

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2AC8UA2570

Company : Anhui Huami Information Technology Co., Ltd.

EUT : Smart Watch

Model Number : A2570

Report No. : CTA26061300103

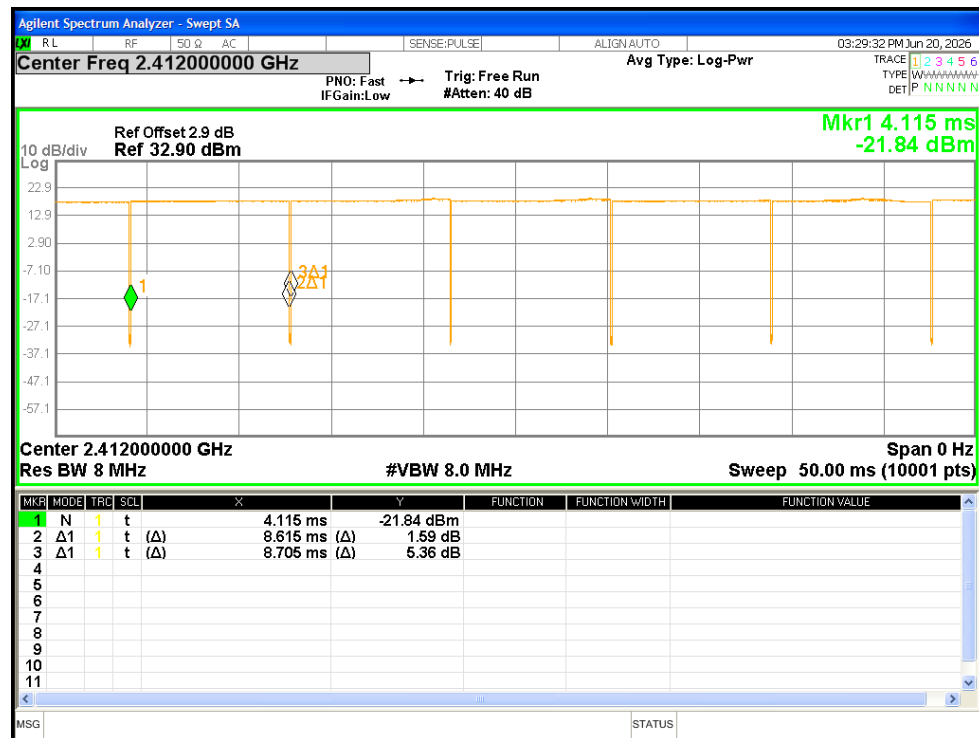
Reviewed By : Eric Wang

Duty Cycle

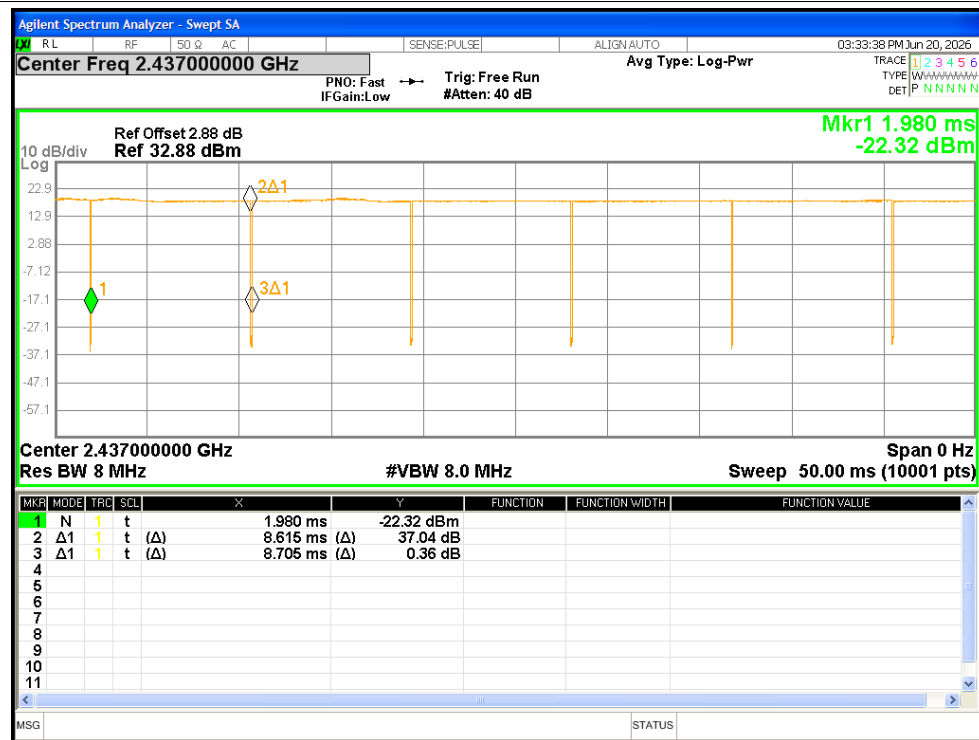
Condition	Mode	Frequency (MHz)	On Time (ms)	Period (ms)	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	8.615	8.705	98.97	0.04	0.12
NVNT	b	2437	8.615	8.705	98.97	0.04	0.12
NVNT	b	2462	8.61	8.705	98.91	0.05	0.12
NVNT	g	2412	1.428	1.527	93.52	0.29	0.7
NVNT	g	2437	1.428	1.527	93.52	0.29	0.7
NVNT	g	2462	1.428	1.527	93.52	0.29	0.7
NVNT	n20	2412	1.335	1.434	93.1	0.31	0.75
NVNT	n20	2437	1.338	1.437	93.11	0.31	0.75
NVNT	n20	2462	1.338	1.434	93.31	0.3	0.75

Test Graphs

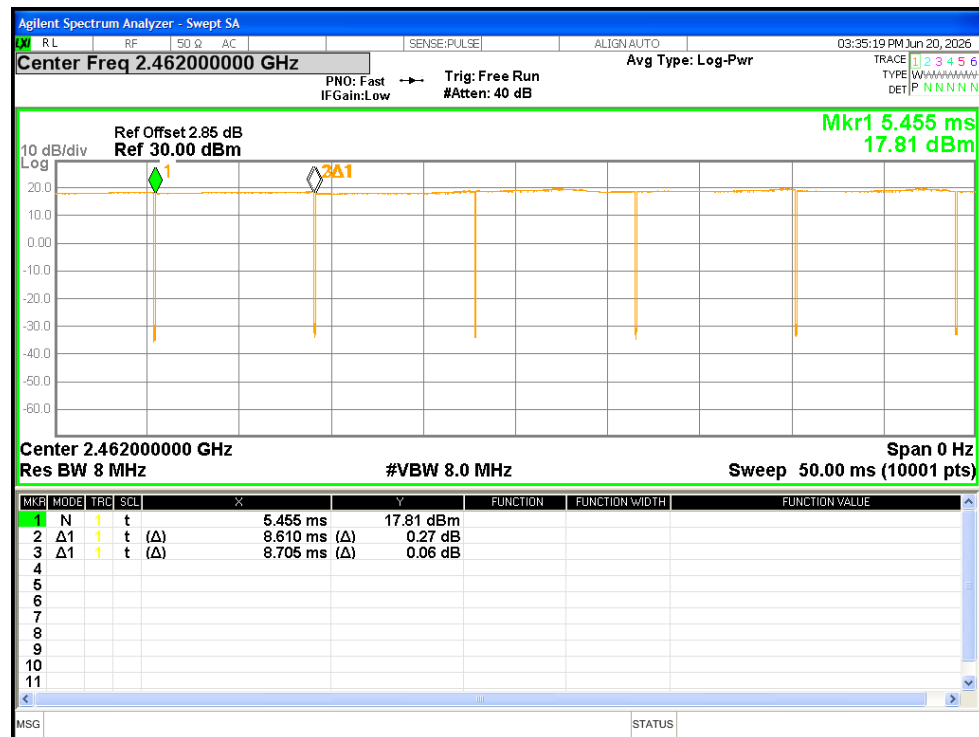
Duty Cycle NVNT b 2412MHz



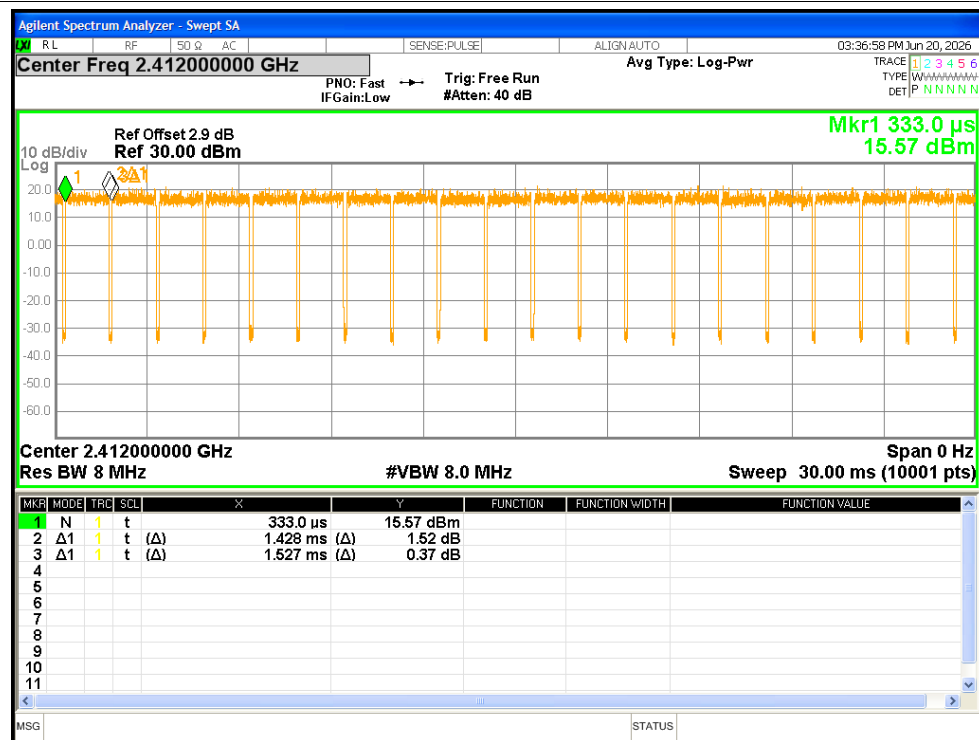
Duty Cycle NVNT b 2437MHz



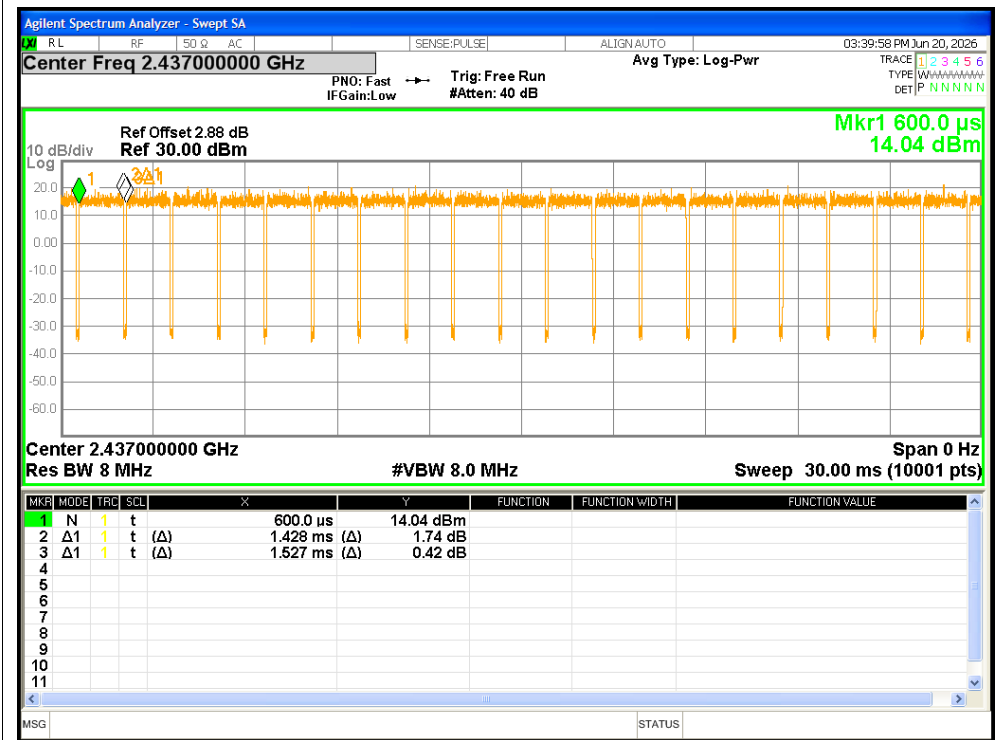
Duty Cycle NVNT b 2462MHz



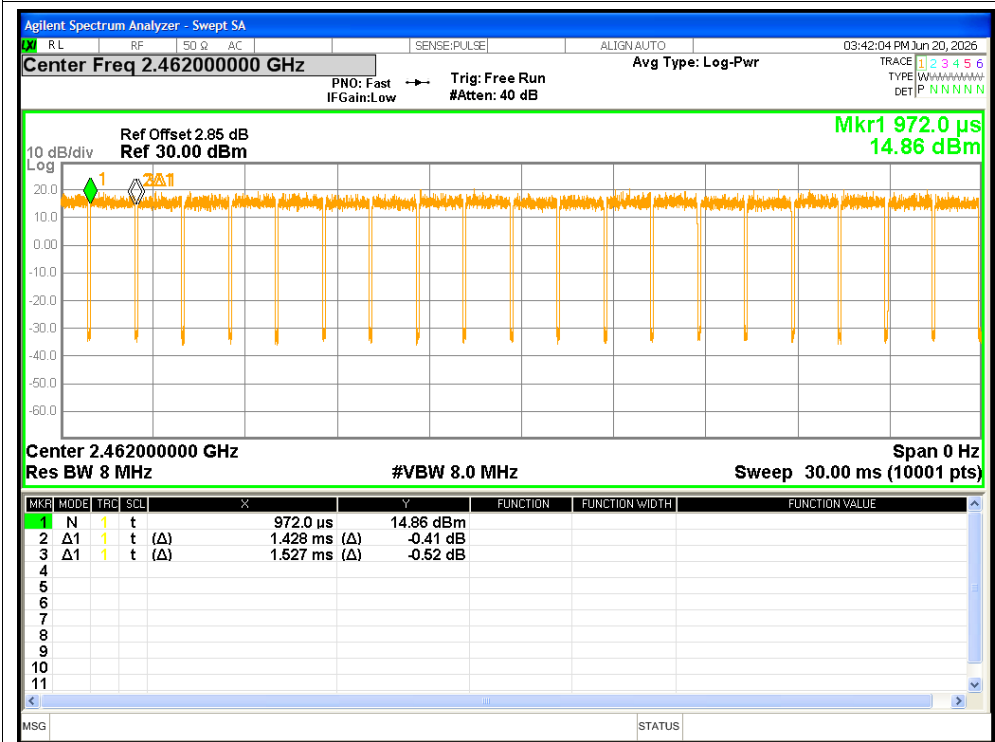
Duty Cycle NVNT g 2412MHz



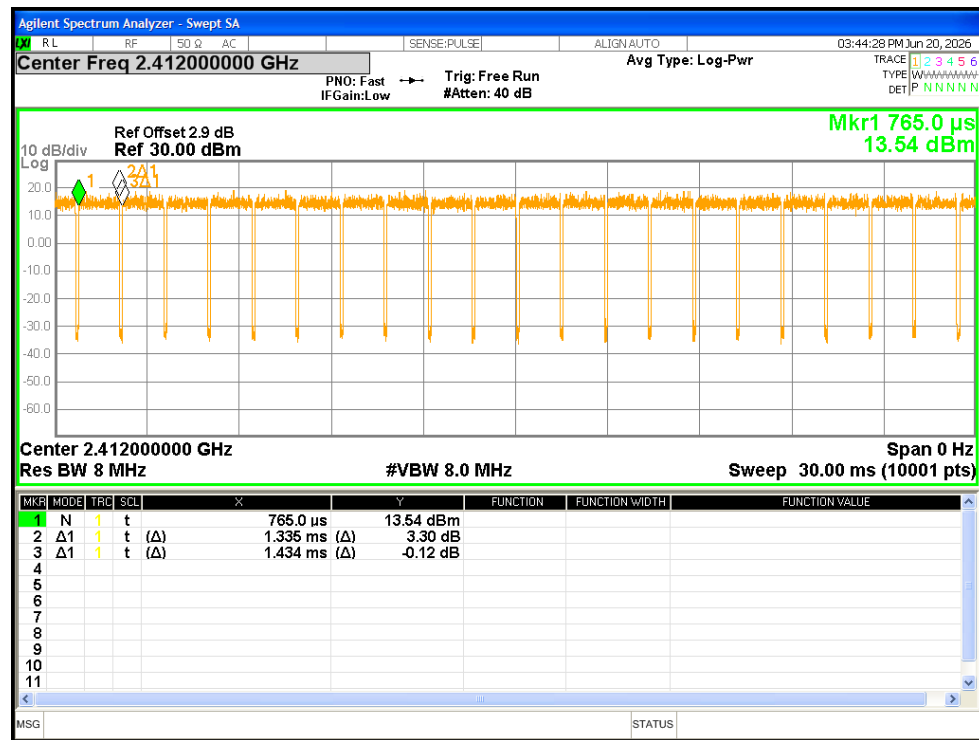
Duty Cycle NVNT g 2437MHz



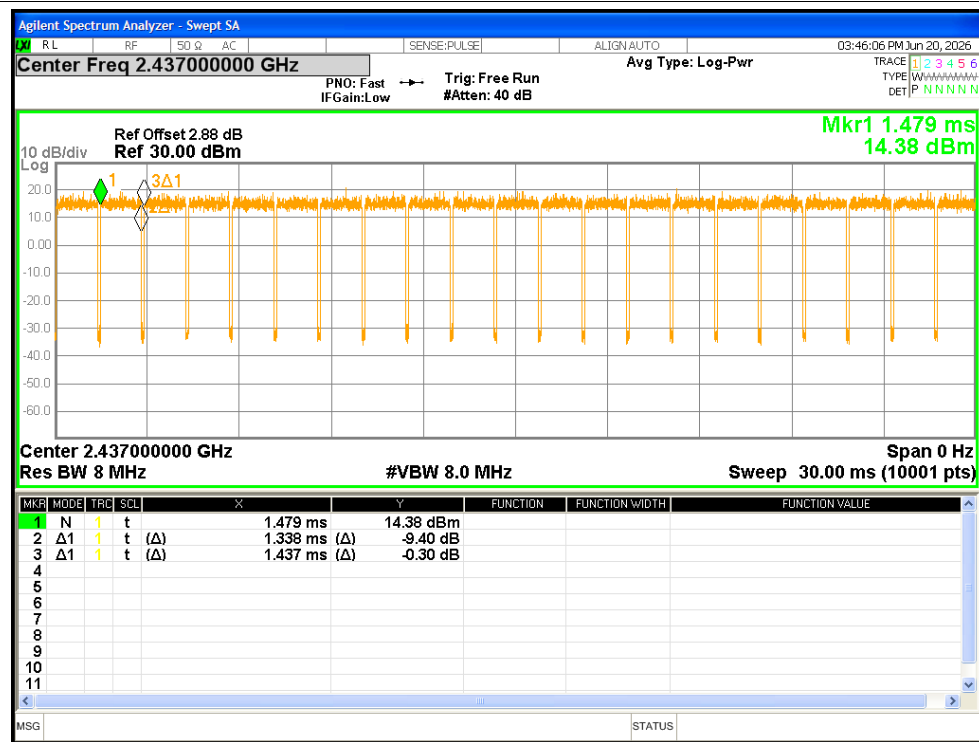
Duty Cycle NVNT g 2462MHz



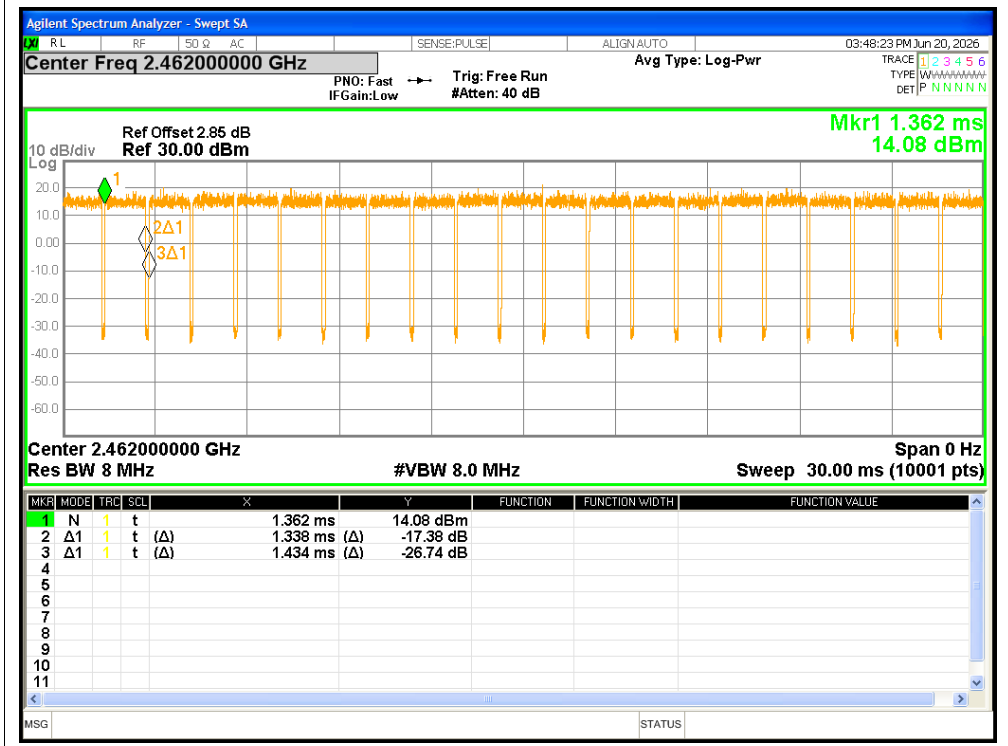
Duty Cycle NVNT n20 2412MHz



Duty Cycle NVNT n20 2437MHz



Duty Cycle NVNT n20 2462MHz



Maximum Peak Conducted Output Power

Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	17.31	<=30	Pass
NVNT	b	2437	17.76	<=30	Pass
NVNT	b	2462	17.87	<=30	Pass
NVNT	g	2412	16.68	<=30	Pass
NVNT	g	2437	17.02	<=30	Pass
NVNT	g	2462	17.2	<=30	Pass
NVNT	n20	2412	16.3	<=30	Pass
NVNT	n20	2437	17.06	<=30	Pass
NVNT	n20	2462	17.01	<=30	Pass

