

Appendix A for 2.4GWIFI Test Data

Product Name: Notebook

Test Model:A14

Environmental Conditions

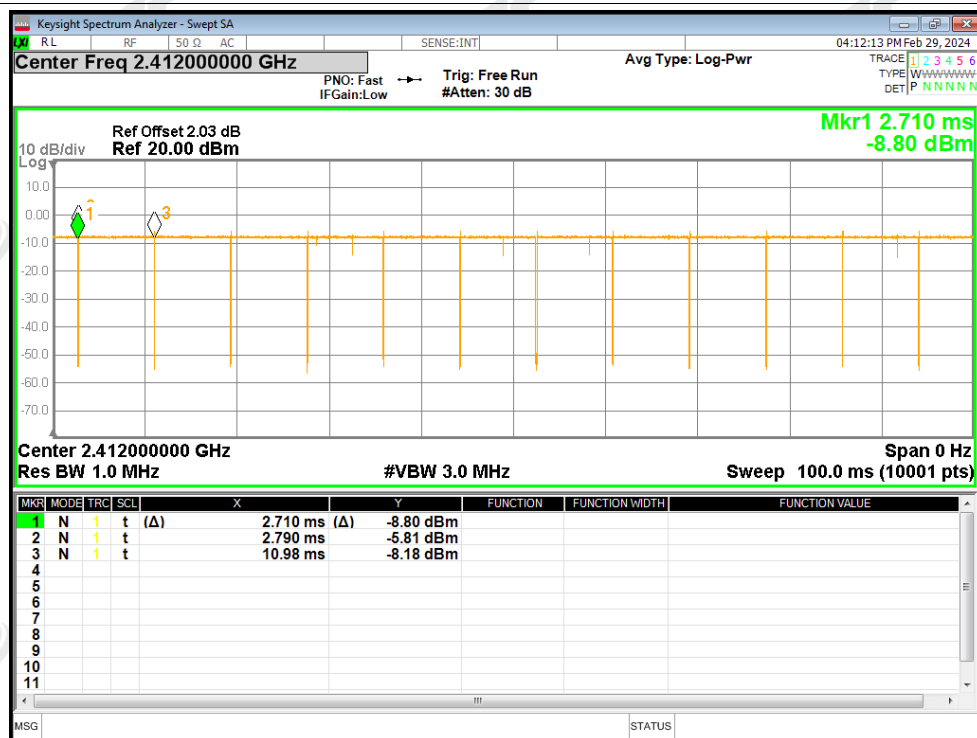
Temperature:	23.8℃
Relative Humidity:	52%
ATM Pressure:	101.0 kPa
Test Engineer:	Leon Li
Supervised by:	Baret Wu

**A1.Duty Cycle**

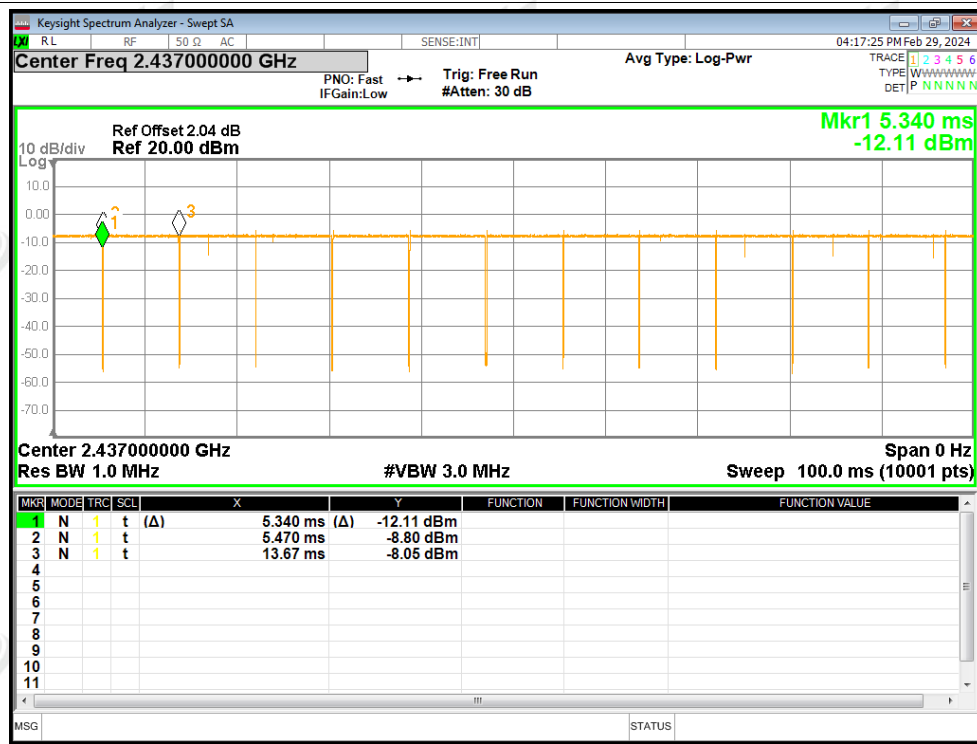
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	b	2412	Ant1	99.03	0
NVNT	b	2437	Ant1	98.44	0
NVNT	b	2462	Ant1	98.68	0
NVNT	b	2412	Ant2	98.96	0
NVNT	b	2437	Ant2	99.44	0
NVNT	b	2462	Ant2	99.04	0
NVNT	g	2412	Ant1	85	0.71
NVNT	g	2437	Ant1	91.28	0.4
NVNT	g	2462	Ant1	87.74	0.57
NVNT	g	2412	Ant2	95.37	0.21
NVNT	g	2437	Ant2	94.06	0.27
NVNT	g	2462	Ant2	96.24	0.17
NVNT	n20	2412	Ant1	95.5	0.2
NVNT	n20	2437	Ant1	97.45	0.11
NVNT	n20	2462	Ant1	95.5	0.2
NVNT	n20	2412	Ant2	96.95	0.13
NVNT	n20	2437	Ant2	93.63	0.29
NVNT	n20	2462	Ant2	92.72	0.33
NVNT	n40	2422	Ant1	90.1	0.45
NVNT	n40	2437	Ant1	89.22	0.5
NVNT	n40	2452	Ant1	91.92	0.37
NVNT	n40	2422	Ant2	88.24	0.54
NVNT	n40	2437	Ant2	86.67	0.62
NVNT	n40	2452	Ant2	88.24	0.54

