

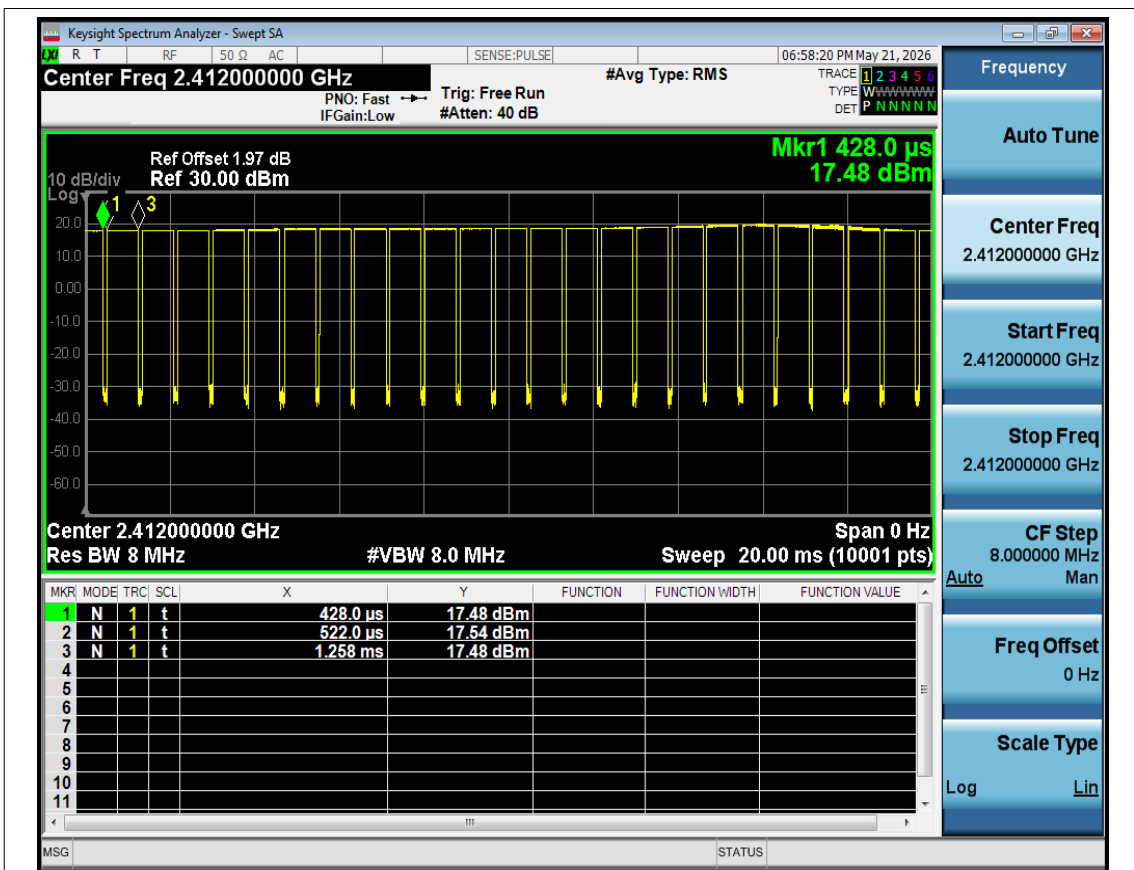
RF Test Data

FCC ID:2BWNS-X1

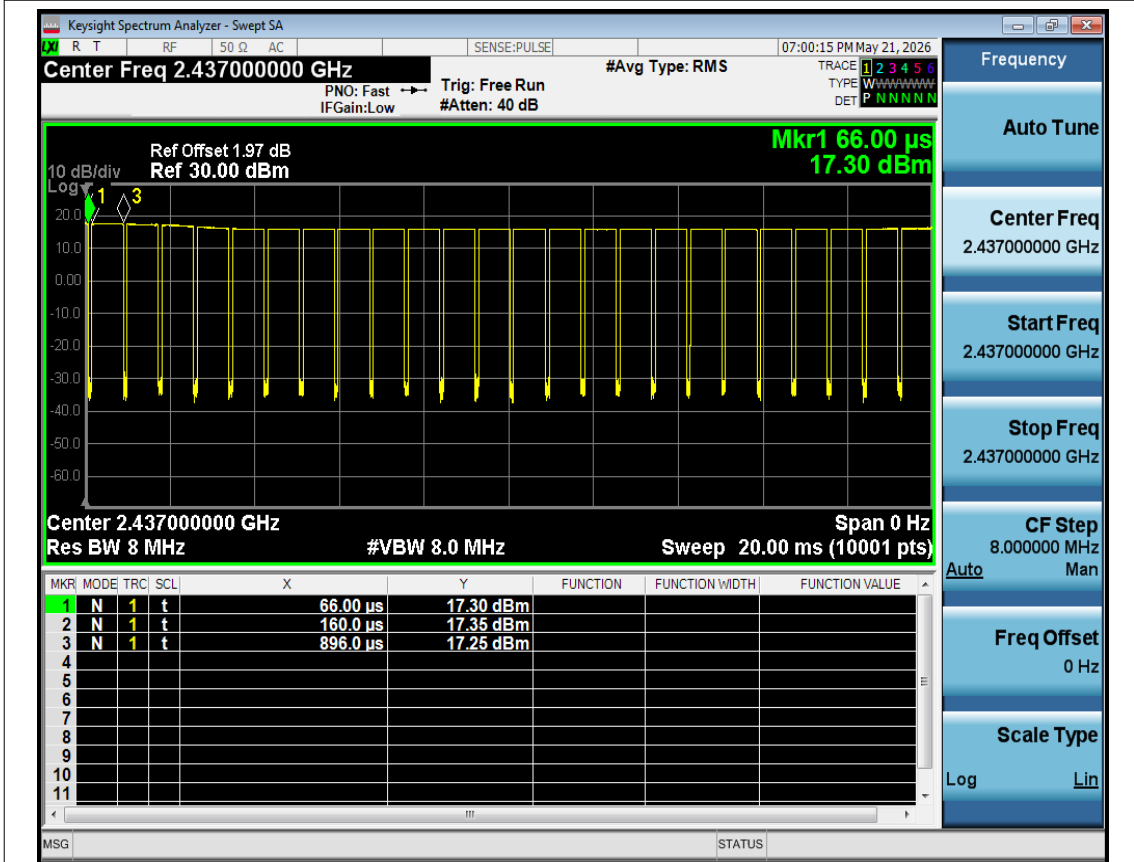
Duty Cycle	2
Maximum Average Conducted Output Power	9
-6dB Bandwidth	16
Occupied Channel Bandwidth	23
Maximum Power Spectral Density Level	30
Band Edge	37
Conducted RF Spurious Emission	46

Duty Cycle

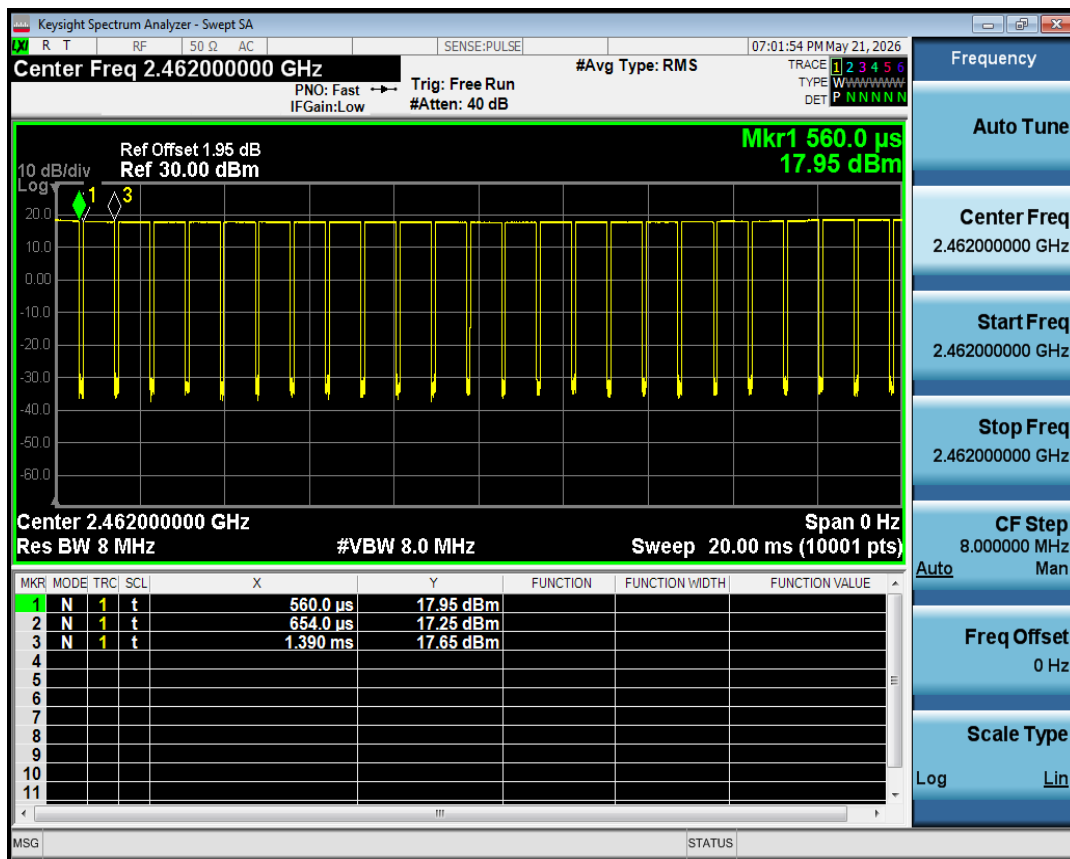
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	88.67	0.52	1.36
NVNT	b	2437	Ant1	88.67	0.52	1.36
NVNT	b	2462	Ant1	88.67	0.52	1.36
NVNT	g	2412	Ant1	56.55	2.48	8.58
NVNT	g	2437	Ant1	56.31	2.49	8.62
NVNT	g	2462	Ant1	56.55	2.48	8.58
NVNT	n20	2412	Ant1	56.34	2.49	8.66
NVNT	n20	2437	Ant1	56.34	2.49	8.66
NVNT	n20	2462	Ant1	56.59	2.47	8.62
NVNT	n40	2422	Ant1	45.76	3.4	13.25
NVNT	n40	2437	Ant1	45.76	3.4	13.25
NVNT	n40	2452	Ant1	46.06	3.37	13.16