-6dB Bandwidth

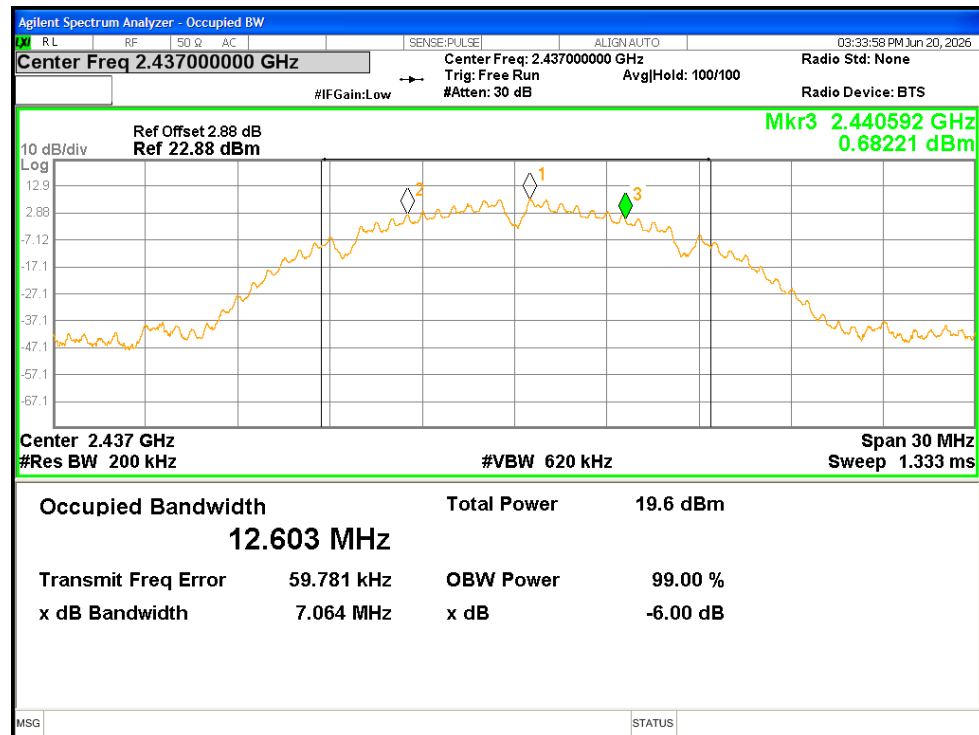
Condition	Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	6.594	≥ 0.5	Pass
NVNT	b	2437	7.064	≥ 0.5	Pass
NVNT	b	2462	7.033	≥ 0.5	Pass
NVNT	g	2412	16.13	≥ 0.5	Pass
NVNT	g	2437	15.53	≥ 0.5	Pass
NVNT	g	2462	15.88	≥ 0.5	Pass
NVNT	n20	2412	16.32	≥ 0.5	Pass
NVNT	n20	2437	16.51	≥ 0.5	Pass
NVNT	n20	2462	16.89	≥ 0.5	Pass