Test Graphs

Duty Cycle NVNT b 2412MHz Ant1

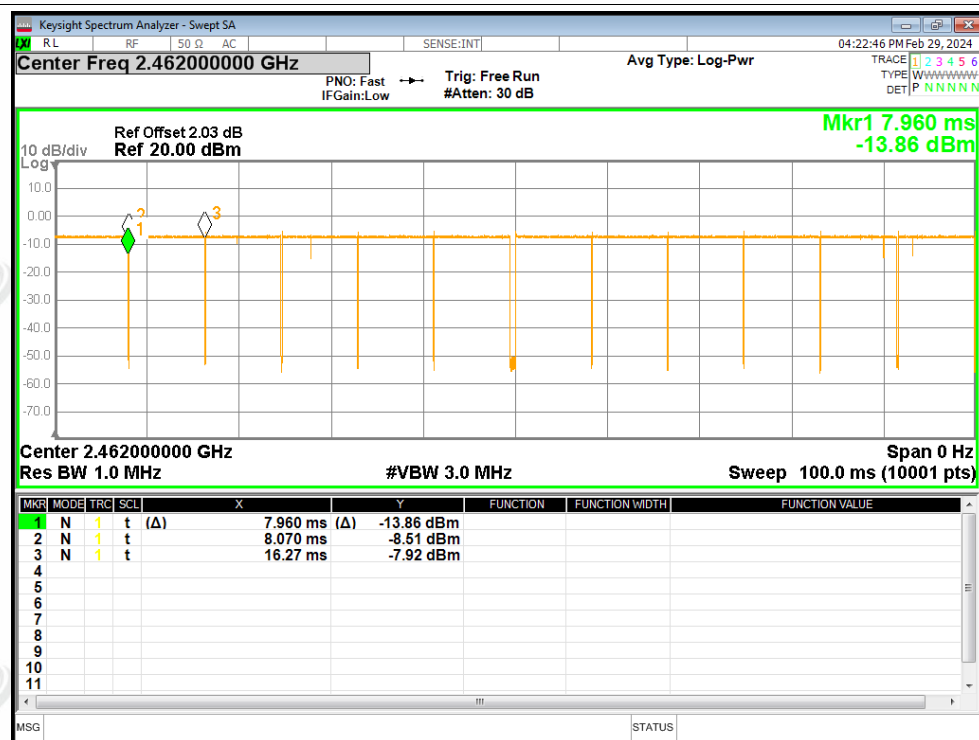


Duty Cycle NVNT b 2437MHz Ant1

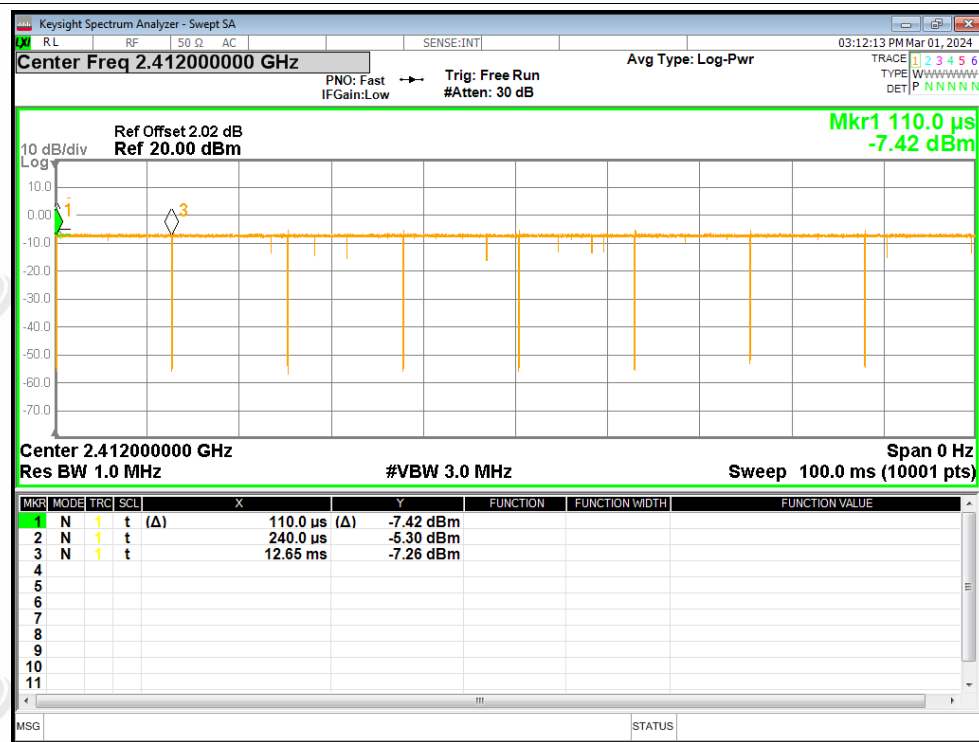




Duty Cycle NVNT b 2462MHz Ant1

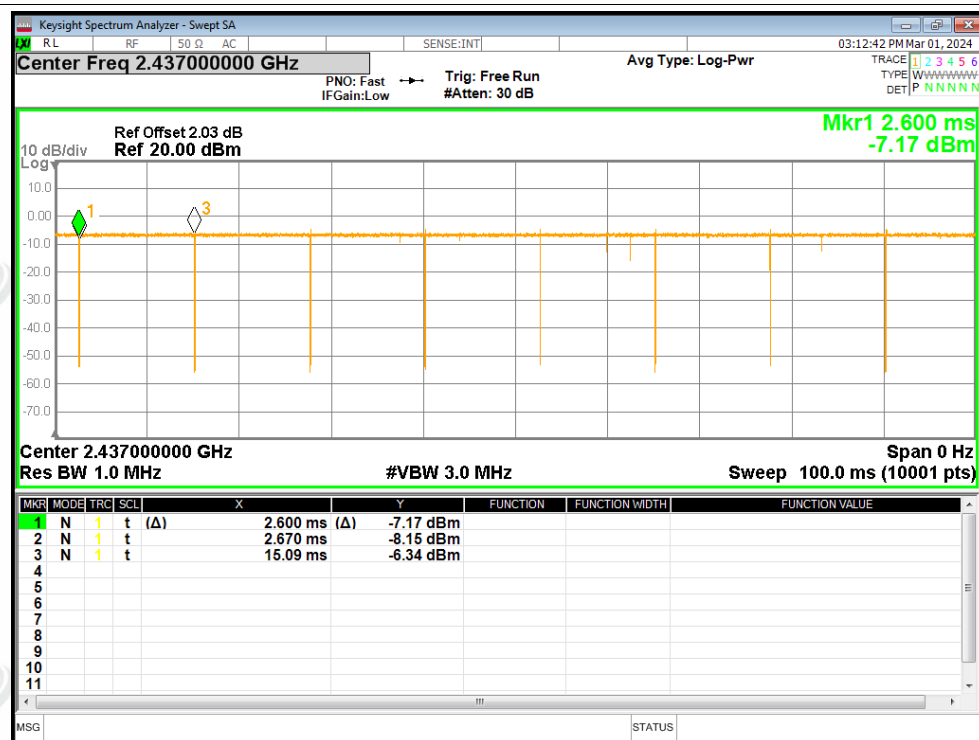


Duty Cycle NVNT b 2412MHz Ant2

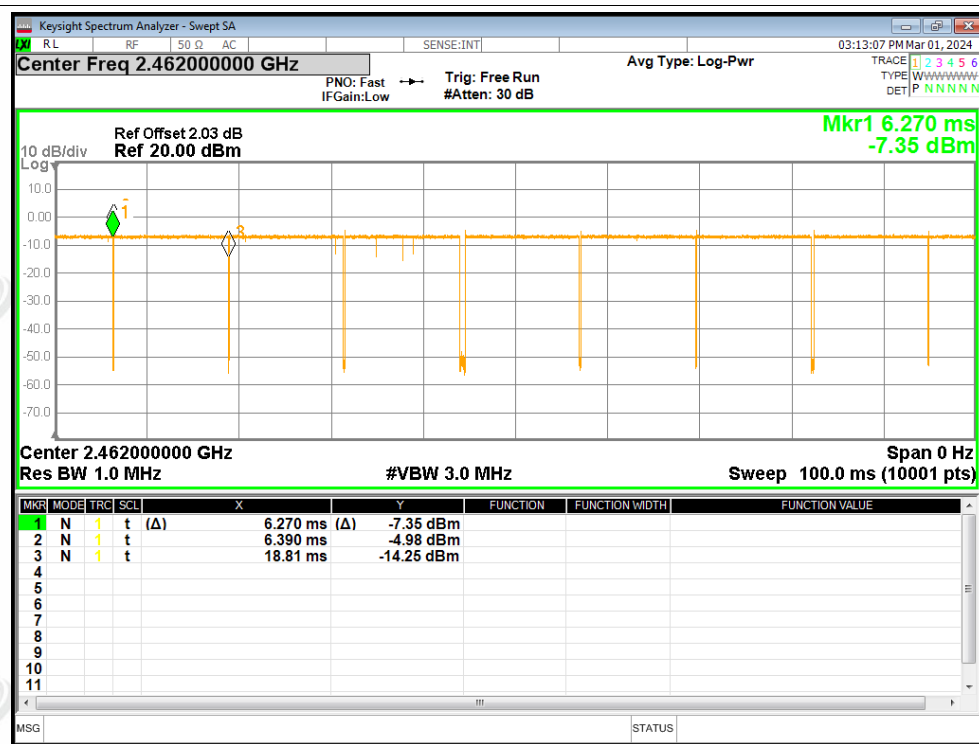




Duty Cycle NVNT b 2437MHz Ant2

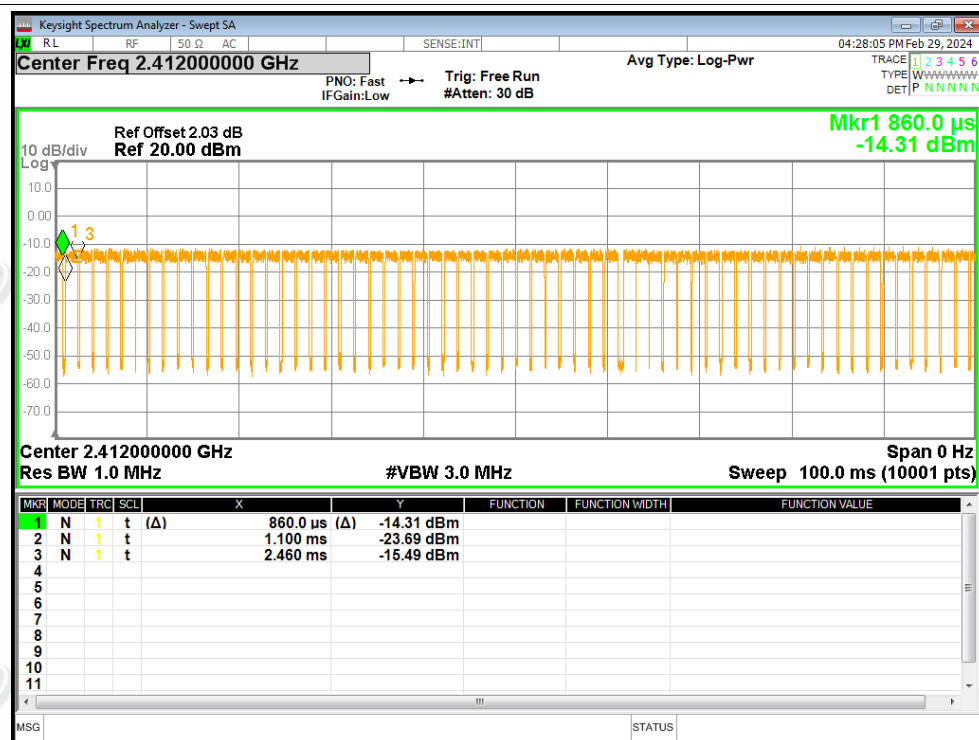


Duty Cycle NVNT b 2462MHz Ant2

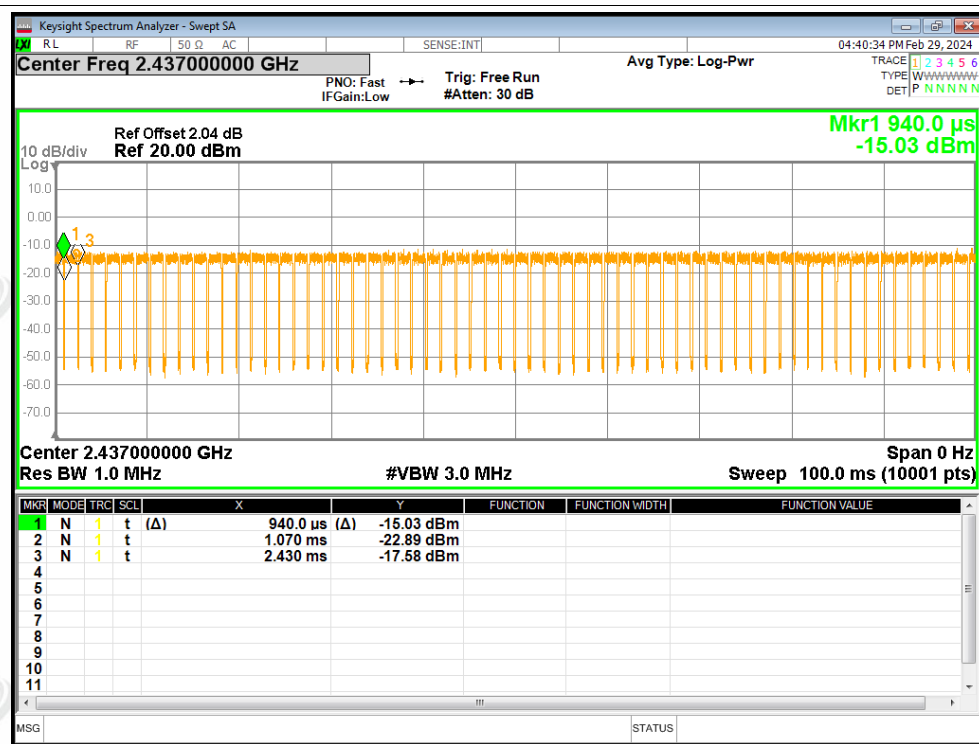




Duty Cycle NVNT g 2412MHz Ant1

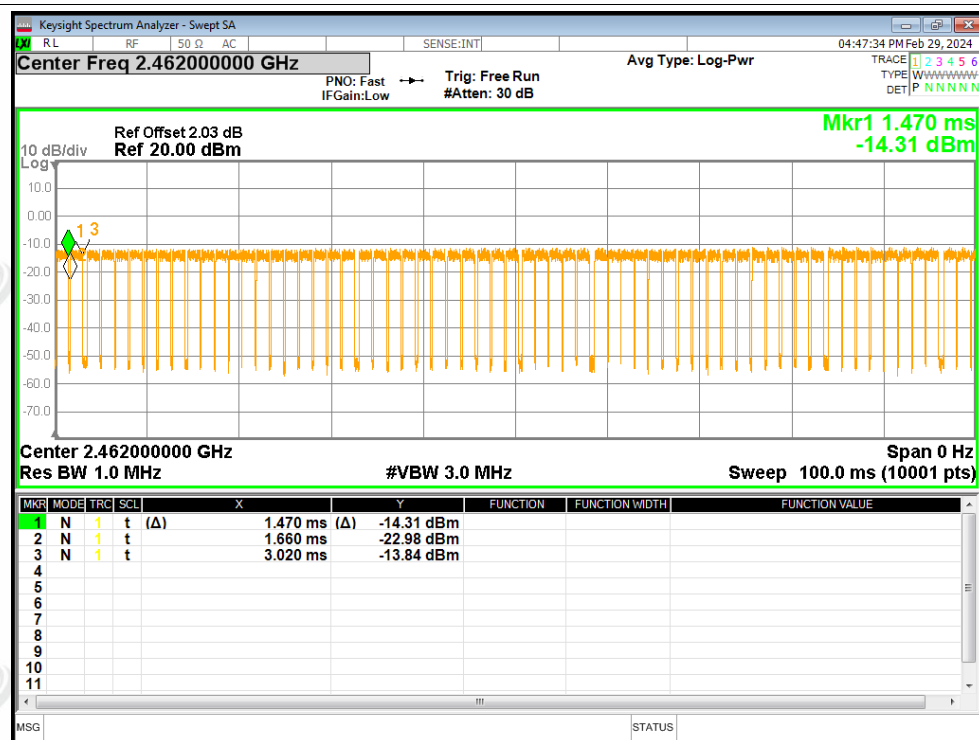


Duty Cycle NVNT g 2437MHz Ant1

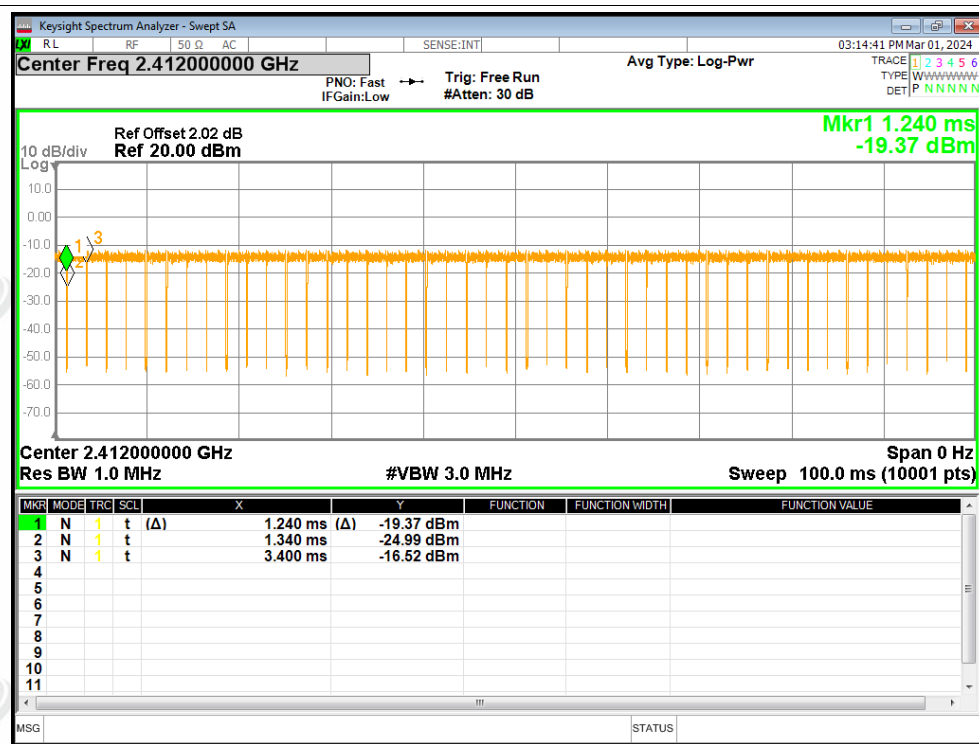




Duty Cycle NVNT g 2462MHz Ant1

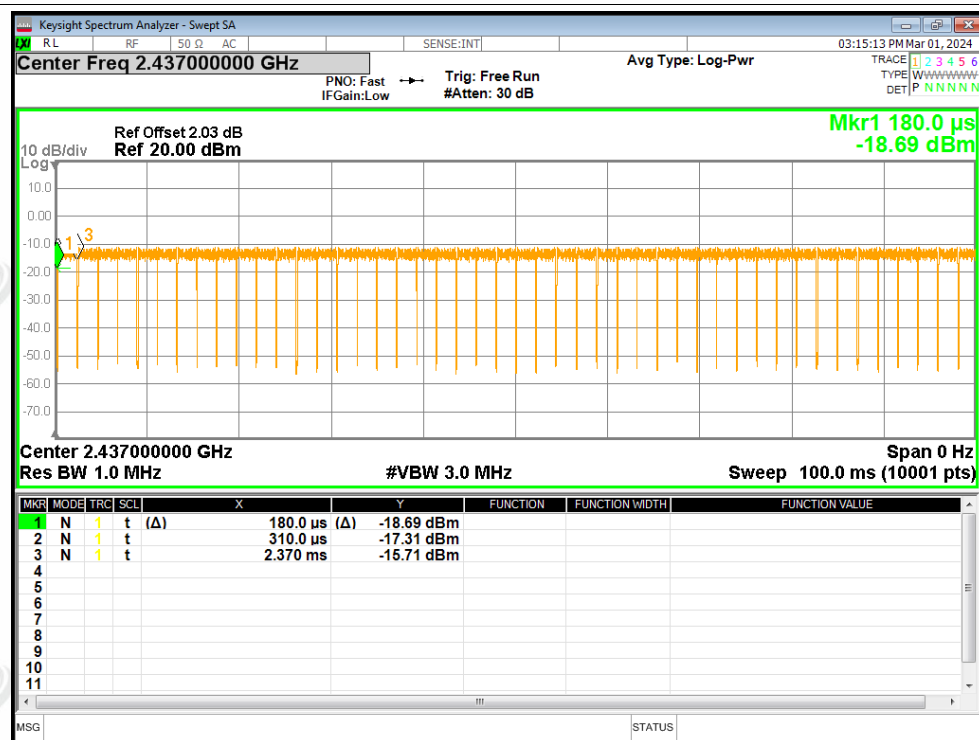


Duty Cycle NVNT g 2412MHz Ant2

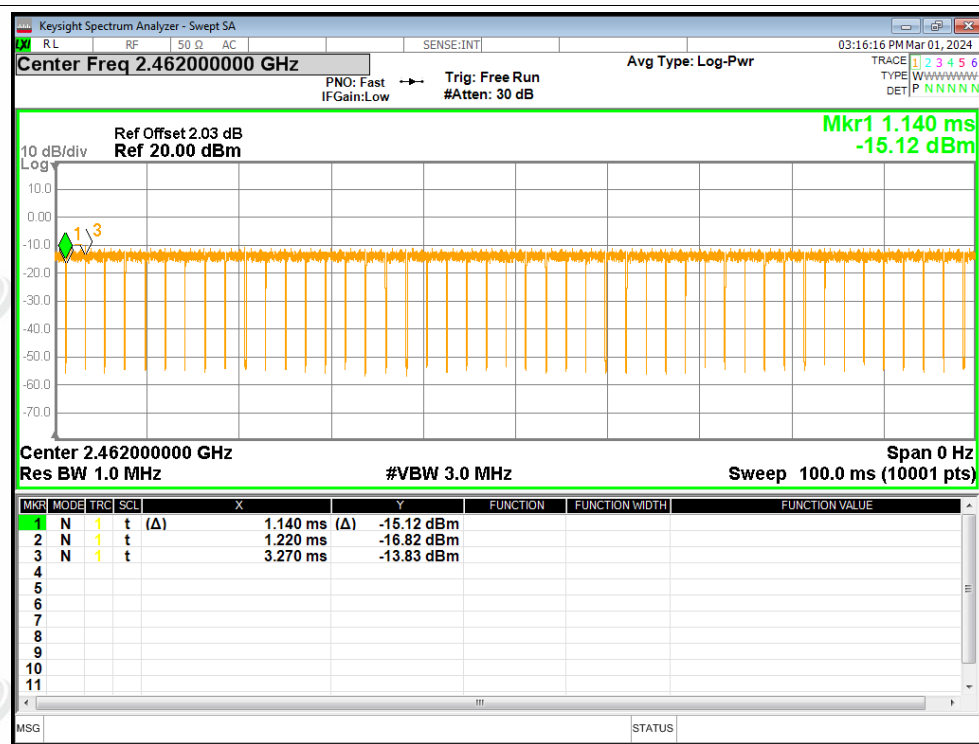




