RF Test Data for 2.4G
(Conducted Measurements)

General Description of EUT	
Product Name:	2.4GWireless mouse
Test Model:	QY-BC-300(H)
Sample ID:	202210_0041-01-02
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 3V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202210-0041-2	

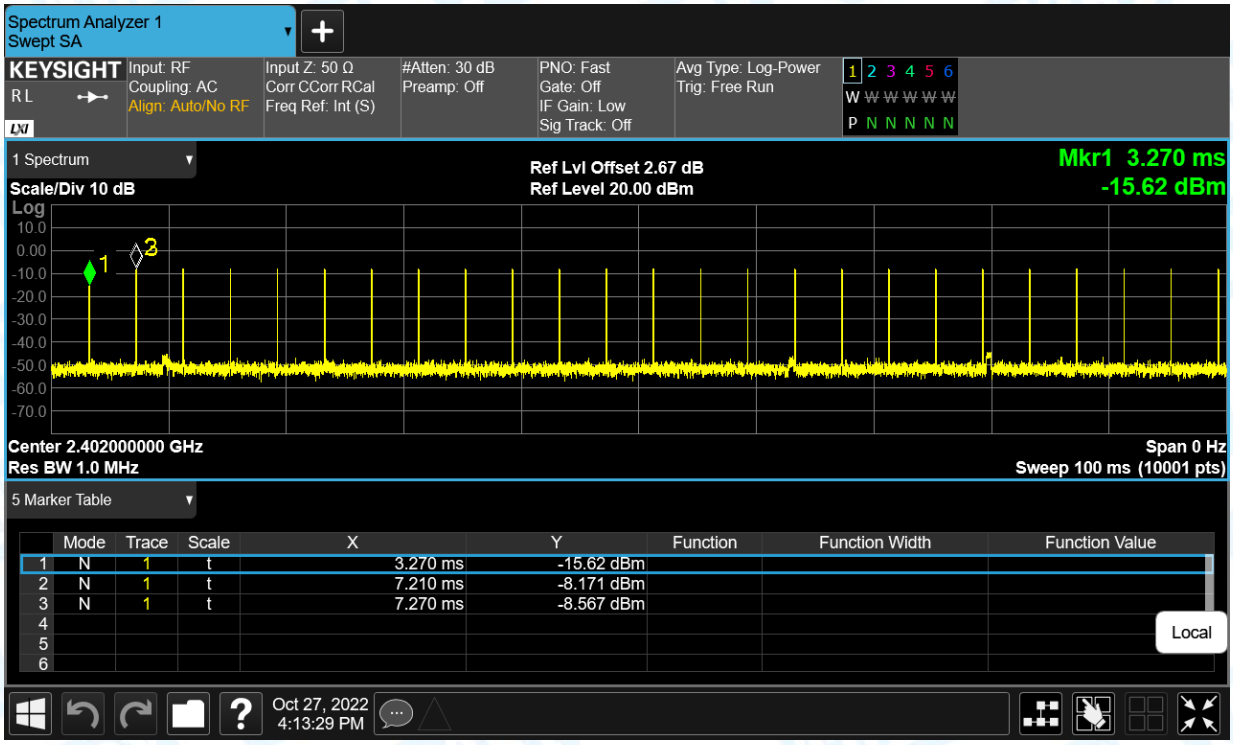
Contents

1. Duty Cycle

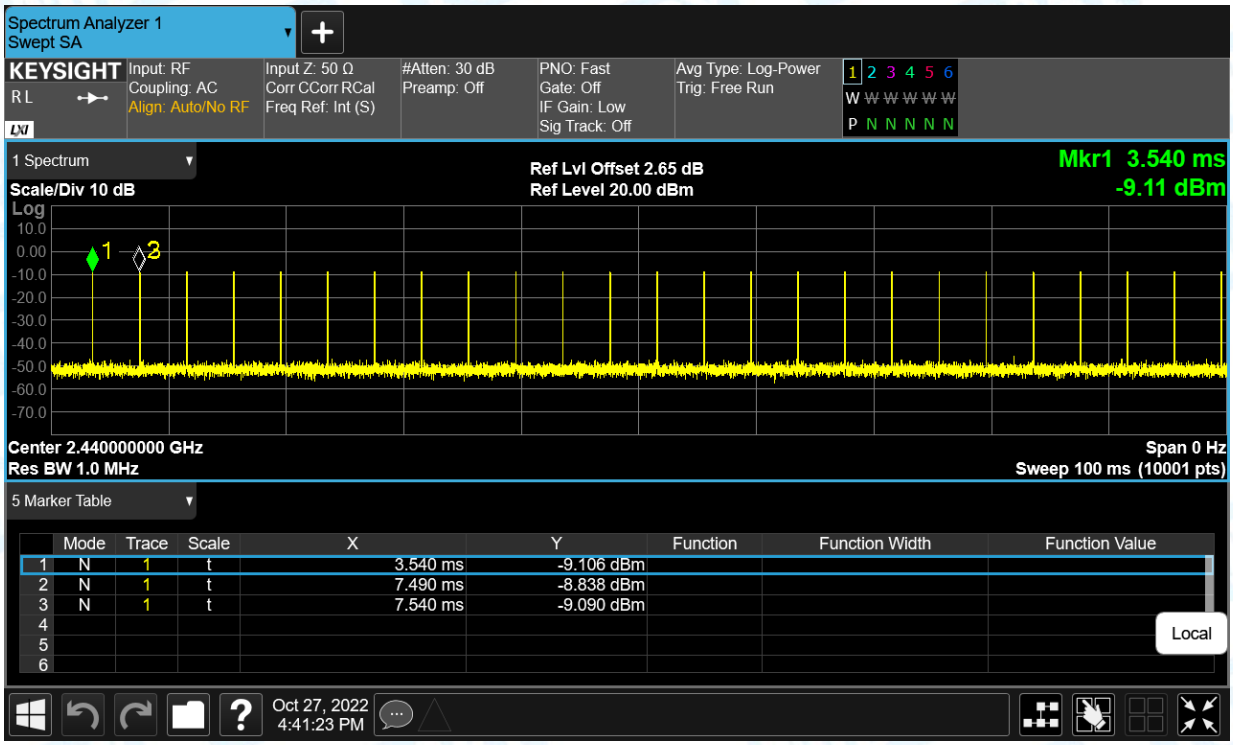
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	GFSK	2402	Ant1	1.5	18.24	16.67
NVNT	GFSK	2440	Ant1	1.25	19.03	20
NVNT	GFSK	2480	Ant1	1.5	18.24	16.67