Test Graphs

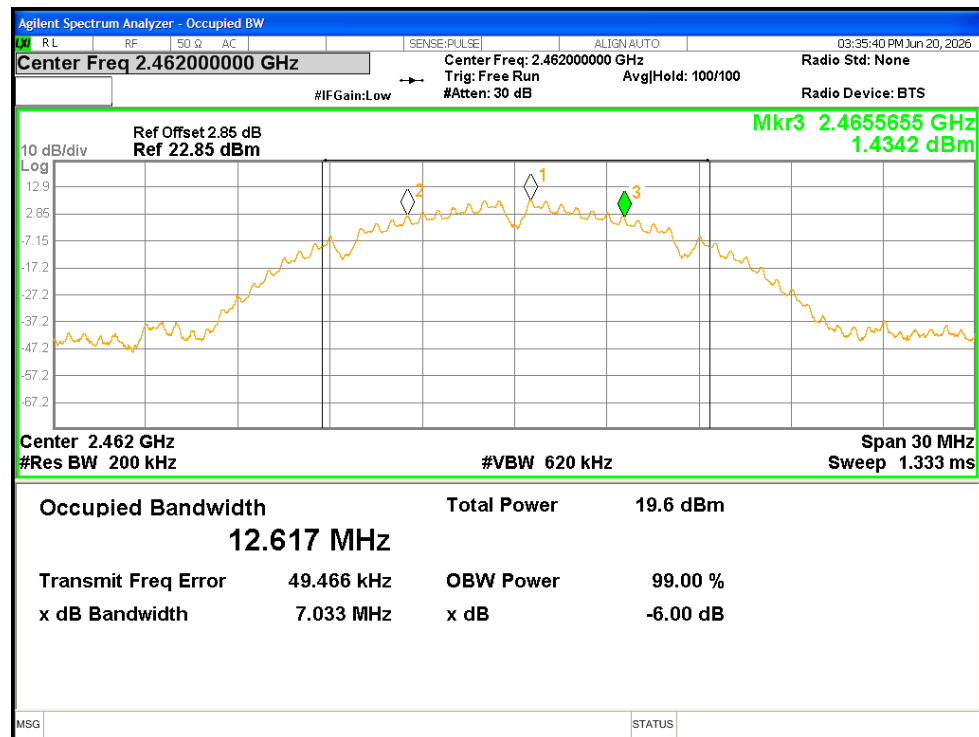
-6dB Bandwidth NVNT b 2412MHz



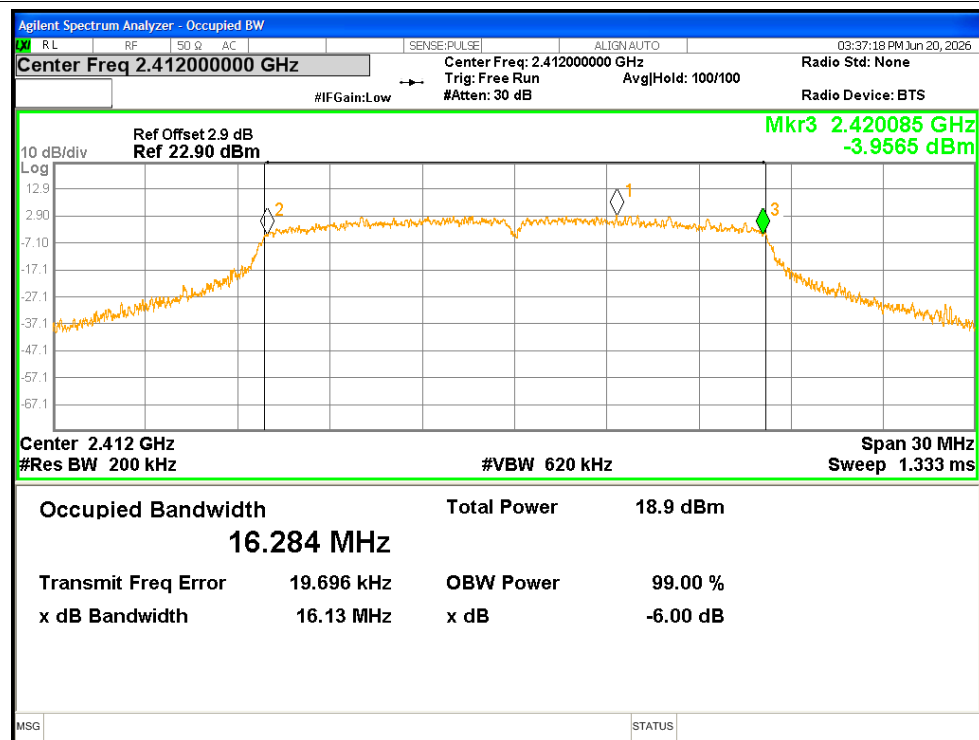
-6dB Bandwidth NVNT b 2437MHz



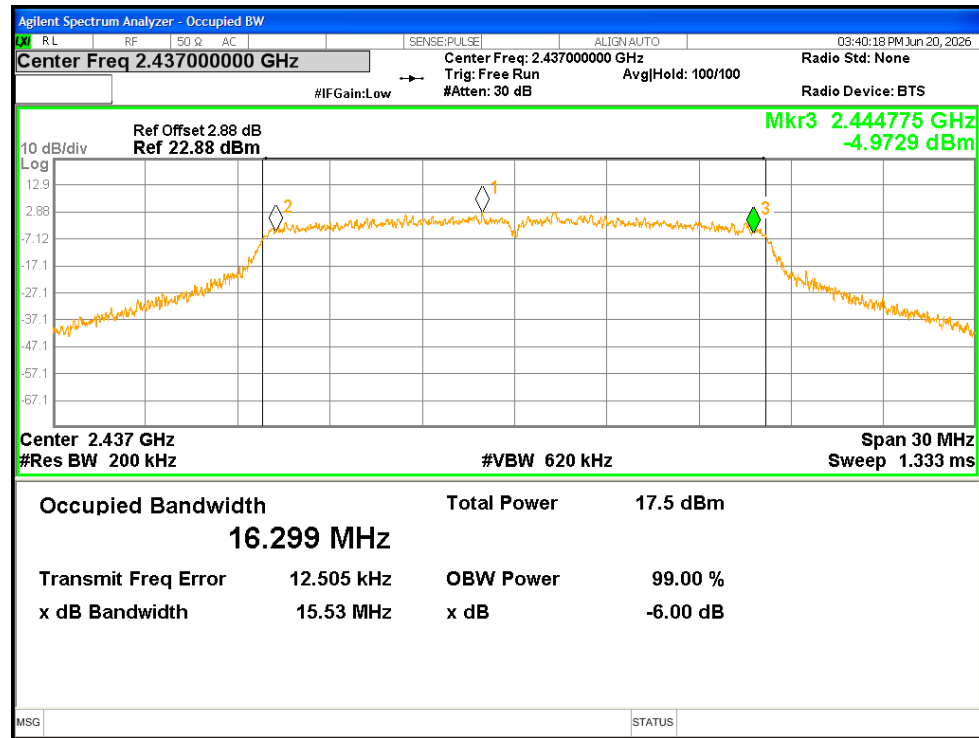
-6dB Bandwidth NVNT b 2462MHz



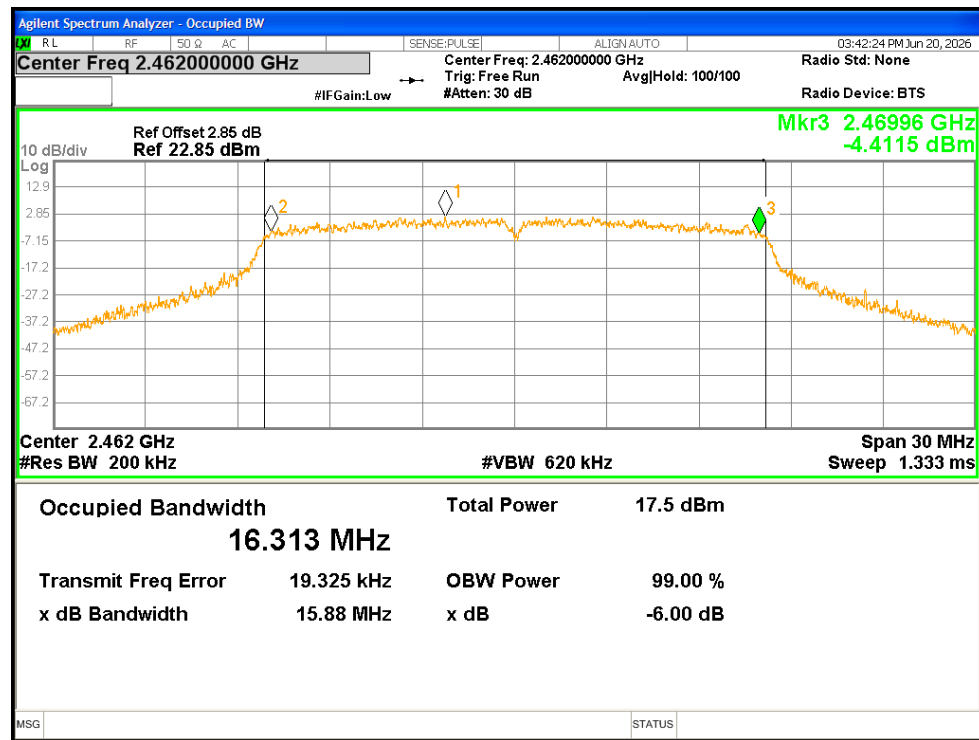
-6dB Bandwidth NVNT g 2412MHz



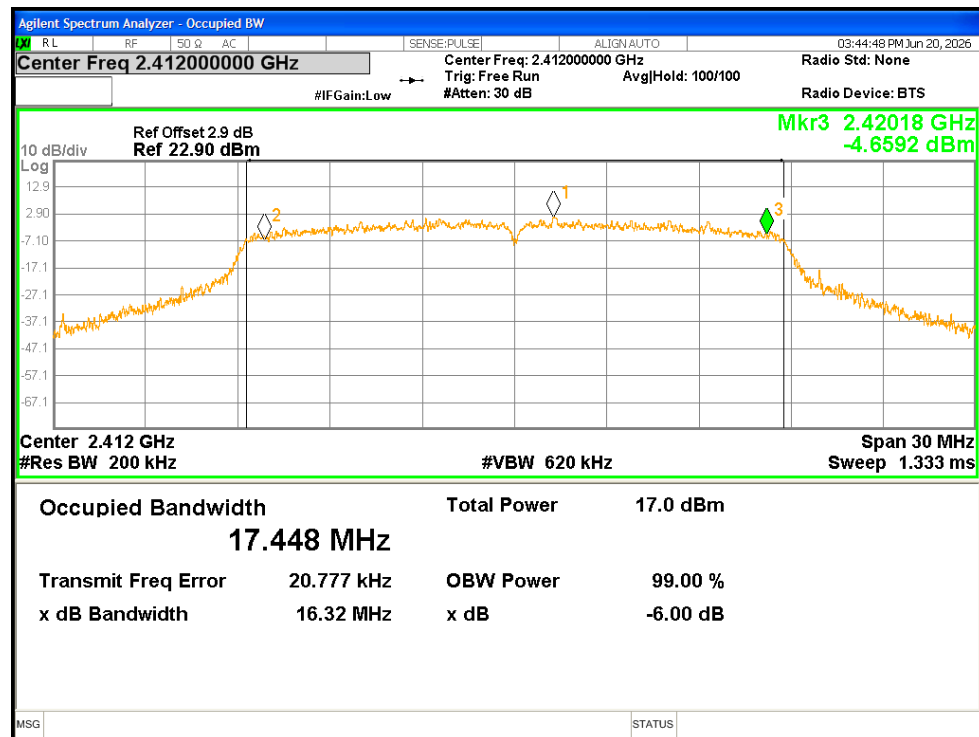
-6dB Bandwidth NVNT g 2437MHz



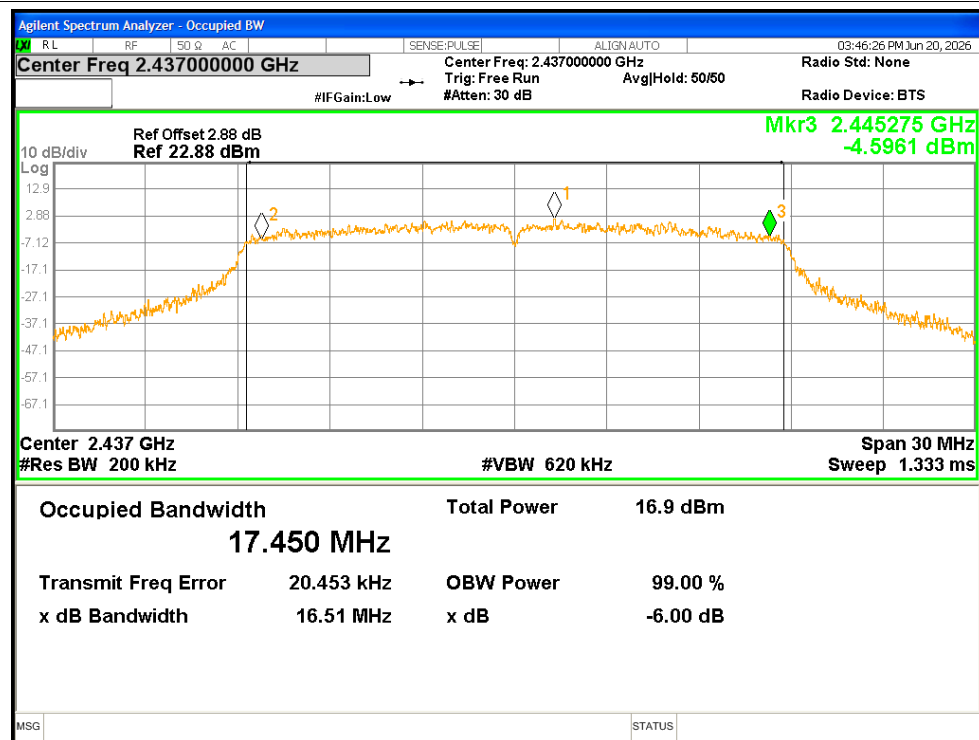
-6dB Bandwidth NVNT g 2462MHz



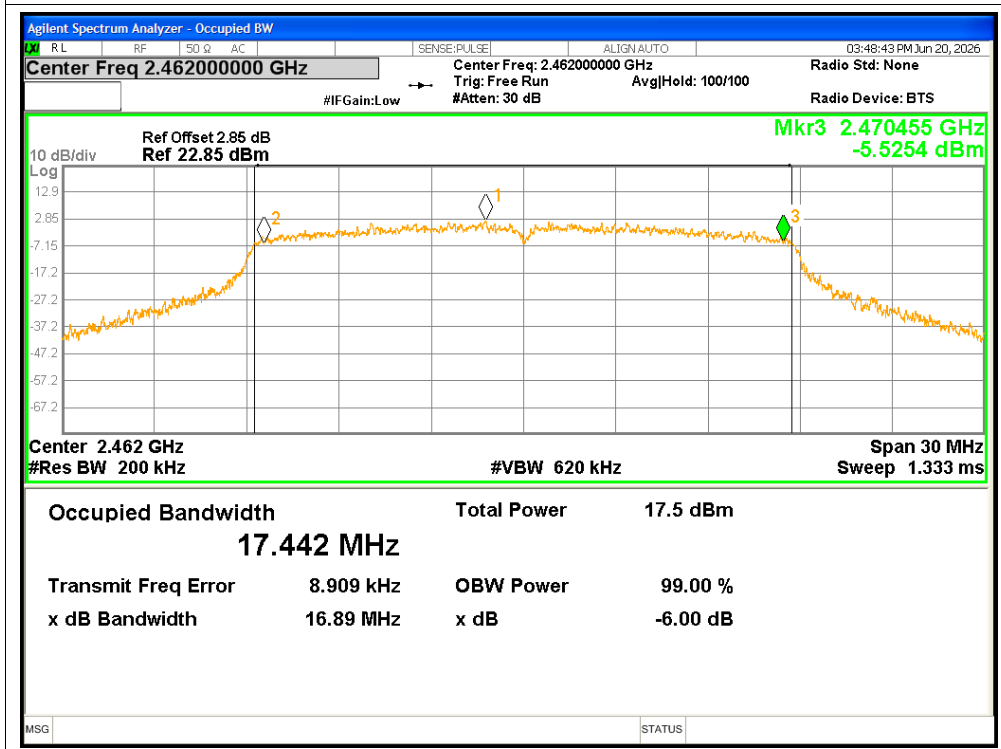
-6dB Bandwidth NVNT n20 2412MHz



-6dB Bandwidth NVNT n20 2437MHz



-6dB Bandwidth NVNT n20 2462MHz

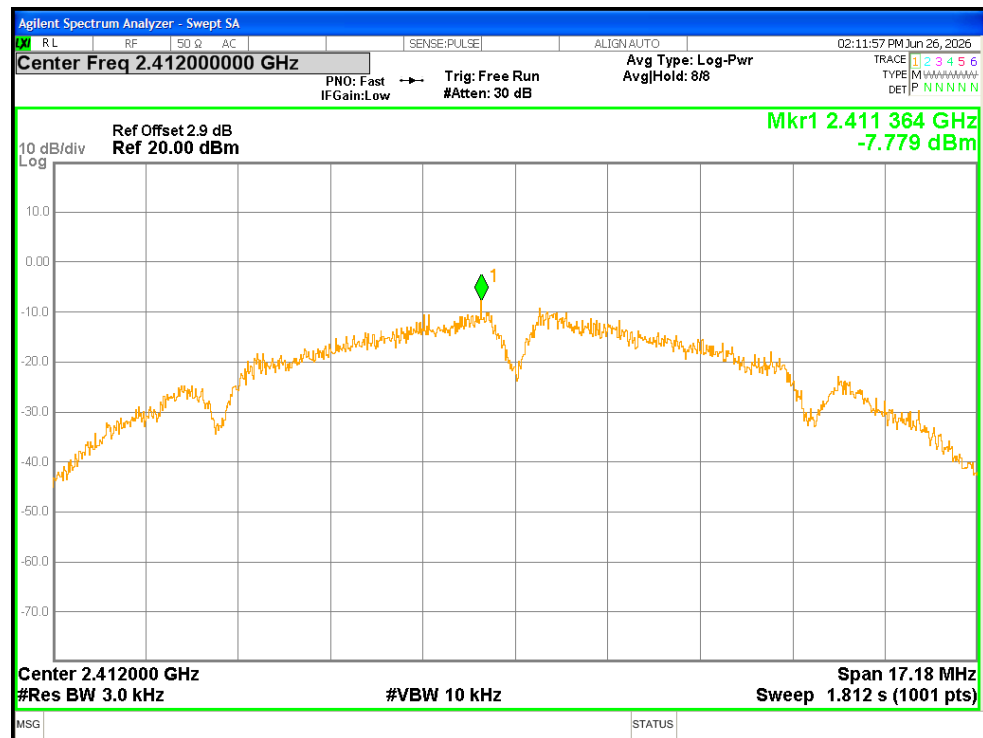


Maximum Power Spectral Density Level

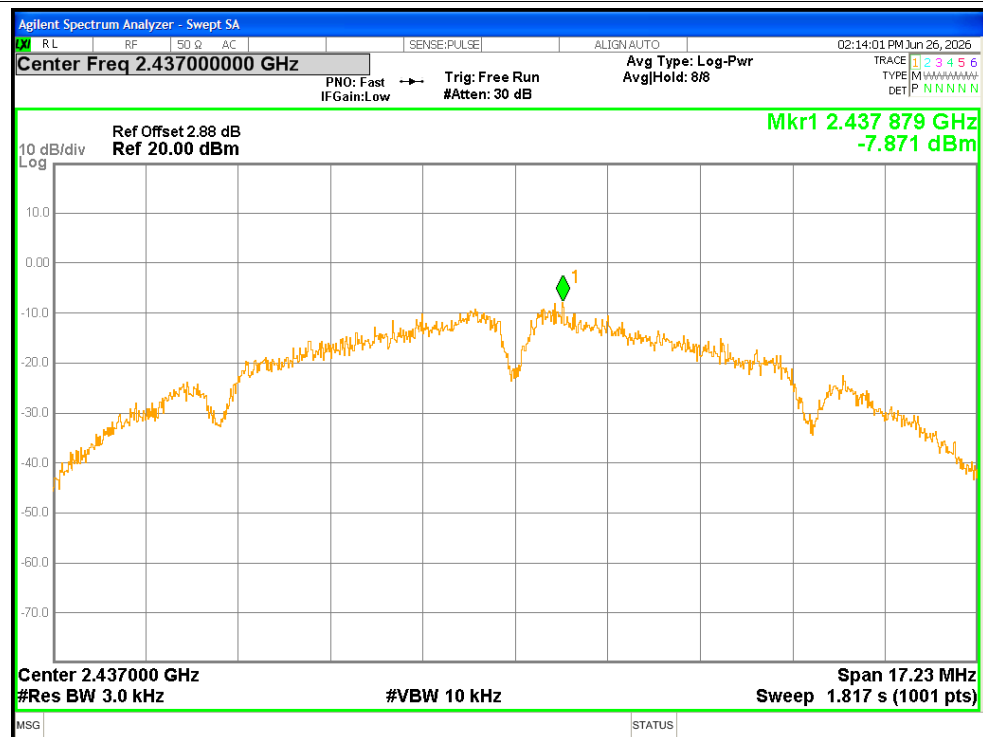
Condition	Mode	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	-7.78	<=8	Pass
NVNT	b	2437	-7.87	<=8	Pass
NVNT	b	2462	-8.26	<=8	Pass
NVNT	g	2412	-13.76	<=8	Pass
NVNT	g	2437	-13.67	<=8	Pass
NVNT	g	2462	-13.88	<=8	Pass
NVNT	n20	2412	-13.88	<=8	Pass
NVNT	n20	2437	-13.16	<=8	Pass
NVNT	n20	2462	-13.79	<=8	Pass