Duty Cycle NVNT g 2437MHz Ant2

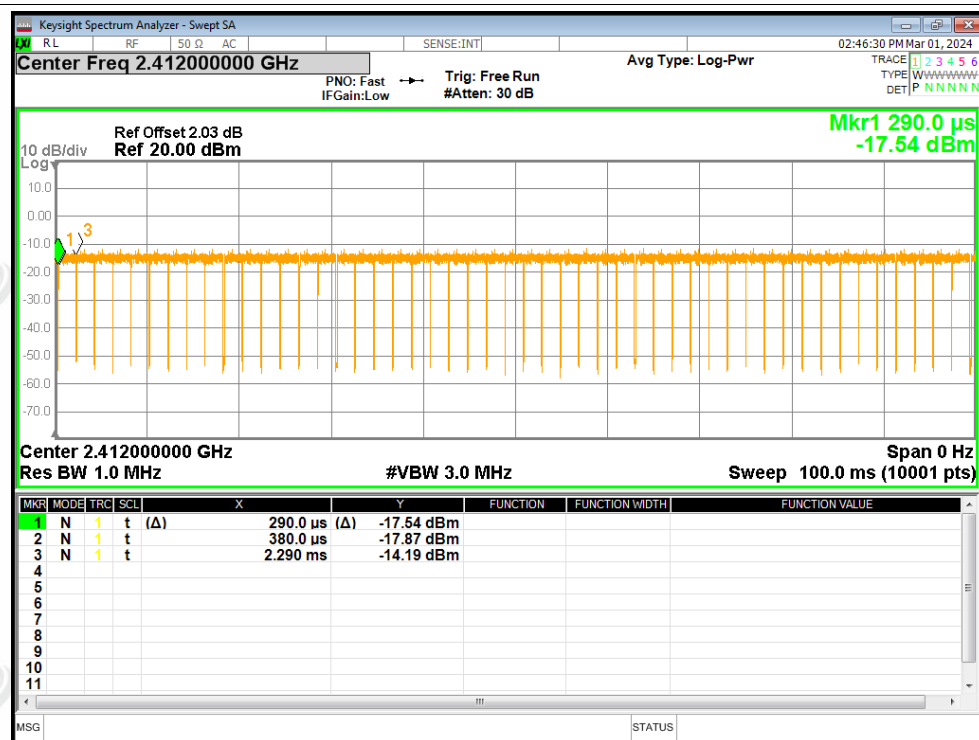


Duty Cycle NVNT g 2462MHz Ant2

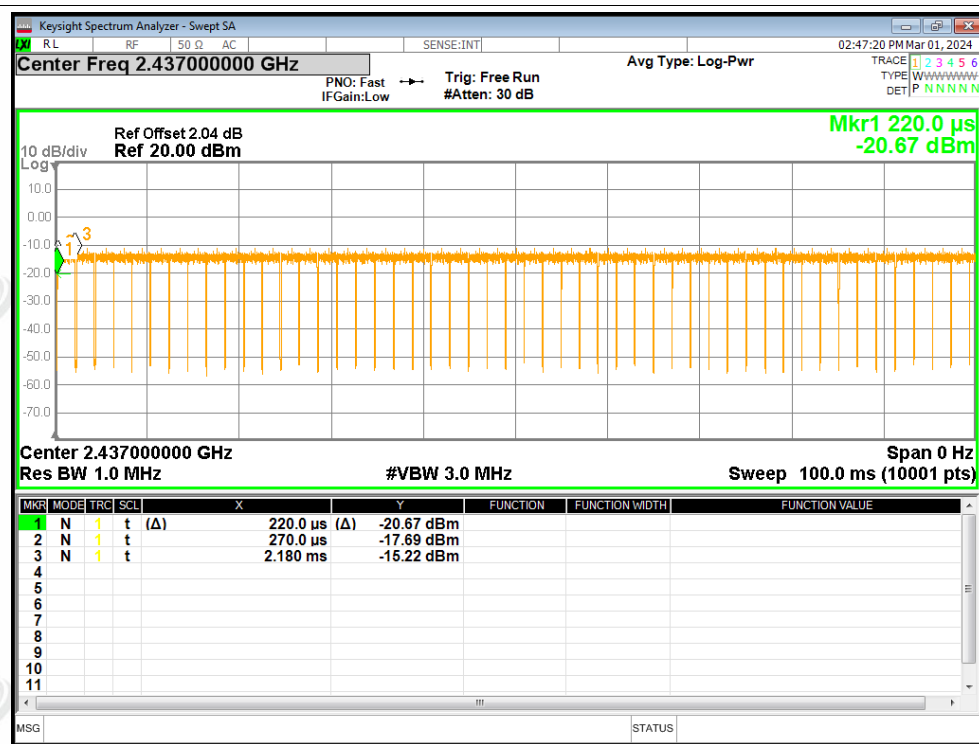




Duty Cycle NVNT n20 2412MHz Ant1

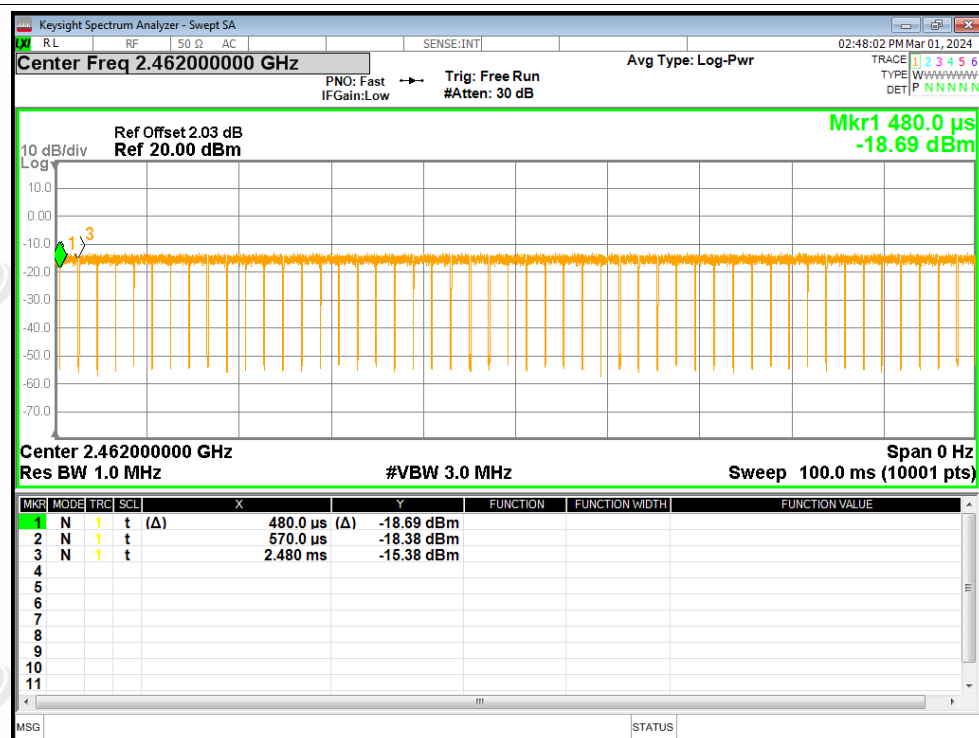


Duty Cycle NVNT n20 2437MHz Ant1

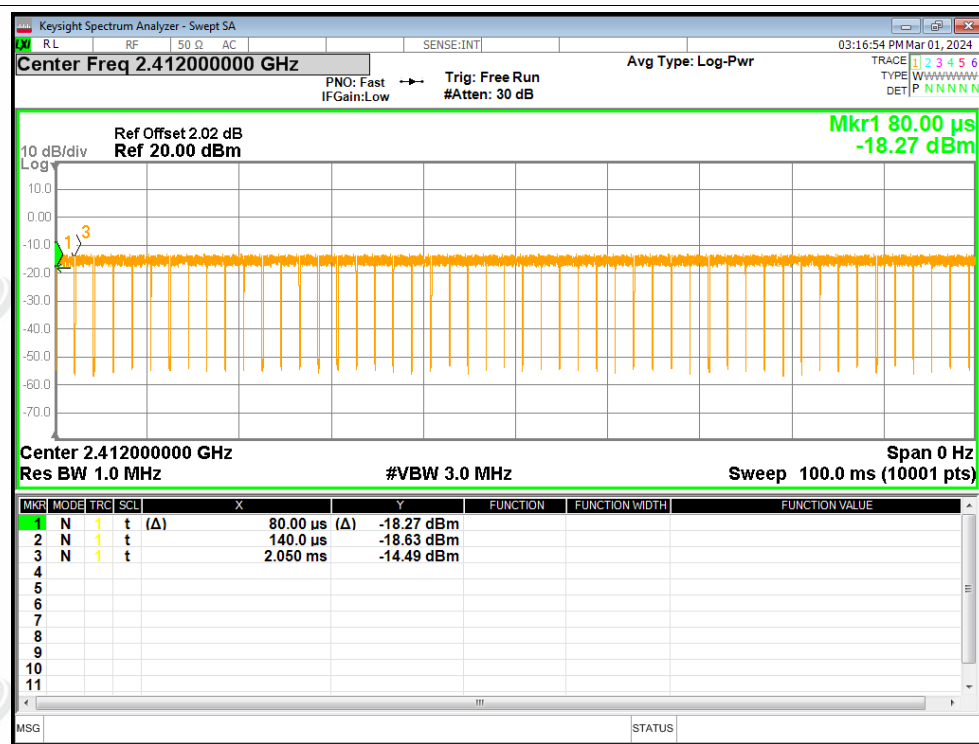




Duty Cycle NVNT n20 2462MHz Ant1

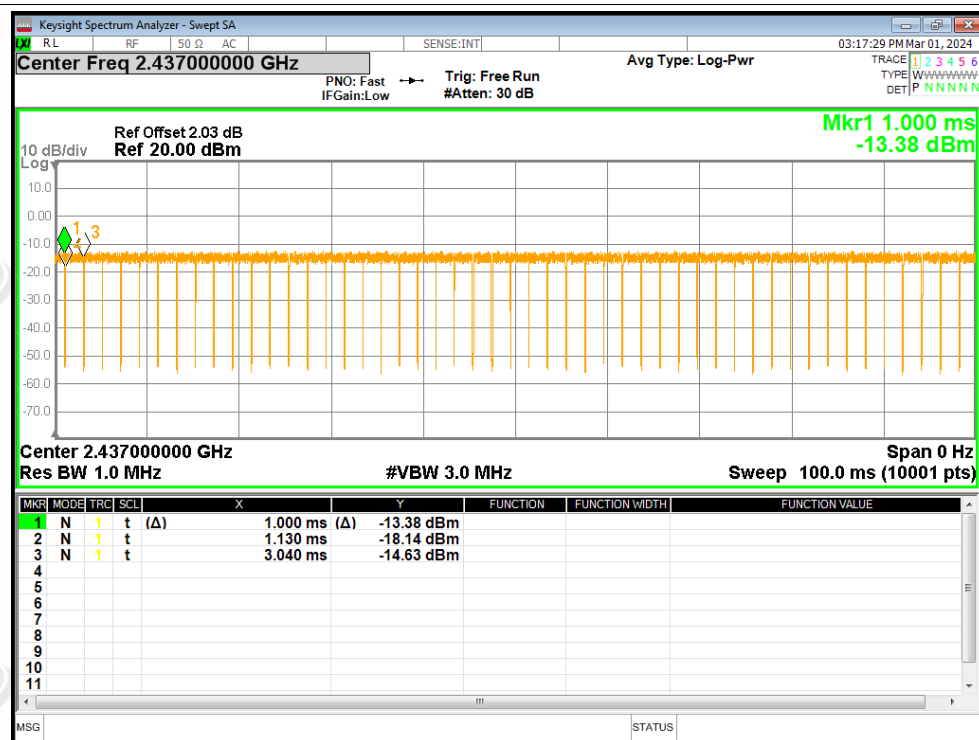


Duty Cycle NVNT n20 2412MHz Ant2

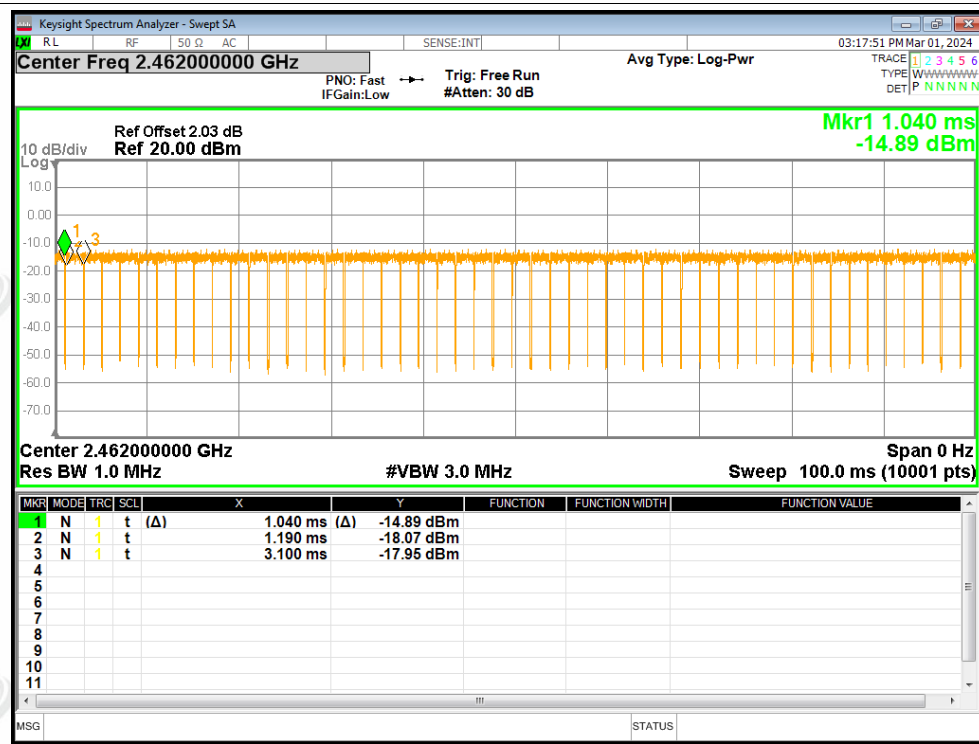




Duty Cycle NVNT n20 2437MHz Ant2

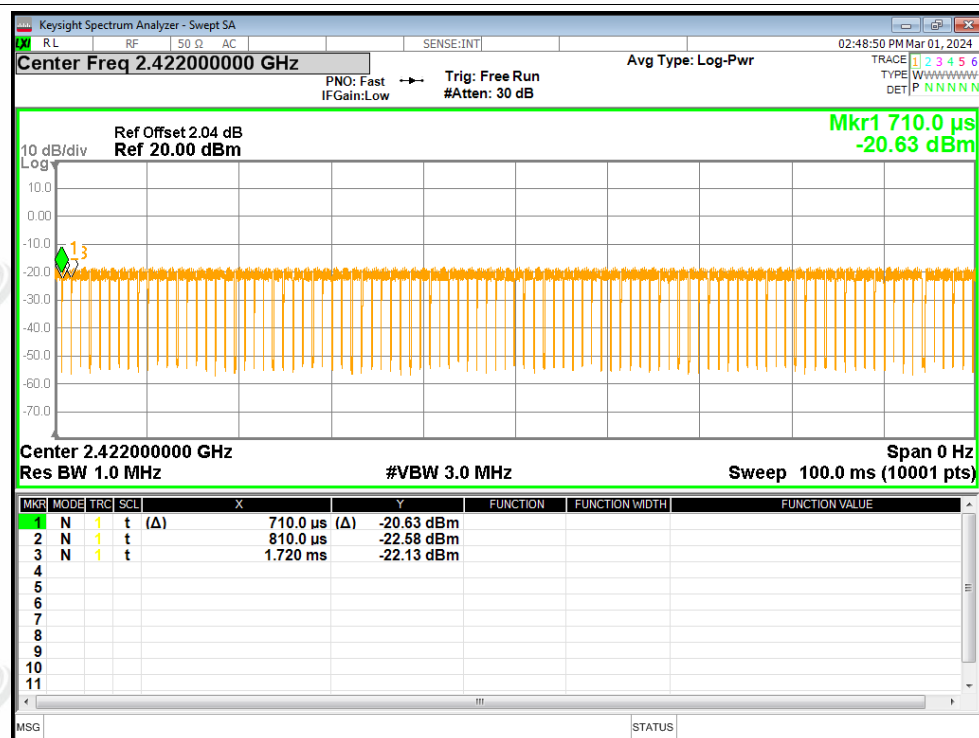


Duty Cycle NVNT n20 2462MHz Ant2

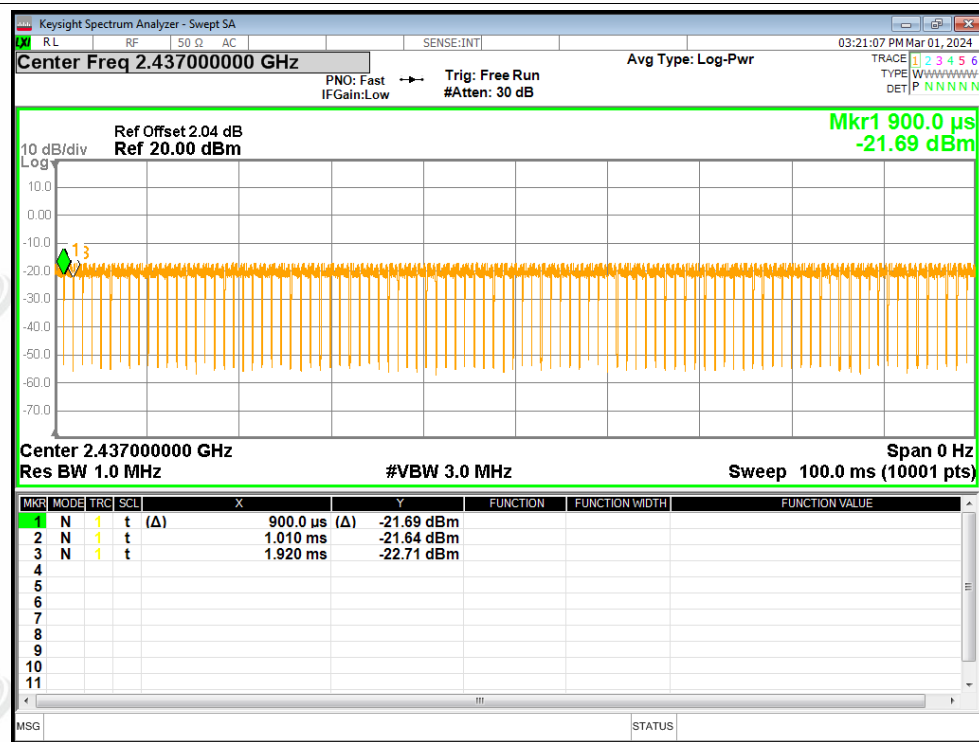




Duty Cycle NVNT n40 2422MHz Ant1

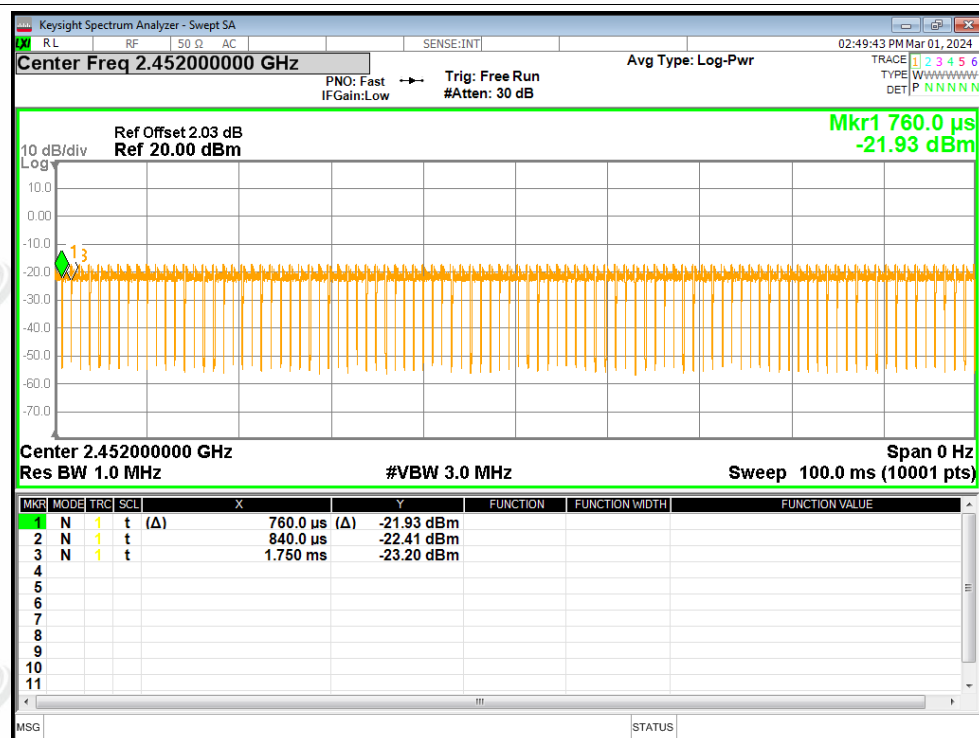


Duty Cycle NVNT n40 2437MHz Ant1

