

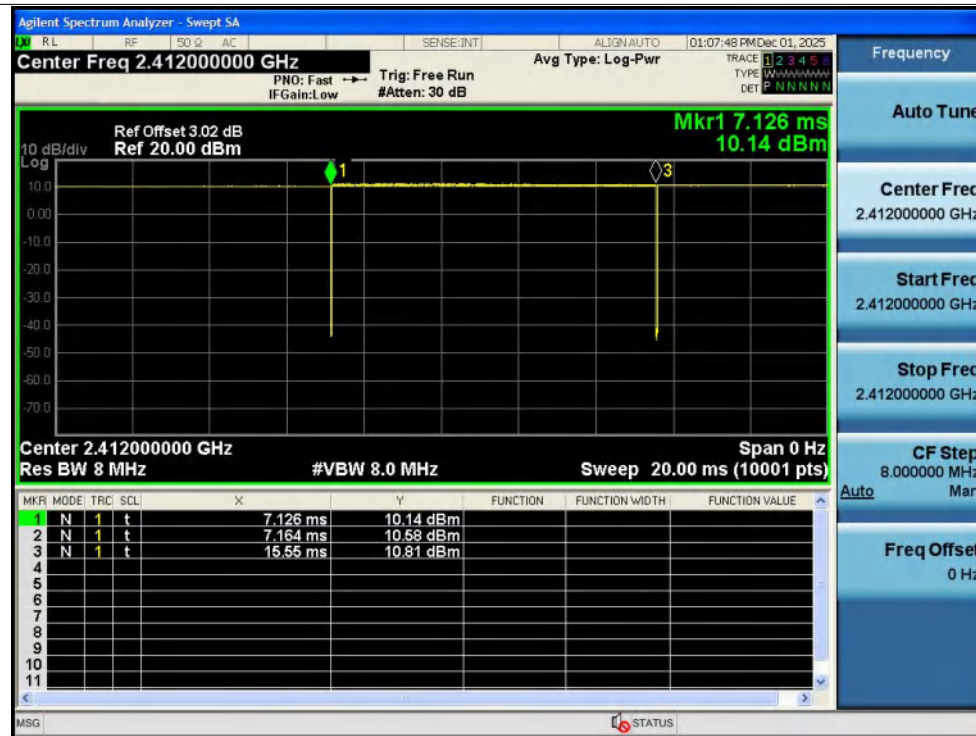
Appendix A 2.4G WIFI

Duty Cycle

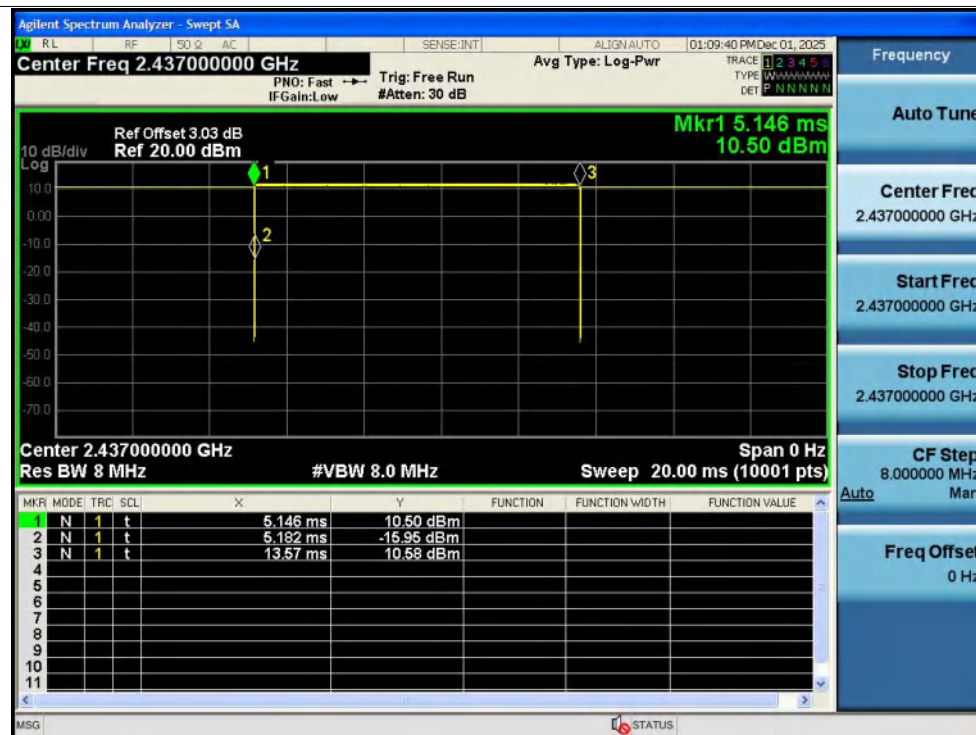
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	99.55	0.02	0.12
NVNT	b	2437	Ant1	99.57	0.02	0.12
NVNT	b	2462	Ant1	99.57	0.02	0.12
NVNT	g	2412	Ant1	96.94	0.13	0.72
NVNT	g	2437	Ant1	96.94	0.13	0.72
NVNT	g	2462	Ant1	96.94	0.13	0.72
NVNT	n20	2412	Ant1	96.73	0.14	0.77
NVNT	n20	2437	Ant1	96.73	0.14	0.77
NVNT	n20	2462	Ant1	96.73	0.14	0.77
NVNT	n40	2422	Ant1	93.64	0.29	1.54
NVNT	n40	2437	Ant1	93.64	0.29	1.54
NVNT	n40	2452	Ant1	93.64	0.29	1.54

