

RF Test Data for 2.4G WiFi (Conducted Measurements)

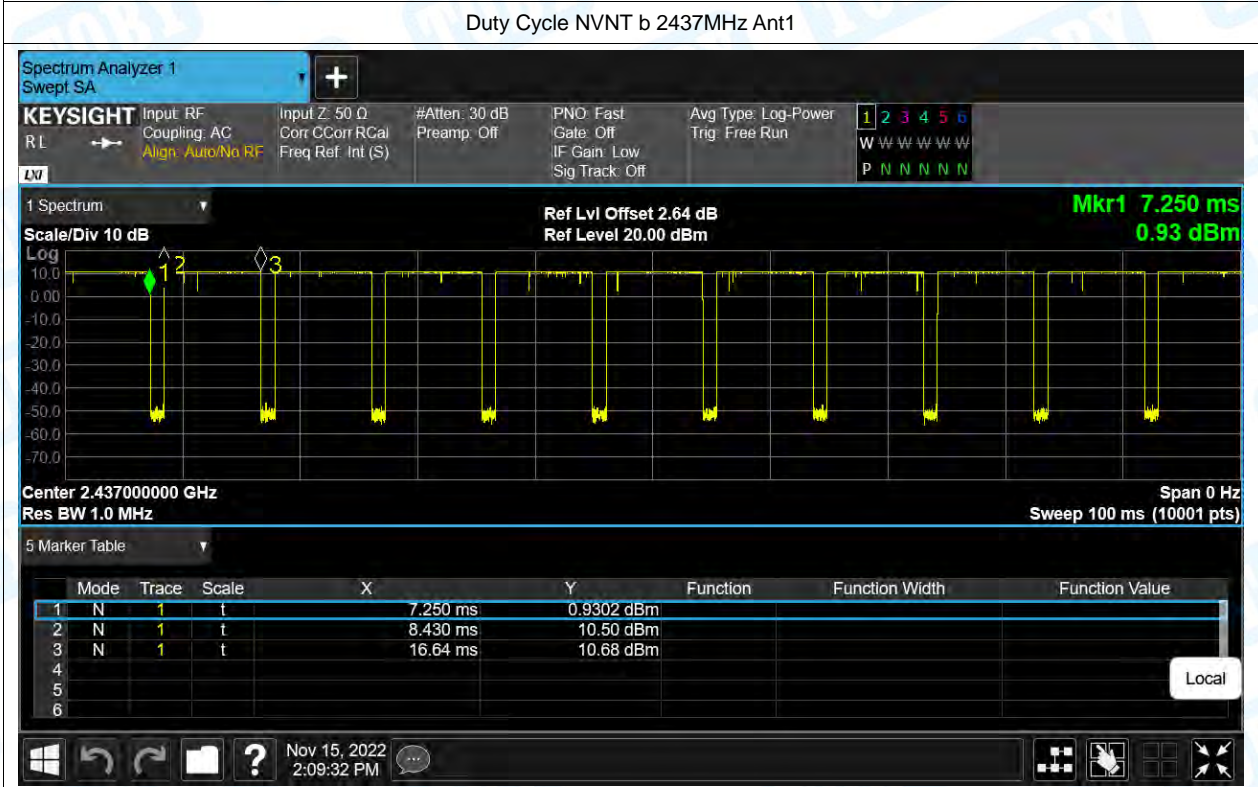
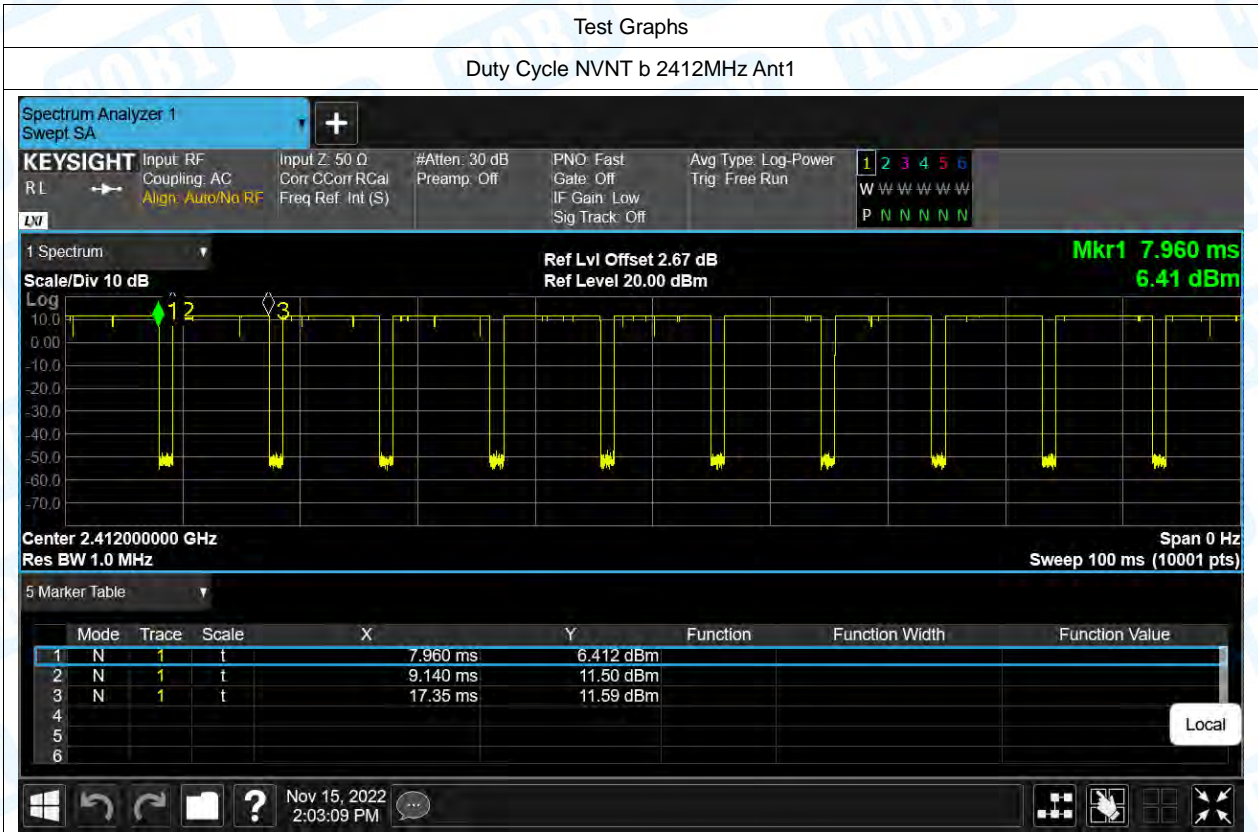
General Description of EUT	
Product Name:	Smart PTZ Battery Camera
Test Model:	CQ1
Sample ID:	202211-0073-01_2
Environmental Conditions	
Temperature:	25°C
Relative Humidity:	55%
Test Voltage:	DC 3.7V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202211-0073-91	

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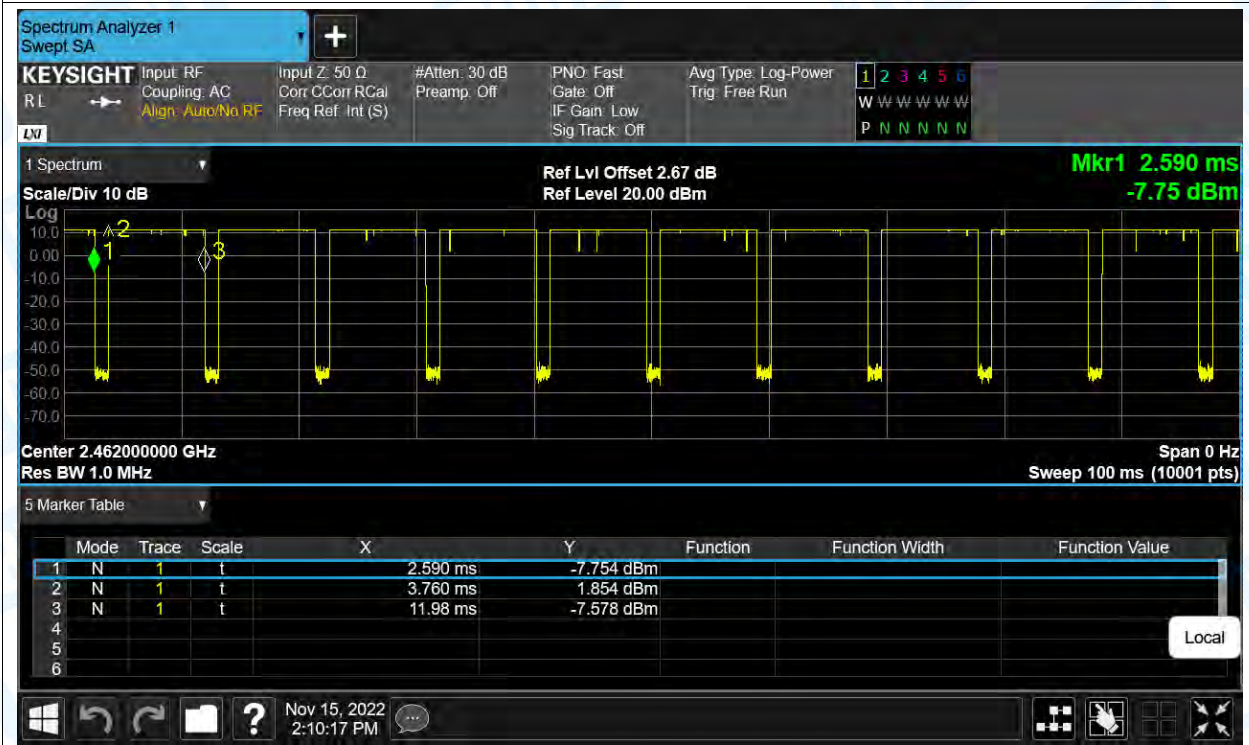
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1. Duty Cycle

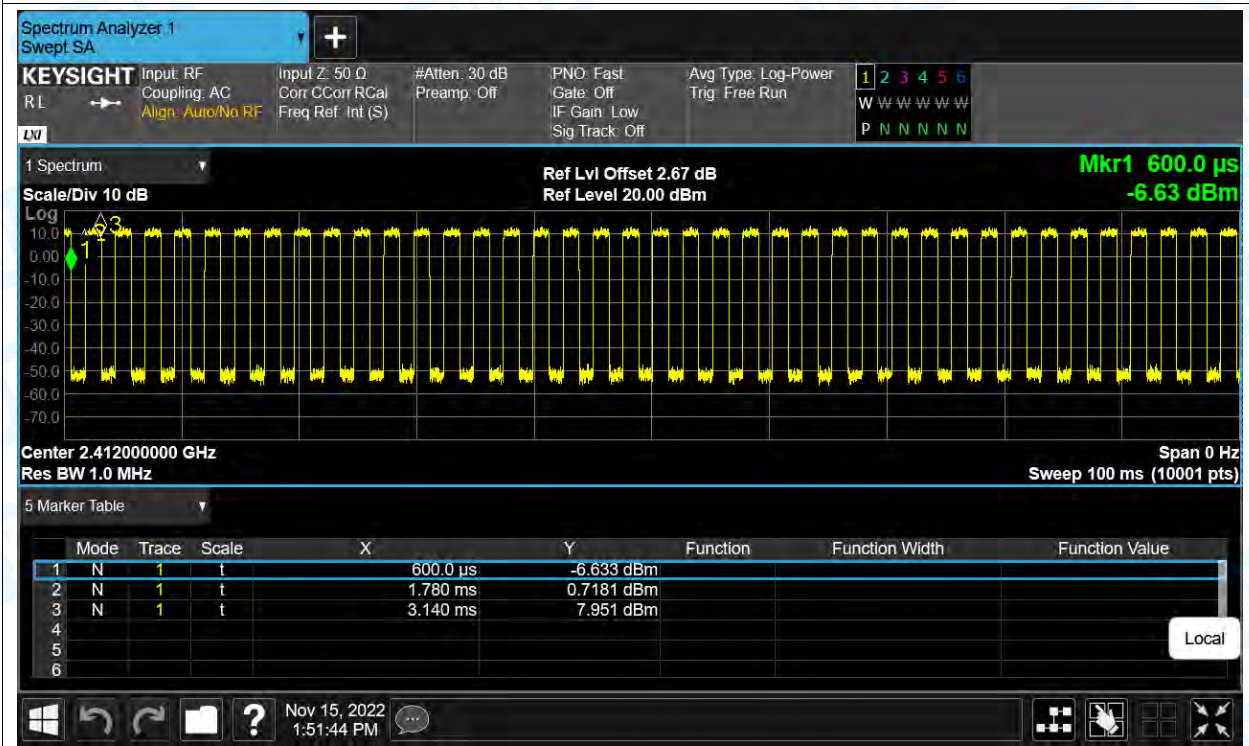
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	87.43	0.58	0.12
NVNT	b	2437	Ant1	87.43	0.58	0.12
NVNT	b	2462	Ant1	87.54	0.58	0.12
NVNT	g	2412	Ant1	53.54	2.71	0.74
NVNT	g	2437	Ant1	53.54	2.71	0.74
NVNT	g	2462	Ant1	53.73	2.7	0.73
NVNT	n(HT20)	2412	Ant1	51.84	2.85	0.79
NVNT	n(HT20)	2437	Ant1	51.84	2.85	0.79
NVNT	n(HT20)	2462	Ant1	51.64	2.87	0.79



