



Appendix A

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: LED RGB Light

Test Model: MZT-FW01

Environmental Conditions

Temperature:	23.5° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Wunder Wu
Supervised by:	Li Huan



A.1 6dB Bandwidth

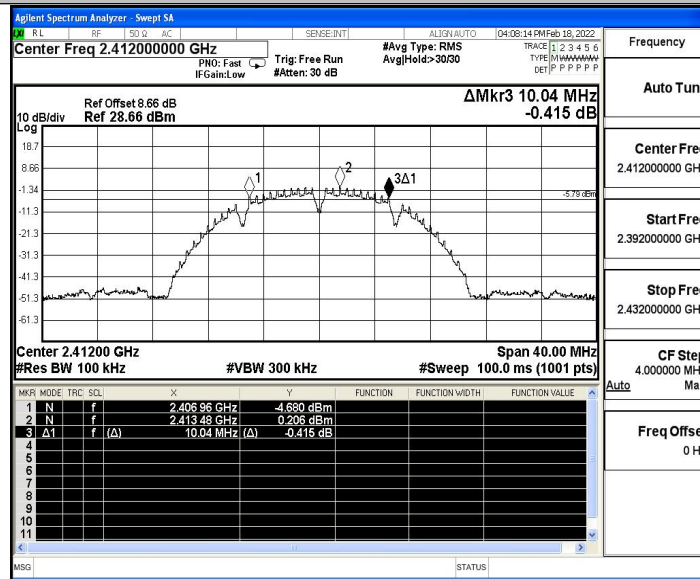
Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.040	2406.960	2417.000	0.5	PASS
		2437	10.040	2431.960	2442.000	0.5	PASS
		2462	10.040	2456.960	2467.000	0.5	PASS
11G	Ant1	2412	16.320	2403.840	2420.160	0.5	PASS
		2437	16.320	2428.840	2445.160	0.5	PASS
		2462	16.320	2453.840	2470.160	0.5	PASS
11N20SISO	Ant1	2412	17.560	2403.200	2420.760	0.5	PASS
		2437	17.600	2428.200	2445.800	0.5	PASS
		2462	17.560	2453.200	2470.760	0.5	PASS

