

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

General Description of EUT	
Product Name:	Multimedia Projector
Test Model:	KAODCPPROV4
Sample ID:	RW-C-202209-0179-1-2#
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 12V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202209-0179-21	

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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	30.4	5.17	2.63
NVNT	1-DH1	2441	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2480	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2480	Ant1	31.2	5.06	2.56

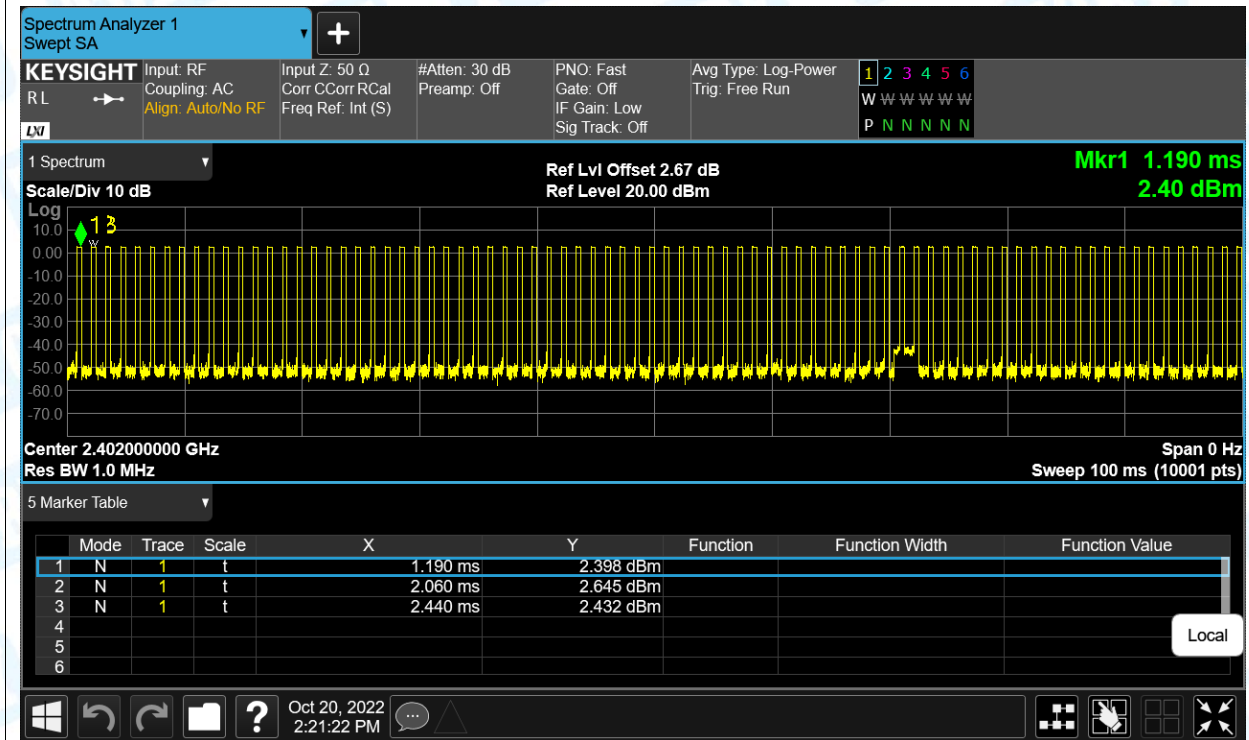
Note: Duty Cycle(%)=ON(ms)/(ON(ms)+OFF(ms))

ON(ms)=Maker3-Maker2

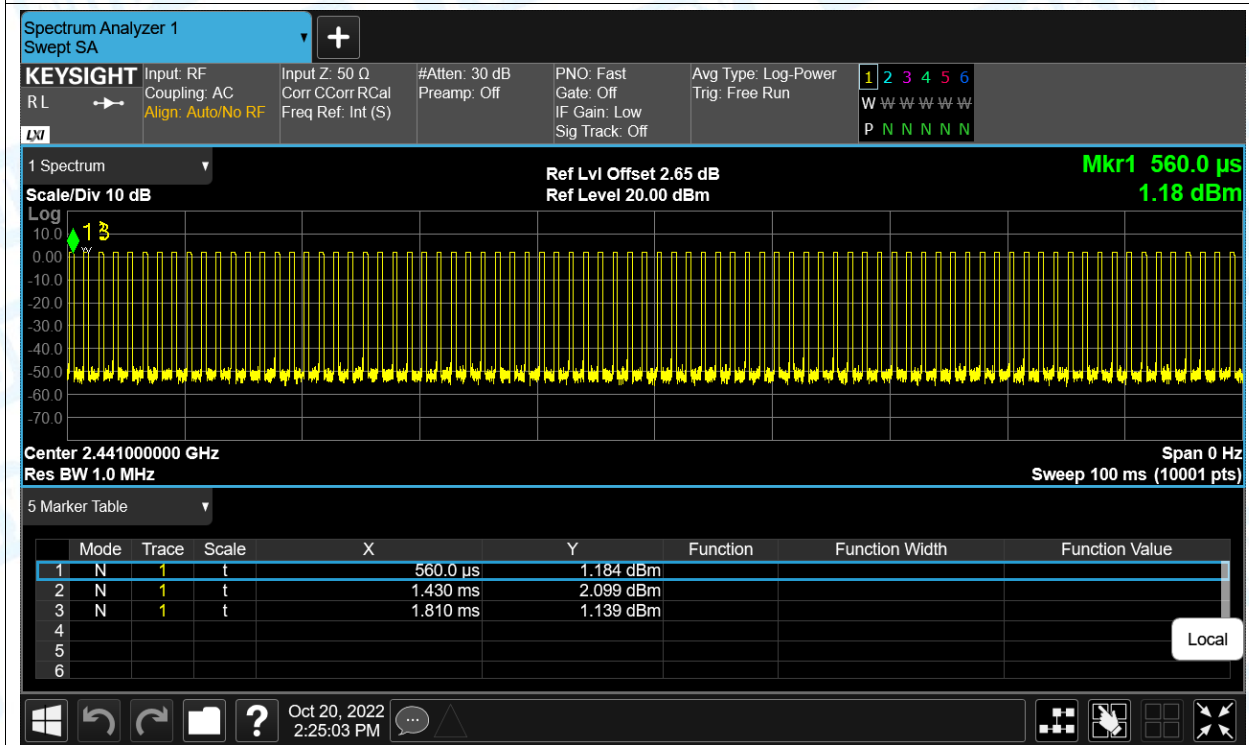
(ON(ms)+OFF(ms))=Maker3-Maker1

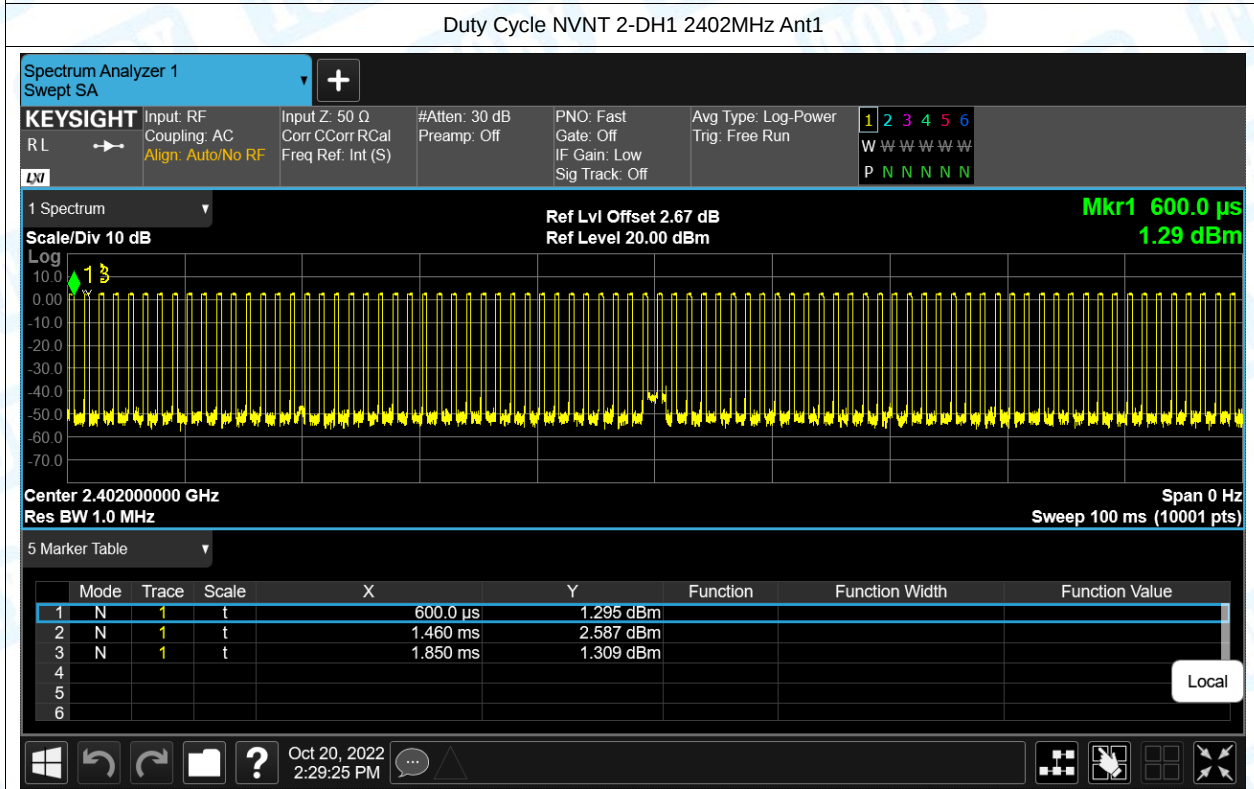
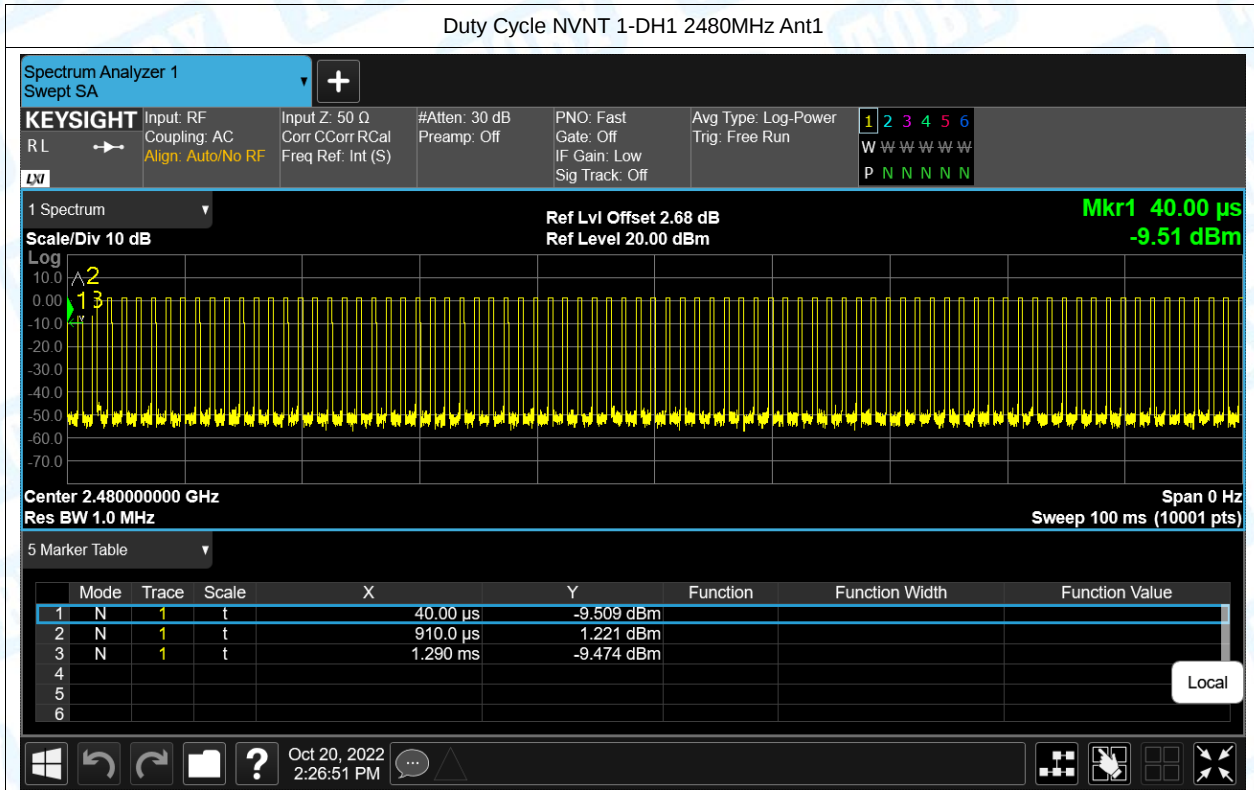
Test Graphs

Duty Cycle NVNT 1-DH1 2402MHz Ant1

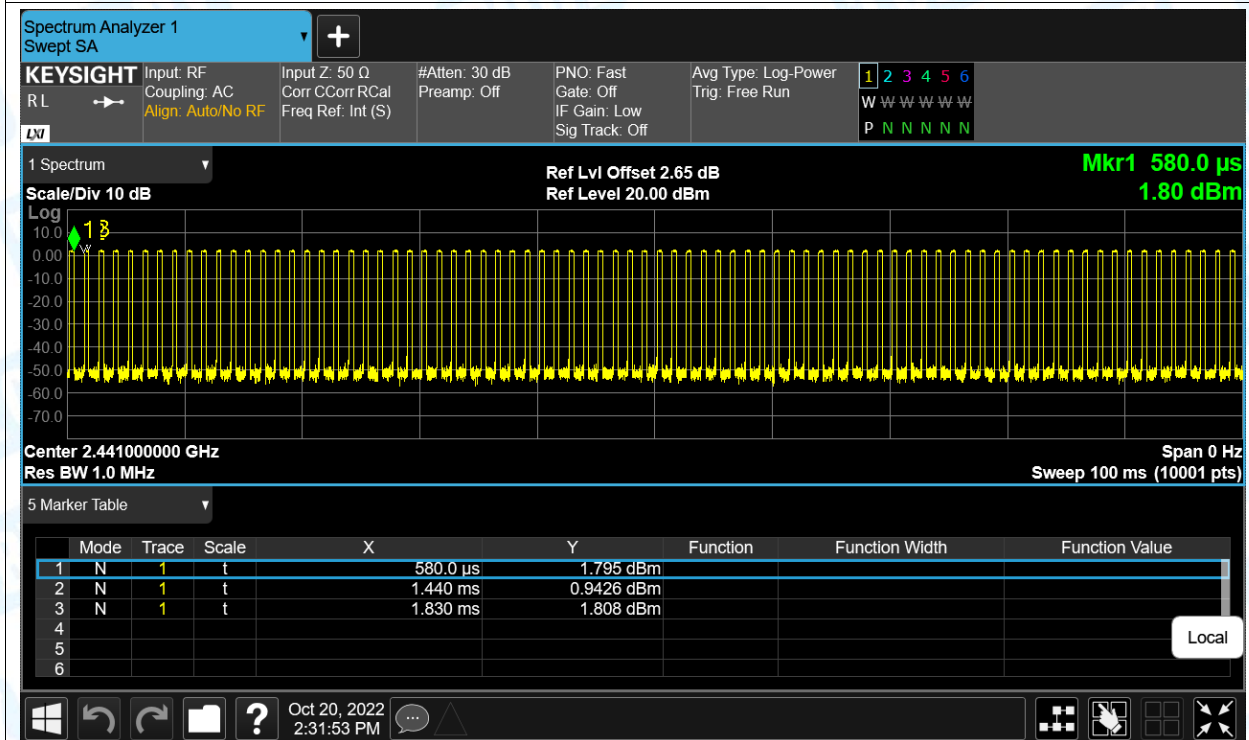


Duty Cycle NVNT 1-DH1 2441MHz Ant1

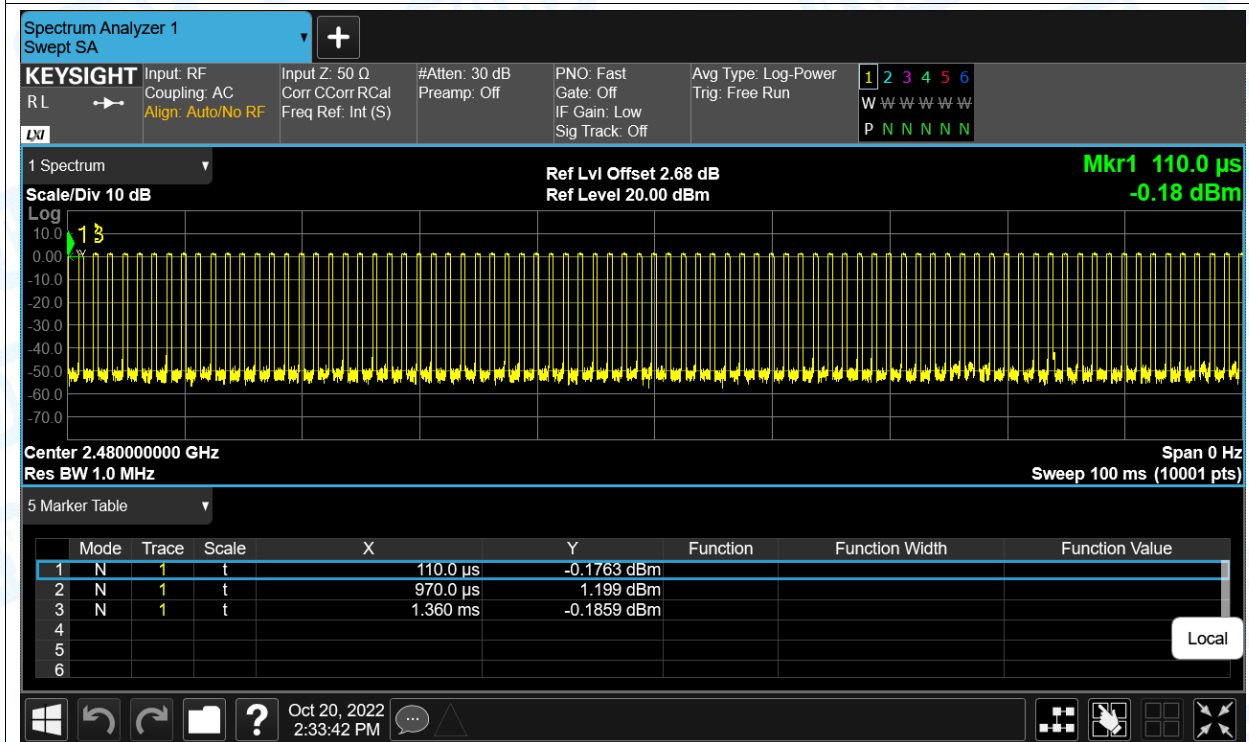




Duty Cycle NVNT 2-DH1 2441MHz Ant1



Duty Cycle NVNT 2-DH1 2480MHz Ant1

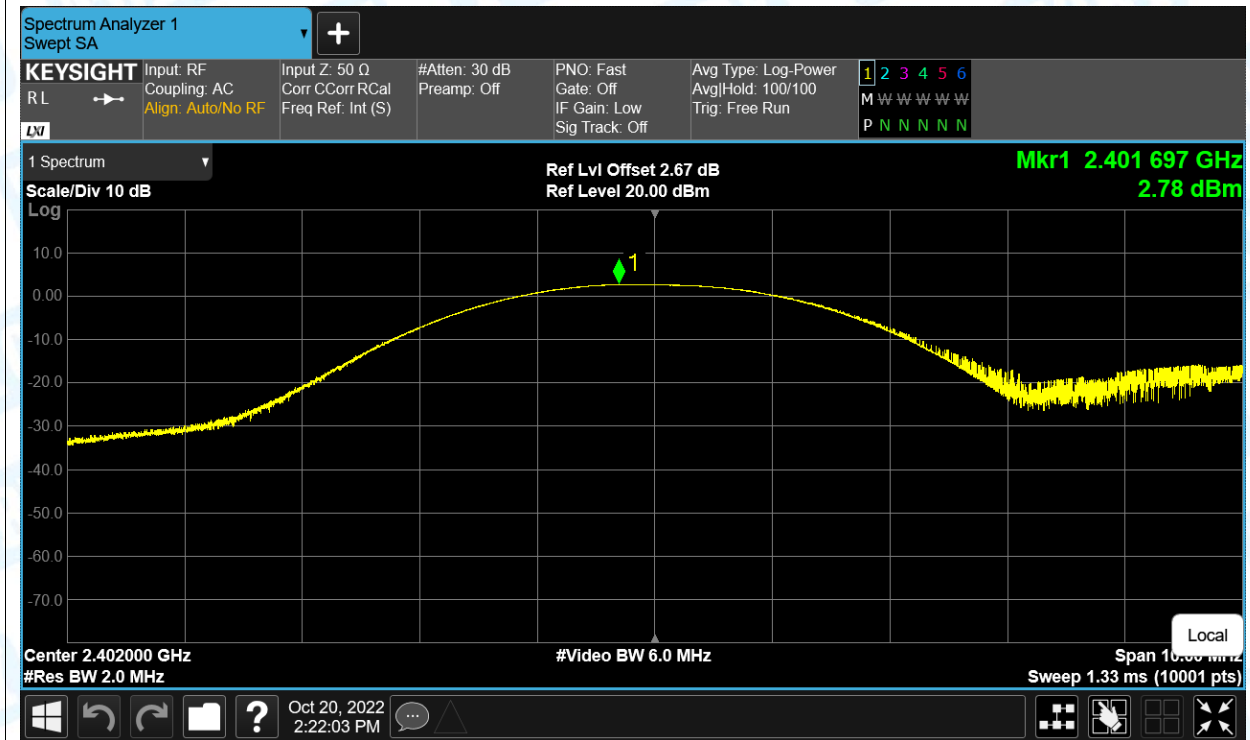


2. Maximum Conducted Output Power

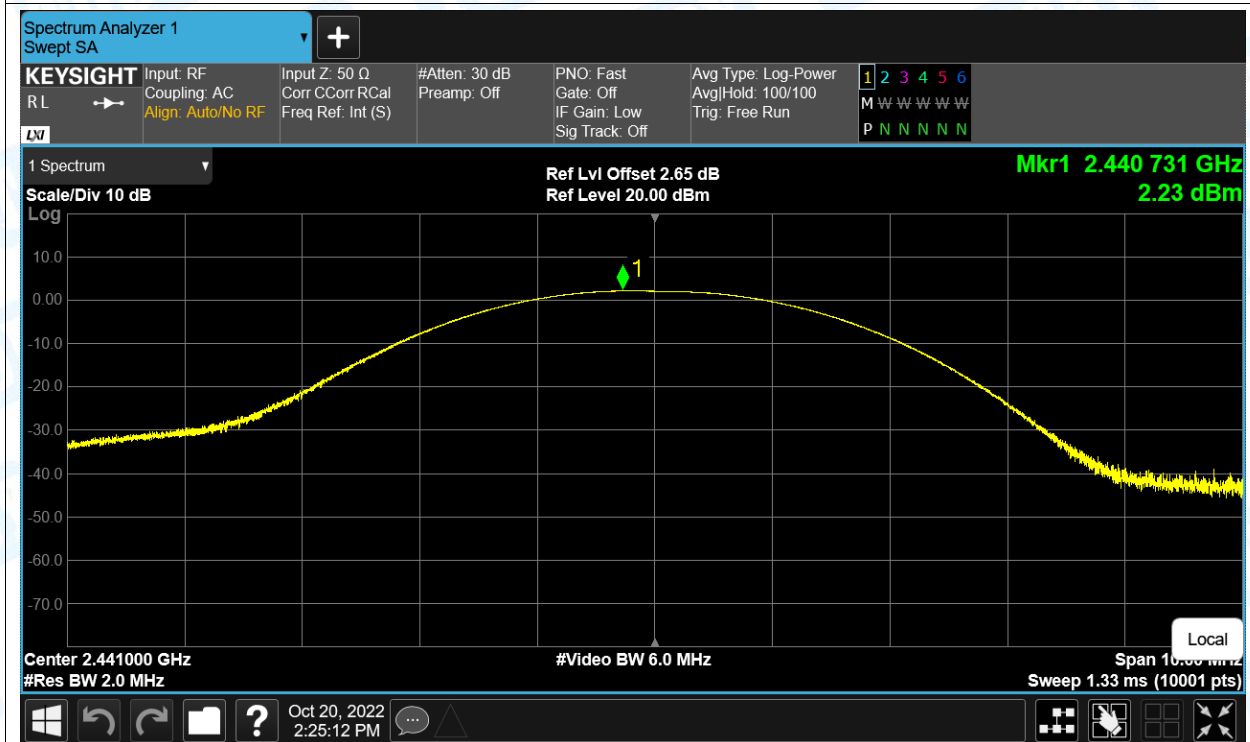
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	2.78	21	Pass
NVNT	1-DH1	2441	Ant1	2.23	21	Pass
NVNT	1-DH1	2480	Ant1	1.35	21	Pass
NVNT	2-DH1	2402	Ant1	3.32	21	Pass
NVNT	2-DH1	2441	Ant1	2.78	21	Pass
NVNT	2-DH1	2480	Ant1	1.93	21	Pass

