

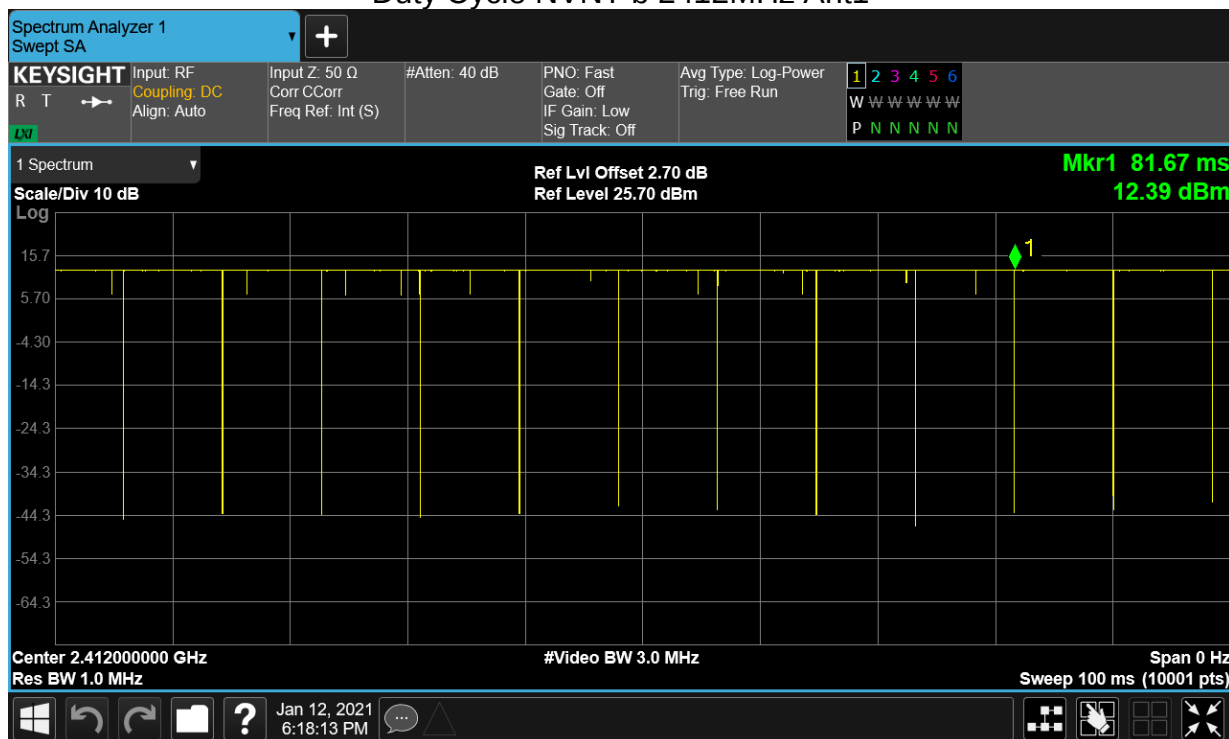
Appendix A - 2.4G WIFI

Test Data

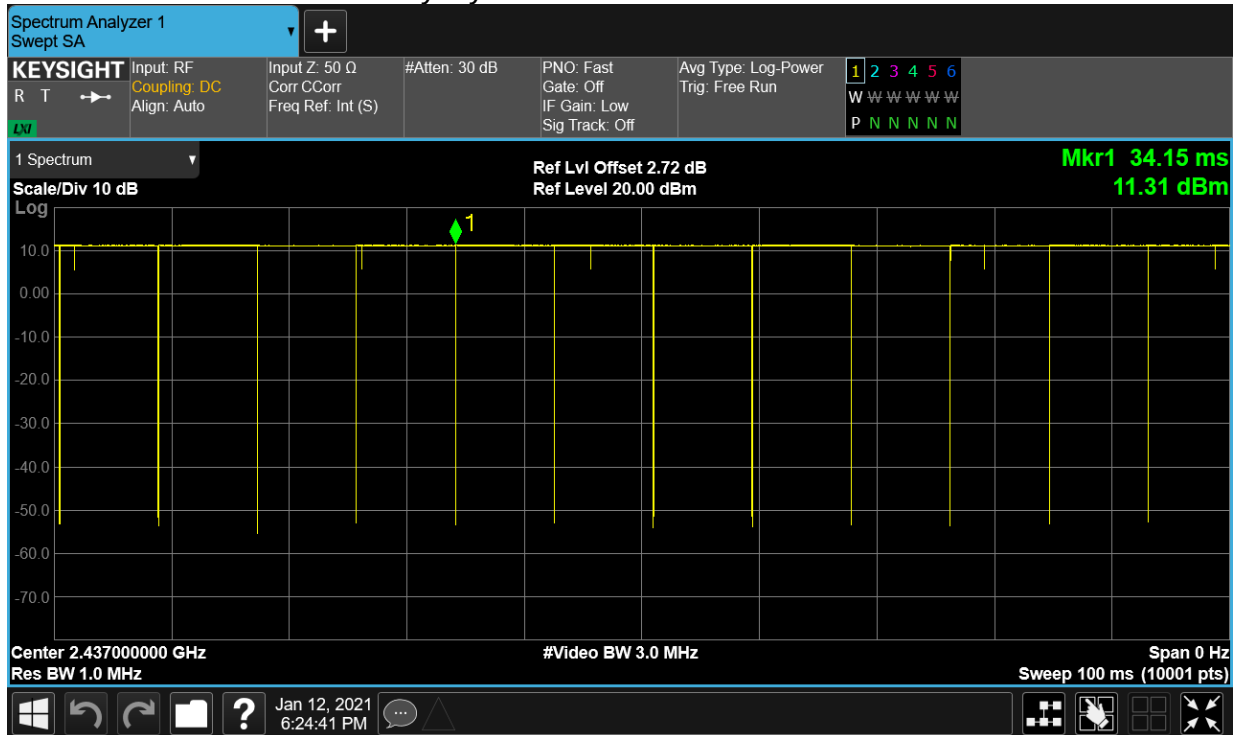
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	b	2412	Ant1	99.7	0.01
NVNT	b	2437	Ant1	99.68	0.01
NVNT	b	2462	Ant1	99.71	0.01
NVNT	g	2412	Ant1	97.76	0.1
NVNT	g	2437	Ant1	97.74	0.1
NVNT	g	2462	Ant1	97.72	0.1
NVNT	n20	2412	Ant1	97.57	0.11
NVNT	n20	2437	Ant1	97.6	0.11
NVNT	n20	2462	Ant1	97.57	0.11
NVNT	n40	2422	Ant1	95.32	0.21
NVNT	n40	2437	Ant1	95.36	0.21
NVNT	n40	2452	Ant1	95.28	0.21

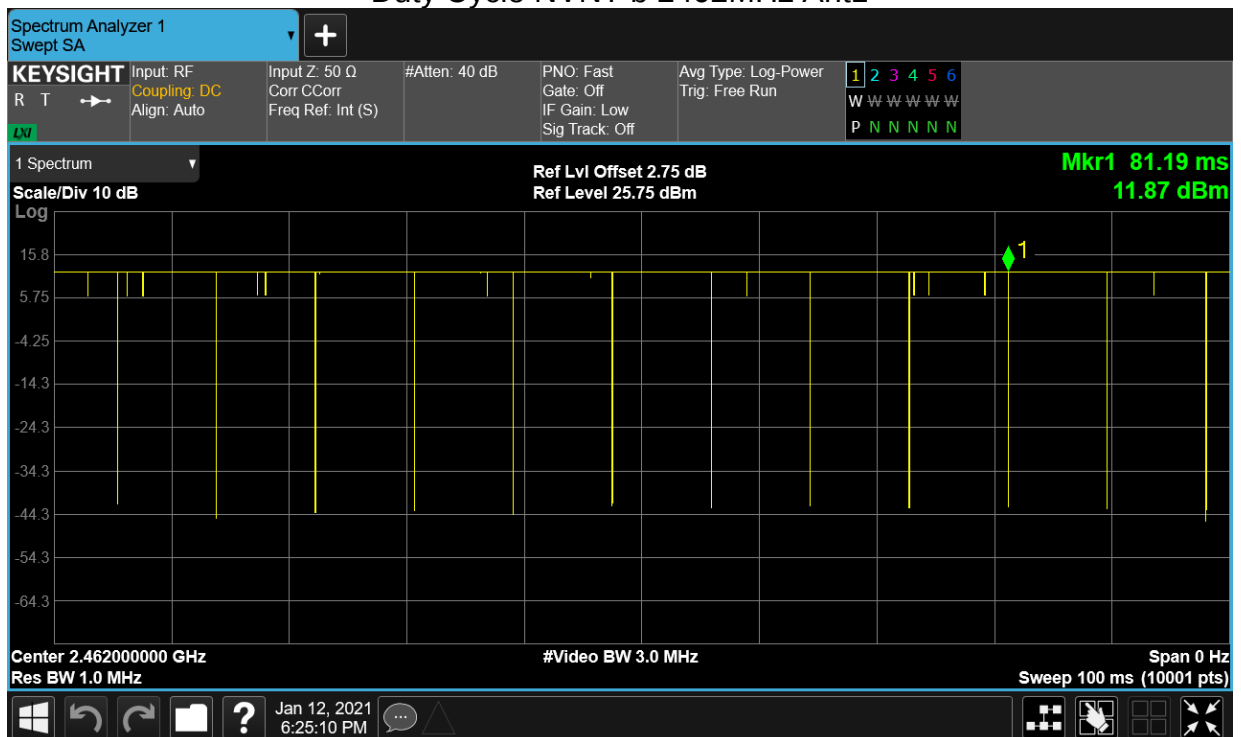
Duty Cycle NVNT b 2412MHz Ant1



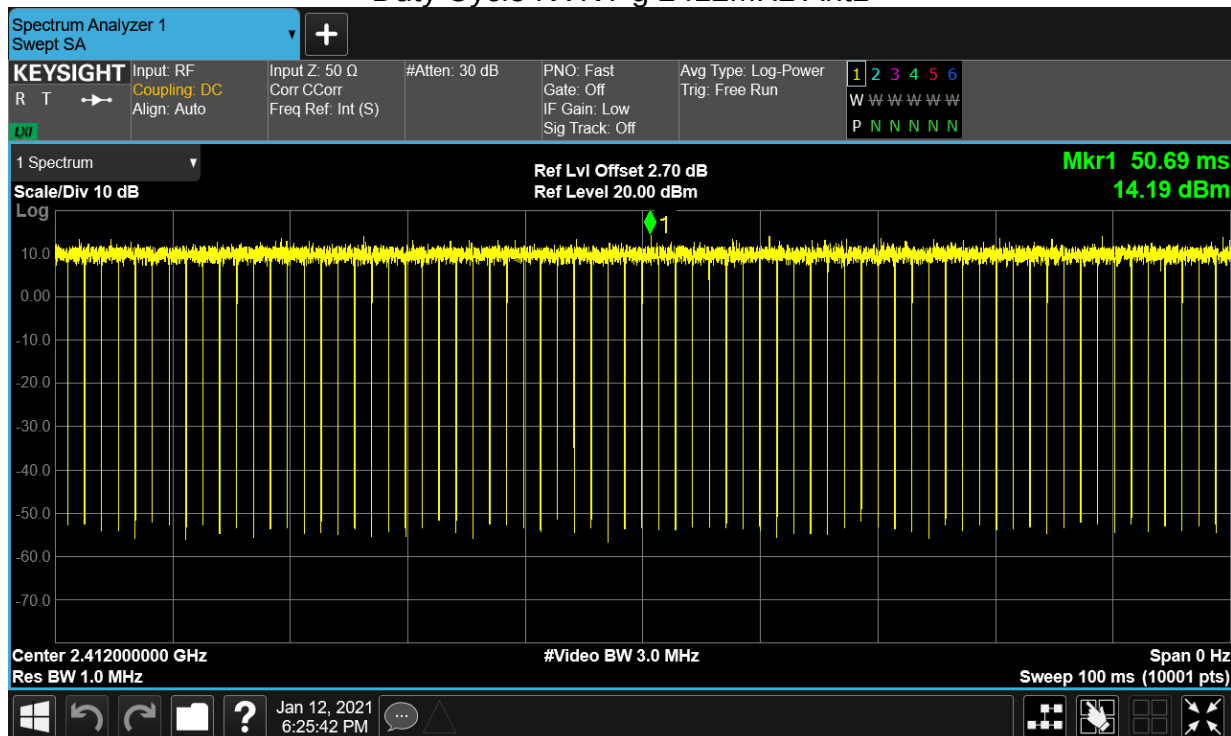
Duty Cycle NVNT b 2437MHz Ant1



Duty Cycle NVNT b 2462MHz Ant1



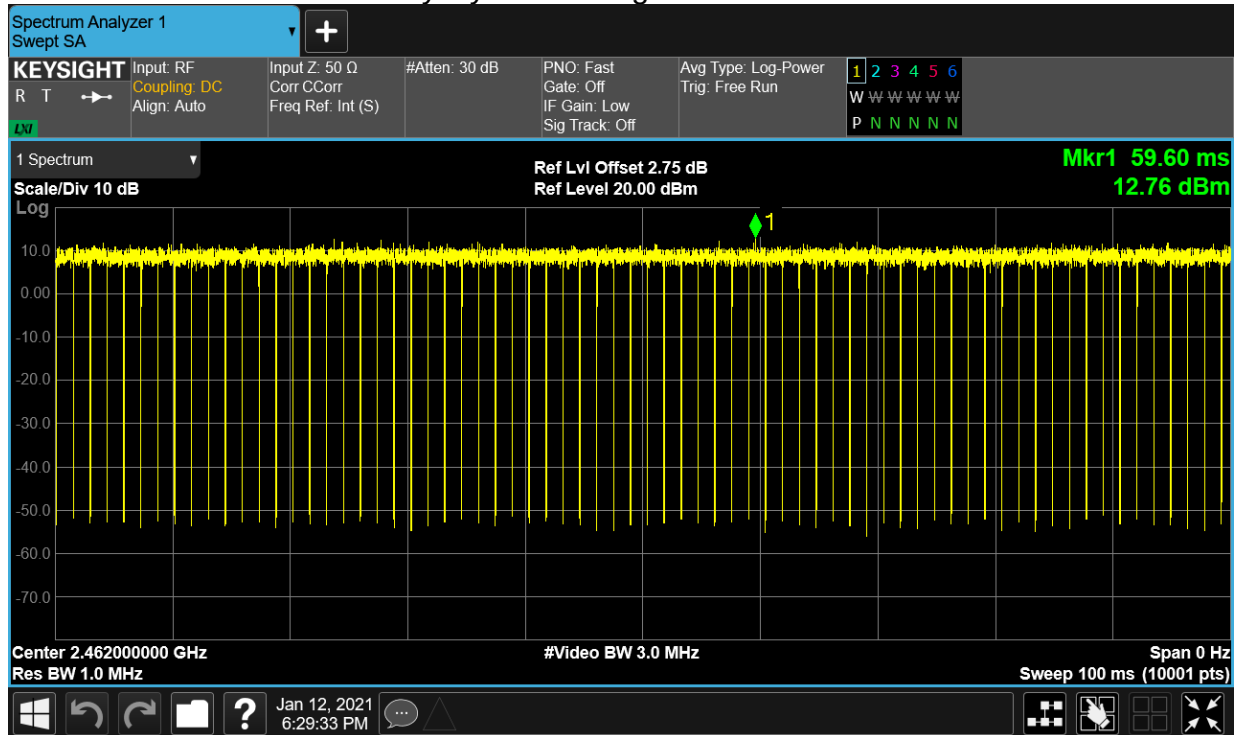
Duty Cycle NVNT g 2412MHz Ant1



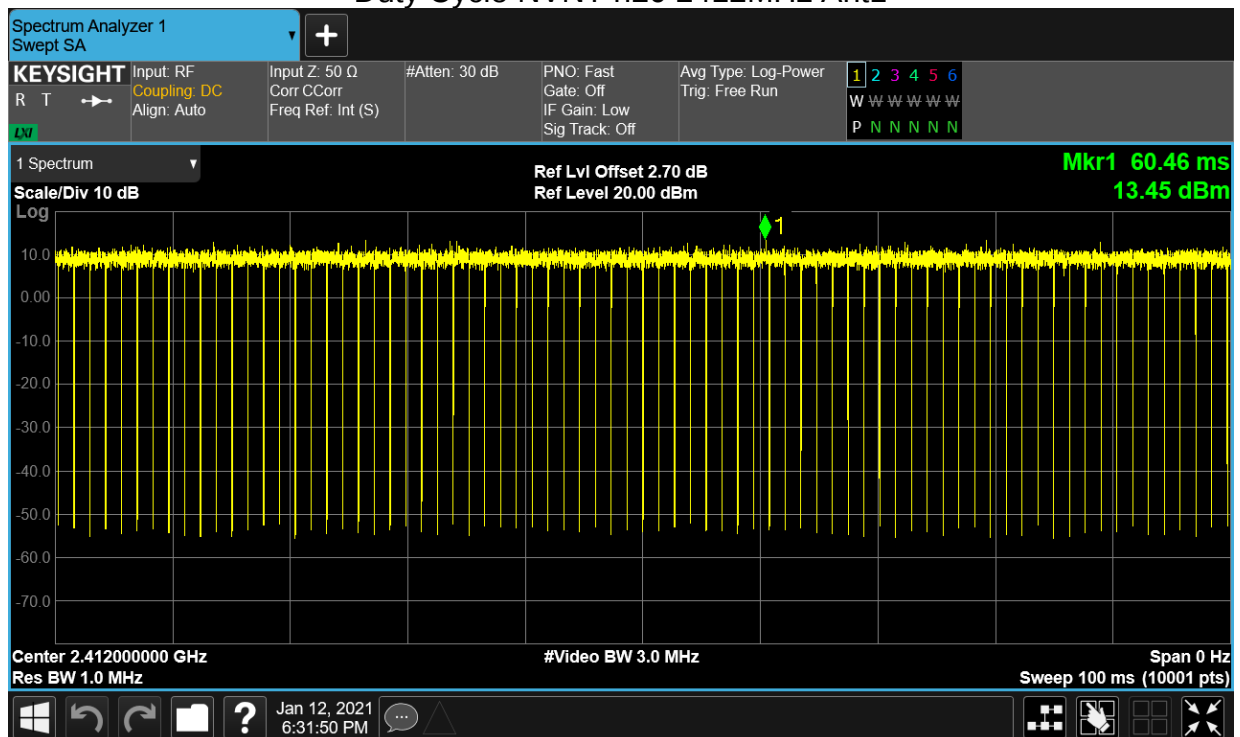
Duty Cycle NVNT g 2437MHz Ant1



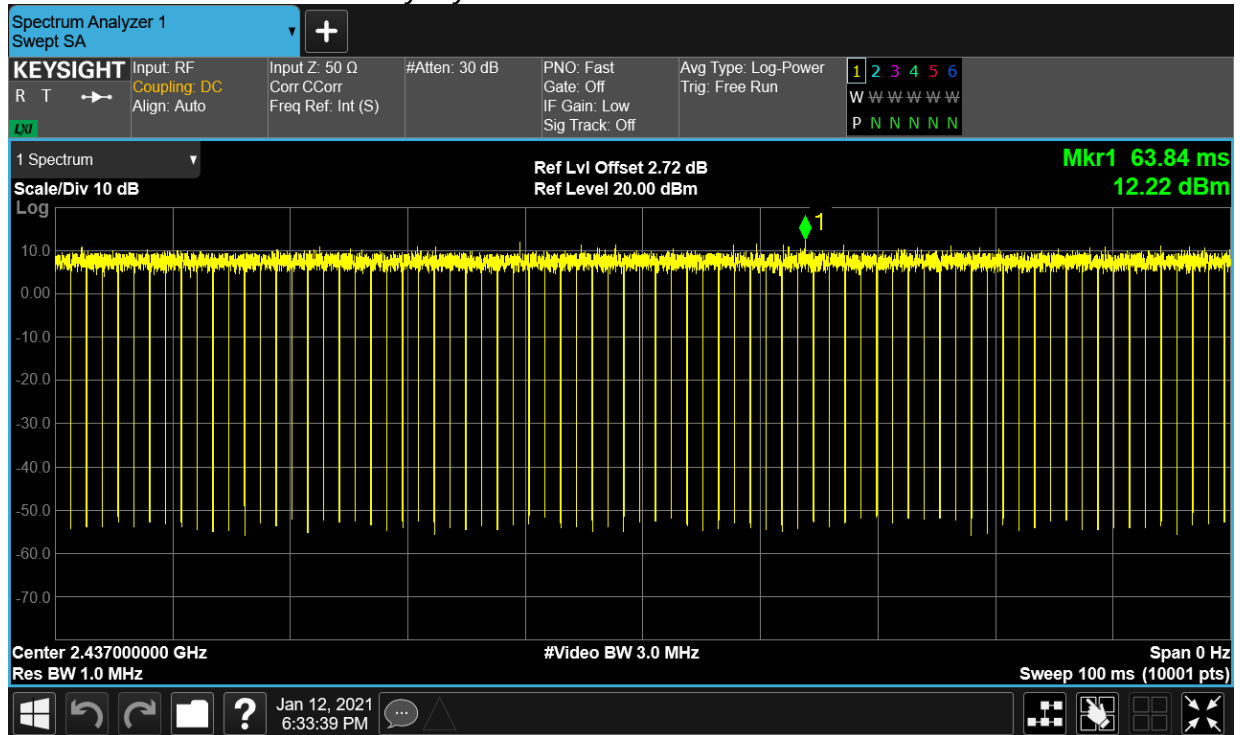
Duty Cycle NVNT g 2462MHz Ant1



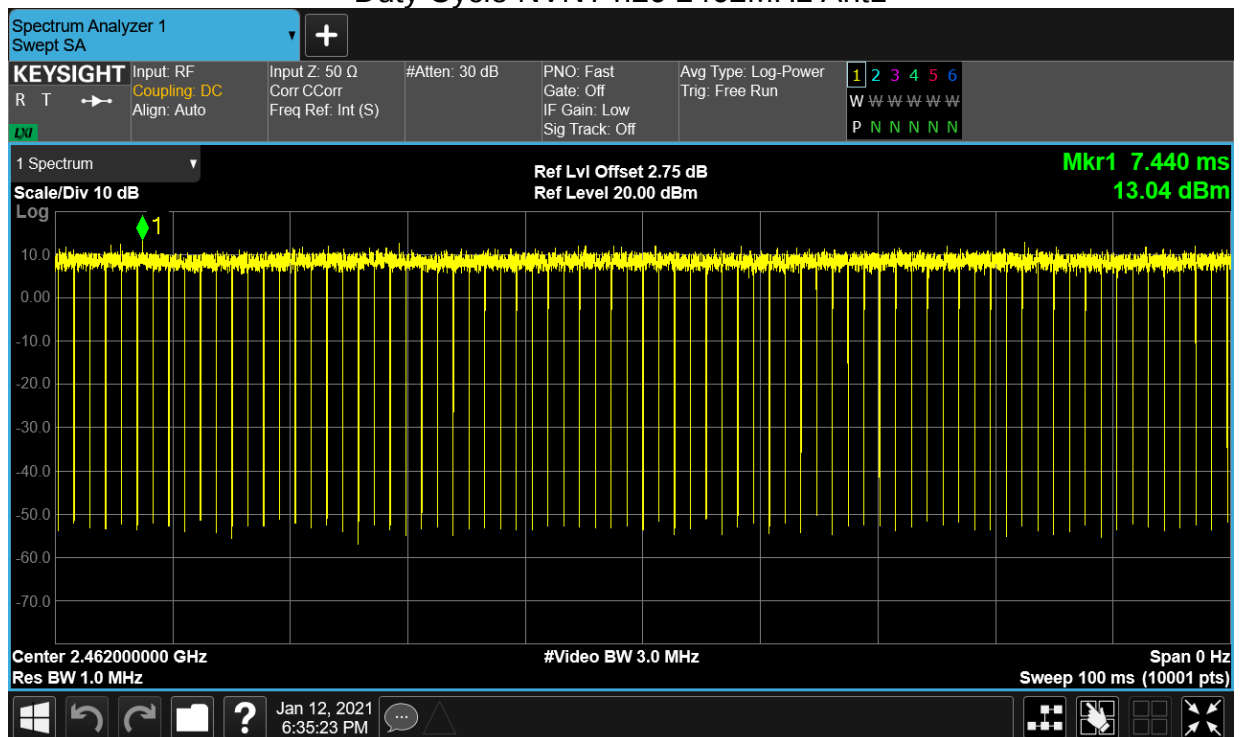
Duty Cycle NVNT n20 2412MHz Ant1



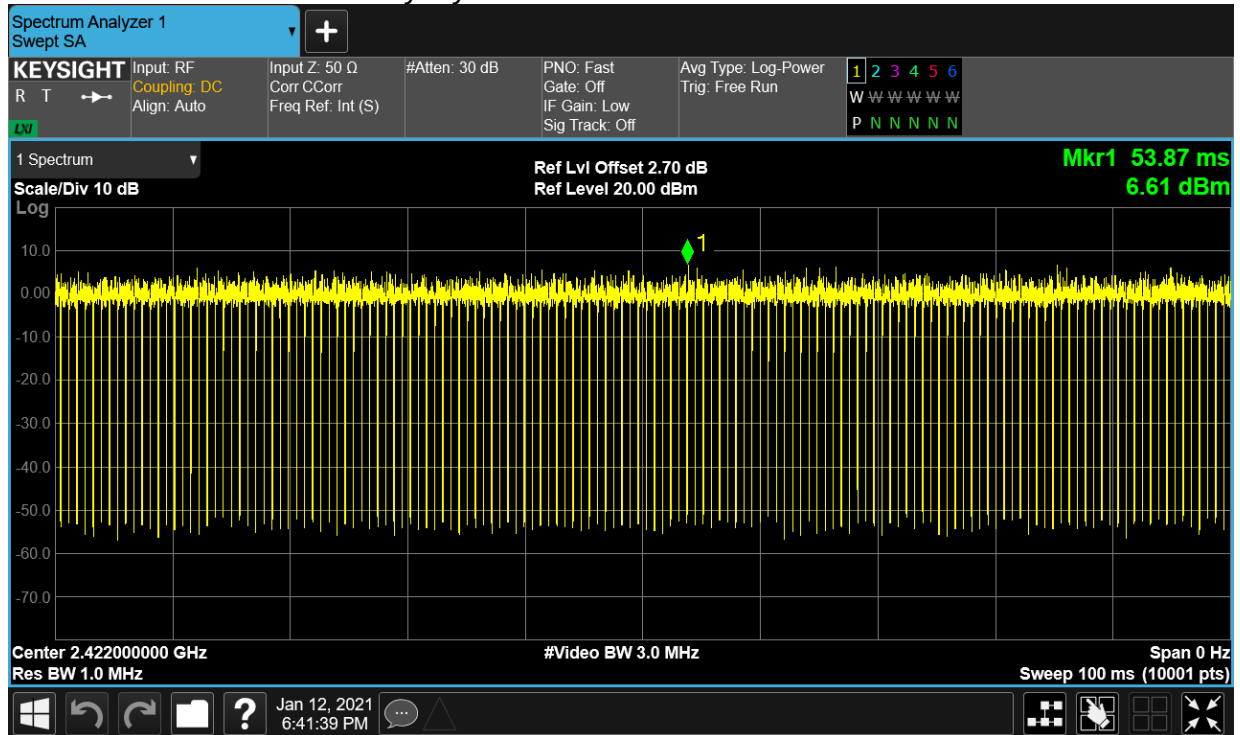
Duty Cycle NVNT n20 2437MHz Ant1



Duty Cycle NVNT n20 2462MHz Ant1



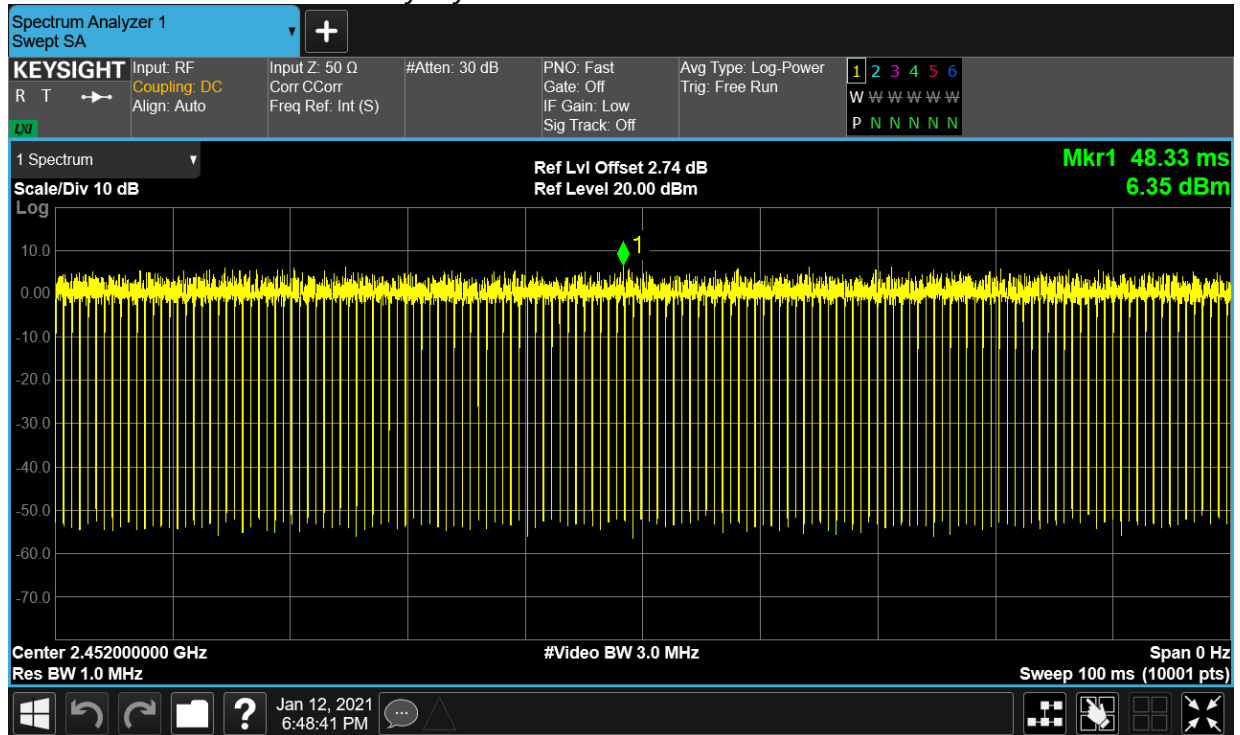
Duty Cycle NVNT n40 2422MHz Ant1



Duty Cycle NVNT n40 2437MHz Ant1



Duty Cycle NVNT n40 2452MHz Ant1



Maximum Conducted Output Power

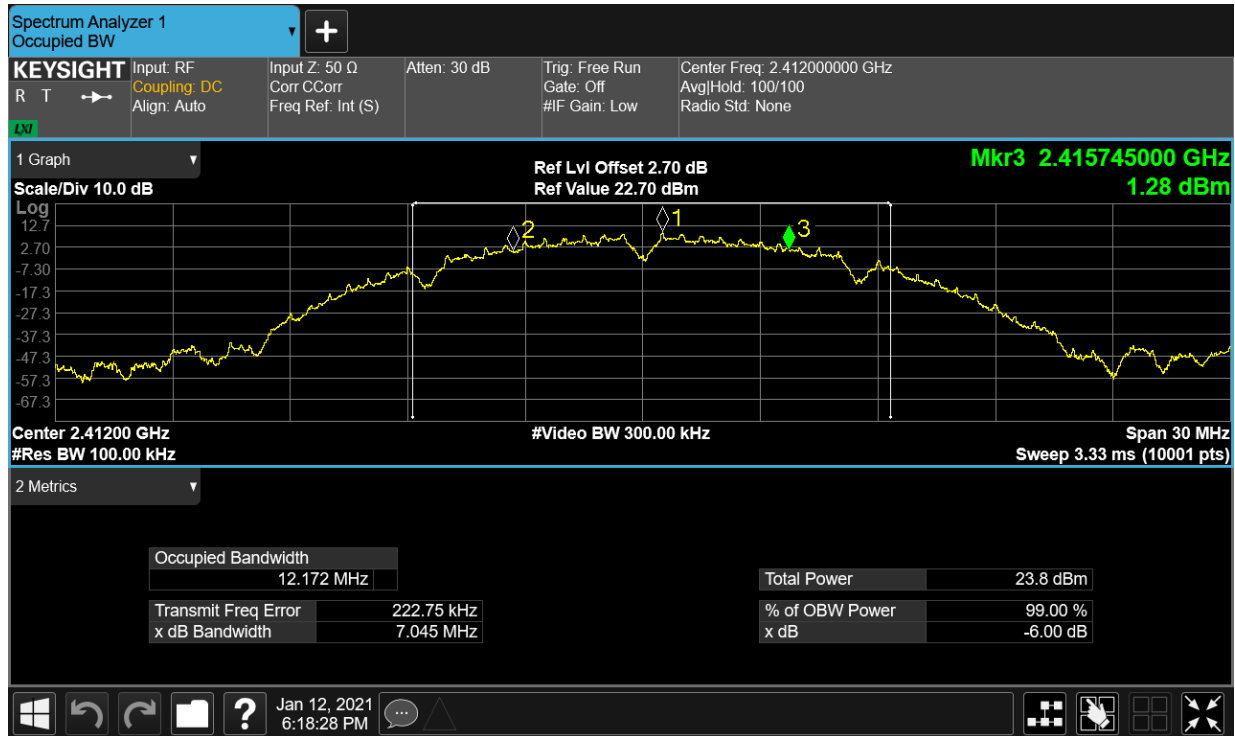
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2402	Ant1	16.72	0	16.72	30	Pass
NVNT	b	2437	Ant1	16.34	0.01	16.35	30	Pass
NVNT	b	2462	Ant1	16.36	0.01	16.37	30	Pass
NVNT	g	2412	Ant1	14.38	0.1	14.48	30	Pass
NVNT	g	2437	Ant1	14.25	0.1	14.35	30	Pass
NVNT	g	2462	Ant1	14.31	0.1	14.41	30	Pass
NVNT	n20	2412	Ant1	14.25	0.11	14.36	30	Pass
NVNT	n20	2437	Ant1	14.18	0.11	14.29	30	Pass
NVNT	n20	2462	Ant1	14.1	0.11	14.21	30	Pass
NVNT	n40	2422	Ant1	13.63	0.21	13.84	30	Pass
NVNT	n40	2437	Ant1	13.35	0.21	13.56	30	Pass
NVNT	n40	2452	Ant1	13.45	0.21	13.66	30	Pass