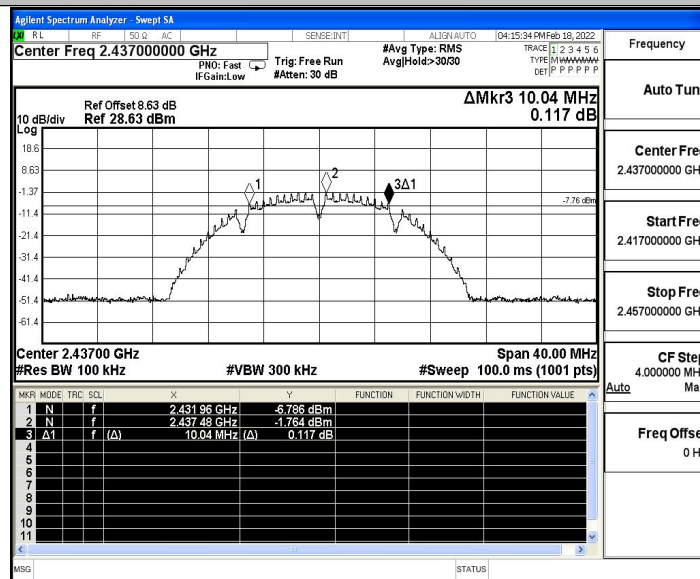


Test Graphs

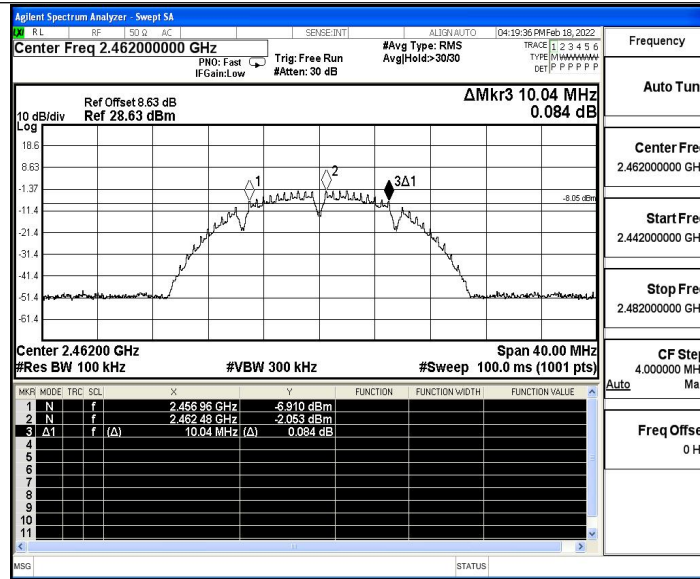
11B_Ant1_2412



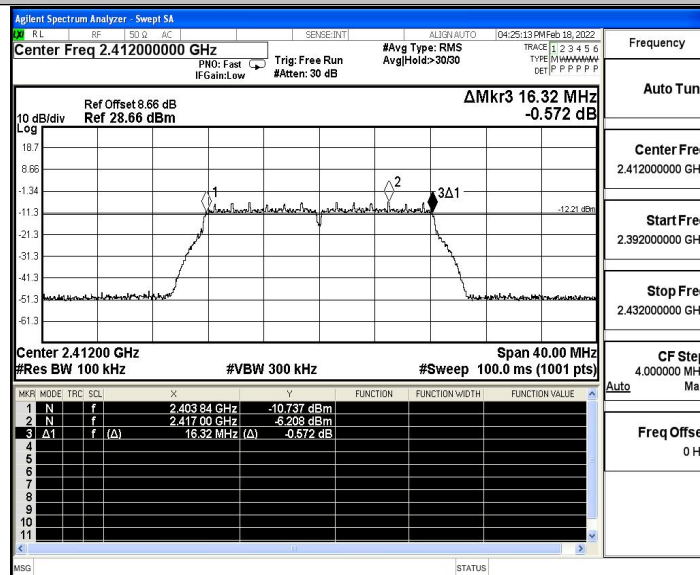
11B_Ant1_2437



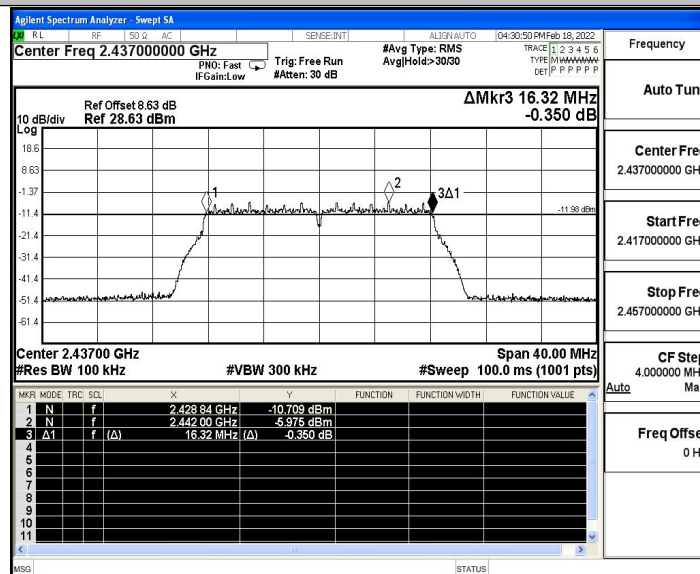
11B_Ant1_2462



11G_Ant1_2412

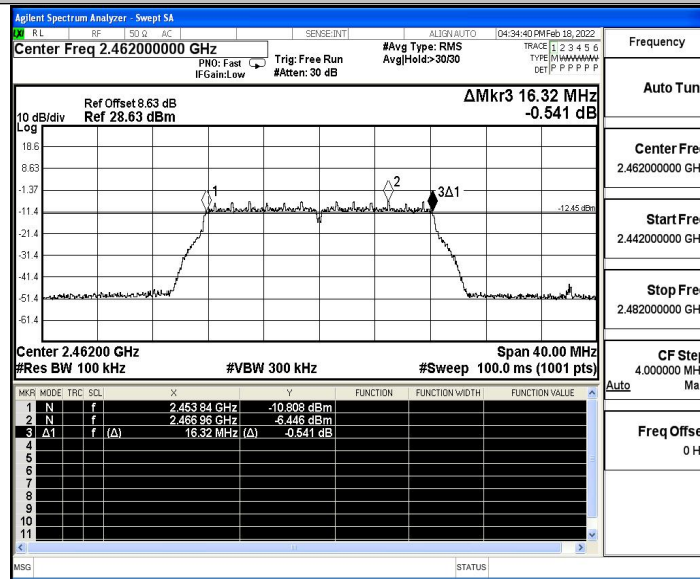


11G_Ant1_2437

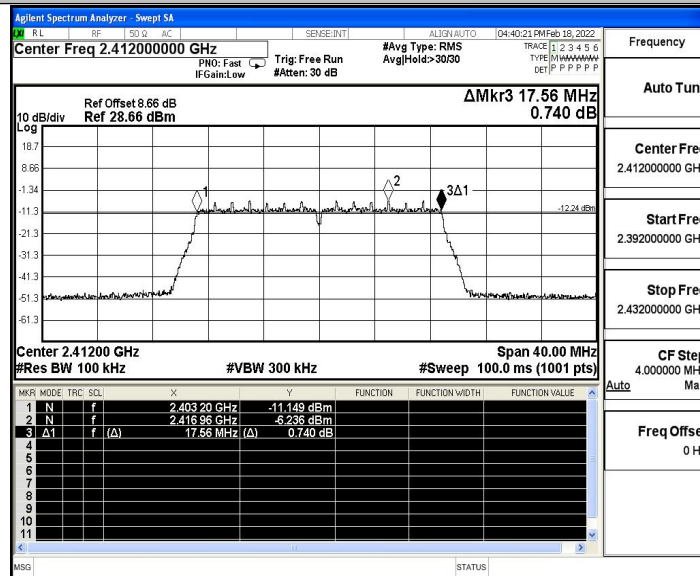




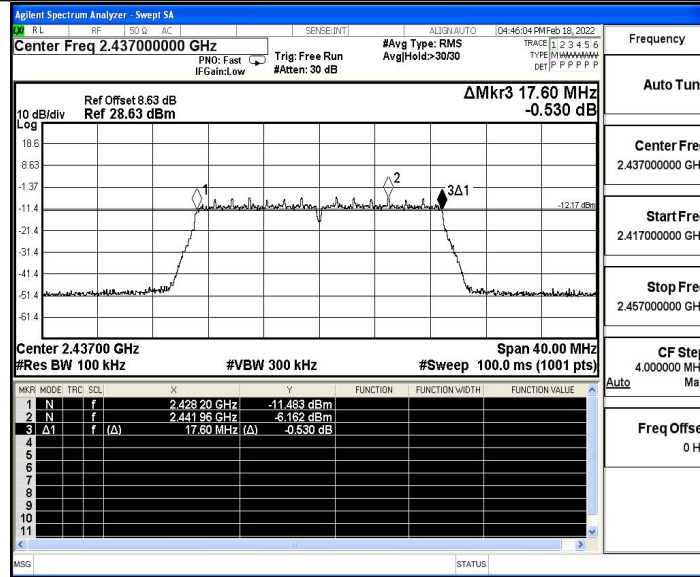
11G_Ant1_2462



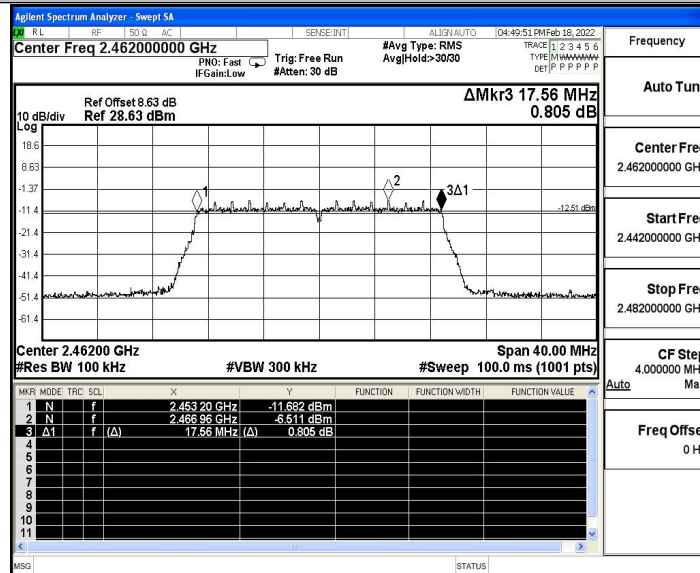
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462





A.2 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	15.35	0	15.35	30	Pass
NVNT	b	2437	Ant1	15.17	0	15.17	30	Pass
NVNT	b	2462	Ant1	15.13	0	15.13	30	Pass
NVNT	g	2412	Ant1	14.33	0	14.33	30	Pass
NVNT	g	2437	Ant1	14.73	0	14.73	30	Pass
NVNT	g	2462	Ant1	14.11	0	14.11	30	Pass
NVNT	n20	2412	Ant1	14.03	0	14.03	30	Pass
NVNT	n20	2437	Ant1	13.64	0	13.64	30	Pass
NVNT	n20	2462	Ant1	13.32	0	13.32	30	Pass



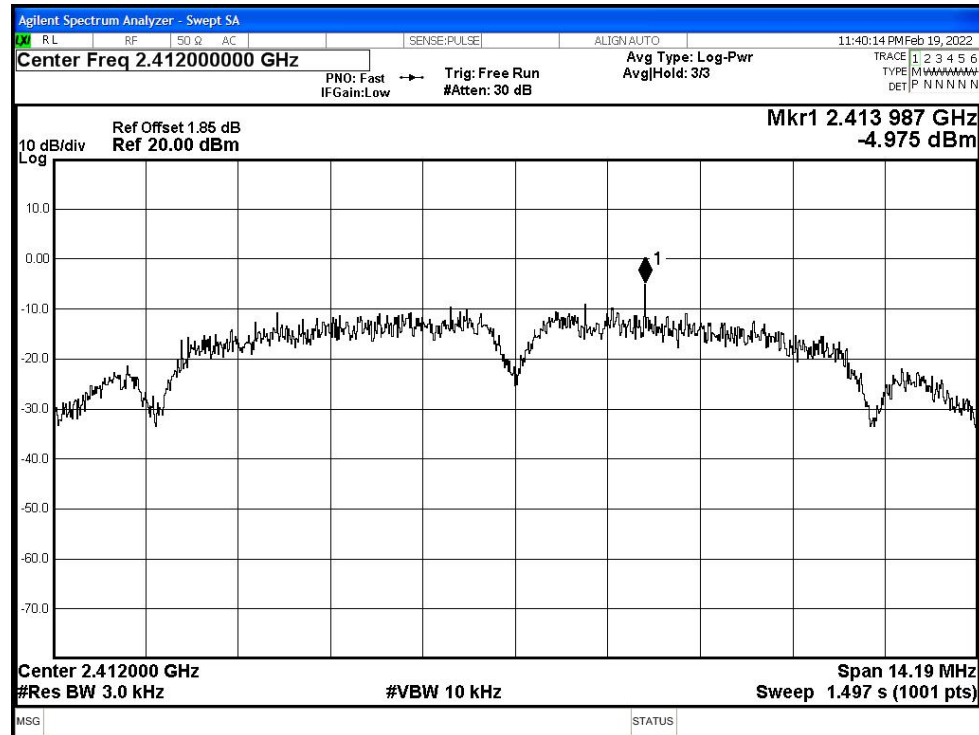
A.3 Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant1	-4.97	0	-4.97	8	Pass
NVNT	b	2437	Ant1	-8.85	0	-8.85	8	Pass
NVNT	b	2462	Ant1	-9.07	0	-9.07	8	Pass
NVNT	g	2412	Ant1	-13	0	-13	8	Pass
NVNT	g	2437	Ant1	-12.13	0	-12.13	8	Pass
NVNT	g	2462	Ant1	-12.4	0	-12.4	8	Pass
NVNT	n20	2412	Ant1	-13.96	0	-13.96	8	Pass
NVNT	n20	2437	Ant1	-14.25	0	-14.25	8	Pass
NVNT	n20	2462	Ant1	-14.12	0	-14.12	8	Pass

