

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

General Description of EUT	
Product Name:	RUN2
Test Model:	RUN2
Sample ID:	202210-0063-3-2#
Environmental Conditions	
Temperature:	25°C
Relative Humidity:	55%
Test Voltage:	DC 3.7V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202210-0063-13	

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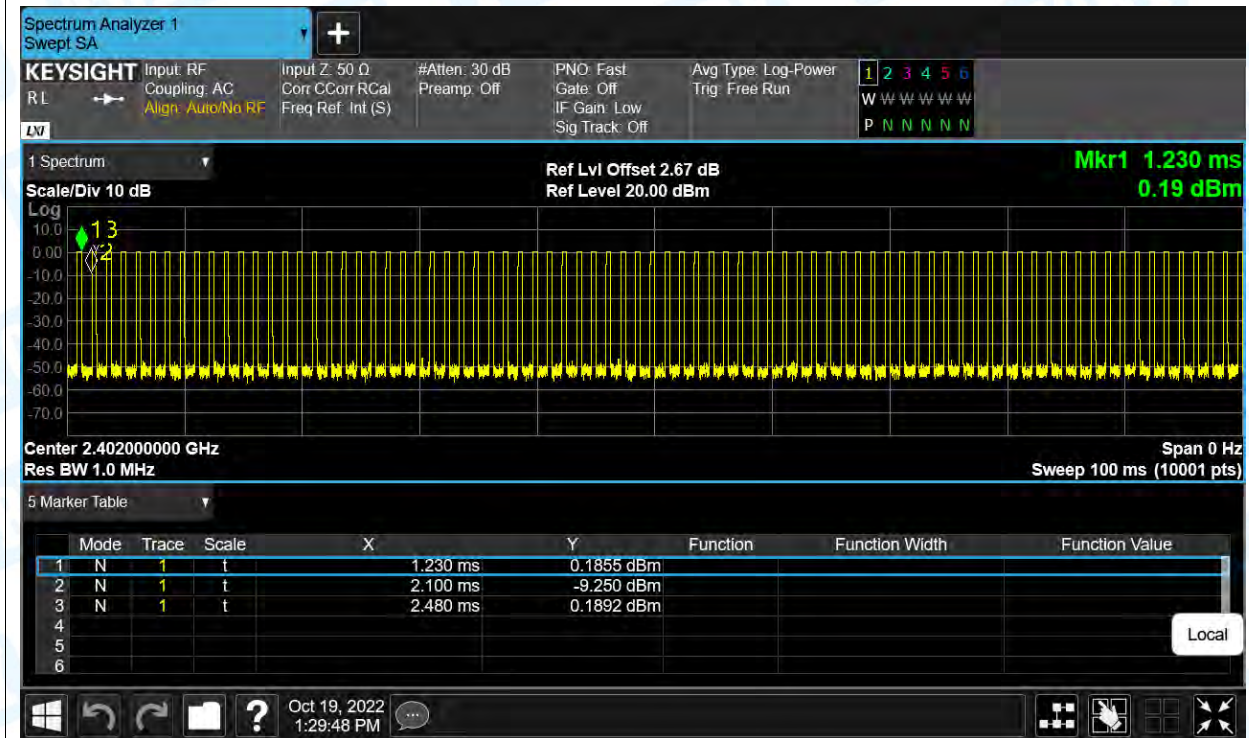
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1. Duty Cycle

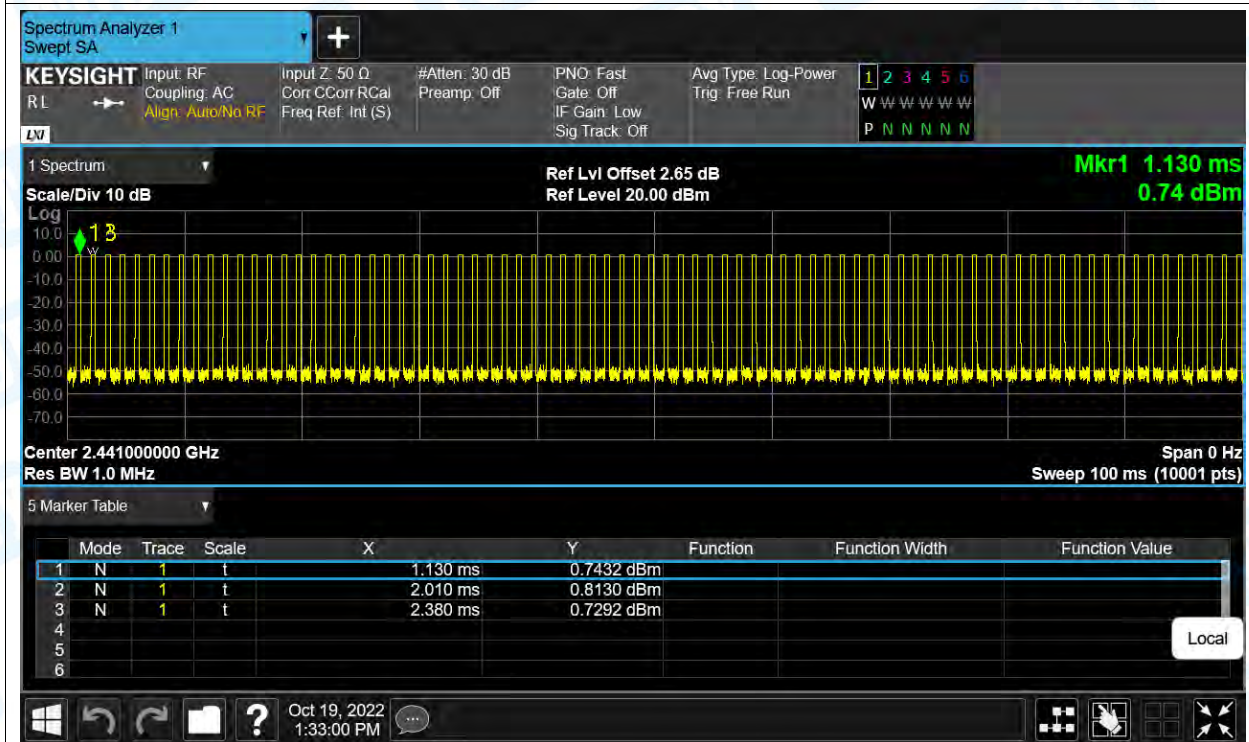
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2441	Ant1	29.6	5.29	2.7
NVNT	1-DH1	2480	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2441	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2480	Ant1	31.2	5.06	2.56
NVNT	3-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	3-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	3-DH1	2480	Ant1	31.2	5.06	2.56

Test Graphs

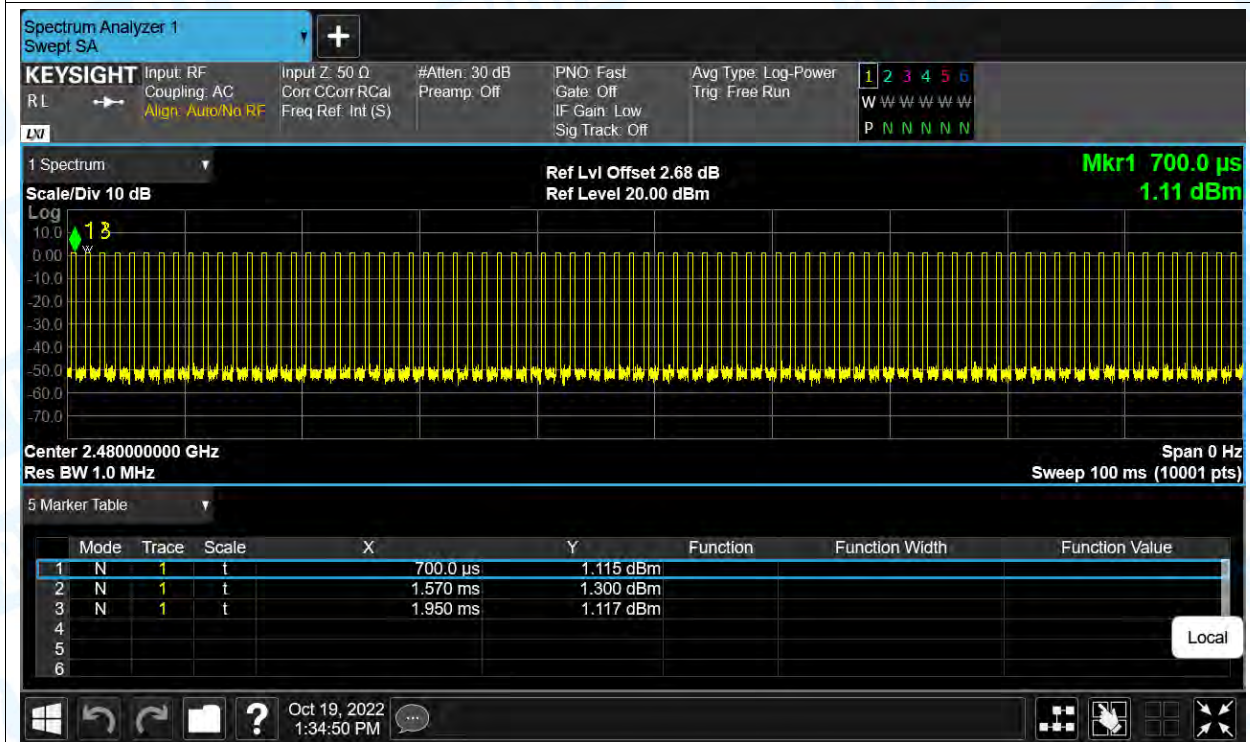
Duty Cycle NVNT 1-DH1 2402MHz Ant1



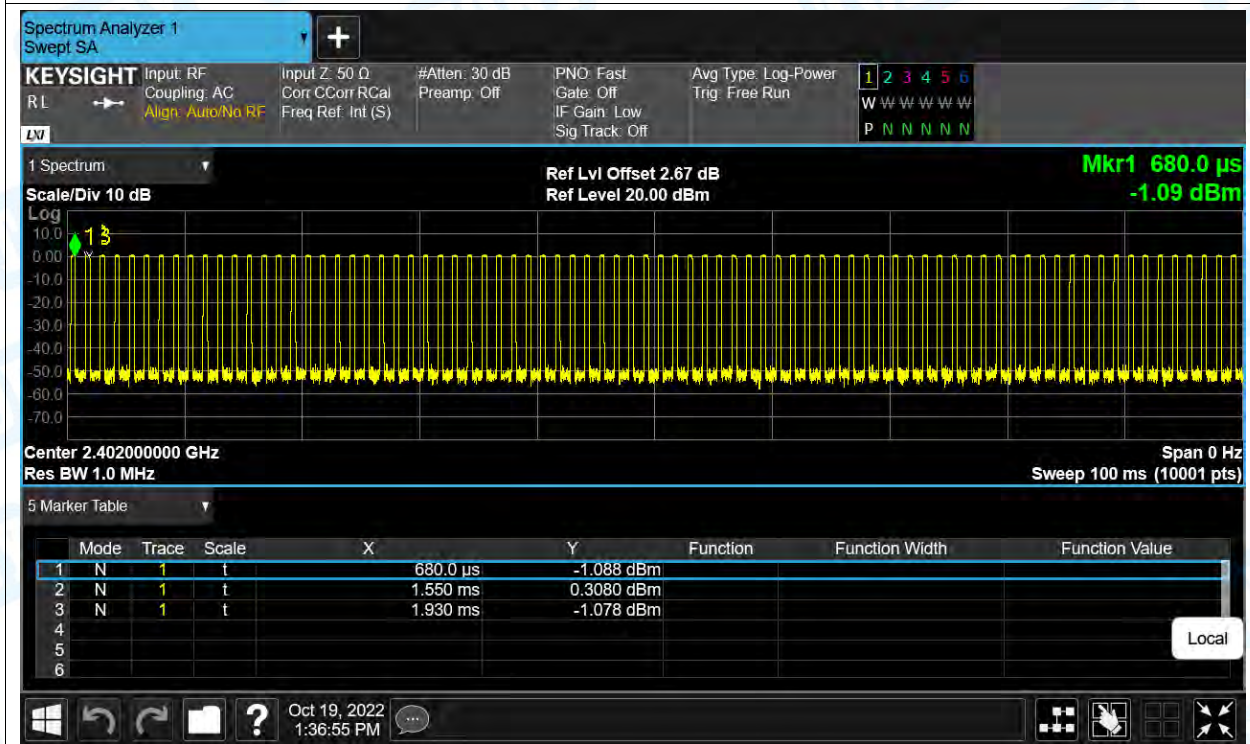
Duty Cycle NVNT 1-DH1 2441MHz Ant1



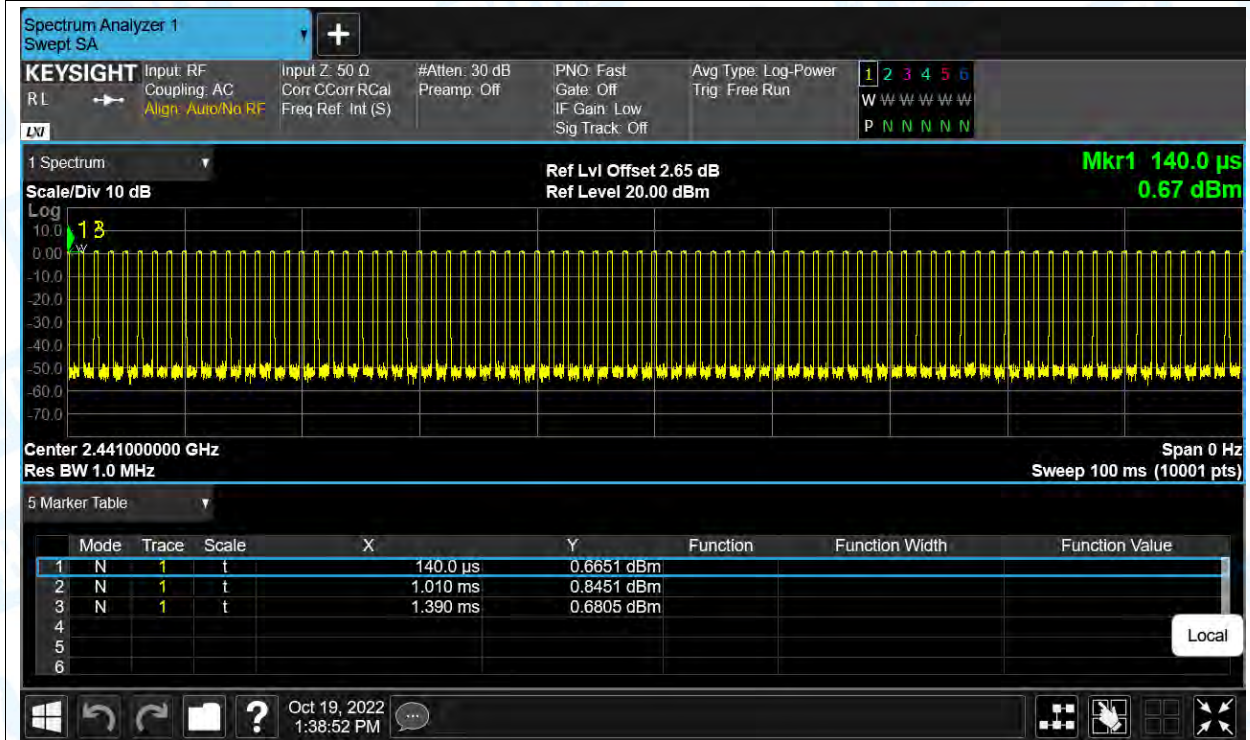
Duty Cycle NVNT 1-DH1 2480MHz Ant1



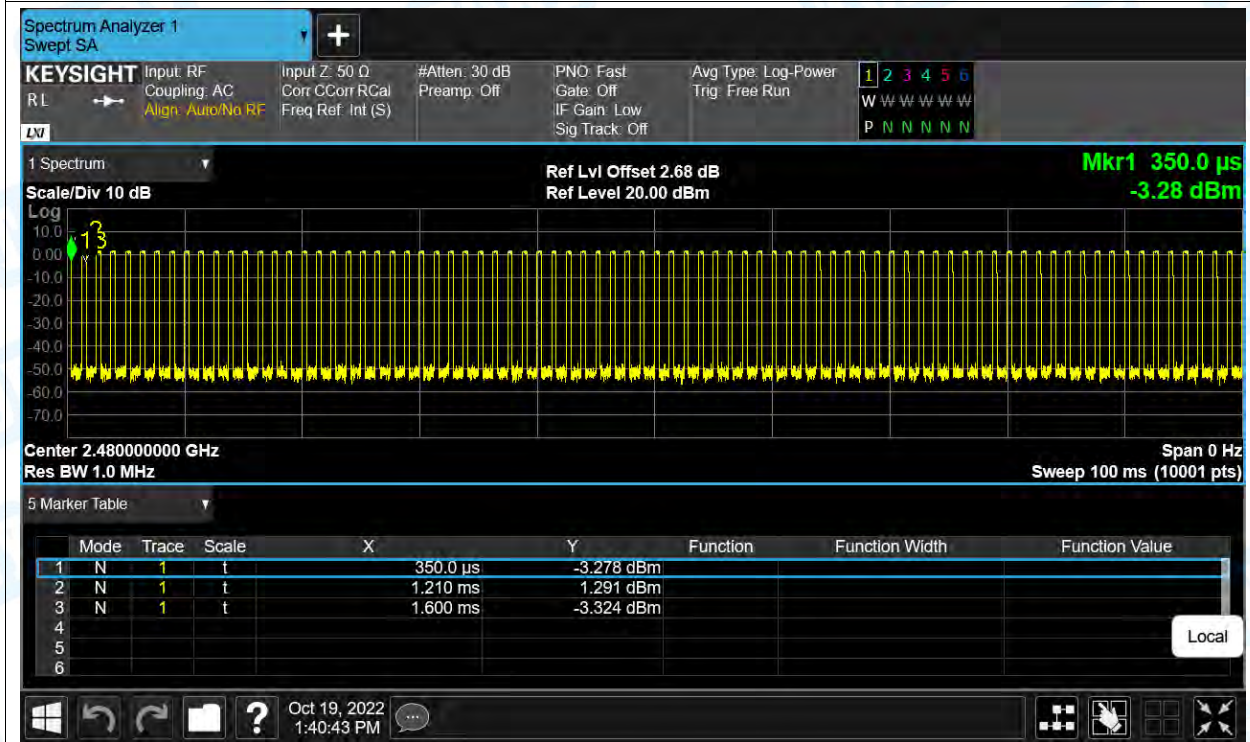
Duty Cycle NVNT 2-DH1 2402MHz Ant1



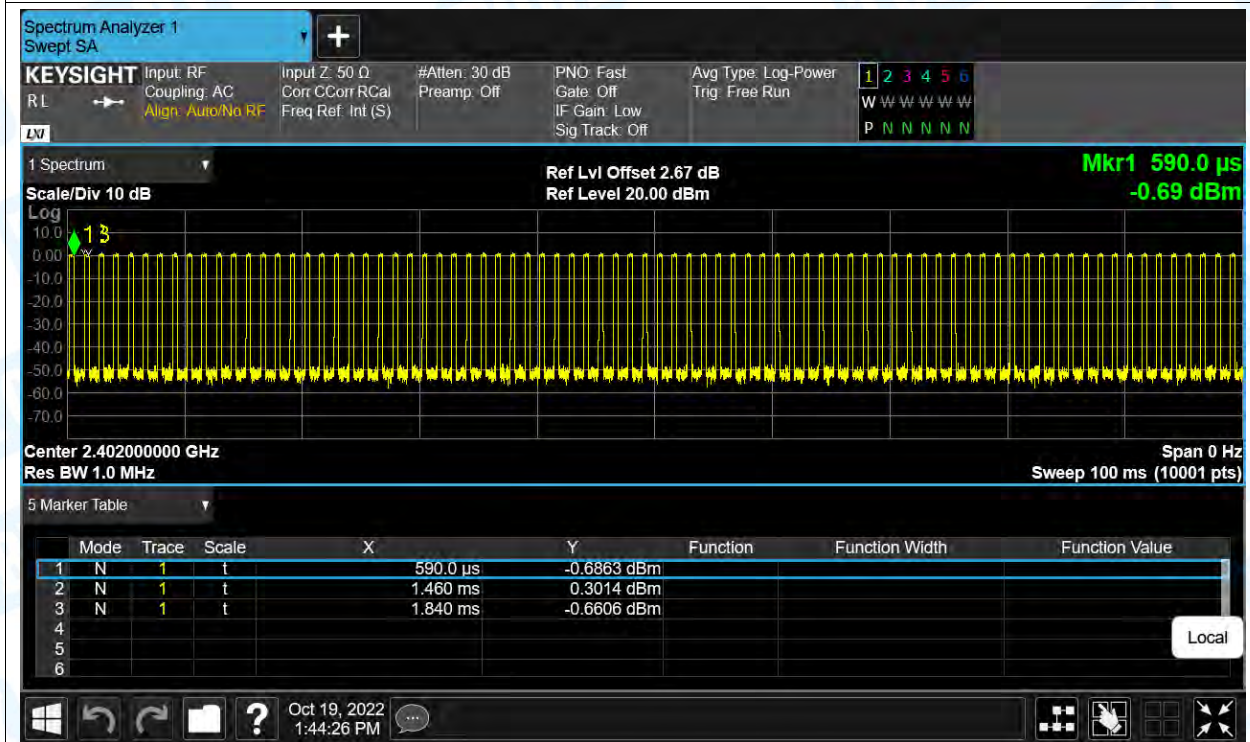
Duty Cycle NVNT 2-DH1 2441MHz Ant1



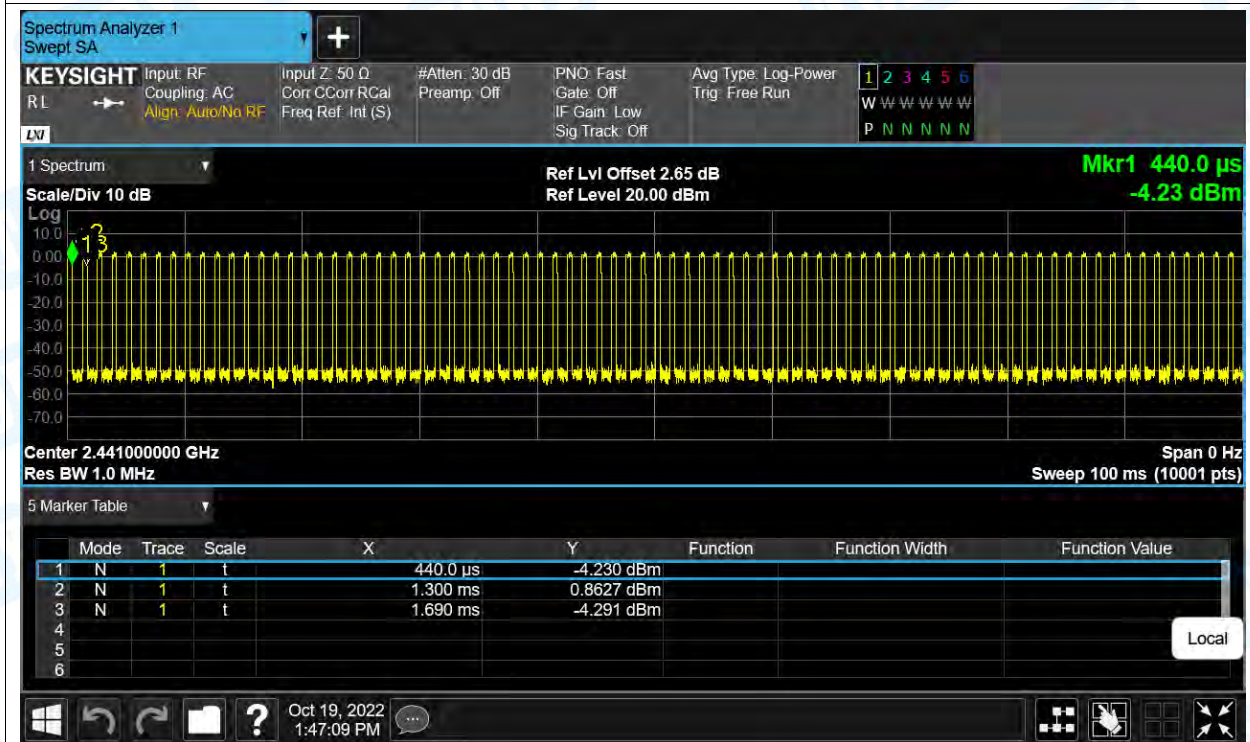
Duty Cycle NVNT 2-DH1 2480MHz Ant1

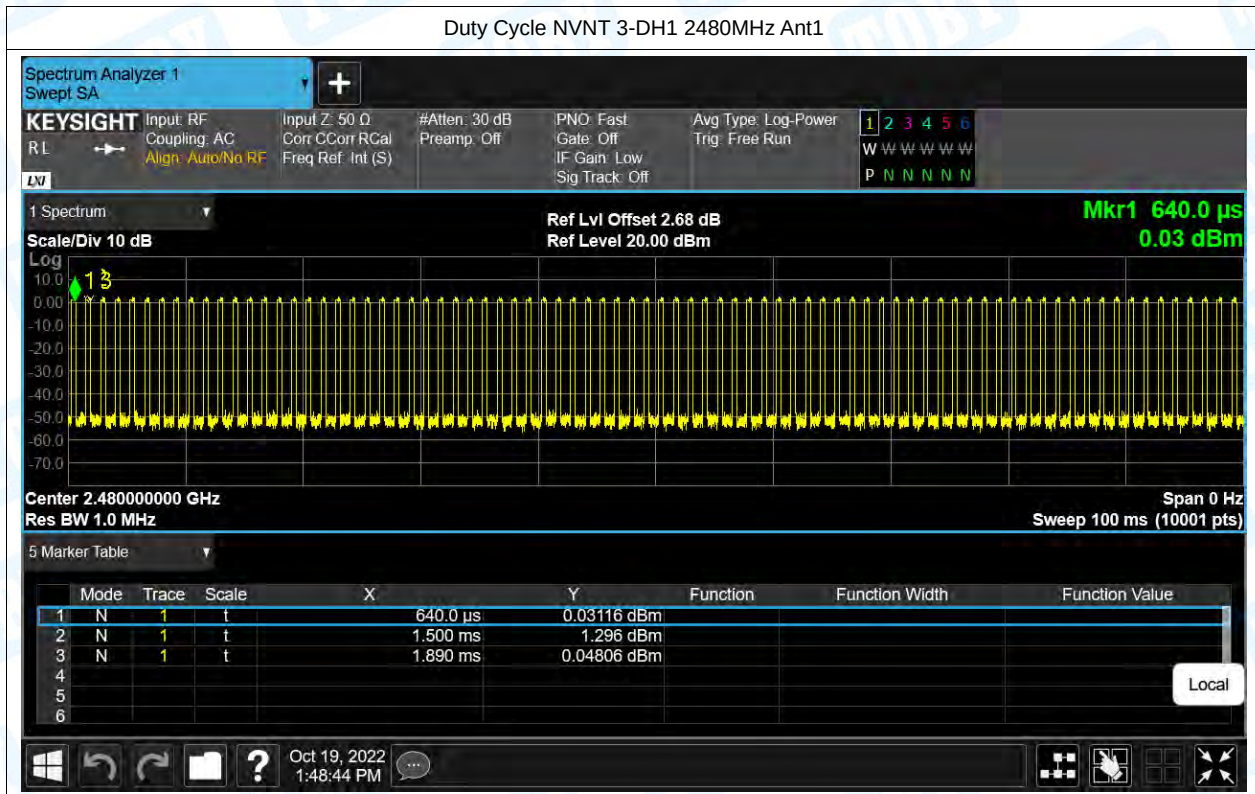


Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1





2. Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	0.369	21	Pass
NVNT	1-DH1	2441	Ant1	0.857	21	Pass
NVNT	1-DH1	2480	Ant1	1.315	21	Pass
NVNT	2-DH1	2402	Ant1	1.16	21	Pass
NVNT	2-DH1	2441	Ant1	1.715	21	Pass
NVNT	2-DH1	2480	Ant1	2.102	21	Pass
NVNT	3-DH1	2402	Ant1	1.76	21	Pass
NVNT	3-DH1	2441	Ant1	2.274	21	Pass
NVNT	3-DH1	2480	Ant1	2.67	21	Pass

