

RF Test Data for 2.4G WiFi (Conducted Measurements)

General Description of EUT	
Product Name:	StiX
Test Model:	3700
Sample ID:	202211-0053-01-2
Environmental Conditions	
Temperature:	25°C
Relative Humidity:	55%
Test Voltage:	DC 5V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202211-0053-52	

Contents

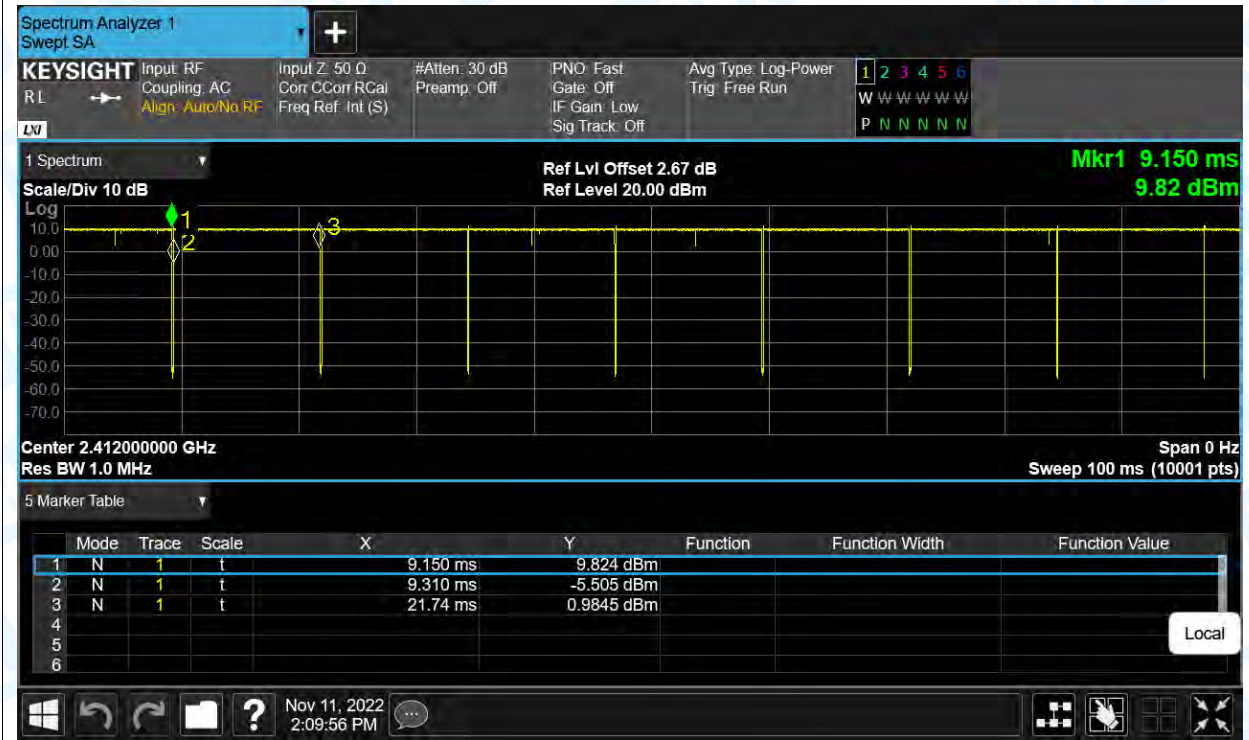
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1. Duty Cycle

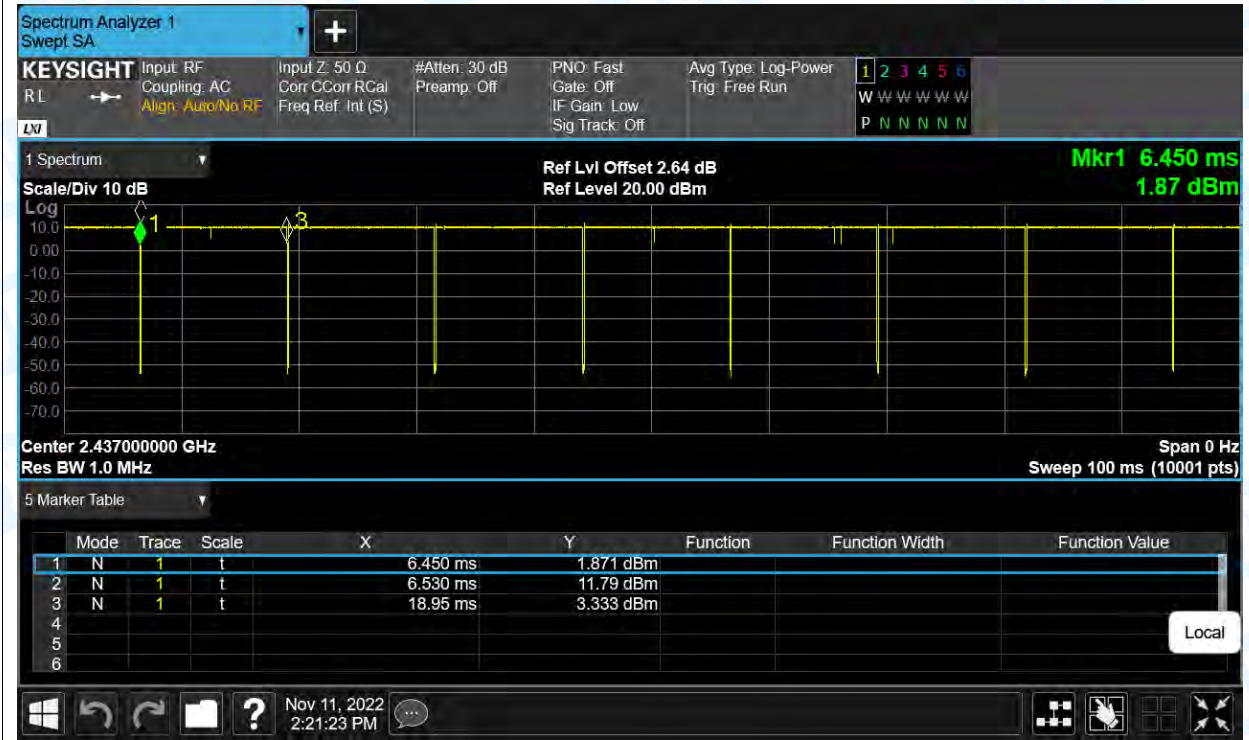
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	98.73	0.06	0.08
NVNT	b	2437	Ant1	99.36	0.03	0.08
NVNT	b	2462	Ant1	98.73	0.06	0.08
NVNT	g	2412	Ant1	92.83	0.32	0.48
NVNT	g	2437	Ant1	98.1	0.08	0.48
NVNT	g	2462	Ant1	97.63	0.1	0.49
NVNT	n(HT20)	2412	Ant1	95.52	0.2	0.52
NVNT	n(HT20)	2437	Ant1	91.87	0.37	0.52
NVNT	n(HT20)	2462	Ant1	92.75	0.33	0.52
NVNT	n(HT40)	2422	Ant1	89.52	0.48	1.06
NVNT	n(HT40)	2437	Ant1	96.94	0.13	1.05
NVNT	n(HT40)	2452	Ant1	90.48	0.43	1.05

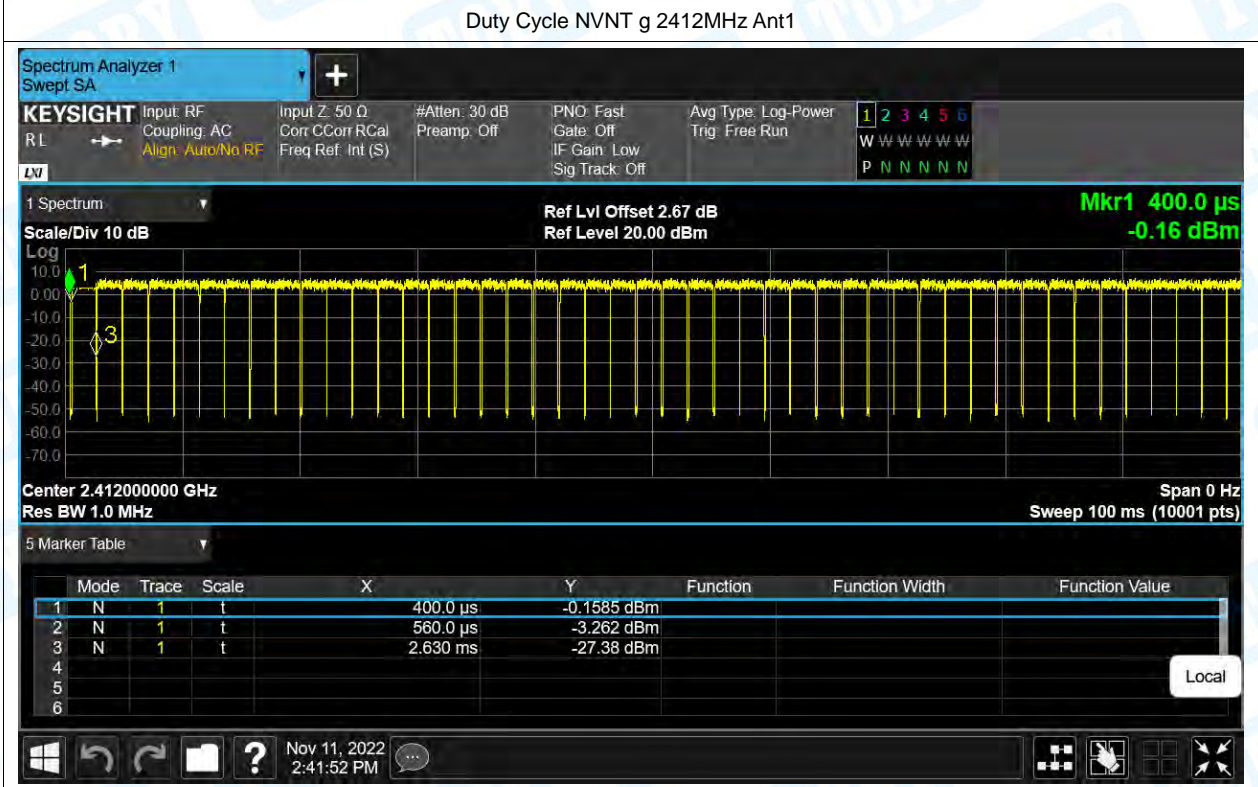
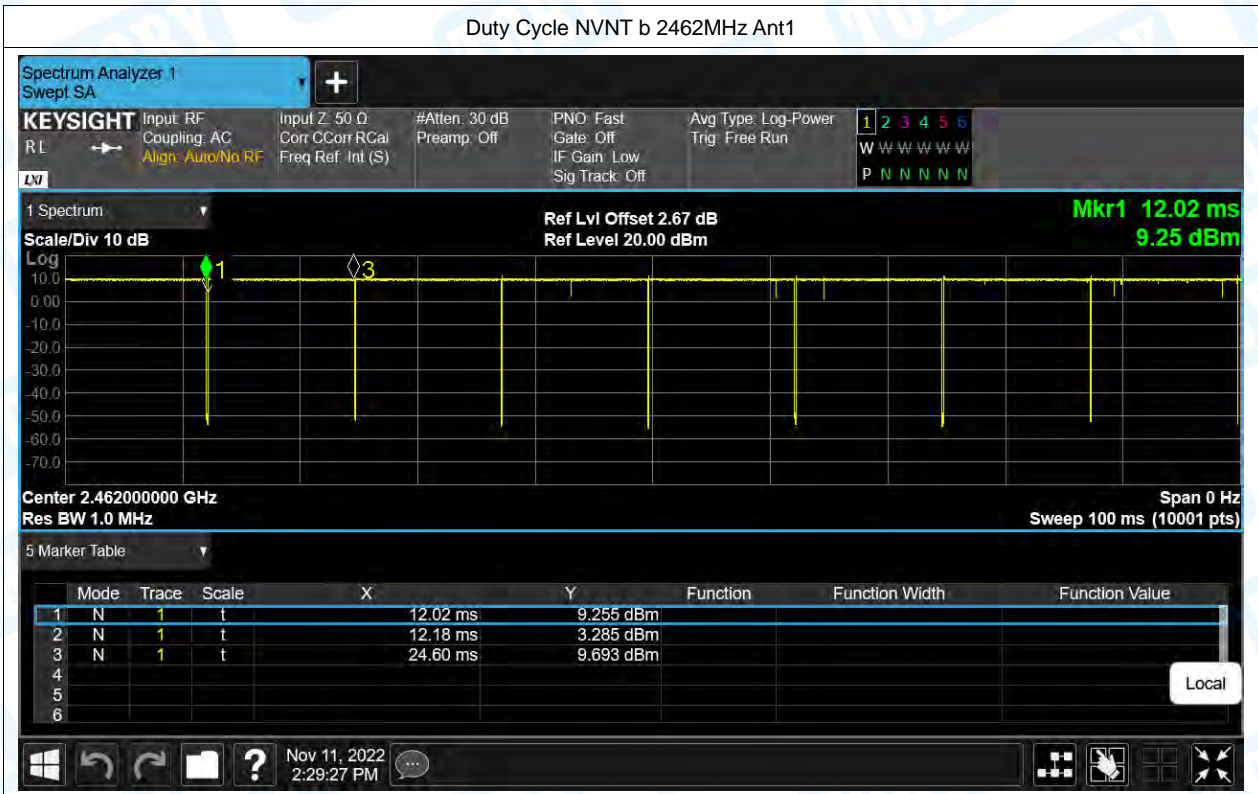
Test Graphs

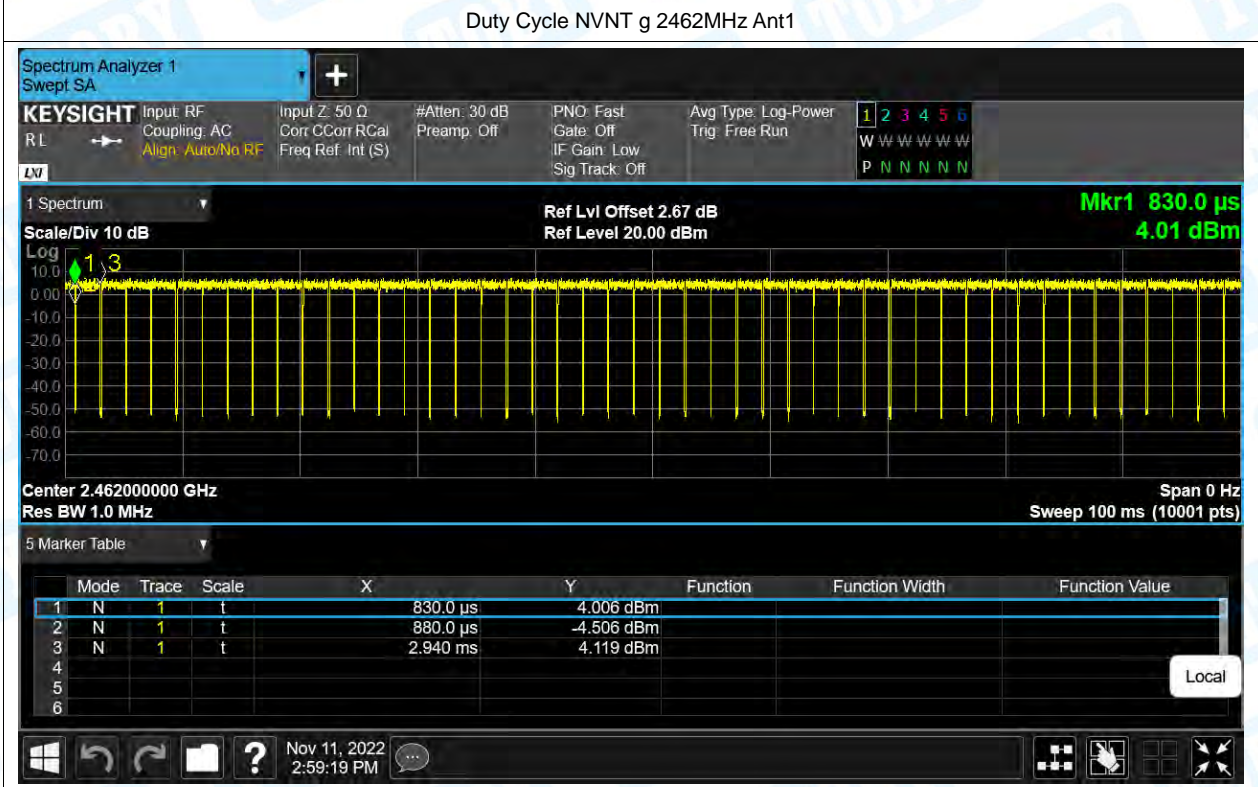
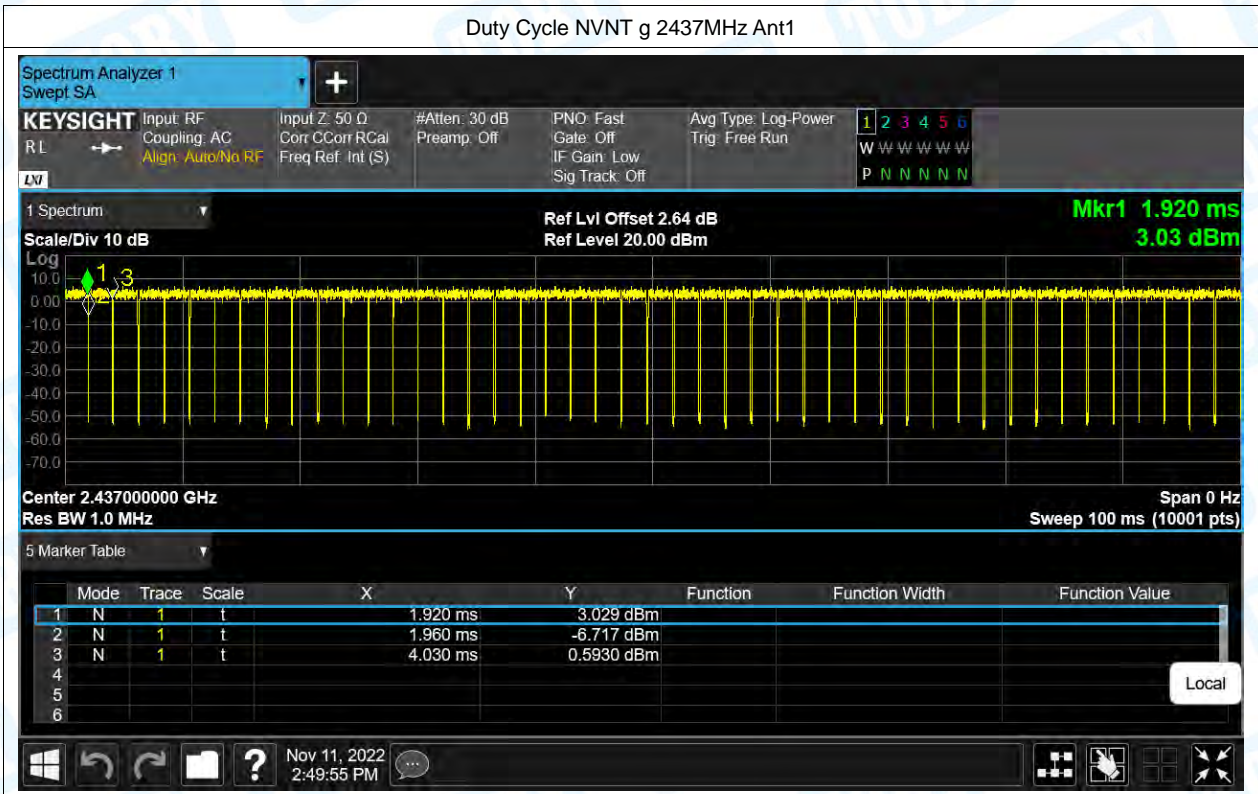
Duty Cycle NVNT b 2412MHz Ant1

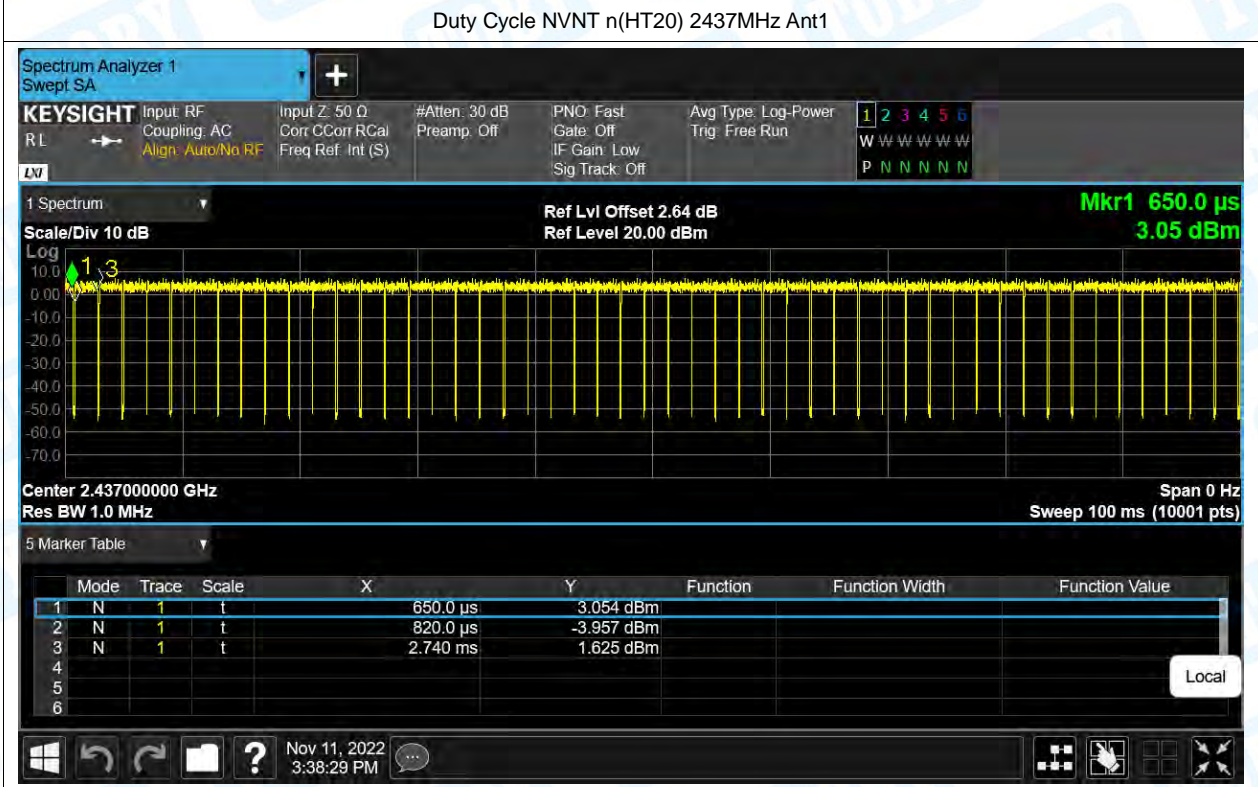
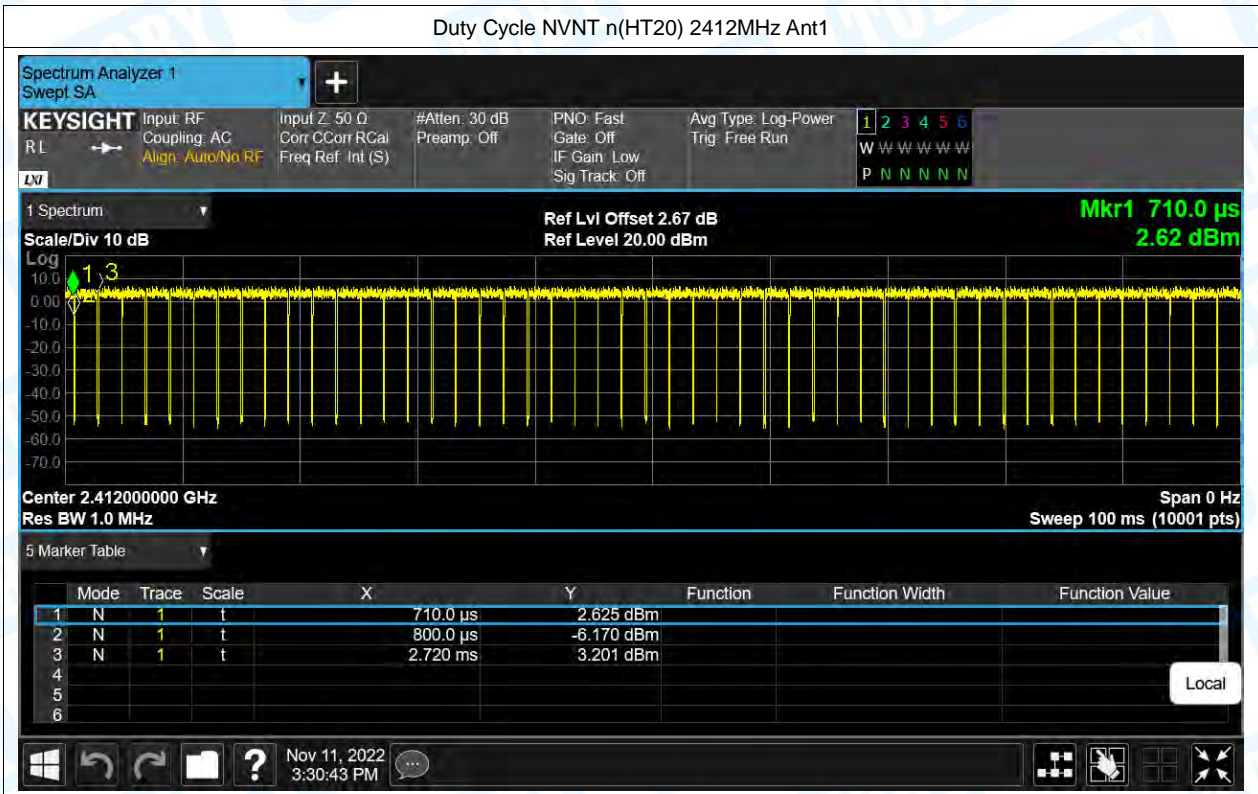


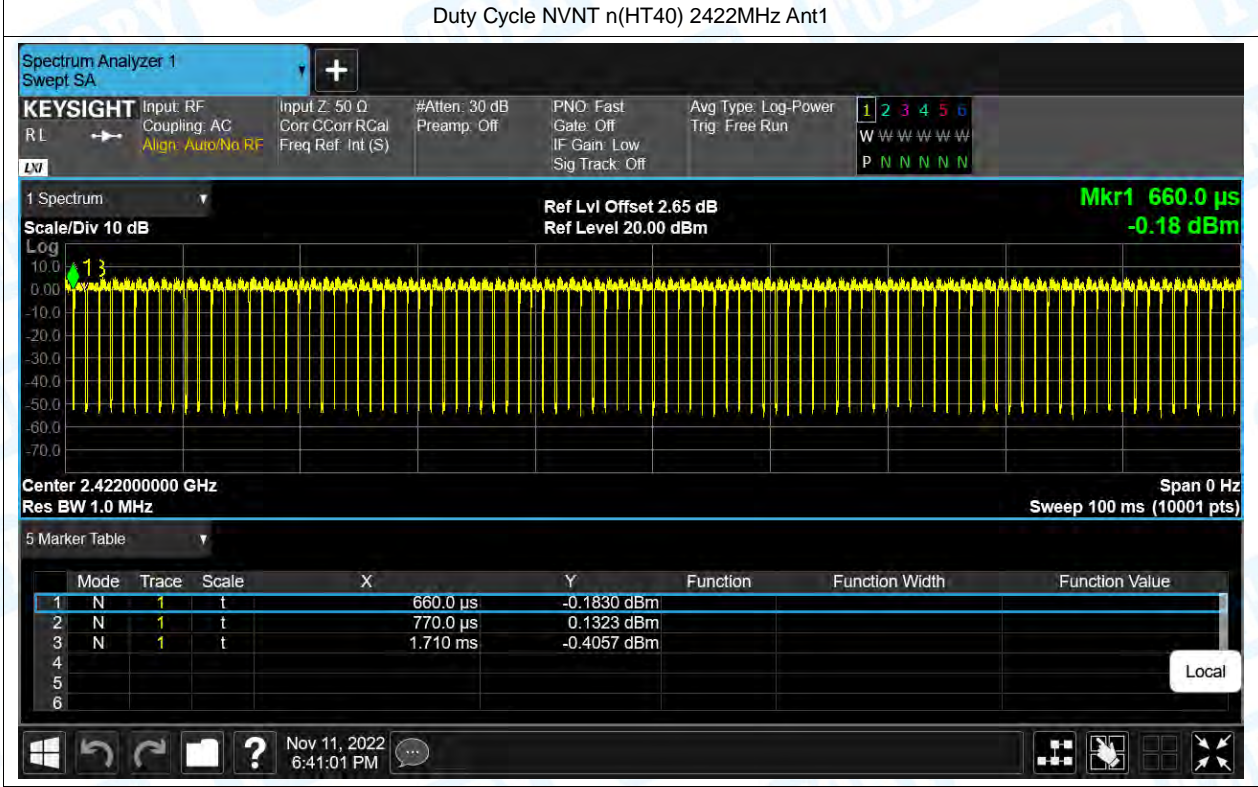
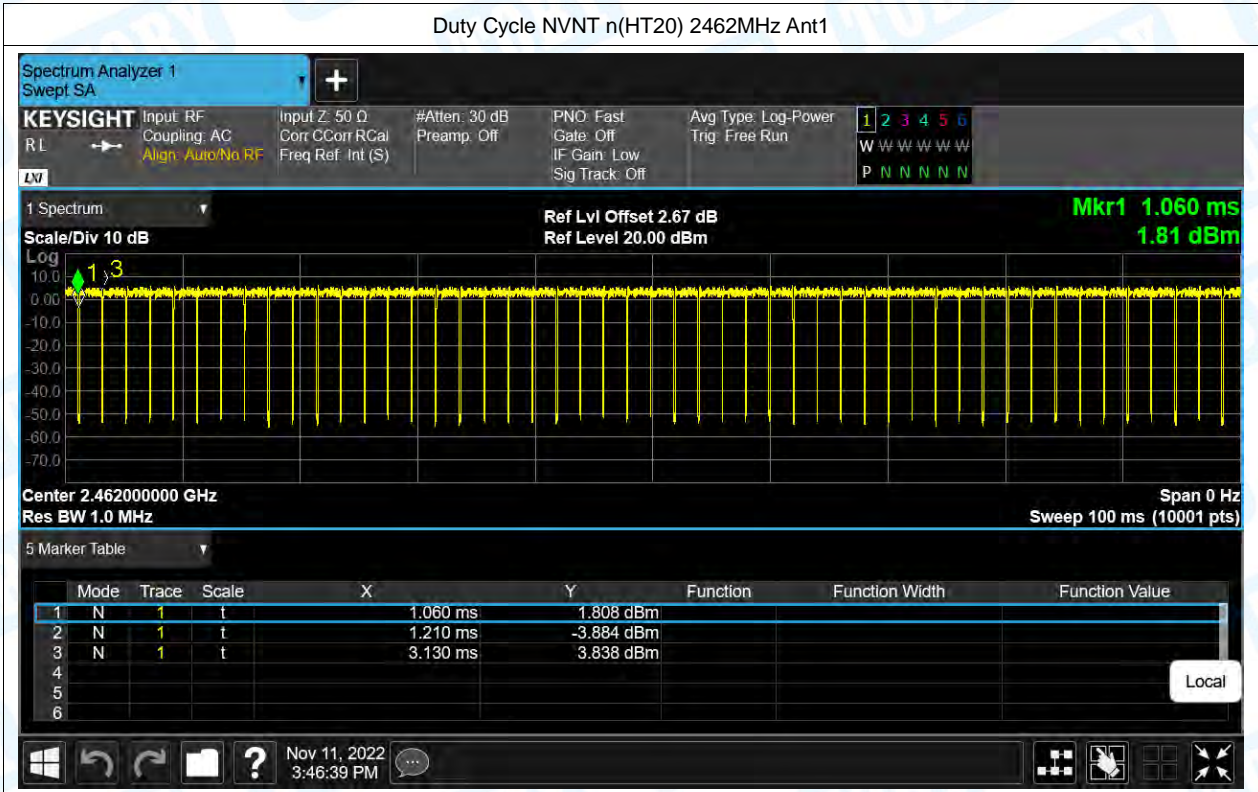
Duty Cycle NVNT b 2437MHz Ant1

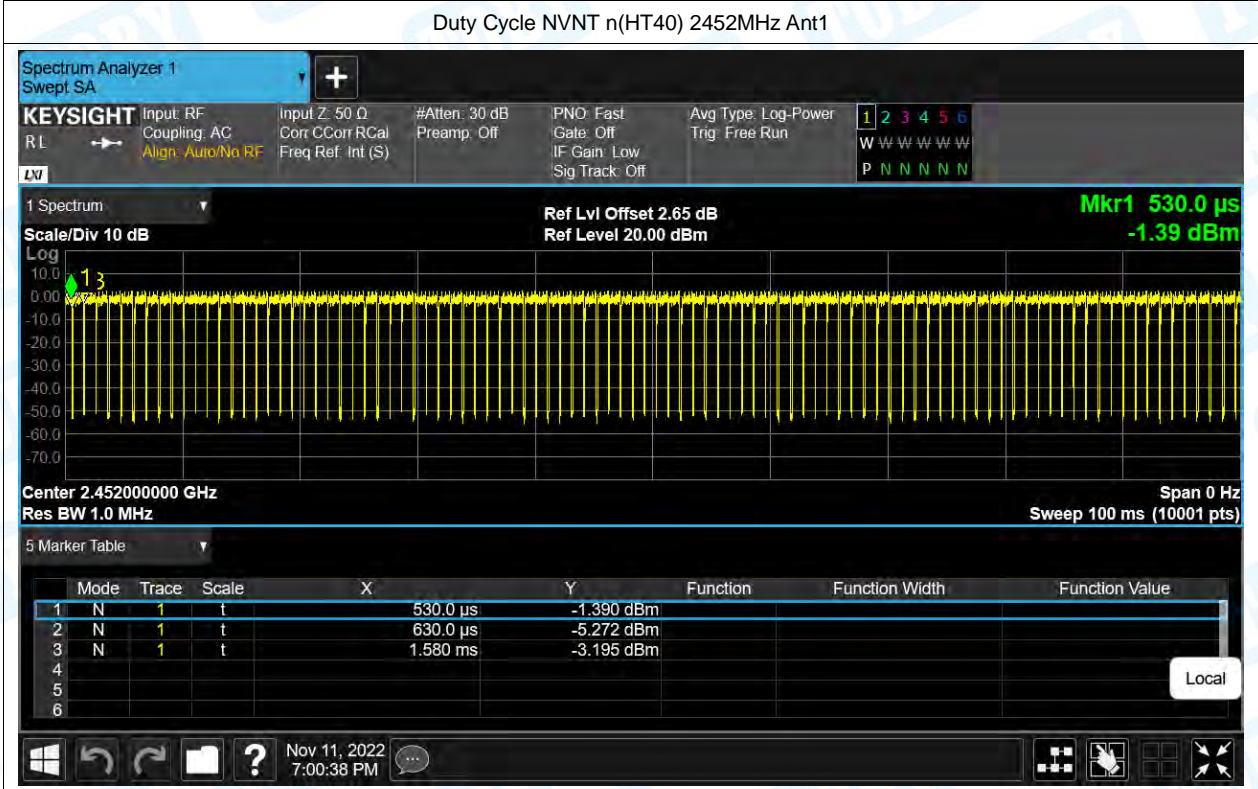
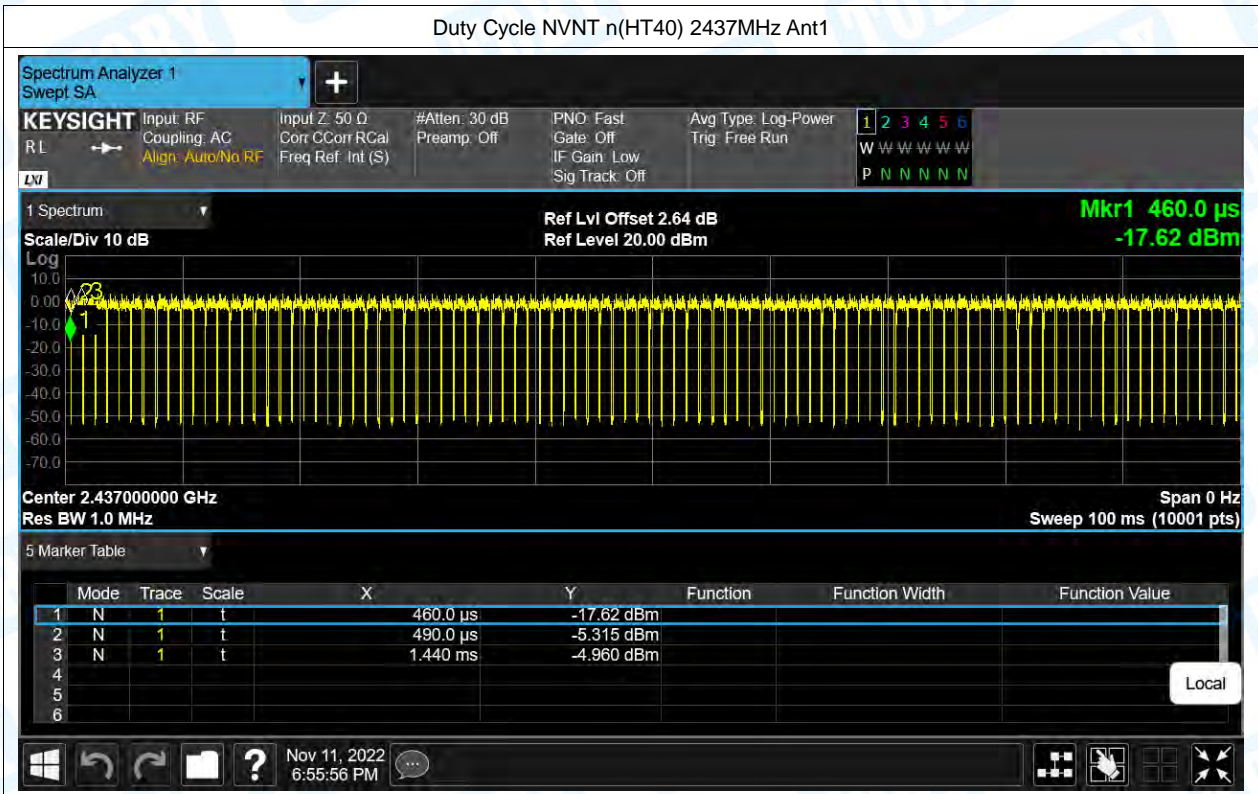












