

FCC Appendix RF Test Data for 2.4G WIFI

FCC ID : 2BVTV-K180

Company : Shenzhen Wiikk Technology Co., Ltd

EUT : 3D LED FAN

Model Number : K180

Report No. : CTA25120502202

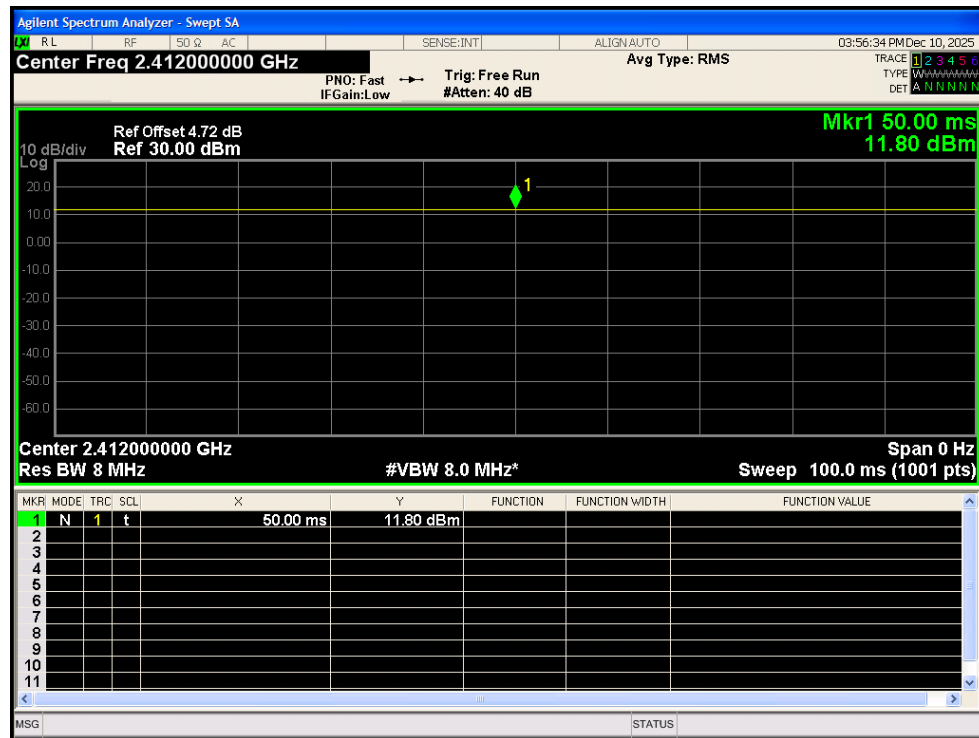
Reviewed By : Eric Wang

Duty Cycle

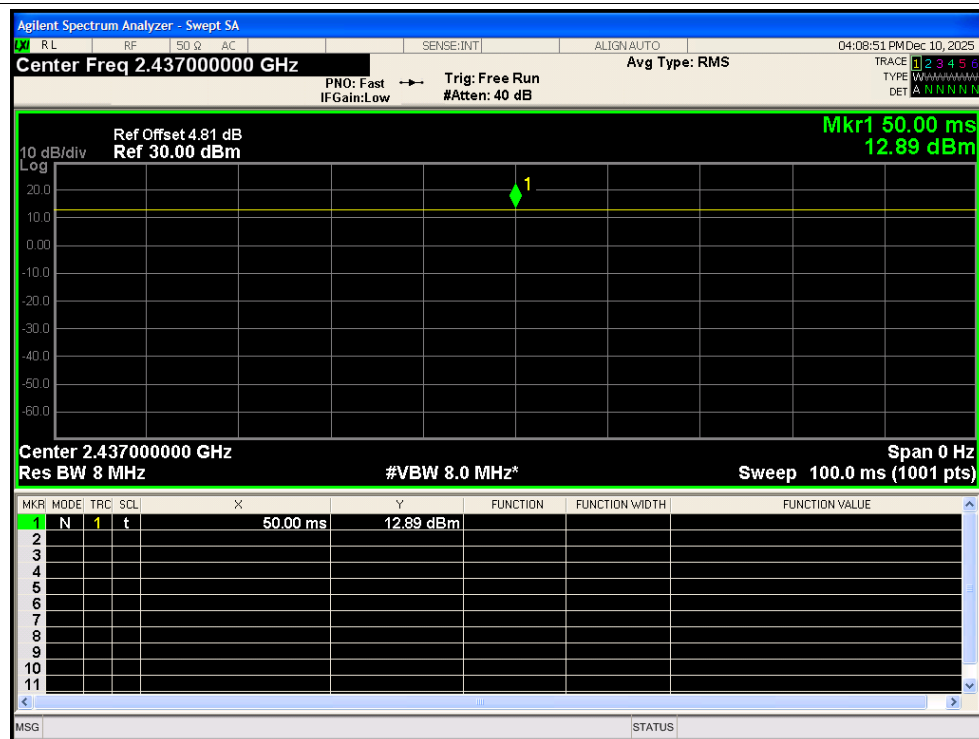
Condition	Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor (dB)
NVNT	b	2412	100	0
NVNT	b	2437	100	0
NVNT	b	2462	100	0
NVNT	g	2412	100	0
NVNT	g	2437	100	0
NVNT	g	2462	100	0
NVNT	n20	2412	100	0
NVNT	n20	2437	100	0
NVNT	n20	2462	100	0