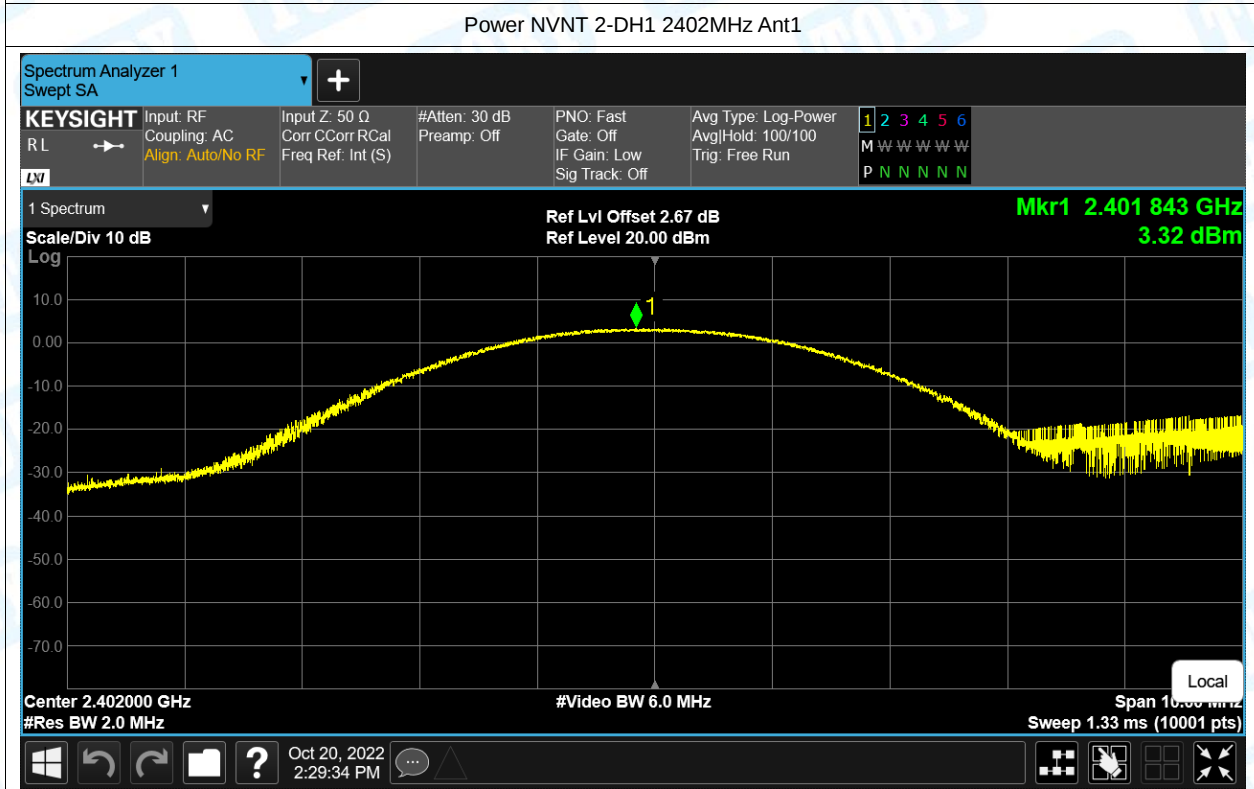
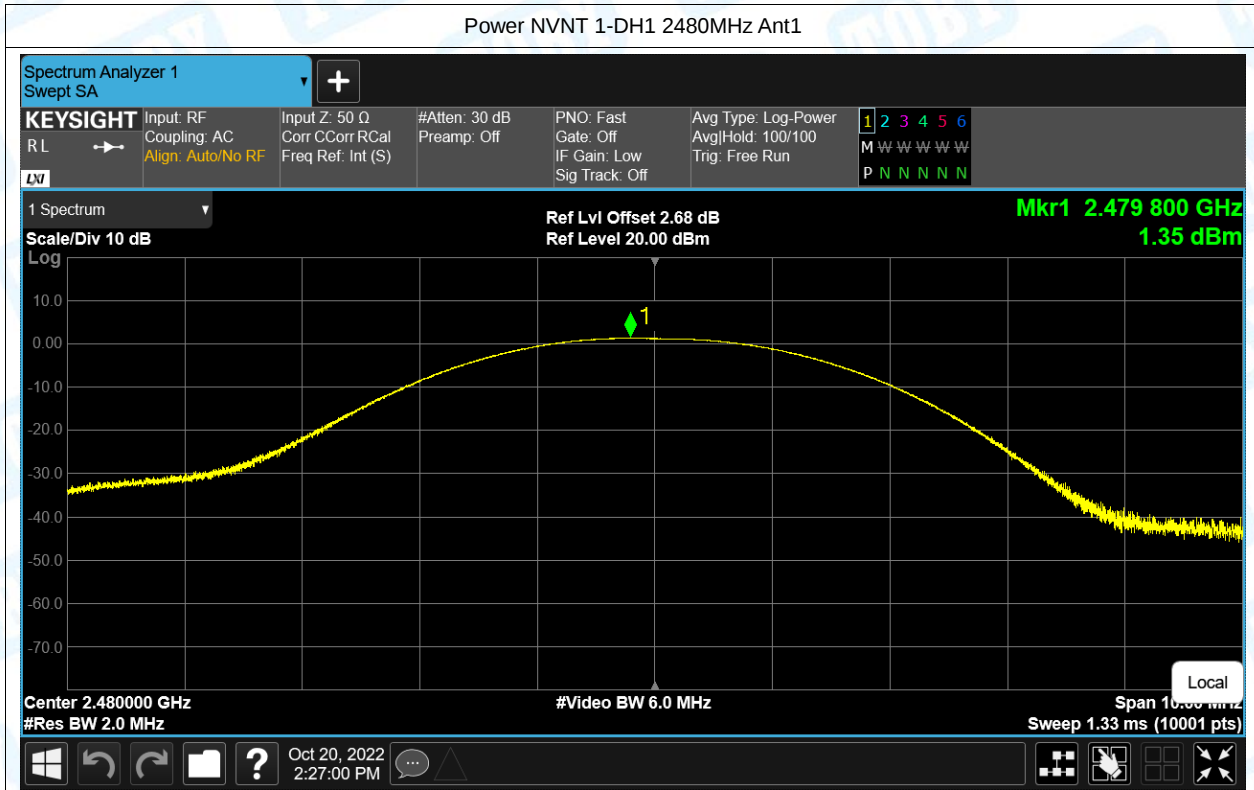
Test Graphs

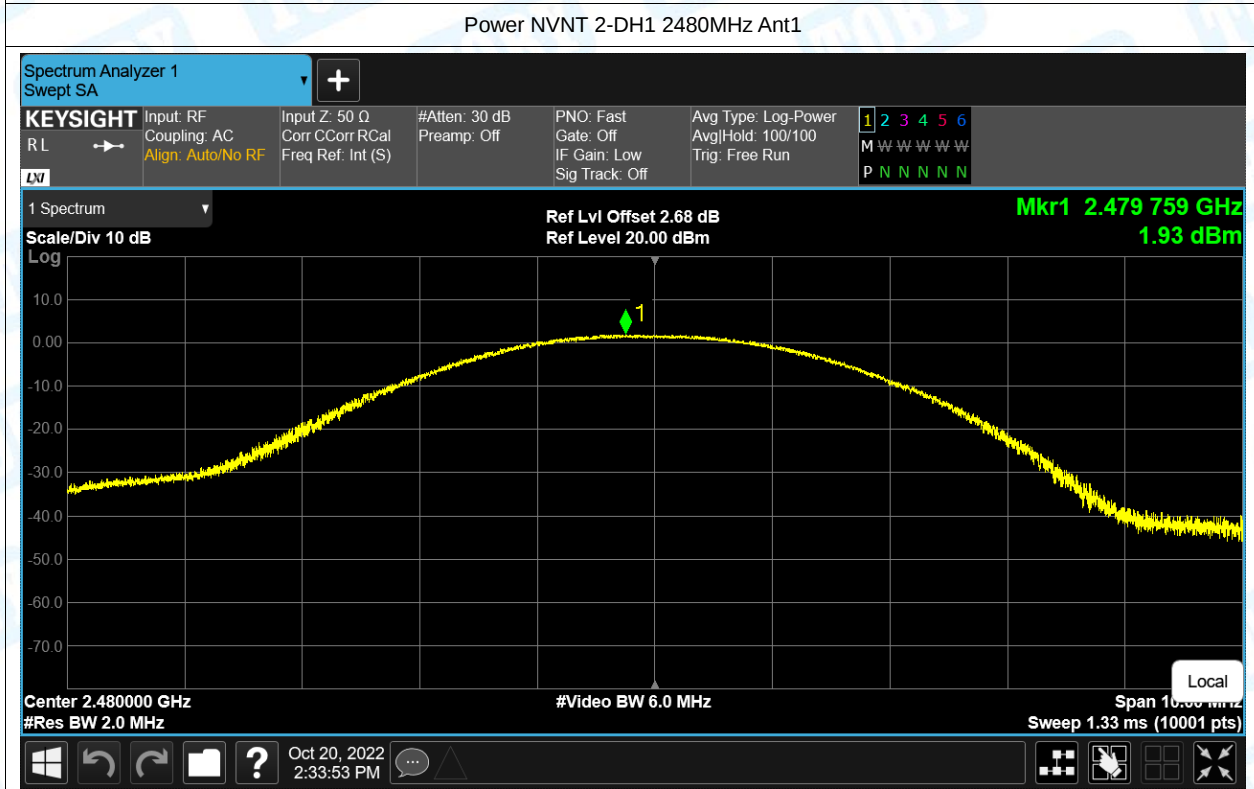
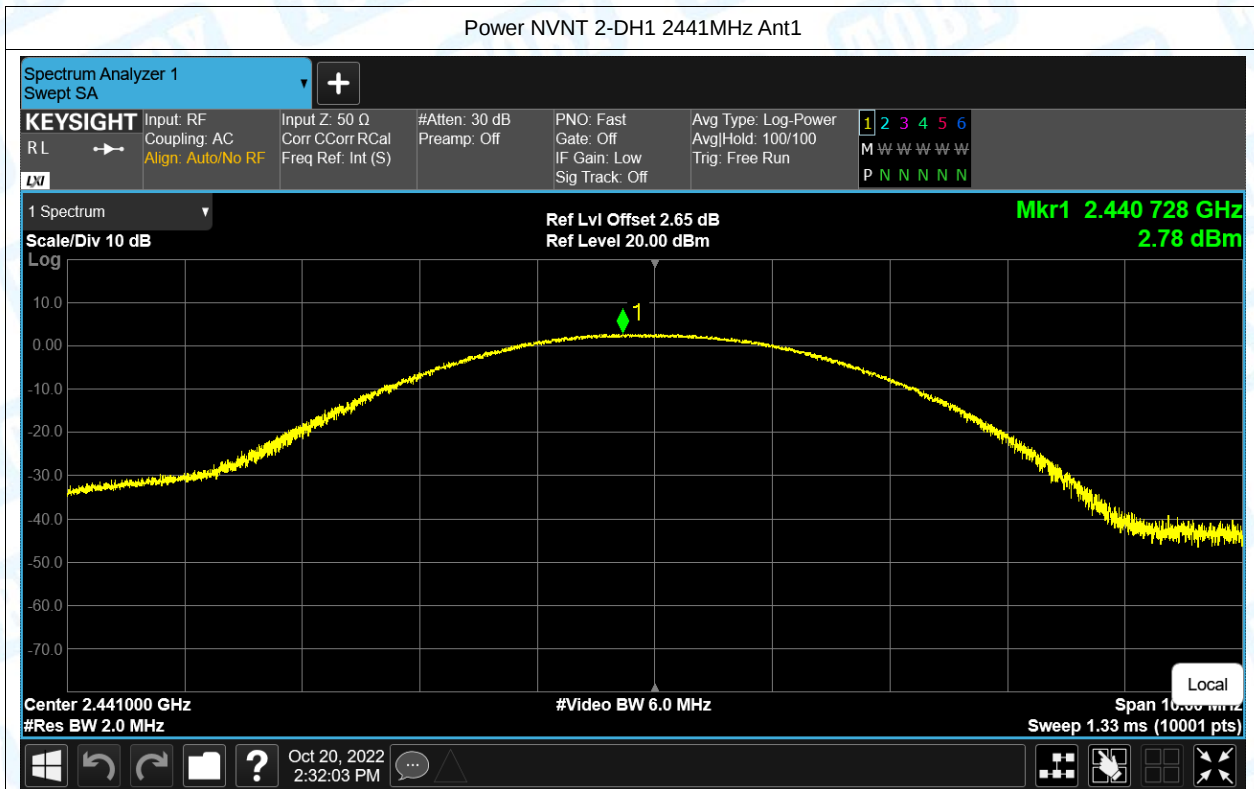
Power NVNT 1-DH1 2402MHz Ant1



Power NVNT 1-DH1 2441MHz Ant1





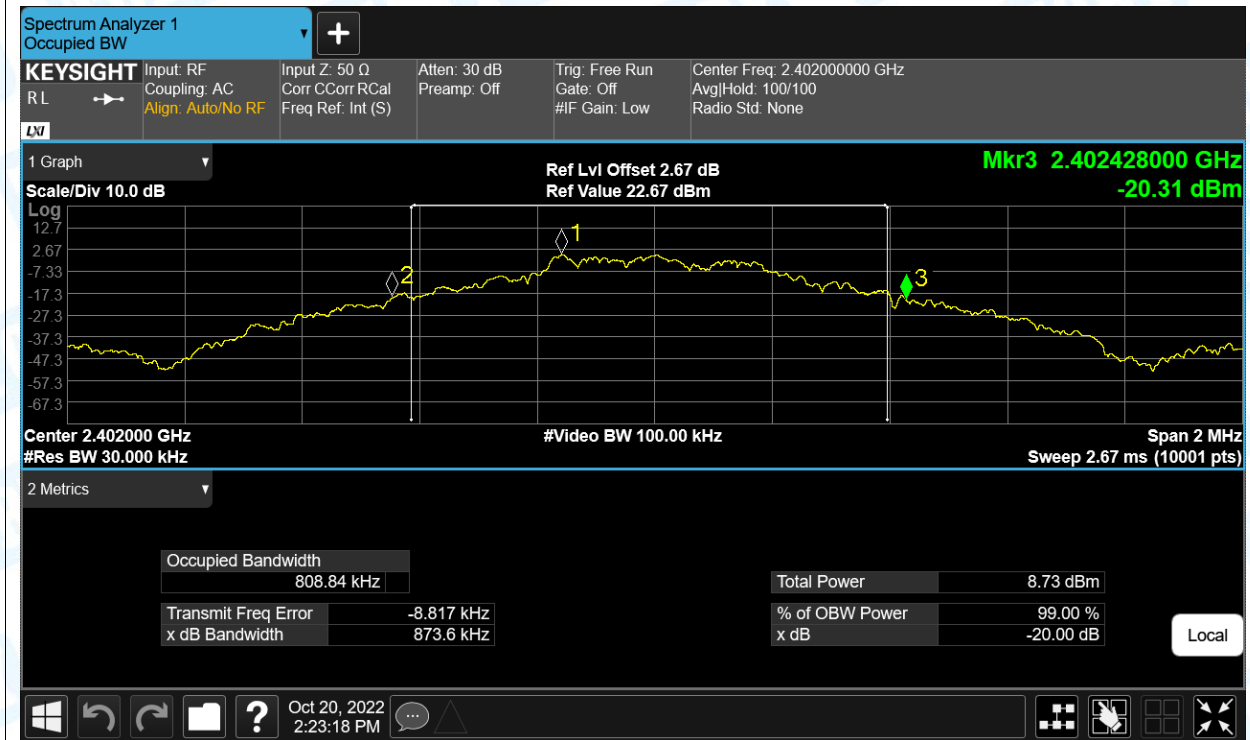


3. -20dB Bandwidth

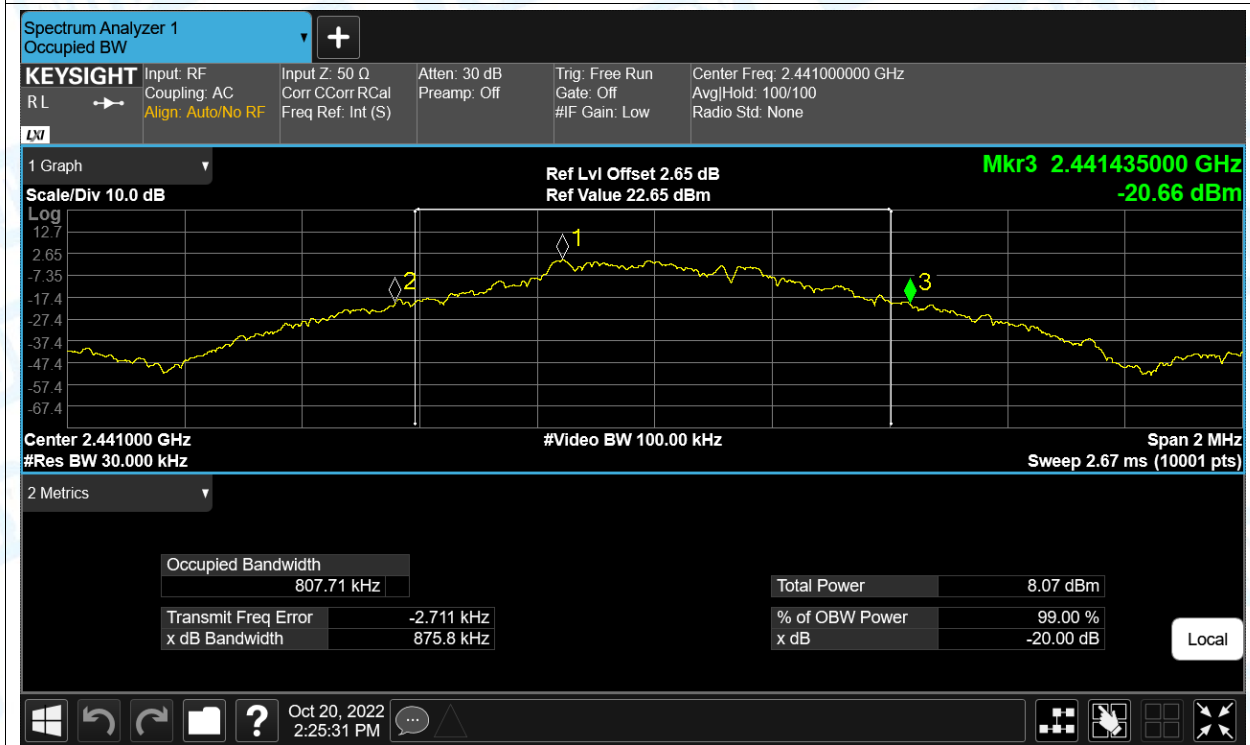
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.87	----	Pass
NVNT	1-DH1	2441	Ant1	0.88	----	Pass
NVNT	1-DH1	2480	Ant1	0.88	----	Pass
NVNT	2-DH1	2402	Ant1	1.28	----	Pass
NVNT	2-DH1	2441	Ant1	1.23	----	Pass
NVNT	2-DH1	2480	Ant1	1.28	----	Pass

Test Graphs

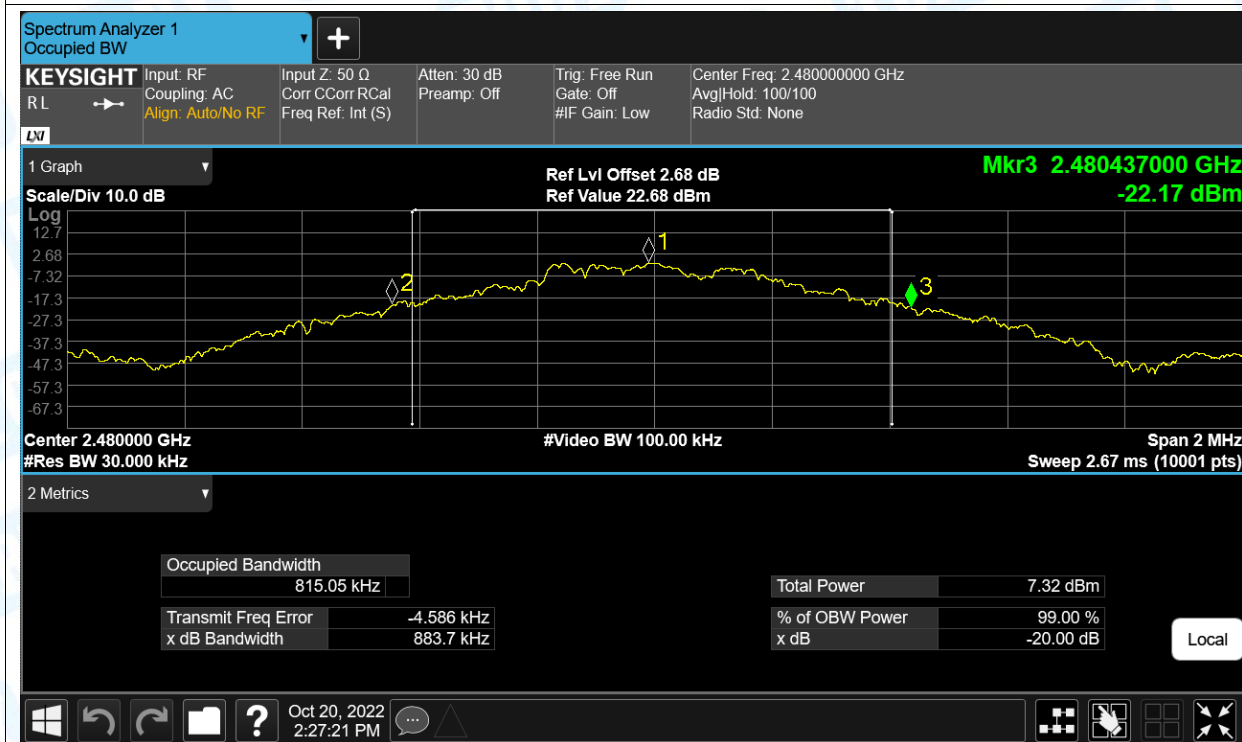
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



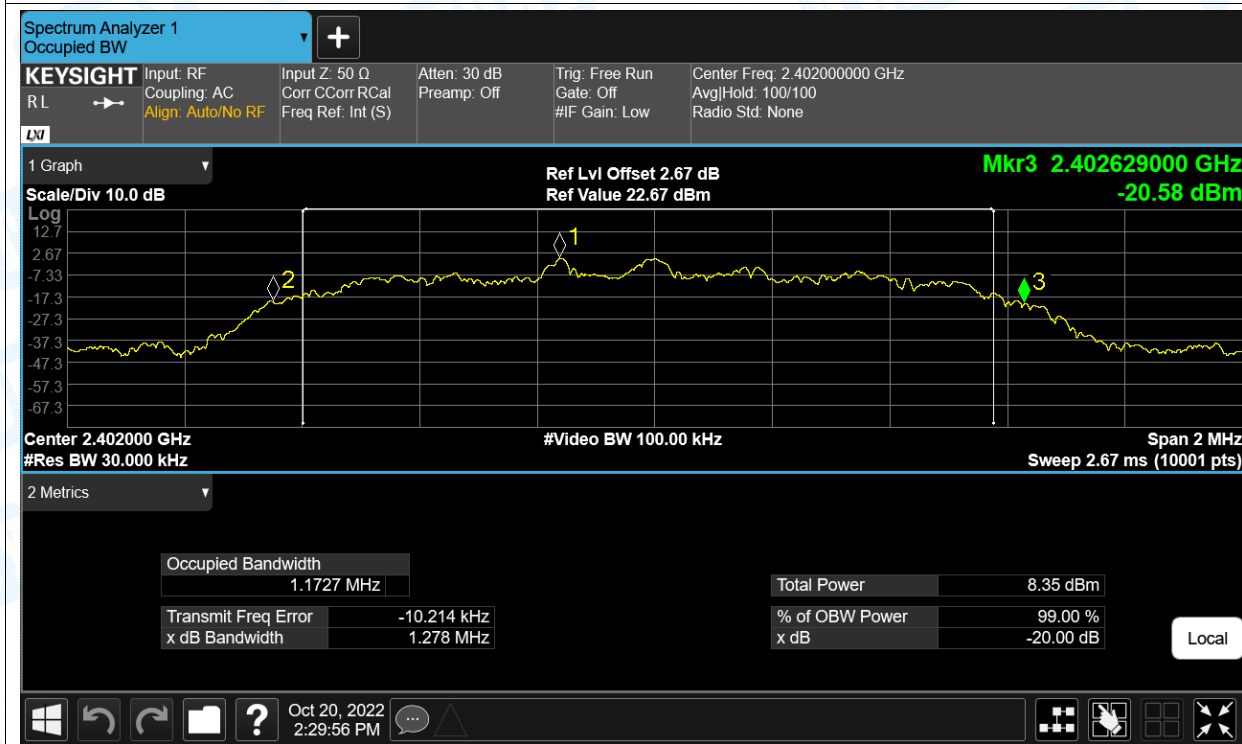
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



