

RF Test Data for 2.4G WiFi (Conducted Measurements)

General Description of EUT	
Product Name:	SUMTV_BOX
Test Model:	DV9061
Sample ID:	202212-0216-3-1#
Environmental Conditions	
Temperature:	23.9°C
Relative Humidity:	47%
Test Voltage:	DC 12V
Test Engineer:	Jianping Huang
Note: For a more detailed features description, please refer to the report TBR-C-202212-0216-32.	

Contents

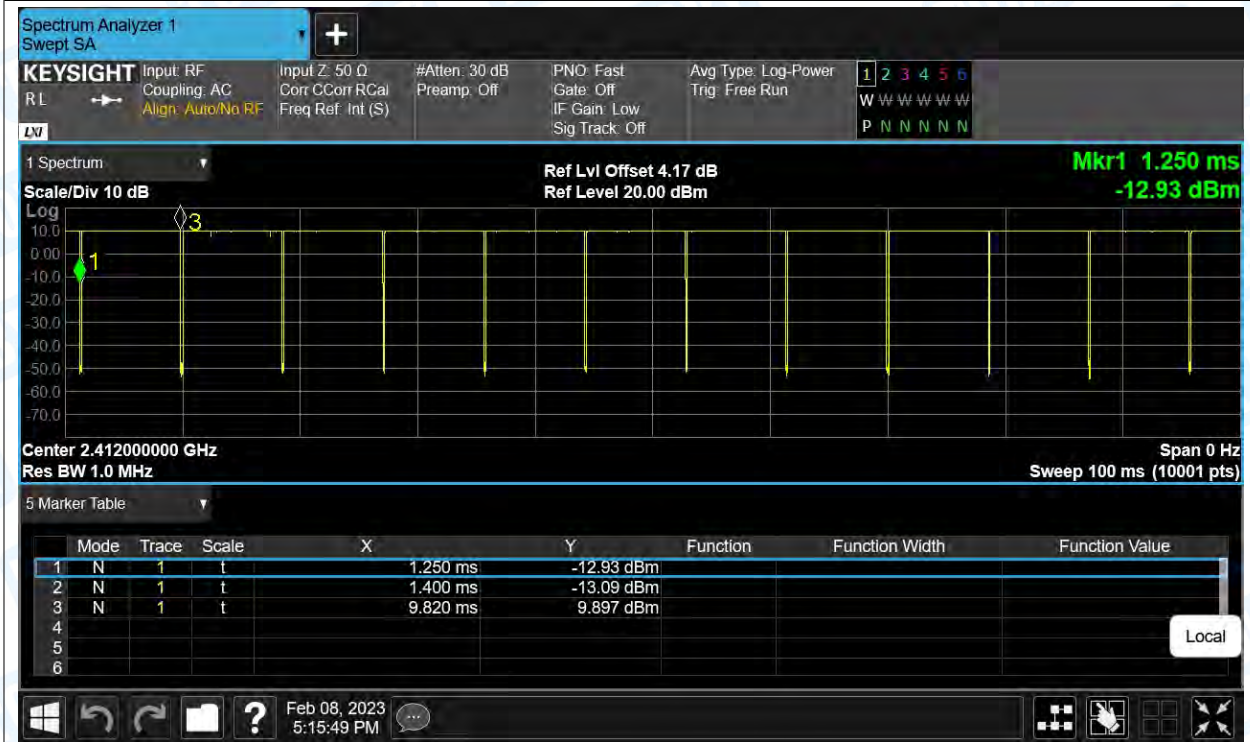
1. Duty Cycle	3
2. Maximum Conducted Output Power	6
3. -6dB Bandwidth	7
4. Maximum Power Spectral Density Level	14
5. Band Edge	21
6. Conducted RF Spurious Emission	30

1. Duty Cycle

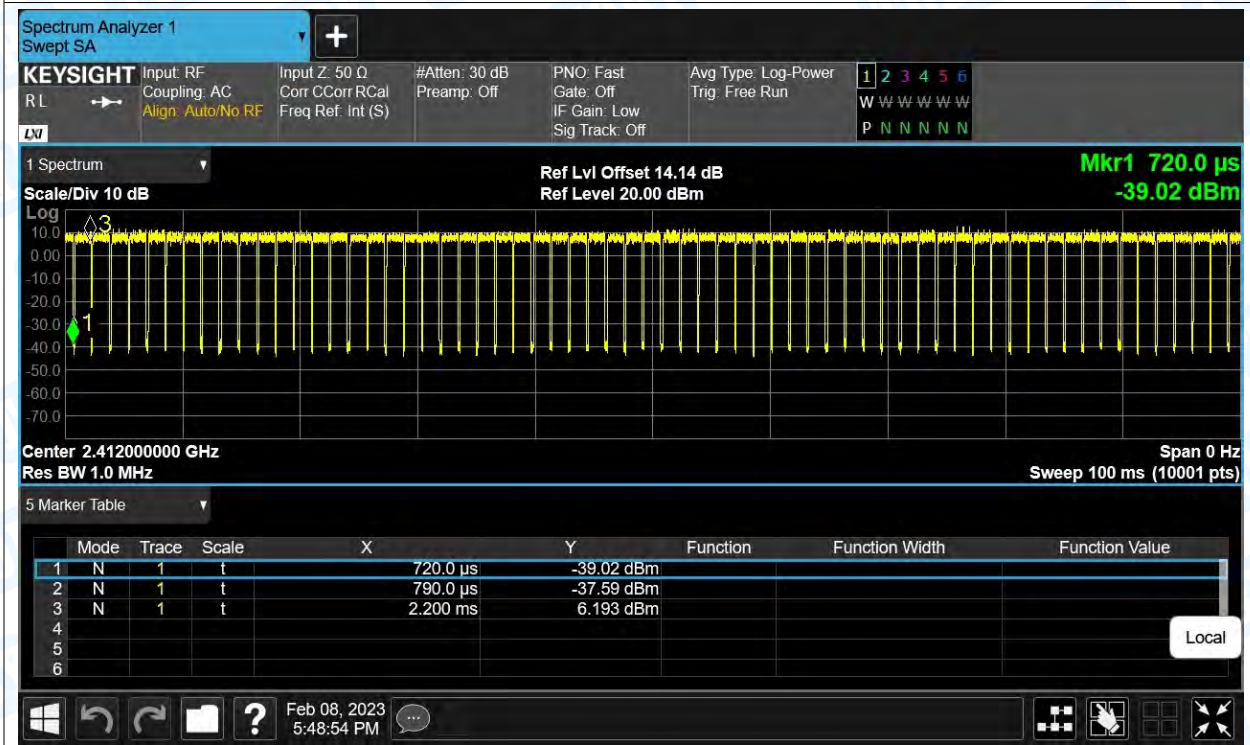
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	AntB	98.25	0.08	0.12
NVNT	g	2412	AntB	95.27	0.21	0.71
NVNT	n(HT20)	2412	AntB	98.56	0.06	0.73
NVNT	n(HT40)	2422	AntB	66.67	1.76	25

Test Graphs

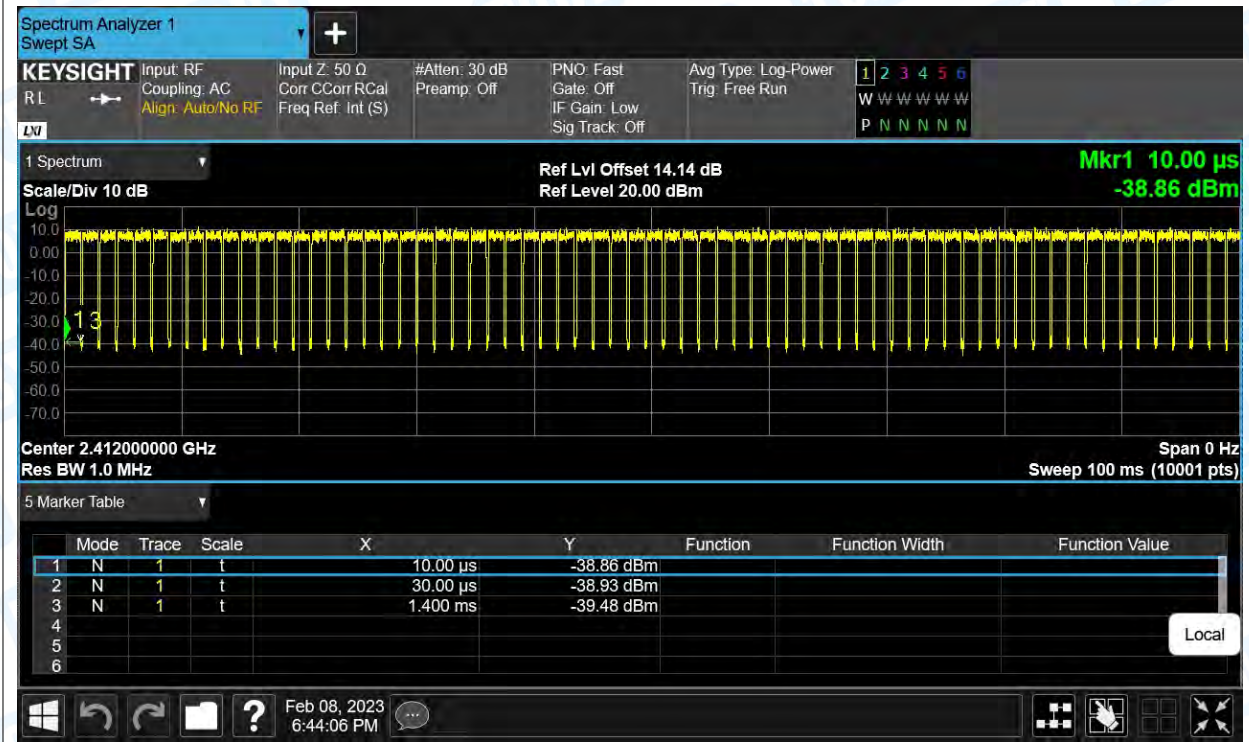
Duty Cycle NVNT b 2412MHz AntB



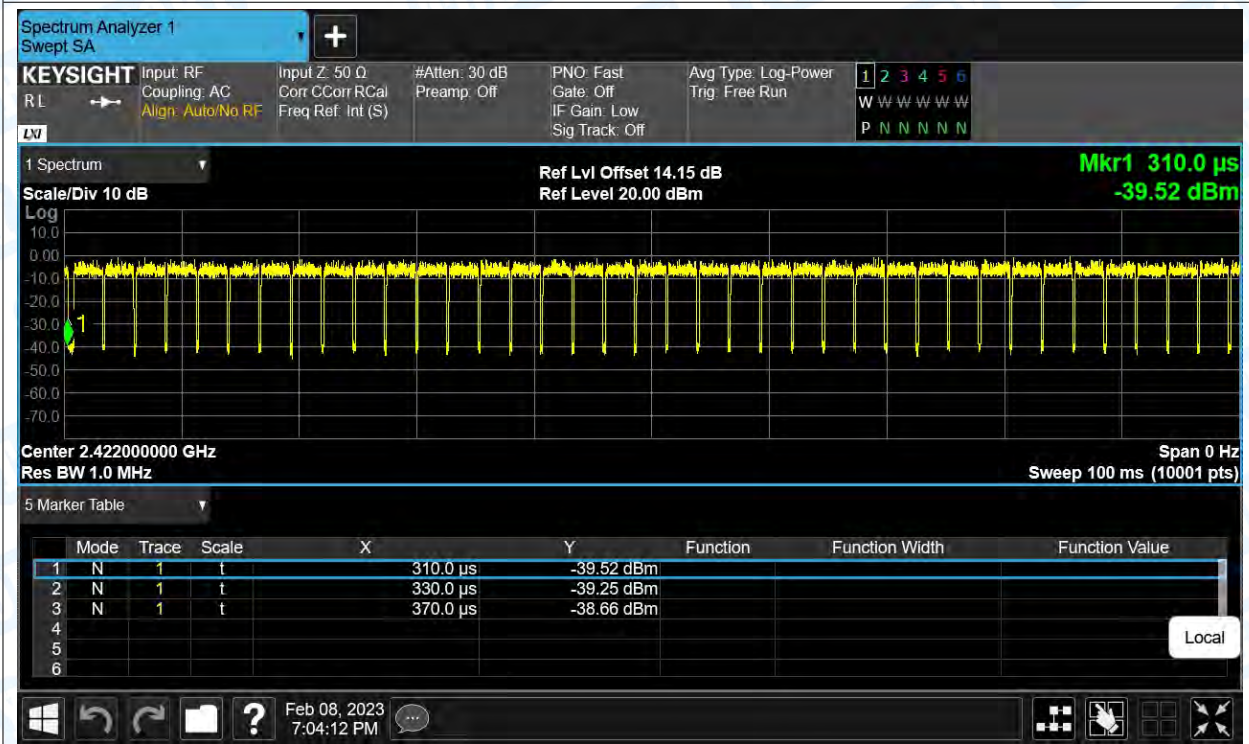
Duty Cycle NVNT g 2412MHz AntB



Duty Cycle NVNT n(HT20) 2412MHz AntB



Duty Cycle NVNT n(HT40) 2422MHz AntB



2. Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	AntB	16.55	30	Pass
NVNT	b	2437	AntB	17.76	30	Pass
NVNT	b	2462	AntB	17.36	30	Pass
NVNT	g	2412	AntB	15.15	30	Pass
NVNT	g	2437	AntB	15.57	30	Pass
NVNT	g	2462	AntB	15.53	30	Pass
NVNT	n(HT20)	2412	AntB	15.13	30	Pass
NVNT	n(HT20)	2437	AntB	15.36	30	Pass
NVNT	n(HT20)	2462	AntB	15.45	30	Pass
NVNT	n(HT40)	2422	AntB	15.06	30	Pass
NVNT	n(HT40)	2437	AntB	15.31	30	Pass
NVNT	n(HT40)	2452	AntB	15.83	30	Pass

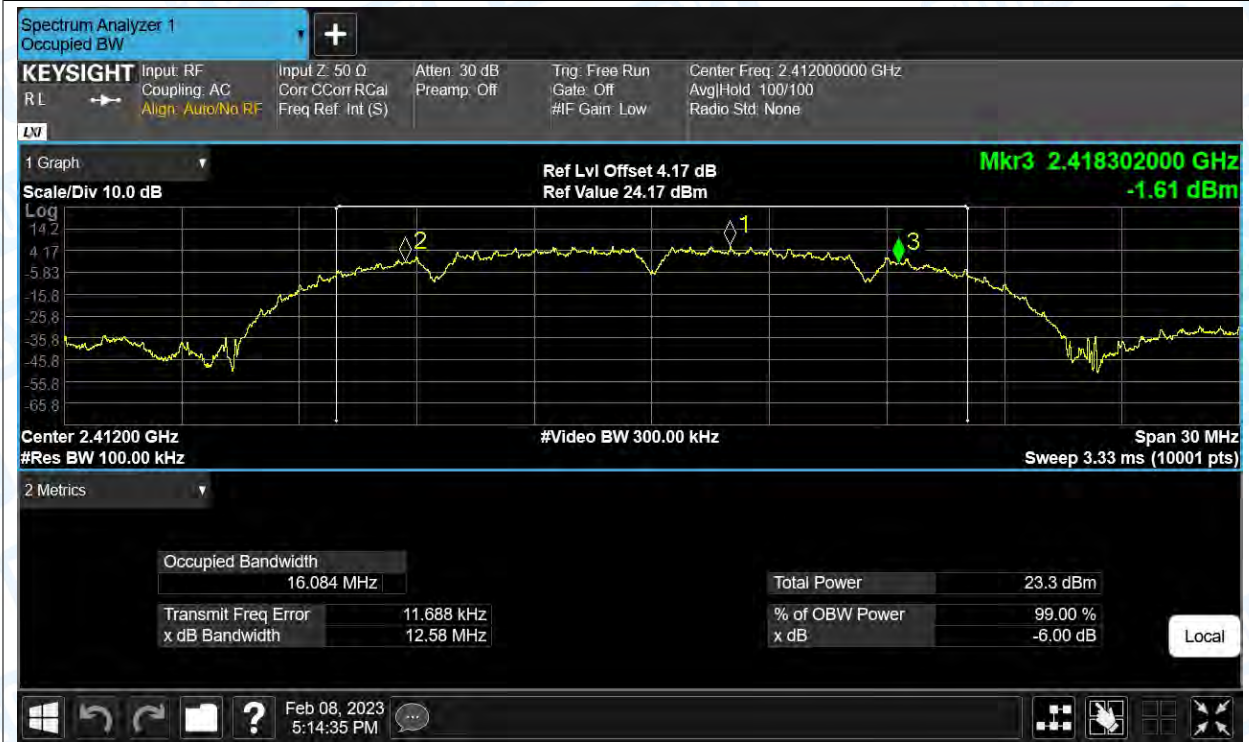
Note: The antenna Gain <math>< 6\text{dBi}</math>, So the power limit = 30dBm.

