
FCC ID: 2BMHL-X1PRO

Duty Cycle 2

Maximum Conducted Output Power 12

-6dB Bandwidth 13

Occupied Channel Bandwidth 23

Maximum Power Spectral Density Level 33

Band Edge 43

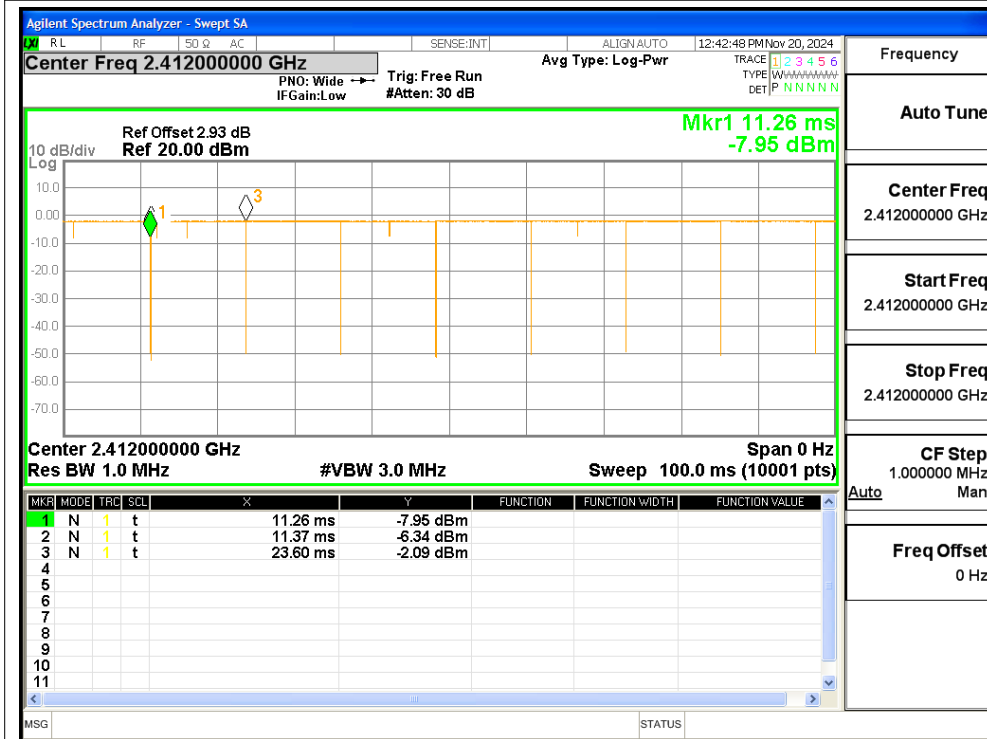
Conducted RF Spurious Emission 56

Duty Cycle

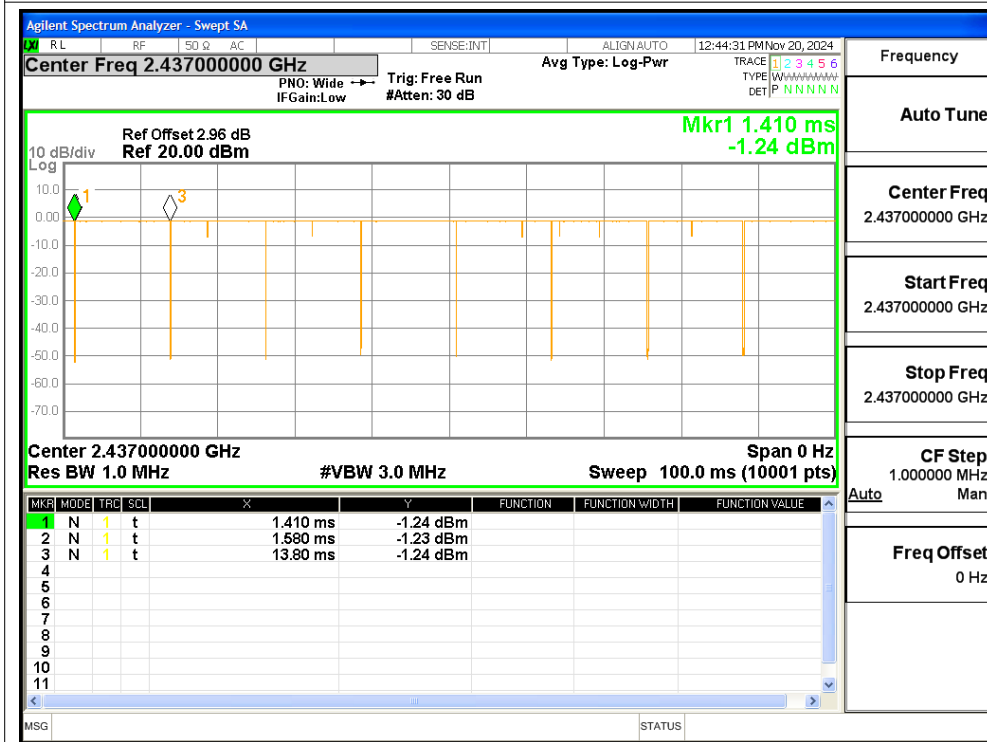
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	99.11	0	0.08
		2437		98.63	0	0.08
		2462		98.87	0	0.08
	g	2412		97.97	0.09	0.49
		2437		95.94	0.18	0.49
		2462		95.94	0.18	0.49
	n20	2412		93.58	0.29	0.53
		2437		91.31	0.39	0.53
		2462		95.17	0.21	0.53
	n40	2422		12.5	9.03	1000
		2437		0.92	20.36	1000
		2452		0.74	21.31	1000
	ax20	2412		89.77	0.47	0.69
		2437		87.48	0.58	0.69
		2462		90.66	0.43	0.69
	ax40	2422		0.28	25.53	1000
		2437		1.15	19.39	1000
		2452		0.95	20.22	1000

Test Graphs

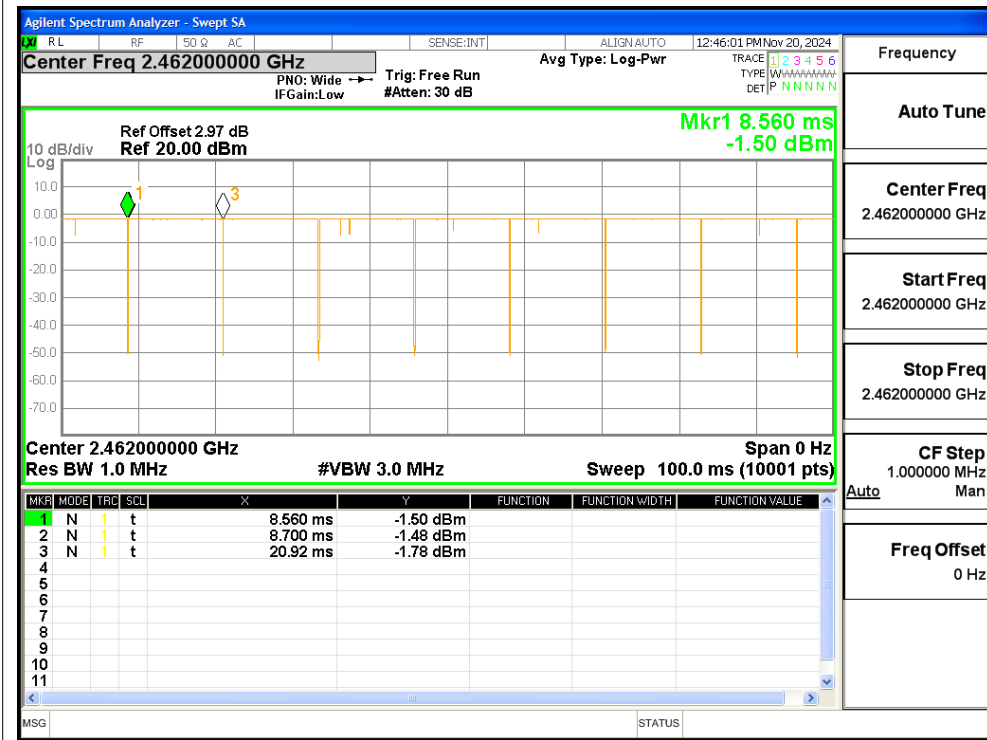
Duty Cycle NVNT b 2412MHz Ant1



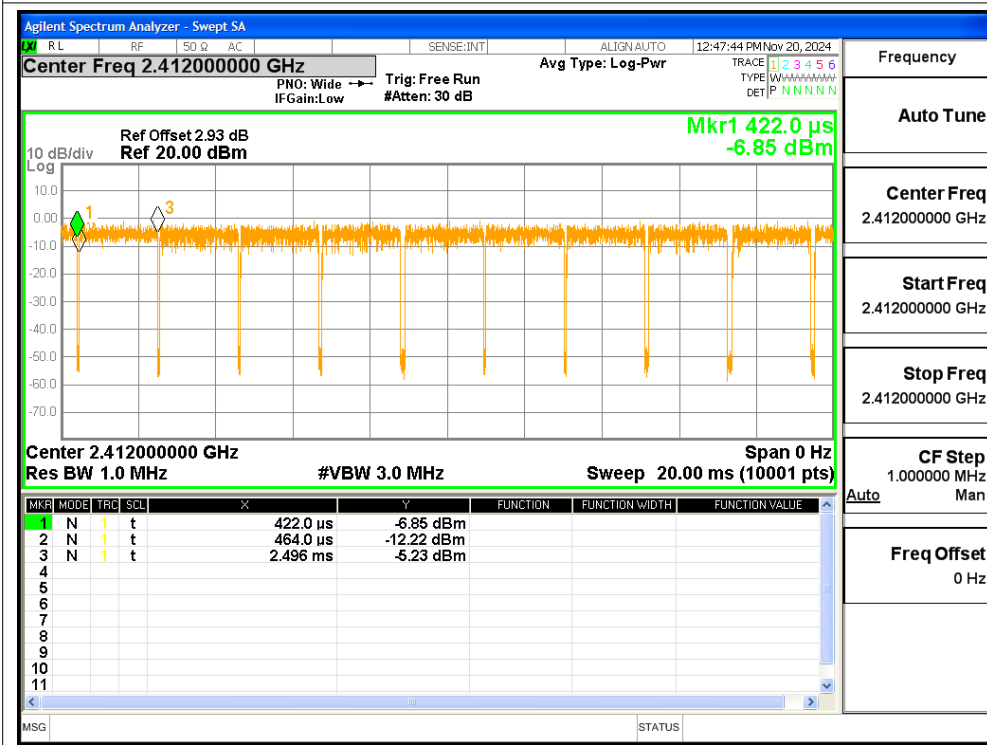
Duty Cycle NVNT b 2437MHz Ant1



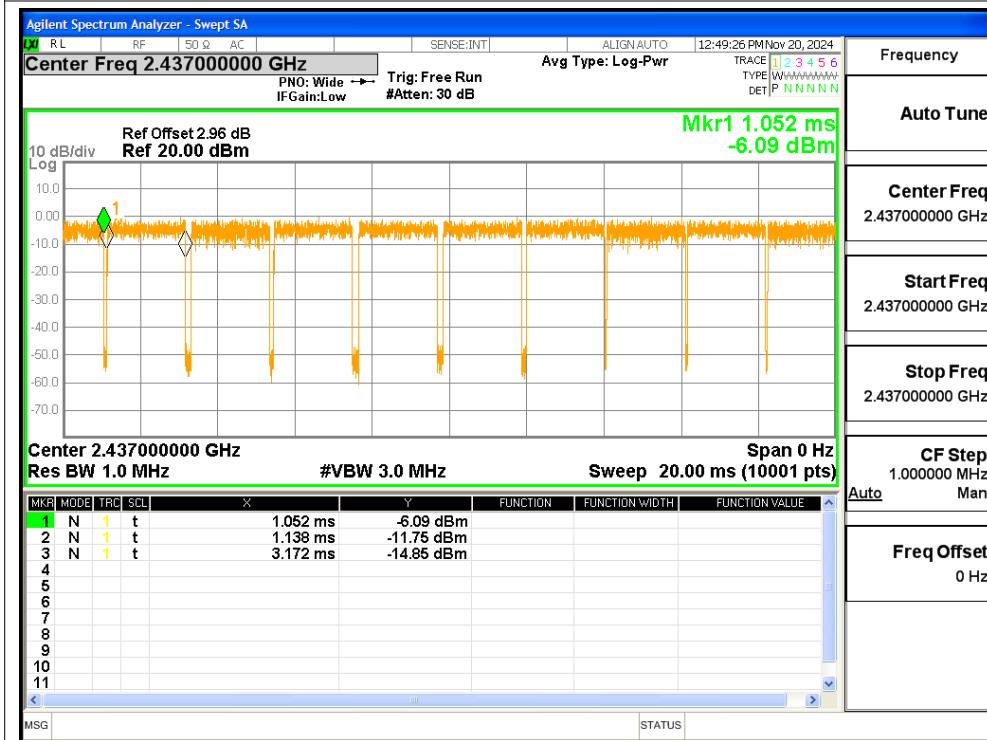
Duty Cycle NVNT b 2462MHz Ant1



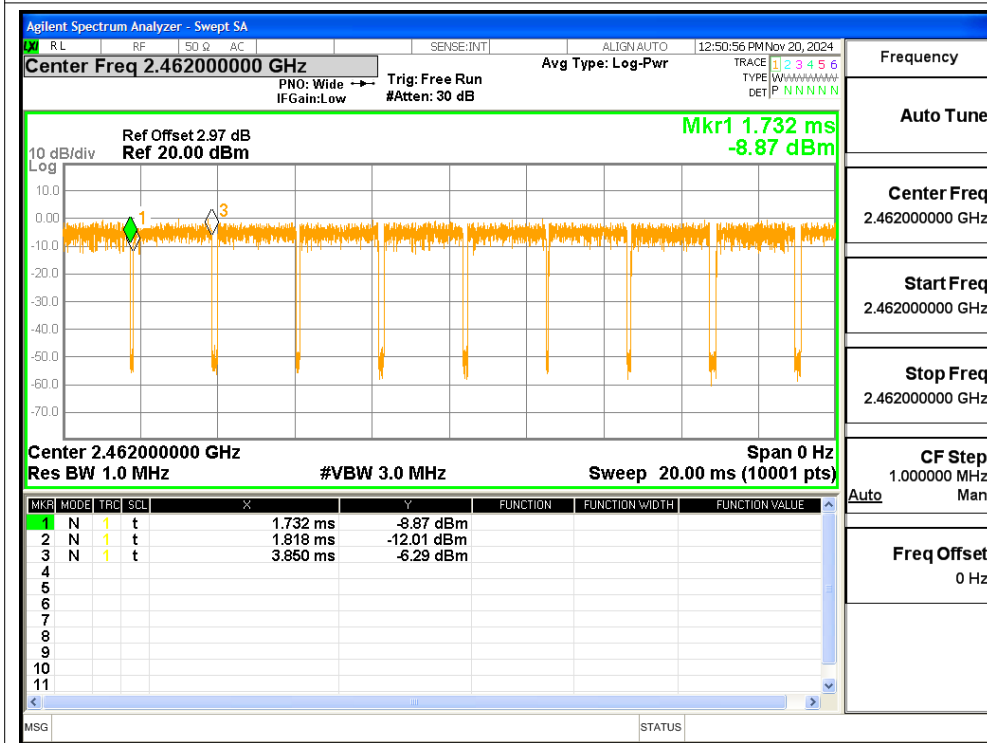
Duty Cycle NVNT g 2412MHz Ant1



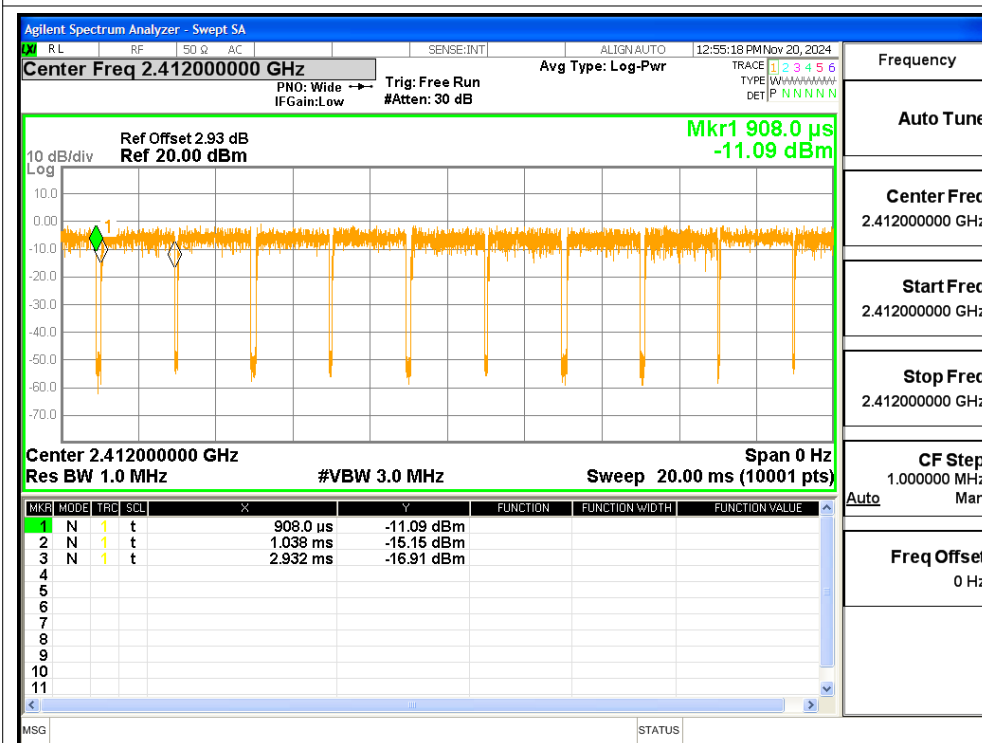
Duty Cycle NVNT g 2437MHz Ant1



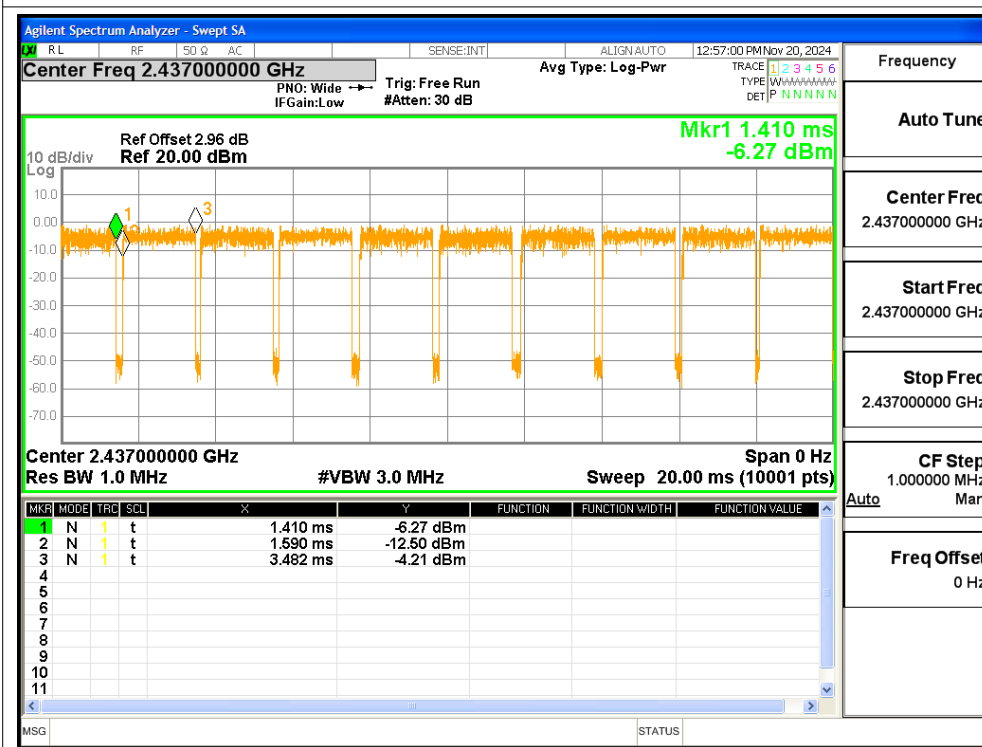
Duty Cycle NVNT g 2462MHz Ant1



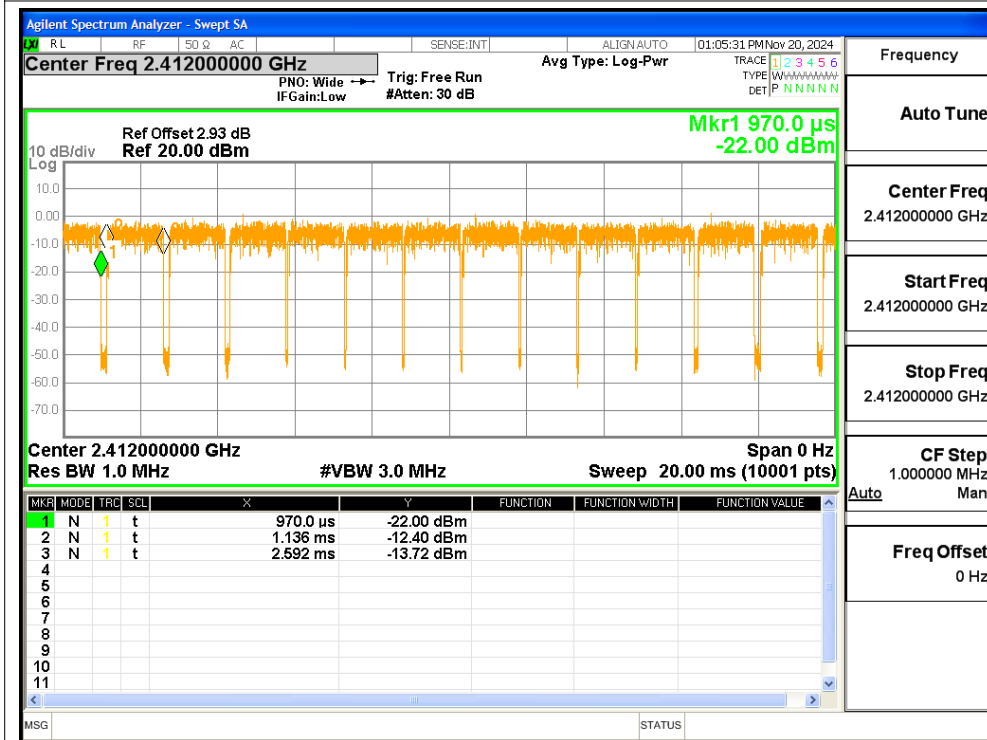
Duty Cycle NVNT n20 2412MHz Ant1



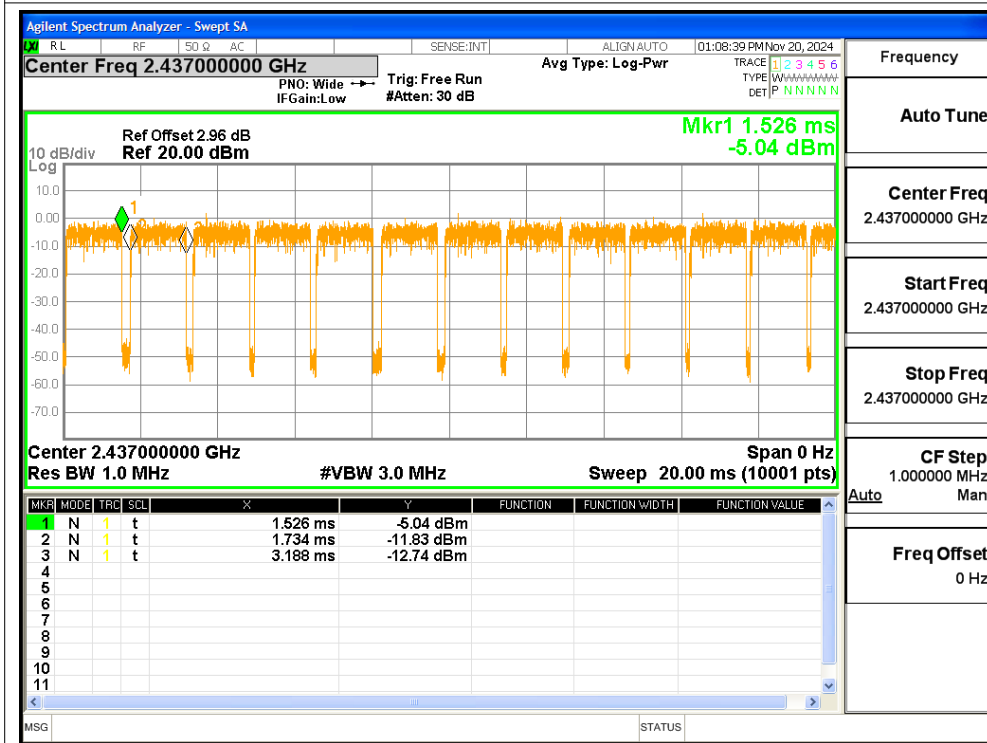
Duty Cycle NVNT n20 2437MHz Ant1



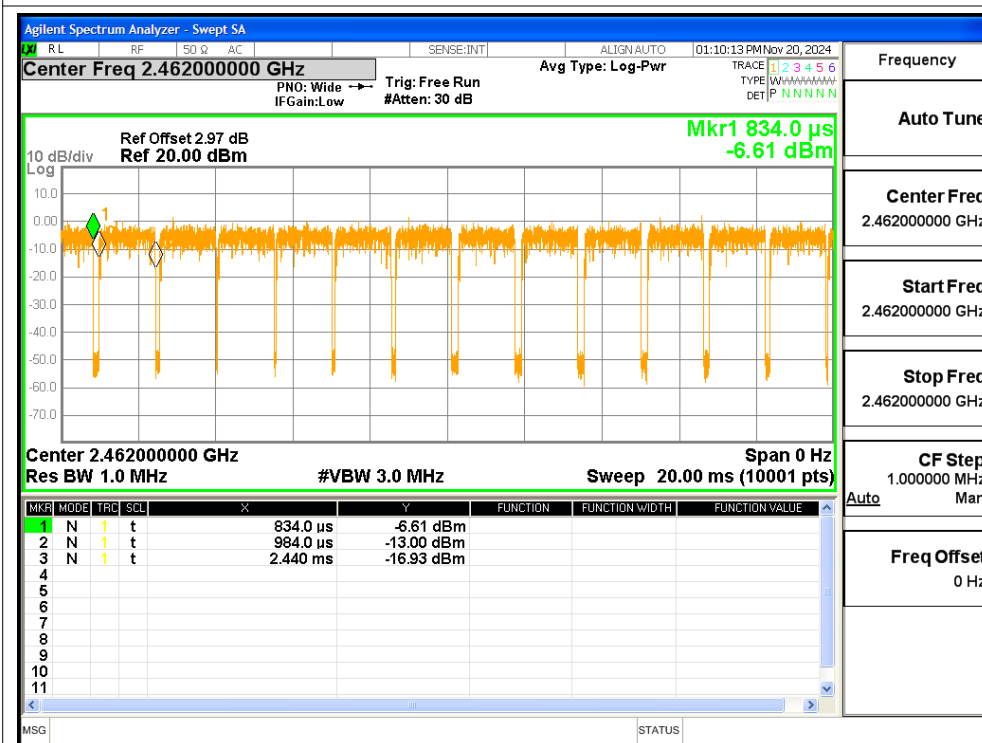
Duty Cycle NVNT ax20 2412MHz Ant1



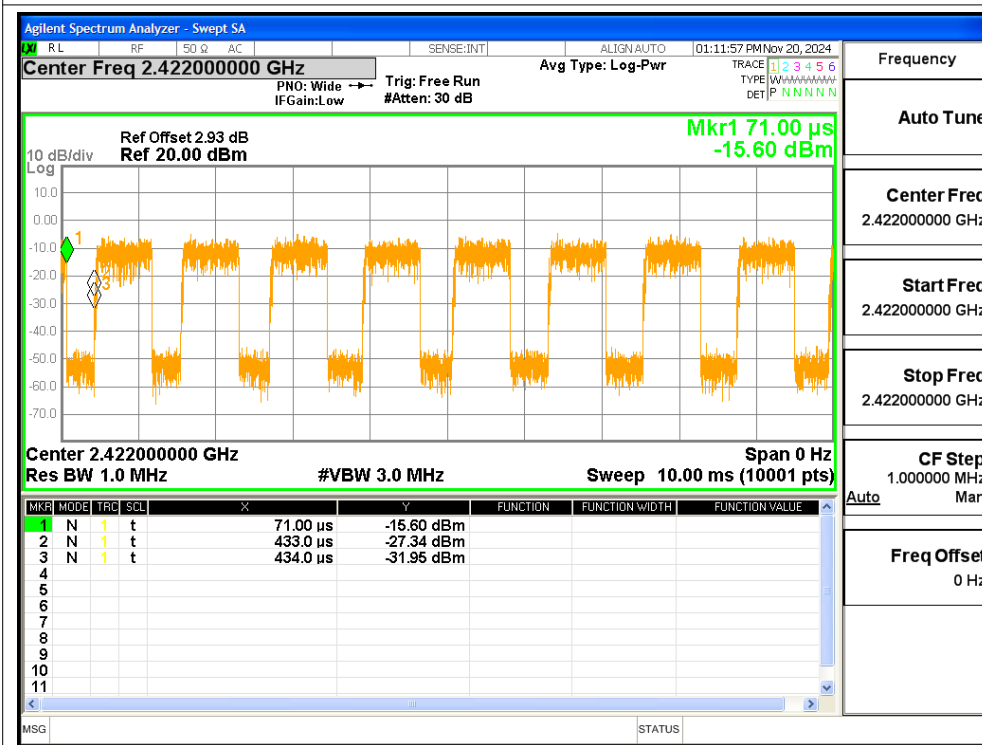
Duty Cycle NVNT ax20 2437MHz Ant1



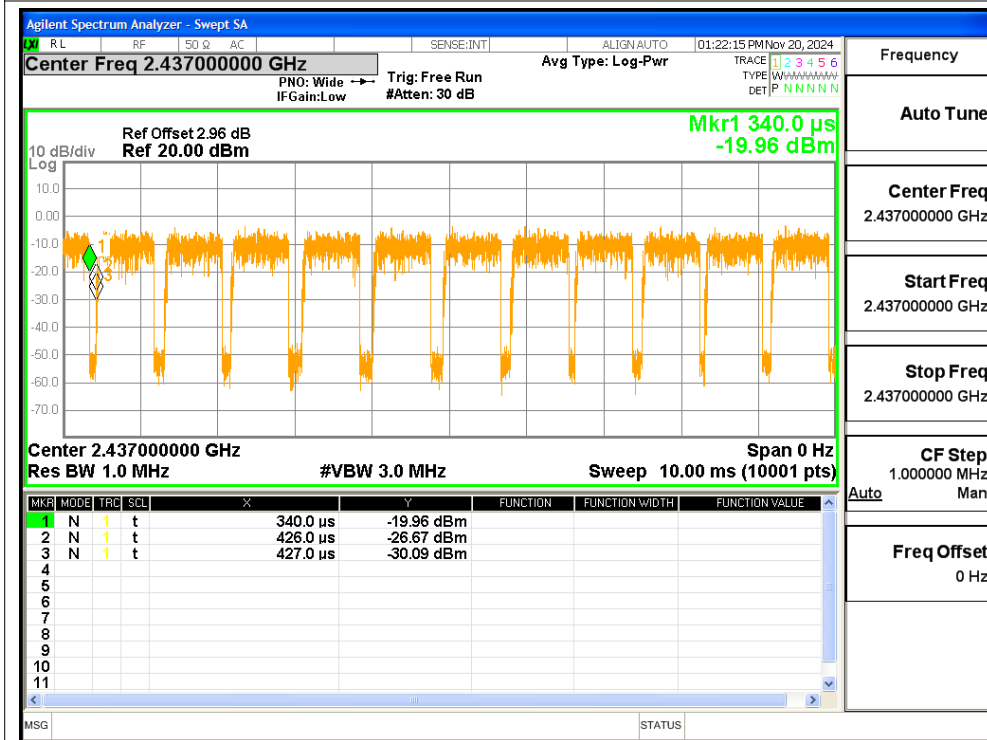
Duty Cycle NVNT ax20 2462MHz Ant1



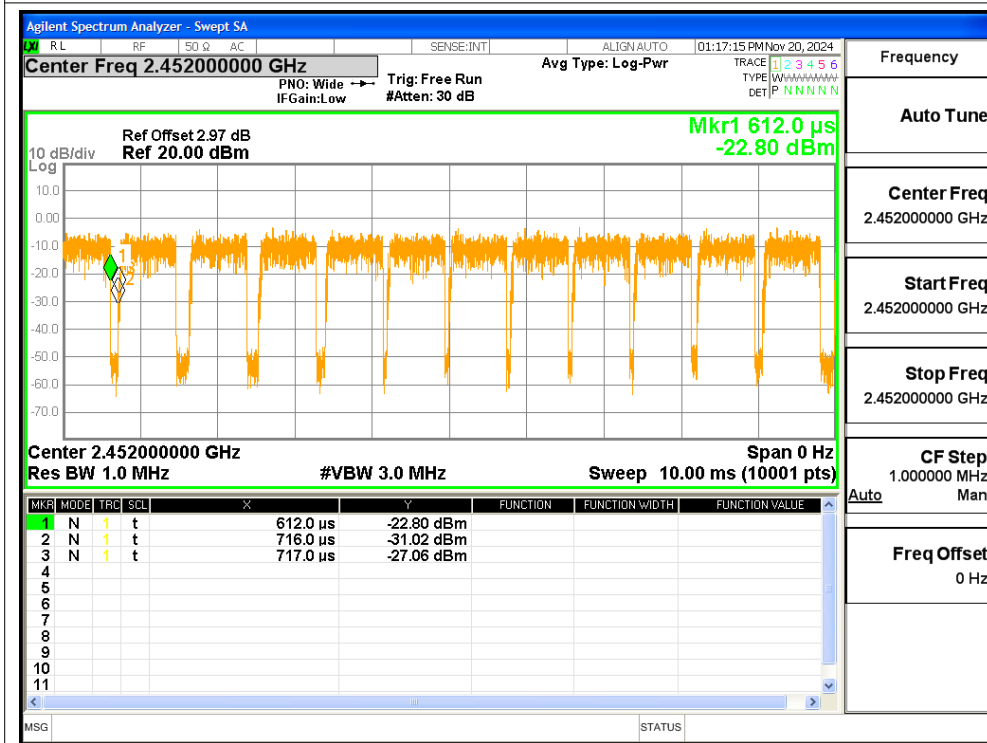
Duty Cycle NVNT ax40 2422MHz Ant1



Duty Cycle NVNT ax40 2437MHz Ant1



Duty Cycle NVNT ax40 2452MHz Ant1



Maximum Conducted Output Power

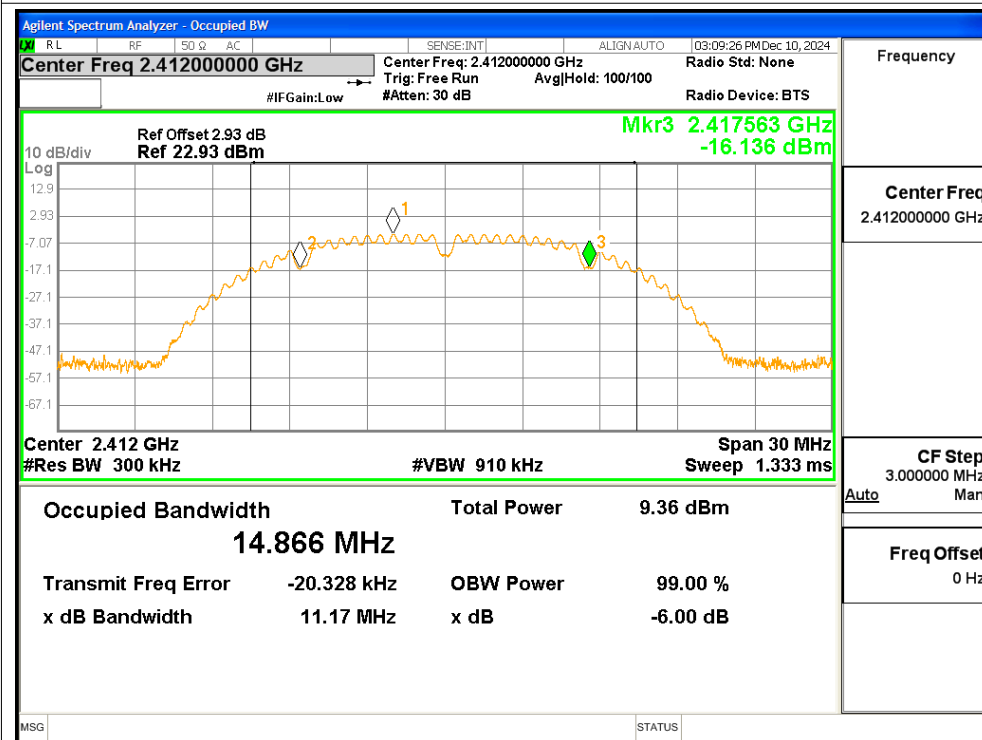
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	3.6	30	Pass
		2437		4.44	30	Pass
		2462		3.65	30	Pass
	g	2412		4.36	30	Pass
		2437		5	30	Pass
		2462		4.5	30	Pass
	n20	2412		4.35	30	Pass
		2437		5.01	30	Pass
		2462		4.49	30	Pass
	n40	2422		4.06	30	Pass
		2437		4.8	30	Pass
		2452		4.81	30	Pass
	ax20	2412		4.29	30	Pass
		2437		5	30	Pass
		2462		4.47	30	Pass
	ax40	2422		3.98	30	Pass
		2437		4.77	30	Pass
		2452		4.8	30	Pass