Test Graphs

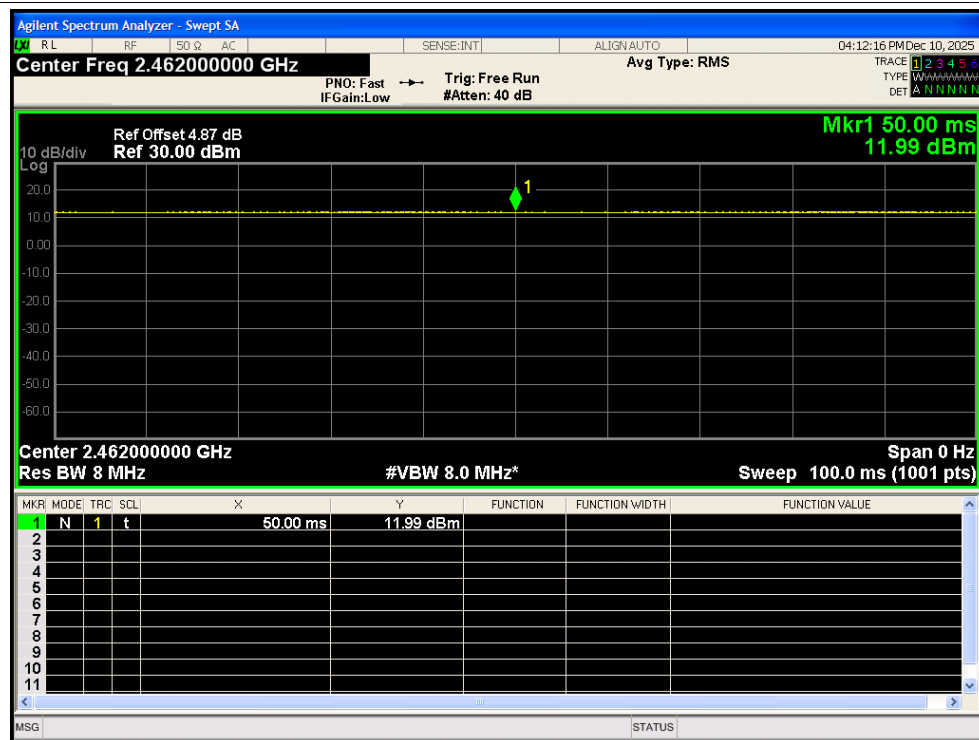
Duty Cycle NVNT b 2412MHz



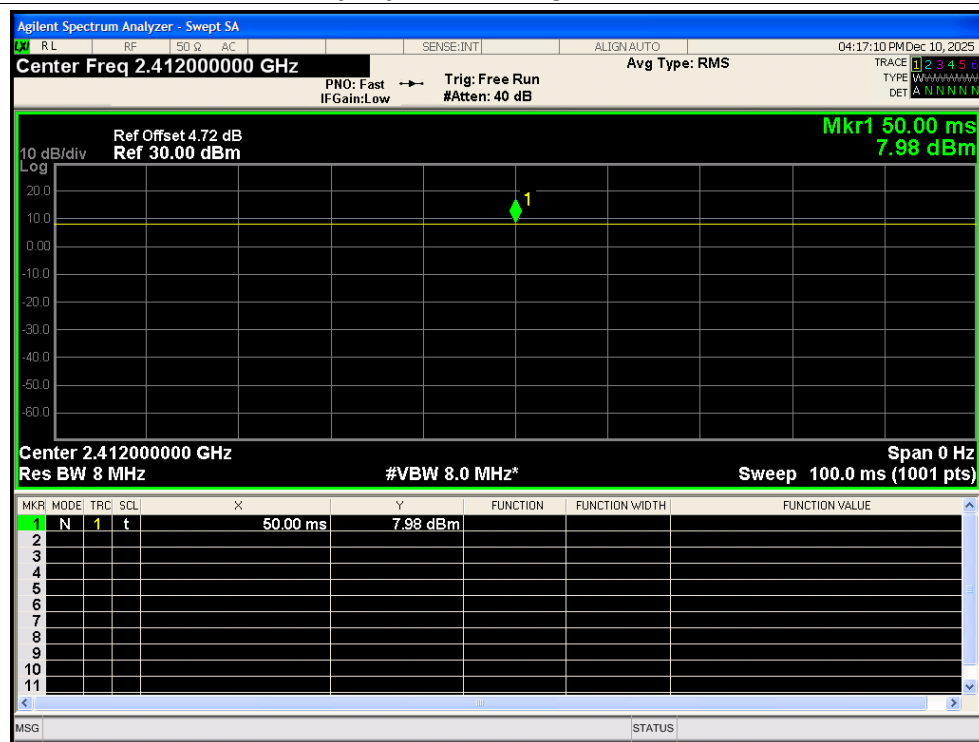
Duty Cycle NVNT b 2437MHz



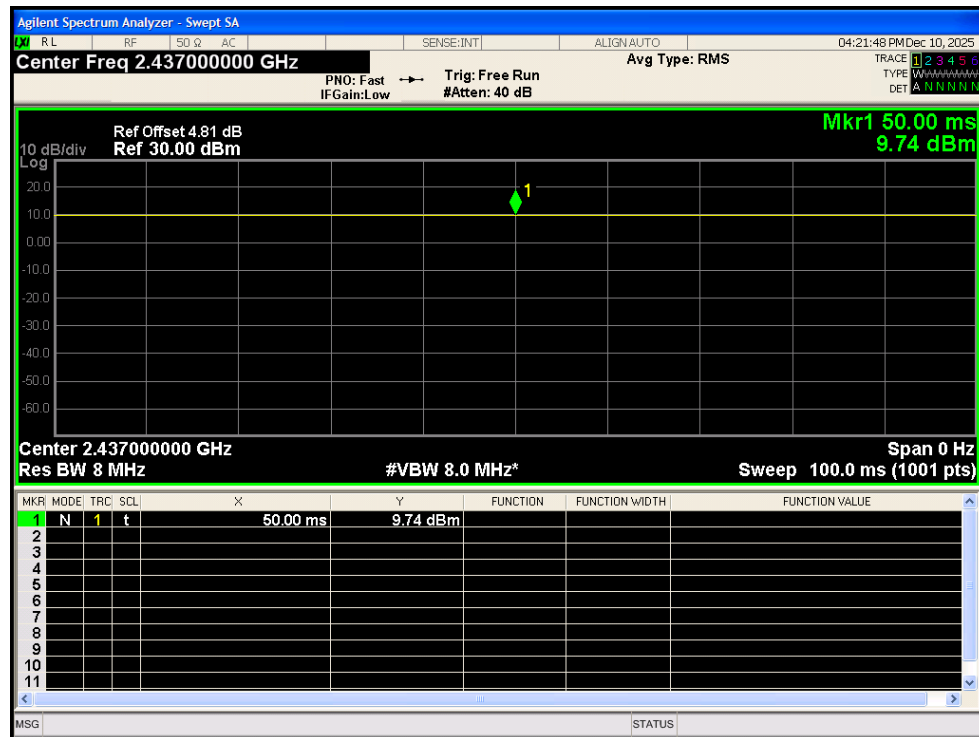
Duty Cycle NVNT b 2462MHz



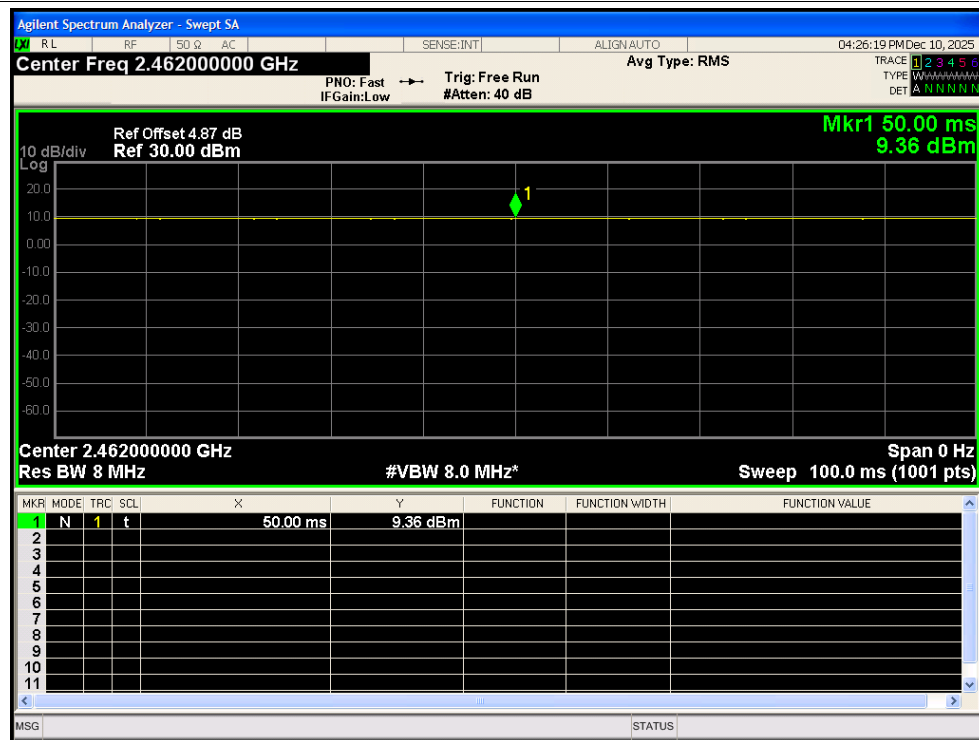
Duty Cycle NVNT g 2412MHz



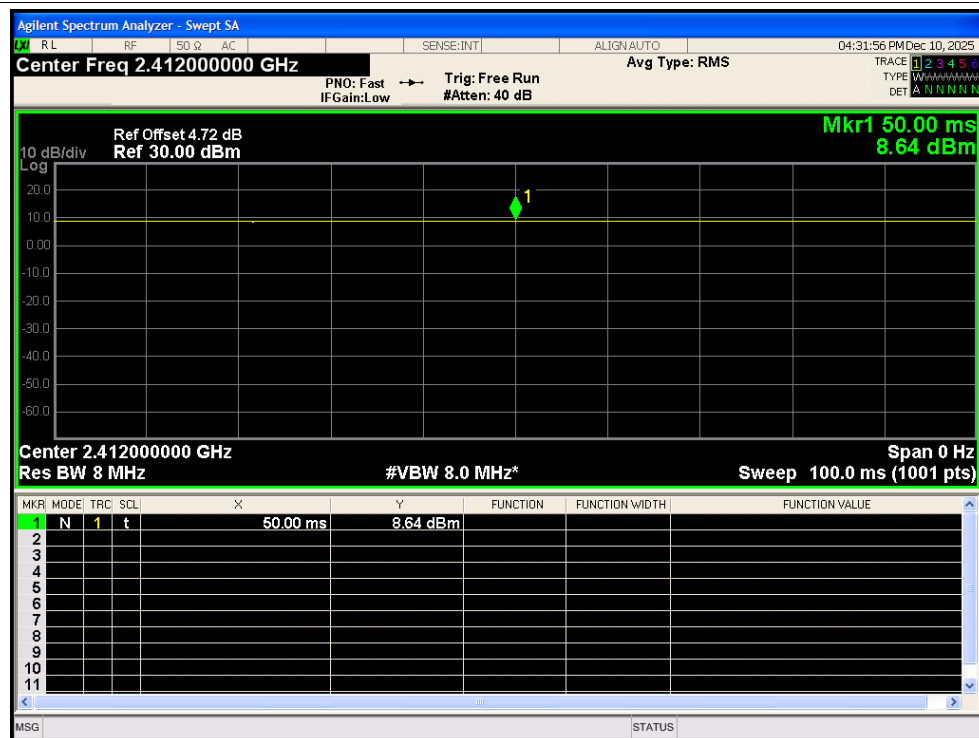
Duty Cycle NVNT g 2437MHz



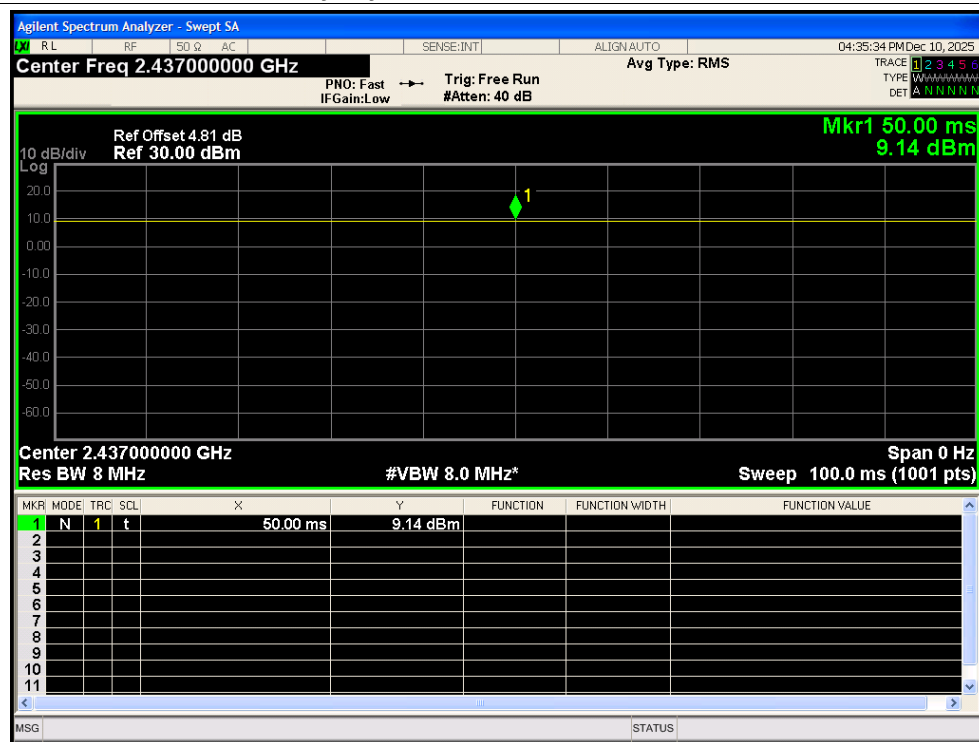
Duty Cycle NVNT g 2462MHz



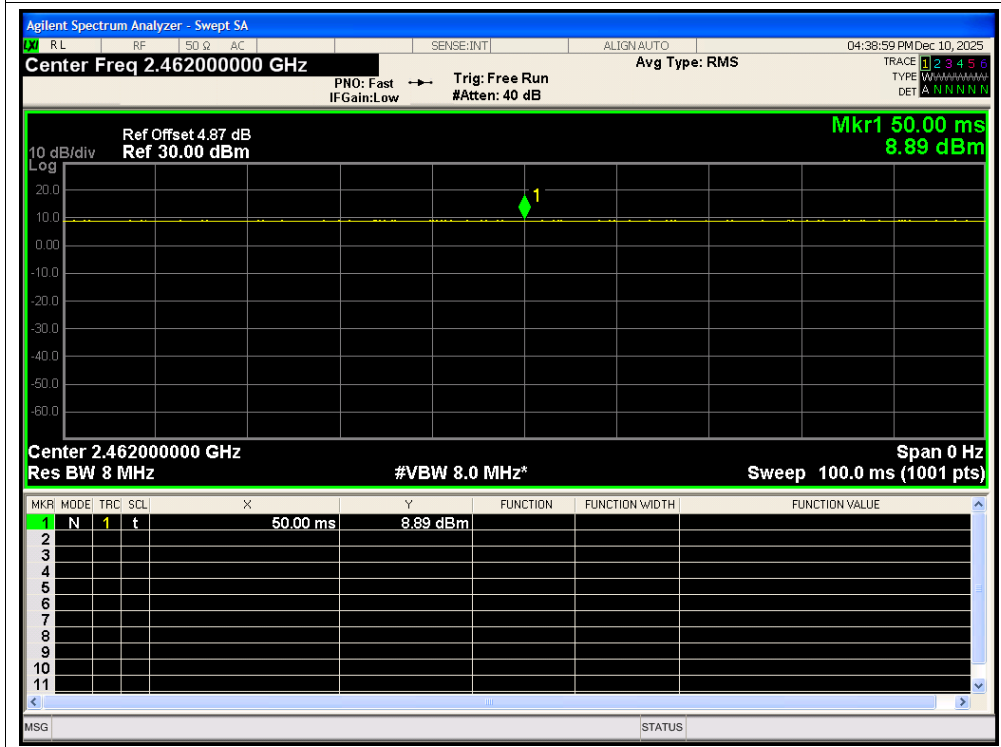
Duty Cycle NVNT n20 2412MHz



Duty Cycle NVNT n20 2437MHz



Duty Cycle NVNT n20 2462MHz



Maximum Conducted Output Power

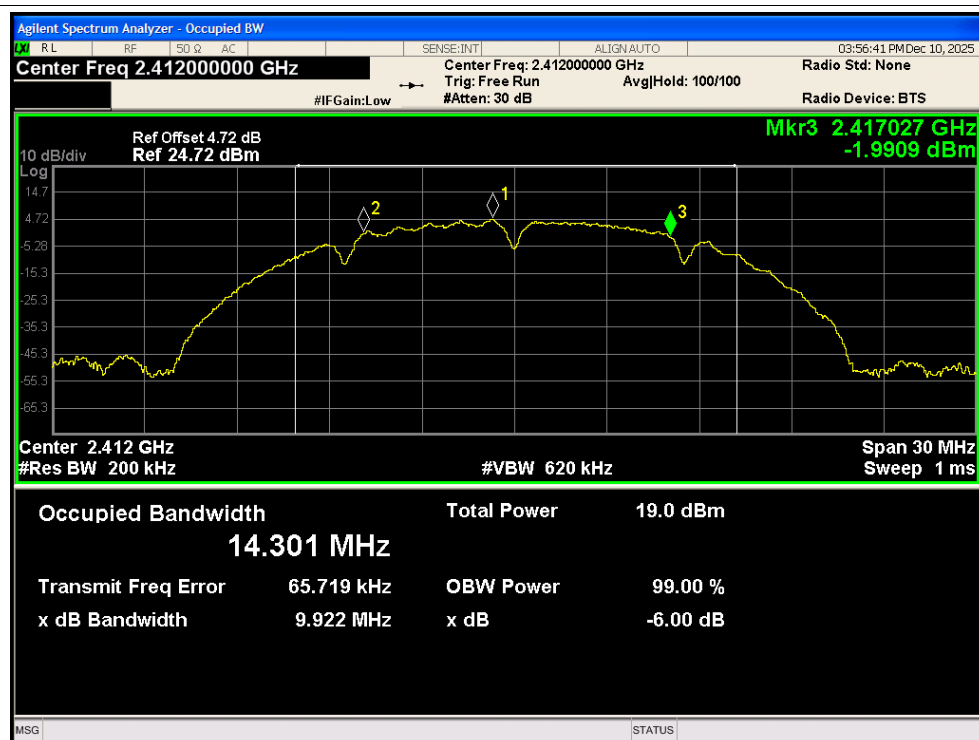
Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	13.05	30	Pass
NVNT	b	2437	13.21	30	Pass
NVNT	b	2462	12.84	30	Pass
NVNT	g	2412	11.37	30	Pass
NVNT	g	2437	12.36	30	Pass
NVNT	g	2462	12.29	30	Pass
NVNT	n20	2412	12.46	30	Pass
NVNT	n20	2437	12.19	30	Pass
NVNT	n20	2462	12.20	30	Pass

-6dB Bandwidth

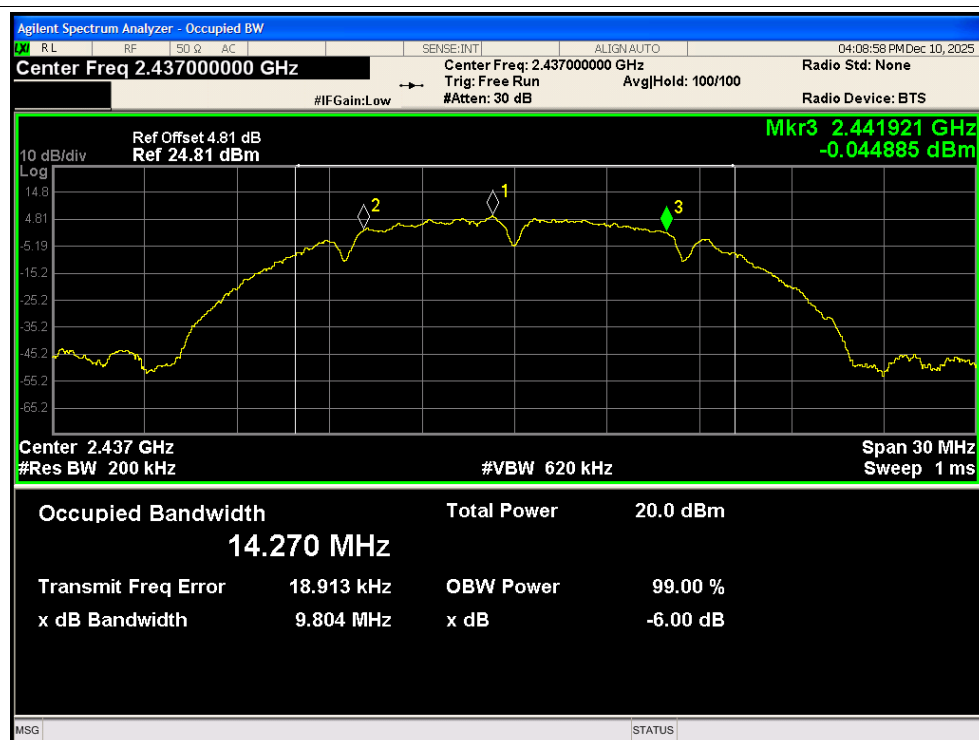
Condition	Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	9.922	0.5	Pass
NVNT	b	2437	9.804	0.5	Pass
NVNT	b	2462	9.645	0.5	Pass
NVNT	g	2412	16.49	0.5	Pass
NVNT	g	2437	16.56	0.5	Pass
NVNT	g	2462	16.37	0.5	Pass
NVNT	n20	2412	17.74	0.5	Pass
NVNT	n20	2437	17.73	0.5	Pass
NVNT	n20	2462	17.66	0.5	Pass

