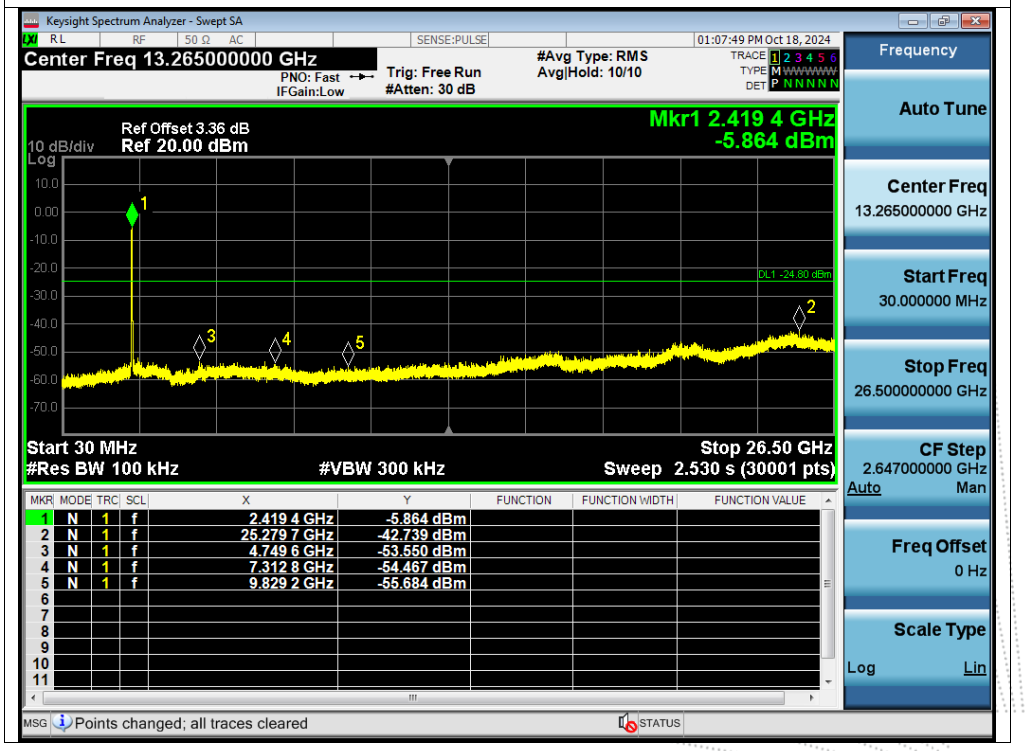


Tx. Spurious NVNT n20 2462MHz Emission



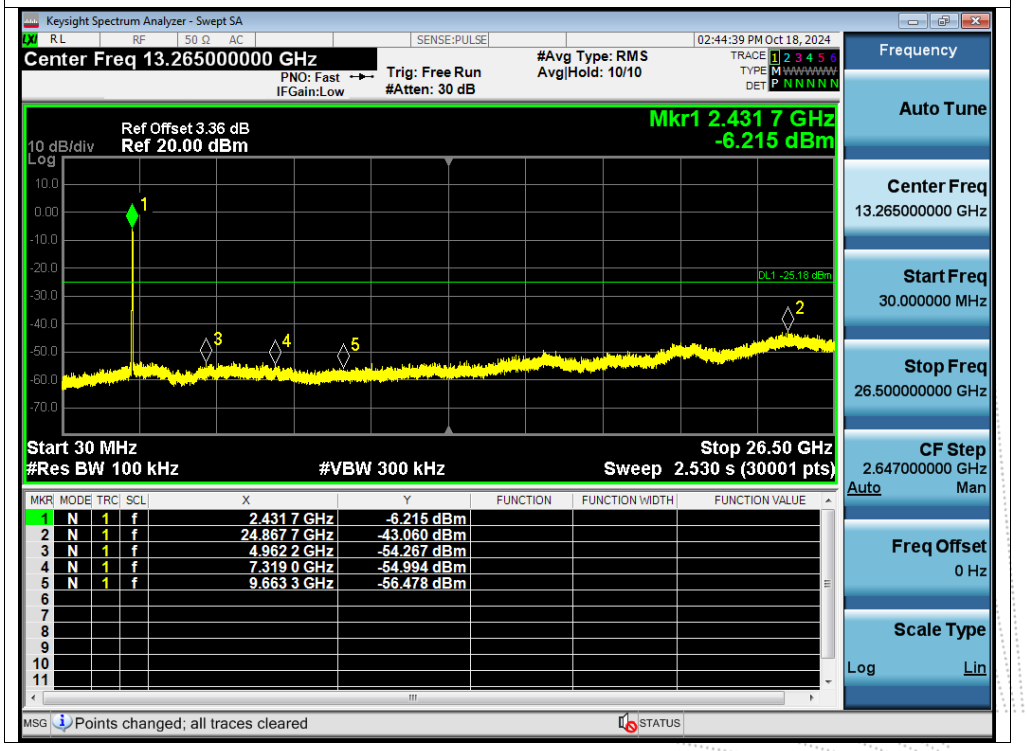
Tx. Spurious NVNT n40 2422MHz Ref

Tx. Spurious NVNT n40 2422MHz Emission



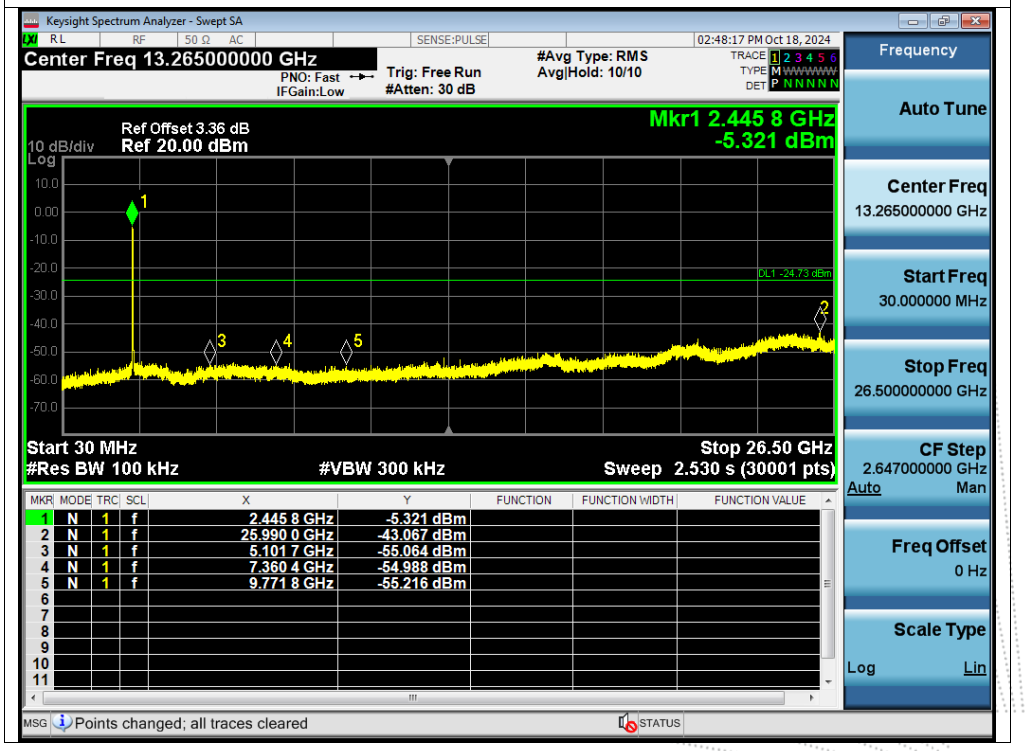
