

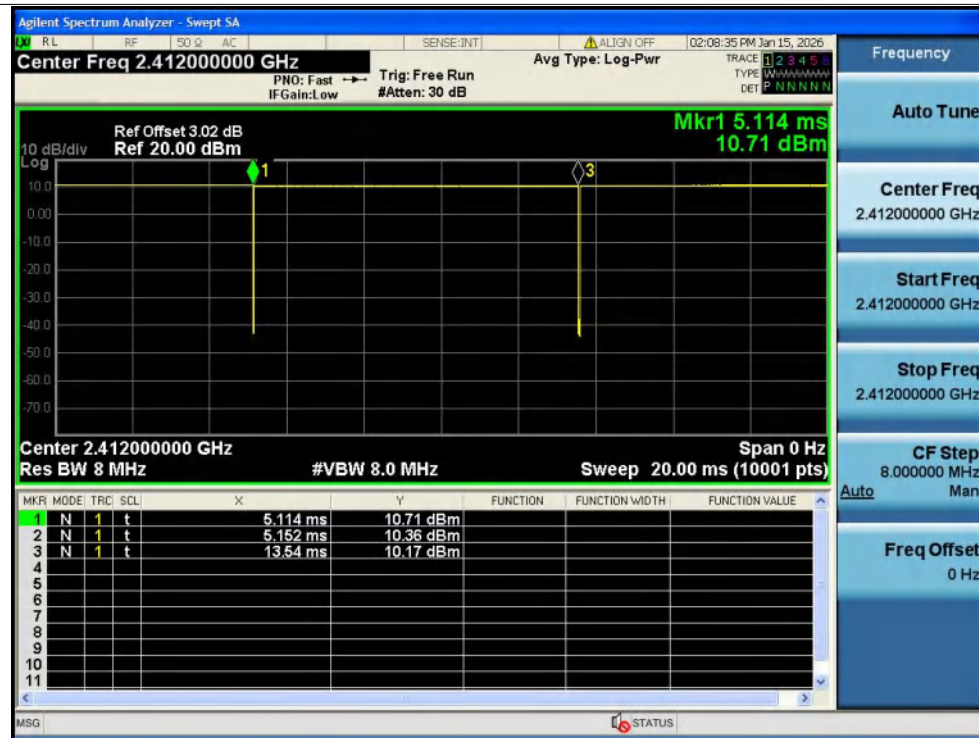
Appendix C 2.4G WIFI

Duty Cycle

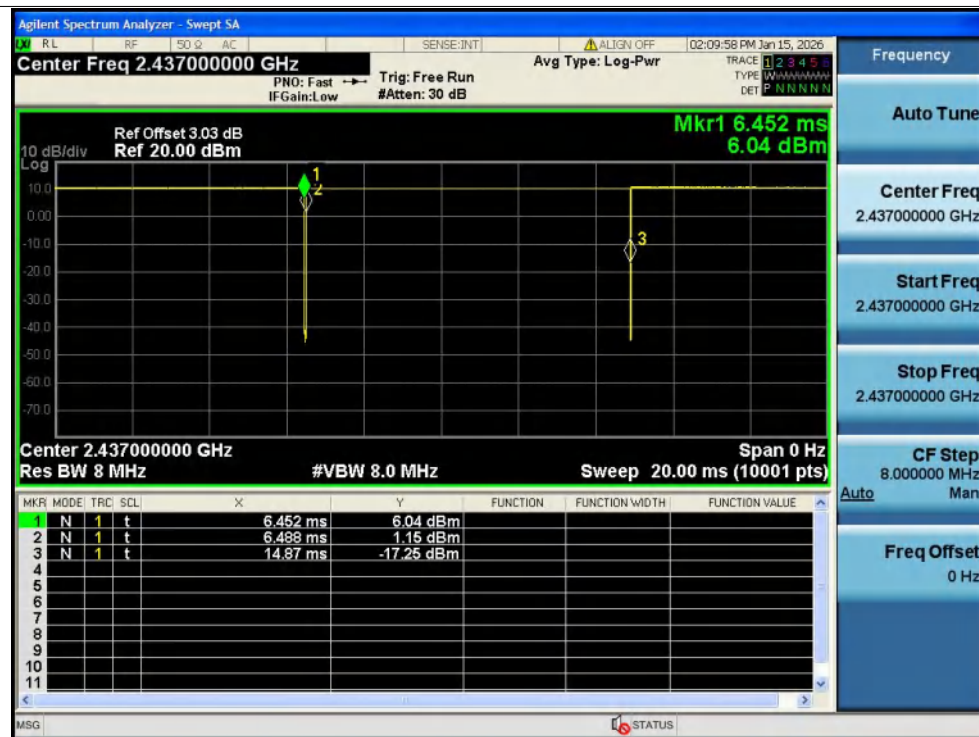
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	99.55	0.02	0.12
NVNT	b	2437	Ant1	99.57	0.02	0.12
NVNT	b	2462	Ant1	99.55	0.02	0.12
NVNT	g	2412	Ant1	96.94	0.13	0.72
NVNT	g	2437	Ant1	96.94	0.13	0.72
NVNT	g	2462	Ant1	96.94	0.13	0.72
NVNT	n20	2412	Ant1	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

