

FCC Appendix RF Test Data for 2.4G WIFI

FCC ID : 2BG9Y-MODELXXXPXXX

Company : Hyatta Digital Technology Co., Ltd.

EUT : Portable Data Terminal

Model Number : Model 7

Report No. : CTA26052902019

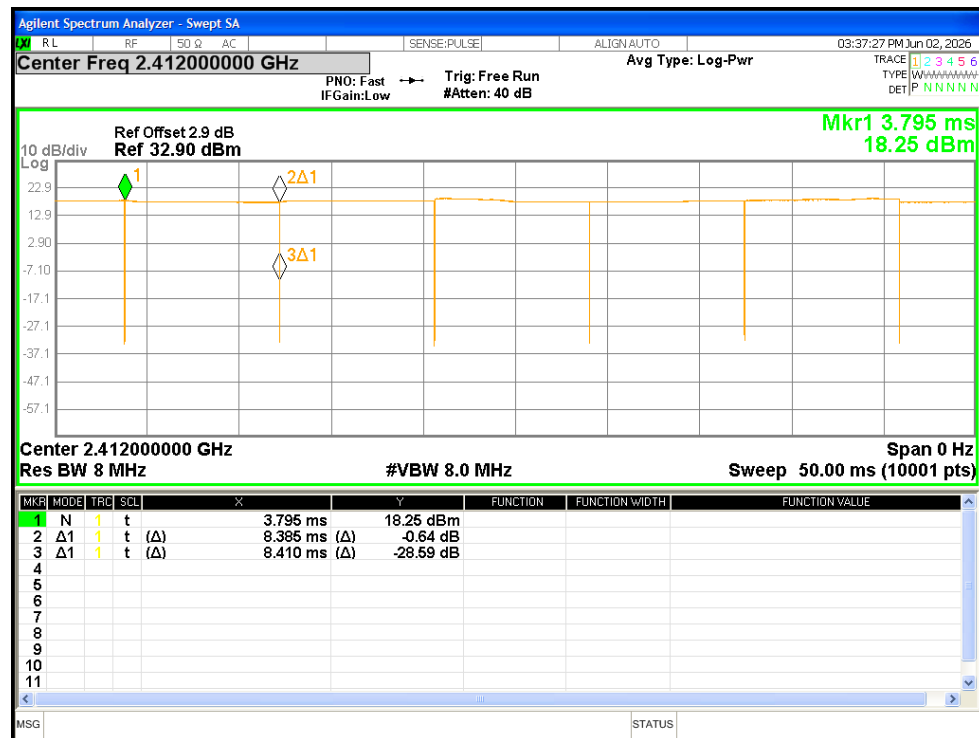
Reviewed By : Eric Wang

Duty Cycle

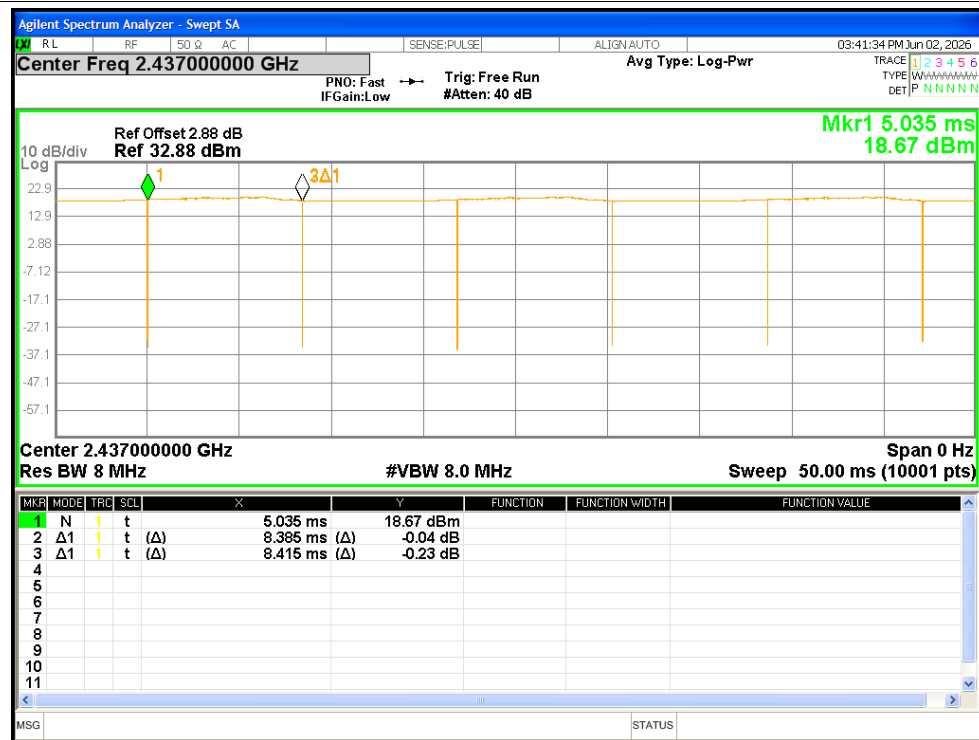
Condition	Mode	Frequency (MHz)	On Time (ms)	Period (ms)	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	8.385	8.41	99.7	0.01	0.12
NVNT	b	2437	8.385	8.415	99.64	0.02	0.12
NVNT	b	2462	8.385	8.415	99.64	0.02	0.12
NVNT	g	2412	1.392	1.428	97.48	0.11	0.72
NVNT	g	2437	1.392	1.428	97.48	0.11	0.72
NVNT	g	2462	1.392	1.428	97.48	0.11	0.72
NVNT	n20	2412	1.299	1.335	97.3	0.12	0.77
NVNT	n20	2437	1.299	1.335	97.3	0.12	0.77
NVNT	n20	2462	1.302	1.335	97.53	0.11	0.77
NVNT	n40	2422	0.648	0.682	95.01	0.22	1.54
NVNT	n40	2437	0.648	0.682	95.01	0.22	1.54
NVNT	n40	2452	0.65	0.684	95.03	0.22	1.54