Test Graphs

Duty Cycle NVNT b 2412MHz Ant1



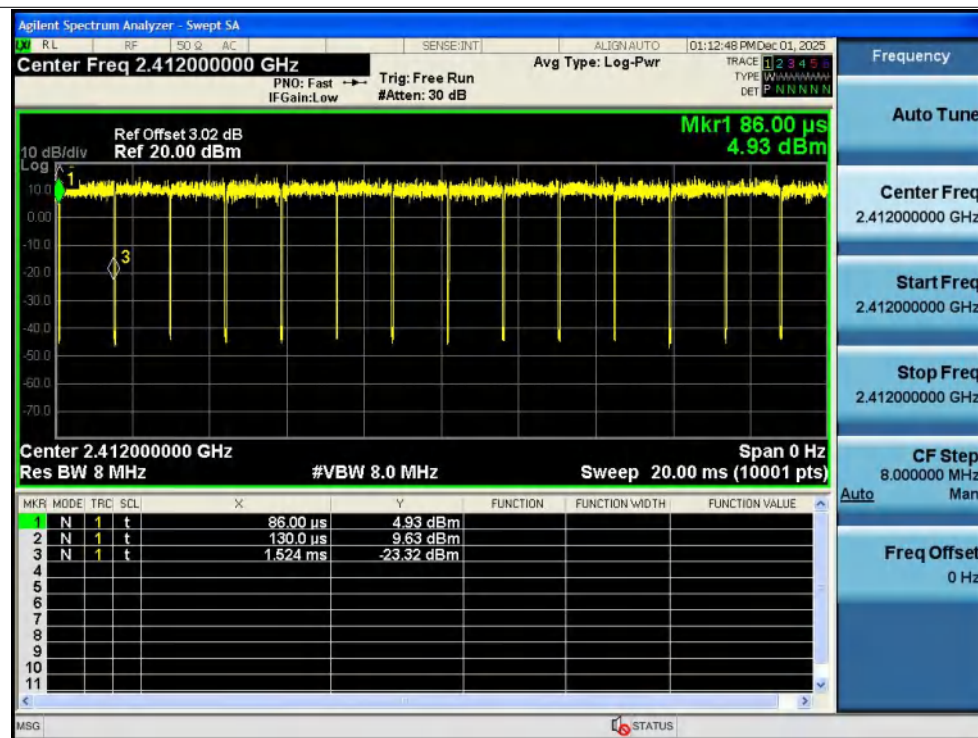
Duty Cycle NVNT b 2437MHz Ant1



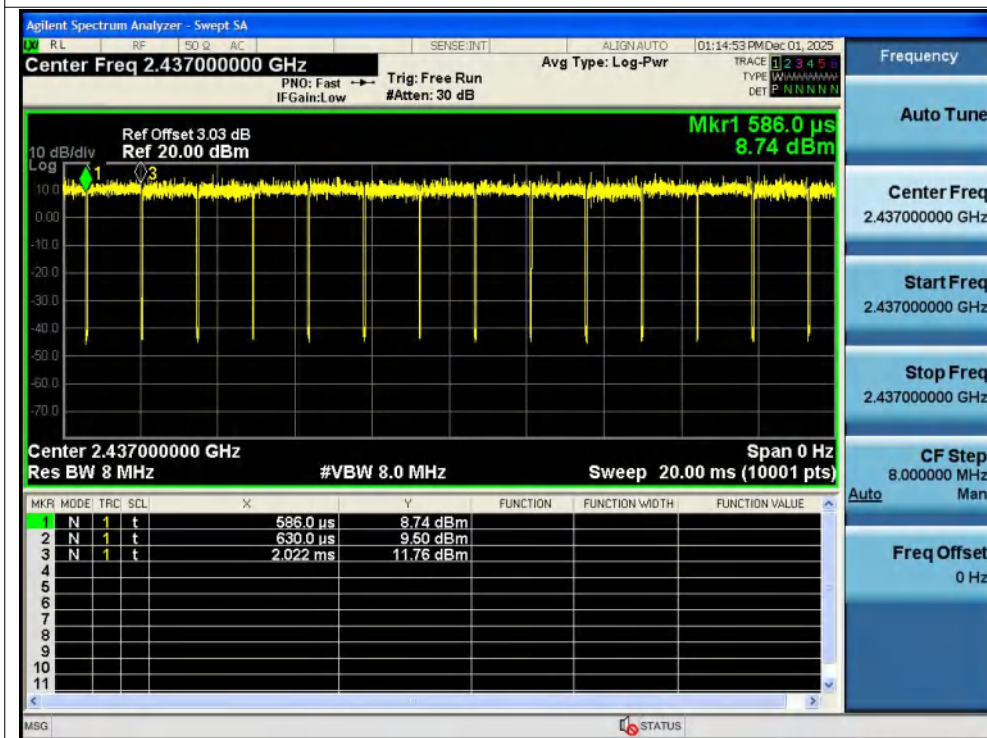
Duty Cycle NVNT b 2462MHz Ant1



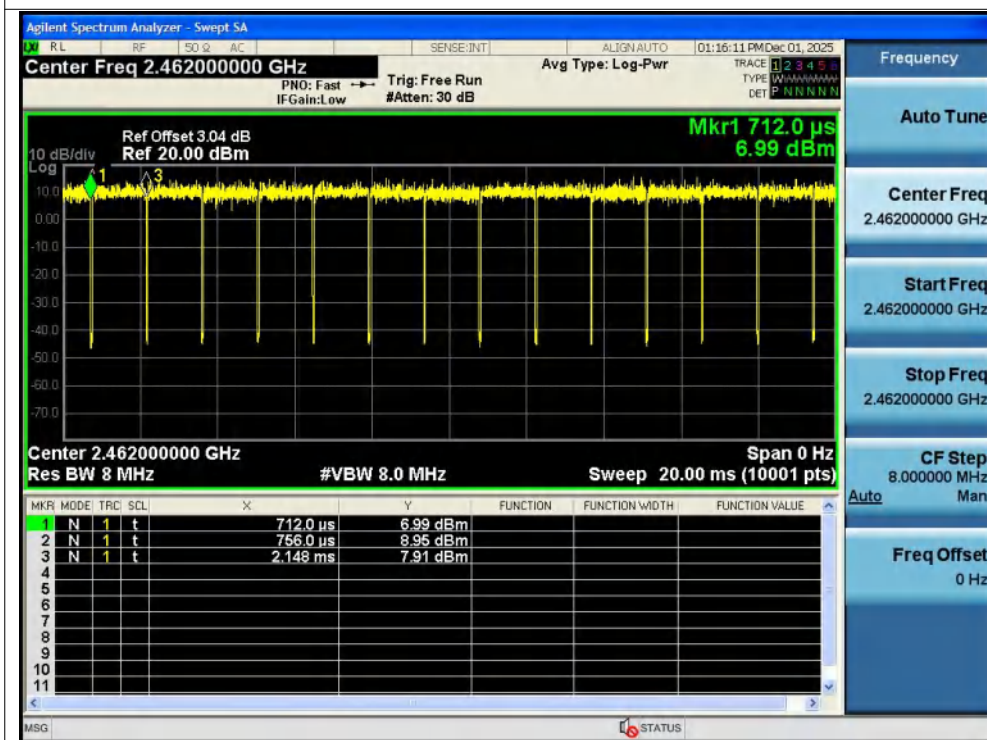
Duty Cycle NVNT g 2412MHz Ant1



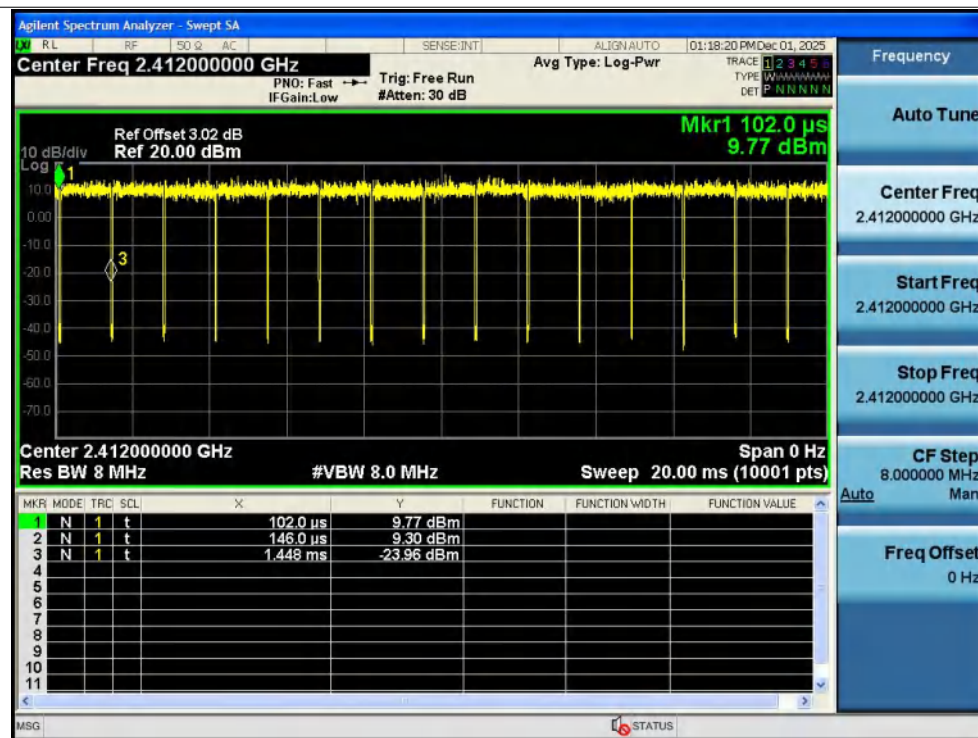
Duty Cycle NVNT g 2437MHz Ant1



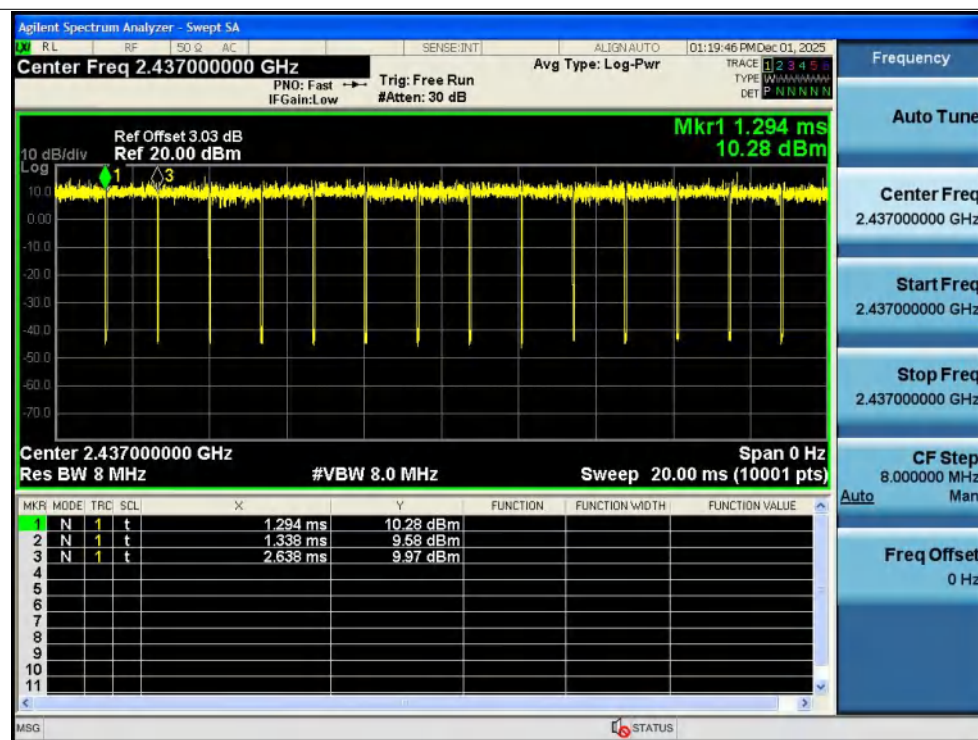
Duty Cycle NVNT g 2462MHz Ant1



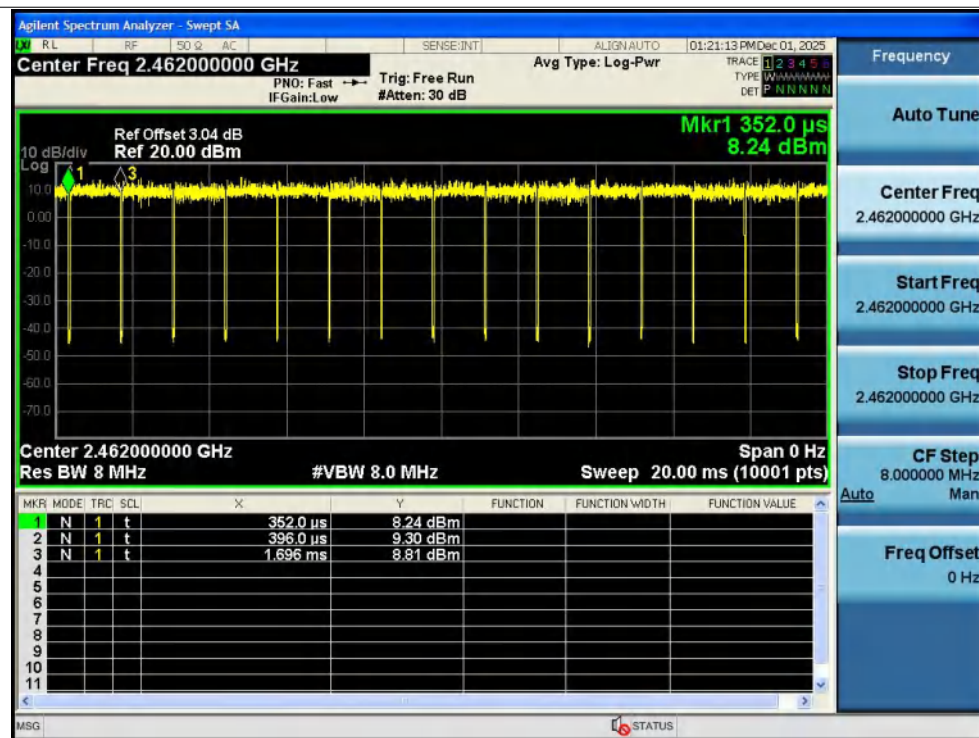
Duty Cycle NVNT n20 2412MHz Ant1