Test Graphs

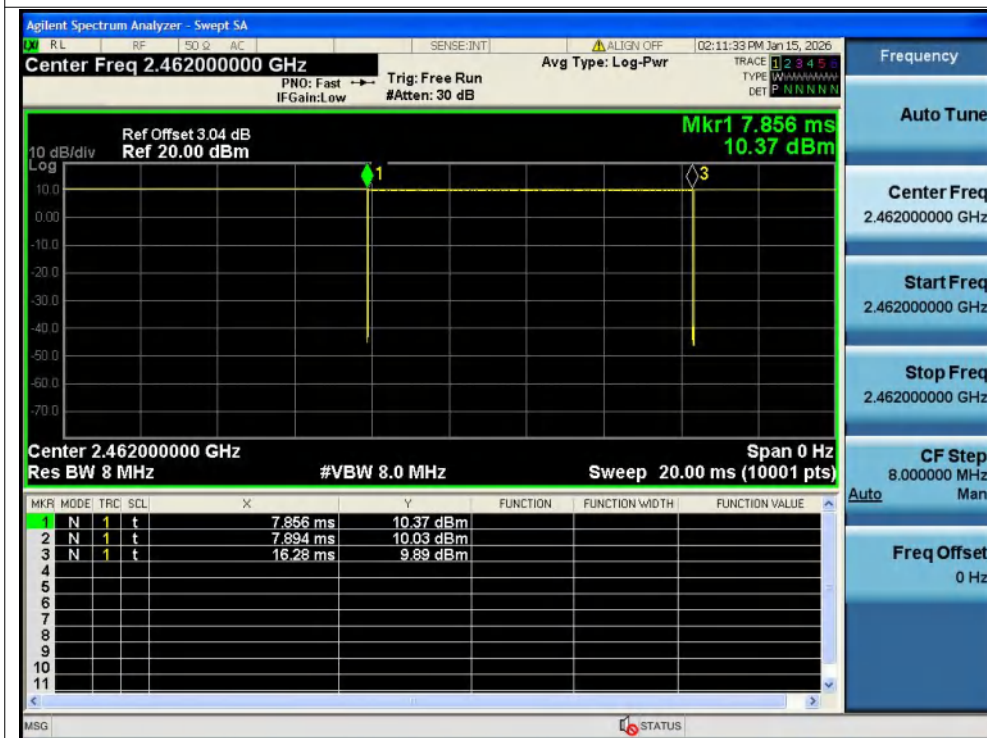
Duty Cycle NVNT b 2412MHz Ant1



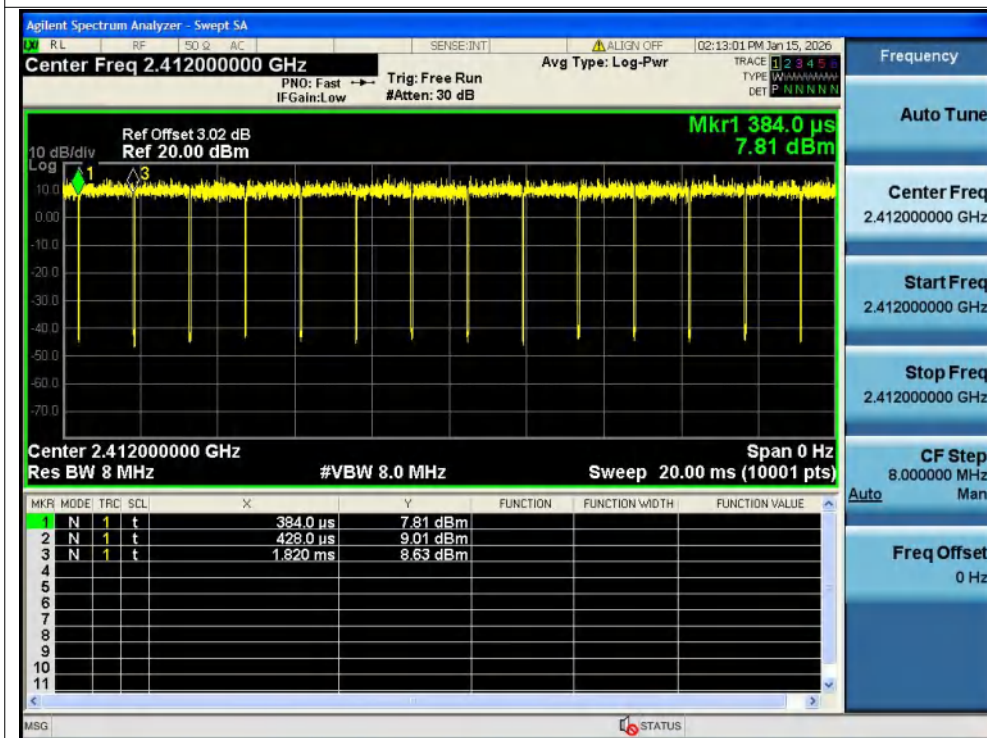
Duty Cycle NVNT b 2437MHz Ant1



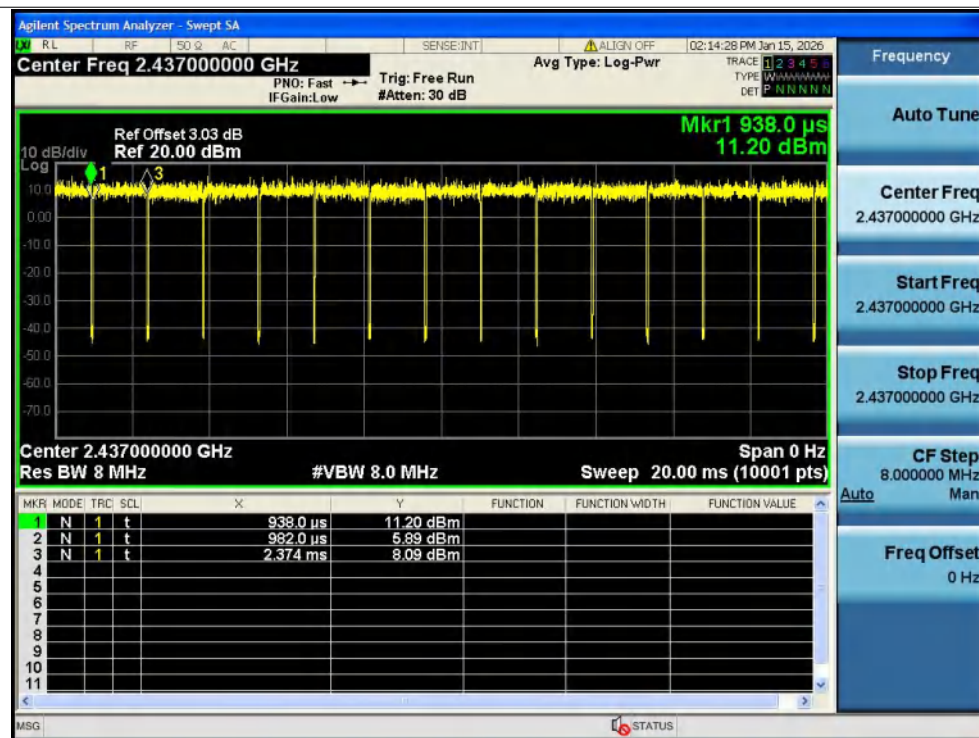
Duty Cycle NVNT b 2462MHz Ant1



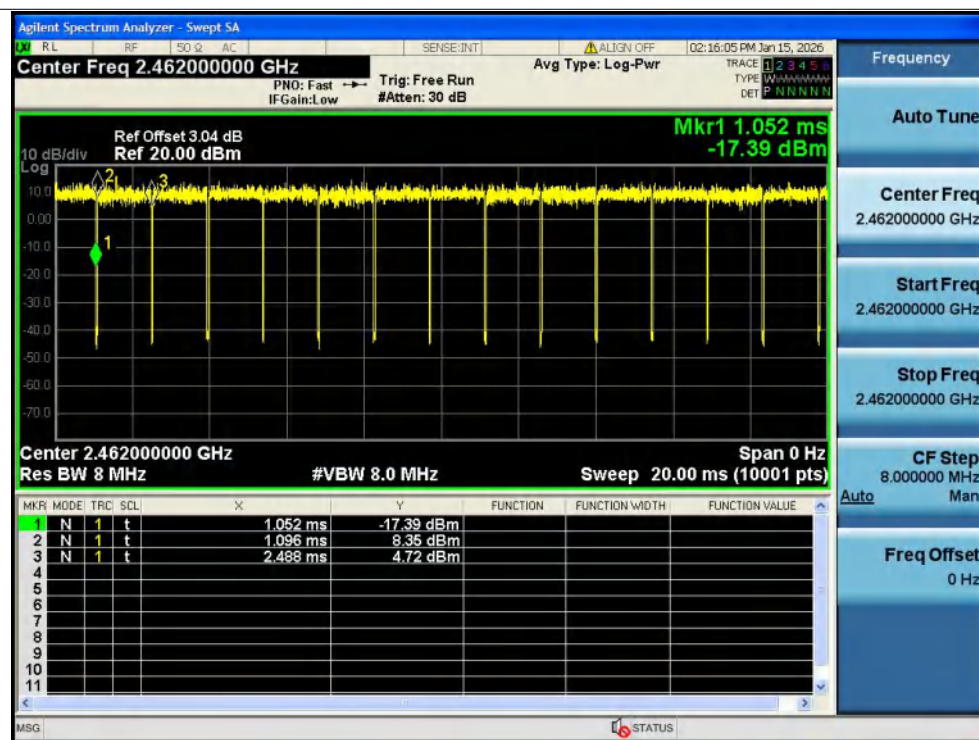
Duty Cycle NVNT g 2412MHz Ant1



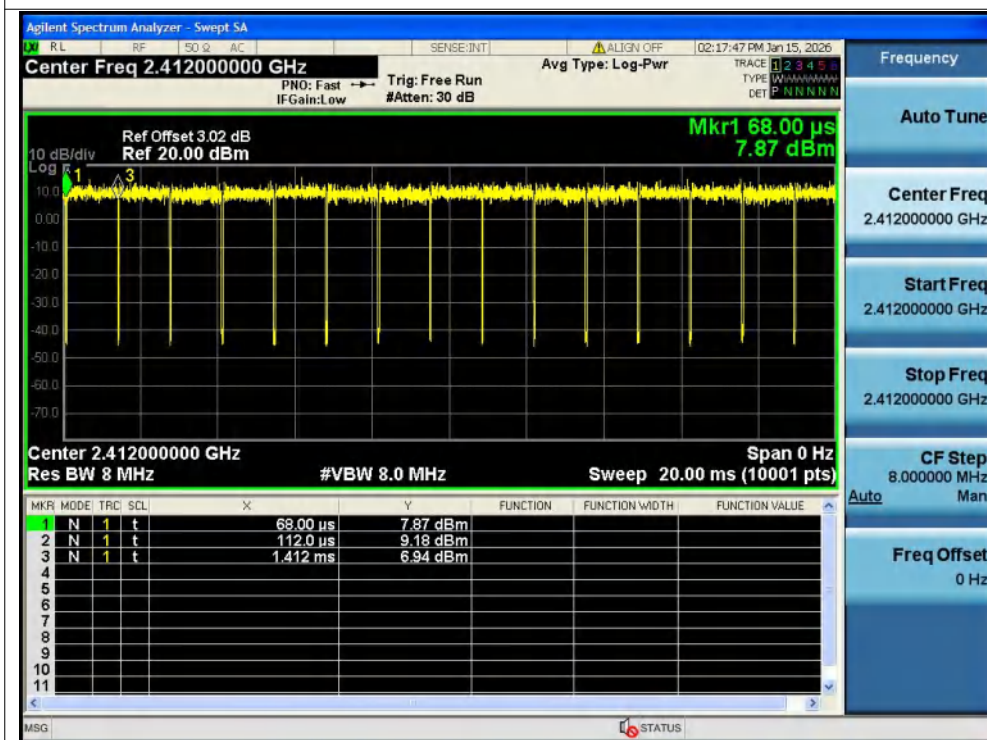
Duty Cycle NVNT g 2437MHz Ant1



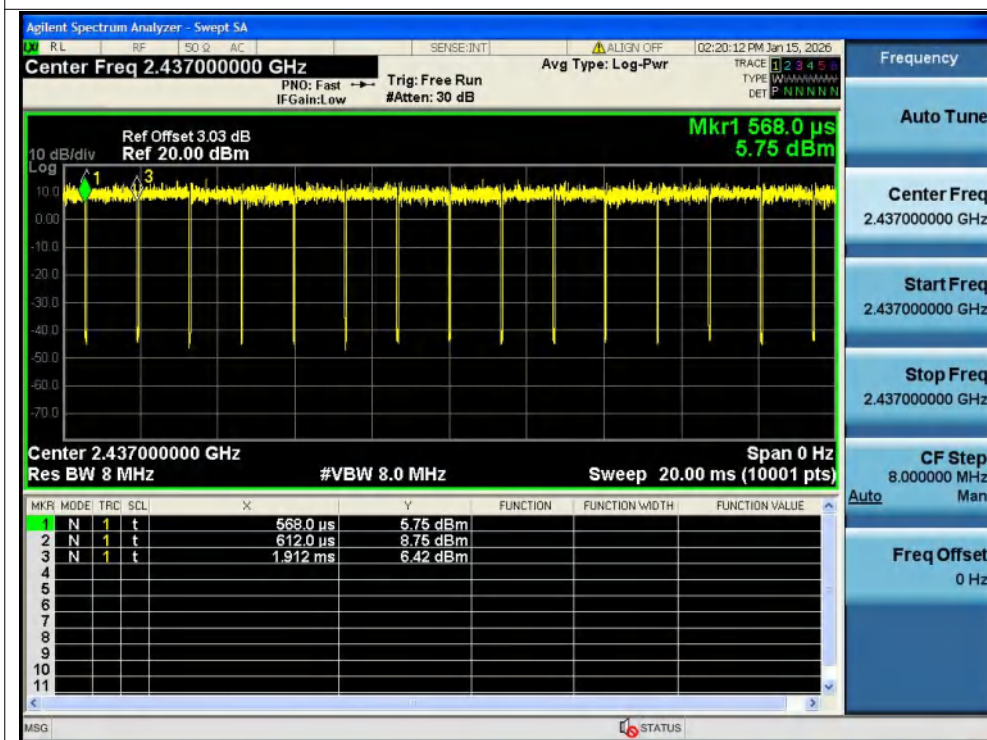
Duty Cycle NVNT g 2462MHz Ant1

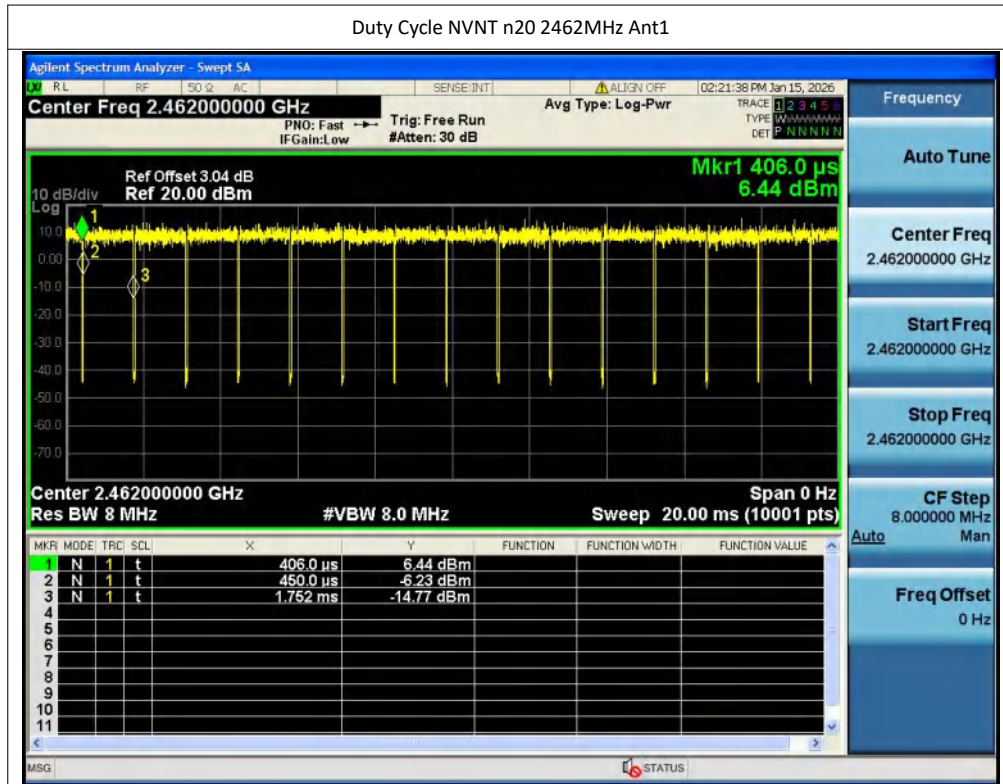


Duty Cycle NVNT n20 2412MHz Ant1



Duty Cycle NVNT n20 2437MHz Ant1





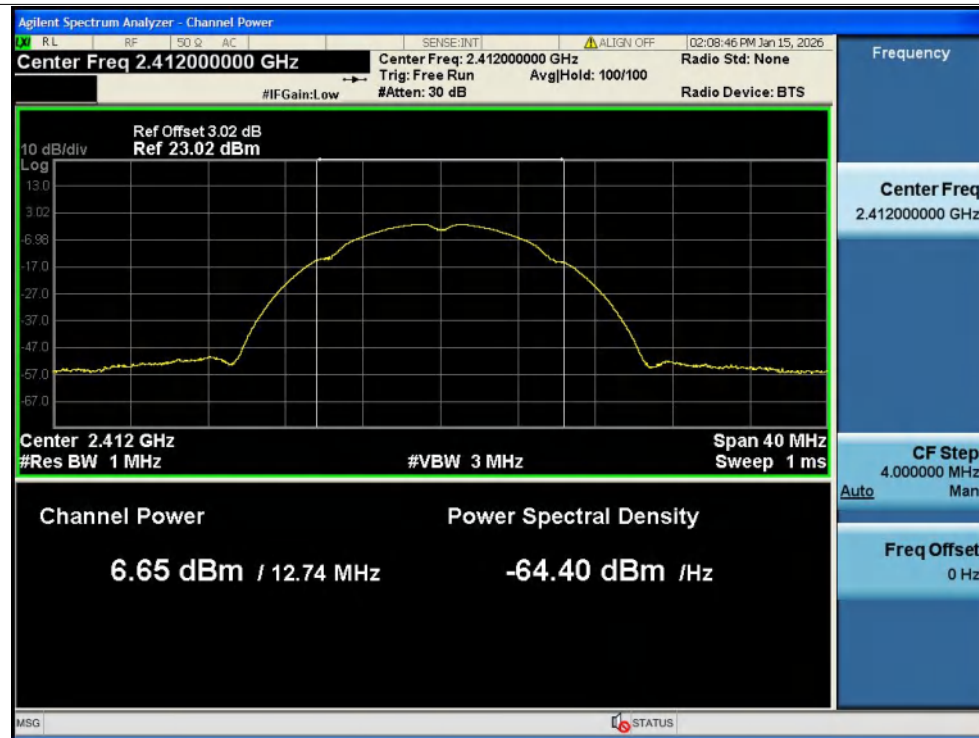


Maximum Conducted Output Power

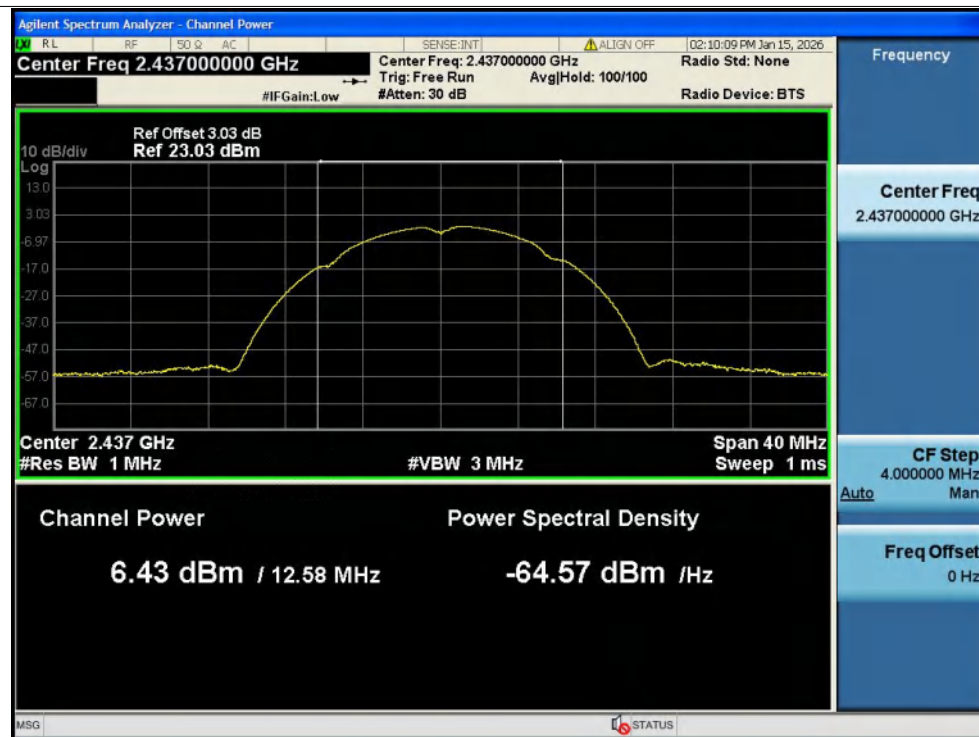
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	6.65	0.02	6.67	30	Pass
NVNT	b	2437	Ant1	6.43	0.02	6.45	30	Pass
NVNT	b	2462	Ant1	6.45	0.02	6.47	30	Pass
NVNT	g	2412	Ant1	6.58	0.13	6.71	30	Pass
NVNT	g	2437	Ant1	6.32	0.13	6.45	30	Pass
NVNT	g	2462	Ant1	6.25	0.13	6.38	30	Pass
NVNT	n20	2412	Ant1	6.47	0.14	6.61	30	Pass
NVNT	n20	2437	Ant1	6.21	0.14	6.35	30	Pass
NVNT	n20	2462	Ant1	6.12	0.14	6.26	30	Pass