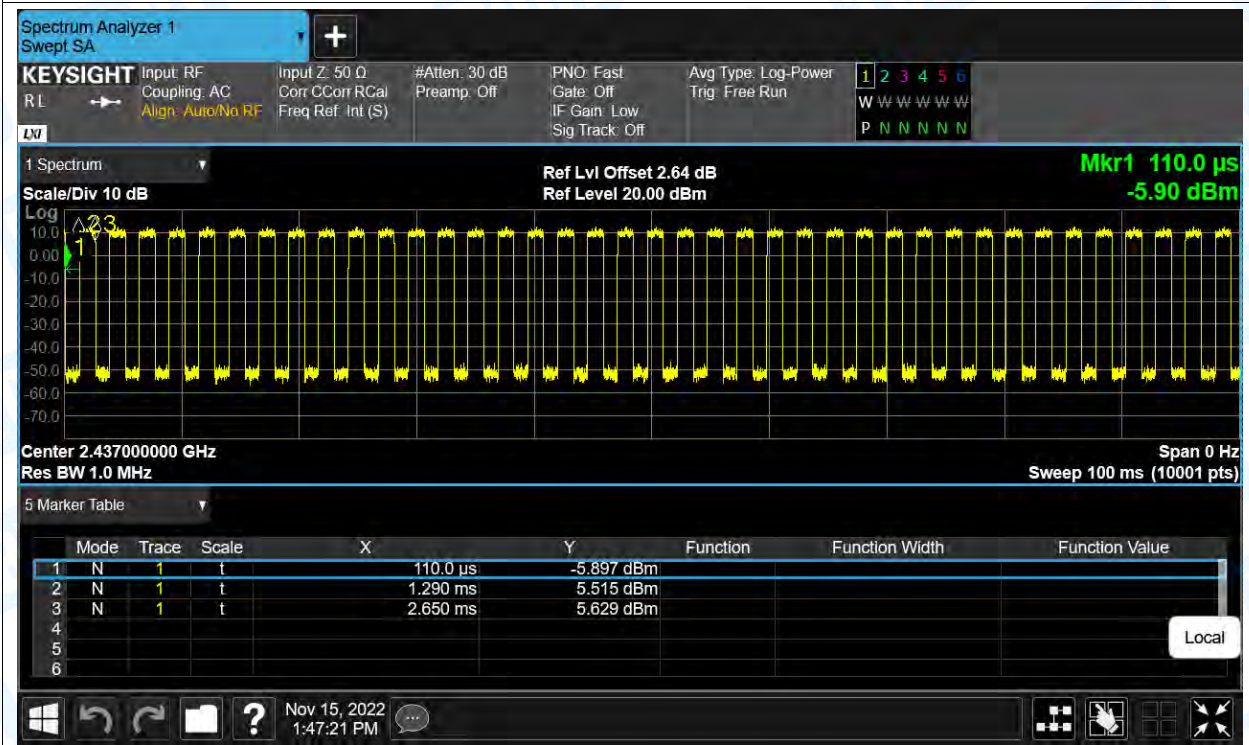
Duty Cycle NVNT b 2462MHz Ant1



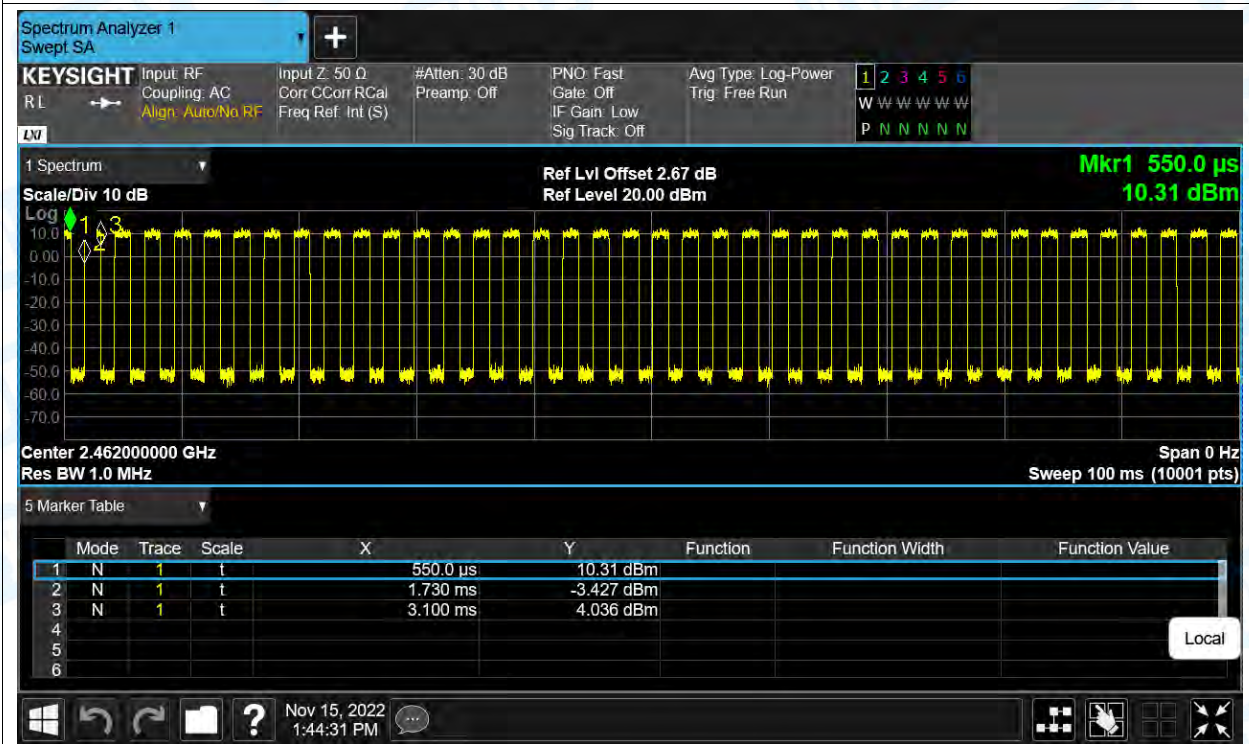
Duty Cycle NVNT g 2412MHz Ant1



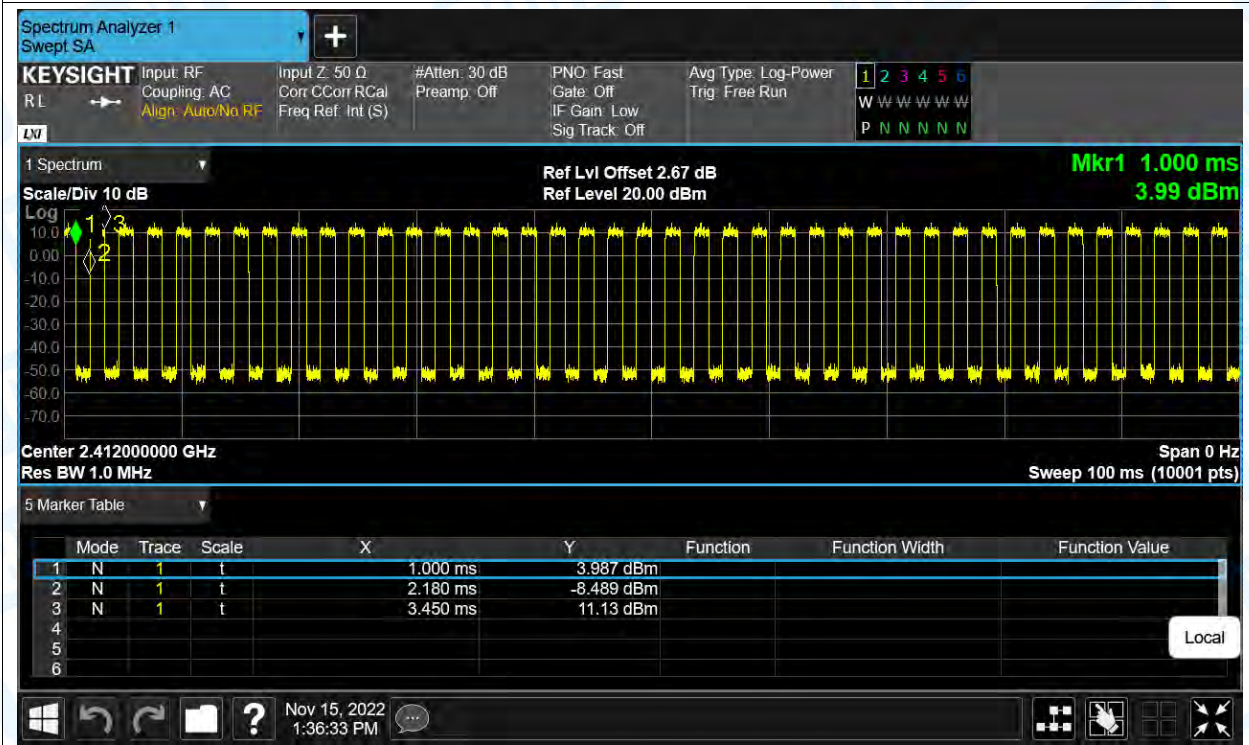
Duty Cycle NVNT g 2437MHz Ant1



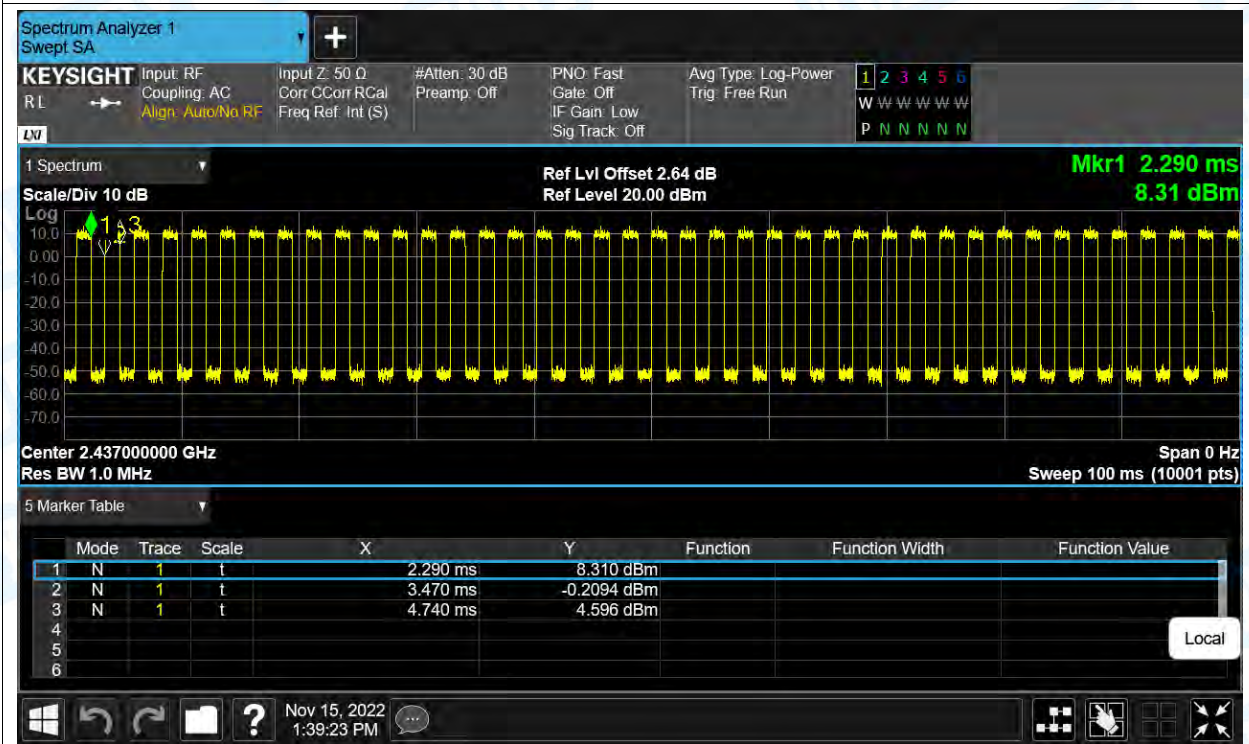
Duty Cycle NVNT g 2462MHz Ant1

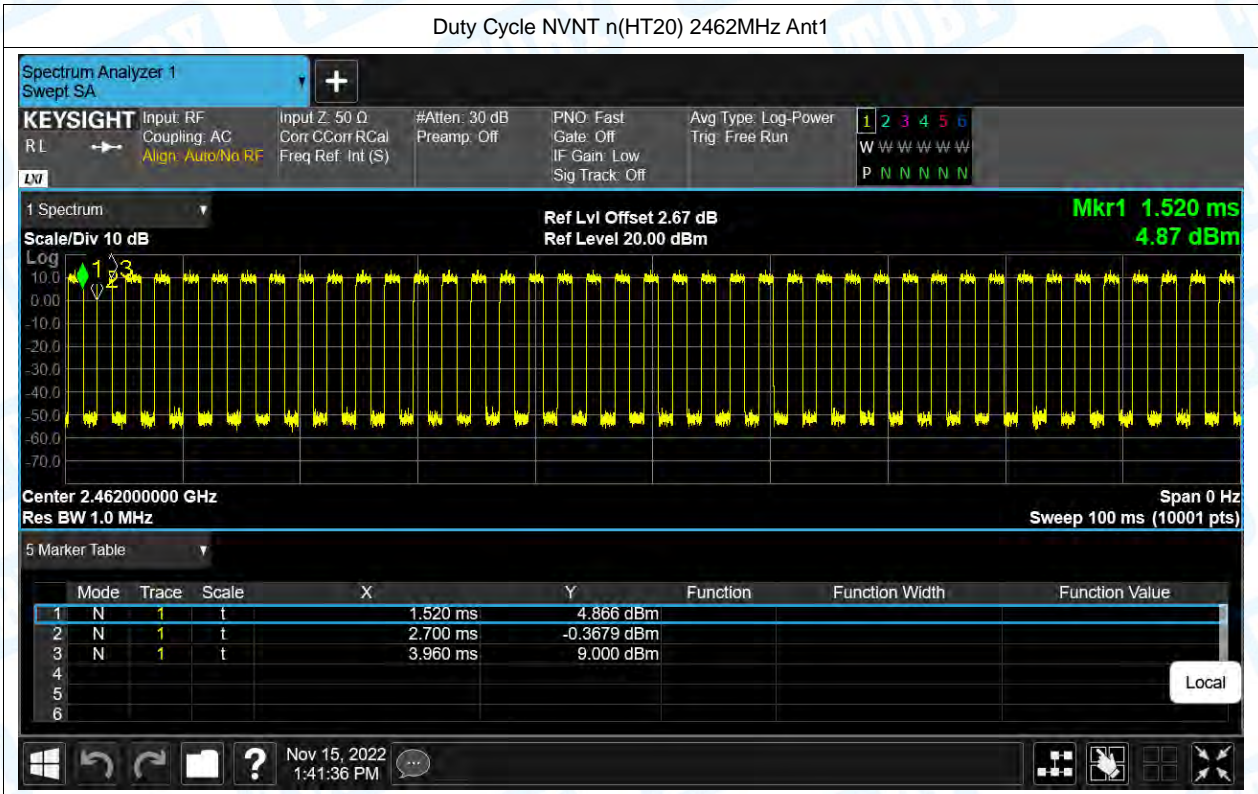


Duty Cycle NVNT n(HT20) 2412MHz Ant1



Duty Cycle NVNT n(HT20) 2437MHz Ant1





2. Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	16.164	30	Pass
NVNT	b	2437	Ant1	15.445	30	Pass
NVNT	b	2462	Ant1	15.732	30	Pass
NVNT	g	2412	Ant1	13.552	30	Pass
NVNT	g	2437	Ant1	13.018	30	Pass
NVNT	g	2462	Ant1	13.281	30	Pass
NVNT	n(HT20)	2412	Ant1	13.418	30	Pass
NVNT	n(HT20)	2437	Ant1	13.05	30	Pass
NVNT	n(HT20)	2462	Ant1	12.802	30	Pass

3. -6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	9.56	0.5	Pass
NVNT	b	2437	Ant1	10.04	0.5	Pass
NVNT	b	2462	Ant1	9.55	0.5	Pass
NVNT	g	2412	Ant1	14.04	0.5	Pass
NVNT	g	2437	Ant1	13.74	0.5	Pass
NVNT	g	2462	Ant1	15.06	0.5	Pass
NVNT	n(HT20)	2412	Ant1	13.57	0.5	Pass
NVNT	n(HT20)	2437	Ant1	12.33	0.5	Pass
NVNT	n(HT20)	2462	Ant1	14.68	0.5	Pass

Test Graphs

-6dB Bandwidth NVNT b 2412MHz Ant1



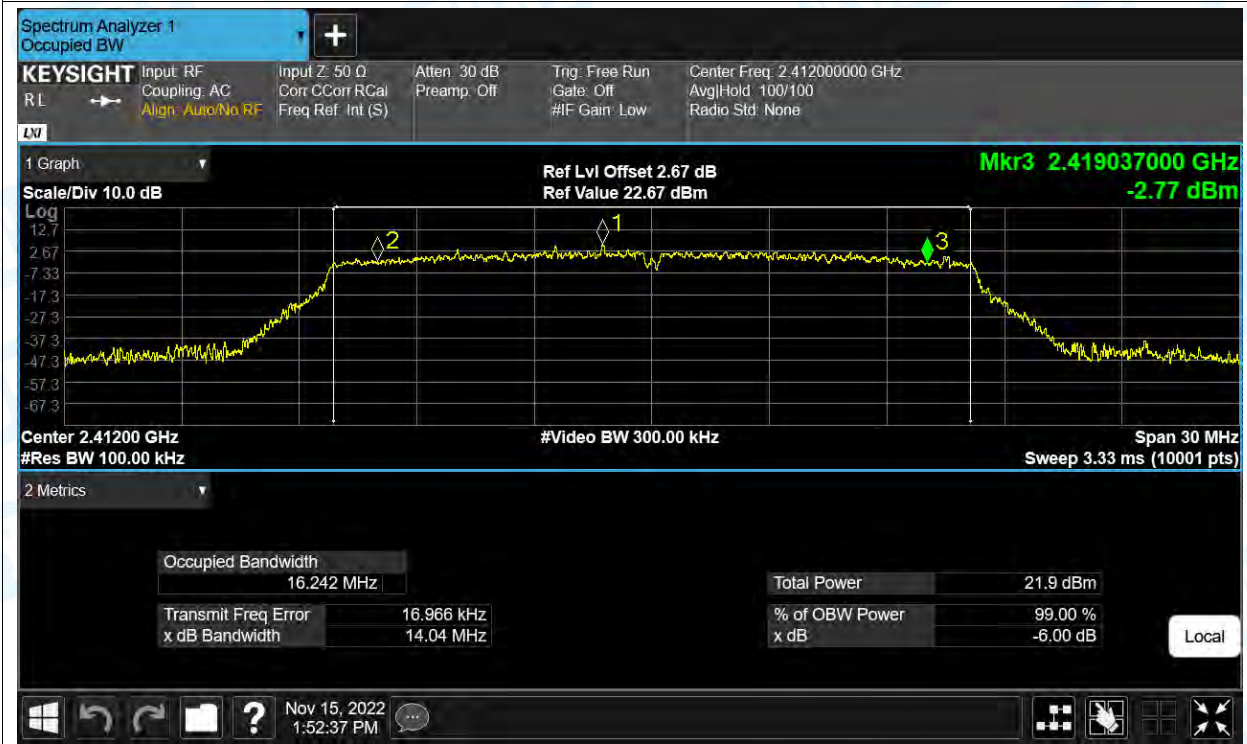
-6dB Bandwidth NVNT b 2437MHz Ant1

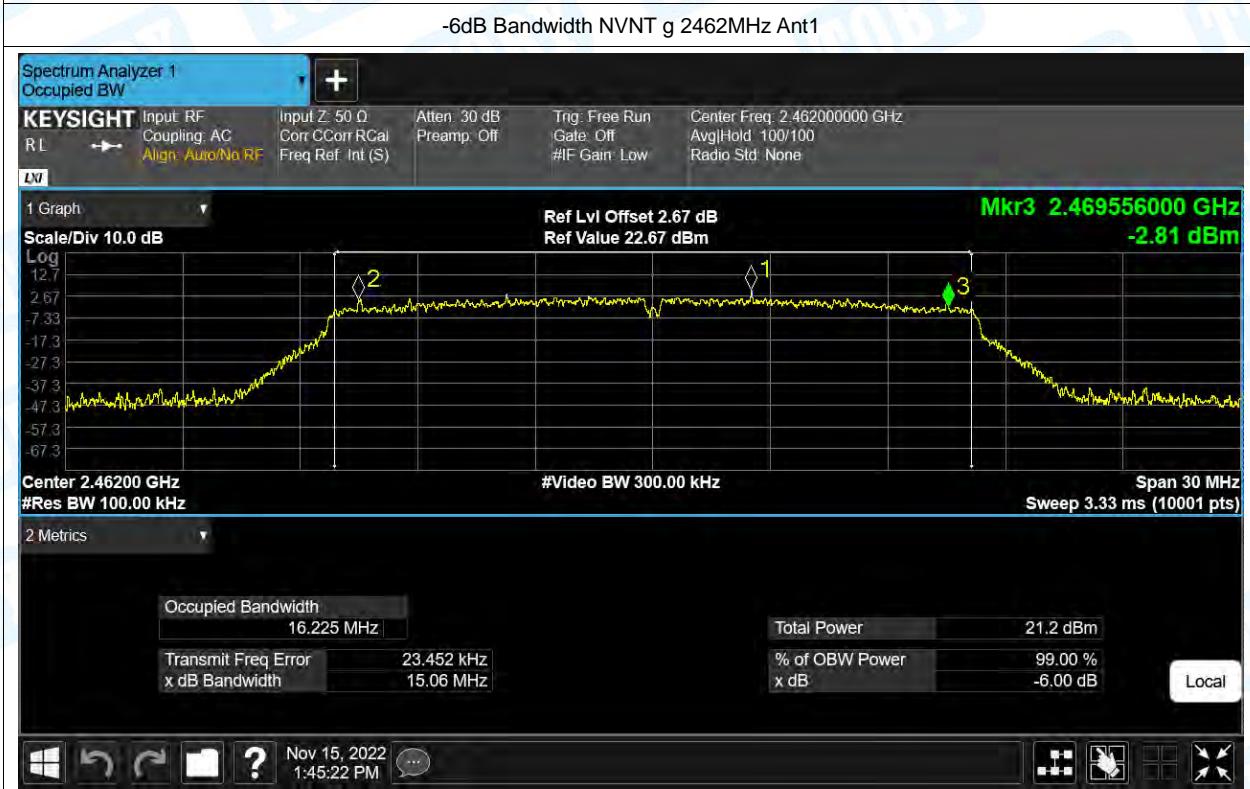
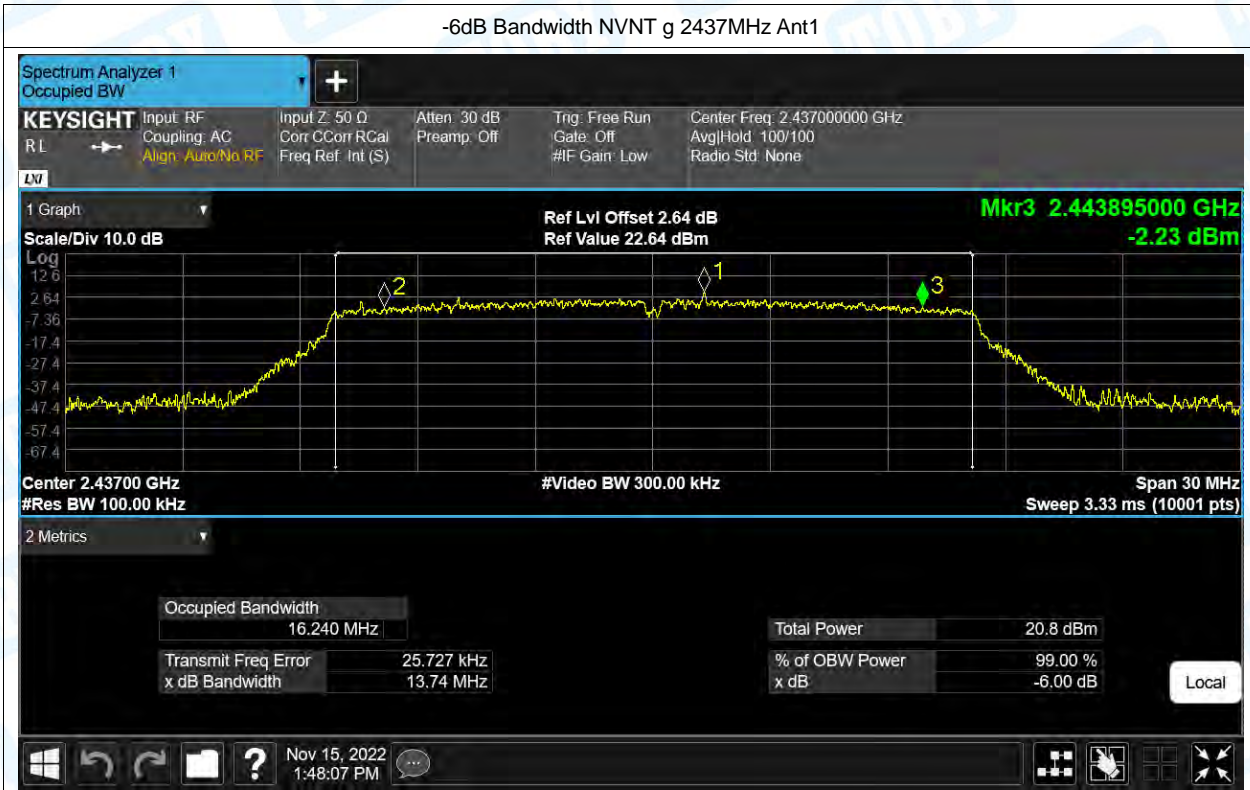


