

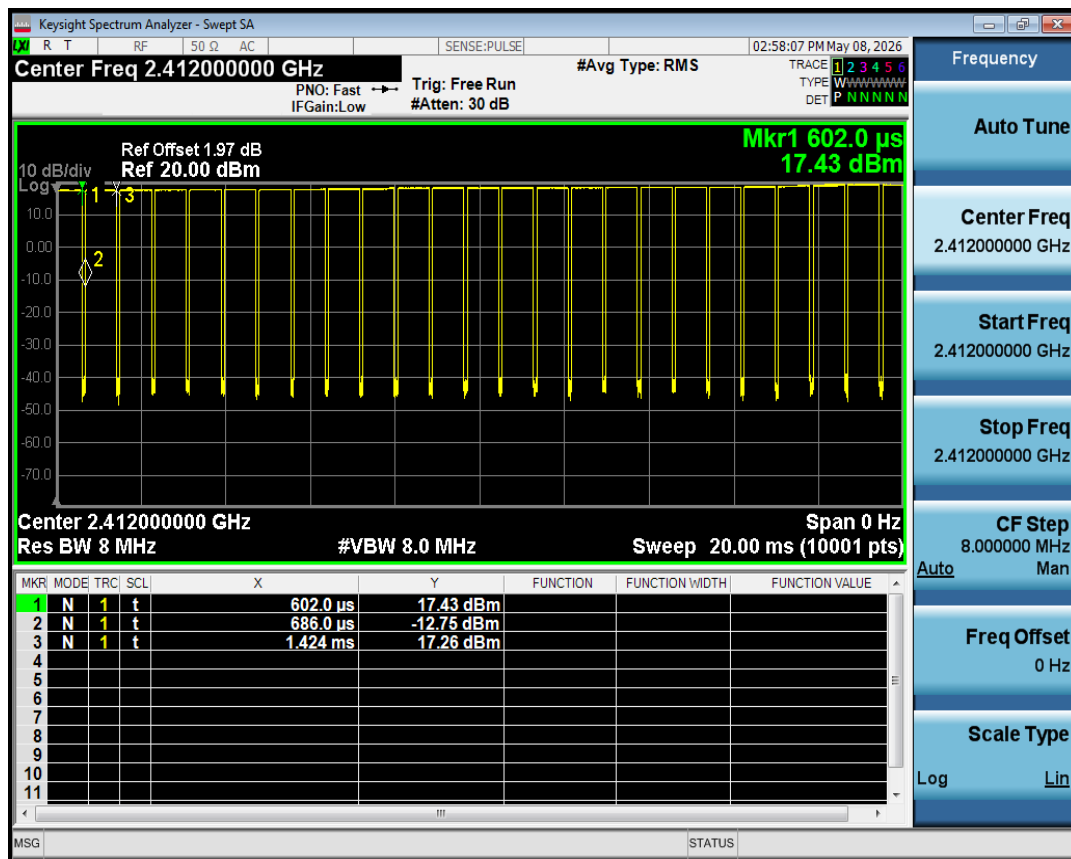
RF Test Data

FCC ID:2BWAW-LPH-SE

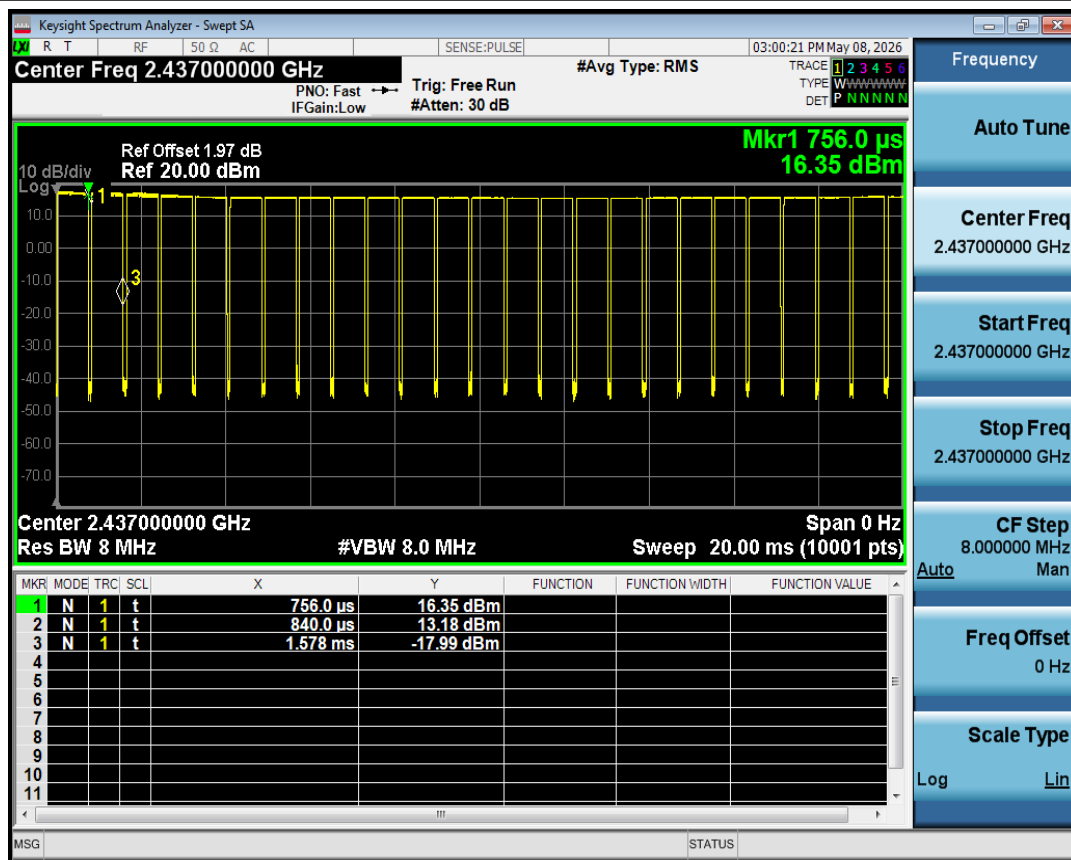
Duty Cycle	2
Maximum Average Conducted Output Power	9
-6dB Bandwidth	10
Occupied Channel Bandwidth	17
Maximum Power Spectral Density Level	24
Band Edge	31
Conducted RF Spurious Emission	40

Duty Cycle

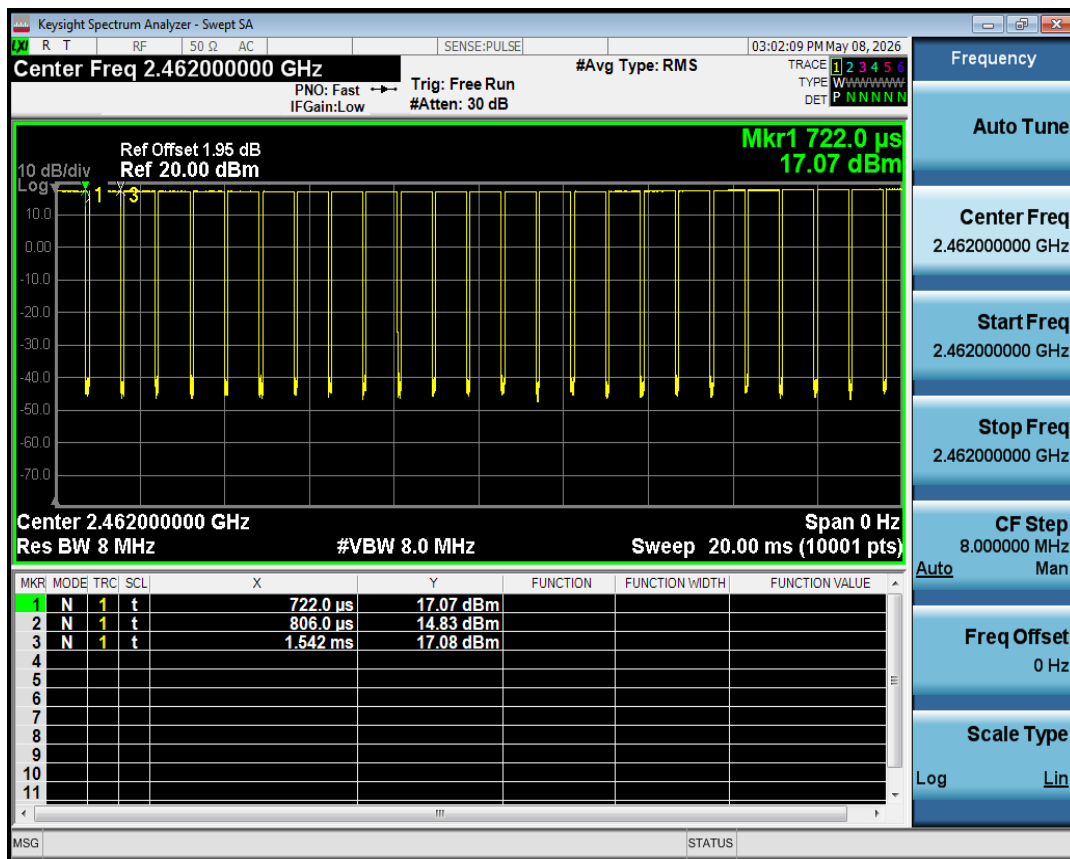
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	89.78	0.47	1.36
NVNT	b	2437	Ant1	89.78	0.47	1.36
NVNT	b	2462	Ant1	89.76	0.47	1.36
NVNT	g	2412	Ant1	58.59	2.32	8.62
NVNT	g	2437	Ant1	59.18	2.28	8.62
NVNT	g	2462	Ant1	59.6	2.25	8.47
NVNT	n20	2412	Ant1	59.18	2.28	8.62
NVNT	n20	2437	Ant1	59.18	2.28	8.62
NVNT	n20	2462	Ant1	59.18	2.28	8.62
NVNT	n40	2422	Ant1	48.72	3.12	13.16
NVNT	n40	2437	Ant1	48.72	3.12	13.16
NVNT	n40	2452	Ant1	48.72	3.12	13.16