2. Maximum Conducted Output Power

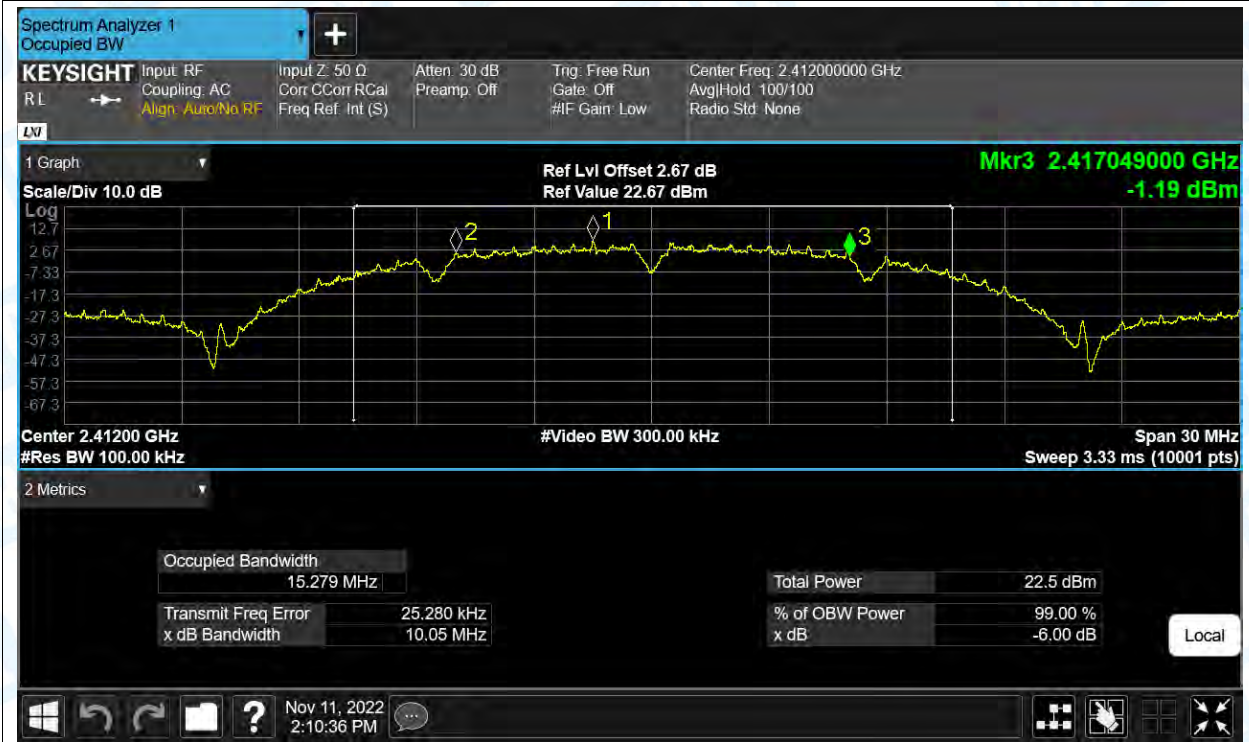
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	17.667	30	Pass
NVNT	b	2437	Ant1	17.579	30	Pass
NVNT	b	2462	Ant1	17.244	30	Pass
NVNT	g	2412	Ant1	17.097	30	Pass
NVNT	g	2437	Ant1	17.392	30	Pass
NVNT	g	2462	Ant1	17.121	30	Pass
NVNT	n(HT20)	2412	Ant1	16.533	30	Pass
NVNT	n(HT20)	2437	Ant1	16.565	30	Pass
NVNT	n(HT20)	2462	Ant1	16.413	30	Pass
NVNT	n(HT40)	2422	Ant1	13.575	30	Pass
NVNT	n(HT40)	2437	Ant1	15.262	30	Pass
NVNT	n(HT40)	2452	Ant1	14.595	30	Pass

3. -6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	10.05	0.5	Pass
NVNT	b	2437	Ant1	11.05	0.5	Pass
NVNT	b	2462	Ant1	10.09	0.5	Pass
NVNT	g	2412	Ant1	16.34	0.5	Pass
NVNT	g	2437	Ant1	16.33	0.5	Pass
NVNT	g	2462	Ant1	16.32	0.5	Pass
NVNT	n(HT20)	2412	Ant1	17.29	0.5	Pass
NVNT	n(HT20)	2437	Ant1	17.53	0.5	Pass
NVNT	n(HT20)	2462	Ant1	17.23	0.5	Pass
NVNT	n(HT40)	2422	Ant1	35.48	0.5	Pass
NVNT	n(HT40)	2437	Ant1	35.61	0.5	Pass
NVNT	n(HT40)	2452	Ant1	36.03	0.5	Pass

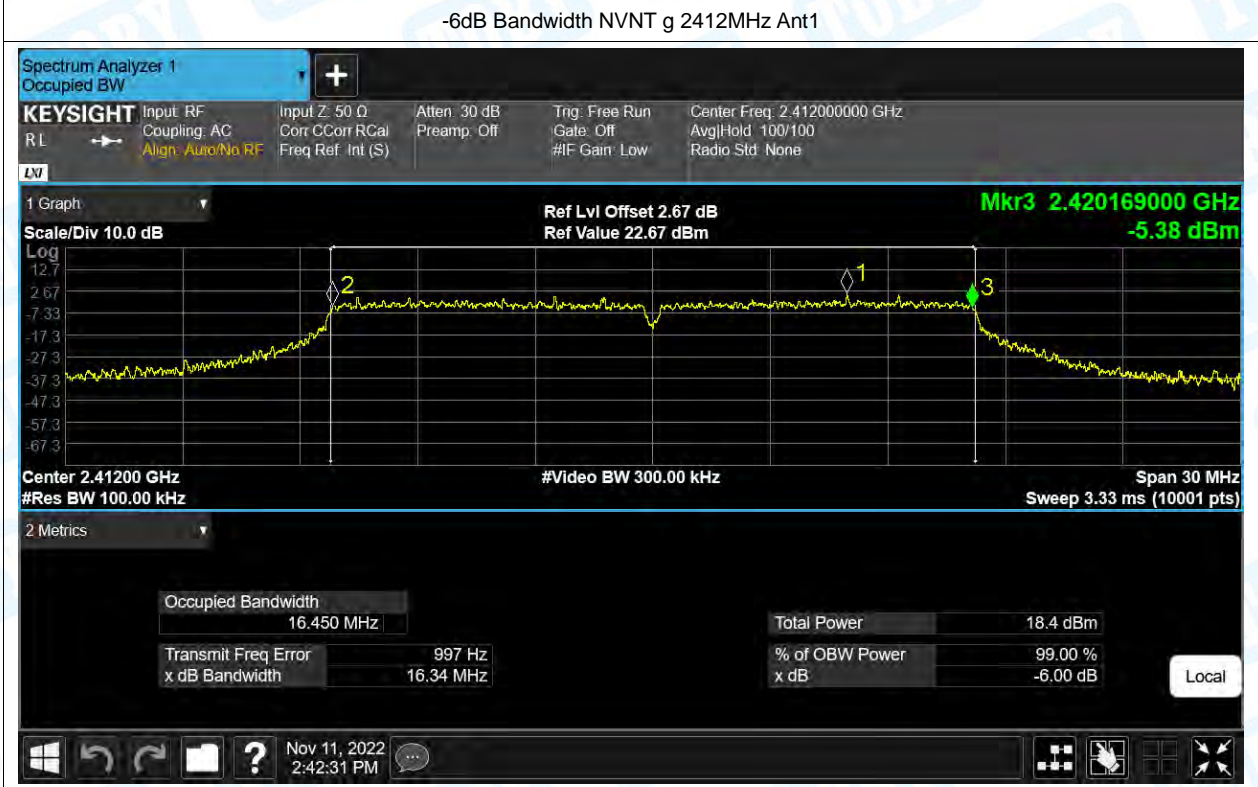
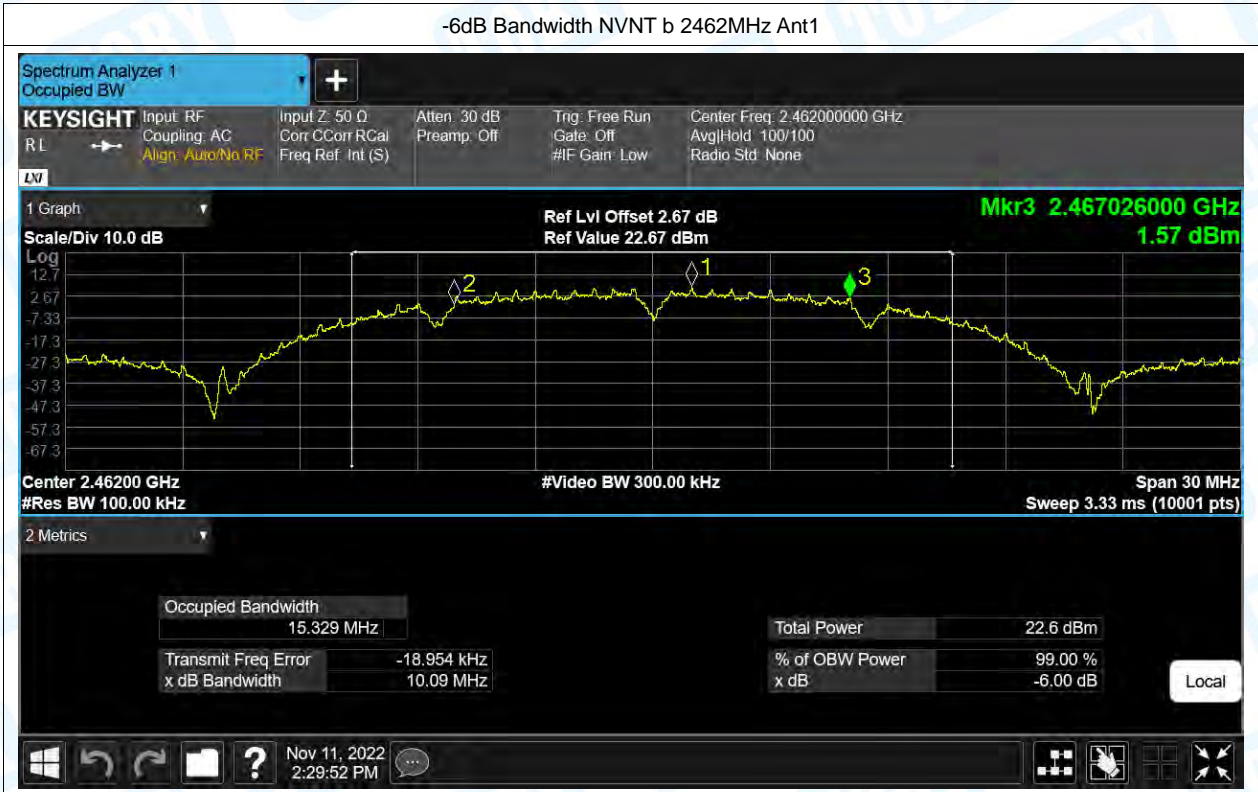
Test Graphs

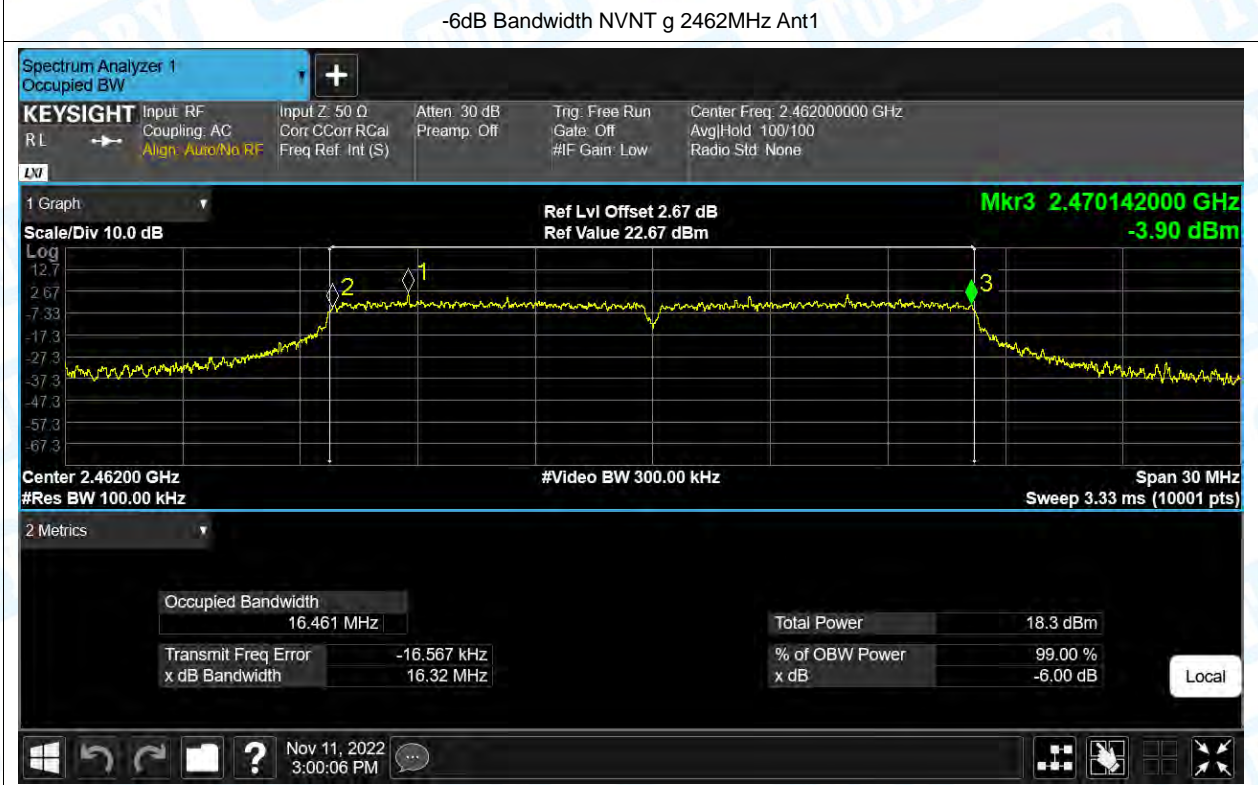
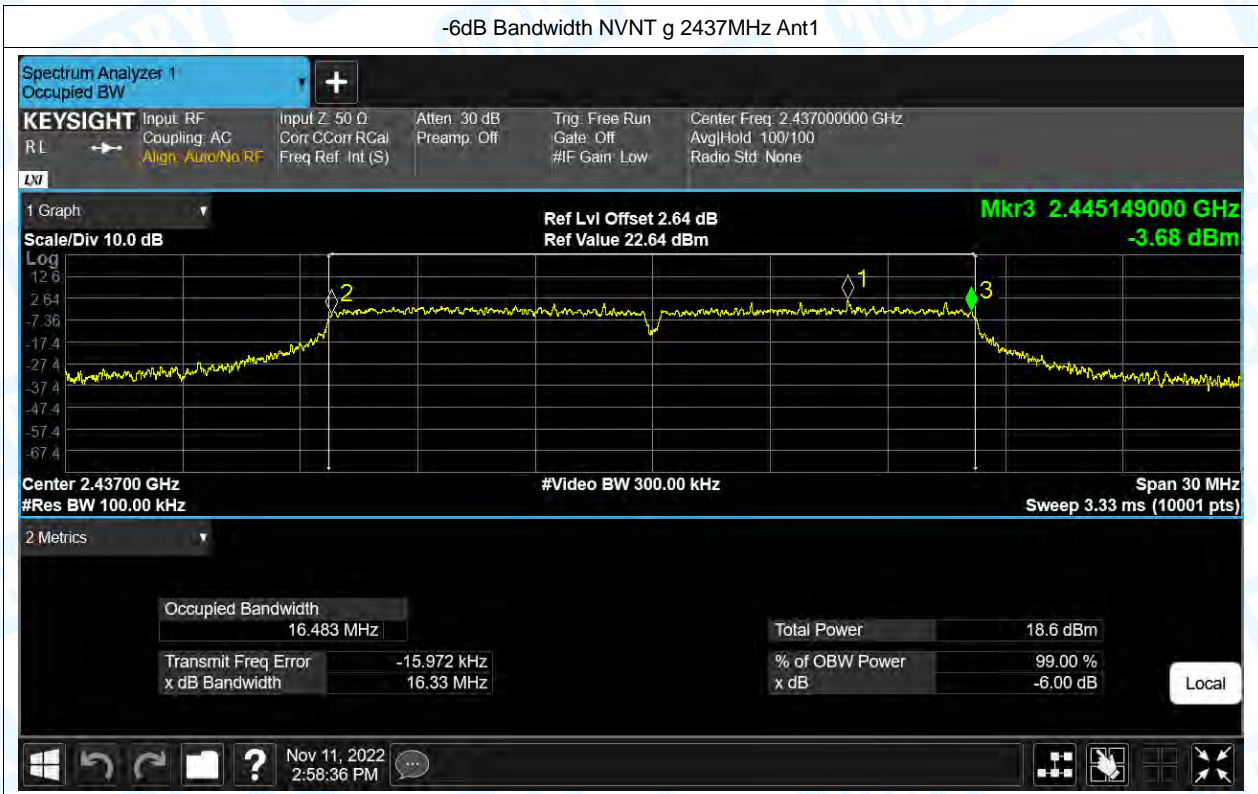
-6dB Bandwidth NVNT b 2412MHz Ant1

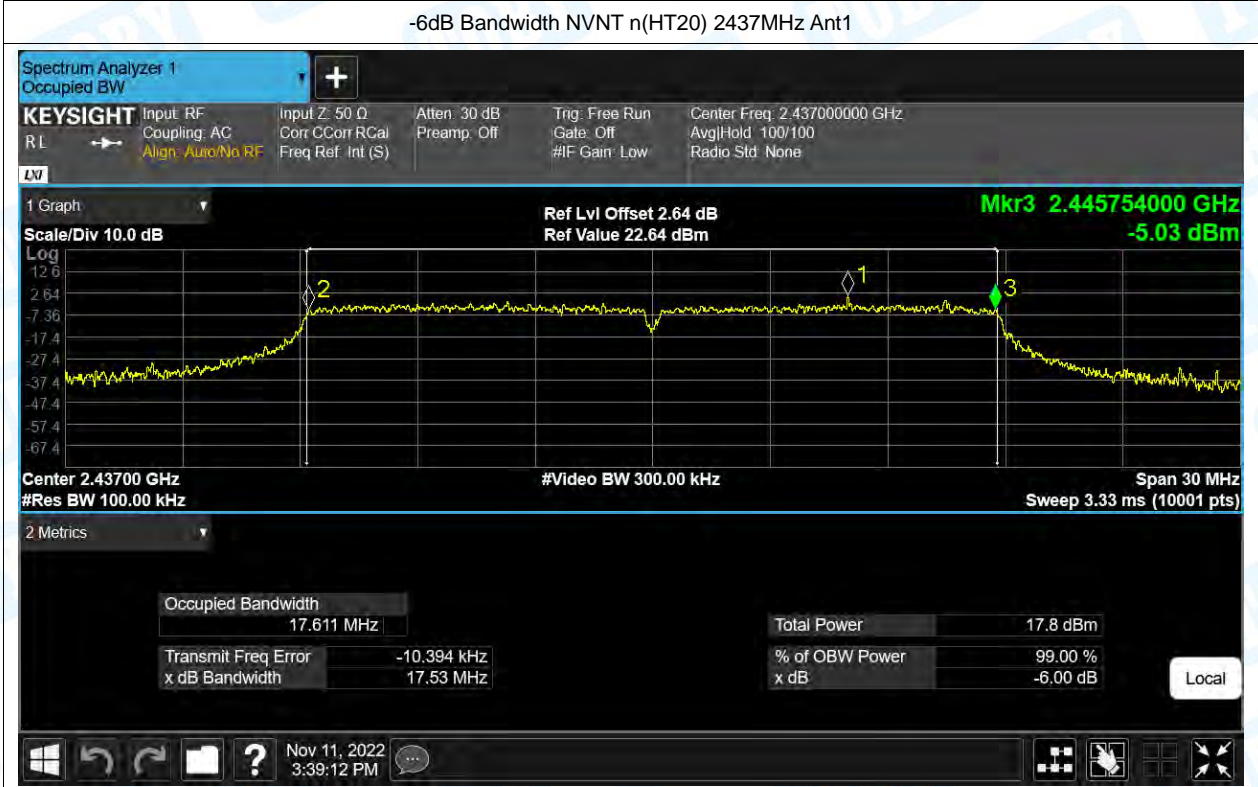
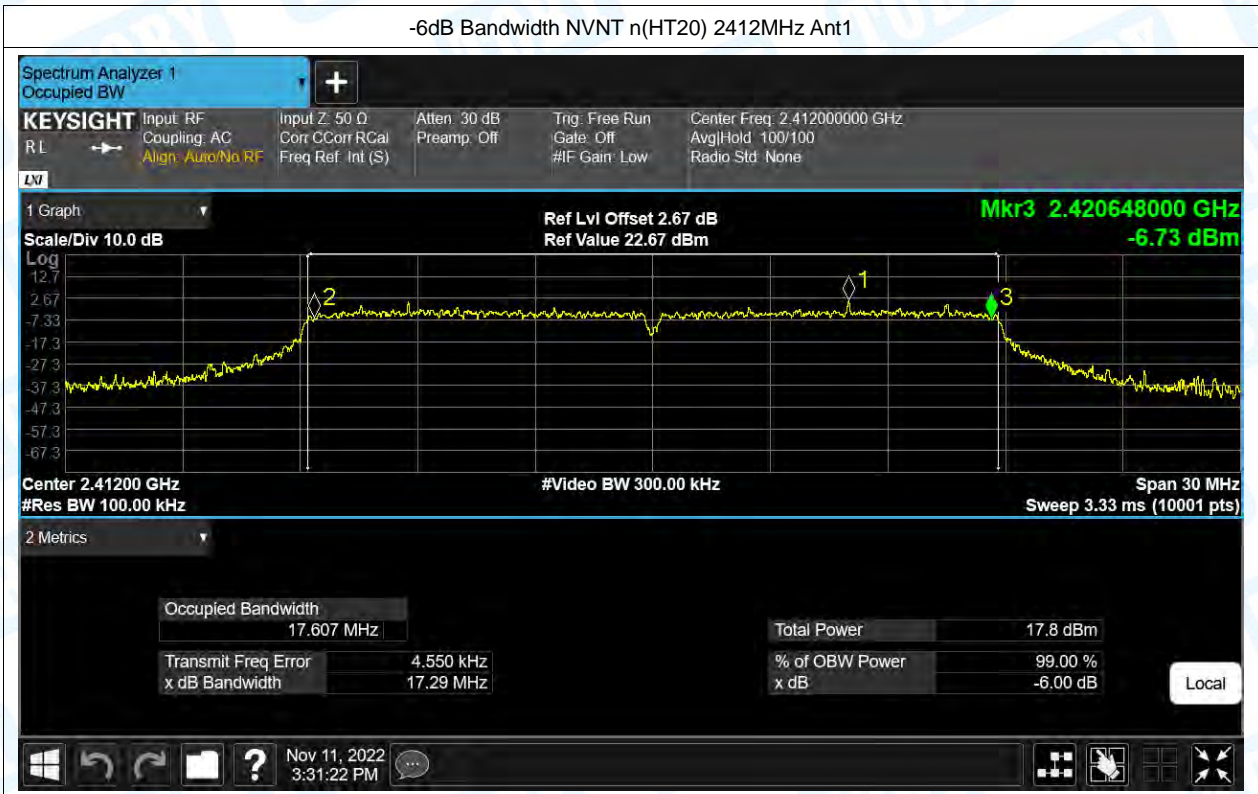


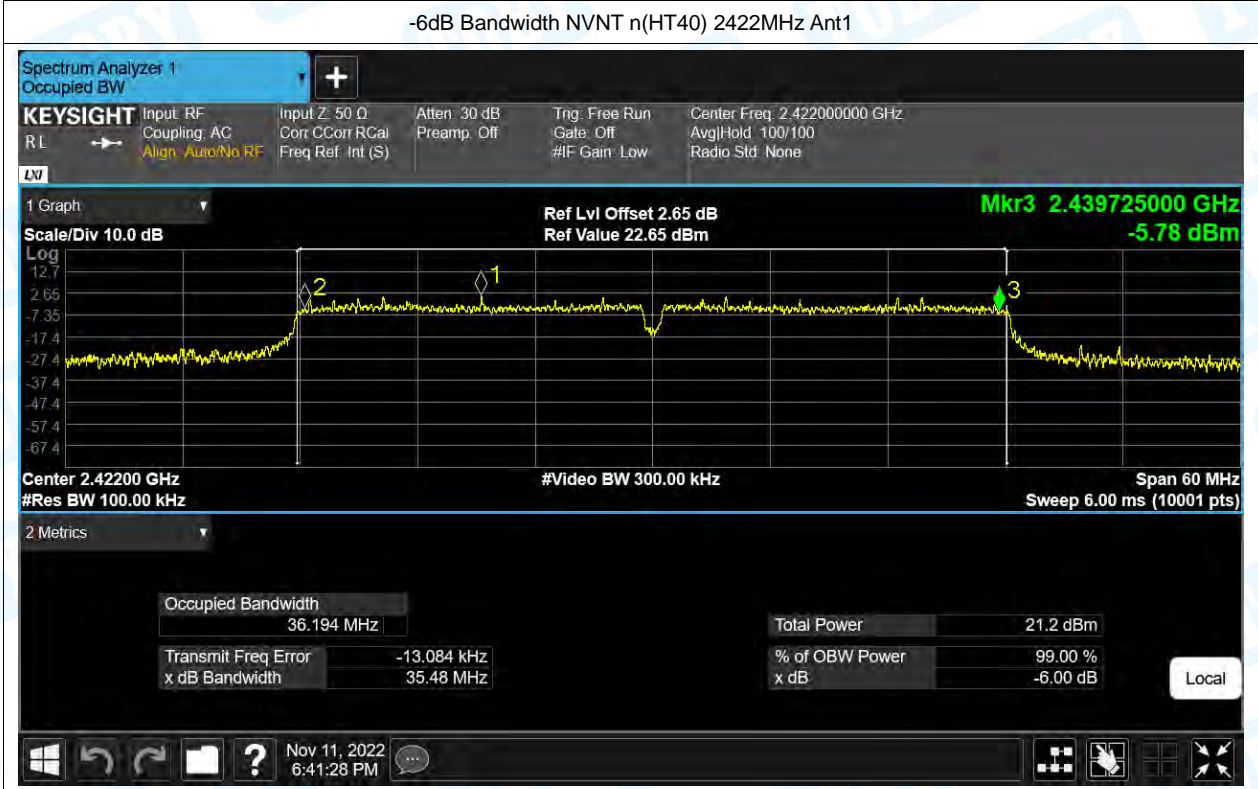
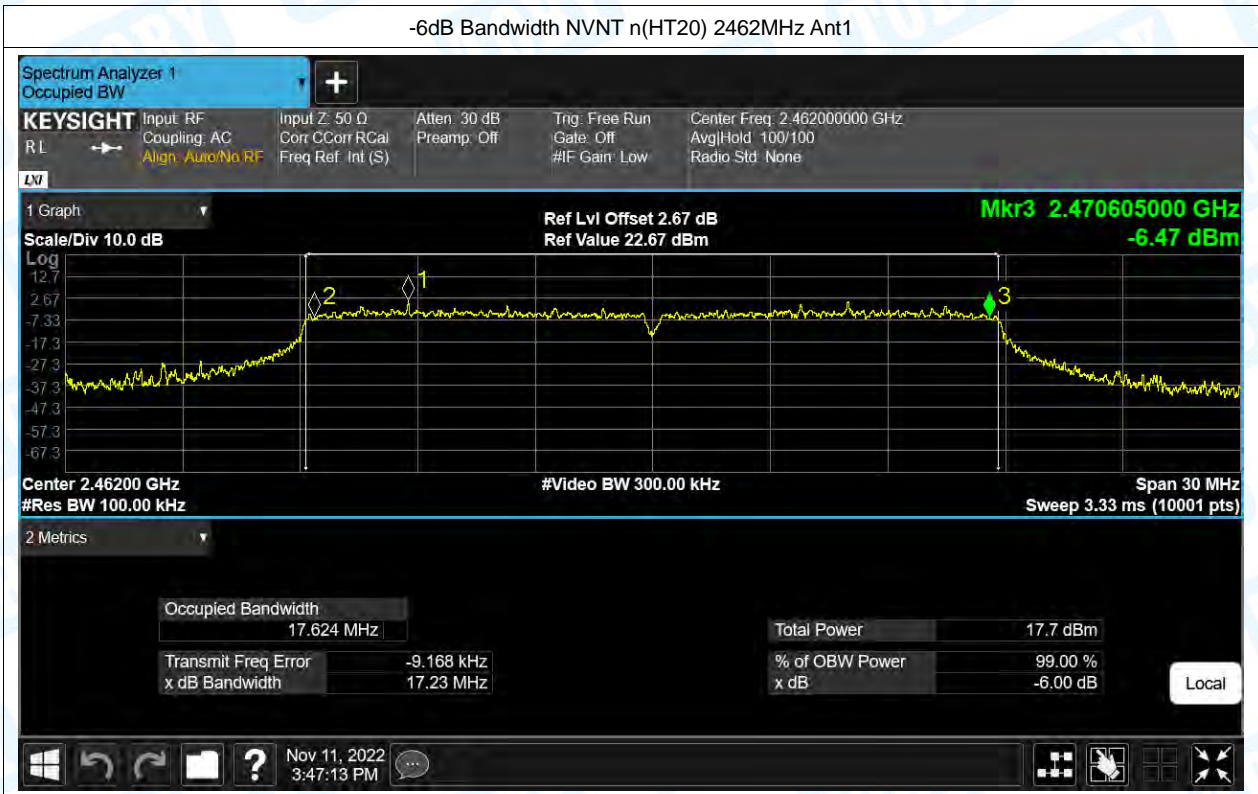
-6dB Bandwidth NVNT b 2437MHz Ant1

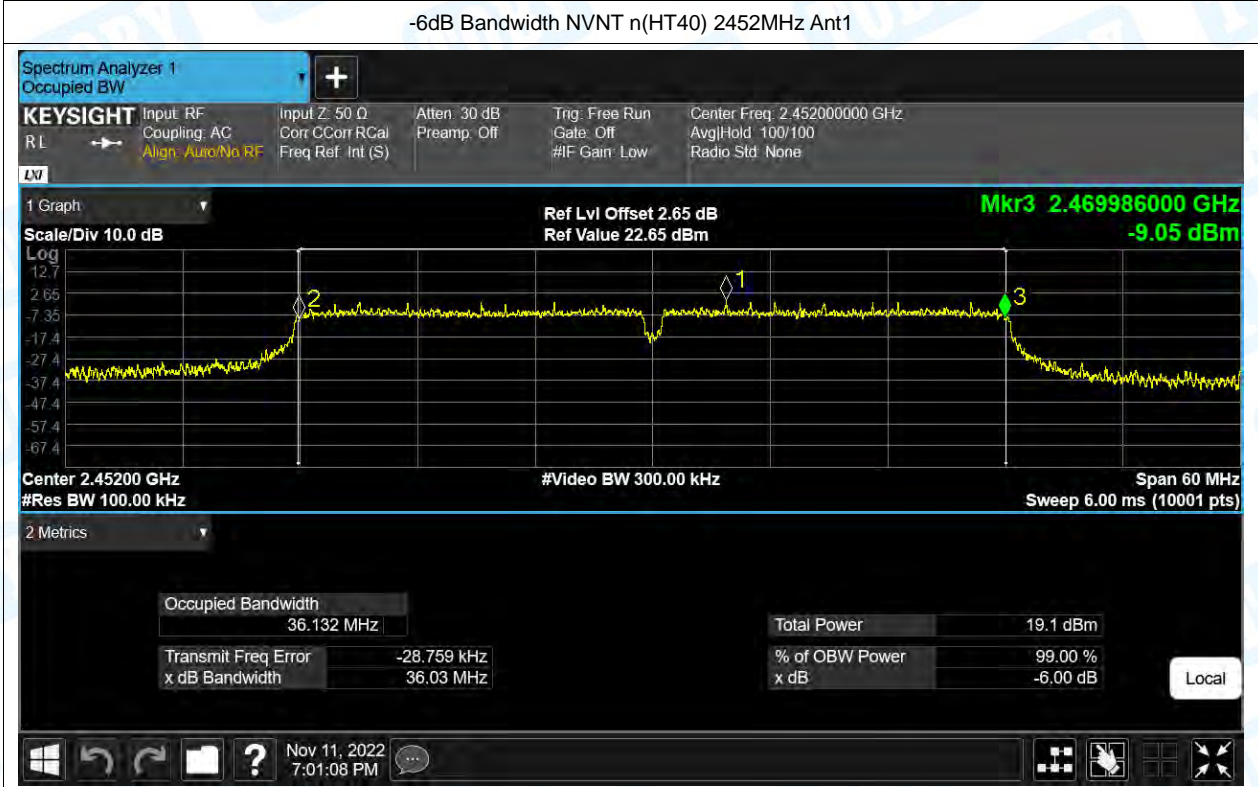
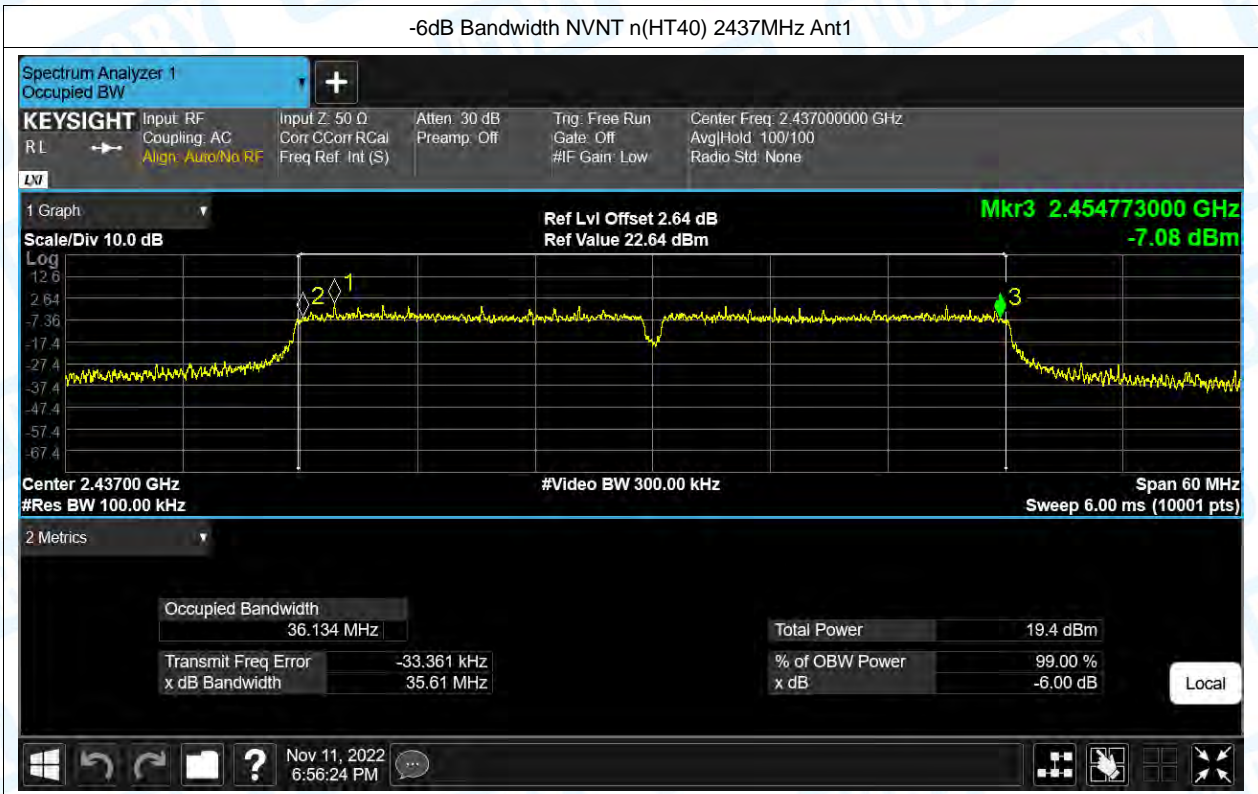