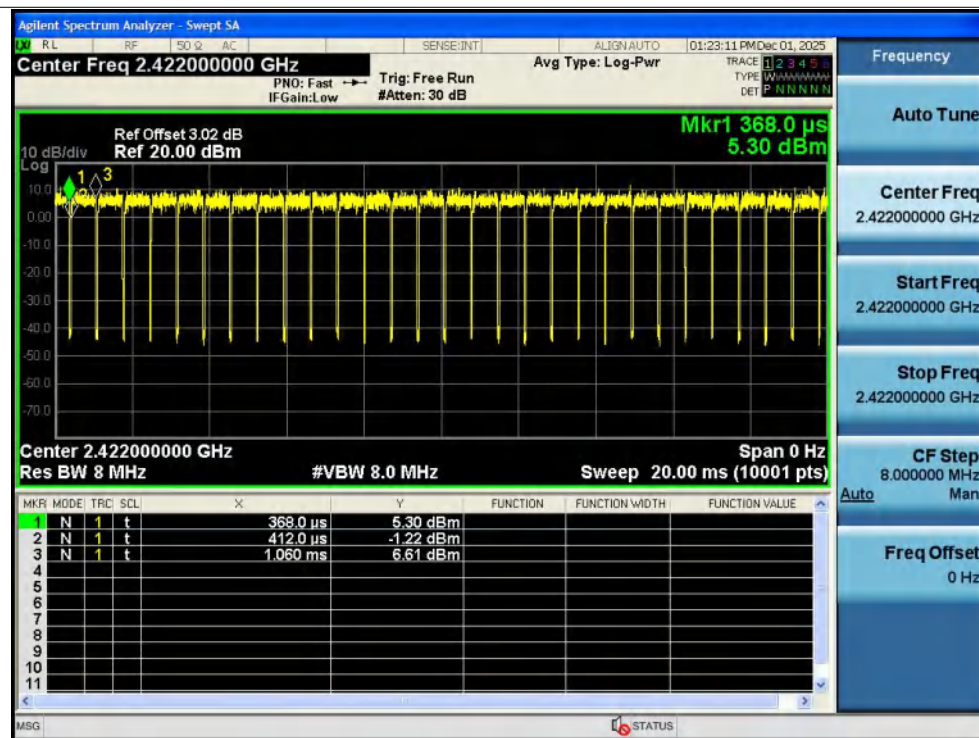
Duty Cycle NVNT n20 2437MHz Ant1



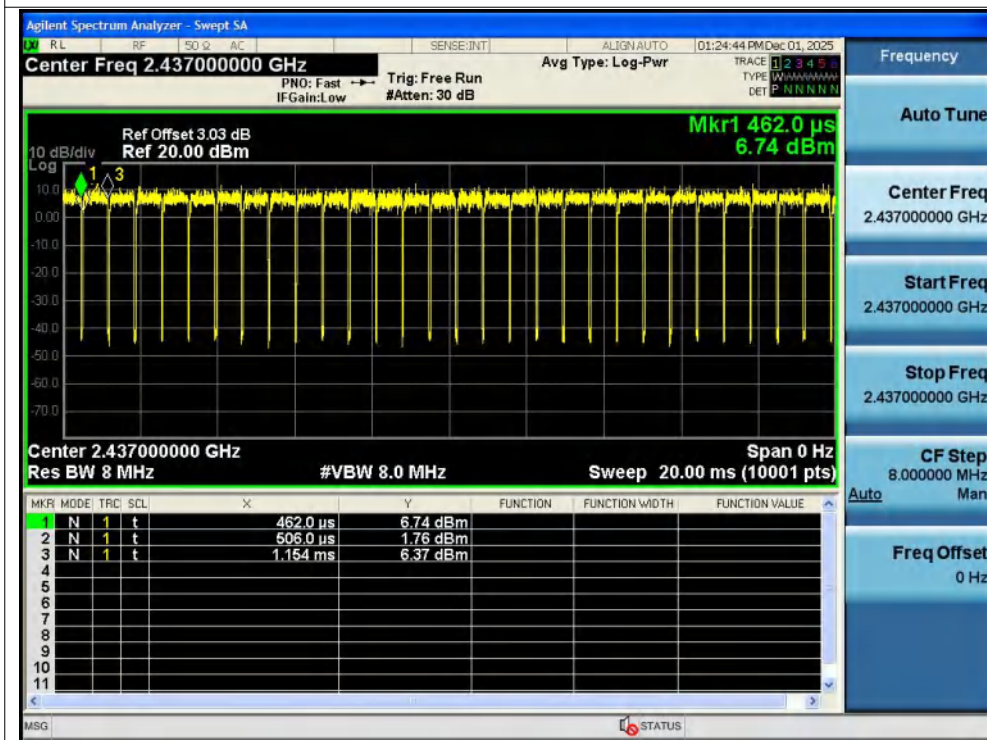
Duty Cycle NVNT n20 2462MHz Ant1



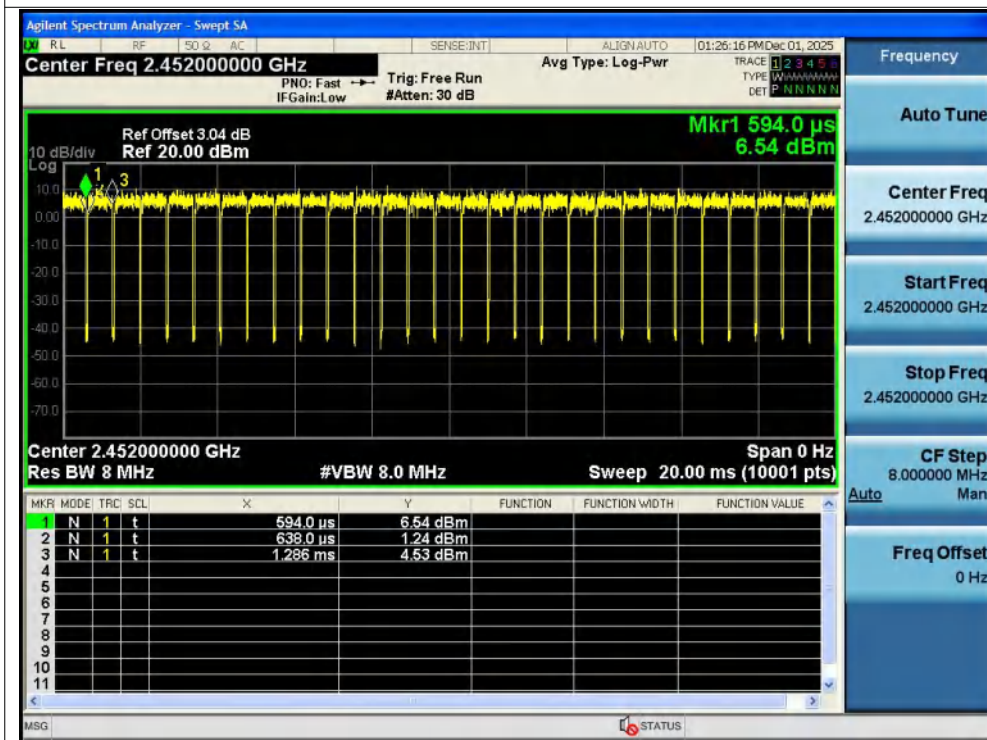
Duty Cycle NVNT n40 2422MHz Ant1



Duty Cycle NVNT n40 2437MHz Ant1



Duty Cycle NVNT n40 2452MHz Ant1



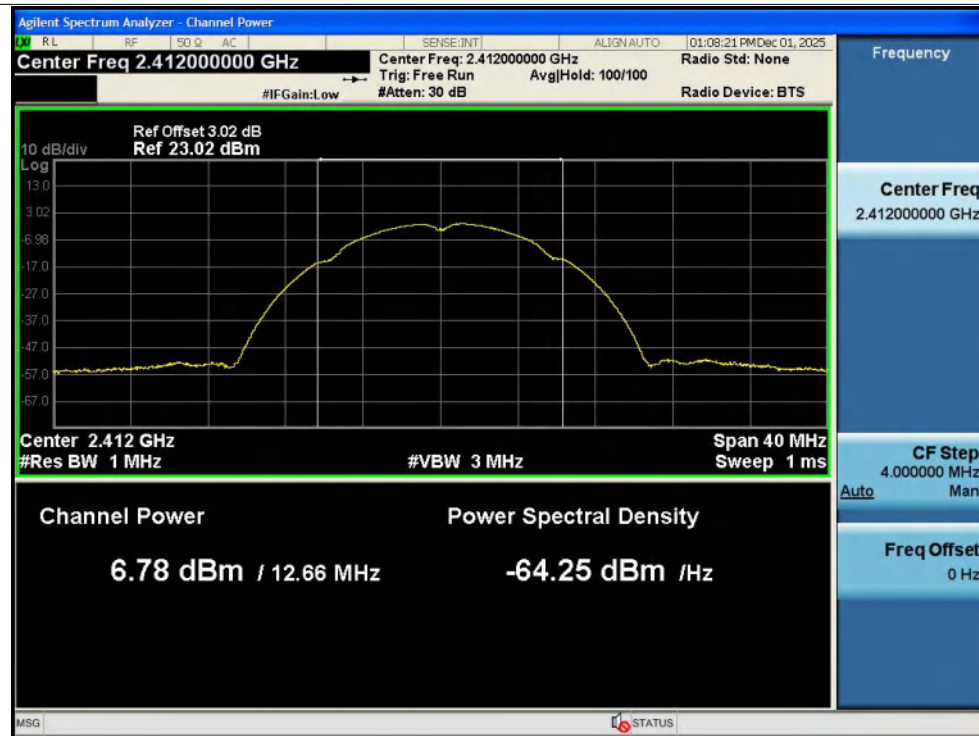


Maximum Conducted Output Power

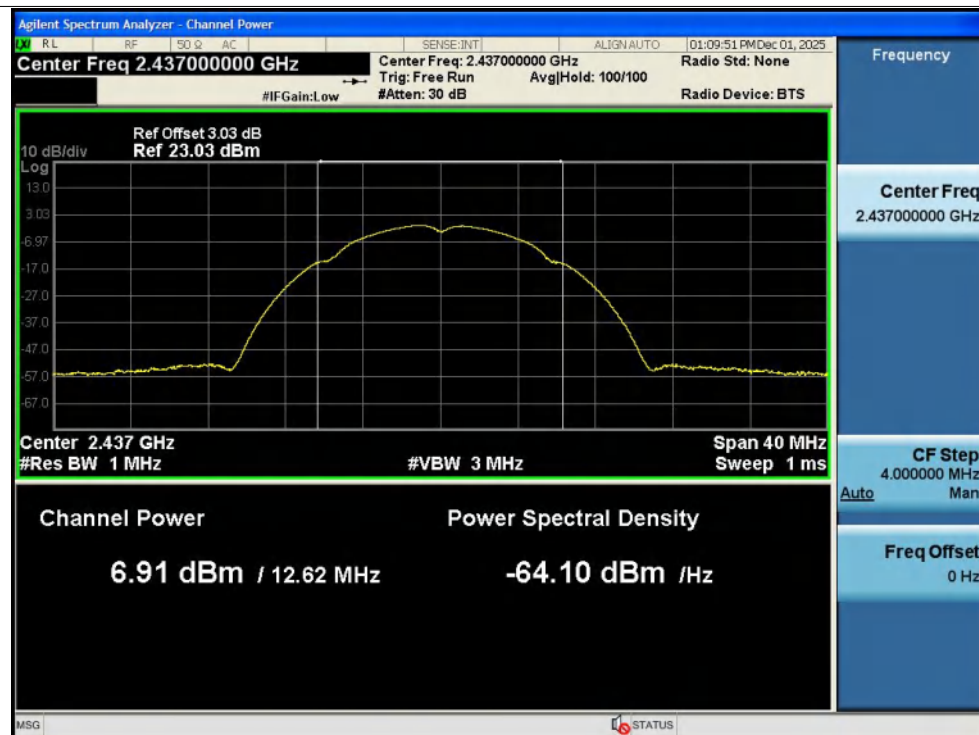
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	6.78	0.02	6.8	28	Pass
NVNT	b	2437	Ant1	6.91	0.02	6.93	28	Pass
NVNT	b	2462	Ant1	6.82	0.02	6.84	28	Pass
NVNT	g	2412	Ant1	6.85	0.13	6.98	28	Pass
NVNT	g	2437	Ant1	7.13	0.13	7.26	28	Pass
NVNT	g	2462	Ant1	6.88	0.13	7.01	28	Pass
NVNT	n20	2412	Ant1	6.78	0.14	6.92	28	Pass
NVNT	n20	2437	Ant1	6.9	0.14	7.04	28	Pass
NVNT	n20	2462	Ant1	6.68	0.14	6.82	28	Pass
NVNT	n40	2422	Ant1	6.16	0.29	6.45	28	Pass
NVNT	n40	2437	Ant1	6.23	0.29	6.52	28	Pass
NVNT	n40	2452	Ant1	6.18	0.29	6.47	28	Pass