-6dB Bandwidth

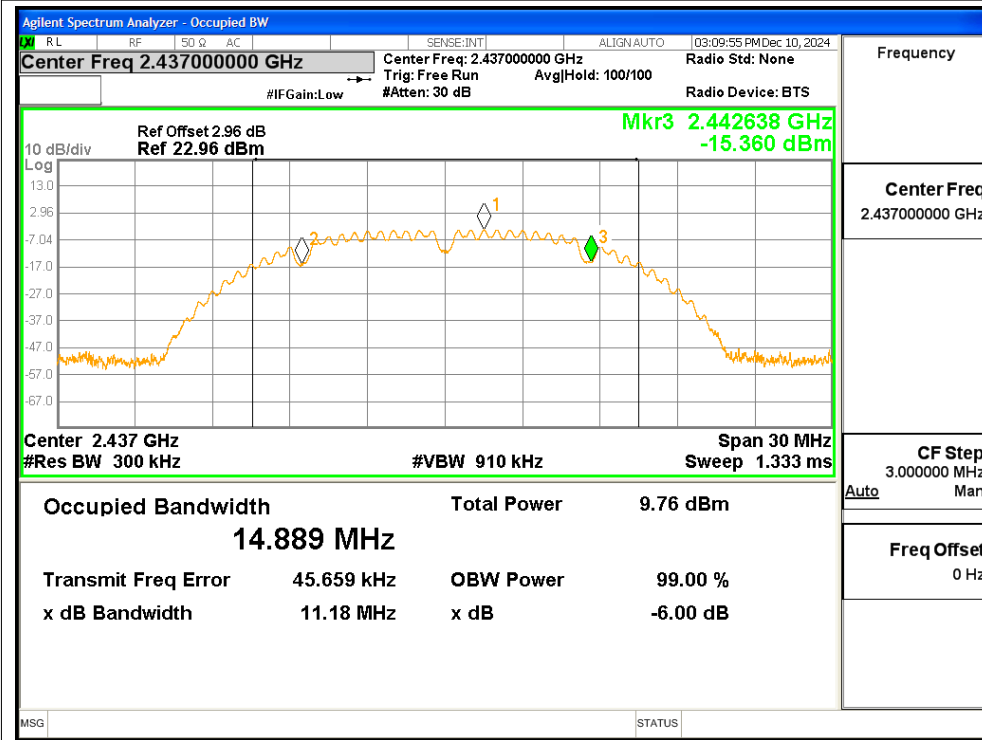
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	11.166	0.5	Pass
		2437		11.184	0.5	Pass
		2462		11.189	0.5	Pass
	g	2412		16.337	0.5	Pass
		2437		16.288	0.5	Pass
		2462		16.204	0.5	Pass
	n20	2412		16.508	0.5	Pass
		2437		17.439	0.5	Pass
		2462		17.267	0.5	Pass
	n40	2422		26.705	0.5	Pass
		2437		36.268	0.5	Pass
		2452		36.117	0.5	Pass
	ax20	2412		18.759	0.5	Pass
		2437		18.569	0.5	Pass
		2462		18.602	0.5	Pass
	ax40	2422		37.718	0.5	Pass
		2437		37.248	0.5	Pass
		2452		37.652	0.5	Pass