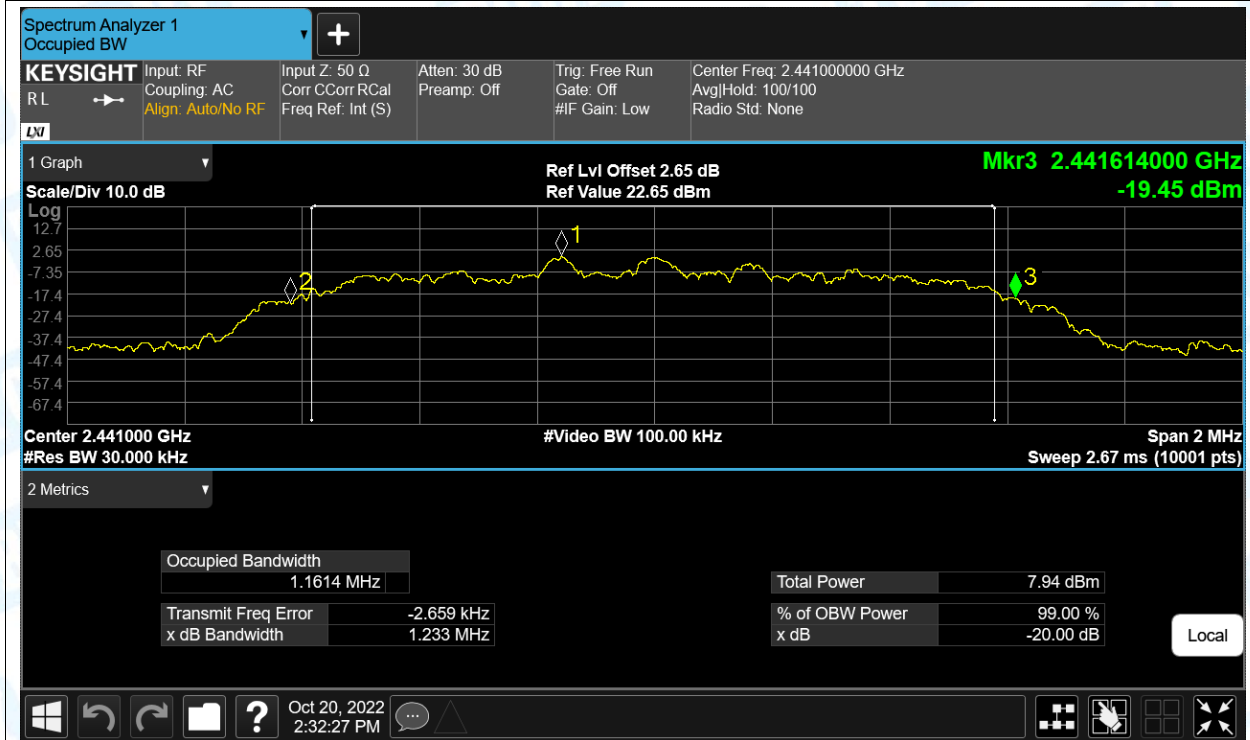
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



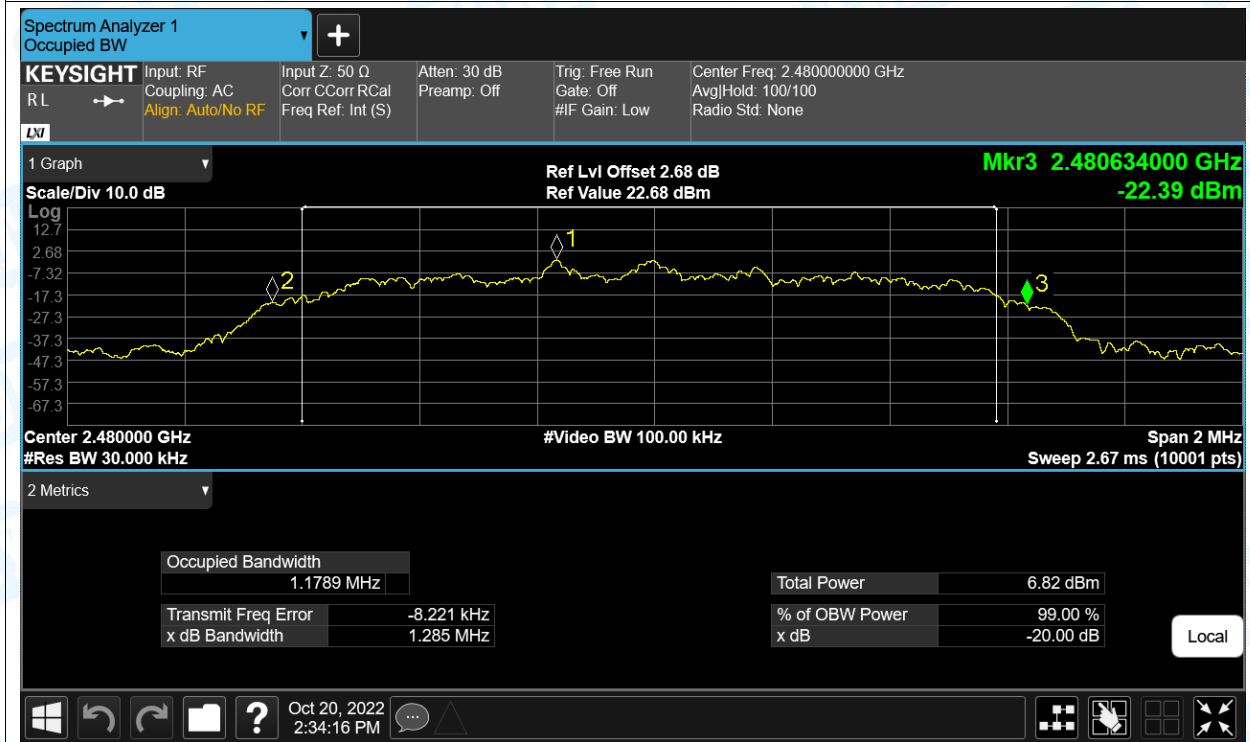
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

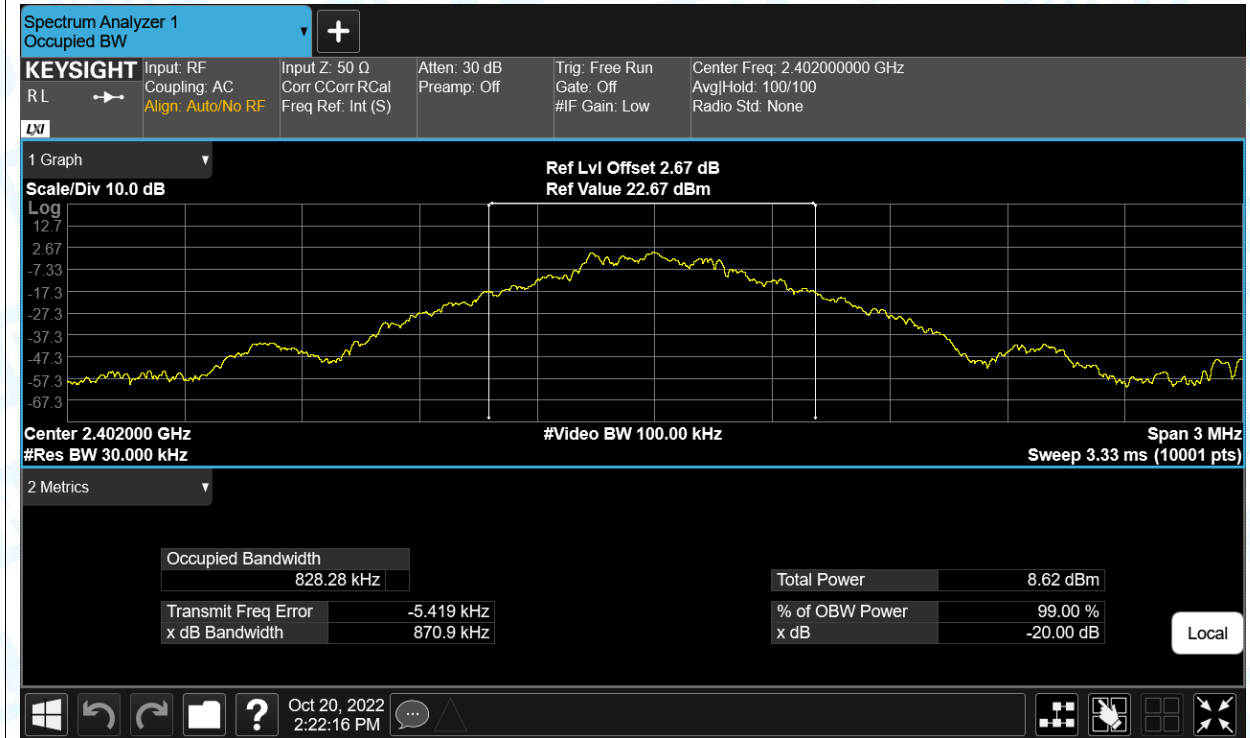


4. Occupied Channel Bandwidth

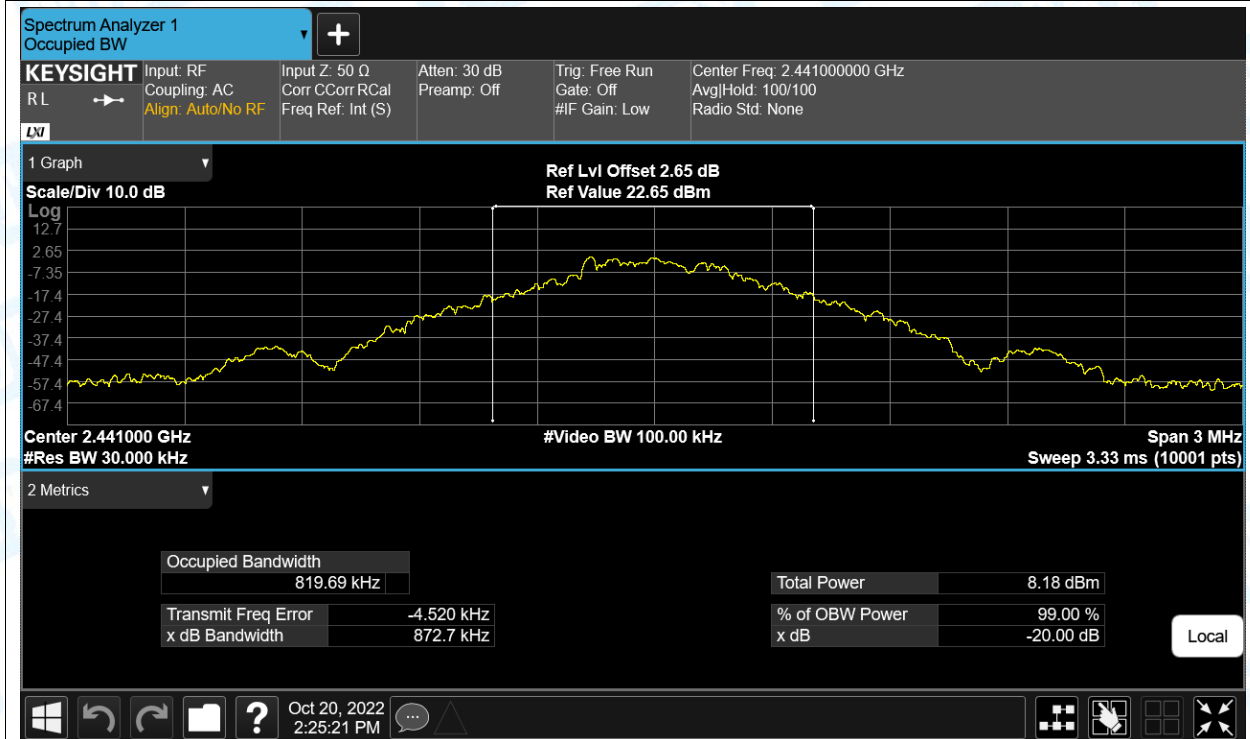
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.828
NVNT	1-DH1	2441	Ant1	0.82
NVNT	1-DH1	2480	Ant1	0.825
NVNT	2-DH1	2402	Ant1	1.171
NVNT	2-DH1	2441	Ant1	1.187
NVNT	2-DH1	2480	Ant1	1.175

Test Graphs

OBW NVNT 1-DH1 2402MHz Ant1



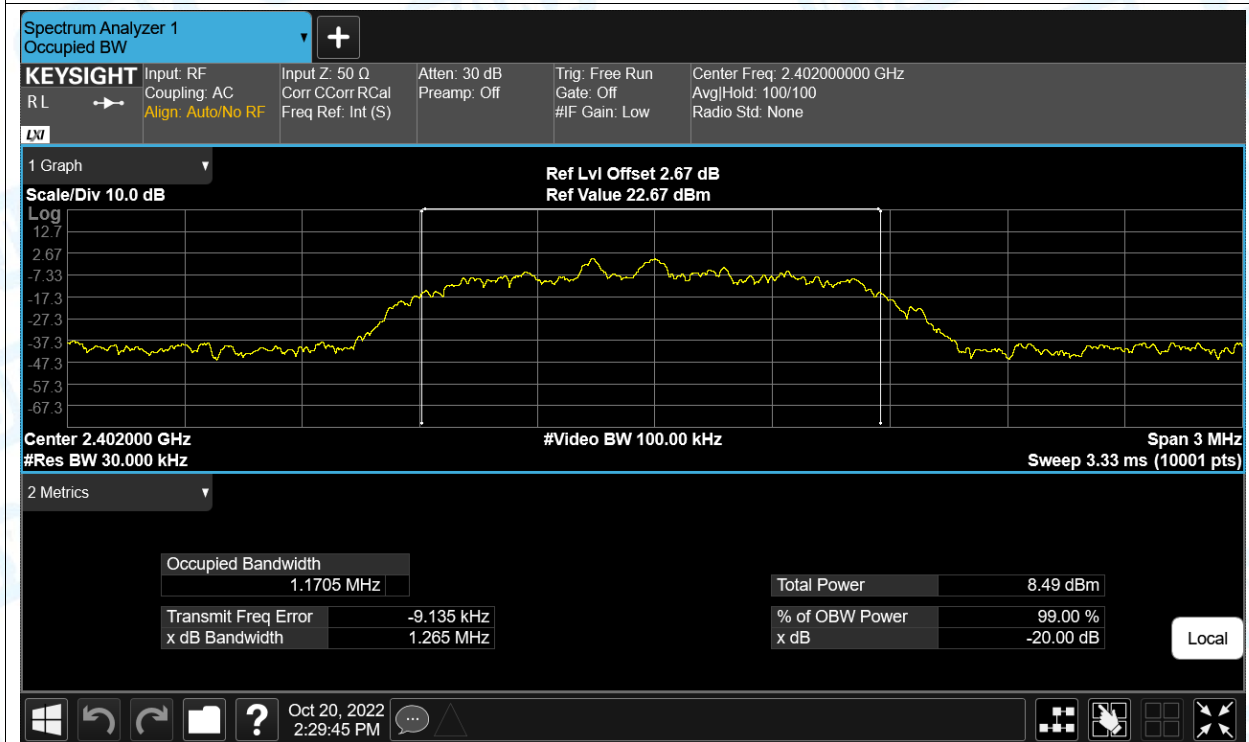
OBW NVNT 1-DH1 2441MHz Ant1



OBW NVNT 1-DH1 2480MHz Ant1



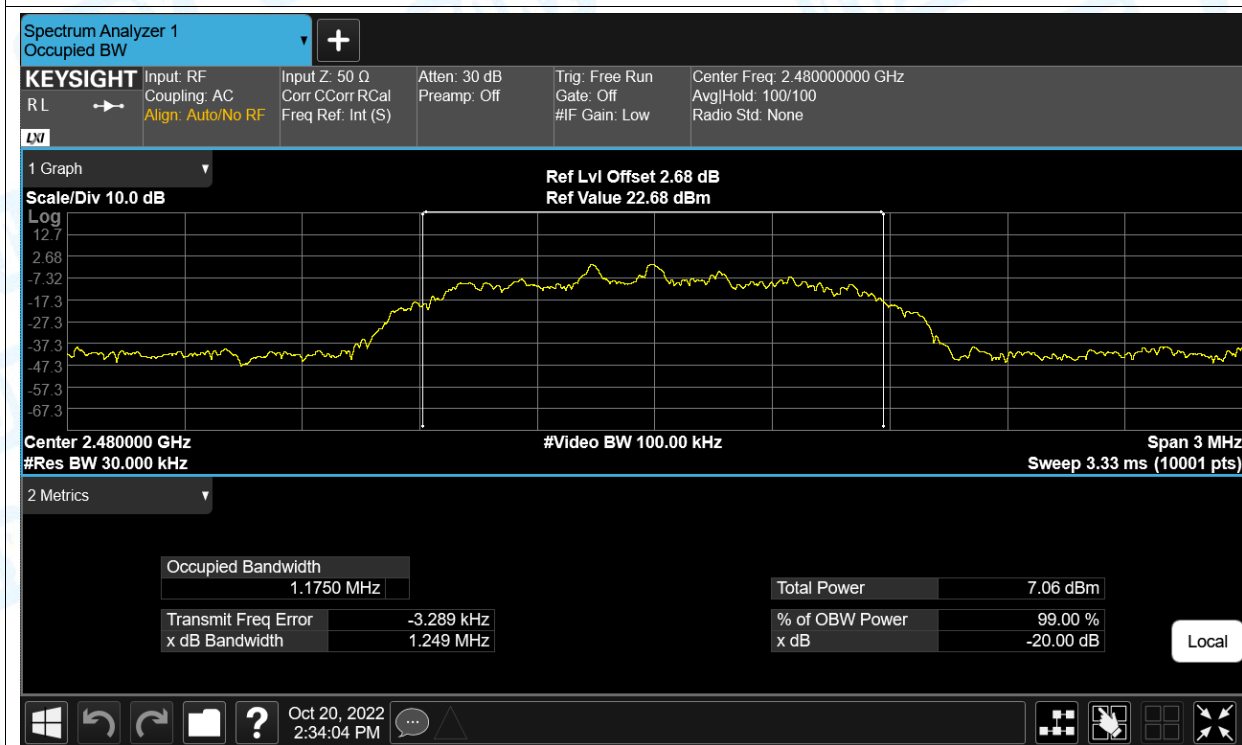
OBW NVNT 2-DH1 2402MHz Ant1



OBW NVNT 2-DH1 2441MHz Ant1



OBW NVNT 2-DH1 2480MHz Ant1

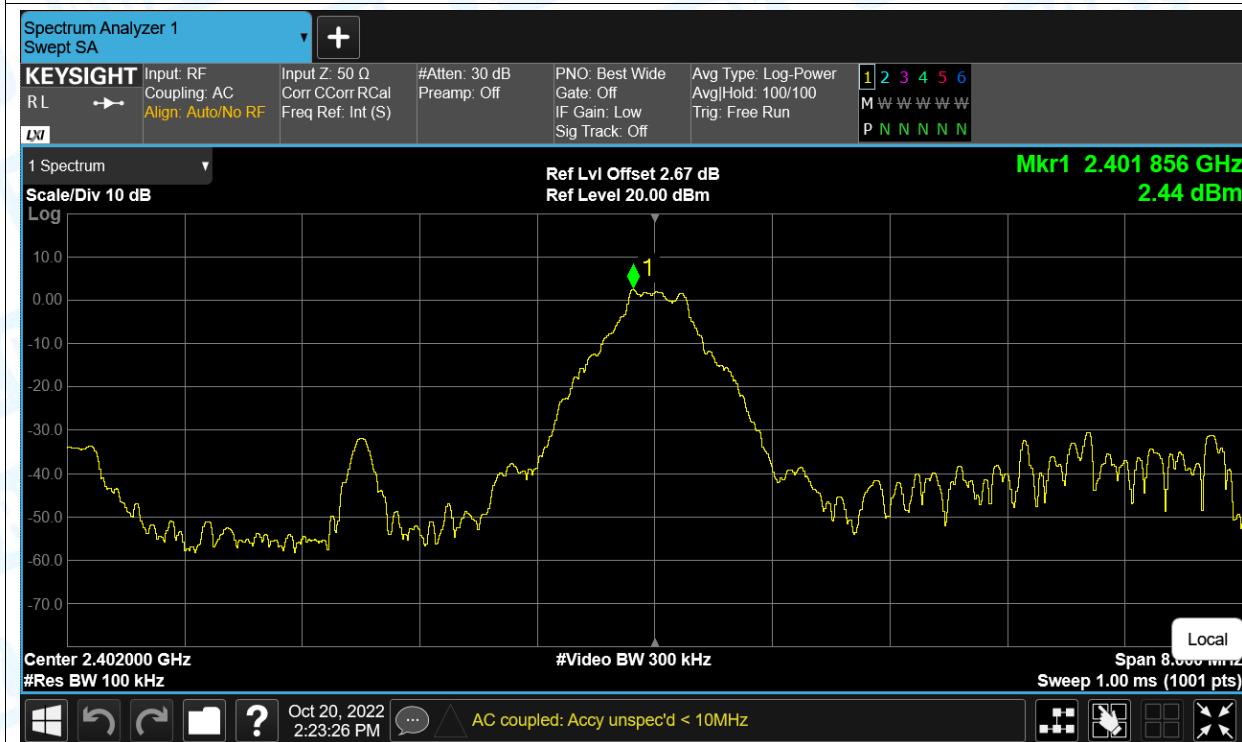


5. Band Edge

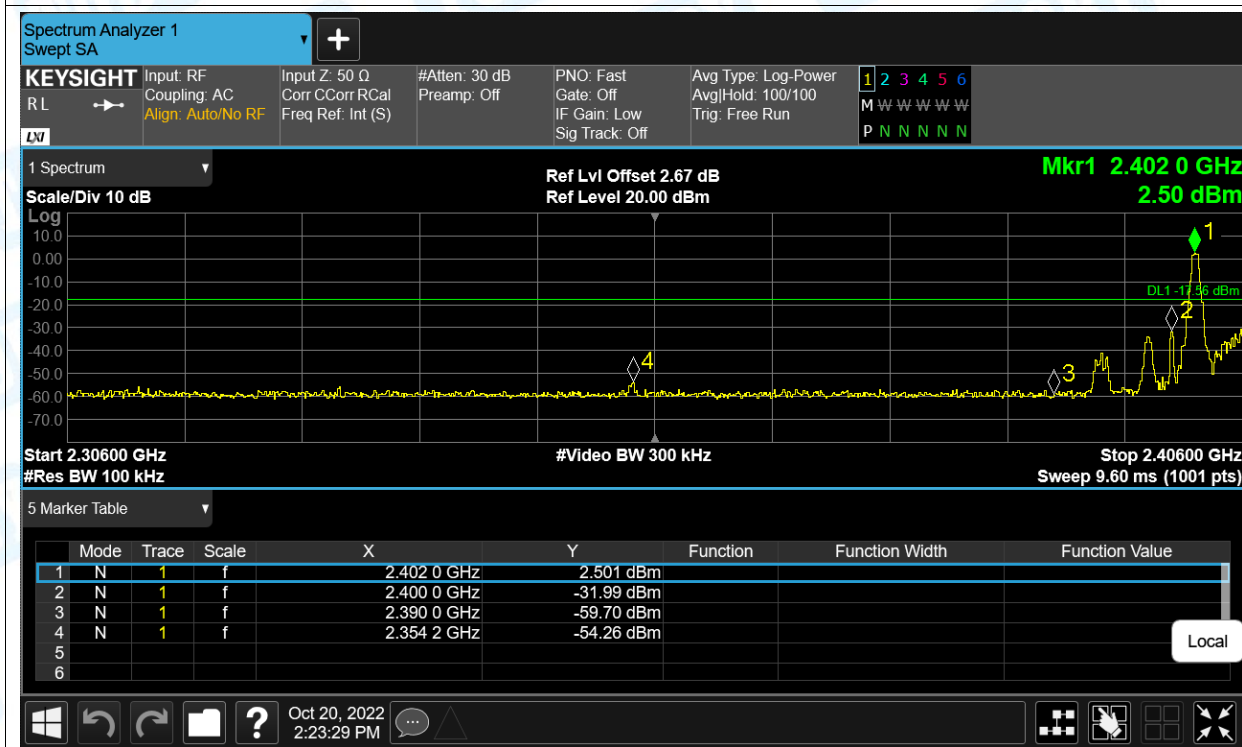
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-56.7	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-48.45	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-57.06	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-47.64	-20	Pass

Test Graphs

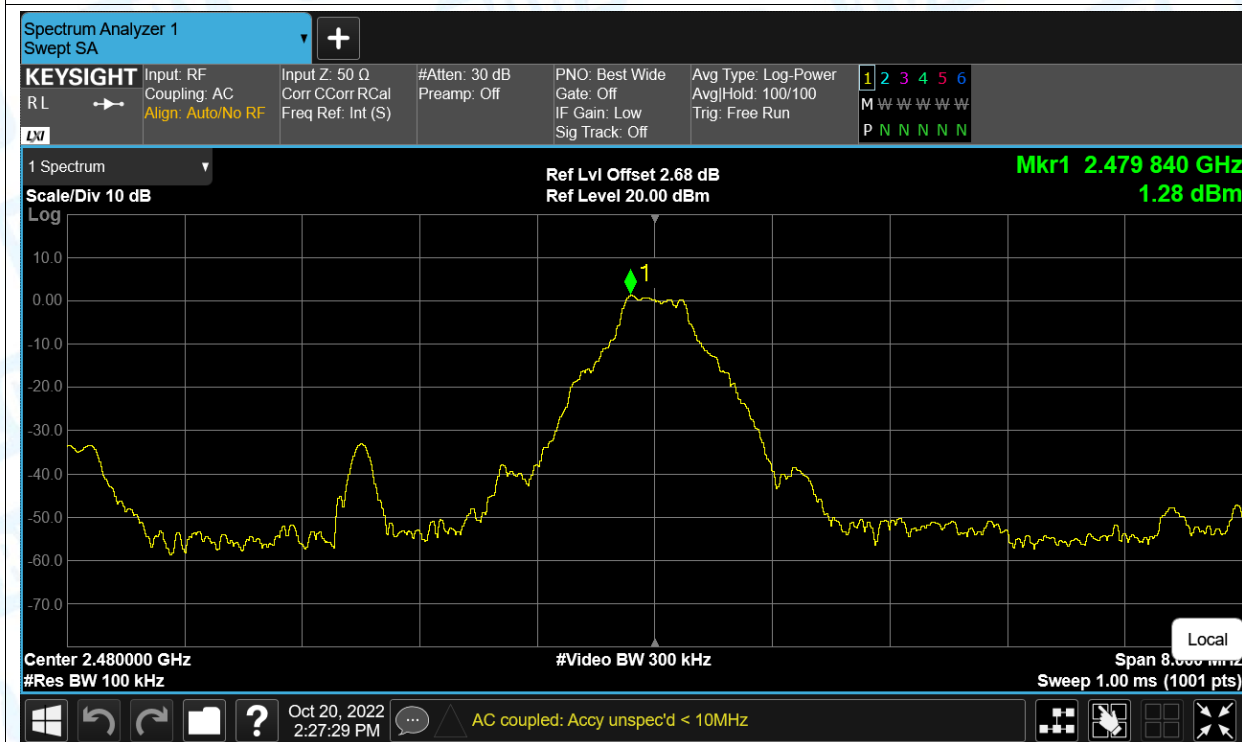
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