Test Graphs

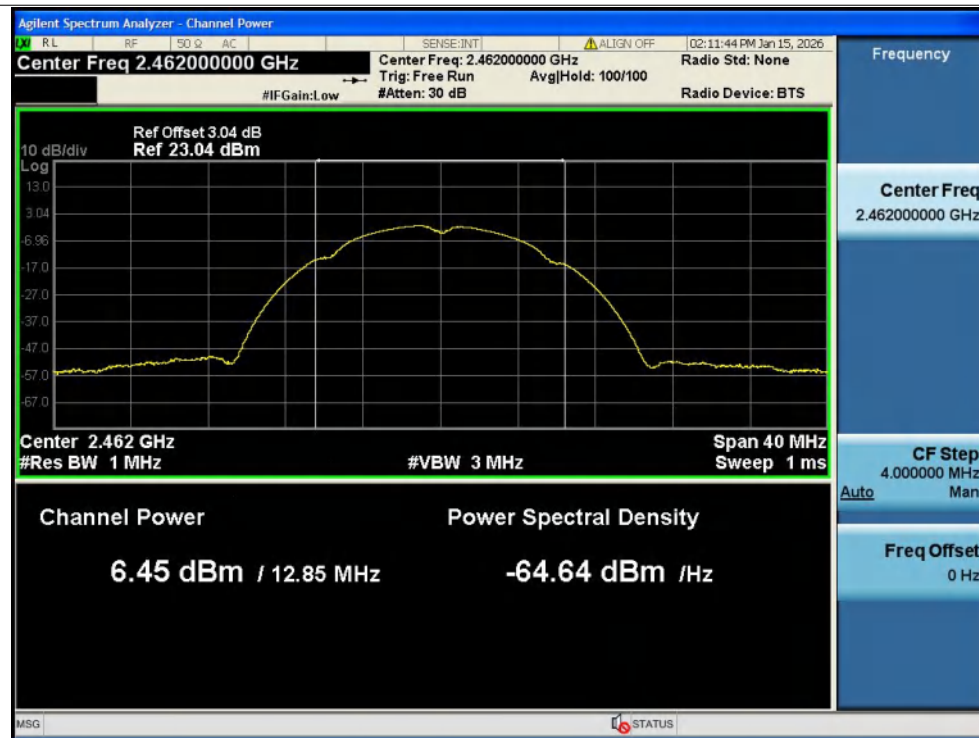
Power NVNT b 2412MHz Ant1



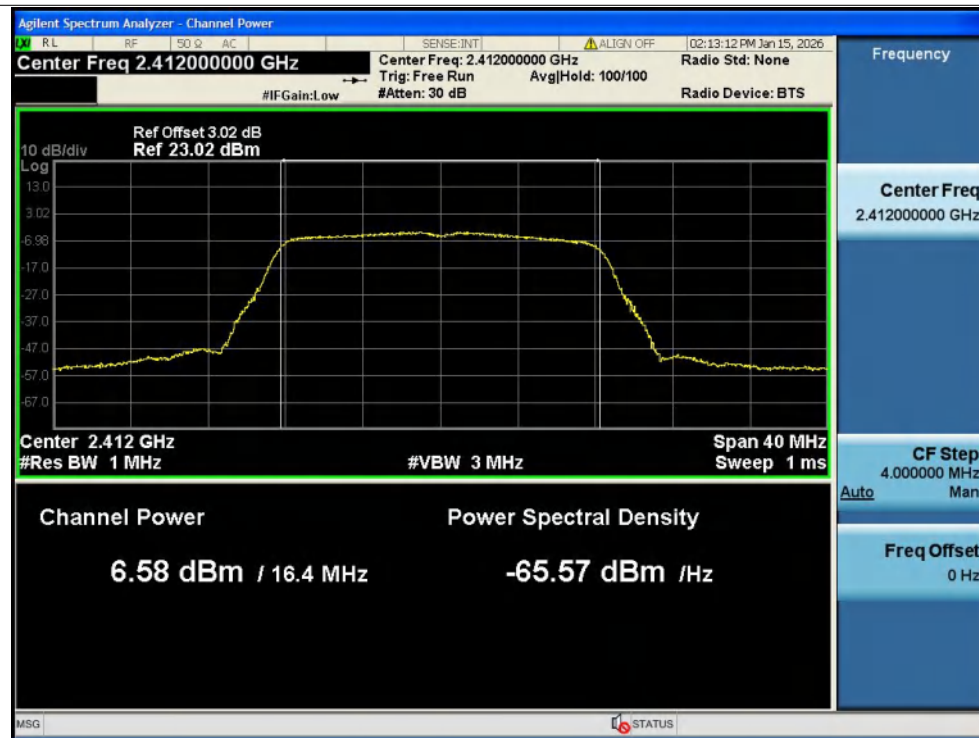
Power NVNT b 2437MHz Ant1



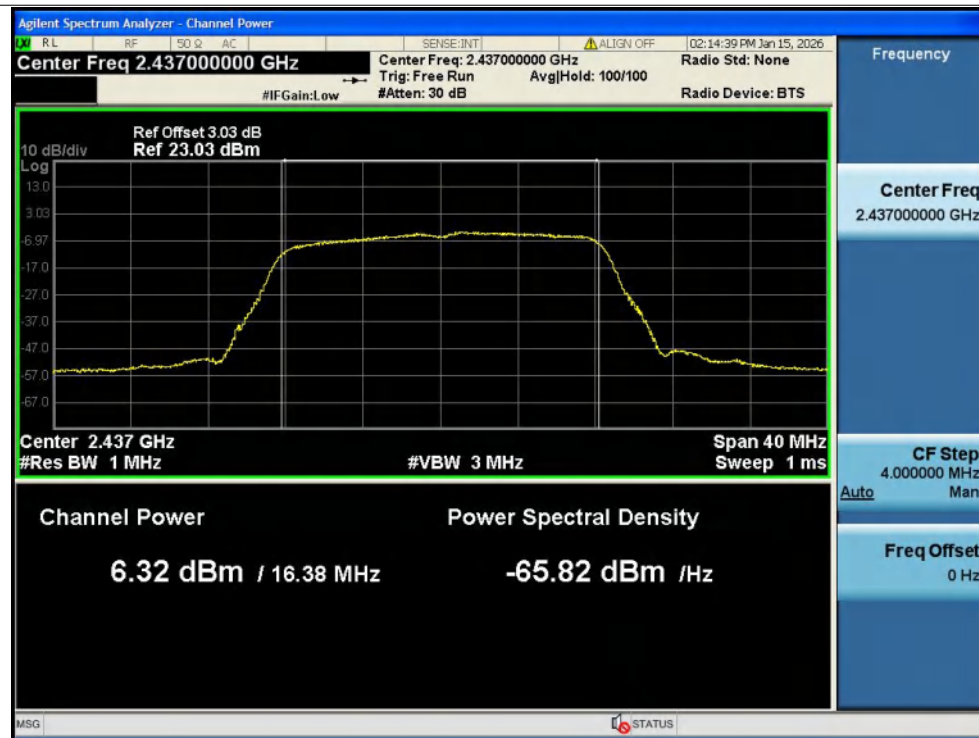
Power NVNT b 2462MHz Ant1



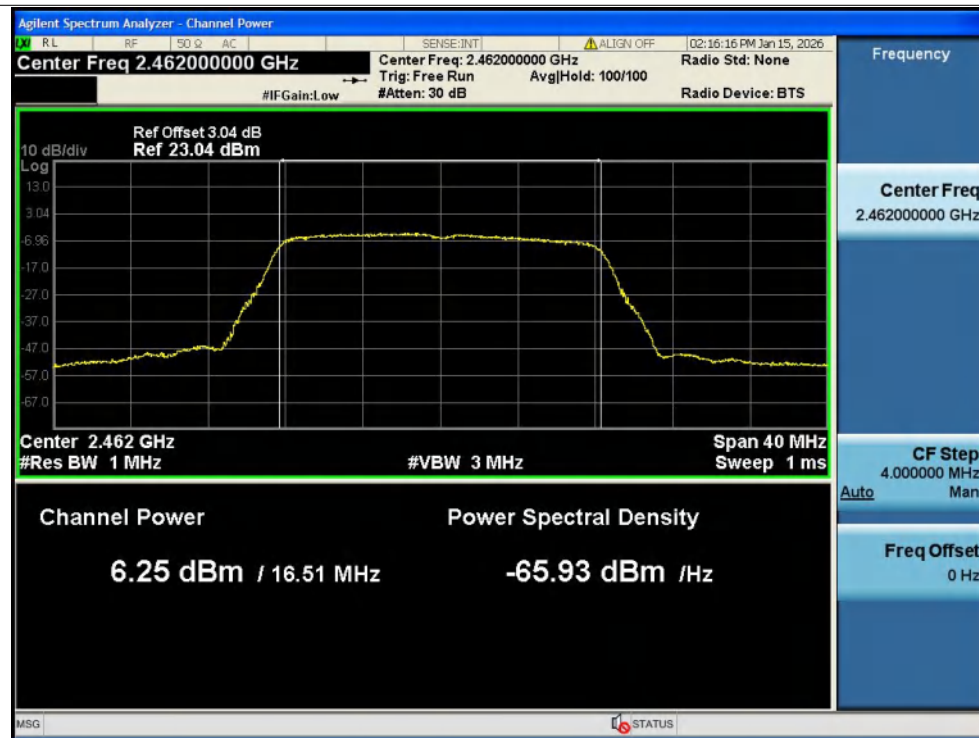
Power NVNT g 2412MHz Ant1



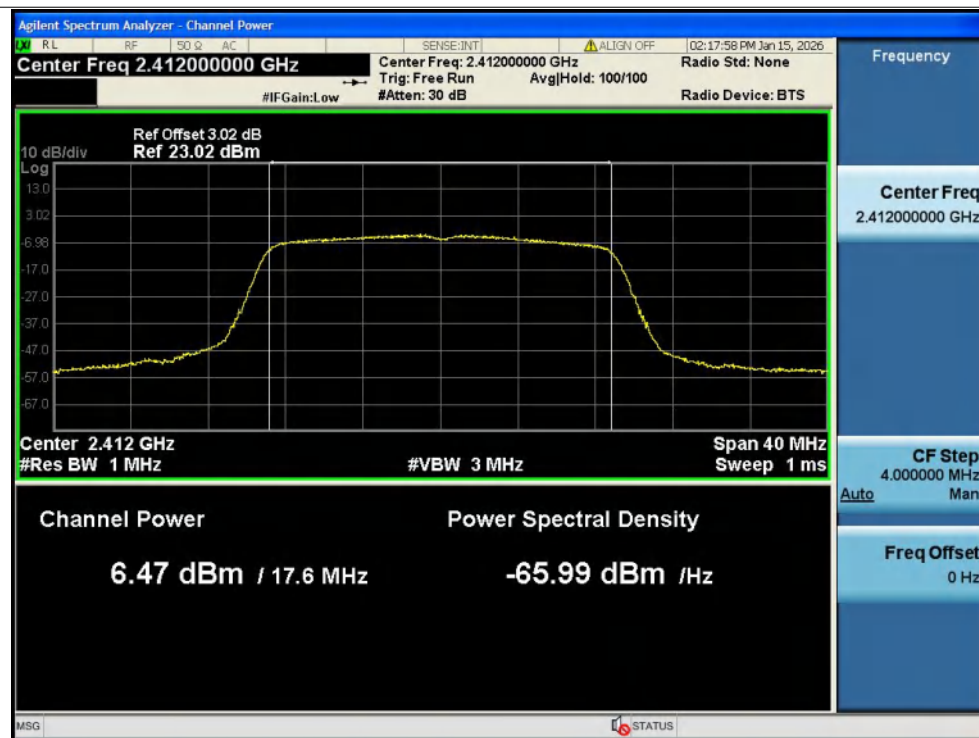
Power NVNT g 2437MHz Ant1



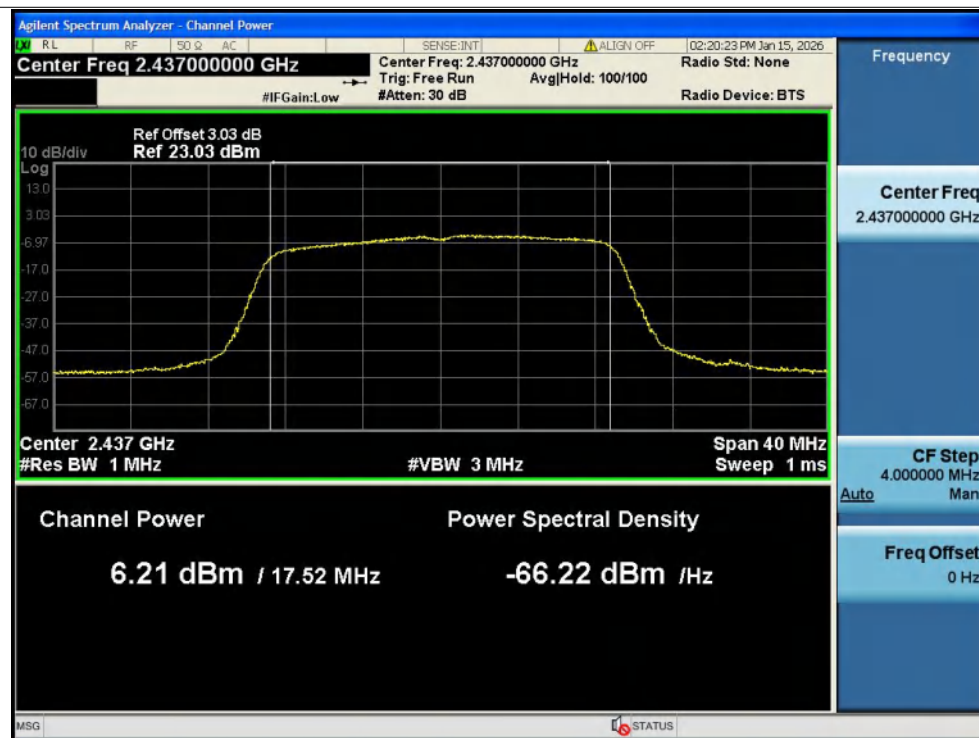
Power NVNT g 2462MHz Ant1

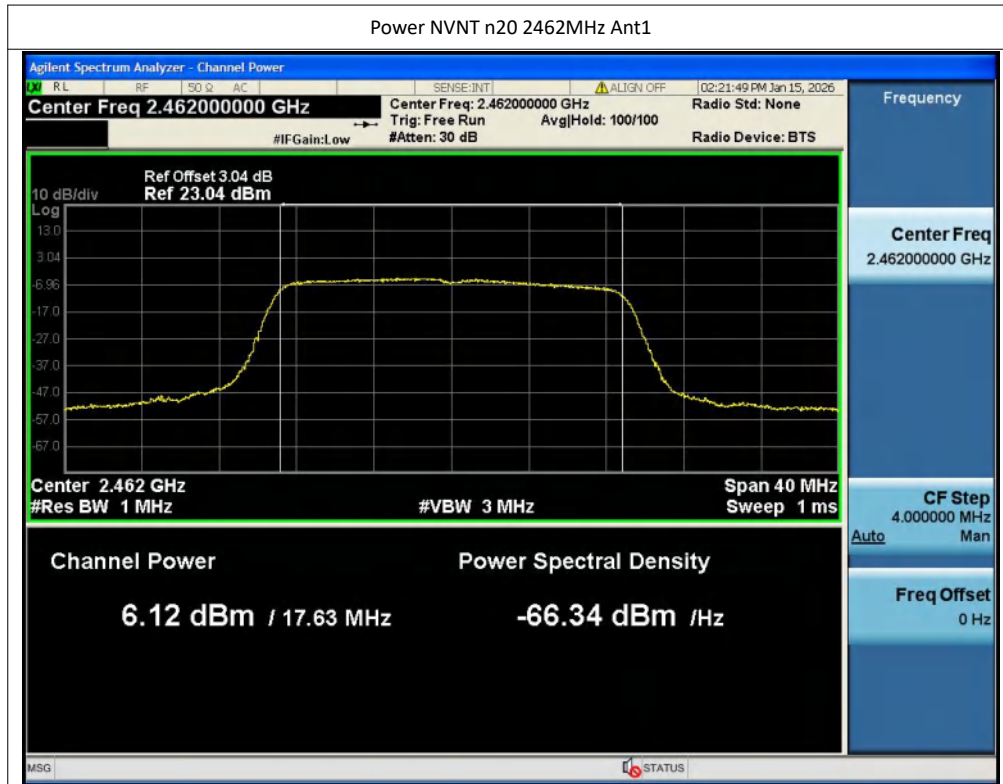


Power NVNT n20 2412MHz Ant1



Power NVNT n20 2437MHz Ant1







-6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	8.122	0.5	Pass
NVNT	b	2437	Ant1	8.094	0.5	Pass
NVNT	b	2462	Ant1	8.526	0.5	Pass
NVNT	g	2412	Ant1	15.9	0.5	Pass