Test Graphs

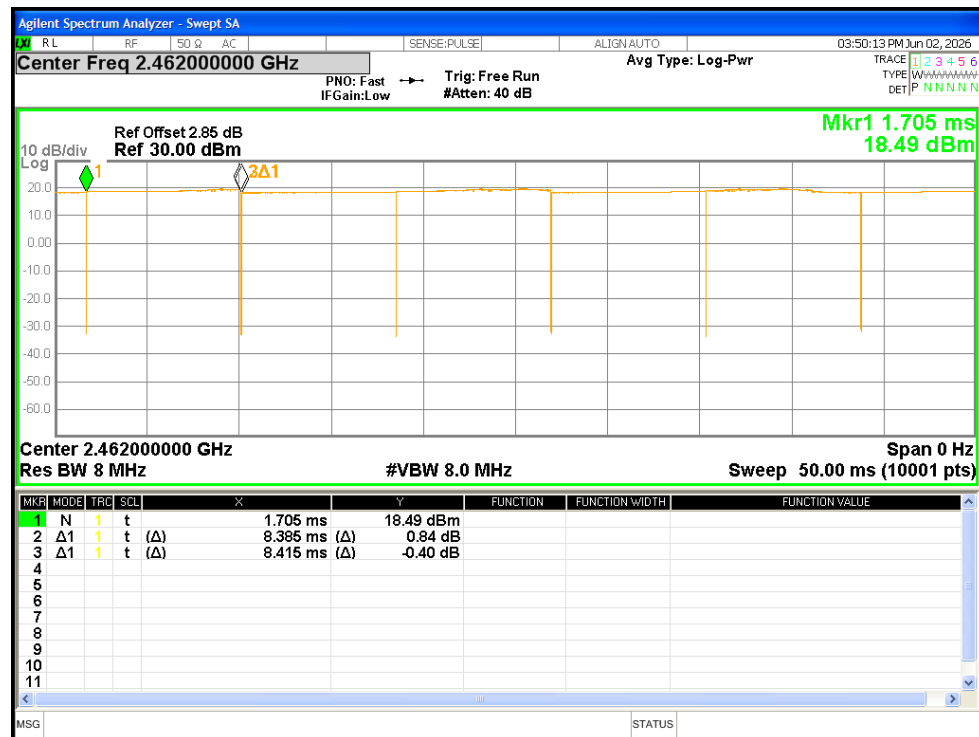
Duty Cycle NVNT b 2412MHz



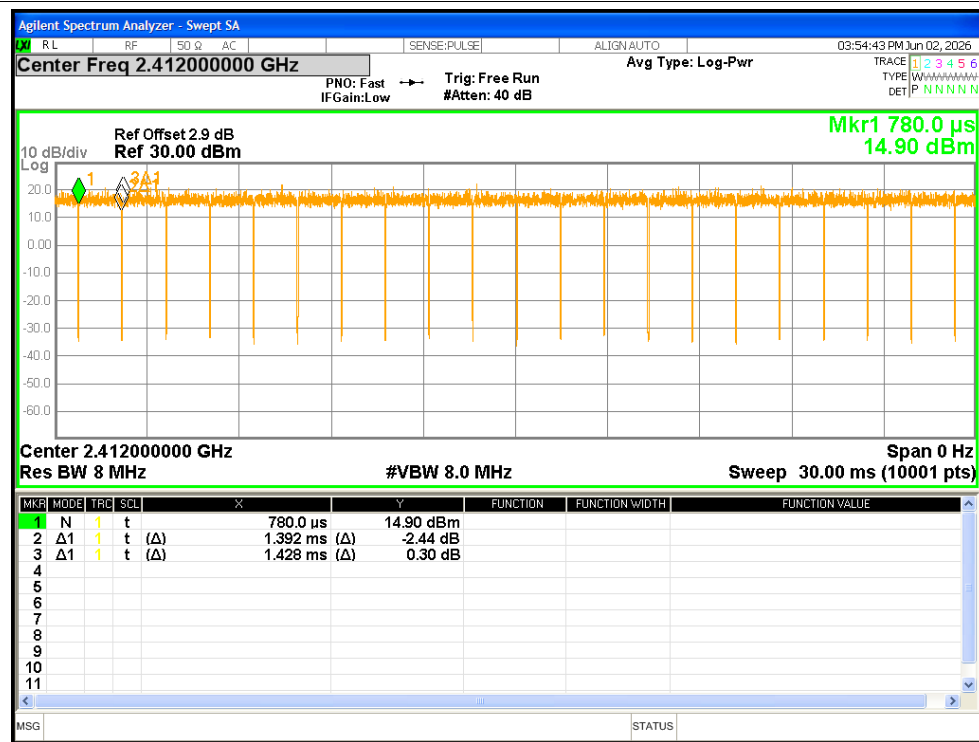
Duty Cycle NVNT b 2437MHz



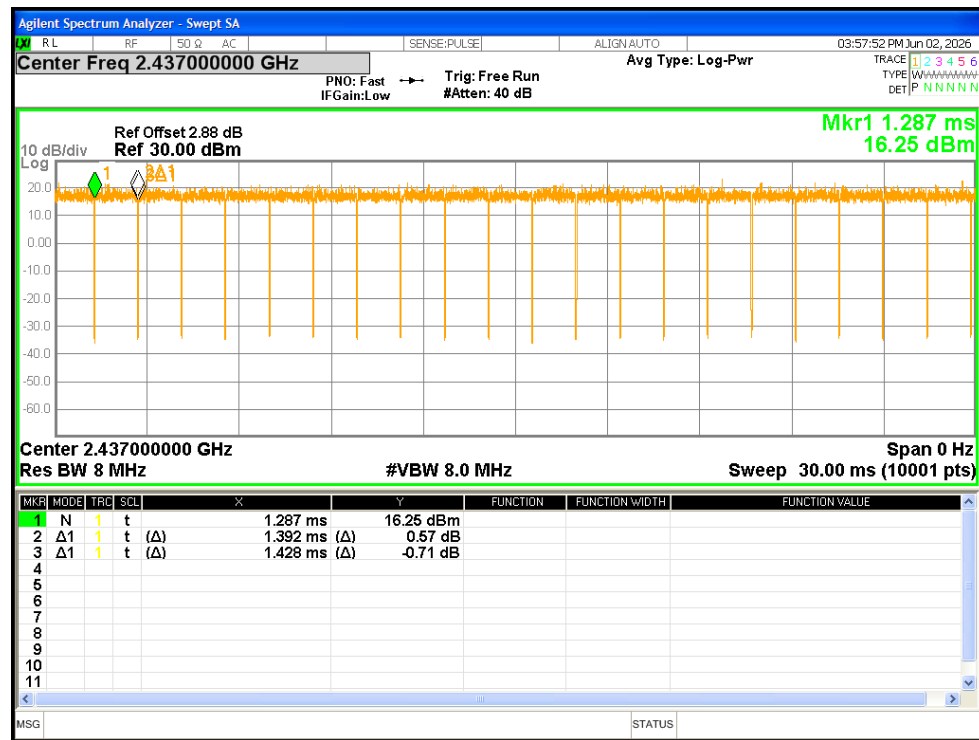
Duty Cycle NVNT b 2462MHz



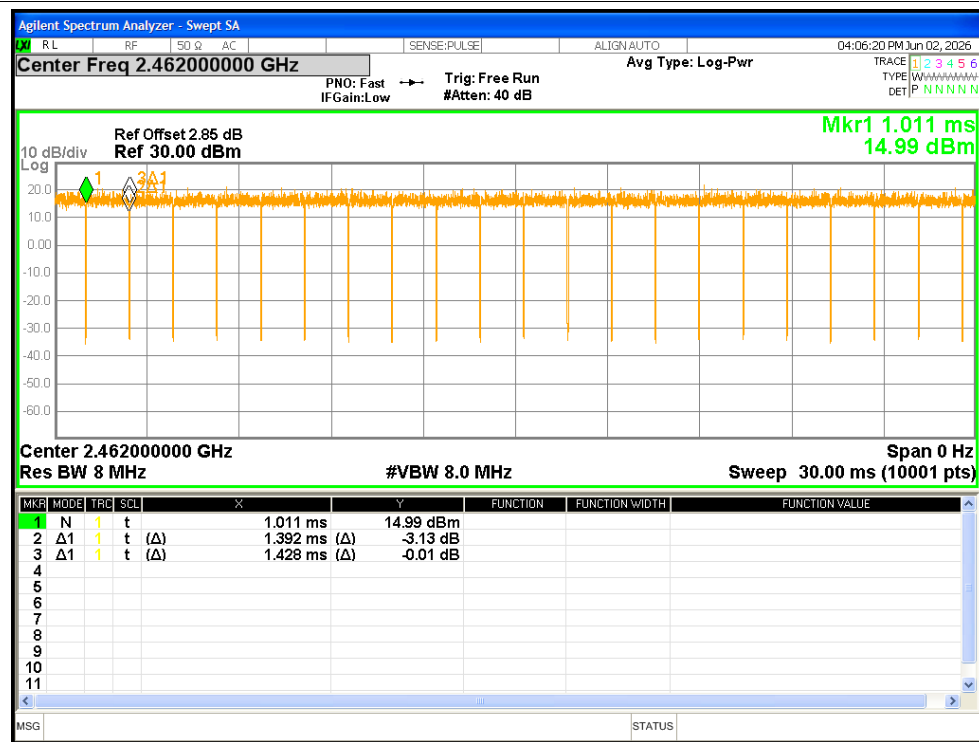
Duty Cycle NVNT g 2412MHz



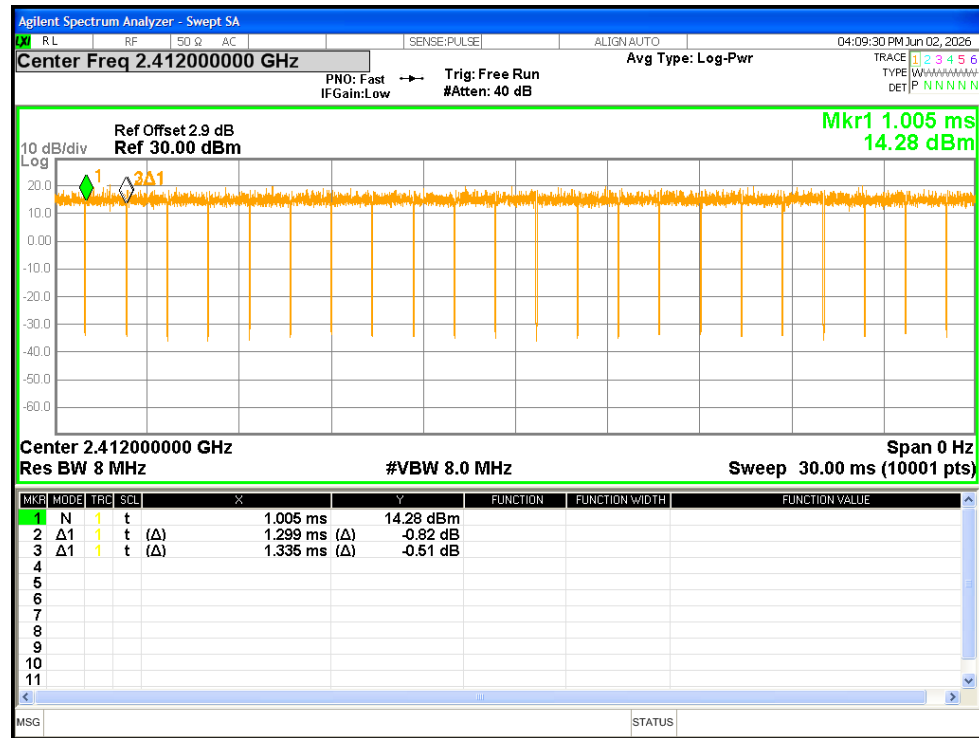
Duty Cycle NVNT g 2437MHz



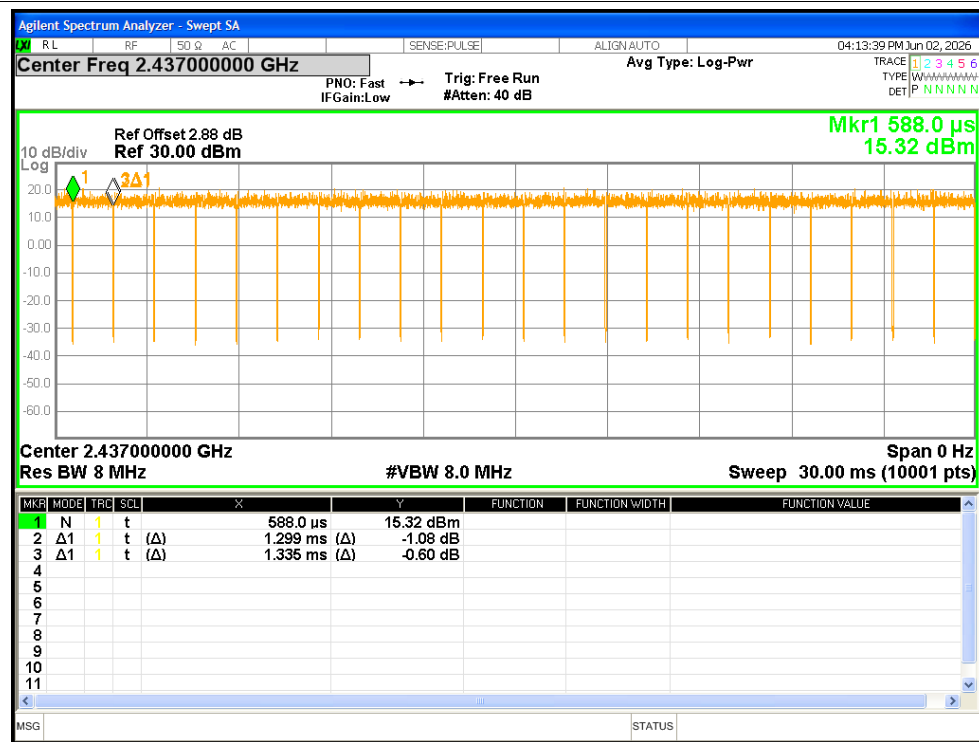
Duty Cycle NVNT g 2462MHz



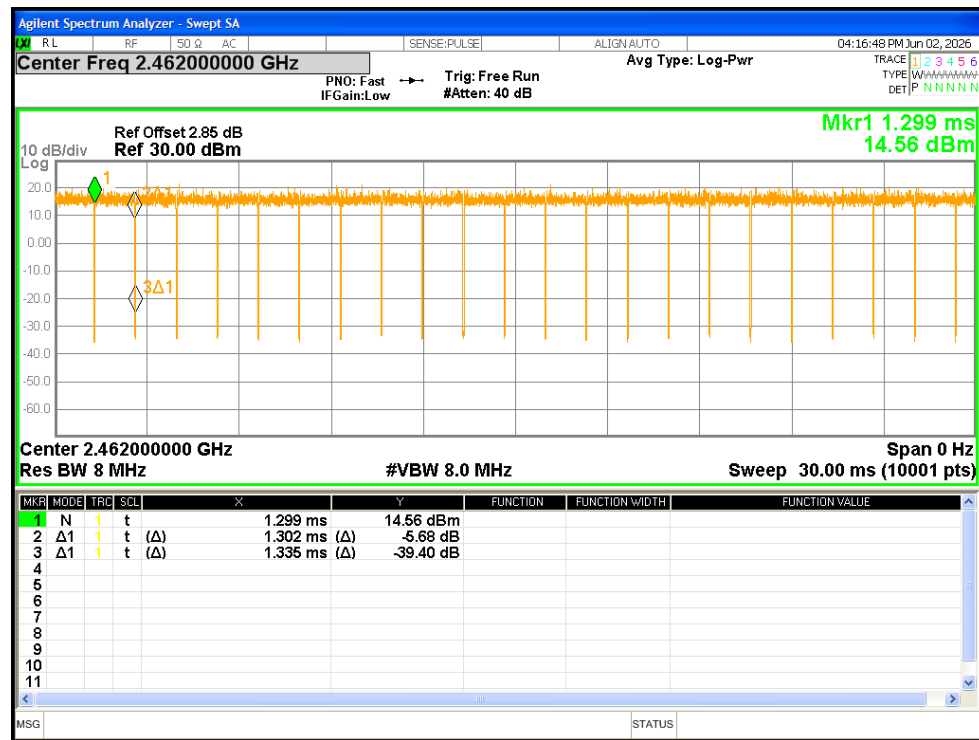
Duty Cycle NVNT n20 2412MHz



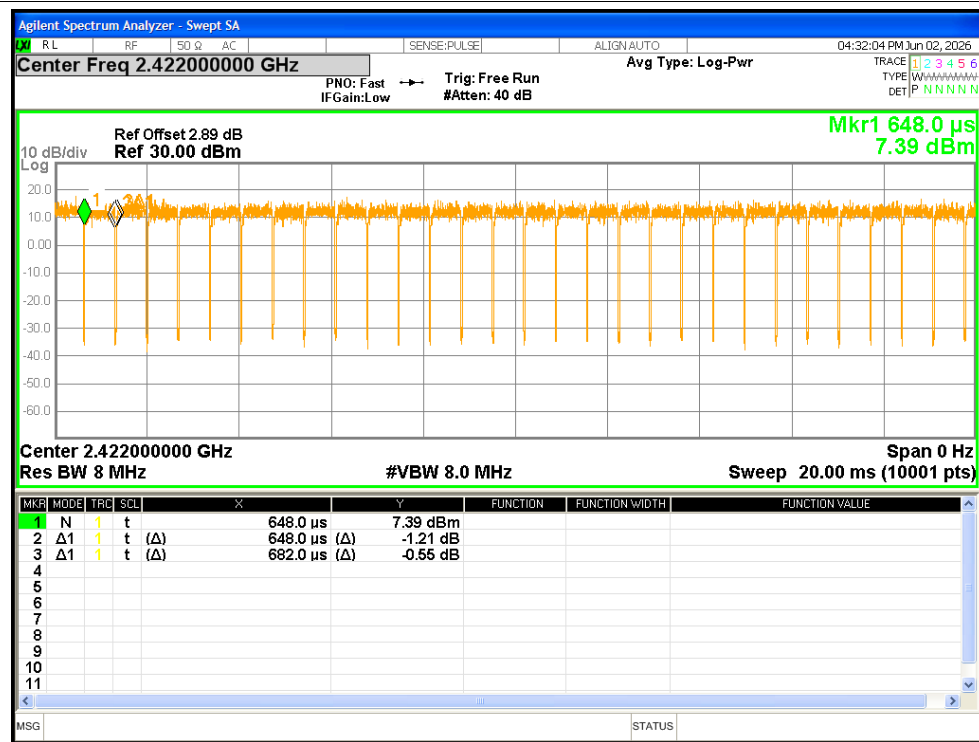
Duty Cycle NVNT n20 2437MHz



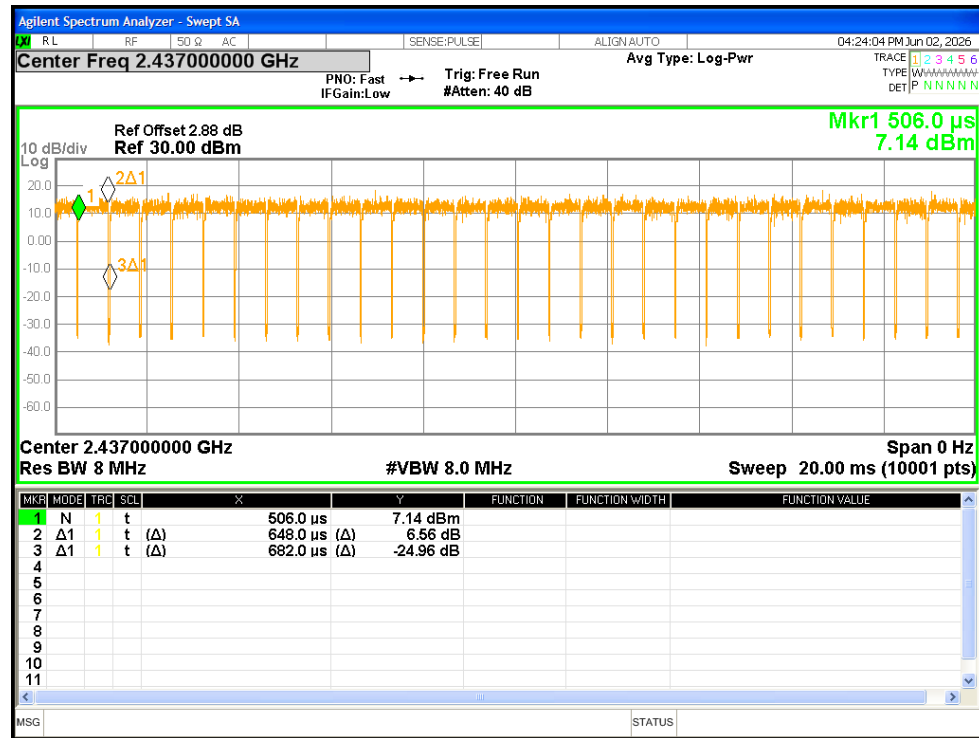
Duty Cycle NVNT n20 2462MHz



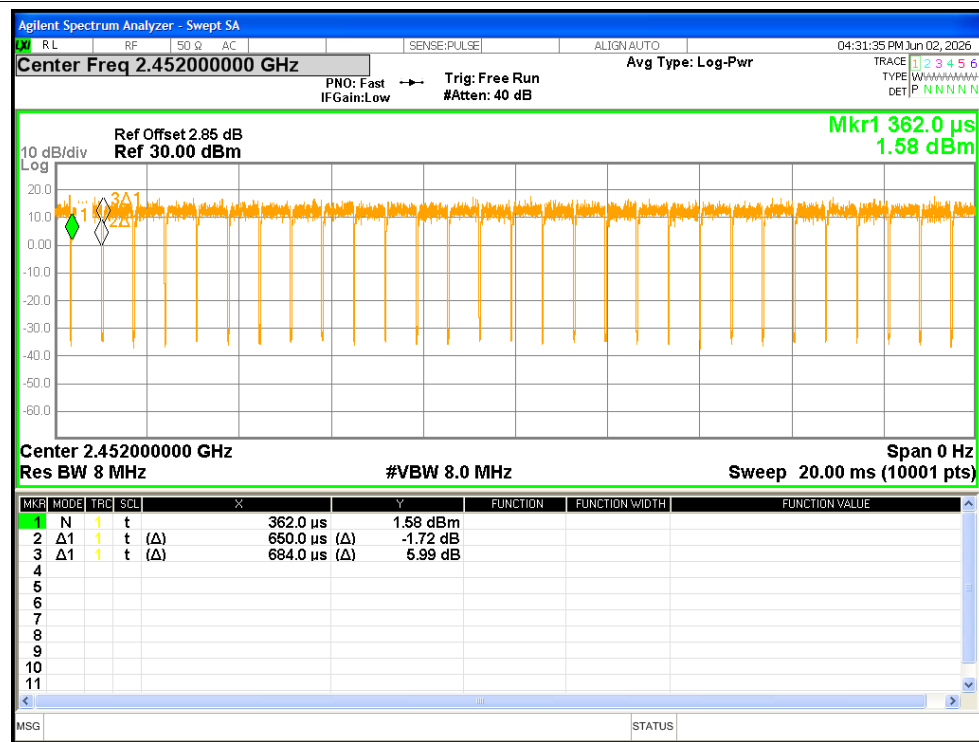
Duty Cycle NVNT n40 2422MHz



Duty Cycle NVNT n40 2437MHz



Duty Cycle NVNT n40 2452MHz



Maximum Peak Conducted Output Power

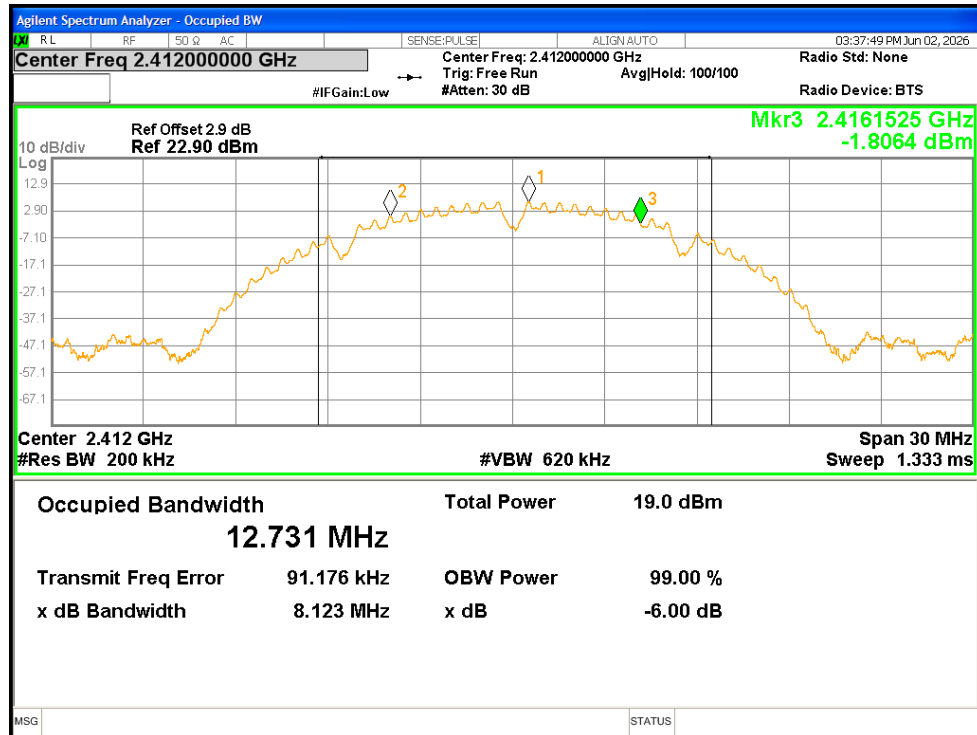
Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	19.05	<=30	Pass
NVNT	b	2437	19.8	<=30	Pass
NVNT	b	2462	19.58	<=30	Pass
NVNT	g	2412	17.97	<=30	Pass
NVNT	g	2437	18.91	<=30	Pass
NVNT	g	2462	18.74	<=30	Pass
NVNT	n20	2412	17.98	<=30	Pass
NVNT	n20	2437	18.76	<=30	Pass
NVNT	n20	2462	18.75	<=30	Pass
NVNT	n40	2422	18.26	<=30	Pass
NVNT	n40	2437	18.7	<=30	Pass
NVNT	n40	2452	18.82	<=30	Pass

-6dB Bandwidth

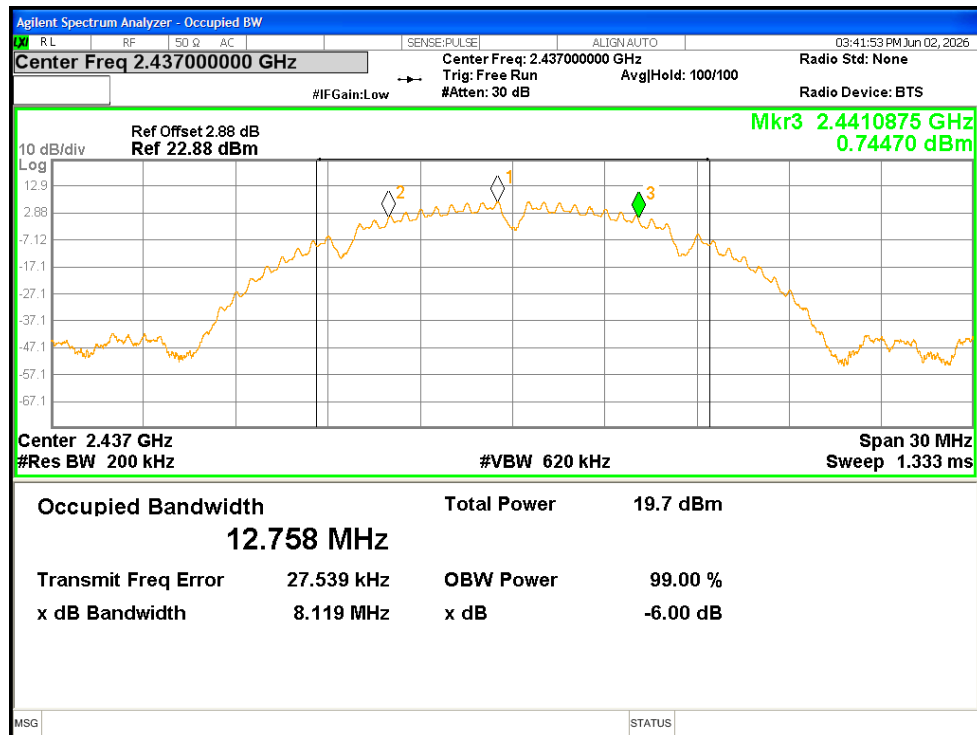
Condition	Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	8.123	≥ 0.5	Pass
NVNT	b	2437	8.119	≥ 0.5	Pass
NVNT	b	2462	8.08	≥ 0.5	Pass
NVNT	g	2412	16.1	≥ 0.5	Pass
NVNT	g	2437	15.92	≥ 0.5	Pass
NVNT	g	2462	16.16	≥ 0.5	Pass
NVNT	n20	2412	17.12	≥ 0.5	Pass
NVNT	n20	2437	17.2	≥ 0.5	Pass
NVNT	n20	2462	17.23	≥ 0.5	Pass
NVNT	n40	2422	34.97	≥ 0.5	Pass
NVNT	n40	2437	35.65	≥ 0.5	Pass
NVNT	n40	2452	35.29	≥ 0.5	Pass