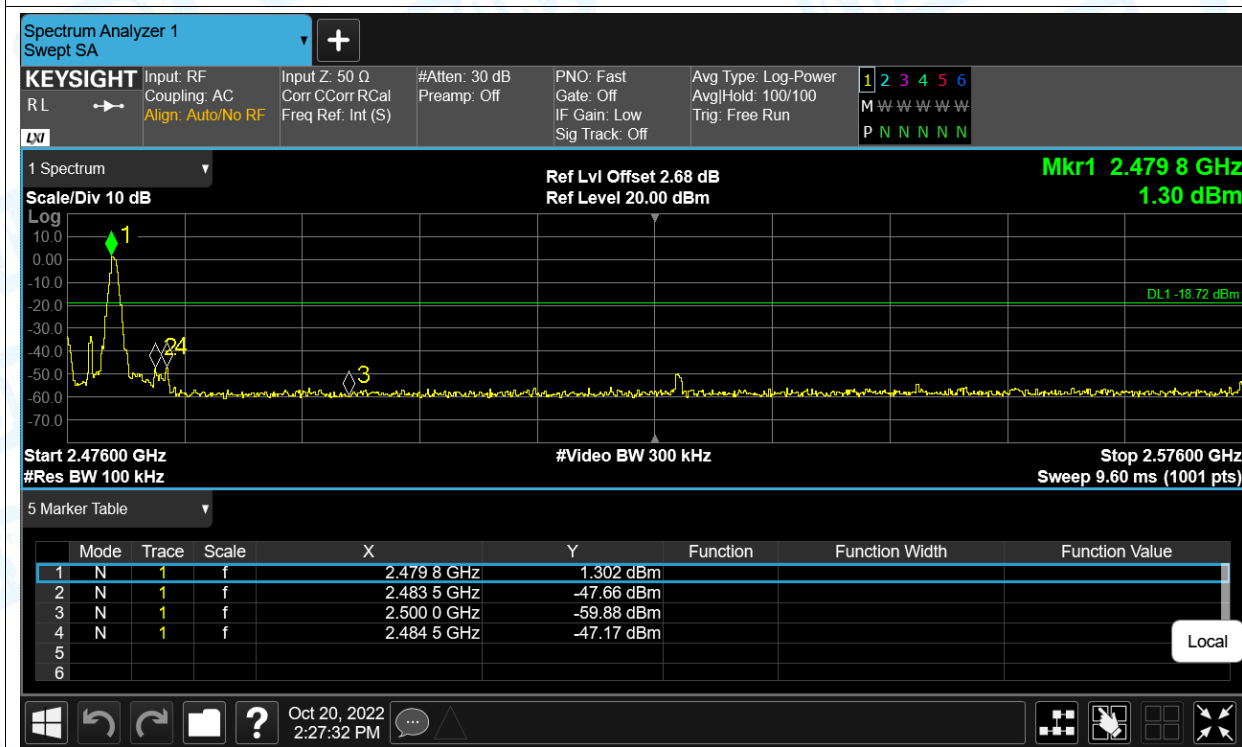
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission

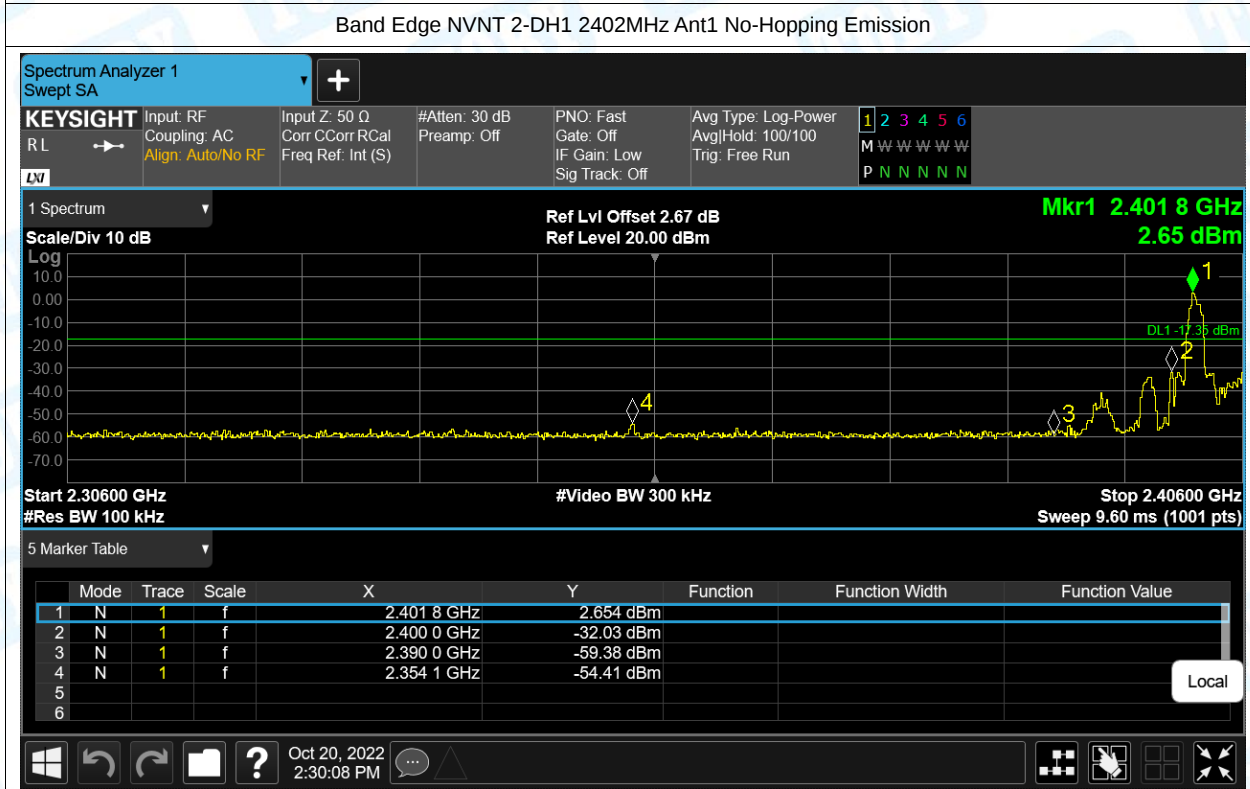
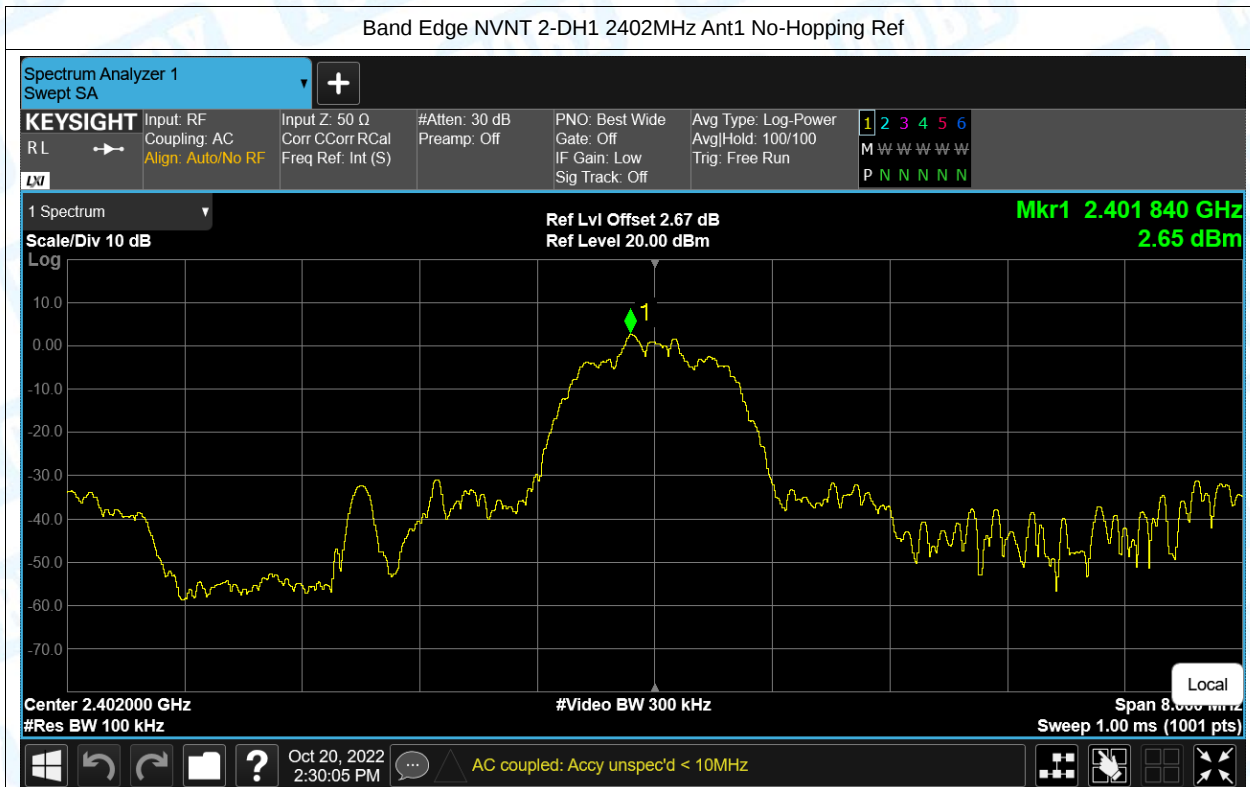


Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref

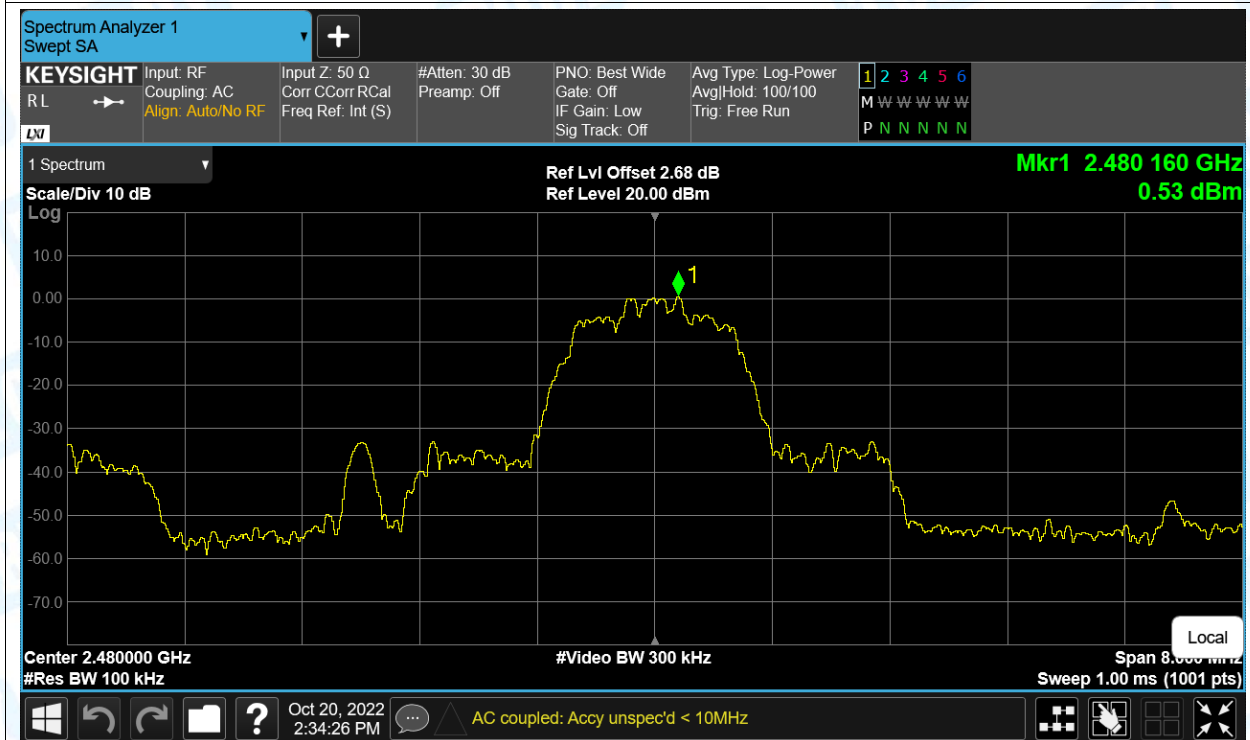


Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission

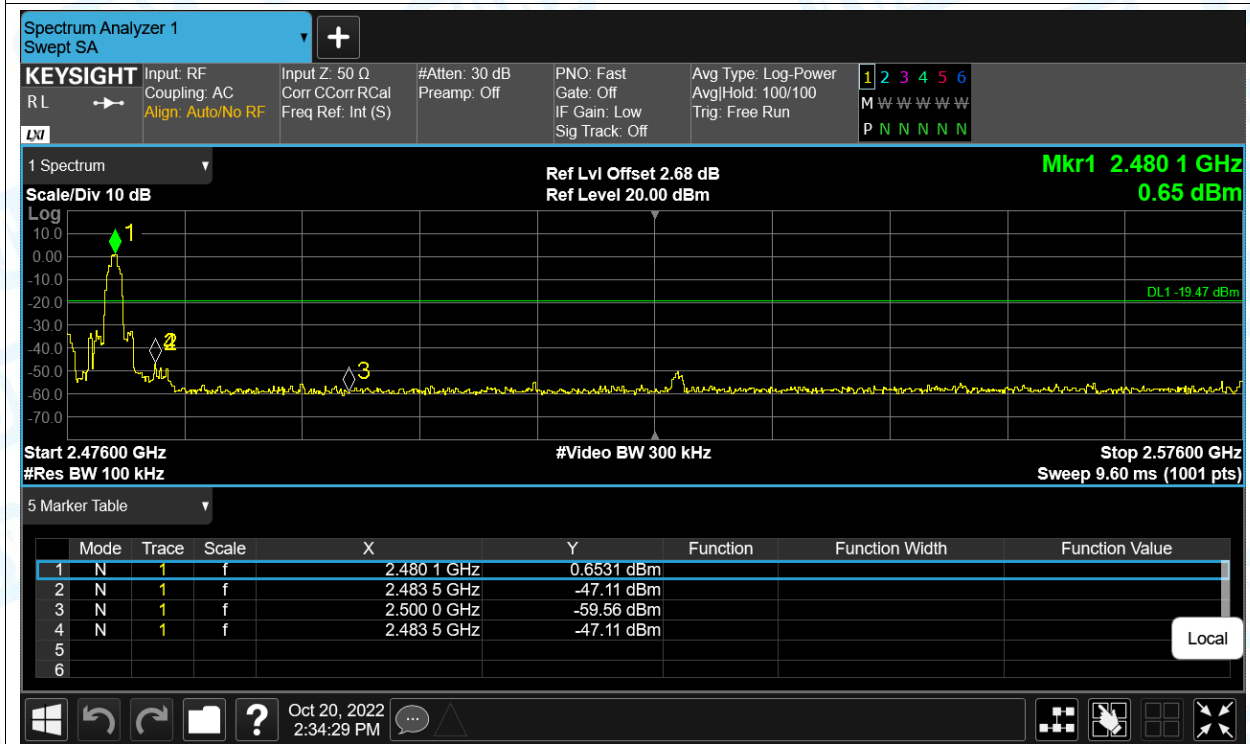




Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref



Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission

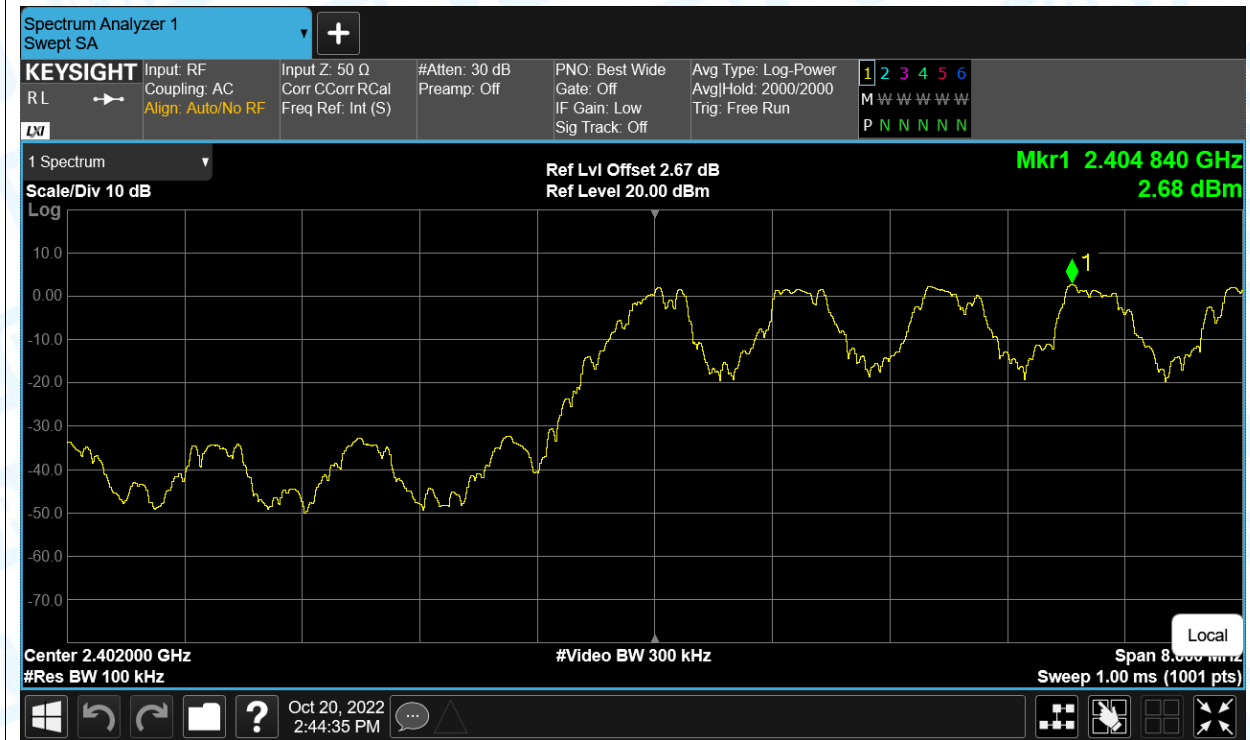


6. Band Edge(Hopping)

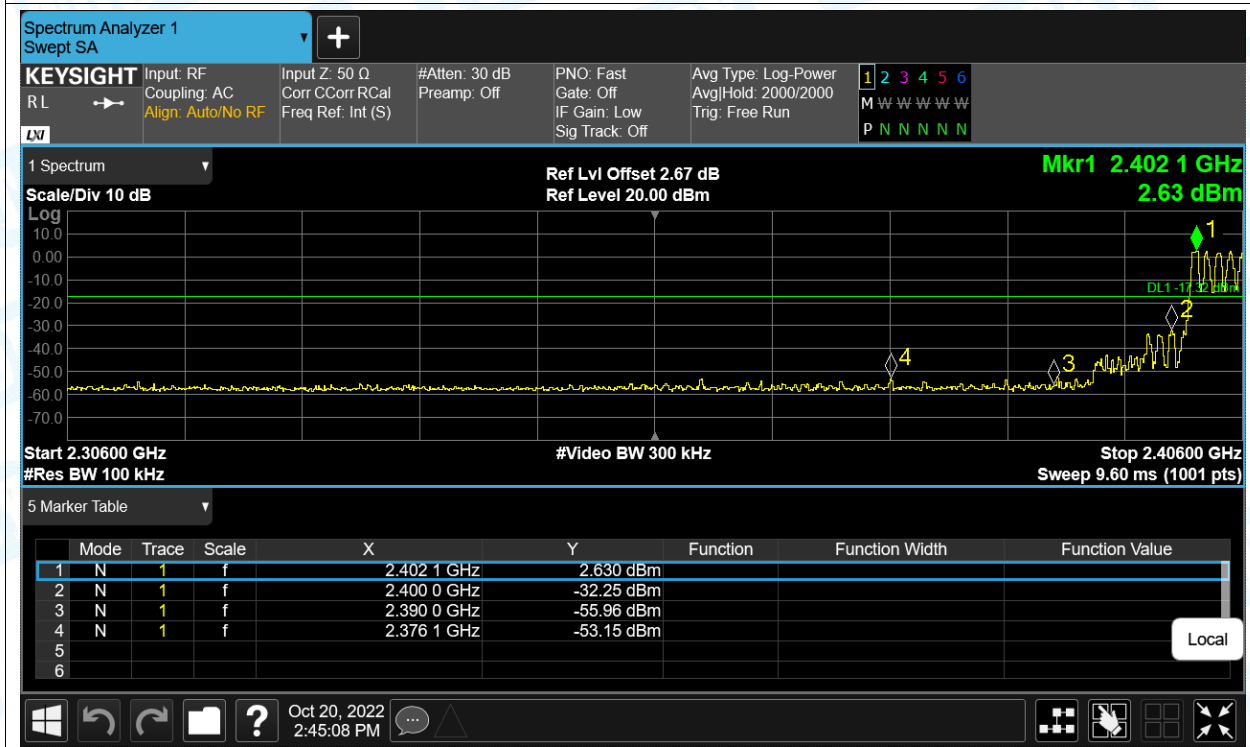
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-55.83	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-51.68	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-57.22	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-51.21	-20	Pass

Test Graphs

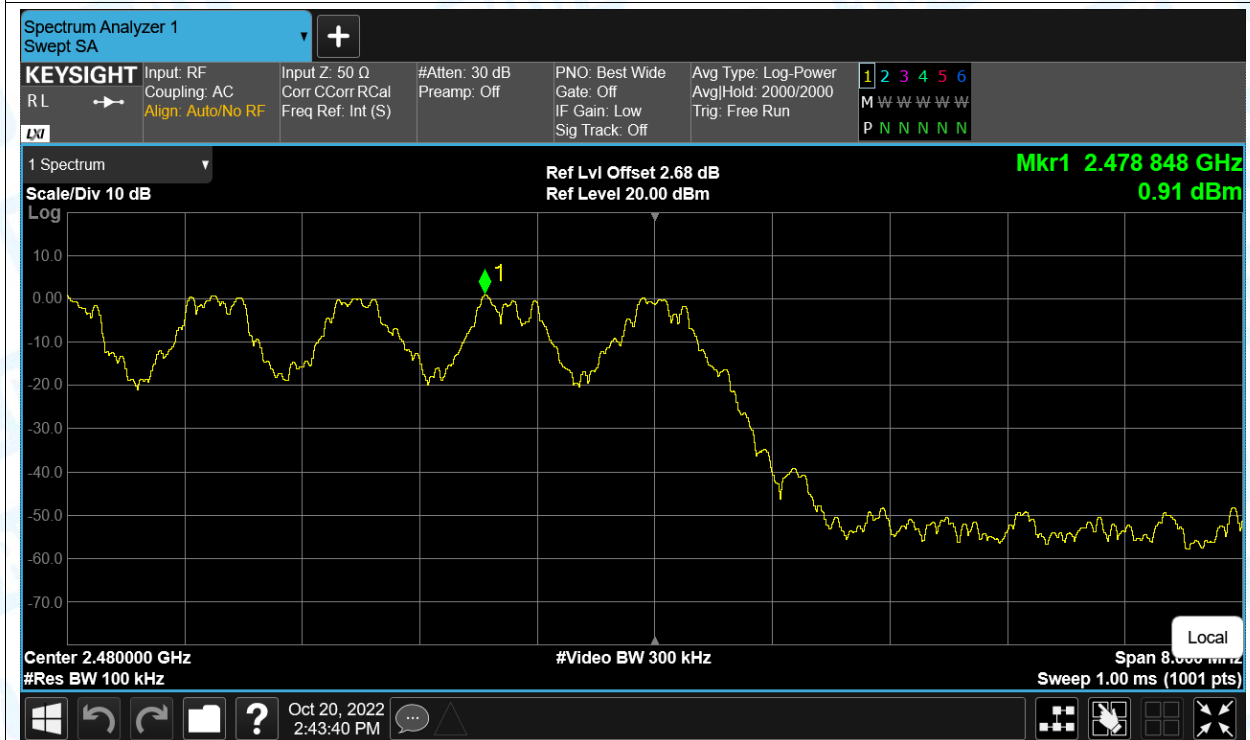
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Ref



