

RF Test Data for Bluetooth(BDR+EDR) (Conducted Measurements)

General Description of EUT	
Product Name:	M501 Trackball Mouse
Test Model:	M501
Sample ID:	202203-0205_01-02
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 3.7V
Test Engineer:	Huangjianping
Note: For a more detailed features description, please refer to the report TBR-C-202203-0205-5	

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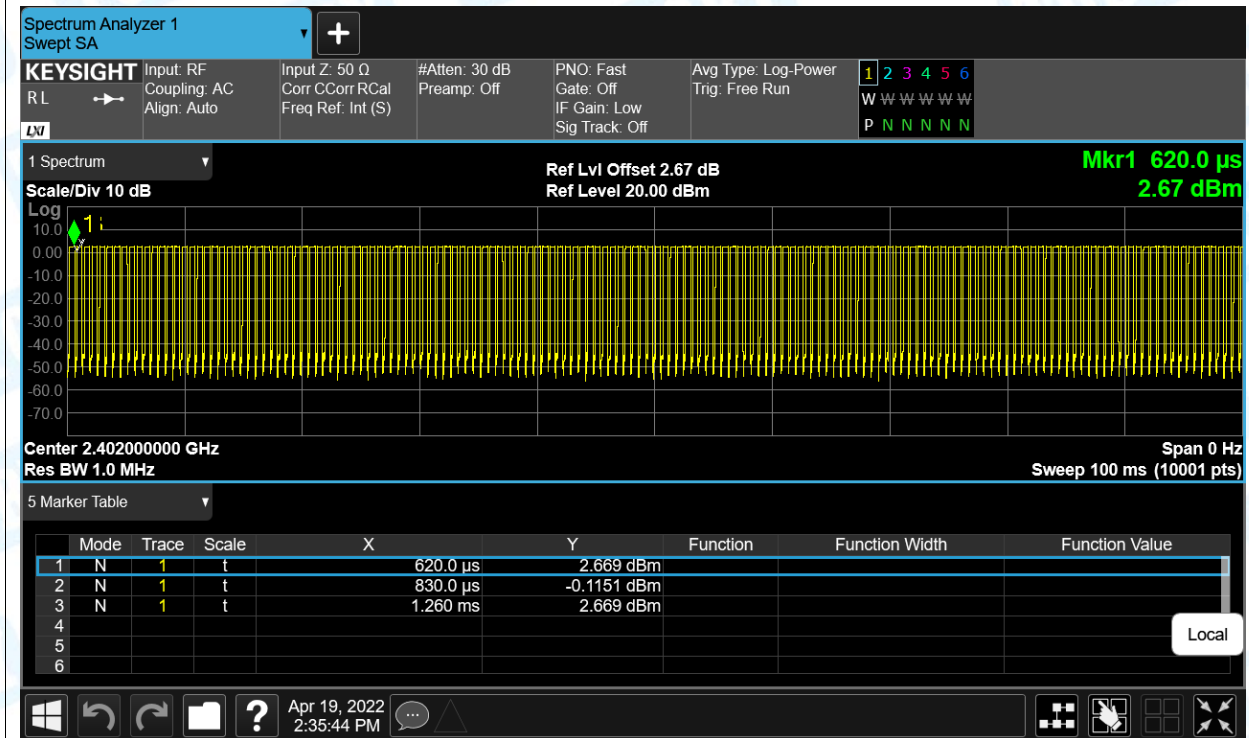
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1.Duty Cycle

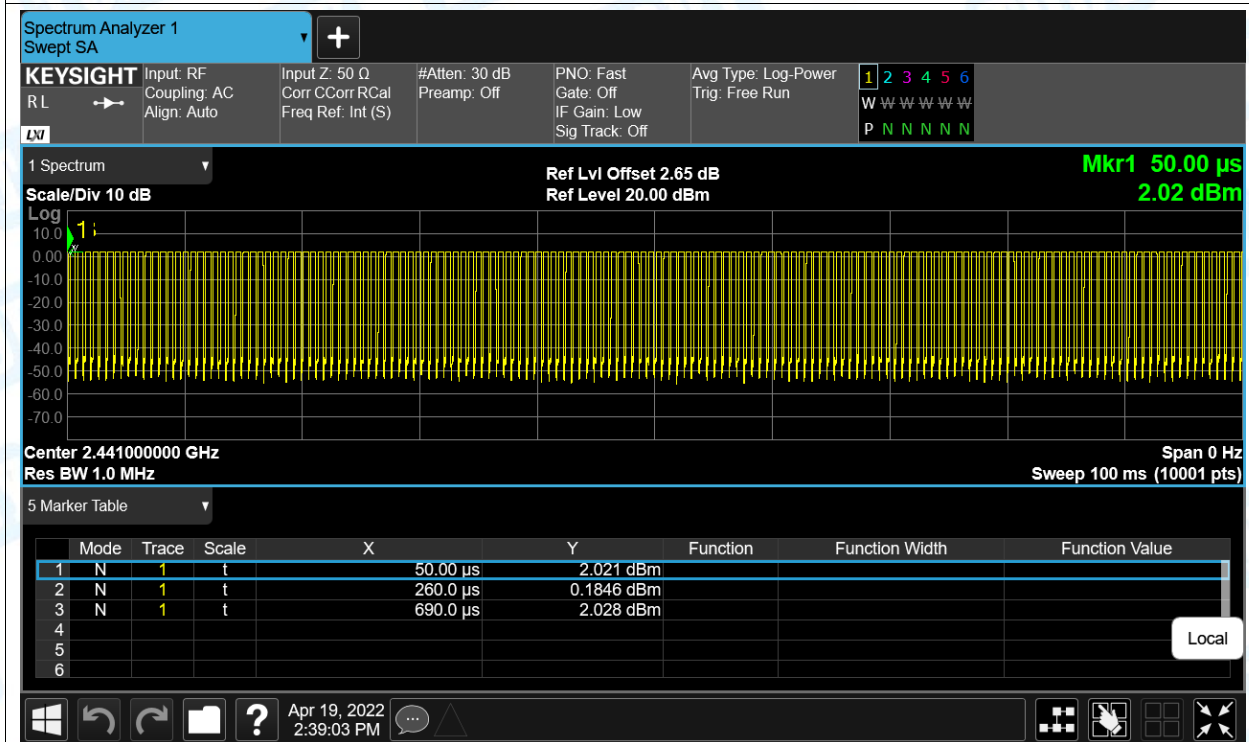
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	69.44	1.58	2.33
NVNT	1-DH1	2441	Ant1	69.39	1.59	2.33
NVNT	1-DH1	2480	Ant1	69.6	1.57	2.33