Test Graphs

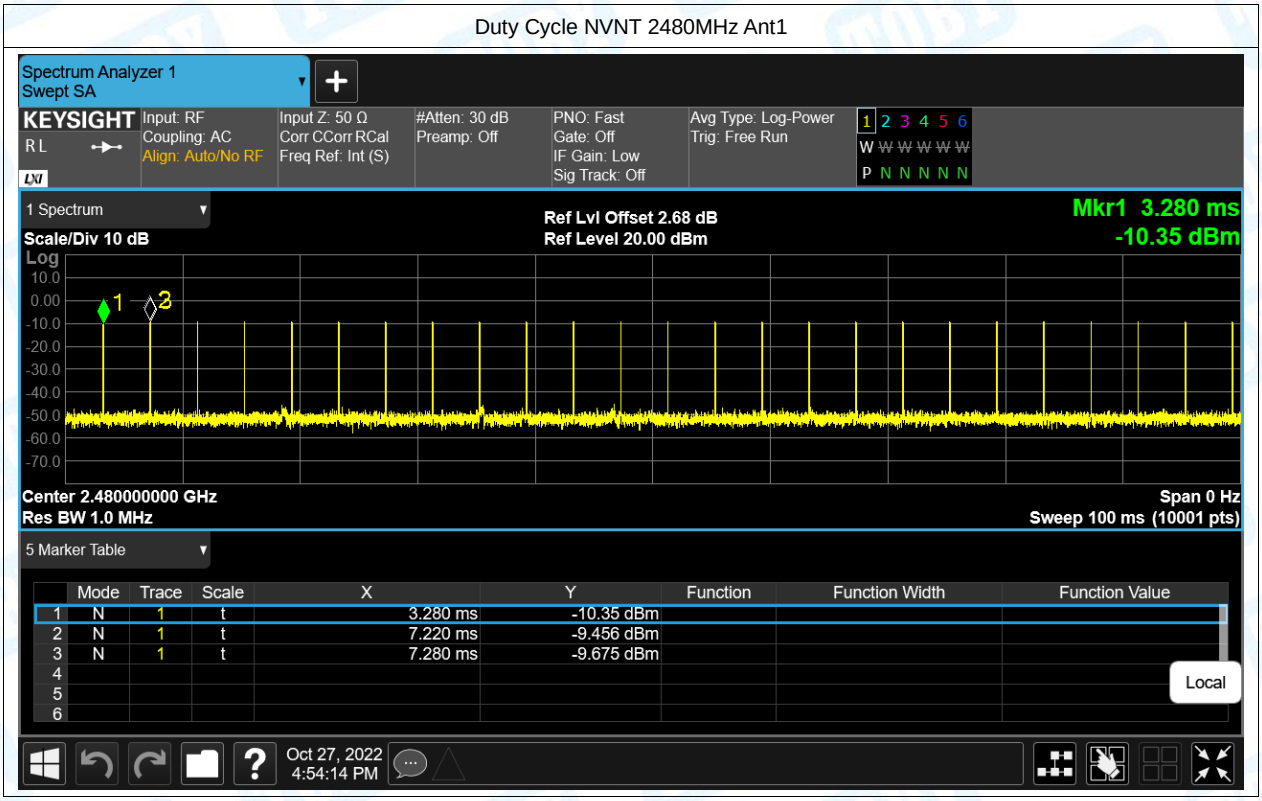
Duty Cycle NVNT 2402MHz Ant1



Duty Cycle NVNT 2440MHz Ant1



Duty Cycle NVNT 2480MHz Ant1

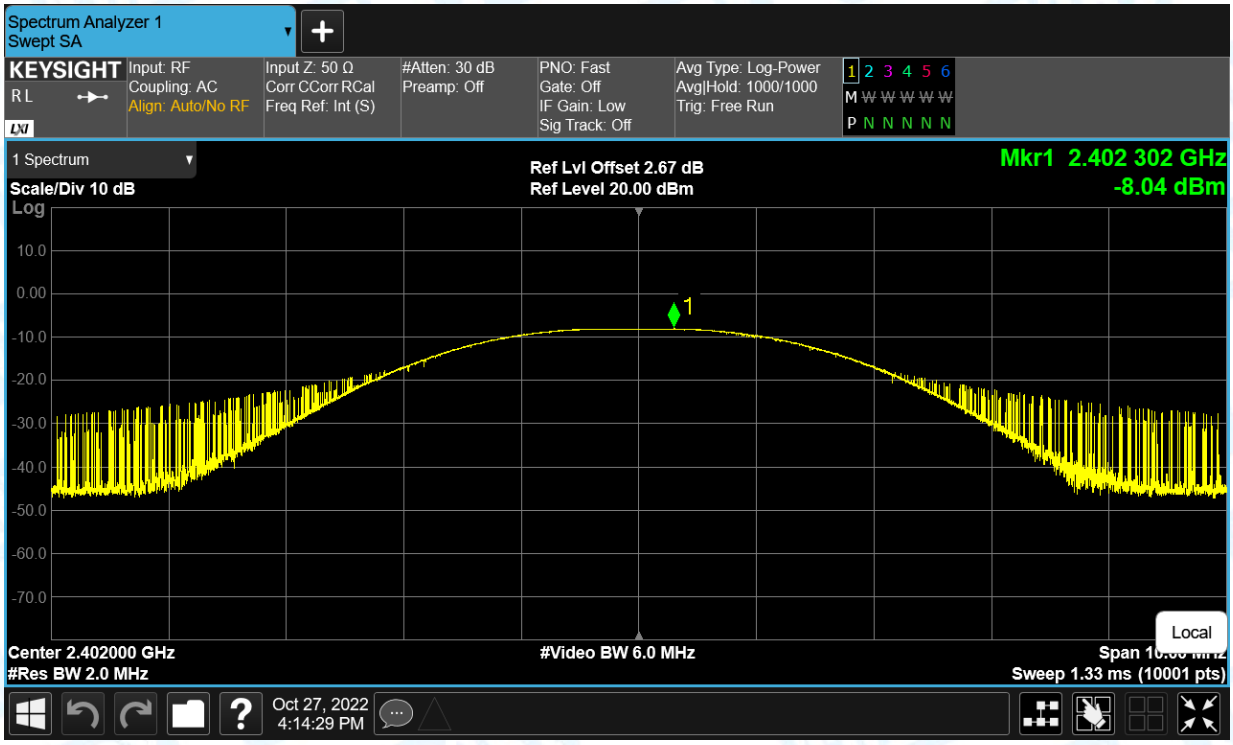


2. Maximum Conducted Output Power

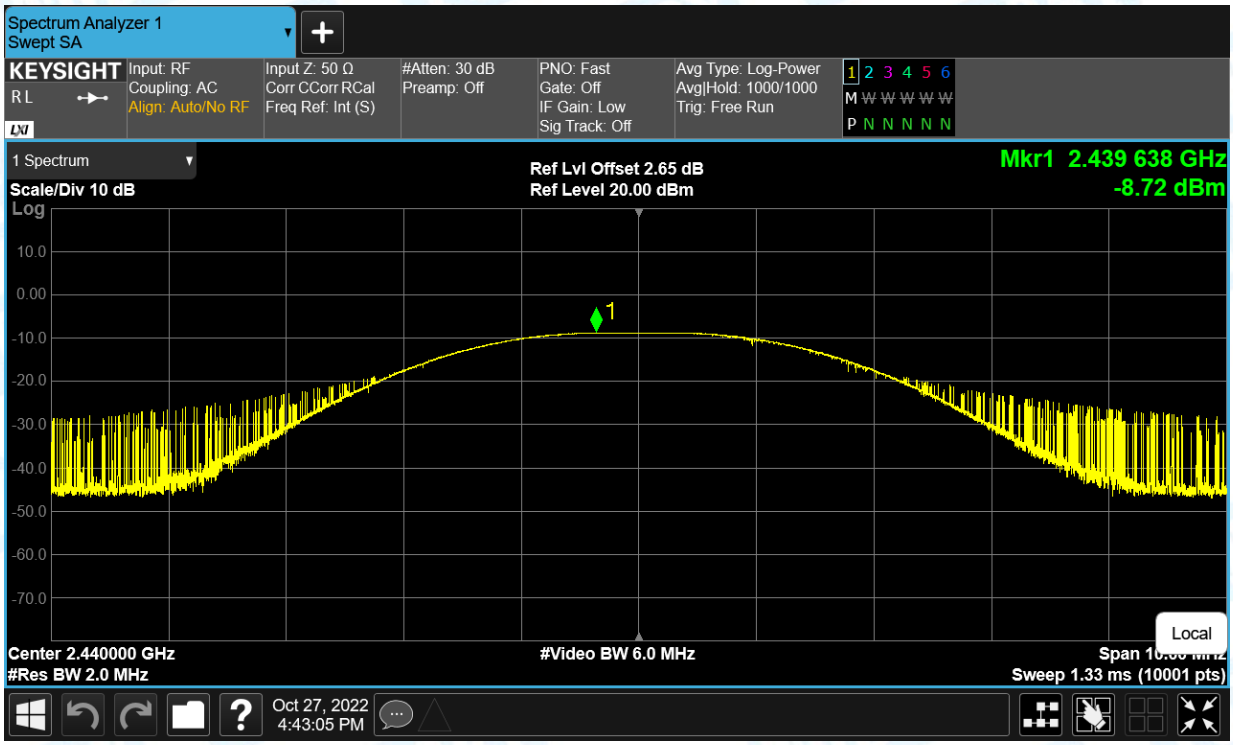
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	GFSK	2402	Ant1	-8.042	21	Pass
NVNT	GFSK	2440	Ant1	-8.722	21	Pass
NVNT	GFSK	2480	Ant1	-9.3	21	Pass

Test Graphs

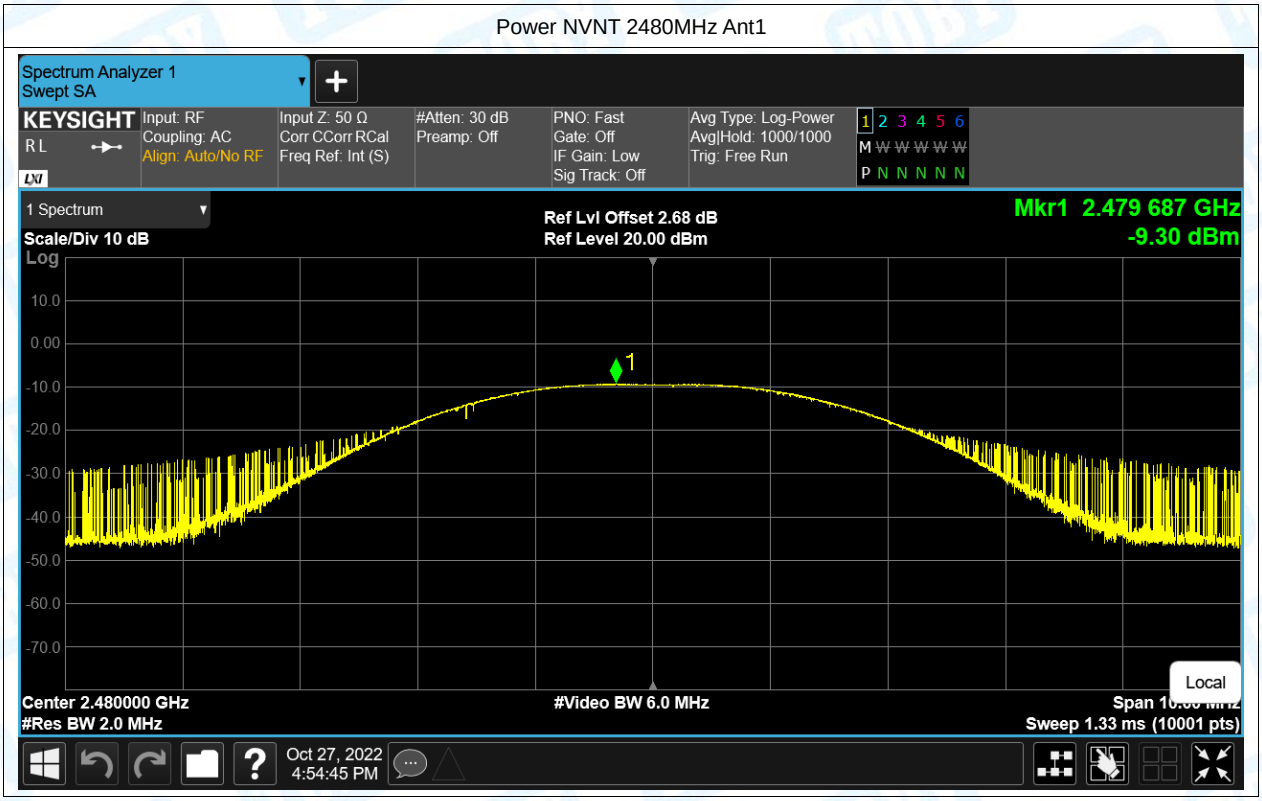
Power NVNT 2402MHz Ant1



Power NVNT 2440MHz Ant1



Power NVNT 2480MHz Ant1

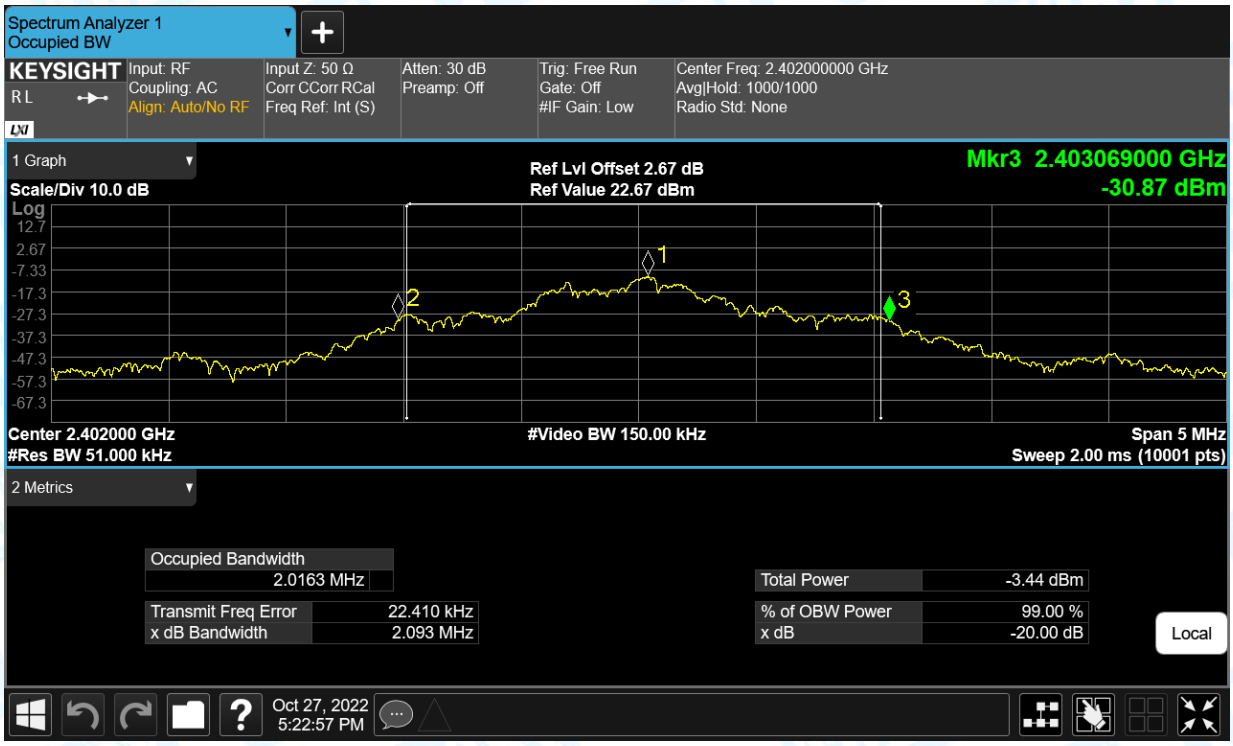


3. -20dB Bandwidth

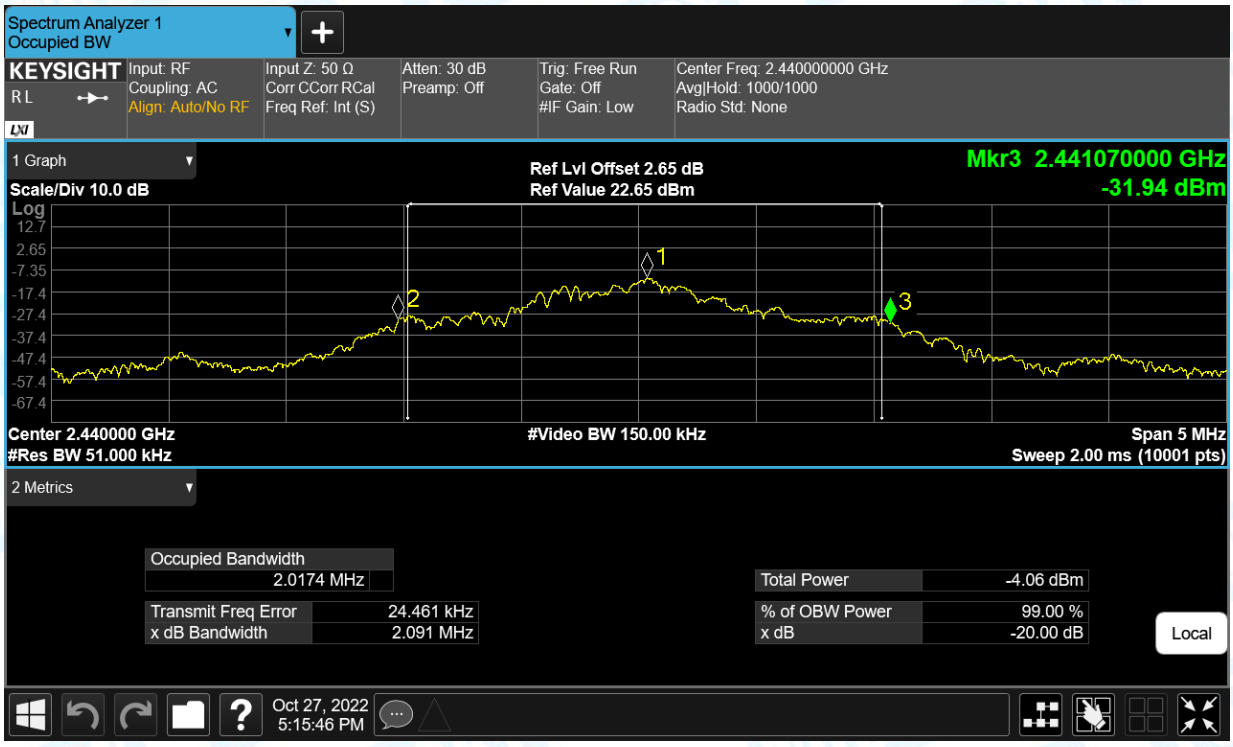
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	GFSK	2402	Ant1	2.09	0	Pass
NVNT	GFSK	2440	Ant1	2.09	0	Pass
NVNT	GFSK	2480	Ant1	2.08	0	Pass