Test Graphs

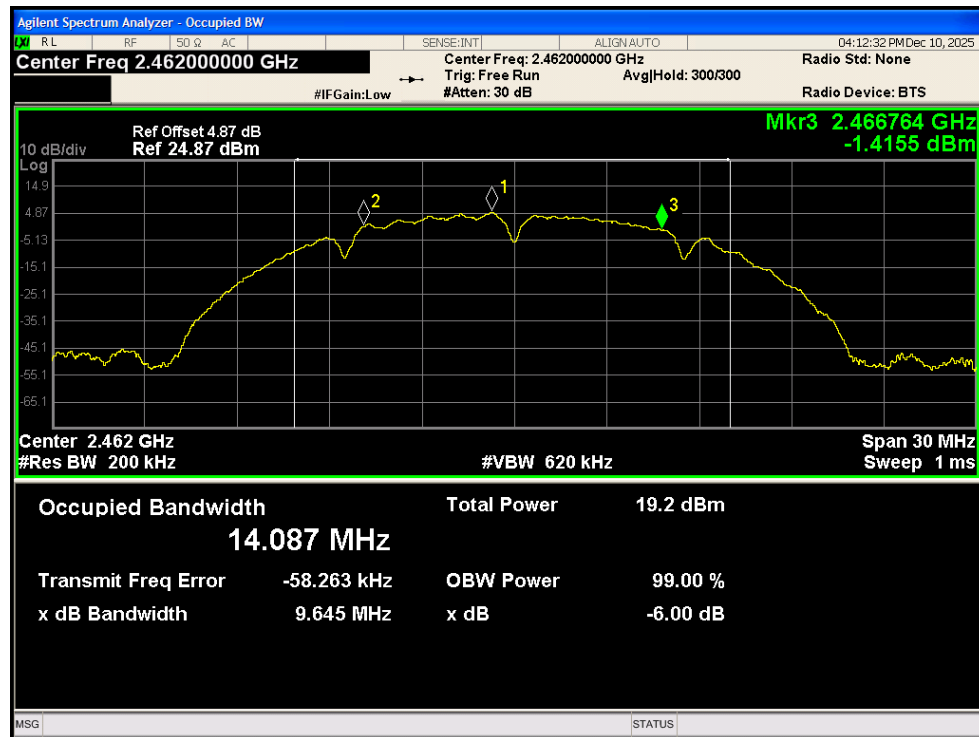
-6dB Bandwidth NVNT b 2412MHz



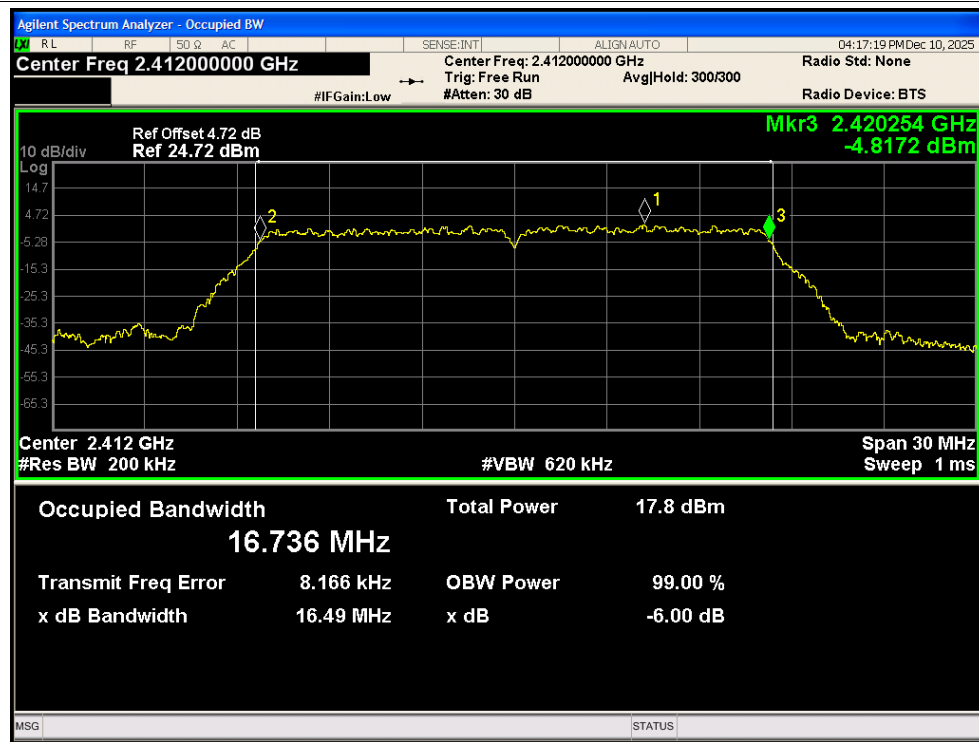
-6dB Bandwidth NVNT b 2437MHz



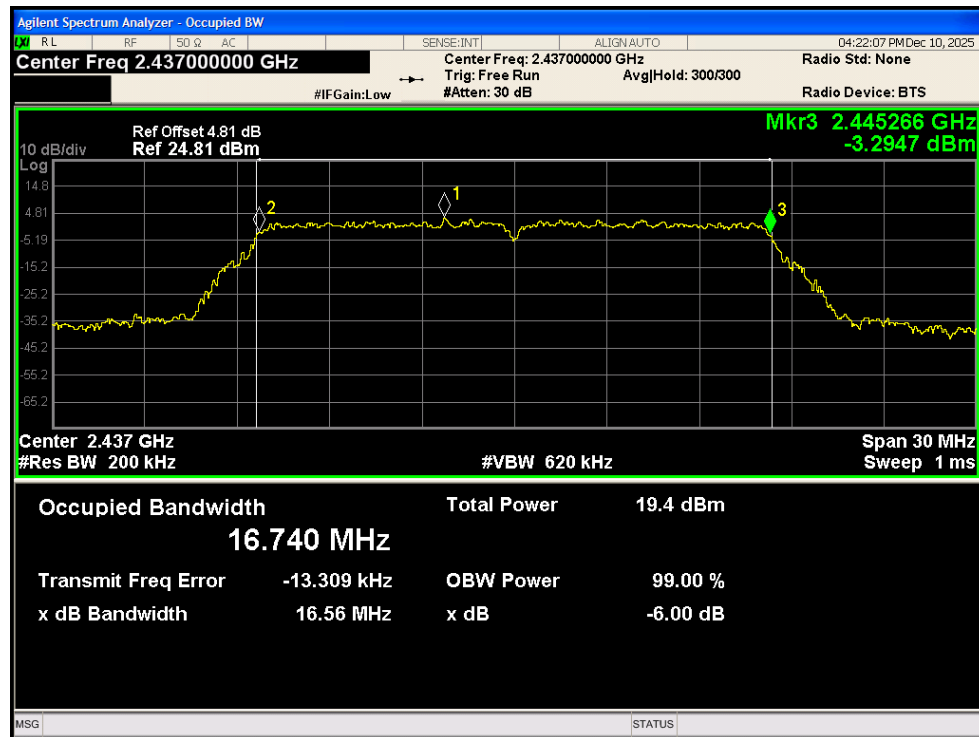
-6dB Bandwidth NVNT b 2462MHz



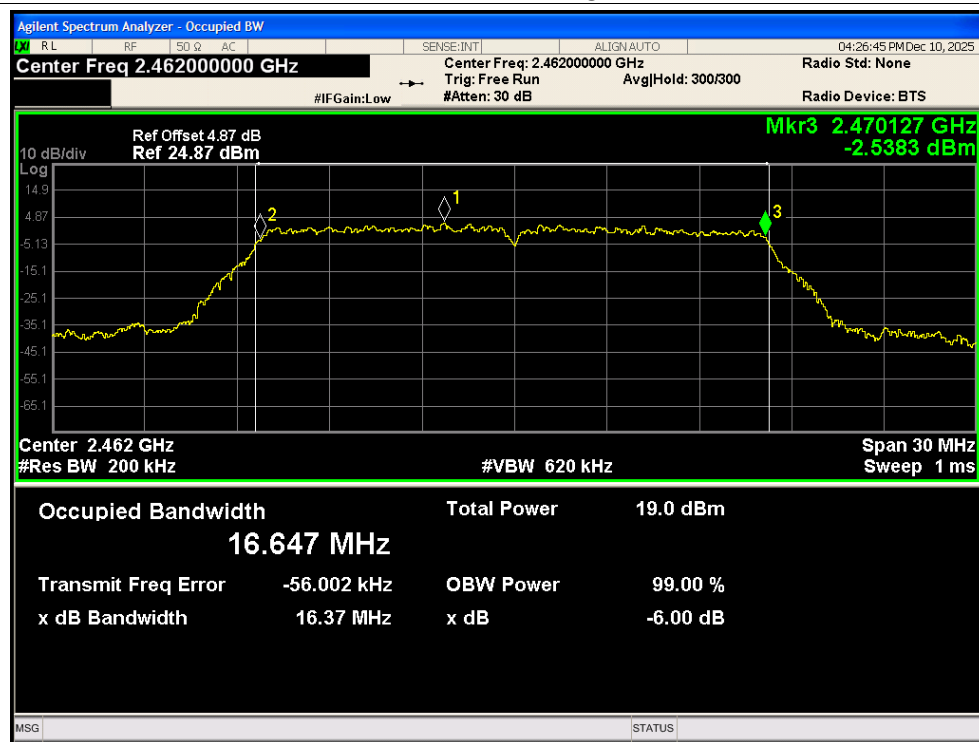
-6dB Bandwidth NVNT g 2412MHz



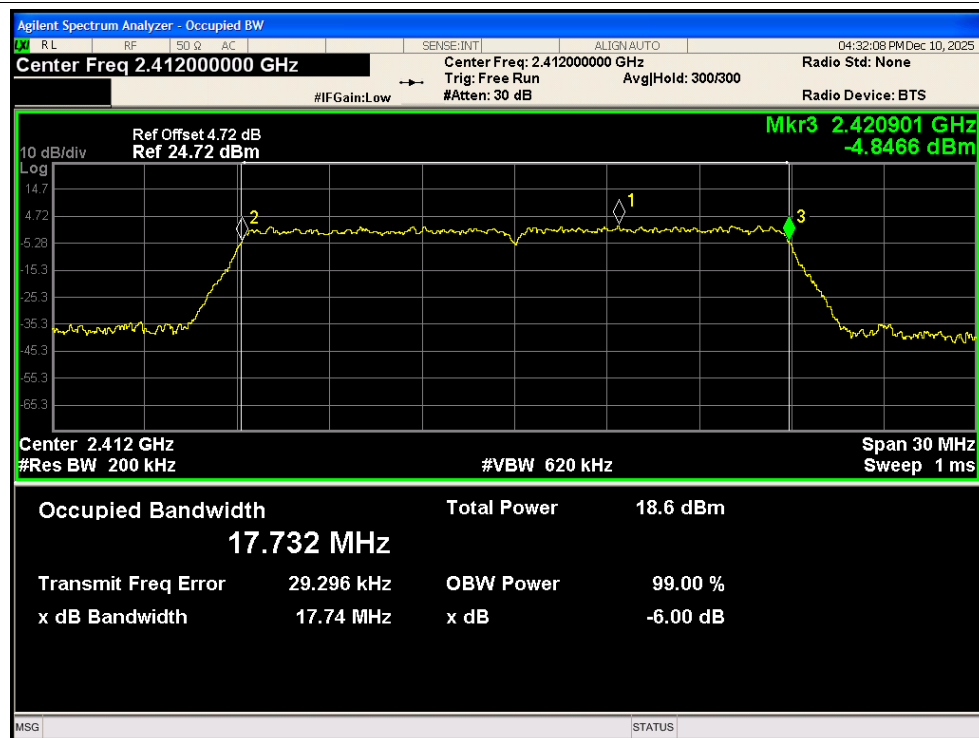
-6dB Bandwidth NVNT g 2437MHz



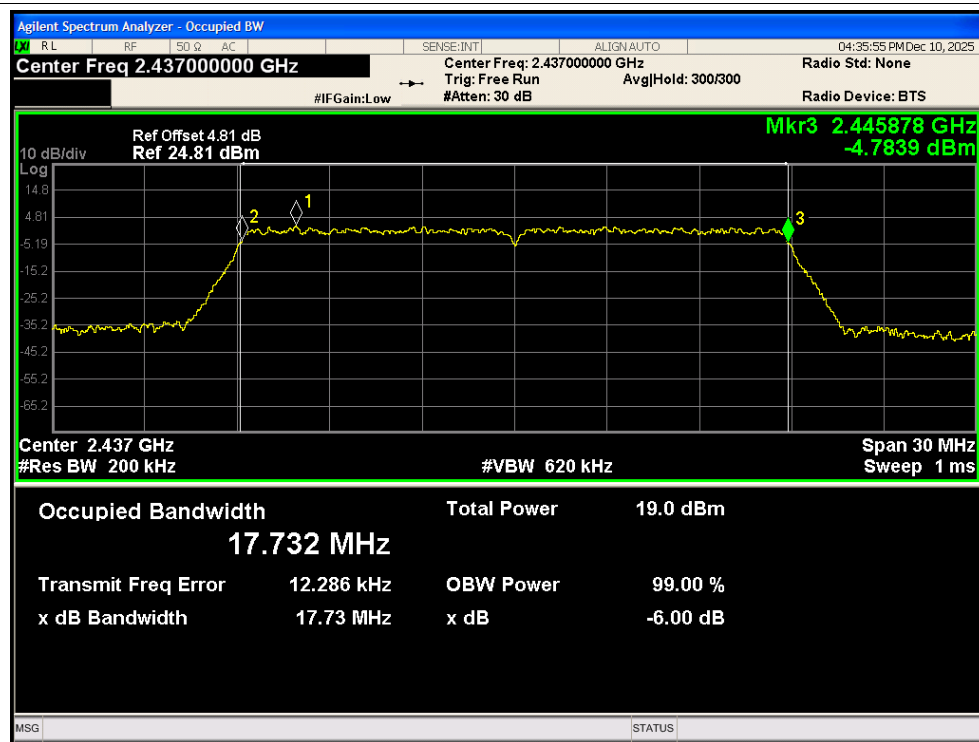
-6dB Bandwidth NVNT g 2462MHz



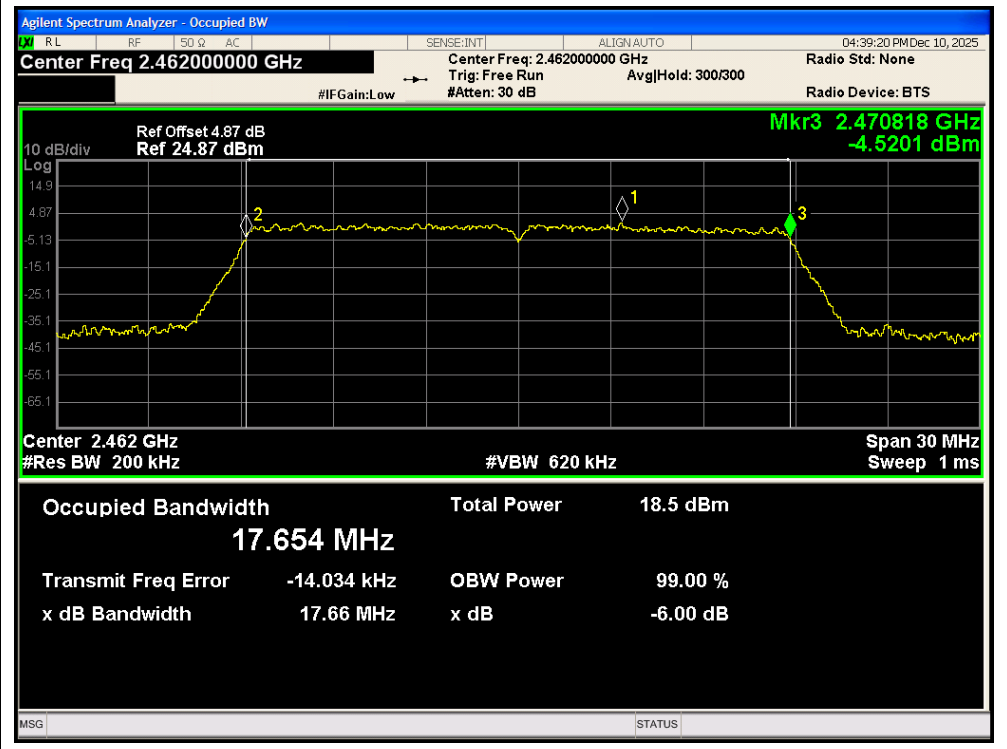
-6dB Bandwidth NVNT n20 2412MHz



-6dB Bandwidth NVNT n20 2437MHz



-6dB Bandwidth NVNT n20 2462MHz

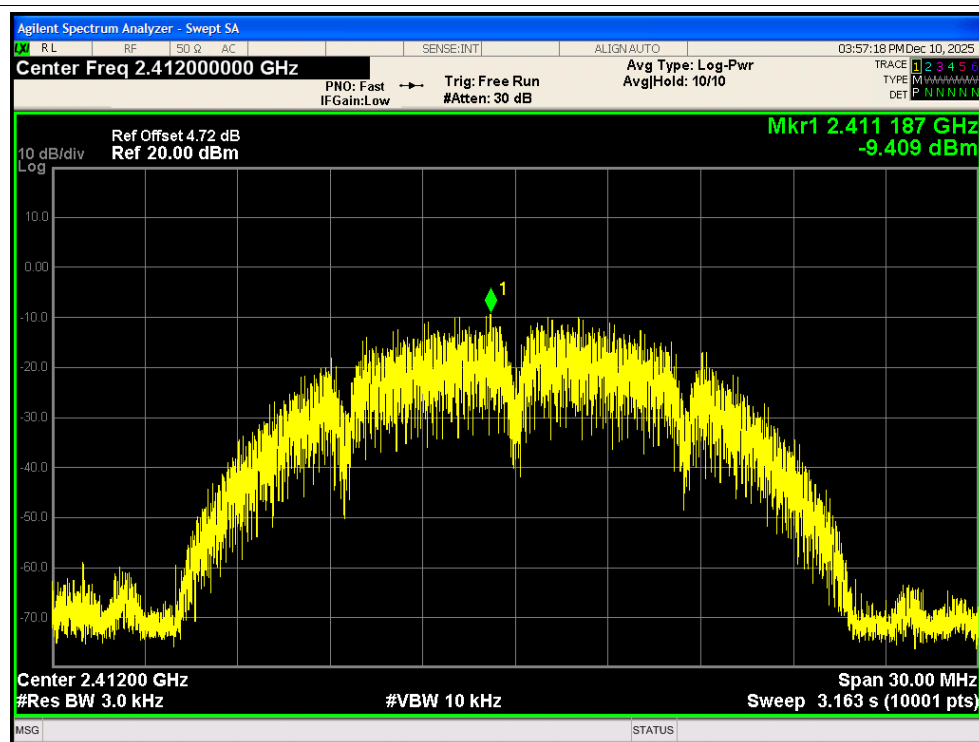


Maximum Power Spectral Density Level

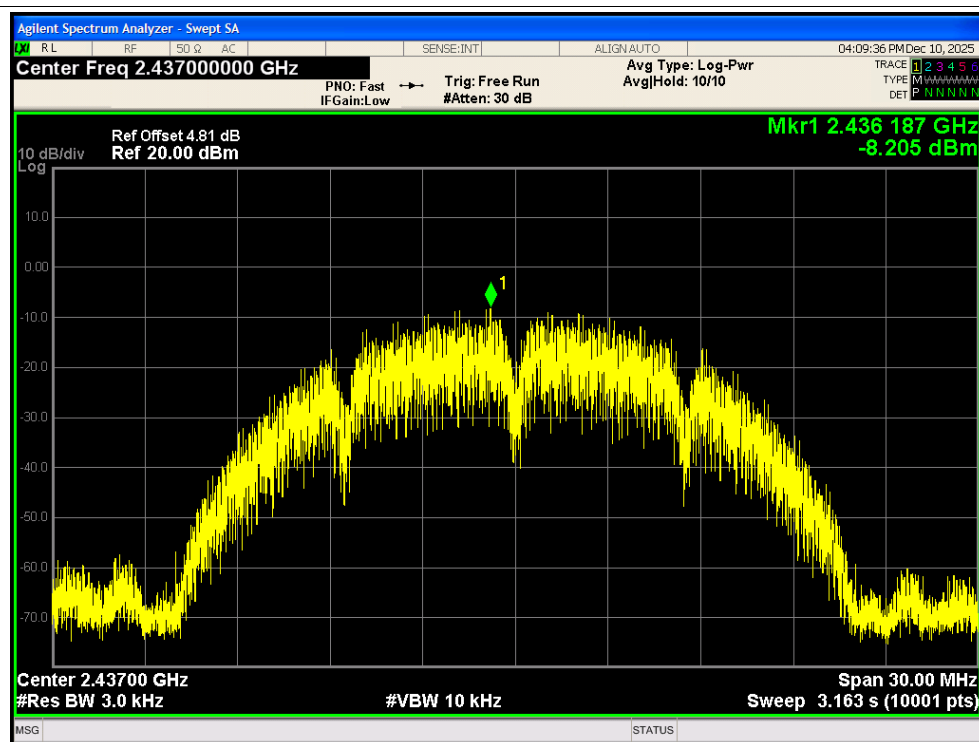
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	-9.41	8	Pass
NVNT	b	2437	-8.21	8	Pass
NVNT	b	2462	-8.96	8	Pass
NVNT	g	2412	-16.68	8	Pass
NVNT	g	2437	-15.02	8	Pass
NVNT	g	2462	-15.10	8	Pass
NVNT	n20	2412	-14.58	8	Pass
NVNT	n20	2437	-14.88	8	Pass
NVNT	n20	2462	-15.32	8	Pass

Test Graphs

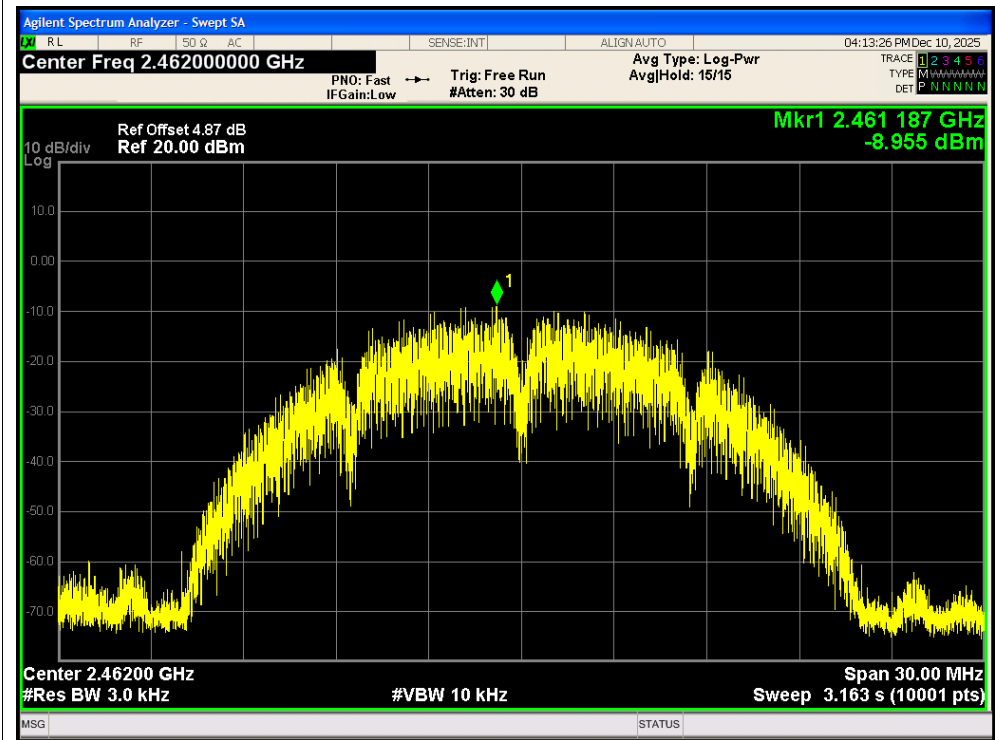
PSD NVNT b 2412MHz



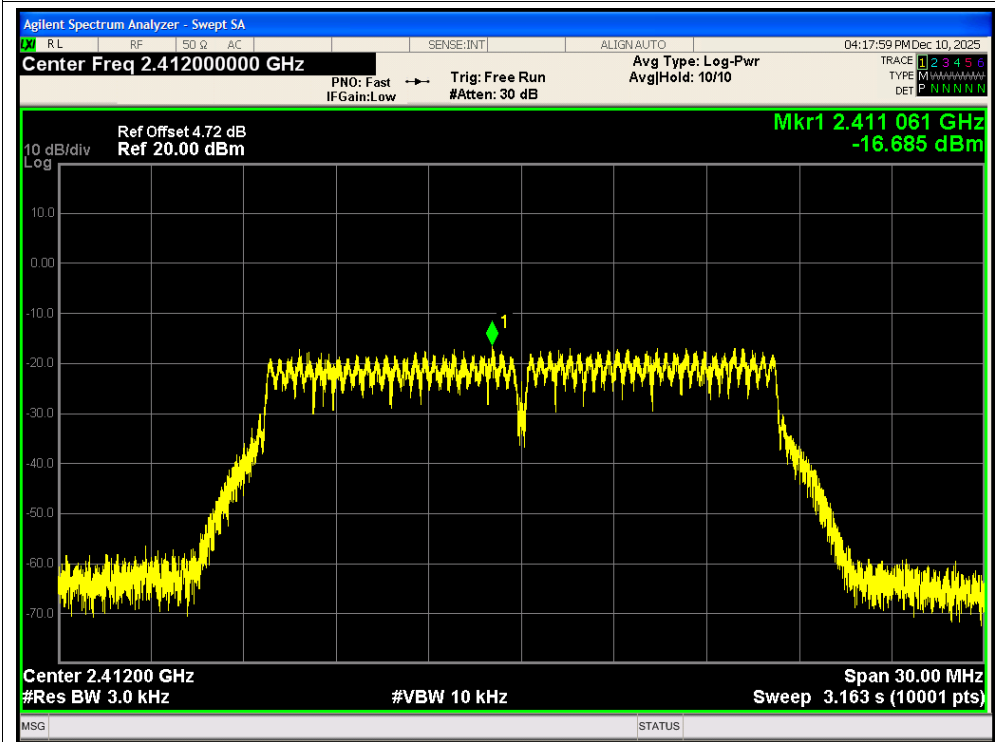
PSD NVNT b 2437MHz



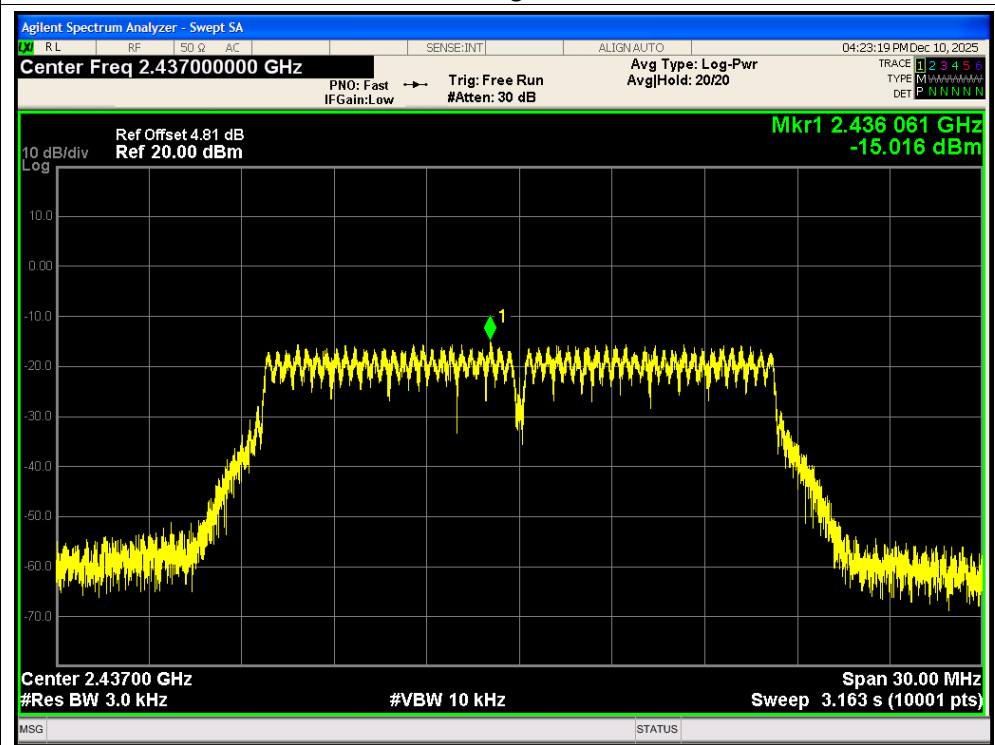
PSD NVNT b 2462MHz



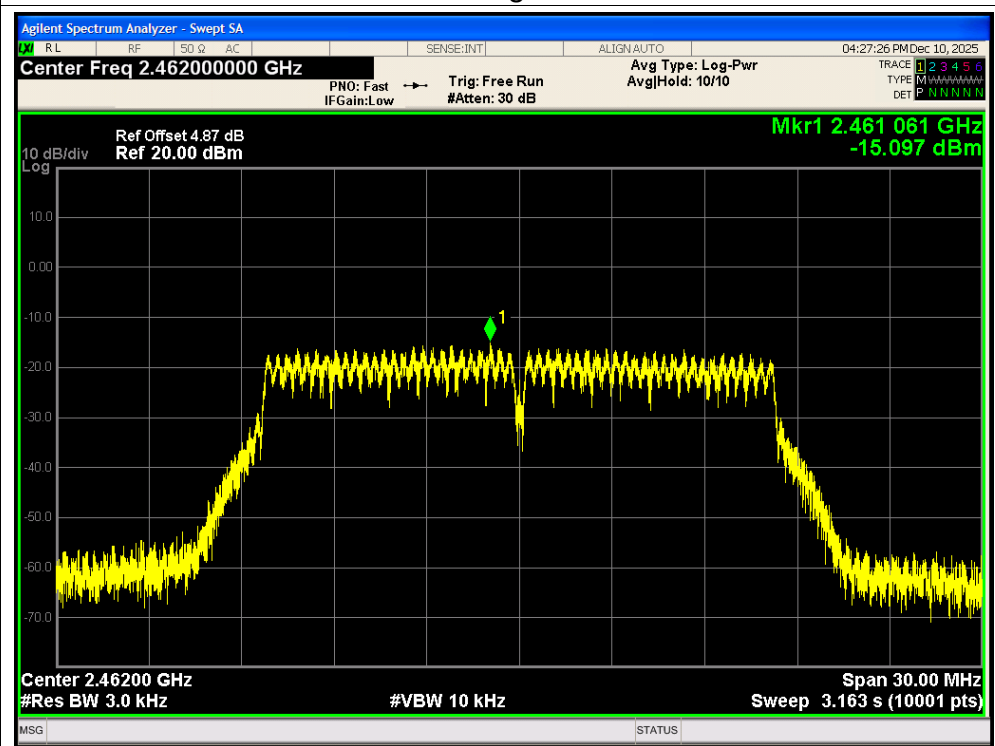
PSD NVNT g 2412MHz



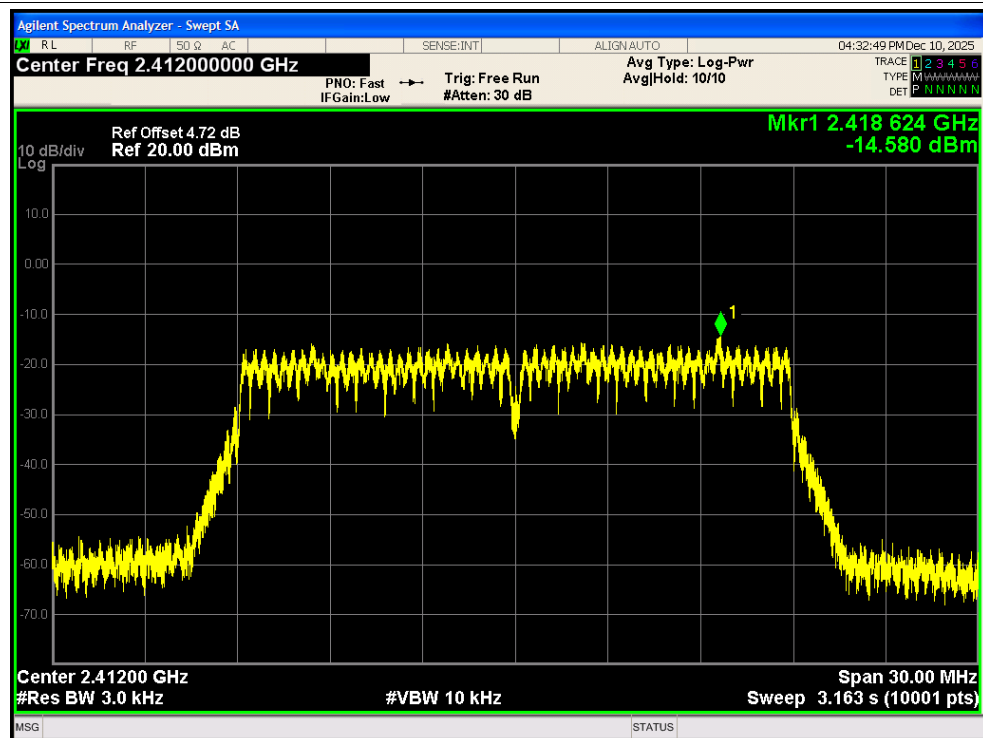
PSD NVNT g 2437MHz



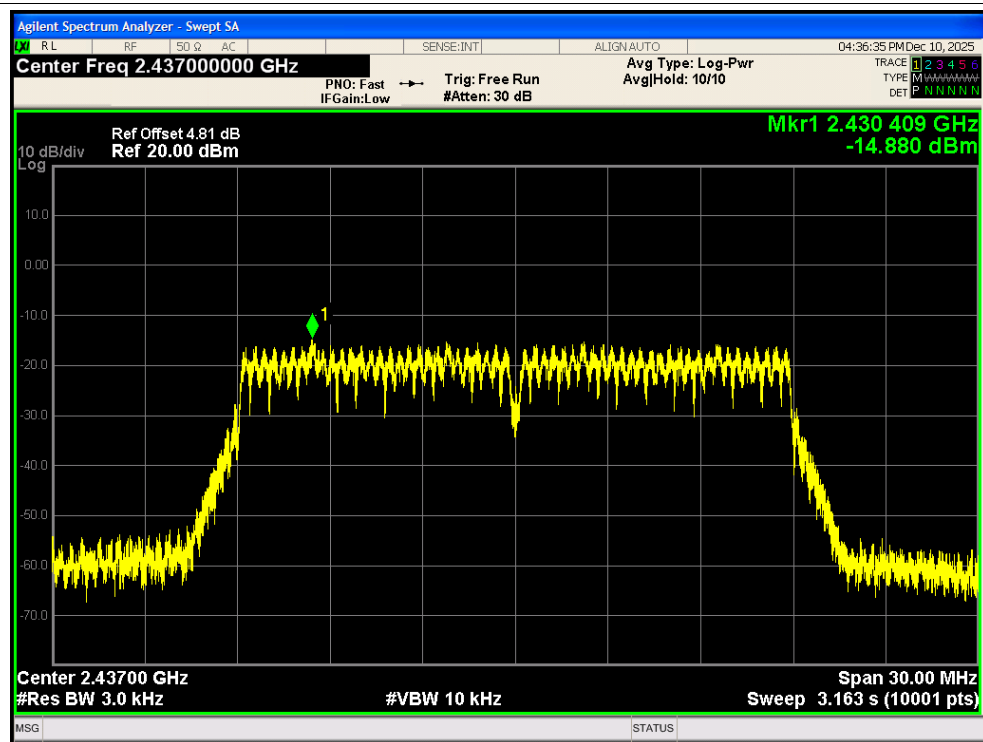
PSD NVNT g 2462MHz



PSD NVNT n20 2412MHz



PSD NVNT n20 2437MHz



PSD NVNT n20 2462MHz

The screenshot displays an Agilent Spectrum Analyzer interface. The title bar reads "Agilent Spectrum Analyzer - Swept SA". The top status bar shows various settings: "RL", "RF", "50 G", "AC", "SENSE:INT", "ALIGN:AUTO", and the date/time "04:40:01 PM Dec 10, 2025". Below this, the main display area has a black background with a yellow grid. A yellow trace shows a signal centered at 2.462 GHz. The signal level is approximately -15 dBm. A green marker labeled "Mkr1" is placed on the signal peak. The bottom status bar shows "Center Freq 2.46200000 GHz", "Ref Offset 4.87 dB", "Ref 20.00 dBm", "PNO: Fast IF Gain: Low", "Trig: Free Run #Atten: 30 dB", "Avg Type: Log-Pwr", "Avg/Hold: 10/10", "TRACE 1 2 3 4 5 6", "TYPE M N N N N N N N", and "DET P N N N N N".