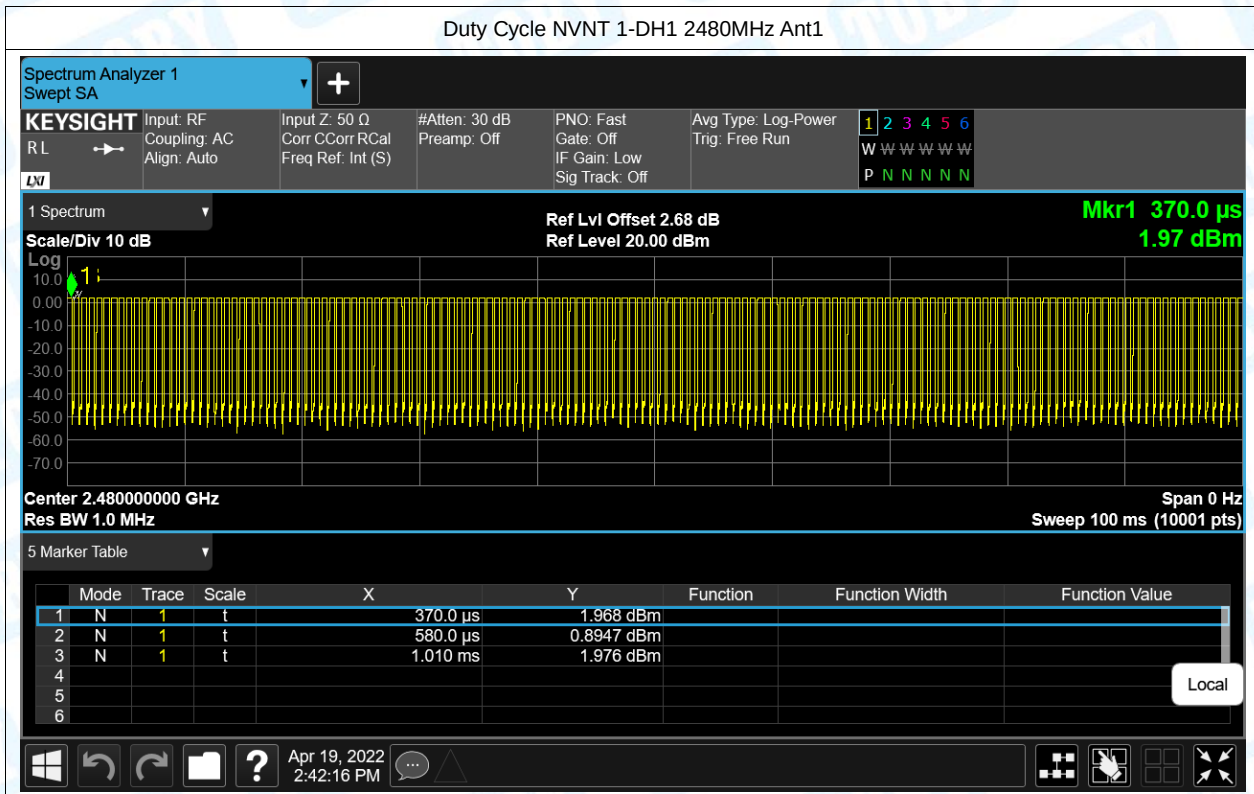
Test Graphs

Duty Cycle NVNT 1-DH1 2402MHz Ant1



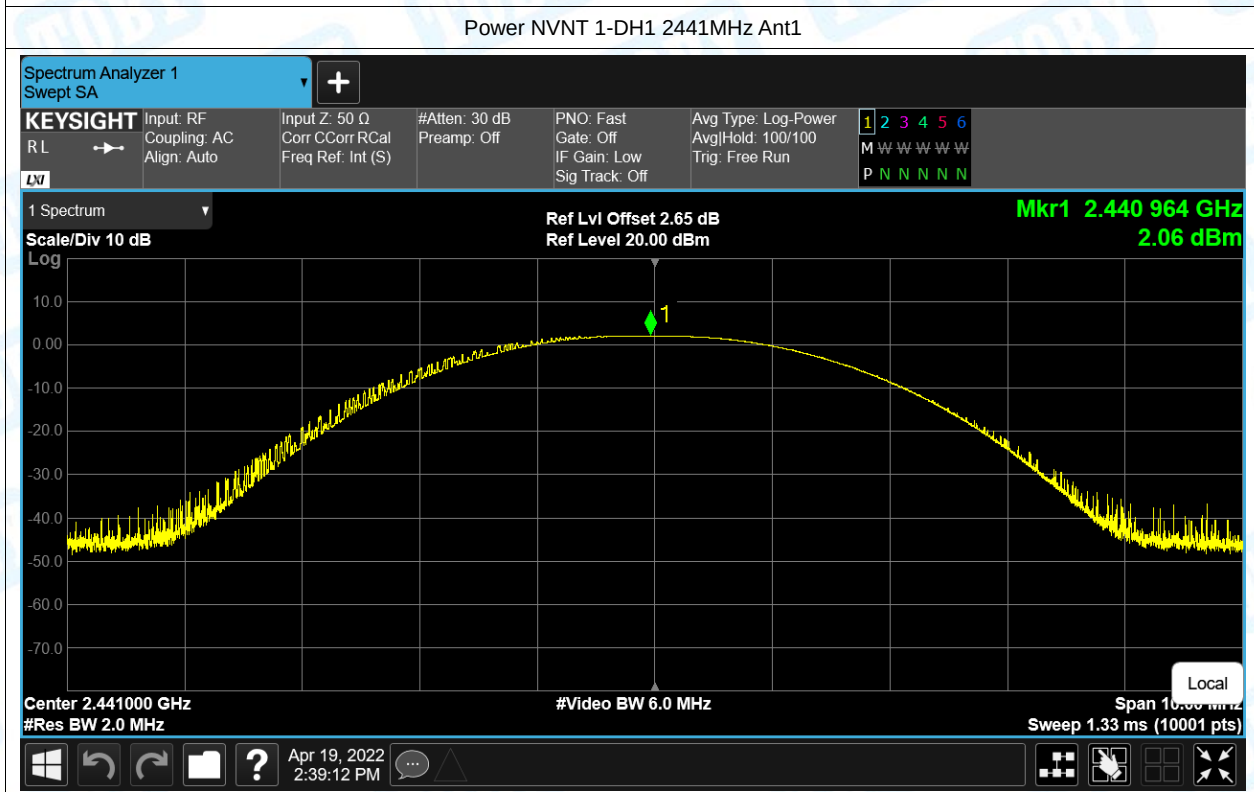
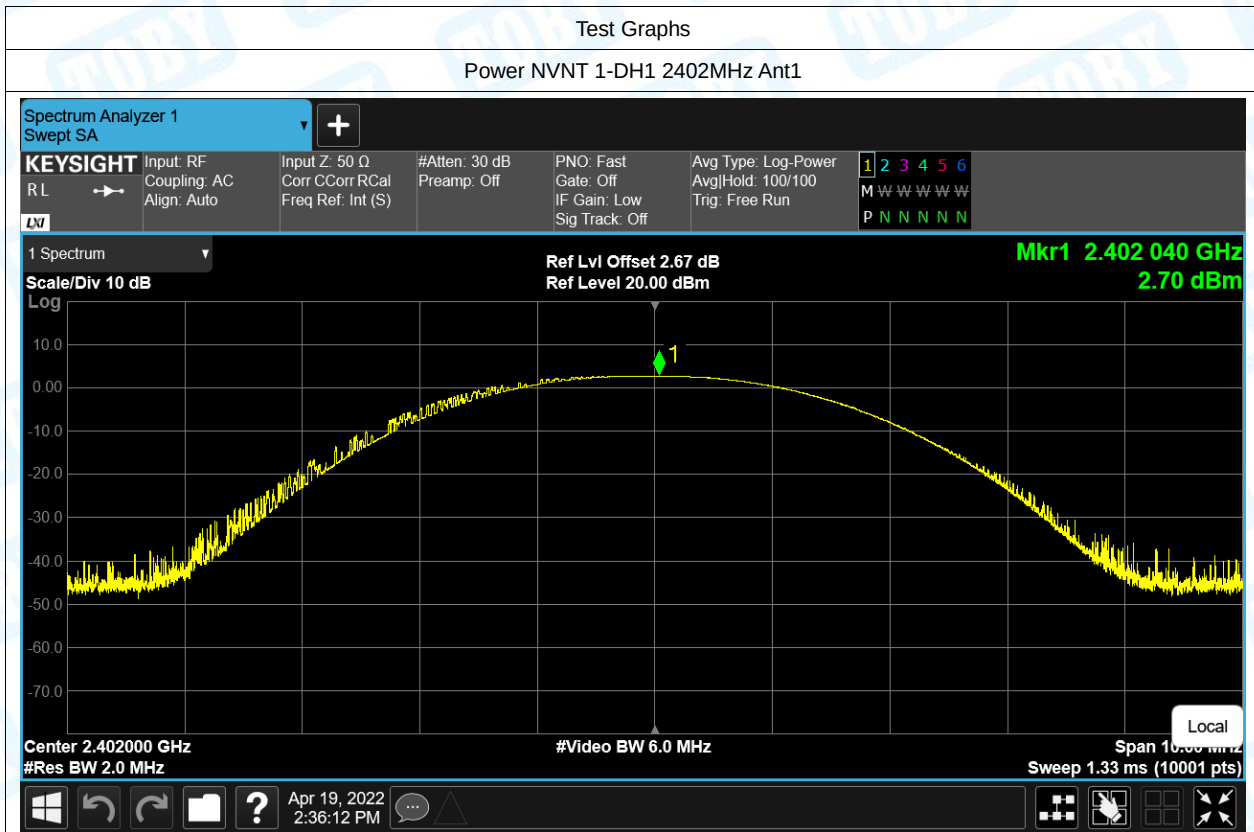
Duty Cycle NVNT 1-DH1 2441MHz Ant1

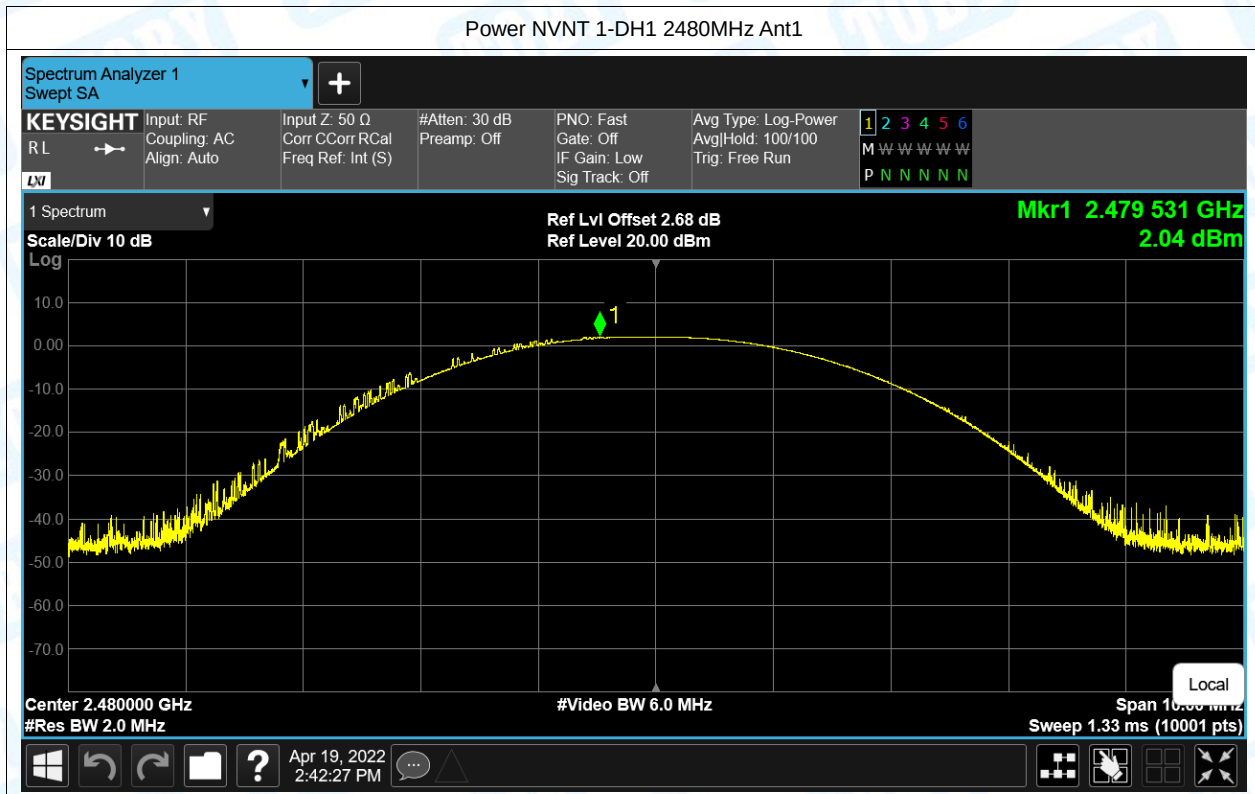




2.Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	2.698	21	Pass
NVNT	1-DH1	2441	Ant1	2.064	21	Pass
NVNT	1-DH1	2480	Ant1	2.035	21	Pass