Test Graphs

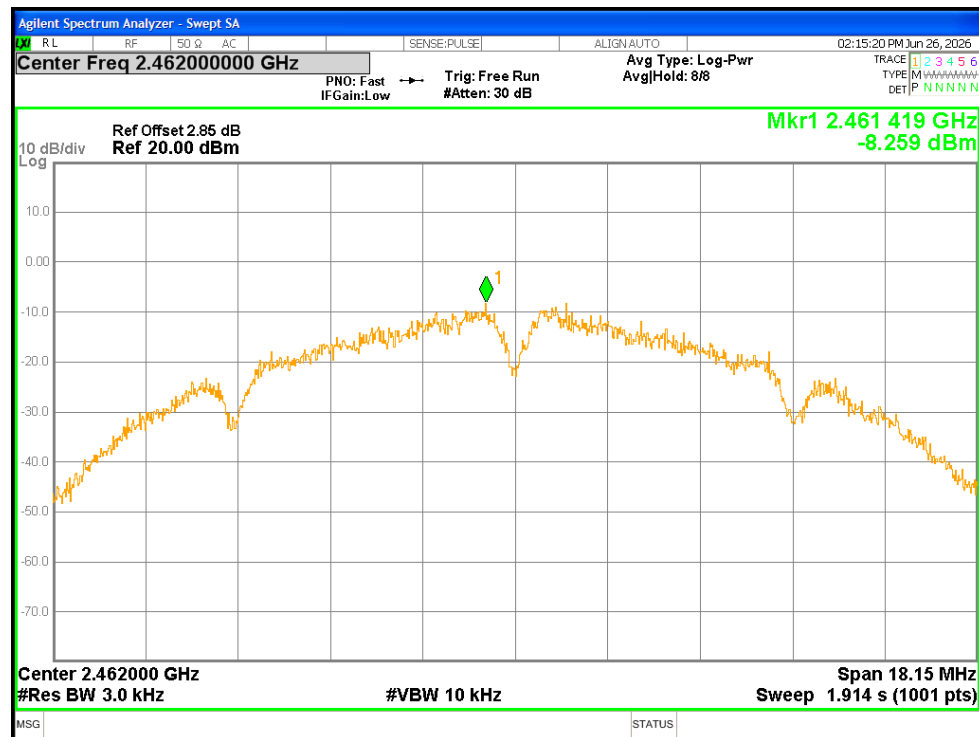
PSD NVNT b 2412MHz



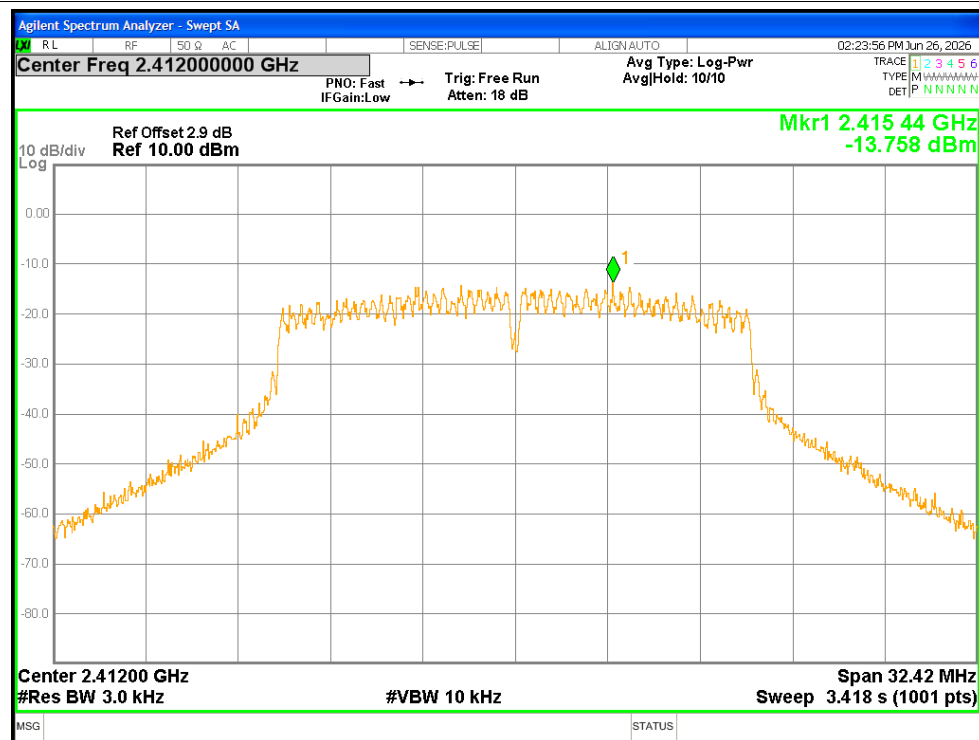
PSD NVNT b 2437MHz



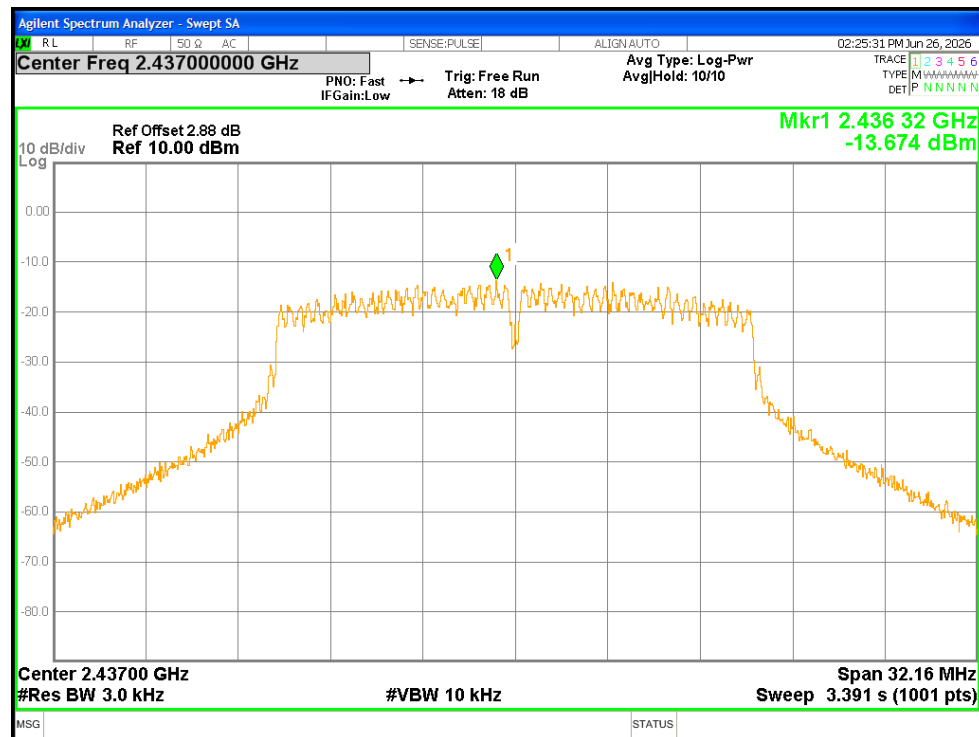
PSD NVNT b 2462MHz



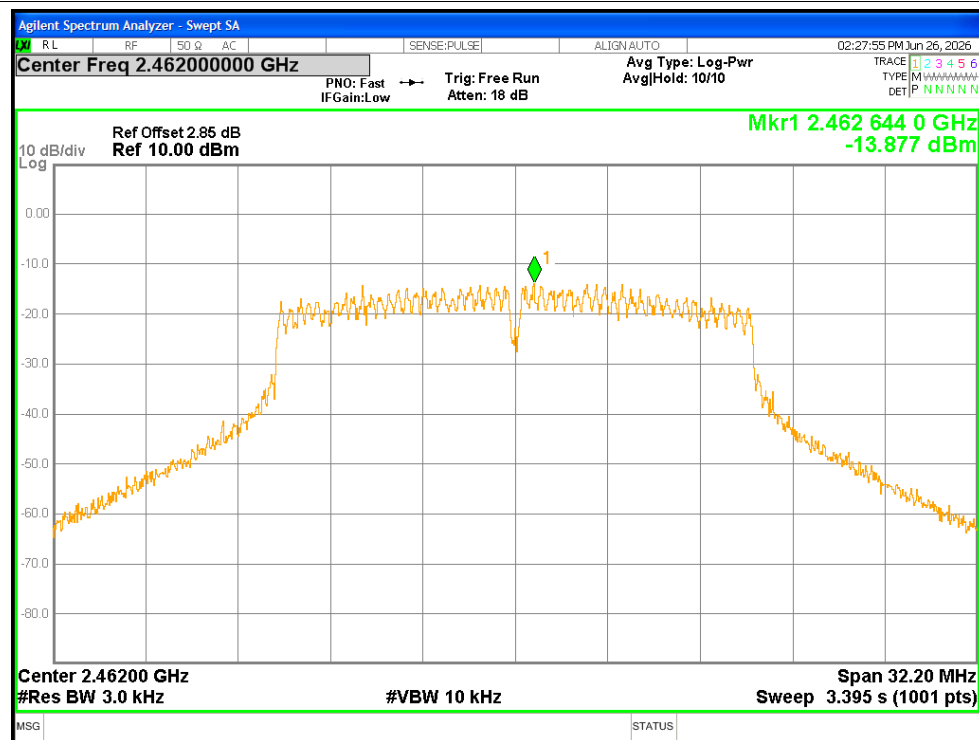
PSD NVNT g 2412MHz



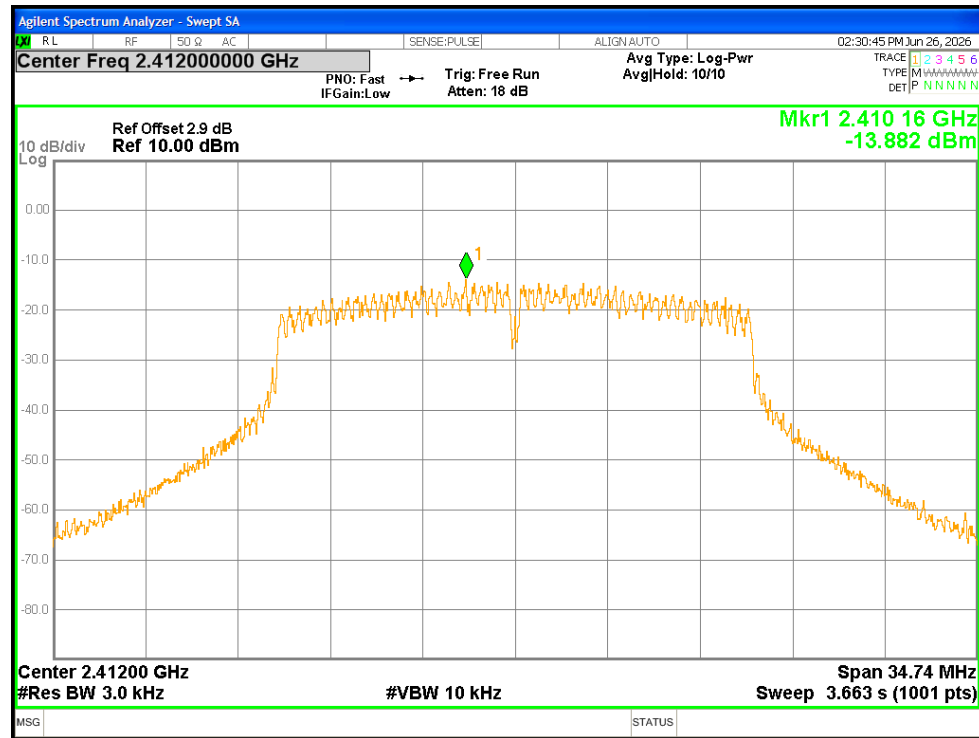
PSD NVNT g 2437MHz



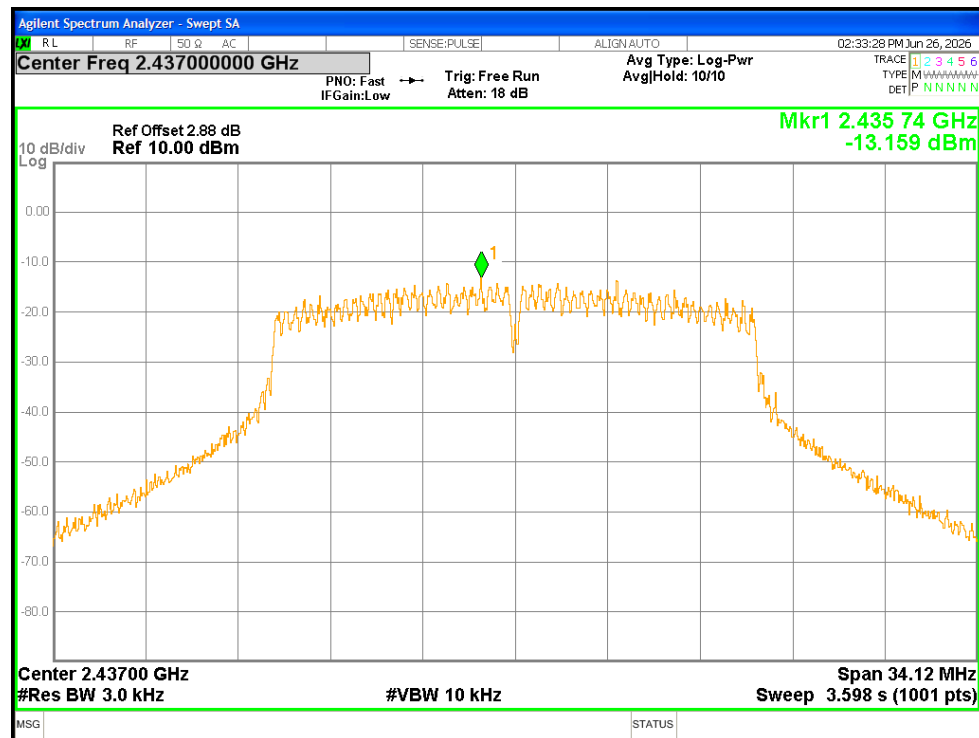
PSD NVNT g 2462MHz



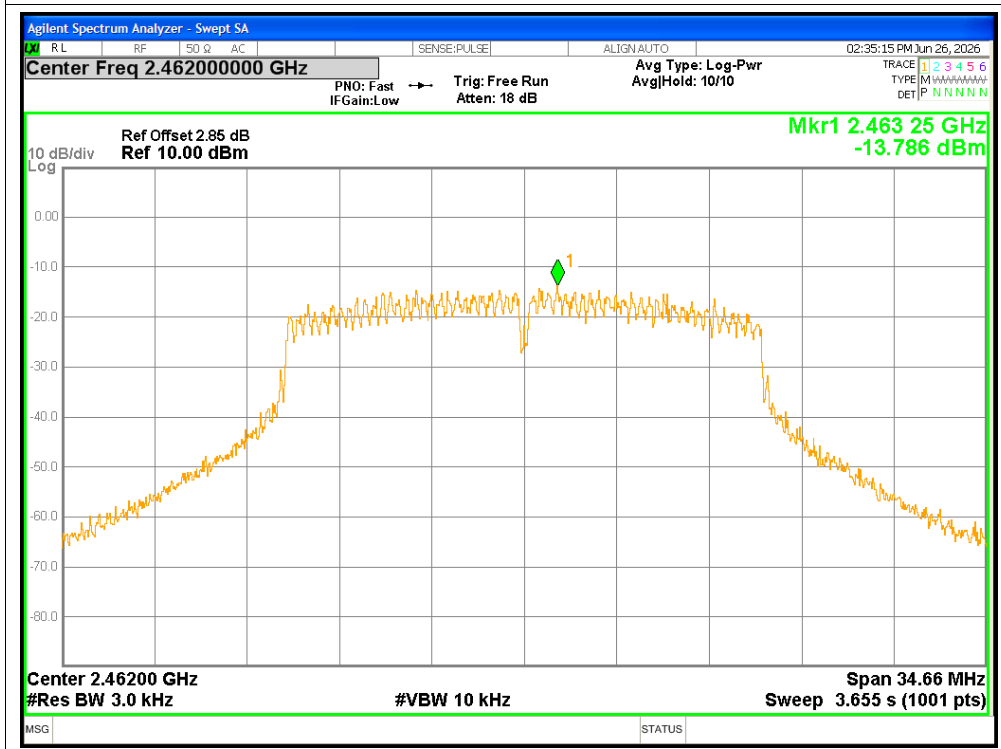
PSD NVNT n20 2412MHz



PSD NVNT n20 2437MHz



PSD NVNT n20 2462MHz

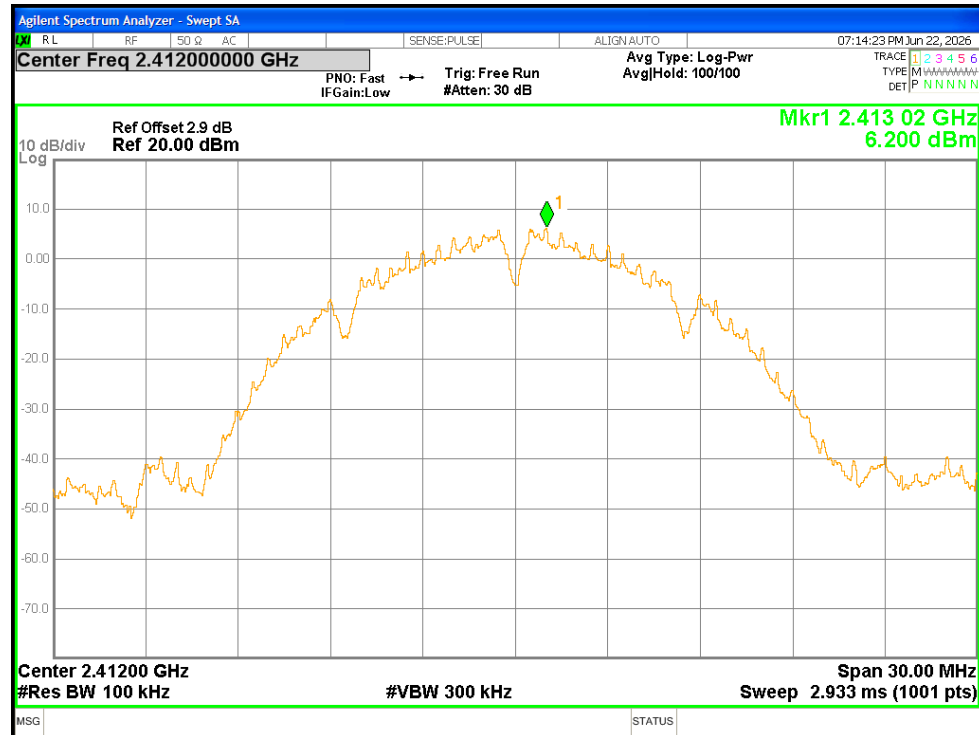


Band Edge

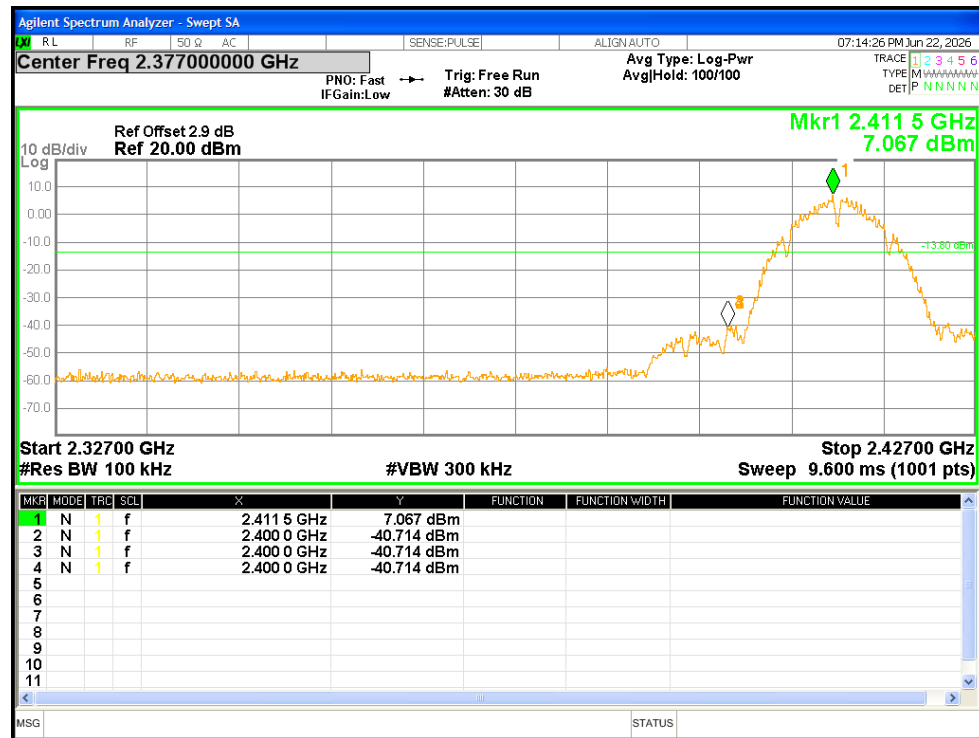
Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	-46.91	<=-20	Pass
NVNT	b	2462	-62.22	<=-20	Pass
NVNT	g	2412	-34.52	<=-20	Pass
NVNT	g	2462	-49.15	<=-20	Pass
NVNT	n20	2412	-34.65	<=-20	Pass
NVNT	n20	2462	-47.49	<=-20	Pass