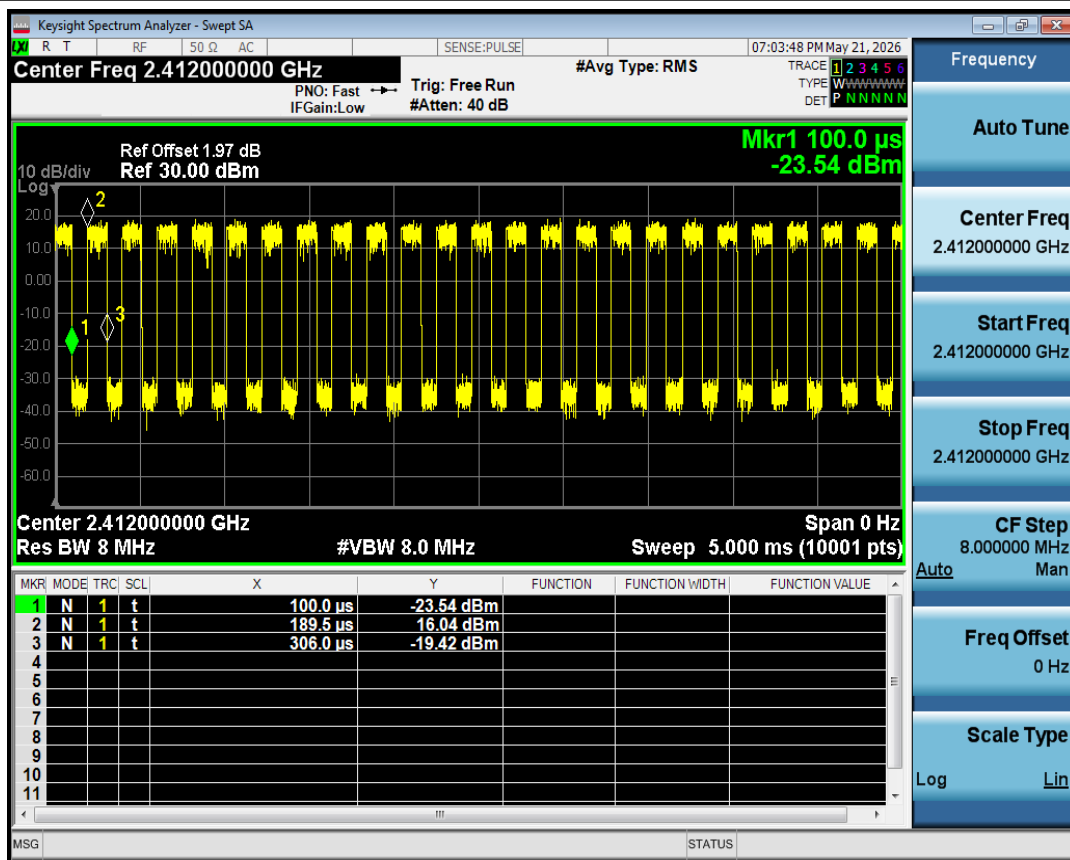
Duty Cycle NVNT b 2412MHz Ant1



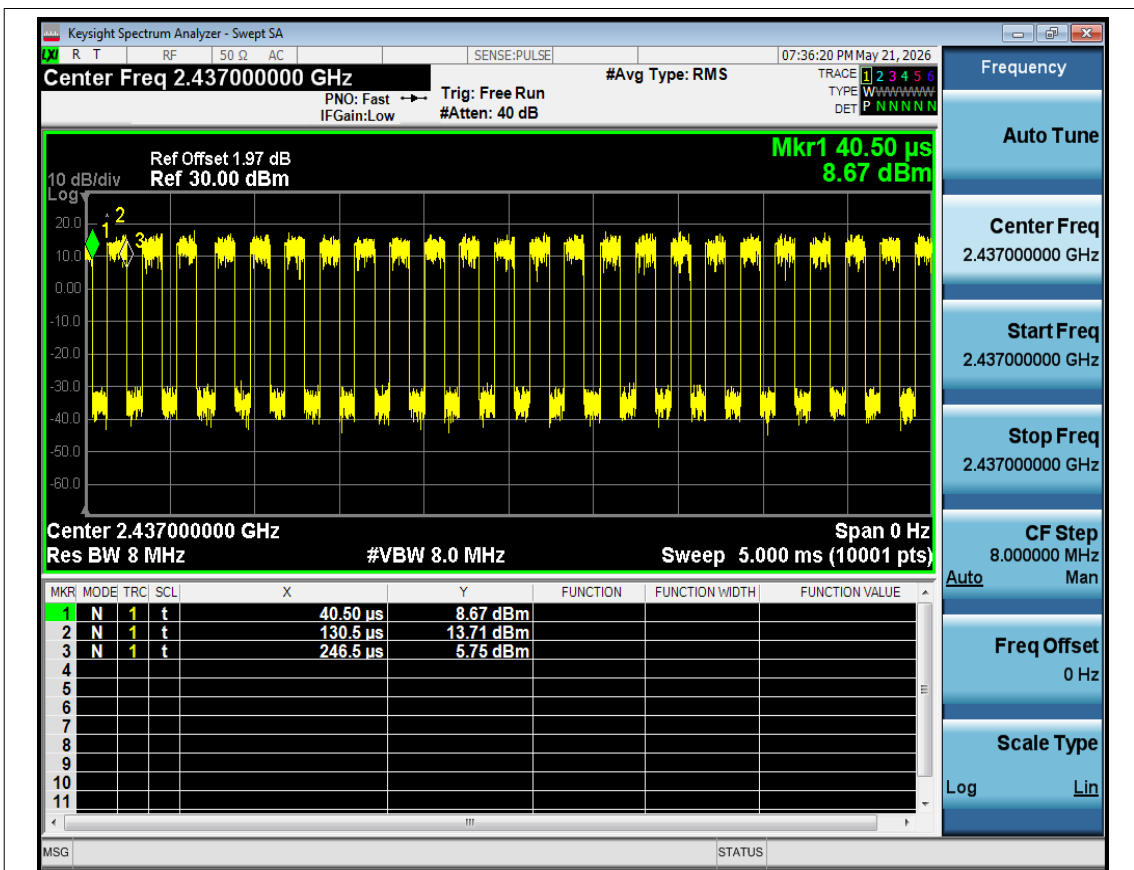
Duty Cycle NVNT b 2437MHz Ant1



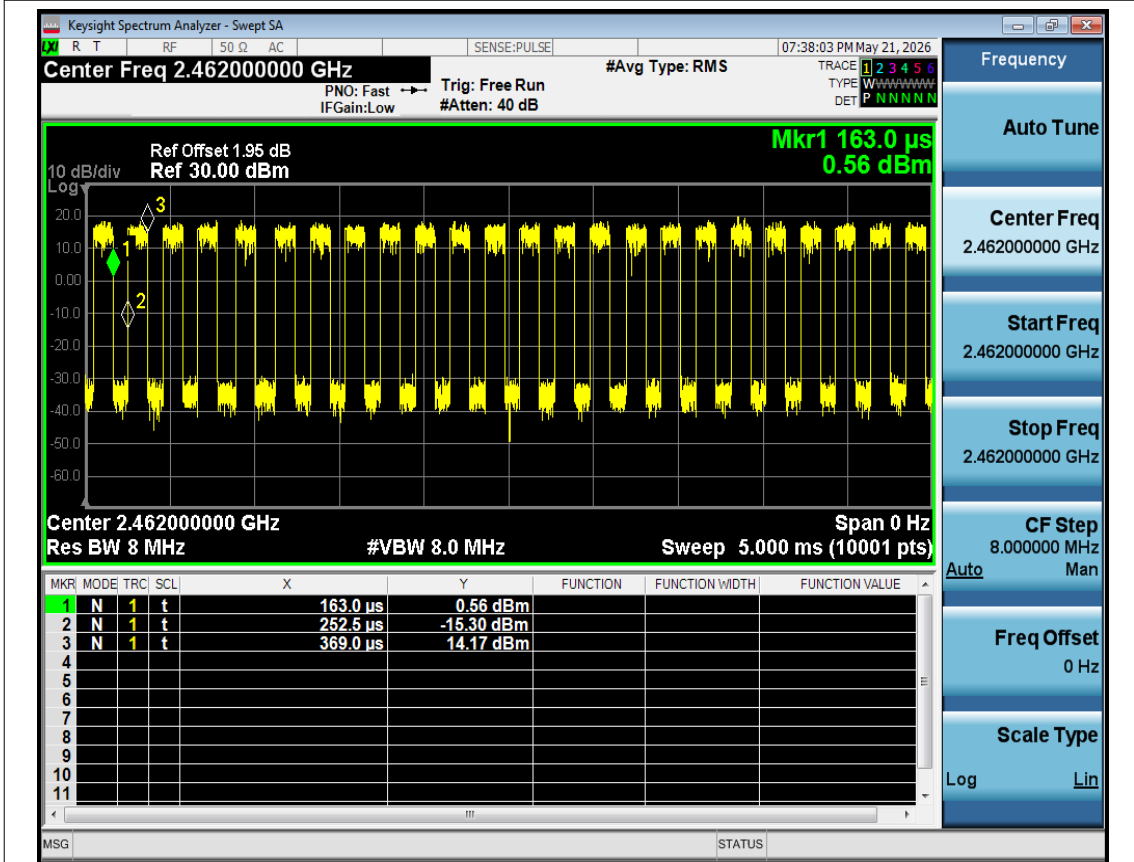
Duty Cycle NVNT b 2462MHz Ant1



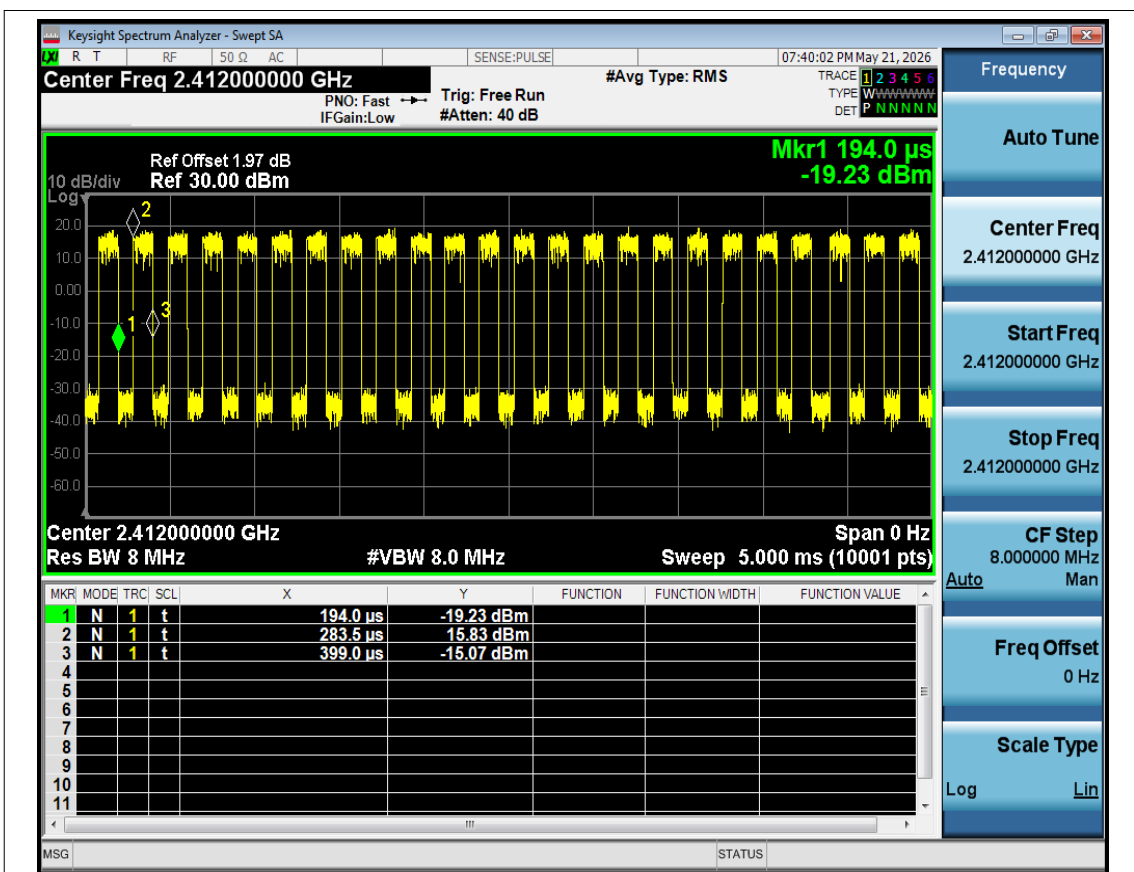
Duty Cycle NVNT g 2412MHz Ant1



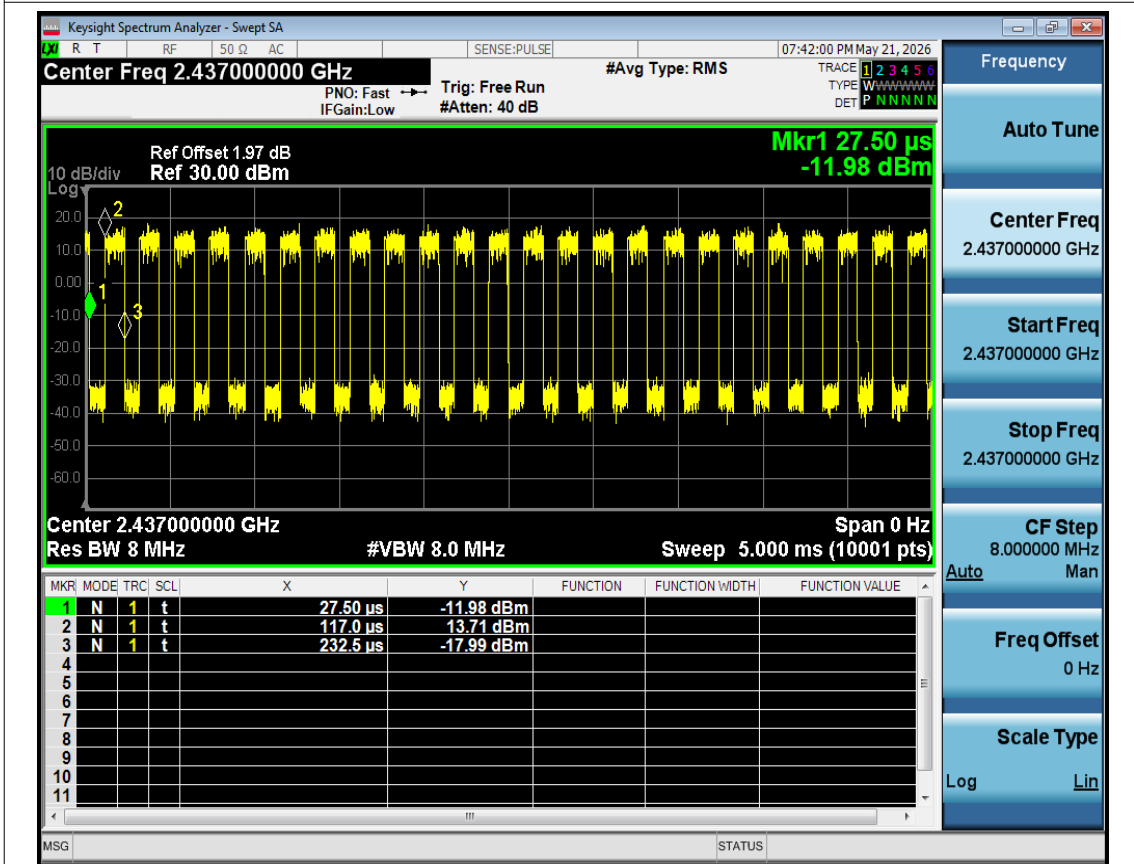
Duty Cycle NVNT g 2437MHz Ant1



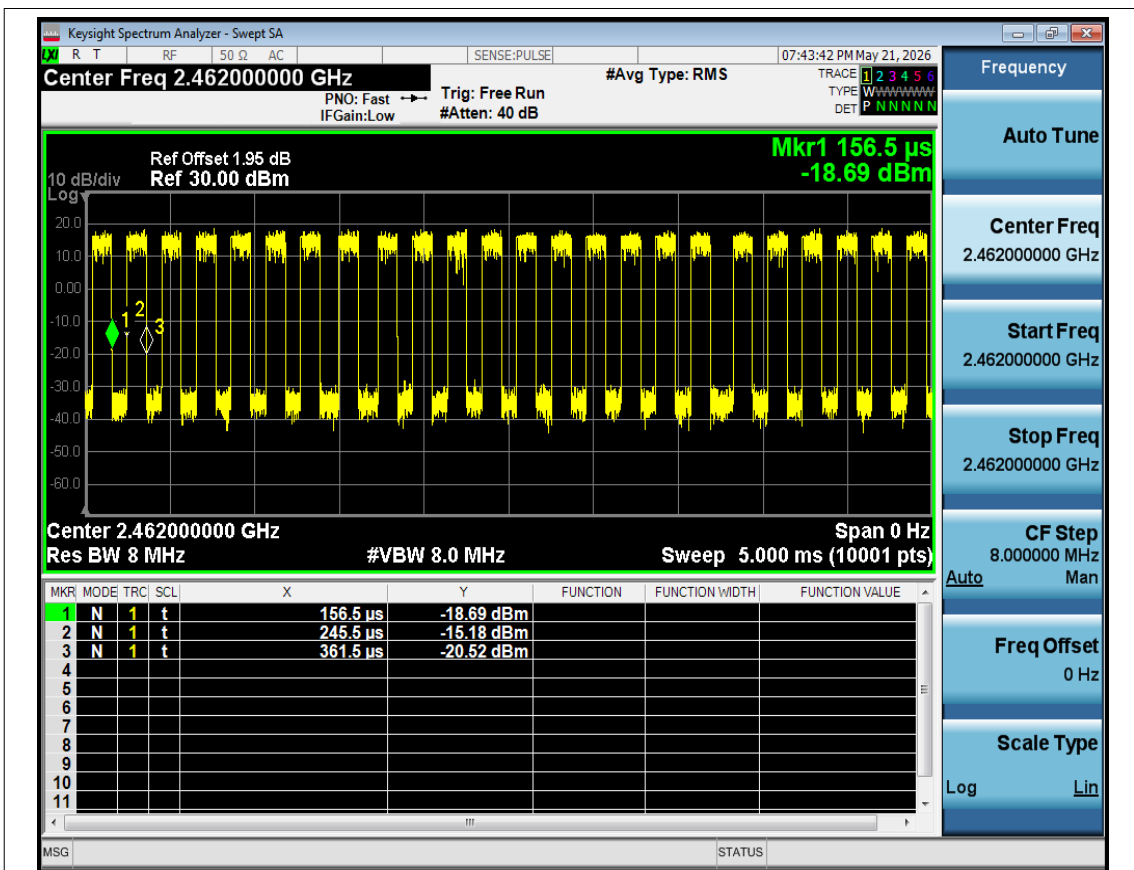
Duty Cycle NVNT g 2462MHz Ant1



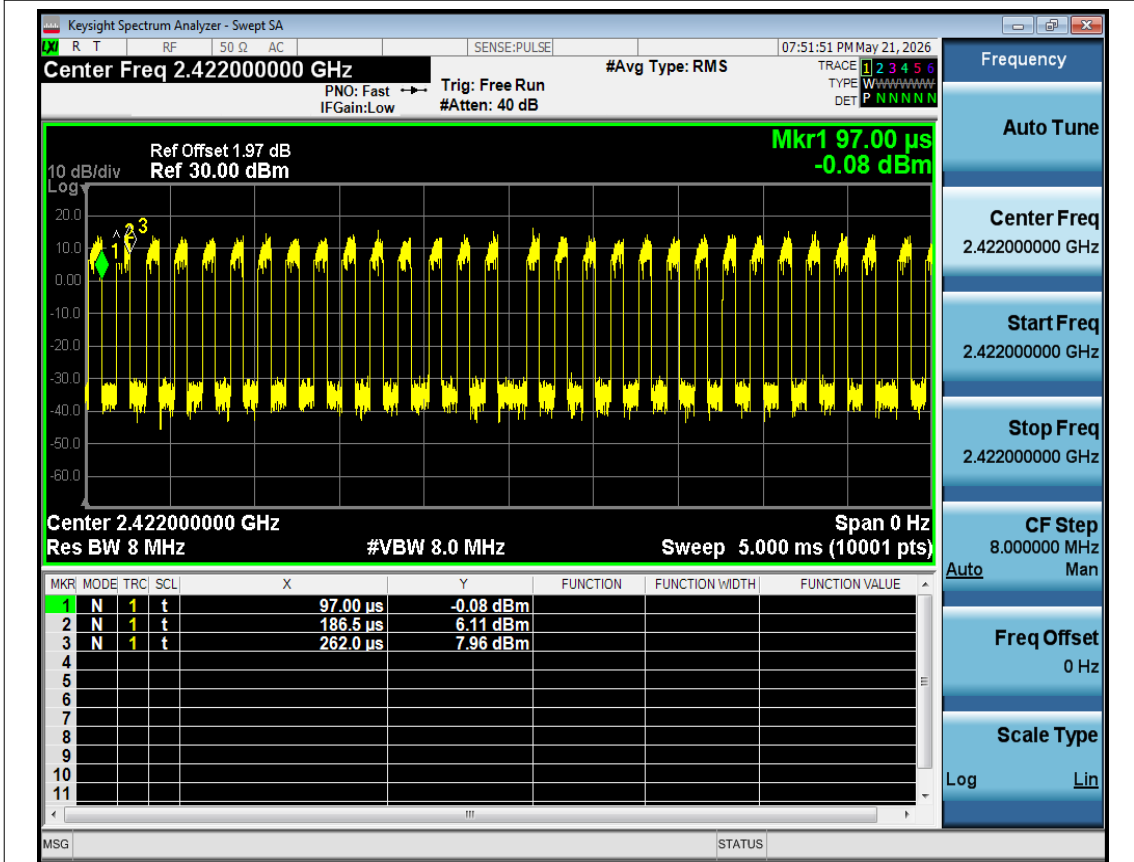
Duty Cycle NVNT n20 2412MHz Ant1



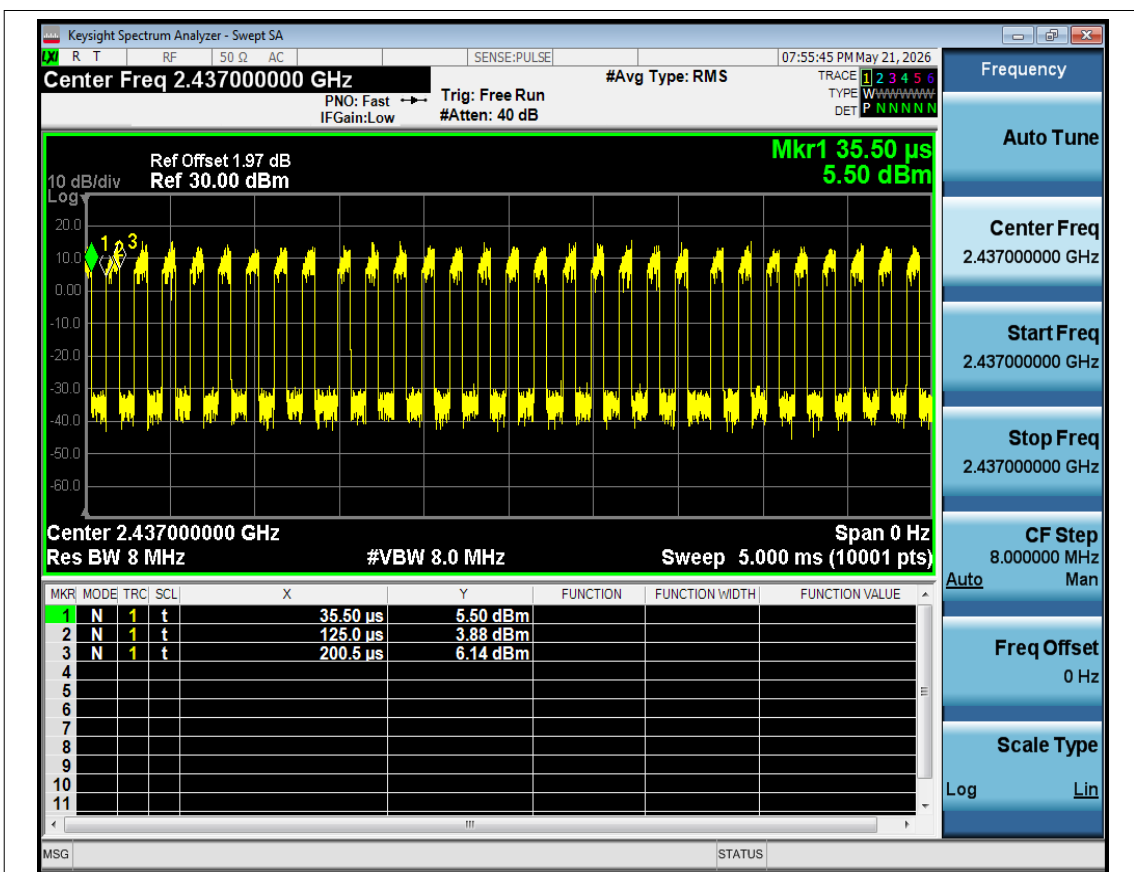
Duty Cycle NVNT n20 2437MHz Ant1



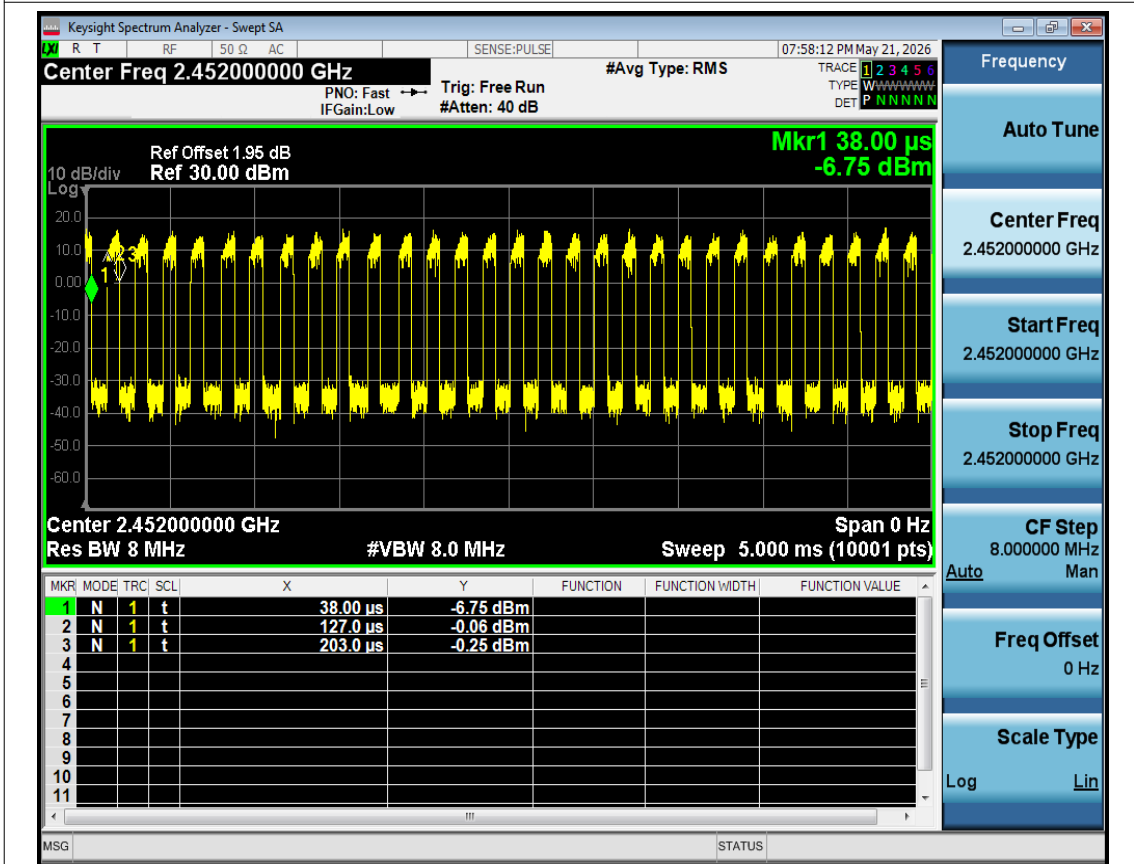
Duty Cycle NVNT n20 2462MHz Ant1



Duty Cycle NVNT n40 2422MHz Ant1



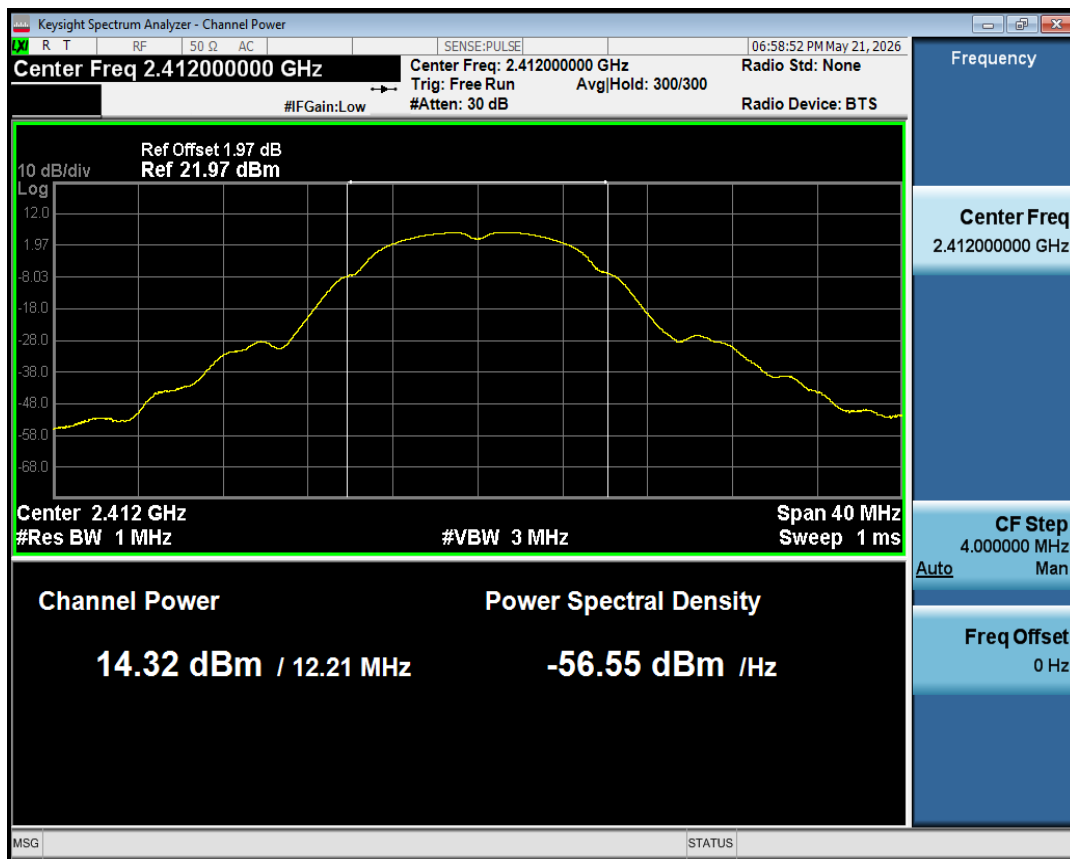
Duty Cycle NVNT n40 2437MHz Ant1



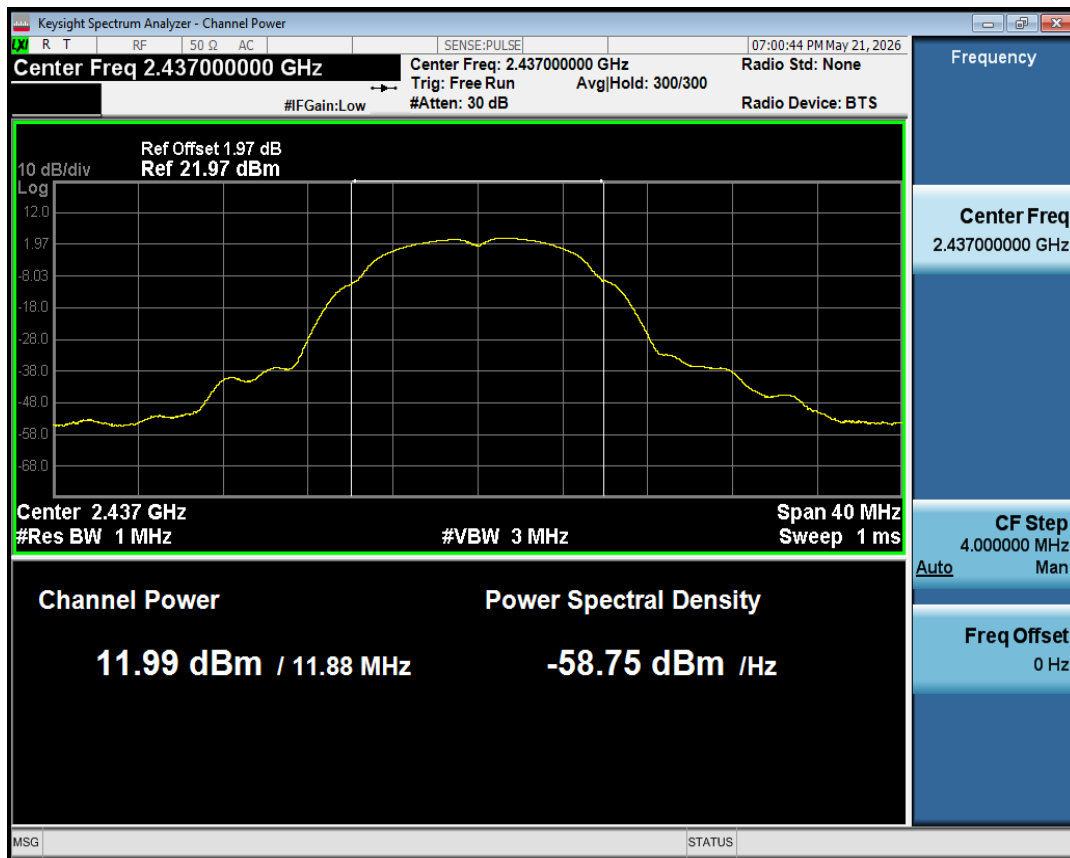
Duty Cycle NVNT n40 2452MHz Ant1

Maximum Average Conducted Output Power

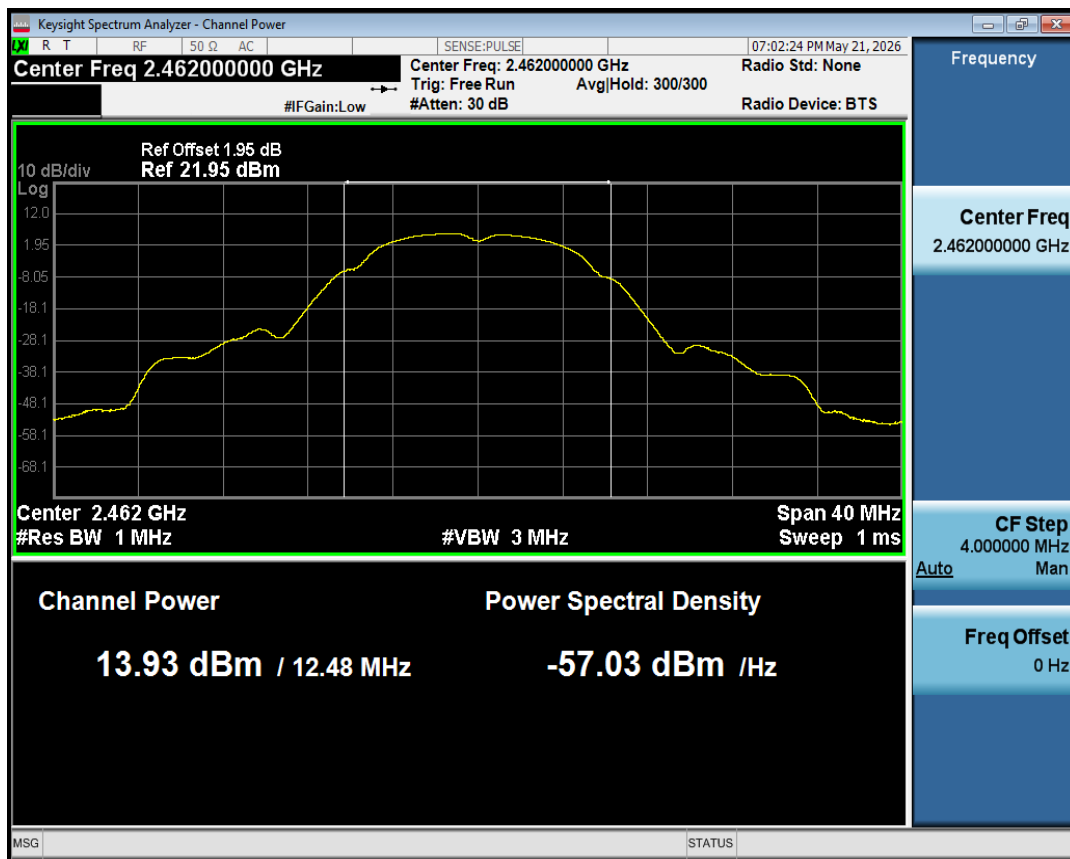
Condi tion	Mod e	Frequen cy (MHz)	Anten na	Conduct ed Power (dBm)	Duty Fact or (dB)	Total Conduct ed Power (dBm)	Total Conduct ed Power (W)	Limit Conducted(dB m)	Verdi ct
NVNT	b	2412	Ant1	14.32	0.52	14.84	0.03048	30	Pass
NVNT	b	2437	Ant1	11.99	0.52	12.51	0.01782	30	Pass
NVNT	b	2462	Ant1	13.93	0.52	14.45	0.02786	30	Pass
NVNT	g	2412	Ant1	11.11	2.48	13.59	0.02286	30	Pass
NVNT	g	2437	Ant1	9.23	2.49	11.72	0.01486	30	Pass
NVNT	g	2462	Ant1	11.17	2.48	13.65	0.02317	30	Pass
NVNT	n20	2412	Ant1	11.31	2.49	13.8	0.02399	30	Pass
NVNT	n20	2437	Ant1	9.37	2.49	11.86	0.01535	30	Pass
NVNT	n20	2462	Ant1	11.26	2.47	13.73	0.0236	30	Pass
NVNT	n40	2422	Ant1	8.73	3.4	12.13	0.01633	30	Pass
NVNT	n40	2437	Ant1	8.65	3.4	12.05	0.01603	30	Pass
NVNT	n40	2452	Ant1	9.55	3.37	12.92	0.01959	30	Pass