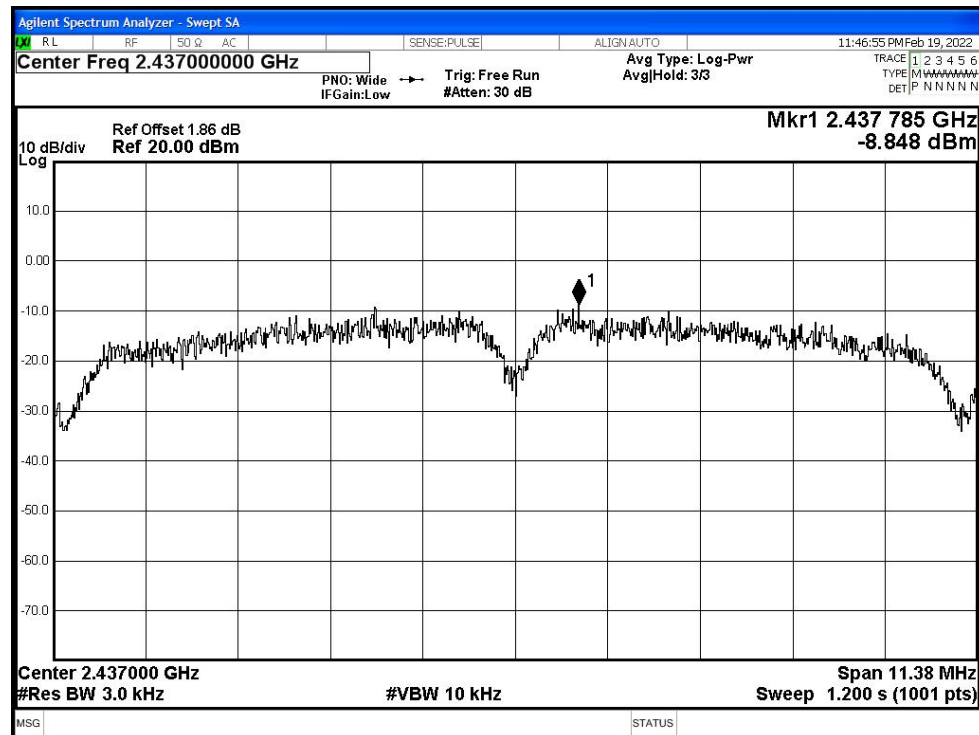


Test Graphs

PSD NVNT b 2412MHz Ant1

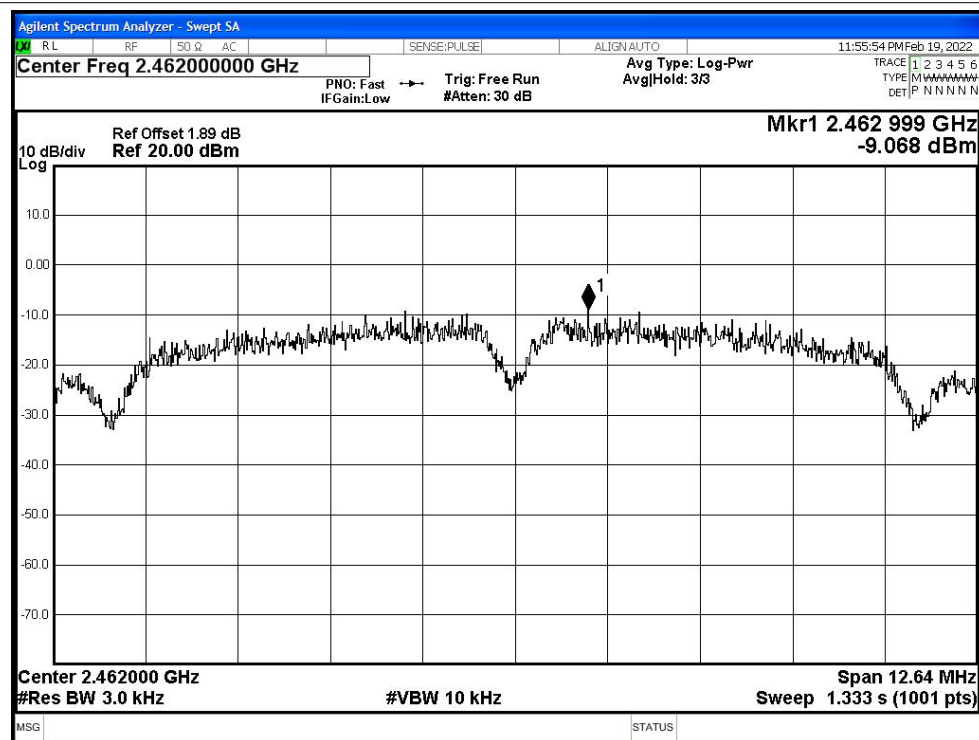


PSD NVNT b 2437MHz Ant1

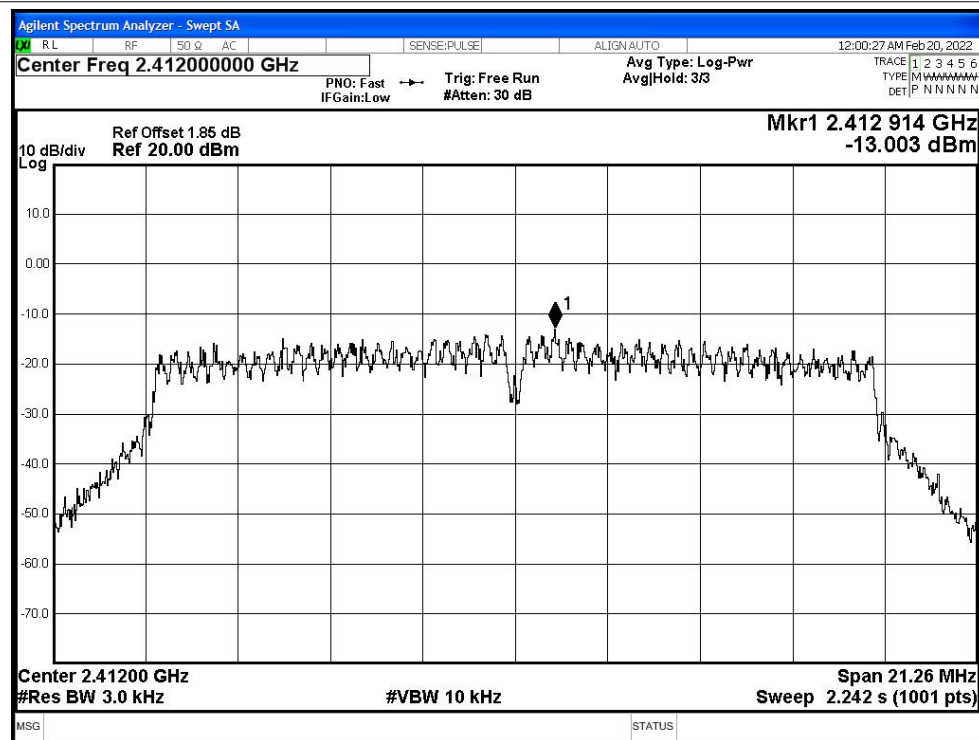




PSD NVNT b 2462MHz Ant1

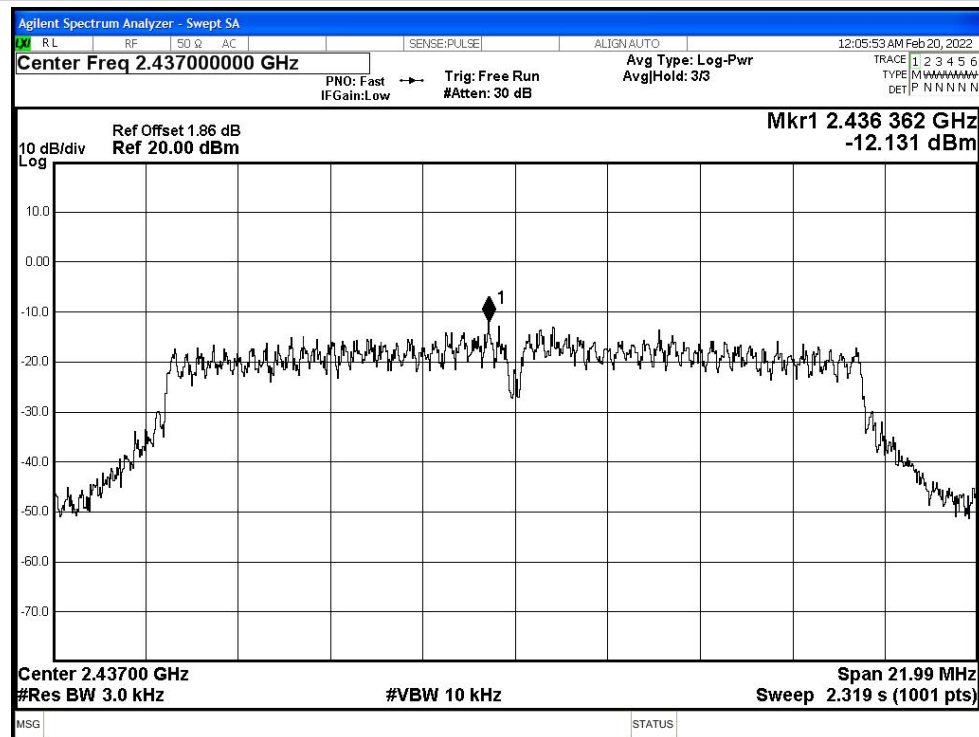


PSD NVNT g 2412MHz Ant1

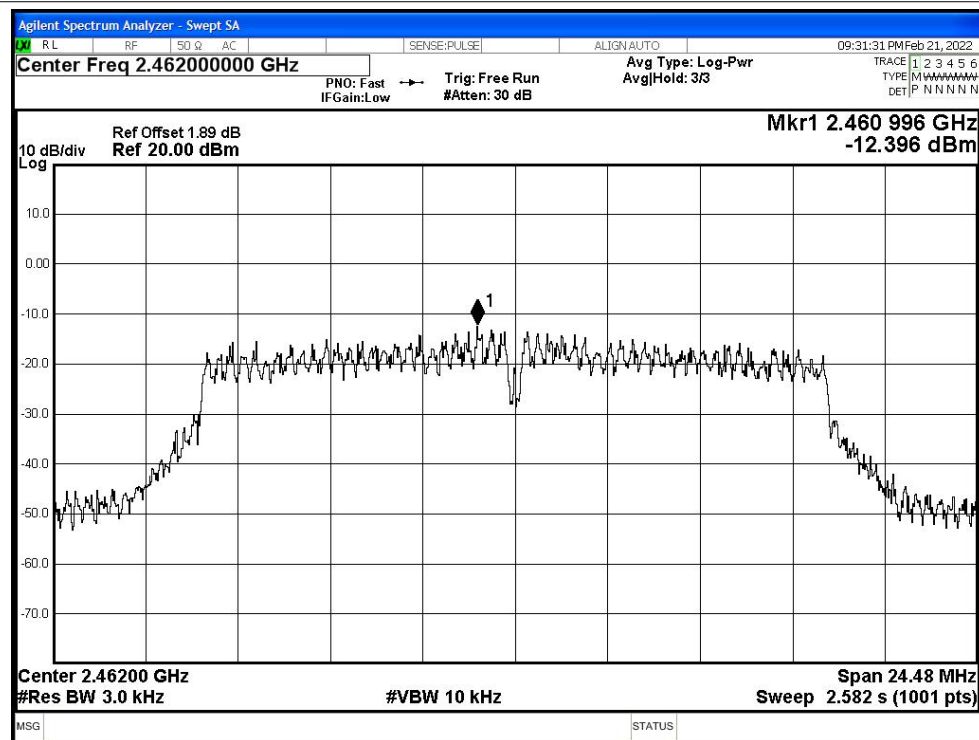


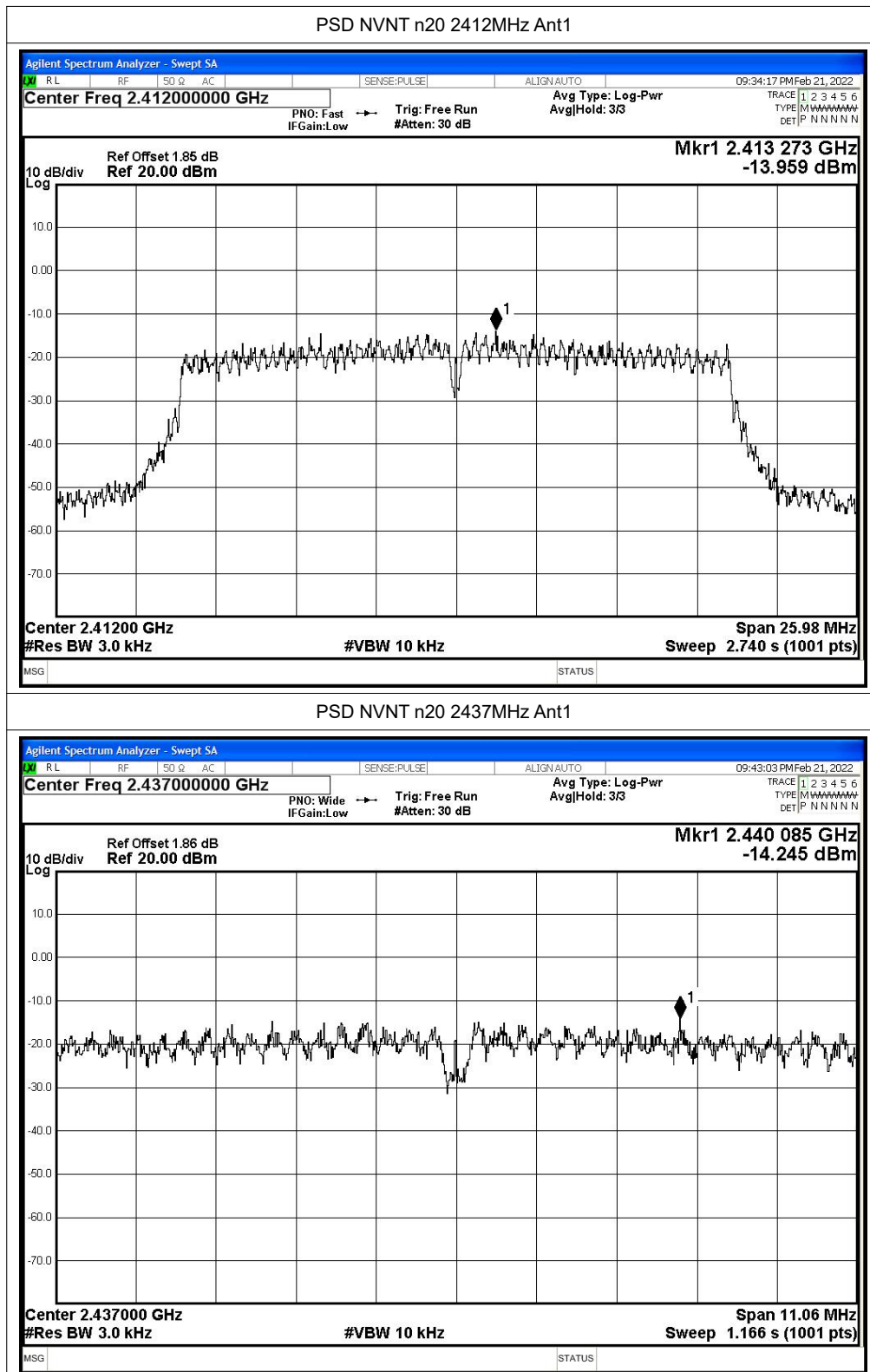