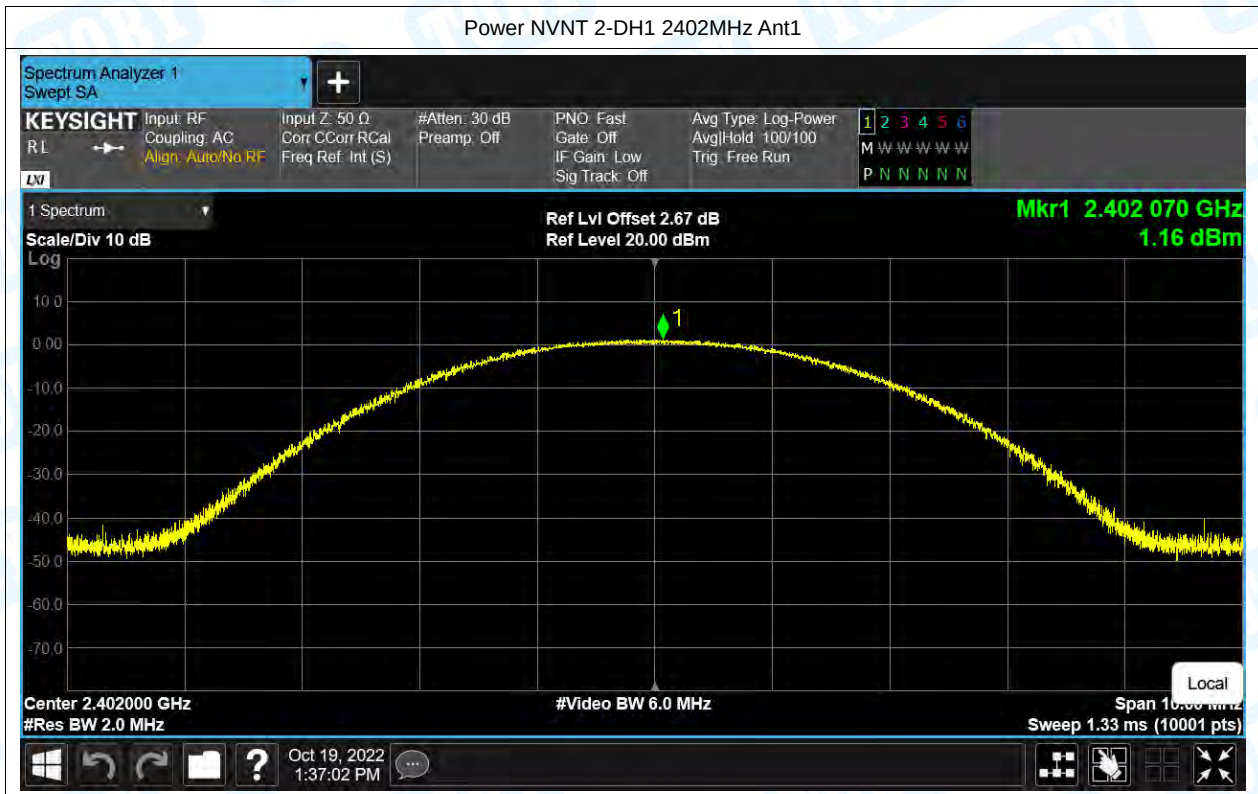
Test Graphs

Power NVNT 1-DH1 2402MHz Ant1



Power NVNT 1-DH1 2441MHz Ant1



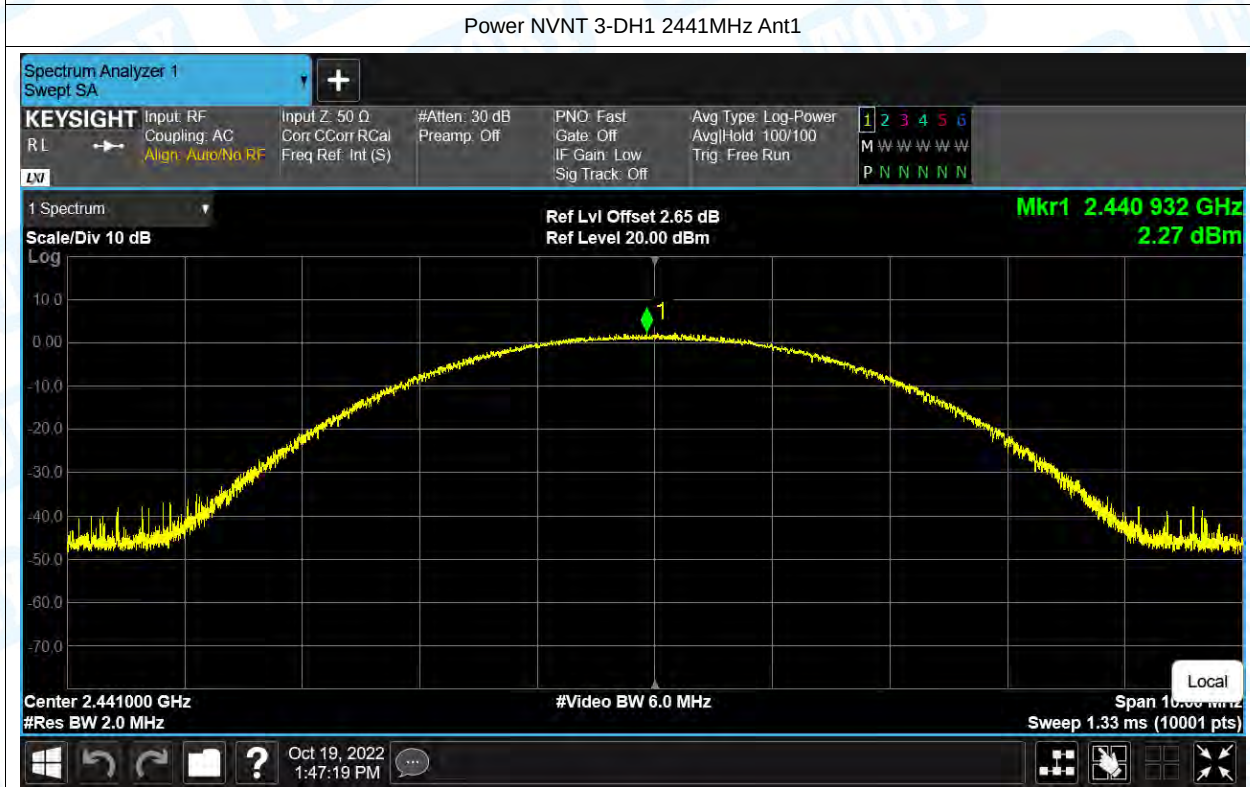


Power NVNT 2-DH1 2441MHz Ant1



Power NVNT 2-DH1 2480MHz Ant1







3. -20dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	1.02	0	Pass
NVNT	1-DH1	2441	Ant1	1.04	0	Pass
NVNT	1-DH1	2480	Ant1	1.03	0	Pass
NVNT	2-DH1	2402	Ant1	1.3	0	Pass
NVNT	2-DH1	2441	Ant1	1.29	0	Pass
NVNT	2-DH1	2480	Ant1	1.25	0	Pass
NVNT	3-DH1	2402	Ant1	1.25	0	Pass
NVNT	3-DH1	2441	Ant1	1.24	0	Pass
NVNT	3-DH1	2480	Ant1	1.3	0	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

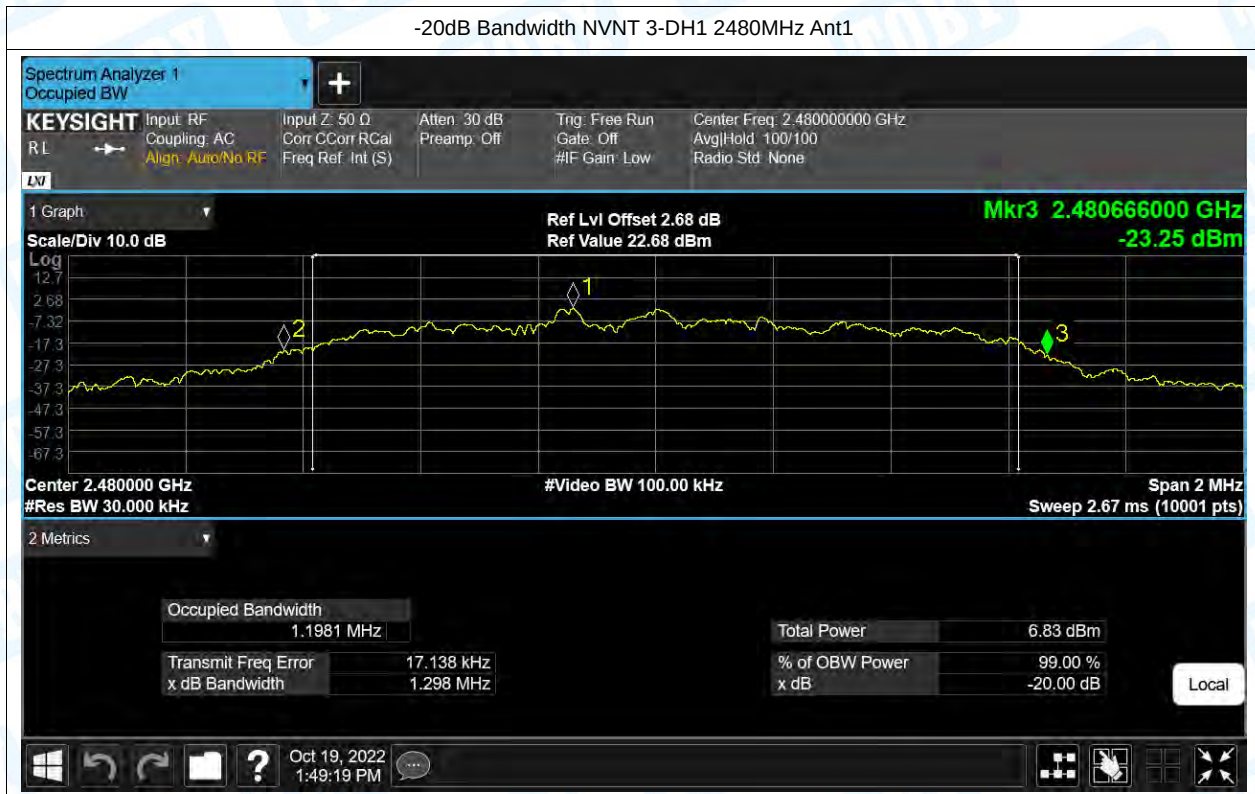


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1





4. Occupied Channel Bandwidth

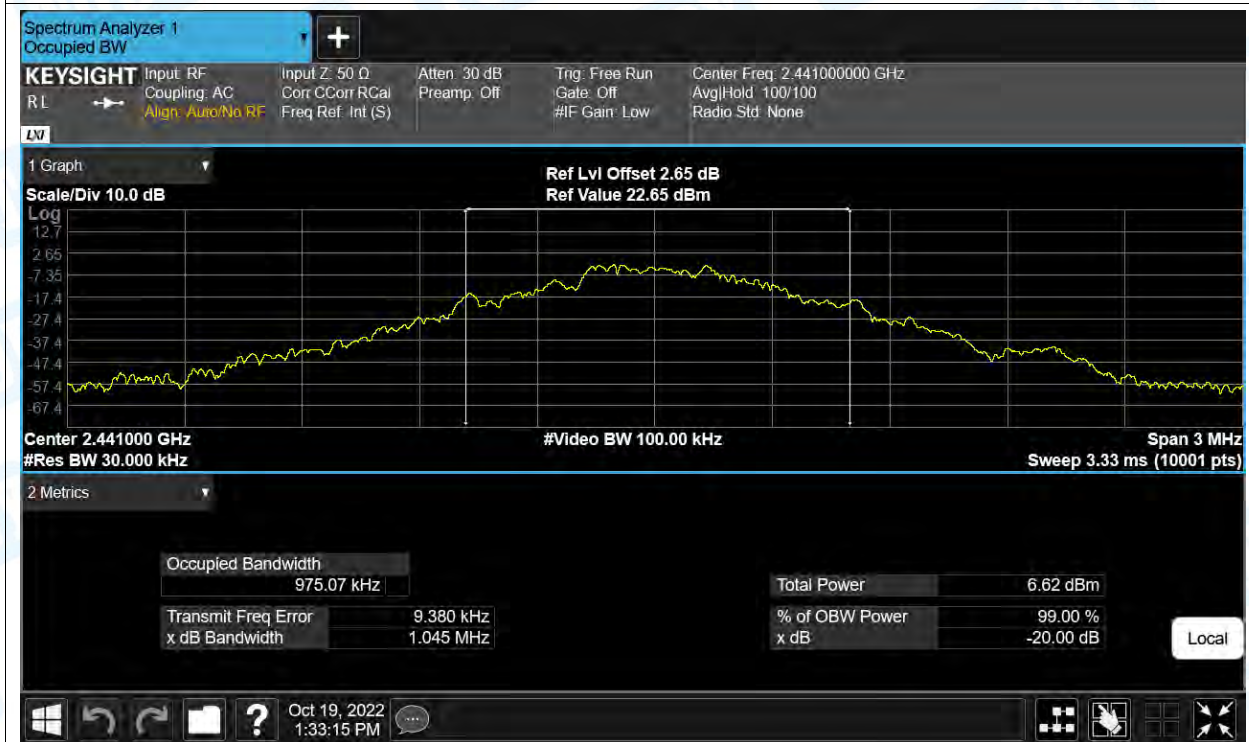
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.941
NVNT	1-DH1	2441	Ant1	0.975
NVNT	1-DH1	2480	Ant1	0.983
NVNT	2-DH1	2402	Ant1	1.211
NVNT	2-DH1	2441	Ant1	1.231
NVNT	2-DH1	2480	Ant1	1.22
NVNT	3-DH1	2402	Ant1	1.188
NVNT	3-DH1	2441	Ant1	1.201
NVNT	3-DH1	2480	Ant1	1.195

Test Graphs

OBW NVNT 1-DH1 2402MHz Ant1



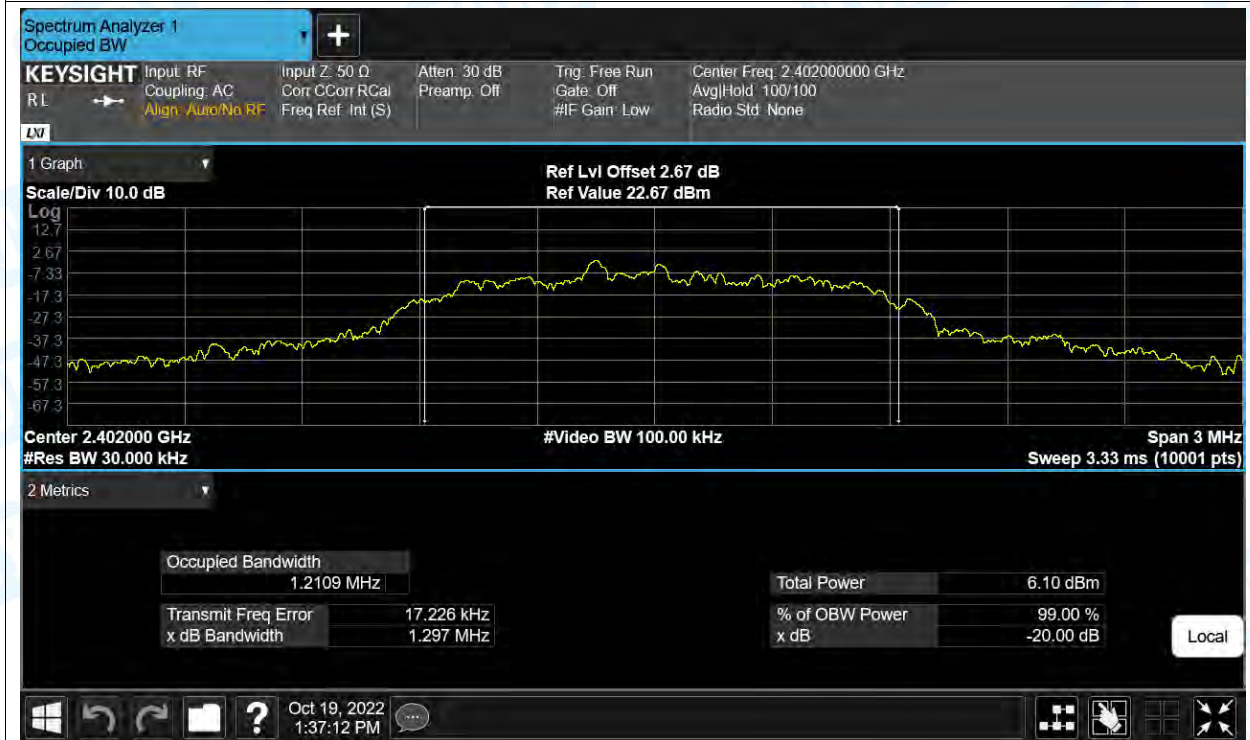
OBW NVNT 1-DH1 2441MHz Ant1



OBW NVNT 1-DH1 2480MHz Ant1



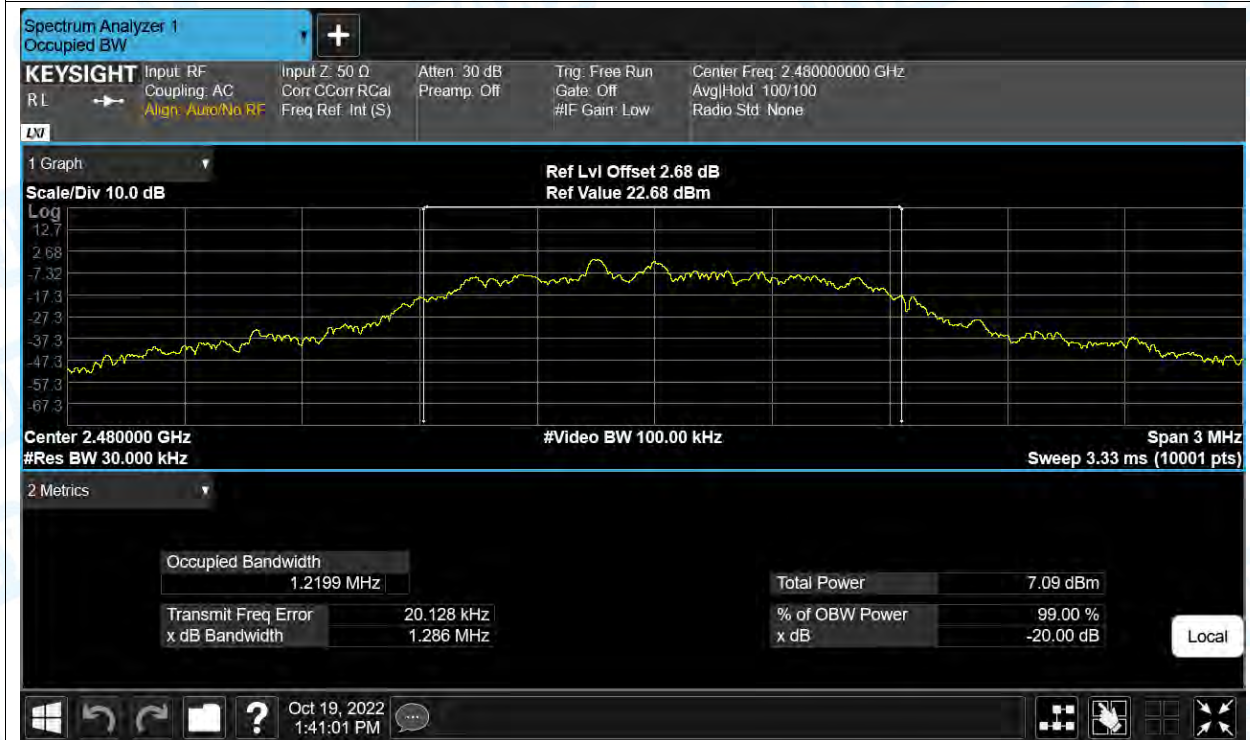
OBW NVNT 2-DH1 2402MHz Ant1



OBW NVNT 2-DH1 2441MHz Ant1



OBW NVNT 2-DH1 2480MHz Ant1



OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1



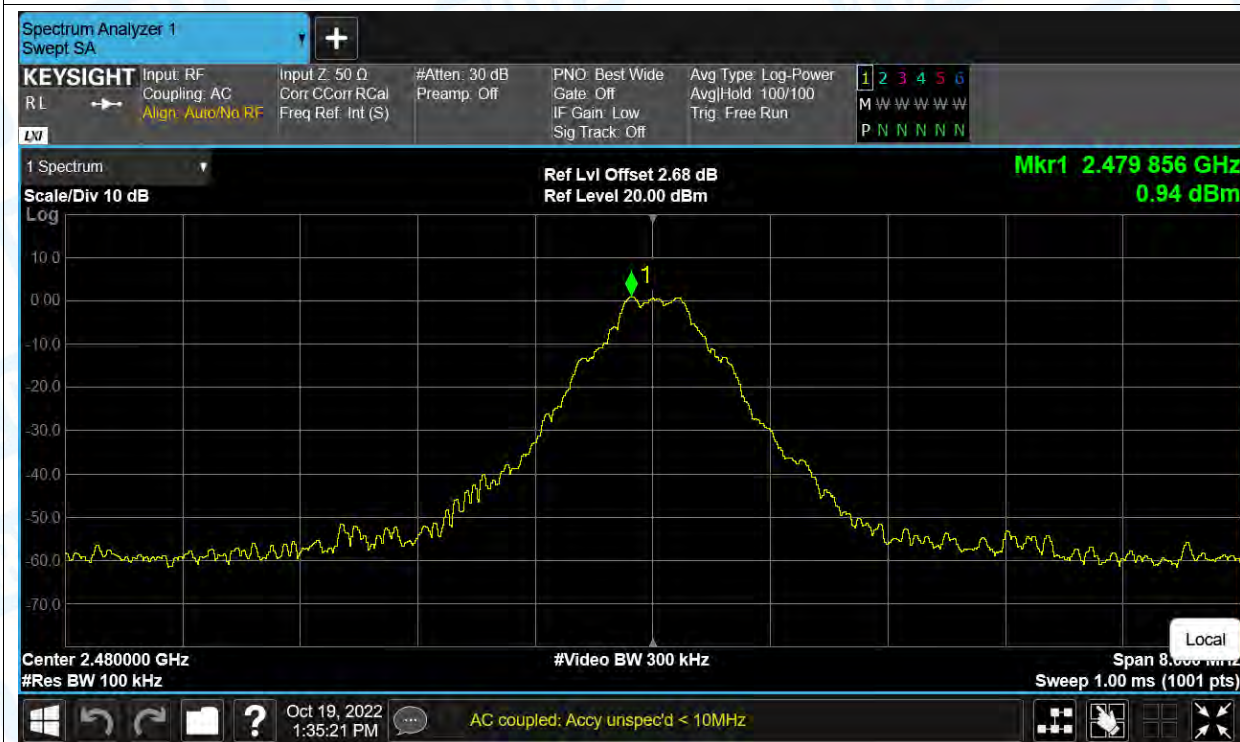


5. Band Edge

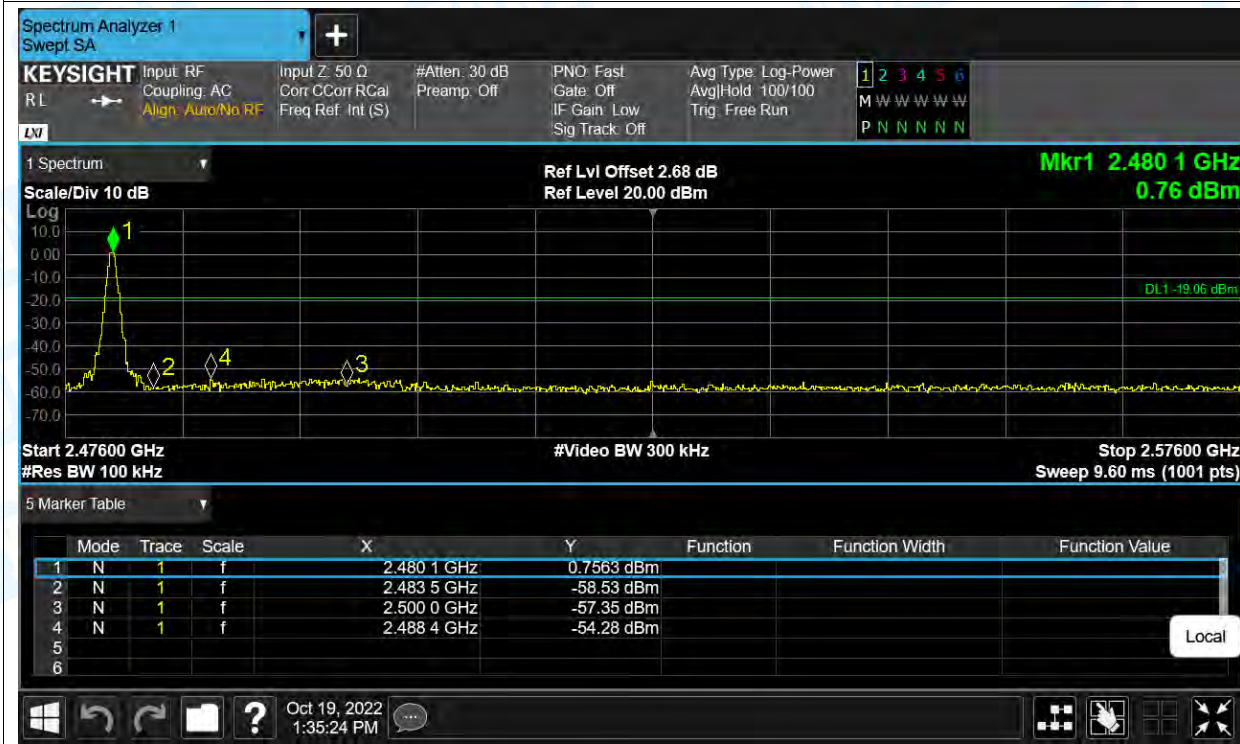
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-53.96	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-55.23	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-54.03	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-53.83	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-54.08	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-55.4	-20	Pass