-6dB Bandwidth

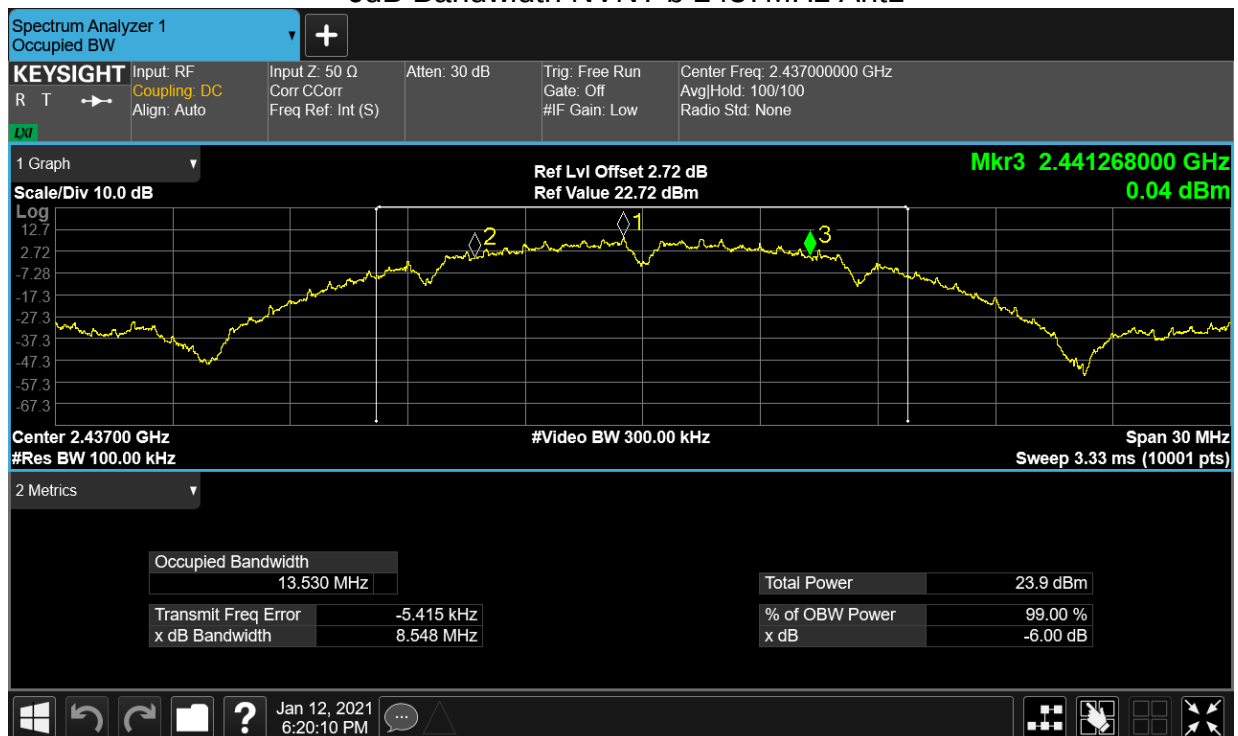
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	7.045	0.5	Pass
NVNT	b	2437	Ant1	8.548	0.5	Pass
NVNT	b	2462	Ant1	7.551	0.5	Pass
NVNT	g	2412	Ant1	13.796	0.5	Pass
NVNT	g	2437	Ant1	15.086	0.5	Pass
NVNT	g	2462	Ant1	14.152	0.5	Pass
NVNT	n20	2412	Ant1	13.831	0.5	Pass
NVNT	n20	2437	Ant1	16.012	0.5	Pass

NVNT	n20	2462	Ant1	11.677	0.5	Pass
NVNT	n40	2422	Ant1	20.055	0.5	Pass
NVNT	n40	2437	Ant1	36.37	0.5	Pass
NVNT	n40	2452	Ant1	22.551	0.5	Pass