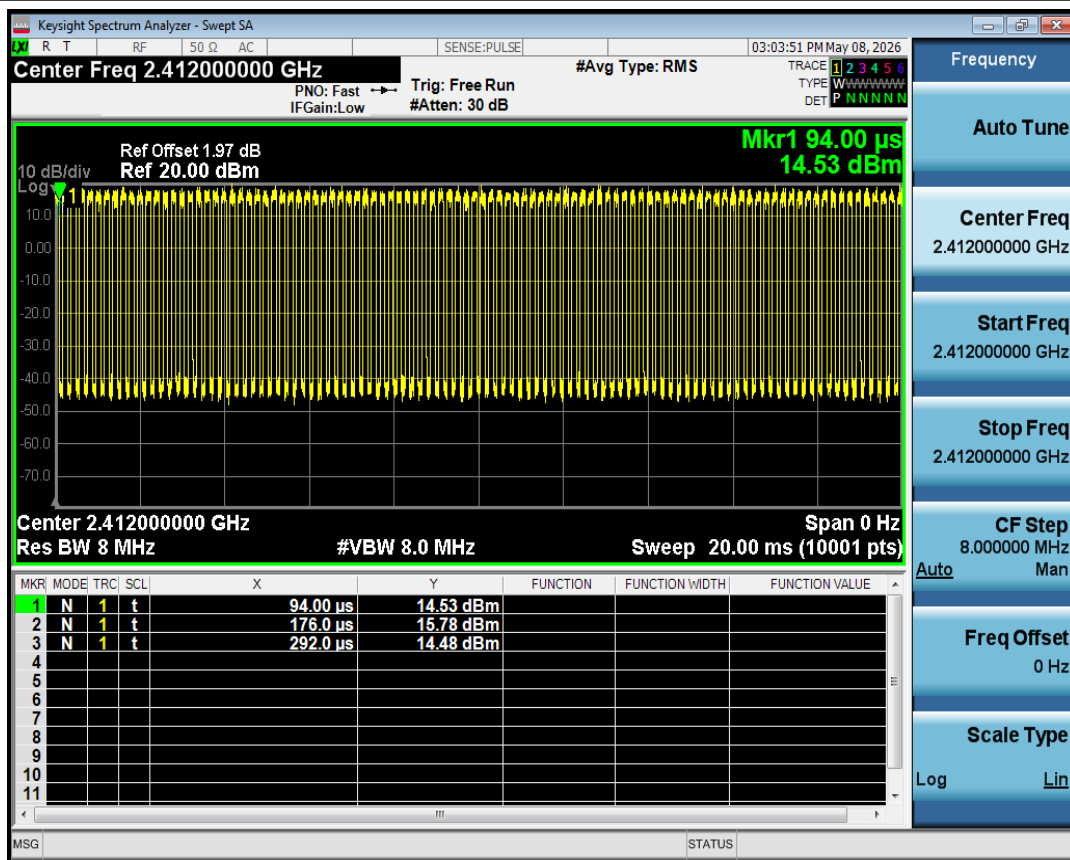
Duty Cycle NVNT b 2412MHz Ant1



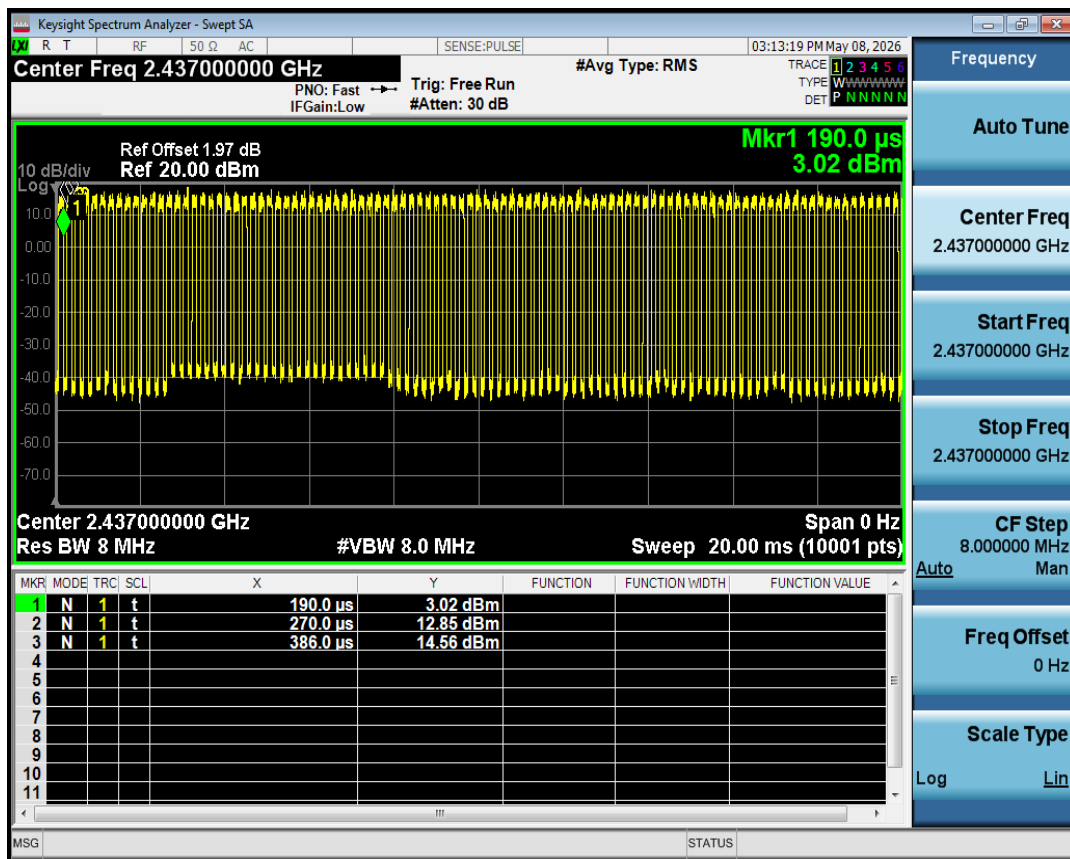
Duty Cycle NVNT b 2437MHz Ant1



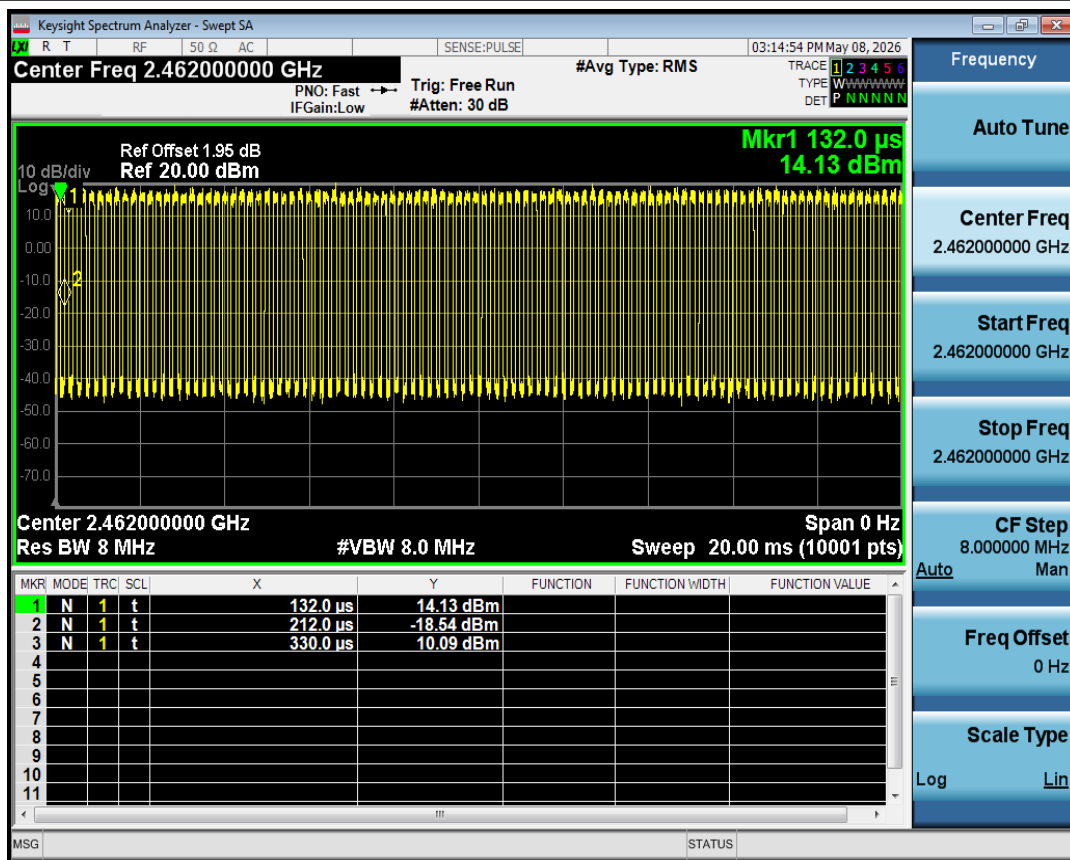
Duty Cycle NVNT b 2462MHz Ant1



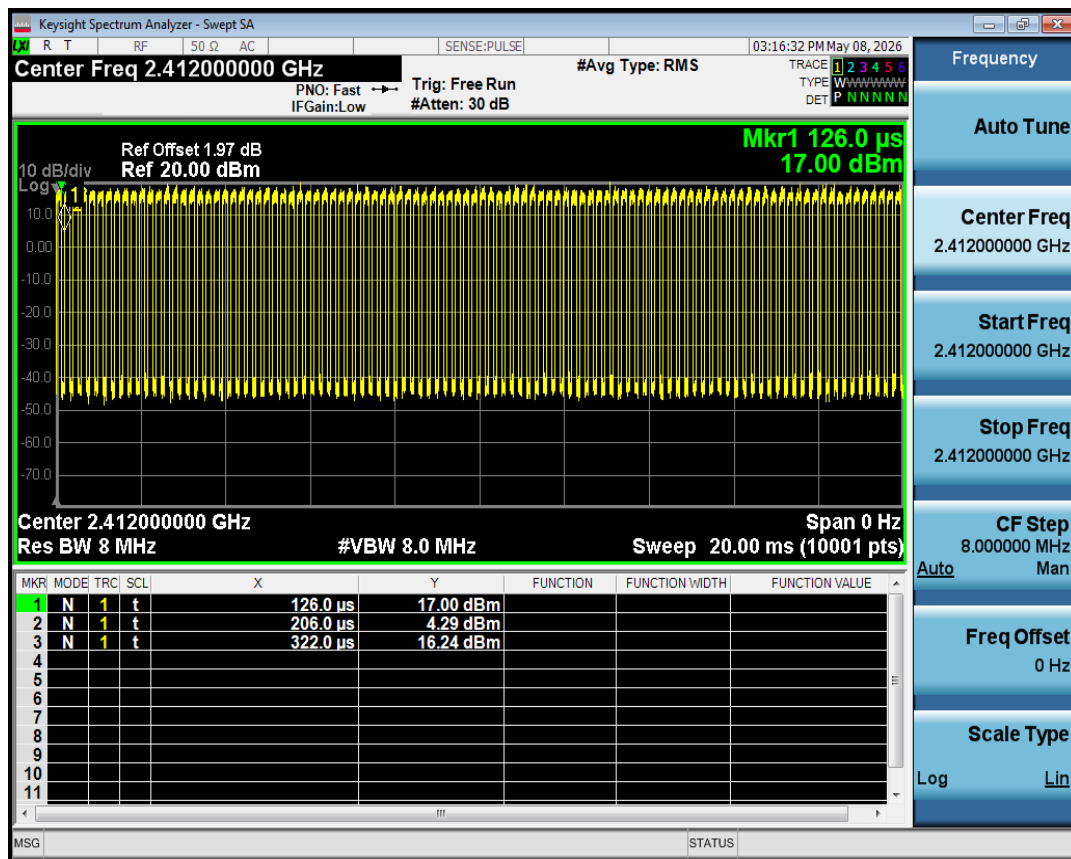
Duty Cycle NVNT g 2412MHz Ant1



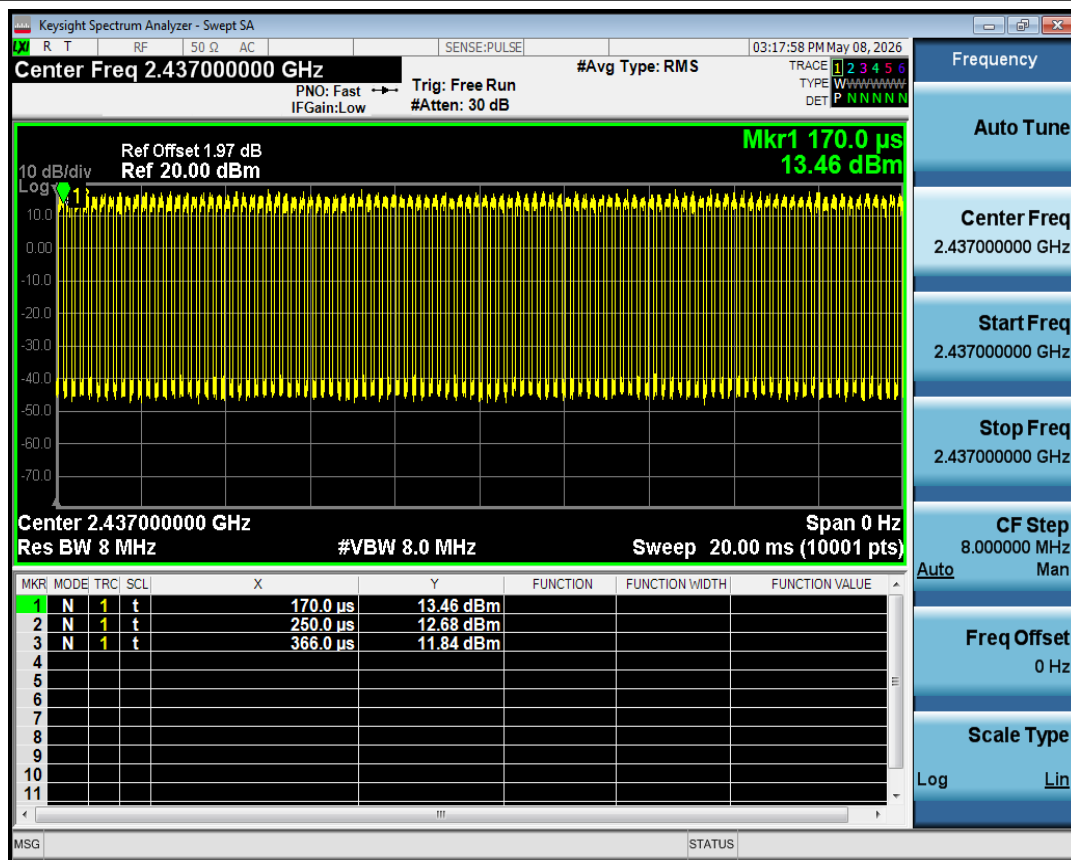
Duty Cycle NVNT g 2437MHz Ant1



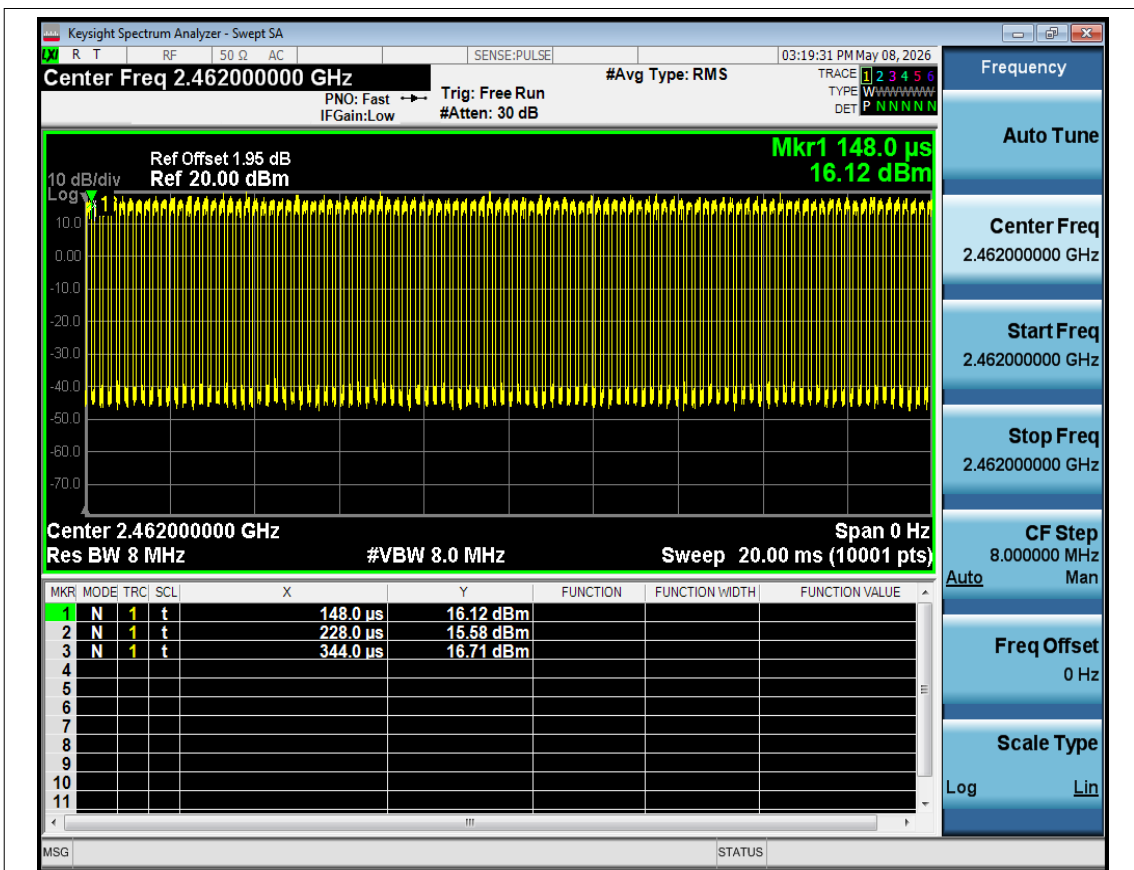
Duty Cycle NVNT g 2462MHz Ant1



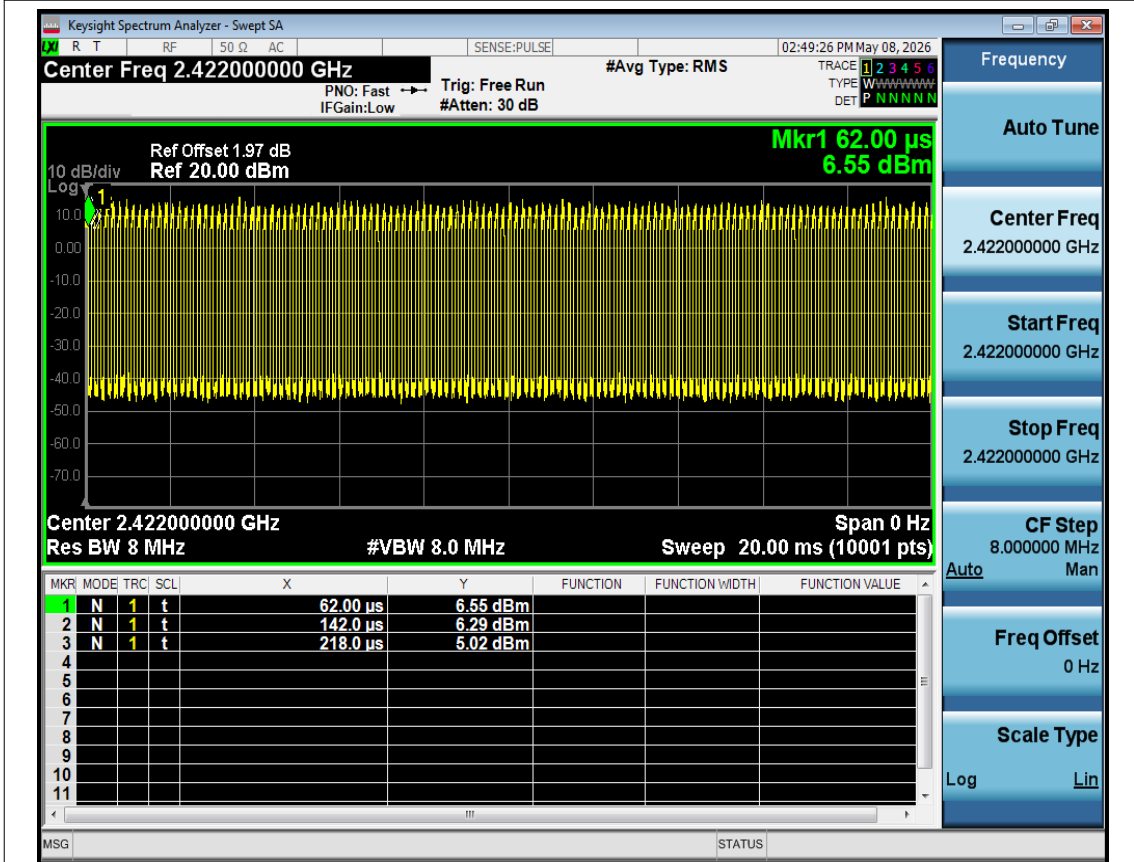
Duty Cycle NVNT n20 2412MHz Ant1



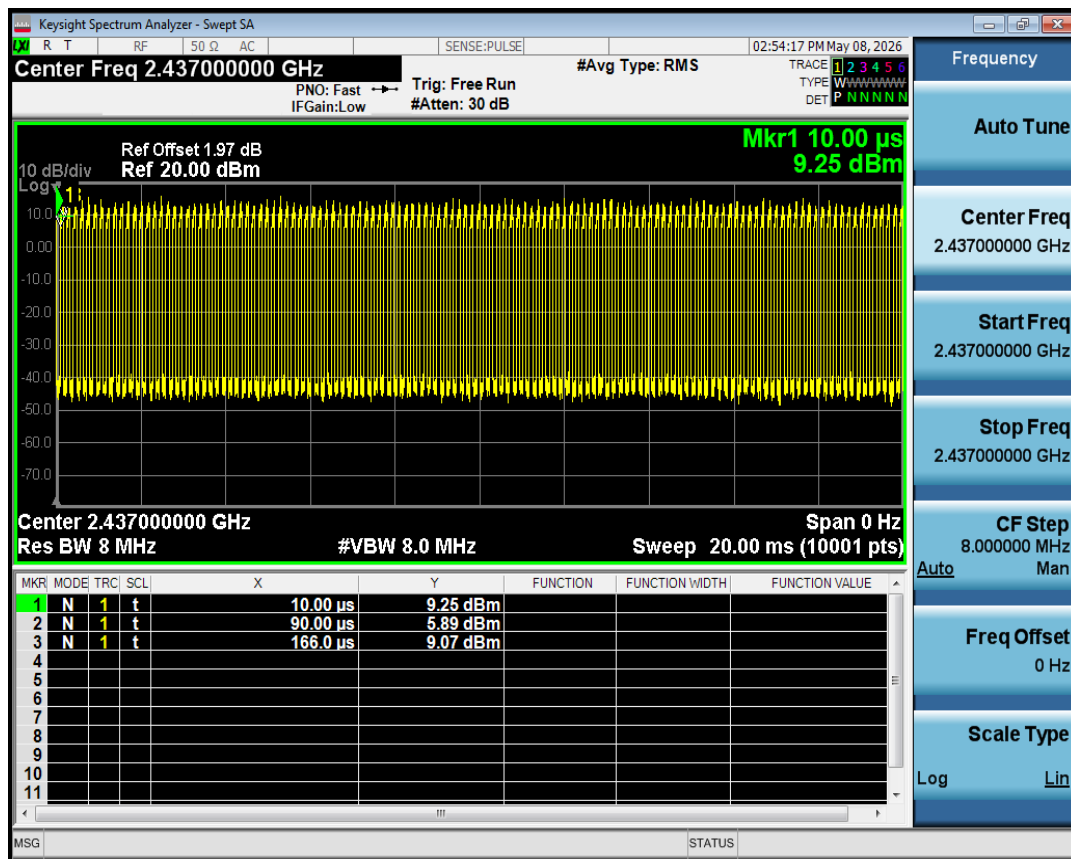
Duty Cycle NVNT n20 2437MHz Ant1



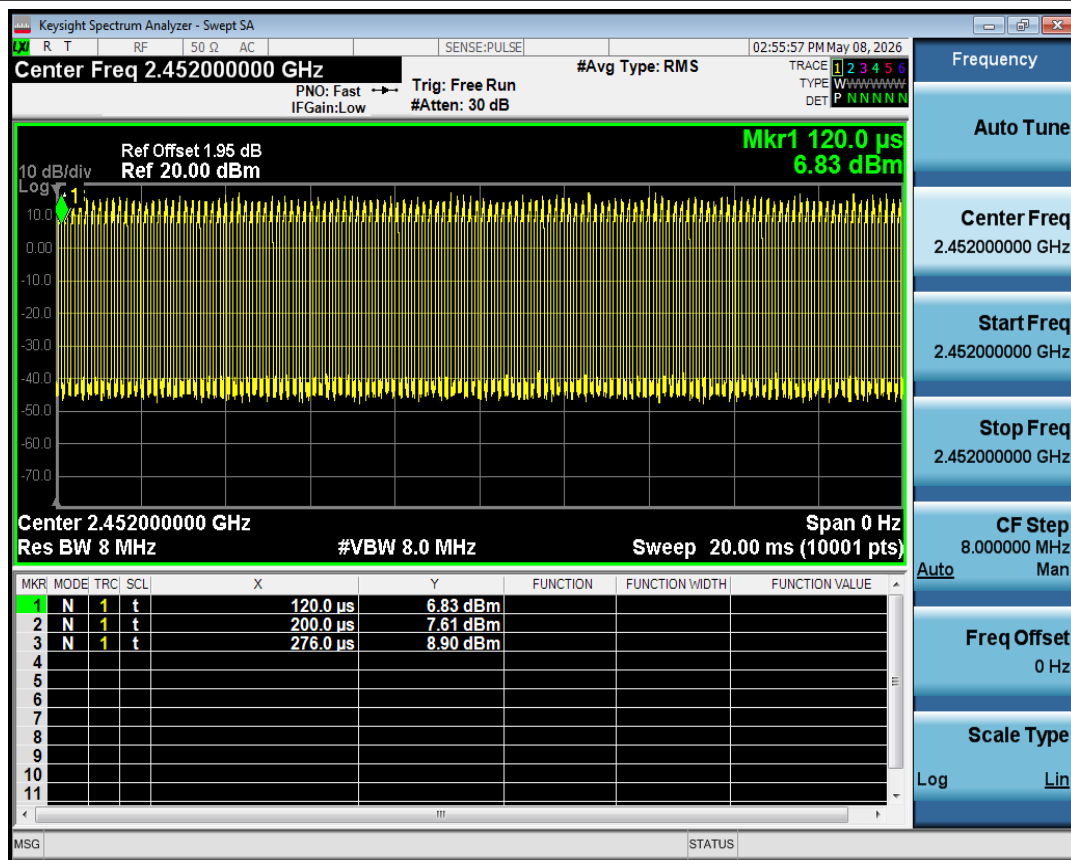
Duty Cycle NVNT n20 2462MHz Ant1



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	13.88	0.47	14.35	0.0272	30	Pass
NVNT	b	2437	Ant1	11.76	0.47	12.23	0.0167	30	Pass
NVNT	b	2462	Ant1	13.85	0.47	14.32	0.0270	30	Pass
NVNT	g	2412	Ant1	11.02	2.32	13.34	0.0216	30	Pass
NVNT	g	2437	Ant1	9.19	2.28	11.47	0.0140	30	Pass
NVNT	g	2462	Ant1	11.11	2.25	13.36	0.0217	30	Pass
NVNT	n20	2412	Ant1	11.2	2.28	13.48	0.0223	30	Pass
NVNT	n20	2437	Ant1	9.35	2.28	11.63	0.0146	30	Pass
NVNT	n20	2462	Ant1	11.26	2.28	13.54	0.0226	30	Pass
NVNT	n40	2422	Ant1	8.74	3.12	11.86	0.0153	30	Pass
NVNT	n40	2437	Ant1	8.71	3.12	11.83	0.0152	30	Pass
NVNT	n40	2452	Ant1	9.62	3.12	12.74	0.0188	30	Pass

-6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	9.079	0.5	Pass
NVNT	b	2437	Ant1	9.094	0.5	Pass
NVNT	b	2462	Ant1	9.098	0.5	Pass
NVNT	g	2412	Ant1	16.24	0.5	Pass
NVNT	g	2437	Ant1	16.2	0.5	Pass
NVNT	g	2462	Ant1	16.12	0.5	Pass
NVNT	n20	2412	Ant1	17.02	0.5	Pass
NVNT	n20	2437	Ant1	17.26	0.5	Pass
NVNT	n20	2462	Ant1	16.9	0.5	Pass
NVNT	n40	2422	Ant1	35.76	0.5	Pass
NVNT	n40	2437	Ant1	35.77	0.5	Pass
NVNT	n40	2452	Ant1	34.94	0.5	Pass