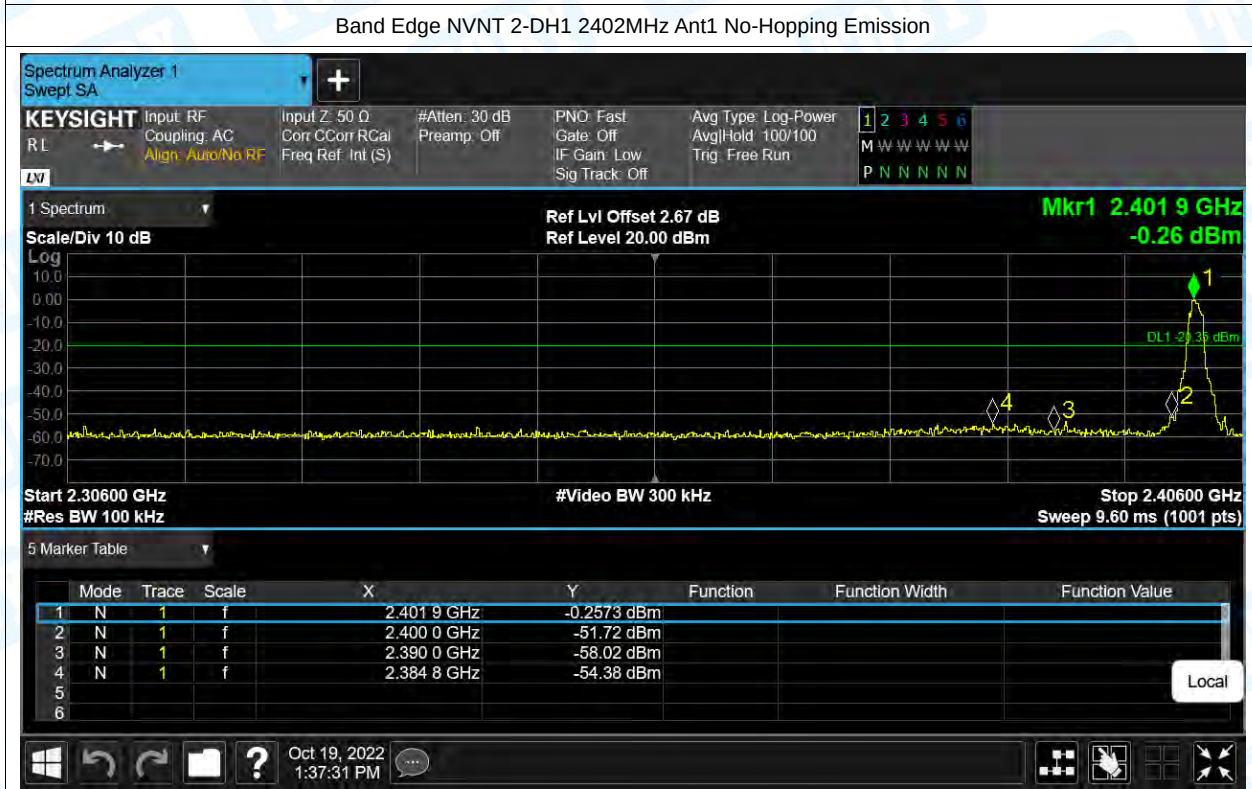
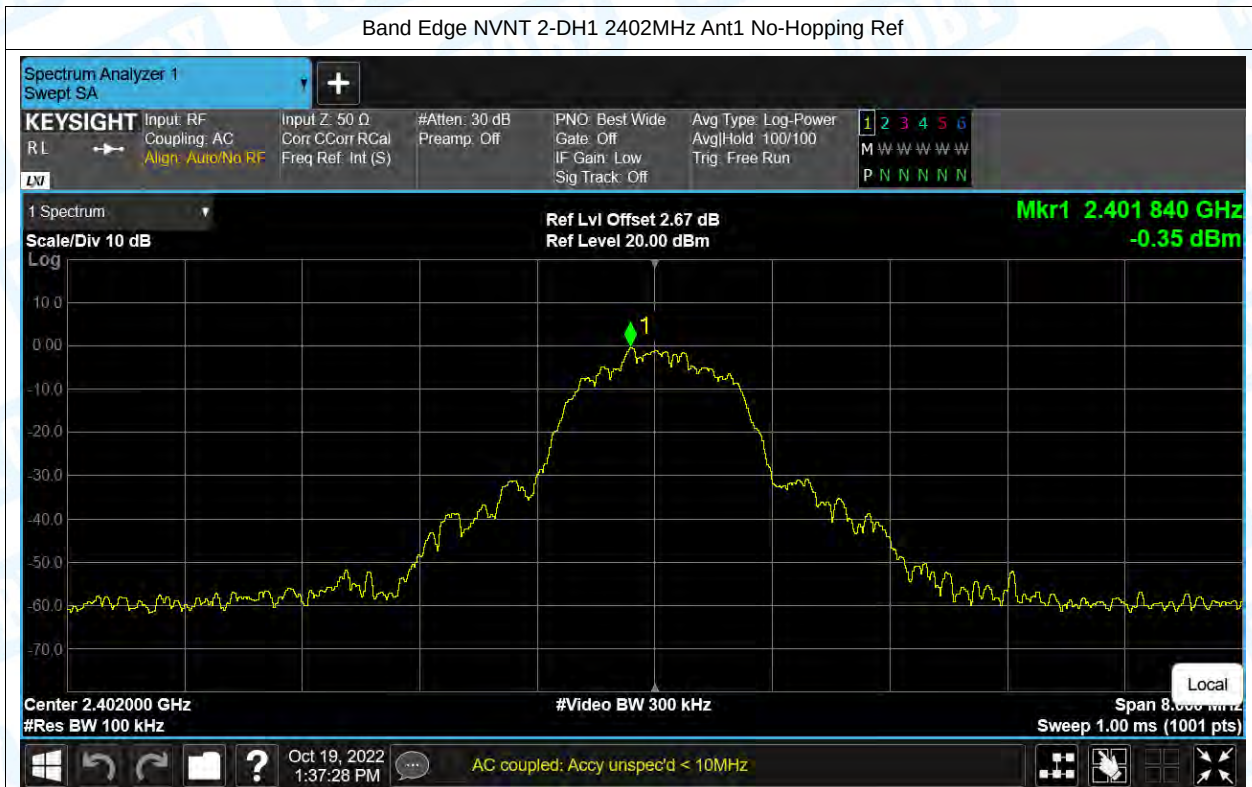


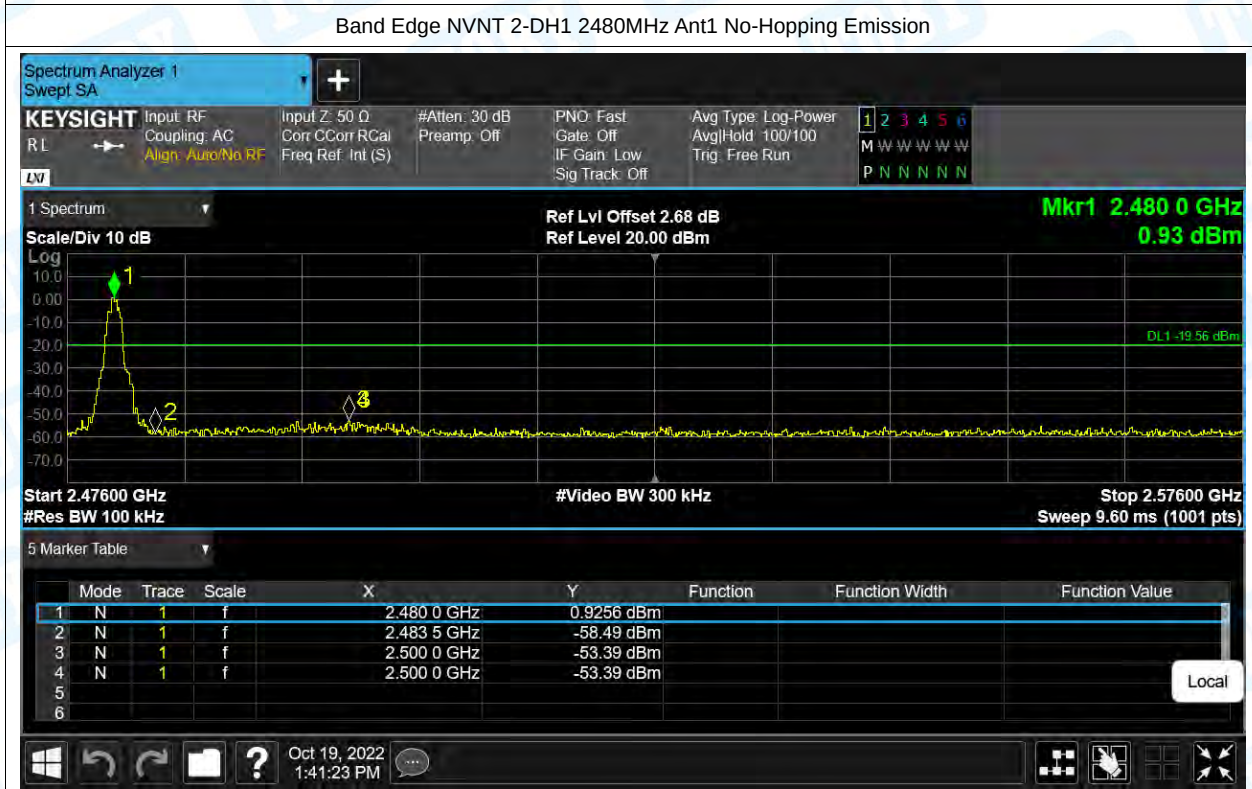
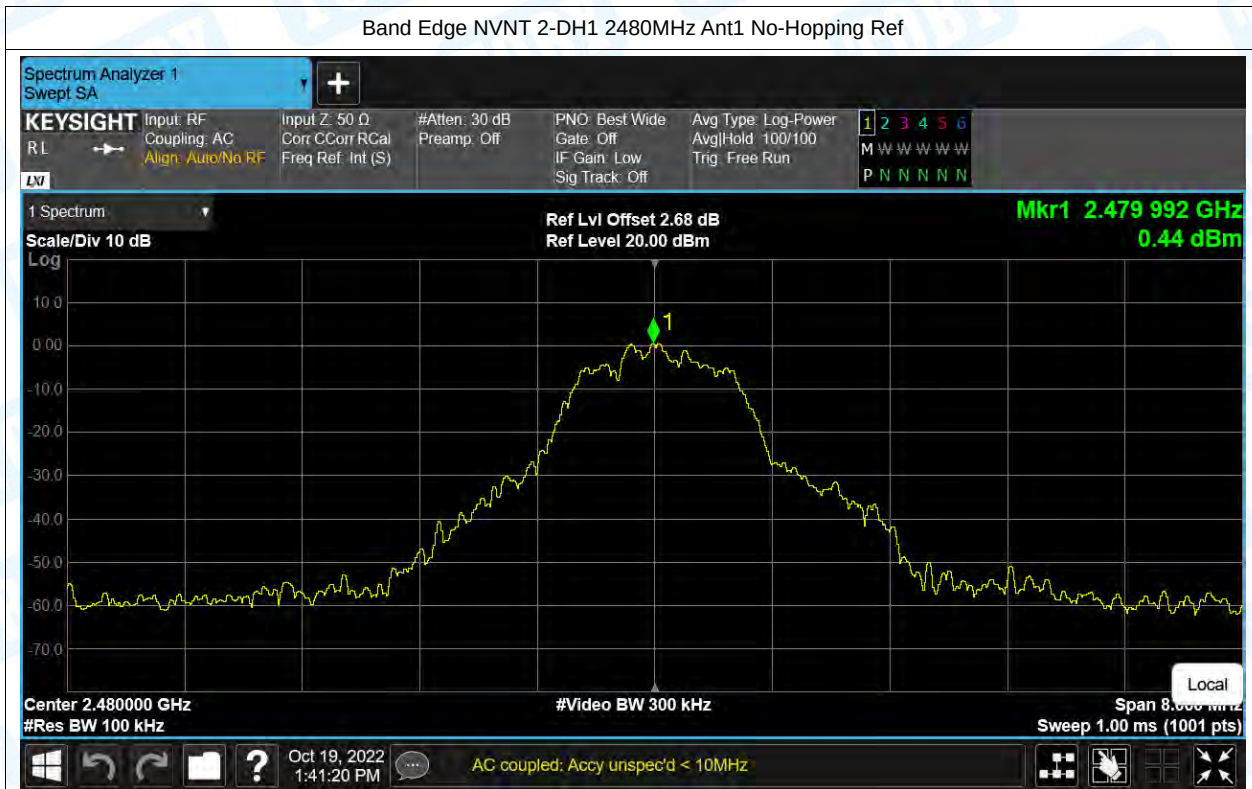
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



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



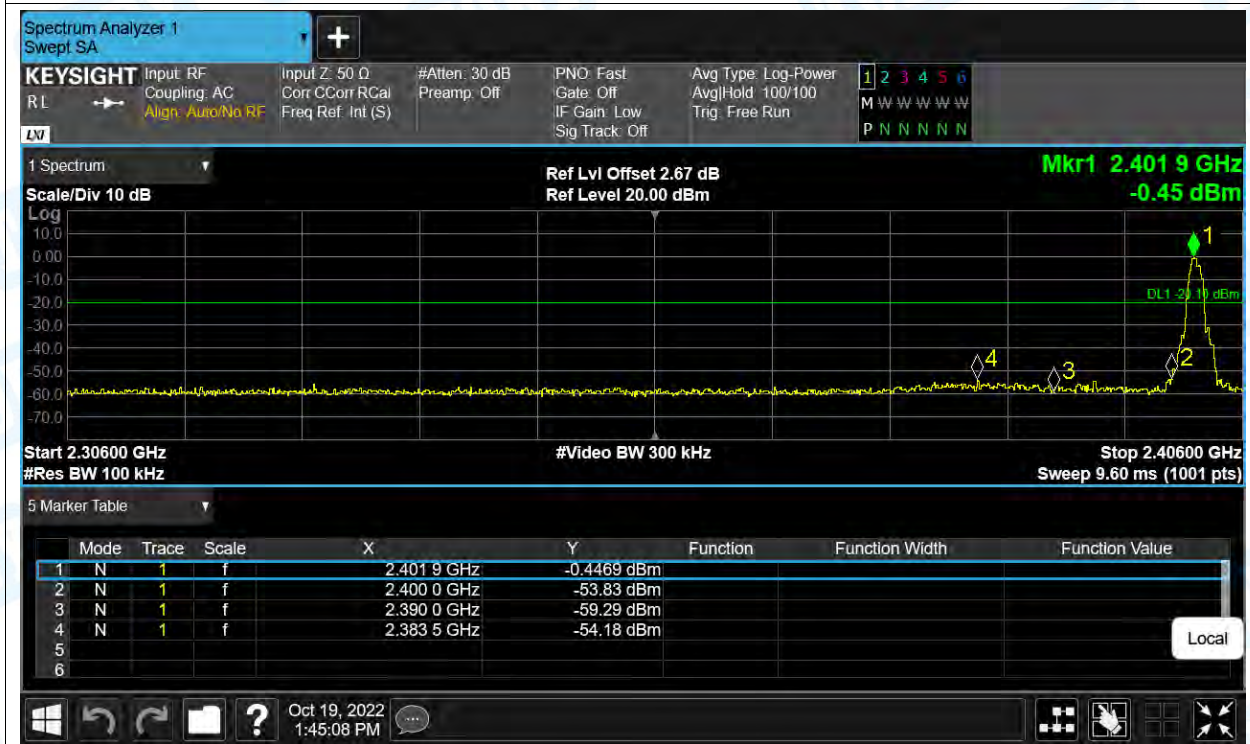




Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref



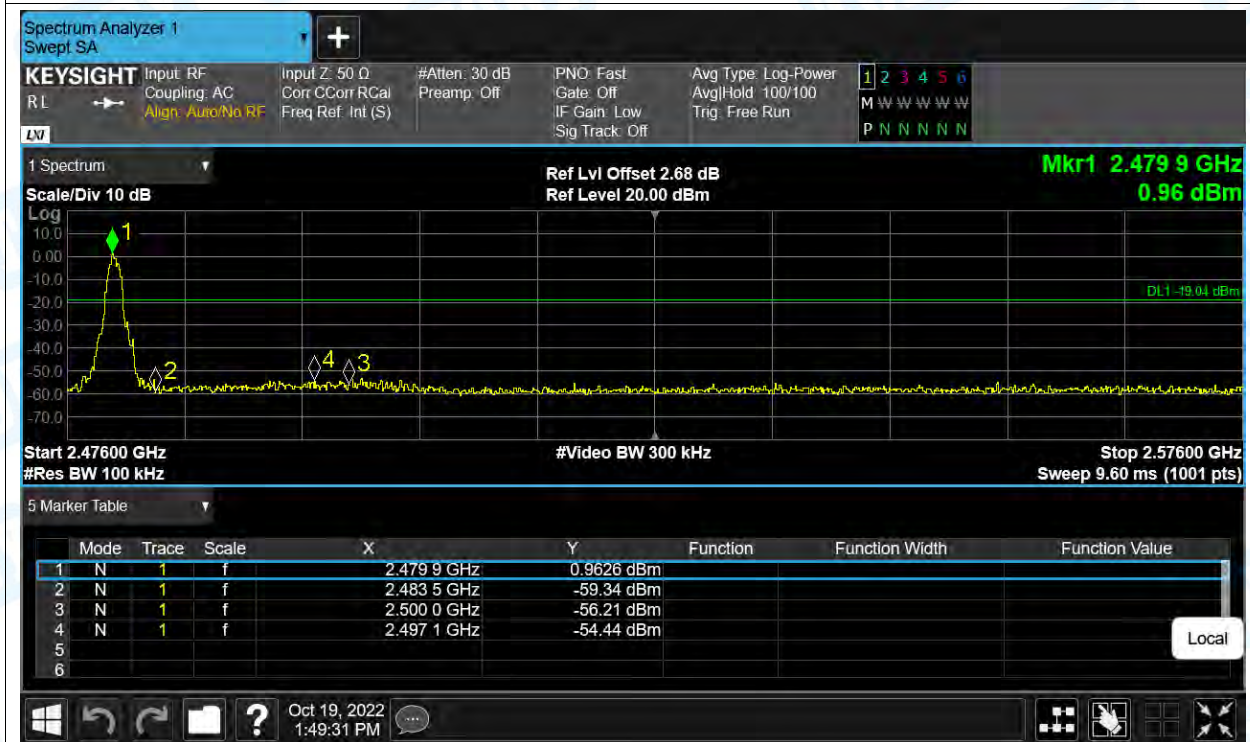
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission



Band Edge NVNT 3-DH1 2480MHz Ant1 No-Hopping Ref



Band Edge NVNT 3-DH1 2480MHz Ant1 No-Hopping Emission



6. Band Edge(Hopping)

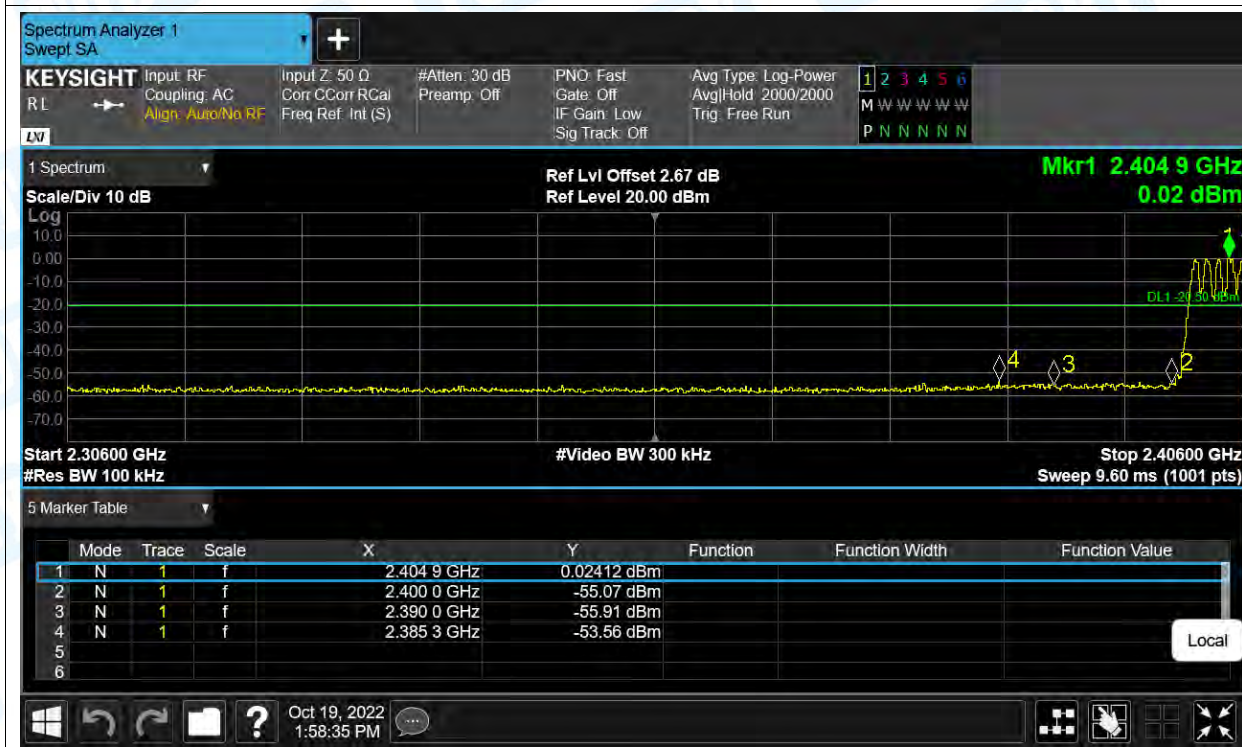
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-53.06	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-54.09	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-53.15	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-53.04	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-54.14	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-54.63	-20	Pass

Test Graphs

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



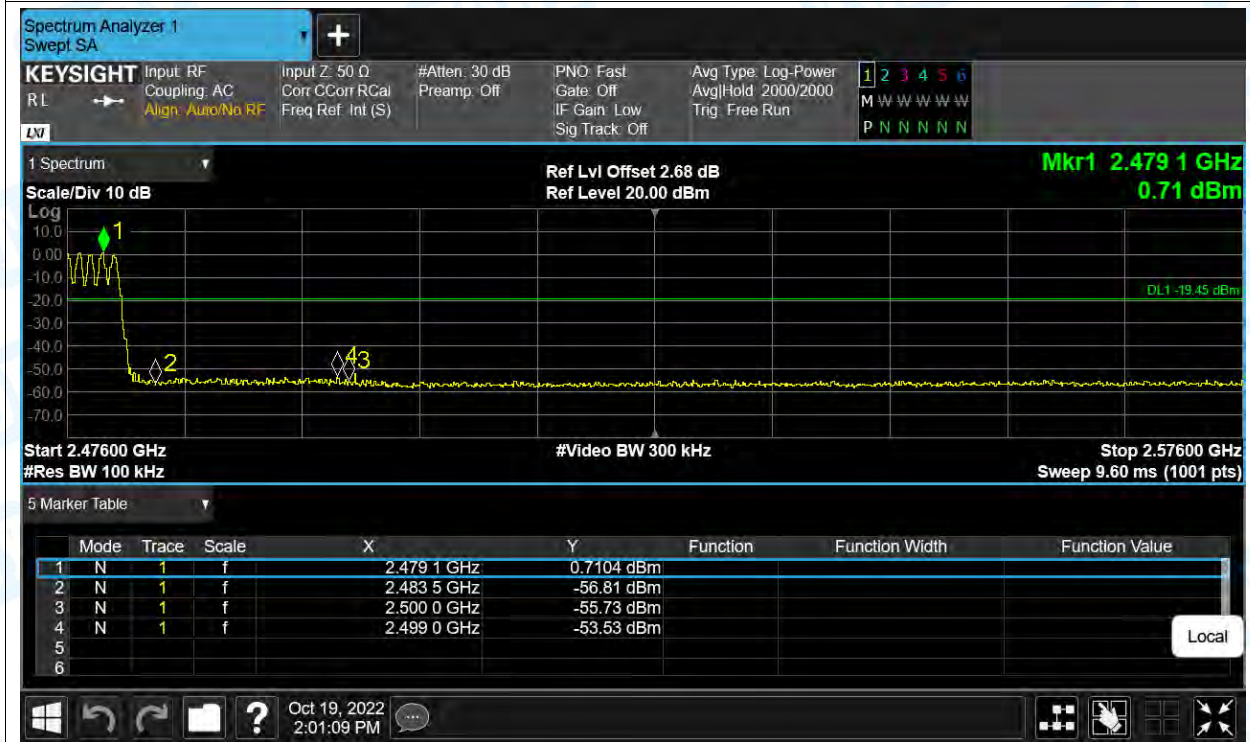
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission

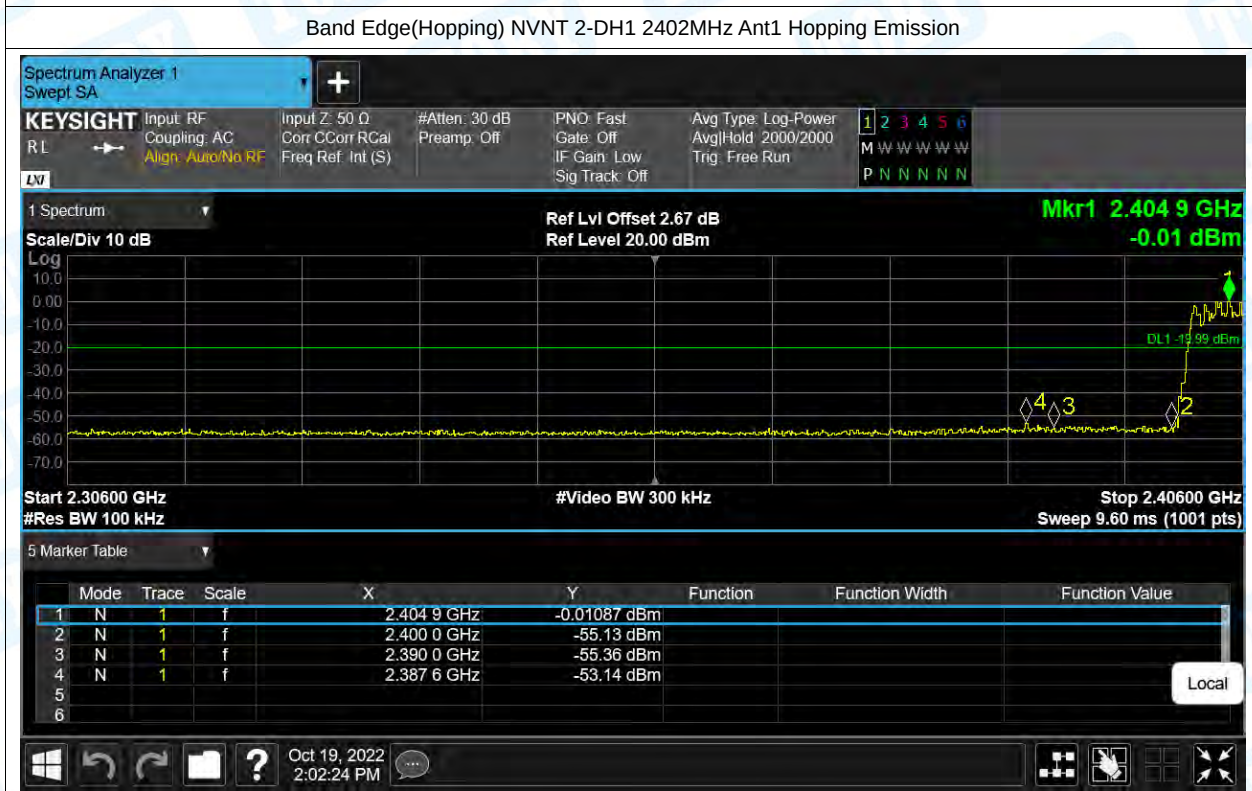
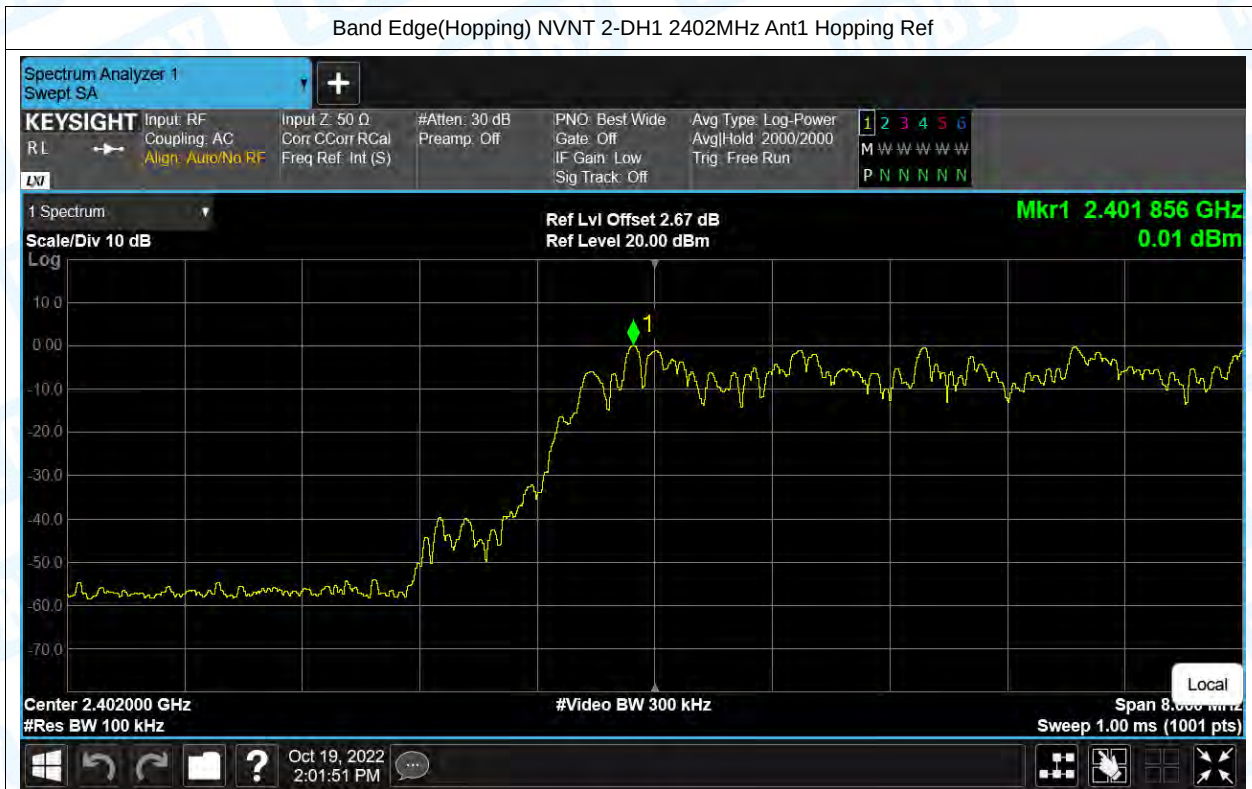