-6dB Bandwidth NVNT b 2462MHz Ant1

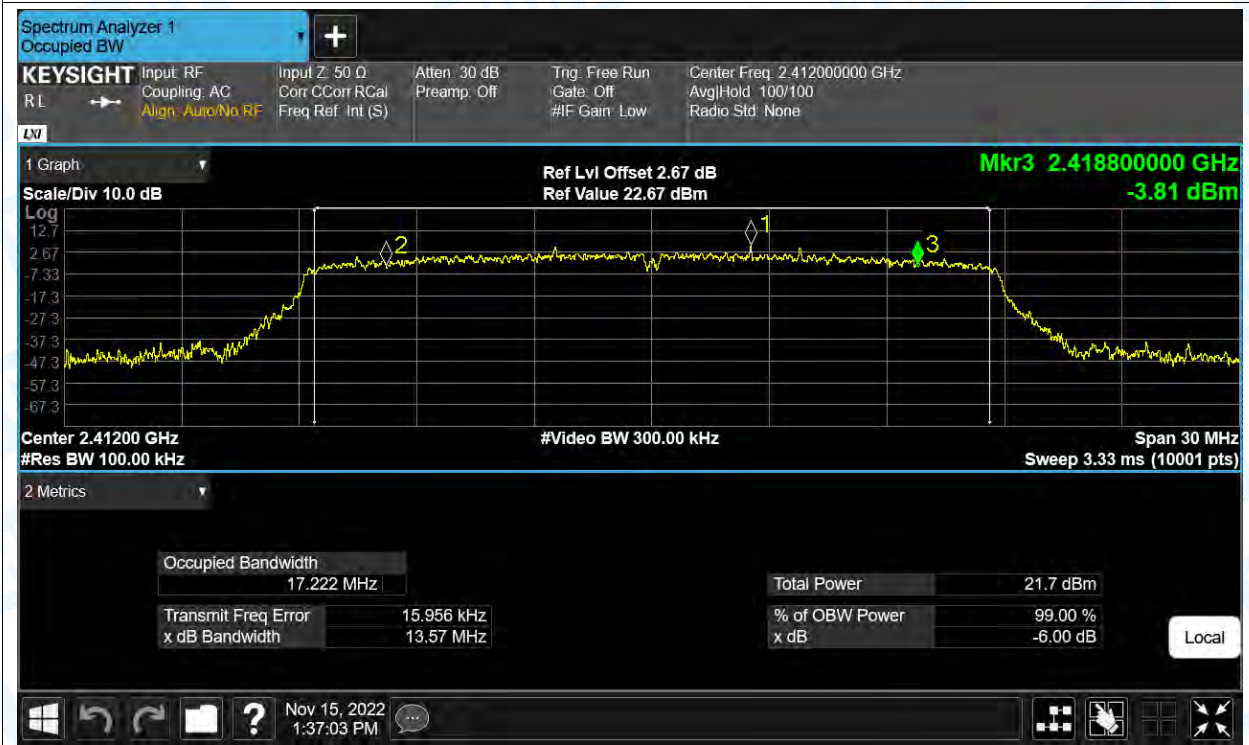


-6dB Bandwidth NVNT g 2412MHz Ant1

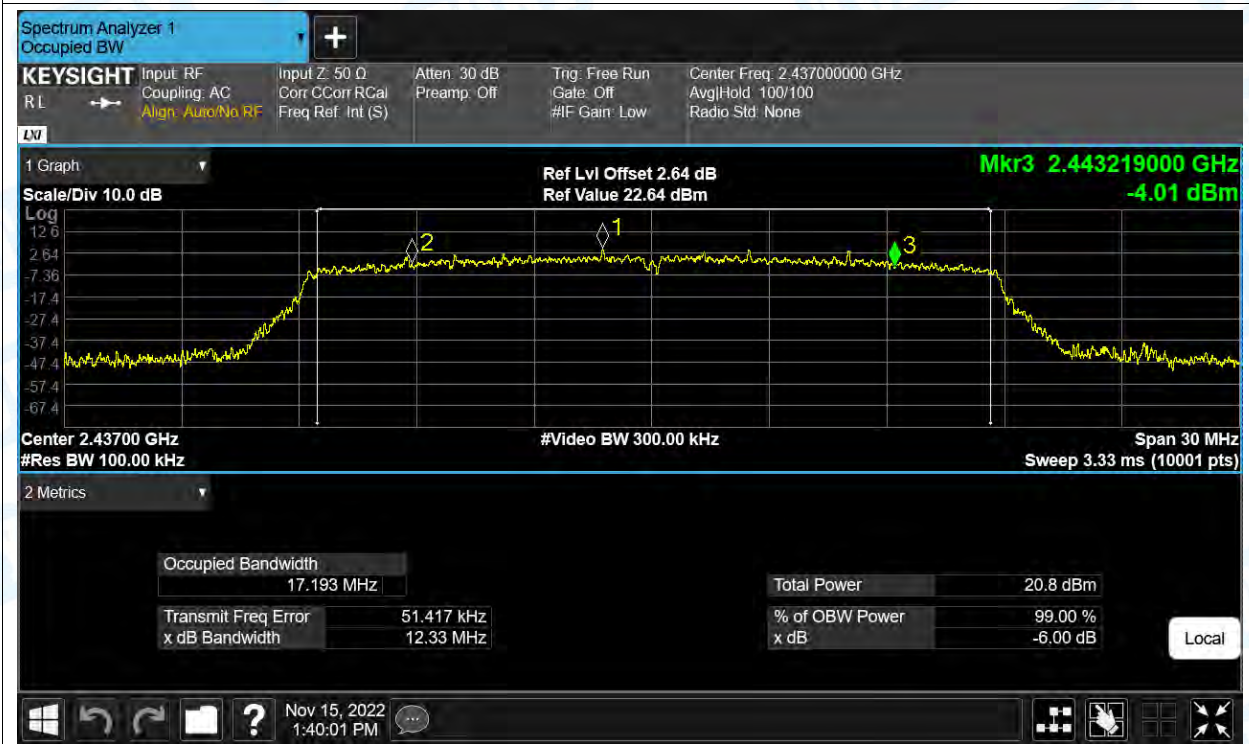




-6dB Bandwidth NVNT n(HT20) 2412MHz Ant1



-6dB Bandwidth NVNT n(HT20) 2437MHz Ant1





4. Occupied Channel Bandwidth

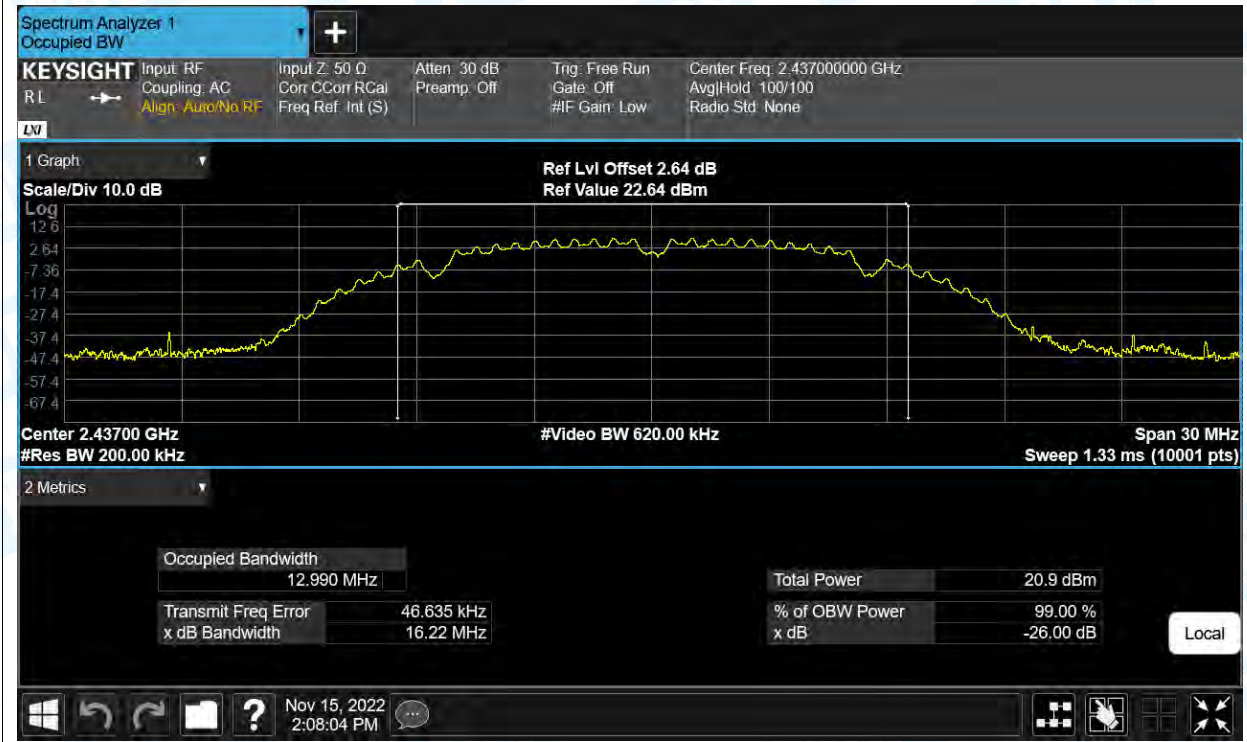
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	12.969
NVNT	b	2437	Ant1	12.99
NVNT	b	2462	Ant1	12.985
NVNT	g	2412	Ant1	16.251
NVNT	g	2437	Ant1	16.241
NVNT	g	2462	Ant1	16.249
NVNT	n(HT20)	2412	Ant1	17.176
NVNT	n(HT20)	2437	Ant1	17.163
NVNT	n(HT20)	2462	Ant1	17.196

Test Graphs

OBW NVNT b 2412MHz Ant1



OBW NVNT b 2437MHz Ant1



OBW NVNT b 2462MHz Ant1



OBW NVNT g 2412MHz Ant1





OBW NVNT n(HT20) 2412MHz Ant1



OBW NVNT n(HT20) 2437MHz Ant1





5. Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	-1.91	8	Pass
NVNT	b	2437	Ant1	-1.952	8	Pass
NVNT	b	2462	Ant1	-1.07	8	Pass
NVNT	g	2412	Ant1	-4.671	8	Pass
NVNT	g	2437	Ant1	-5.507	8	Pass
NVNT	g	2462	Ant1	-5.706	8	Pass
NVNT	n(HT20)	2412	Ant1	-4.991	8	Pass
NVNT	n(HT20)	2437	Ant1	-7.14	8	Pass
NVNT	n(HT20)	2462	Ant1	-5.908	8	Pass

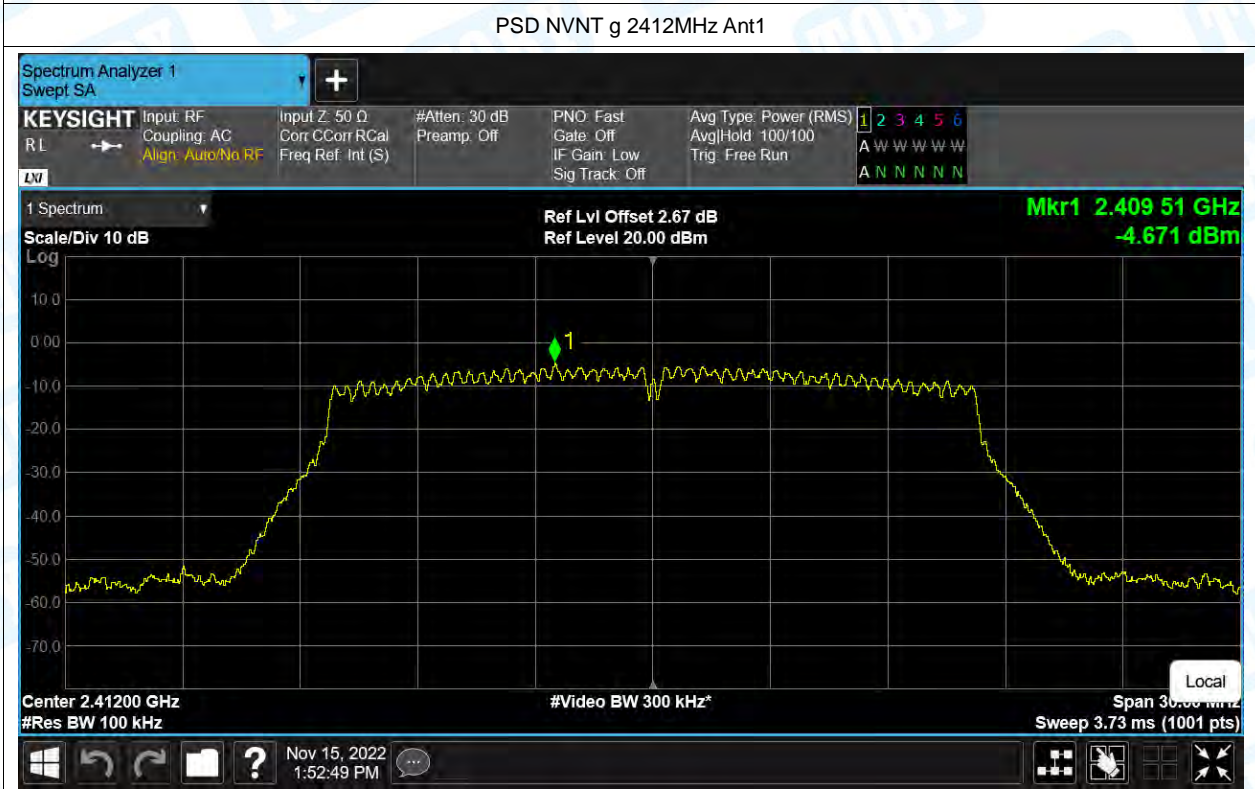
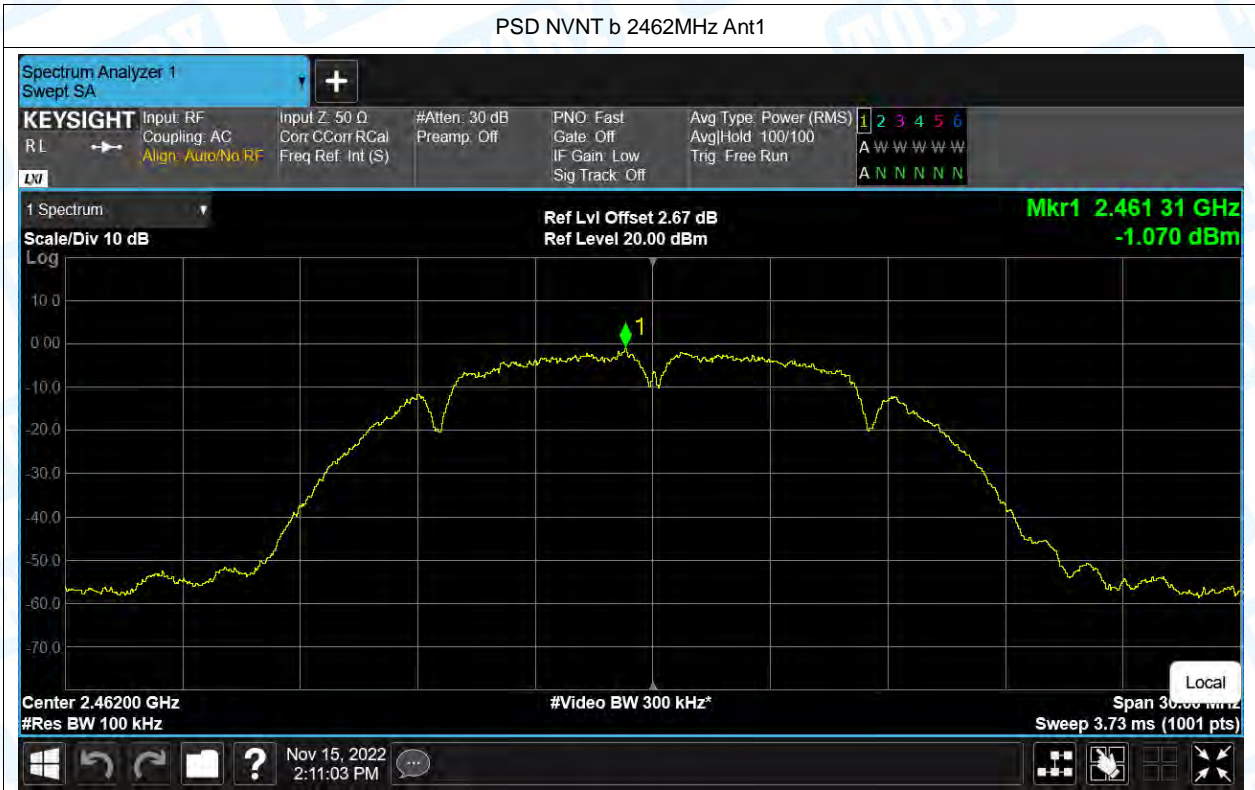
Test Graphs

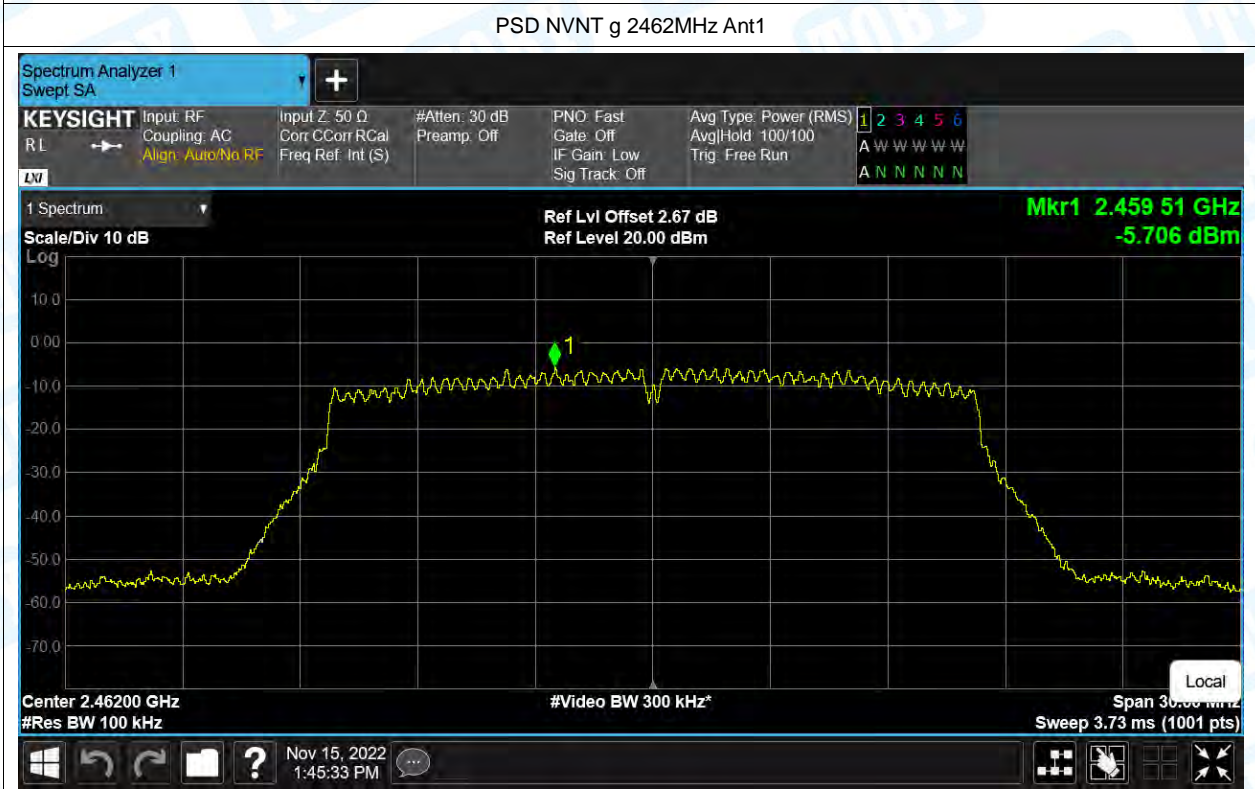
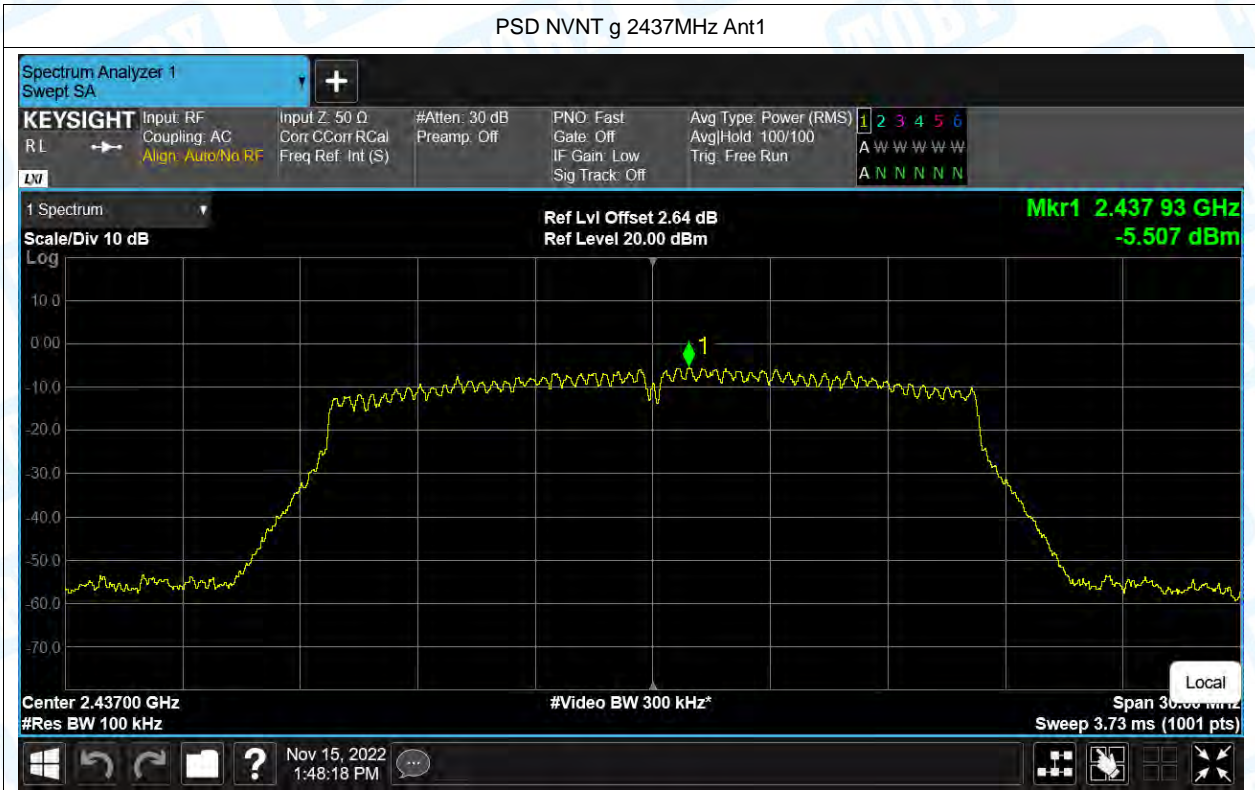
PSD NVNT b 2412MHz Ant1

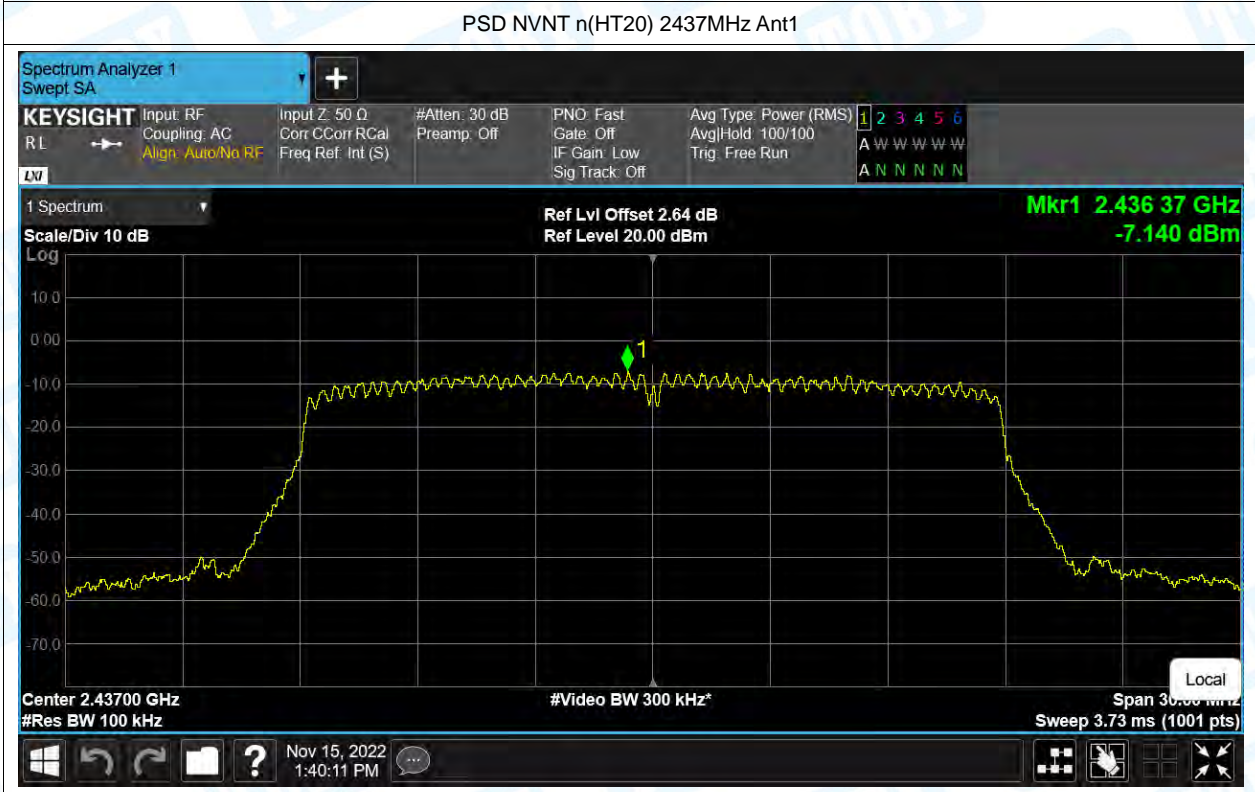
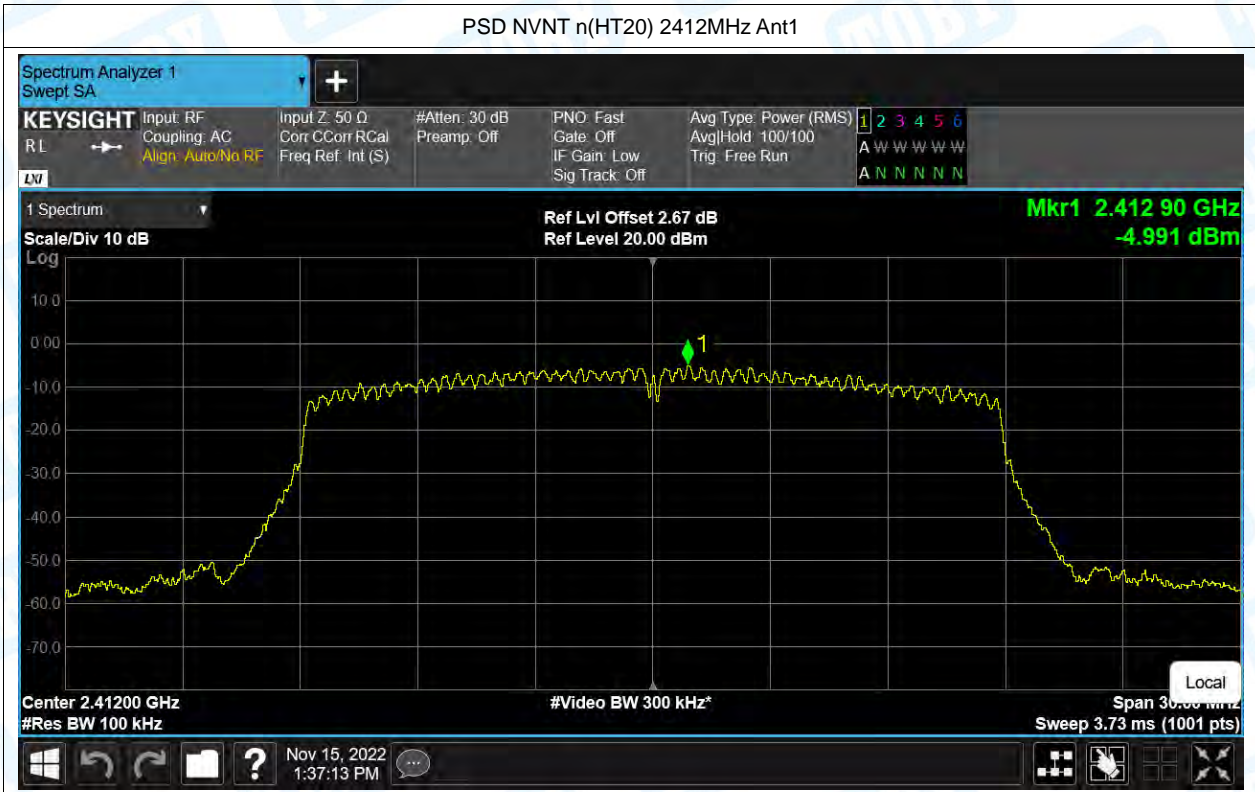