Test Graphs

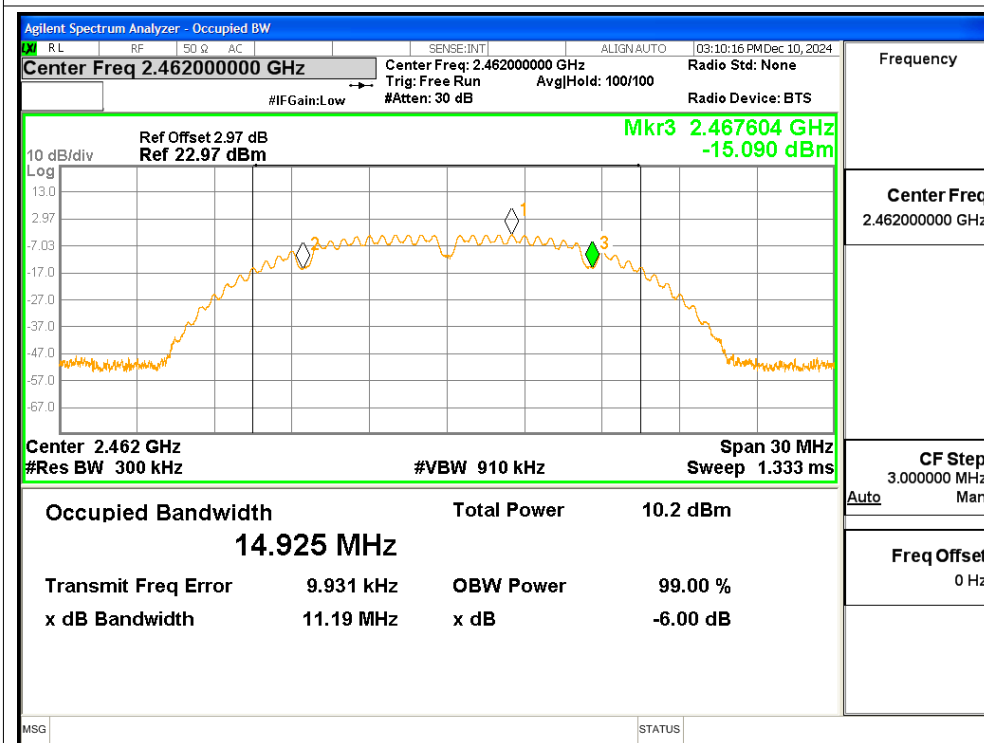
-6dB Bandwidth NVNT b 2412MHz Ant1



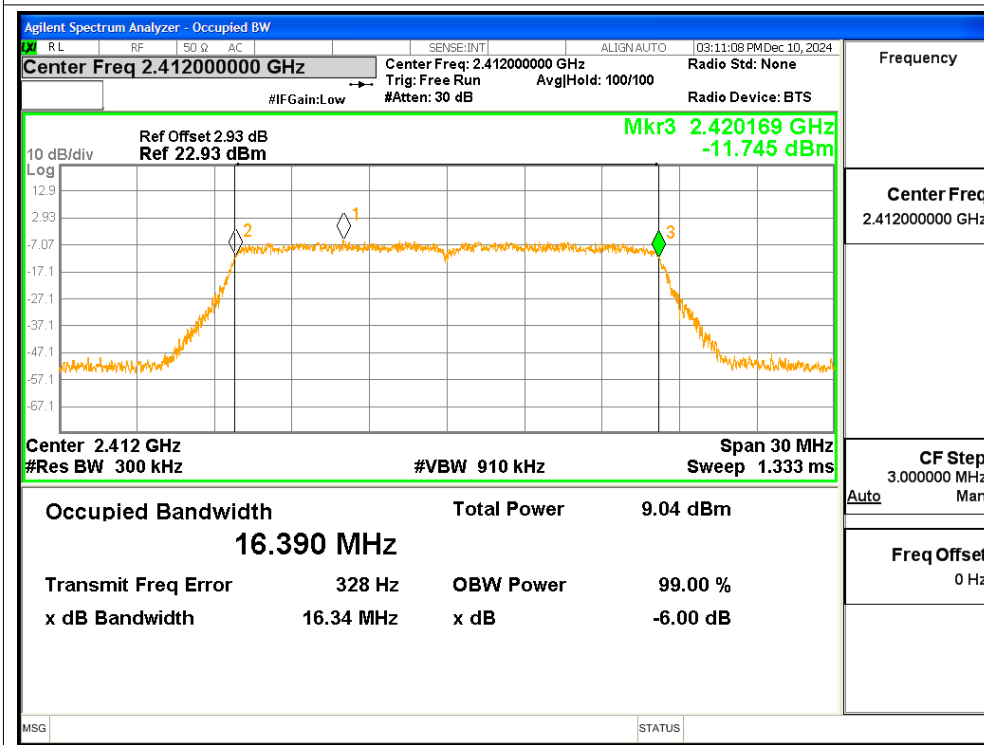
-6dB Bandwidth NVNT b 2437MHz Ant1



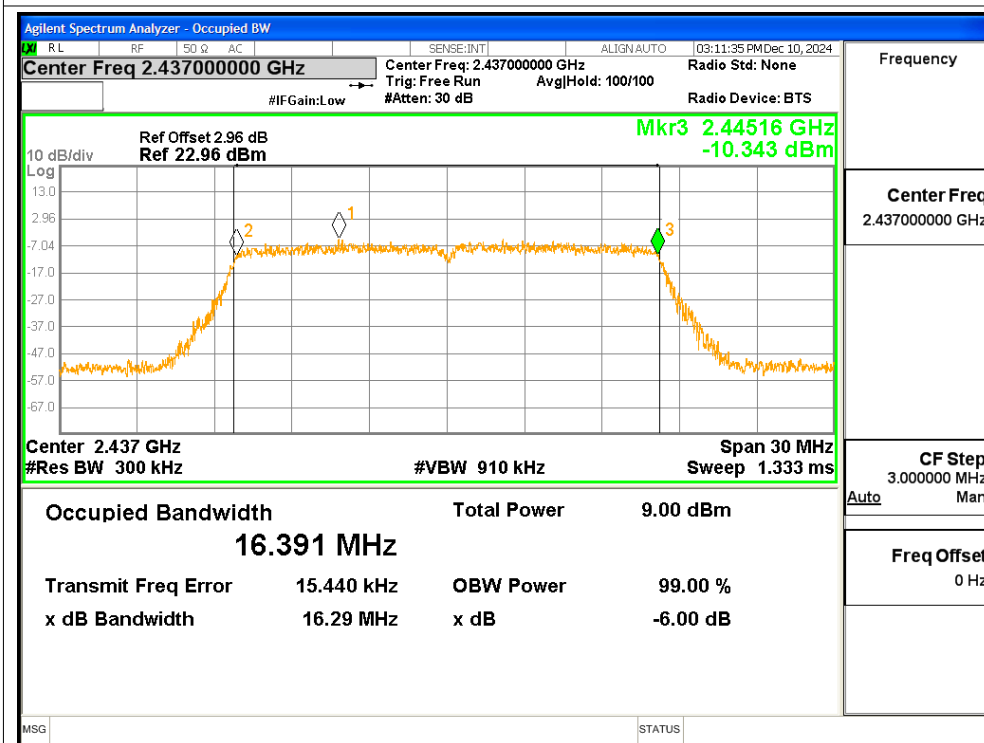
-6dB Bandwidth NVNT b 2462MHz Ant1



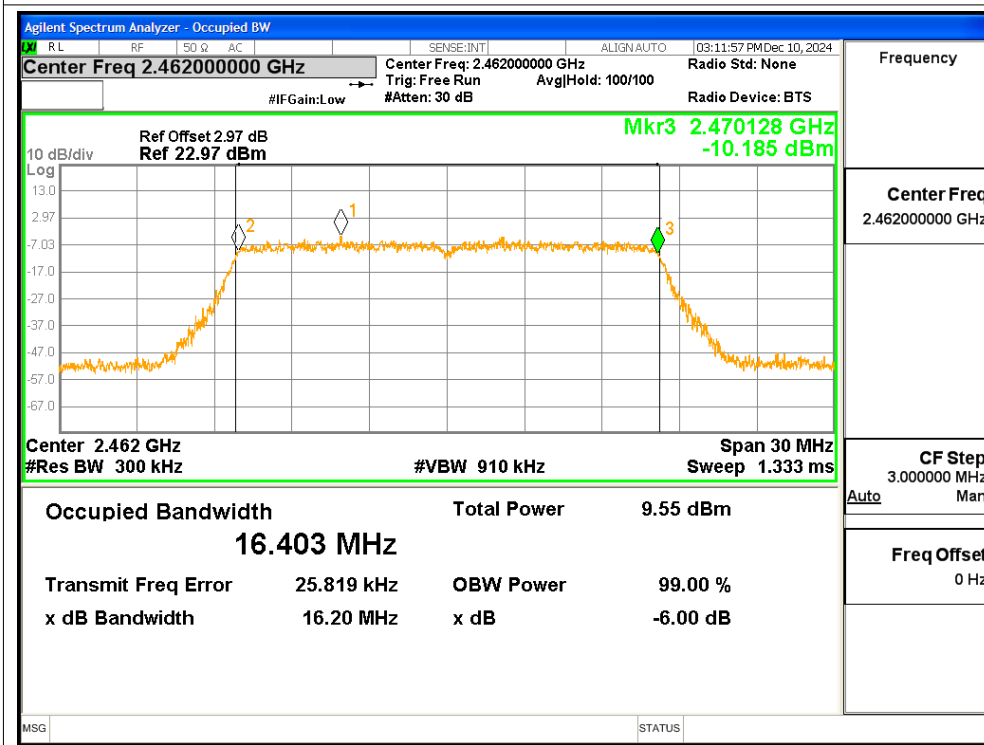
-6dB Bandwidth NVNT g 2412MHz Ant1



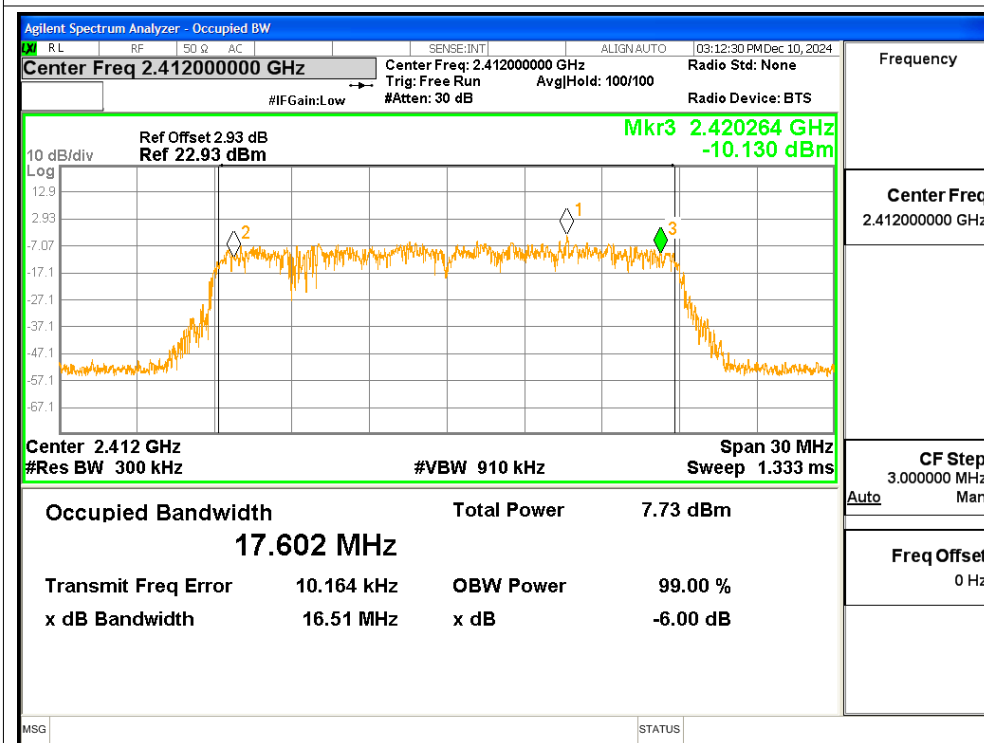
-6dB Bandwidth NVNT g 2437MHz Ant1



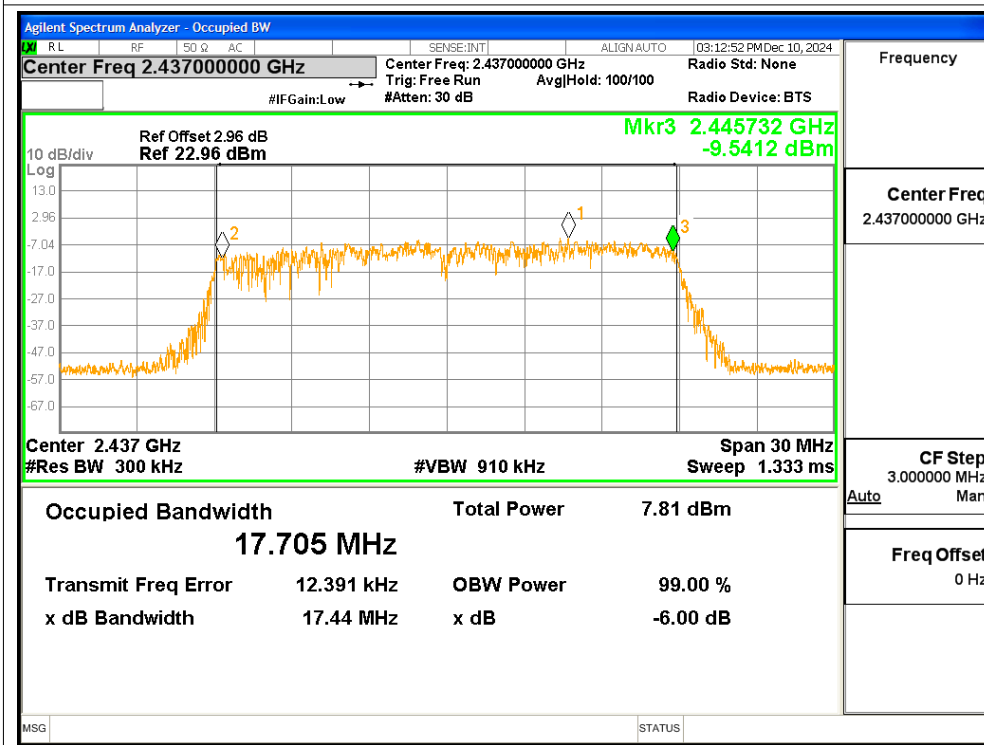
-6dB Bandwidth NVNT g 2462MHz Ant1



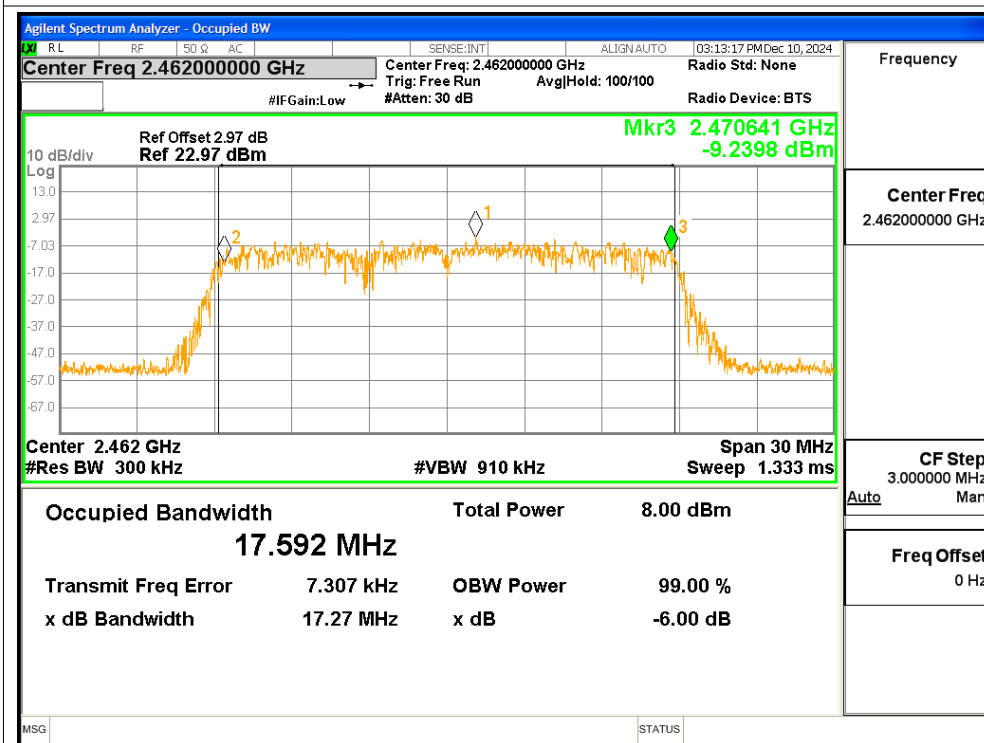
-6dB Bandwidth NVNT n20 2412MHz Ant1



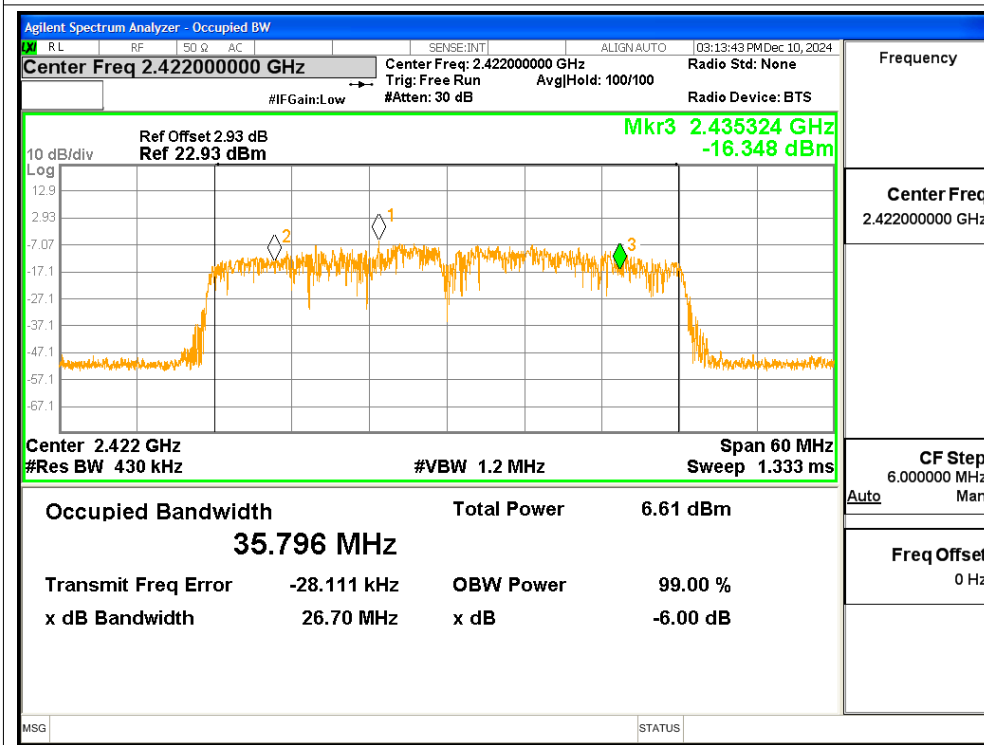
-6dB Bandwidth NVNT n20 2437MHz Ant1



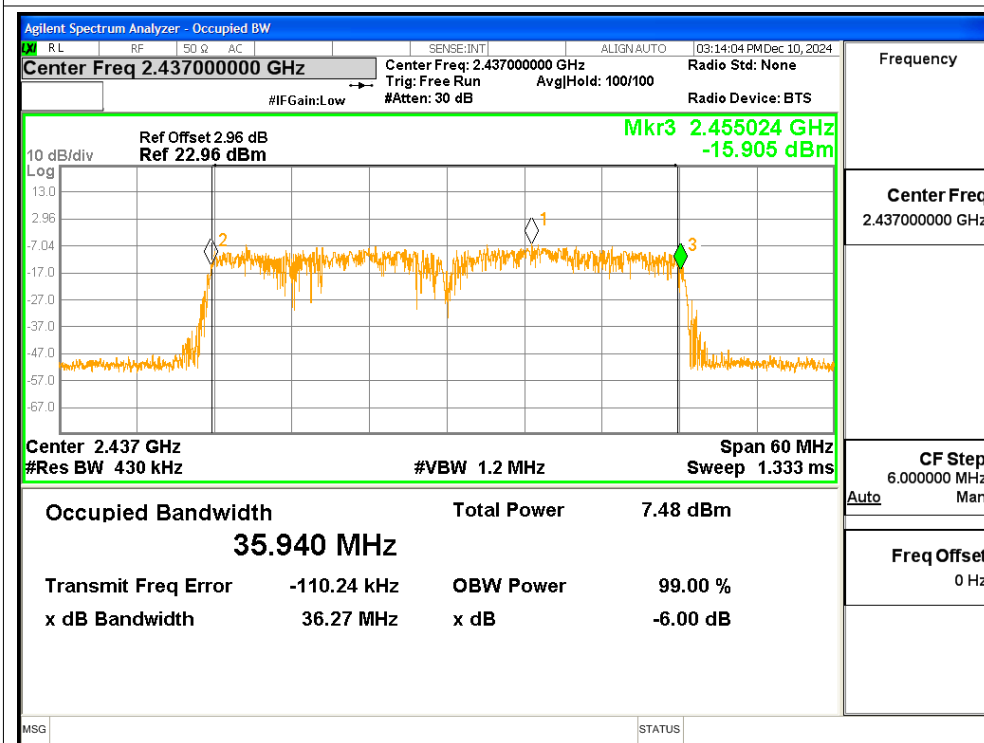
-6dB Bandwidth NVNT n20 2462MHz Ant1



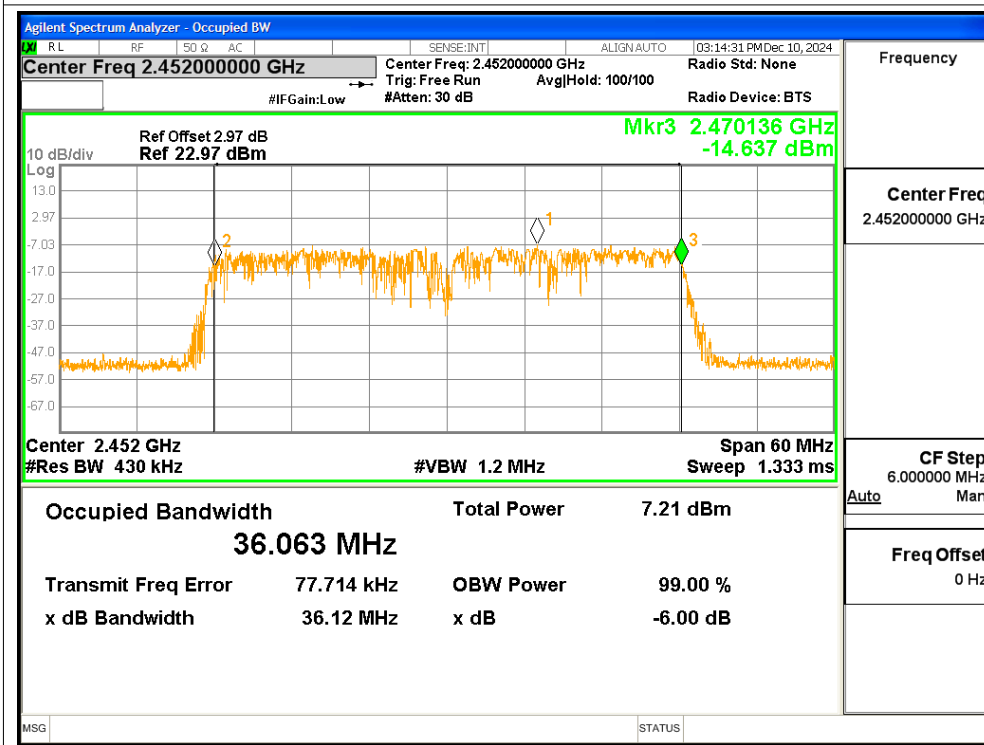
-6dB Bandwidth NVNT n40 2422MHz Ant1



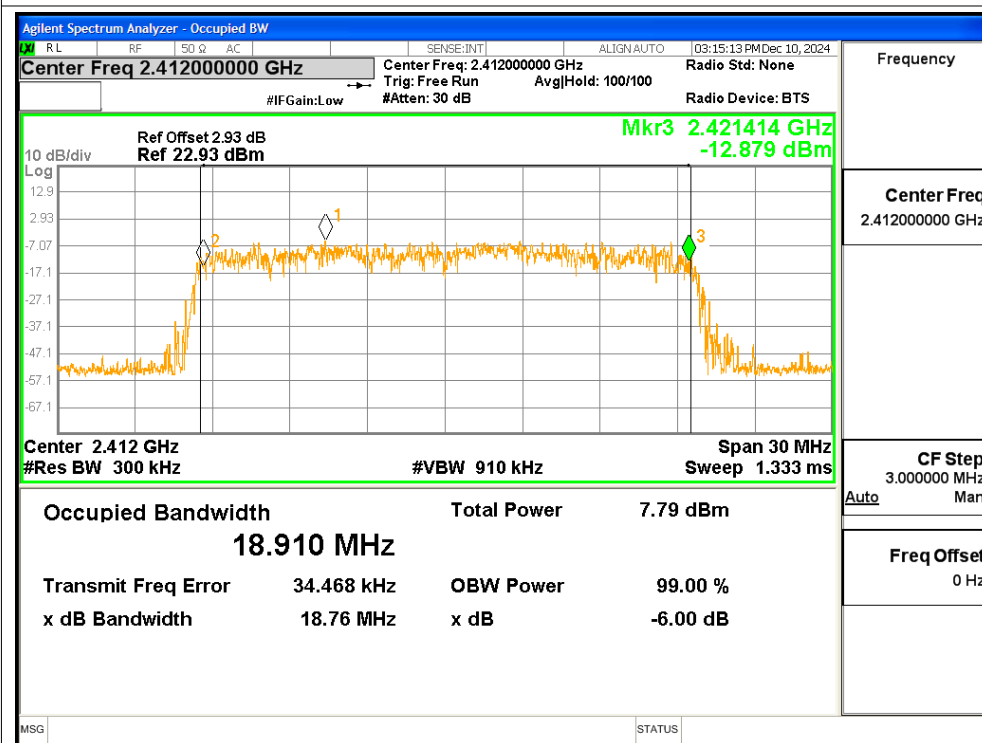
-6dB Bandwidth NVNT n40 2437MHz Ant1



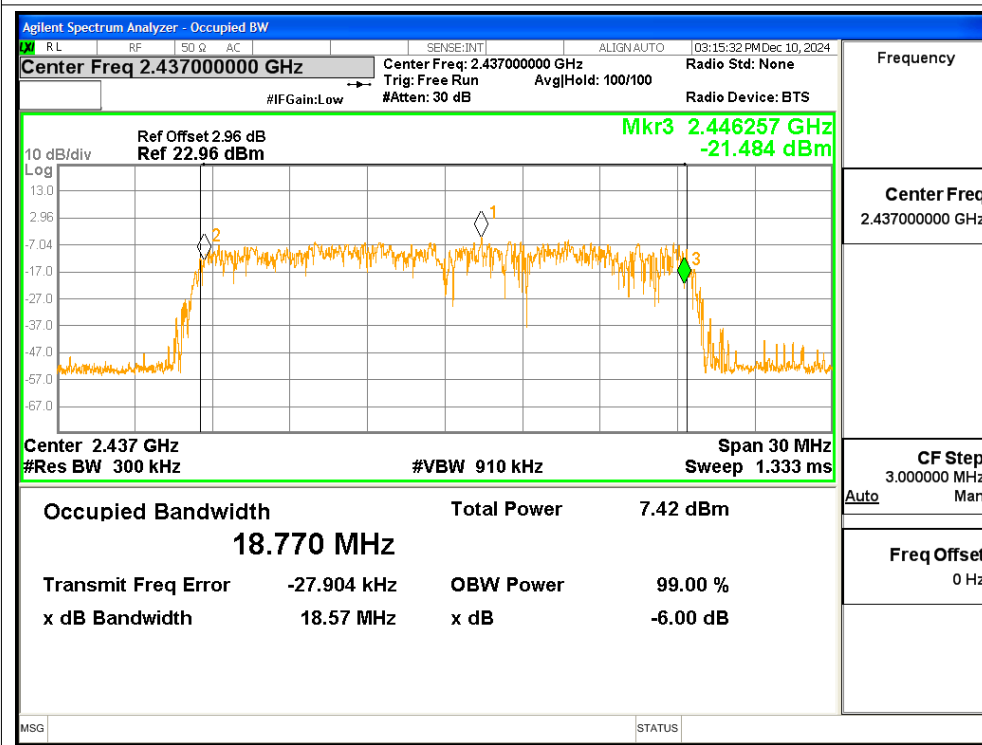
-6dB Bandwidth NVNT n40 2452MHz Ant1



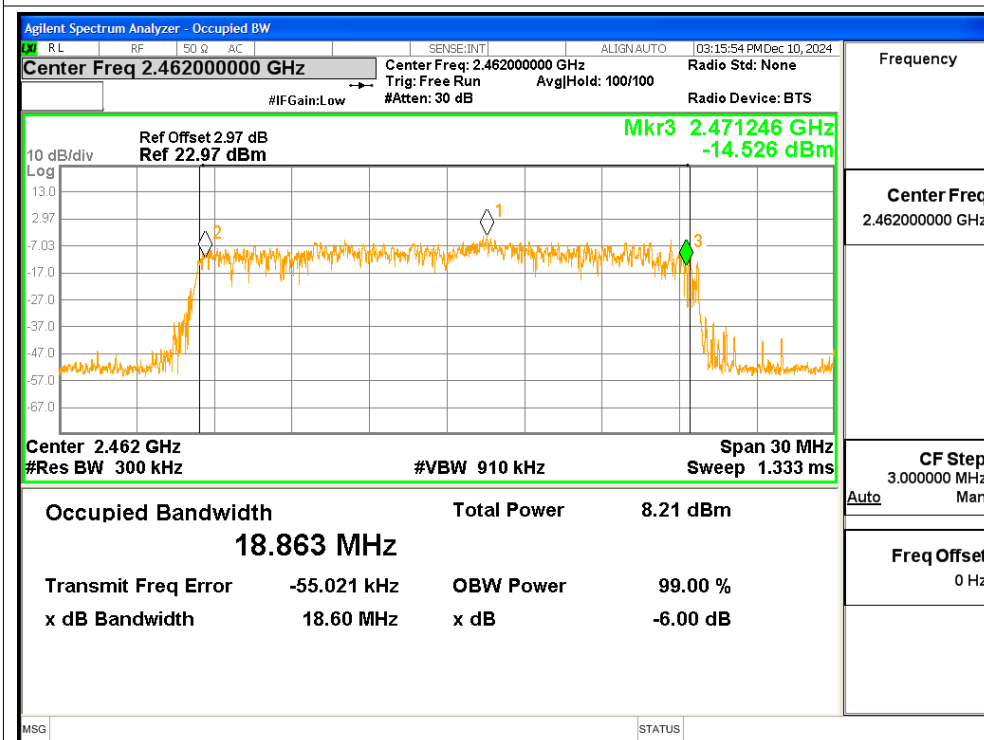
-6dB Bandwidth NVNT ax20 2412MHz Ant1



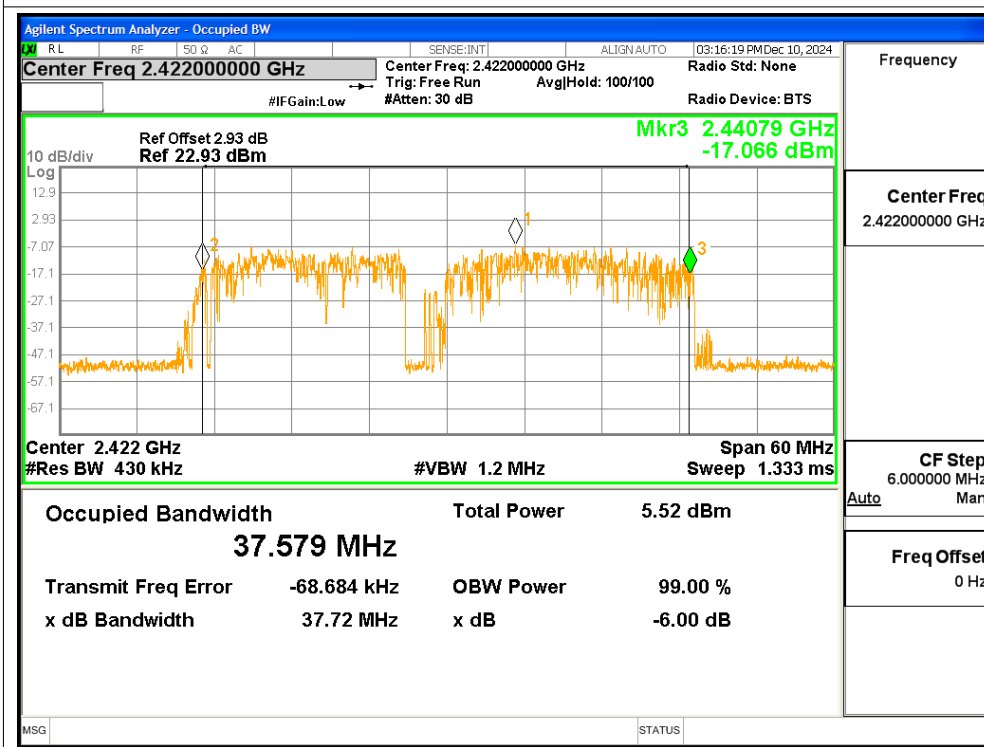
-6dB Bandwidth NVNT ax20 2437MHz Ant1



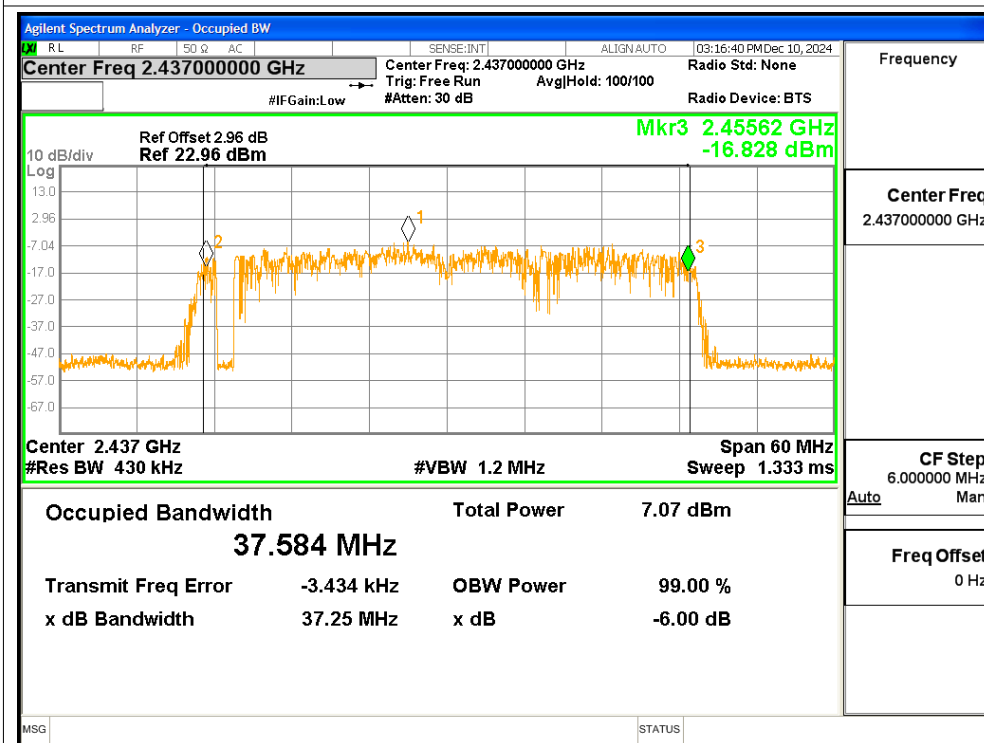
-6dB Bandwidth NVNT ax20 2462MHz Ant1



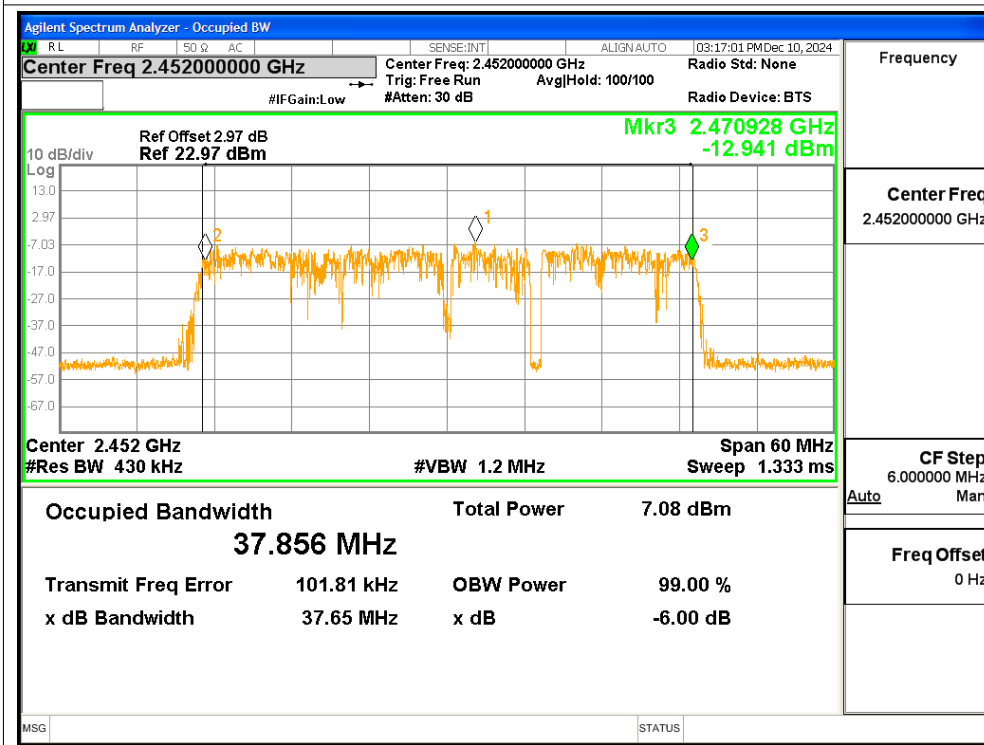
-6dB Bandwidth NVNT ax40 2422MHz Ant1



-6dB Bandwidth NVNT ax40 2437MHz Ant1



-6dB Bandwidth NVNT ax40 2452MHz Ant1

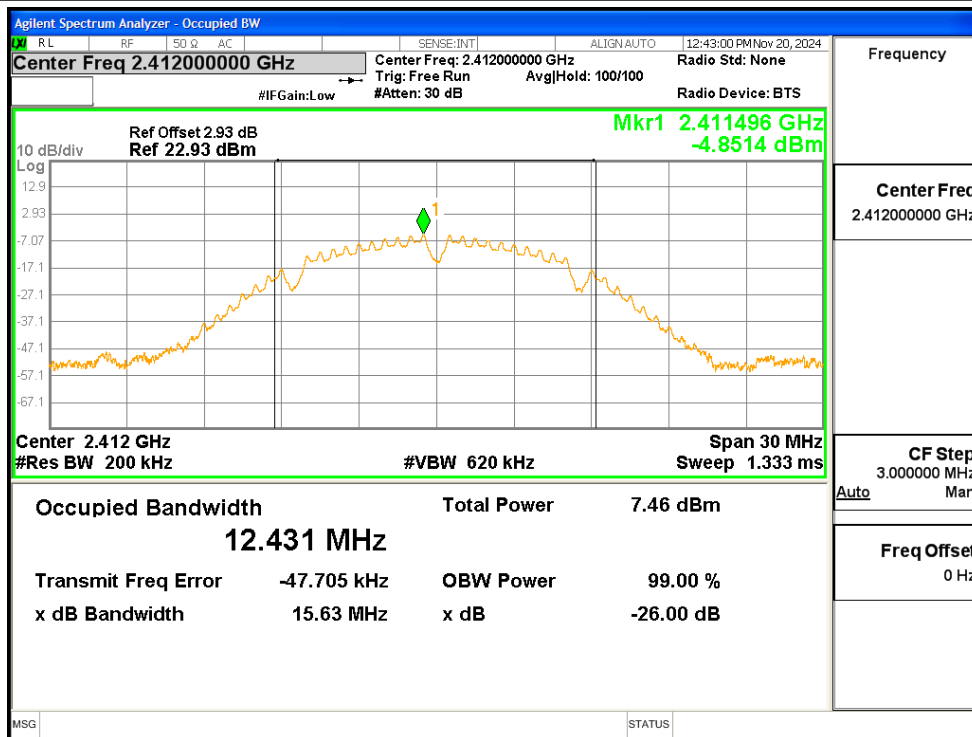


Occupied Channel Bandwidth

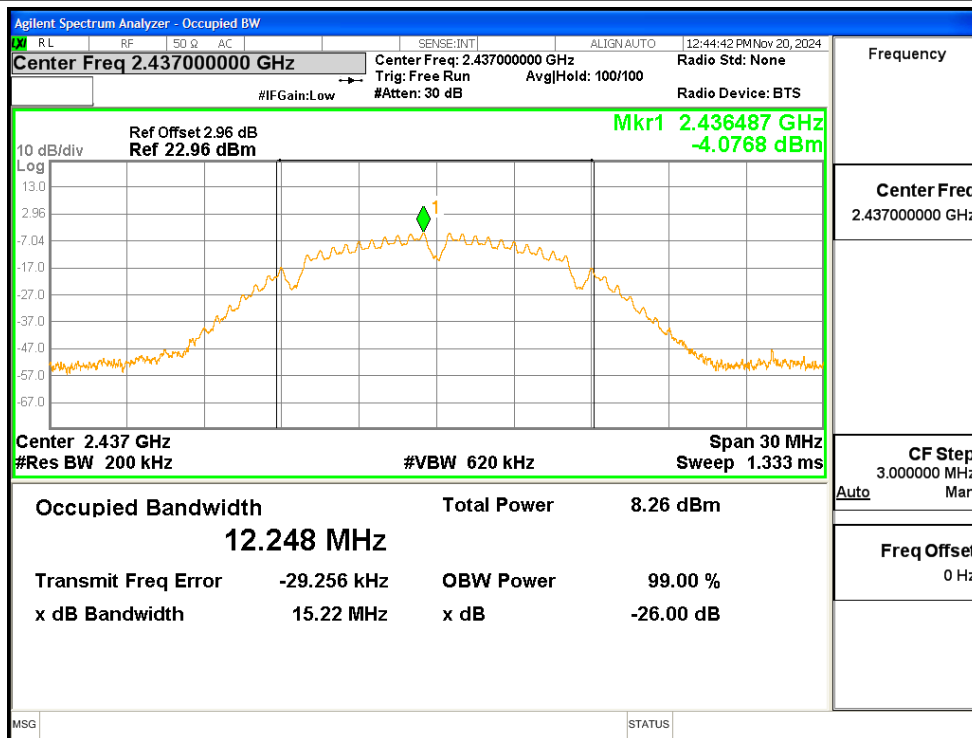
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	12.431
		2437		12.248
		2462		12.292
	g	2412		16.748
		2437		16.714
		2462		16.709
	n20	2412		17.944
		2437		17.906
		2462		17.935
	n40	2422		36.55
		2437		36.488
		2452		36.53
	ax20	2412		19.101
		2437		19.114
		2462		19.132
	ax40	2422		37.996
		2437		37.995
		2452		37.942