3.-6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	AntB	12.58	0.5	Pass
NVNT	b	2437	AntB	11.08	0.5	Pass
NVNT	b	2462	AntB	11.09	0.5	Pass
NVNT	g	2412	AntB	16.35	0.5	Pass
NVNT	g	2437	AntB	16.36	0.5	Pass
NVNT	g	2462	AntB	16.38	0.5	Pass
NVNT	n(HT20)	2412	AntB	17.58	0.5	Pass
NVNT	n(HT20)	2437	AntB	17.58	0.5	Pass
NVNT	n(HT20)	2462	AntB	17.59	0.5	Pass
NVNT	n(HT40)	2422	AntB	36.35	0.5	Pass
NVNT	n(HT40)	2437	AntB	36.38	0.5	Pass
NVNT	n(HT40)	2452	AntB	36.32	0.5	Pass

Test Graphs

-6dB Bandwidth NVNT b 2412MHz AntB



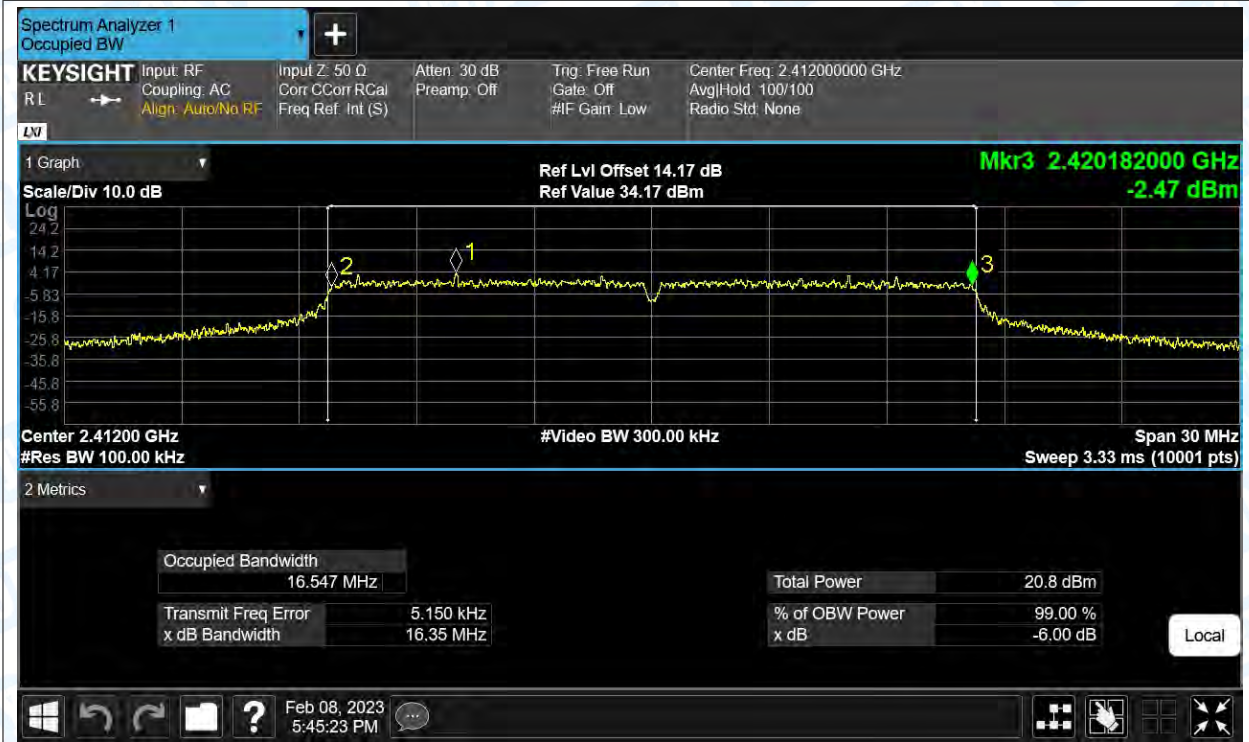
-6dB Bandwidth NVNT b 2437MHz AntB



-6dB Bandwidth NVNT b 2462MHz AntB



-6dB Bandwidth NVNT g 2412MHz AntB



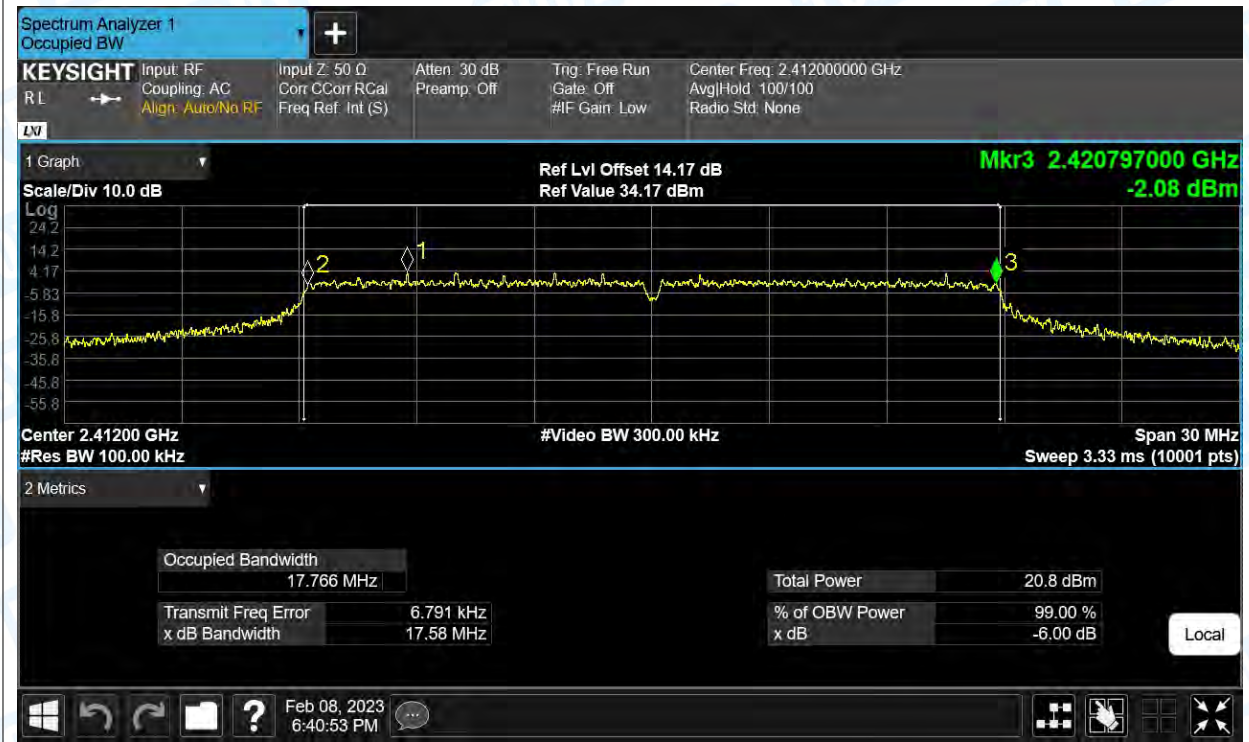
-6dB Bandwidth NVNT g 2437MHz AntB



-6dB Bandwidth NVNT g 2462MHz AntB



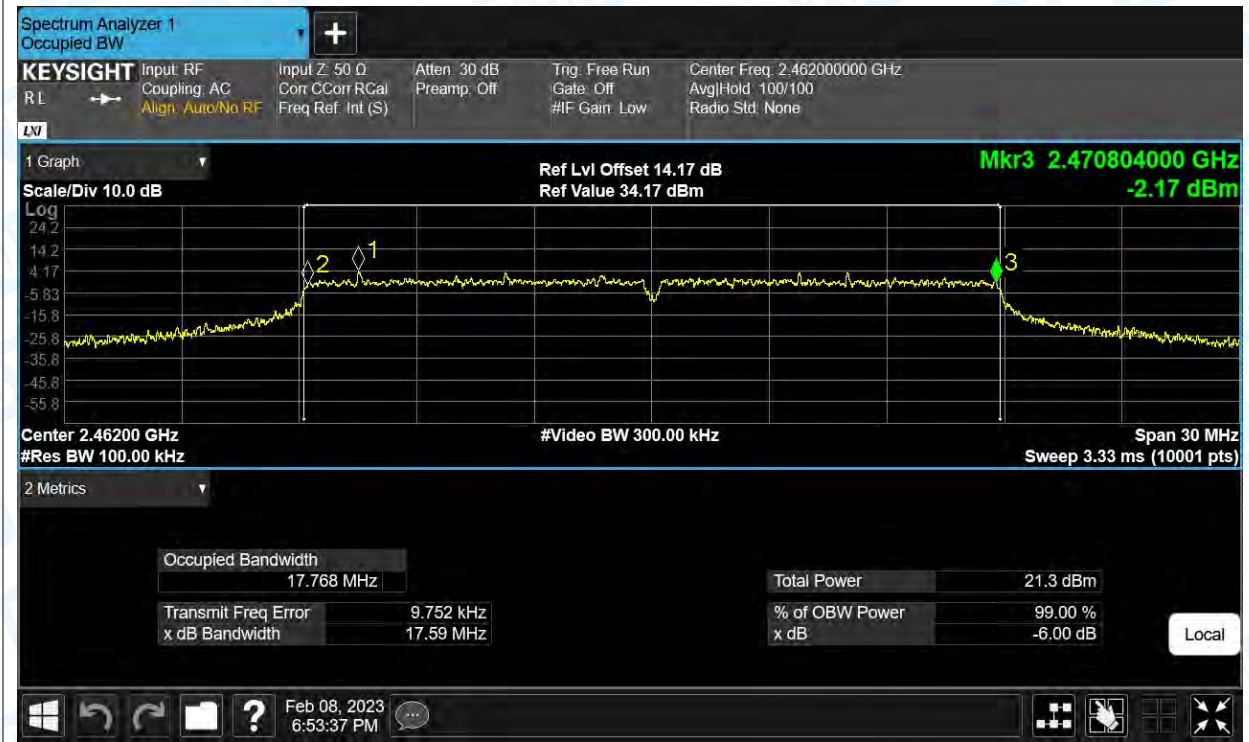
-6dB Bandwidth NVNT n(HT20) 2412MHz AntB



-6dB Bandwidth NVNT n(HT20) 2437MHz AntB



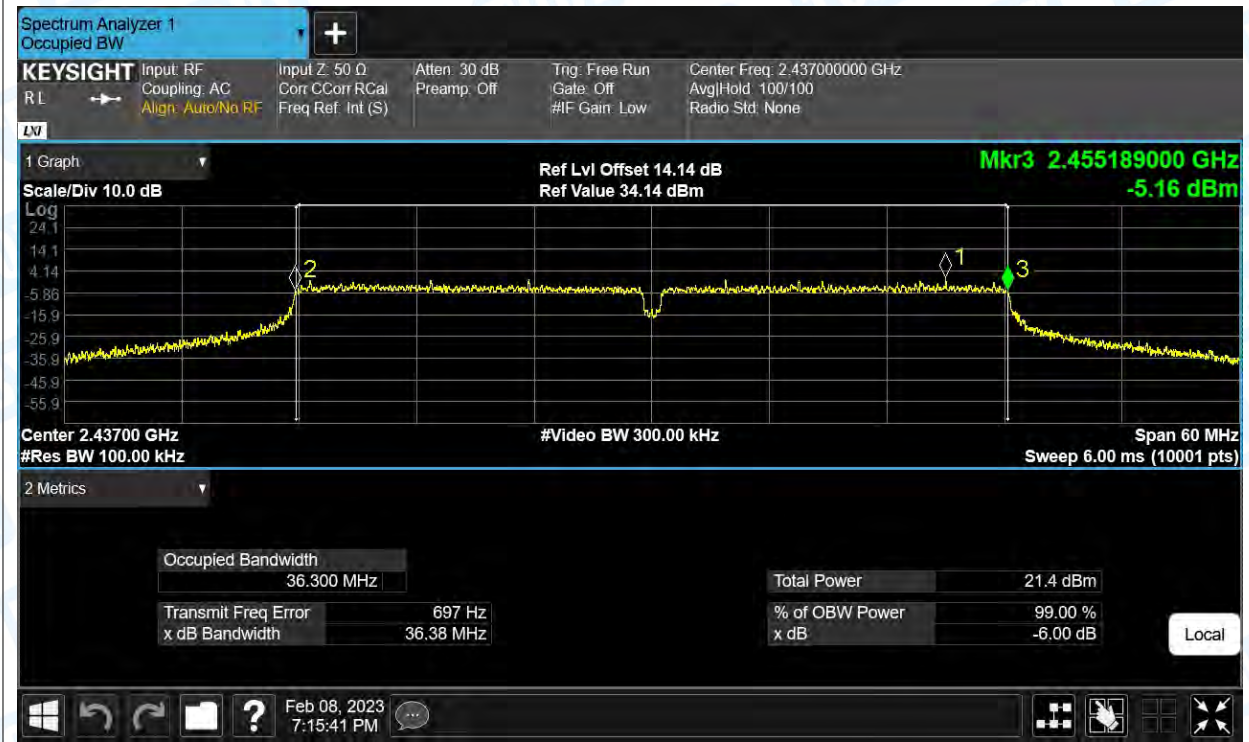
-6dB Bandwidth NVNT n(HT20) 2462MHz AntB



-6dB Bandwidth NVNT n(HT40) 2422MHz AntB



-6dB Bandwidth NVNT n(HT40) 2437MHz AntB



-6dB Bandwidth NVNT n(HT40) 2452MHz AntB



4. Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm/3KHz)	Limit (dBm/3KHz)	Verdict
NVNT	b	2412	AntB	0.185	8	Pass
NVNT	b	2437	AntB	4.529	8	Pass
NVNT	b	2462	AntB	0.589	8	Pass
NVNT	g	2412	AntB	-11.794	8	Pass
NVNT	g	2437	AntB	-11.116	8	Pass
NVNT	g	2462	AntB	-12.291	8	Pass
NVNT	n(HT20)	2412	AntB	-10.036	8	Pass
NVNT	n(HT20)	2437	AntB	-9.626	8	Pass
NVNT	n(HT20)	2462	AntB	-10.79	8	Pass
NVNT	n(HT40)	2422	AntB	-12.45	8	Pass
NVNT	n(HT40)	2437	AntB	-11.117	8	Pass
NVNT	n(HT40)	2452	AntB	-10.873	8	Pass

