



Appendix C

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: Set top box

Test Model: Real Vision 4K Plus

Environmental Conditions

Temperature:	23.8° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Taylor Hu
Supervised by:	Ling Zhu





C.1 -6dB Bandwidth

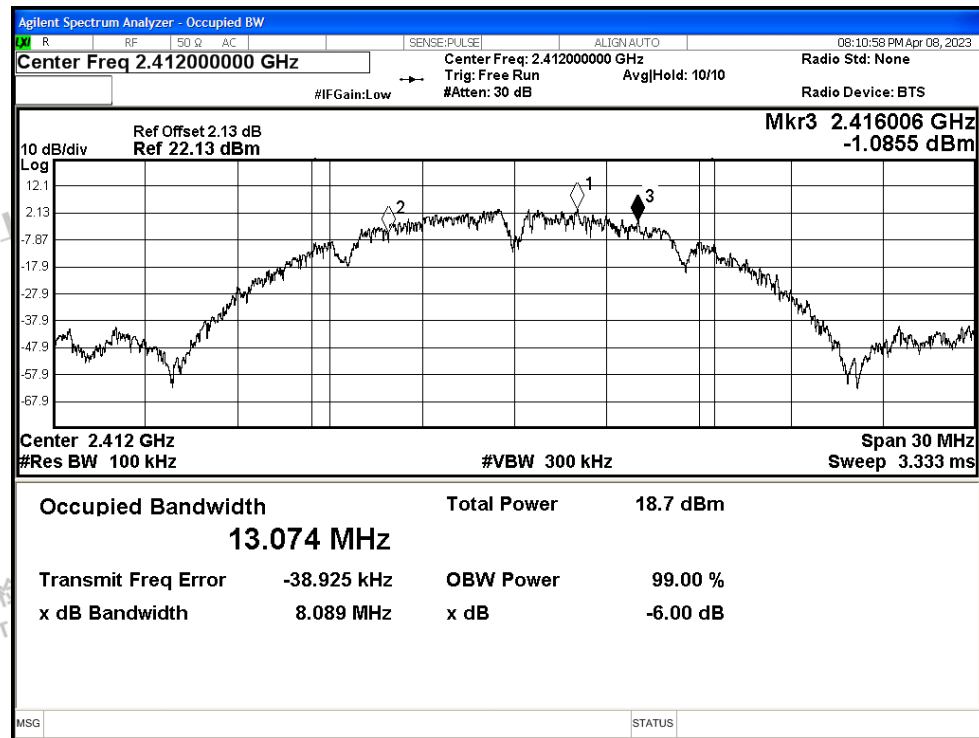
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant0	8.089	≥ 0.5	Pass
NVNT	b	2437	Ant0	8.122	≥ 0.5	Pass
NVNT	b	2462	Ant0	8.219	≥ 0.5	Pass
NVNT	g	2412	Ant0	15.869	≥ 0.5	Pass
NVNT	g	2437	Ant0	15.615	≥ 0.5	Pass
NVNT	g	2462	Ant0	16.306	≥ 0.5	Pass
NVNT	n20	2412	Ant0	17.338	≥ 0.5	Pass
NVNT	n20	2437	Ant0	14.577	≥ 0.5	Pass
NVNT	n20	2462	Ant0	17.578	≥ 0.5	Pass
NVNT	n40	2422	Ant0	35.043	≥ 0.5	Pass
NVNT	n40	2437	Ant0	35.066	≥ 0.5	Pass
NVNT	n40	2452	Ant0	33.895	≥ 0.5	Pass



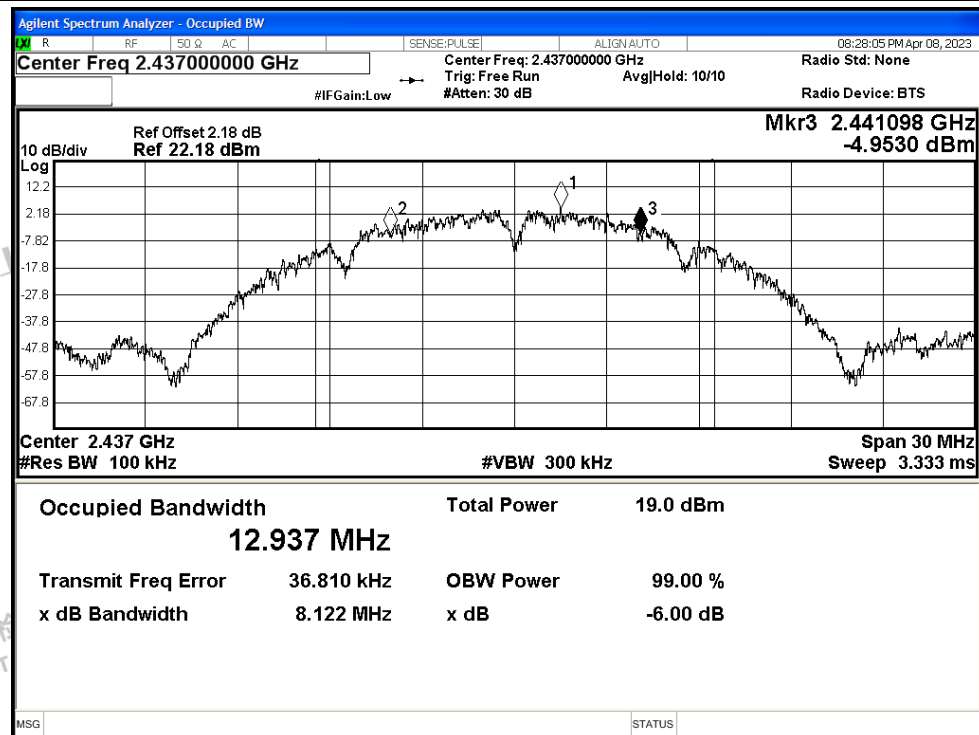


Test Graphs

-6dB Bandwidth NVNT b 2412MHz Ant0

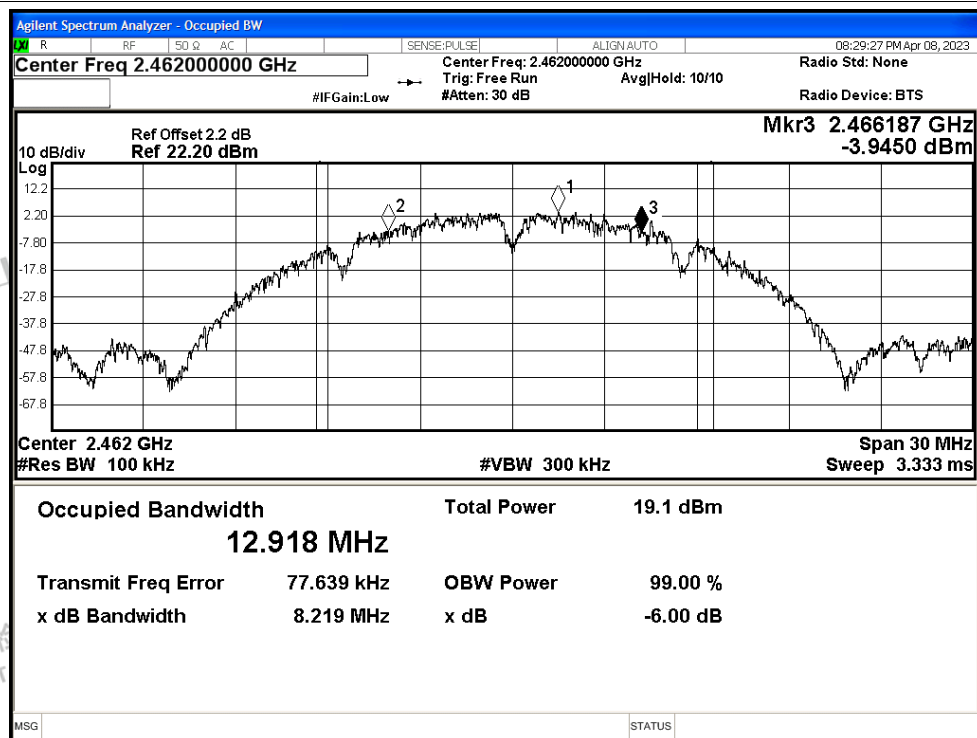


-6dB Bandwidth NVNT b 2437MHz Ant0

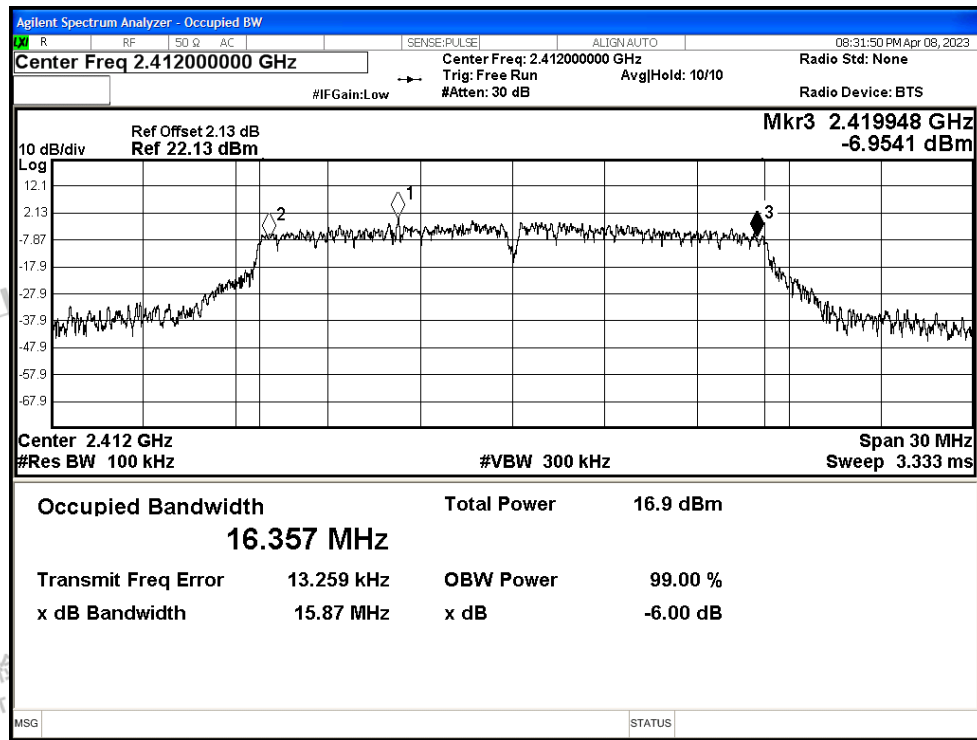


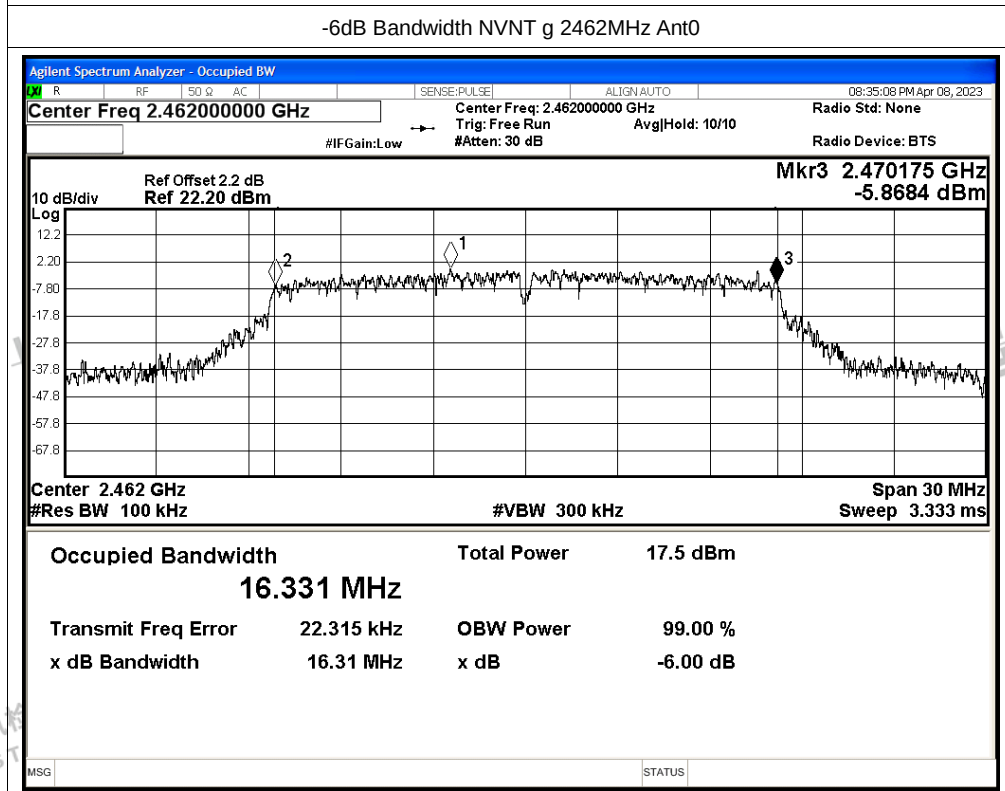
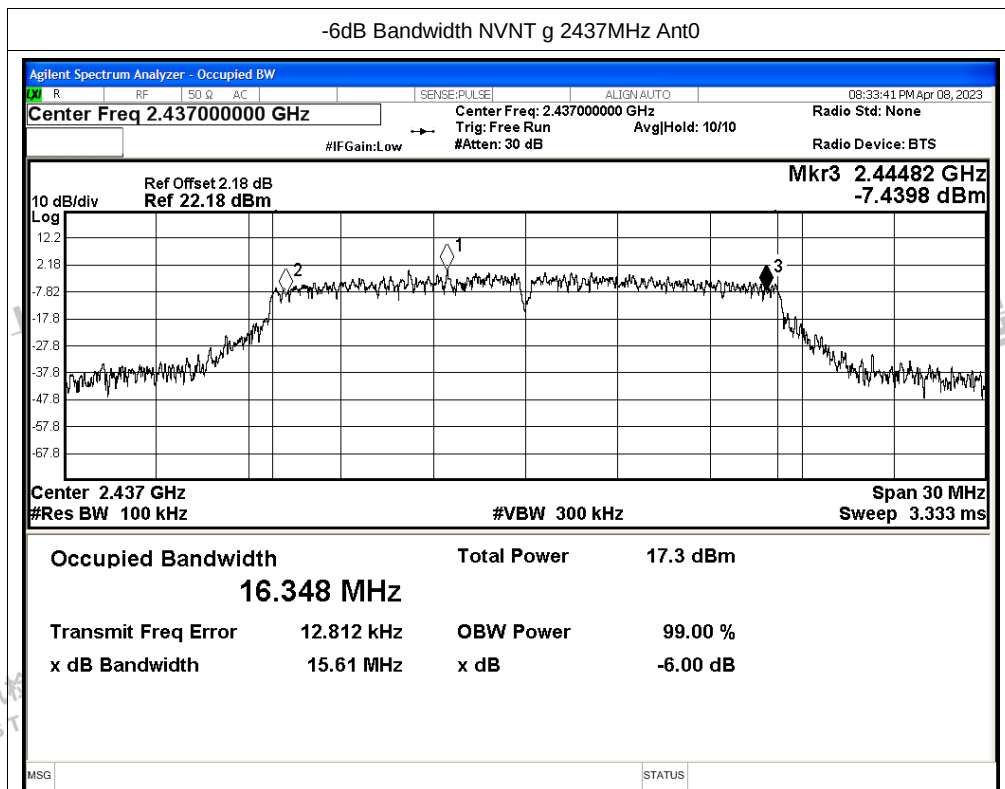


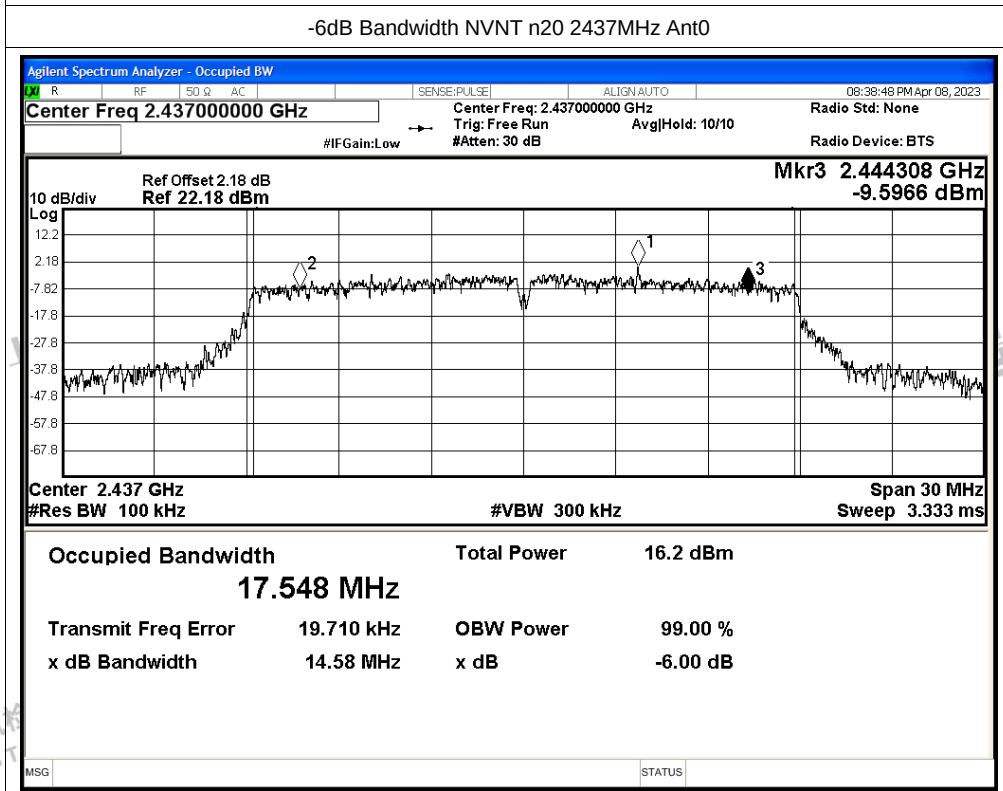
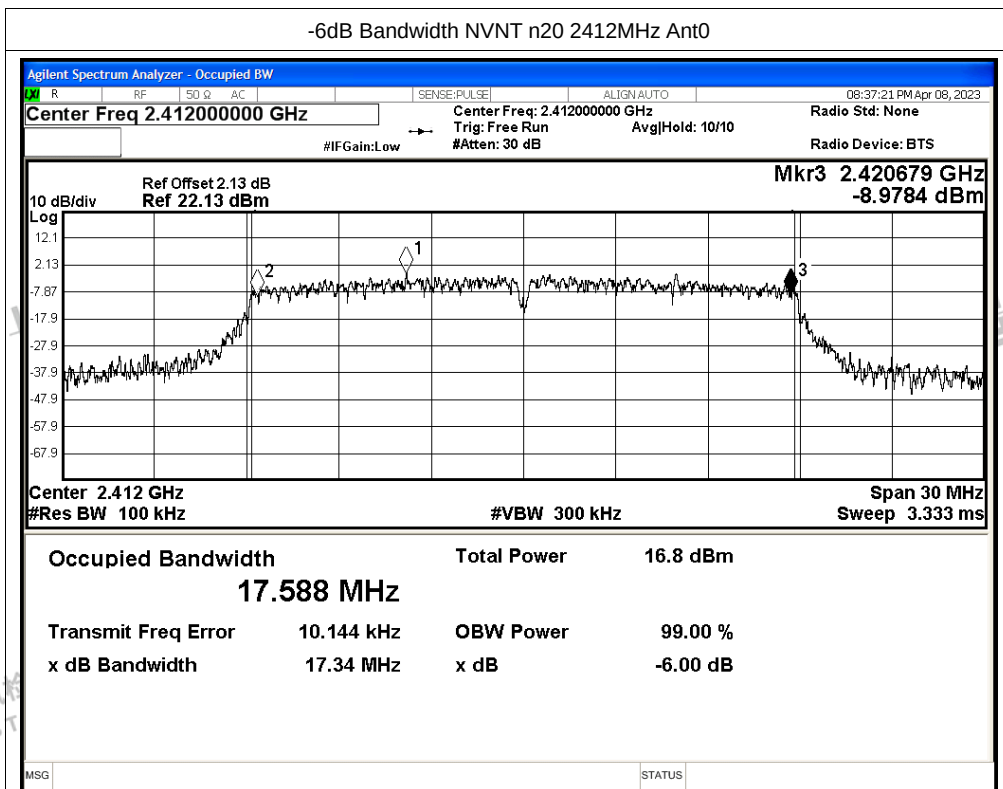
-6dB Bandwidth NVNT b 2462MHz Ant0



-6dB Bandwidth NVNT g 2412MHz Ant0

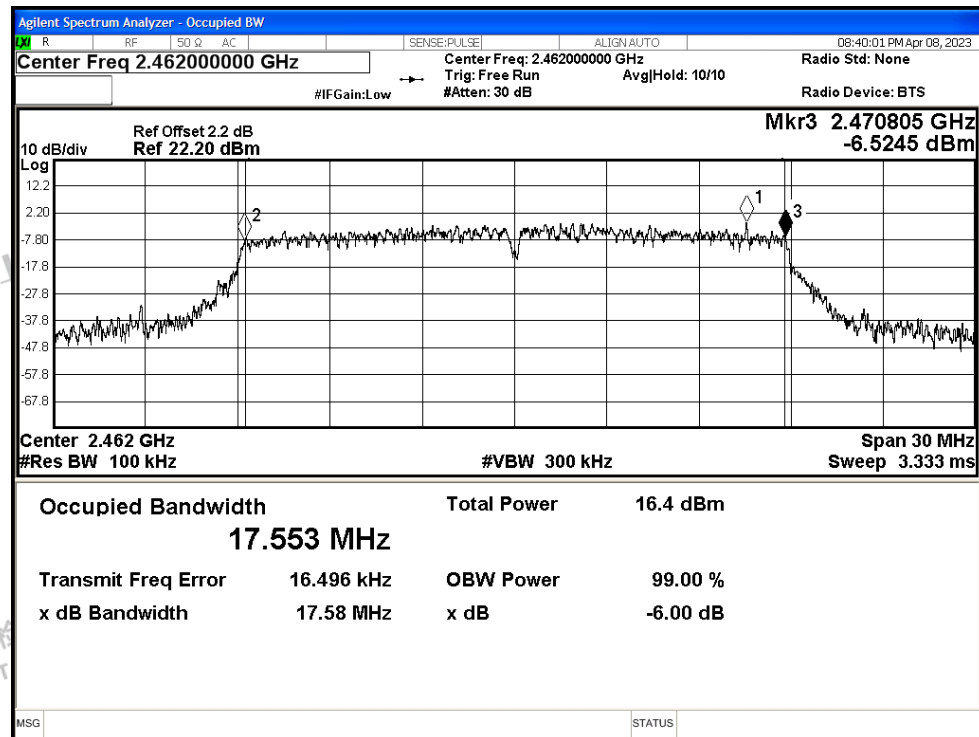




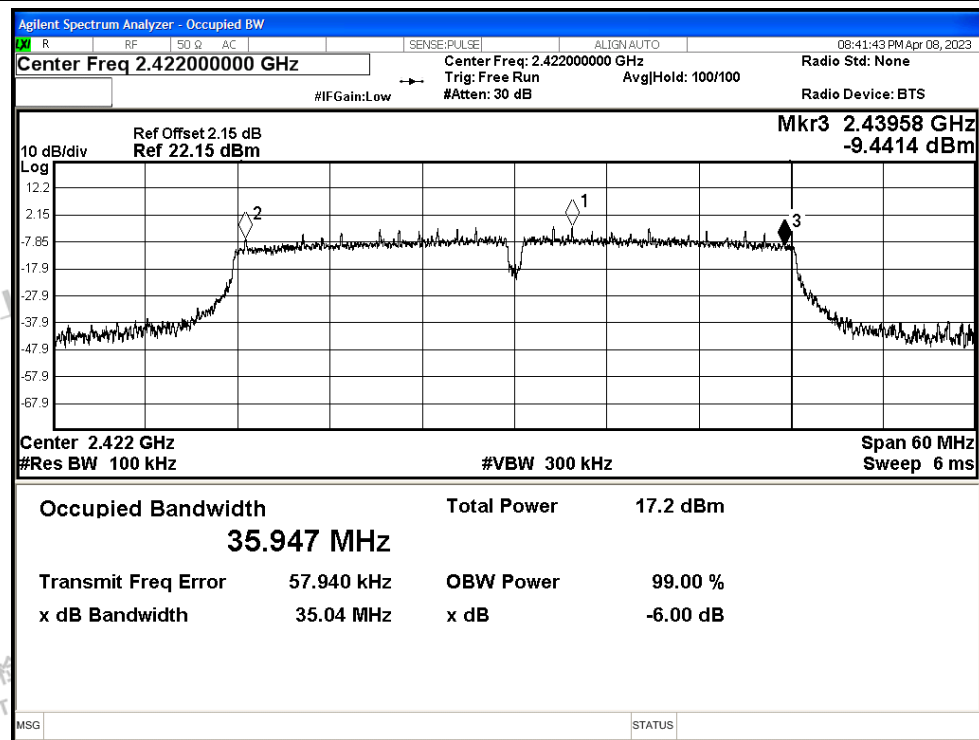


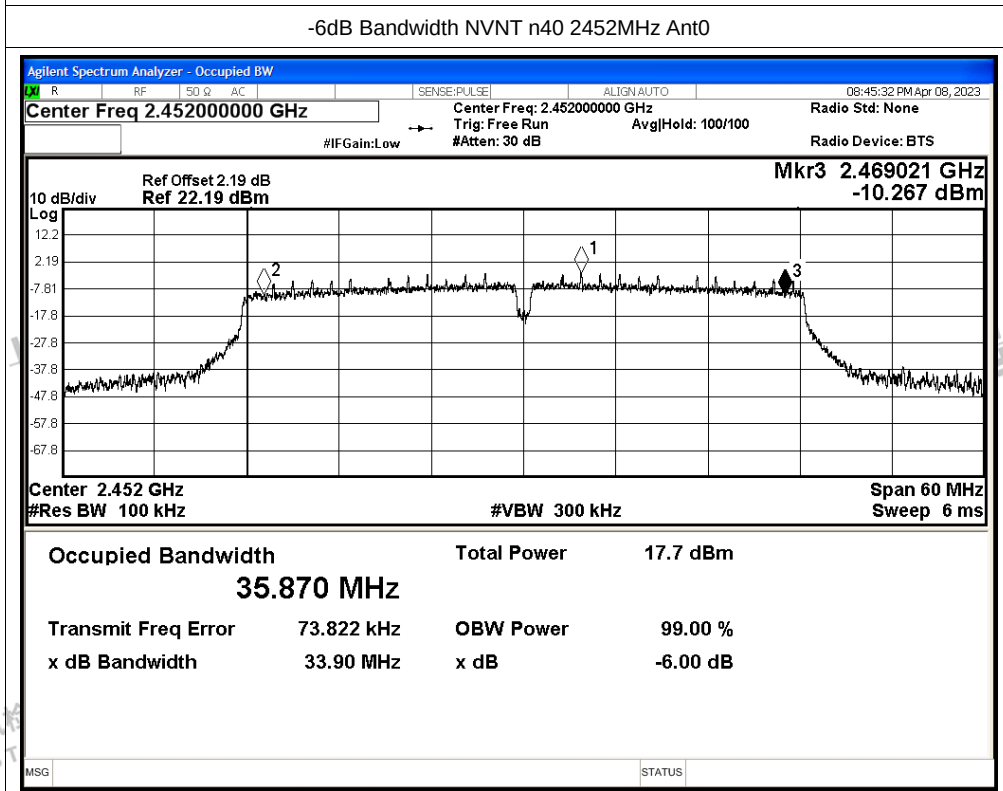
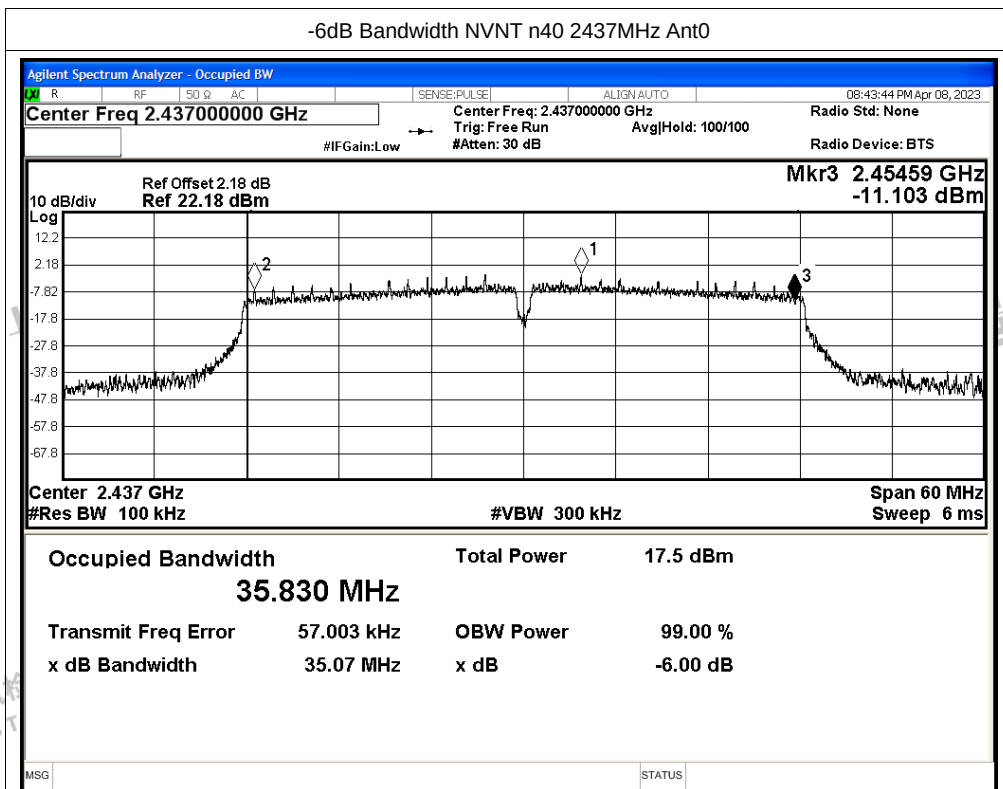


-6dB Bandwidth NVNT n20 2462MHz Ant0



-6dB Bandwidth NVNT n40 2422MHz Ant0







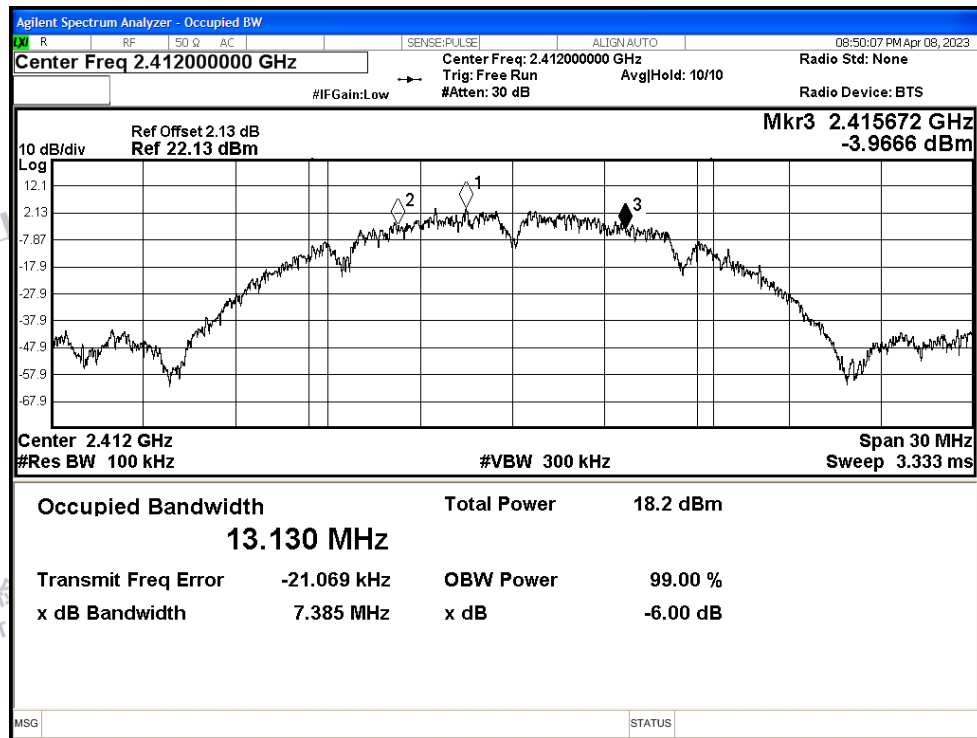
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	7.385	≥ 0.5	Pass
NVNT	b	2437	Ant1	7.693	≥ 0.5	Pass
NVNT	b	2462	Ant1	8.487	≥ 0.5	Pass
NVNT	g	2412	Ant1	11.891	≥ 0.5	Pass
NVNT	g	2437	Ant1	14.096	≥ 0.5	Pass
NVNT	g	2462	Ant1	16.355	≥ 0.5	Pass
NVNT	n20	2412	Ant1	17.325	≥ 0.5	Pass
NVNT	n20	2437	Ant1	17.545	≥ 0.5	Pass
NVNT	n20	2462	Ant1	15.953	≥ 0.5	Pass
NVNT	n40	2422	Ant1	35.031	≥ 0.5	Pass
NVNT	n40	2437	Ant1	32.592	≥ 0.5	Pass
NVNT	n40	2452	Ant1	35.133	≥ 0.5	Pass