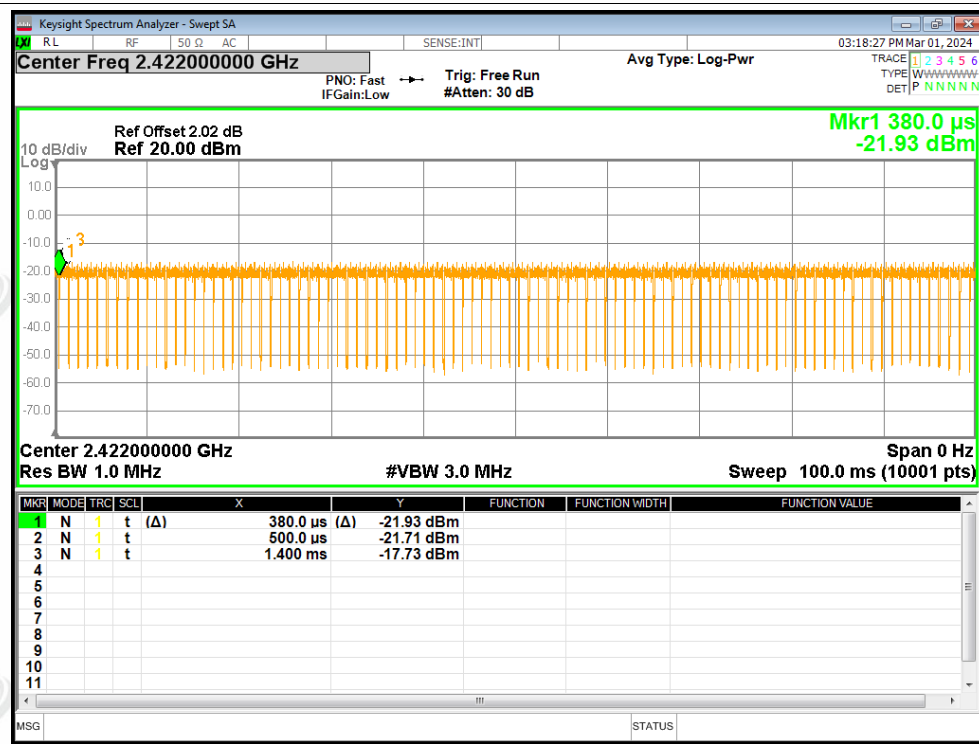




Duty Cycle NVNT n40 2452MHz Ant1

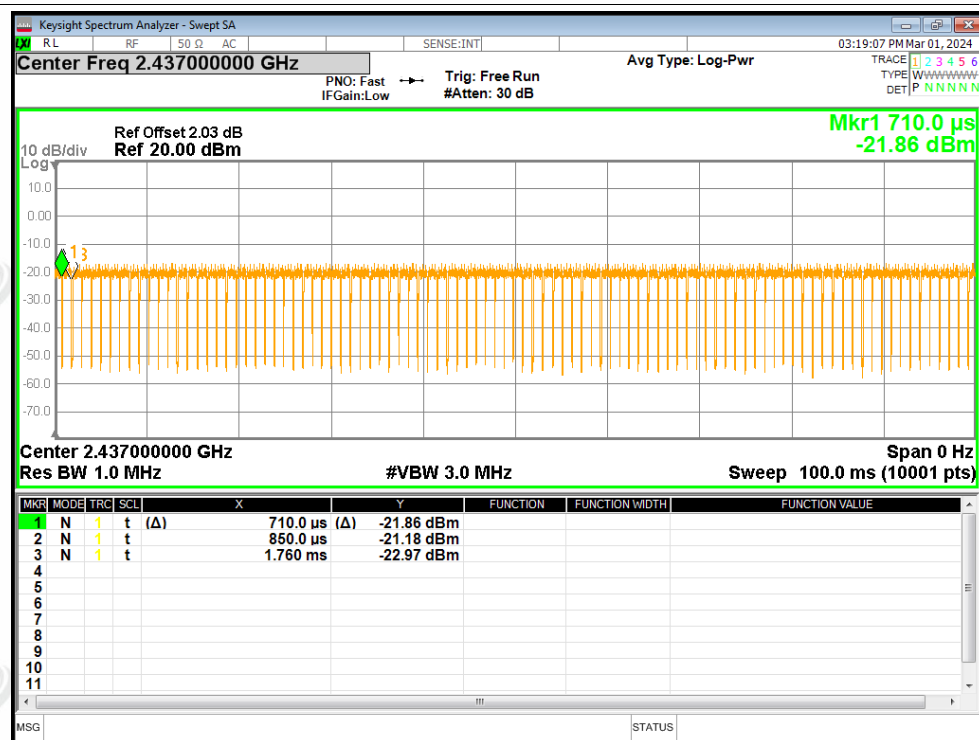


Duty Cycle NVNT n40 2422MHz Ant2

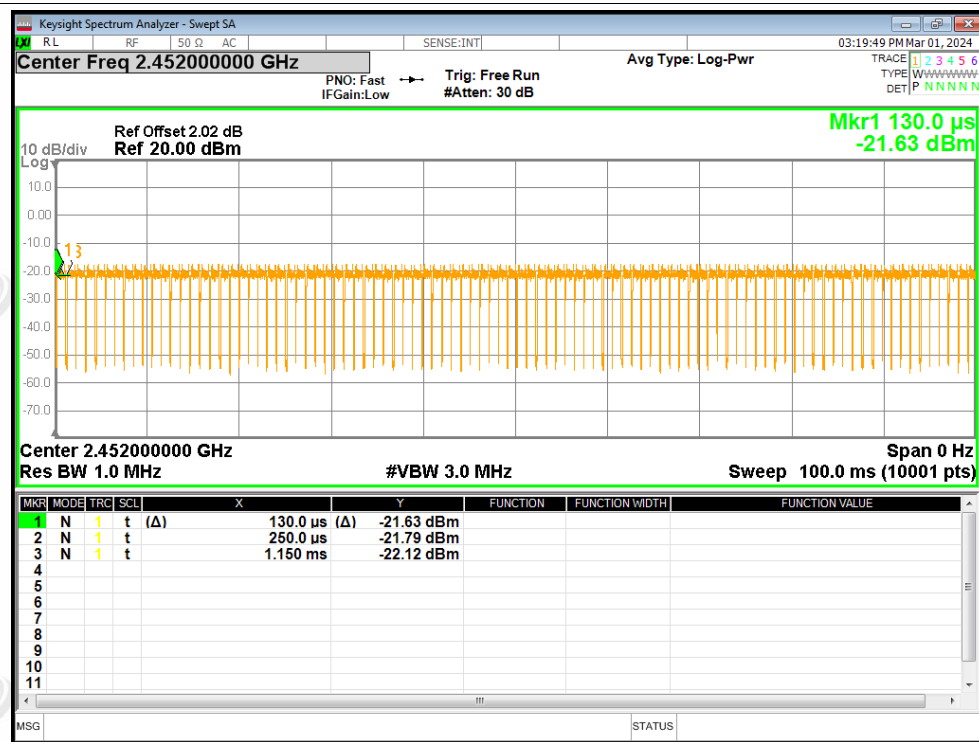




Duty Cycle NVNT n40 2437MHz Ant2



Duty Cycle NVNT n40 2452MHz Ant2





A2. Maximum Average Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	0.06	0	0.06	30	Pass
NVNT	b	2437	Ant1	1.89	0	1.89	30	Pass
NVNT	b	2462	Ant1	1.89	0	1.89	30	Pass
NVNT	b	2412	Ant2	1.05	0	1.05	30	Pass
NVNT	b	2437	Ant2	1.73	0	1.73	30	Pass
NVNT	b	2462	Ant2	2.02	0	2.02	30	Pass
NVNT	g	2412	Ant1	1.54	0.71	2.25	30	Pass
NVNT	g	2437	Ant1	1.79	0.4	2.19	30	Pass
NVNT	g	2462	Ant1	1.39	0.57	1.96	30	Pass
NVNT	g	2412	Ant2	1.6	0.21	1.81	30	Pass
NVNT	g	2437	Ant2	1.08	0.27	1.35	30	Pass