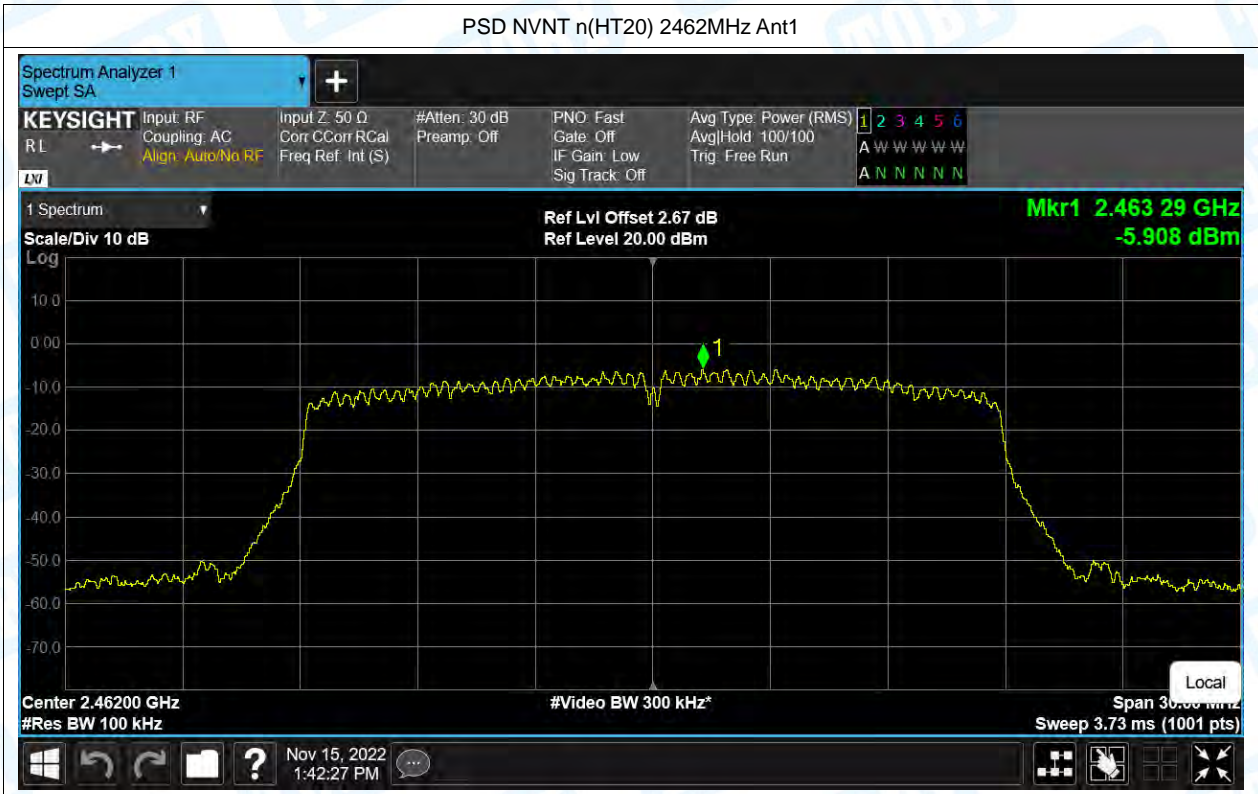
PSD NVNT b 2437MHz Ant1











6. Band Edge

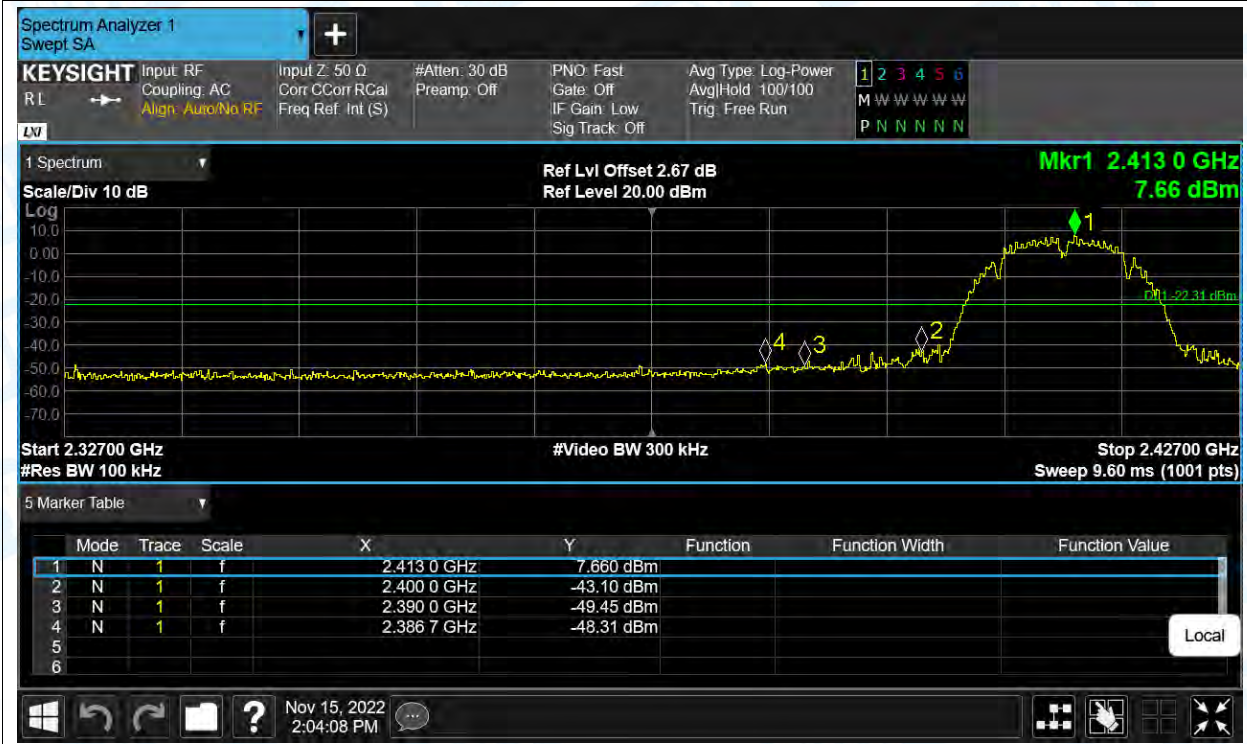
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-56	-30	Pass
NVNT	b	2462	Ant1	-54.76	-30	Pass
NVNT	g	2412	Ant1	-51.26	-30	Pass
NVNT	g	2462	Ant1	-50.89	-30	Pass
NVNT	n(HT20)	2412	Ant1	-52.44	-30	Pass
NVNT	n(HT20)	2462	Ant1	-53.07	-30	Pass

