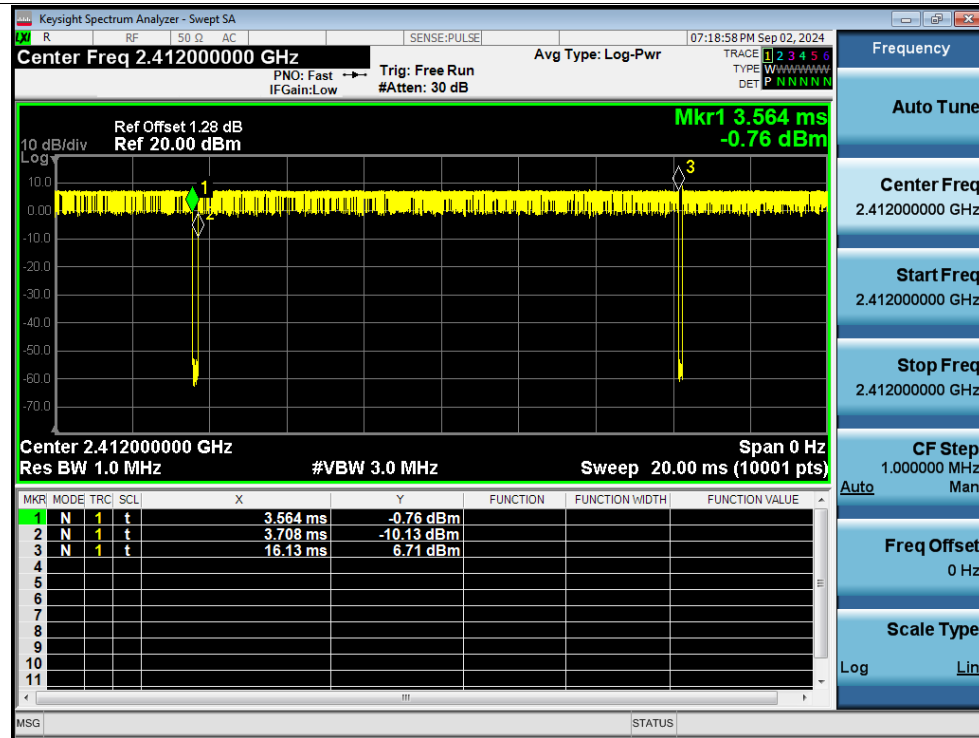


Duty Cycle

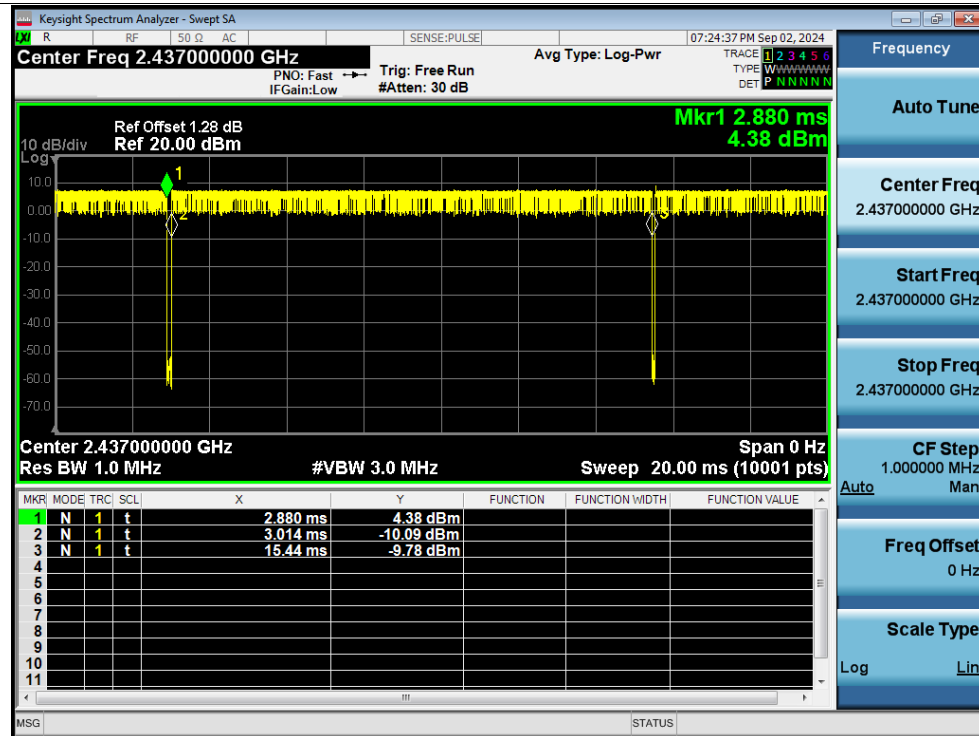
Condition	Mode	Frequency (MHz)	Antenna	On Time (ms)	Period (ms)	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	12.42	12.56	98.89	0	0.08
NVNT	b	2437	Ant1	12.42	12.56	98.89	0	0.08
NVNT	b	2462	Ant1	12.42	12.47	99.6	0	0.08
NVNT	g	2412	Ant1	2.07	2.21	93.67	0.28	0.48
NVNT	g	2437	Ant1	2.07	2.12	97.64	0.1	0.48
NVNT	g	2462	Ant1	2.07	2.17	95.39	0.2	0.48
NVNT	n20	2412	Ant1	1.92	1.96	97.96	0.09	0.52
NVNT	n20	2437	Ant1	1.92	1.97	97.46	0.11	0.52
NVNT	n20	2462	Ant1	1.92	2.06	93.2	0.31	0.52
NVNT	n40	2422	Ant1	0.95	1.02	93.14	0.31	1.05
NVNT	n40	2437	Ant1	0.95	1	95	0.22	1.05
NVNT	n40	2452	Ant1	0.95	1.11	85.59	0.68	1.05