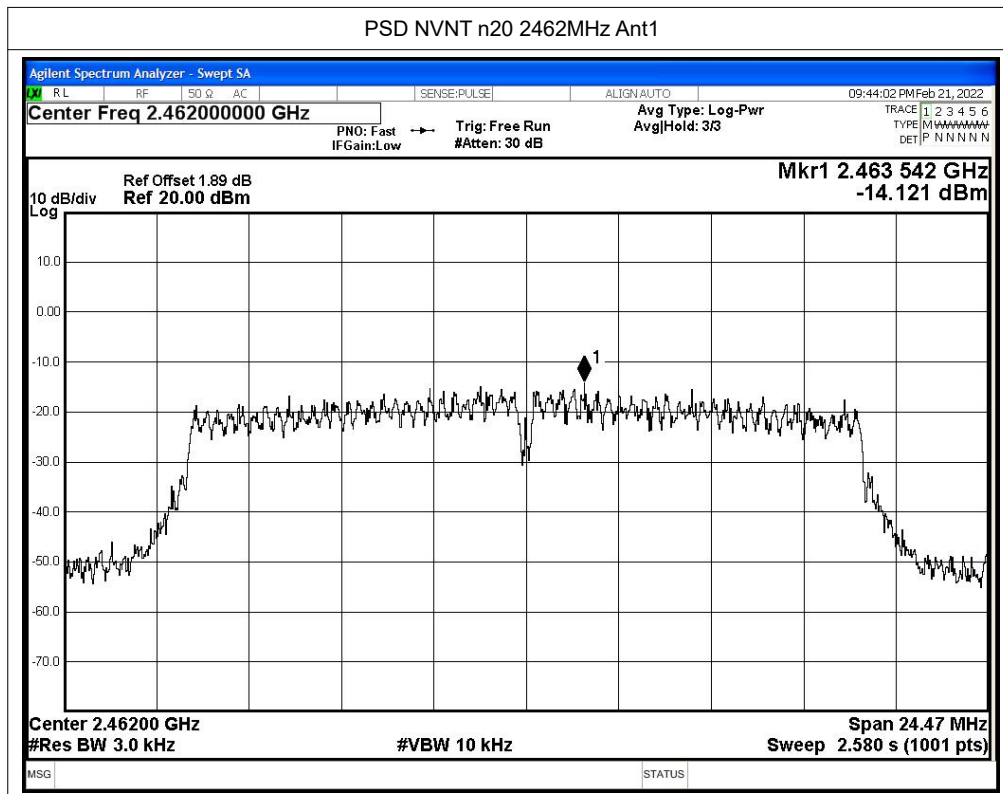
PSD NVNT g 2437MHz Ant1



PSD NVNT g 2462MHz Ant1









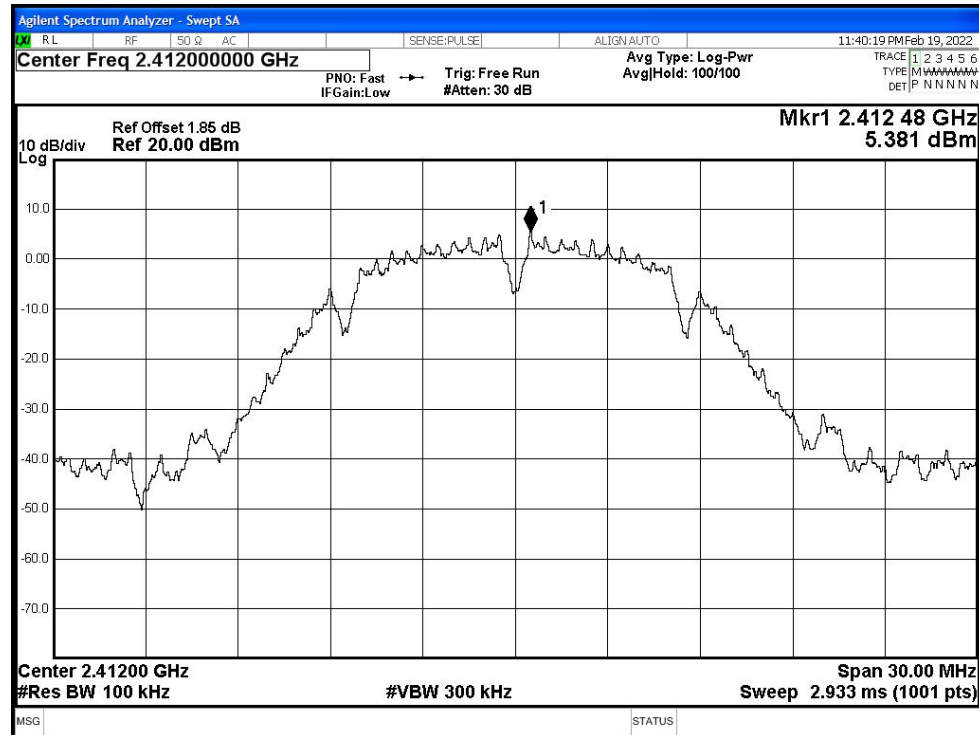
A.4 Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-45.35	-20	Pass
NVNT	b	2462	Ant1	-58.98	-20	Pass
NVNT	g	2412	Ant1	-35.47	-20	Pass
NVNT	g	2462	Ant1	-48.71	-20	Pass
NVNT	n20	2412	Ant1	-35.24	-20	Pass
NVNT	n20	2462	Ant1	-46.12	-20	Pass