Test Graphs

PSD NVNT b 2412MHz AntB



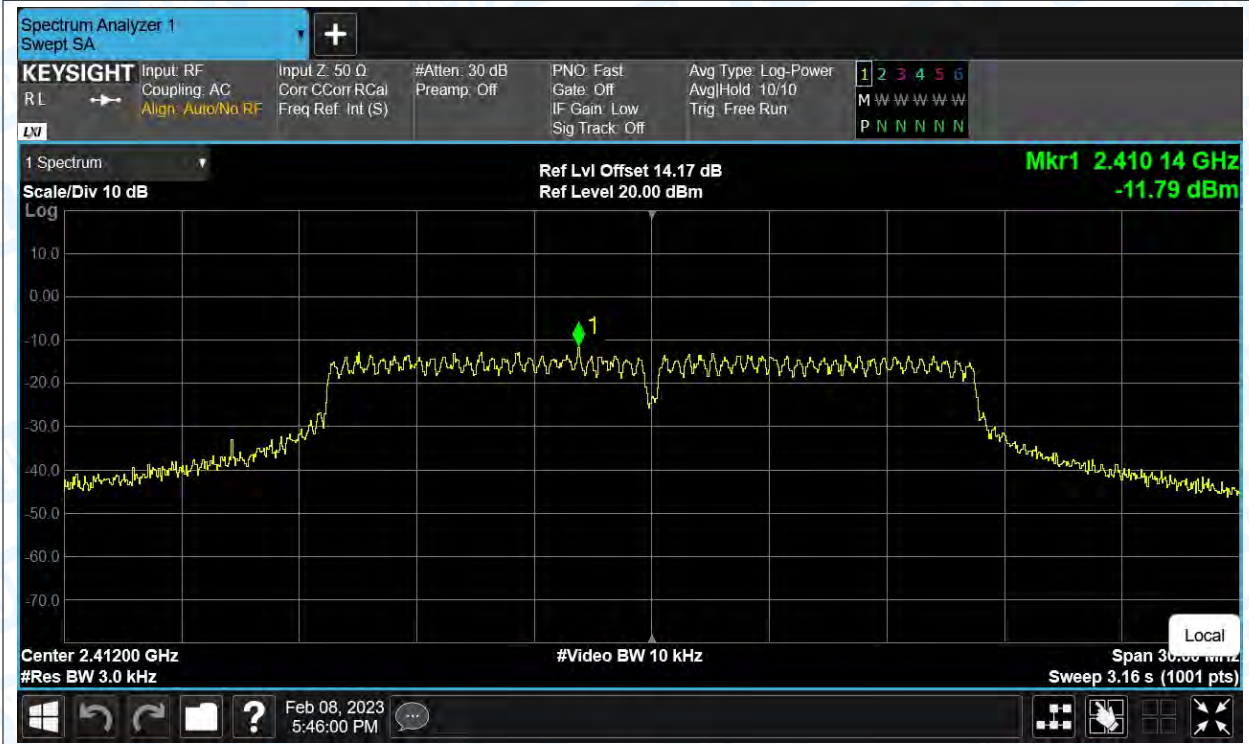
PSD NVNT b 2437MHz AntB



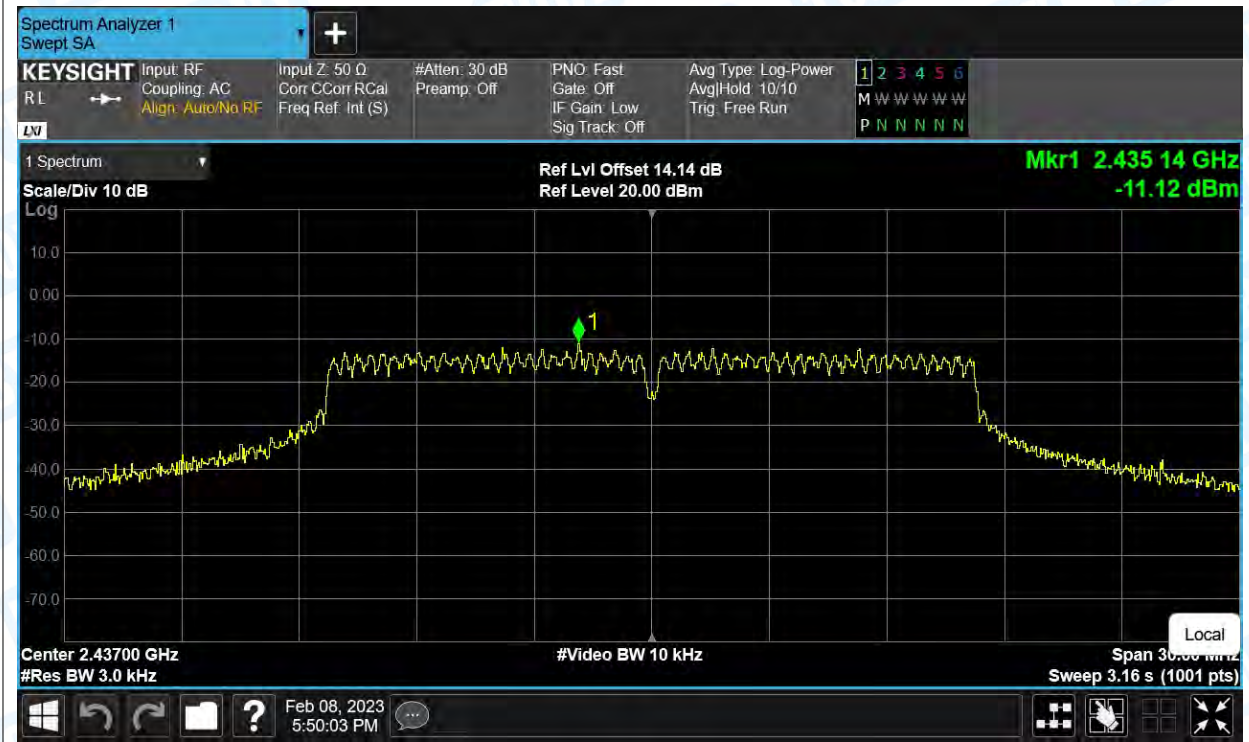
PSD NVNT b 2462MHz AntB



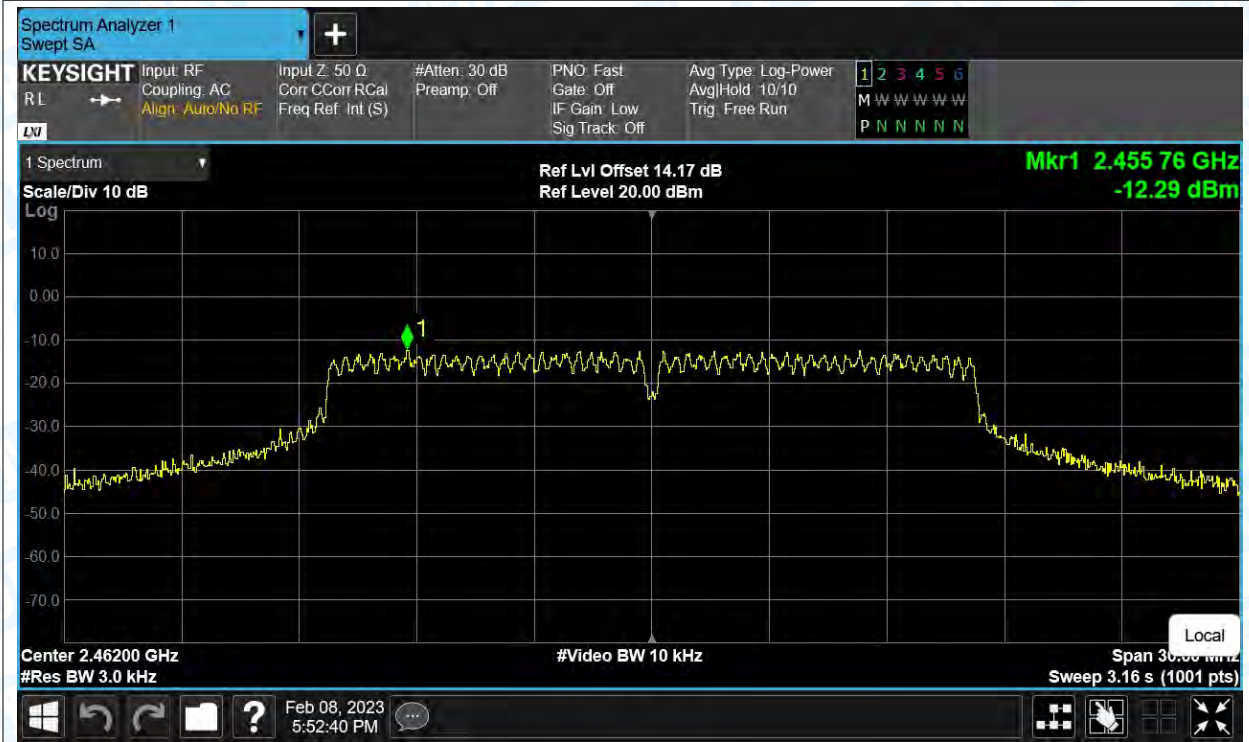
PSD NVNT g 2412MHz AntB



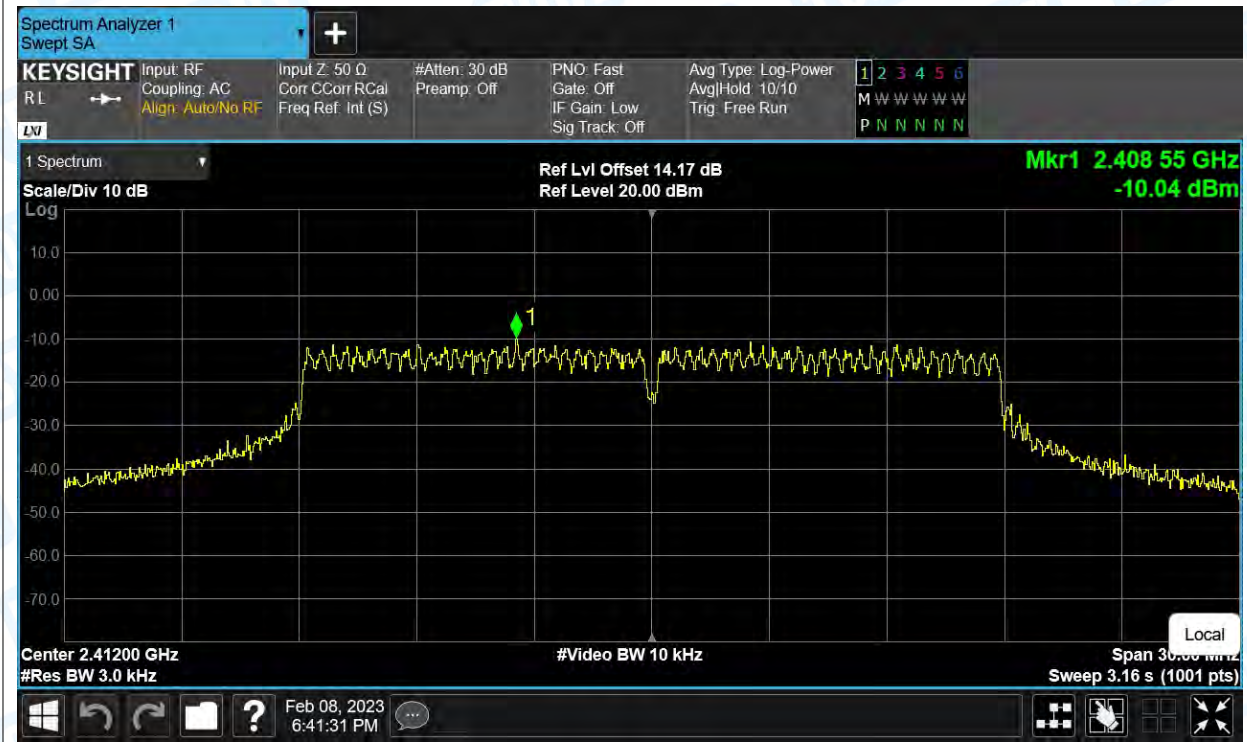
PSD NVNT g 2437MHz AntB



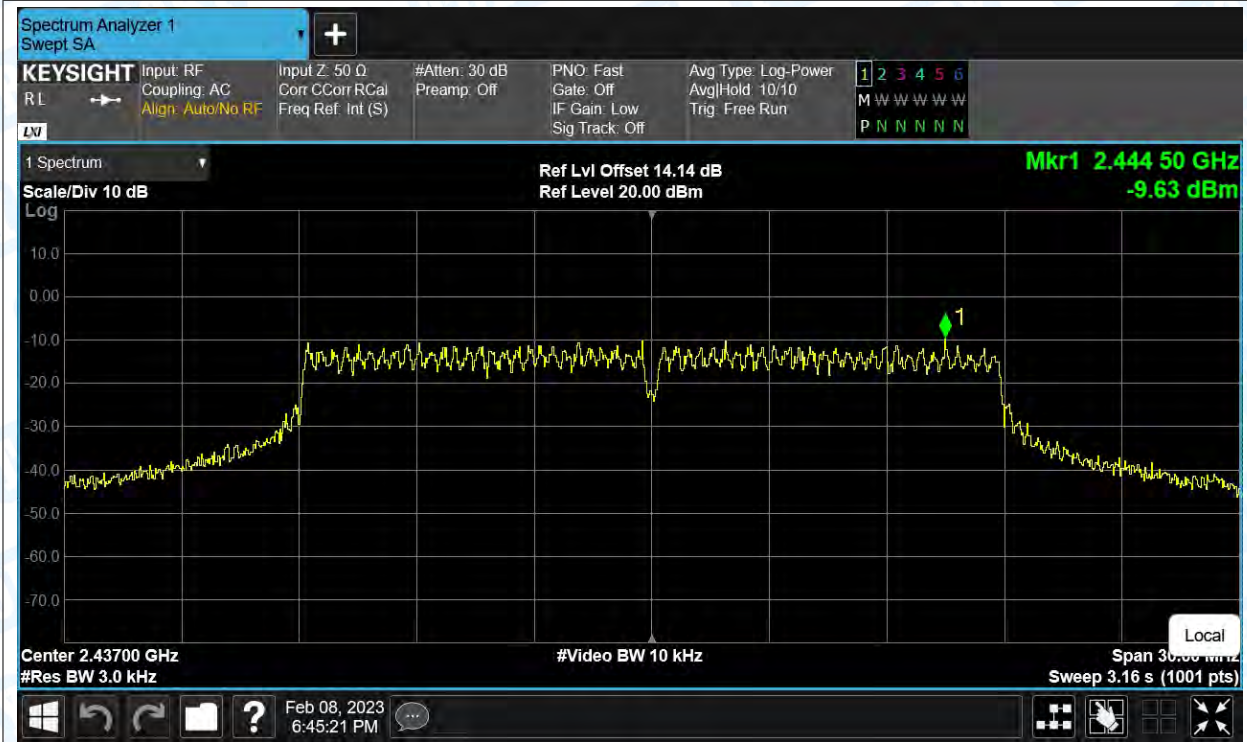
PSD NVNT g 2462MHz AntB



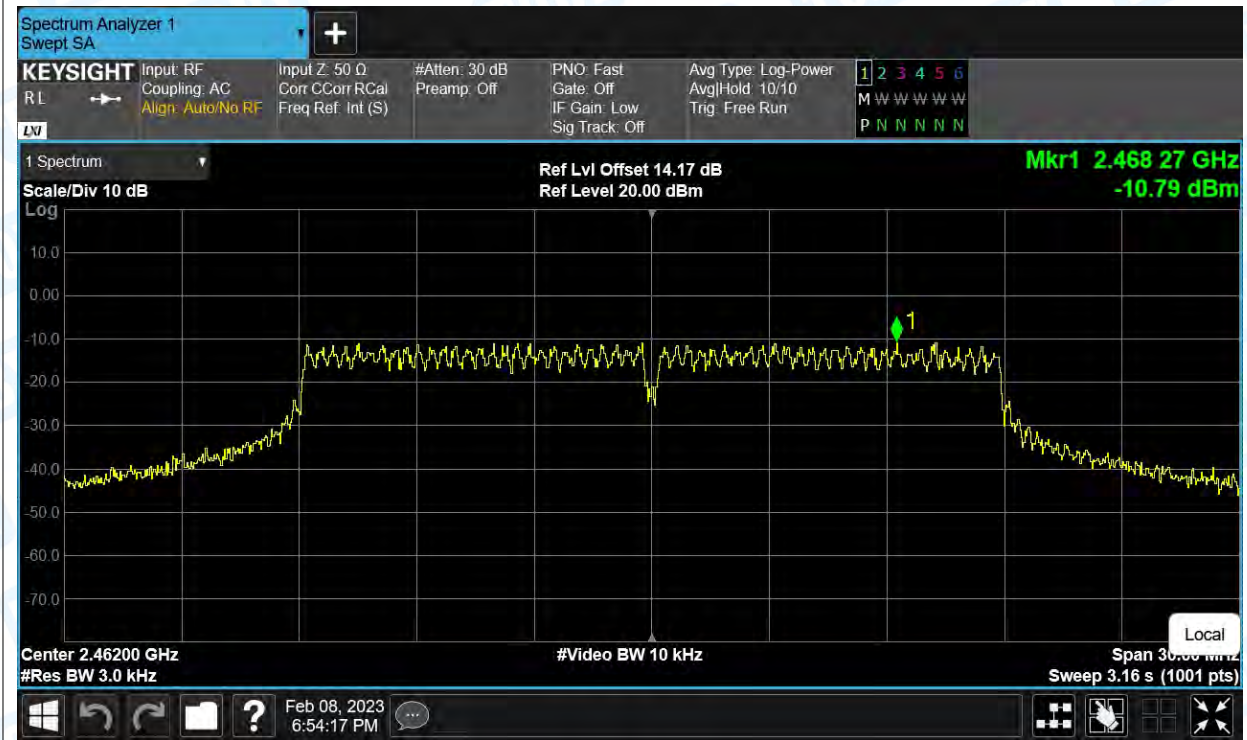
PSD NVNT n(HT20) 2412MHz AntB



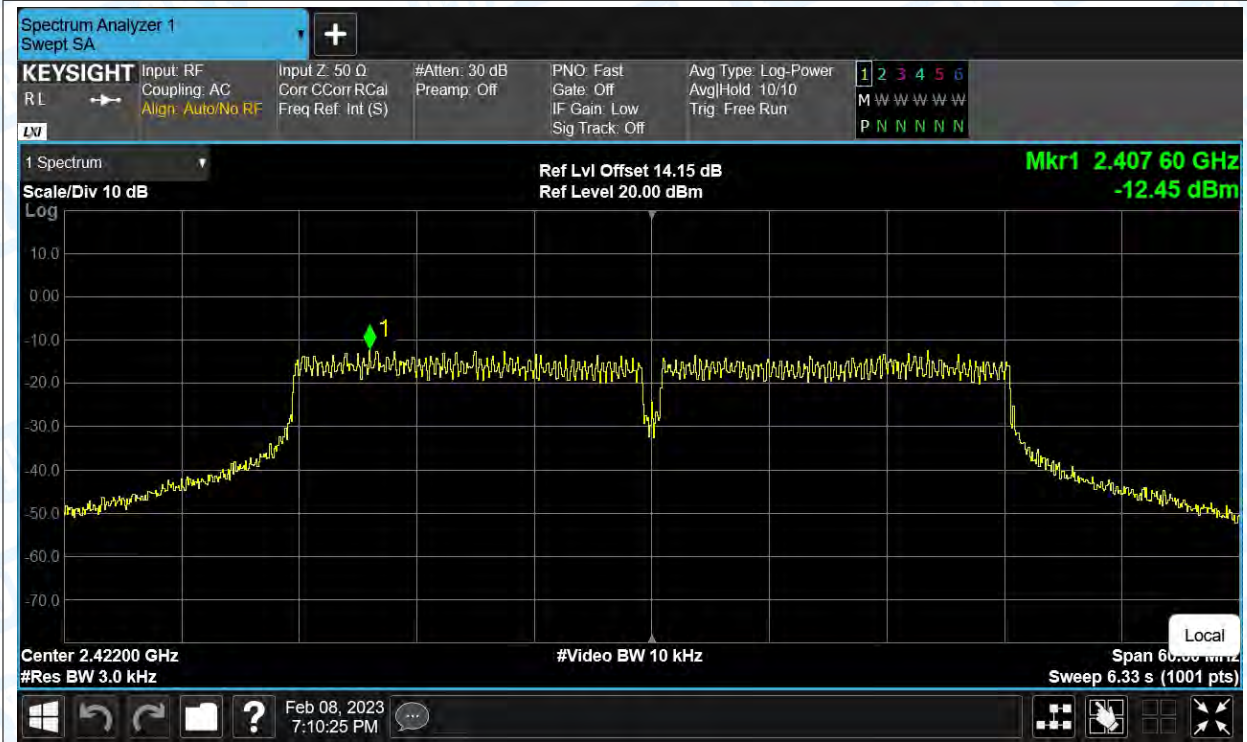
PSD NVNT n(HT20) 2437MHz AntB



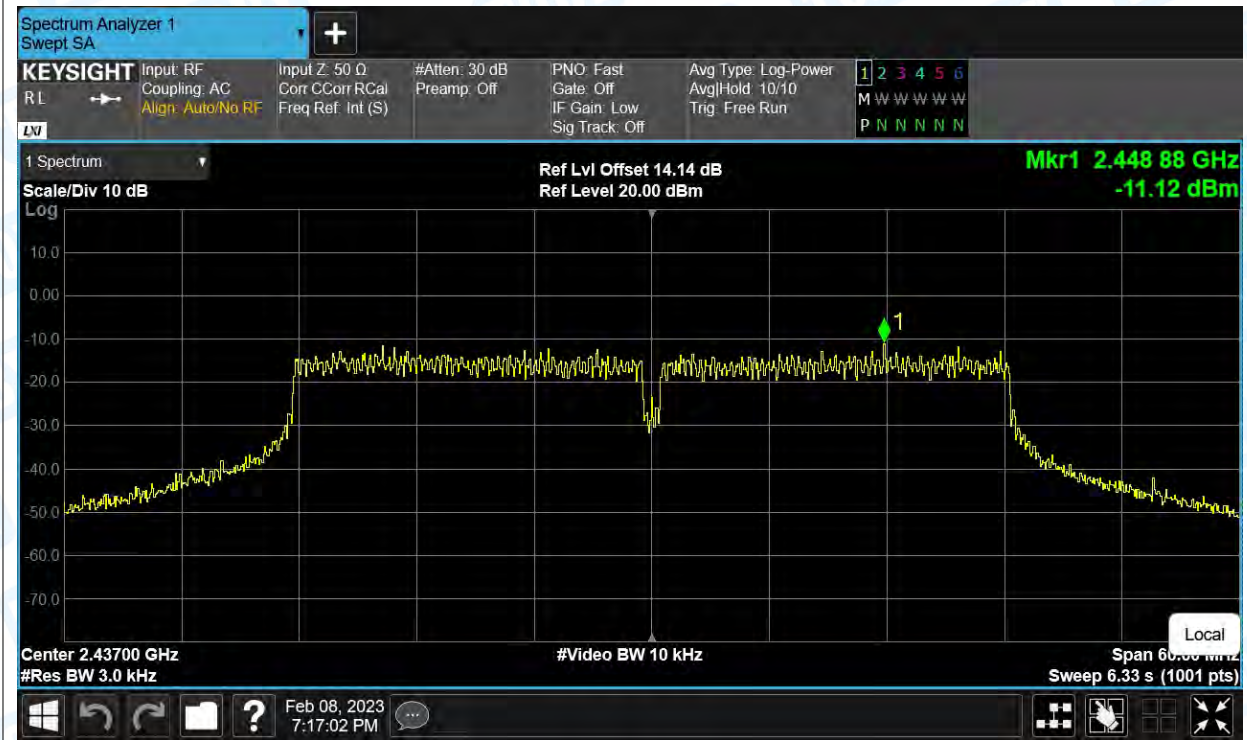