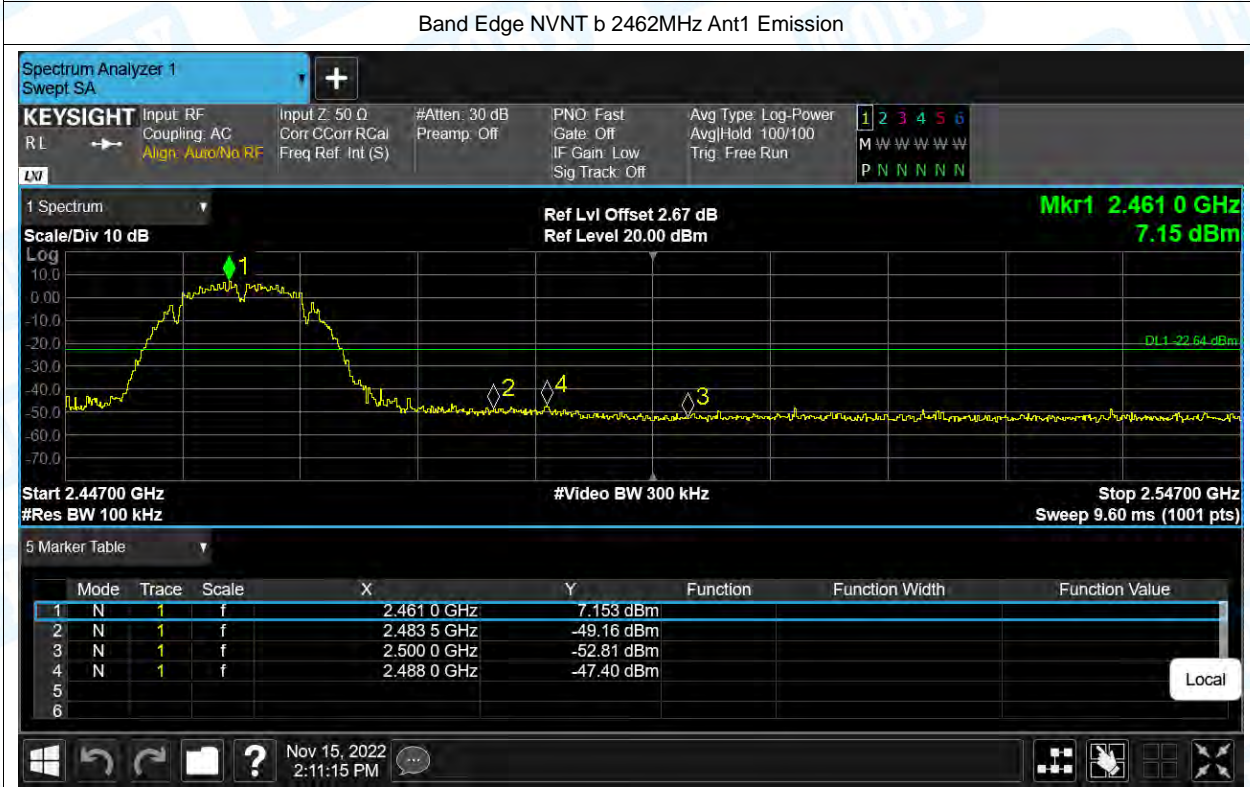
Test Graphs

Band Edge NVNT b 2412MHz Ant1 Ref

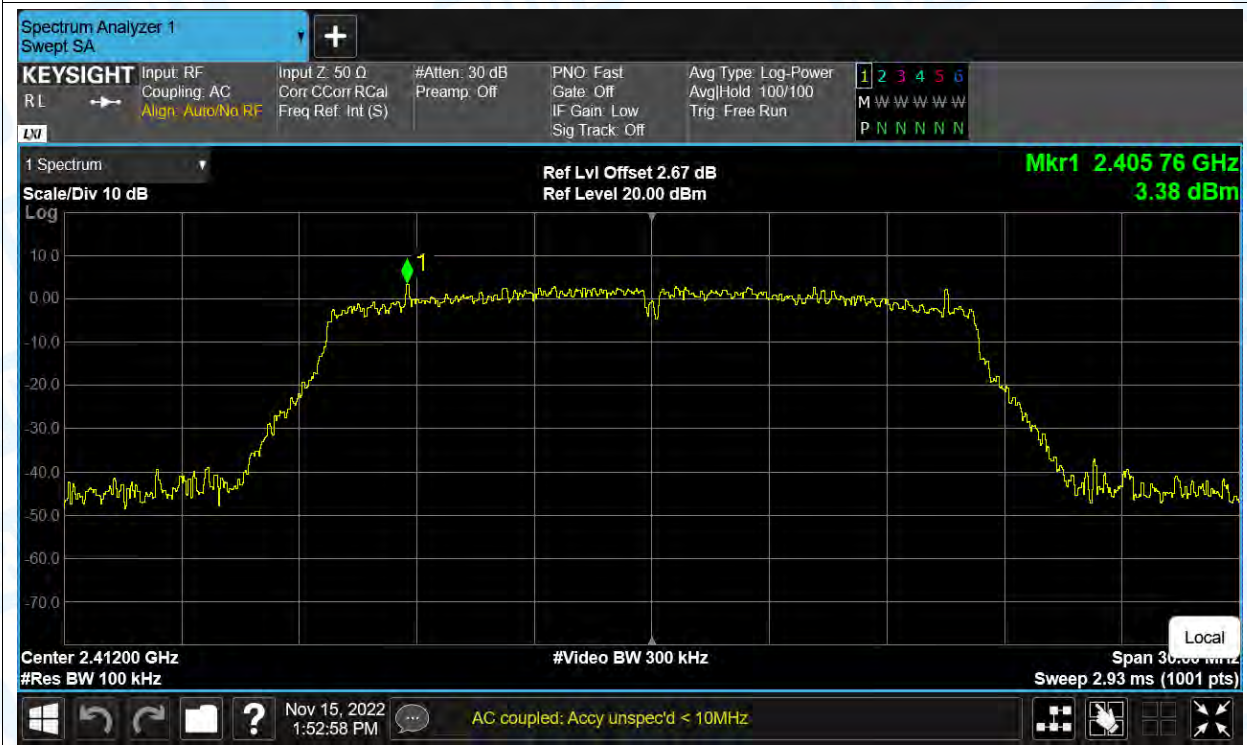


Band Edge NVNT b 2412MHz Ant1 Emission

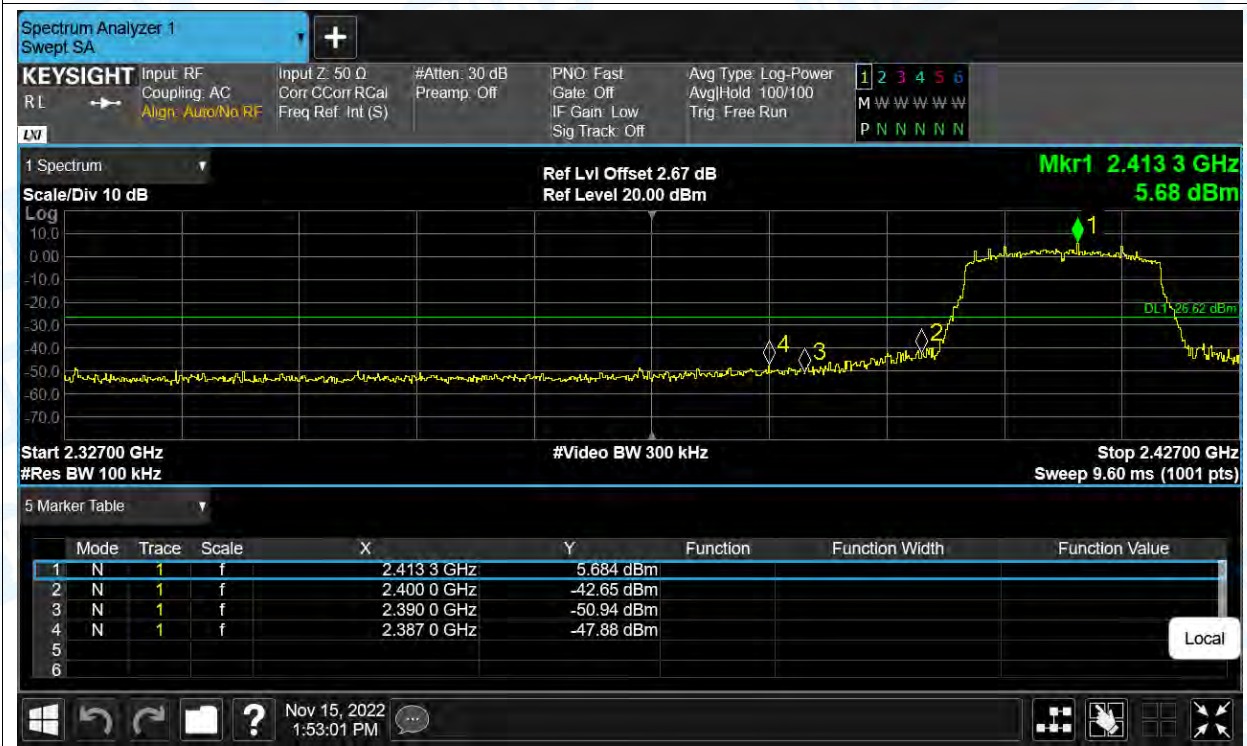


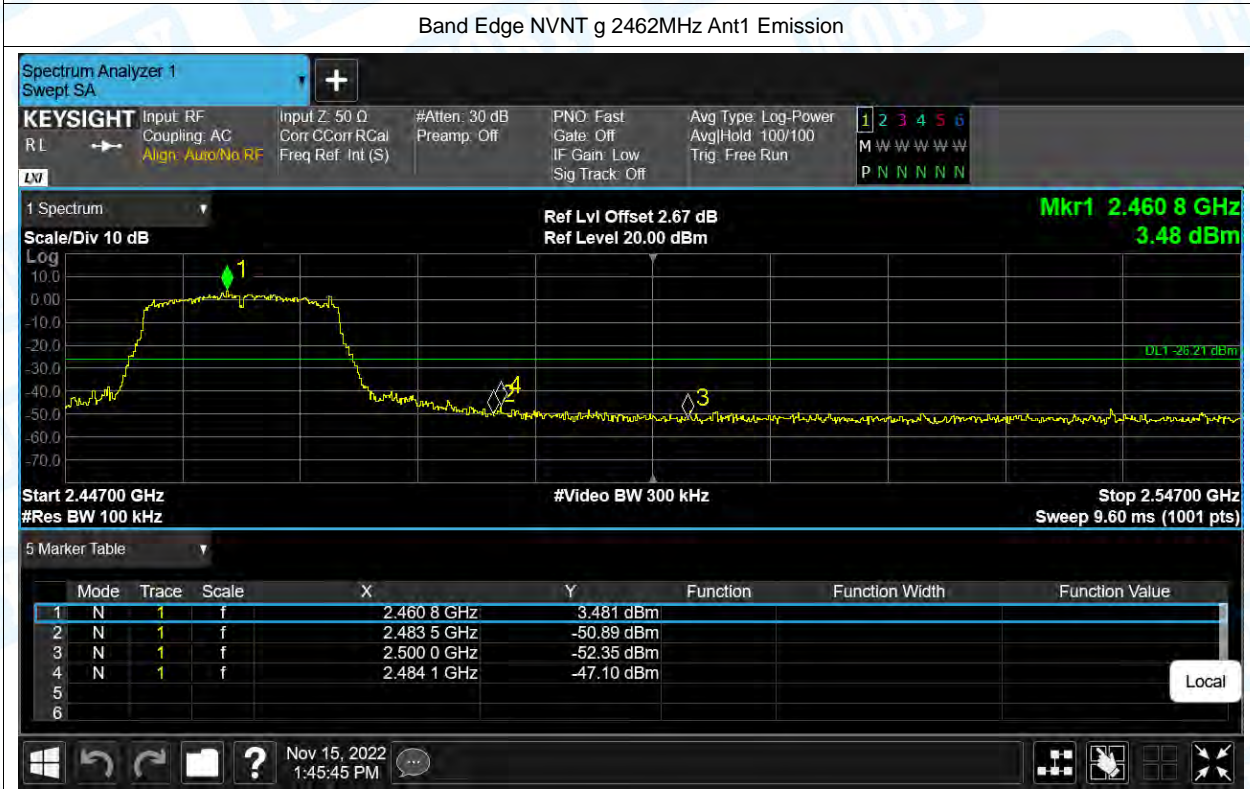


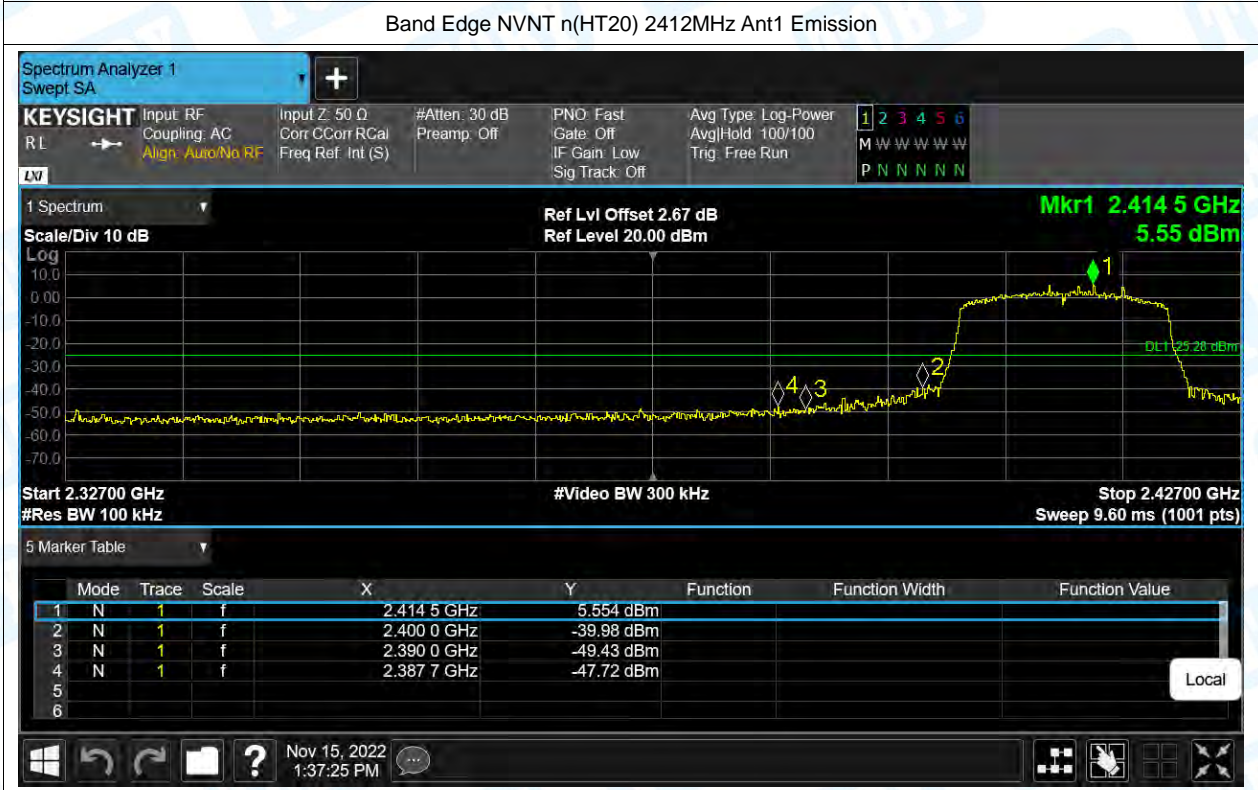
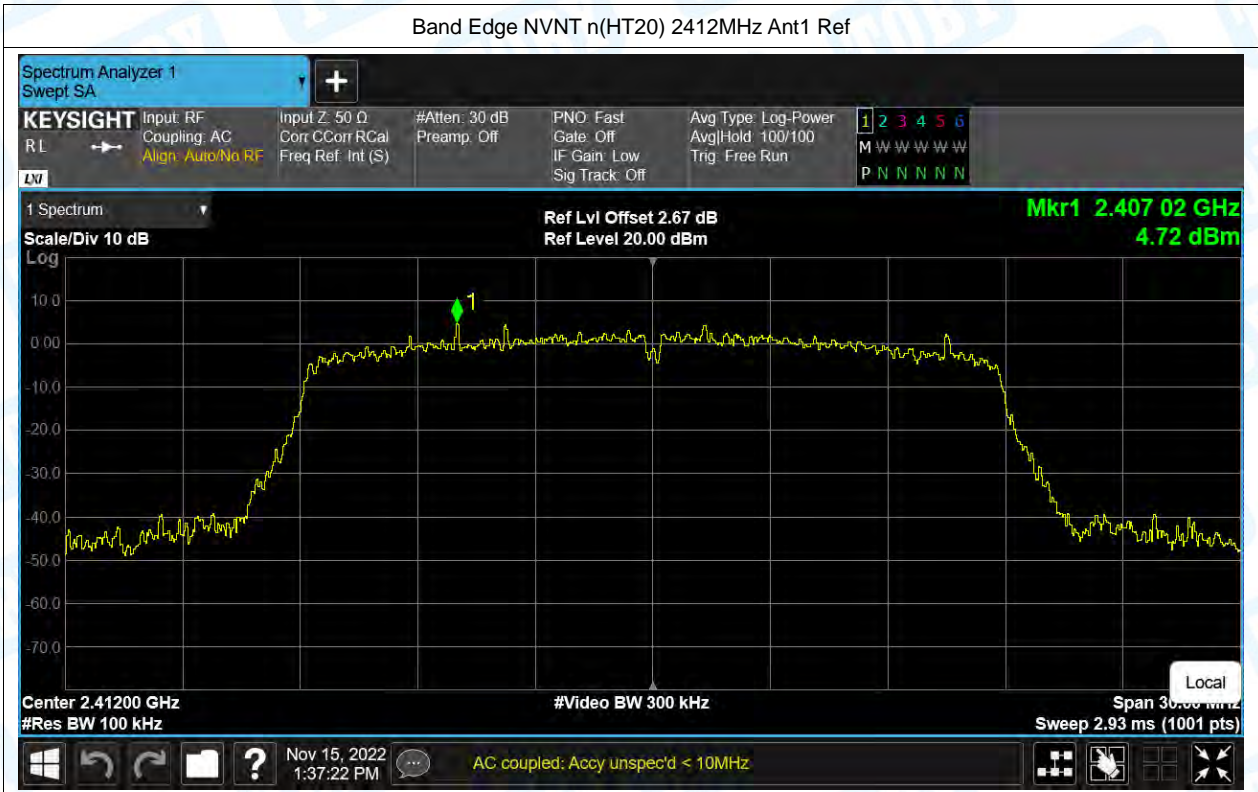
Band Edge NVNT g 2412MHz Ant1 Ref



Band Edge NVNT g 2412MHz Ant1 Emission



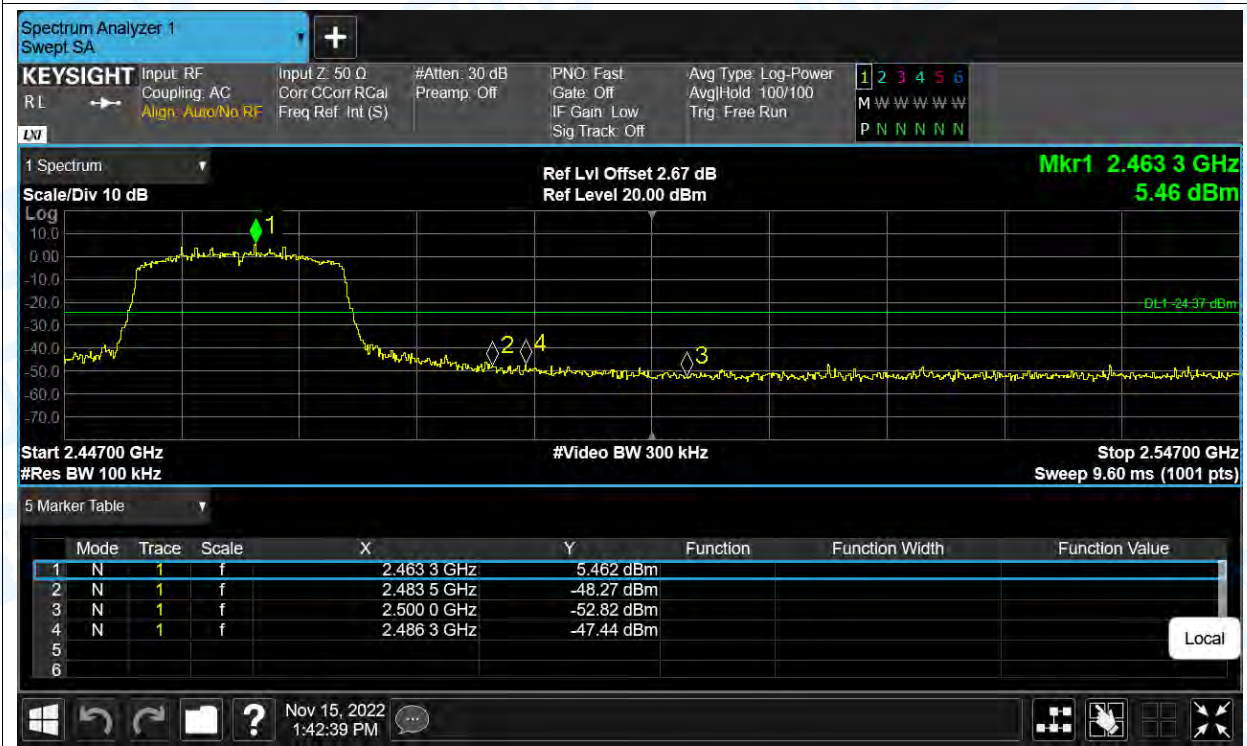




Band Edge NVNT n(HT20) 2462MHz Ant1 Ref



Band Edge NVNT n(HT20) 2462MHz Ant1 Emission



7. Conducted RF Spurious Emission

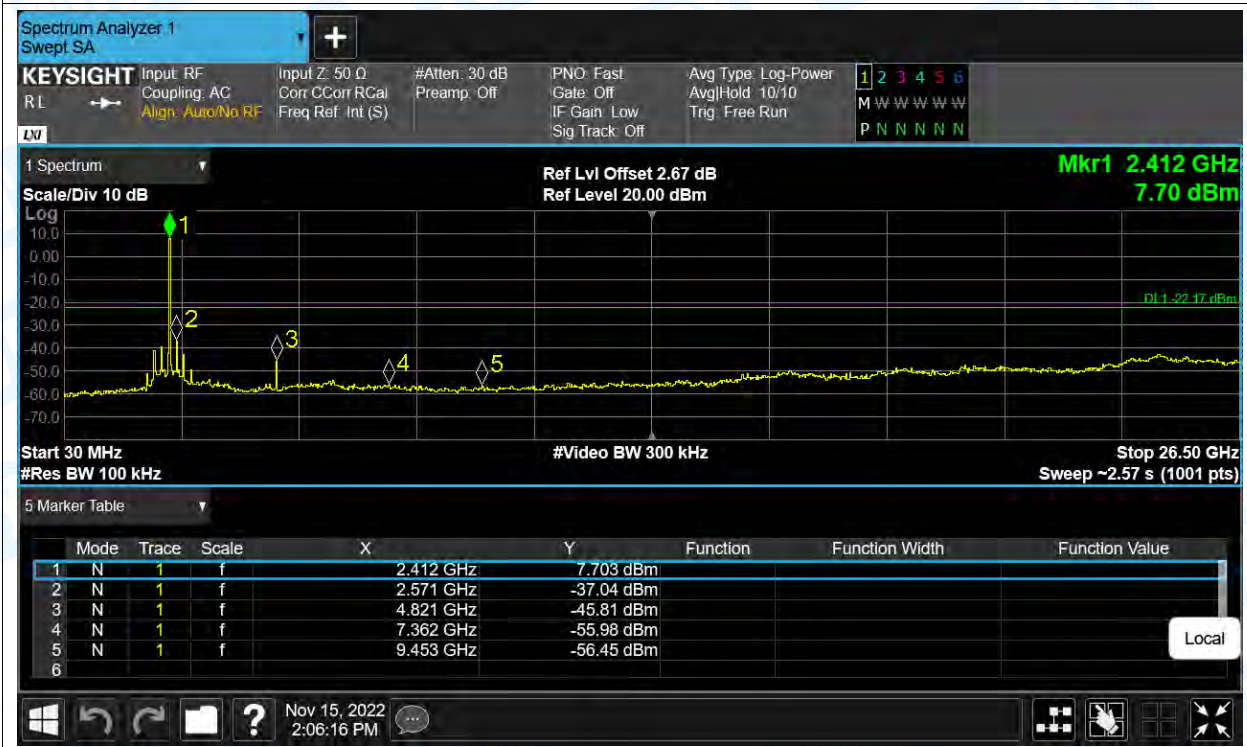
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-44.87	-30	Pass
NVNT	b	2437	Ant1	-43.88	-30	Pass
NVNT	b	2462	Ant1	-44.29	-30	Pass
NVNT	g	2412	Ant1	-41.61	-30	Pass
NVNT	g	2437	Ant1	-39.28	-30	Pass
NVNT	g	2462	Ant1	-39.8	-30	Pass
NVNT	n(HT20)	2412	Ant1	-38.81	-30	Pass
NVNT	n(HT20)	2437	Ant1	-39.27	-30	Pass
NVNT	n(HT20)	2462	Ant1	-39.41	-30	Pass

Test Graphs

Tx. Spurious NVNT b 2412MHz Ant1 Ref



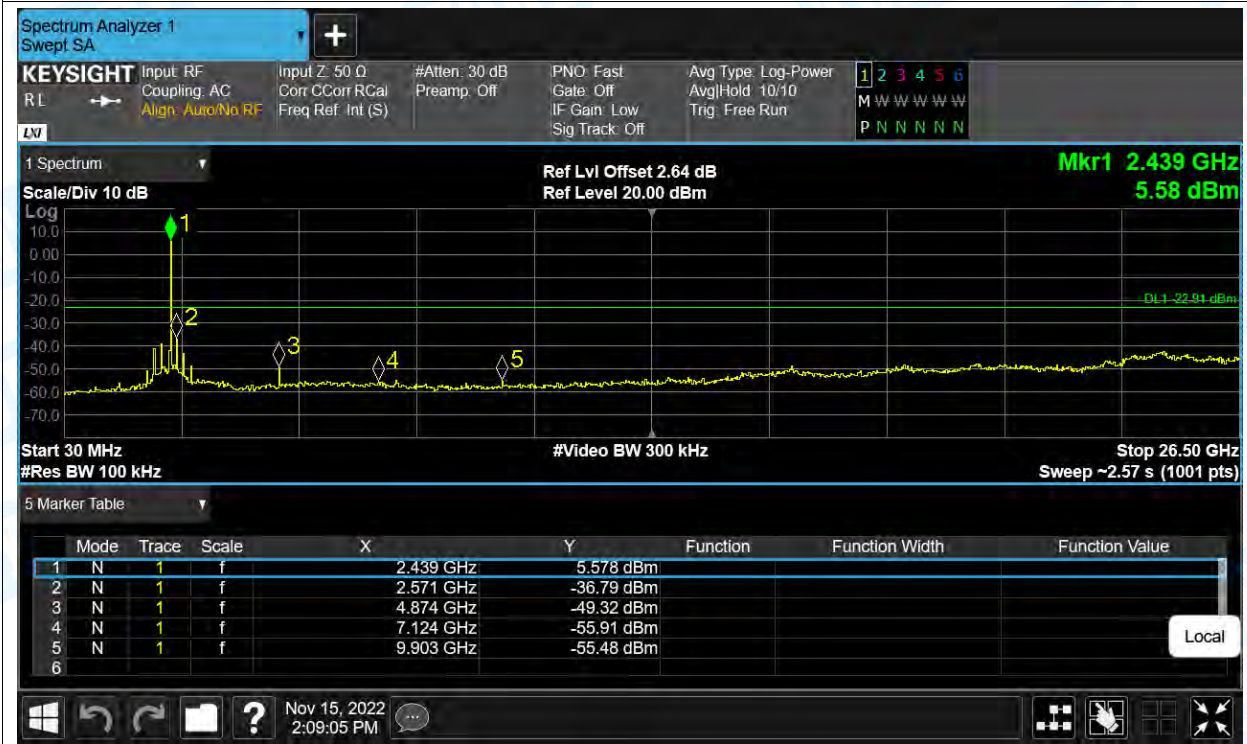
Tx. Spurious NVNT b 2412MHz Ant1 Emission



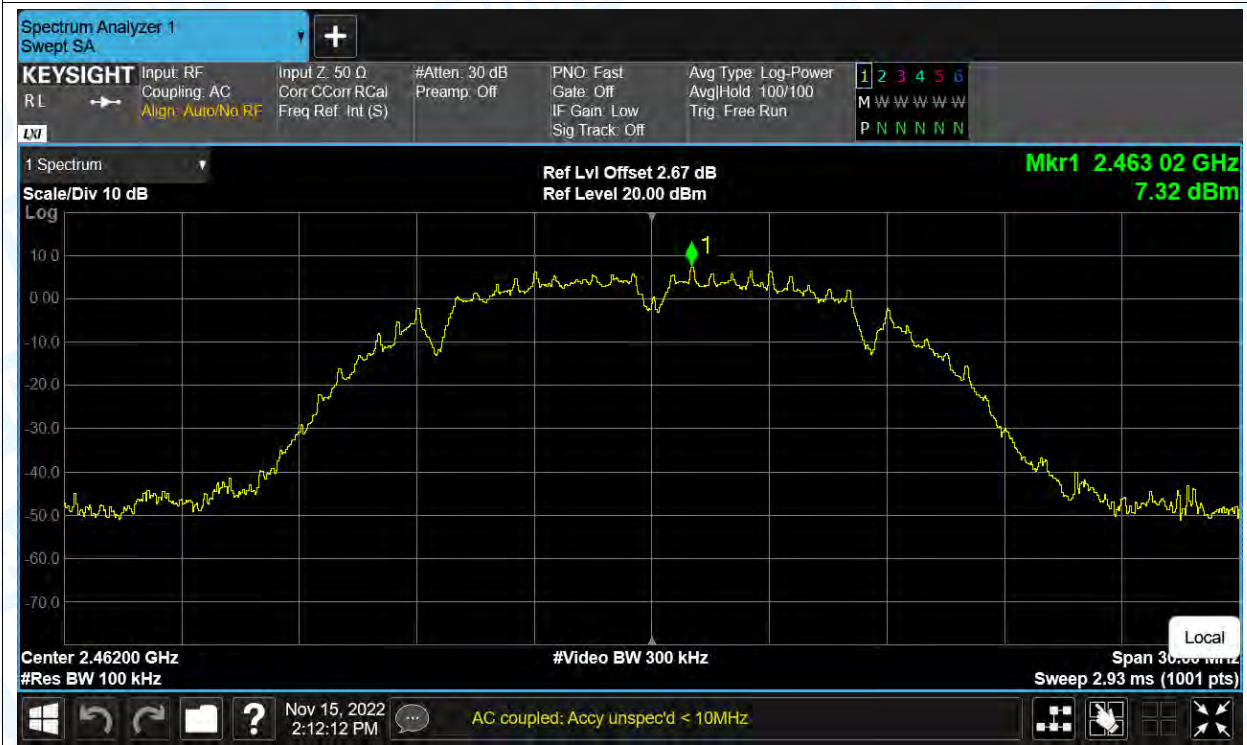
Tx. Spurious NVNT b 2437MHz Ant1 Ref



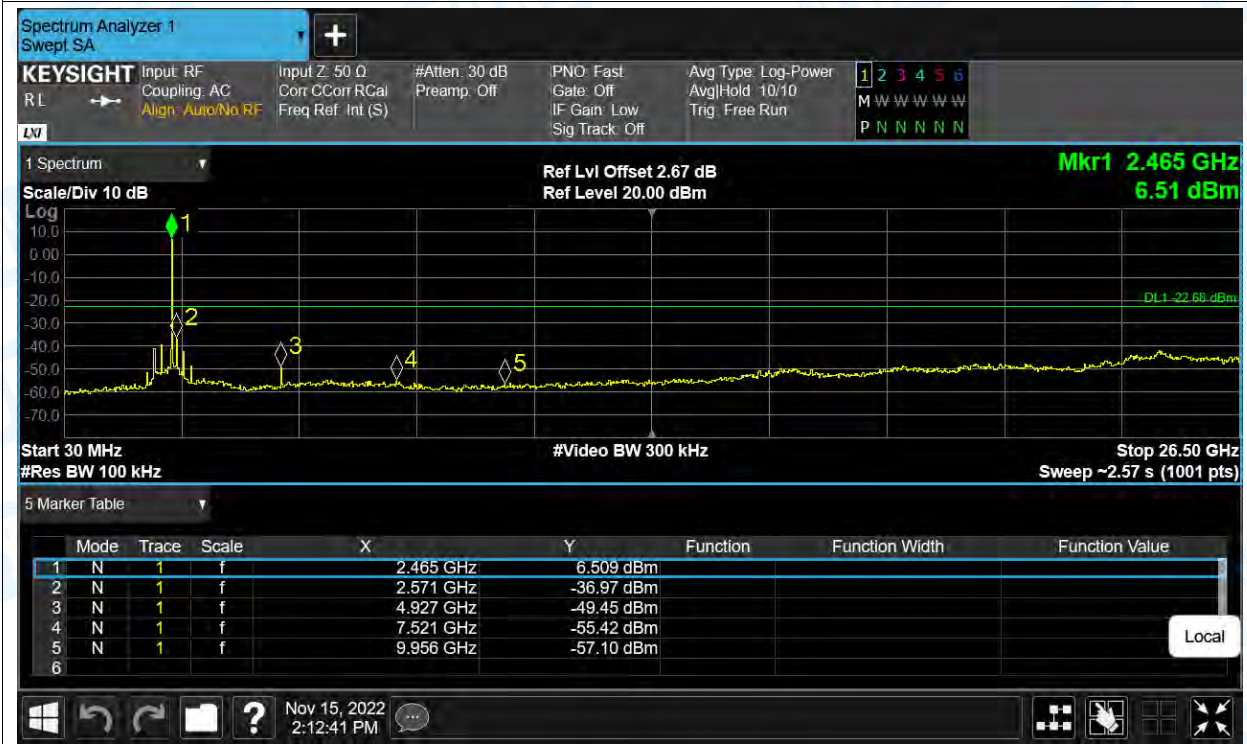
Tx. Spurious NVNT b 2437MHz Ant1 Emission