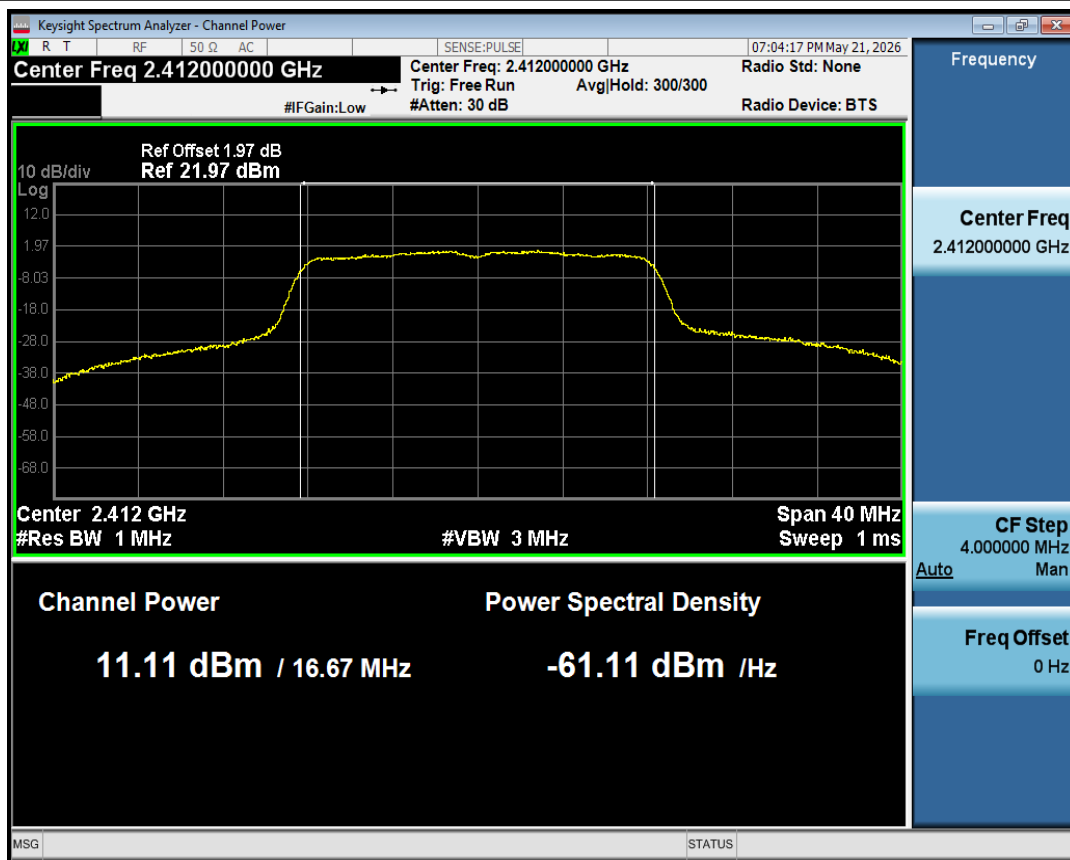
Average Power NVNT b 2412MHz Ant1



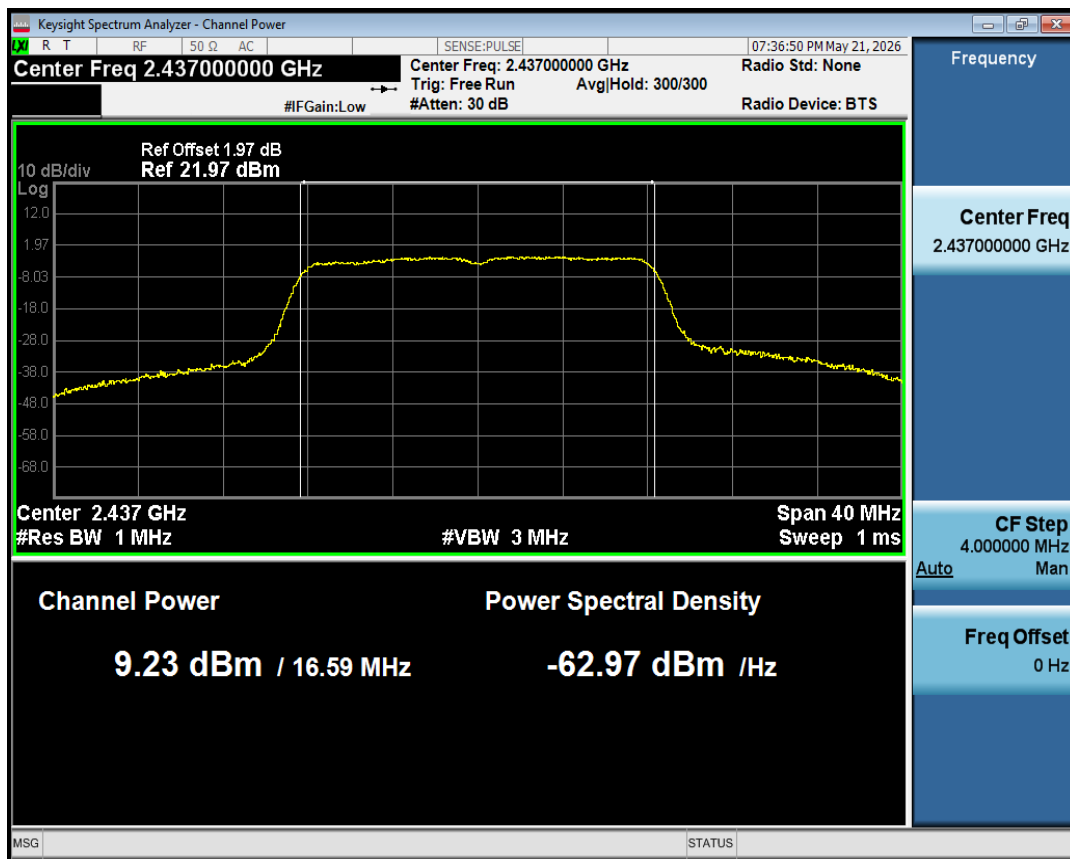
Average Power NVNT b 2437MHz Ant1



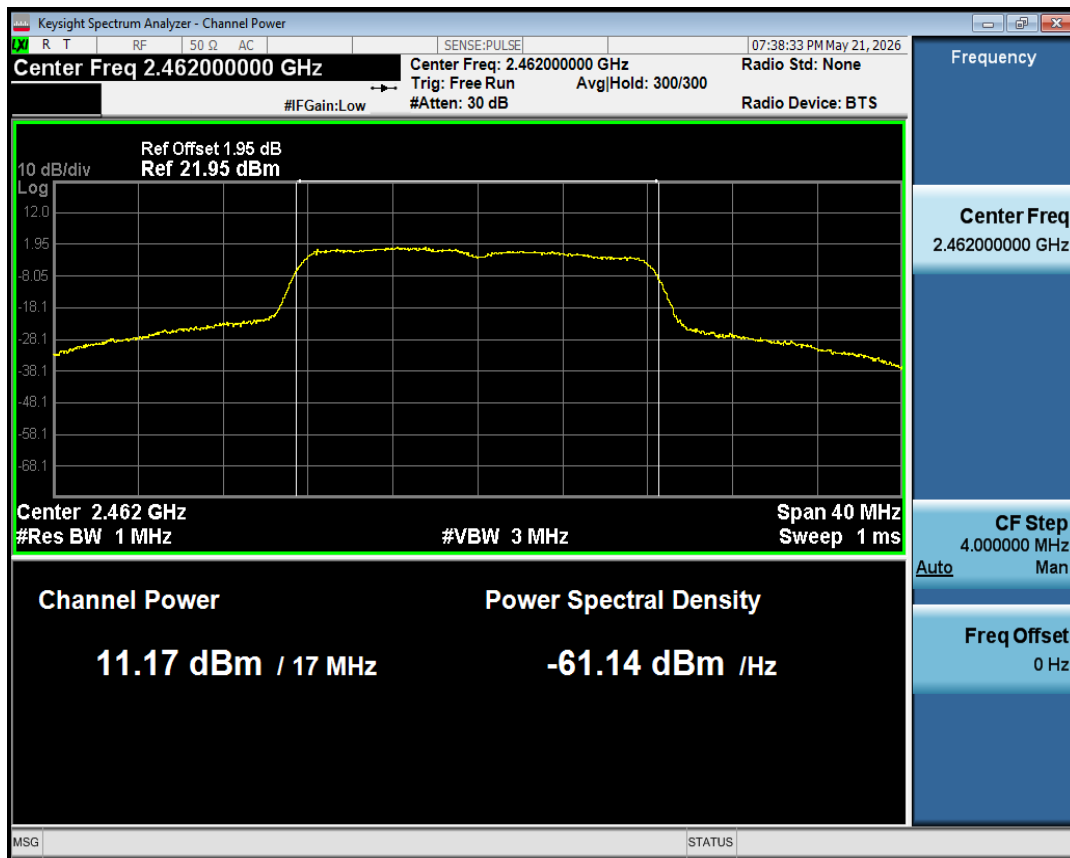
Average Power NVNT b 2462MHz Ant1



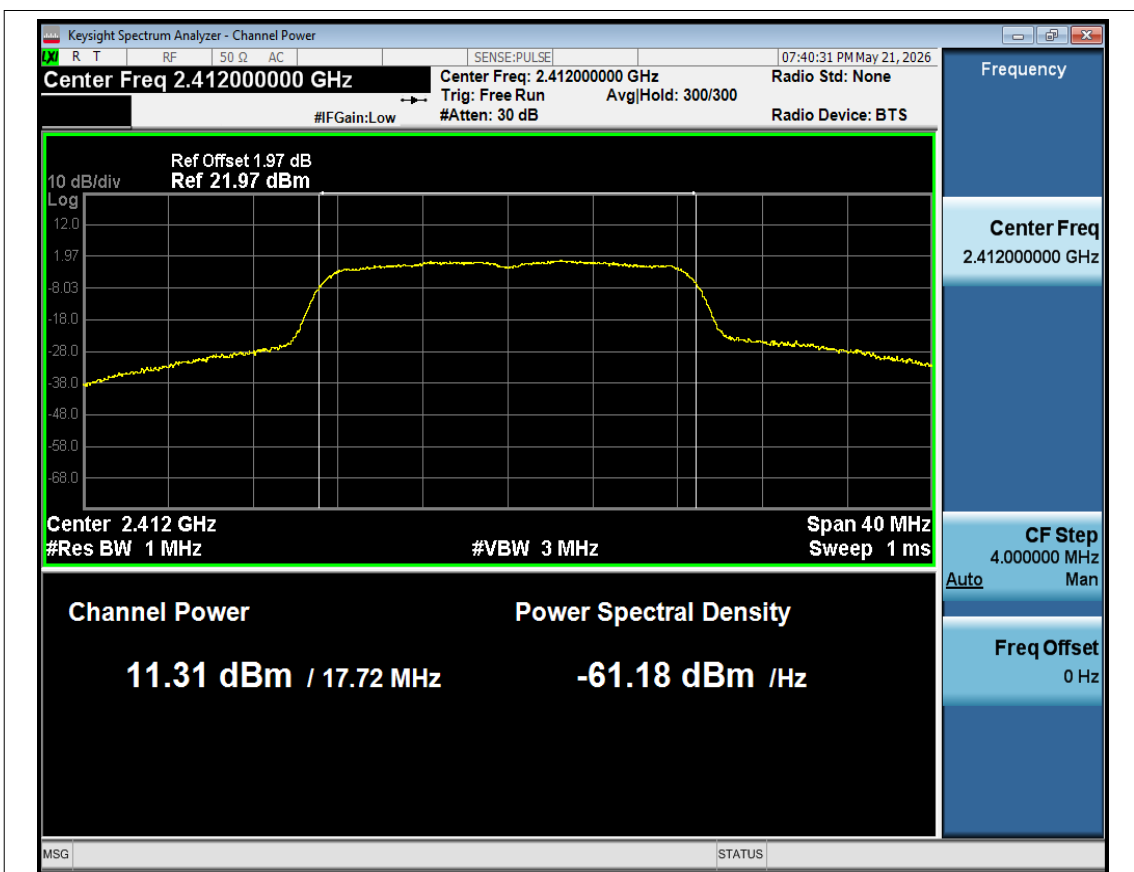
Average Power NVNT g 2412MHz Ant1



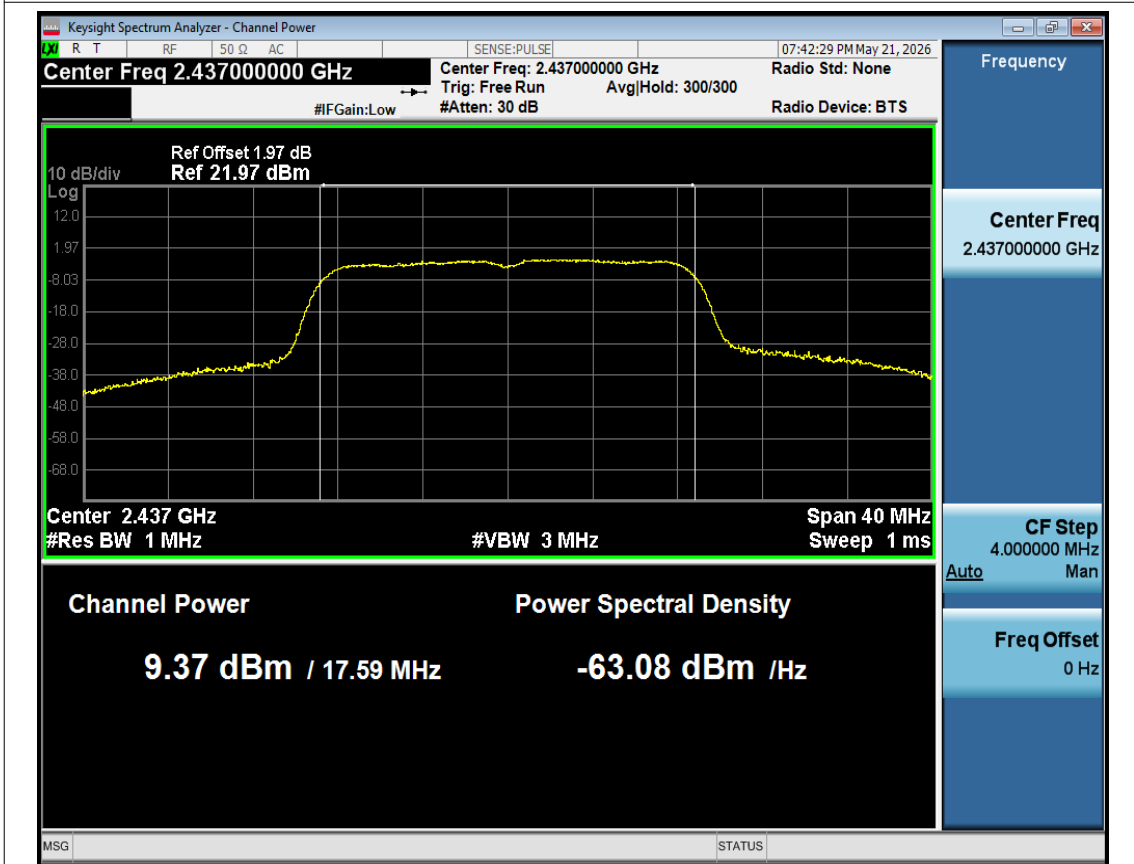
Average Power NVNT g 2437MHz Ant1



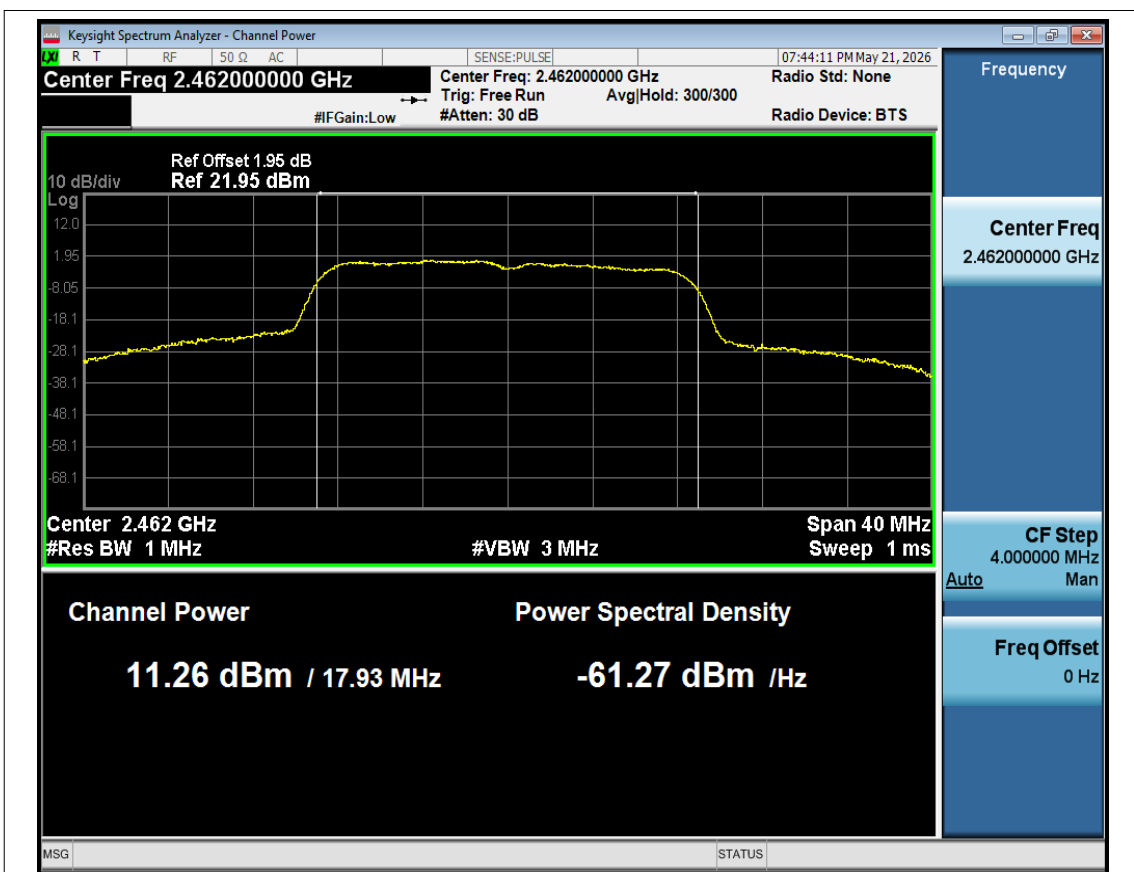
Average Power NVNT g 2462MHz Ant1



Average Power NVNT n20 2412MHz Ant1



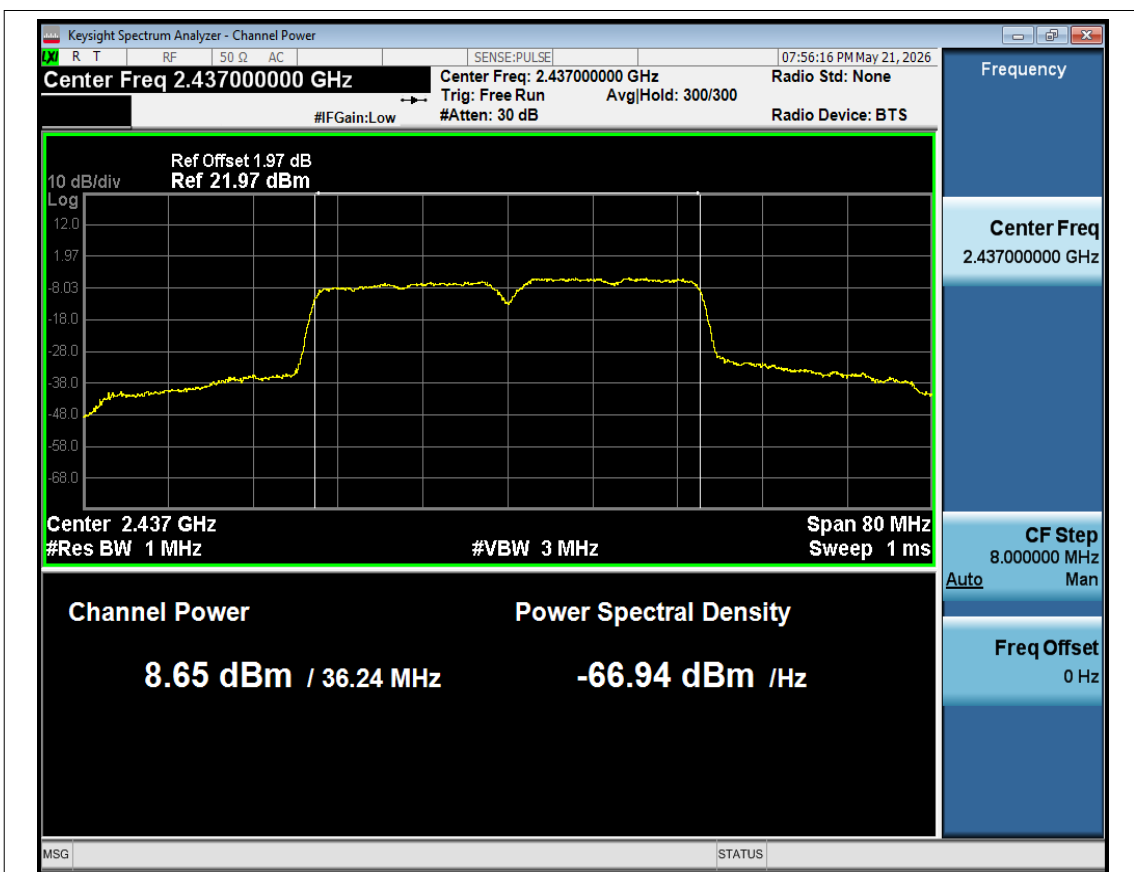
Average Power NVNT n20 2437MHz Ant1



Average Power NVNT n20 2462MHz Ant1



Average Power NVNT n40 2422MHz Ant1



Average Power NVNT n40 2437MHz Ant1



Average Power NVNT n40 2452MHz Ant1

-6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	9.101	0.5	Pass
NVNT	b	2437	Ant1	9.093	0.5	Pass
NVNT	b	2462	Ant1	9.106	0.5	Pass
NVNT	g	2412	Ant1	16.1	0.5	Pass
NVNT	g	2437	Ant1	16.21	0.5	Pass
NVNT	g	2462	Ant1	16.13	0.5	Pass
NVNT	n20	2412	Ant1	17.04	0.5	Pass
NVNT	n20	2437	Ant1	17.31	0.5	Pass
NVNT	n20	2462	Ant1	16.76	0.5	Pass
NVNT	n40	2422	Ant1	35.41	0.5	Pass
NVNT	n40	2437	Ant1	35.59	0.5	Pass
NVNT	n40	2452	Ant1	35.59	0.5	Pass



-6dB Bandwidth NVNT b 2412MHz Ant1



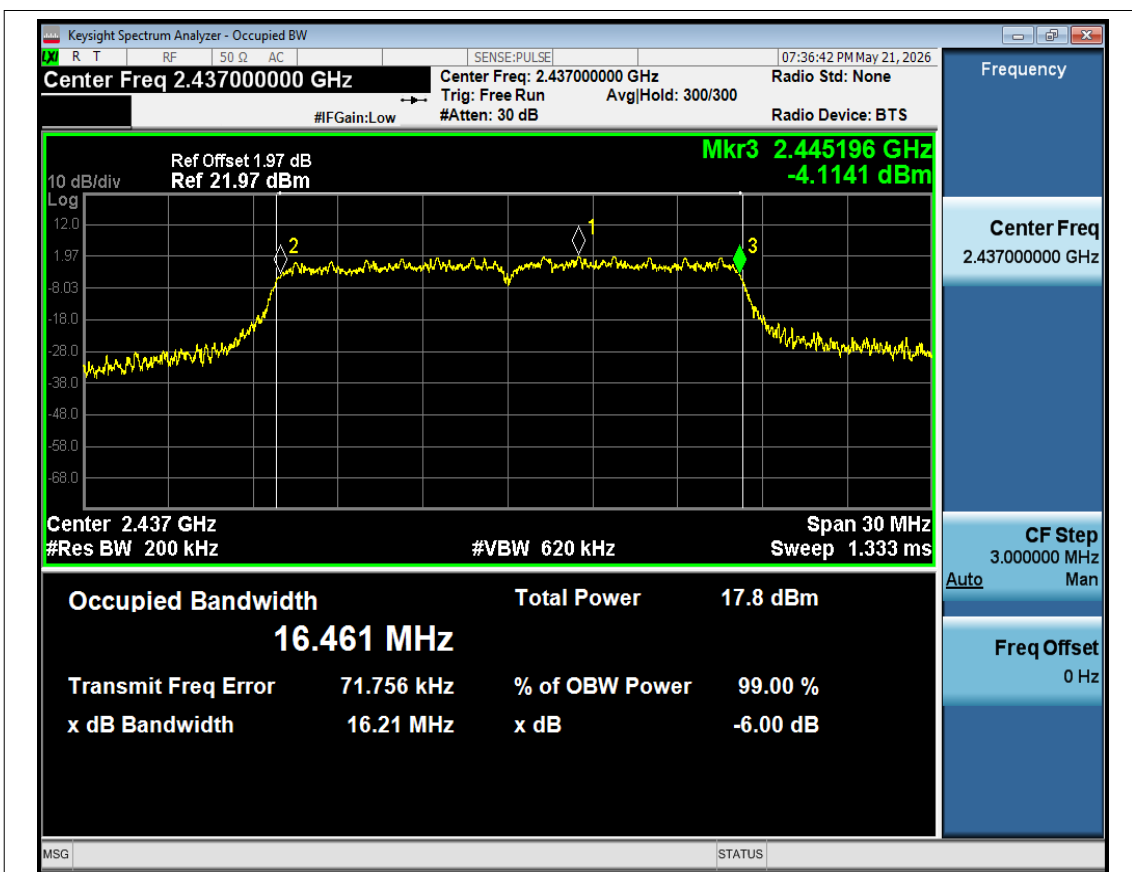
-6dB Bandwidth NVNT b 2437MHz Ant1



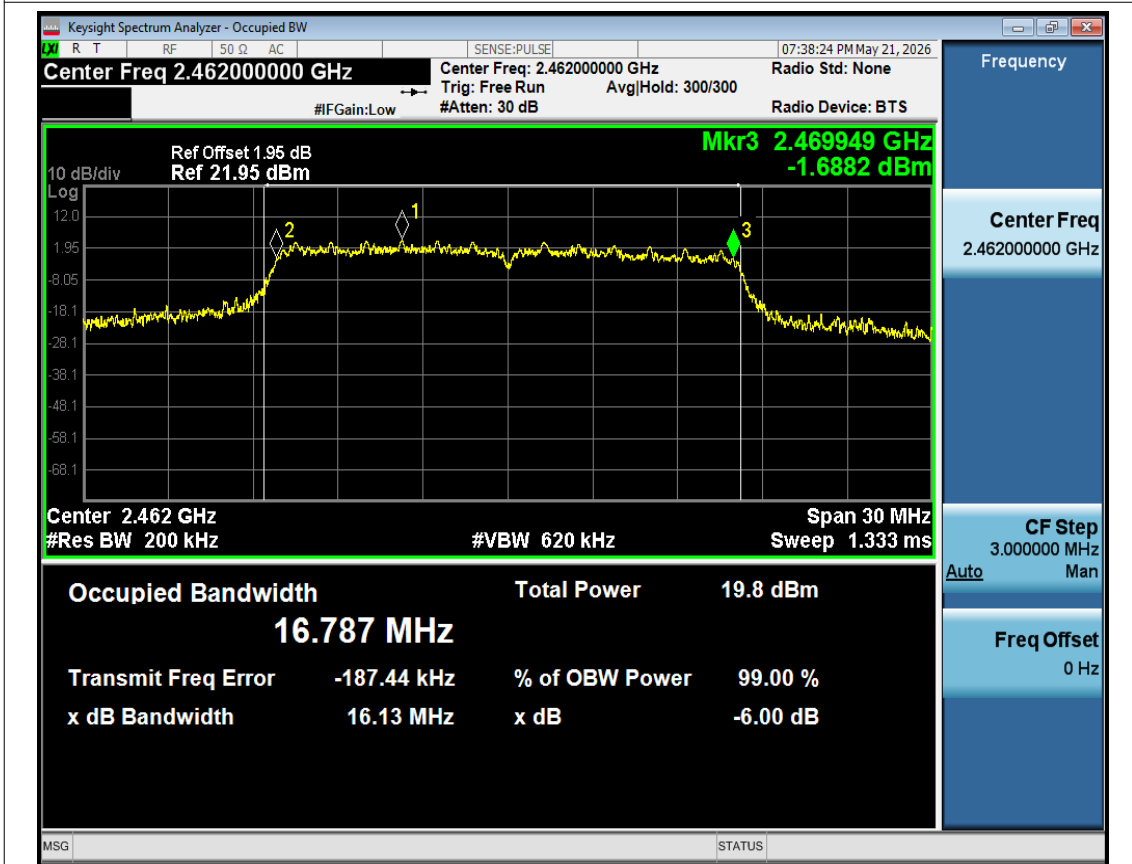
-6dB Bandwidth NVNT b 2462MHz Ant1



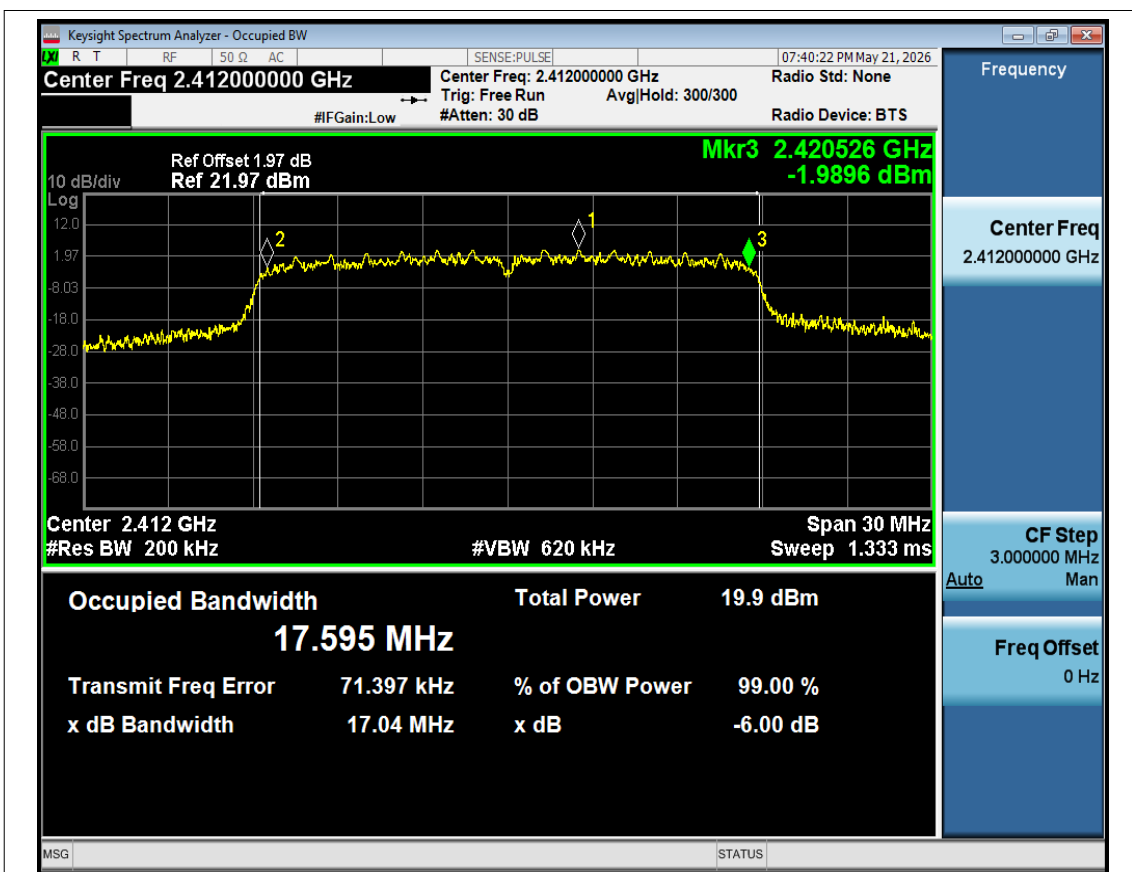
-6dB Bandwidth NVNT g 2412MHz Ant1



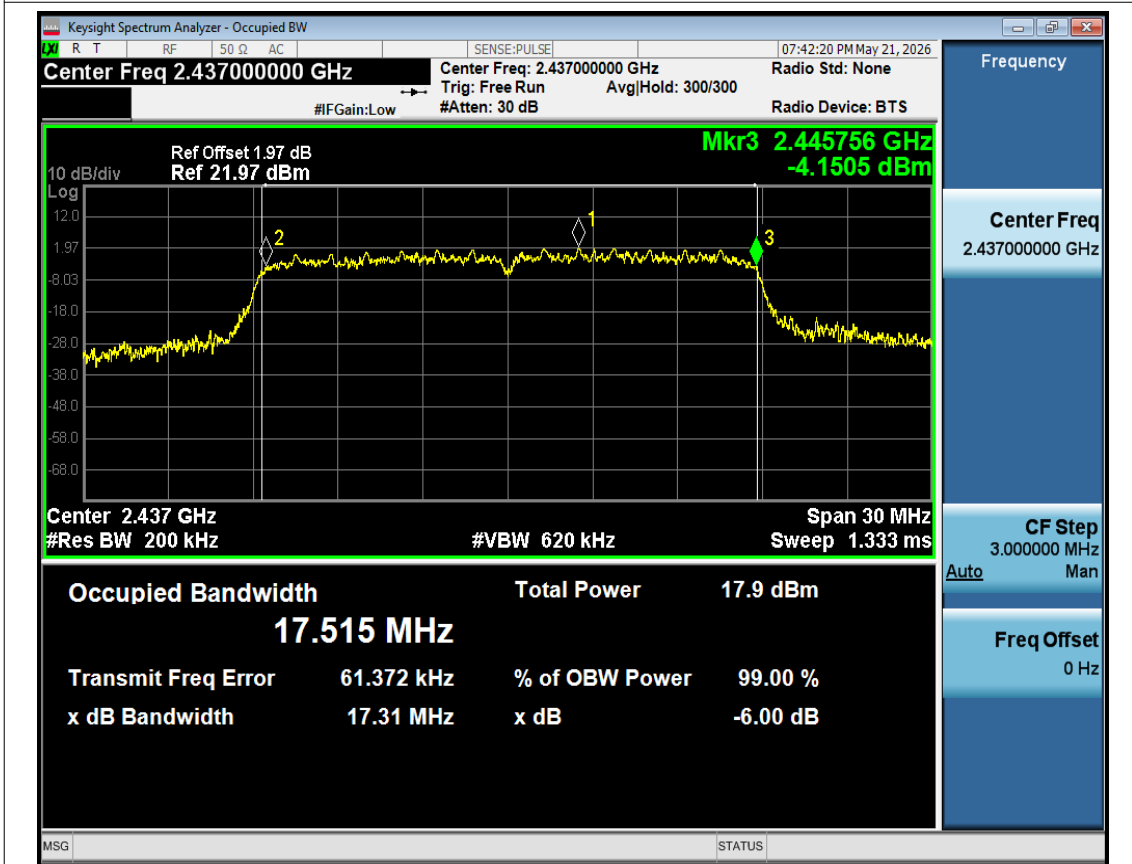
-6dB Bandwidth NVNT g 2437MHz Ant1



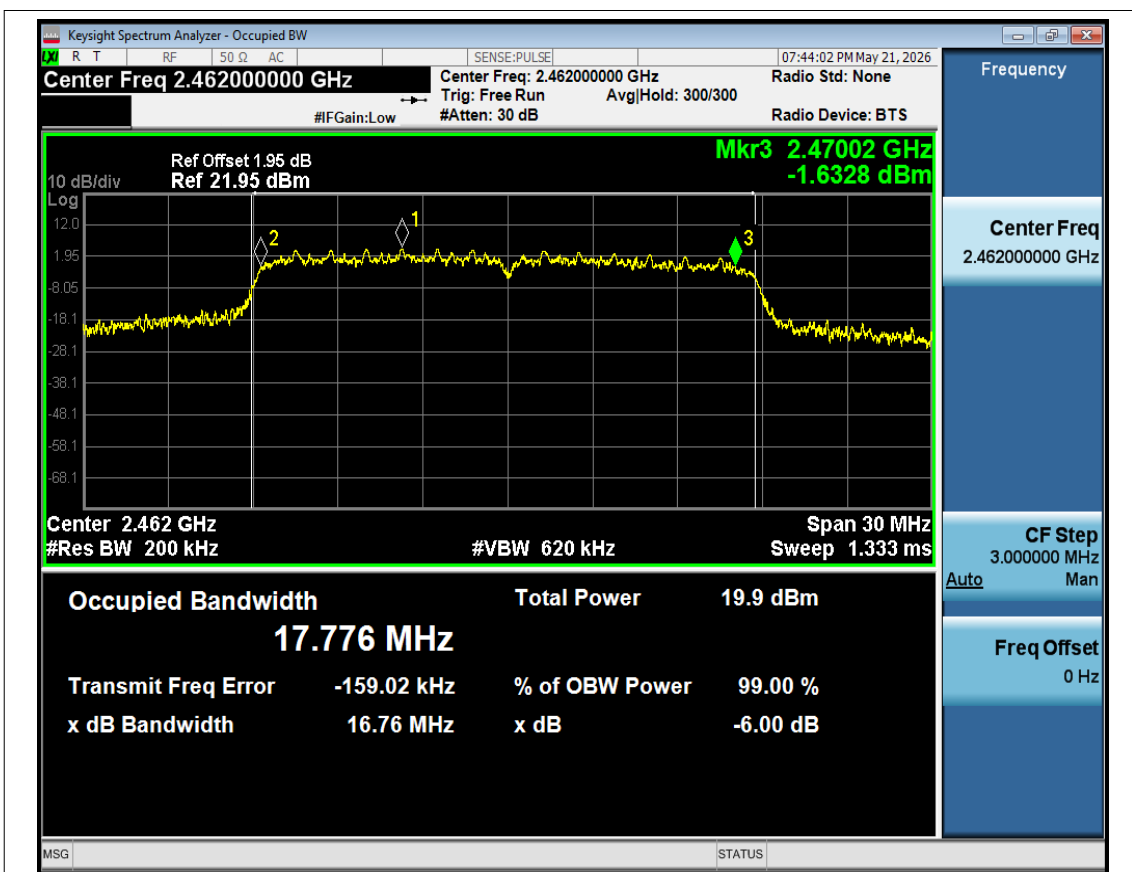
-6dB Bandwidth NVNT g 2462MHz Ant1



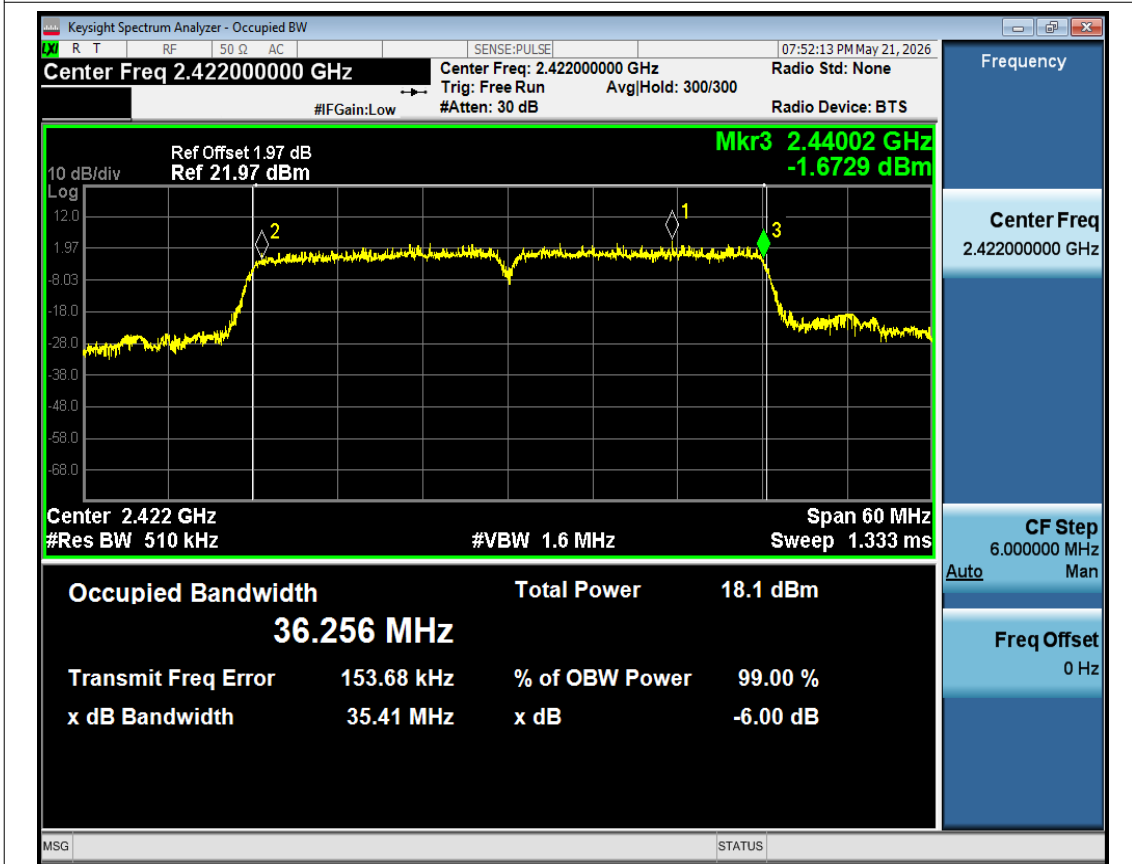
-6dB Bandwidth NVNT n20 2412MHz Ant1



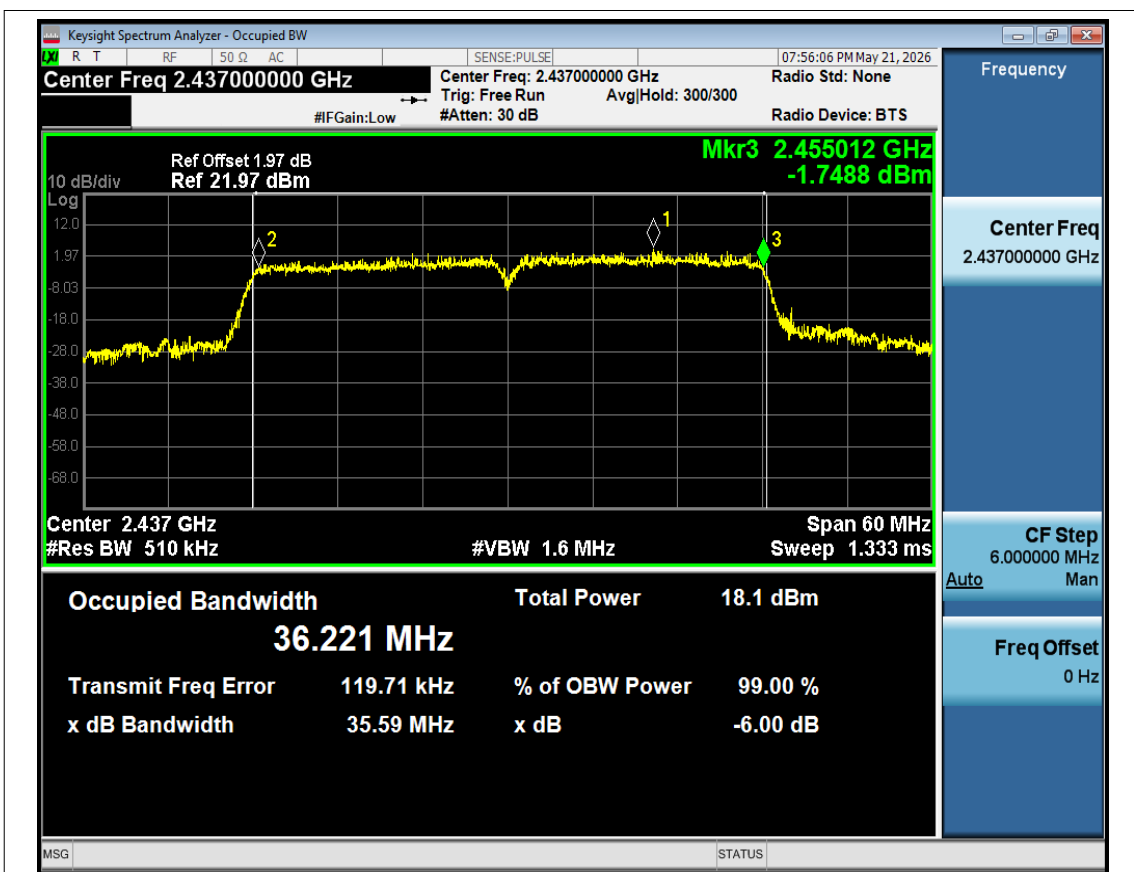
-6dB Bandwidth NVNT n20 2437MHz Ant1



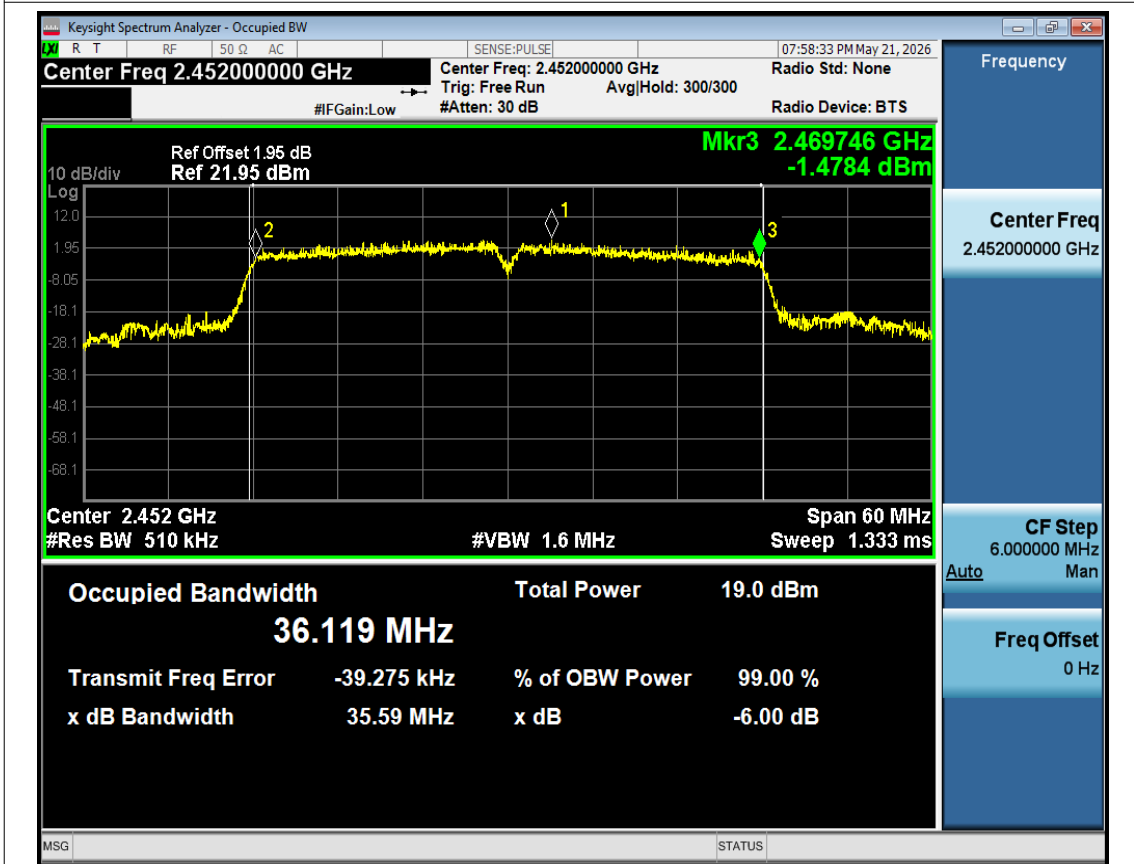
-6dB Bandwidth NVNT n20 2462MHz Ant1



-6dB Bandwidth NVNT n40 2422MHz Ant1



-6dB Bandwidth NVNT n40 2437MHz Ant1



-6dB Bandwidth NVNT n40 2452MHz Ant1

Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	12.205
NVNT	b	2437	Ant1	11.879
NVNT	b	2462	Ant1	12.478
NVNT	g	2412	Ant1	16.669
NVNT	g	2437	Ant1	16.587
NVNT	g	2462	Ant1	16.998
NVNT	n20	2412	Ant1	17.716
NVNT	n20	2437	Ant1	17.592
NVNT	n20	2462	Ant1	17.932
NVNT	n40	2422	Ant1	36.34
NVNT	n40	2437	Ant1	36.242
NVNT	n40	2452	Ant1	36.117