Test Graphs

-20dB Bandwidth NVNT 2402MHz Ant1



-20dB Bandwidth NVNT 2440MHz Ant1



-20dB Bandwidth NVNT 2480MHz Ant1

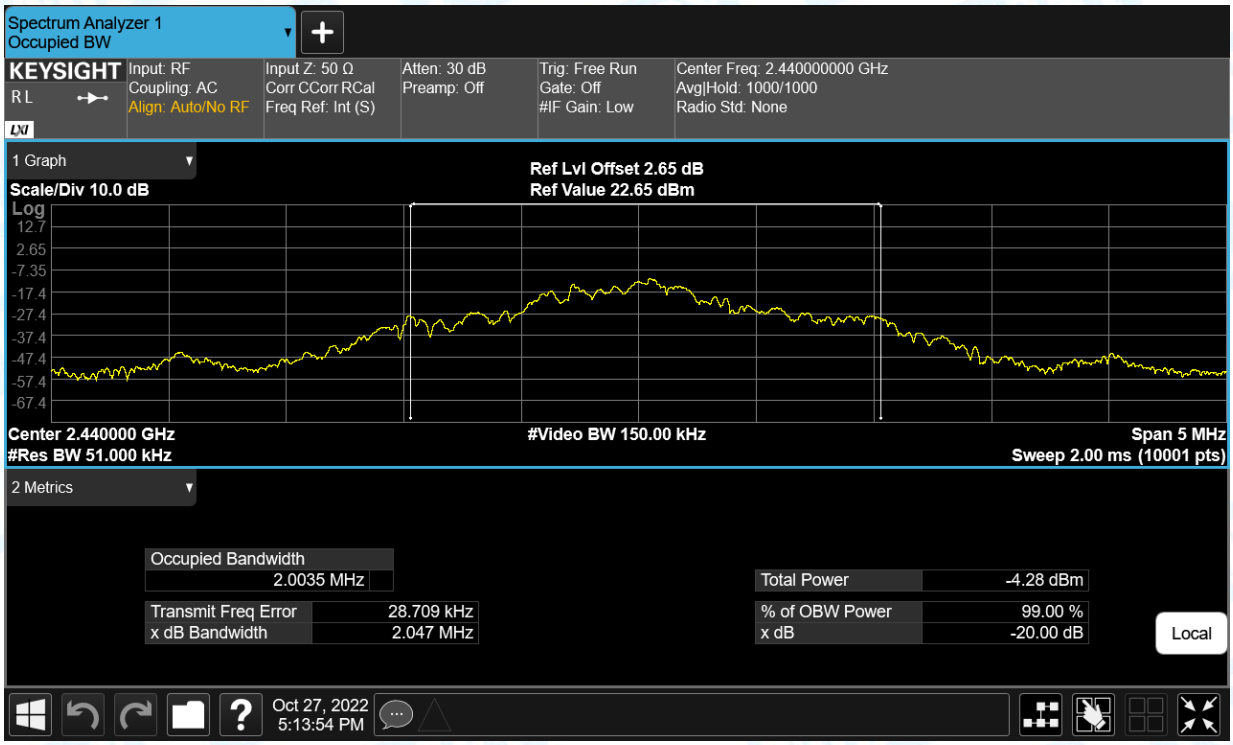
4. Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	GFSK	2402	Ant1	1.989
NVNT	GFSK	2440	Ant1	2.003
NVNT	GFSK	2480	Ant1	2.055

Test Graphs

OBW NVNT 2402MHz Ant1

OBW NVNT 2440MHz Ant1



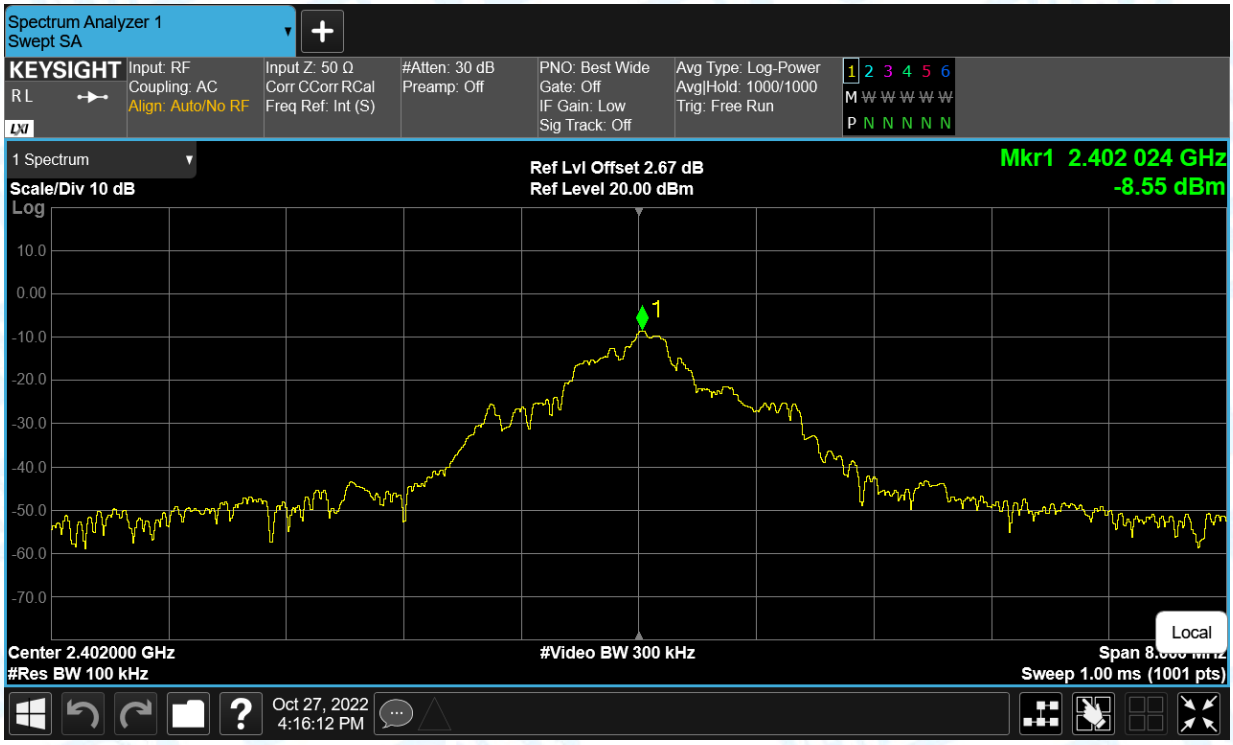
OBW NVNT 2480MHz Ant1

5. Band Edge

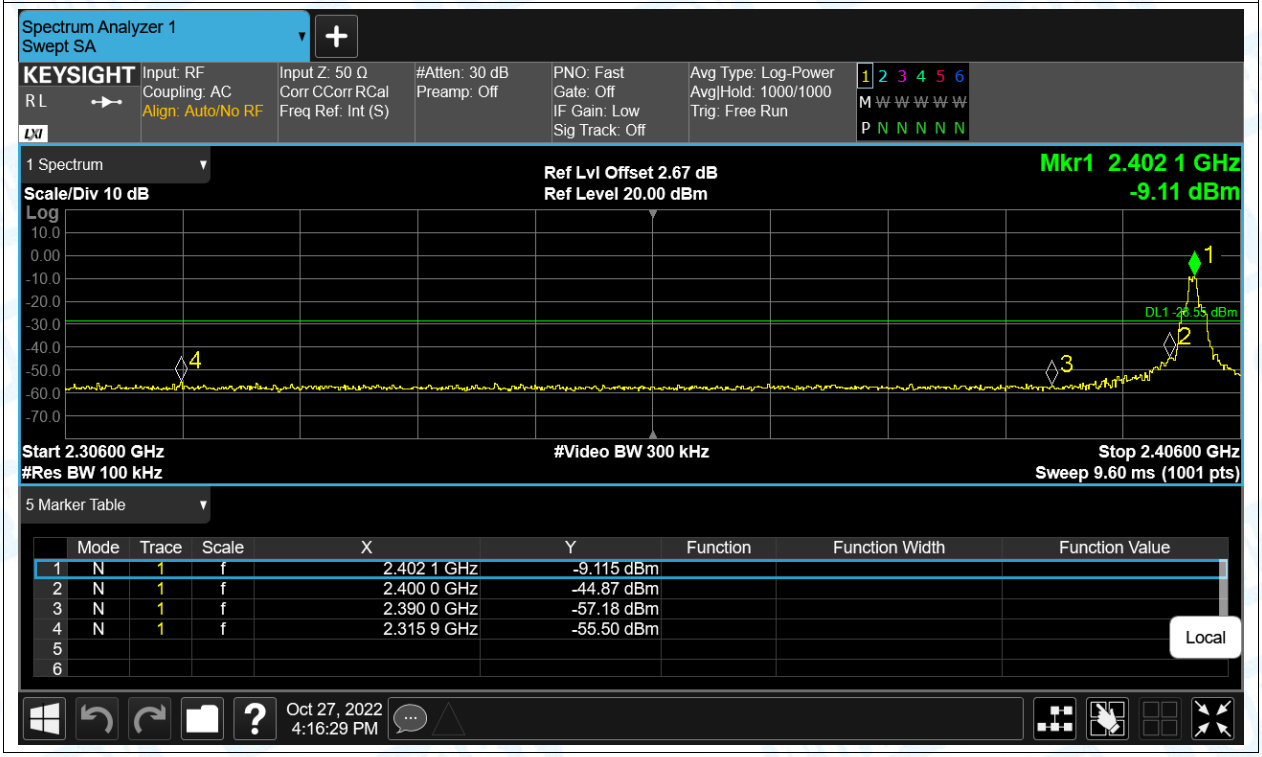
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	GFSK	2402	Ant1	No-Hopping	-46.95	-20	Pass
NVNT	GFSK	2480	Ant1	No-Hopping	-41.11	-20	Pass

Test Graphs

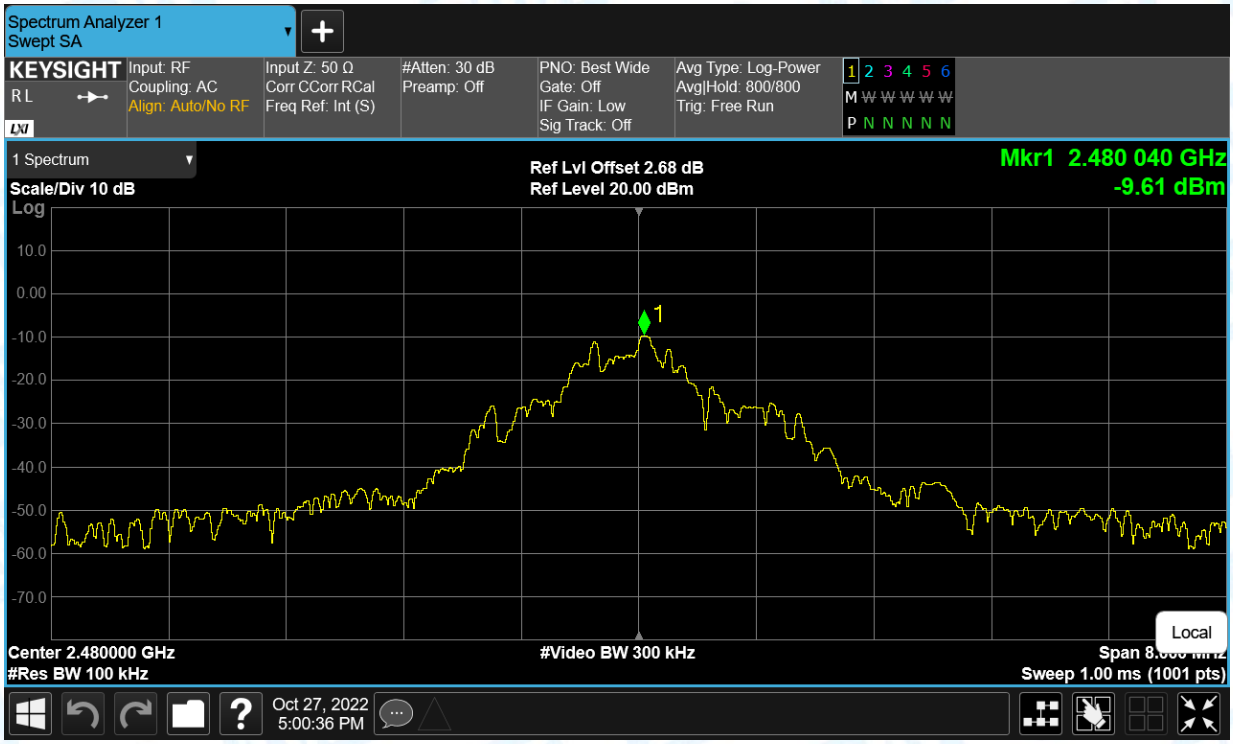
Band Edge NVNT 2402MHz Ant1 No-Hopping Ref