Test Graphs

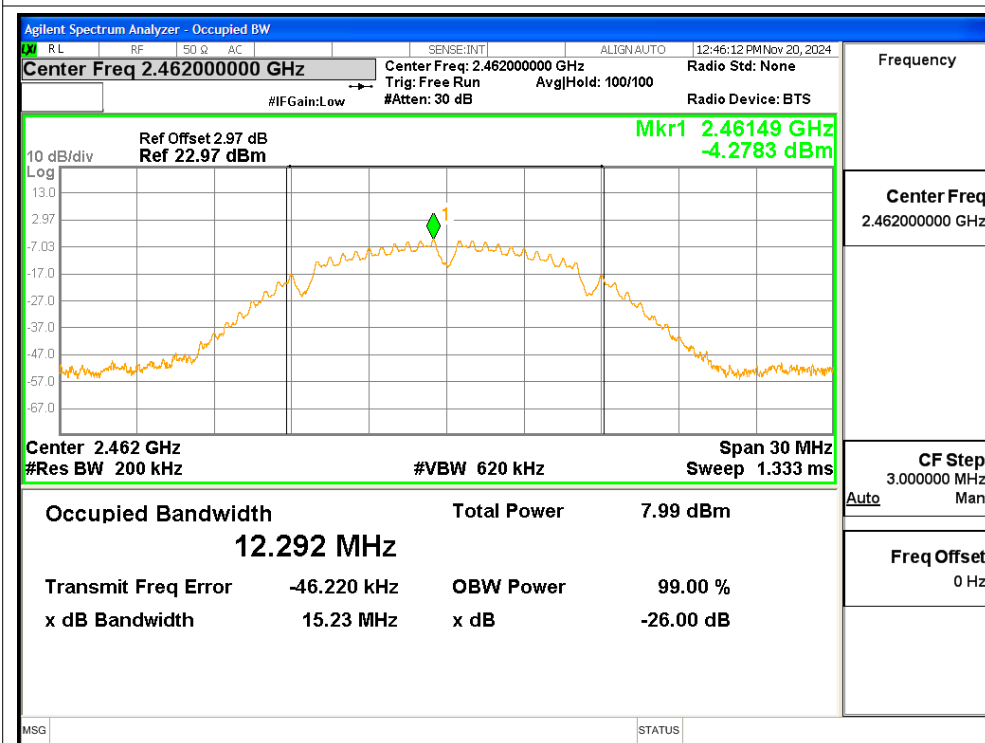
OBW NVNT b 2412MHz Ant1



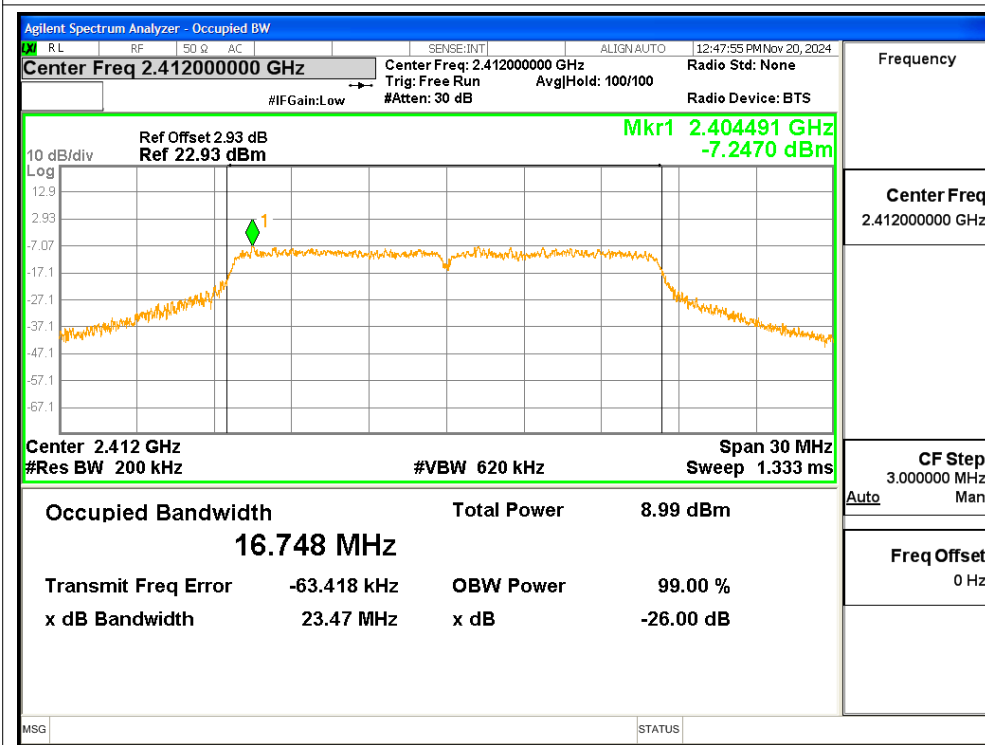
OBW NVNT b 2437MHz Ant1



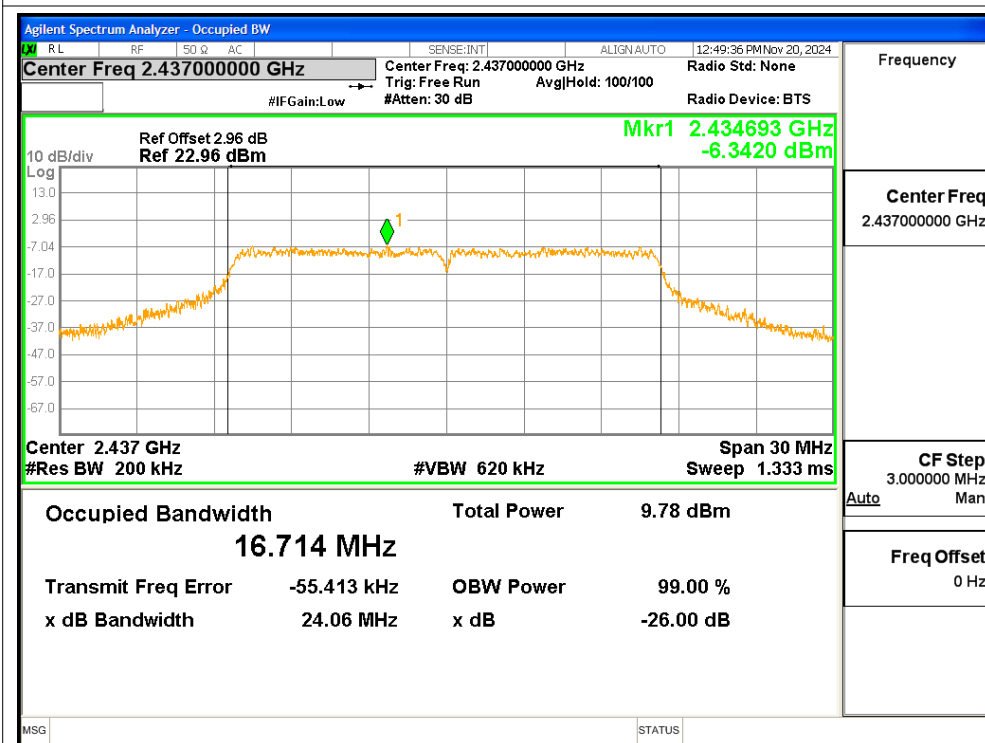
OBV NVNT b 2462MHz Ant1



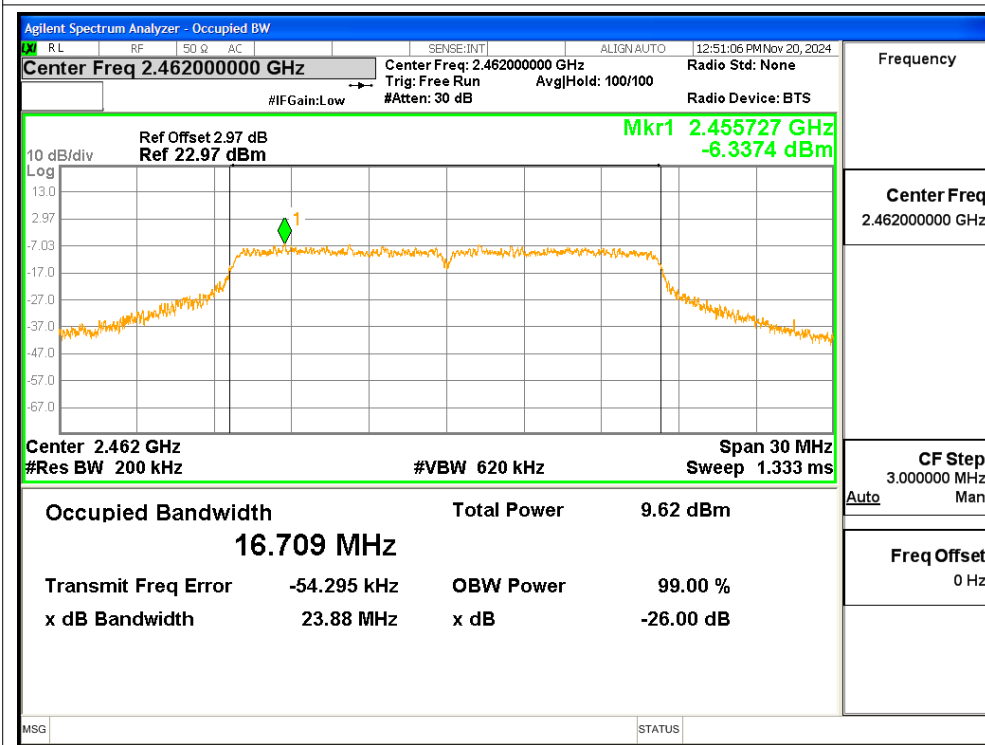
OBV NVNT g 2412MHz Ant1



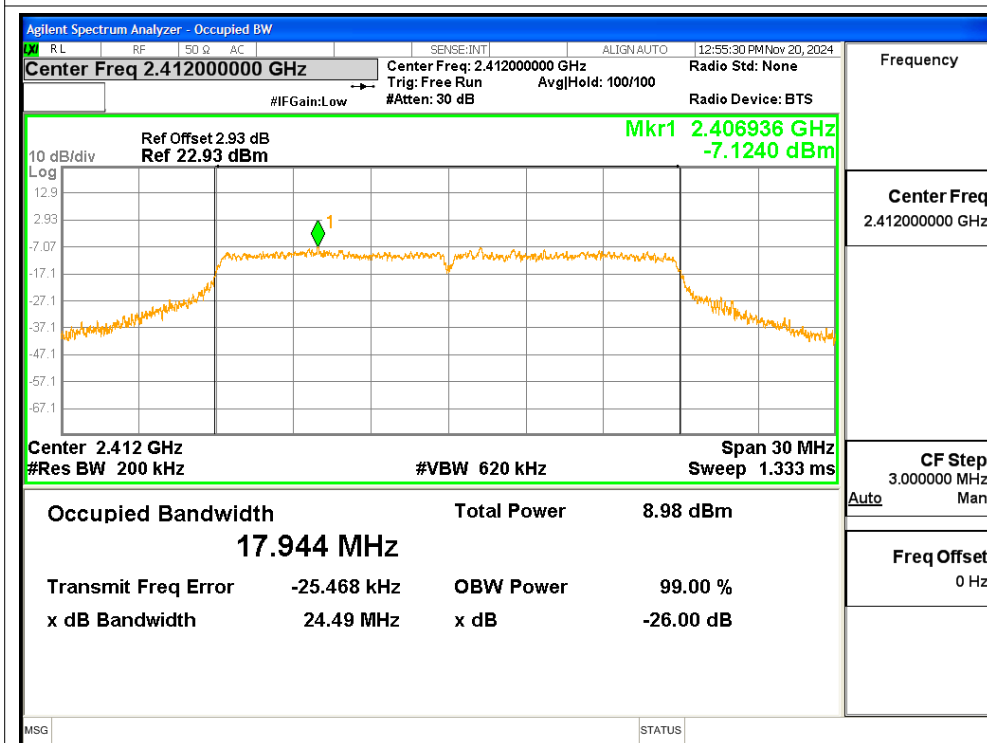
OBW NVNT g 2437MHz Ant1



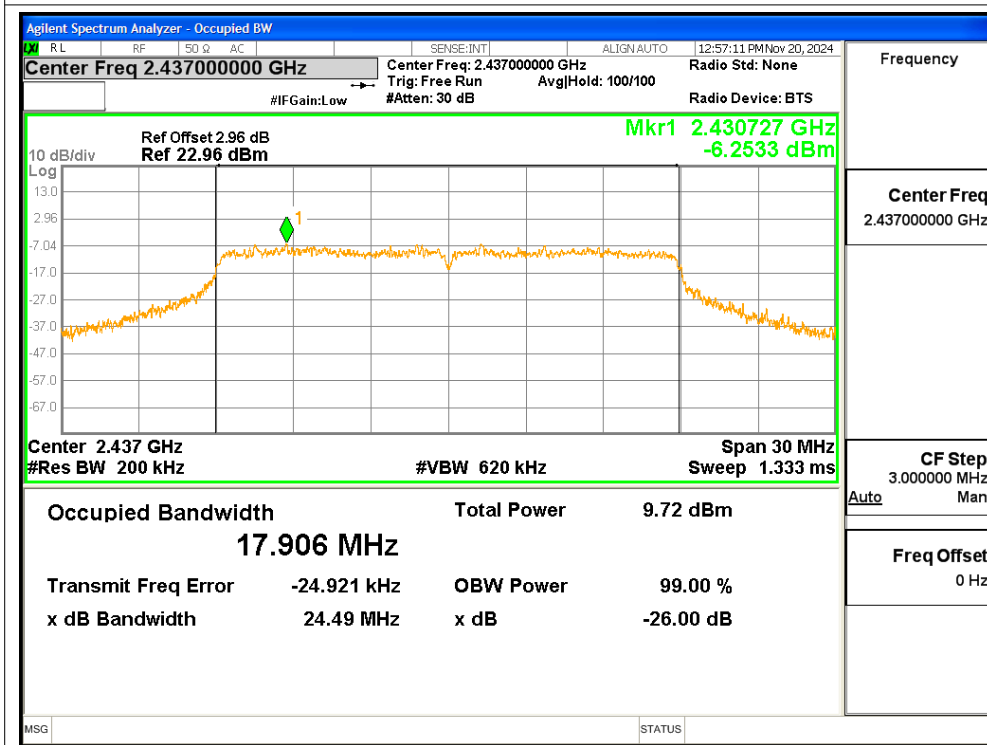
OBW NVNT g 2462MHz Ant1



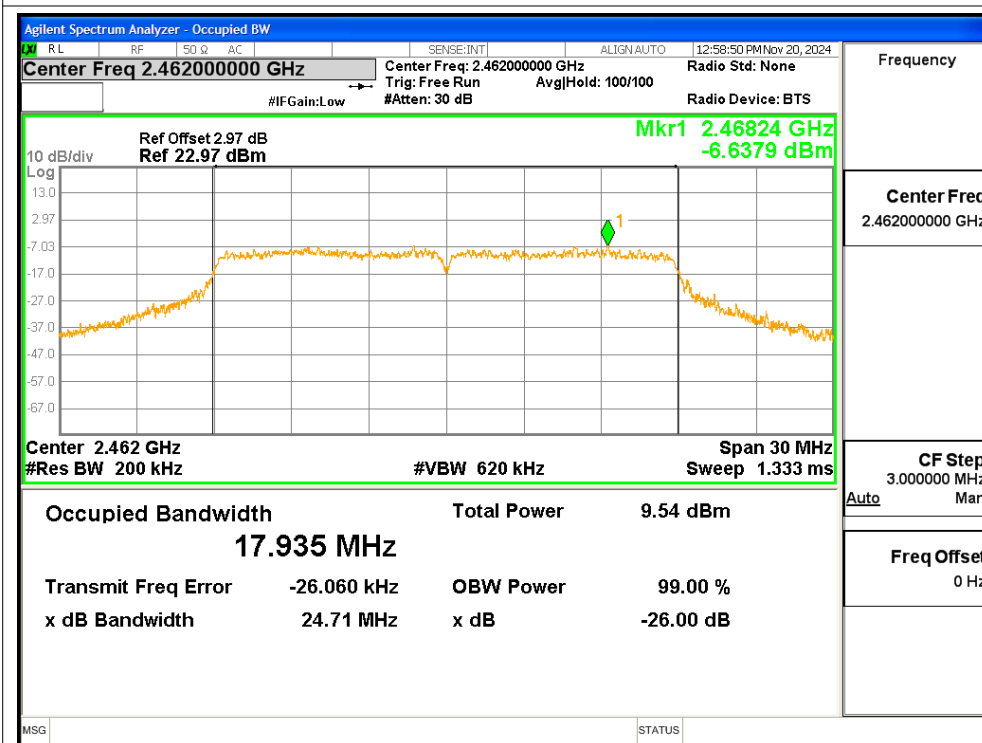
OBW NVNT n20 2412MHz Ant1



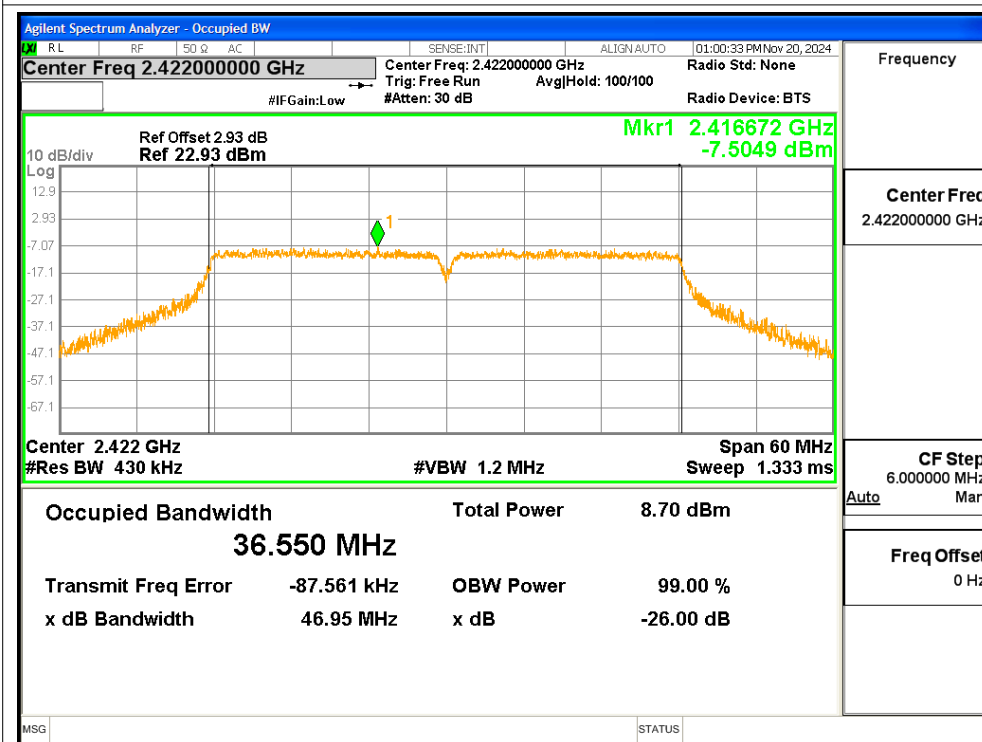
OBW NVNT n20 2437MHz Ant1



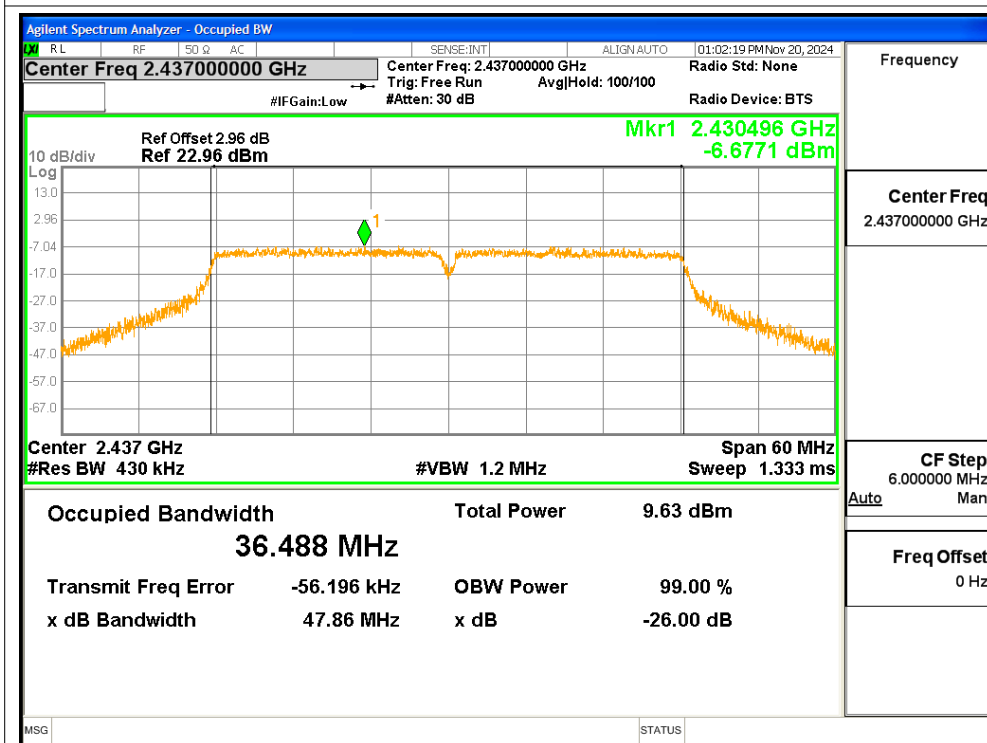
OBW NVNT n20 2462MHz Ant1



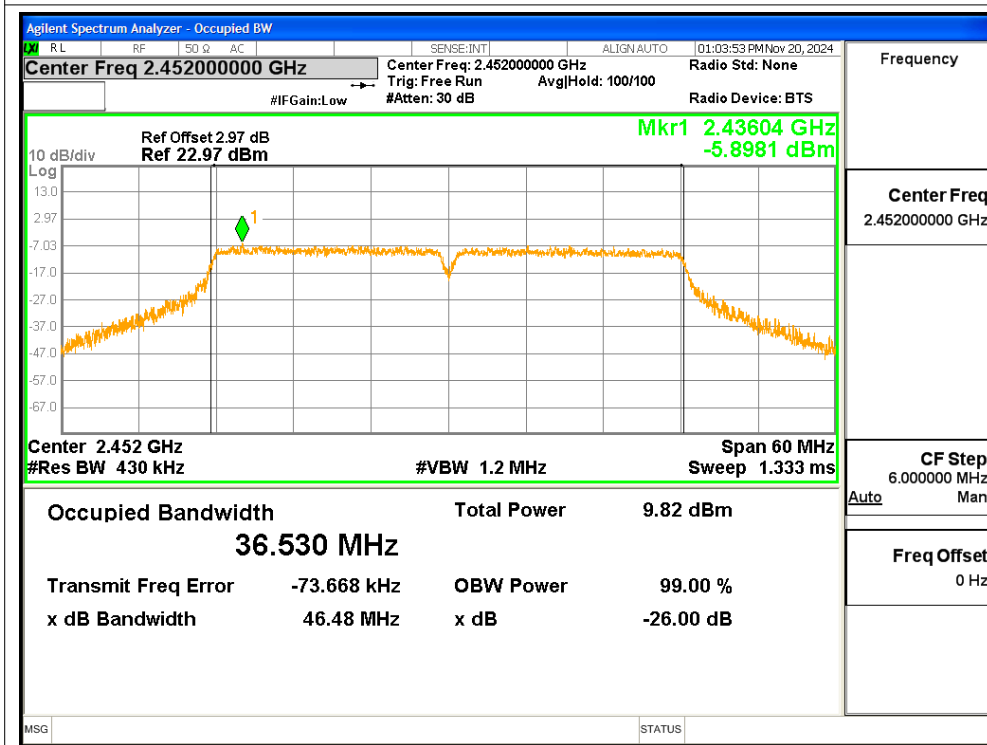
OBW NVNT n40 2422MHz Ant1



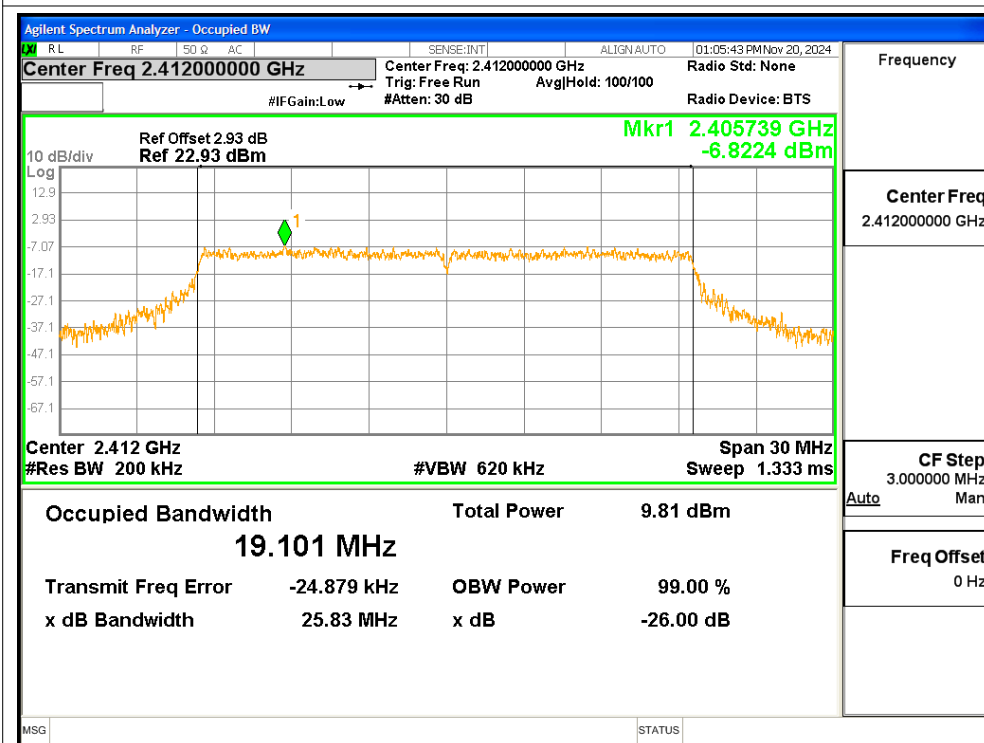
OBW NVNT n40 2437MHz Ant1



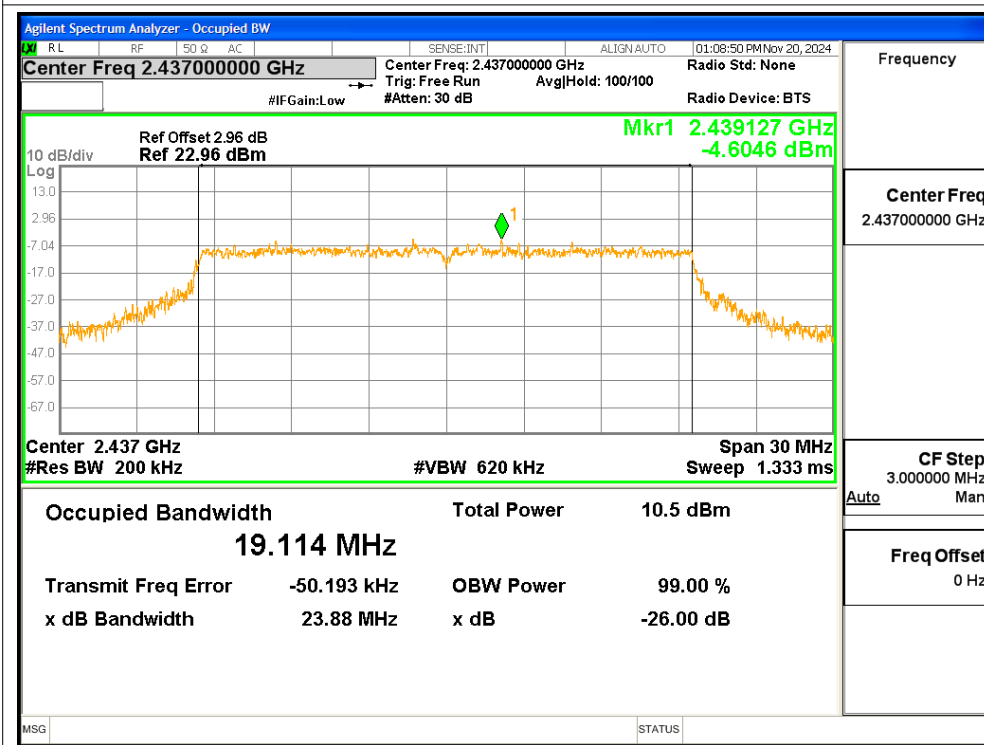
OBW NVNT n40 2452MHz Ant1



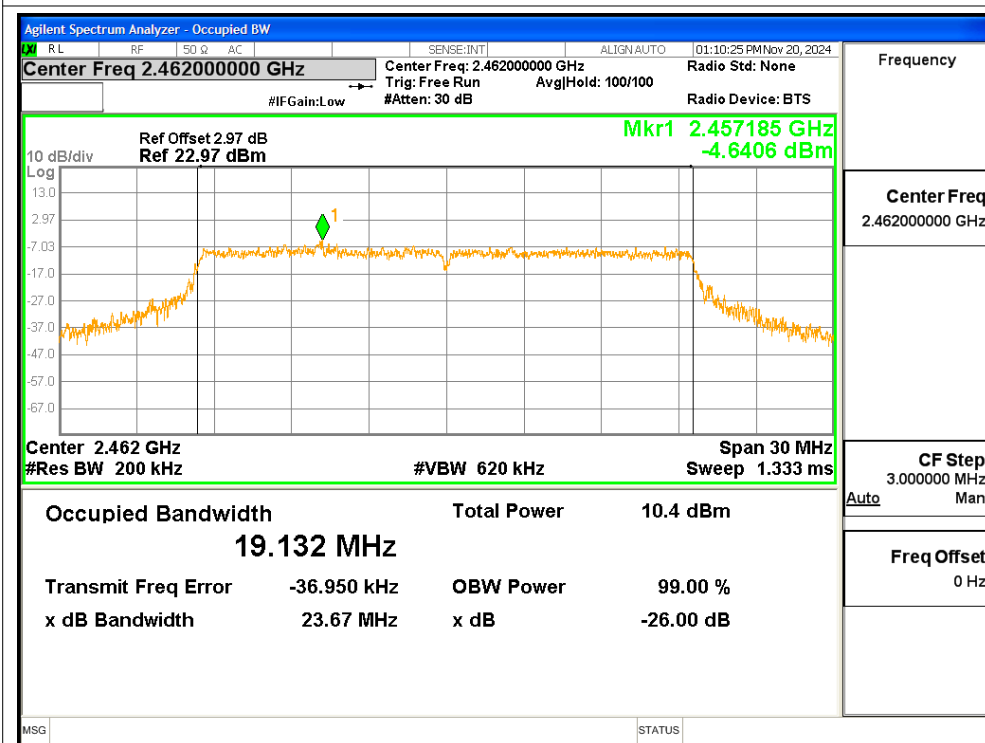
OBW NVNT ax20 2412MHz Ant1



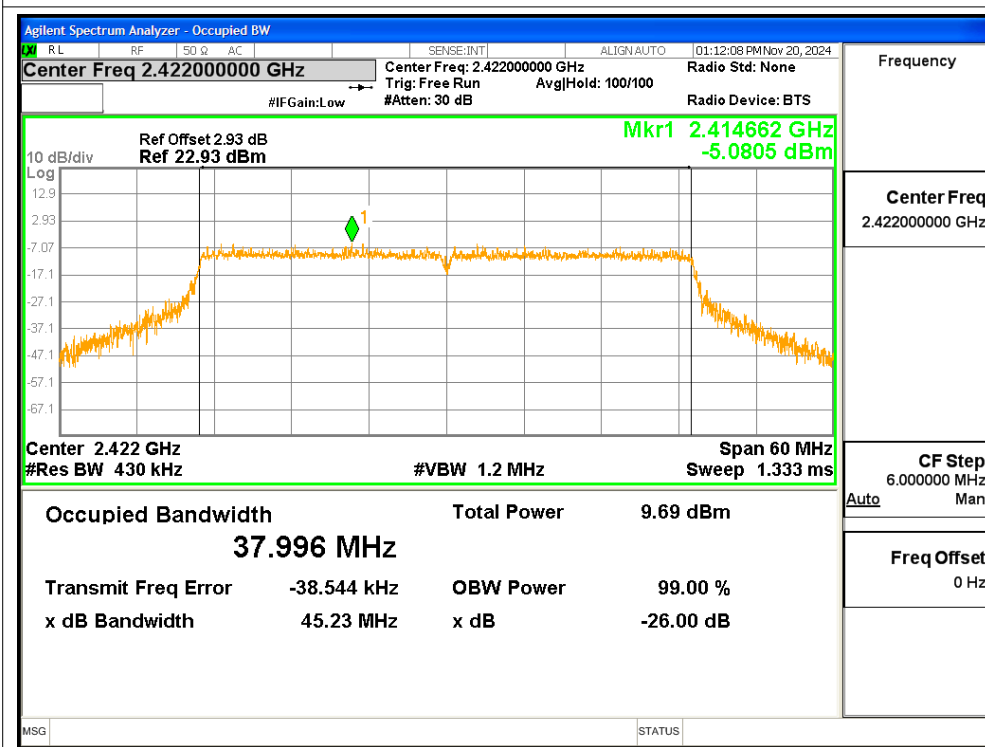
OBW NVNT ax20 2437MHz Ant1



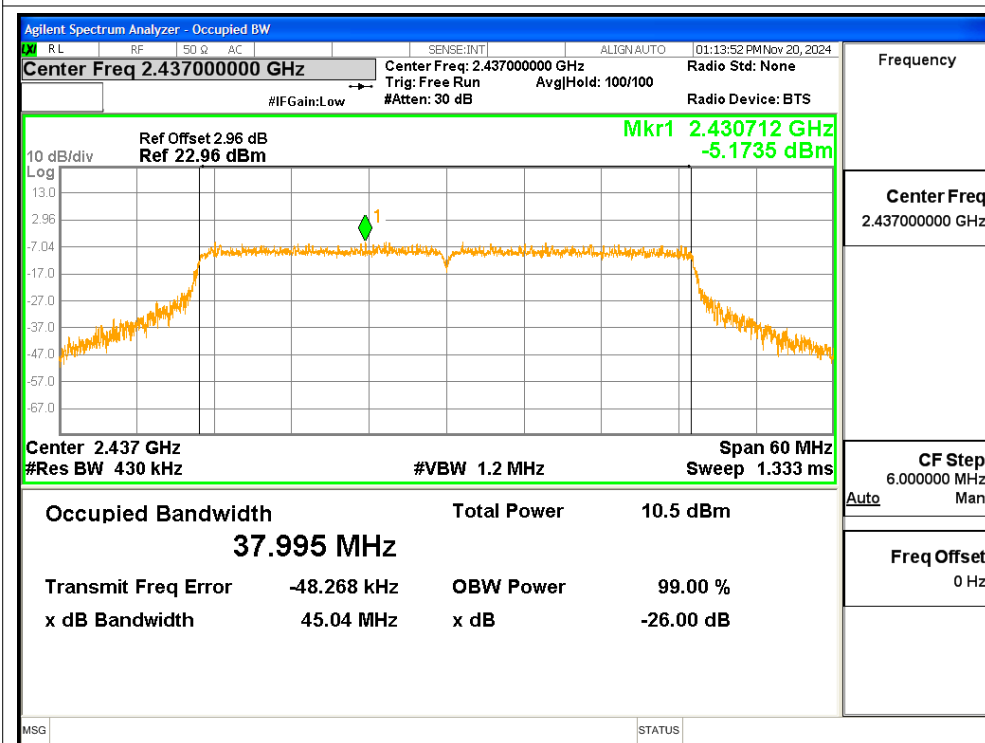
OBW NVNT ax20 2462MHz Ant1



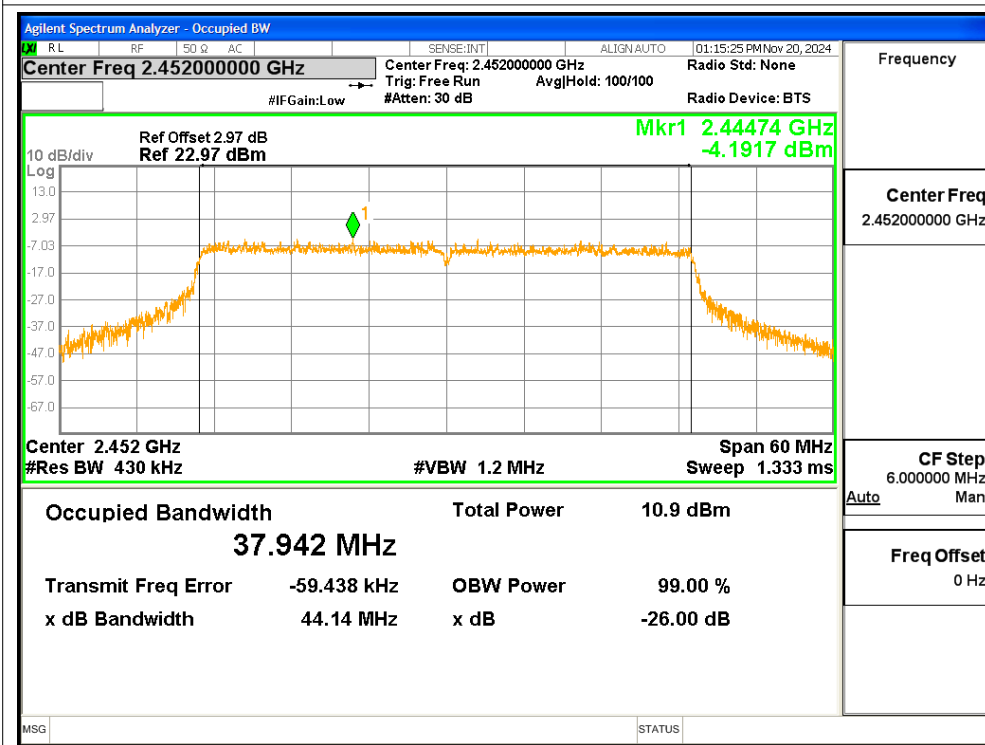
OBW NVNT ax40 2422MHz Ant1



OBW NVNT ax40 2437MHz Ant1



OBW NVNT ax40 2452MHz Ant1

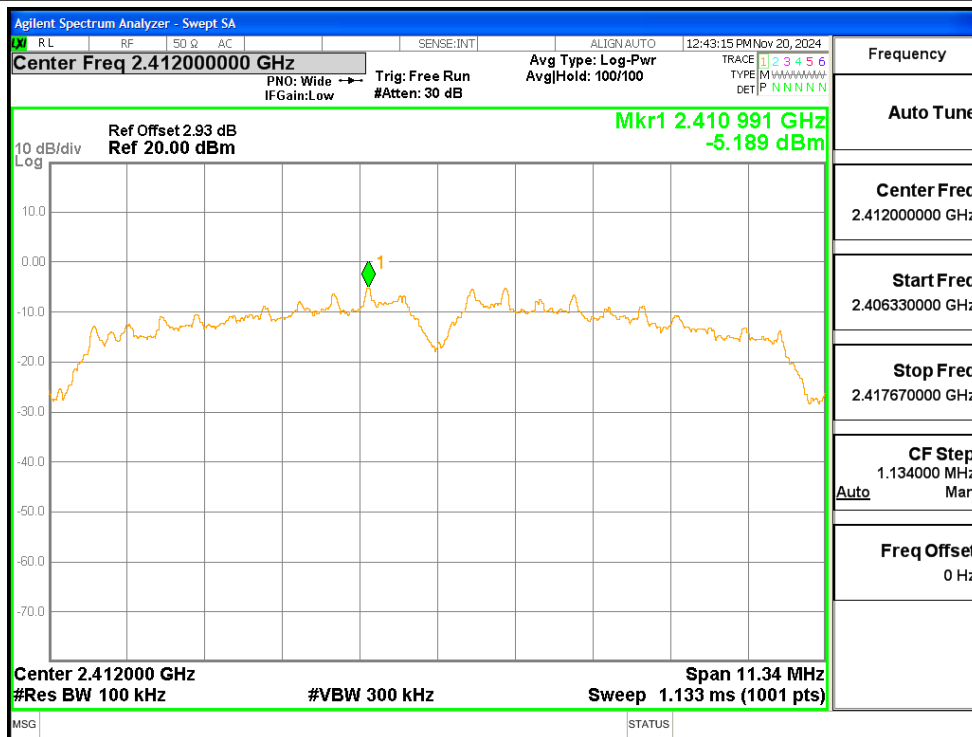


Maximum Power Spectral Density Level

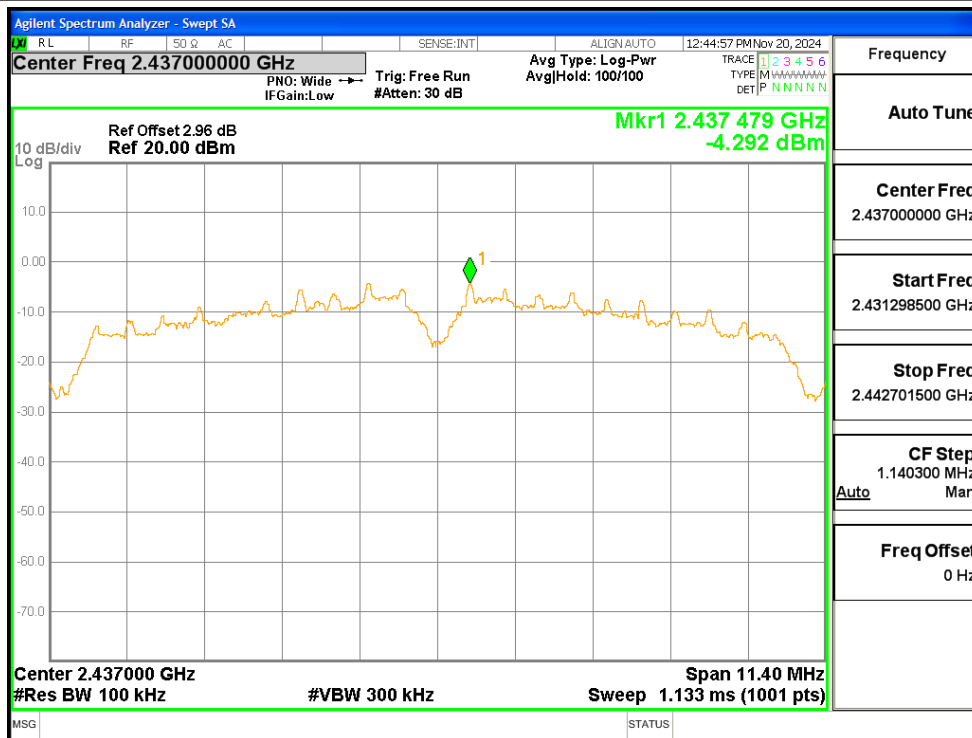
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/100kHz)	RB factor(dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant1	-5.19	-15.2	-20.39	8	Pass
		2437		-4.29	-15.2	-19.49	8	Pass
		2462		-5.25	-15.2	-20.45	8	Pass
	g	2412		-7.66	-15.2	-22.86	8	Pass
		2437		-7.52	-15.2	-22.72	8	Pass
		2462		-7.88	-15.2	-23.08	8	Pass
	n20	2412		-7.59	-15.2	-22.79	8	Pass
		2437		-6.98	-15.2	-22.18	8	Pass
		2462		-6.9	-15.2	-22.1	8	Pass
	n40	2422		-11.49	-15.2	-26.69	8	Pass
		2437		-10.33	-15.2	-25.53	8	Pass
		2452		-10.12	-15.2	-25.32	8	Pass
	ax20	2412		-7.51	-15.2	-22.71	8	Pass
		2437		-7.17	-15.2	-22.37	8	Pass
		2462		-7.11	-15.2	-22.31	8	Pass
	ax40	2422		-11.06	-15.2	-26.26	8	Pass
		2437		-10.1	-15.2	-25.3	8	Pass
		2452		-9.87	-15.2	-25.07	8	Pass