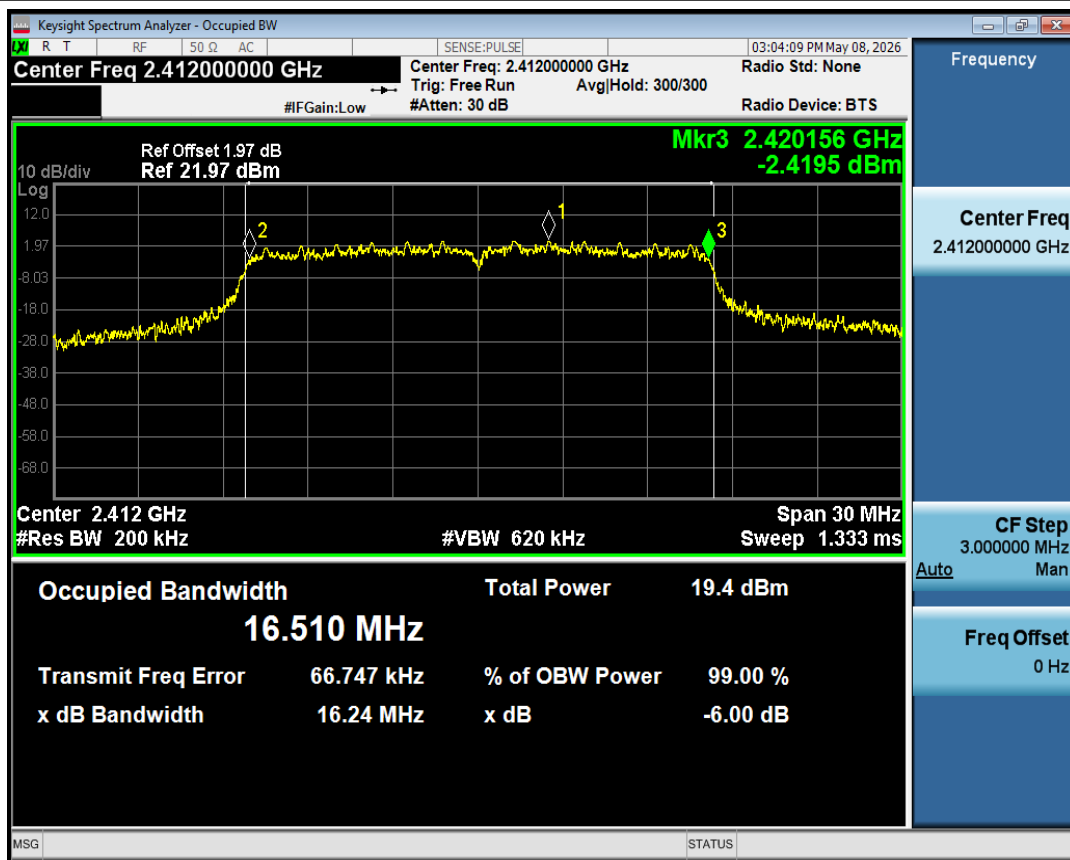
-6dB Bandwidth NVNT b 2412MHz Ant1



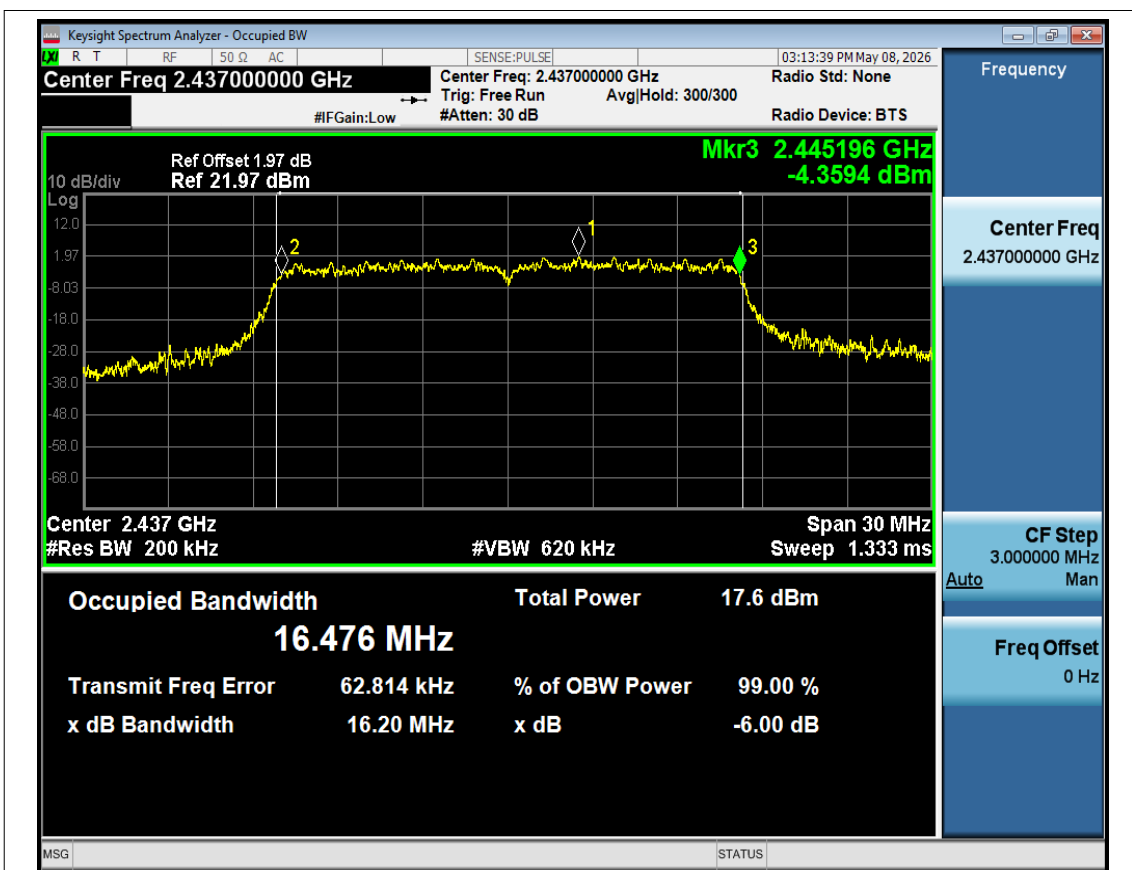
-6dB Bandwidth NVNT b 2437MHz Ant1



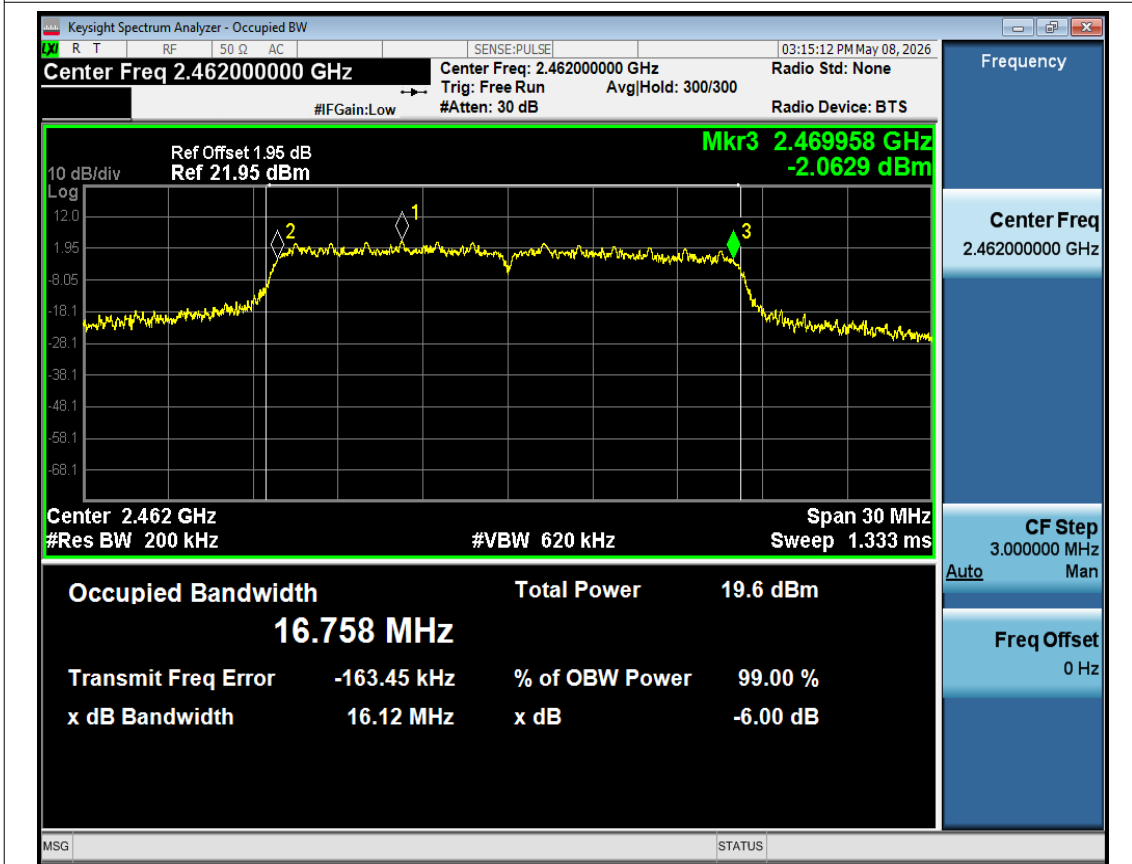
-6dB Bandwidth NVNT b 2462MHz Ant1



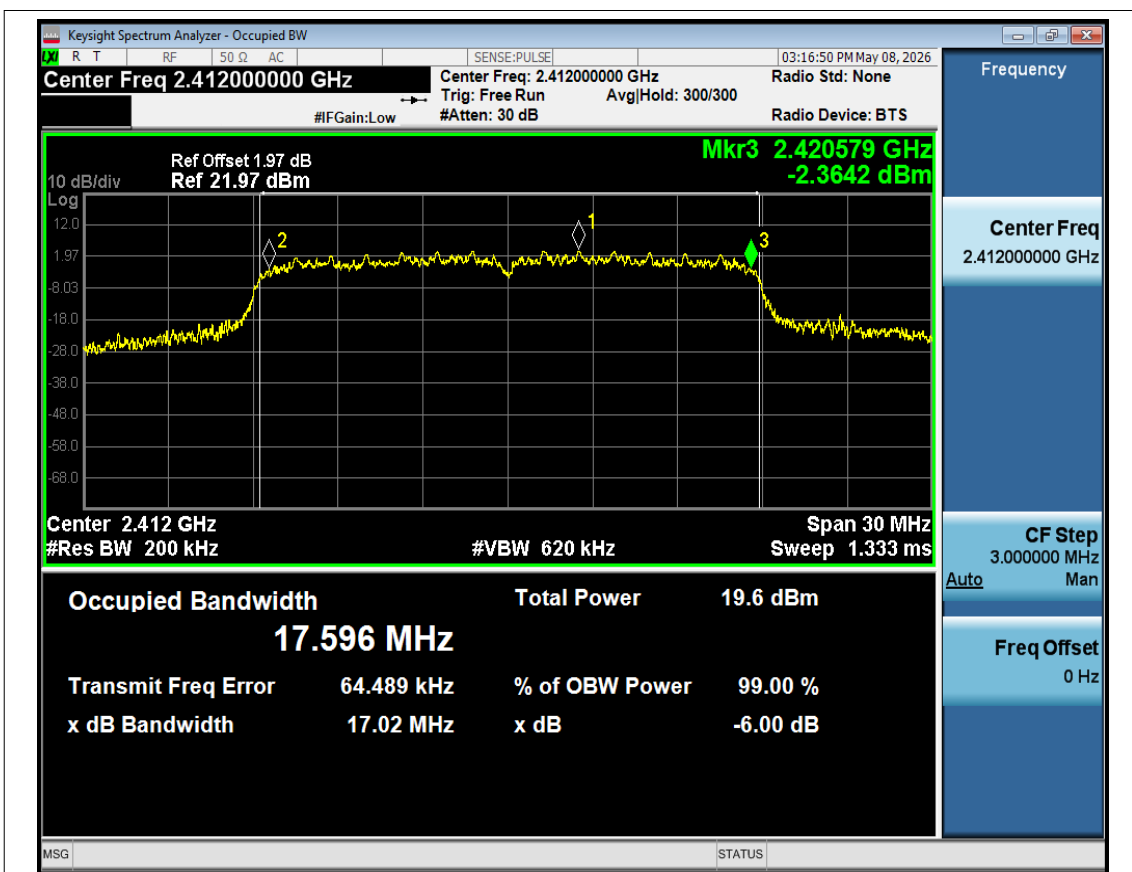
-6dB Bandwidth NVNT g 2412MHz Ant1



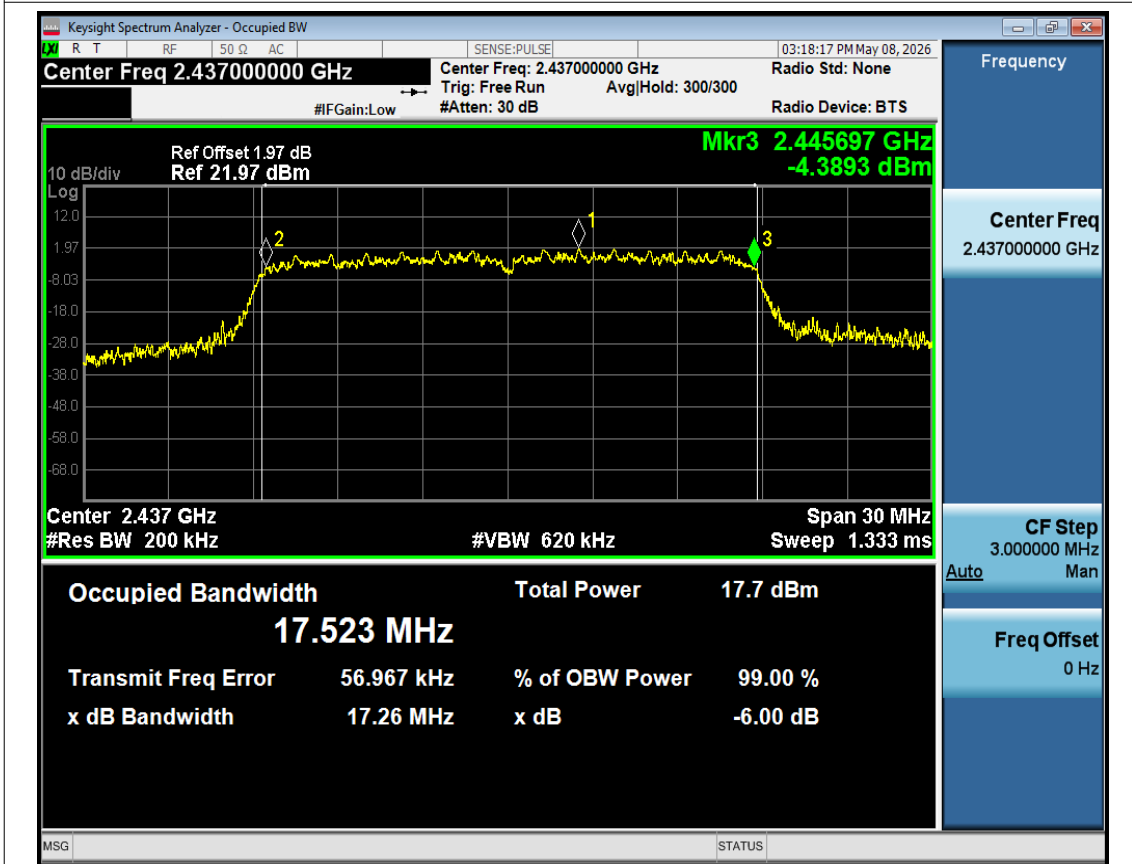
-6dB Bandwidth NVNT g 2437MHz Ant1



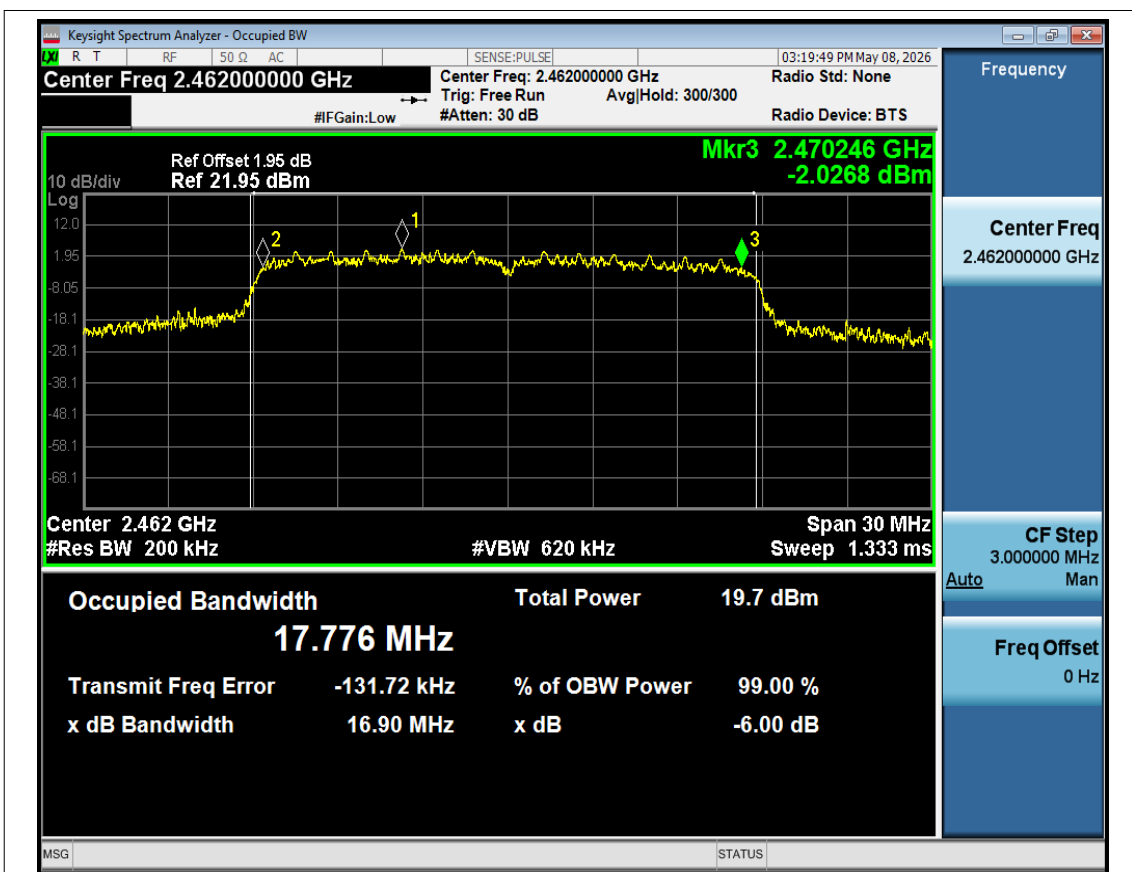
-6dB Bandwidth NVNT g 2462MHz Ant1



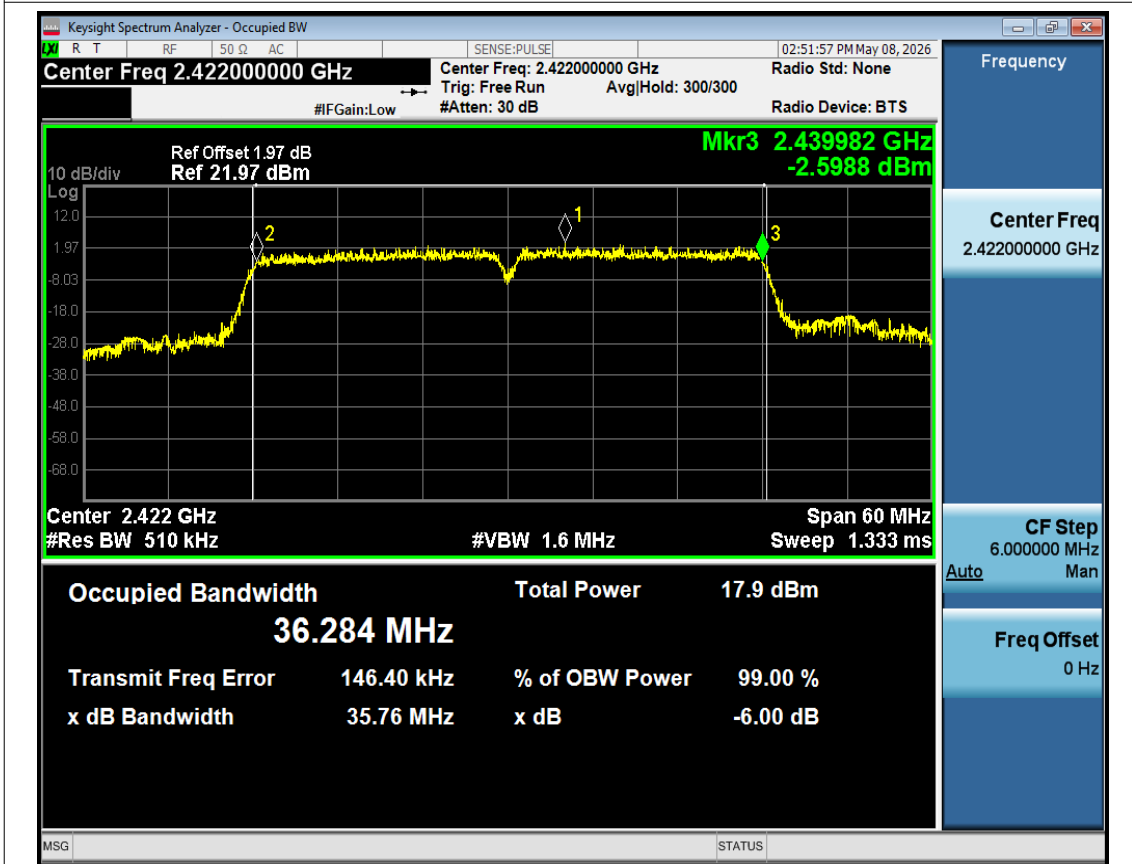
-6dB Bandwidth NVNT n20 2412MHz Ant1



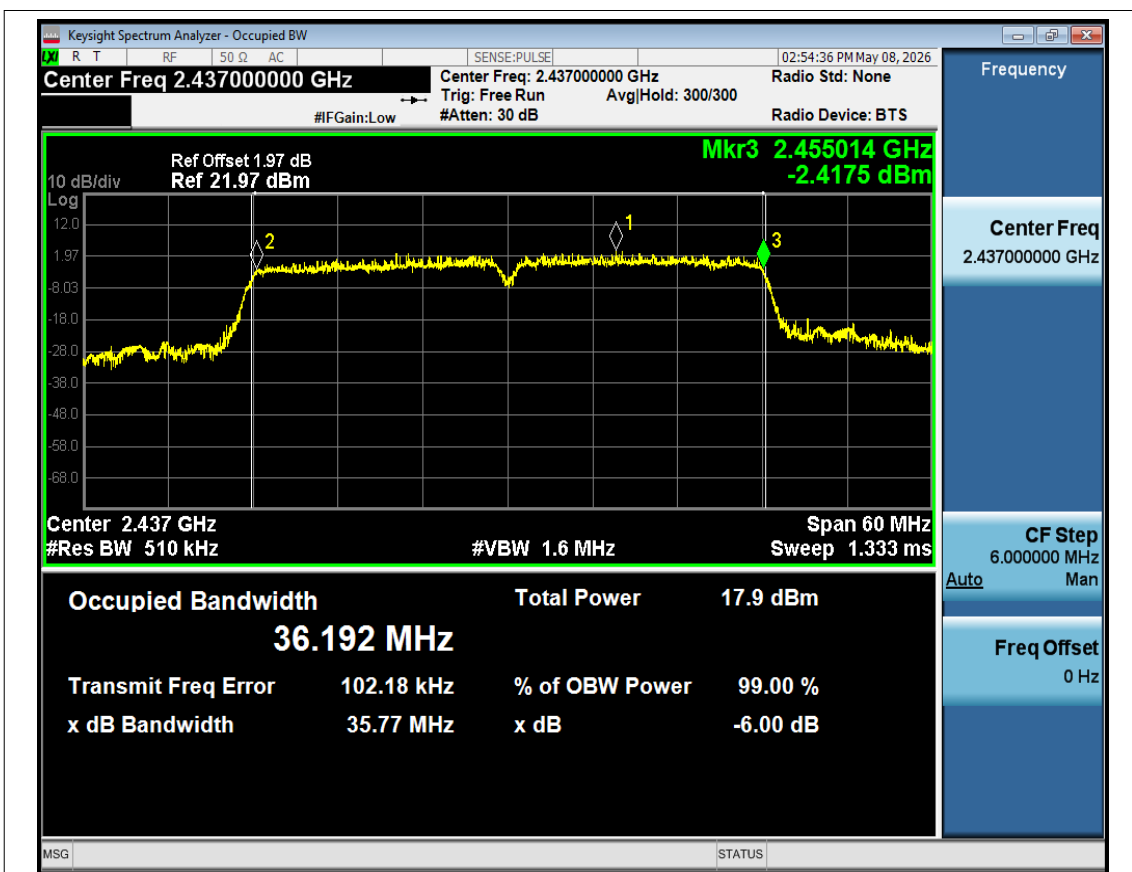
-6dB Bandwidth NVNT n20 2437MHz Ant1



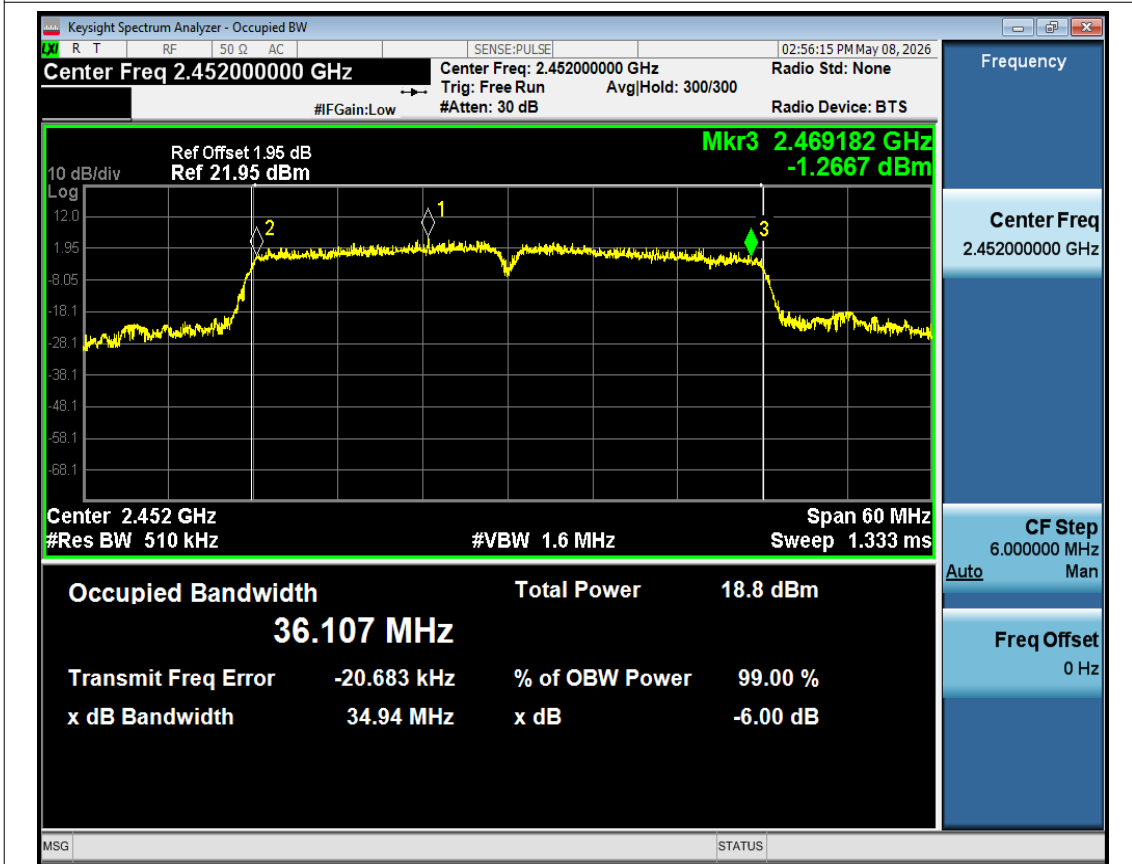
-6dB Bandwidth NVNT n20 2462MHz Ant1



-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	12.031
NVNT	b	2437	Ant1	11.843
NVNT	b	2462	Ant1	12.419
NVNT	g	2412	Ant1	16.654
NVNT	g	2437	Ant1	16.554
NVNT	g	2462	Ant1	16.944
NVNT	n20	2412	Ant1	17.68
NVNT	n20	2437	Ant1	17.585
NVNT	n20	2462	Ant1	17.936
NVNT	n40	2422	Ant1	36.291
NVNT	n40	2437	Ant1	36.246
NVNT	n40	2452	Ant1	36.206



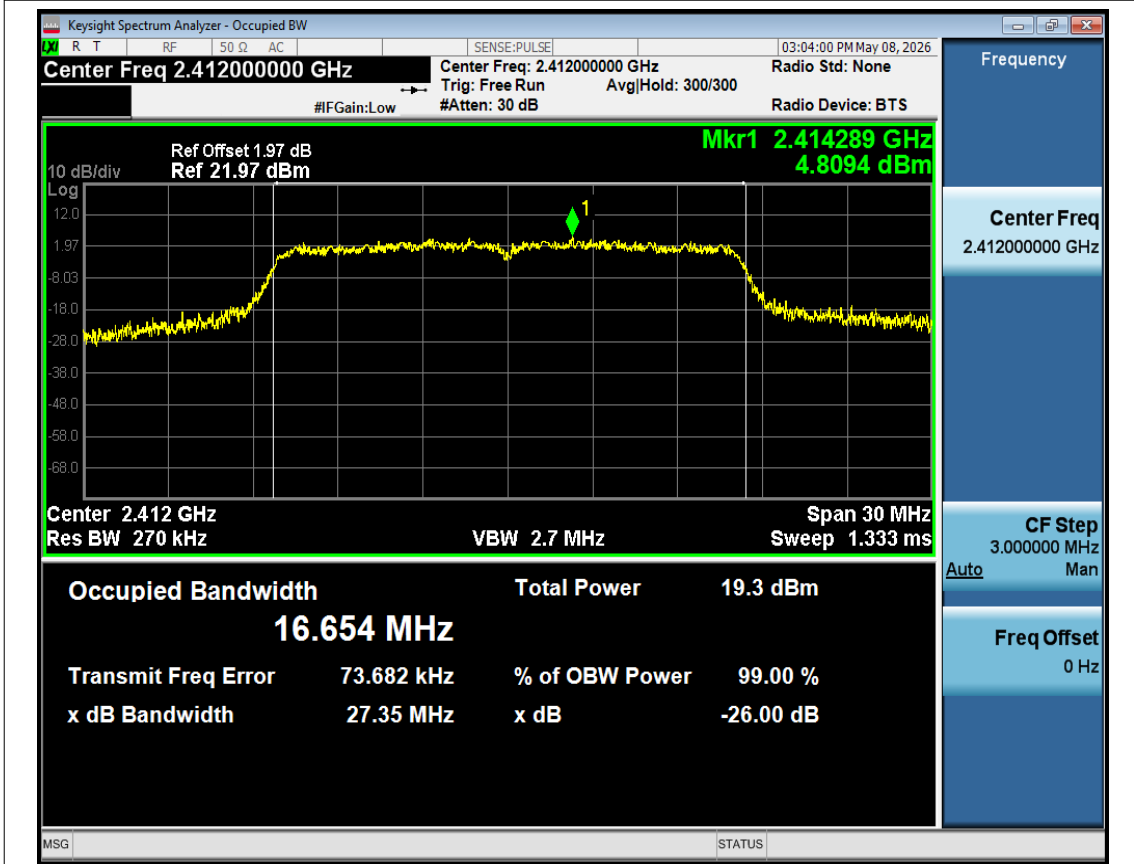
OBW NVNT b 2412MHz Ant1



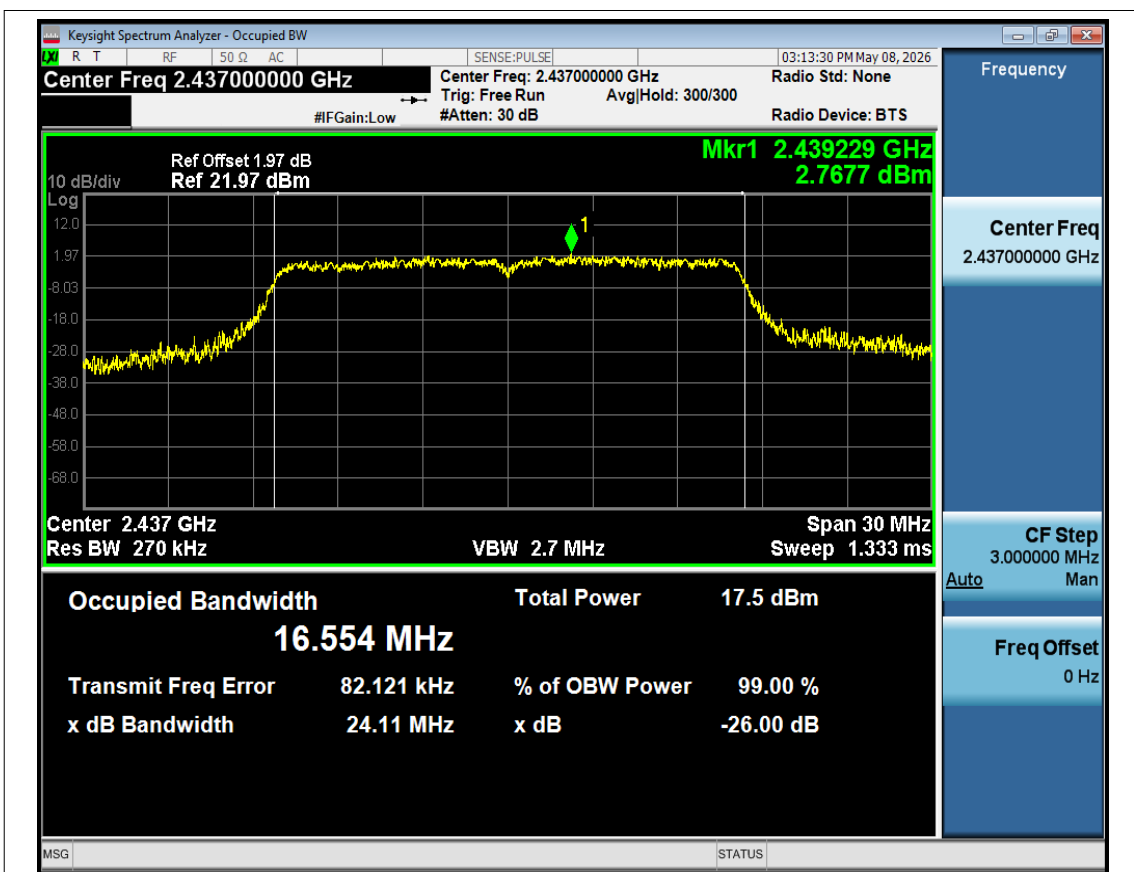
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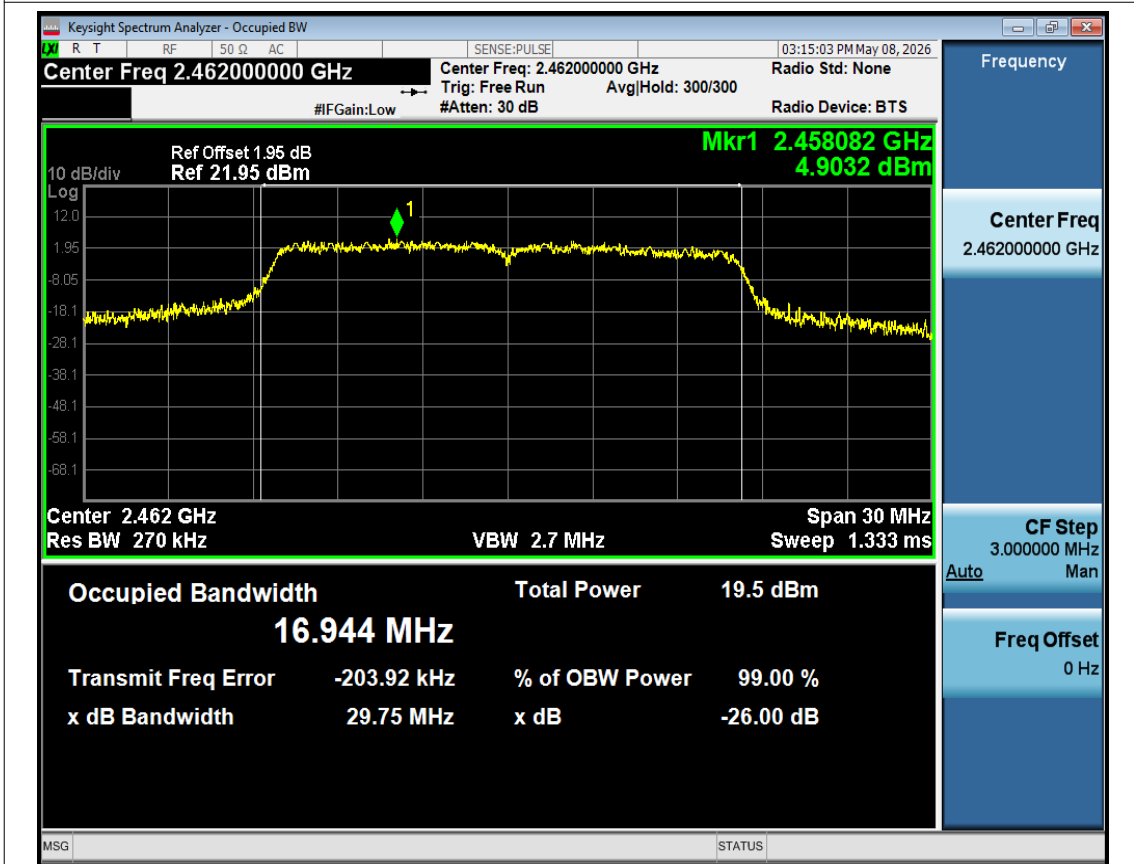
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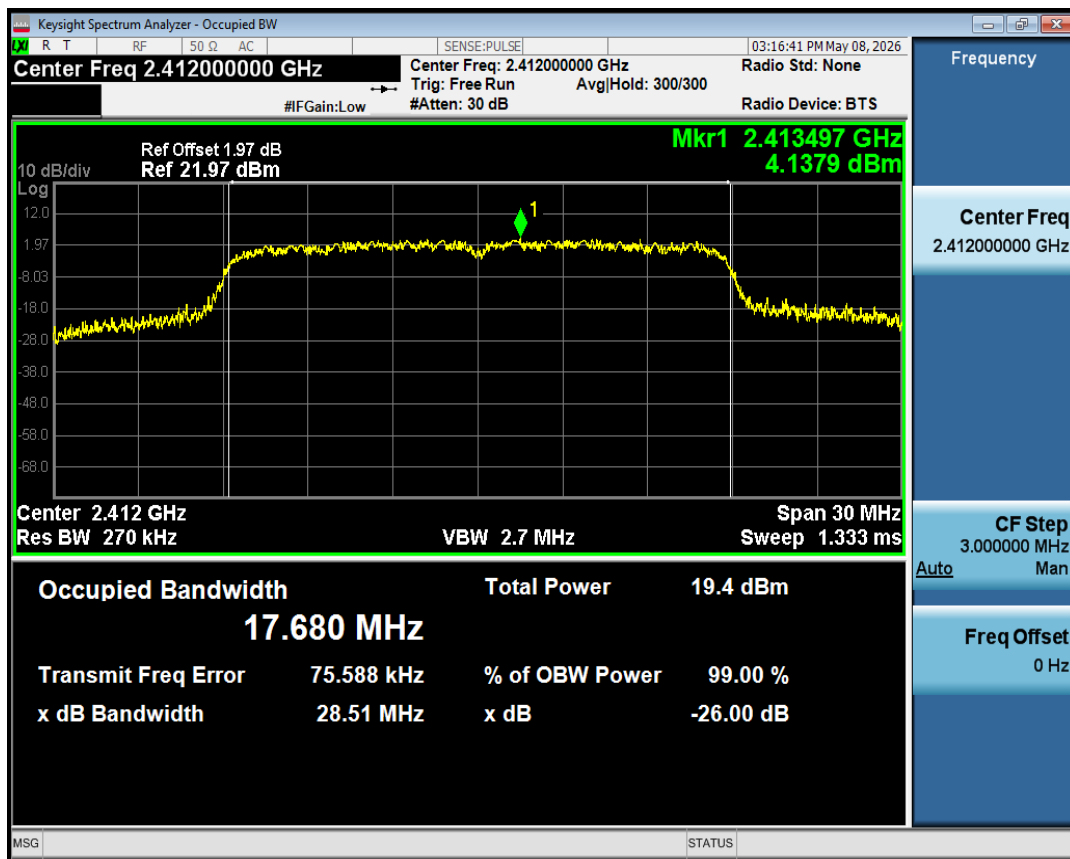
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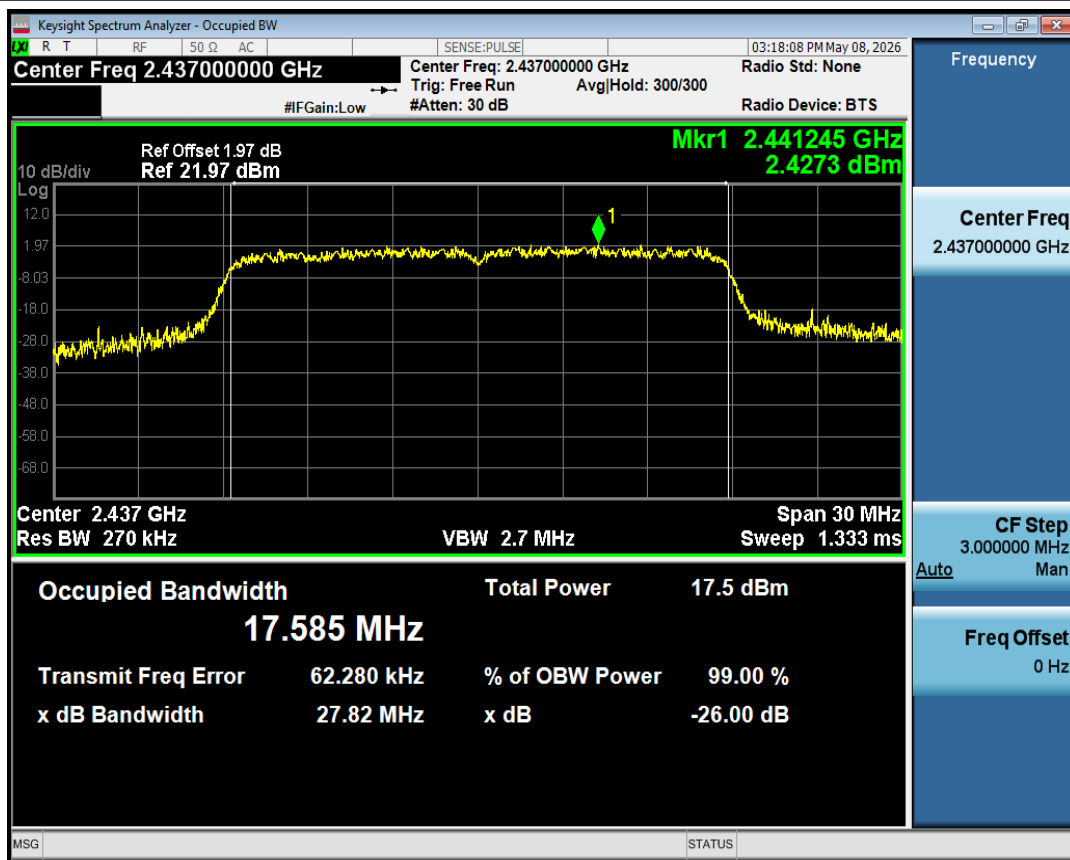
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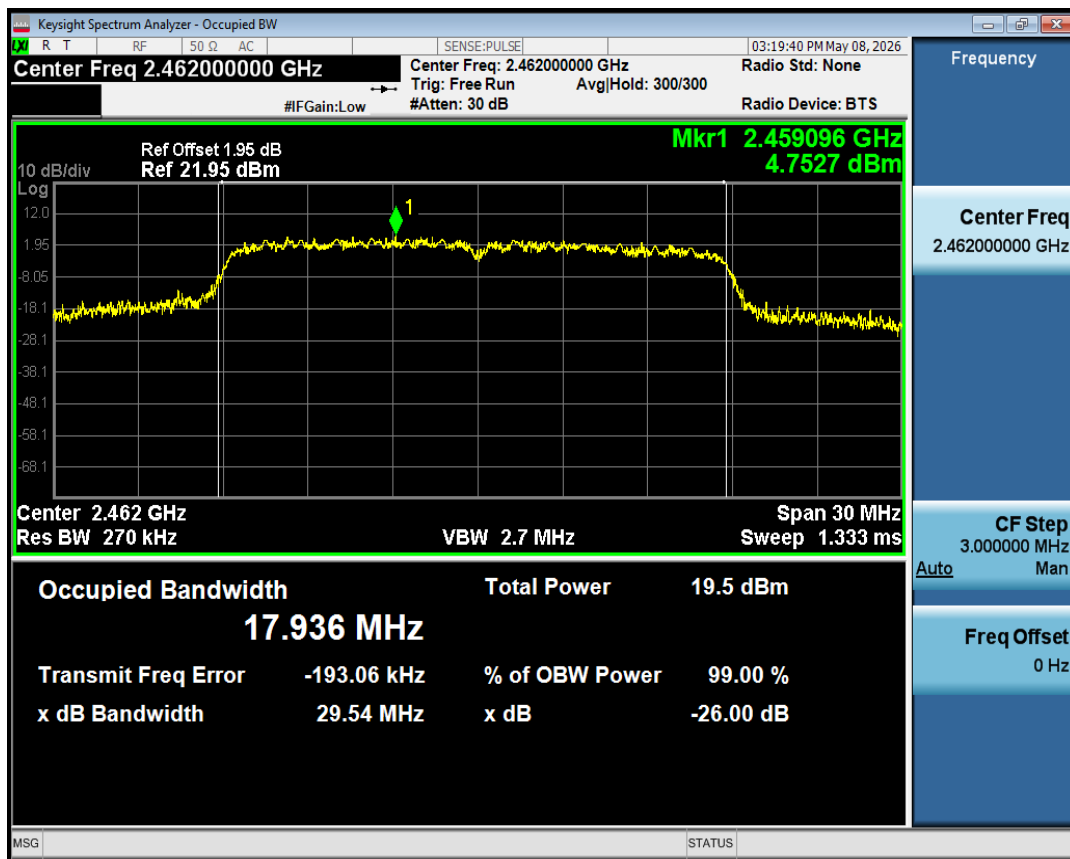
OBW NVNT g 2462MHz Ant1