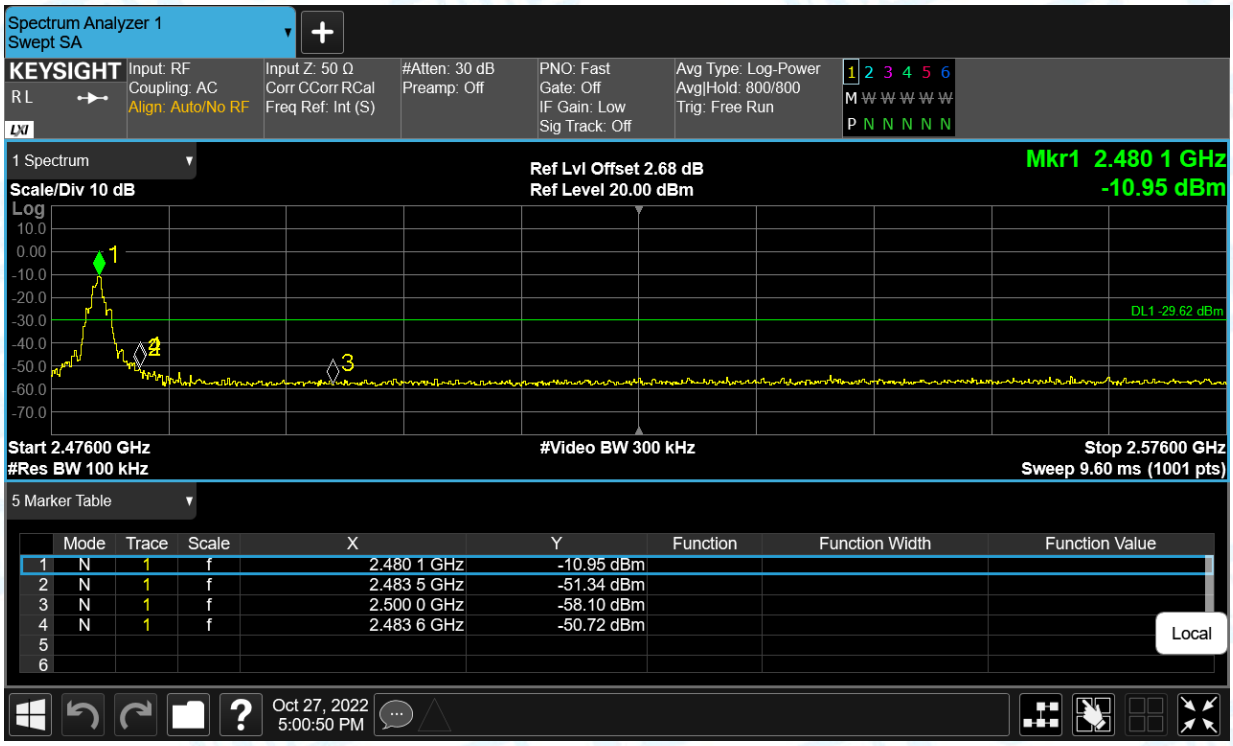
Band Edge NVNT 2402MHz Ant1 No-Hopping Emission



Band Edge NVNT 2480MHz Ant1 No-Hopping Ref



Band Edge NVNT 2480MHz Ant1 No-Hopping Emission

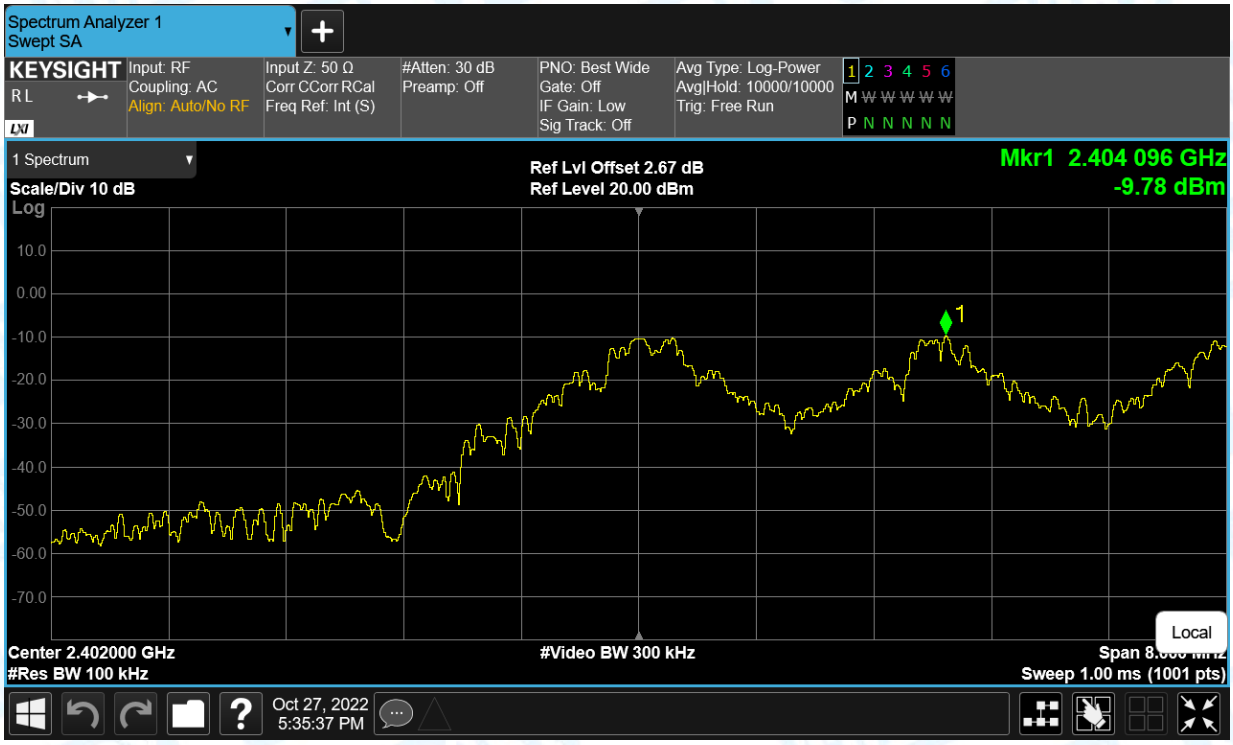


6. Band Edge(Hopping)

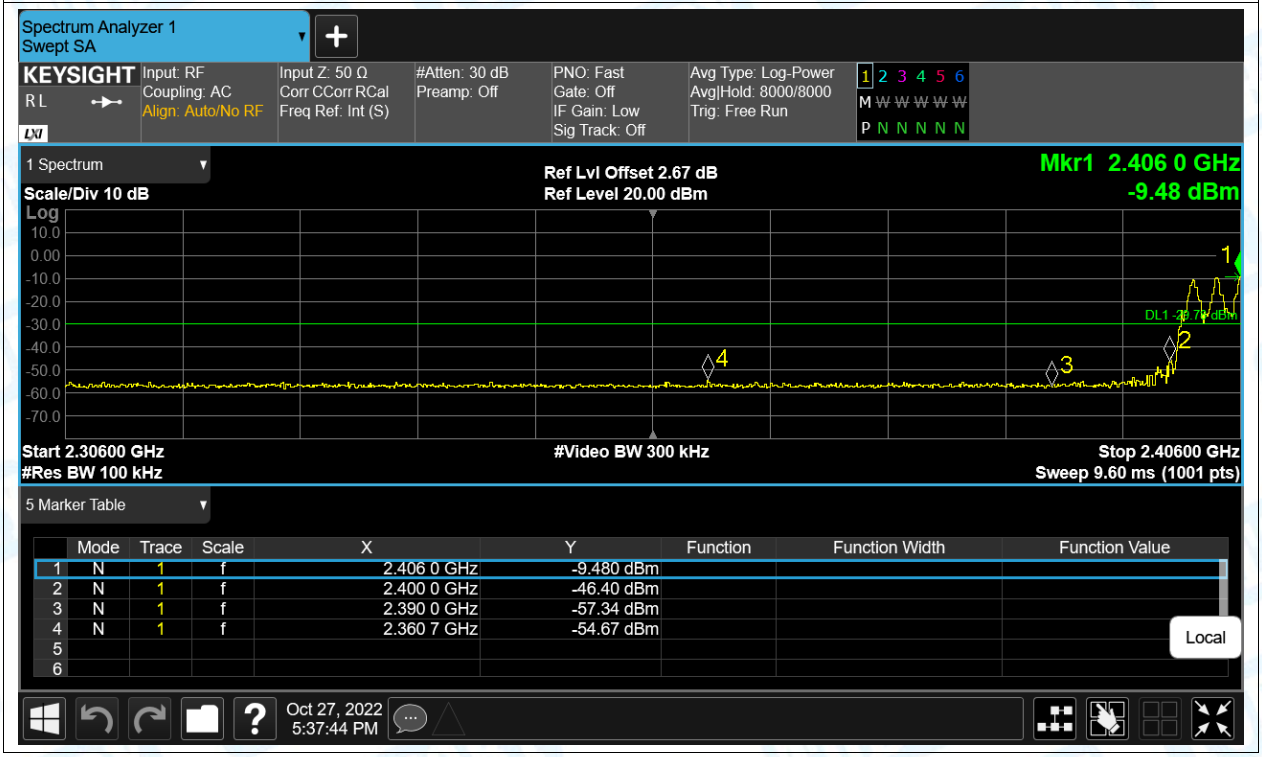
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	GFSK	2402	Ant1	Hopping	-44.89	-20	Pass
NVNT	GFSK	2480	Ant1	Hopping	-40.62	-20	Pass