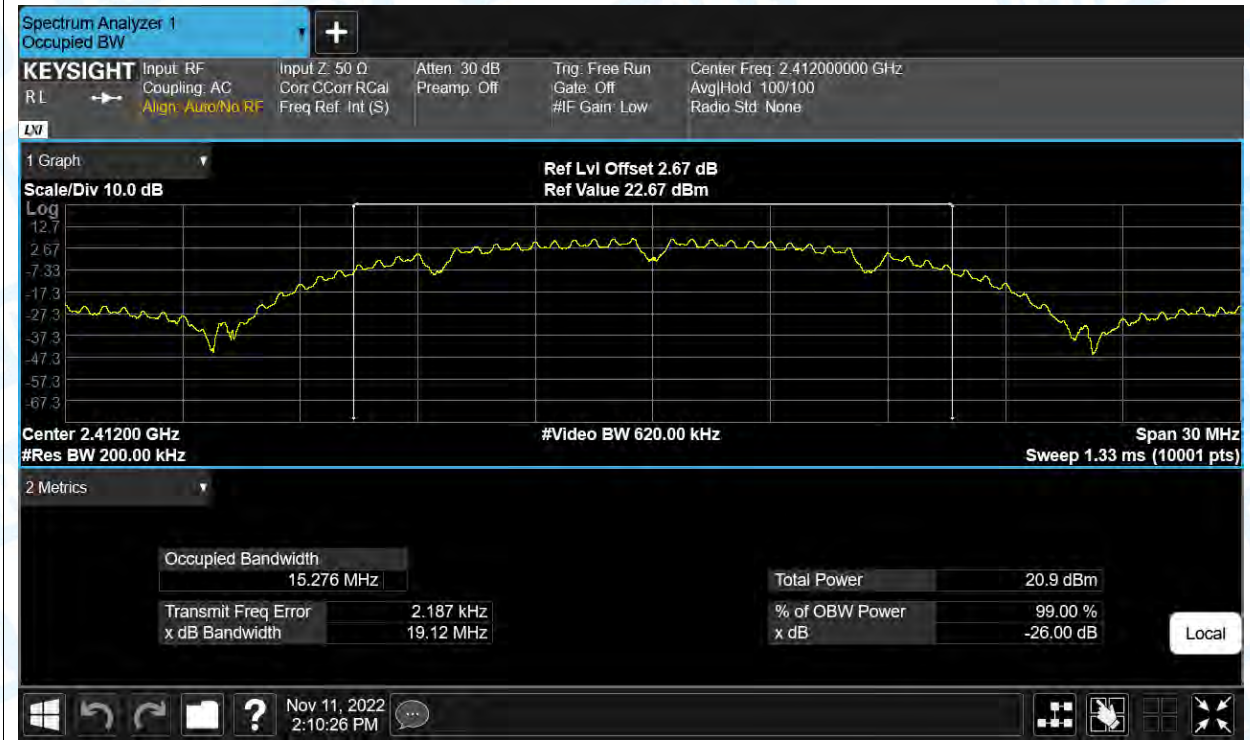


4. Occupied Channel Bandwidth

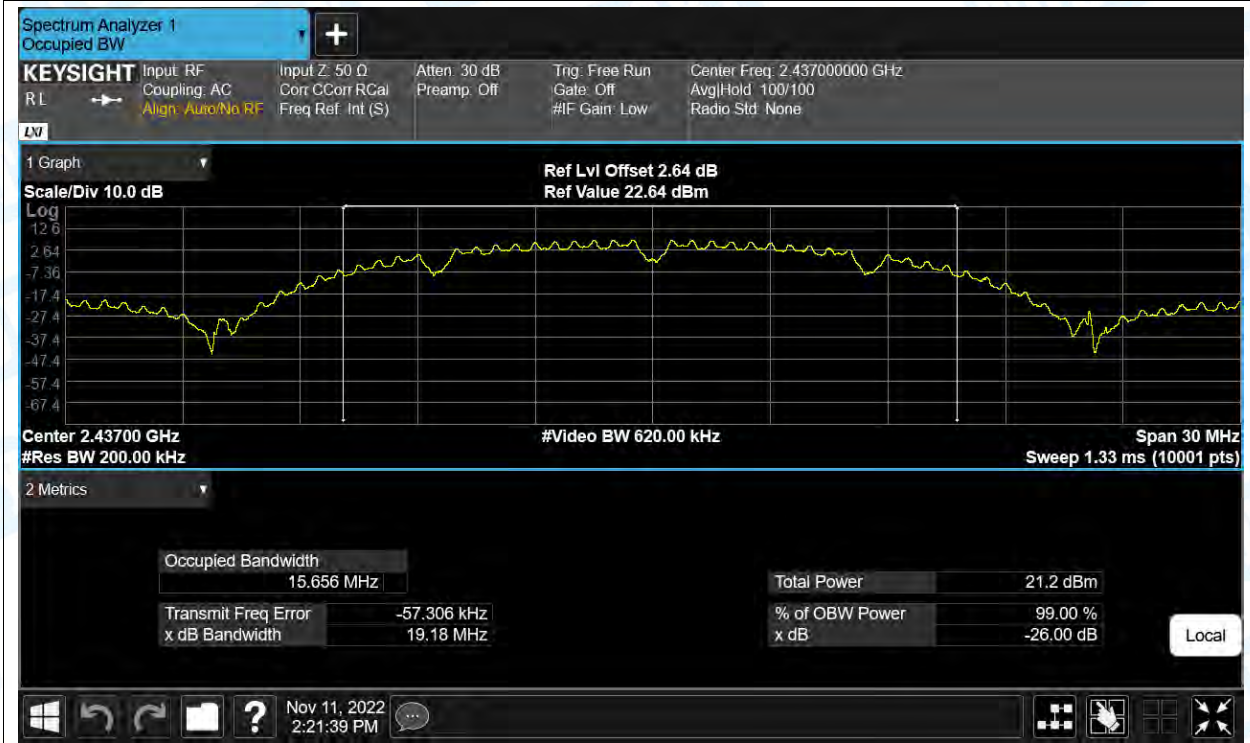
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	15.276
NVNT	b	2437	Ant1	15.656
NVNT	b	2462	Ant1	15.2
NVNT	g	2412	Ant1	16.562
NVNT	g	2437	Ant1	16.626
NVNT	g	2462	Ant1	16.597
NVNT	n(HT20)	2412	Ant1	17.671
NVNT	n(HT20)	2437	Ant1	17.637
NVNT	n(HT20)	2462	Ant1	17.661
NVNT	n(HT40)	2422	Ant1	36.153
NVNT	n(HT40)	2437	Ant1	36.272
NVNT	n(HT40)	2452	Ant1	36.183

Test Graphs

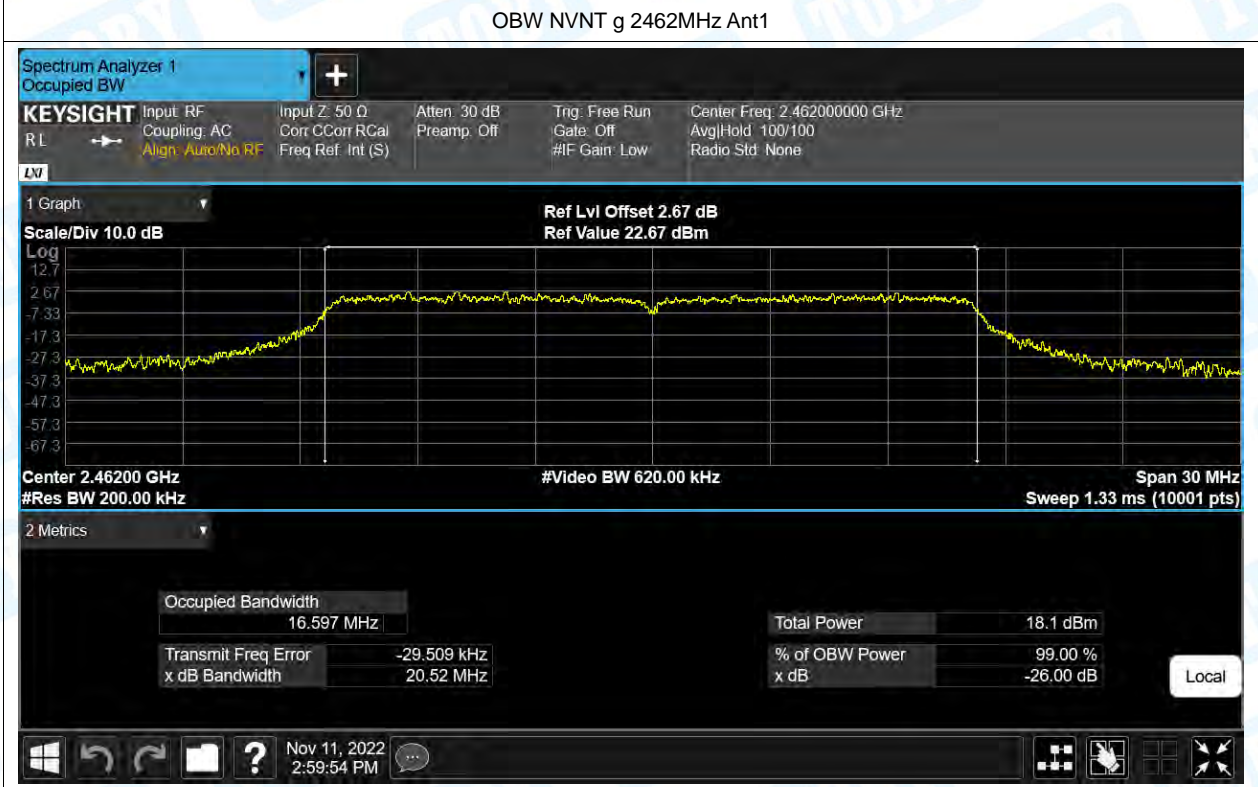
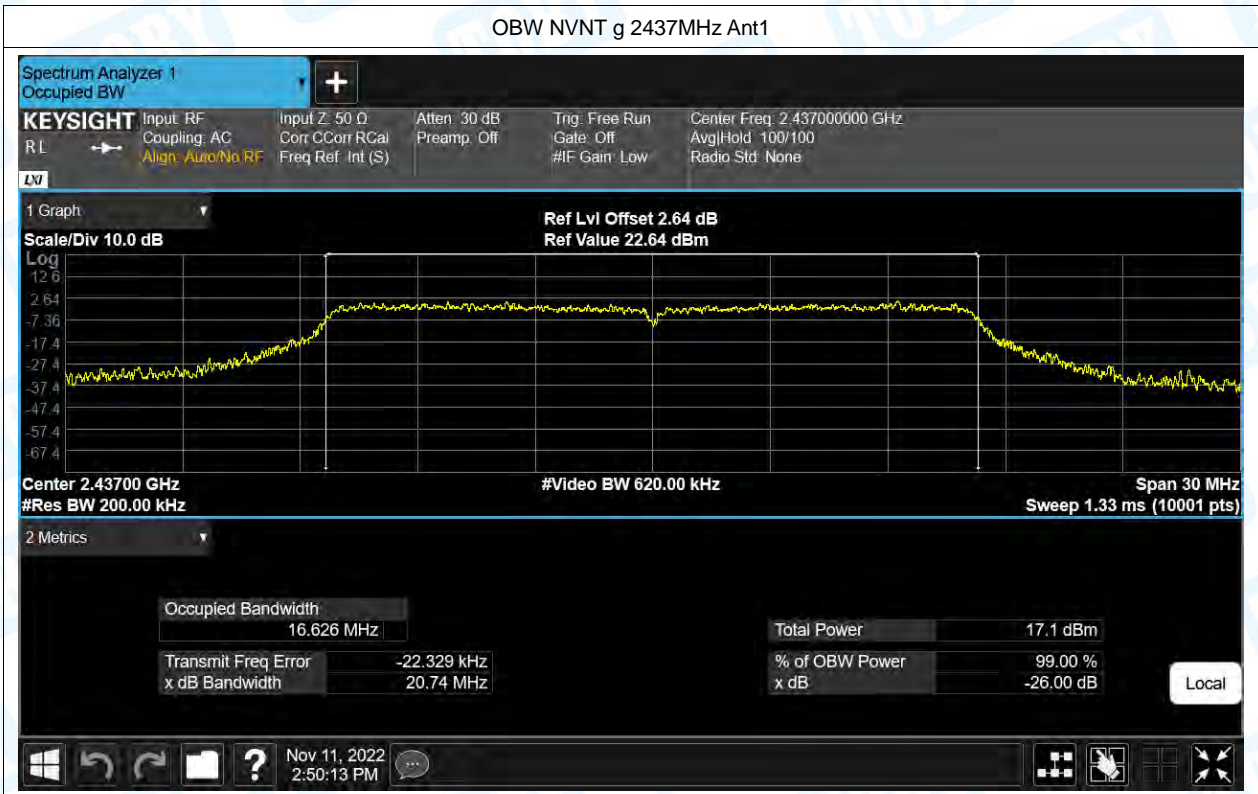
OBW NVNT b 2412MHz Ant1

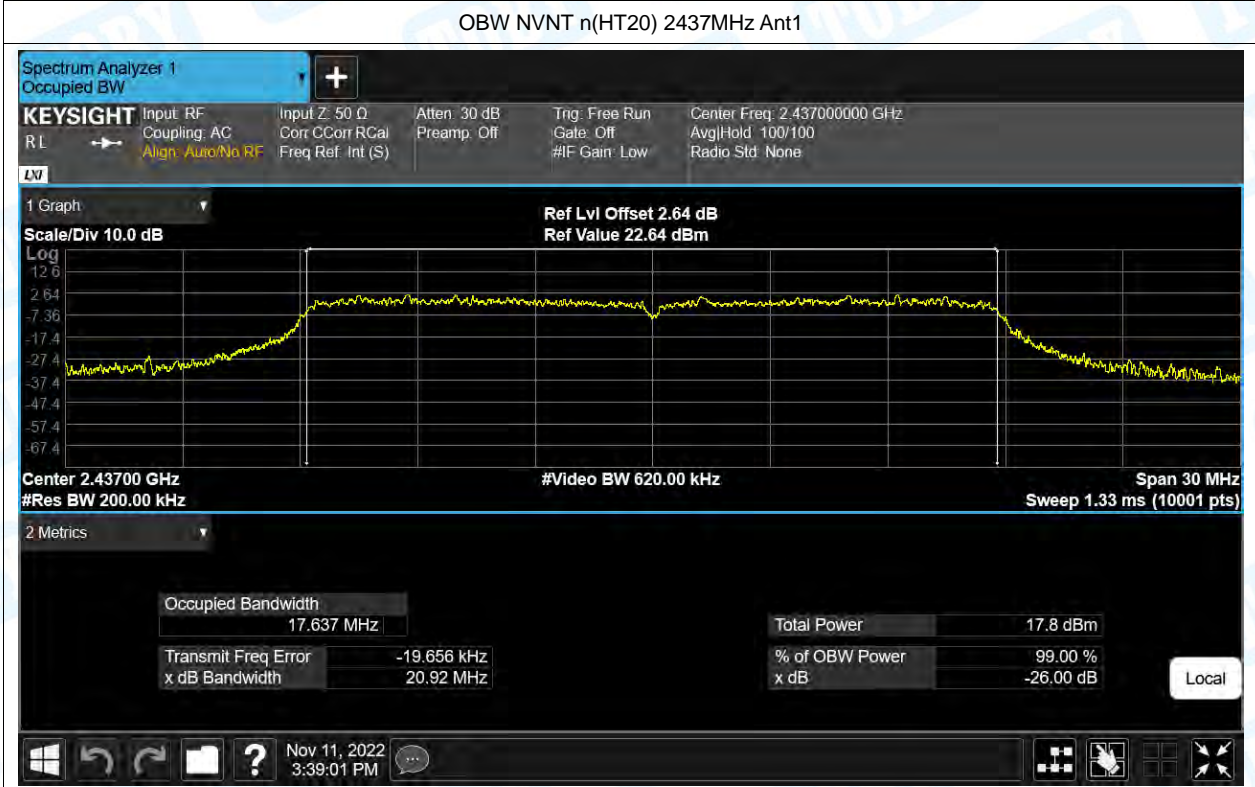
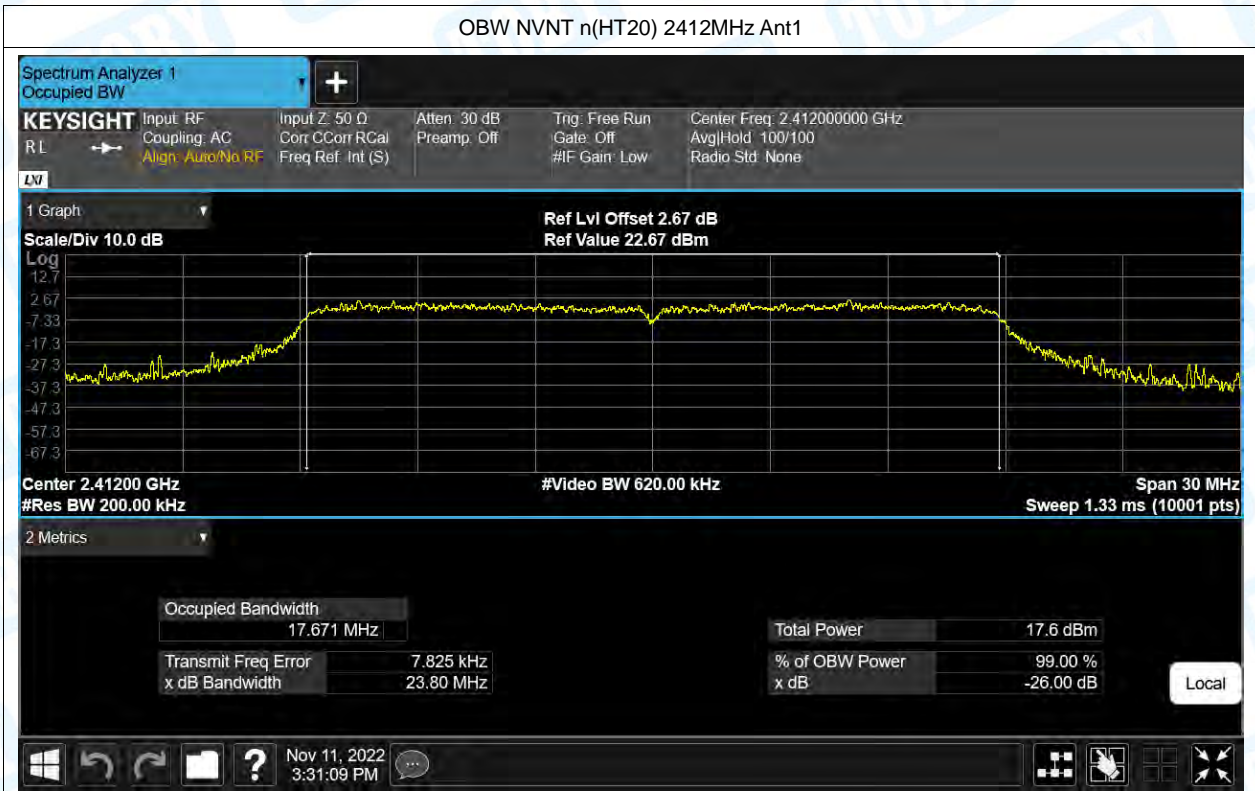


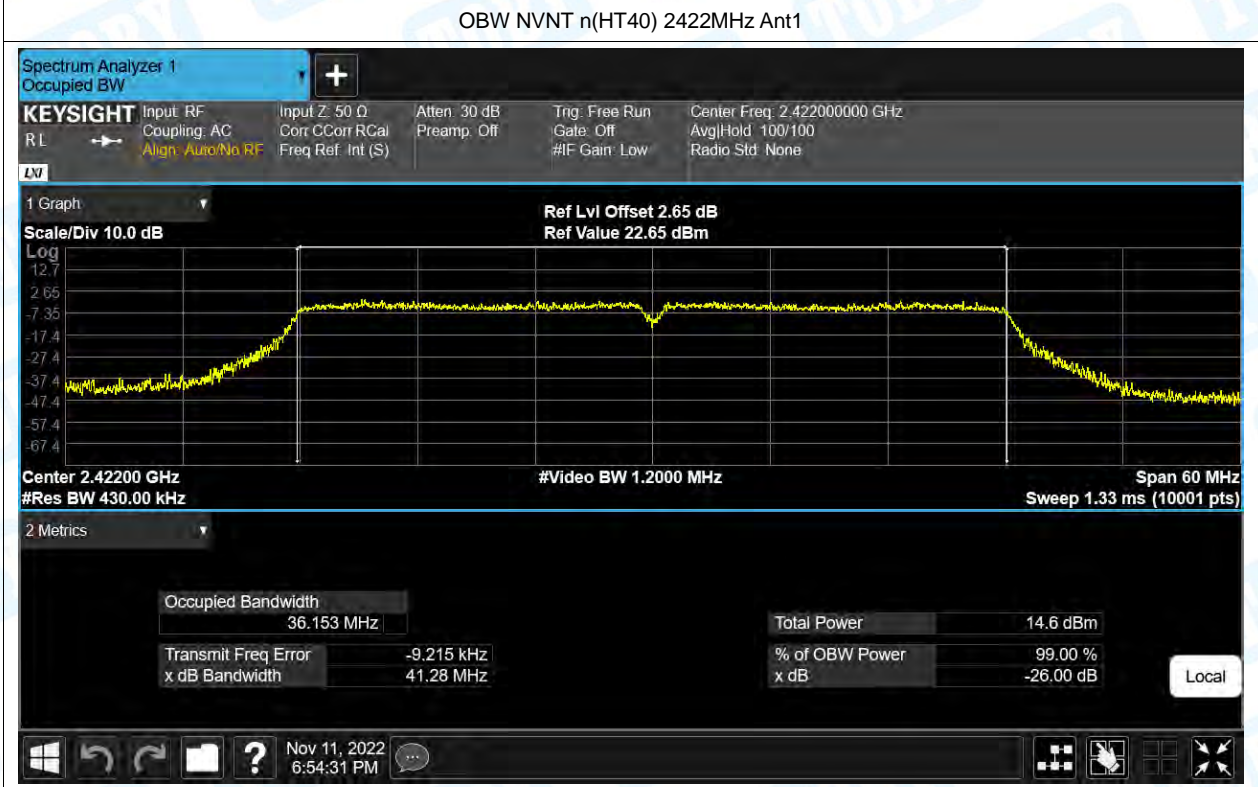
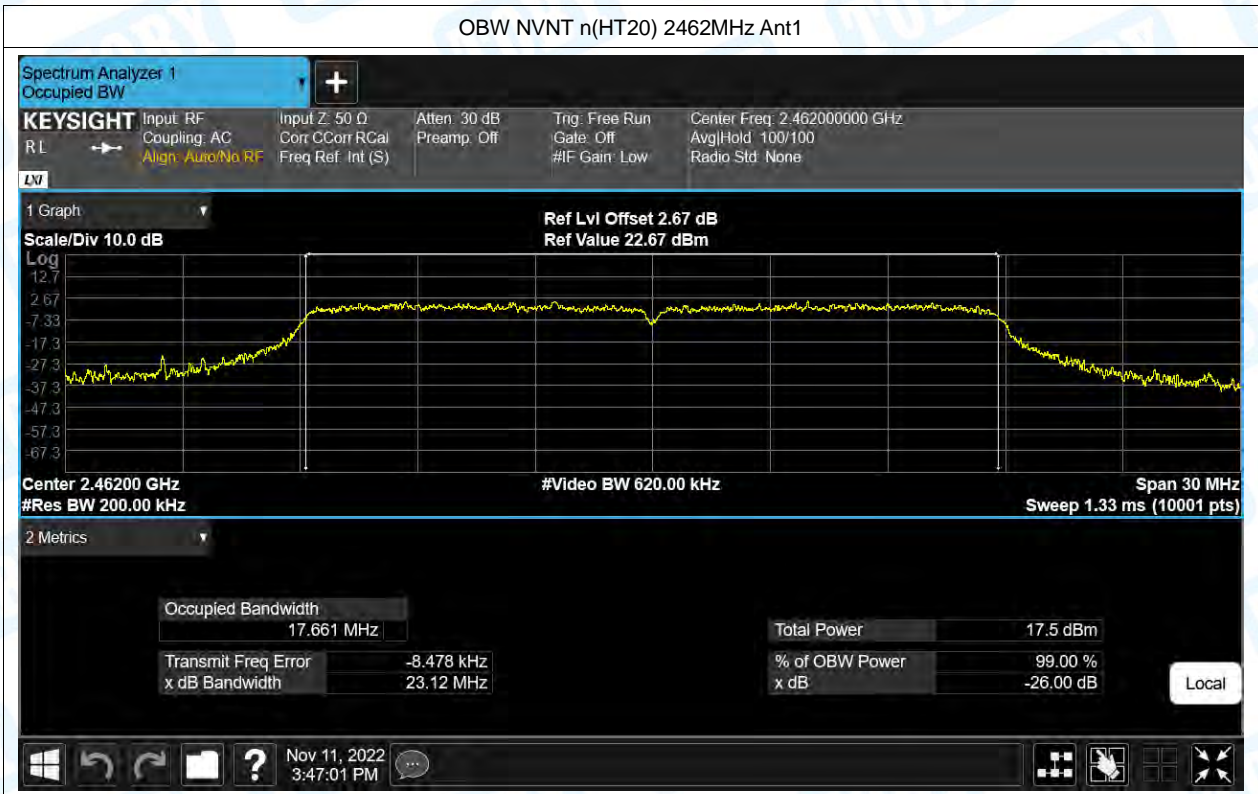
OBW NVNT b 2437MHz Ant1

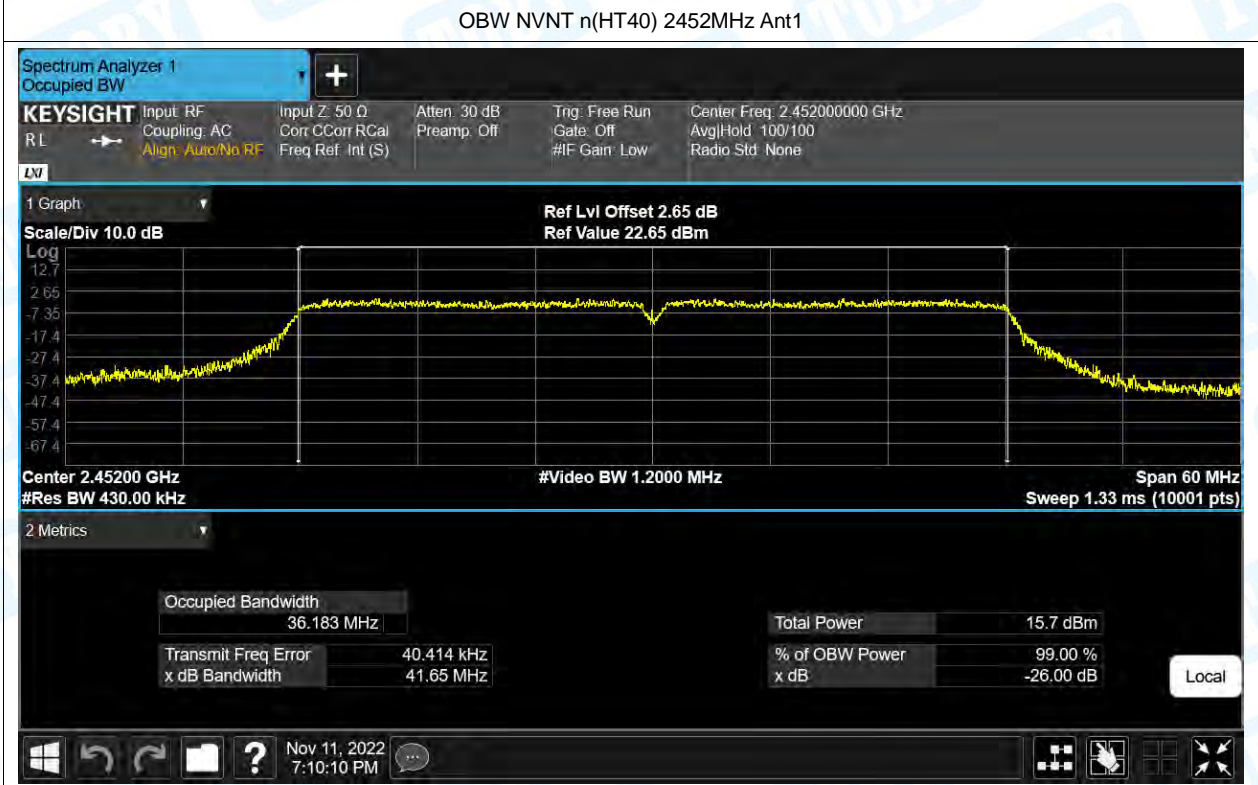
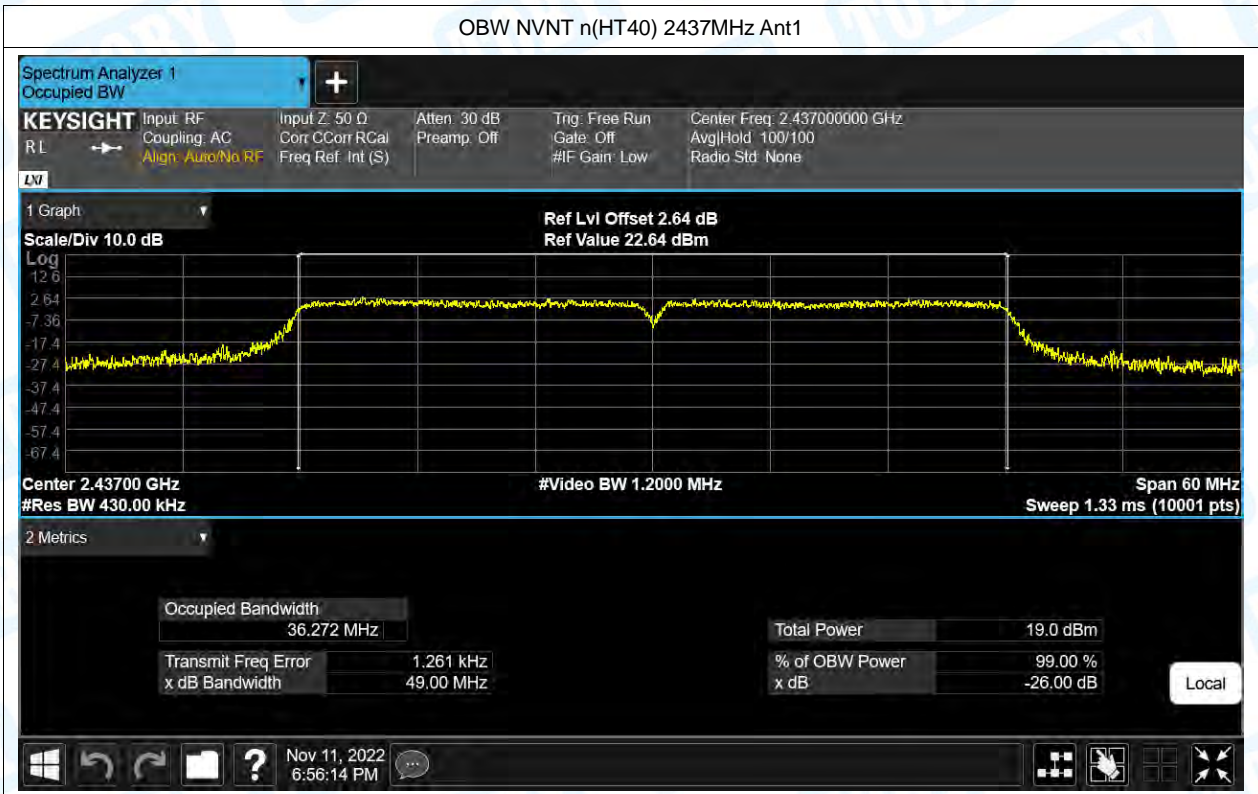












5. Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	-4.755	8	Pass
NVNT	b	2437	Ant1	-6.423	8	Pass
NVNT	b	2462	Ant1	-6.765	8	Pass
NVNT	g	2412	Ant1	-11.818	8	Pass
NVNT	g	2437	Ant1	-13.643	8	Pass
NVNT	g	2462	Ant1	-11.453	8	Pass
NVNT	n(HT20)	2412	Ant1	-13.088	8	Pass
NVNT	n(HT20)	2437	Ant1	-12.388	8	Pass
NVNT	n(HT20)	2462	Ant1	-13.271	8	Pass
NVNT	n(HT40)	2422	Ant1	-18.529	8	Pass
NVNT	n(HT40)	2437	Ant1	-14.482	8	Pass
NVNT	n(HT40)	2452	Ant1	-12.891	8	Pass