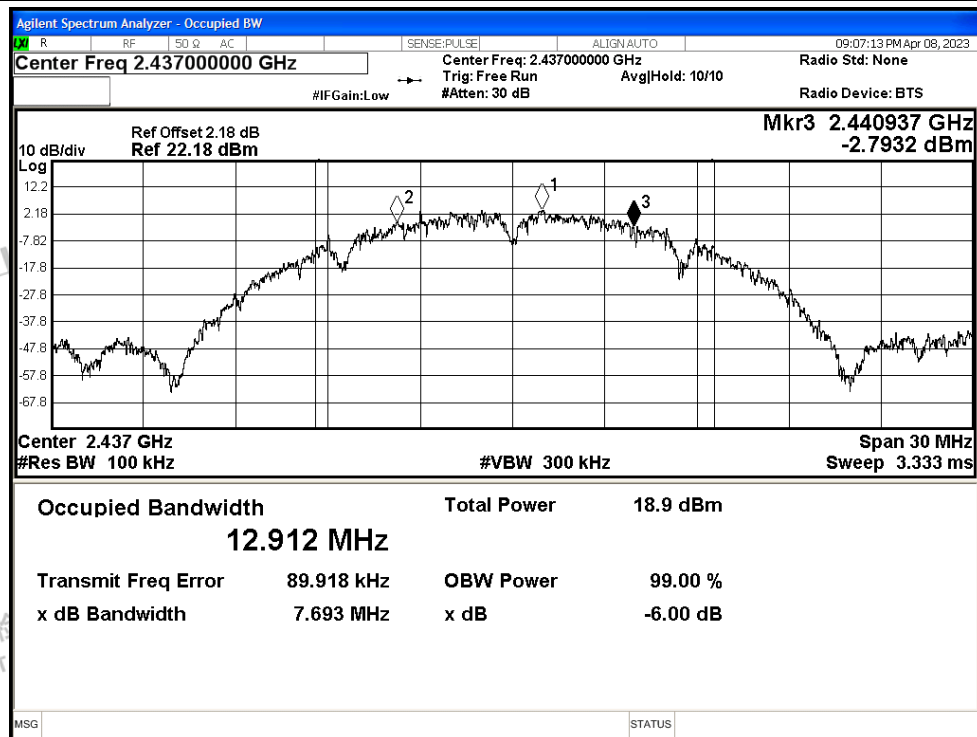


Test Graphs

-6dB Bandwidth NVNT b 2412MHz Ant1

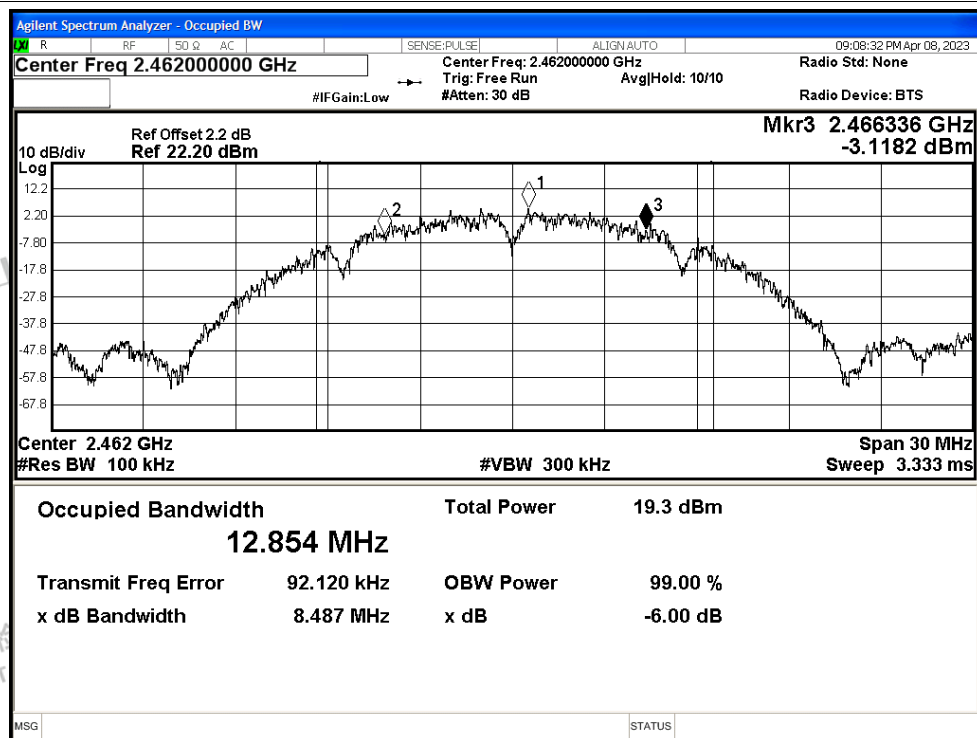


-6dB Bandwidth NVNT b 2437MHz Ant1

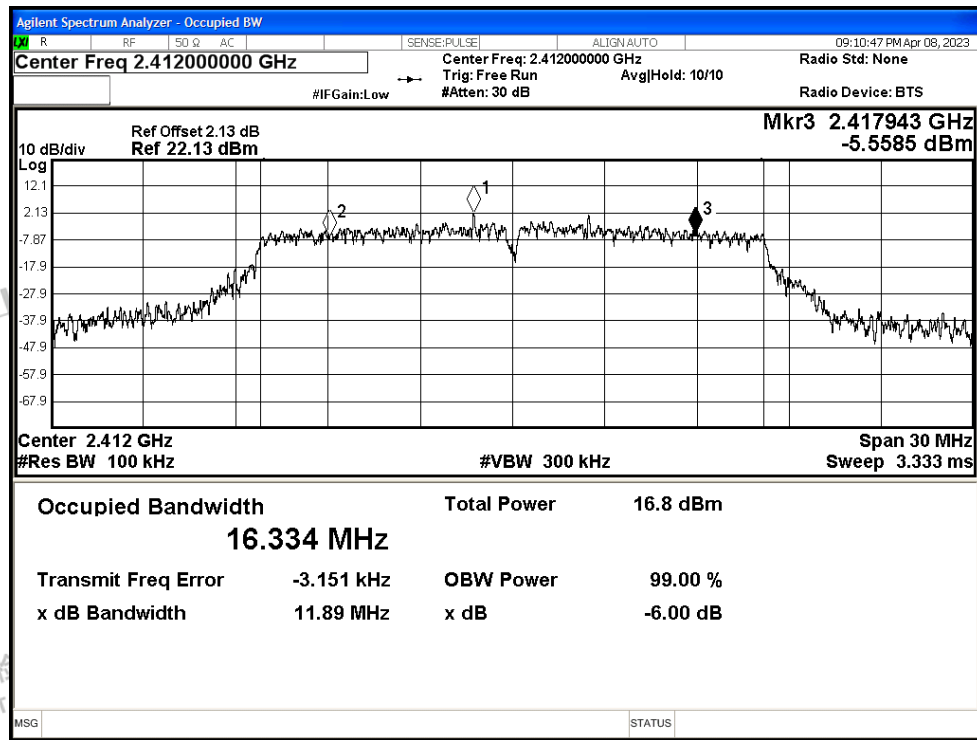


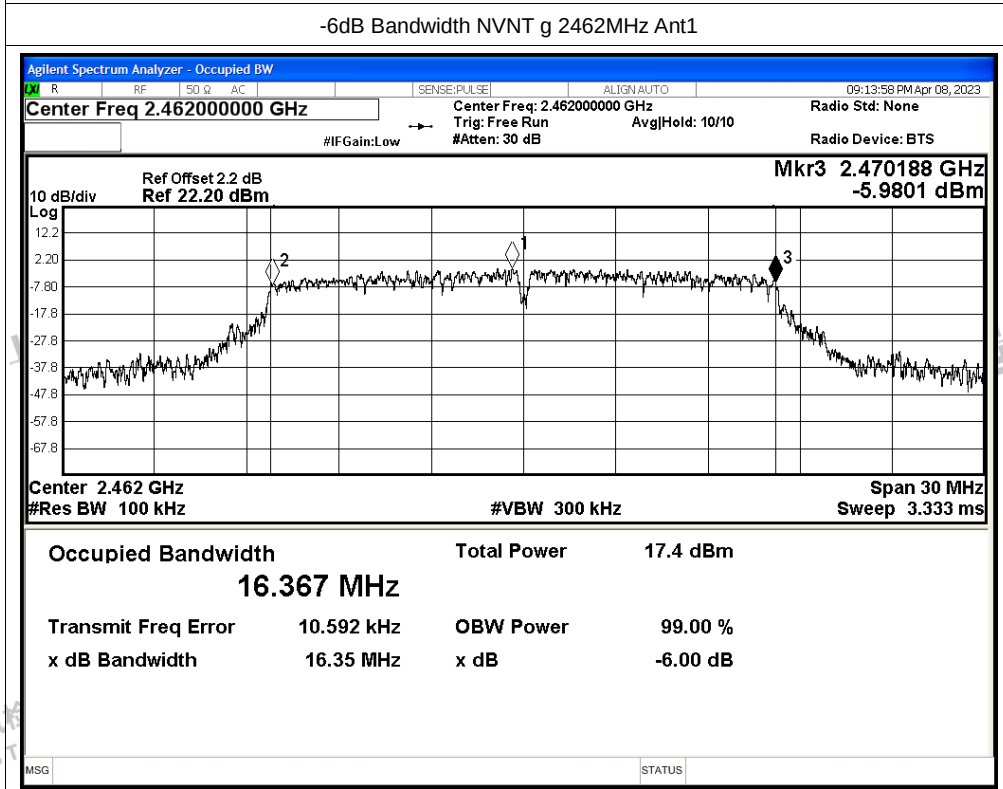
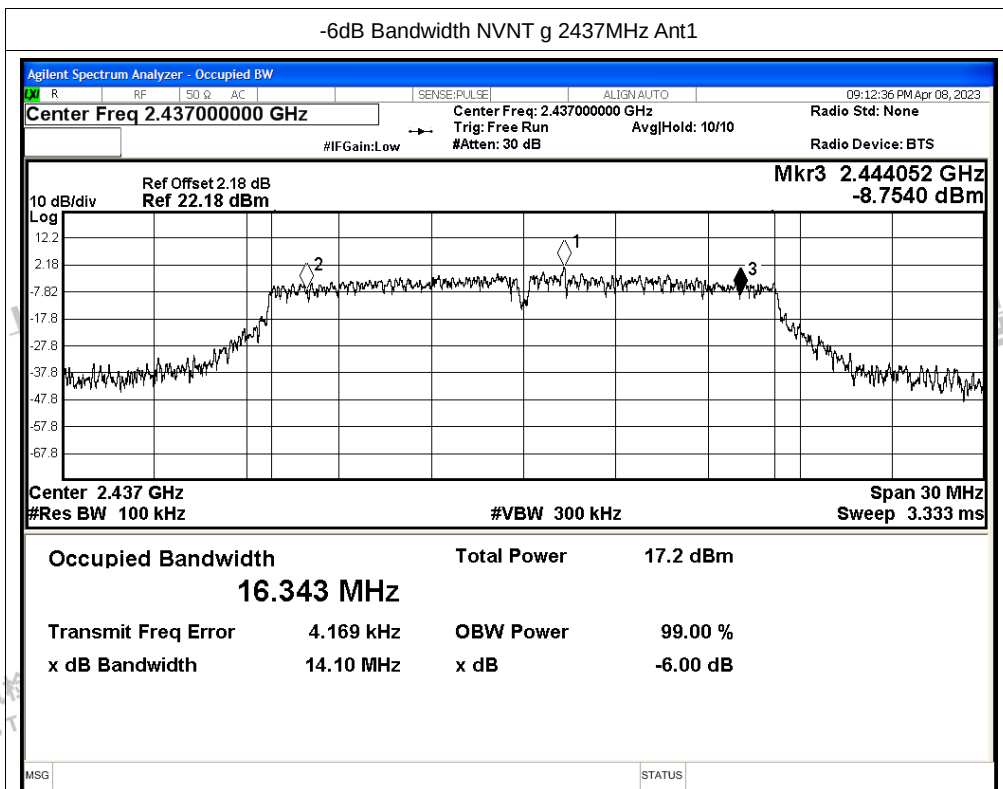


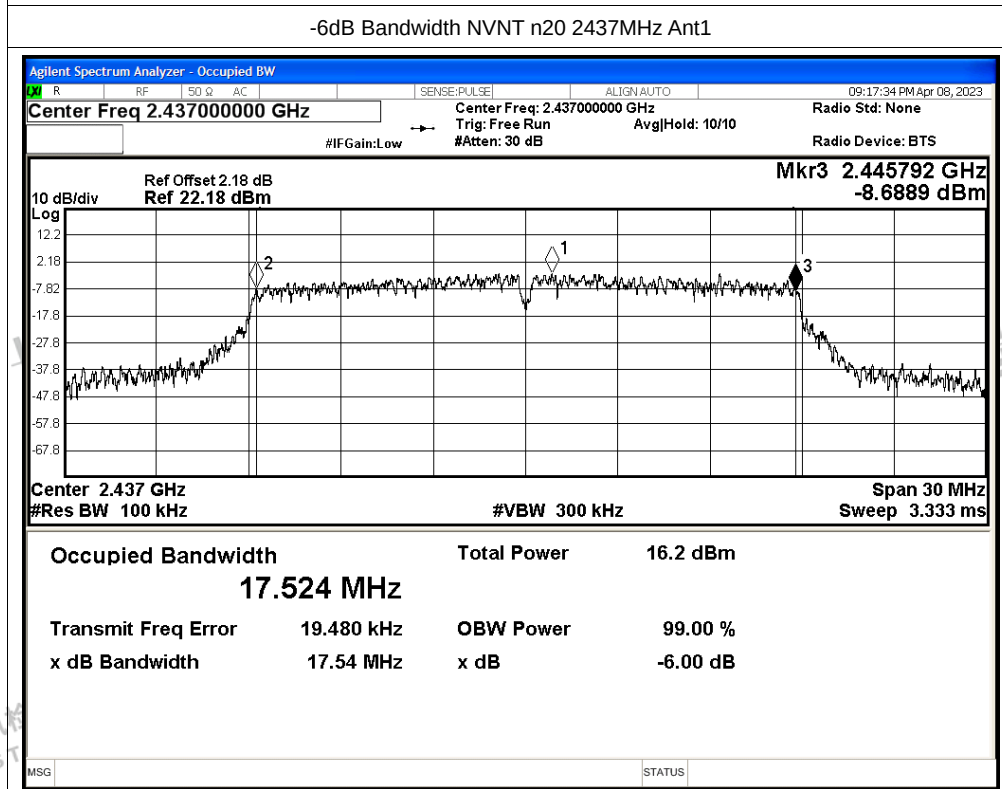
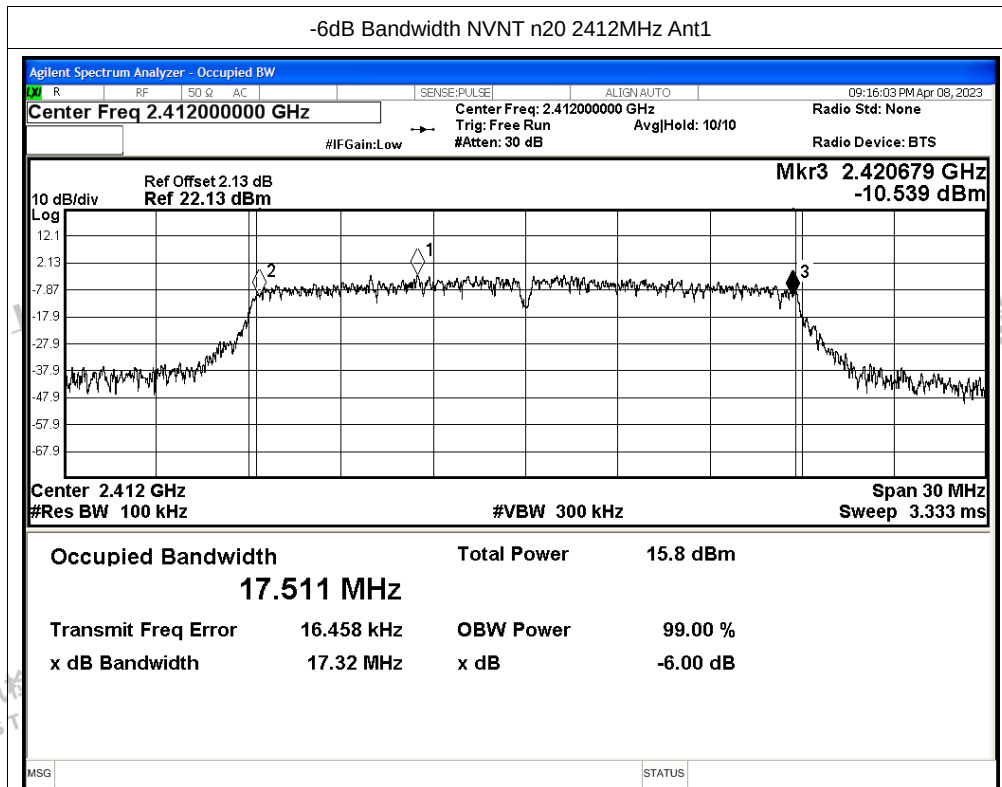
-6dB Bandwidth NVNT b 2462MHz Ant1



-6dB Bandwidth NVNT g 2412MHz Ant1

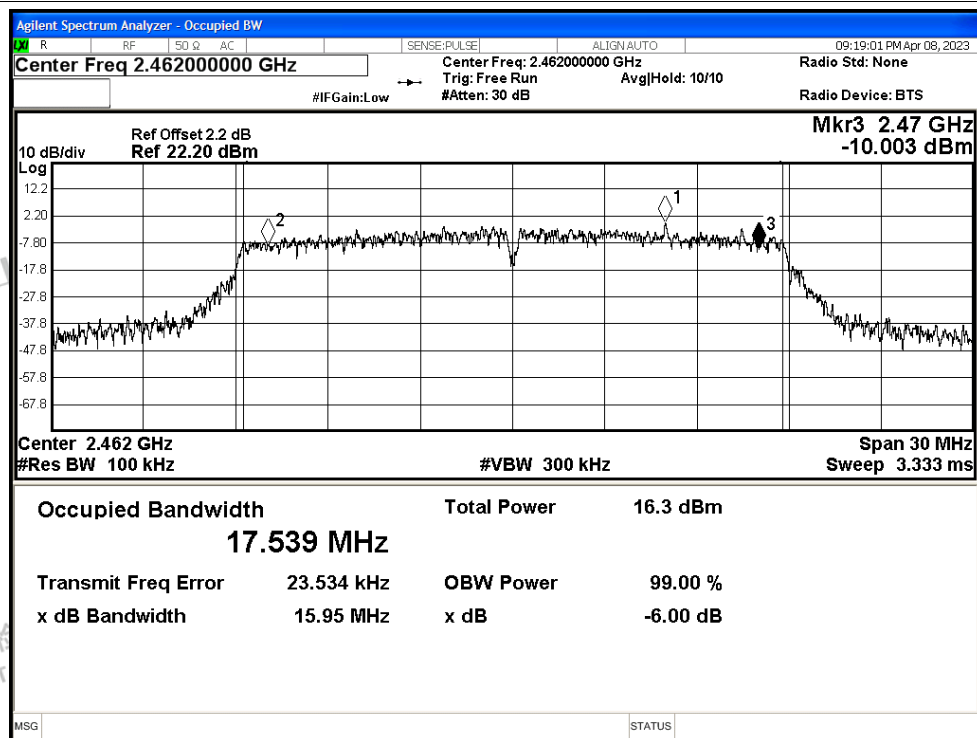




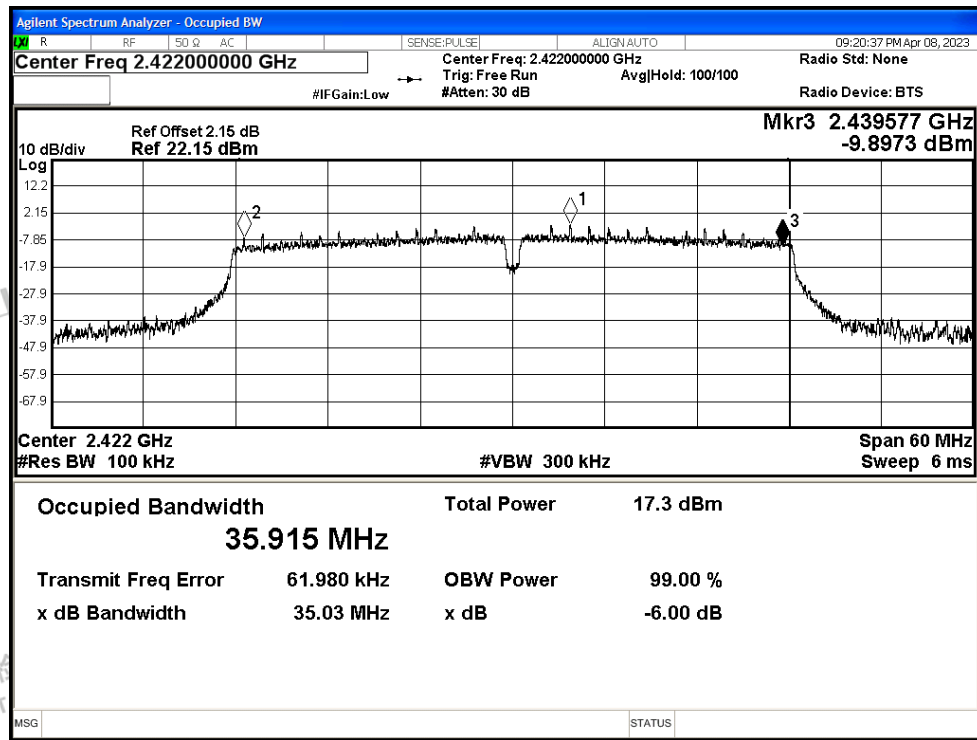


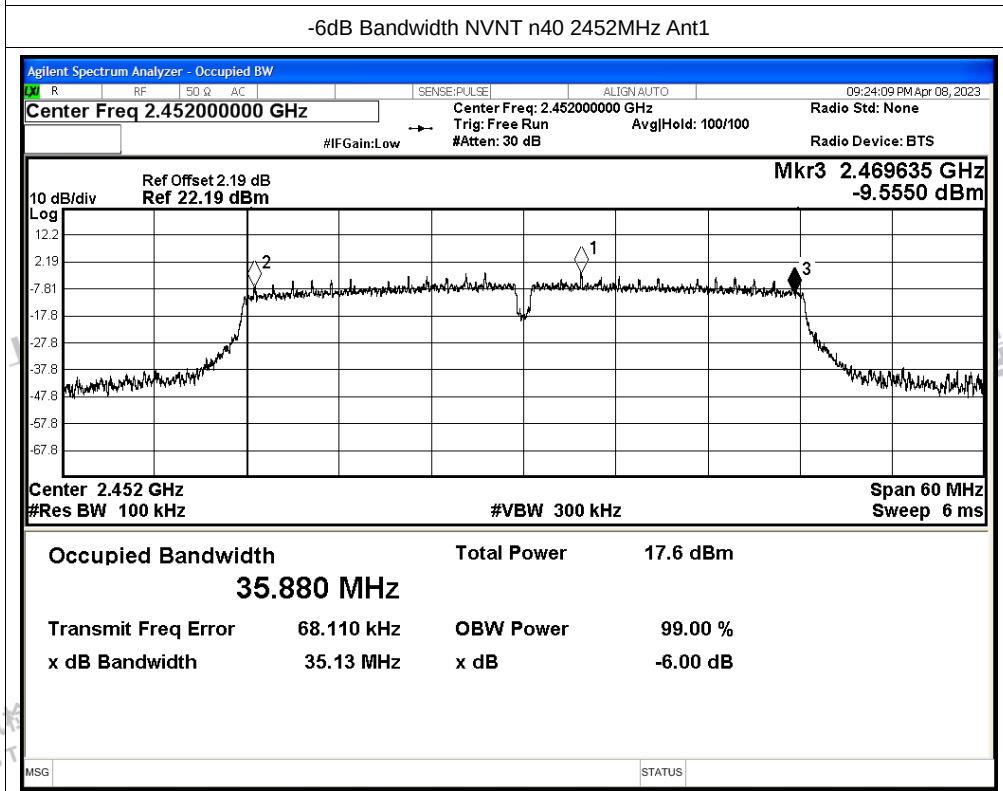
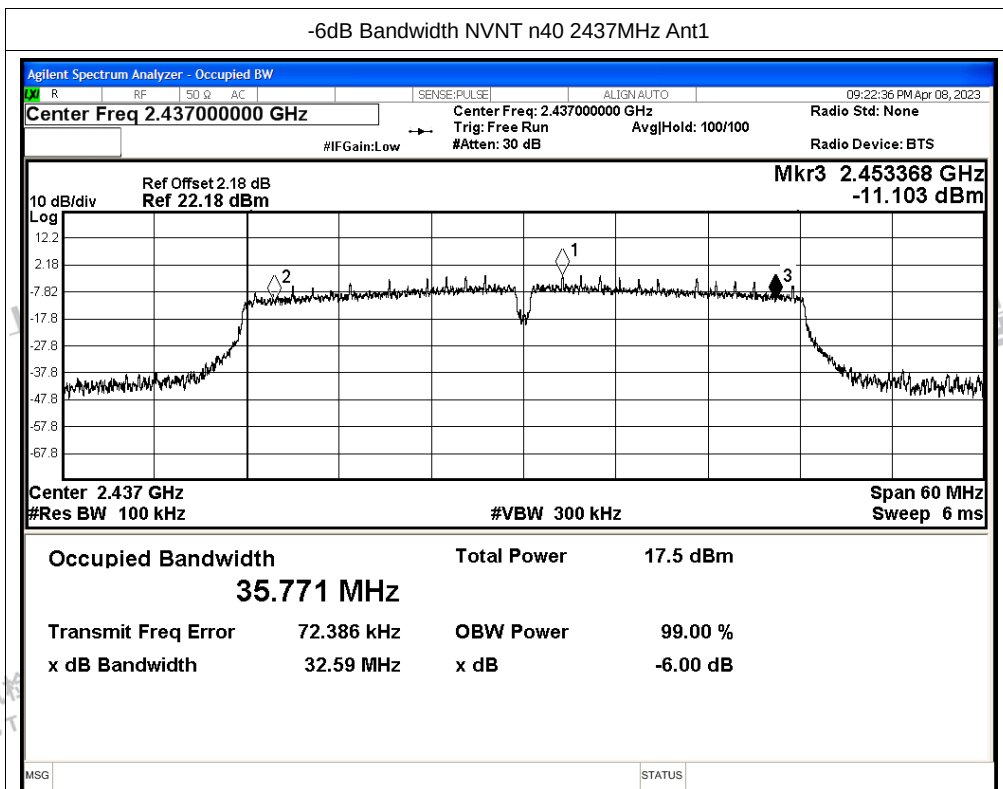


-6dB Bandwidth NVNT n20 2462MHz Ant1



-6dB Bandwidth NVNT n40 2422MHz Ant1







C.2 Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant0	15.27	30	Pass
NVNT	b	2437	Ant0	15.64	30	Pass
NVNT	b	2462	Ant0	15.40	30	Pass
NVNT	g	2412	Ant0	15.50	30	Pass
NVNT	g	2437	Ant0	15.99	30	Pass
NVNT	g	2462	Ant0	16.00	30	Pass
NVNT	n20	2412	Ant0	15.45	30	Pass
NVNT	n20	2437	Ant0	14.99	30	Pass
NVNT	n20	2462	Ant0	16.66	30	Pass
NVNT	n40	2422	Ant0	15.62	30	Pass
NVNT	n40	2437	Ant0	16.01	30	Pass
NVNT	n40	2452	Ant0	16.09	30	Pass

Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	14.98	30	Pass
NVNT	b	2437	Ant1	15.50	30	Pass
NVNT	b	2462	Ant1	15.60	30	Pass
NVNT	g	2412	Ant1	15.57	30	Pass
NVNT	g	2437	Ant1	15.86	30	Pass
NVNT	g	2462	Ant1	16.07	30	Pass
NVNT	n20	2412	Ant1	14.44	30	Pass
NVNT	n20	2437	Ant1	14.89	30	Pass
NVNT	n20	2462	Ant1	16.64	30	Pass
NVNT	n40	2422	Ant1	15.70	30	Pass
NVNT	n40	2437	Ant1	15.84	30	Pass
NVNT	n40	2452	Ant1	16.08	30	Pass

MIMO

Condition	Mode	Frequency (MHz)	Total Power (dBm)			Limit (dBm)	Verdict
			Ant0	Ant1	Ant0+Ant1		
NVNT	n20	2412	15.45	14.44	17.98	30	Pass
NVNT	n20	2437	14.99	14.89	17.95	30	Pass
NVNT	n20	2462	16.66	16.64	19.66	30	Pass
NVNT	n40	2422	15.62	15.70	18.67	30	Pass
NVNT	n40	2437	16.01	15.84	18.94	30	Pass
NVNT	n40	2452	16.09	16.08	19.10	30	Pass





C.3 Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant0	-8	8	Pass
NVNT	b	2437	Ant0	-8.41	8	Pass
NVNT	b	2462	Ant0	-6.81	8	Pass
NVNT	g	2412	Ant0	-12.23	8	Pass
NVNT	g	2437	Ant0	-11.45	8	Pass
NVNT	g	2462	Ant0	-10.95	8	Pass
NVNT	n20	2412	Ant0	-12.73	8	Pass
NVNT	n20	2437	Ant0	-11.72	8	Pass
NVNT	n20	2462	Ant0	-13.01	8	Pass
NVNT	n40	2422	Ant0	-16.59	8	Pass
NVNT	n40	2437	Ant0	-16.20	8	Pass
NVNT	n40	2452	Ant0	-15.92	8	Pass

Condition	Mode	Frequency (MHz)	Antenna	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant1	-8.47	8	Pass
NVNT	b	2437	Ant1	-8.76	8	Pass
NVNT	b	2462	Ant1	-7.68	8	Pass
NVNT	g	2412	Ant1	-12.51	8	Pass
NVNT	g	2437	Ant1	-12.37	8	Pass
NVNT	g	2462	Ant1	-10.82	8	Pass
NVNT	n20	2412	Ant1	-12.71	8	Pass
NVNT	n20	2437	Ant1	-11.88	8	Pass
NVNT	n20	2462	Ant1	-13.64	8	Pass
NVNT	n40	2422	Ant1	-16.76	8	Pass
NVNT	n40	2437	Ant1	-16.75	8	Pass
NVNT	n40	2452	Ant1	-16.41	8	Pass

MIMO

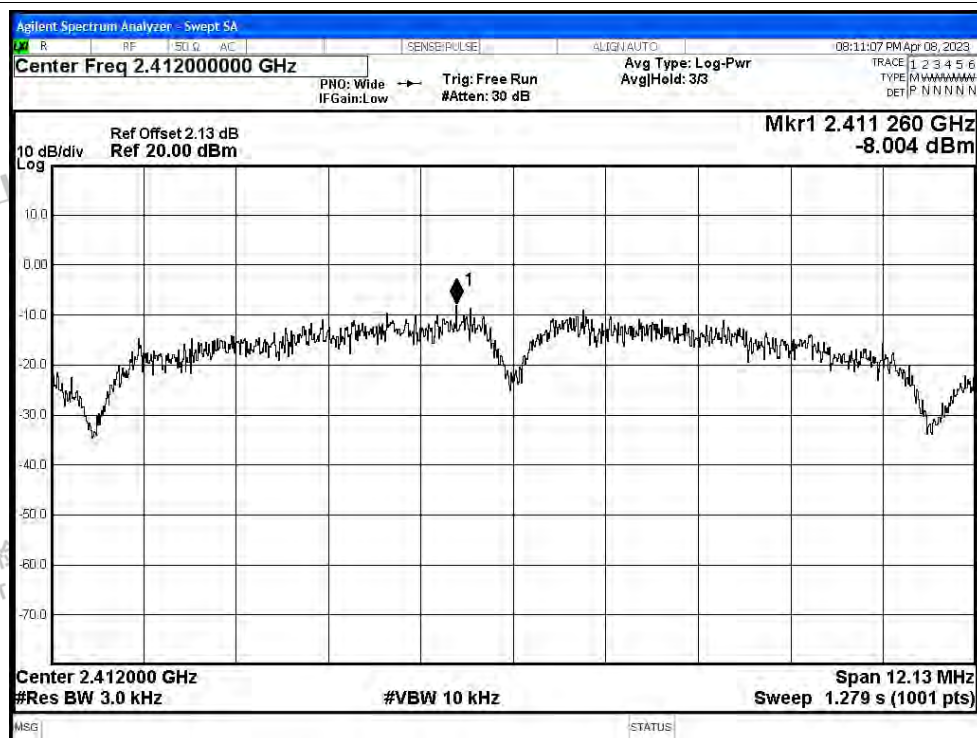
Condition	Mode	Frequency (MHz)	Total PSD (dBm/3kHz)			Limit (dBm)	Verdict
			Ant0	Ant1	Ant0+Ant1		
NVNT	n20	2412	-12.73	-12.71	-9.71	8	Pass
NVNT	n20	2437	-11.72	-11.88	-8.79	8	Pass
NVNT	n20	2462	-13.01	-13.64	-10.30	8	Pass
NVNT	n40	2422	-16.59	-16.76	-13.66	8	Pass
NVNT	n40	2437	-16.20	-16.75	-13.46	8	Pass
NVNT	n40	2452	-15.92	-16.41	-13.15	8	Pass