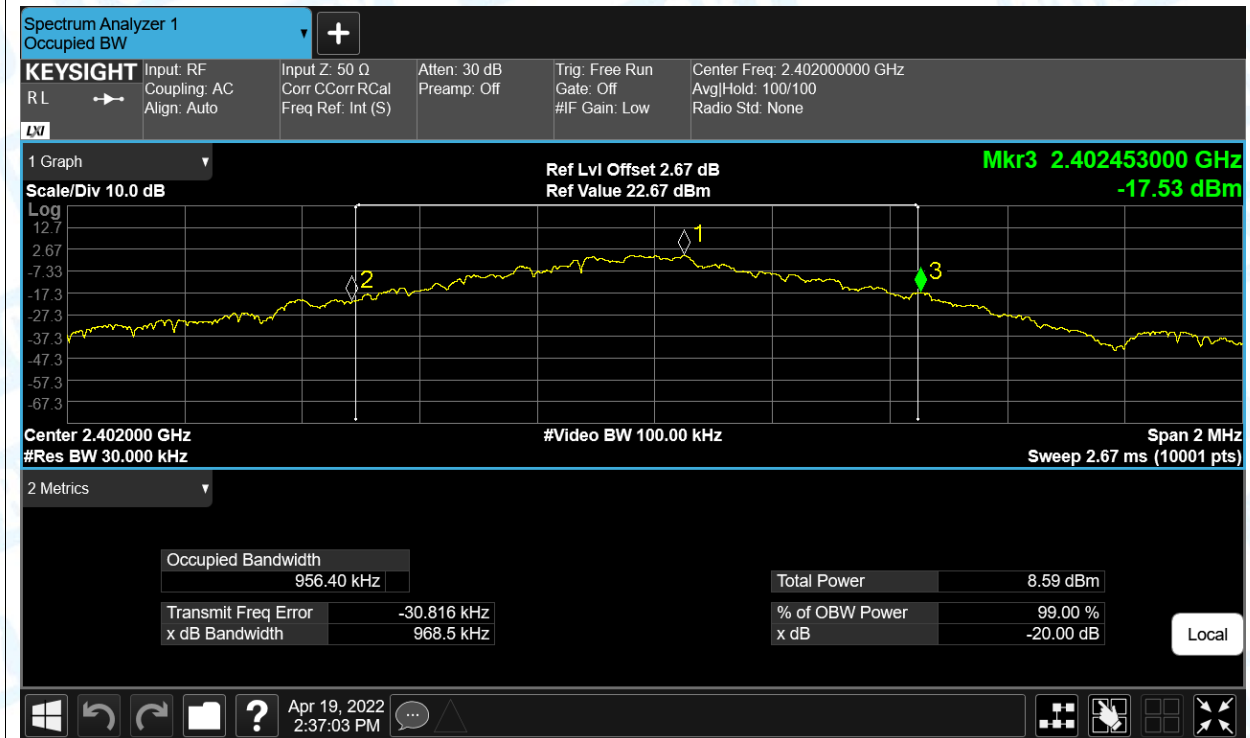


3.-20dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.97	Not Specified	Pass
NVNT	1-DH1	2441	Ant1	0.95	Not Specified	Pass
NVNT	1-DH1	2480	Ant1	1.06	Not Specified	Pass

Test Graphs

-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1





4.Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.948
NVNT	1-DH1	2441	Ant1	0.946
NVNT	1-DH1	2480	Ant1	0.939

Test Graphs

OBW NVNT 1-DH1 2402MHz Ant1



OBW NVNT 1-DH1 2441MHz Ant1



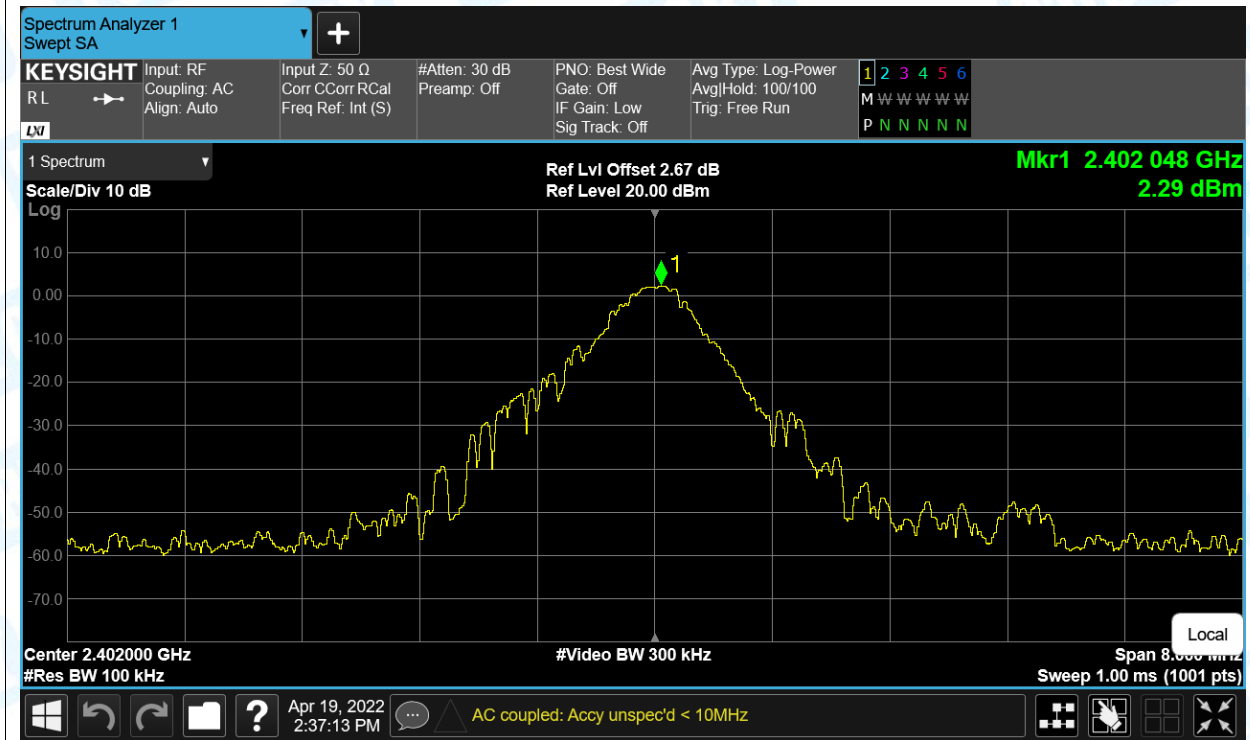


5.Band Edge

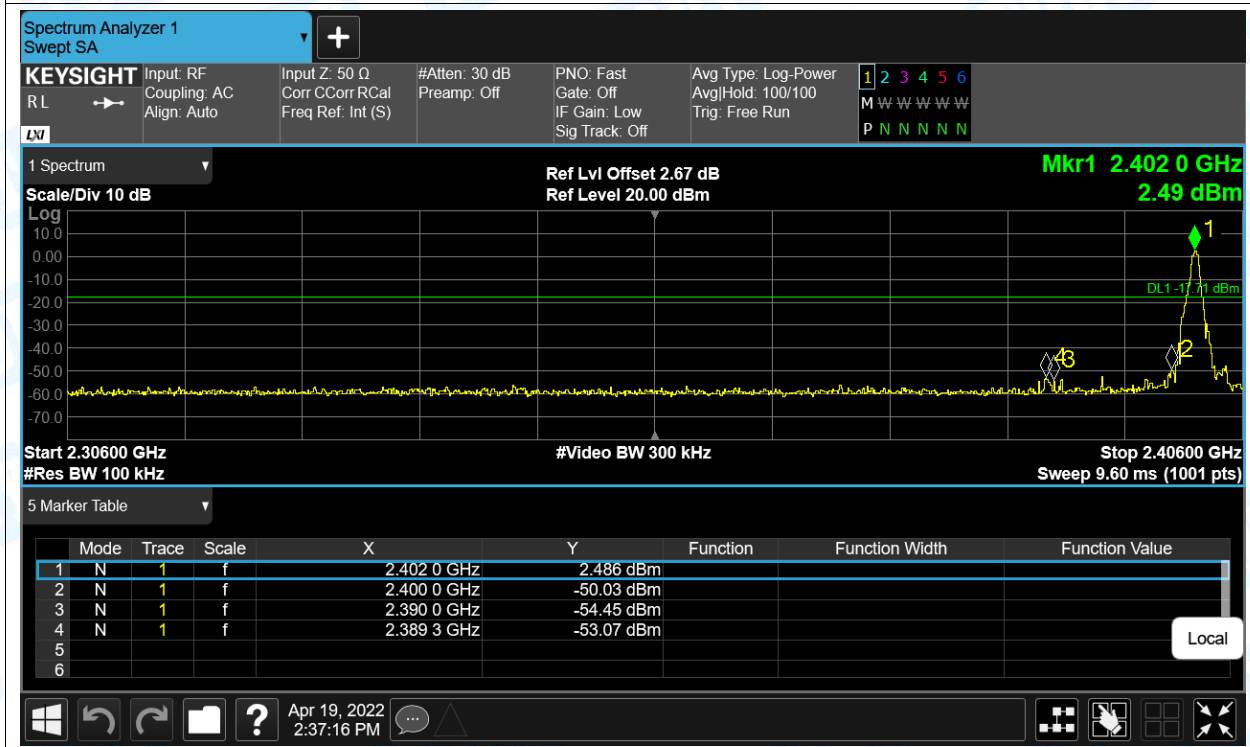
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-55.36	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-55.06	-20	Pass