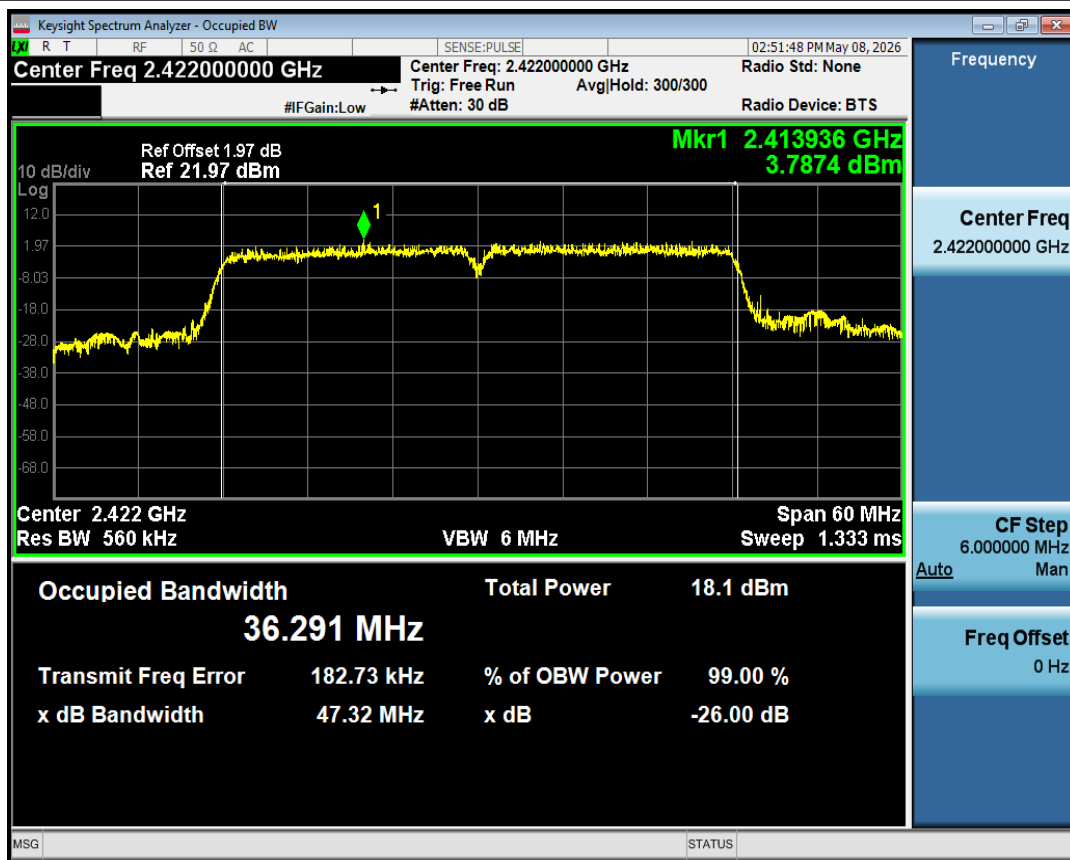
OBW NVNT n20 2412MHz Ant1



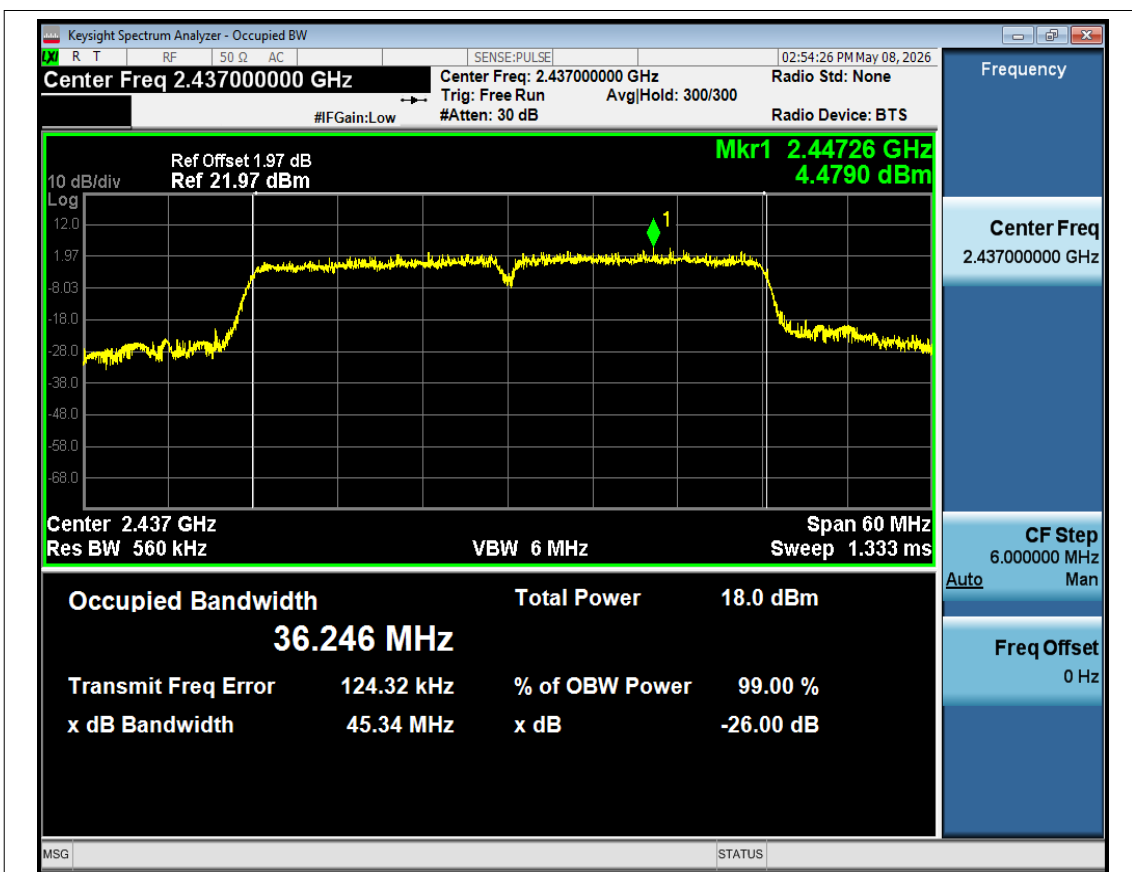
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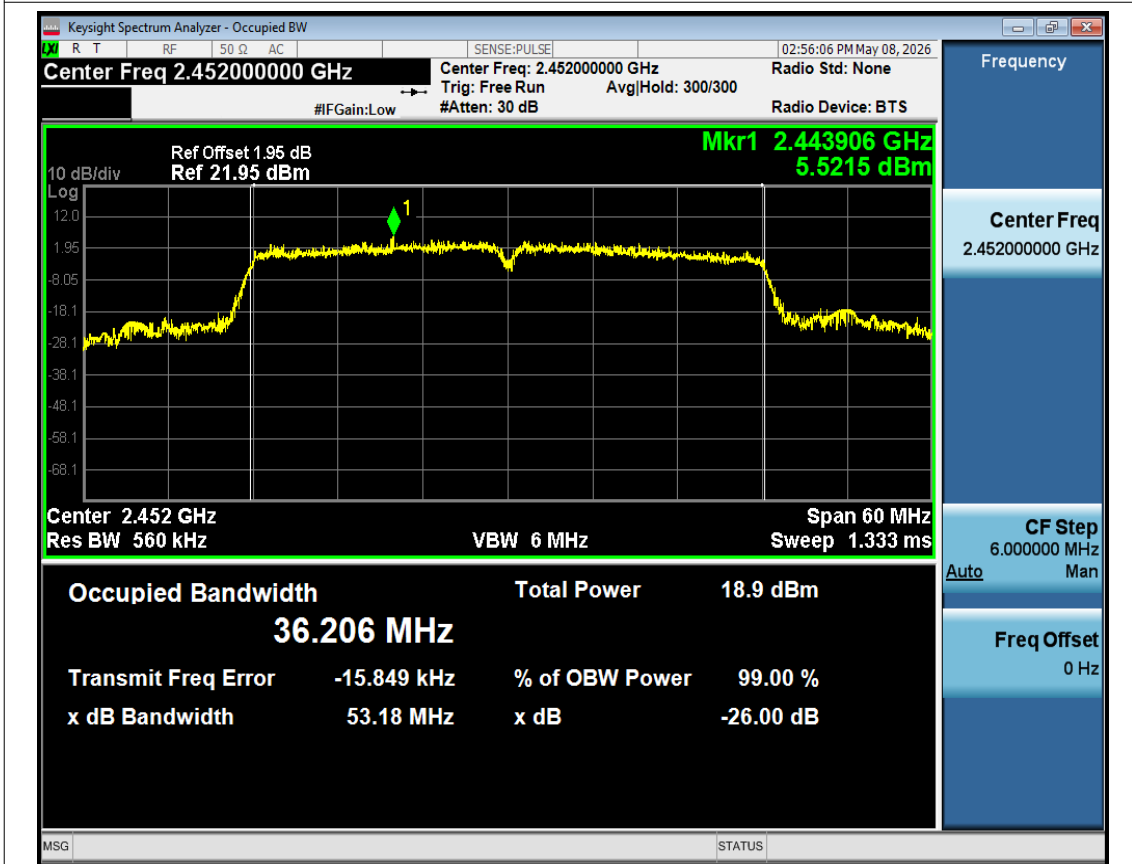
OBW NVNT n20 2462MHz Ant1



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	-17.42	0.47	-16.95	8	Pass
NVNT	b	2437	Ant1	-20.2	0.47	-19.73	8	Pass
NVNT	b	2462	Ant1	-17.94	0.47	-17.47	8	Pass
NVNT	g	2412	Ant1	-21.34	2.32	-19.02	8	Pass
NVNT	g	2437	Ant1	-23.27	2.28	-20.99	8	Pass
NVNT	g	2462	Ant1	-20.96	2.25	-18.71	8	Pass
NVNT	n20	2412	Ant1	-21.27	2.28	-18.99	8	Pass
NVNT	n20	2437	Ant1	-23.65	2.28	-21.37	8	Pass
NVNT	n20	2462	Ant1	-21.04	2.28	-18.76	8	Pass
NVNT	n40	2422	Ant1	-25.79	3.12	-22.67	8	Pass
NVNT	n40	2437	Ant1	-25.65	3.12	-22.53	8	Pass
NVNT	n40	2452	Ant1	-24.5	3.12	-21.38	8	Pass
Remark: $PSD(dBm/3kHz) = PSD(dBm/30kHz) - 10\log(30kHz/3kHz)$								