Test Graphs

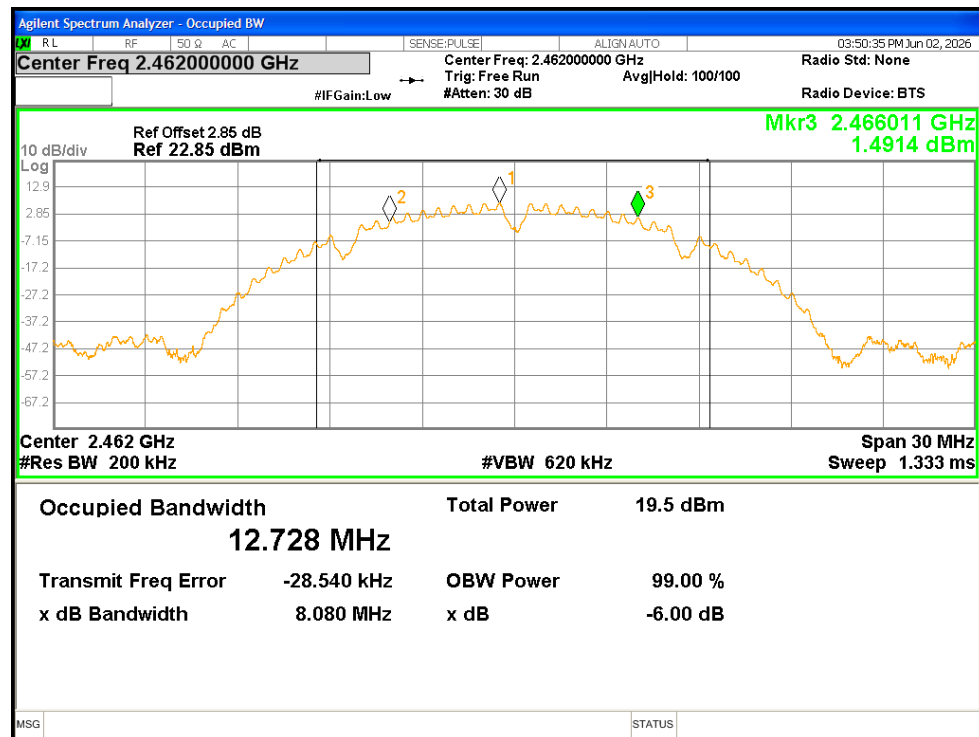
-6dB Bandwidth NVNT b 2412MHz



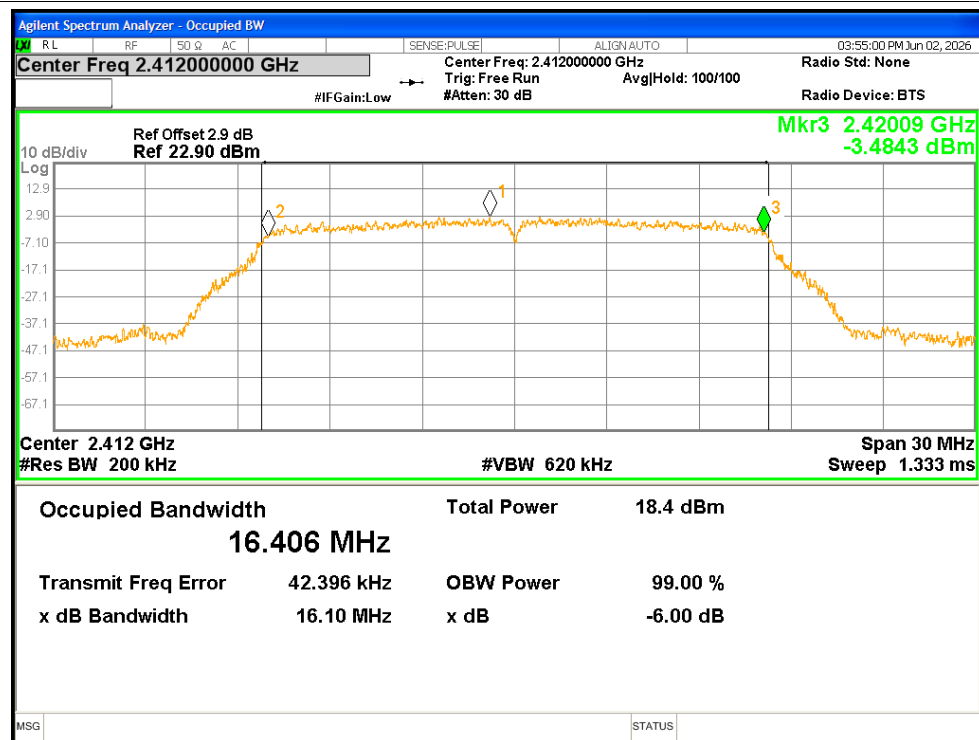
-6dB Bandwidth NVNT b 2437MHz



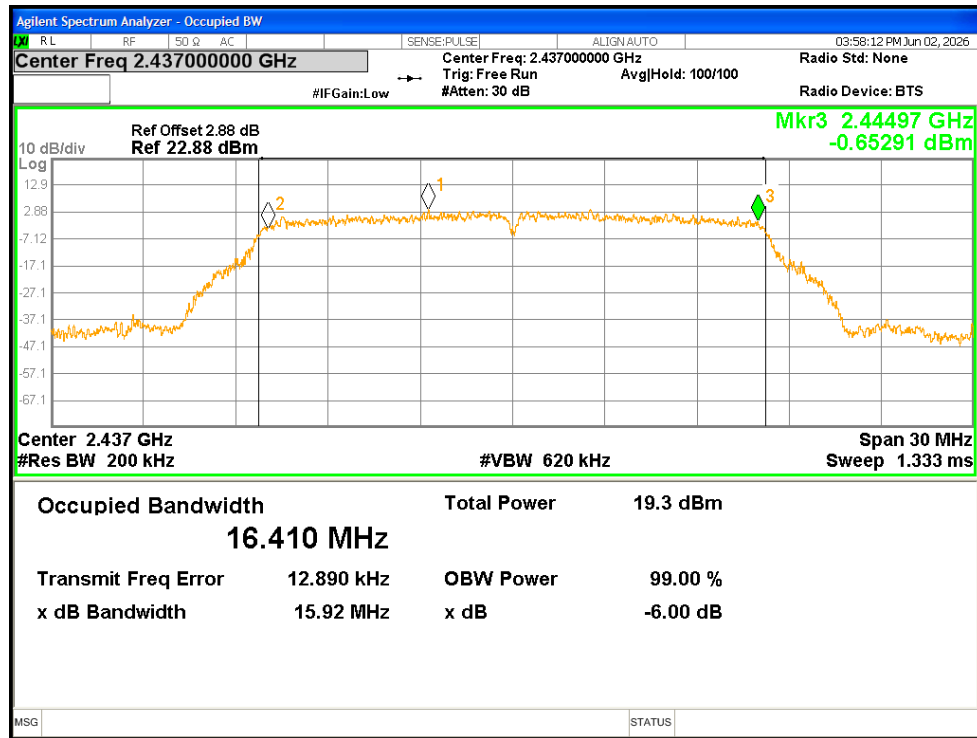
-6dB Bandwidth NVNT b 2462MHz



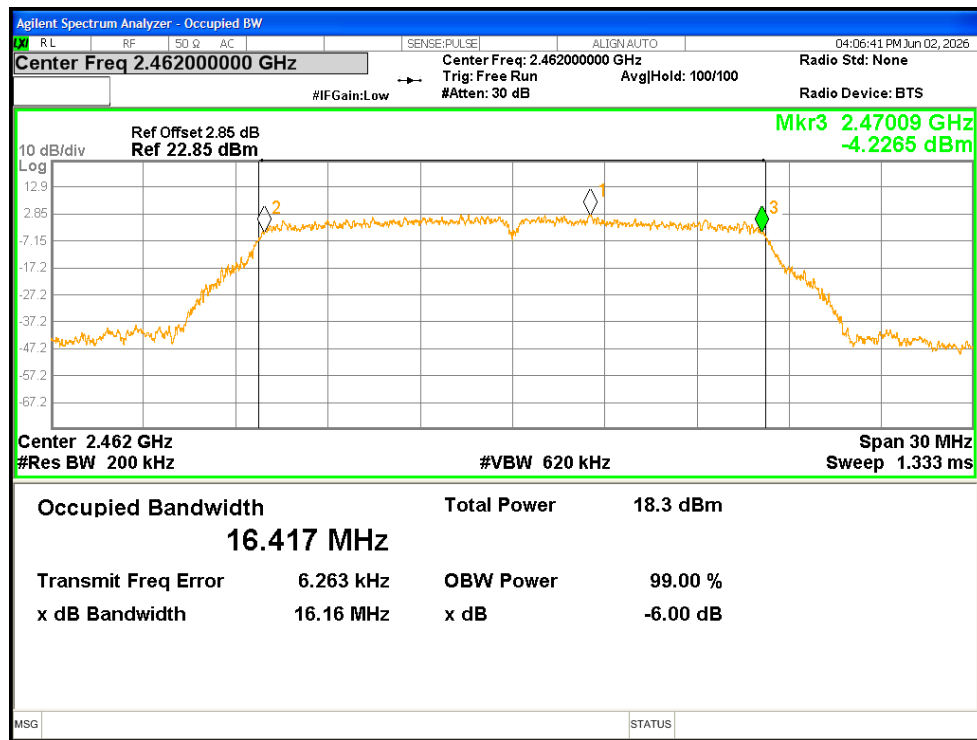
-6dB Bandwidth NVNT g 2412MHz



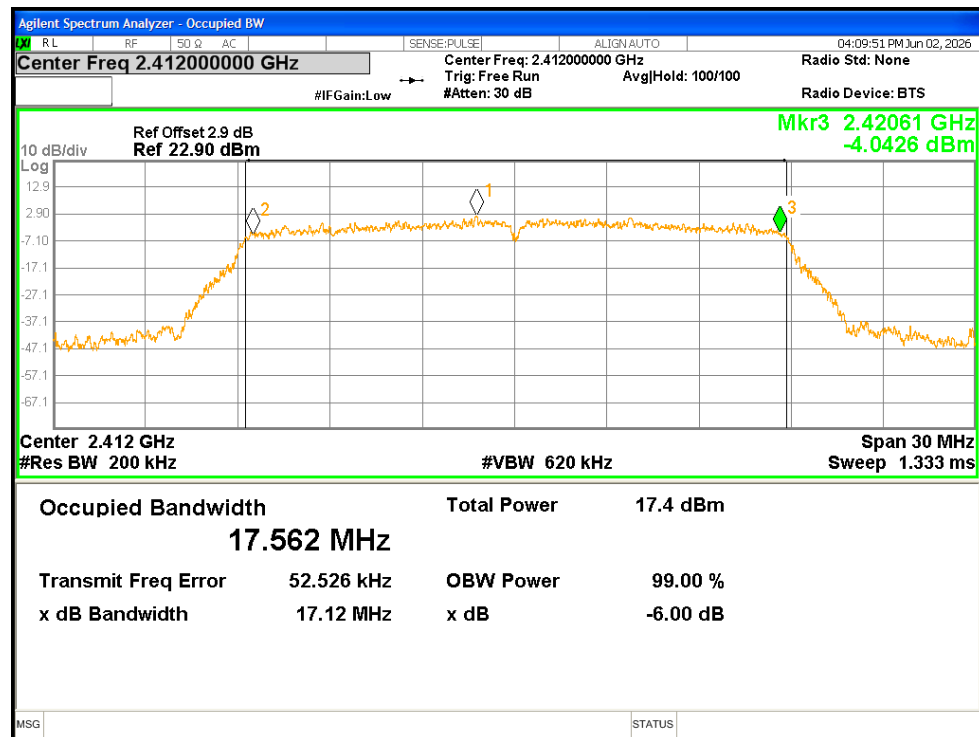
-6dB Bandwidth NVNT g 2437MHz



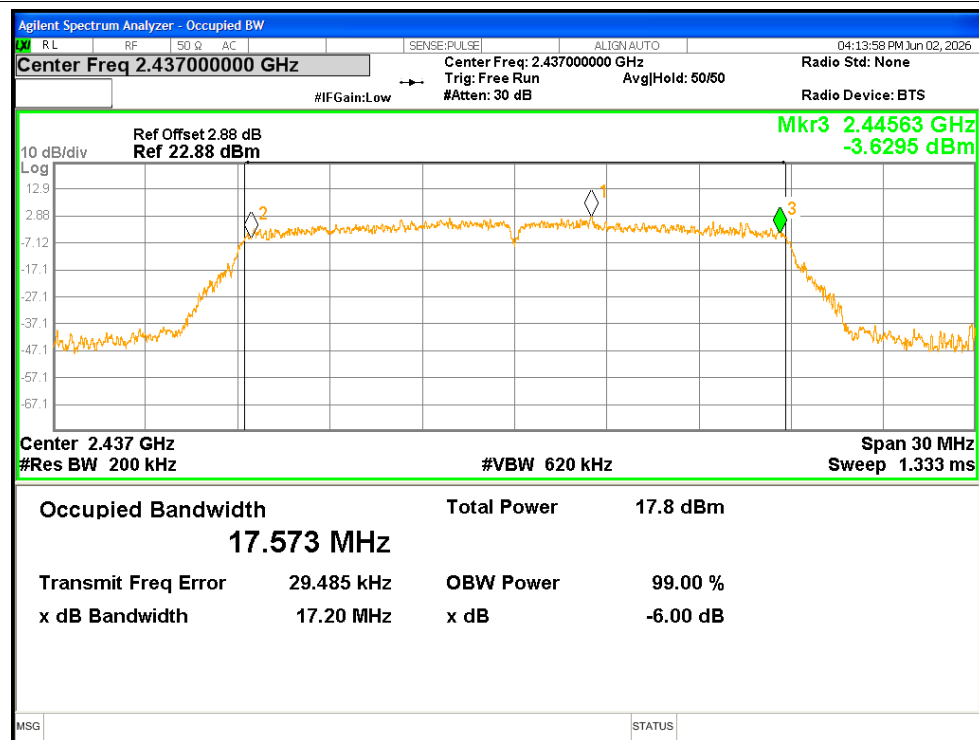
-6dB Bandwidth NVNT g 2462MHz



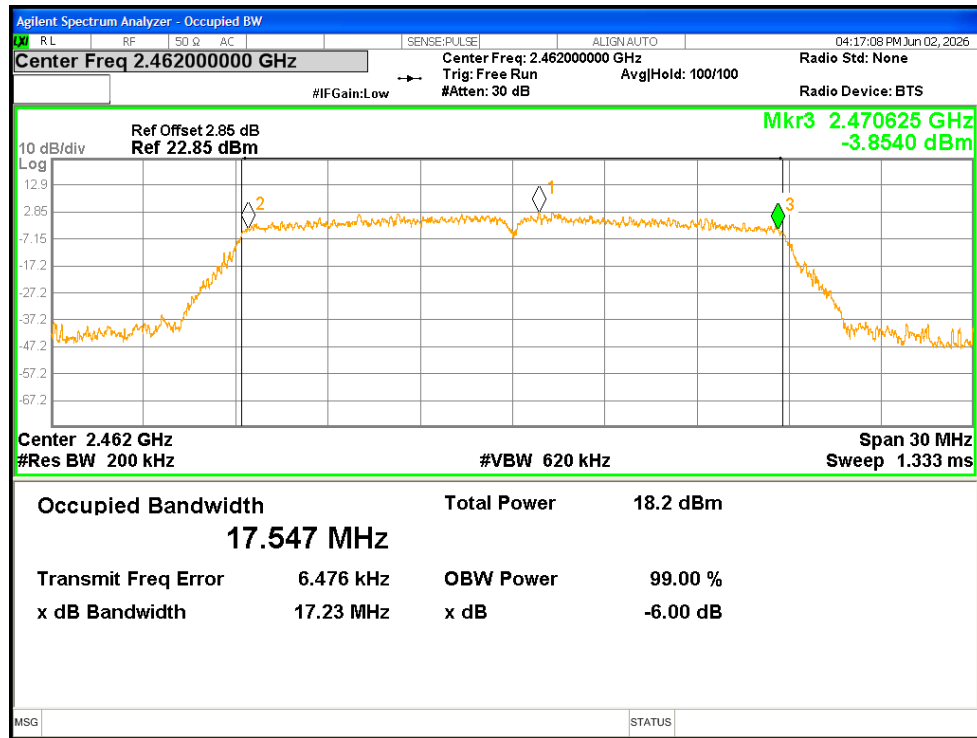
-6dB Bandwidth NVNT n20 2412MHz



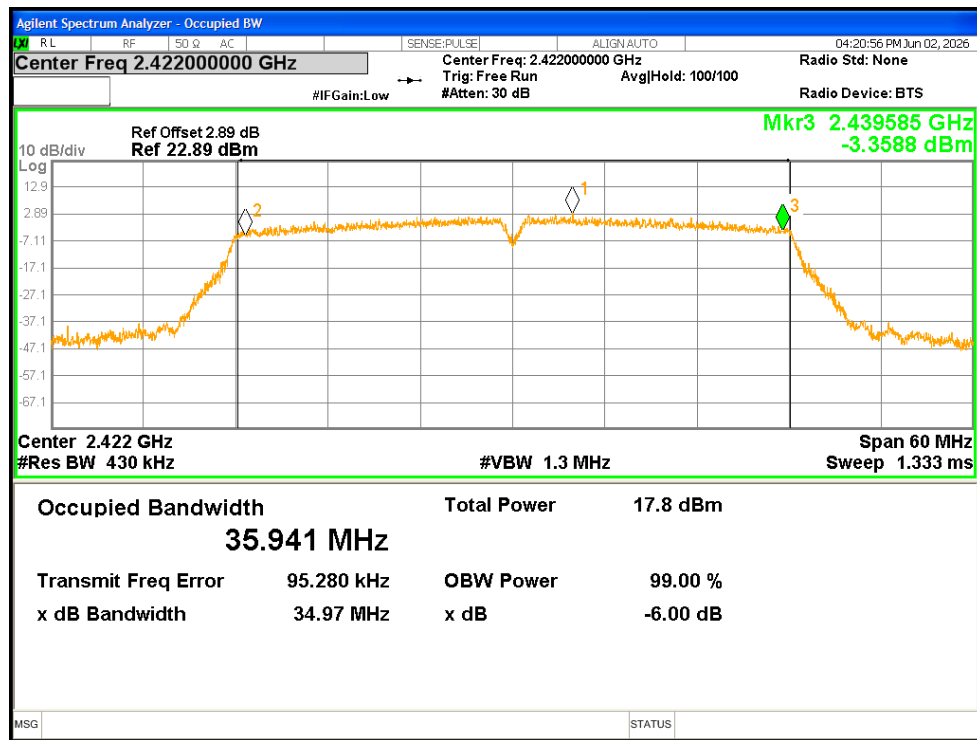
-6dB Bandwidth NVNT n20 2437MHz



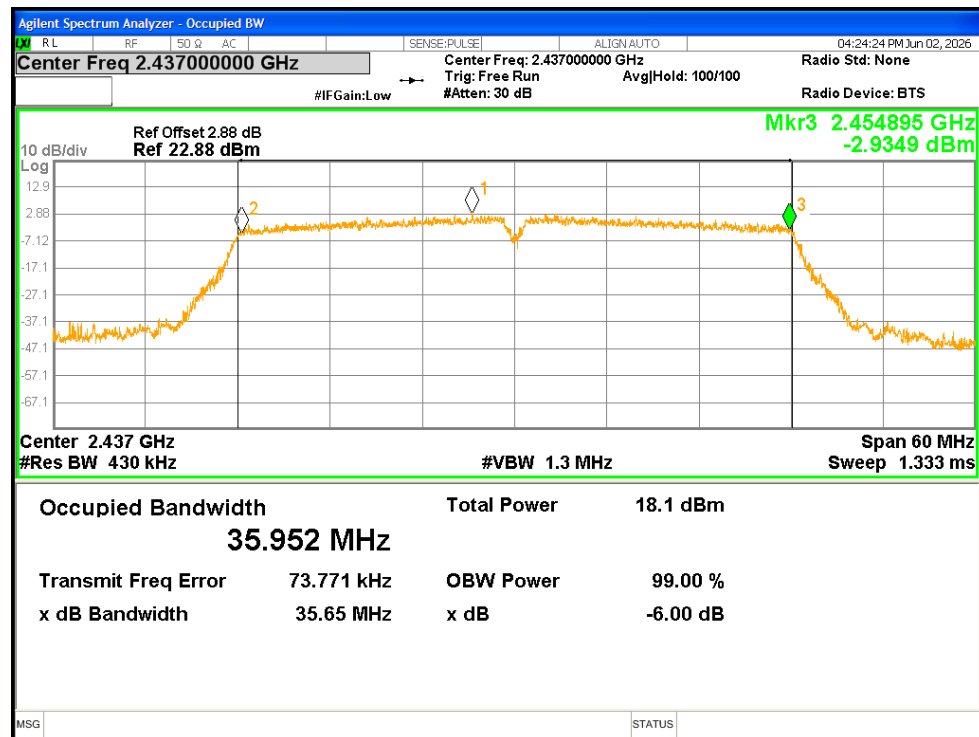
-6dB Bandwidth NVNT n20 2462MHz



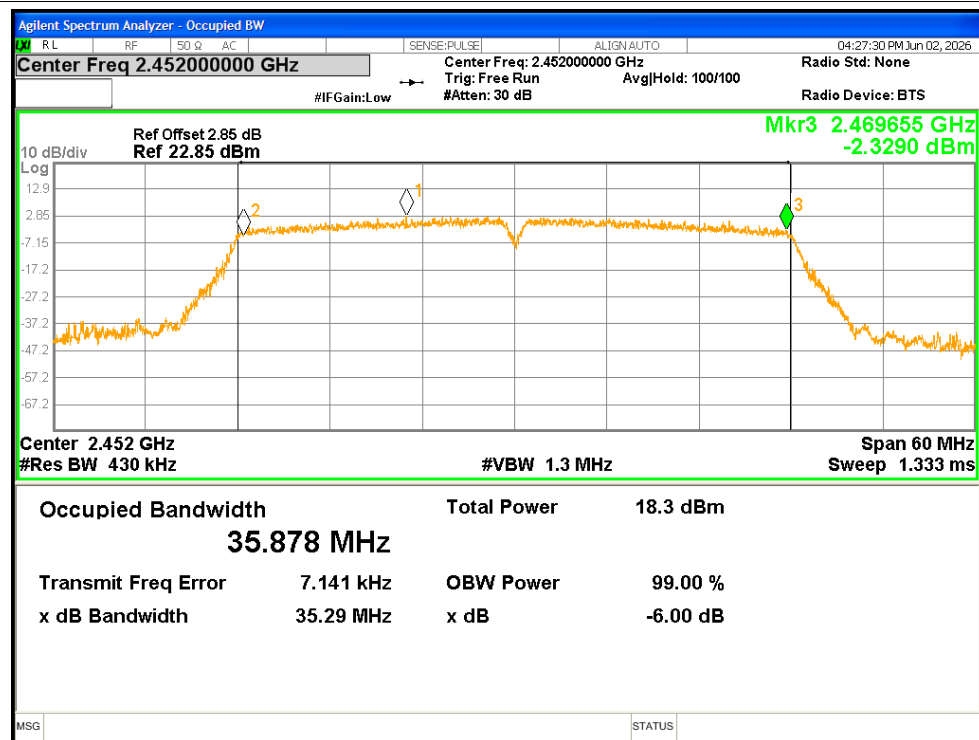
-6dB Bandwidth NVNT n40 2422MHz



-6dB Bandwidth NVNT n40 2437MHz



-6dB Bandwidth NVNT n40 2452MHz

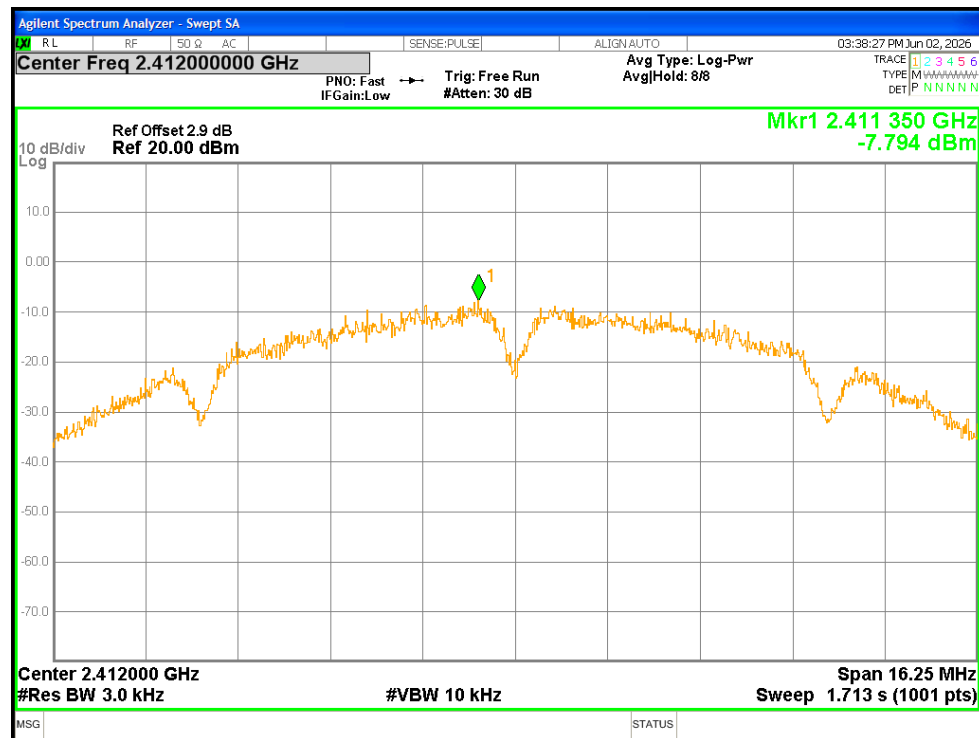


Maximum Power Spectral Density Level

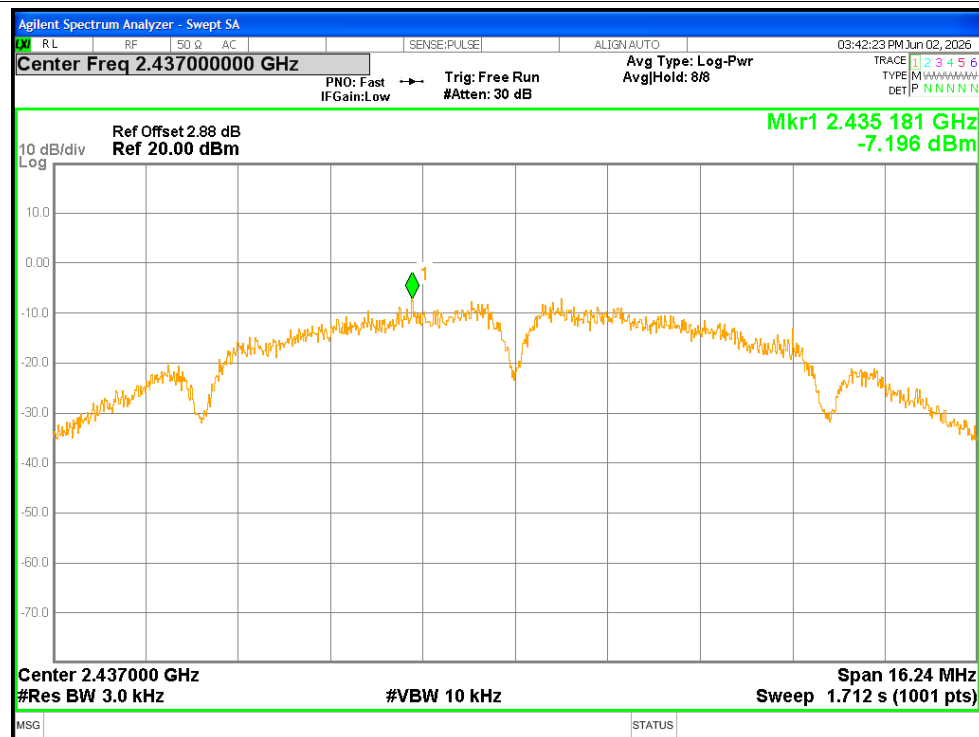
Condition	Mode	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	-7.79	<=8	Pass
NVNT	b	2437	-7.2	<=8	Pass
NVNT	b	2462	-7.37	<=8	Pass
NVNT	g	2412	-13.08	<=8	Pass
NVNT	g	2437	-11.24	<=8	Pass
NVNT	g	2462	-11.25	<=8	Pass
NVNT	n20	2412	-12.59	<=8	Pass
NVNT	n20	2437	-11.8	<=8	Pass
NVNT	n20	2462	-10.78	<=8	Pass
NVNT	n40	2422	-15.36	<=8	Pass
NVNT	n40	2437	-14.61	<=8	Pass
NVNT	n40	2452	-14.38	<=8	Pass