Tx. Spurious NVNT n40 2437MHz Ref

Tx. Spurious NVNT n40 2437MHz Emission



Tx. Spurious NVNT n40 2452MHz Ref

Tx. Spurious NVNT n40 2452MHz Emission

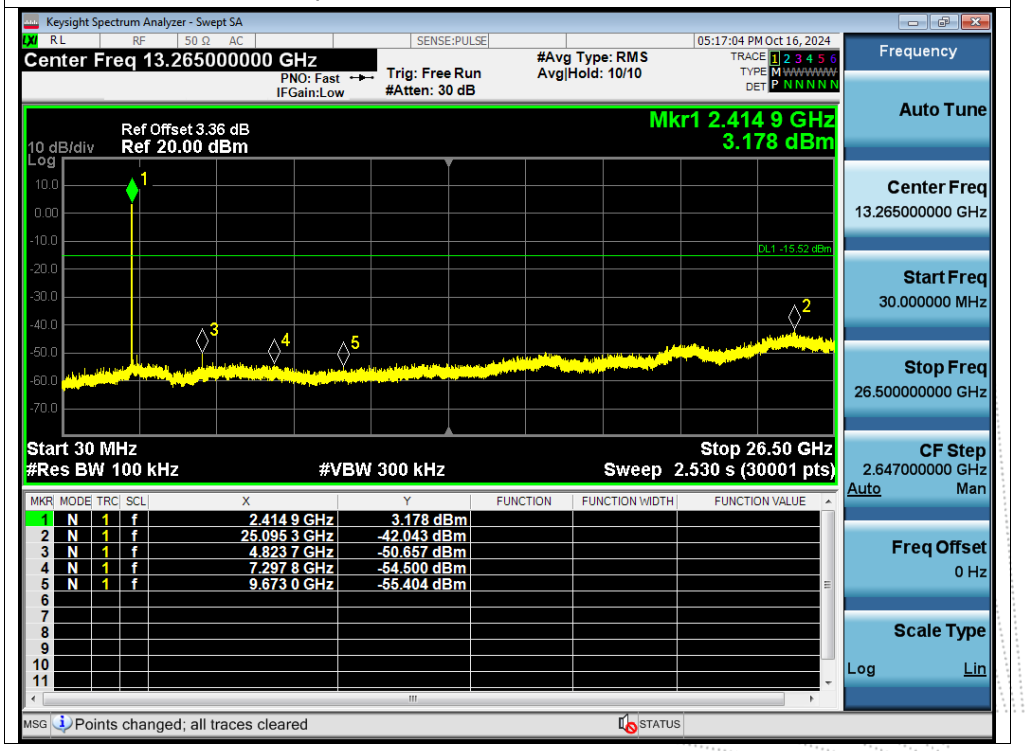


WIFI module 1:QCA9531-BL3A,AntB