Agilent Spectrum Analyzer - Swept SA

RL RF 50 G AC SENSE:INT ALIGN:AUTO 04:40:01 PM Dec 10, 2025

Center Freq 2.46200000 GHz

PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg/Hold: 10/10

TRACE 1 2 3 4 5 6
TYPE M N N N N N N N
DET P N N N N N

Ref Offset 4.87 dB
Ref 20.00 dBm

Mkr1 2.464 142 GHz
-15.322 dBm

10 dB/div
Log

Center 2.46200 GHz
#Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (10001 pts)

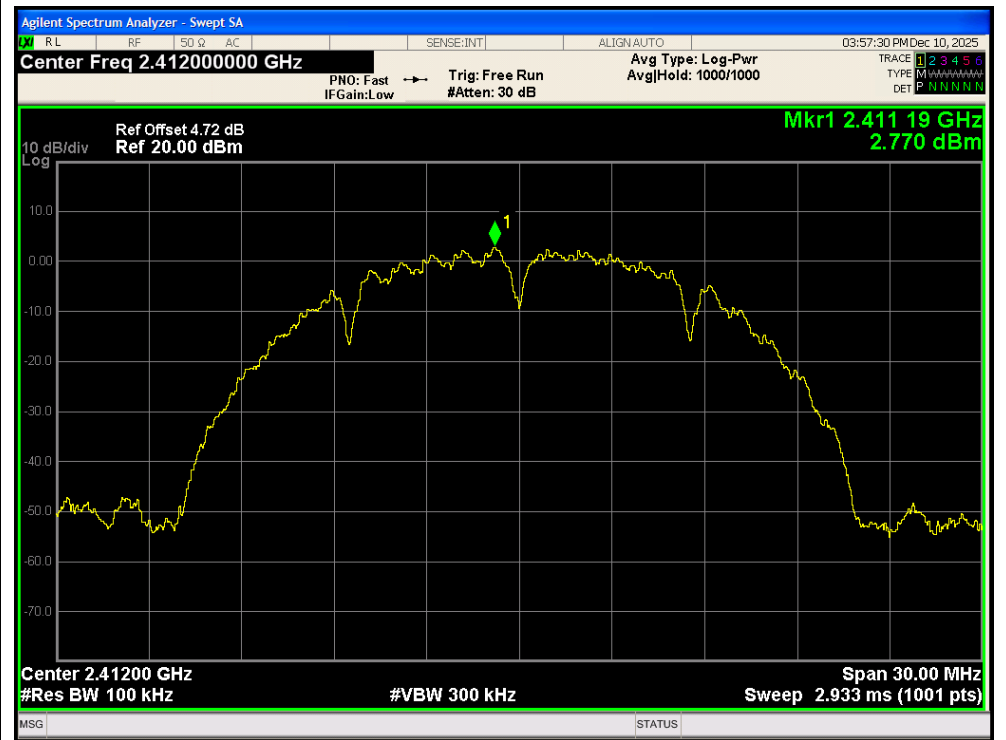
MSG STATUS

Band Edge

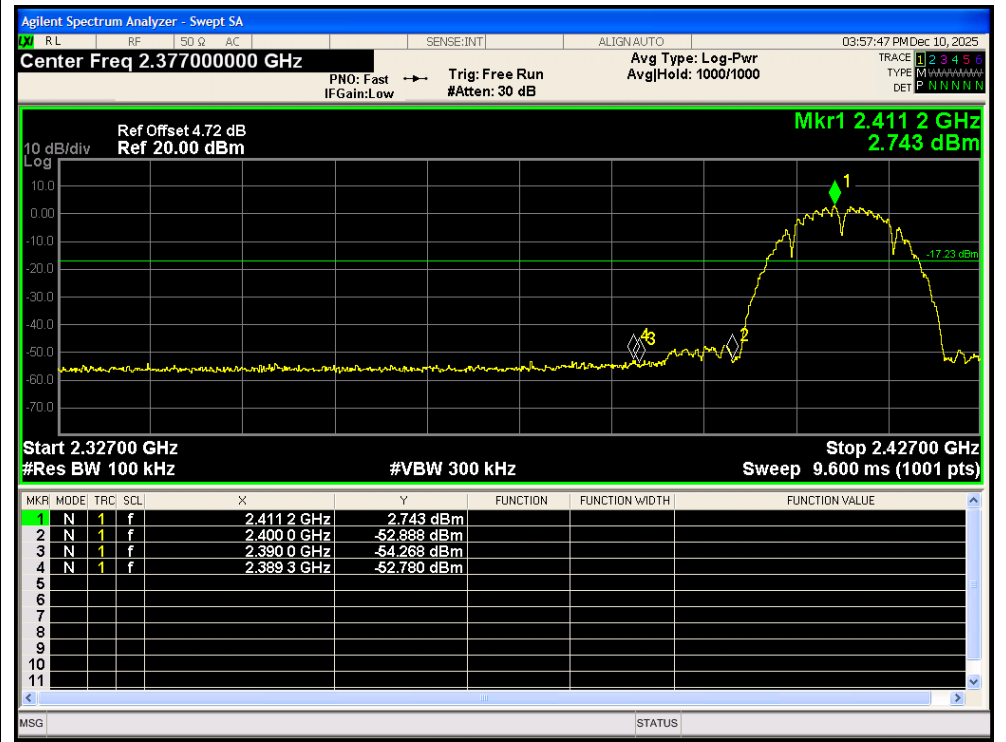
Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	-55.55	-20	Pass
NVNT	b	2462	-55.62	-20	Pass
NVNT	g	2412	-47.70	-20	Pass
NVNT	g	2462	-47.08	-20	Pass
NVNT	n20	2412	-43.42	-20	Pass
NVNT	n20	2462	-47.41	-20	Pass