Test Graphs

PSD NVNT b 2412MHz Ant1



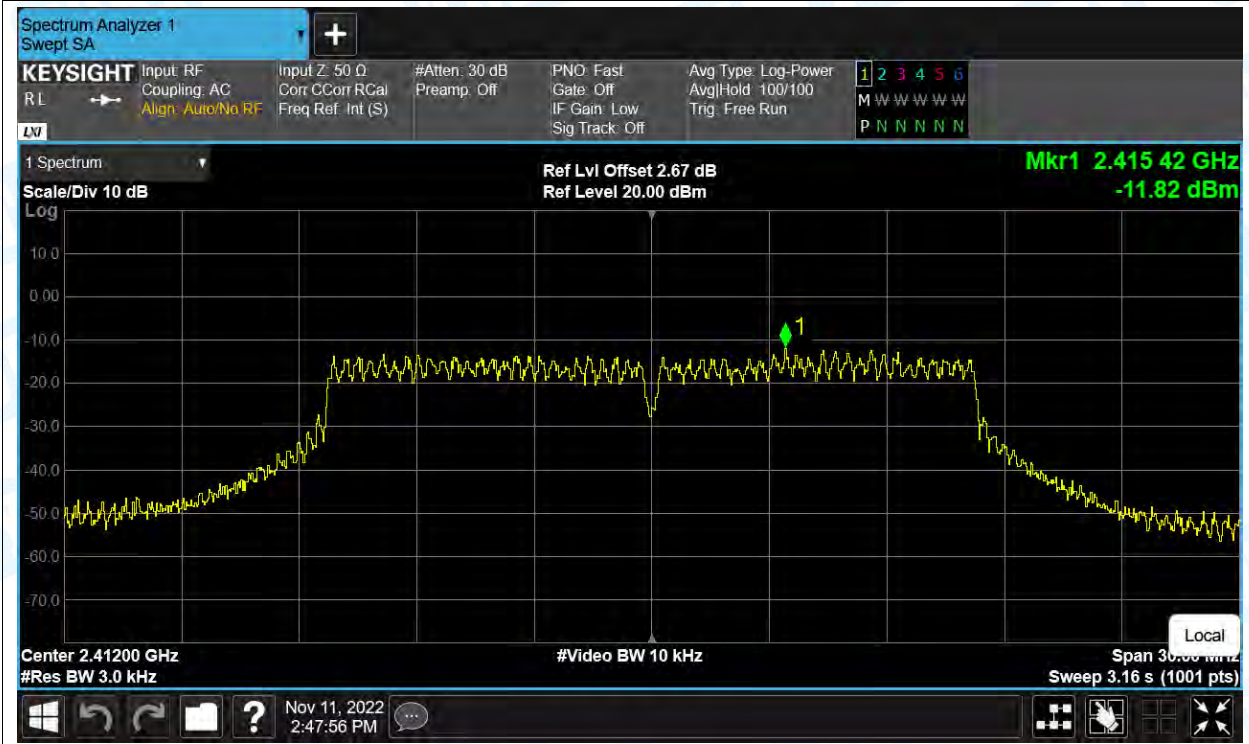
PSD NVNT b 2437MHz Ant1

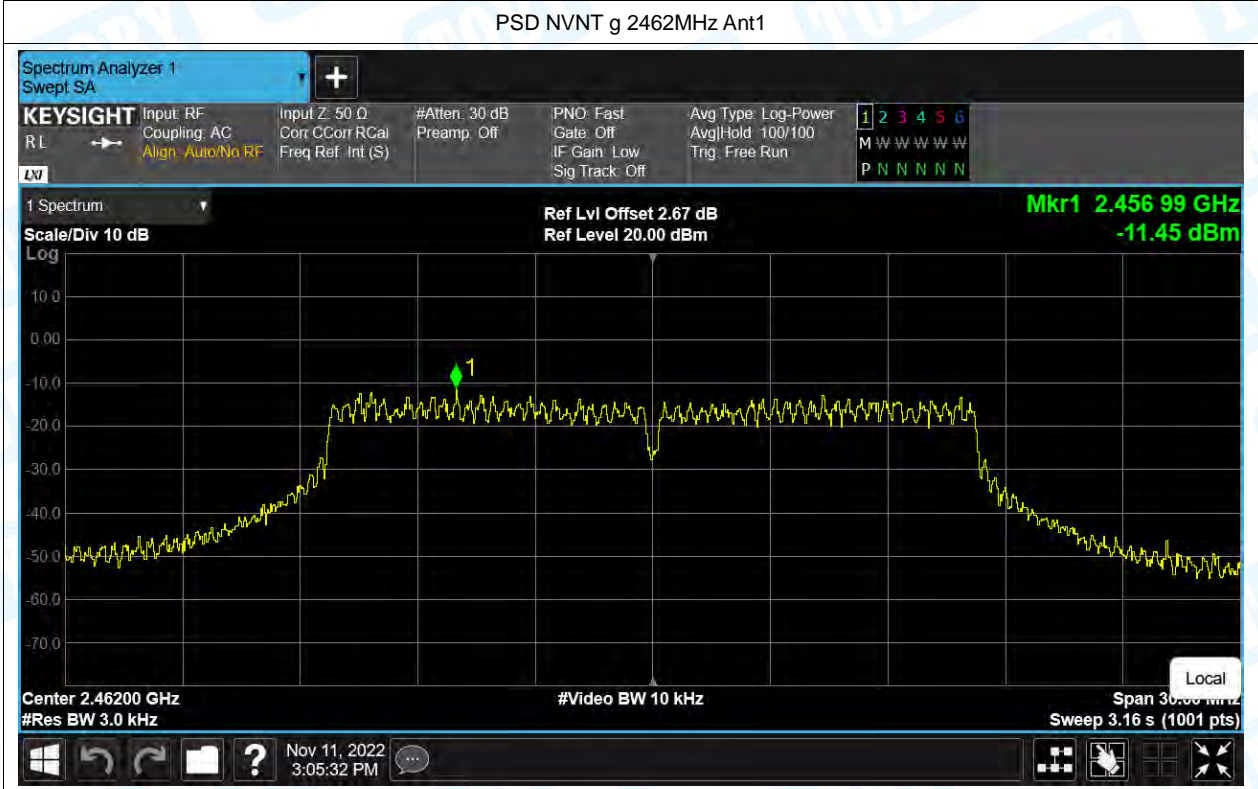
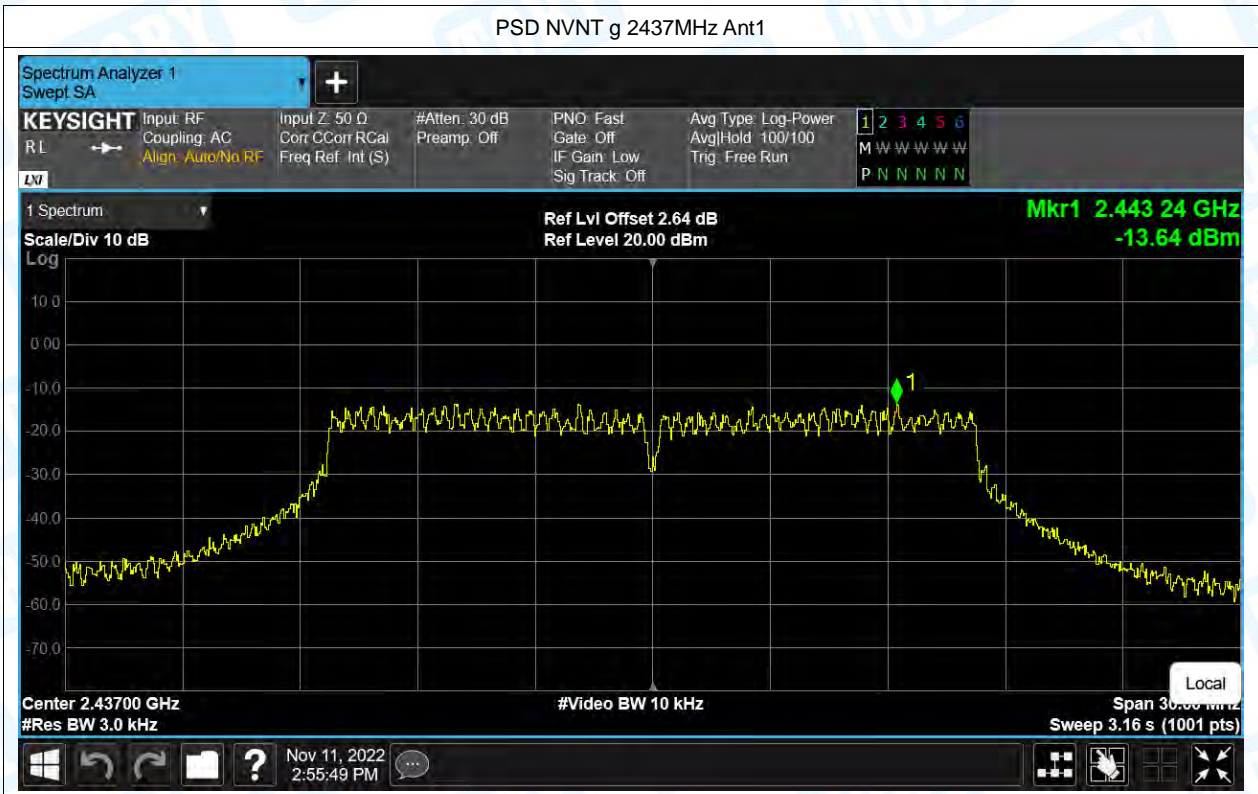


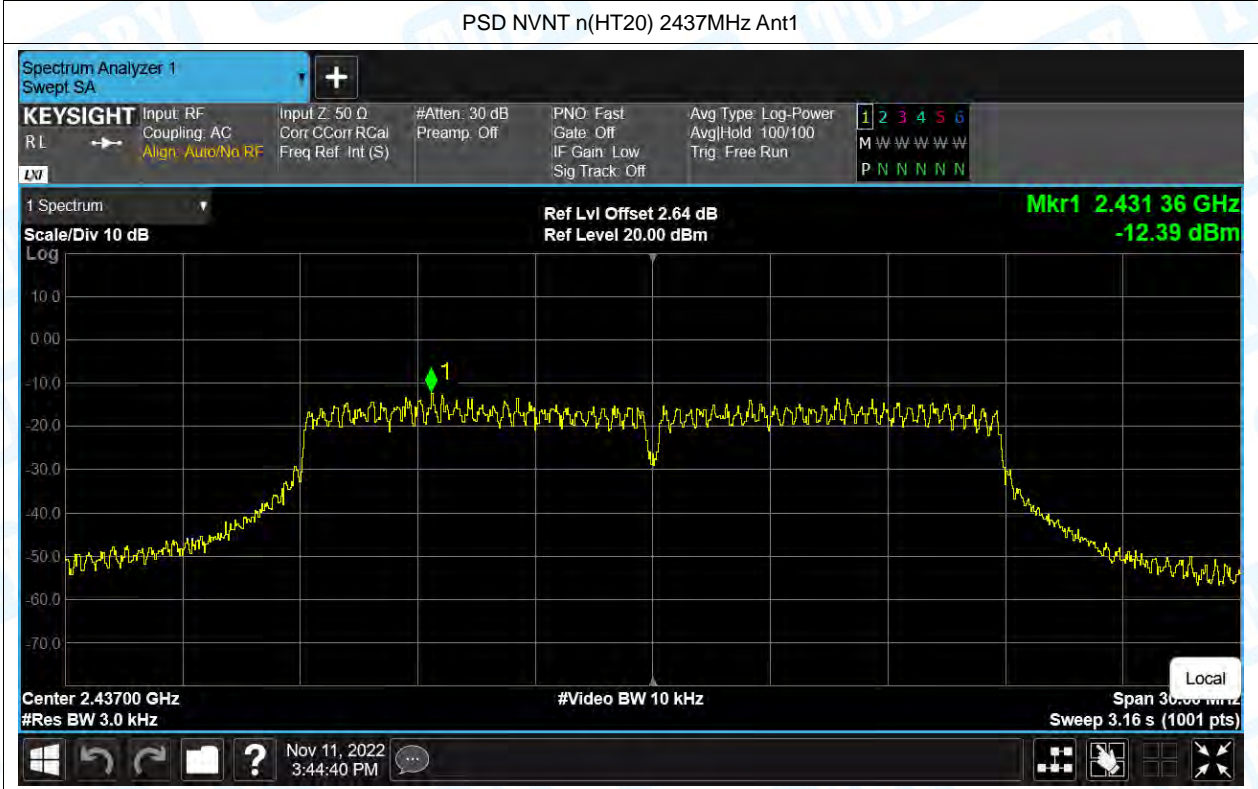
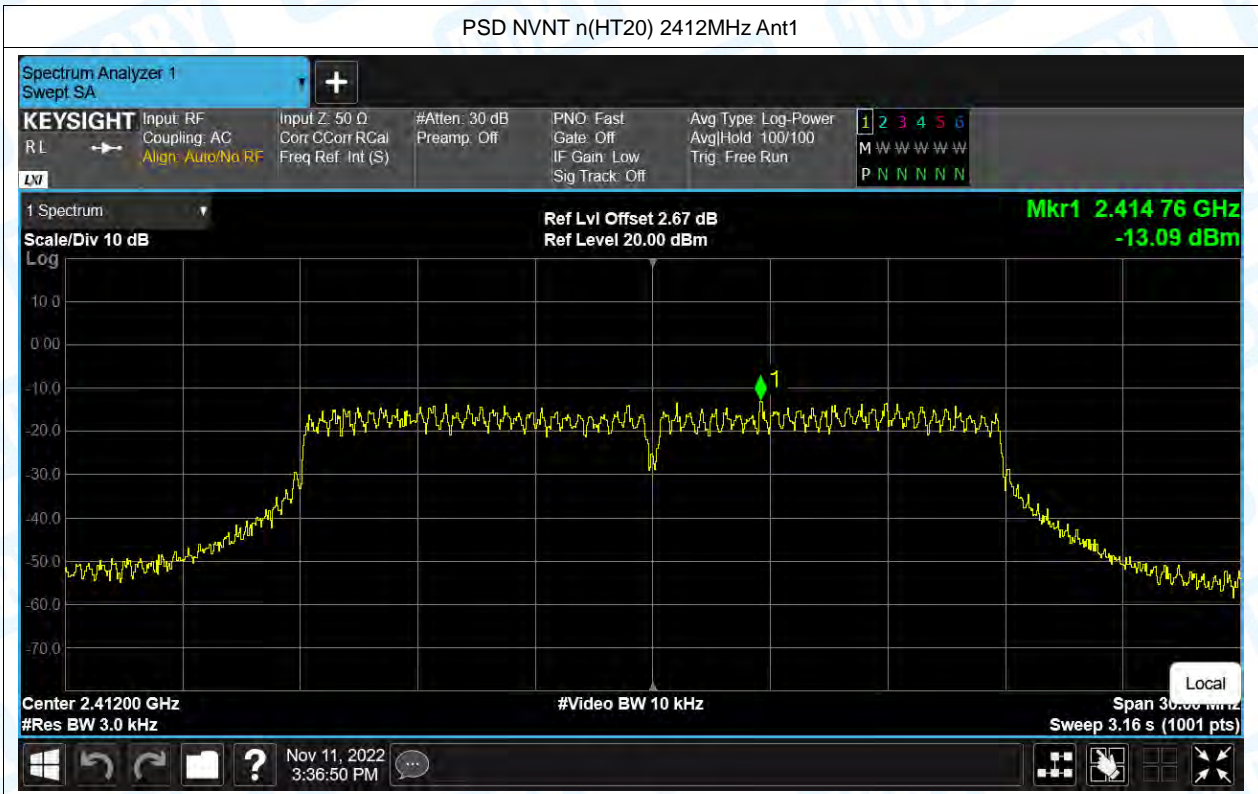
PSD NVNT b 2462MHz Ant1

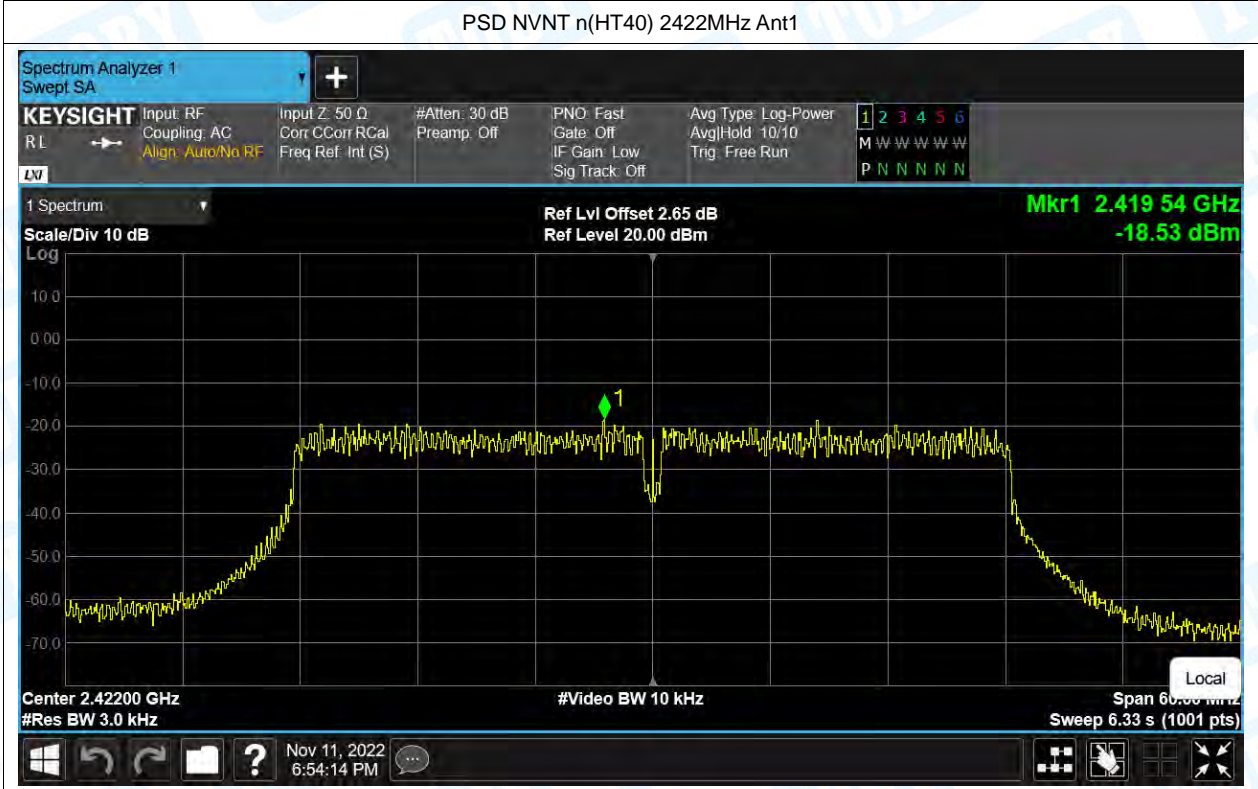
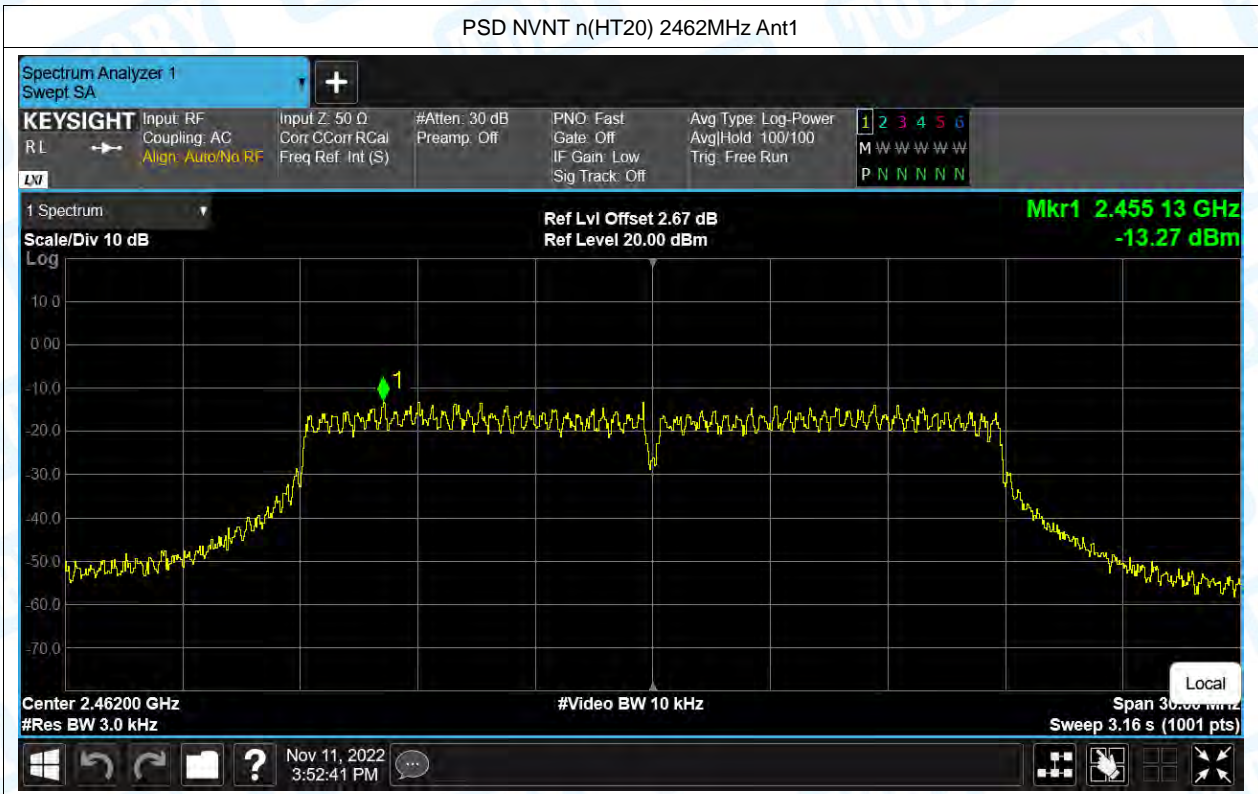


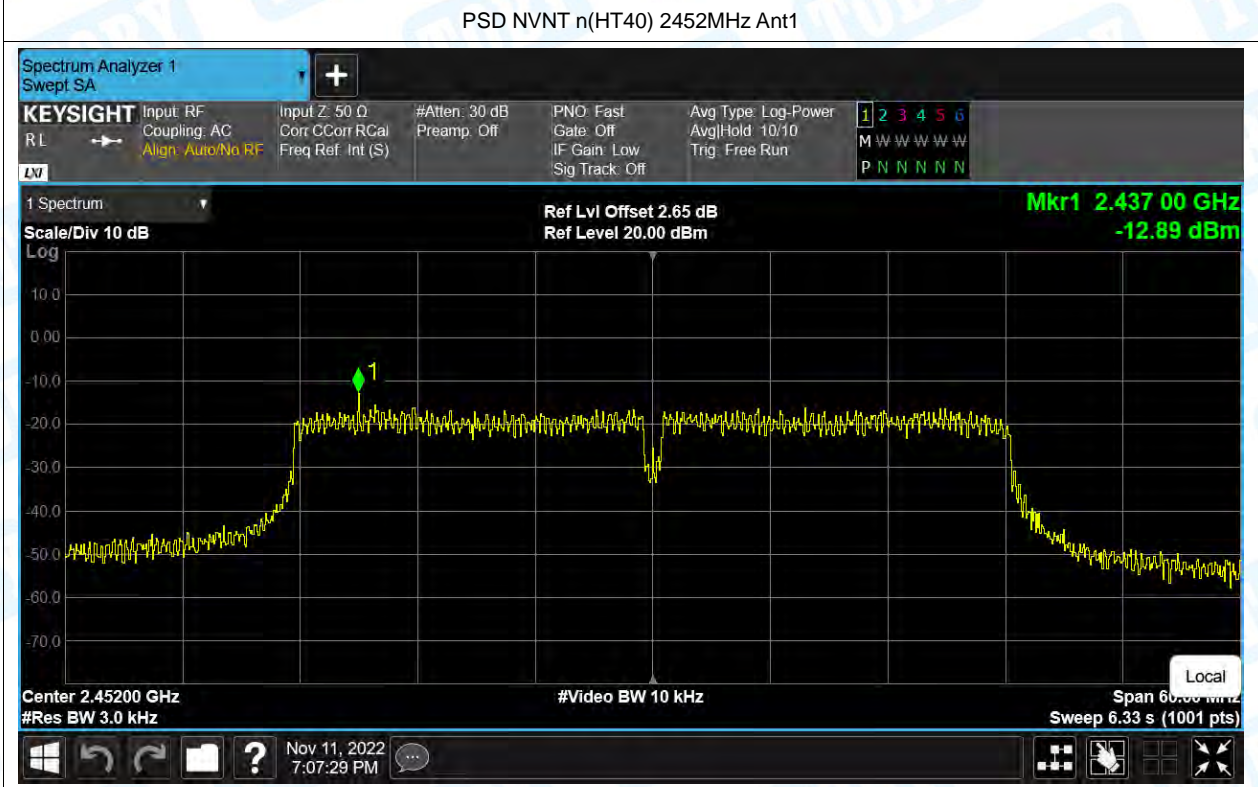
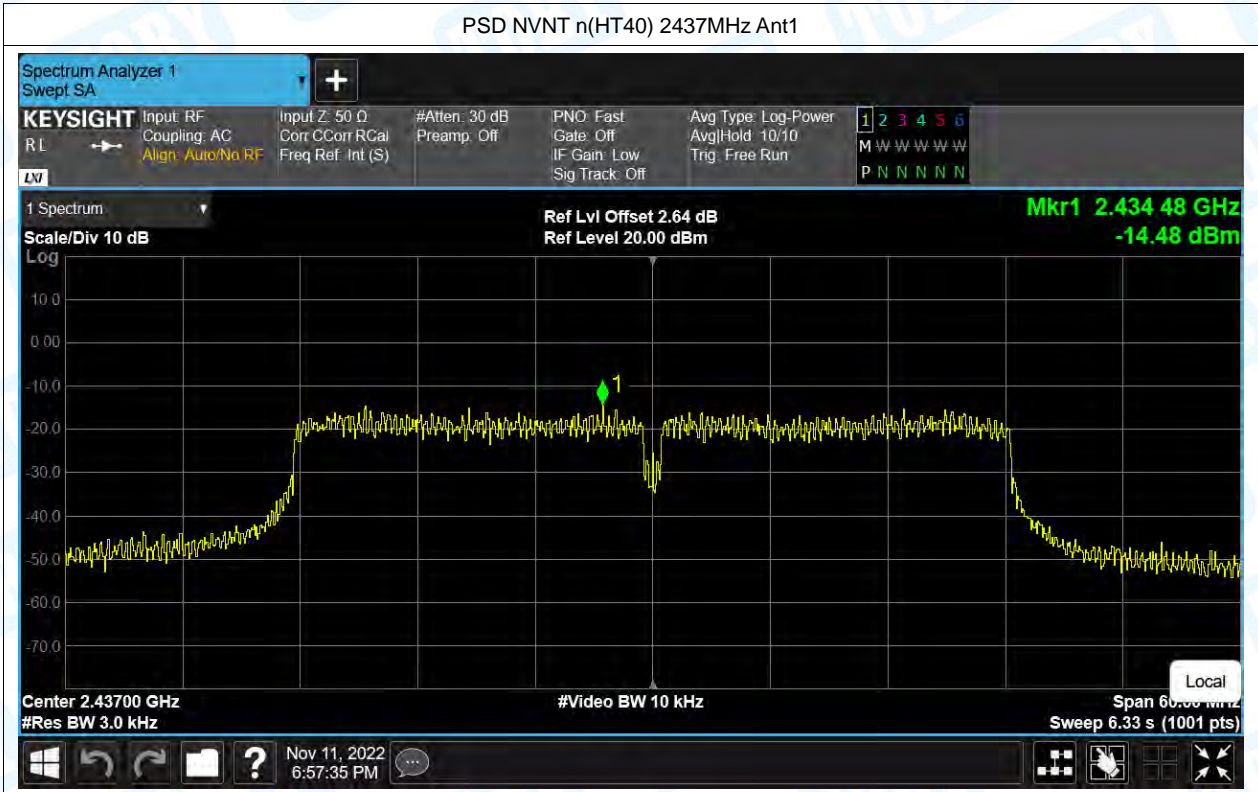
PSD NVNT g 2412MHz Ant1









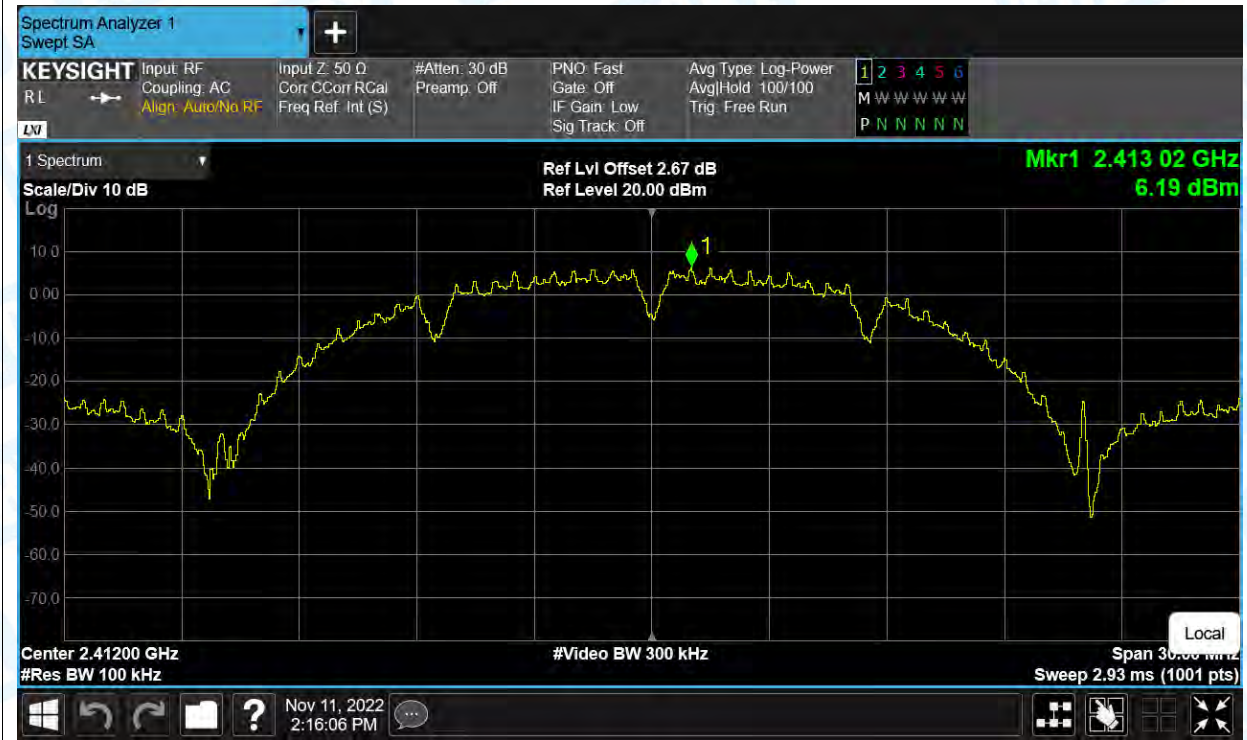


6. Band Edge

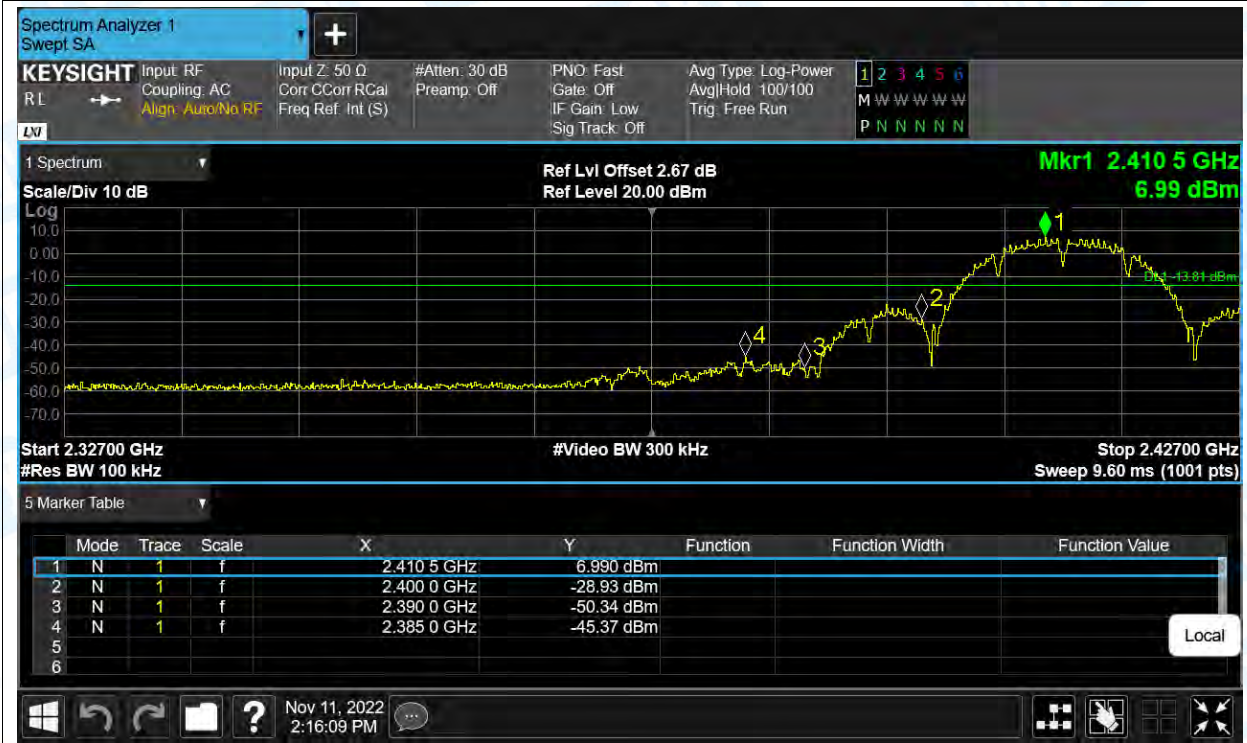
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-51.56	-20	Pass
NVNT	b	2462	Ant1	-54.21	-20	Pass
NVNT	g	2412	Ant1	-45.17	-20	Pass
NVNT	g	2462	Ant1	-44.85	-20	Pass
NVNT	n(HT20)	2412	Ant1	-47.7	-20	Pass
NVNT	n(HT20)	2462	Ant1	-41.97	-20	Pass
NVNT	n(HT40)	2422	Ant1	-25.82	-20	Pass
NVNT	n(HT40)	2452	Ant1	-33.46	-20	Pass

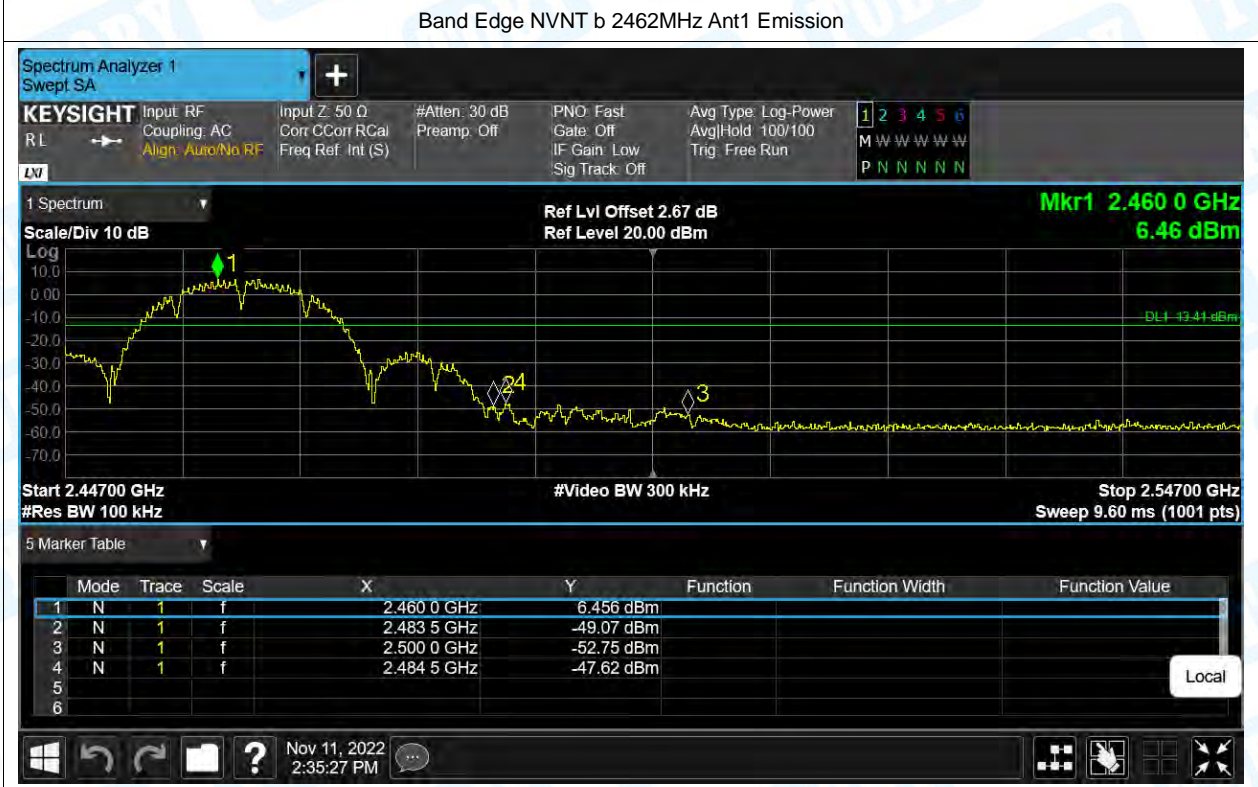
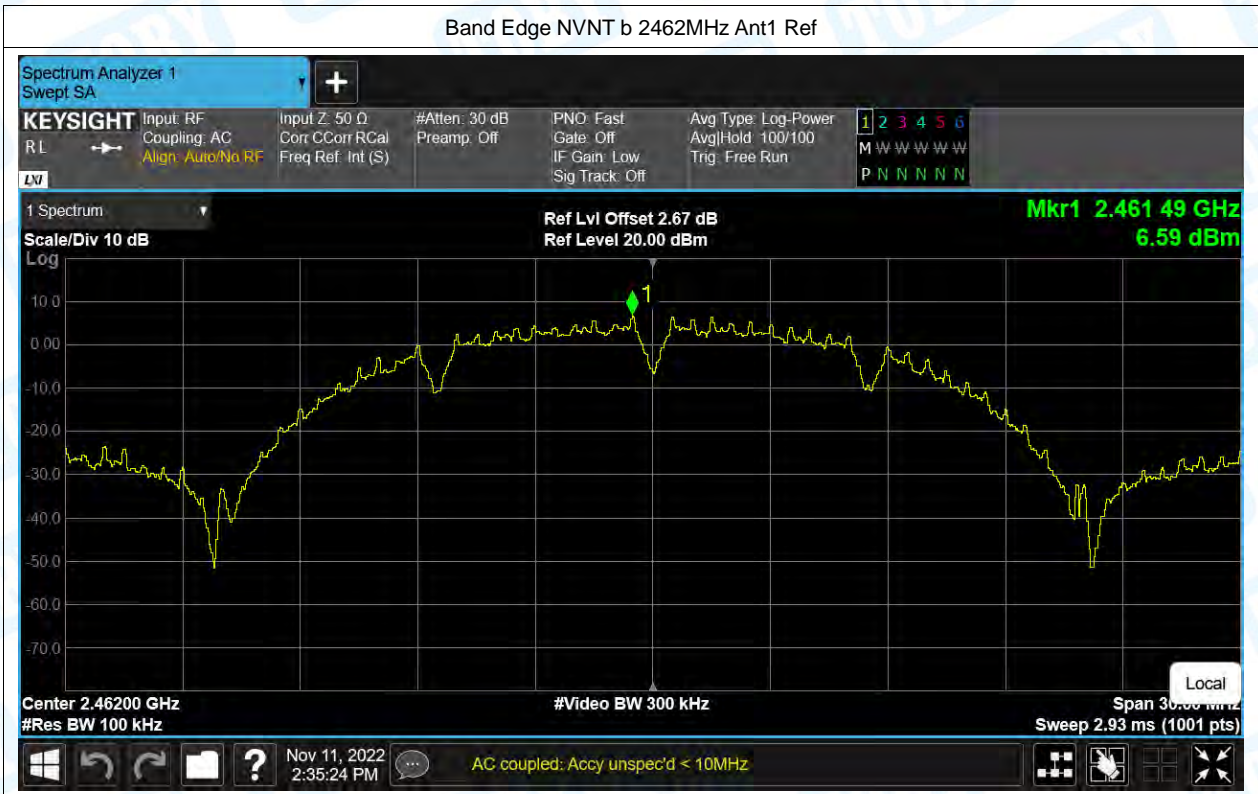
Test Graphs