Test Graphs

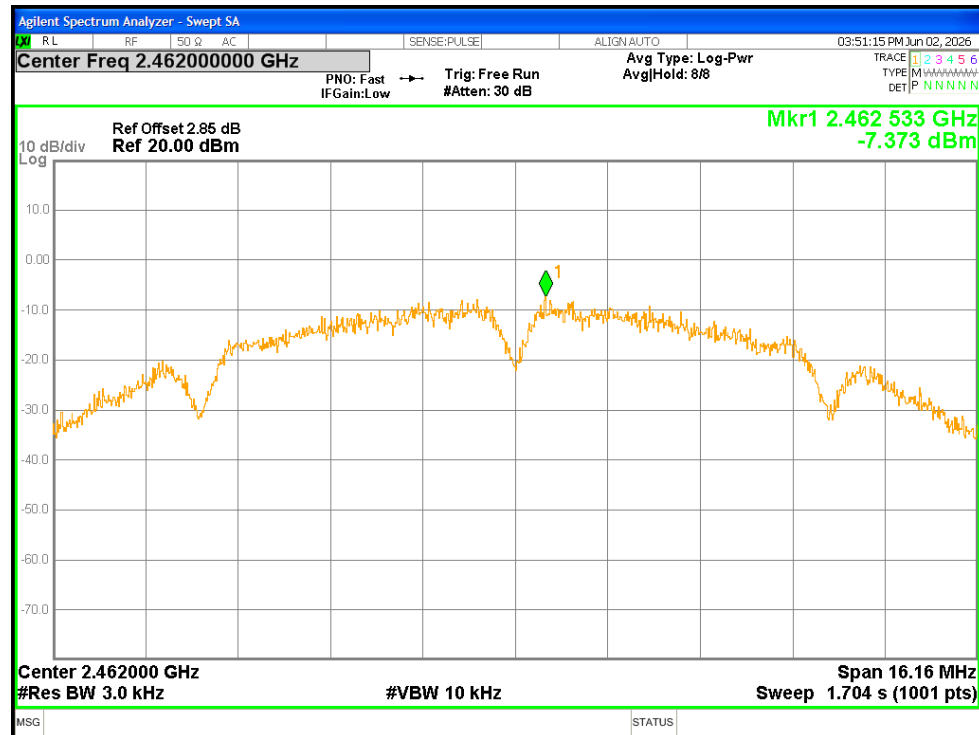
PSD NVNT b 2412MHz



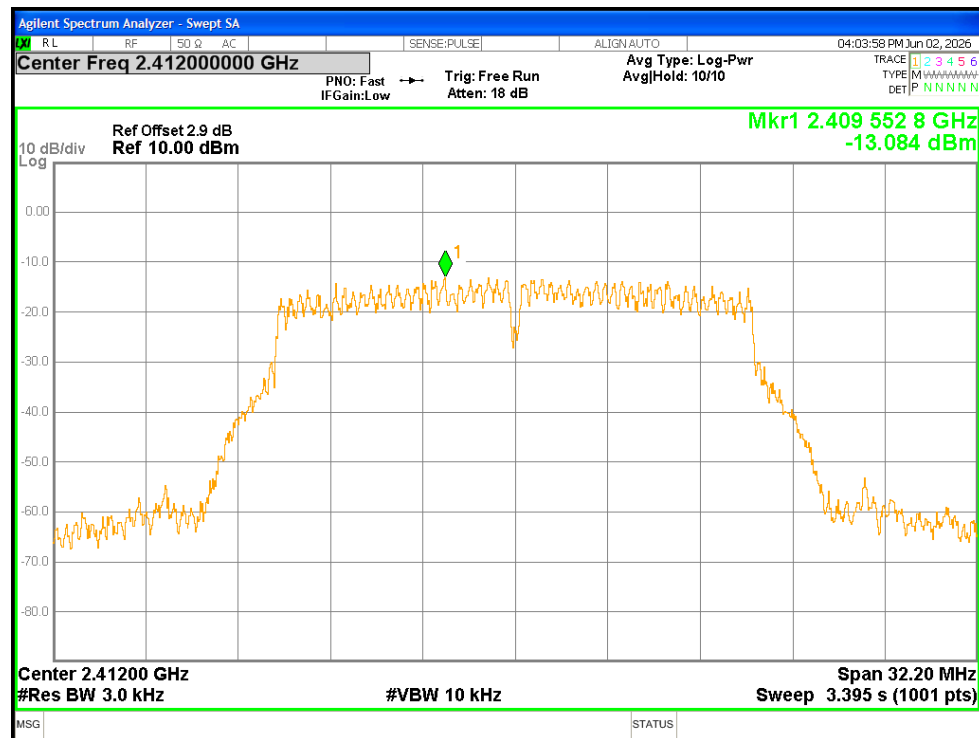
PSD NVNT b 2437MHz



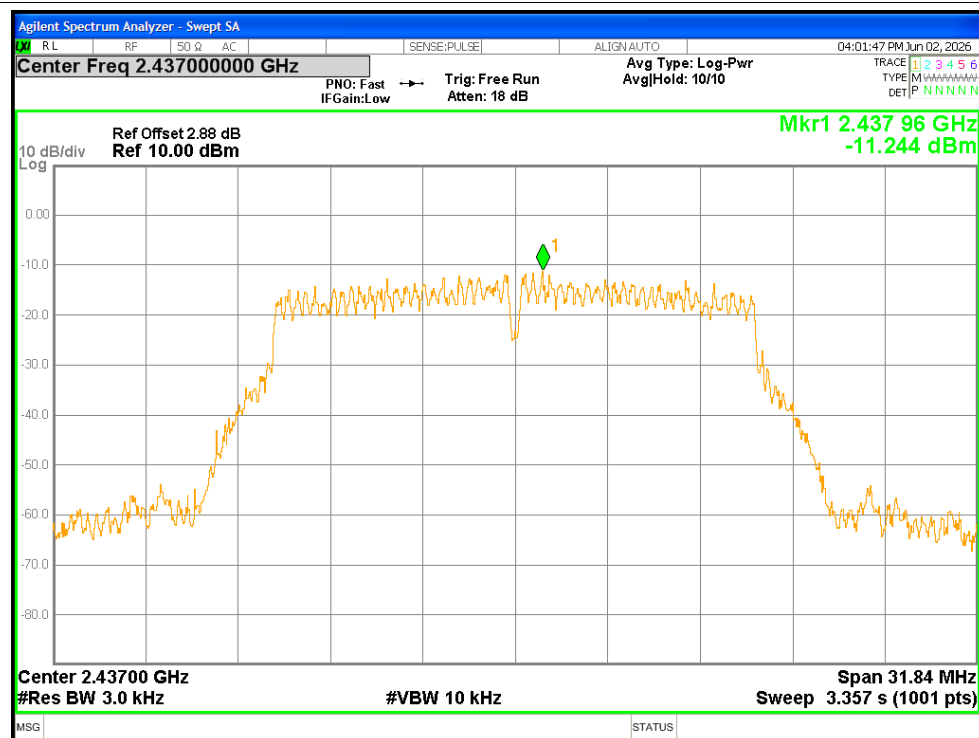
PSD NVNT b 2462MHz



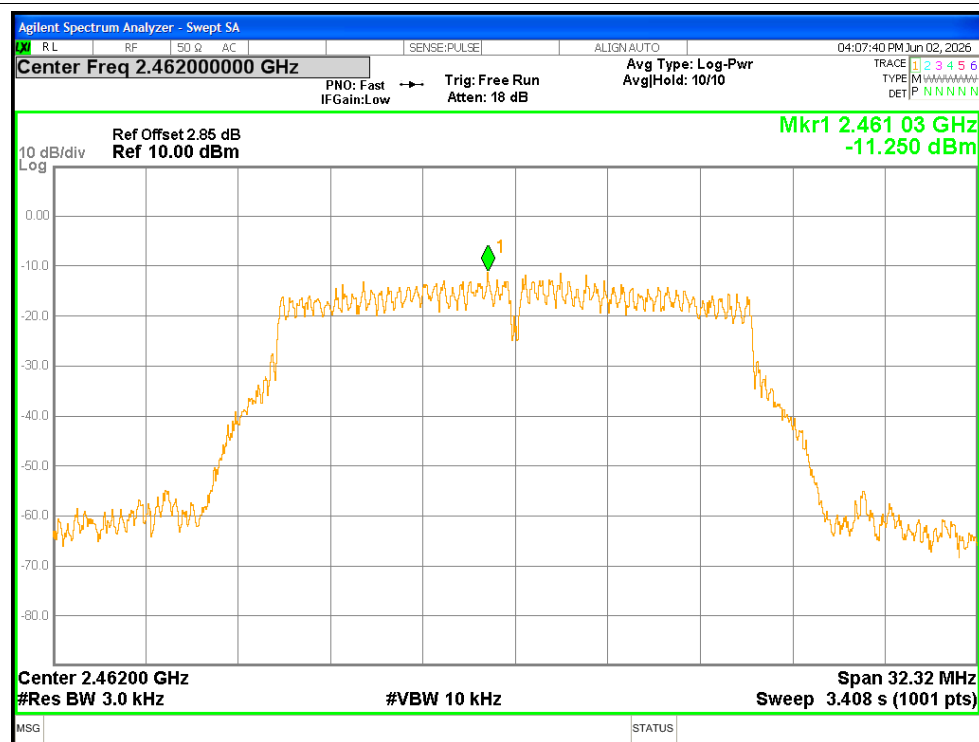
PSD NVNT g 2412MHz



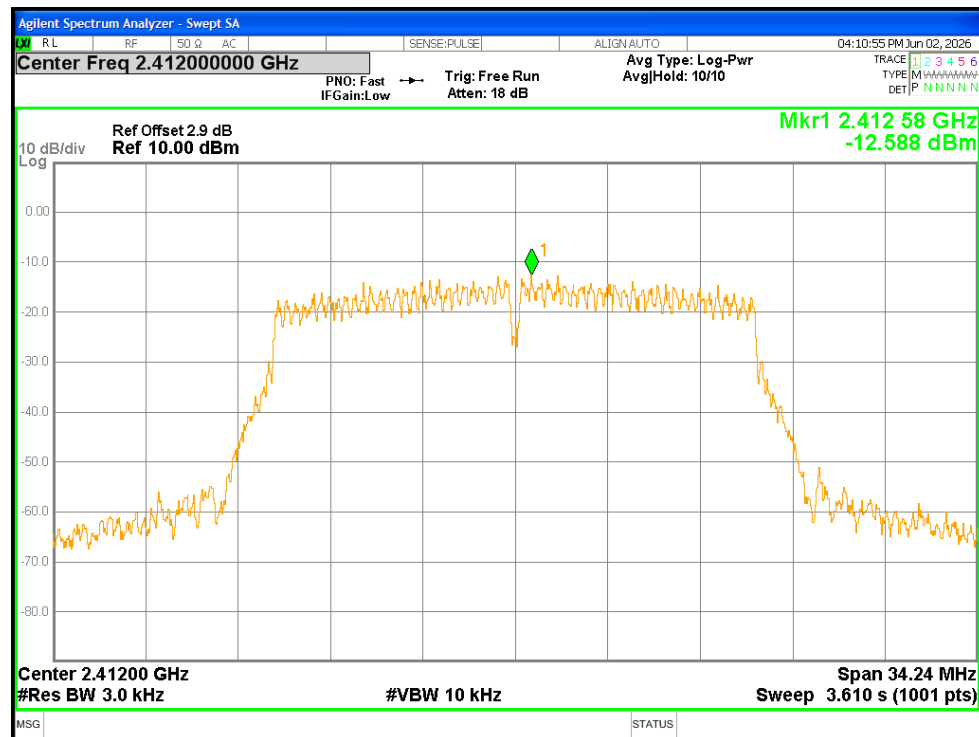
PSD NVNT g 2437MHz



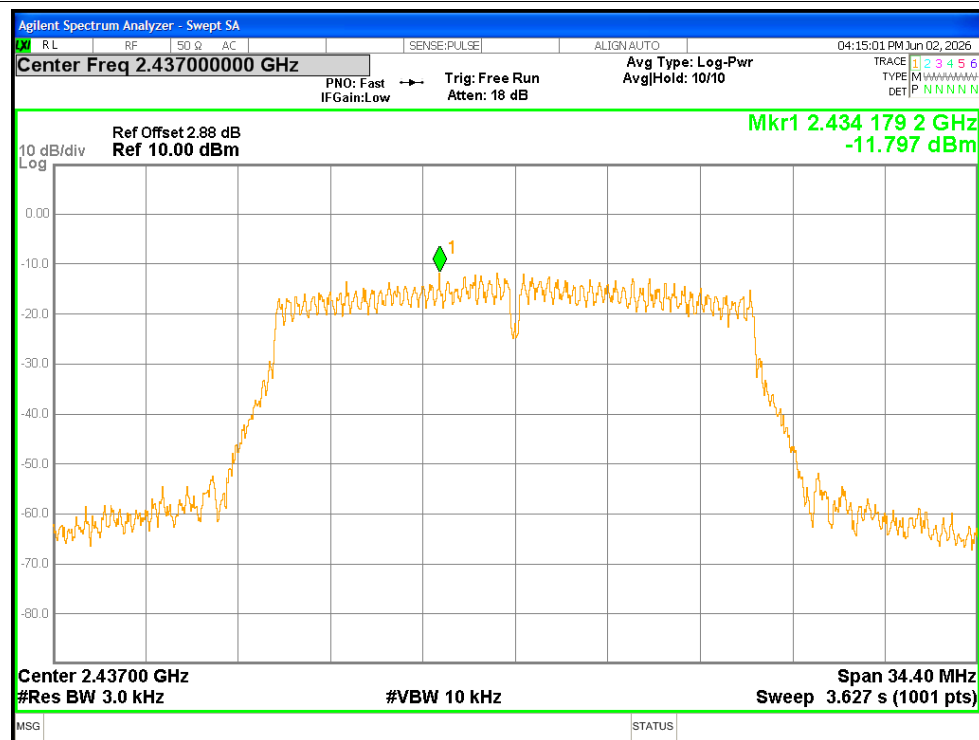
PSD NVNT g 2462MHz



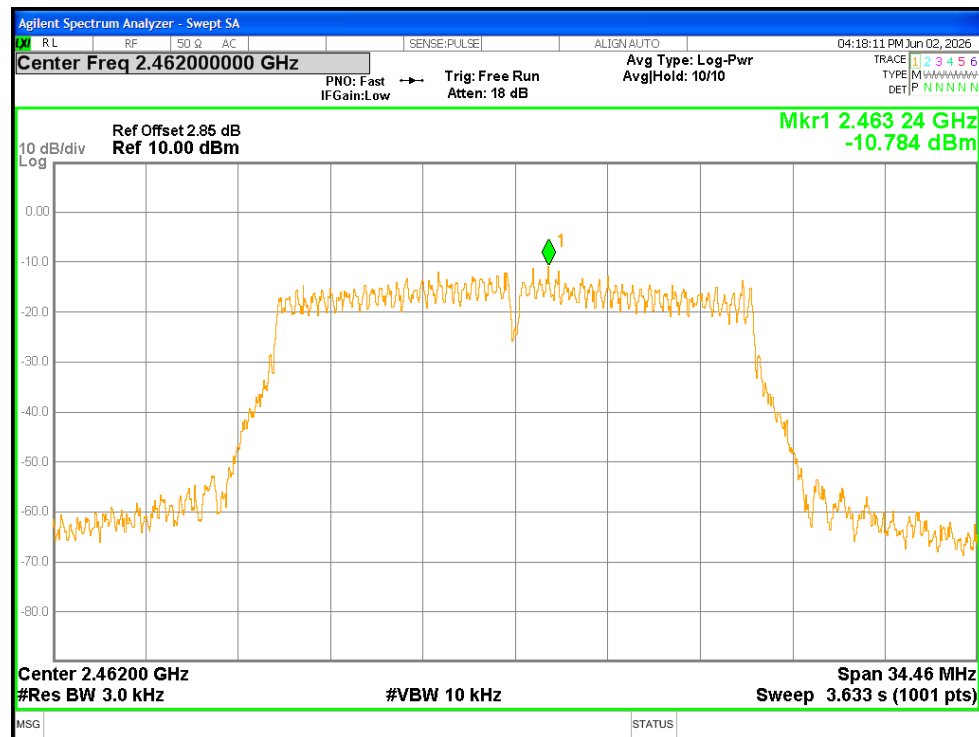
PSD NVNT n20 2412MHz



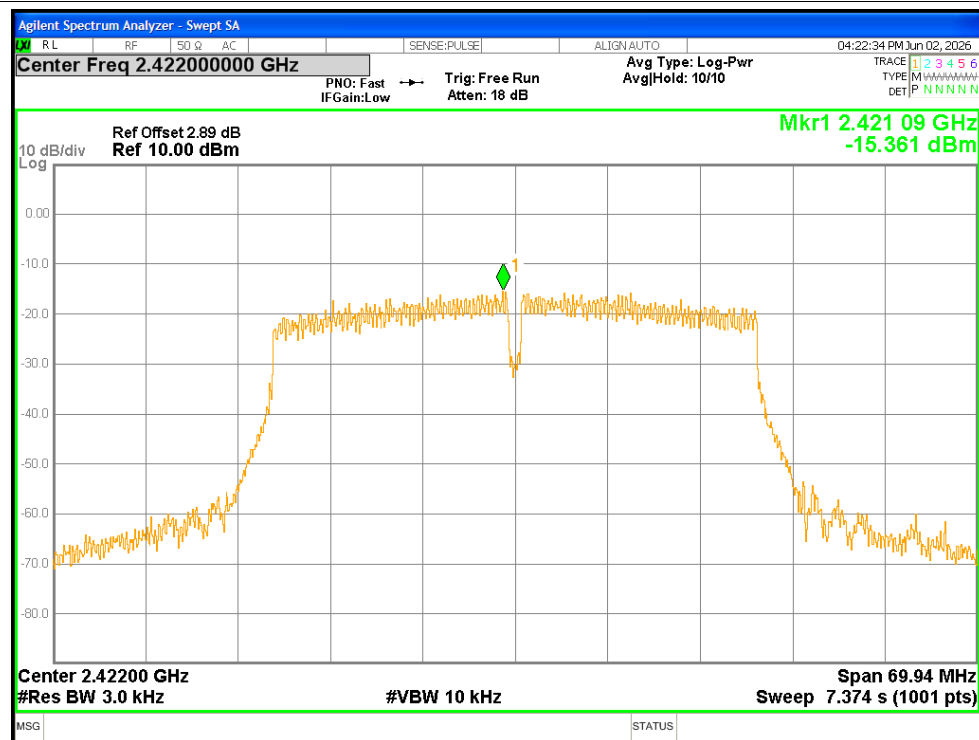
PSD NVNT n20 2437MHz



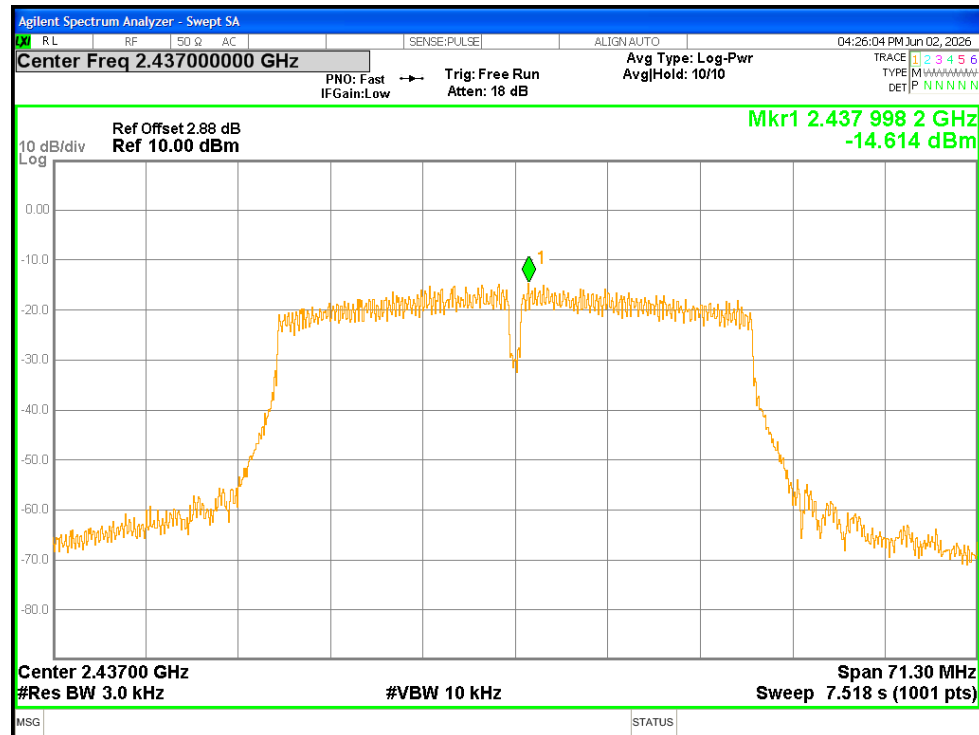
PSD NVNT n20 2462MHz



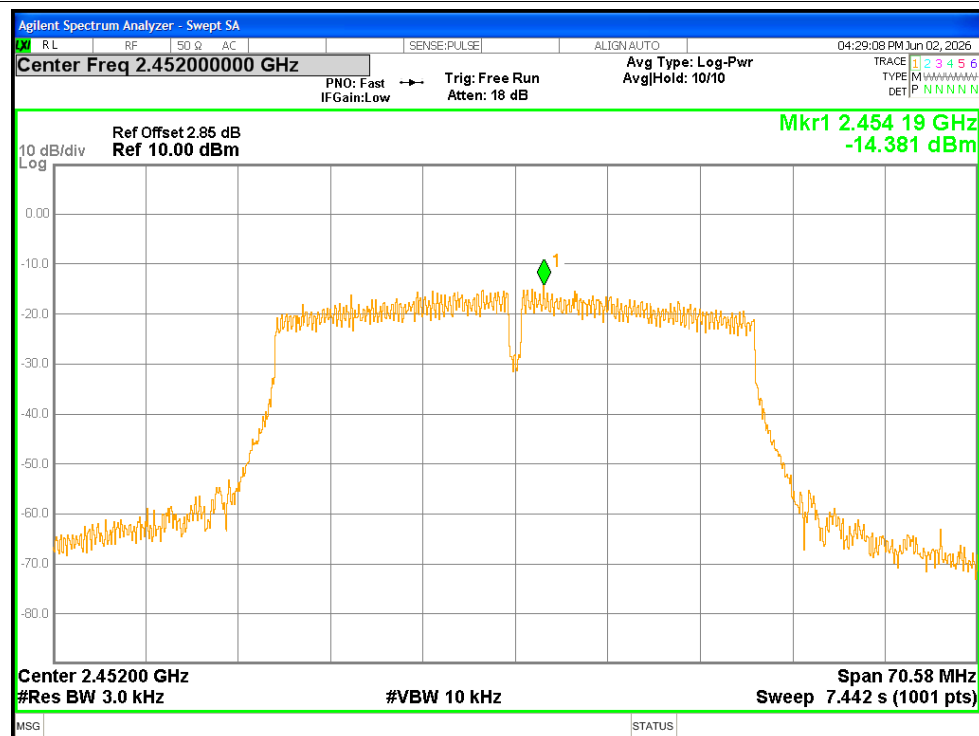
PSD NVNT n40 2422MHz



PSD NVNT n40 2437MHz



PSD NVNT n40 2452MHz

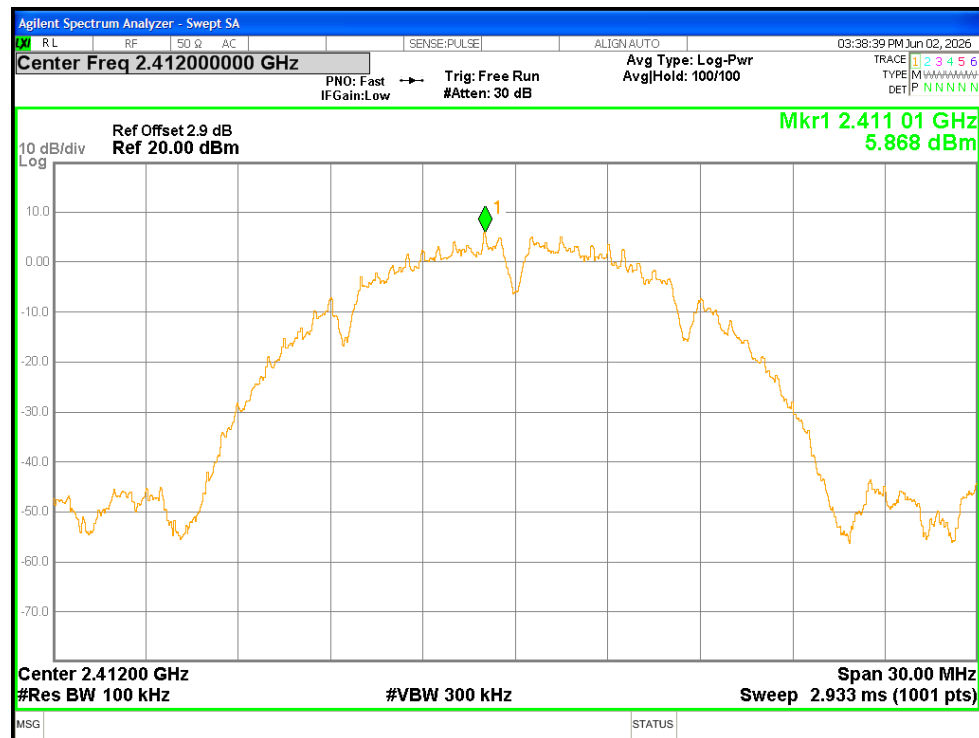


Band Edge

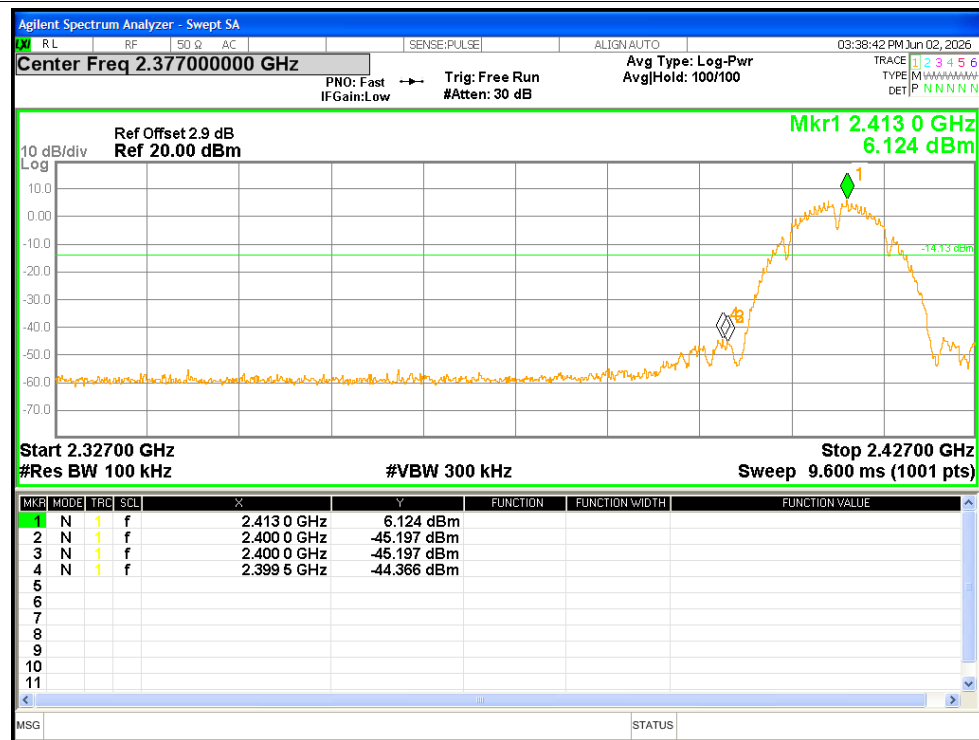
Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	-50.23	<=-20	Pass
NVNT	b	2462	-61.03	<=-20	Pass
NVNT	g	2412	-43.4	<=-20	Pass
NVNT	g	2462	-54.95	<=-20	Pass
NVNT	n20	2412	-43.21	<=-20	Pass
NVNT	n20	2462	-52.68	<=-20	Pass
NVNT	n40	2422	-42.15	<=-20	Pass
NVNT	n40	2452	-47.17	<=-20	Pass