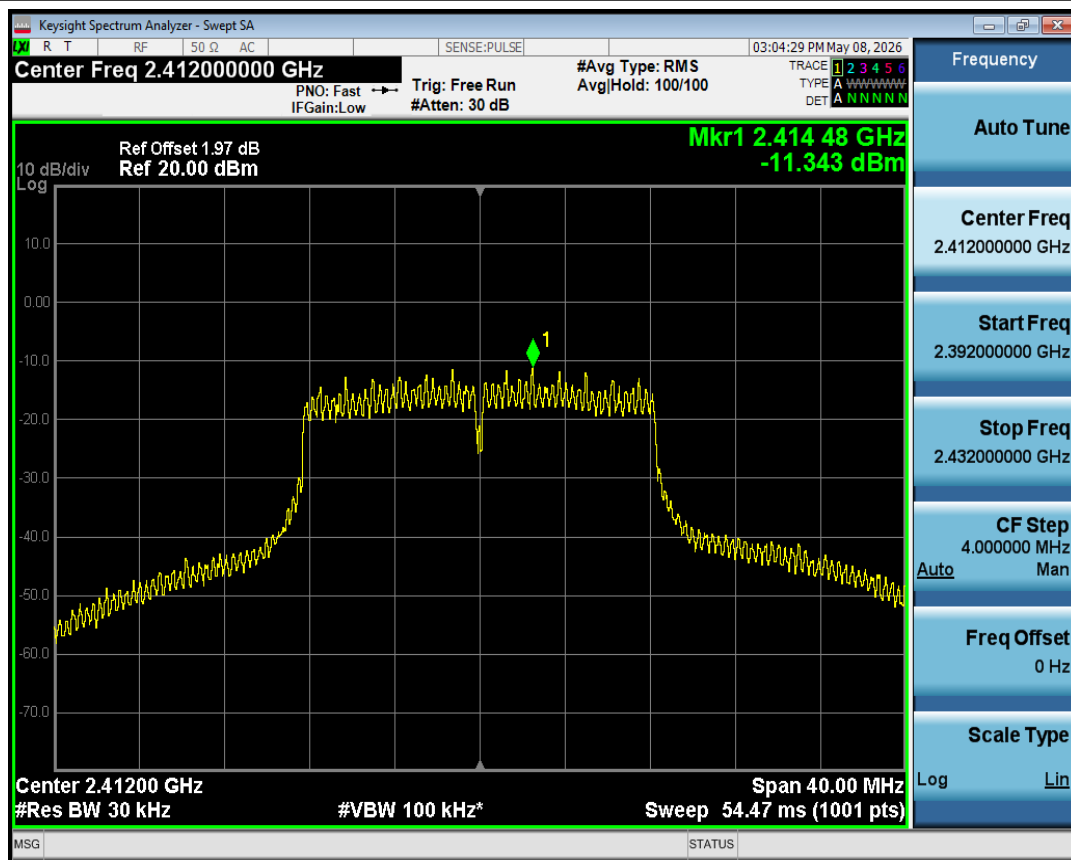
PSD NVNT b 2412MHz Ant1



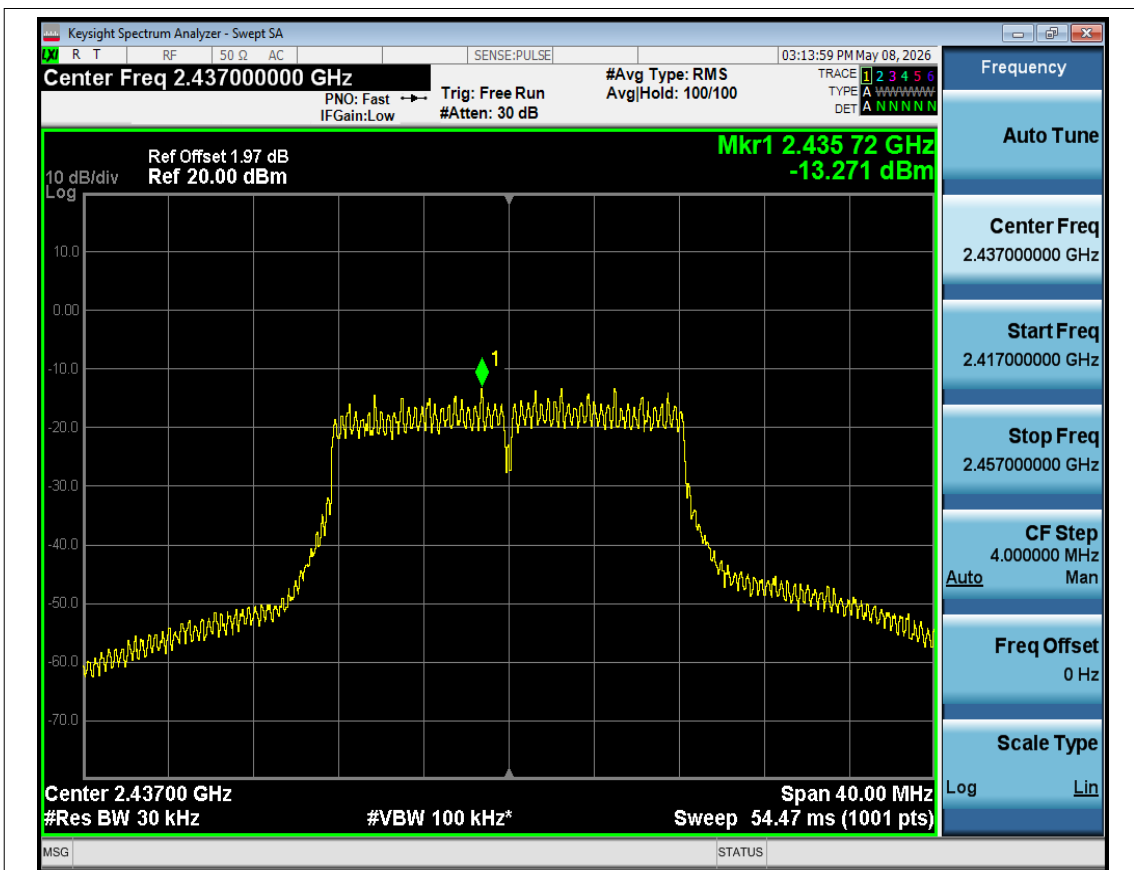
PSD NVNT b 2437MHz Ant1



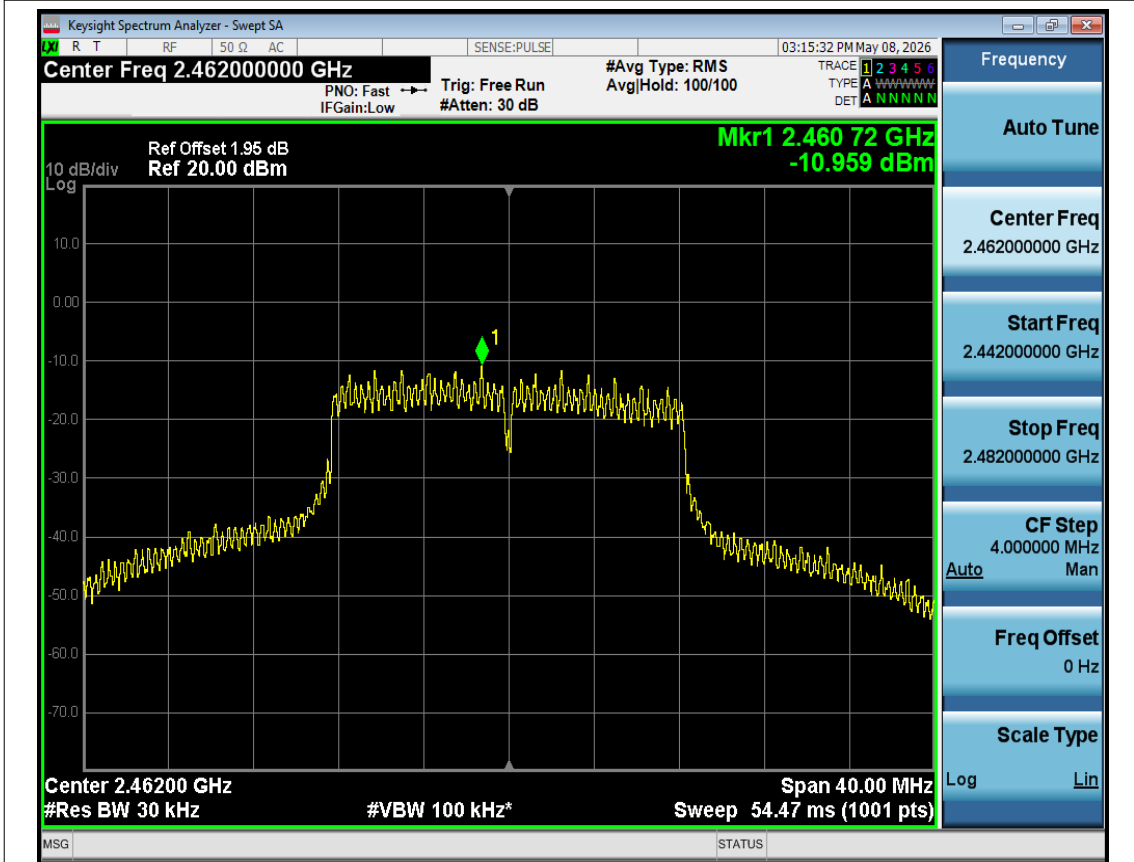
PSD NVNT b 2462MHz Ant1



PSD NVNT g 2412MHz Ant1



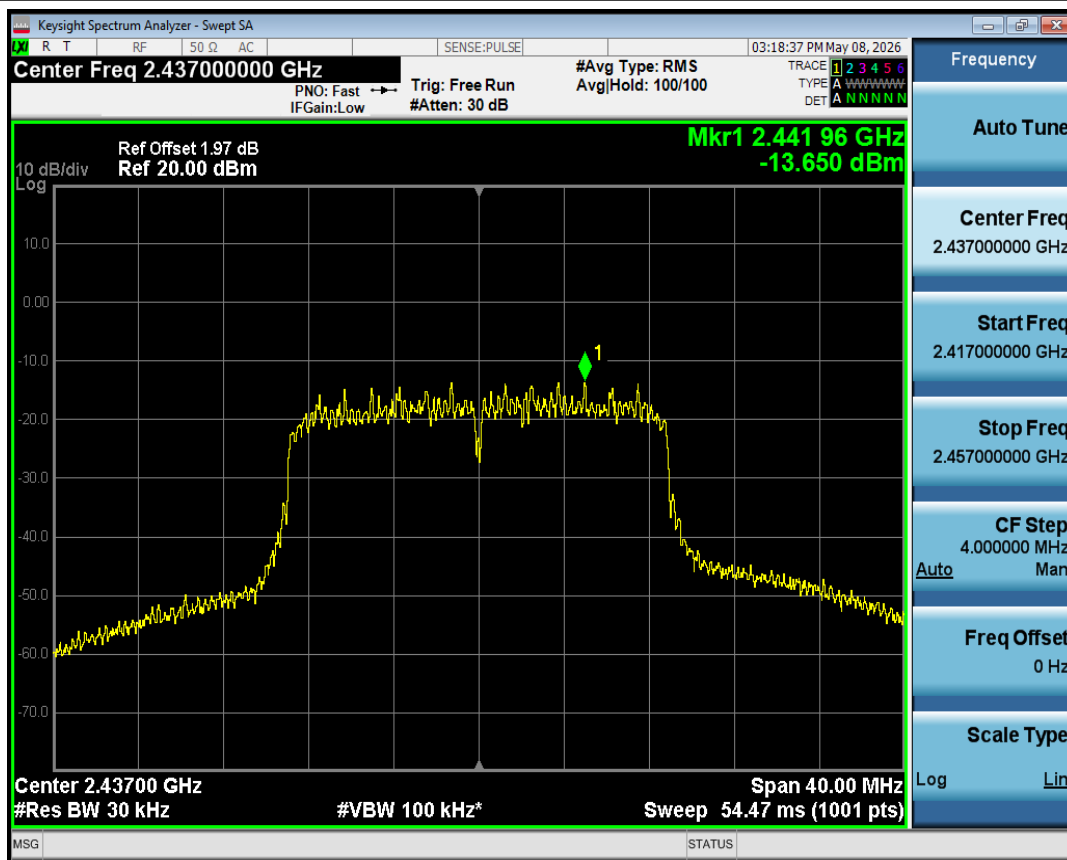
PSD NVNT g 2437MHz Ant1



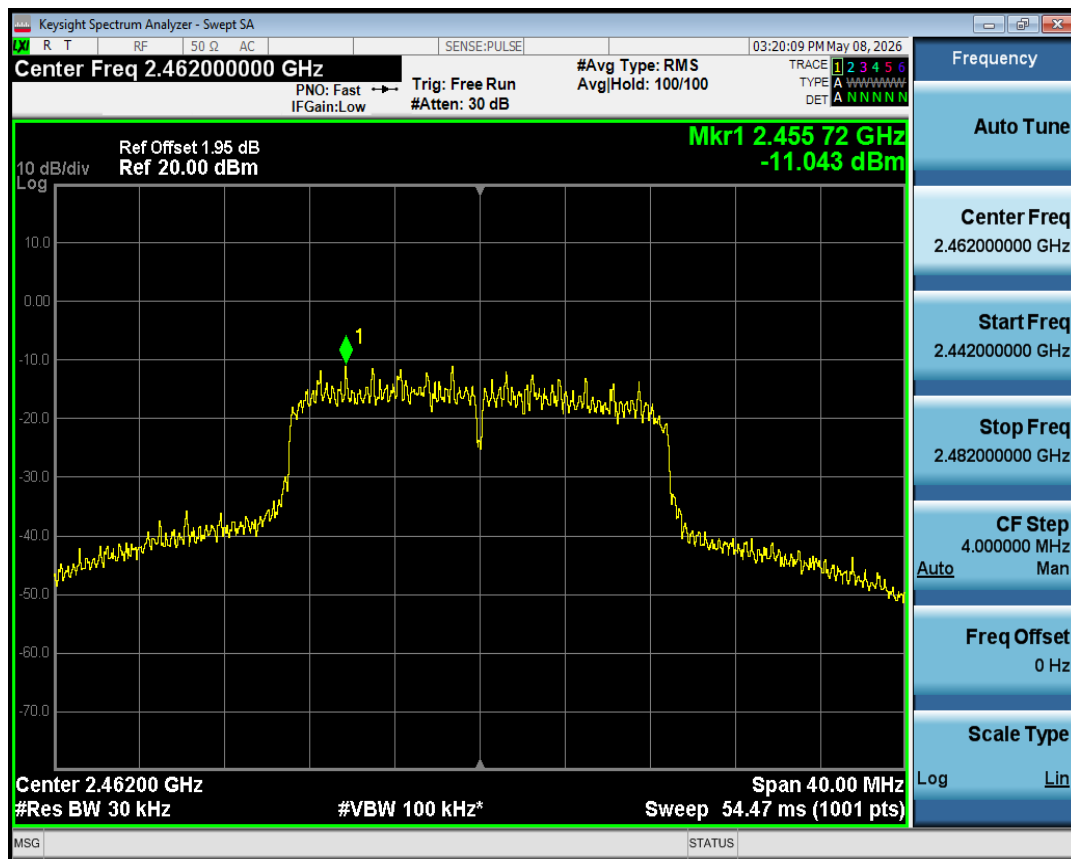
PSD NVNT g 2462MHz Ant1



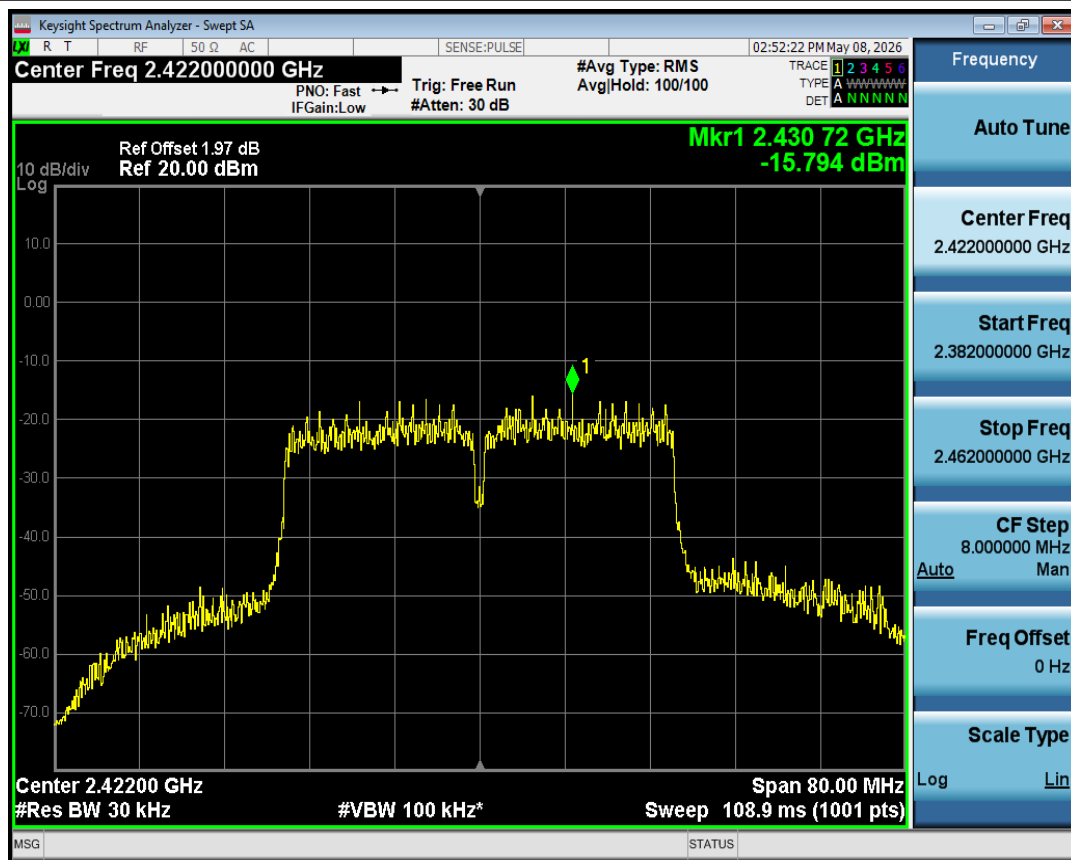
PSD NVNT n20 2412MHz Ant1



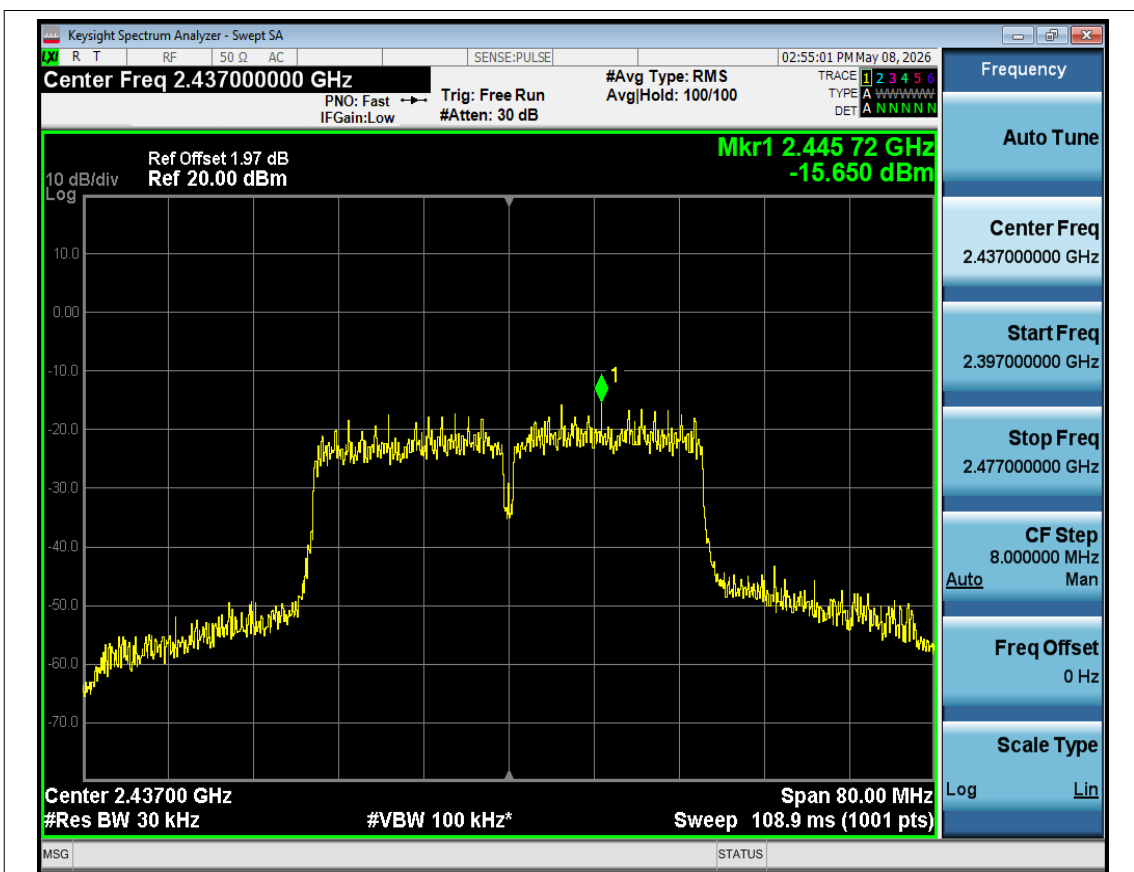
PSD NVNT n20 2437MHz Ant1



PSD NVNT n20 2462MHz Ant1



PSD NVNT n40 2422MHz Ant1



PSD NVNT n40 2437MHz Ant1



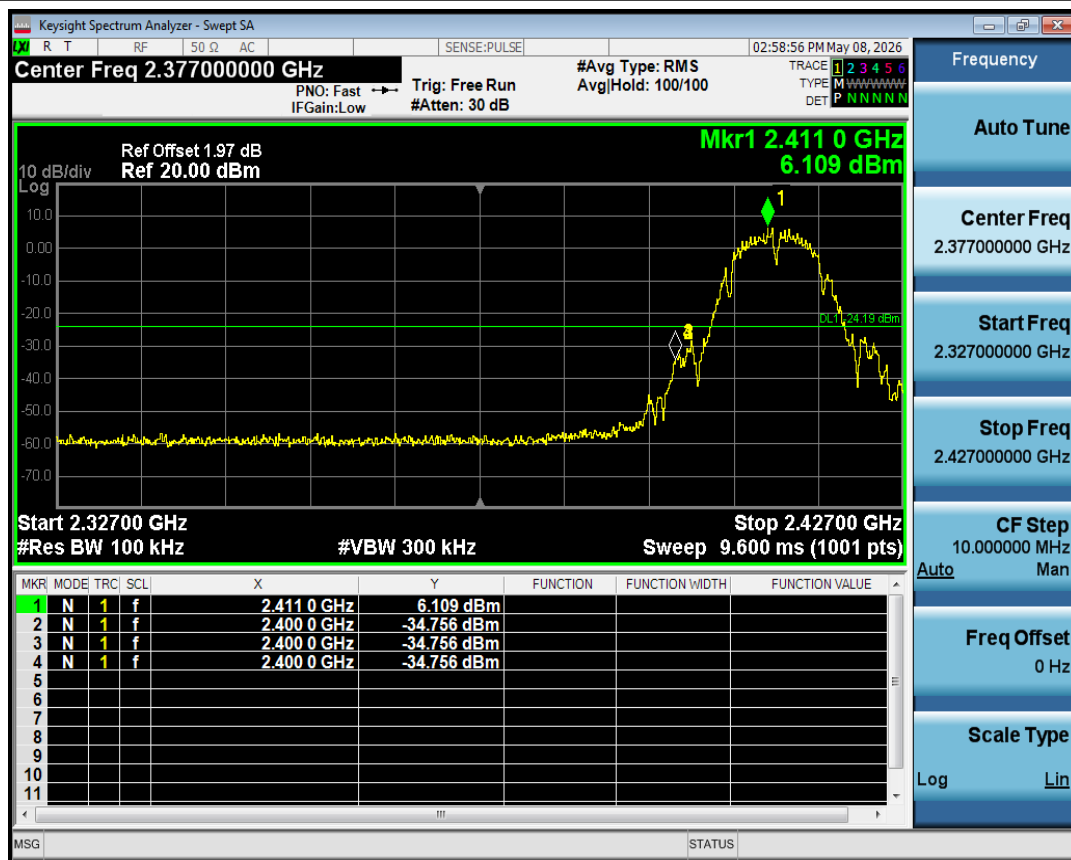
PSD NVNT n40 2452MHz Ant1

Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-40.56	-30	Pass
NVNT	b	2462	Ant1	-60.27	-30	Pass
NVNT	g	2412	Ant1	-33.99	-30	Pass
NVNT	g	2462	Ant1	-42.86	-30	Pass
NVNT	n20	2412	Ant1	-31.14	-30	Pass
NVNT	n20	2462	Ant1	-37.71	-30	Pass
NVNT	n40	2422	Ant1	-31.03	-30	Pass
NVNT	n40	2452	Ant1	-31.37	-30	Pass