NVNT	g	2462	Ant2	1.53	0.17	1.7	30	Pass
NVNT	n20	2412	Ant1	1.87	0.2	2.07	30	Pass
NVNT	n20	2437	Ant1	1.66	0.11	1.77	30	Pass
NVNT	n20	2462	Ant1	1.79	0.2	1.99	30	Pass
NVNT	n20	2412	Ant2	1.04	0.13	1.17	30	Pass
NVNT	n20	2437	Ant2	1.79	0.29	2.08	30	Pass
NVNT	n20	2462	Ant2	1.41	0.33	1.74	30	Pass
NVNT	n40	2422	Ant1	1.14	0.45	1.59	30	Pass
NVNT	n40	2437	Ant1	1.92	0.5	2.42	30	Pass
NVNT	n40	2452	Ant1	1.81	0.37	2.18	30	Pass
NVNT	n40	2422	Ant2	1.27	0.54	1.81	30	Pass
NVNT	n40	2437	Ant2	0.55	0.62	1.17	30	Pass
NVNT	n40	2452	Ant2	1.24	0.54	1.78	30	Pass
NVNT	n20	2412	MIMO	/	/	4.65	30	Pass
NVNT	n20	2437	MIMO	/	/	4.94	30	Pass
NVNT	n20	2462	MIMO	/	/	4.88	30	Pass
NVNT	n40	2422	MIMO	/	/	4.71	30	Pass
NVNT	n40	2437	MIMO	/	/	4.85	30	Pass
NVNT	n40	2452	MIMO	/	/	4.99	30	Pass