Test Graphs

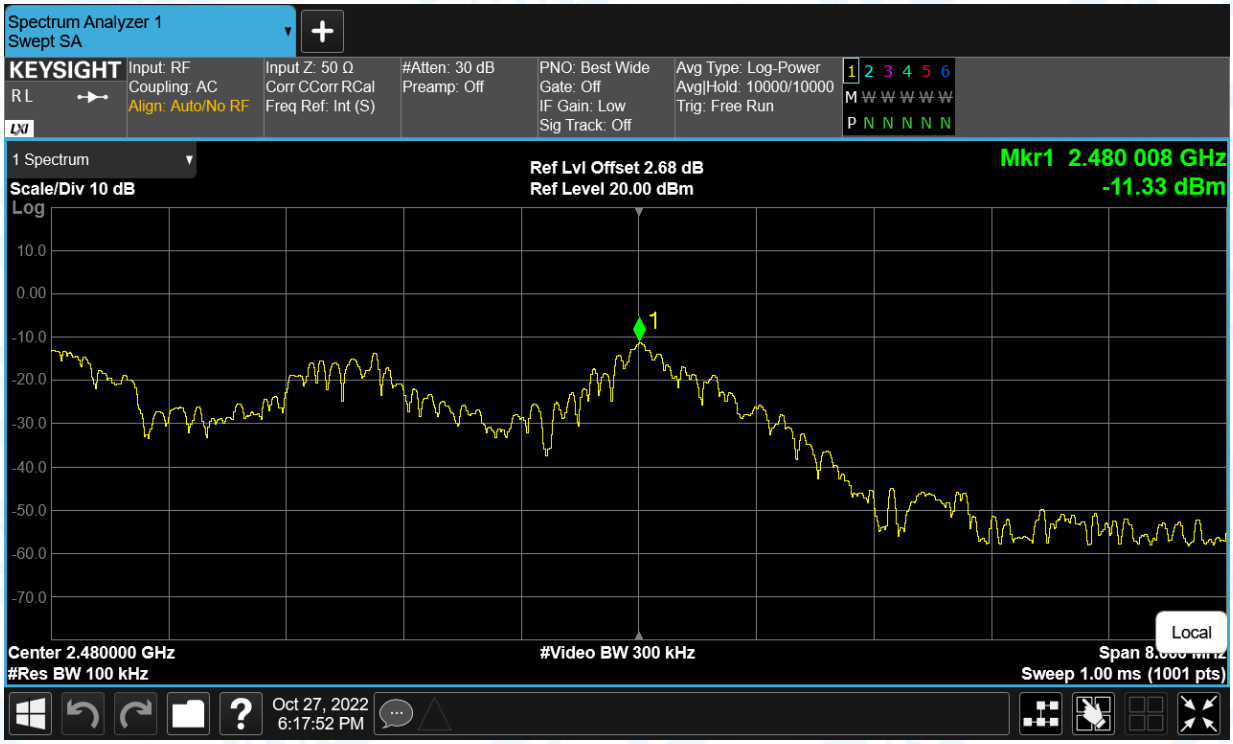
Band Edge(Hopping) NVNT 2402MHz Ant1 Hopping Ref



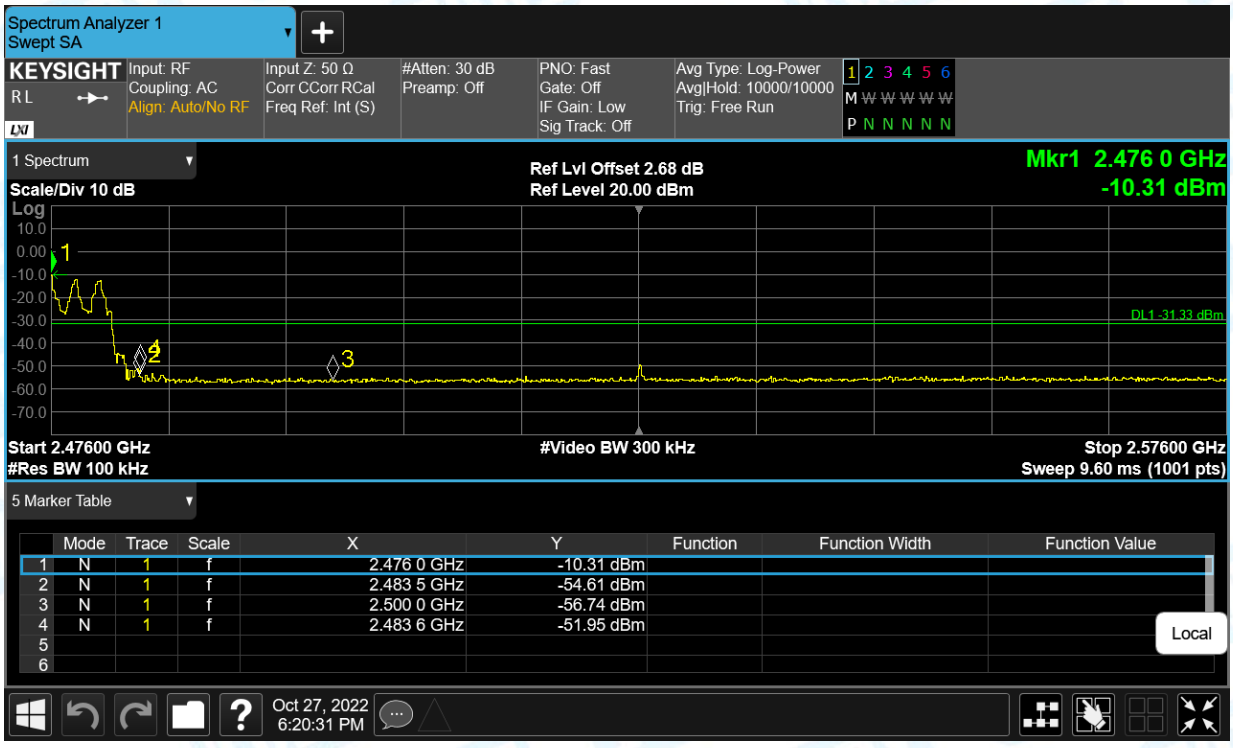
Band Edge(Hopping) NVNT 2402MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 2480MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 2480MHz Ant1 Hopping Emission

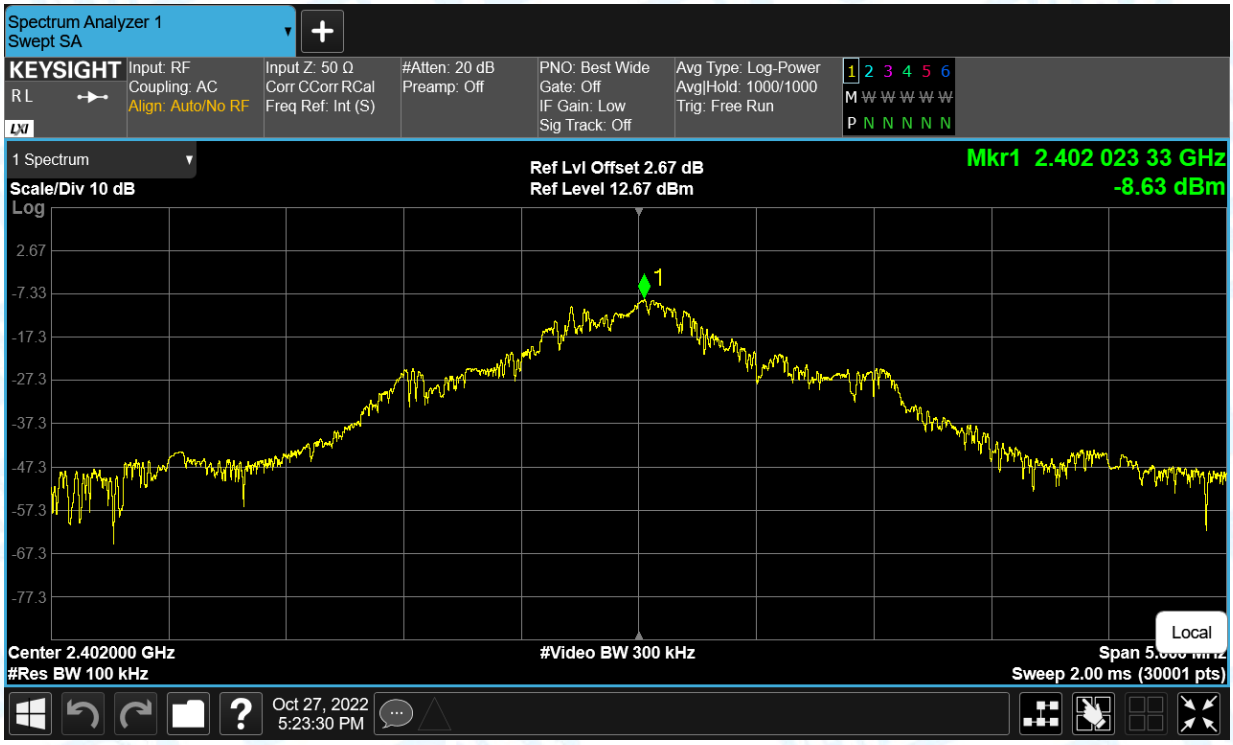


7. Conducted RF Spurious Emission

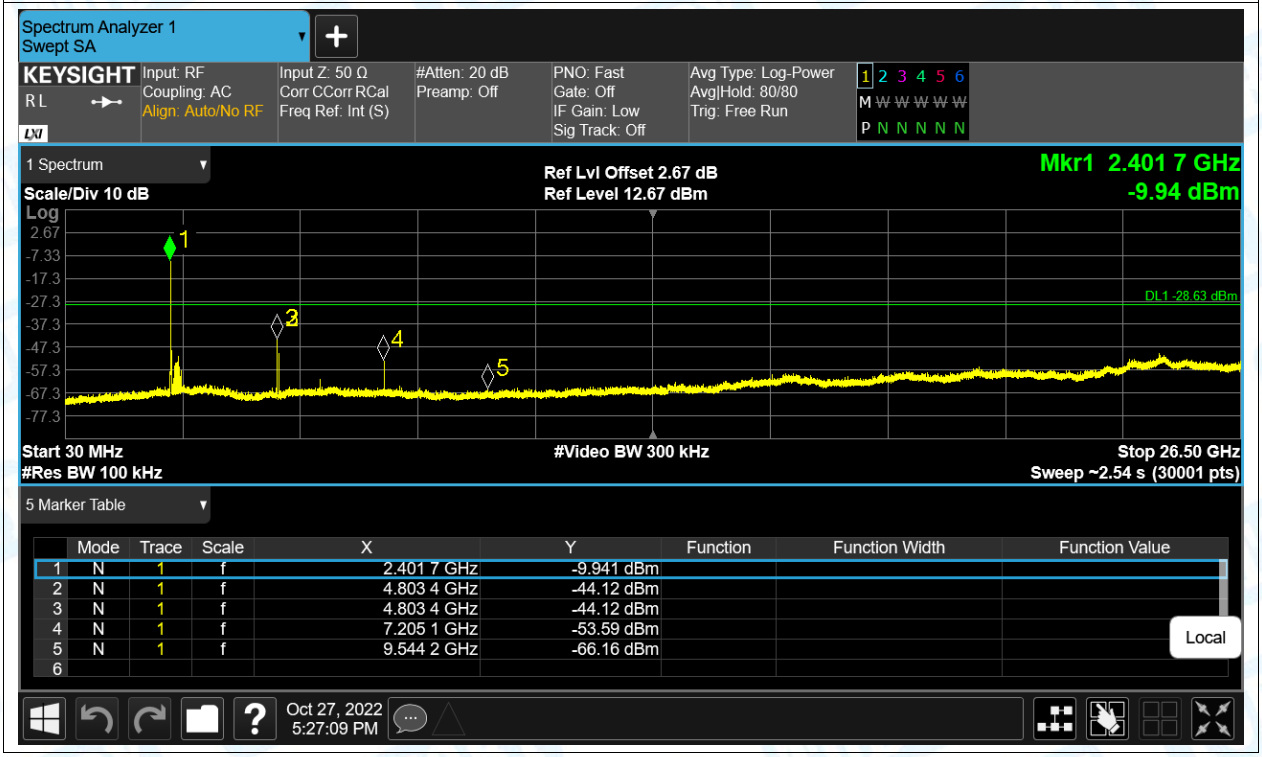
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	GFSK	2402	Ant1	-35.49	-20	Pass
NVNT	GFSK	2440	Ant1	-34.2	-20	Pass
NVNT	GFSK	2480	Ant1	-37.65	-20	Pass