NVNT	g	2437	Ant1	15.52	0.5	Pass
NVNT	g	2462	Ant1	16.02	0.5	Pass
NVNT	n20	2412	Ant1	17.09	0.5	Pass
NVNT	n20	2437	Ant1	16.29	0.5	Pass
NVNT	n20	2462	Ant1	17.39	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



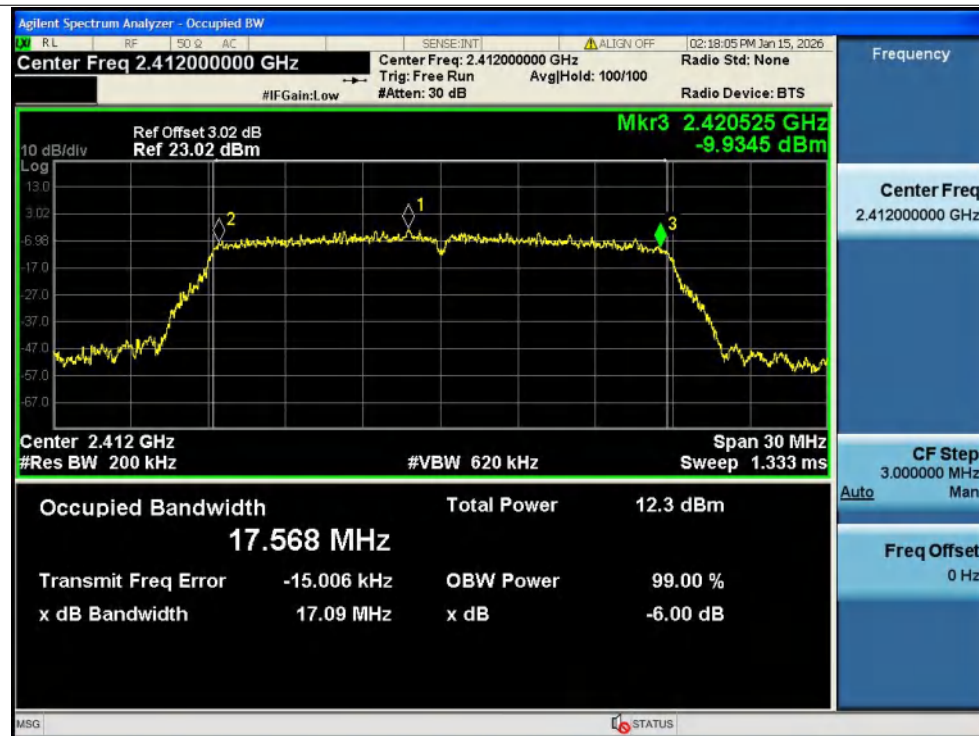
-6dB Bandwidth NVNT g 2437MHz Ant1



-6dB Bandwidth NVNT g 2462MHz Ant1

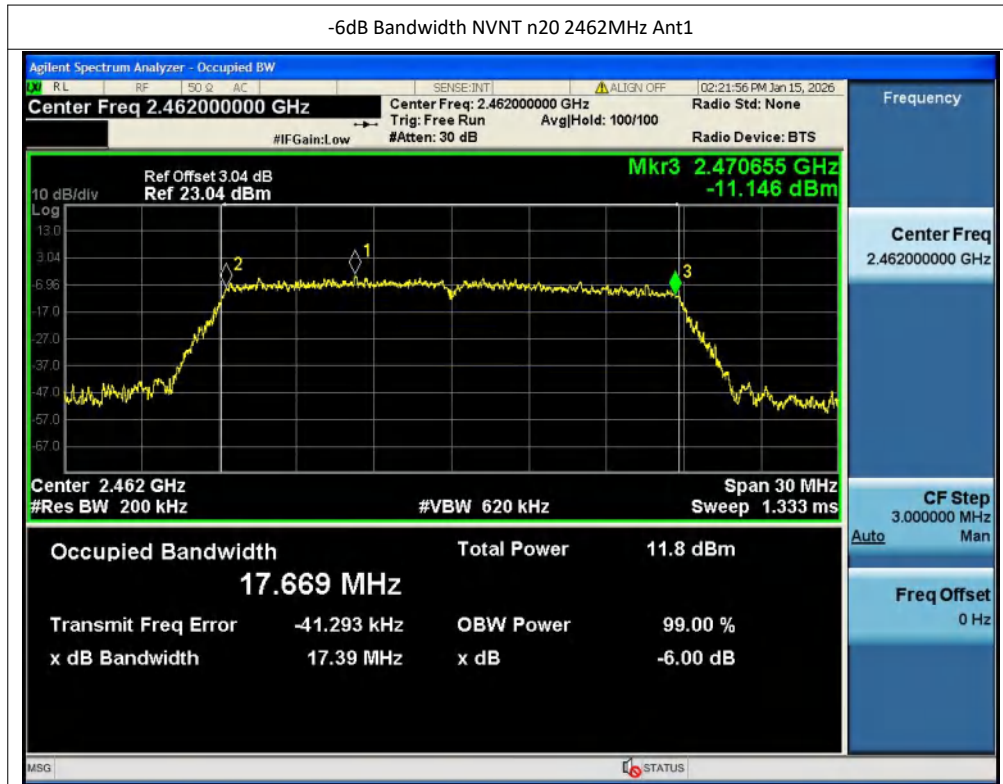


-6dB Bandwidth NVNT n20 2412MHz Ant1



-6dB Bandwidth NVNT n20 2437MHz Ant1





Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	12.74
NVNT	b	2437	Ant1	12.576
NVNT	b	2462	Ant1	12.845
NVNT	g	2412	Ant1	16.404
NVNT	g	2437	Ant1	16.375
NVNT	g	2462	Ant1	16.51
NVNT	n20	2412	Ant1	17.6
NVNT	n20	2437	Ant1	17.519
NVNT	n20	2462	Ant1	17.629