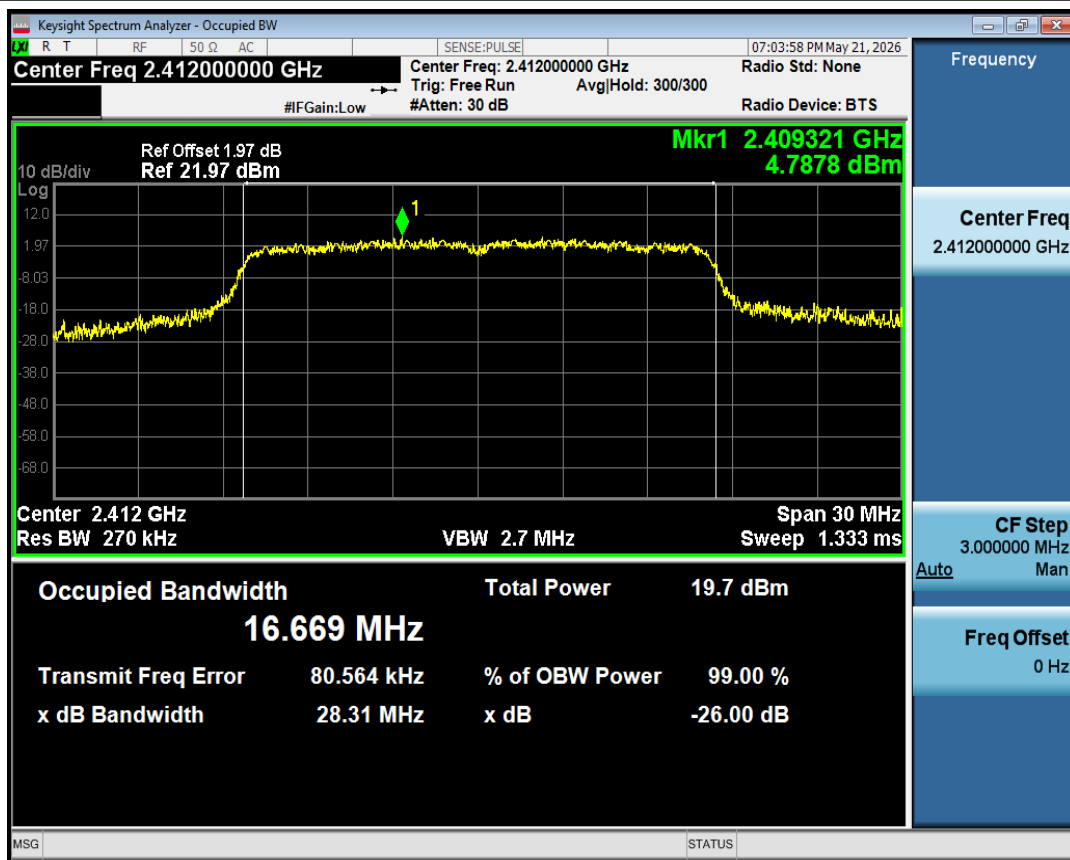
OBW NVNT b 2412MHz Ant1



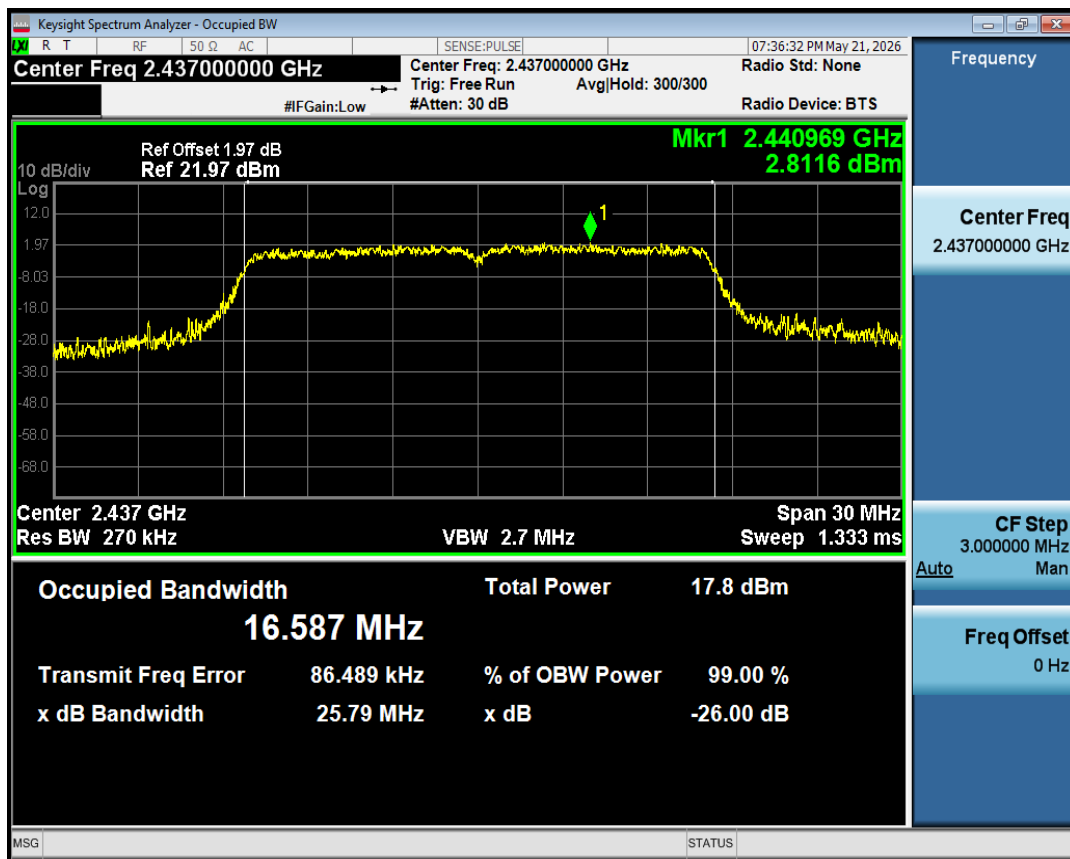
OBW NVNT b 2437MHz Ant1



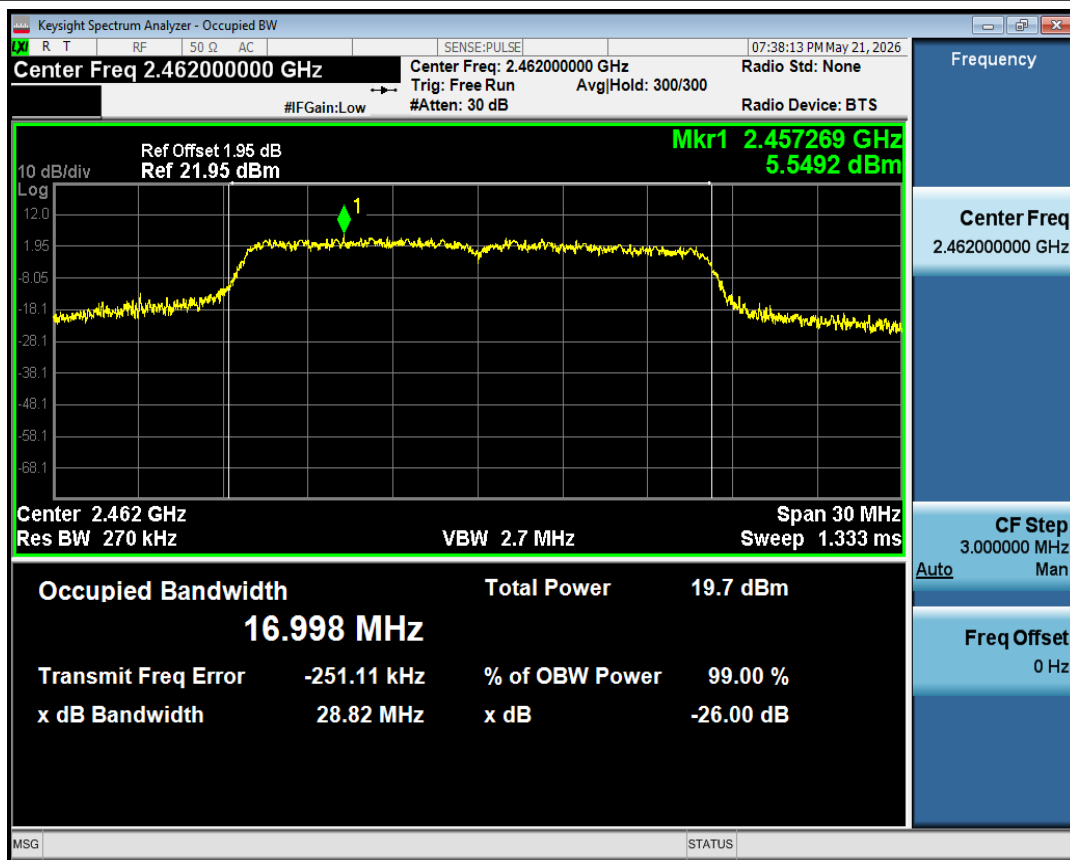
OBW NVNT b 2462MHz Ant1



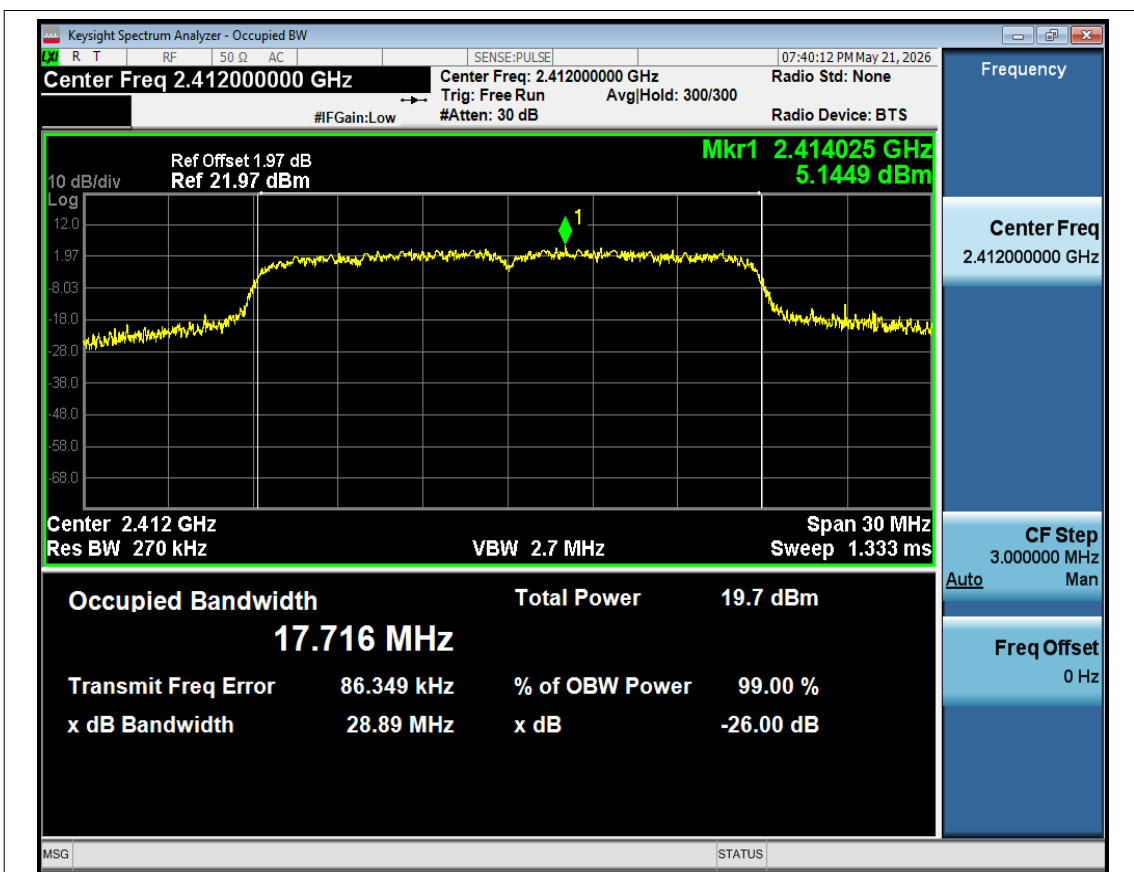
OBW NVNT g 2412MHz Ant1



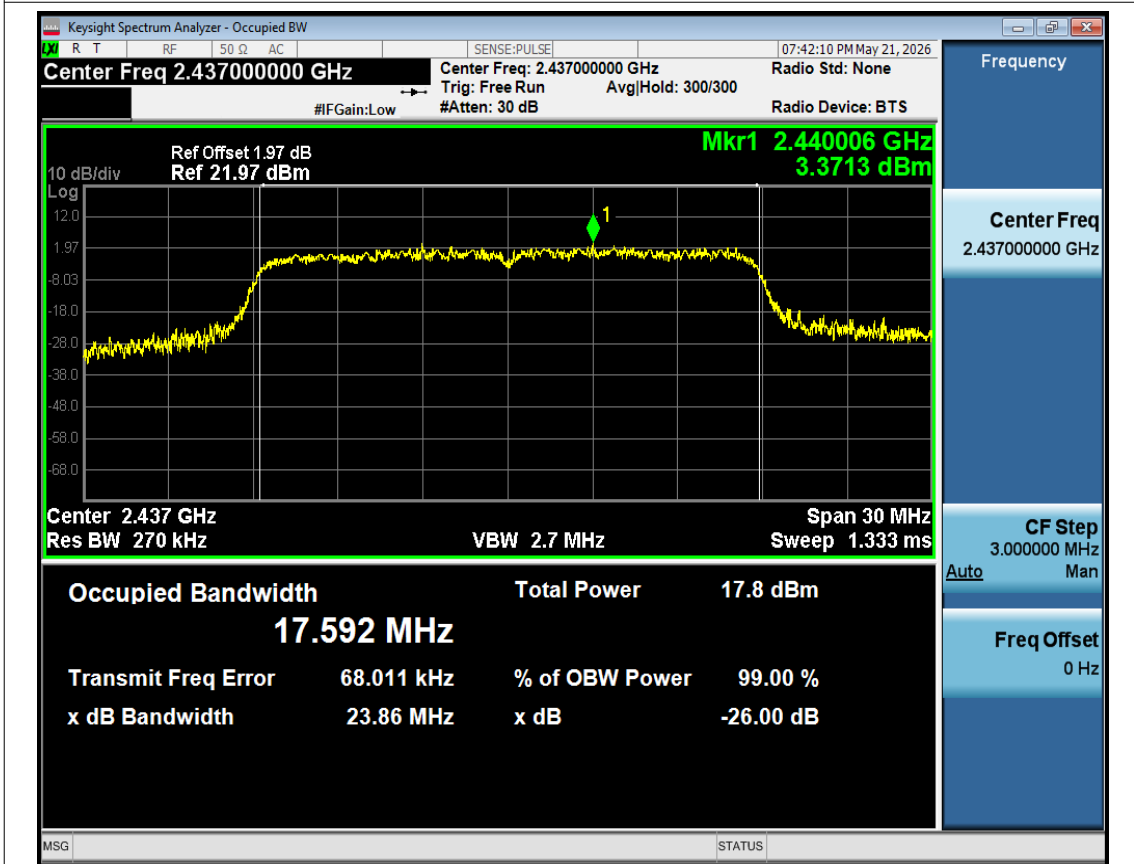
OBW NVNT g 2437MHz Ant1



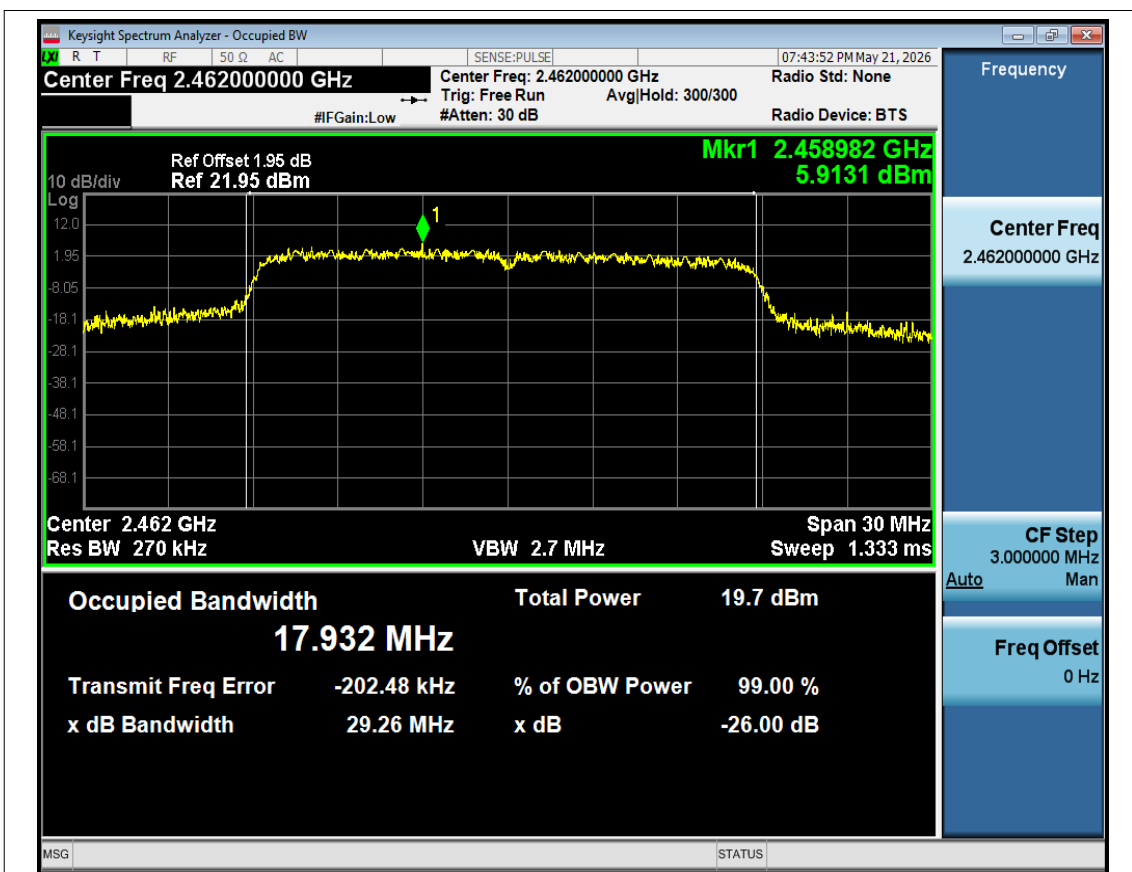
OBW NVNT g 2462MHz Ant1



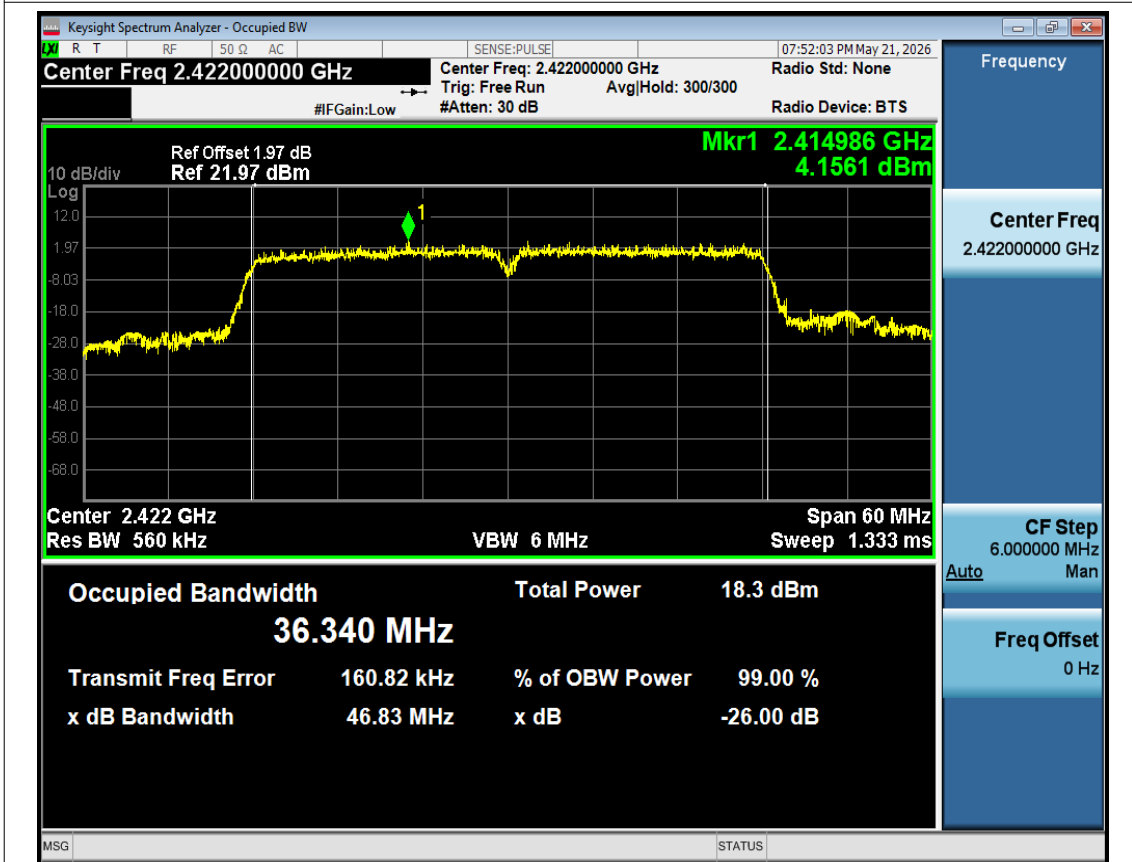
OBW NVNT n20 2412MHz Ant1



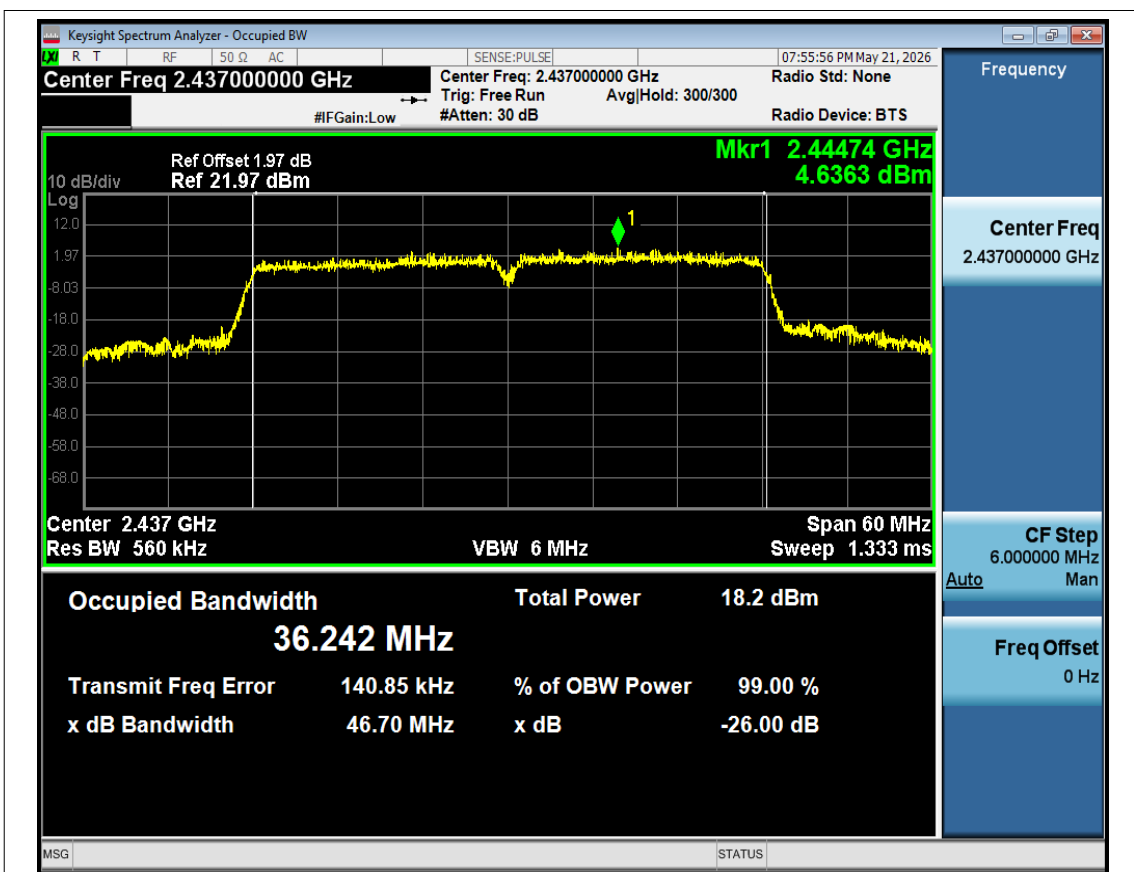
OBW NVNT n20 2437MHz Ant1



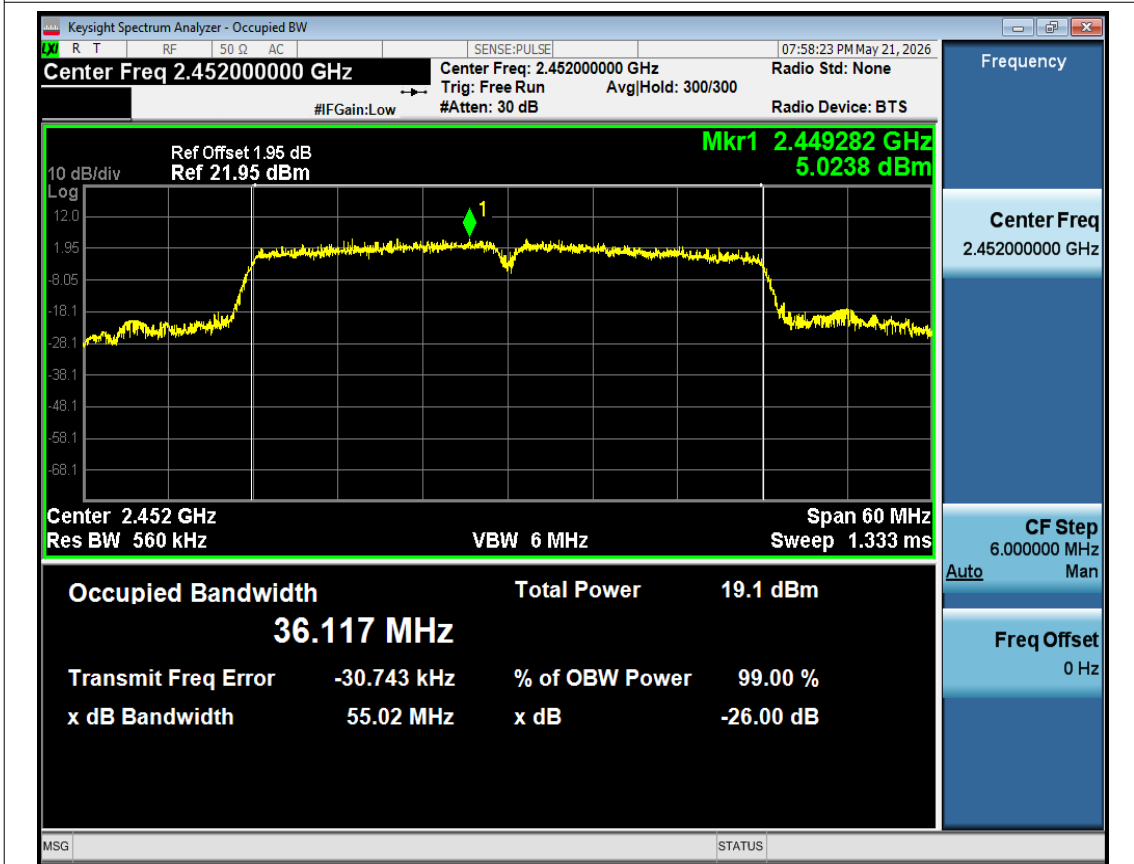
OBW NVNT n20 2462MHz Ant1



OBW NVNT n40 2422MHz Ant1



OBW NVNT n40 2437MHz Ant1



OBW NVNT n40 2452MHz Ant1

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	-17.72	0.52	-17.2	8	Pass
NVNT	b	2437	Ant1	-19.73	0.52	-19.21	8	Pass
NVNT	b	2462	Ant1	-18.19	0.52	-17.67	8	Pass
NVNT	g	2412	Ant1	-19.84	2.48	-17.36	8	Pass
NVNT	g	2437	Ant1	-22.42	2.49	-19.93	8	Pass
NVNT	g	2462	Ant1	-20.77	2.48	-18.29	8	Pass
NVNT	n20	2412	Ant1	-21.53	2.49	-19.04	8	Pass
NVNT	n20	2437	Ant1	-23.18	2.49	-20.69	8	Pass
NVNT	n20	2462	Ant1	-21.1	2.47	-18.63	8	Pass
NVNT	n40	2422	Ant1	-26.32	3.4	-22.92	8	Pass
NVNT	n40	2437	Ant1	-25.68	3.4	-22.28	8	Pass
NVNT	n40	2452	Ant1	-24.86	3.37	-21.49	8	Pass
Remark: PSD(dBm/3kHz)=PSD(dBm/30kHz)-10Log(30kHz/3kHz)								