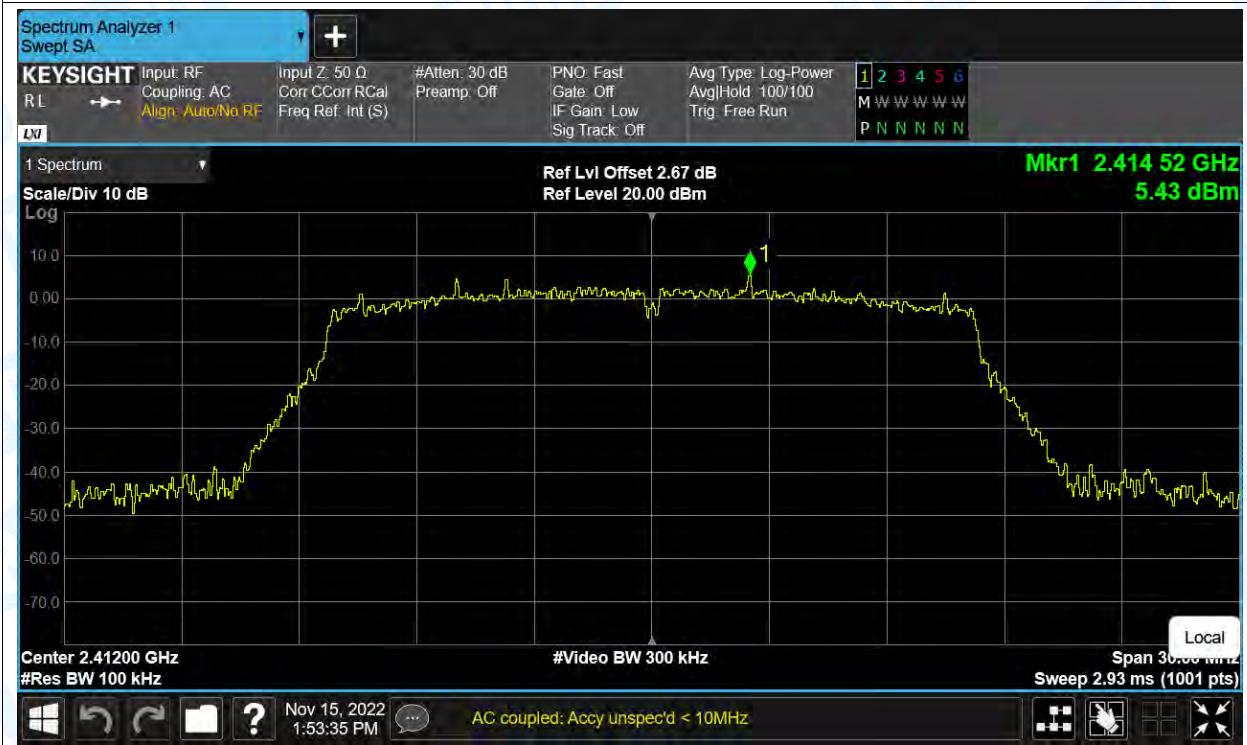
Tx. Spurious NVNT b 2462MHz Ant1 Ref



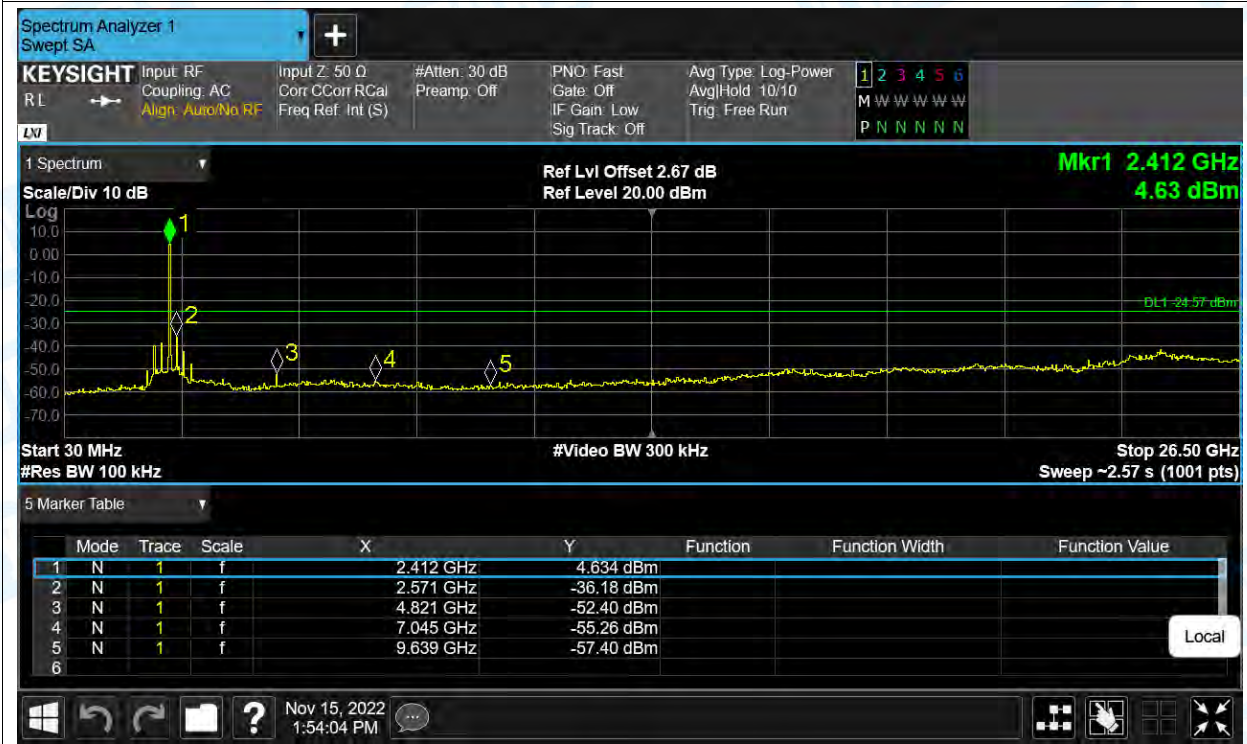
Tx. Spurious NVNT b 2462MHz Ant1 Emission



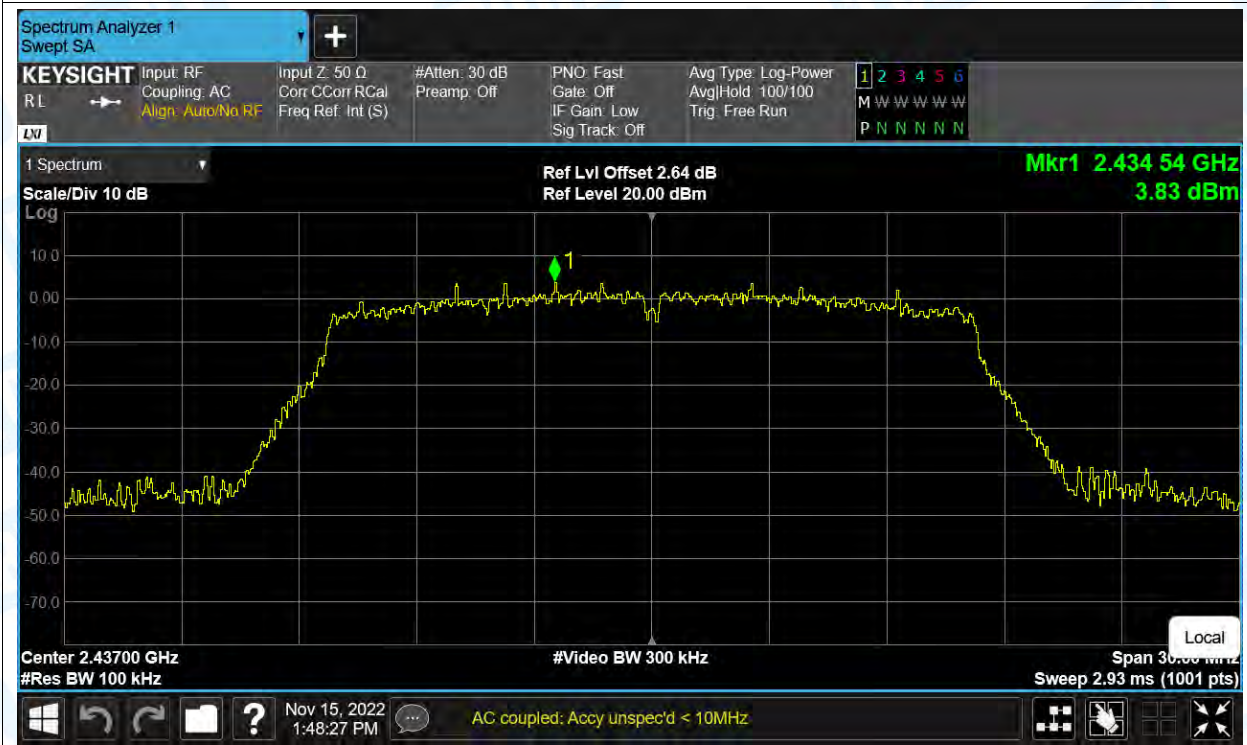
Tx. Spurious NVNT g 2412MHz Ant1 Ref



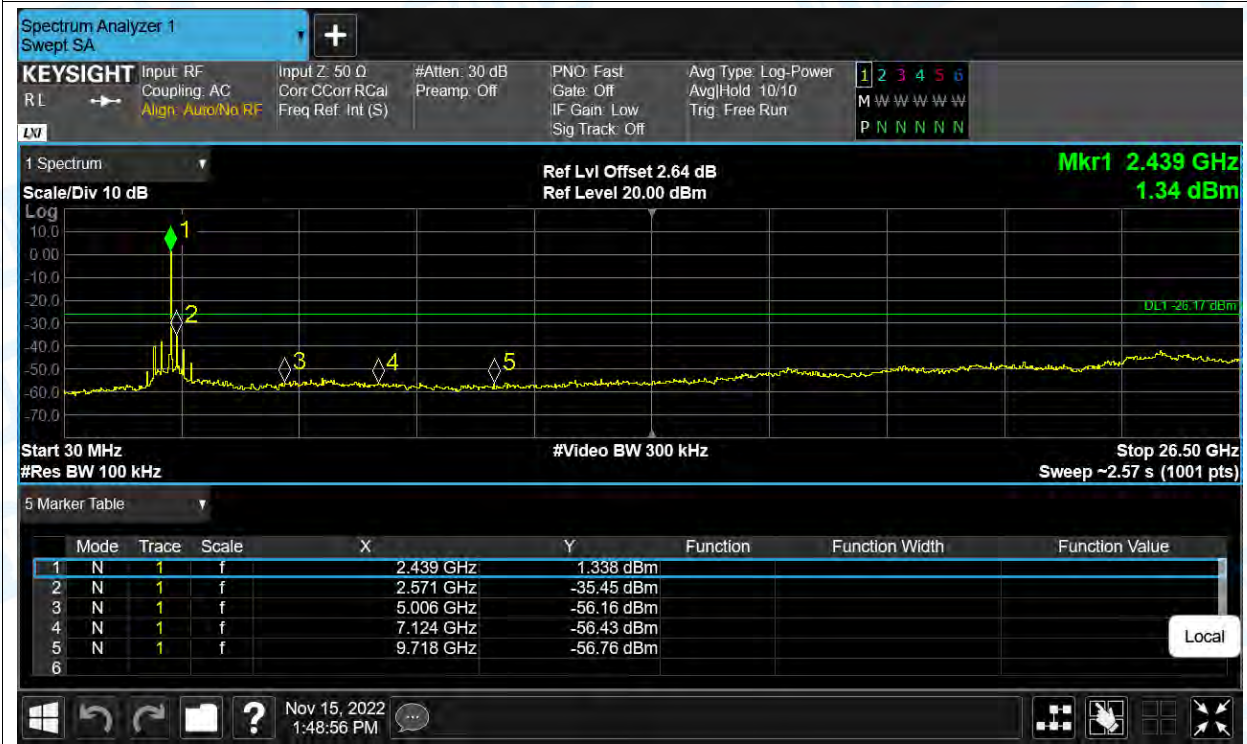
Tx. Spurious NVNT g 2412MHz Ant1 Emission



Tx. Spurious NVNT g 2437MHz Ant1 Ref



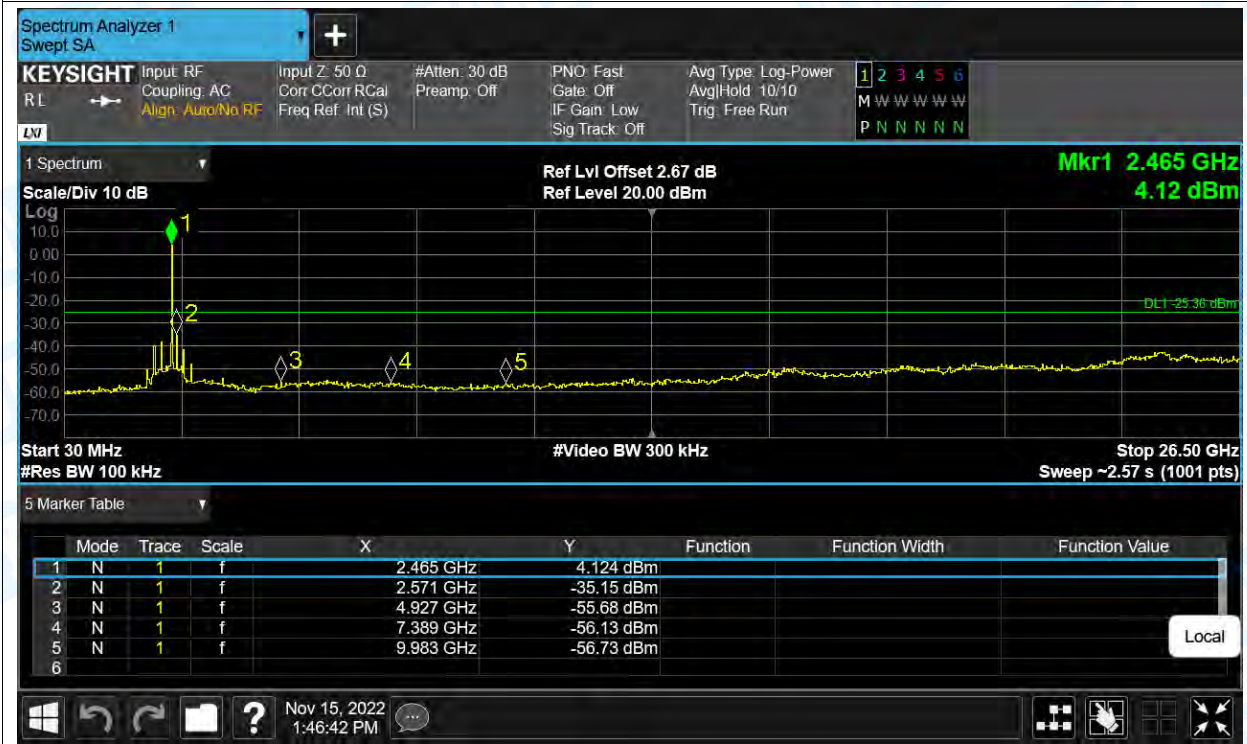
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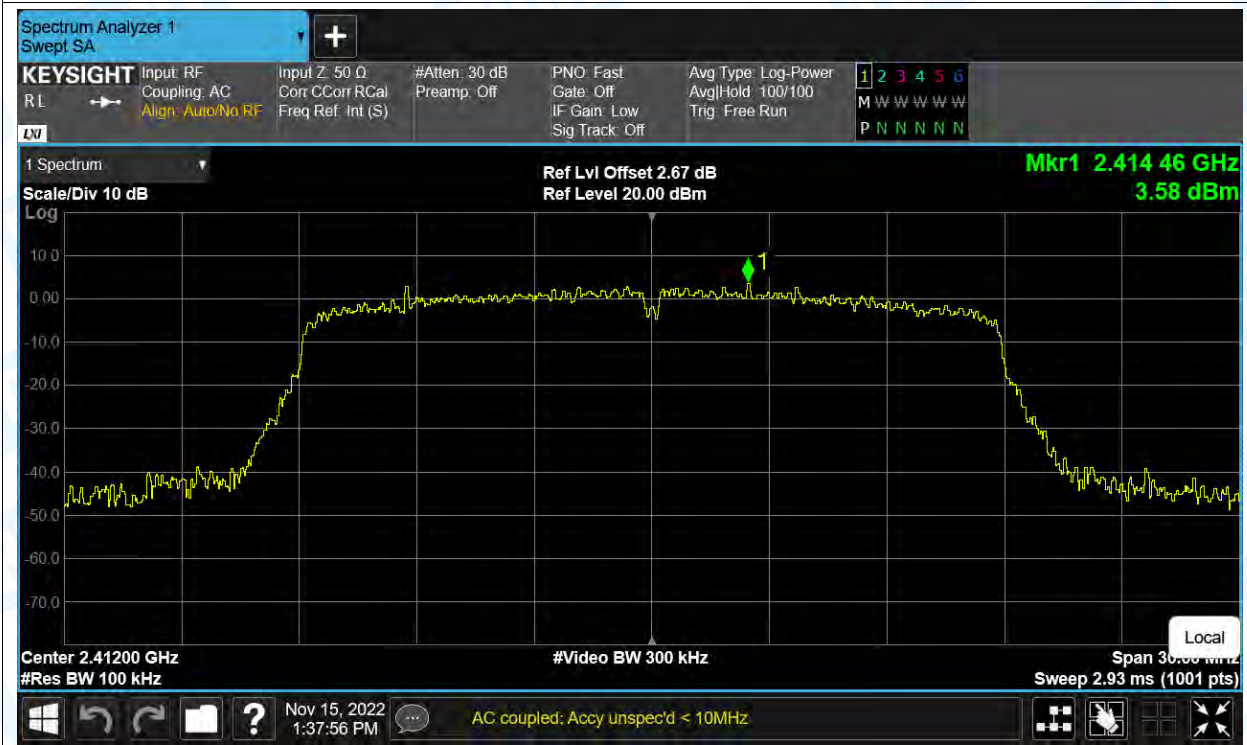
Tx. Spurious NVNT g 2462MHz Ant1 Ref



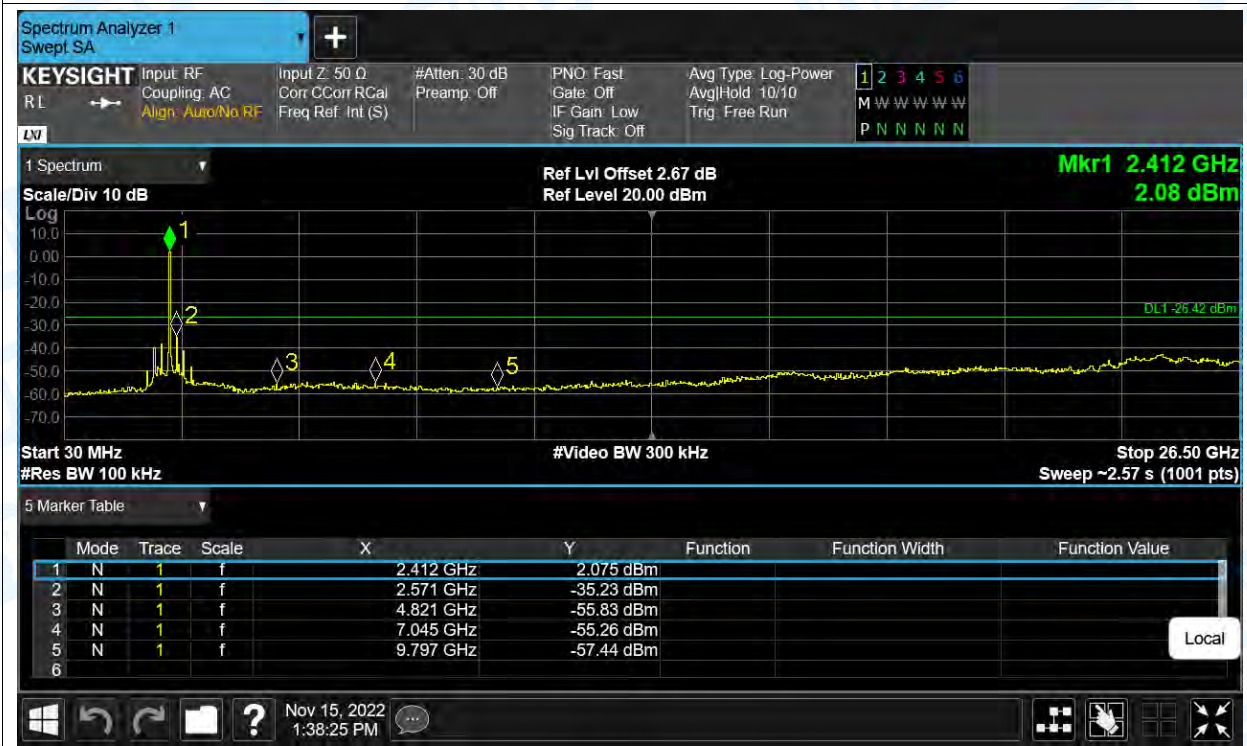
Tx. Spurious NVNT g 2462MHz Ant1 Emission



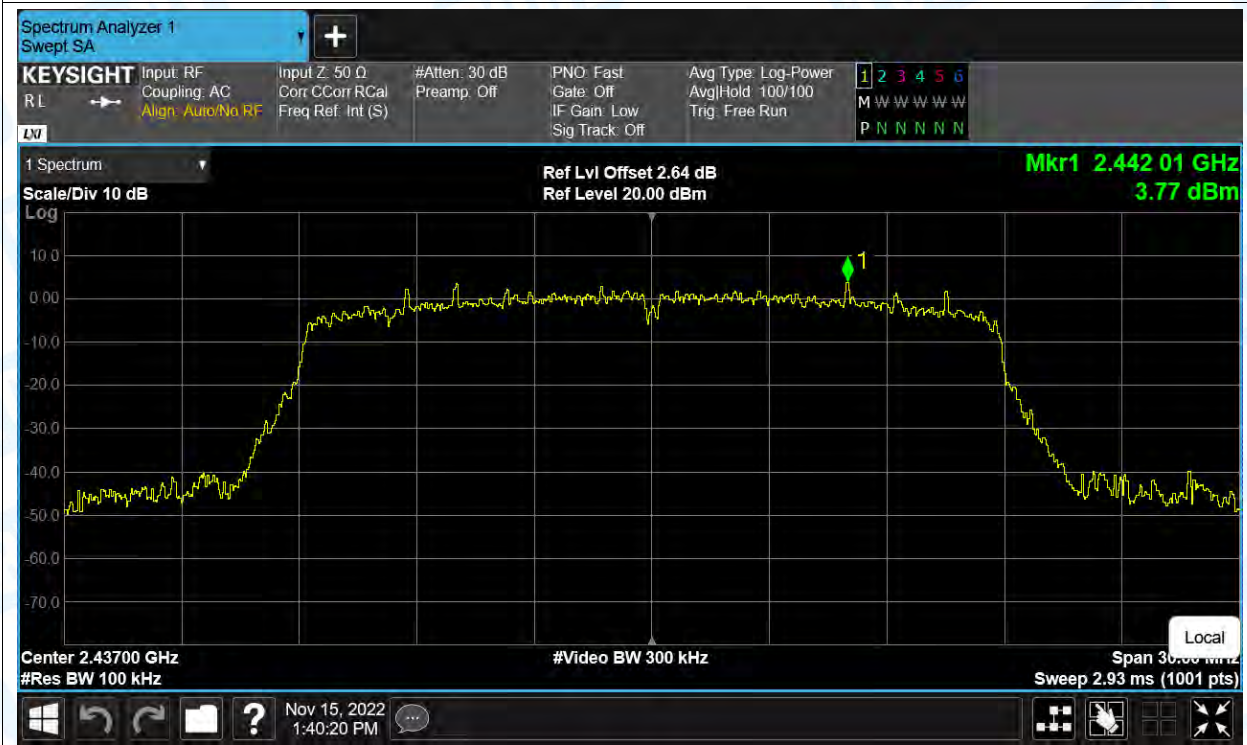
Tx. Spurious NVNT n(HT20) 2412MHz Ant1 Ref