Test Graphs

OBW NVNT b 2412MHz Ant1



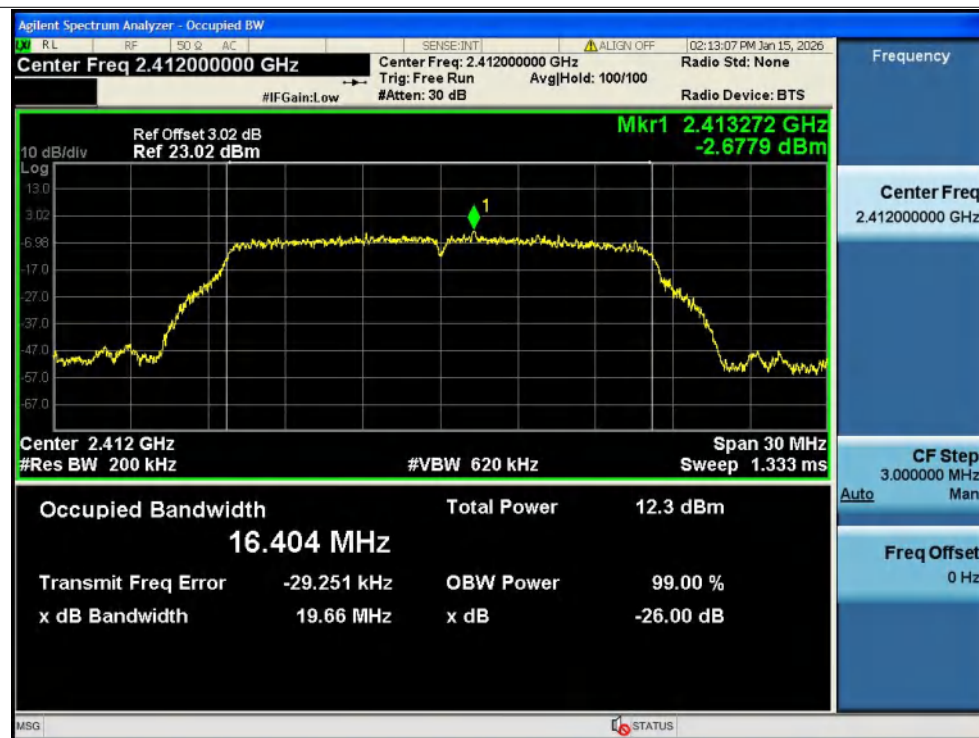
OBW NVNT b 2437MHz Ant1



OBW NVNT b 2462MHz Ant1



OBW NVNT g 2412MHz Ant1



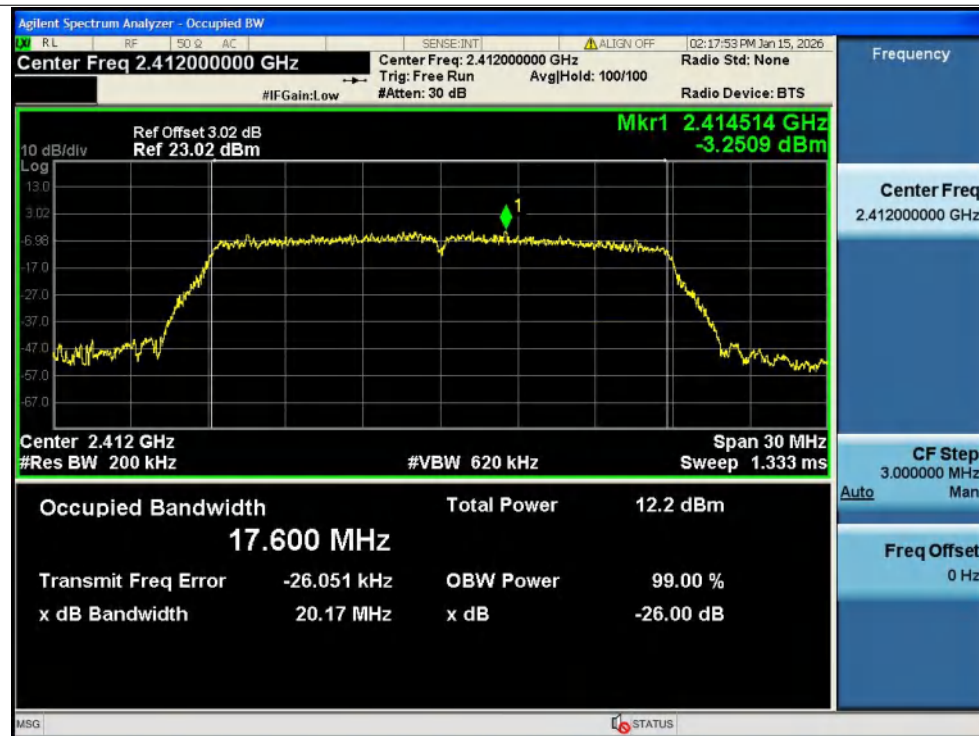
OBW NVNT g 2437MHz Ant1



OBW NVNT g 2462MHz Ant1

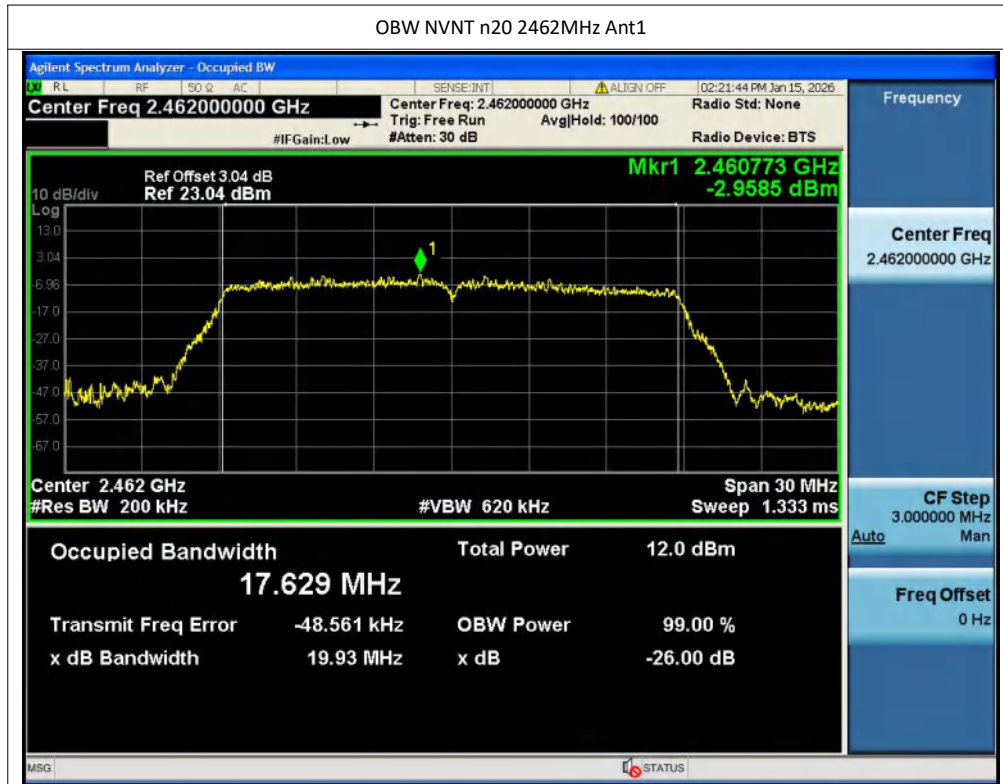


OBW NVNT n20 2412MHz Ant1



OBW NVNT n20 2437MHz Ant1





Maximum Power Spectral Density Level

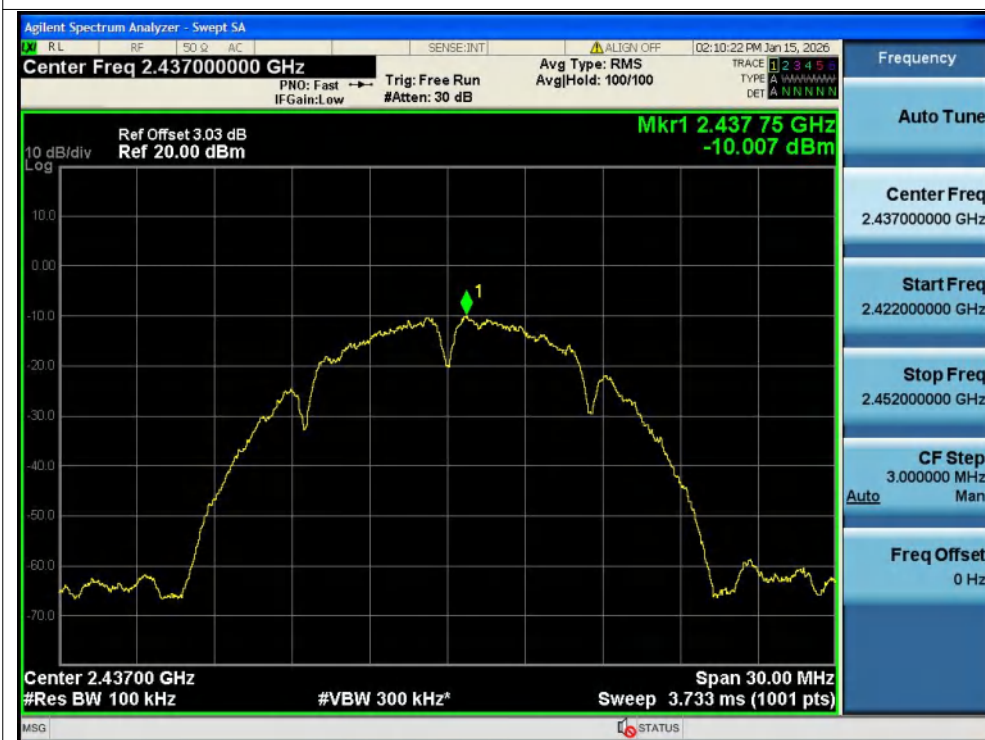
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/100kHz)	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant1	-9.74	-24.97	0.02	-24.95	8	Pass
NVNT	b	2437	Ant1	-10.01	-25.24	0.02	-25.22	8	Pass
NVNT	b	2462	Ant1	-9.89	-25.12	0.02	-25.1	8	Pass
NVNT	g	2412	Ant1	-12.51	-27.74	0.13	-27.61	8	Pass
NVNT	g	2437	Ant1	-12.68	-27.91	0.13	-27.78	8	Pass
NVNT	g	2462	Ant1	-12.83	-28.06	0.13	-27.93	8	Pass
NVNT	n20	2412	Ant1	-12.97	-28.2	0.14	-28.06	8	Pass
NVNT	n20	2437	Ant1	-12.81	-28.04	0.14	-27.9	8	Pass
NVNT	n20	2462	Ant1	-13.35	-28.58	0.14	-28.44	8	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