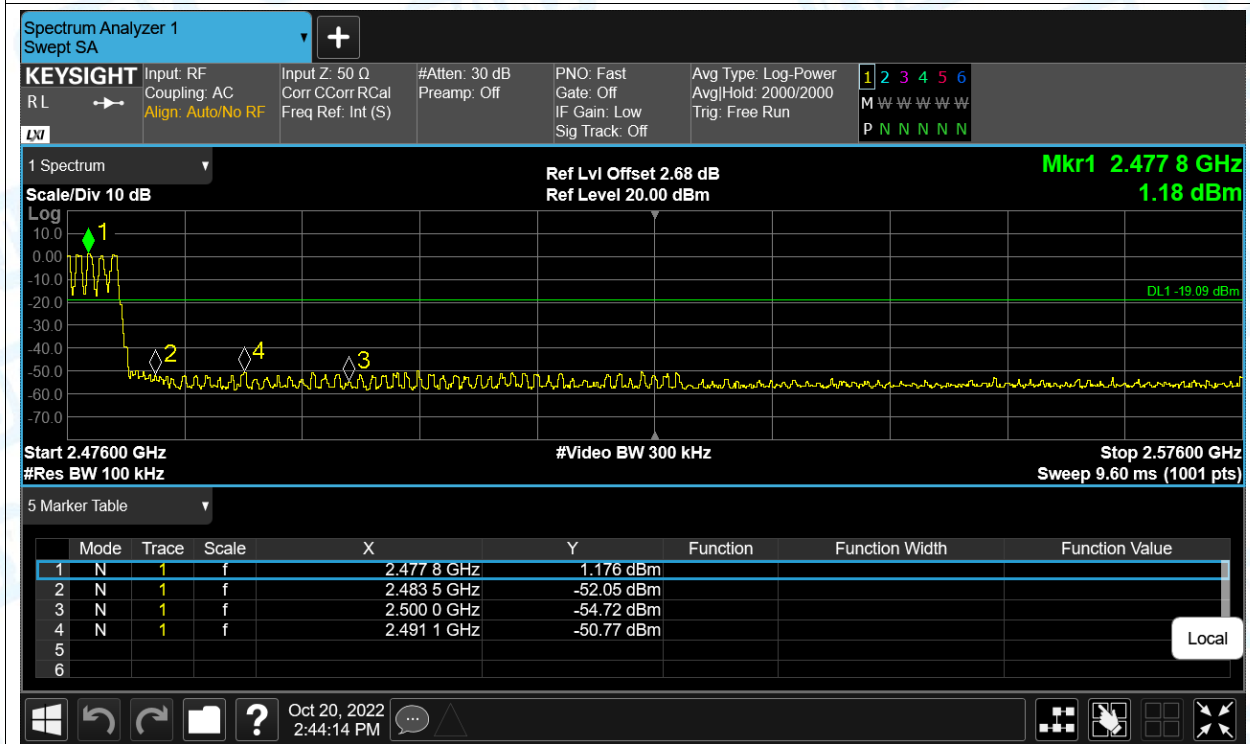
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission

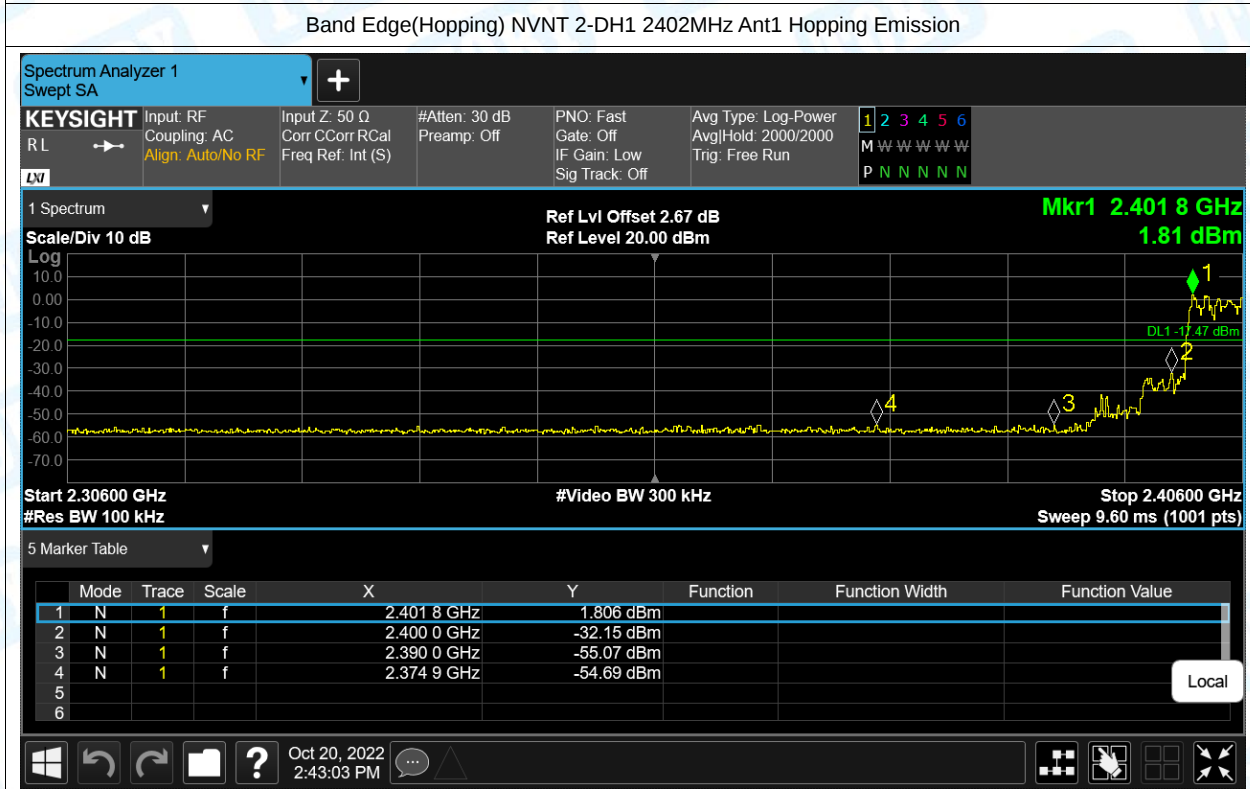
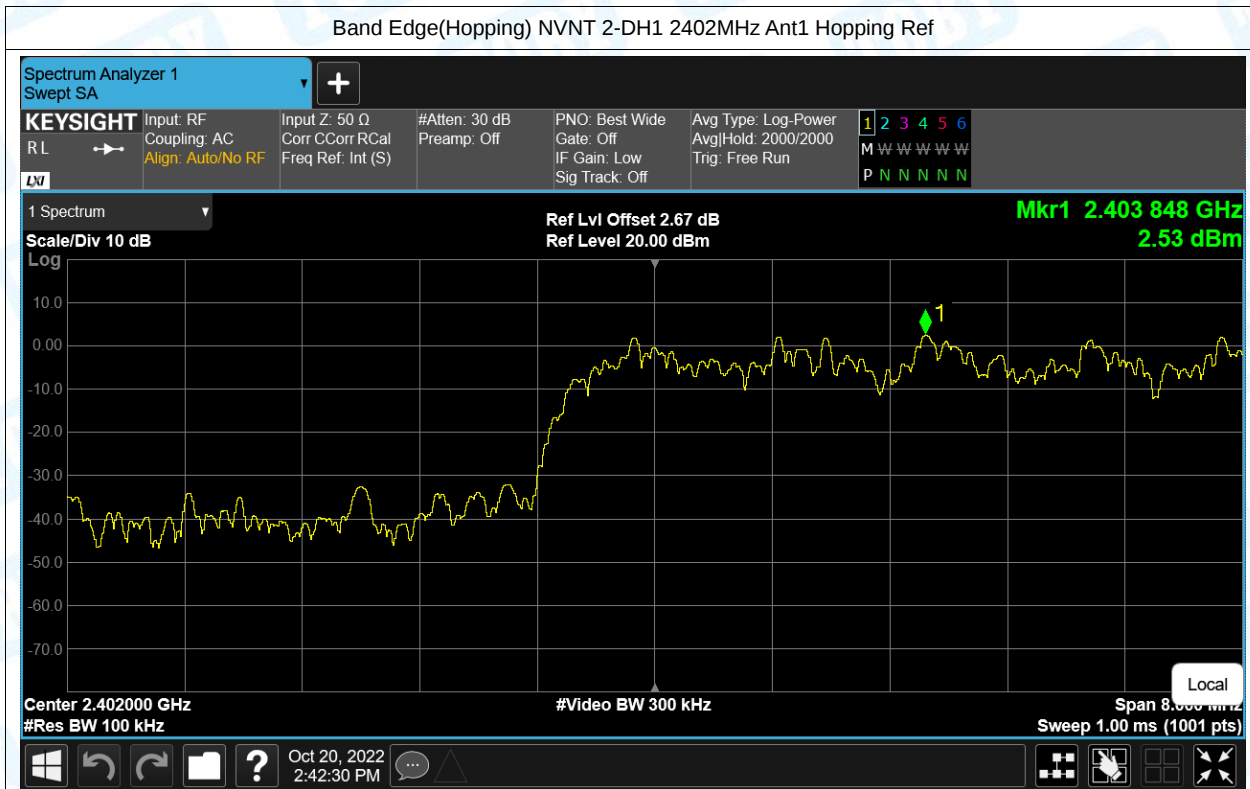


Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission

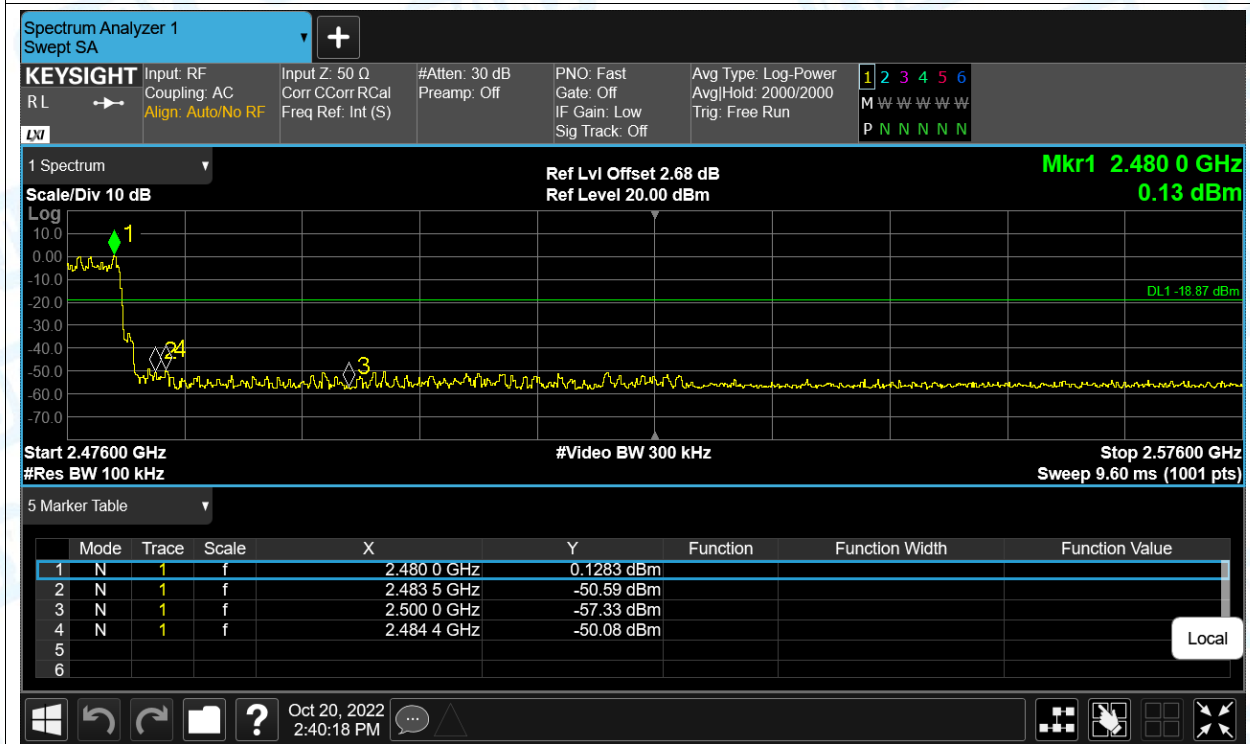




Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Emission

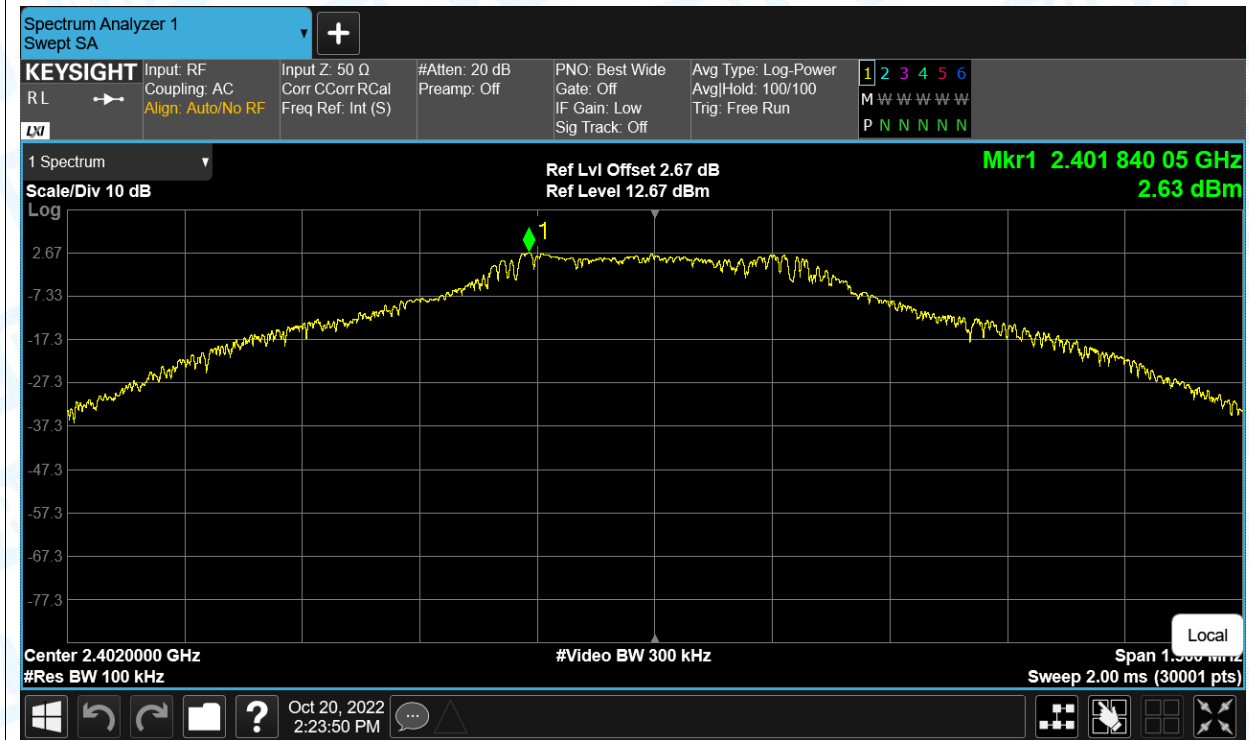


7. Conducted RF Spurious Emission

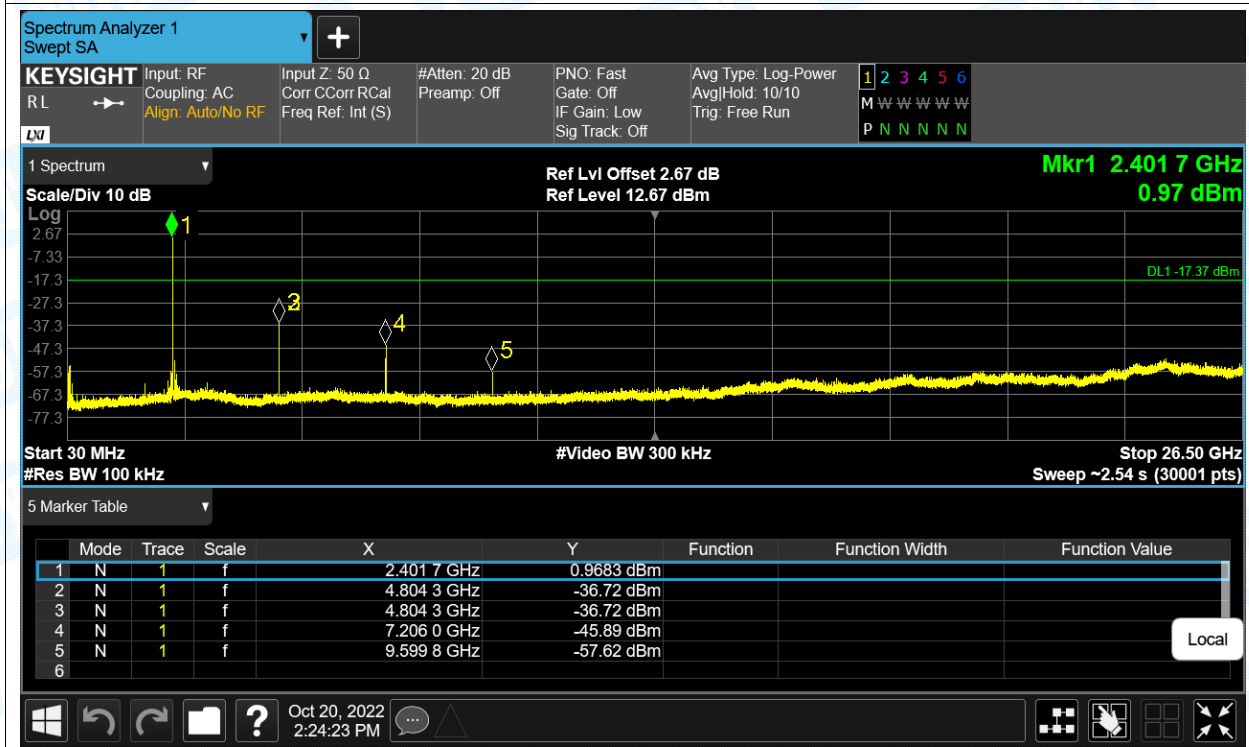
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-39.35	-20	Pass
NVNT	1-DH1	2441	Ant1	-42.53	-20	Pass
NVNT	1-DH1	2480	Ant1	-39.41	-20	Pass
NVNT	2-DH1	2402	Ant1	-41.7	-20	Pass
NVNT	2-DH1	2441	Ant1	-44.57	-20	Pass
NVNT	2-DH1	2480	Ant1	-44.71	-20	Pass

Test Graphs

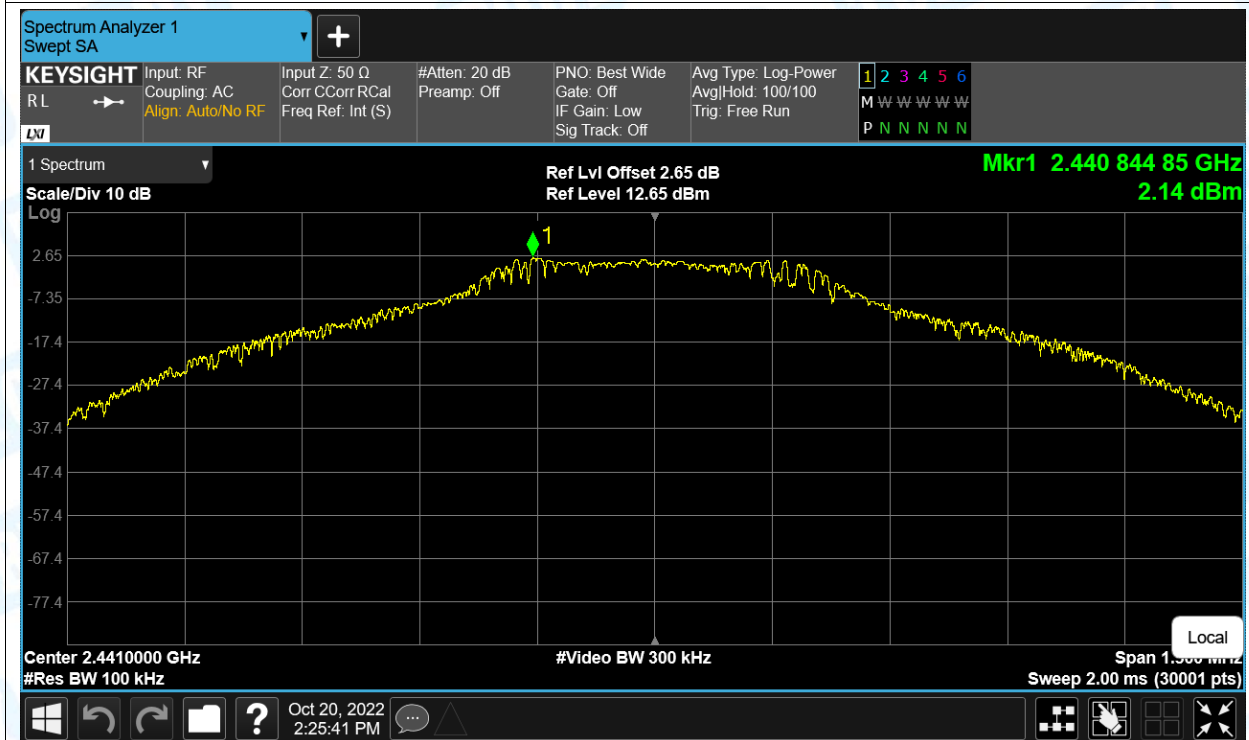
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



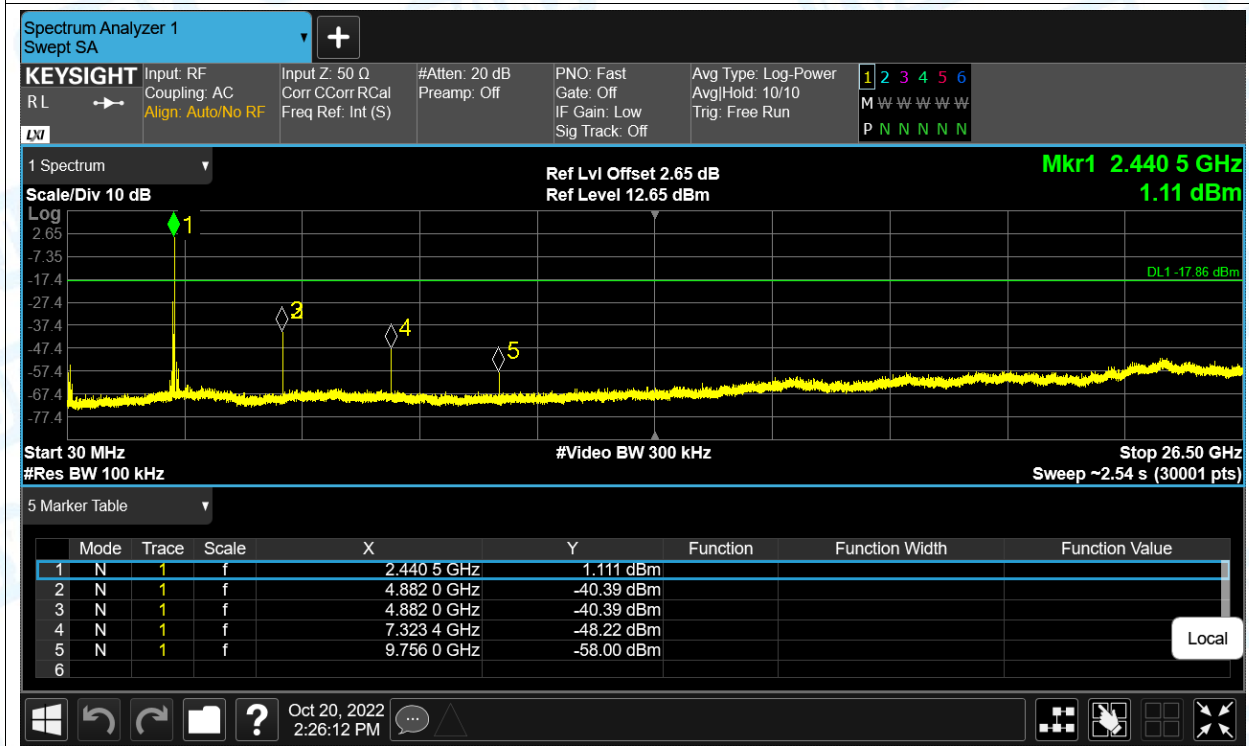
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



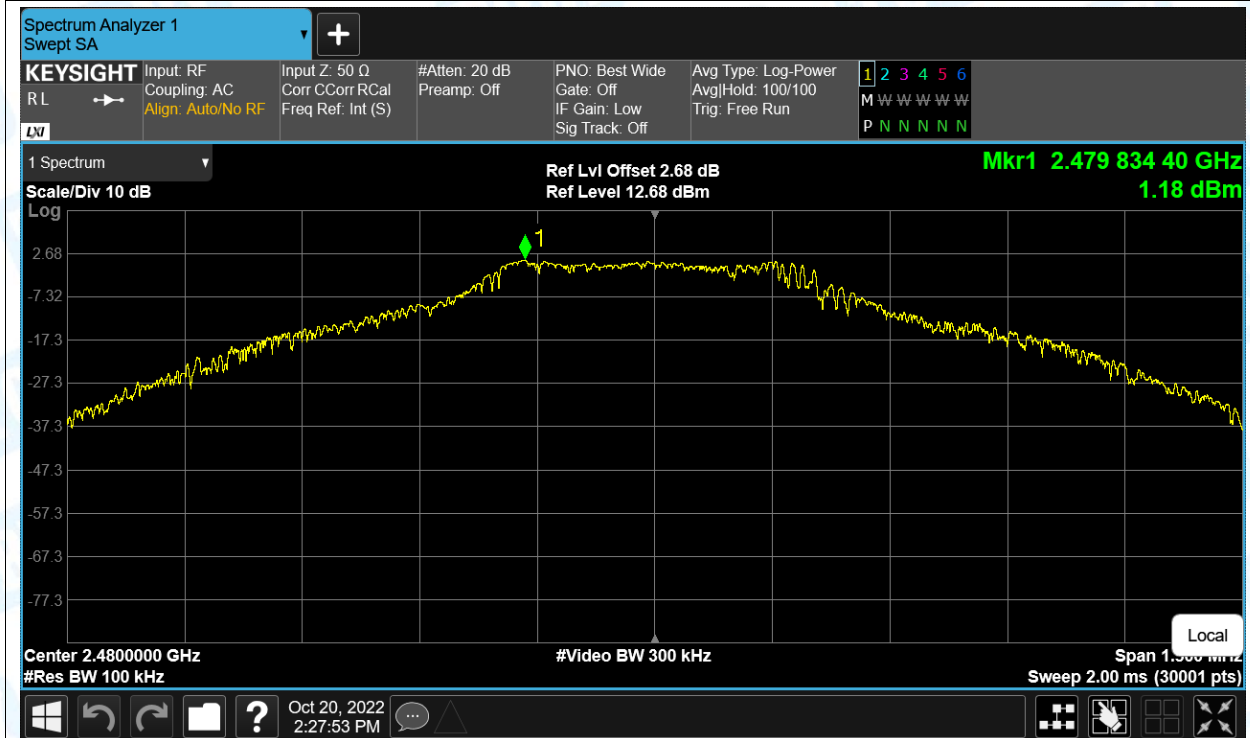
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