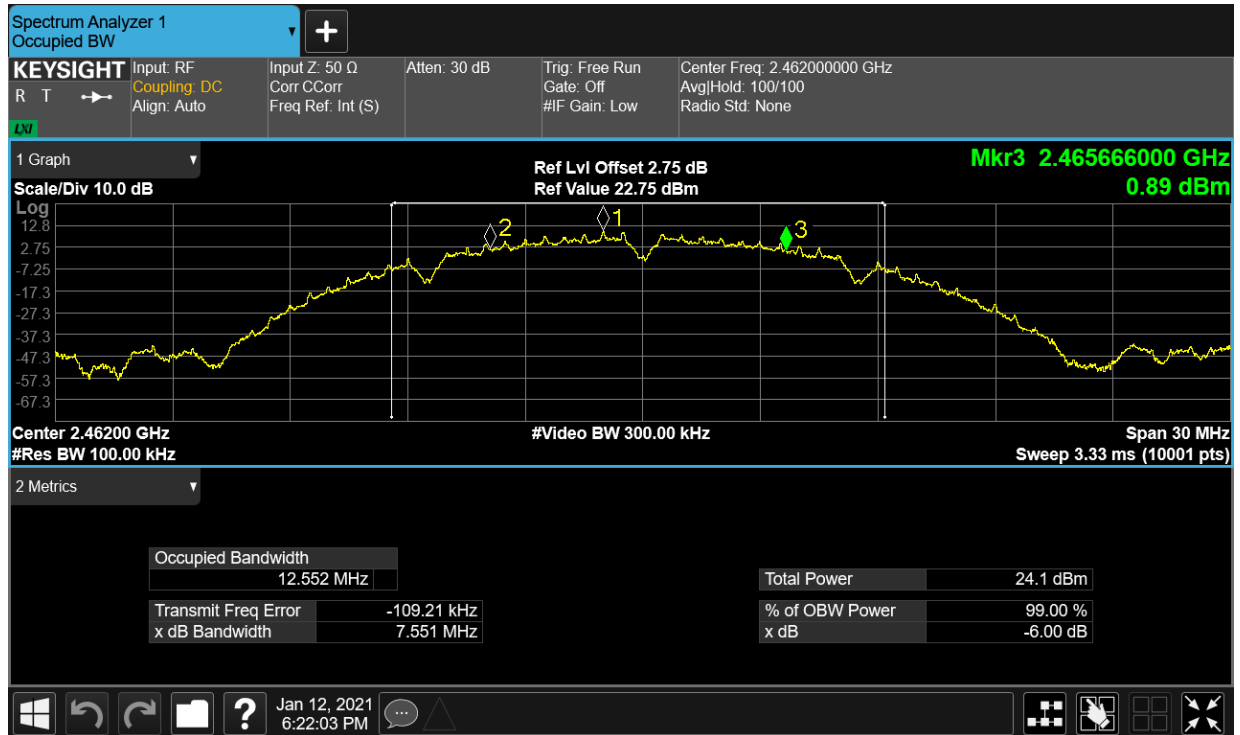
-6dB Bandwidth NVNT b 2412MHz Ant1



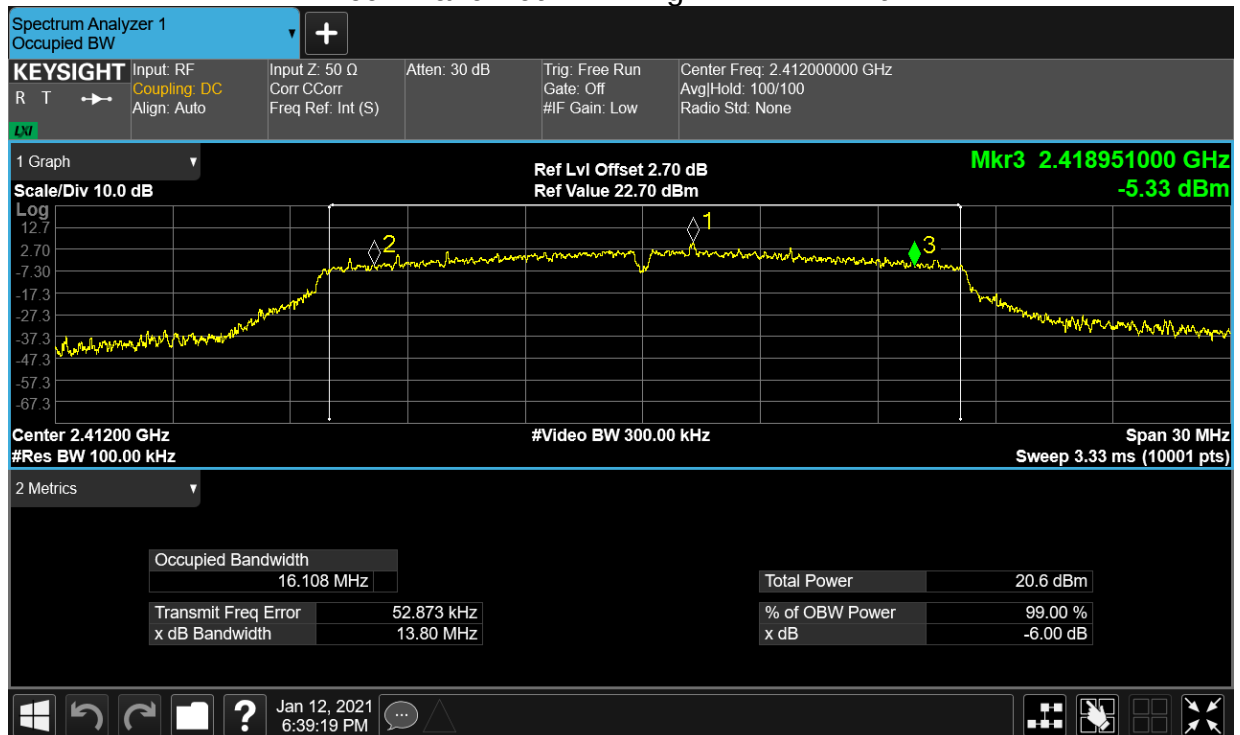
-6dB Bandwidth NVNT b 2437MHz Ant1



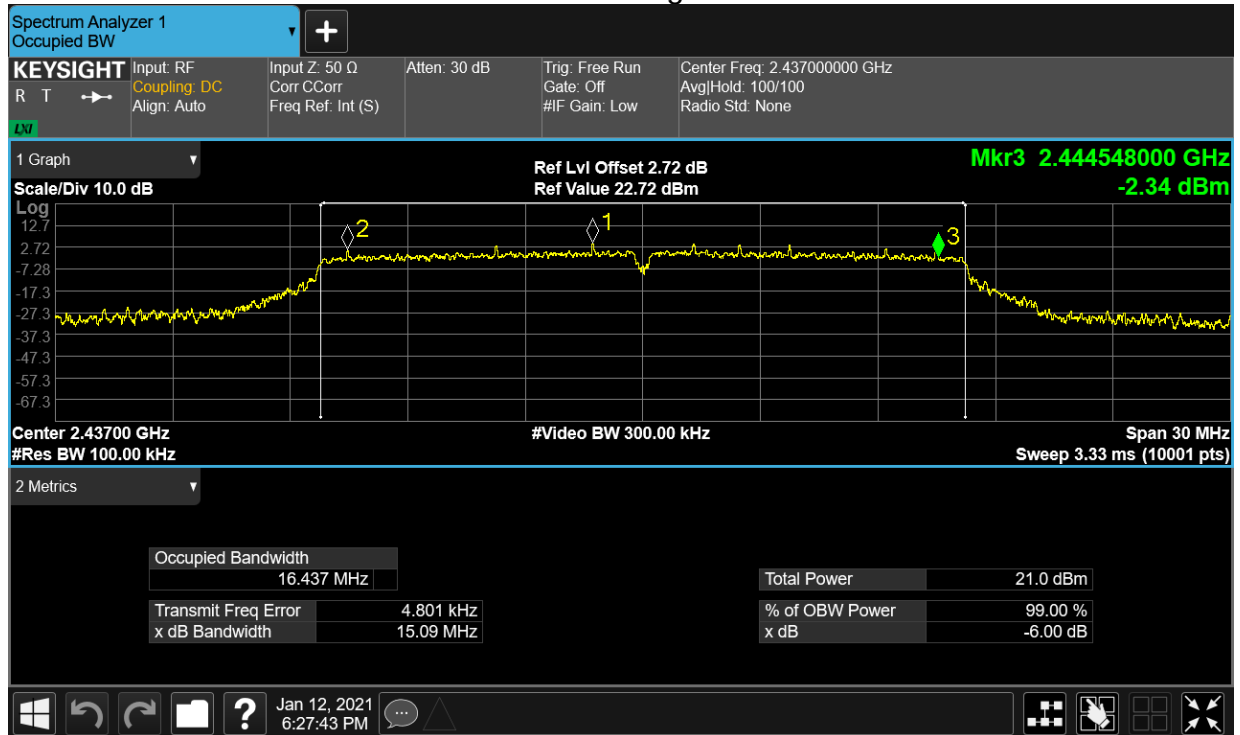
-6dB Bandwidth NVNT b 2462MHz Ant1



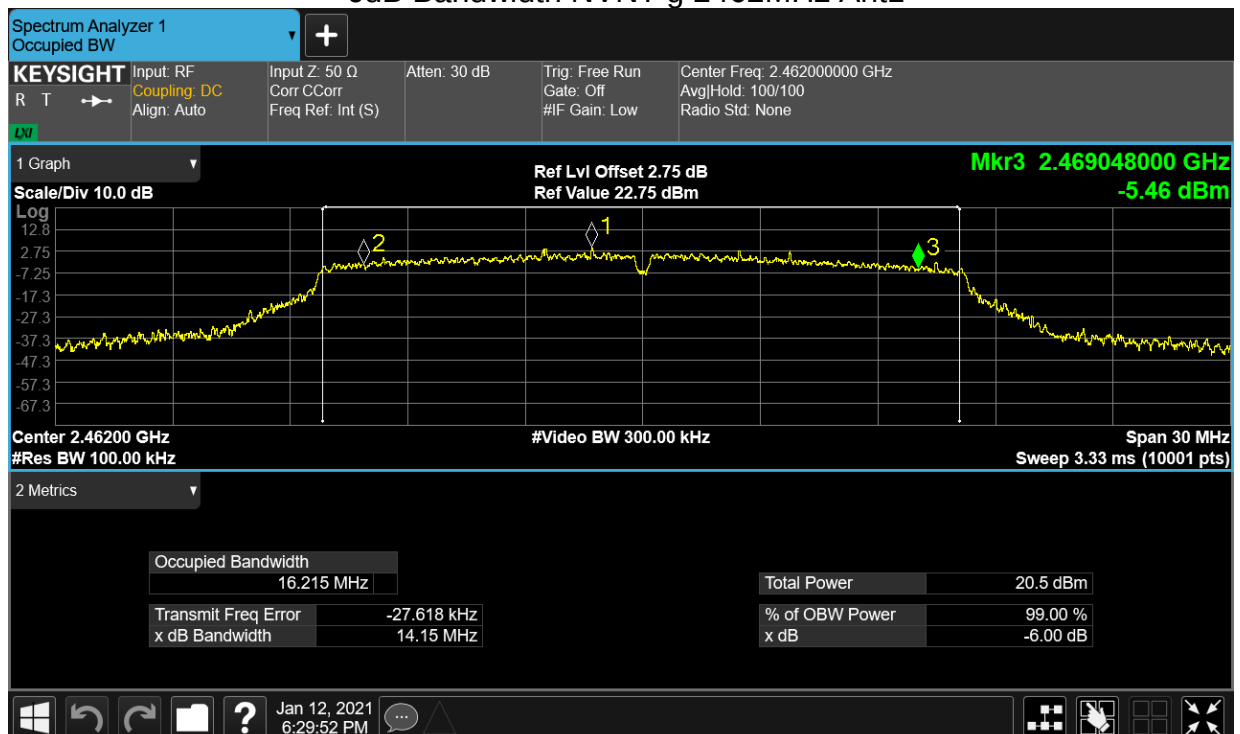
-6dB Bandwidth NVNT g 2412MHz Ant1



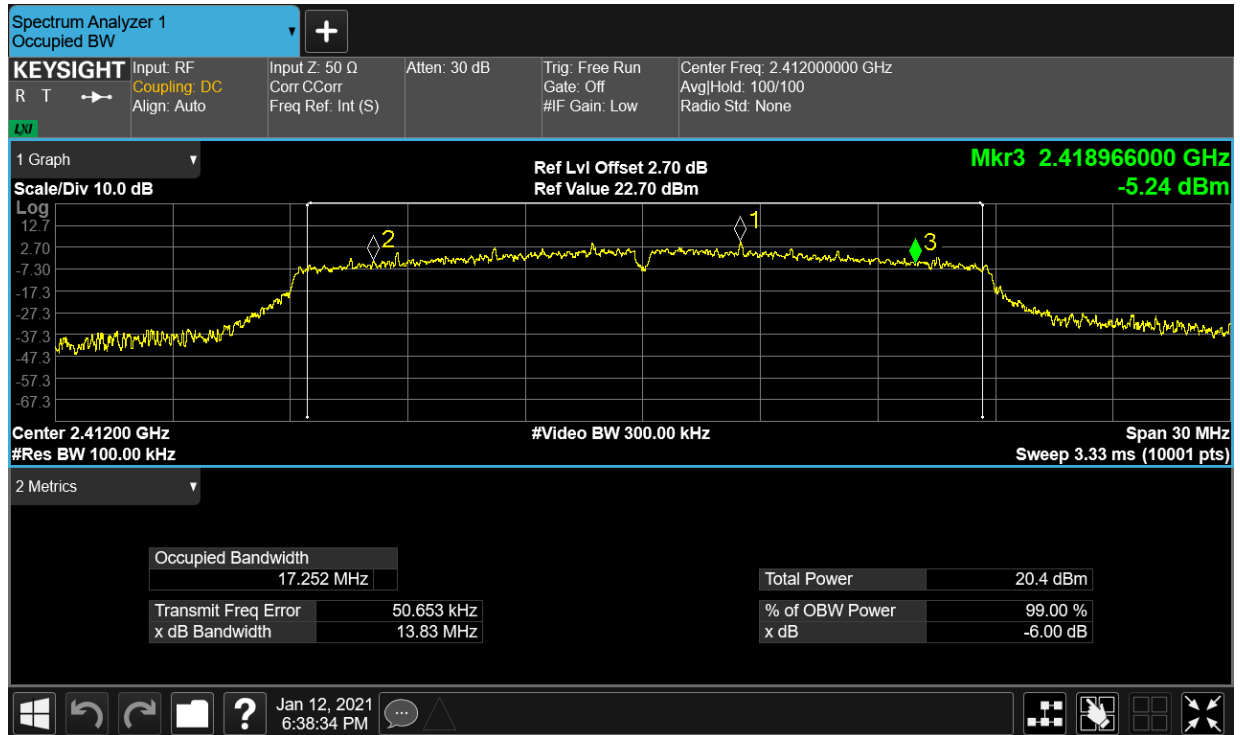
-6dB Bandwidth NVNT g 2437MHz Ant1



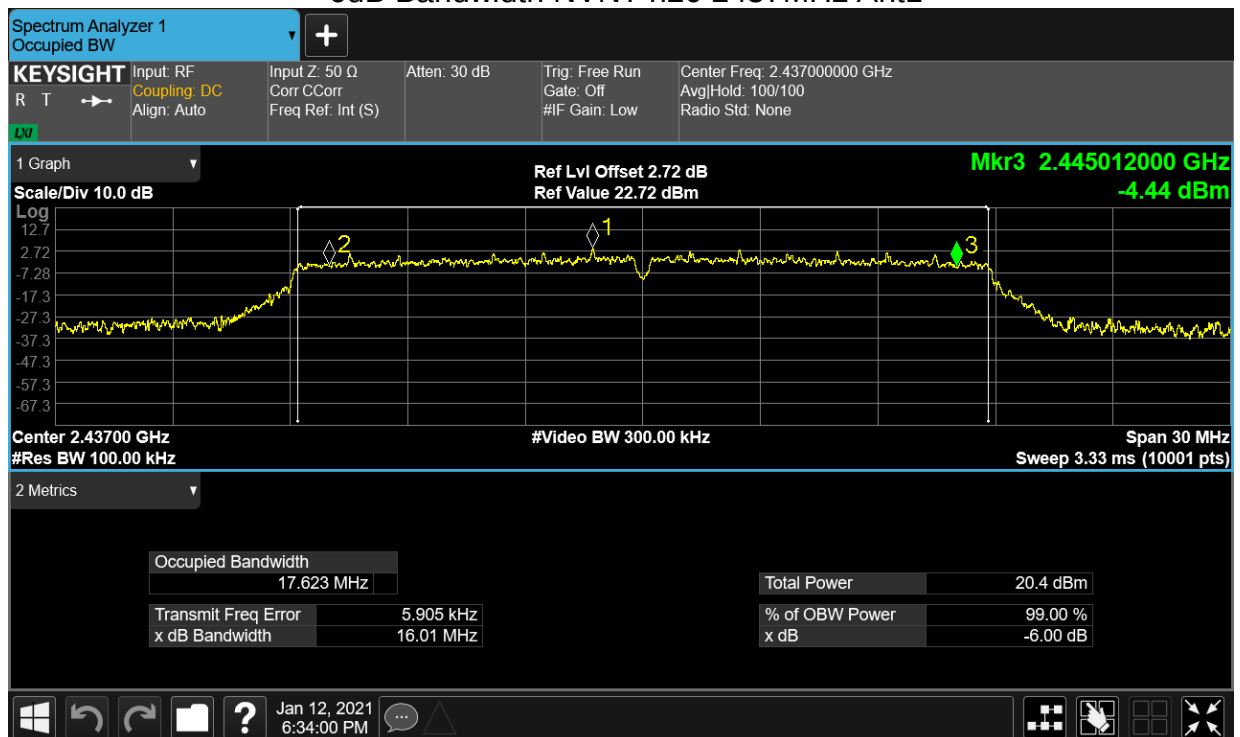
-6dB Bandwidth NVNT g 2462MHz Ant1



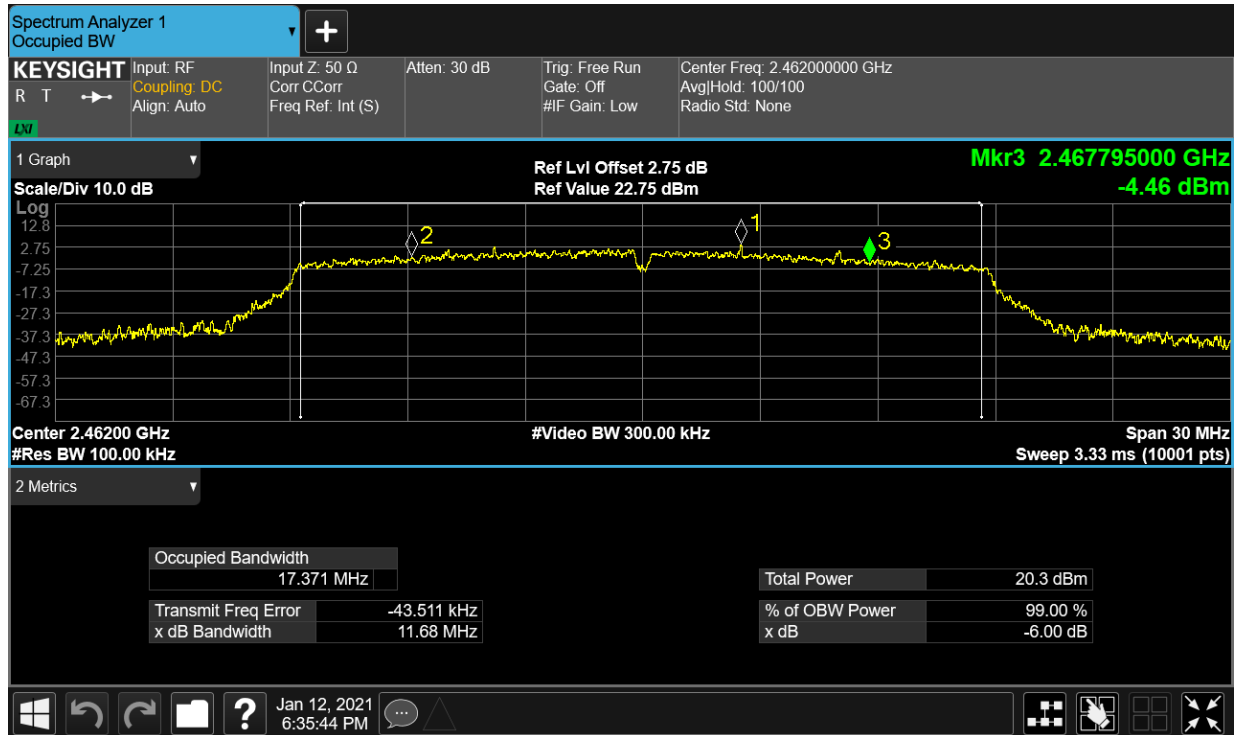
-6dB Bandwidth NVNT n20 2412MHz Ant1



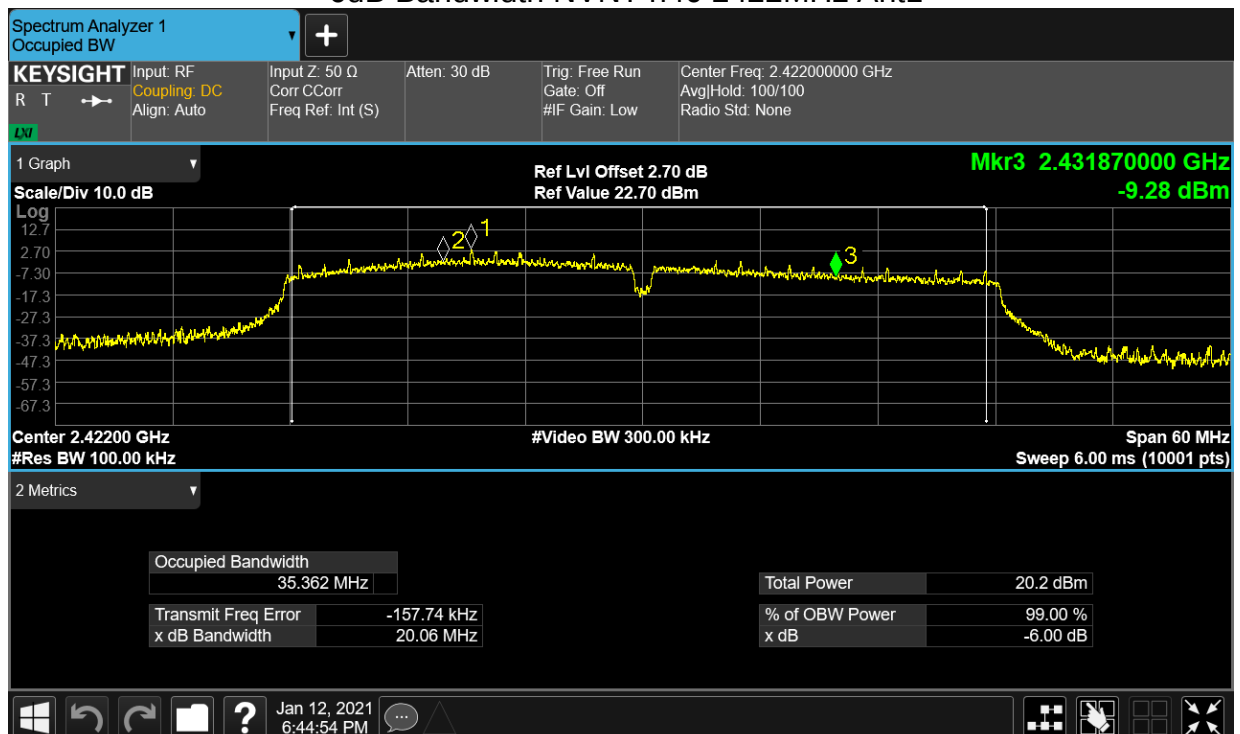
-6dB Bandwidth NVNT n20 2437MHz Ant1



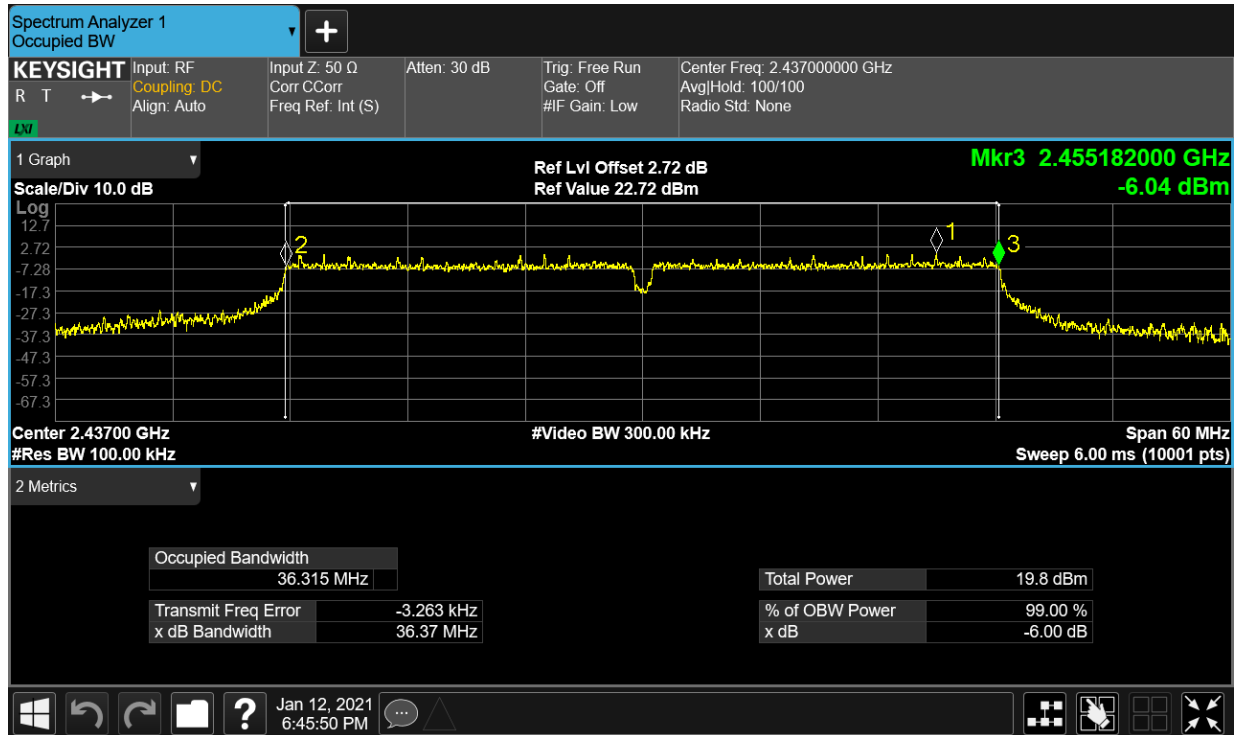
-6dB Bandwidth NVNT n20 2462MHz Ant1



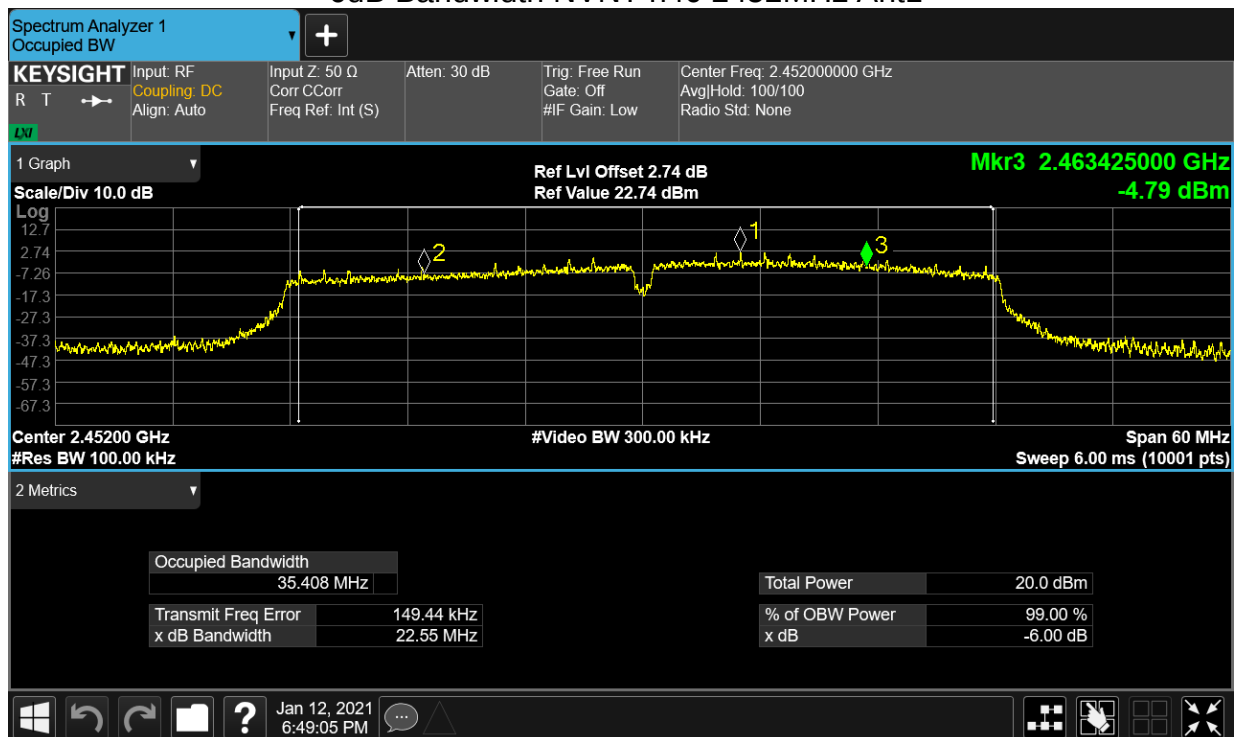
-6dB Bandwidth NVNT n40 2422MHz Ant1



-6dB Bandwidth NVNT n40 2437MHz Ant1



-6dB Bandwidth NVNT n40 2452MHz Ant1

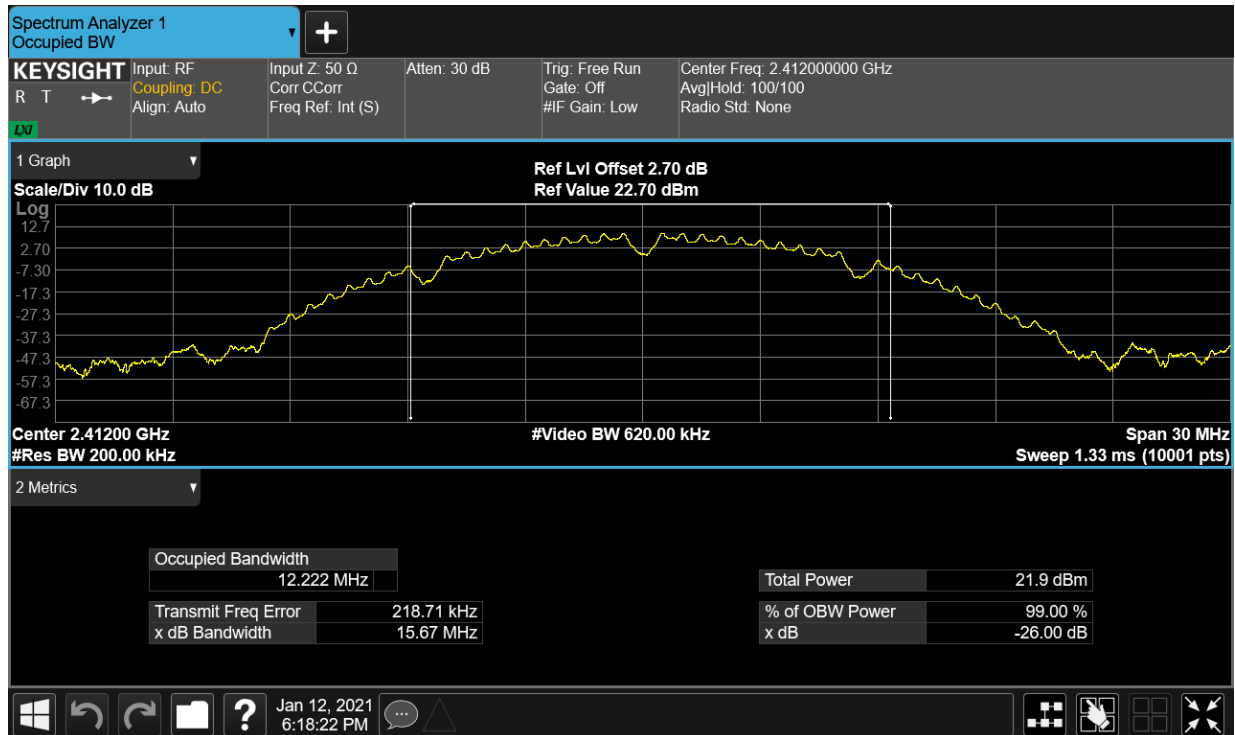


Occupied Channel Bandwidth

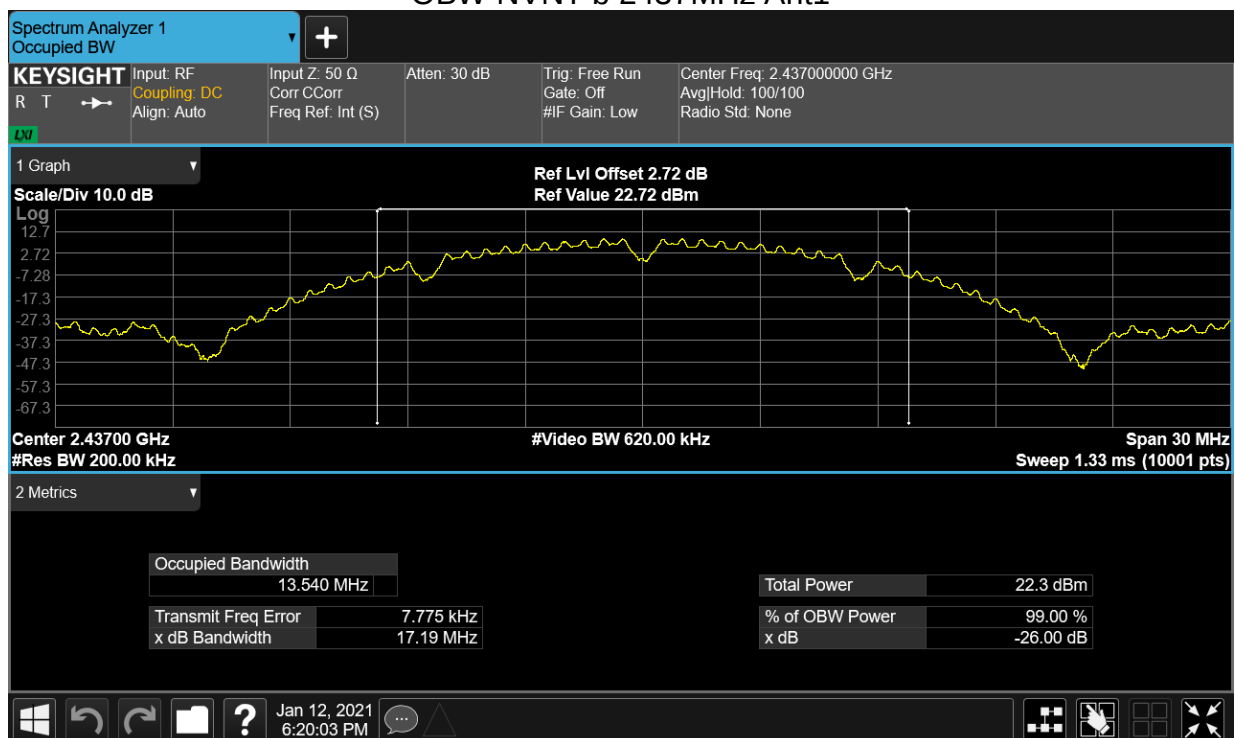
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	12.2224768
NVNT	b	2437	Ant1	13.54024744
NVNT	b	2462	Ant1	12.57044623
NVNT	g	2412	Ant1	16.12601171
NVNT	g	2437	Ant1	16.55705527
NVNT	g	2462	Ant1	16.19565858

NVNT	n20	2412	Ant1	17.2234112
NVNT	n20	2437	Ant1	17.69343482
NVNT	n20	2462	Ant1	17.34248329
NVNT	n40	2422	Ant1	35.4941317
NVNT	n40	2437	Ant1	36.64597961
NVNT	n40	2452	Ant1	35.5565578