Test Graphs

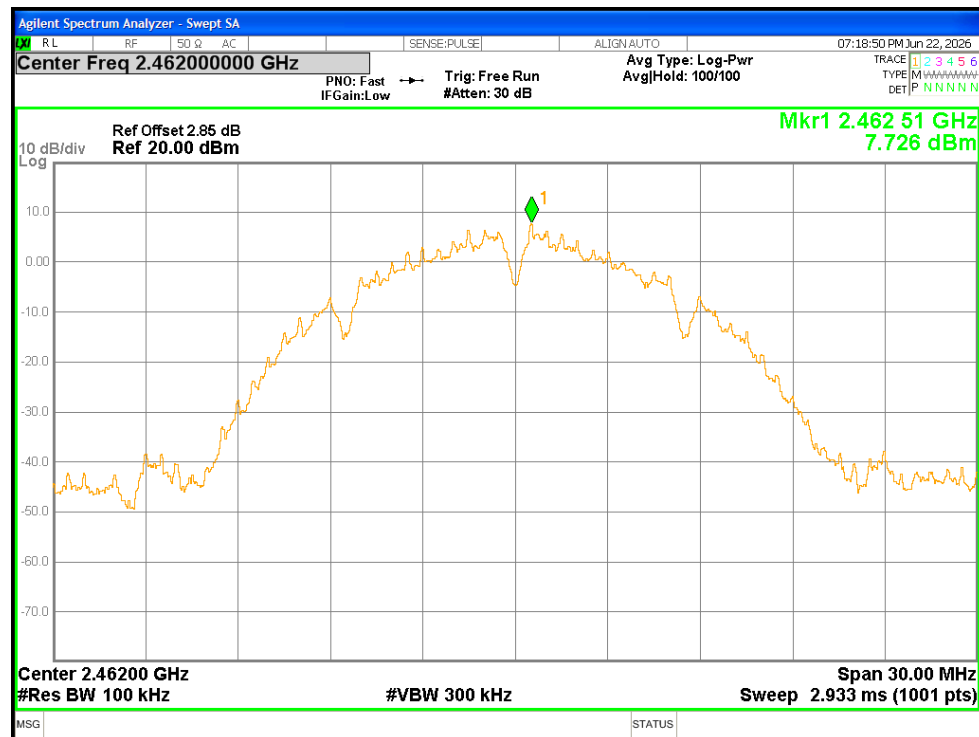
Band Edge NVNT b 2412MHz Ref



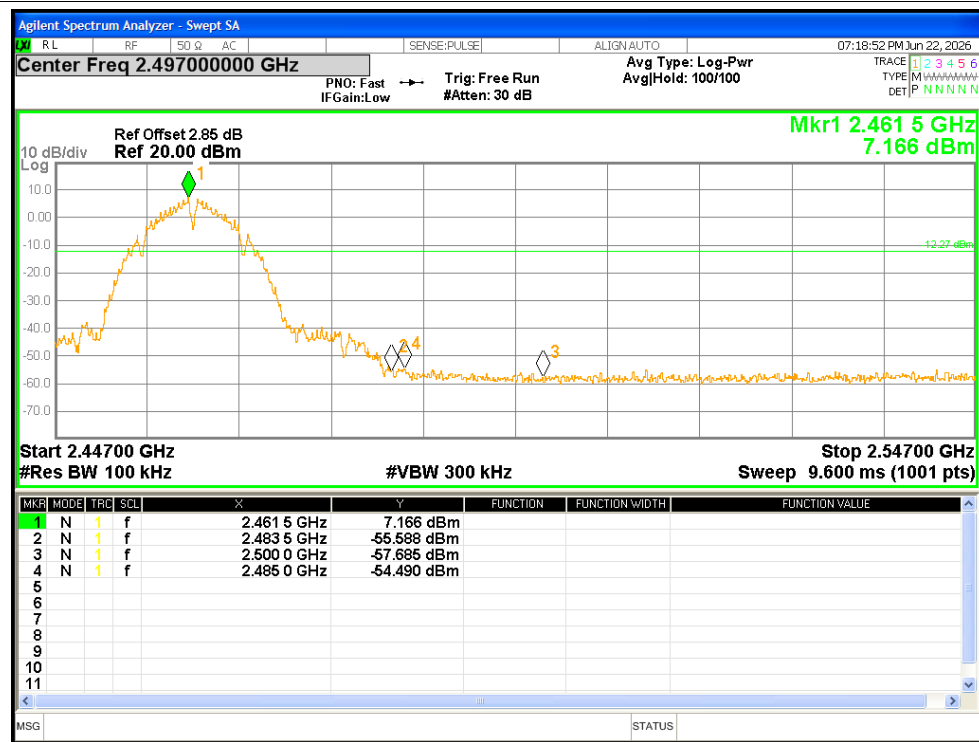
Band Edge NVNT b 2412MHz Emission



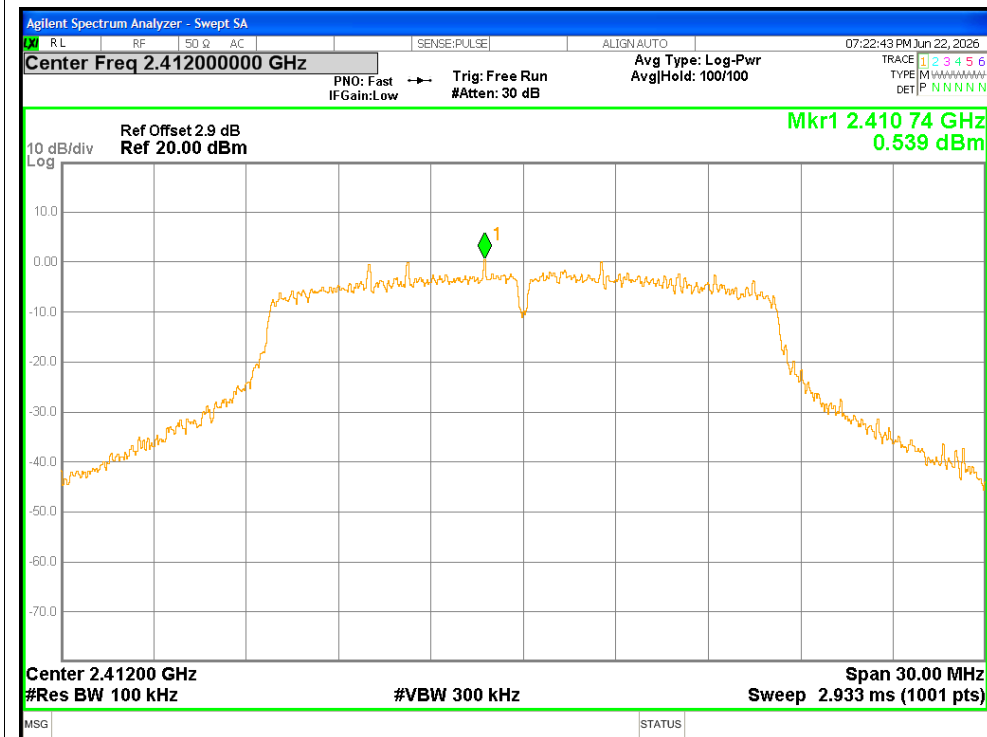
Band Edge NVNT b 2462MHz Ref



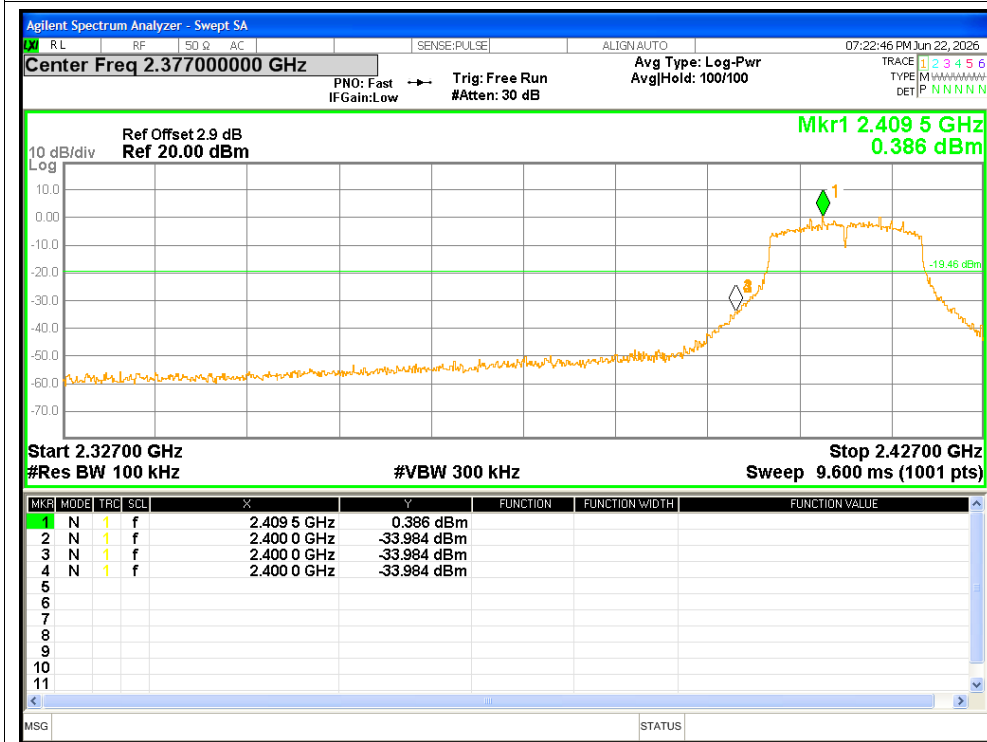
Band Edge NVNT b 2462MHz Emission



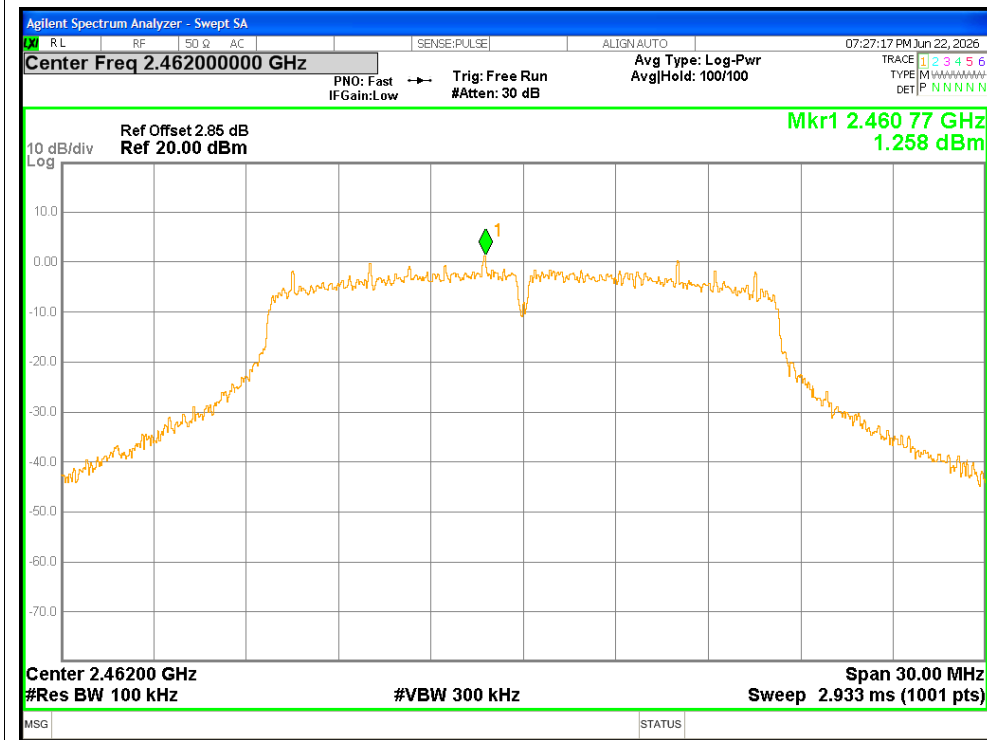
Band Edge NVNT g 2412MHz Ref



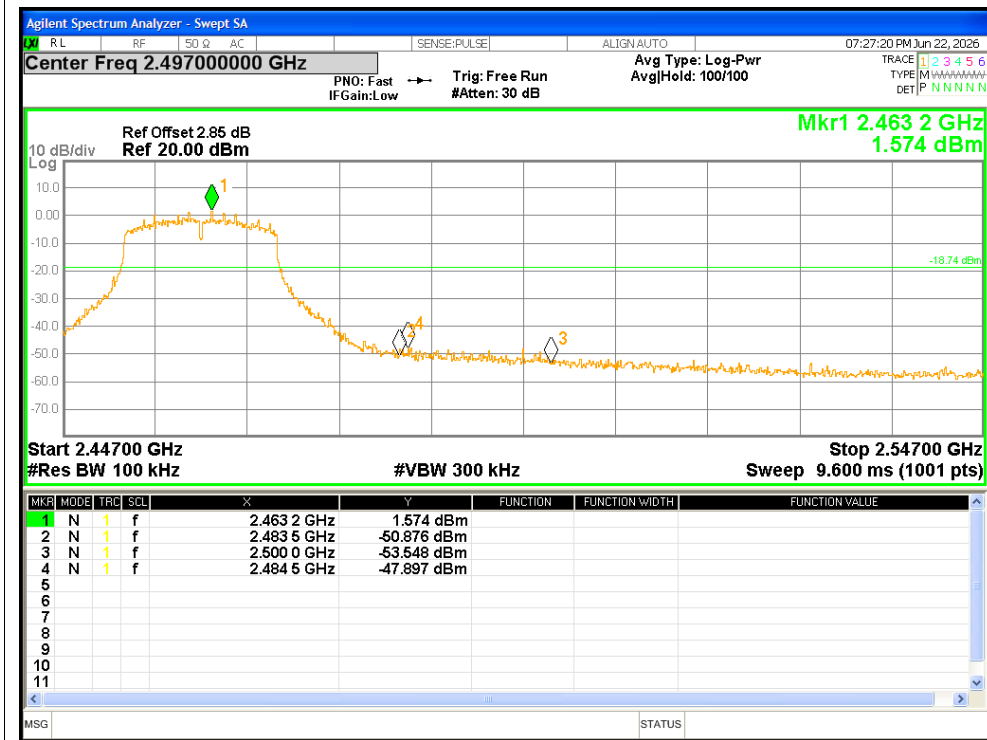
Band Edge NVNT g 2412MHz Emission



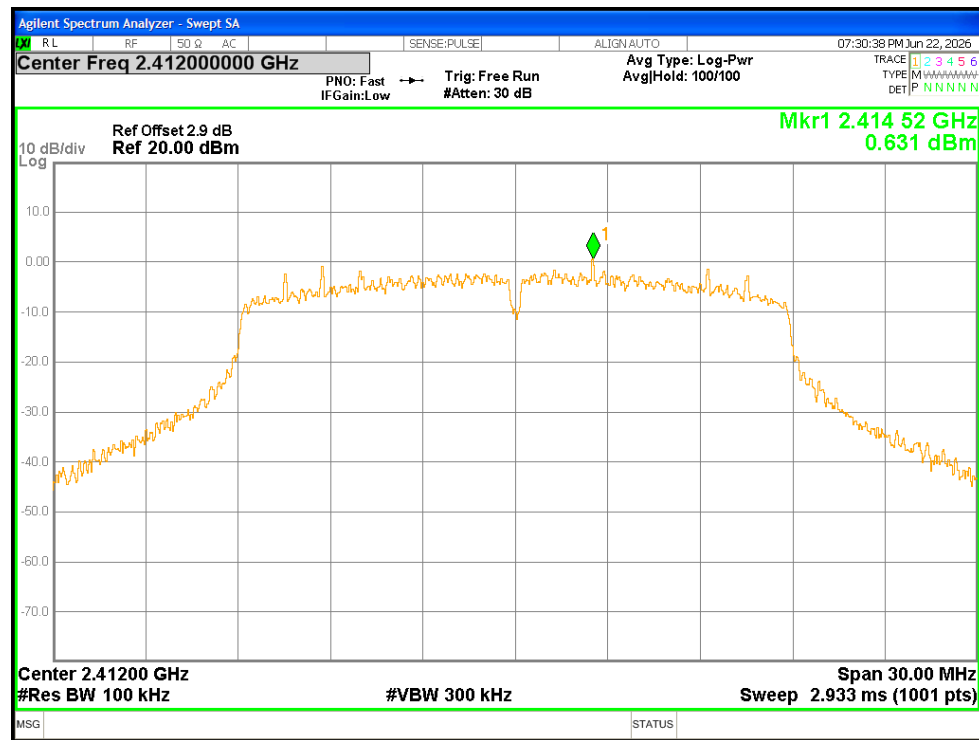
Band Edge NVNT g 2462MHz Ref



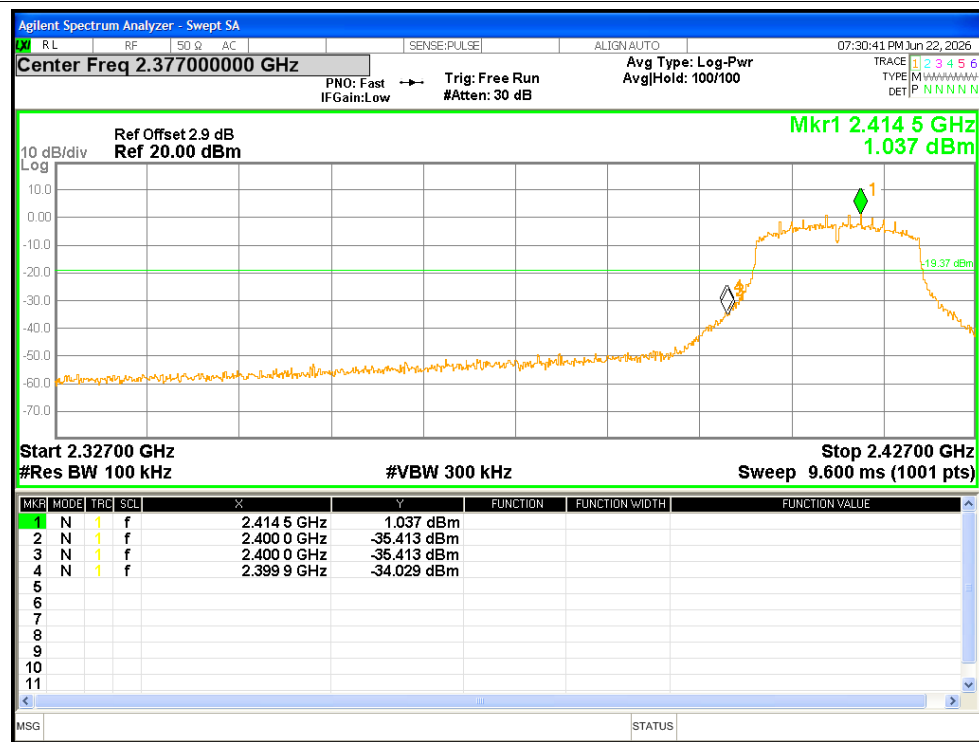
Band Edge NVNT g 2462MHz Emission



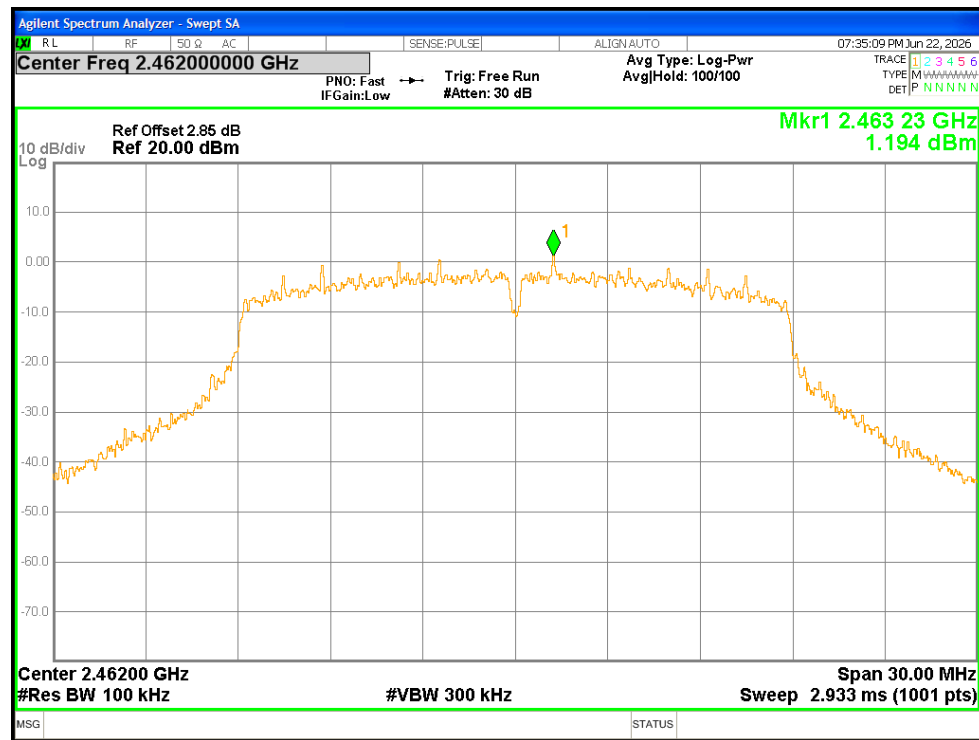
Band Edge NVNT n20 2412MHz Ref



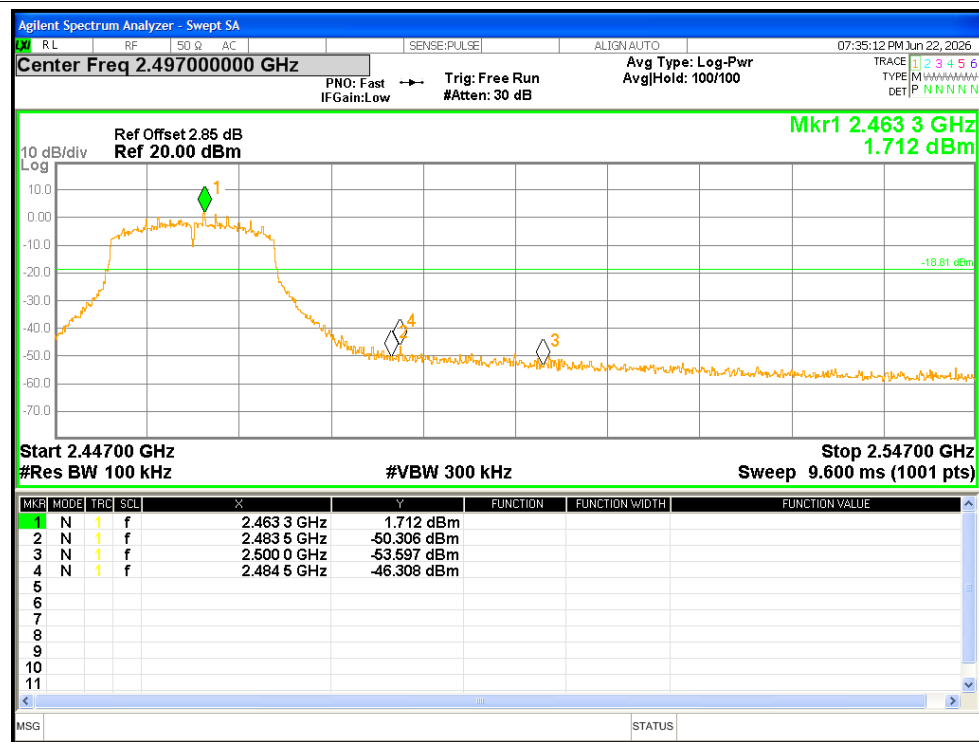
Band Edge NVNT n20 2412MHz Emission



Band Edge NVNT n20 2462MHz Ref



Band Edge NVNT n20 2462MHz Emission

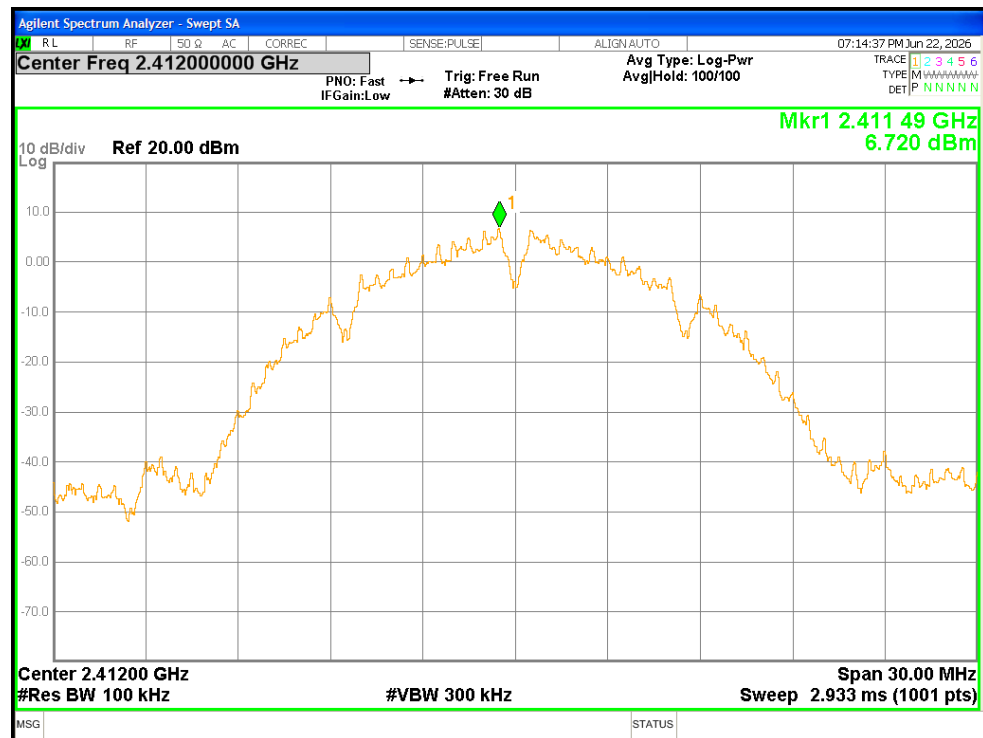


Conducted RF Spurious Emission

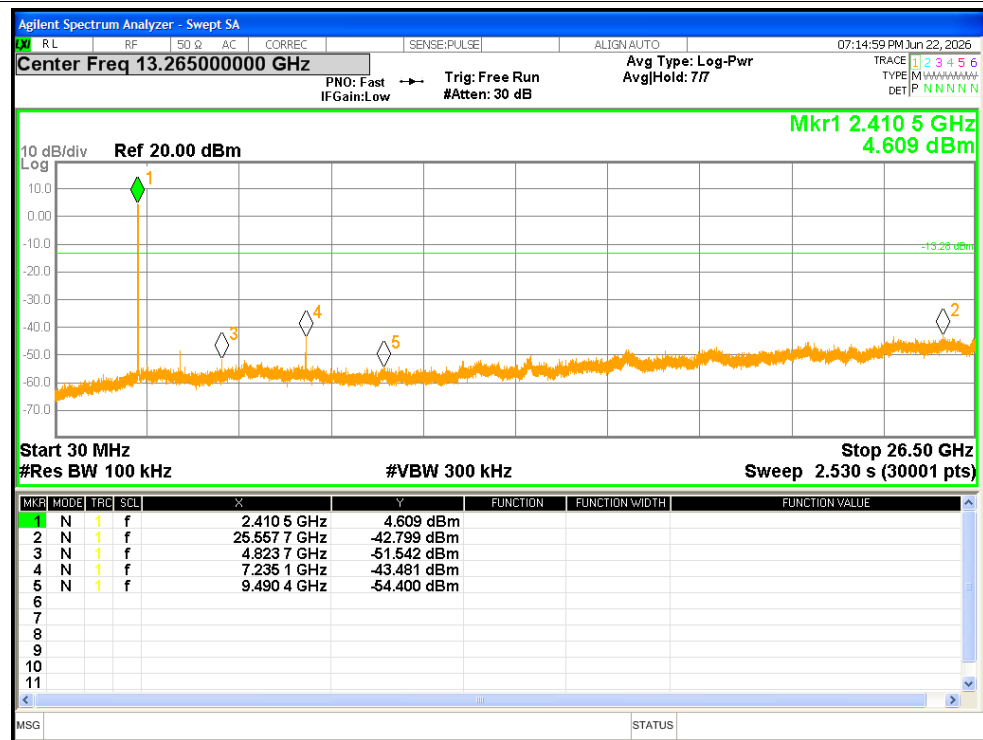
Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	-49.51	<=-20	Pass
NVNT	b	2437	-49.08	<=-20	Pass
NVNT	b	2462	-48.6	<=-20	Pass
NVNT	g	2412	-43.17	<=-20	Pass
NVNT	g	2437	-43.58	<=-20	Pass
NVNT	g	2462	-44.27	<=-20	Pass
NVNT	n20	2412	-42.87	<=-20	Pass
NVNT	n20	2437	-43.68	<=-20	Pass
NVNT	n20	2462	-44.91	<=-20	Pass