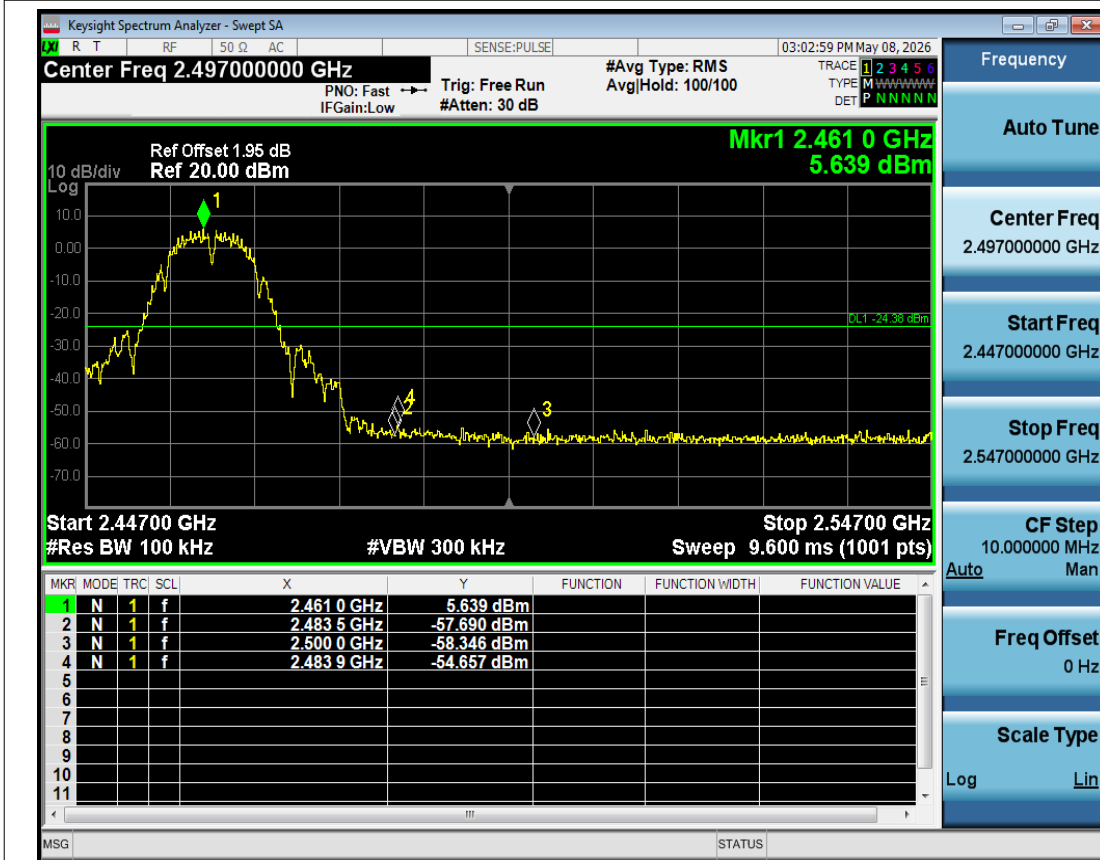
Band Edge NVNT b 2412MHz Ant1 Ref



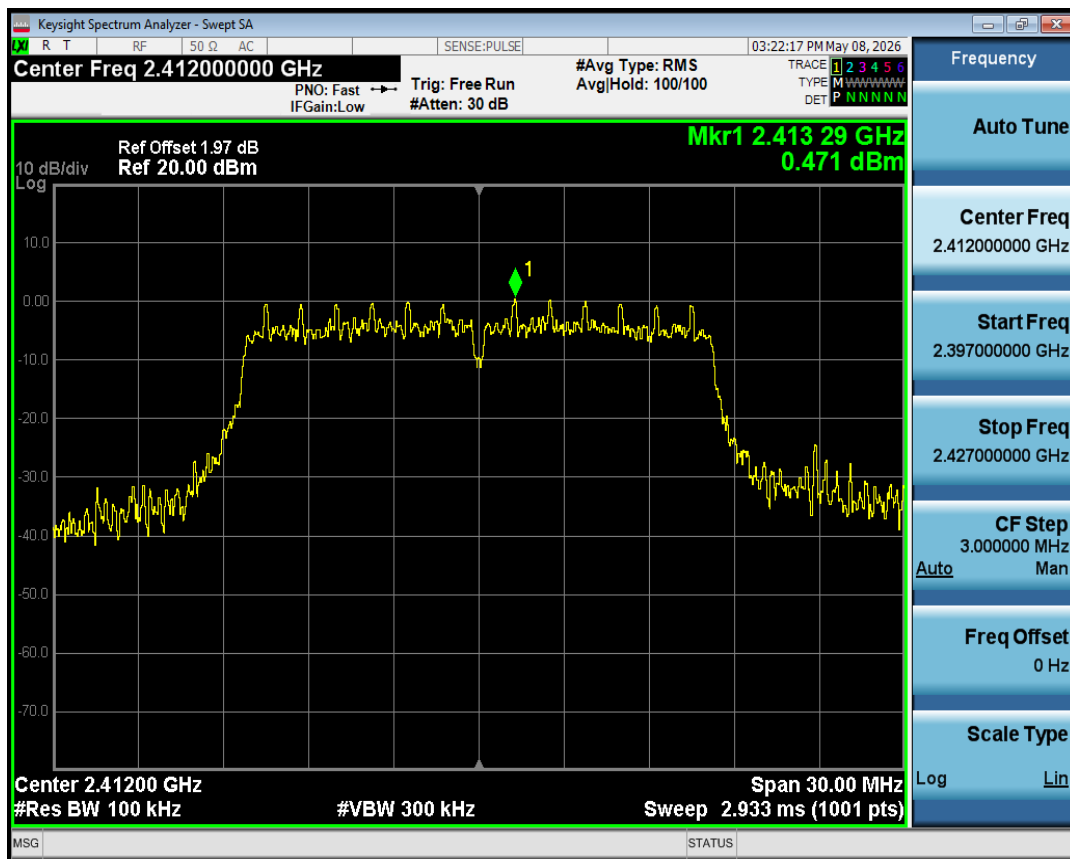
Band Edge NVNT b 2412MHz Ant1 Emission



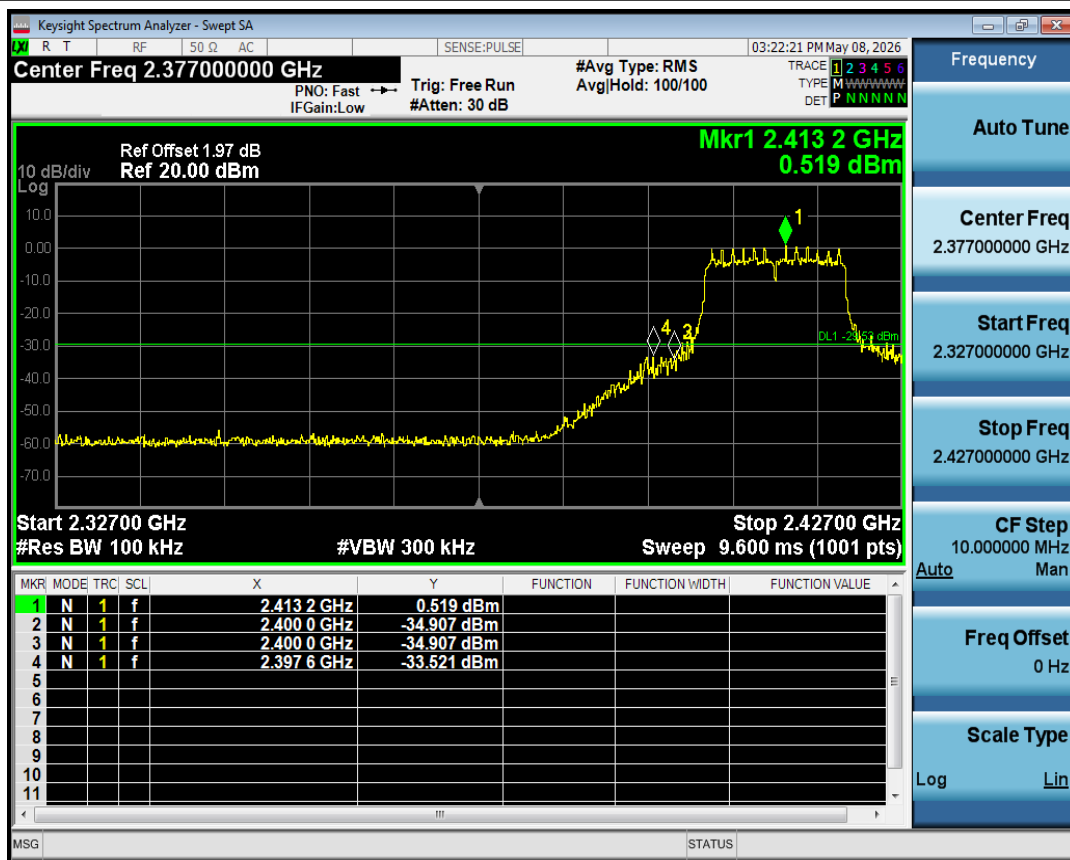
Band Edge NVNT b 2462MHz Ant1 Ref



Band Edge NVNT b 2462MHz Ant1 Emission



Band Edge NVNT g 2412MHz Ant1 Ref



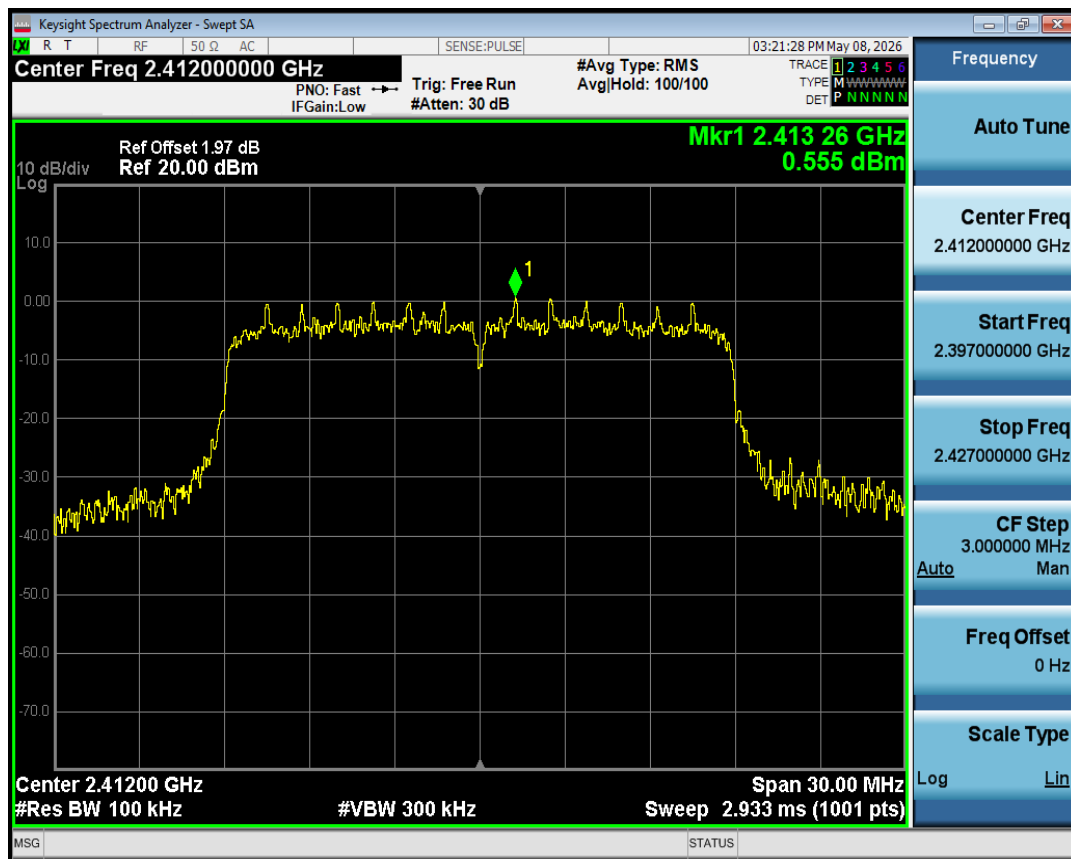
Band Edge NVNT g 2412MHz Ant1 Emission



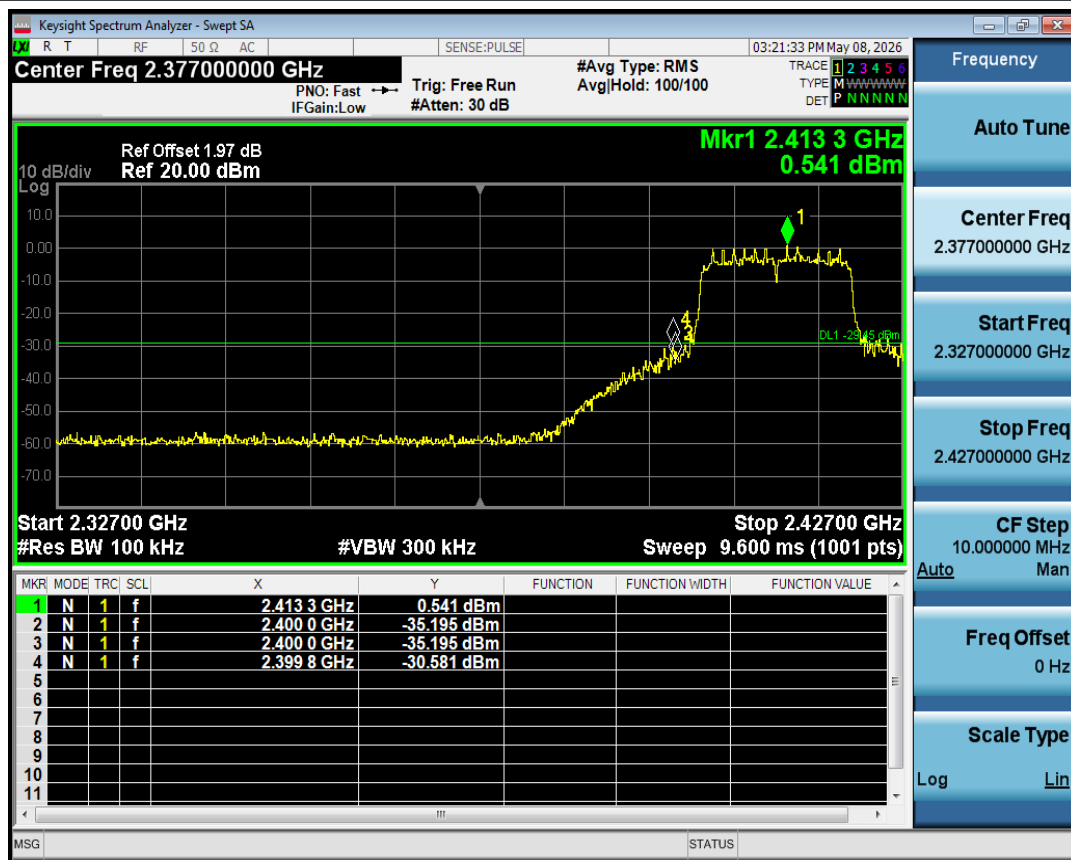
Band Edge NVNT g 2462MHz Ant1 Ref



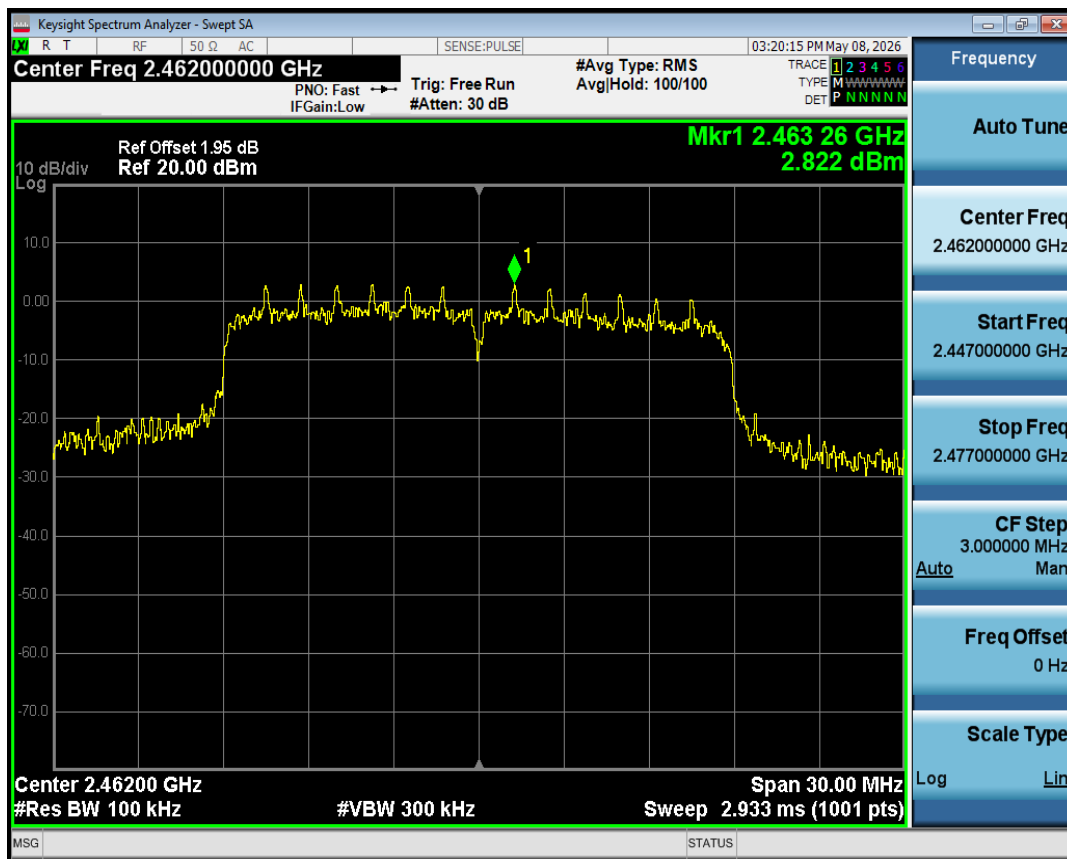
Band Edge NVNT g 2462MHz Ant1 Emission



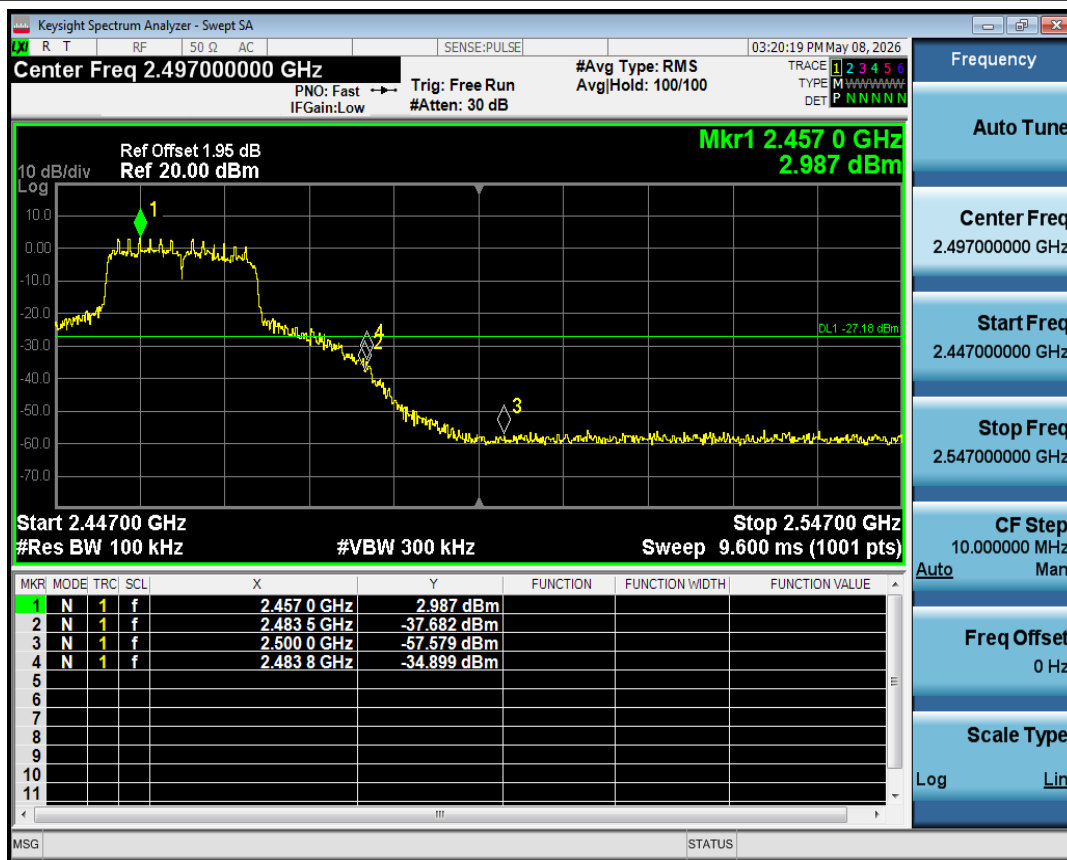
Band Edge NVNT n20 2412MHz Ant1 Ref



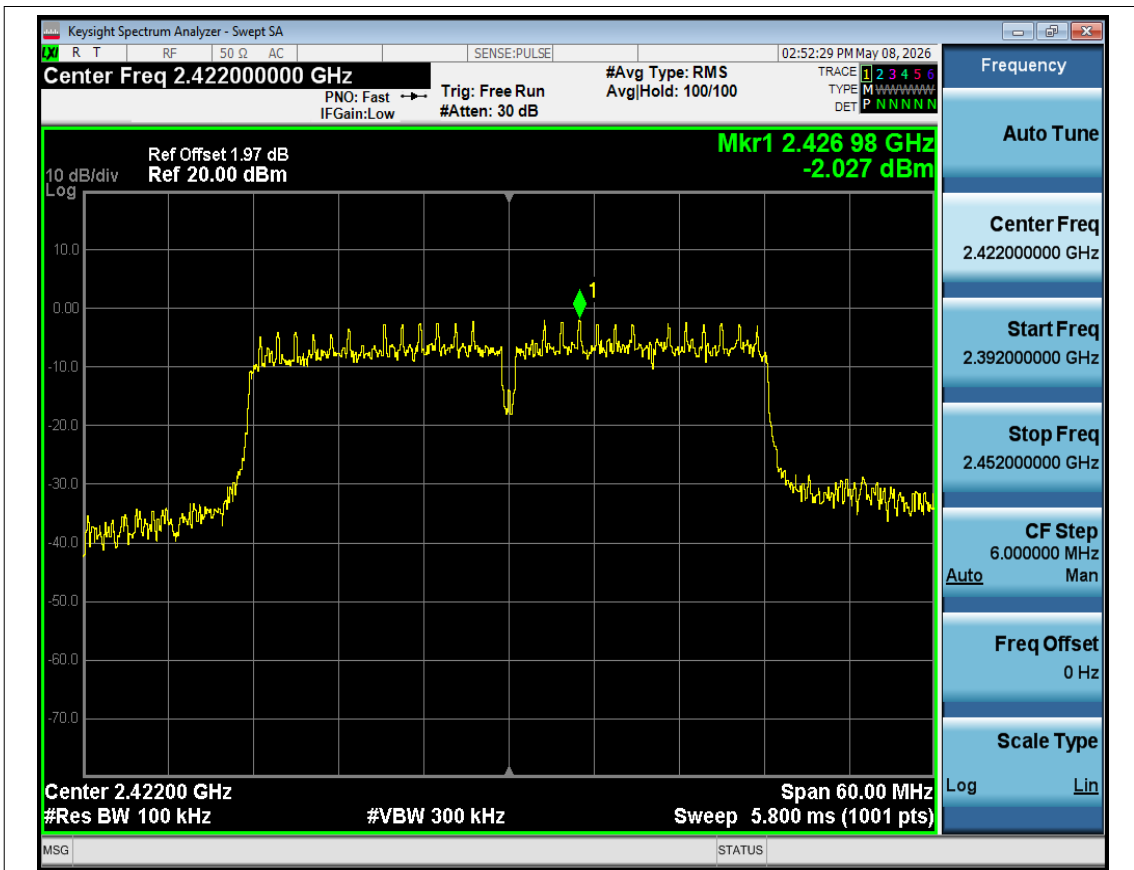
Band Edge NVNT n20 2412MHz Ant1 Emission



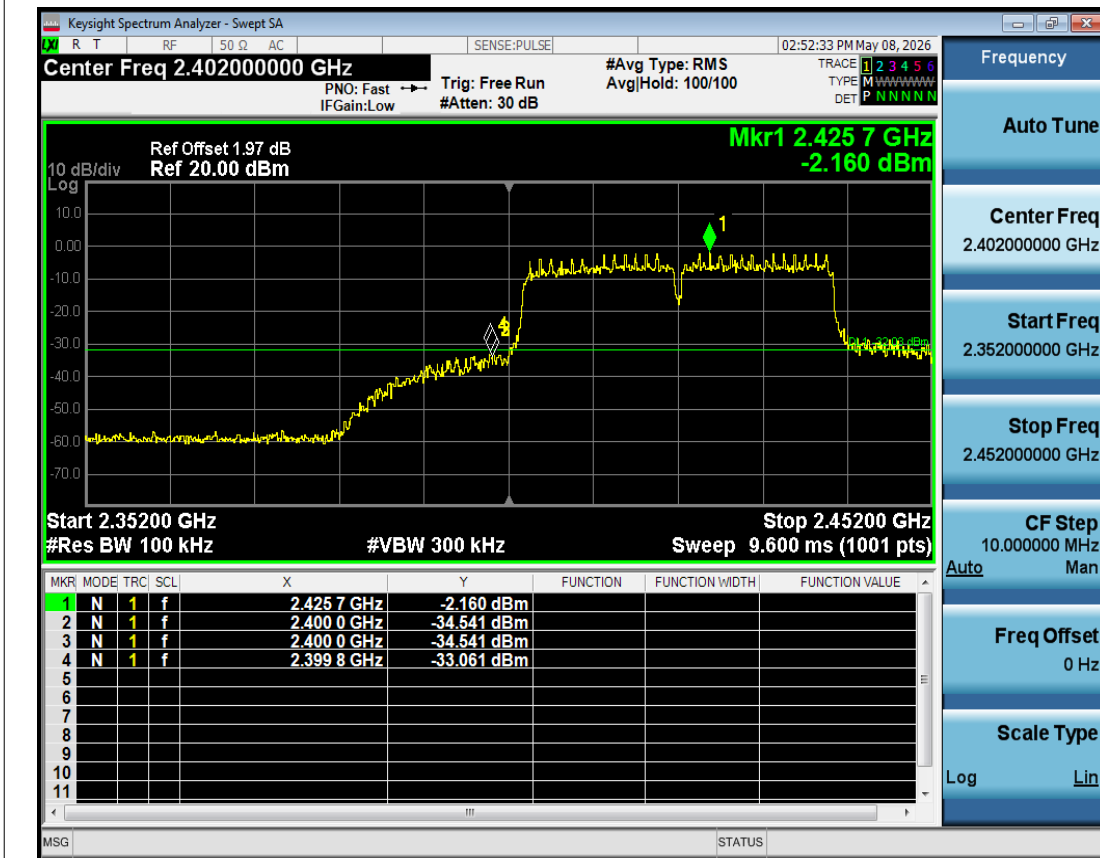
Band Edge NVNT n20 2462MHz Ant1 Ref



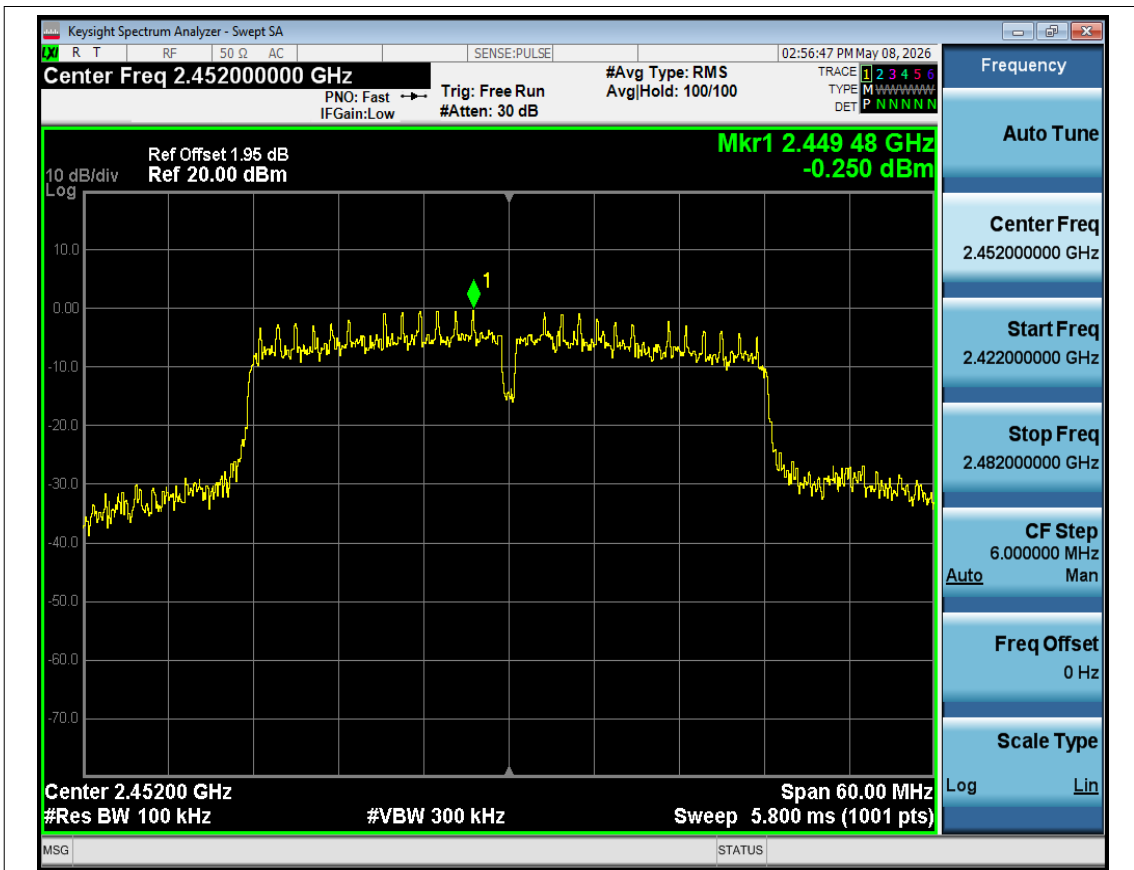
Band Edge NVNT n20 2462MHz Ant1 Emission



Band Edge NVNT n40 2422MHz Ant1 Ref



Band Edge NVNT n40 2422MHz Ant1 Emission



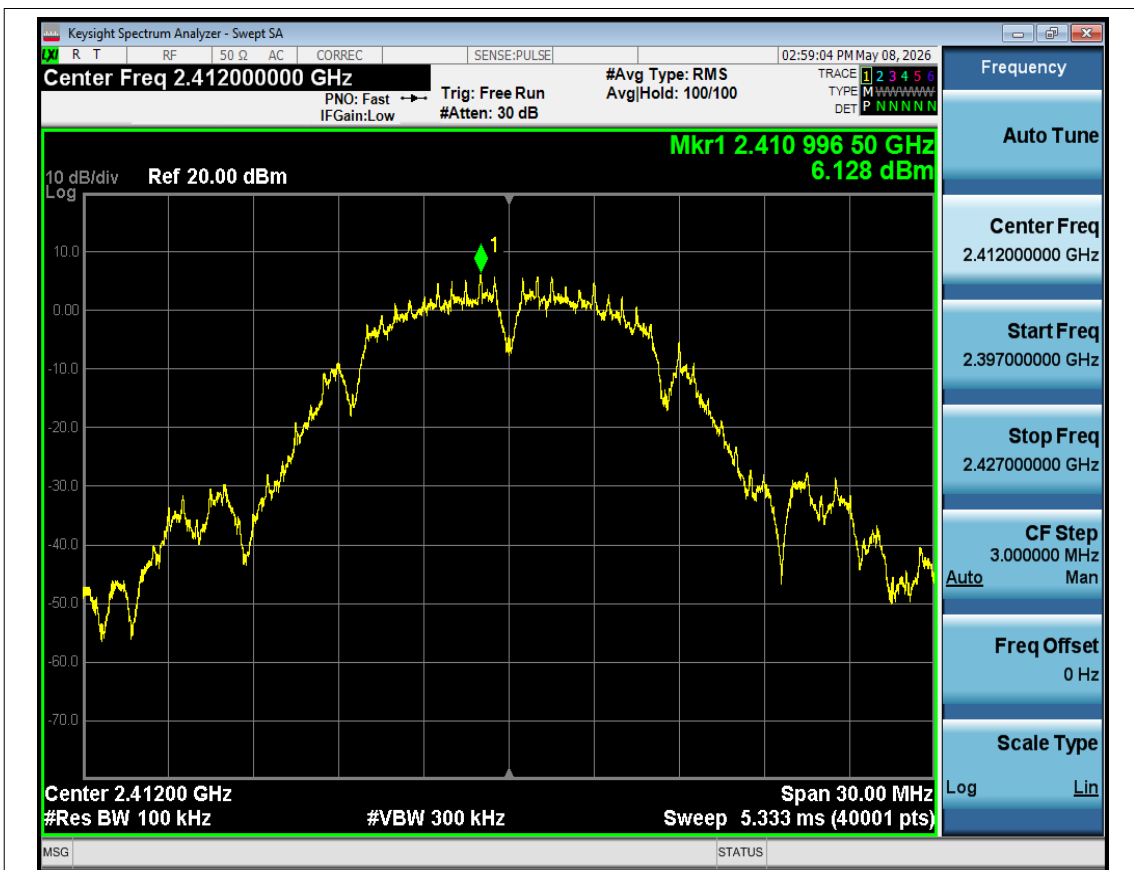
Band Edge NVNT n40 2452MHz Ant1 Ref



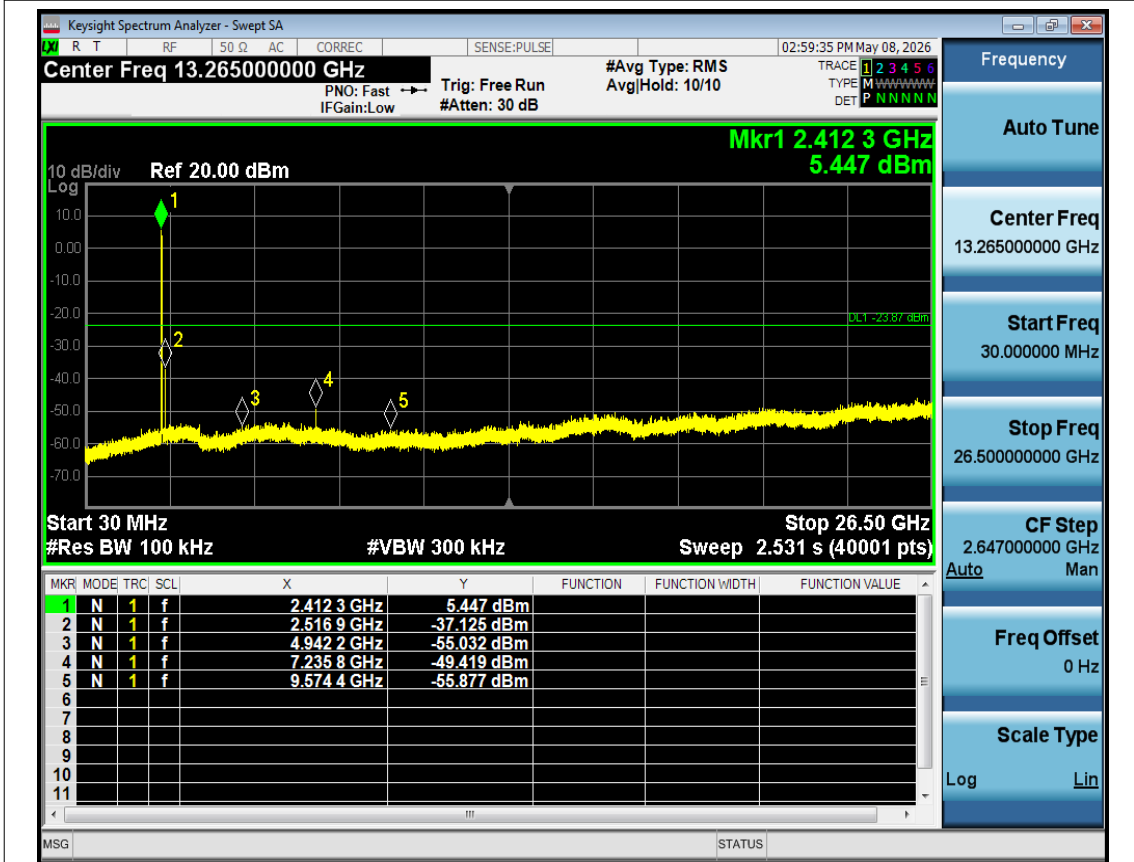
Band Edge NVNT n40 2452MHz Ant1 Emission

Conducted RF Spurious Emission

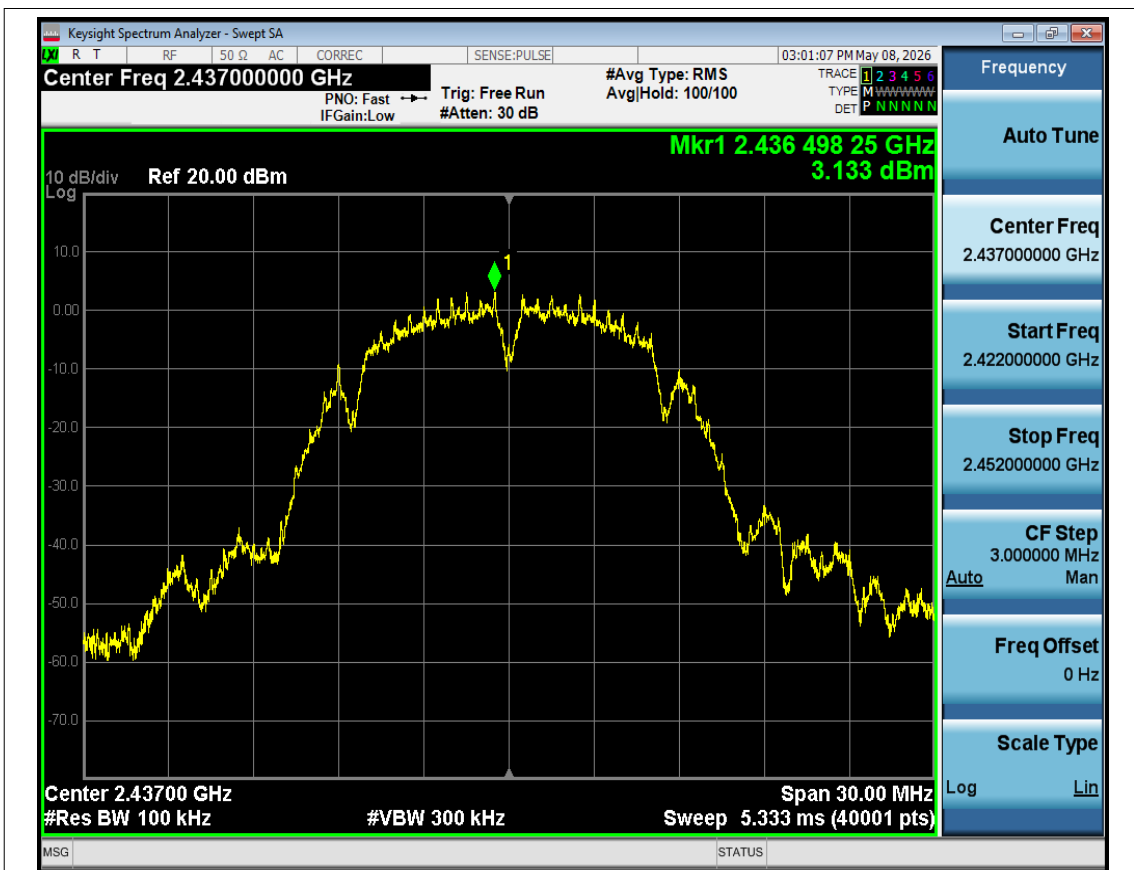
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-43.25	-30	Pass
NVNT	b	2437	Ant1	-49.82	-30	Pass
NVNT	b	2462	Ant1	-51.35	-30	Pass
NVNT	g	2412	Ant1	-48.86	-30	Pass
NVNT	g	2437	Ant1	-46.75	-30	Pass
NVNT	g	2462	Ant1	-49.5	-30	Pass
NVNT	n20	2412	Ant1	-49.16	-30	Pass
NVNT	n20	2437	Ant1	-45.86	-30	Pass
NVNT	n20	2462	Ant1	-48.96	-30	Pass
NVNT	n40	2422	Ant1	-44.3	-30	Pass
NVNT	n40	2437	Ant1	-45.18	-30	Pass
NVNT	n40	2452	Ant1	-46.37	-30	Pass



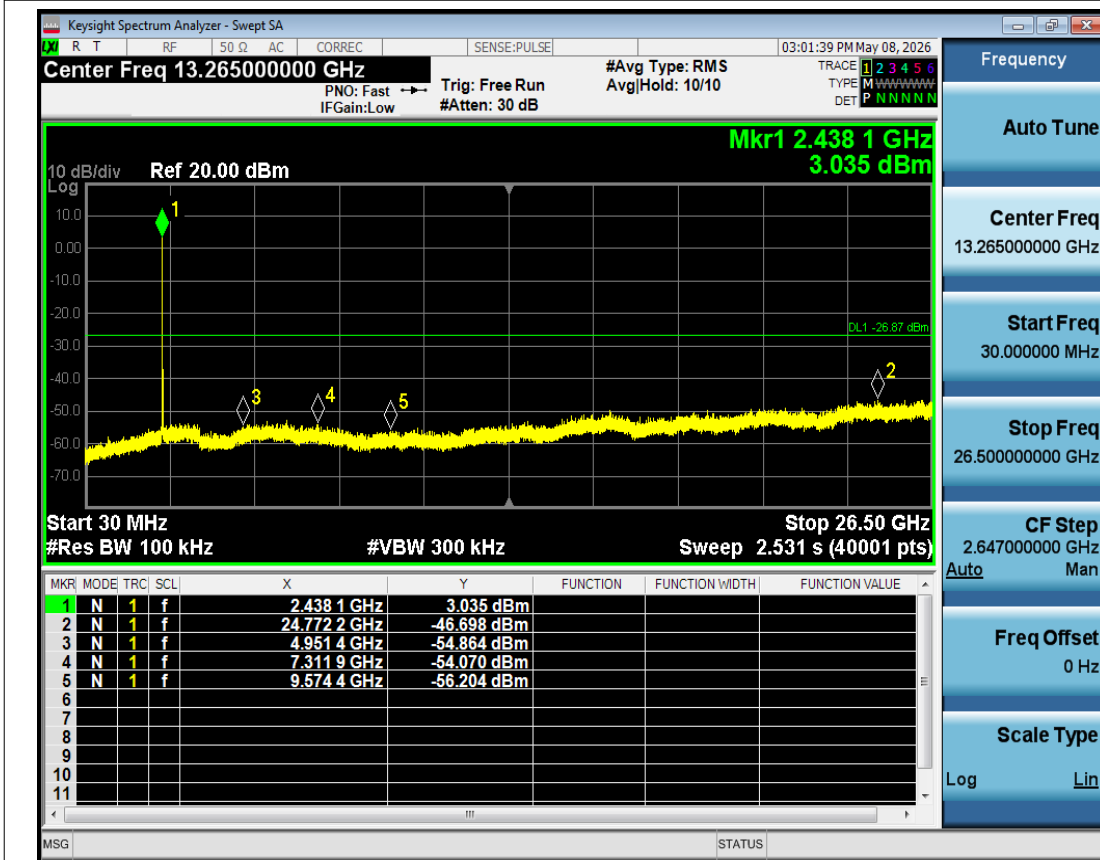
Tx. Spurious NVNT b 2412MHz Ant1 Ref



Tx. Spurious NVNT b 2412MHz Ant1 Emission



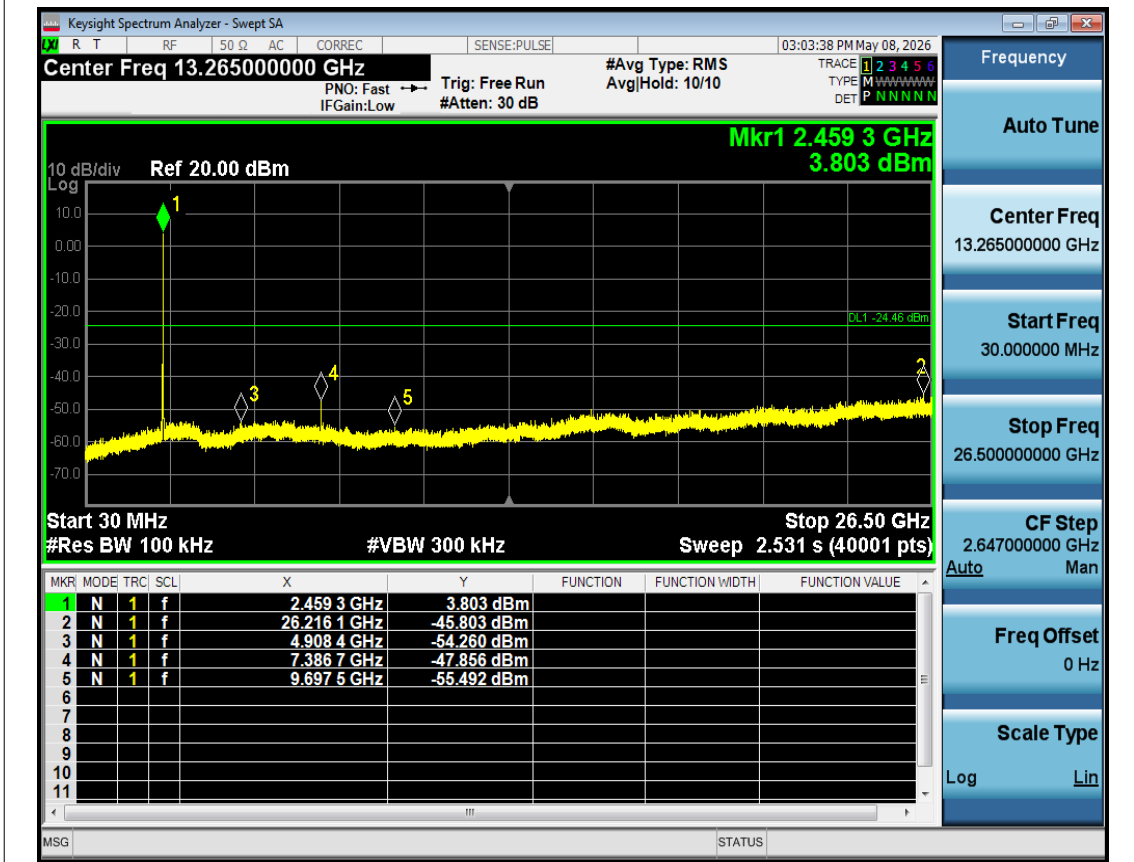
Tx. Spurious NVNT b 2437MHz Ant1 Ref



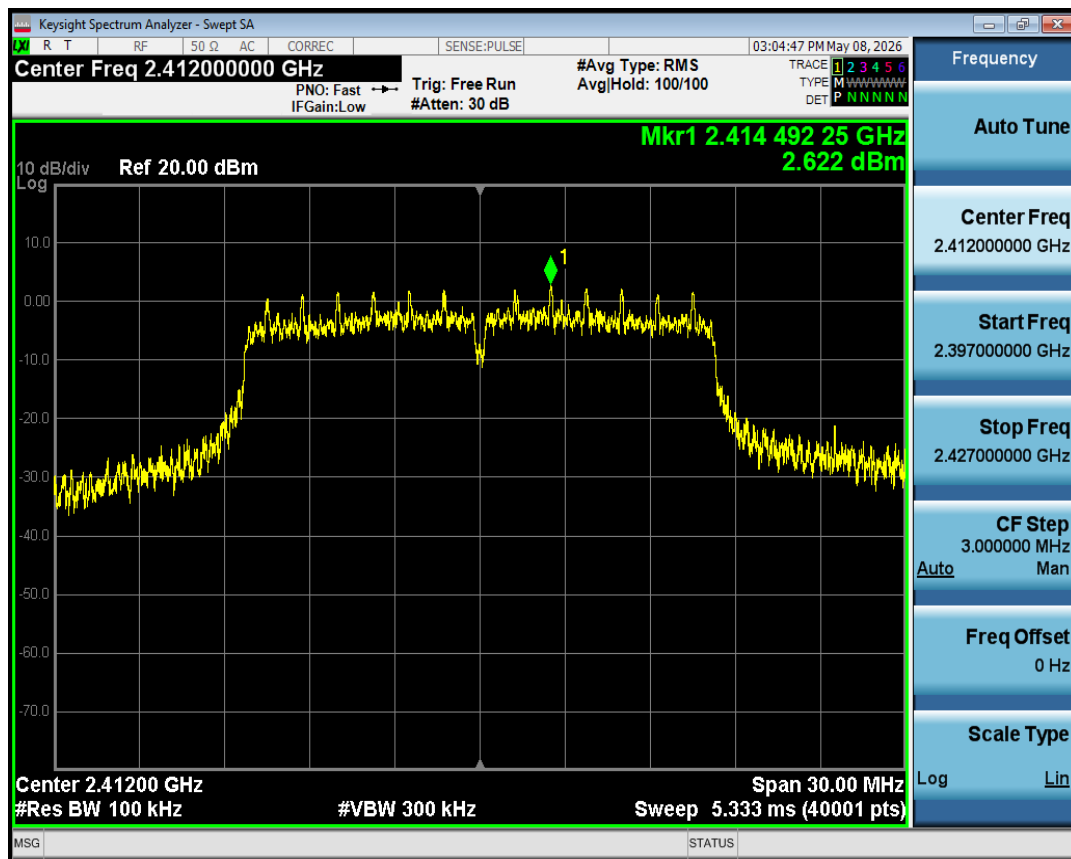
Tx. Spurious NVNT b 2437MHz Ant1 Emission