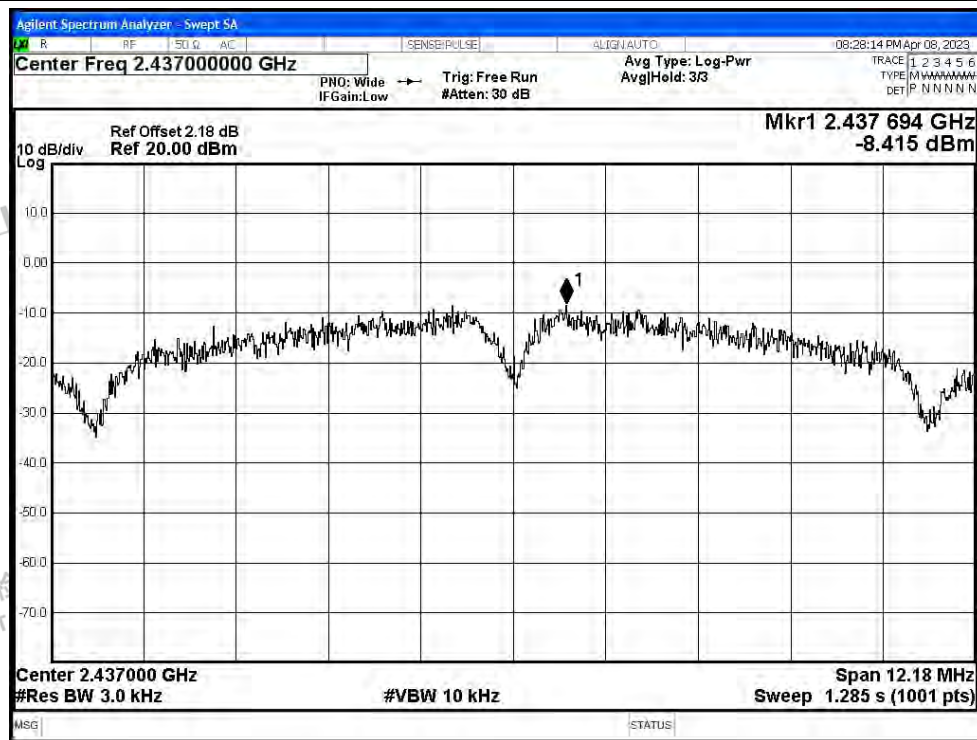


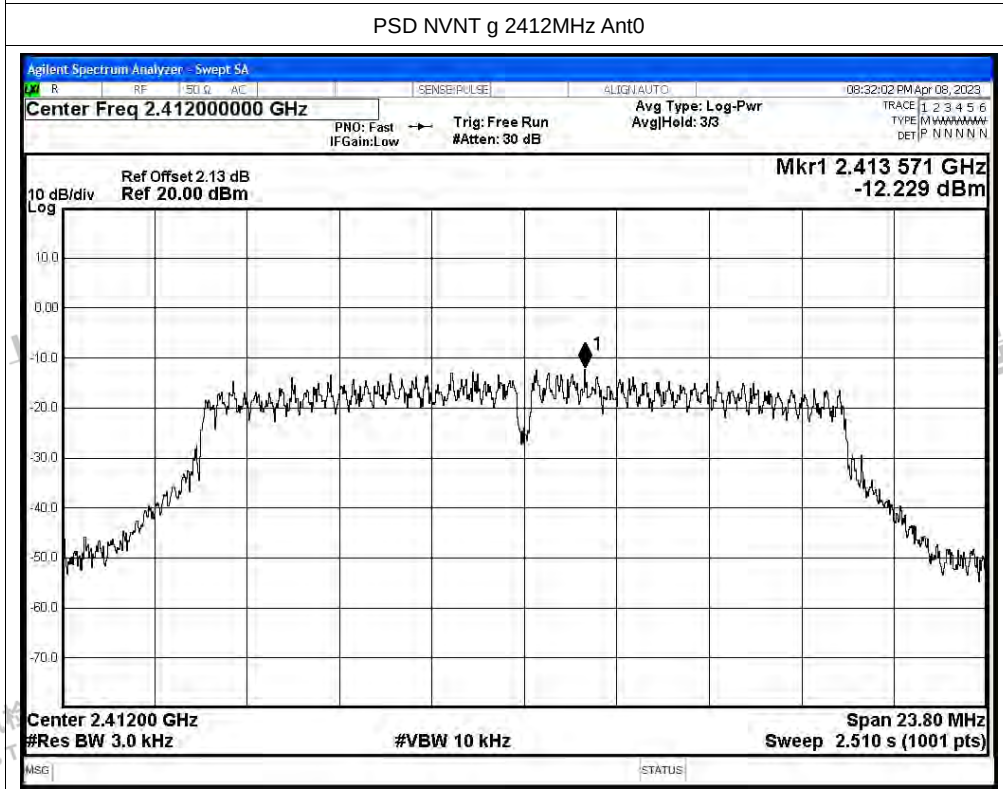
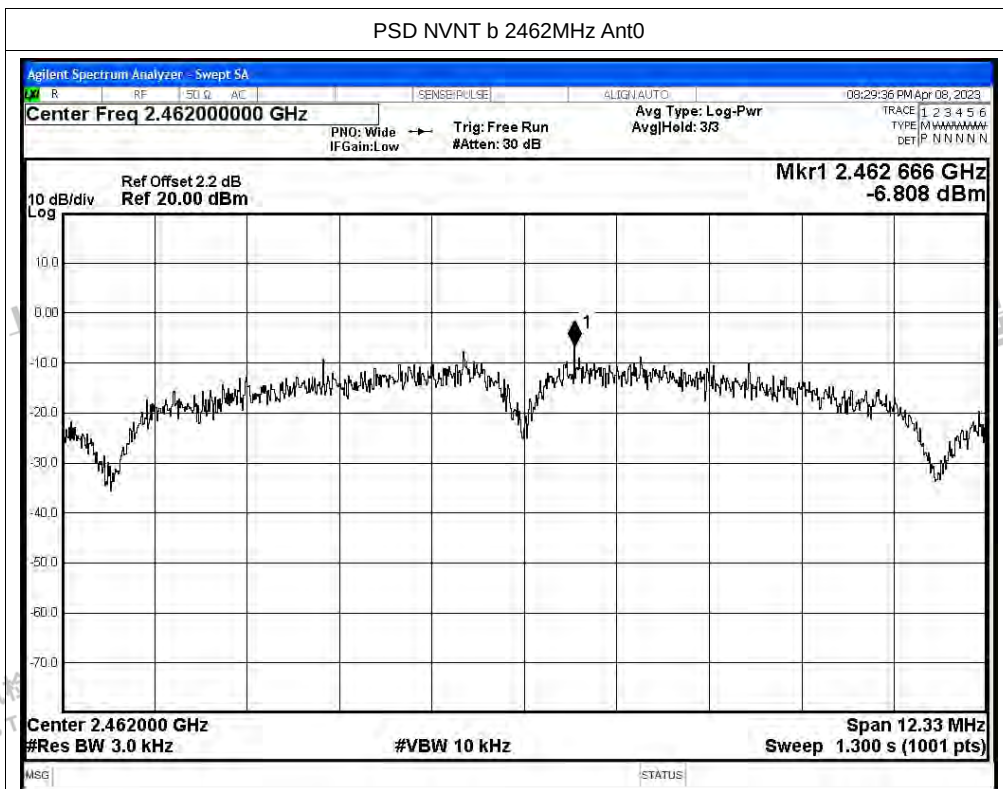
Test Graphs

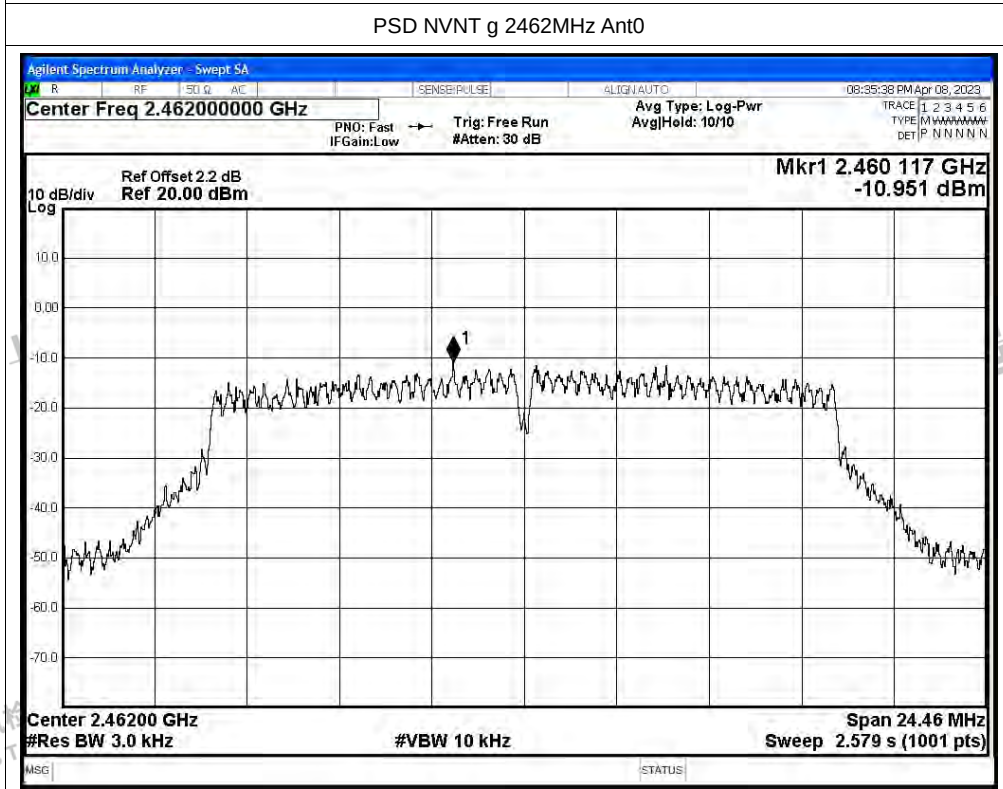
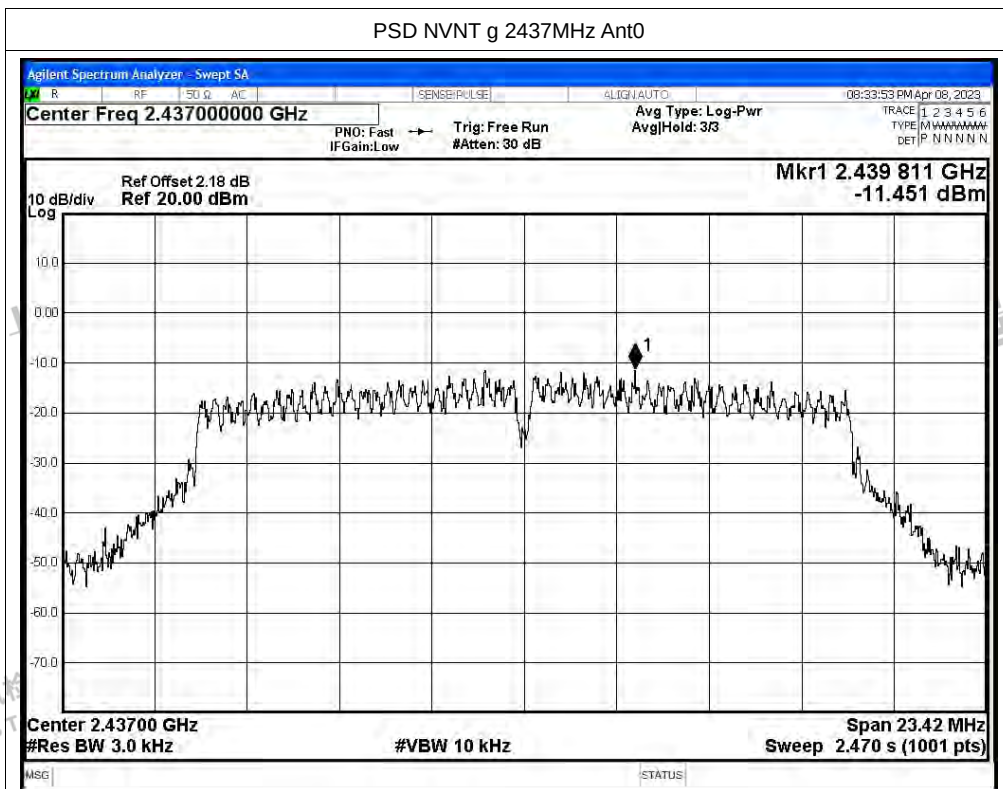
PSD NVNT b 2412MHz Ant0

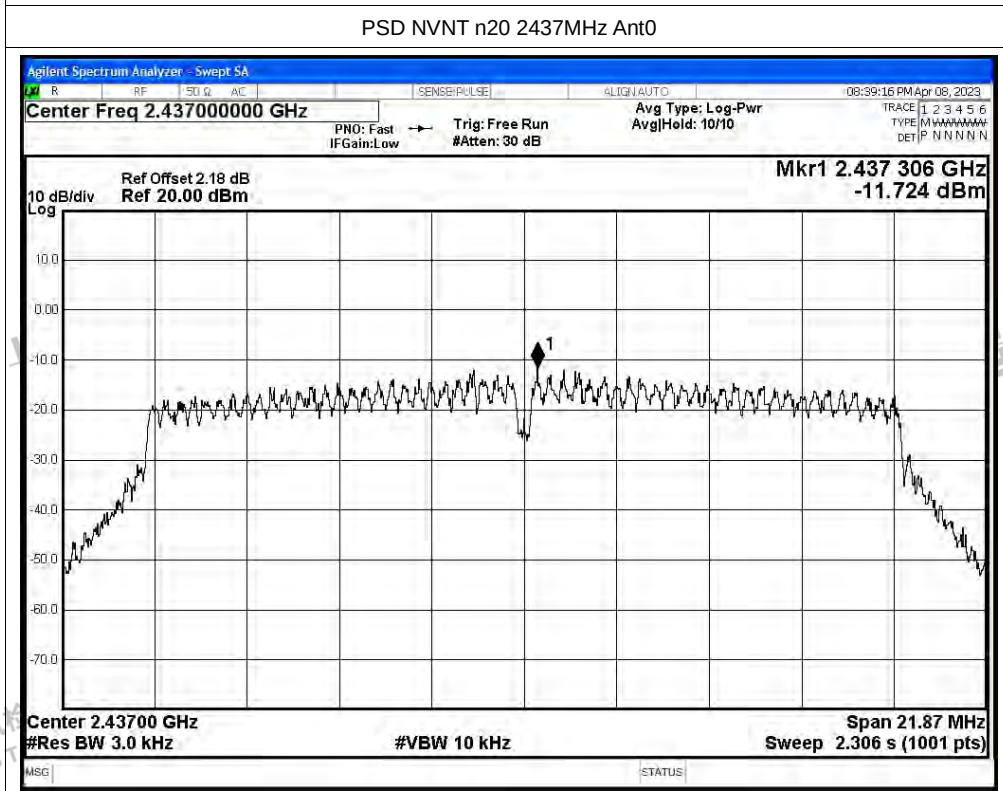
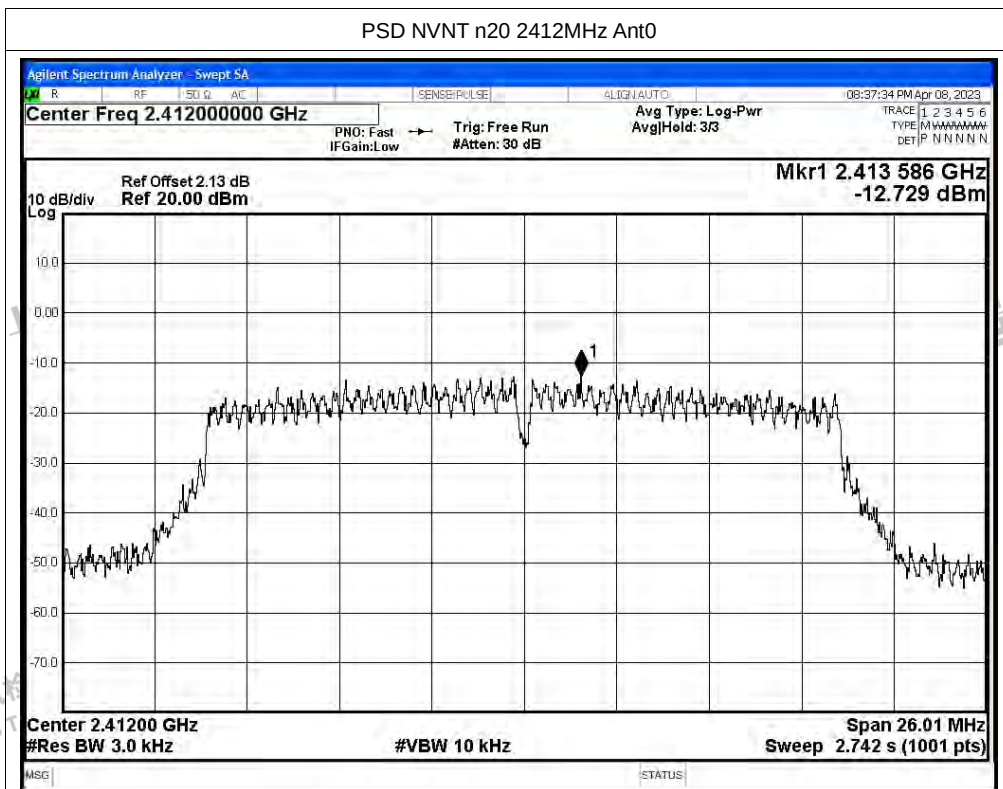


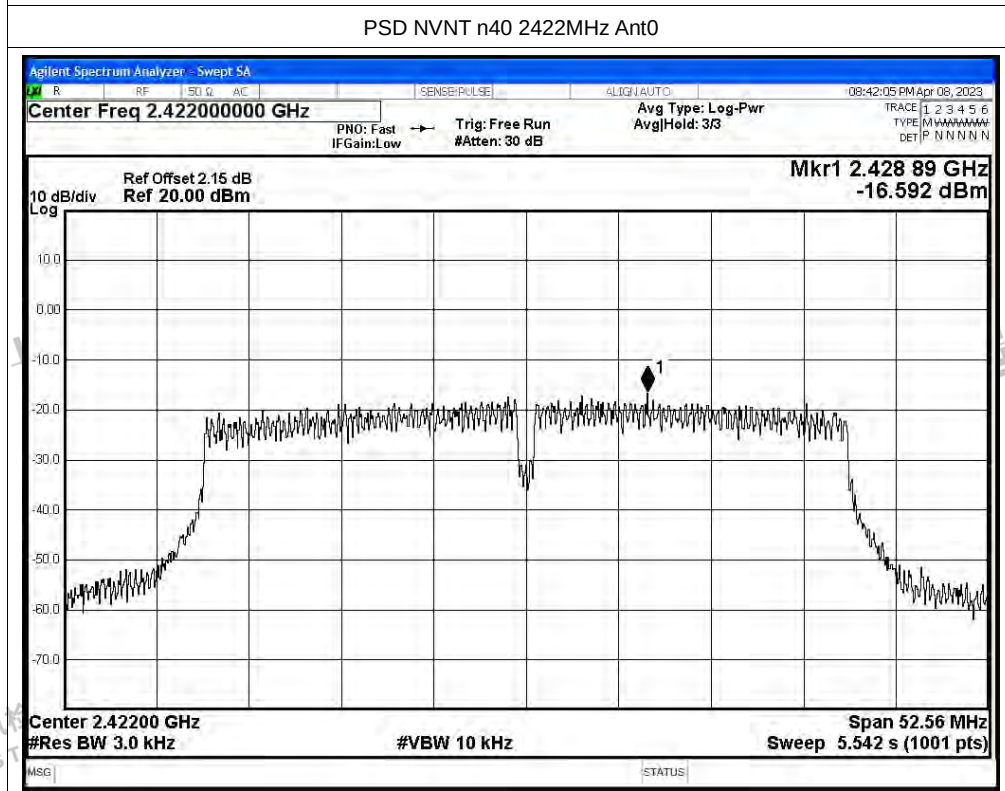
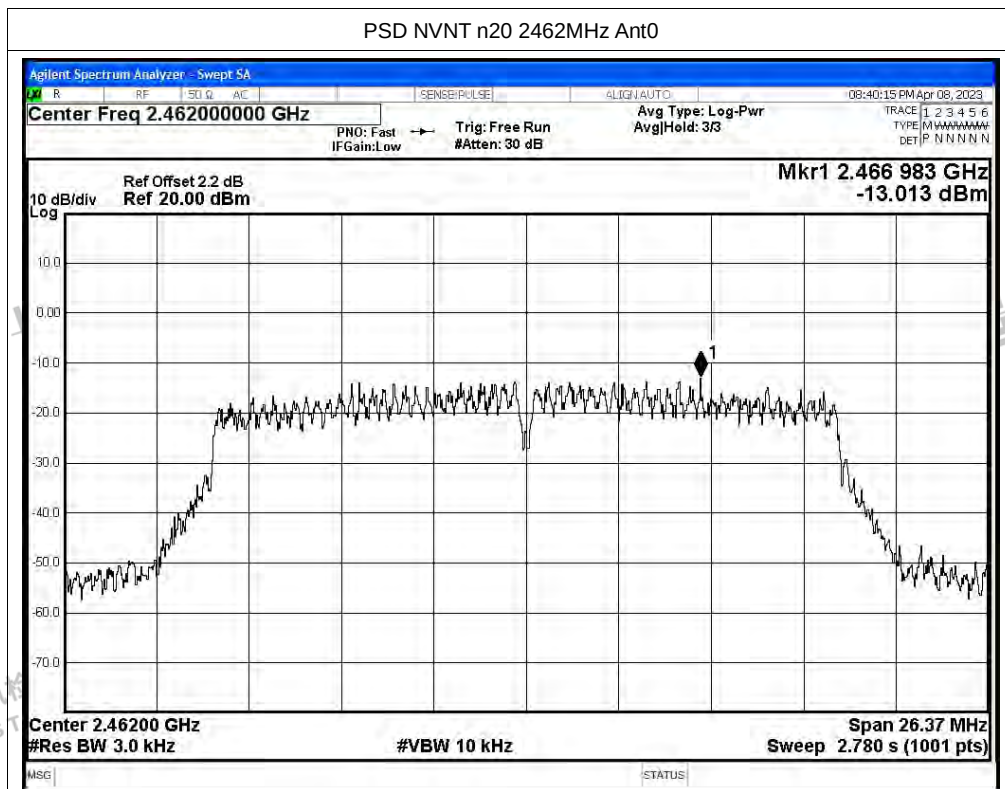
PSD NVNT b 2437MHz Ant0

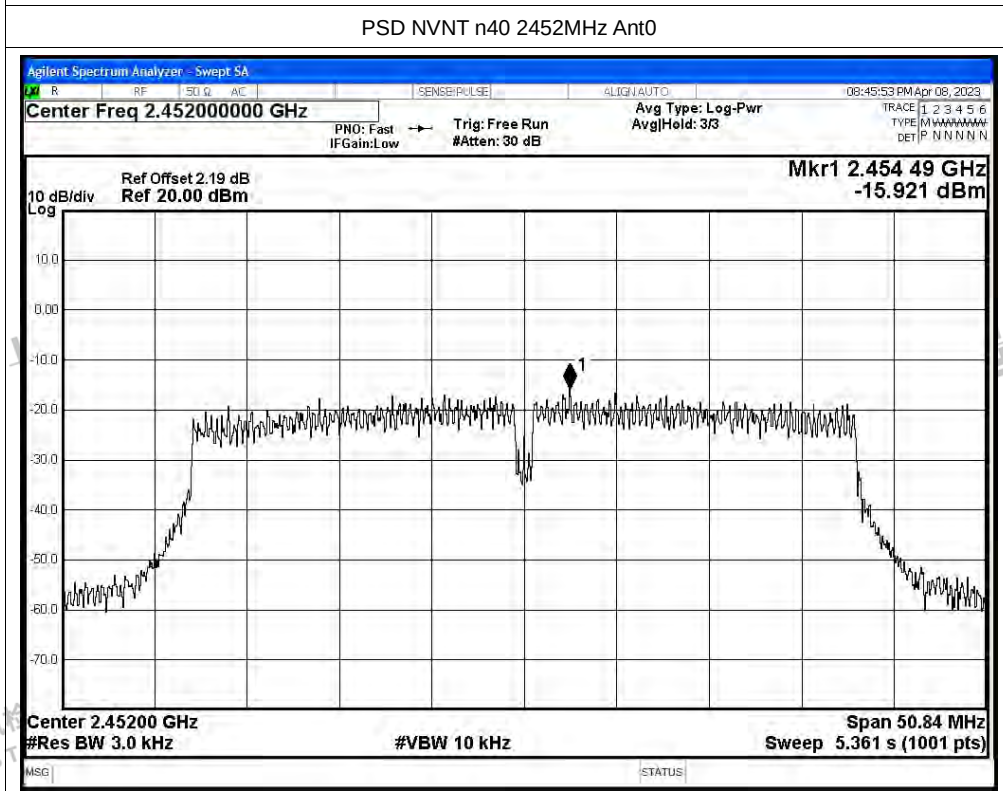
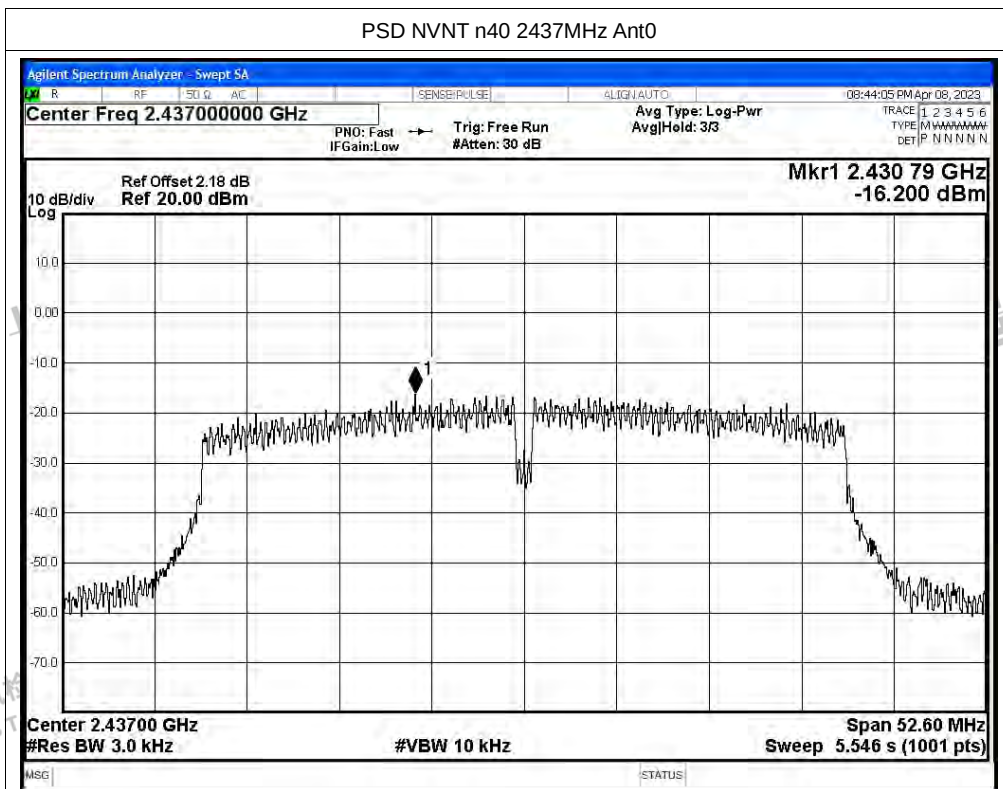