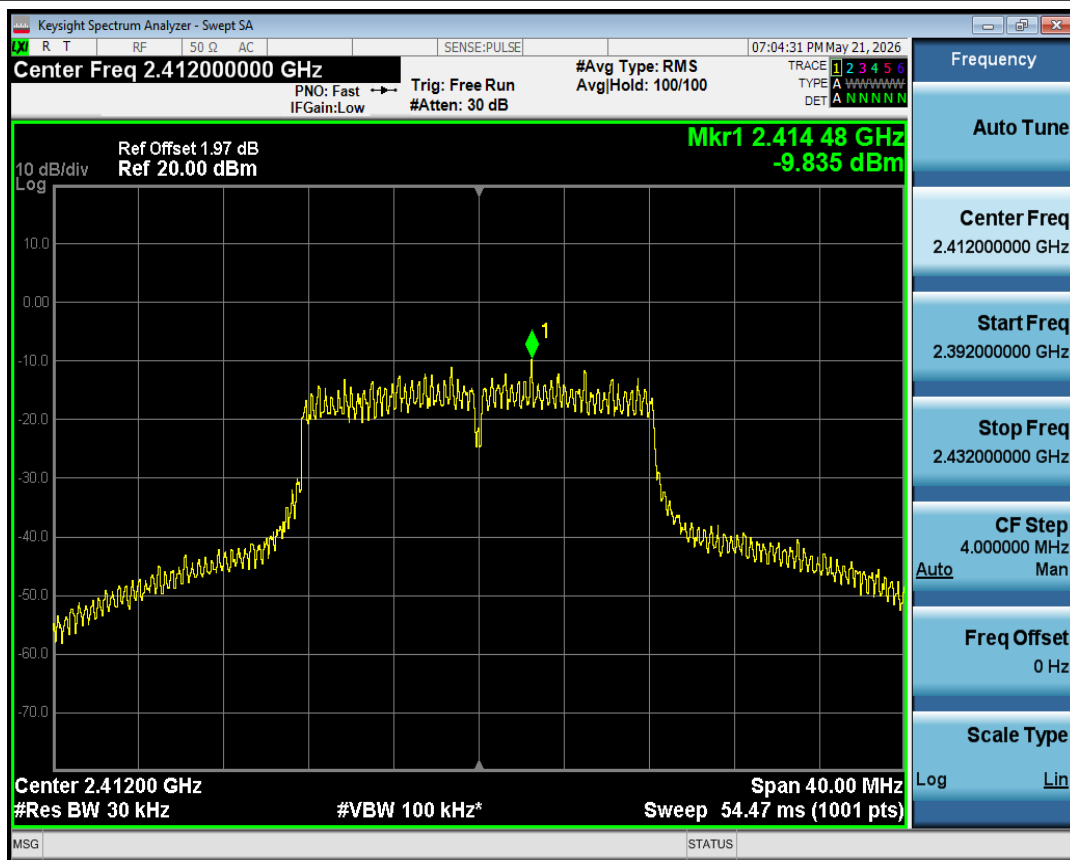
PSD NVNT b 2412MHz Ant1



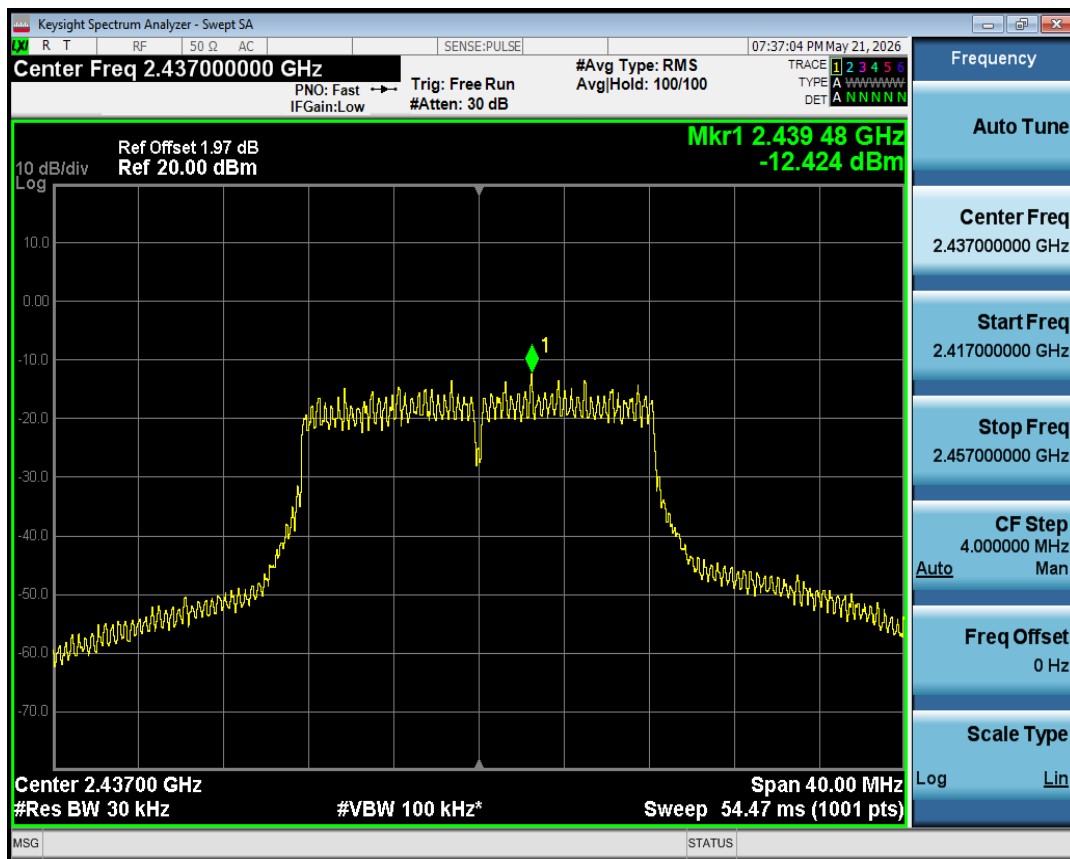
PSD NVNT b 2437MHz Ant1



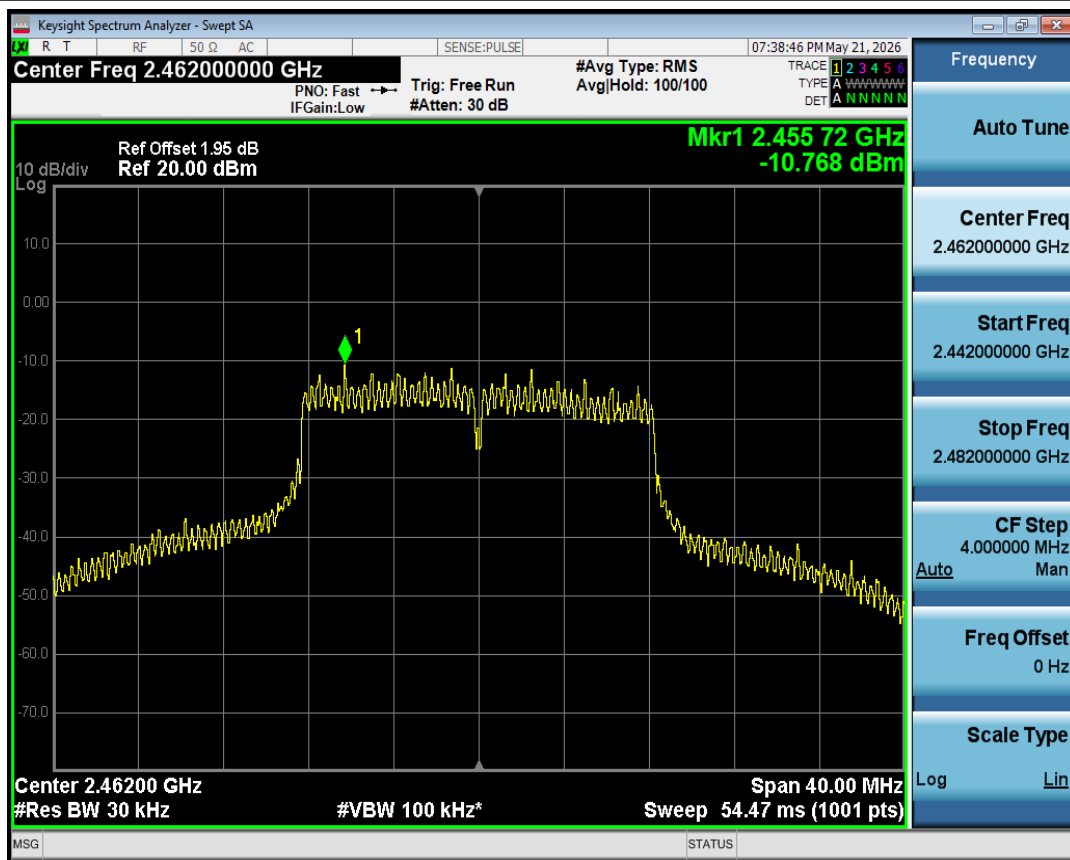
PSD NVNT b 2462MHz Ant1



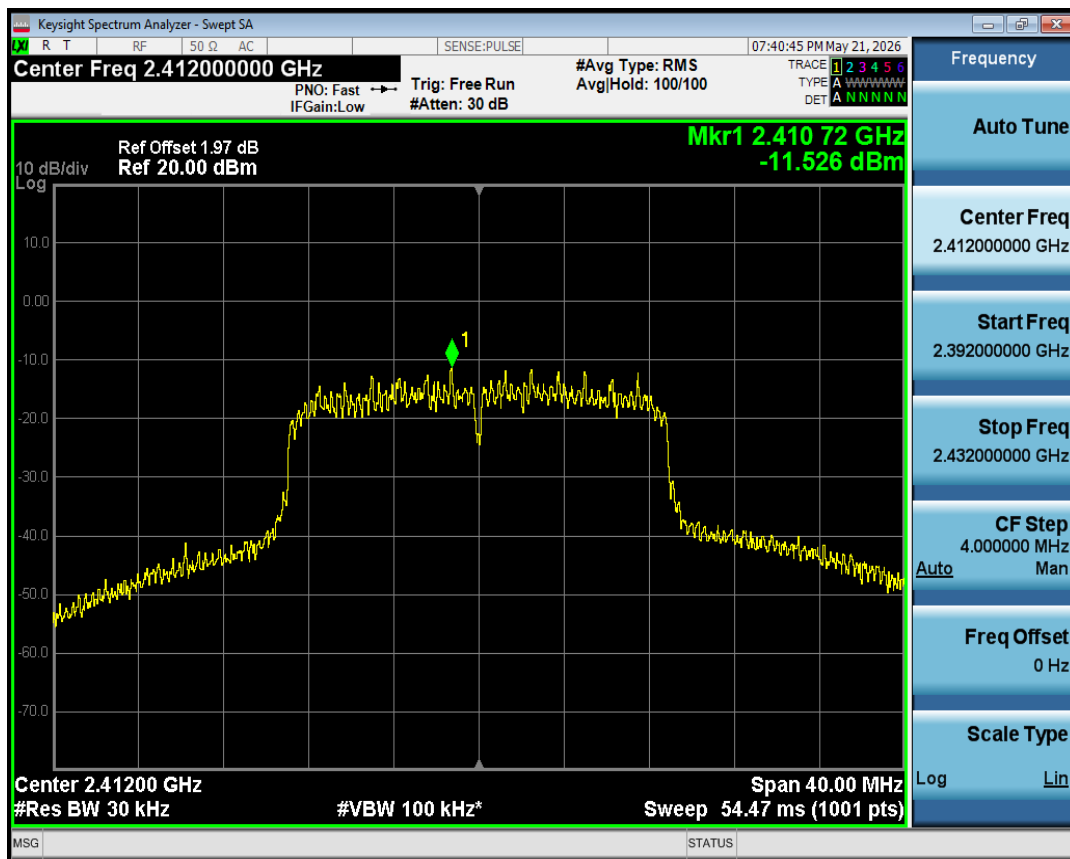
PSD NVNT g 2412MHz Ant1



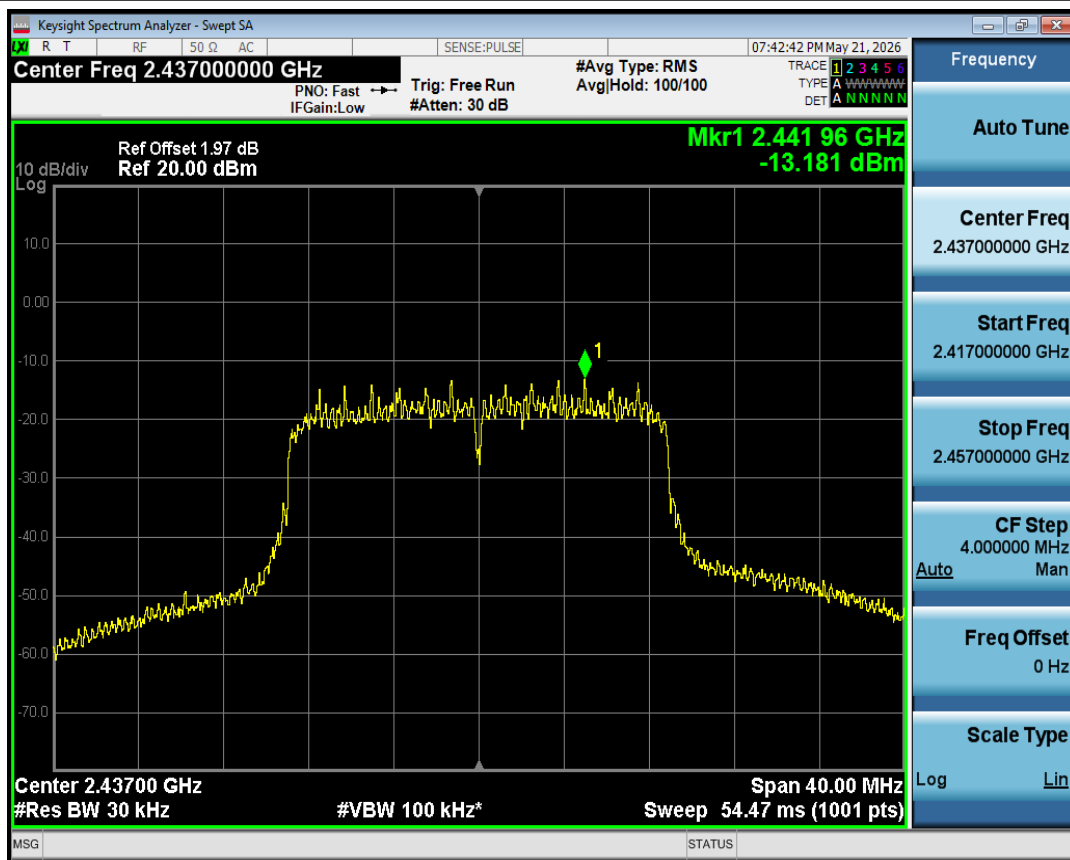
PSD NVNT g 2437MHz Ant1



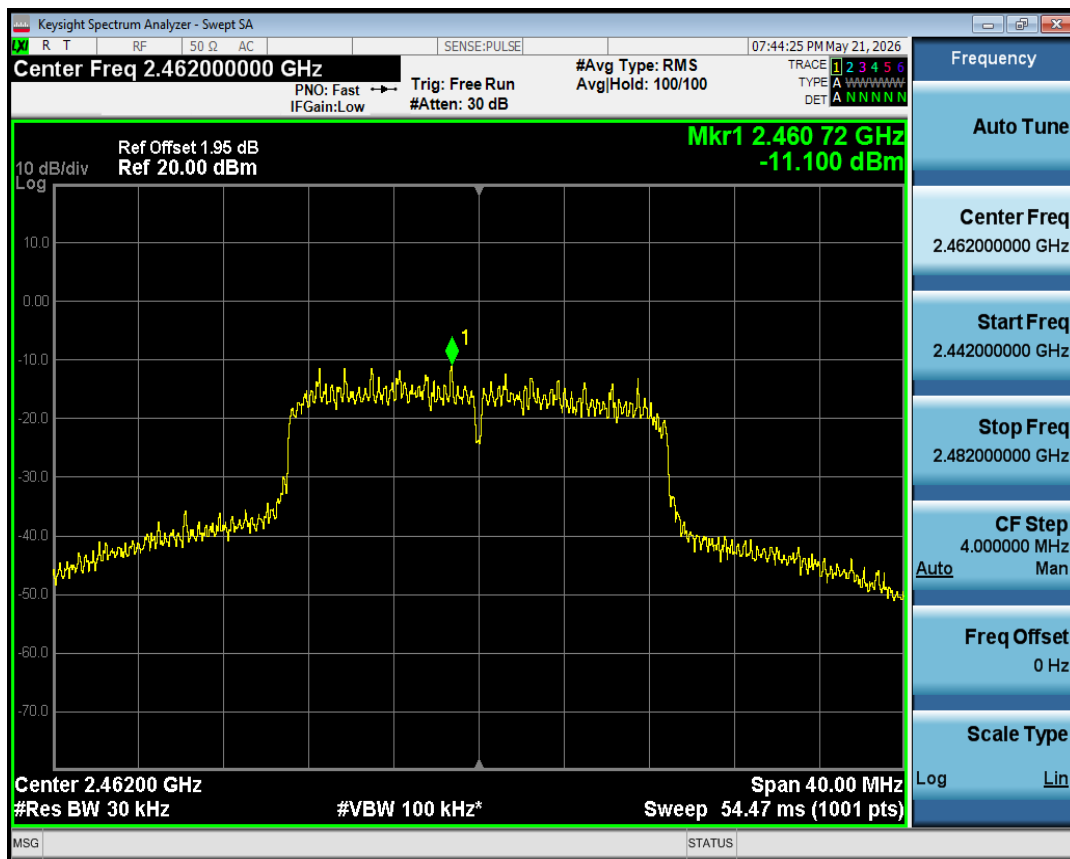
PSD NVNT g 2462MHz Ant1



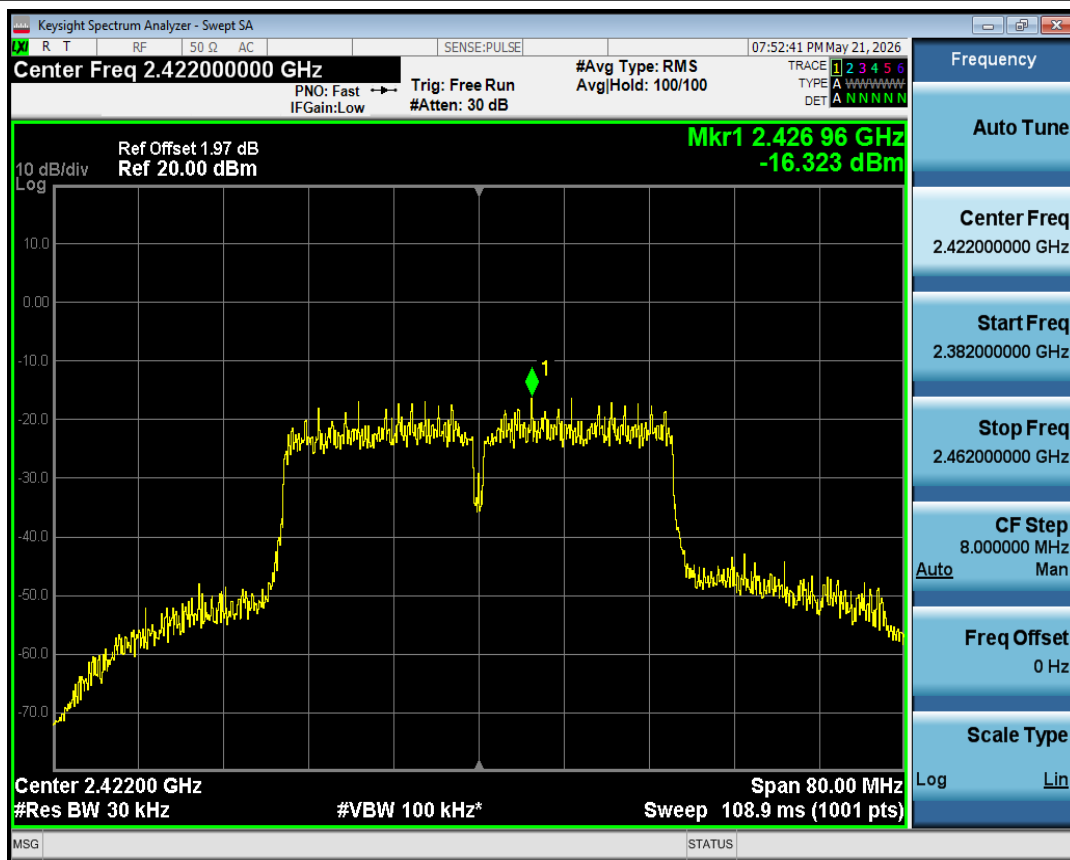
PSD NVNT n20 2412MHz Ant1



PSD NVNT n20 2437MHz Ant1



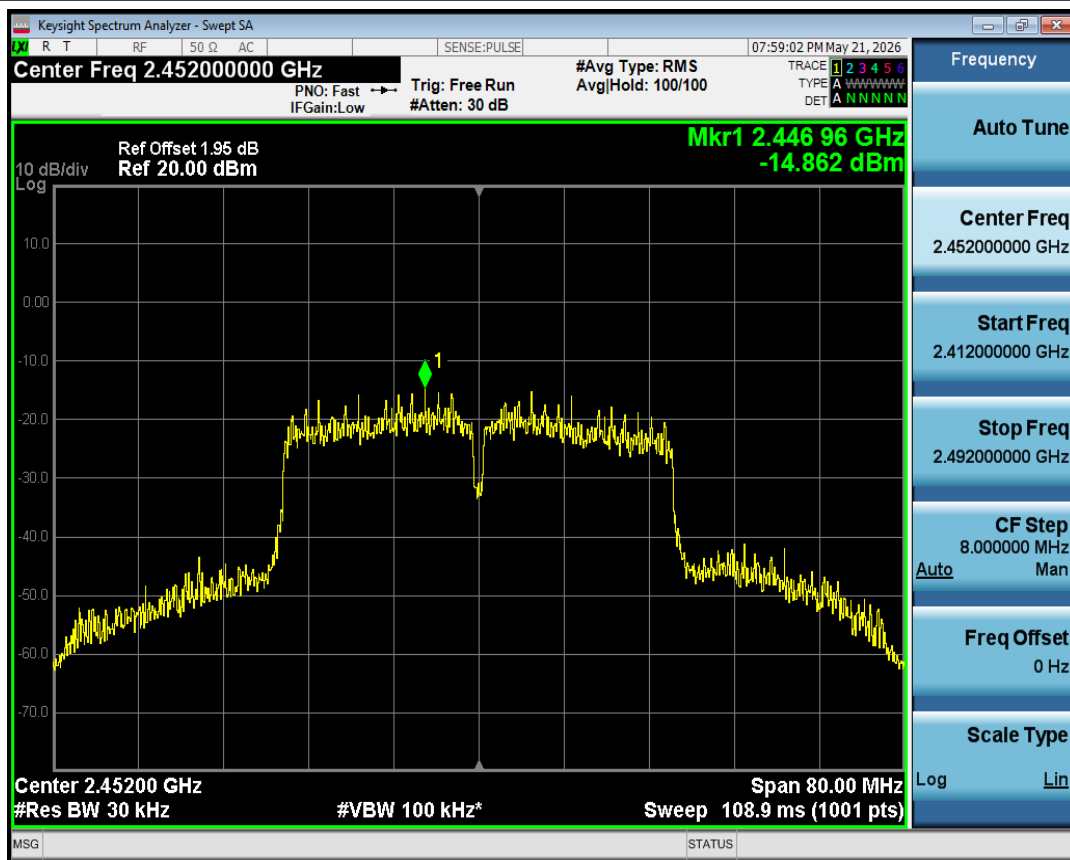
PSD NVNT n20 2462MHz Ant1



PSD NVNT n40 2422MHz Ant1



PSD NVNT n40 2437MHz Ant1



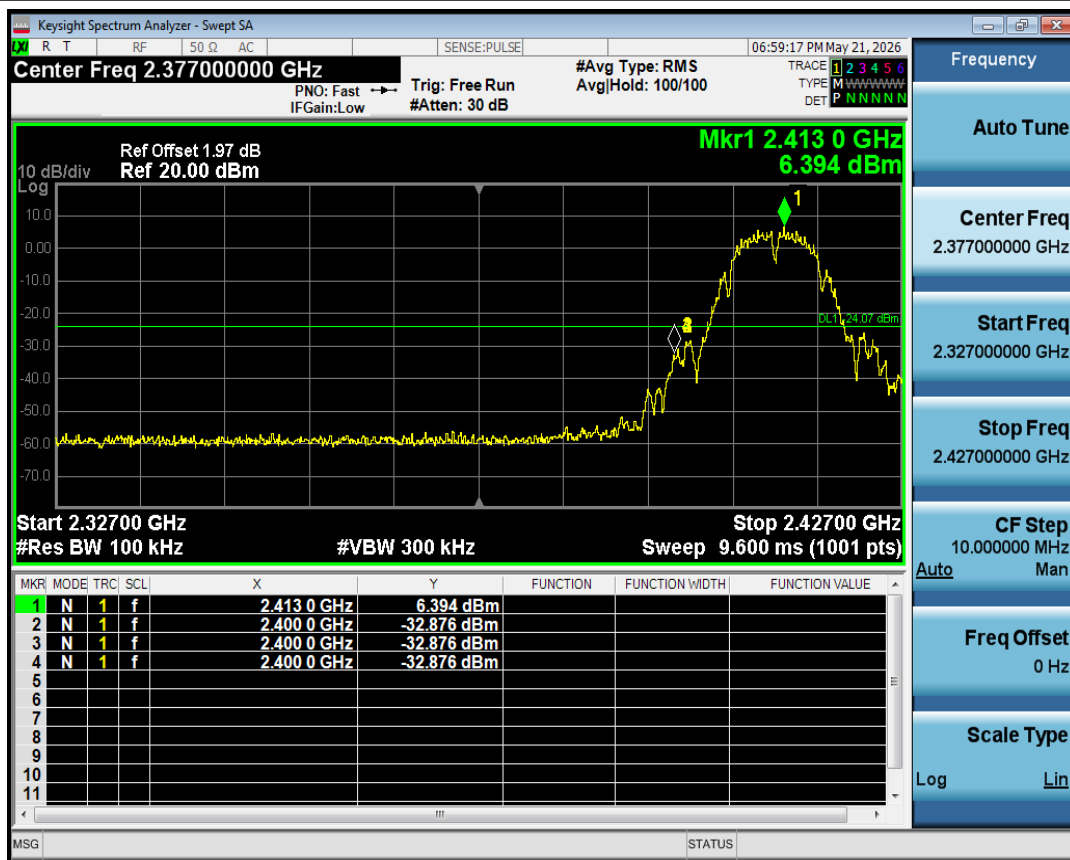
PSD NVNT n40 2452MHz Ant1

Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-38.8	-30	Pass
NVNT	b	2462	Ant1	-58.95	-30	Pass
NVNT	g	2412	Ant1	-33.56	-30	Pass
NVNT	g	2462	Ant1	-40.7	-30	Pass
NVNT	n20	2412	Ant1	-30.67	-30	Pass
NVNT	n20	2462	Ant1	-36.5	-30	Pass
NVNT	n40	2422	Ant1	-30.87	-30	Pass
NVNT	n40	2452	Ant1	-31.48	-30	Pass