Test Graphs

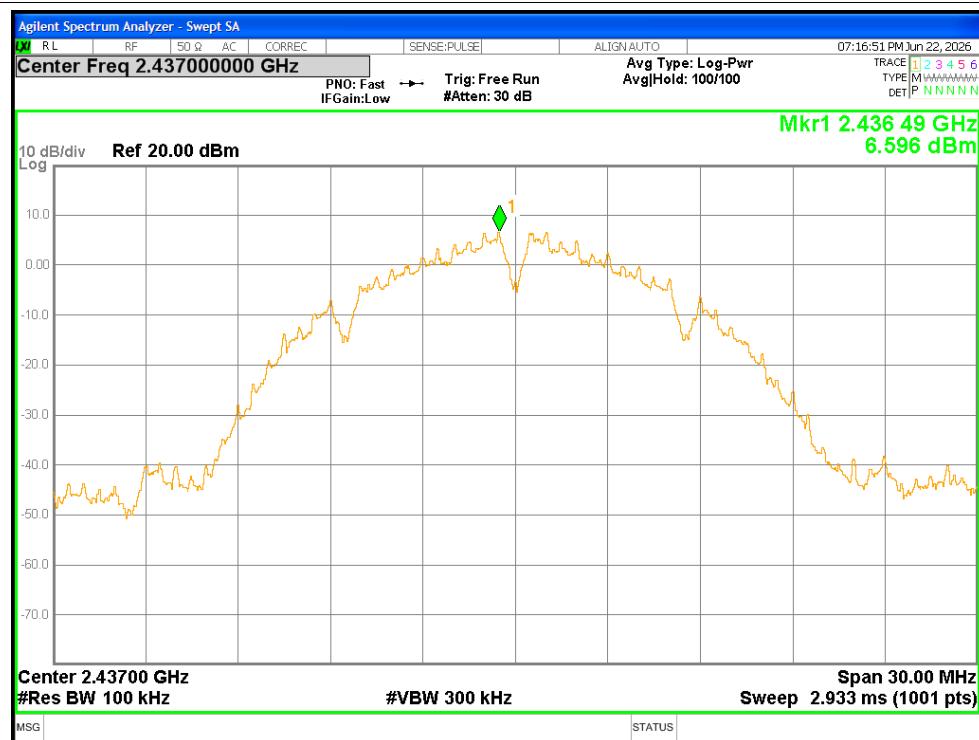
Tx. Spurious NVNT b 2412MHz Ref



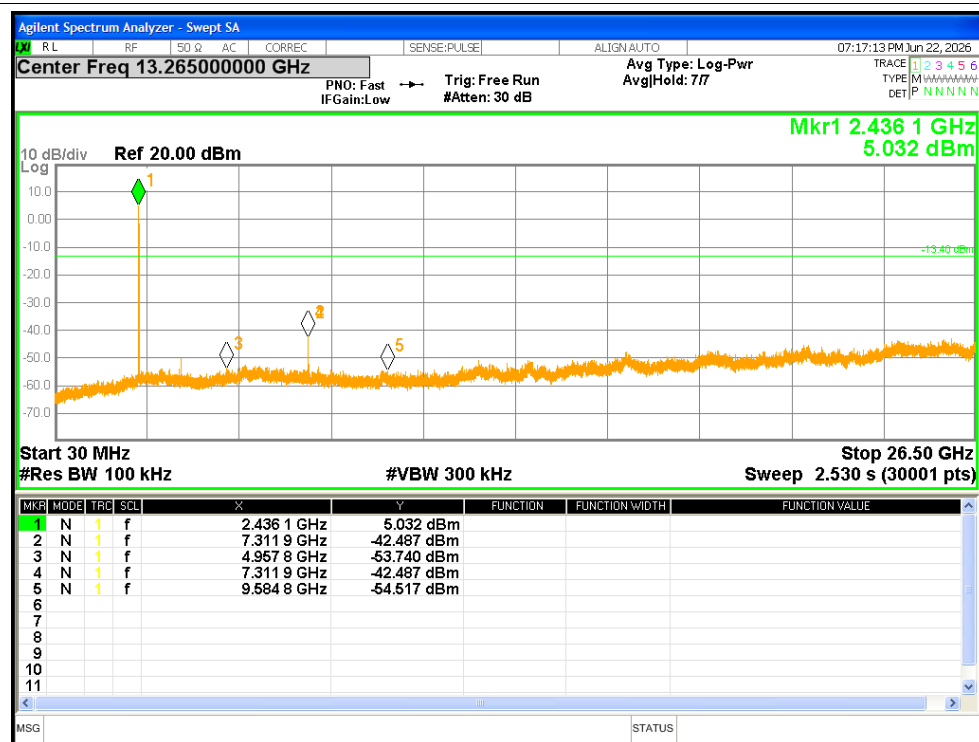
Tx. Spurious NVNT b 2412MHz Emission



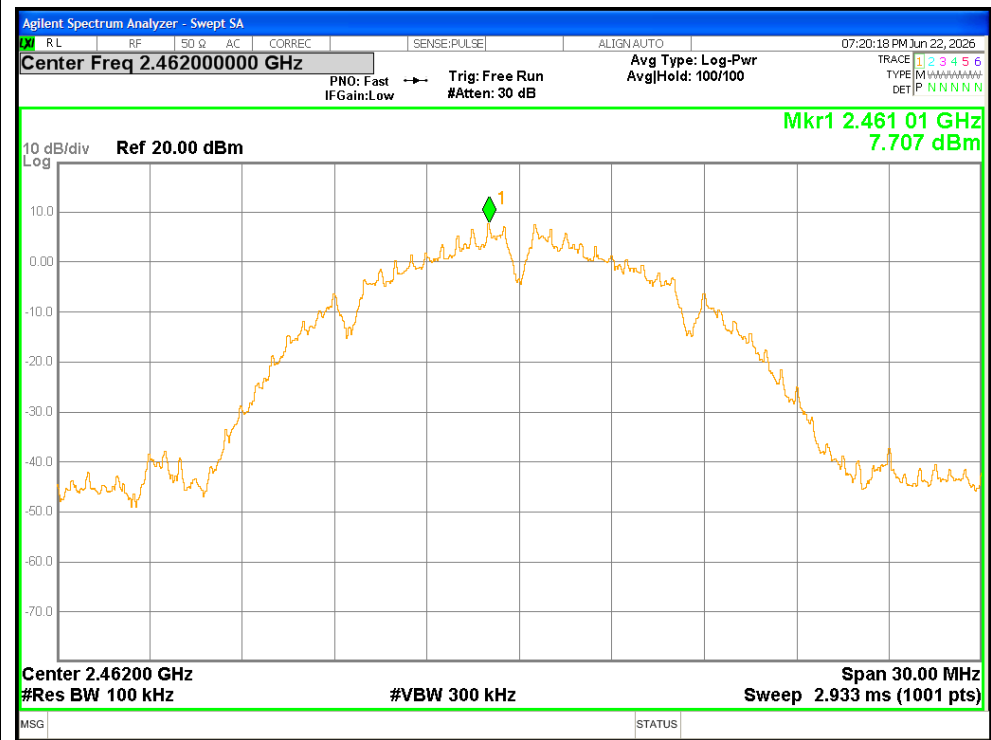
Tx. Spurious NVNT b 2437MHz Ref



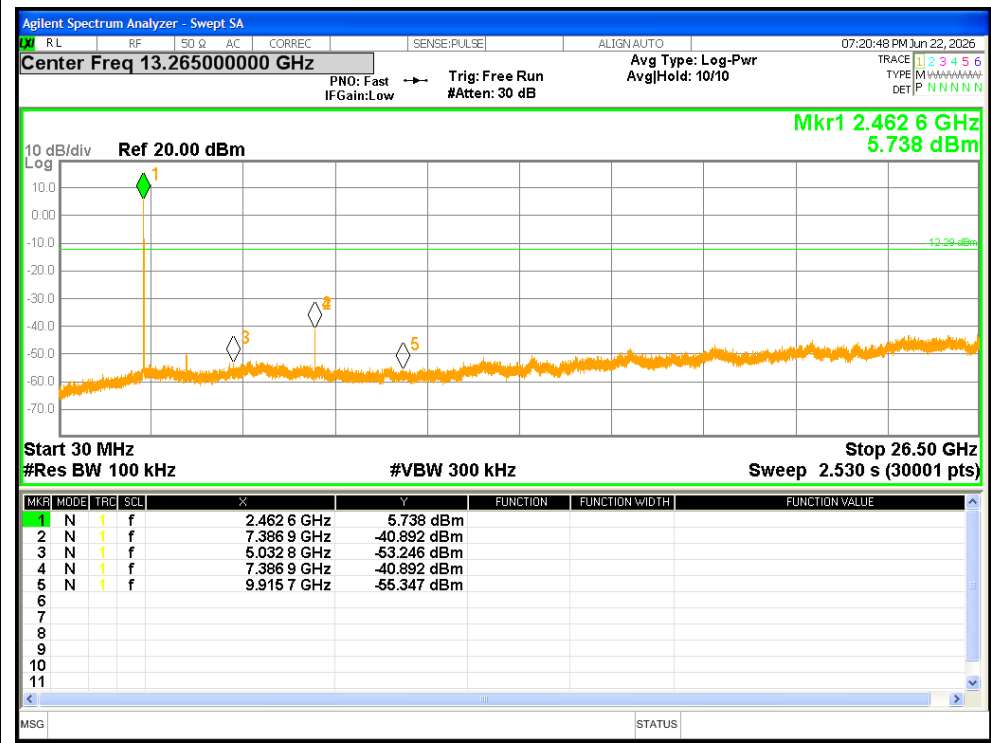
Tx. Spurious NVNT b 2437MHz Emission



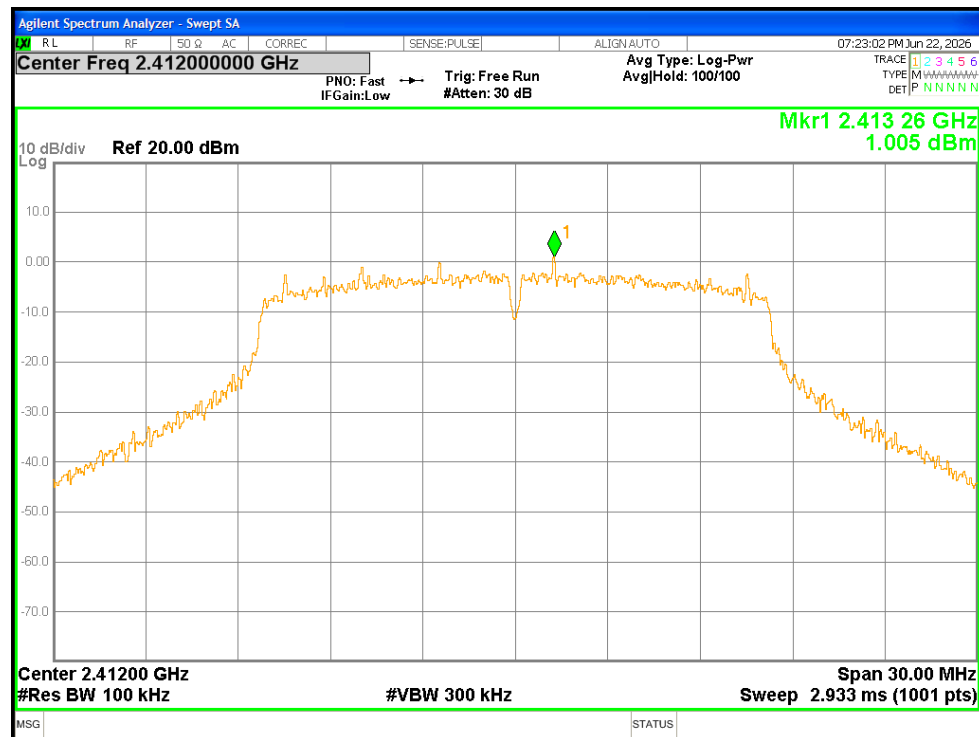
Tx. Spurious NVNT b 2462MHz Ref



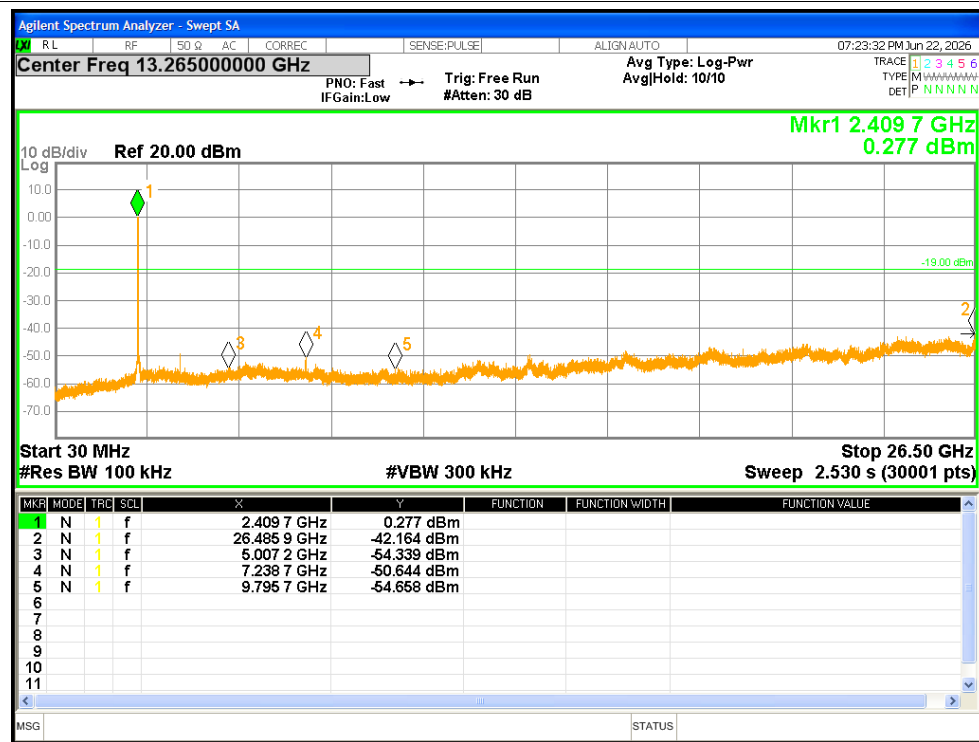
Tx. Spurious NVNT b 2462MHz Emission



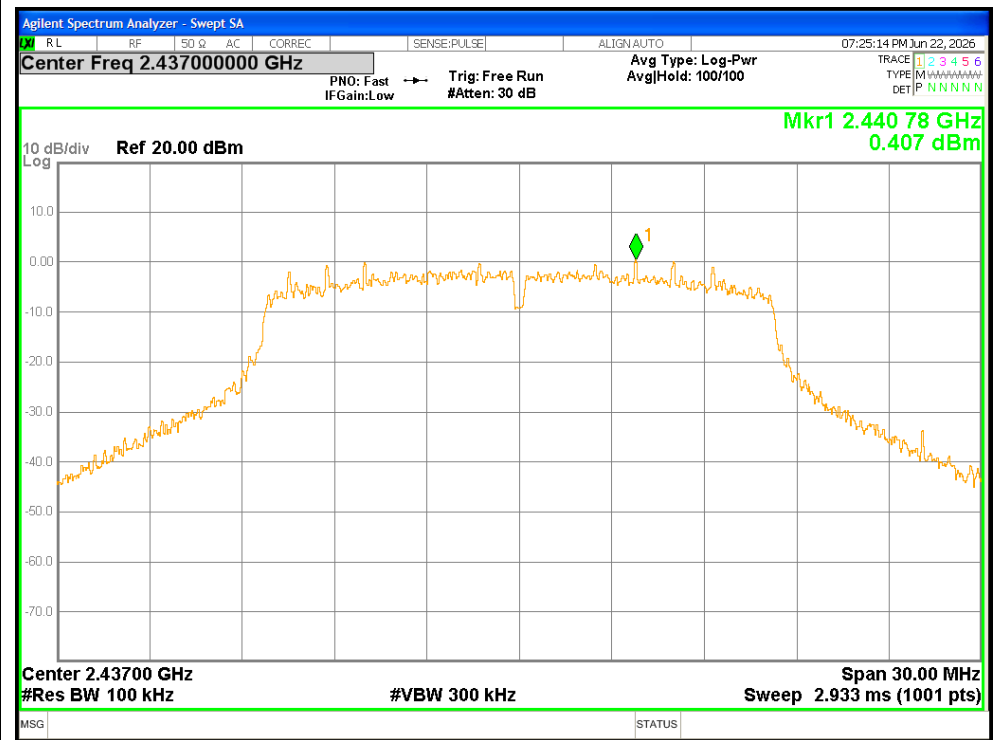
Tx. Spurious NVNT g 2412MHz Ref



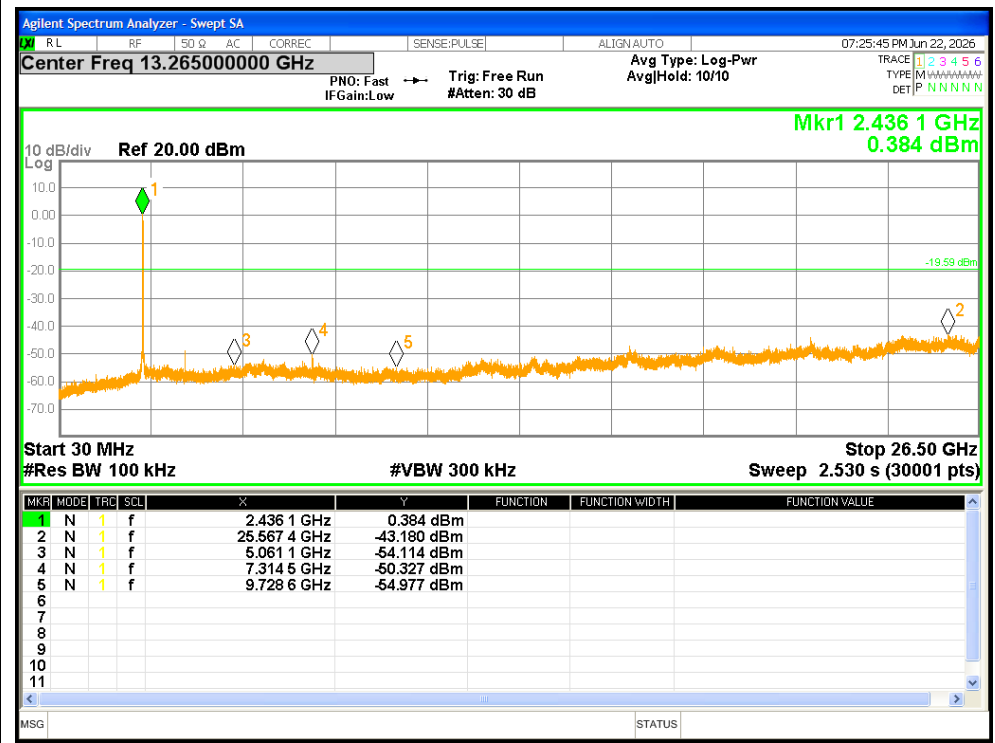
Tx. Spurious NVNT g 2412MHz Emission



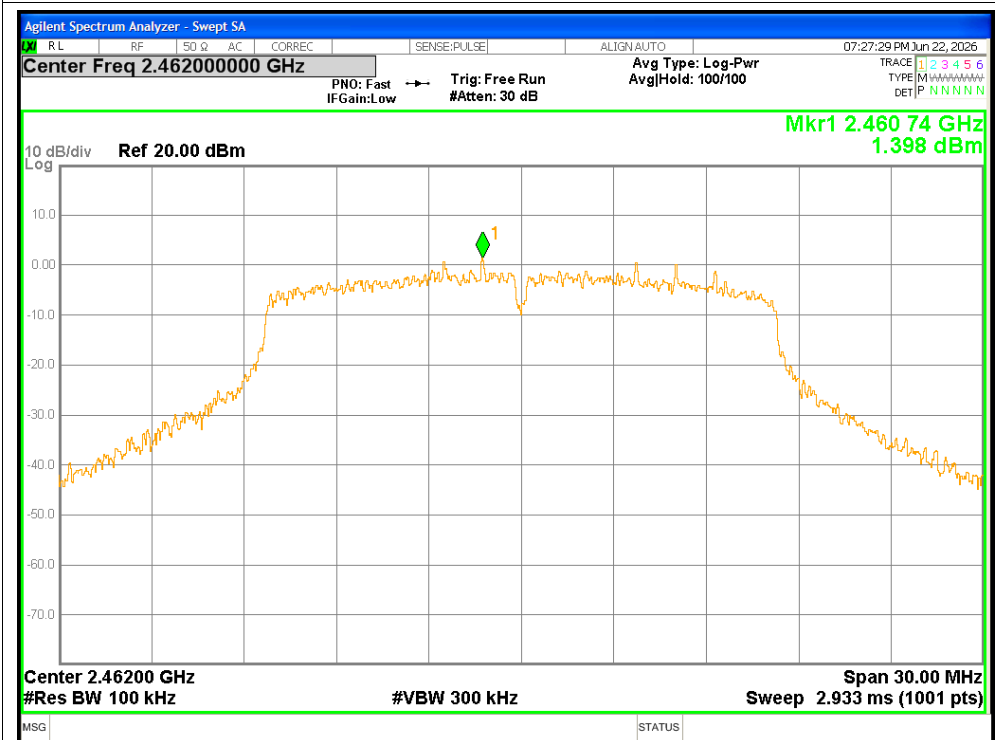
Tx. Spurious NVNT g 2437MHz Ref



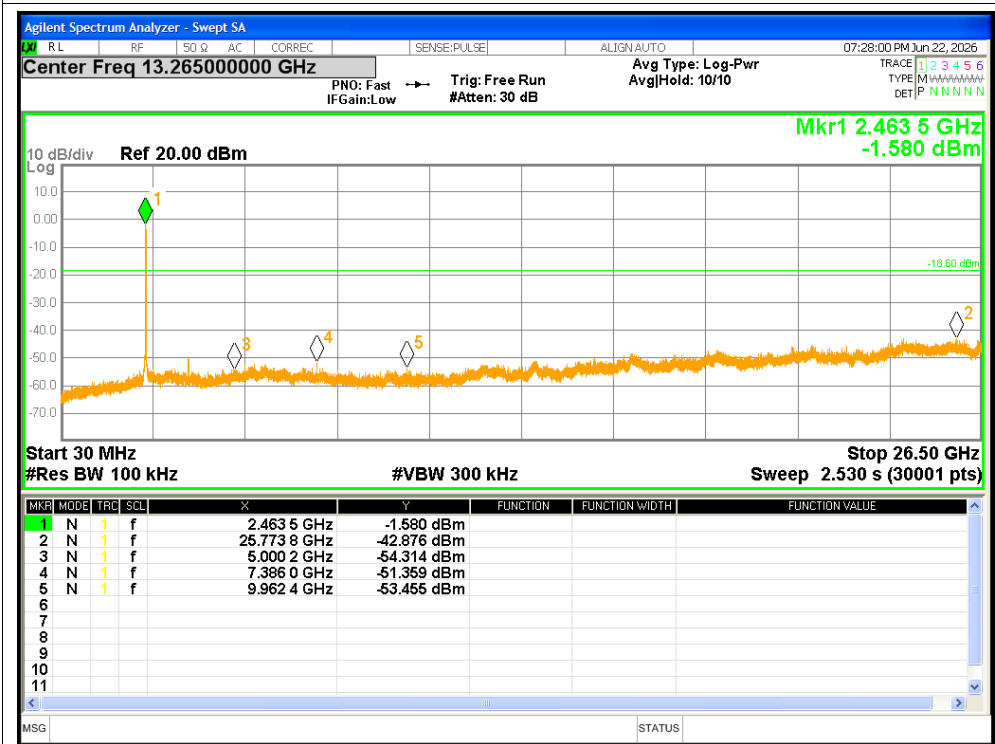
Tx. Spurious NVNT g 2437MHz Emission



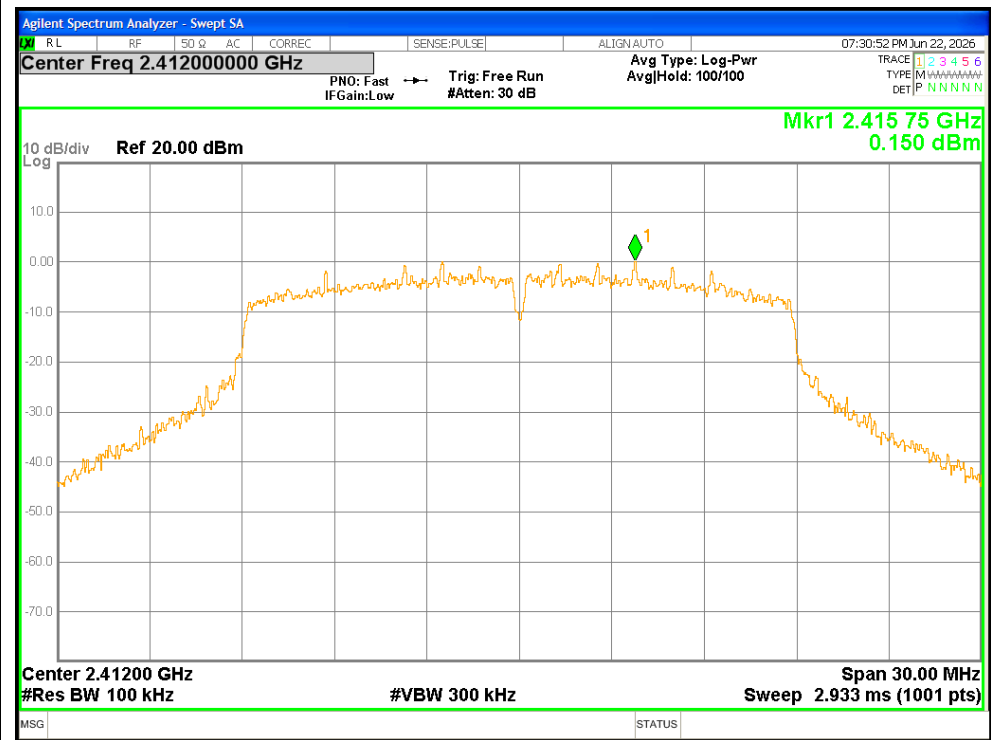
Tx. Spurious NVNT g 2462MHz Ref



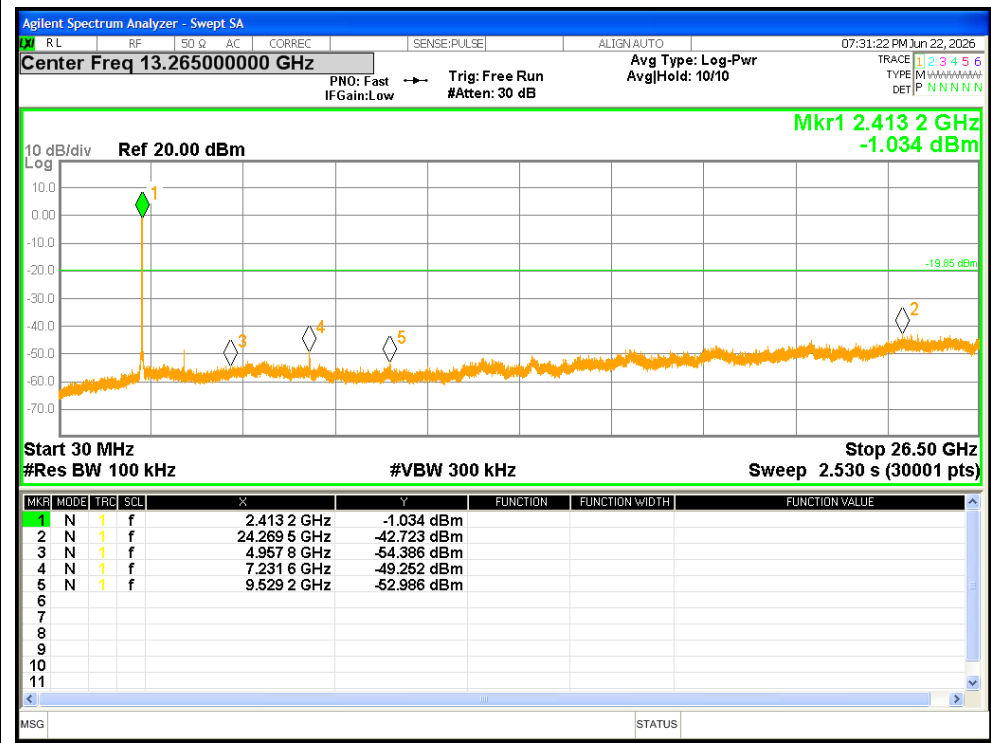
Tx. Spurious NVNT g 2462MHz Emission



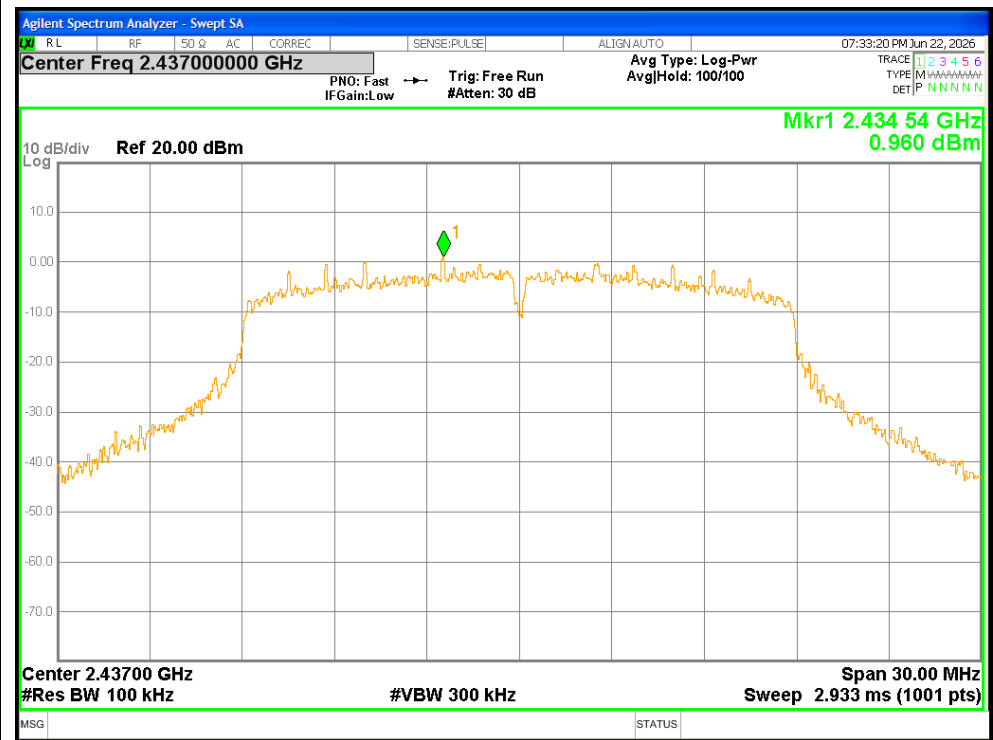
Tx. Spurious NVNT n20 2412MHz Ref



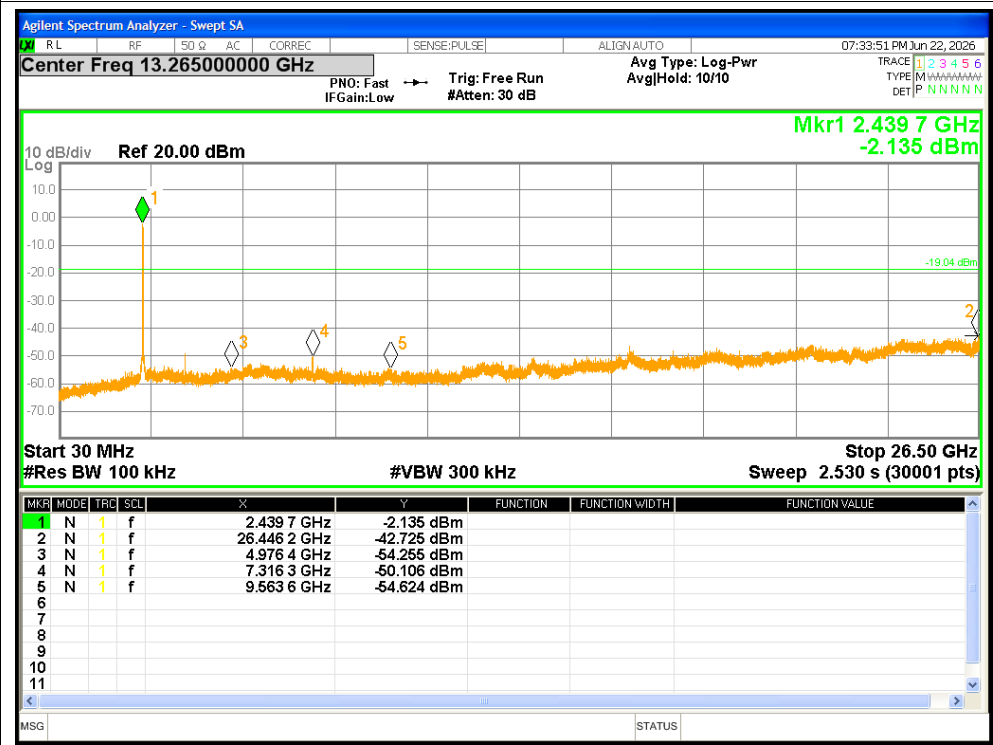
Tx. Spurious NVNT n20 2412MHz Emission



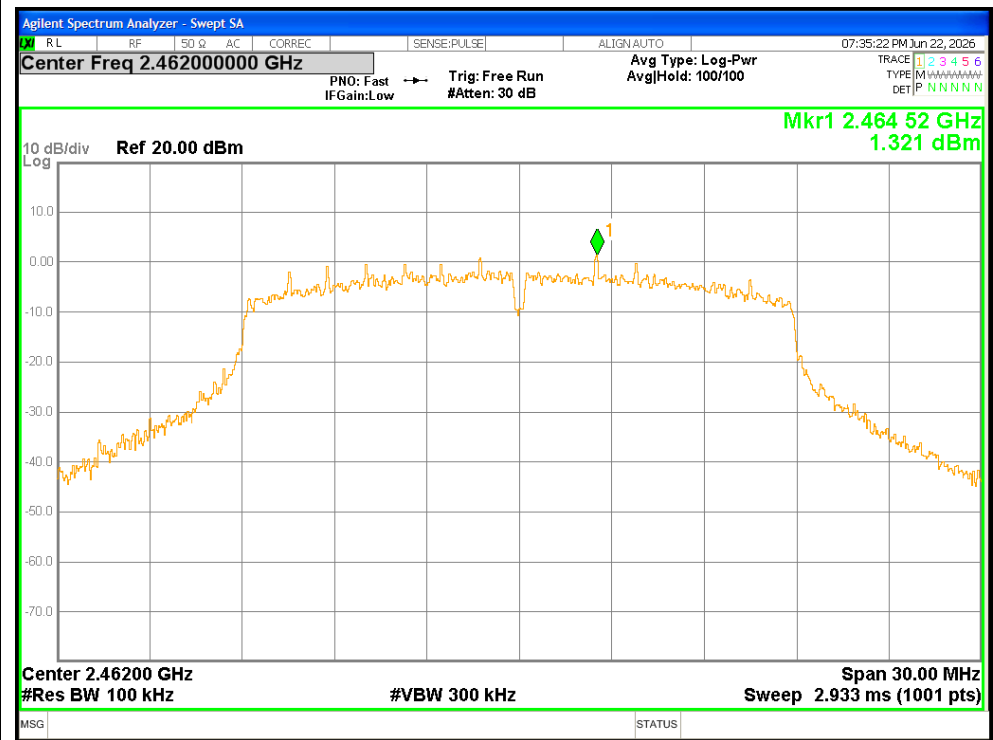
Tx. Spurious NVNT n20 2437MHz Ref



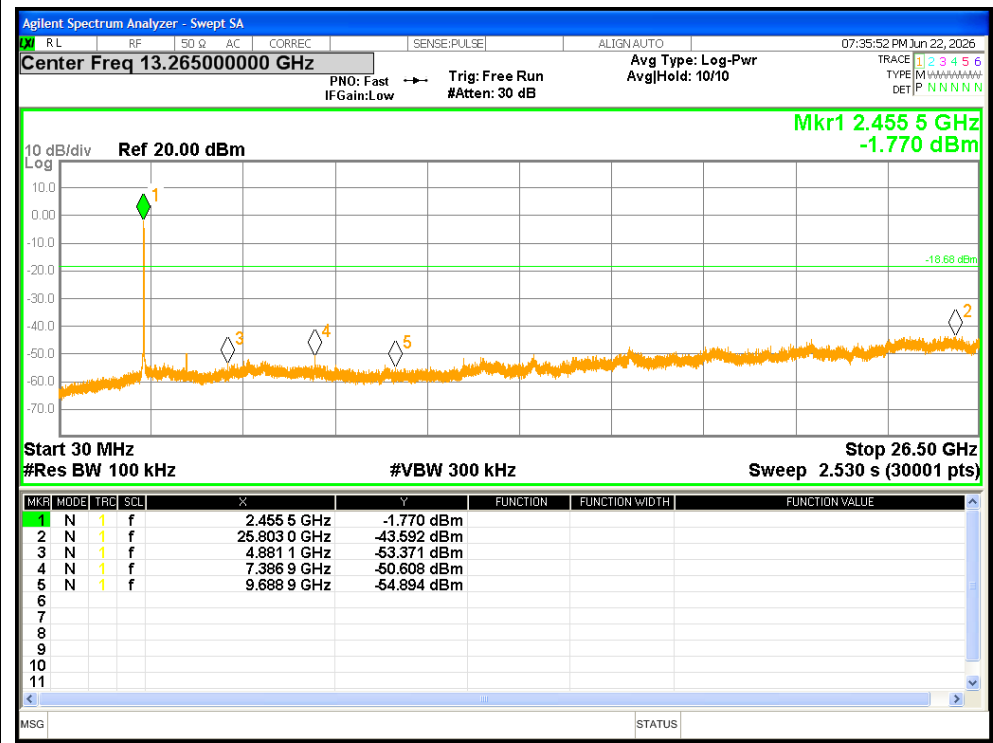
Tx. Spurious NVNT n20 2437MHz Emission



Tx. Spurious NVNT n20 2462MHz Ref



Tx. Spurious NVNT n20 2462MHz Emission

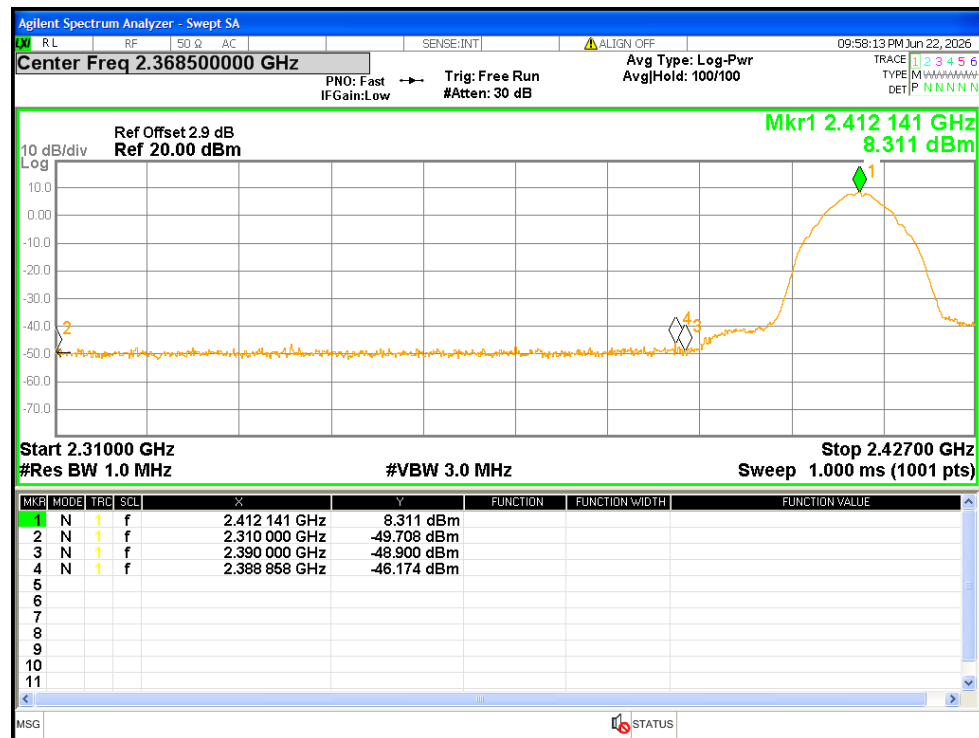


Restrict Band

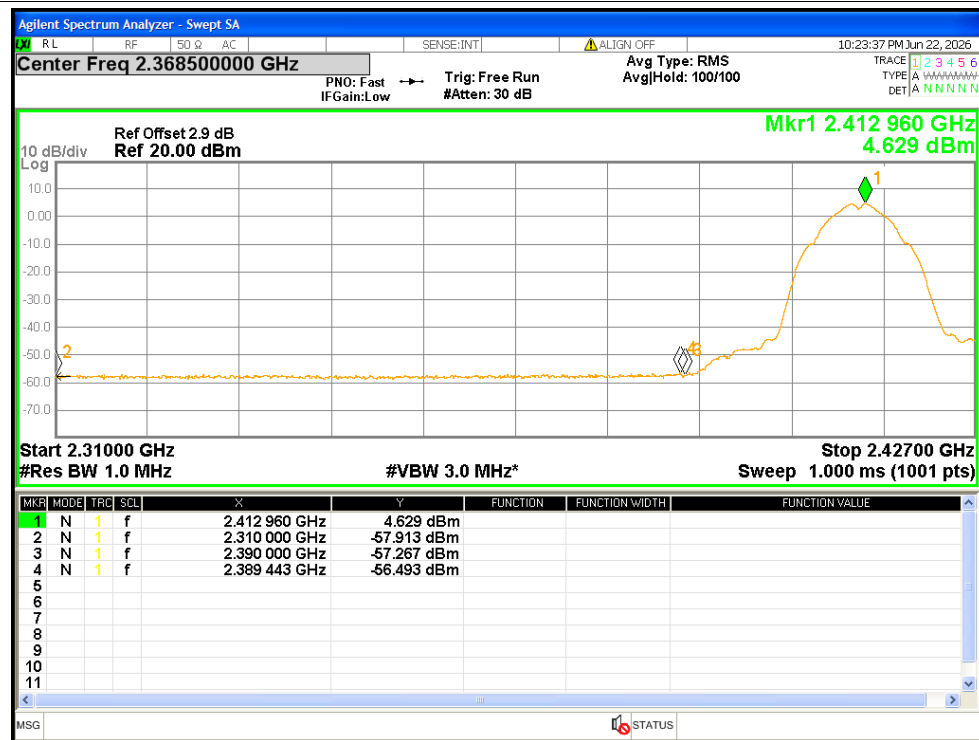
Mode	Frequency (MHz)	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB))	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
b	2412	2310	-49.7	2	0	47.56	Peak	<=74	Pass
b	2412	2310	-57.91	2	0.04	39.39	Average	<=54	Pass