Test Graphs

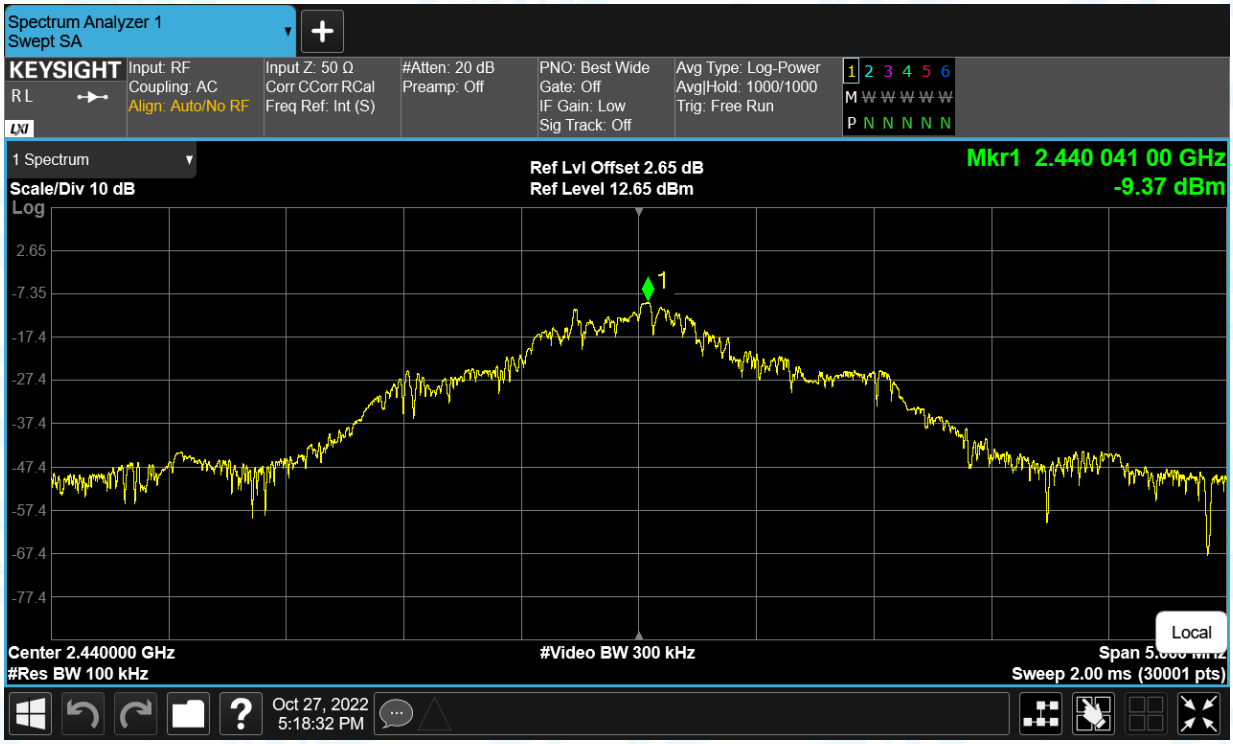
Tx. Spurious NVNT 2402MHz Ant1 Ref



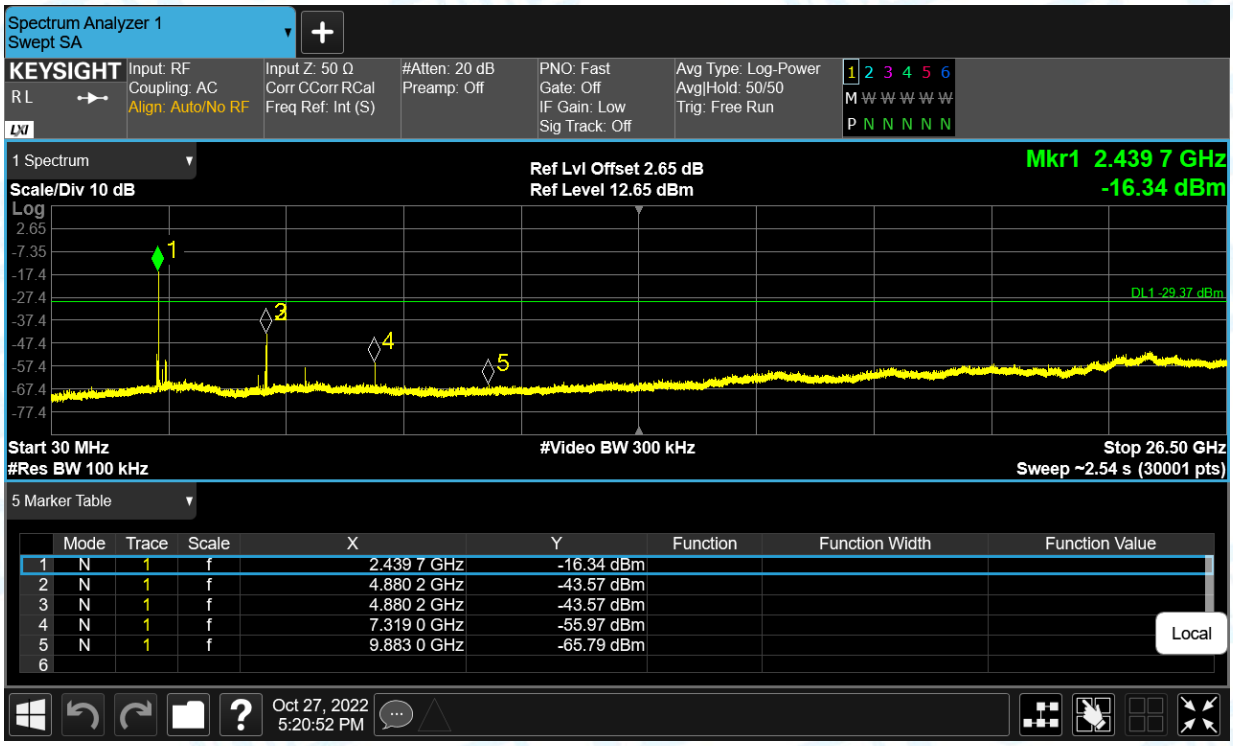
Tx. Spurious NVNT 2402MHz Ant1 Emission



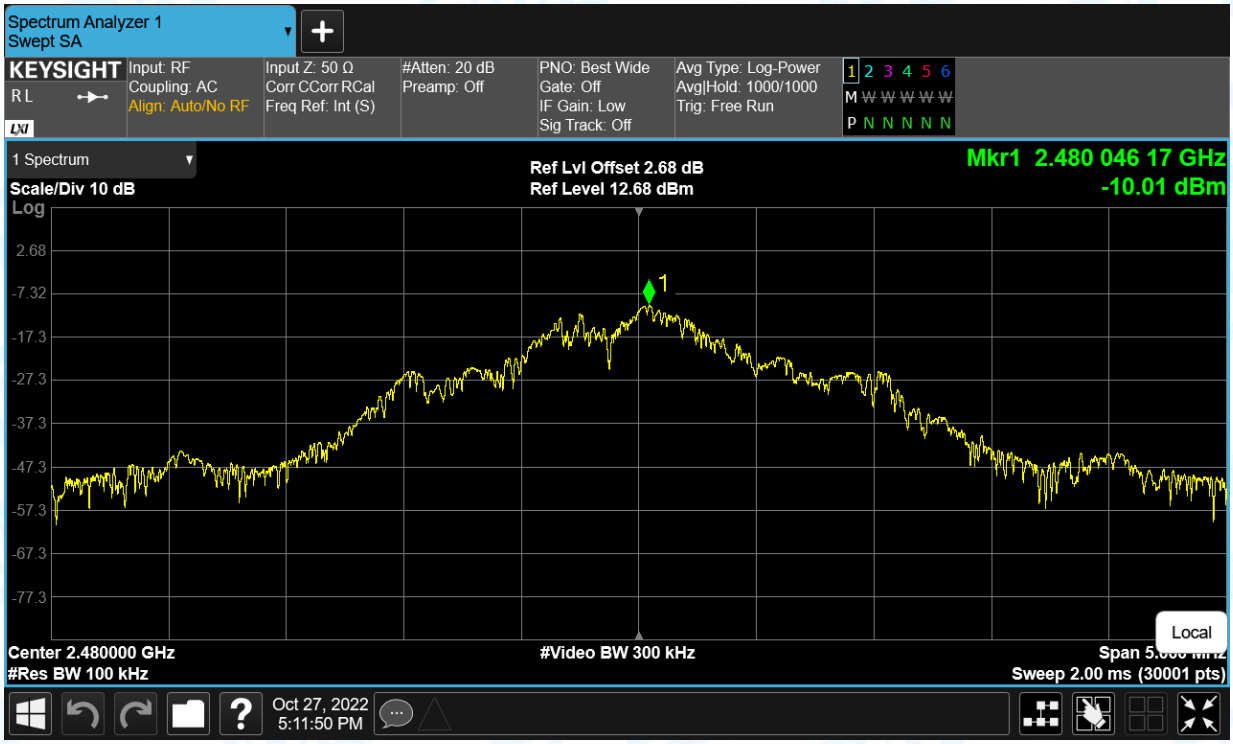
Tx. Spurious NVNT 2440MHz Ant1 Ref



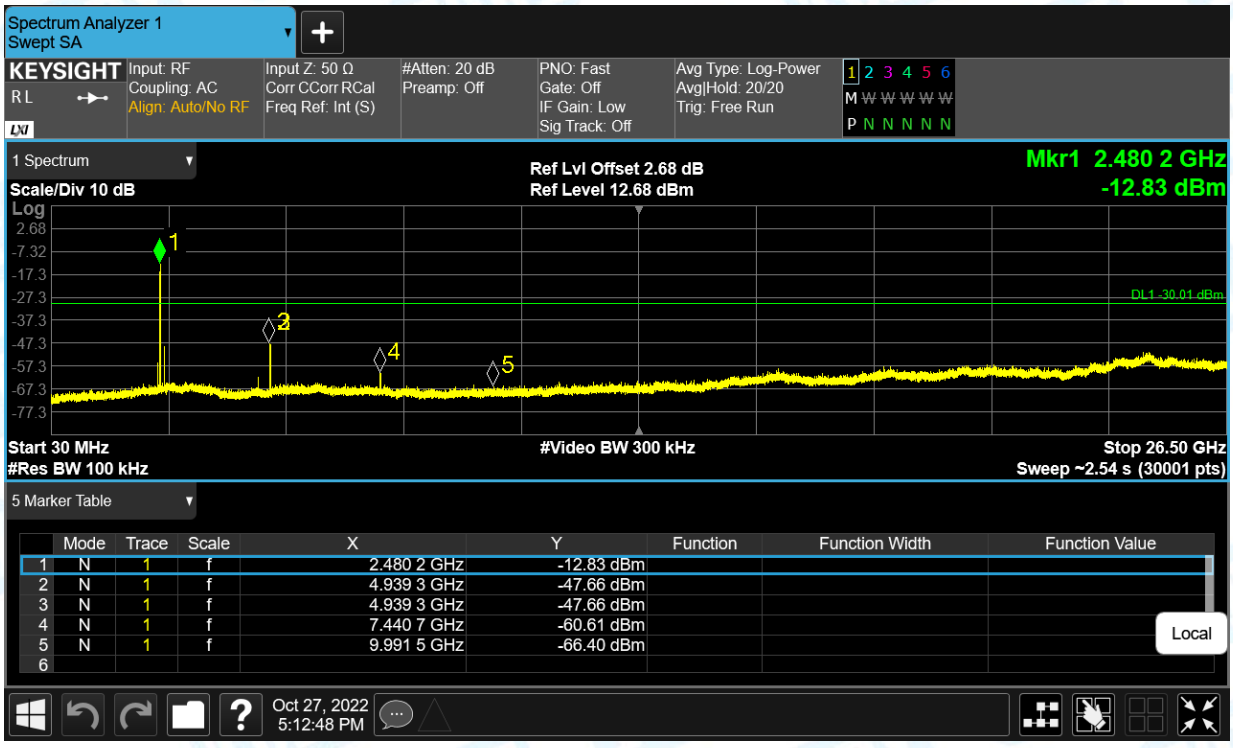
Tx. Spurious NVNT 2440MHz Ant1 Emission



Tx. Spurious NVNT 2480MHz Ant1 Ref



Tx. Spurious NVNT 2480MHz Ant1 Emission

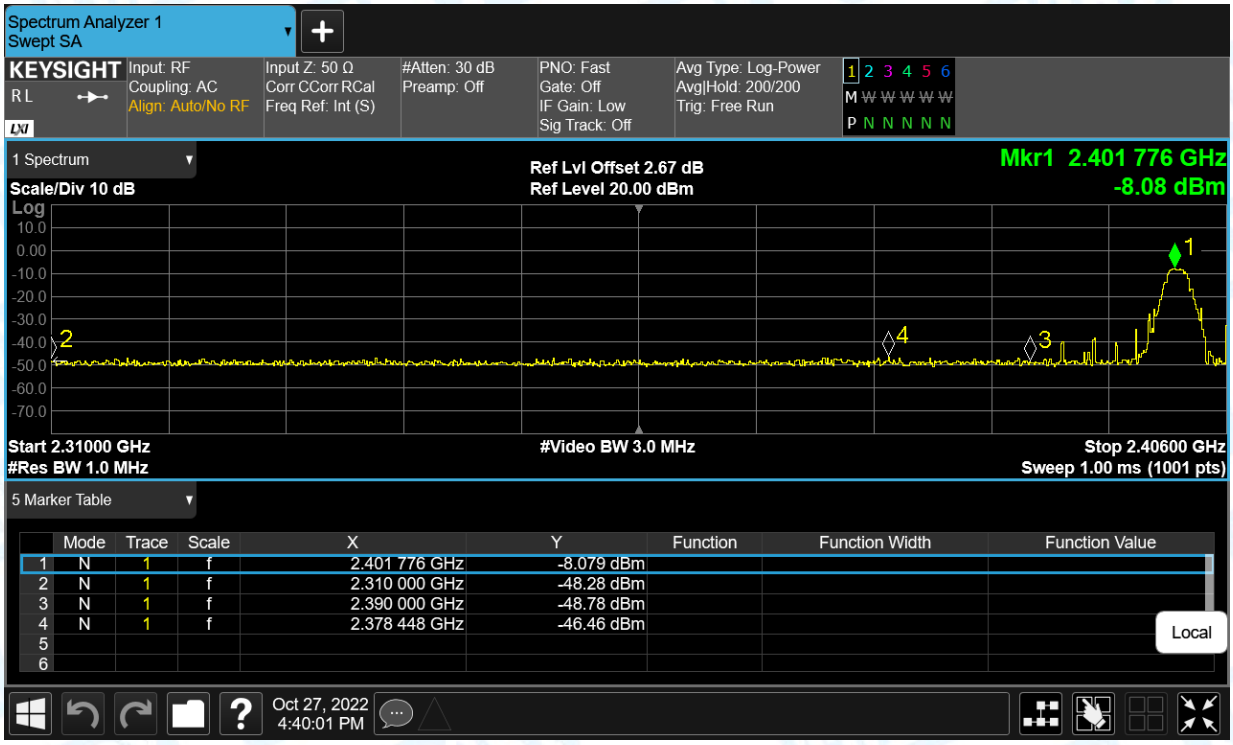


8. Restrict Band

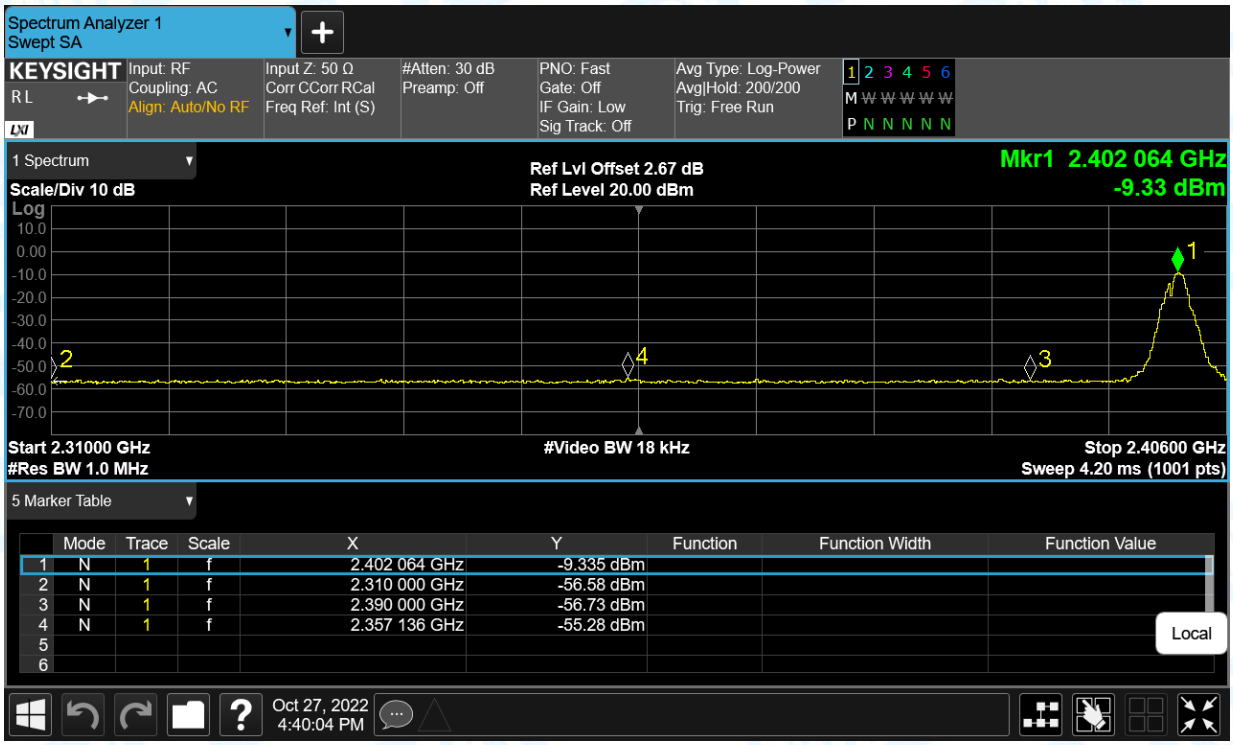
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	GFSK	2402	Ant1	No-Hopping	2310	-48.28	2	48.98	Peak	74	Pass
NVNT	GFSK	2402	Ant1	No-Hopping	2310	-56.58	2	40.68	Average	54	Pass
NVNT	GFSK	2402	Ant1	No-Hopping	2378.448	-46.46	2	50.8	Peak	74	Pass