Test Graphs

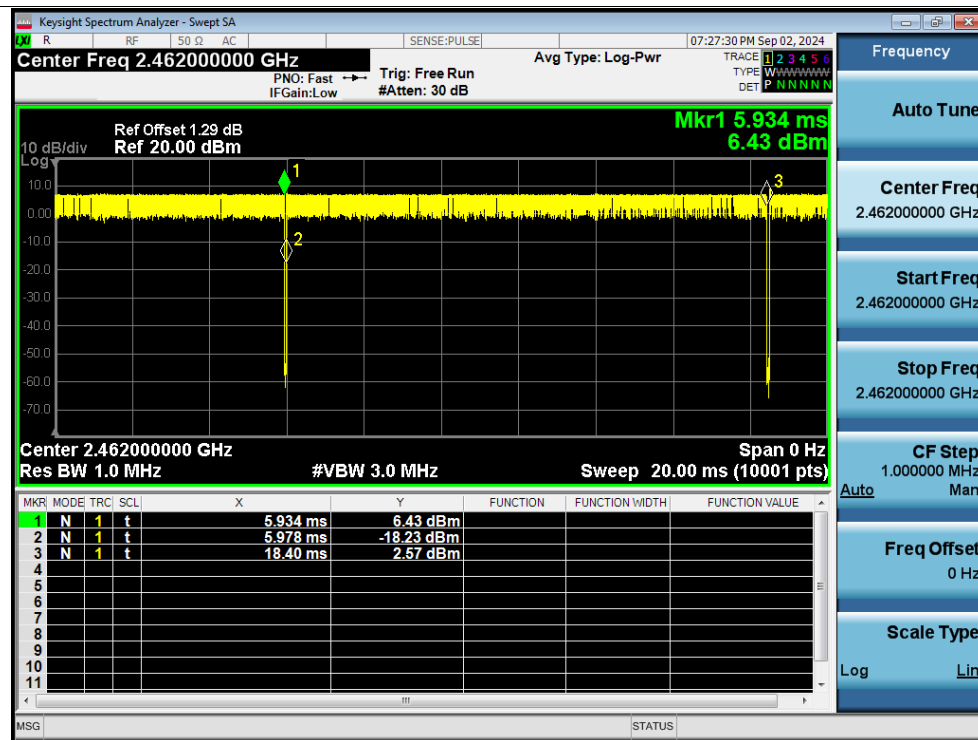
Duty Cycle NVNT b 2412MHz Ant1



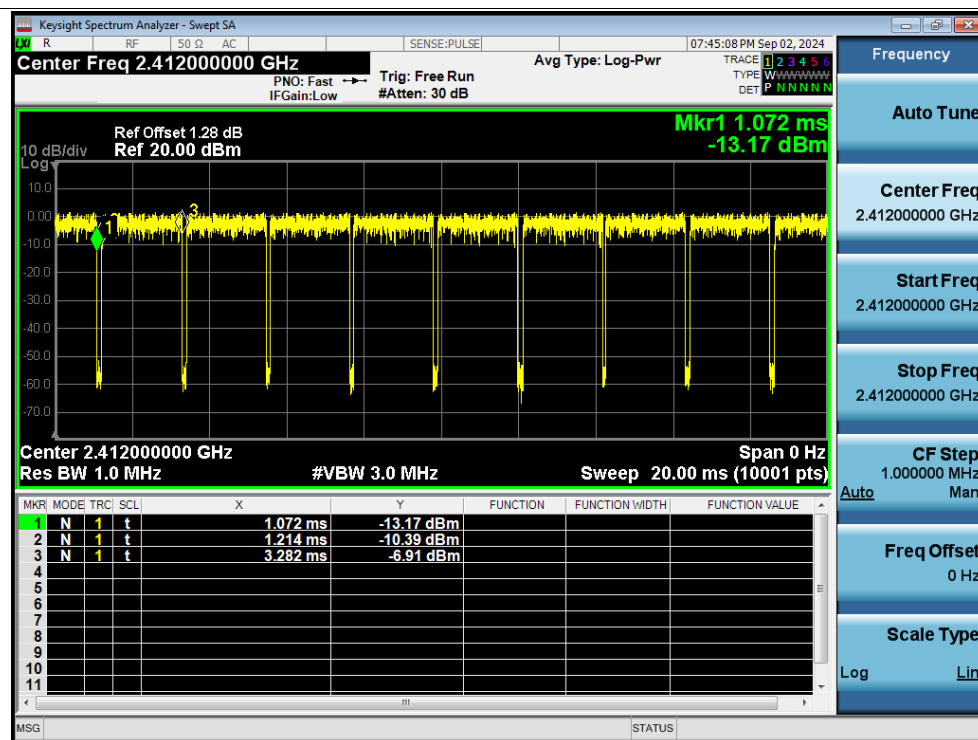
Duty Cycle NVNT b 2437MHz Ant1



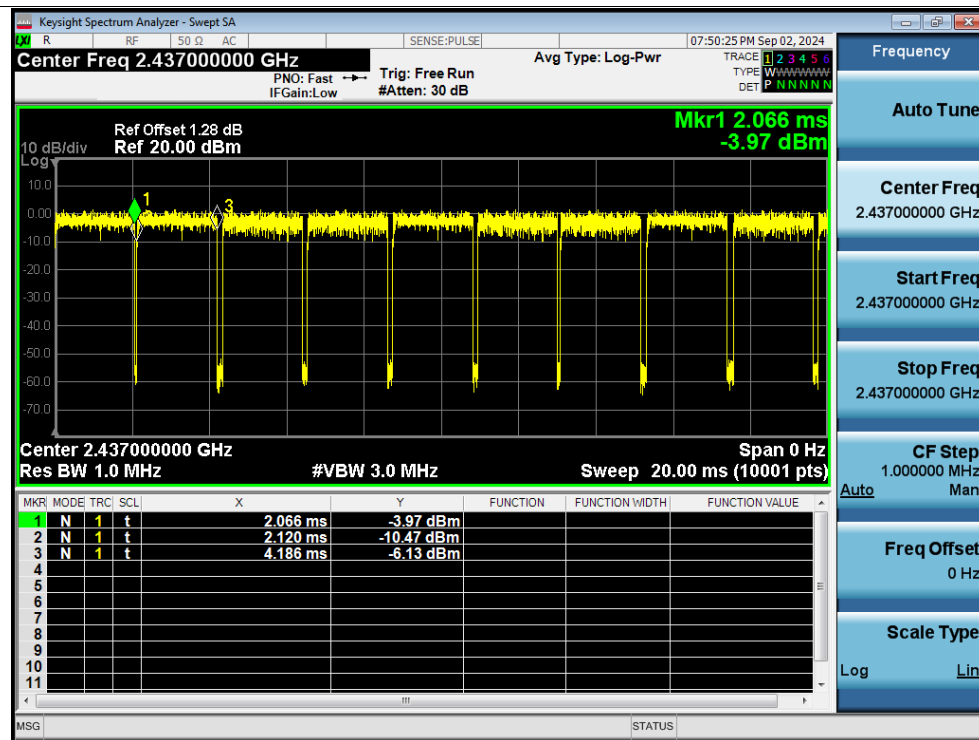
Duty Cycle NVNT b 2462MHz Ant1



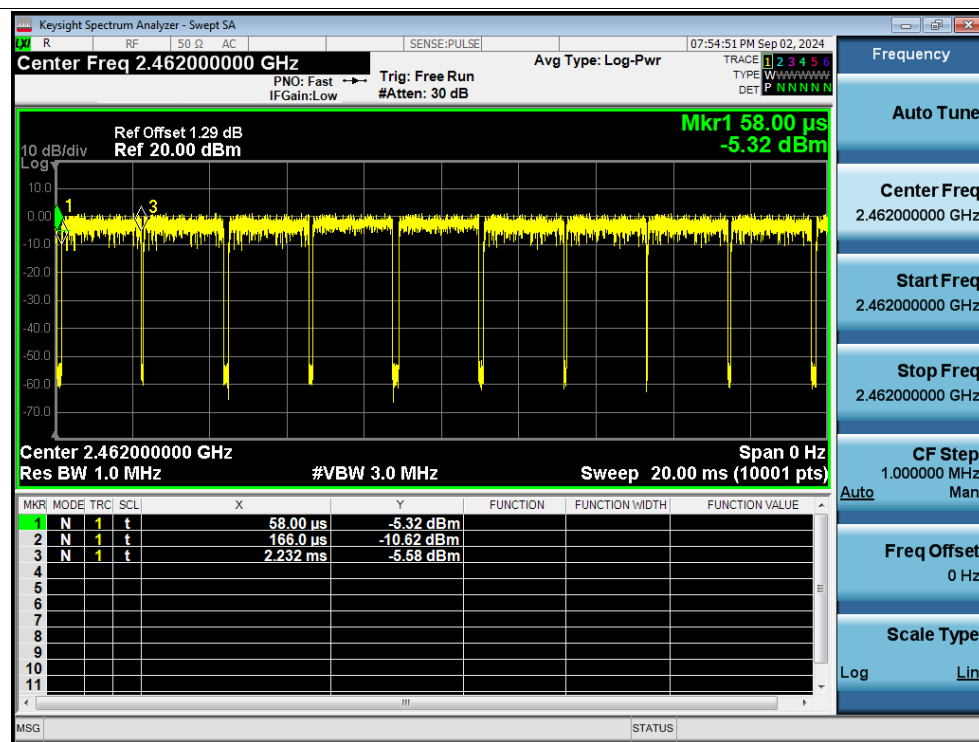
Duty Cycle NVNT g 2412MHz Ant1



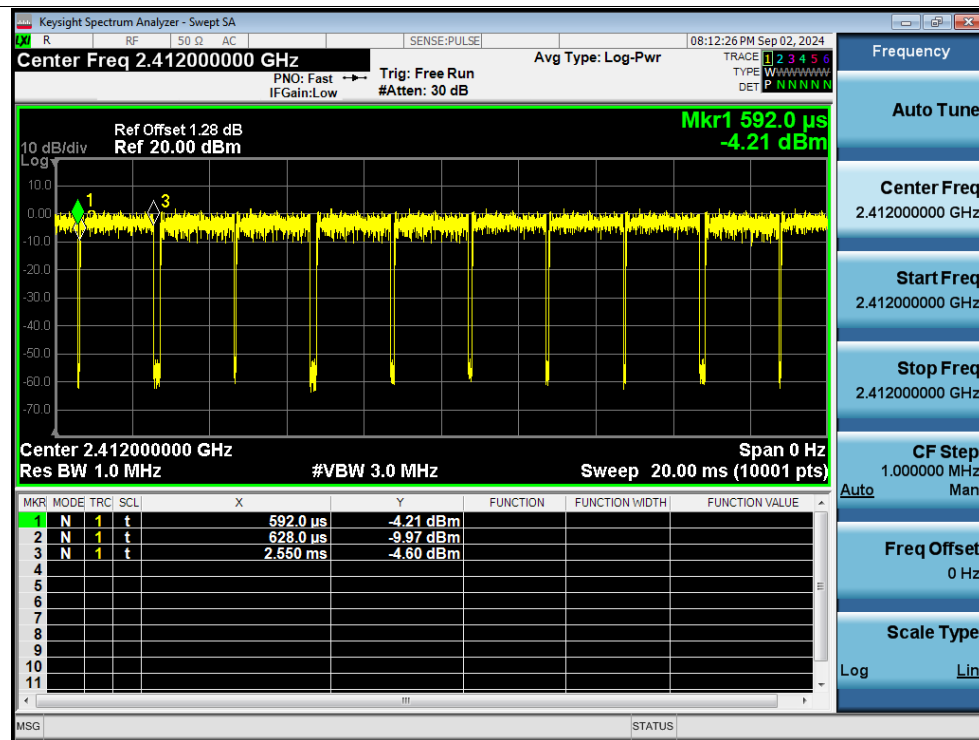
Duty Cycle NVNT g 2437MHz Ant1



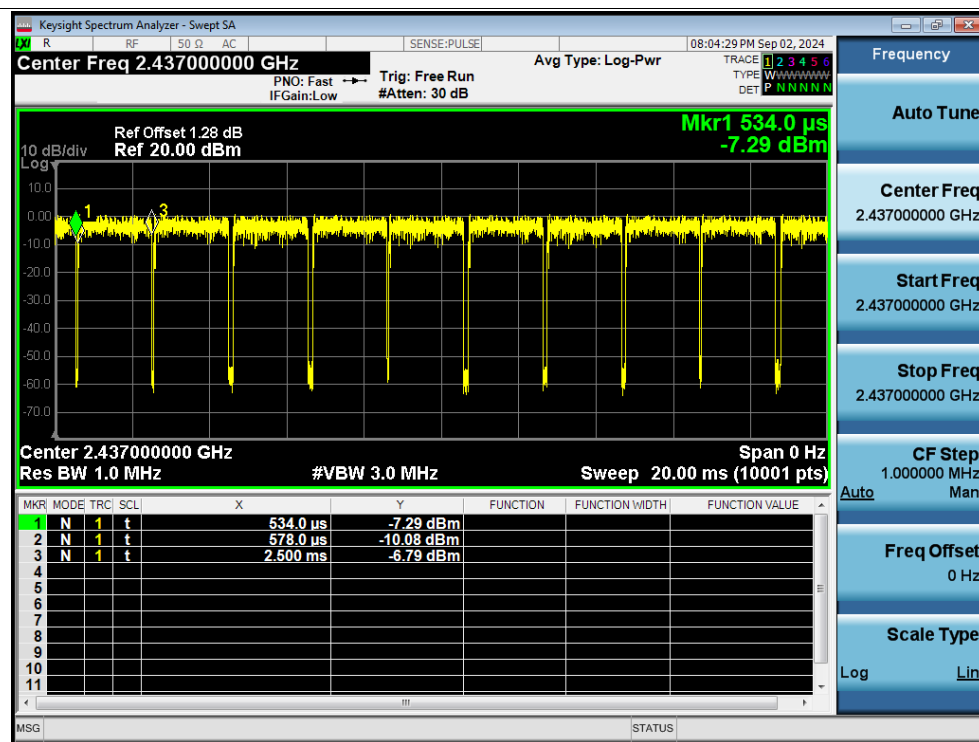
Duty Cycle NVNT g 2462MHz Ant1



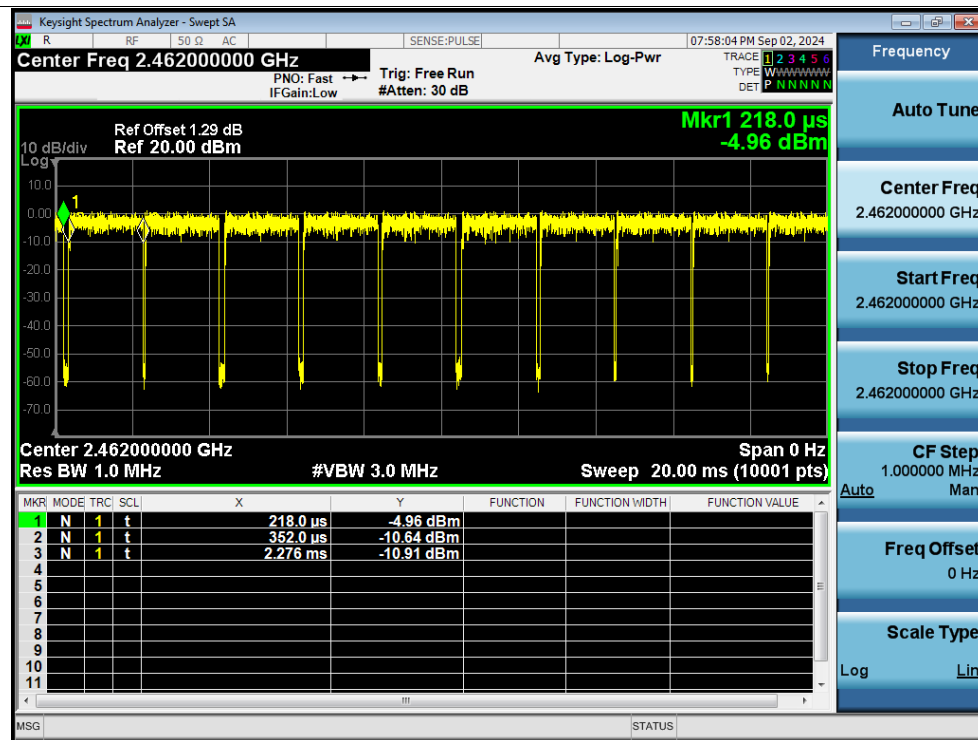
Duty Cycle NVNT n20 2412MHz Ant1



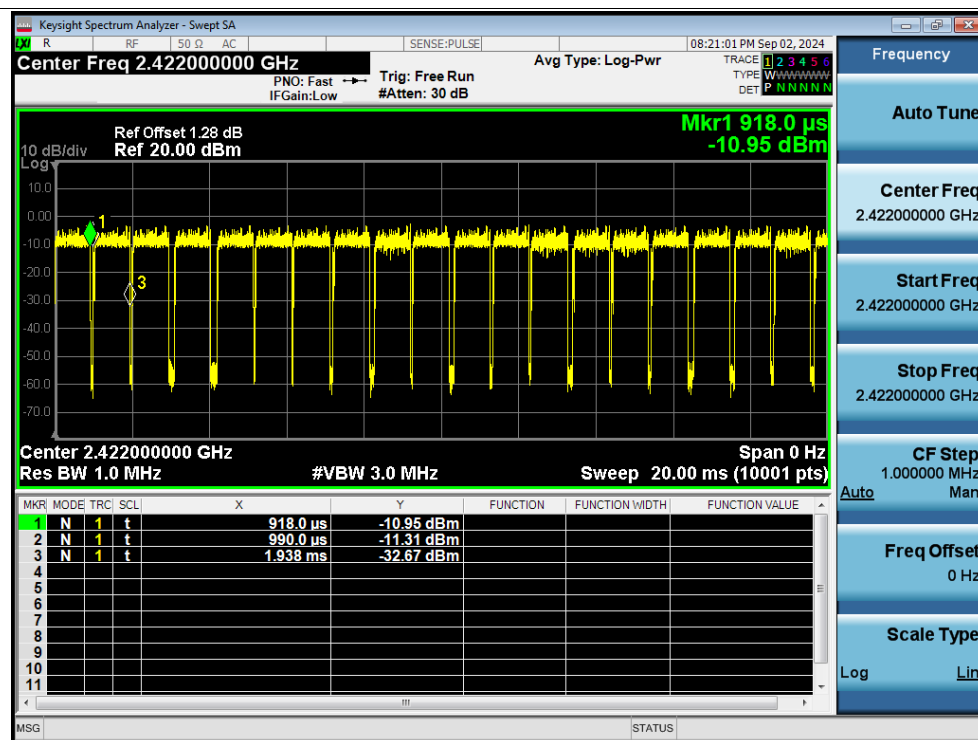
Duty Cycle NVNT n20 2437MHz Ant1



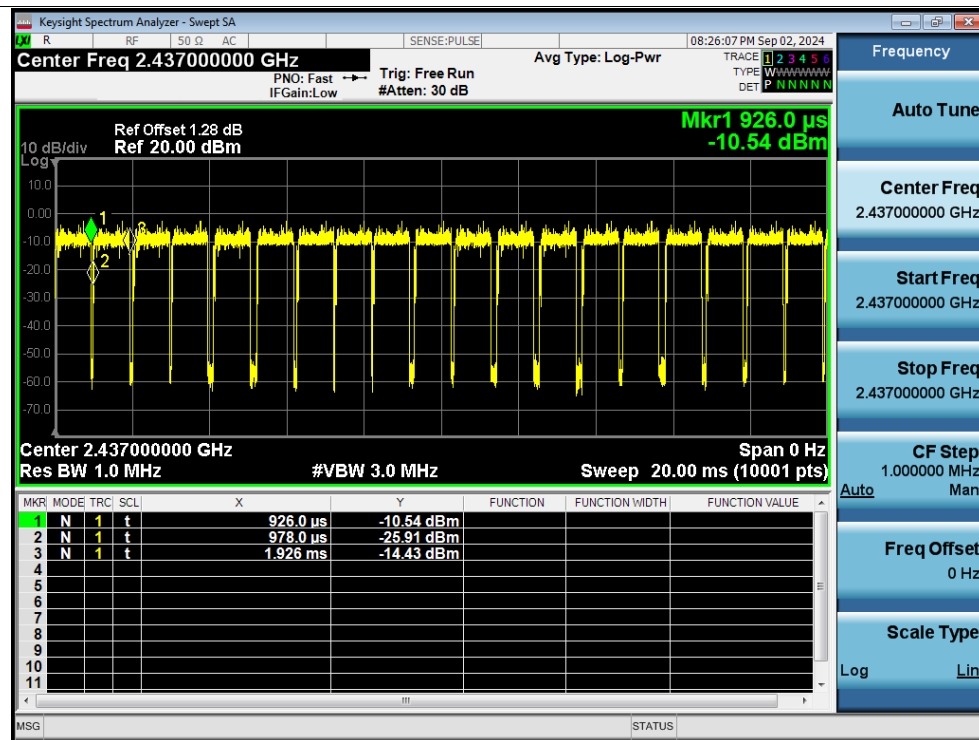
Duty Cycle NVNT n20 2462MHz Ant1



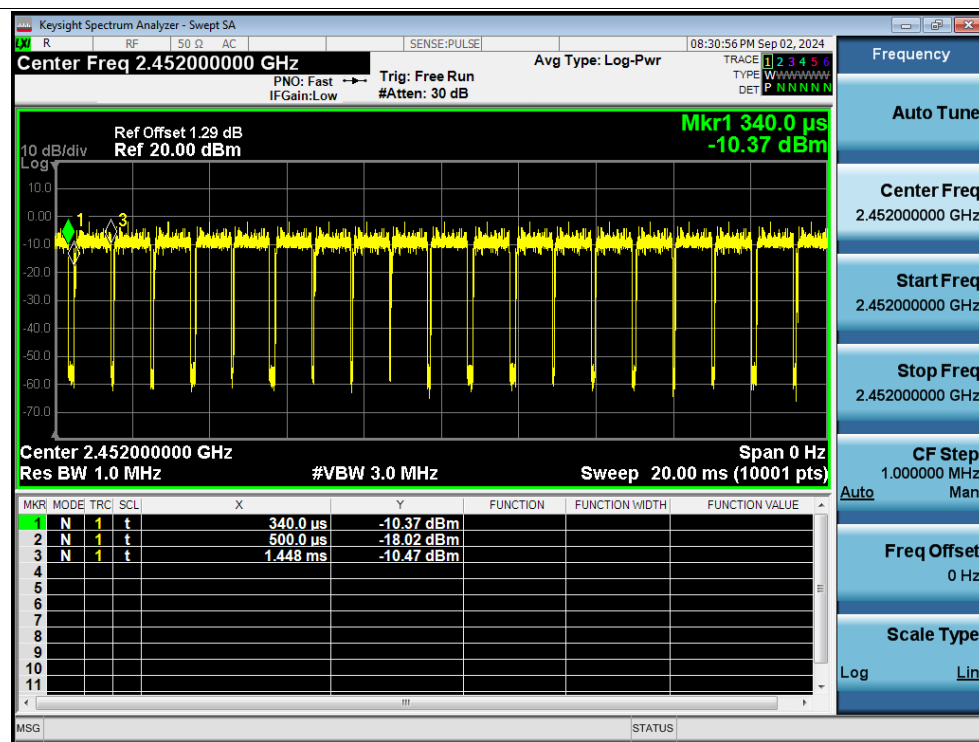
Duty Cycle NVNT n40 2422MHz Ant1



Duty Cycle NVNT n40 2437MHz Ant1



Duty Cycle NVNT n40 2452MHz Ant1



Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	15.57	30	Pass
NVNT	b	2437	Ant1	15.61	30	Pass
NVNT	b	2462	Ant1	15.34	30	Pass
NVNT	g	2412	Ant1	14.65	30	Pass
NVNT	g	2437	Ant1	14.51	30	Pass
NVNT	g	2462	Ant1	14.34	30	Pass
NVNT	n20	2412	Ant1	14.15	30	Pass
NVNT	n20	2437	Ant1	13.96	30	Pass
NVNT	n20	2462	Ant1	13.8	30	Pass
NVNT	n40	2422	Ant1	14.29	30	Pass
NVNT	n40	2437	Ant1	14.16	30	Pass
NVNT	n40	2452	Ant1	14.14	30	Pass

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Antenna Gain (dBi)	E.i.r.p. (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	15.57	2.19	17.76	36.02	Pass
NVNT	b	2437	Ant1	15.61	2.19	17.80	36.02	Pass
NVNT	b	2462	Ant1	15.34	2.19	17.53	36.02	Pass
NVNT	g	2412	Ant1	14.65	2.19	16.84	36.02	Pass
NVNT	g	2437	Ant1	14.51	2.19	16.70	36.02	Pass
NVNT	g	2462	Ant1	14.34	2.19	16.53	36.02	Pass
NVNT	n20	2412	Ant1	14.15	2.19	16.34	36.02	Pass
NVNT	n20	2437	Ant1	13.96	2.19	16.15	36.02	Pass
NVNT	n20	2462	Ant1	13.8	2.19	15.99	36.02	Pass
NVNT	n40	2422	Ant1	14.29	2.19	16.48	36.02	Pass
NVNT	n40	2437	Ant1	14.16	2.19	16.35	36.02	Pass
NVNT	n40	2452	Ant1	14.14	2.19	16.33	36.02	Pass

-6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	10.03	0.5	Pass
NVNT	b	2437	Ant1	10.07	0.5	Pass
NVNT	b	2462	Ant1	10.02	0.5	Pass
NVNT	g	2412	Ant1	16.32	0.5	Pass
NVNT	g	2437	Ant1	16.33	0.5	Pass
NVNT	g	2462	Ant1	16.33	0.5	Pass
NVNT	n20	2412	Ant1	17.53	0.5	Pass
NVNT	n20	2437	Ant1	17.27	0.5	Pass
NVNT	n20	2462	Ant1	17.04	0.5	Pass
NVNT	n40	2422	Ant1	35.69	0.5	Pass
NVNT	n40	2437	Ant1	35.81	0.5	Pass
NVNT	n40	2452	Ant1	35.65	0.5	Pass