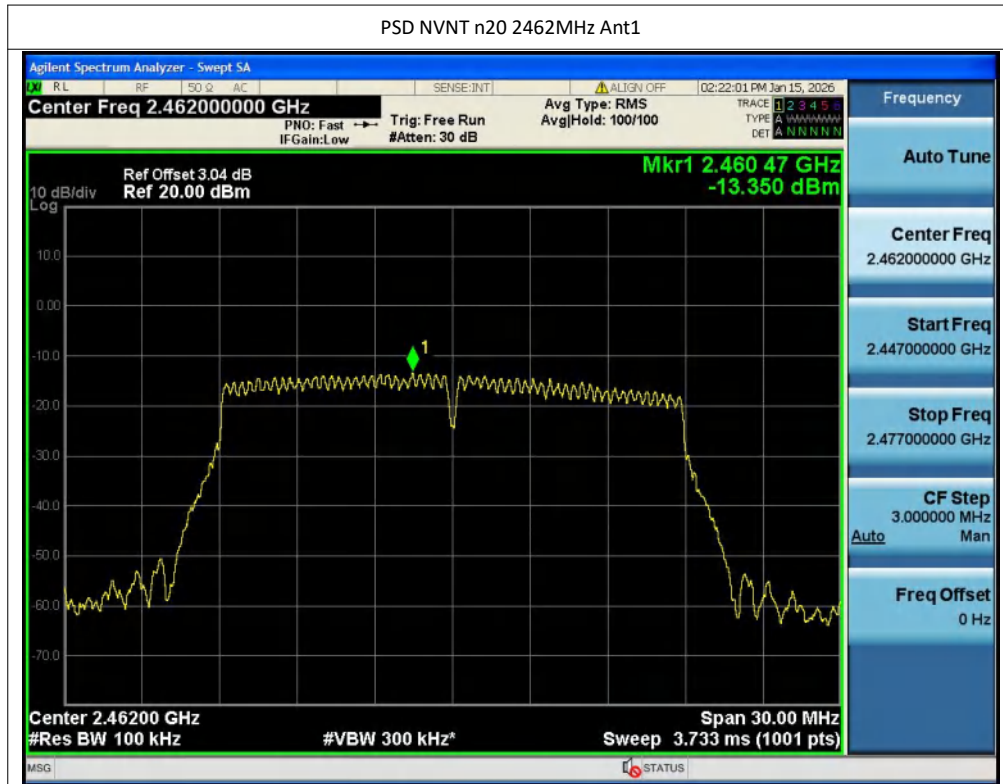


PSD NVNT n20 2412MHz Ant1



PSD NVNT n20 2437MHz Ant1







Band Edge

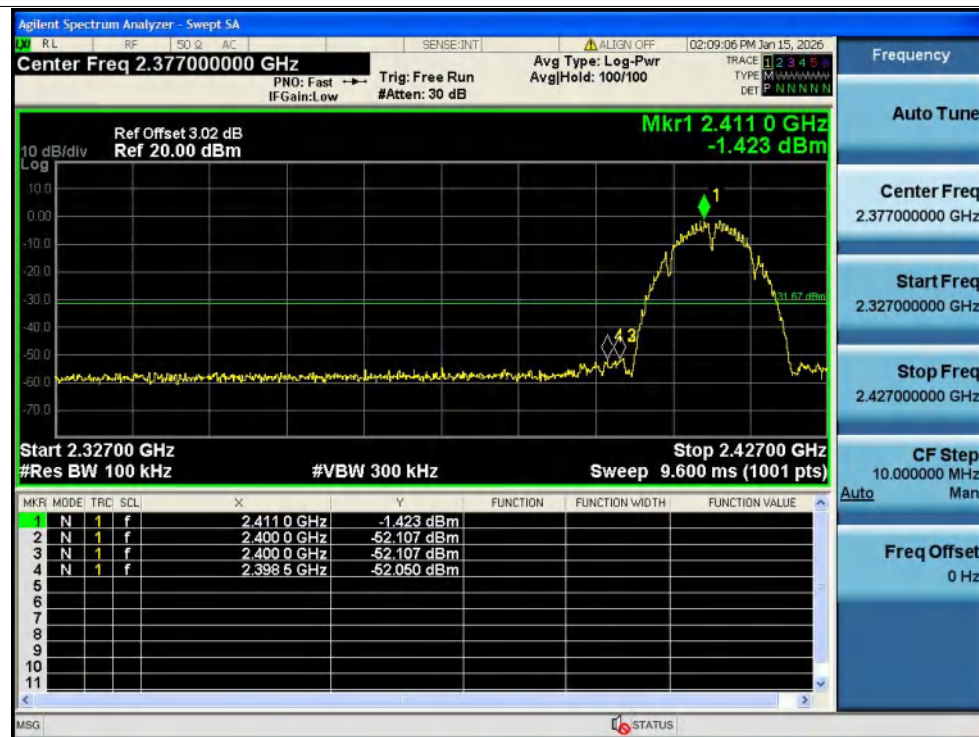
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-50.38	-30	Pass
NVNT	b	2462	Ant1	-52.53	-30	Pass
NVNT	g	2412	Ant1	-41.26	-30	Pass
NVNT	g	2462	Ant1	-48.62	-30	Pass
NVNT	n20	2412	Ant1	-43.41	-30	Pass
NVNT	n20	2462	Ant1	-49.12	-30	Pass