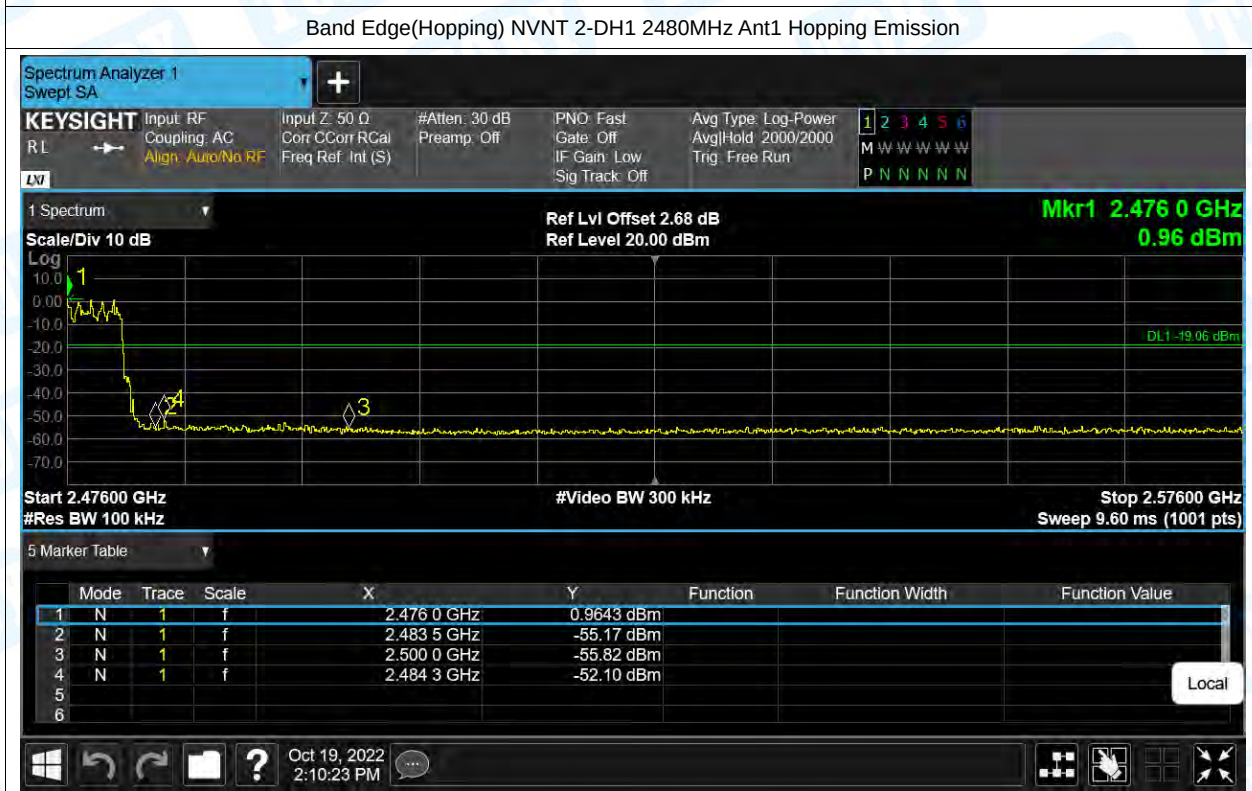
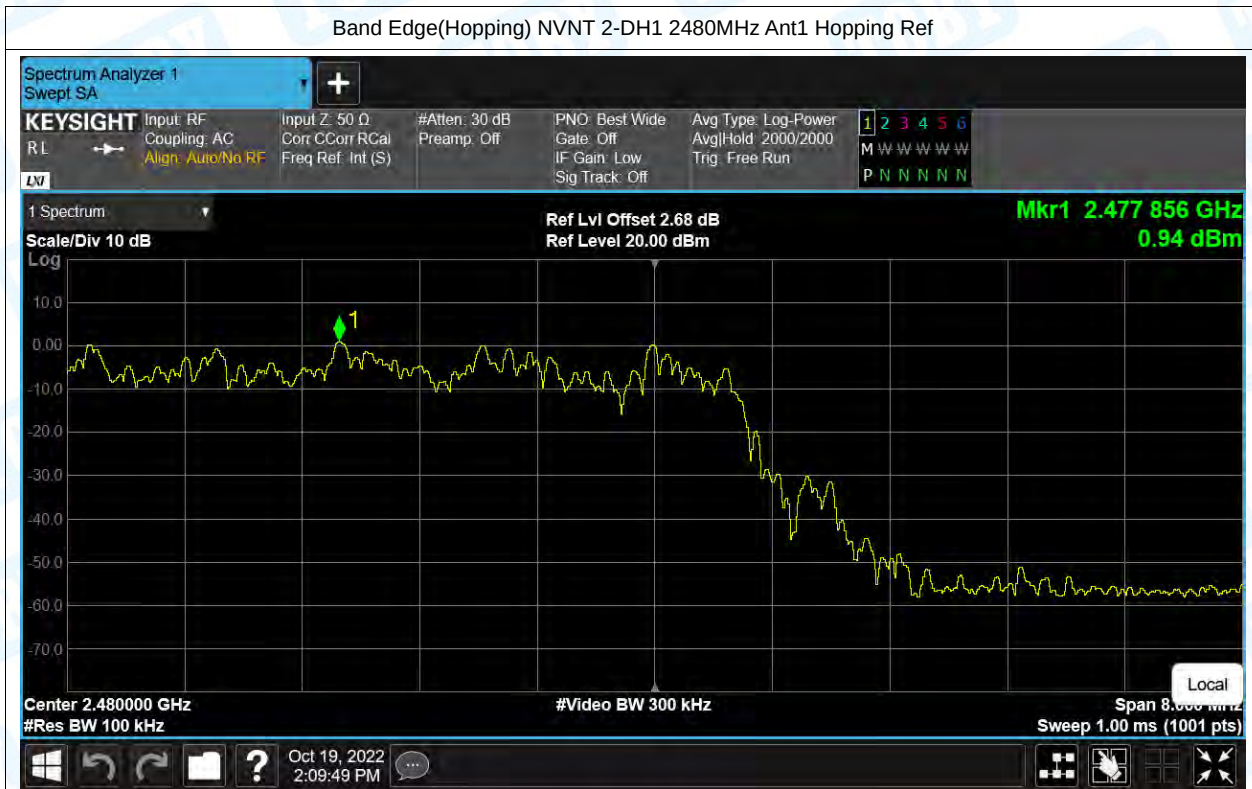
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Ref

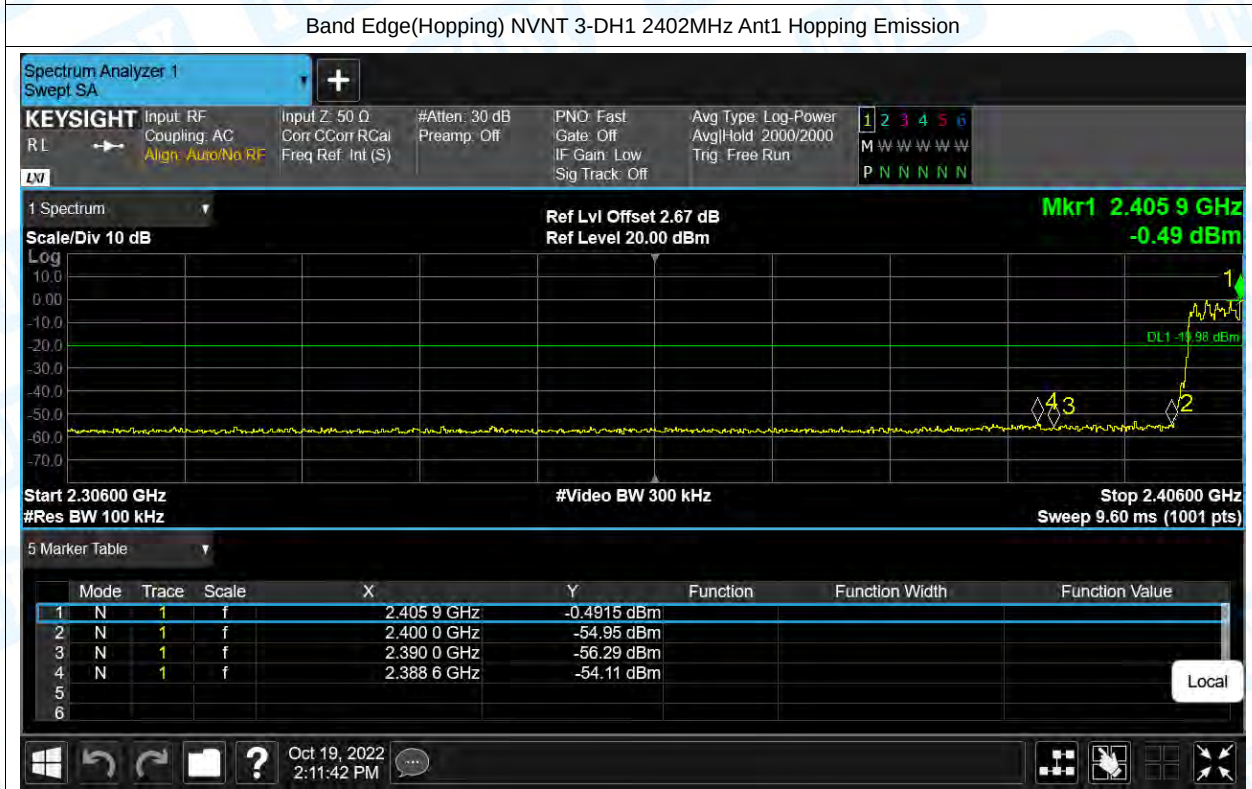
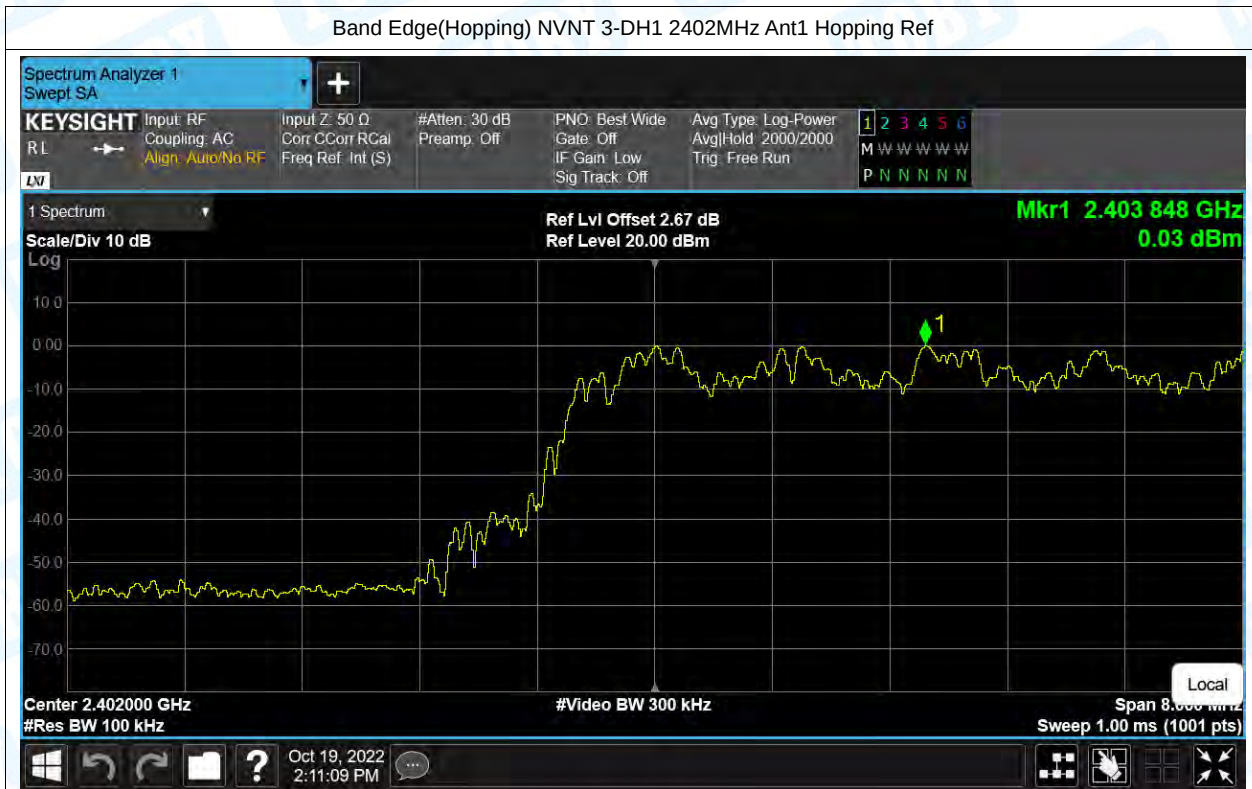


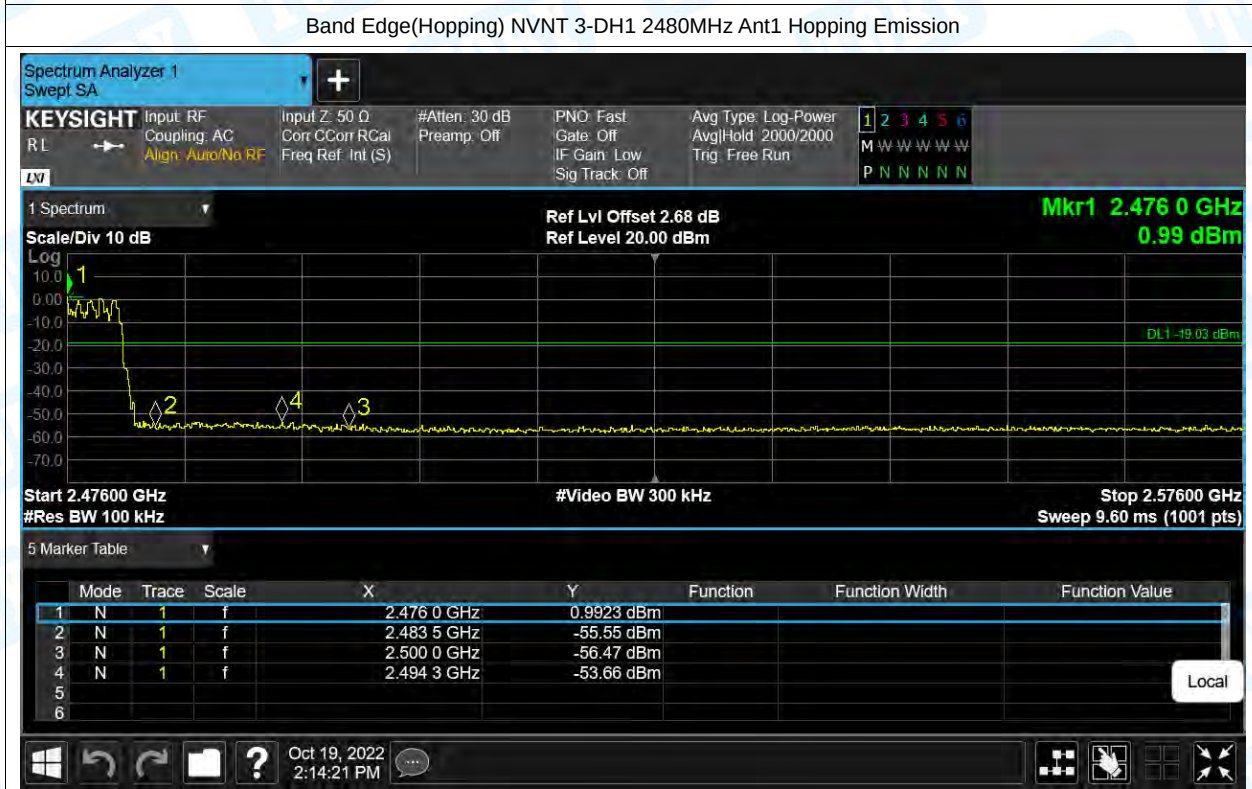
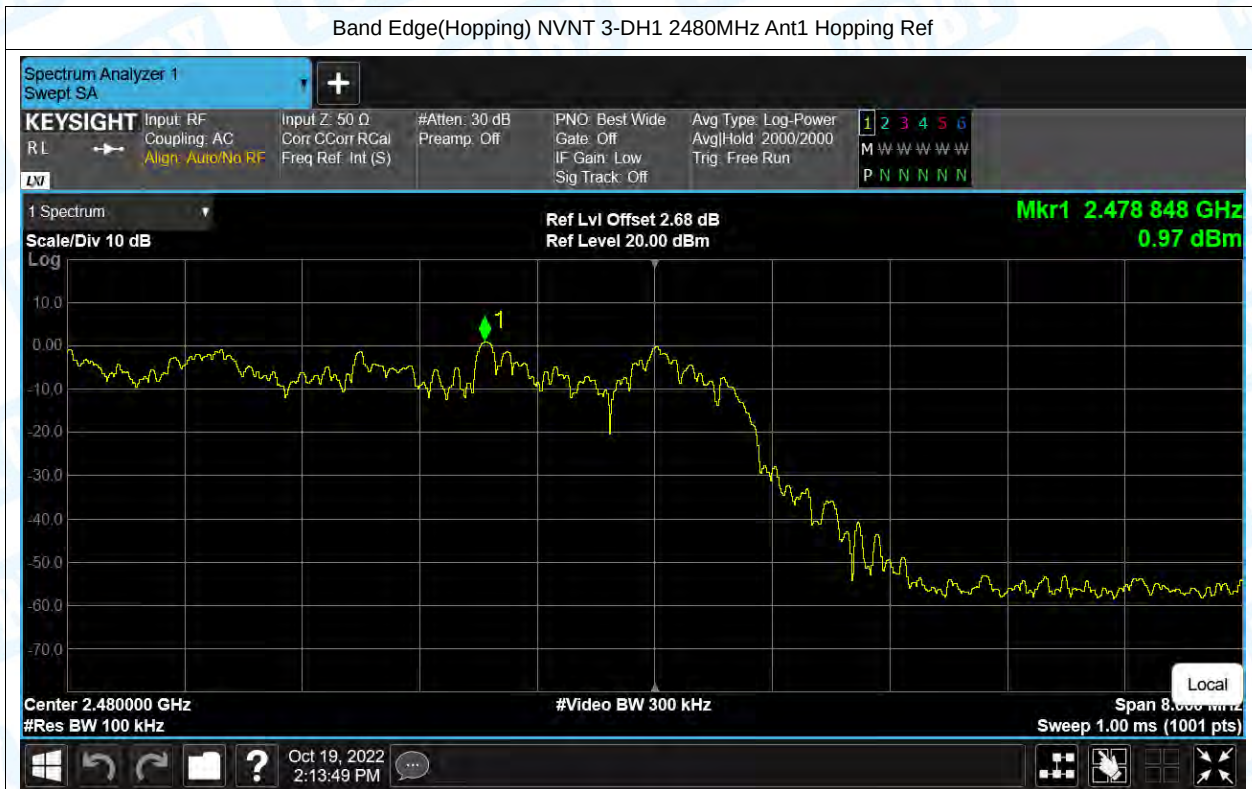
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission





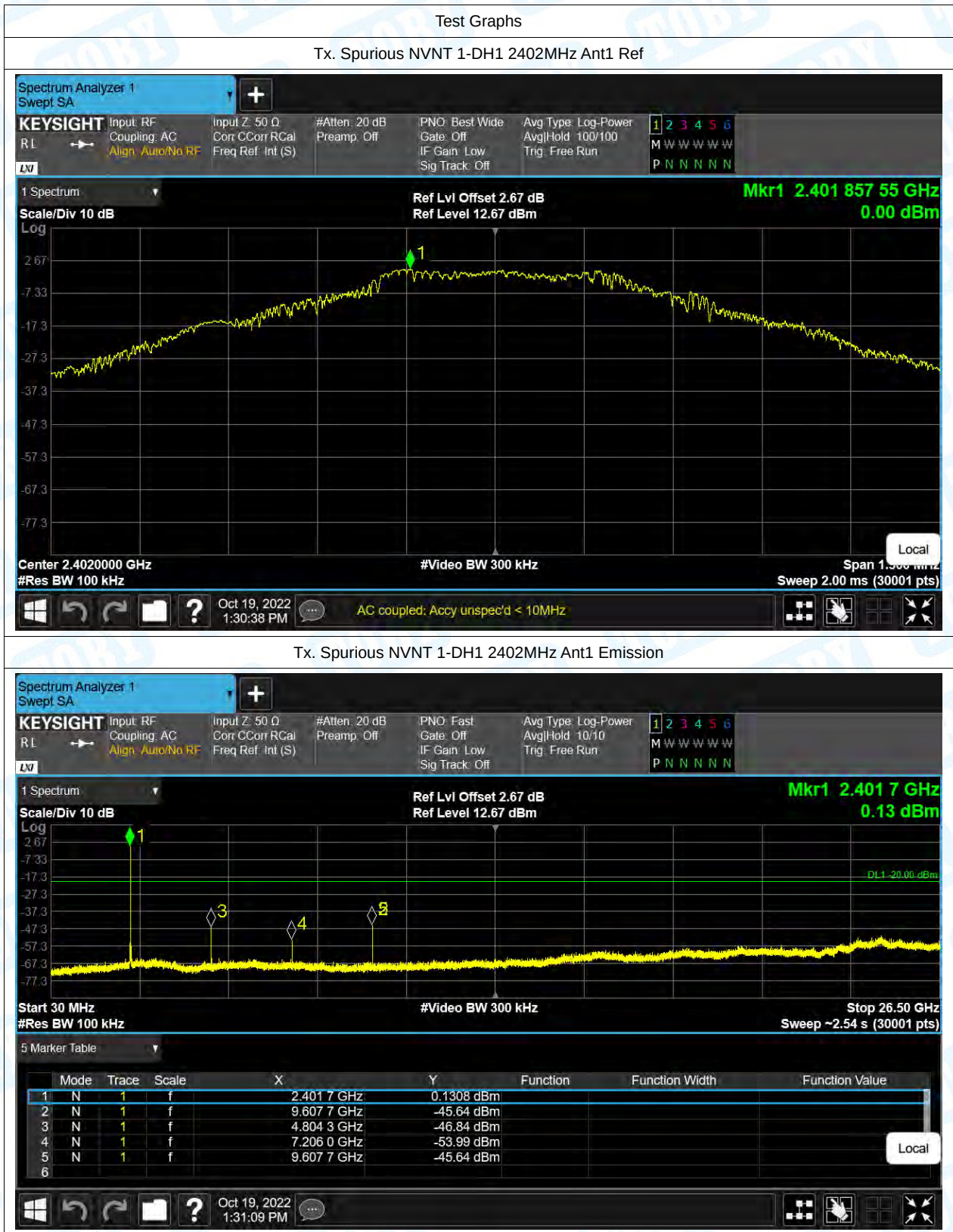


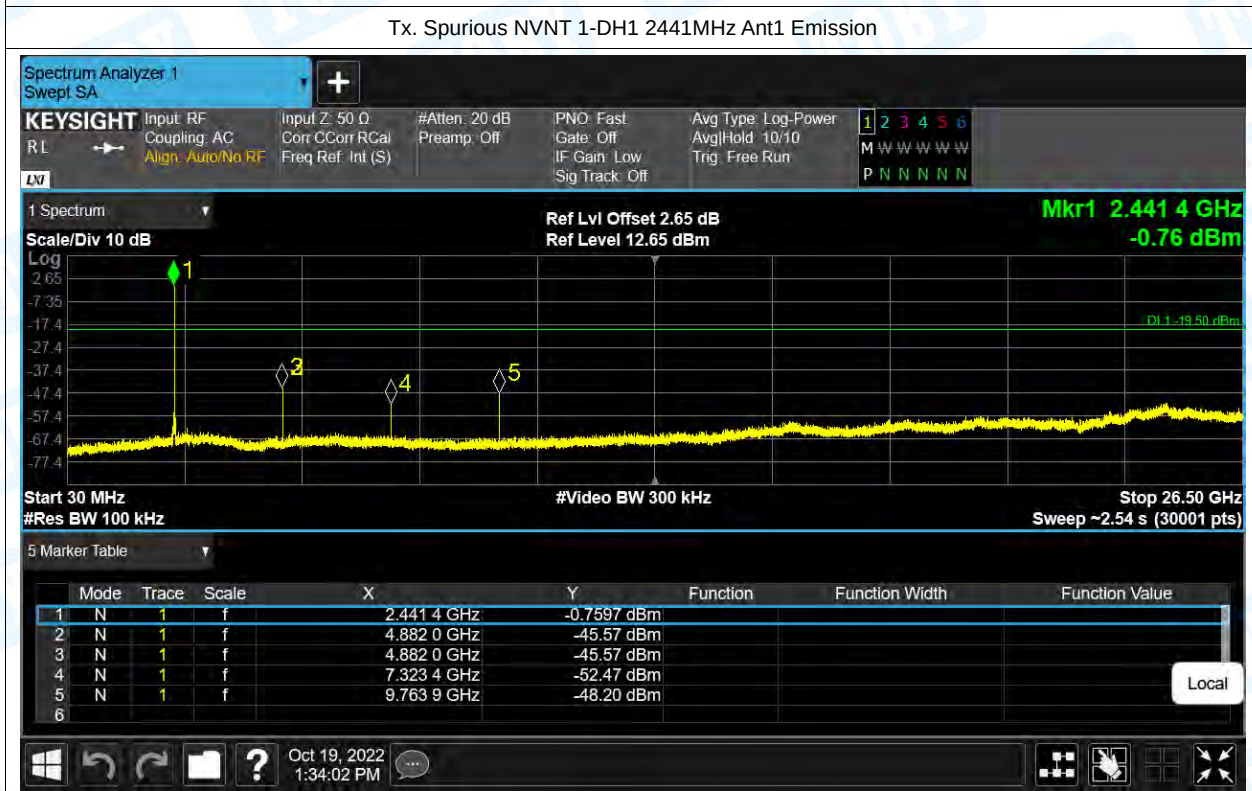
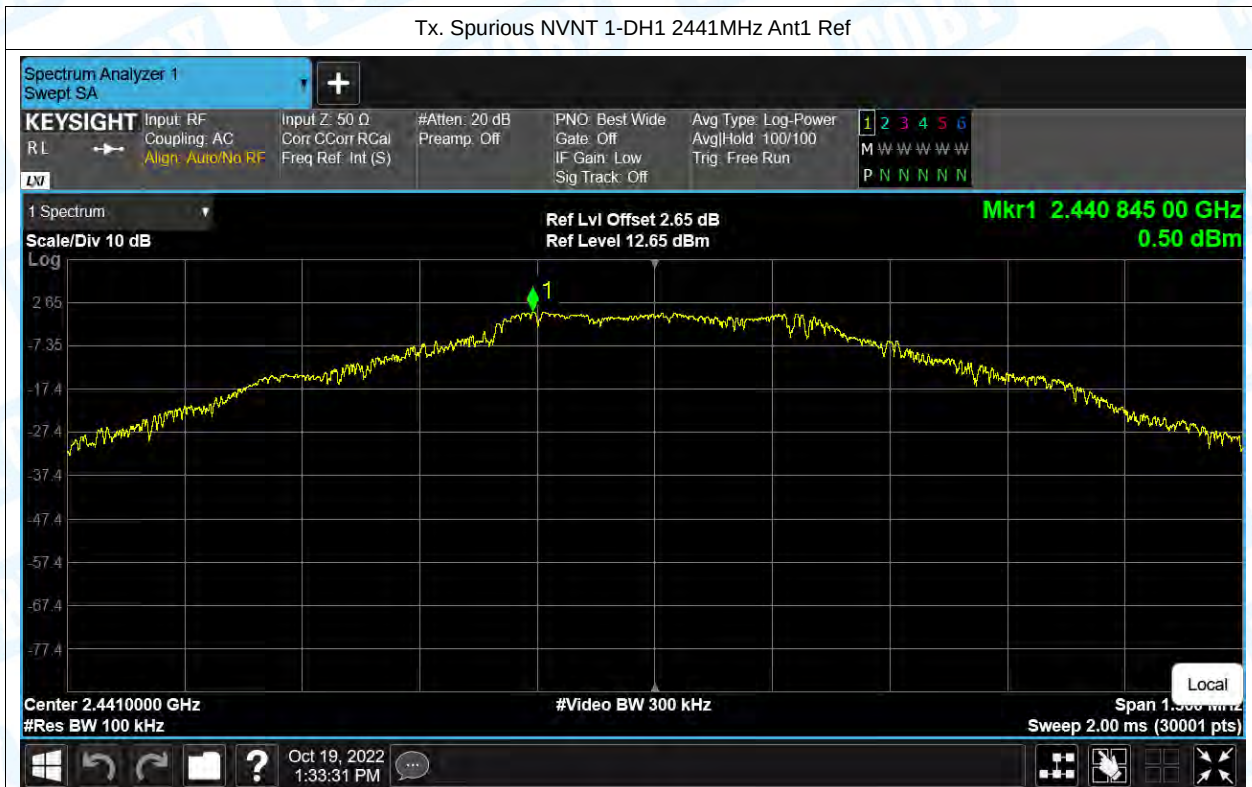