Test Graphs

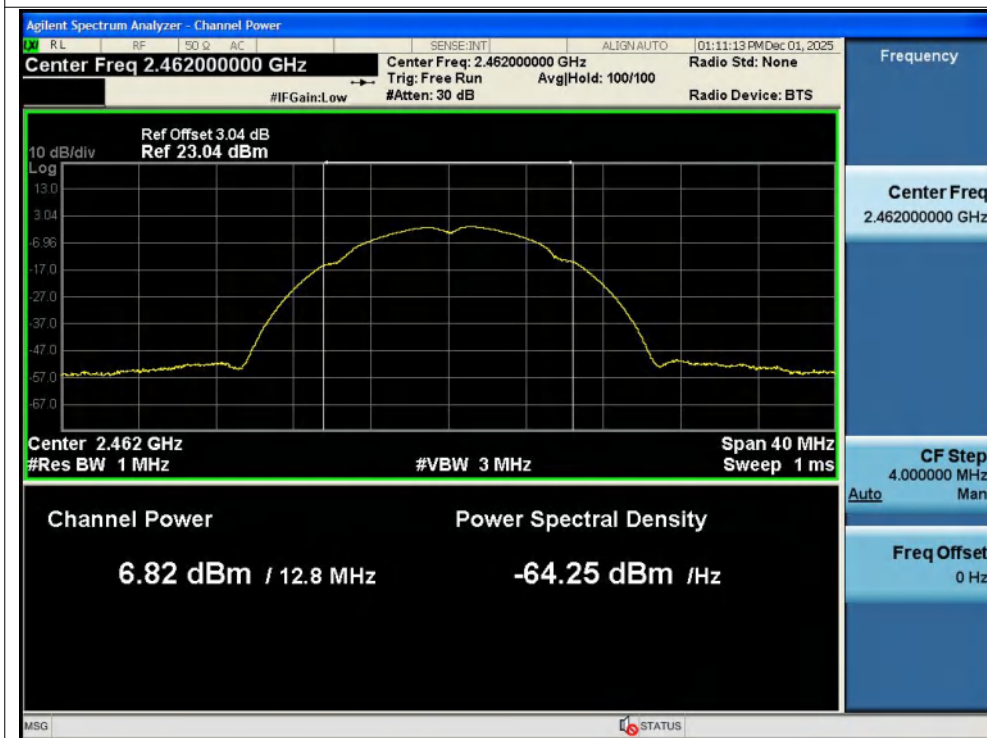
Power NVNT b 2412MHz Ant1



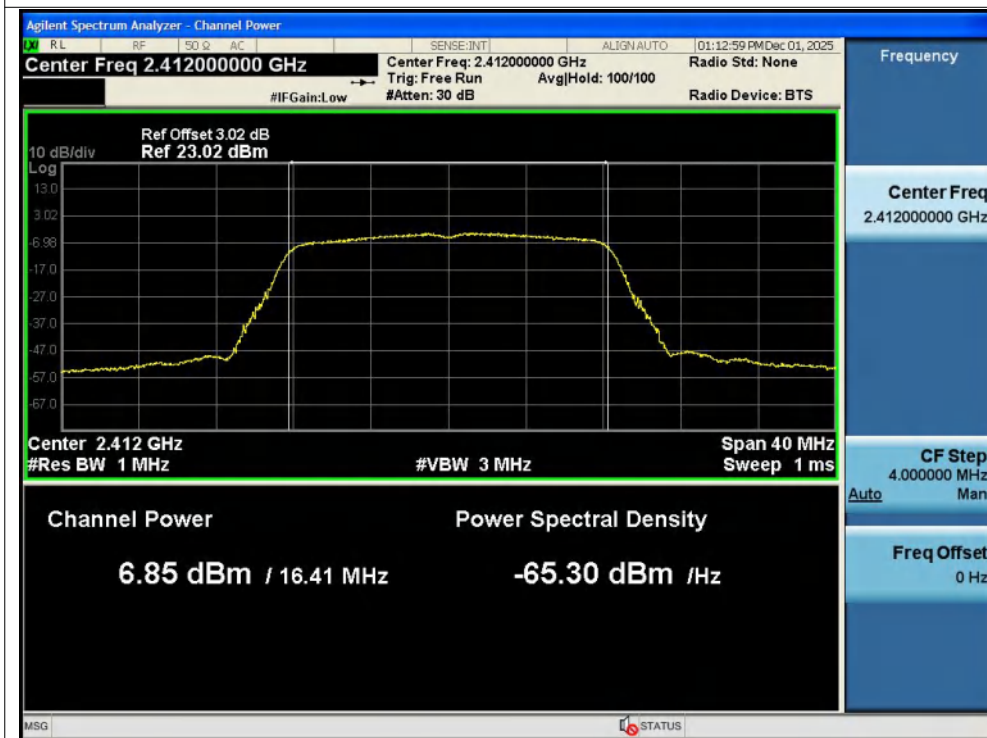
Power NVNT b 2437MHz Ant1



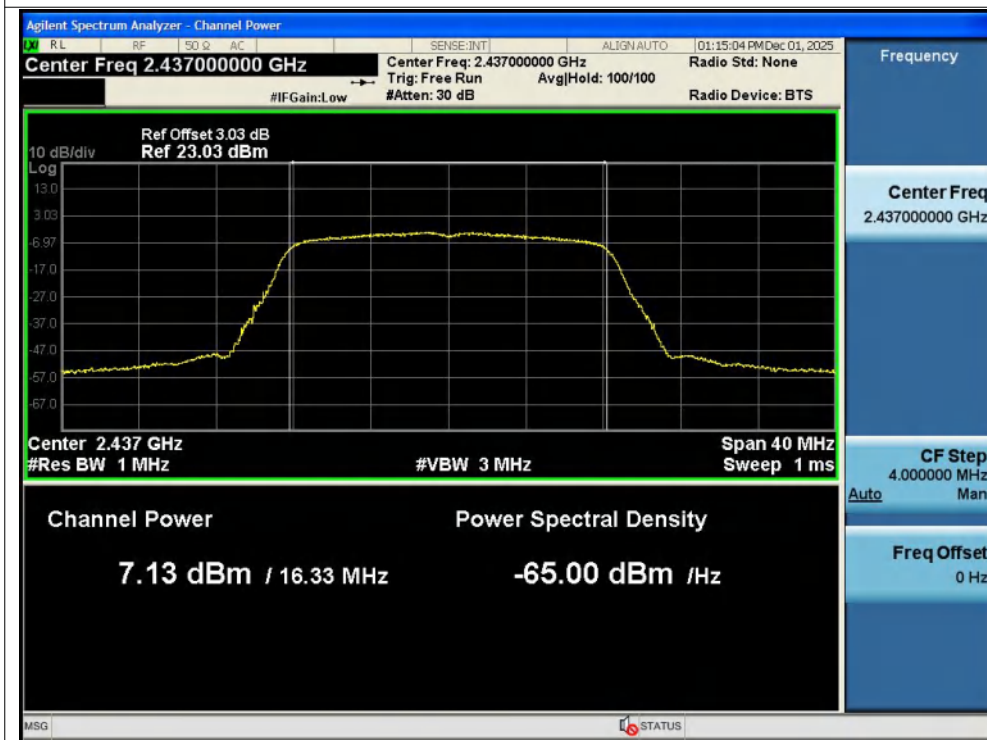
Power NVNT b 2462MHz Ant1



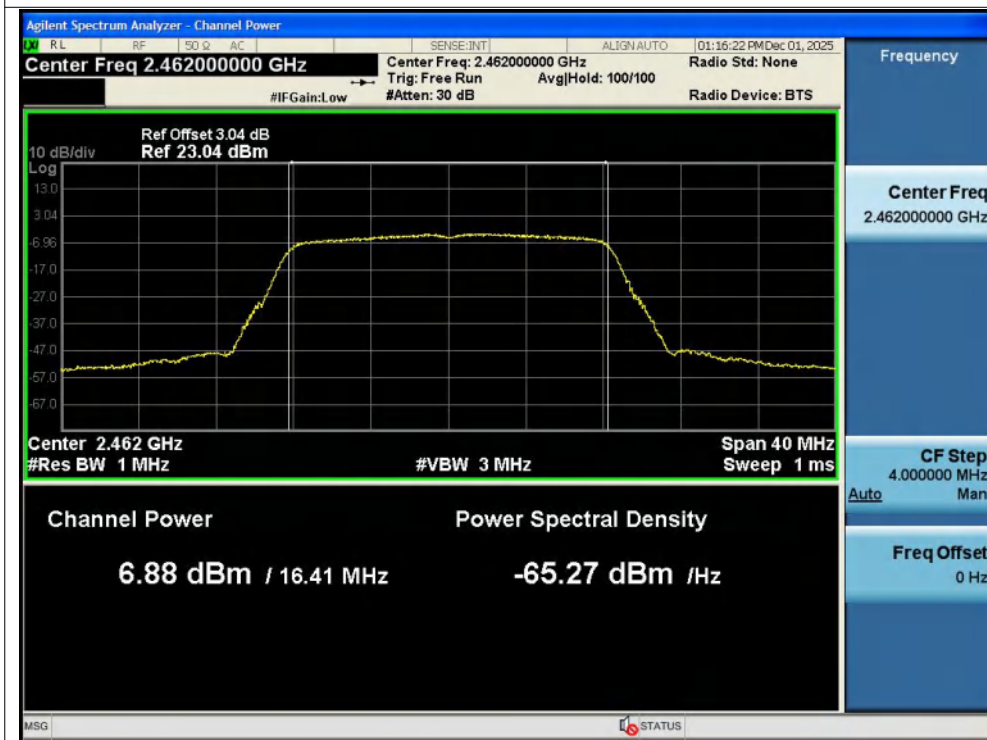
Power NVNT g 2412MHz Ant1



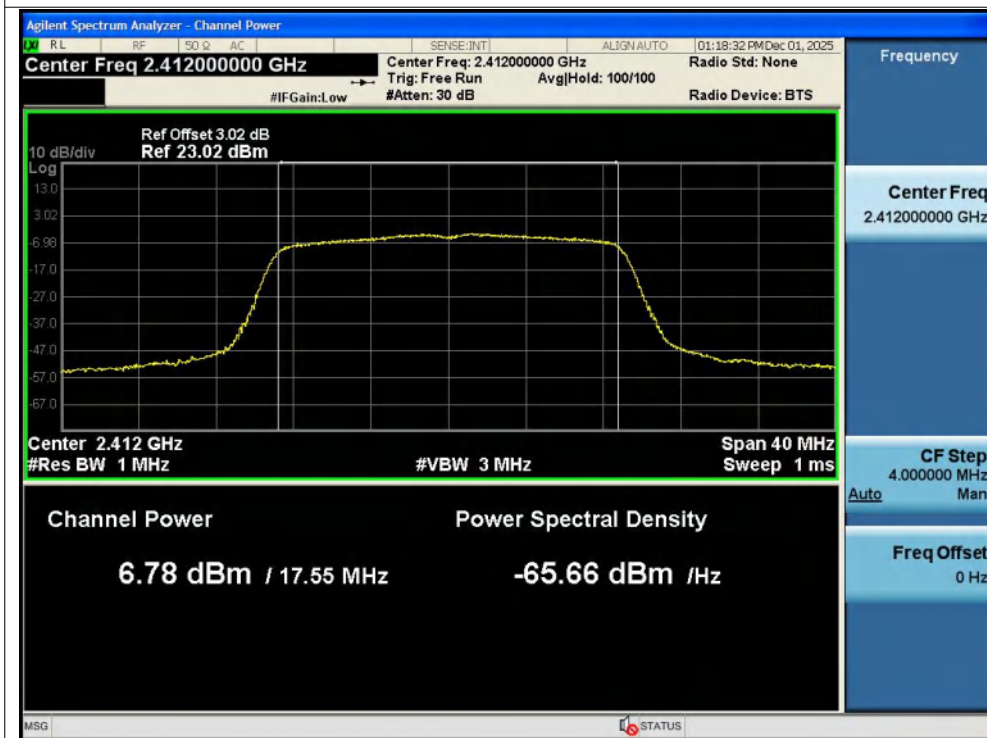
Power NVNT g 2437MHz Ant1



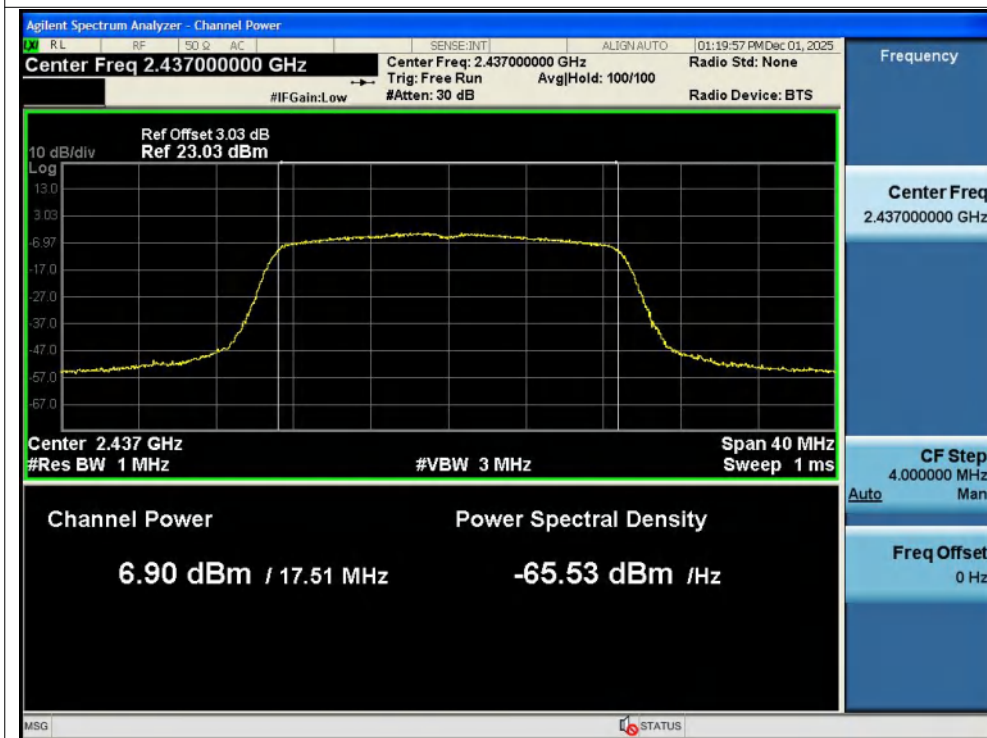
Power NVNT g 2462MHz Ant1



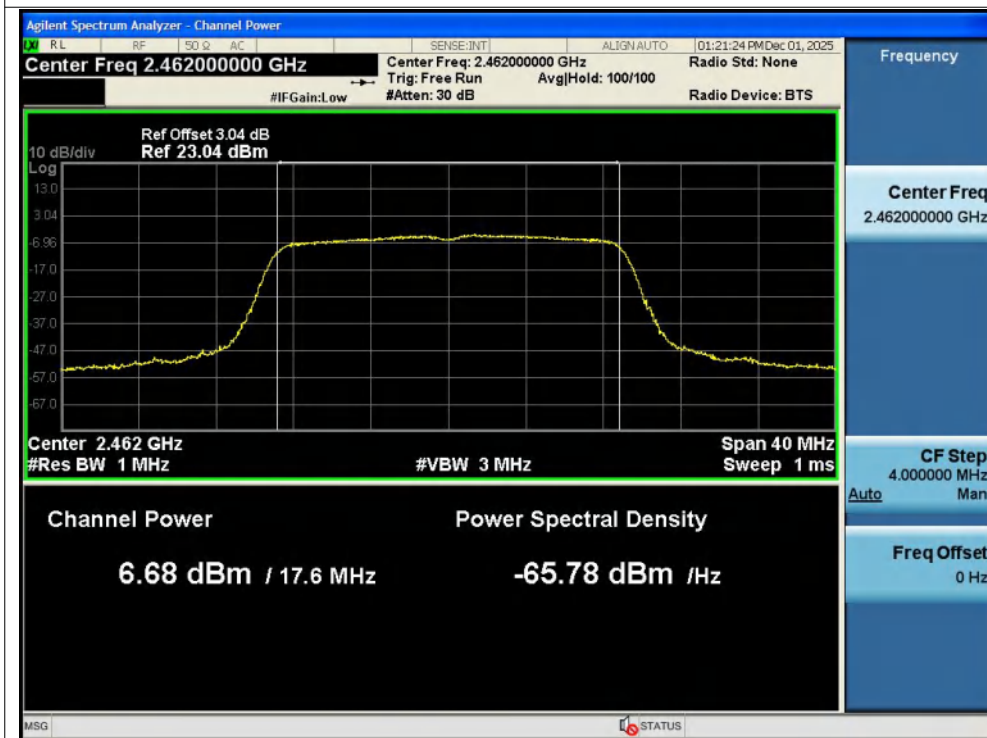
Power NVNT n20 2412MHz Ant1



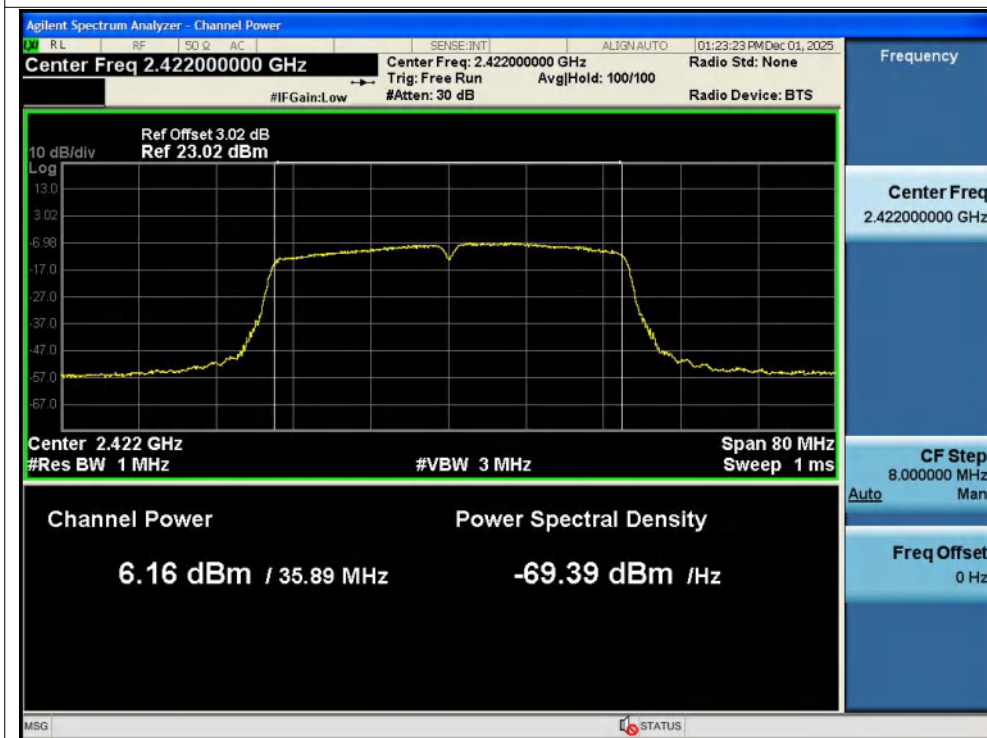
Power NVNT n20 2437MHz Ant1



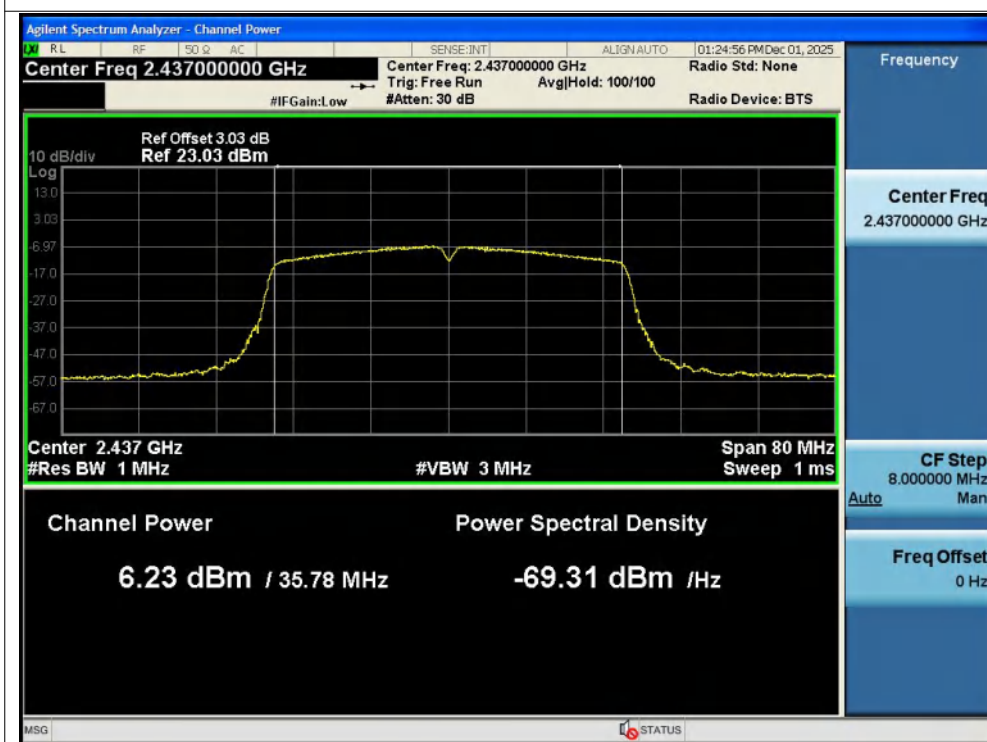
Power NVNT n20 2462MHz Ant1



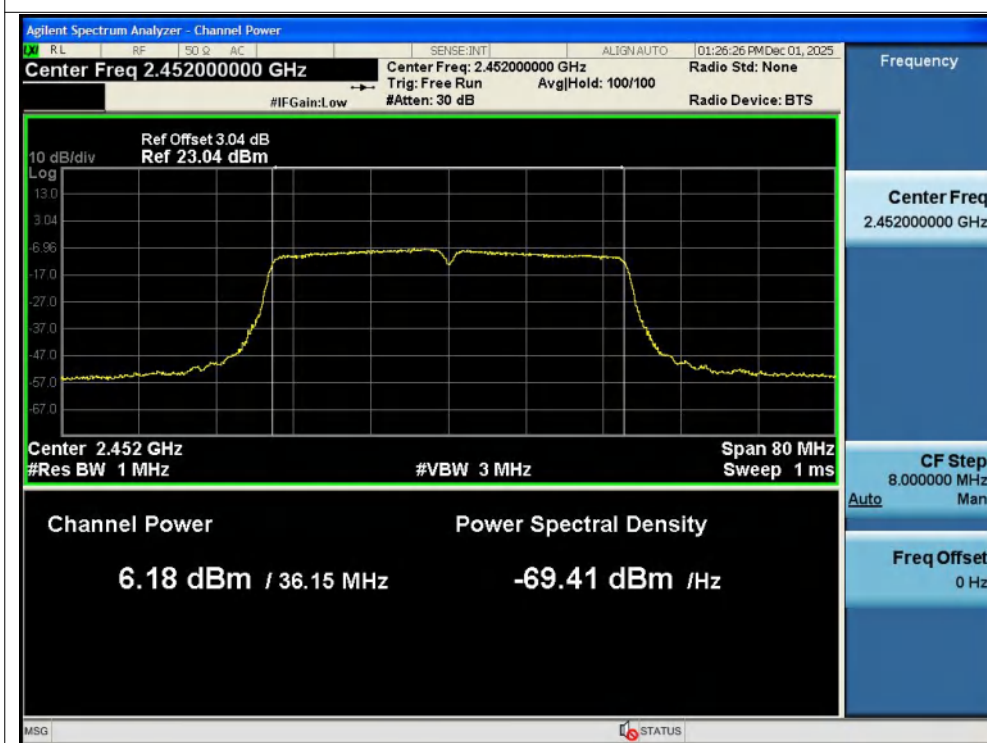
Power NVNT n40 2422MHz Ant1



Power NVNT n40 2437MHz Ant1



Power NVNT n40 2452MHz Ant1