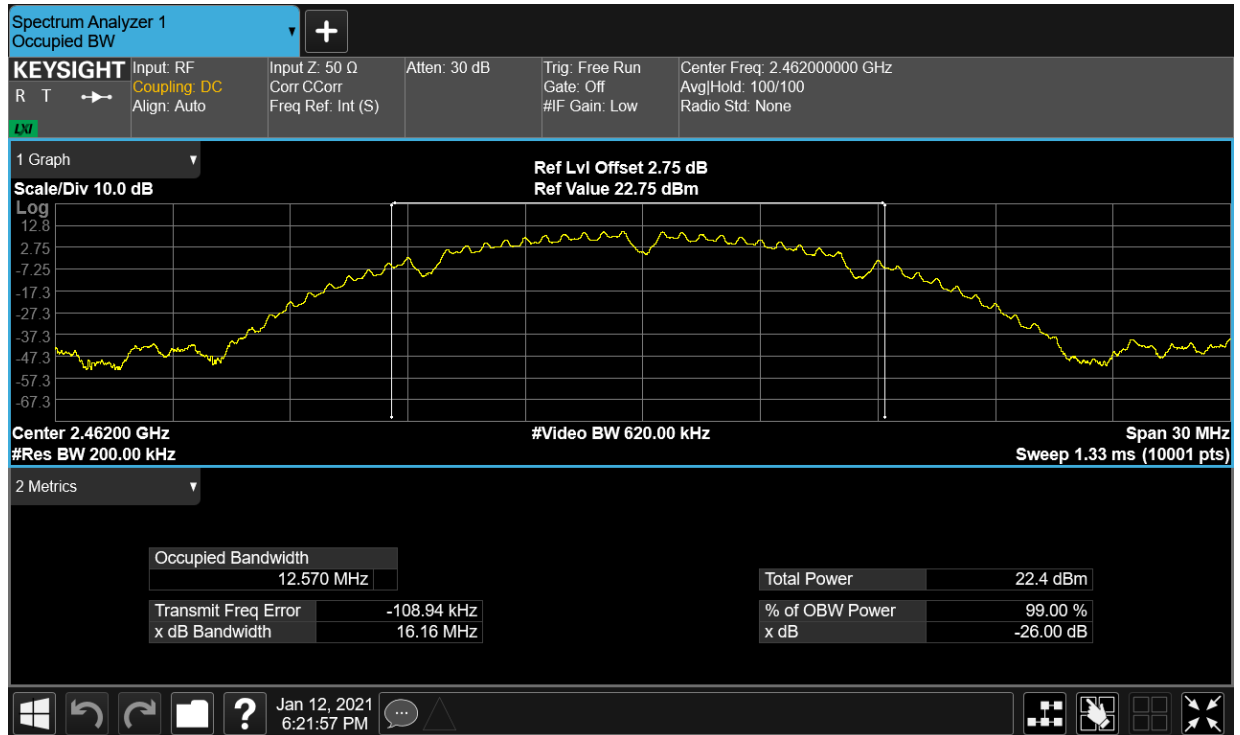
OBW NVNT b 2412MHz Ant1



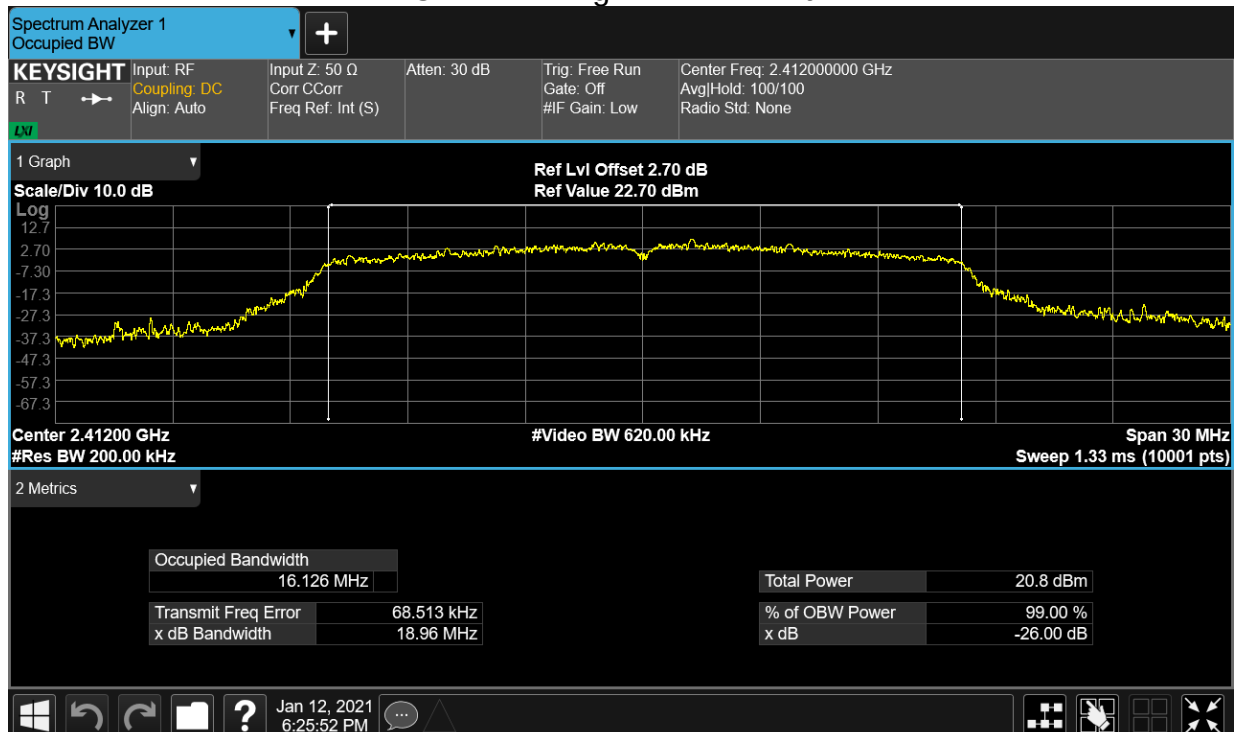
OBW NVNT b 2437MHz Ant1



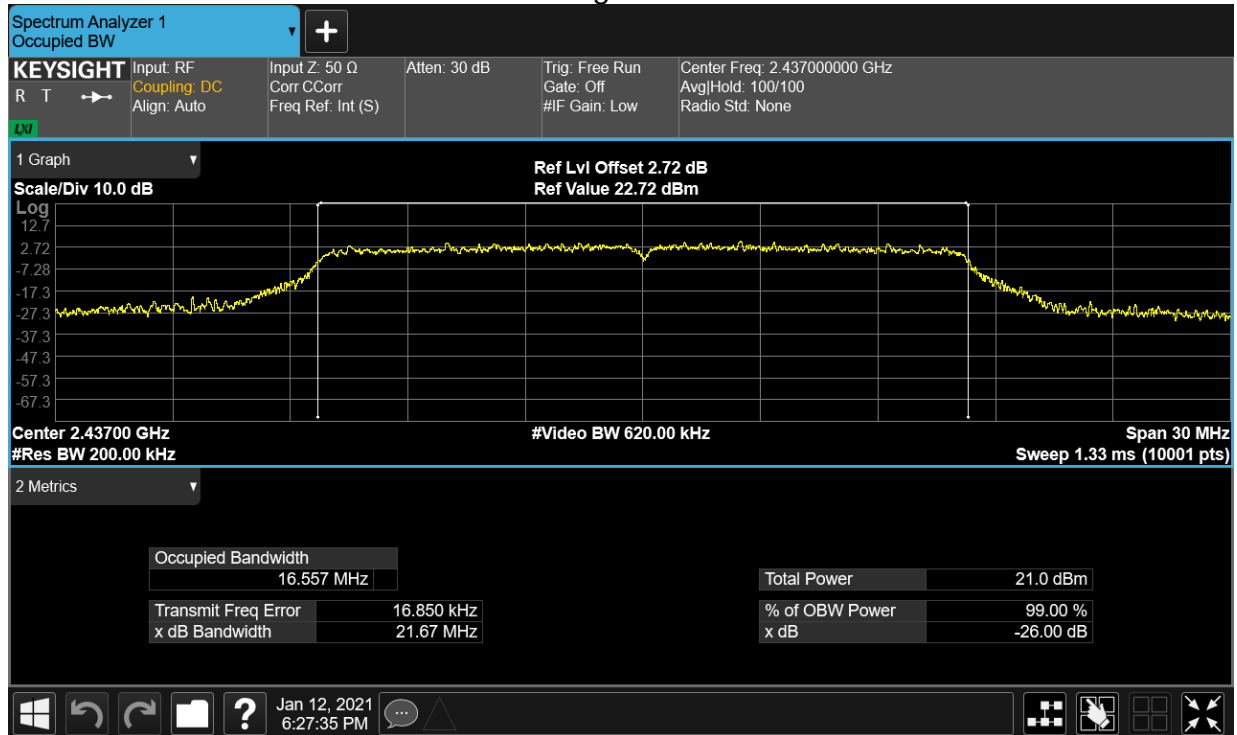
OBW NVNT b 2462MHz Ant1



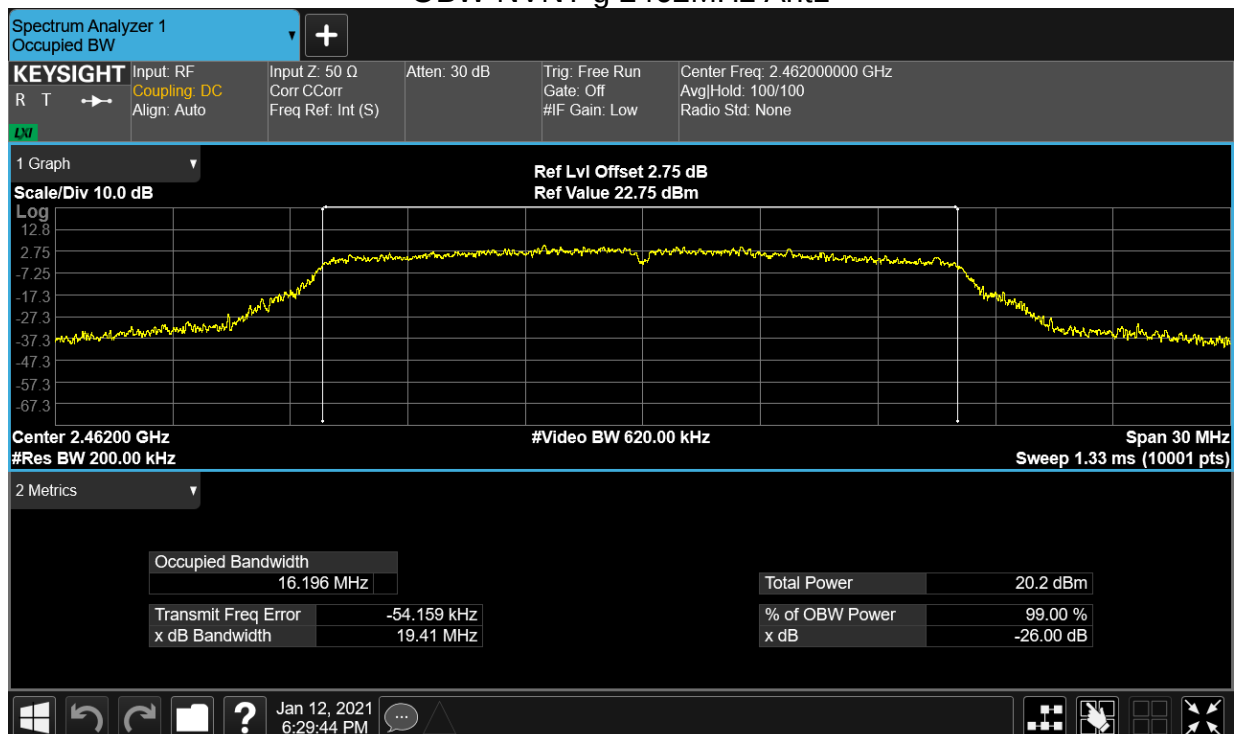
OBW NVNT g 2412MHz Ant1



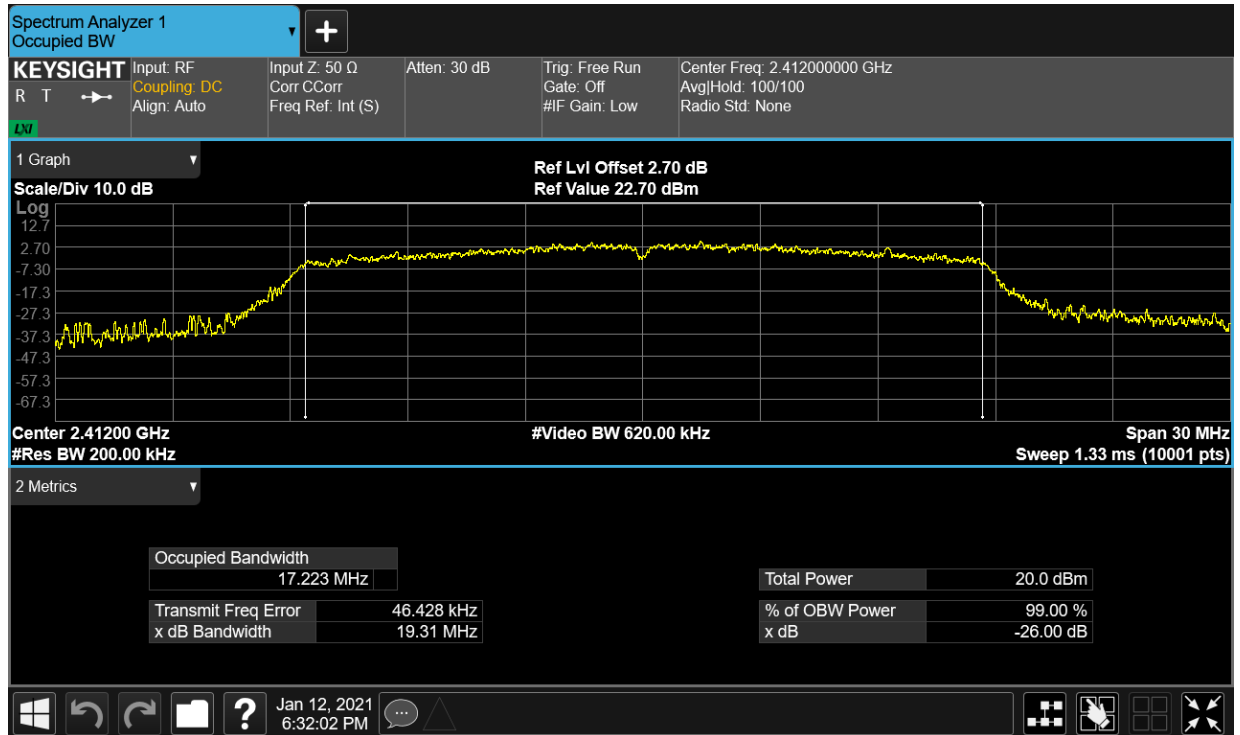
OBW NVNT g 2437MHz Ant1



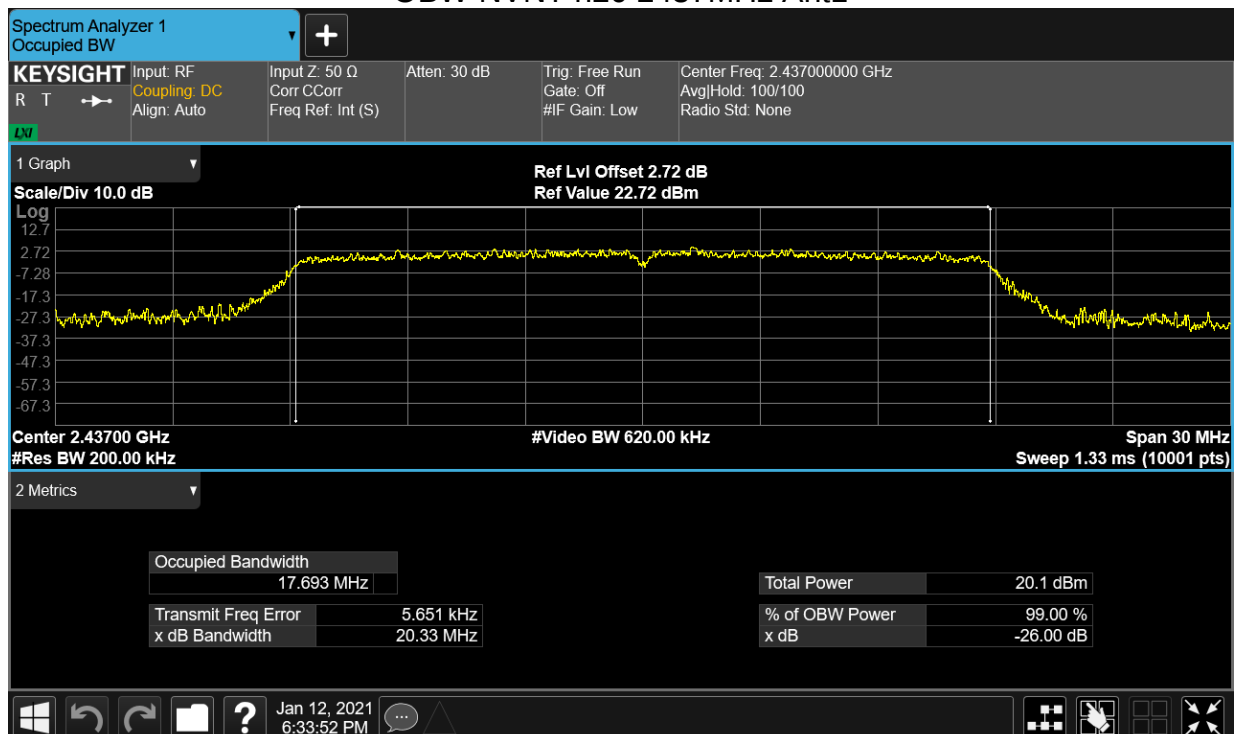
OBW NVNT g 2462MHz Ant1



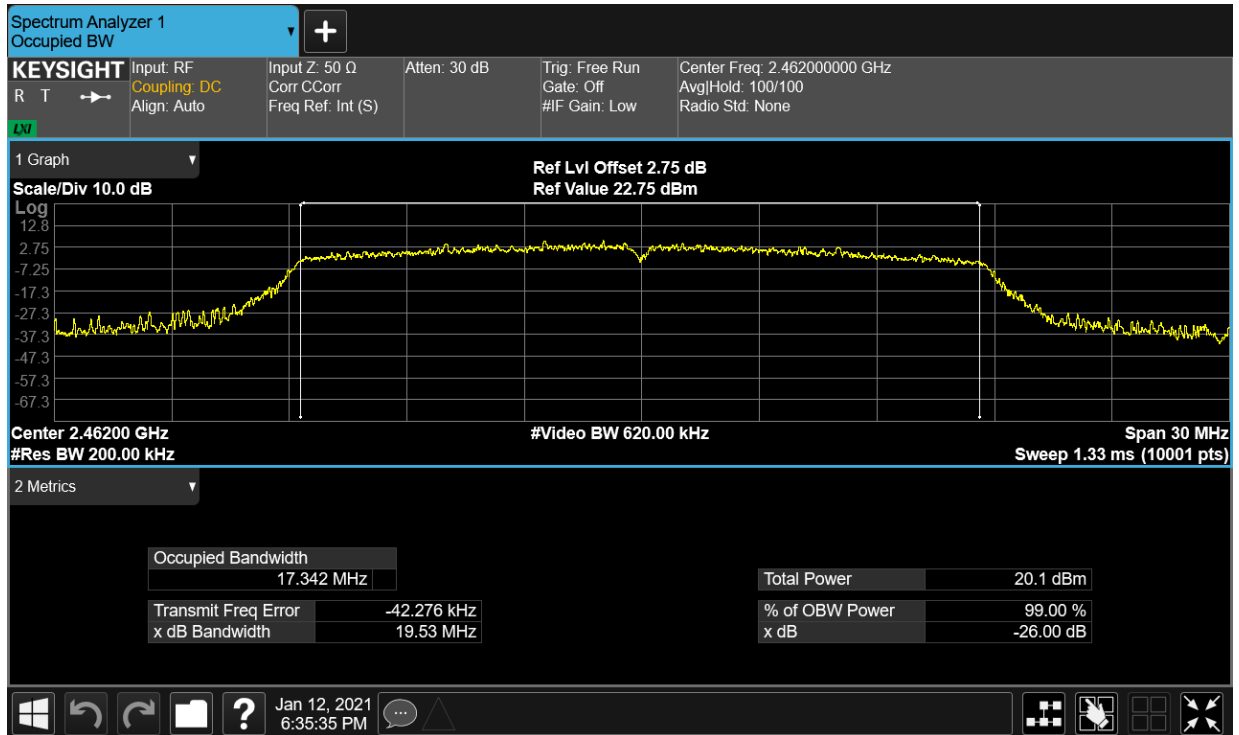
OBW NVNT n20 2412MHz Ant1



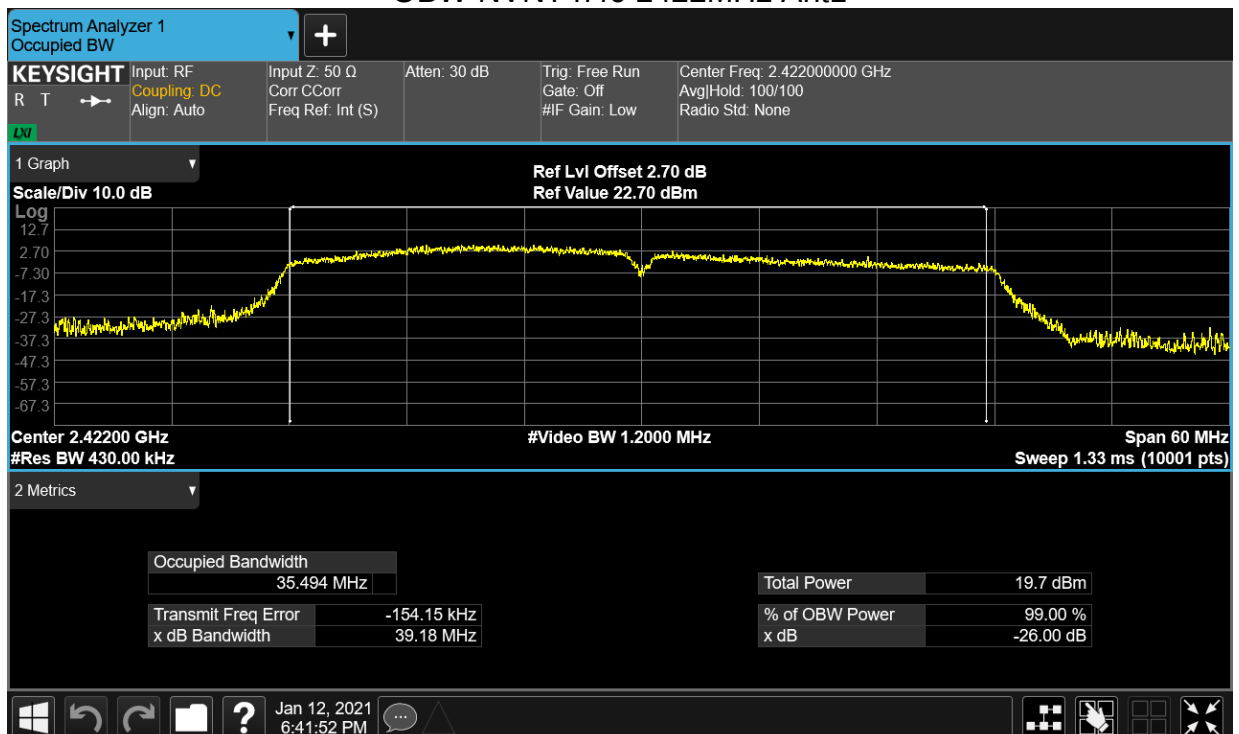
OBW NVNT n20 2437MHz Ant1



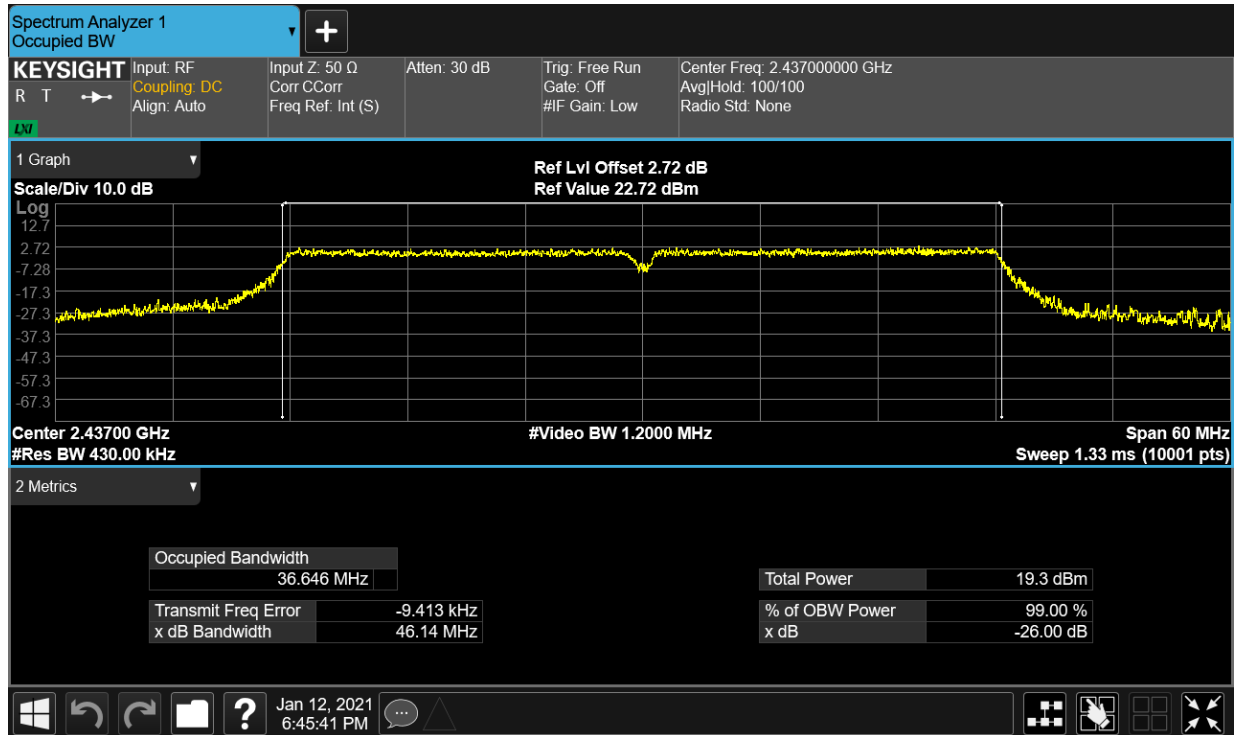
OBW NVNT n20 2462MHz Ant1



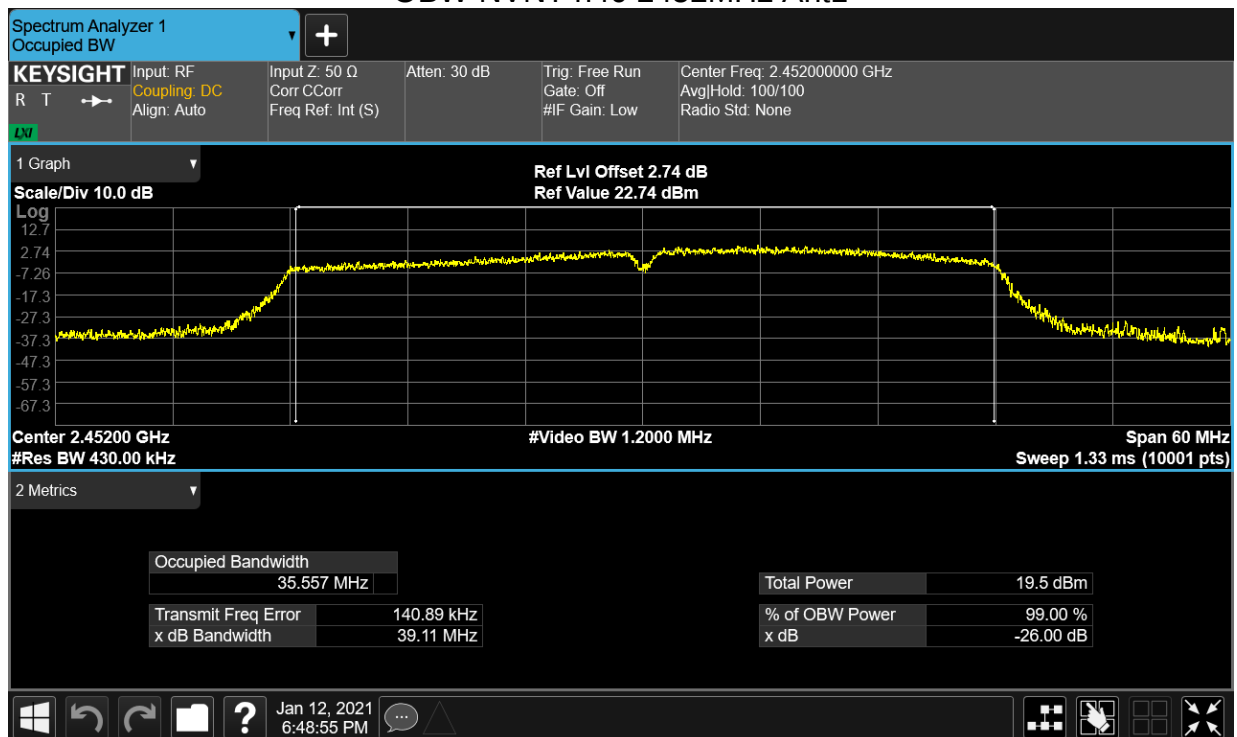
OBW NVNT n40 2422MHz Ant1



OBW NVNT n40 2437MHz Ant1



OBW NVNT n40 2452MHz Ant1



Maximum Power Spectral Density Level

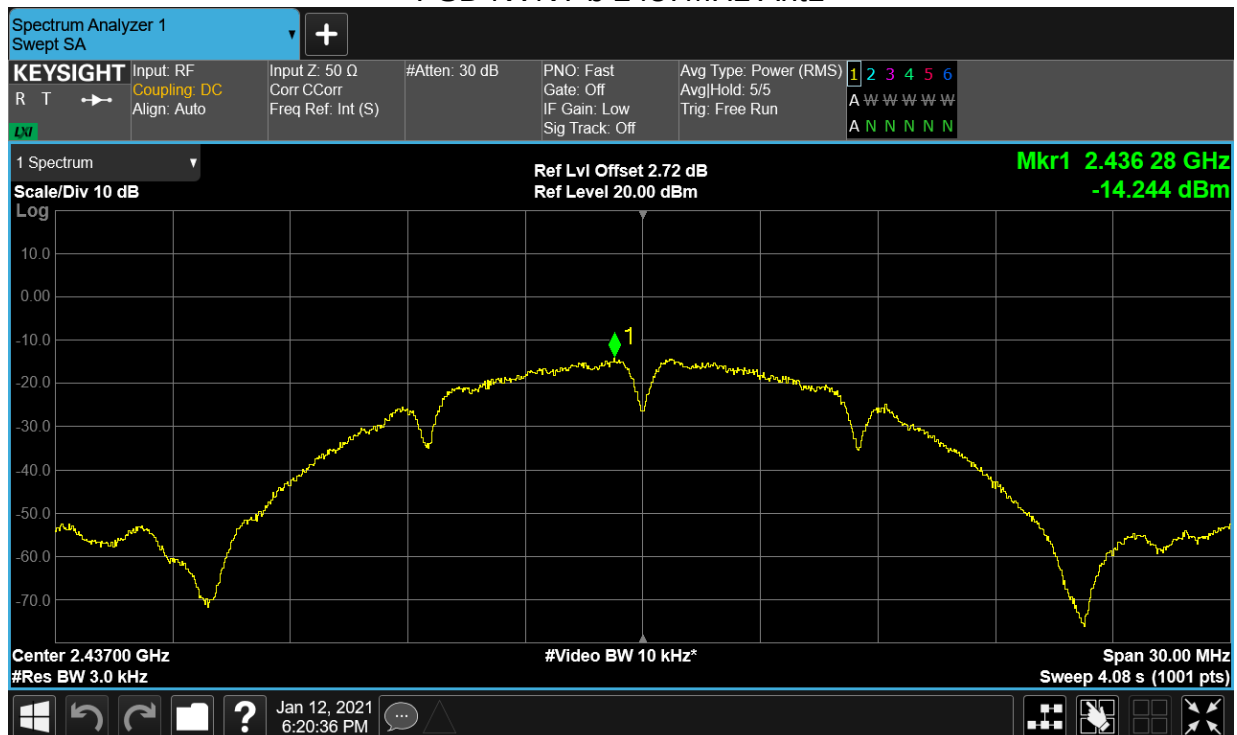
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	-13.379	8	Pass
NVNT	b	2437	Ant1	-14.244	8	Pass
NVNT	b	2462	Ant1	-13.871	8	Pass
NVNT	g	2412	Ant1	-17.321	8	Pass
NVNT	g	2437	Ant1	-18.964	8	Pass
NVNT	g	2462	Ant1	-17.767	8	Pass

NVNT	n20	2412	Ant1	-18.219	8	Pass
NVNT	n20	2437	Ant1	-19.633	8	Pass
NVNT	n20	2462	Ant1	-18.607	8	Pass
NVNT	n40	2422	Ant1	-21.537	8	Pass
NVNT	n40	2437	Ant1	-23.922	8	Pass
NVNT	n40	2452	Ant1	-21.786	8	Pass