NVNT	GFSK	2402	Ant1	No-Hopping	2357.136	-55.28	2	41.98	Average	54	Pass
NVNT	GFSK	2402	Ant1	No-Hopping	2390	-49	2	48.26	Peak	74	Pass
NVNT	GFSK	2402	Ant1	No-Hopping	2390	-56.72	2	40.54	Average	54	Pass
NVNT	GFSK	2480	Ant1	No-Hopping	2483.5	-33.08	2	64.18	Peak	74	Pass
NVNT	GFSK	2480	Ant1	No-Hopping	2483.5	-54.12	2	43.14	Average	54	Pass
NVNT	GFSK	2480	Ant1	No-Hopping	2483.992	-32.92	2	64.34	Peak	74	Pass
NVNT	GFSK	2480	Ant1	No-Hopping	2483.56	-53.01	2	44.25	Average	54	Pass
NVNT	GFSK	2480	Ant1	No-Hopping	2500	-48.37	2	48.89	Peak	74	Pass
NVNT	GFSK	2480	Ant1	No-Hopping	2500	-56.47	2	40.79	Average	54	Pass

Test Graphs

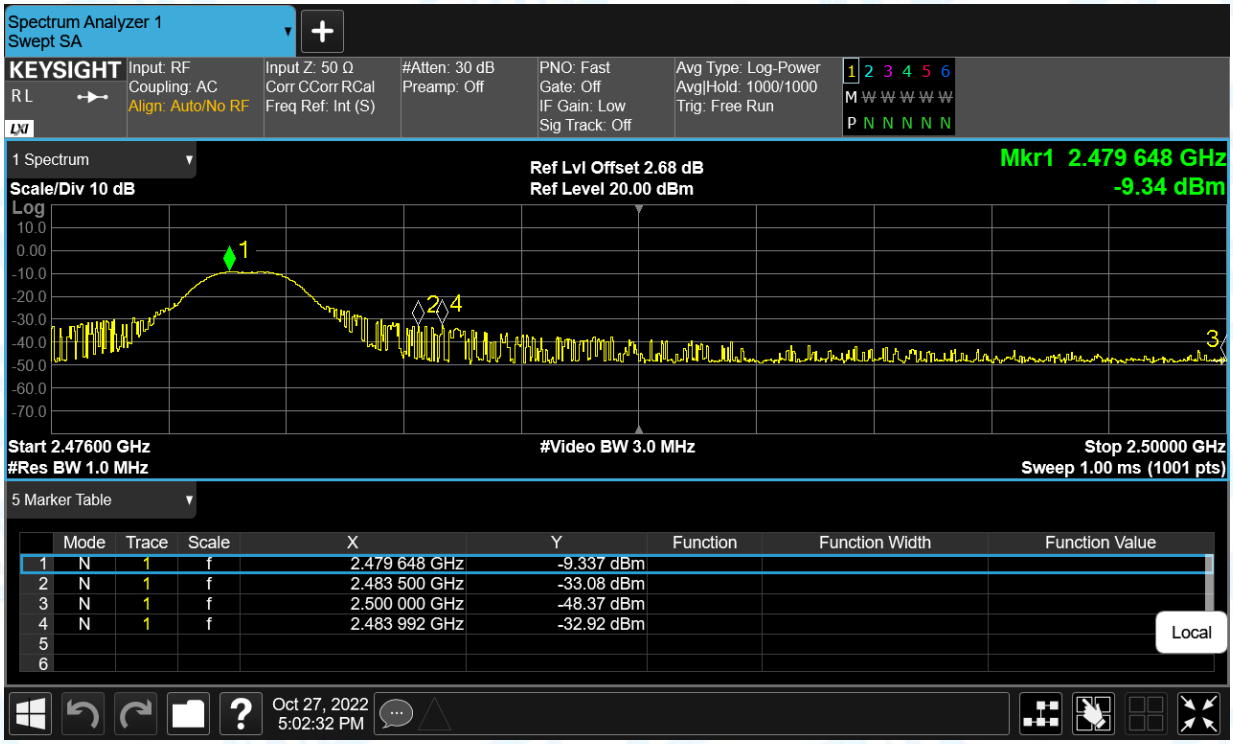
Restrict Band NVNT 2402MHz Ant1 No-Hopping Peak



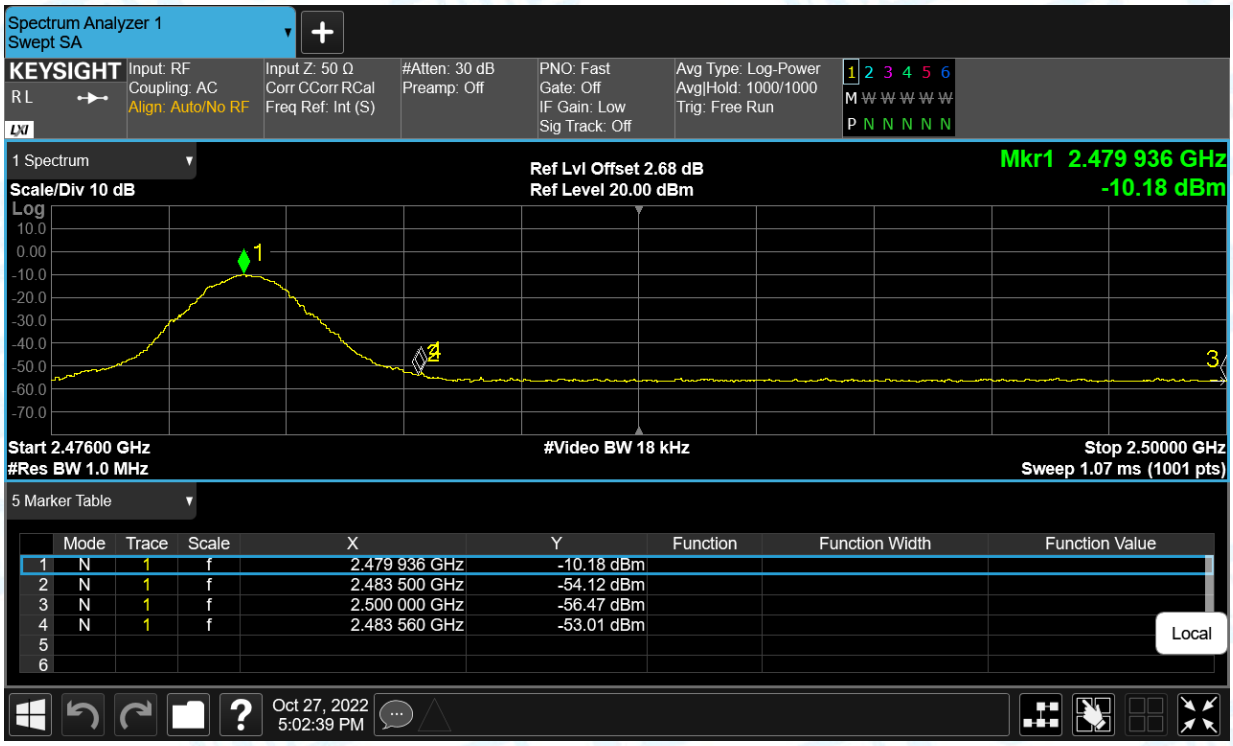
Restrict Band NVNT 2402MHz Ant1 No-Hopping Average