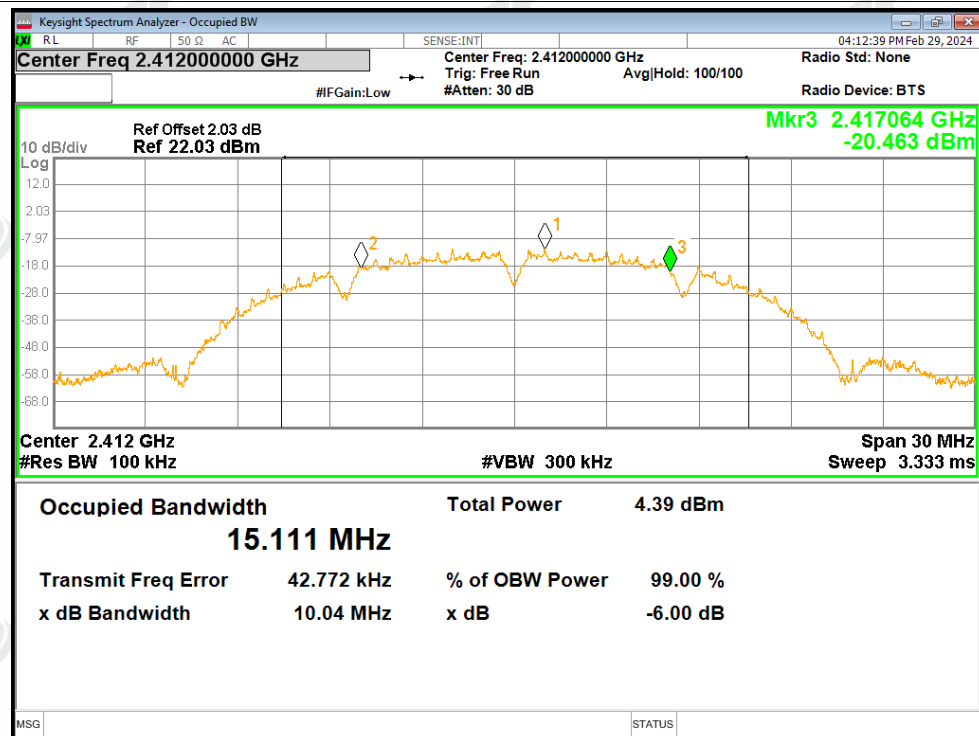
A3. -6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	10.04	0.5	Pass
NVNT	b	2437	Ant1	10.01	0.5	Pass
NVNT	b	2462	Ant1	10.08	0.5	Pass
NVNT	b	2412	Ant2	10.03	0.5	Pass
NVNT	b	2437	Ant2	10.09	0.5	Pass
NVNT	b	2462	Ant2	10.11	0.5	Pass
NVNT	g	2412	Ant1	16.32	0.5	Pass
NVNT	g	2437	Ant1	16.34	0.5	Pass
NVNT	g	2462	Ant1	16.37	0.5	Pass
NVNT	g	2412	Ant2	16.34	0.5	Pass
NVNT	g	2437	Ant2	16.37	0.5	Pass
NVNT	g	2462	Ant2	16.36	0.5	Pass
NVNT	n20	2412	Ant1	17.31	0.5	Pass
NVNT	n20	2437	Ant1	17.19	0.5	Pass
NVNT	n20	2462	Ant1	17.57	0.5	Pass
NVNT	n20	2412	Ant2	17.58	0.5	Pass
NVNT	n20	2437	Ant2	17.39	0.5	Pass
NVNT	n20	2462	Ant2	17.611	0.5	Pass
NVNT	n40	2422	Ant1	35.77	0.5	Pass
NVNT	n40	2437	Ant1	35.85	0.5	Pass
NVNT	n40	2452	Ant1	35.90	0.5	Pass
NVNT	n40	2422	Ant2	35.94	0.5	Pass
NVNT	n40	2437	Ant2	35.75	0.5	Pass
NVNT	n40	2452	Ant2	35.76	0.5	Pass