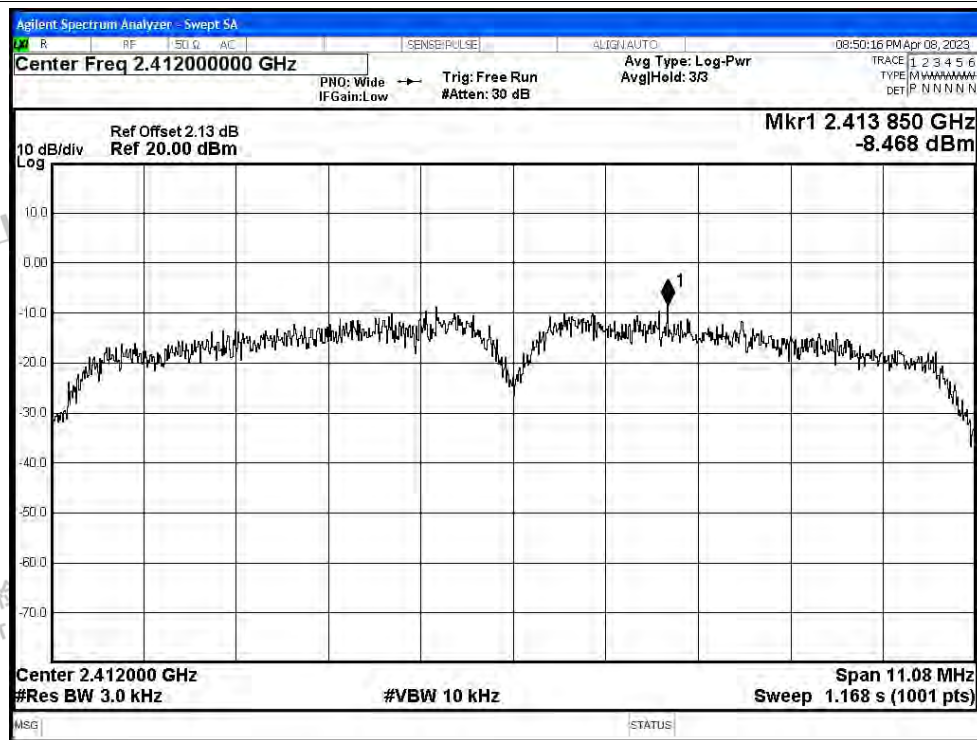




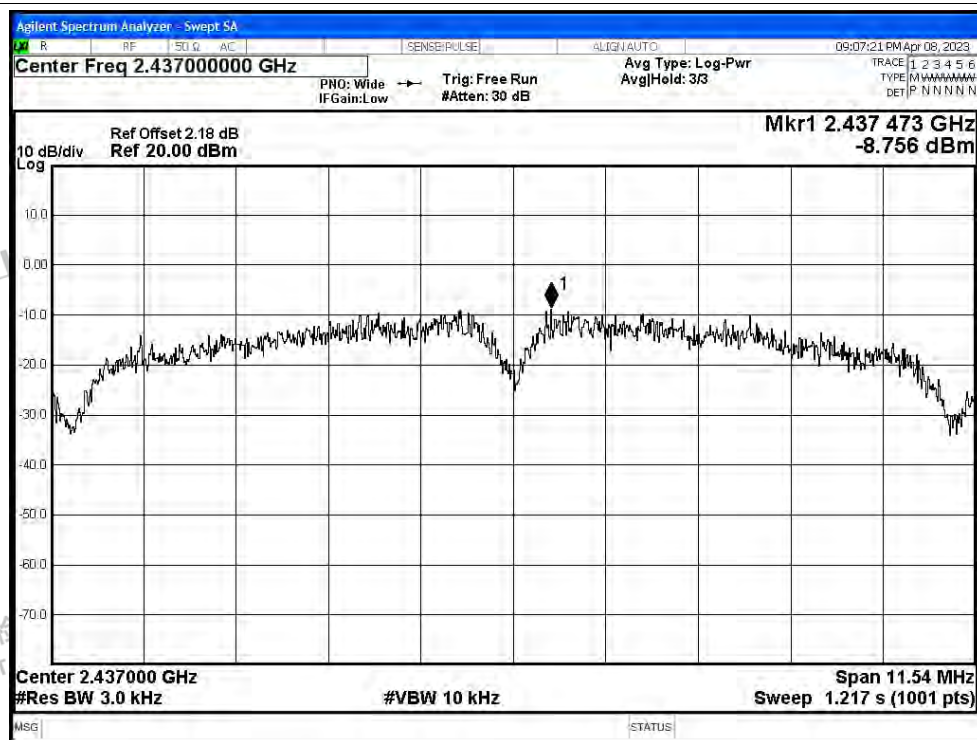


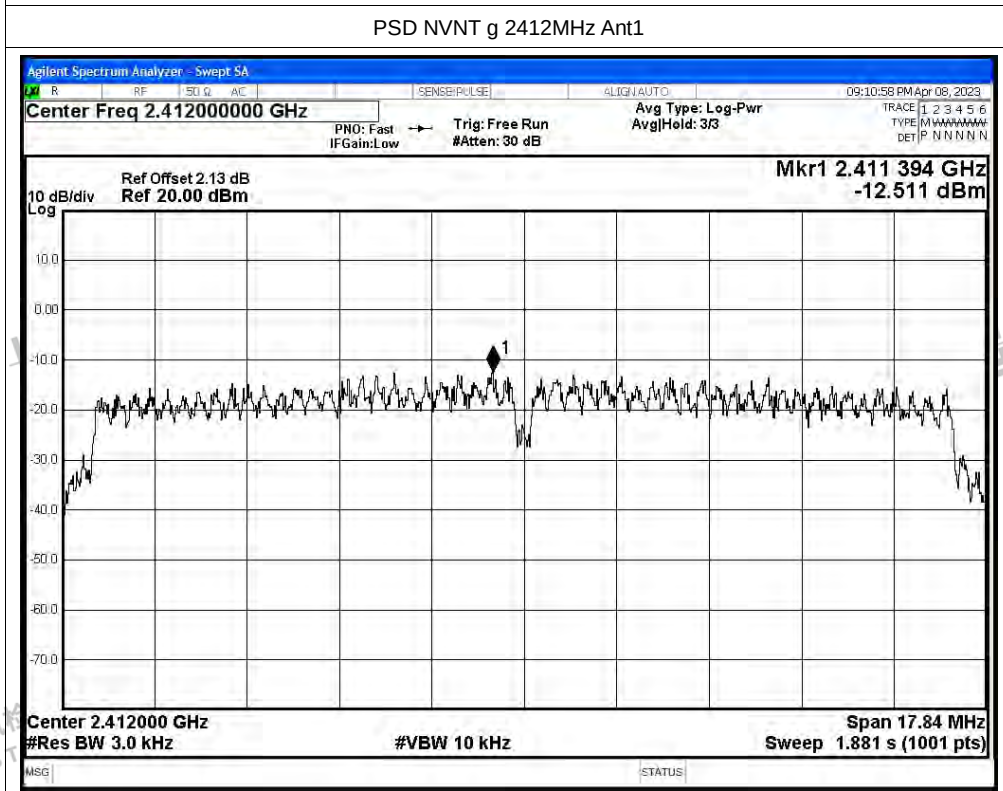
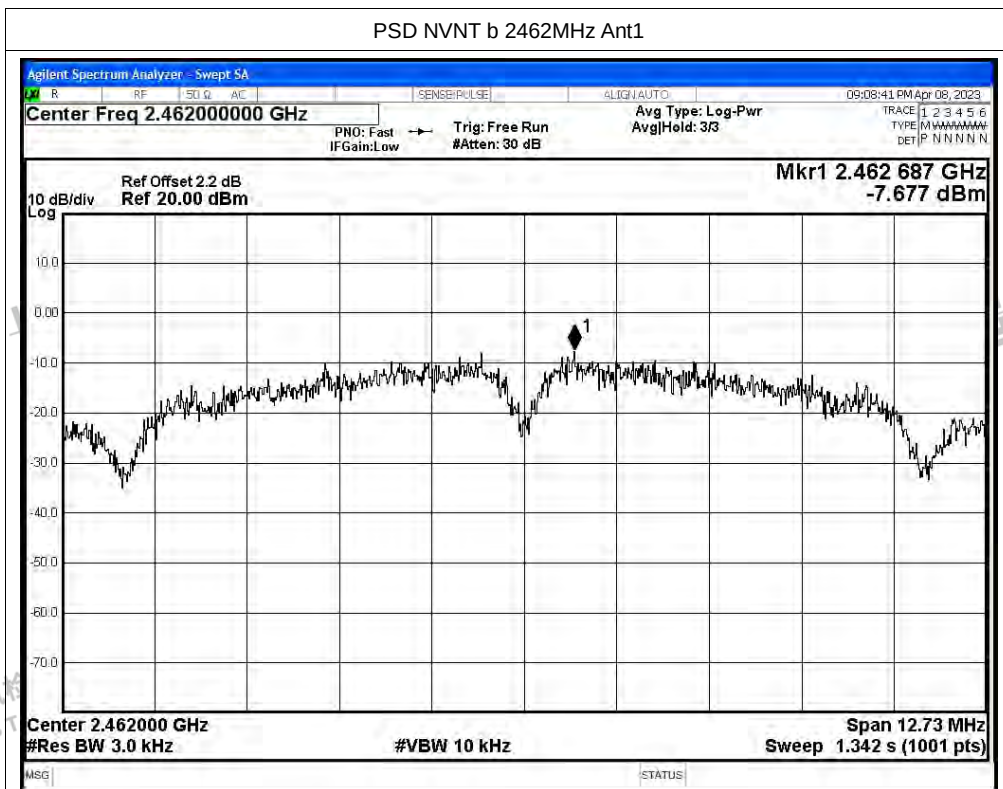
Test Graphs

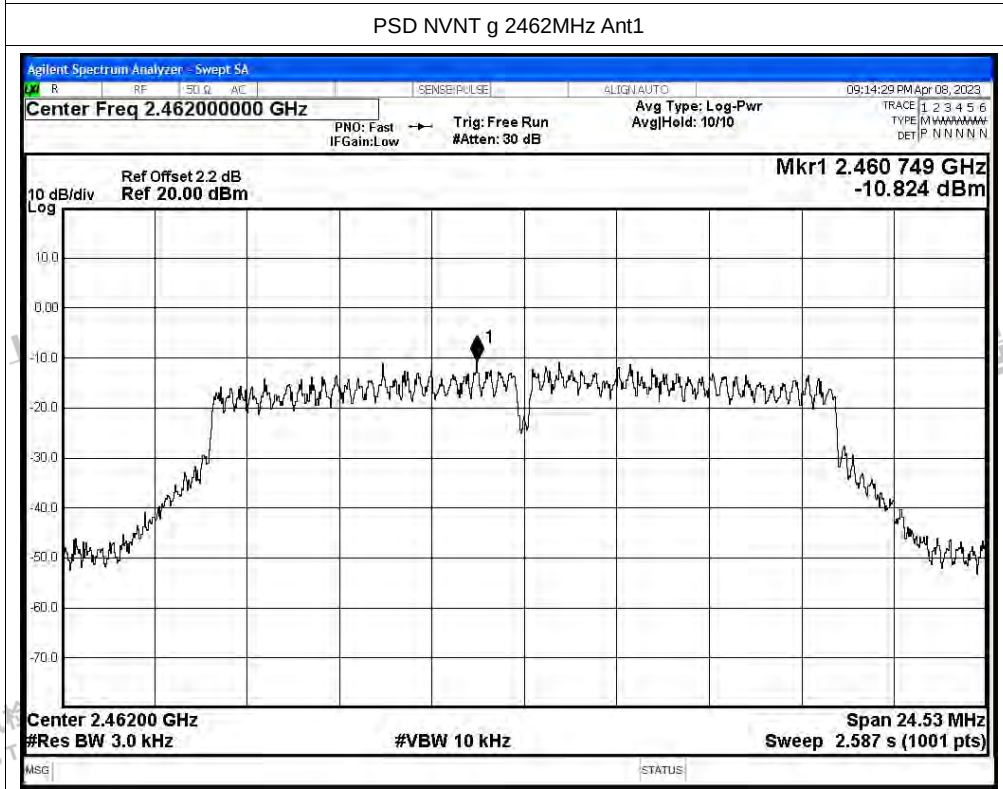
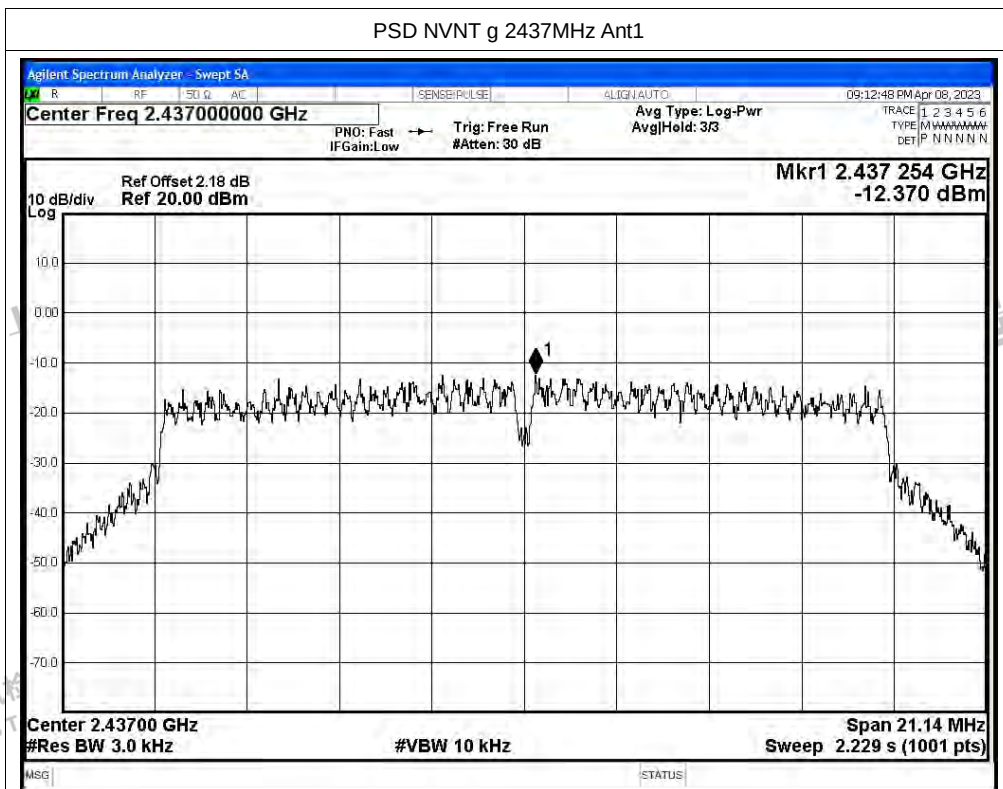
PSD NVNT b 2412MHz Ant1

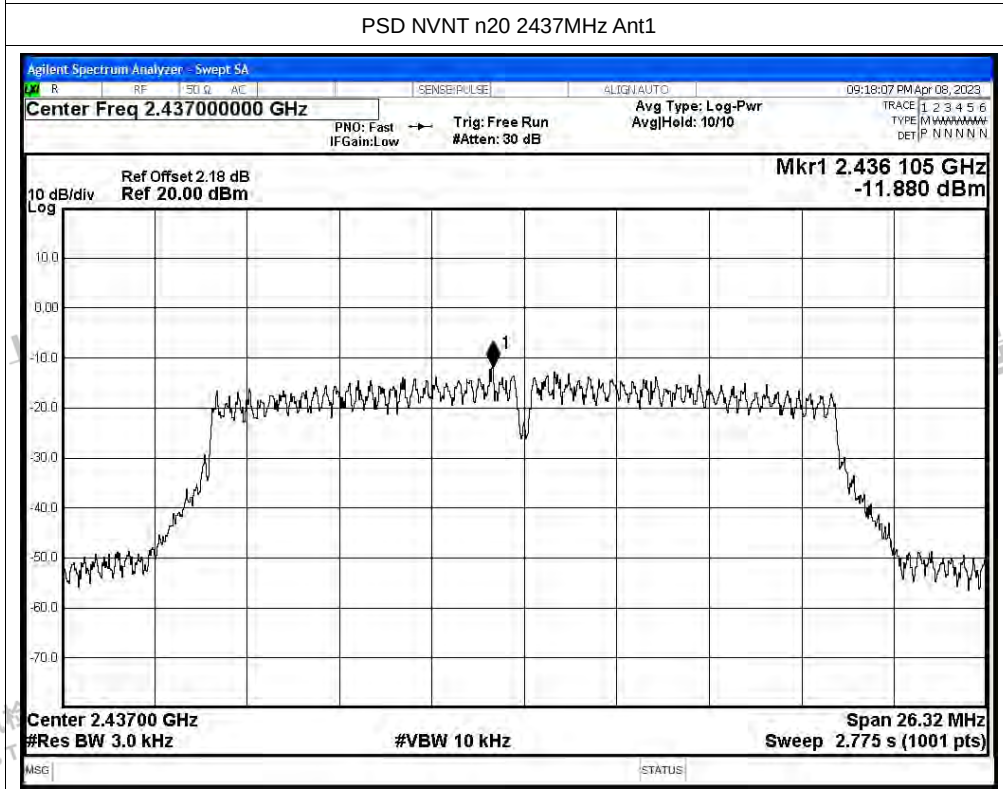
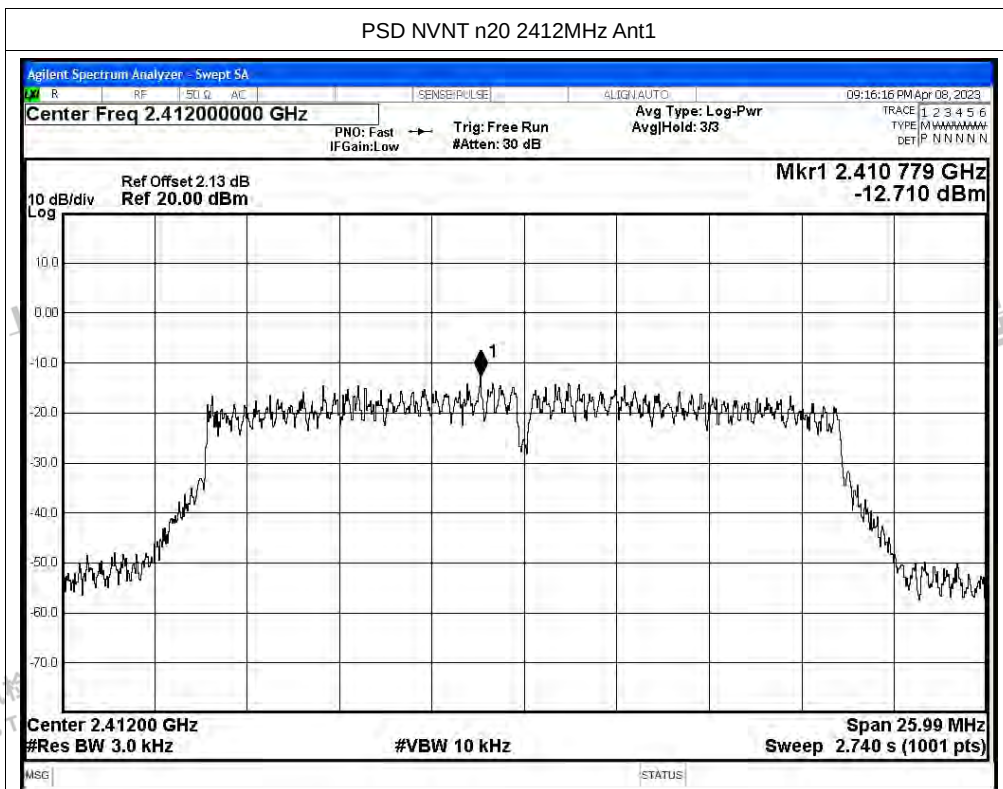


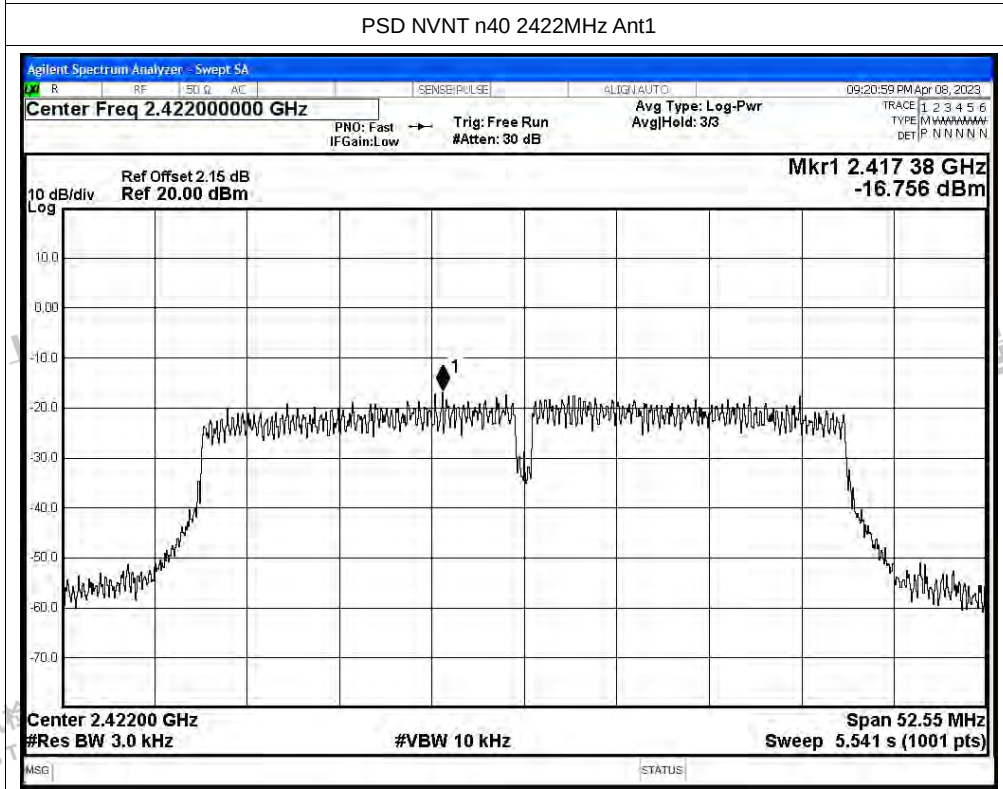
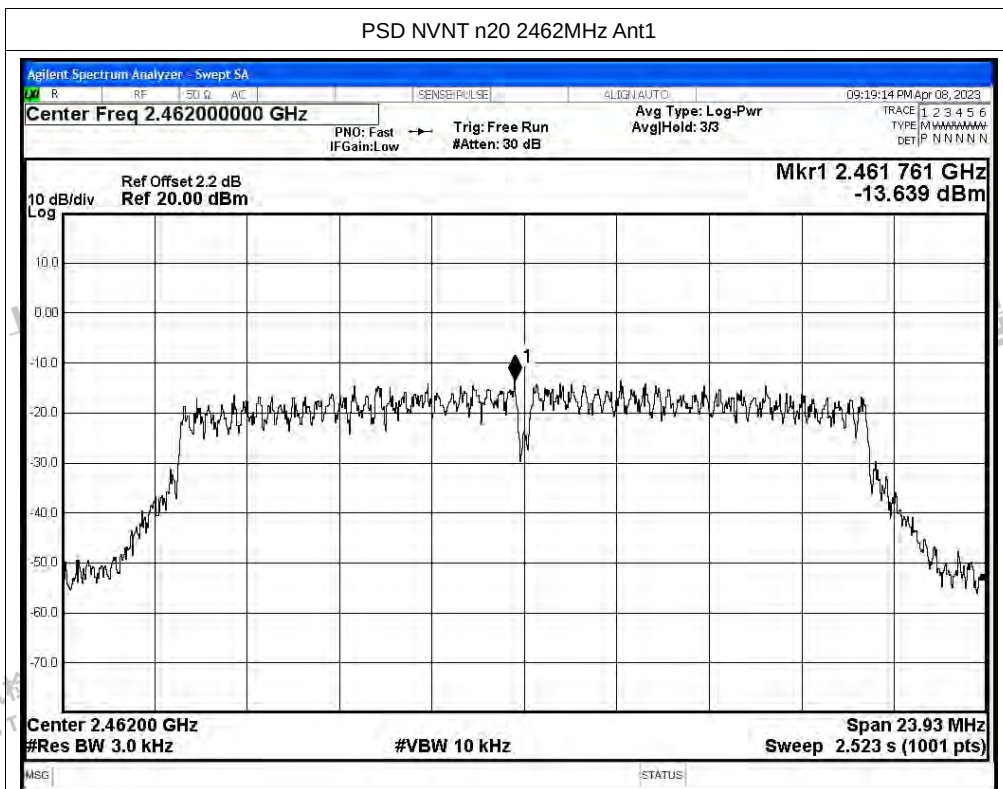
PSD NVNT b 2437MHz Ant1

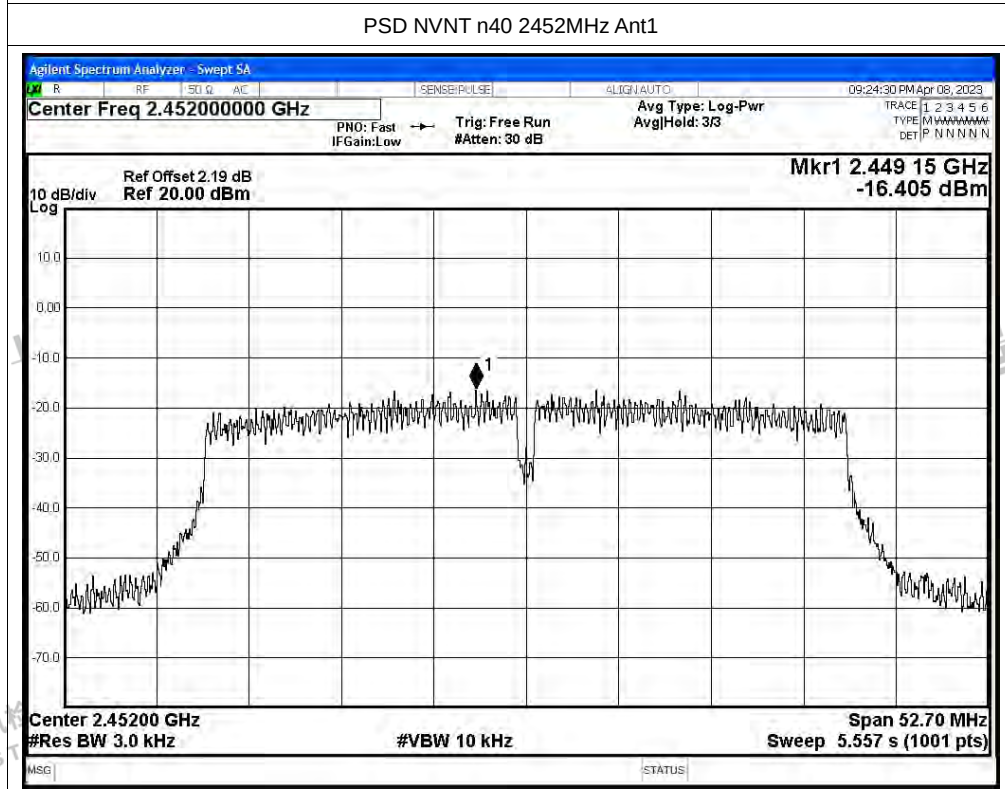
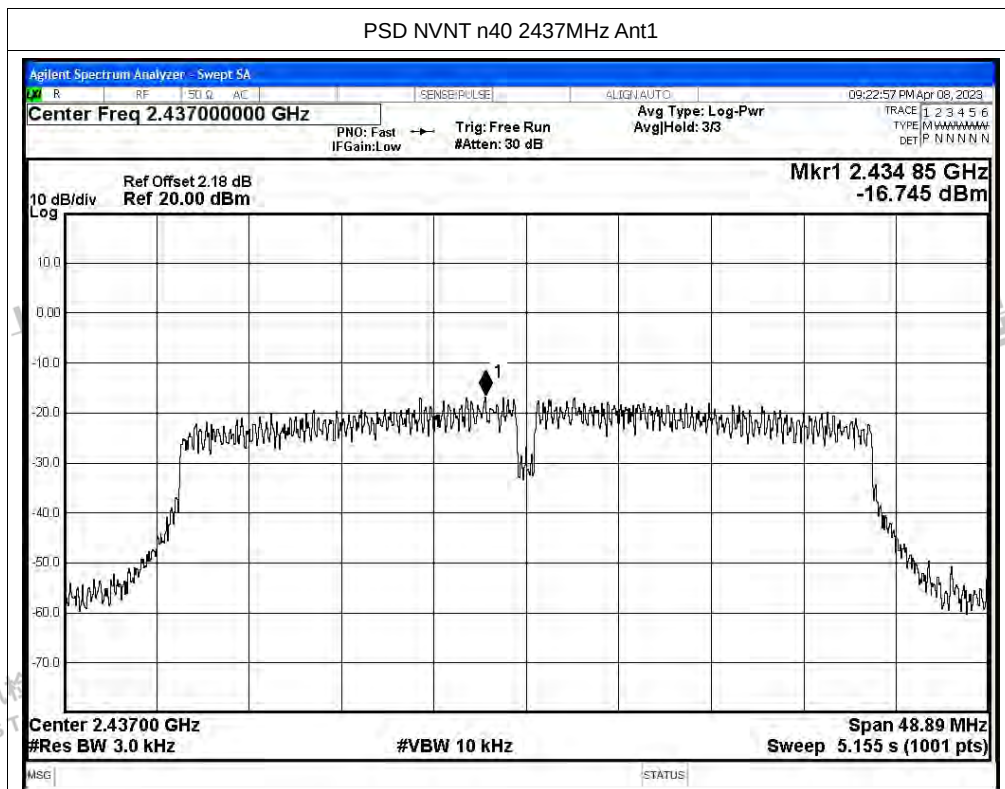














C.4 Band Edge

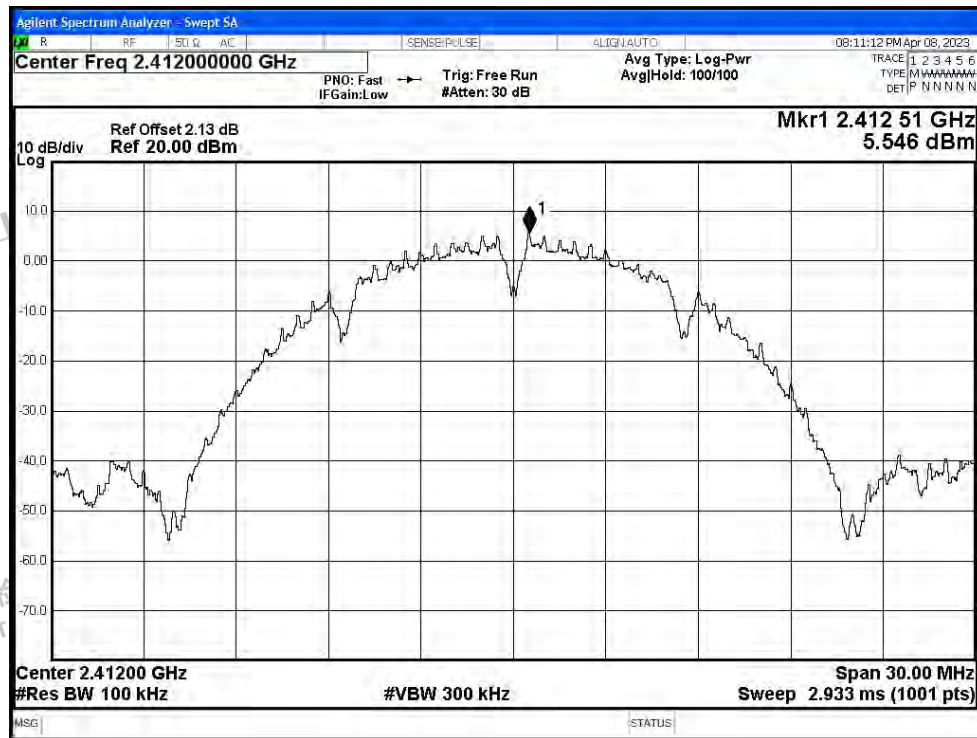
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant0	-46.16	-20	Pass
NVNT	b	2462	Ant0	-59.85	-20	Pass
NVNT	g	2412	Ant0	-34.87	-20	Pass
NVNT	g	2462	Ant0	-51.45	-20	Pass
NVNT	n20	2412	Ant0	-32.62	-20	Pass
NVNT	n20	2462	Ant0	-49.58	-20	Pass
NVNT	n40	2422	Ant0	-33.26	-20	Pass
NVNT	n40	2452	Ant0	-37.9	-20	Pass