Test Graphs

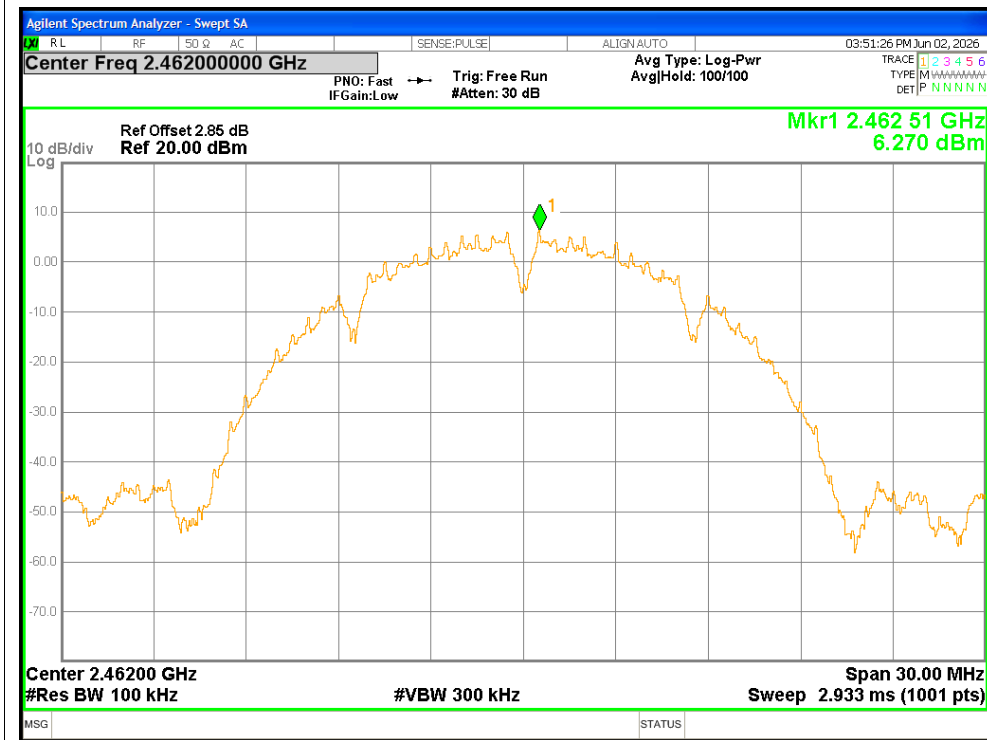
Band Edge NVNT b 2412MHz Ref



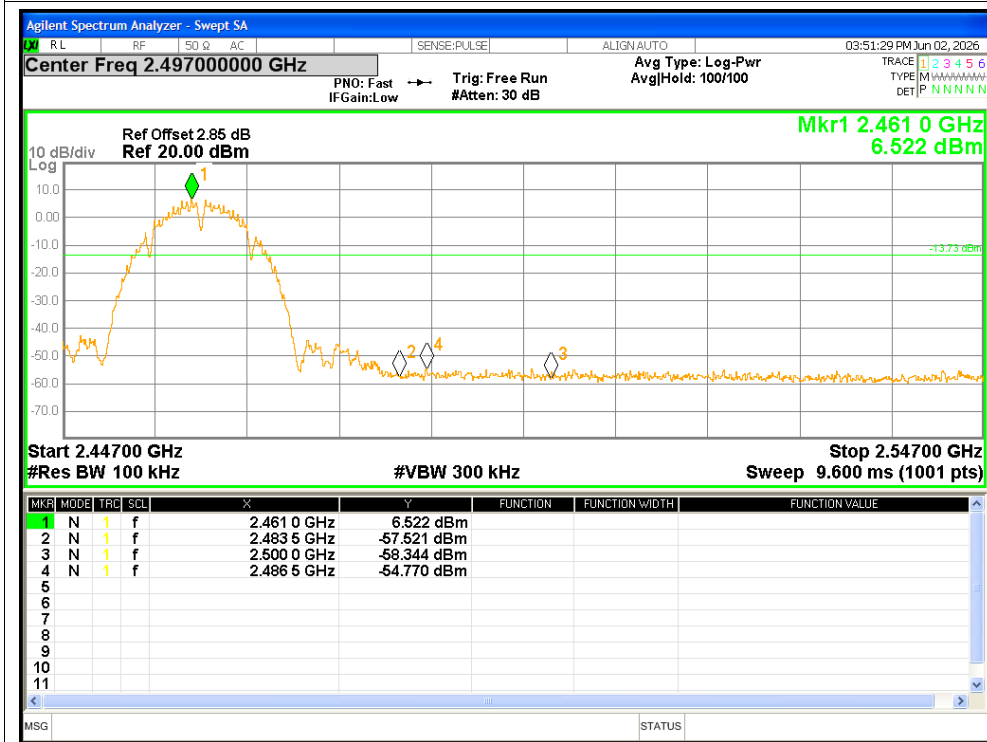
Band Edge NVNT b 2412MHz Emission



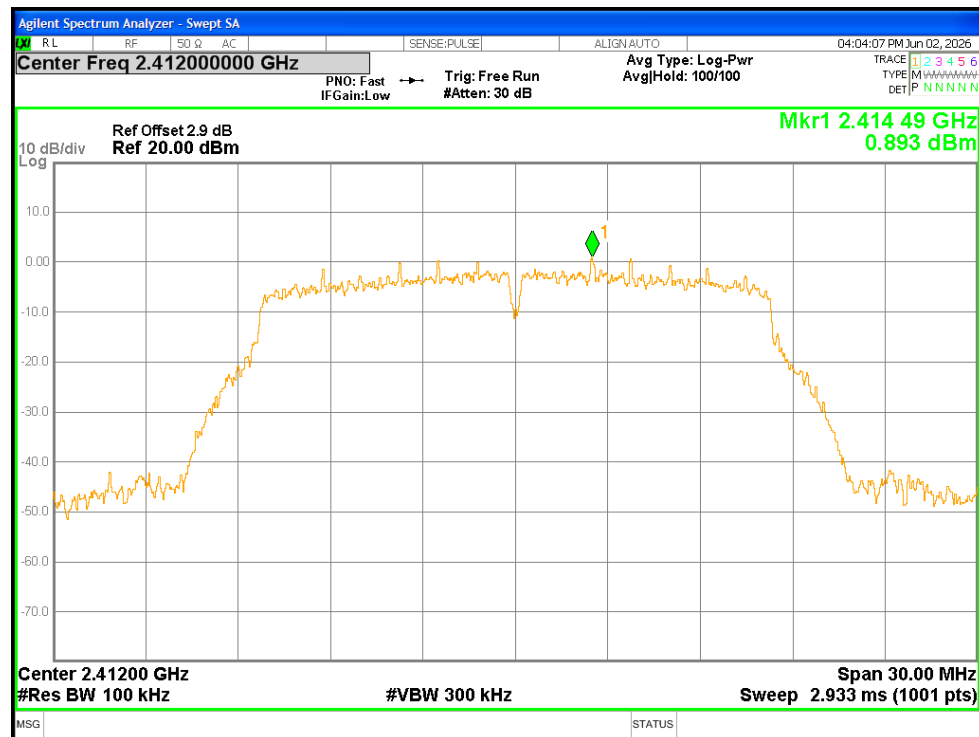
Band Edge NVNT b 2462MHz Ref



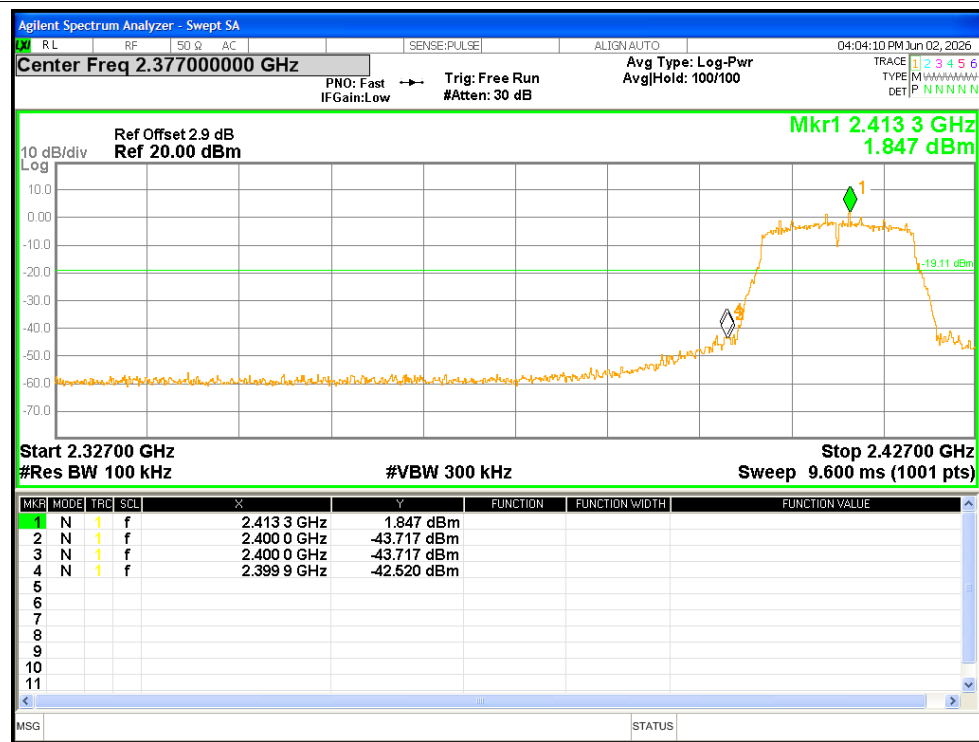
Band Edge NVNT b 2462MHz Emission



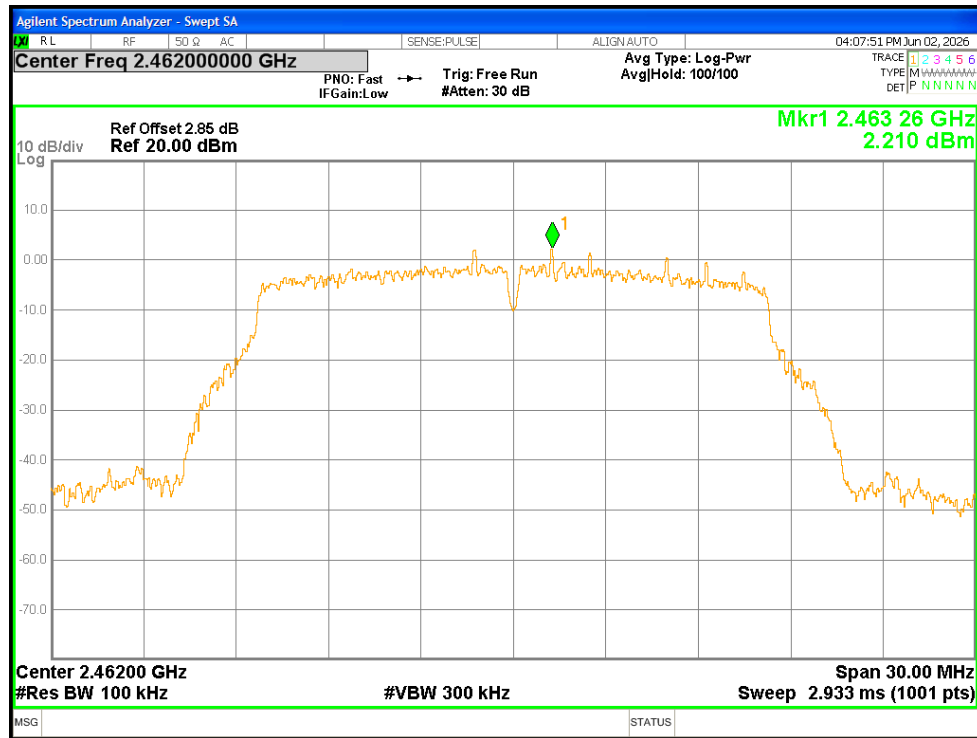
Band Edge NVNT g 2412MHz Ref



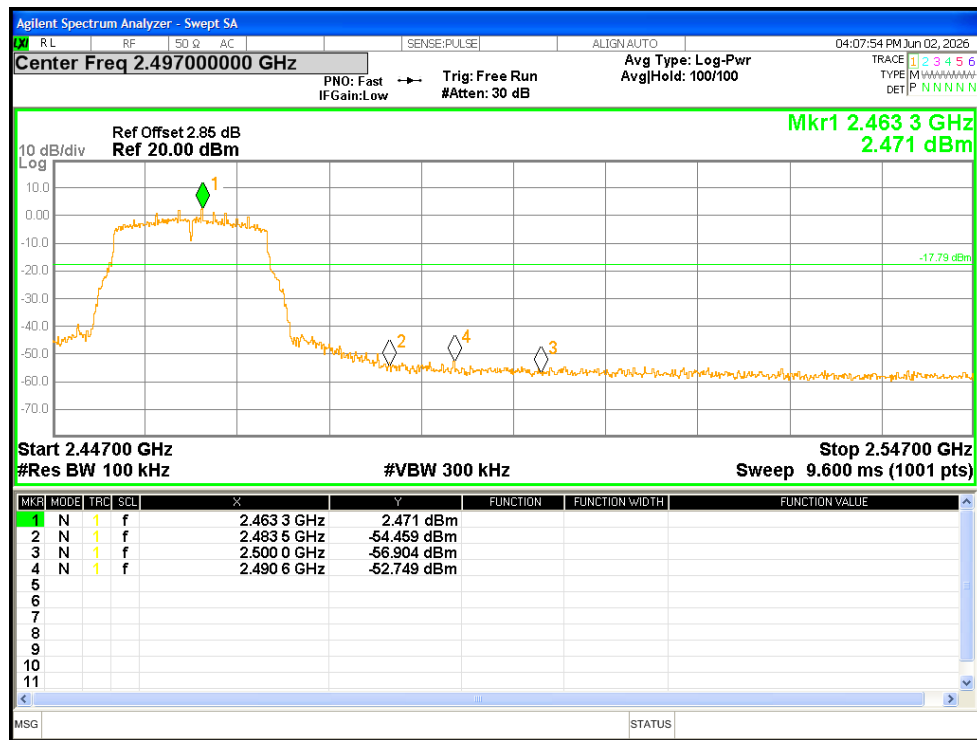
Band Edge NVNT g 2412MHz Emission



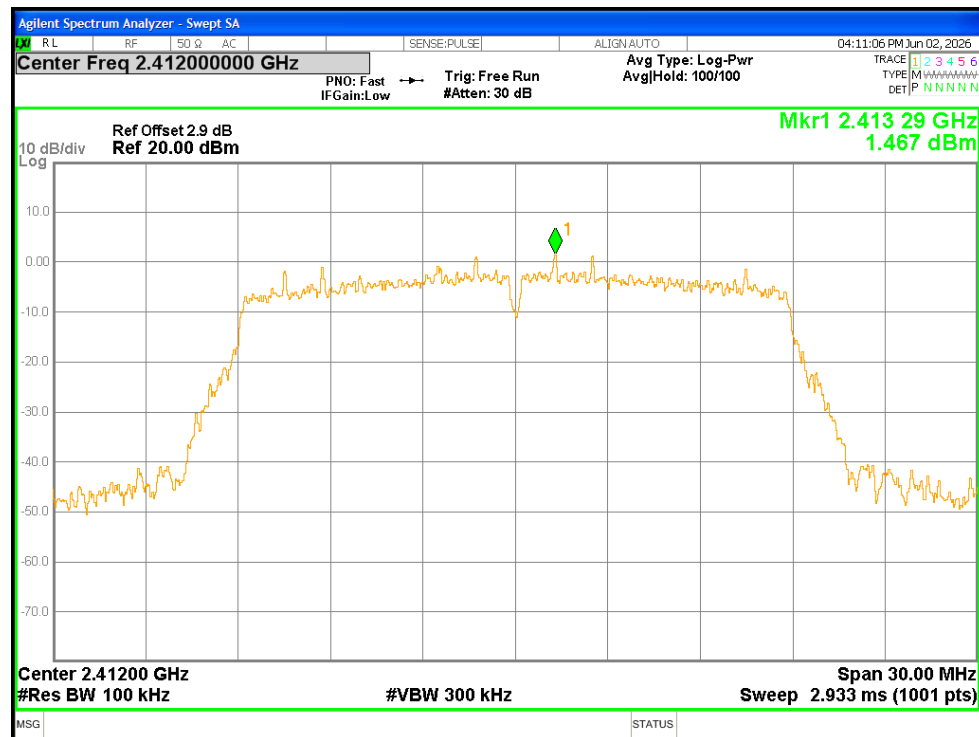
Band Edge NVNT g 2462MHz Ref



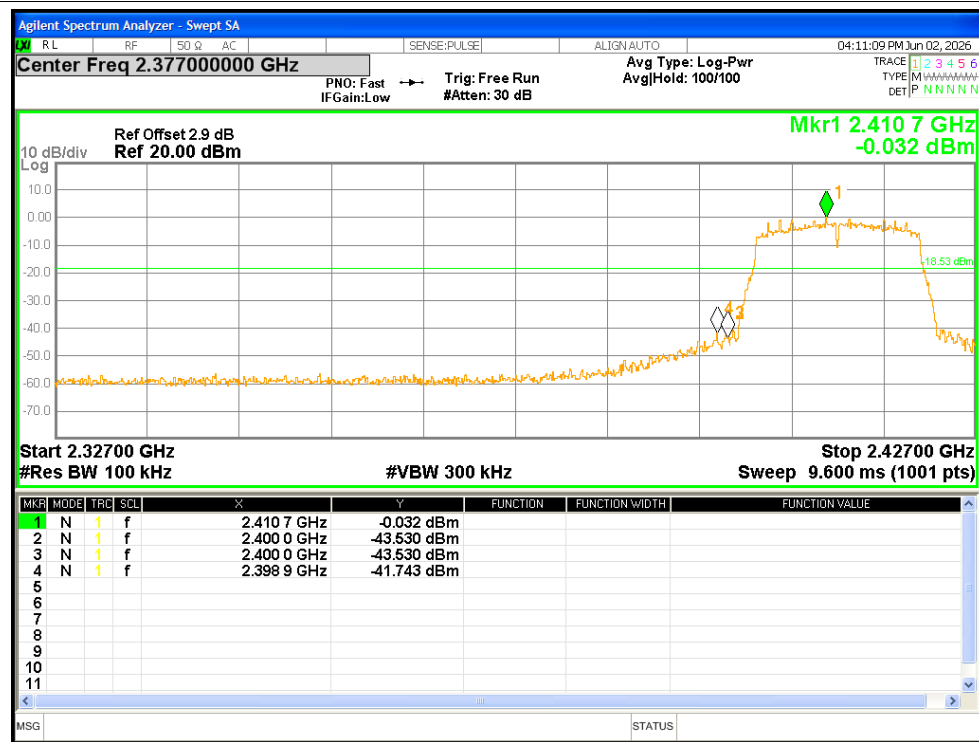
Band Edge NVNT g 2462MHz Emission



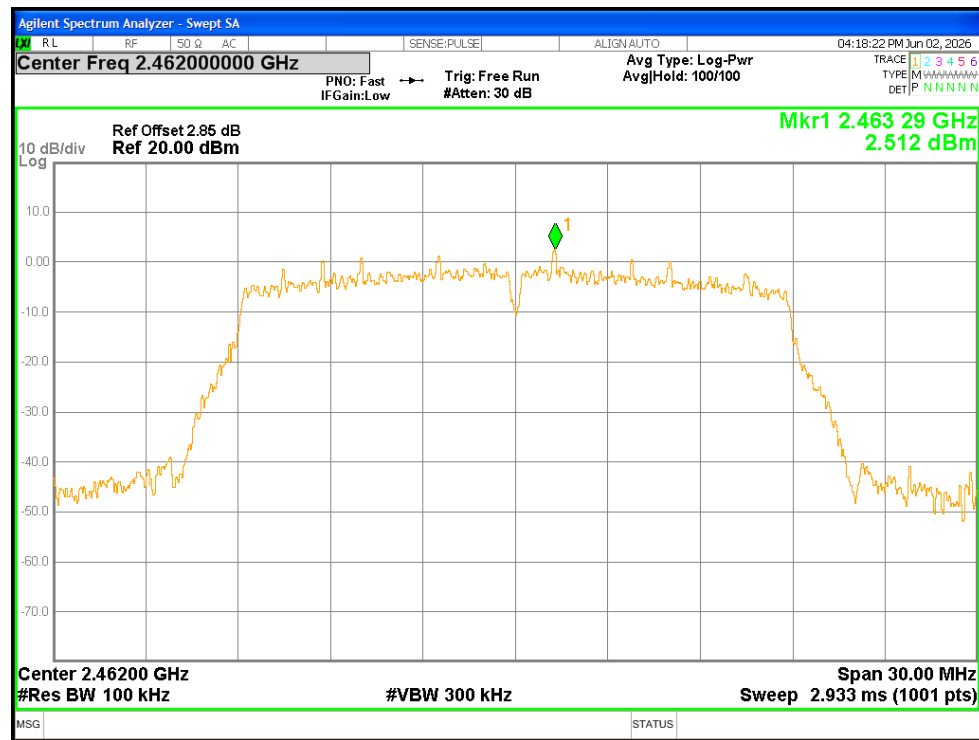
Band Edge NVNT n20 2412MHz Ref



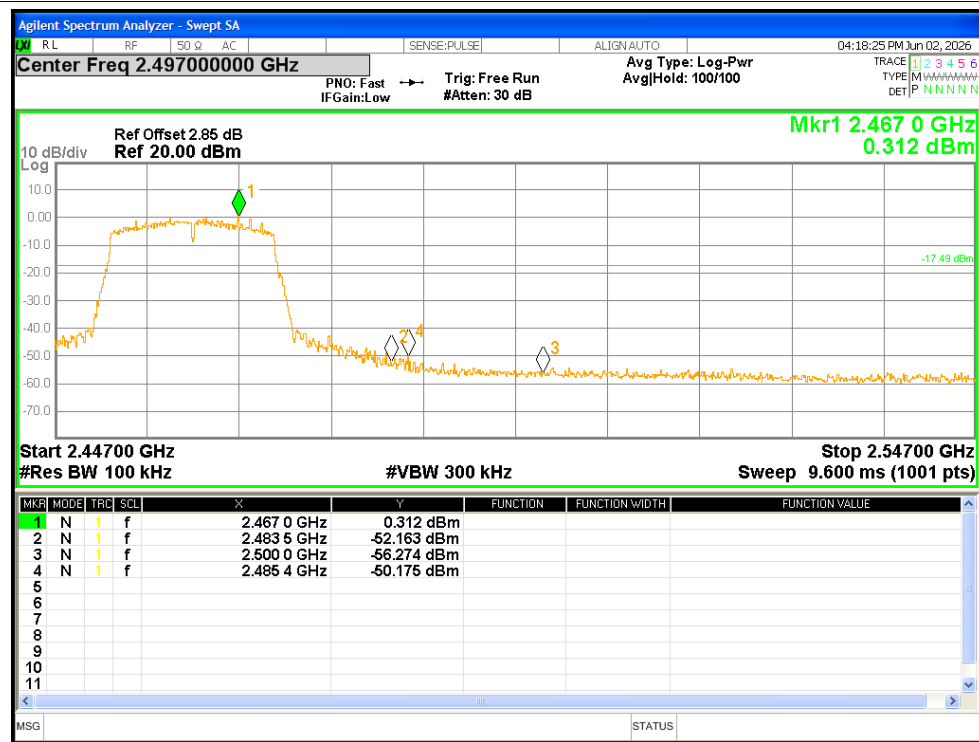
Band Edge NVNT n20 2412MHz Emission



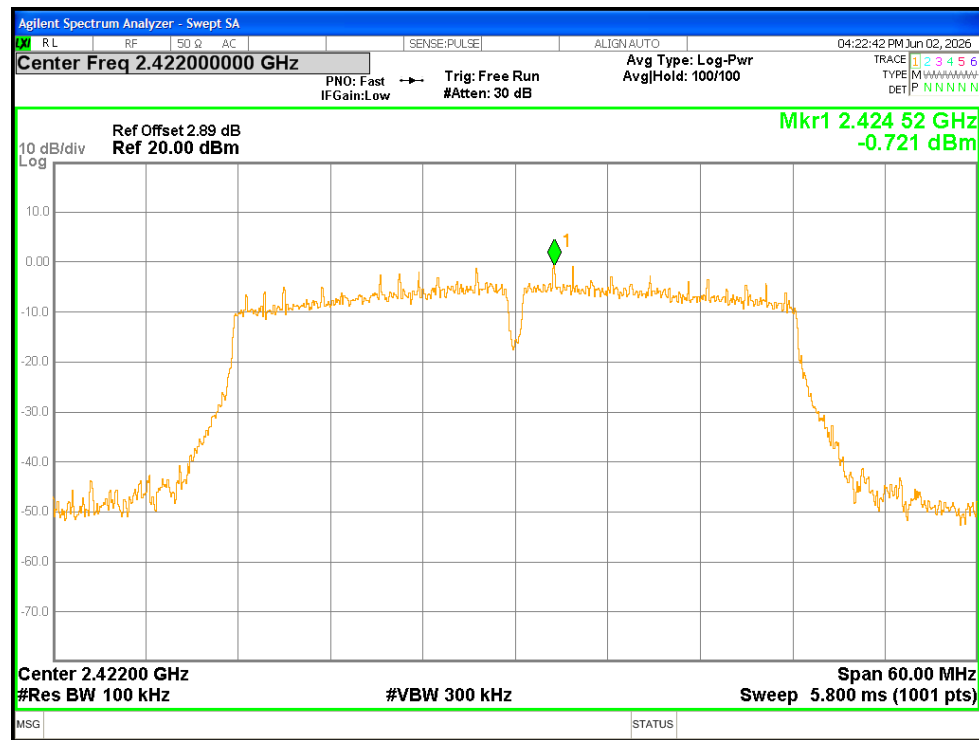
Band Edge NVNT n20 2462MHz Ref



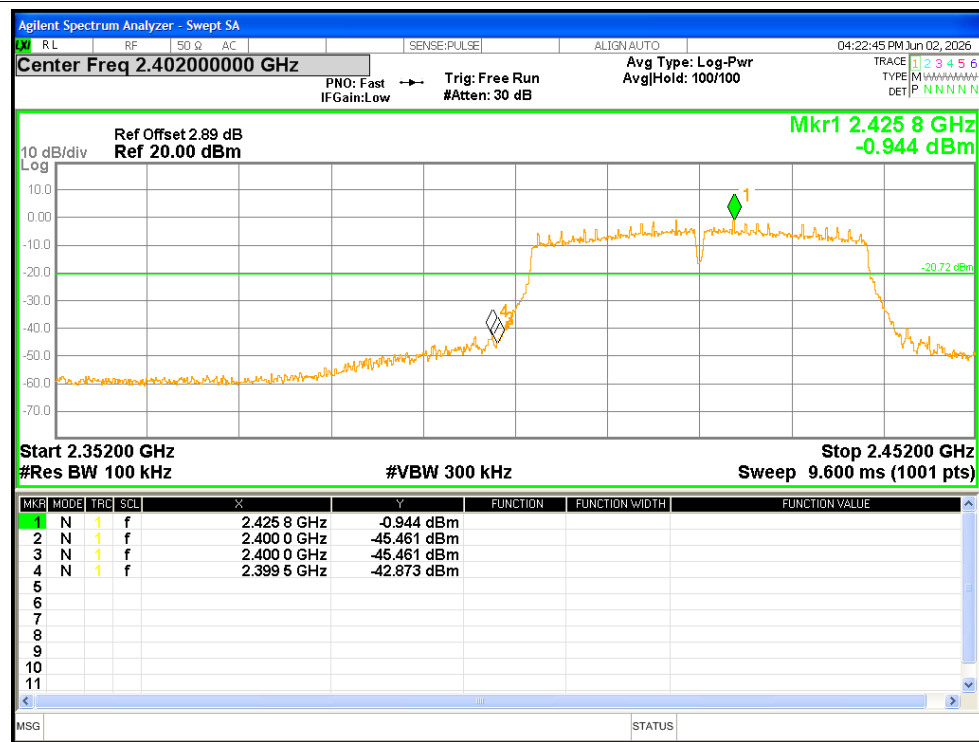
Band Edge NVNT n20 2462MHz Emission



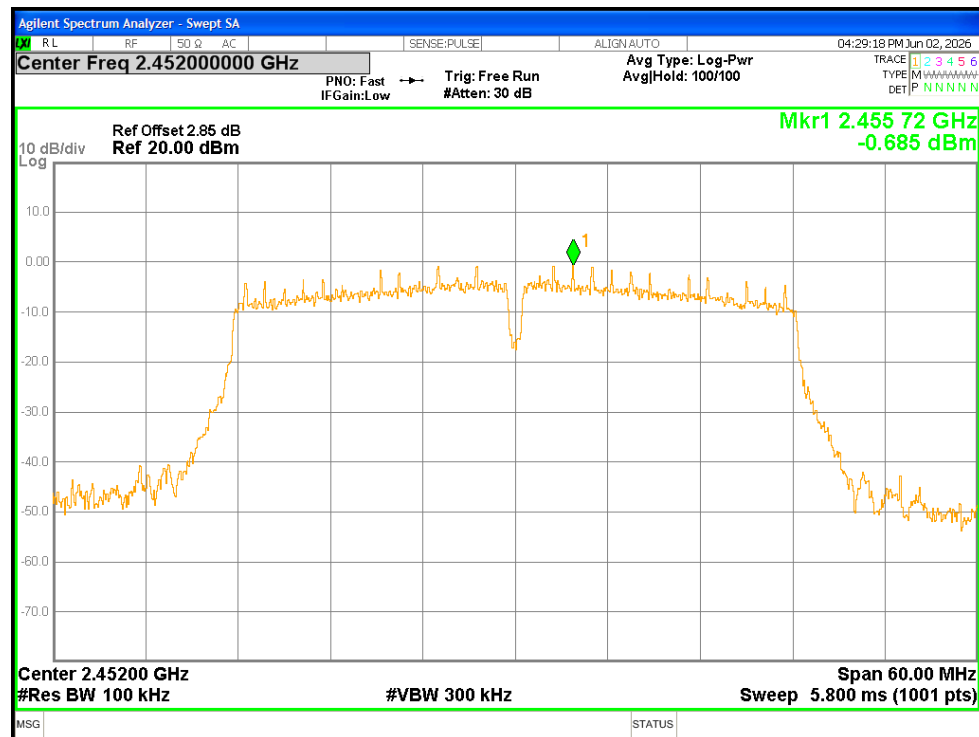
Band Edge NVNT n40 2422MHz Ref



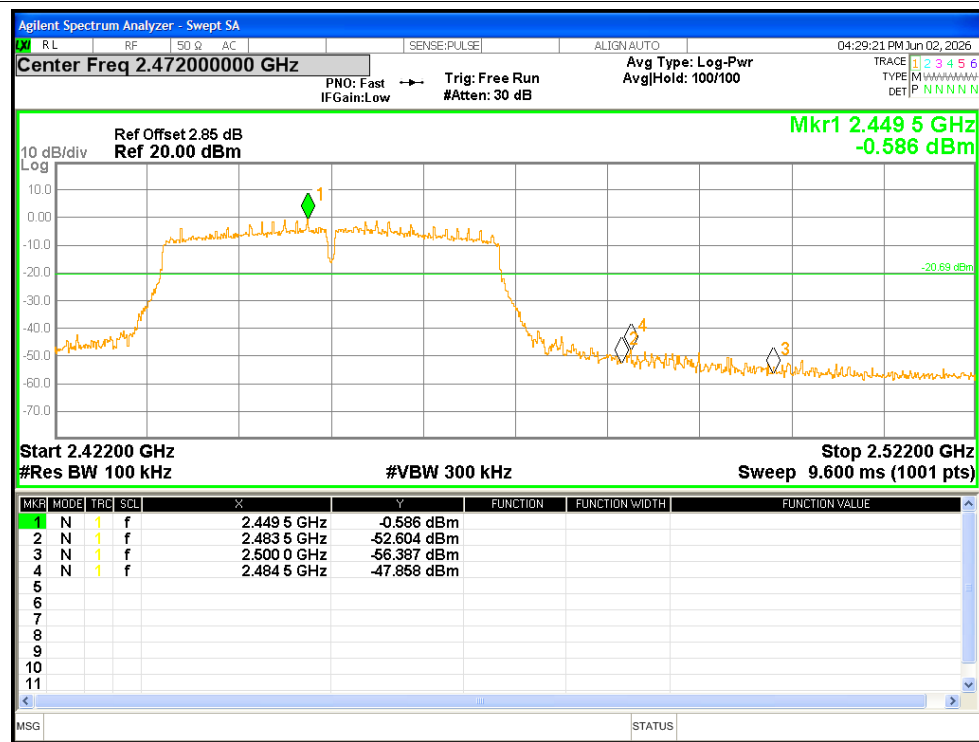
Band Edge NVNT n40 2422MHz Emission



Band Edge NVNT n40 2452MHz Ref



Band Edge NVNT n40 2452MHz Emission

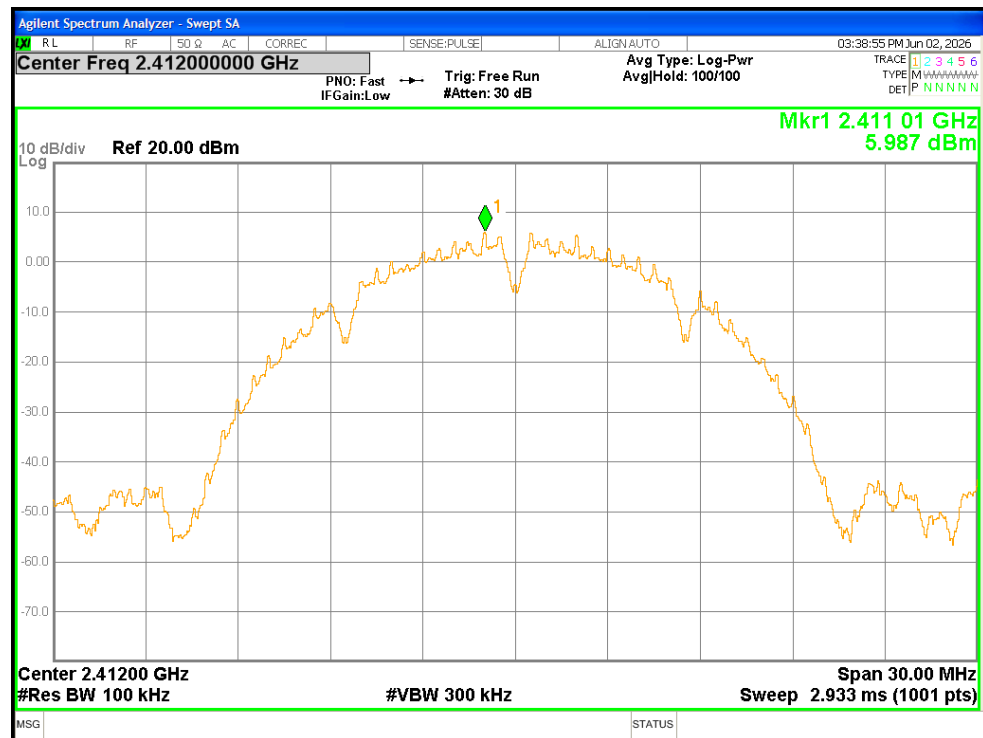


Conducted RF Spurious Emission

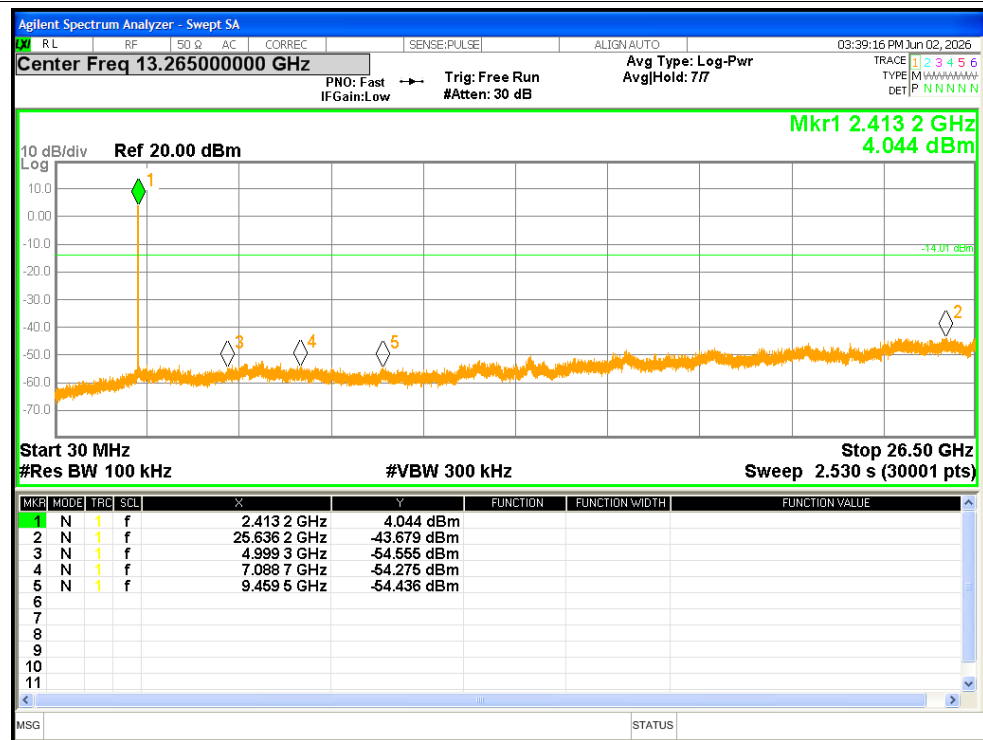
Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	-49.66	<=-20	Pass
NVNT	b	2437	-49.03	<=-20	Pass
NVNT	b	2462	-49.7	<=-20	Pass
NVNT	g	2412	-43.6	<=-20	Pass
NVNT	g	2437	-45.28	<=-20	Pass
NVNT	g	2462	-45.29	<=-20	Pass
NVNT	n20	2412	-43.77	<=-20	Pass
NVNT	n20	2437	-44.36	<=-20	Pass
NVNT	n20	2462	-45.54	<=-20	Pass
NVNT	n40	2422	-41.85	<=-20	Pass
NVNT	n40	2437	-41.3	<=-20	Pass
NVNT	n40	2452	-42.12	<=-20	Pass