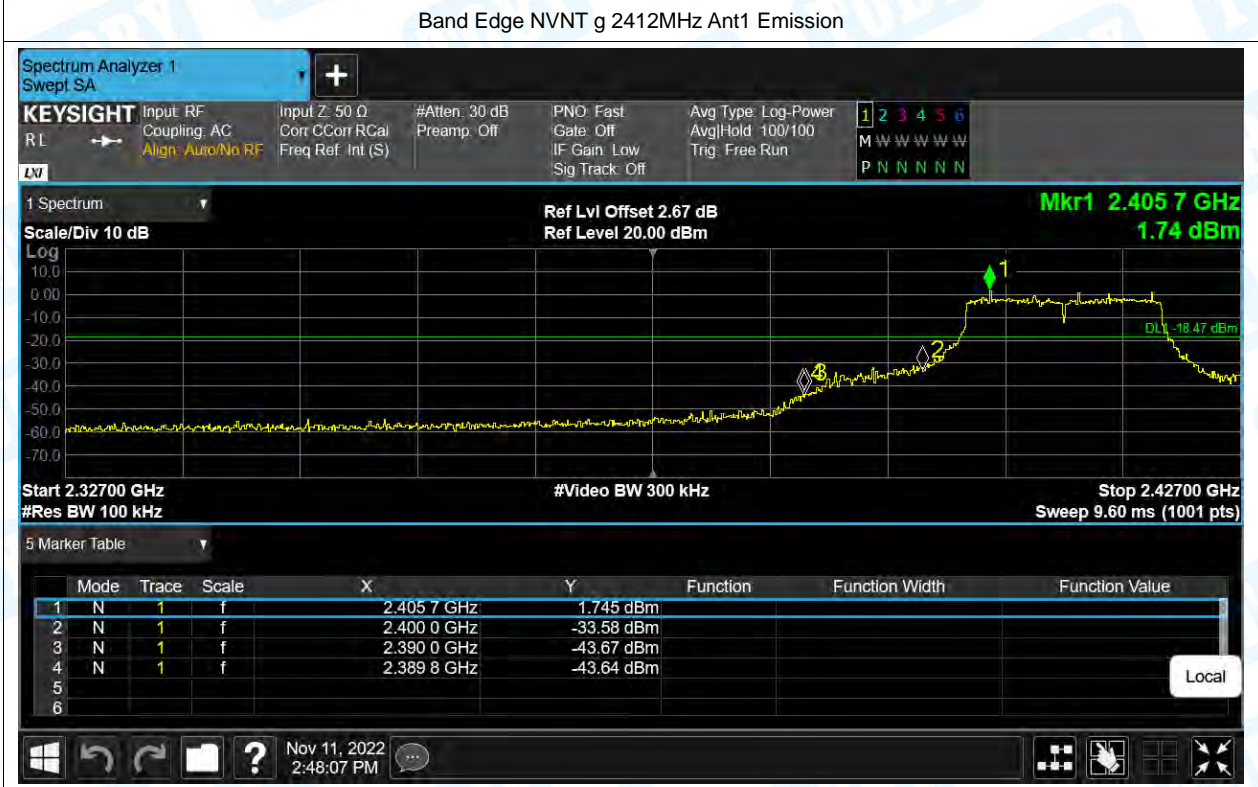
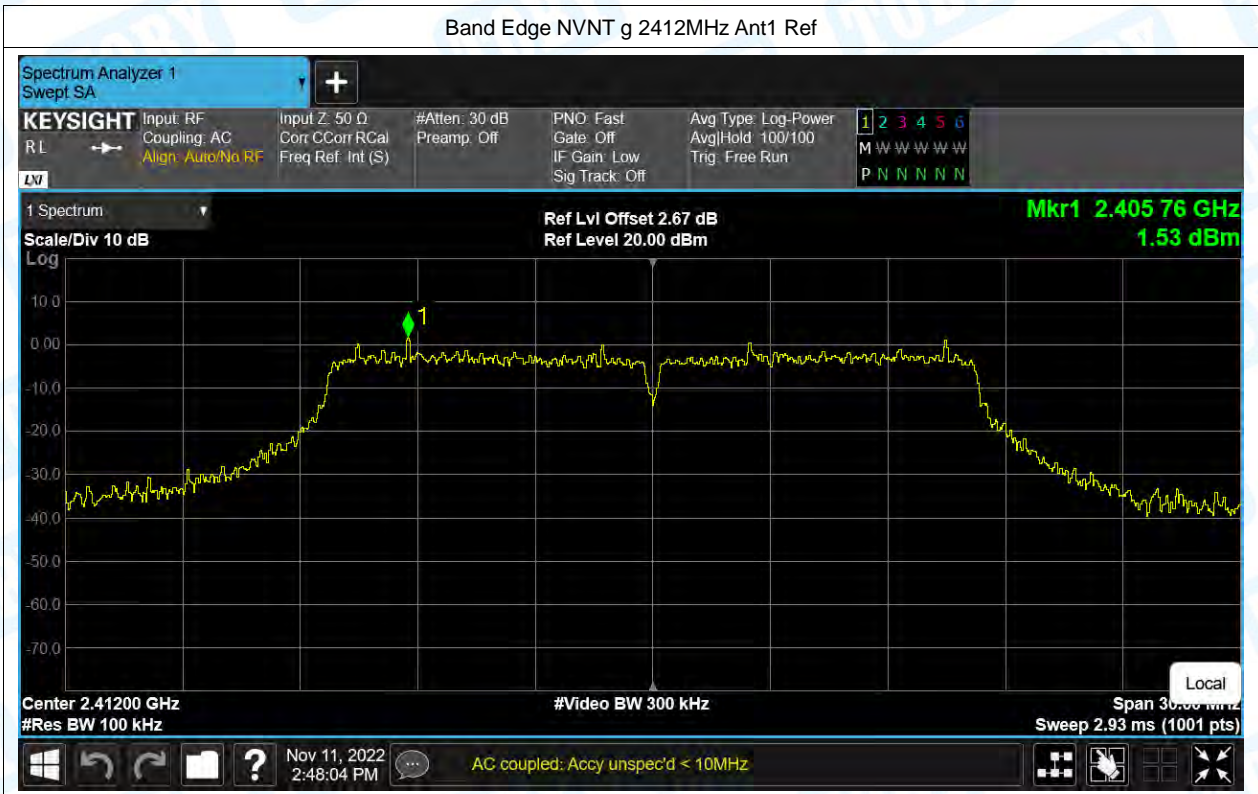
Band Edge NVNT b 2412MHz Ant1 Ref

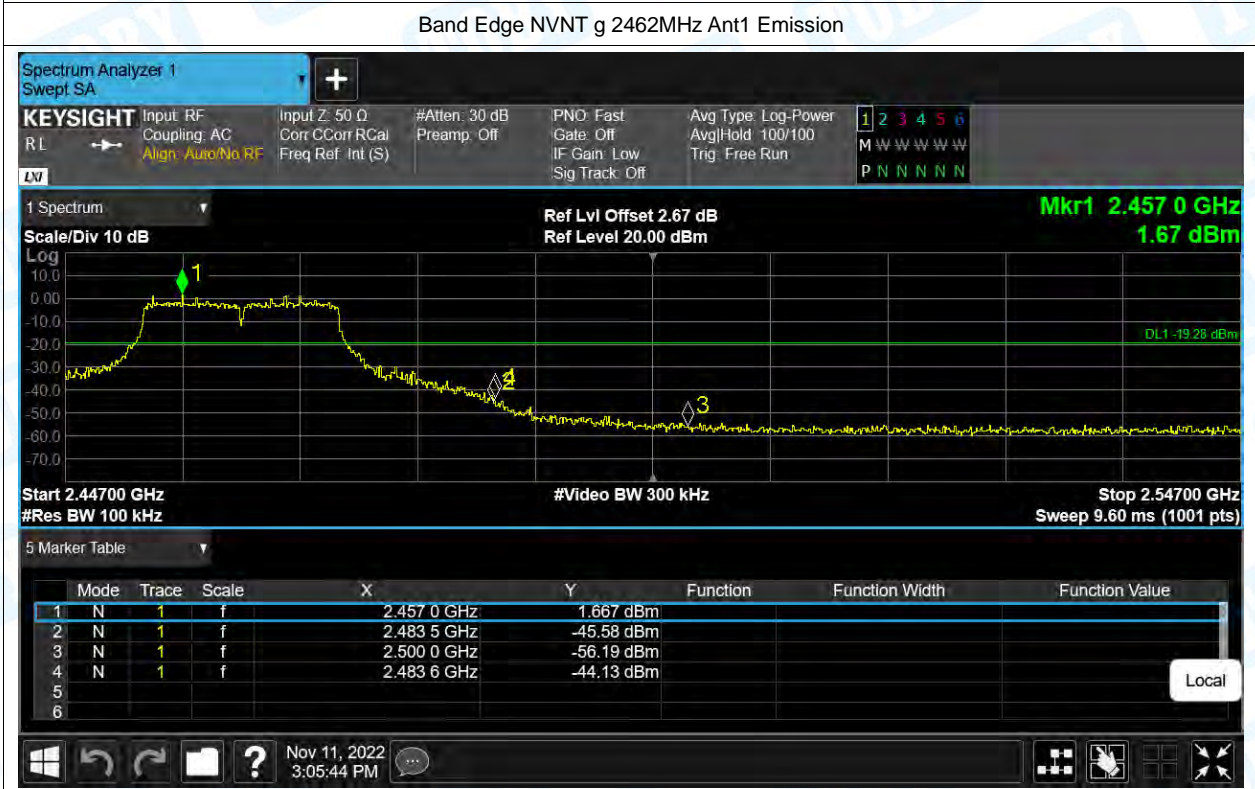
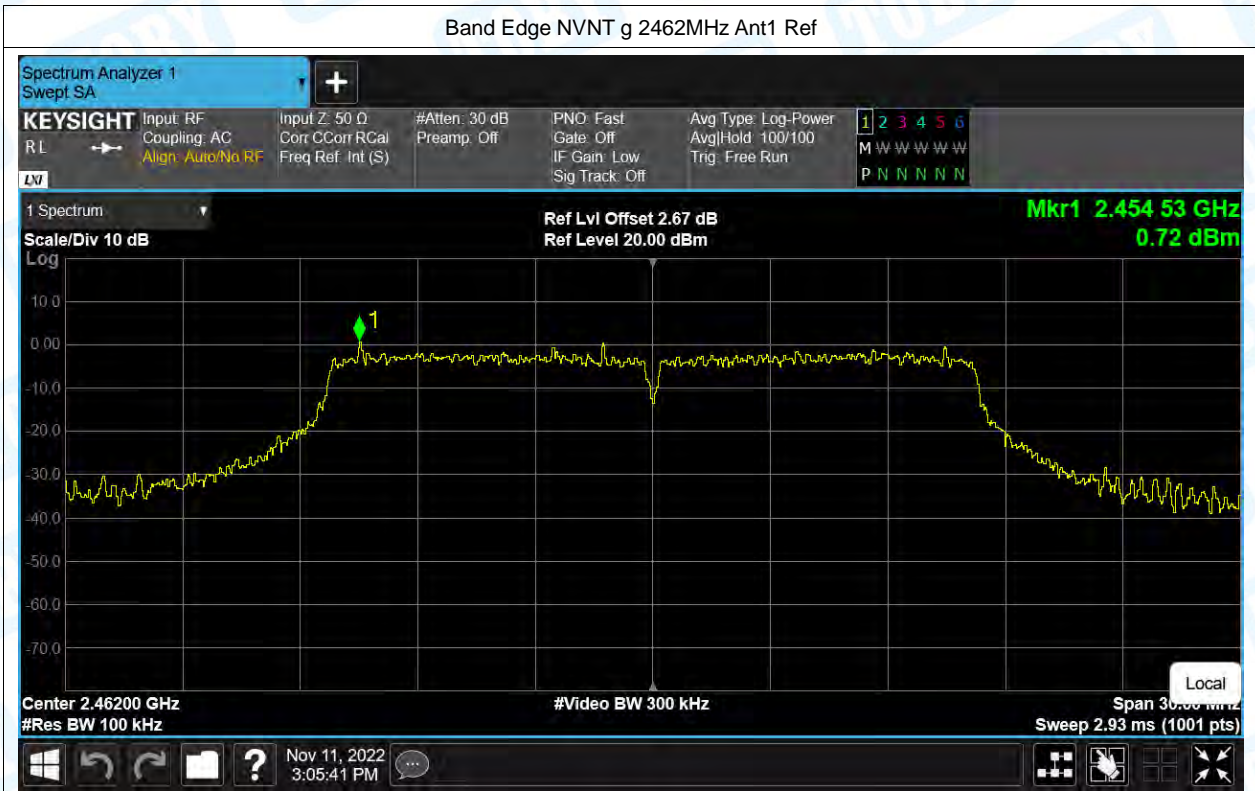


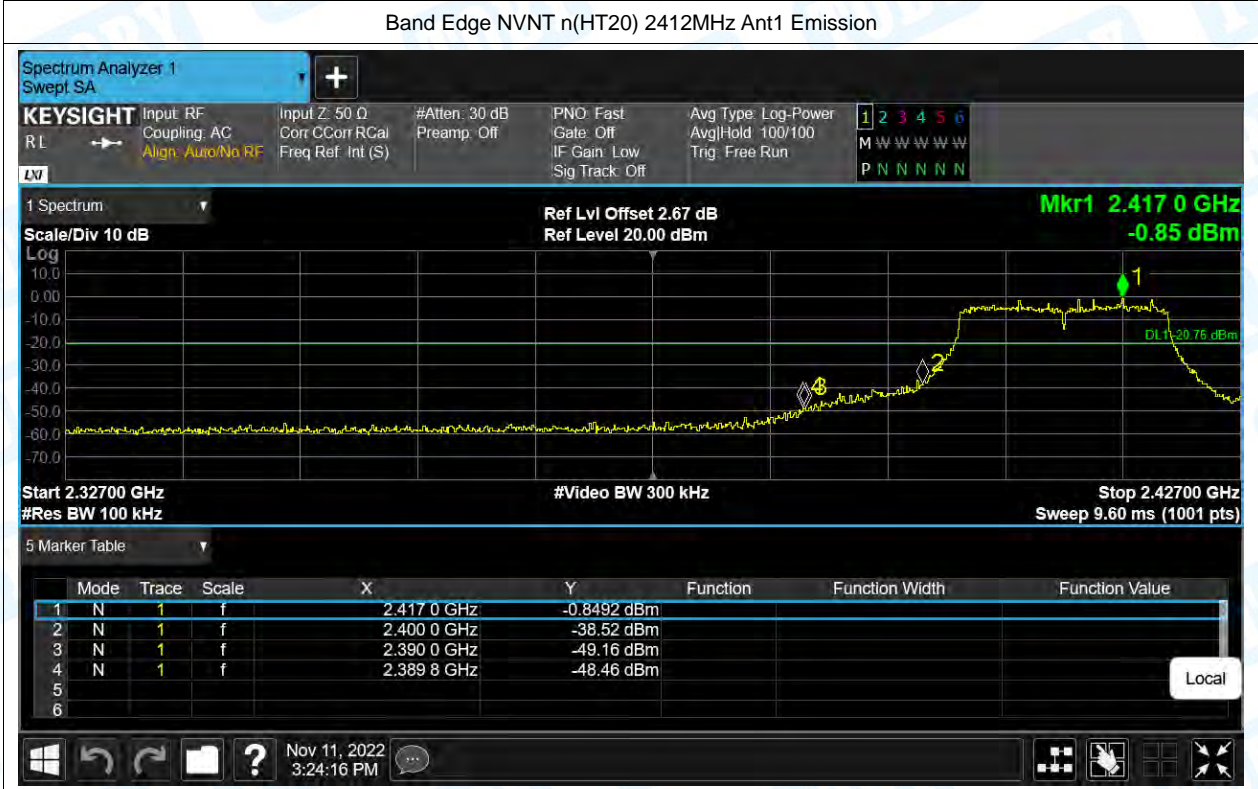
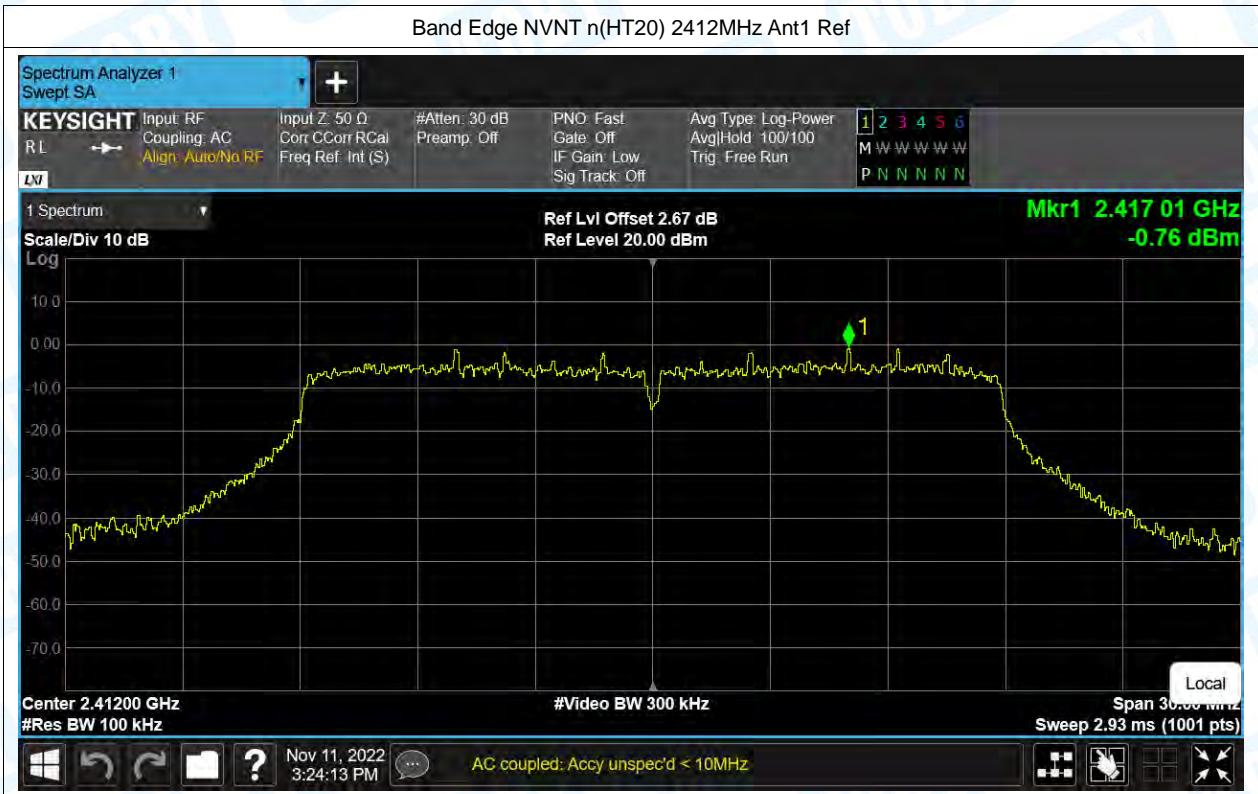
Band Edge NVNT b 2412MHz Ant1 Emission

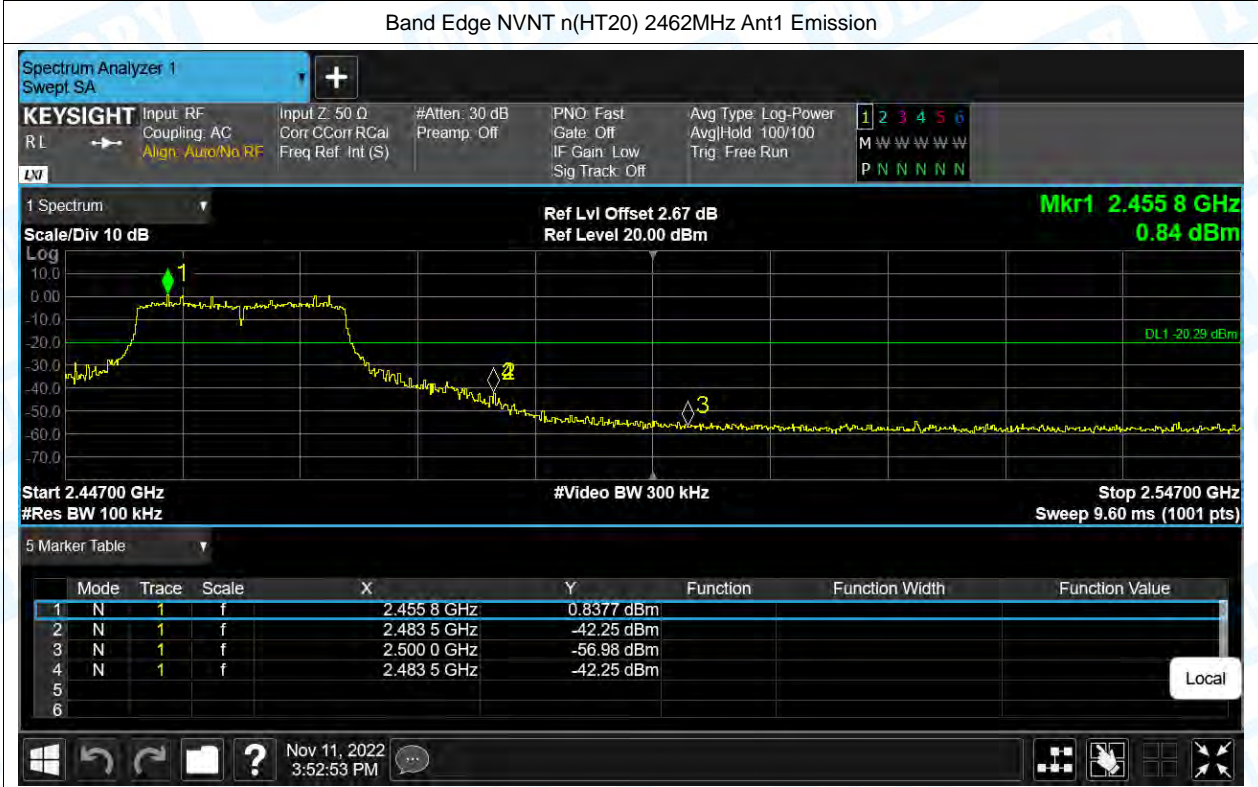
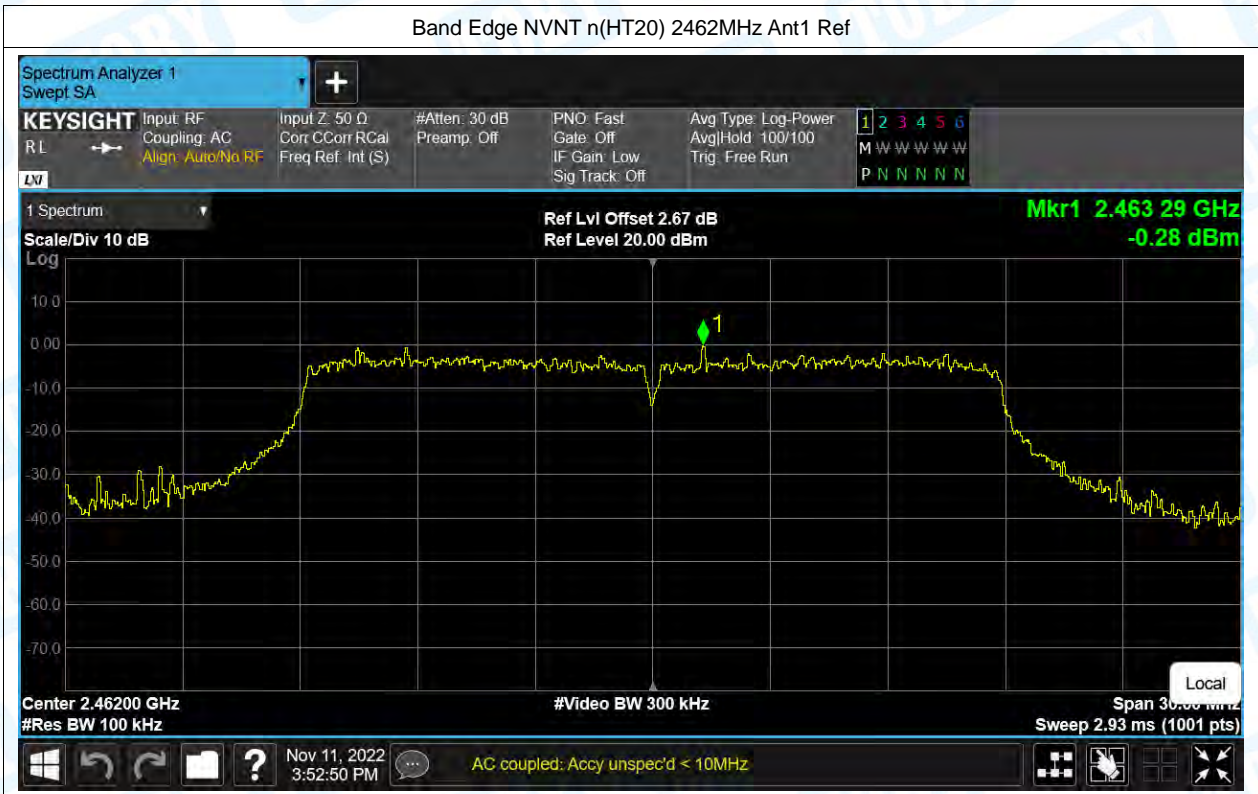


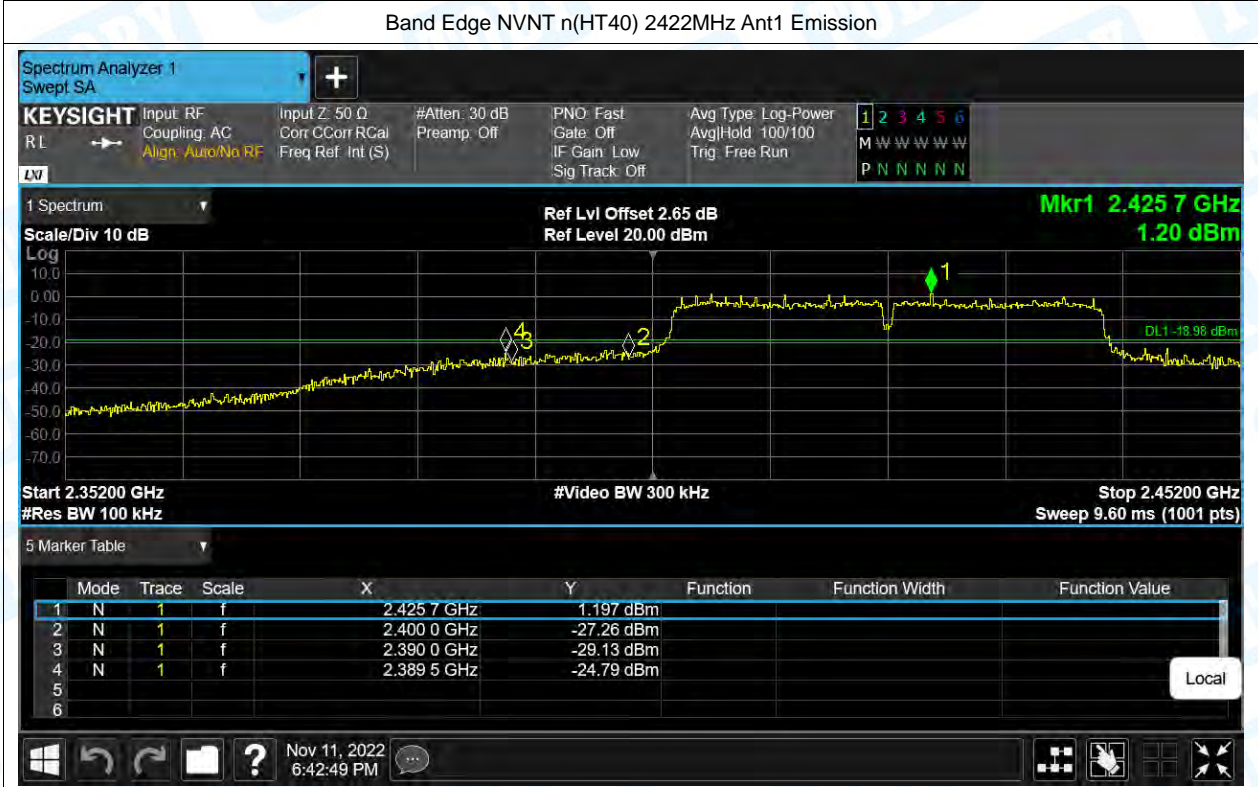
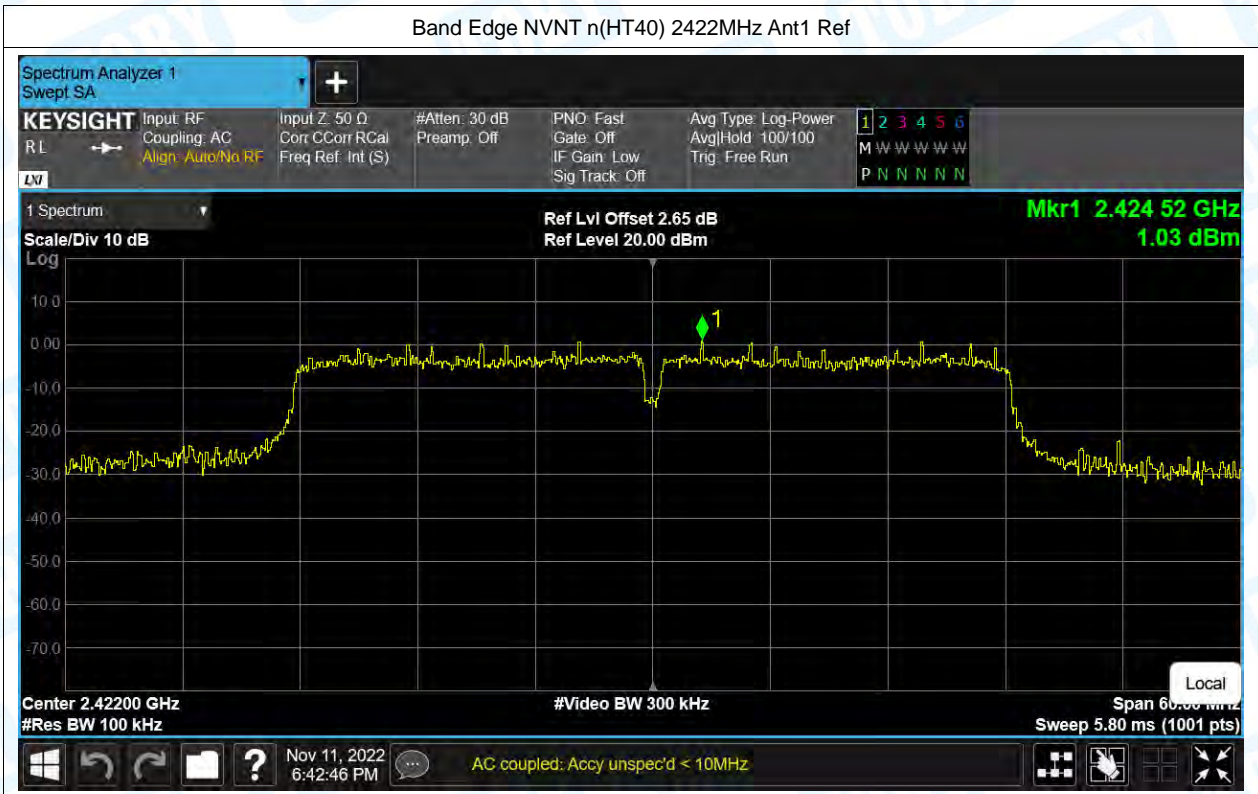


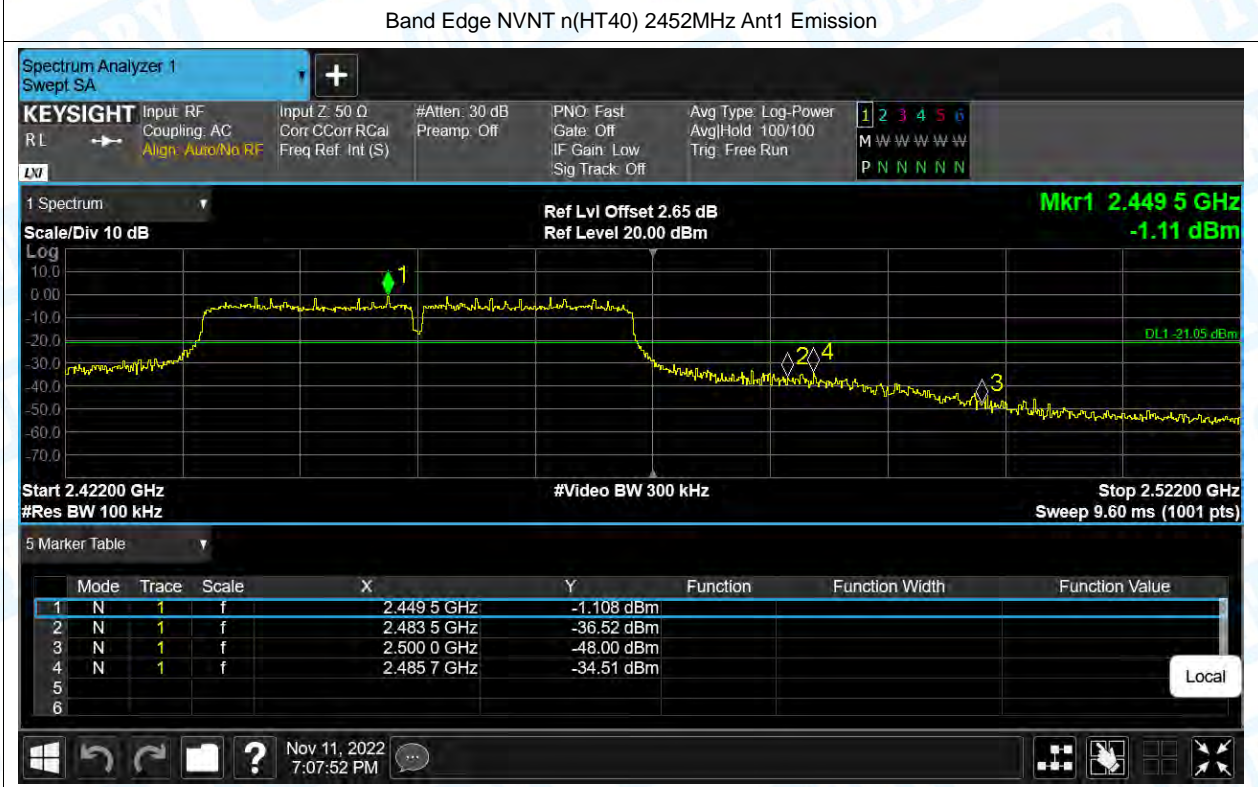
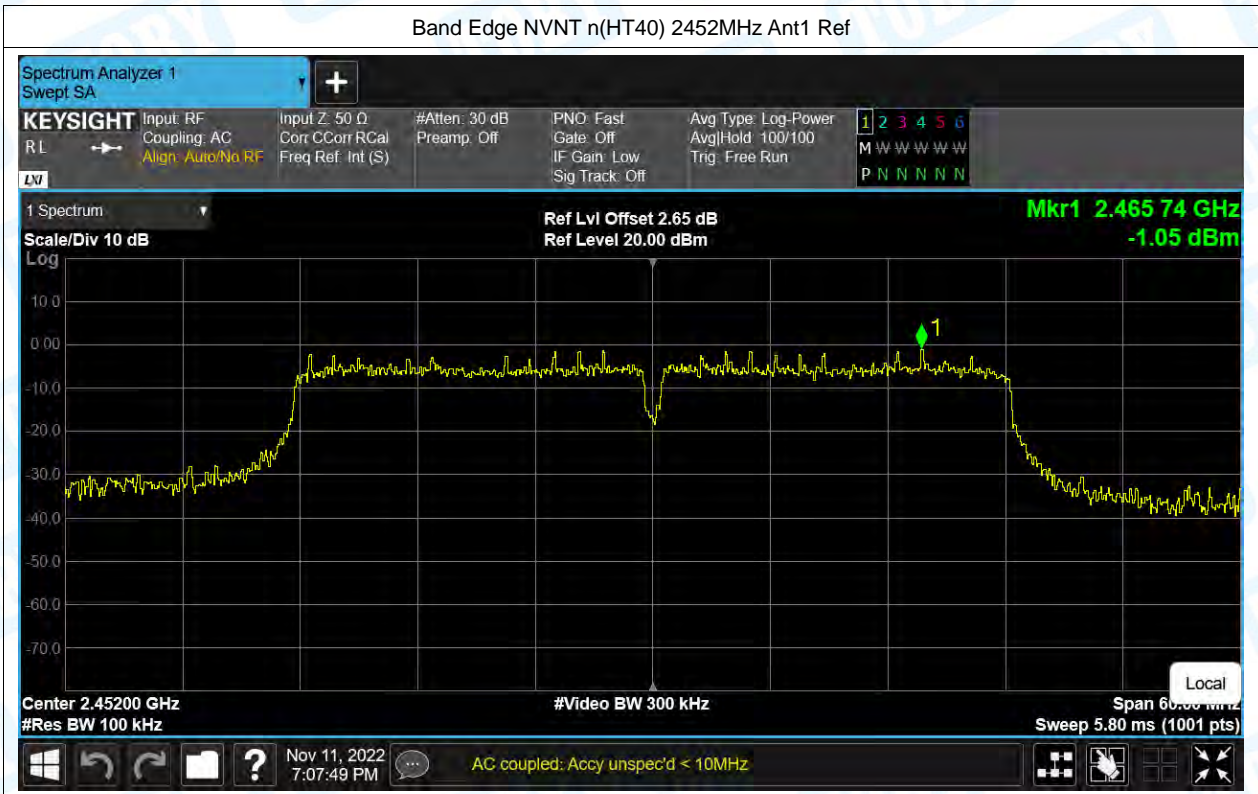