PSD NVNT n(HT20) 2462MHz AntB



PSD NVNT n(HT40) 2422MHz AntB



PSD NVNT n(HT40) 2437MHz AntB



PSD NVNT n(HT40) 2452MHz AntB

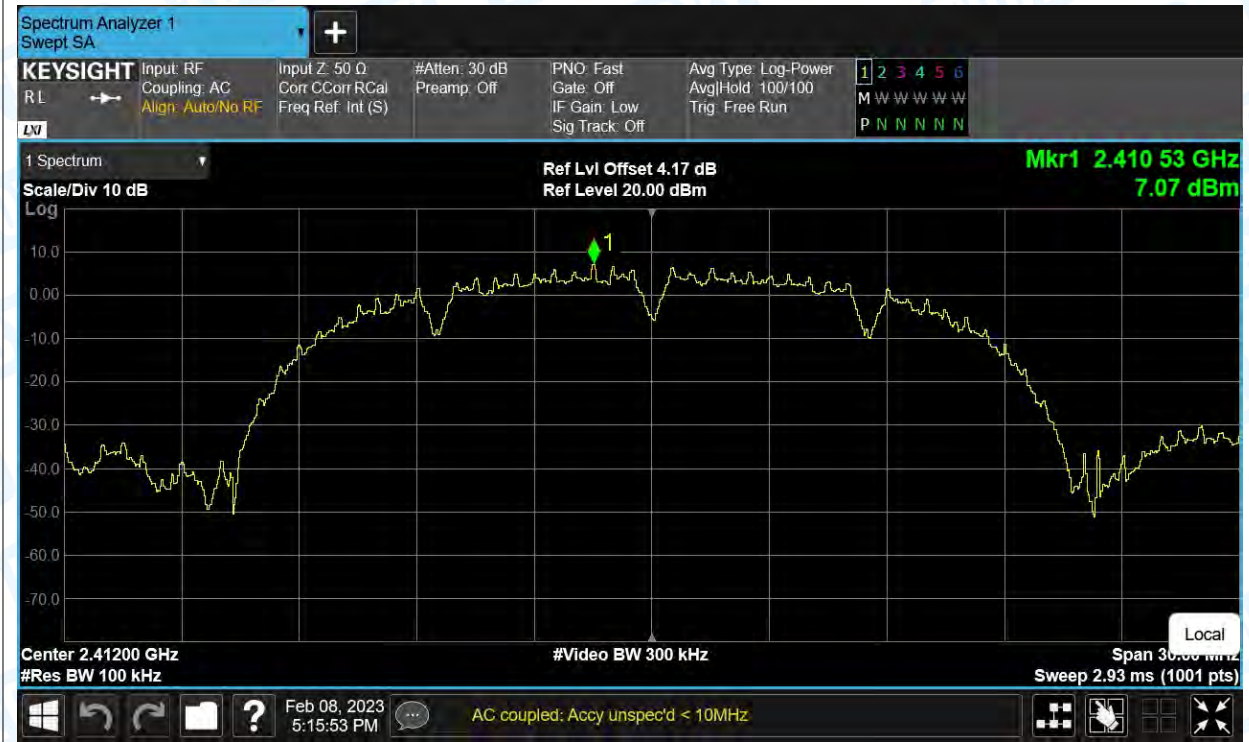


5. Band Edge

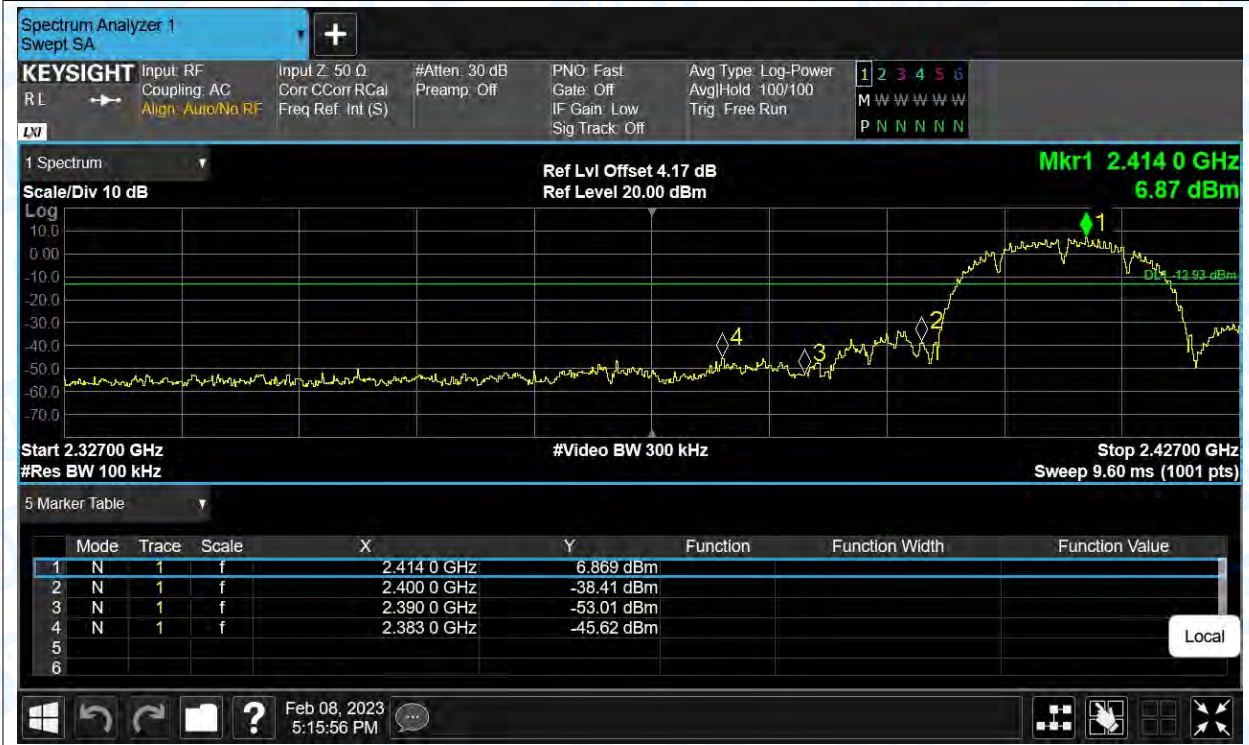
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	AntB	-52.69	-20	Pass
NVNT	b	2462	AntB	-52.17	-20	Pass
NVNT	g	2412	AntB	-38.97	-20	Pass
NVNT	g	2462	AntB	-39.18	-20	Pass
NVNT	n(HT20)	2412	AntB	-39.21	-20	Pass
NVNT	n(HT20)	2462	AntB	-39.58	-20	Pass
NVNT	n(HT40)	2422	AntB	-36.82	-20	Pass
NVNT	n(HT40)	2452	AntB	-36.57	-20	Pass