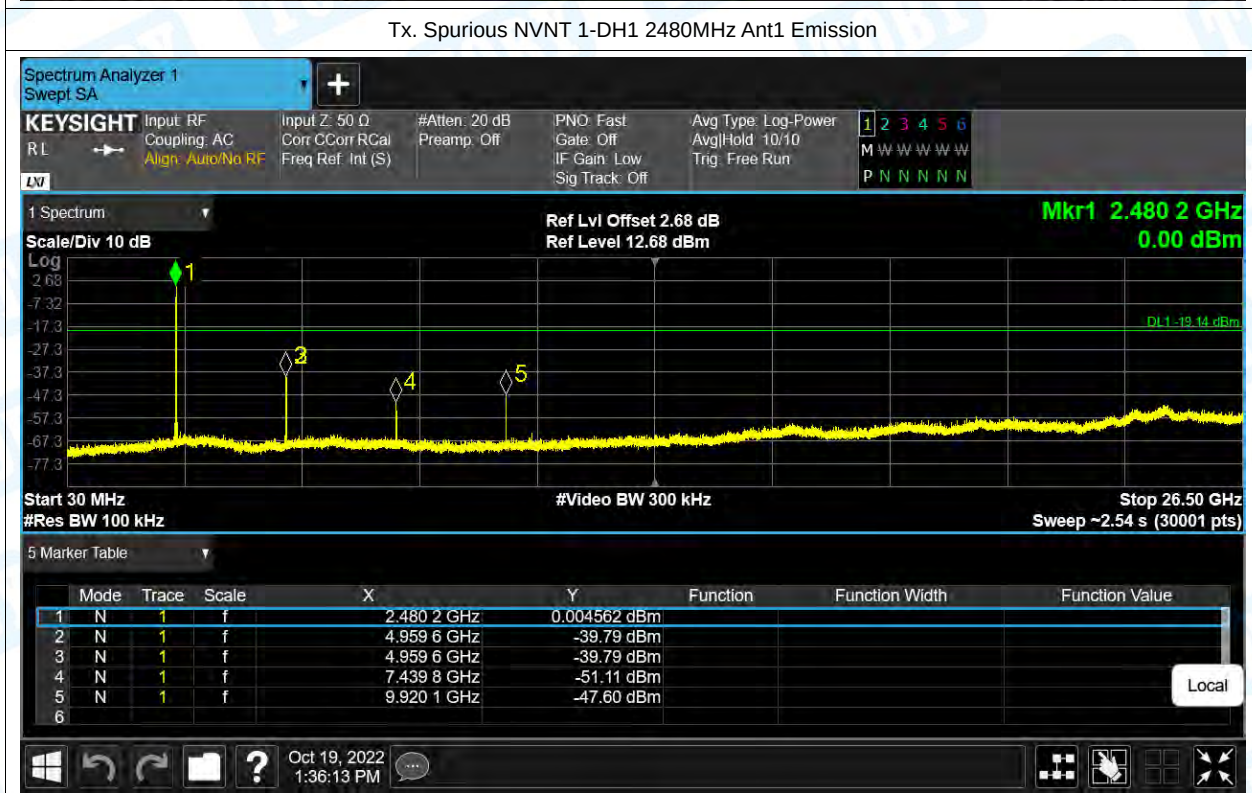
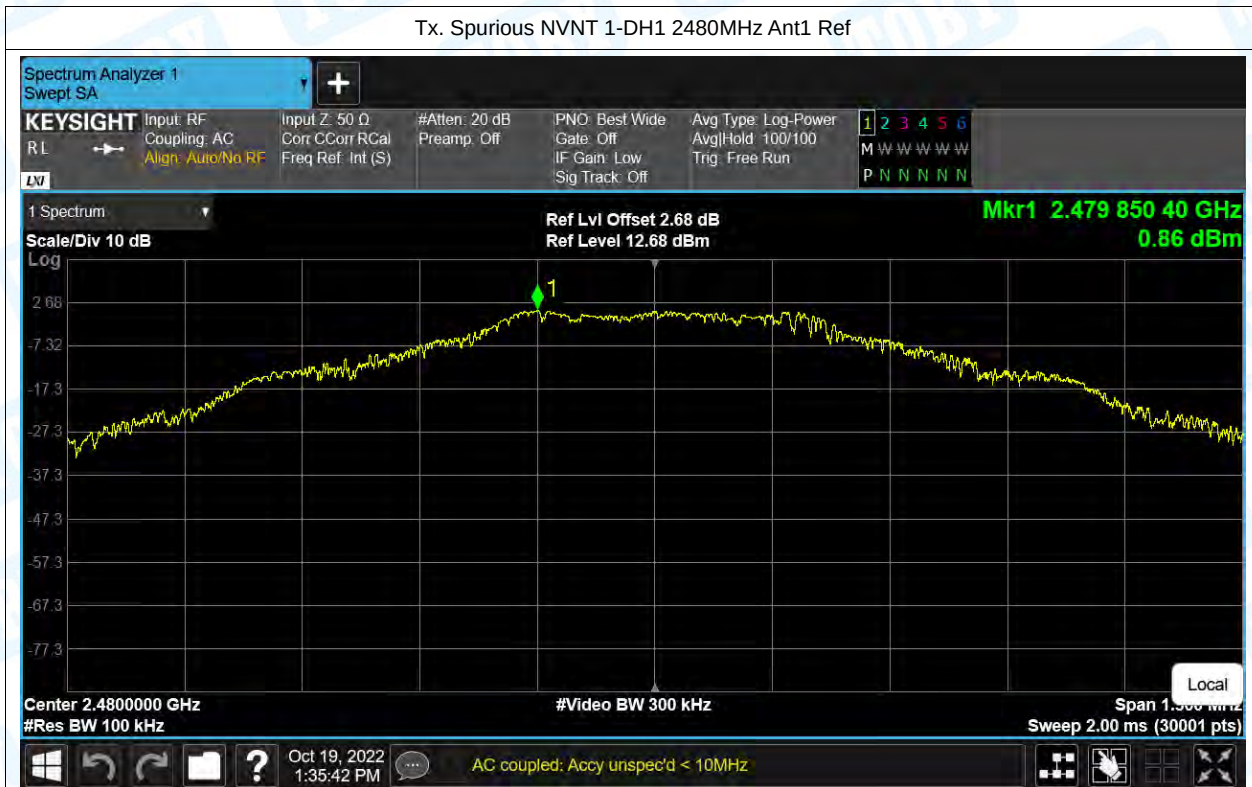


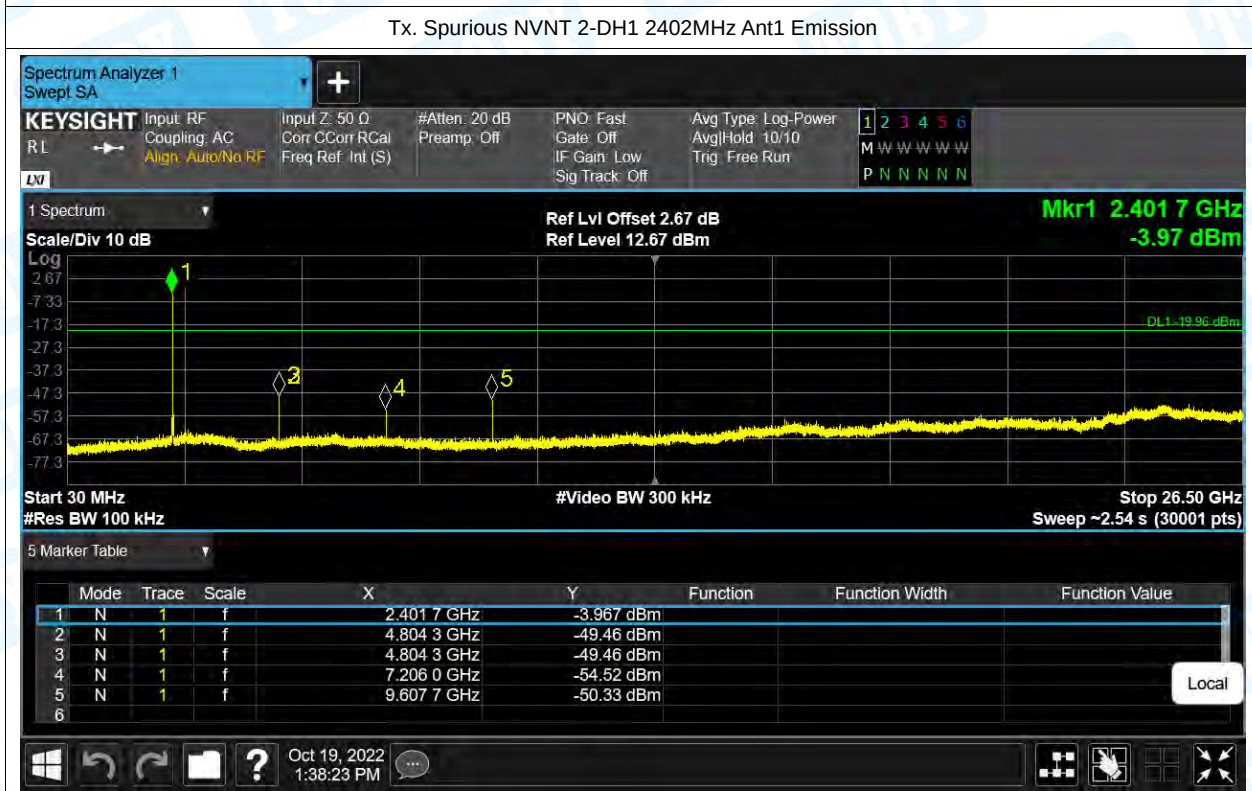
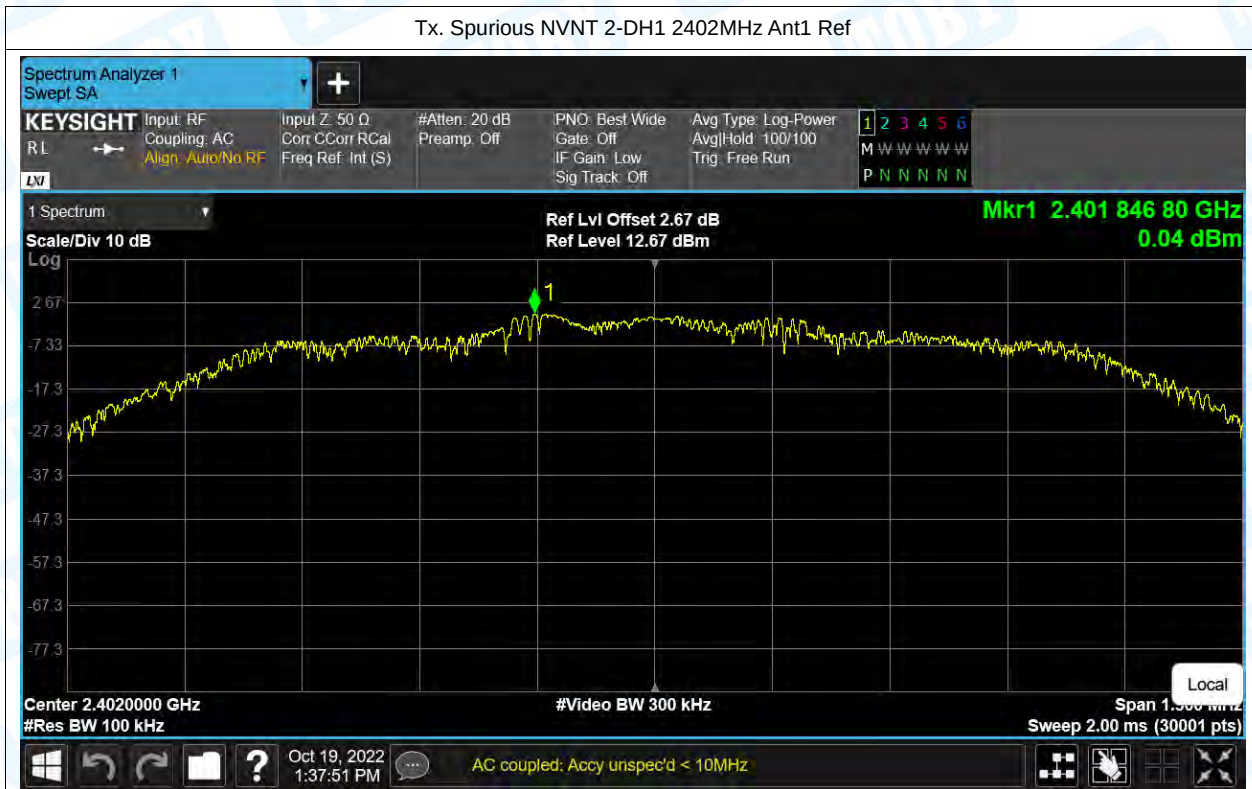
7. Conducted RF Spurious Emission

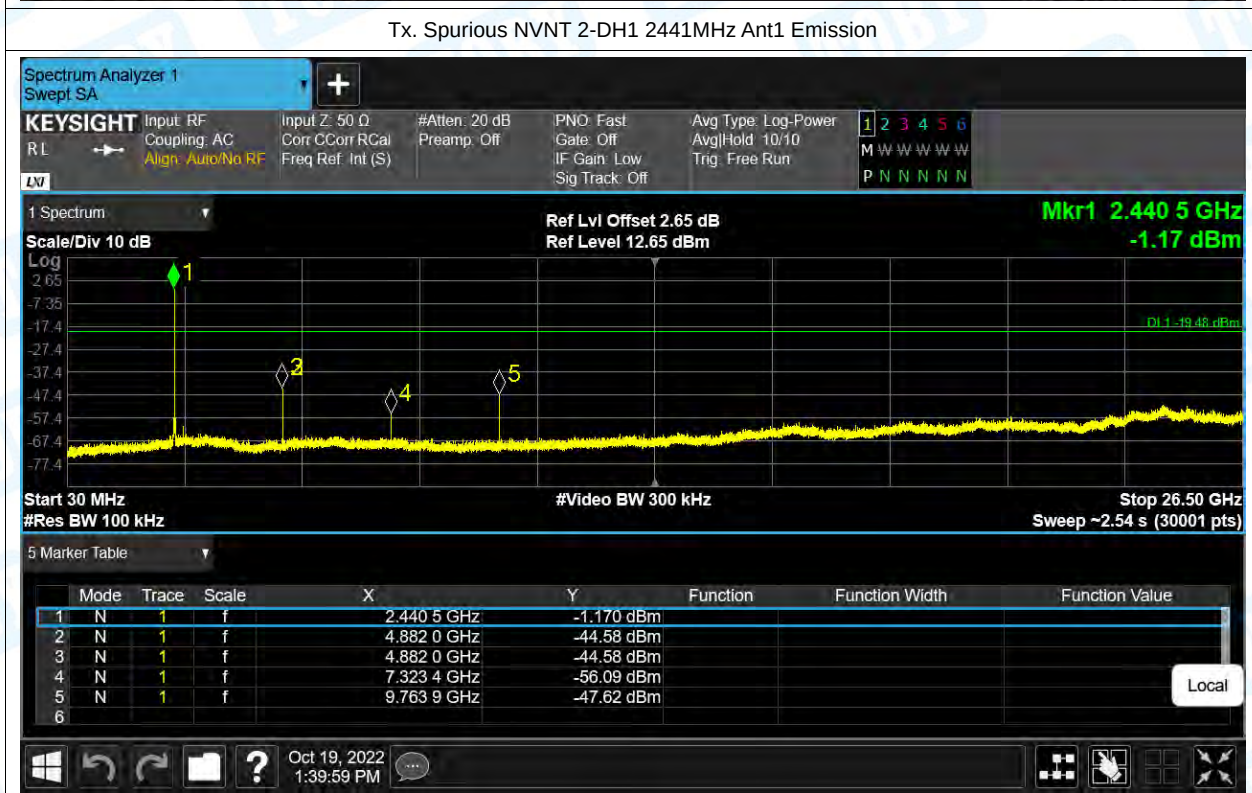
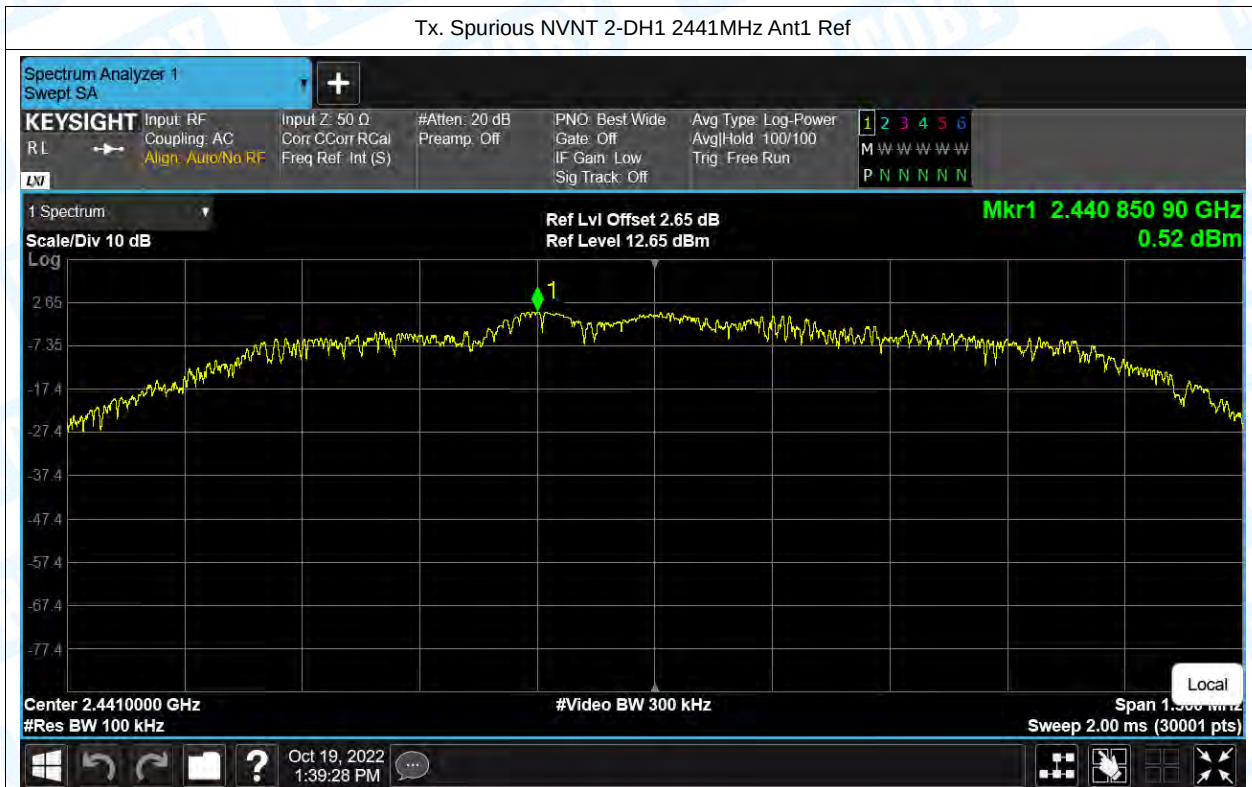
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-45.64	-20	Pass
NVNT	1-DH1	2441	Ant1	-46.07	-20	Pass
NVNT	1-DH1	2480	Ant1	-40.65	-20	Pass
NVNT	2-DH1	2402	Ant1	-49.5	-20	Pass
NVNT	2-DH1	2441	Ant1	-45.1	-20	Pass
NVNT	2-DH1	2480	Ant1	-46.05	-20	Pass
NVNT	3-DH1	2402	Ant1	-47.28	-20	Pass
NVNT	3-DH1	2441	Ant1	-43.16	-20	Pass
NVNT	3-DH1	2480	Ant1	-44.12	-20	Pass

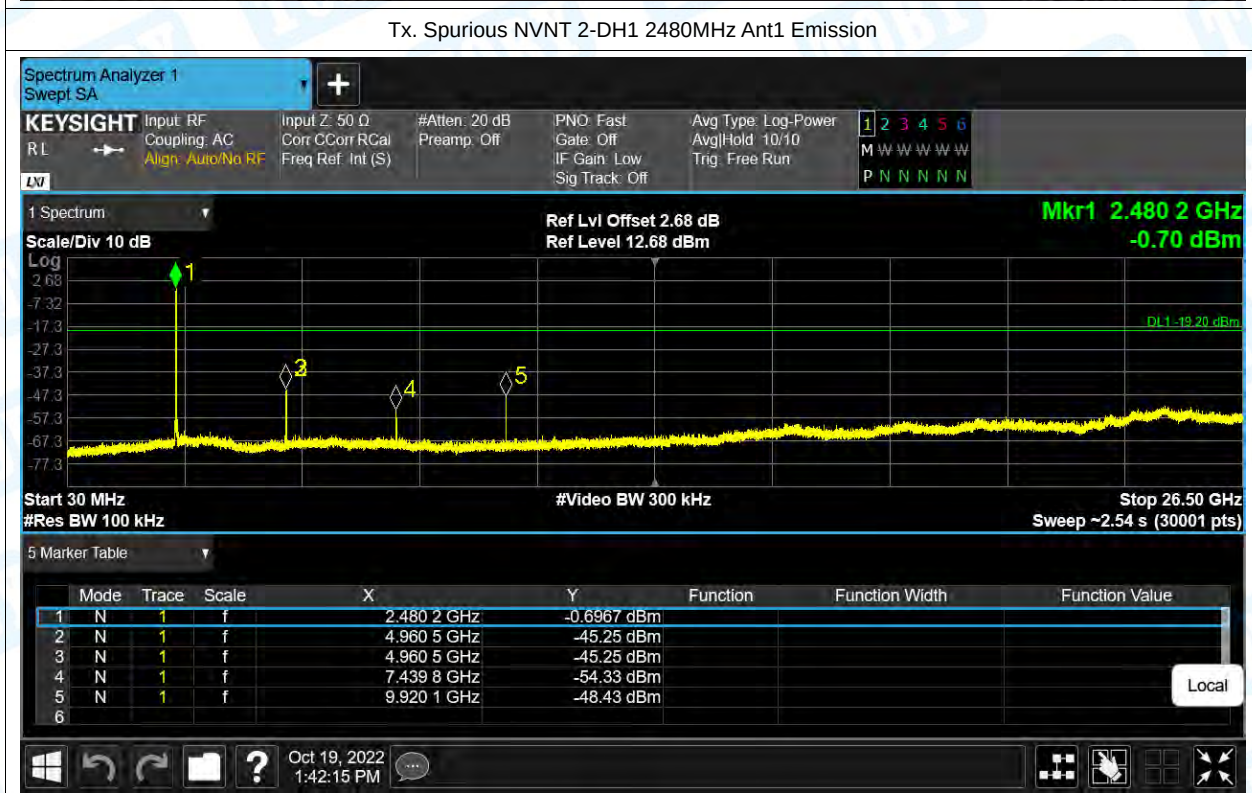
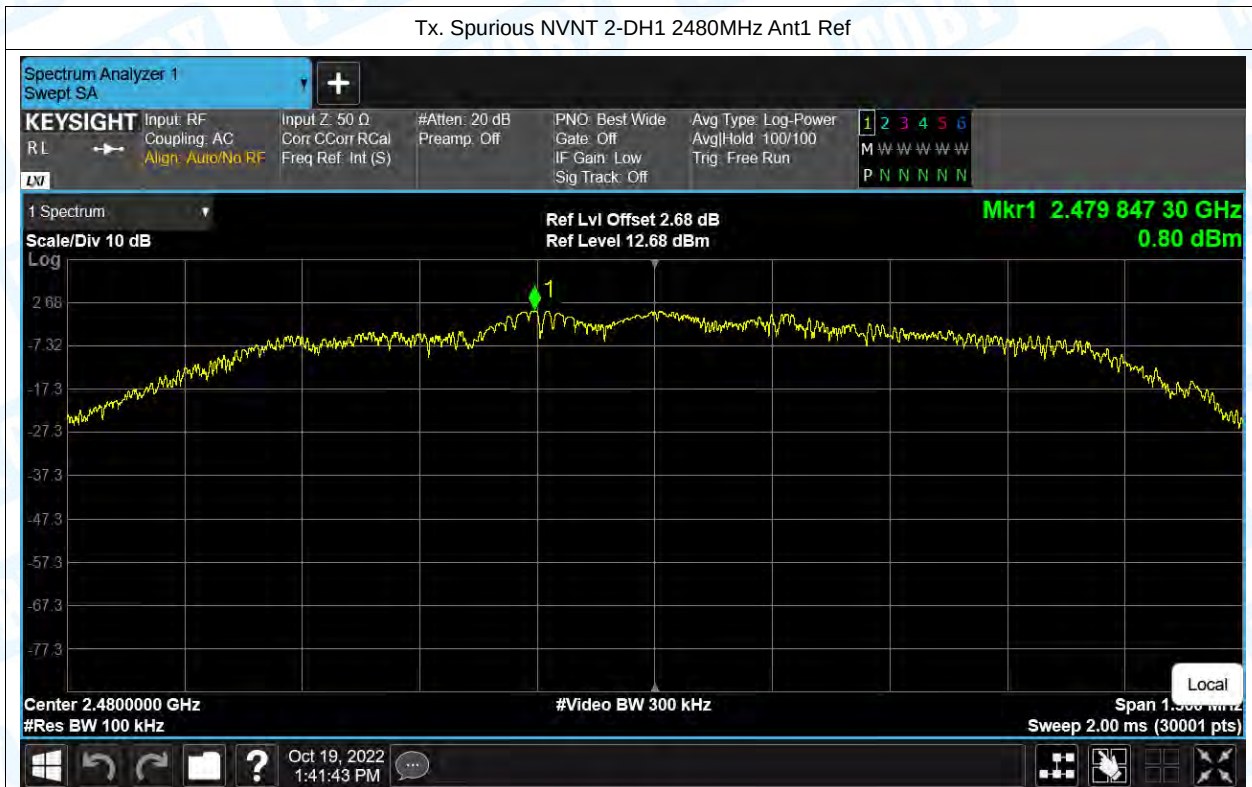