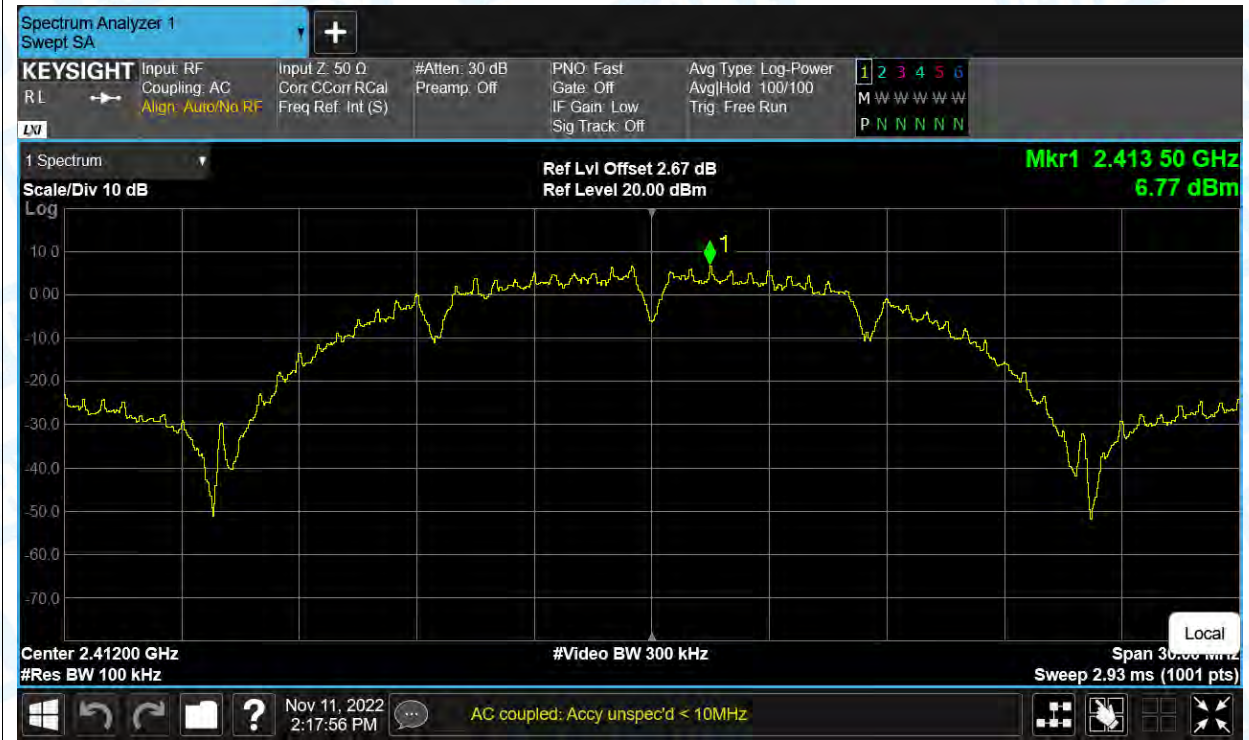


7. Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-47.79	-20	Pass
NVNT	b	2437	Ant1	-48.99	-20	Pass
NVNT	b	2462	Ant1	-48.32	-20	Pass
NVNT	g	2412	Ant1	-42.93	-20	Pass
NVNT	g	2437	Ant1	-41.23	-20	Pass
NVNT	g	2462	Ant1	-44.09	-20	Pass
NVNT	n(HT20)	2412	Ant1	-43.06	-20	Pass
NVNT	n(HT20)	2437	Ant1	-42.61	-20	Pass
NVNT	n(HT20)	2462	Ant1	-43.17	-20	Pass
NVNT	n(HT40)	2422	Ant1	-43.57	-20	Pass
NVNT	n(HT40)	2437	Ant1	-41.65	-20	Pass
NVNT	n(HT40)	2452	Ant1	-40.33	-20	Pass

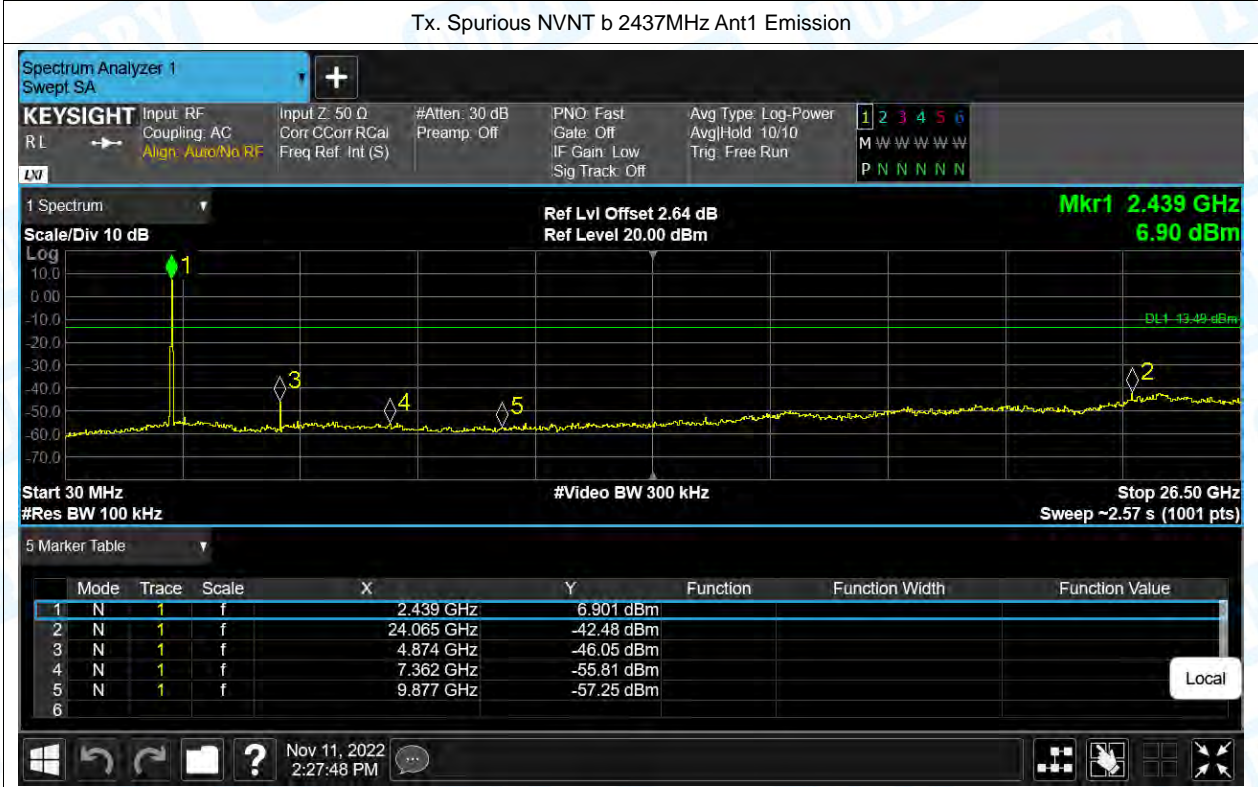
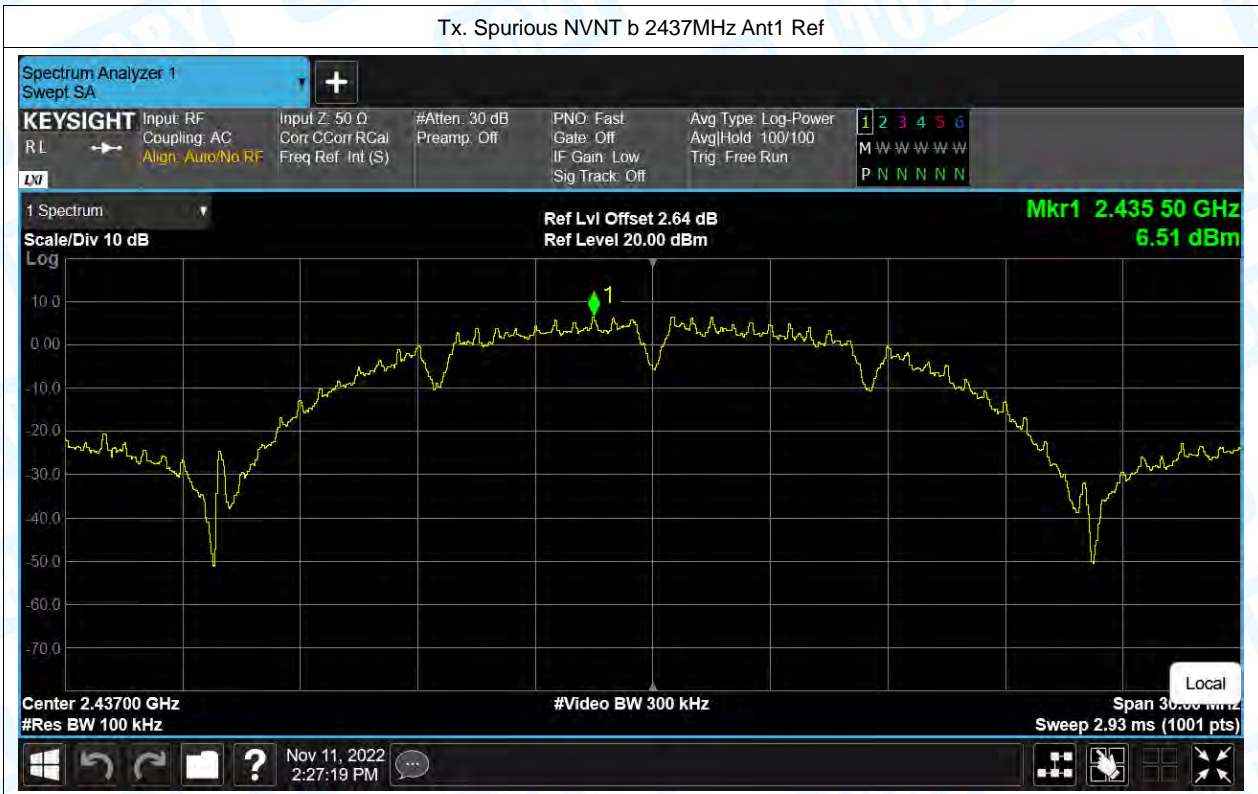
Test Graphs

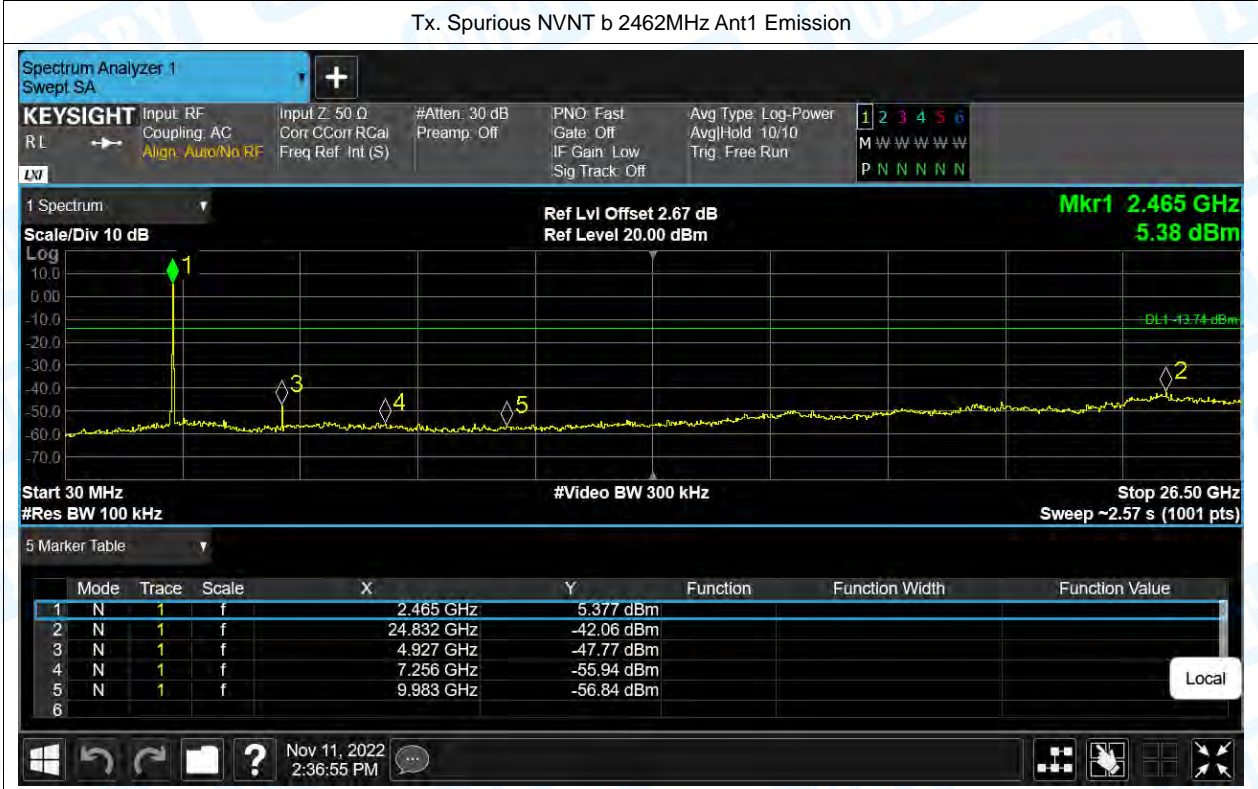
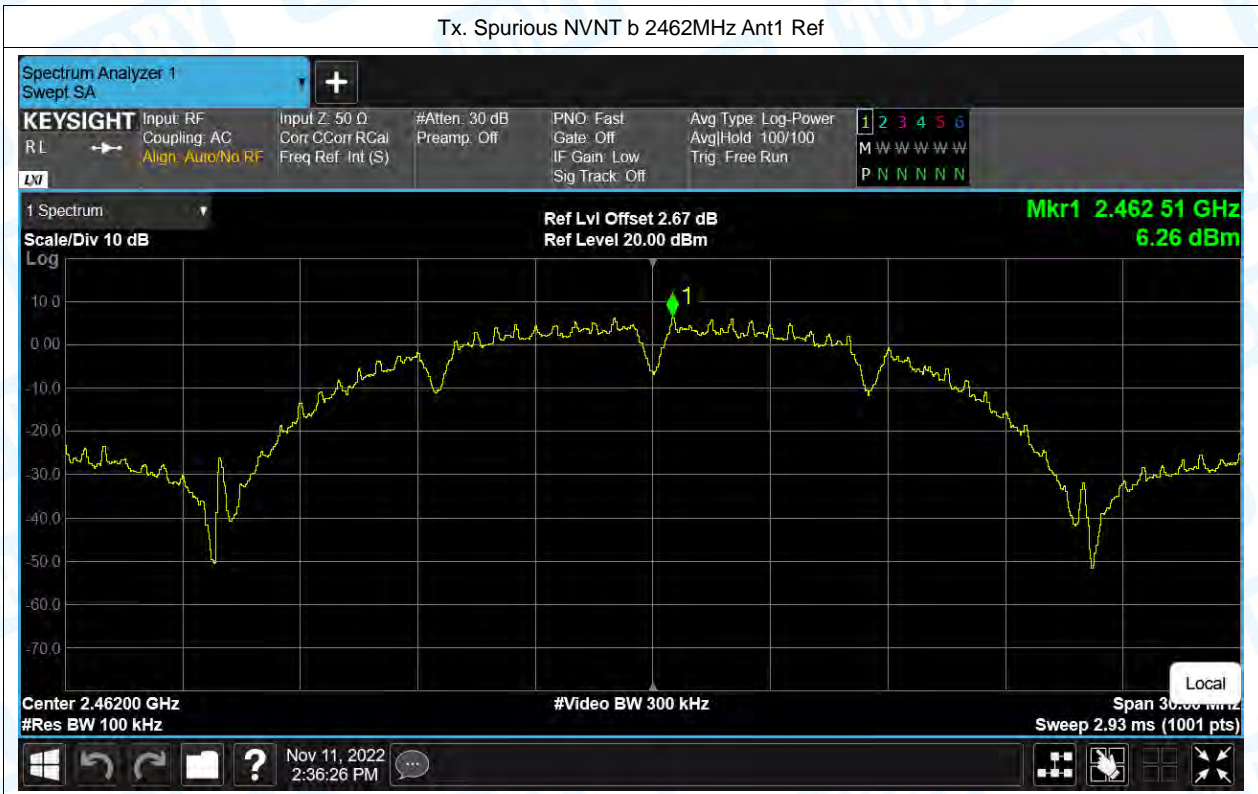
Tx. Spurious NVNT b 2412MHz Ant1 Ref

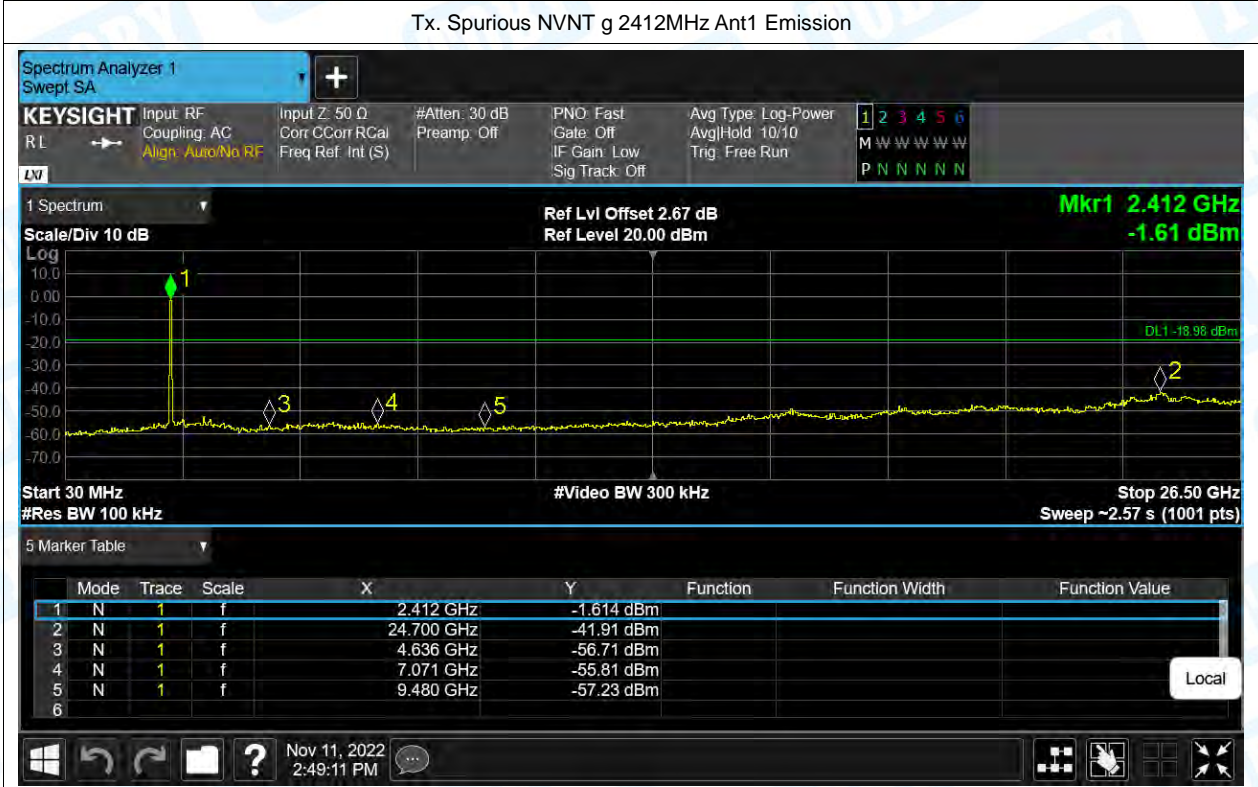
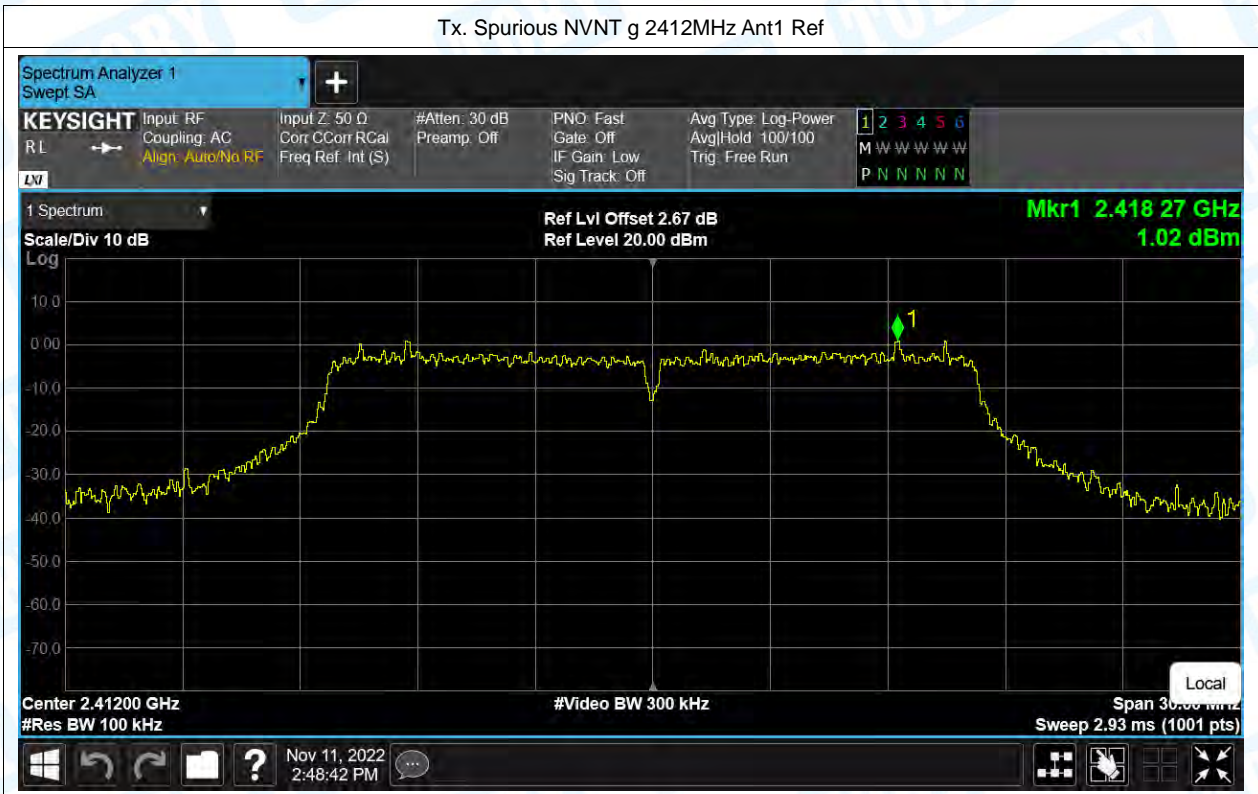


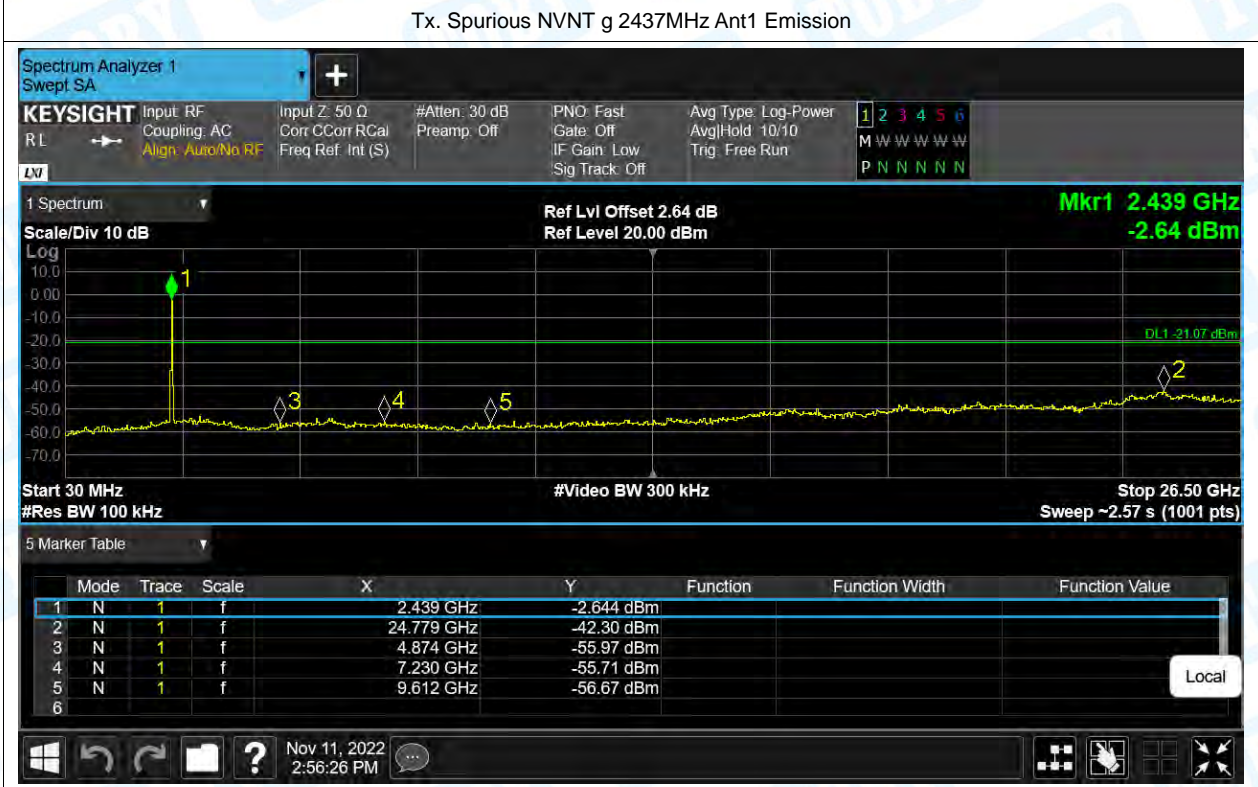
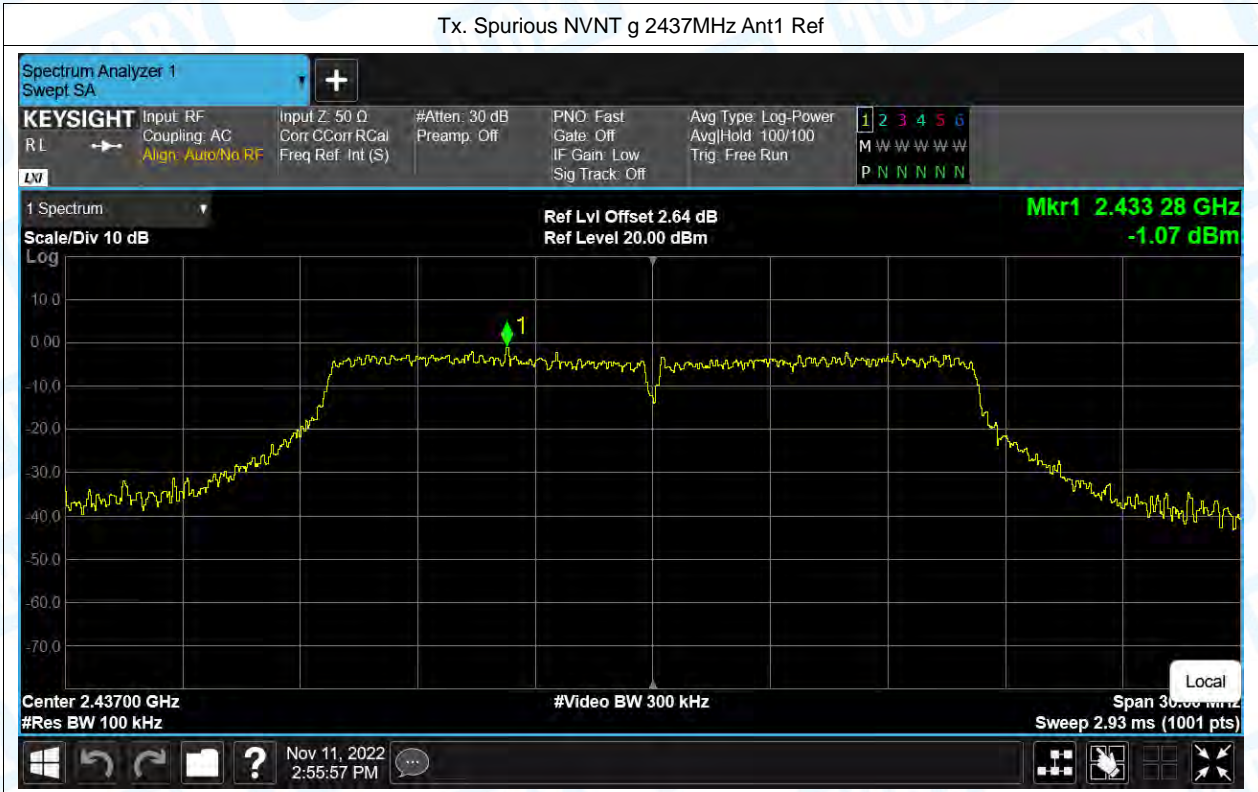
Tx. Spurious NVNT b 2412MHz Ant1 Emission

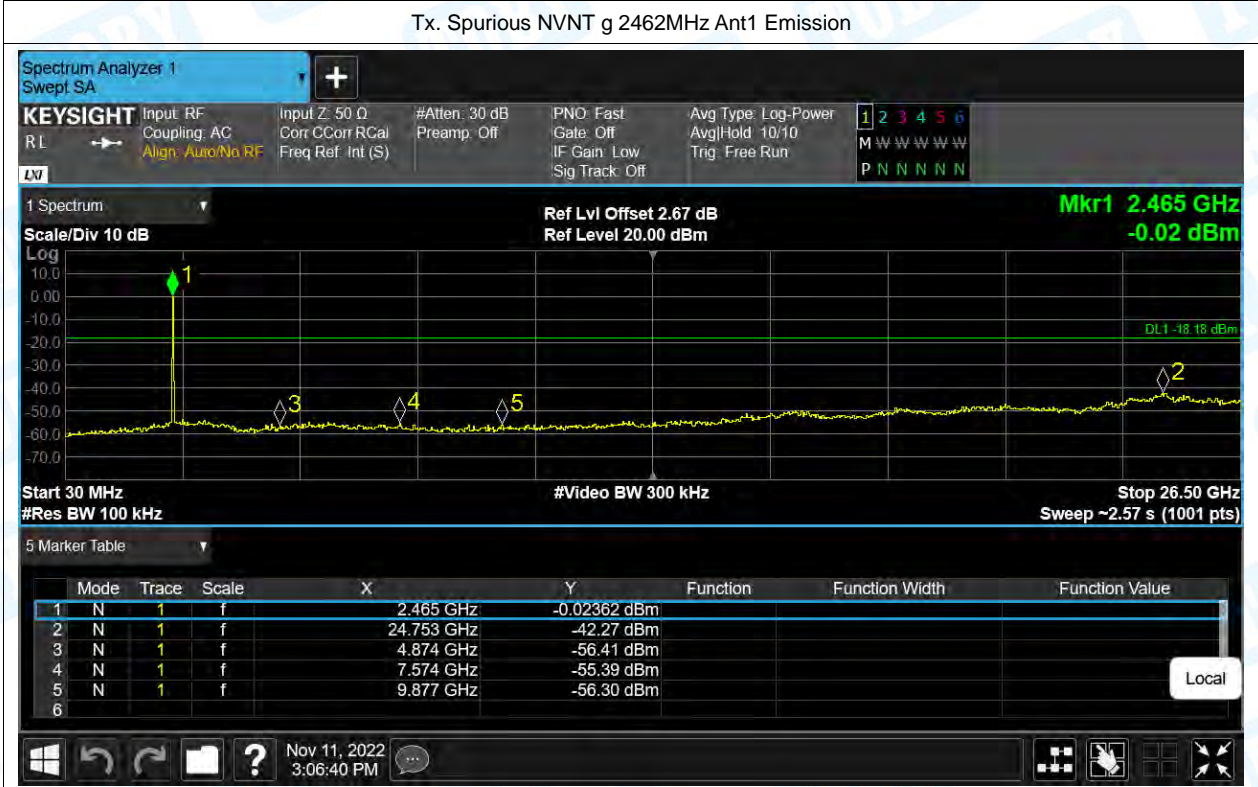
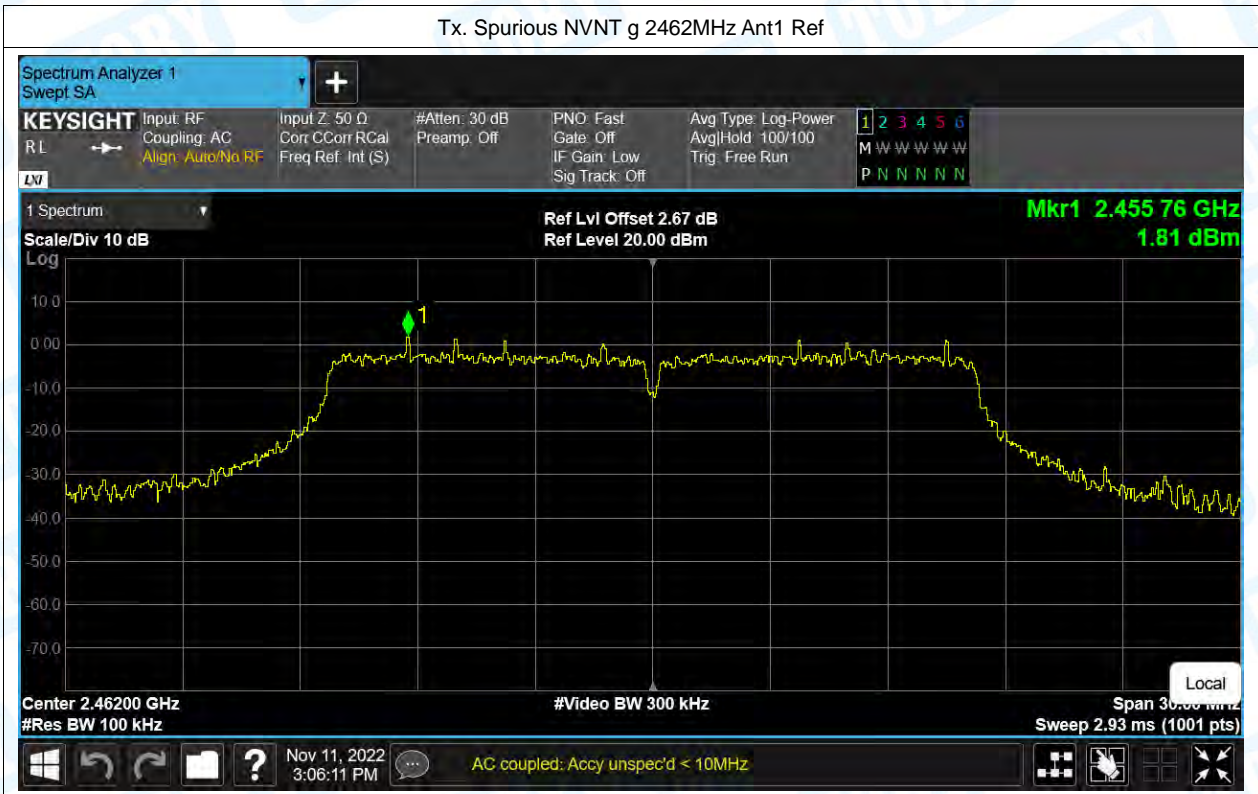