Test Graphs

Band Edge NVNT b 2412MHz AntB Ref



Band Edge NVNT b 2412MHz AntB Emission



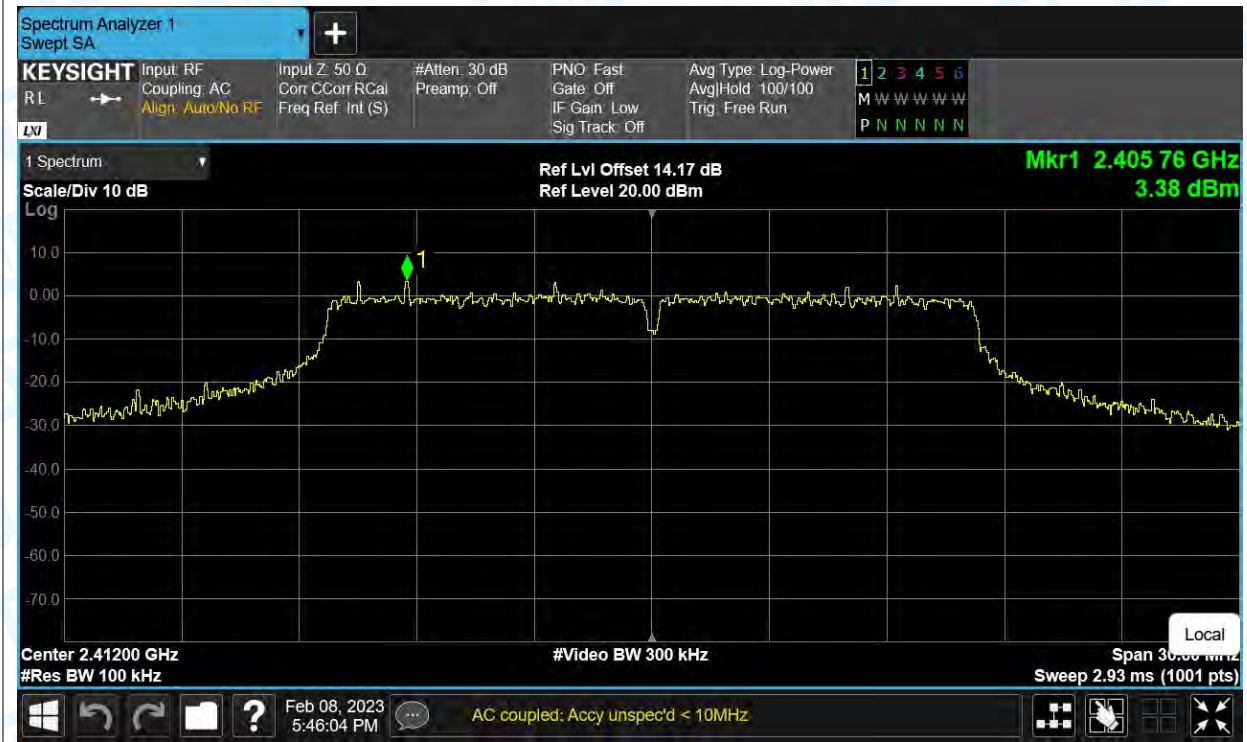
Band Edge NVNT b 2462MHz AntB Ref



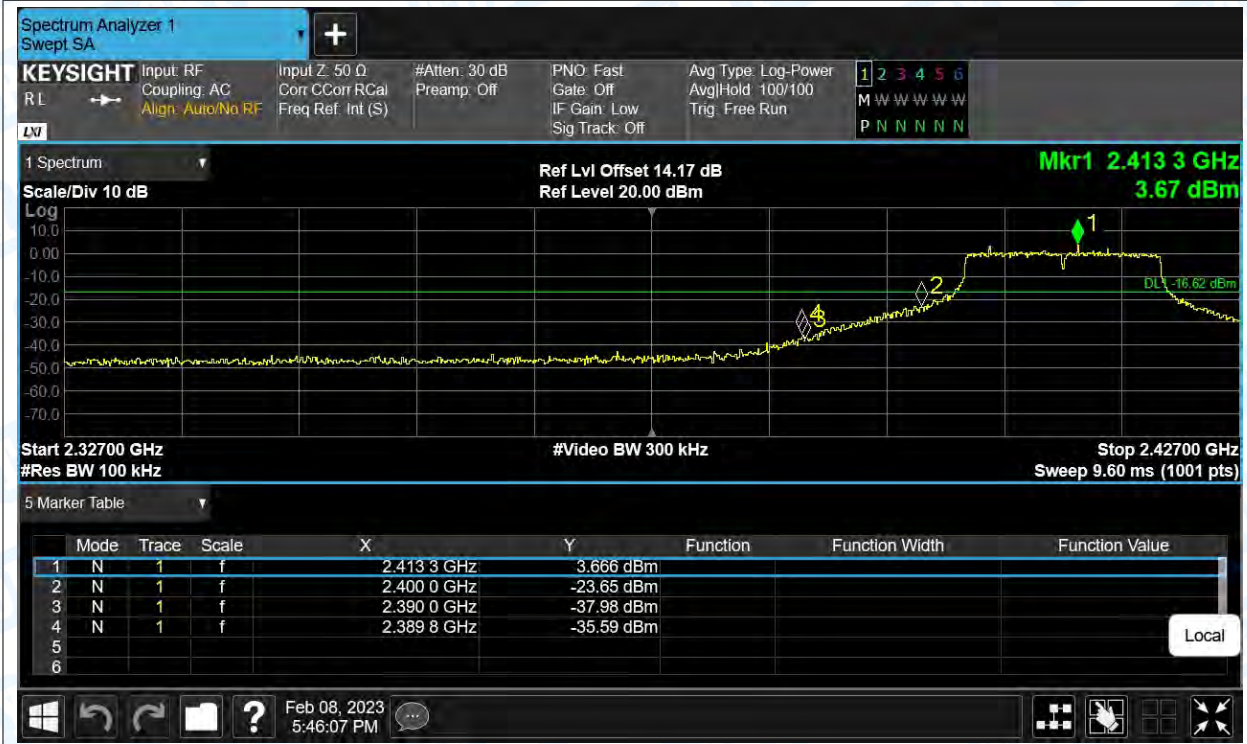
Band Edge NVNT b 2462MHz AntB Emission



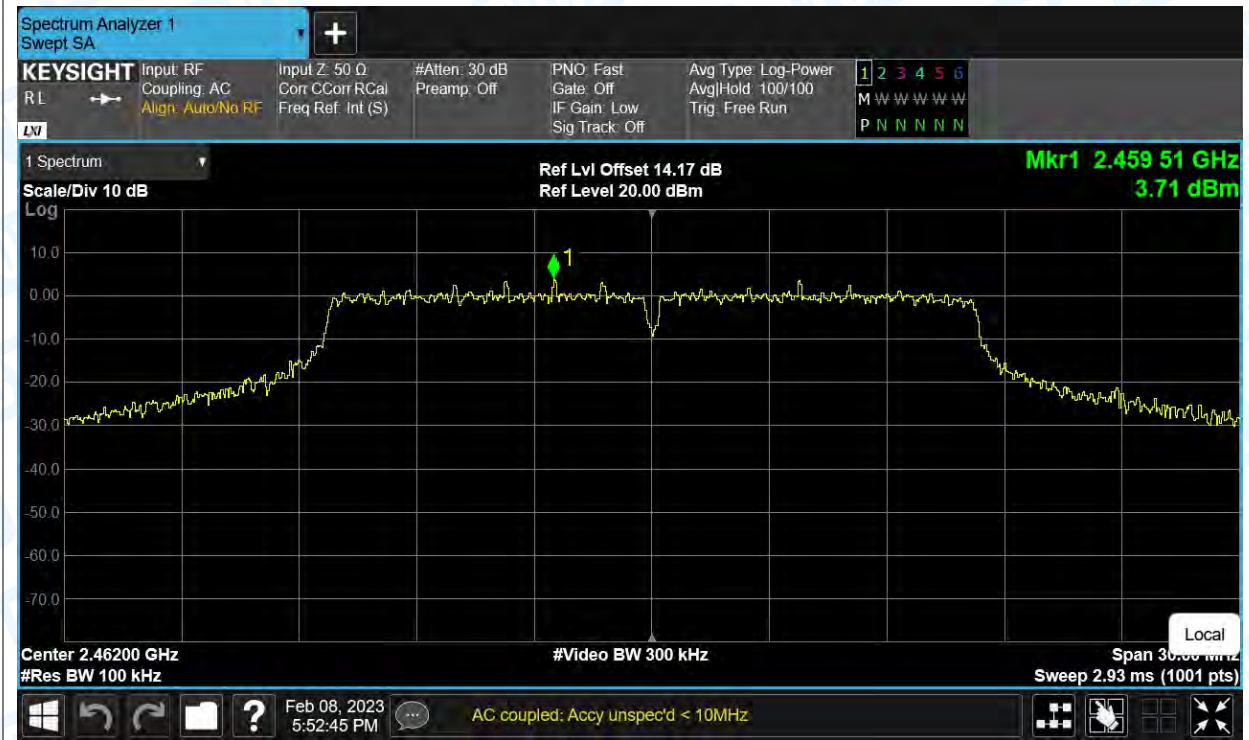
Band Edge NVNT g 2412MHz AntB Ref



Band Edge NVNT g 2412MHz AntB Emission



Band Edge NVNT g 2462MHz AntB Ref



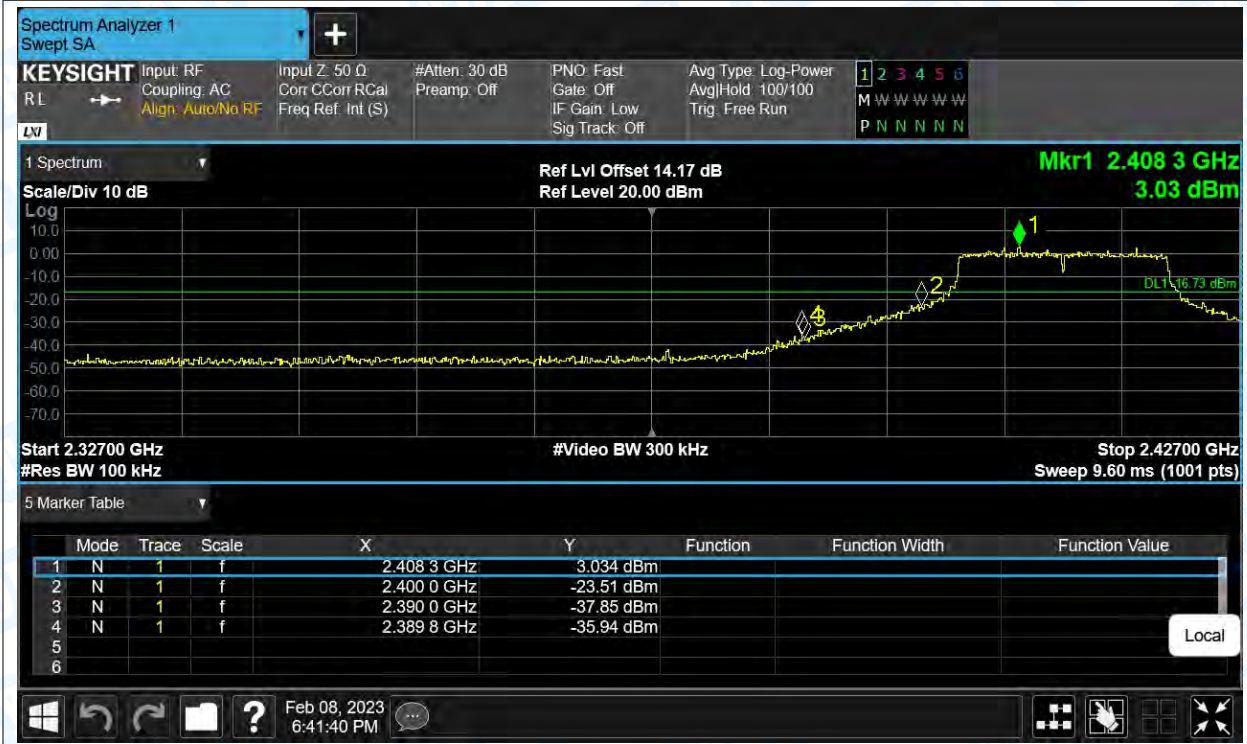
Band Edge NVNT g 2462MHz AntB Emission



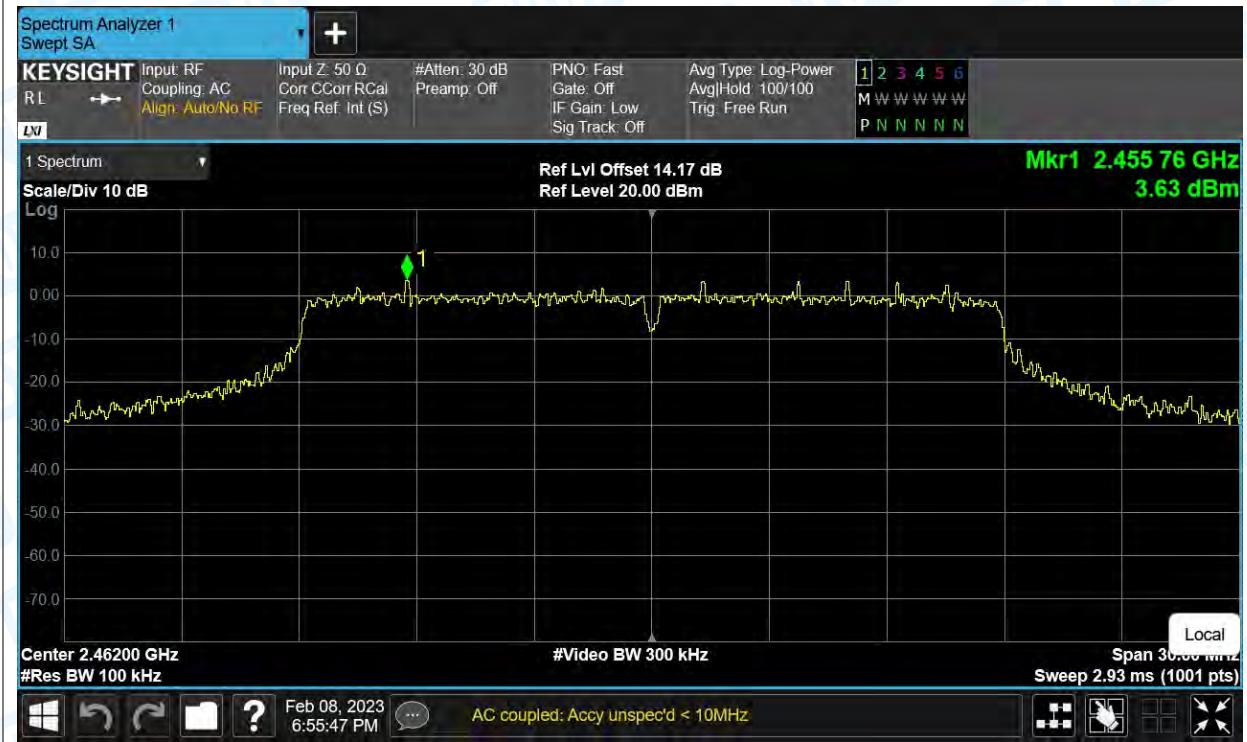
Band Edge NVNT n(HT20) 2412MHz AntB Ref



Band Edge NVNT n(HT20) 2412MHz AntB Emission



Band Edge NVNT n(HT20) 2462MHz AntB Ref



Band Edge NVNT n(HT20) 2462MHz AntB Emission



Band Edge NVNT n(HT40) 2422MHz AntB Ref



Band Edge NVNT n(HT40) 2422MHz AntB Emission



Band Edge NVNT n(HT40) 2452MHz AntB Ref



Band Edge NVNT n(HT40) 2452MHz AntB Emission

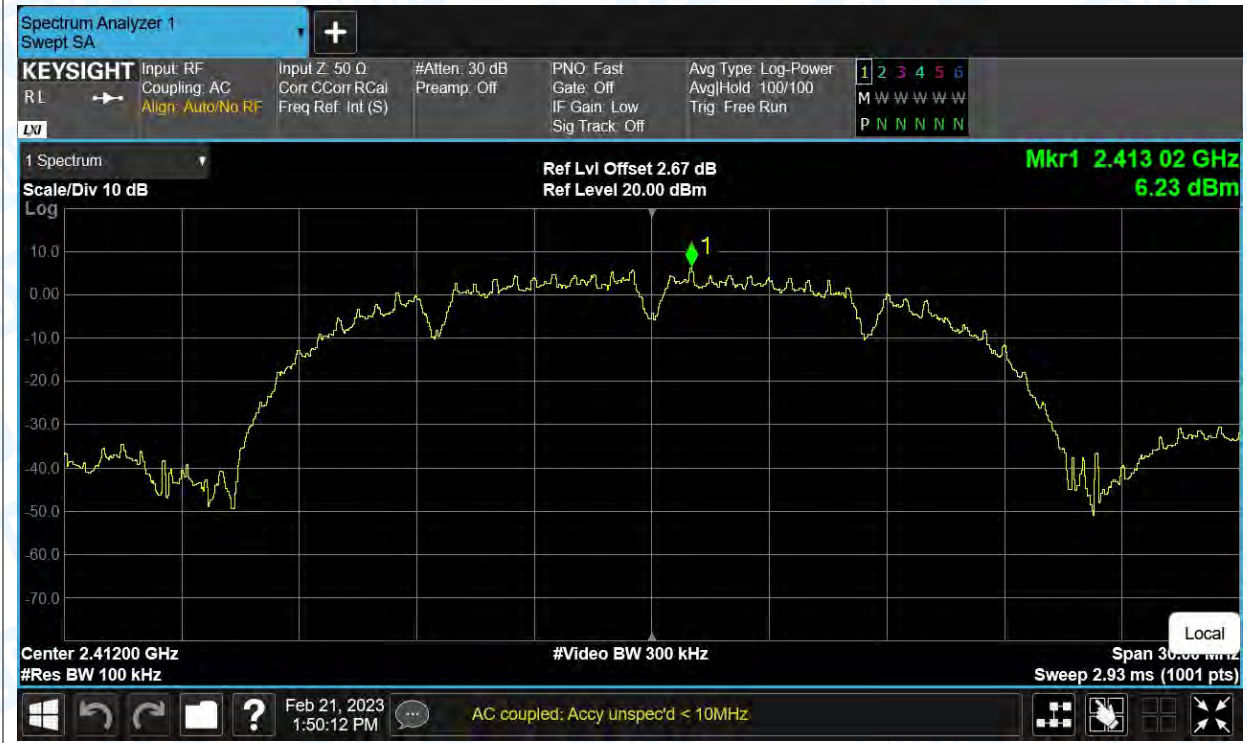


6. Conducted RF Spurious Emission