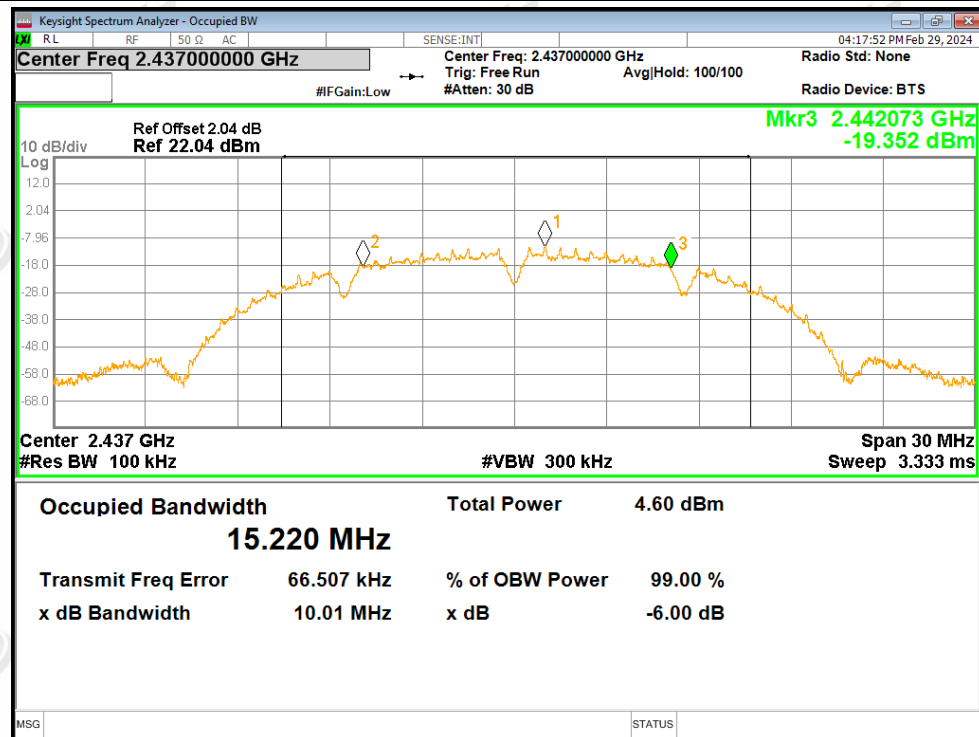


Test Graphs

-6dB Bandwidth NVNT b 2412MHz Ant1

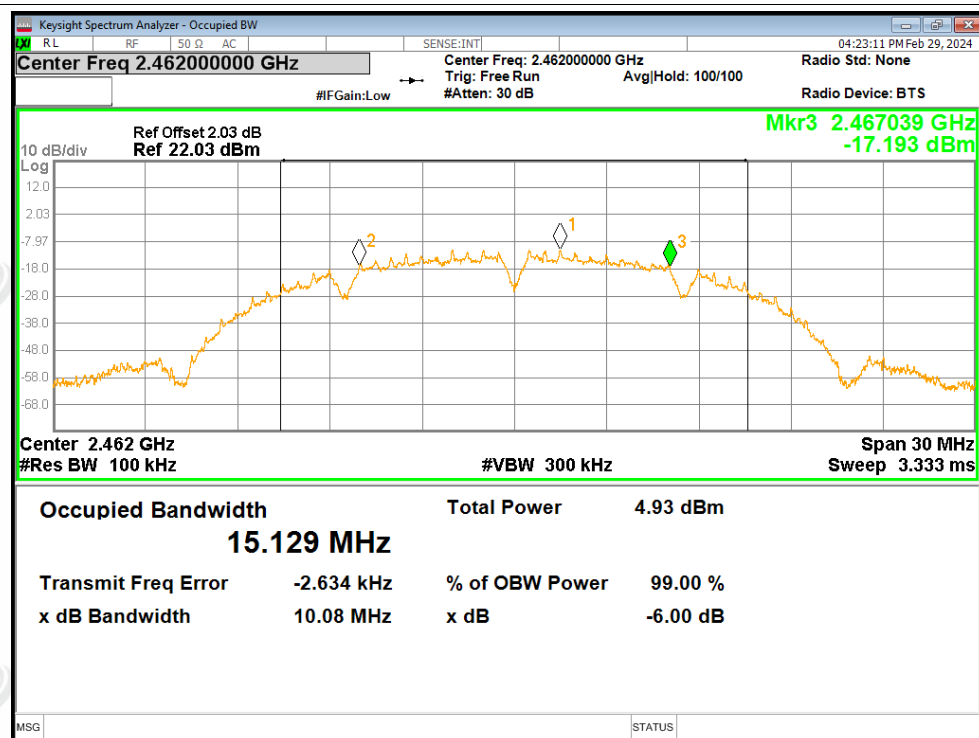


-6dB Bandwidth NVNT b 2437MHz Ant1

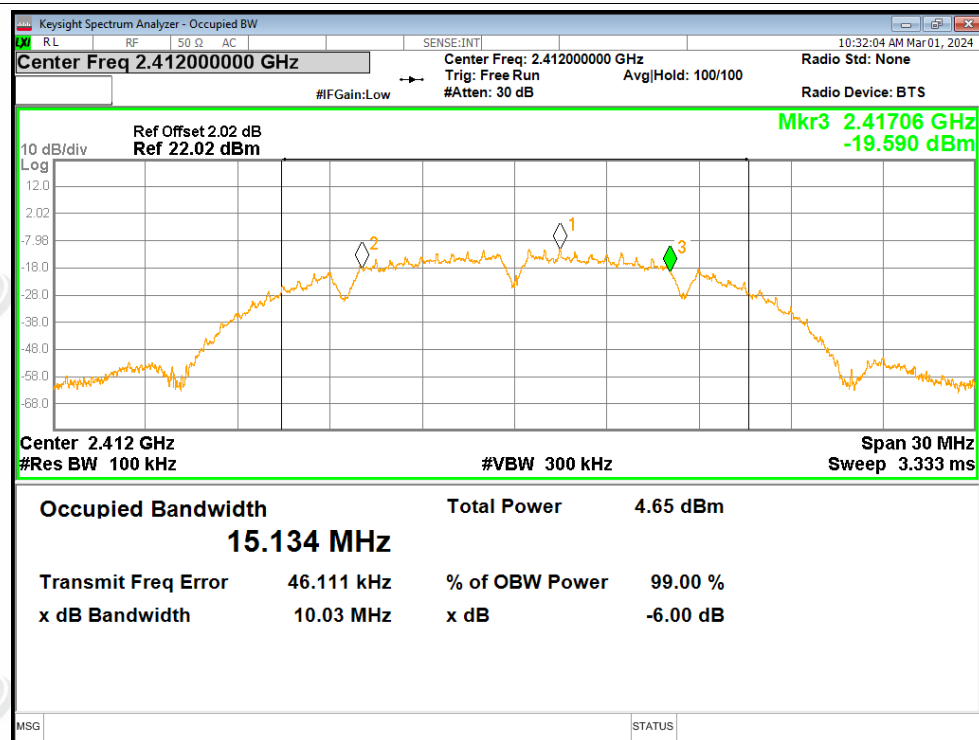




-6dB Bandwidth NVNT b 2462MHz Ant1

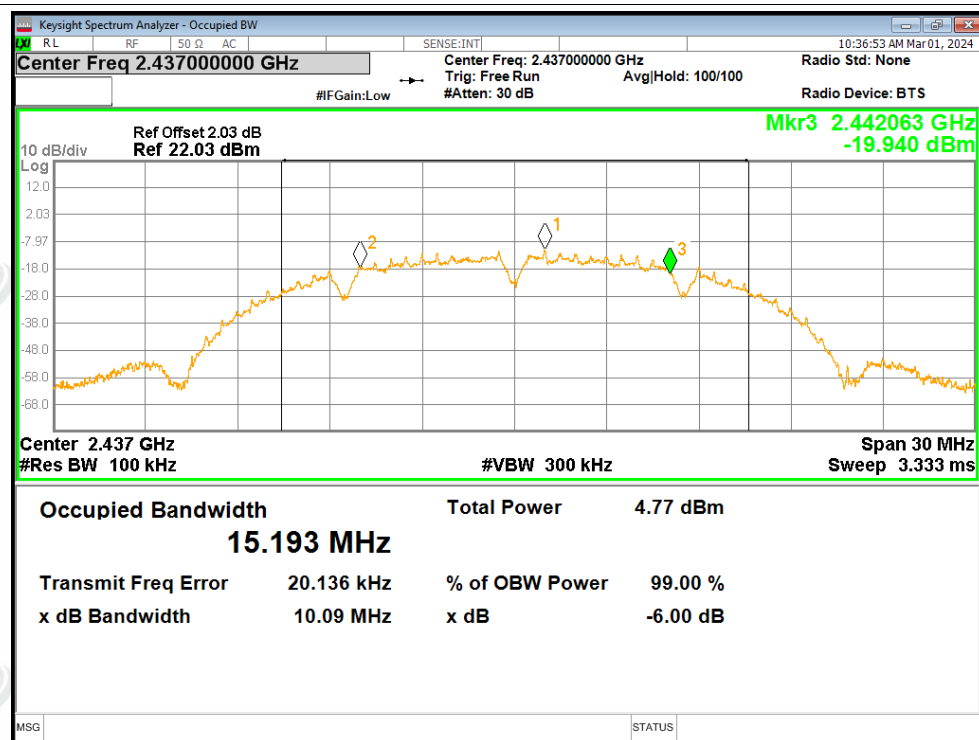


-6dB Bandwidth NVNT b 2412MHz Ant2

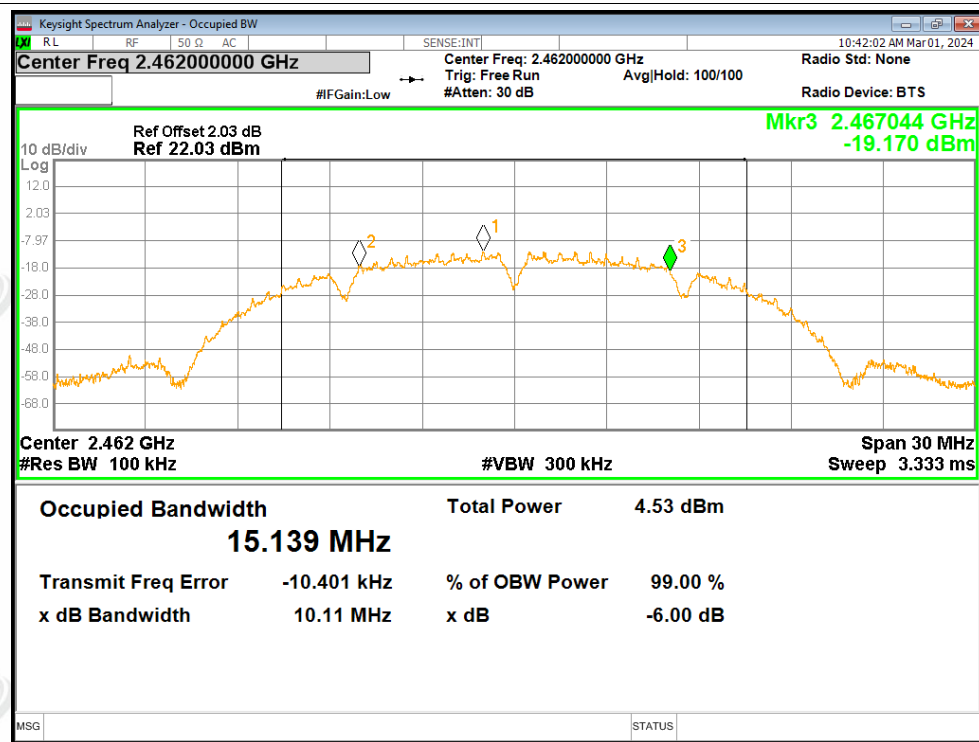




-6dB Bandwidth NVNT b 2437MHz Ant2

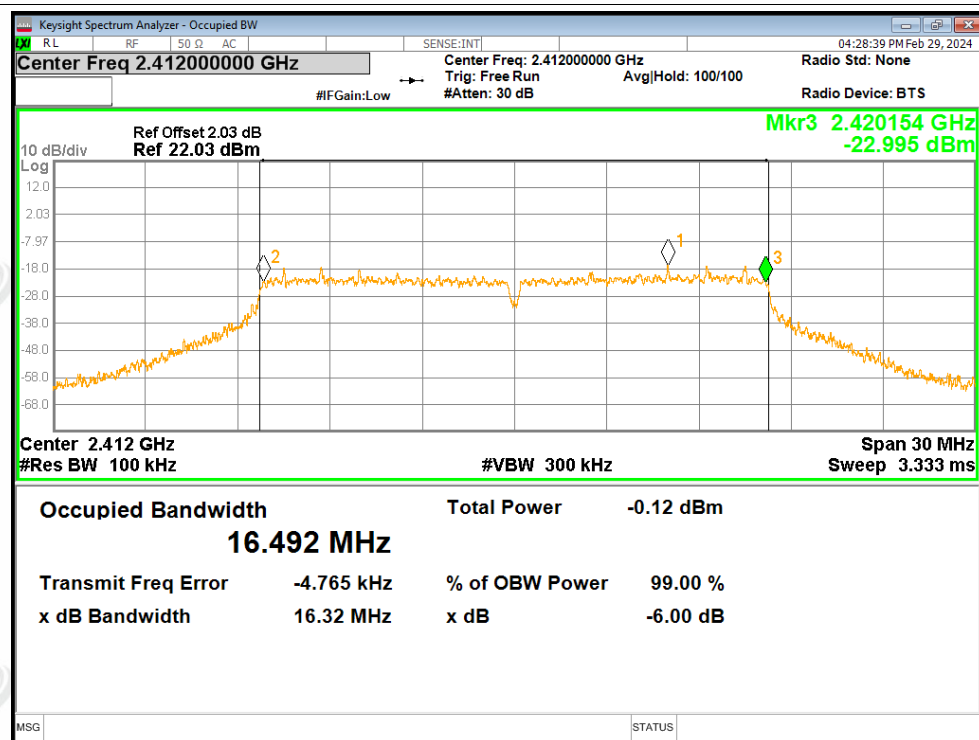


-6dB Bandwidth NVNT b 2462MHz Ant2

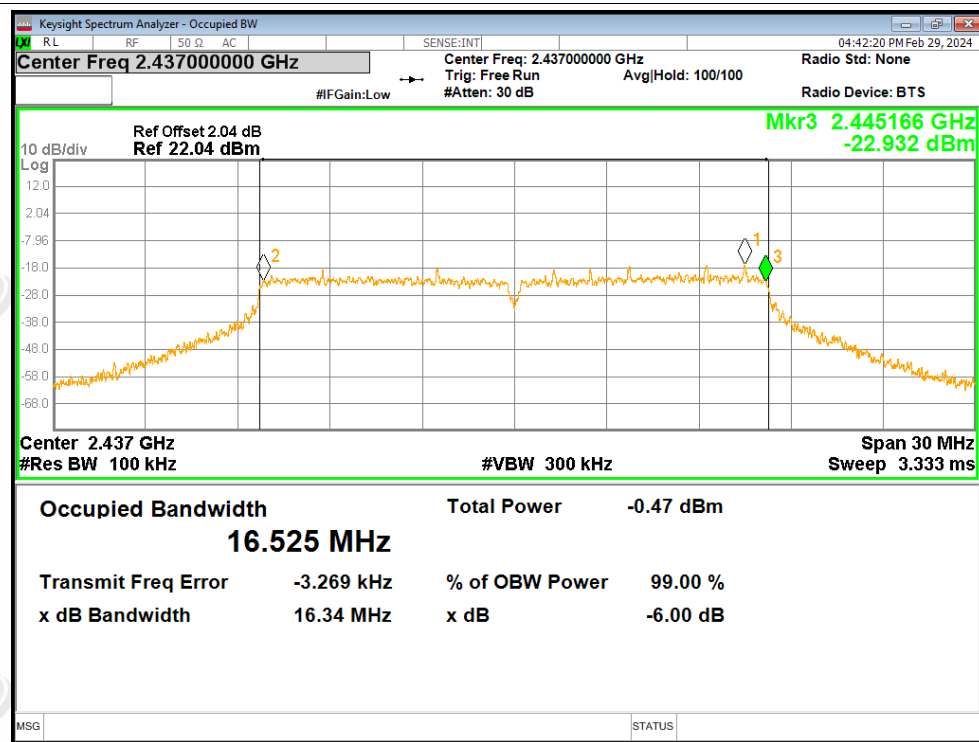




-6dB Bandwidth NVNT g 2412MHz Ant1