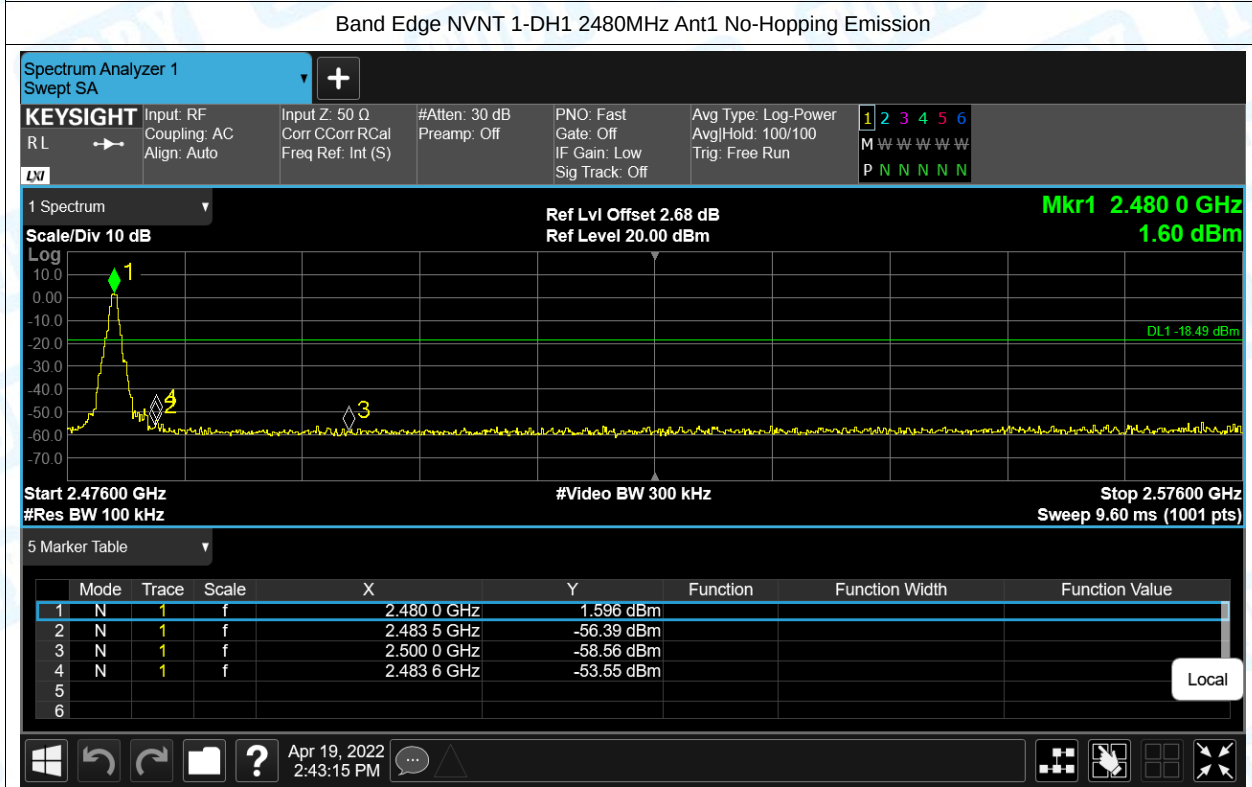
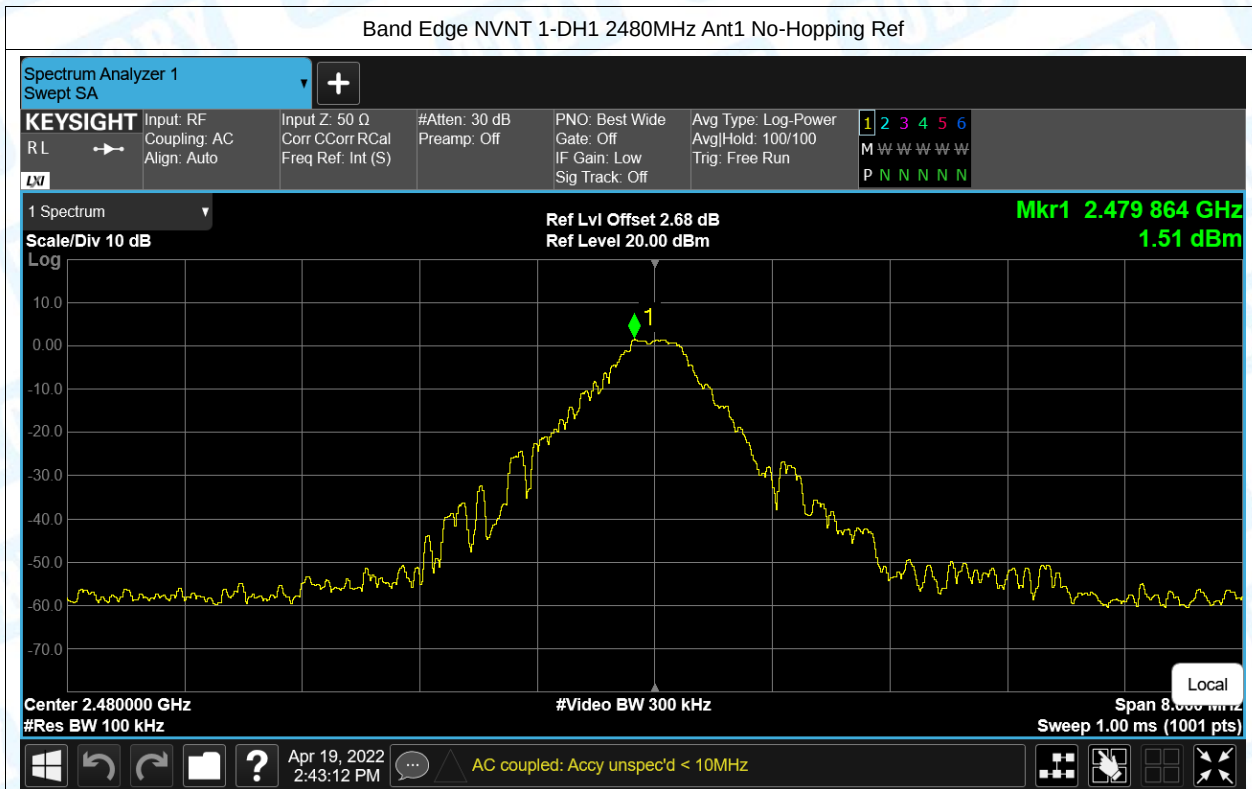
Test Graphs

Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



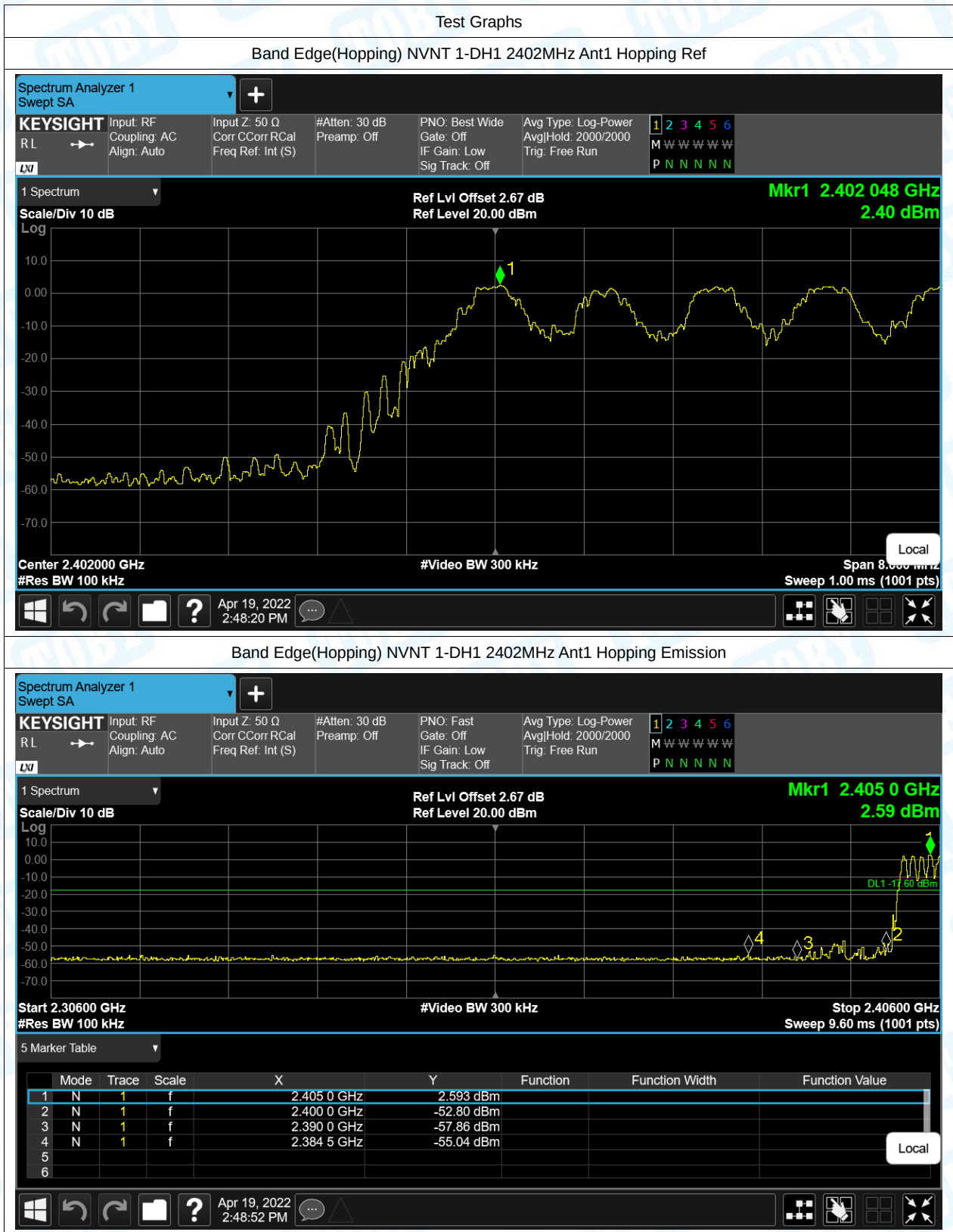
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission

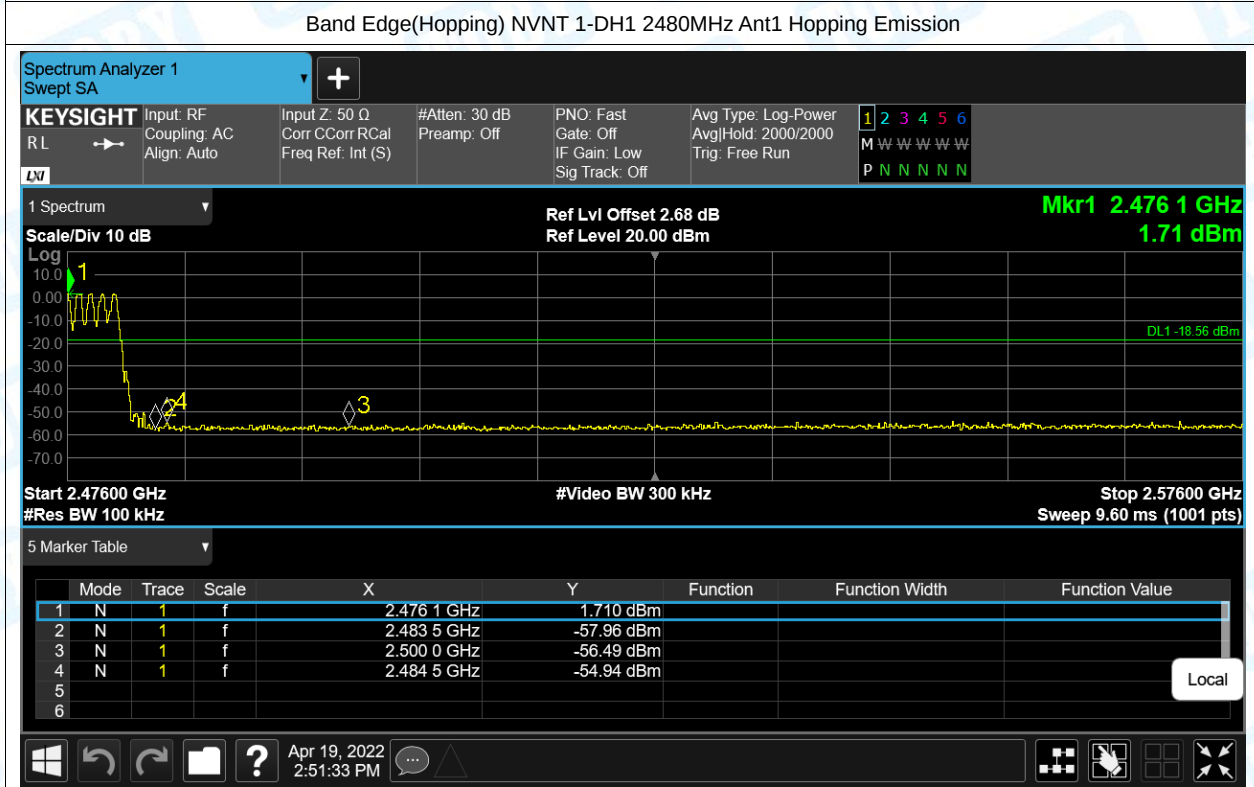
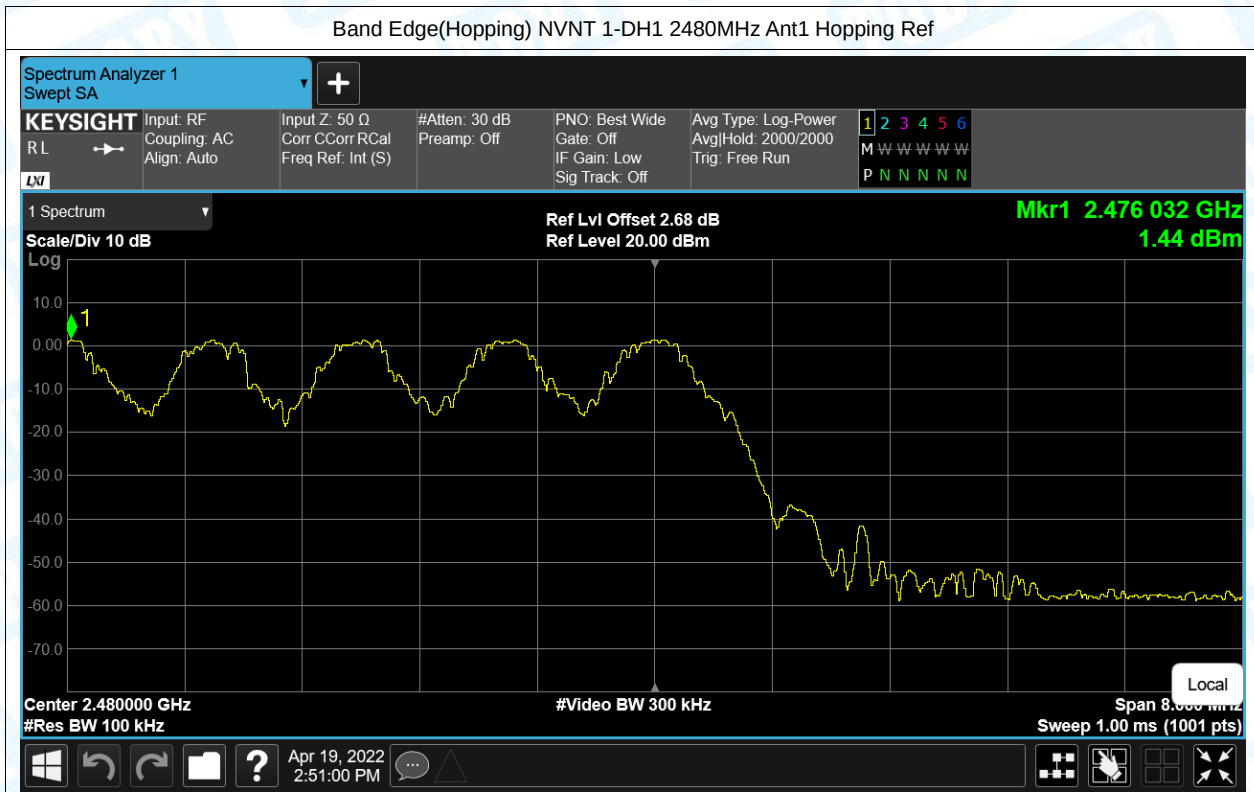




6.Band Edge(Hopping)

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-57.44	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-56.38	-20	Pass



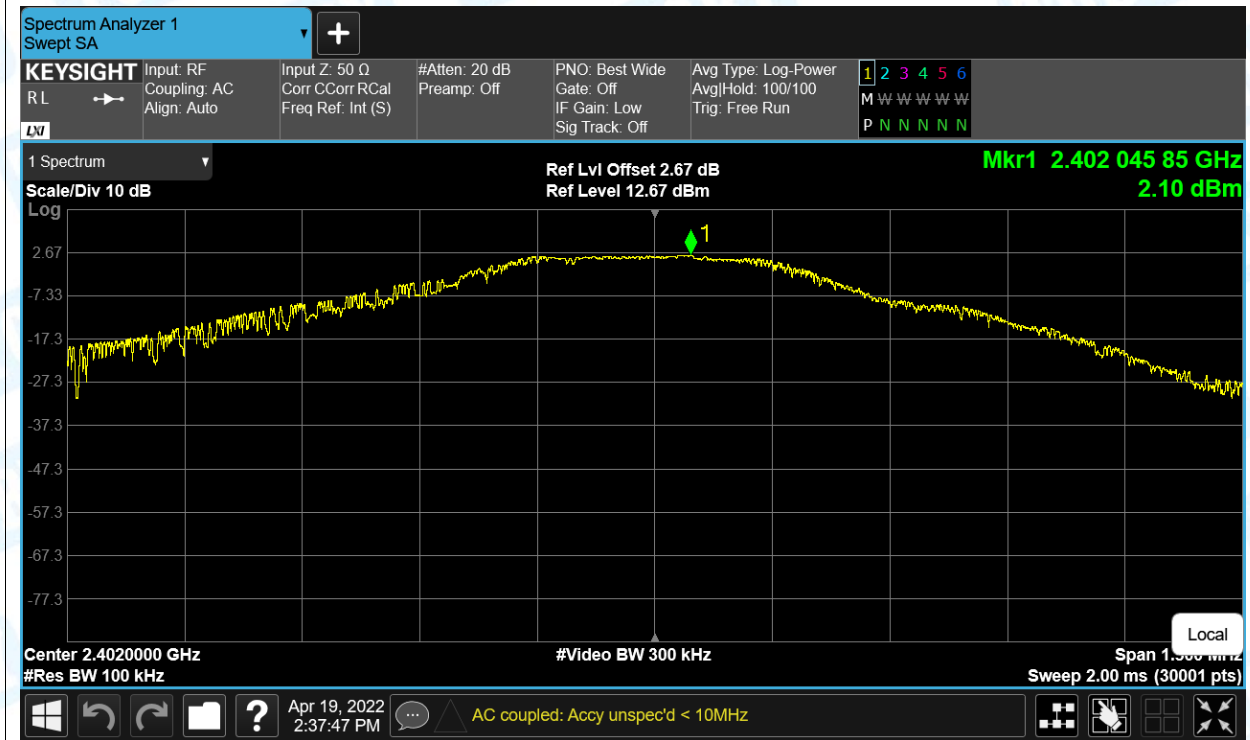


7. Conducted RF Spurious Emission

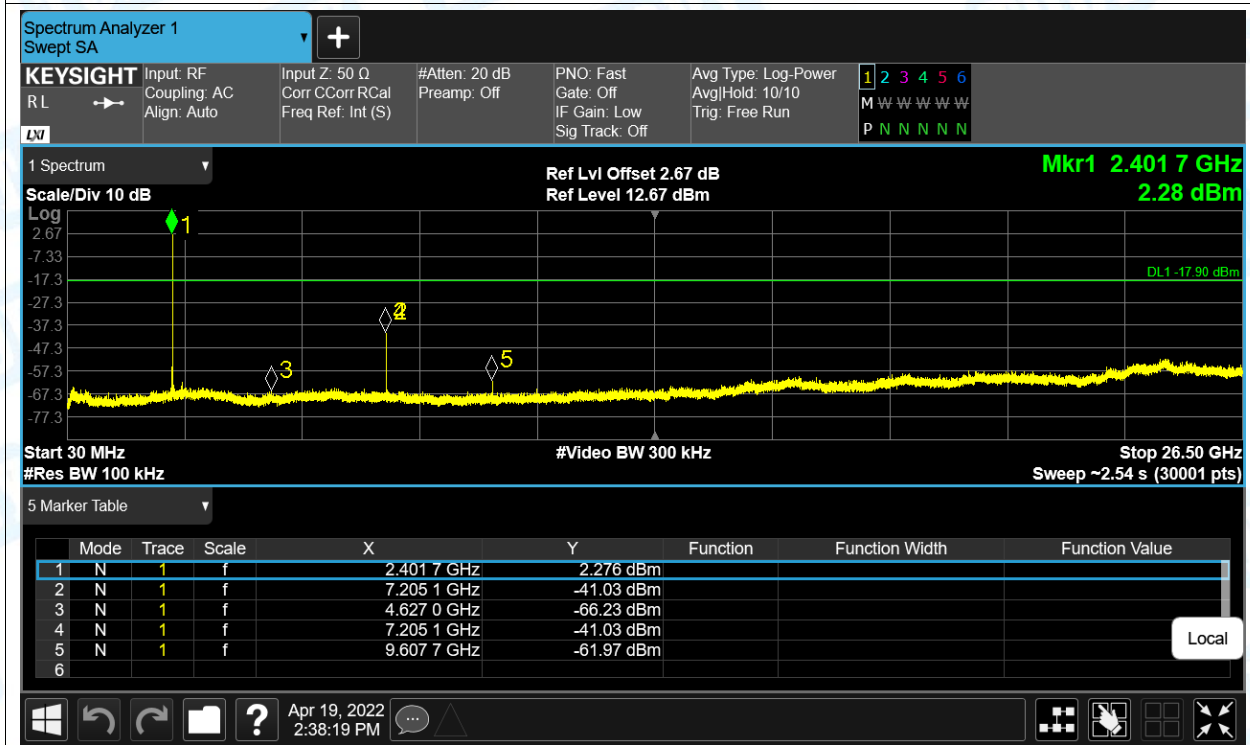
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-43.13	-20	Pass
NVNT	1-DH1	2441	Ant1	-45.27	-20	Pass
NVNT	1-DH1	2480	Ant1	-45.57	-20	Pass