-6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	8.072	0.5	Pass
NVNT	b	2437	Ant1	8.1	0.5	Pass
NVNT	b	2462	Ant1	8.574	0.5	Pass
NVNT	g	2412	Ant1	15.91	0.5	Pass
NVNT	g	2437	Ant1	16.04	0.5	Pass
NVNT	g	2462	Ant1	16.12	0.5	Pass
NVNT	n20	2412	Ant1	16.21	0.5	Pass
NVNT	n20	2437	Ant1	16.91	0.5	Pass
NVNT	n20	2462	Ant1	17.35	0.5	Pass
NVNT	n40	2422	Ant1	33.66	0.5	Pass
NVNT	n40	2437	Ant1	33.14	0.5	Pass
NVNT	n40	2452	Ant1	36.22	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 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	12.662
NVNT	b	2437	Ant1	12.618
NVNT	b	2462	Ant1	12.802
NVNT	g	2412	Ant1	16.411
NVNT	g	2437	Ant1	16.326
NVNT	g	2462	Ant1	16.411
NVNT	n20	2412	Ant1	17.554
NVNT	n20	2437	Ant1	17.507
NVNT	n20	2462	Ant1	17.601
NVNT	n40	2422	Ant1	35.89
NVNT	n40	2437	Ant1	35.779
NVNT	n40	2452	Ant1	36.147