Test Graphs

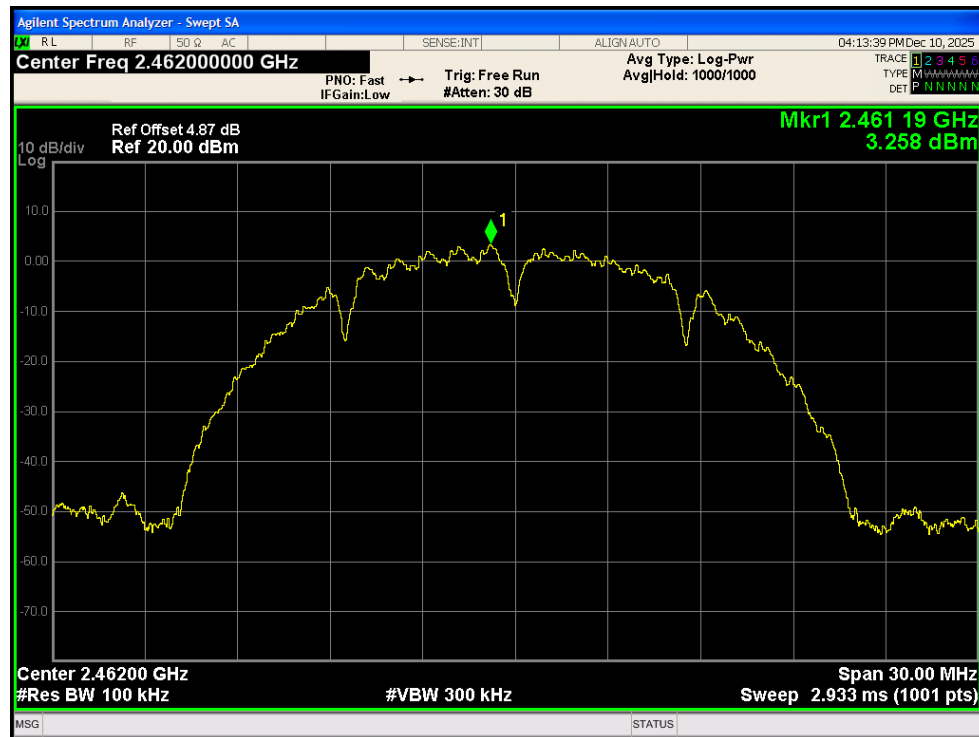
Band Edge NVNT b 2412MHz Ref



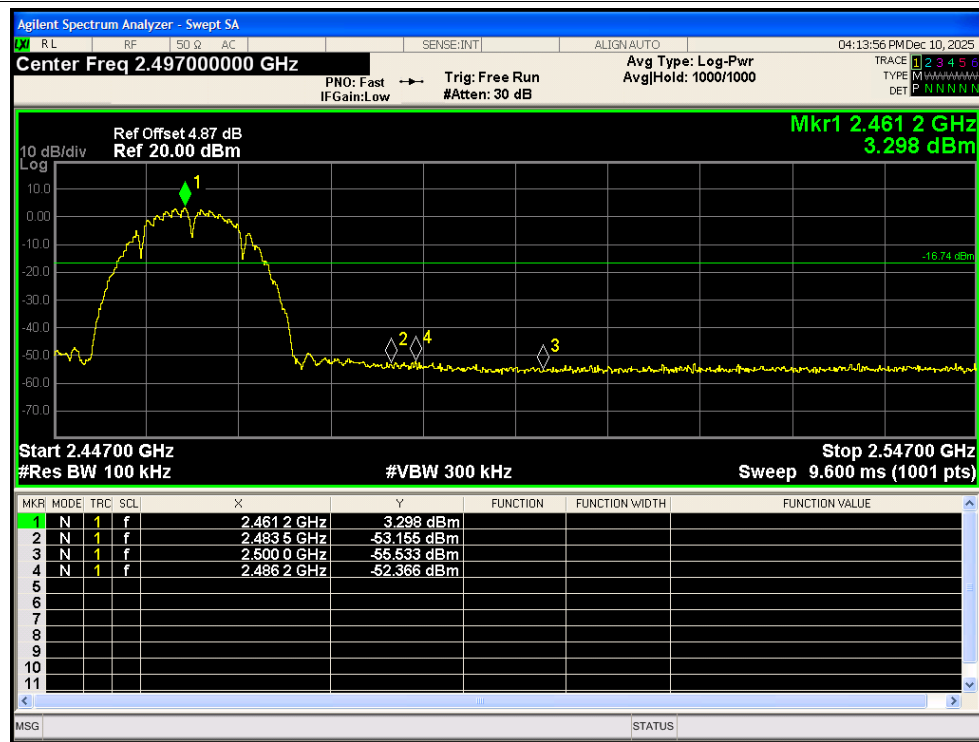
Band Edge NVNT b 2412MHz Emission



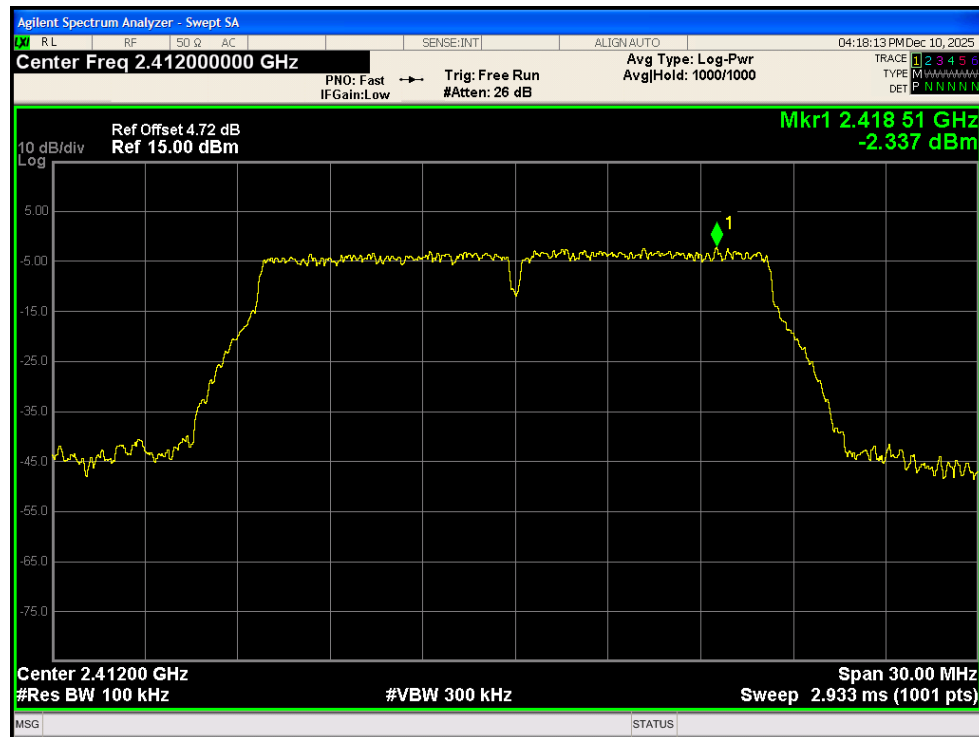
Band Edge NVNT b 2462MHz Ref



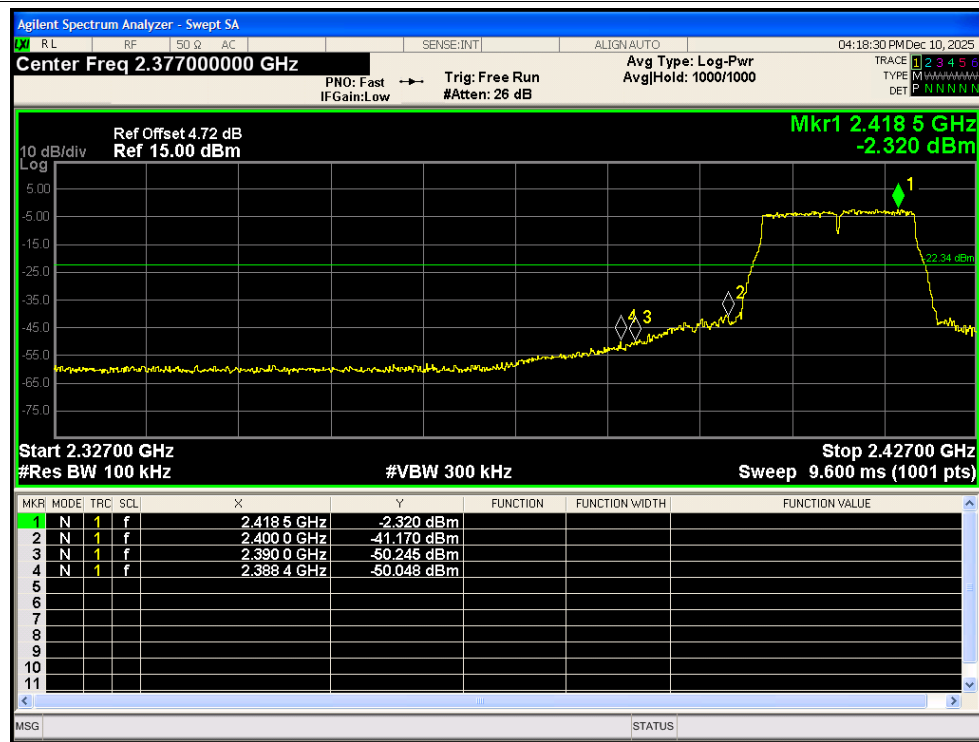
Band Edge NVNT b 2462MHz Emission



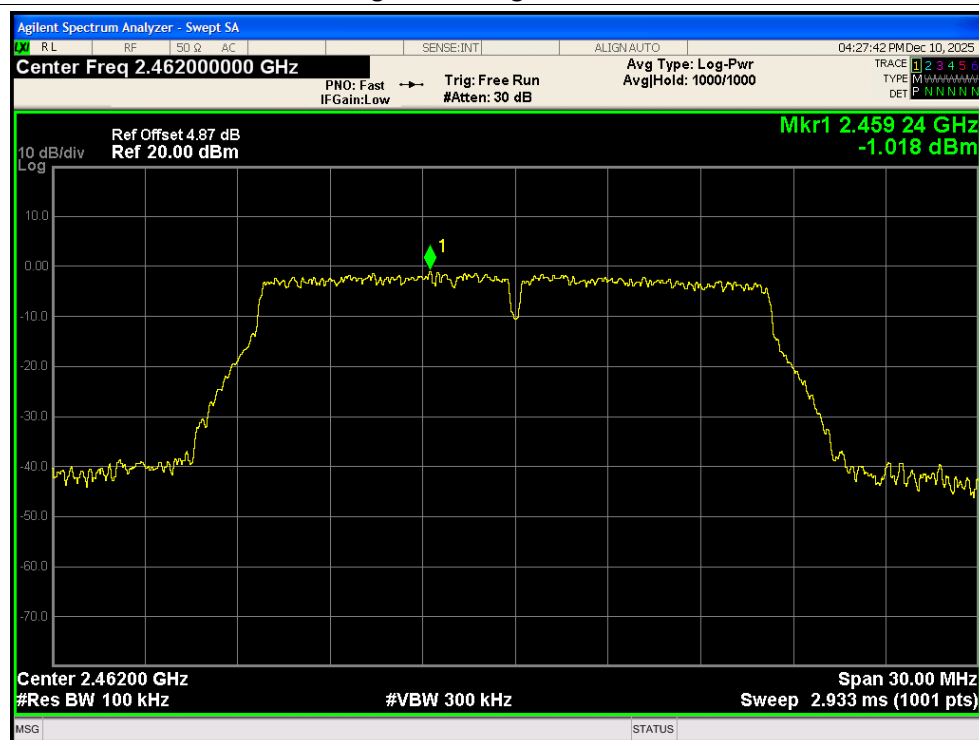
Band Edge NVNT g 2412MHz Ref



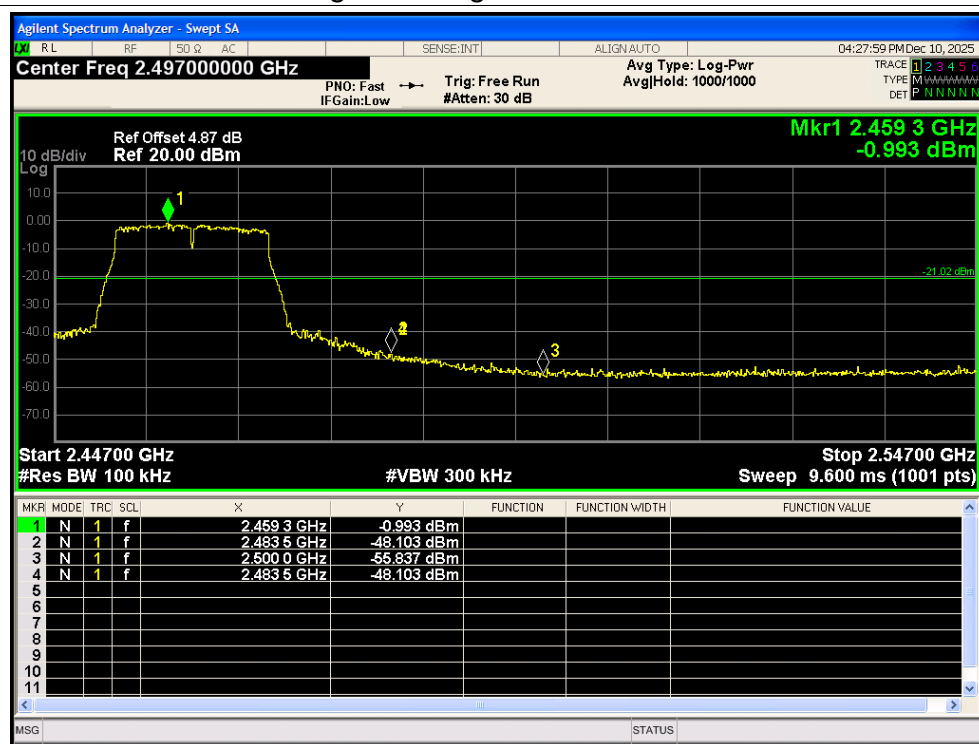
Band Edge NVNT g 2412MHz Emission



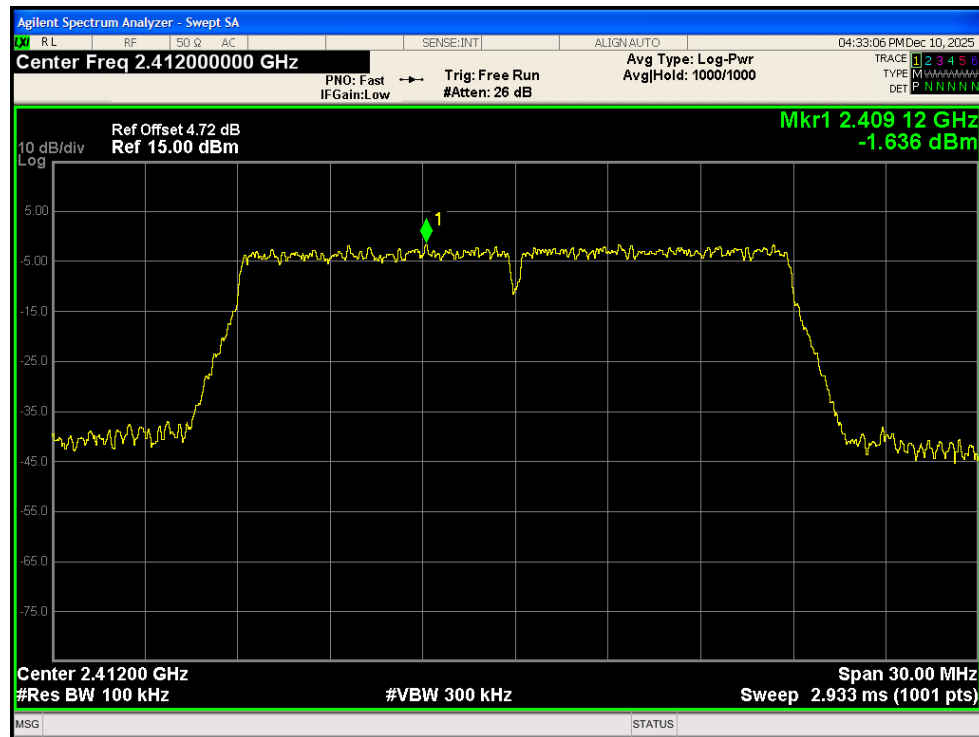
Band Edge NVNT g 2462MHz Ref



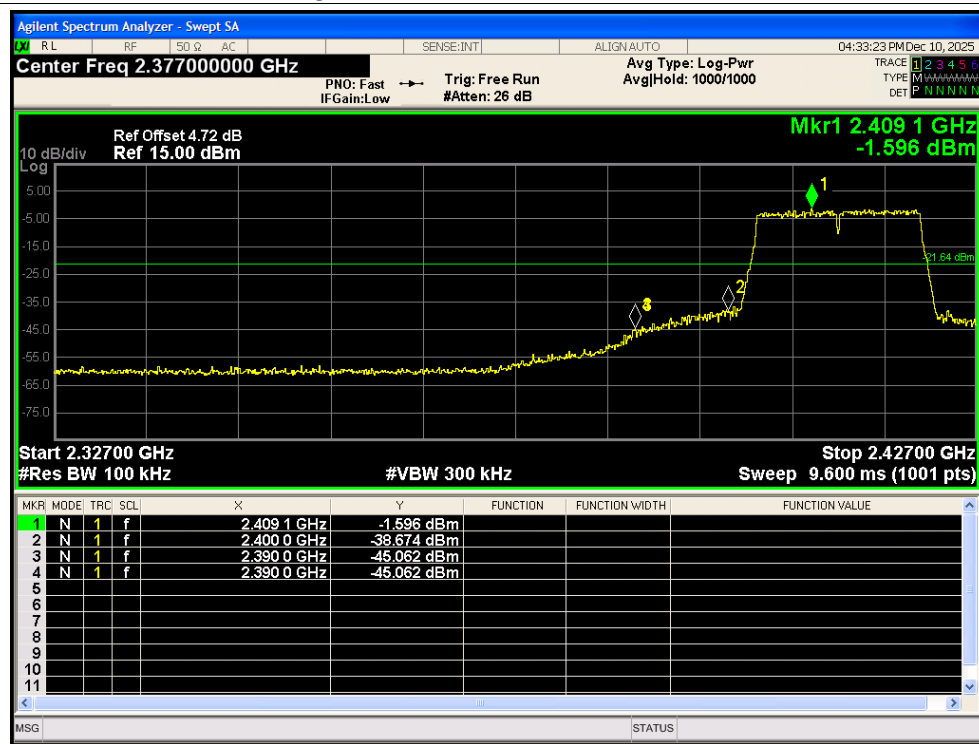
Band Edge NVNT g 2462MHz Emission



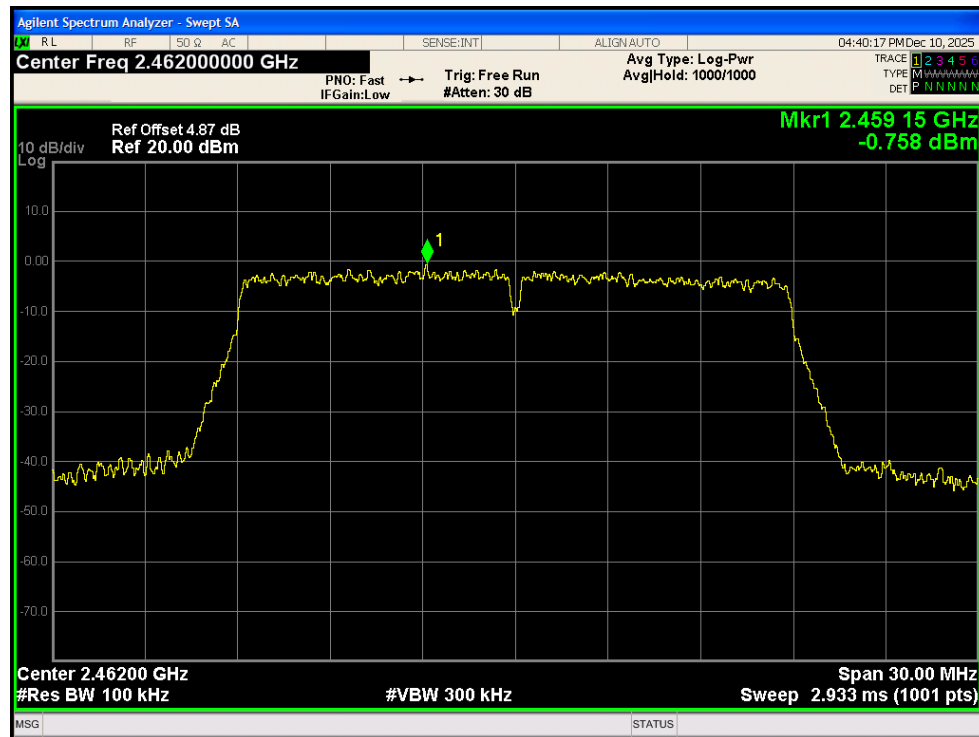
Band Edge NVNT n20 2412MHz Ref



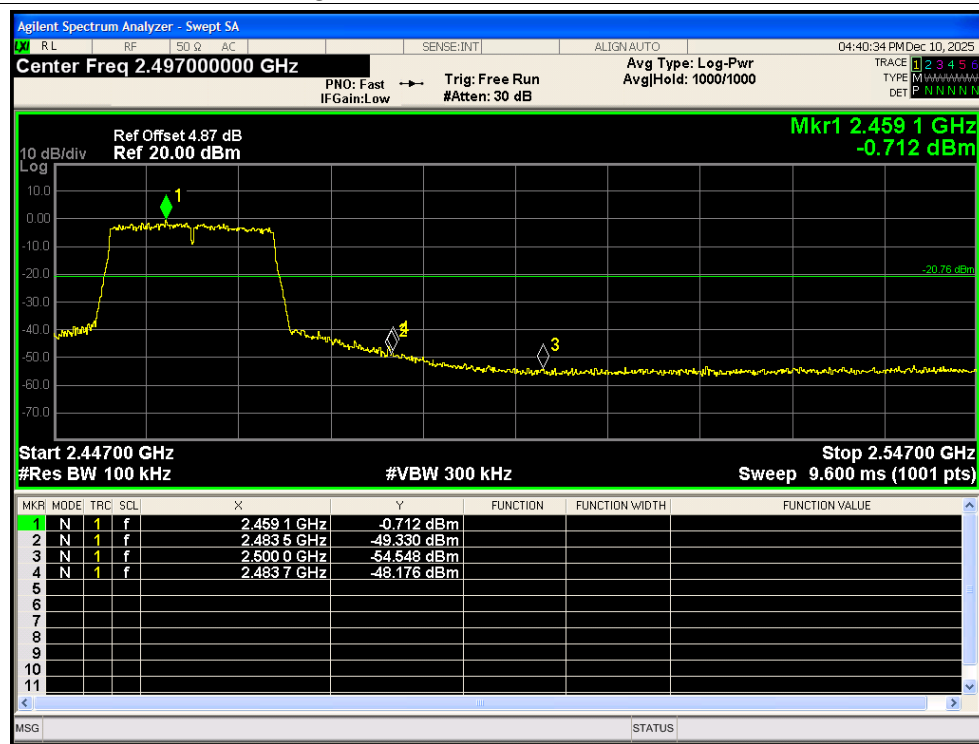
Band Edge NVNT n20 2412MHz Emission



Band Edge NVNT n20 2462MHz Ref



Band Edge NVNT n20 2462MHz Emission

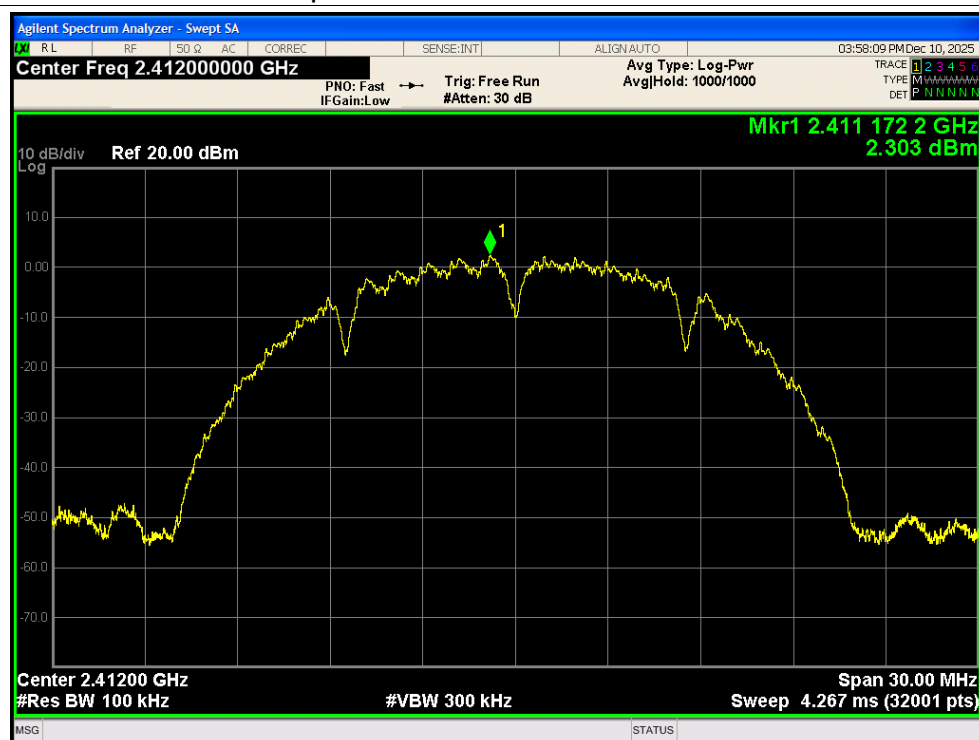


Conducted RF Spurious Emission

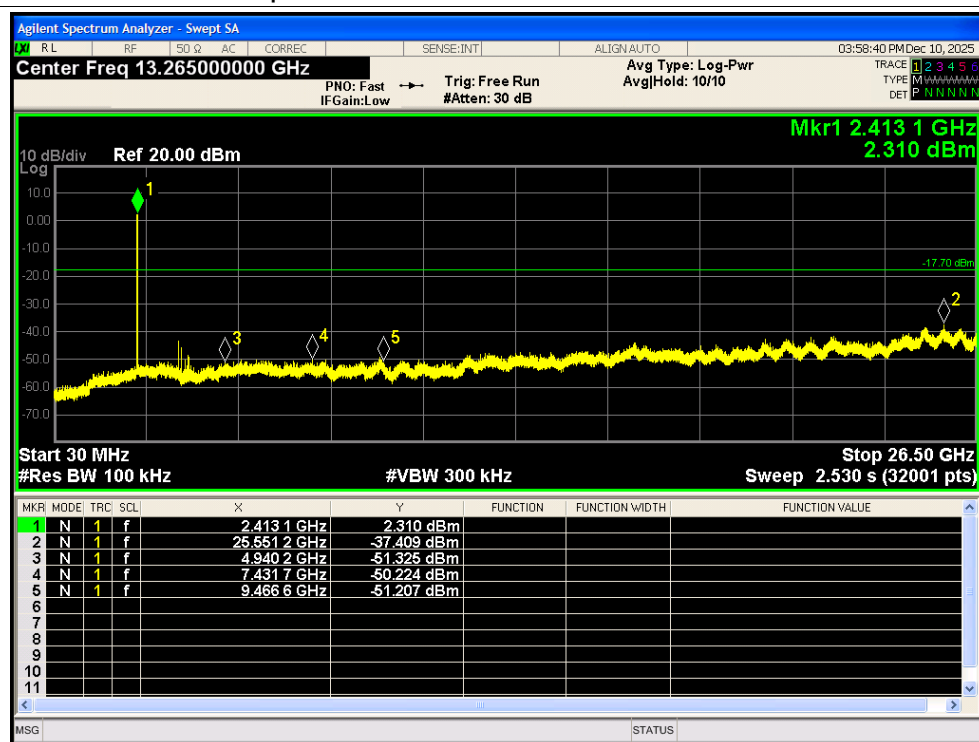
Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	-39.70	-20	Pass
NVNT	b	2437	-42.35	-20	Pass
NVNT	b	2462	-40.64	-20	Pass
NVNT	g	2412	-35.92	-20	Pass
NVNT	g	2437	-37.23	-20	Pass
NVNT	g	2462	-37.84	-20	Pass
NVNT	n20	2412	-36.52	-20	Pass
NVNT	n20	2437	-36.54	-20	Pass
NVNT	n20	2462	-37.44	-20	Pass