Test Graphs

-6dB Bandwidth NVNT b 2412MHz Ant1



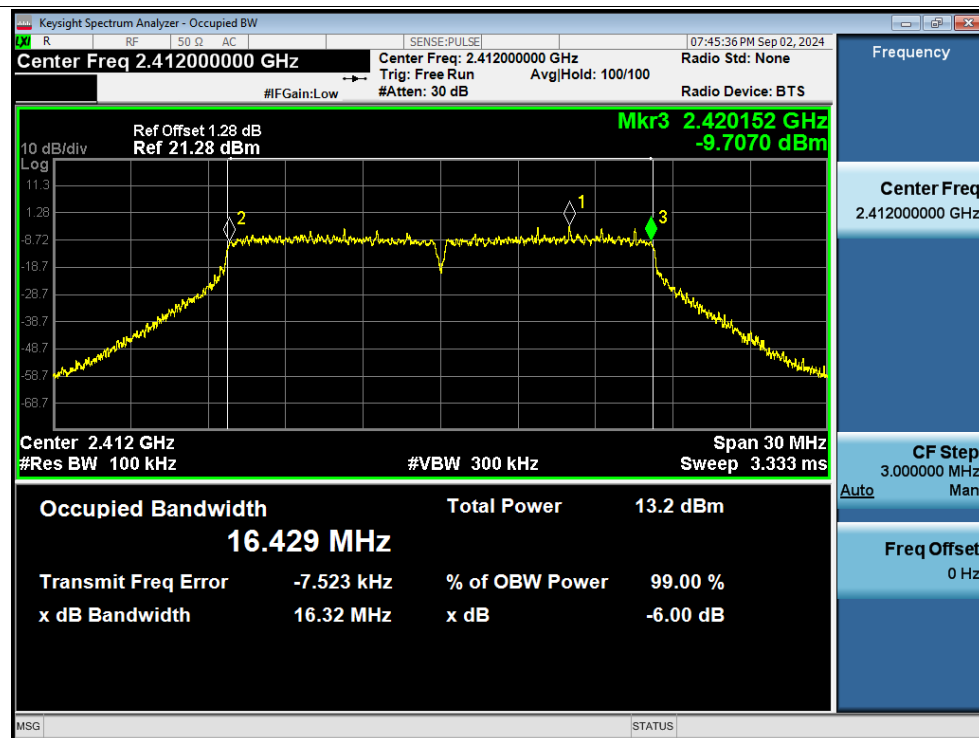
-6dB Bandwidth NVNT b 2437MHz Ant1



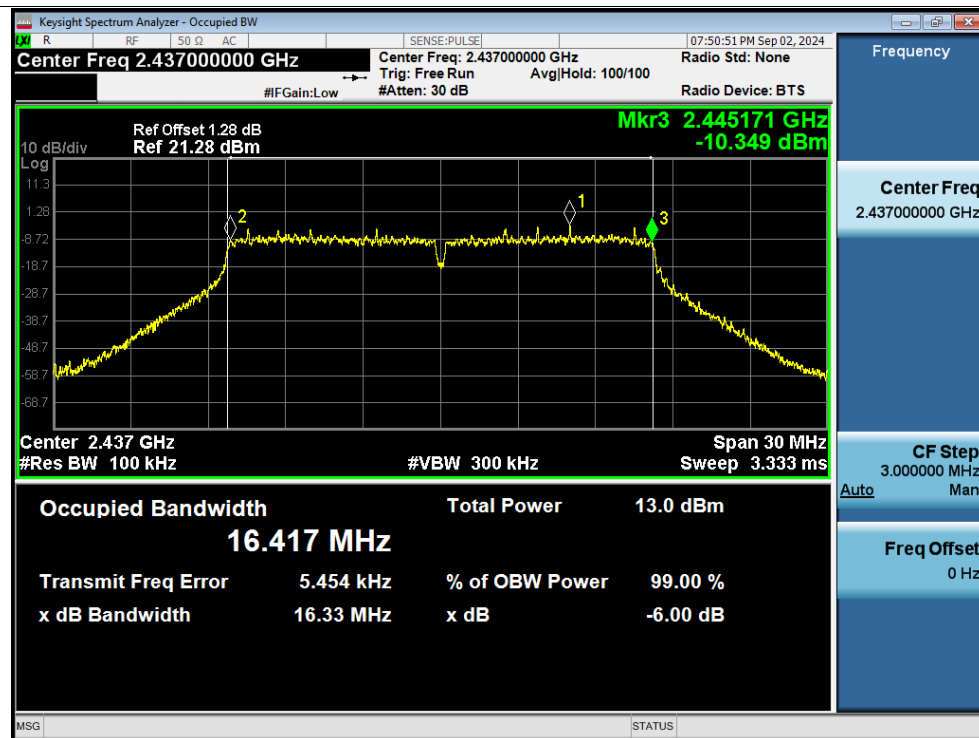
-6dB Bandwidth NVNT b 2462MHz Ant1



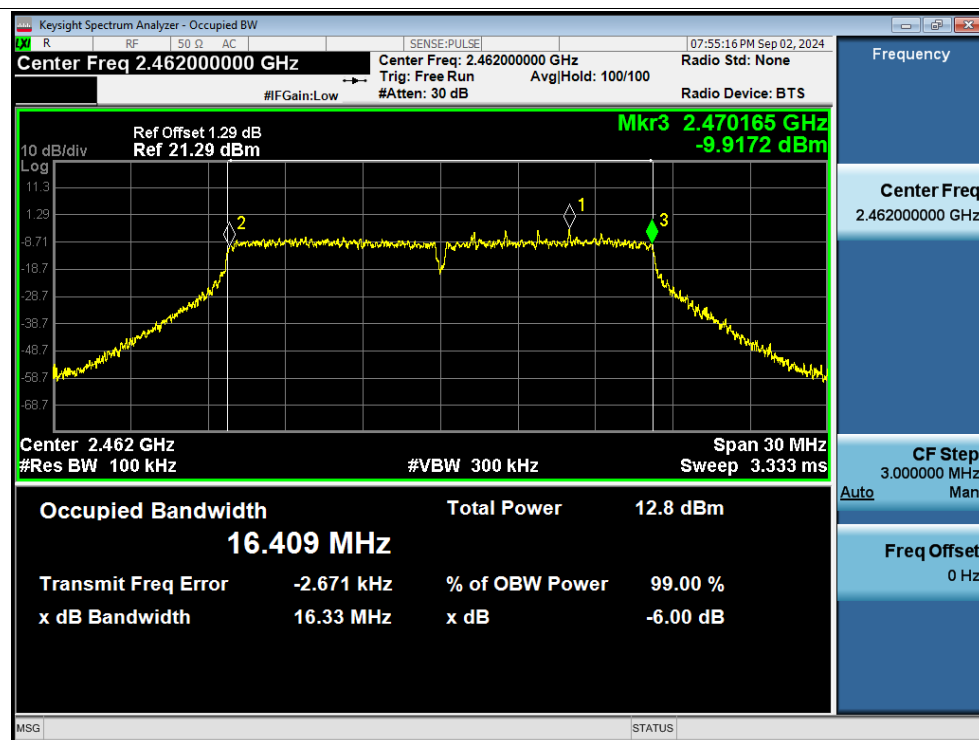
-6dB Bandwidth NVNT g 2412MHz Ant1



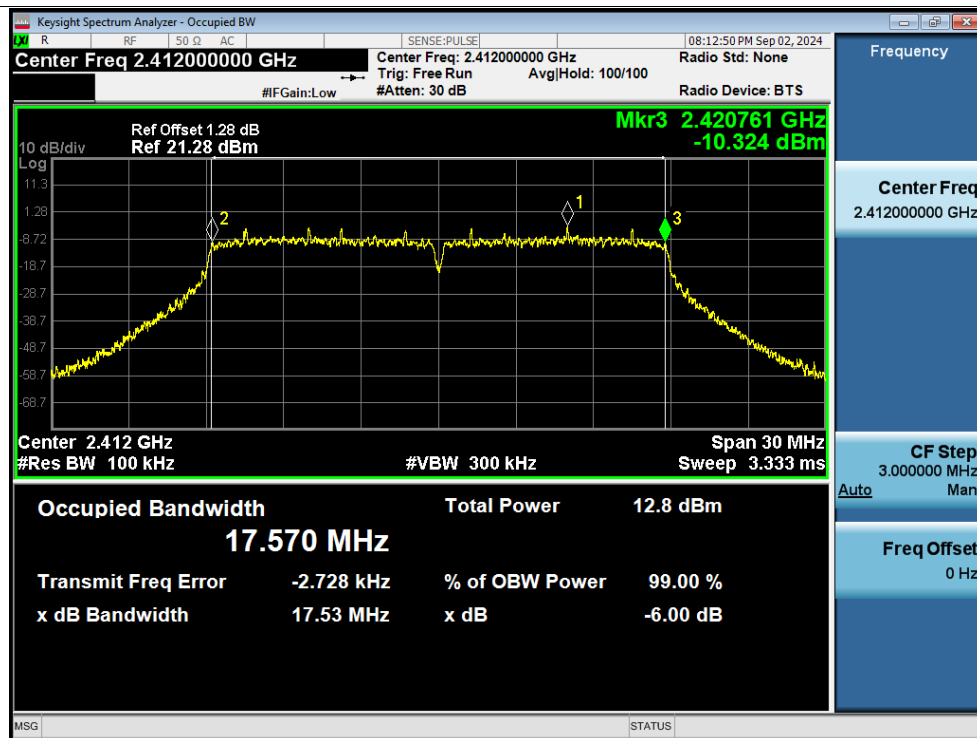
-6dB Bandwidth NVNT g 2437MHz Ant1



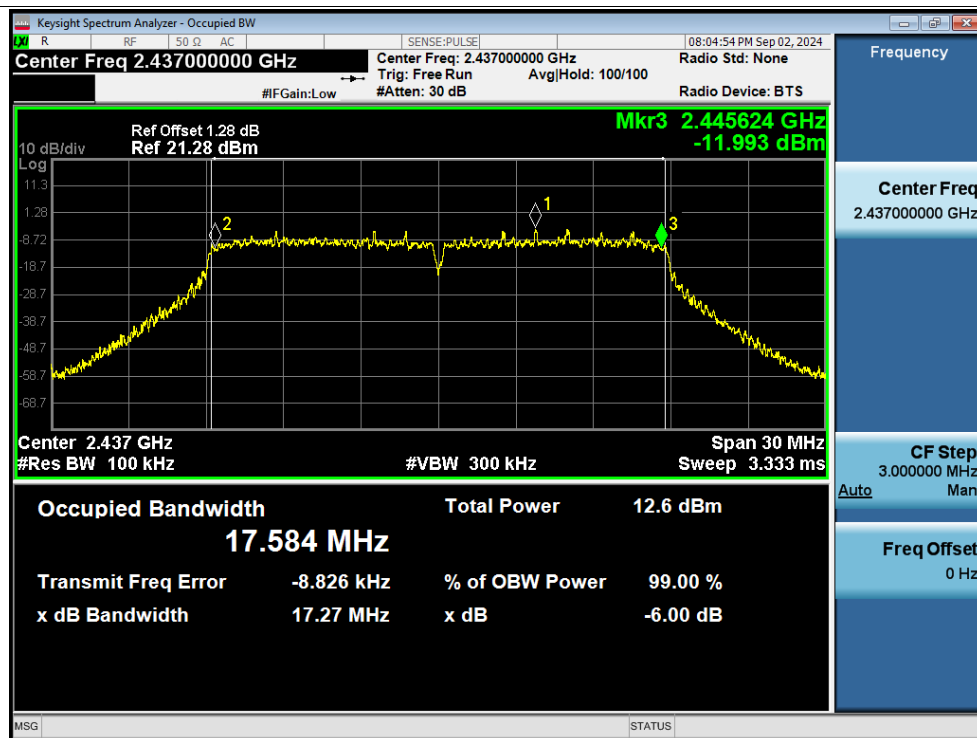
-6dB Bandwidth NVNT g 2462MHz Ant1



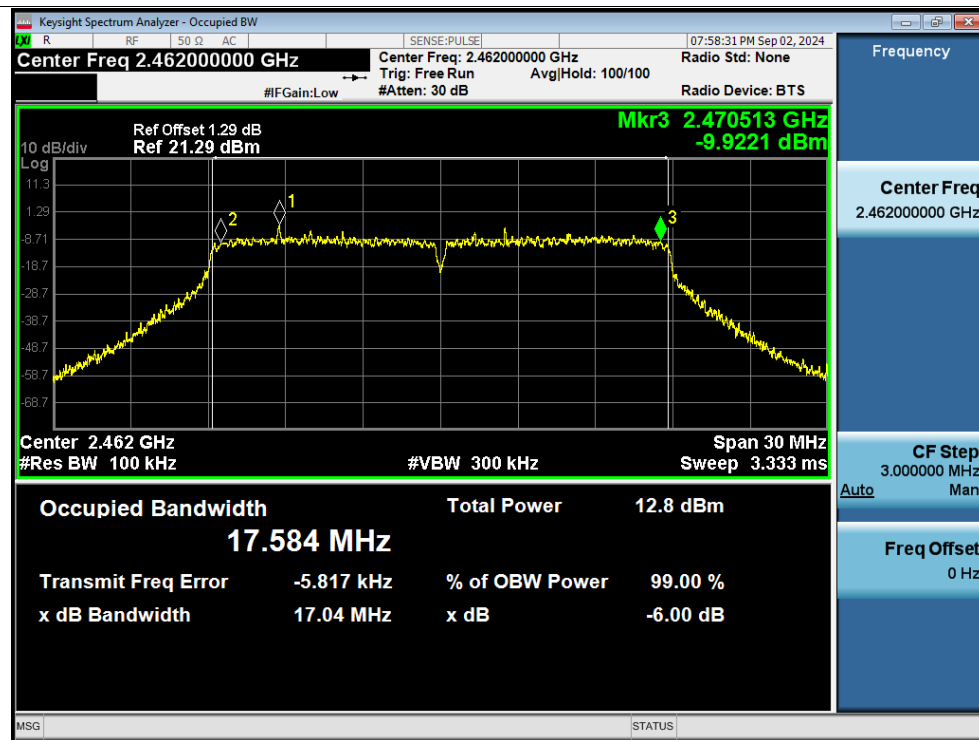
-6dB Bandwidth NVNT n20 2412MHz Ant1



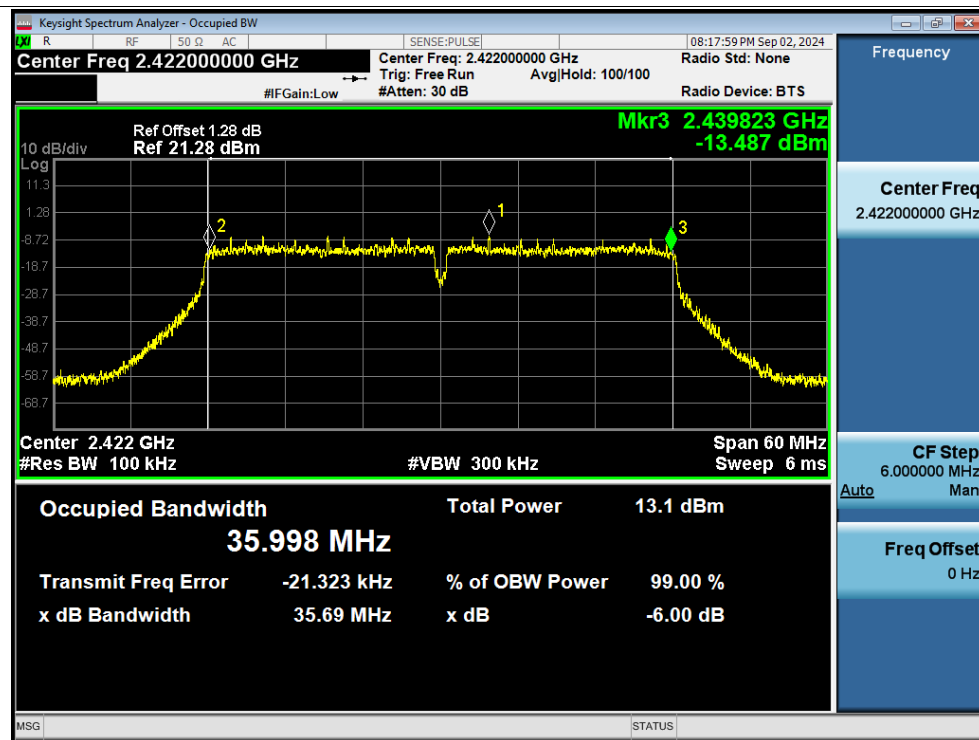
-6dB Bandwidth NVNT n20 2437MHz Ant1



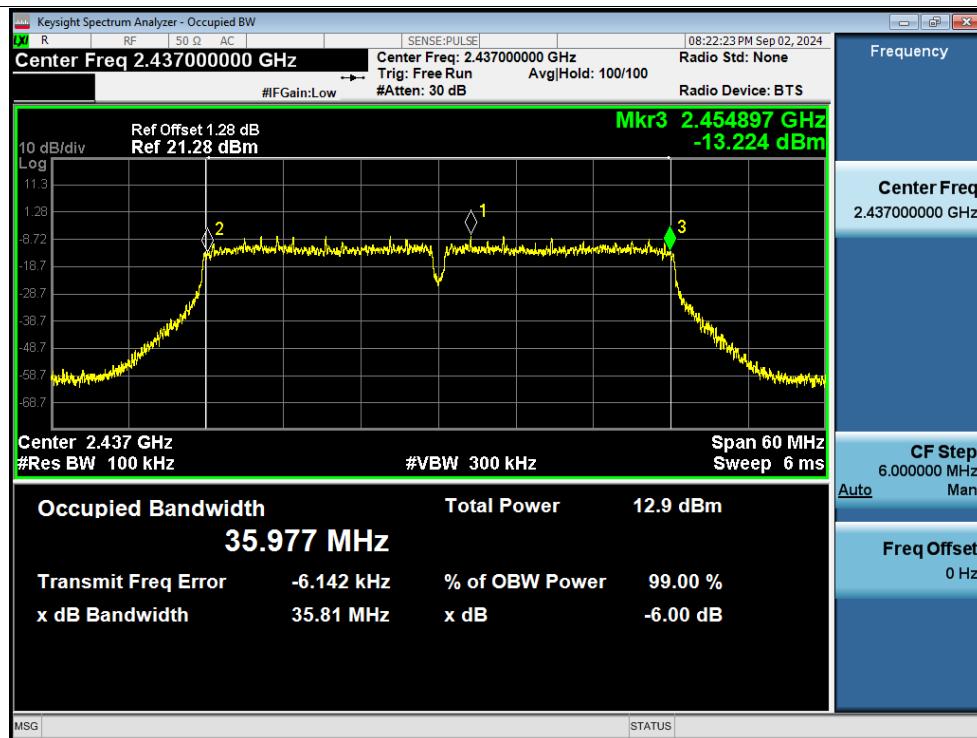
-6dB Bandwidth NVNT n20 2462MHz Ant1



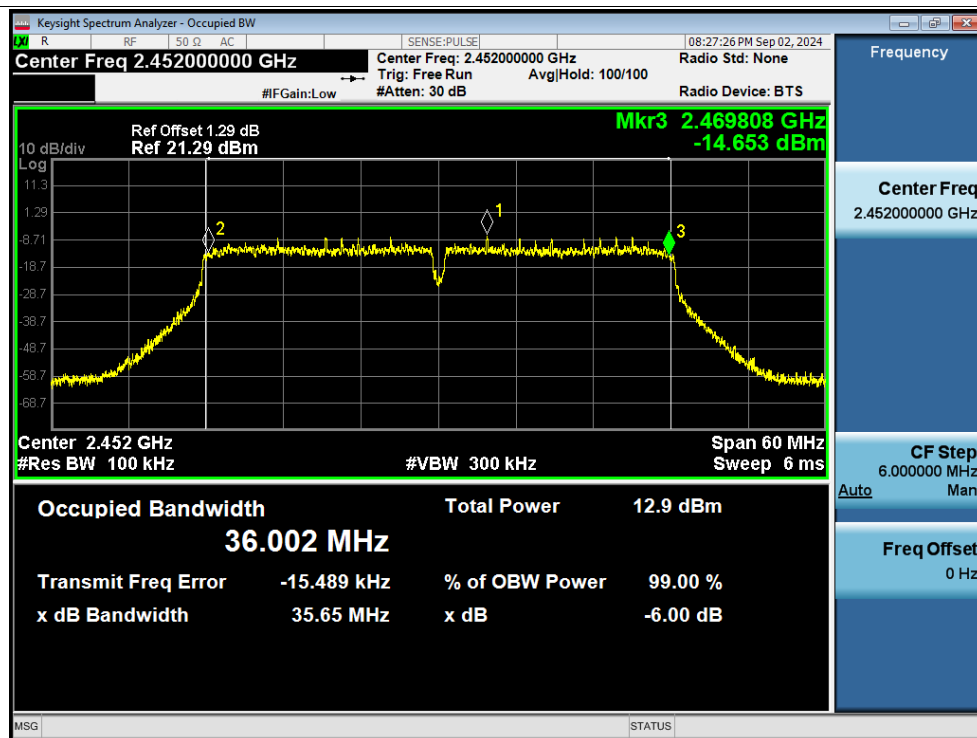
-6dB Bandwidth NVNT n40 2422MHz Ant1



-6dB Bandwidth NVNT n40 2437MHz Ant1



-6dB Bandwidth NVNT n40 2452MHz Ant1



Occupied Channel Bandwidth

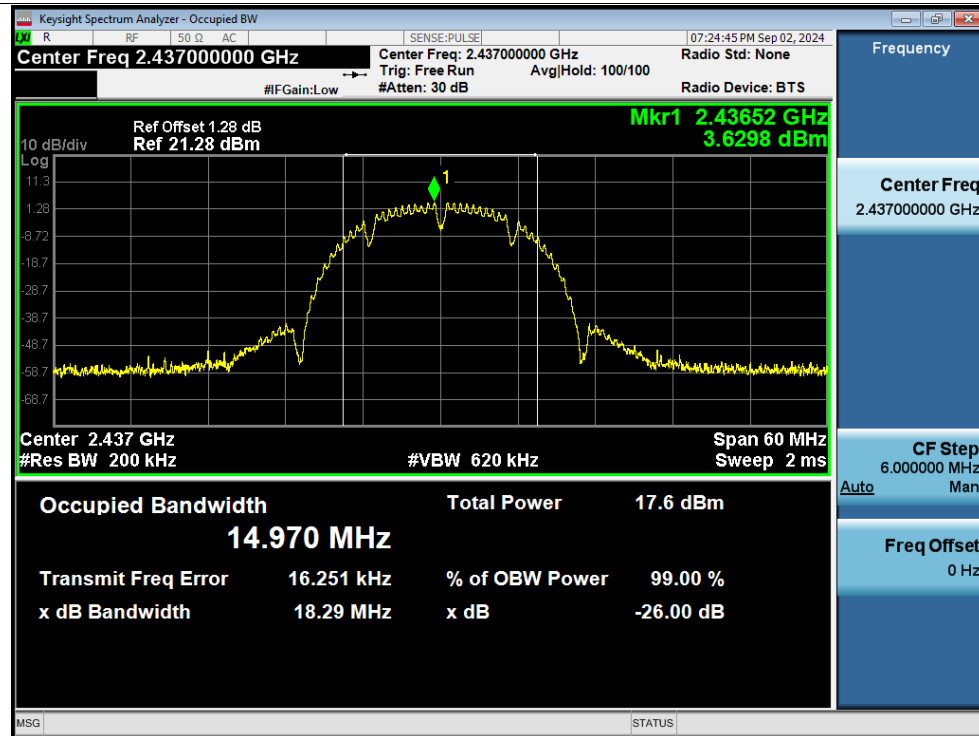
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	14.969
NVNT	b	2437	Ant1	14.97
NVNT	b	2462	Ant1	14.959
NVNT	g	2412	Ant1	16.518
NVNT	g	2437	Ant1	16.522
NVNT	g	2462	Ant1	16.539
NVNT	n20	2412	Ant1	17.614
NVNT	n20	2437	Ant1	17.64
NVNT	n20	2462	Ant1	17.615
NVNT	n40	2422	Ant1	36.202
NVNT	n40	2437	Ant1	36.121
NVNT	n40	2452	Ant1	36.115