b	2412	2388.858	-46.17	2	0	51.09	Peak	<=74	Pass
b	2412	2389.443	-56.49	2	0.04	40.81	Average	<=54	Pass
b	2412	2390	-48.89	2	0	48.37	Peak	<=74	Pass
b	2412	2390	-57.26	2	0.04	40.04	Average	<=54	Pass
b	2462	2483.5	-46.09	2	0	51.17	Peak	<=74	Pass
b	2462	2483.5	-55.91	2	0.05	41.4	Average	<=54	Pass
b	2462	2485.955	-45.67	2	0	51.59	Peak	<=74	Pass
b	2462	2483.729	-55.61	2	0.05	41.7	Average	<=54	Pass
b	2462	2500	-48.14	2	0	49.12	Peak	<=74	Pass
b	2462	2500	-56.85	2	0.05	40.46	Average	<=54	Pass
g	2412	2310	-49.41	2	0	47.85	Peak	<=74	Pass
g	2412	2310	-57.76	2	0.29	39.79	Average	<=54	Pass
g	2412	2387.805	-39.26	2	0	58	Peak	<=74	Pass
g	2412	2388.507	-51.17	2	0.29	46.38	Average	<=54	Pass
g	2412	2390	-42.16	2	0	55.1	Peak	<=74	Pass
g	2412	2390	-51.34	2	0.29	46.21	Average	<=54	Pass
g	2462	2483.5	-40.73	2	0	56.53	Peak	<=74	Pass
g	2462	2483.5	-49.37	2	0.29	48.18	Average	<=54	Pass
g	2462	2483.623	-36.73	2	0	60.53	Peak	<=74	Pass
g	2462	2485.107	-48.85	2	0.29	48.7	Average	<=54	Pass
g	2462	2500	-41.33	2	0	55.93	Peak	<=74	Pass
g	2462	2500	-51.76	2	0.29	45.79	Average	<=54	Pass
n20	2412	2310	-50.07	2	0	47.19	Peak	<=74	Pass
n20	2412	2310	-57.79	2	0.31	39.78	Average	<=54	Pass
n20	2412	2386.518	-39.33	2	0	57.93	Peak	<=74	Pass
n20	2412	2389.443	-51	2	0.31	46.57	Average	<=54	Pass
n20	2412	2390	-41.79	2	0	55.47	Peak	<=74	Pass
n20	2412	2390	-51.03	2	0.31	46.54	Average	<=54	Pass
n20	2462	2483.5	-38.72	2	0	58.54	Peak	<=74	Pass
n20	2462	2483.5	-49.45	2	0.30	48.11	Average	<=54	Pass
n20	2462	2484.047	-36.56	2	0	60.7	Peak	<=74	Pass
n20	2462	2483.517	-49.45	2	0.30	48.11	Average	<=54	Pass
n20	2462	2500	-43.01	2	0	54.25	Peak	<=74	Pass
n20	2462	2500	-52.15	2	0.30	45.41	Average	<=54	Pass