Test Graphs

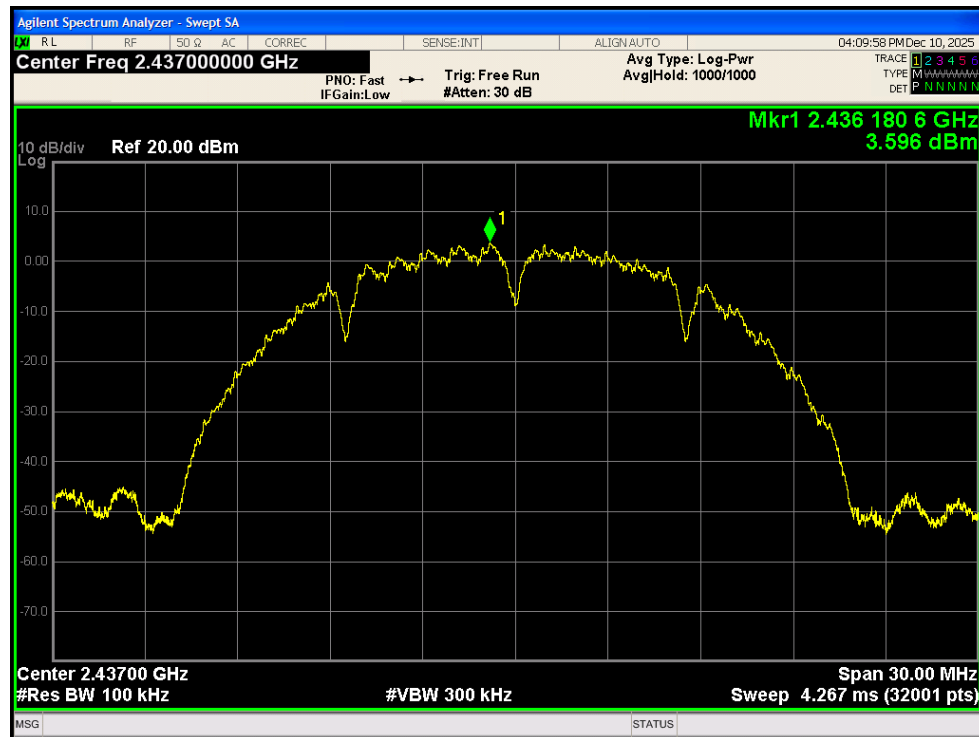
Tx. Spurious NVNT b 2412MHz Ref



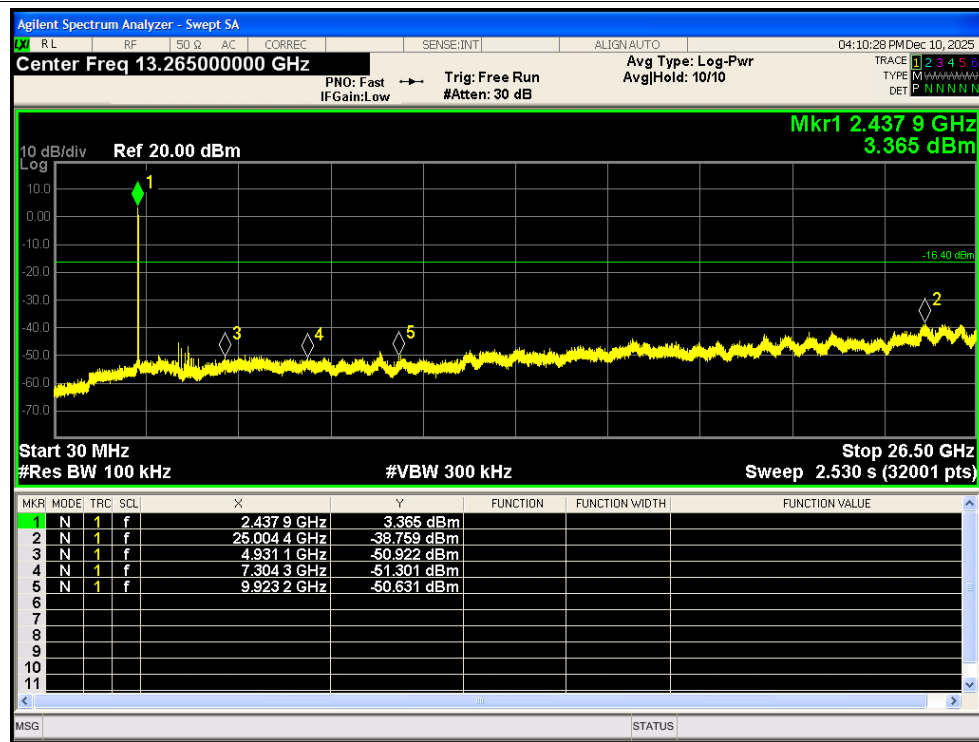
Tx. Spurious NVNT b 2412MHz Emission



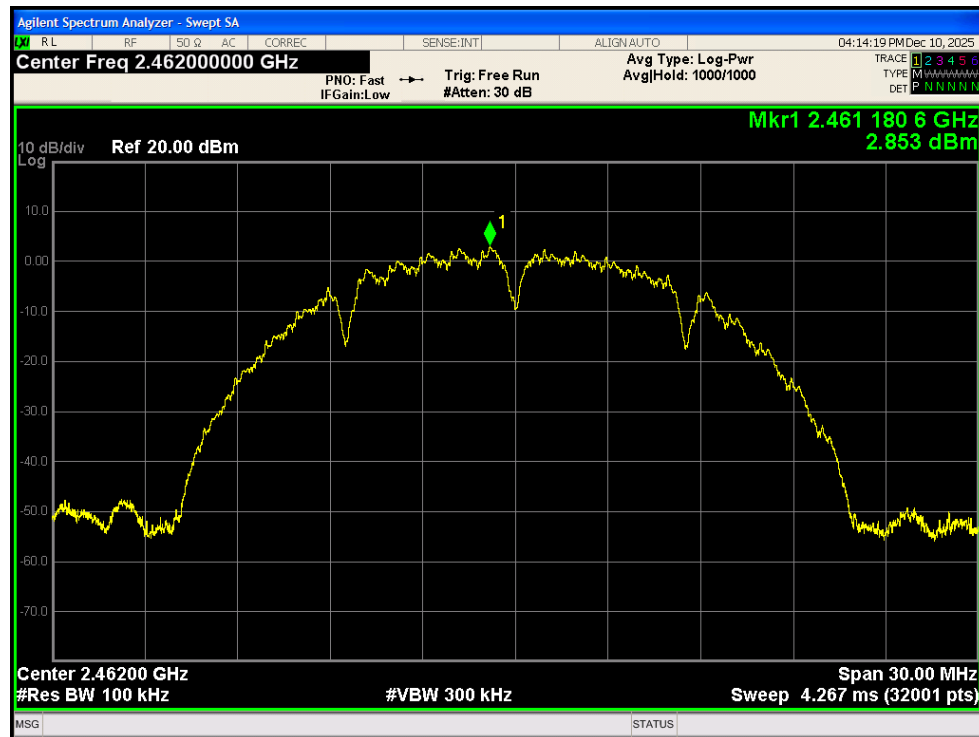
Tx. Spurious NVNT b 2437MHz Ref



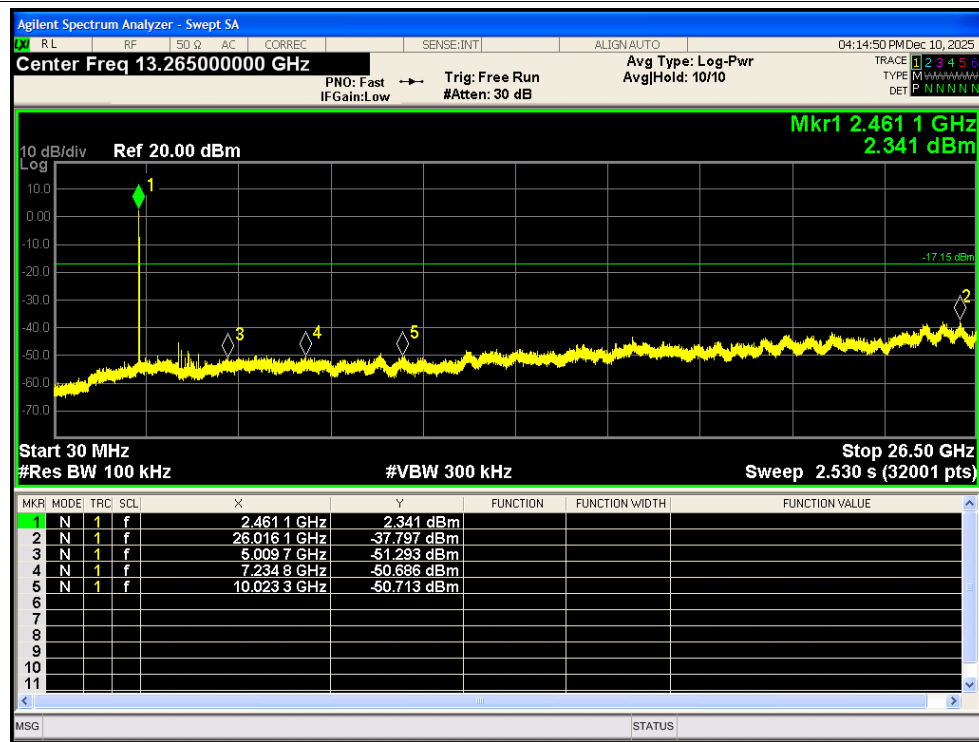
Tx. Spurious NVNT b 2437MHz Emission



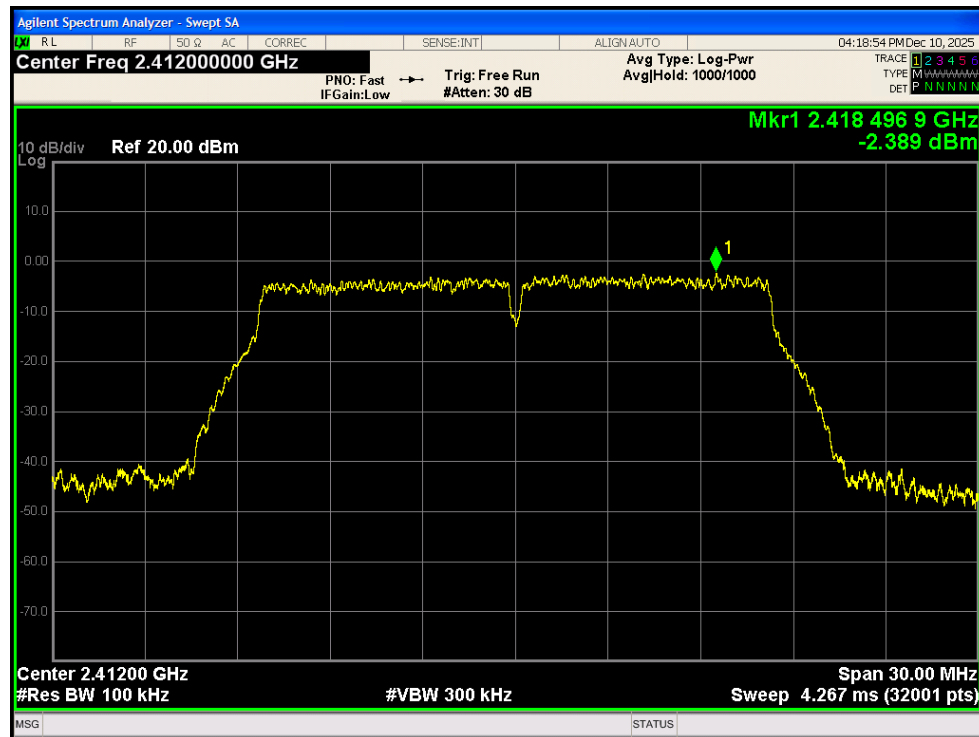
Tx. Spurious NVNT b 2462MHz Ref



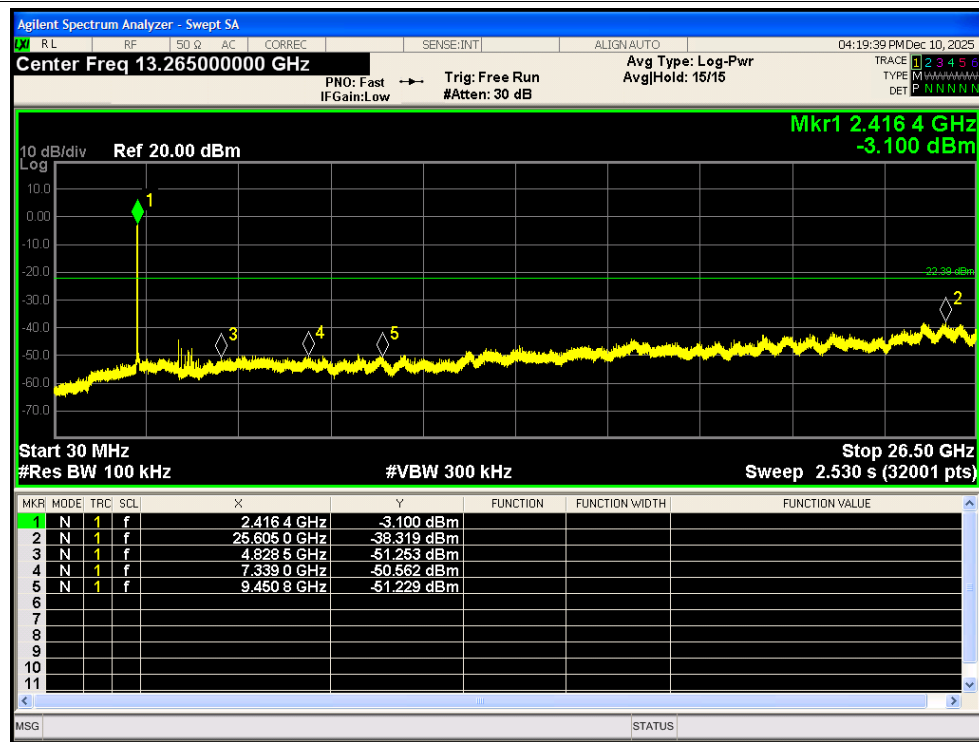
Tx. Spurious NVNT b 2462MHz Emission



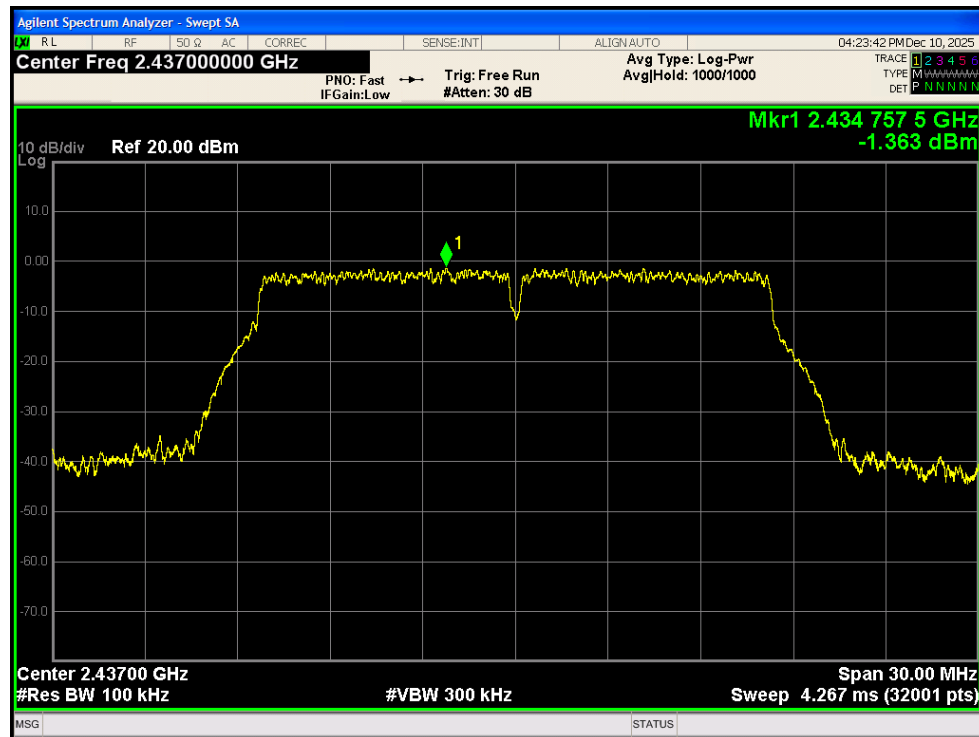
Tx. Spurious NVNT g 2412MHz Ref



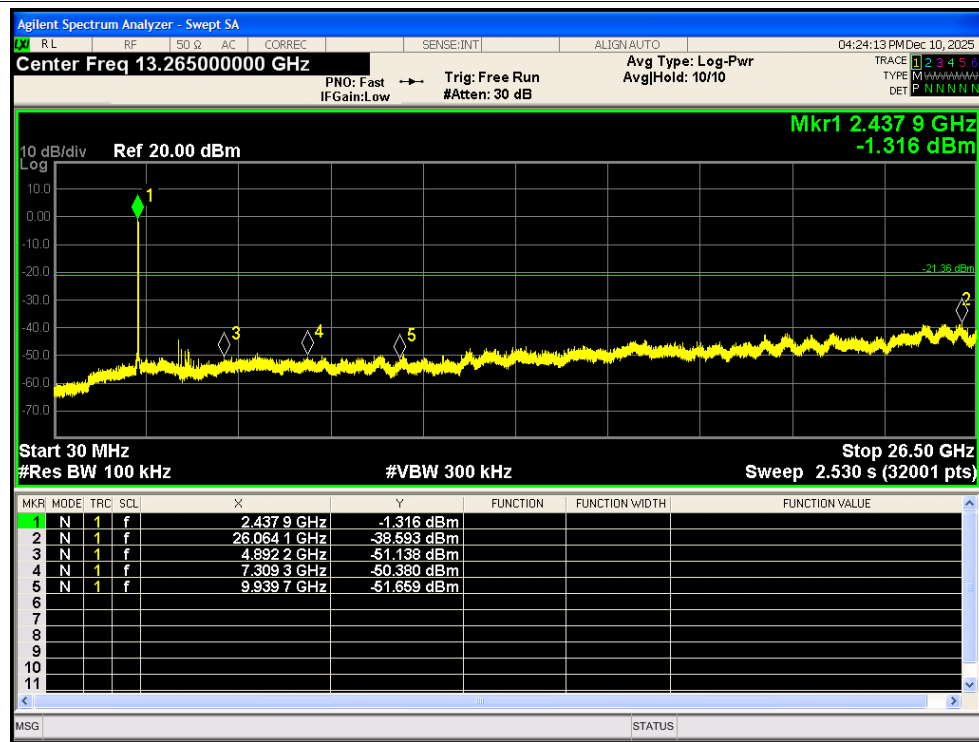
Tx. Spurious NVNT g 2412MHz Emission



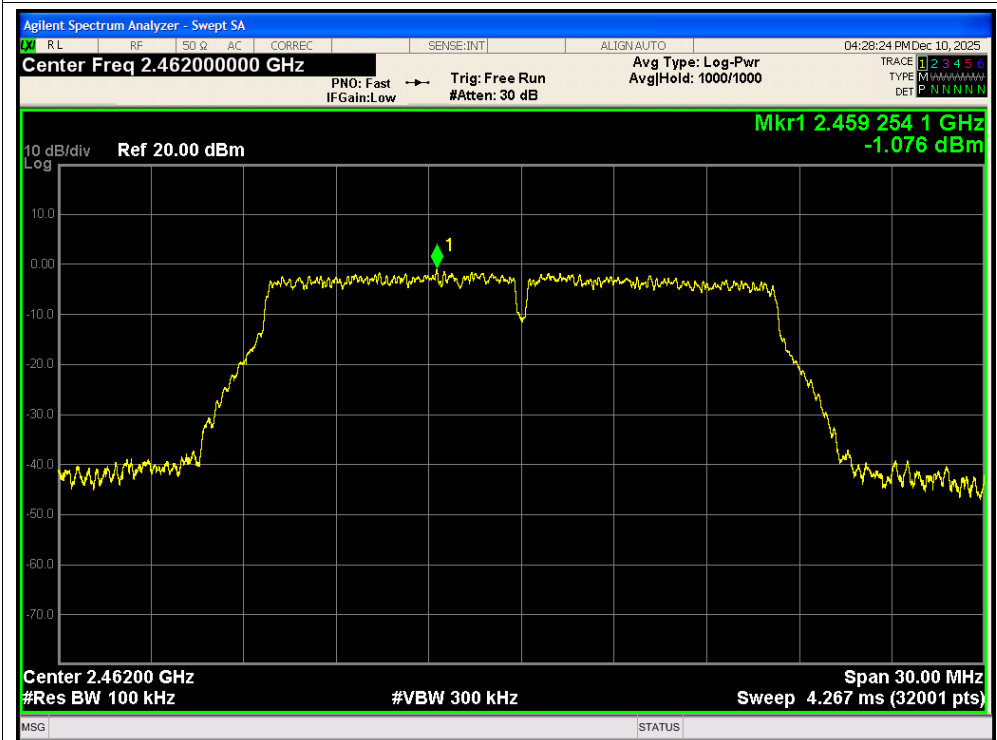
Tx. Spurious NVNT g 2437MHz Ref



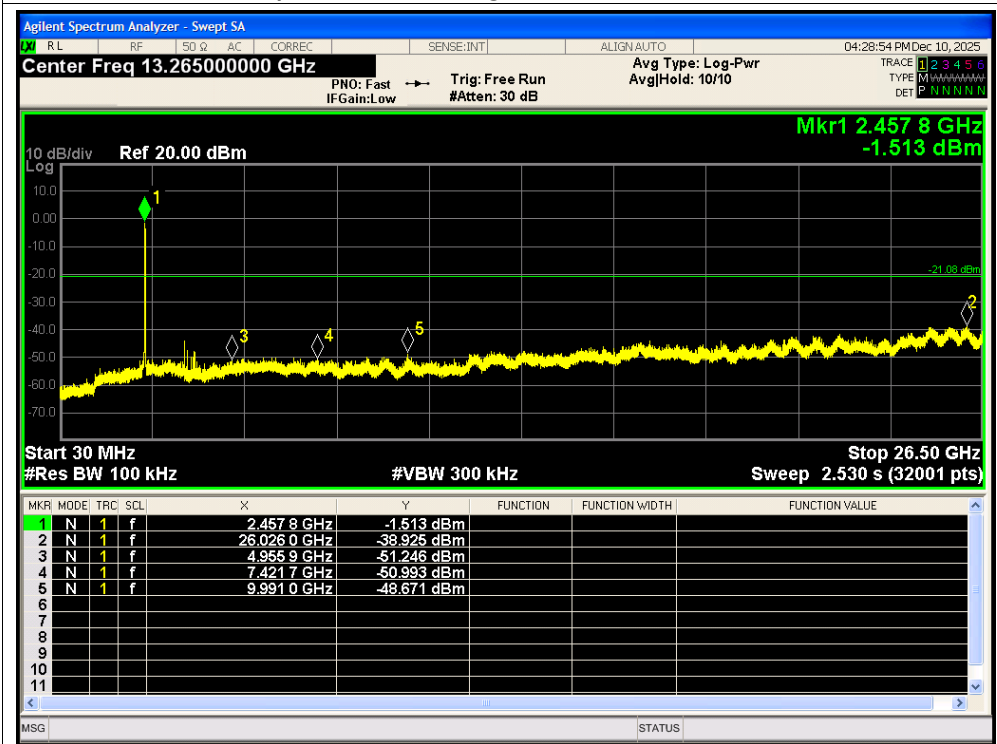
Tx. Spurious NVNT g 2437MHz Emission



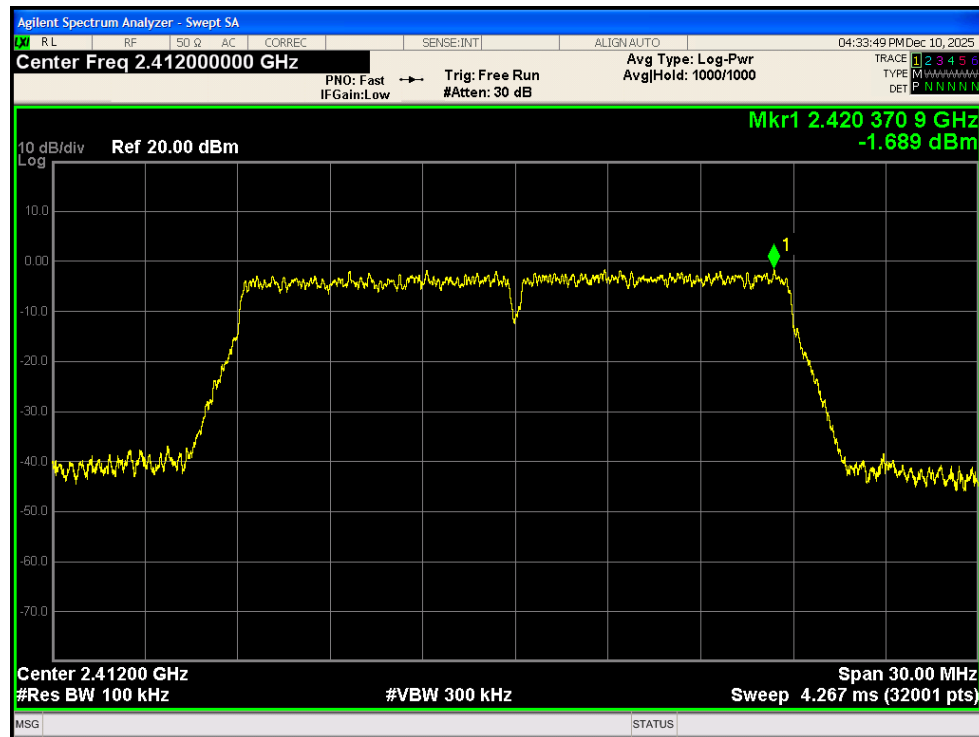
Tx. Spurious NVNT g 2462MHz Ref



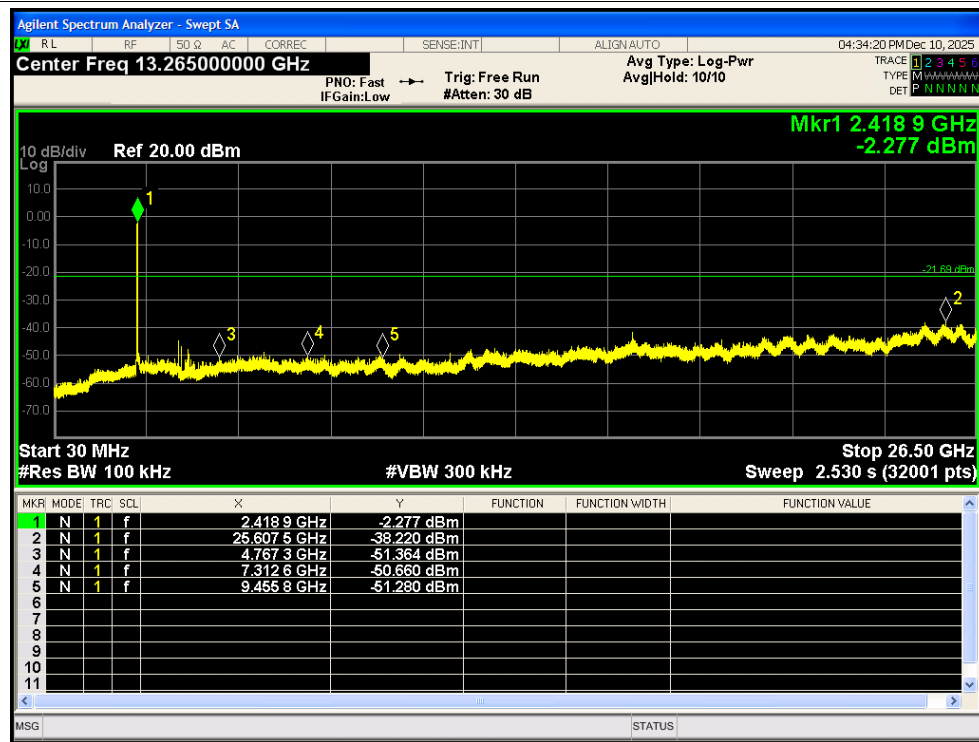
Tx. Spurious NVNT g 2462MHz Emission



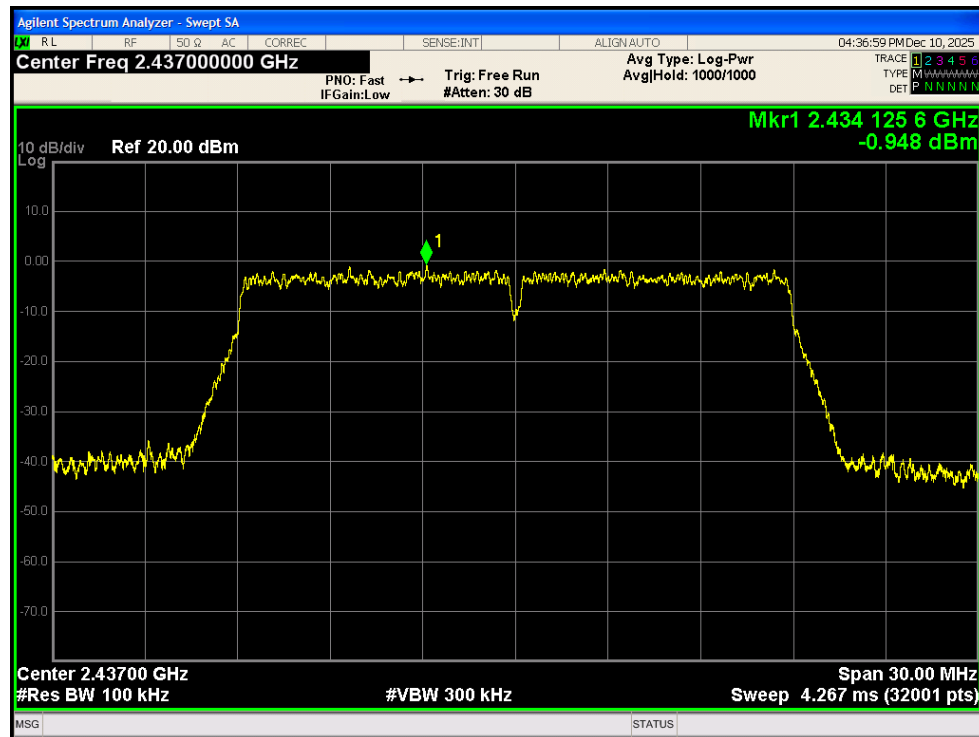
Tx. Spurious NVNT n20 2412MHz Ref



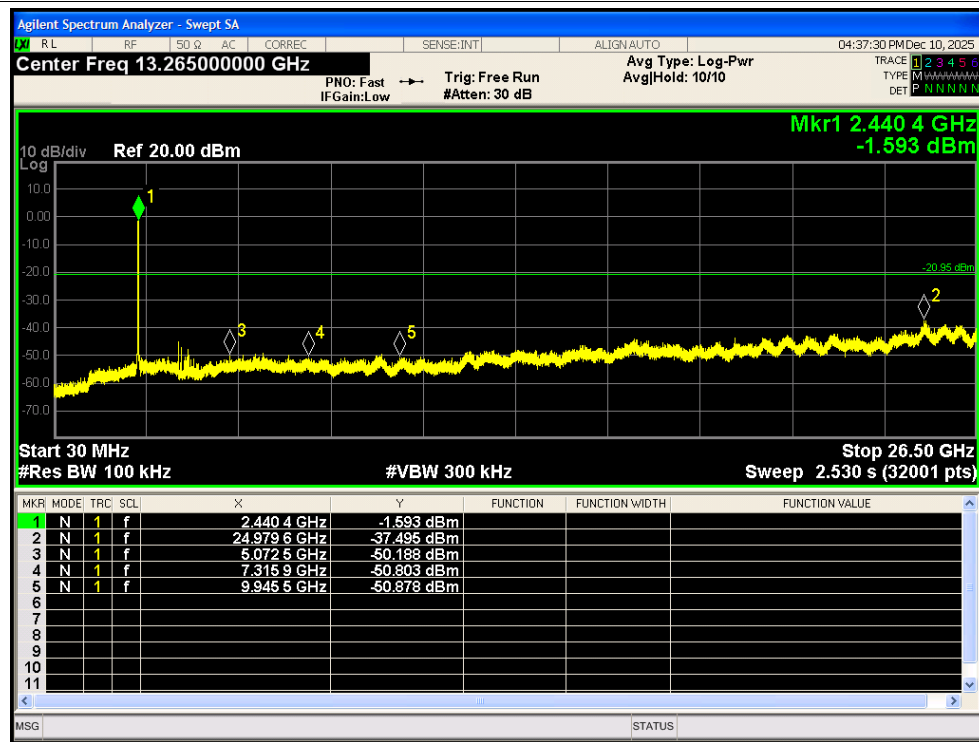
Tx. Spurious NVNT n20 2412MHz Emission



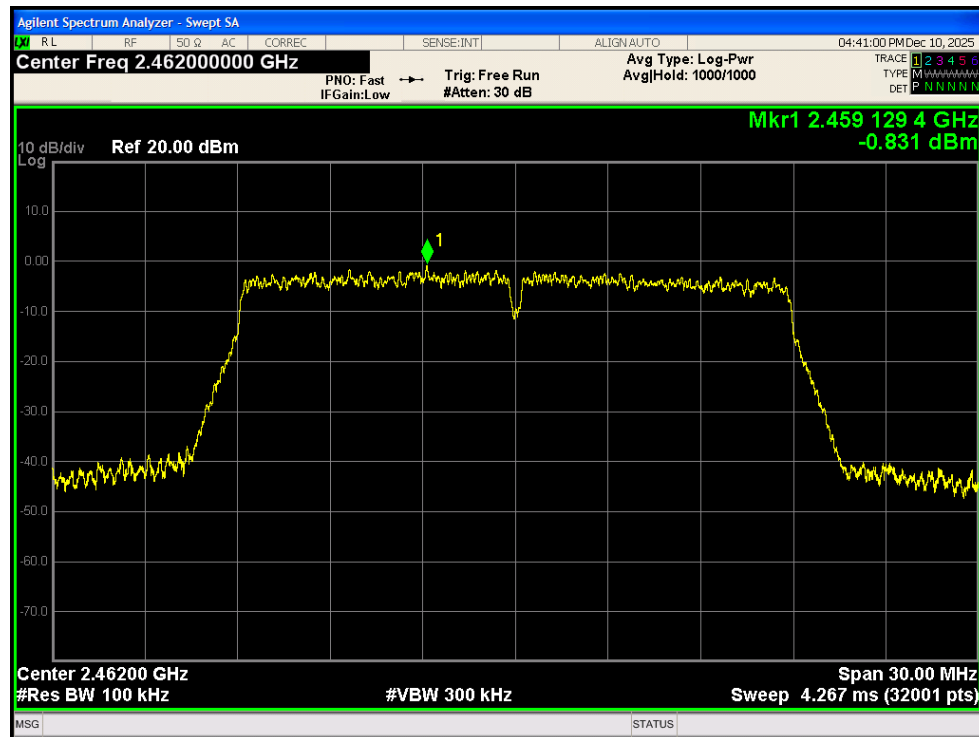
Tx. Spurious NVNT n20 2437MHz Ref



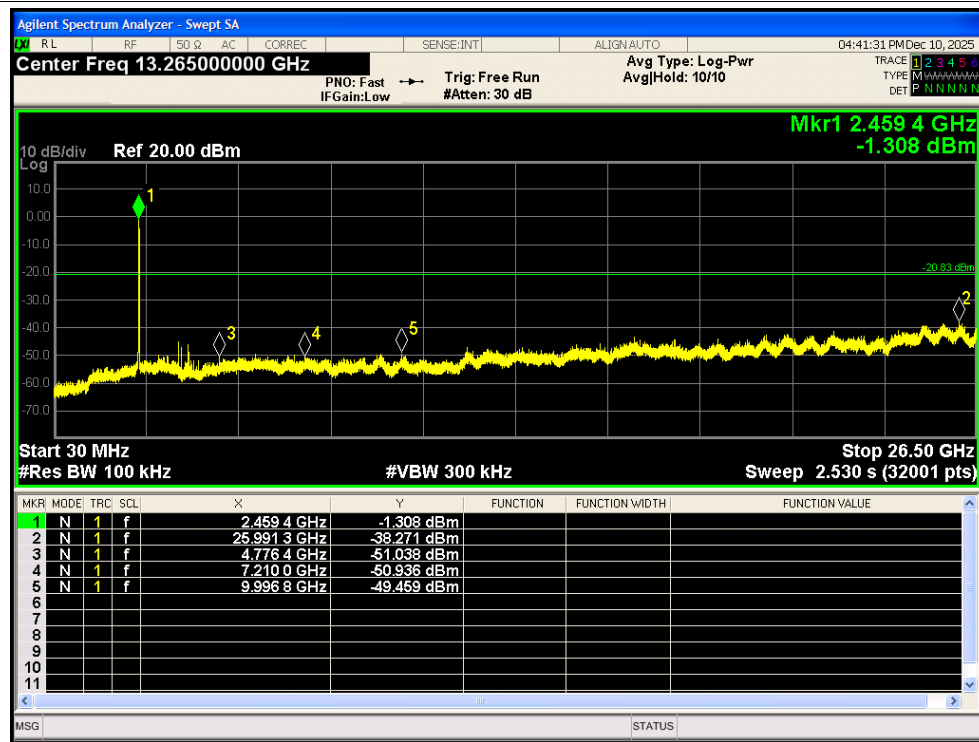
Tx. Spurious NVNT n20 2437MHz Emission



Tx. Spurious NVNT n20 2462MHz Ref



Tx. Spurious NVNT n20 2462MHz Emission

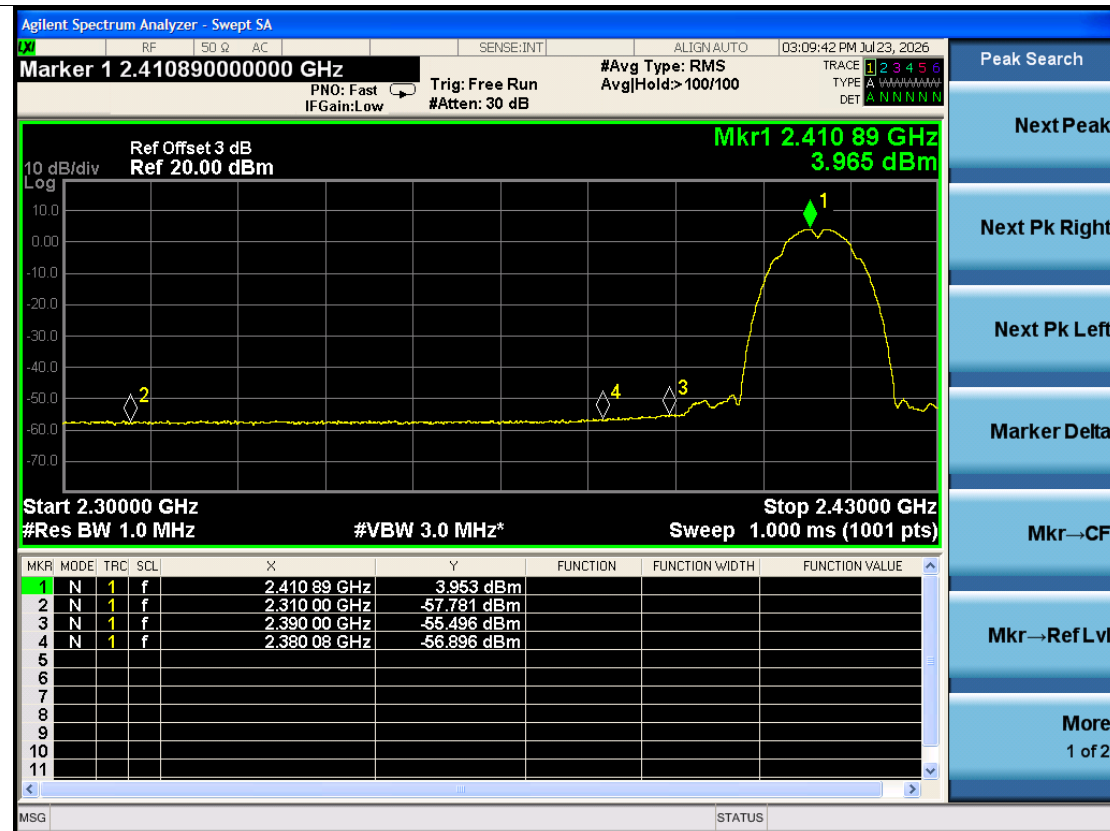


Emissions at Restricted Band

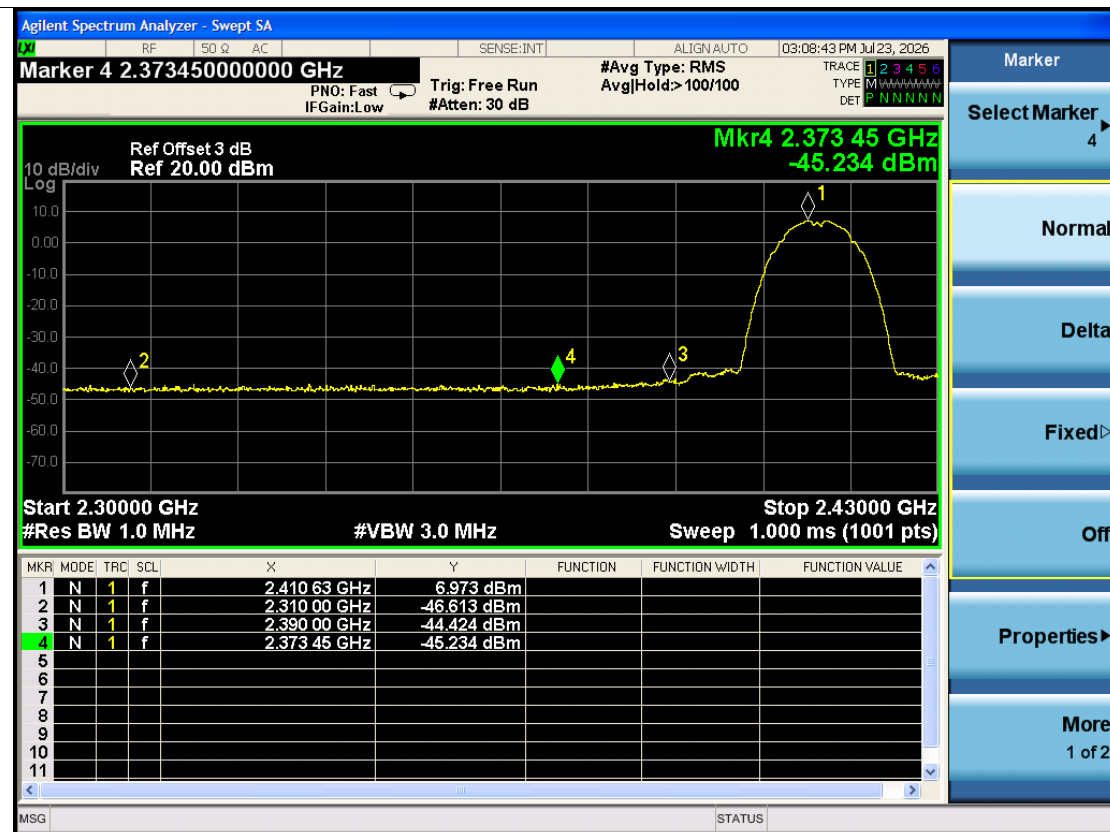
Test Mode	Ch	Freq (MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dBi]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