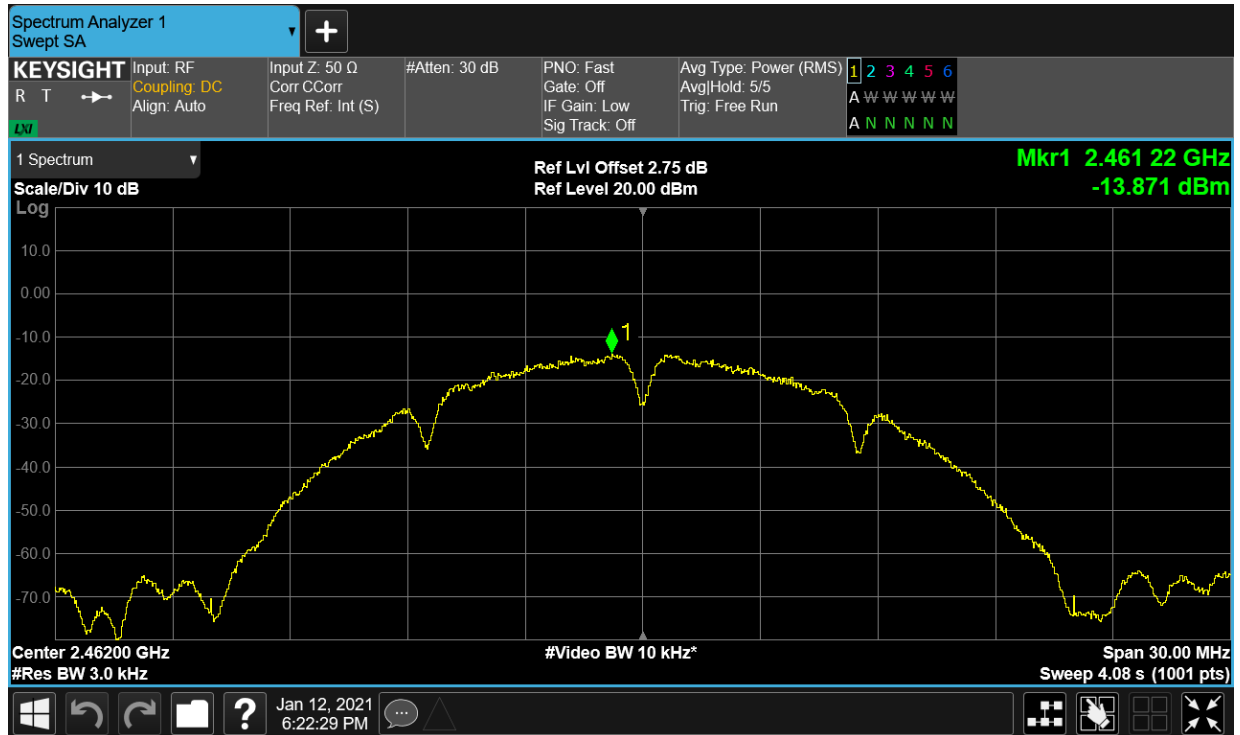
PSD NVNT b 2412MHz Ant1



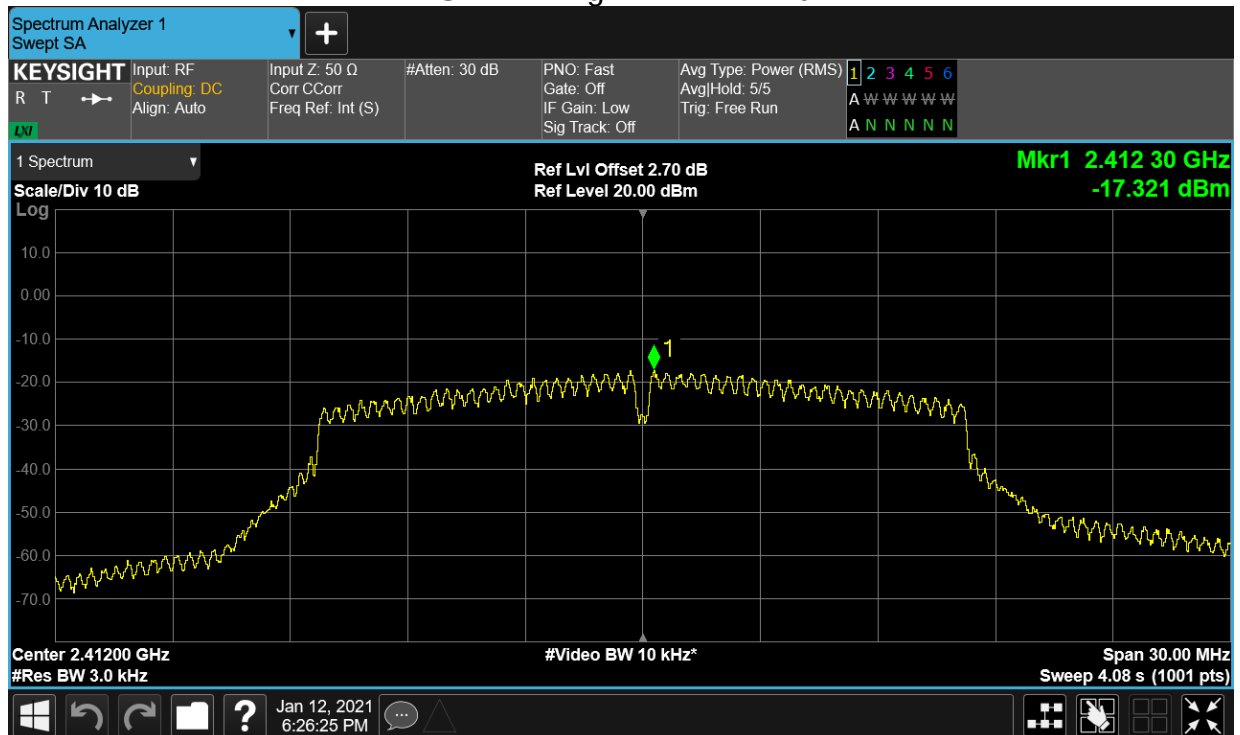
PSD NVNT b 2437MHz Ant1



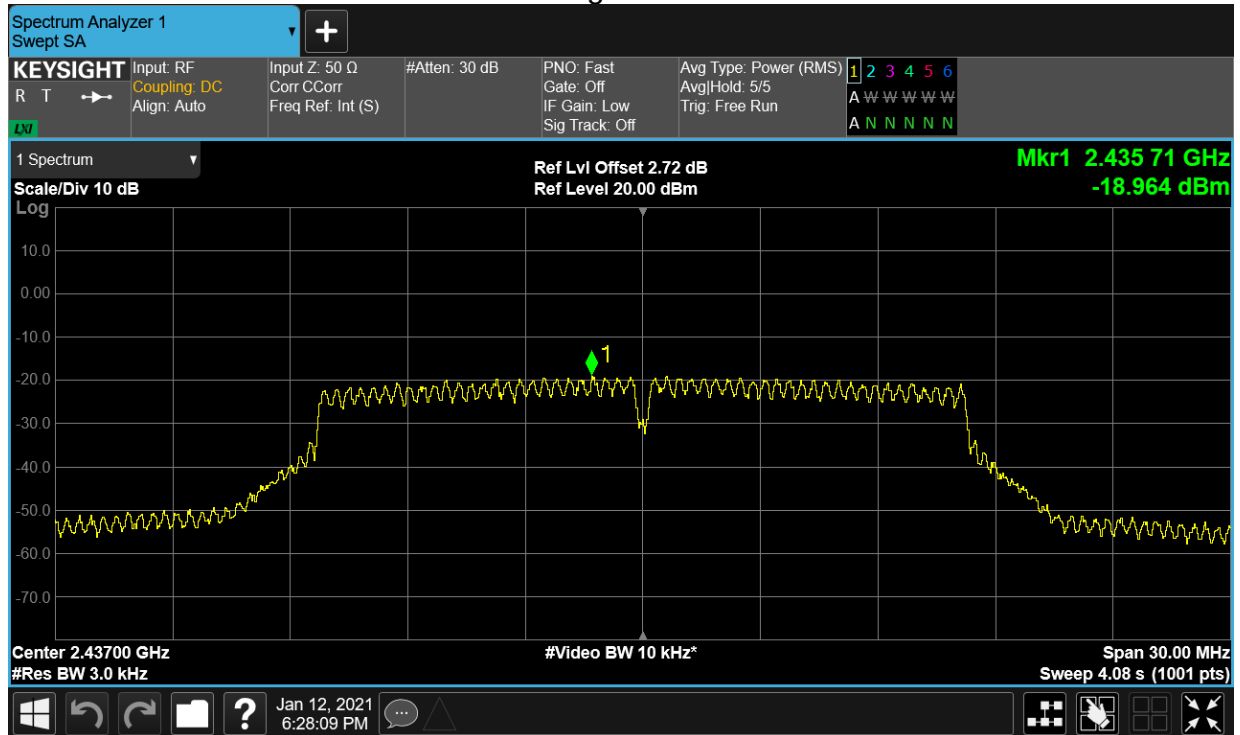
PSD NVNT b 2462MHz Ant1



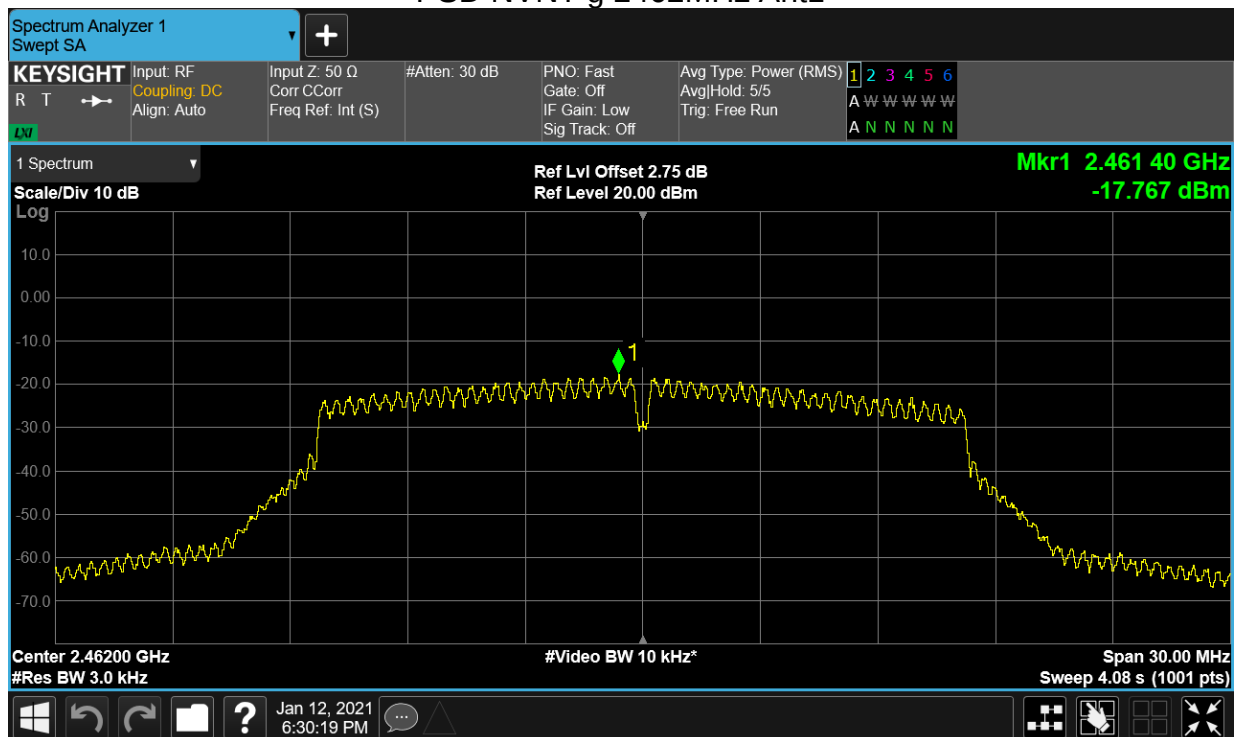
PSD NVNT g 2412MHz Ant1



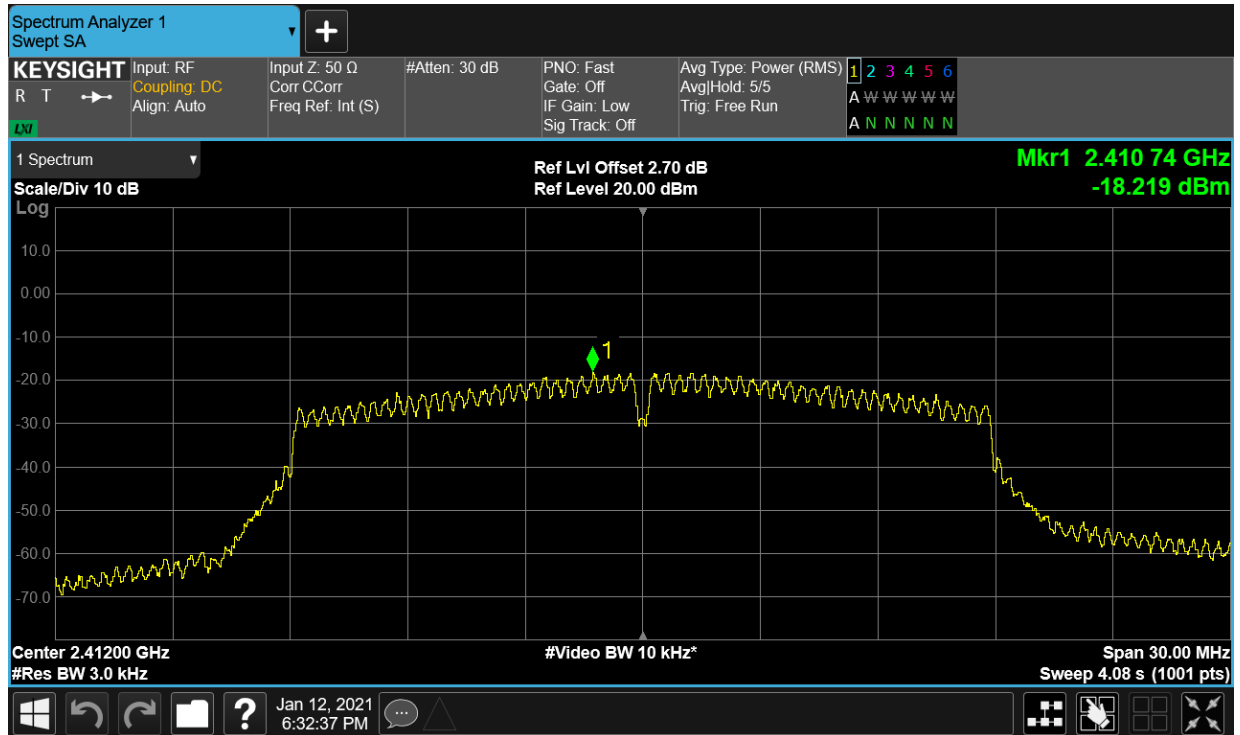
PSD NVNT g 2437MHz Ant1



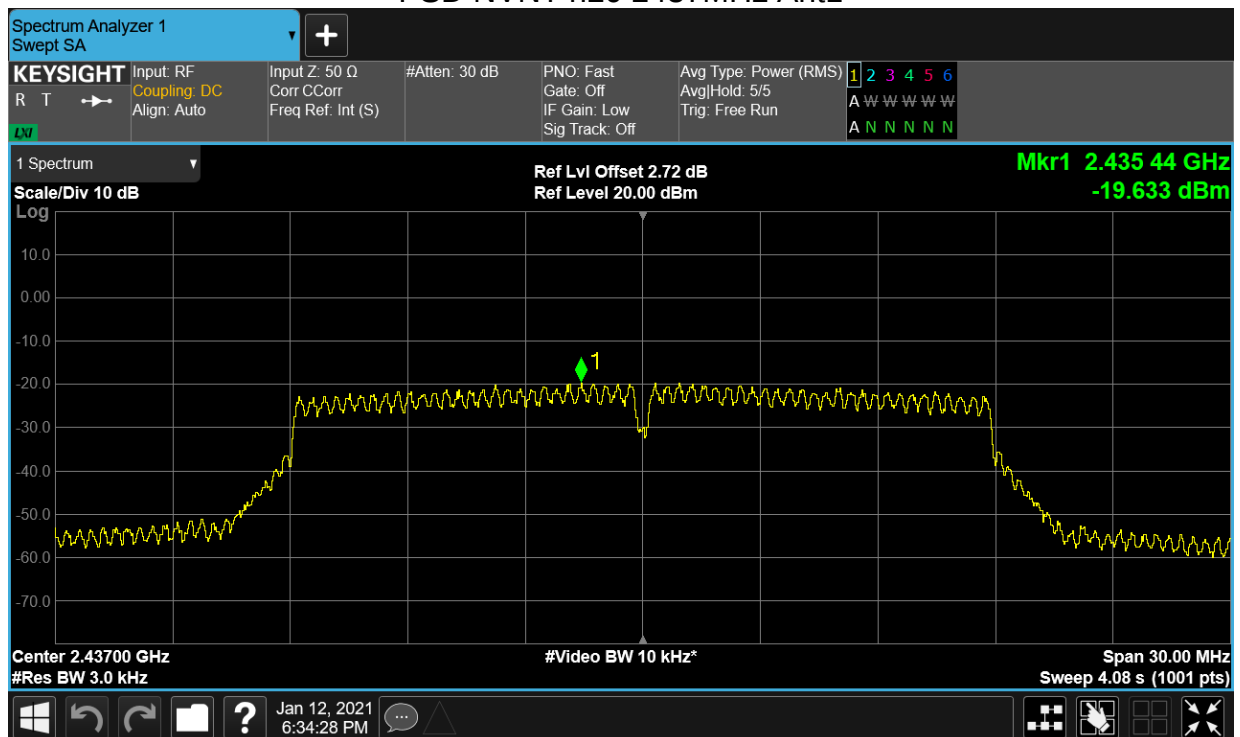
PSD NVNT g 2462MHz Ant1



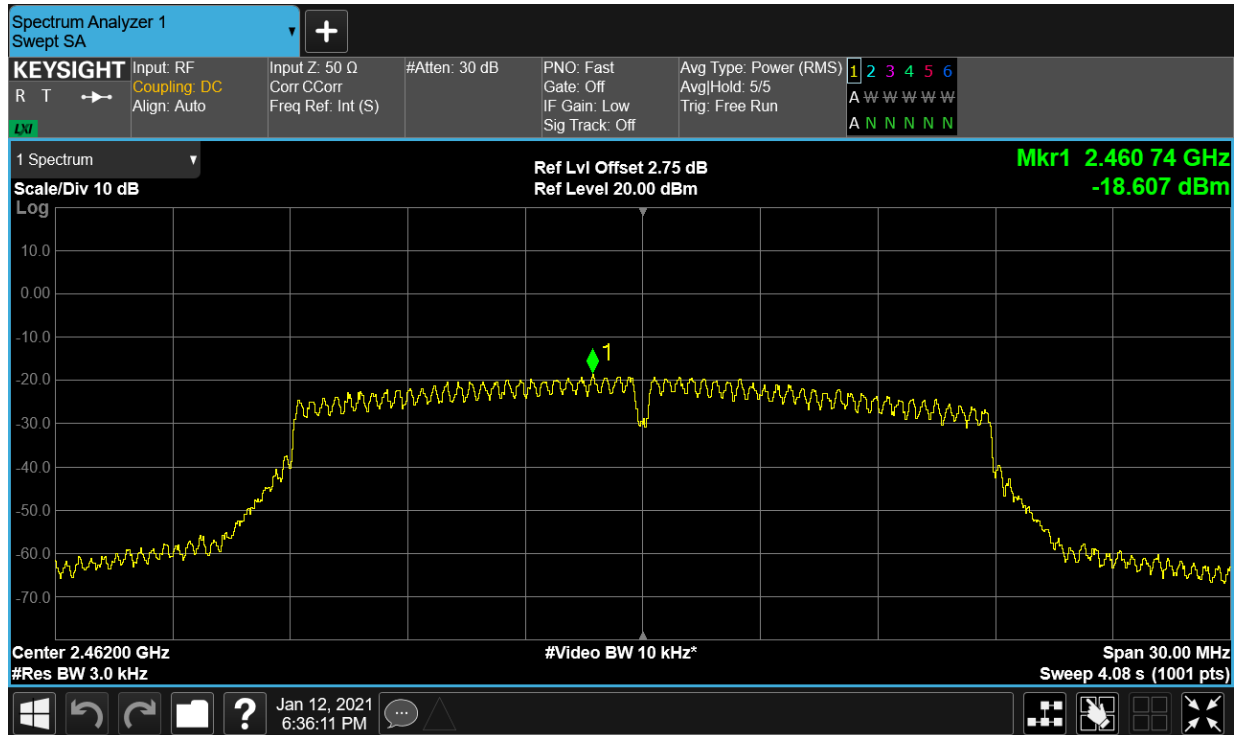
PSD NVNT n20 2412MHz Ant1



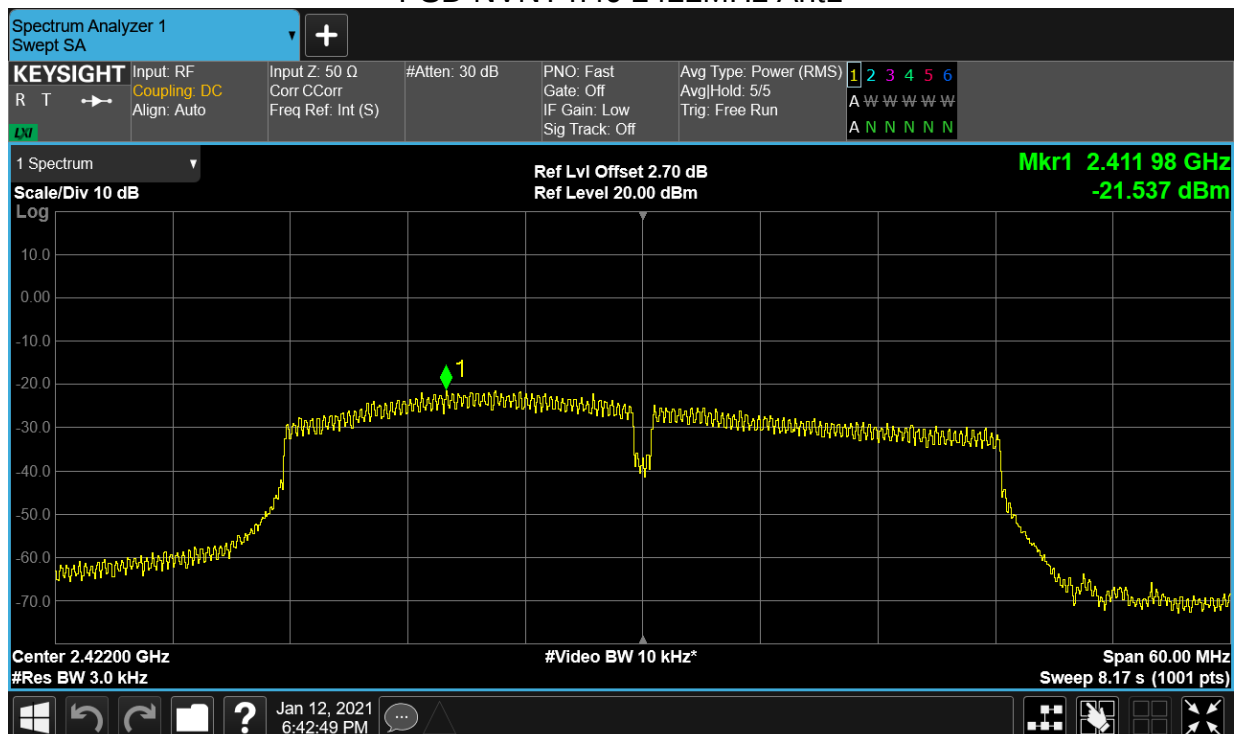
PSD NVNT n20 2437MHz Ant1



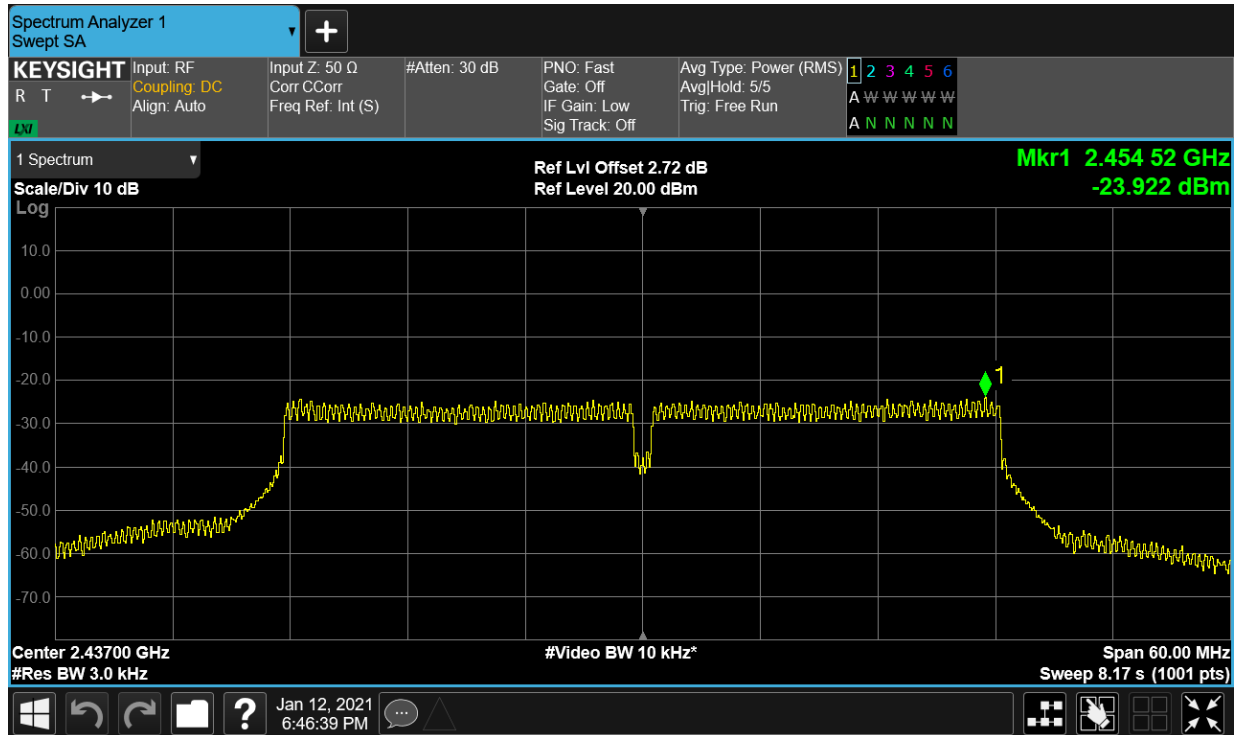
PSD NVNT n20 2462MHz Ant1



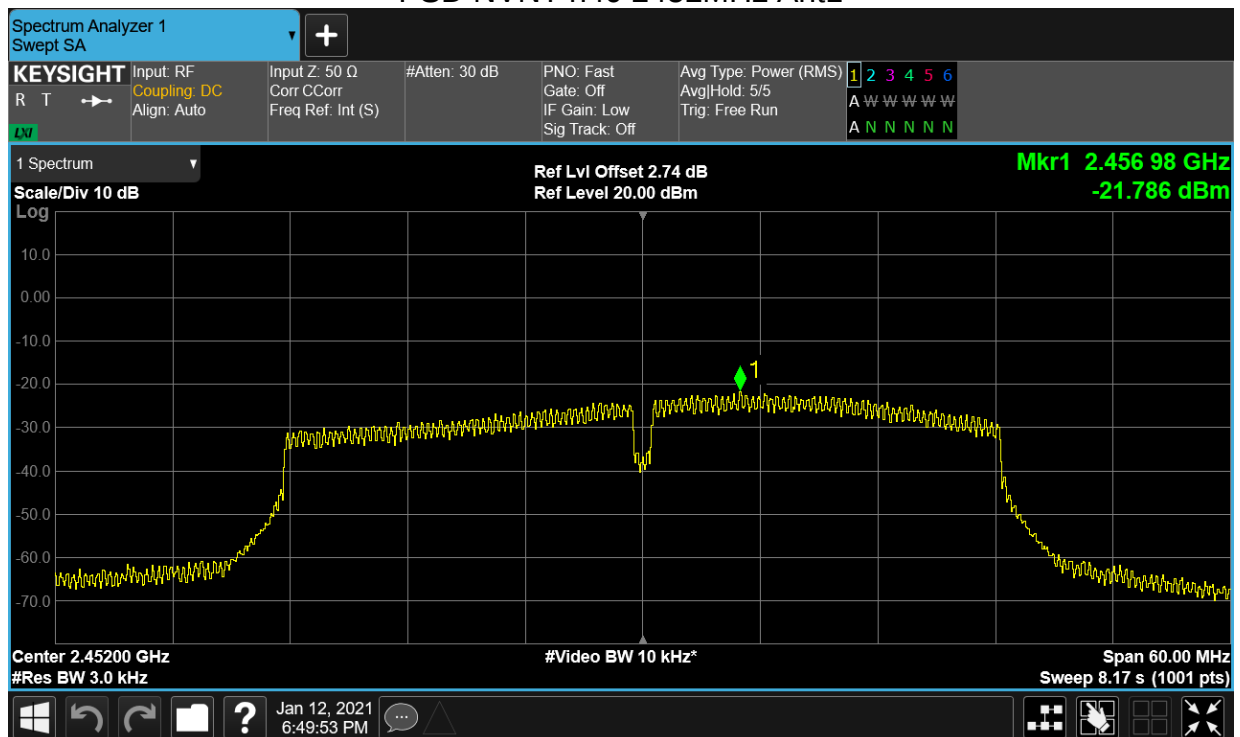
PSD NVNT n40 2422MHz Ant1



PSD NVNT n40 2437MHz Ant1



PSD NVNT n40 2452MHz Ant1

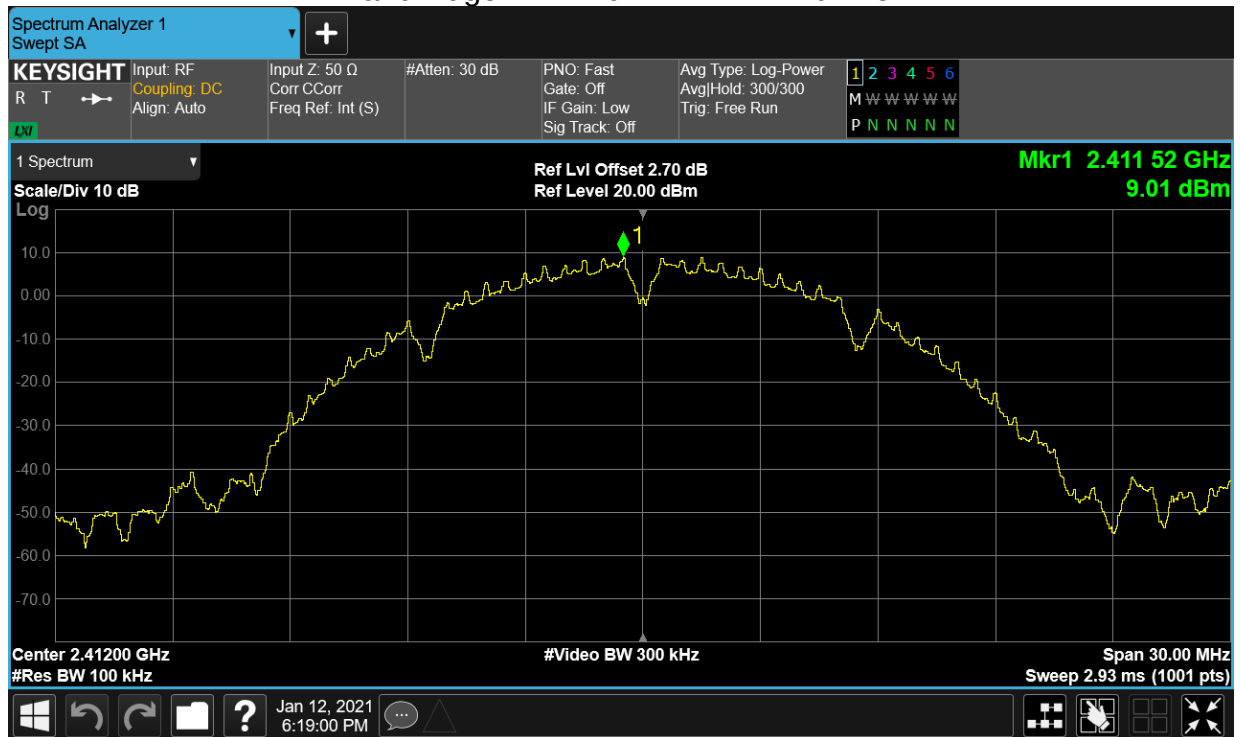


Band Edge

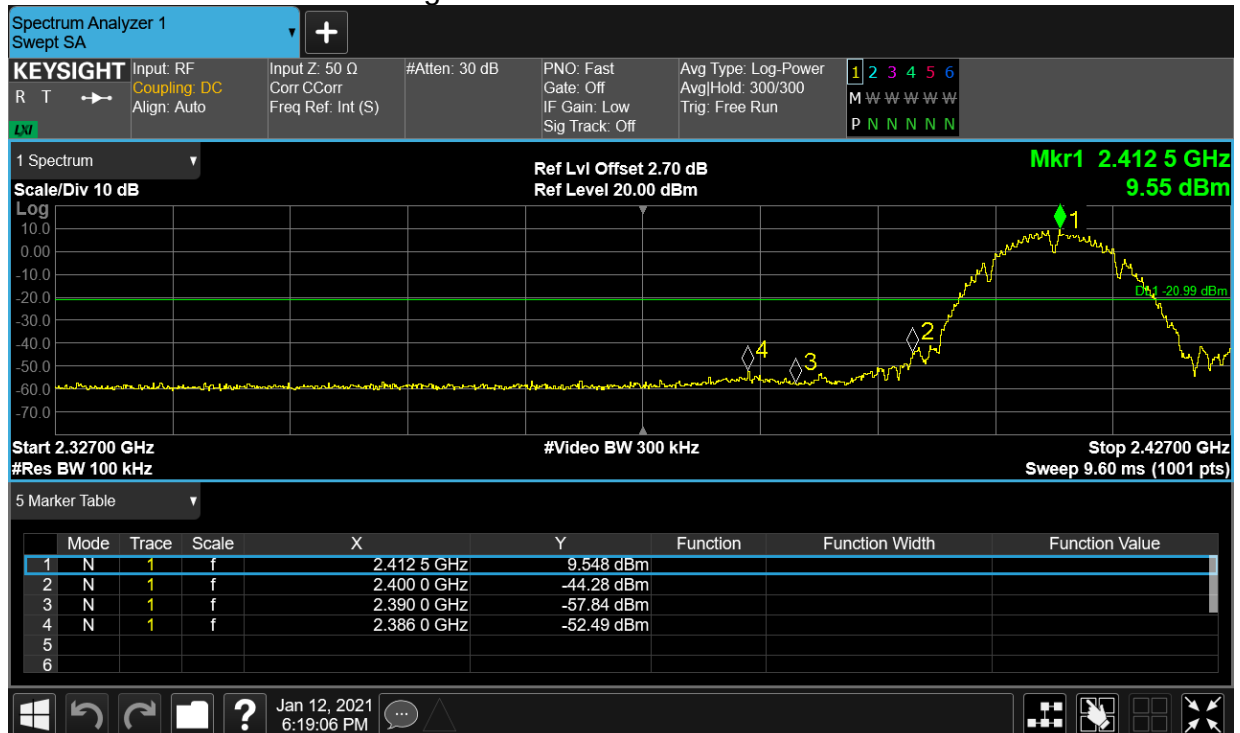
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-61.5	-30	Pass
NVNT	b	2462	Ant1	-61.4	-30	Pass
NVNT	g	2412	Ant1	-51.91	-30	Pass
NVNT	g	2462	Ant1	-51.98	-30	Pass
NVNT	n20	2412	Ant1	-49.12	-30	Pass
NVNT	n20	2462	Ant1	-52.89	-30	Pass