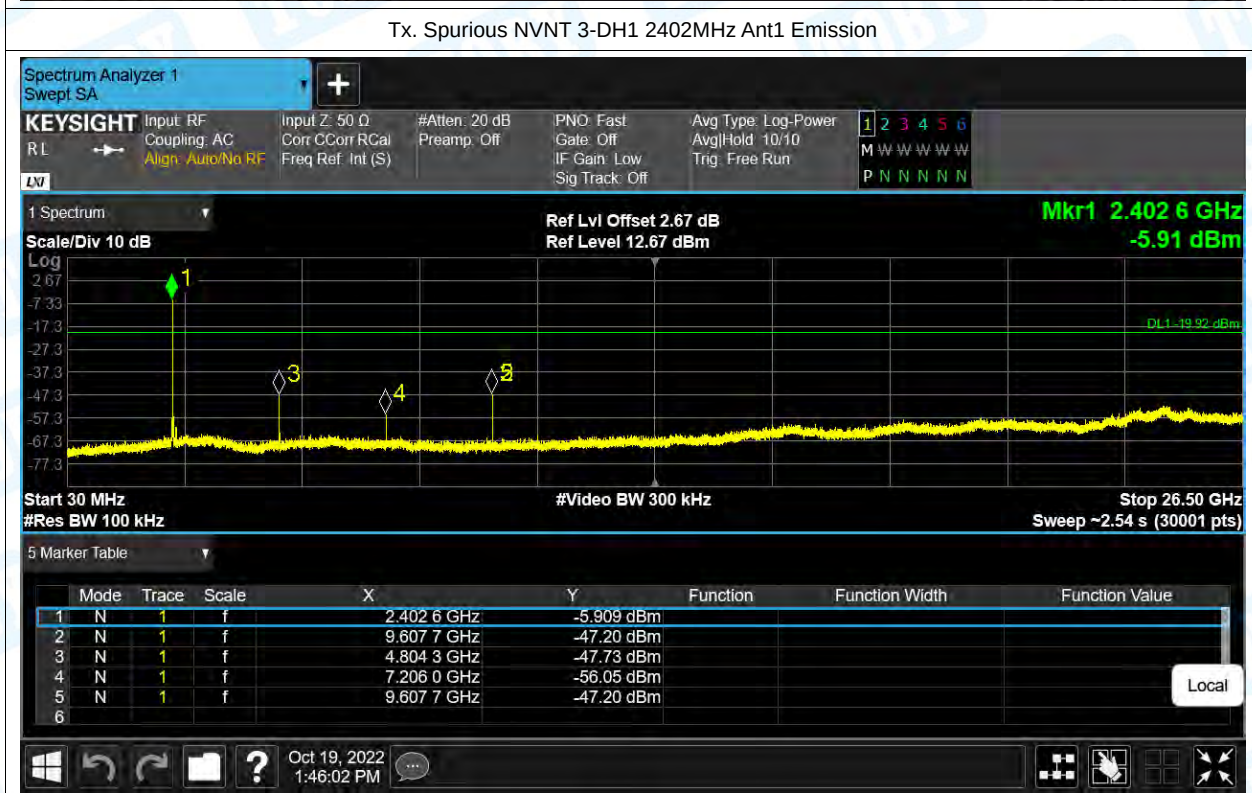
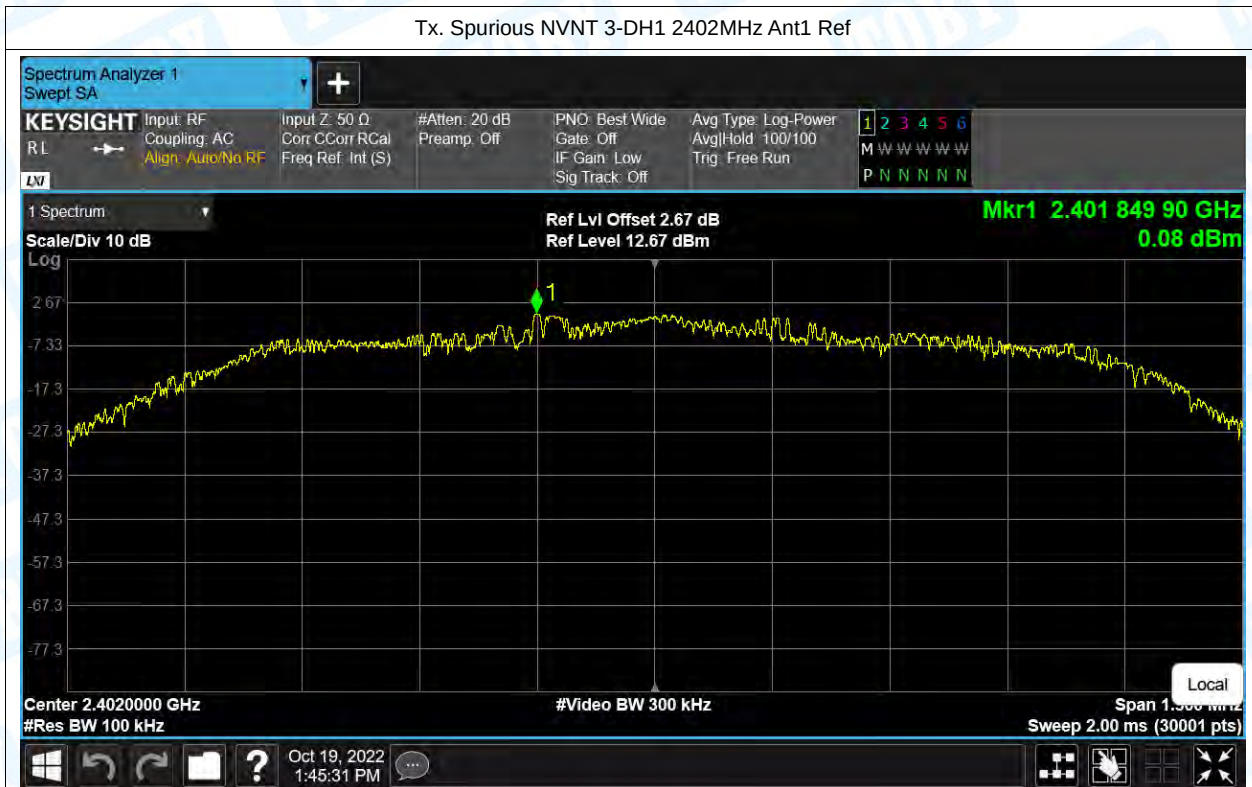


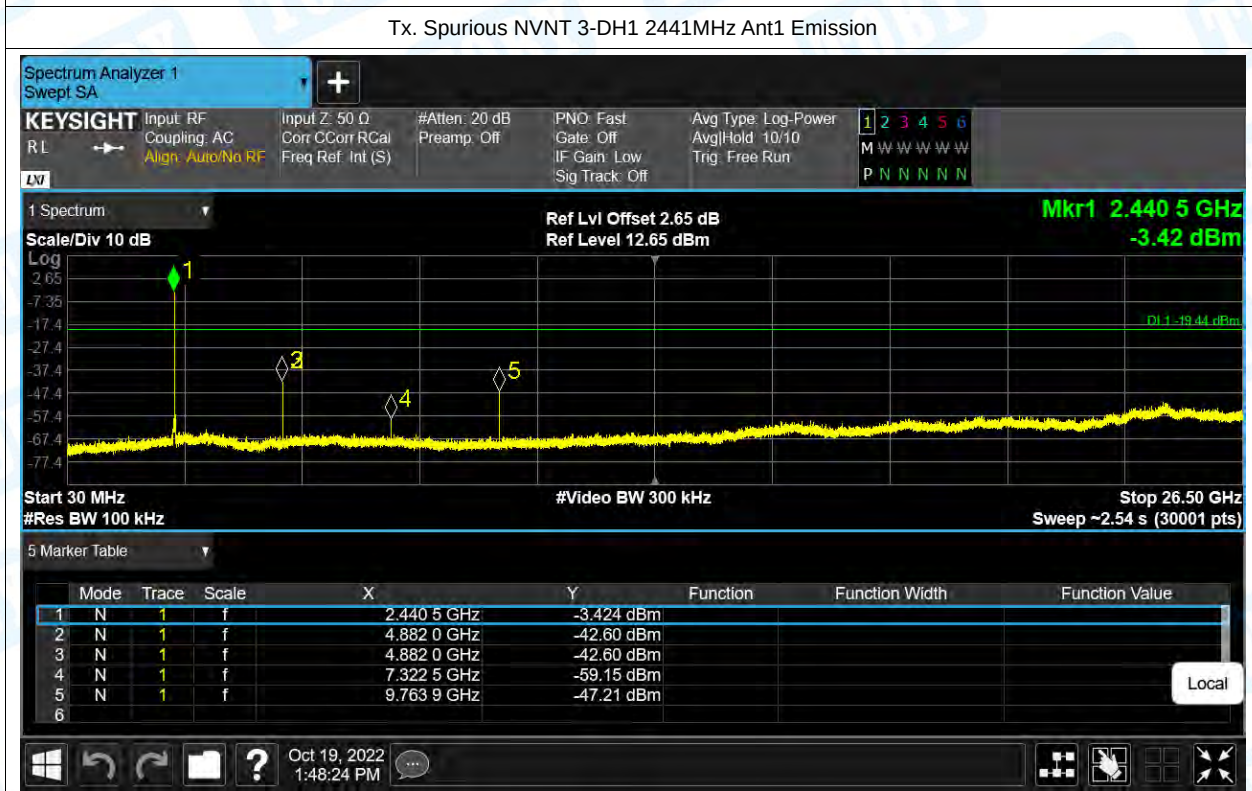
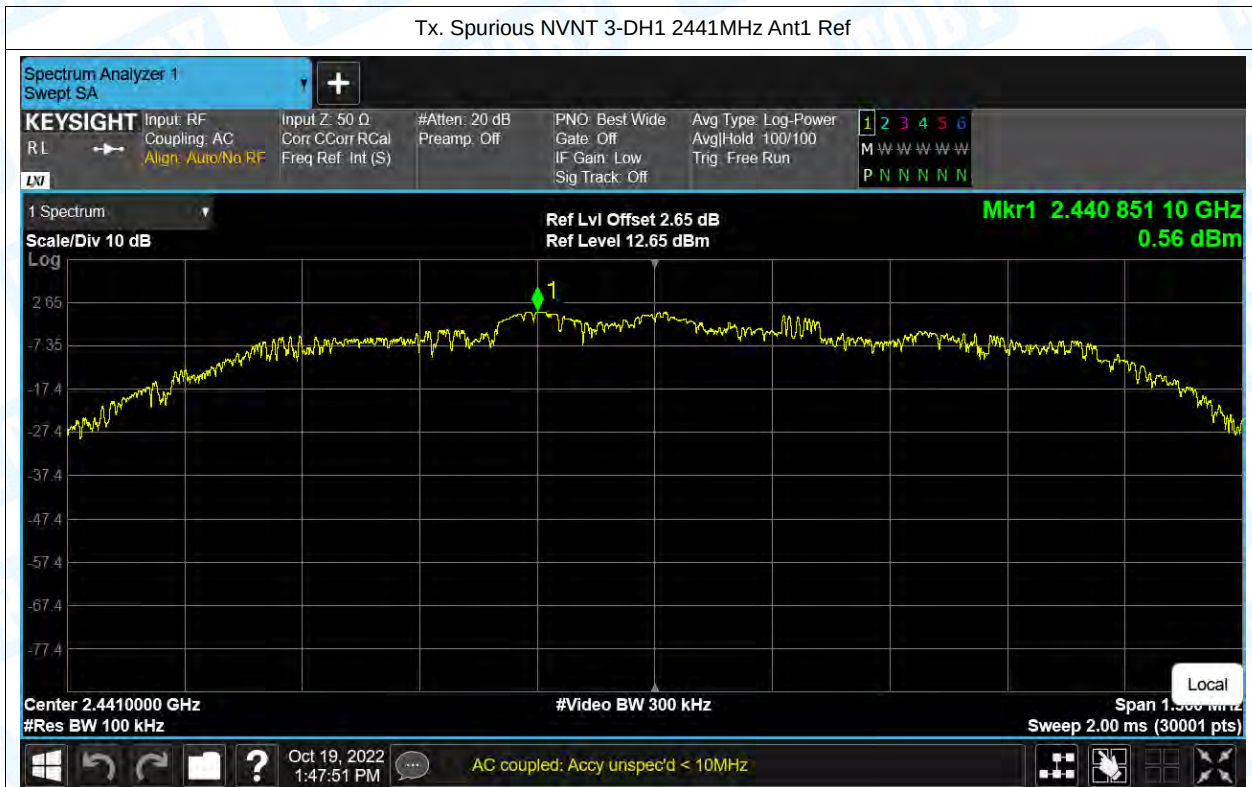












Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

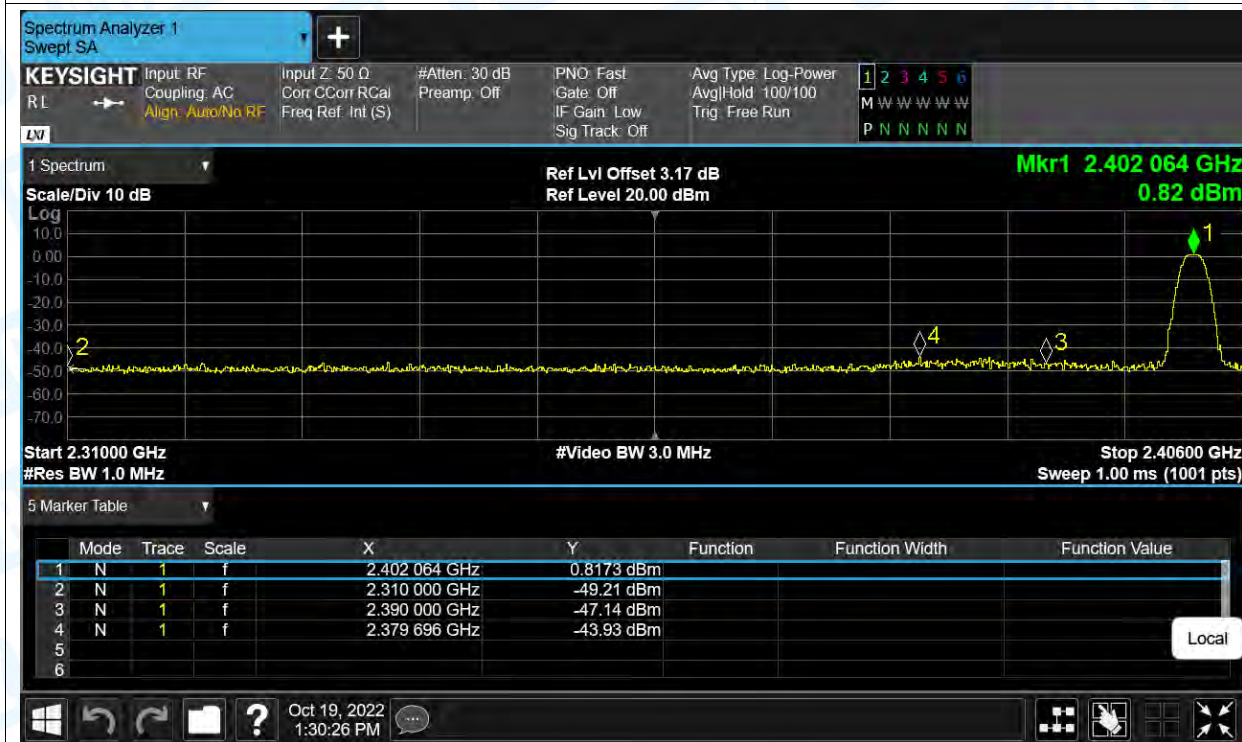


8. Restrict Band

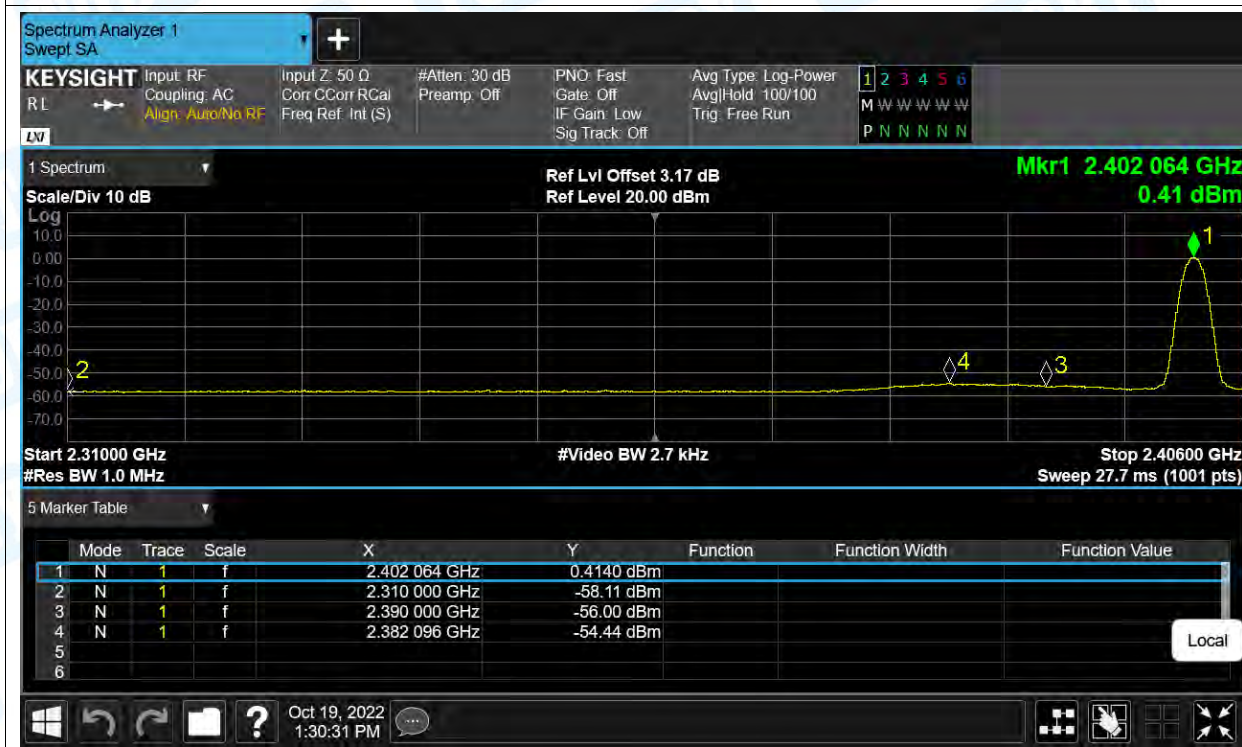
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-49.21	2	48.05	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-58.11	2	39.15	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2379.696	-43.93	2	53.33	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2382.096	-54.44	2	42.82	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-46.91	2	50.35	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-56.14	2	41.12	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-42.53	2	54.73	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-55.94	2	41.32	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2499.568	-42.21	2	55.05	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2499.208	-54.13	2	43.13	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-45.57	2	51.69	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-54.45	2	42.81	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-48.74	2	48.52	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-57.94	2	39.32	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2383.728	-44.33	2	52.93	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2382.384	-54.37	2	42.89	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-46.61	2	50.65	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-55.44	2	41.82	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-47.01	2	50.25	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-56.08	2	41.18	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.536	-42.14	2	55.12	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2497.432	-53.88	2	43.38	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-47.41	2	49.85	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-54.24	2	43.02	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-49.27	2	47.99	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-58.22	2	39.04	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2382.768	-44.2	2	53.06	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2379.888	-54.6	2	42.66	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-47.73	2	49.53	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-55.7	2	41.56	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-49.68	2	47.58	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-56.19	2	41.07	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.776	-41.62	2	55.64	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2498.728	-53.93	2	43.33	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-45.76	2	51.5	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-54.44	2	42.82	Average	54	Pass

Test Graphs

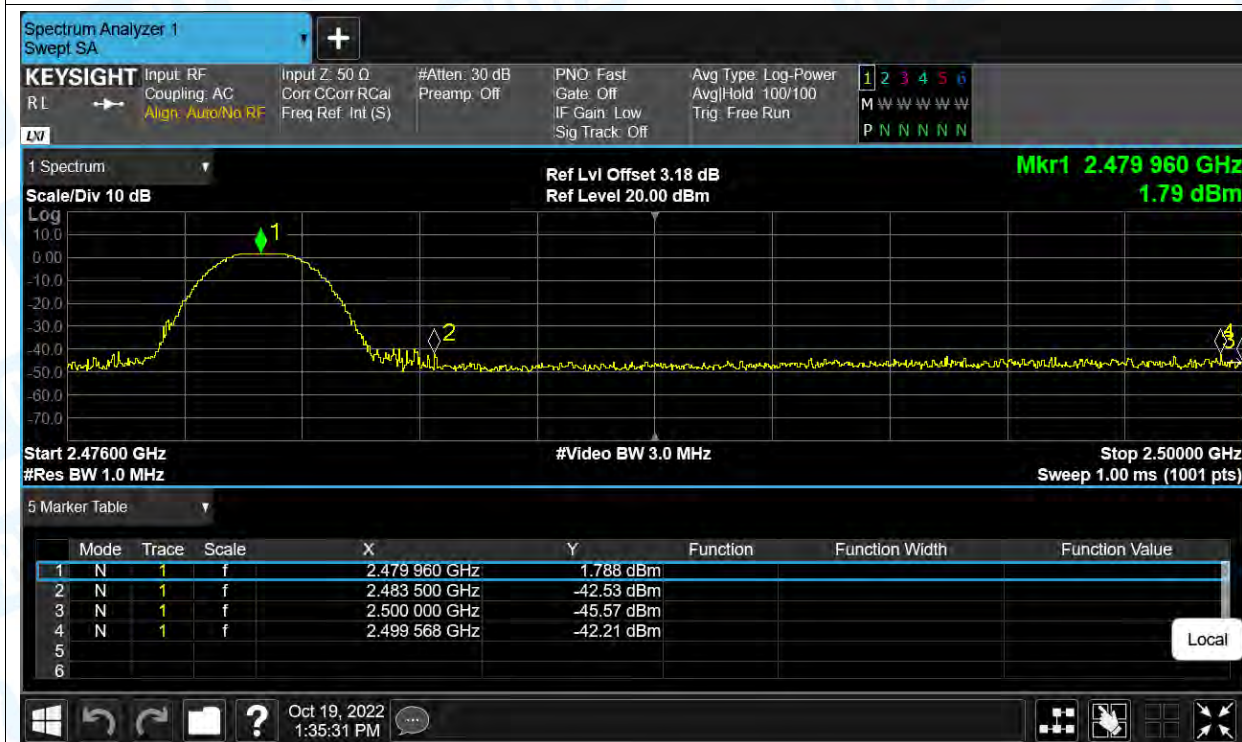
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



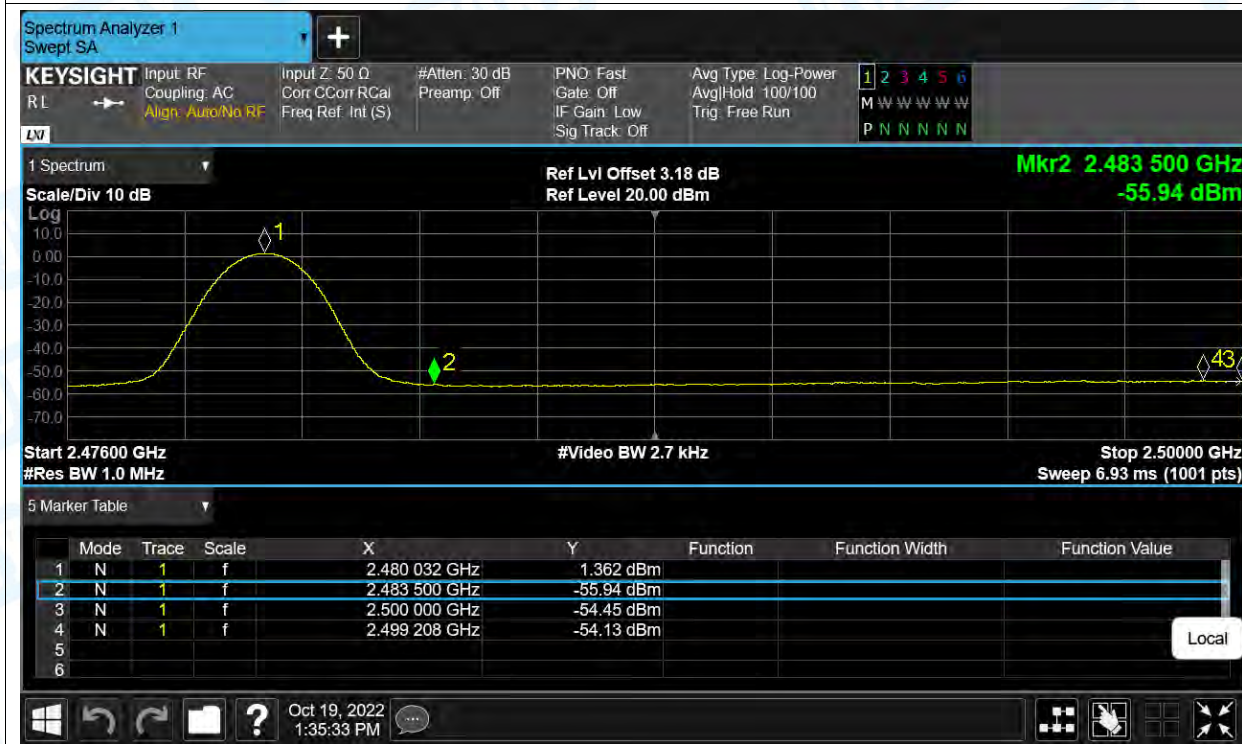
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



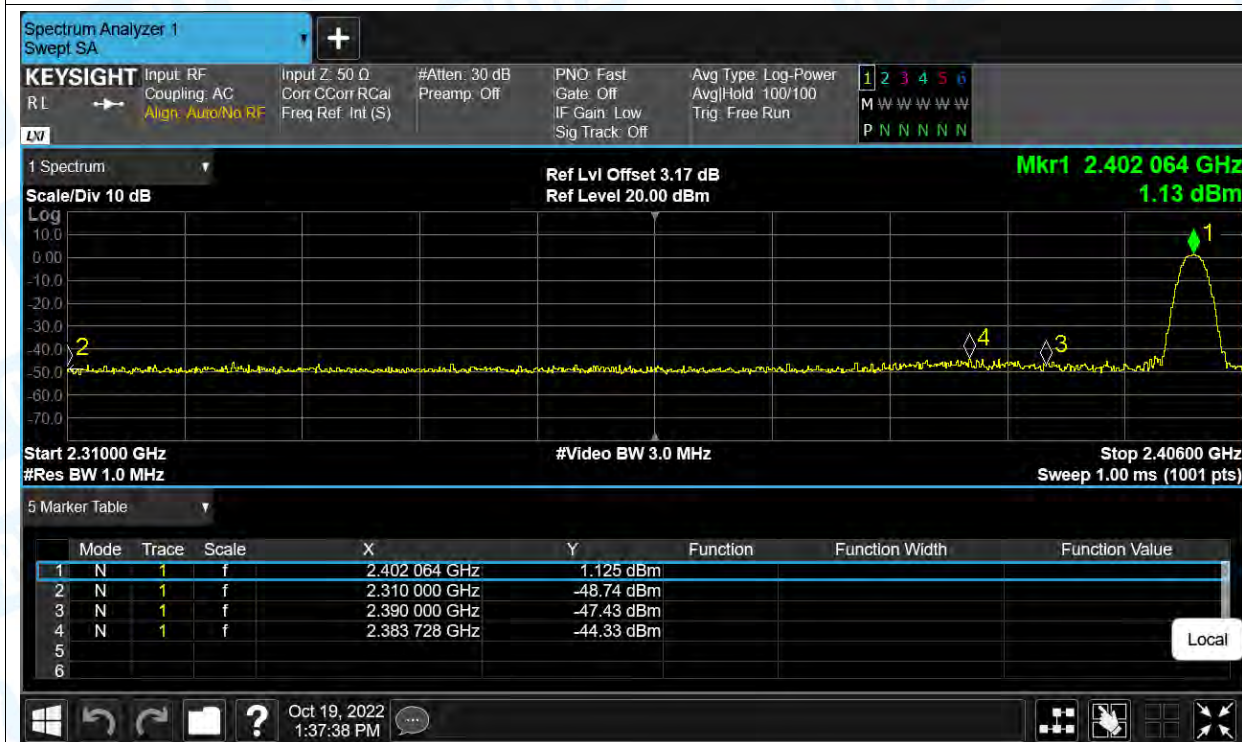
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