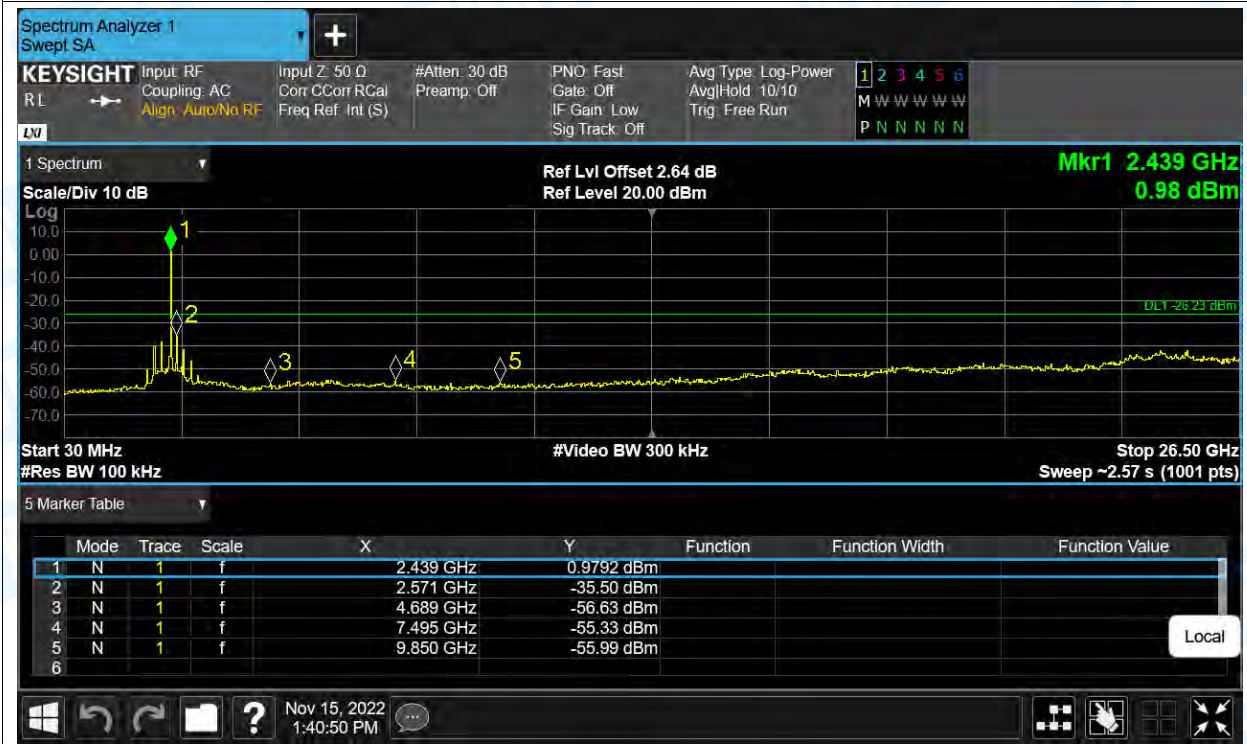
Tx. Spurious NVNT n(HT20) 2412MHz Ant1 Emission



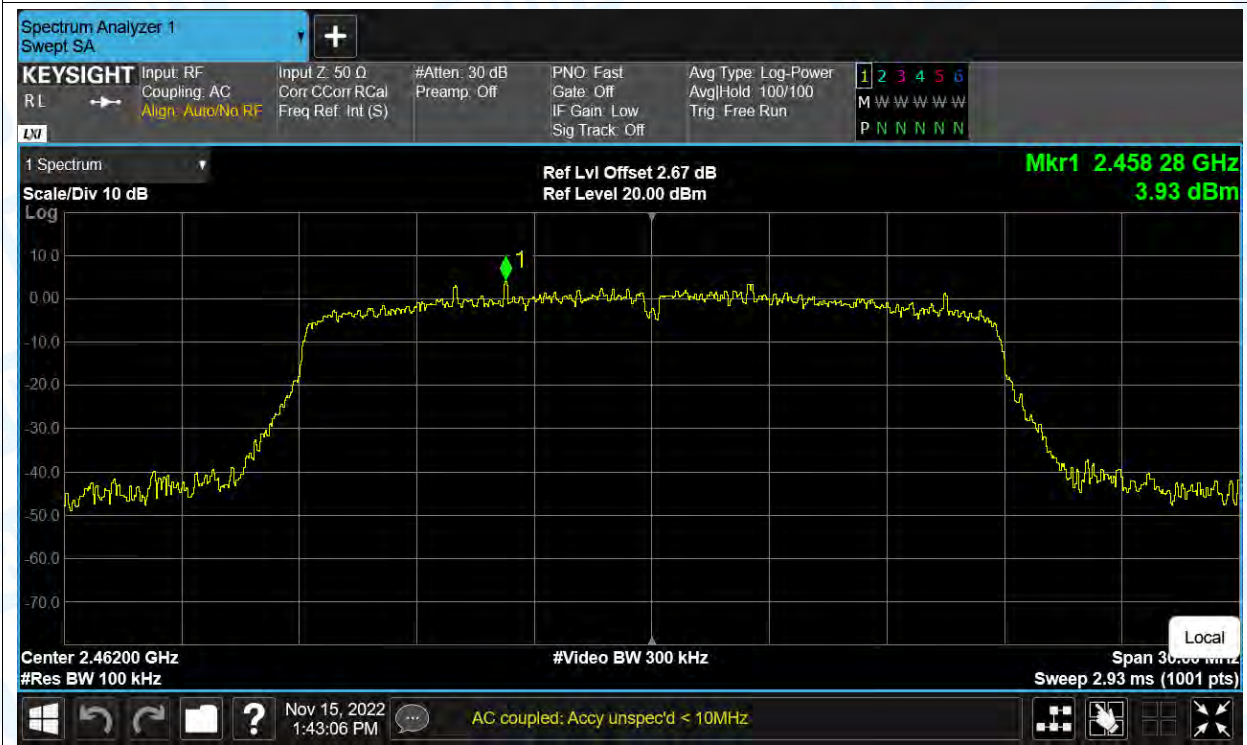
Tx. Spurious NVNT n(HT20) 2437MHz Ant1 Ref



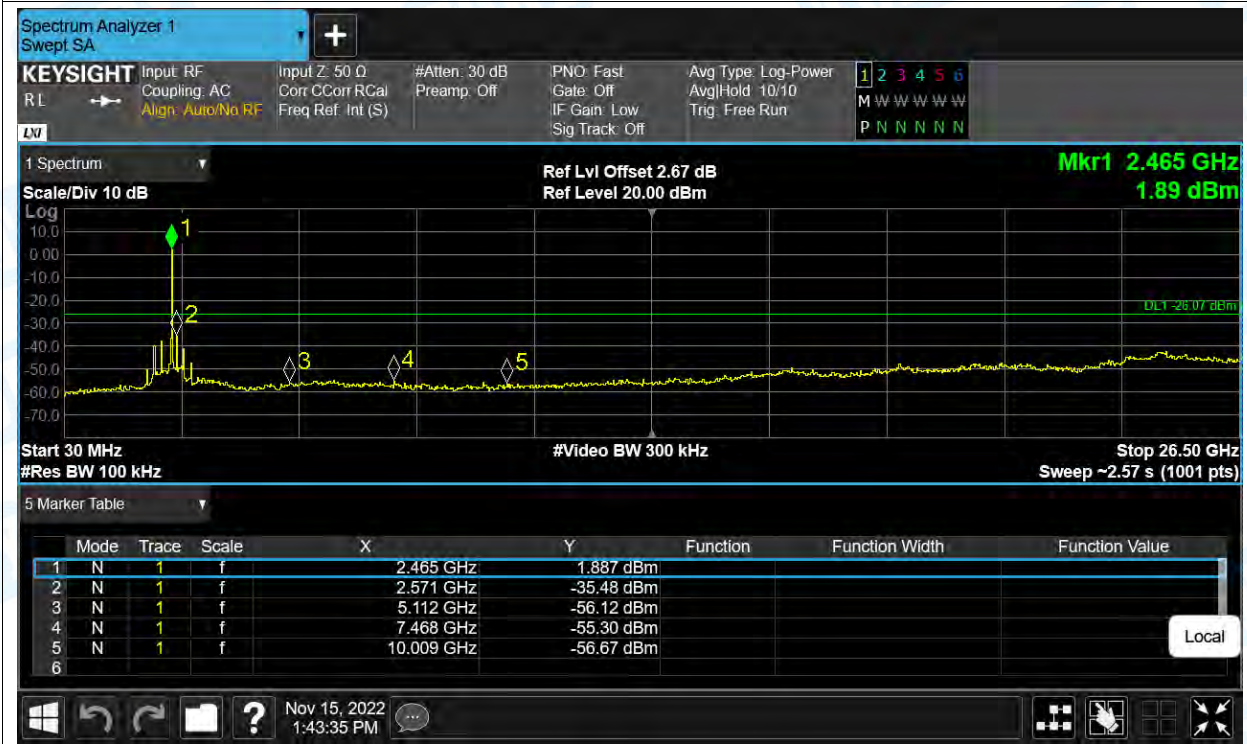
Tx. Spurious NVNT n(HT20) 2437MHz Ant1 Emission



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



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

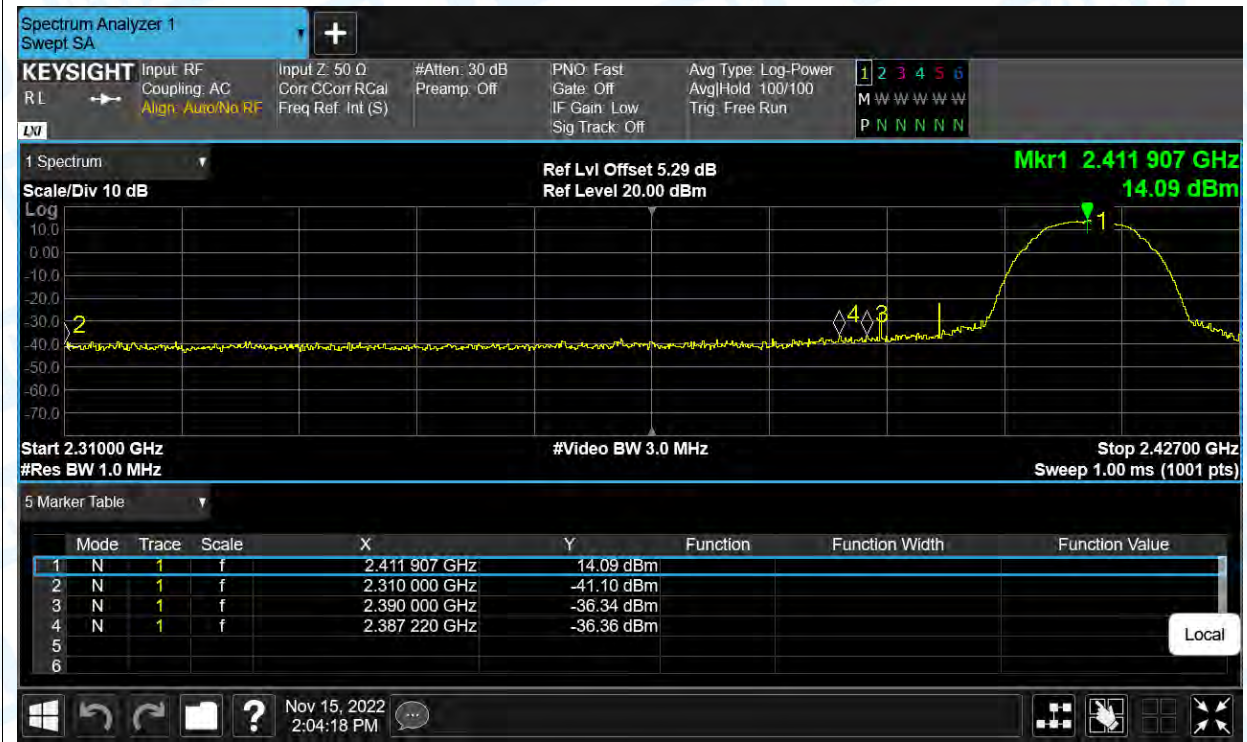


8. Restrict Band

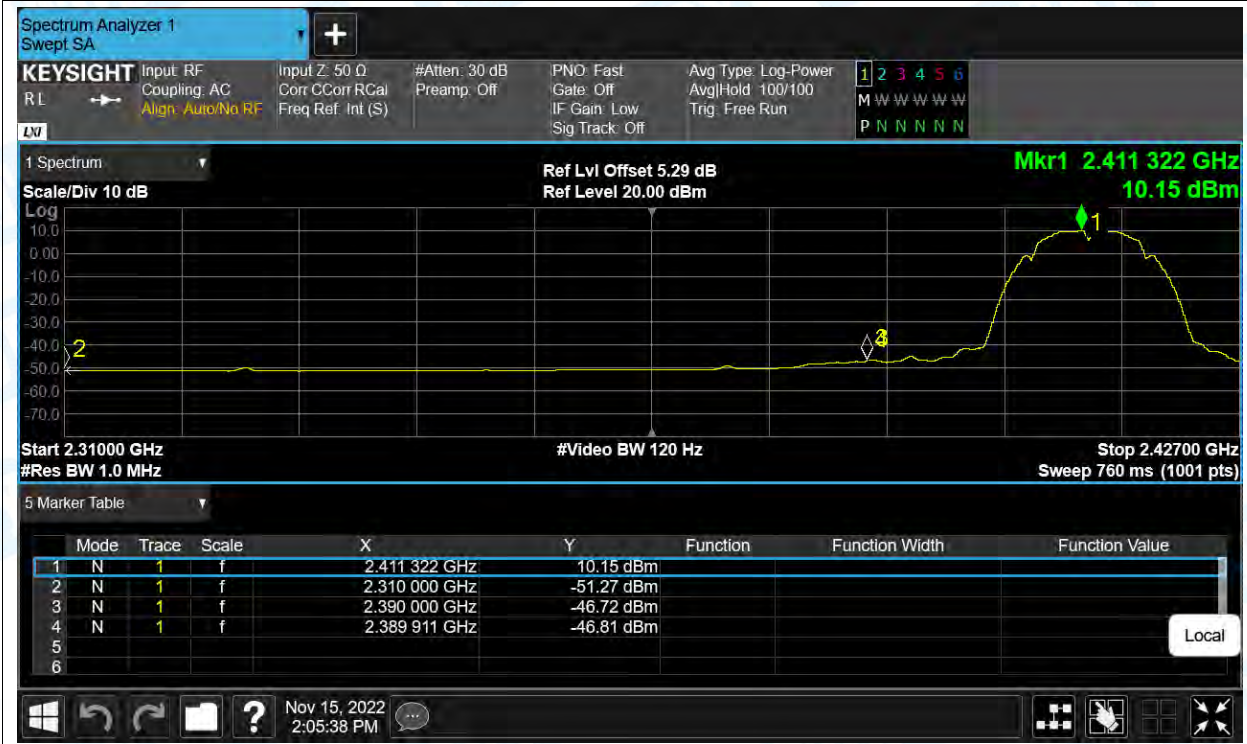
Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	b	2412	Ant1	2310	-41.1	2.62	56.78	Peak	74	Pass
NVNT	b	2412	Ant1	2310	-51.27	2.62	46.61	Average	54	Pass
NVNT	b	2412	Ant1	2387.22	-36.36	2.62	61.52	Peak	74	Pass
NVNT	b	2412	Ant1	2389.911	-46.81	2.62	51.07	Average	54	Pass
NVNT	b	2412	Ant1	2390	-36.34	2.62	61.54	Peak	74	Pass
NVNT	b	2412	Ant1	2390	-46.72	2.62	51.16	Average	54	Pass
NVNT	b	2462	Ant1	2483.5	-37.03	2.62	60.85	Peak	74	Pass
NVNT	b	2462	Ant1	2483.5	-46.12	2.62	51.76	Average	54	Pass
NVNT	b	2462	Ant1	2486.379	-32.81	2.62	65.07	Peak	74	Pass
NVNT	b	2462	Ant1	2484.1	-45.83	2.62	52.05	Average	54	Pass
NVNT	b	2462	Ant1	2500	-38.98	2.62	58.9	Peak	74	Pass
NVNT	b	2462	Ant1	2500	-49.97	2.62	47.91	Average	54	Pass
NVNT	g	2412	Ant1	2310	-41.19	2.62	56.69	Peak	74	Pass
NVNT	g	2412	Ant1	2310	-50.47	2.62	47.41	Average	54	Pass
NVNT	g	2412	Ant1	2388.156	-27.37	2.62	70.51	Peak	74	Pass
NVNT	g	2412	Ant1	2389.677	-47.06	2.62	50.82	Average	54	Pass
NVNT	g	2412	Ant1	2390	-38.57	2.62	59.31	Peak	74	Pass
NVNT	g	2412	Ant1	2390	-47.17	2.62	50.71	Average	54	Pass
NVNT	g	2462	Ant1	2483.5	-37.78	2.62	60.1	Peak	74	Pass
NVNT	g	2462	Ant1	2483.5	-46.58	2.62	51.3	Average	54	Pass
NVNT	g	2462	Ant1	2484.418	-27.98	2.62	69.9	Peak	74	Pass
NVNT	g	2462	Ant1	2483.782	-46.46	2.62	51.42	Average	54	Pass
NVNT	g	2462	Ant1	2500	-40.85	2.62	57.03	Peak	74	Pass
NVNT	g	2462	Ant1	2500	-49.03	2.62	48.85	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2310	-41.96	2.62	55.92	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2310	-50.2	2.62	47.68	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2389.092	-27.17	2.62	70.71	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2389.794	-46.68	2.62	51.2	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2390	-36.91	2.62	60.97	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2390	-46.72	2.62	51.16	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2483.5	-36.74	2.62	61.14	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2483.5	-46.23	2.62	51.65	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2486.379	-30.88	2.62	67	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2483.517	-46.23	2.62	51.65	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2500	-40.18	2.62	57.7	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2500	-48.83	2.62	49.05	Average	54	Pass

Test Graphs

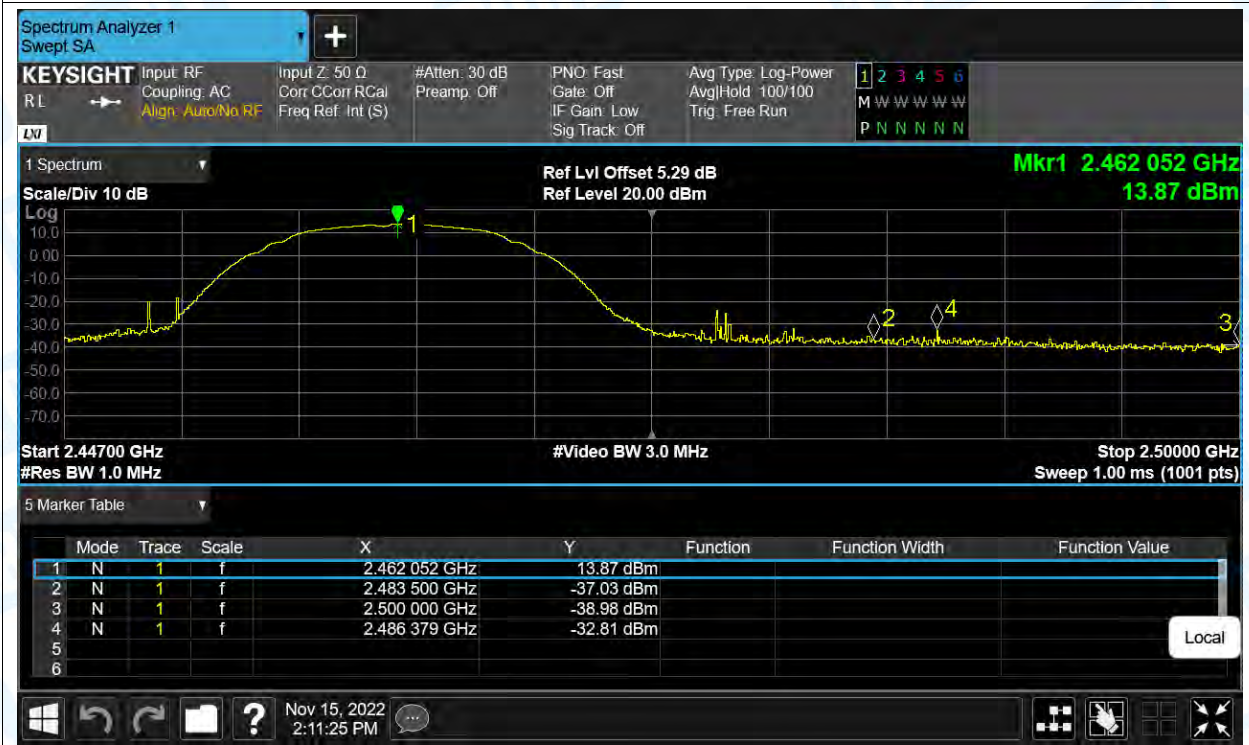
Restrict Band NVNT b 2412MHz Ant1 Peak



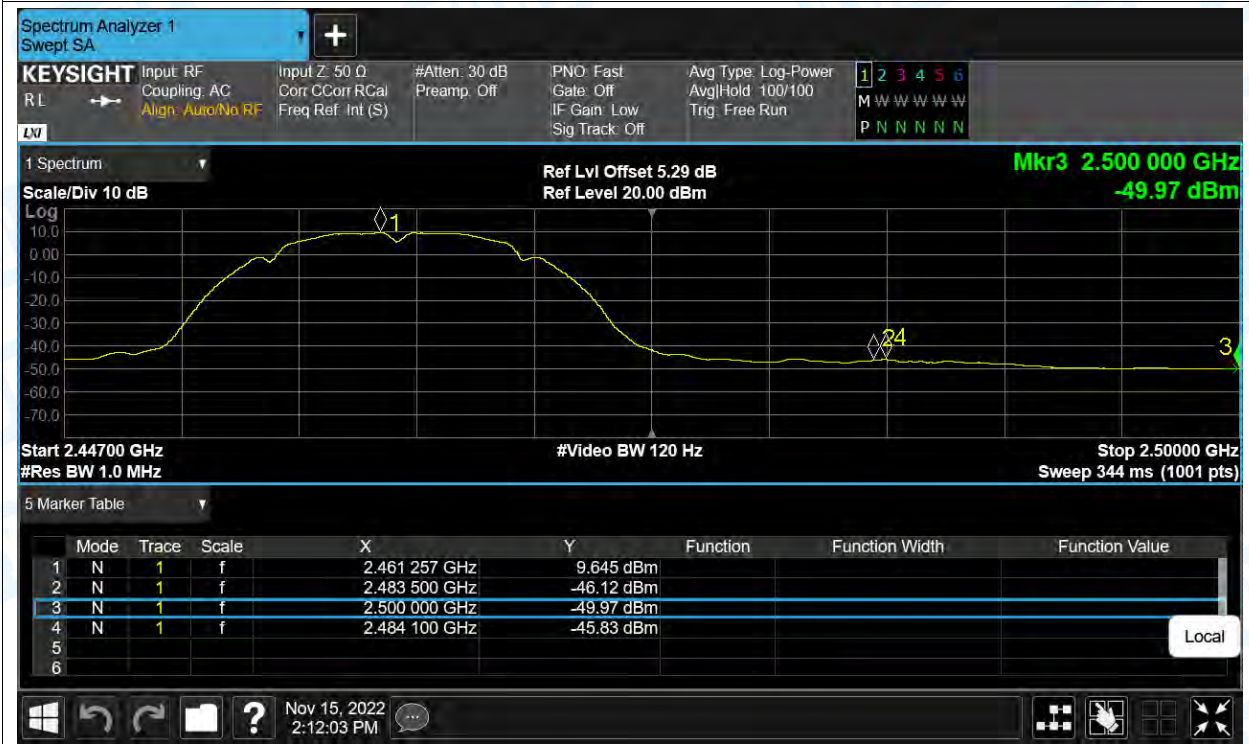
Restrict Band NVNT b 2412MHz Ant1 Average