Test Graphs

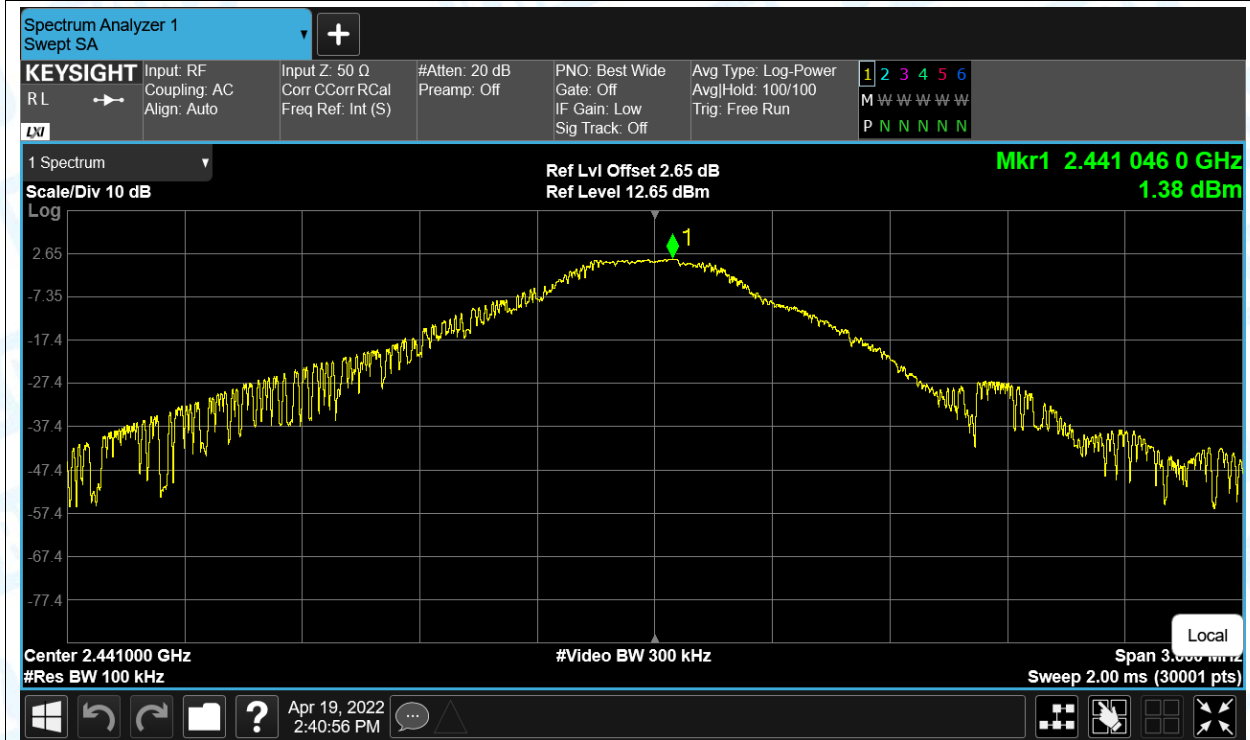
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



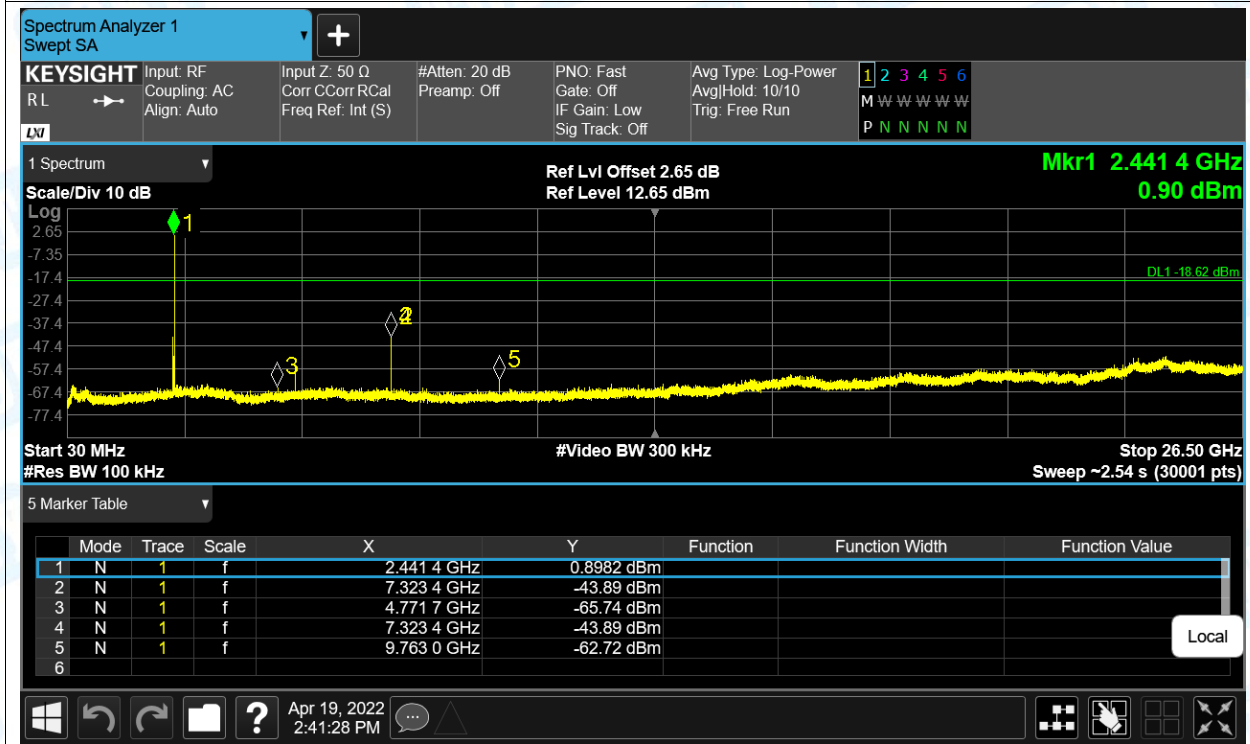
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



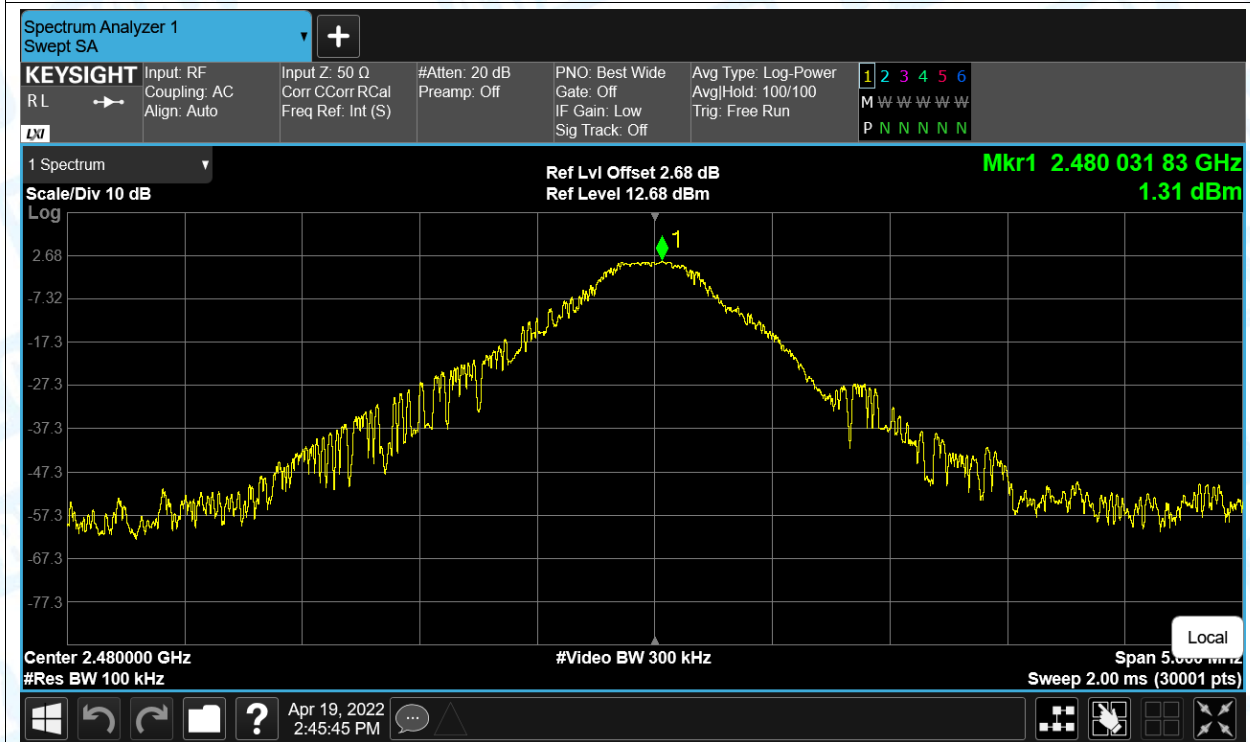
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



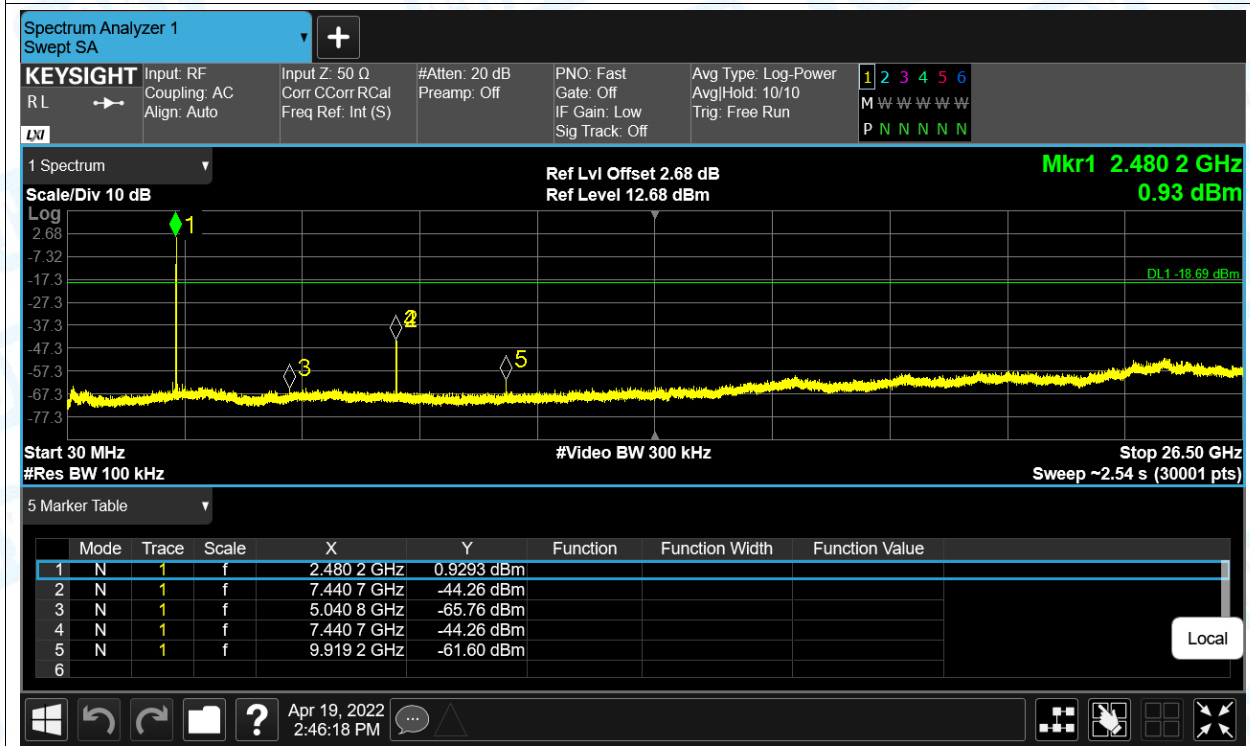
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission