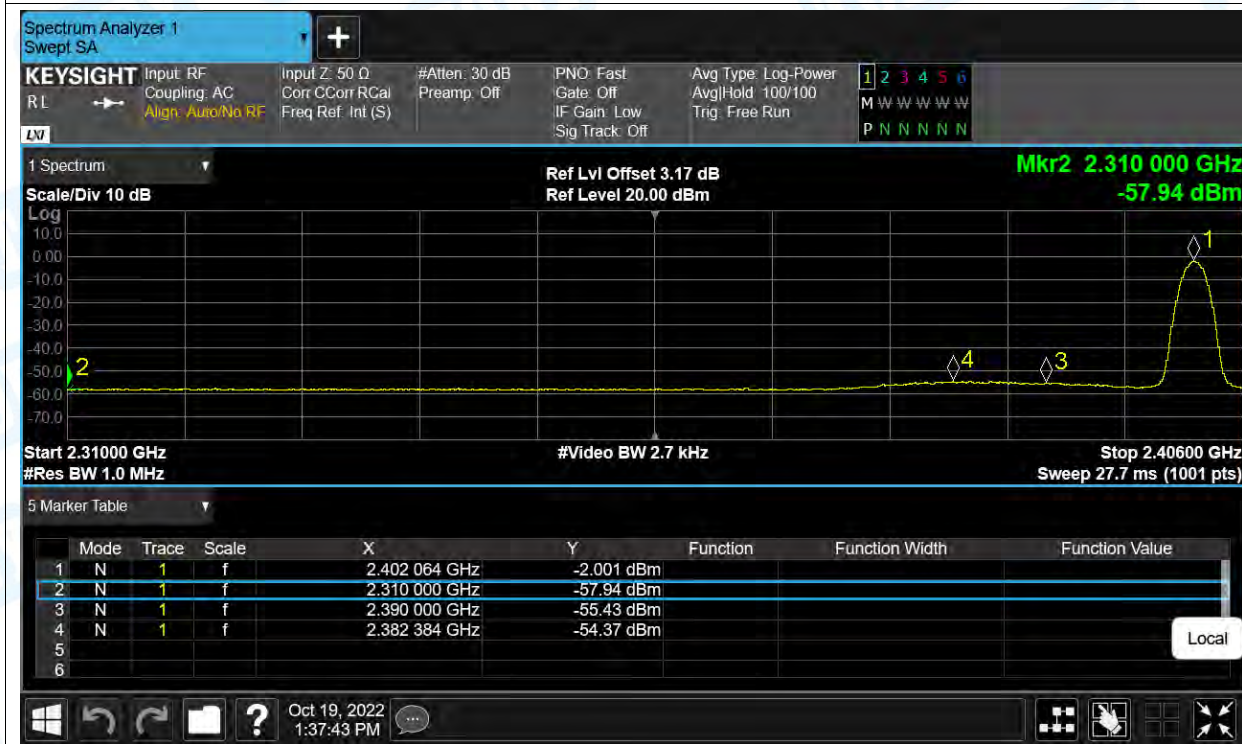
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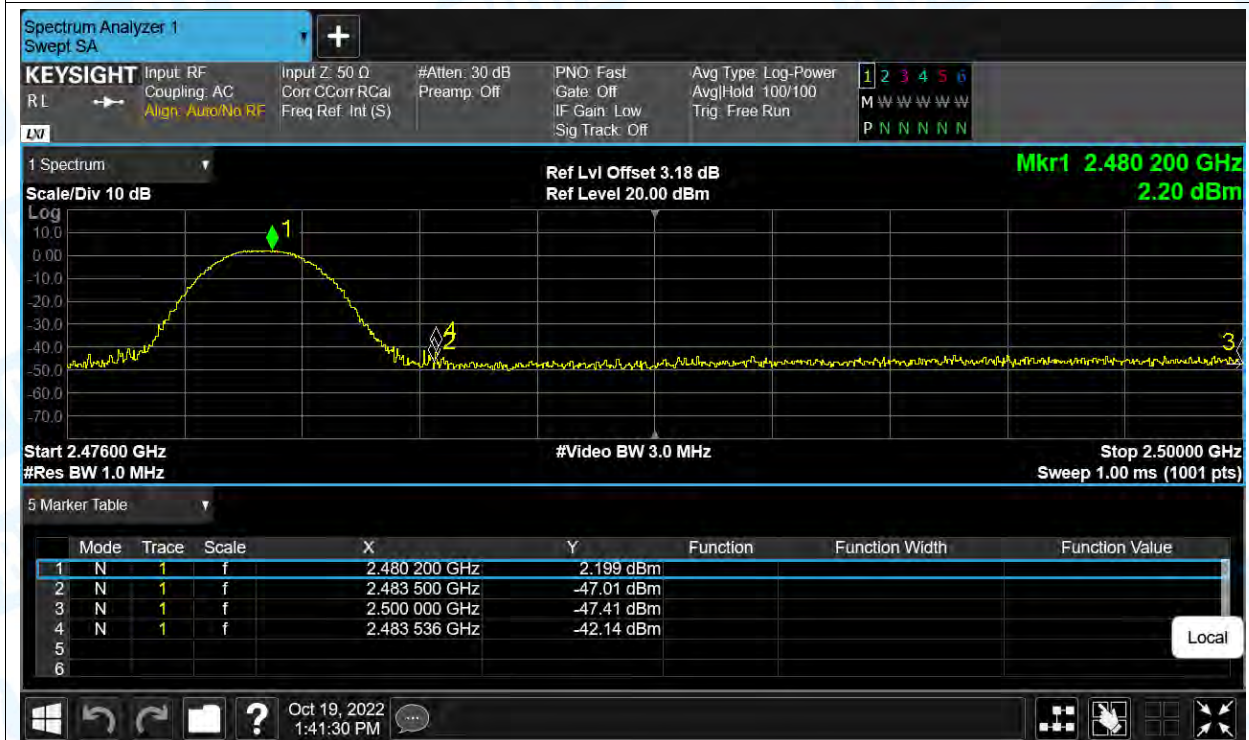
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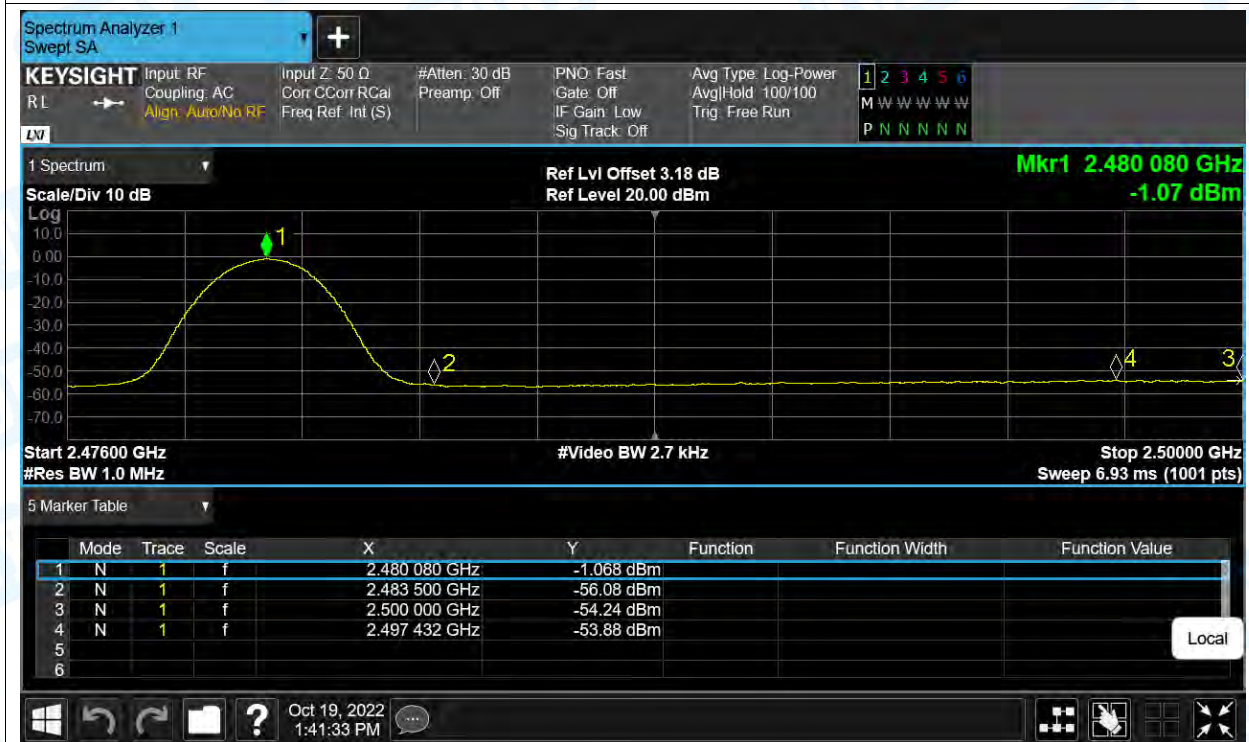
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



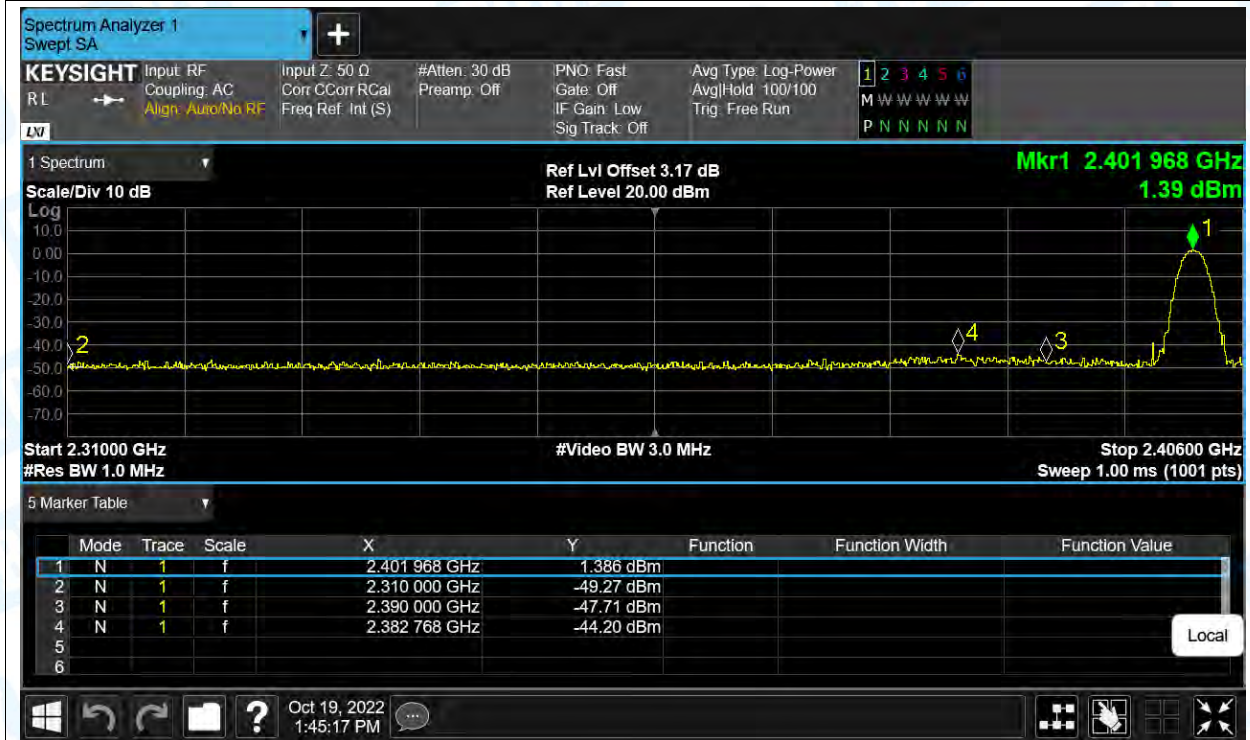
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



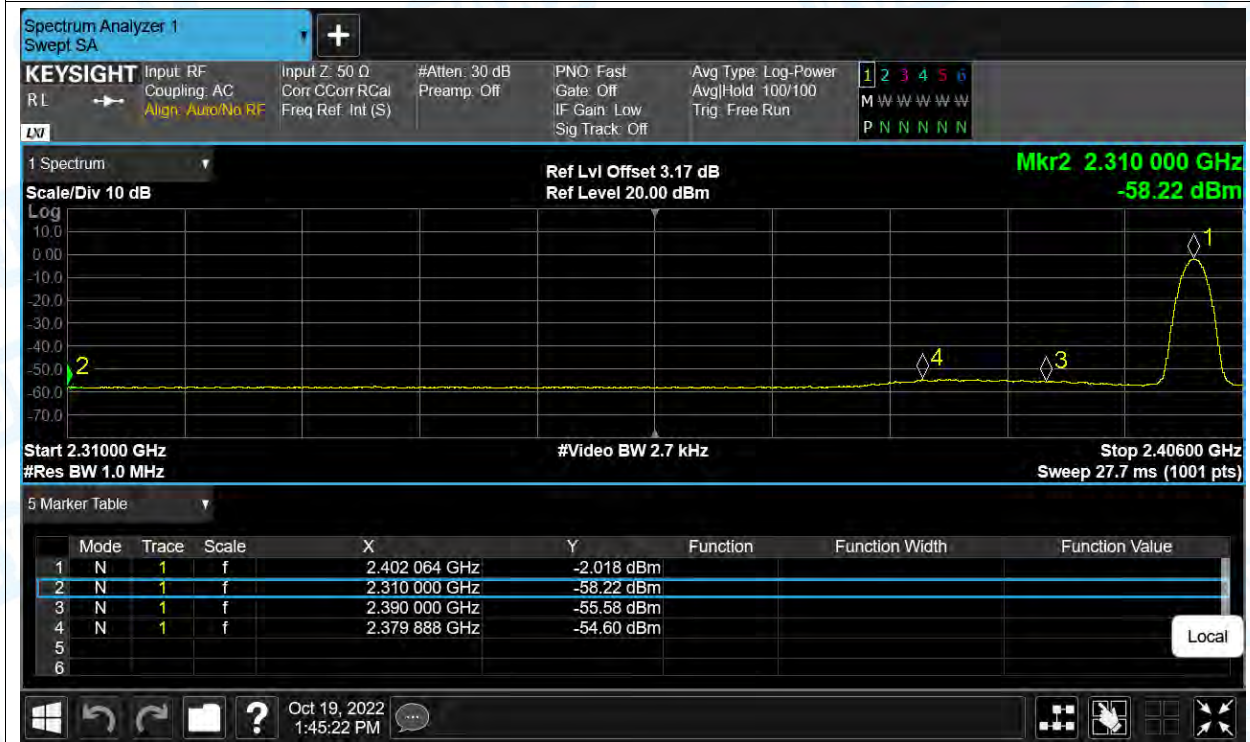
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average



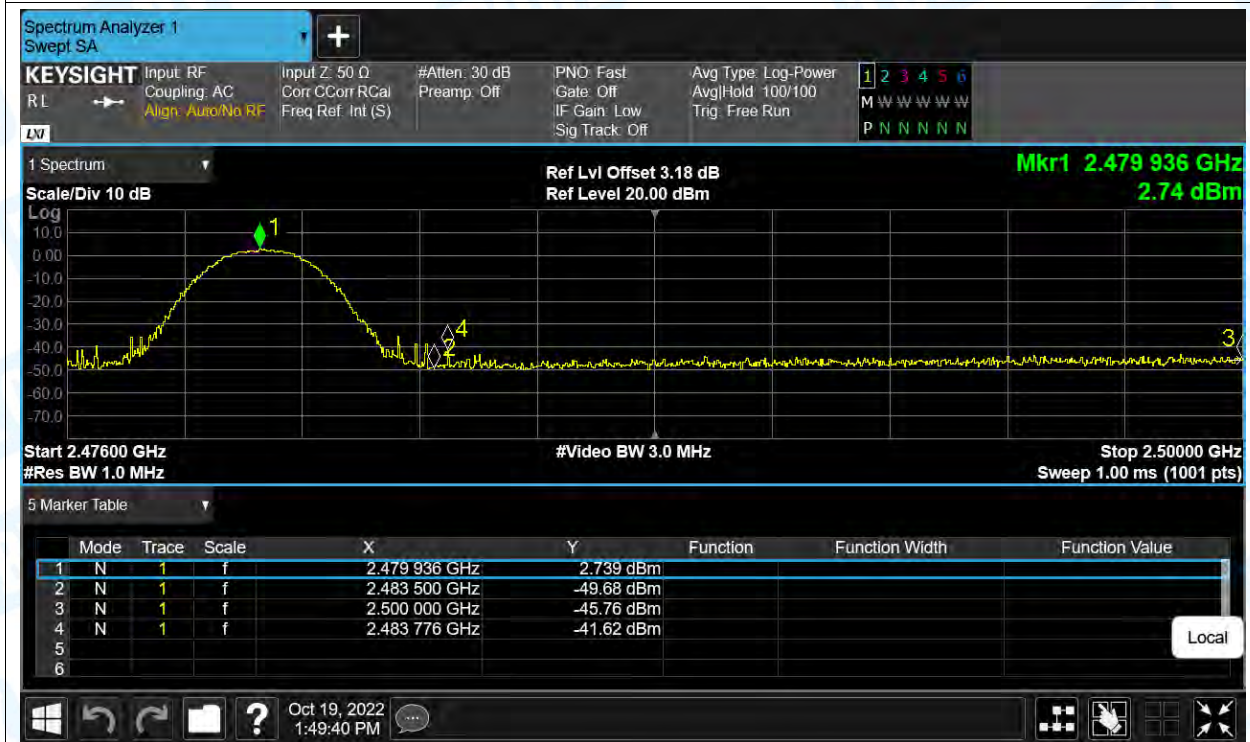
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Peak



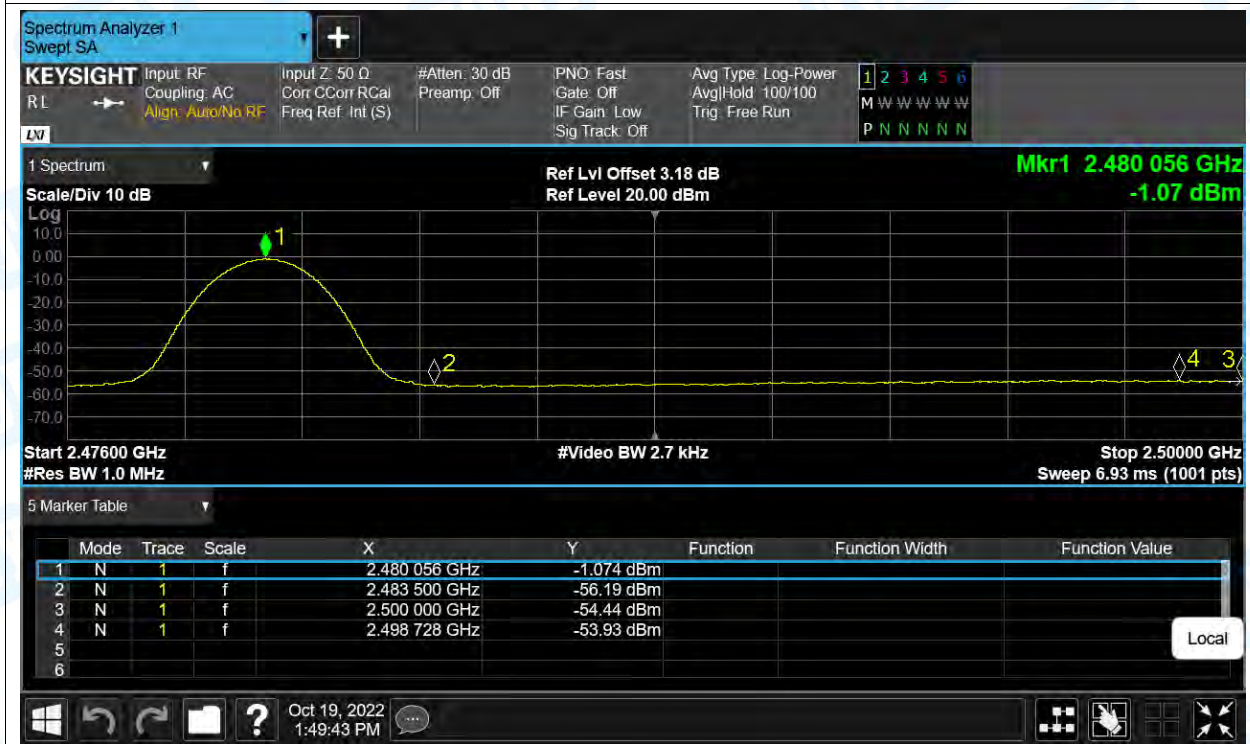
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



Restrict Band NVNT 3-DH1 2480MHz Ant1 No-Hopping Peak

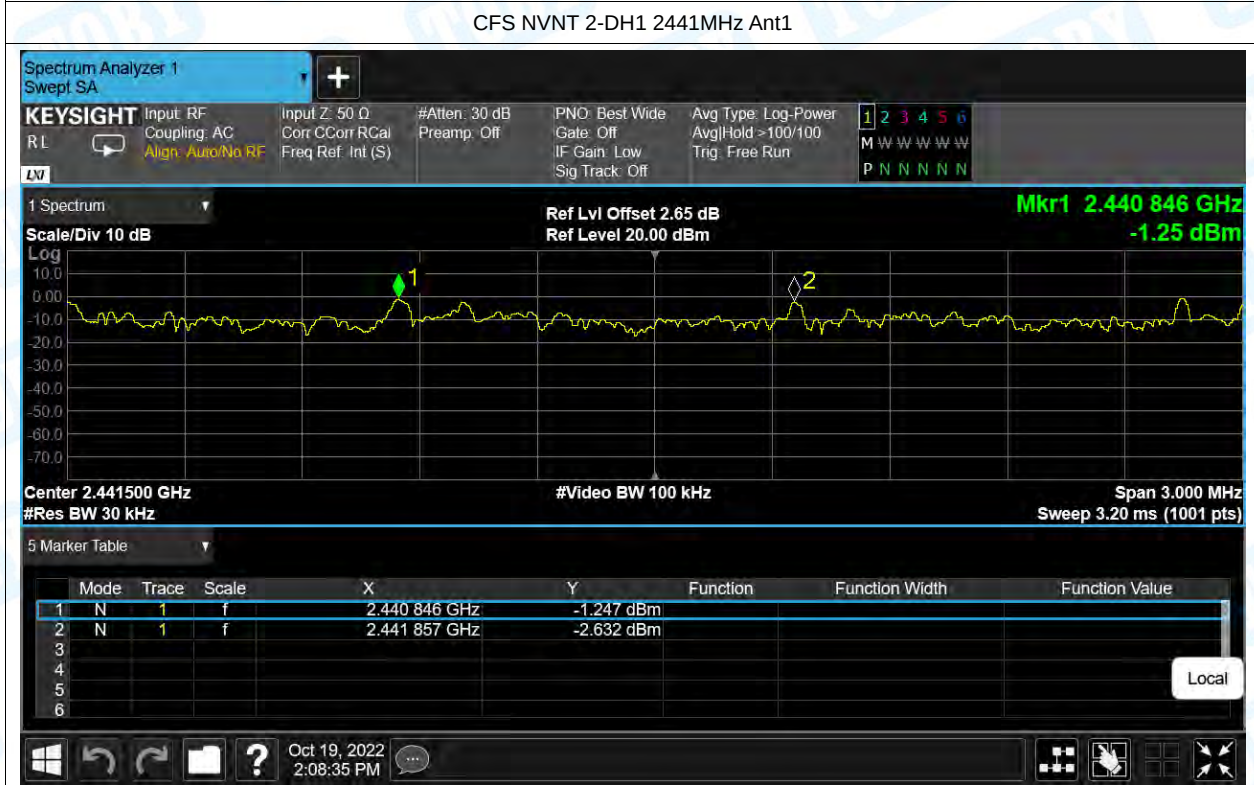
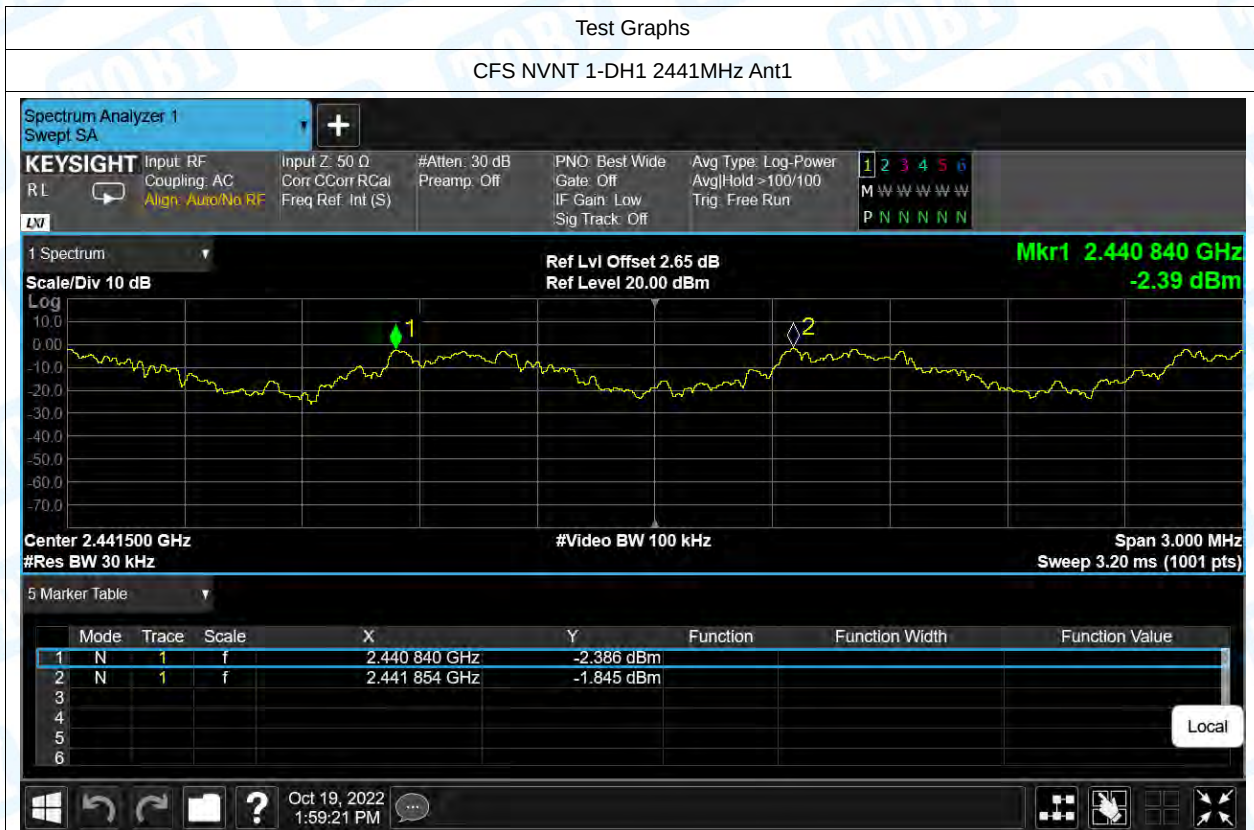


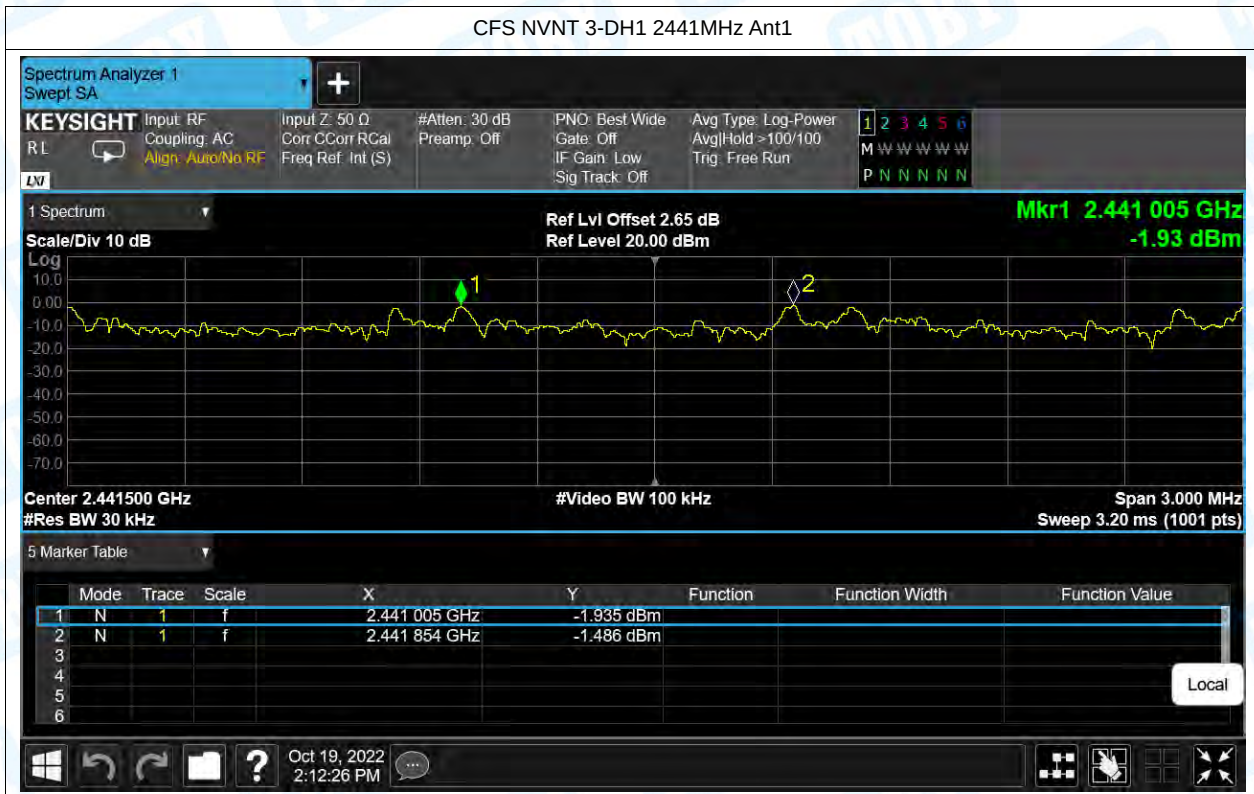
Restrict Band NVNT 3-DH1 2480MHz Ant1 No-Hopping Average