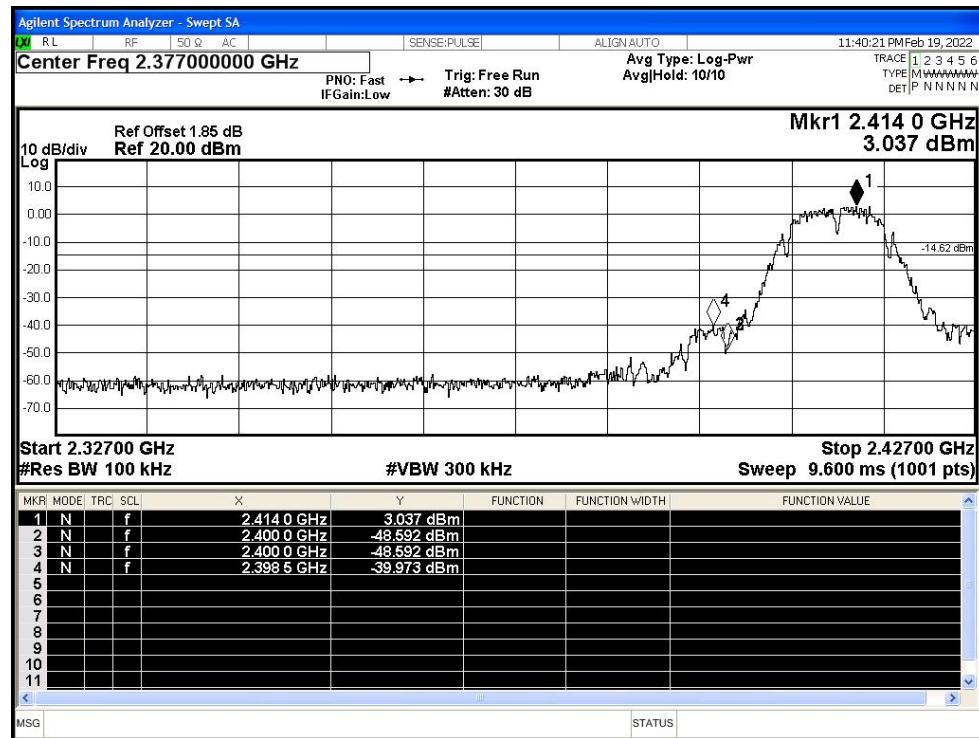


Test Graphs

Band Edge NVNT b 2412MHz Ant1 Ref

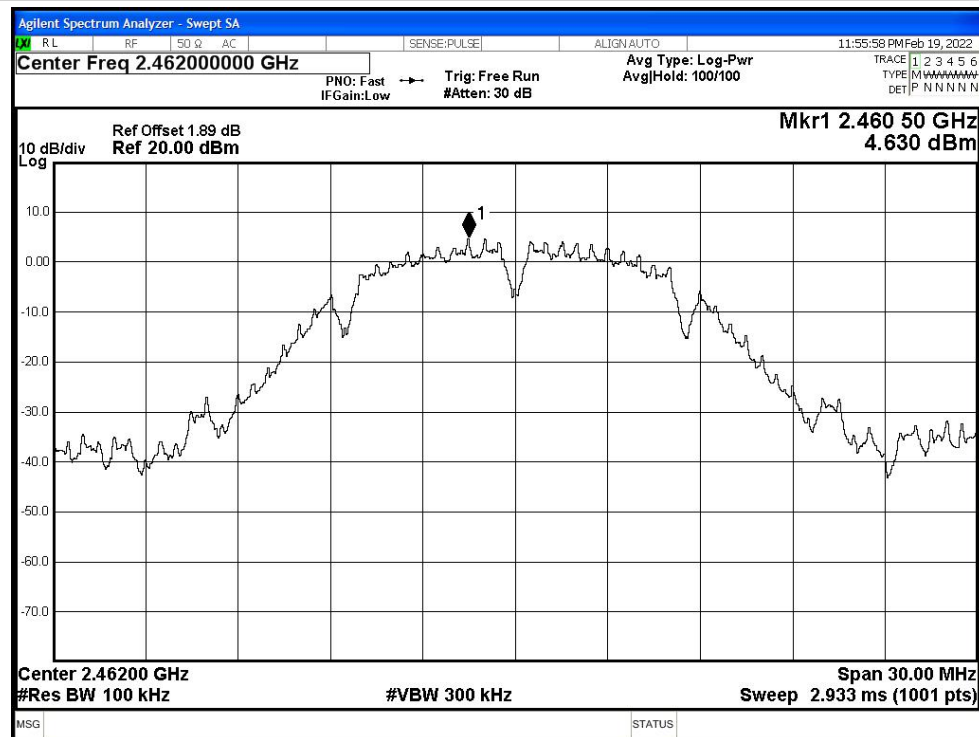


Band Edge NVNT b 2412MHz Ant1 Emission

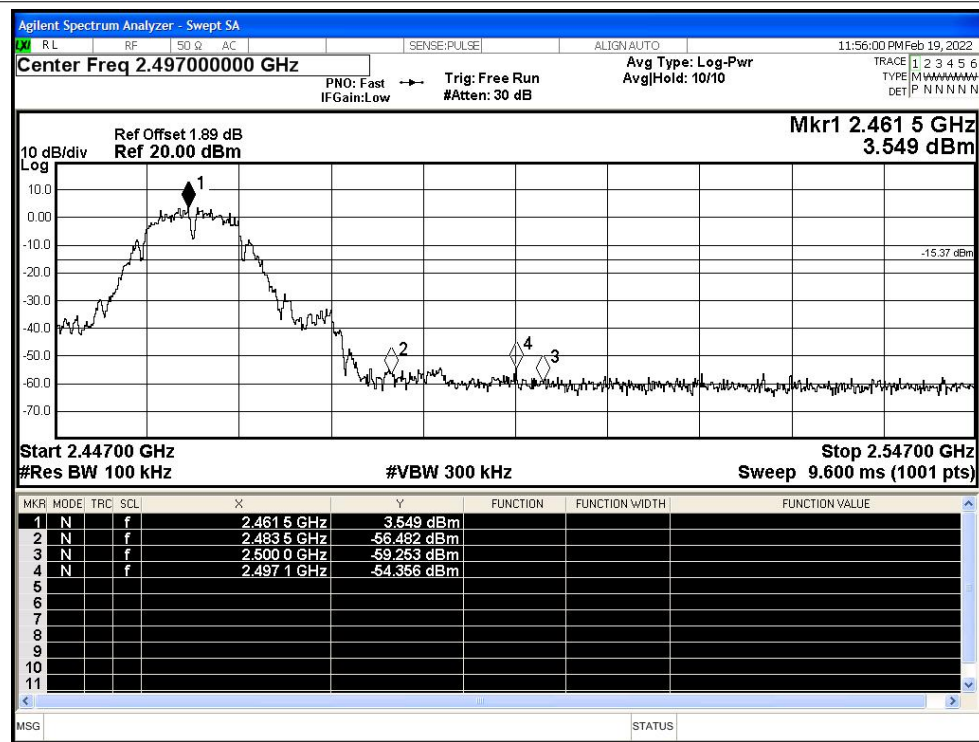




Band Edge NVNT b 2462MHz Ant1 Ref

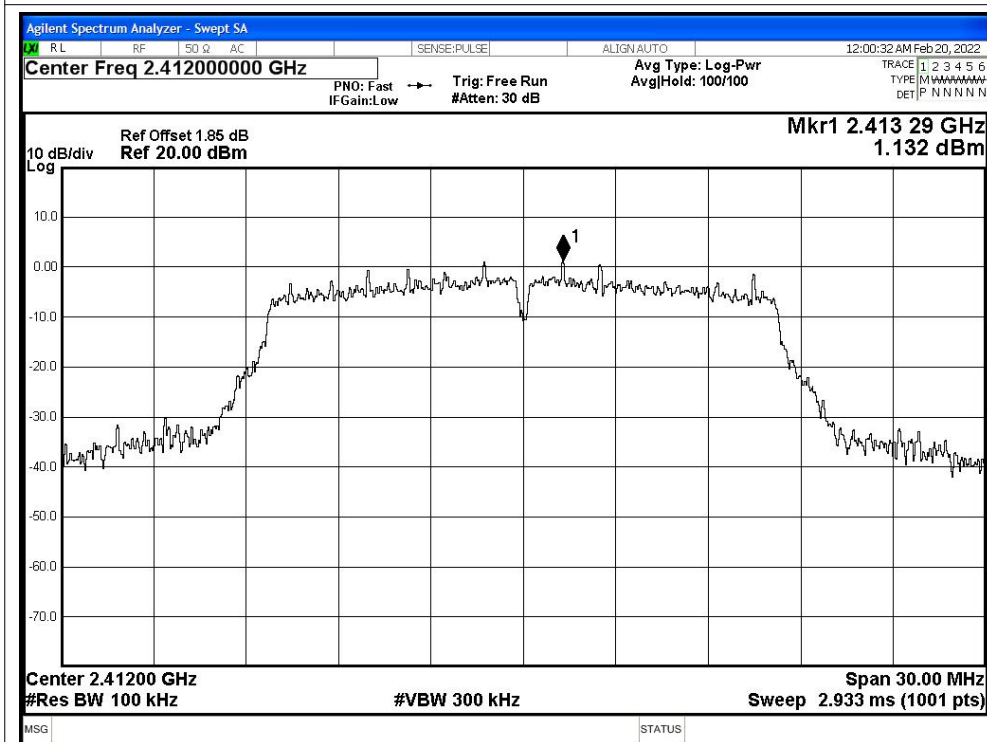


Band Edge NVNT b 2462MHz Ant1 Emission

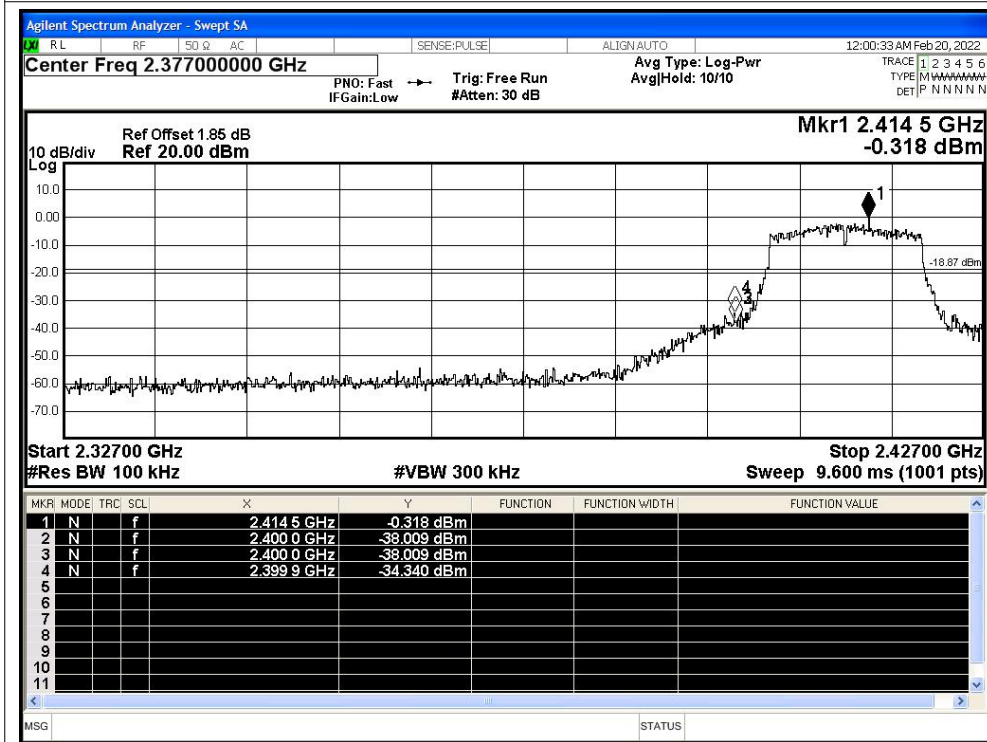




Band Edge NVNT g 2412MHz Ant1 Ref