Test Graphs

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



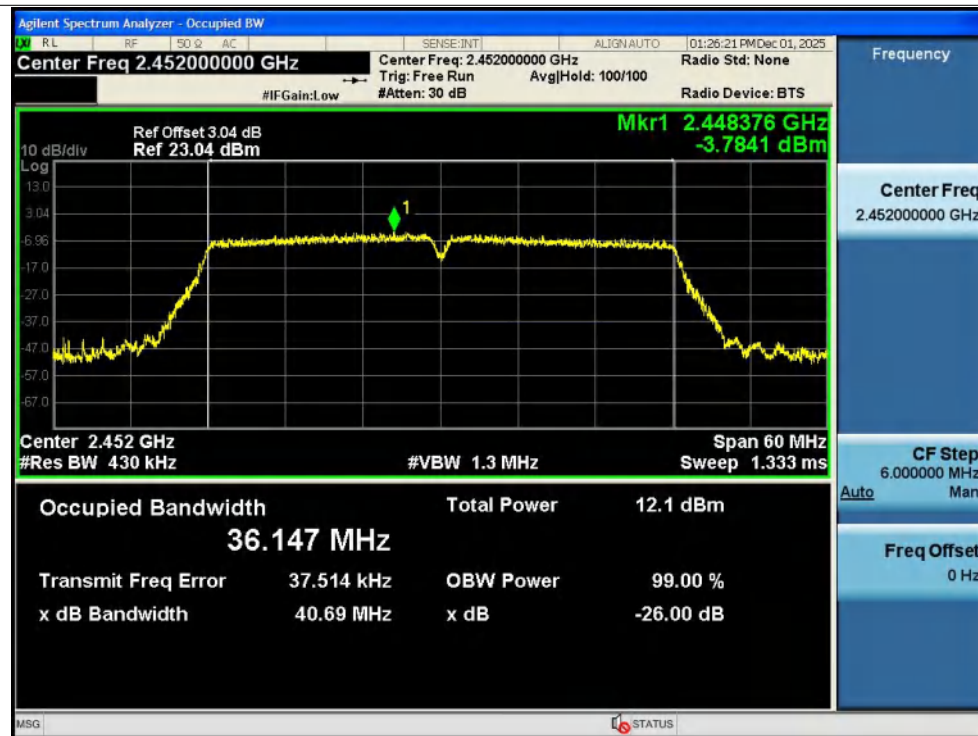
OBW NVNT n40 2422MHz Ant1



OBW NVNT n40 2437MHz Ant1



OBW NVNT n40 2452MHz Ant1



Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/100kHz)	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant1	-9.78	-25.01	0.02	-24.99	6	Pass
NVNT	b	2437	Ant1	-9.35	-24.58	0.02	-24.56	6	Pass
NVNT	b	2462	Ant1	-9.44	-24.67	0.02	-24.65	6	Pass
NVNT	g	2412	Ant1	-12.33	-27.56	0.13	-27.43	6	Pass
NVNT	g	2437	Ant1	-11.74	-26.97	0.13	-26.84	6	Pass
NVNT	g	2462	Ant1	-12.37	-27.6	0.13	-27.47	6	Pass
NVNT	n20	2412	Ant1	-12.68	-27.91	0.14	-27.77	6	Pass
NVNT	n20	2437	Ant1	-12.3	-27.53	0.14	-27.39	6	Pass
NVNT	n20	2462	Ant1	-12.46	-27.69	0.14	-27.55	6	Pass
NVNT	n40	2422	Ant1	-16.13	-31.36	0.29	-31.07	6	Pass
NVNT	n40	2437	Ant1	-15.65	-30.88	0.29	-30.59	6	Pass
NVNT	n40	2452	Ant1	-15.93	-31.16	0.29	-30.87	6	Pass

Test Graphs

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

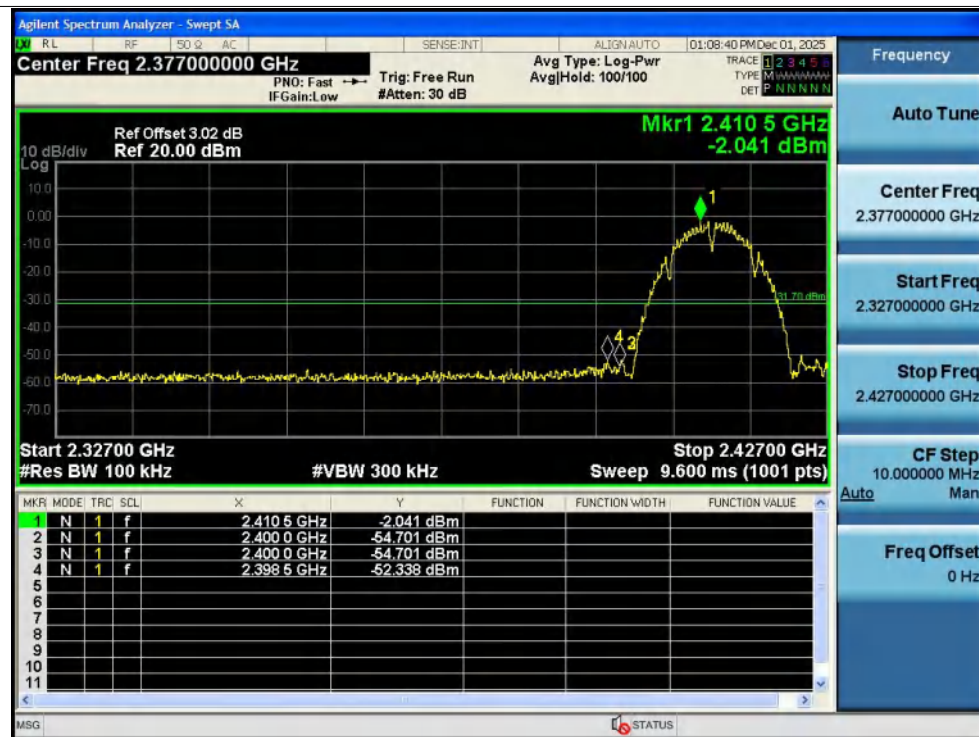
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-50.63	-30	Pass
NVNT	b	2462	Ant1	-53.1	-30	Pass
NVNT	g	2412	Ant1	-44.59	-30	Pass
NVNT	g	2462	Ant1	-48.8	-30	Pass
NVNT	n20	2412	Ant1	-45.41	-30	Pass
NVNT	n20	2462	Ant1	-50.07	-30	Pass
NVNT	n40	2422	Ant1	-40.34	-30	Pass
NVNT	n40	2452	Ant1	-45.1	-30	Pass