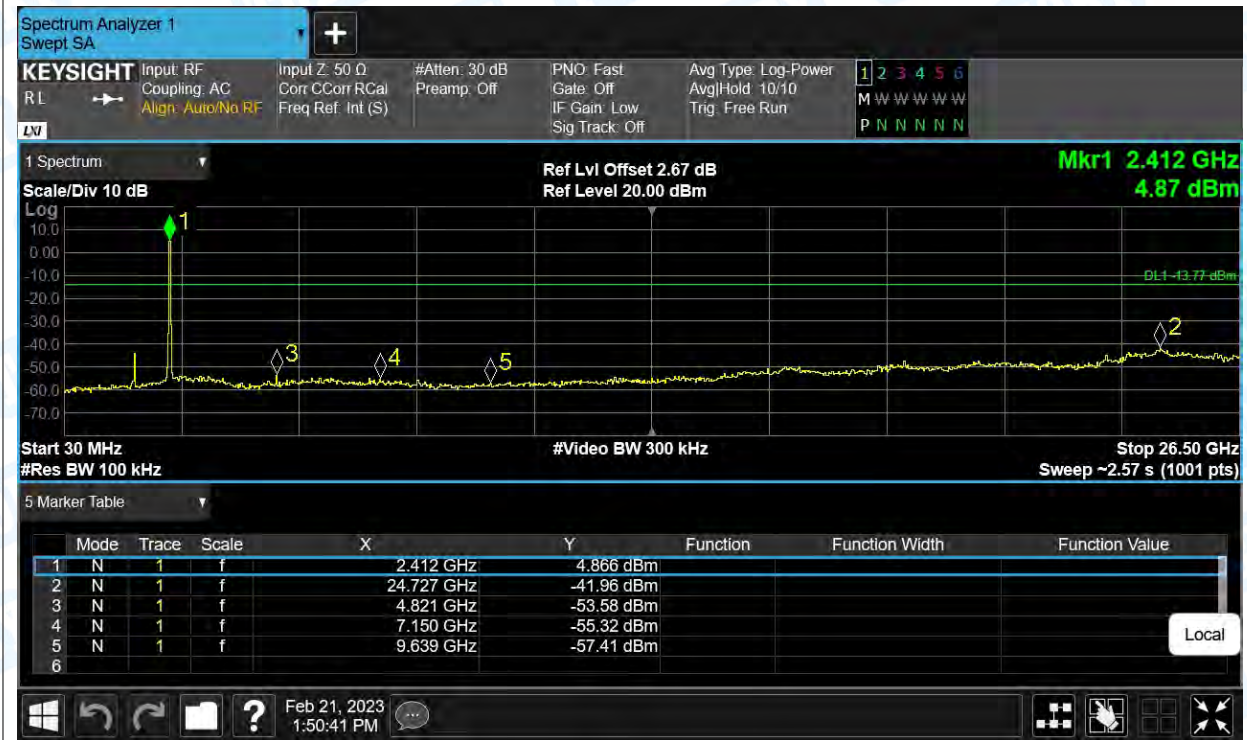
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	AntB	-48.19	-20	Pass
NVNT	b	2437	AntB	-48.65	-20	Pass
NVNT	b	2462	AntB	-47.54	-20	Pass
NVNT	g	2412	AntB	-47.85	-20	Pass
NVNT	g	2437	AntB	-48.12	-20	Pass
NVNT	g	2462	AntB	-47.24	-20	Pass
NVNT	n(HT20)	2412	AntB	-46.93	-20	Pass
NVNT	n(HT20)	2437	AntB	-47.74	-20	Pass
NVNT	n(HT20)	2462	AntB	-47.16	-20	Pass
NVNT	n(HT40)	2422	AntB	-34.79	-20	Pass
NVNT	n(HT40)	2437	AntB	-34.65	-20	Pass
NVNT	n(HT40)	2452	AntB	-34.62	-20	Pass

Test Graphs

Tx. Spurious NVNT b 2412MHz AntB Ref



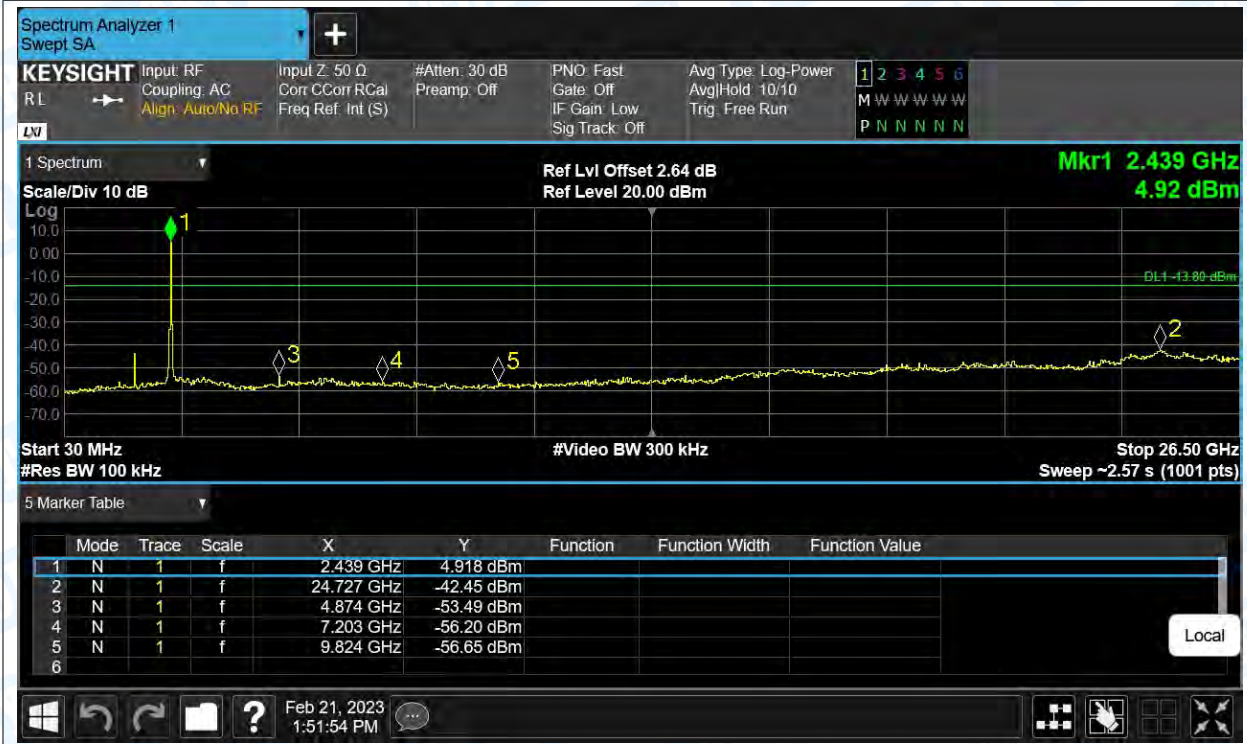
Tx. Spurious NVNT b 2412MHz AntB Emission



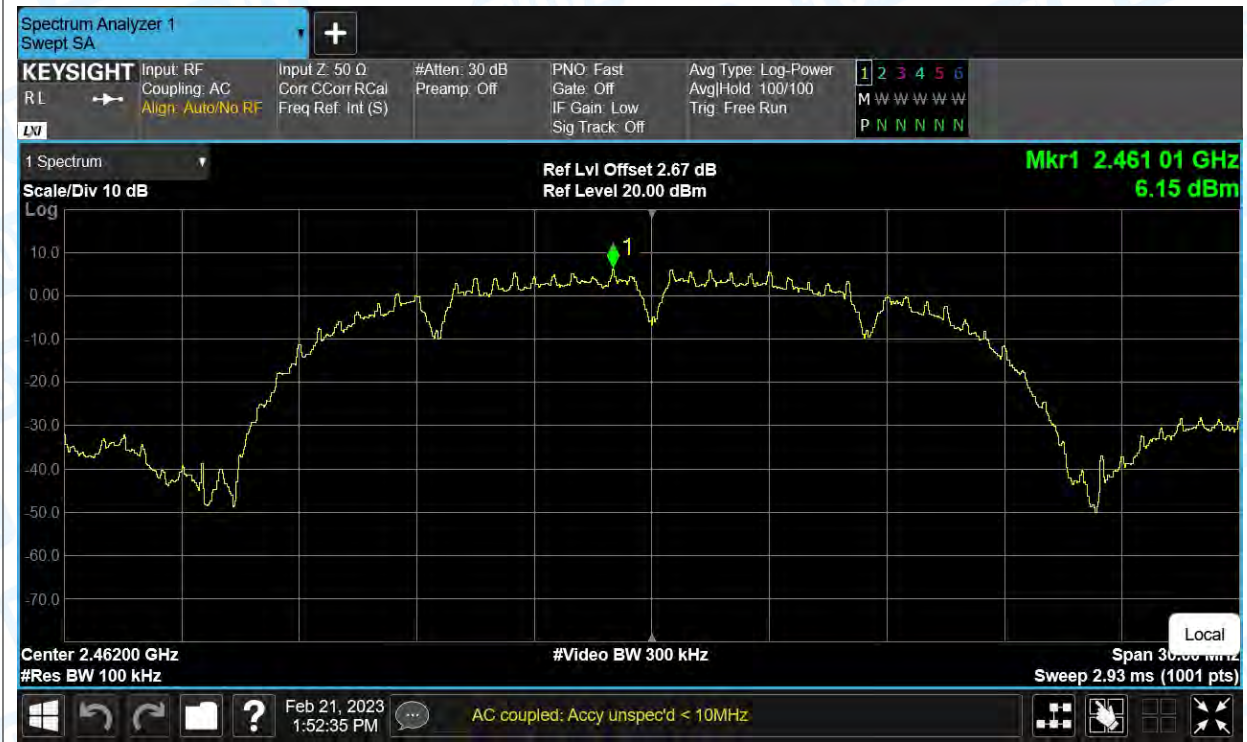
Tx. Spurious NVNT b 2437MHz AntB Ref



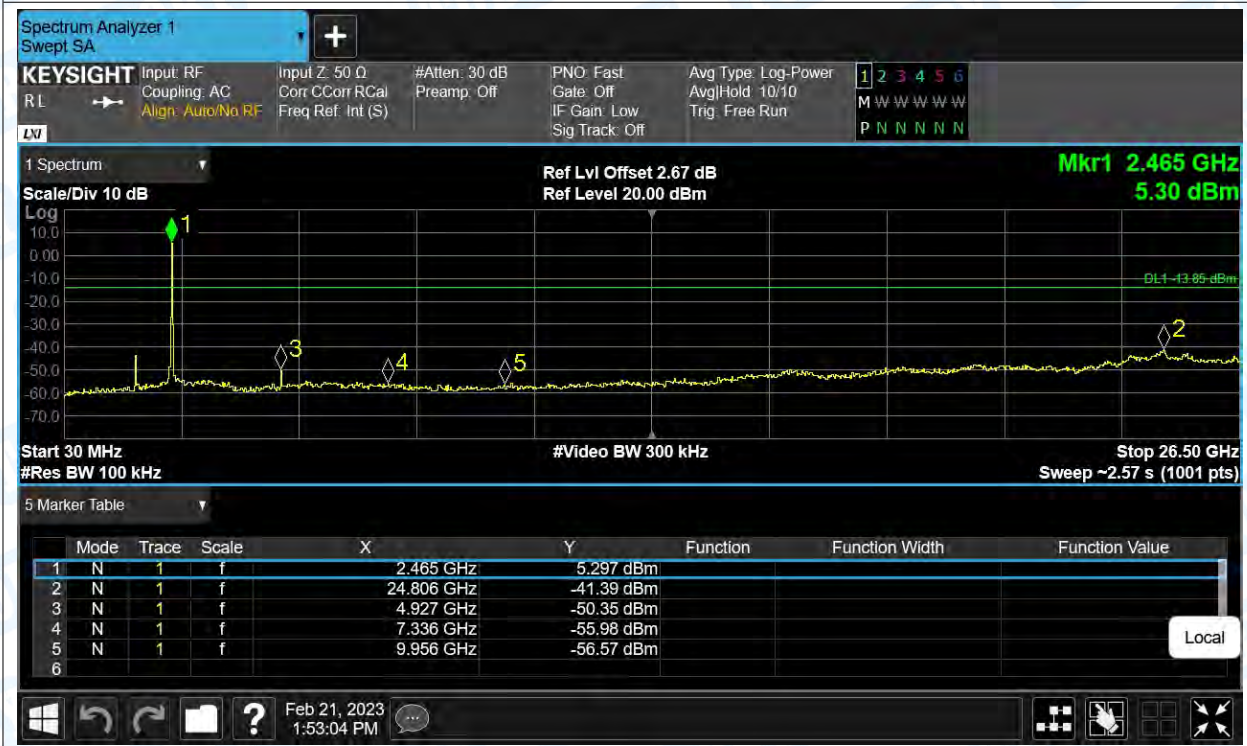
Tx. Spurious NVNT b 2437MHz AntB Emission



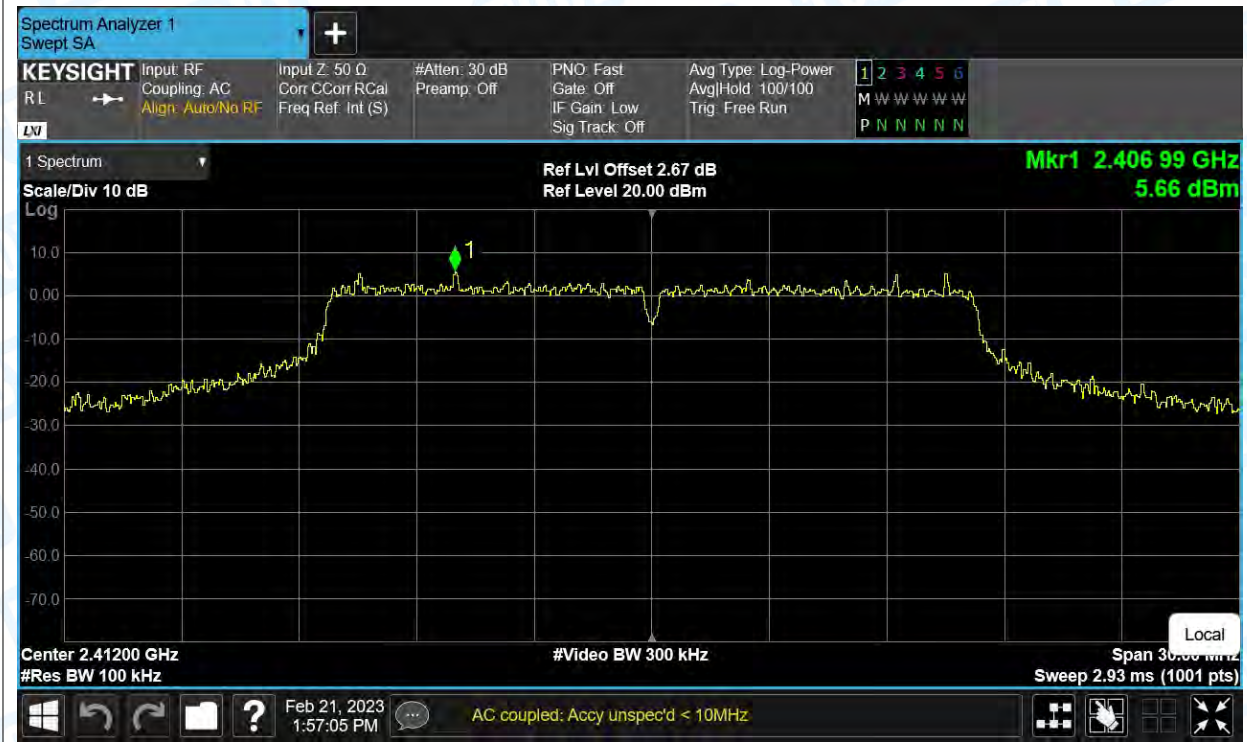
Tx. Spurious NVNT b 2462MHz AntB Ref



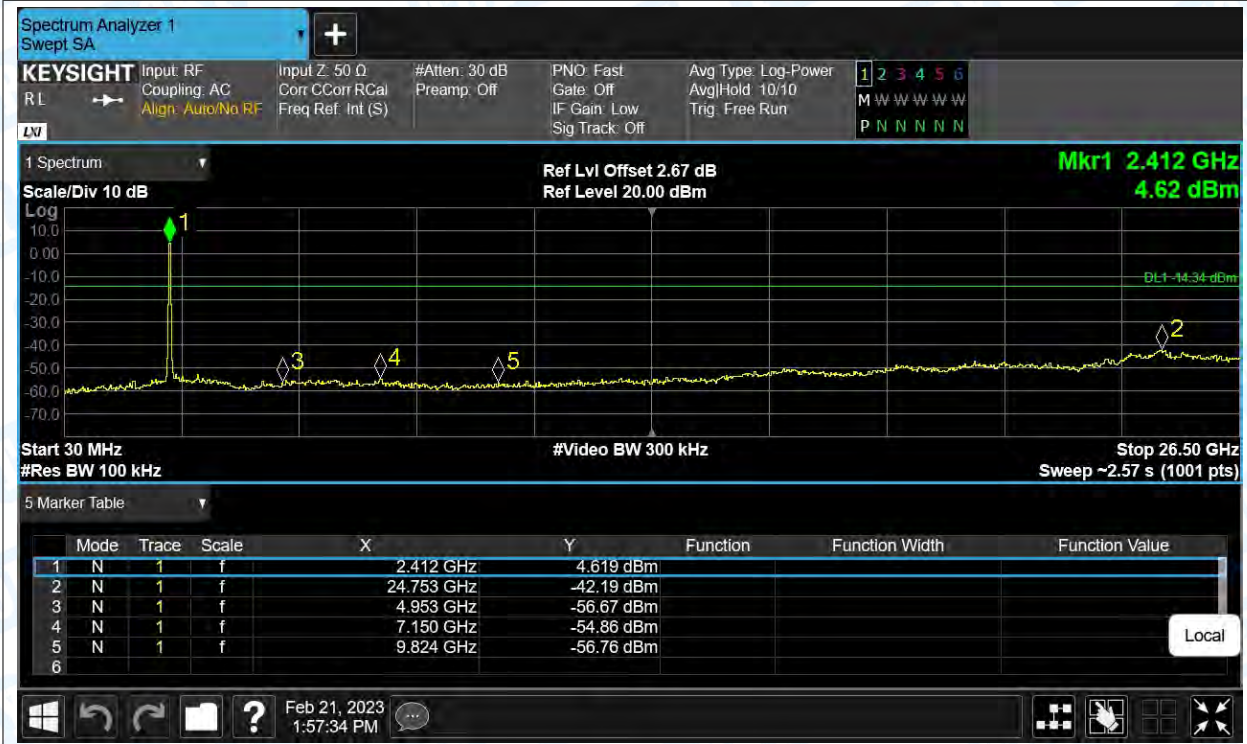
Tx. Spurious NVNT b 2462MHz AntB Emission