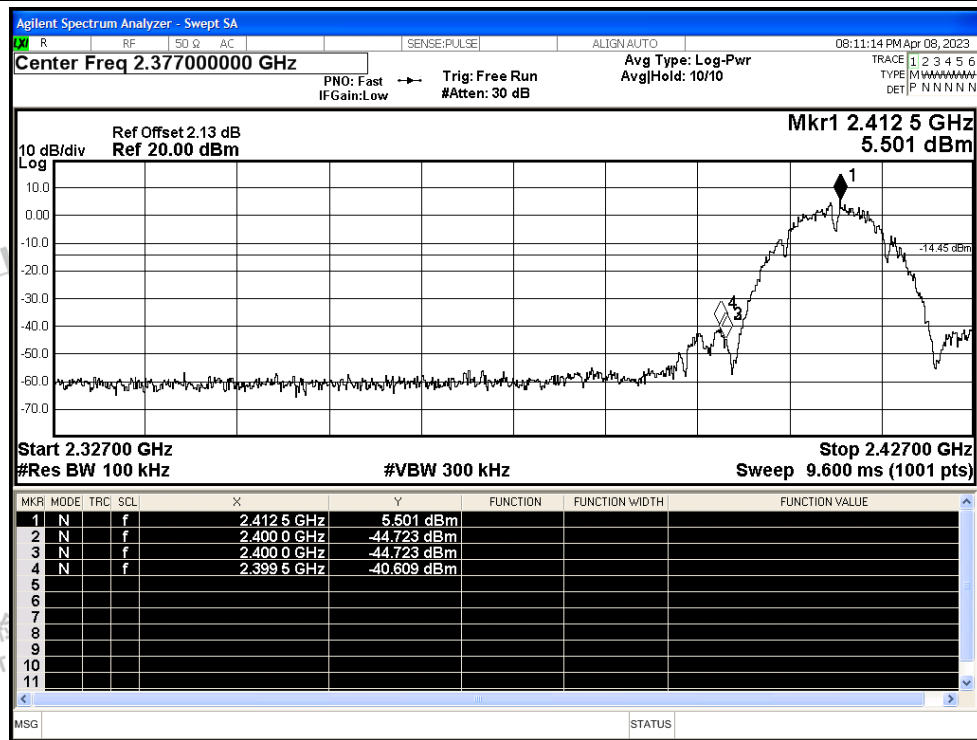


Test Graphs

Band Edge NVNT b 2412MHz Ant0 Ref

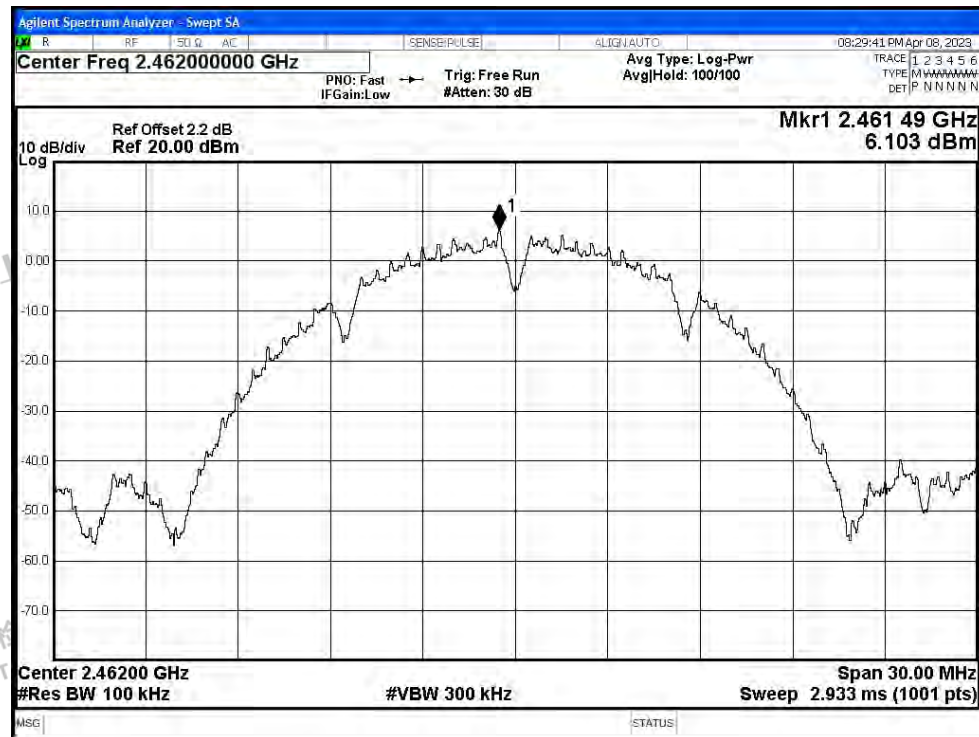


Band Edge NVNT b 2412MHz Ant0 Emission

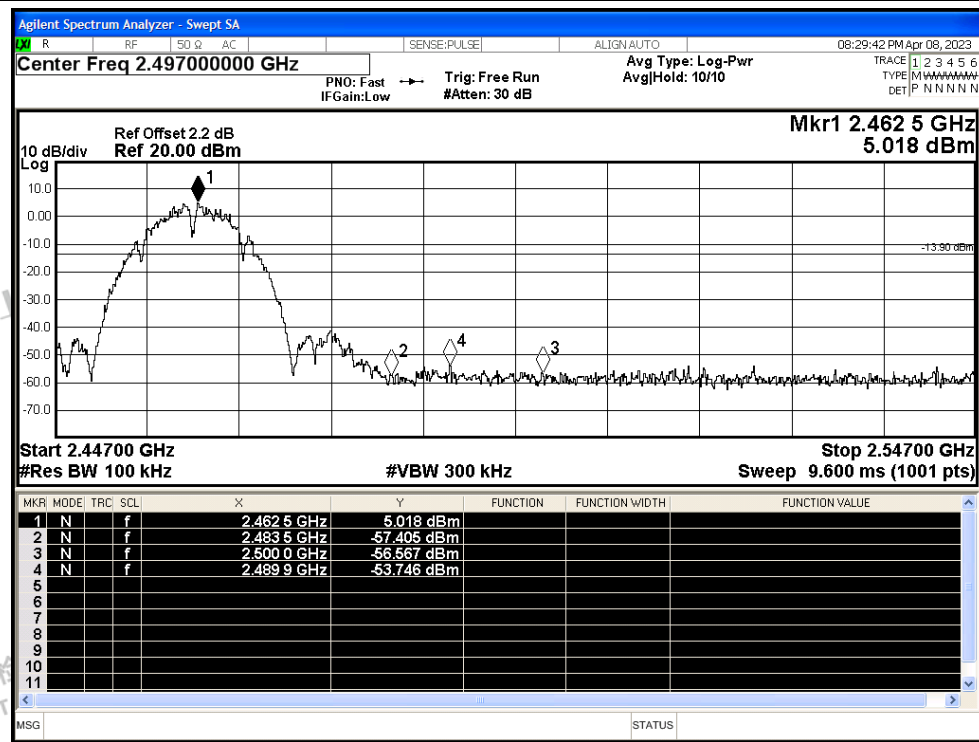




Band Edge NVNT b 2462MHz Ant0 Ref

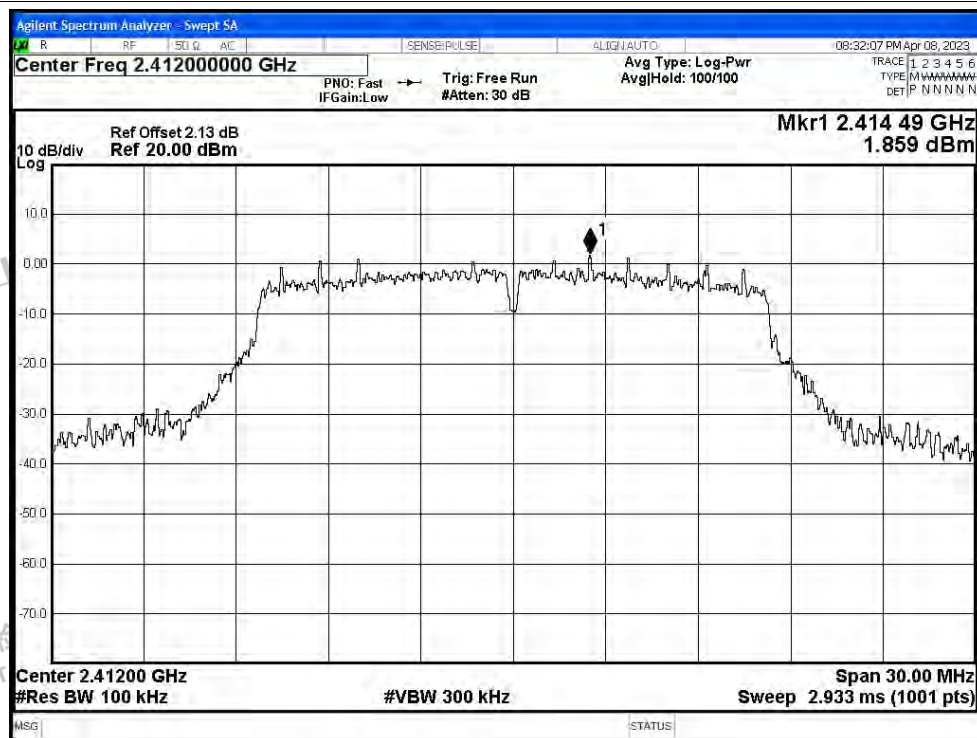


Band Edge NVNT b 2462MHz Ant0 Emission

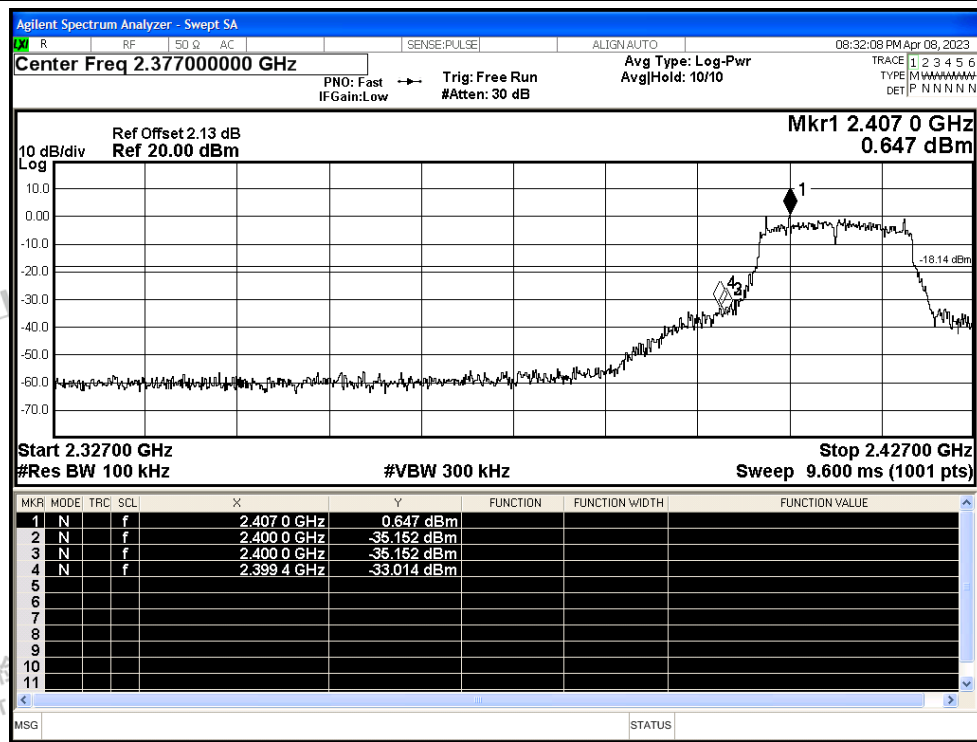




Band Edge NVNT g 2412MHz Ant0 Ref

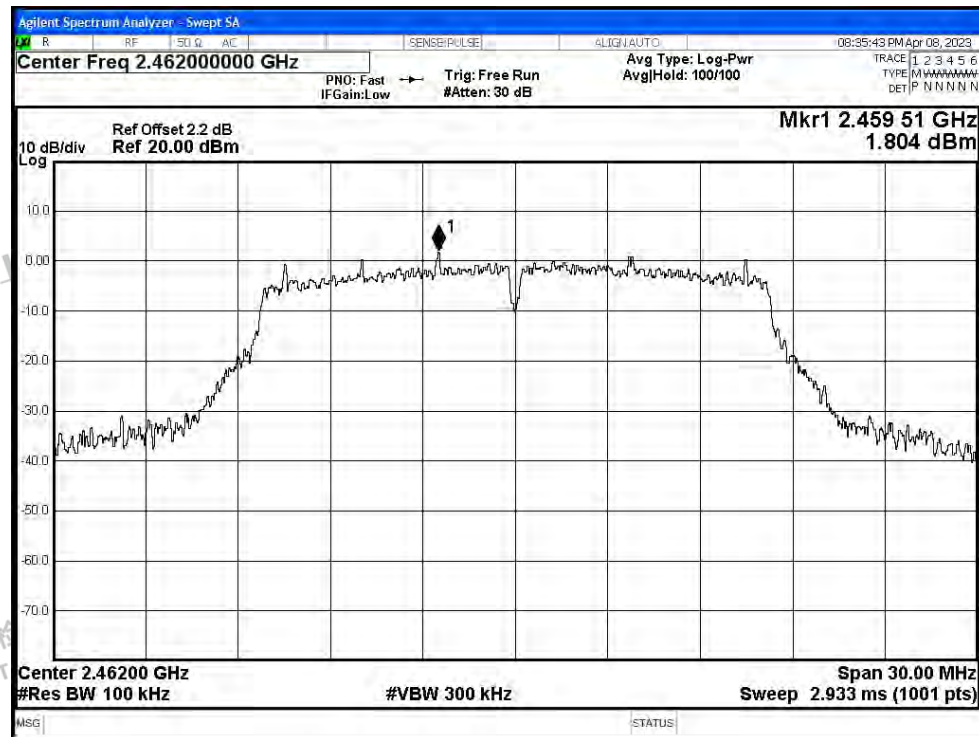


Band Edge NVNT g 2412MHz Ant0 Emission

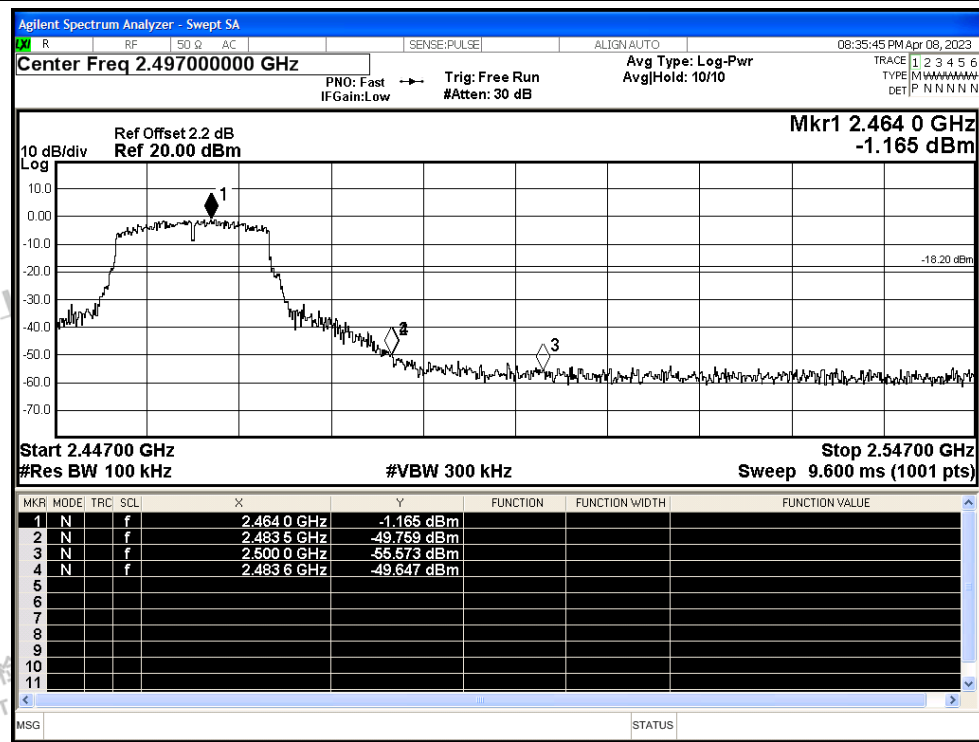




Band Edge NVNT g 2462MHz Ant0 Ref

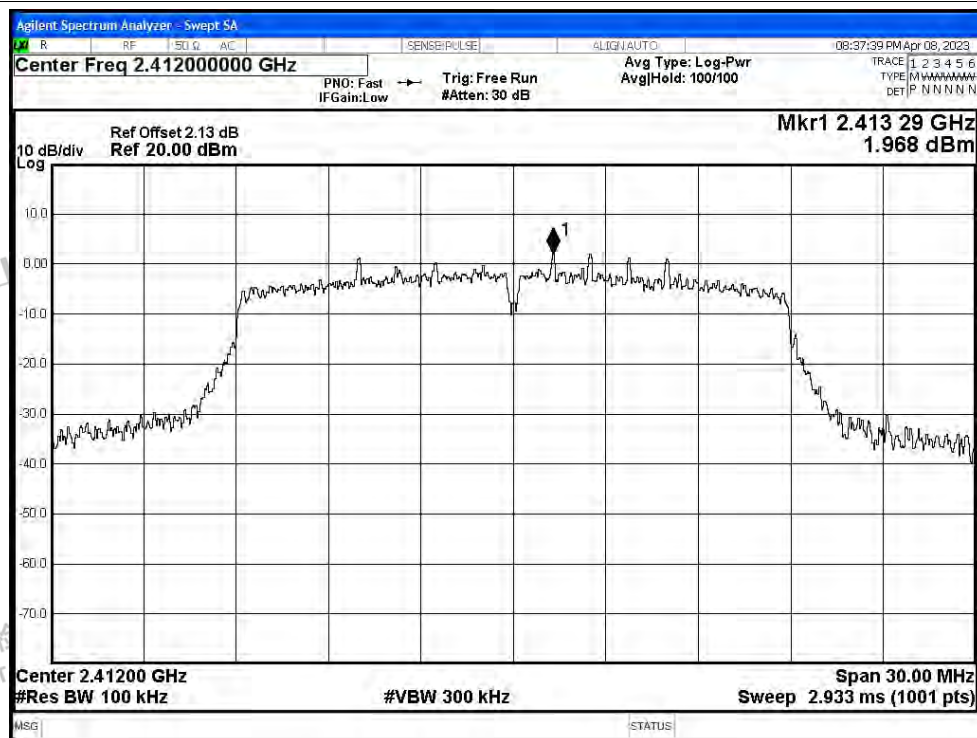


Band Edge NVNT g 2462MHz Ant0 Emission

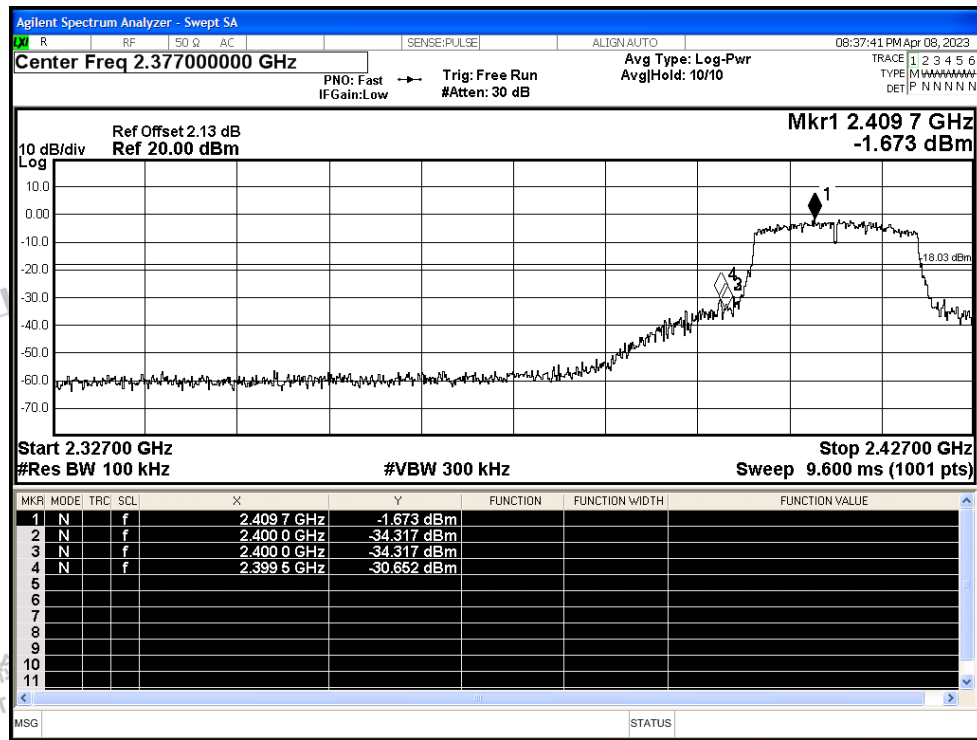




Band Edge NVNT n20 2412MHz Ant0 Ref

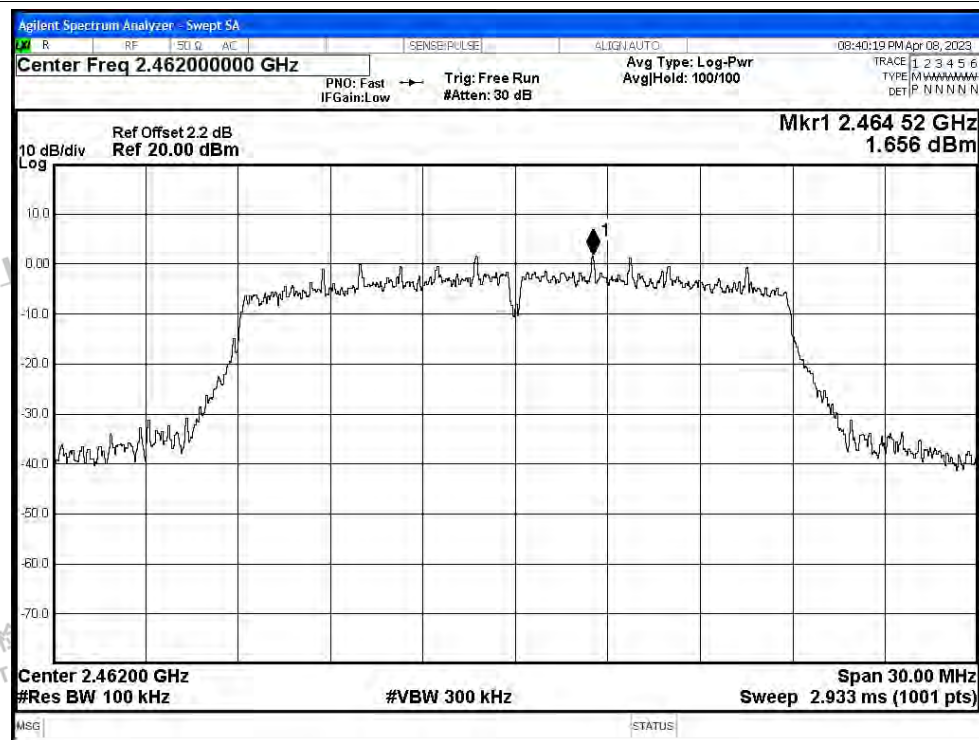


Band Edge NVNT n20 2412MHz Ant0 Emission

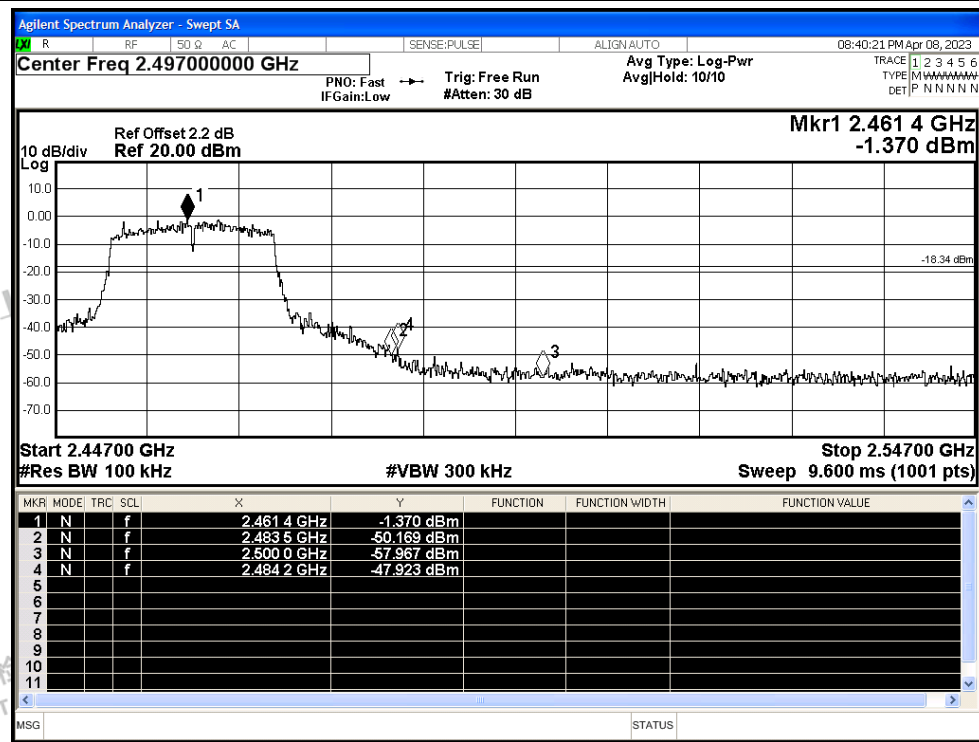




Band Edge NVNT n20 2462MHz Ant0 Ref

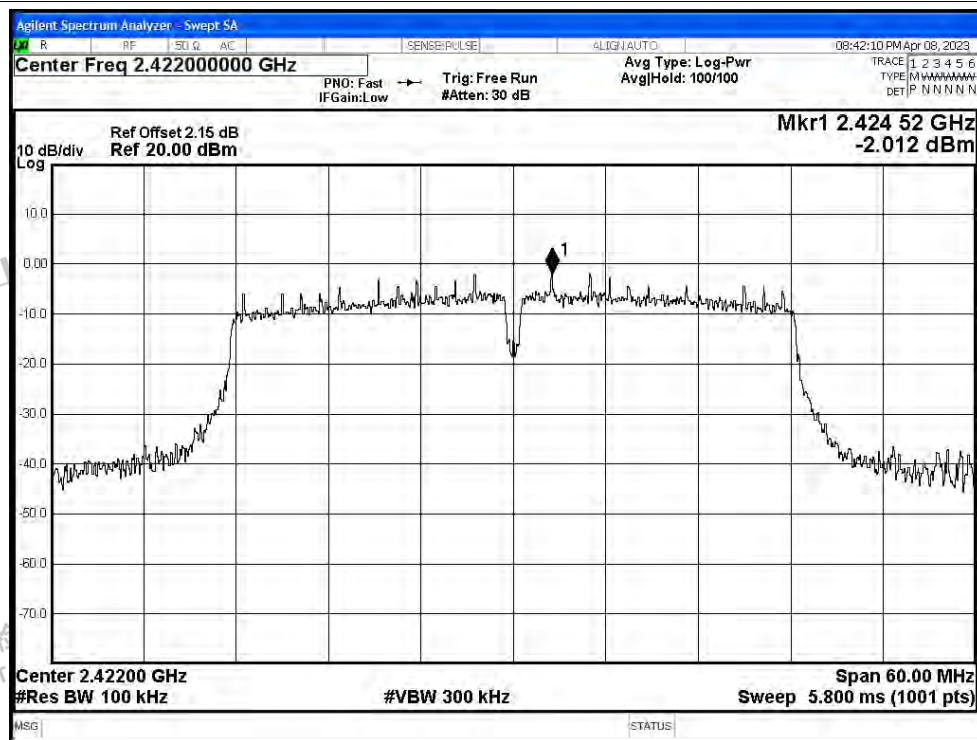


Band Edge NVNT n20 2462MHz Ant0 Emission

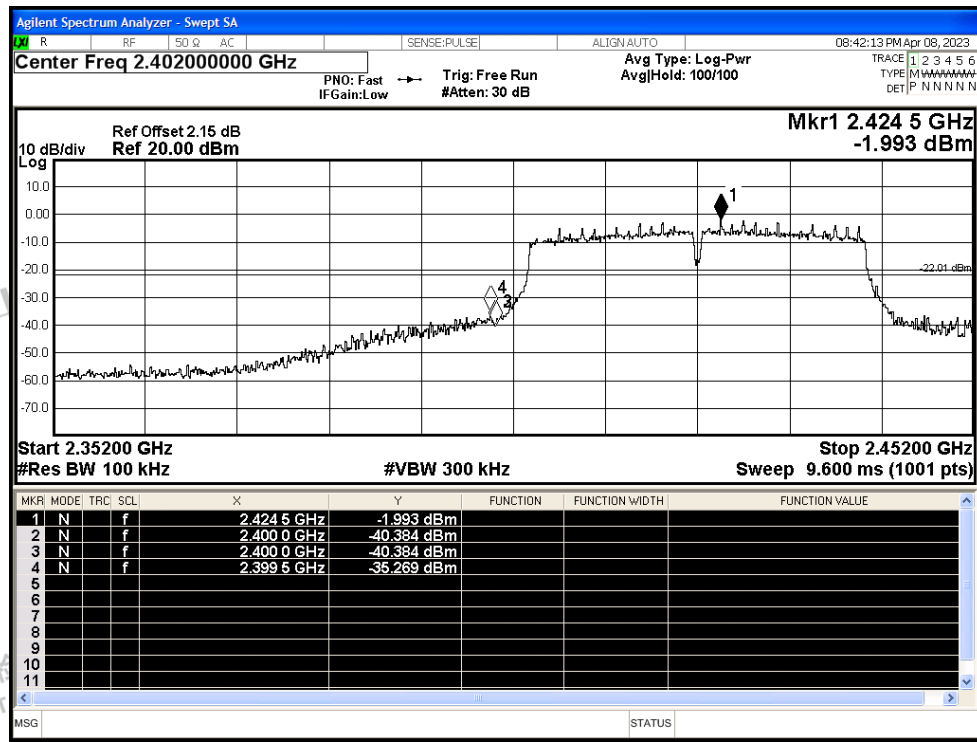




Band Edge NVNT n40 2422MHz Ant0 Ref

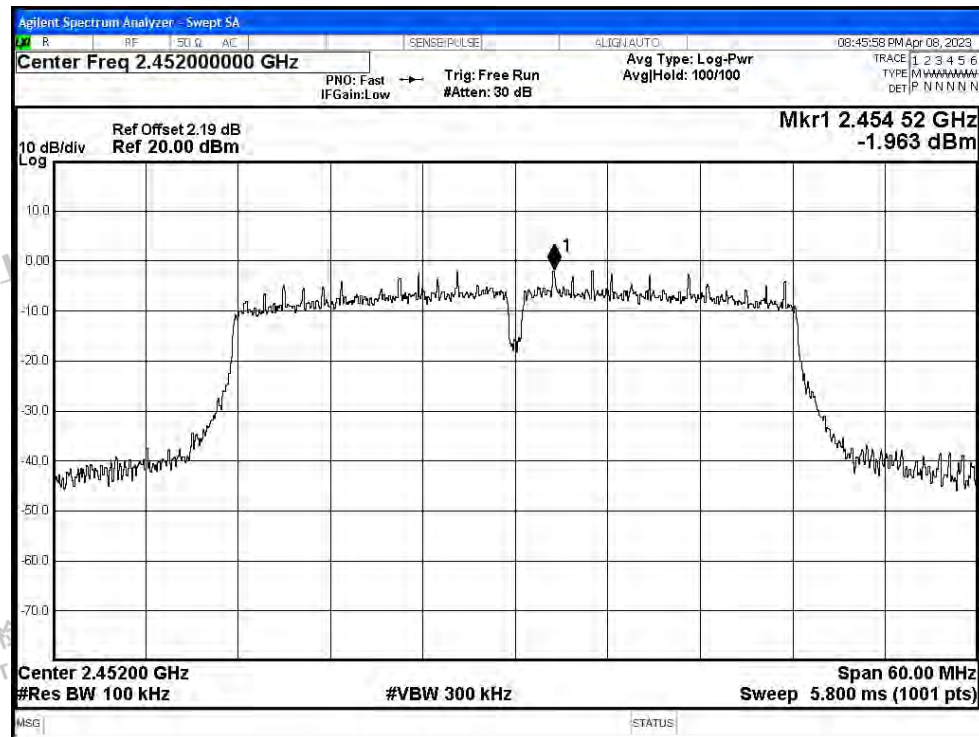


Band Edge NVNT n40 2422MHz Ant0 Emission

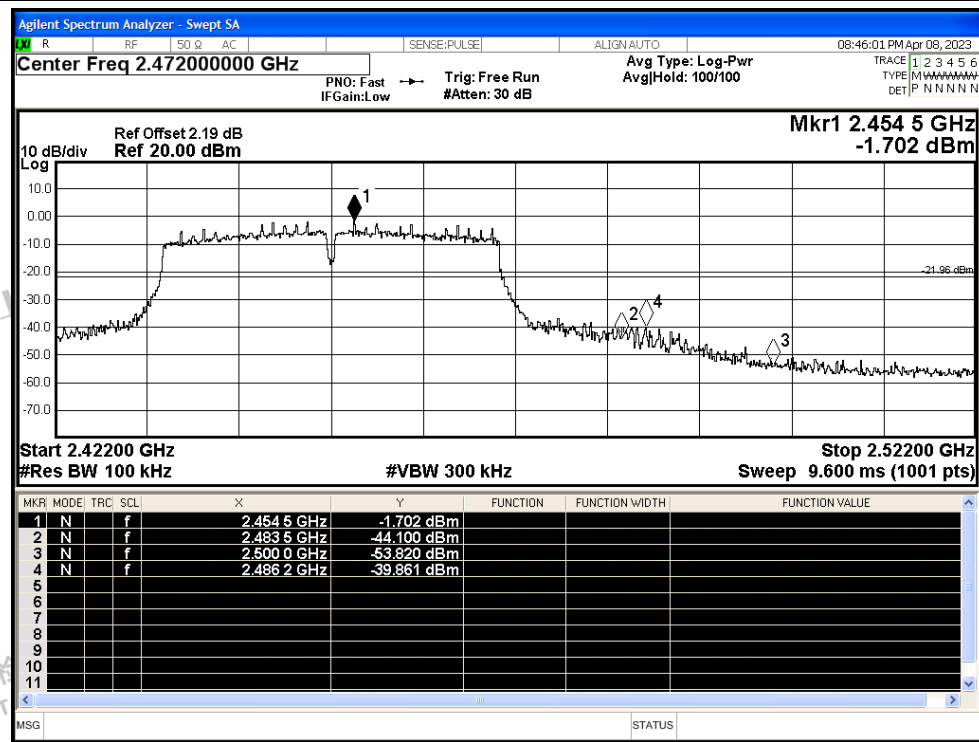




Band Edge NVNT n40 2452MHz Ant0 Ref



Band Edge NVNT n40 2452MHz Ant0 Emission





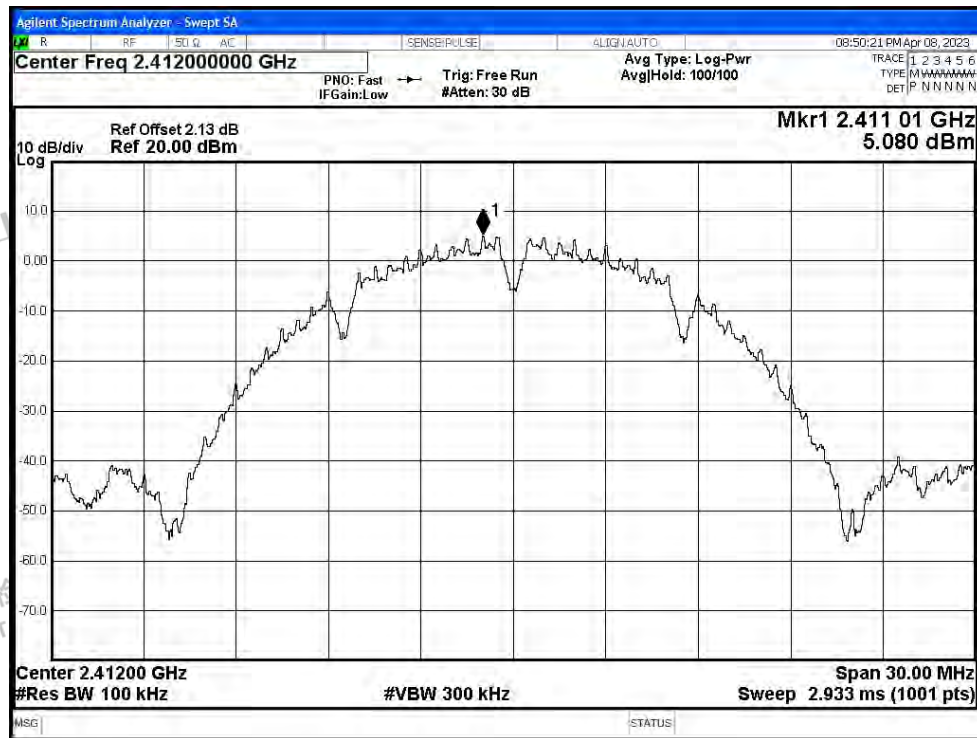
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-46.38	-20	Pass
NVNT	b	2462	Ant1	-60.34	-20	Pass
NVNT	g	2412	Ant1	-34.49	-20	Pass
NVNT	g	2462	Ant1	-52.03	-20	Pass
NVNT	n20	2412	Ant1	-36	-20	Pass
NVNT	n20	2462	Ant1	-51.21	-20	Pass
NVNT	n40	2422	Ant1	-33.67	-20	Pass
NVNT	n40	2452	Ant1	-37.53	-20	Pass