Test Graphs

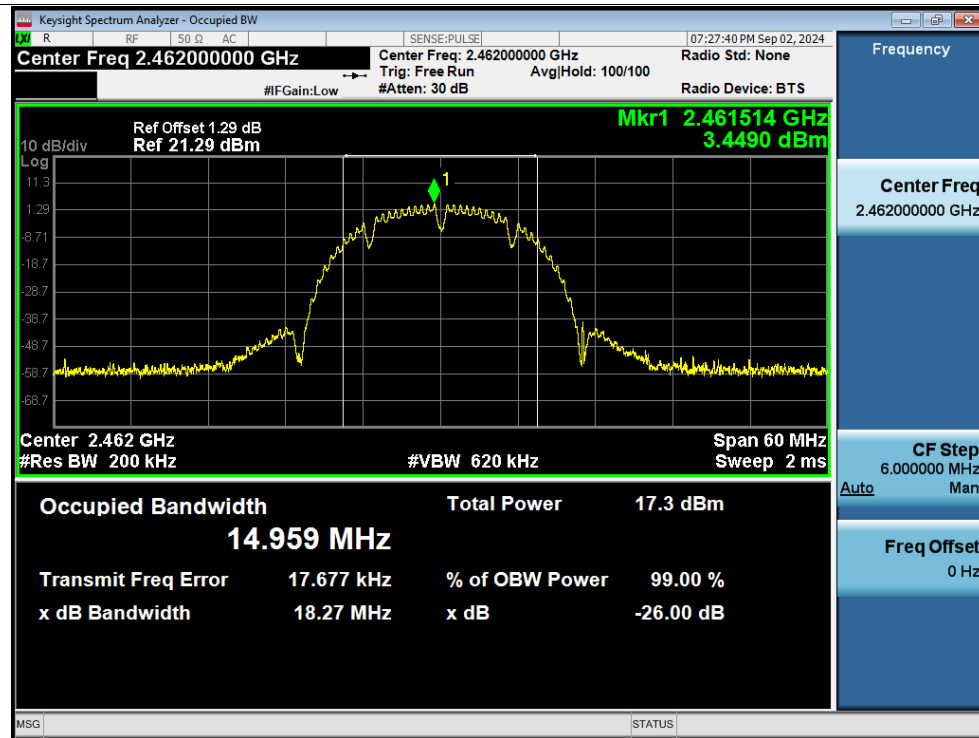
OBW NVNT b 2412MHz Ant1



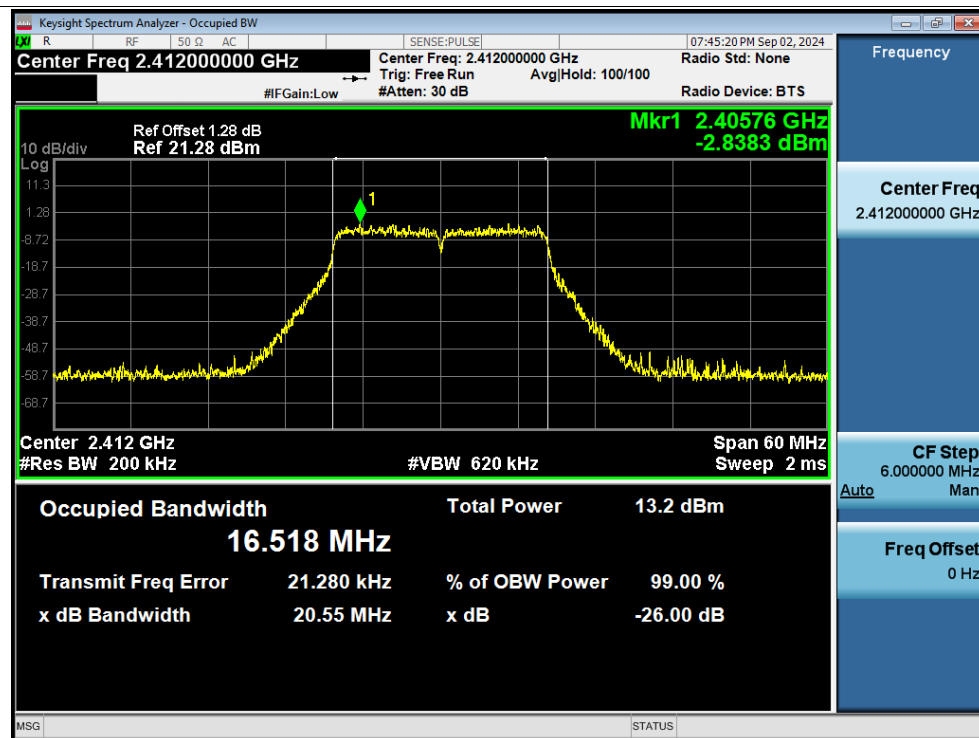
OBW NVNT b 2437MHz Ant1



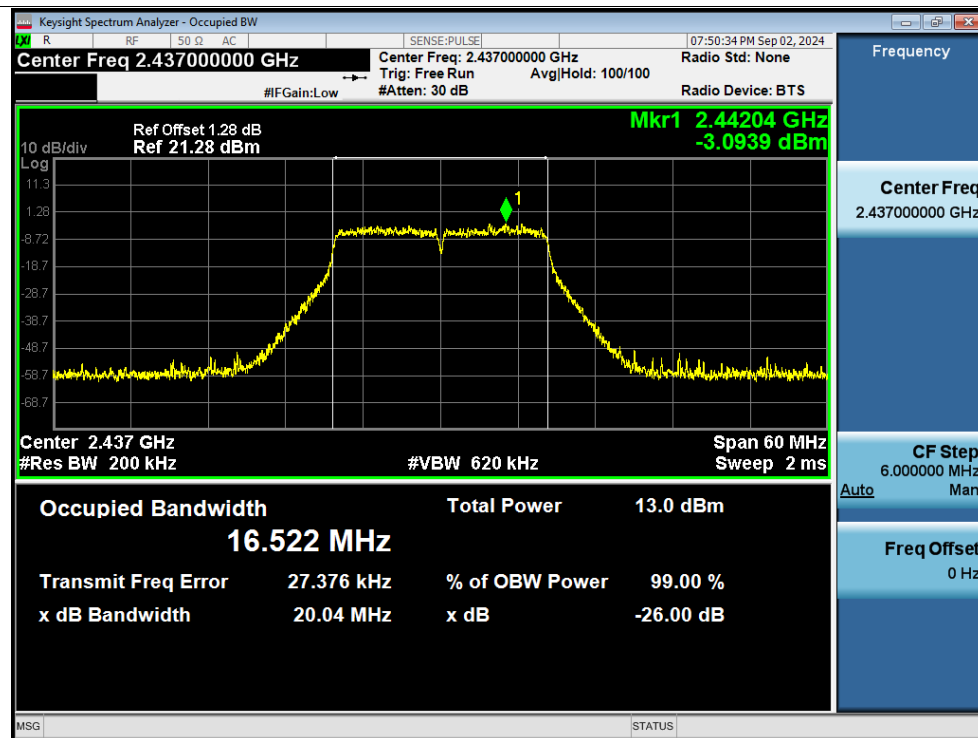
OBW NVNT b 2462MHz Ant1



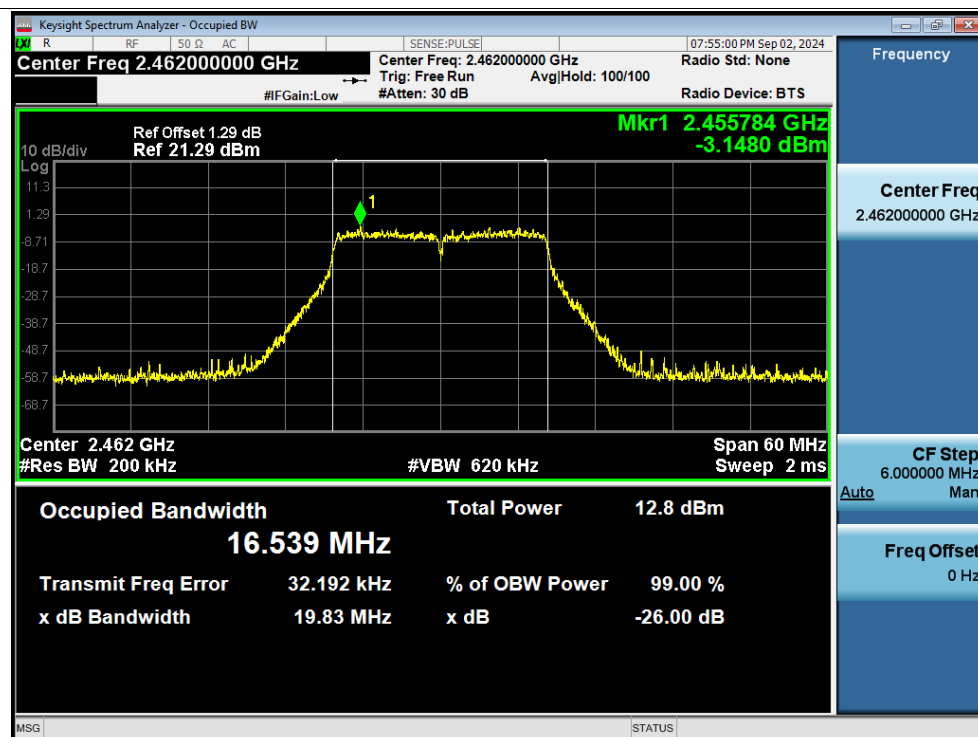
OBW NVNT g 2412MHz Ant1



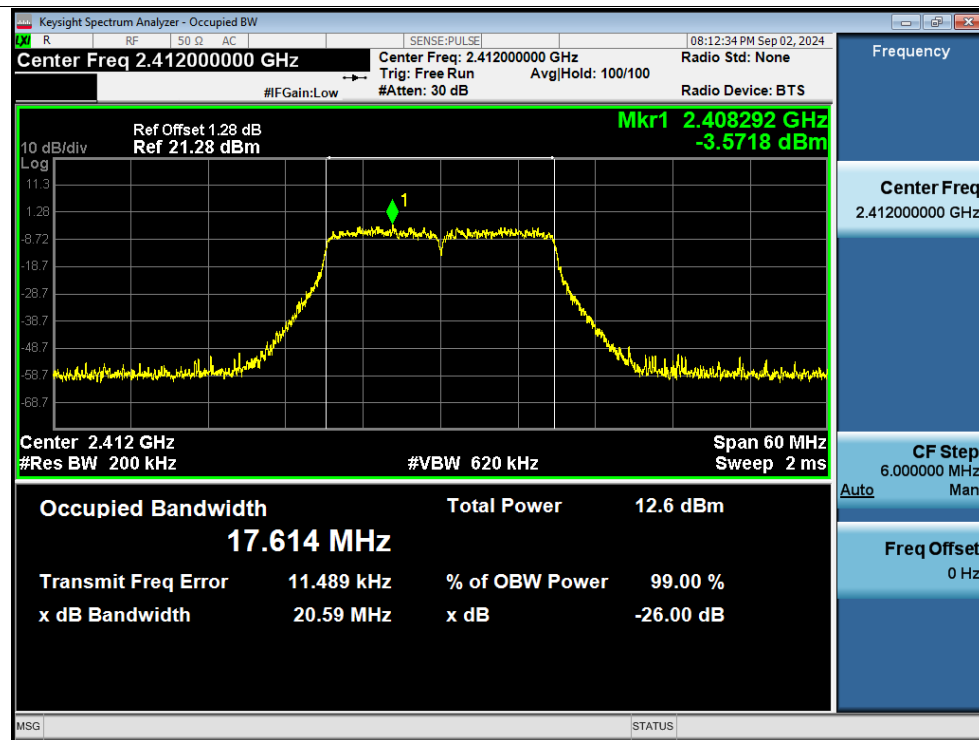
OBW NVNT g 2437MHz Ant1



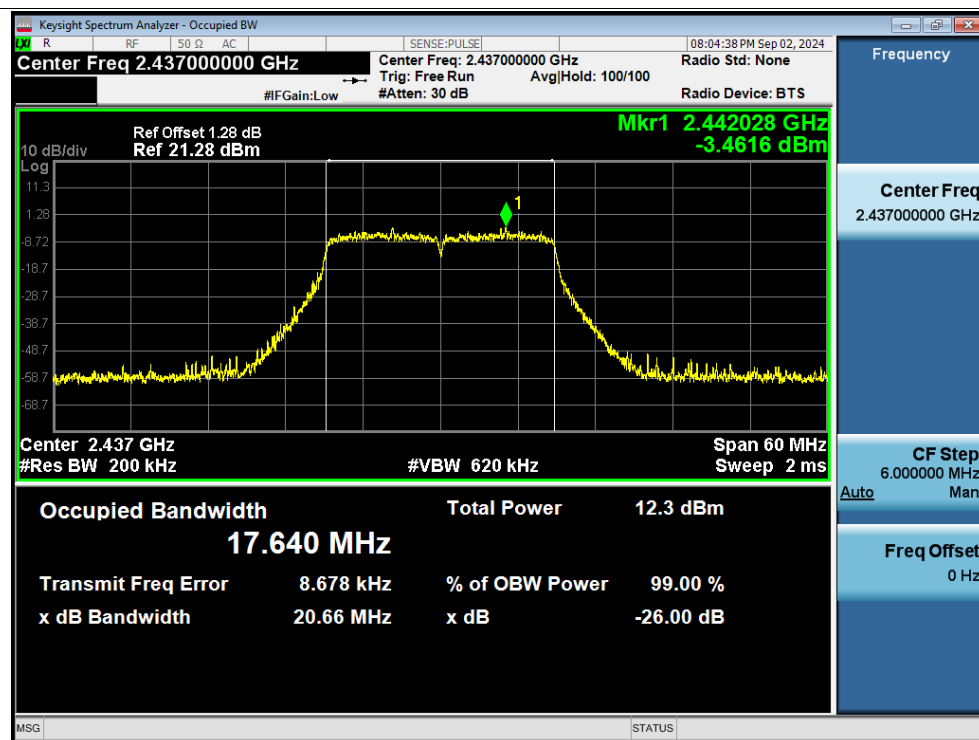
OBW NVNT g 2462MHz Ant1



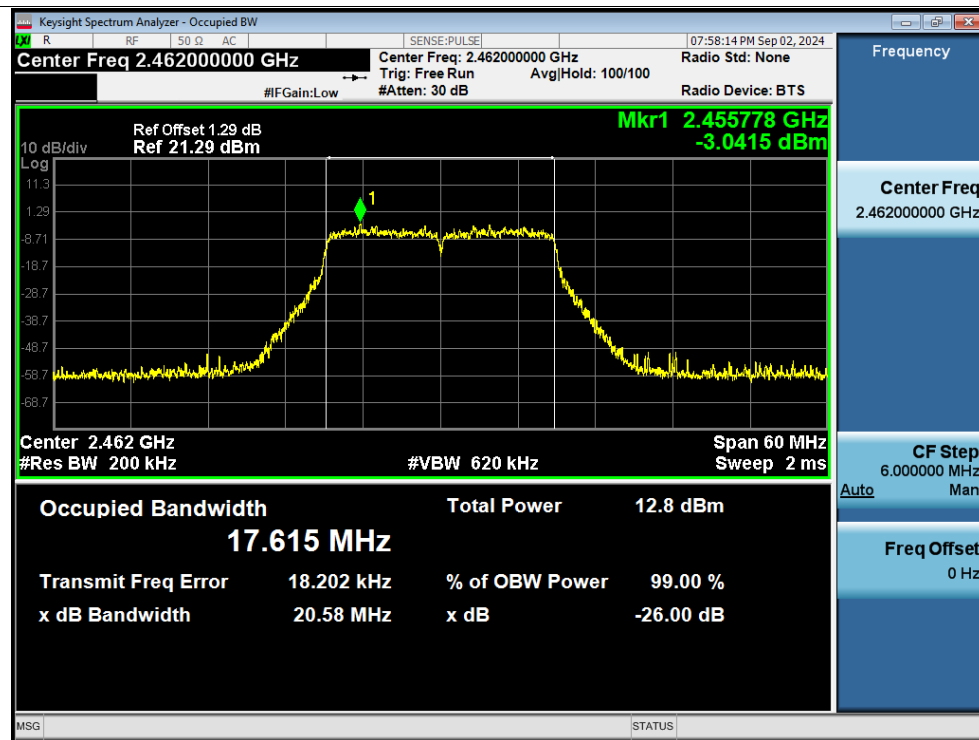
OBW NVNT n20 2412MHz Ant1



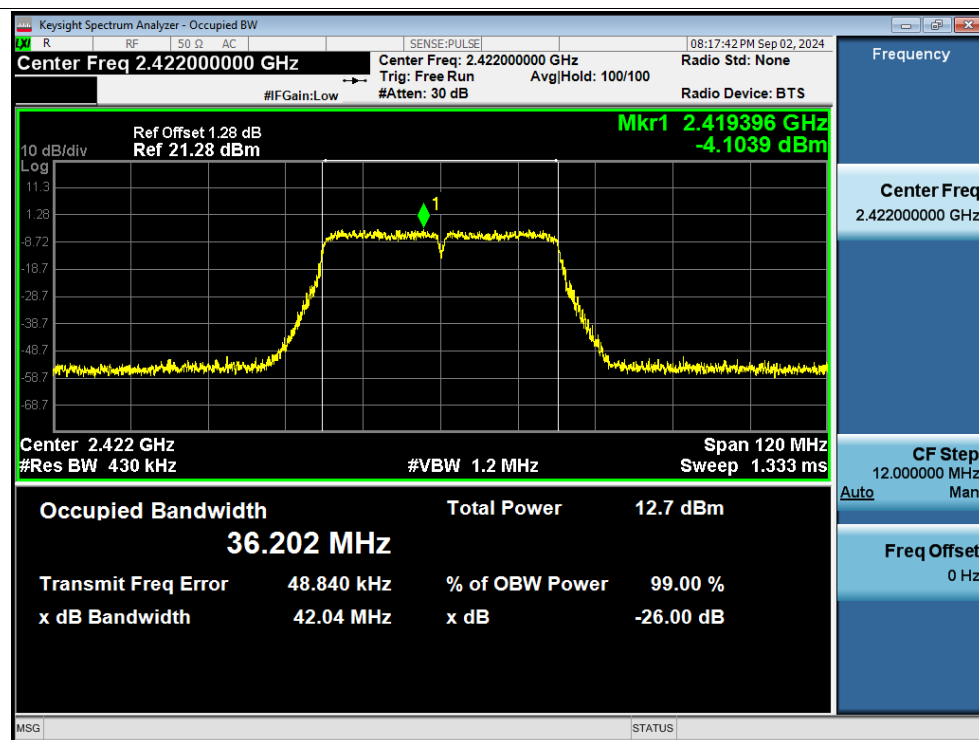
OBW NVNT n20 2437MHz Ant1



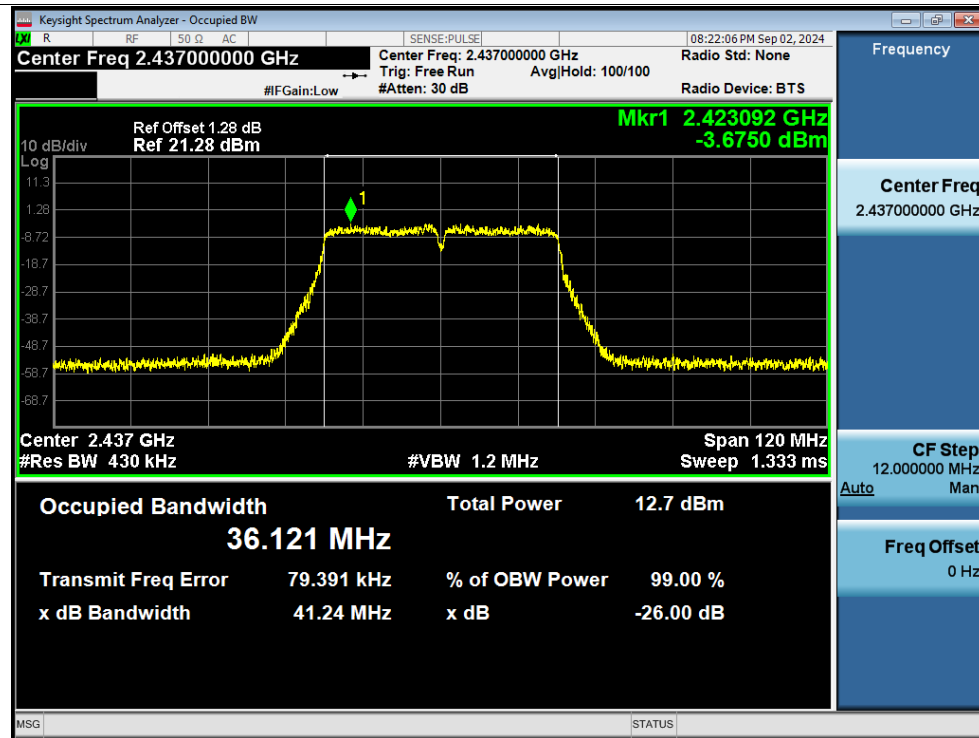
OBW NVNT n20 2462MHz Ant1



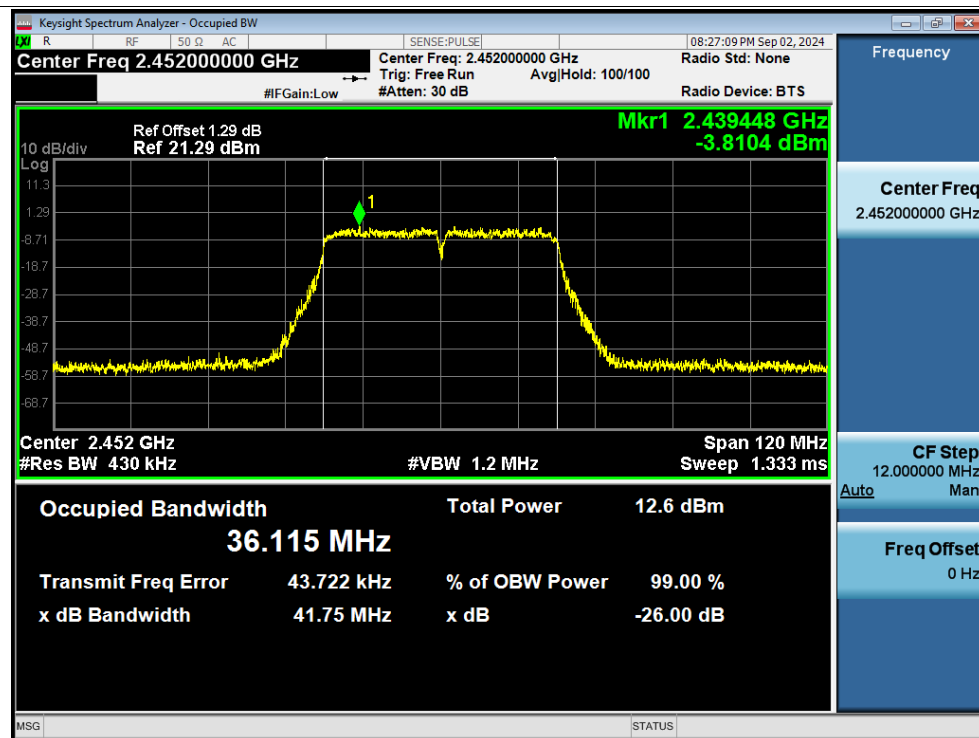
OBW NVNT n40 2422MHz Ant1



OBW NVNT n40 2437MHz Ant1



OBW NVNT n40 2452MHz Ant1



Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant1	-10.25	8	Pass
NVNT	b	2437	Ant1	-9.71	8	Pass
NVNT	b	2462	Ant1	-10.78	8	Pass
NVNT	g	2412	Ant1	-17.05	8	Pass
NVNT	g	2437	Ant1	-18.13	8	Pass
NVNT	g	2462	Ant1	-15.96	8	Pass
NVNT	n20	2412	Ant1	-18.13	8	Pass
NVNT	n20	2437	Ant1	-18.62	8	Pass
NVNT	n20	2462	Ant1	-18.64	8	Pass
NVNT	n40	2422	Ant1	-21.07	8	Pass
NVNT	n40	2437	Ant1	-21.17	8	Pass
NVNT	n40	2452	Ant1	-21.98	8	Pass