Test Graphs

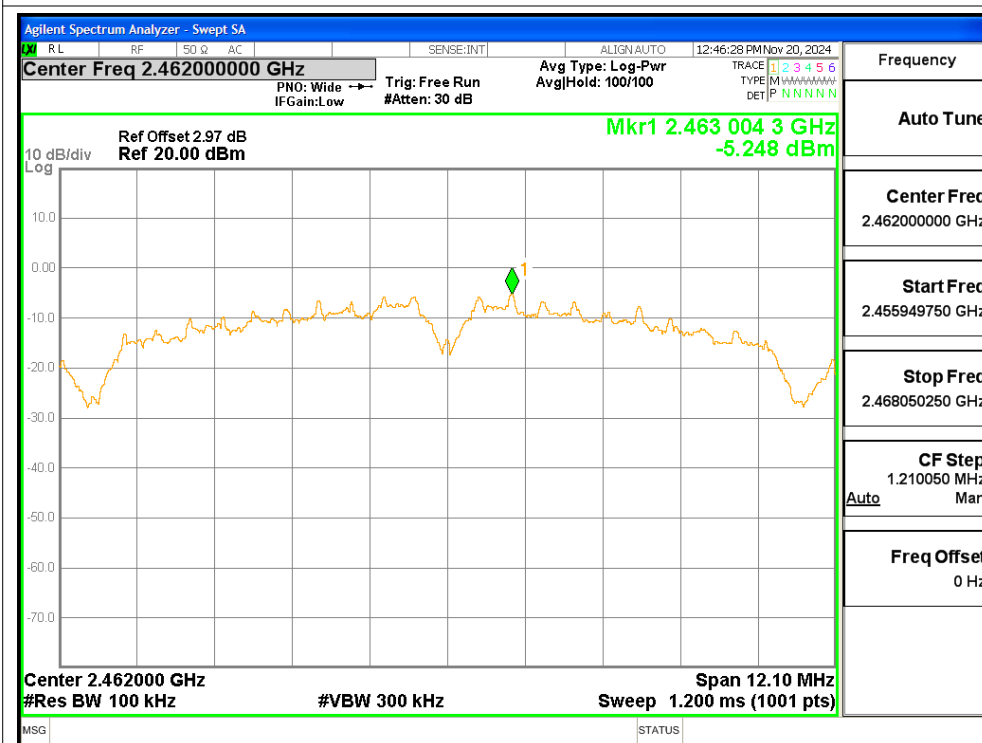
PSD NVNT b 2412MHz Ant1



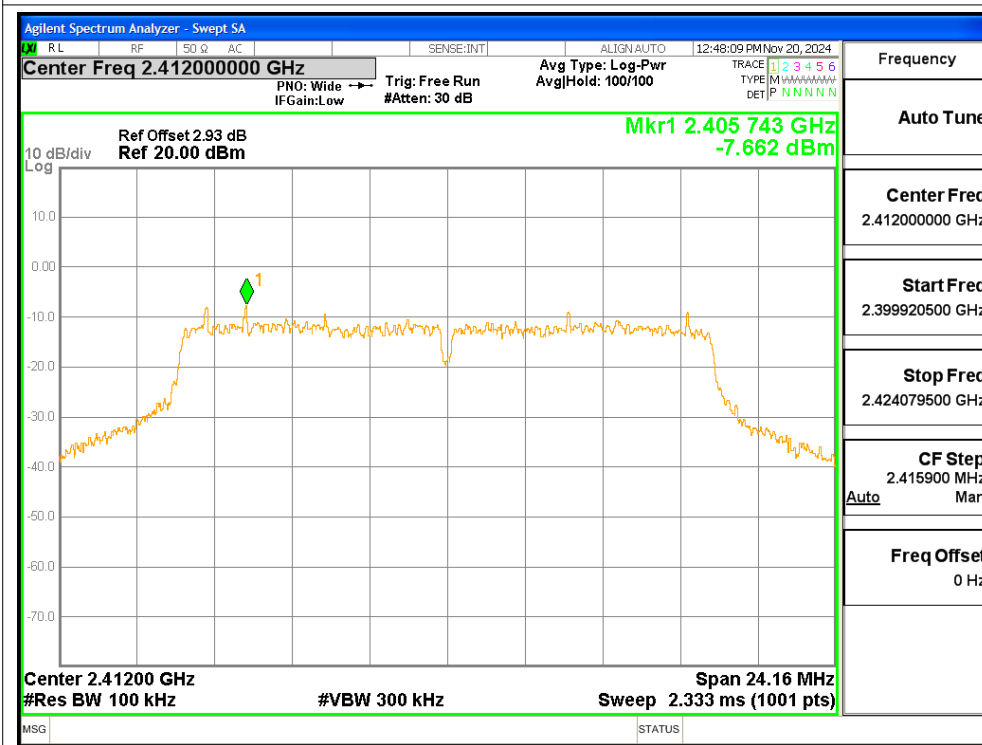
PSD NVNT b 2437MHz Ant1



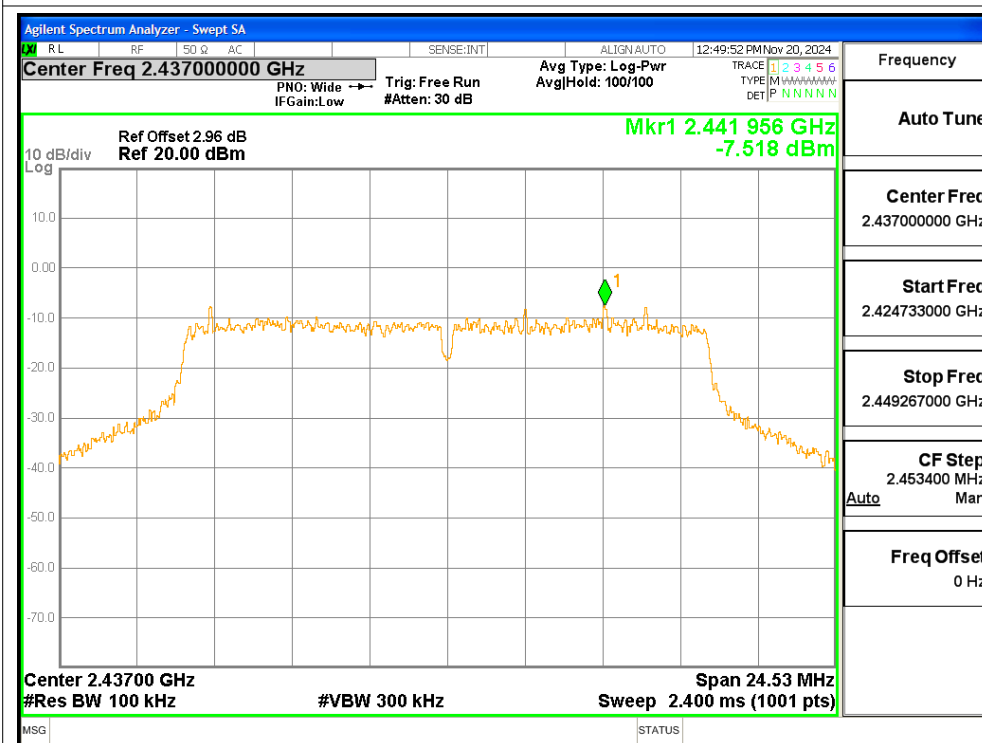
PSD NVNT b 2462MHz Ant1



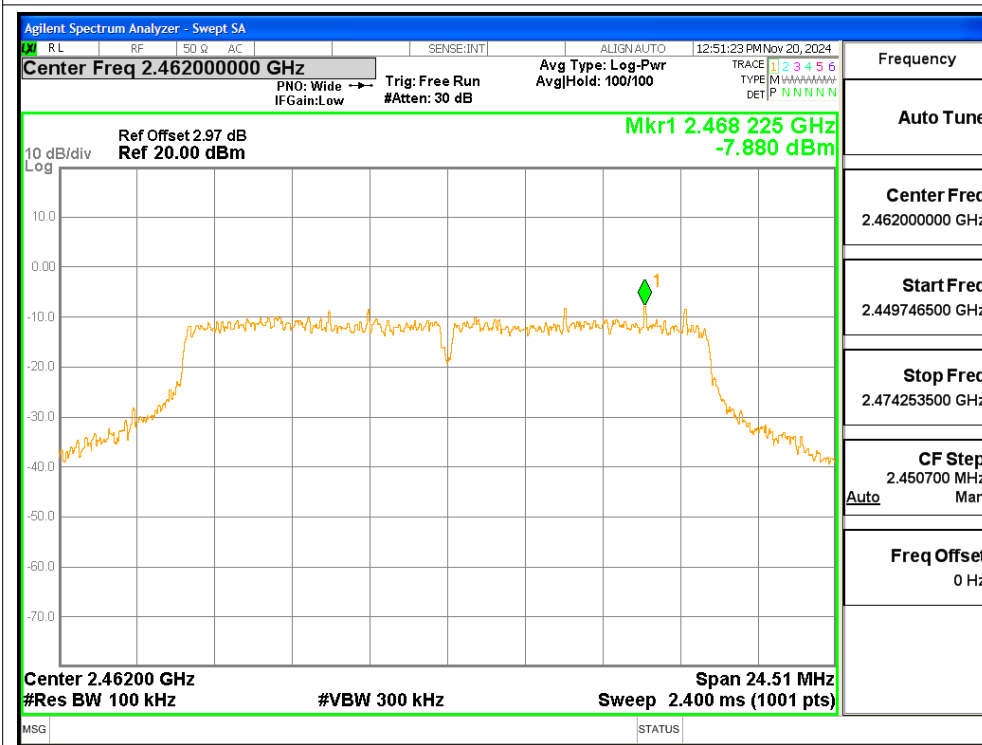
PSD NVNT g 2412MHz Ant1



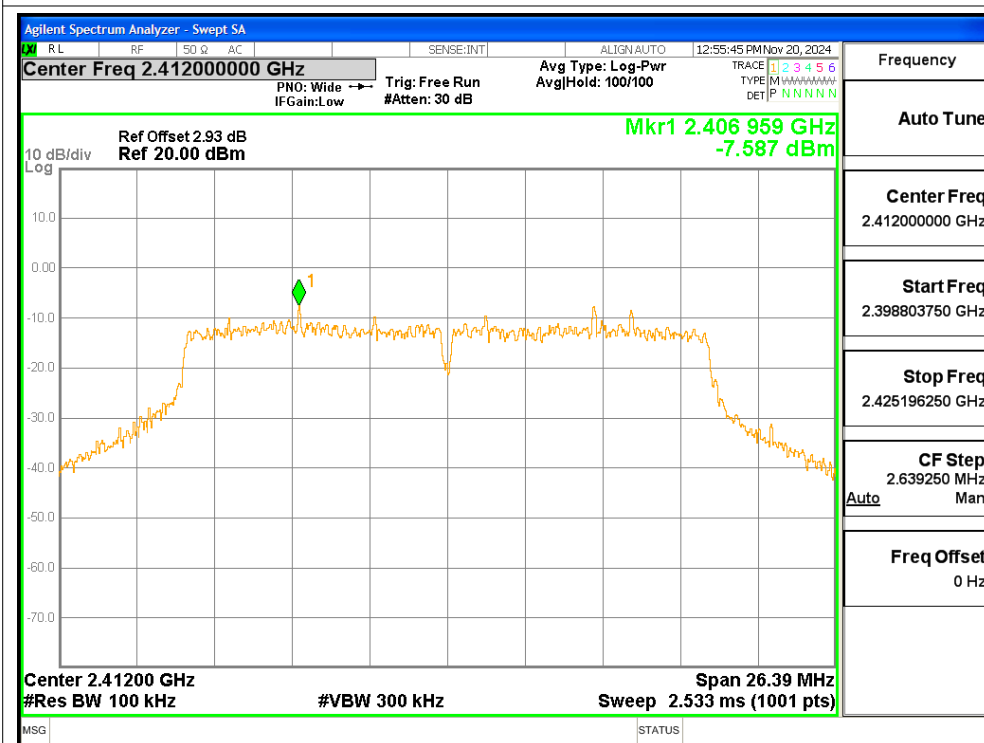
PSD NVNT g 2437MHz Ant1



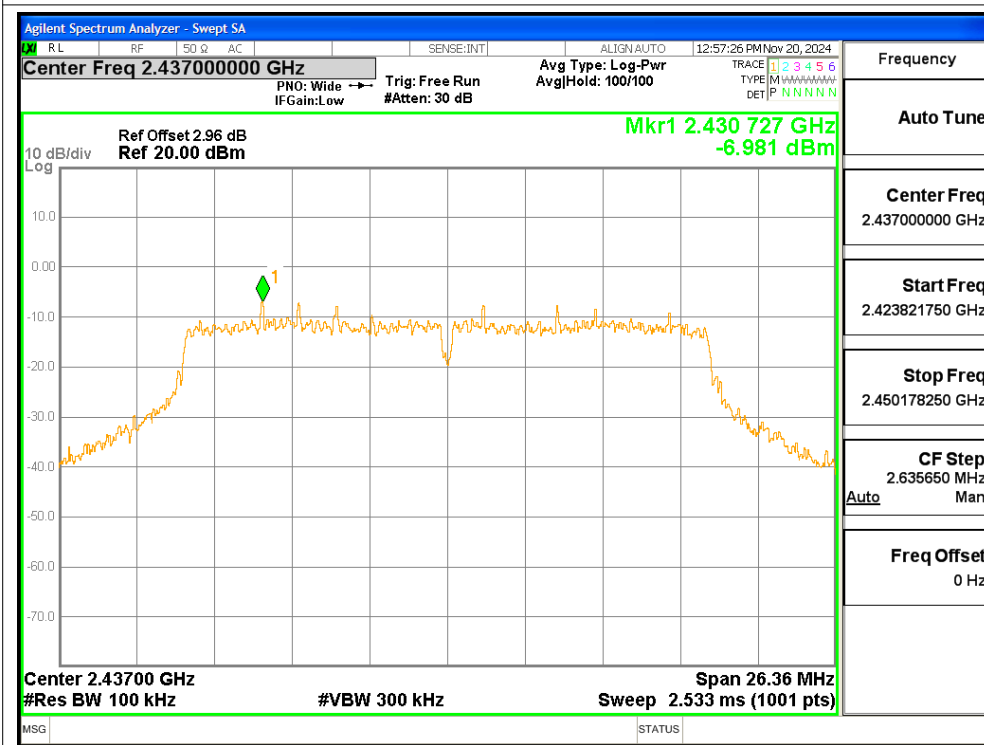
PSD NVNT g 2462MHz Ant1



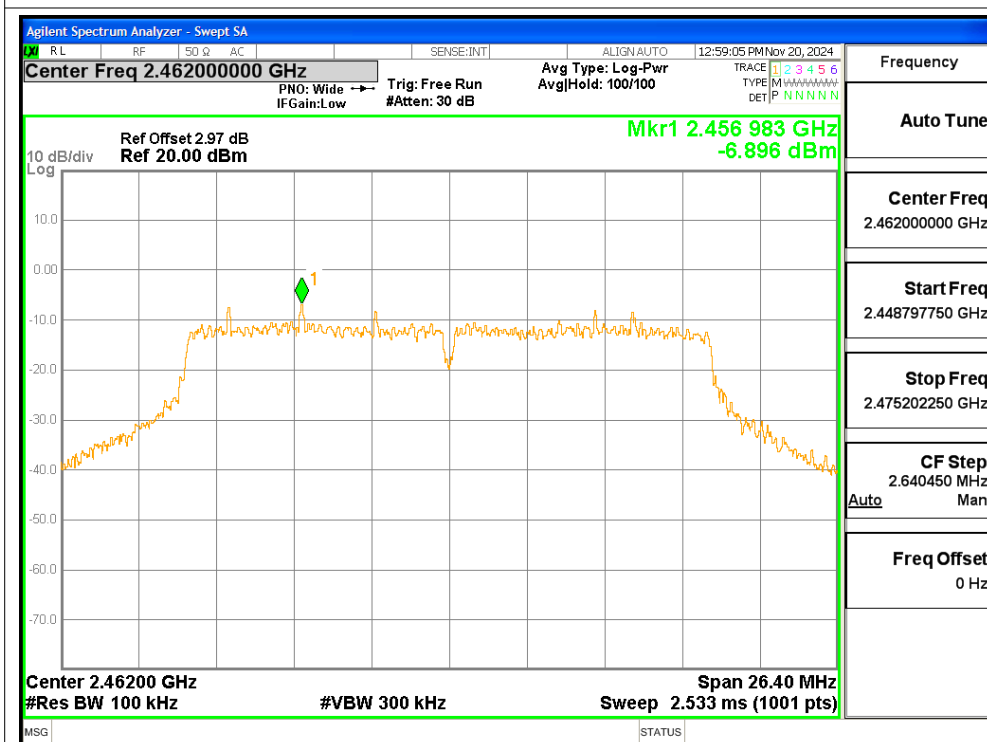
PSD NVNT n20 2412MHz Ant1



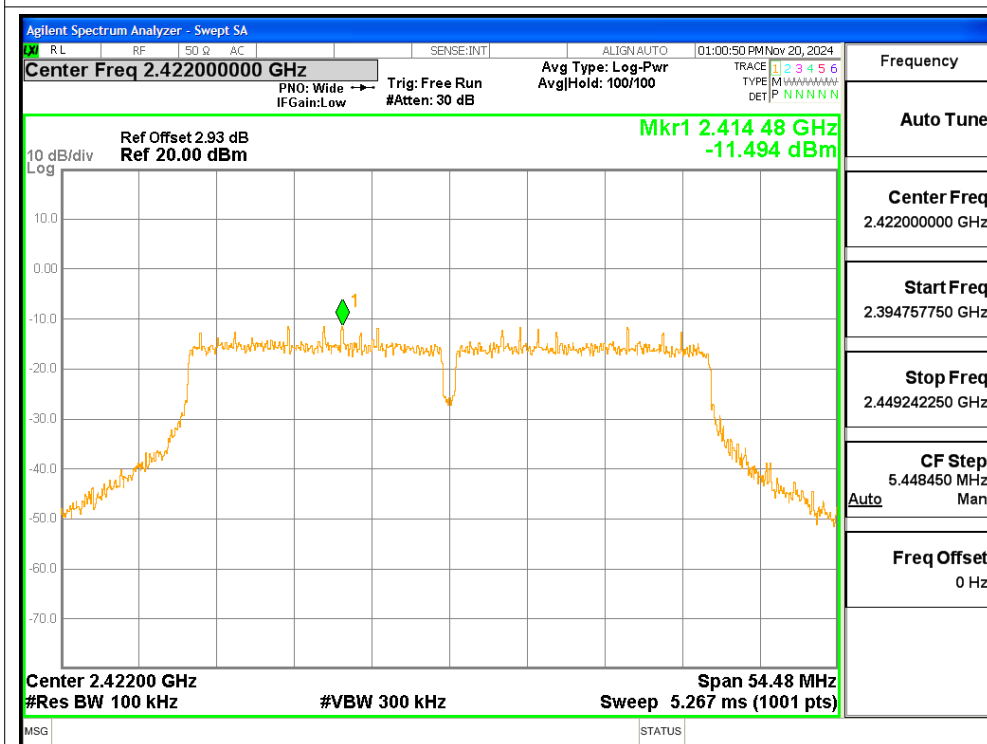
PSD NVNT n20 2437MHz Ant1



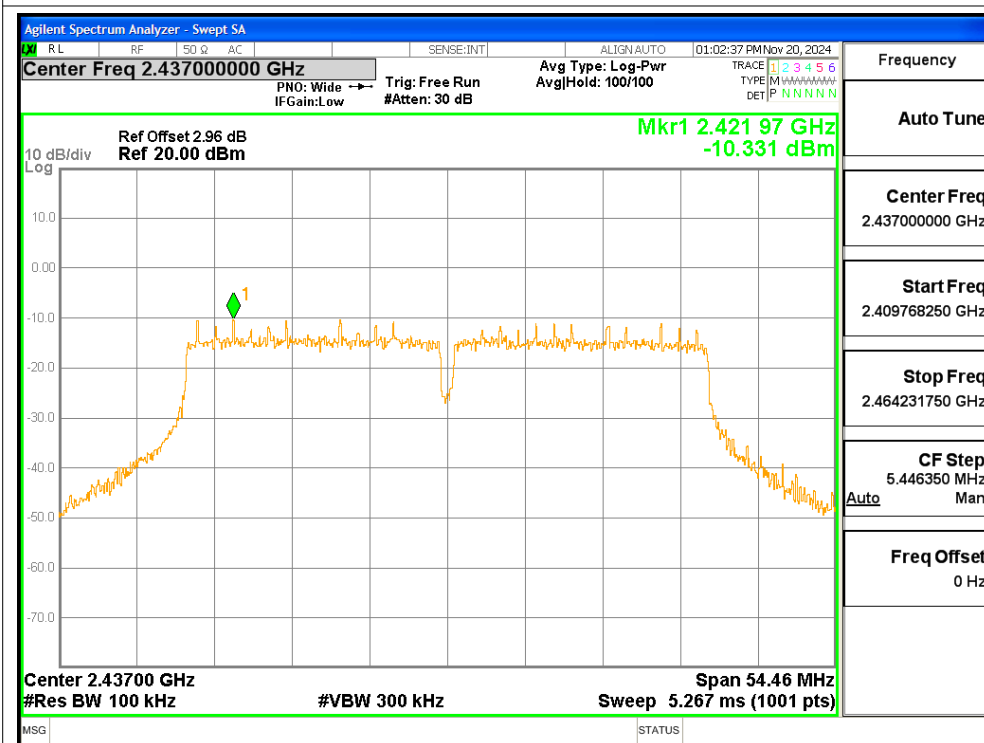
PSD NVNT n20 2462MHz Ant1



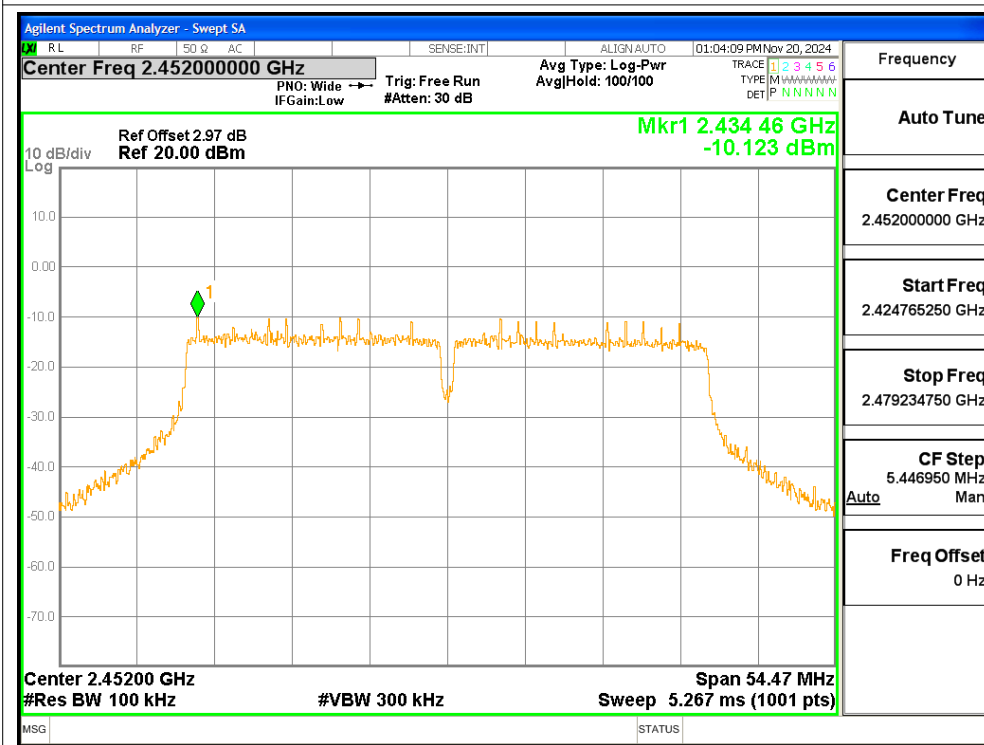
PSD NVNT n40 2422MHz Ant1



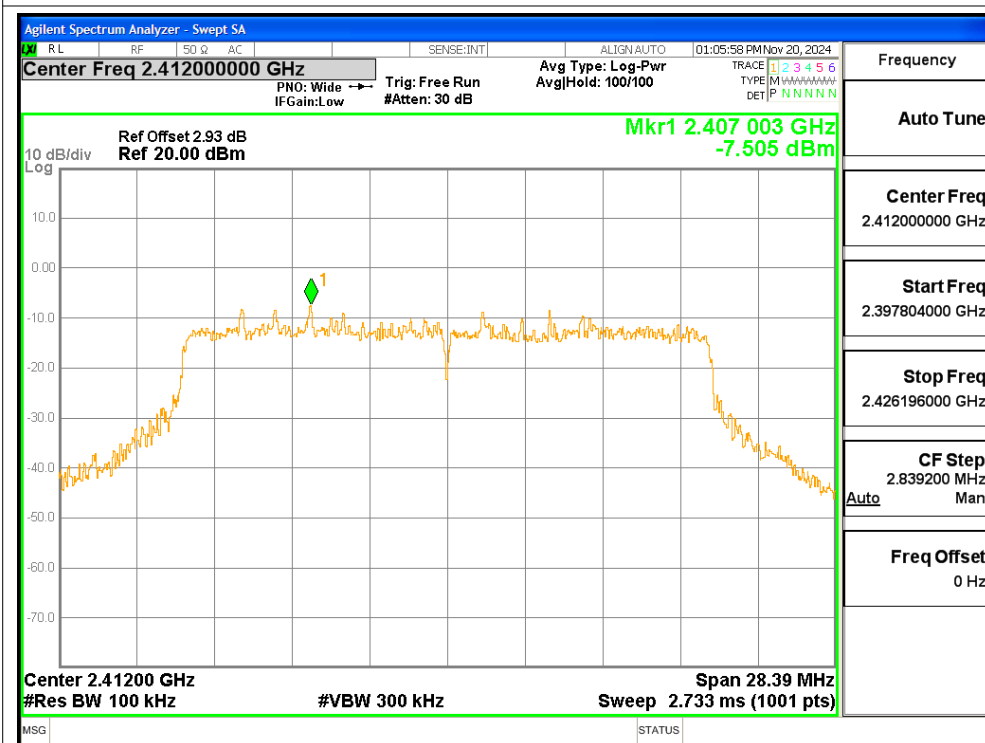
PSD NVNT n40 2437MHz Ant1



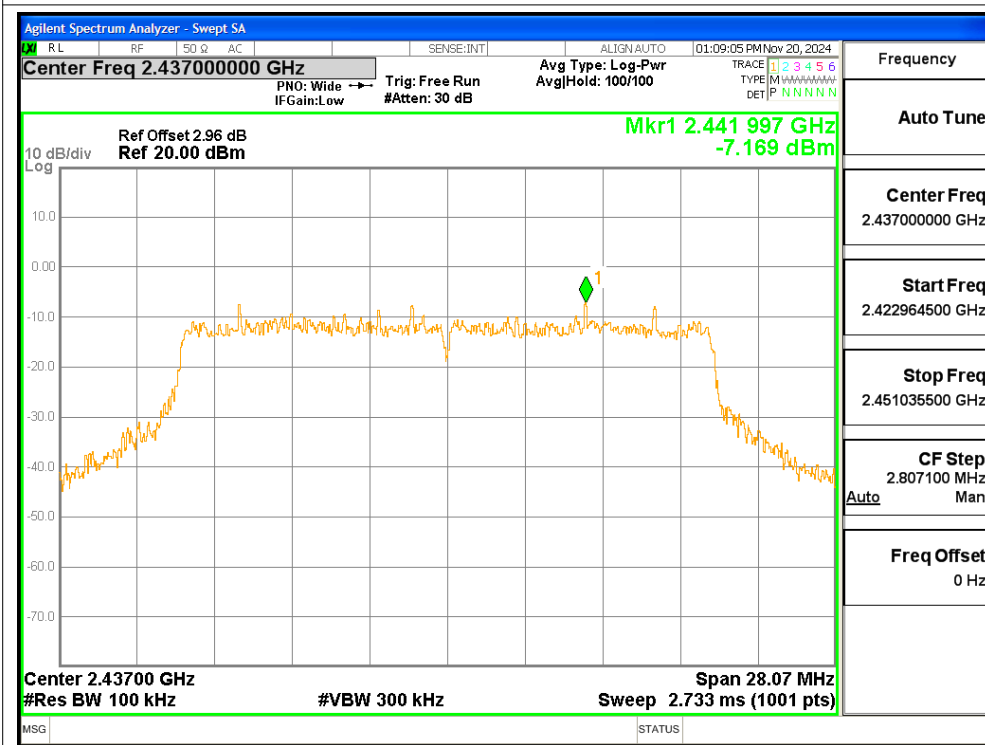
PSD NVNT n40 2452MHz Ant1



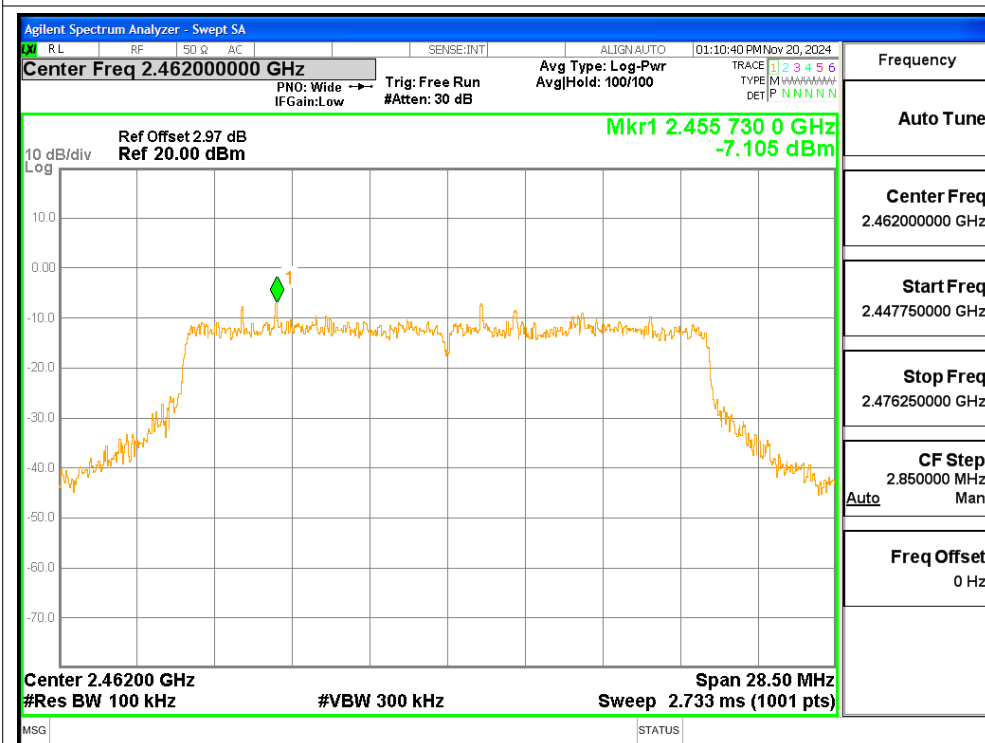
PSD NVNT ax20 2412MHz Ant1



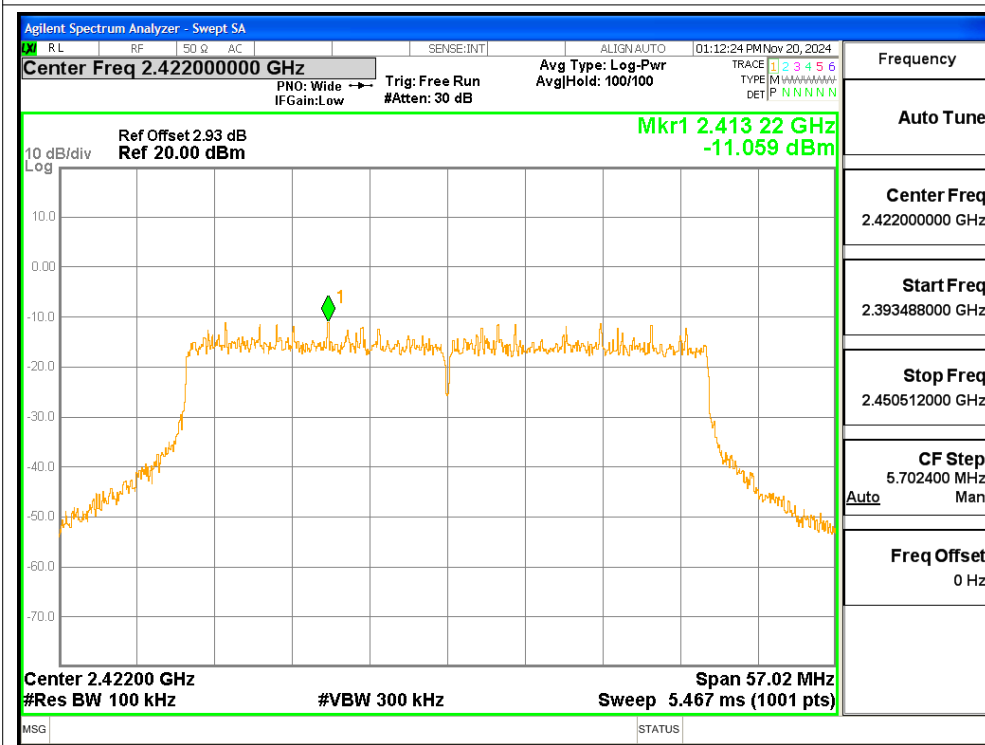
PSD NVNT ax20 2437MHz Ant1



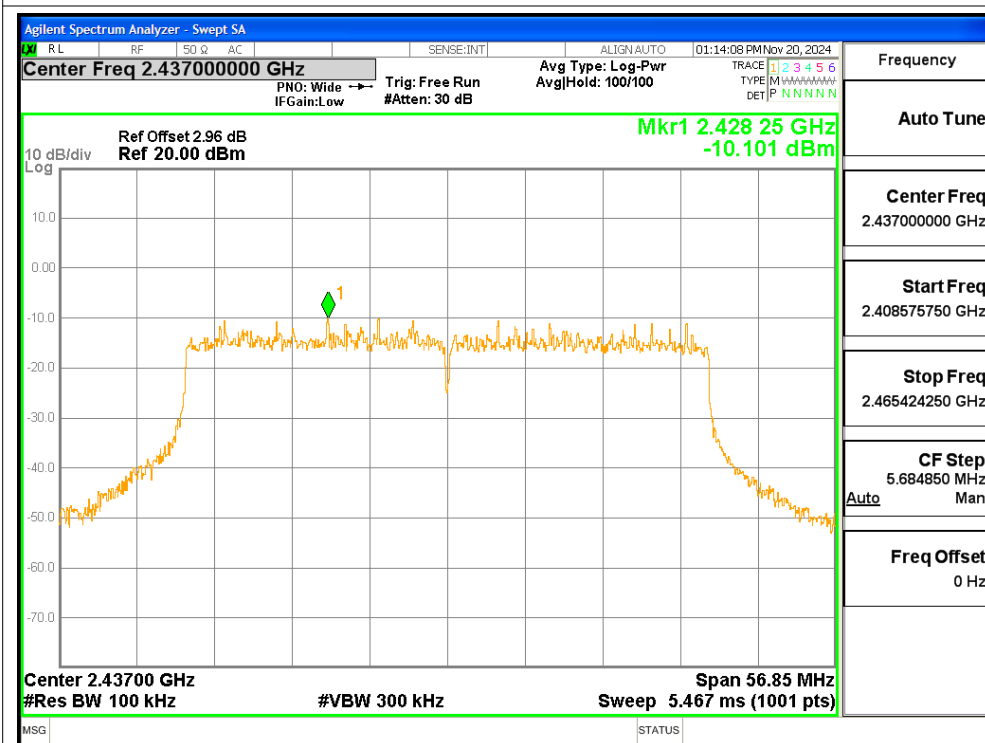
PSD NVNT ax20 2462MHz Ant1



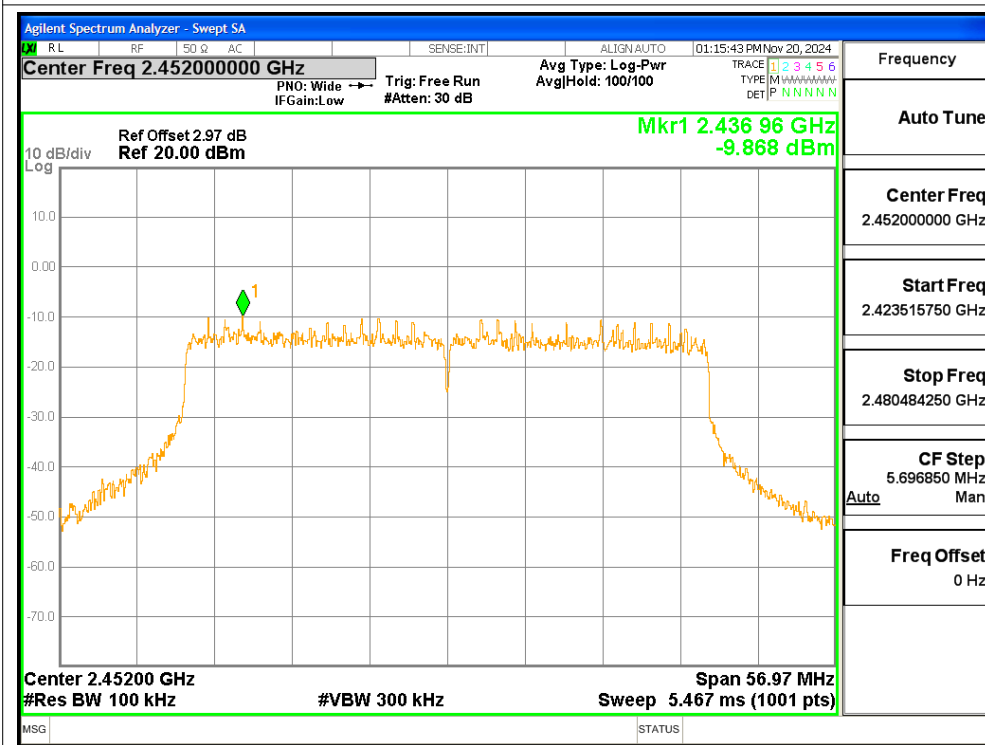
PSD NVNT ax40 2422MHz Ant1



PSD NVNT ax40 2437MHz Ant1



PSD NVNT ax40 2452MHz Ant1

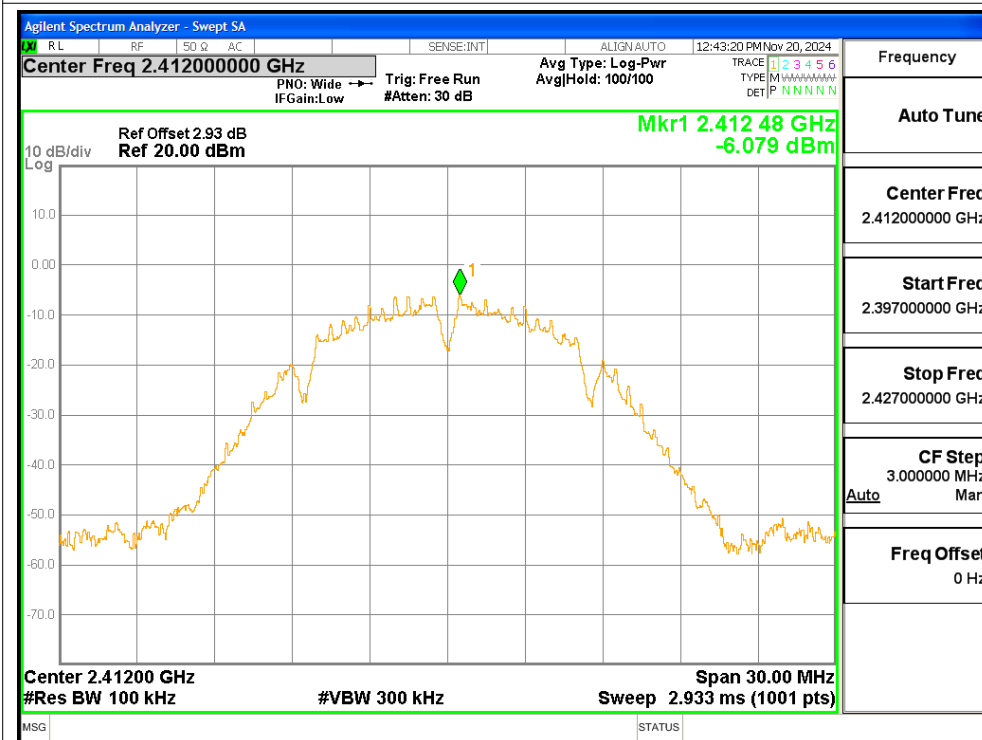


Band Edge

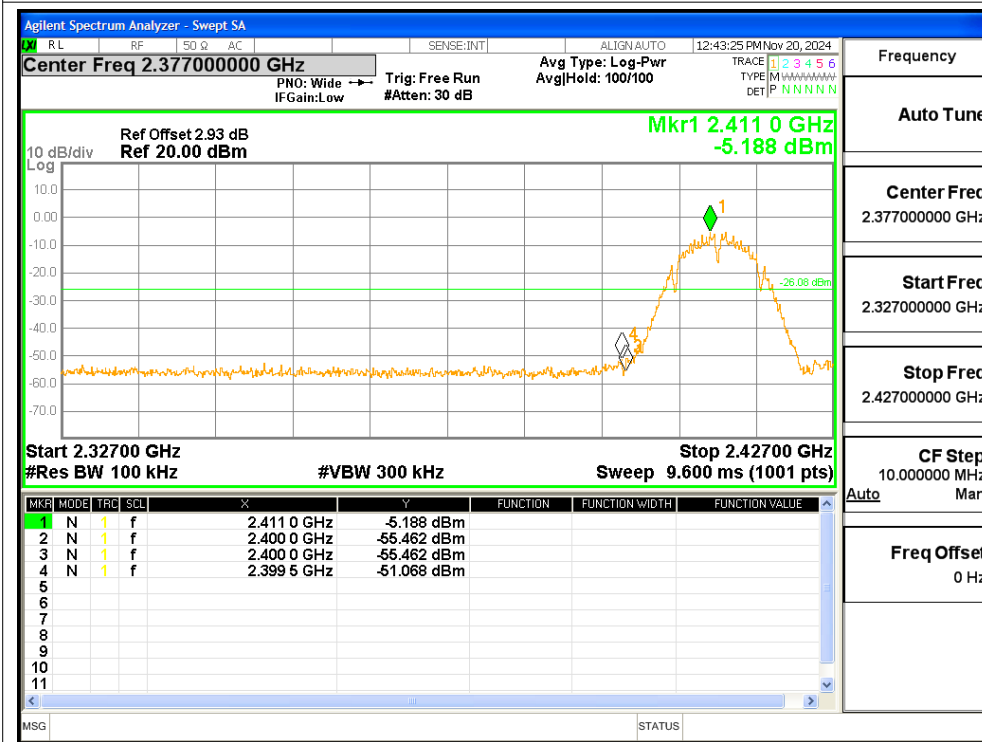
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-44.98	-20	Pass
		2462		-47.92	-20	Pass
	g	2412		-26.54	-20	Pass
		2462		-45.65	-20	Pass
	n20	2412		-27.9	-20	Pass
		2462		-44.41	-20	Pass
	n40	2422		-28.48	-20	Pass
		2452		-41.1	-20	Pass
	ax20	2412		-28.37	-20	Pass
		2462		-45.51	-20	Pass
	ax40	2422		-28.13	-20	Pass
		2452		-37.99	-20	Pass

Test Graphs

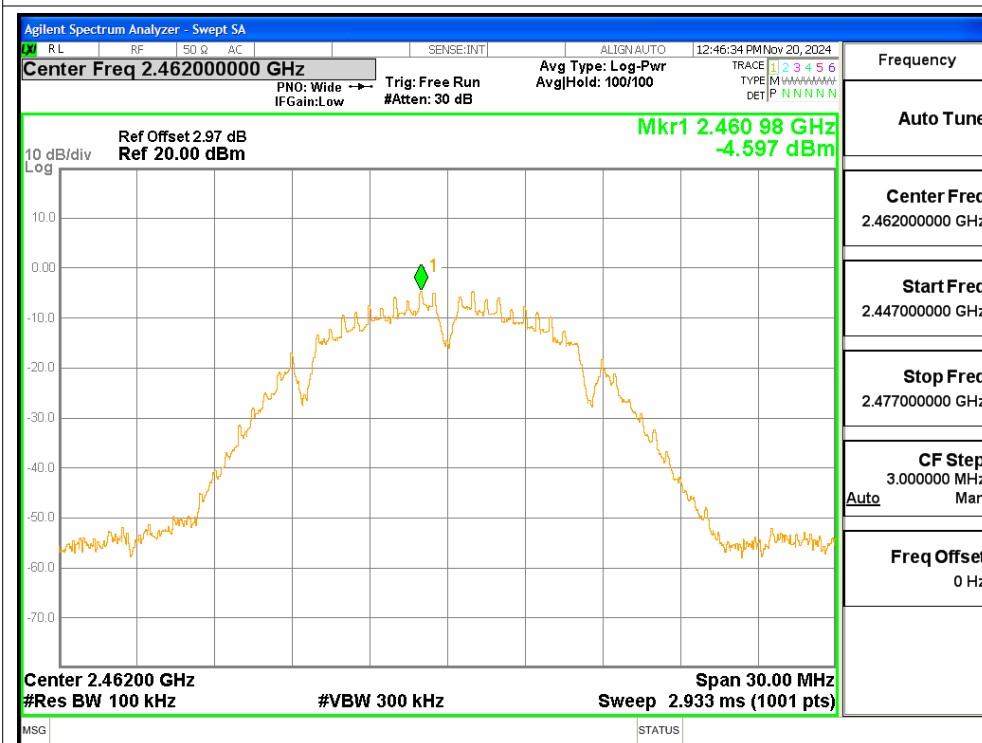
Band Edge NVNT b 2412MHz Ant1 Ref



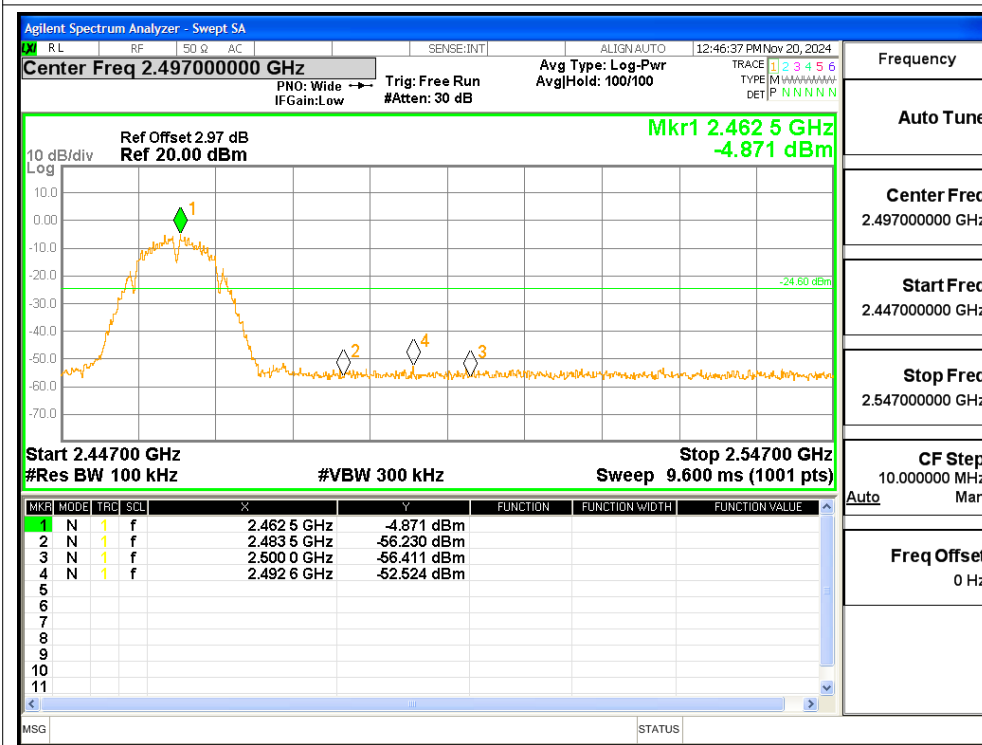
Band Edge NVNT b 2412MHz Ant1 Emission



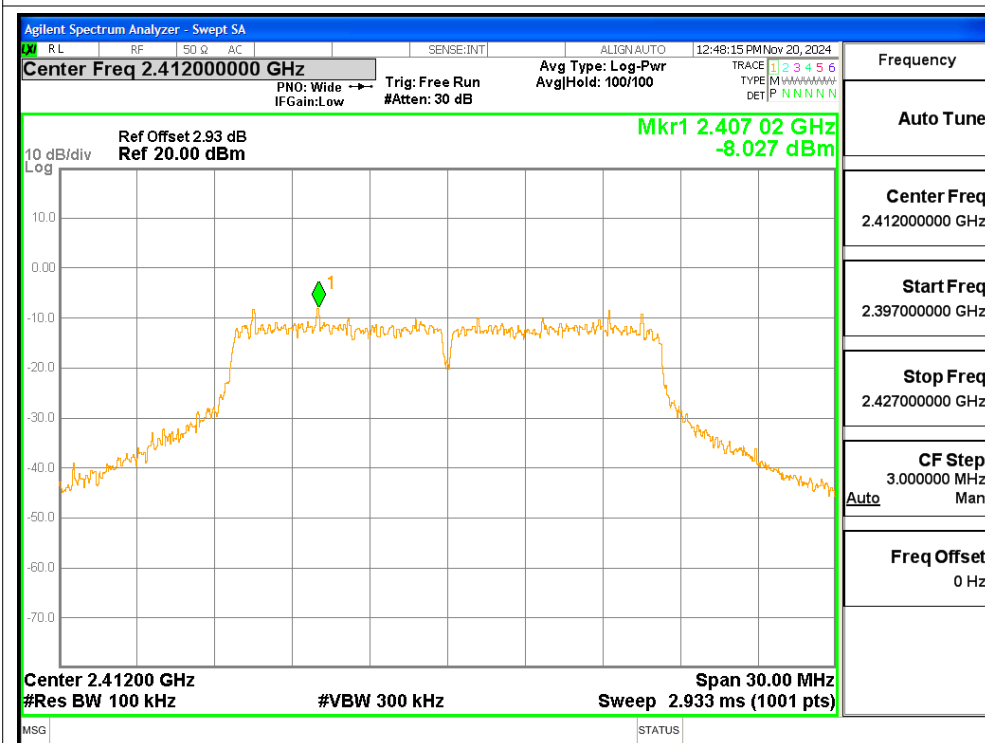
Band Edge NVNT b 2462MHz Ant1 Ref



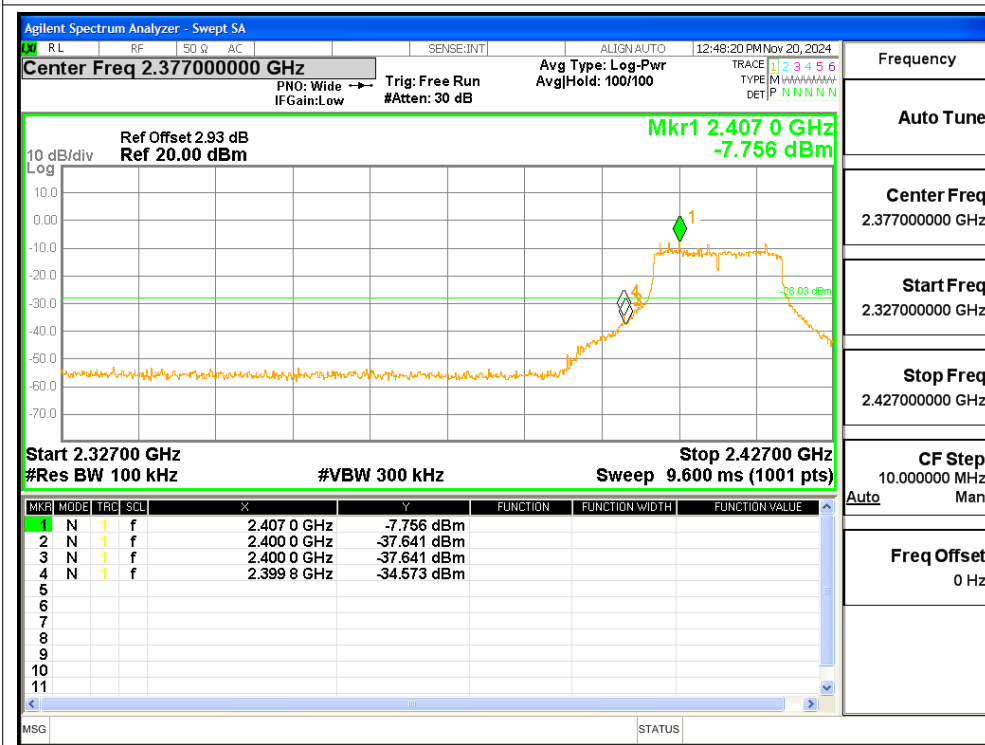
Band Edge NVNT b 2462MHz Ant1 Emission



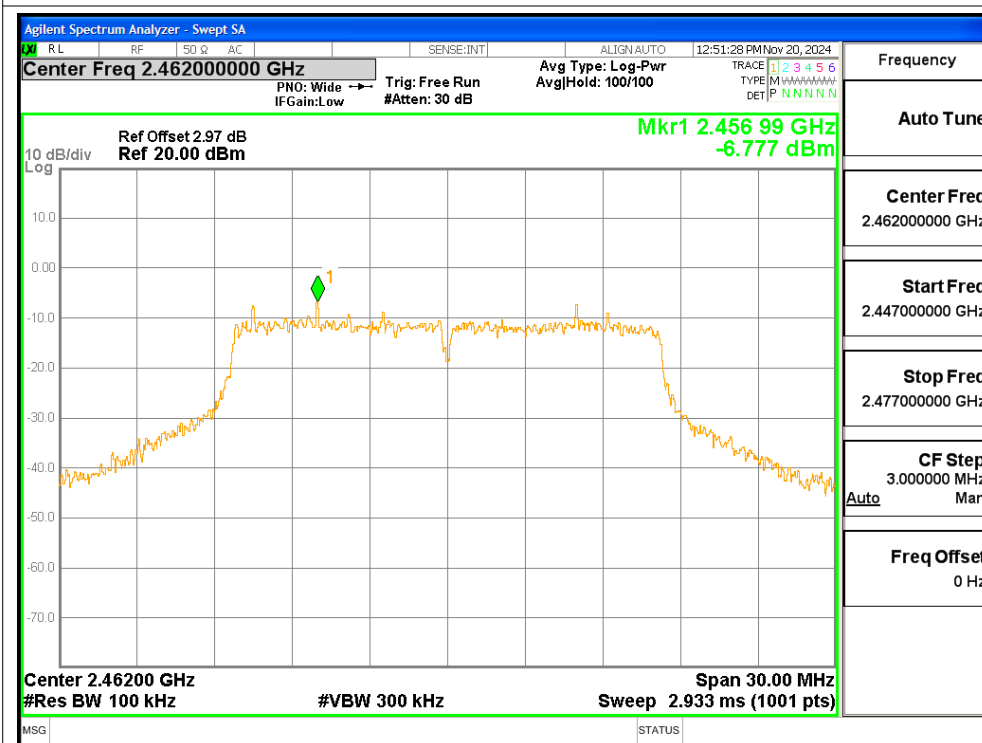
Band Edge NVNT g 2412MHz Ant1 Ref



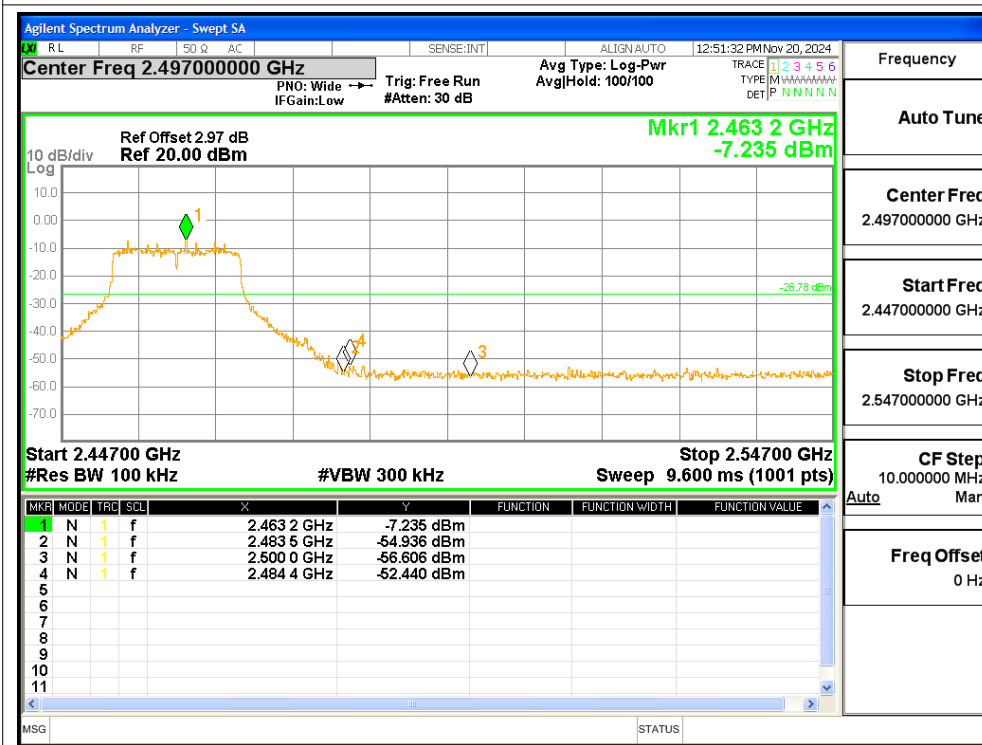
Band Edge NVNT g 2412MHz Ant1 Emission



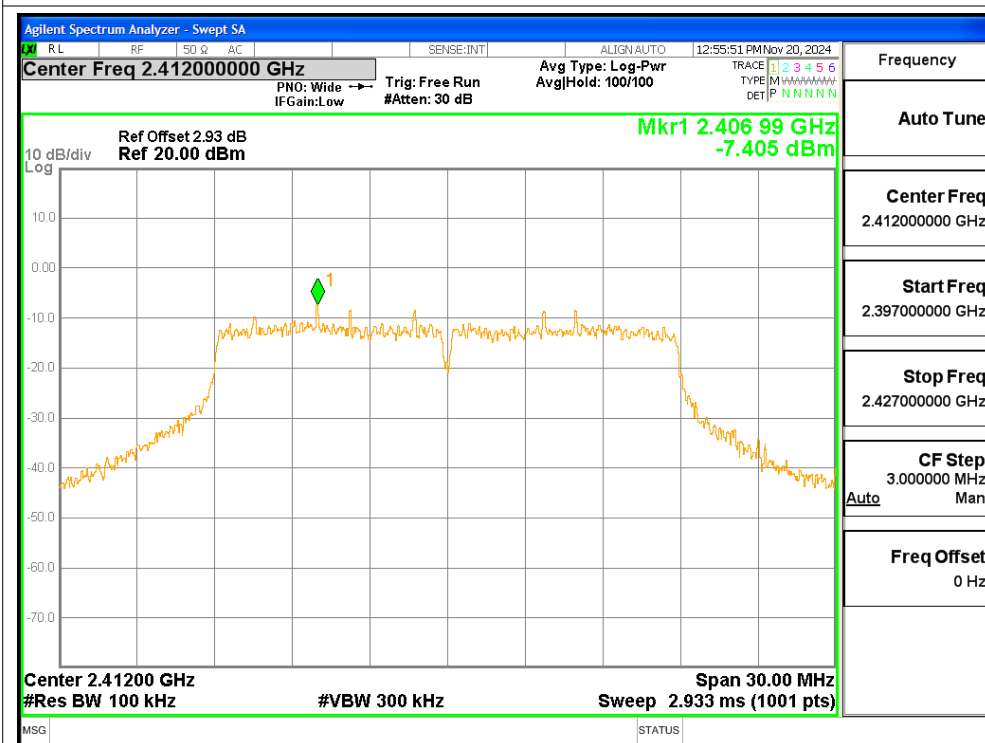
Band Edge NVNT g 2462MHz Ant1 Ref



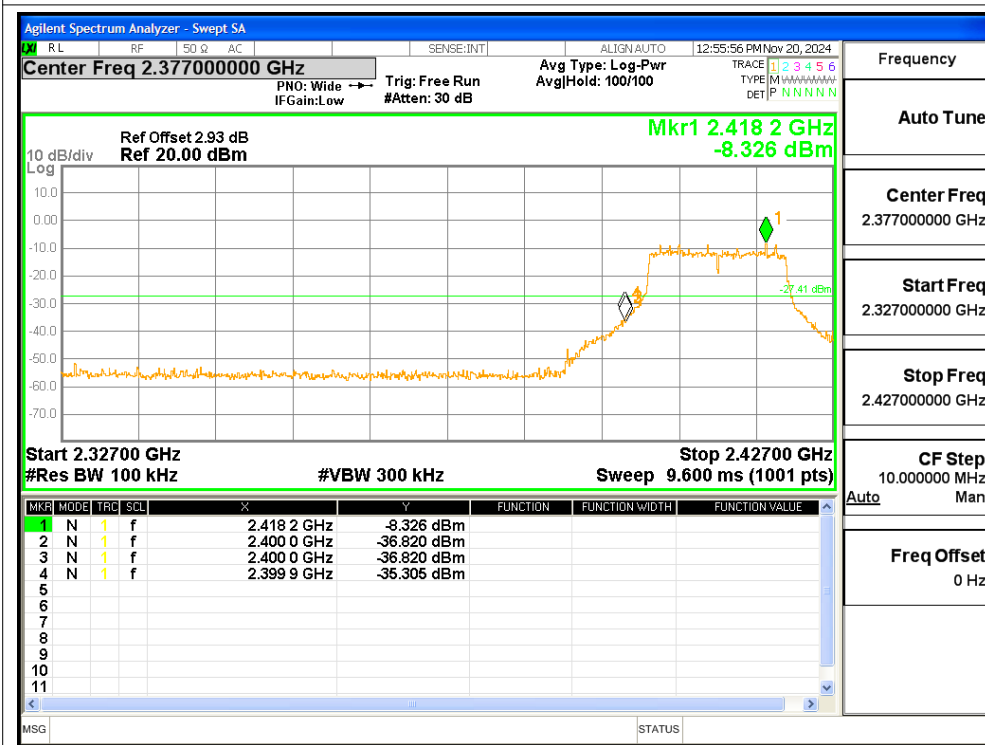
Band Edge NVNT g 2462MHz Ant1 Emission



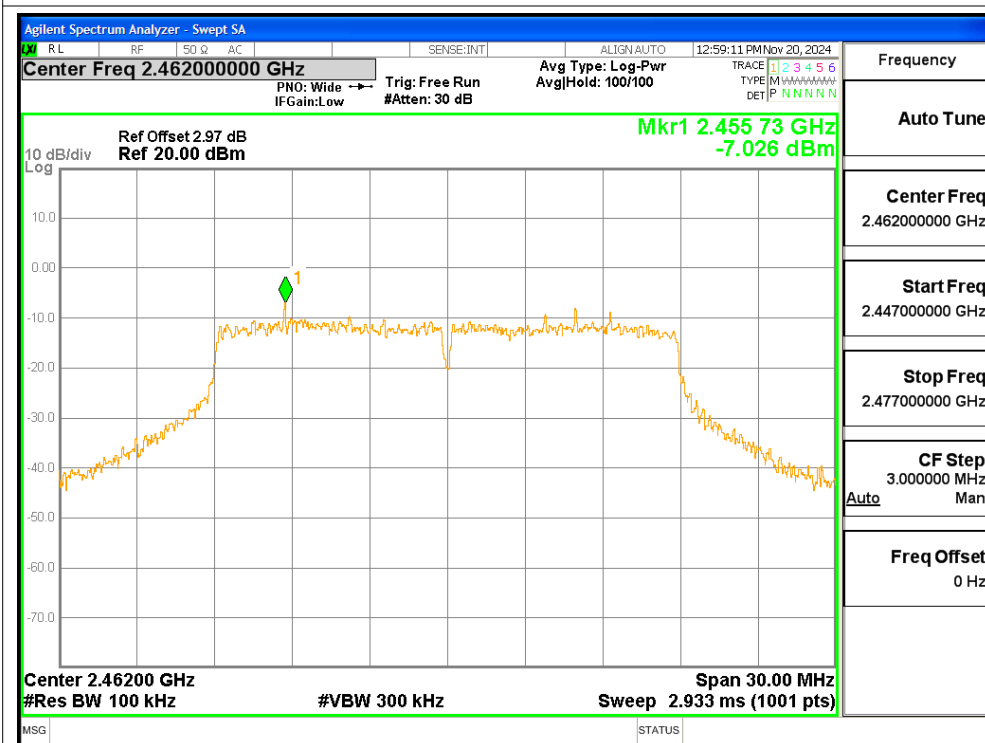
Band Edge NVNT n20 2412MHz Ant1 Ref



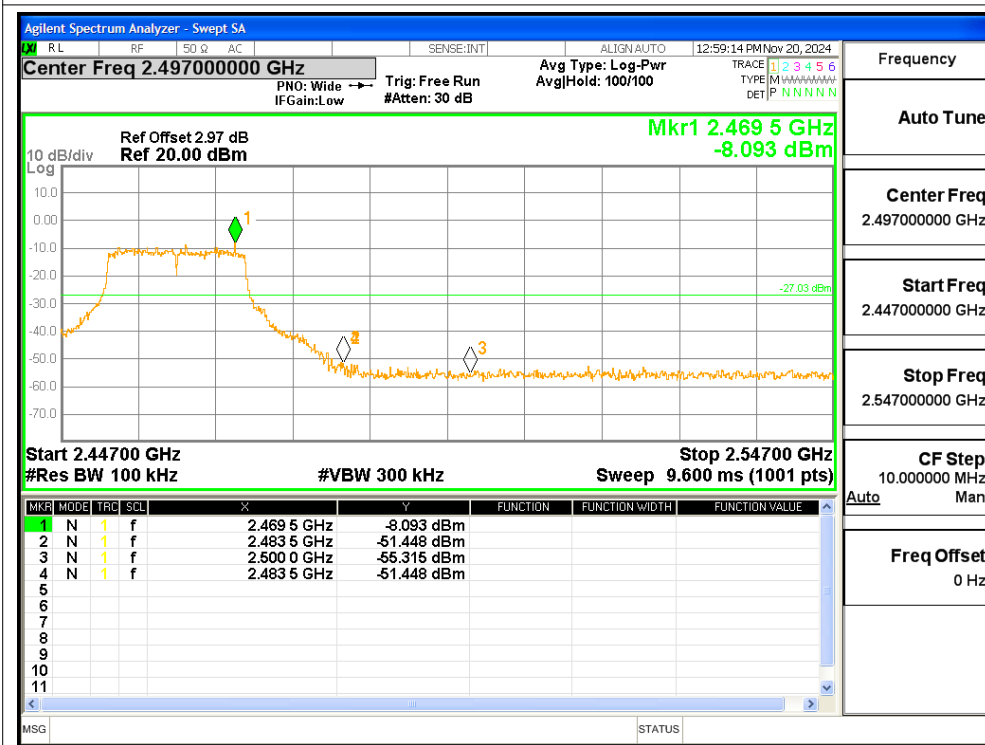
Band Edge NVNT n20 2412MHz Ant1 Emission