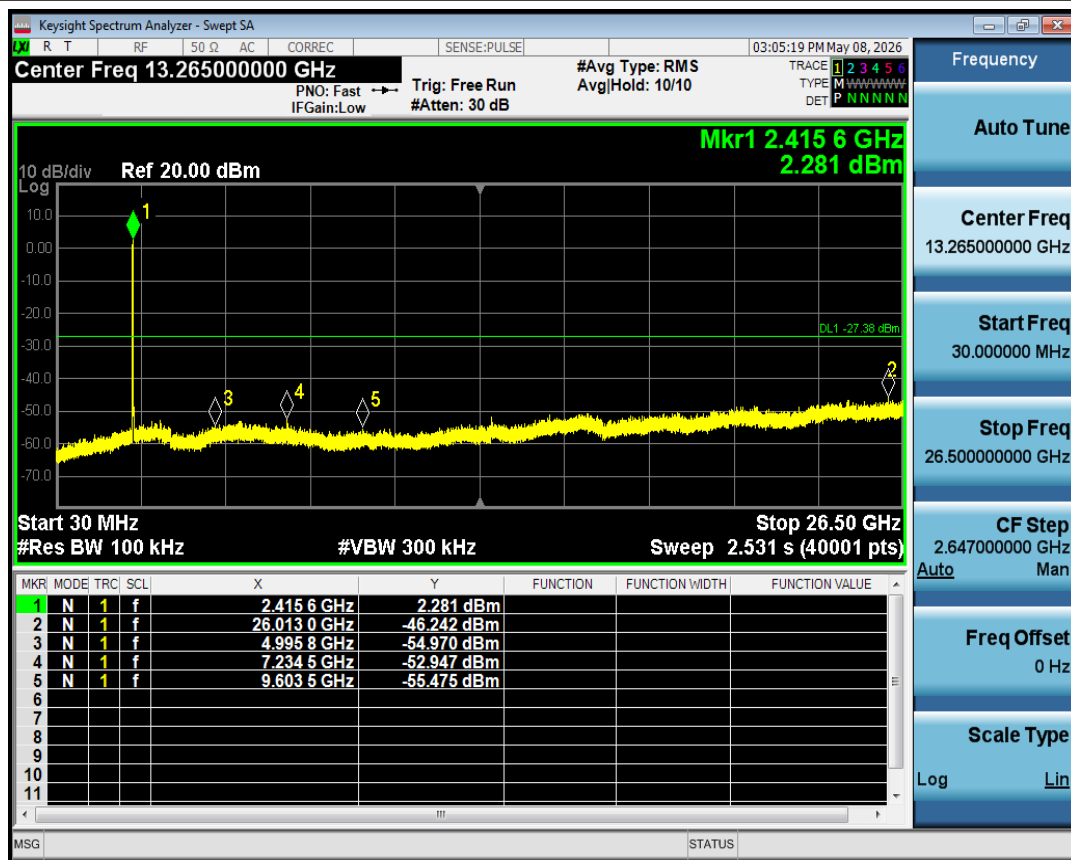
Tx. Spurious NVNT b 2462MHz Ant1 Ref



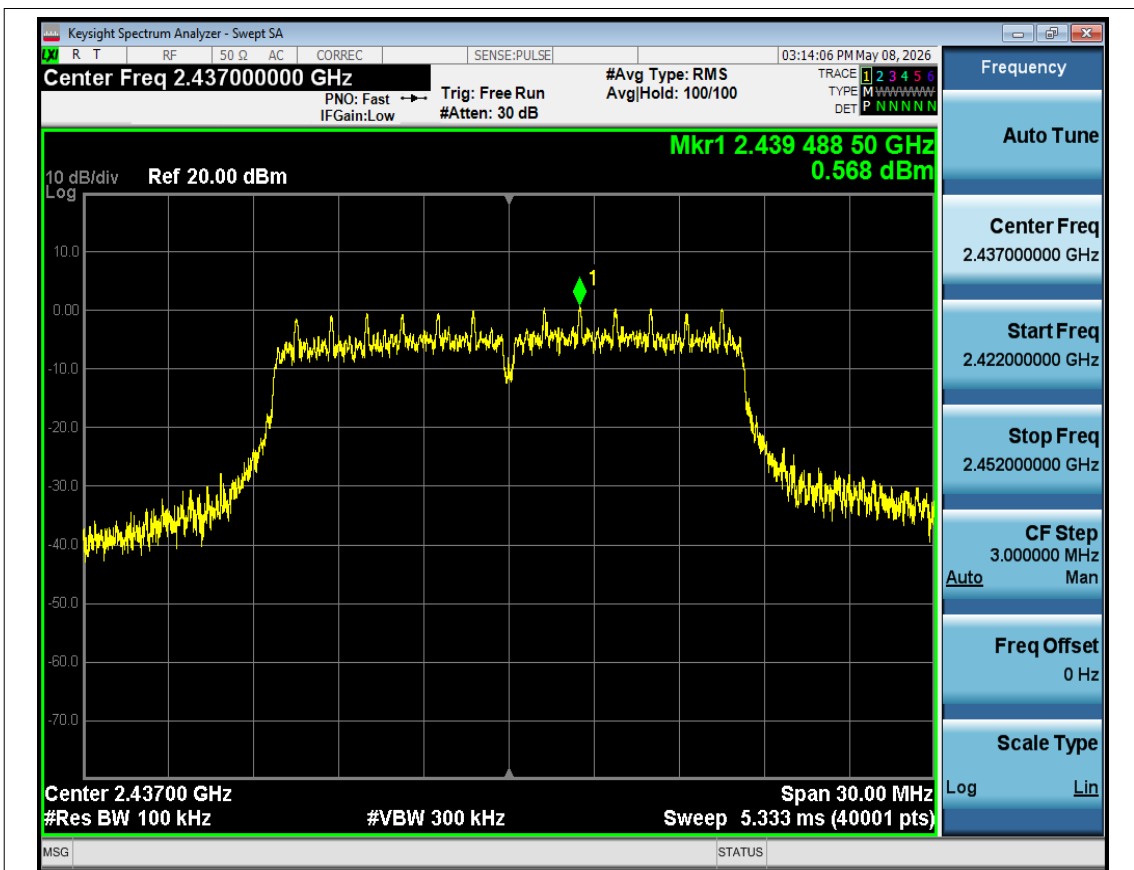
Tx. Spurious NVNT b 2462MHz Ant1 Emission