Test Graphs

Band Edge NVNT b 2412MHz Ant1 Ref



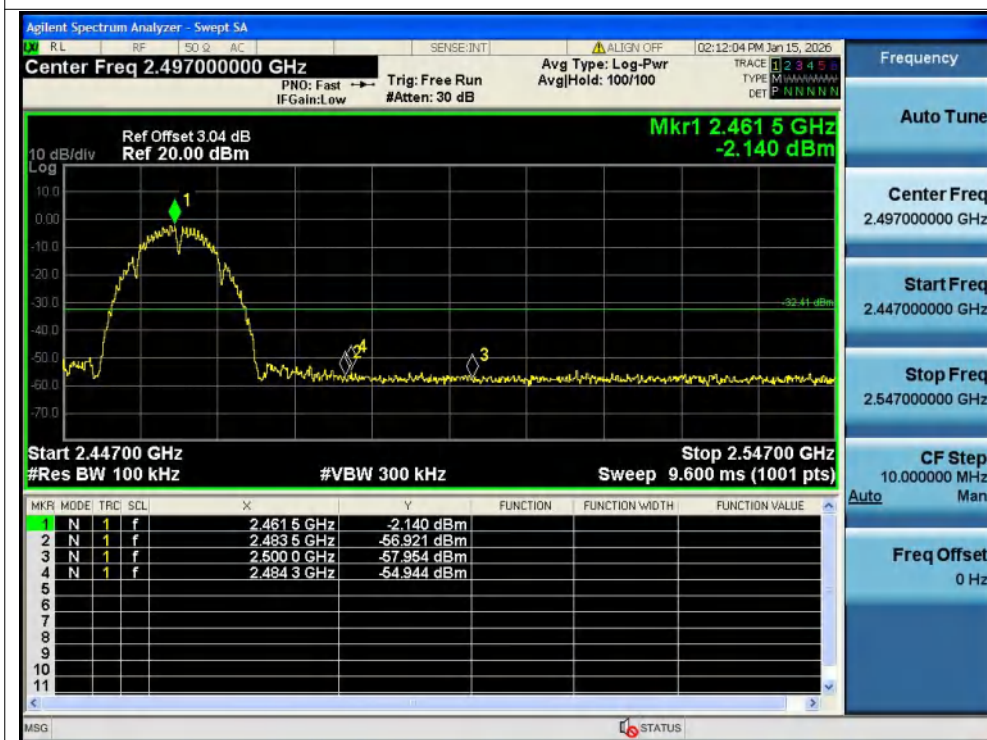
Band Edge NVNT b 2412MHz Ant1 Emission



Band Edge NVNT b 2462MHz Ant1 Ref



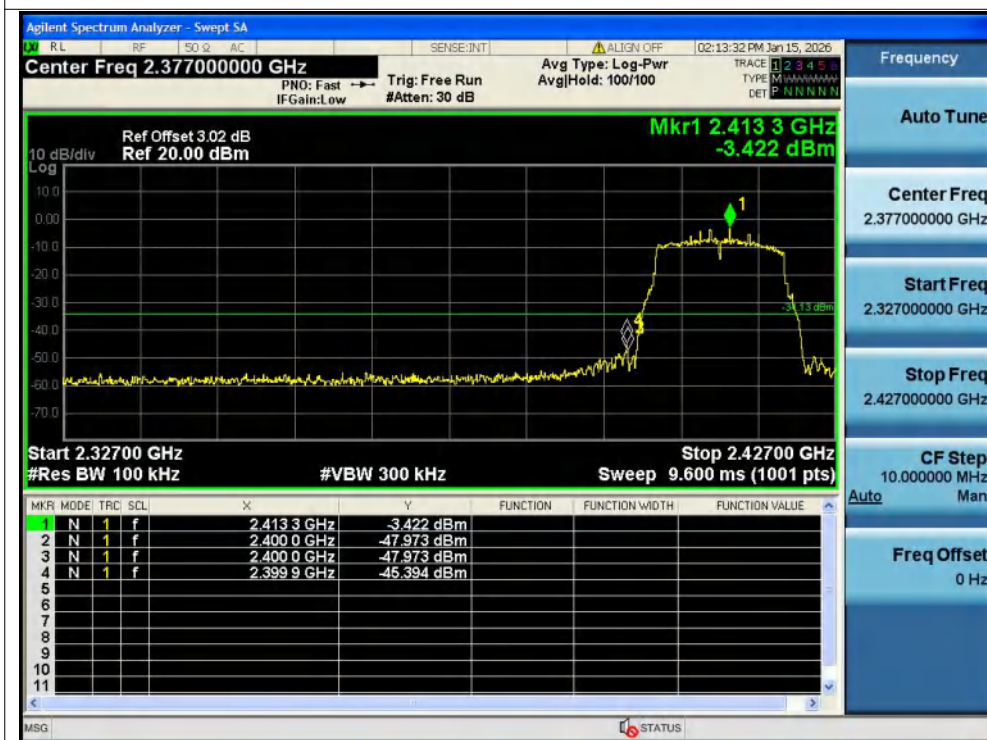
Band Edge NVNT b 2462MHz Ant1 Emission



Band Edge NVNT g 2412MHz Ant1 Ref



Band Edge NVNT g 2412MHz Ant1 Emission



Band Edge NVNT g 2462MHz Ant1 Ref



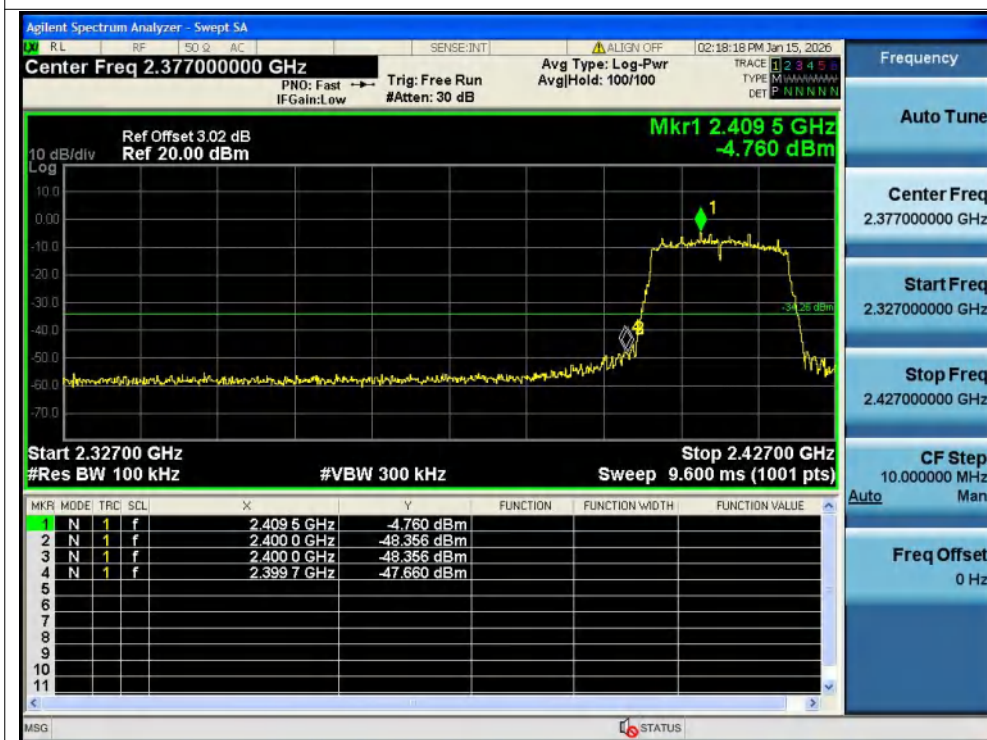
Band Edge NVNT g 2462MHz Ant1 Emission



Band Edge NVNT n20 2412MHz Ant1 Ref



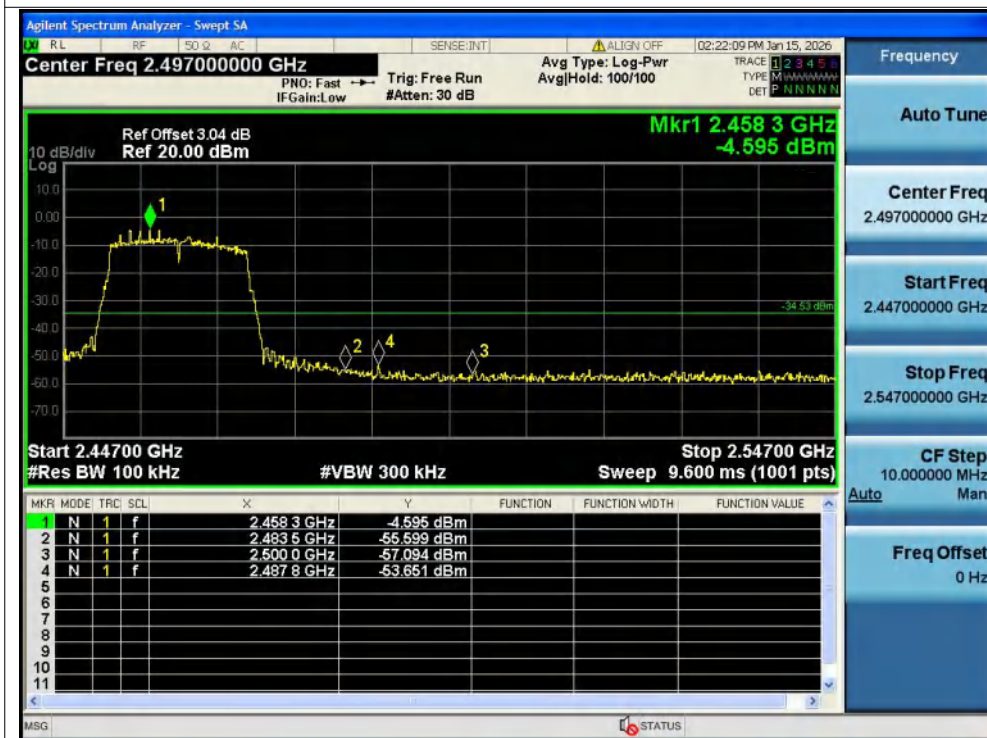
Band Edge NVNT n20 2412MHz Ant1 Emission



Band Edge NVNT n20 2462MHz Ant1 Ref



Band Edge NVNT n20 2462MHz Ant1 Emission



Conducted RF Spurious Emission

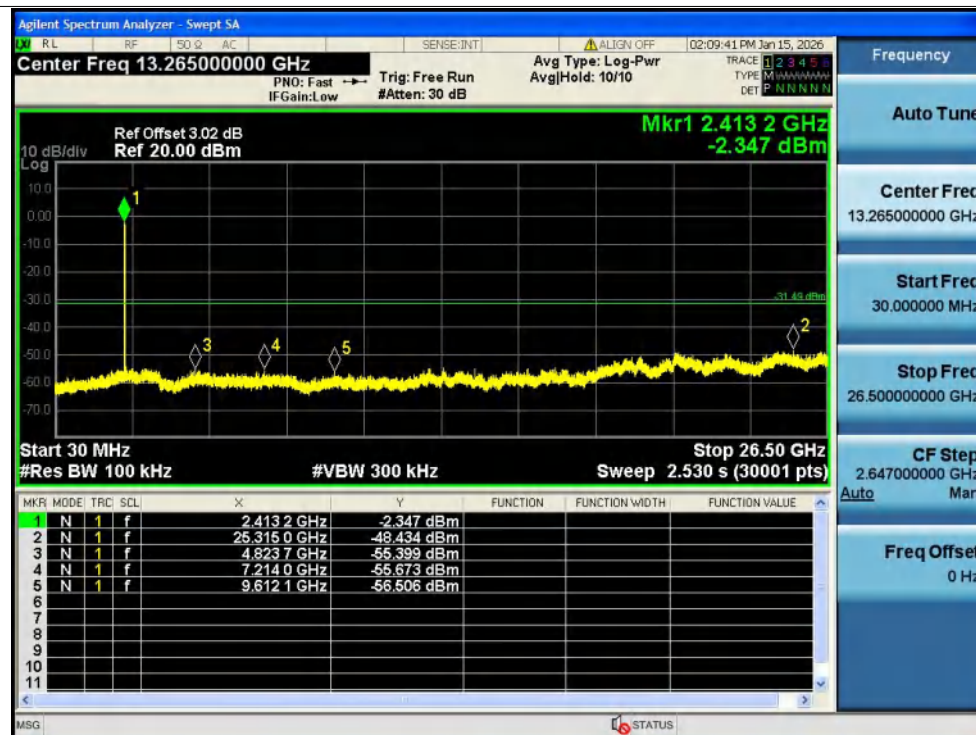
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-46.95	-30	Pass
NVNT	b	2437	Ant1	-46.31	-30	Pass
NVNT	b	2462	Ant1	-45.64	-30	Pass
NVNT	g	2412	Ant1	-45.44	-30	Pass
NVNT	g	2437	Ant1	-43.83	-30	Pass
NVNT	g	2462	Ant1	-44.14	-30	Pass
NVNT	n20	2412	Ant1	-44.43	-30	Pass
NVNT	n20	2437	Ant1	-42.76	-30	Pass
NVNT	n20	2462	Ant1	-43.13	-30	Pass

Test Graphs

Tx. Spurious NVNT b 2412MHz Ant1 Ref



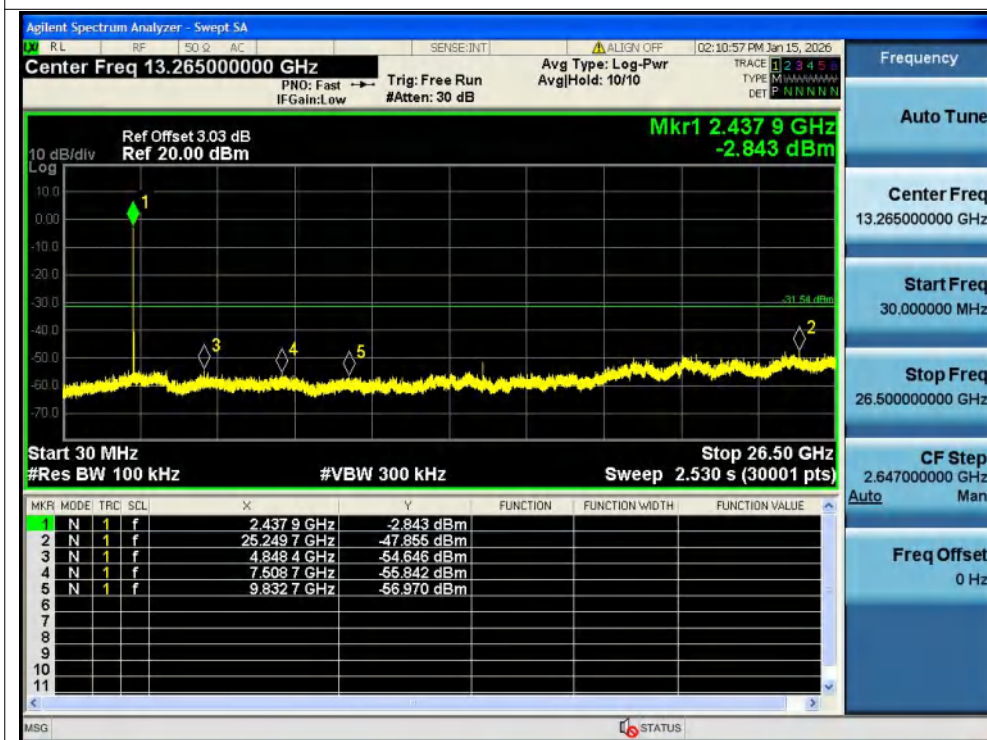
Tx. Spurious NVNT b 2412MHz Ant1 Emission



Tx. Spurious NVNT b 2437MHz Ant1 Ref



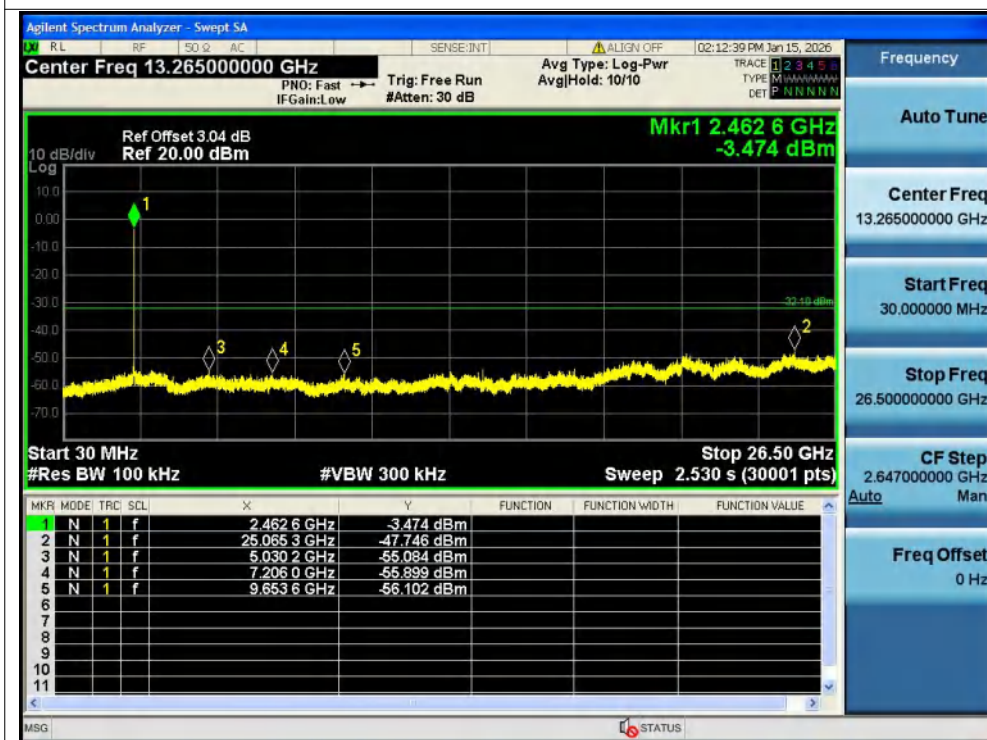
Tx. Spurious NVNT b 2437MHz Ant1 Emission