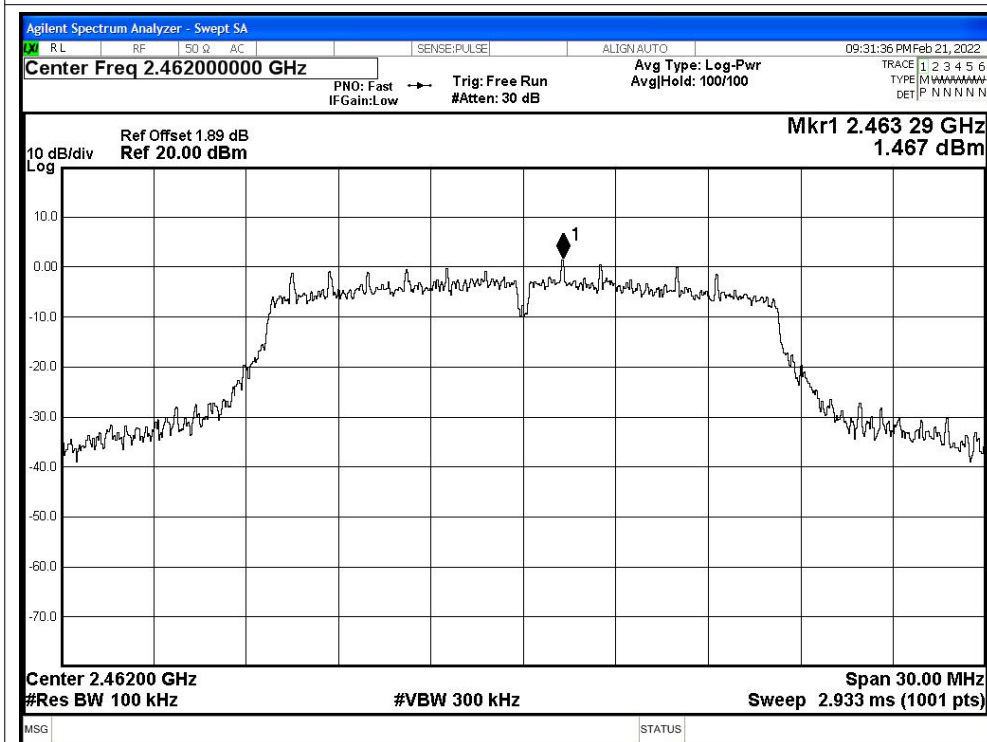


Band Edge NVNT g 2412MHz Ant1 Emission

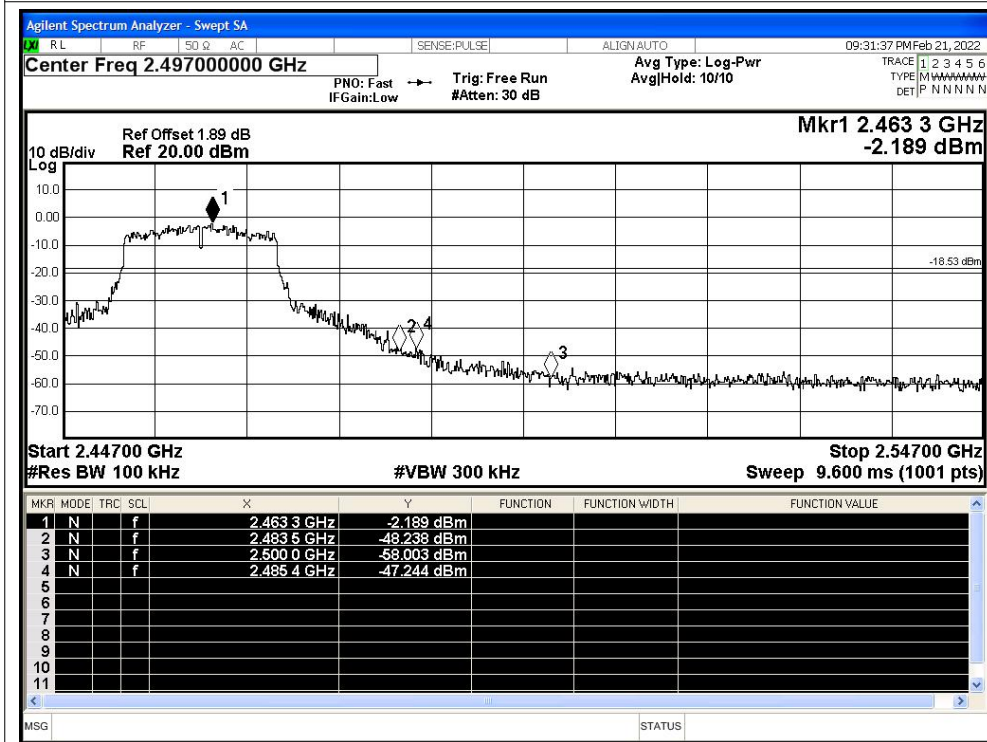




Band Edge NVNT g 2462MHz Ant1 Ref

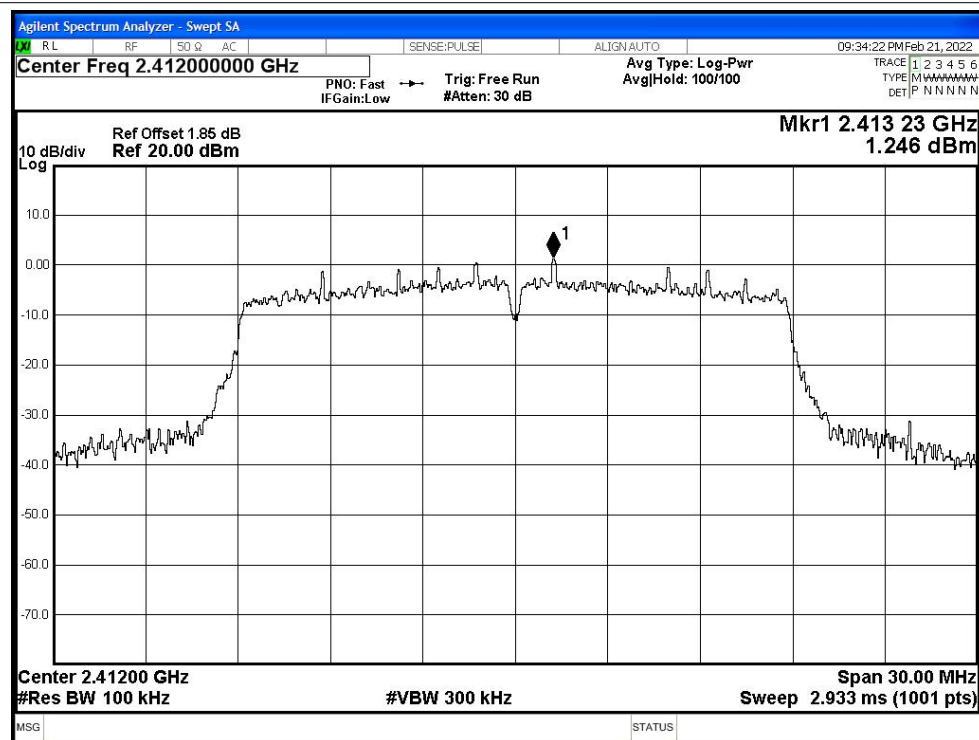


Band Edge NVNT g 2462MHz Ant1 Emission

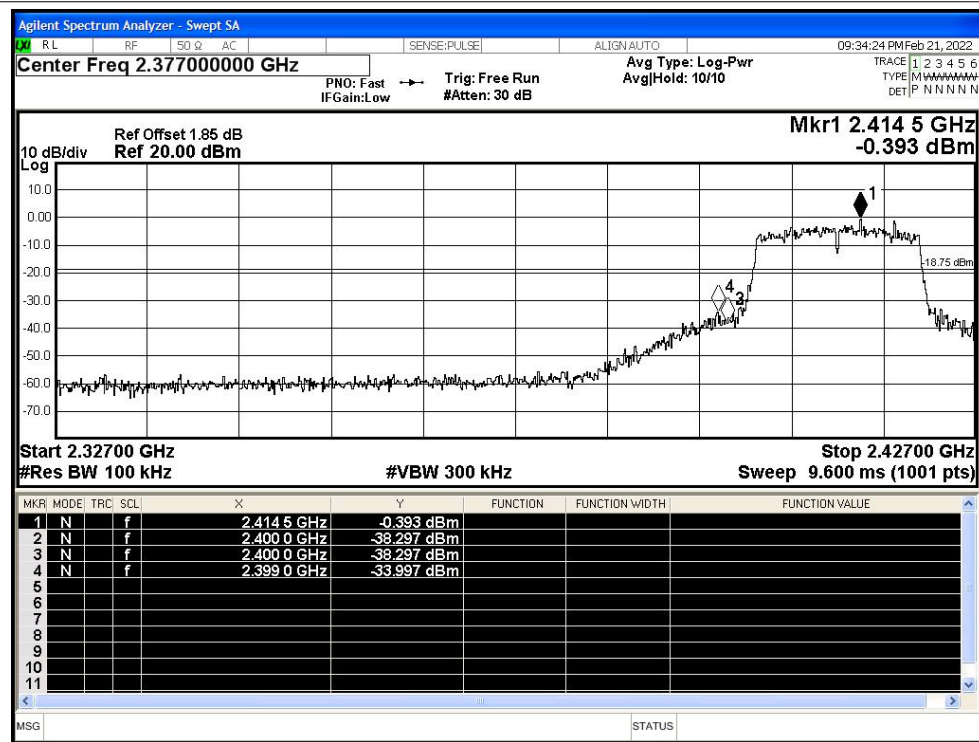




Band Edge NVNT n20 2412MHz Ant1 Ref

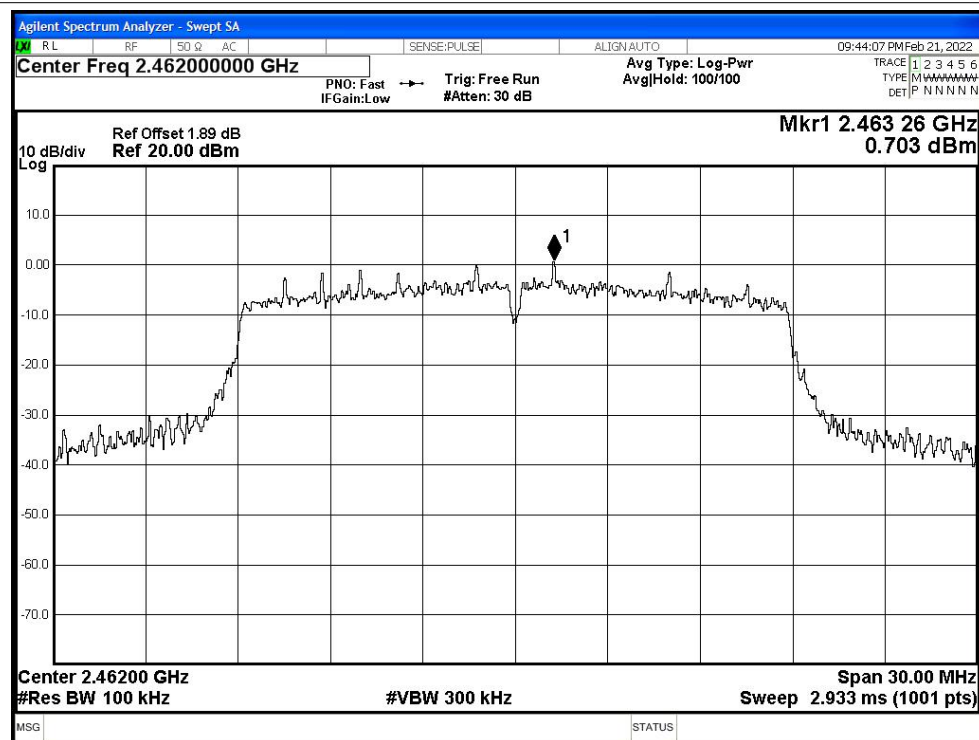


Band Edge NVNT n20 2412MHz Ant1 Emission