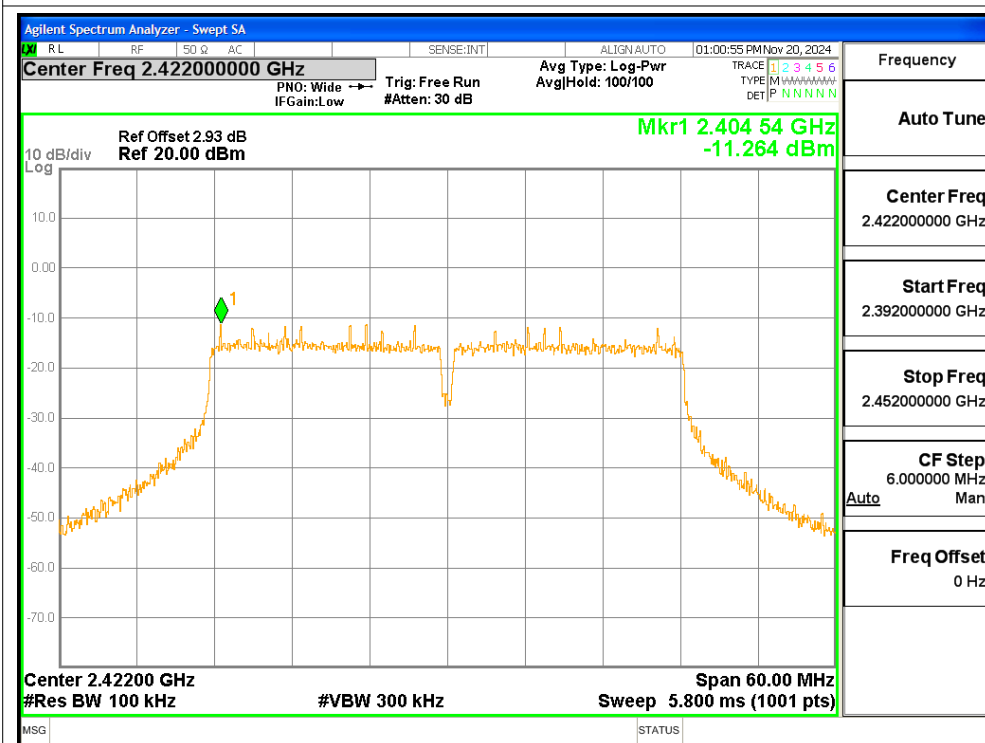
Band Edge NVNT n20 2462MHz Ant1 Ref



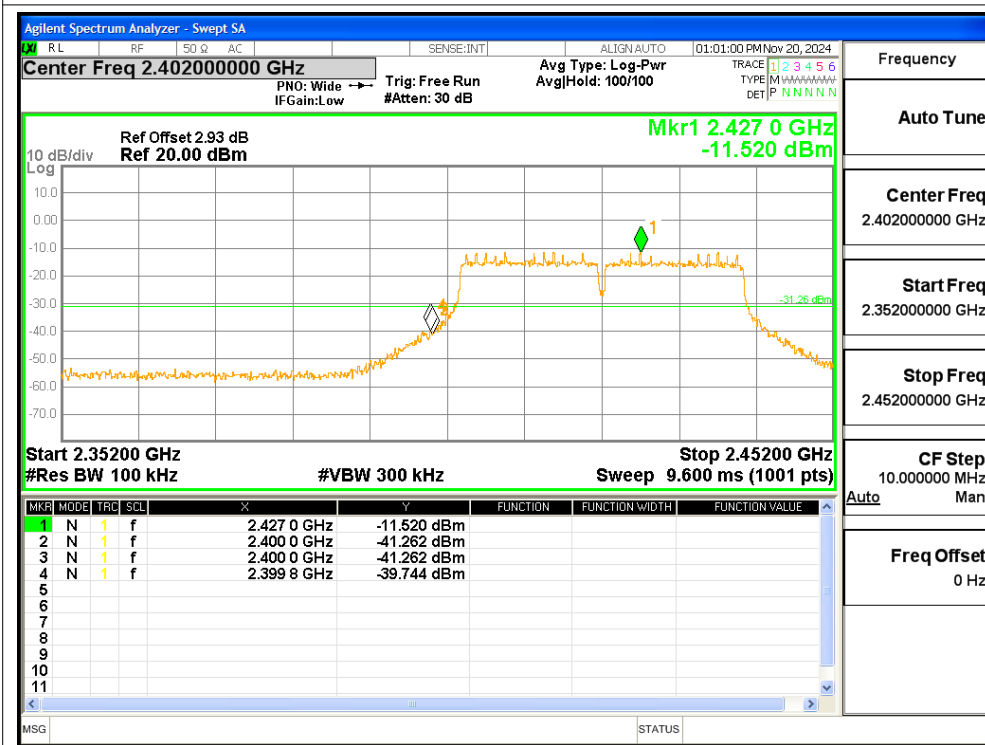
Band Edge NVNT n20 2462MHz Ant1 Emission



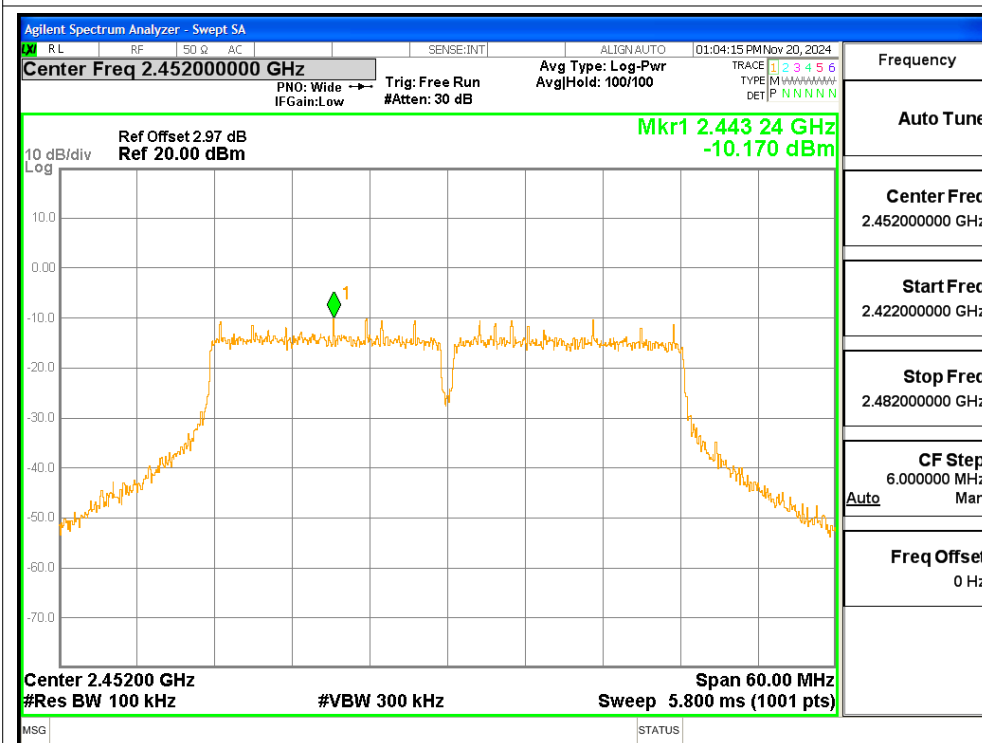
Band Edge NVNT n40 2422MHz Ant1 Ref



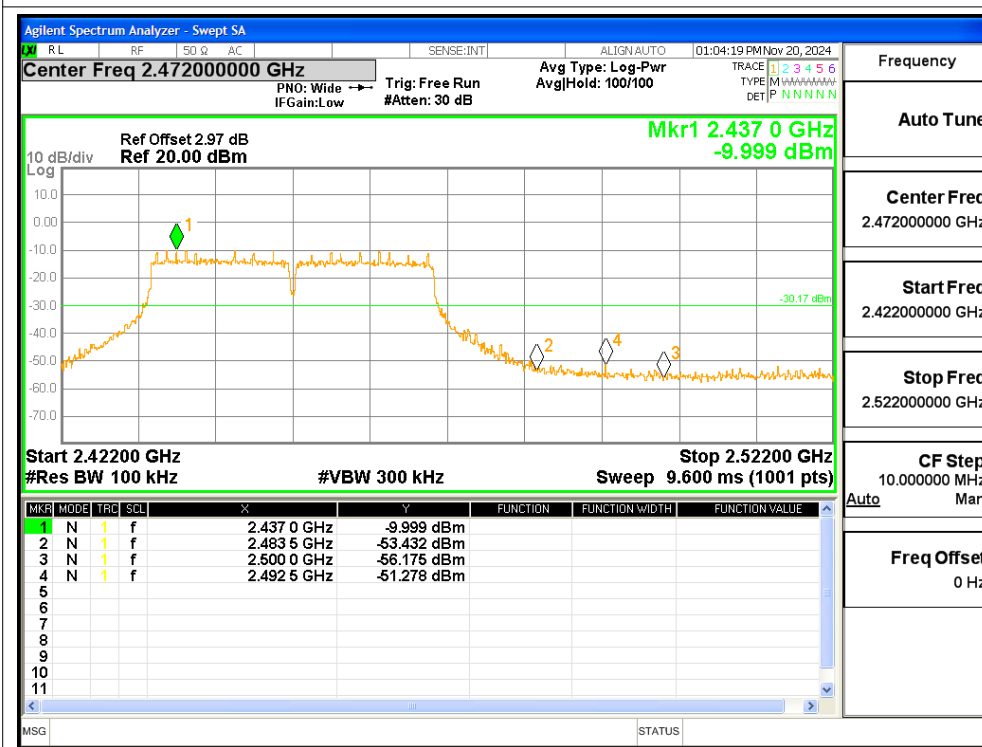
Band Edge NVNT n40 2422MHz Ant1 Emission



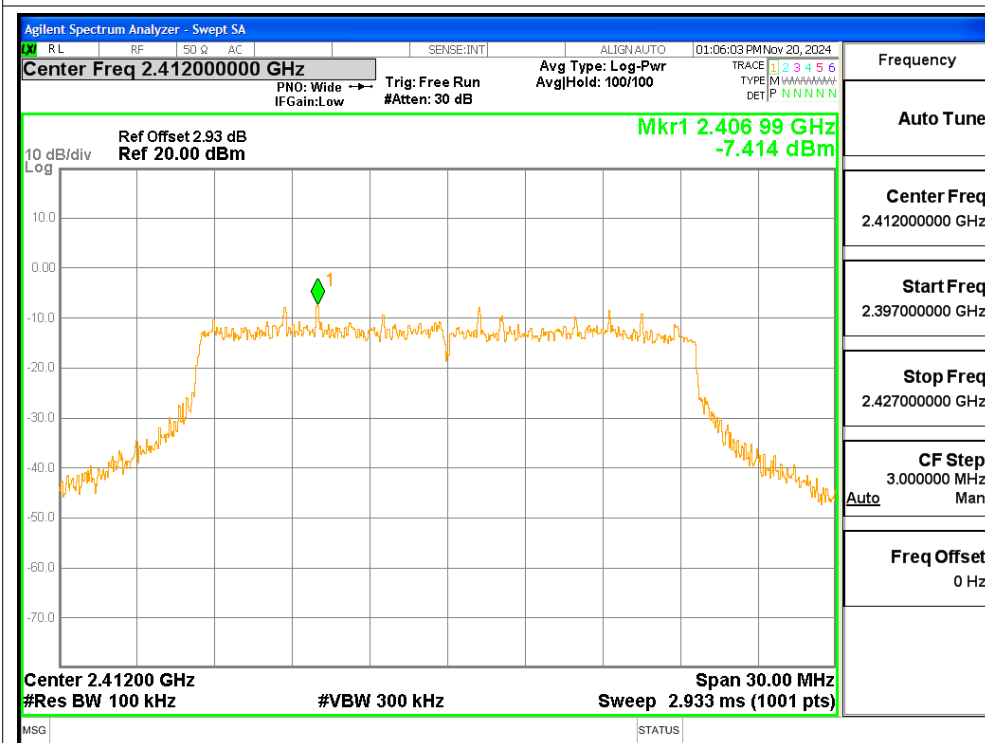
Band Edge NVNT n40 2452MHz Ant1 Ref



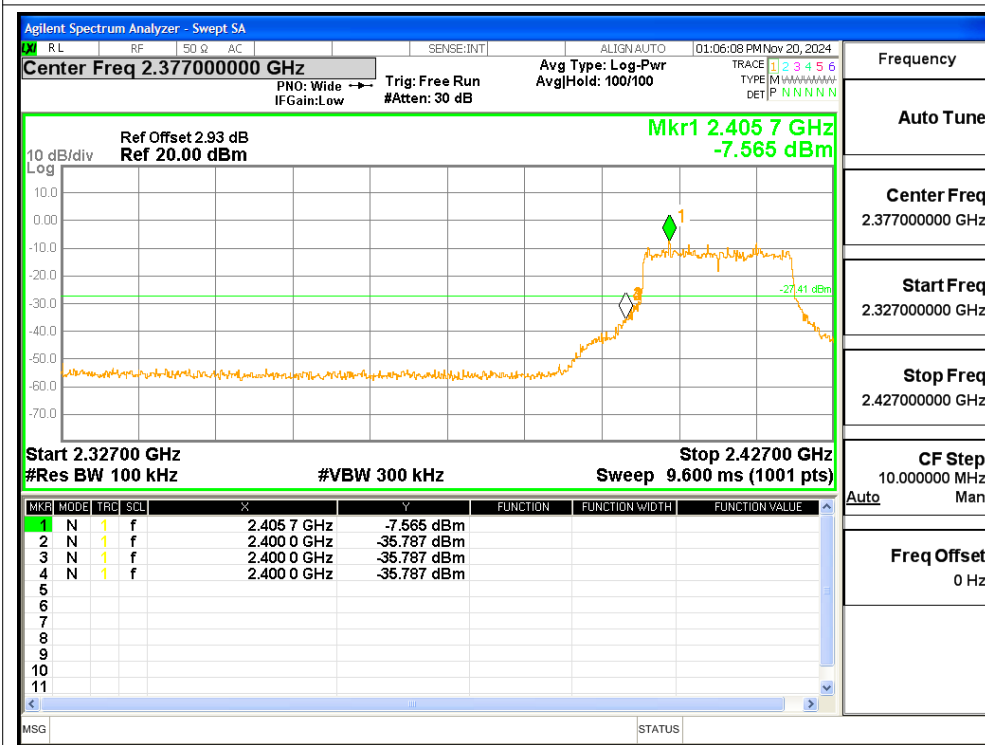
Band Edge NVNT n40 2452MHz Ant1 Emission



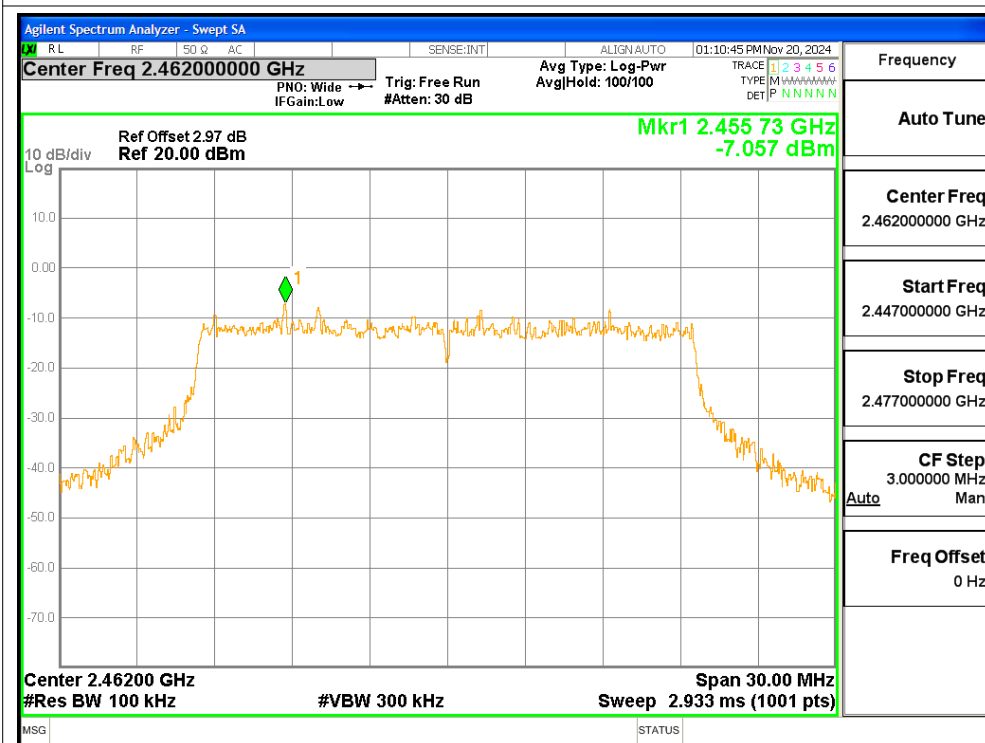
Band Edge NVNT ax20 2412MHz Ant1 Ref



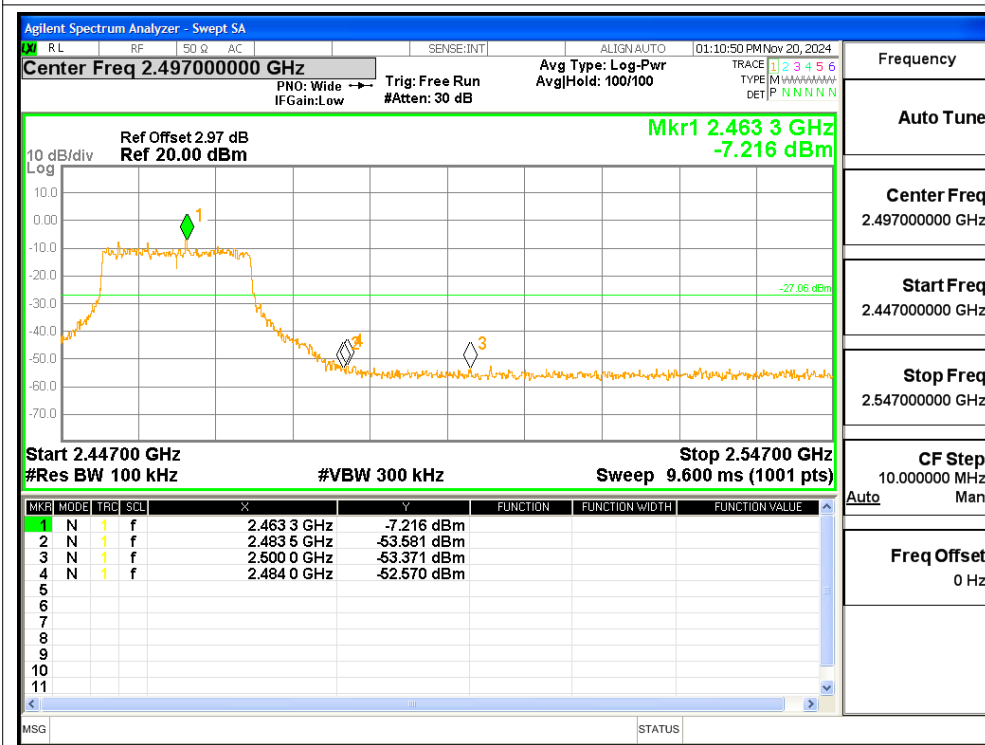
Band Edge NVNT ax20 2412MHz Ant1 Emission



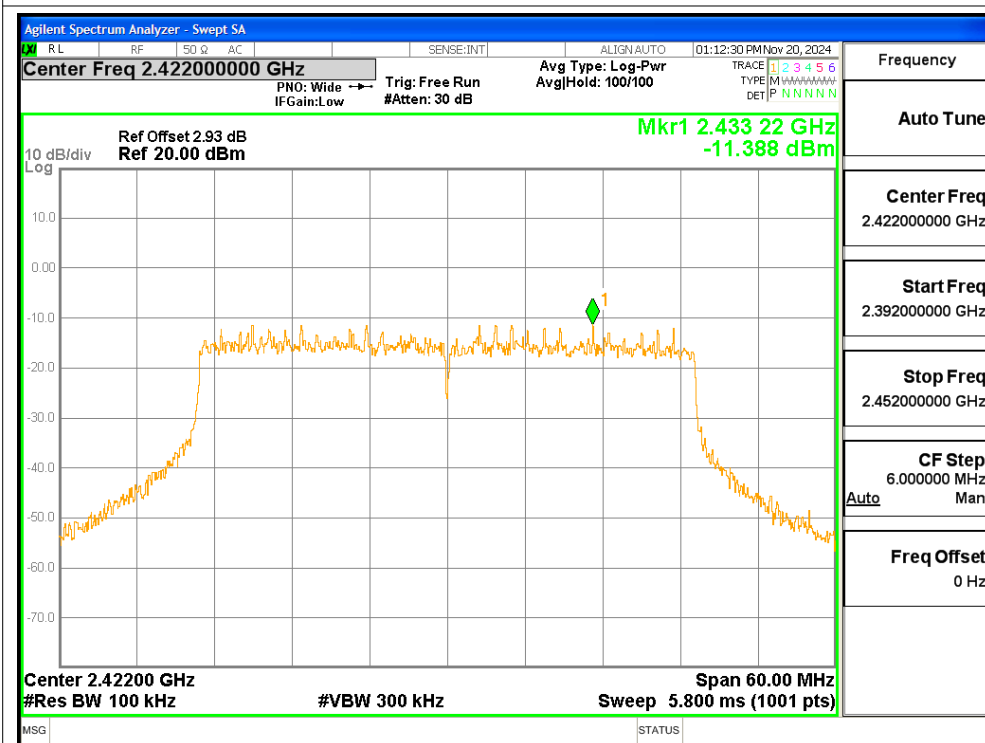
Band Edge NVNT ax20 2462MHz Ant1 Ref



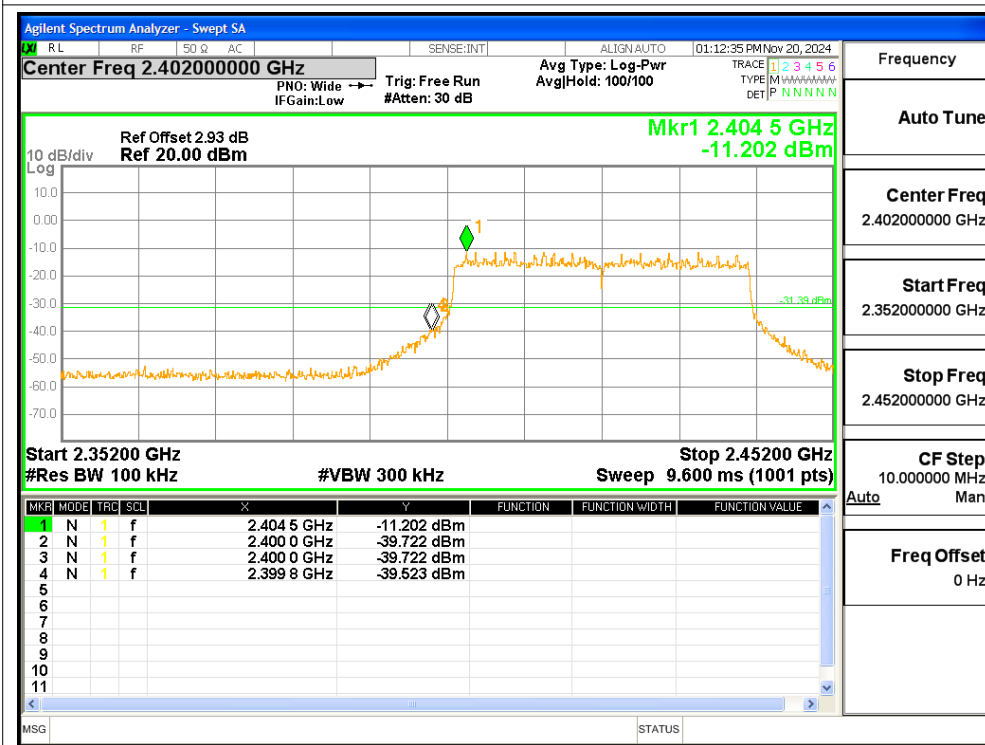
Band Edge NVNT ax20 2462MHz Ant1 Emission



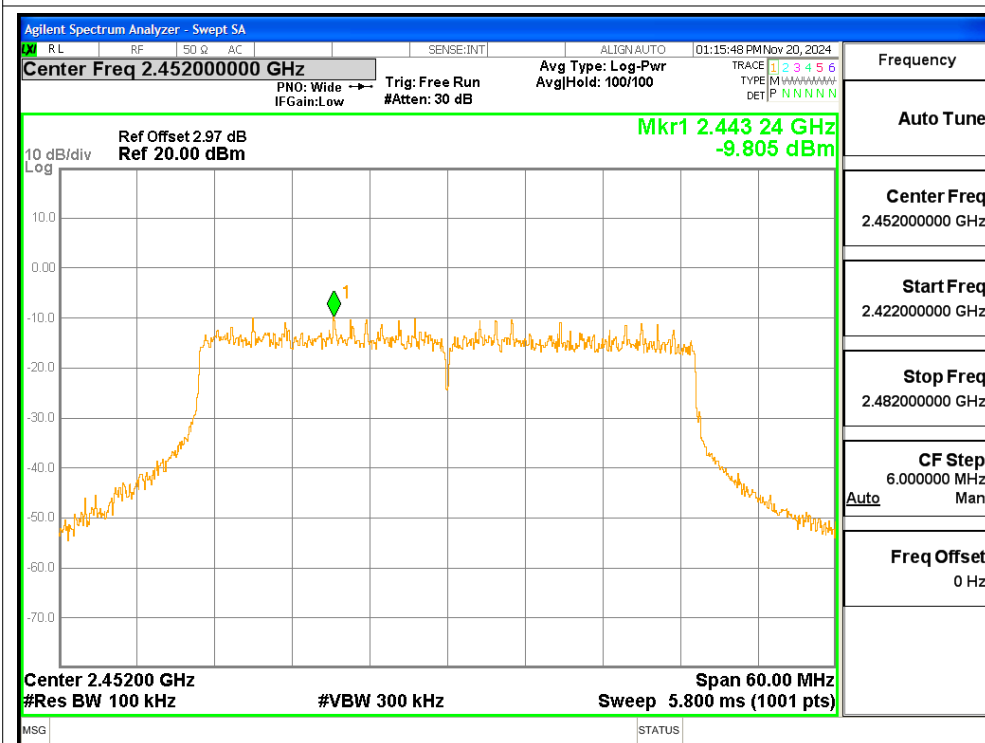
Band Edge NVNT ax40 2422MHz Ant1 Ref



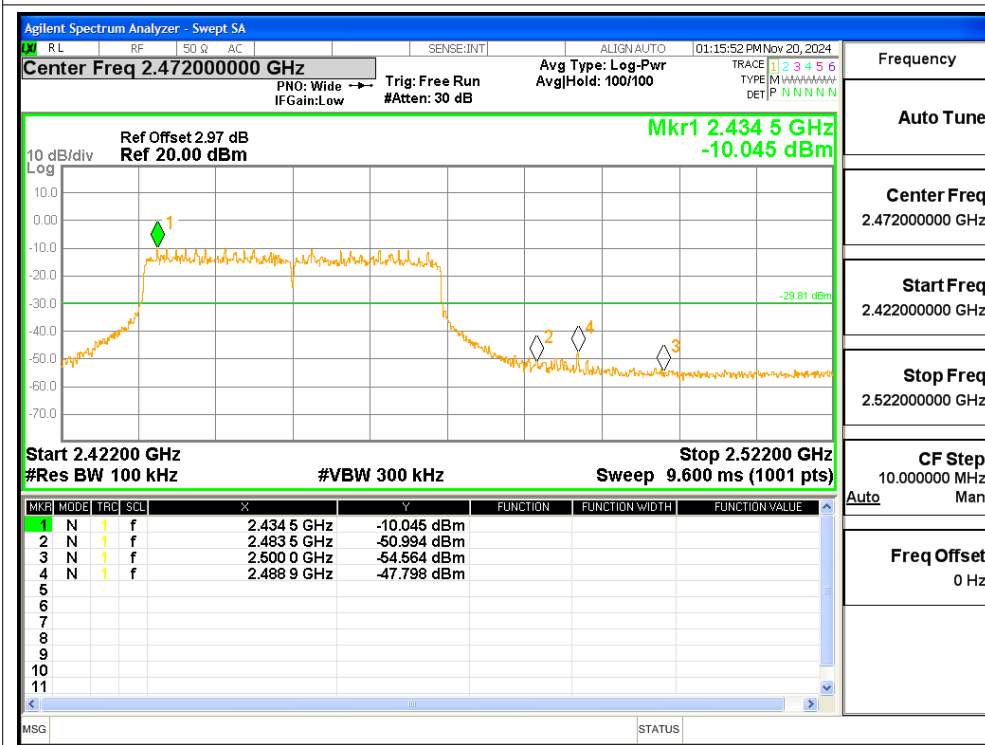
Band Edge NVNT ax40 2422MHz Ant1 Emission



Band Edge NVNT ax40 2452MHz Ant1 Ref



Band Edge NVNT ax40 2452MHz Ant1 Emission

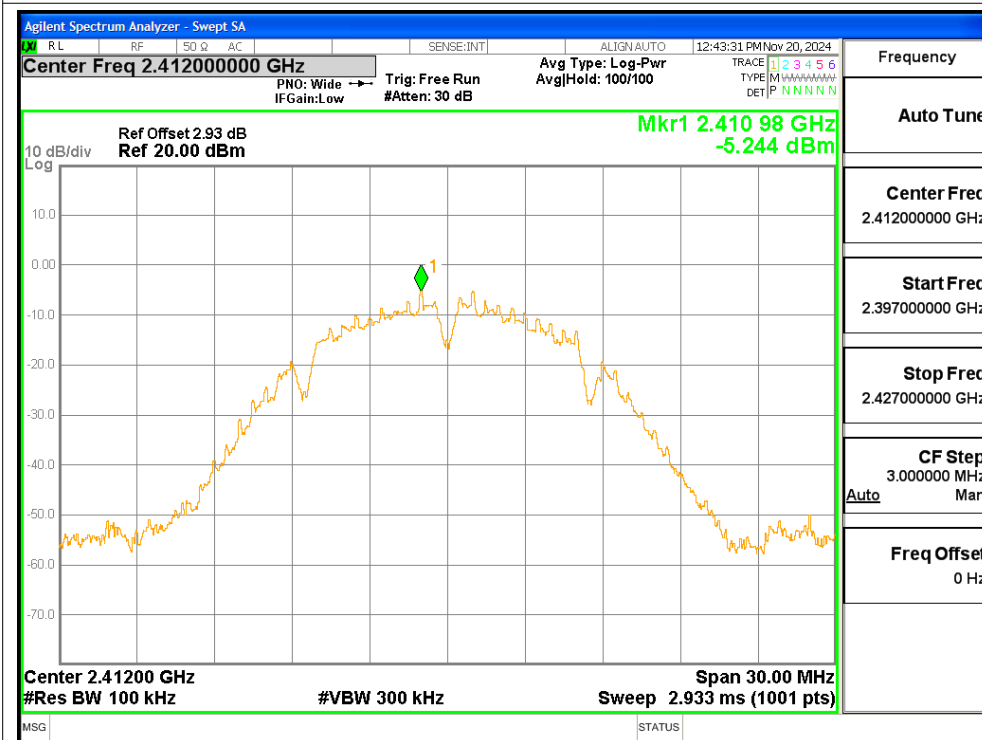


Conducted RF Spurious Emission

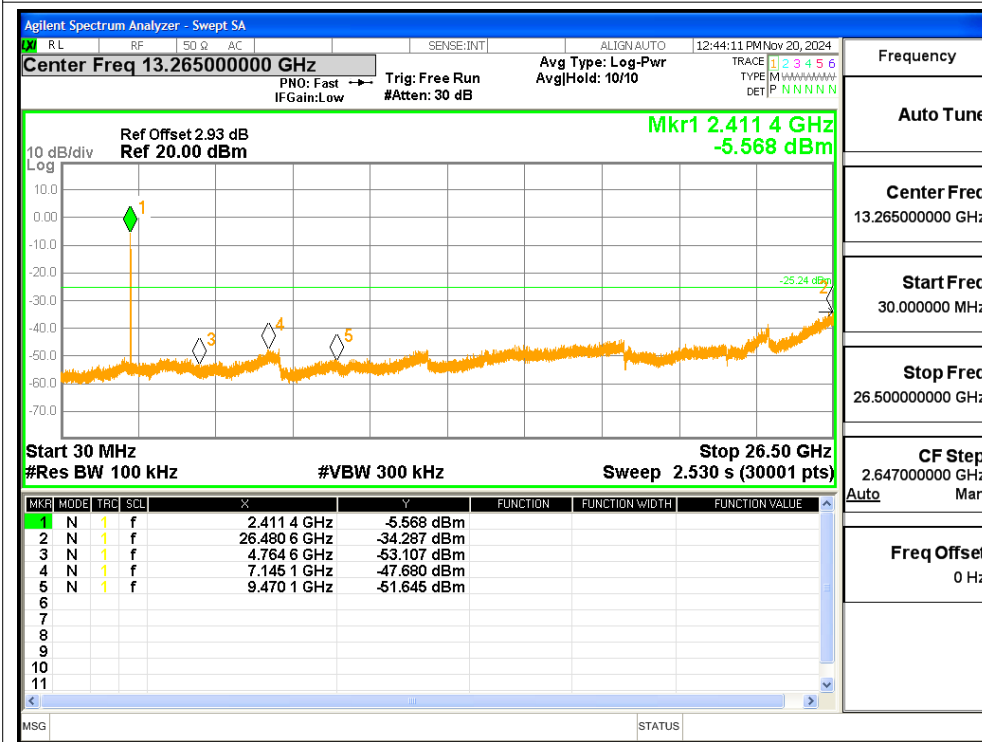
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-29.04	-20	Pass
		2437		-29.38	-20	Pass
		2462		-29.53	-20	Pass
	g	2412		-26.38	-20	Pass
		2437		-28.4	-20	Pass
		2462		-27.28	-20	Pass
	n20	2412		-26.84	-20	Pass
		2437		-27.37	-20	Pass
		2462		-26.96	-20	Pass
	n40	2422		-22.43	-20	Pass
		2437		-23.81	-20	Pass
		2452		-24.3	-20	Pass
	ax20	2412		-26.86	-20	Pass
		2437		-26.01	-20	Pass
		2462		-26.56	-20	Pass
	ax40	2422		-23.67	-20	Pass
		2437		-24.11	-20	Pass
		2452		-24.71	-20	Pass