802.11b	Low	2412	AV	2310.00	-57.78	2.0	0	39.42	≤54	PASS
			AV	2380.08	-56.90	2.0	0	40.30	≤54	PASS
			AV	2390.00	-55.50	2.0	0	41.70	≤54	PASS
			Peak	2310.00	-46.61	2.0	0	50.59	≤74	PASS
			Peak	2373.45	-45.23	2.0	0	51.97	≤74	PASS
			Peak	2390.00	-44.42	2.0	0	52.78	≤74	PASS
	High	2462	AV	2483.50	-55.51	2.0	0	41.69	≤54	PASS
			AV	2487.40	-55.58	2.0	0	41.62	≤54	PASS
			AV	2500.00	-57.00	2.0	0	40.20	≤54	PASS
			Peak	2483.50	-44.77	2.0	0	52.43	≤74	PASS
			Peak	2486.30	-44.65	2.0	0	52.55	≤74	PASS
			Peak	2500.00	-46.26	2.0	0	50.94	≤74	PASS
802.11g	Low	2412	AV	2310.00	-57.64	2.0	0	39.56	≤54	PASS
			AV	2385.02	-52.59	2.0	0	44.61	≤54	PASS
			AV	2390.00	-49.79	2.0	0	47.41	≤54	PASS
			Peak	2310.00	-47.28	2.0	0	49.92	≤74	PASS
			Peak	2383.07	-41.52	2.0	0	55.68	≤74	PASS
			Peak	2390.00	-35.83	2.0	0	61.37	≤74	PASS
	High	2462	AV	2483.50	-50.11	2.0	0	47.09	≤54	PASS
			AV	2486.00	-52.25	2.0	0	44.95	≤54	PASS
			AV	2500.00	-56.66	2.0	0	40.54	≤54	PASS
			Peak	2483.50	-38.62	2.0	0	58.58	≤74	PASS
			Peak	2485.40	-40.59	2.0	0	56.61	≤74	PASS
			Peak	2500.00	-45.57	2.0	0	51.63	≤74	PASS
802.11n (H20)	Low	2412	AV	2310.00	-57.59	2.0	0	39.61	≤54	PASS
			AV	2383.46	-53.12	2.0	0	44.08	≤54	PASS
			AV	2390.00	-48.92	2.0	0	48.28	≤54	PASS
			Peak	2310.00	-47.80	2.0	0	49.40	≤74	PASS
			Peak	2383.72	-41.15	2.0	0	56.05	≤74	PASS
			Peak	2390.00	-32.33	2.0	0	64.87	≤74	PASS
	High	2462	AV	2483.50	-50.03	2.0	0	47.17	≤54	PASS
			AV	2487.10	-52.50	2.0	0	44.70	≤54	PASS
			AV	2500.00	-57.10	2.0	0	40.10	≤54	PASS
			Peak	2483.50	-36.90	2.0	0	60.30	≤74	PASS
			Peak	2491.40	-41.42	2.0	0	55.78	≤74	PASS
			Peak	2500.00	-45.97	2.0	0	51.23	≤74	PASS