Test Graphs

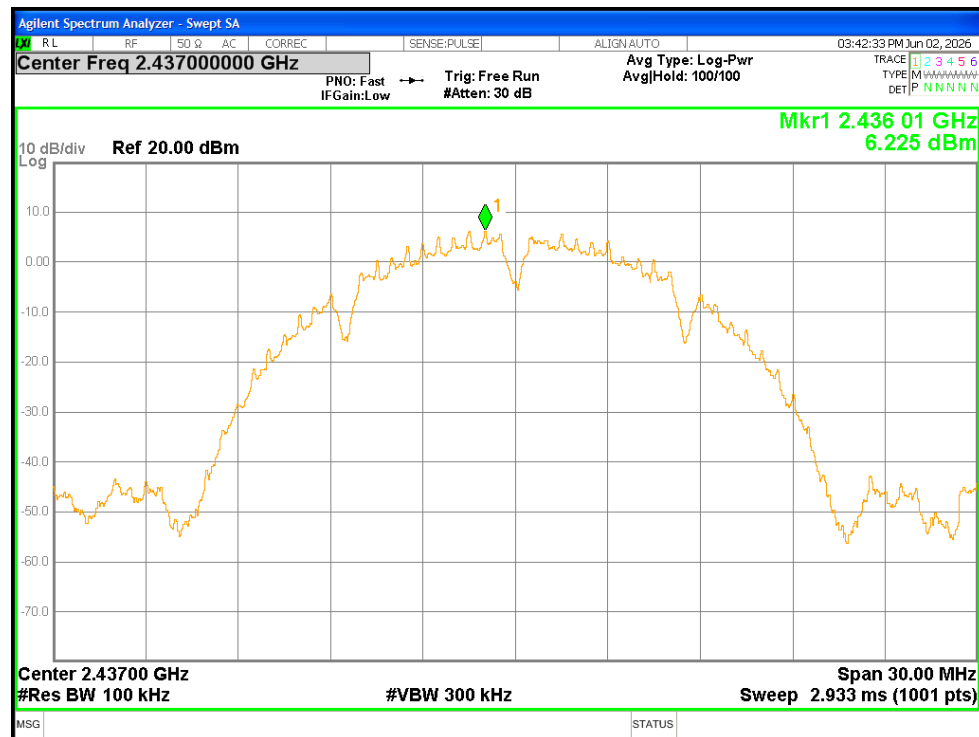
Tx. Spurious NVNT b 2412MHz Ref



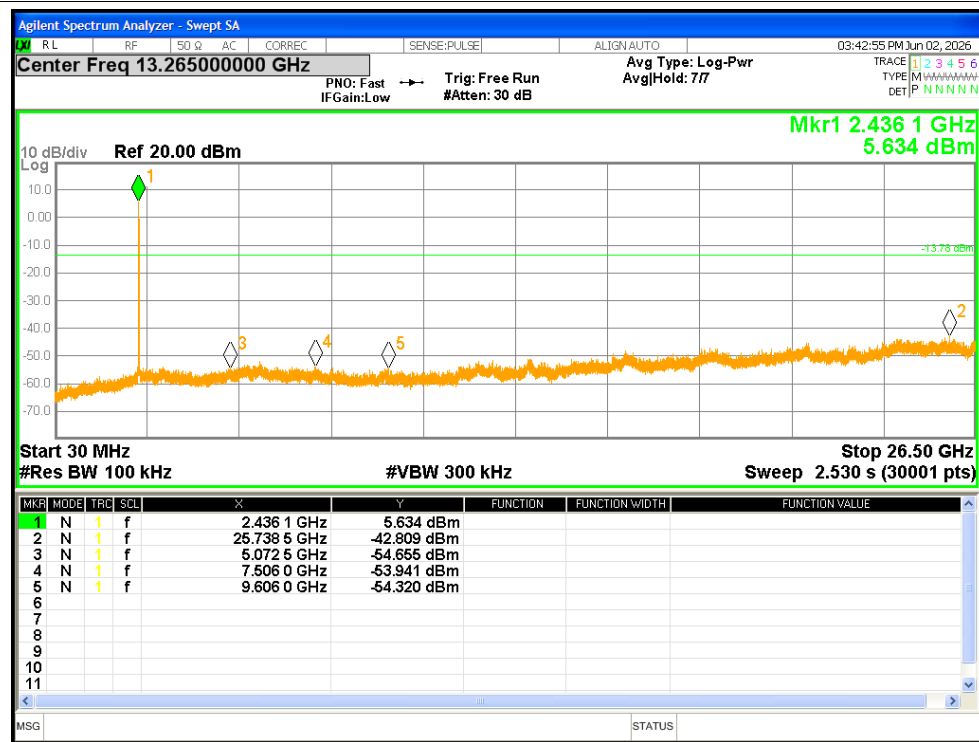
Tx. Spurious NVNT b 2412MHz Emission



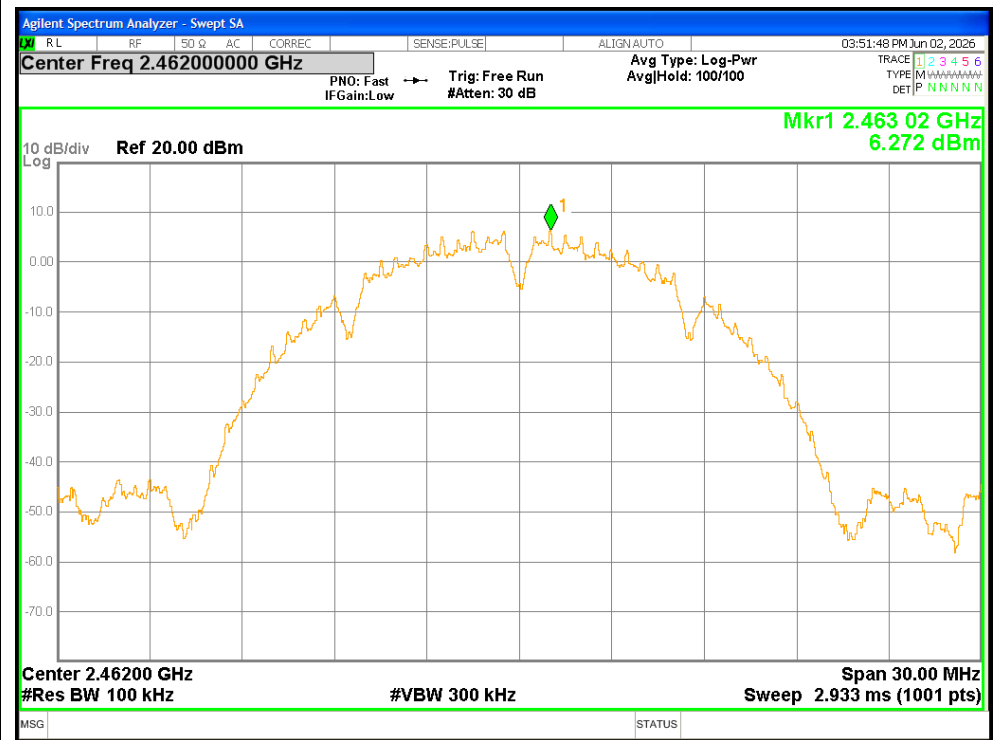
Tx. Spurious NVNT b 2437MHz Ref



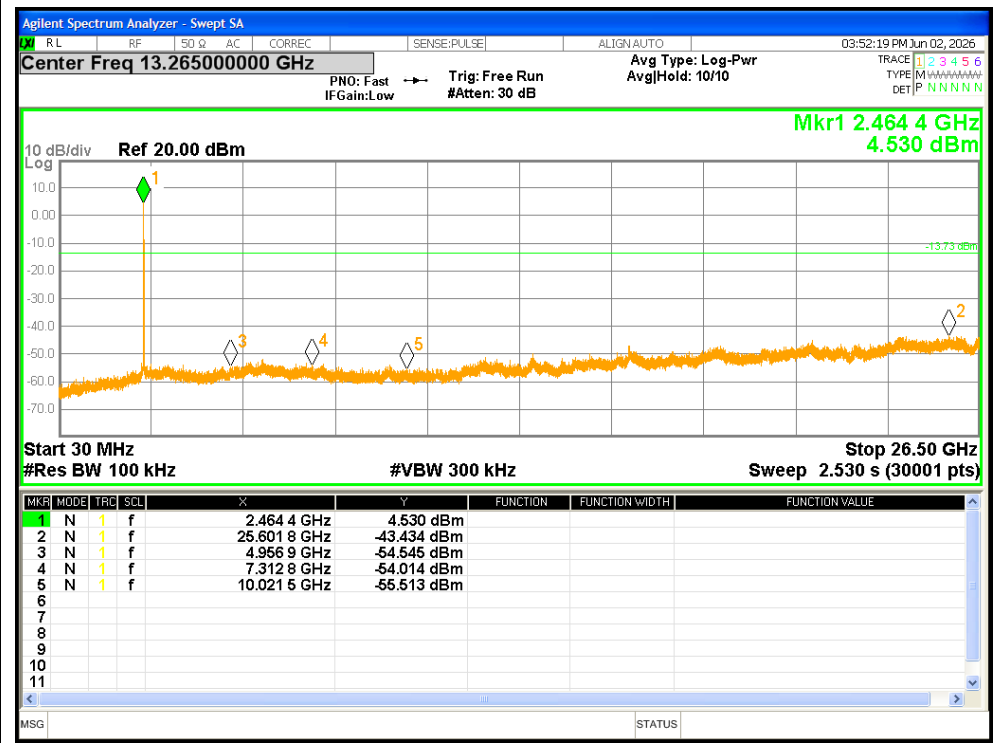
Tx. Spurious NVNT b 2437MHz Emission



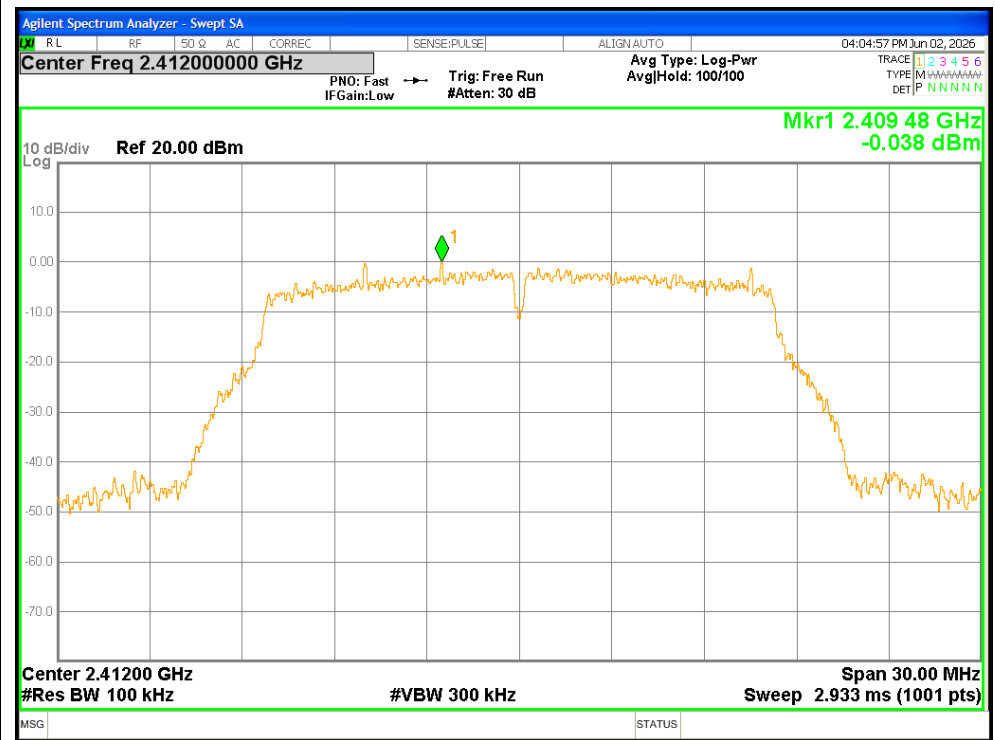
Tx. Spurious NVNT b 2462MHz Ref



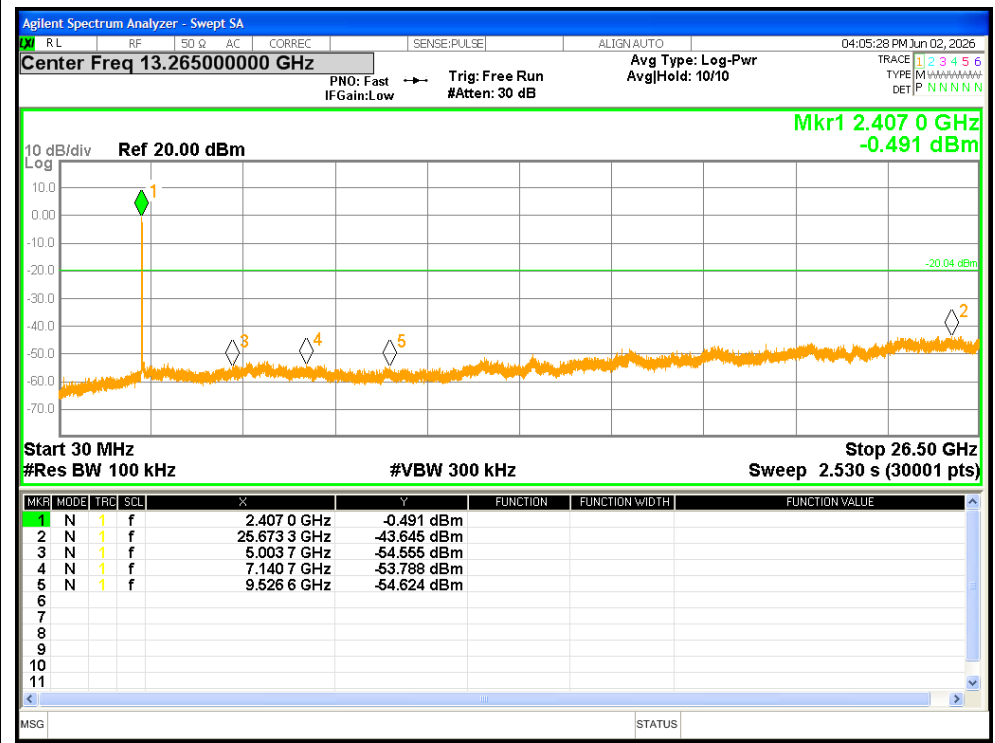
Tx. Spurious NVNT b 2462MHz Emission



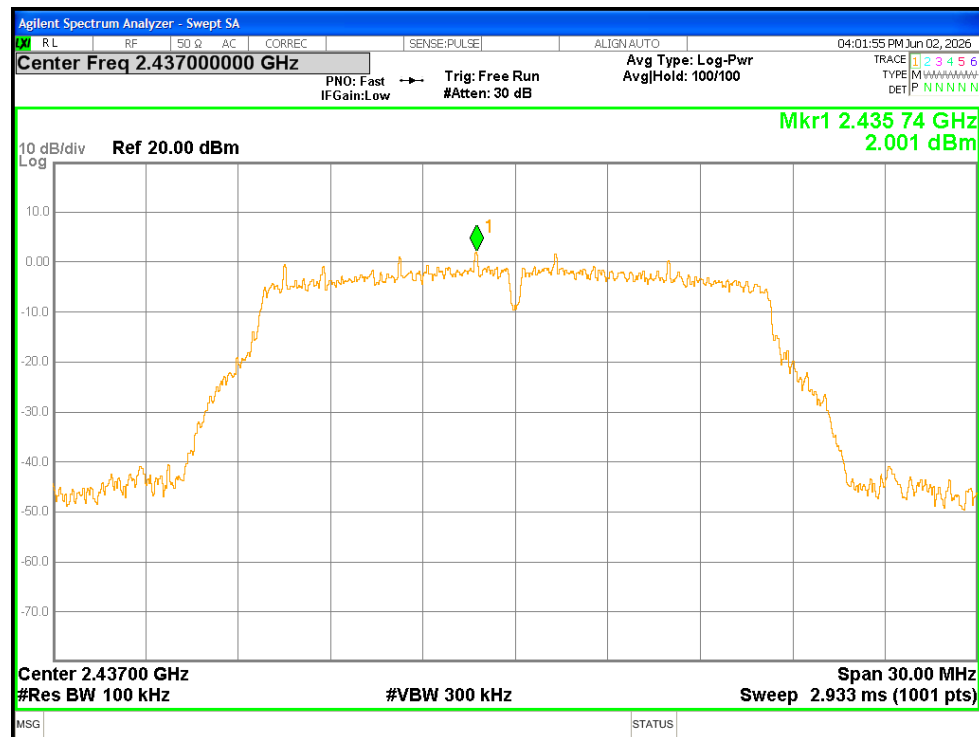
Tx. Spurious NVNT g 2412MHz Ref



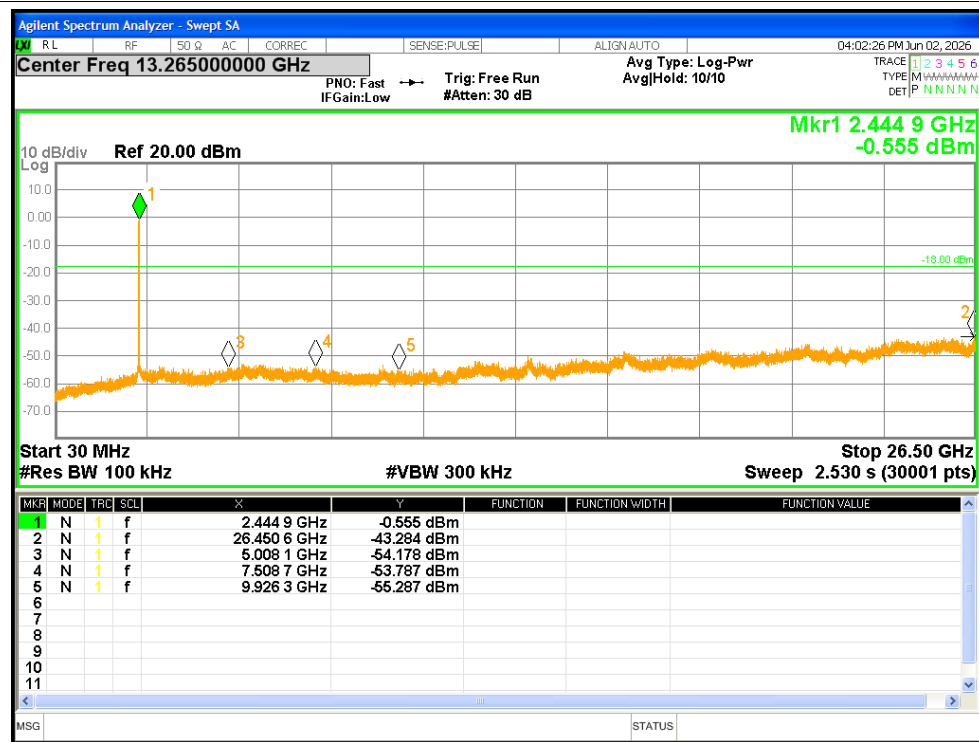
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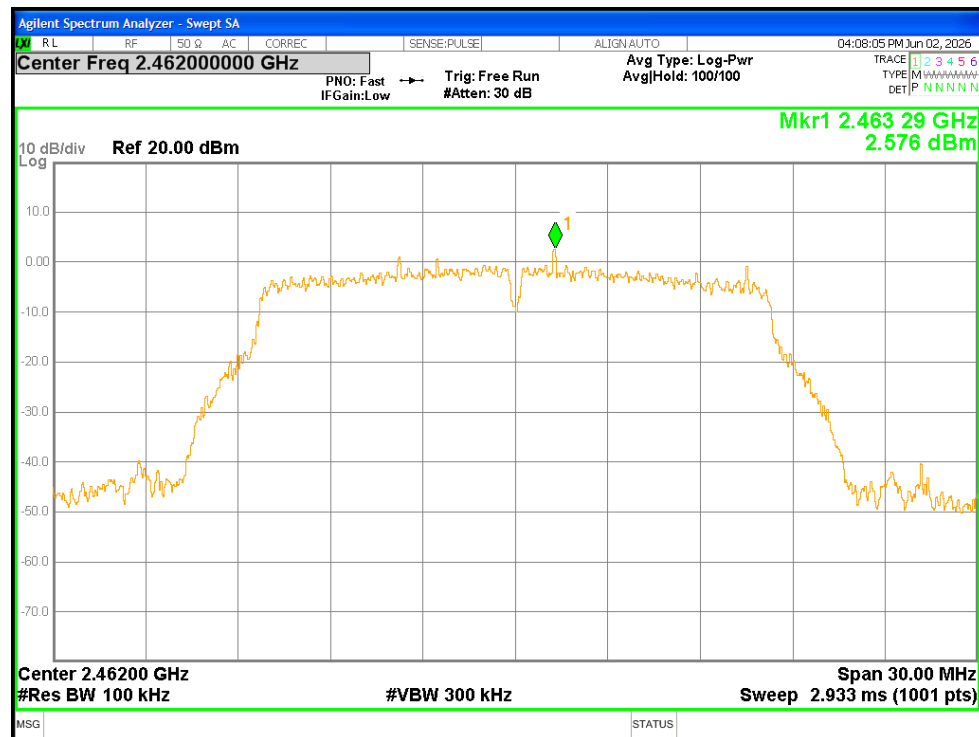
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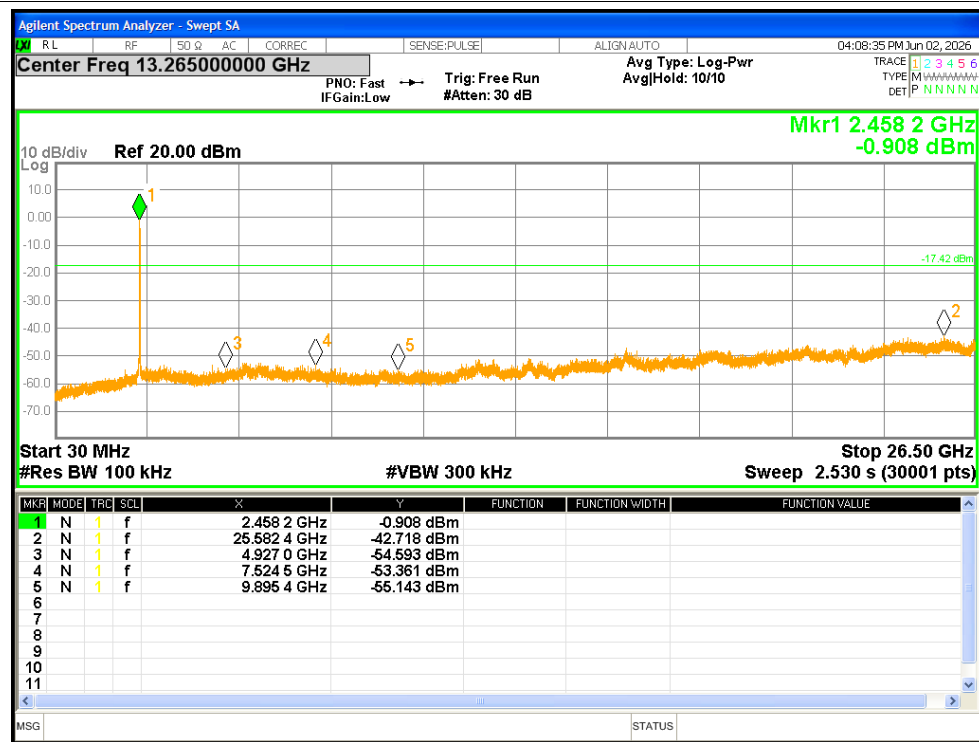
Tx. Spurious NVNT g 2437MHz Emission