Tx. Spurious NVNT g 2412MHz AntB Ref



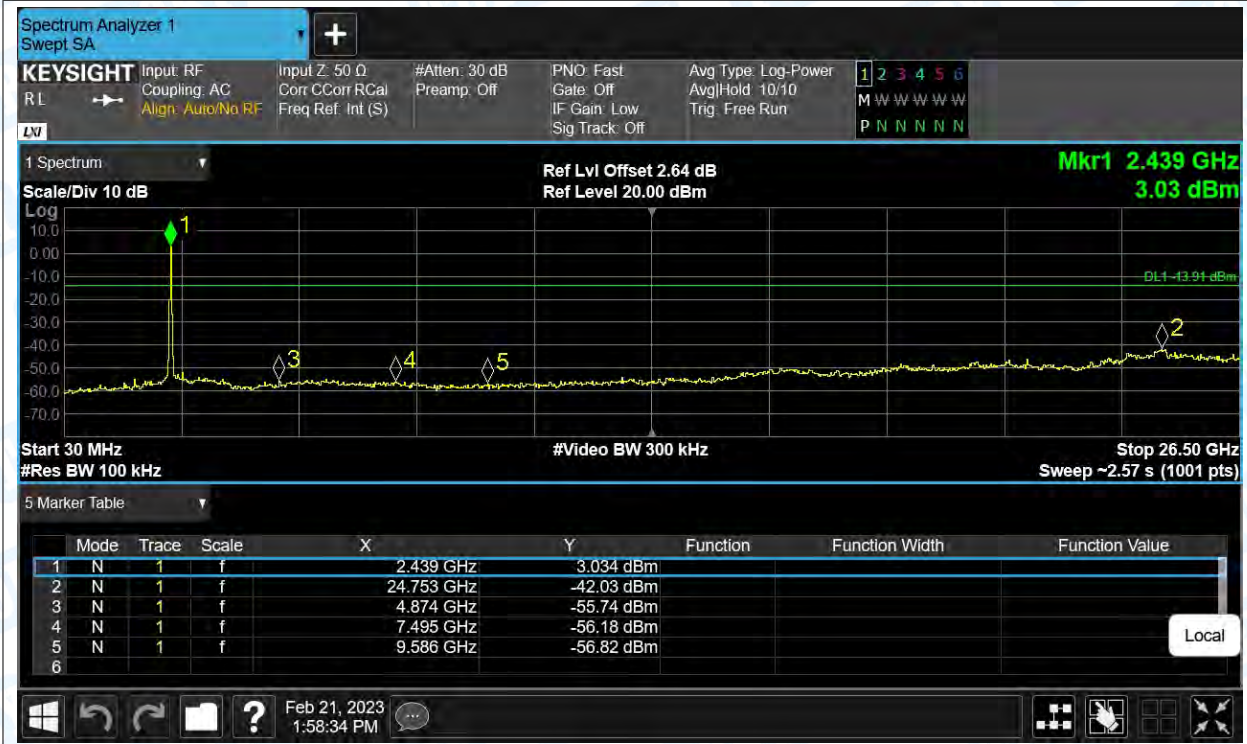
Tx. Spurious NVNT g 2412MHz AntB Emission



Tx. Spurious NVNT g 2437MHz AntB Ref



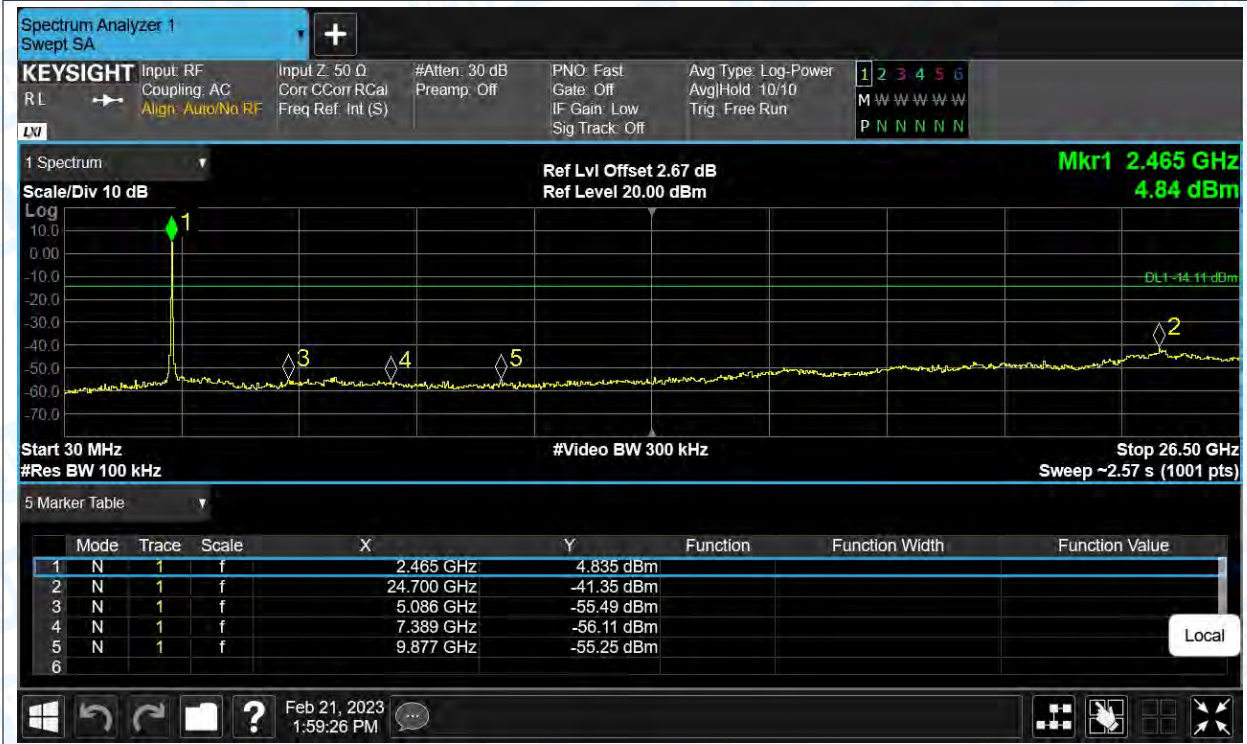
Tx. Spurious NVNT g 2437MHz AntB Emission



Tx. Spurious NVNT g 2462MHz AntB Ref



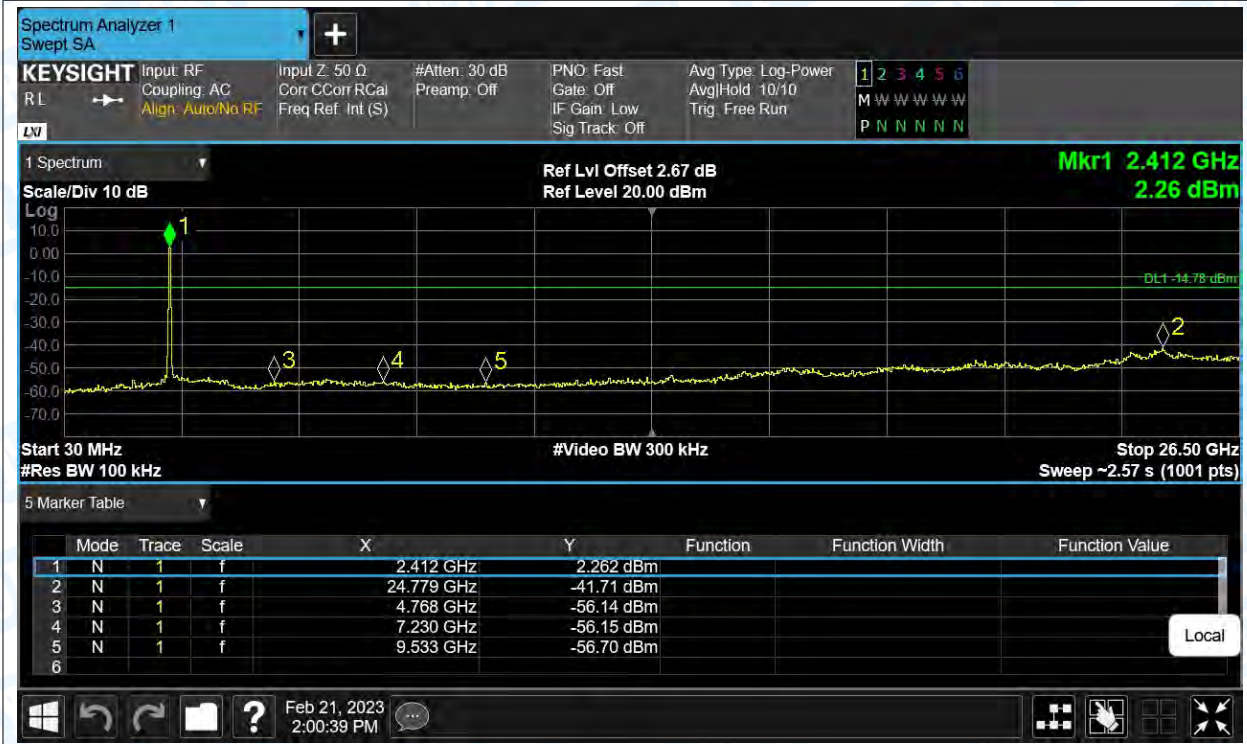
Tx. Spurious NVNT g 2462MHz AntB Emission



Tx. Spurious NVNT n(HT20) 2412MHz AntB Ref



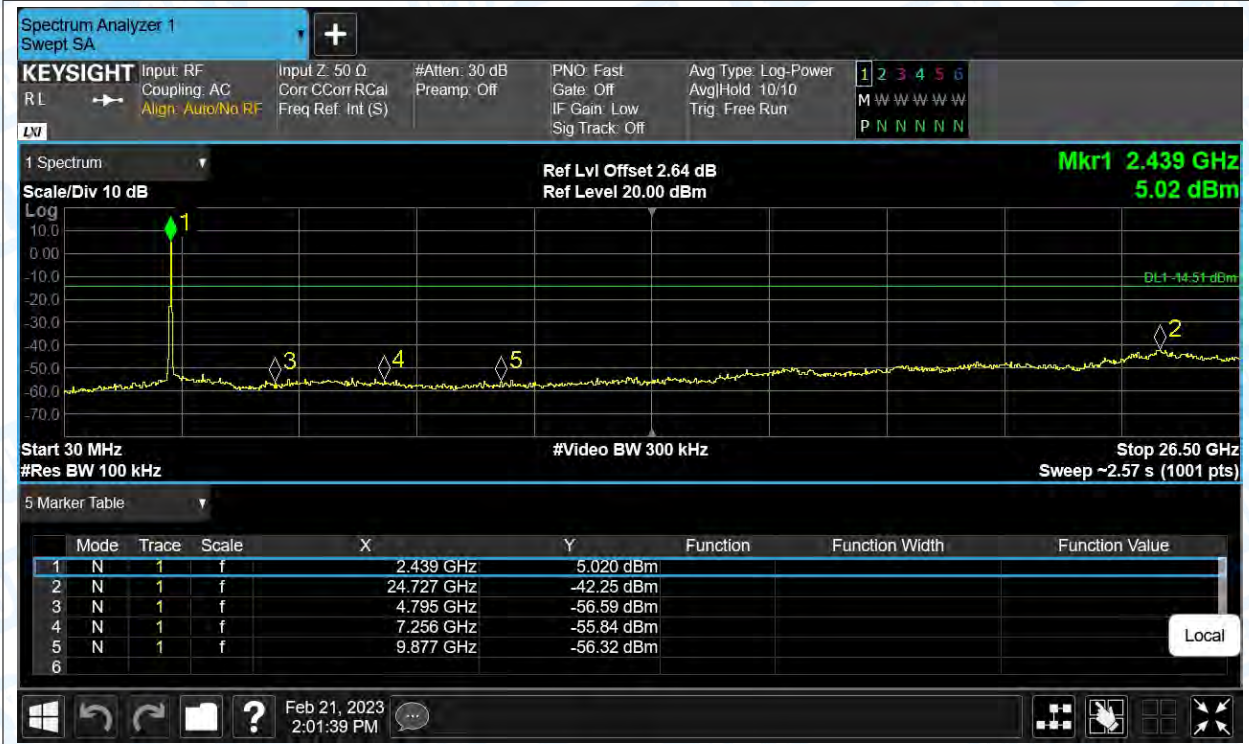
Tx. Spurious NVNT n(HT20) 2412MHz AntB Emission



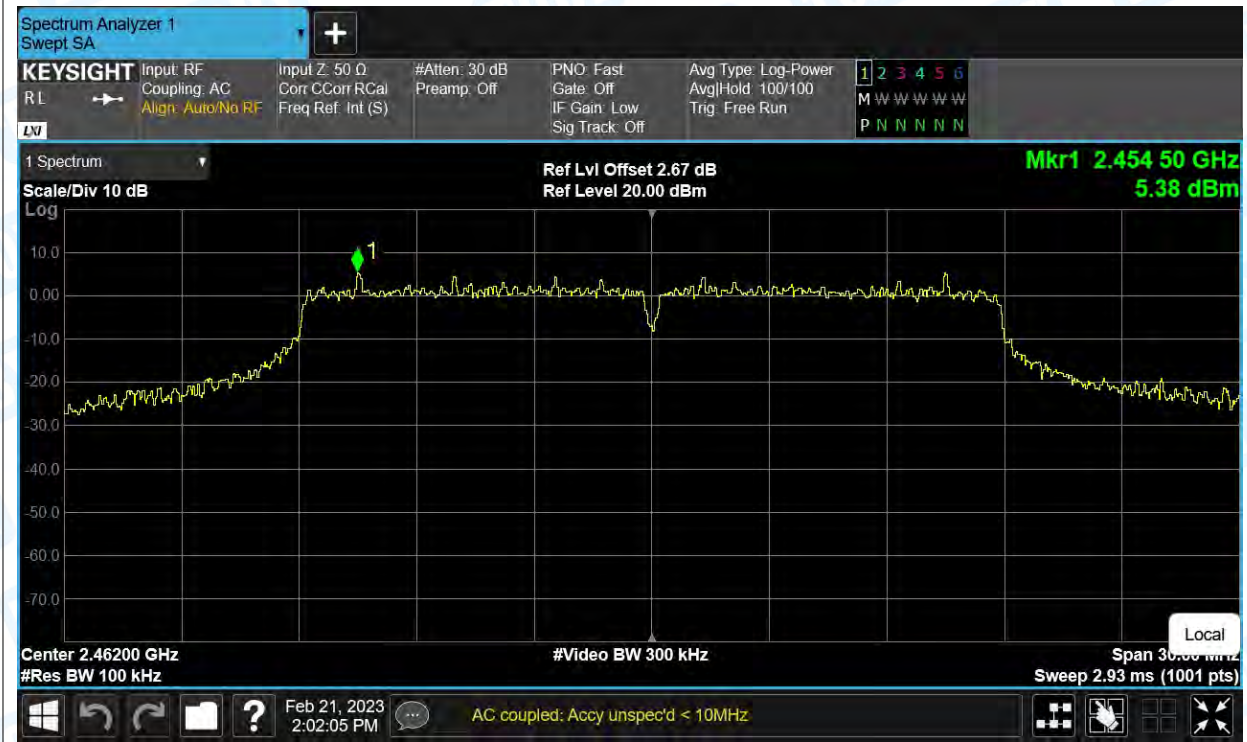
Tx. Spurious NVNT n(HT20) 2437MHz AntB Ref