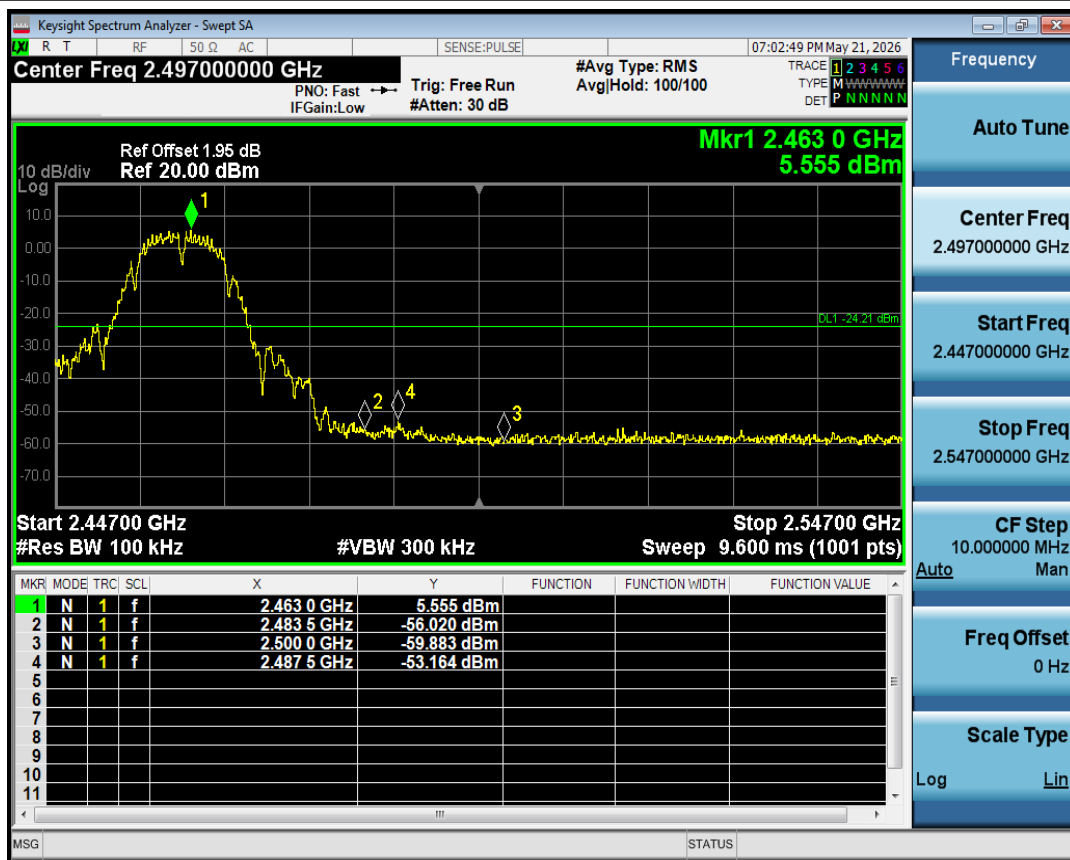
Band Edge NVNT b 2412MHz Ant1 Ref



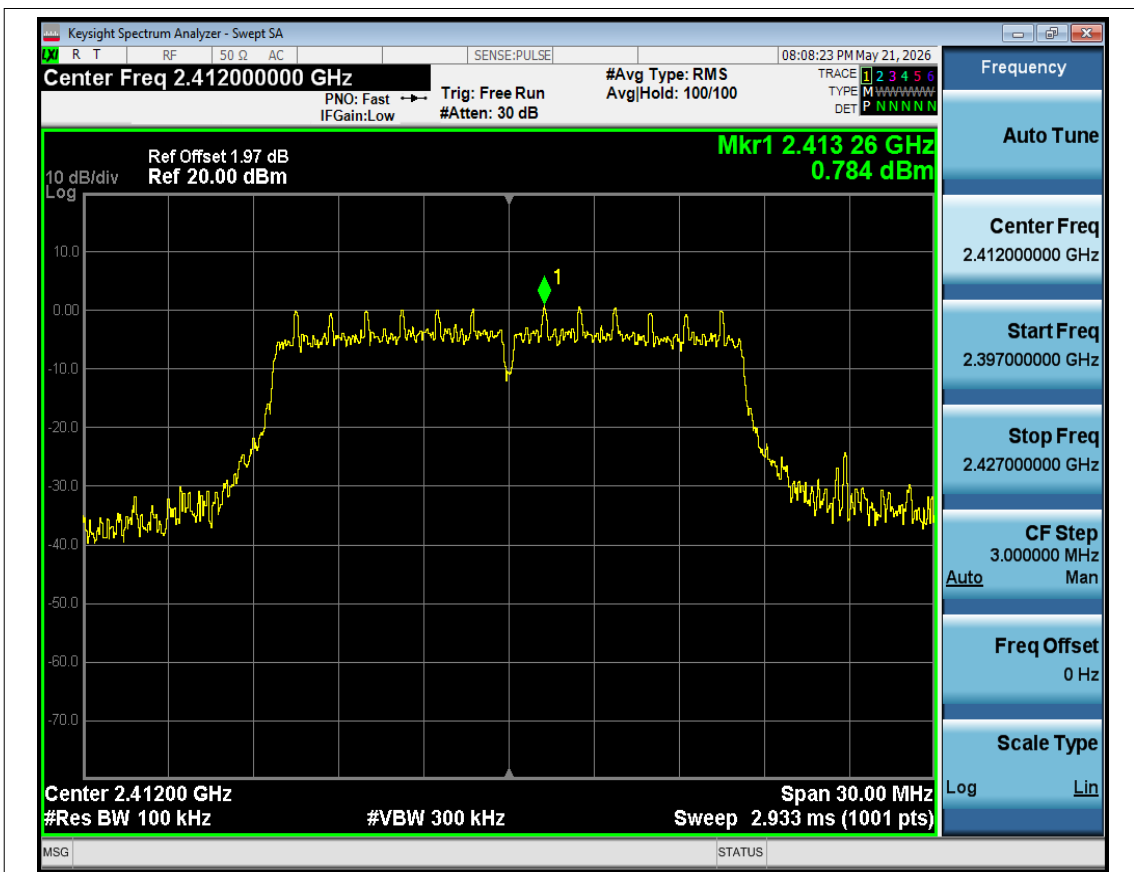
Band Edge NVNT b 2412MHz Ant1 Emission



Band Edge NVNT b 2462MHz Ant1 Ref



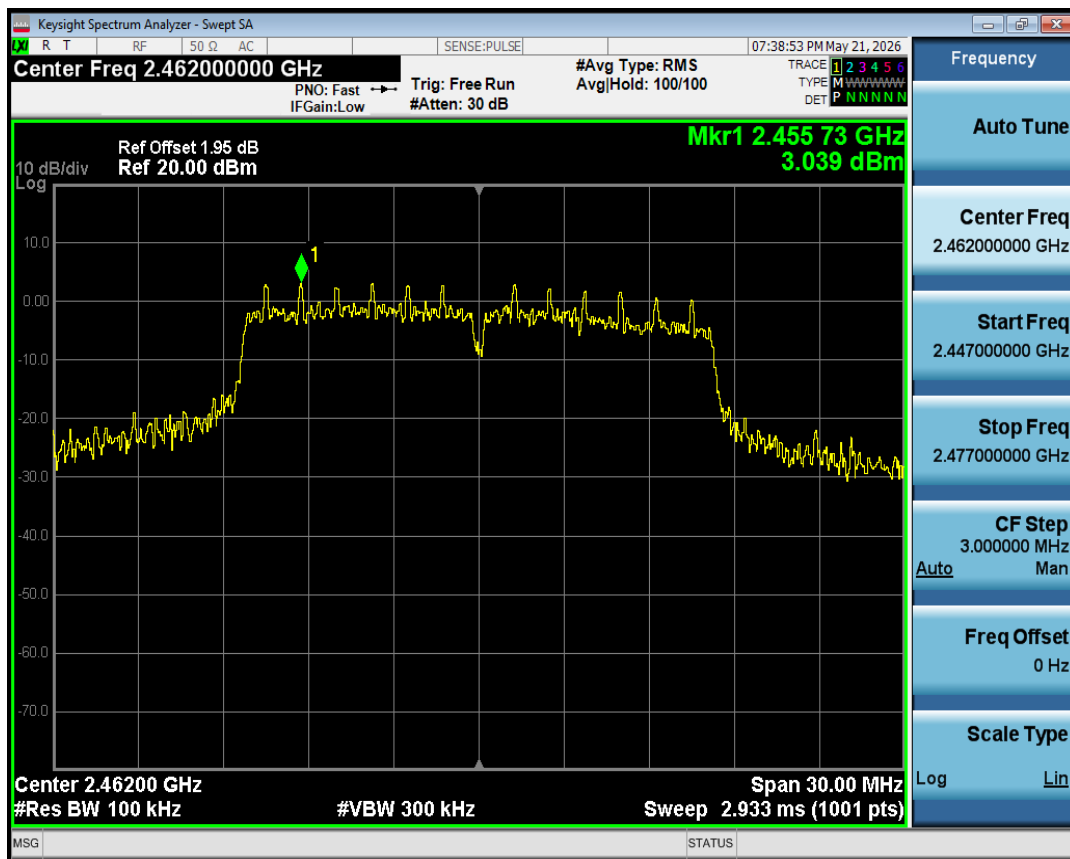
Band Edge NVNT b 2462MHz Ant1 Emission



Band Edge NVNT g 2412MHz Ant1 Ref



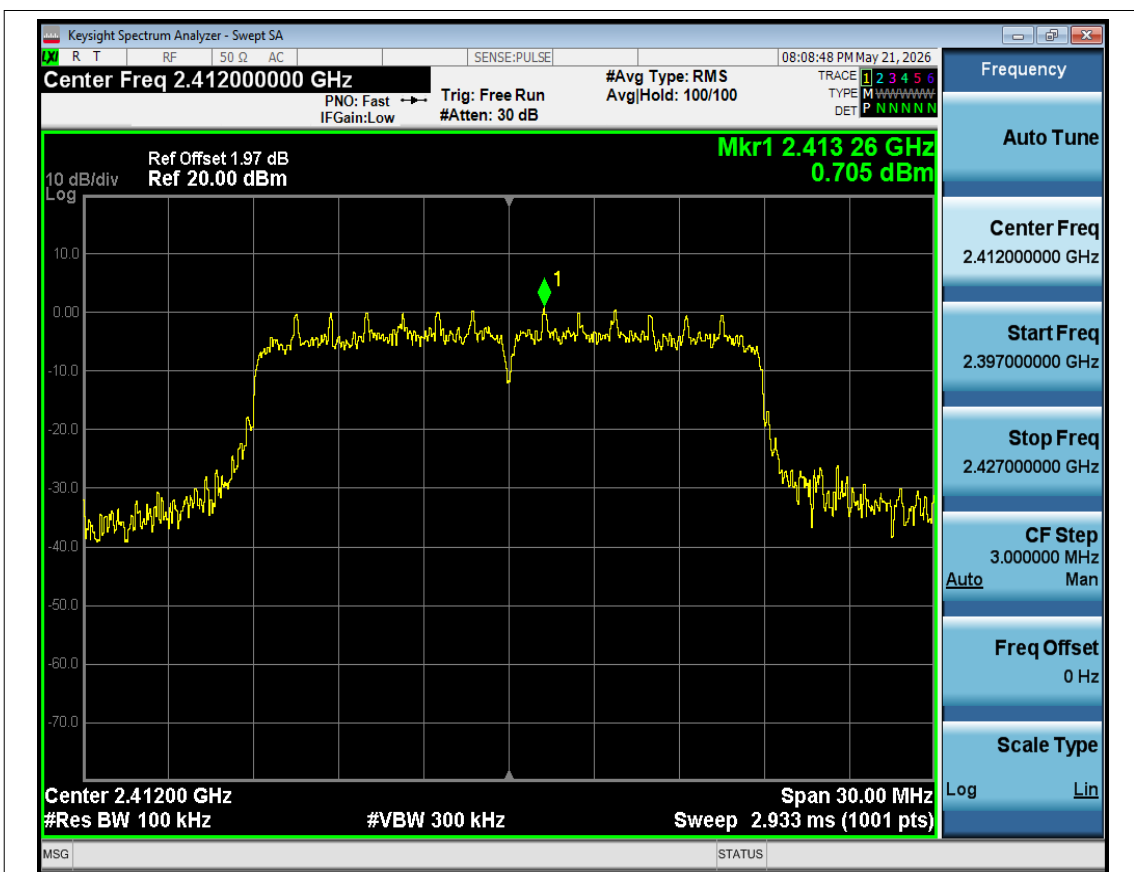
Band Edge NVNT g 2412MHz Ant1 Emission



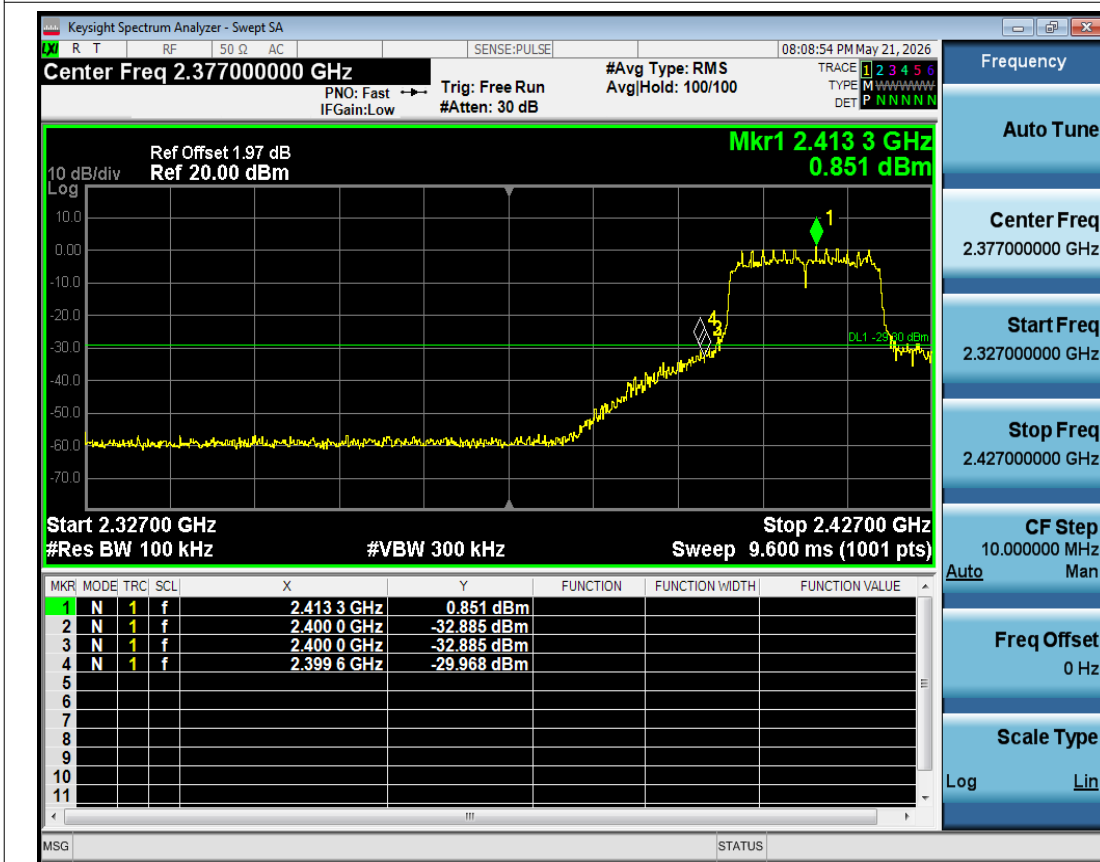
Band Edge NVNT g 2462MHz Ant1 Ref



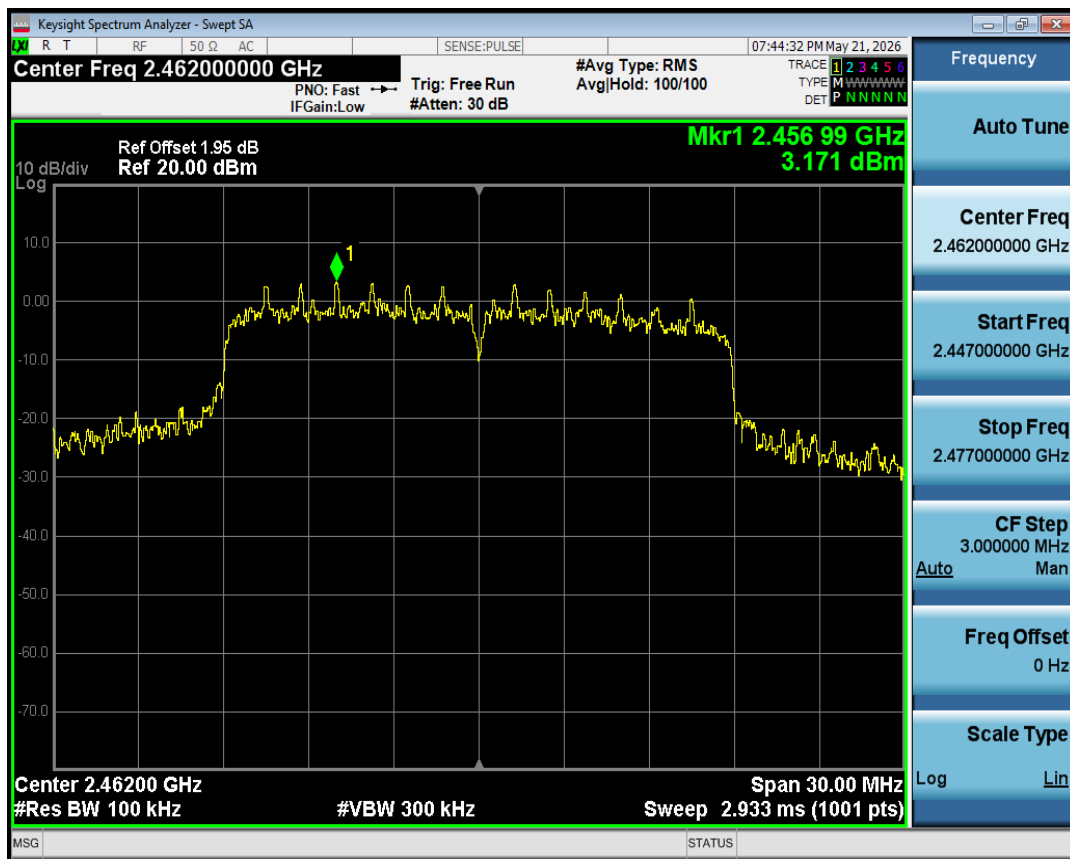
Band Edge NVNT g 2462MHz Ant1 Emission



Band Edge NVNT n20 2412MHz Ant1 Ref



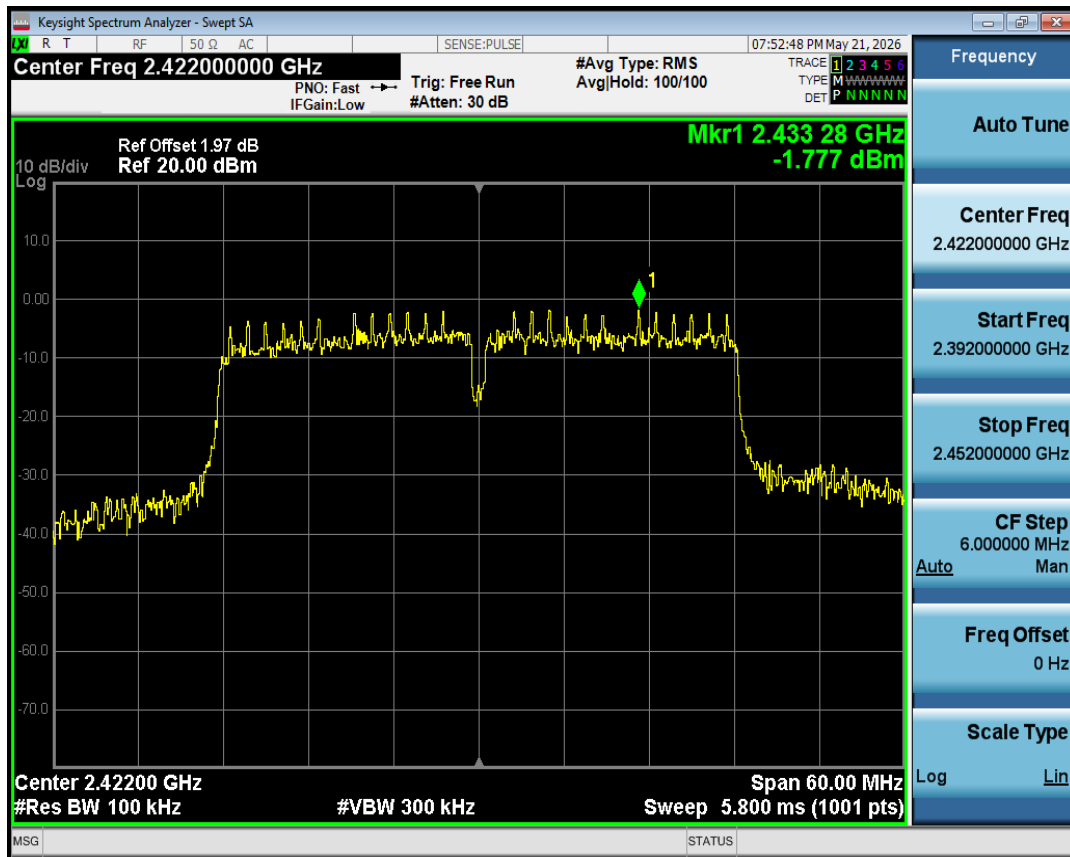
Band Edge NVNT n20 2412MHz Ant1 Emission



Band Edge NVNT n20 2462MHz Ant1 Ref



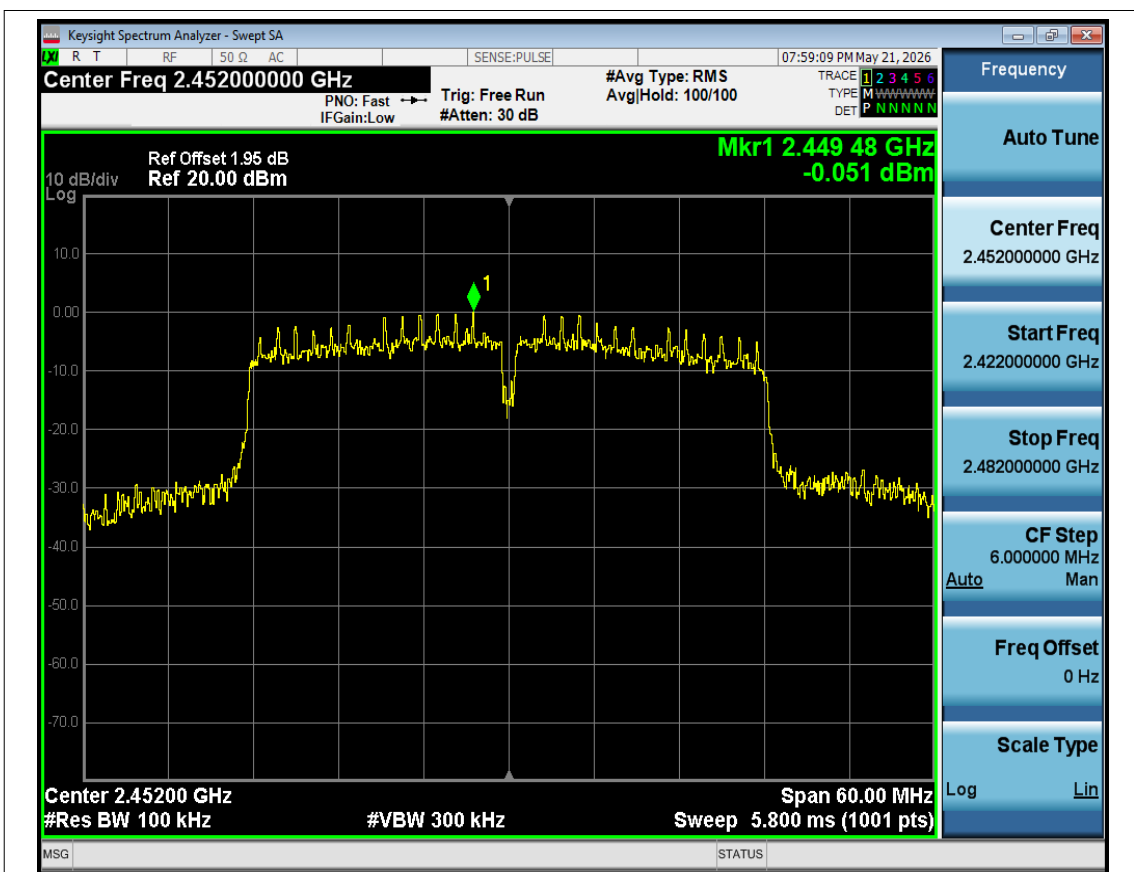
Band Edge NVNT n20 2462MHz Ant1 Emission



Band Edge NVNT n40 2422MHz Ant1 Ref



Band Edge NVNT n40 2422MHz Ant1 Emission



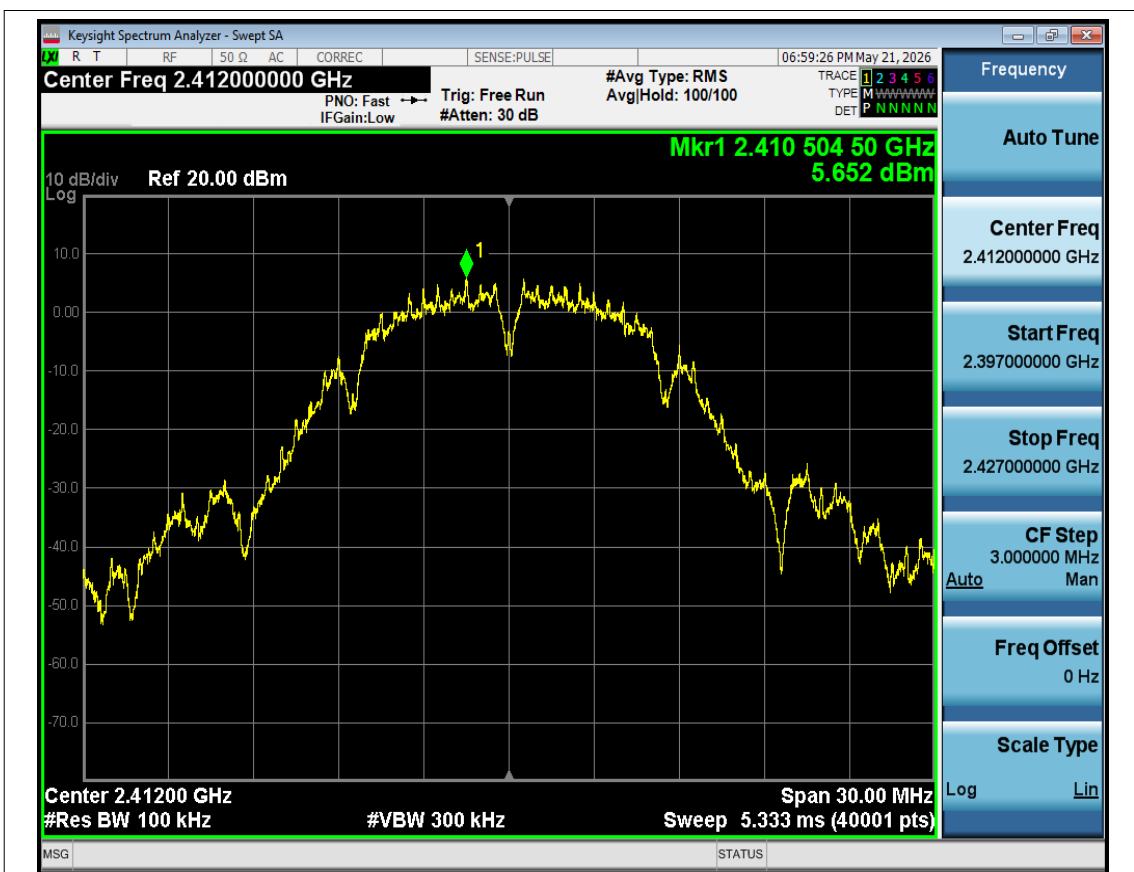
Band Edge NVNT n40 2452MHz Ant1 Ref



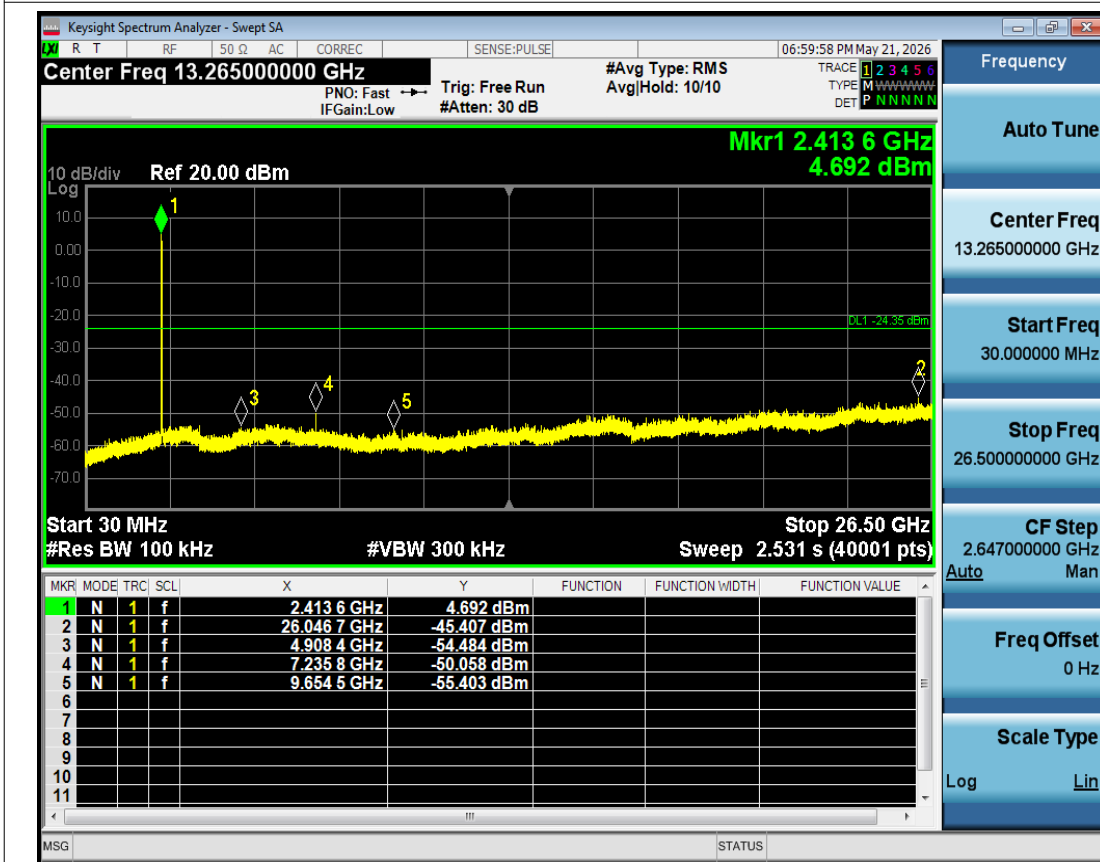
Band Edge NVNT n40 2452MHz Ant1 Emission

Conducted RF Spurious Emission

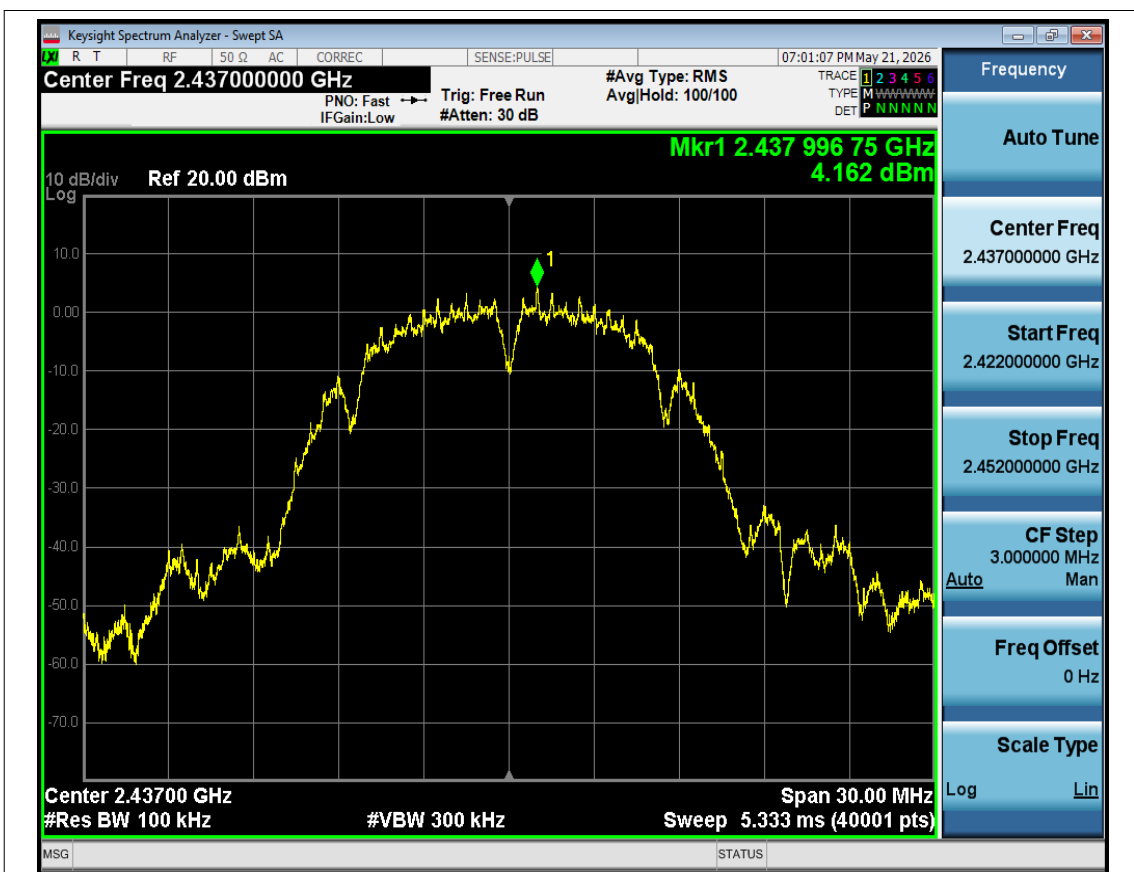
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-51.05	-30	Pass
NVNT	b	2437	Ant1	-49.88	-30	Pass
NVNT	b	2462	Ant1	-52.35	-30	Pass
NVNT	g	2412	Ant1	-48.82	-30	Pass
NVNT	g	2437	Ant1	-46.61	-30	Pass
NVNT	g	2462	Ant1	-49.56	-30	Pass
NVNT	n20	2412	Ant1	-48.19	-30	Pass
NVNT	n20	2437	Ant1	-46.99	-30	Pass
NVNT	n20	2462	Ant1	-49.49	-30	Pass
NVNT	n40	2422	Ant1	-44.76	-30	Pass
NVNT	n40	2437	Ant1	-44.78	-30	Pass
NVNT	n40	2452	Ant1	-45.96	-30	Pass