Tx. Spurious NVNT b 2462MHz Ant1 Ref



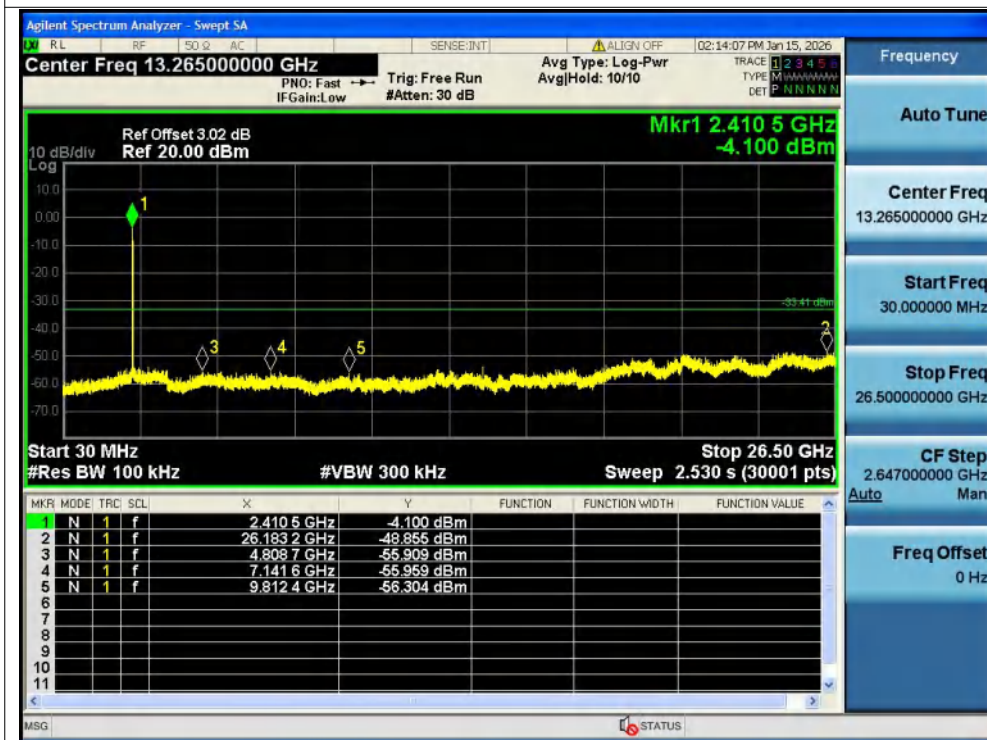
Tx. Spurious NVNT b 2462MHz Ant1 Emission



Tx. Spurious NVNT g 2412MHz Ant1 Ref



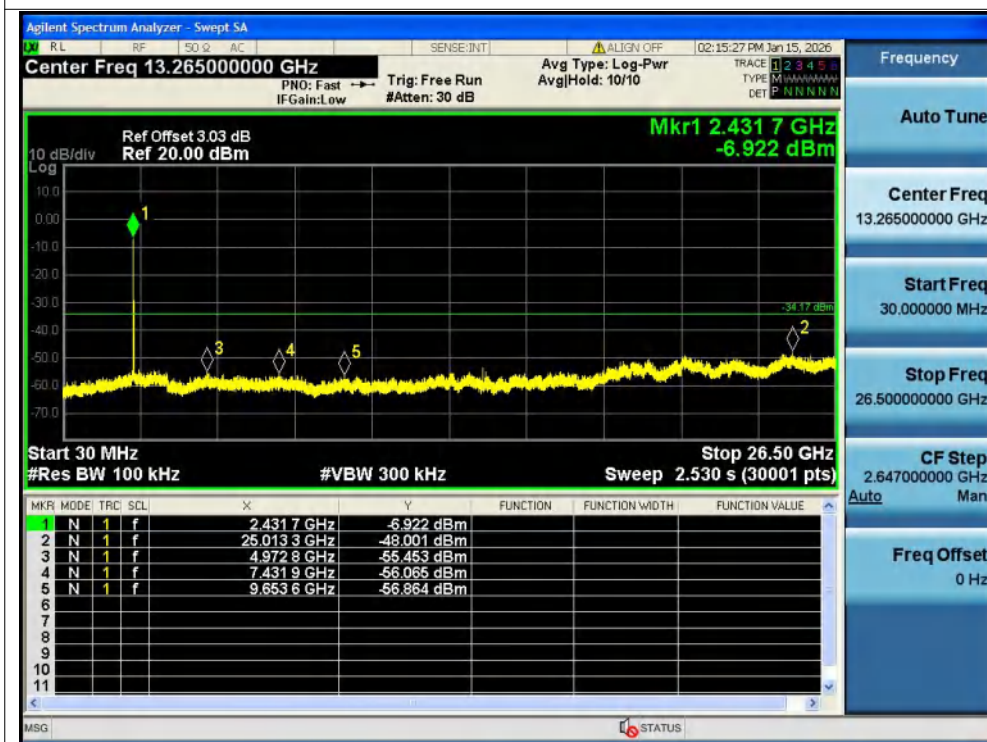
Tx. Spurious NVNT g 2412MHz Ant1 Emission



Tx. Spurious NVNT g 2437MHz Ant1 Ref



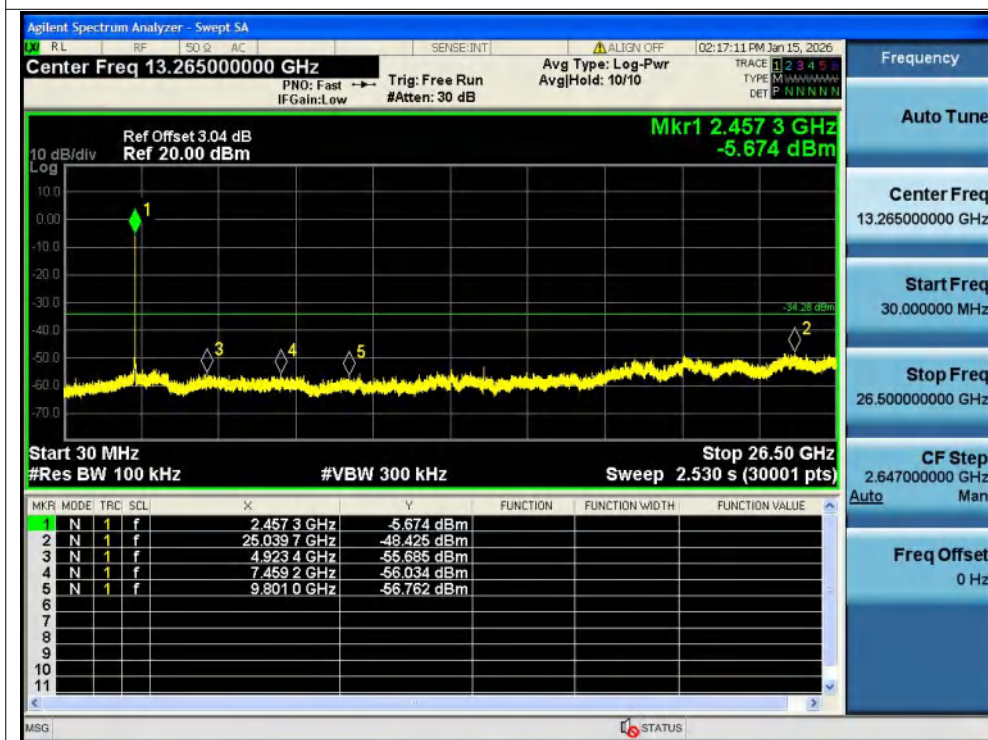
Tx. Spurious NVNT g 2437MHz Ant1 Emission



Tx. Spurious NVNT g 2462MHz Ant1 Ref



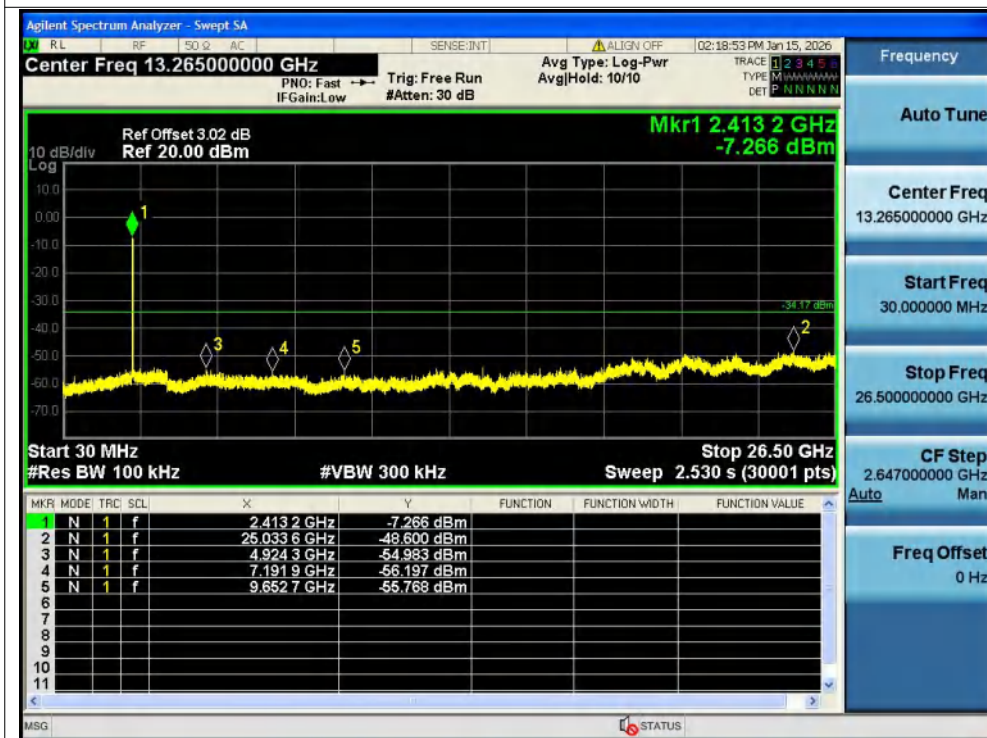
Tx. Spurious NVNT g 2462MHz Ant1 Emission



Tx. Spurious NVNT n20 2412MHz Ant1 Ref



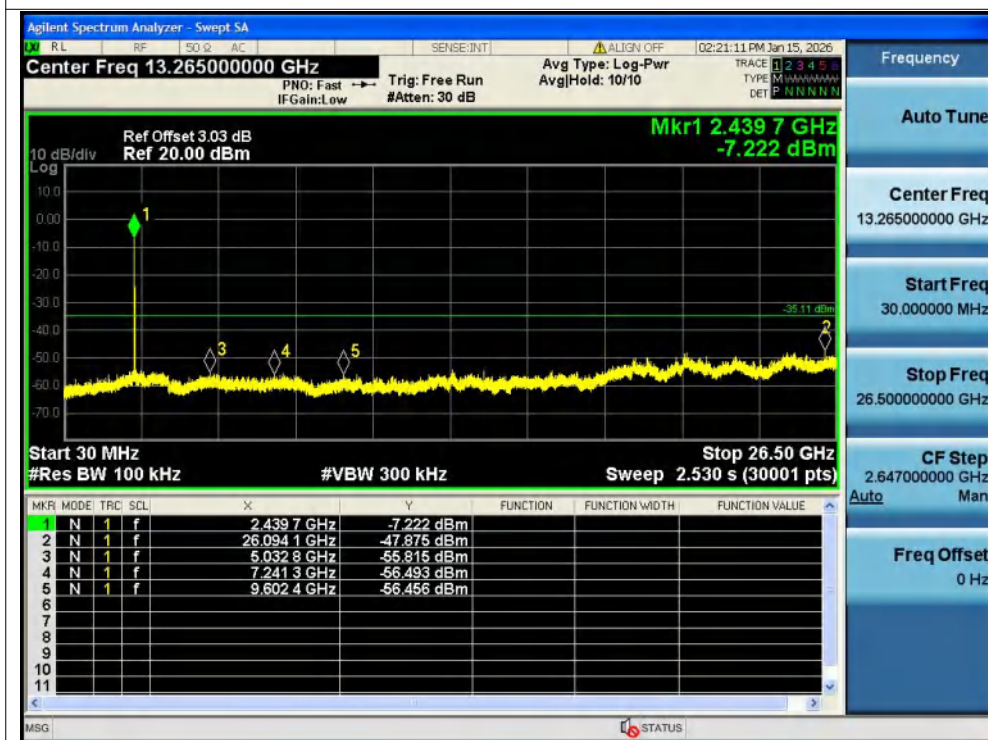
Tx. Spurious NVNT n20 2412MHz Ant1 Emission



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