Test Graphs

Tx. Spurious NVNT b 2412MHz Ref

Tx. Spurious NVNT b 2412MHz Emission



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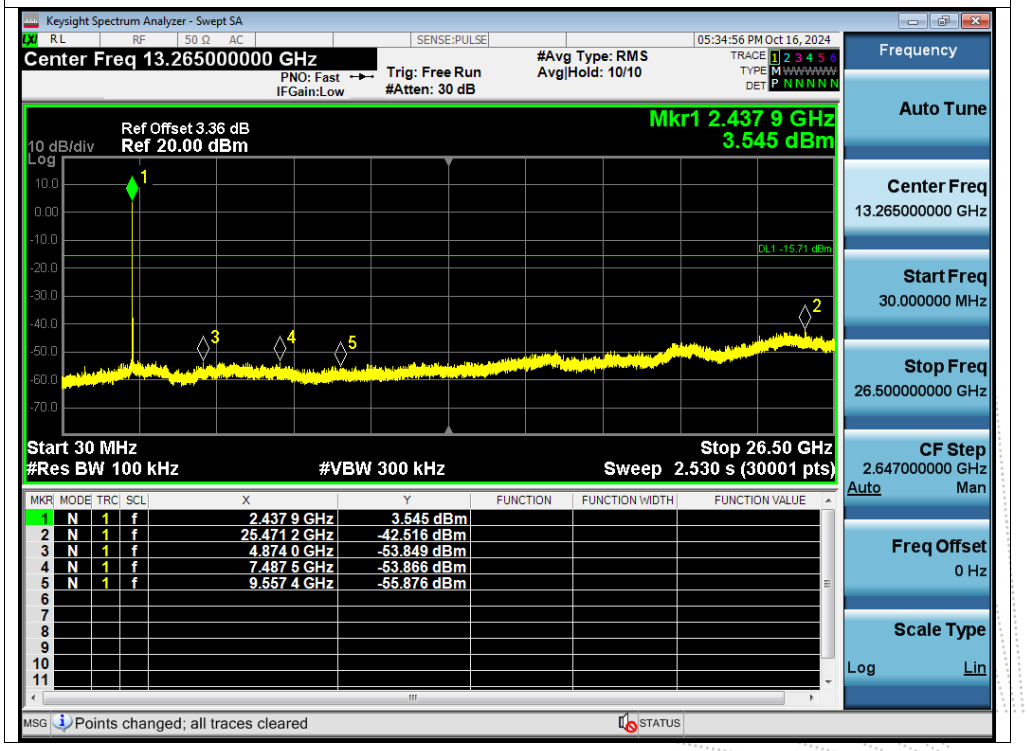
Tx. Spurious NVNT b 2437MHz Emission