NVNT	n40	2422	Ant1	-37.27	-30	Pass
NVNT	n40	2452	Ant1	-41.73	-30	Pass

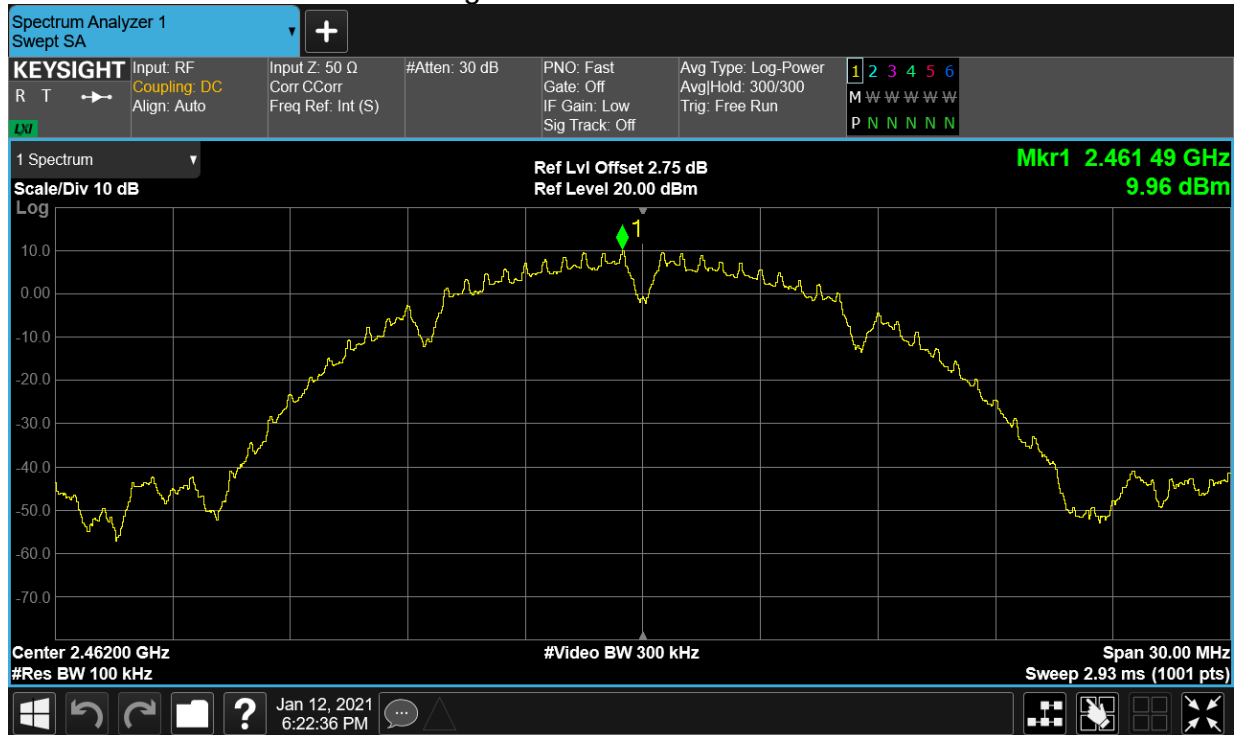
Band Edge NVNT b 2412MHz Ant1 Ref



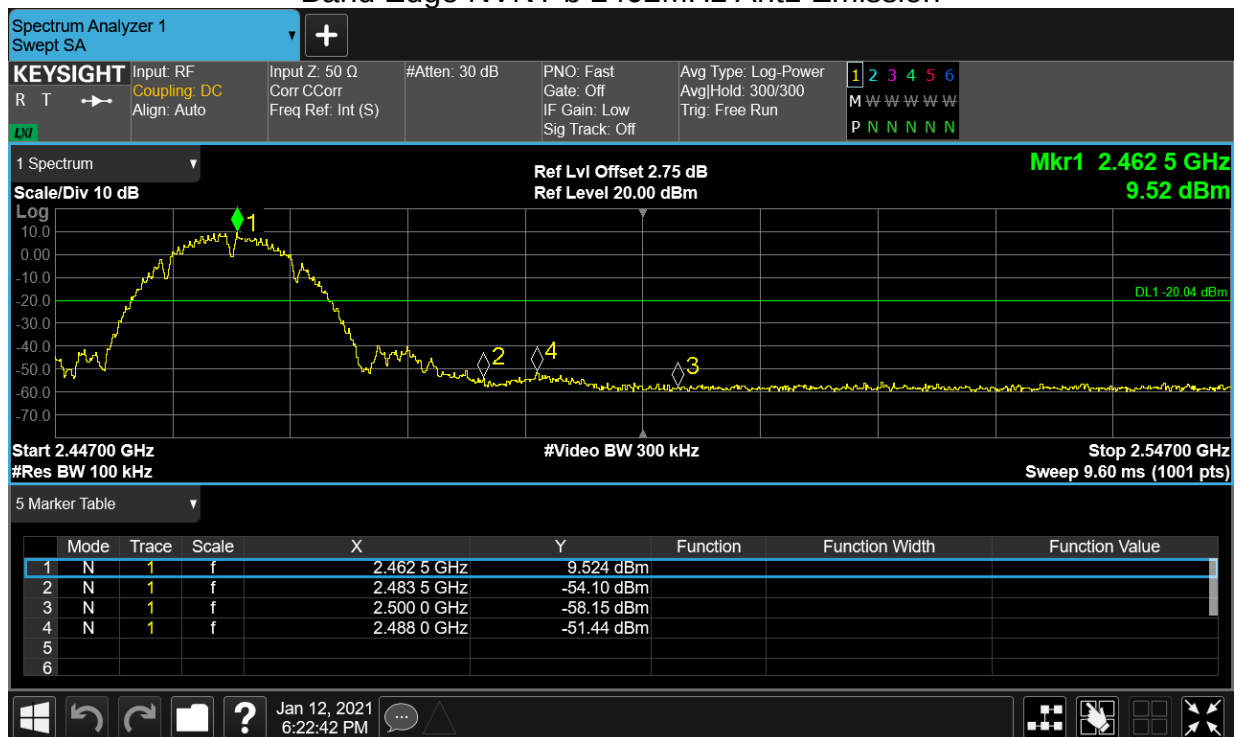
Band Edge NVNT b 2412MHz Ant1 Emission



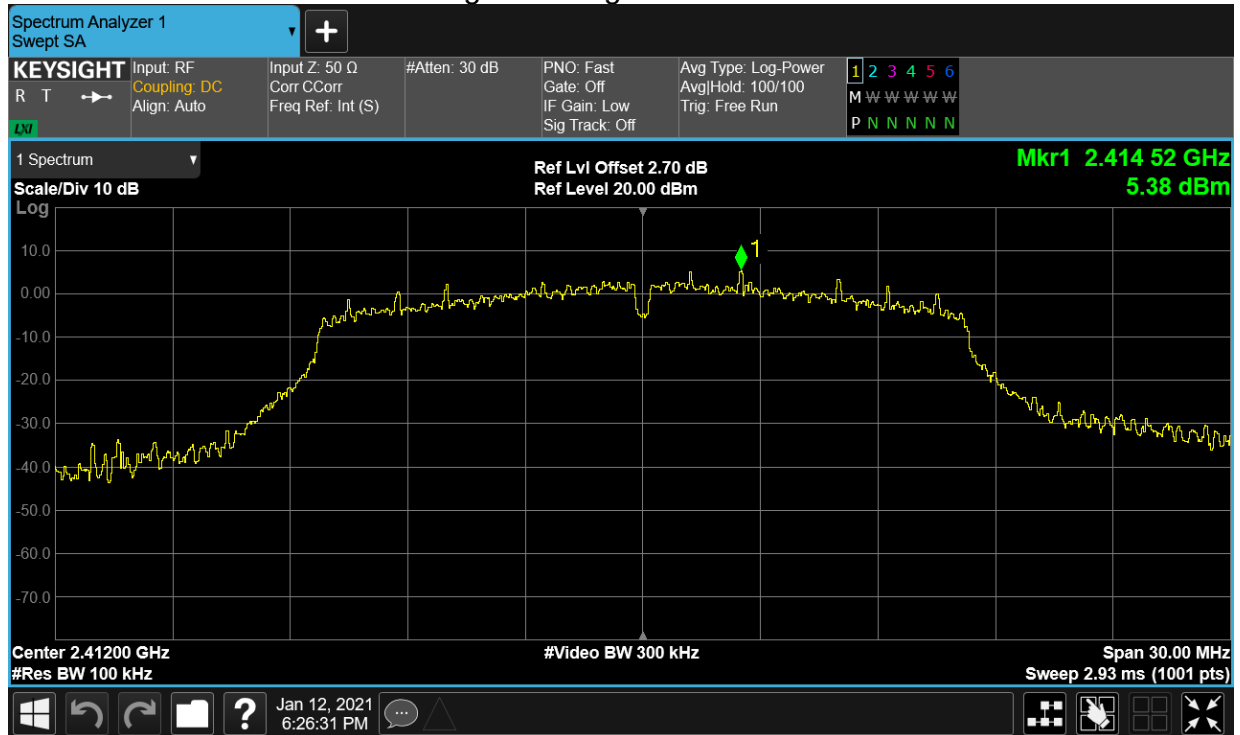
Band Edge NVNT b 2462MHz Ant1 Ref



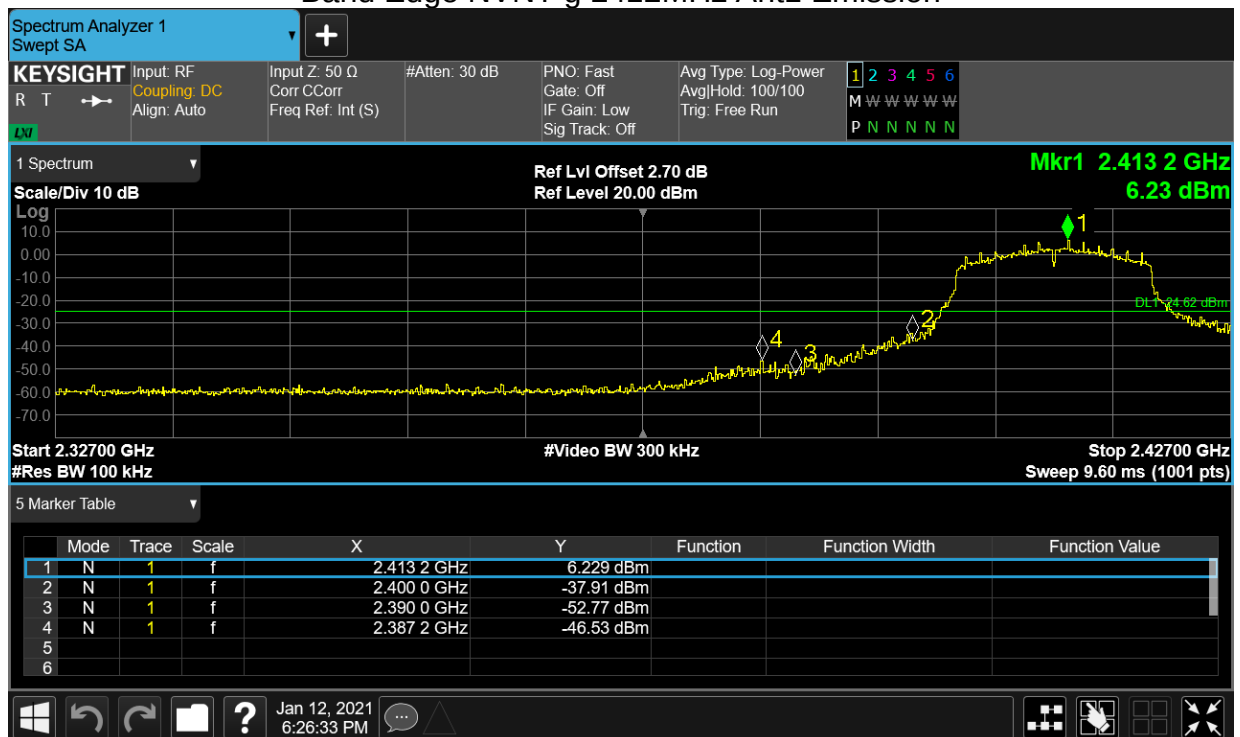
Band Edge NVNT b 2462MHz Ant1 Emission



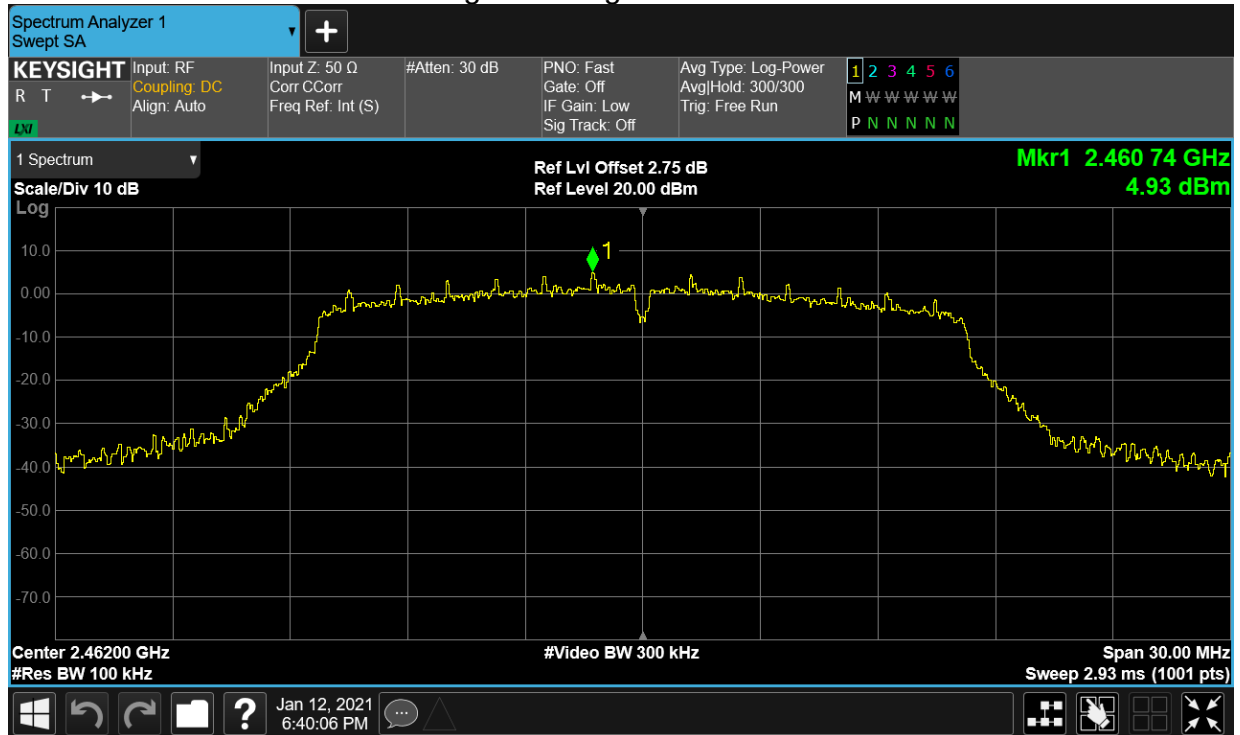
Band Edge NVNT g 2412MHz Ant1 Ref



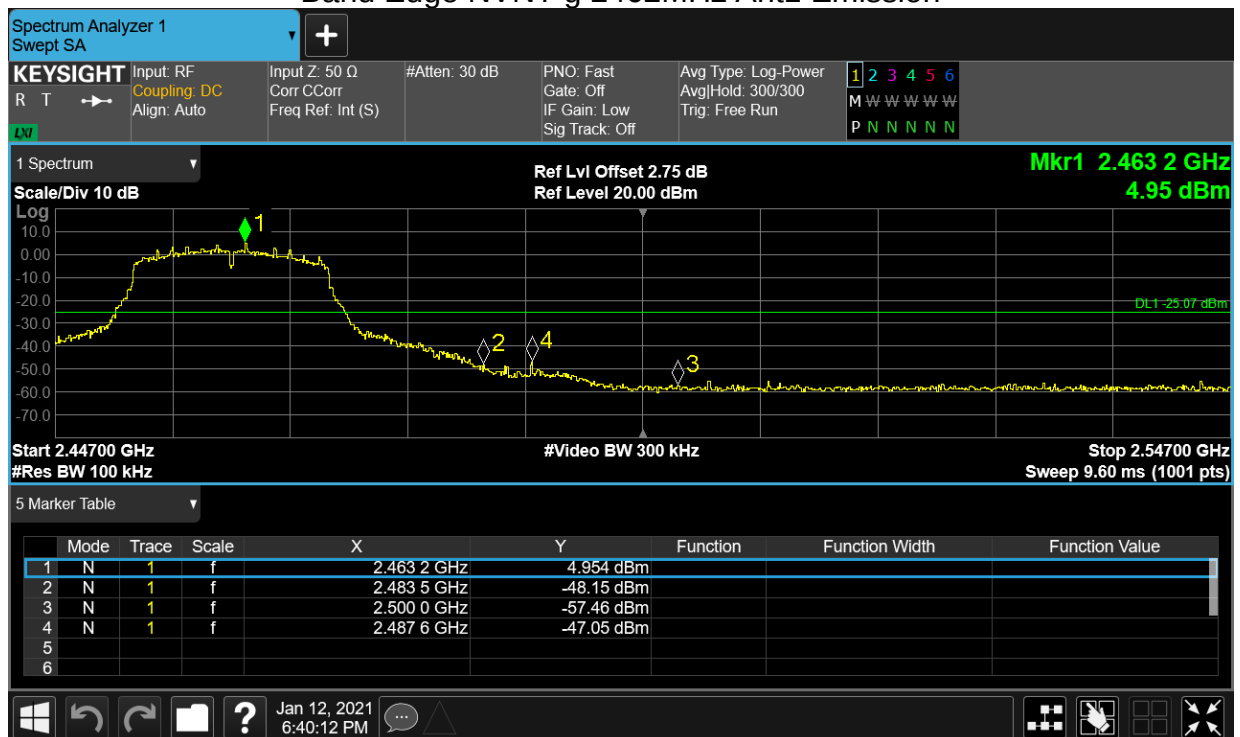
Band Edge NVNT g 2412MHz Ant1 Emission



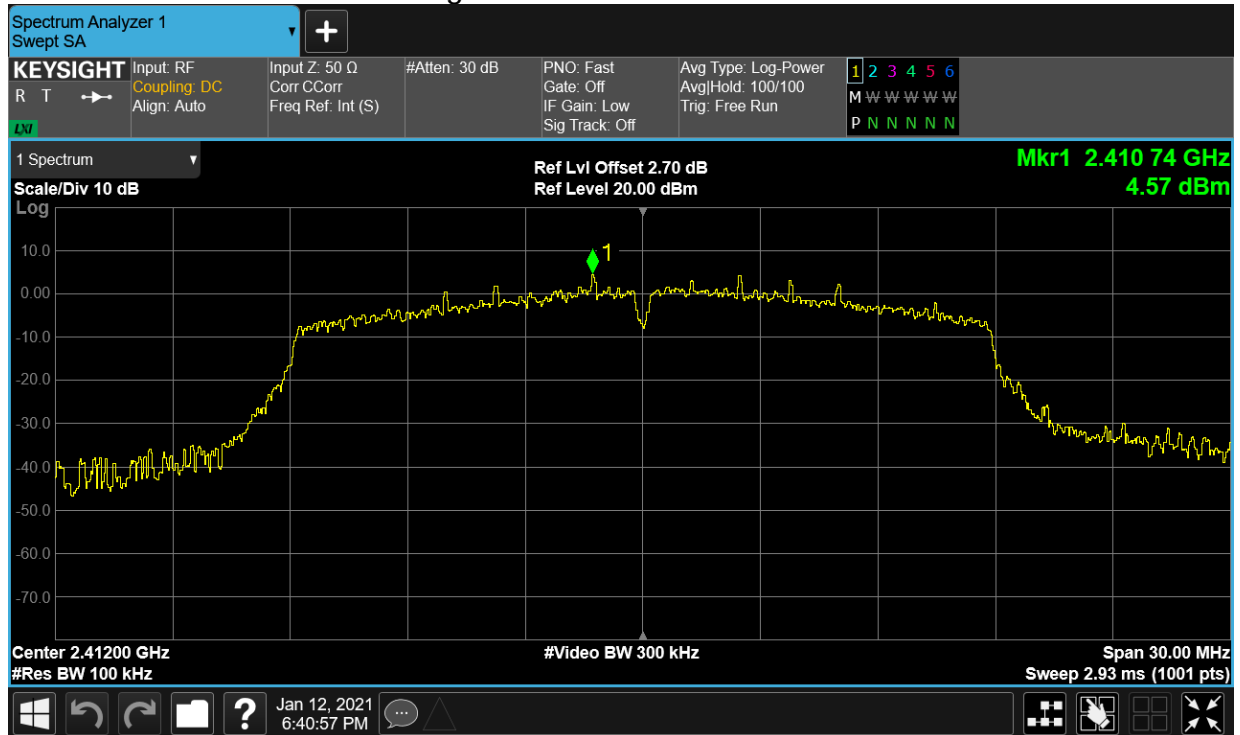
Band Edge NVNT g 2462MHz Ant1 Ref



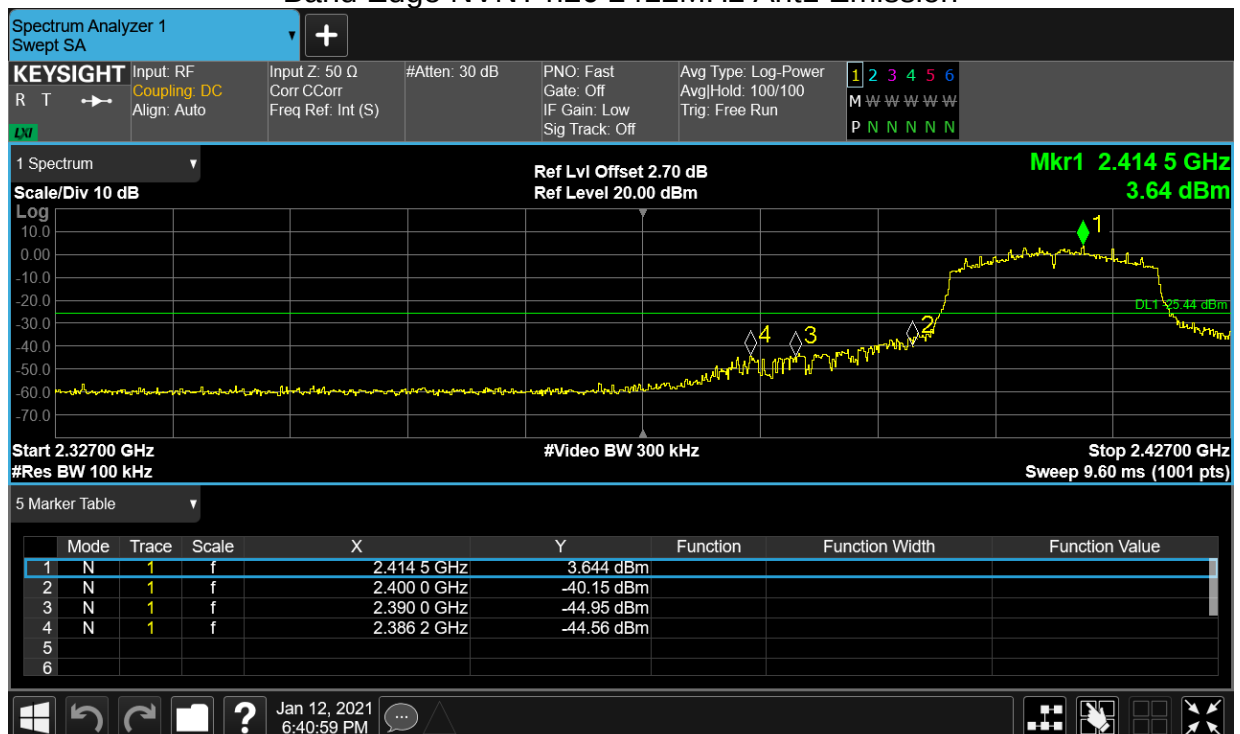
Band Edge NVNT g 2462MHz Ant1 Emission



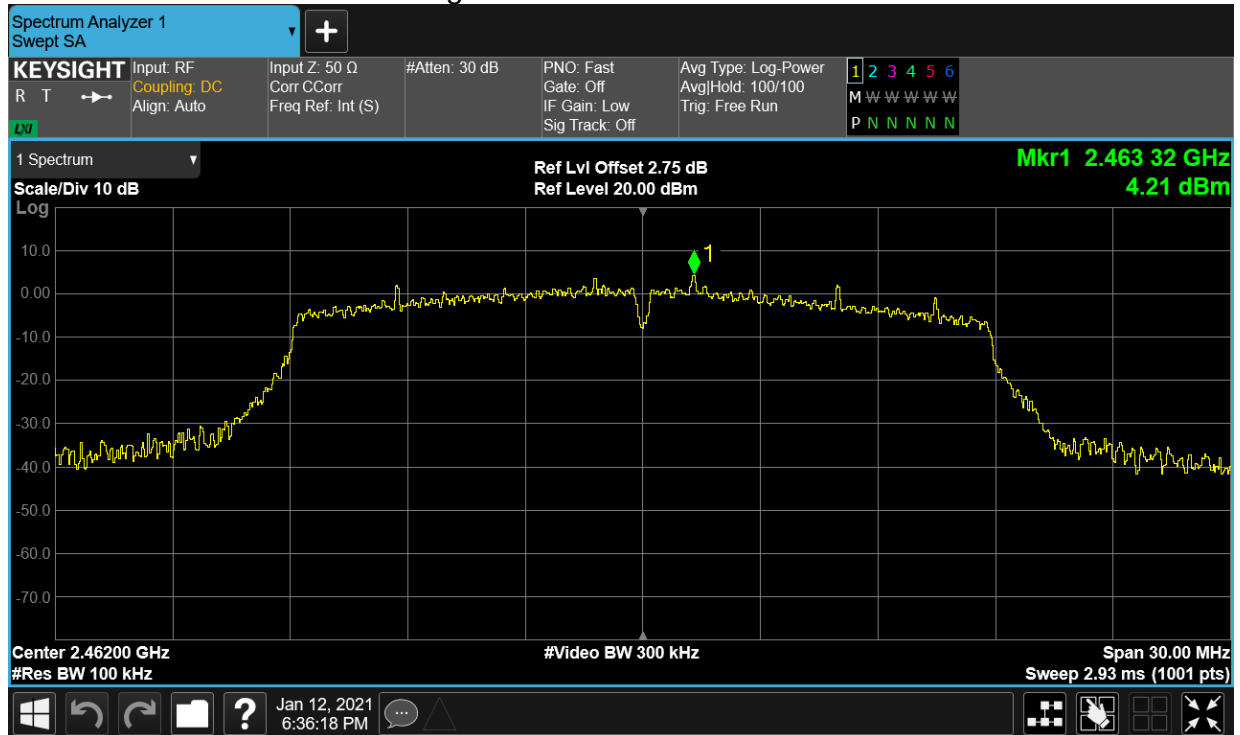
Band Edge NVNT n20 2412MHz Ant1 Ref



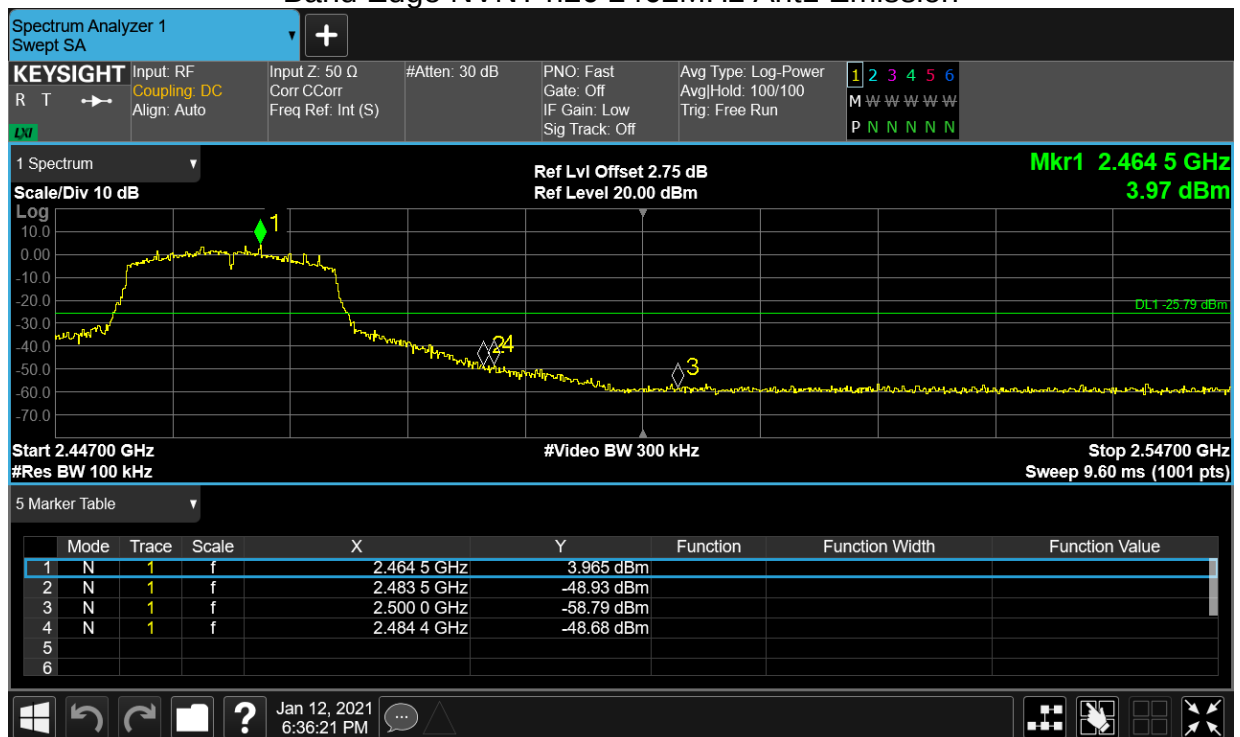
Band Edge NVNT n20 2412MHz Ant1 Emission



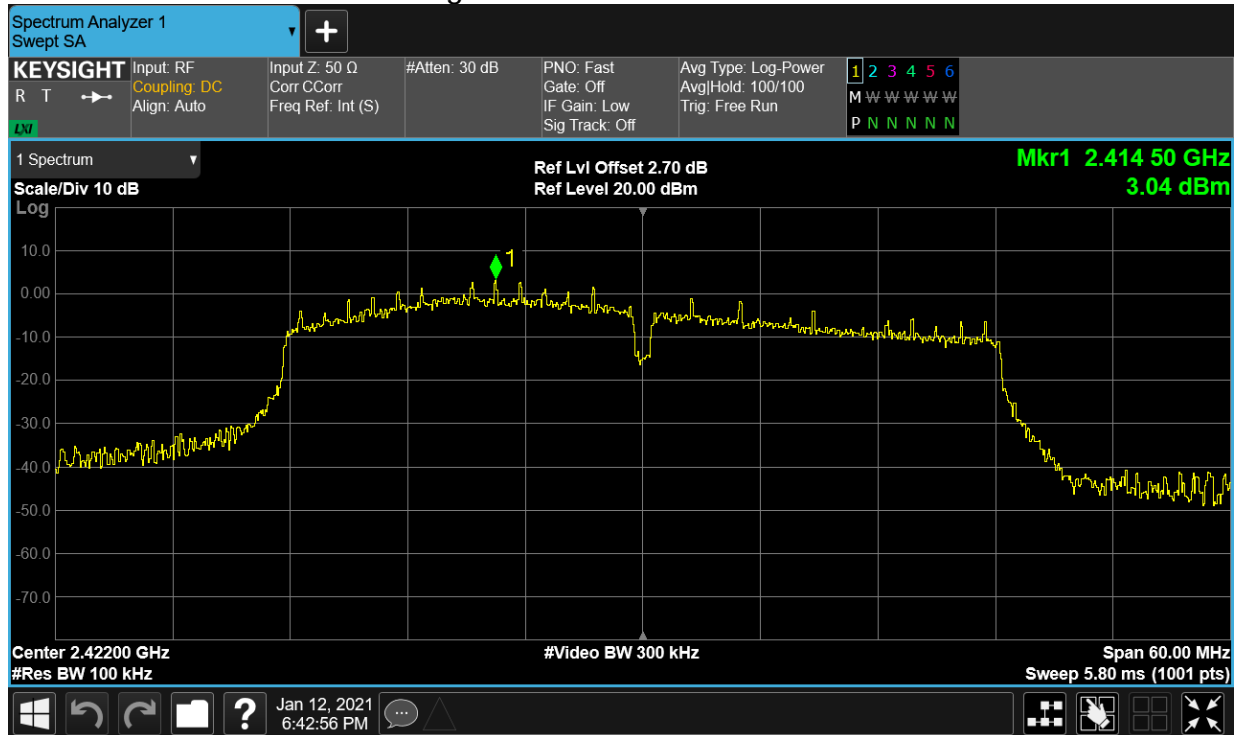
Band Edge NVNT n20 2462MHz Ant1 Ref



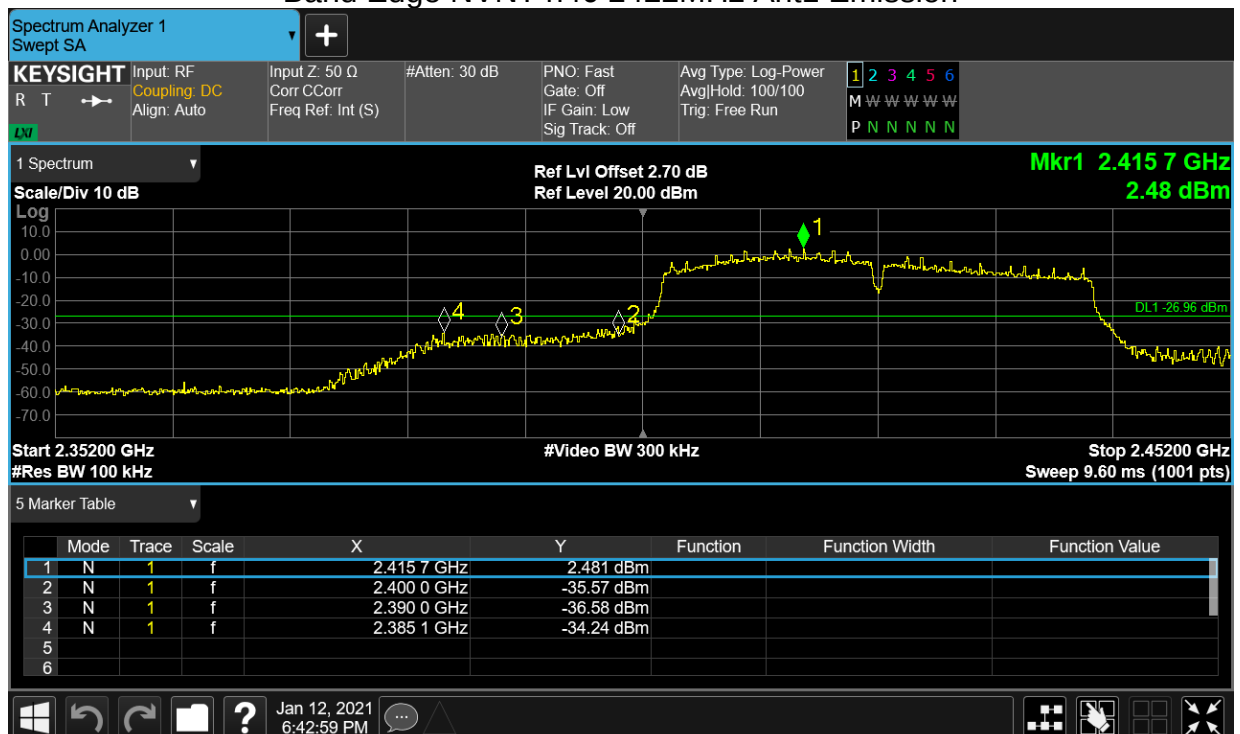
Band Edge NVNT n20 2462MHz Ant1 Emission



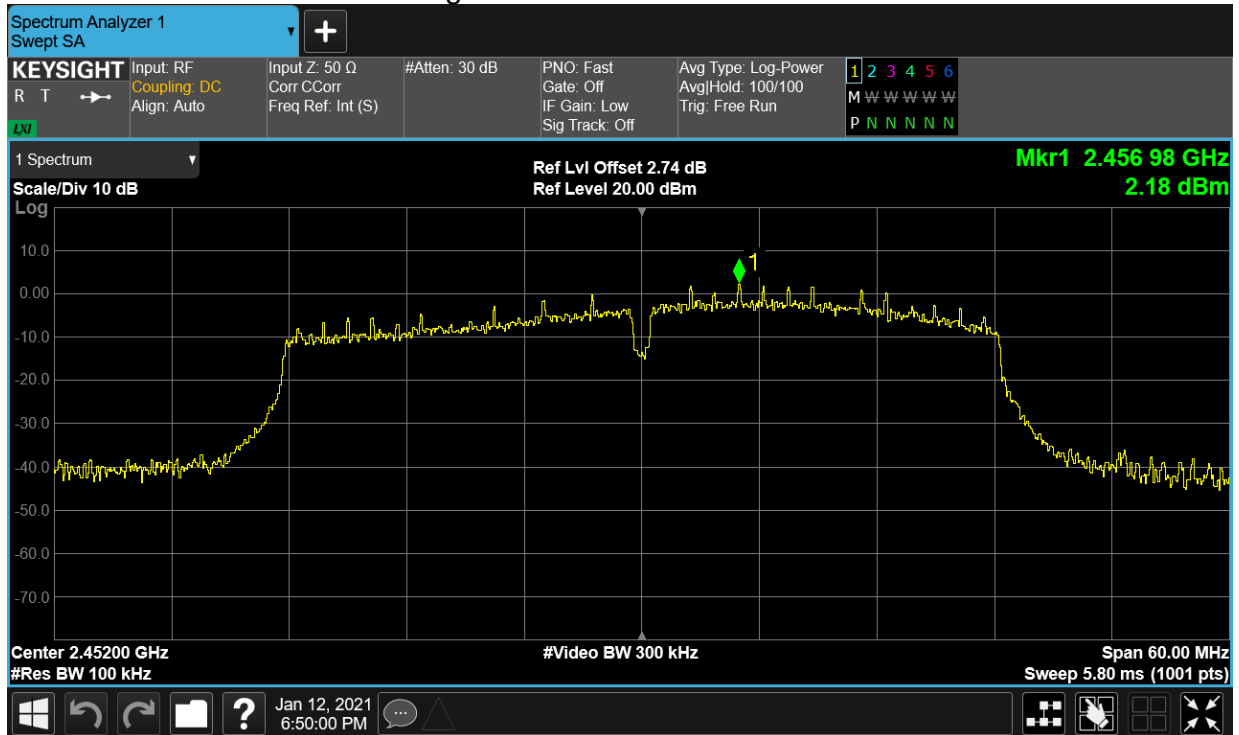
Band Edge NVNT n40 2422MHz Ant1 Ref



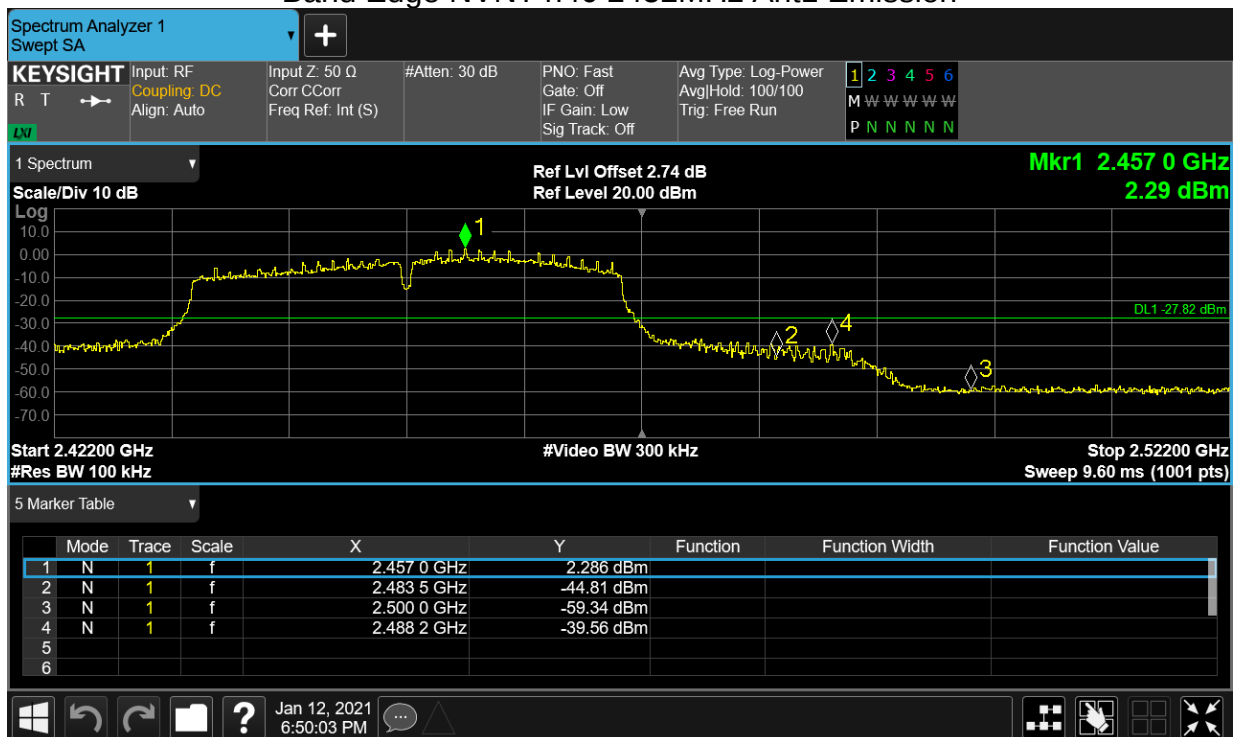
Band Edge NVNT n40 2422MHz Ant1 Emission



Band Edge NVNT n40 2452MHz Ant1 Ref



Band Edge NVNT n40 2452MHz Ant1 Emission

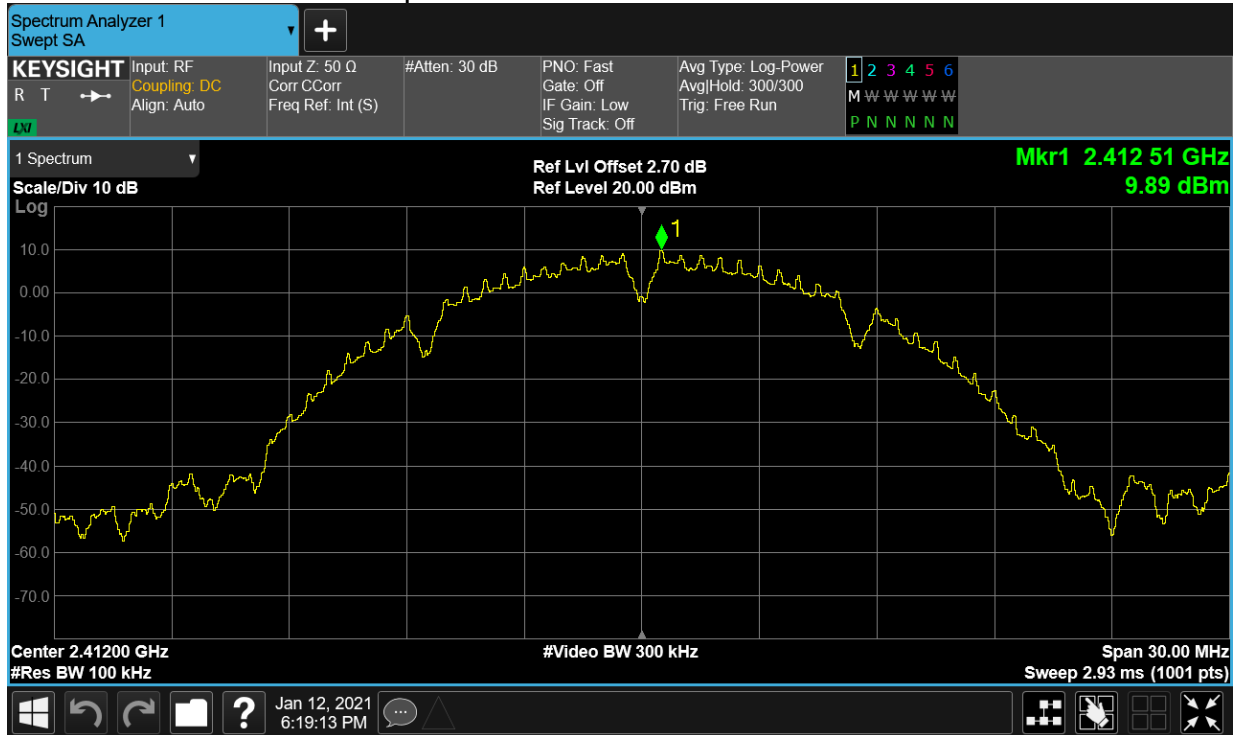


Conducted RF Spurious Emission

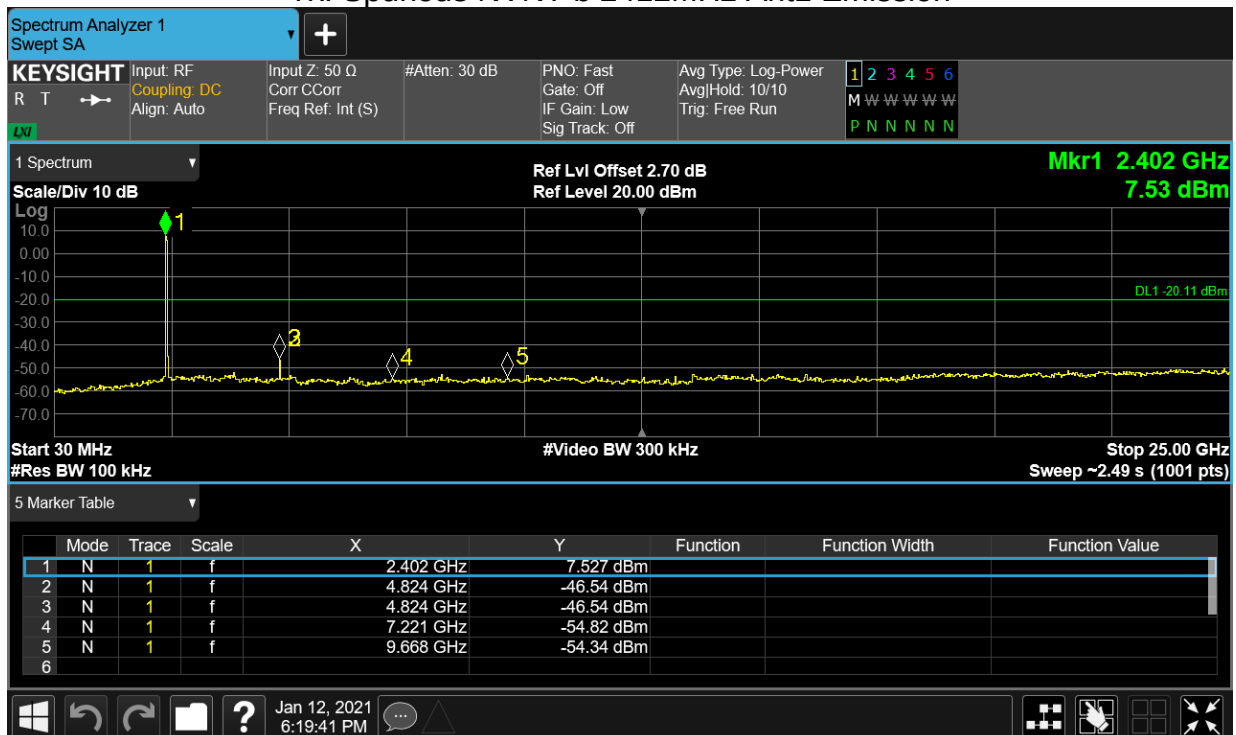
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-56.42	-30	Pass
NVNT	b	2437	Ant1	-48.21	-30	Pass
NVNT	b	2462	Ant1	-53.7	-30	Pass
NVNT	g	2412	Ant1	-55.97	-30	Pass
NVNT	g	2437	Ant1	-54.88	-30	Pass
NVNT	g	2462	Ant1	-54.91	-30	Pass

NVNT	n20	2412	Ant1	-55.68	-30	Pass
NVNT	n20	2437	Ant1	-60.41	-30	Pass
NVNT	n20	2462	Ant1	-51.66	-30	Pass
NVNT	n40	2422	Ant1	-53.88	-30	Pass
NVNT	n40	2437	Ant1	-48.81	-30	Pass
NVNT	n40	2452	Ant1	-47.82	-30	Pass