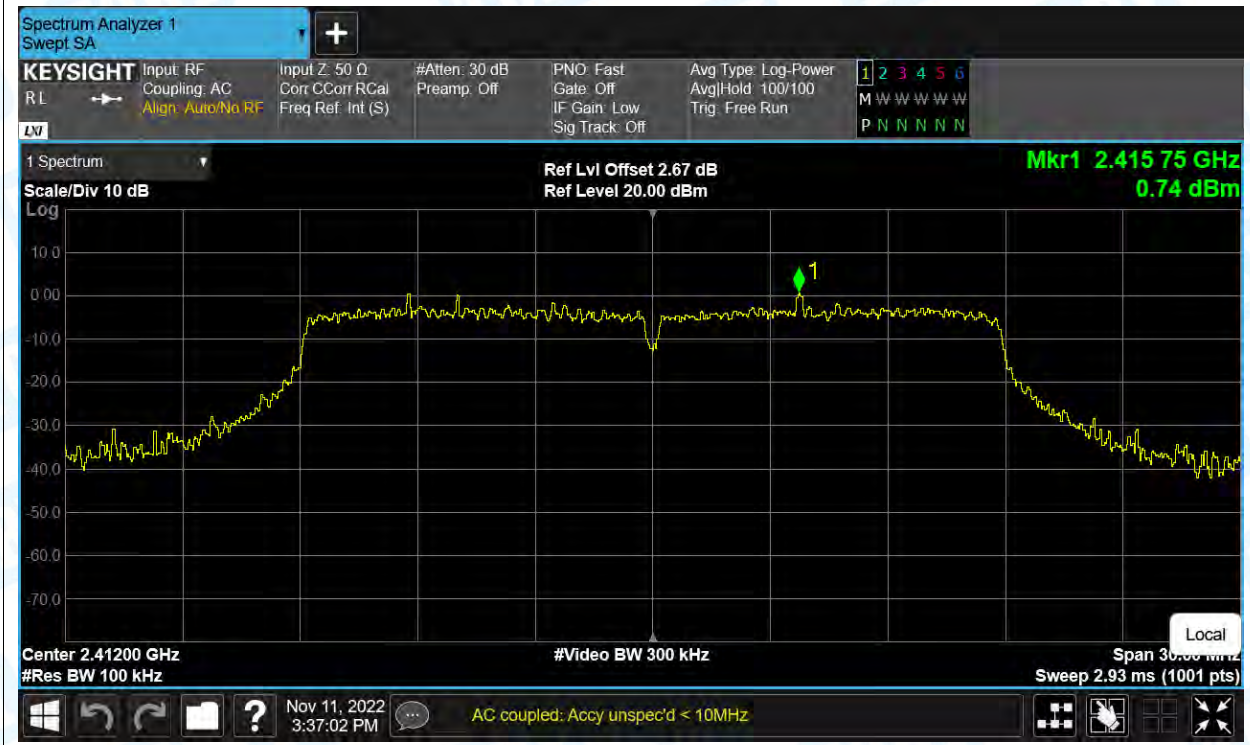




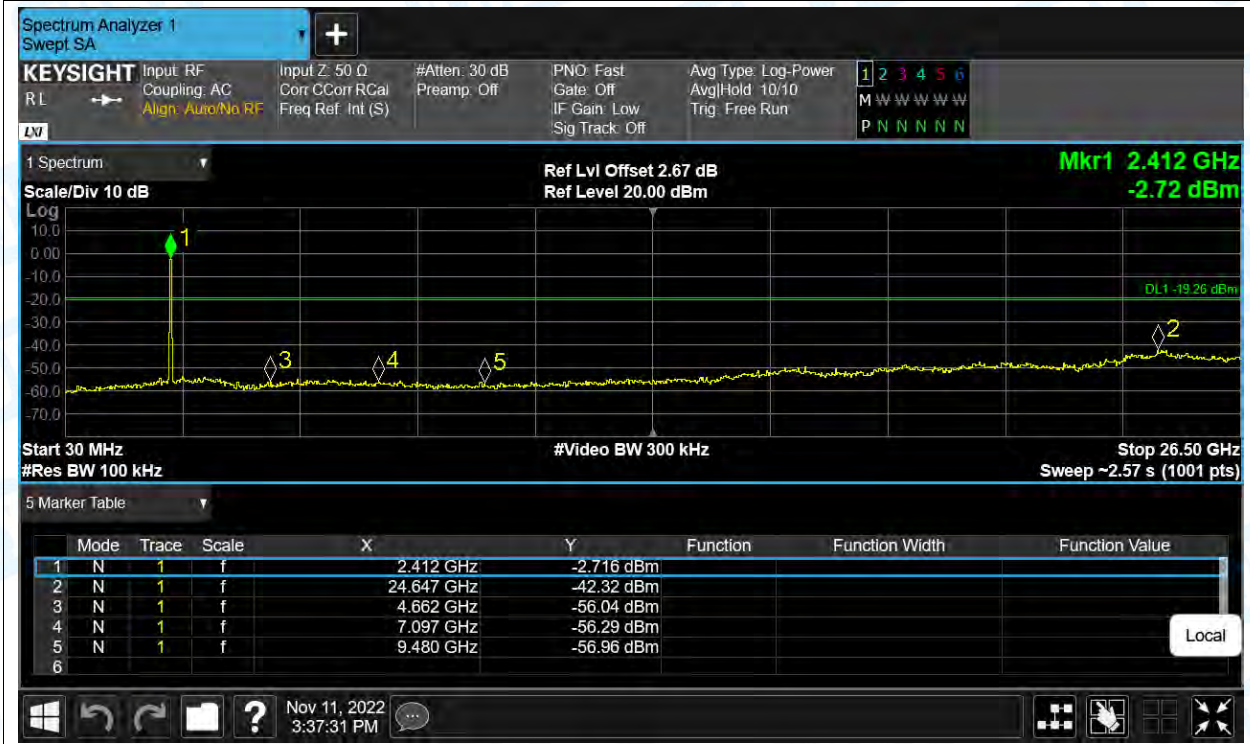




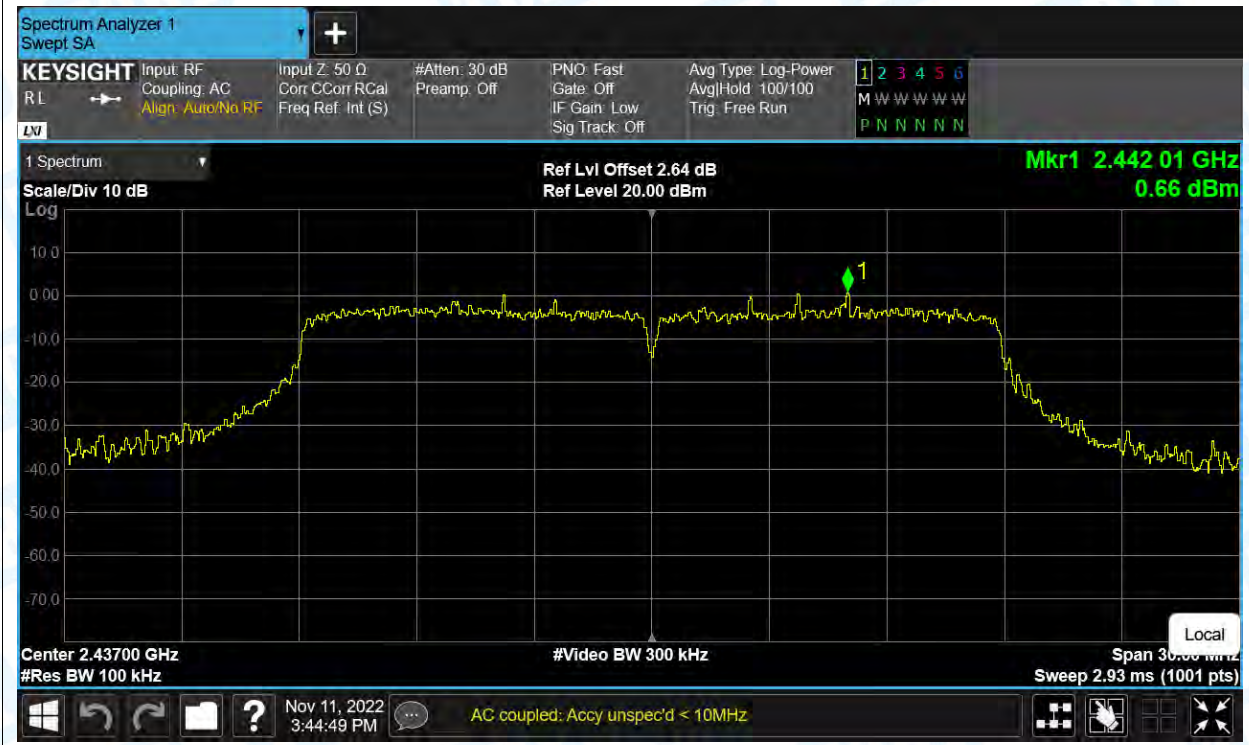
Tx. Spurious NVNT n(HT20) 2412MHz Ant1 Ref



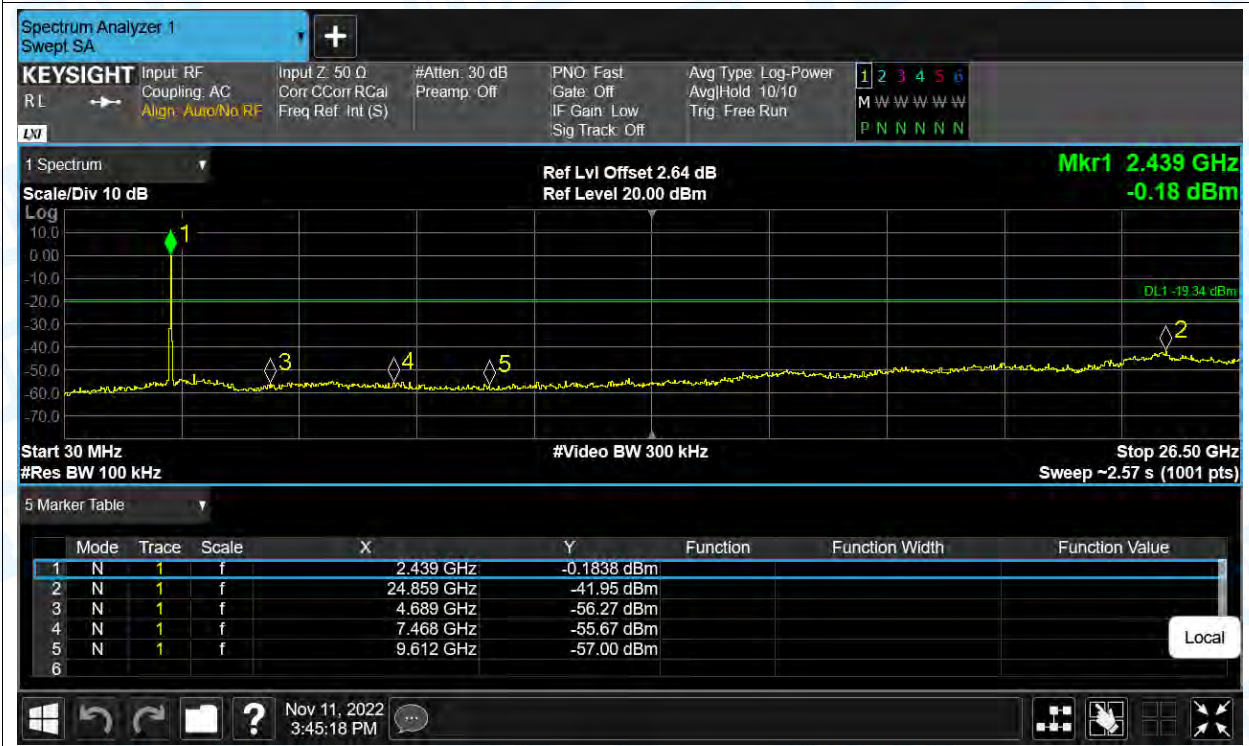
Tx. Spurious NVNT n(HT20) 2412MHz Ant1 Emission



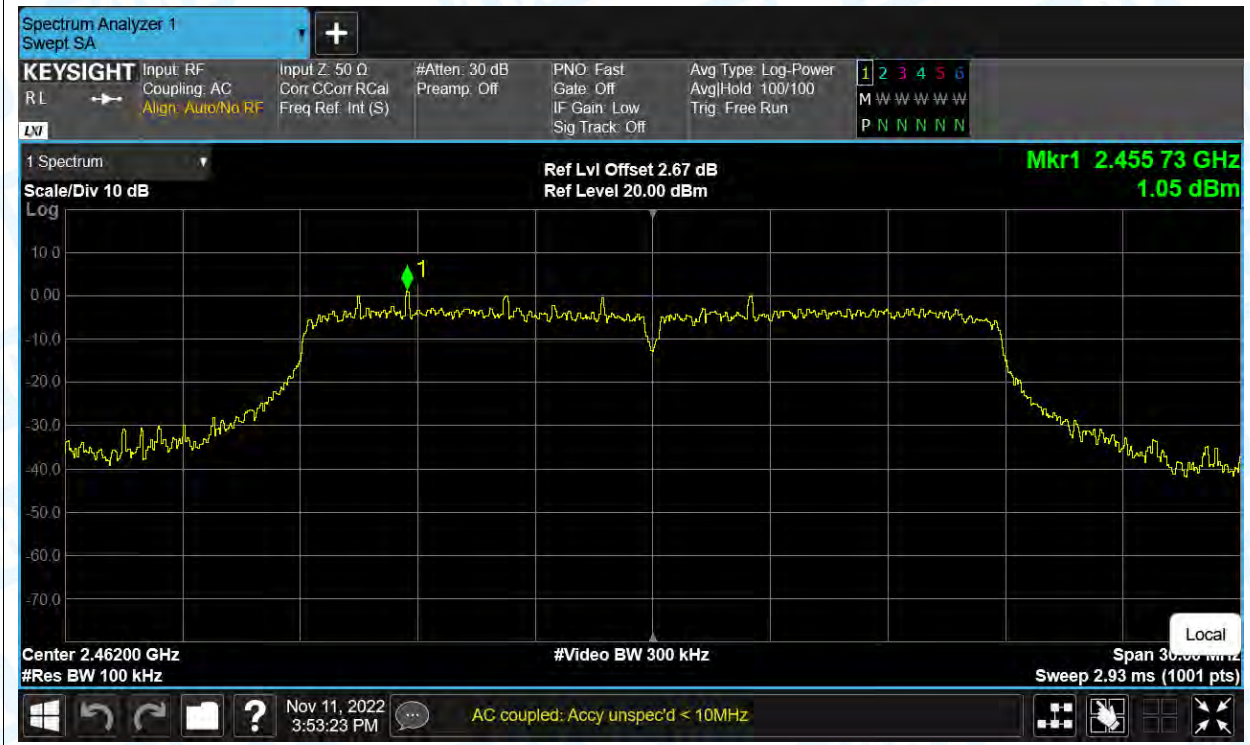
Tx. Spurious NVNT n(HT20) 2437MHz Ant1 Ref



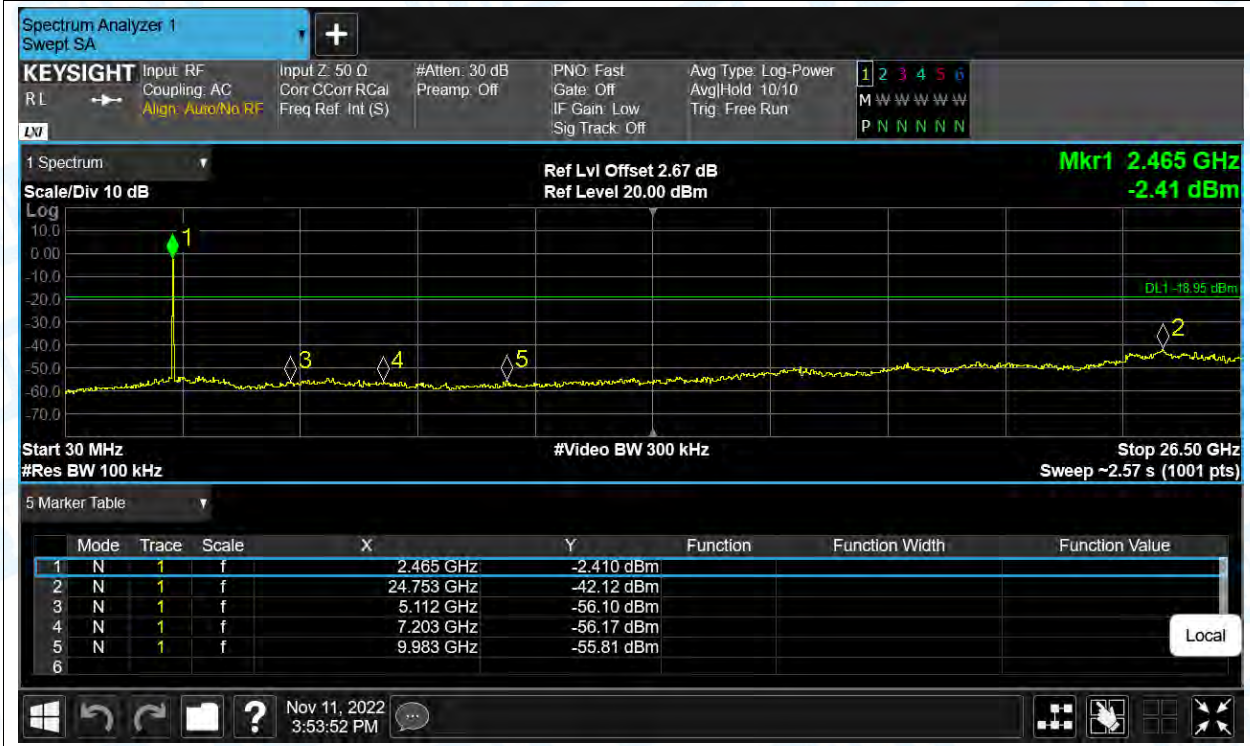
Tx. Spurious NVNT n(HT20) 2437MHz Ant1 Emission



Tx. Spurious NVNT n(HT20) 2462MHz Ant1 Ref



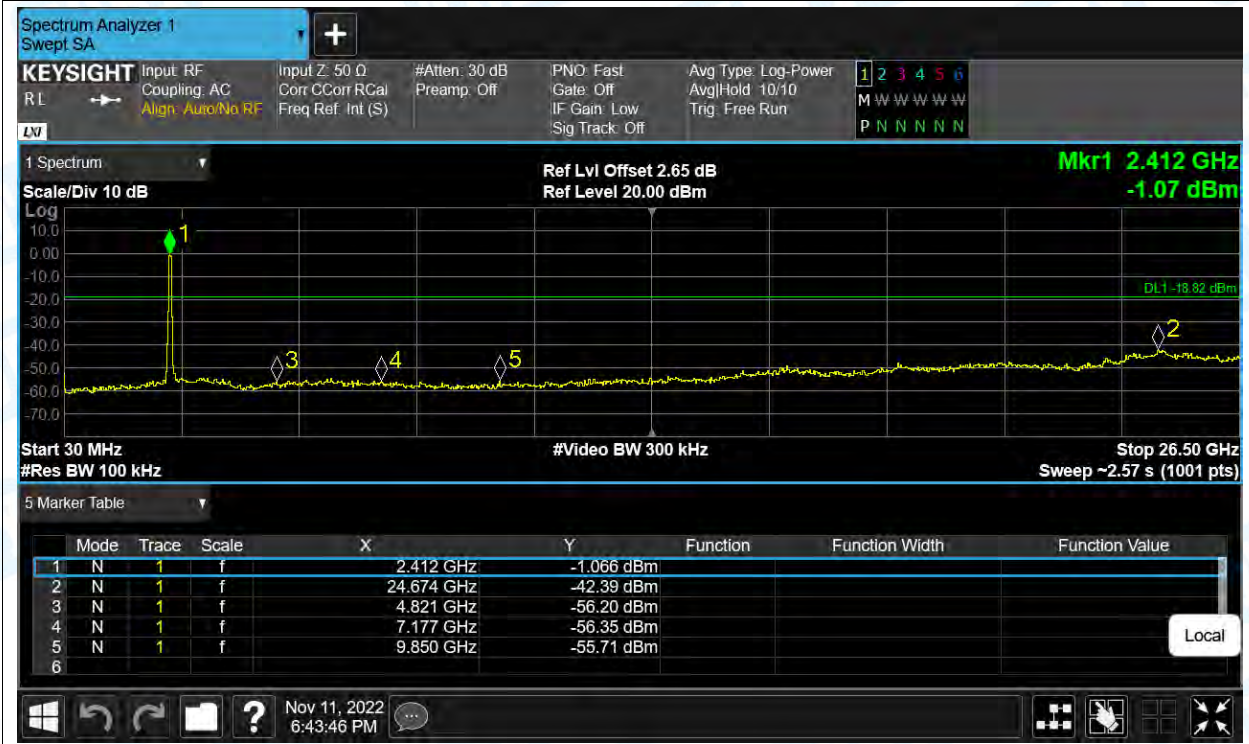
Tx. Spurious NVNT n(HT20) 2462MHz Ant1 Emission



Tx. Spurious NVNT n(HT40) 2422MHz Ant1 Ref



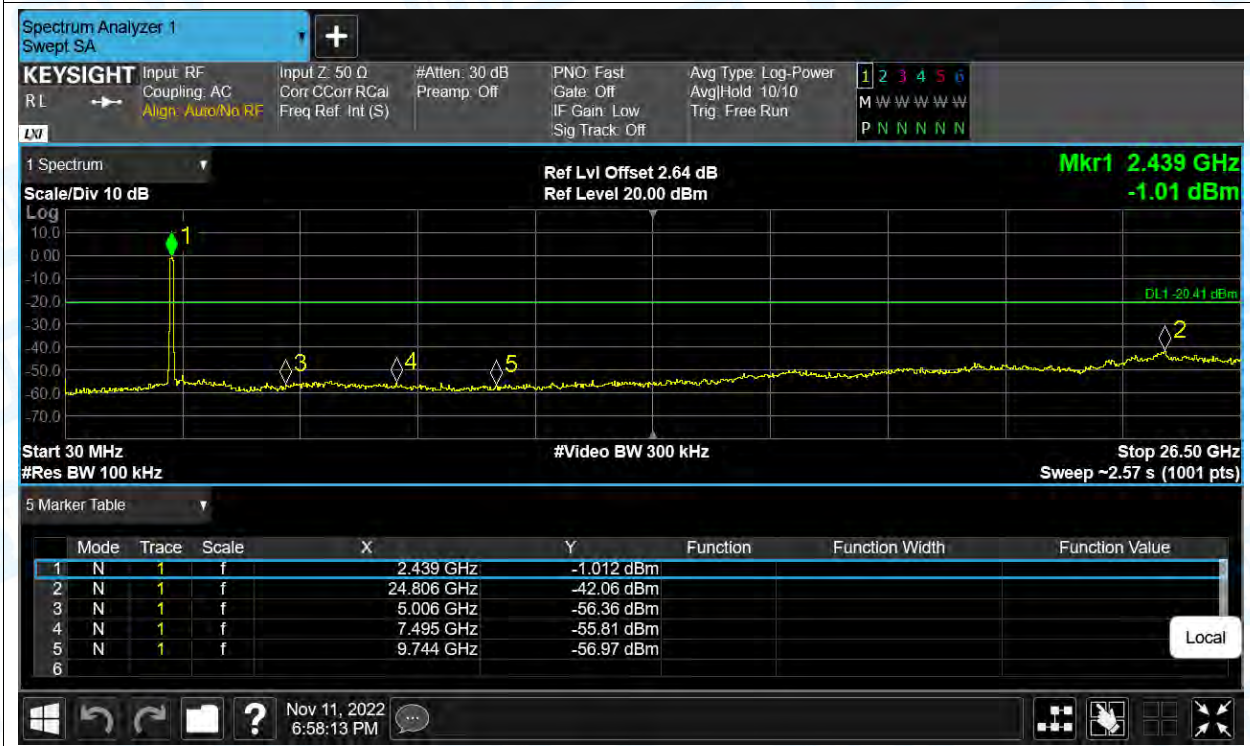
Tx. Spurious NVNT n(HT40) 2422MHz Ant1 Emission



Tx. Spurious NVNT n(HT40) 2437MHz Ant1 Ref



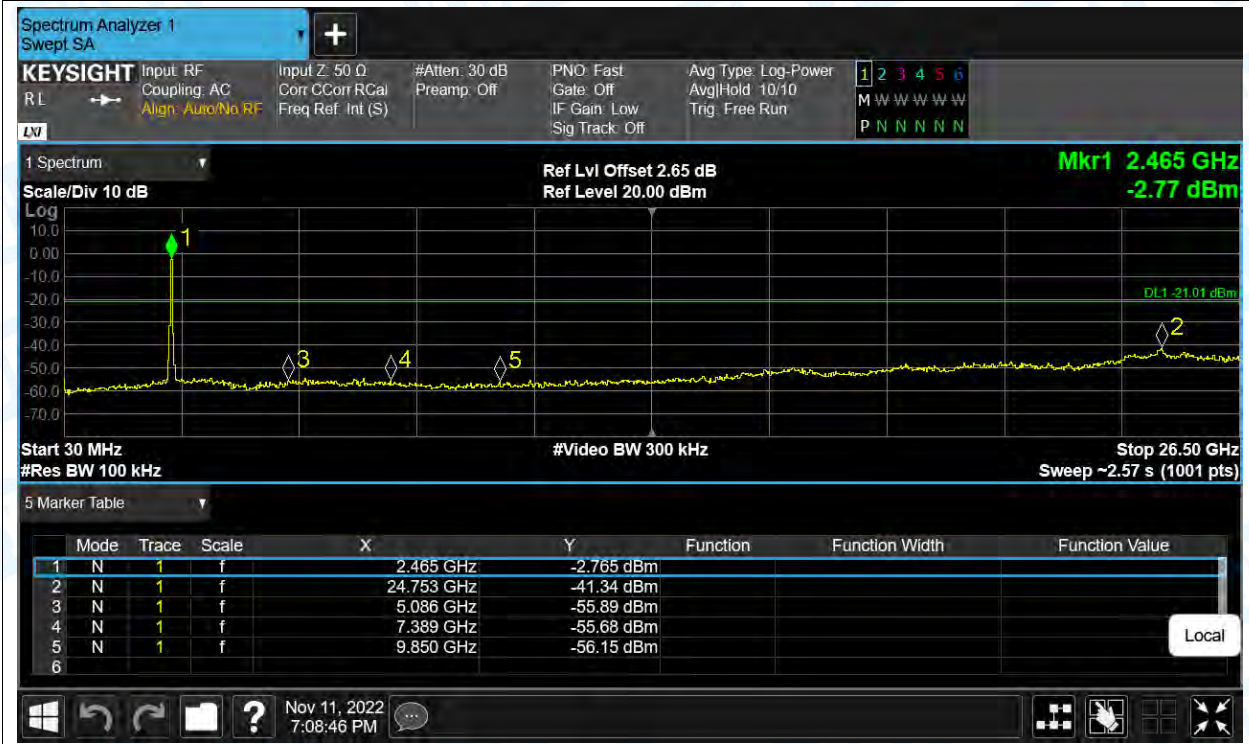
Tx. Spurious NVNT n(HT40) 2437MHz Ant1 Emission



Tx. Spurious NVNT n(HT40) 2452MHz Ant1 Ref



Tx. Spurious NVNT n(HT40) 2452MHz Ant1 Emission



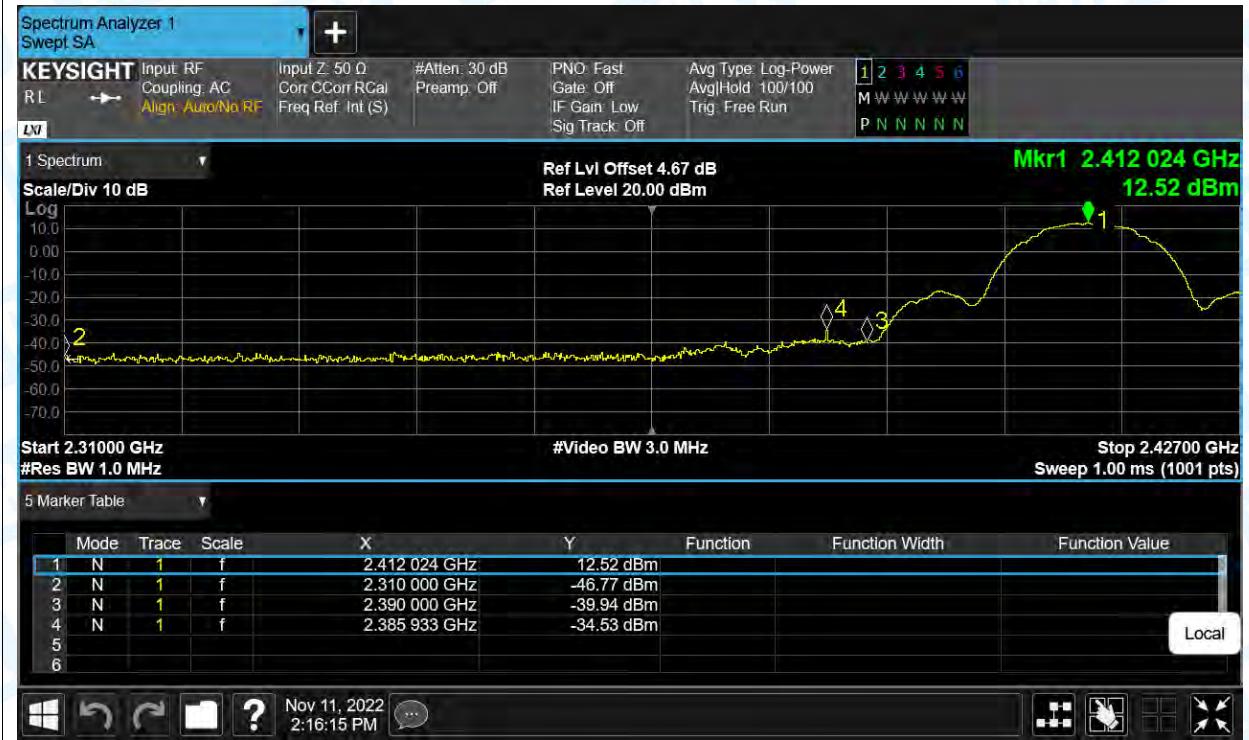
8. Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	b	2412	Ant1	2310	-46.77	2	50.49	Peak	74	Pass
NVNT	b	2412	Ant1	2310	-57	2	40.26	Average	54	Pass
NVNT	b	2412	Ant1	2385.933	-34.53	2	62.73	Peak	74	Pass
NVNT	b	2412	Ant1	2385.348	-44.89	2	52.37	Average	54	Pass
NVNT	b	2412	Ant1	2390	-39.94	2	57.32	Peak	74	Pass
NVNT	b	2412	Ant1	2390	-47.87	2	49.39	Average	54	Pass
NVNT	b	2462	Ant1	2483.5	-39.75	2	57.51	Peak	74	Pass
NVNT	b	2462	Ant1	2483.5	-48.09	2	49.17	Average	54	Pass
NVNT	b	2462	Ant1	2484.153	-38.02	2	59.24	Peak	74	Pass
NVNT	b	2462	Ant1	2484.736	-47.22	2	50.04	Average	54	Pass
NVNT	b	2462	Ant1	2500	-43.19	2	54.07	Peak	74	Pass
NVNT	b	2462	Ant1	2500	-51.34	2	45.92	Average	54	Pass
NVNT	g	2412	Ant1	2310	-46.3	2	50.96	Peak	74	Pass
NVNT	g	2412	Ant1	2310	-56.52	2	40.74	Average	54	Pass
NVNT	g	2412	Ant1	2389.794	-27.5	2	69.76	Peak	74	Pass
NVNT	g	2412	Ant1	2389.911	-45.42	2	51.84	Average	54	Pass
NVNT	g	2412	Ant1	2390	-30.06	2	67.2	Peak	74	Pass
NVNT	g	2412	Ant1	2390	-45.08	2	52.18	Average	54	Pass
NVNT	g	2462	Ant1	2483.5	-31.8	2	65.46	Peak	74	Pass
NVNT	g	2462	Ant1	2483.5	-46.2	2	51.06	Average	54	Pass
NVNT	g	2462	Ant1	2483.57	-28.76	2	68.5	Peak	74	Pass
NVNT	g	2462	Ant1	2483.517	-46.2	2	51.06	Average	54	Pass
NVNT	g	2462	Ant1	2500	-44.82	2	52.44	Peak	74	Pass
NVNT	g	2462	Ant1	2500	-54.56	2	42.7	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2310	-46.67	2	50.59	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2310	-56.52	2	40.74	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2389.677	-25.56	2	71.7	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2389.911	-44.54	2	52.72	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2390	-27.24	2	70.02	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2390	-44.34	2	52.92	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2483.5	-32.36	2	64.9	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2483.5	-47.09	2	50.17	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2484.365	-25.42	2	71.84	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2483.517	-47.09	2	50.17	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2500	-44.69	2	52.57	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2500	-54.98	2	42.28	Average	54	Pass
NVNT	n(HT40)	2422	Ant1	2310	-45.86	2	51.4	Peak	74	Pass
NVNT	n(HT40)	2422	Ant1	2310	-56.5	2	40.76	Average	54	Pass
NVNT	n(HT40)	2422	Ant1	2385.544	-31.37	2	65.89	Peak	74	Pass
NVNT	n(HT40)	2422	Ant1	2389.946	-46.25	2	51.01	Average	54	Pass
NVNT	n(HT40)	2422	Ant1	2390	-36.1	2	61.16	Peak	74	Pass
NVNT	n(HT40)	2422	Ant1	2390	-46.06	2	51.2	Average	54	Pass

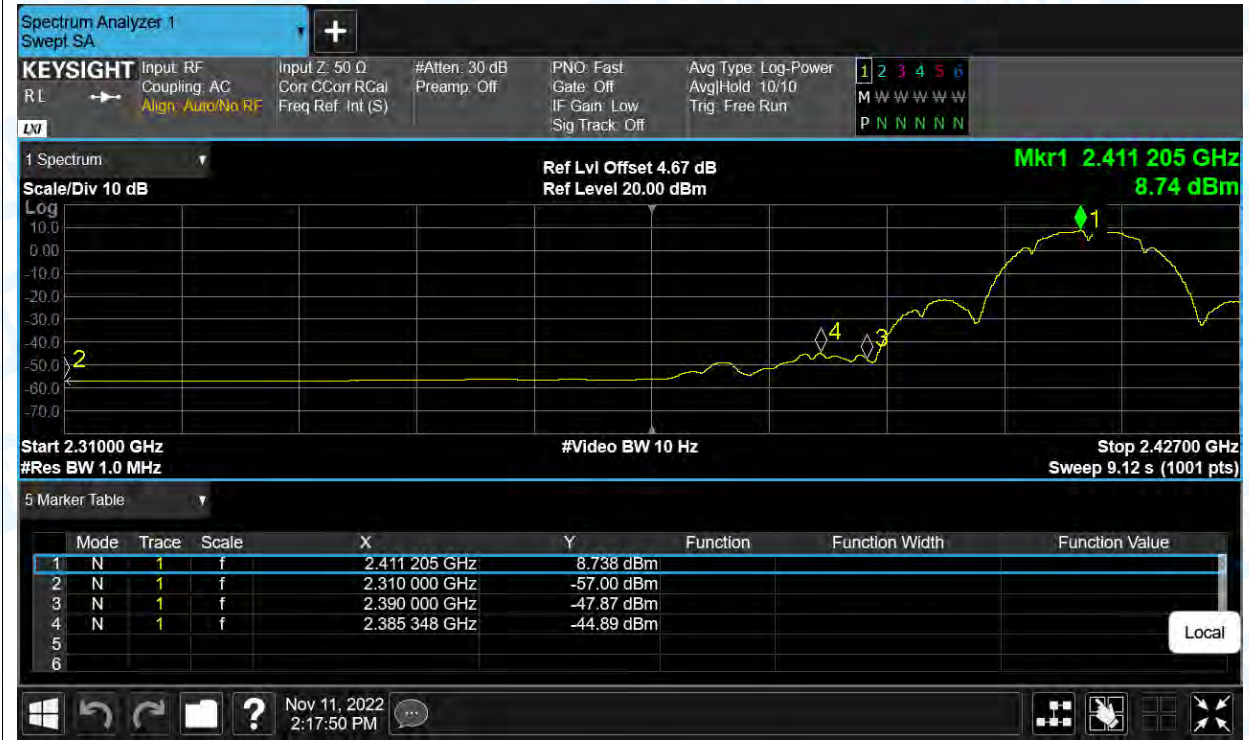
NVNT	n(HT40)	2452	Ant1	2483.5	-38.14	2	59.12	Peak	74	Pass
NVNT	n(HT40)	2452	Ant1	2483.5	-50.24	2	47.02	Average	54	Pass
NVNT	n(HT40)	2452	Ant1	2483.854	-32.64	2	64.62	Peak	74	Pass
NVNT	n(HT40)	2452	Ant1	2483.62	-50.15	2	47.11	Average	54	Pass
NVNT	n(HT40)	2452	Ant1	2500	-44.95	2	52.31	Peak	74	Pass
NVNT	n(HT40)	2452	Ant1	2500	-55.03	2	42.23	Average	54	Pass