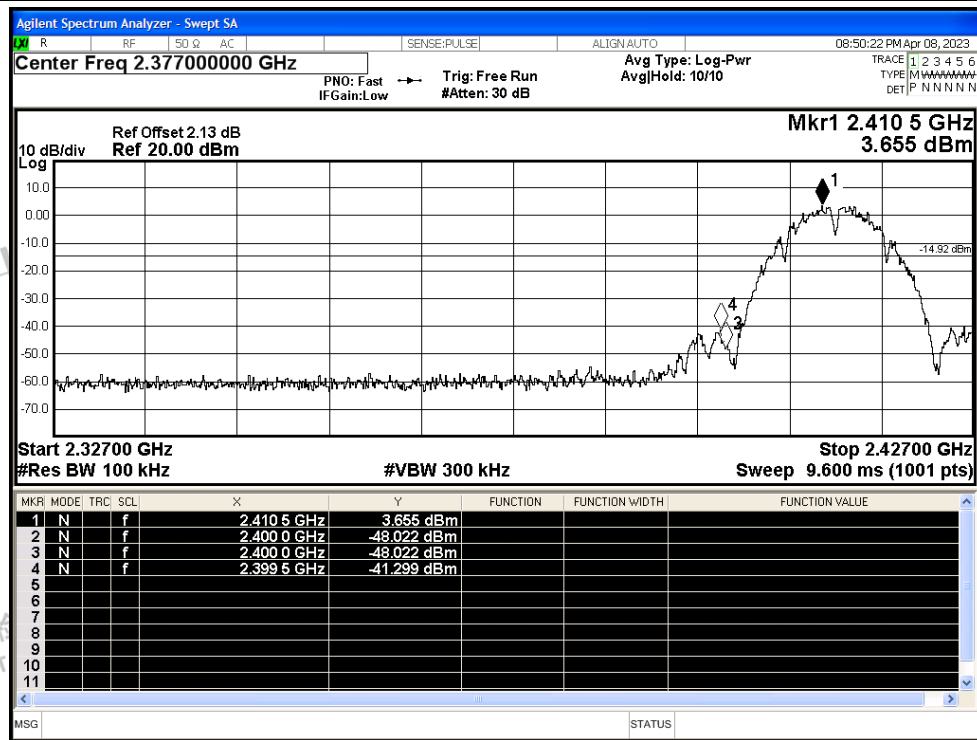


Test Graphs

Band Edge NVNT b 2412MHz Ant1 Ref

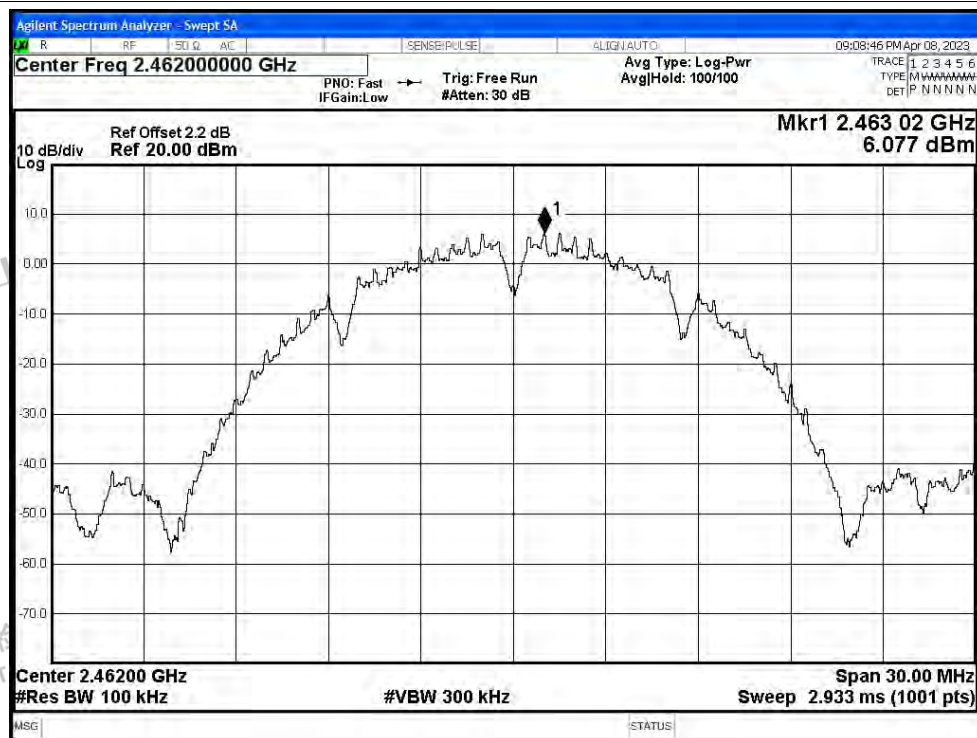


Band Edge NVNT b 2412MHz Ant1 Emission

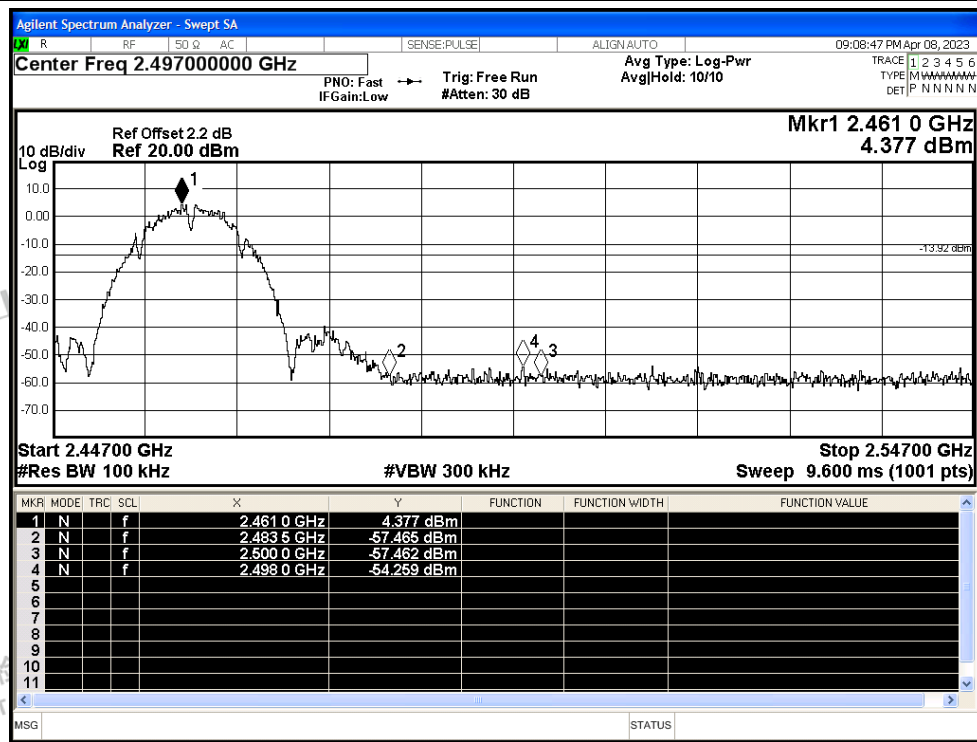




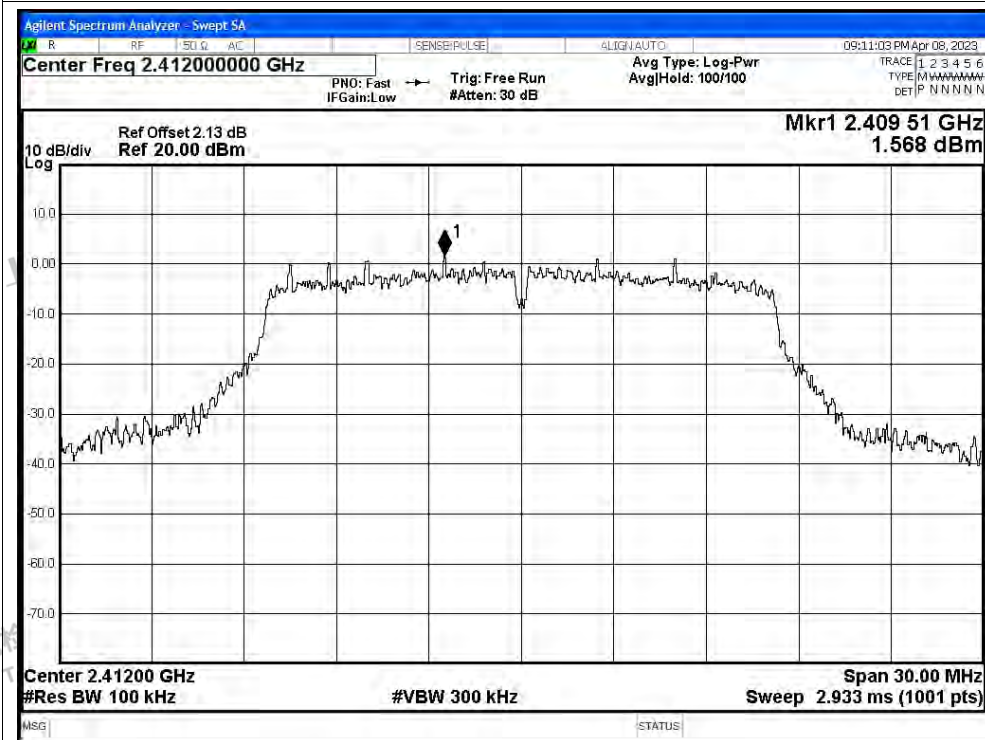
Band Edge NVNT b 2462MHz Ant1 Ref



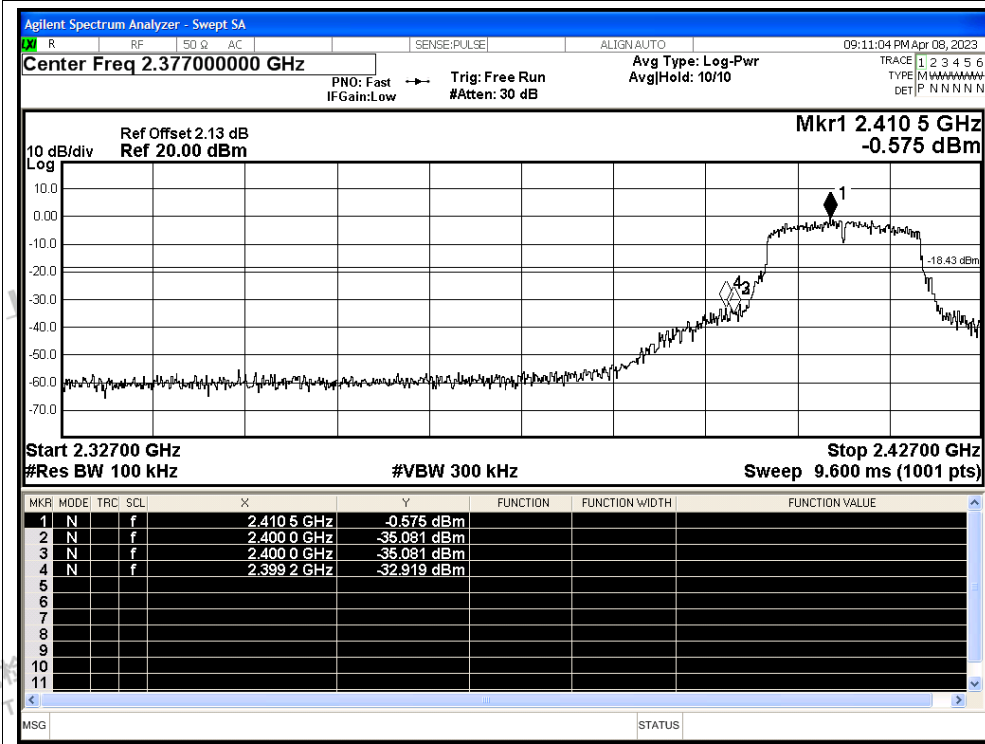
Band Edge NVNT b 2462MHz Ant1 Emission



Band Edge NVNT g 2412MHz Ant1 Ref

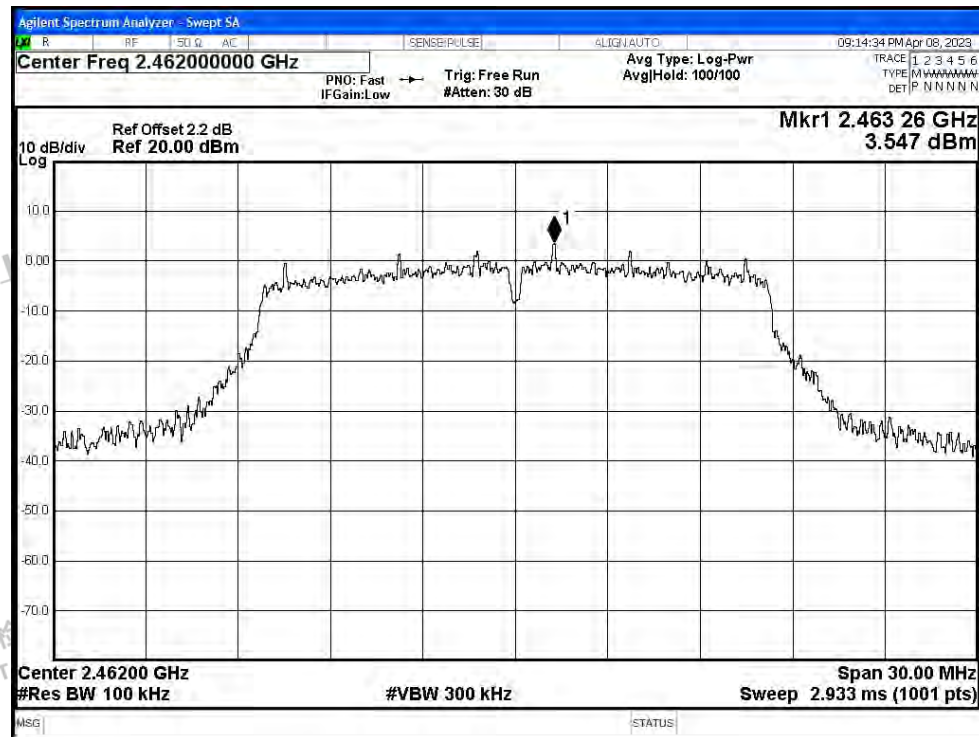


Band Edge NVNT g 2412MHz Ant1 Emission

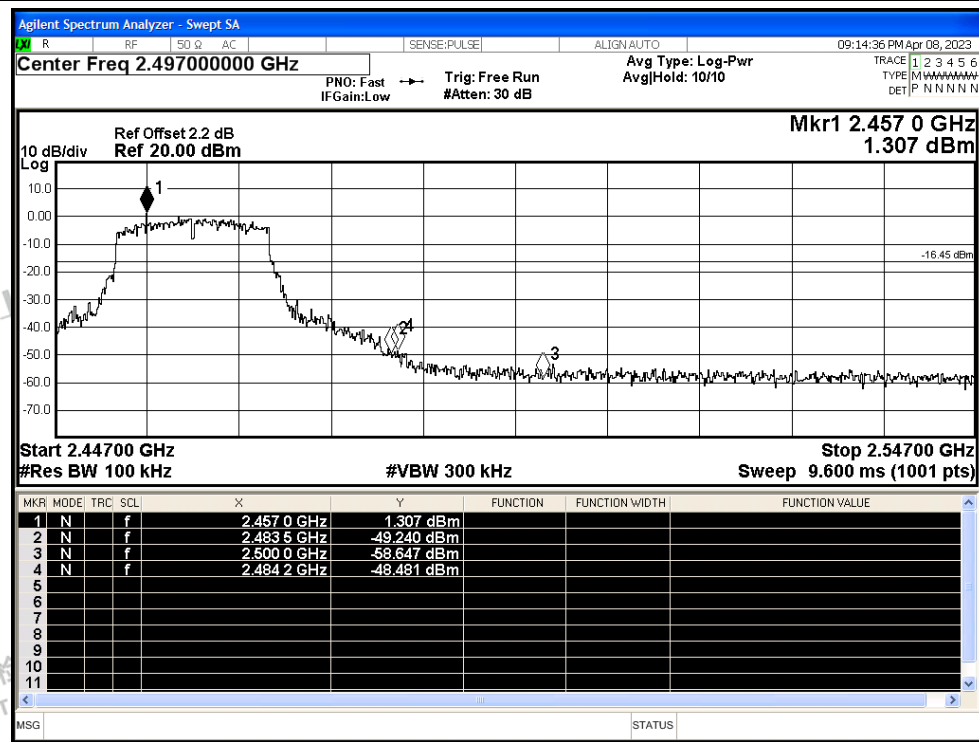




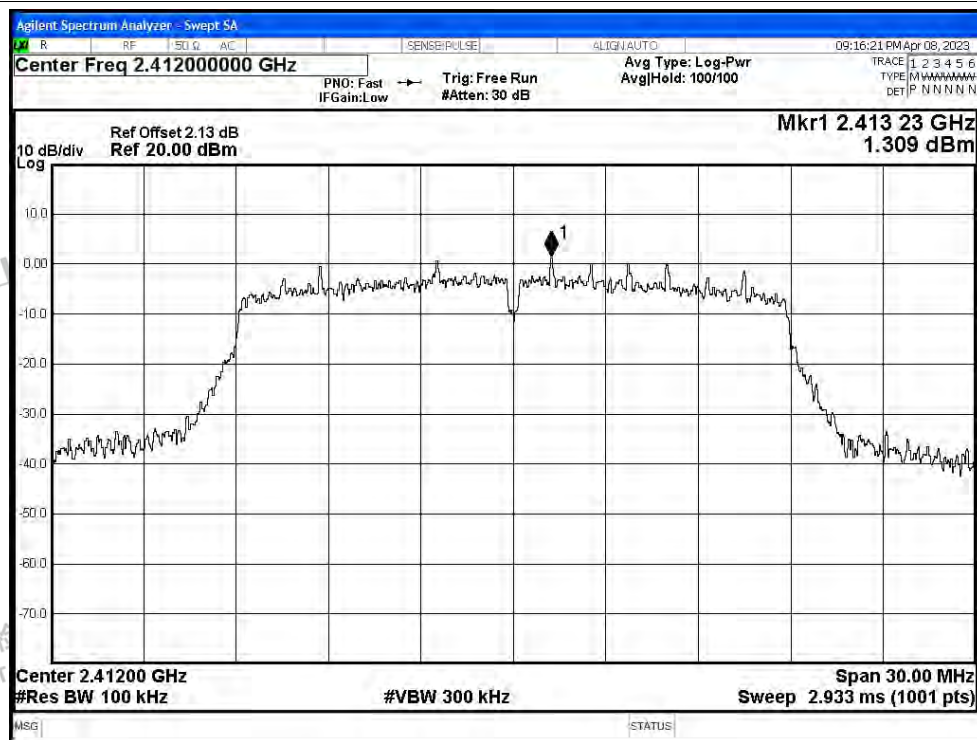
Band Edge NVNT g 2462MHz Ant1 Ref



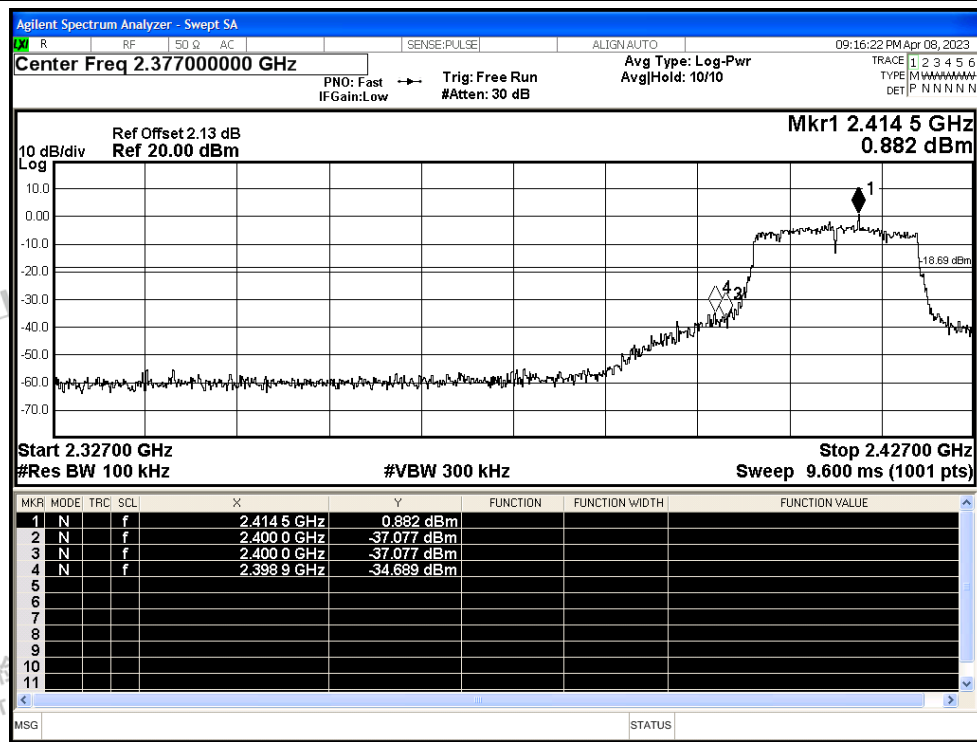
Band Edge NVNT g 2462MHz Ant1 Emission



Band Edge NVNT n20 2412MHz Ant1 Ref

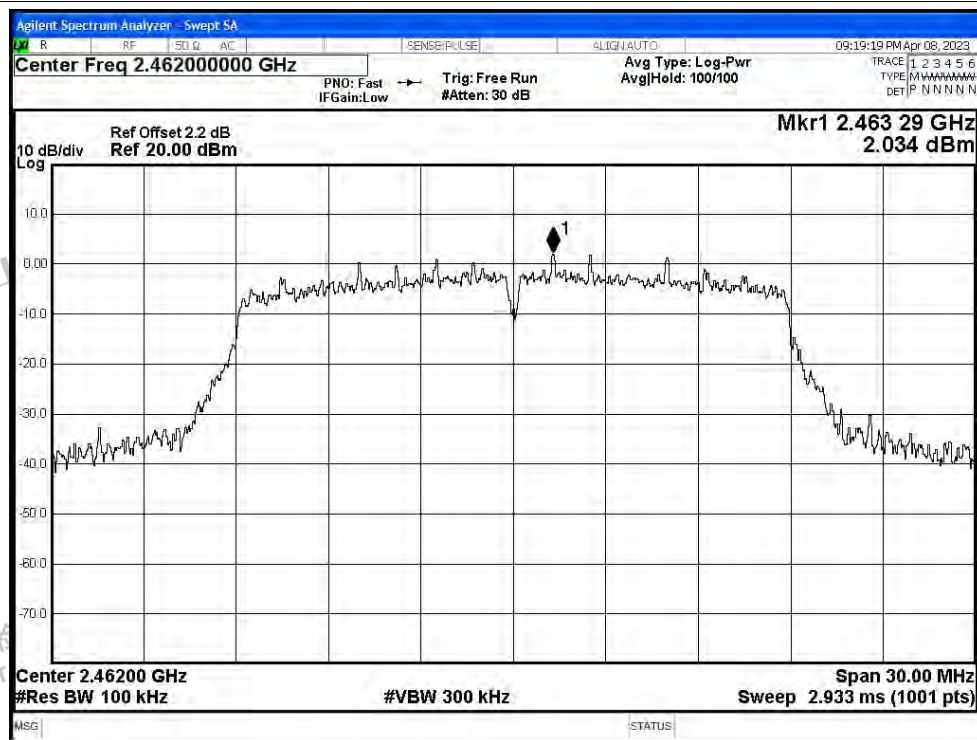


Band Edge NVNT n20 2412MHz Ant1 Emission

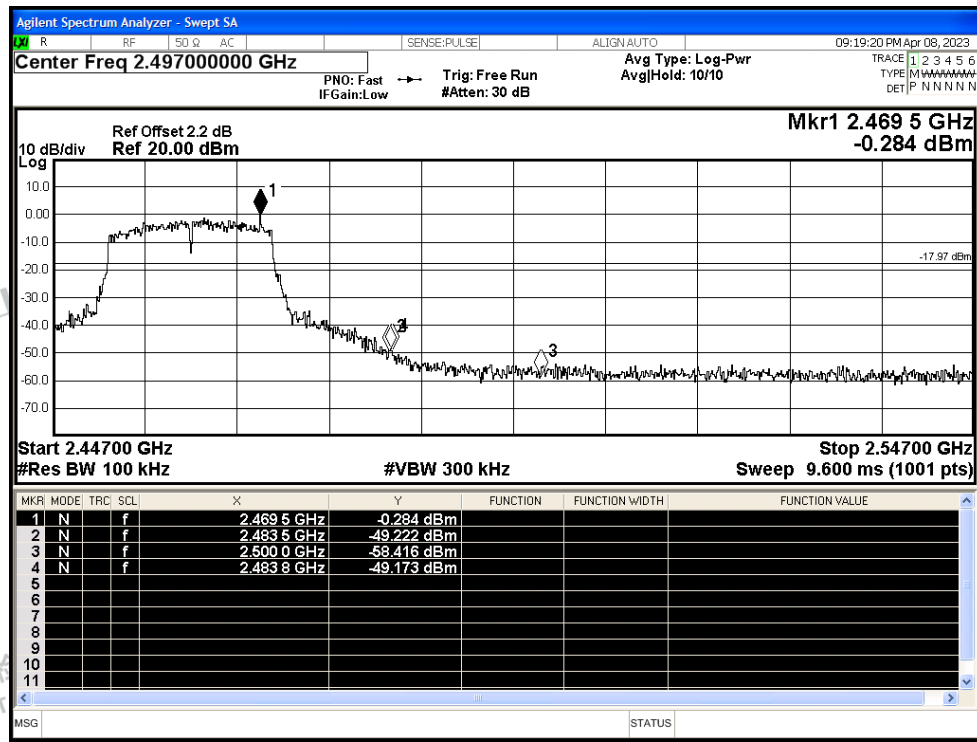




Band Edge NVNT n20 2462MHz Ant1 Ref

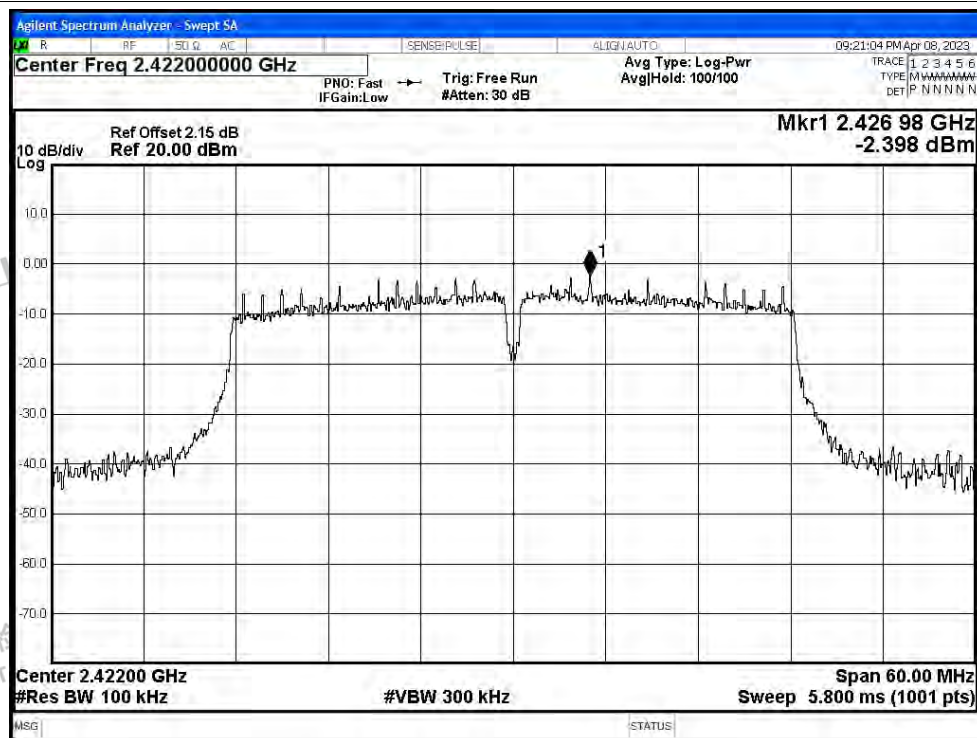


Band Edge NVNT n20 2462MHz Ant1 Emission

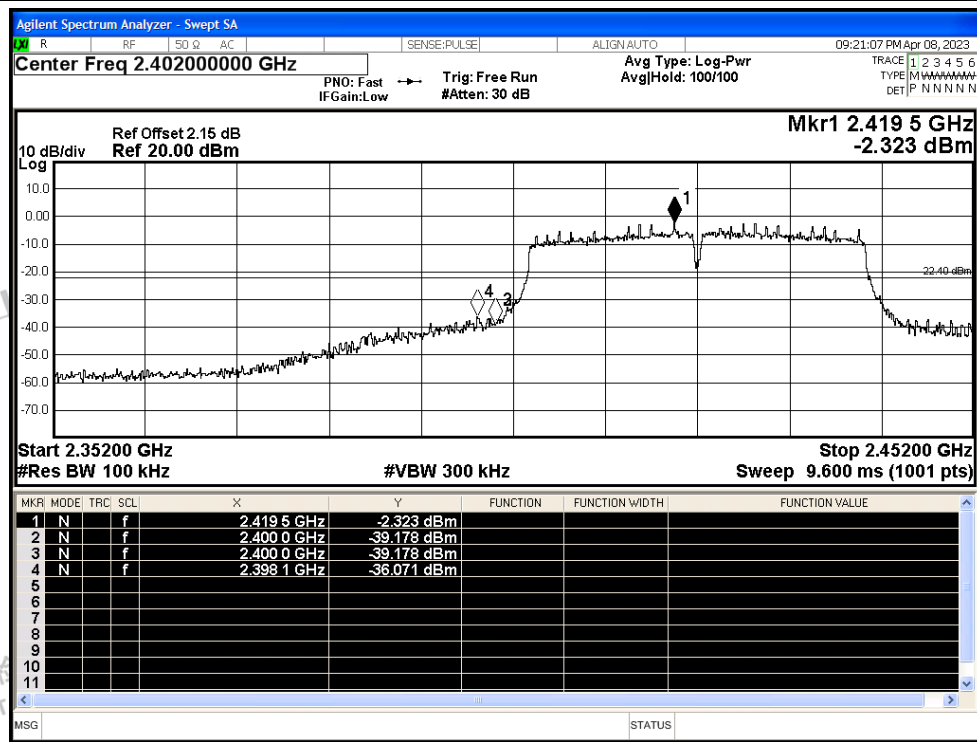




Band Edge NVNT n40 2422MHz Ant1 Ref

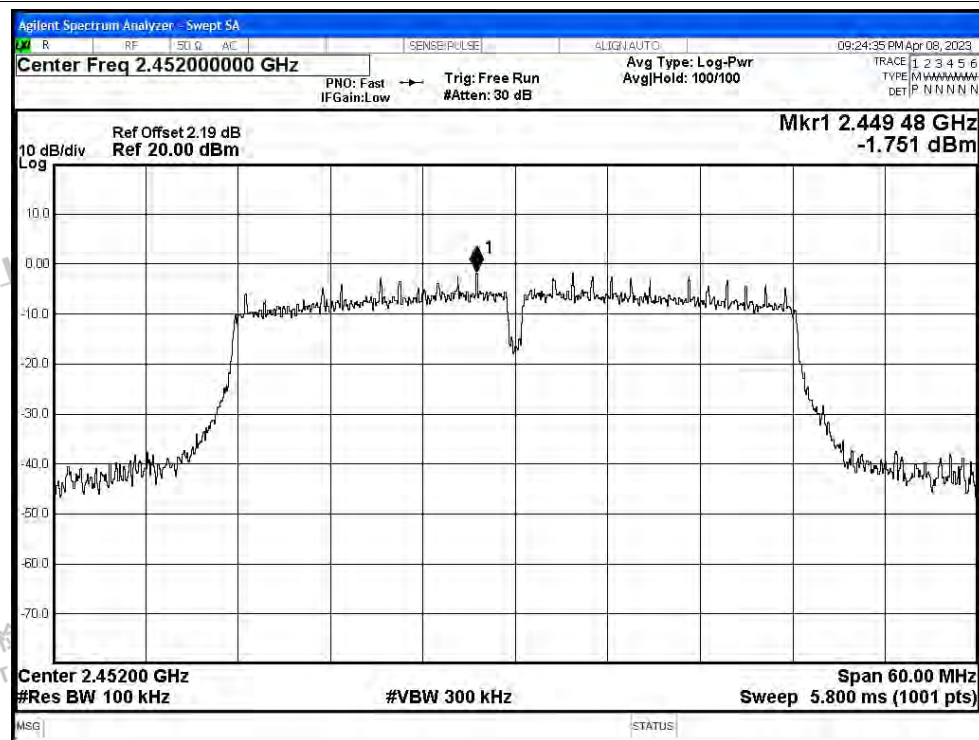


Band Edge NVNT n40 2422MHz Ant1 Emission

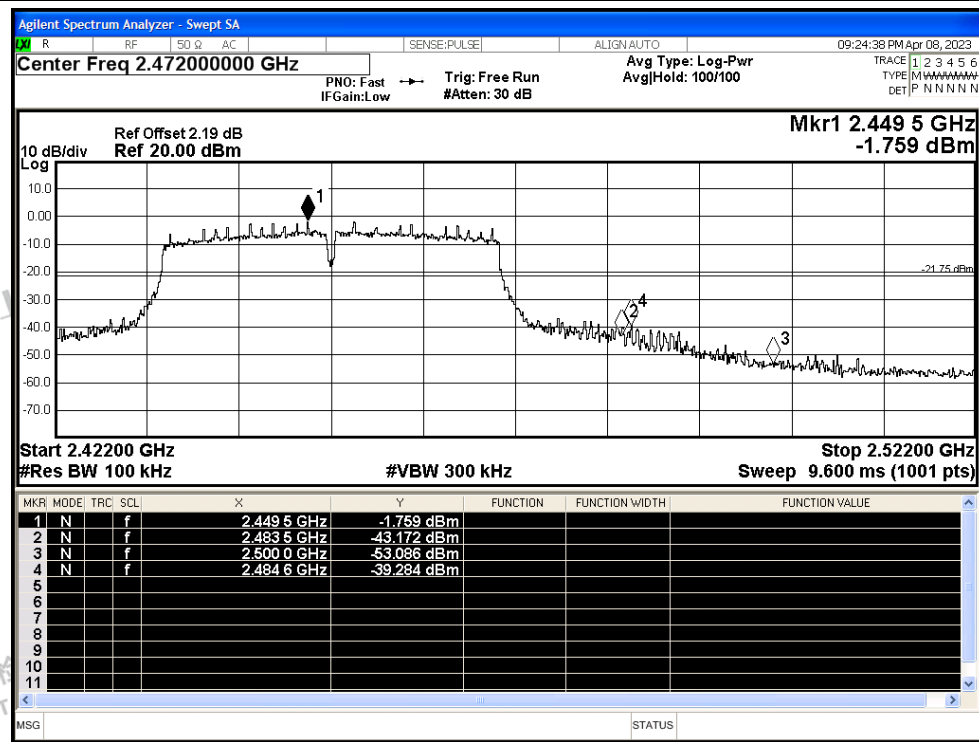




Band Edge NVNT n40 2452MHz Ant1 Ref



Band Edge NVNT n40 2452MHz Ant1 Emission