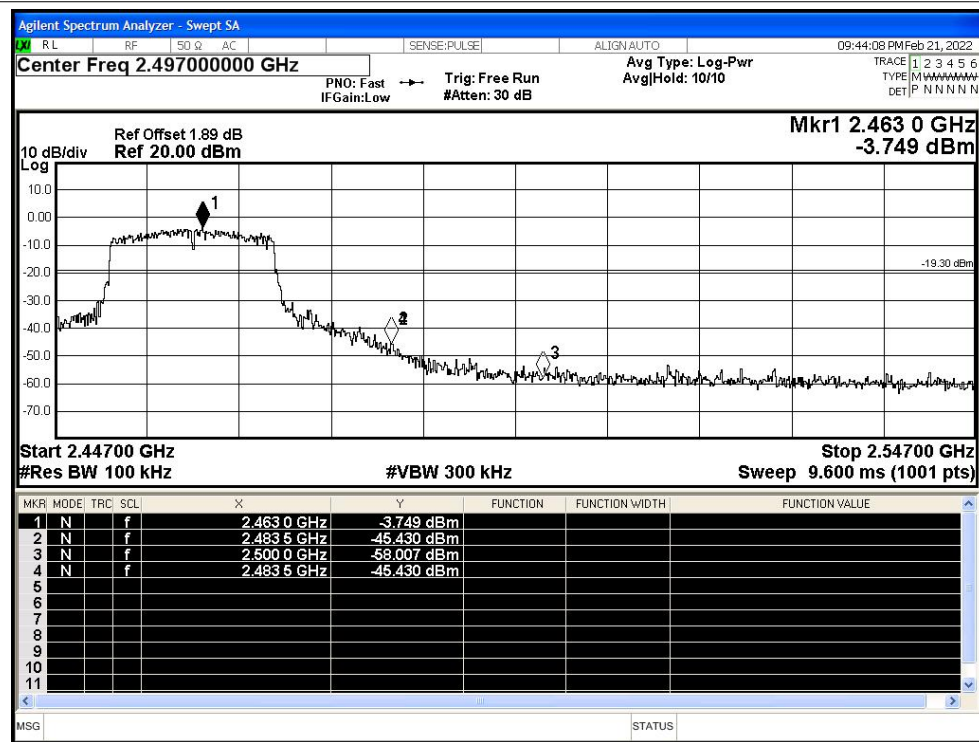




Band Edge NVNT n20 2462MHz Ant1 Ref



Band Edge NVNT n20 2462MHz Ant1 Emission





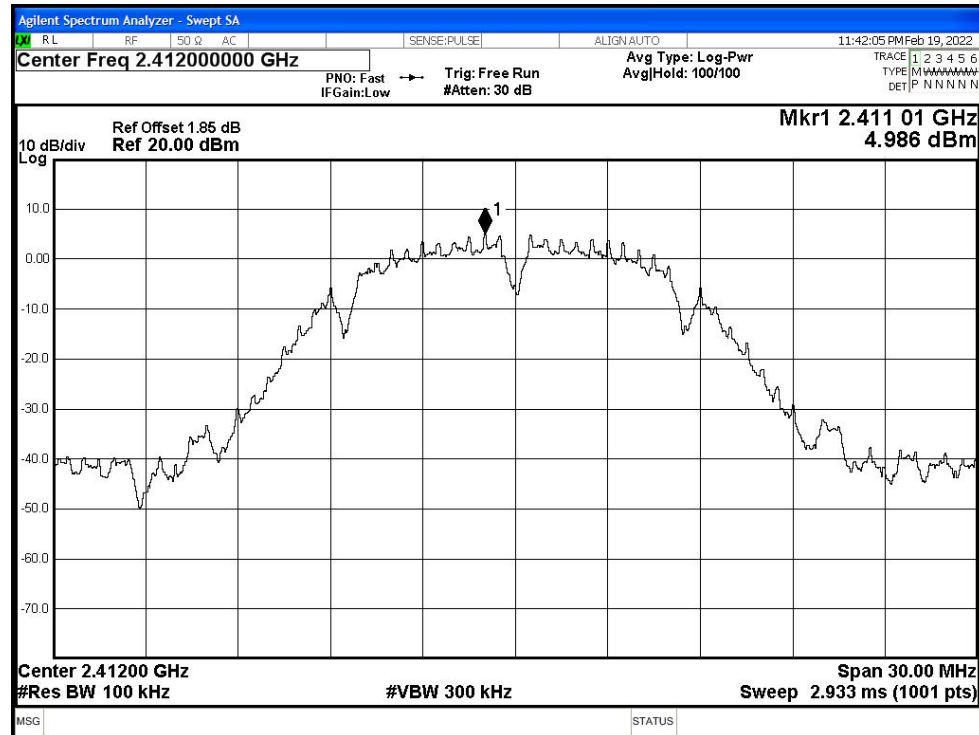
A.5 Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-50.58	-20	Pass
NVNT	b	2462	Ant1	-49.89	-20	Pass
NVNT	g	2412	Ant1	-46.91	-20	Pass
NVNT	g	2462	Ant1	-47.01	-20	Pass
NVNT	n20	2412	Ant1	-46.47	-20	Pass
NVNT	n20	2462	Ant1	-46.28	-20	Pass