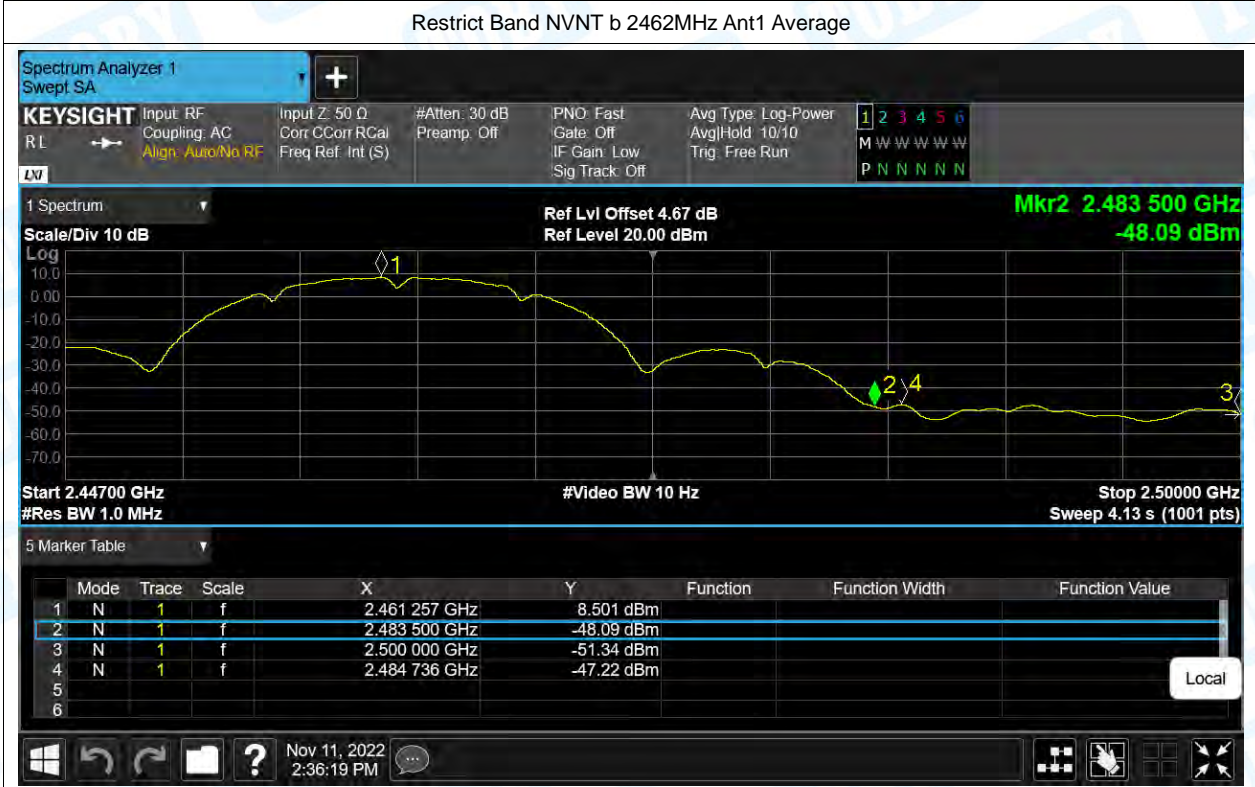
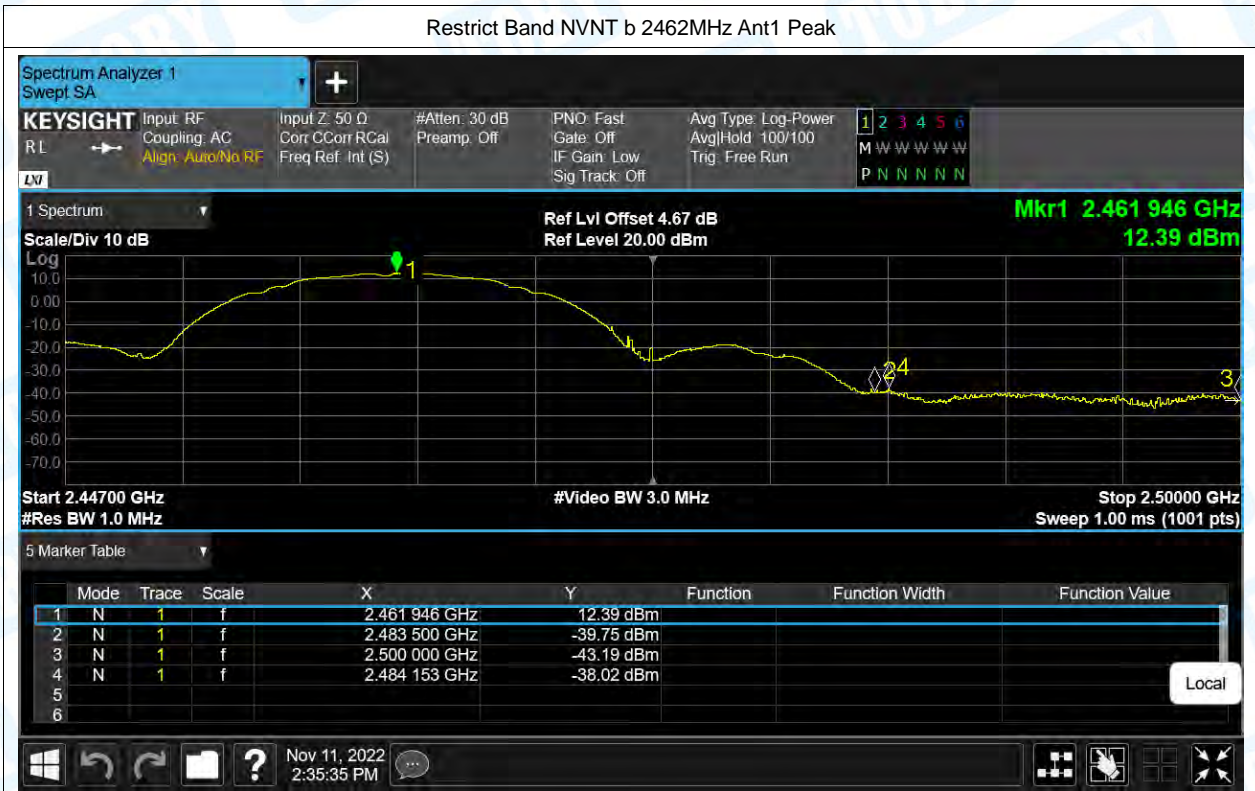
Test Graphs

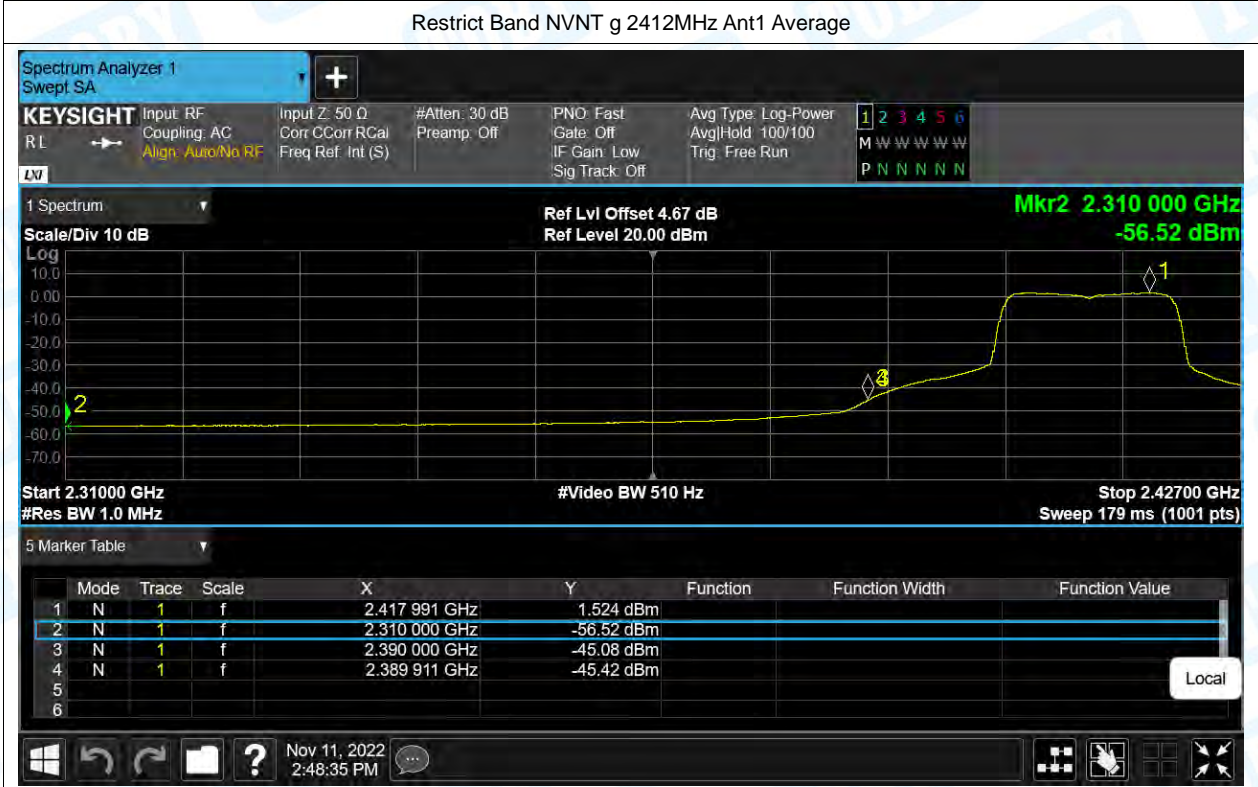
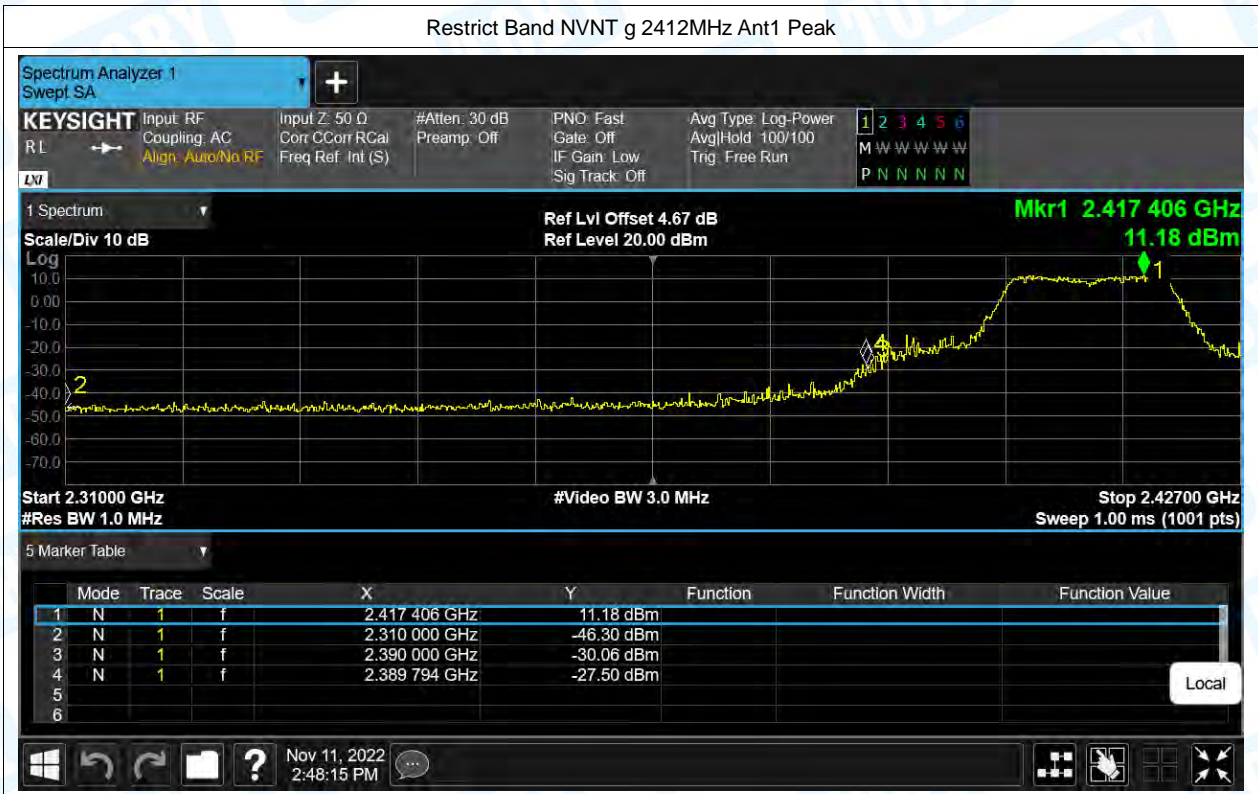
Restrict Band NVNT b 2412MHz Ant1 Peak



Restrict Band NVNT b 2412MHz Ant1 Average





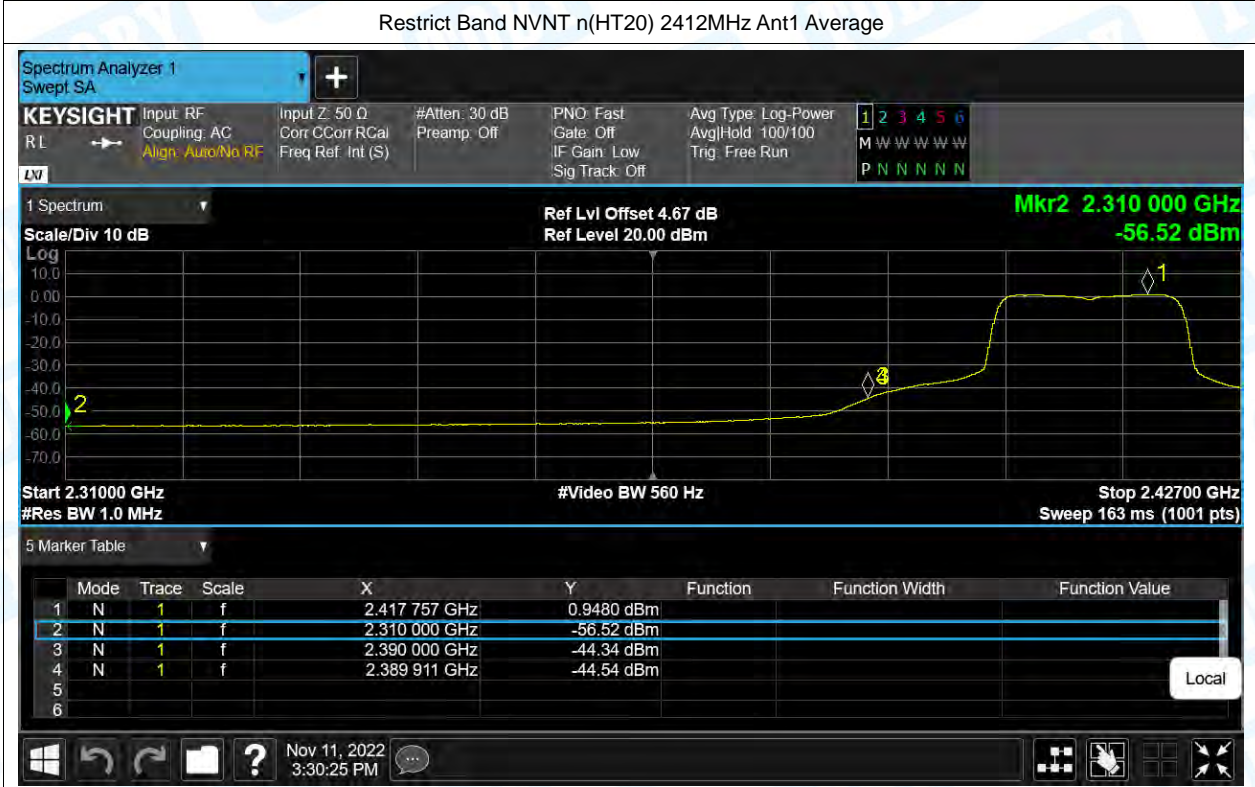
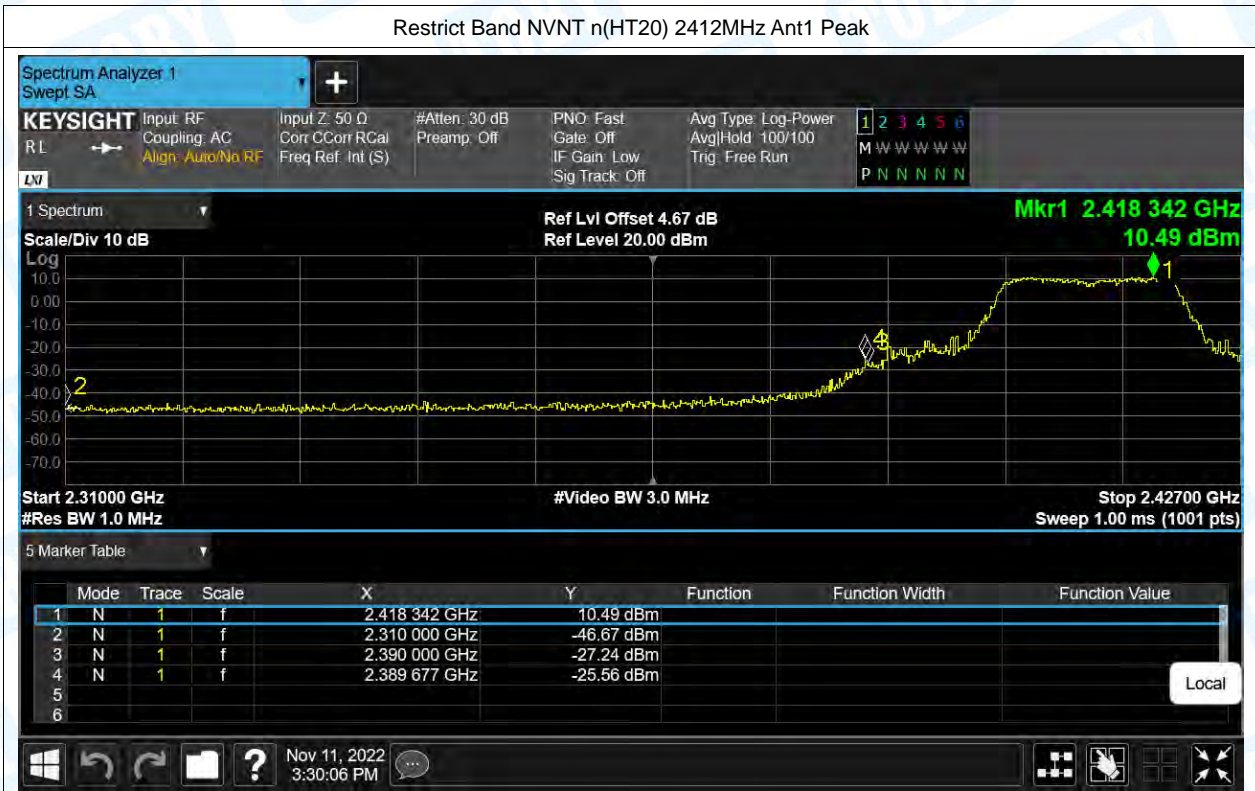


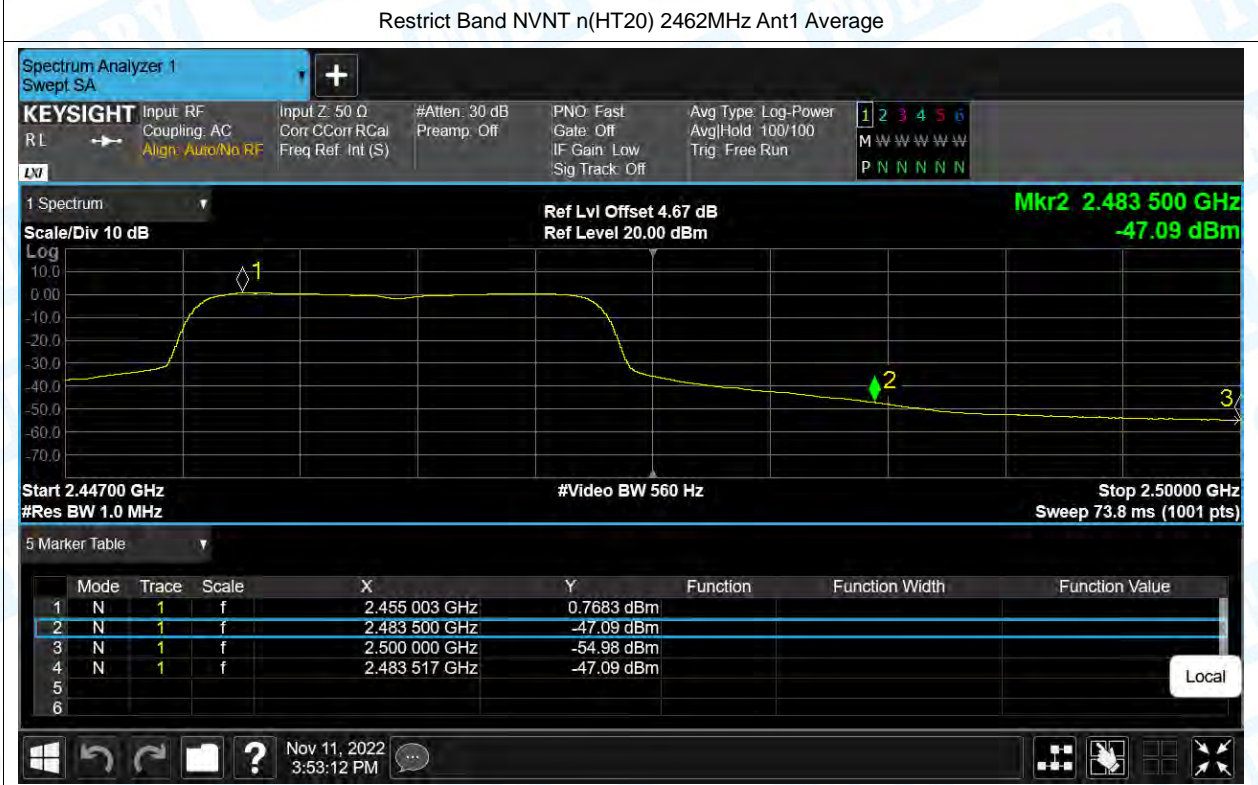
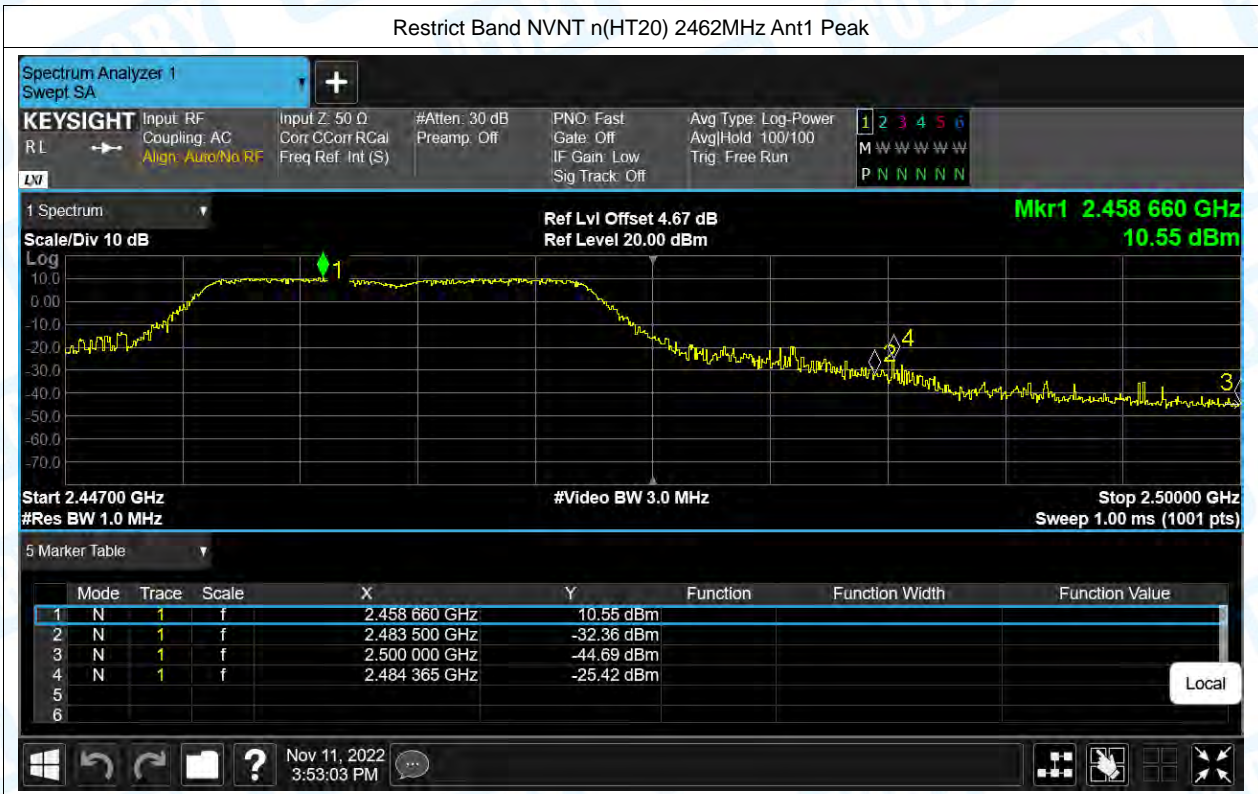
Restrict Band NVNT g 2462MHz Ant1 Peak

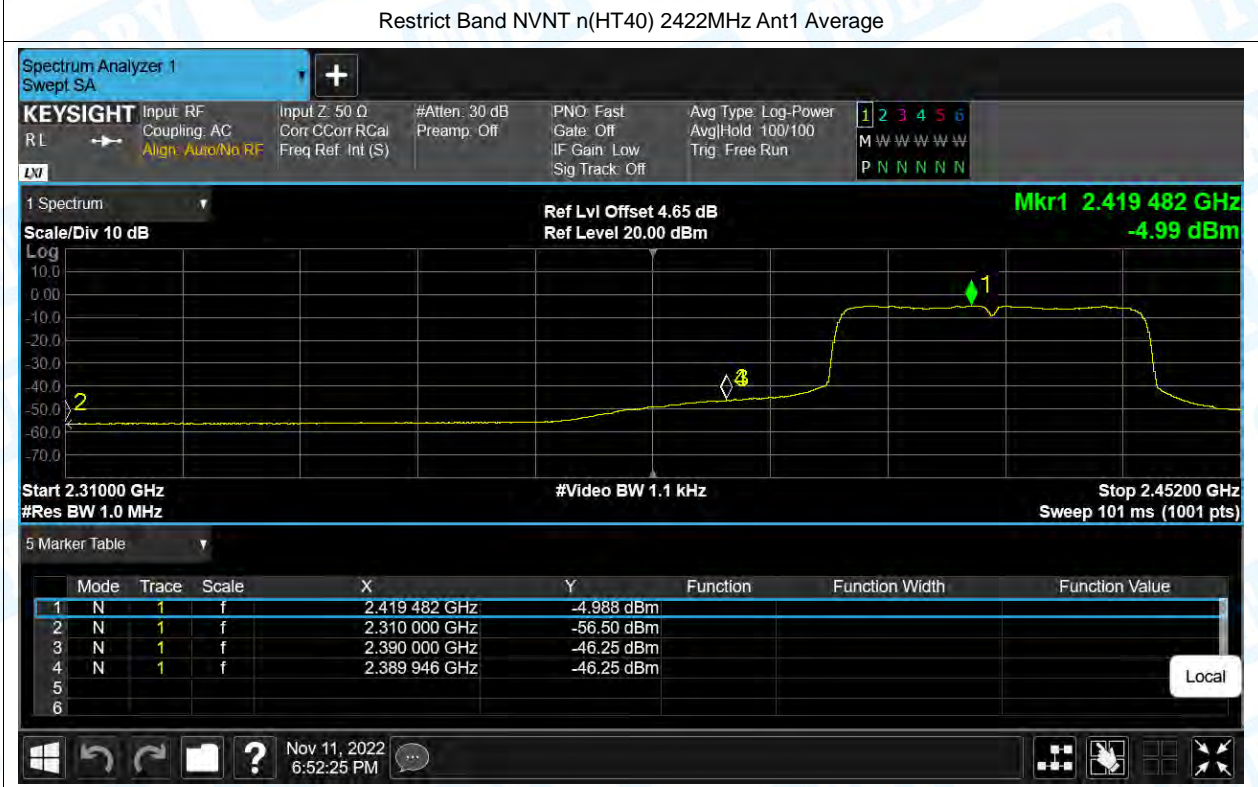
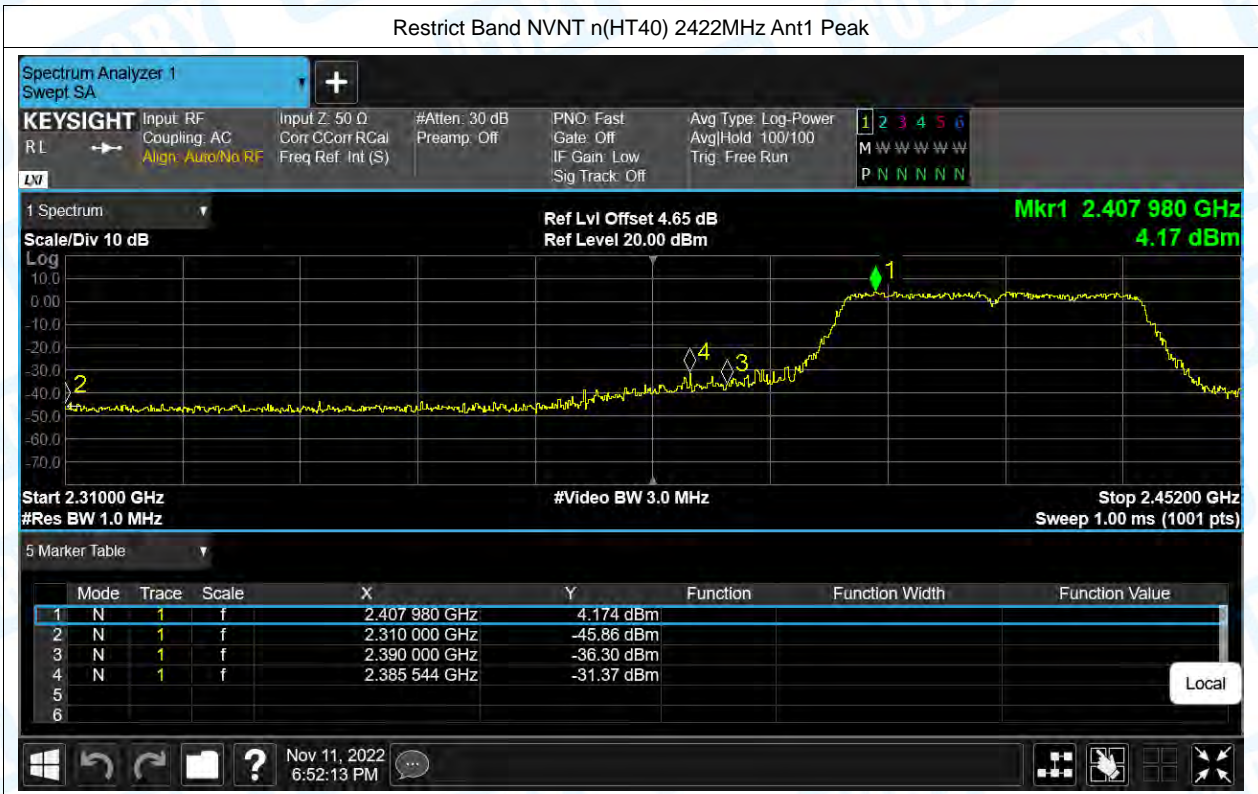


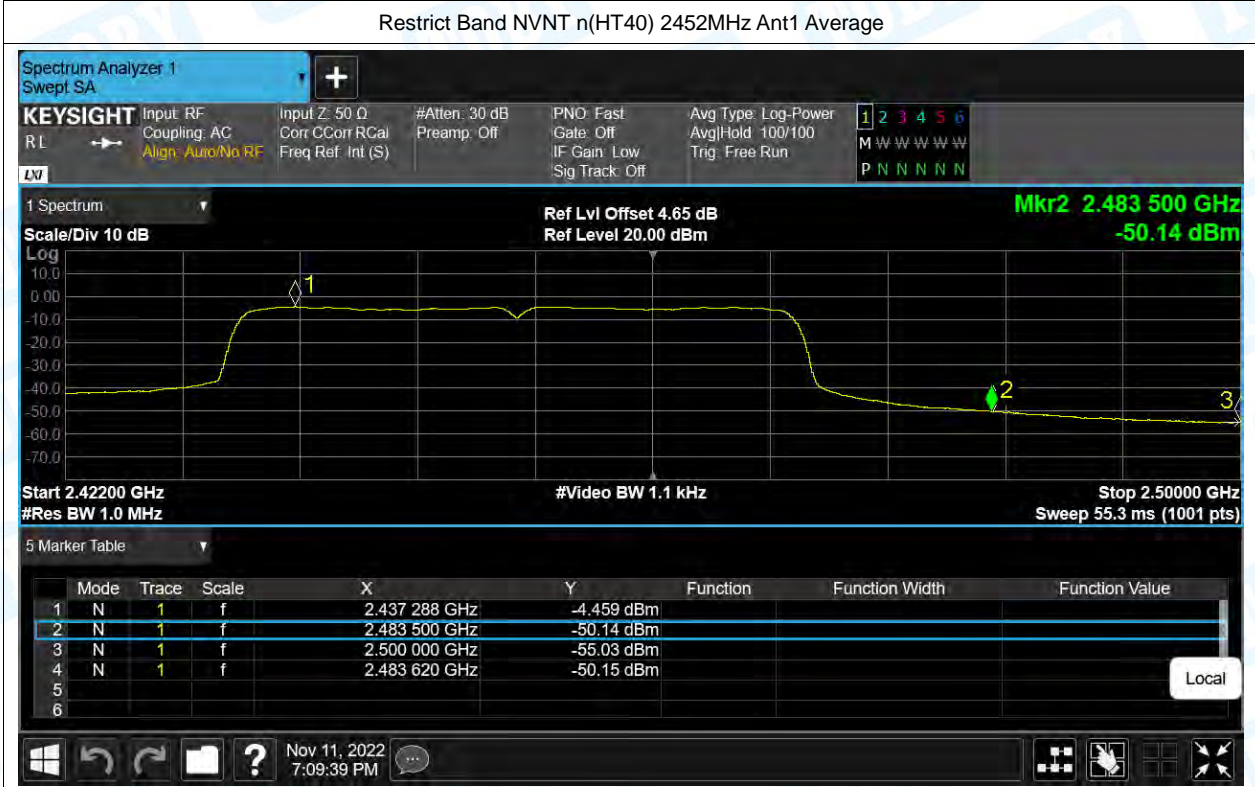
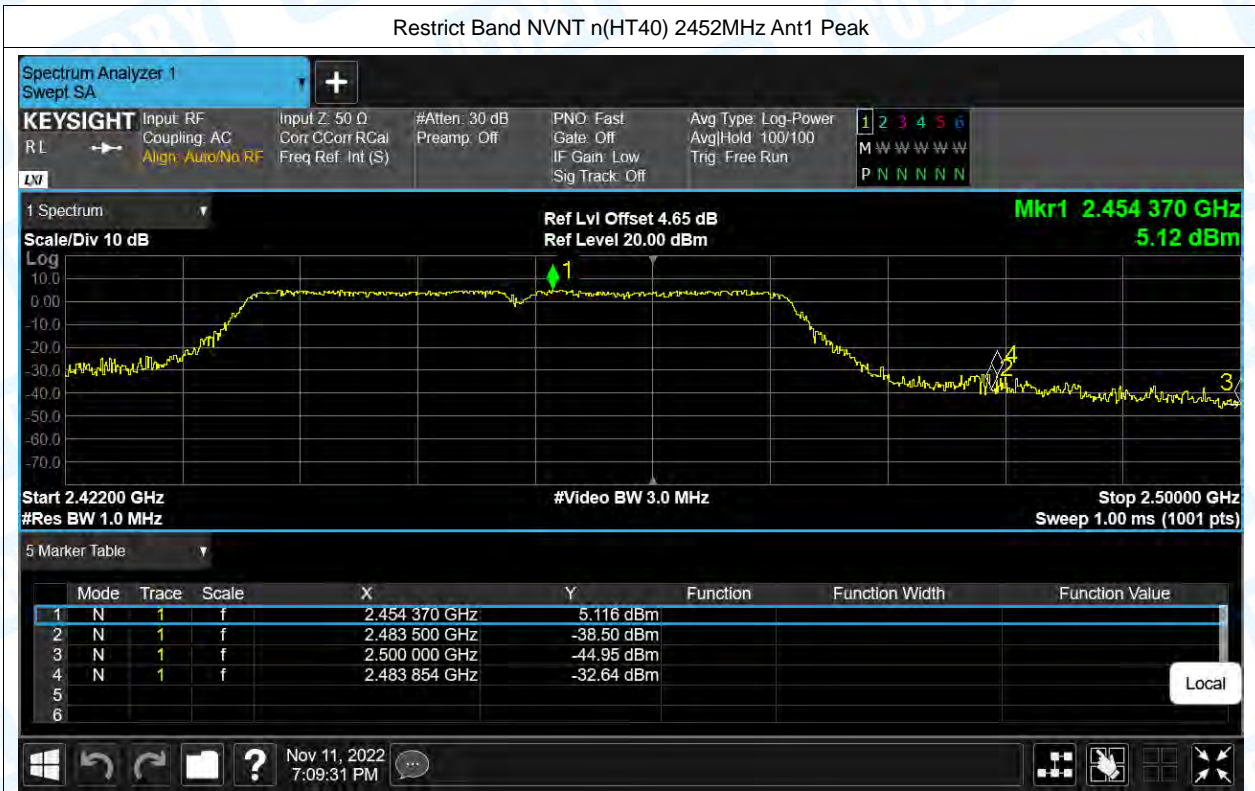
Restrict Band NVNT g 2462MHz Ant1 Average











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