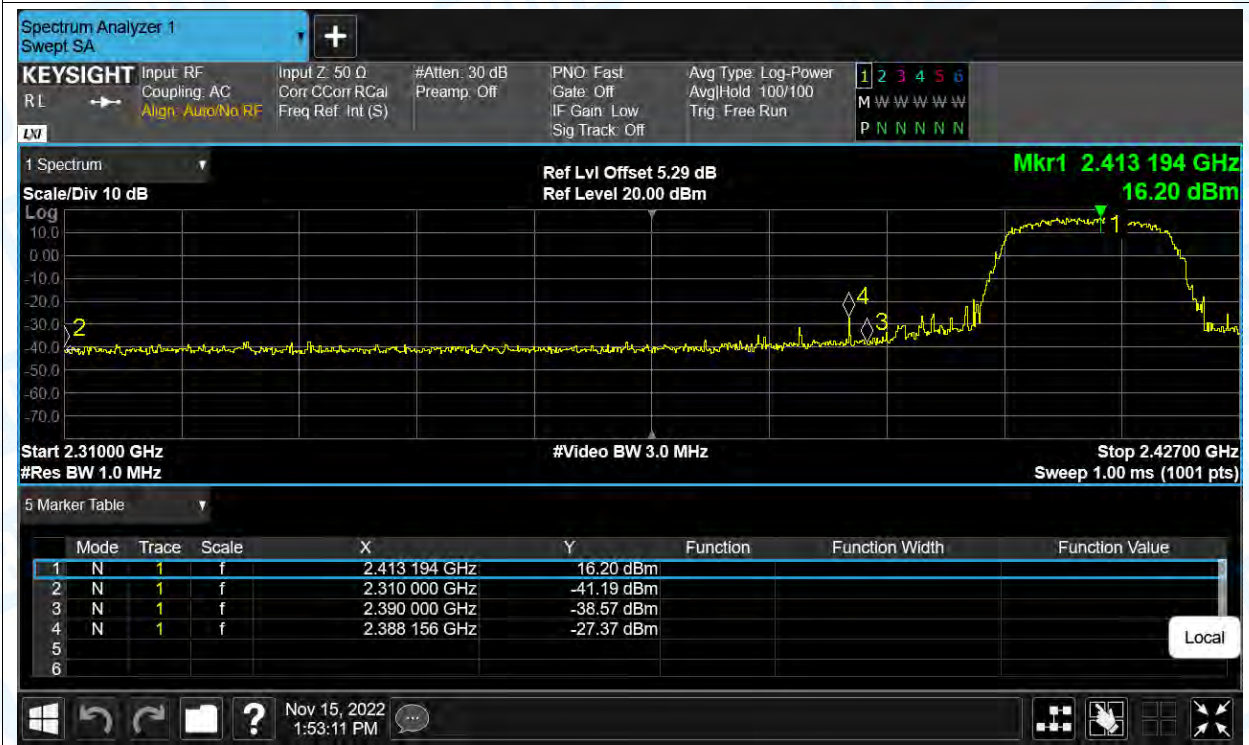
Restrict Band NVNT b 2462MHz Ant1 Peak



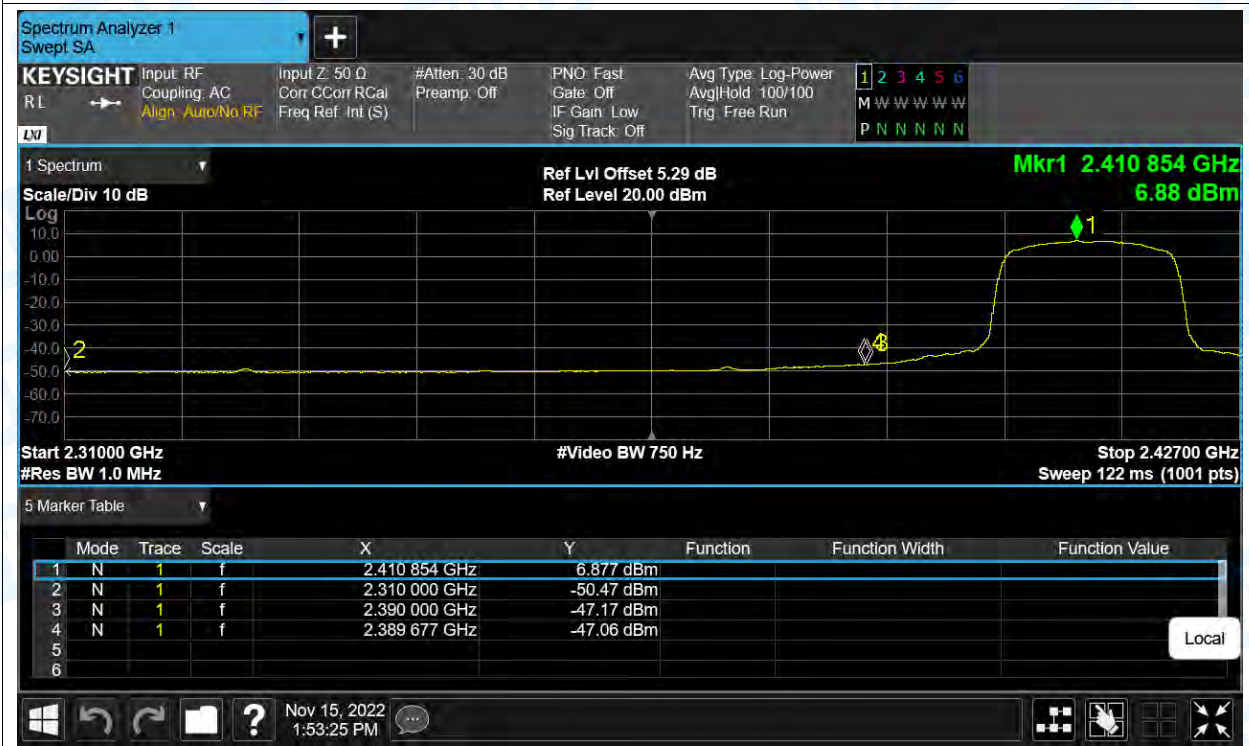
Restrict Band NVNT b 2462MHz Ant1 Average



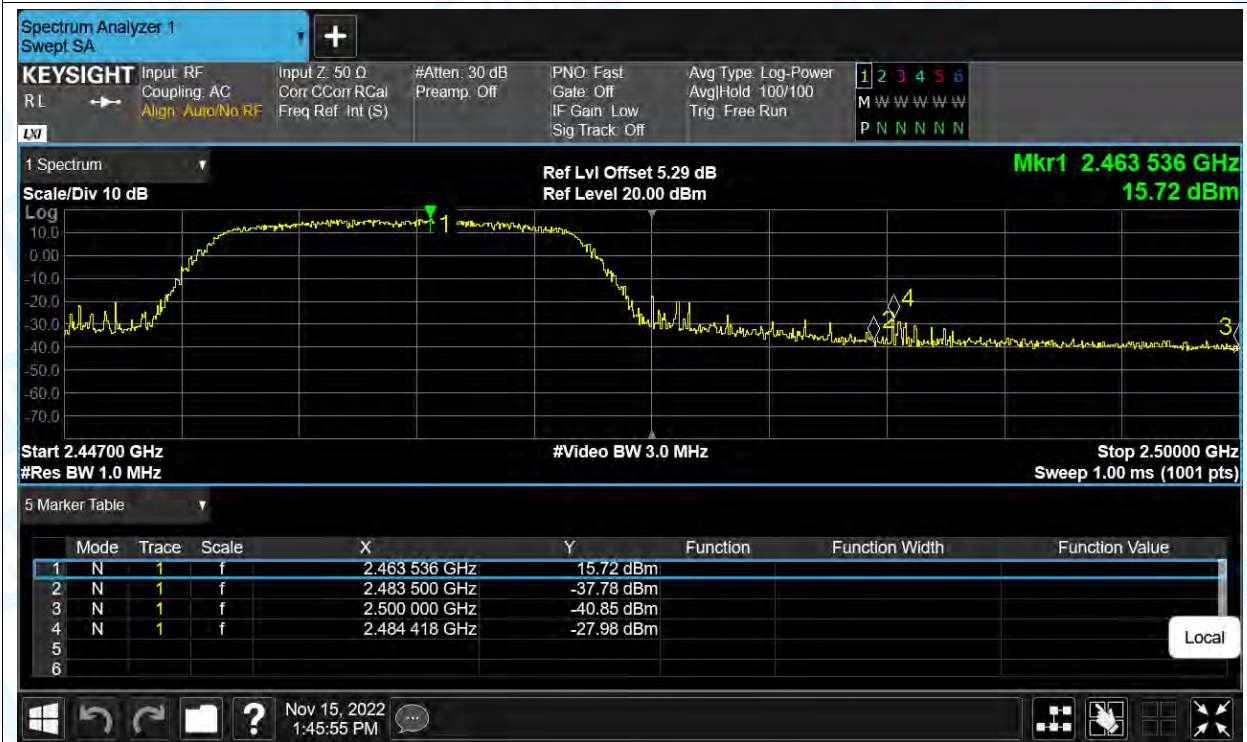
Restrict Band NVNT g 2412MHz Ant1 Peak



Restrict Band NVNT g 2412MHz Ant1 Average



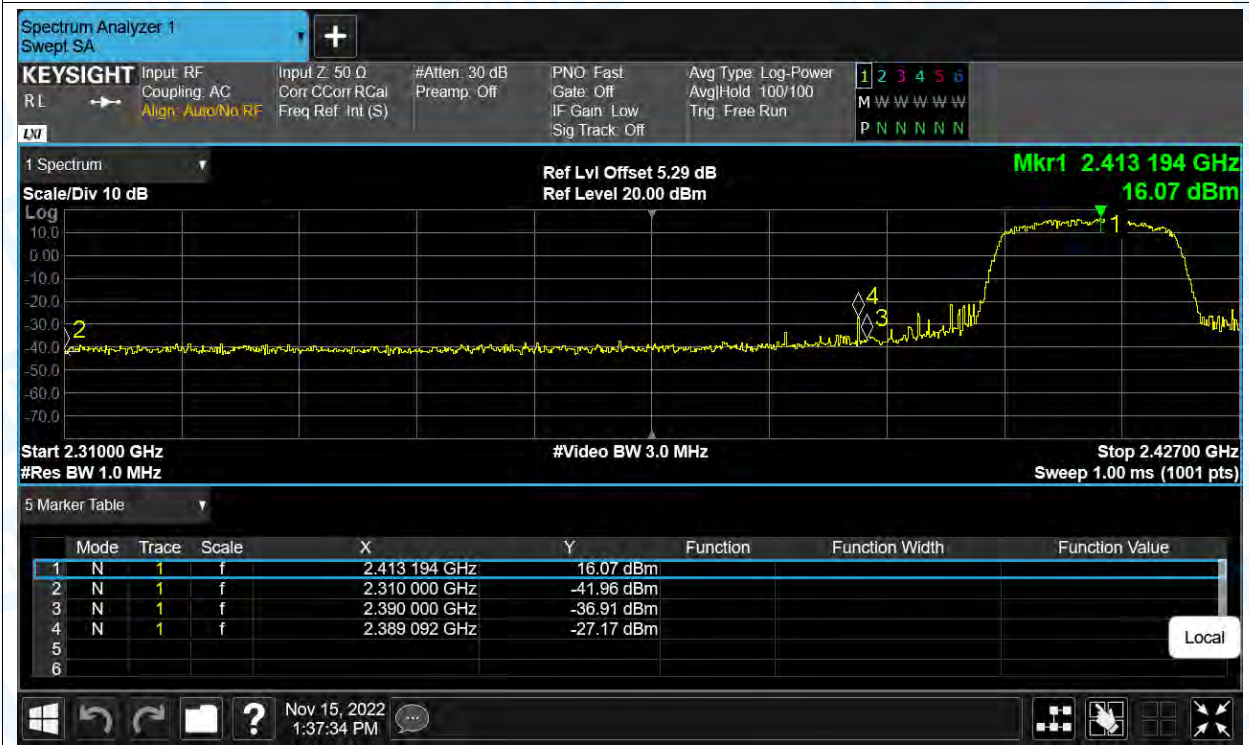
Restrict Band NVNT g 2462MHz Ant1 Peak



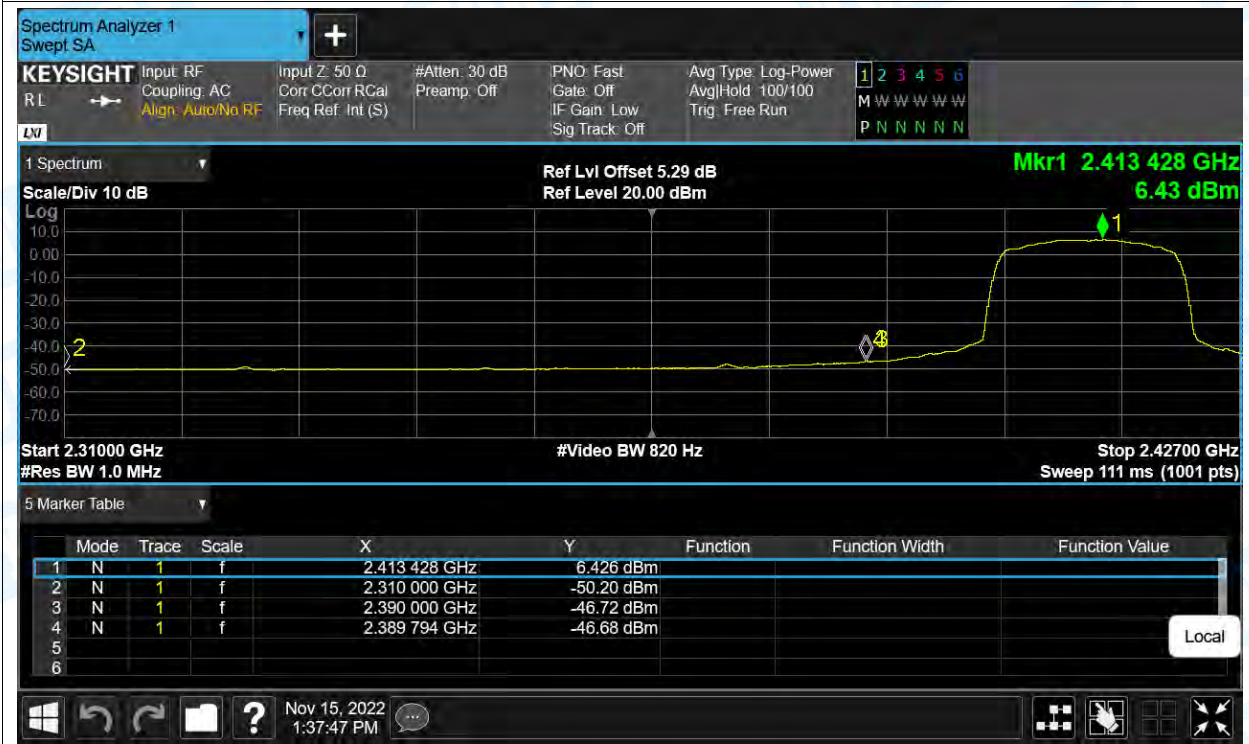
Restrict Band NVNT g 2462MHz Ant1 Average



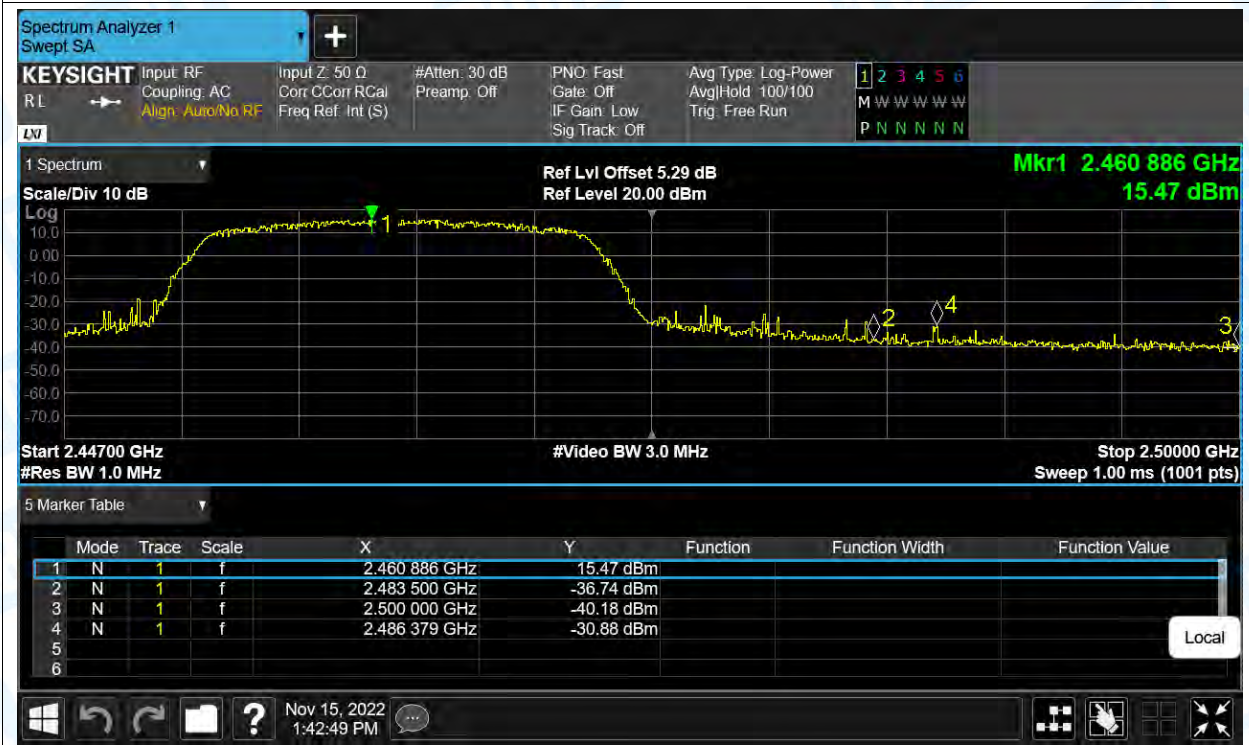
Restrict Band NVNT n(HT20) 2412MHz Ant1 Peak



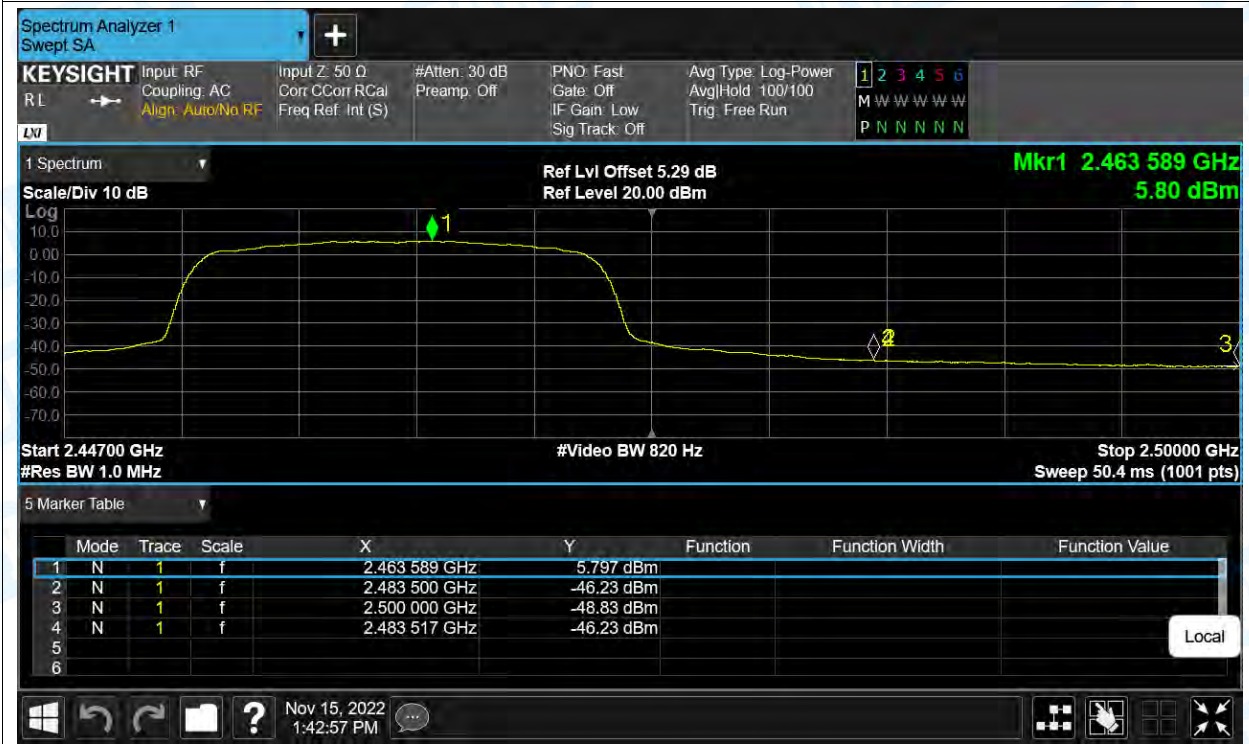
Restrict Band NVNT n(HT20) 2412MHz Ant1 Average



Restrict Band NVNT n(HT20) 2462MHz Ant1 Peak



Restrict Band NVNT n(HT20) 2462MHz Ant1 Average



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