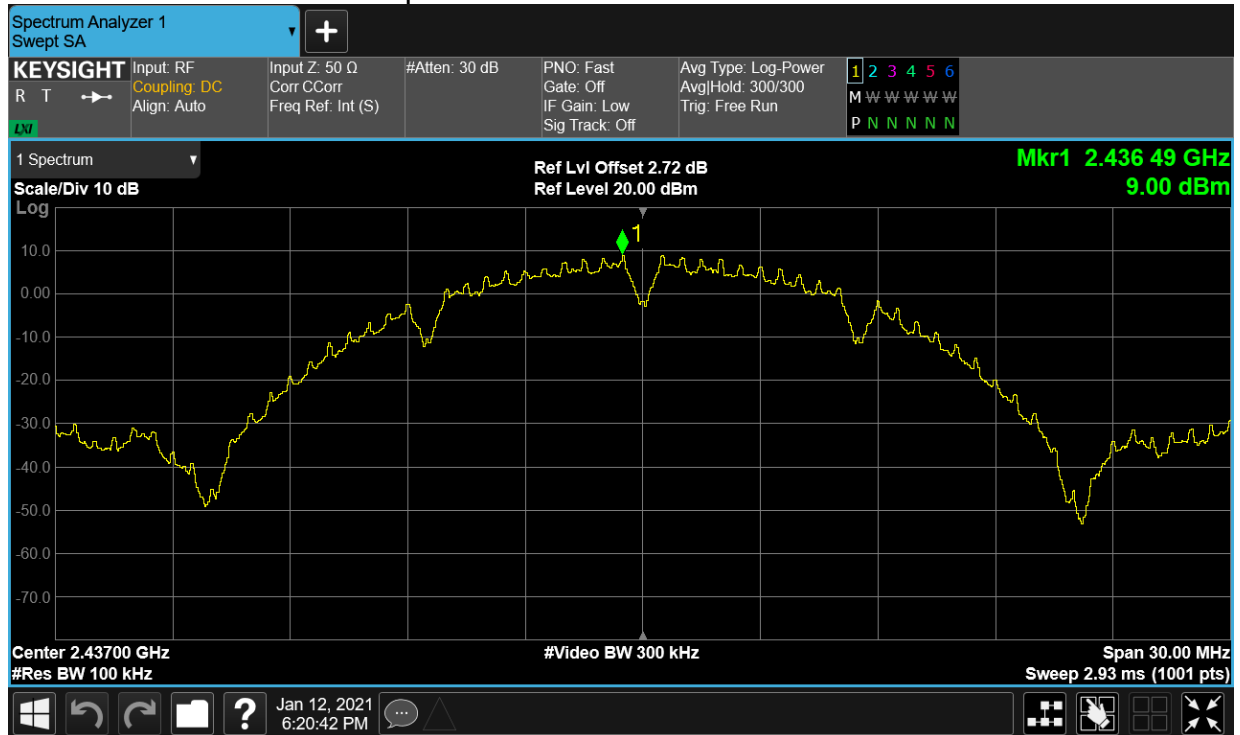
Tx. Spurious NVNT b 2412MHz Ant1 Ref



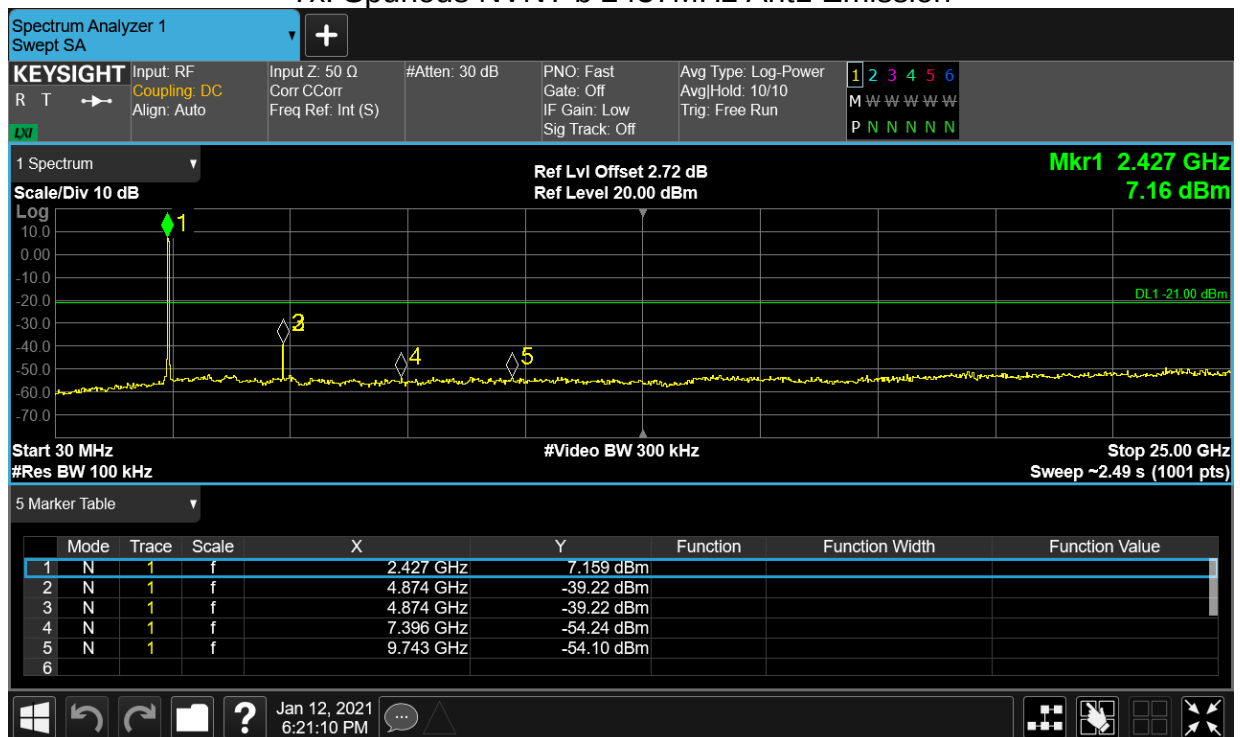
Tx. Spurious NVNT b 2412MHz Ant1 Emission



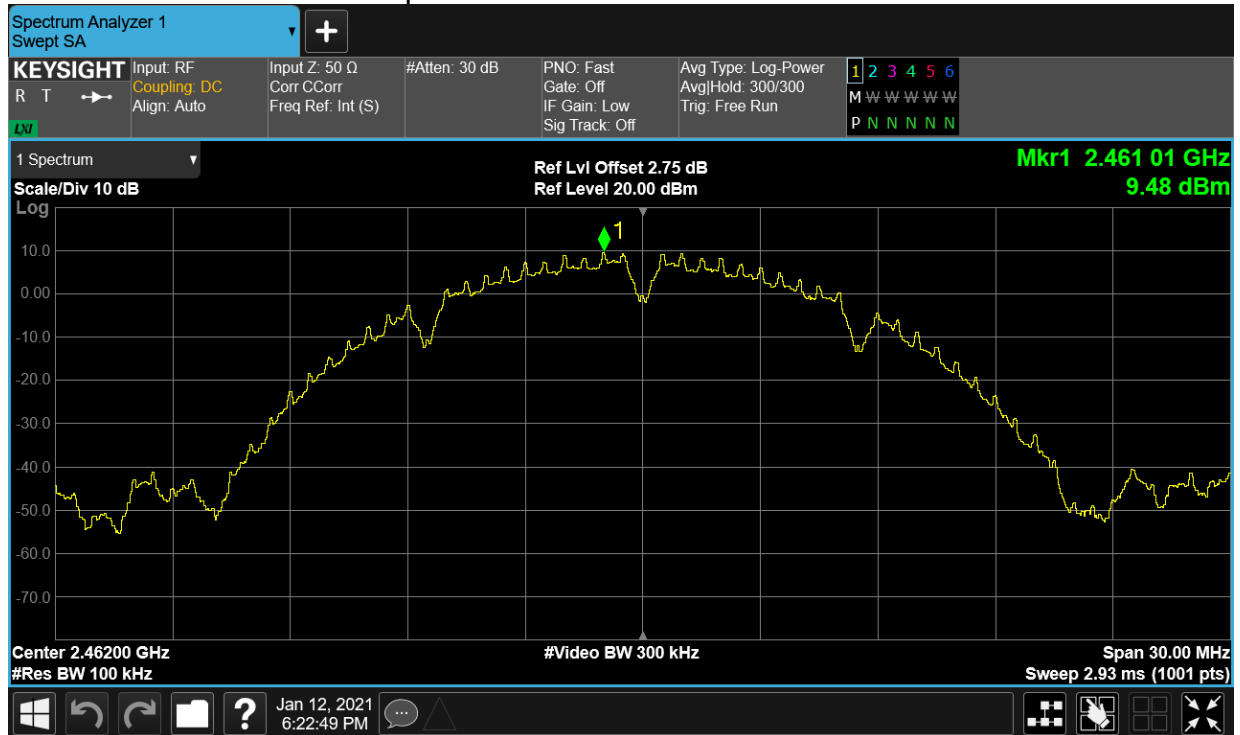
Tx. Spurious NVNT b 2437MHz Ant1 Ref



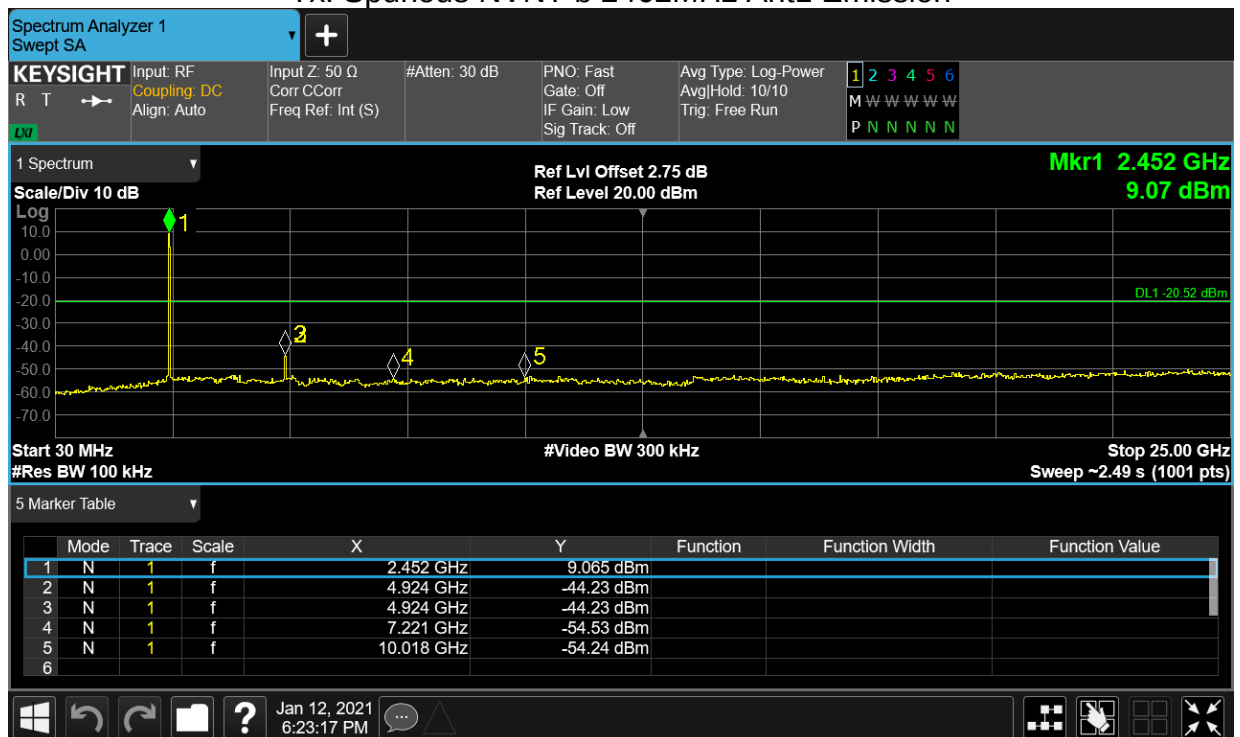
Tx. Spurious NVNT b 2437MHz Ant1 Emission



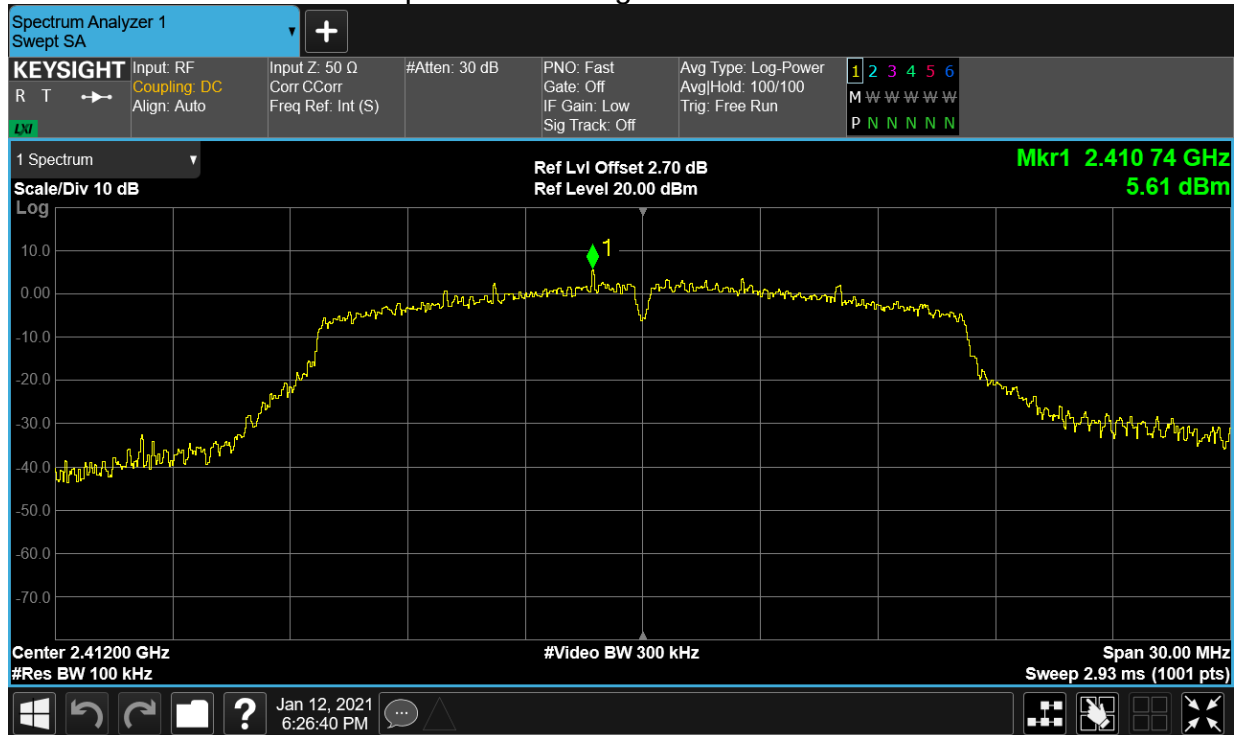
Tx. Spurious NVNT b 2462MHz Ant1 Ref



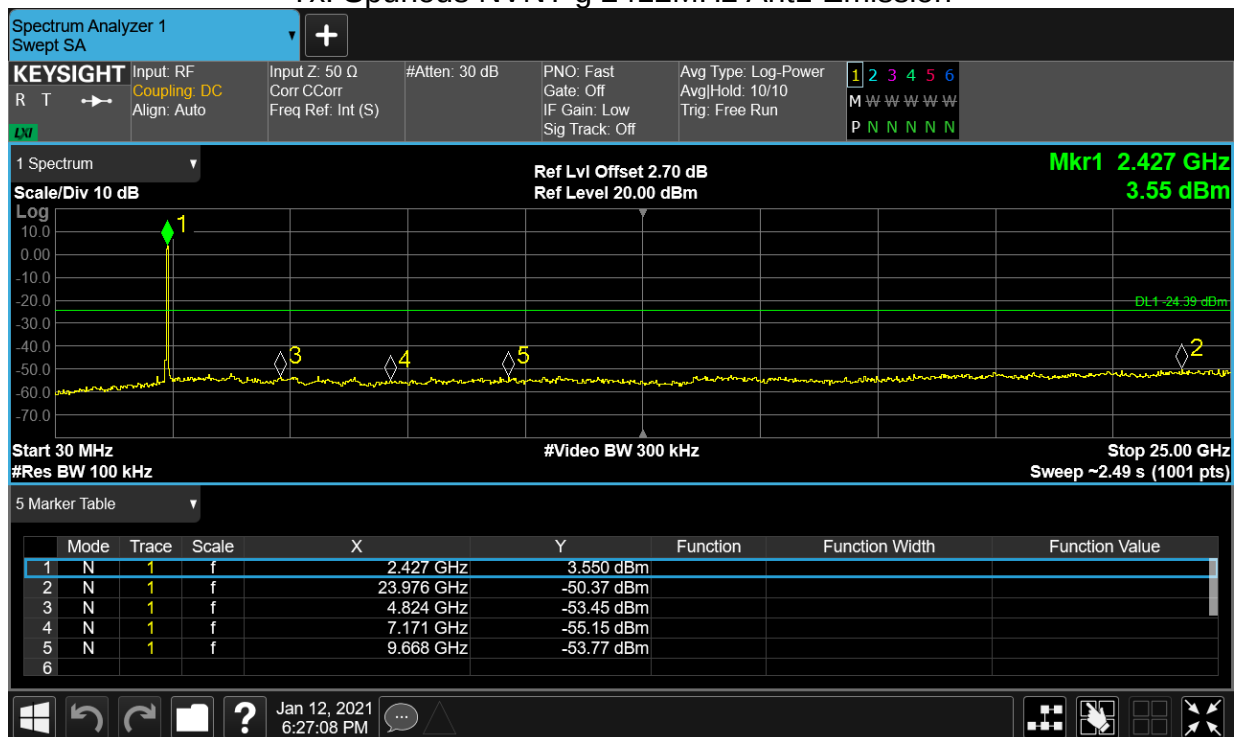
Tx. Spurious NVNT b 2462MHz Ant1 Emission



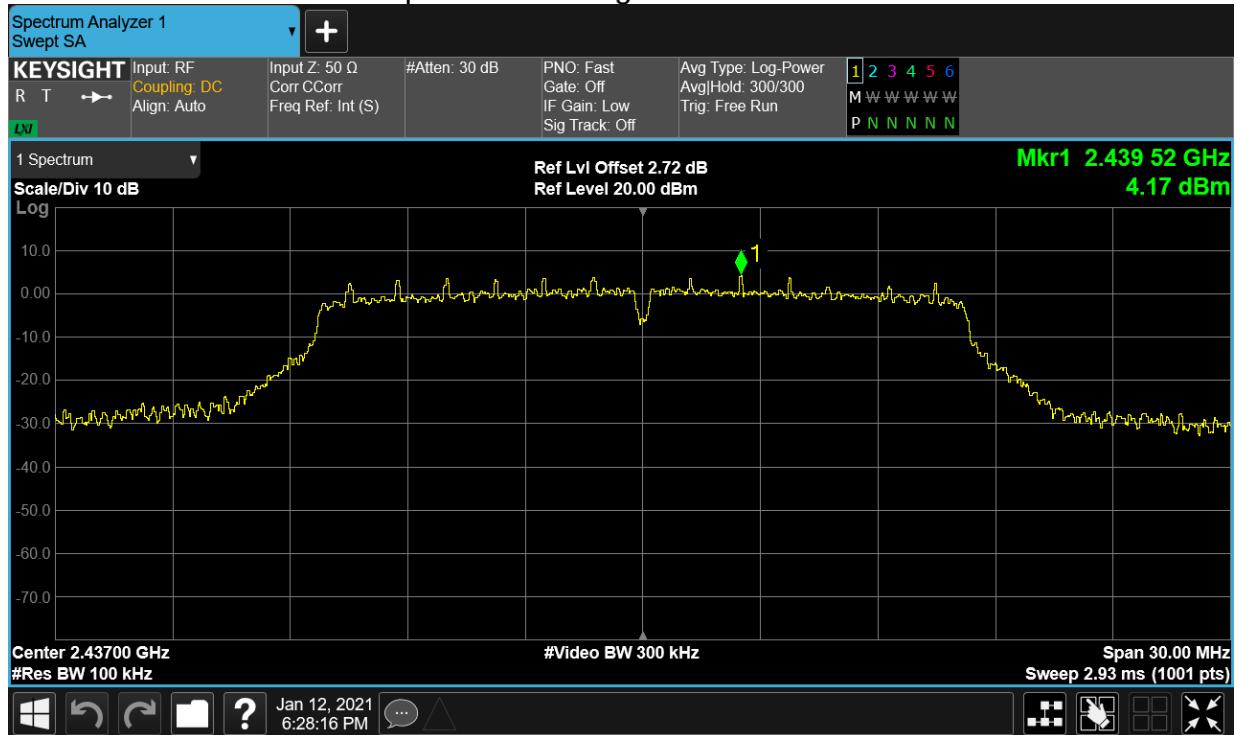
Tx. Spurious NVNT g 2412MHz Ant1 Ref



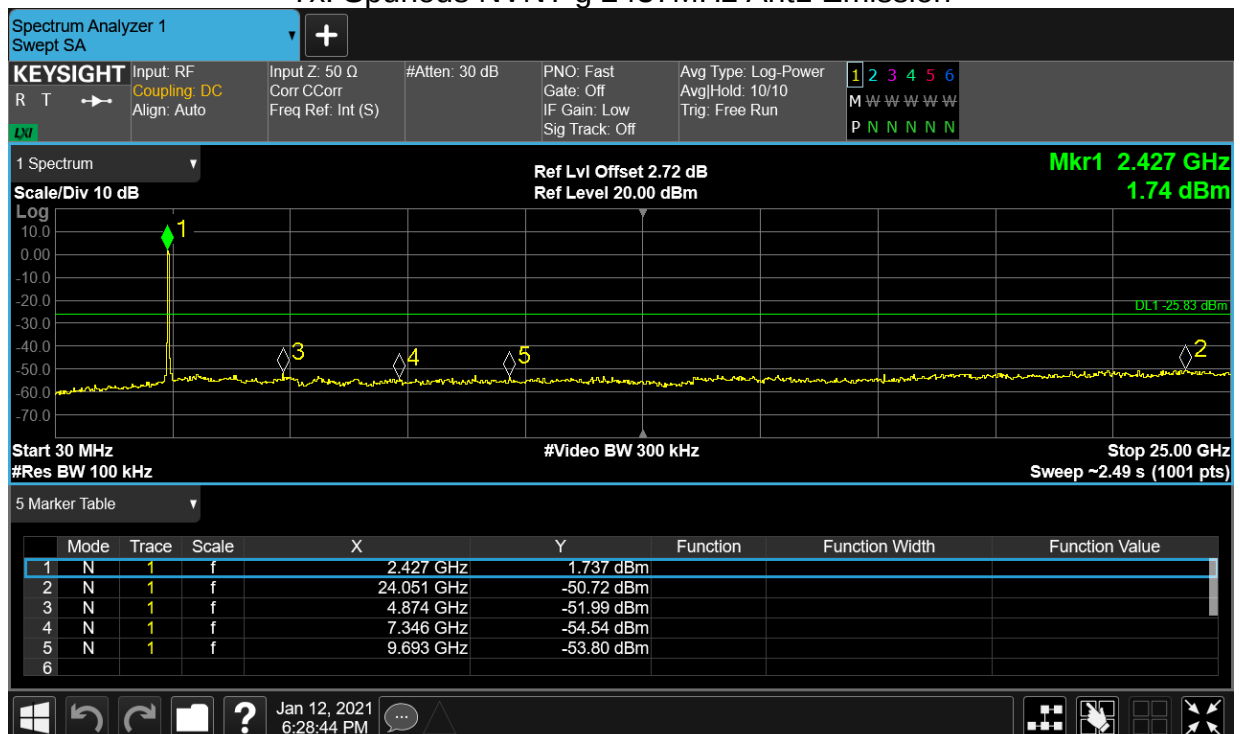
Tx. Spurious NVNT g 2412MHz Ant1 Emission



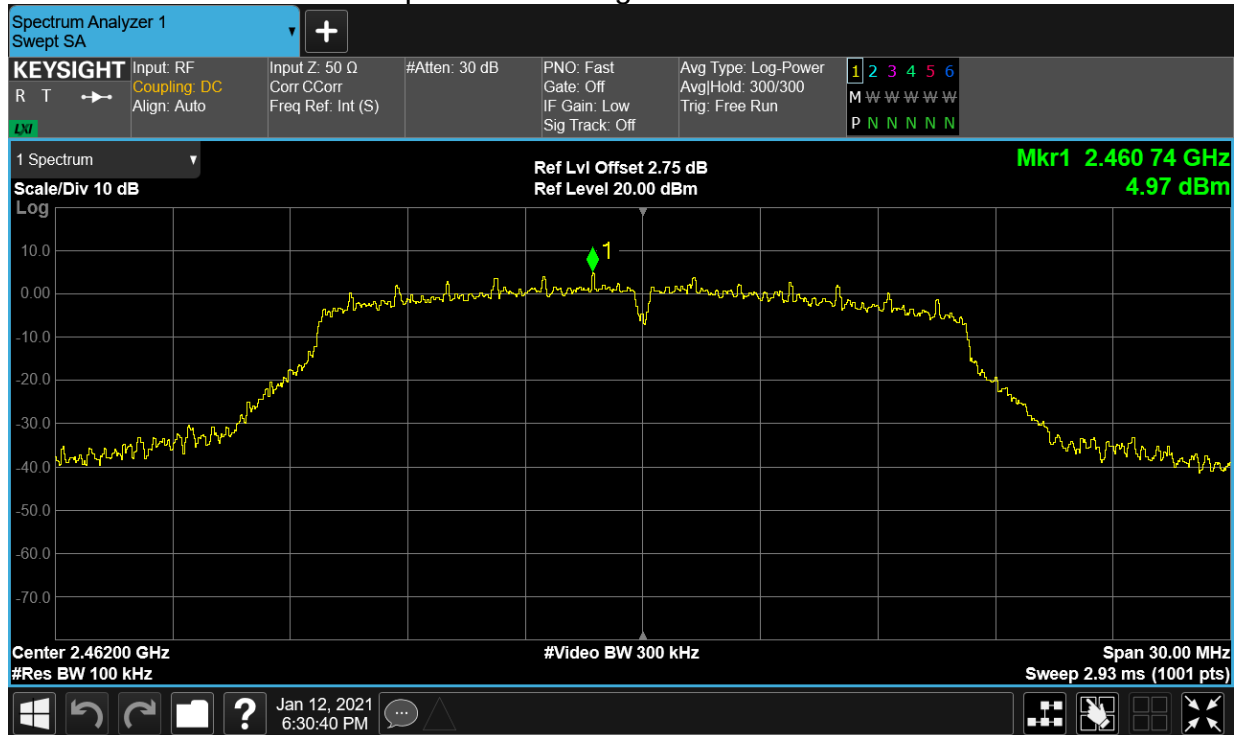
Tx. Spurious NVNT g 2437MHz Ant1 Ref



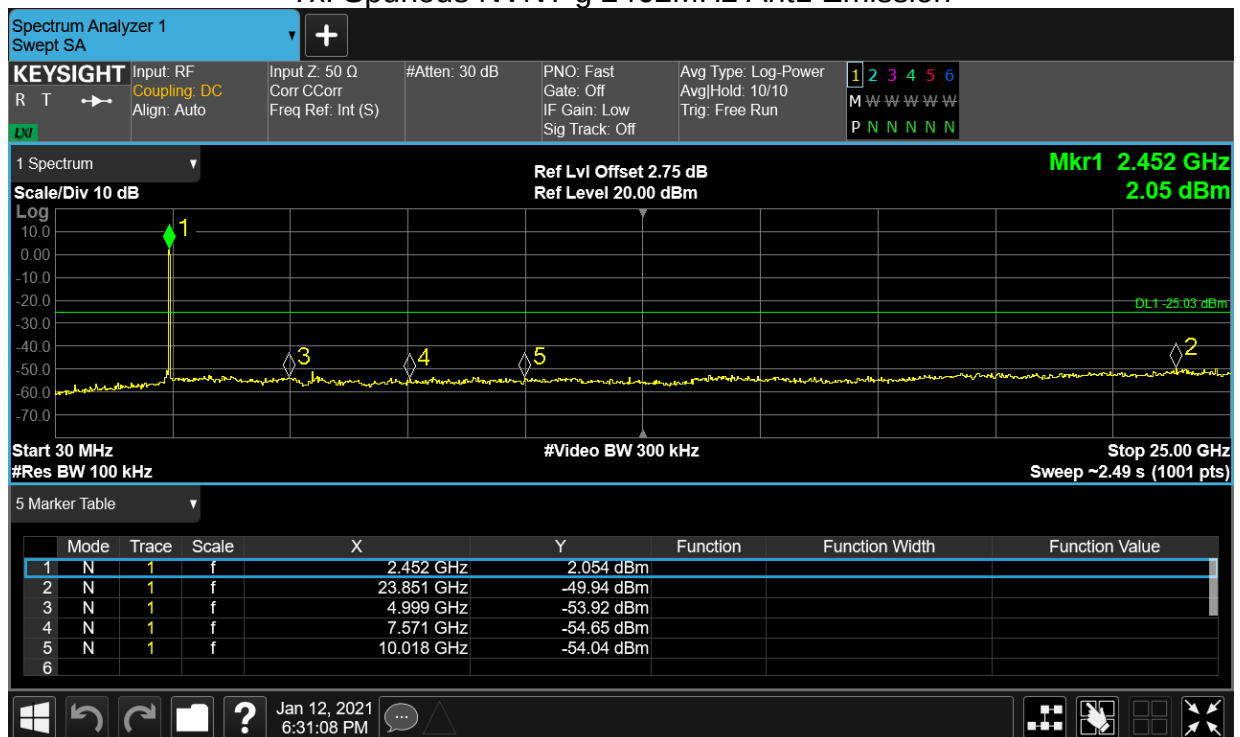
Tx. Spurious NVNT g 2437MHz Ant1 Emission



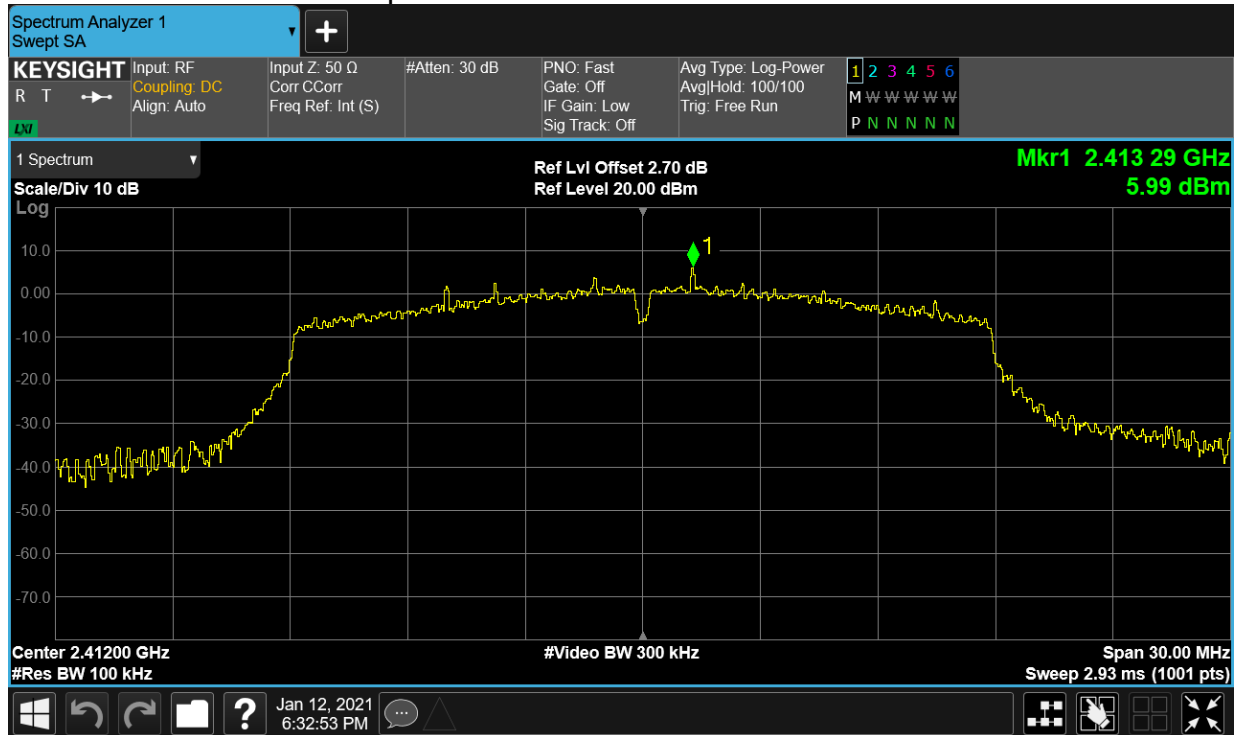
Tx. Spurious NVNT g 2462MHz Ant1 Ref



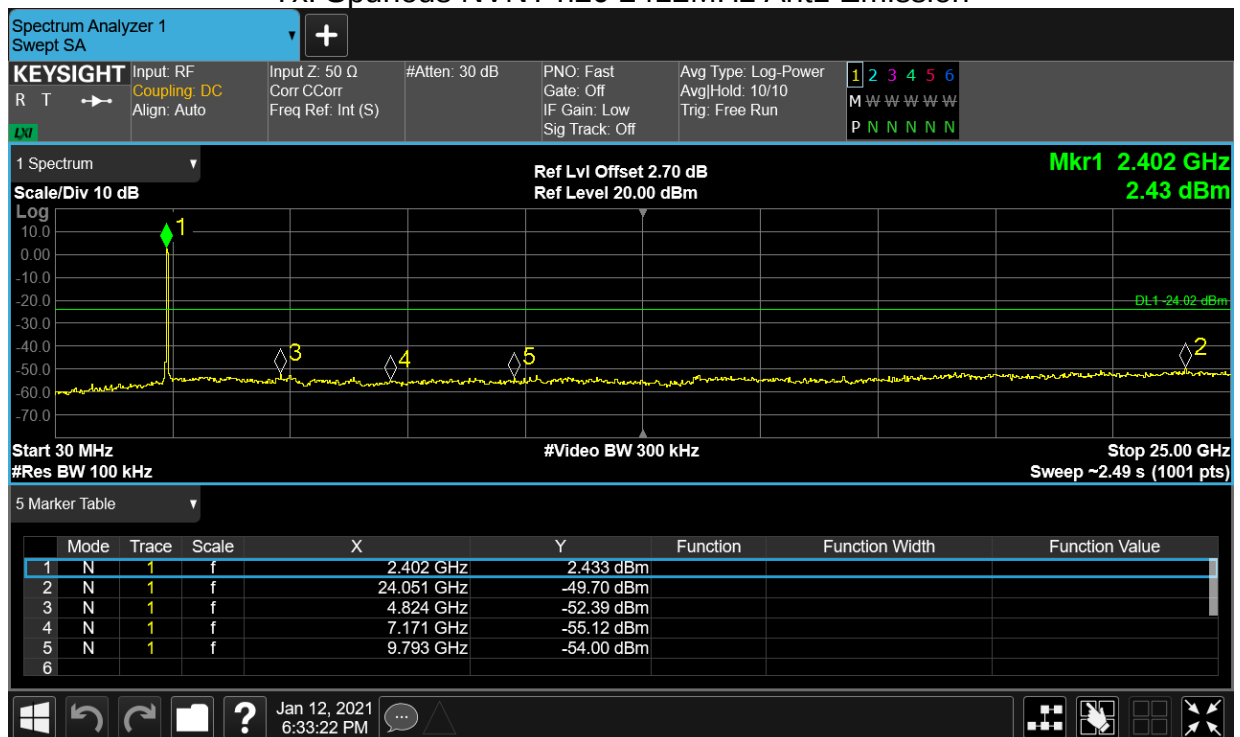
Tx. Spurious NVNT g 2462MHz Ant1 Emission