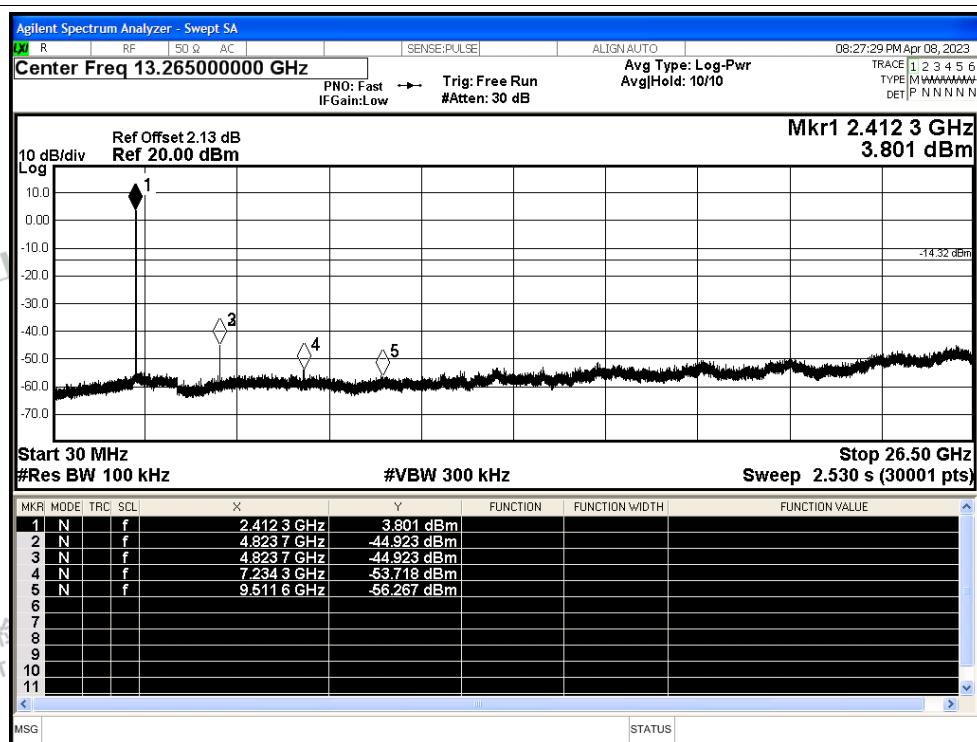




C.5 Conducted RF Spurious Emission

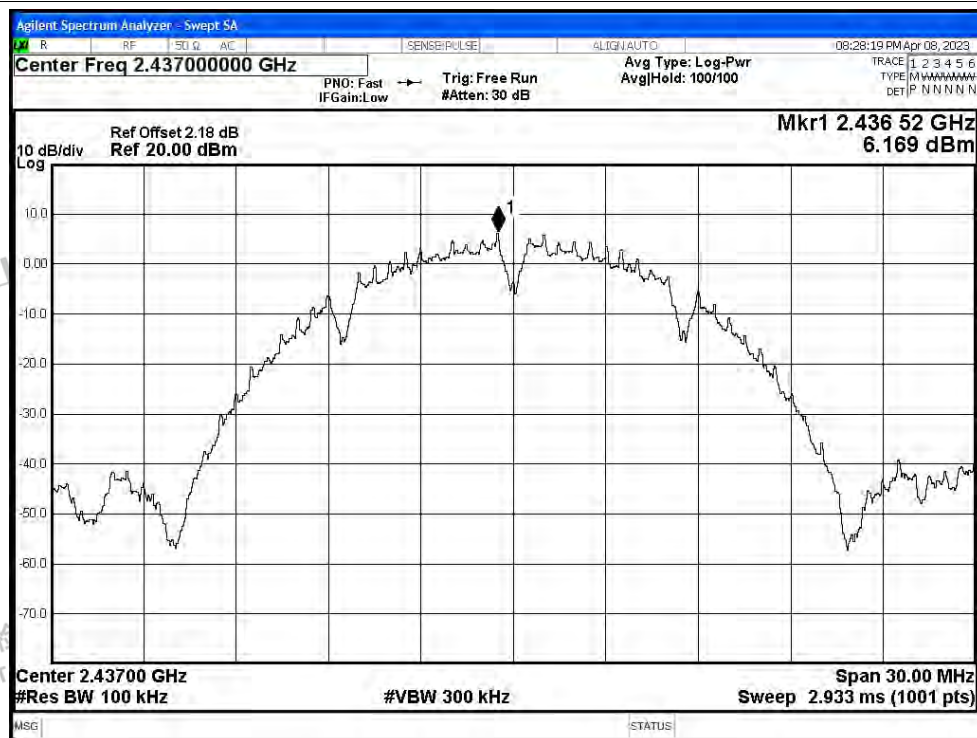
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant0	-50.6	-20	Pass
NVNT	b	2437	Ant0	-51.05	-20	Pass
NVNT	b	2462	Ant0	-51.1	-20	Pass
NVNT	g	2412	Ant0	-47.72	-20	Pass
NVNT	g	2437	Ant0	-48.34	-20	Pass
NVNT	g	2462	Ant0	-46.53	-20	Pass
NVNT	n20	2412	Ant0	-47.9	-20	Pass
NVNT	n20	2437	Ant0	-49.03	-20	Pass
NVNT	n20	2462	Ant0	-46.9	-20	Pass
NVNT	n40	2422	Ant0	-43.45	-20	Pass
NVNT	n40	2437	Ant0	-43.83	-20	Pass
NVNT	n40	2452	Ant0	-43.34	-20	Pass



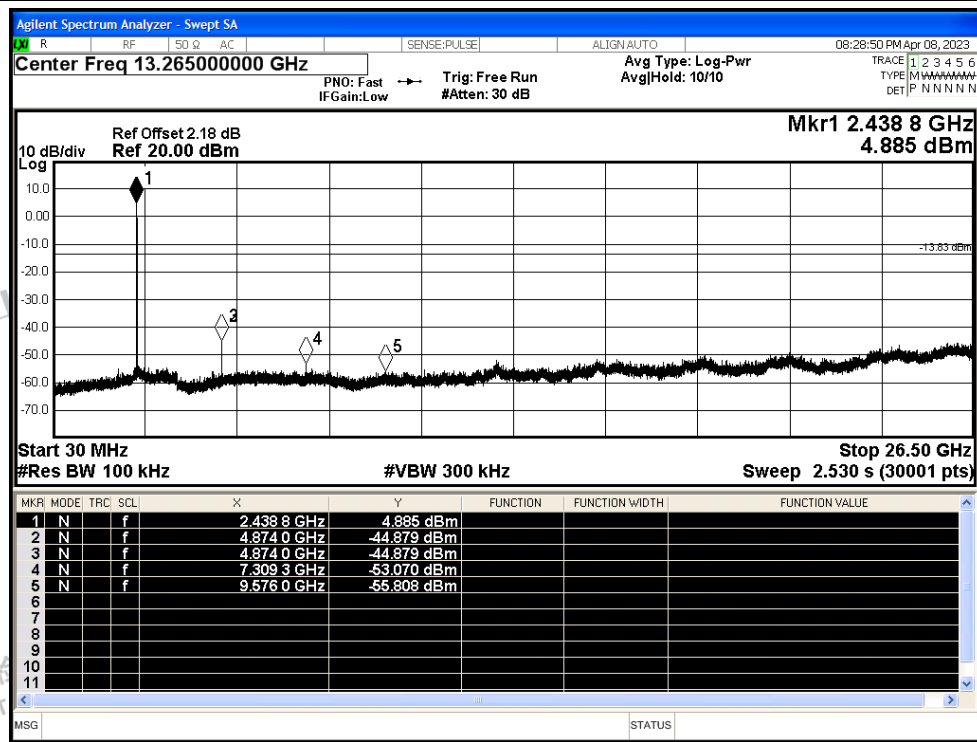




Tx. Spurious NVNT b 2437MHz Ant0 Ref

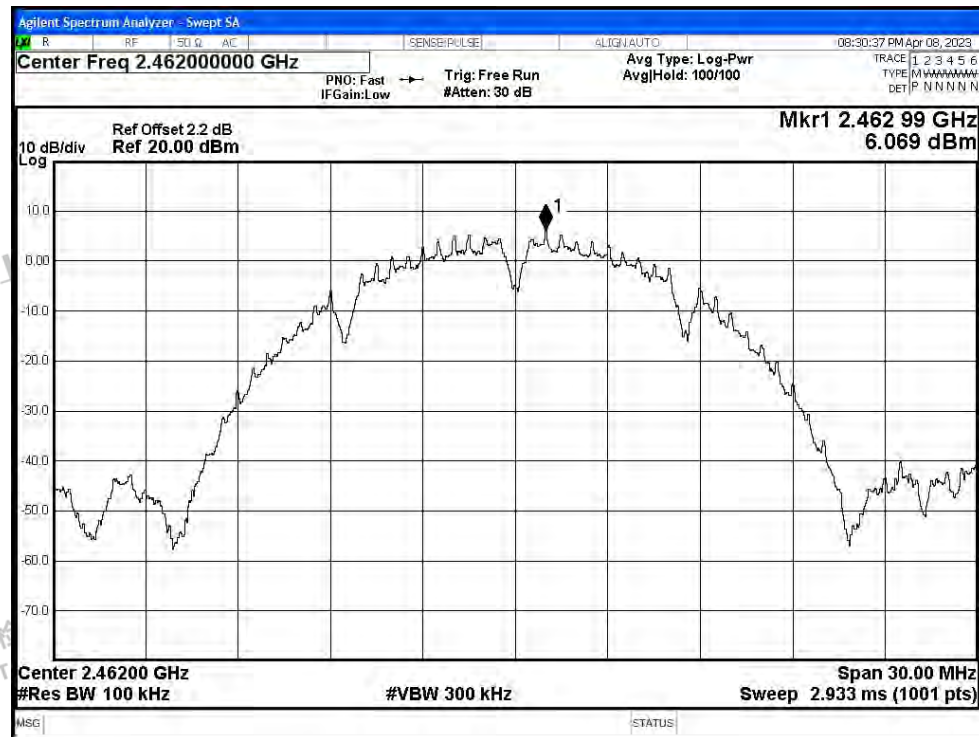


Tx. Spurious NVNT b 2437MHz Ant0 Emission

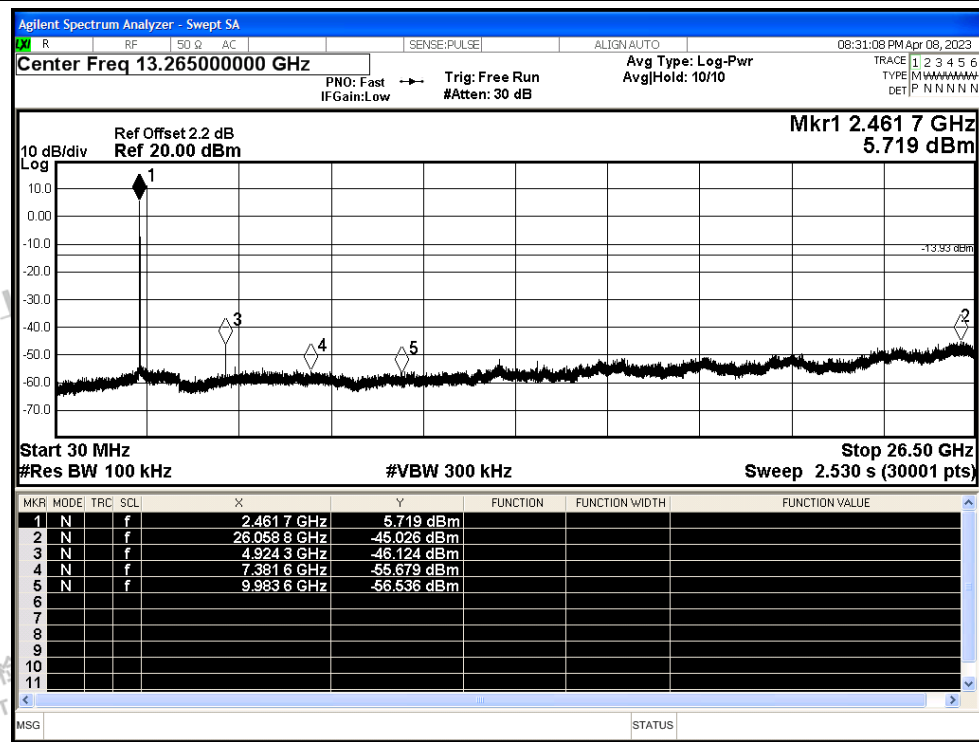




Tx. Spurious NVNT b 2462MHz Ant0 Ref

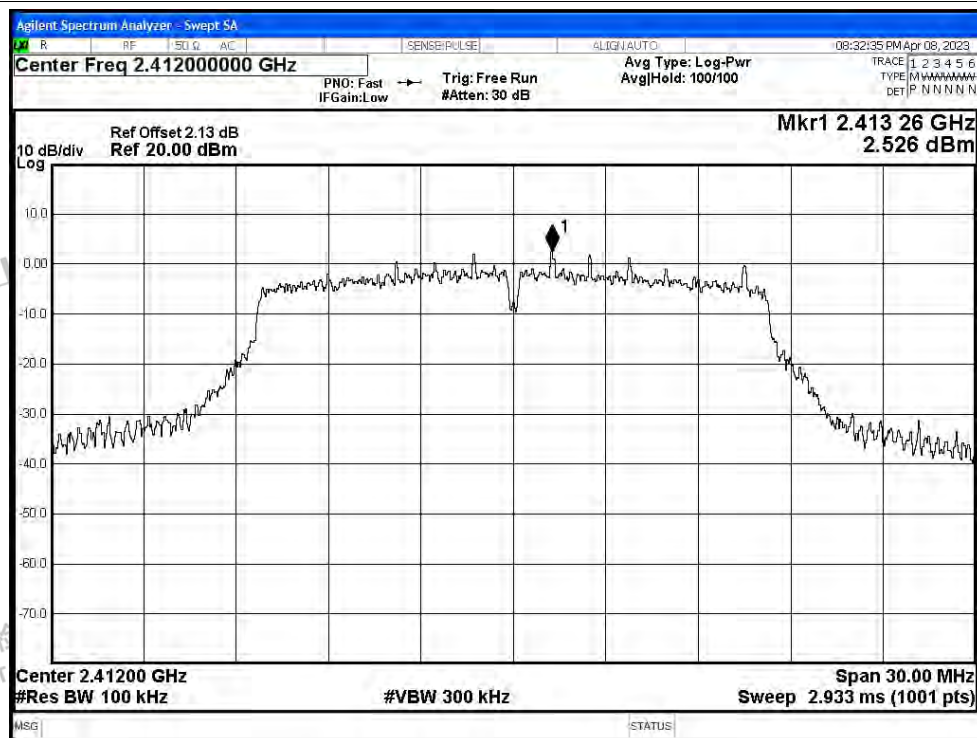


Tx. Spurious NVNT b 2462MHz Ant0 Emission

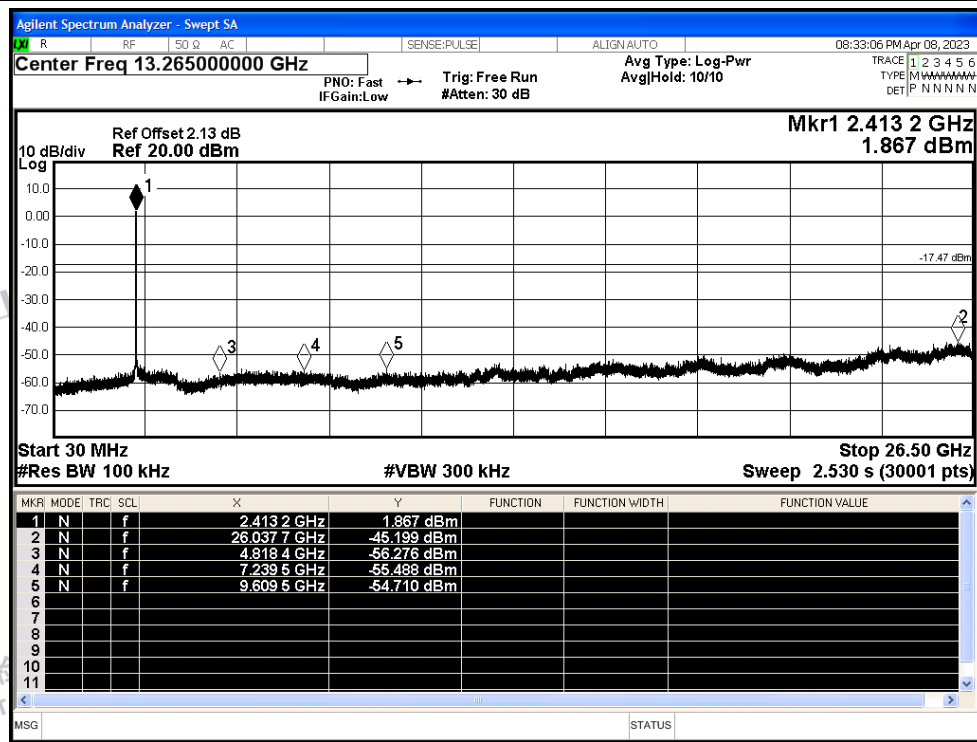




Tx. Spurious NVNT g 2412MHz Ant0 Ref

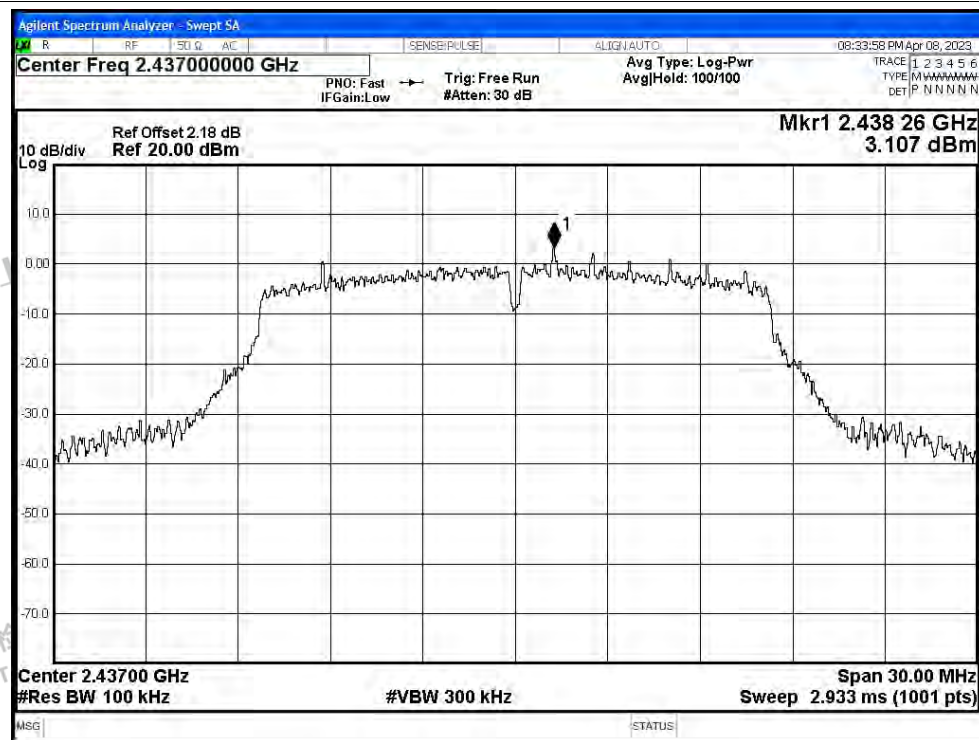


Tx. Spurious NVNT g 2412MHz Ant0 Emission

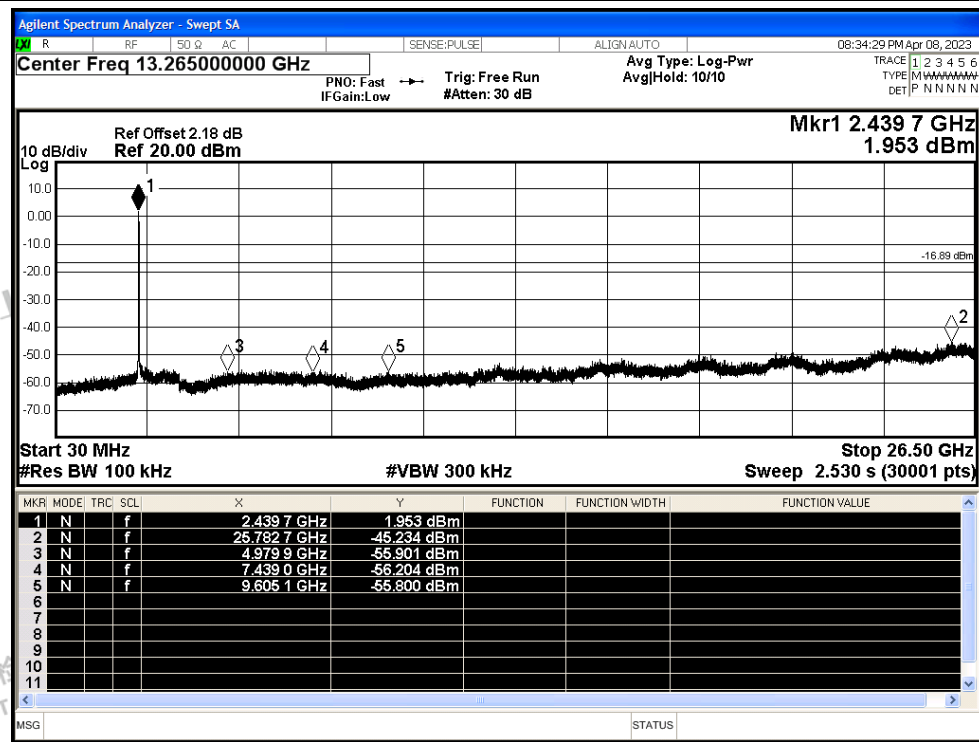




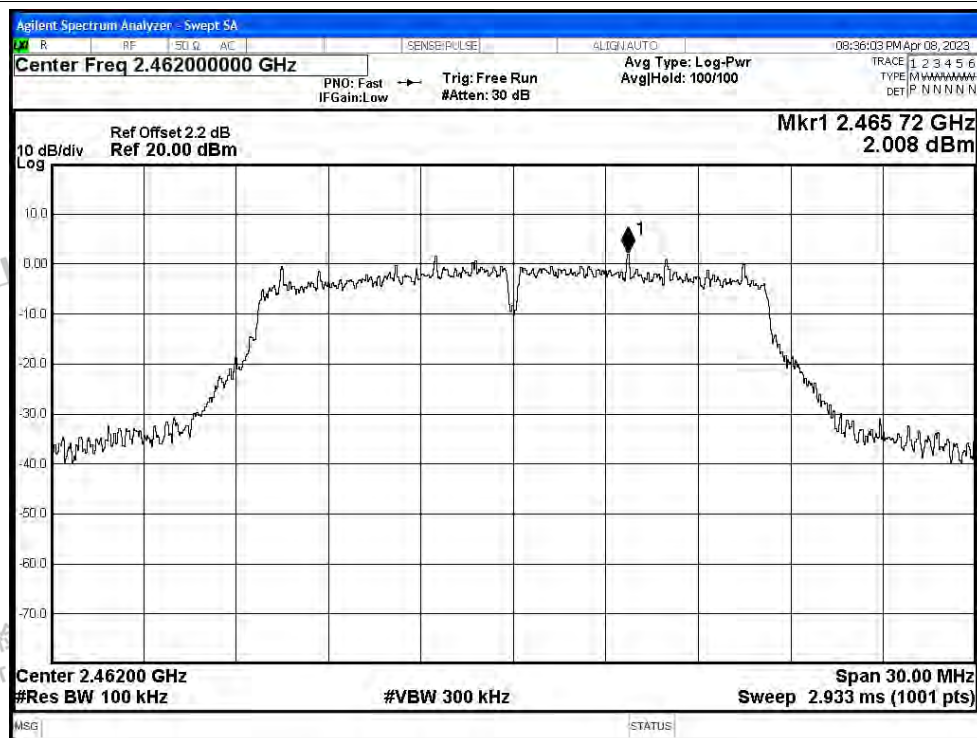
Tx. Spurious NVNT g 2437MHz Ant0 Ref



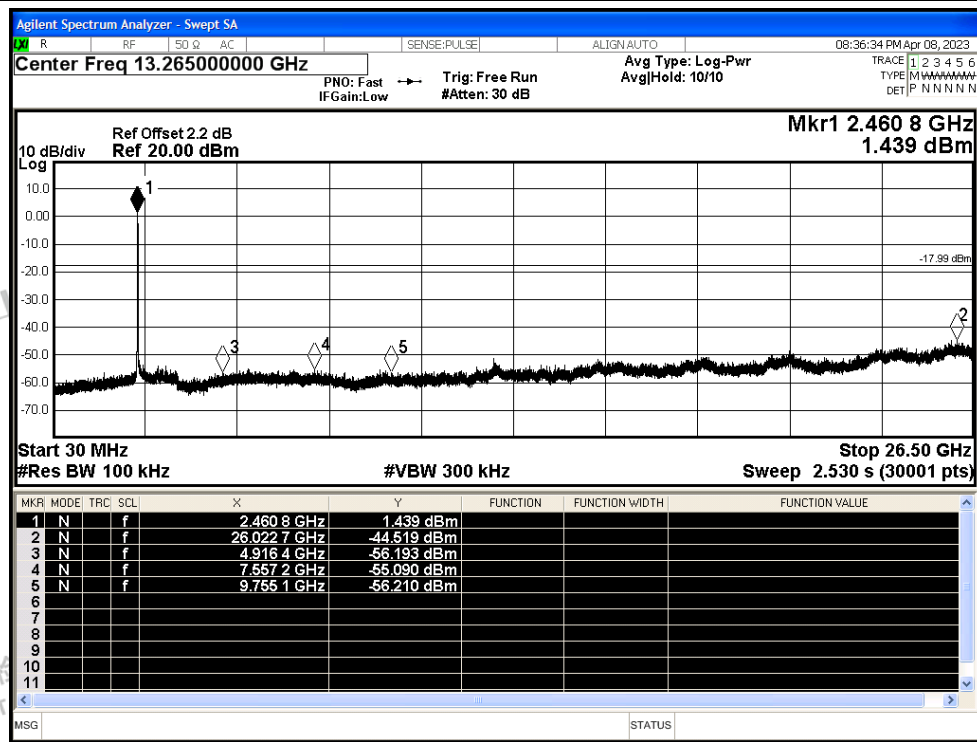
Tx. Spurious NVNT g 2437MHz Ant0 Emission