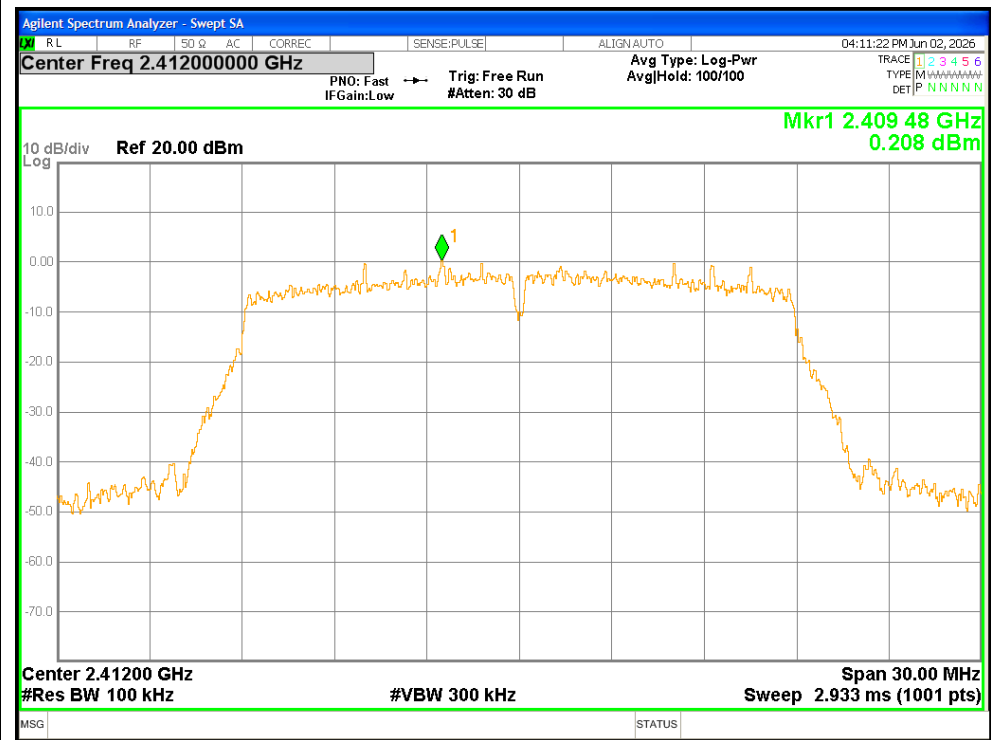
Tx. Spurious NVNT g 2462MHz Ref



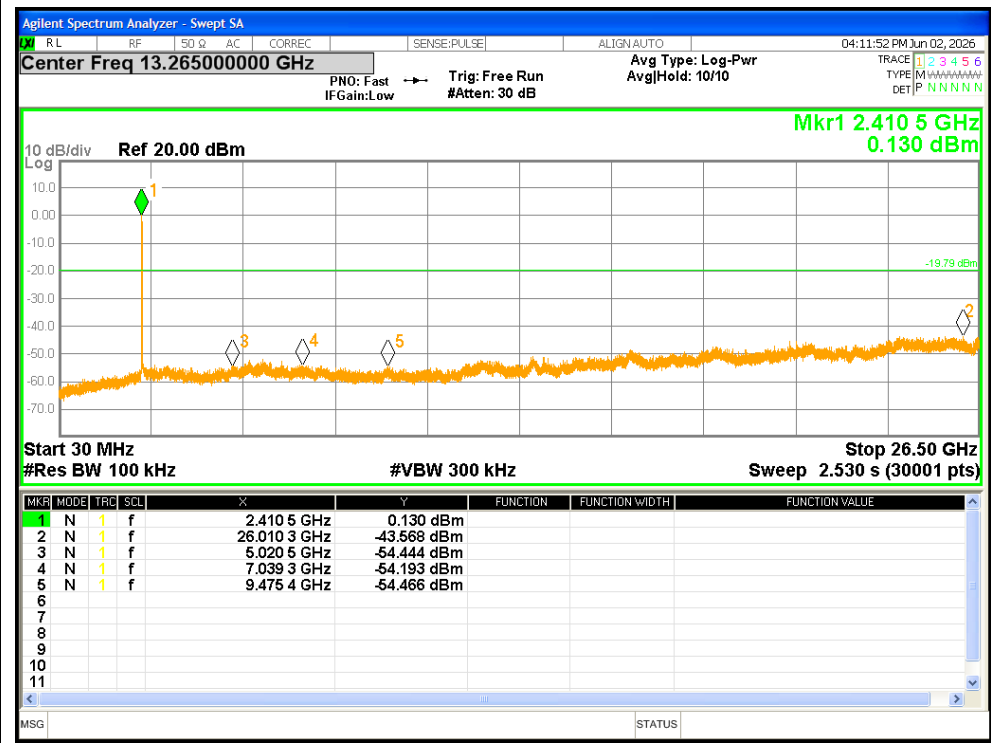
Tx. Spurious NVNT g 2462MHz Emission



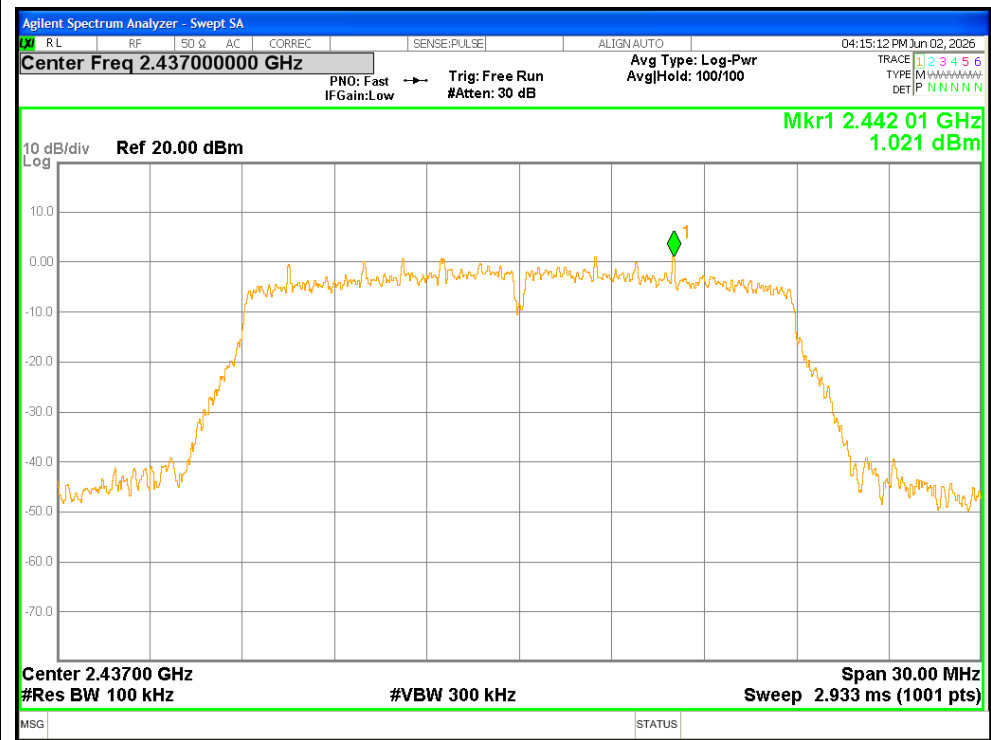
Tx. Spurious NVNT n20 2412MHz Ref



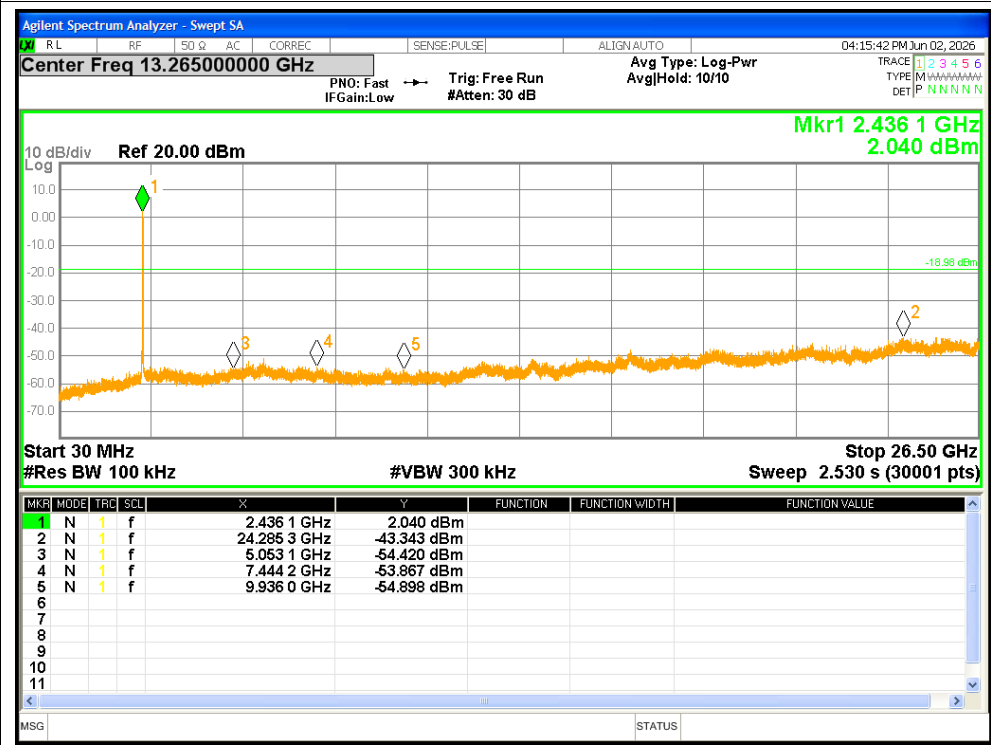
Tx. Spurious NVNT n20 2412MHz Emission



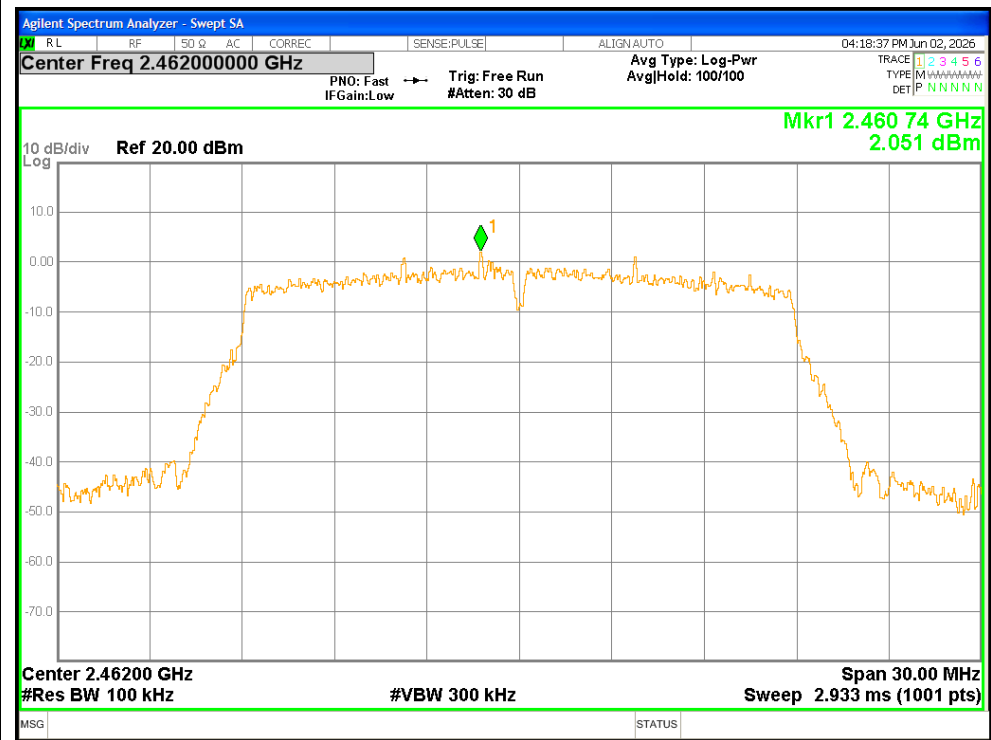
Tx. Spurious NVNT n20 2437MHz Ref



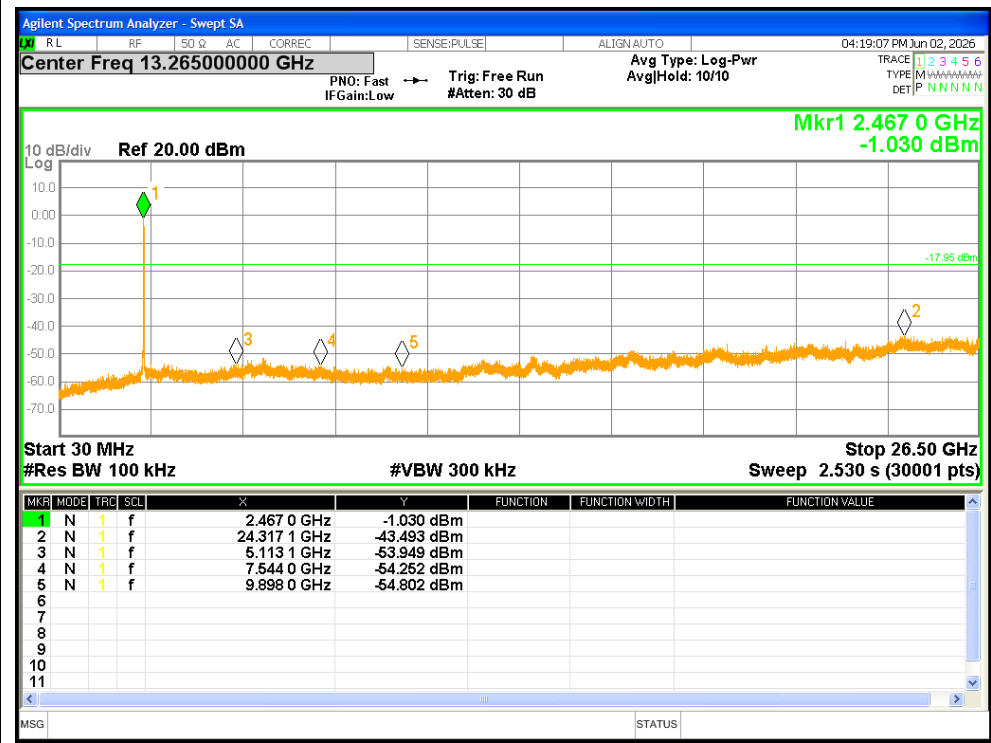
Tx. Spurious NVNT n20 2437MHz Emission



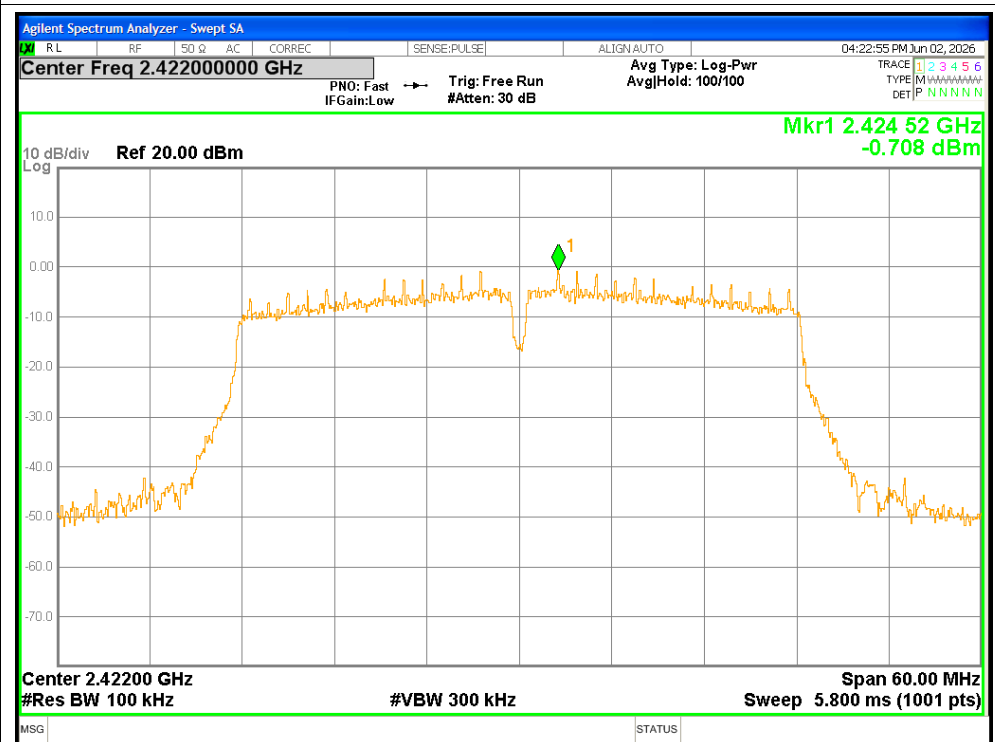
Tx. Spurious NVNT n20 2462MHz Ref



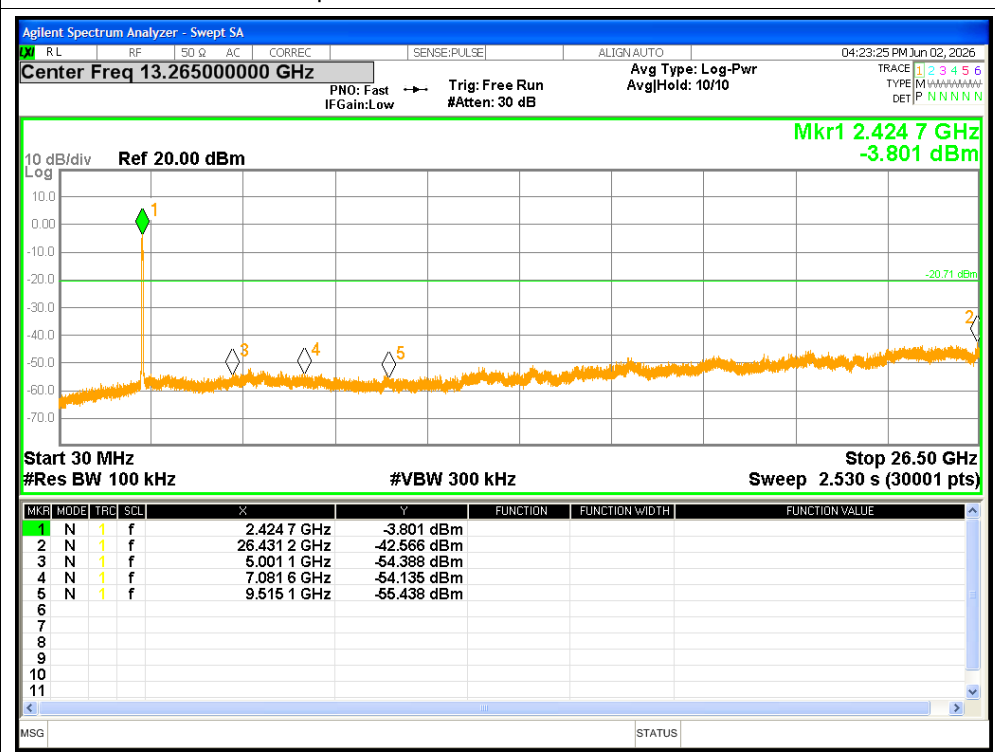
Tx. Spurious NVNT n20 2462MHz Emission



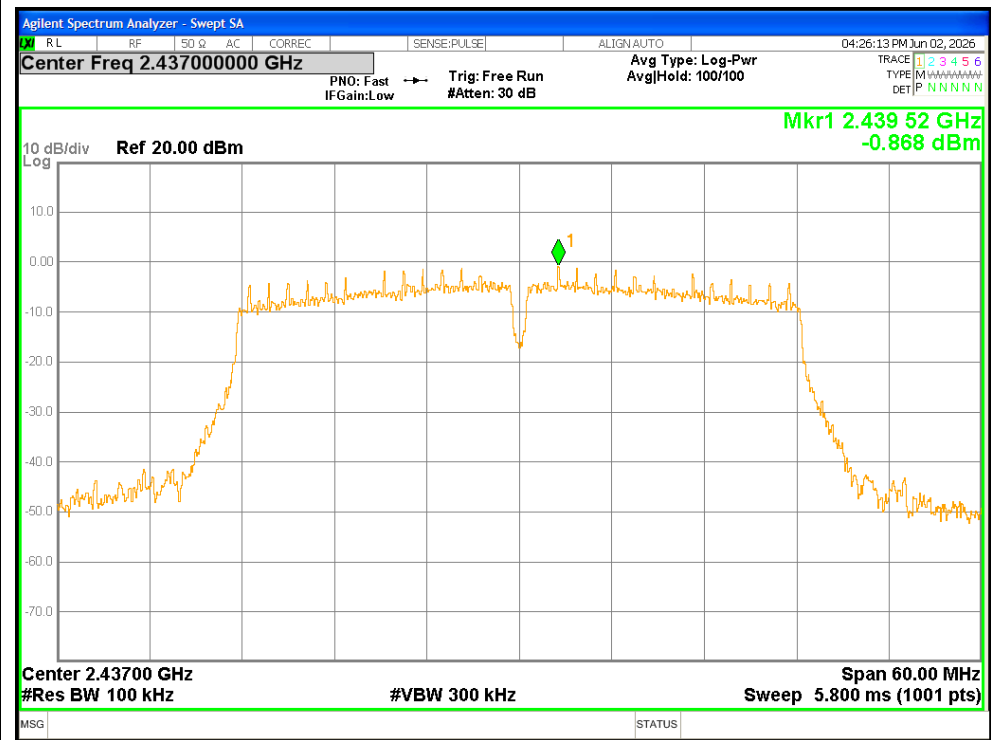
Tx. Spurious NVNT n40 2422MHz Ref



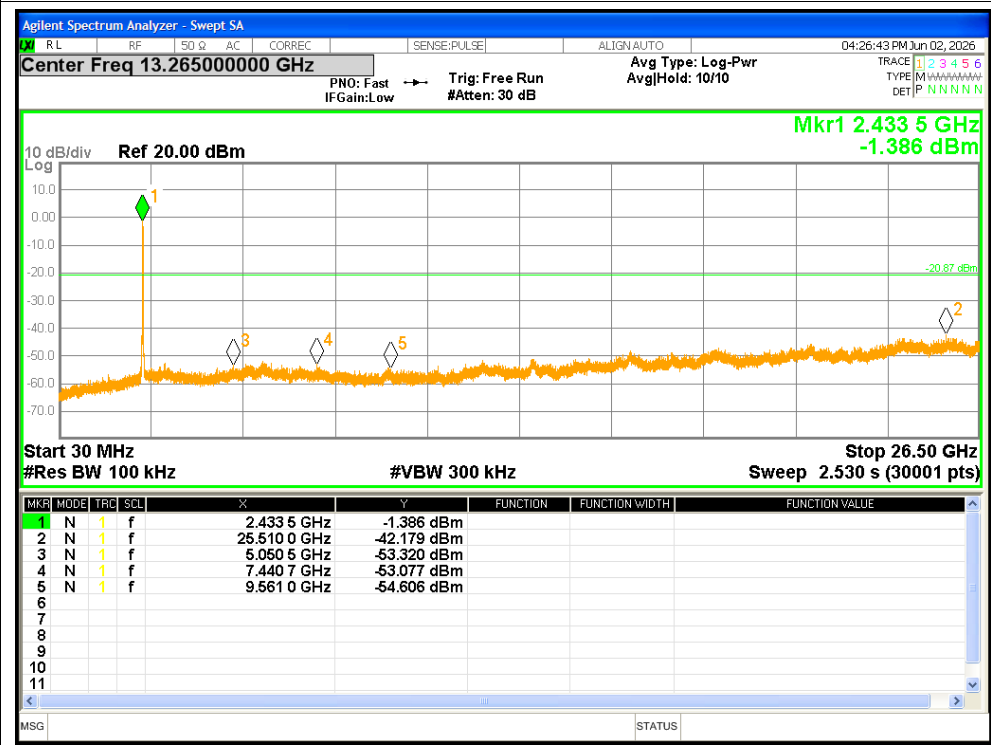
Tx. Spurious NVNT n40 2422MHz Emission



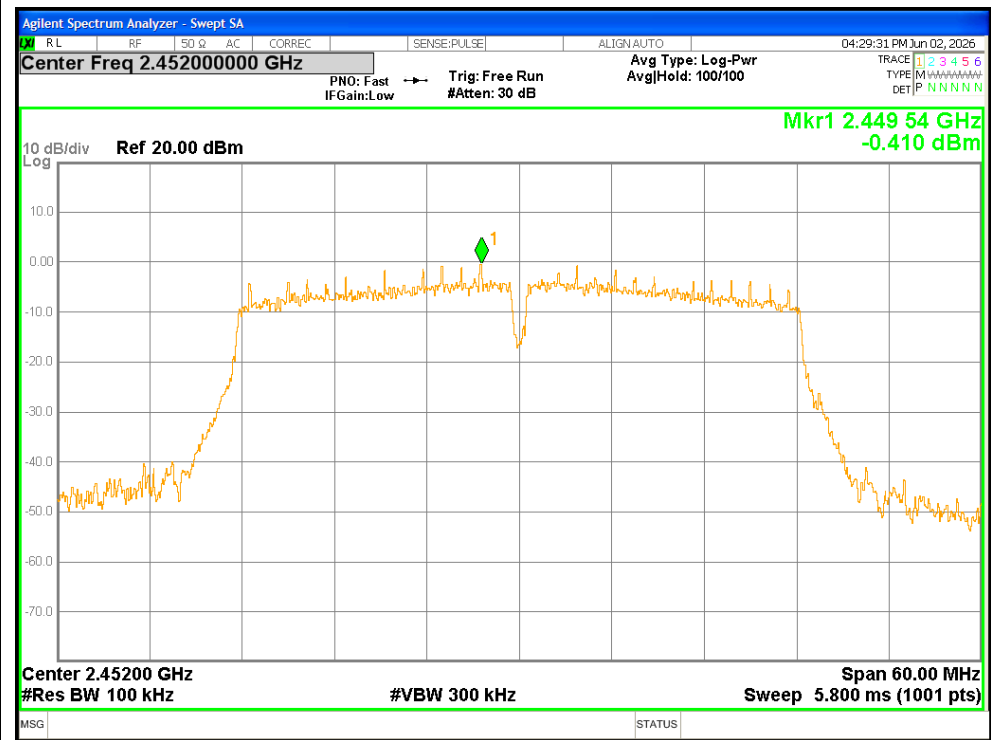
Tx. Spurious NVNT n40 2437MHz Ref



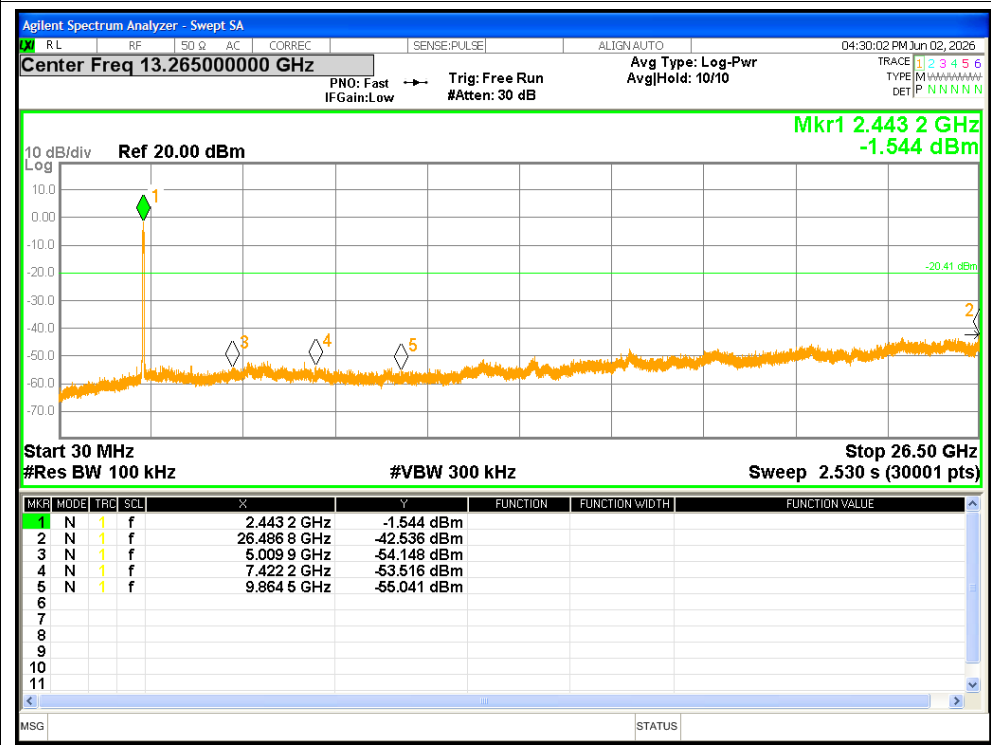
Tx. Spurious NVNT n40 2437MHz Emission



Tx. Spurious NVNT n40 2452MHz Ref



Tx. Spurious NVNT n40 2452MHz Emission



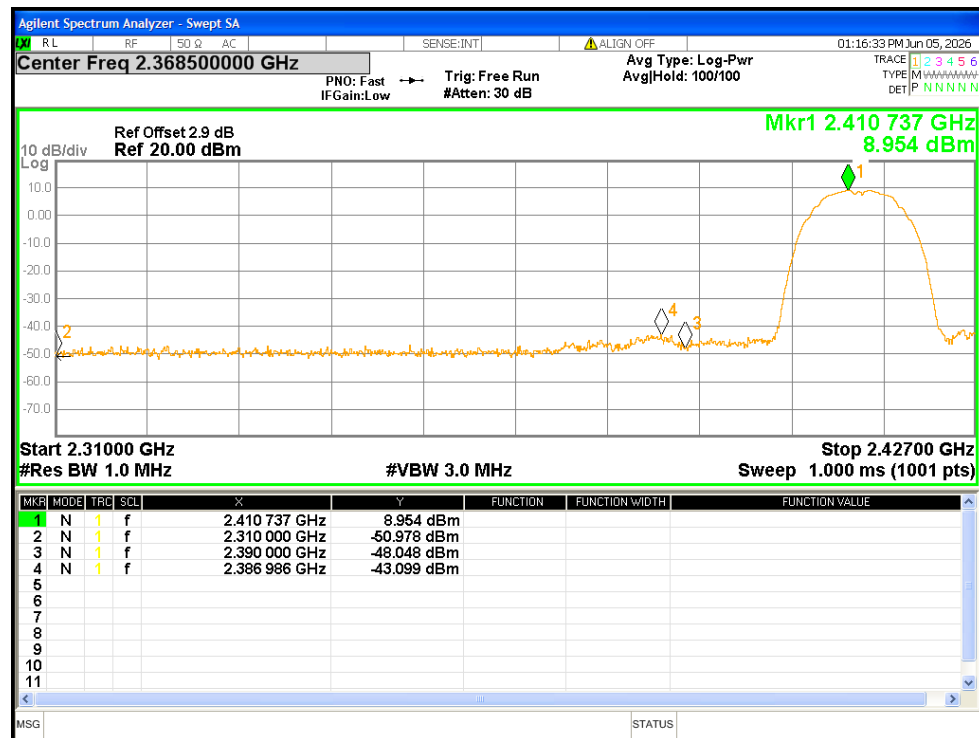
Restrict Band

Mode	Frequency (MHz)	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
b	2412	2310	-50.97	2	0	46.29	Peak	<=74	Pass
b	2412	2310	-57.53	2	0.01	39.74	Average	<=54	Pass
b	2412	2386.986	-43.09	2	0	54.17	Peak	<=74	Pass
b	2412	2385.933	-50.08	2	0.01	47.19	Average	<=54	Pass
b	2412	2390	-48.04	2	0	49.22	Peak	<=74	Pass
b	2412	2390	-55.36	2	0.01	41.91	Average	<=54	Pass
b	2462	2483.5	-47.29	2	0	49.97	Peak	<=74	Pass
b	2462	2483.5	-55.36	2	0.02	41.92	Average	<=54	Pass
b	2462	2488.658	-43.77	2	0	53.49	Peak	<=74	Pass
b	2462	2488.287	-51.93	2	0.02	45.35	Average	<=54	Pass
b	2462	2500	-47.46	2	0	49.8	Peak	<=74	Pass
b	2462	2500	-54.45	2	0.02	42.83	Average	<=54	Pass
g	2412	2310	-50.93	2	0	46.33	Peak	<=74	Pass
g	2412	2310	-57.35	2	0.11	40.02	Average	<=54	Pass
g	2412	2386.401	-45.11	2	0	52.15	Peak	<=74	Pass
g	2412	2389.092	-55.12	2	0.11	42.25	Average	<=54	Pass
g	2412	2390	-47.69	2	0	49.57	Peak	<=74	Pass
g	2412	2390	-55.78	2	0.11	41.59	Average	<=54	Pass
g	2462	2483.5	-46.25	2	0	51.01	Peak	<=74	Pass
g	2462	2483.5	-54.7	2	0.11	42.67	Average	<=54	Pass
g	2462	2484.577	-43.46	2	0	53.8	Peak	<=74	Pass
g	2462	2483.729	-53.88	2	0.11	43.49	Average	<=54	Pass
g	2462	2500	-48.41	2	0	48.85	Peak	<=74	Pass
g	2462	2500	-56.43	2	0.11	40.94	Average	<=54	Pass
n20	2412	2310	-49.21	2	0	48.05	Peak	<=74	Pass
n20	2412	2310	-58	2	0.12	39.38	Average	<=54	Pass
n20	2412	2386.752	-45.04	2	0	52.22	Peak	<=74	Pass
n20	2412	2389.911	-54.5	2	0.12	42.88	Average	<=54	Pass
n20	2412	2390	-46.88	2	0	50.38	Peak	<=74	Pass
n20	2412	2390	-54.87	2	0.12	42.51	Average	<=54	Pass
n20	2462	2483.5	-44.59	2	0	52.67	Peak	<=74	Pass
n20	2462	2483.5	-54.13	2	0.11	43.24	Average	<=54	Pass
n20	2462	2483.782	-42.38	2	0	54.88	Peak	<=74	Pass
n20	2462	2484.047	-53.75	2	0.11	43.62	Average	<=54	Pass
n20	2462	2500	-47.67	2	0	49.59	Peak	<=74	Pass
n20	2462	2500	-57.01	2	0.11	40.36	Average	<=54	Pass
n40	2422	2310	-50.34	2	0	46.92	Peak	<=74	Pass
n40	2422	2310	-57.62	2	0.22	39.86	Average	<=54	Pass
n40	2422	2387.248	-35.55	2	0	61.71	Peak	<=74	Pass

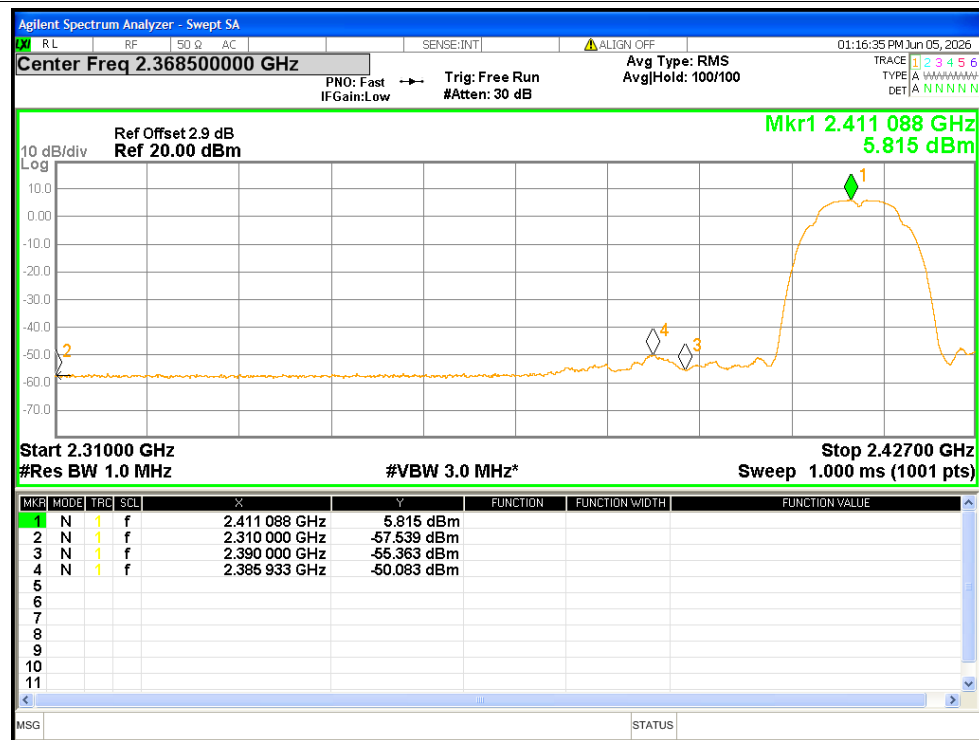
n40	2422	2389.094	-45.45	2	0.22	52.03	Average	<=54	Pass
n40	2422	2390	-37.37	2	0	59.89	Peak	<=74	Pass
n40	2422	2390	-45.62	2	0.22	51.86	Average	<=54	Pass
n40	2452	2483.5	-39.56	2	0	57.7	Peak	<=74	Pass
n40	2452	2483.5	-48.57	2	0.22	48.91	Average	<=54	Pass
n40	2452	2484.322	-37.47	2	0	59.79	Peak	<=74	Pass
n40	2452	2484.088	-47.74	2	0.22	49.74	Average	<=54	Pass
n40	2452	2500	-46.47	2	0	50.79	Peak	<=74	Pass
n40	2452	2500	-54.35	2	0.22	43.13	Average	<=54	Pass