Test Graphs

Band Edge NVNT b 2412MHz Ant1 Ref



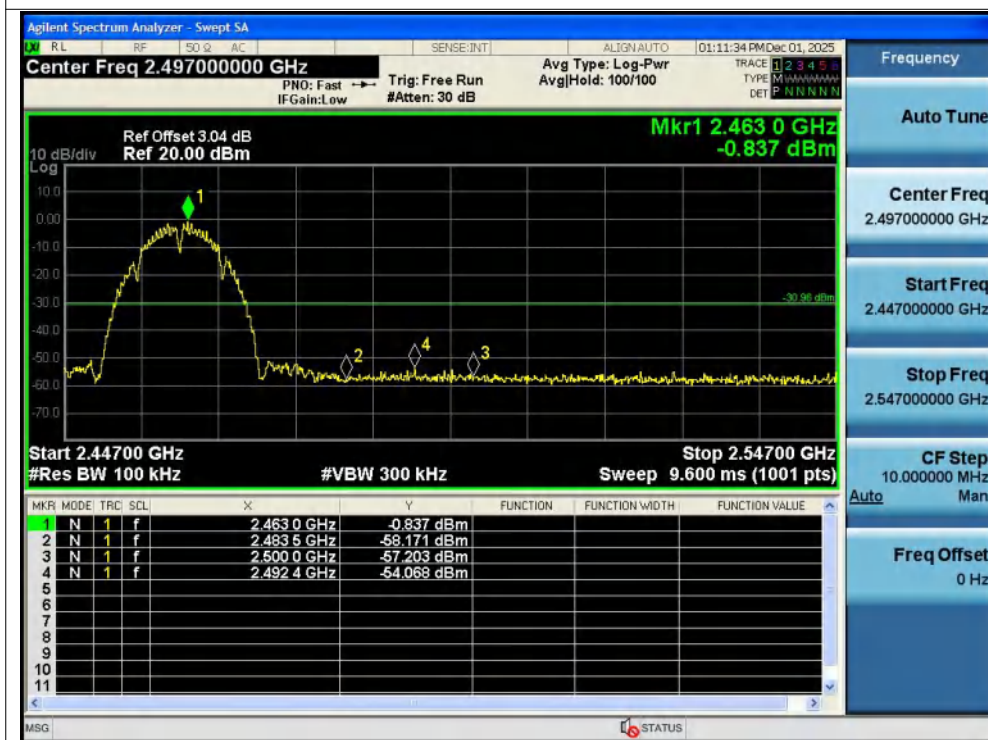
Band Edge NVNT b 2412MHz Ant1 Emission



Band Edge NVNT b 2462MHz Ant1 Ref



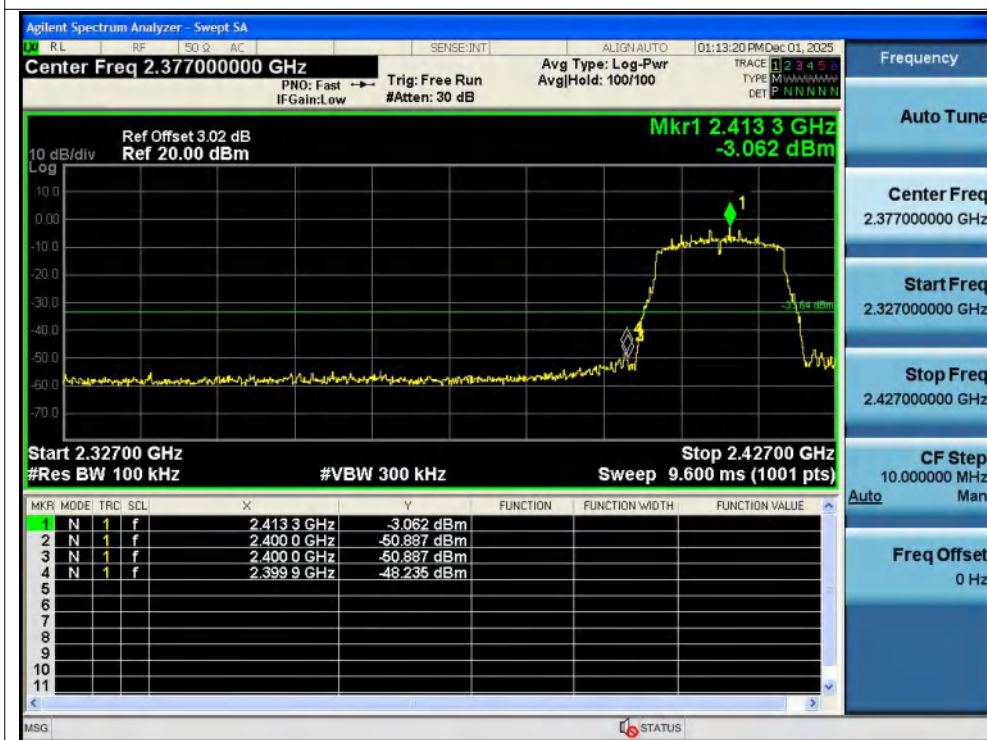
Band Edge NVNT b 2462MHz Ant1 Emission



Band Edge NVNT g 2412MHz Ant1 Ref



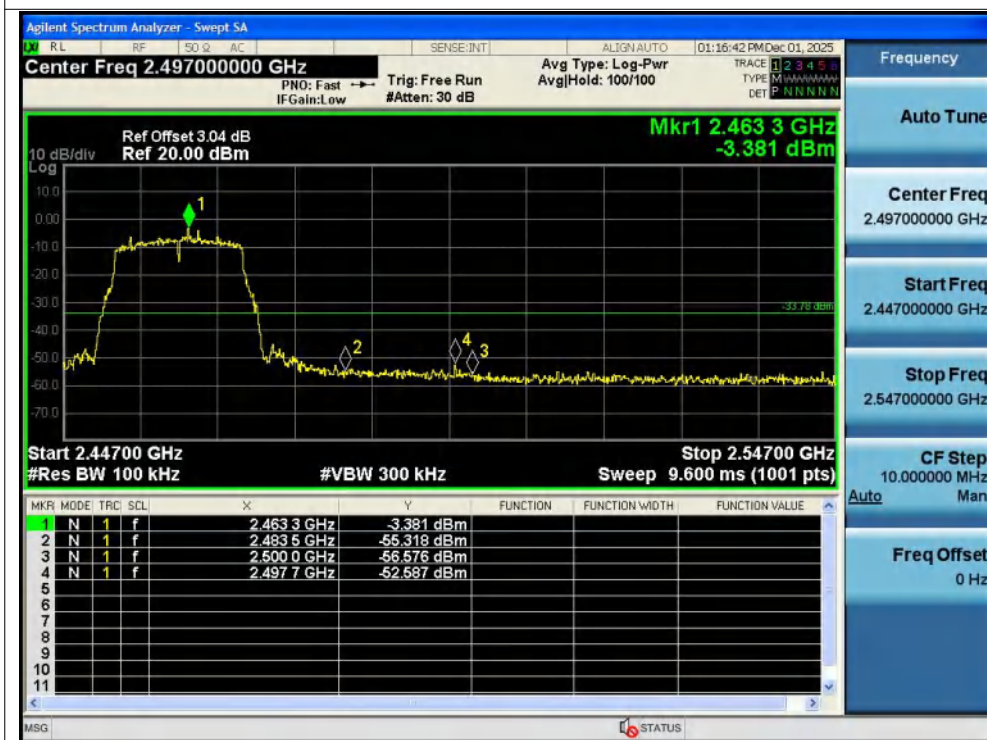
Band Edge NVNT g 2412MHz Ant1 Emission



Band Edge NVNT g 2462MHz Ant1 Ref



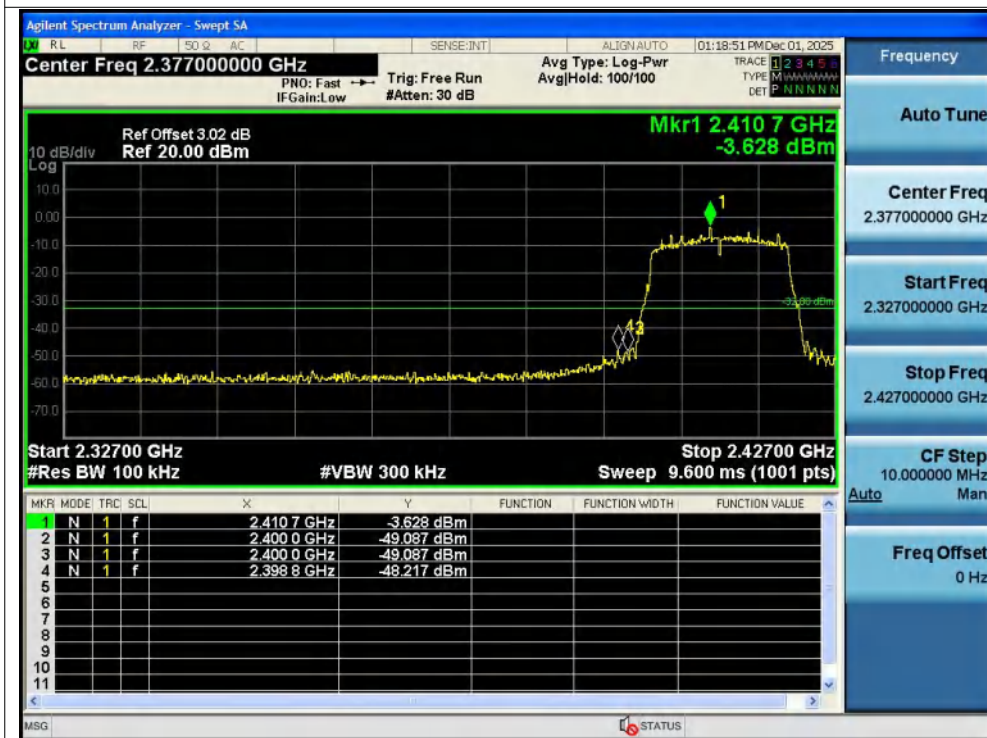
Band Edge NVNT g 2462MHz Ant1 Emission



Band Edge NVNT n20 2412MHz Ant1 Ref



Band Edge NVNT n20 2412MHz Ant1 Emission



Band Edge NVNT n20 2462MHz Ant1 Ref



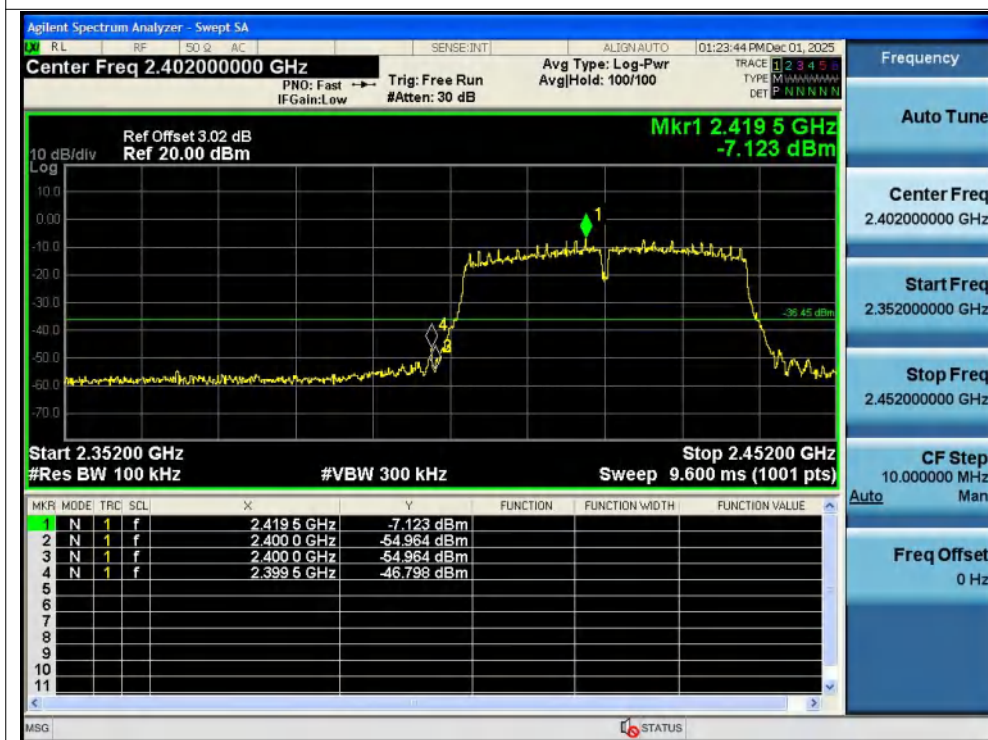
Band Edge NVNT n20 2462MHz Ant1 Emission



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