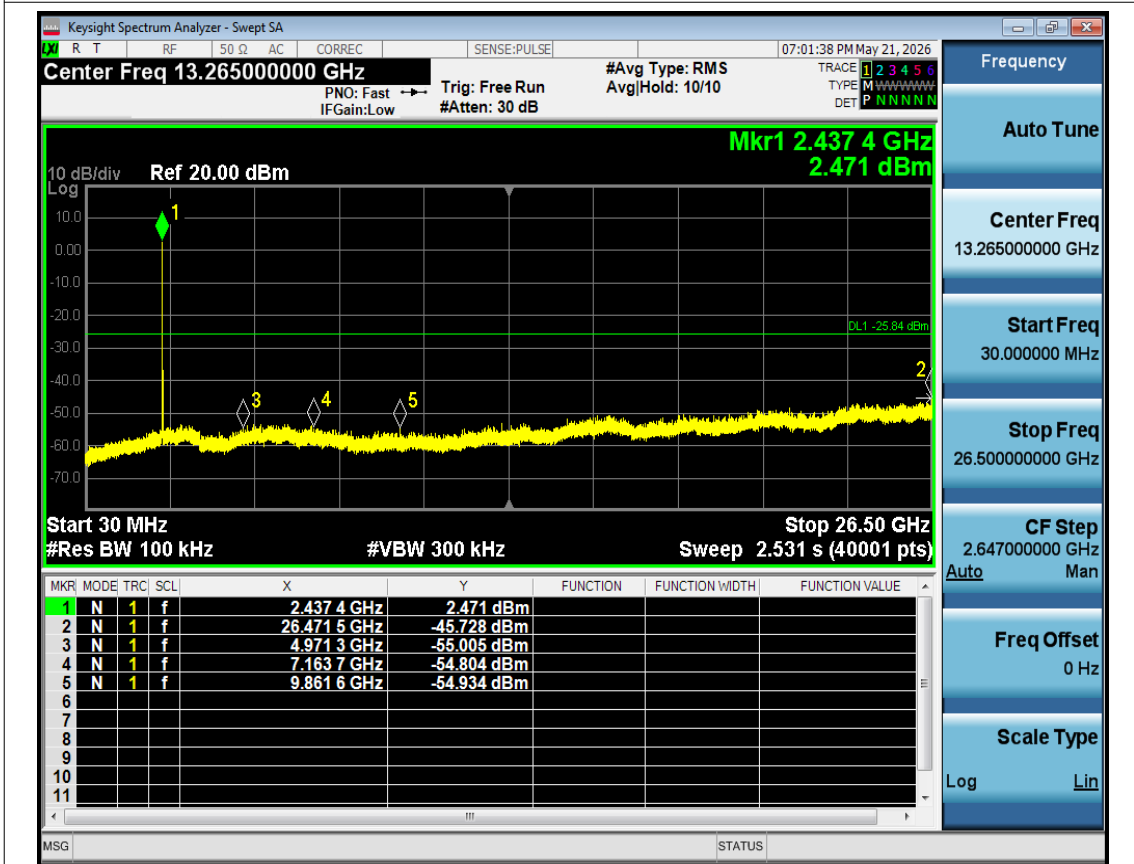
Tx. Spurious NVNT b 2412MHz Ant1 Ref



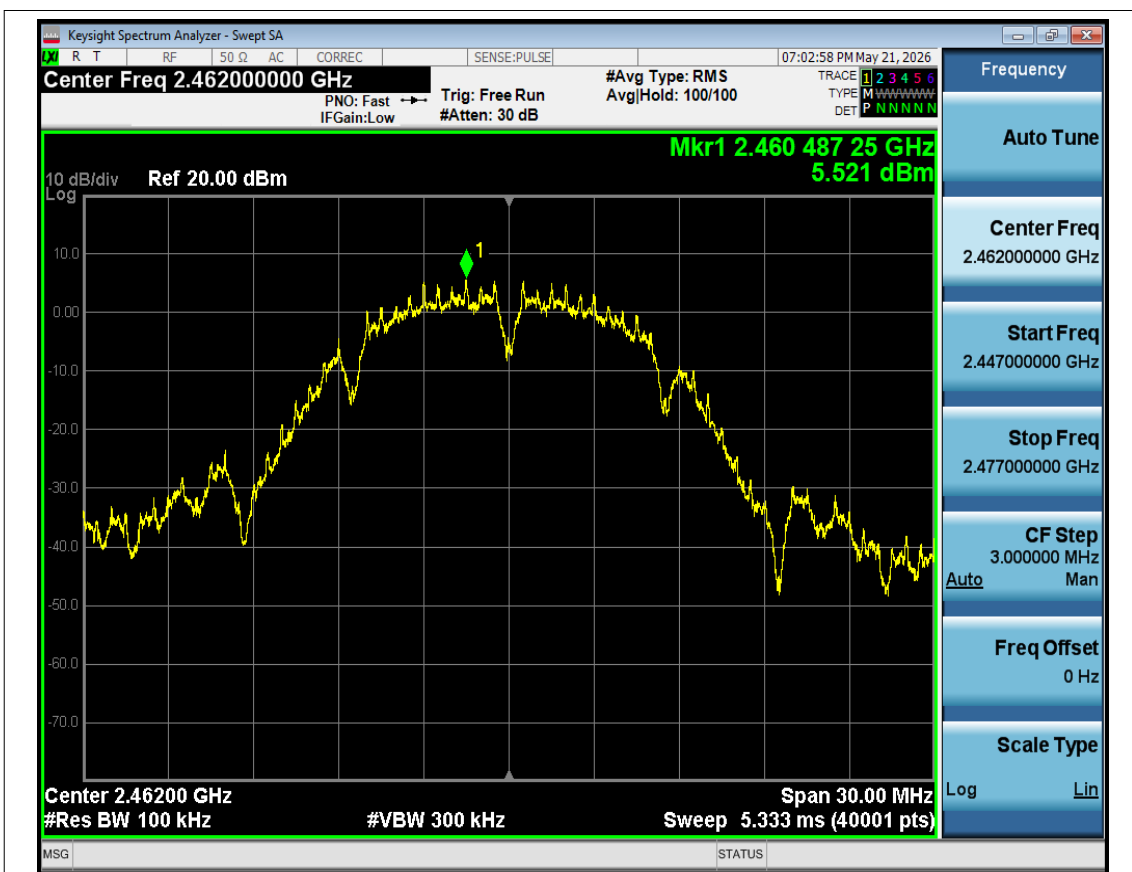
Tx. Spurious NVNT b 2412MHz Ant1 Emission



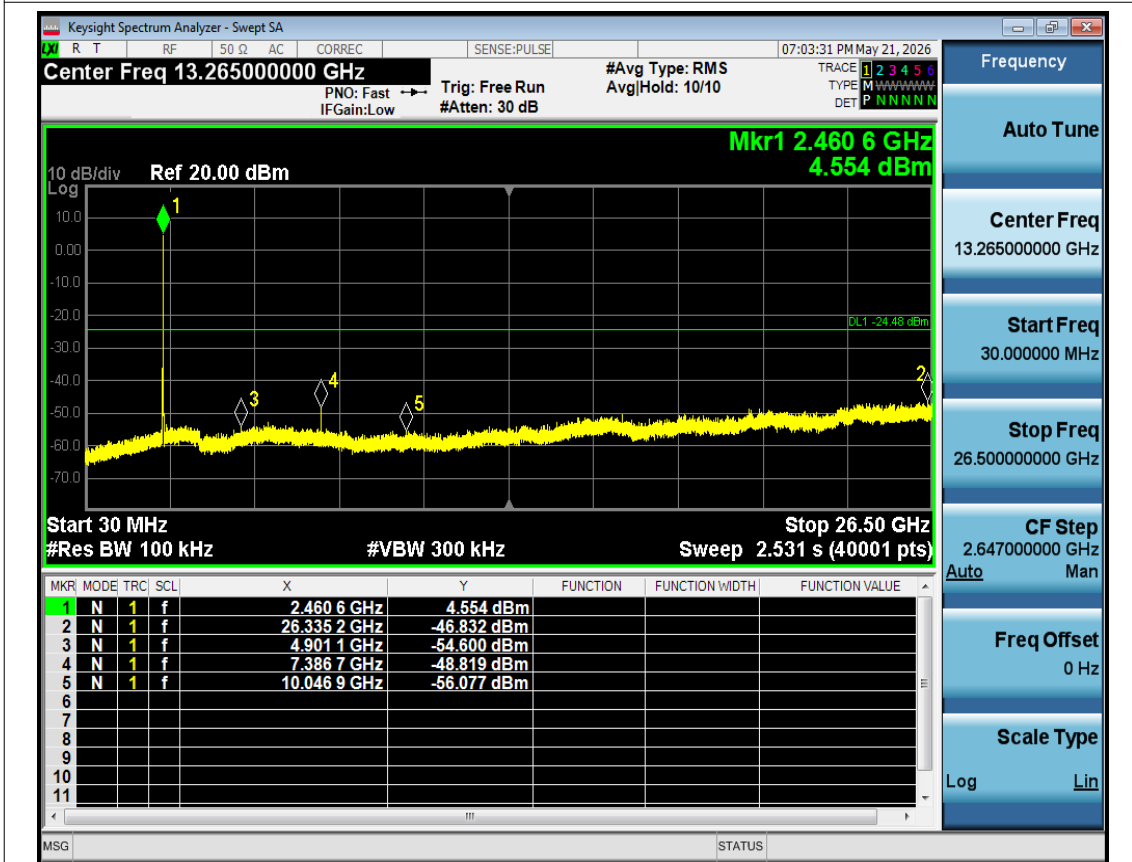
Tx. Spurious NVNT b 2437MHz Ant1 Ref



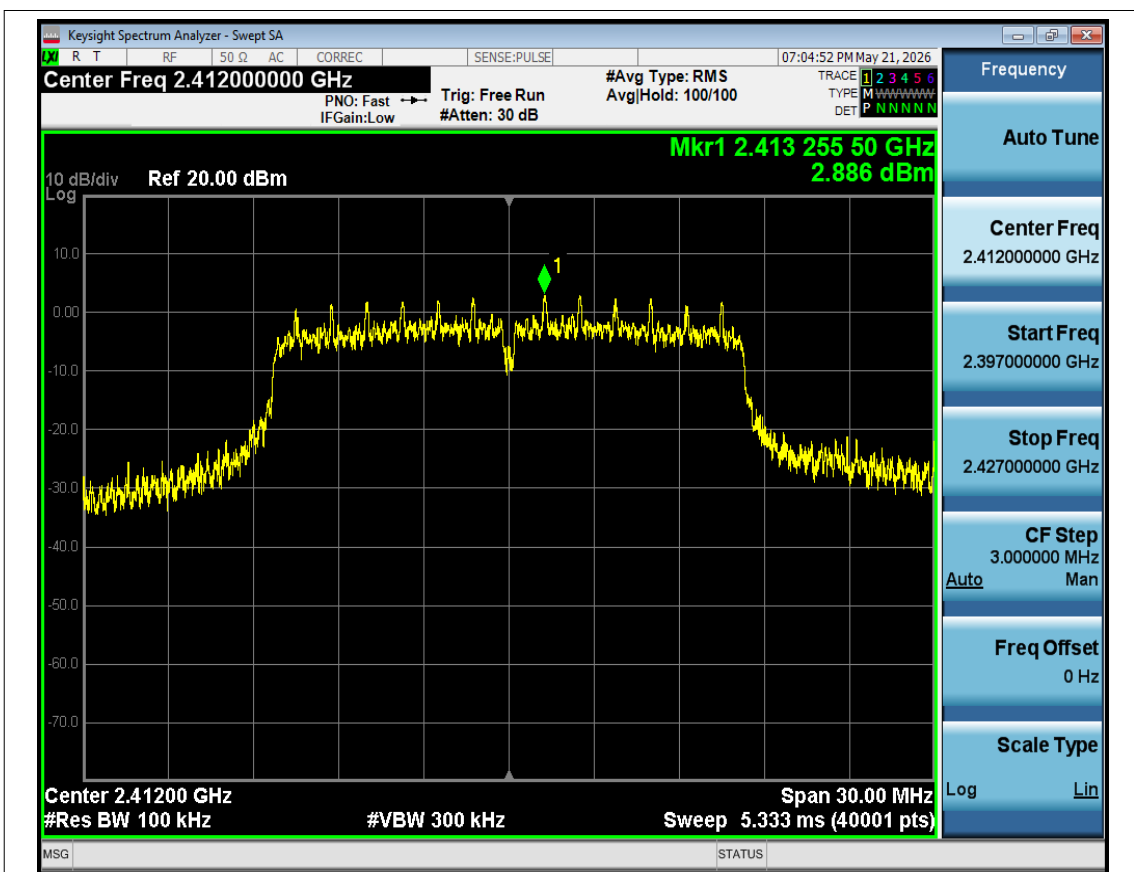
Tx. Spurious NVNT b 2437MHz Ant1 Emission



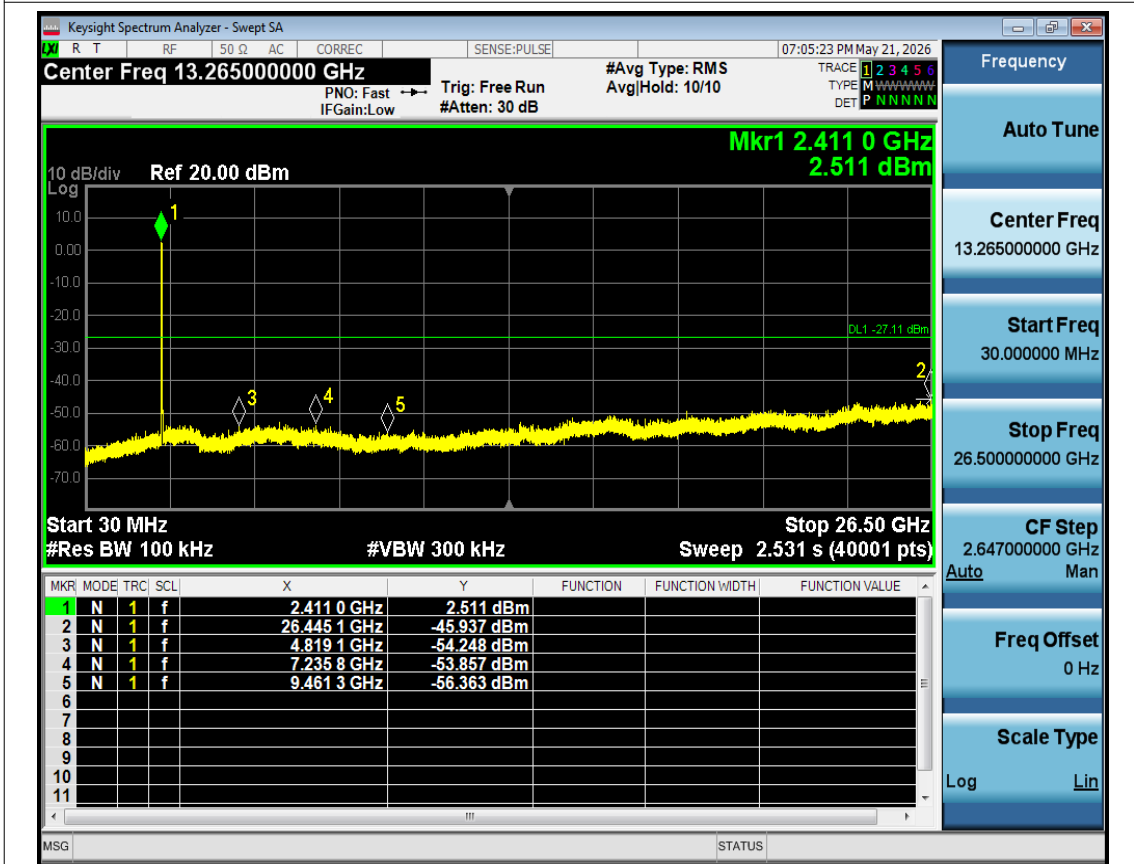
Tx. Spurious NVNT b 2462MHz Ant1 Ref



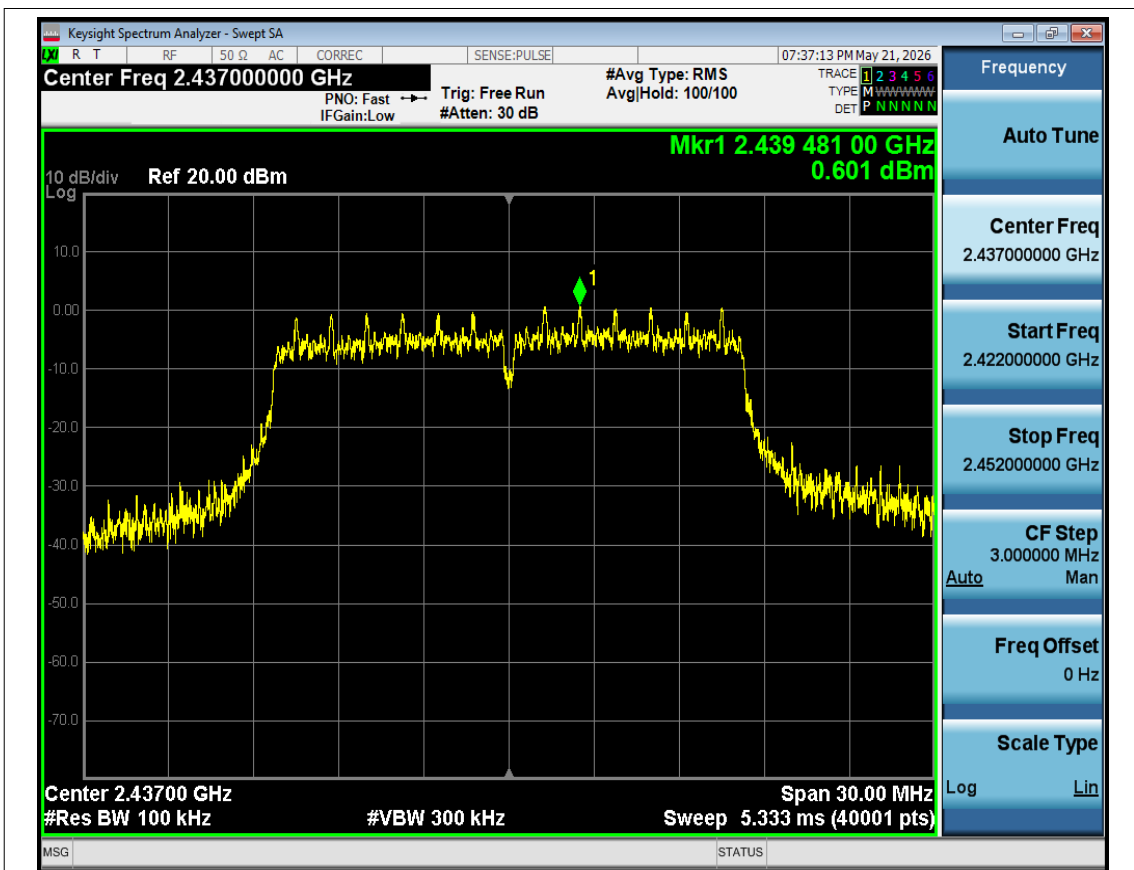
Tx. Spurious NVNT b 2462MHz Ant1 Emission



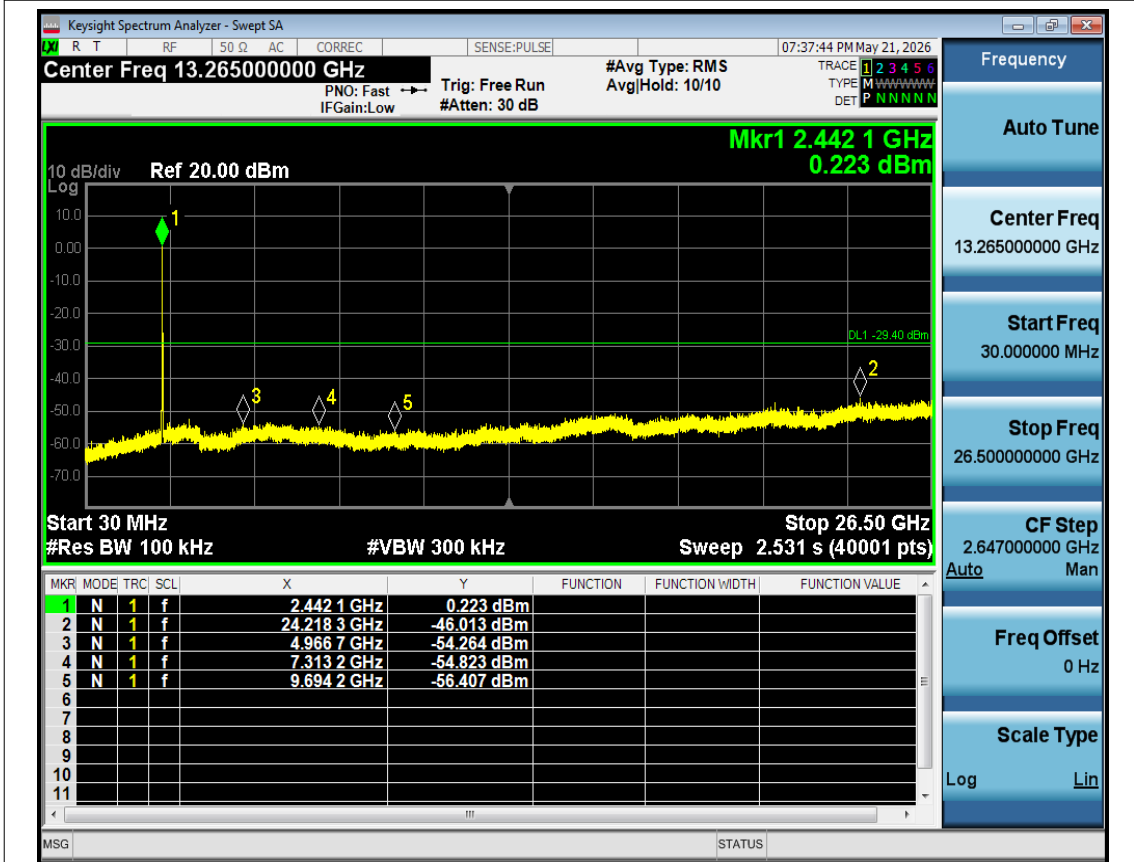
Tx. Spurious NVNT g 2412MHz Ant1 Ref



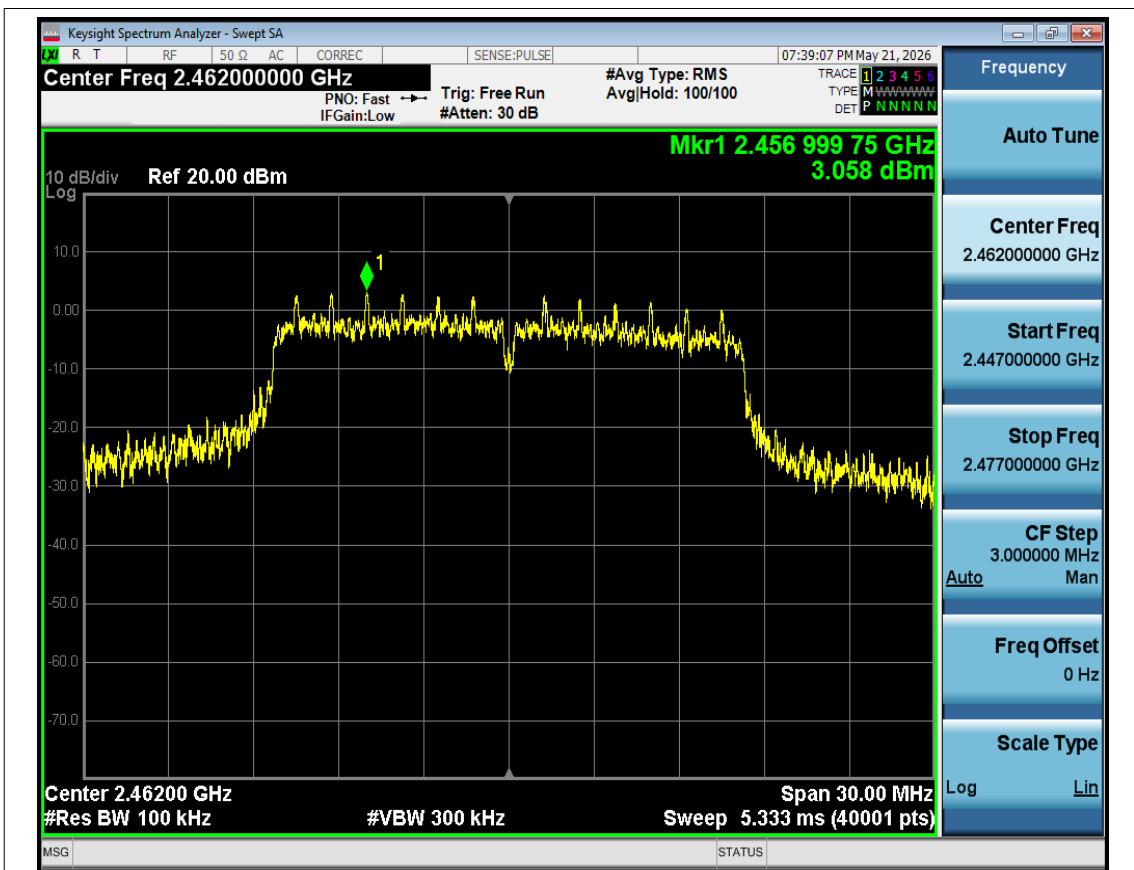
Tx. Spurious NVNT g 2412MHz Ant1 Emission



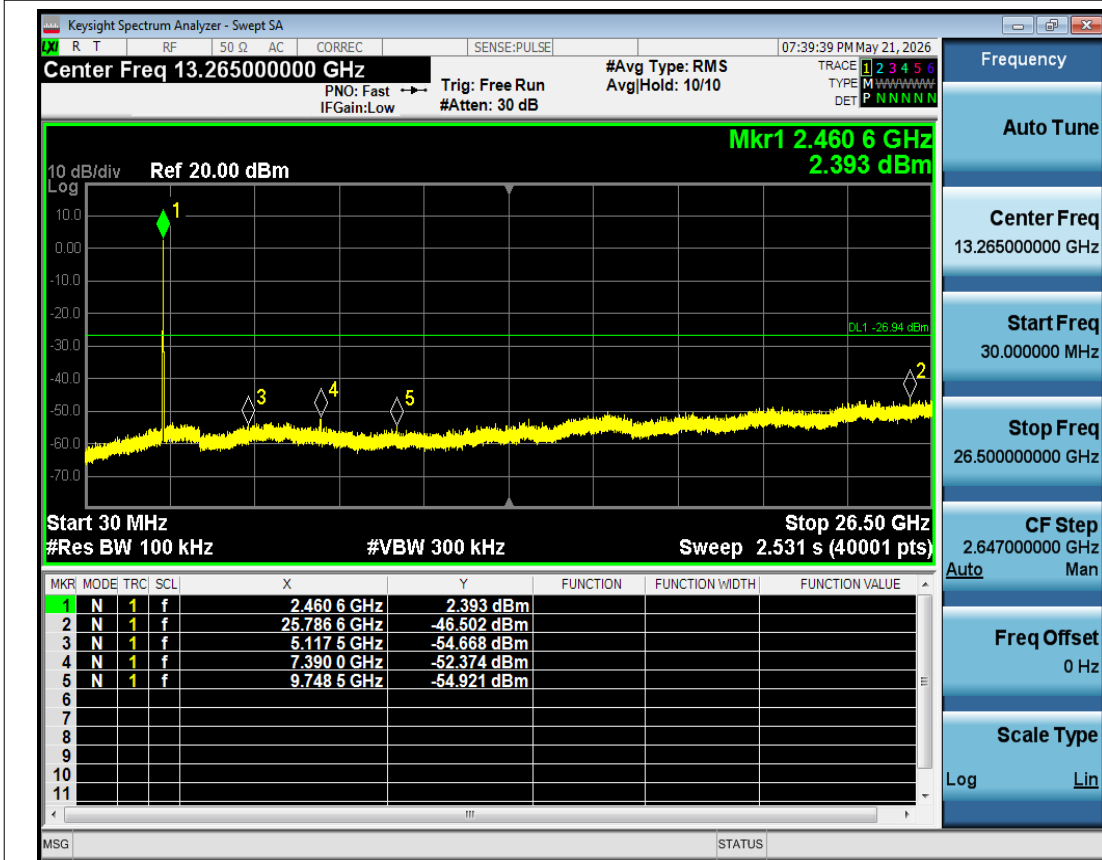
Tx. Spurious NVNT g 2437MHz Ant1 Ref



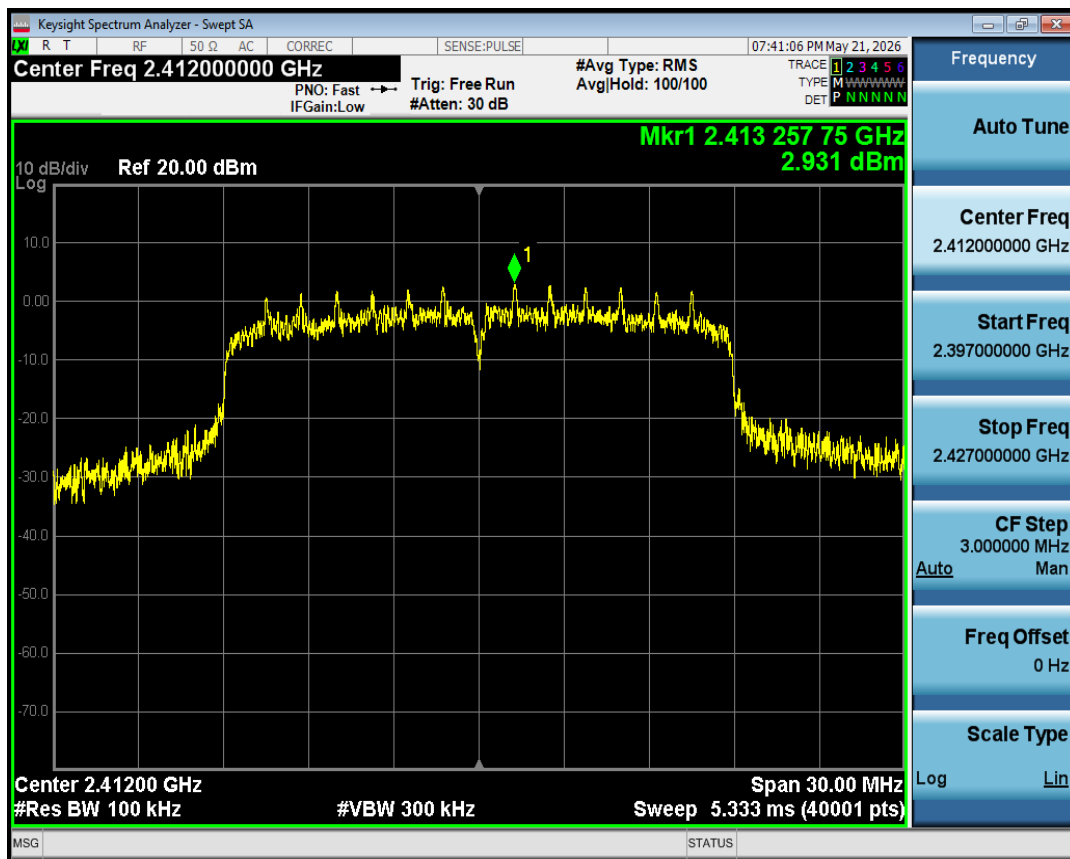
Tx. Spurious NVNT g 2437MHz Ant1 Emission