Test Graphs

PSD NVNT b 2412MHz Ant1



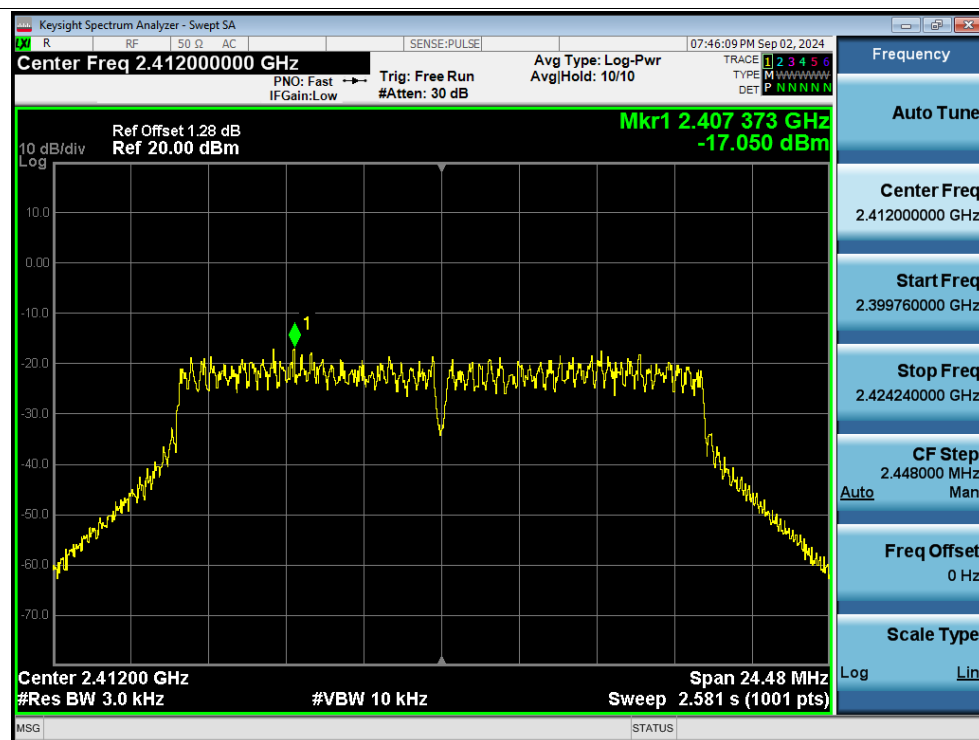
PSD NVNT b 2437MHz Ant1



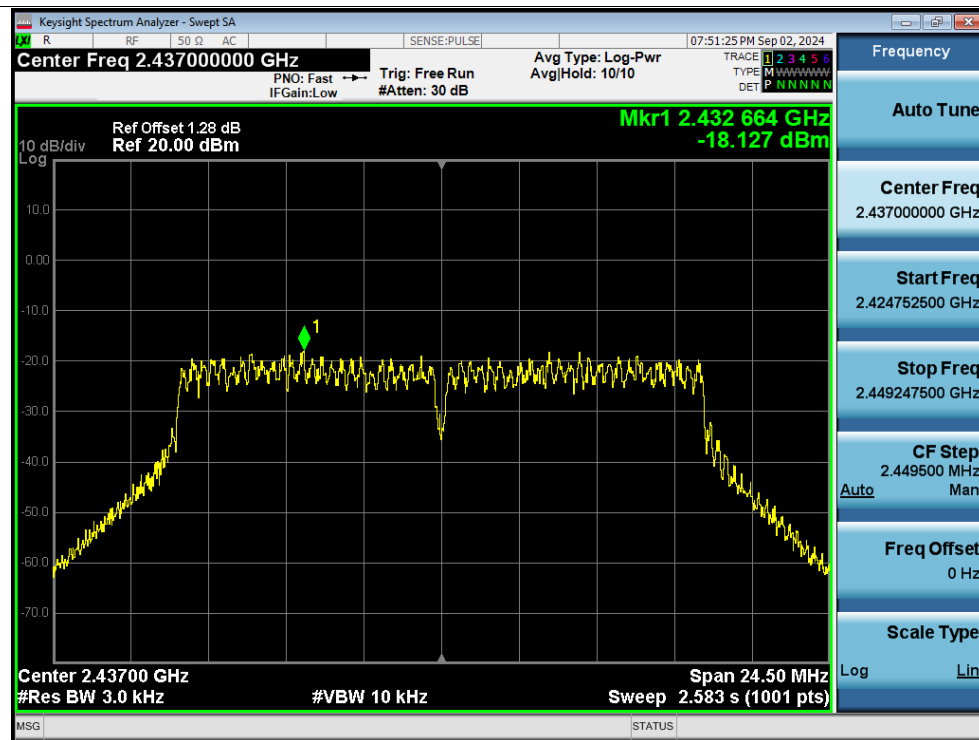
PSD NVNT b 2462MHz Ant1



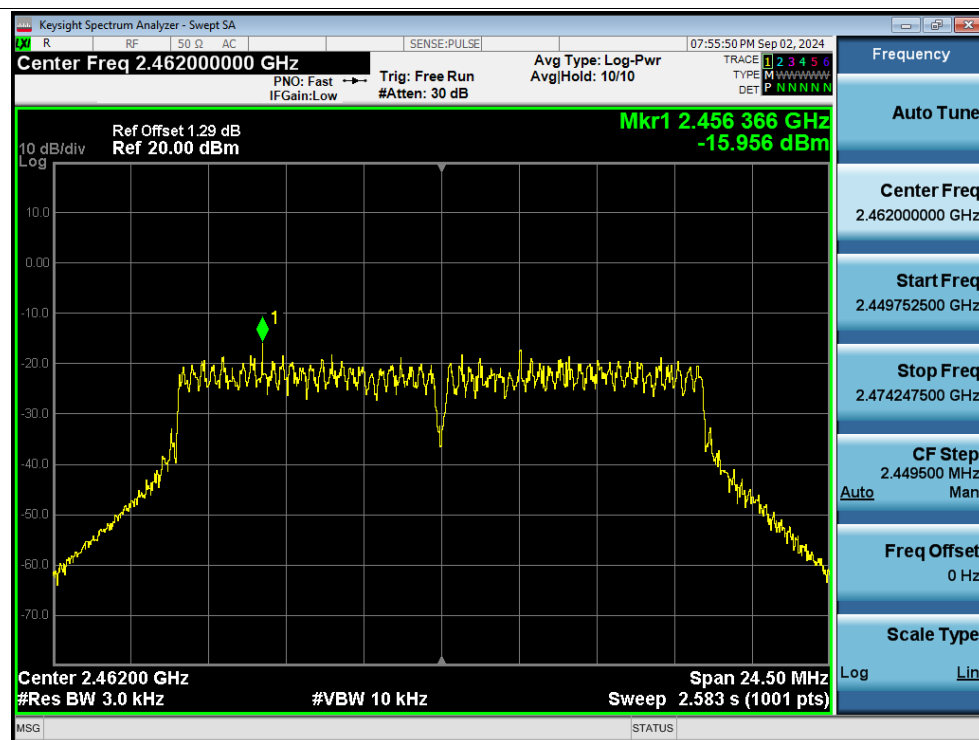
PSD NVNT g 2412MHz Ant1



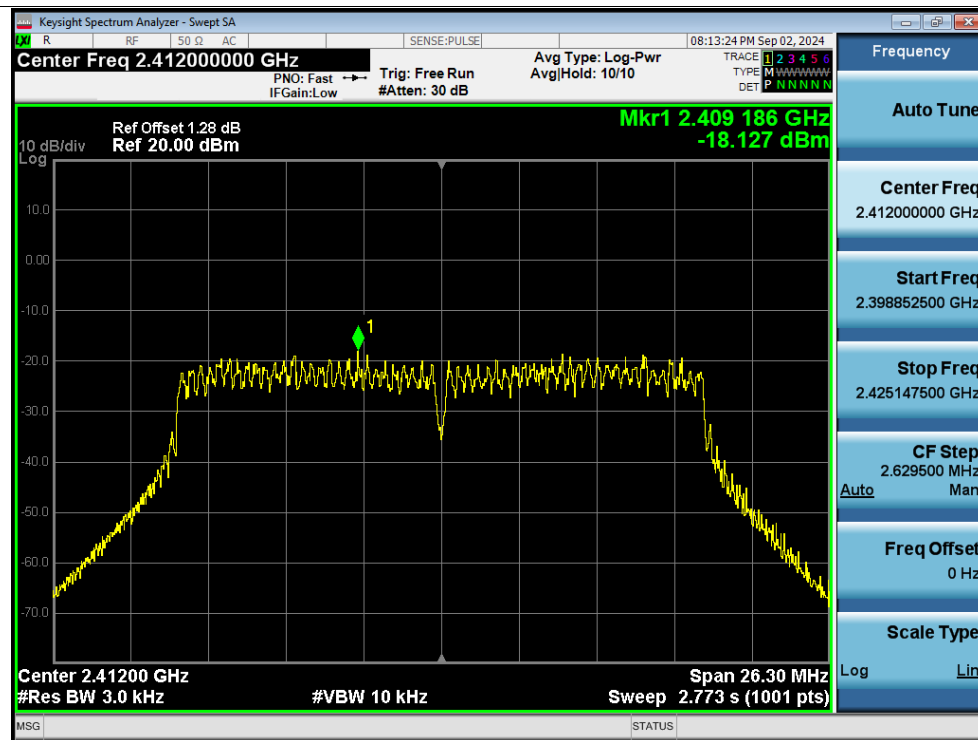
PSD NVNT g 2437MHz Ant1



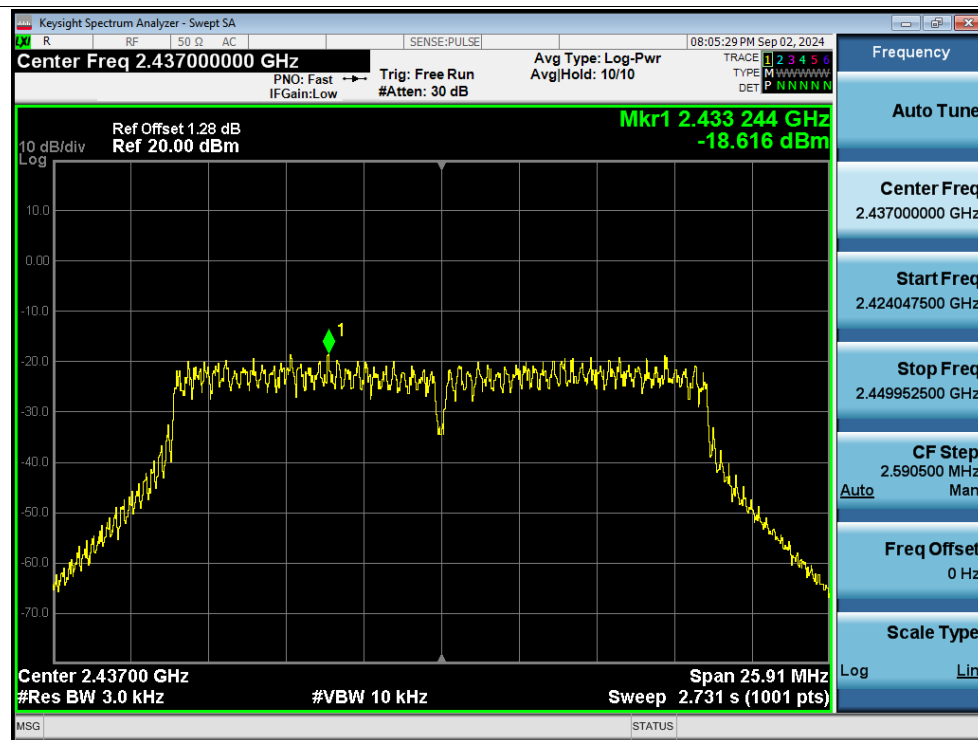
PSD NVNT g 2462MHz Ant1



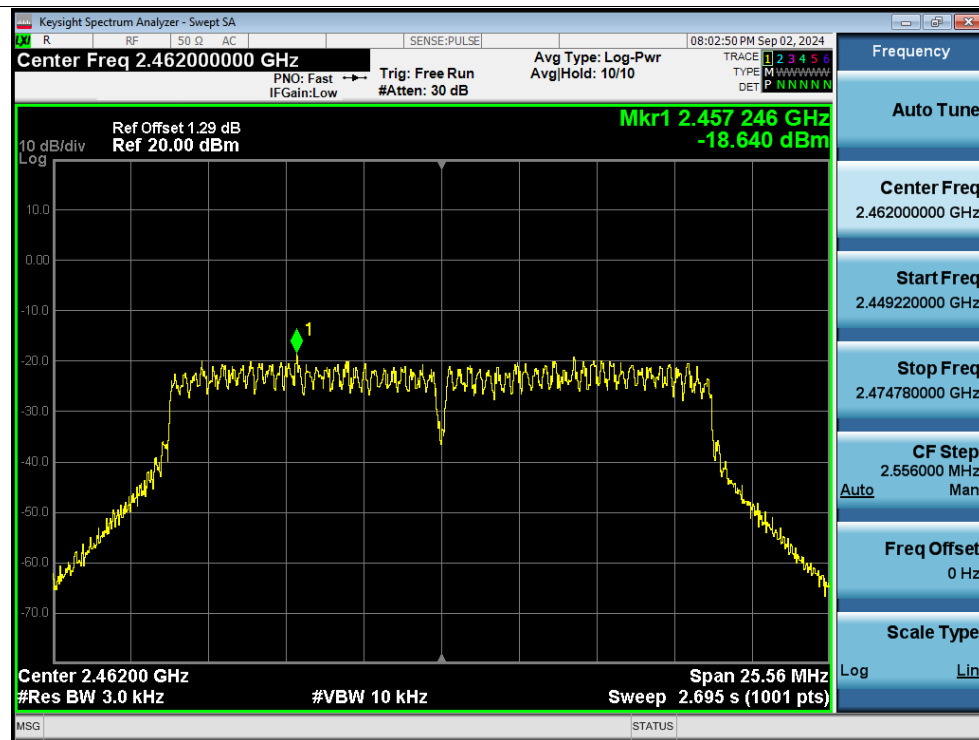
PSD NVNT n20 2412MHz Ant1



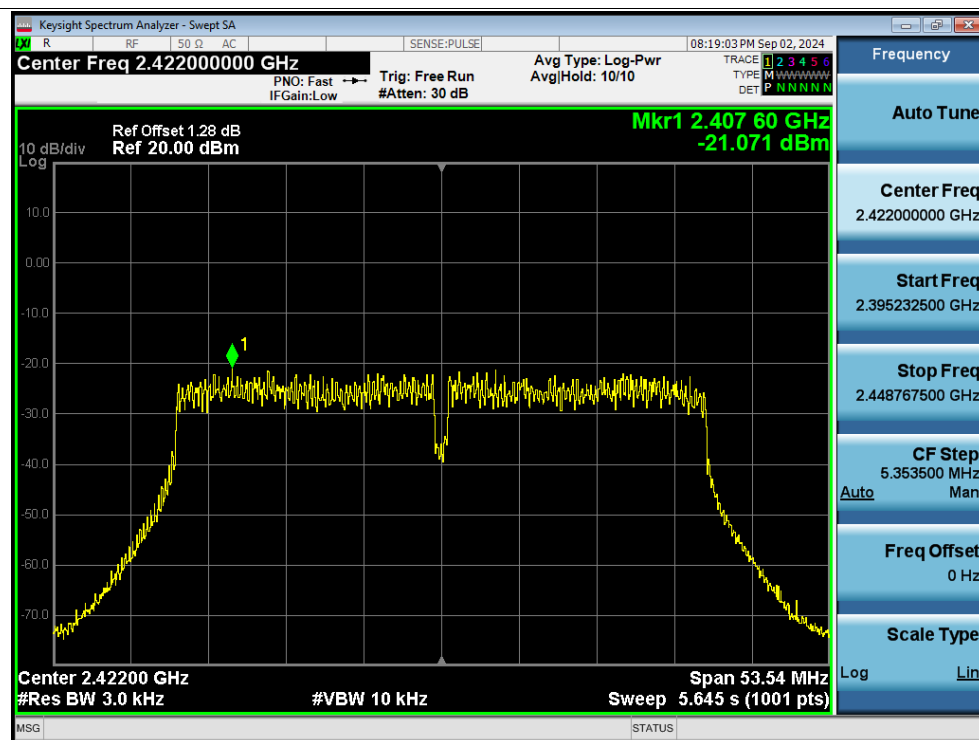
PSD NVNT n20 2437MHz Ant1



PSD NVNT n20 2462MHz Ant1



PSD NVNT n40 2422MHz Ant1



Keysight Spectrum Analyzer - Swept SA

R RF 50 Ω AC SENSE:PULSE 08:23:27 PM Sep 02, 2024

Center Freq 2.437000000 GHz PNO: Fast Trig: Free Run Avg Type: Log-Pwr
IFGain:Low #Atten: 30 dB Avg|Hold: 10/10

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

Ref Offset 1.28 dB
Ref 20.00 dBm

10 dB/div
Log

Mkr1 2.426 36 GHz
-21.165 dBm

Center 2.43700 GHz Span 53.72 MHz
#Res BW 3.0 kHz #VBW 10 kHz Sweep 5.664 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
2.437000000 GHz

Start Freq
2.410142500 GHz

Stop Freq
2.463857500 GHz

CF Step
5.371500 MHz
Man

Auto

Freq Offset
0 Hz

Scale Type
Log Lin

Keysight Spectrum Analyzer - Swept SA

R RF 50 Ω AC SENSE:PULSE 08:28:30 PM Sep 02, 2024

Center Freq 2.45200000 GHz PNO: Fast Trig: Free Run Avg Type: Log-Pwr
IFGain:Low #Atten: 30 dB AvgHold: 10/10