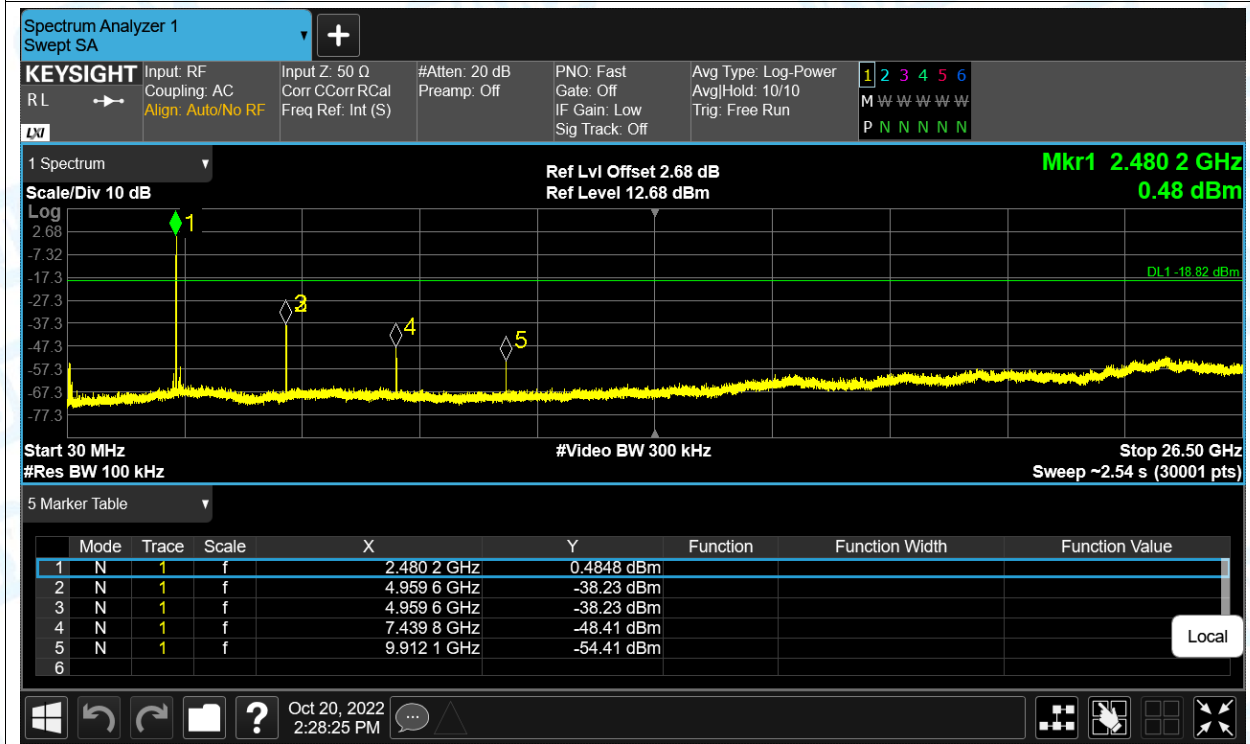
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



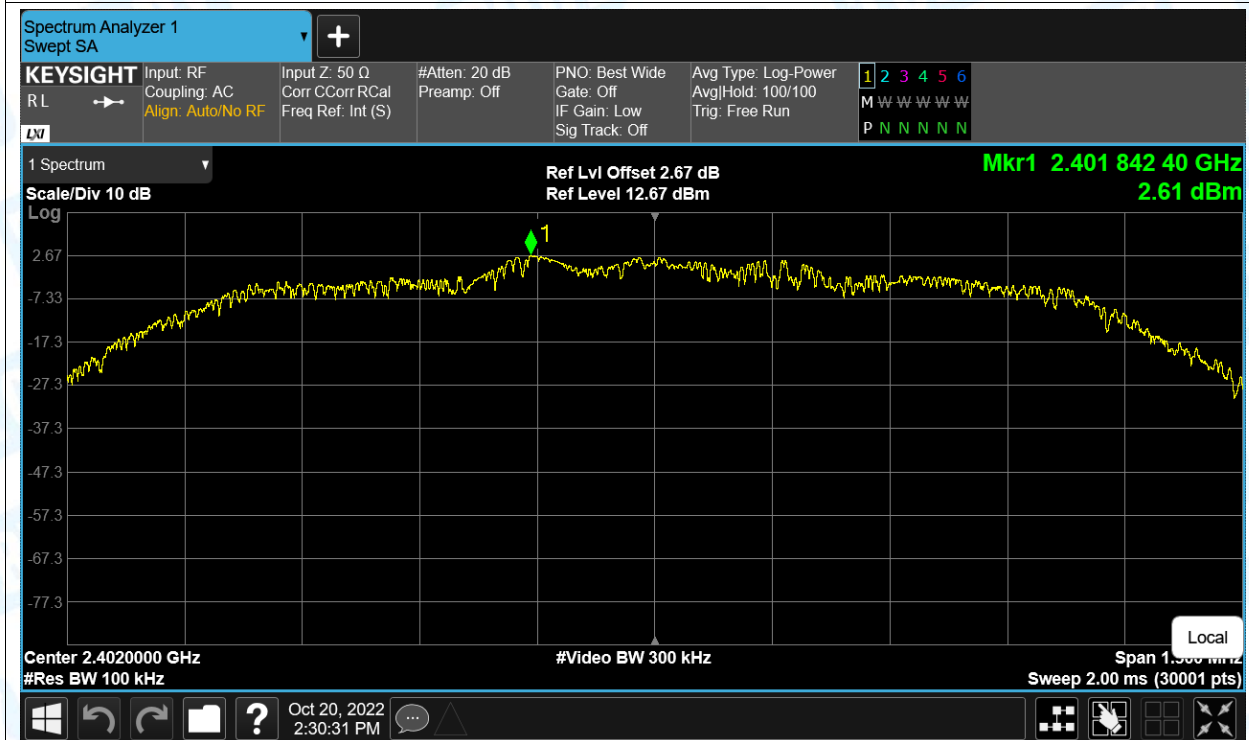
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



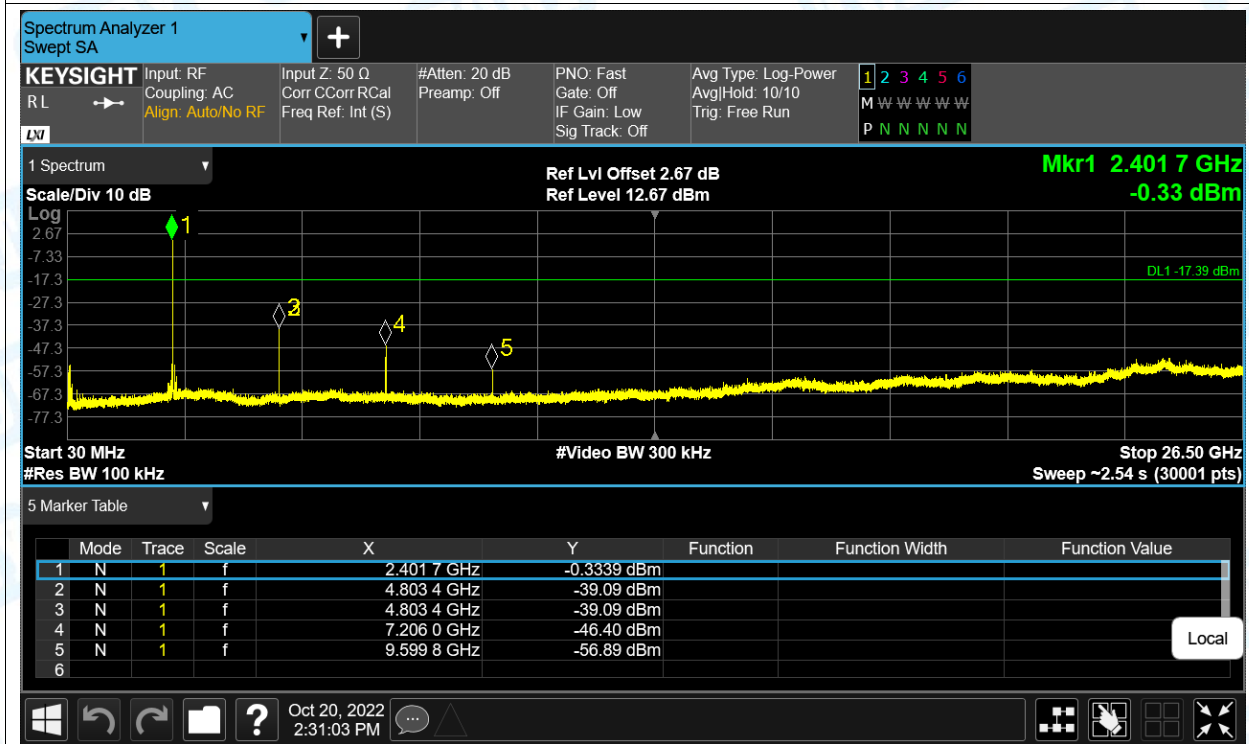
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



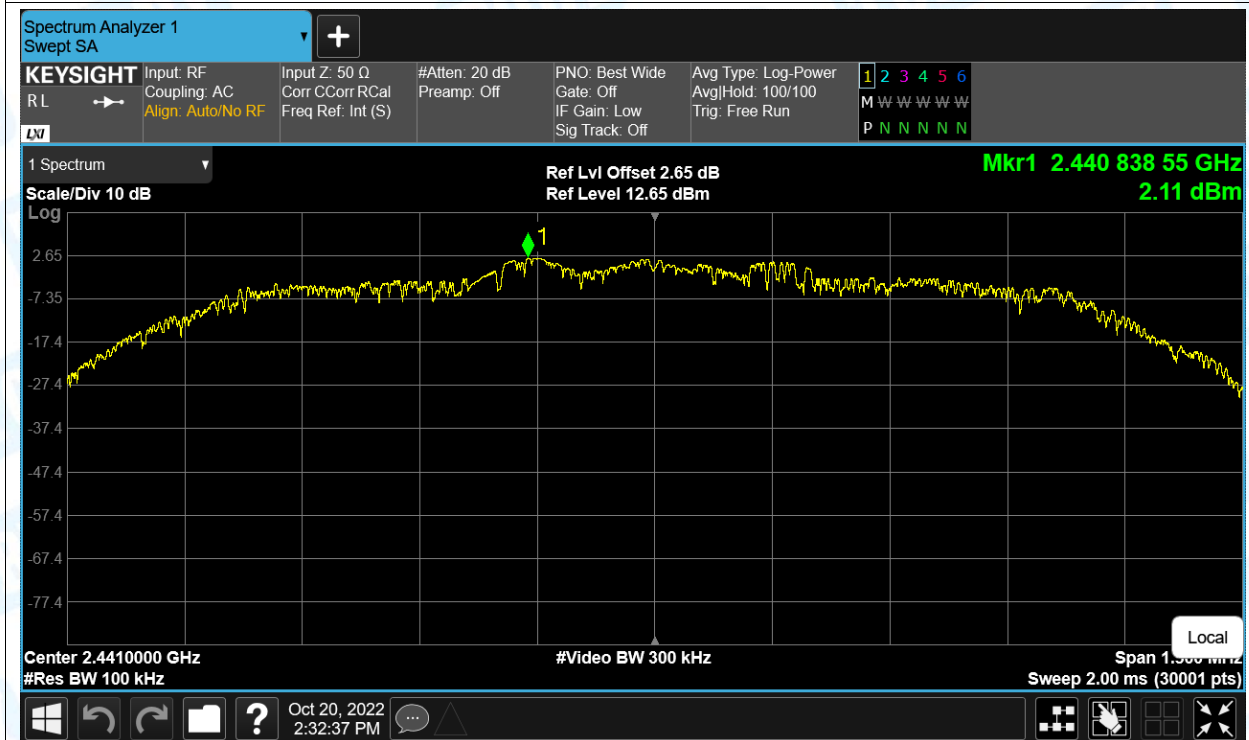
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



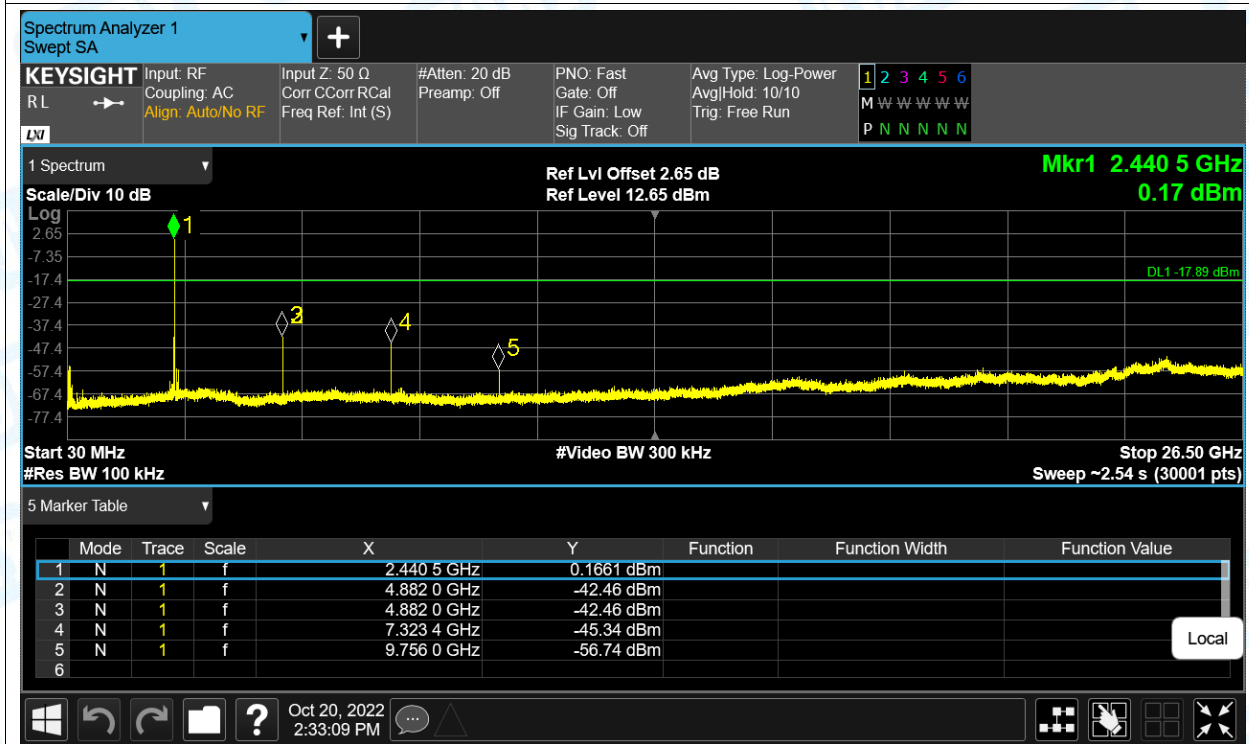
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



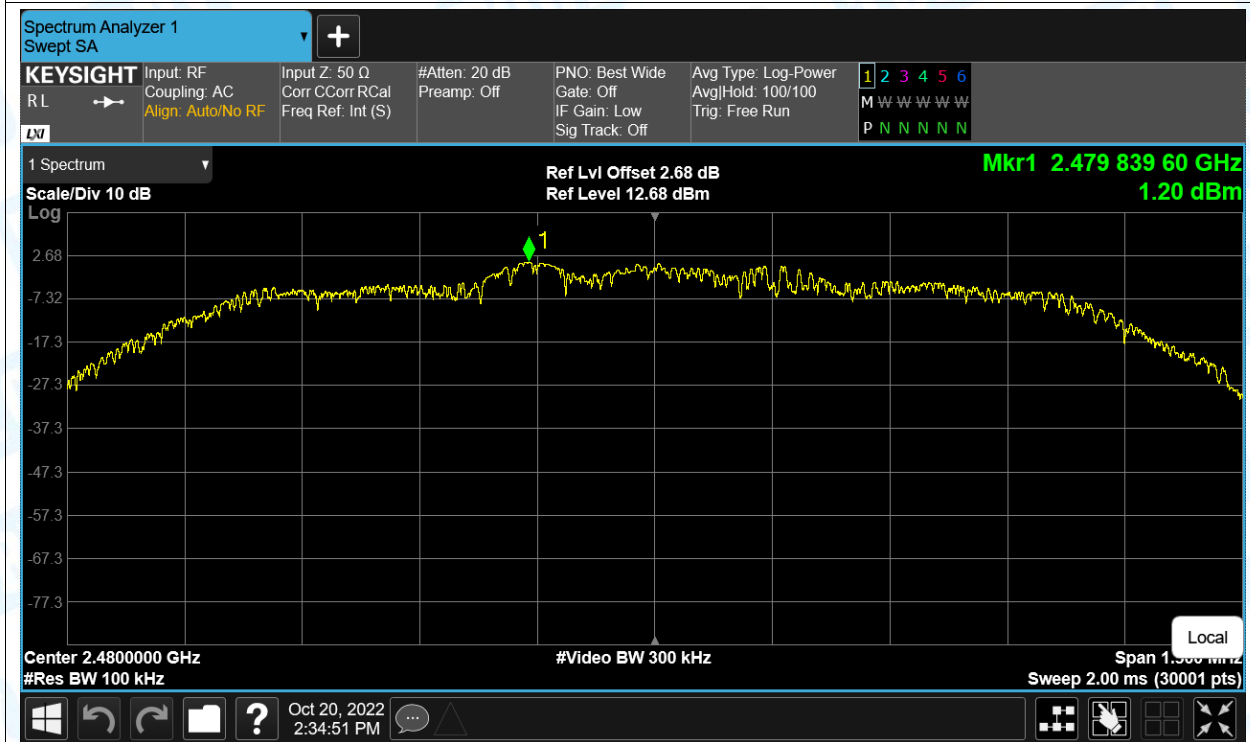
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



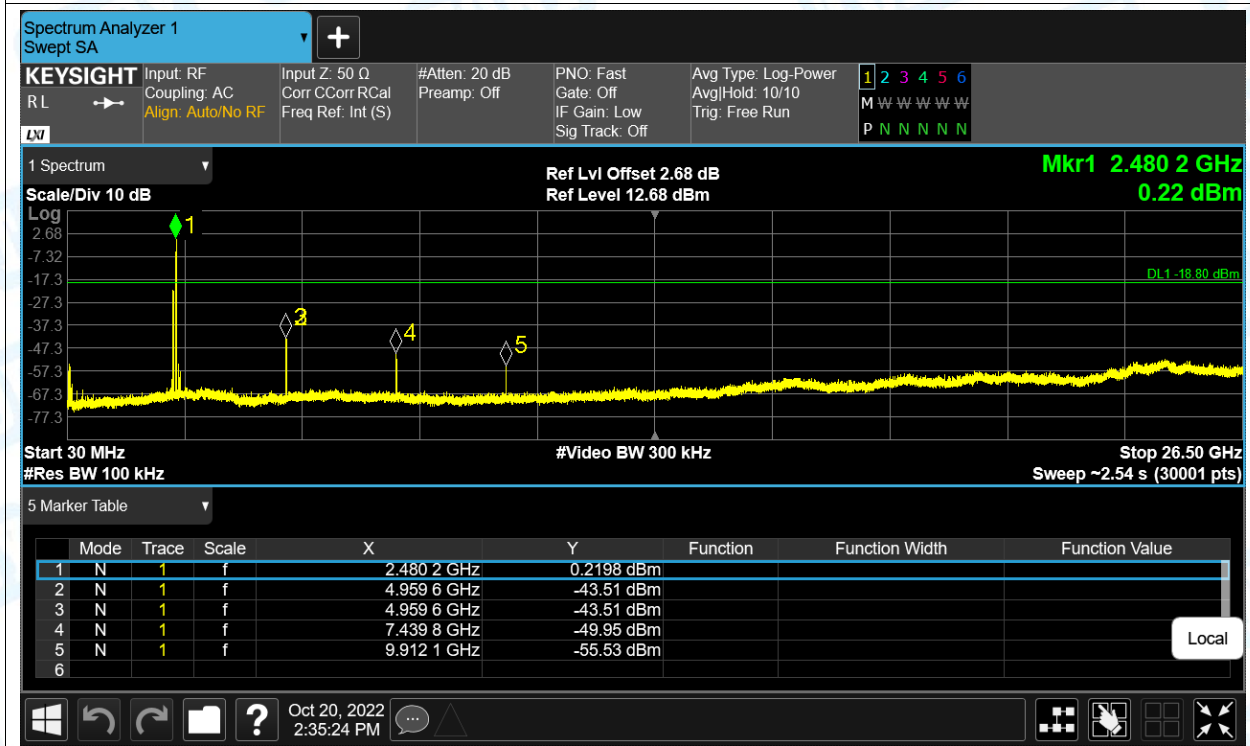
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission

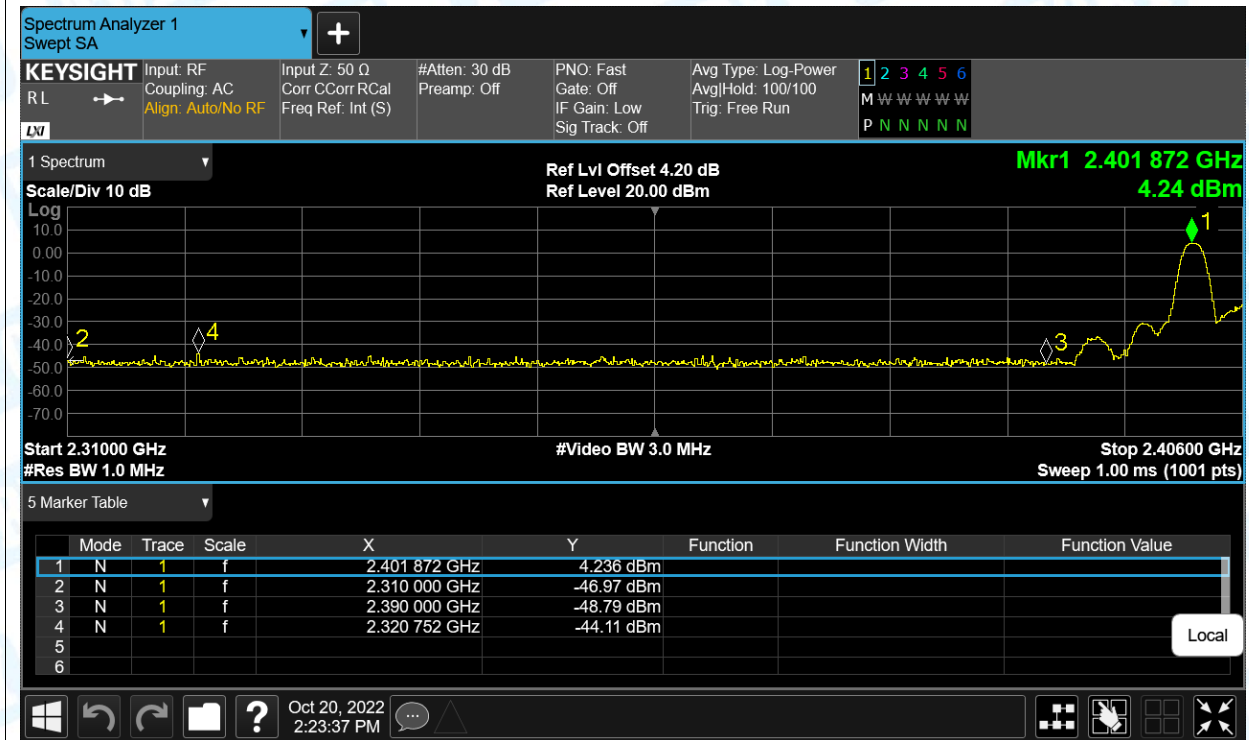


8. Restrict Band

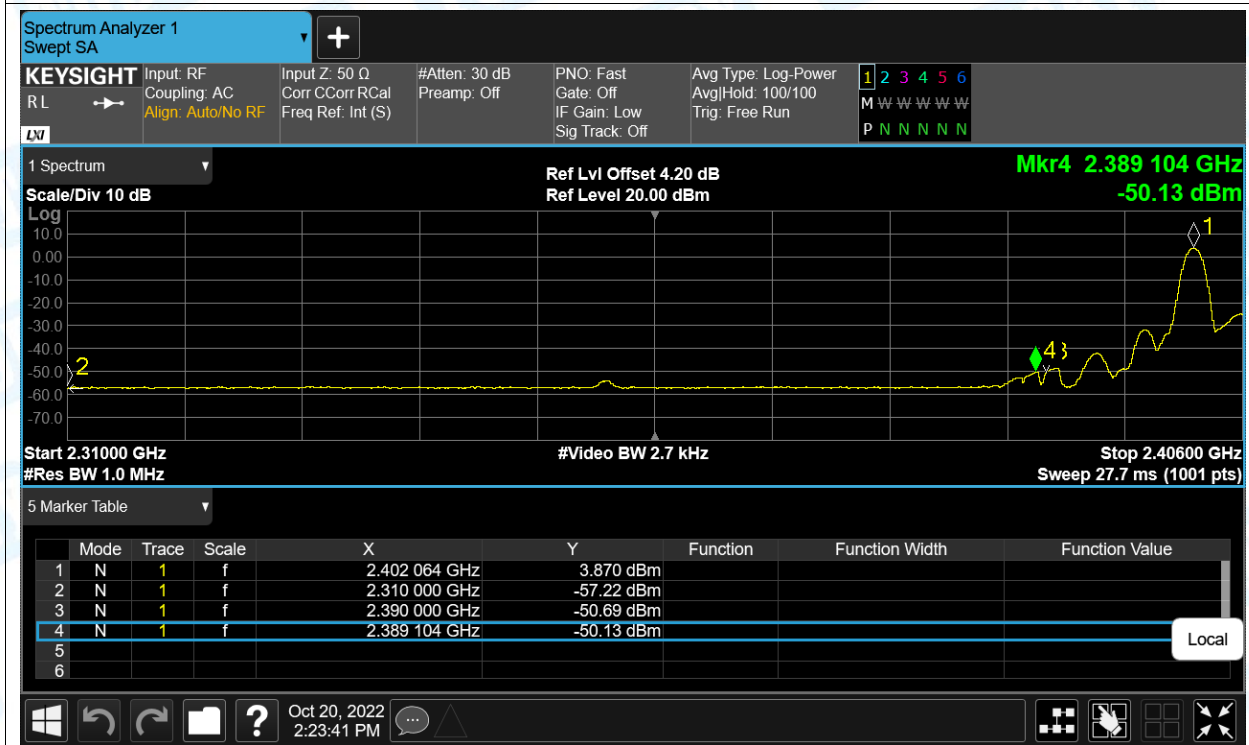
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-46.97	2	50.29	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-57.22	2	40.04	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2320.752	-44.11	2	53.15	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2389.104	-50.13	2	47.13	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-48.03	2	49.23	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-50	2	47.26	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-40.06	2	57.2	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-48.02	2	49.24	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.536	-39.83	2	57.43	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2484.064	-46.91	2	50.35	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-48.13	2	49.13	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-56.54	2	40.72	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-45.82	2	51.44	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-57.11	2	40.15	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2389.584	-43.8	2	53.46	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2388.144	-53.09	2	44.17	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-45.49	2	51.77	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-56.76	2	40.5	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-42.11	2	55.15	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-48.83	2	48.43	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.56	-39.69	2	57.57	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.752	-48.1	2	49.16	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-48.48	2	48.78	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-56.85	2	40.41	Average	54	Pass