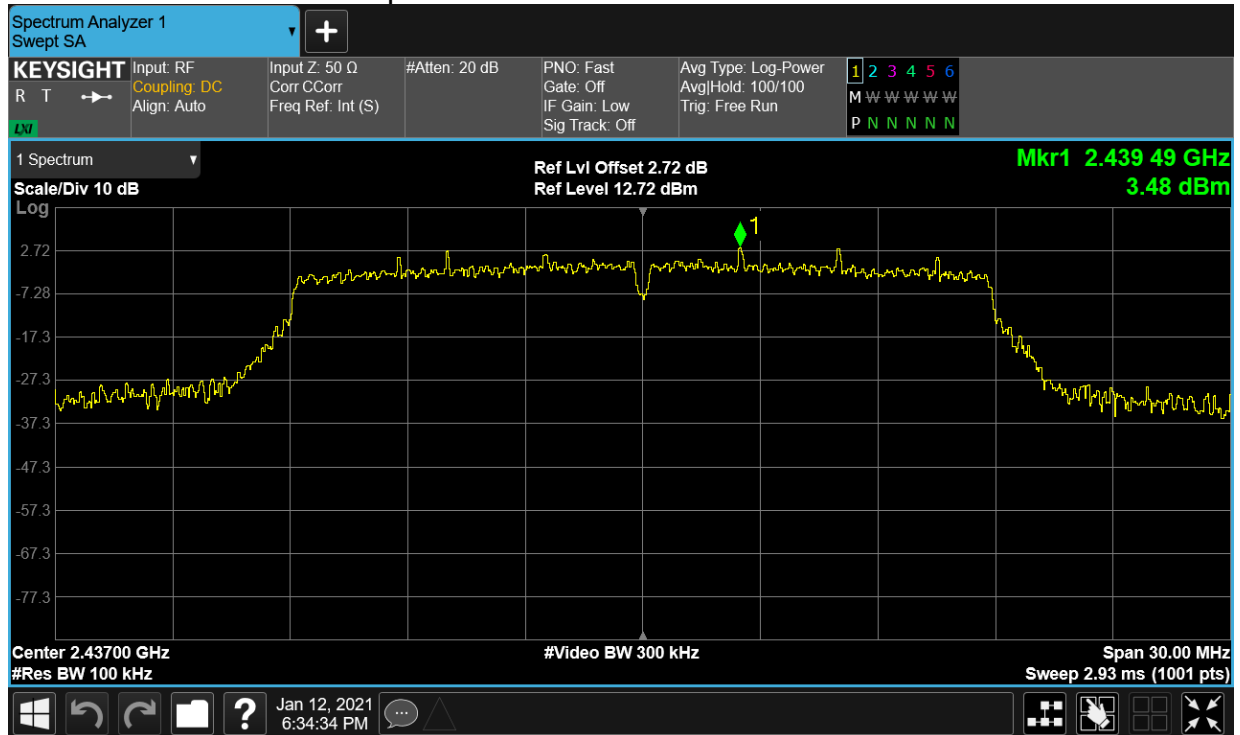
Tx. Spurious NVNT n20 2412MHz Ant1 Ref



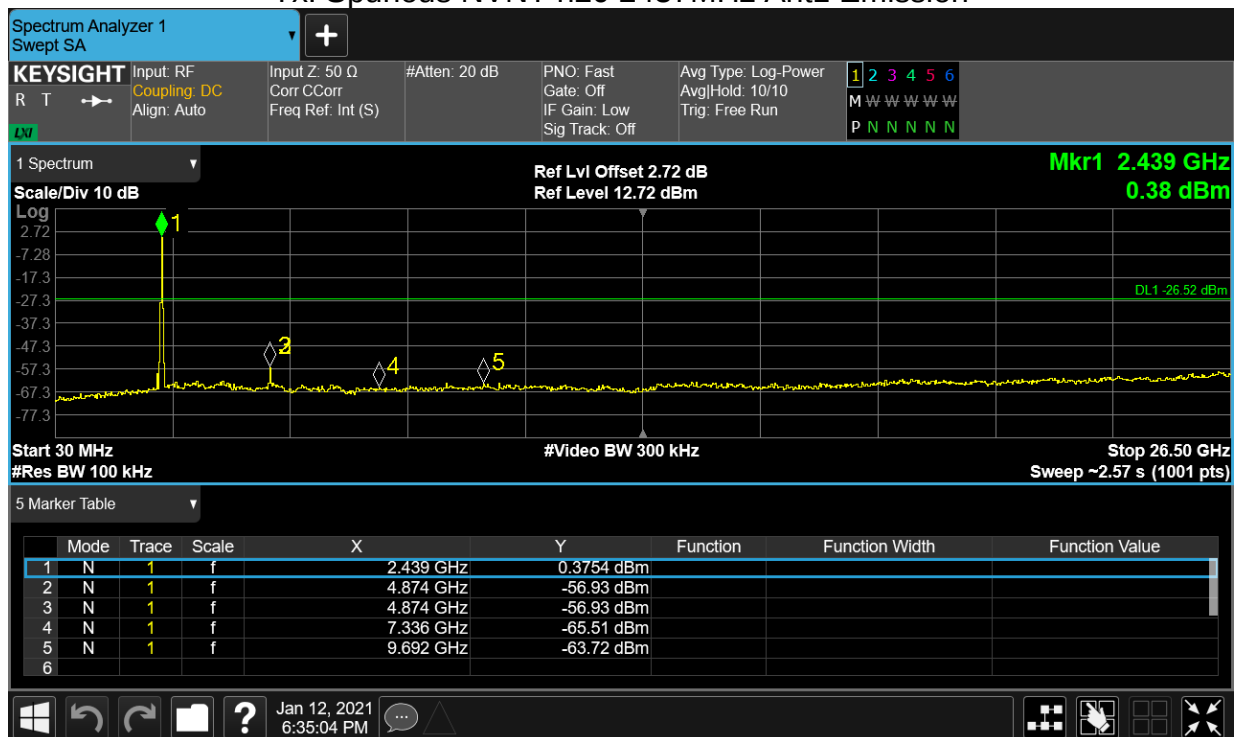
Tx. Spurious NVNT n20 2412MHz Ant1 Emission



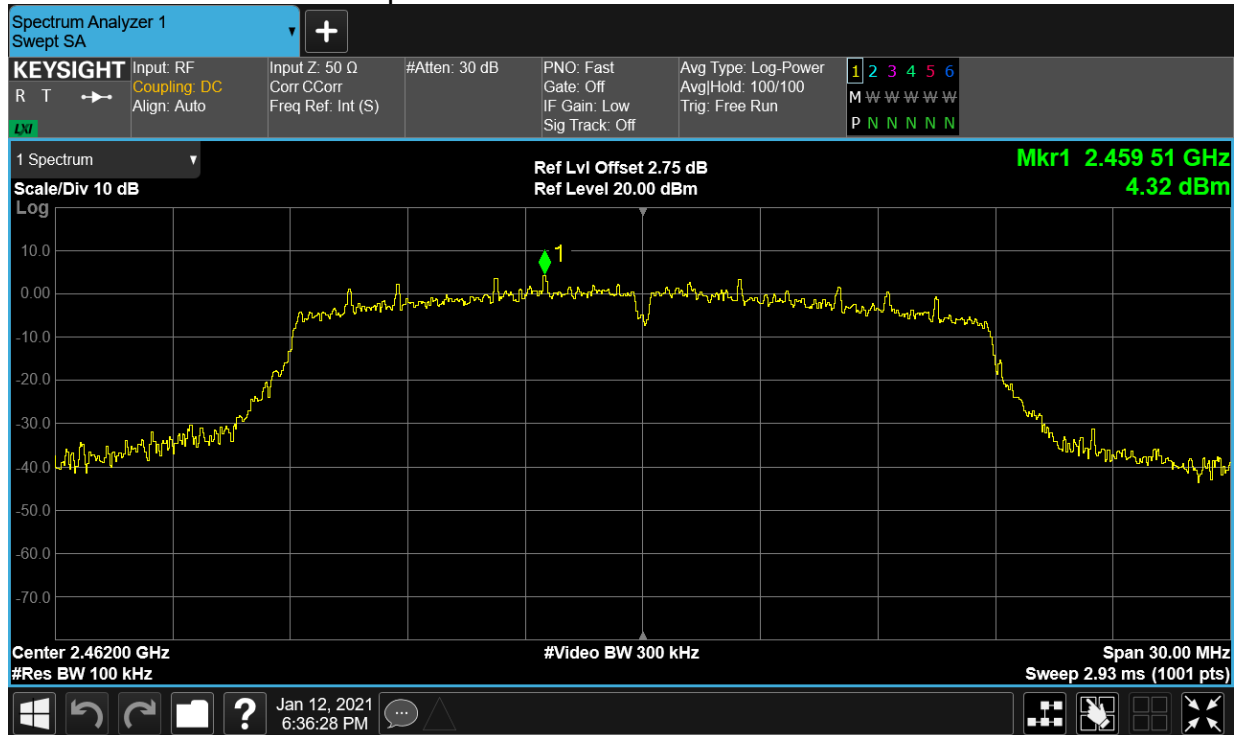
Tx. Spurious NVNT n20 2437MHz Ant1 Ref



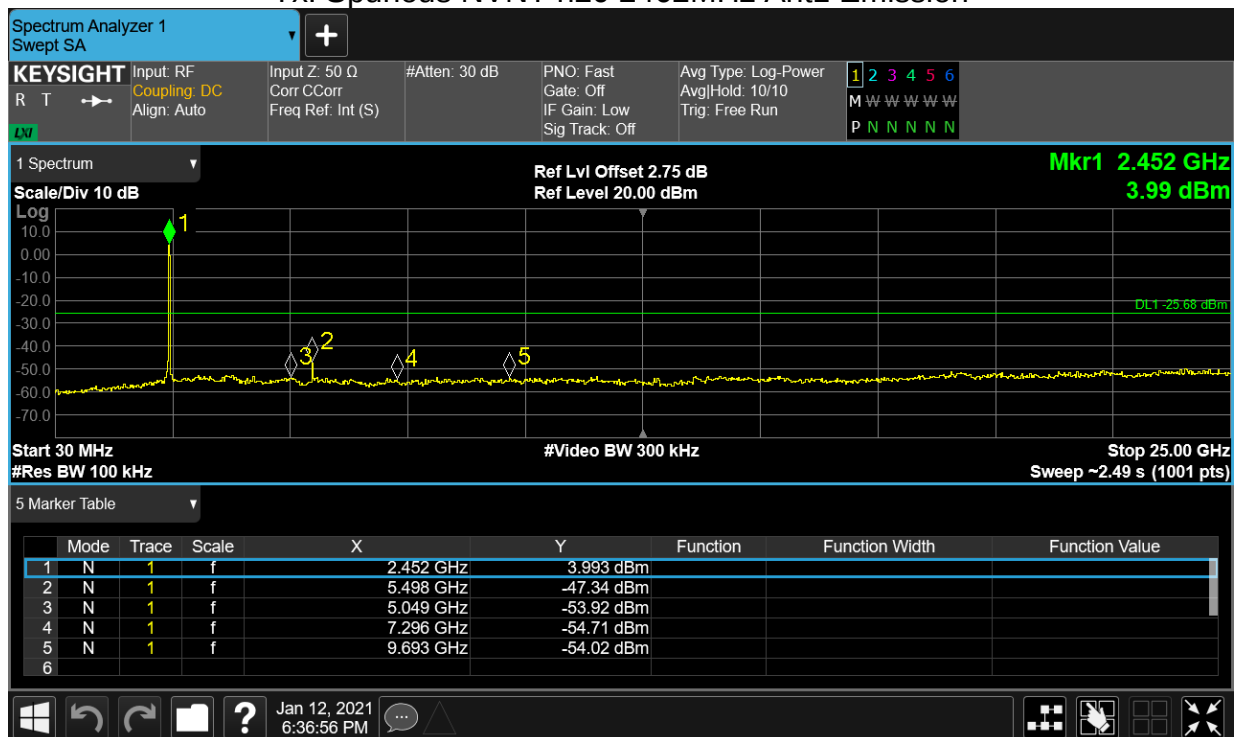
Tx. Spurious NVNT n20 2437MHz Ant1 Emission



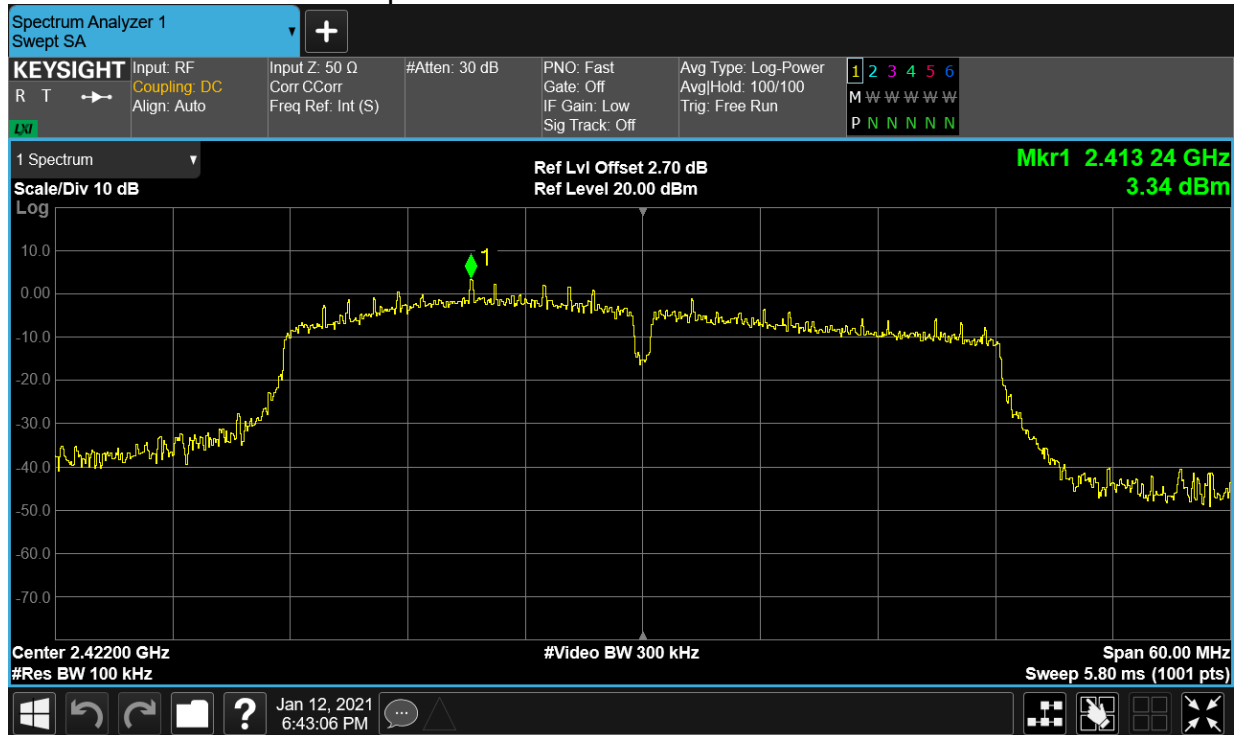
Tx. Spurious NVNT n20 2462MHz Ant1 Ref



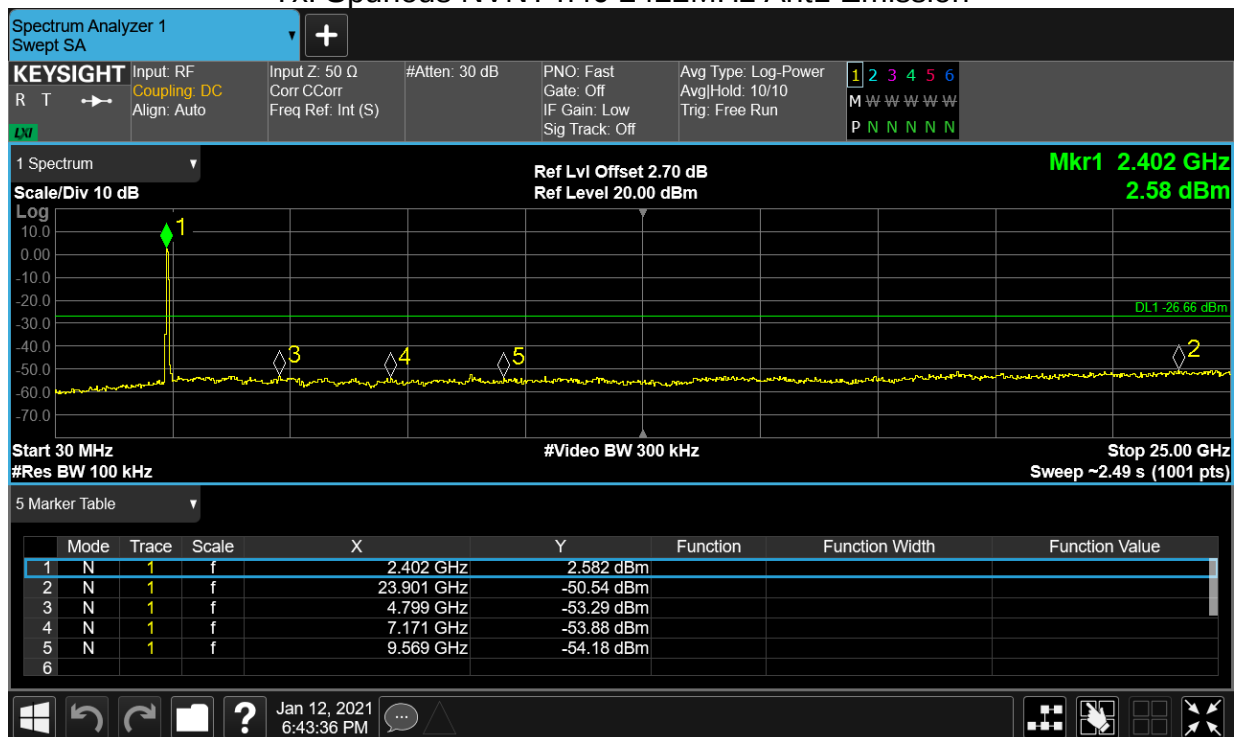
Tx. Spurious NVNT n20 2462MHz Ant1 Emission



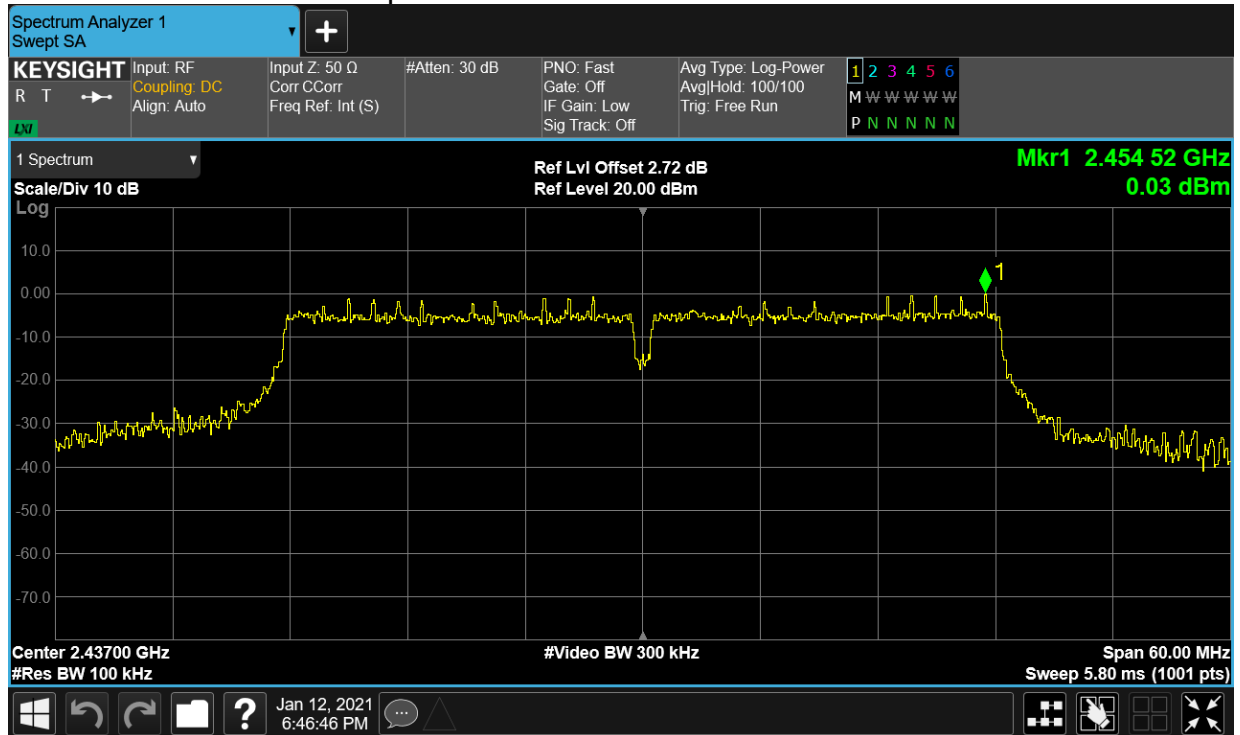
Tx. Spurious NVNT n40 2422MHz Ant1 Ref



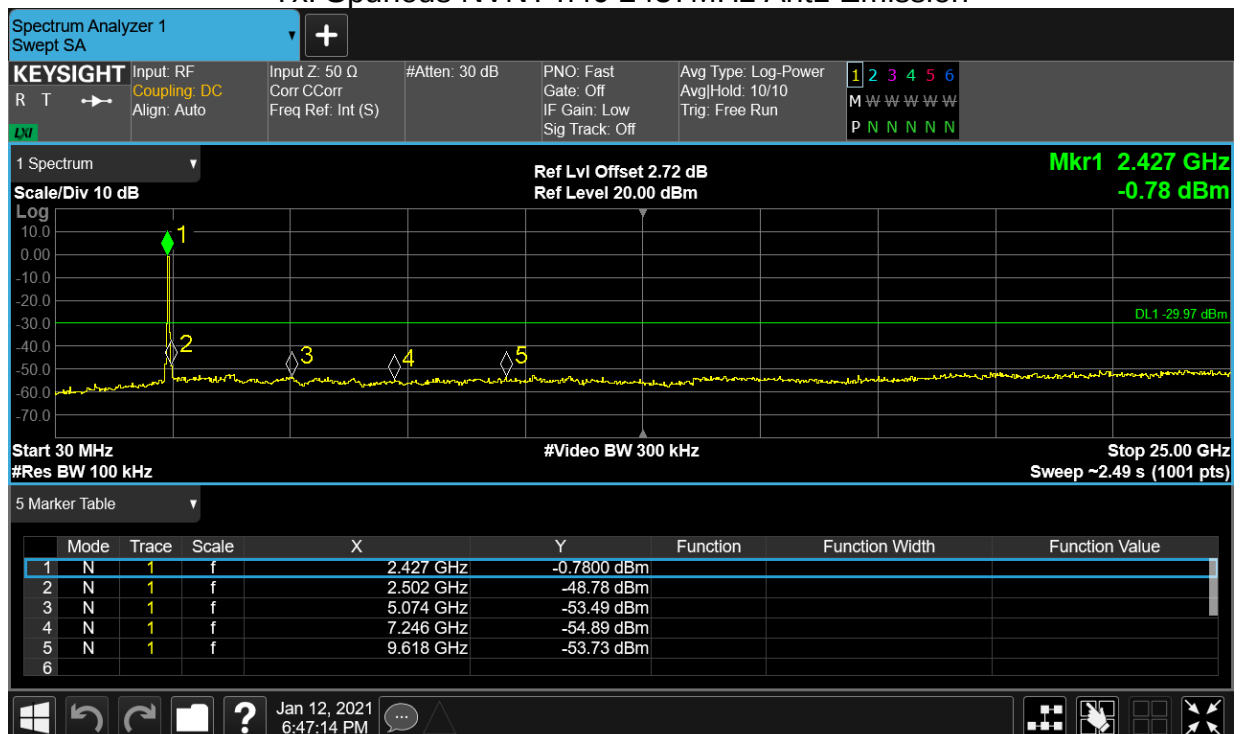
Tx. Spurious NVNT n40 2422MHz Ant1 Emission



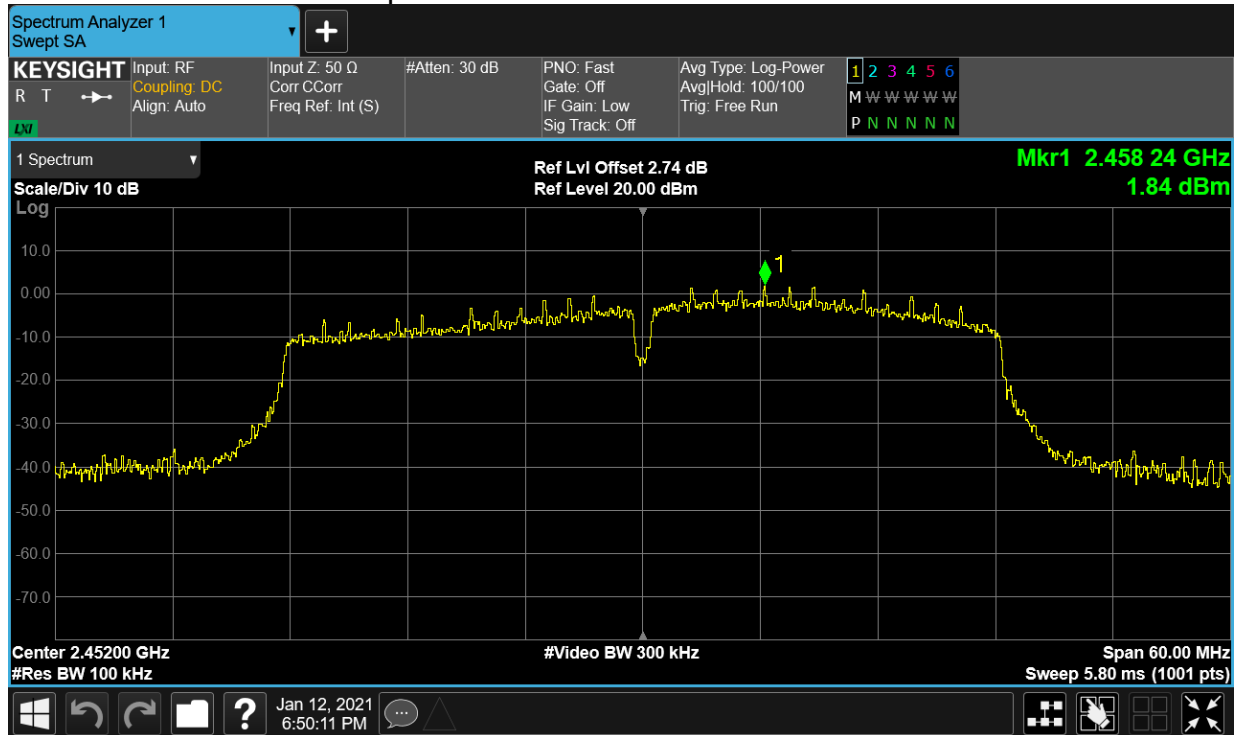
Tx. Spurious NVNT n40 2437MHz Ant1 Ref



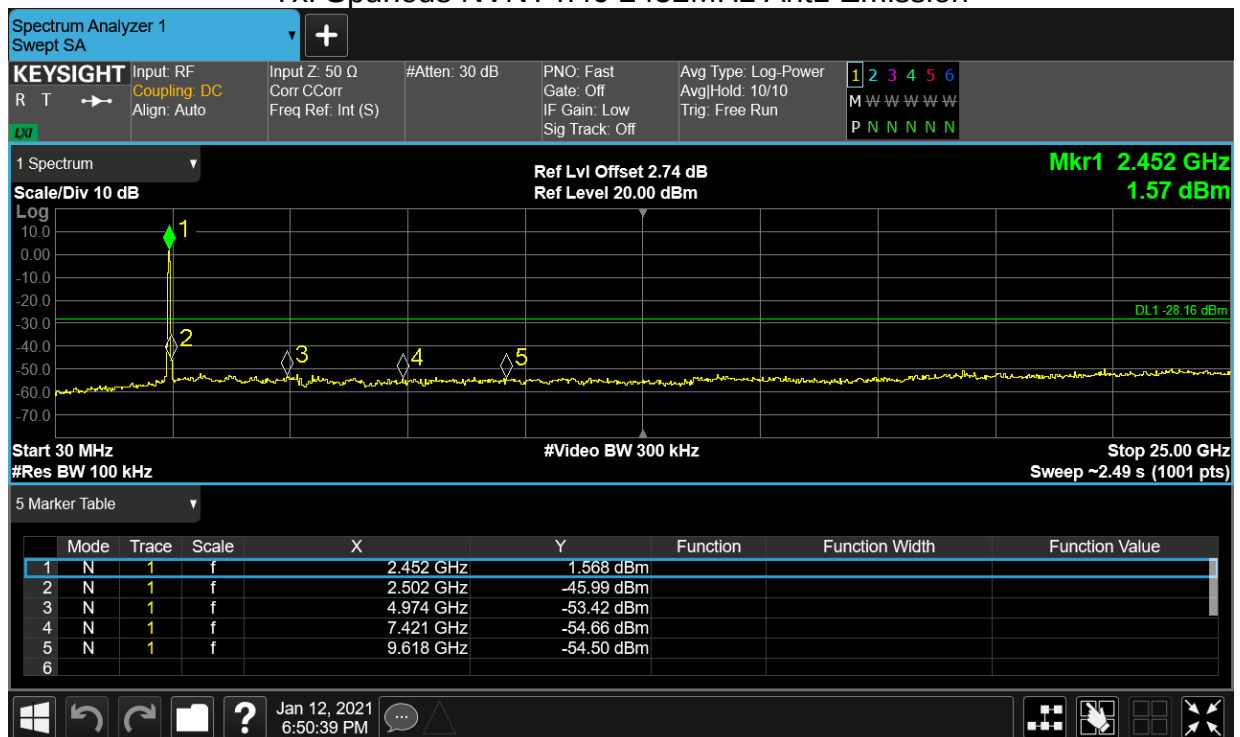
Tx. Spurious NVNT n40 2437MHz Ant1 Emission



Tx. Spurious NVNT n40 2452MHz Ant1 Ref



Tx. Spurious NVNT n40 2452MHz Ant1 Emission



-----End of report-----