Test Graphs

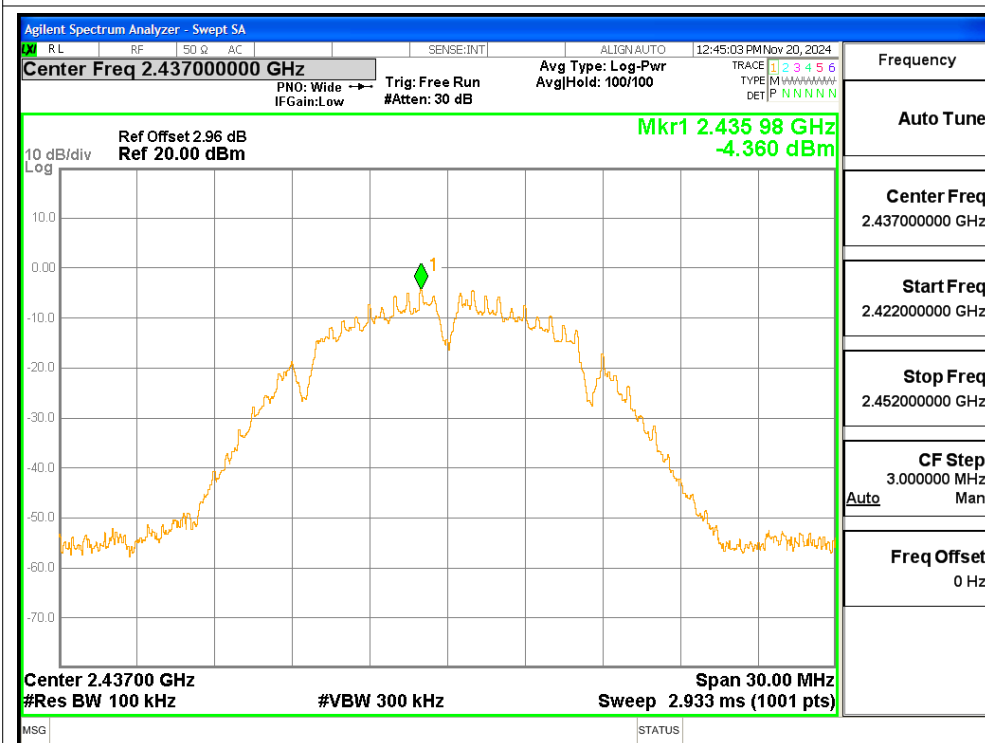
Tx. Spurious NVNT b 2412MHz Ant1 Ref



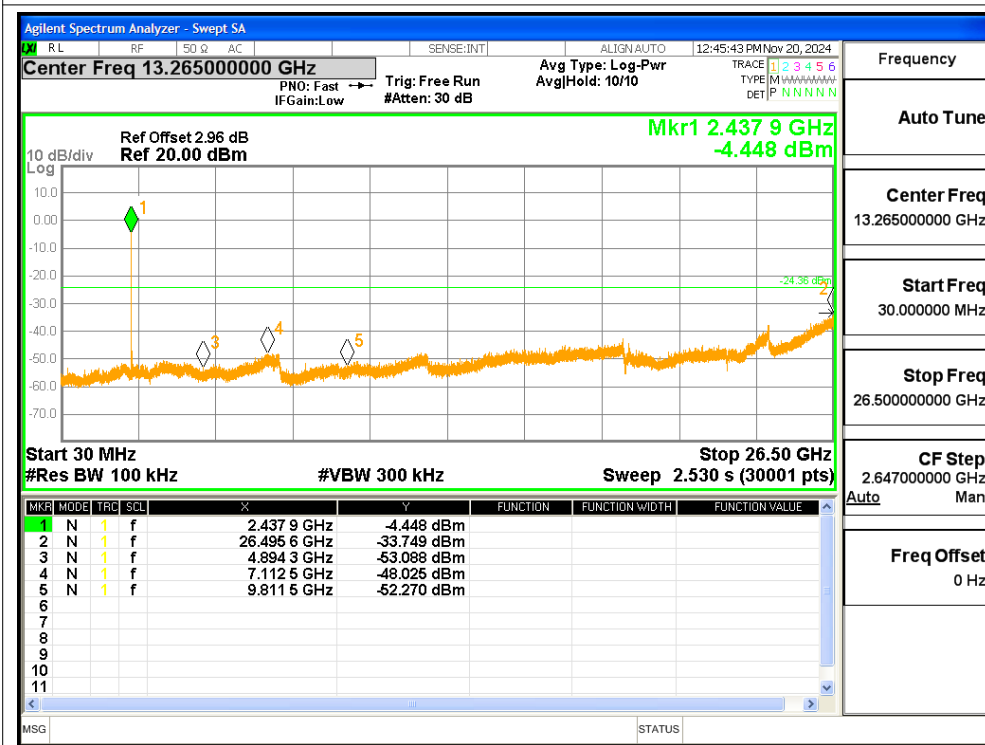
Tx. Spurious NVNT b 2412MHz Ant1 Emission



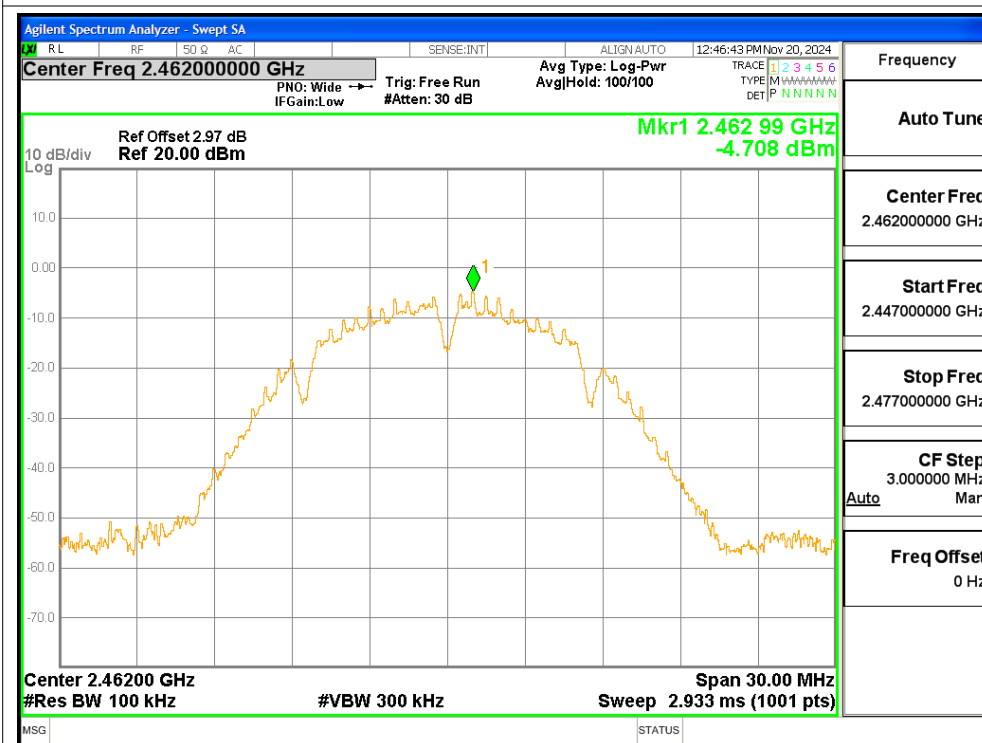
Tx. Spurious NVNT b 2437MHz Ant1 Ref



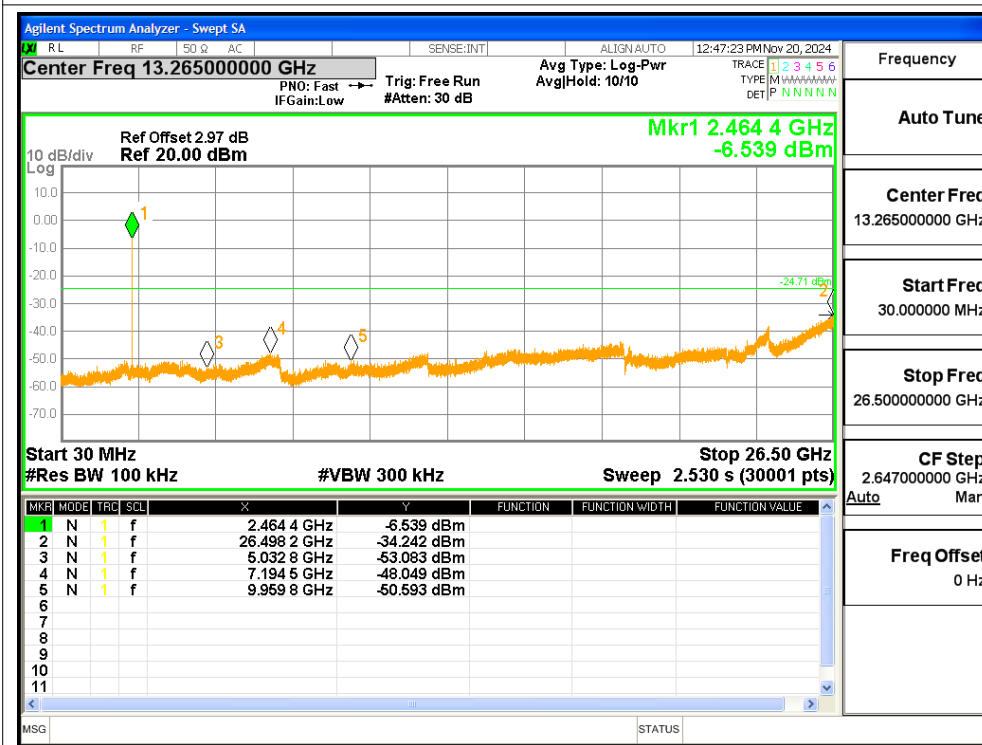
Tx. Spurious NVNT b 2437MHz Ant1 Emission



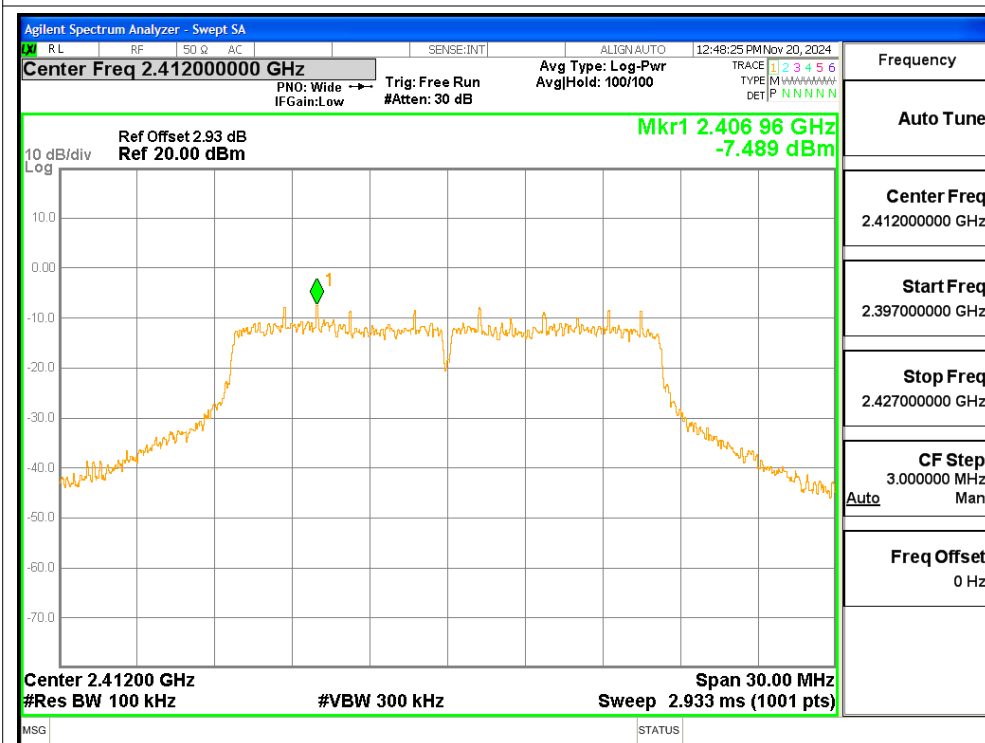
Tx. Spurious NVNT b 2462MHz Ant1 Ref



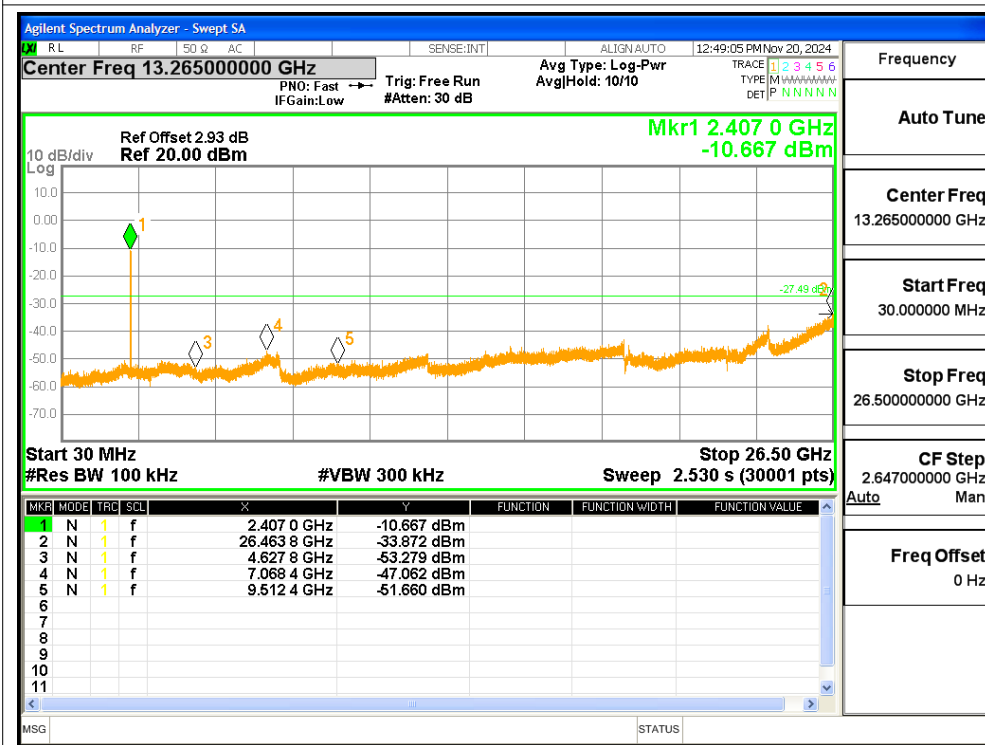
Tx. Spurious NVNT b 2462MHz Ant1 Emission



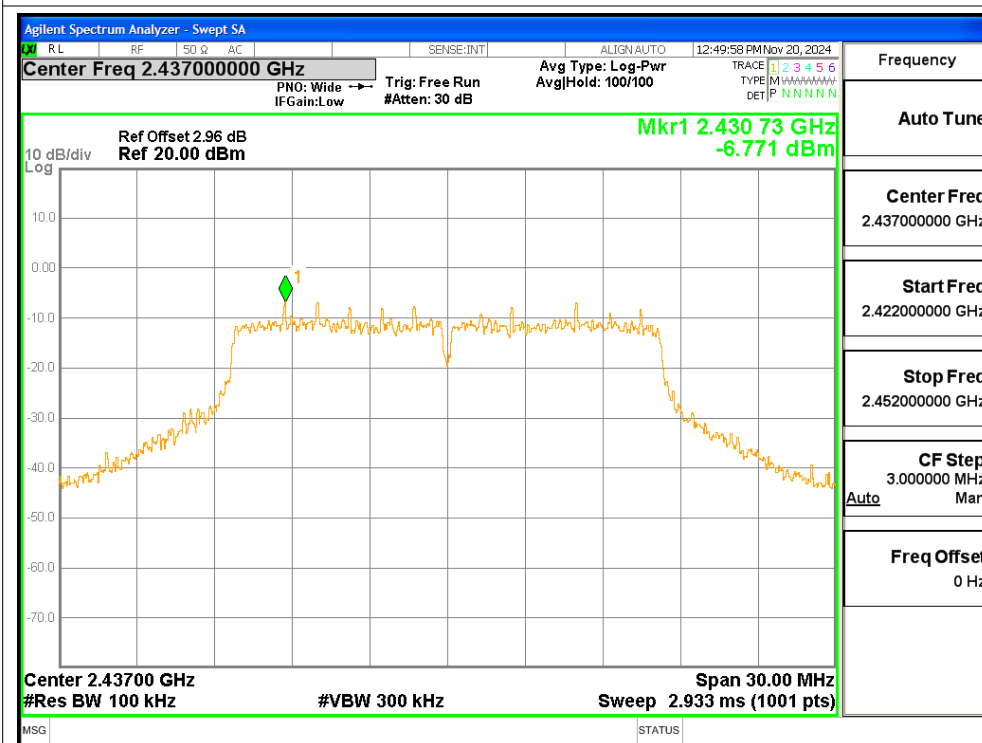
Tx. Spurious NVNT g 2412MHz Ant1 Ref



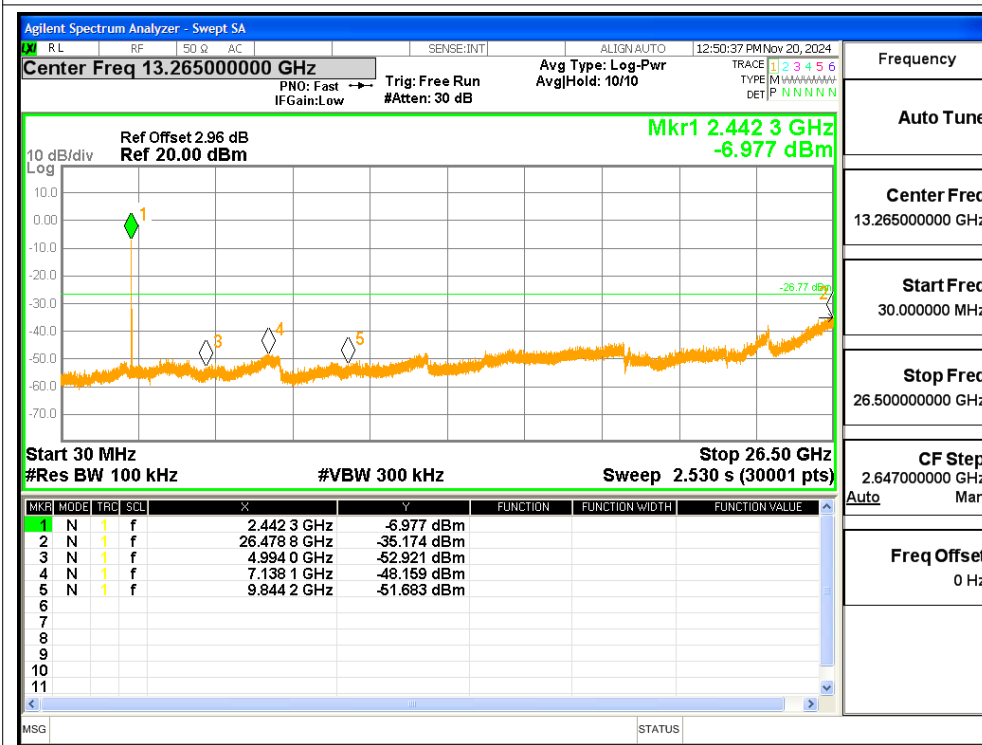
Tx. Spurious NVNT g 2412MHz Ant1 Emission



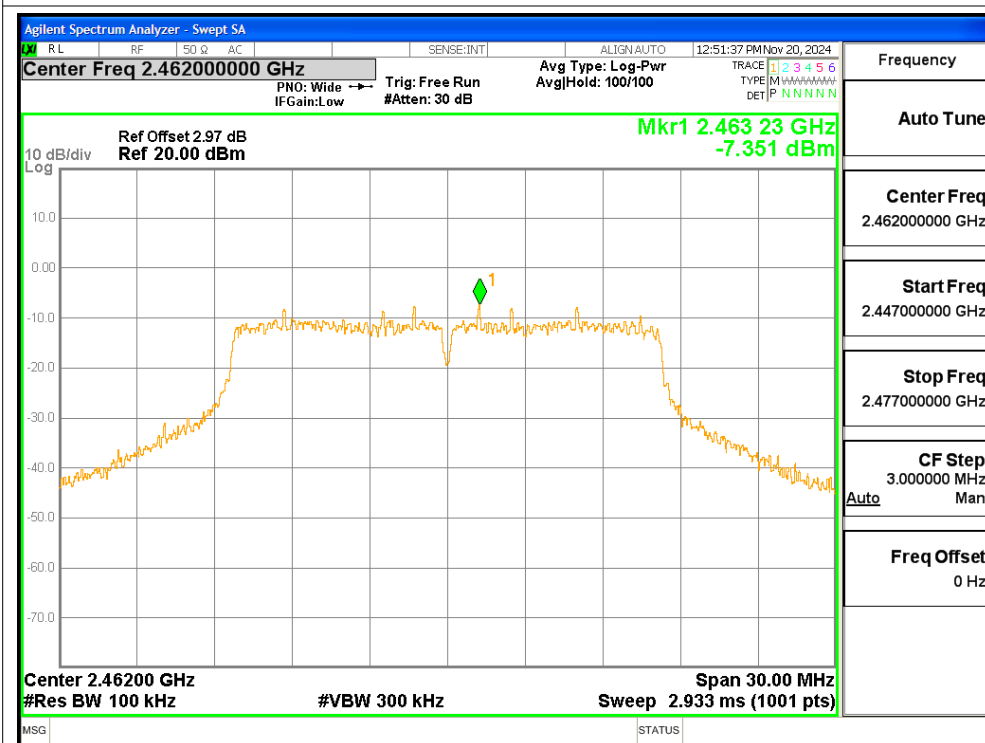
Tx. Spurious NVNT g 2437MHz Ant1 Ref



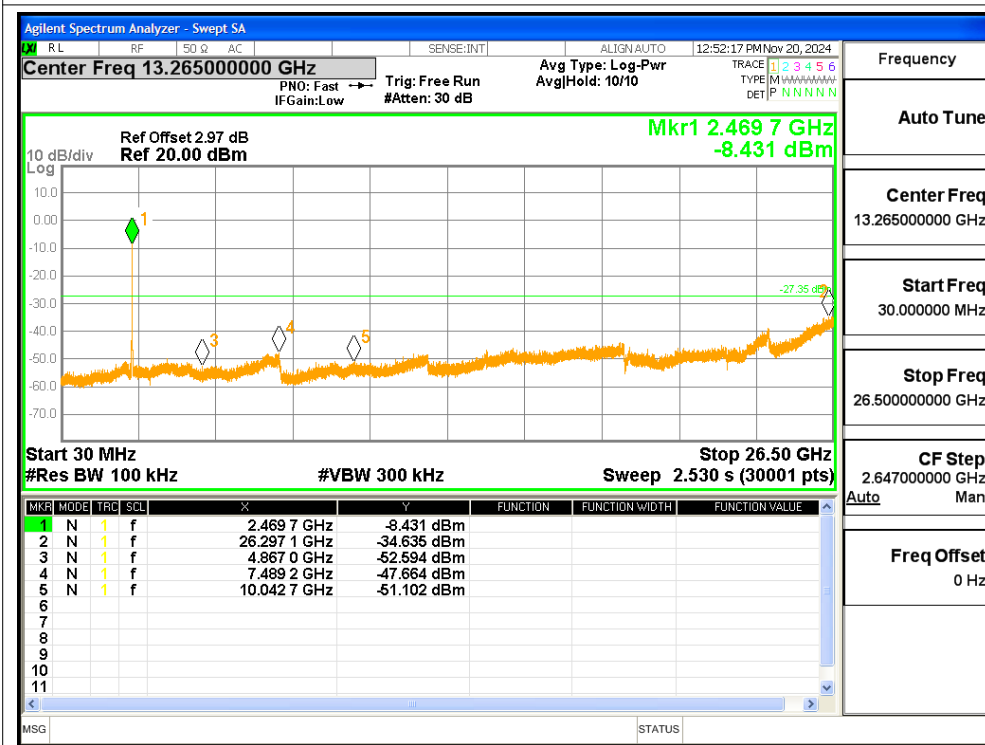
Tx. Spurious NVNT g 2437MHz Ant1 Emission



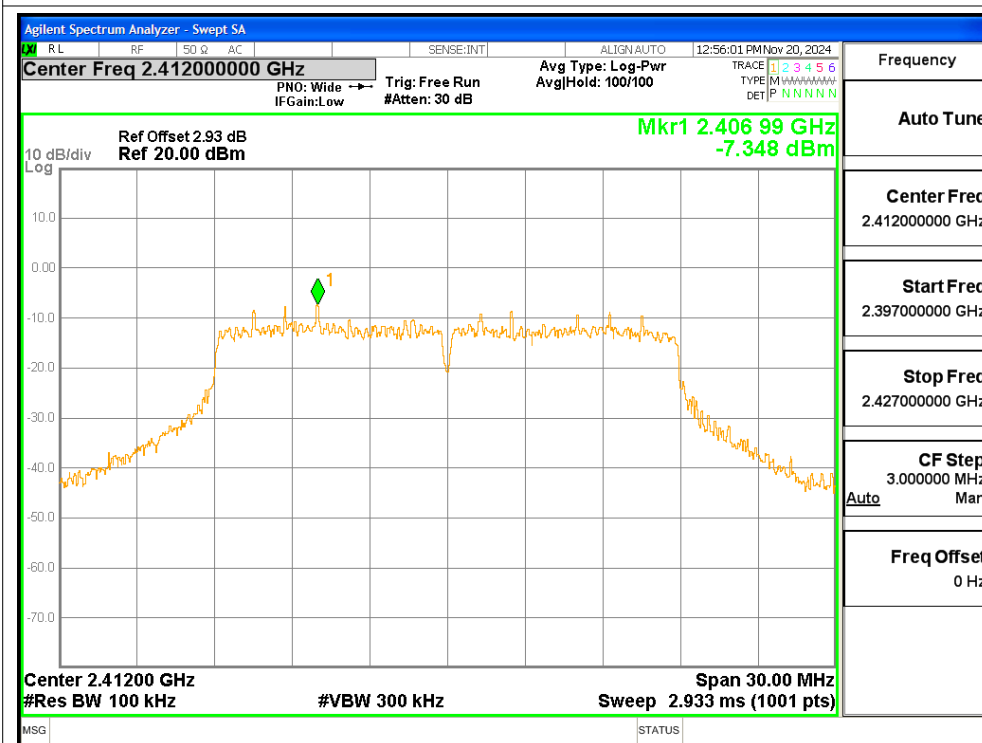
Tx. Spurious NVNT g 2462MHz Ant1 Ref



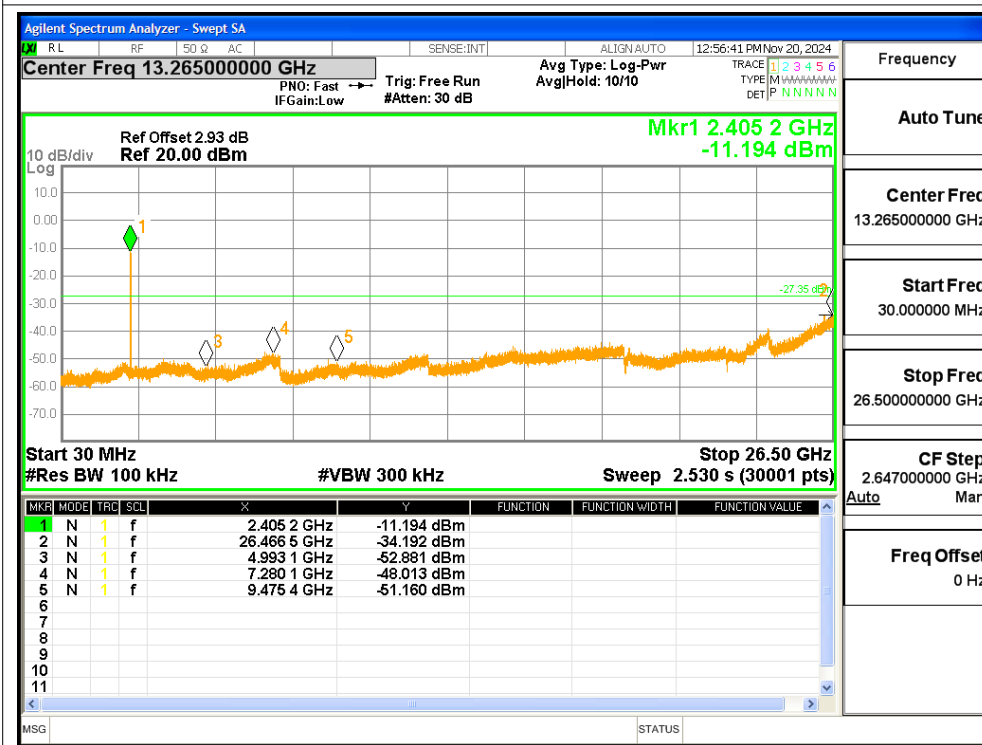
Tx. Spurious NVNT g 2462MHz Ant1 Emission



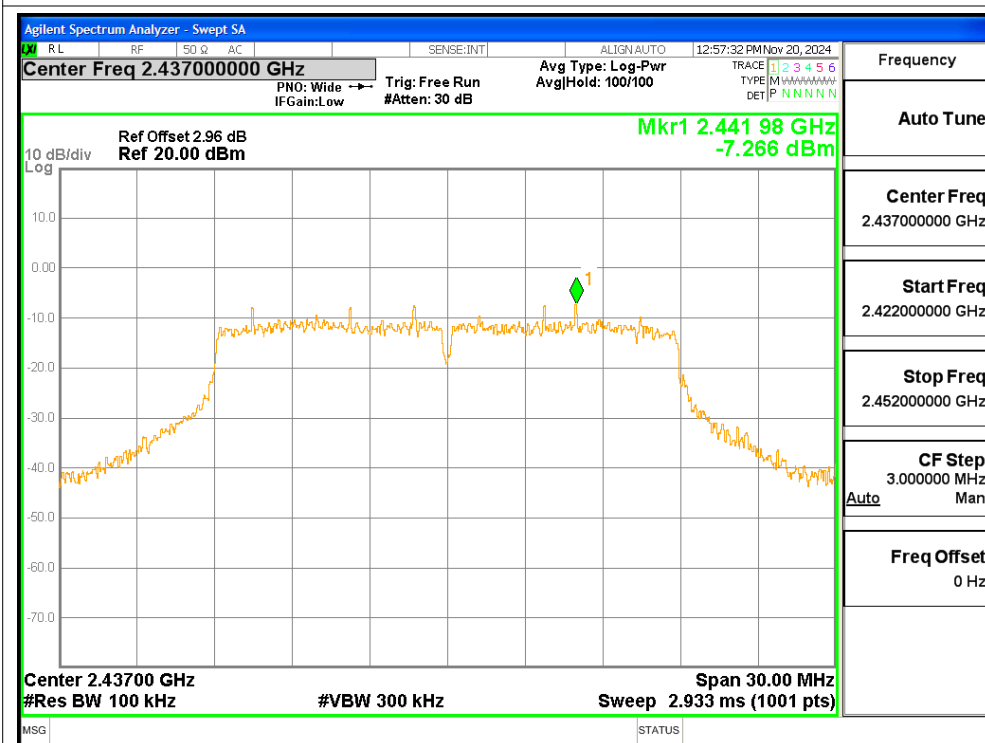
Tx. Spurious NVNT n20 2412MHz Ant1 Ref



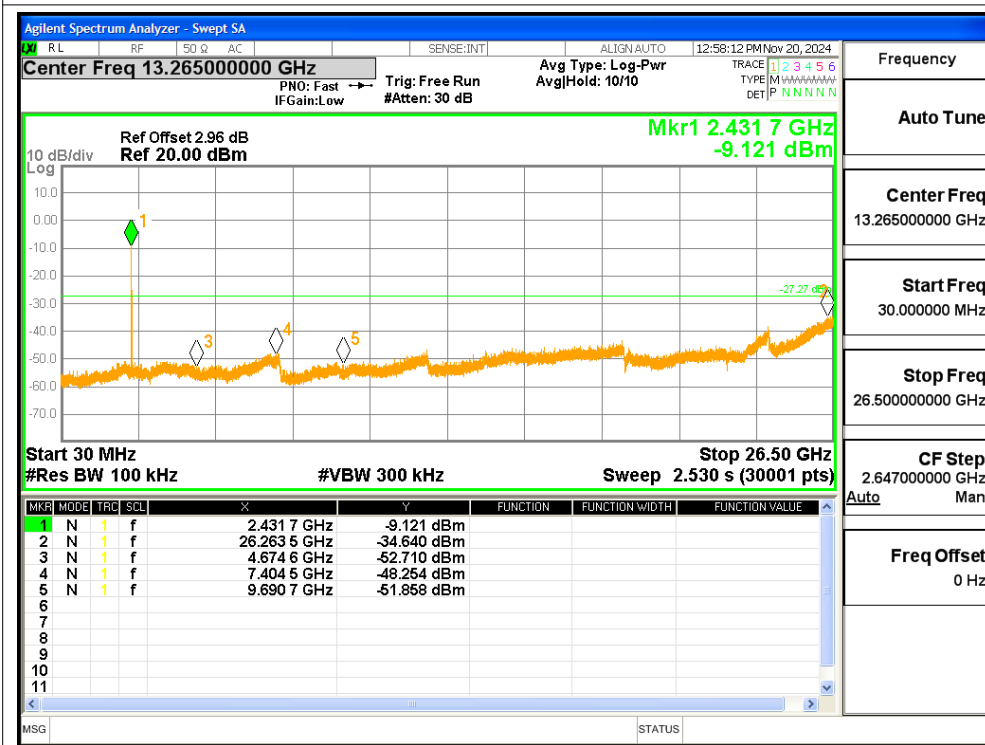
Tx. Spurious NVNT n20 2412MHz Ant1 Emission



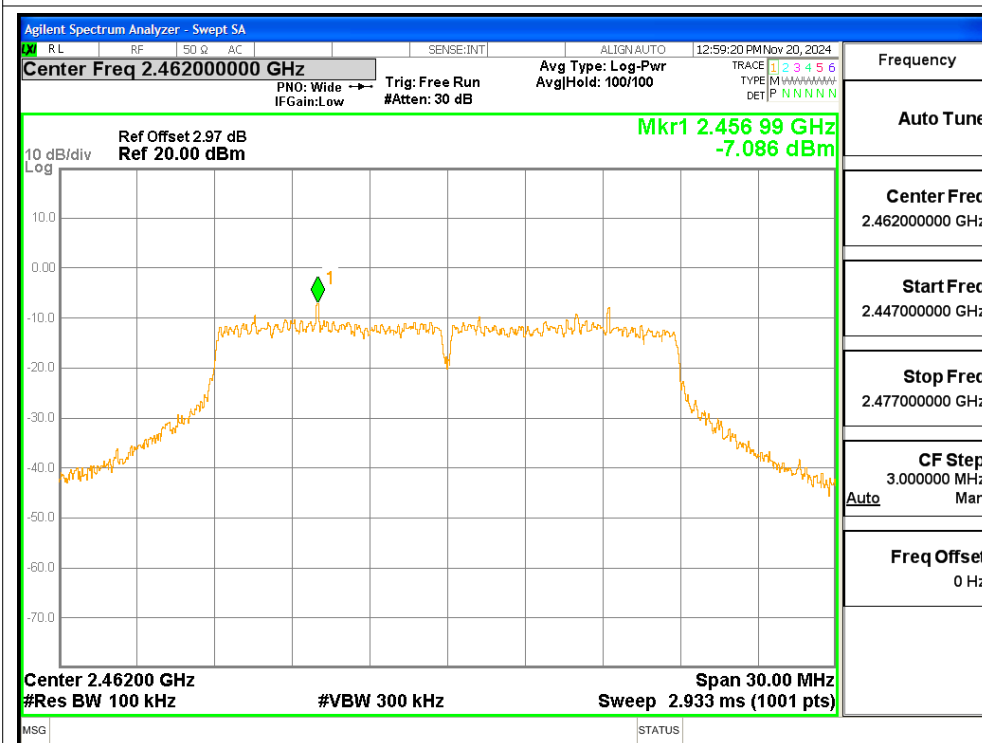
Tx. Spurious NVNT n20 2437MHz Ant1 Ref



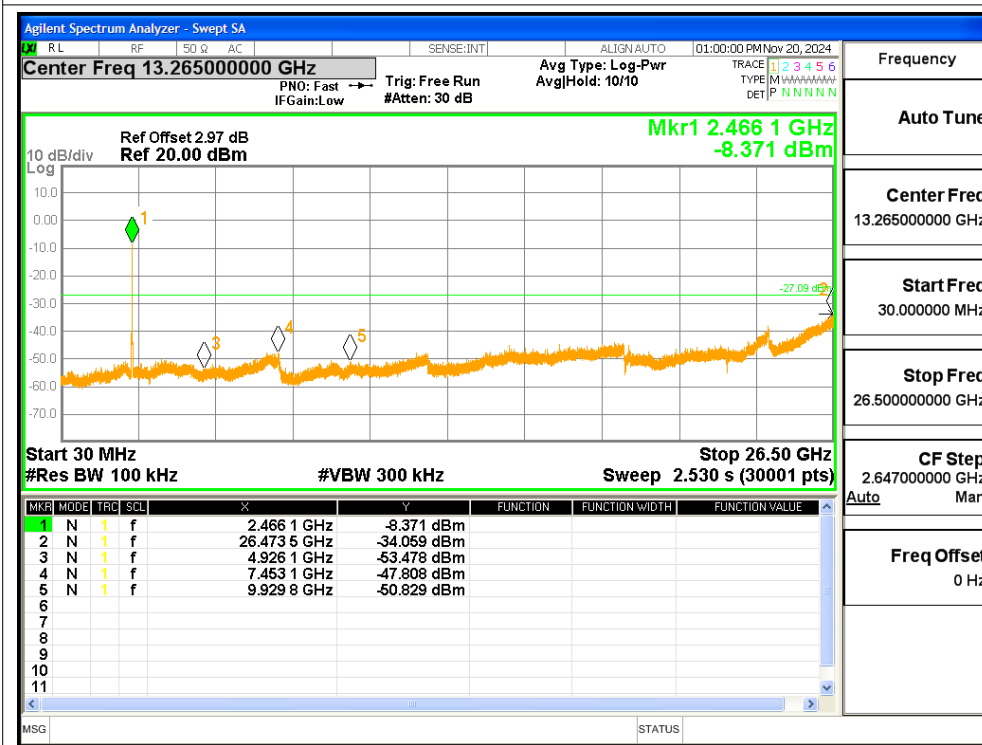
Tx. Spurious NVNT n20 2437MHz Ant1 Emission



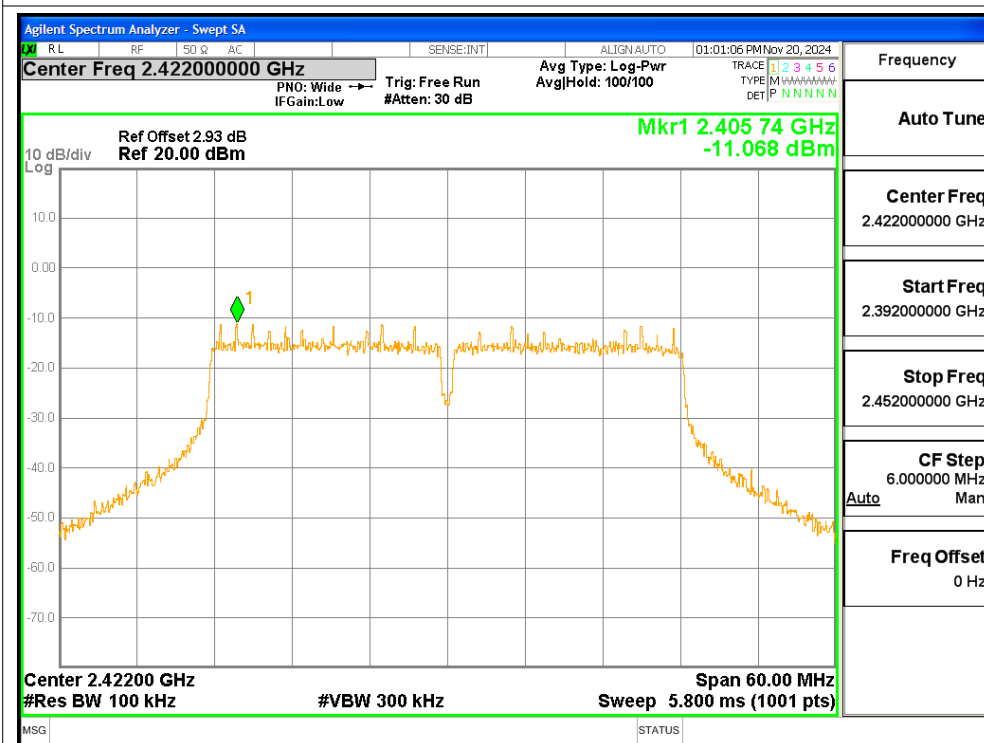
Tx. Spurious NVNT n20 2462MHz Ant1 Ref



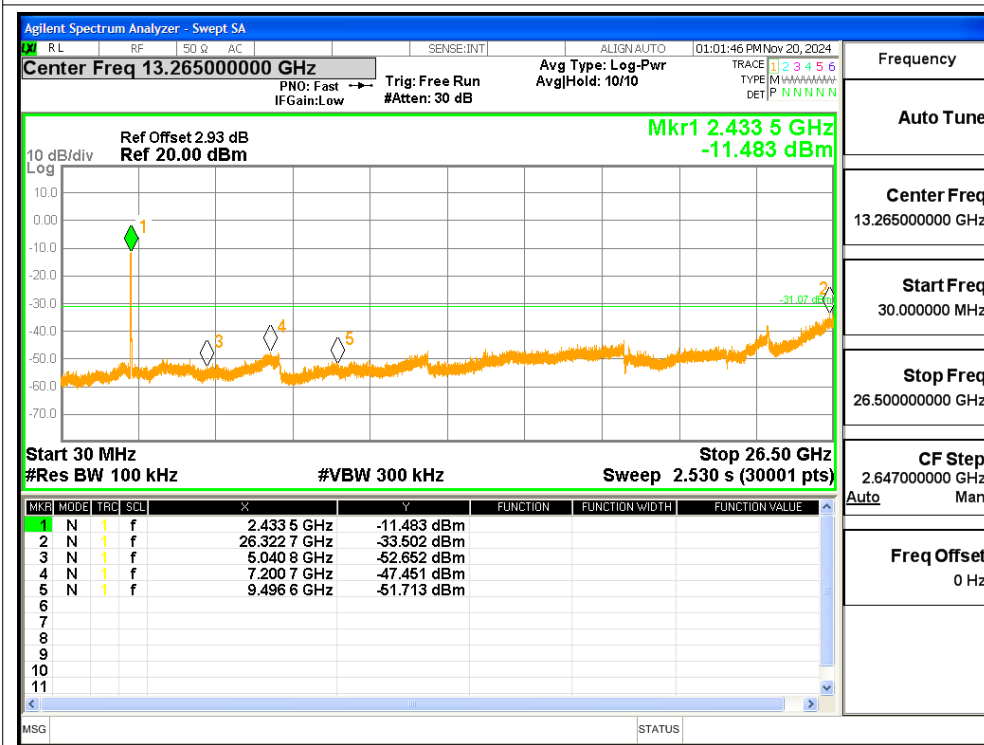
Tx. Spurious NVNT n20 2462MHz Ant1 Emission