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

Ref Offset 1.29 dB
Ref 20.00 dBm

10 dB/div
Log

Mkr1 2.438 26 GHz
-21.979 dBm

1

Center 2.45200 GHz Span 53.48 MHz
#Res BW 3.0 kHz #VBW 10 kHz Sweep 5.638 s (1001 pts)

Auto Tune

Center Freq 2.452000000 GHz

Start Freq 2.425262500 GHz

Stop Freq 2.478737500 GHz

CF Step 5.347500 MHz
Auto Man

Freq Offset 0 Hz

Scale Type Log Lin

MSG STATUS

Band Edge

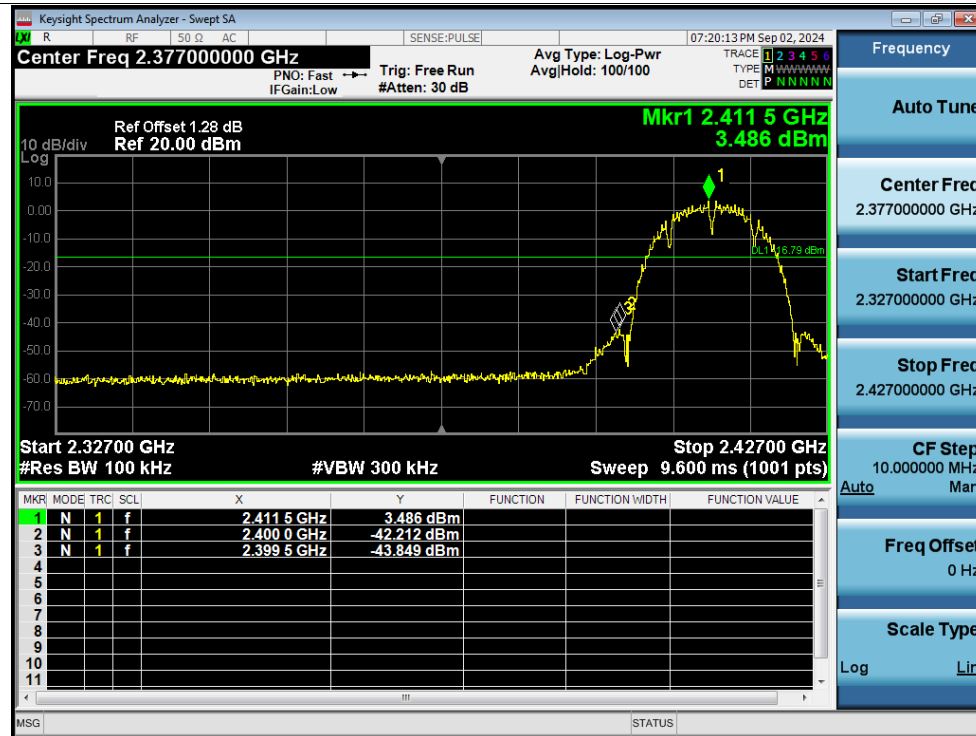
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-45.42	-20	Pass
NVNT	b	2462	Ant1	-60.22	-20	Pass
NVNT	g	2412	Ant1	-39.54	-20	Pass
NVNT	g	2462	Ant1	-52.52	-20	Pass
NVNT	n20	2412	Ant1	-39.99	-20	Pass
NVNT	n20	2462	Ant1	-51.25	-20	Pass
NVNT	n40	2422	Ant1	-36.86	-20	Pass
NVNT	n40	2452	Ant1	-50.46	-20	Pass

Test Graphs

Band Edge NVNT b 2412MHz Ant1 Ref



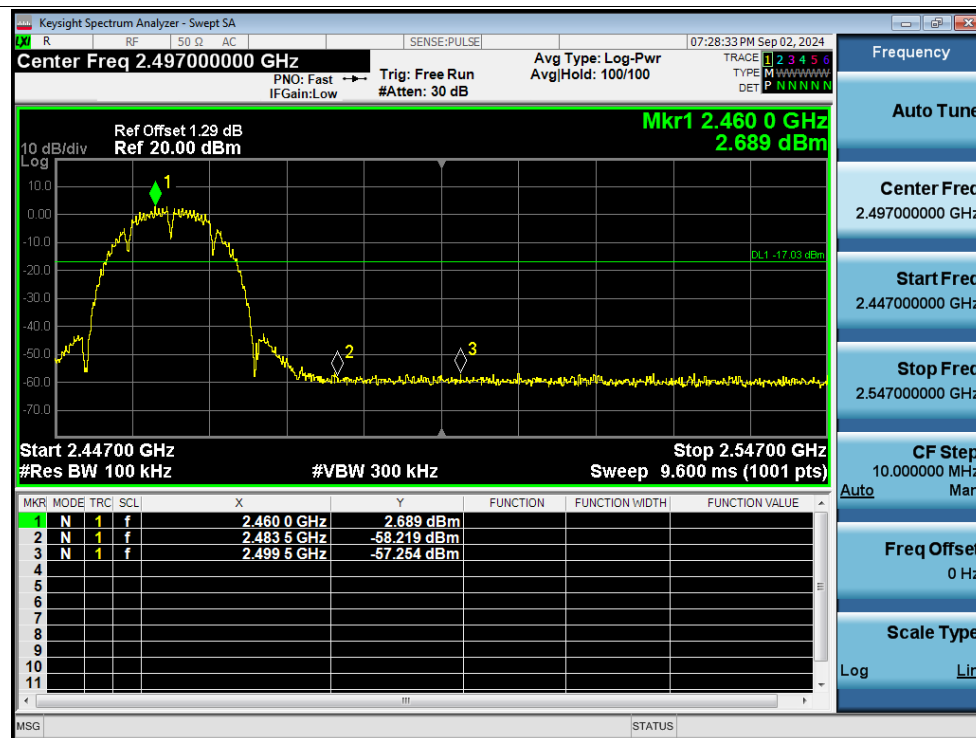
Band Edge NVNT b 2412MHz Ant1 Emission



Band Edge NVNT b 2462MHz Ant1 Ref



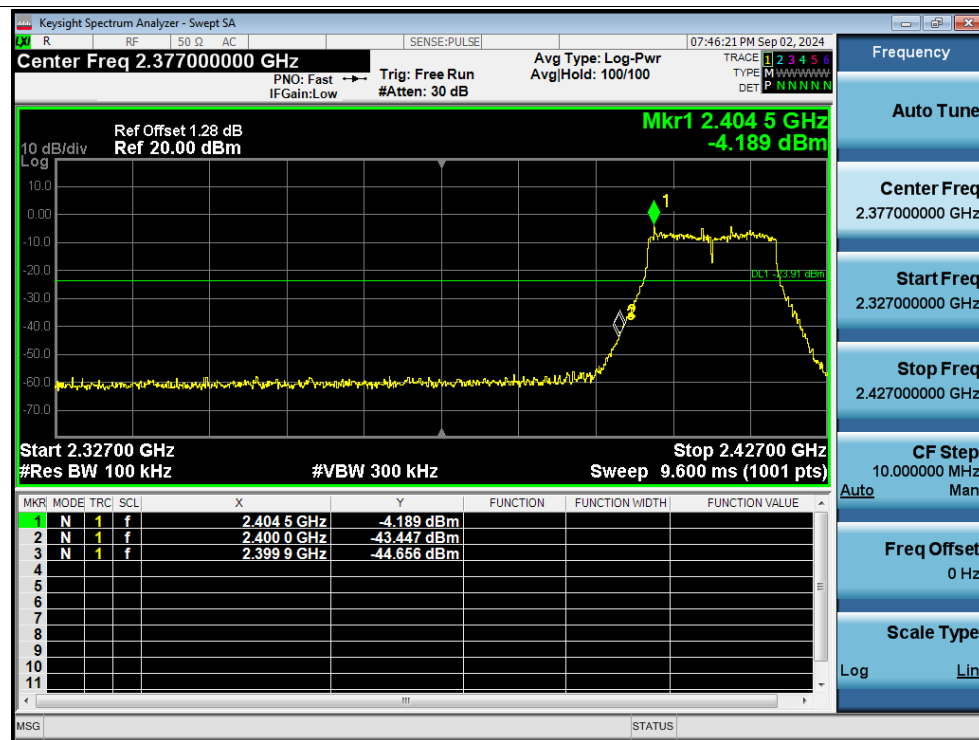
Band Edge NVNT b 2462MHz Ant1 Emission



Band Edge NVNT g 2412MHz Ant1 Ref



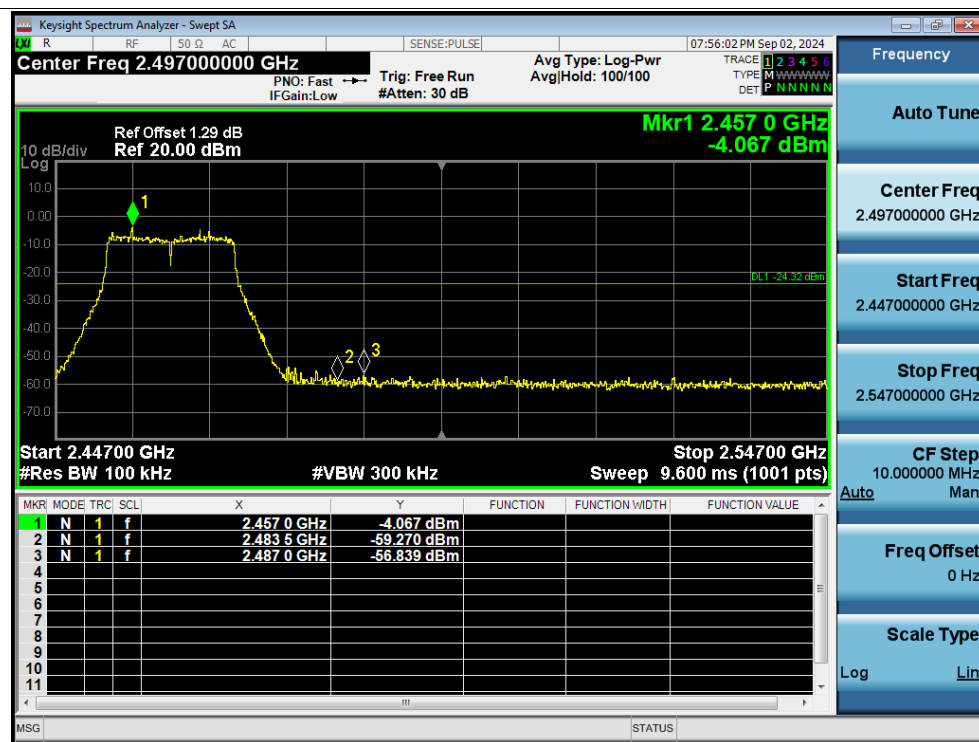
Band Edge NVNT g 2412MHz Ant1 Emission



Band Edge NVNT g 2462MHz Ant1 Ref



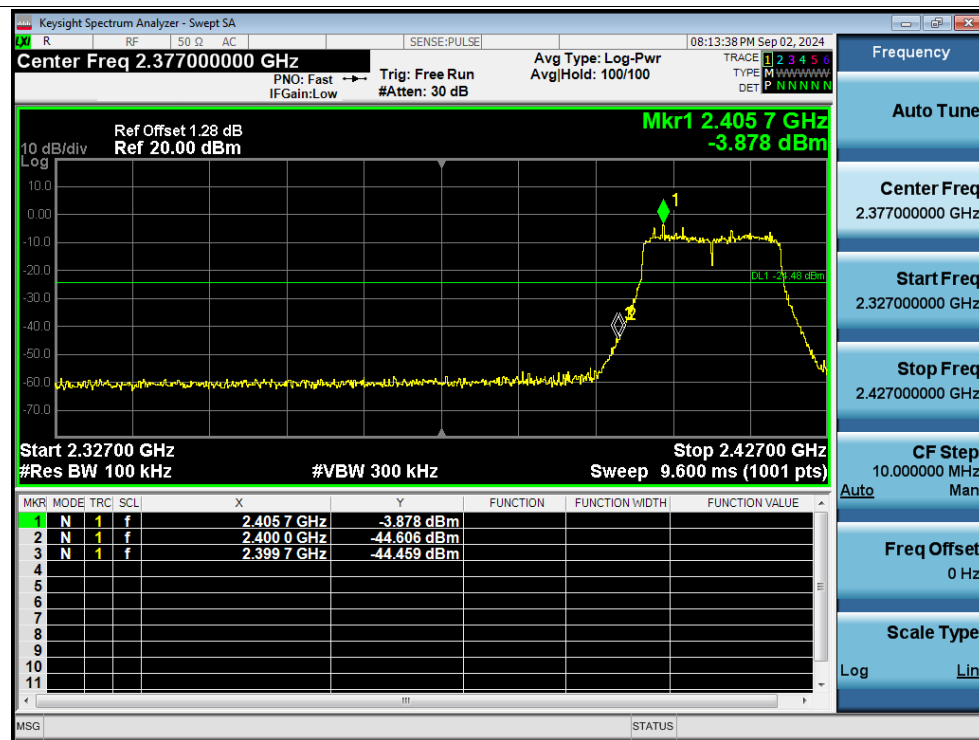
Band Edge NVNT g 2462MHz Ant1 Emission



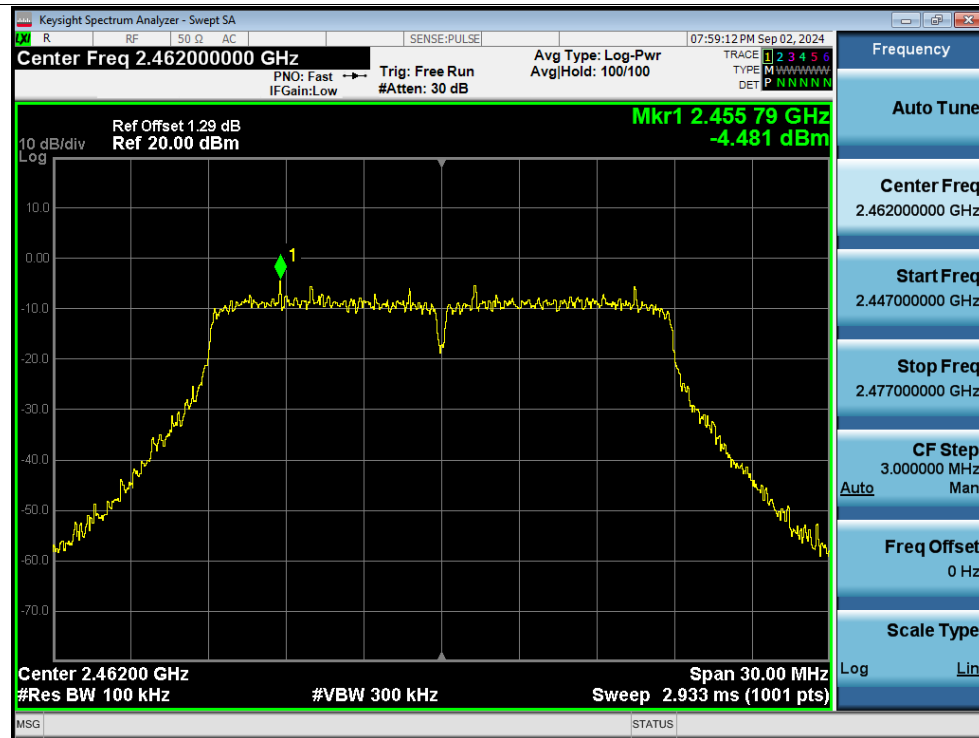
Band Edge NVNT n20 2412MHz Ant1 Ref



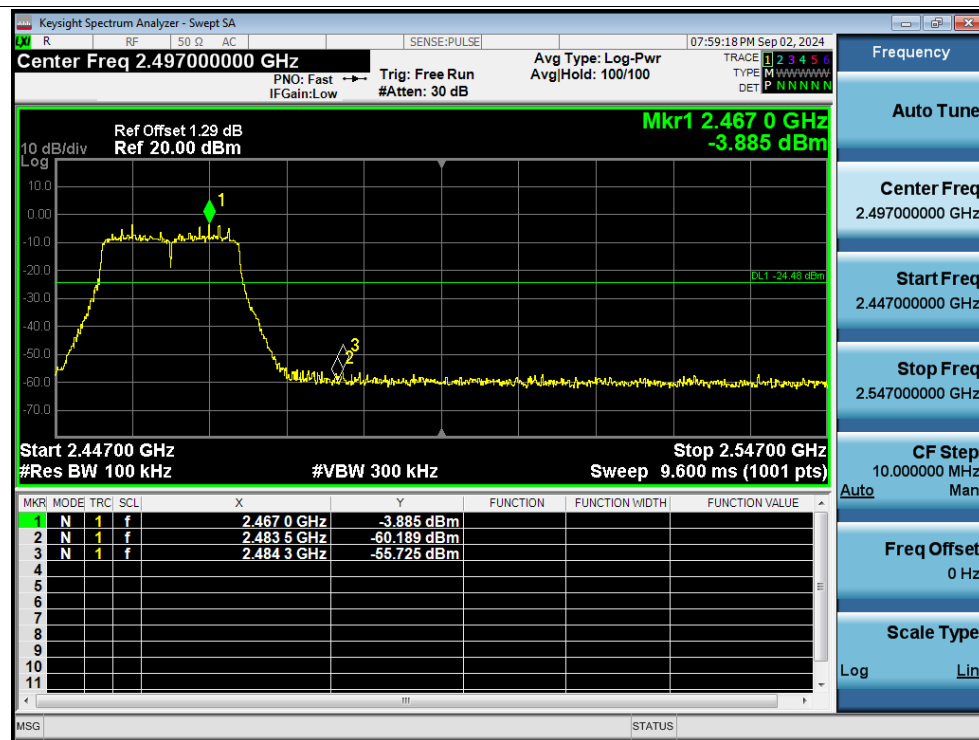
Band Edge NVNT n20 2412MHz Ant1 Emission