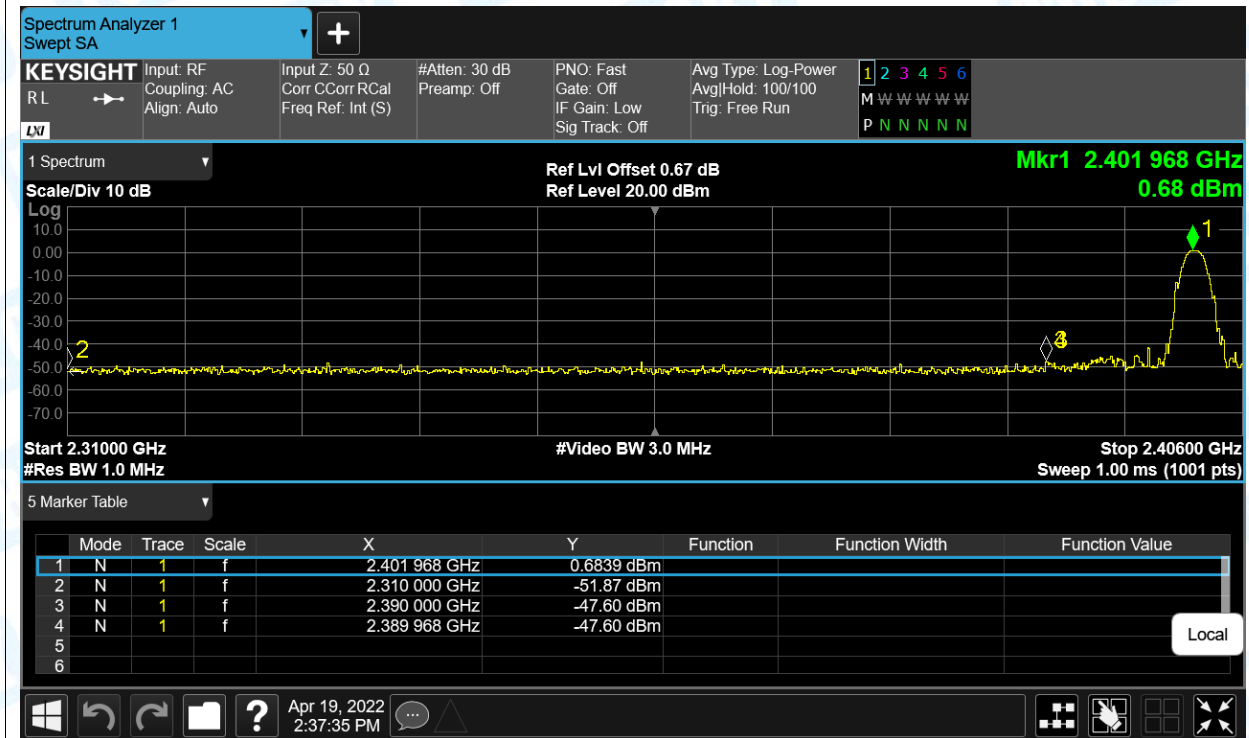


8.Restrict Band

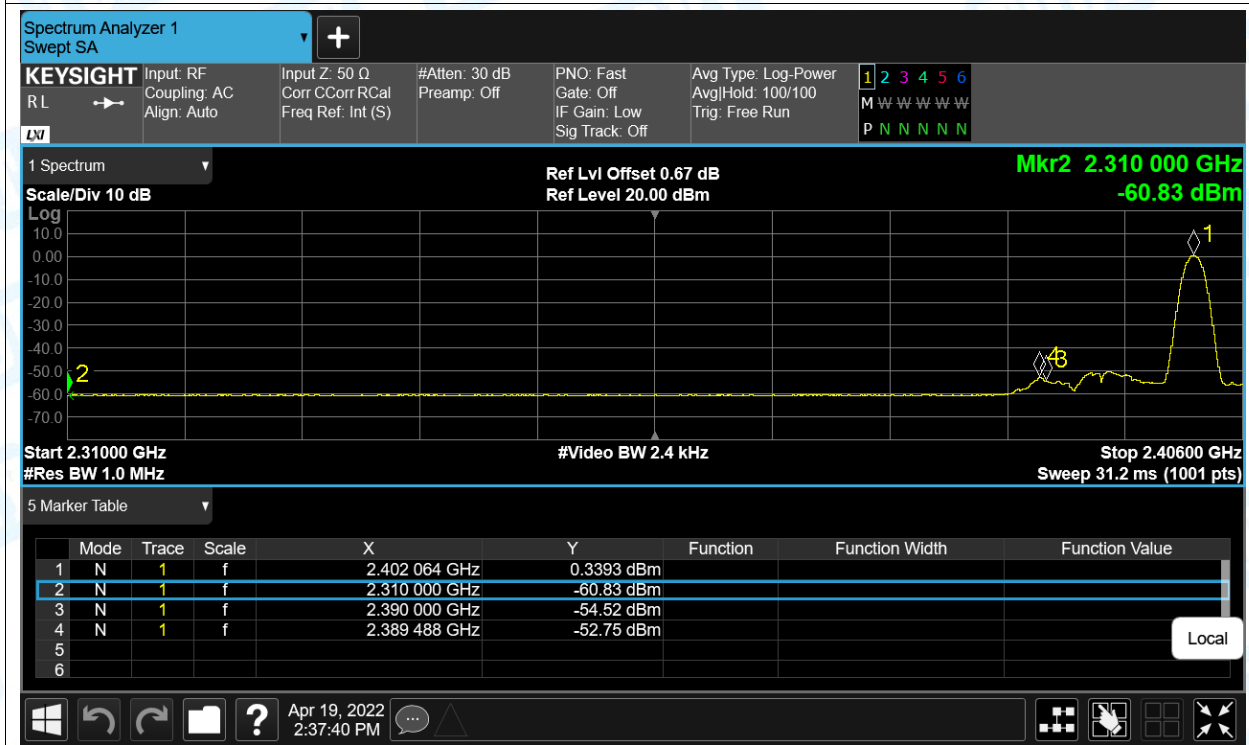
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-51.87	2	45.39	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-60.83	2	36.43	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2389.968	-47.6	2	49.66	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2389.488	-52.75	2	44.51	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-47.59	2	49.67	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-54.56	2	42.7	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-50.67	2	46.59	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-58.49	2	38.77	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.824	-43.67	2	53.59	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.512	-58.49	2	38.77	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-50.88	2	46.38	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-60.59	2	36.67	Average	54	Pass