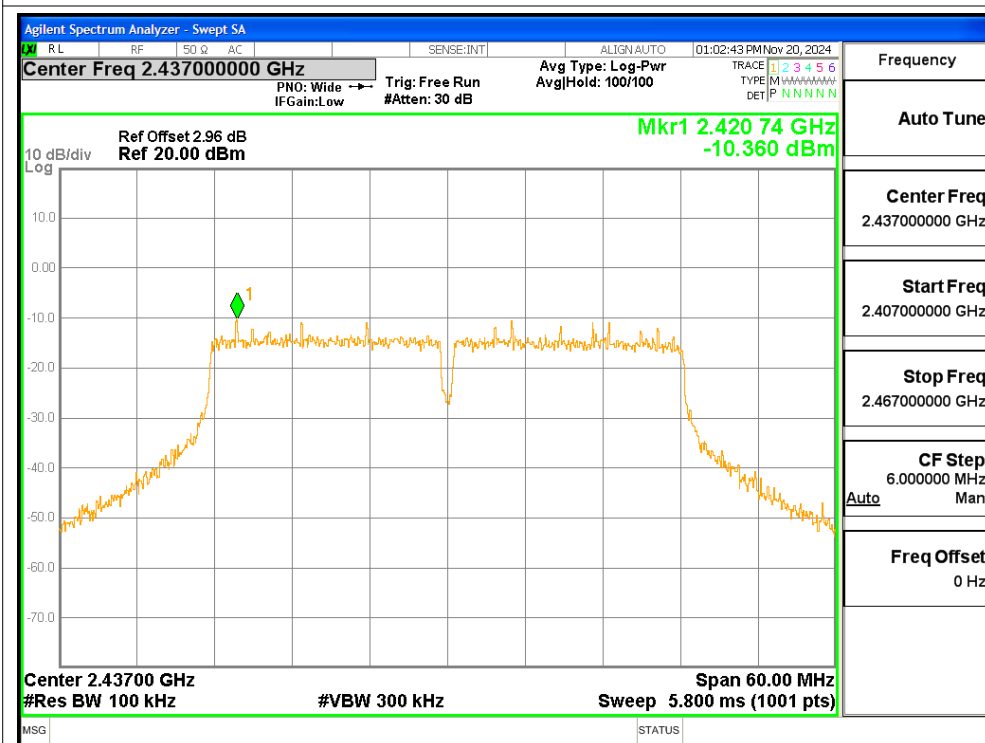
Tx. Spurious NVNT n40 2422MHz Ant1 Ref



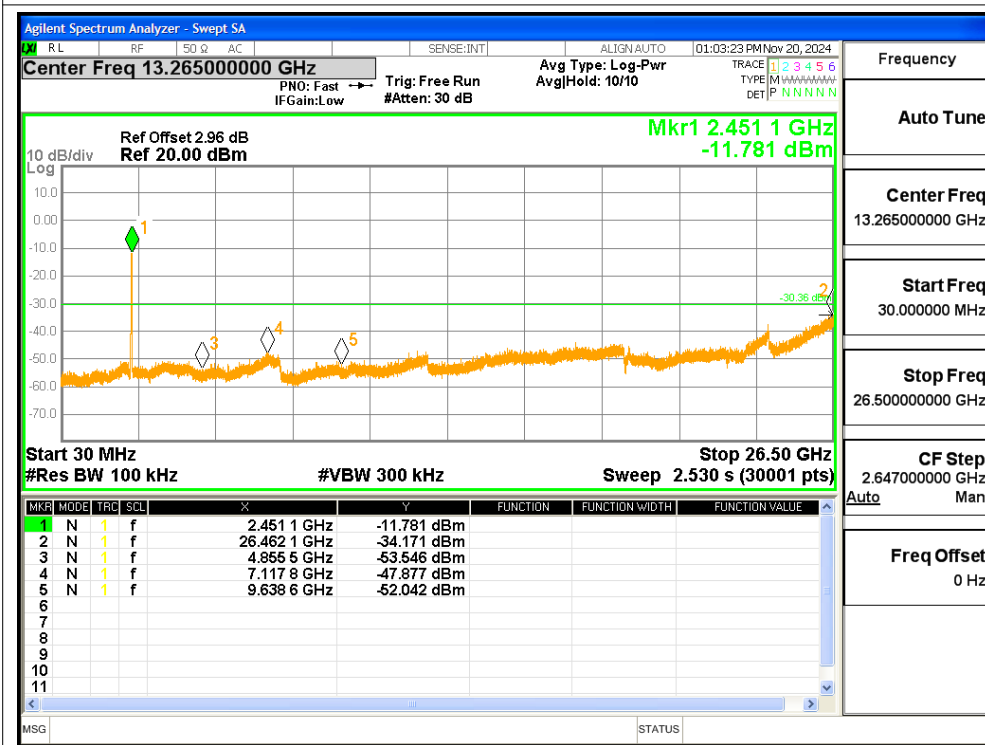
Tx. Spurious NVNT n40 2422MHz Ant1 Emission



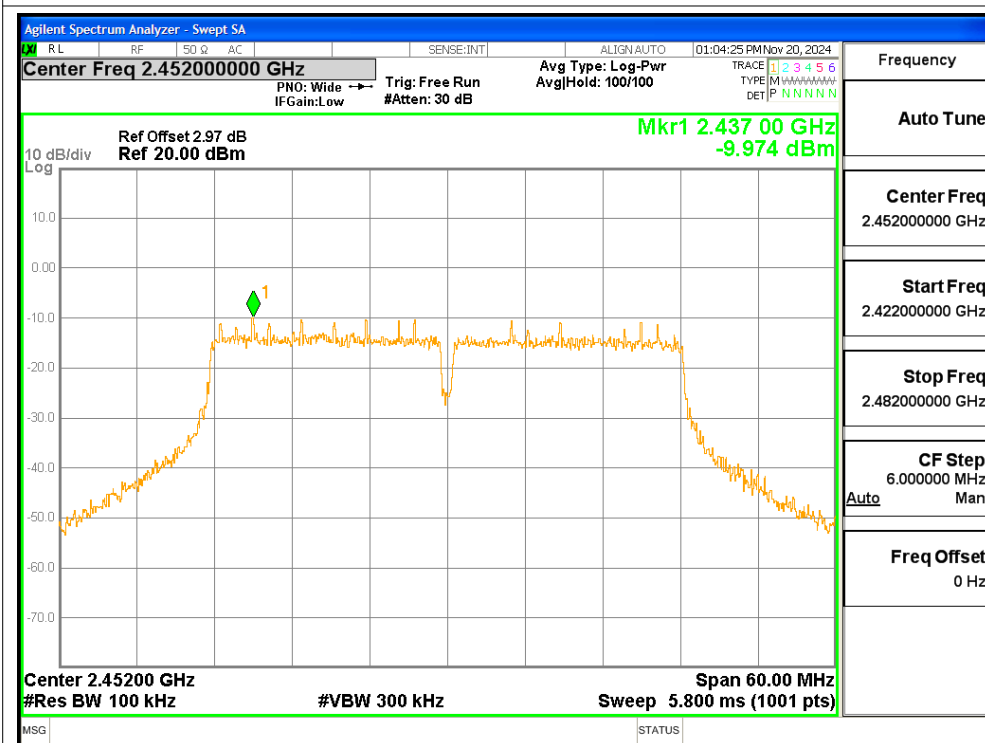
Tx. Spurious NVNT n40 2437MHz Ant1 Ref



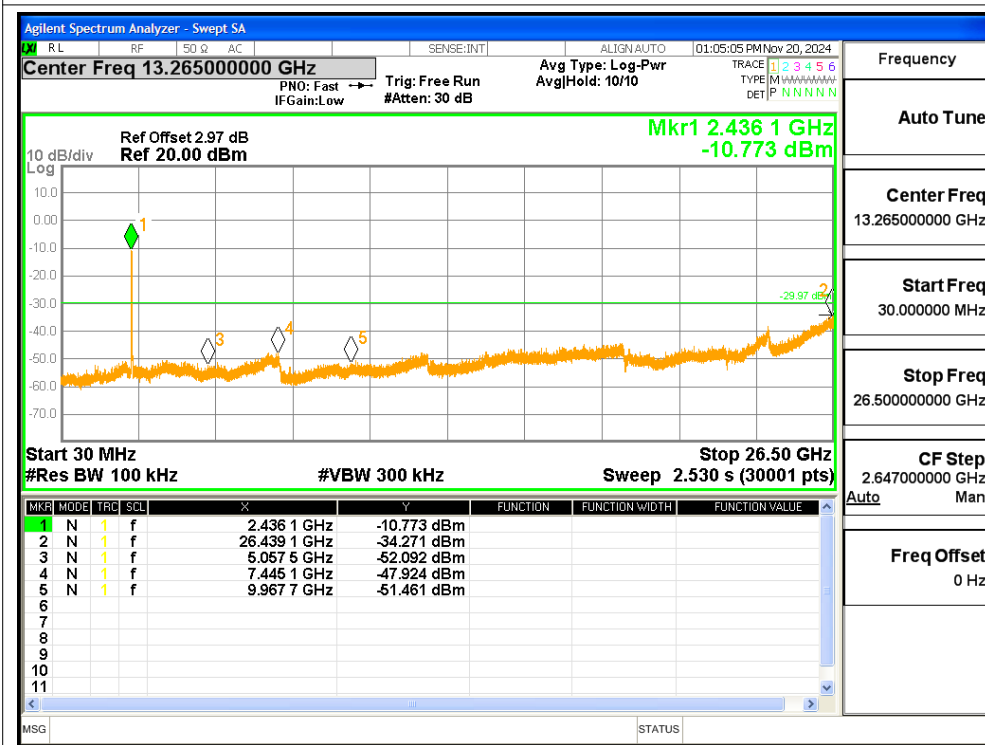
Tx. Spurious NVNT n40 2437MHz Ant1 Emission



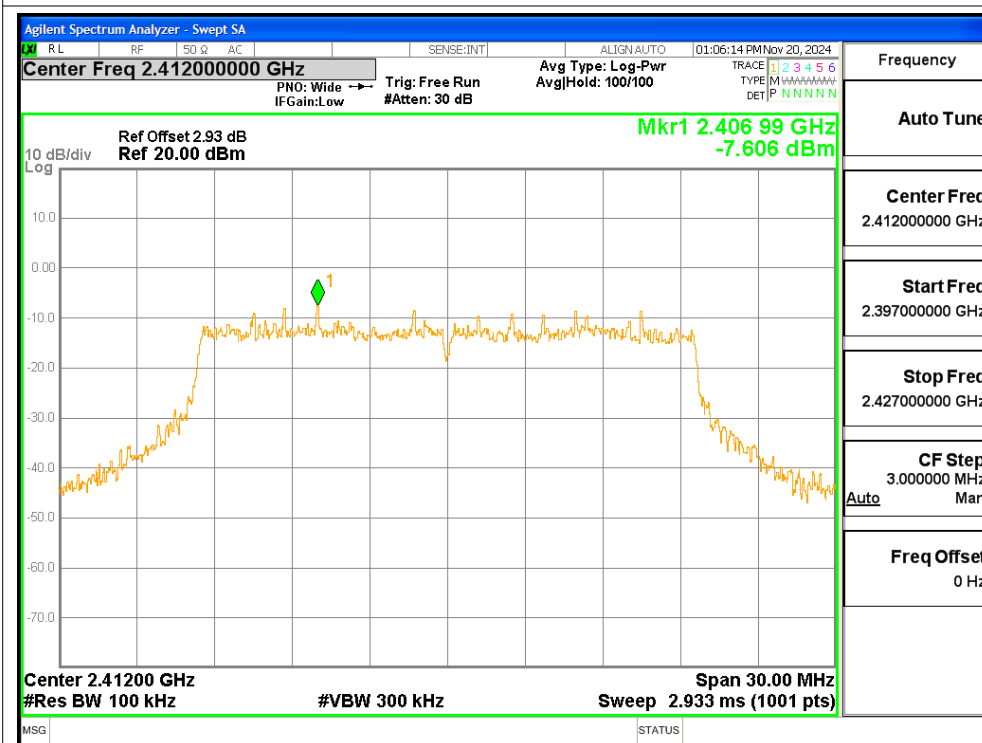
Tx. Spurious NVNT n40 2452MHz Ant1 Ref



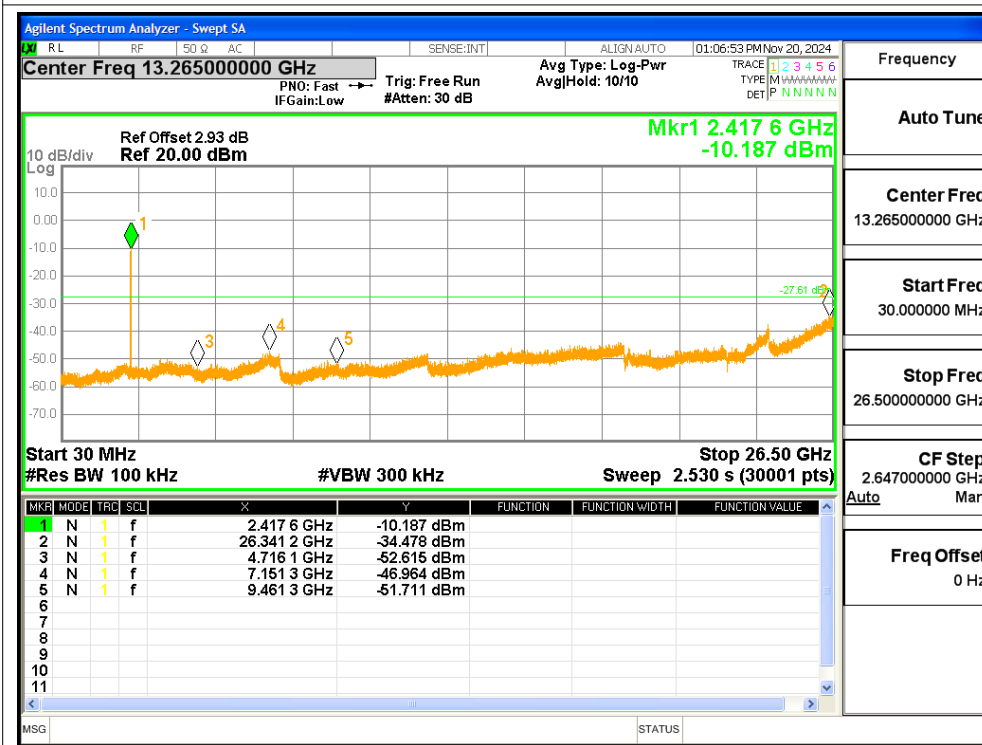
Tx. Spurious NVNT n40 2452MHz Ant1 Emission



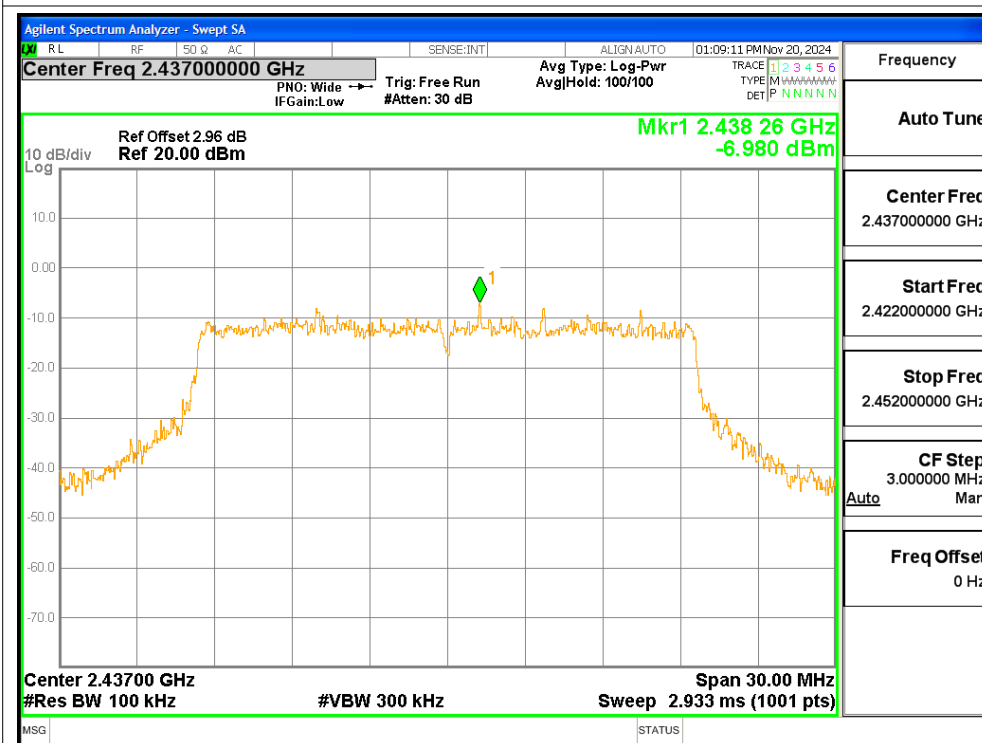
Tx. Spurious NVNT ax20 2412MHz Ant1 Ref



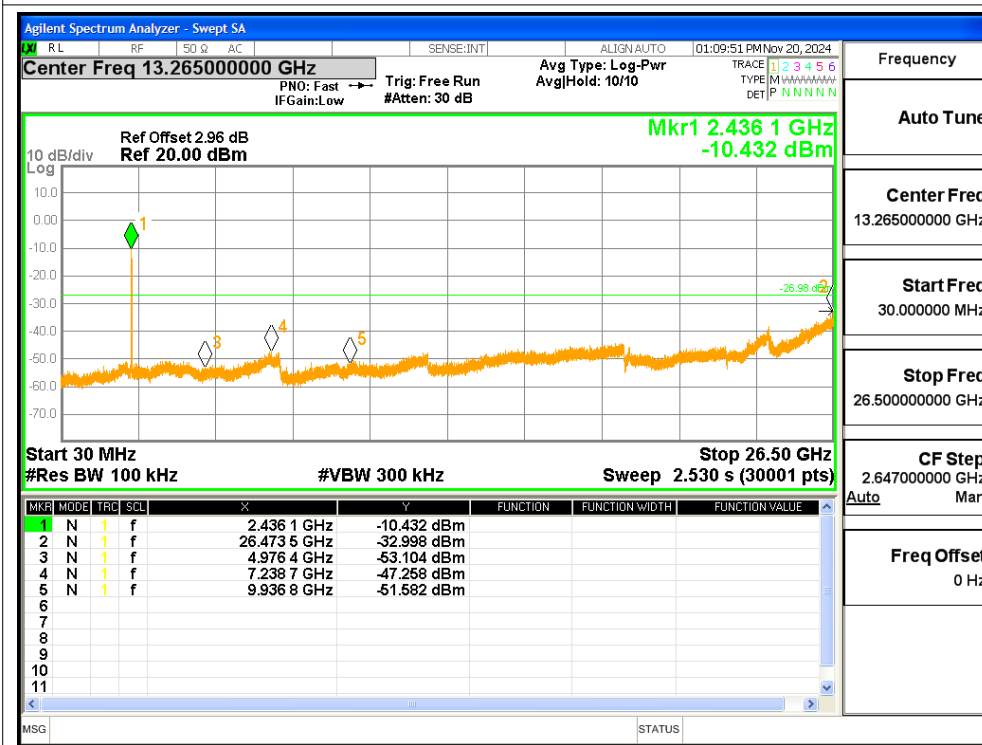
Tx. Spurious NVNT ax20 2412MHz Ant1 Emission



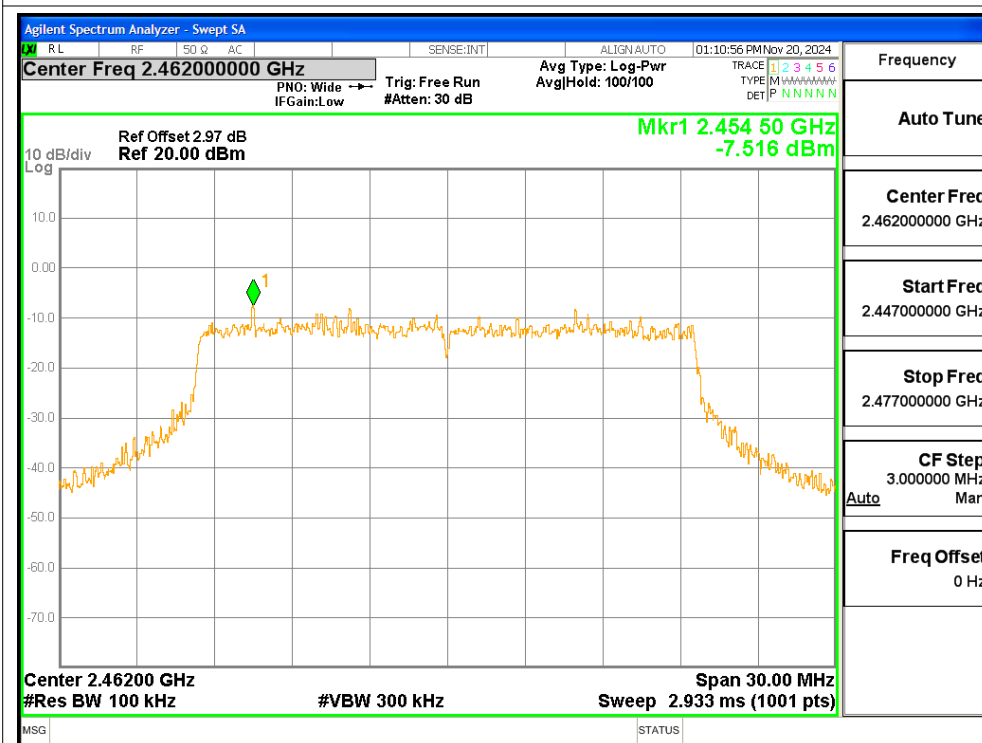
Tx. Spurious NVNT ax20 2437MHz Ant1 Ref



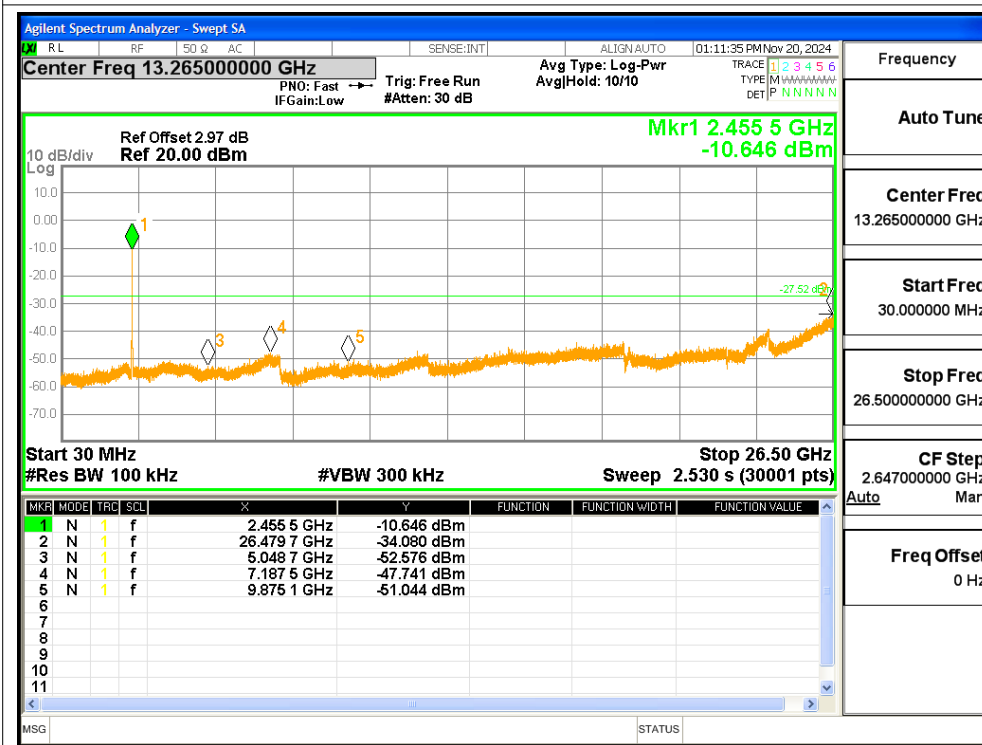
Tx. Spurious NVNT ax20 2437MHz Ant1 Emission



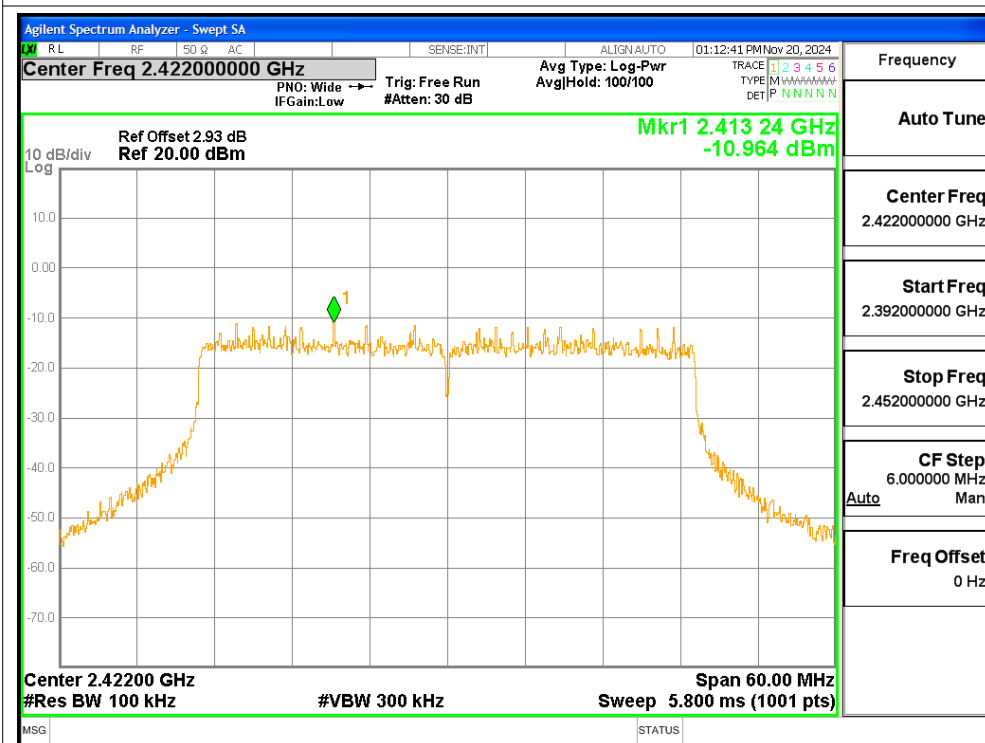
Tx. Spurious NVNT ax20 2462MHz Ant1 Ref



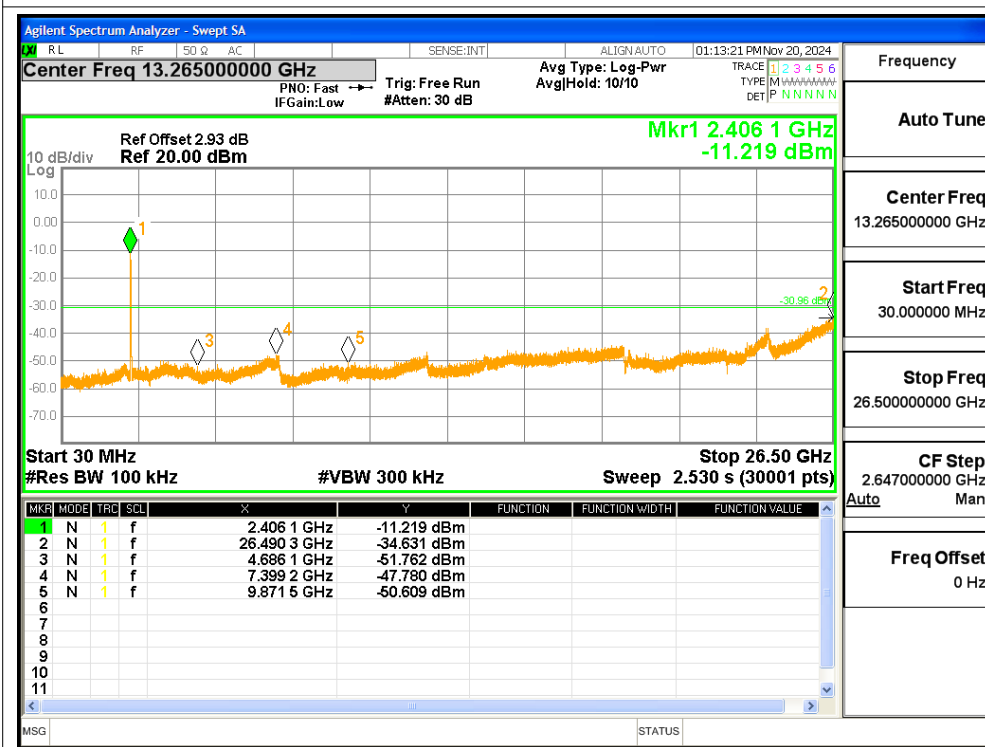
Tx. Spurious NVNT ax20 2462MHz Ant1 Emission



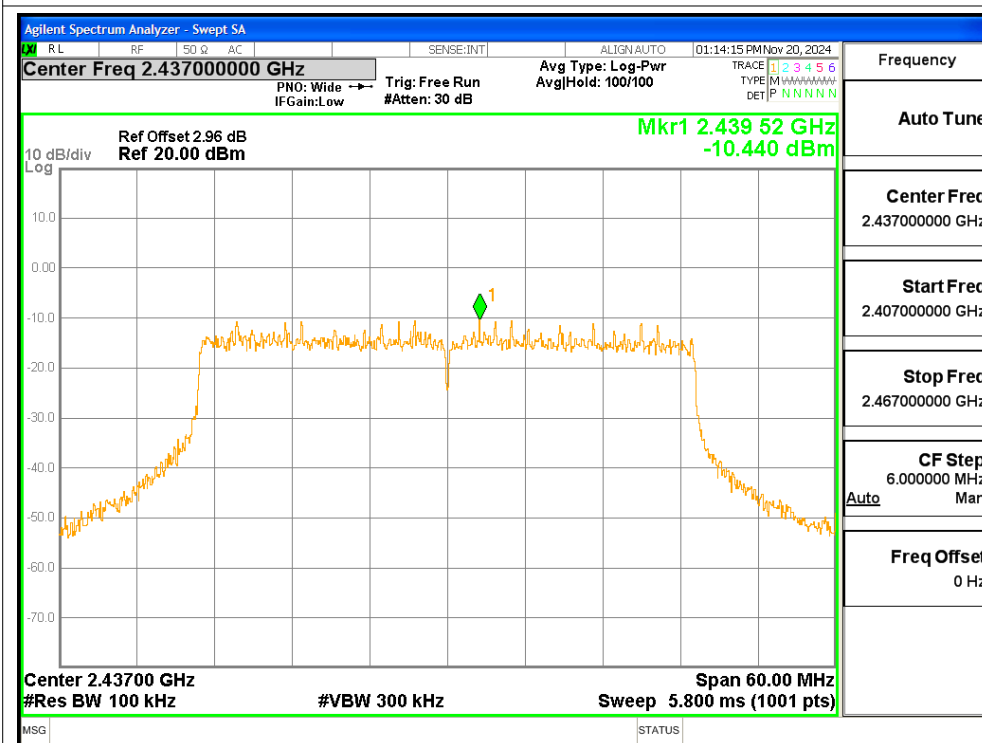
Tx. Spurious NVNT ax40 2422MHz Ant1 Ref



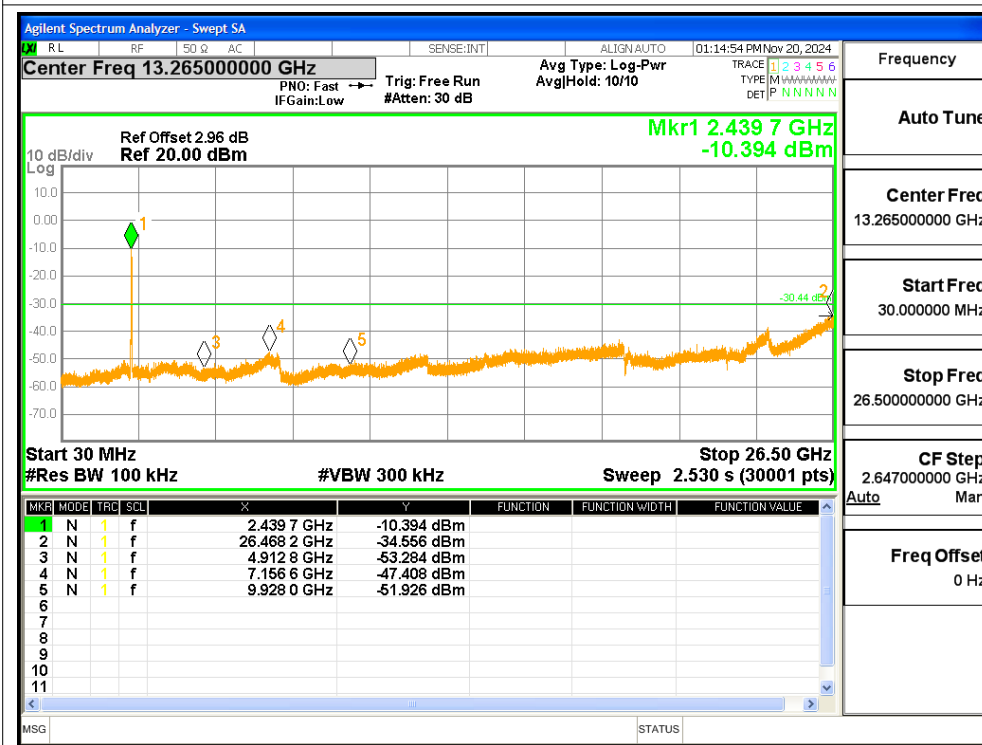
Tx. Spurious NVNT ax40 2422MHz Ant1 Emission



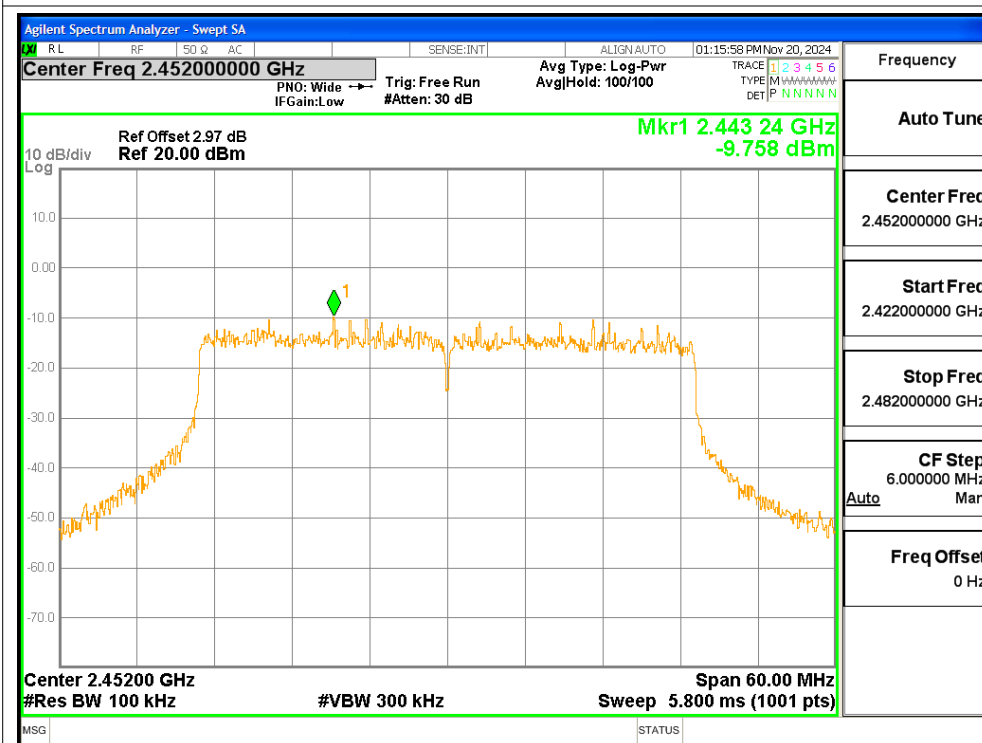
Tx. Spurious NVNT ax40 2437MHz Ant1 Ref



Tx. Spurious NVNT ax40 2437MHz Ant1 Emission



Tx. Spurious NVNT ax40 2452MHz Ant1 Ref



Tx. Spurious NVNT ax40 2452MHz Ant1 Emission