Restrict Band NVNT 2480MHz Ant1 No-Hopping Peak



Restrict Band NVNT 2480MHz Ant1 No-Hopping Average

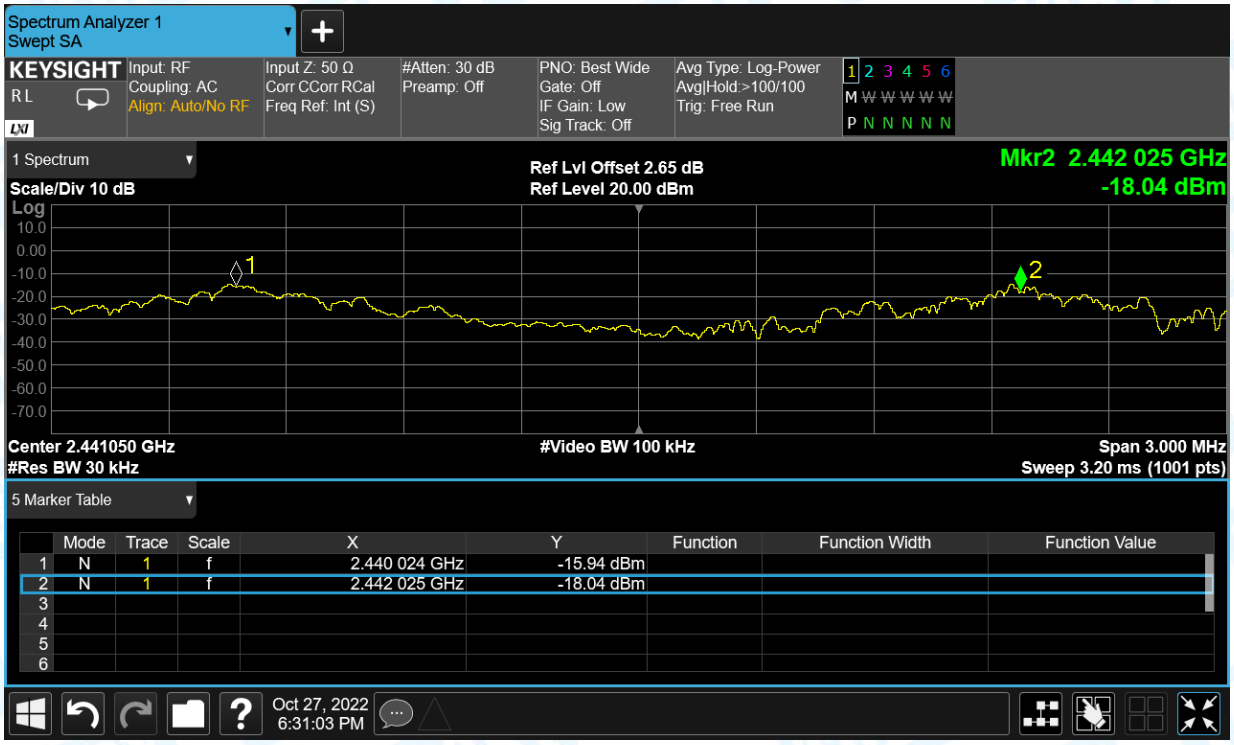


9. Carrier Frequencies Separation

Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	GFSK	Ant1	2440.024	2442.025	2.001	0.025	Pass

Test Graphs

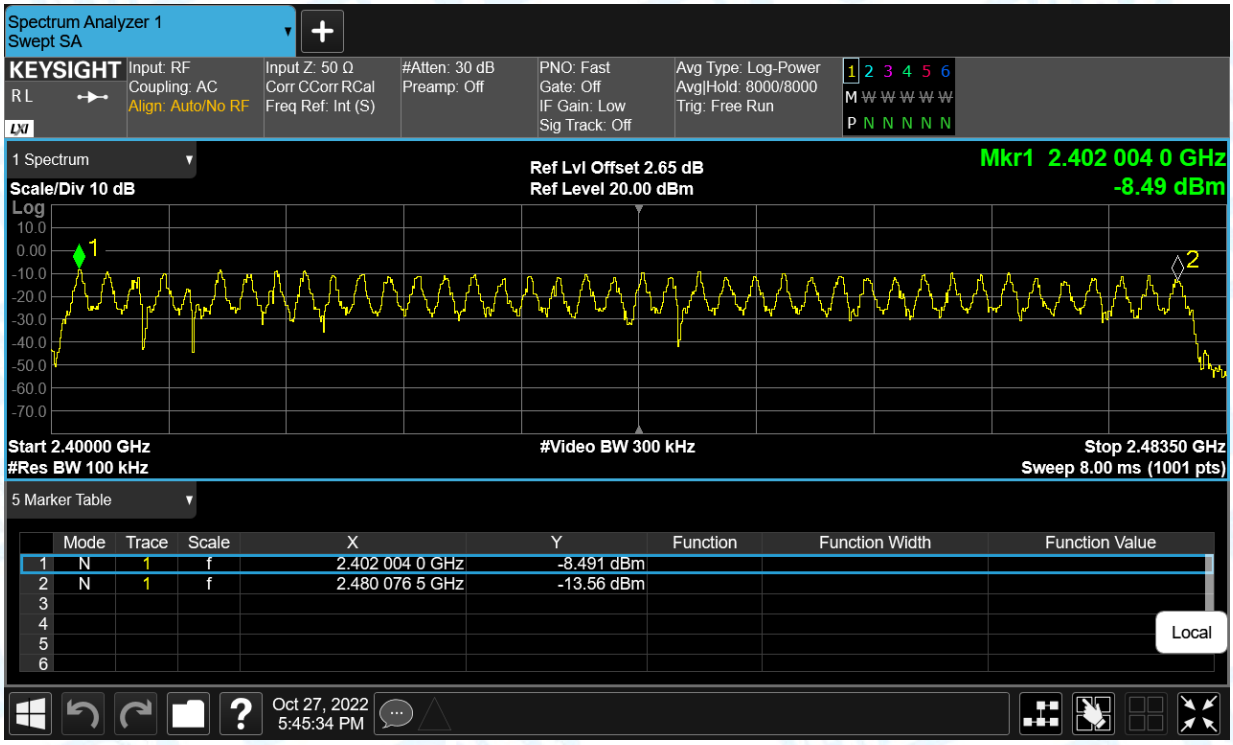
CFS NVNT 2441.1MHz Ant1



10. Number of Hopping Channel

Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	GFSK	Ant1	40	15	Pass

Test Graphs
Hopping No. NVNT 2440MHz Ant1

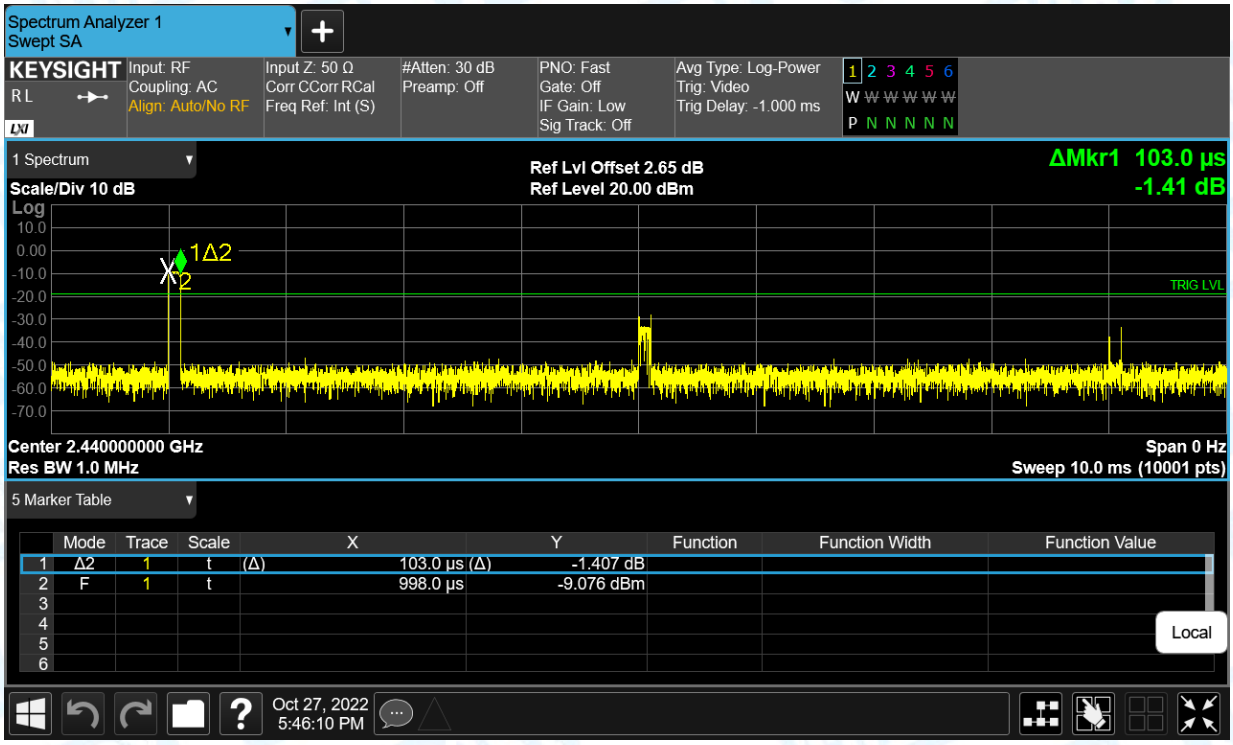


11. Dwell Time

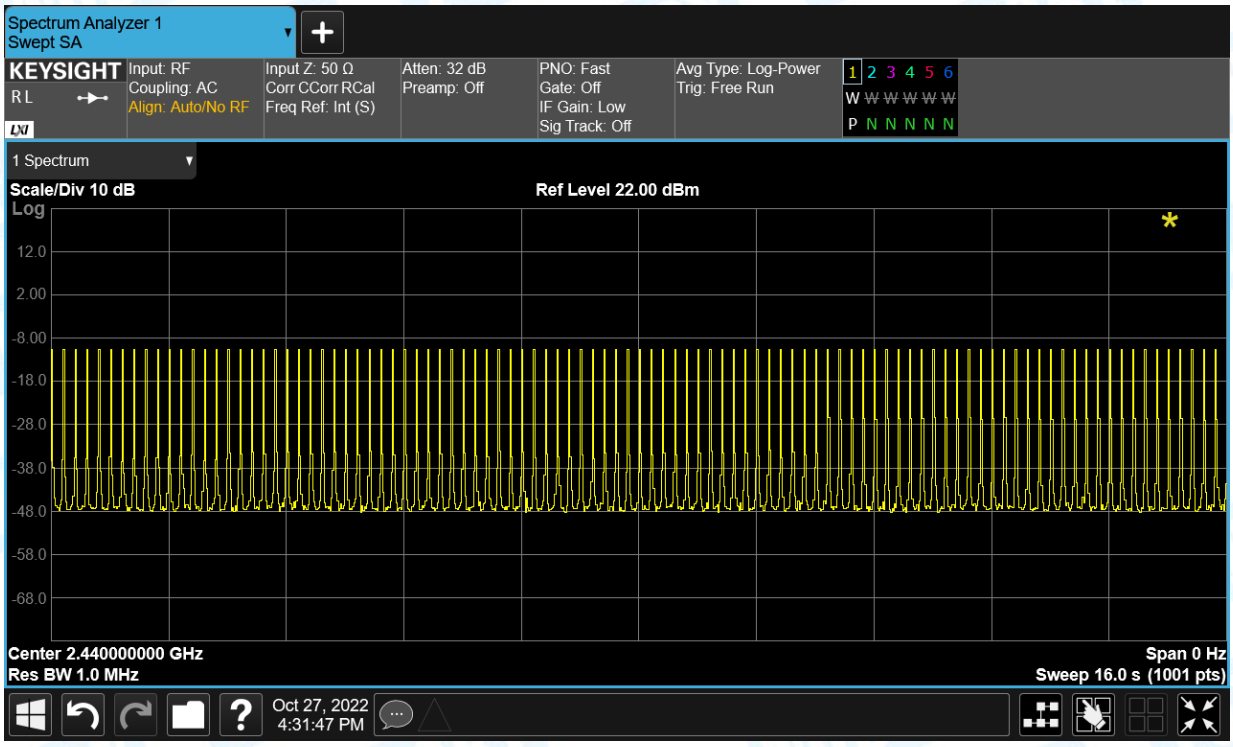
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	GFSK	2440	Ant1	0.103	32.96	16000	400	Pass

Test Graphs

Dwell NVNT 2440MHz Ant1



Dwell NVNT 2440MHz Ant1



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