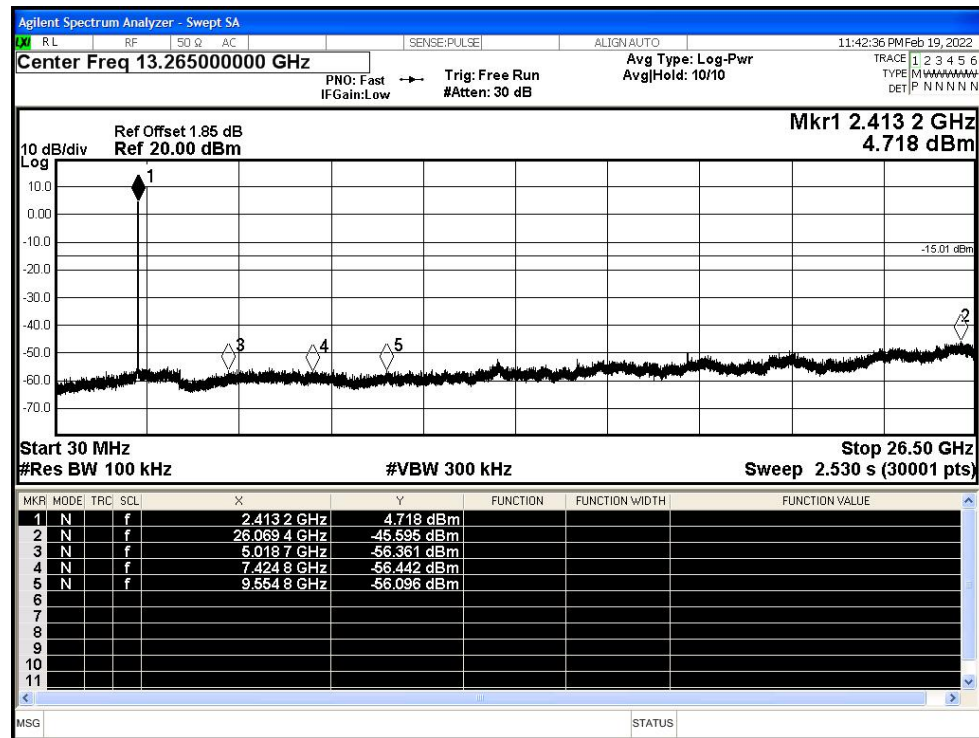


Test Graphs

Tx. Spurious NVNT b 2412MHz Ant1 Ref

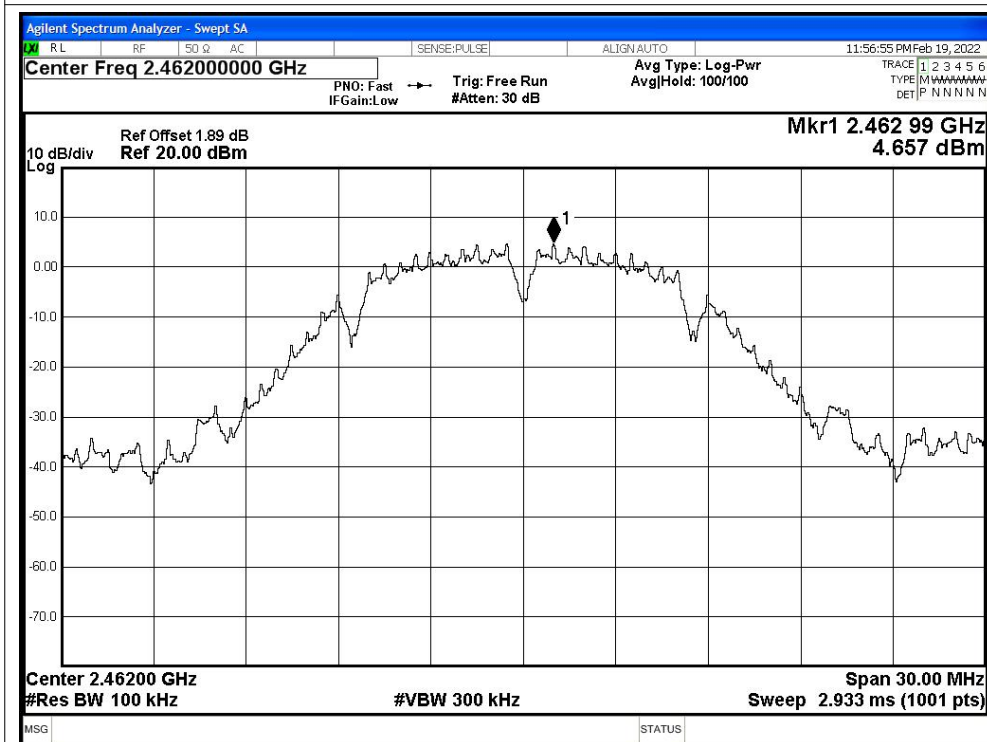


Tx. Spurious NVNT b 2412MHz Ant1 Emission

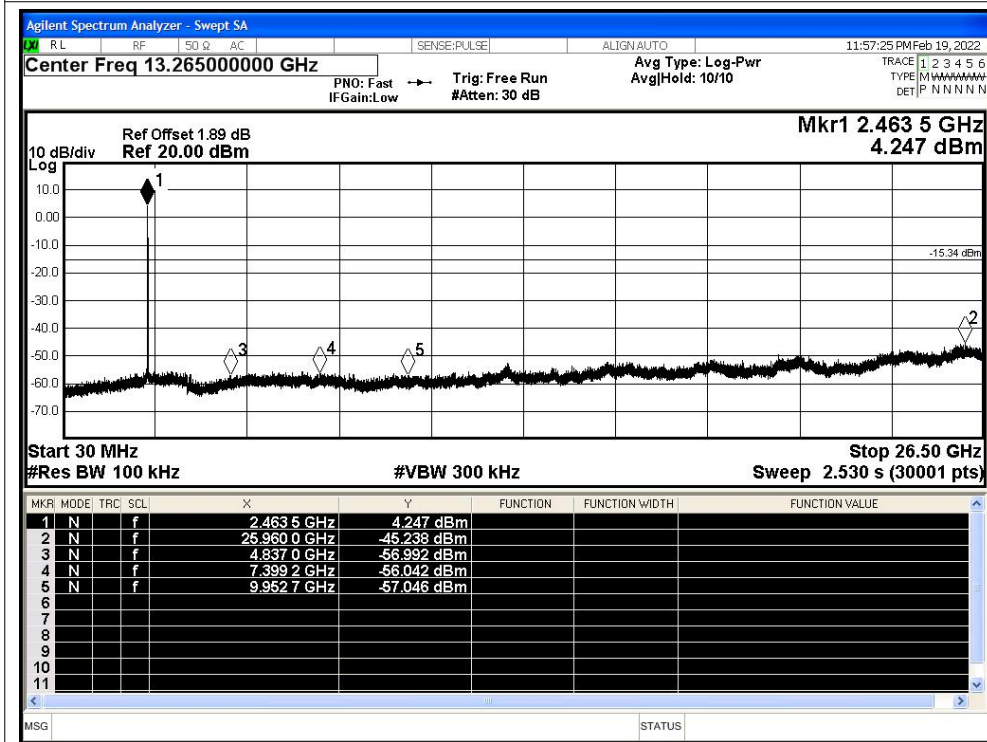




Tx. Spurious NVNT b 2462MHz Ant1 Ref

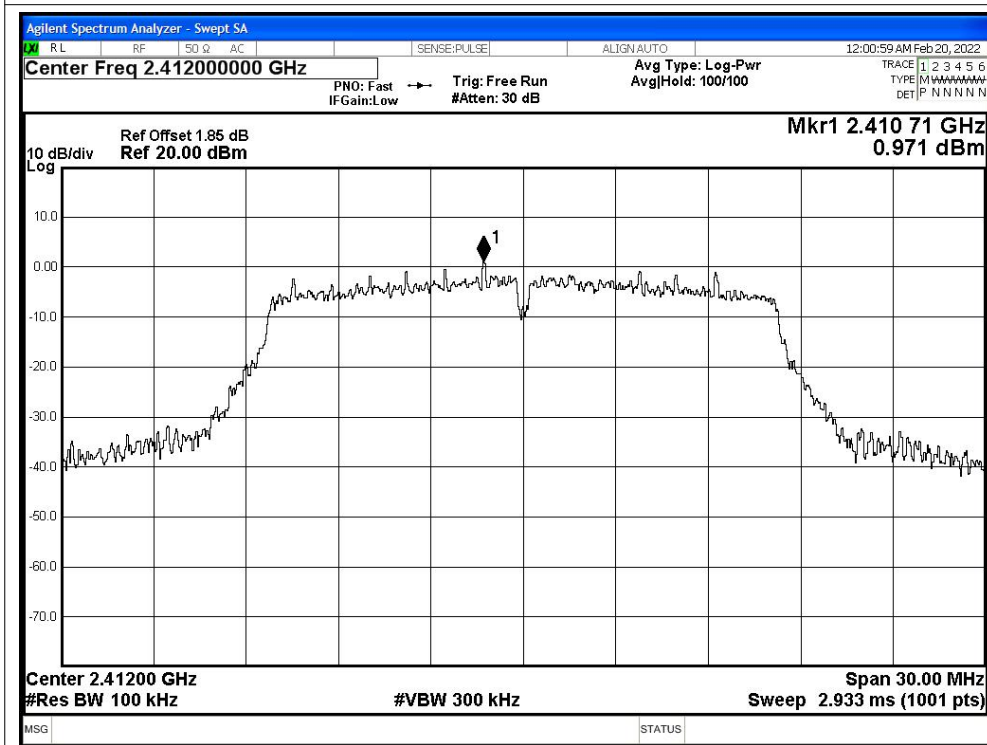


Tx. Spurious NVNT b 2462MHz Ant1 Emission





Tx. Spurious NVNT g 2412MHz Ant1 Ref



Tx. Spurious NVNT g 2412MHz Ant1 Emission