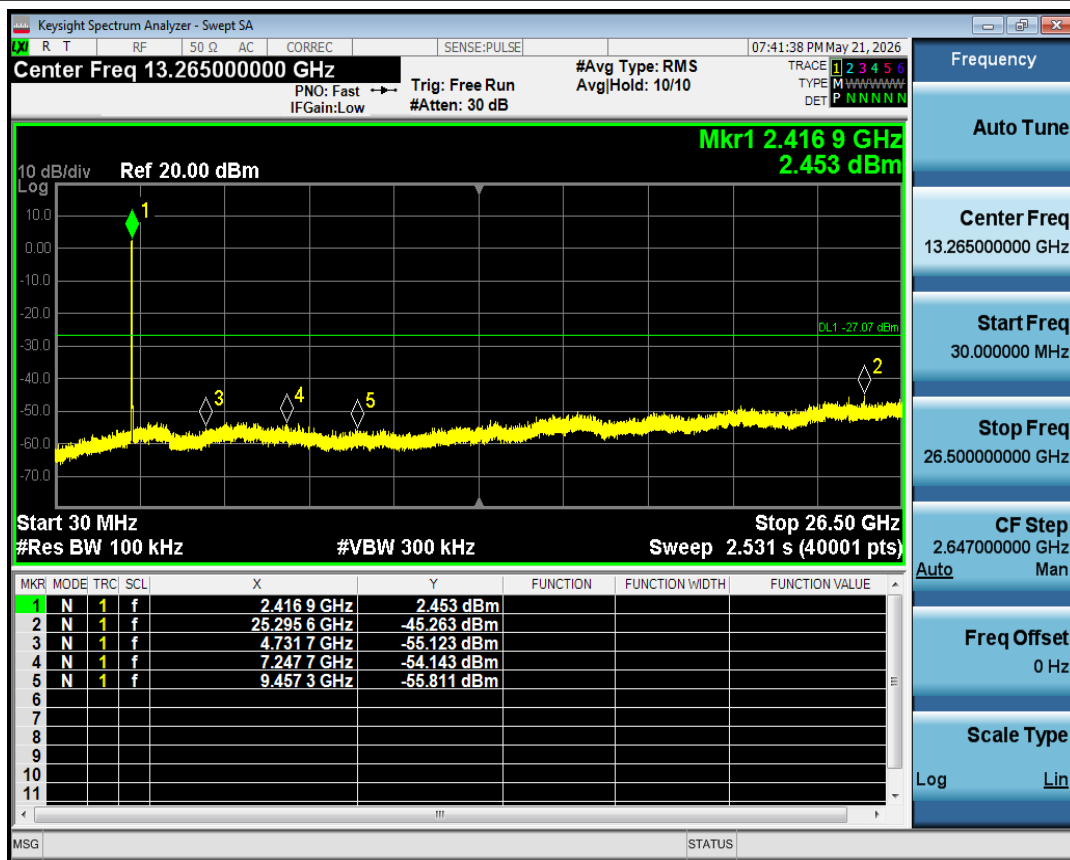
Tx. Spurious NVNT g 2462MHz Ant1 Ref



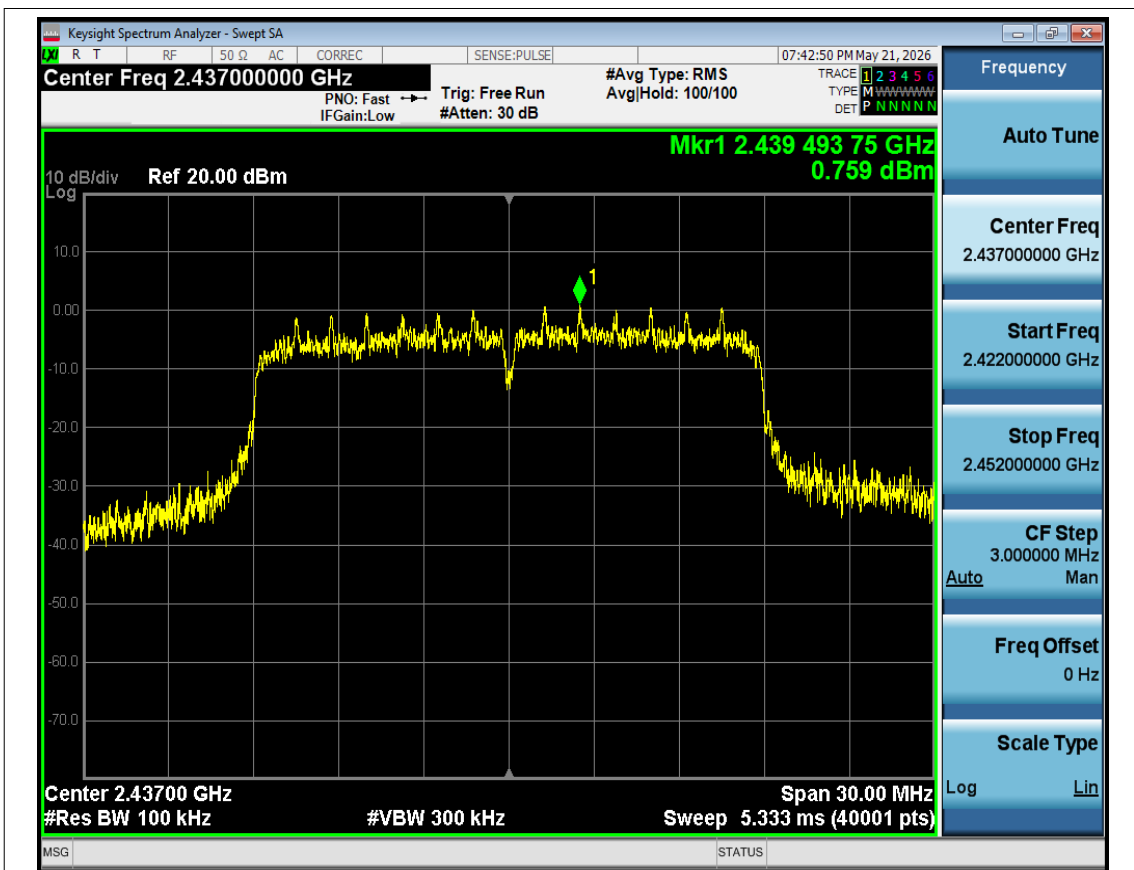
Tx. Spurious NVNT g 2462MHz Ant1 Emission



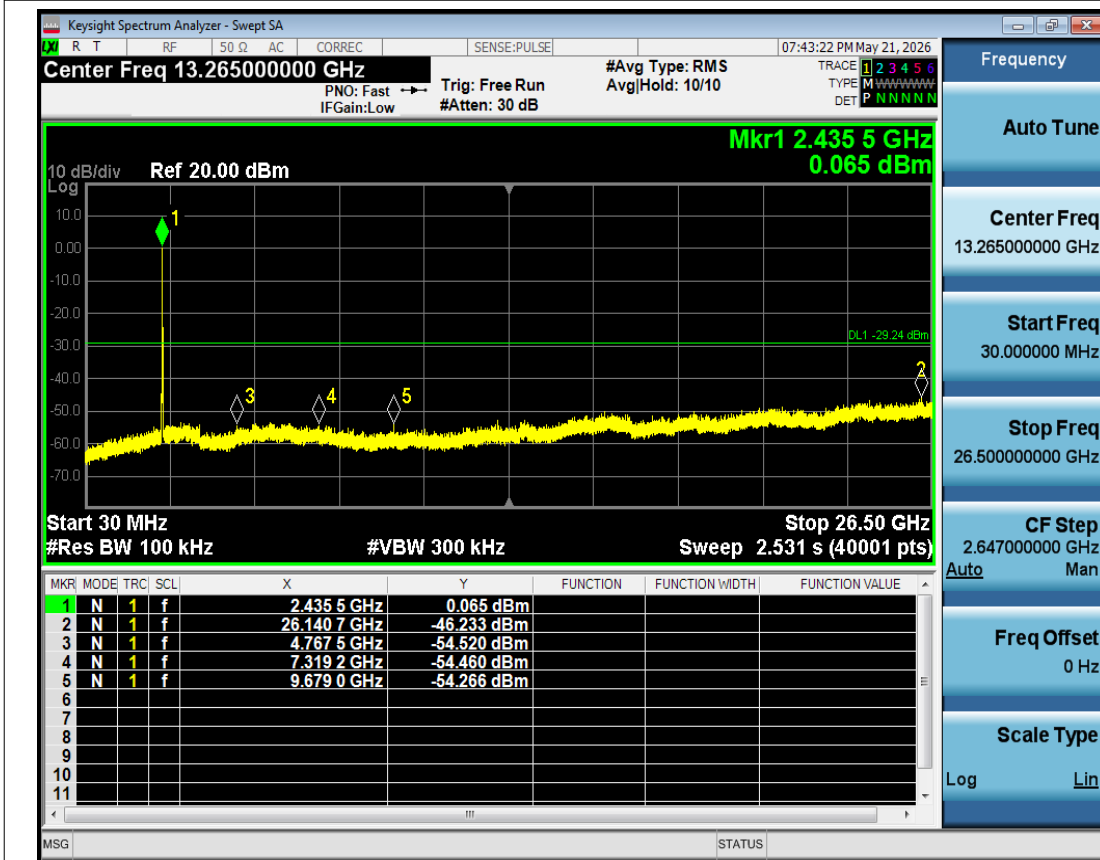
Tx. Spurious NVNT n20 2412MHz Ant1 Ref



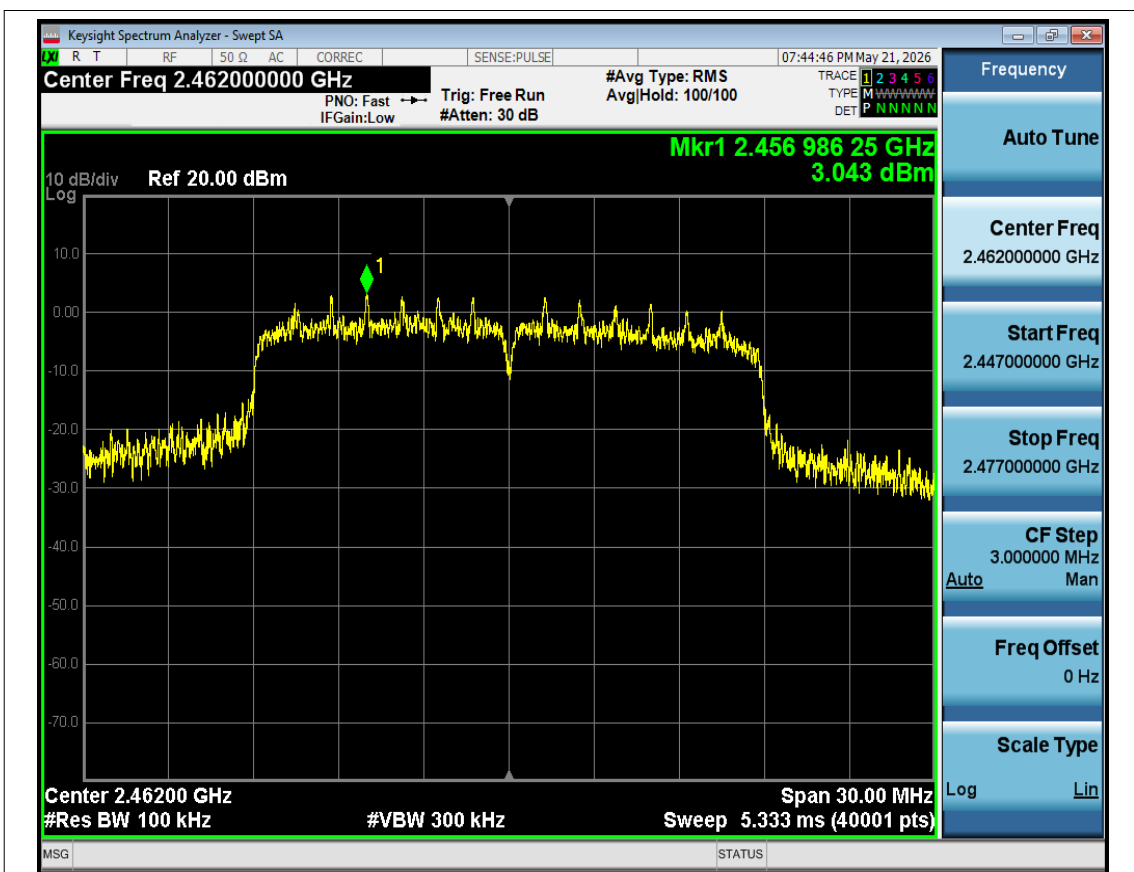
Tx. Spurious NVNT n20 2412MHz Ant1 Emission



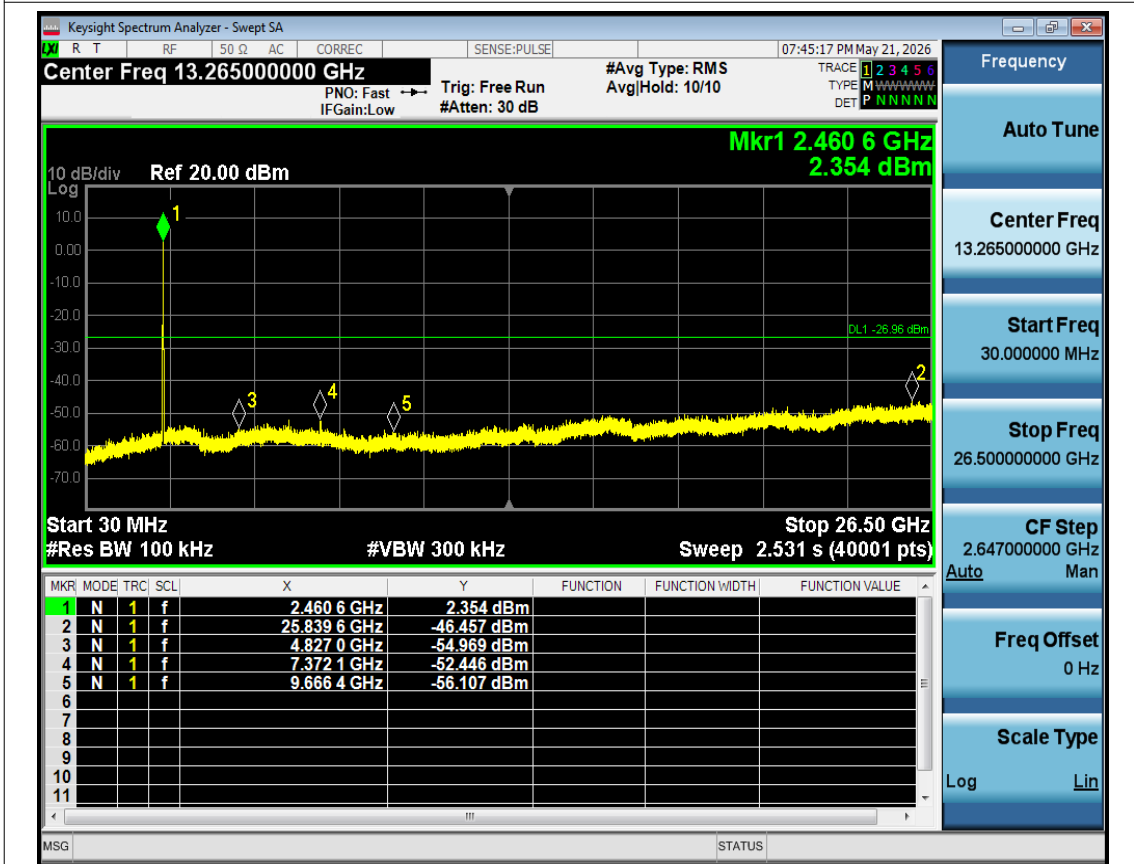
Tx. Spurious NVNT n20 2437MHz Ant1 Ref



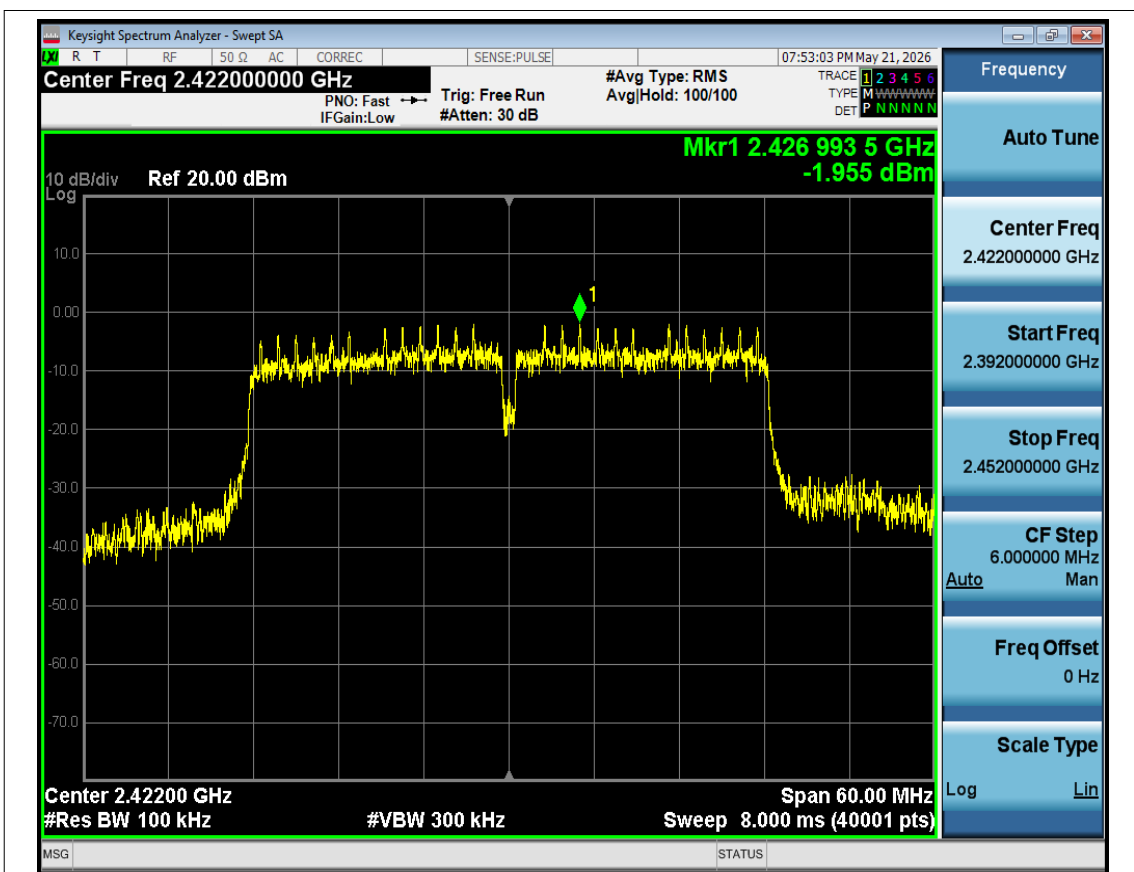
Tx. Spurious NVNT n20 2437MHz Ant1 Emission



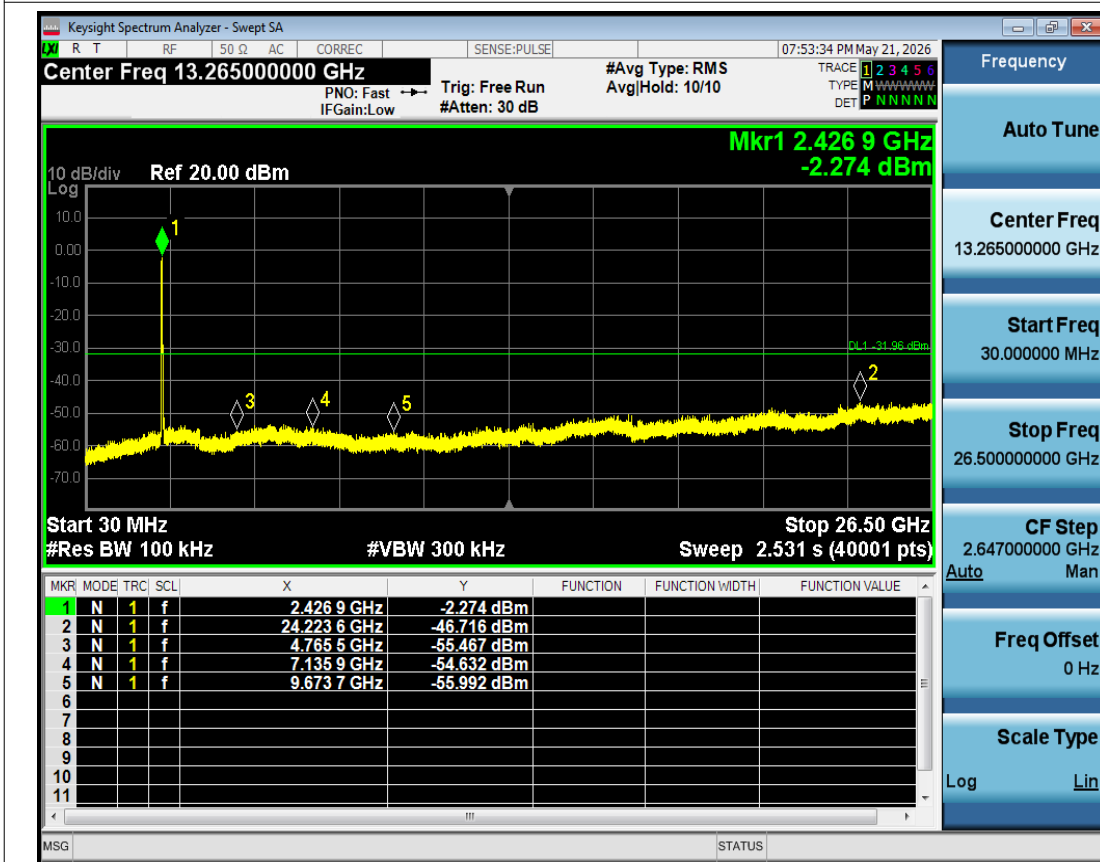
Tx. Spurious NVNT n20 2462MHz Ant1 Ref



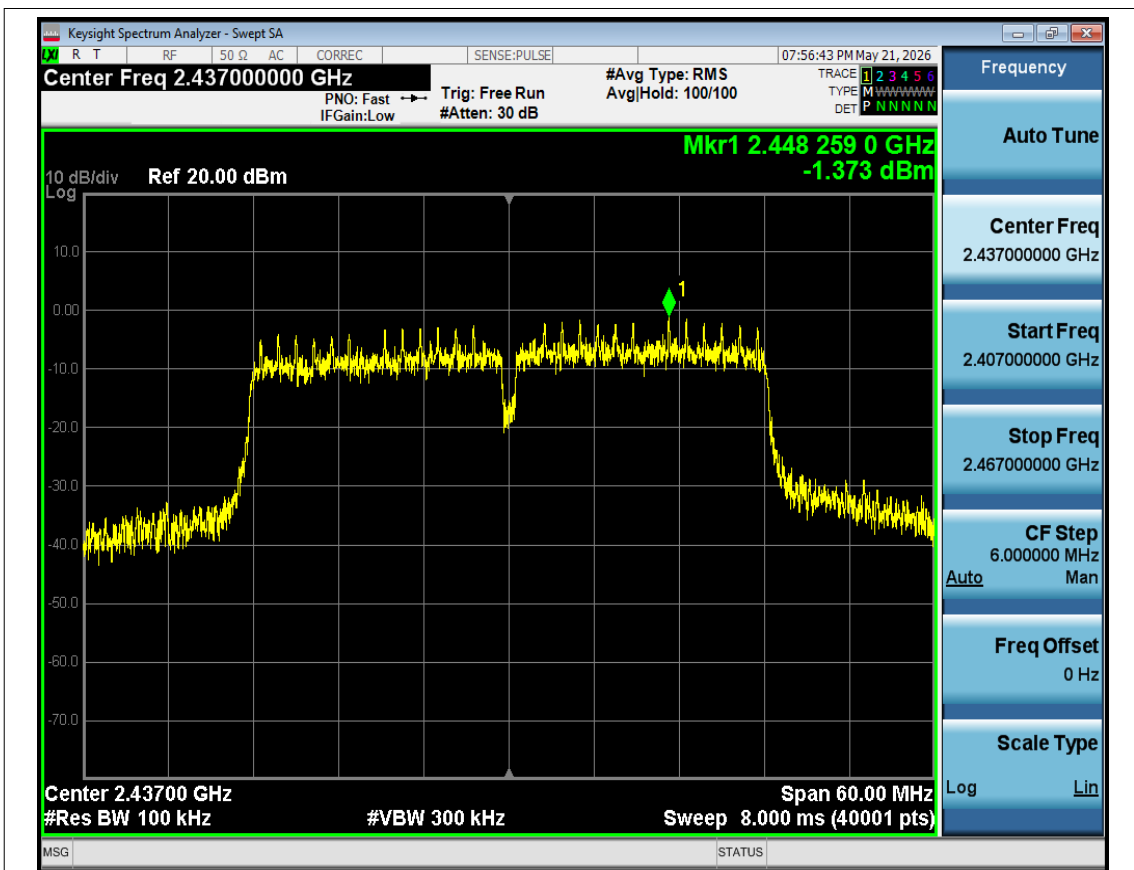
Tx. Spurious NVNT n20 2462MHz Ant1 Emission



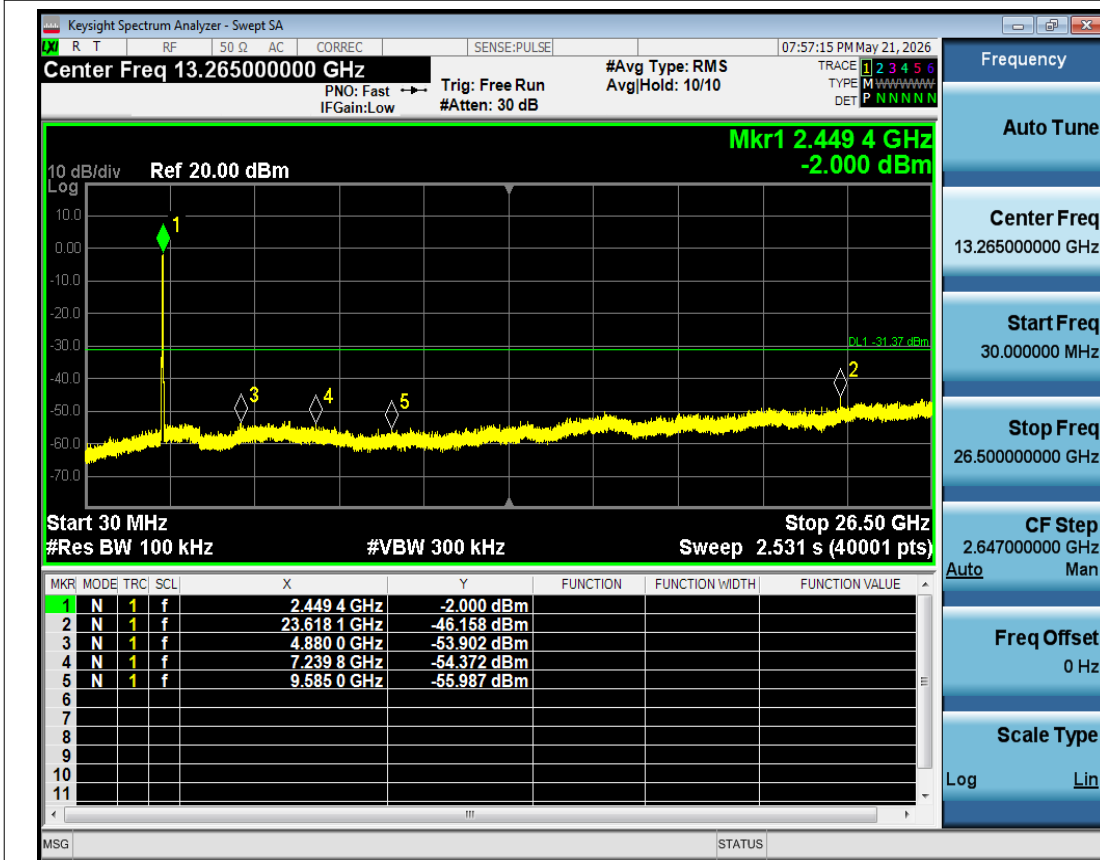
Tx. Spurious NVNT n40 2422MHz Ant1 Ref



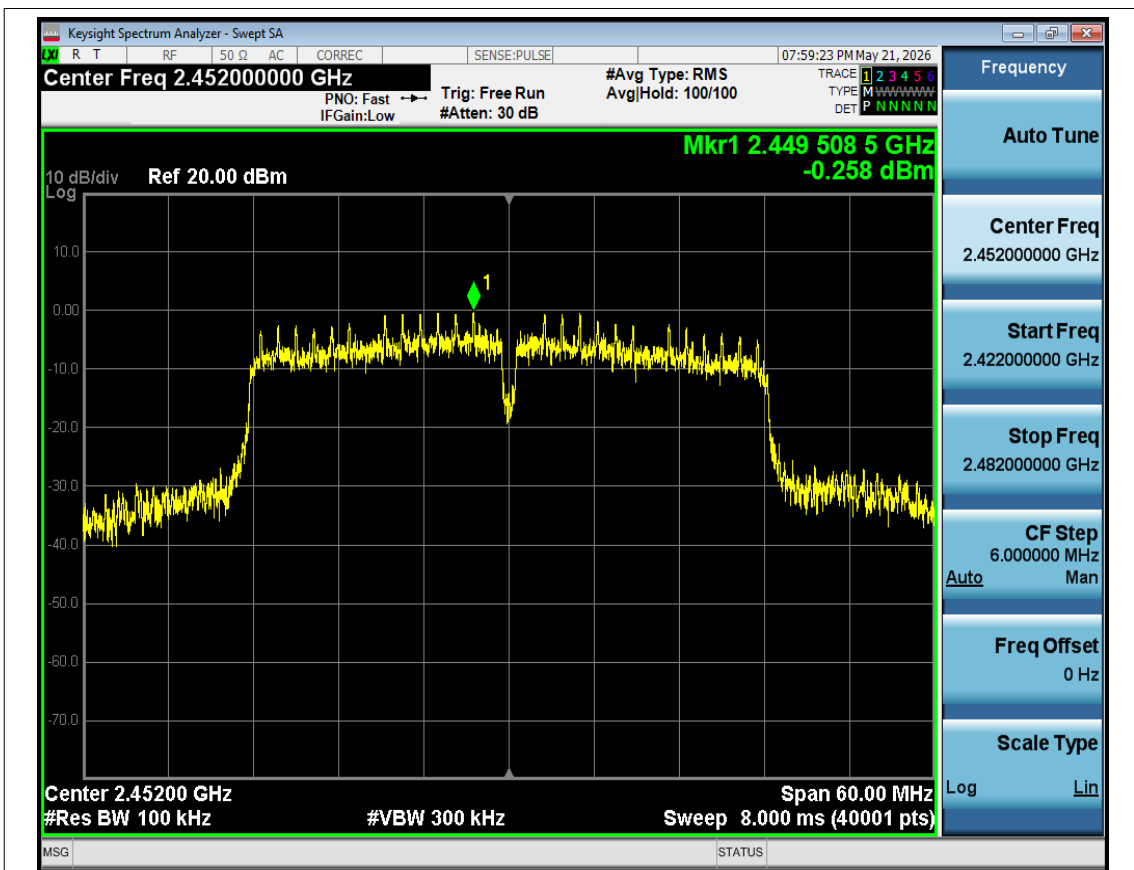
Tx. Spurious NVNT n40 2422MHz Ant1 Emission



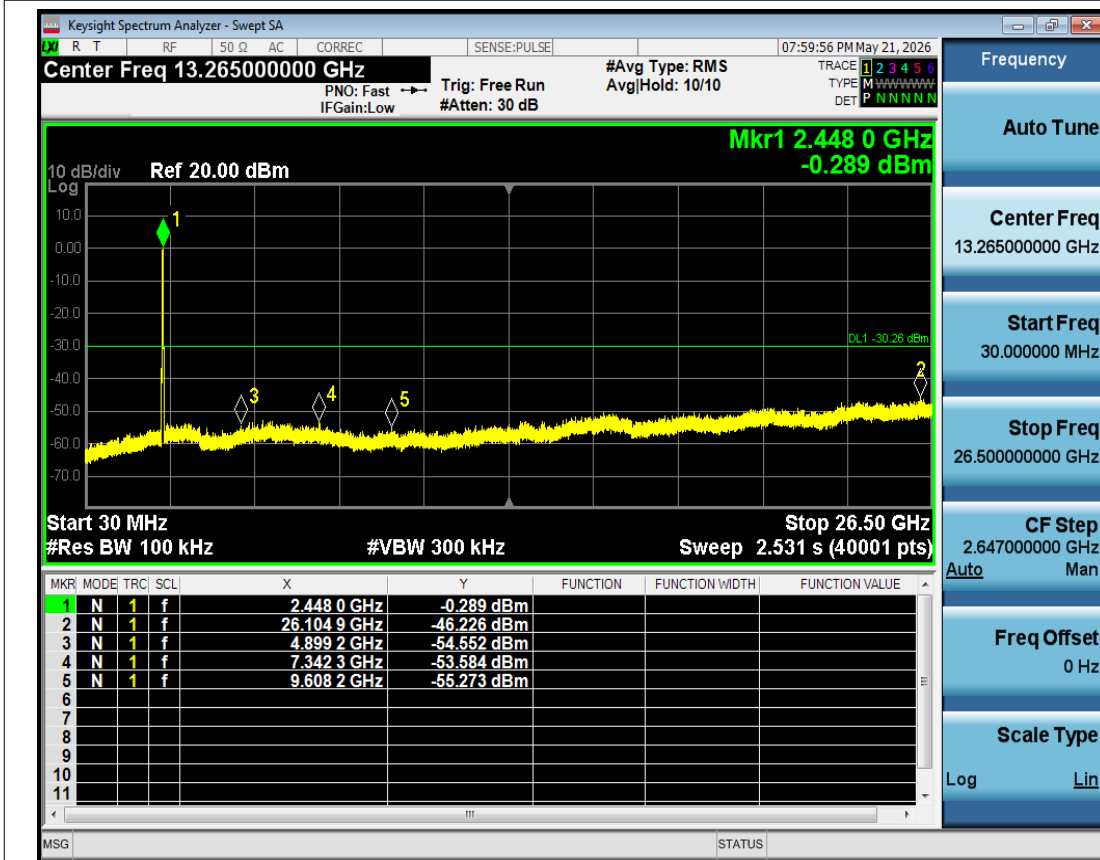
Tx. Spurious NVNT n40 2437MHz Ant1 Ref



Tx. Spurious NVNT n40 2437MHz Ant1 Emission



Tx. Spurious NVNT n40 2452MHz Ant1 Ref



Tx. Spurious NVNT n40 2452MHz Ant1 Emission