Tx. Spurious NVNT g 2462MHz Ant0 Ref

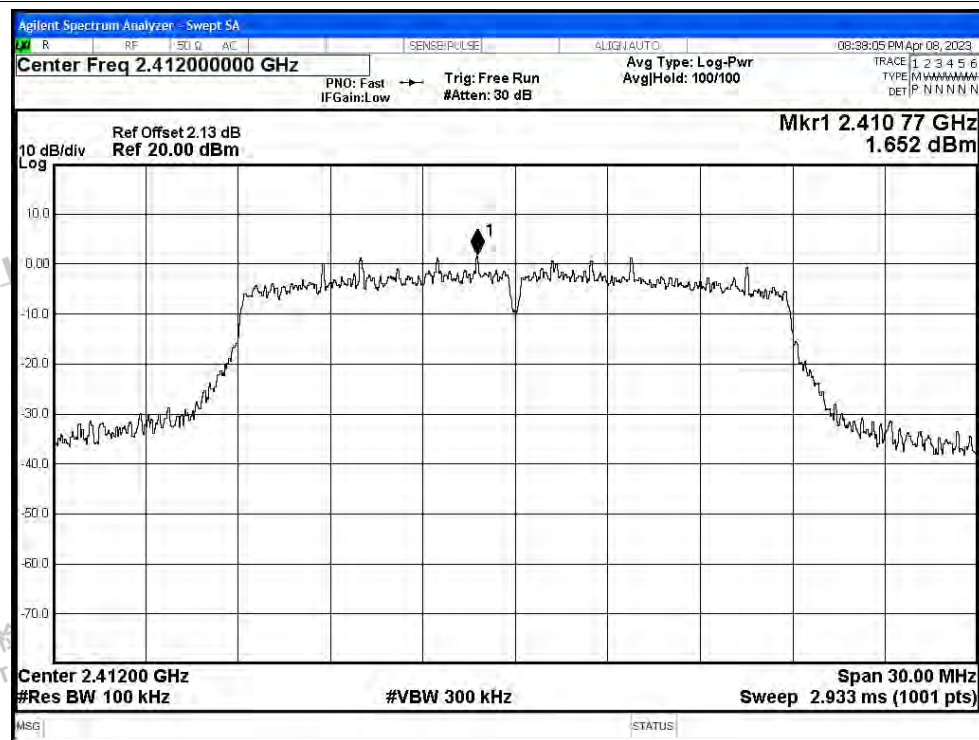


Tx. Spurious NVNT g 2462MHz Ant0 Emission

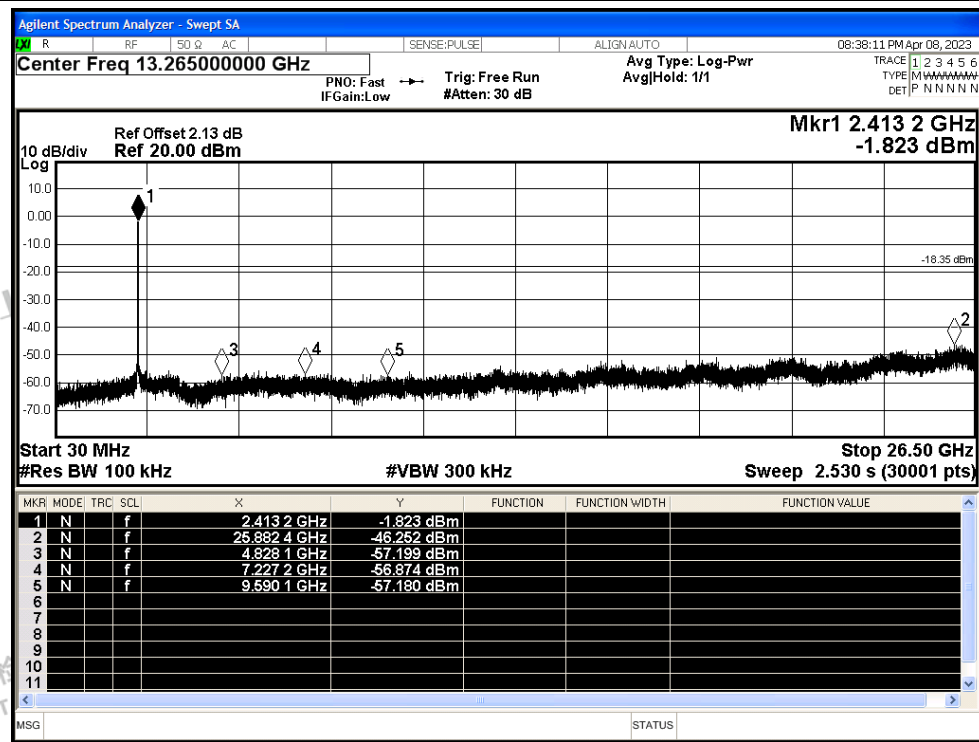




Tx. Spurious NVNT n20 2412MHz Ant0 Ref

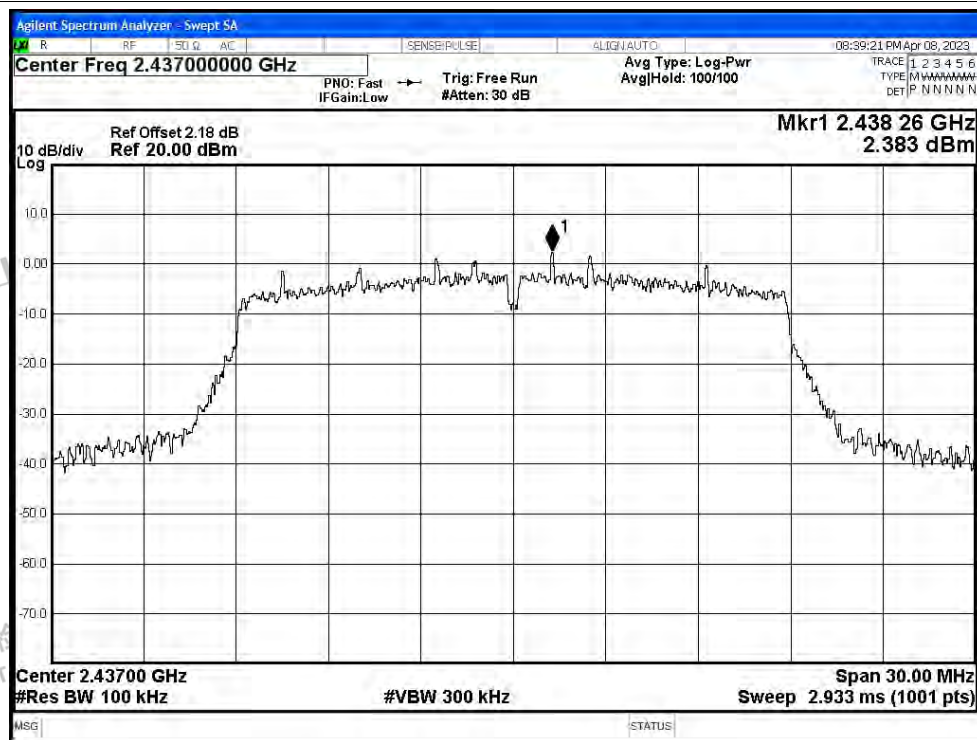


Tx. Spurious NVNT n20 2412MHz Ant0 Emission

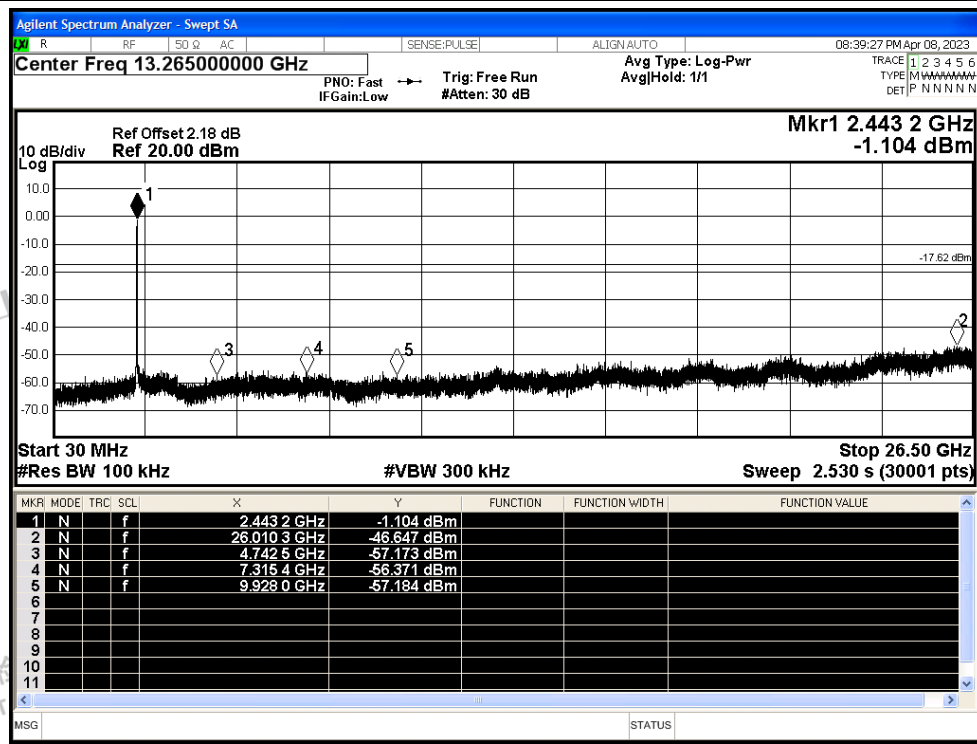




Tx. Spurious NVNT n20 2437MHz Ant0 Ref

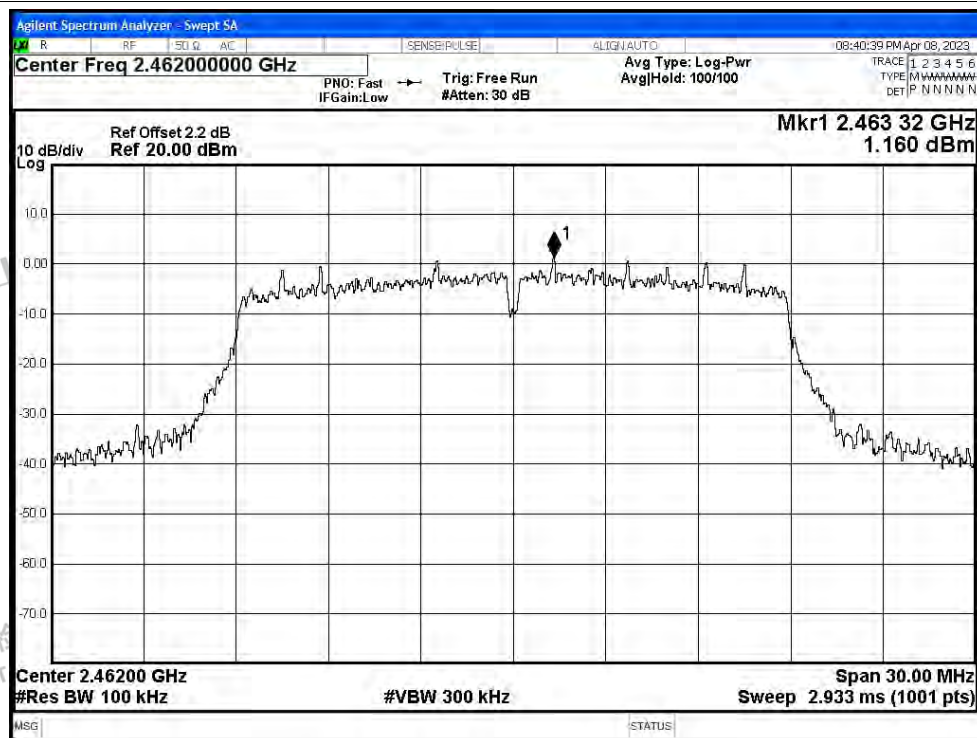


Tx. Spurious NVNT n20 2437MHz Ant0 Emission

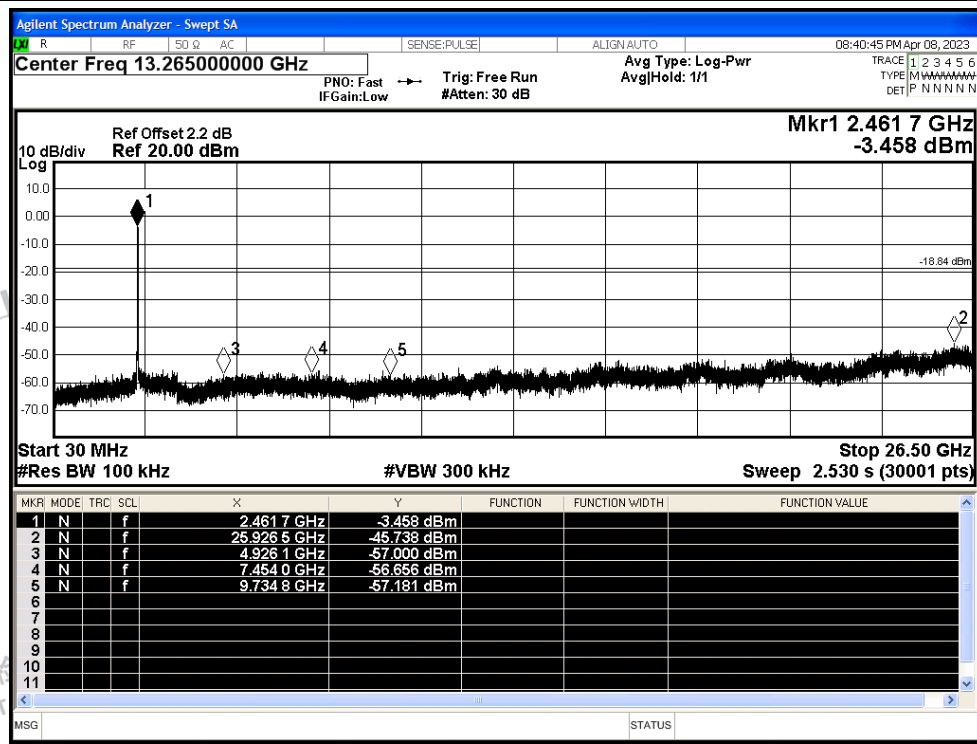




Tx. Spurious NVNT n20 2462MHz Ant0 Ref

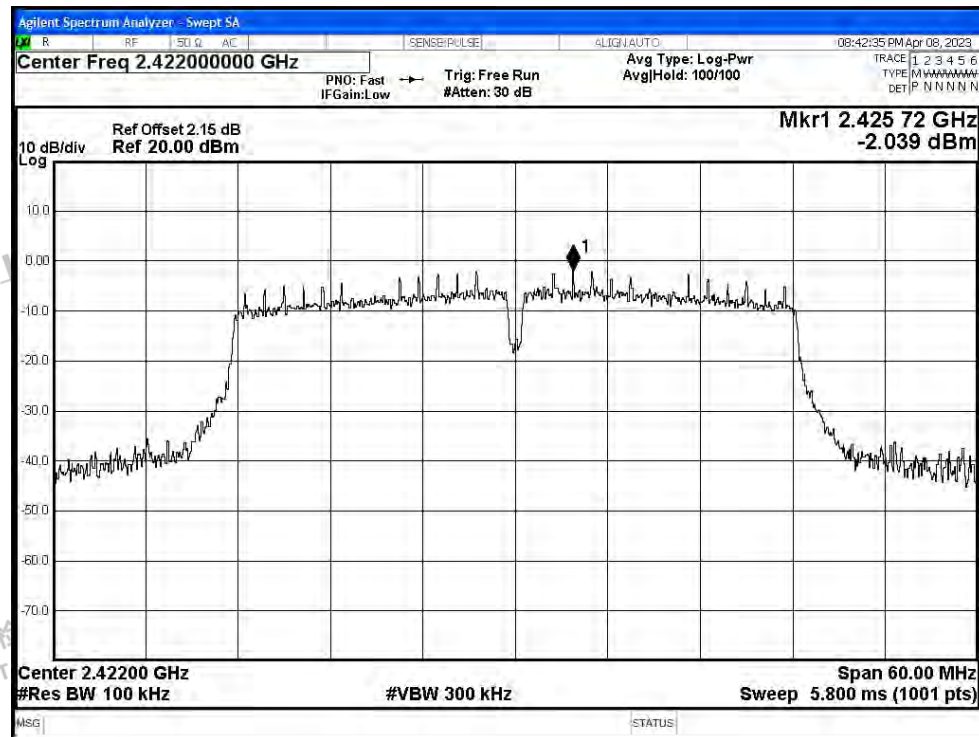


Tx. Spurious NVNT n20 2462MHz Ant0 Emission

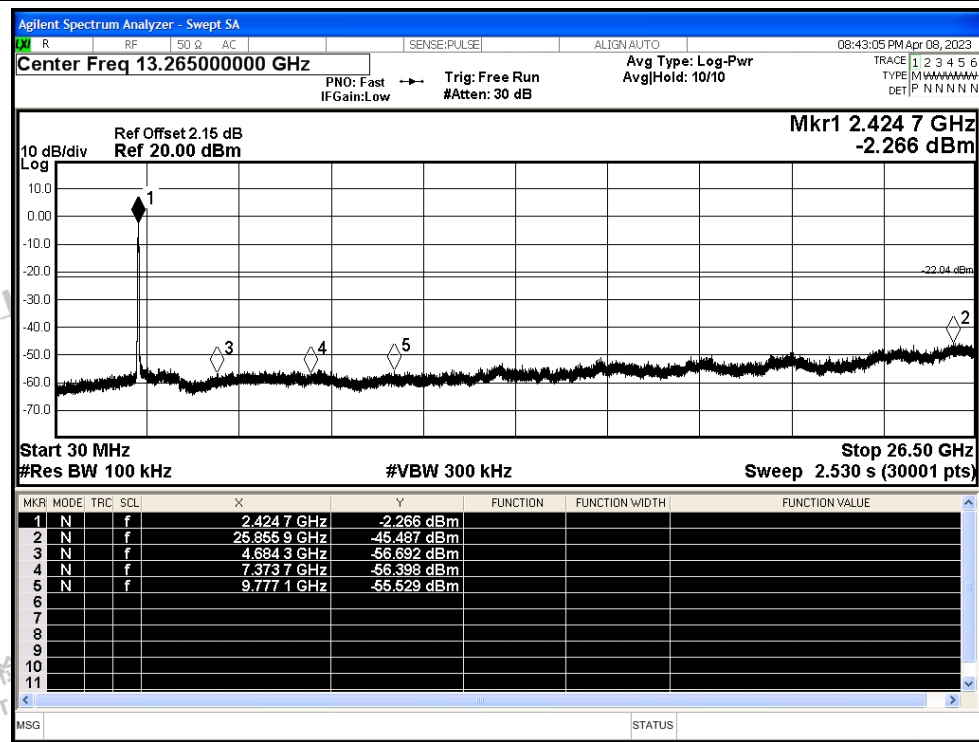




Tx. Spurious NVNT n40 2422MHz Ant0 Ref

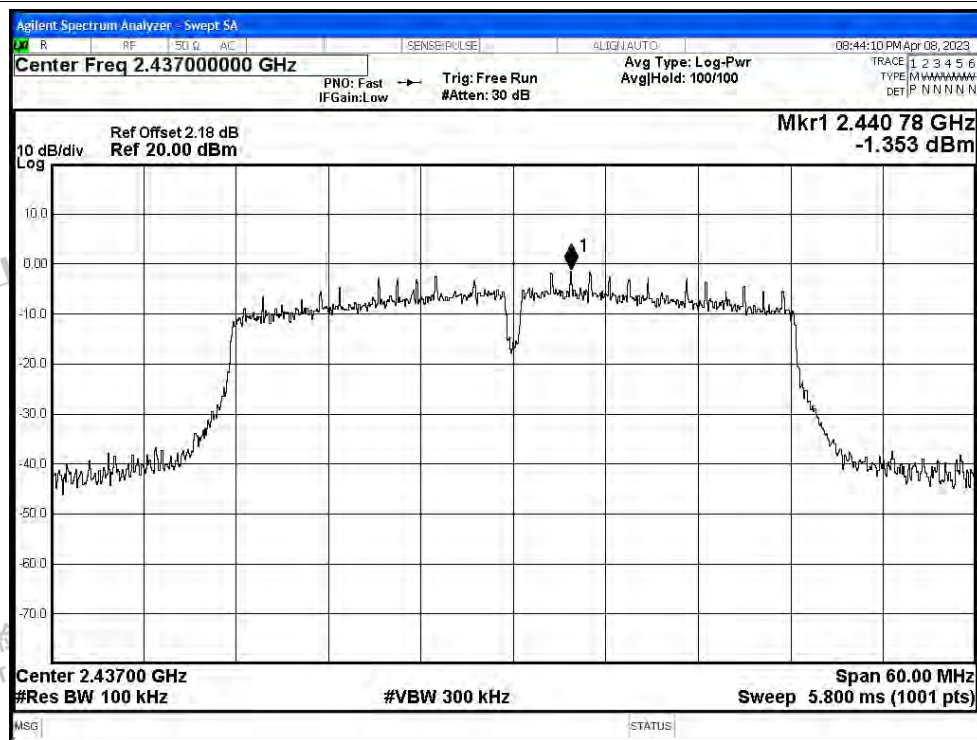


Tx. Spurious NVNT n40 2422MHz Ant0 Emission

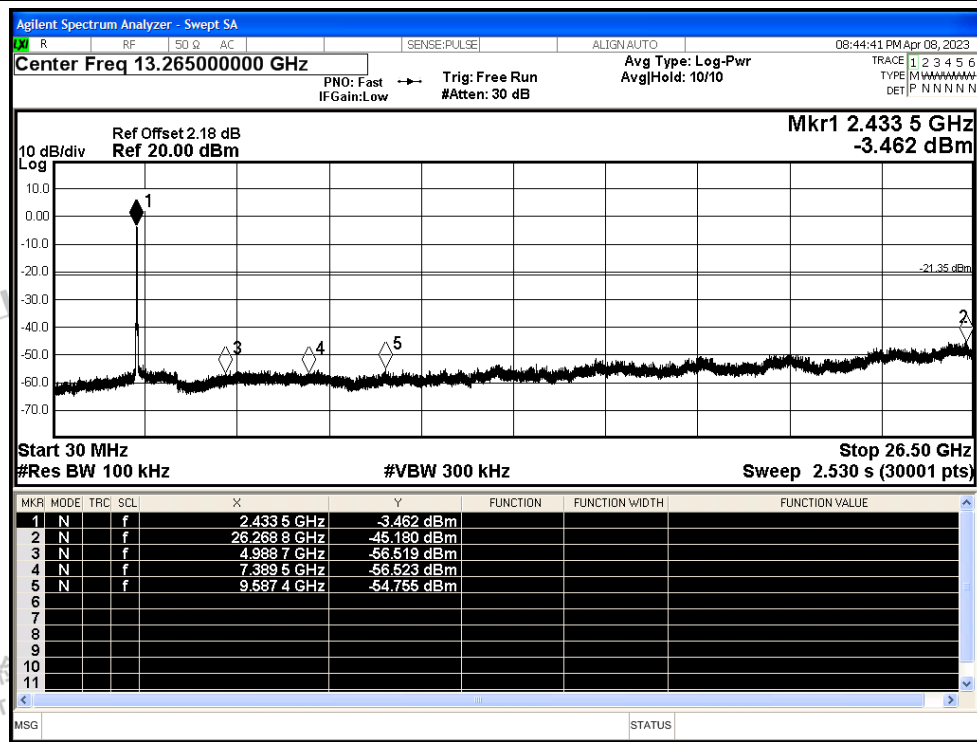




Tx. Spurious NVNT n40 2437MHz Ant0 Ref

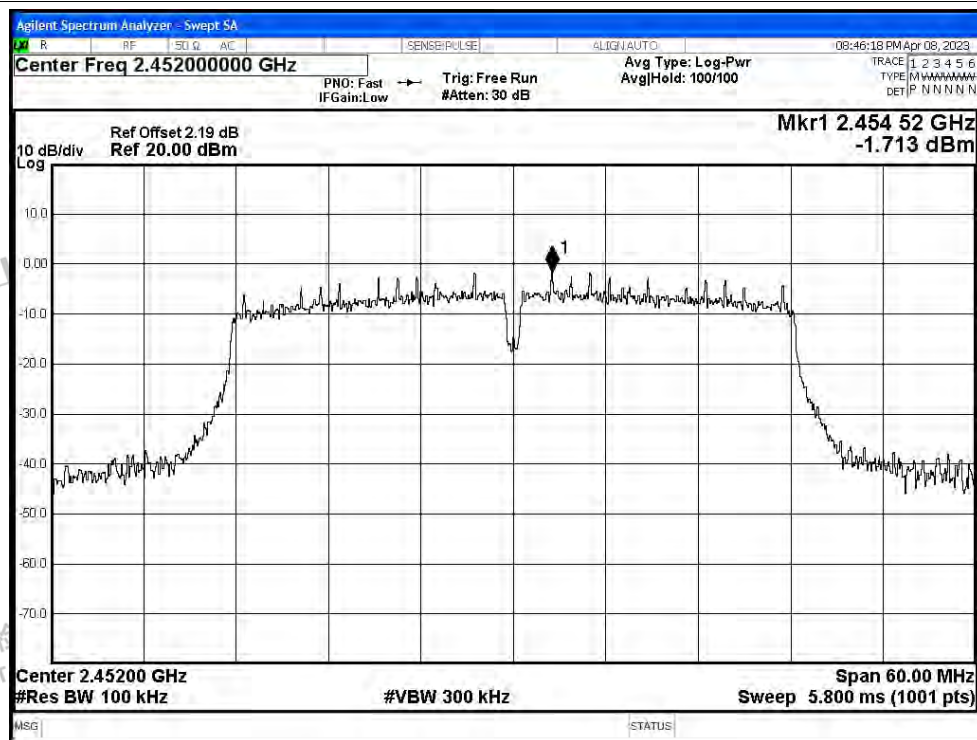


Tx. Spurious NVNT n40 2437MHz Ant0 Emission

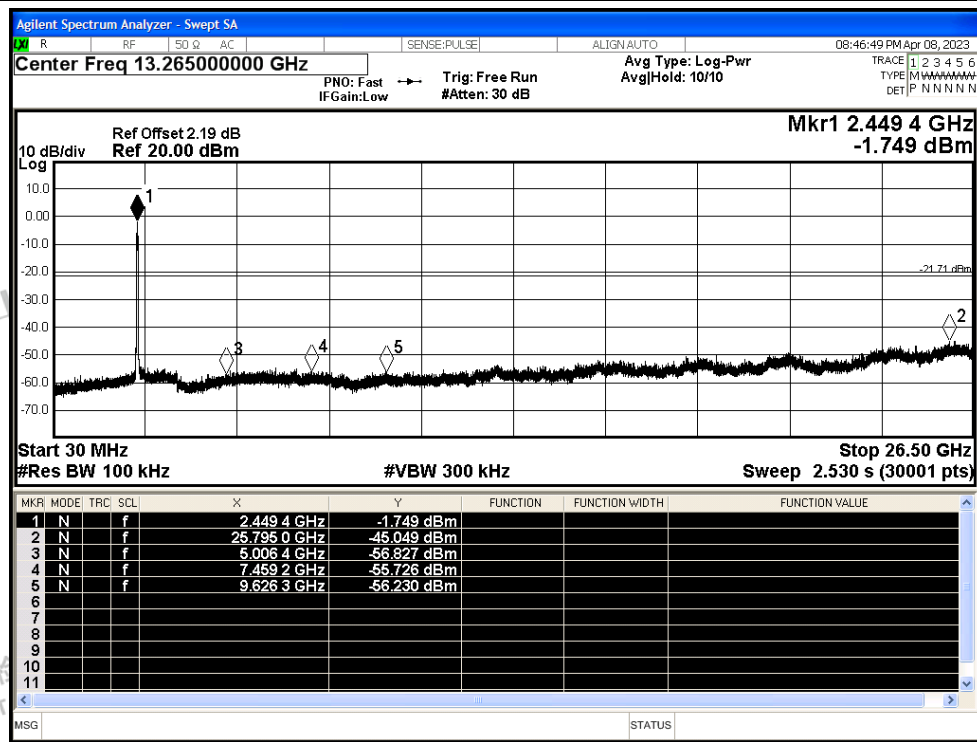




Tx. Spurious NVNT n40 2452MHz Ant0 Ref



Tx. Spurious NVNT n40 2452MHz Ant0 Emission





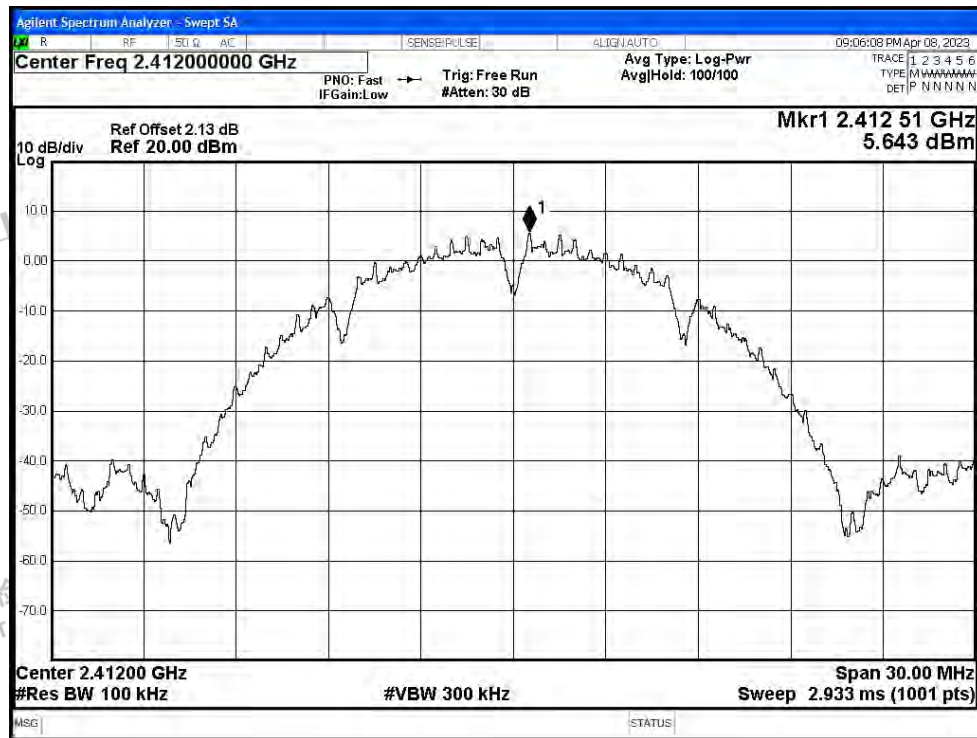
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-49.92	-20	Pass
NVNT	b	2437	Ant1	-51.64	-20	Pass
NVNT	b	2462	Ant1	-51.45	-20	Pass
NVNT	g	2412	Ant1	-46.52	-20	Pass
NVNT	g	2437	Ant1	-48.22	-20	Pass
NVNT	g	2462	Ant1	-47.59	-20	Pass
NVNT	n20	2412	Ant1	-45.67	-20	Pass
NVNT	n20	2437	Ant1	-47.73	-20	Pass
NVNT	n20	2462	Ant1	-48.85	-20	Pass
NVNT	n40	2422	Ant1	-42.14	-20	Pass
NVNT	n40	2437	Ant1	-43.68	-20	Pass
NVNT	n40	2452	Ant1	-43.35	-20	Pass



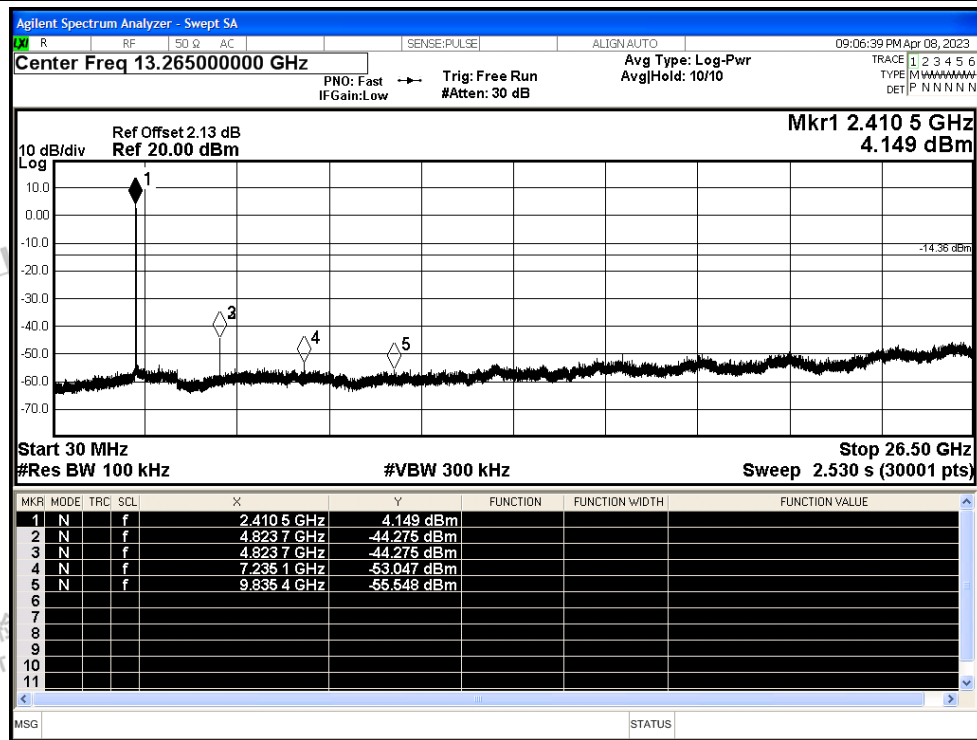


Test Graphs

Tx. Spurious NVNT b 2412MHz Ant1 Ref

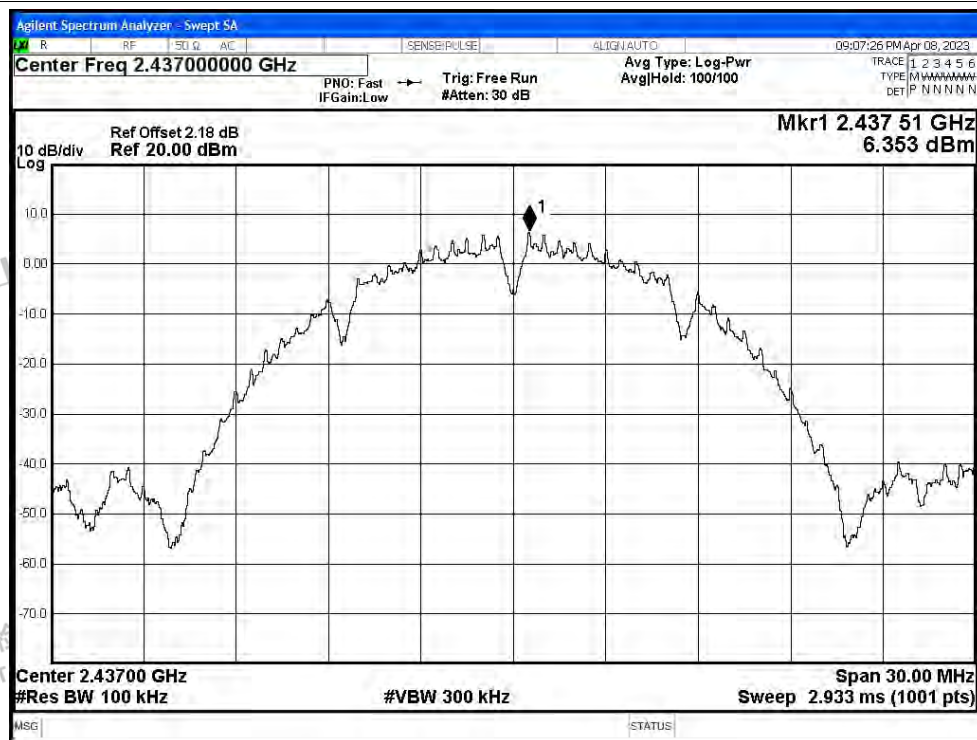


Tx. Spurious NVNT b 2412MHz Ant1 Emission





Tx. Spurious NVNT b 2437MHz Ant1 Ref



Tx. Spurious NVNT b 2437MHz Ant1 Emission