Band Edge NVNT n20 2462MHz Ant1 Ref



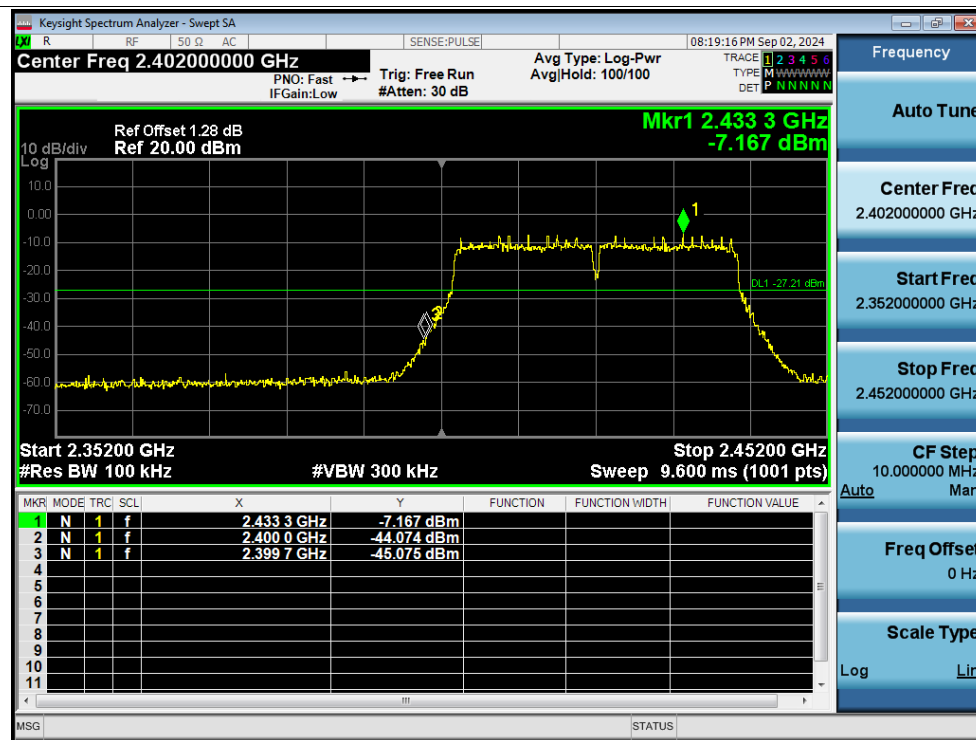
Band Edge NVNT n20 2462MHz Ant1 Emission



Band Edge NVNT n40 2422MHz Ant1 Ref



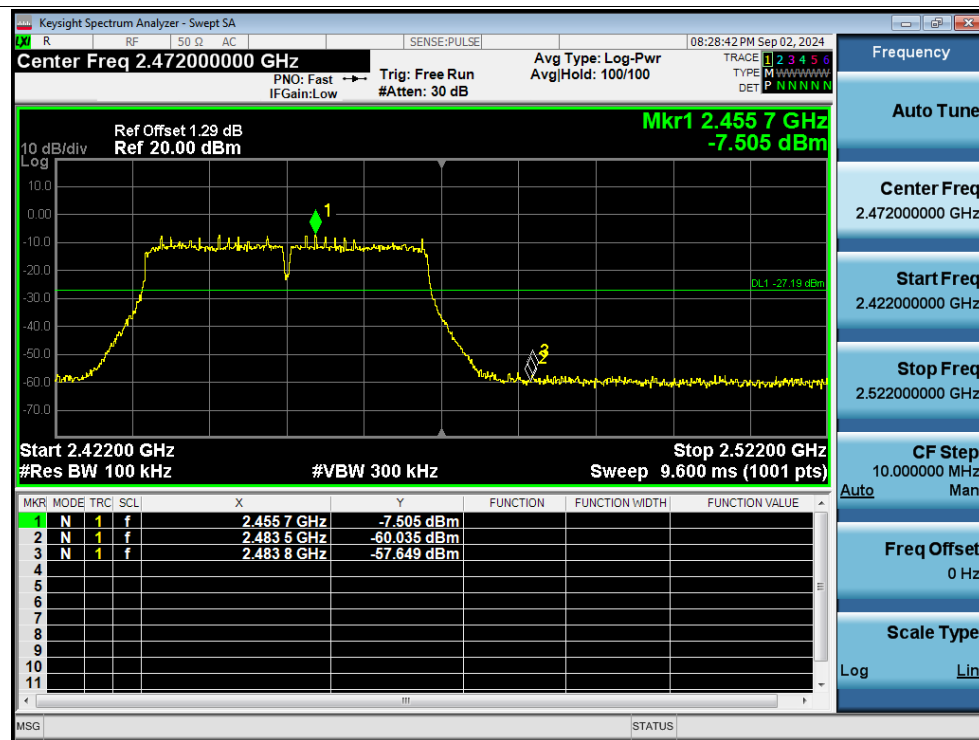
Band Edge NVNT n40 2422MHz Ant1 Emission



Band Edge NVNT n40 2452MHz Ant1 Ref



Band Edge NVNT n40 2452MHz Ant1 Emission



Conducted RF Spurious Emission

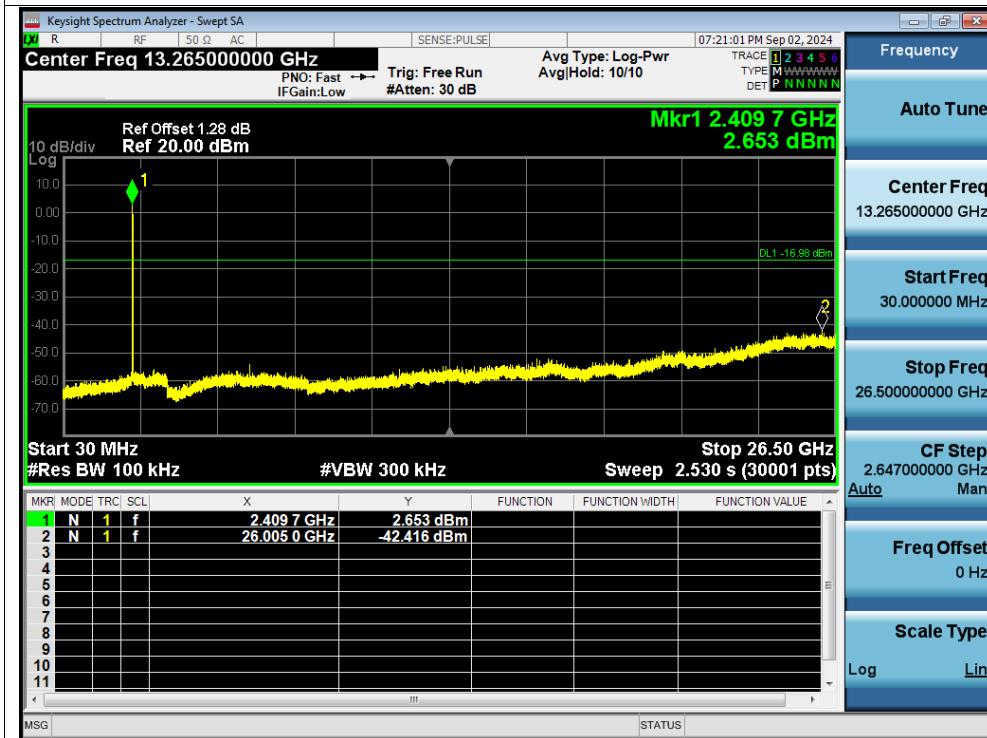
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-45.44	-20	Pass
NVNT	b	2437	Ant1	-45.72	-20	Pass
NVNT	b	2462	Ant1	-45.09	-20	Pass
NVNT	g	2412	Ant1	-38.48	-20	Pass
NVNT	g	2437	Ant1	-38.19	-20	Pass
NVNT	g	2462	Ant1	-38.71	-20	Pass
NVNT	n20	2412	Ant1	-38.22	-20	Pass
NVNT	n20	2437	Ant1	-37.97	-20	Pass
NVNT	n20	2462	Ant1	-38.45	-20	Pass
NVNT	n40	2422	Ant1	-35.76	-20	Pass
NVNT	n40	2437	Ant1	-34.98	-20	Pass
NVNT	n40	2452	Ant1	-35.85	-20	Pass

Test Graphs

Tx. Spurious NVNT b 2412MHz Ant1 Ref



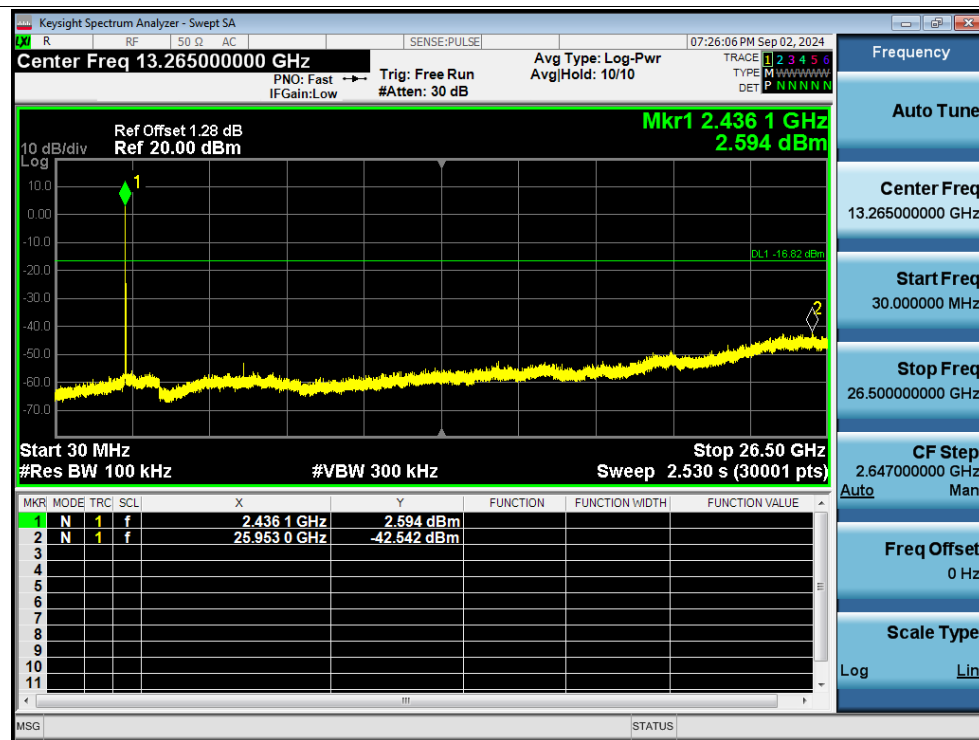
Tx. Spurious NVNT b 2412MHz Ant1 Emission



Tx. Spurious NVNT b 2437MHz Ant1 Ref



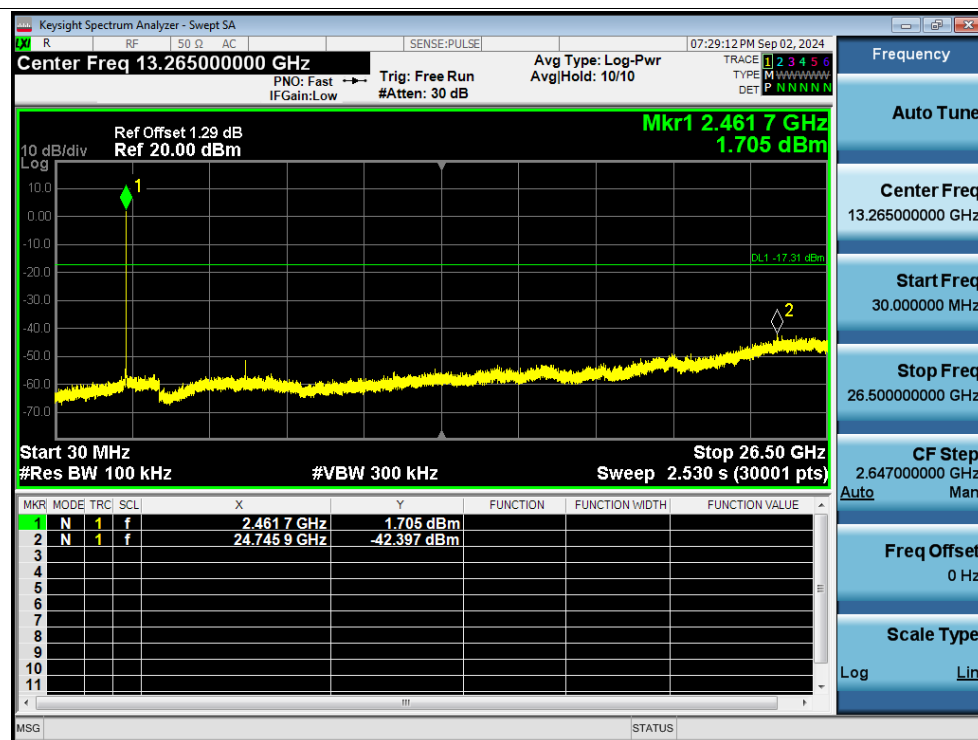
Tx. Spurious NVNT b 2437MHz Ant1 Emission



Tx. Spurious NVNT b 2462MHz Ant1 Ref



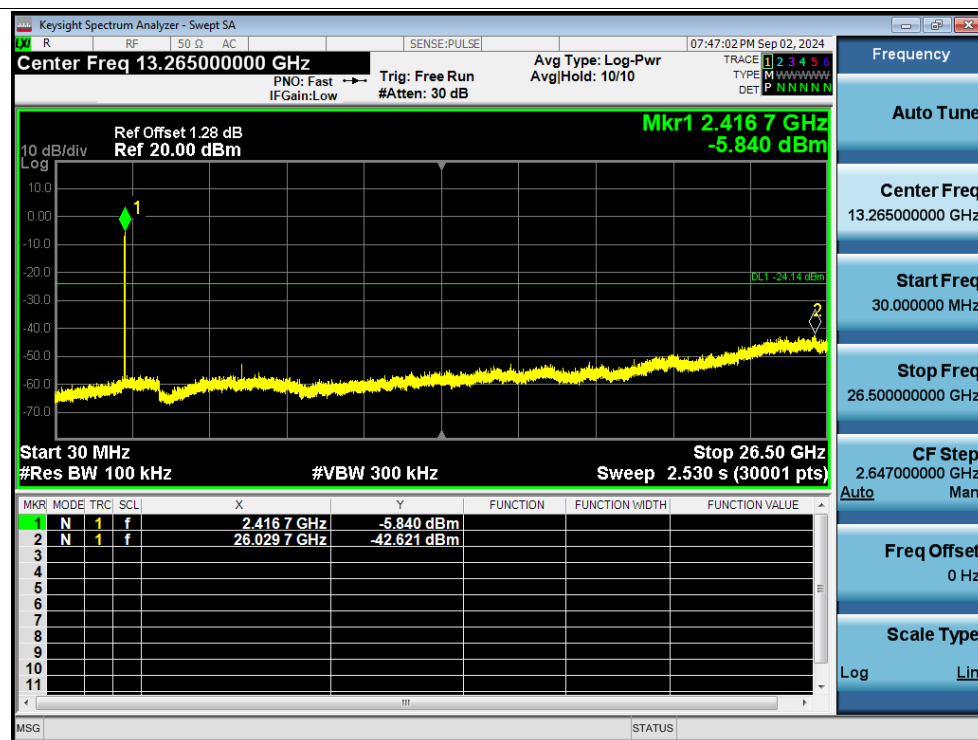
Tx. Spurious NVNT b 2462MHz Ant1 Emission