Test Graphs

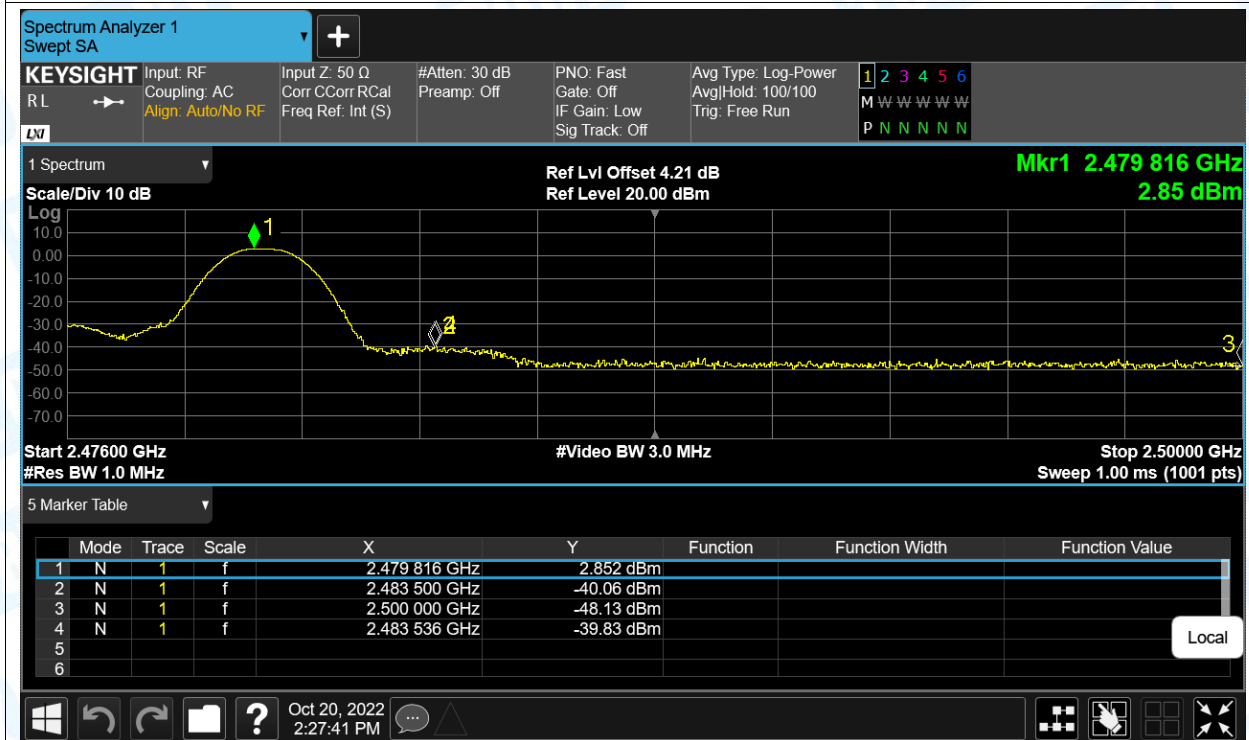
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



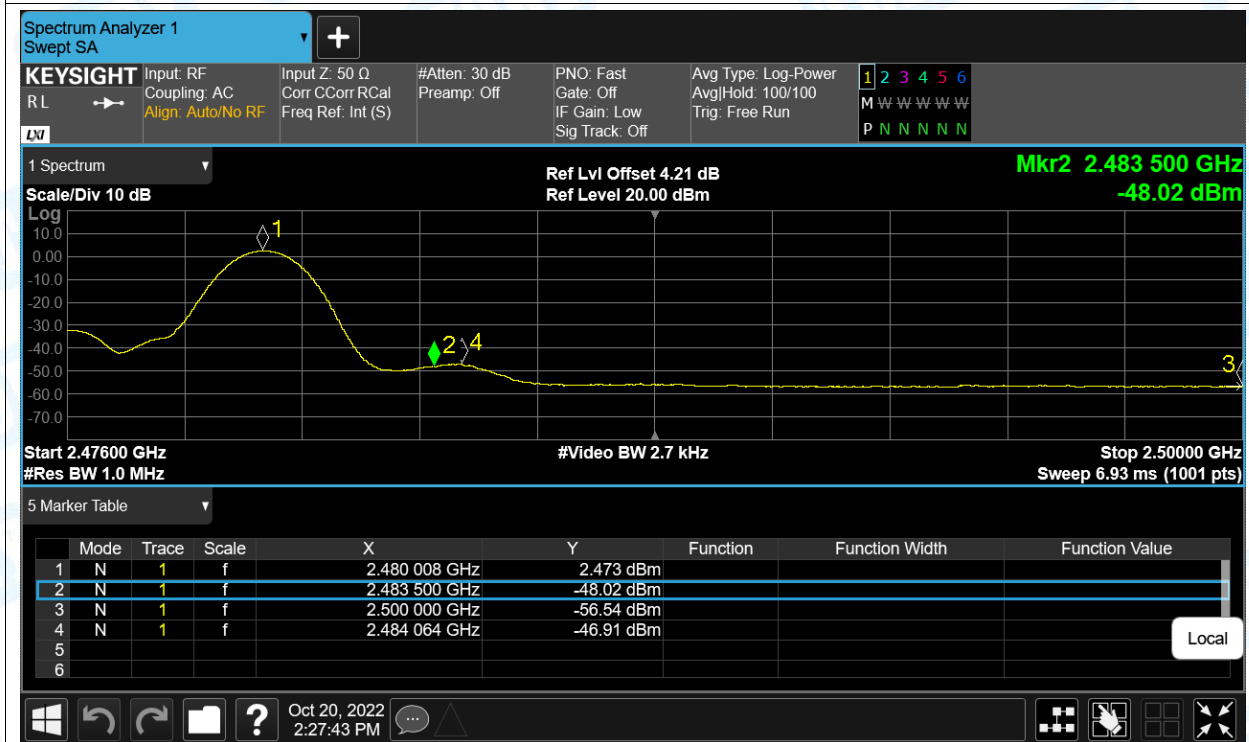
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



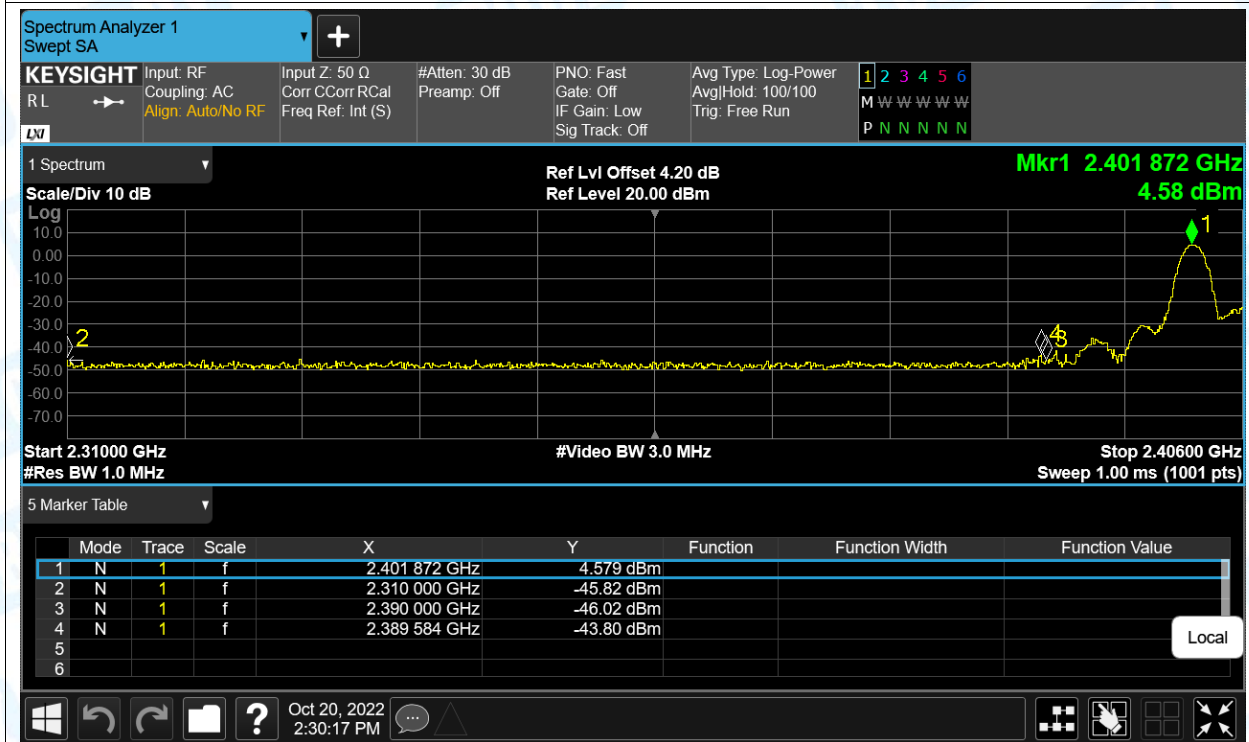
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



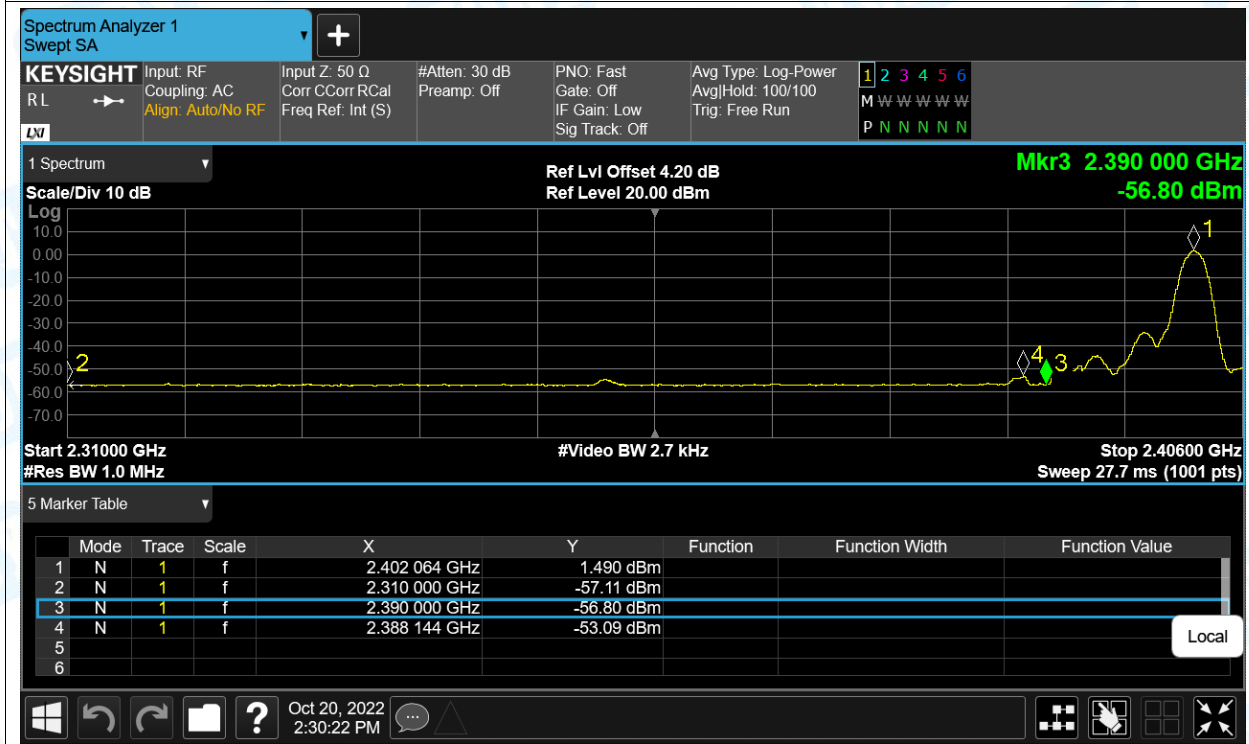
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



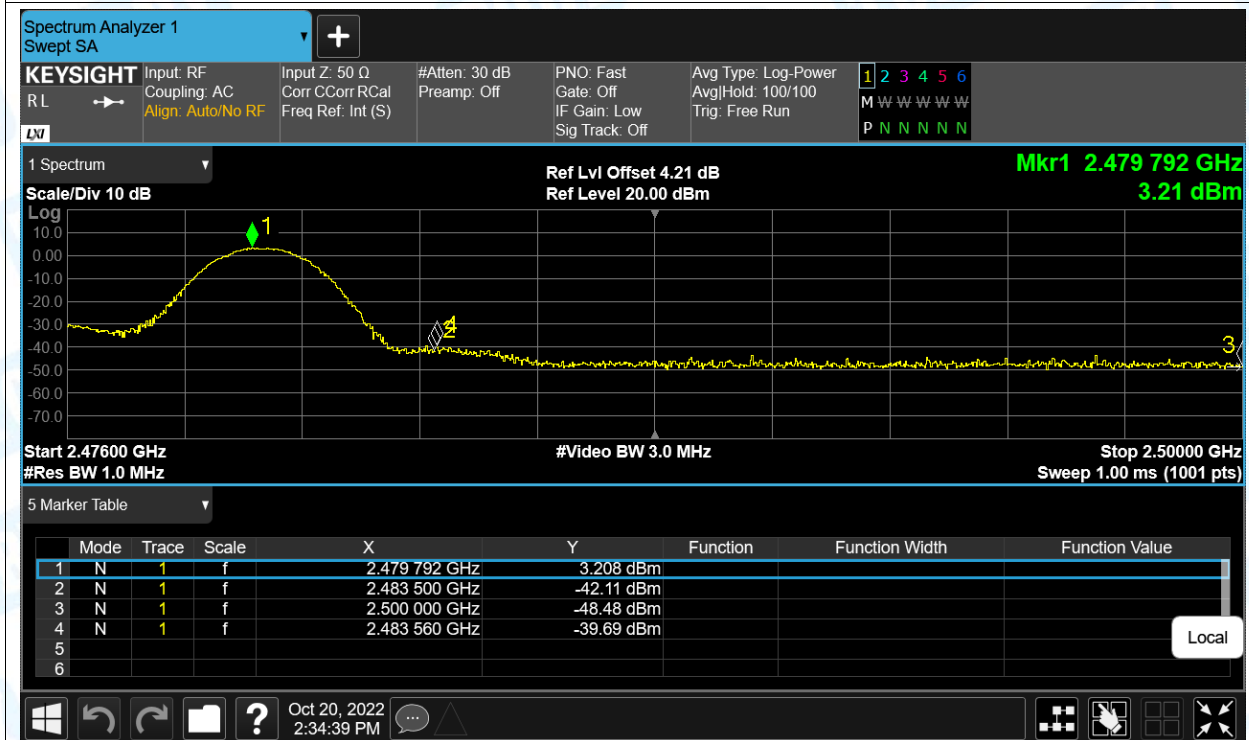
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



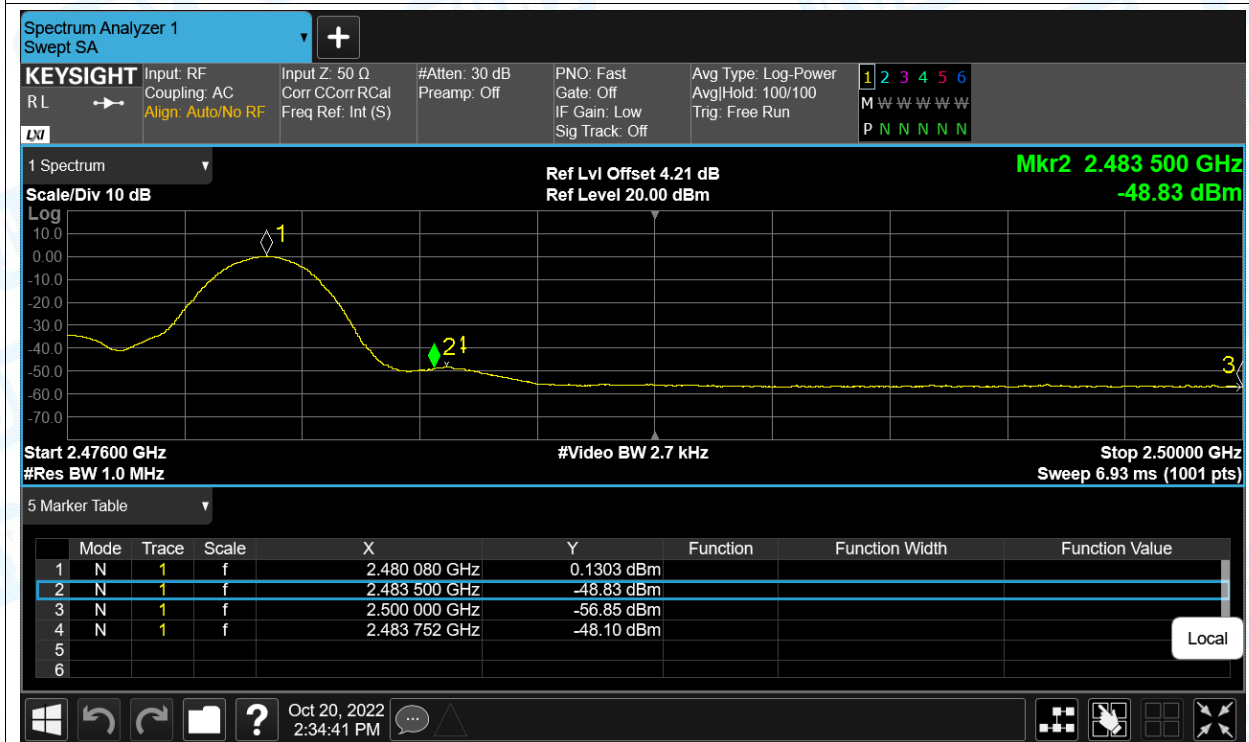
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average

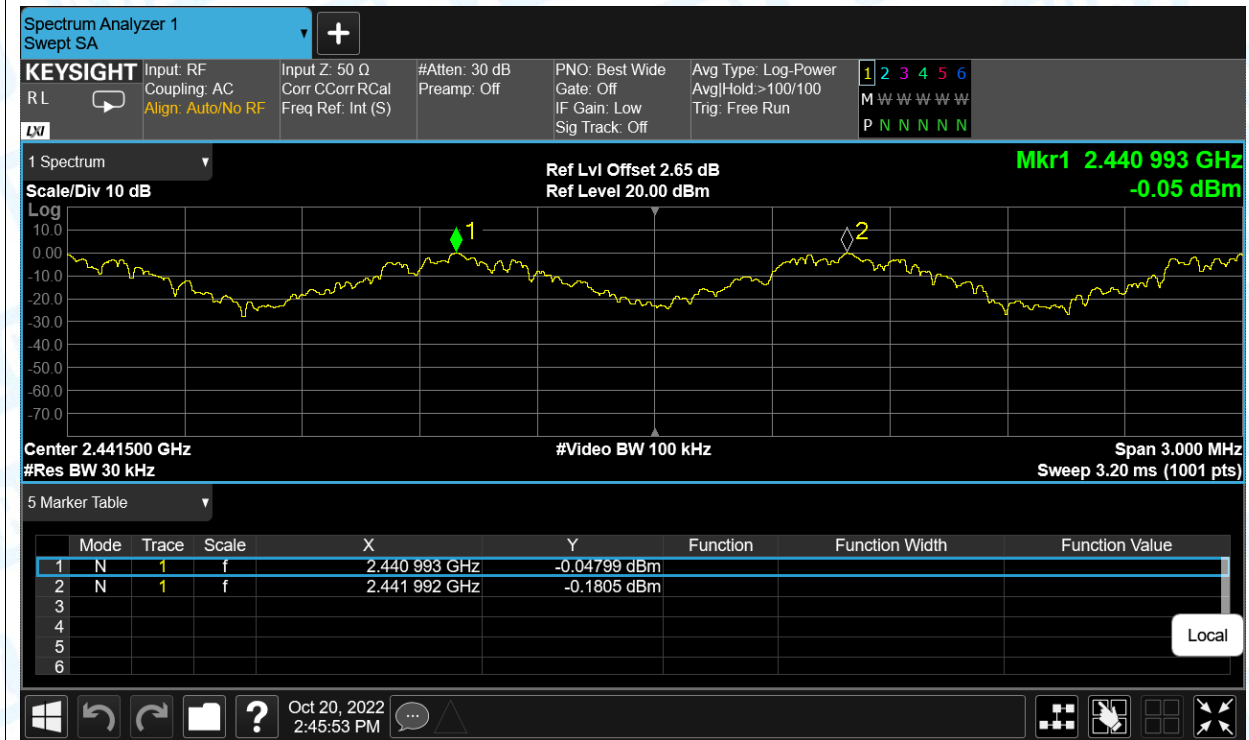


9. Carrier Frequencies Separation

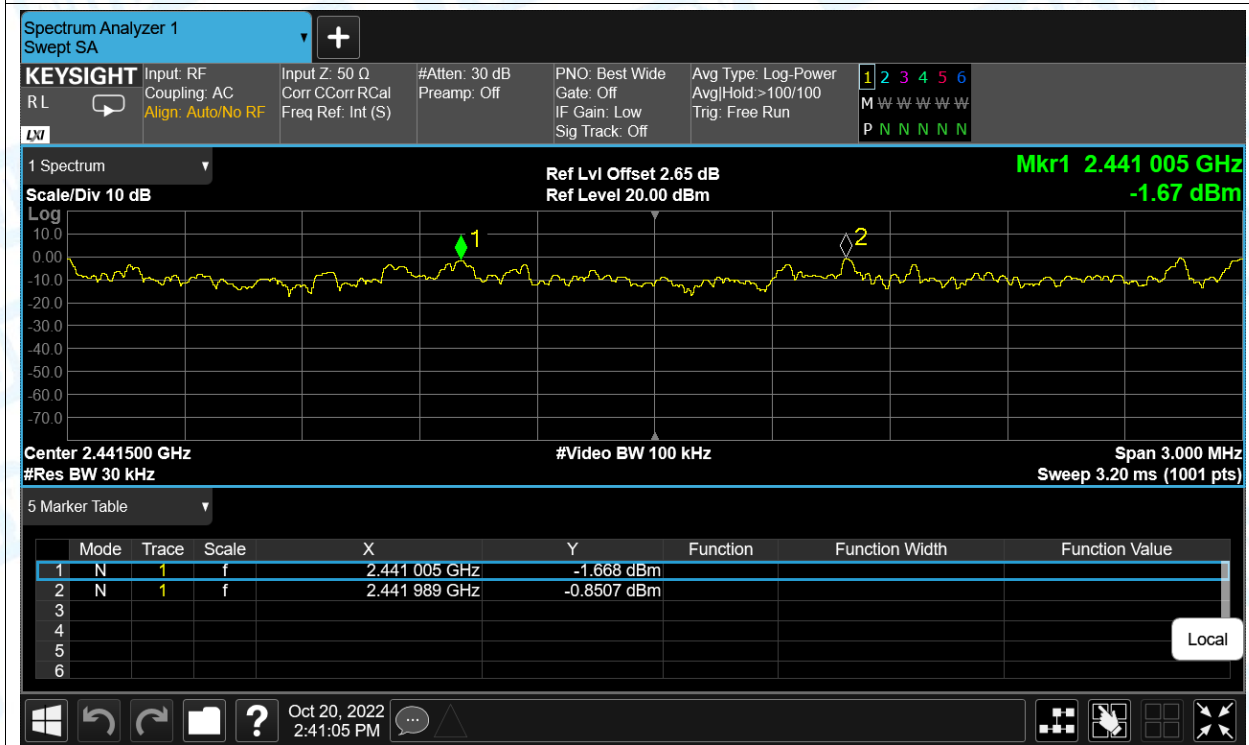
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.993	2441.992	0.999	0.587	Pass
NVNT	2-DH1	Ant1	2441.005	2441.989	0.984	0.853	Pass

Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1

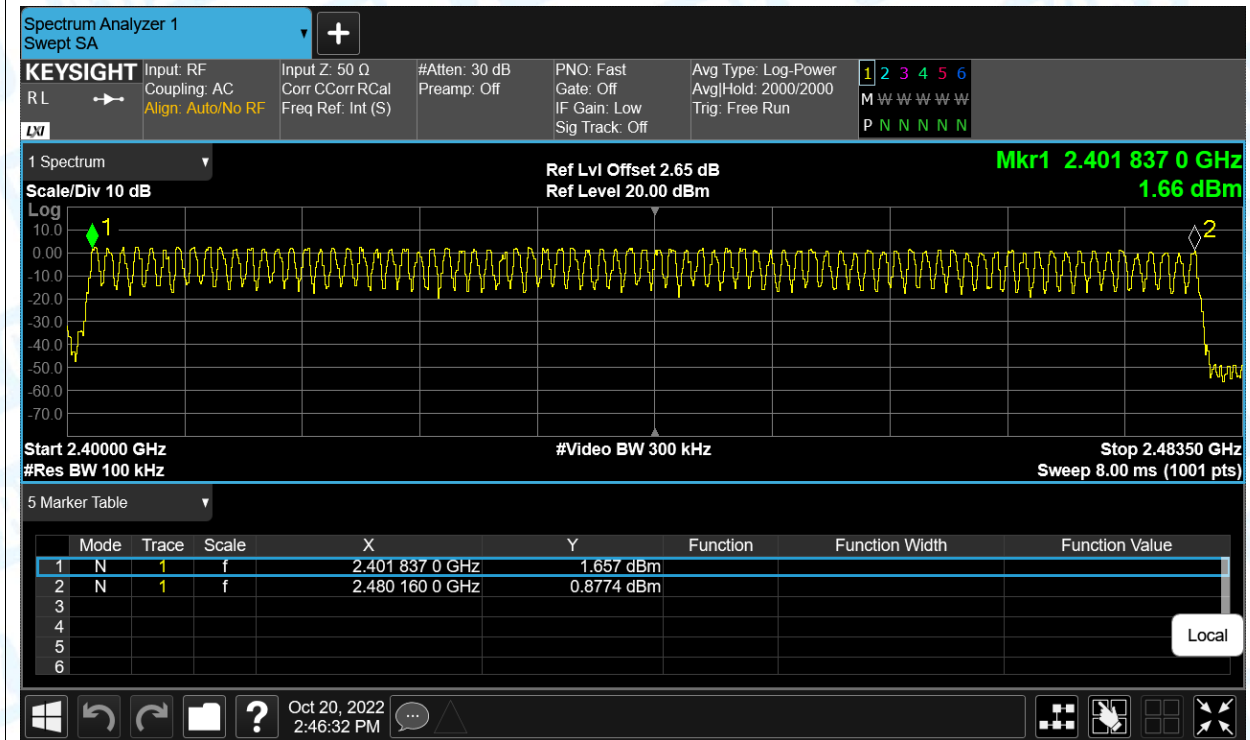


10. Number of Hopping Channel

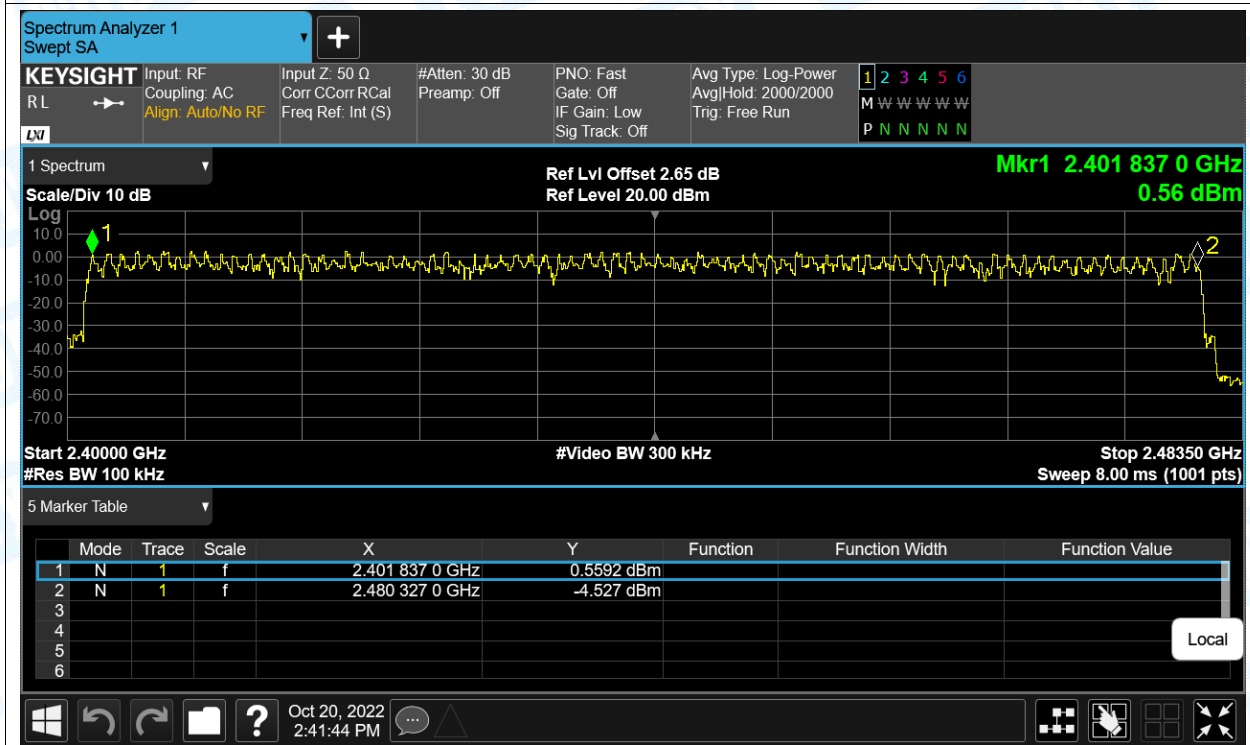
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass

Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1

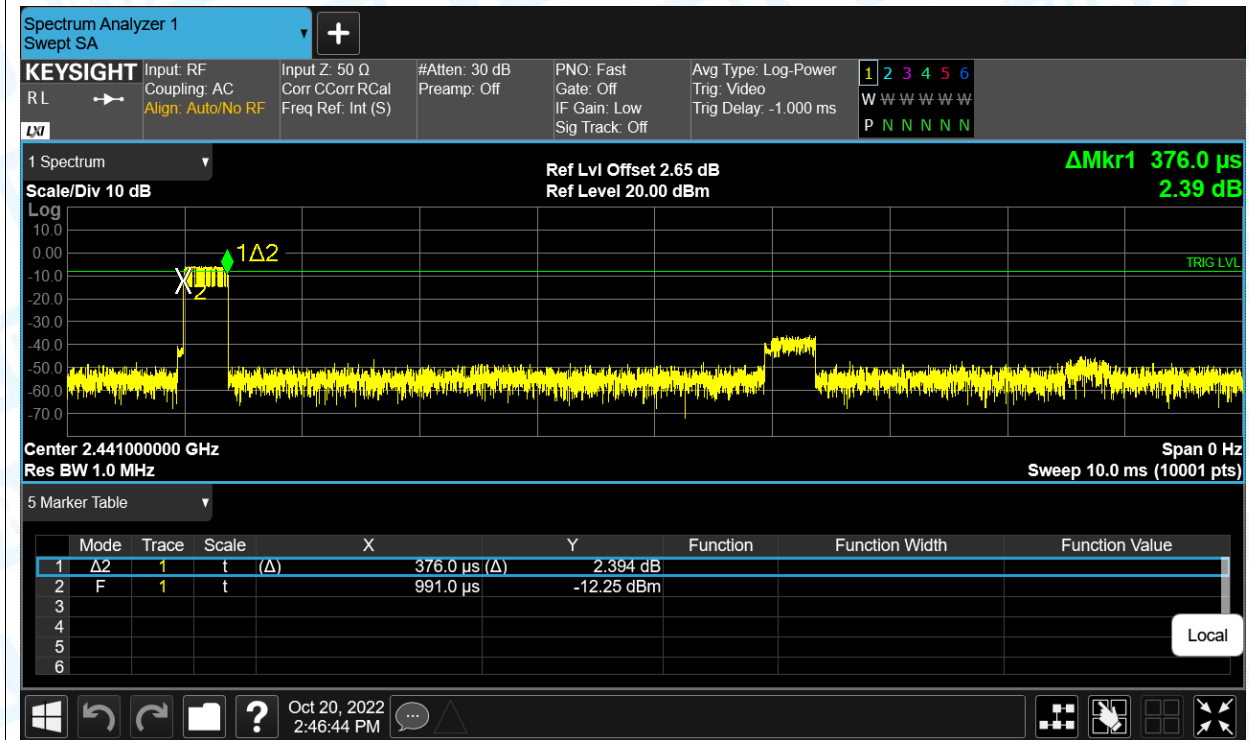


11. Dwell Time

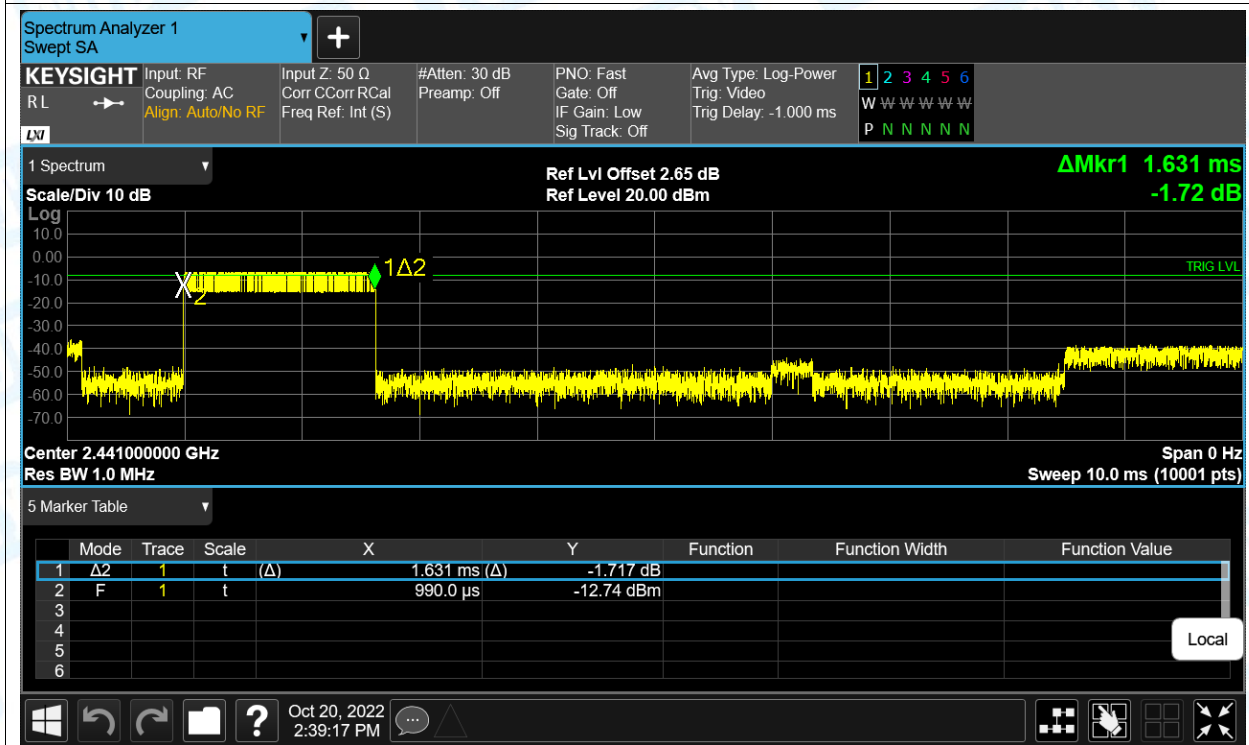
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.376	120.32	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.631	260.96	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.879	307.093	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.386	123.52	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.639	262.24	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.88	307.2	31600	400	Pass

Test Graphs

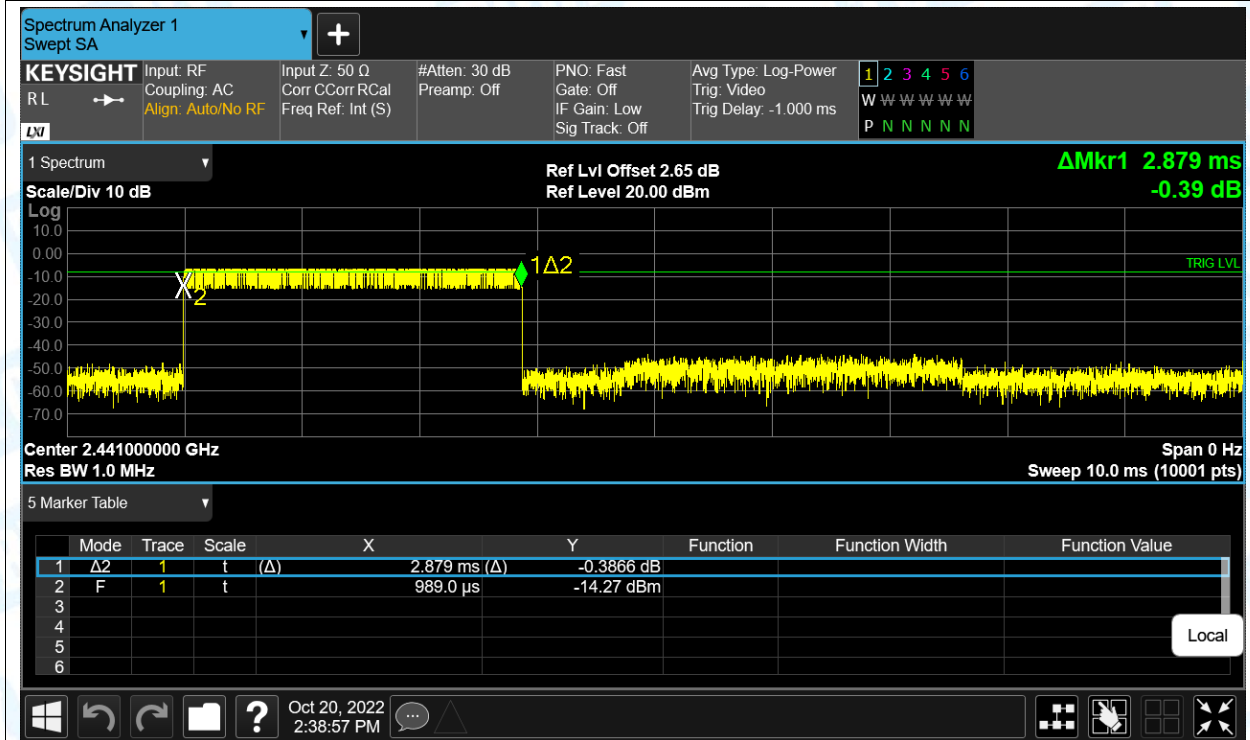
Dwell NVNT 1-DH1 2441MHz Ant1



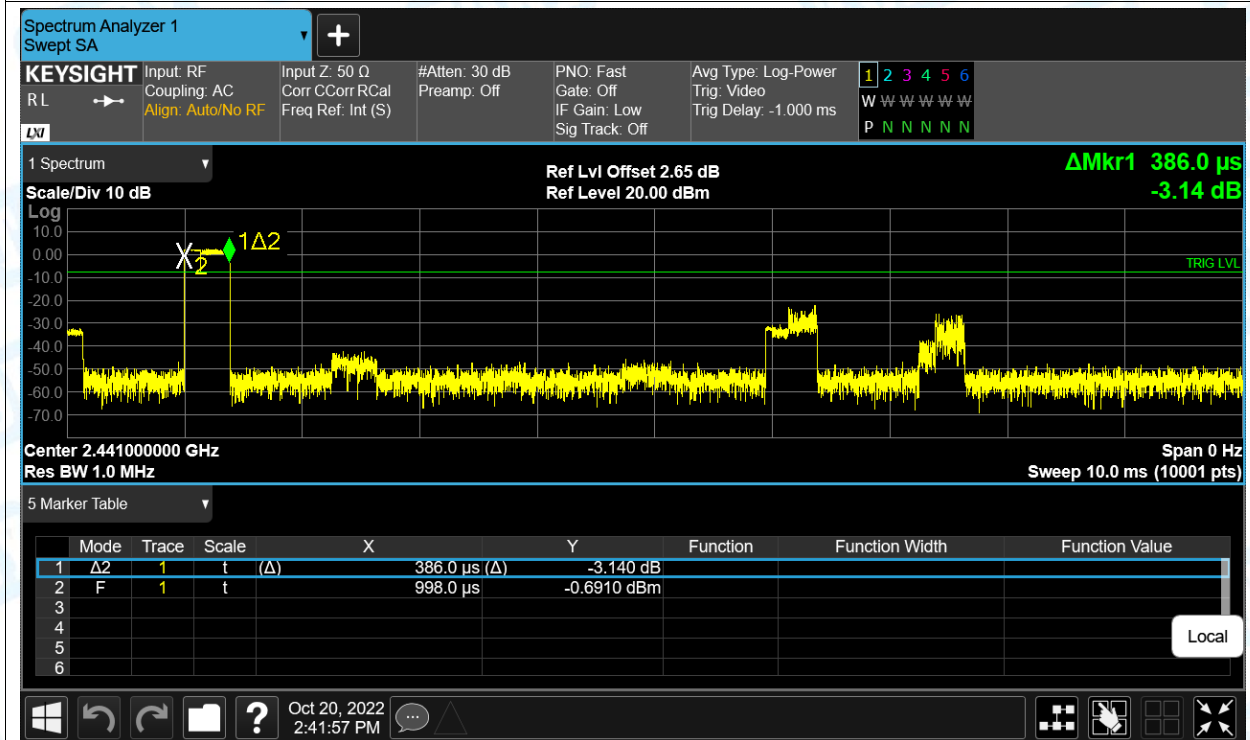
Dwell NVNT 1-DH3 2441MHz Ant1

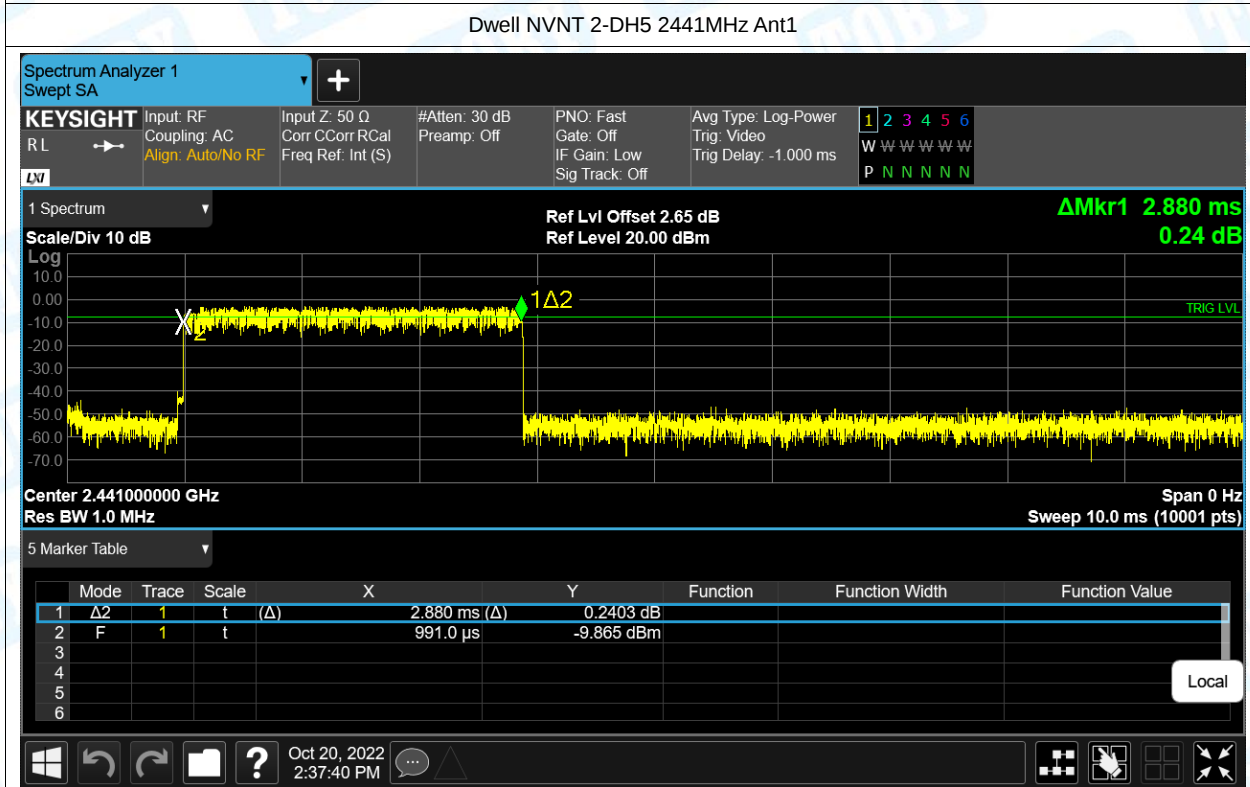
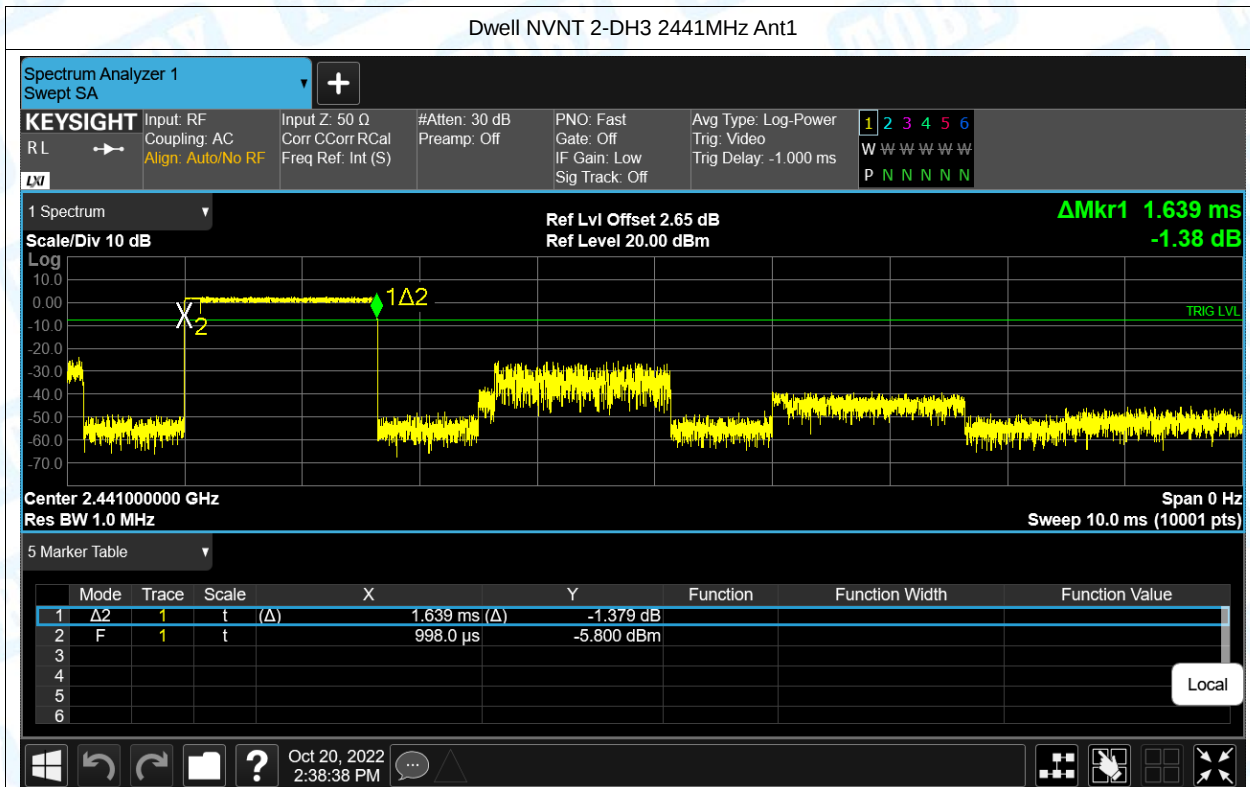


Dwell NVNT 1-DH5 2441MHz Ant1



Dwell NVNT 2-DH1 2441MHz Ant1





-----END OF THE REPORT-----