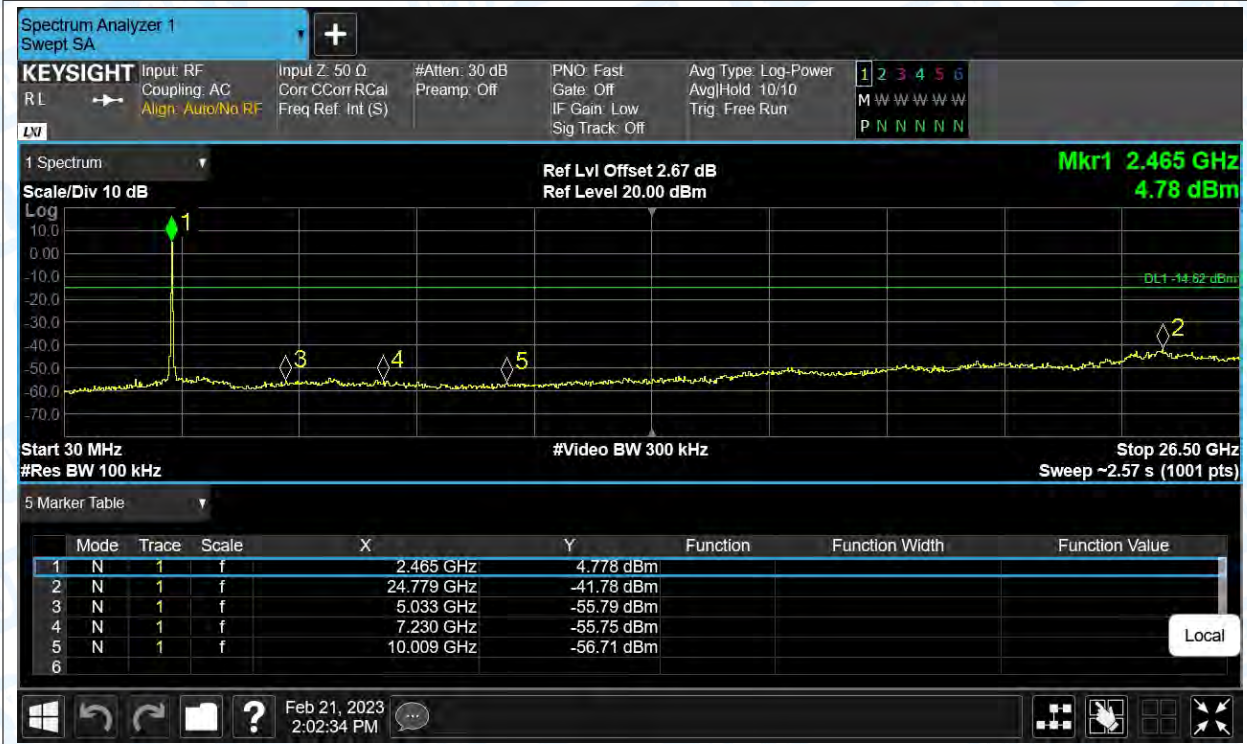
Tx. Spurious NVNT n(HT20) 2437MHz AntB Emission



Tx. Spurious NVNT n(HT20) 2462MHz AntB Ref



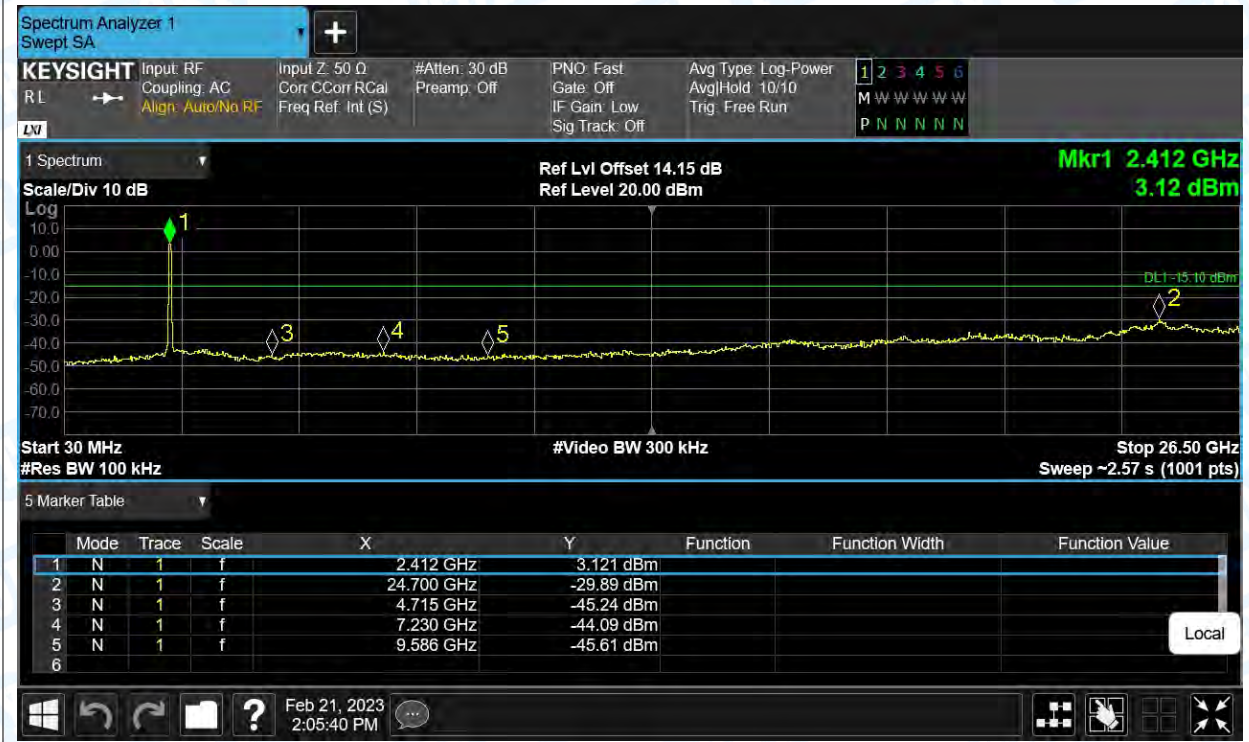
Tx. Spurious NVNT n(HT20) 2462MHz AntB Emission



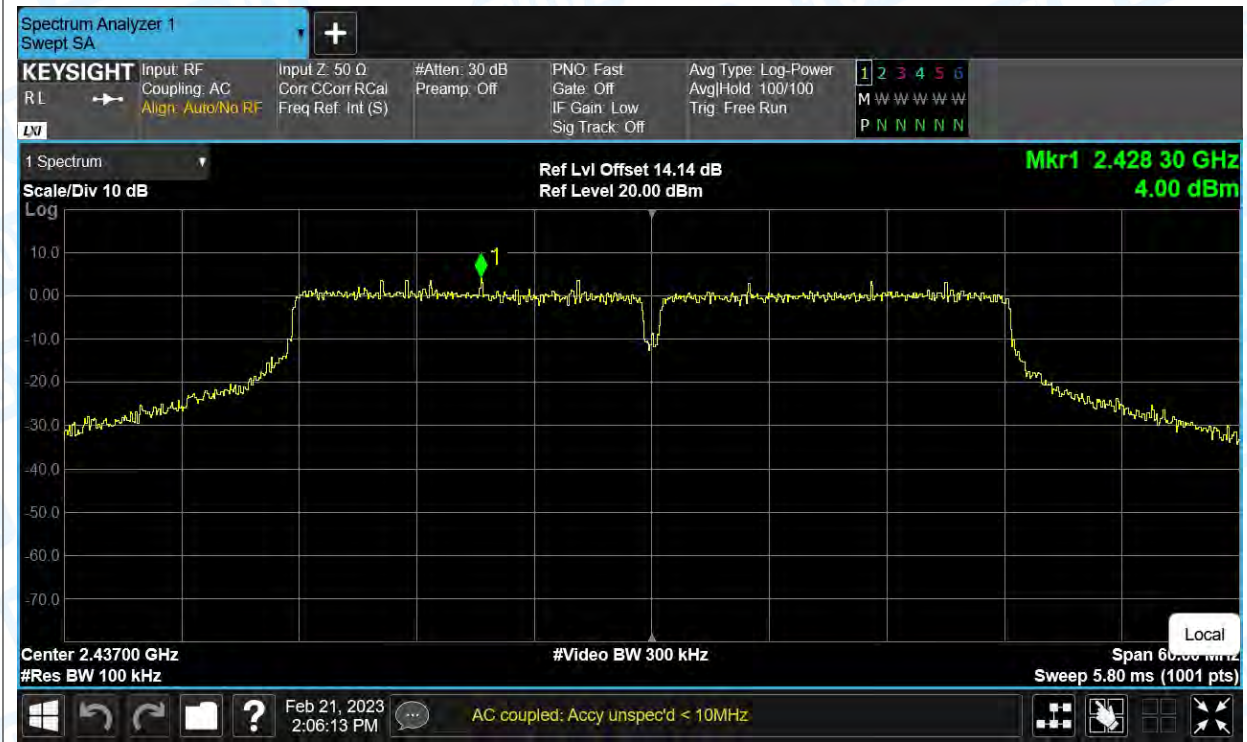
Tx. Spurious NVNT n(HT40) 2422MHz AntB Ref



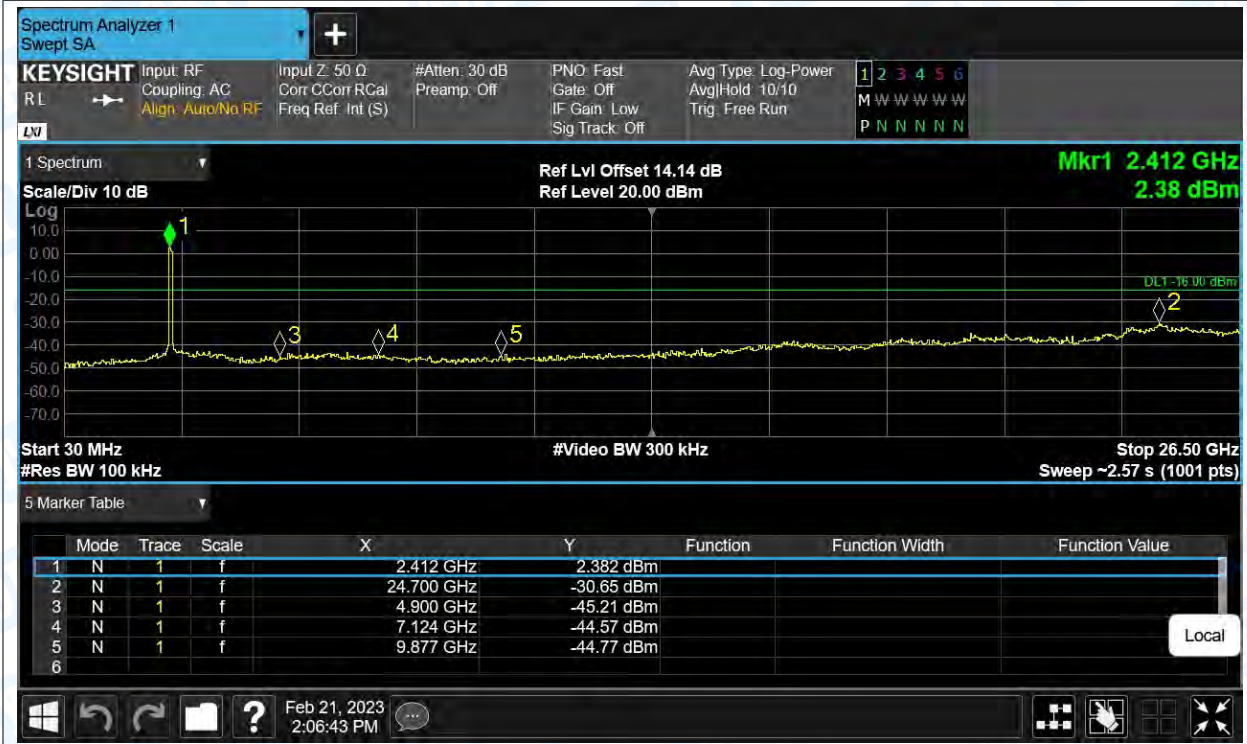
Tx. Spurious NVNT n(HT40) 2422MHz AntB Emission



Tx. Spurious NVNT n(HT40) 2437MHz AntB Ref



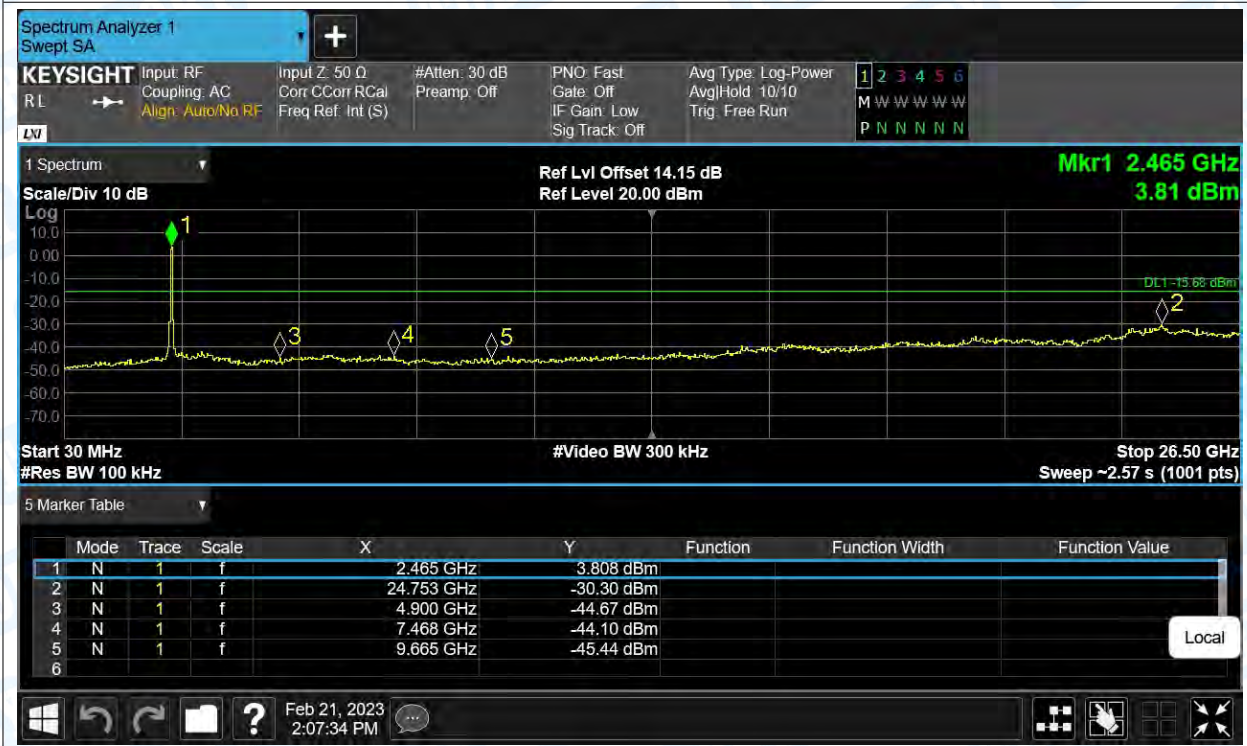
Tx. Spurious NVNT n(HT40) 2437MHz AntB Emission



Tx. Spurious NVNT n(HT40) 2452MHz AntB Ref



Tx. Spurious NVNT n(HT40) 2452MHz AntB Emission



-----End of the report-----