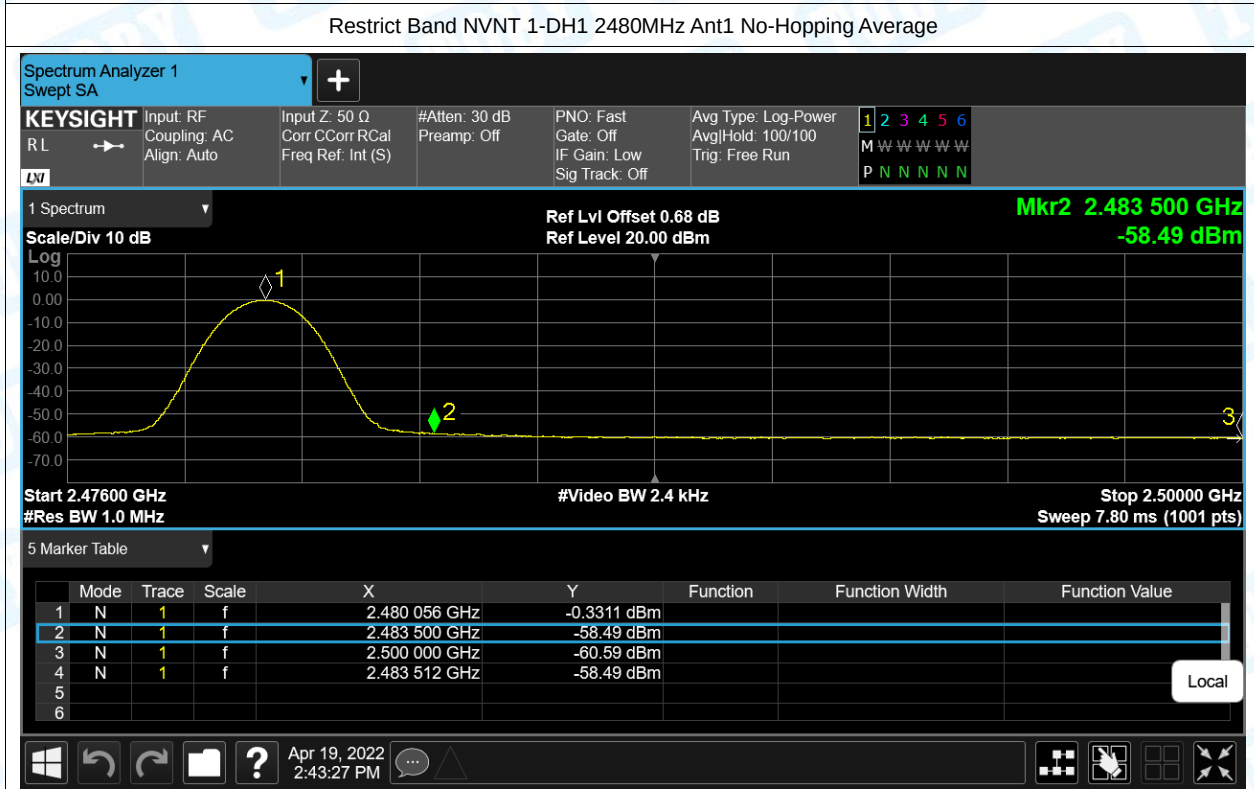
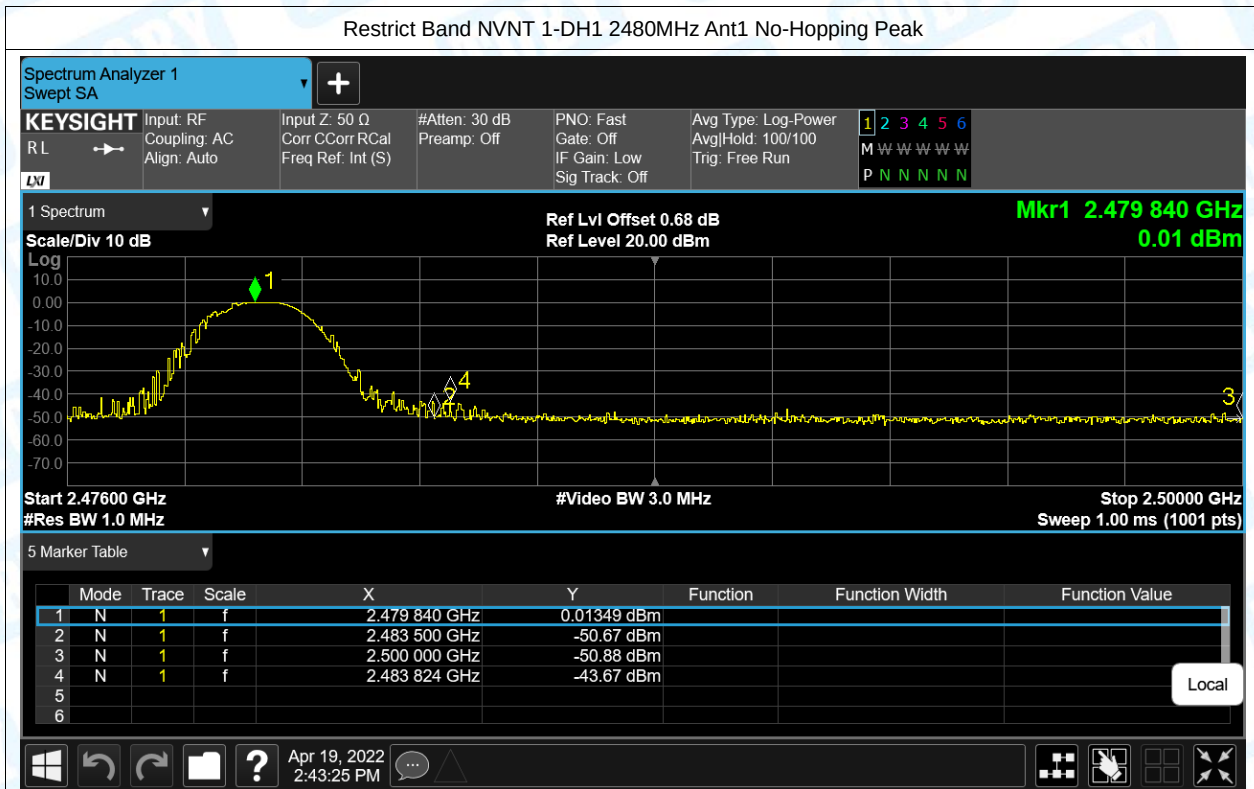
Test Graphs

Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



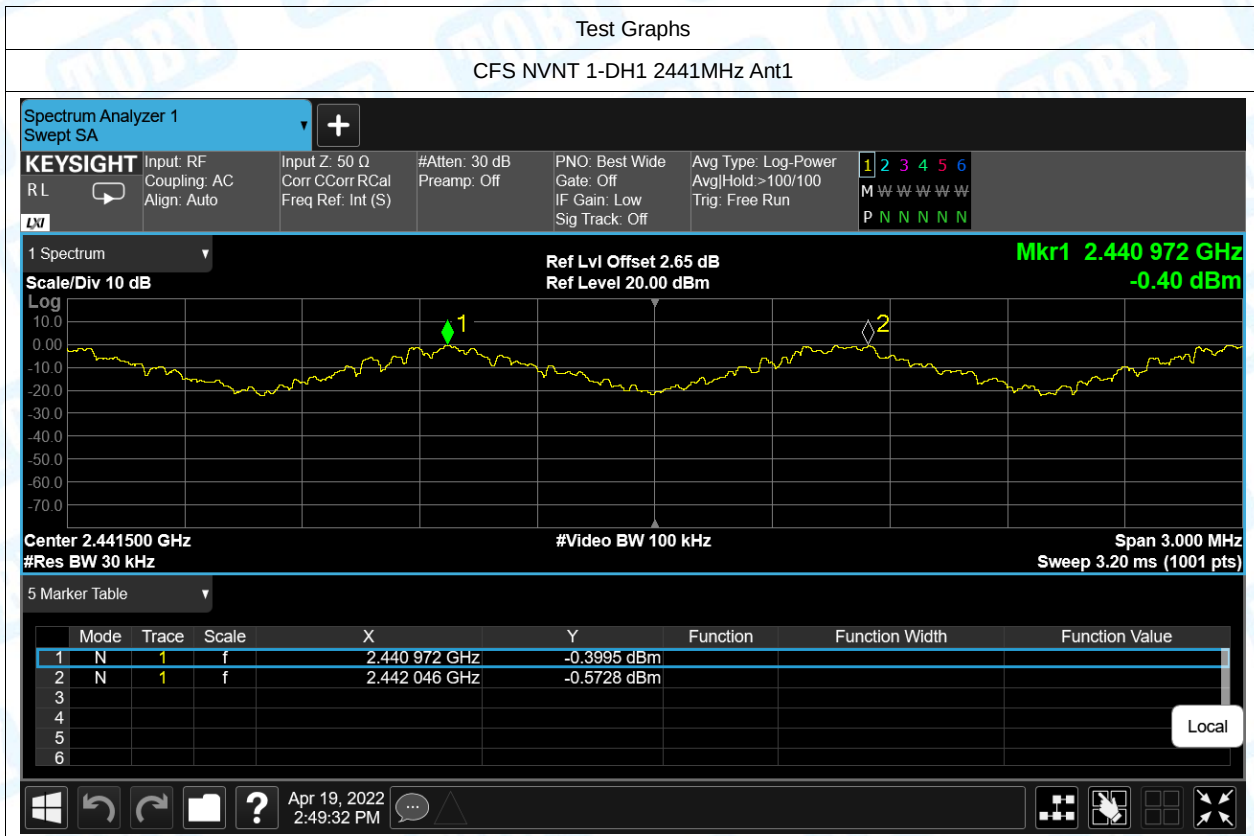
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average





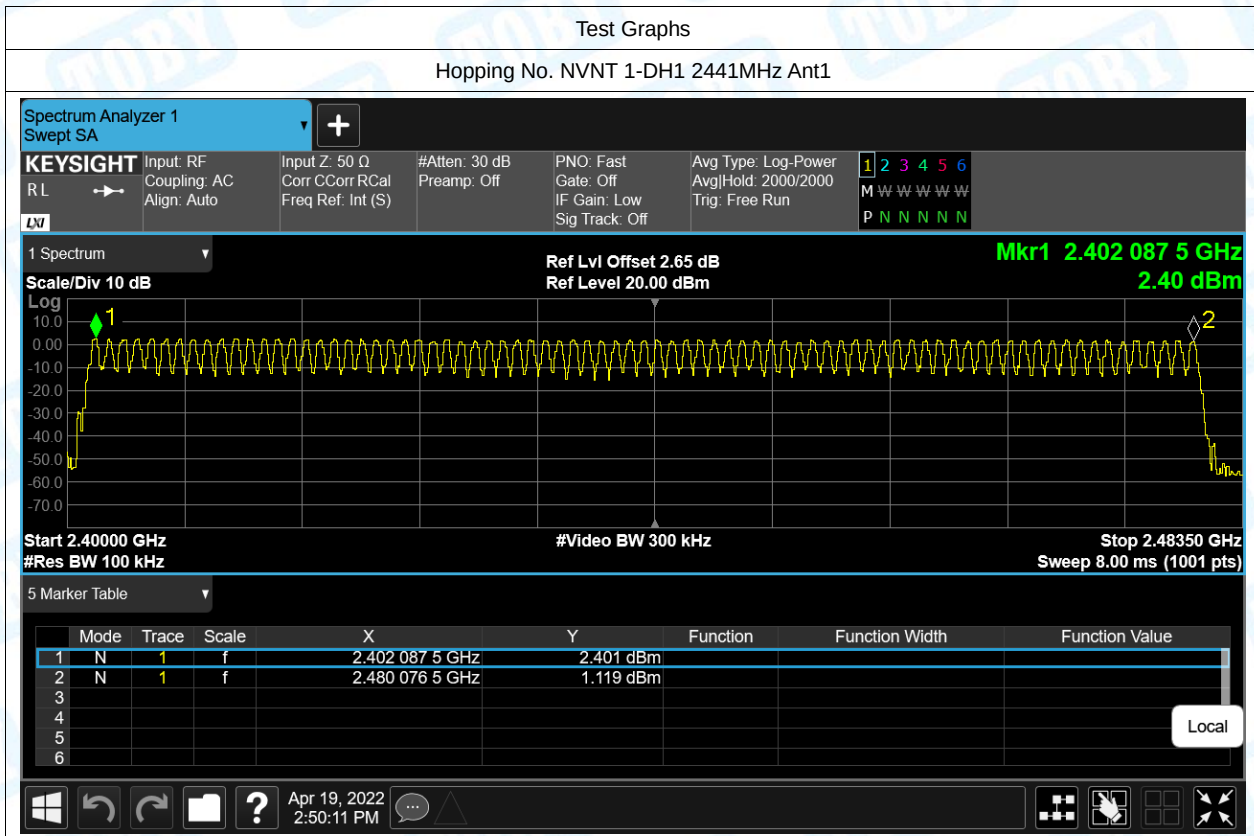
9.Carrier Frequencies Separation

Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.972	2442.046	1.074	0.633	Pass



10.Number of Hopping Channel

Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass



11.Dwell Time

Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.427	136.64	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.545	247.2	31600	400	Pass
NVNT	1-DH5	2441	Ant1	1.54	164.267	31600	400	Pass