Test Graphs

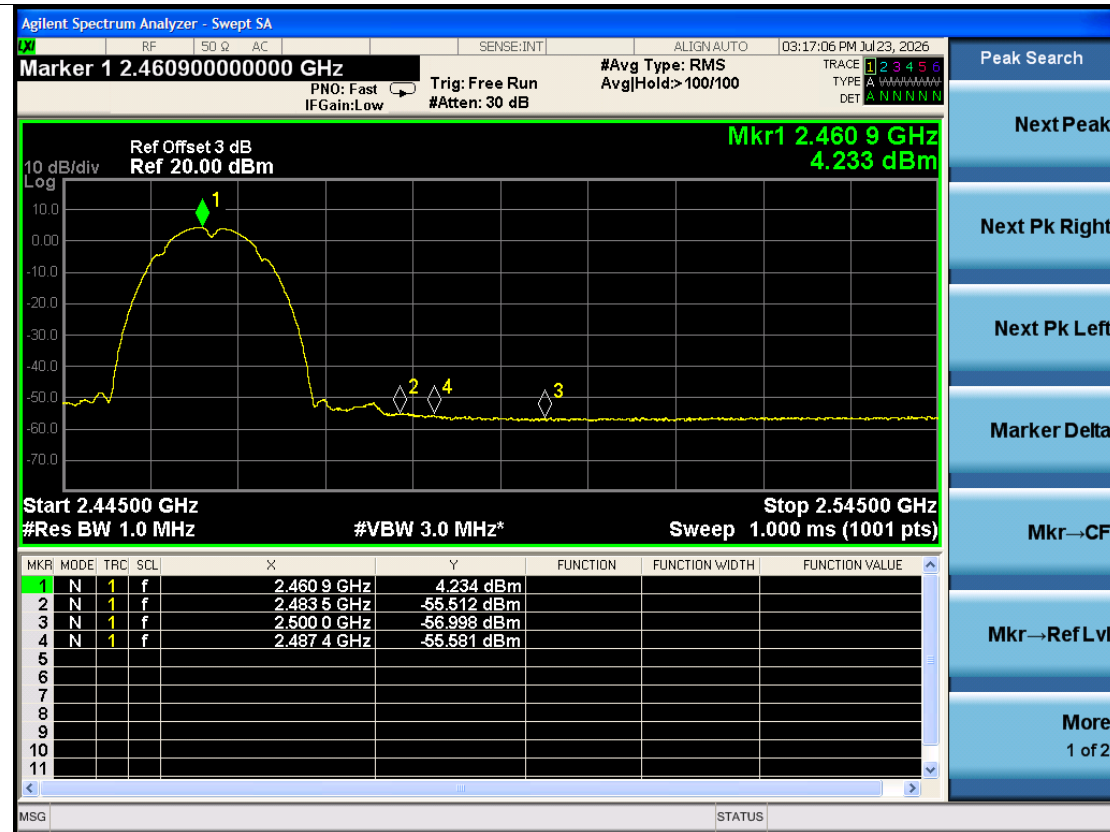
NVNT 802.11b 2412MHz AV



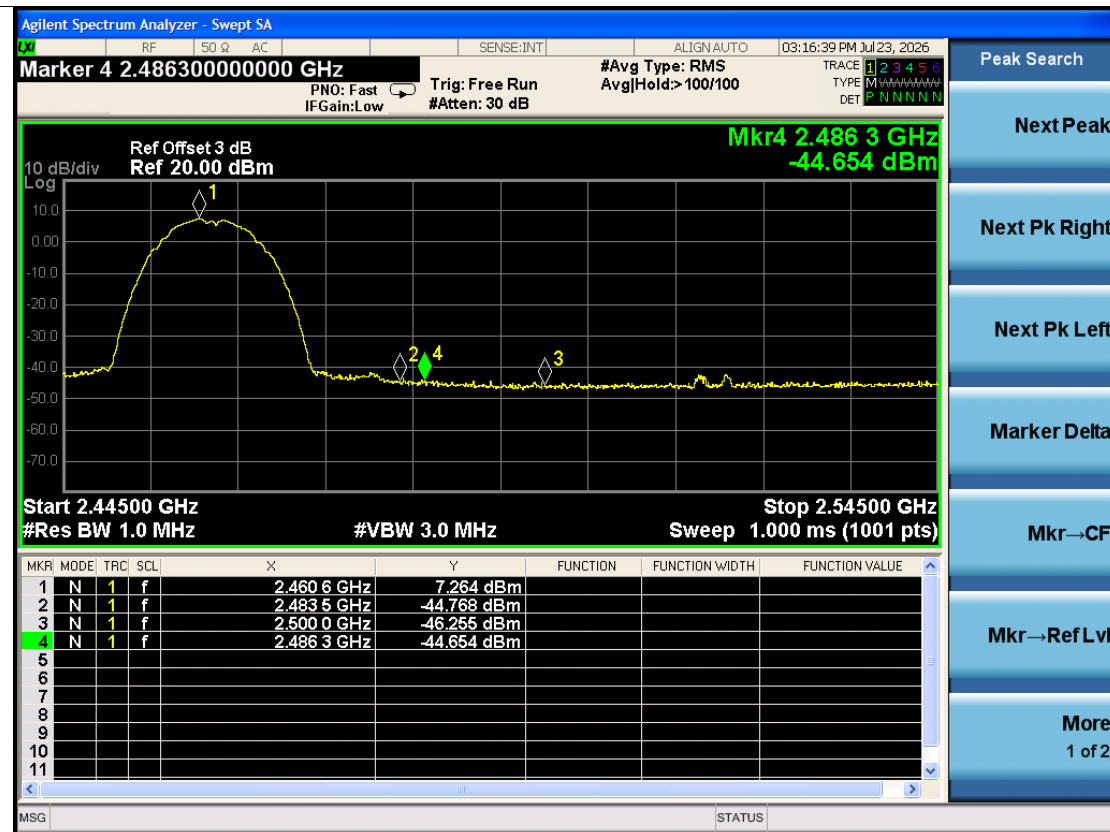
NVNT 802.11b 2412MHz PK



NVNT 802.11b 2462MHz AV

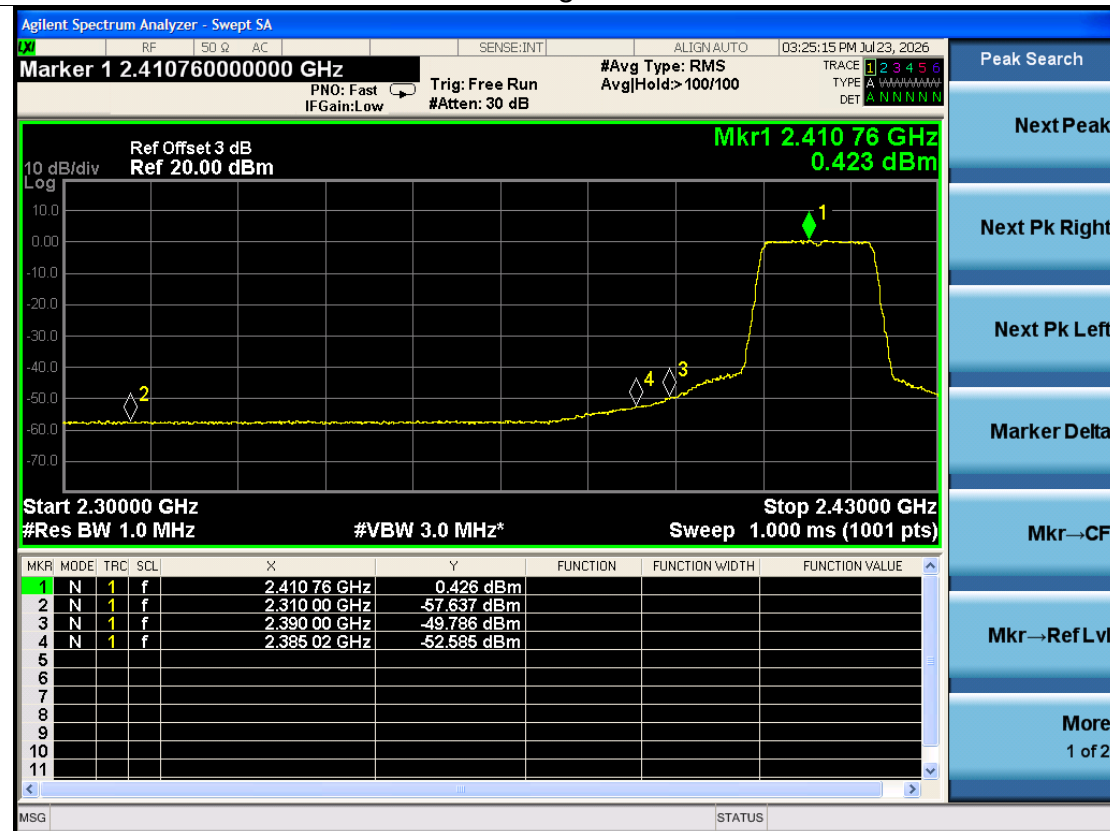


NVNT 802.11b 2462MHz PK

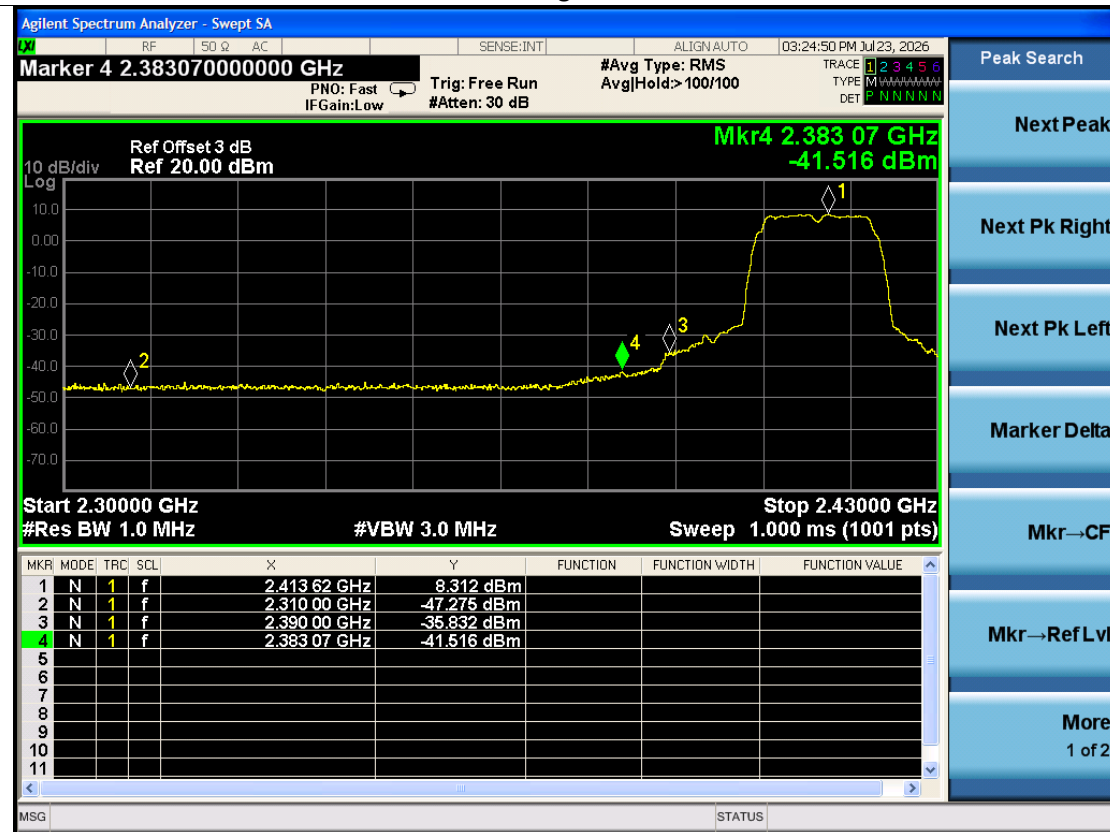


Test Graphs

NVNT 802.11g 2412MHz AV



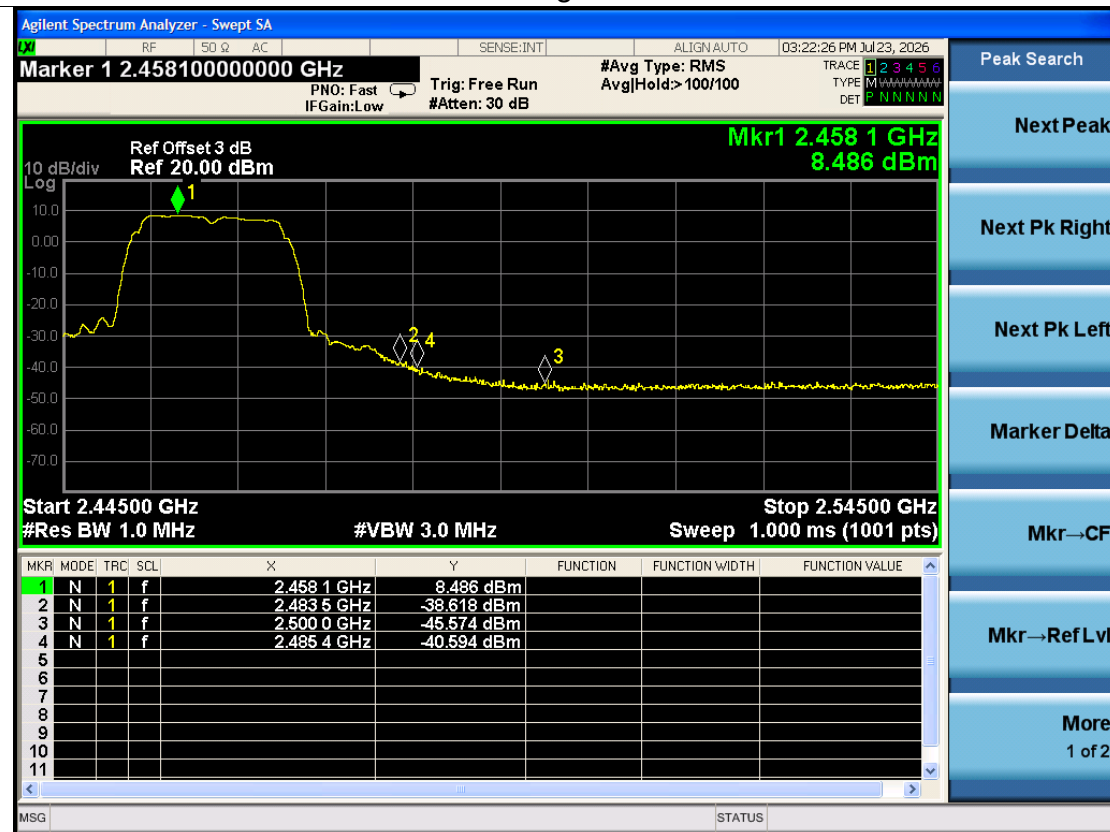
NVNT 802.11g 2412MHz PK



NVNT 802.11g 2462MHz AV

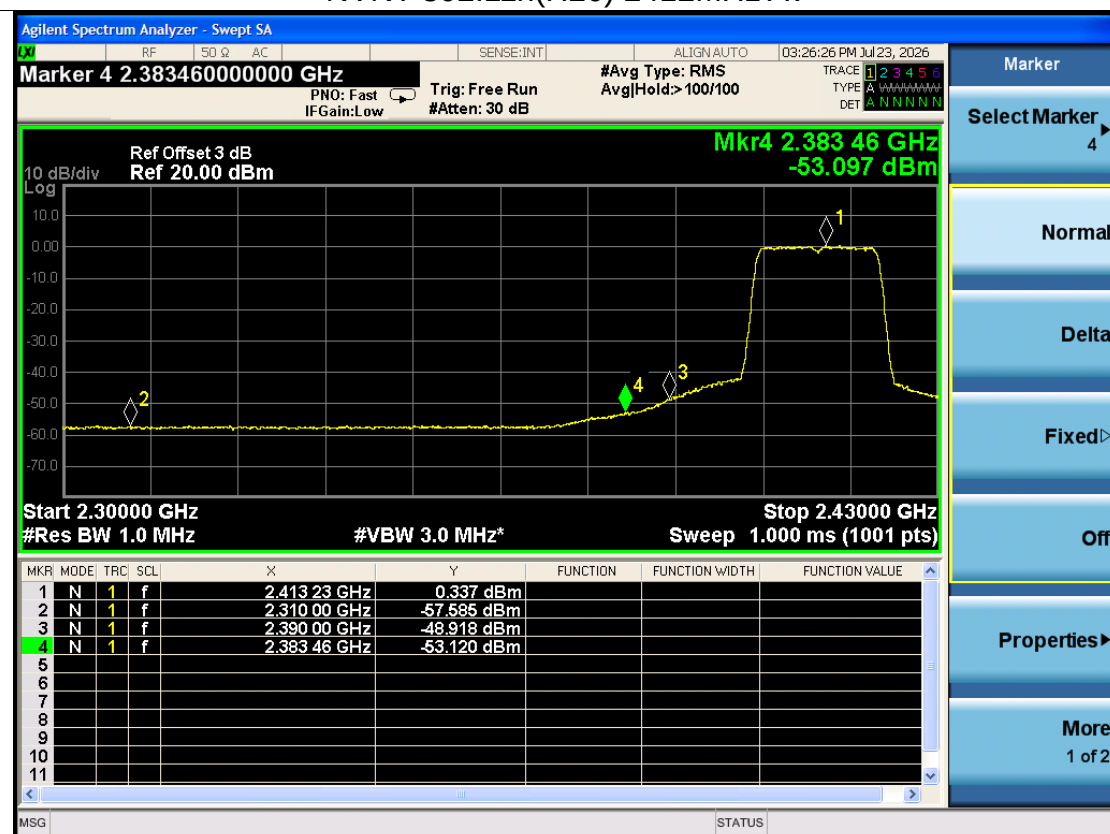


NVNT 802.11g 2462MHz PK

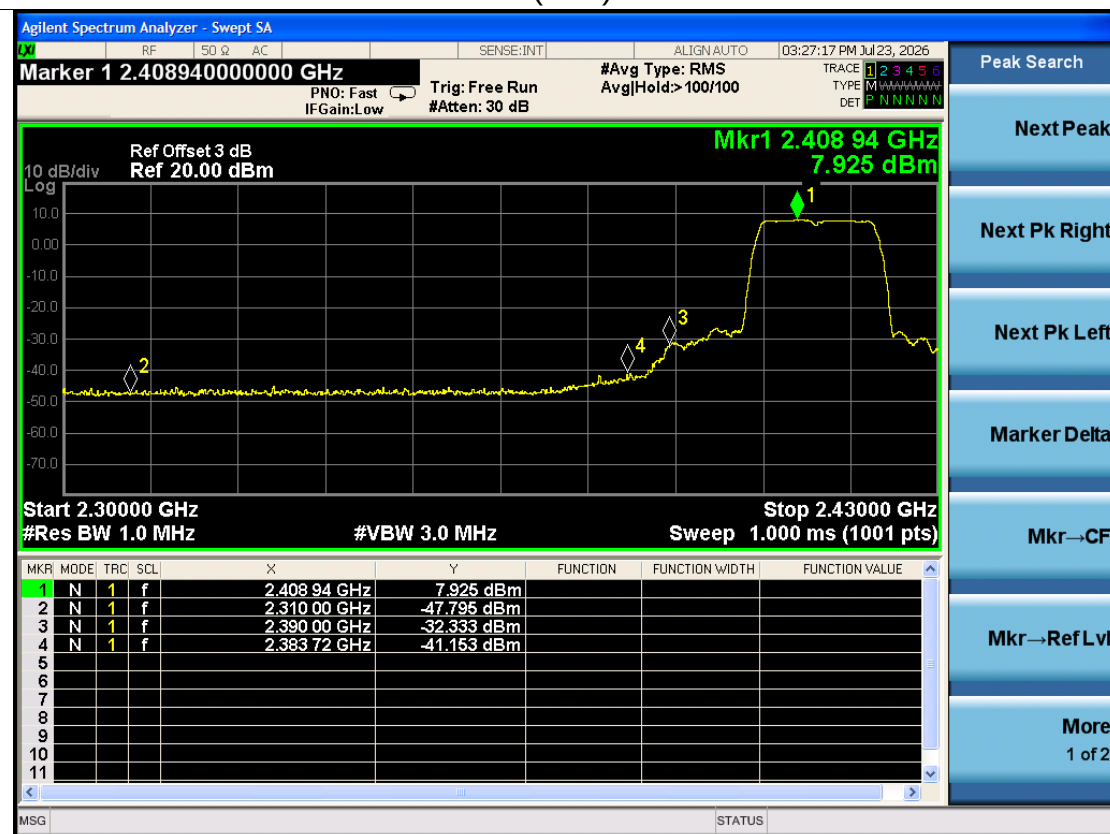


Test Graphs

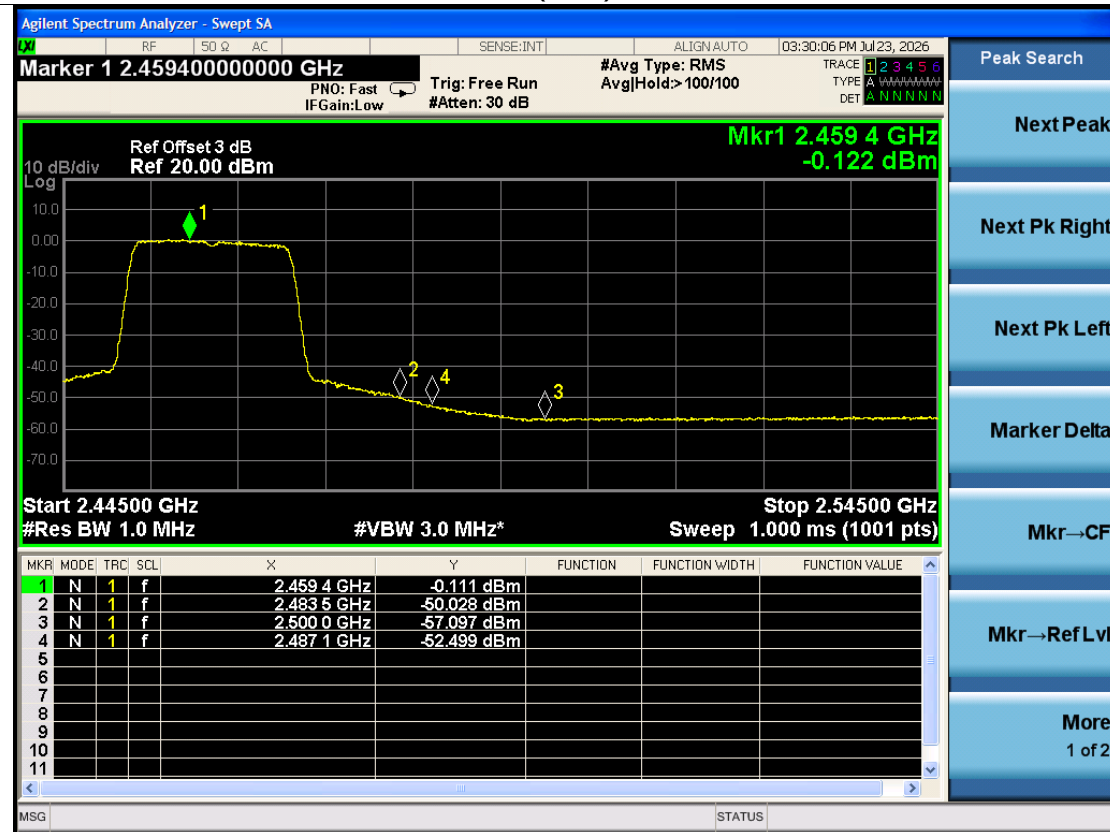
NVNT 802.11n(H20) 2412MHz AV



NVNT 802.11n(H20) 2412MHz PK



NVNT 802.11n(H20) 2462MHz AV



NVNT 802.11n(H20) 2462MHz PK