9. Carrier Frequencies Separation

Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.84	2441.854	1.014	0.693	Pass
NVNT	2-DH1	Ant1	2440.846	2441.857	1.011	0.86	Pass
NVNT	3-DH1	Ant1	2441.005	2441.854	0.849	0.827	Pass



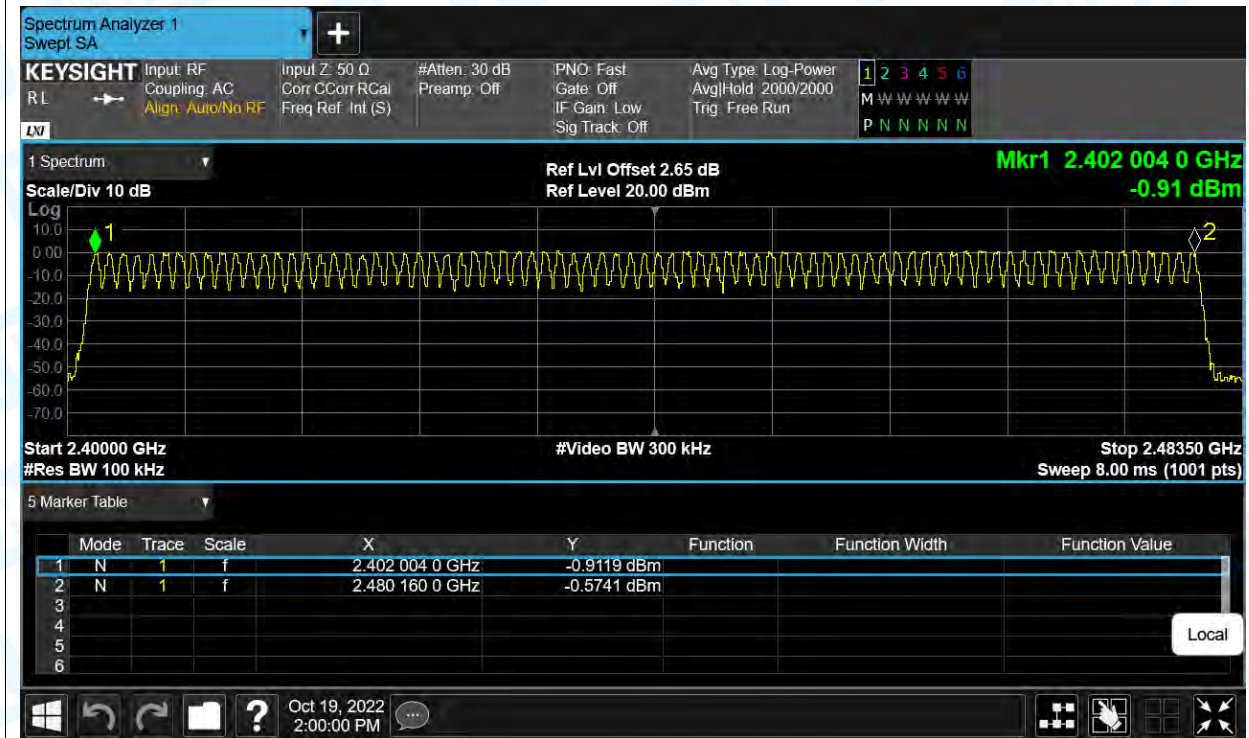


10. Number of Hopping Channel

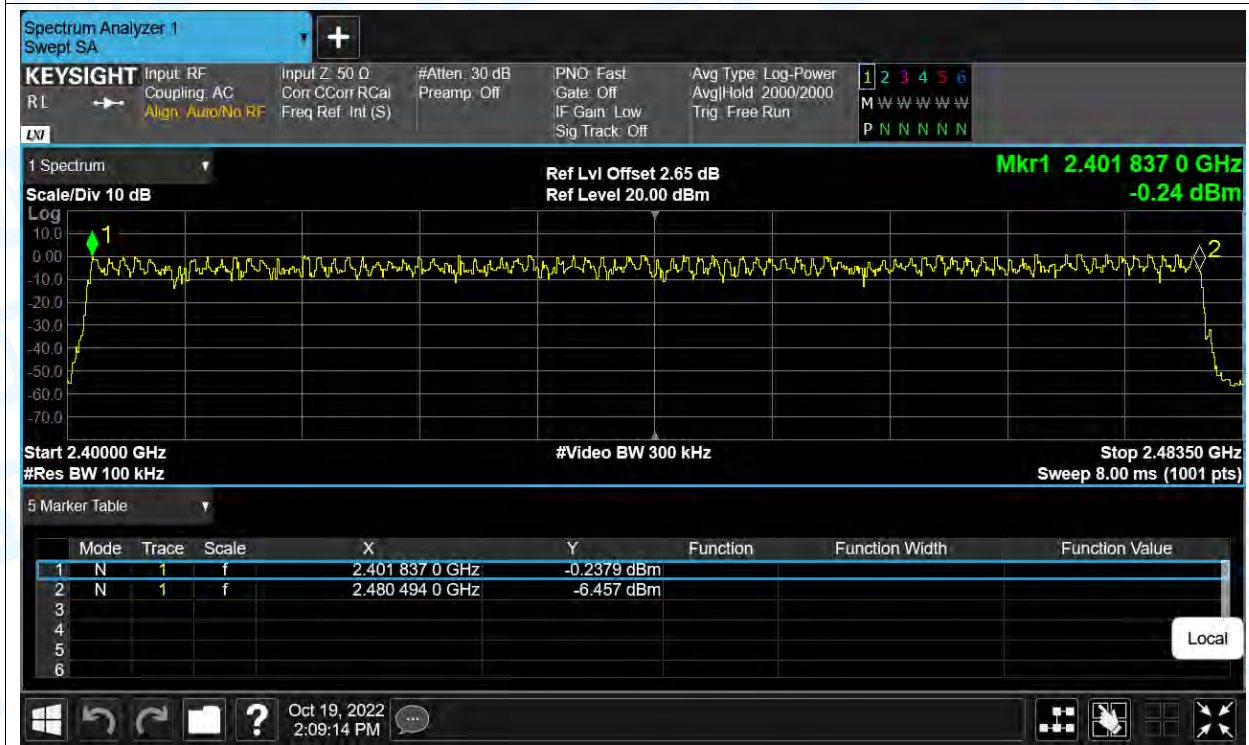
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

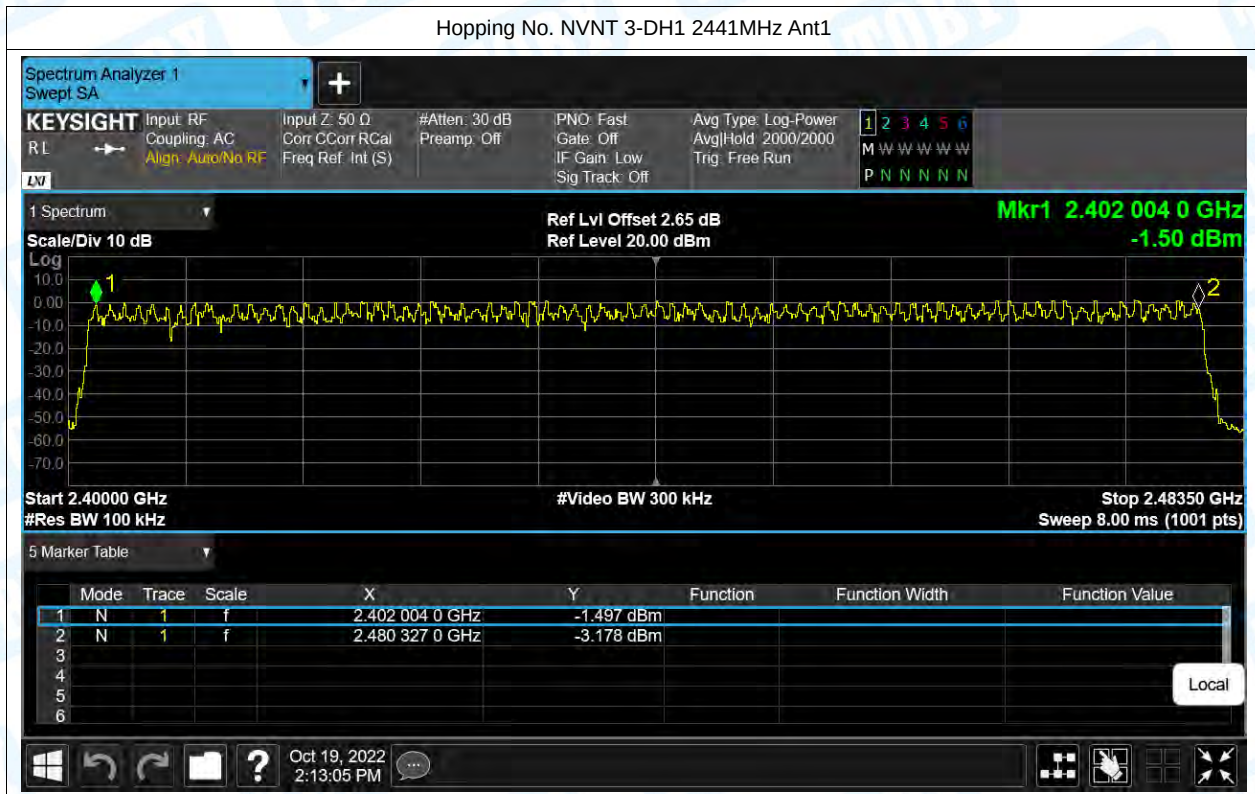
Test Graphs

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	0.375	120	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	0.385	123.2	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.635	261.6	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.885	307.733	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.386	123.52	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.636	261.76	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.887	307.947	31600	400	Pass

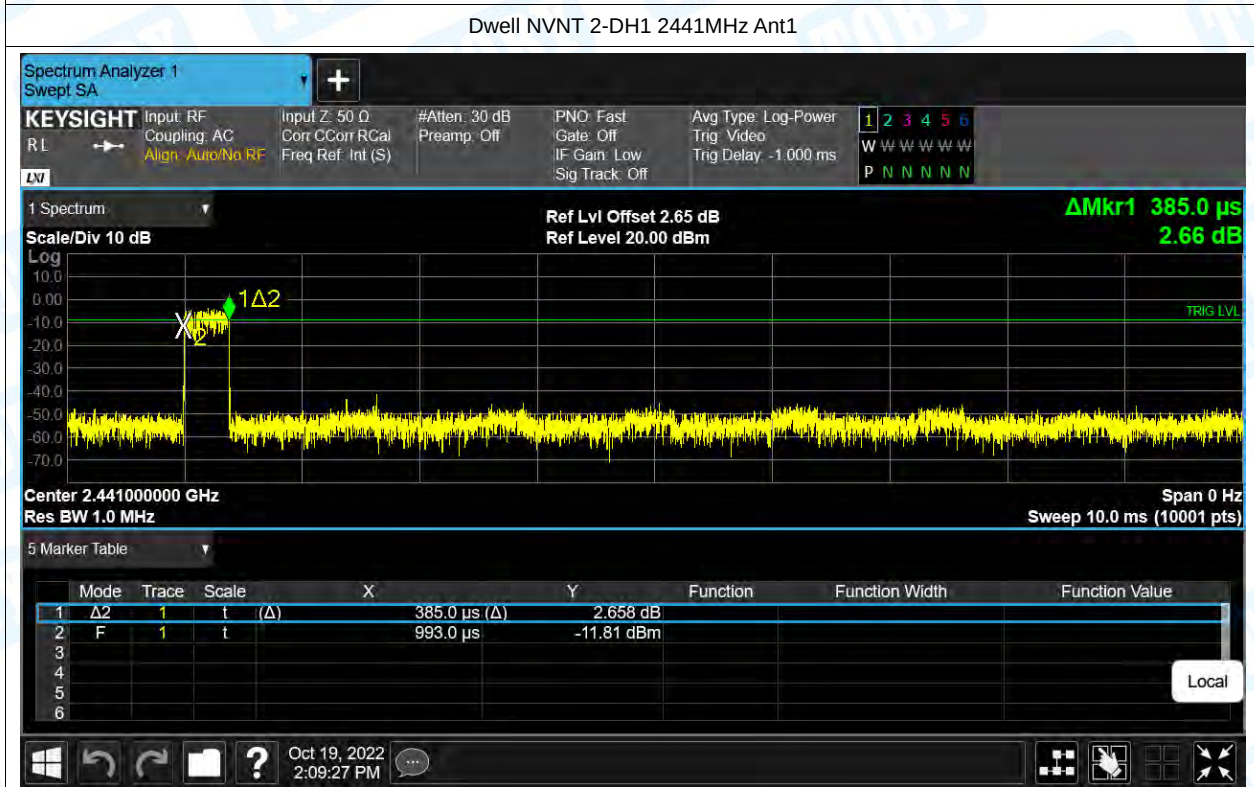
Test Graphs

Dwell NVNT 1-DH1 2441MHz Ant1

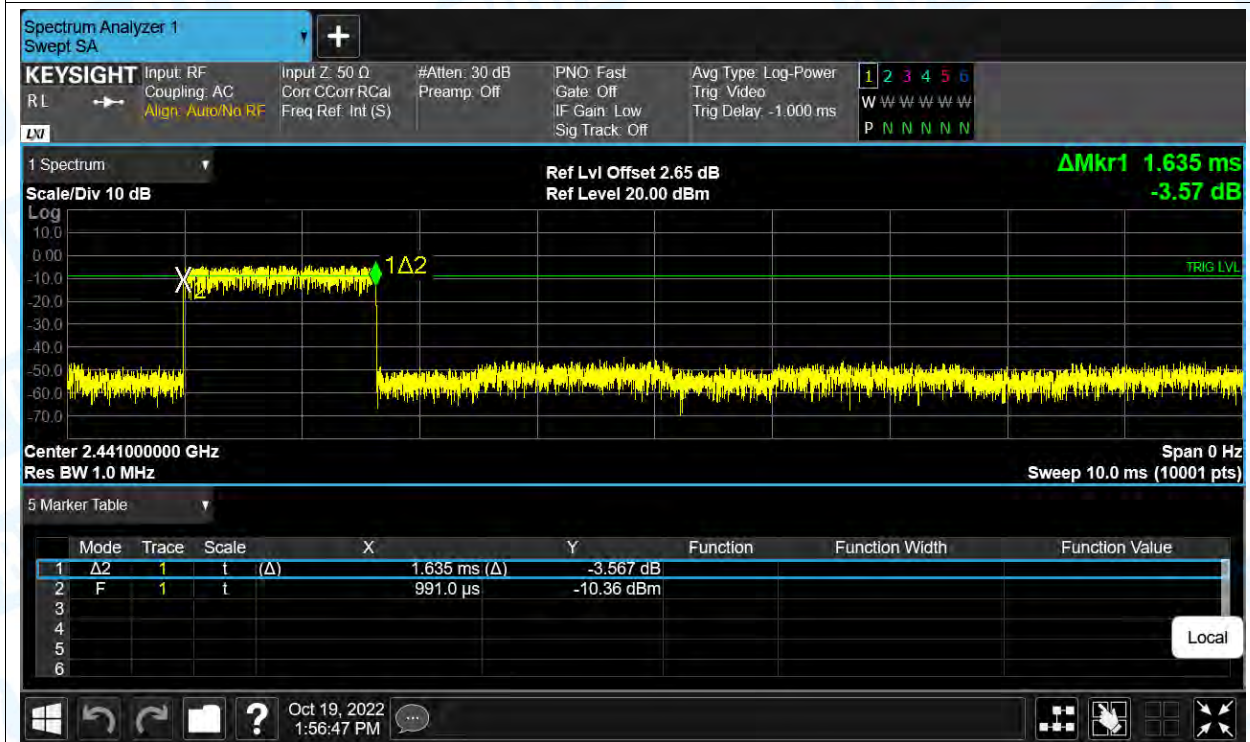


Dwell NVNT 1-DH3 2441MHz Ant1

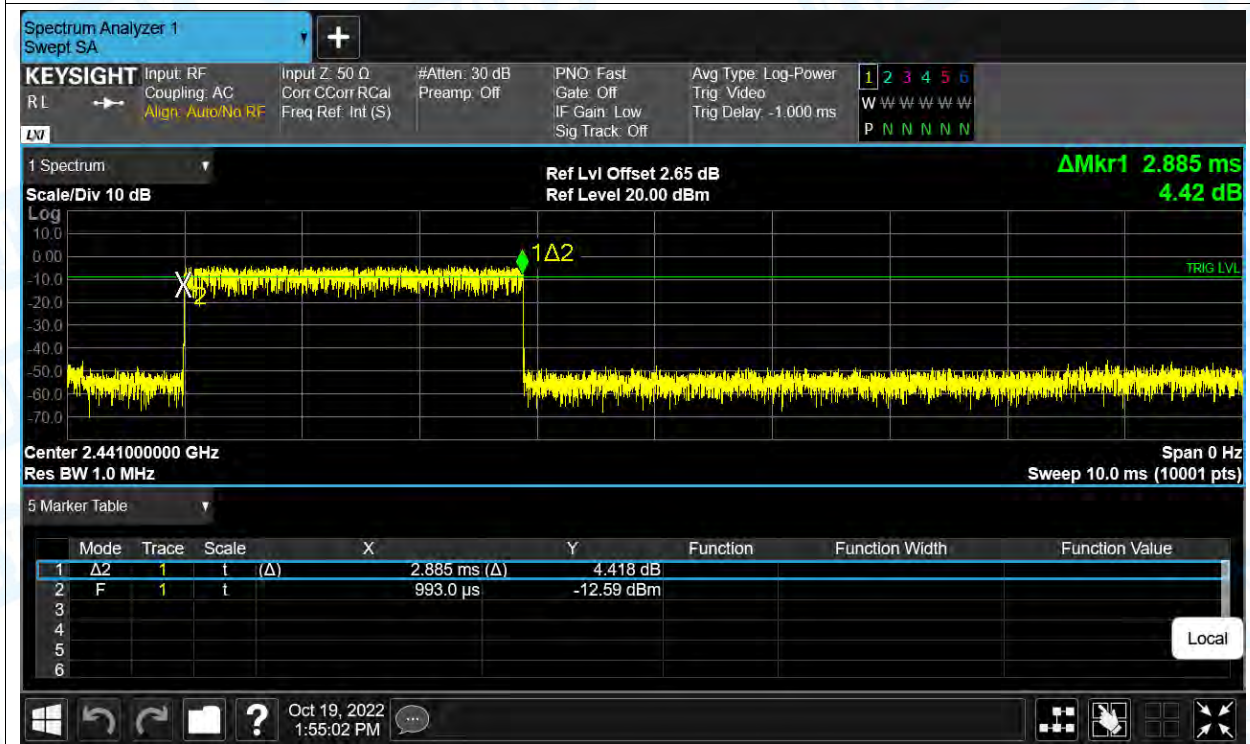


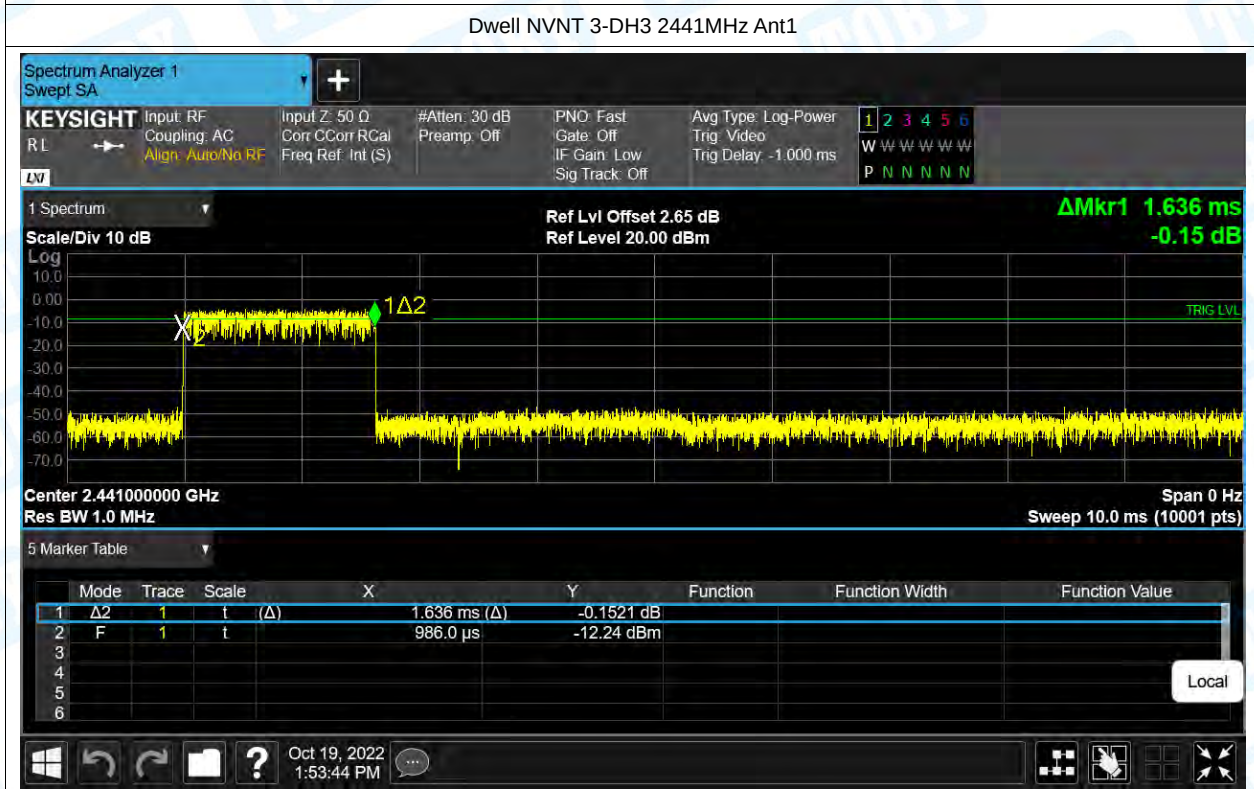
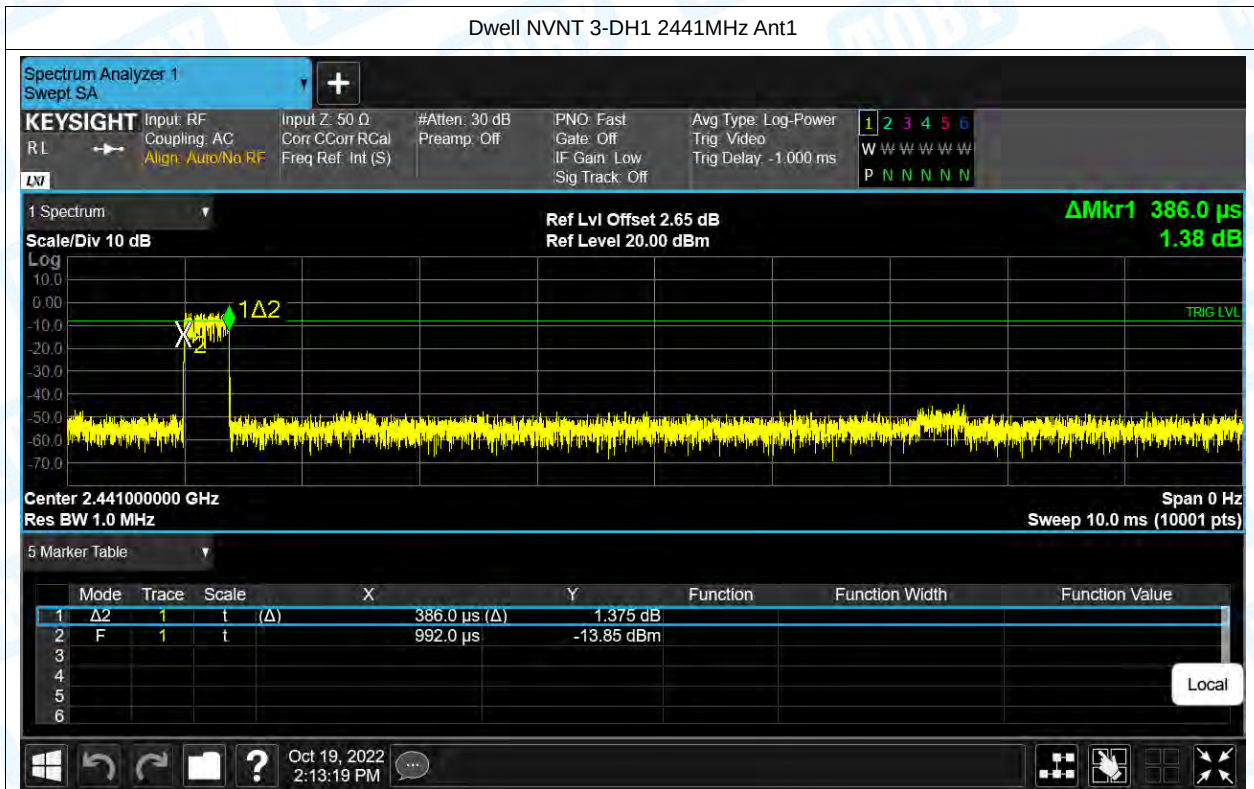


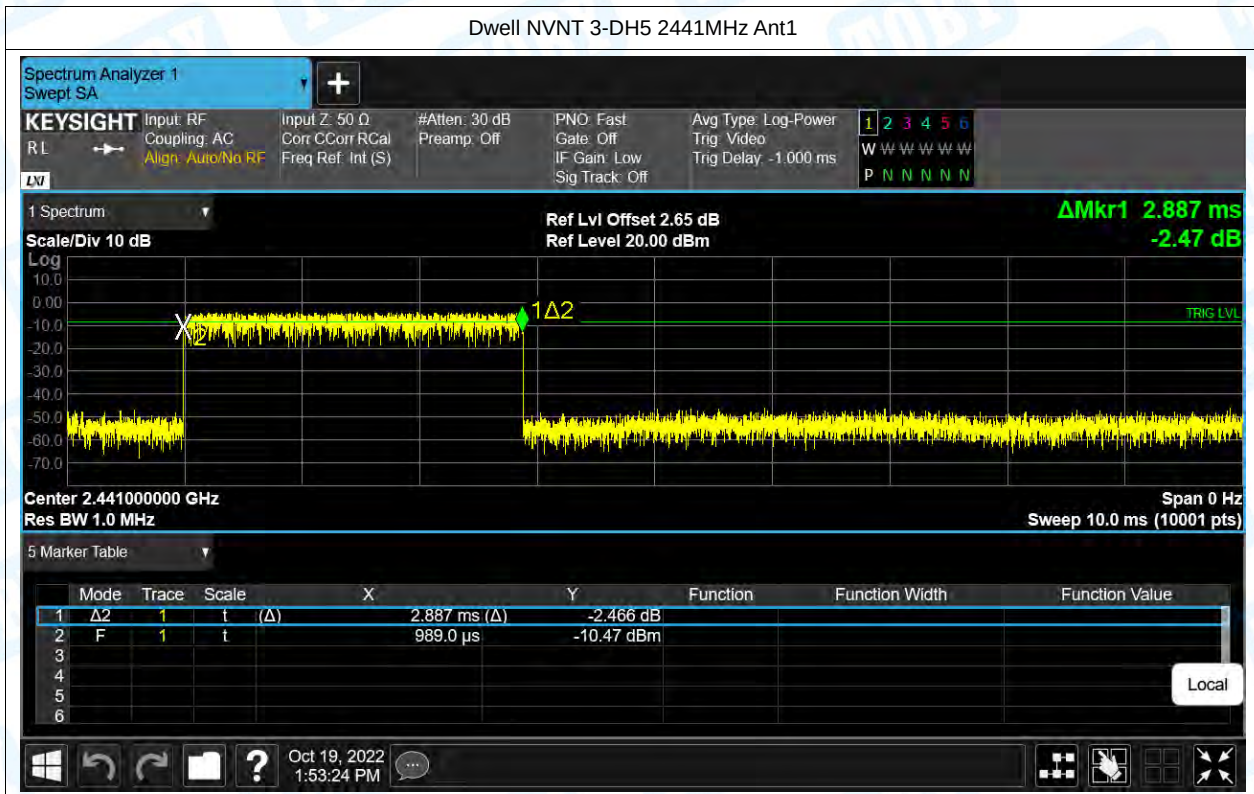
Dwell NVNT 2-DH3 2441MHz Ant1



Dwell NVNT 2-DH5 2441MHz Ant1







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