Test Graphs

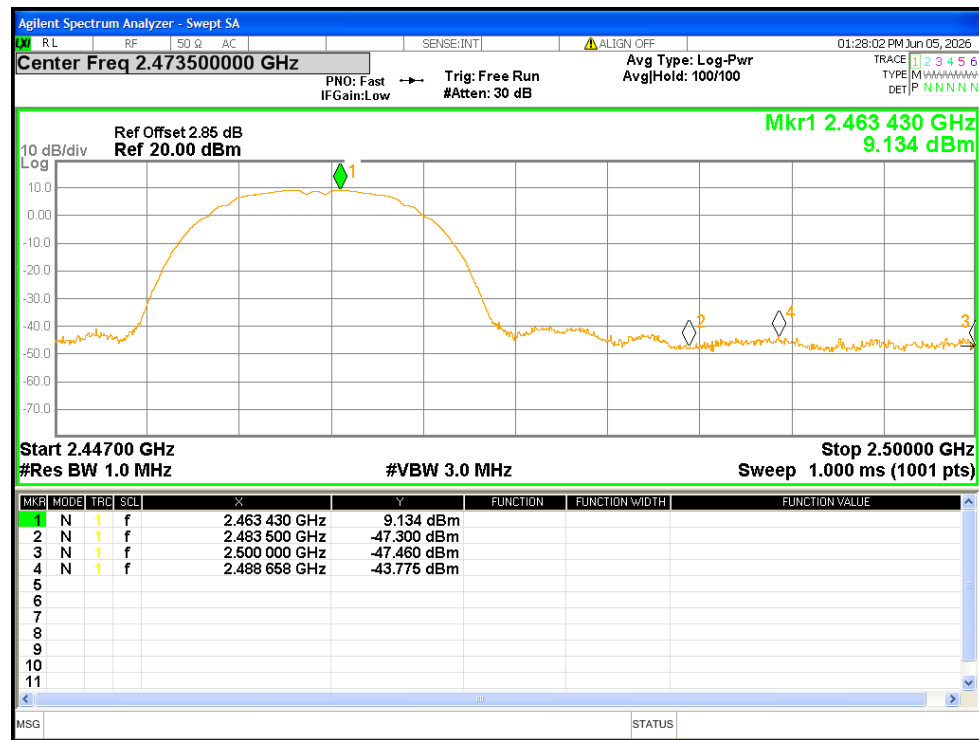
Restrict Band NVNT b 2412MHz Peak



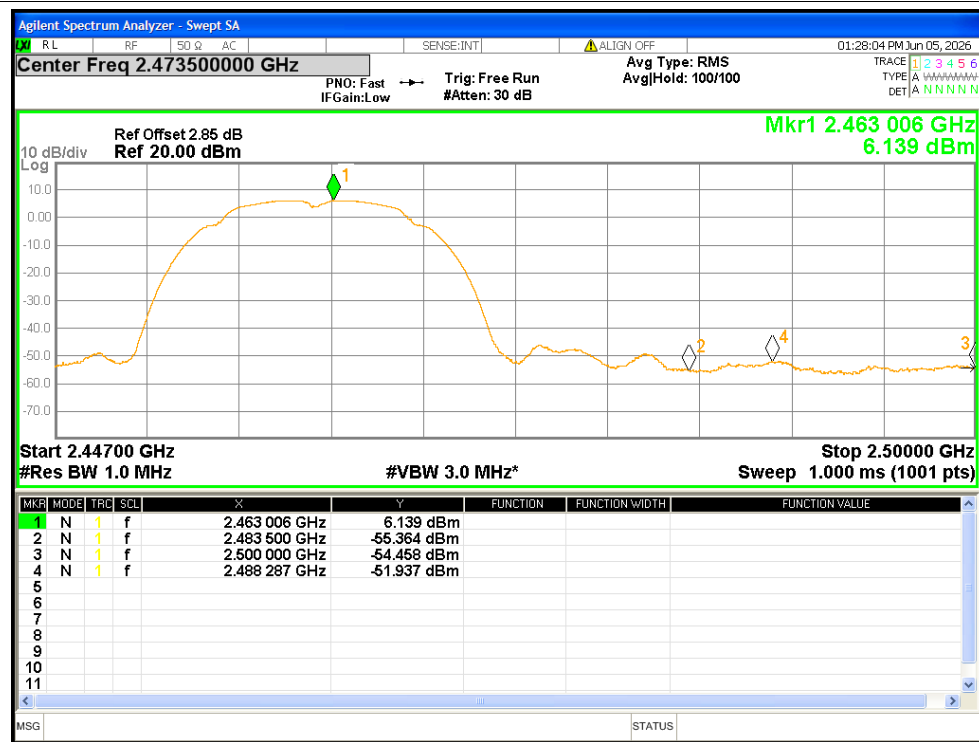
Restrict Band NVNT b 2412MHz Average



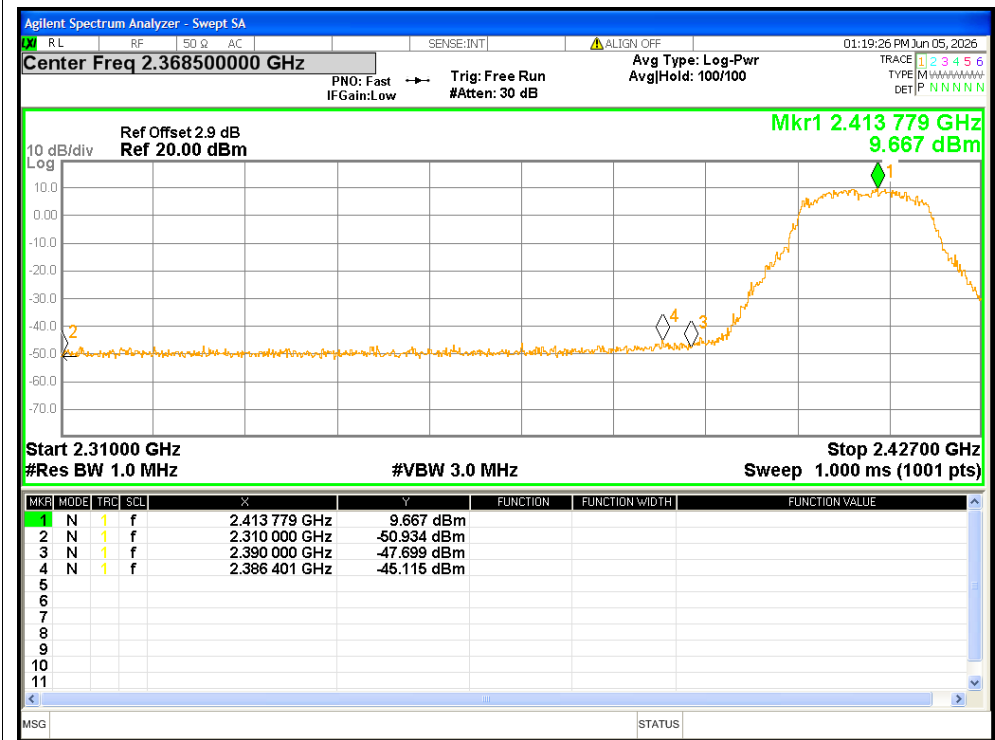
Restrict Band NVNT b 2462MHz Peak



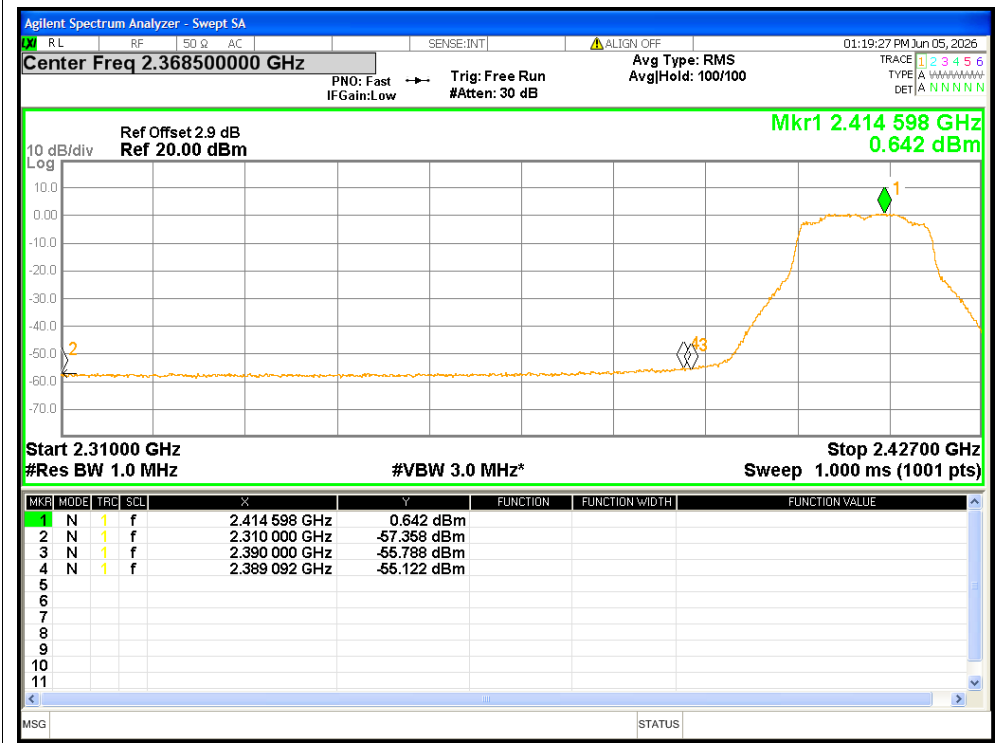
Restrict Band NVNT b 2462MHz Average



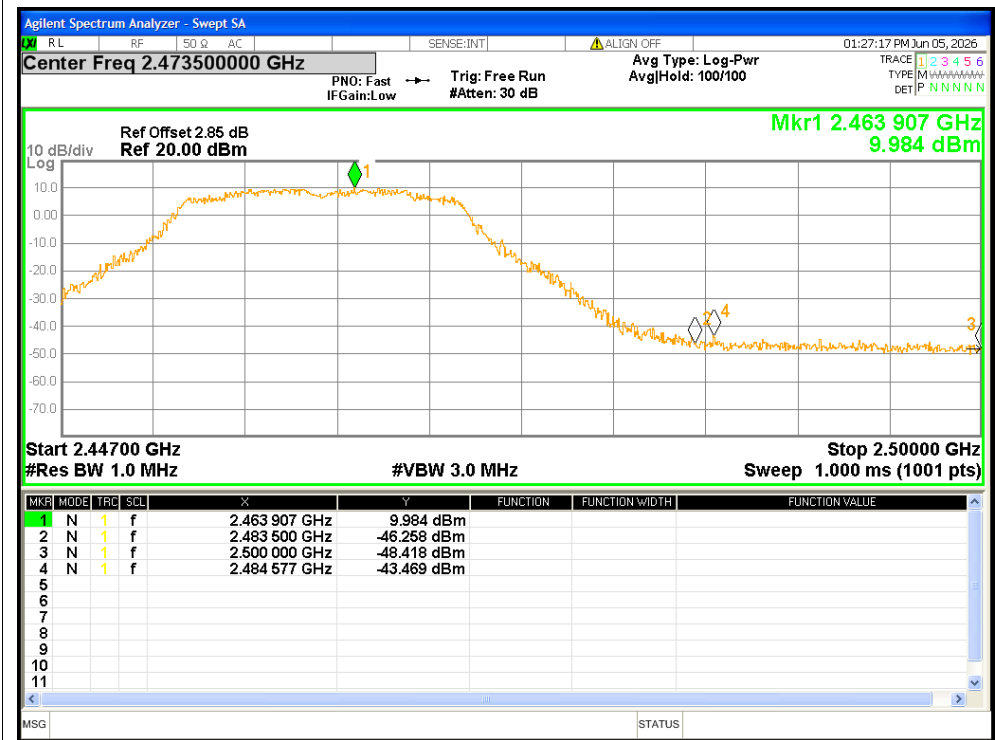
Restrict Band NVNT g 2412MHz Peak



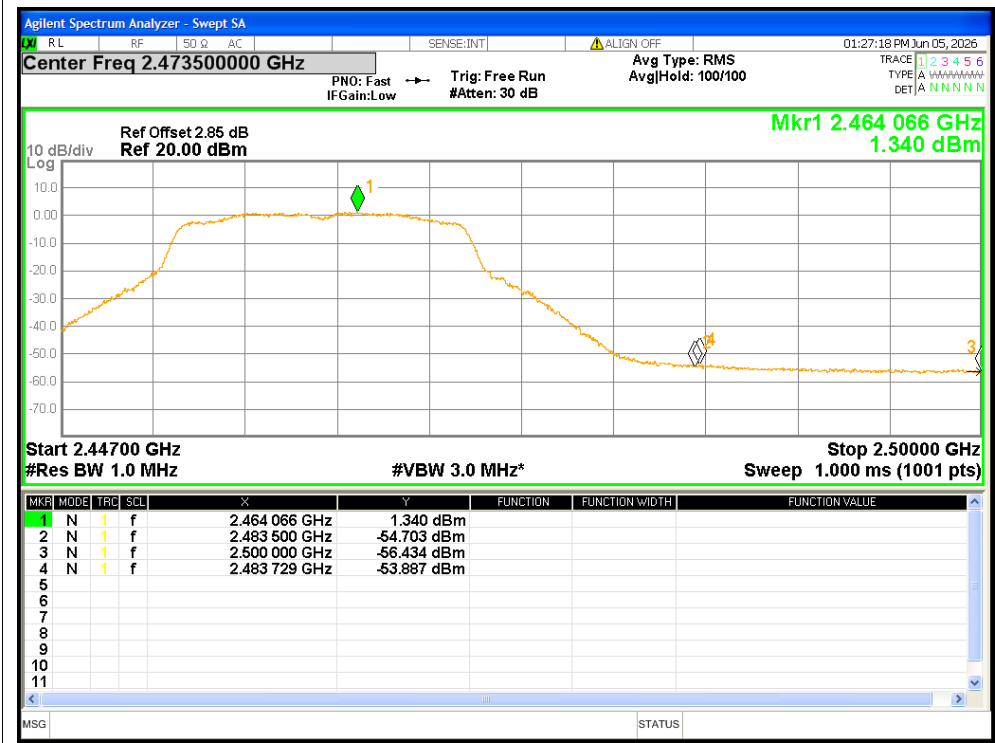
Restrict Band NVNT g 2412MHz Average



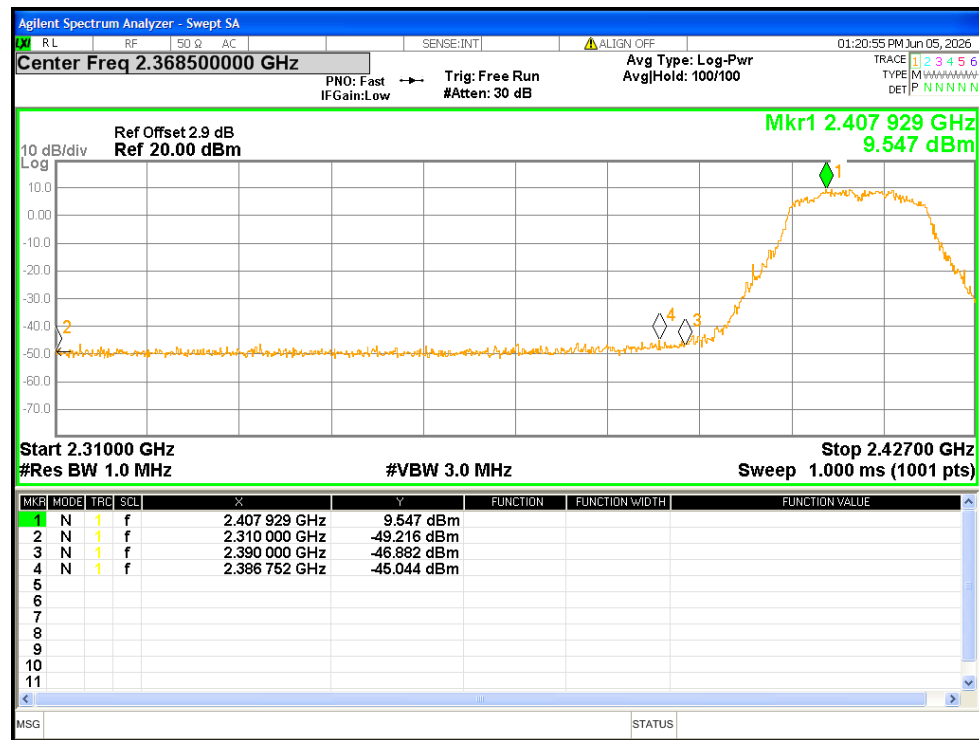
Restrict Band NVNT g 2462MHz Peak



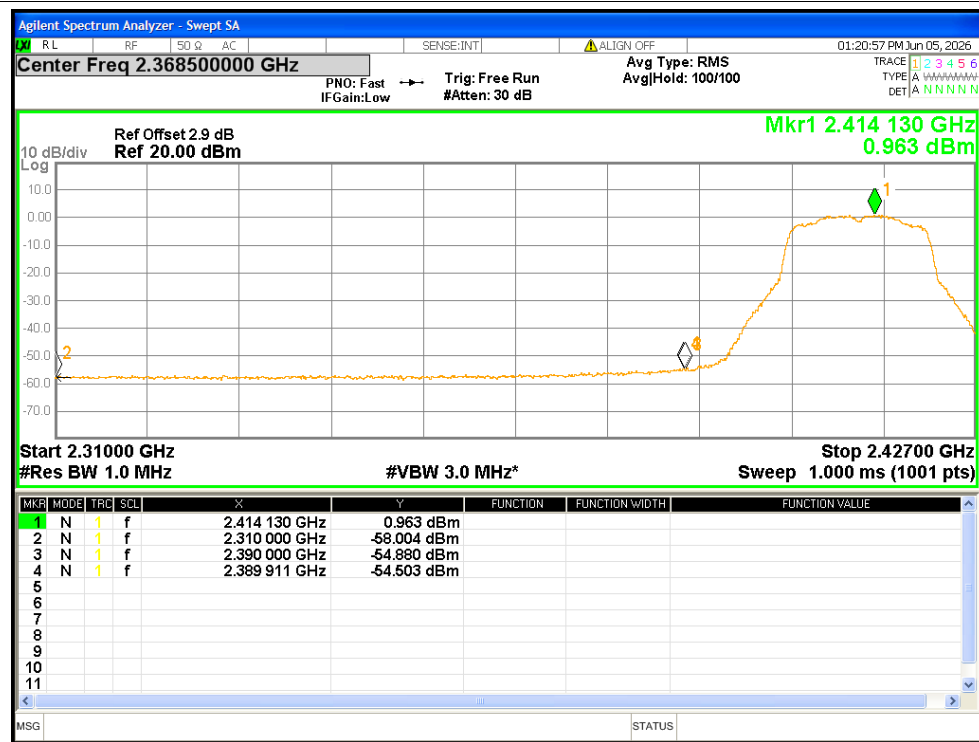
Restrict Band NVNT g 2462MHz Average



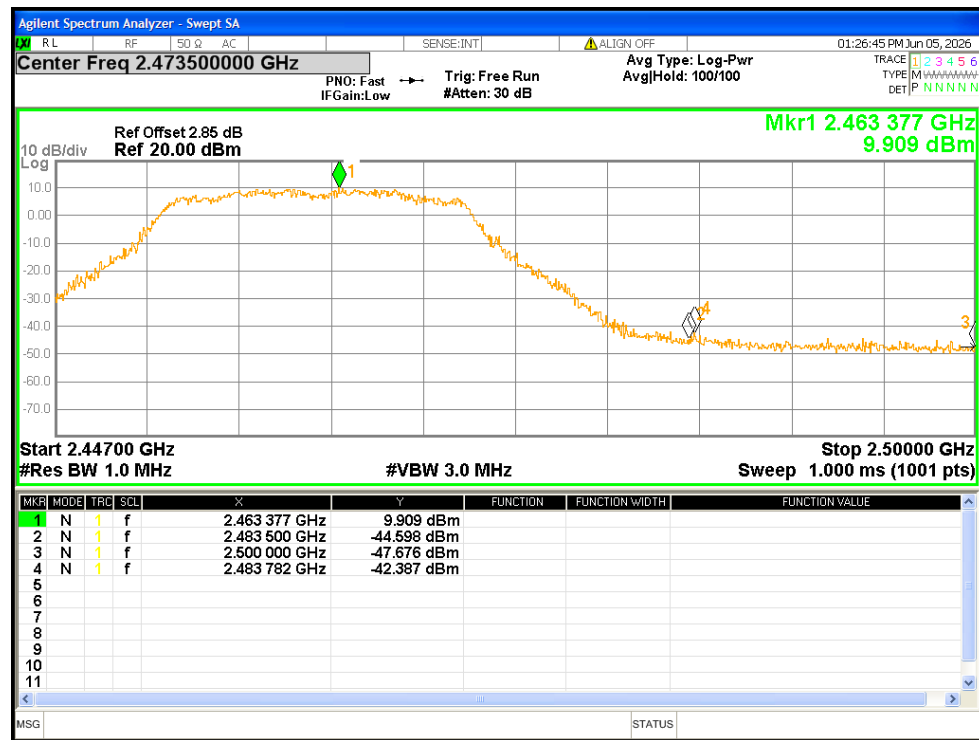
Restrict Band NVNT n20 2412MHz Peak



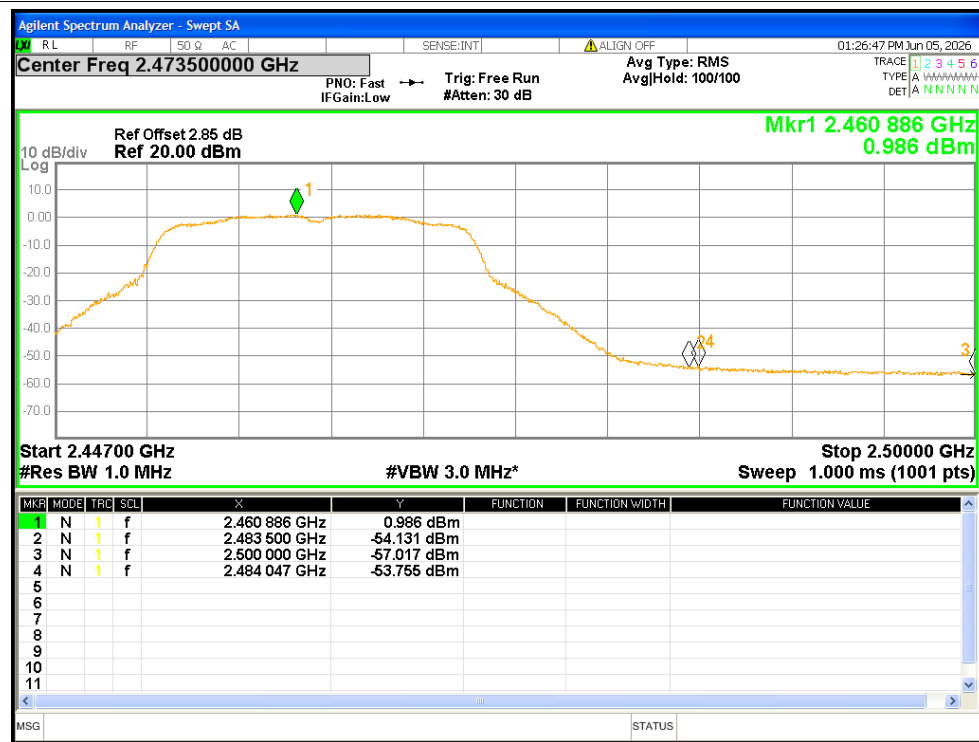
Restrict Band NVNT n20 2412MHz Average



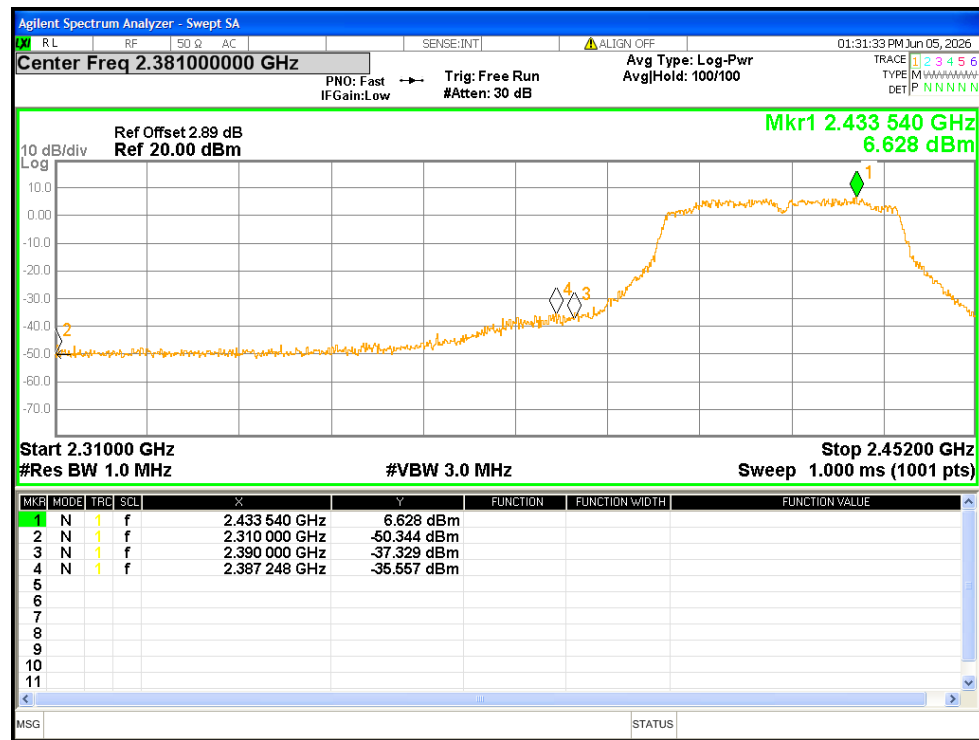
Restrict Band NVNT n20 2462MHz Peak



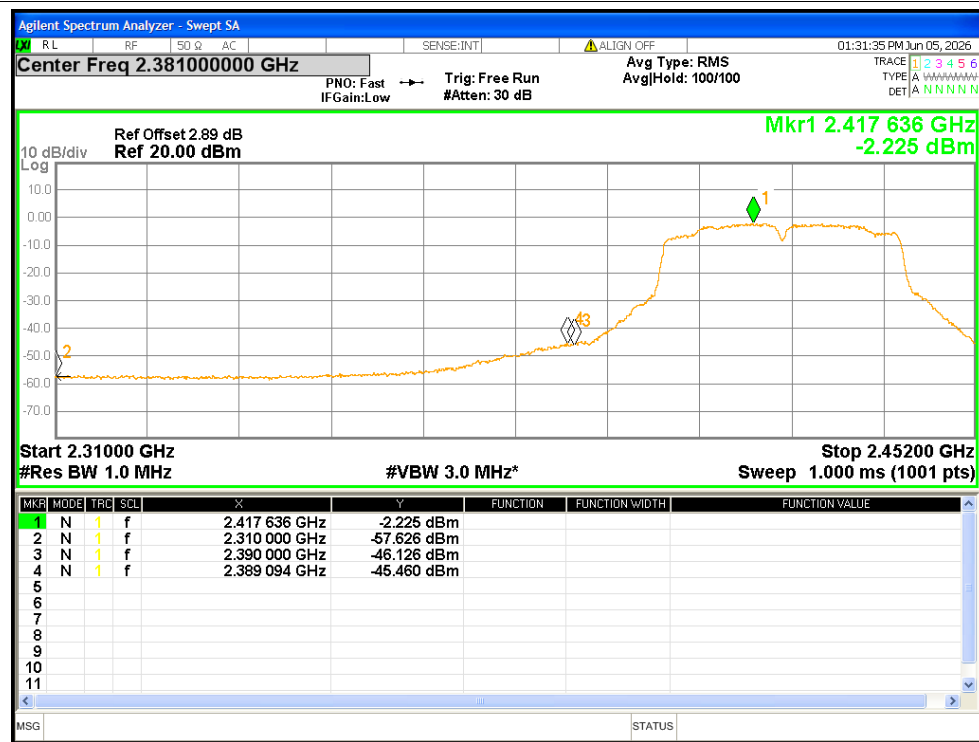
Restrict Band NVNT n20 2462MHz Average



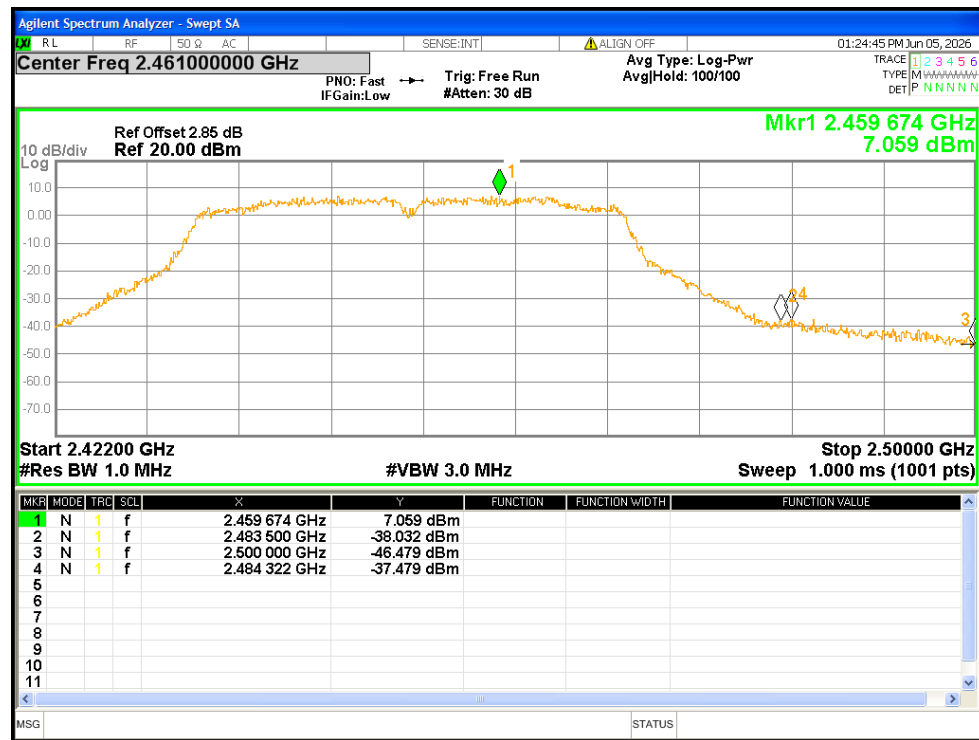
Restrict Band NVNT n40 2422MHz Peak



Restrict Band NVNT n40 2422MHz Average



Restrict Band NVNT n40 2452MHz Peak



Restrict Band NVNT n40 2452MHz Average