Test Graphs

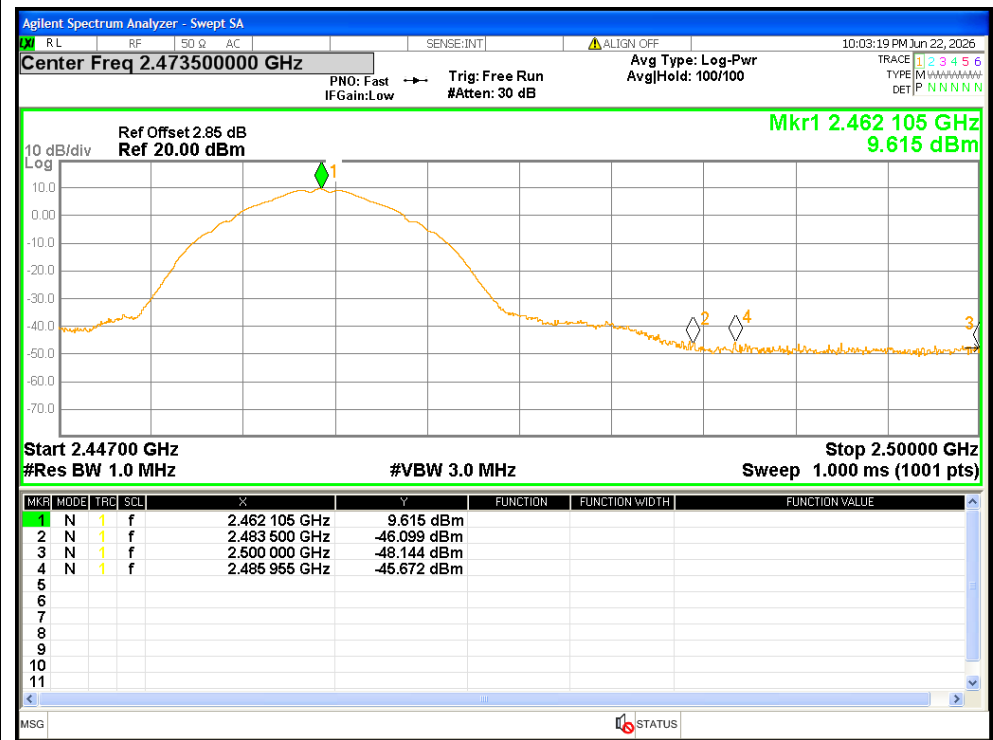
Restrict Band NVNT b 2412MHz Peak



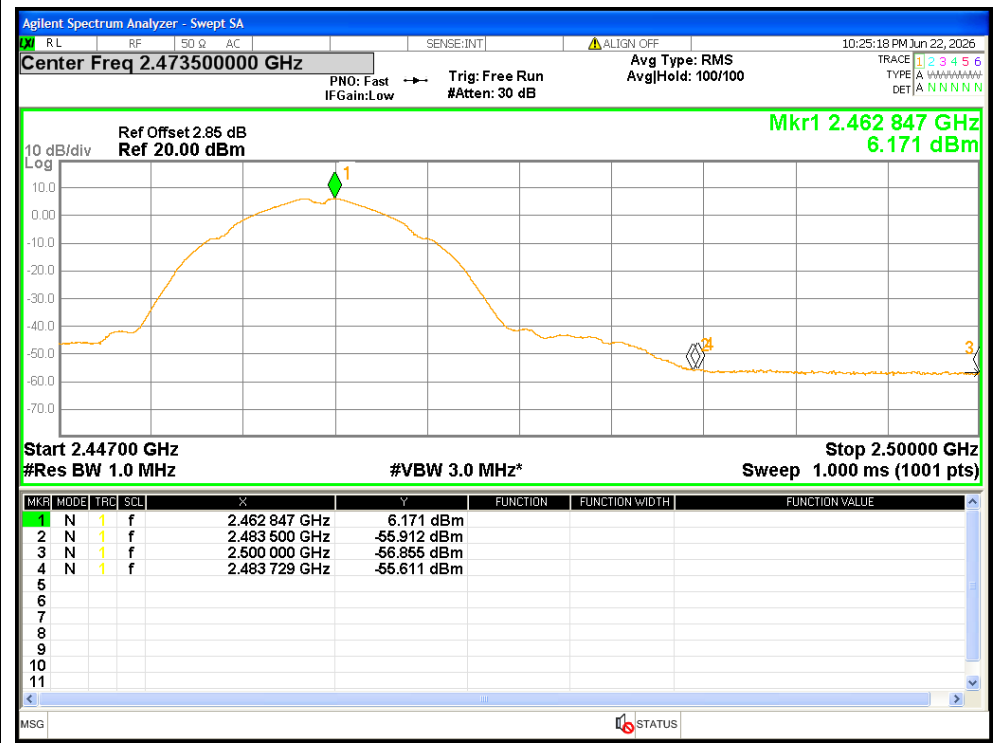
Restrict Band NVNT b 2412MHz Average



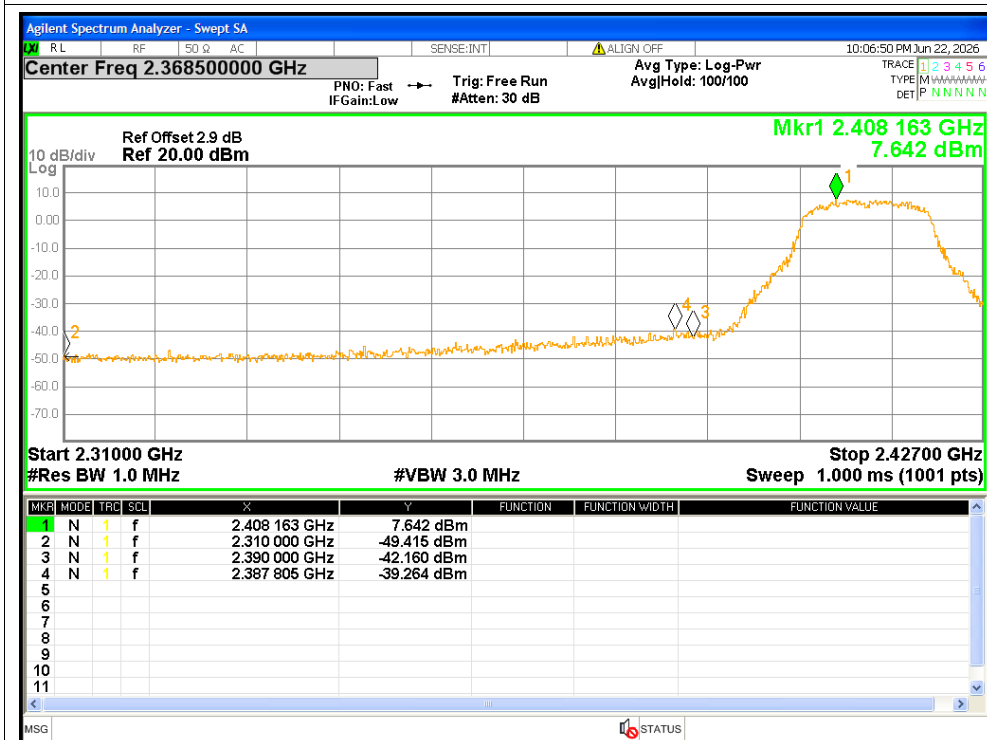
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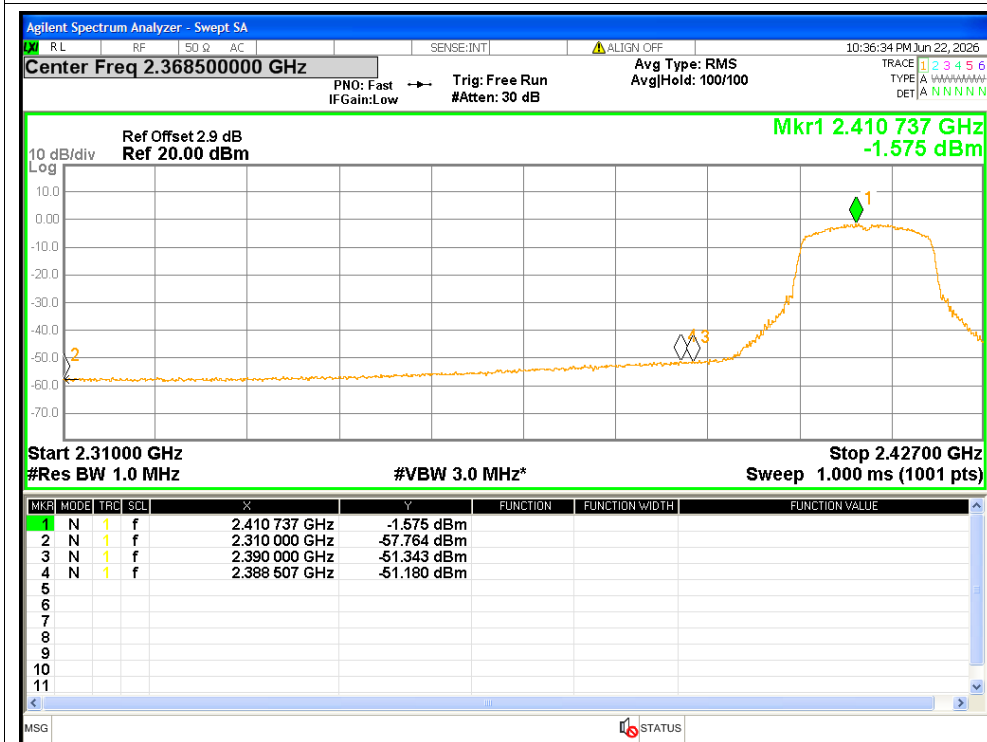
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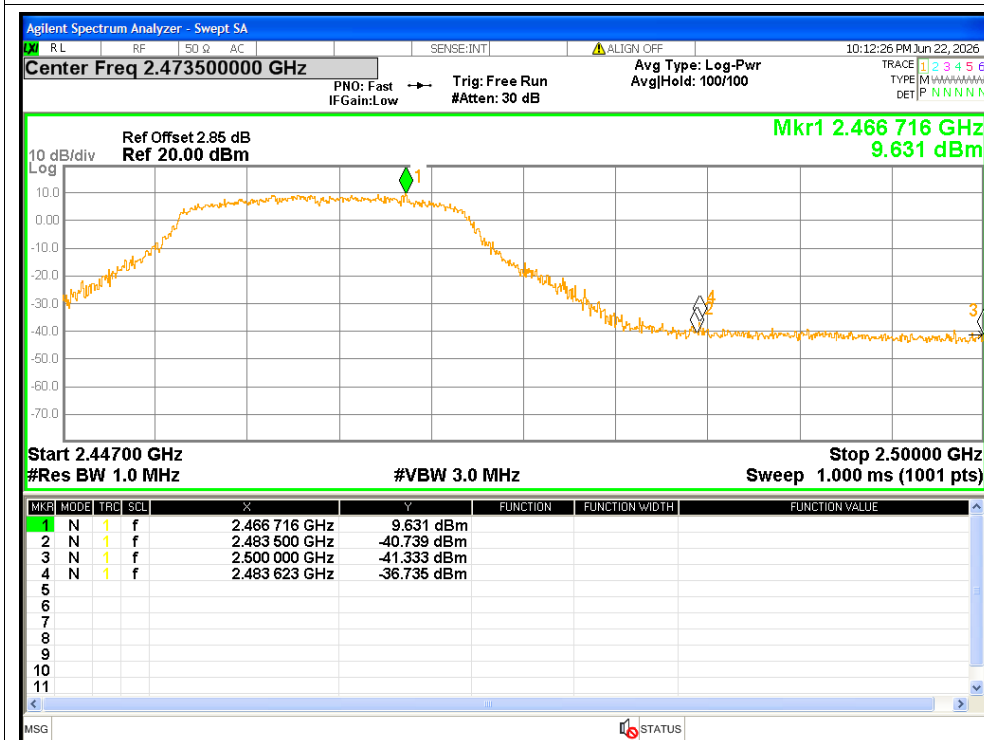
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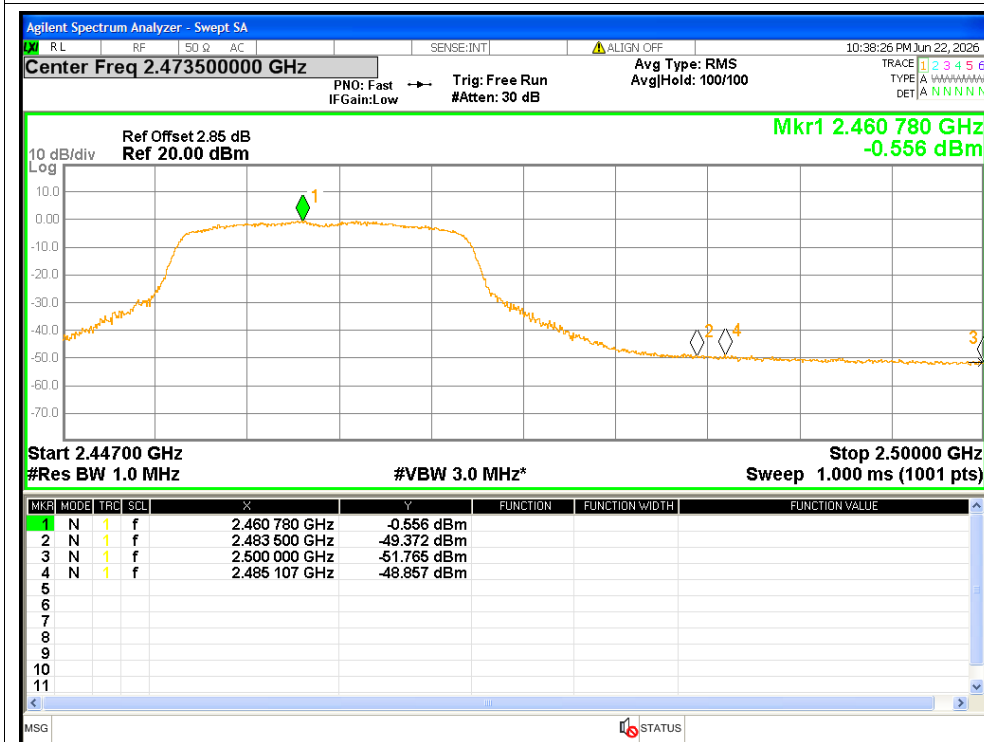
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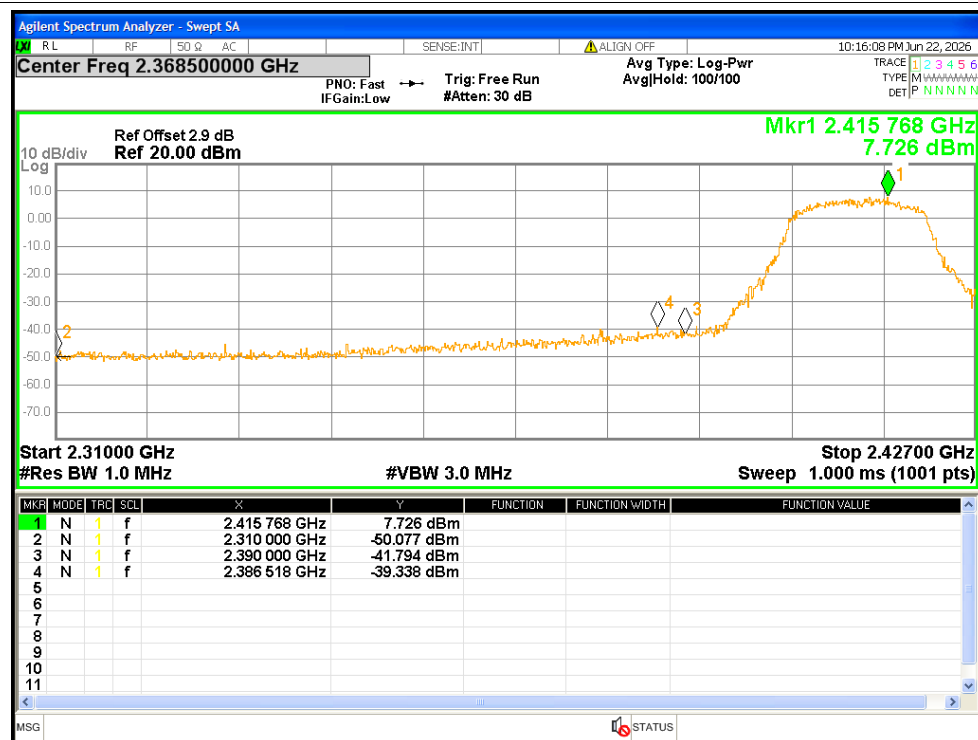
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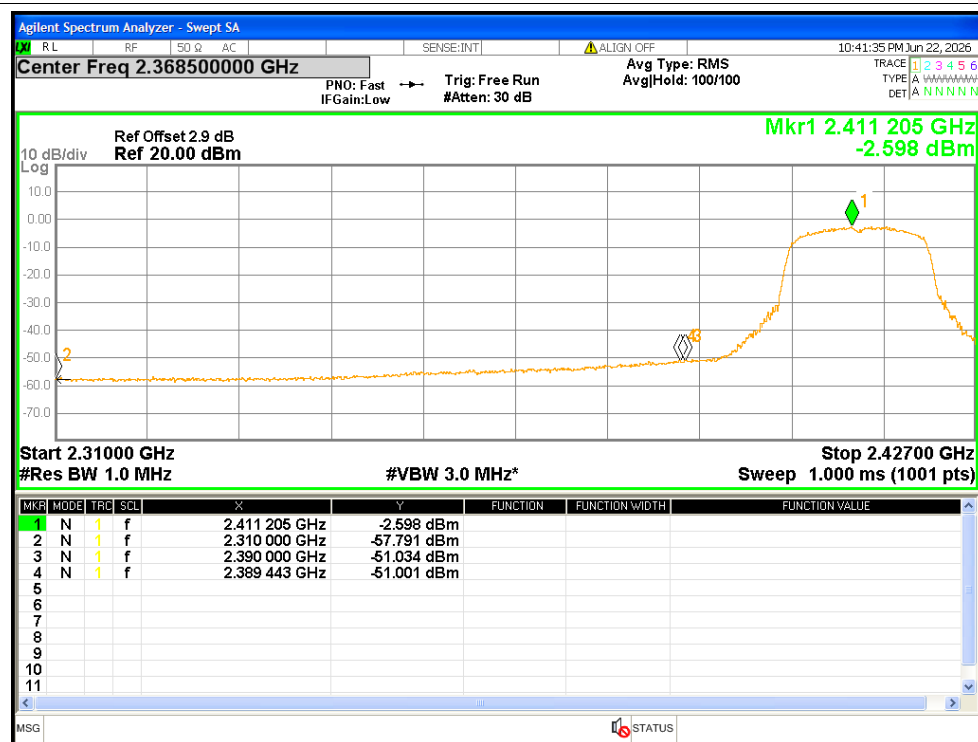
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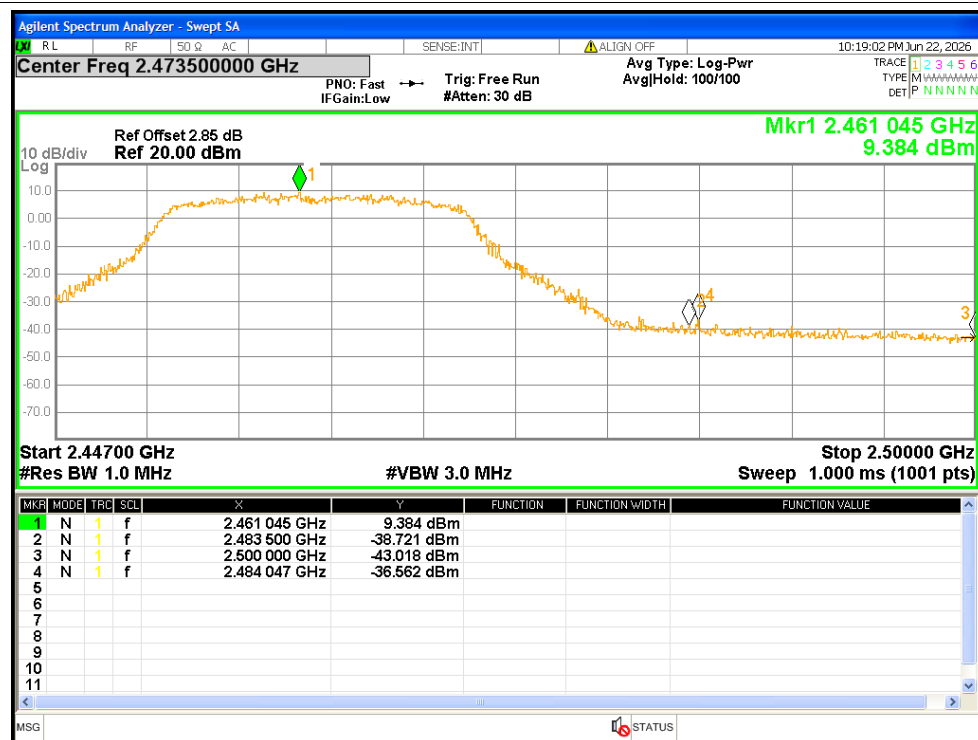
Restrict Band NVNT n20 2412MHz Peak



Restrict Band NVNT n20 2412MHz Average



Restrict Band NVNT n20 2462MHz Peak



Restrict Band NVNT n20 2462MHz Average