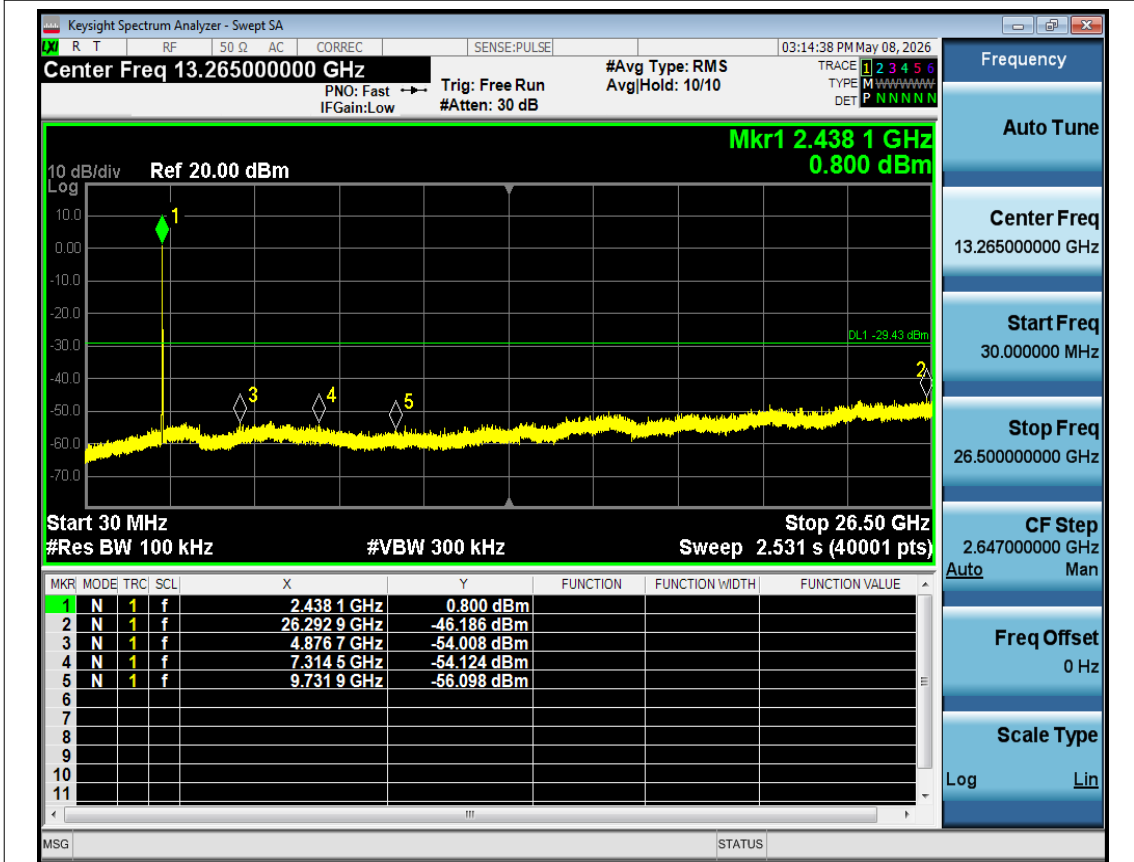
Tx. Spurious NVNT g 2412MHz Ant1 Ref



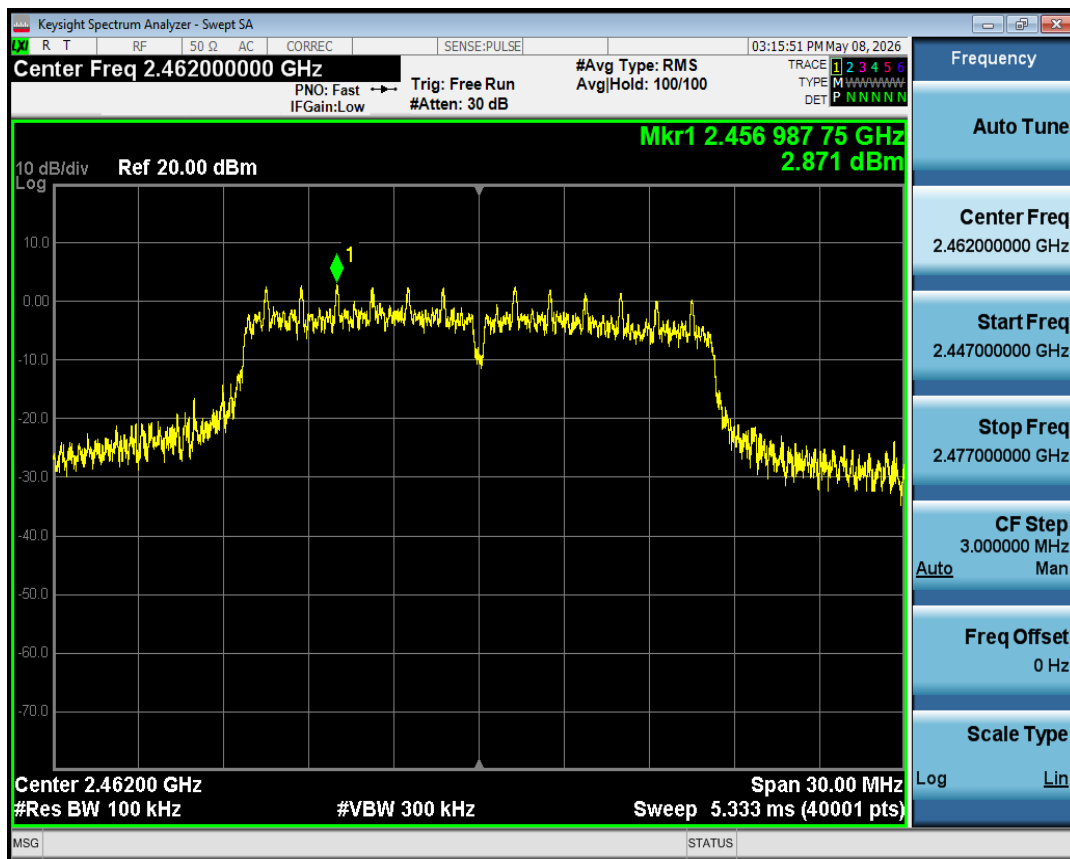
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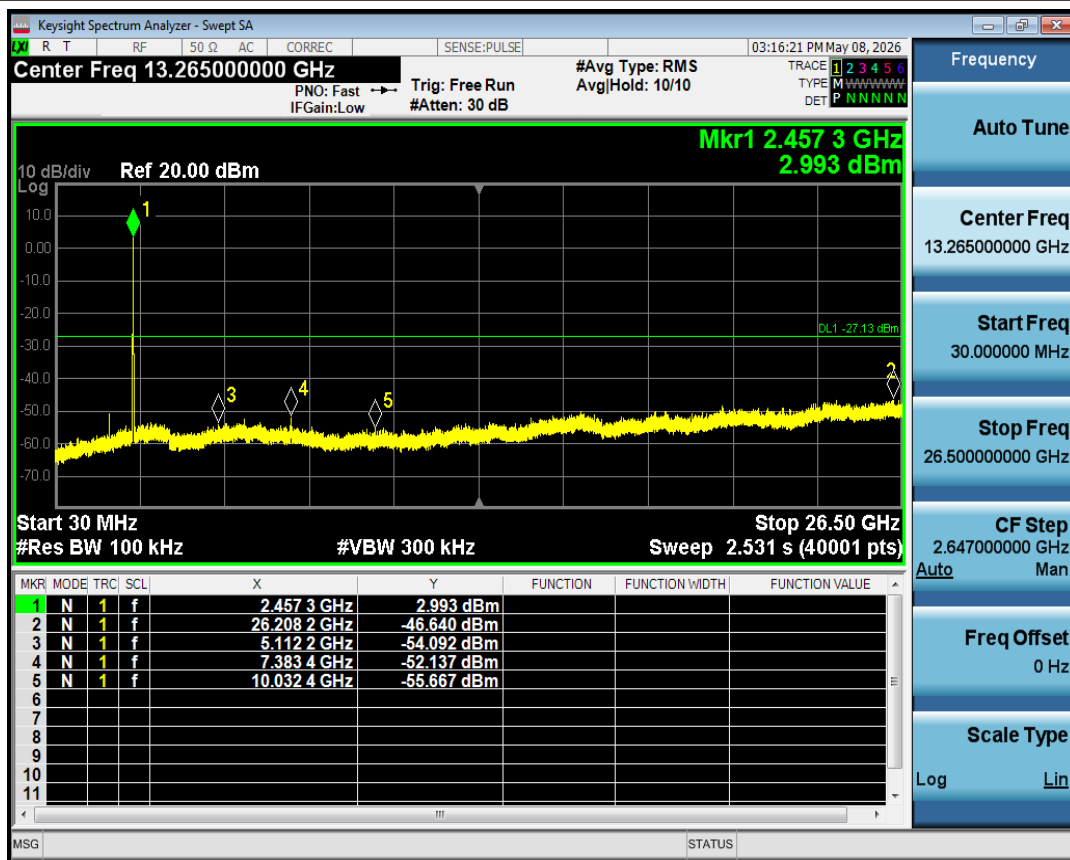
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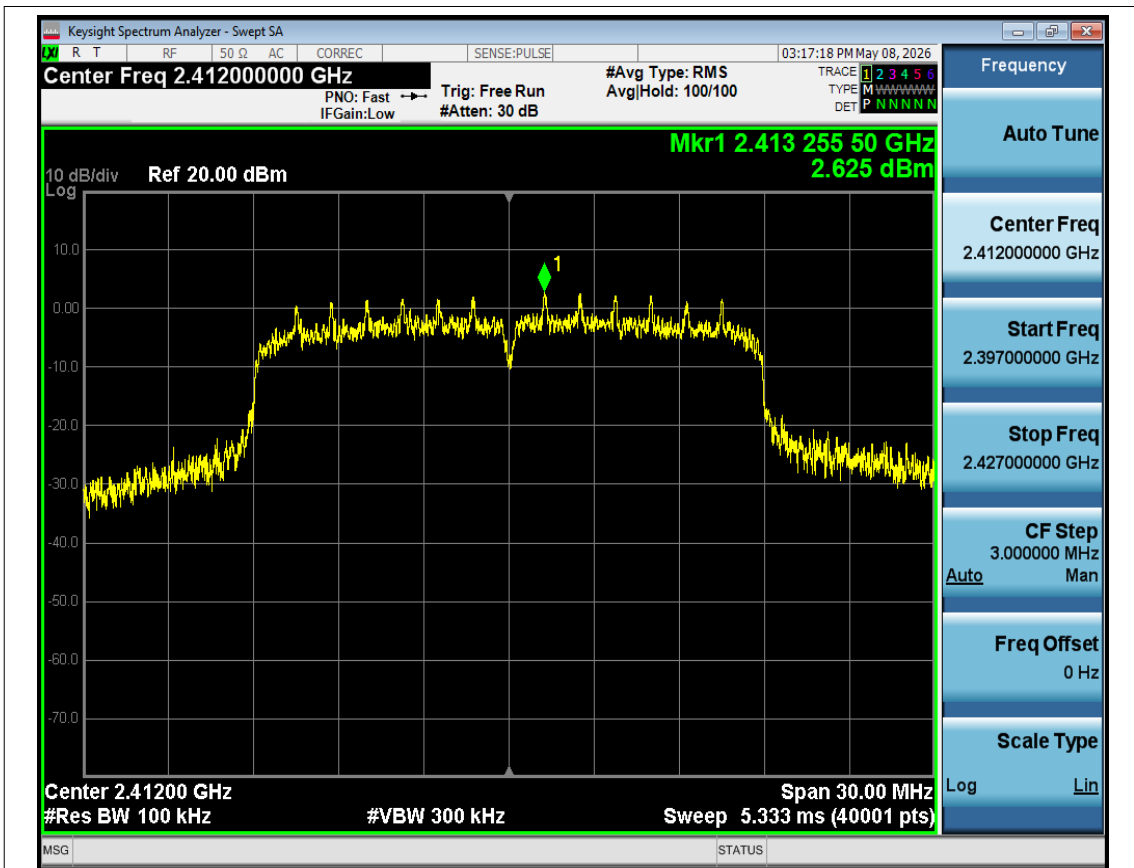
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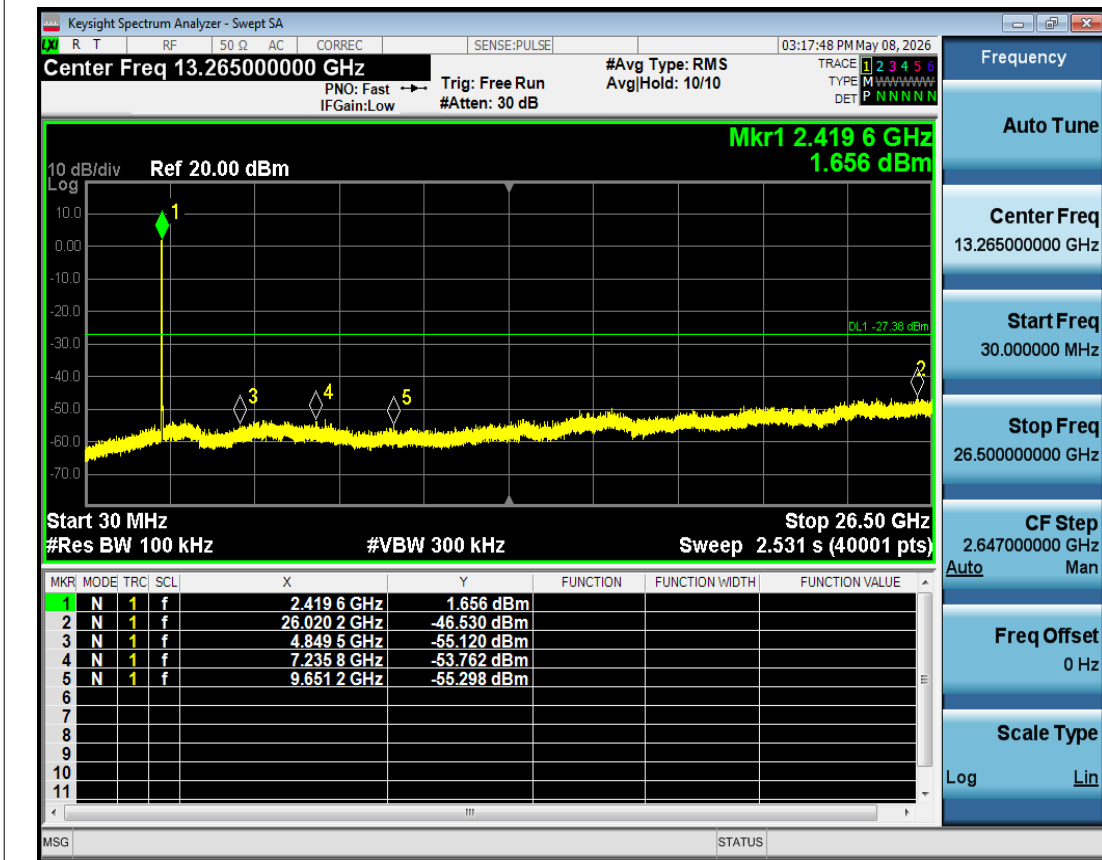
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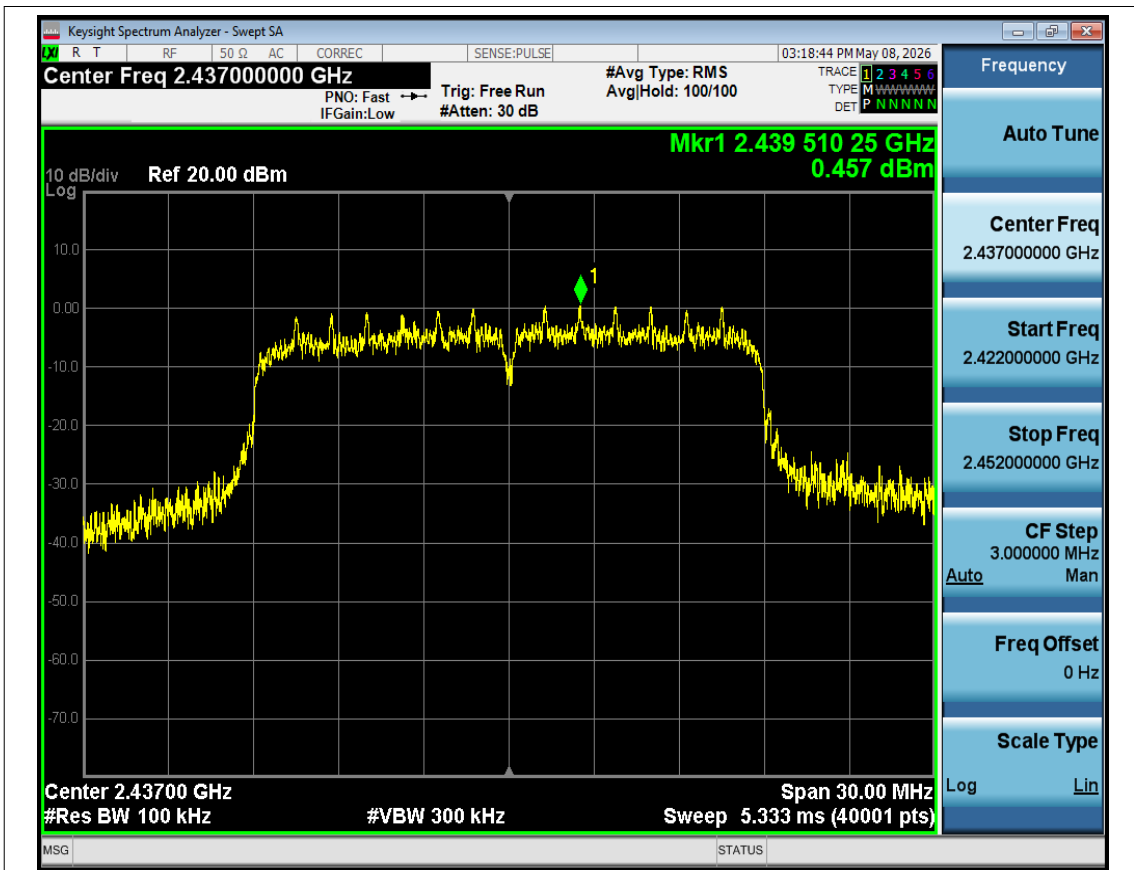
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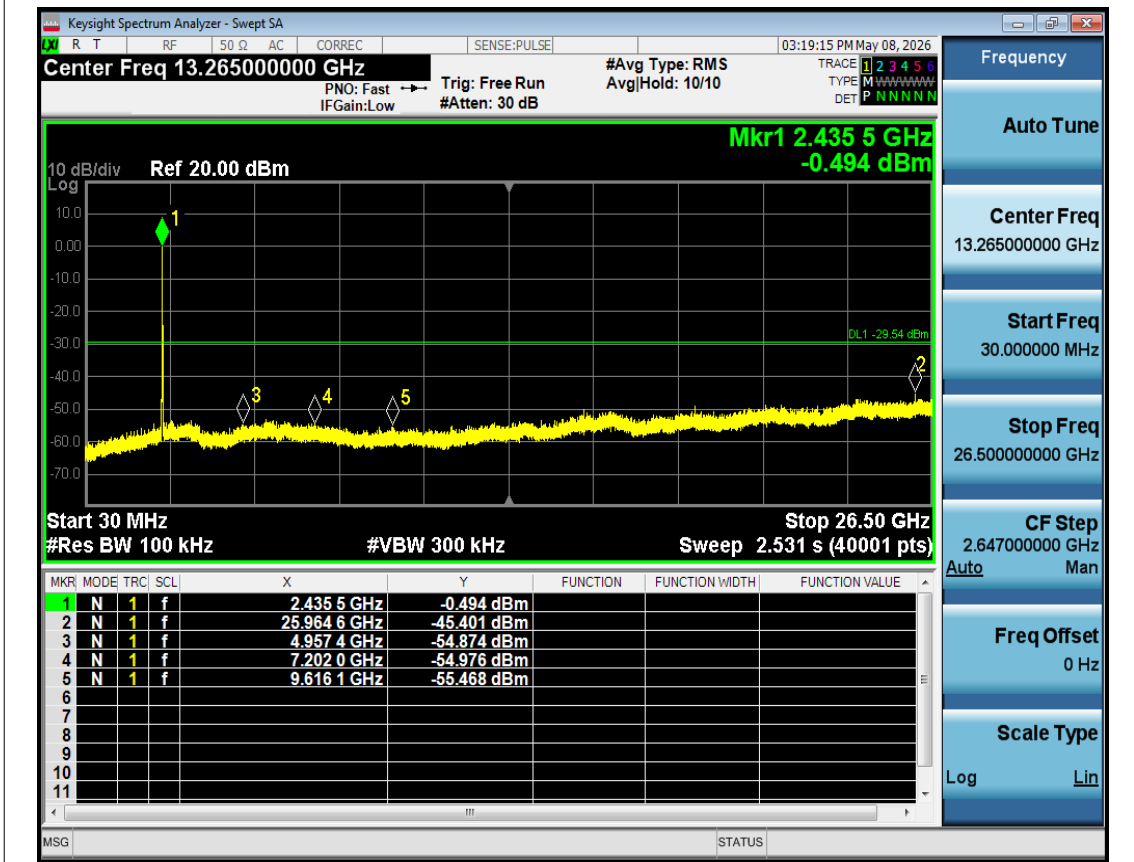
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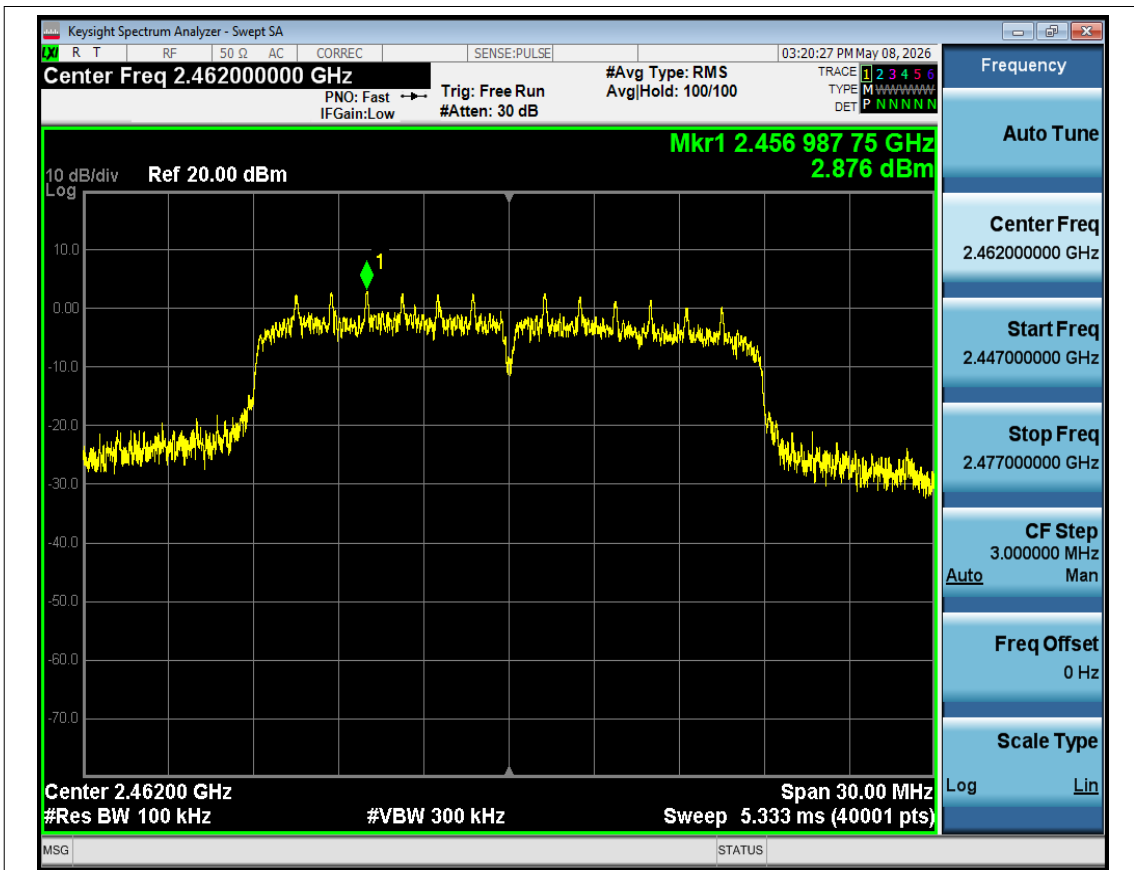
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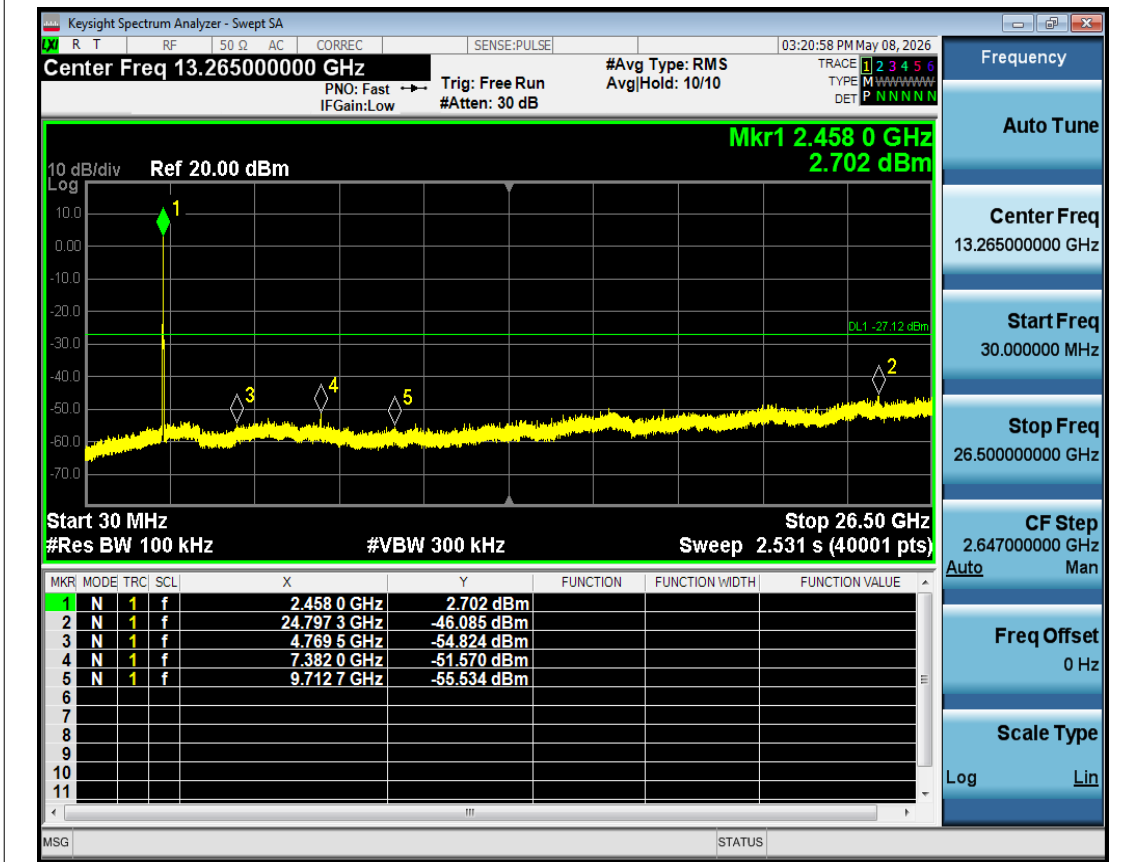
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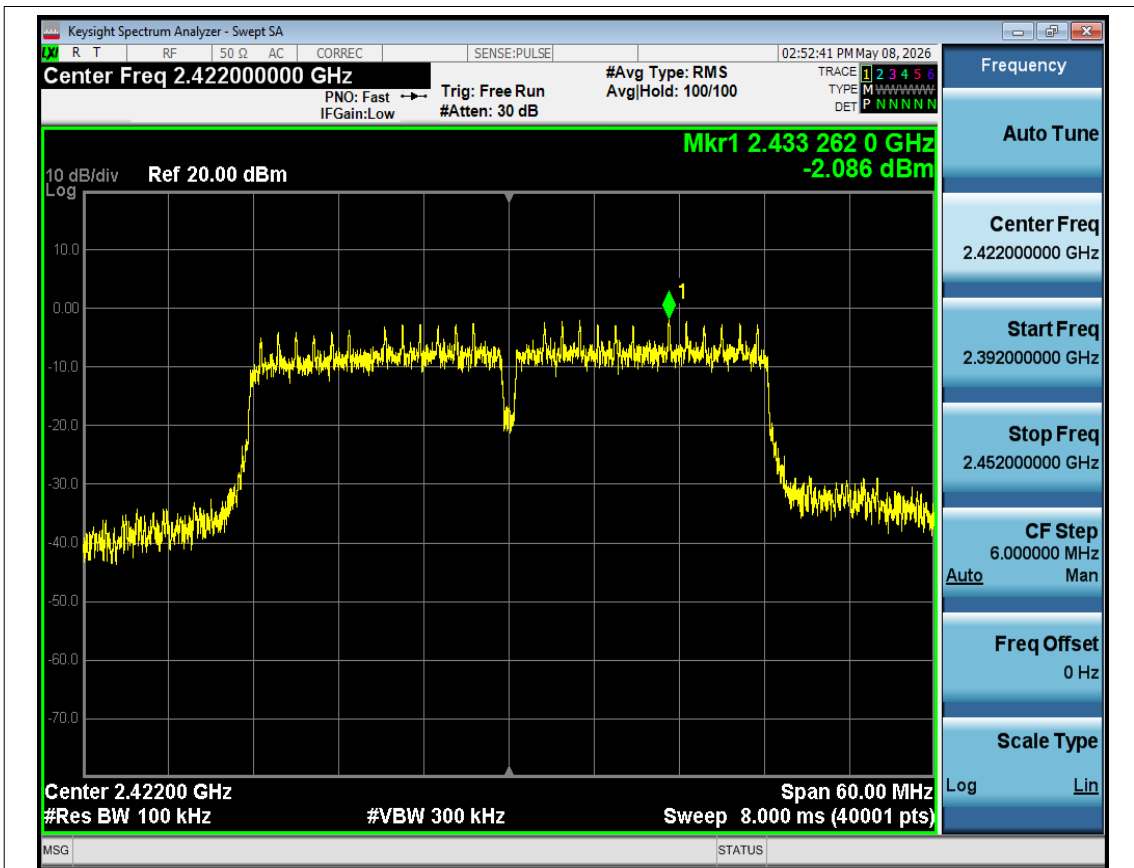
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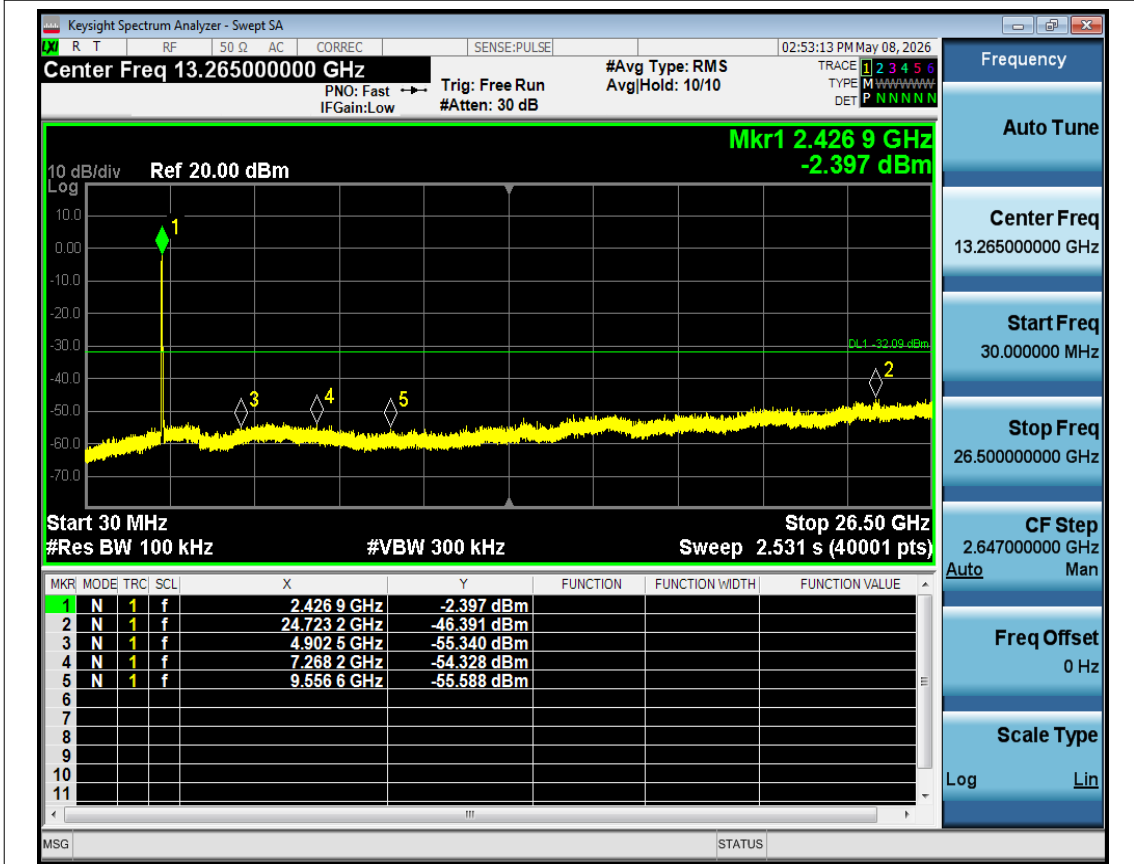
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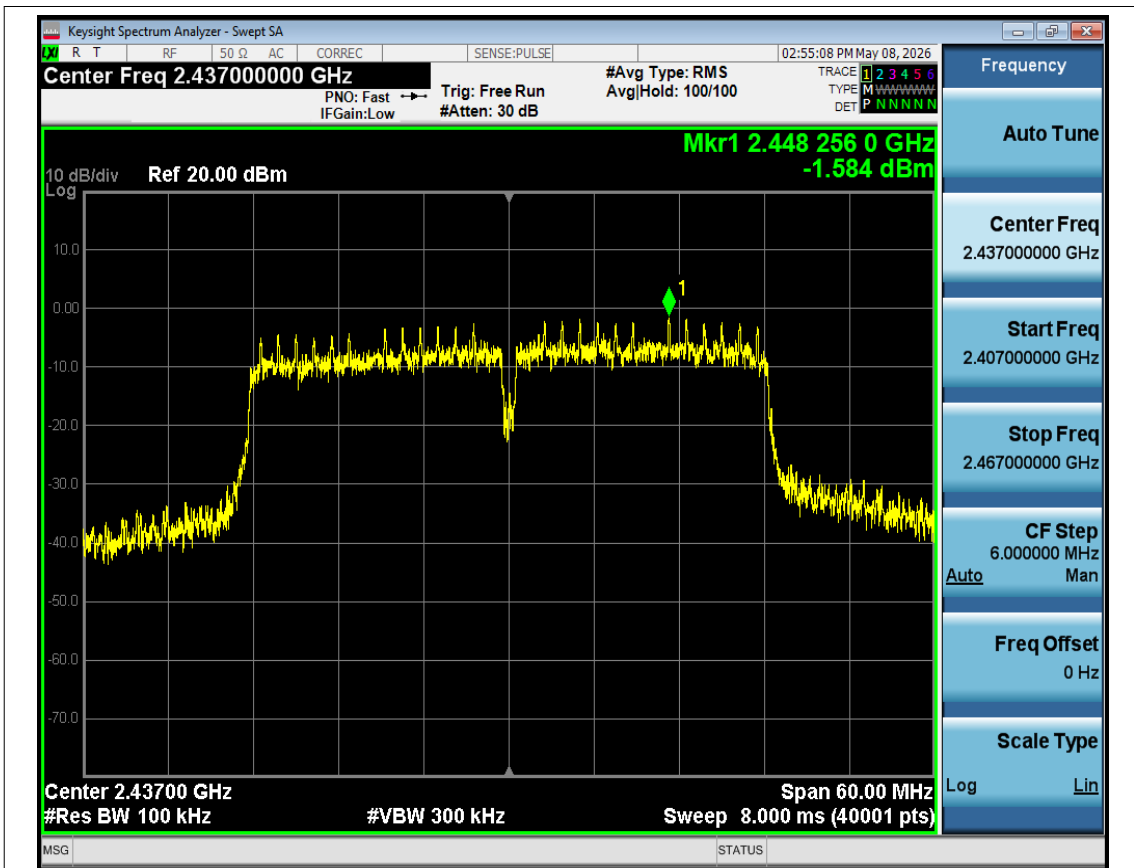
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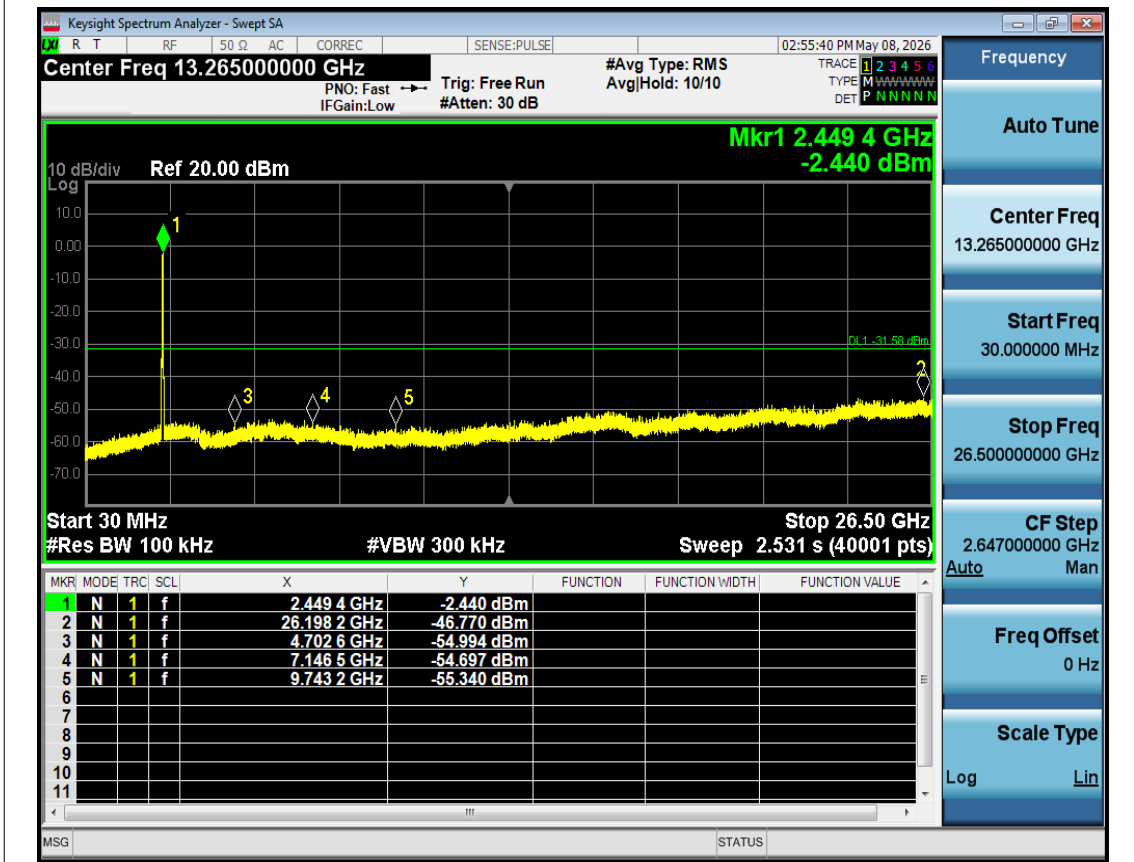
Tx. Spurious NVNT n40 2422MHz Ant1 Ref



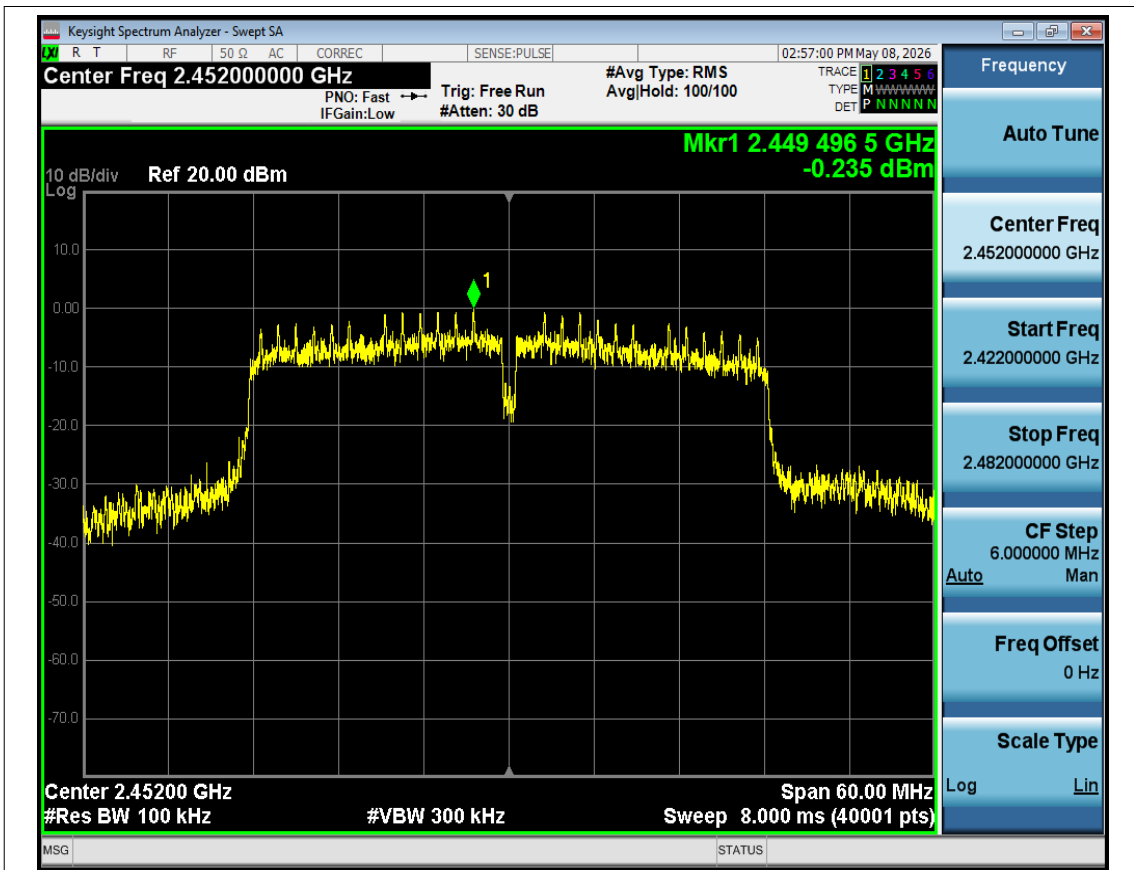
Tx. Spurious NVNT n40 2422MHz Ant1 Emission



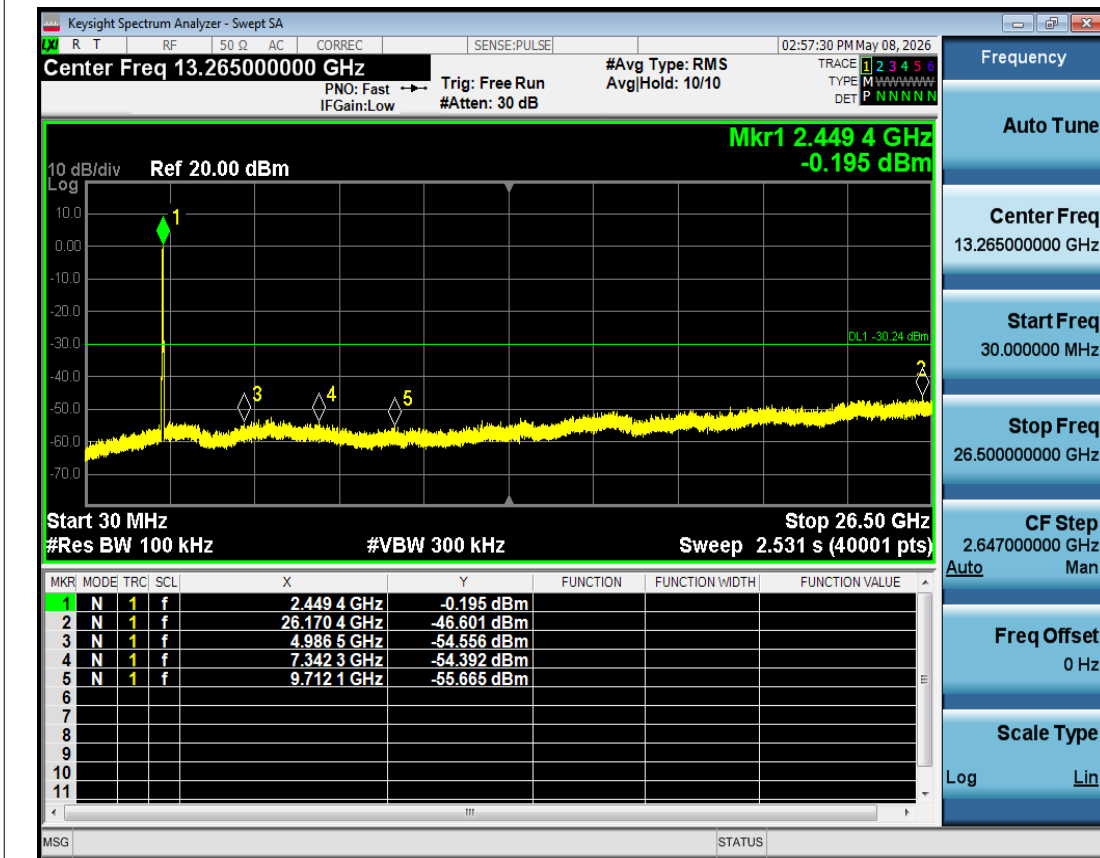
Tx. Spurious NVNT n40 2437MHz Ant1 Ref



Tx. Spurious NVNT n40 2437MHz Ant1 Emission



Tx. Spurious NVNT n40 2452MHz Ant1 Ref



Tx. Spurious NVNT n40 2452MHz Ant1 Emission