Tx. Spurious NVNT g 2412MHz Ant1 Ref



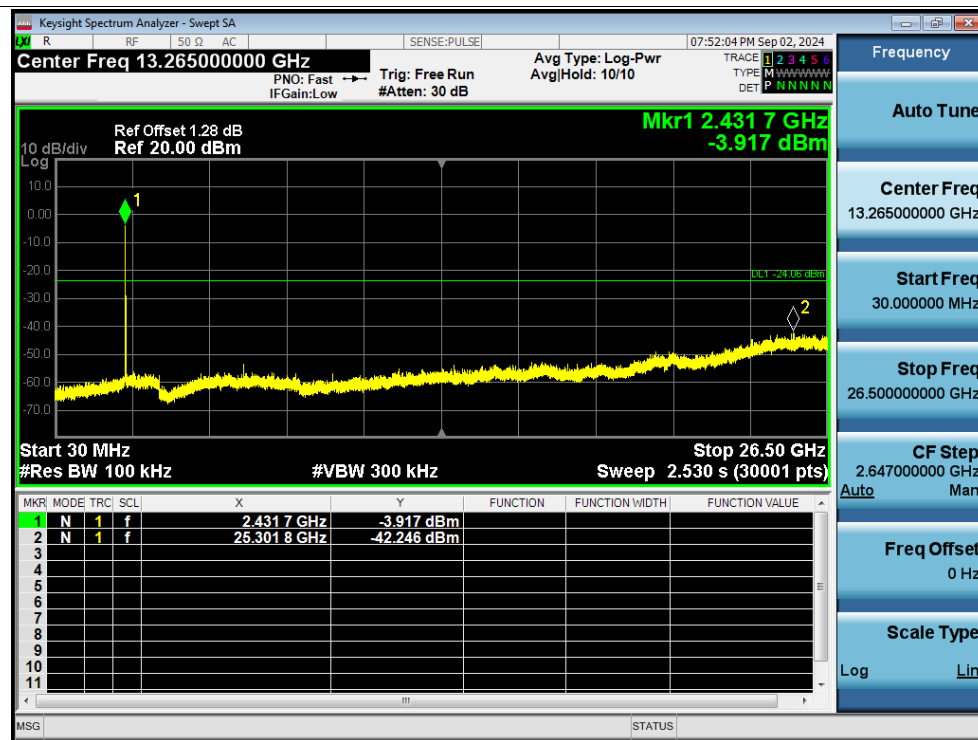
Tx. Spurious NVNT g 2412MHz Ant1 Emission



Tx. Spurious NVNT g 2437MHz Ant1 Ref



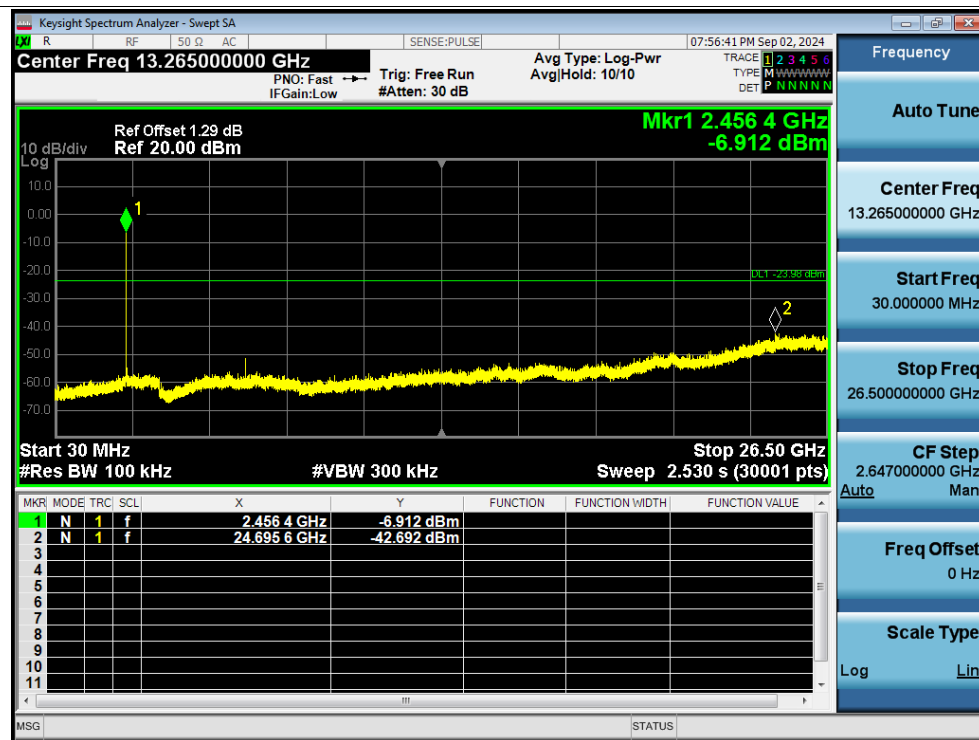
Tx. Spurious NVNT g 2437MHz Ant1 Emission



Tx. Spurious NVNT g 2462MHz Ant1 Ref



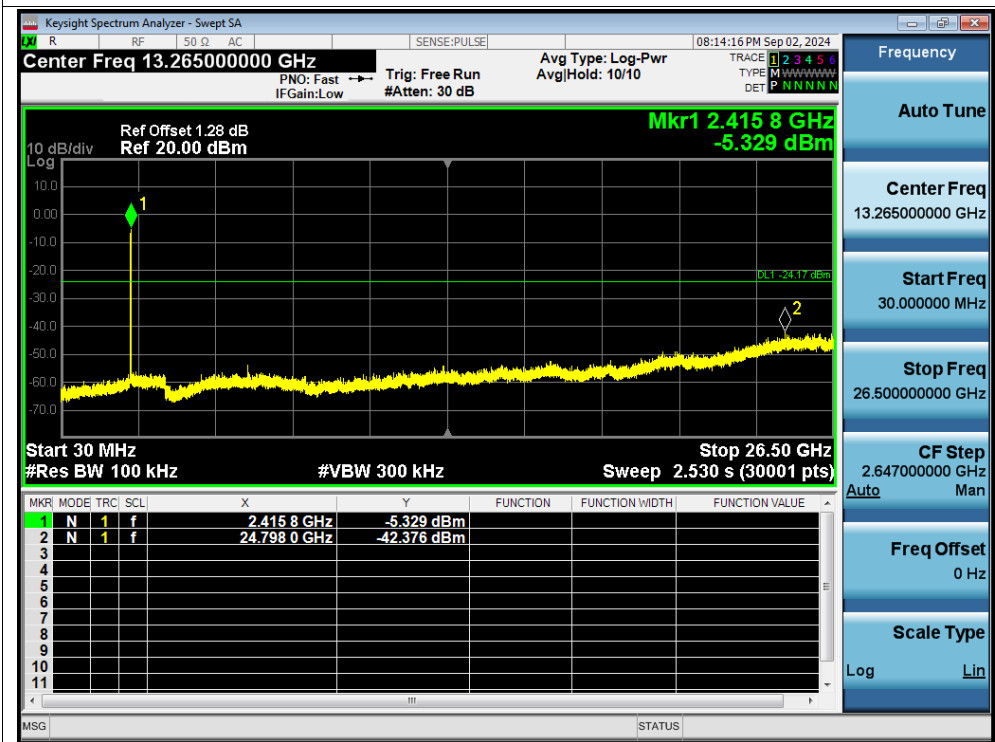
Tx. Spurious NVNT g 2462MHz Ant1 Emission



Tx. Spurious NVNT n20 2412MHz Ant1 Ref



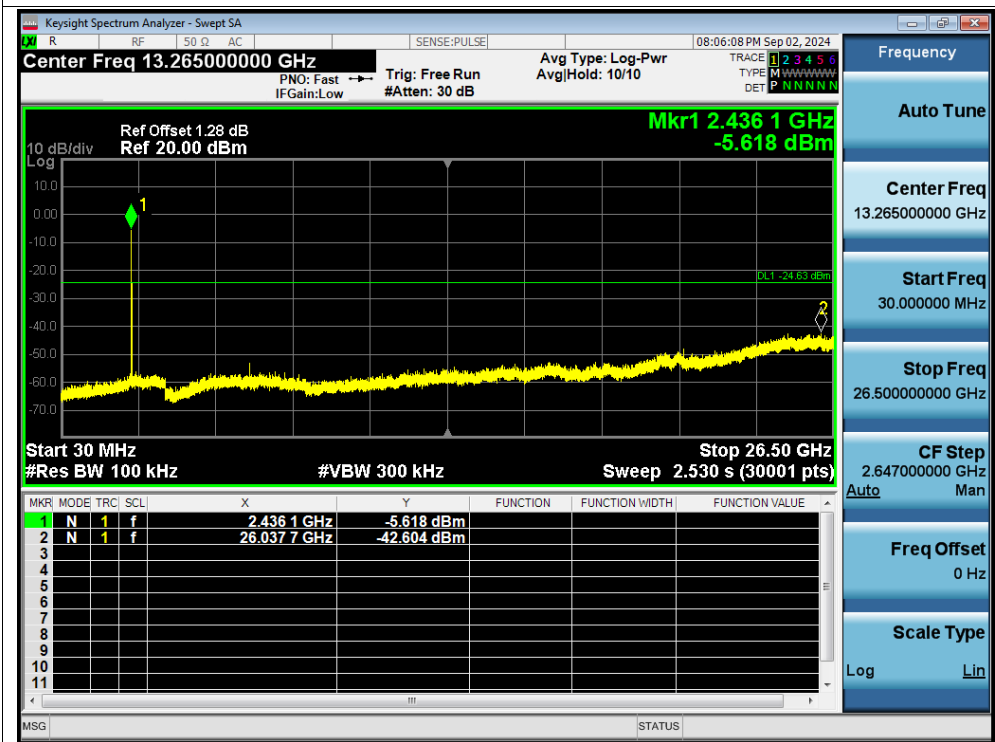
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Tx. Spurious NVNT n20 2437MHz Ant1 Ref



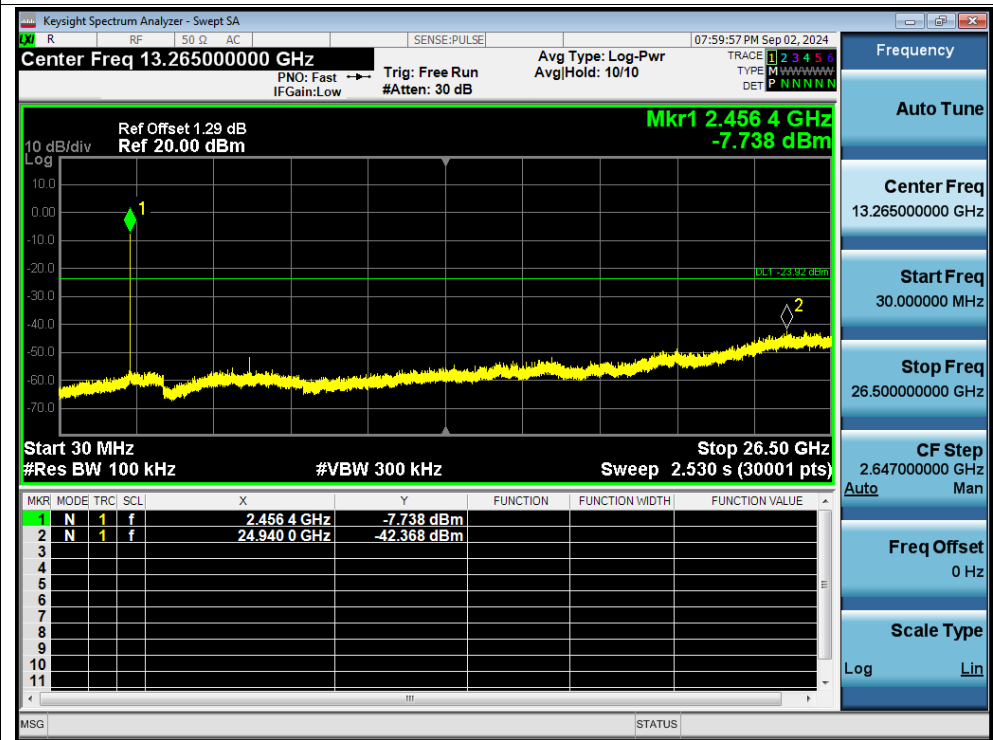
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Tx. Spurious NVNT n20 2462MHz Ant1 Ref



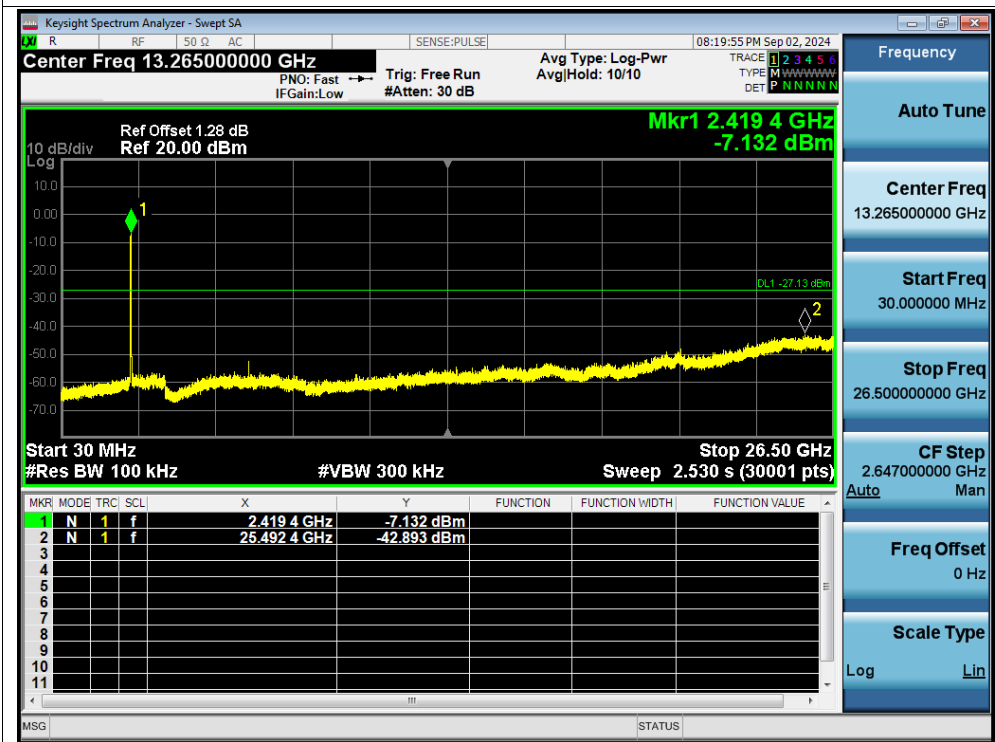
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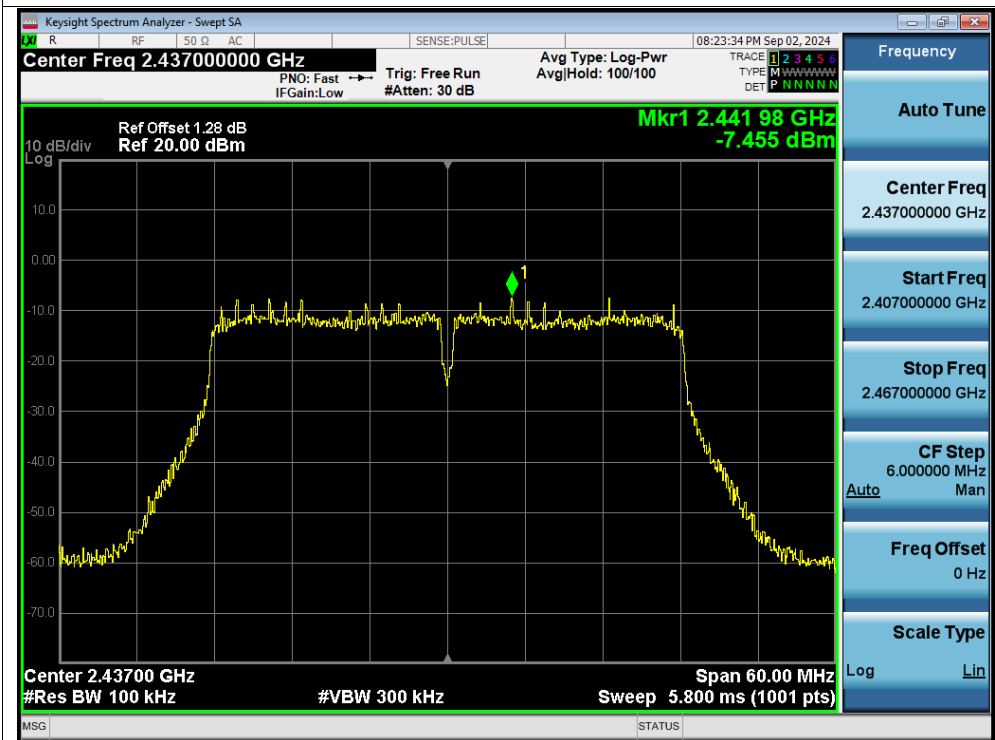
Tx. Spurious NVNT n40 2422MHz Ant1 Ref



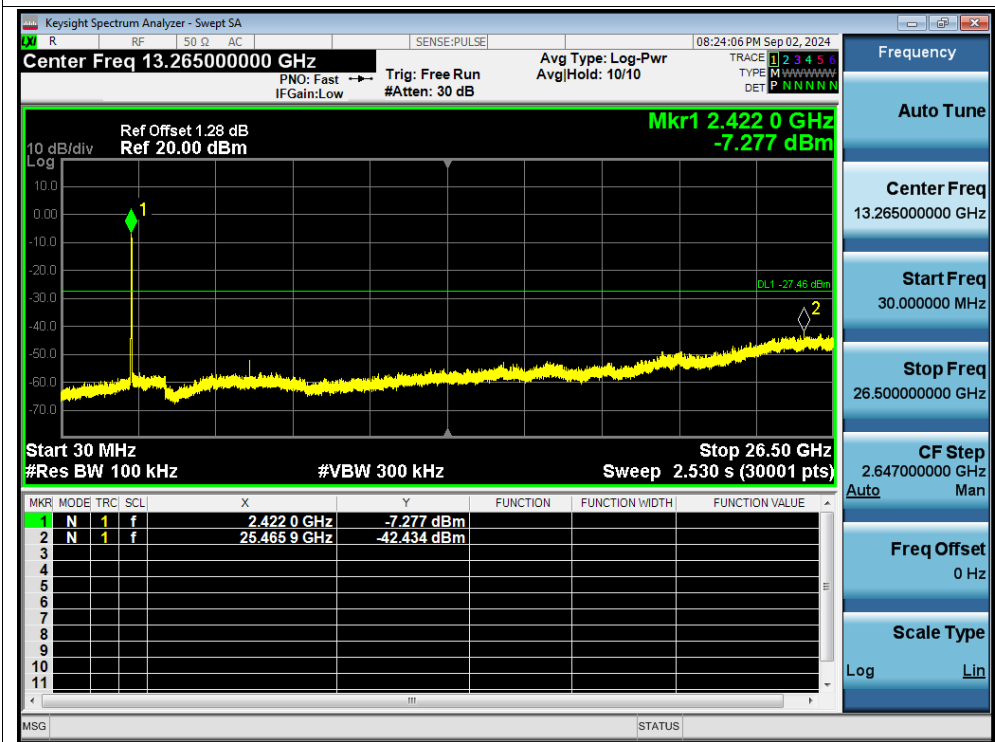
Tx. Spurious NVNT n40 2422MHz Ant1 Emission



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