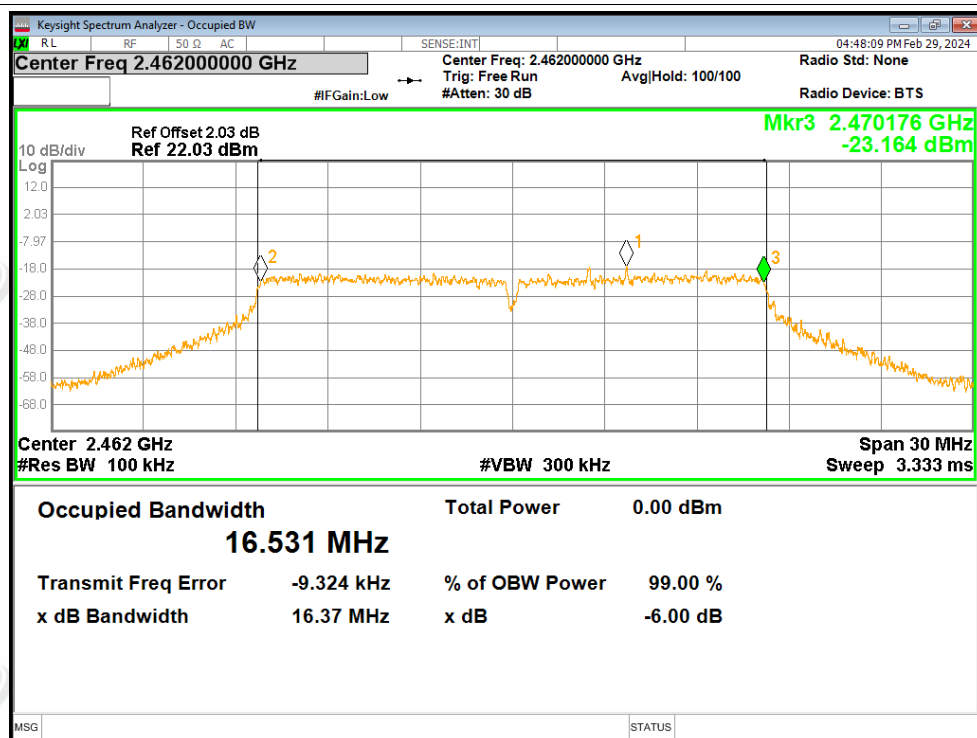


-6dB Bandwidth NVNT g 2437MHz Ant1

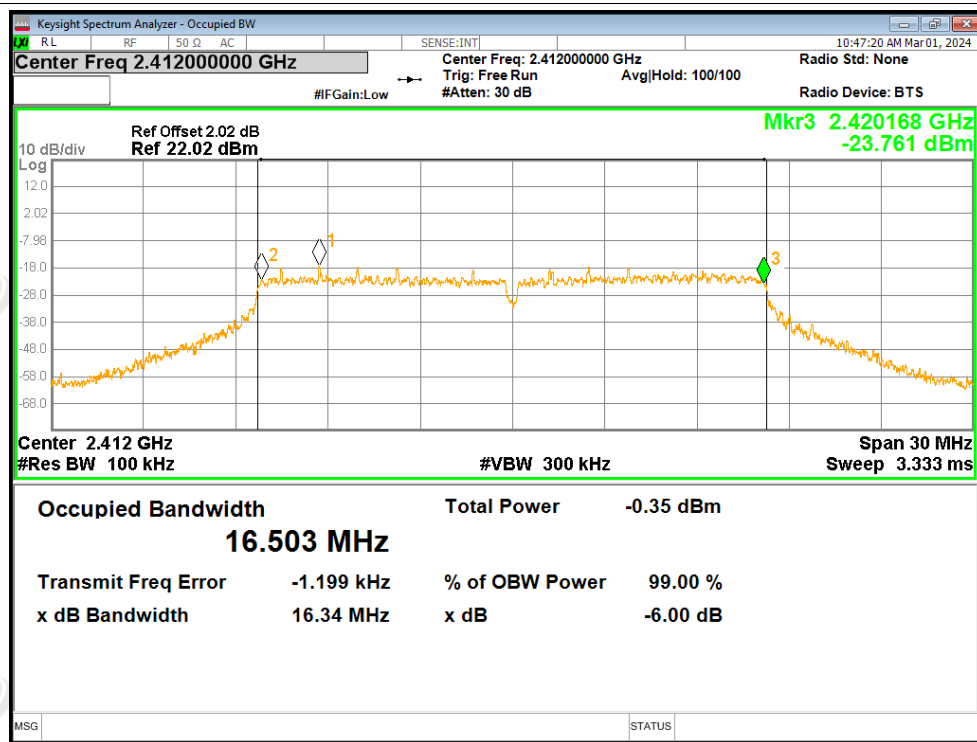




-6dB Bandwidth NVNT g 2462MHz Ant1

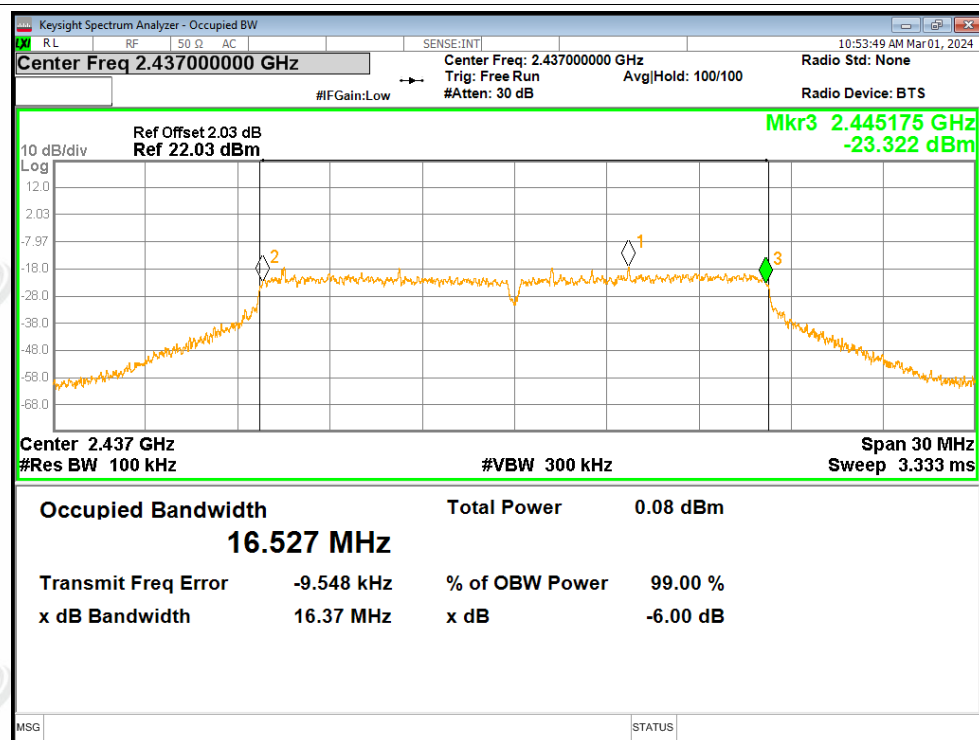


-6dB Bandwidth NVNT g 2412MHz Ant2

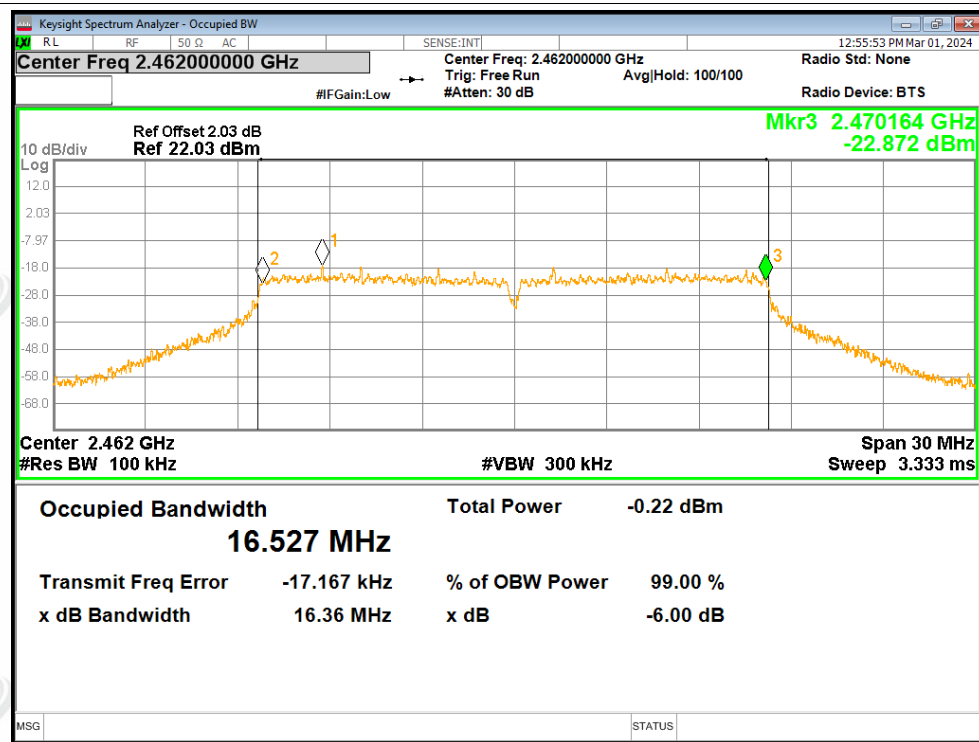




-6dB Bandwidth NVNT g 2437MHz Ant2

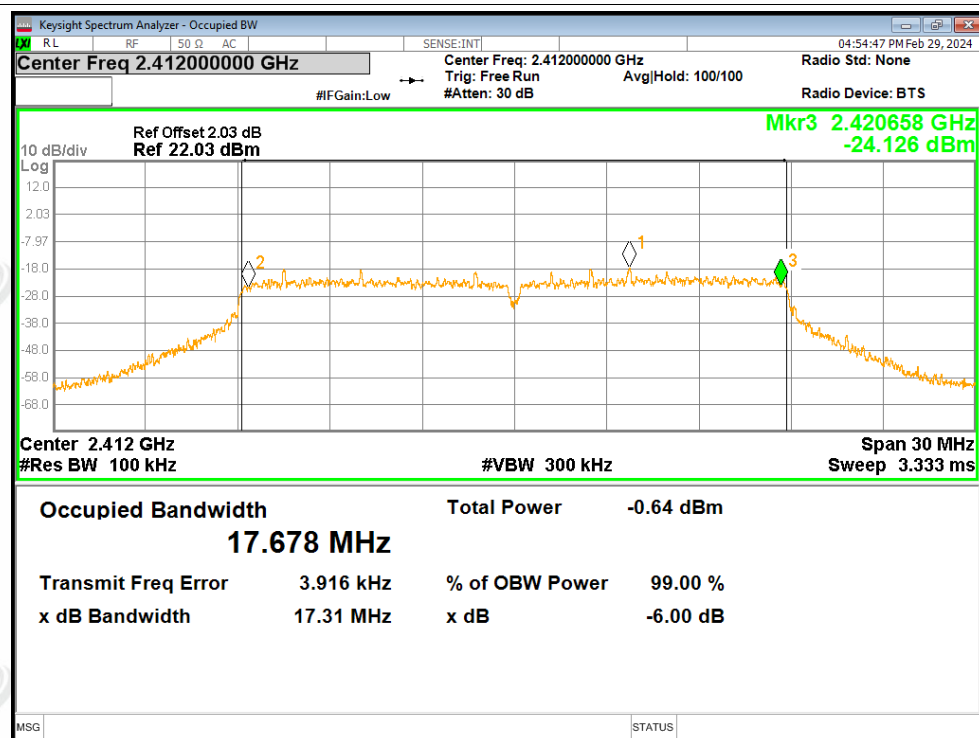


-6dB Bandwidth NVNT g 2462MHz Ant2

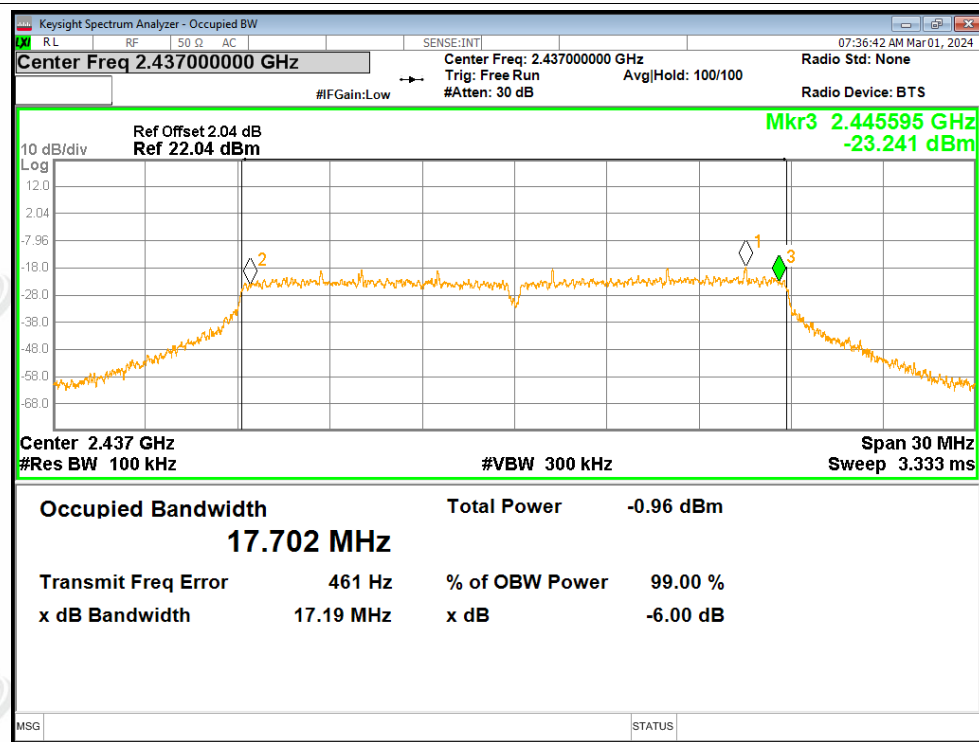




-6dB Bandwidth NVNT n20 2412MHz Ant1

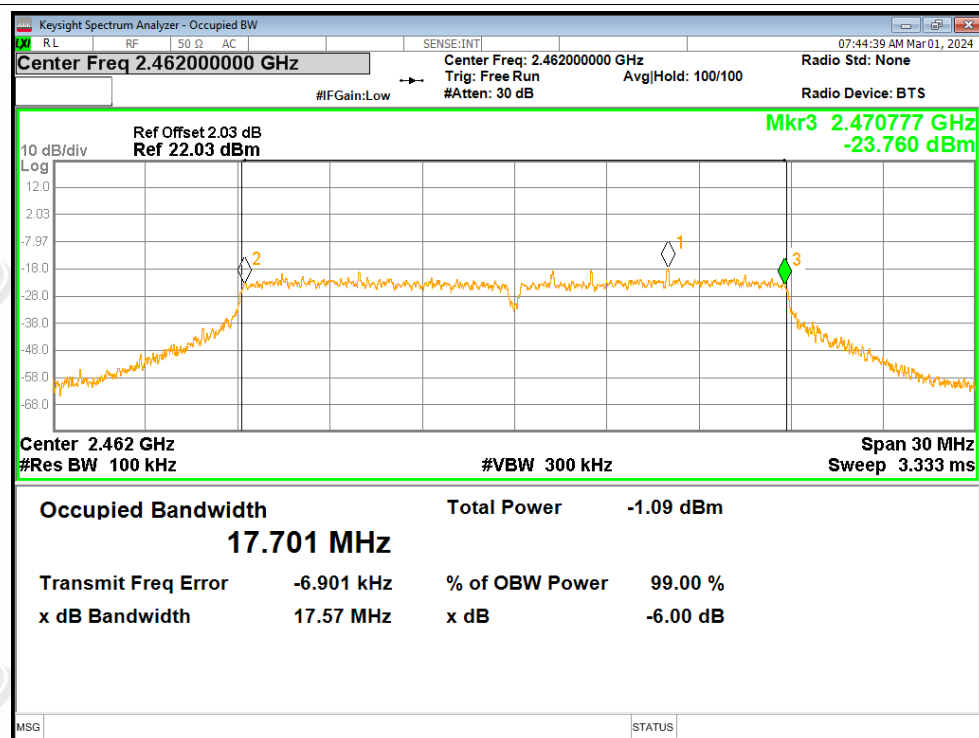


-6dB Bandwidth NVNT n20 2437MHz Ant1

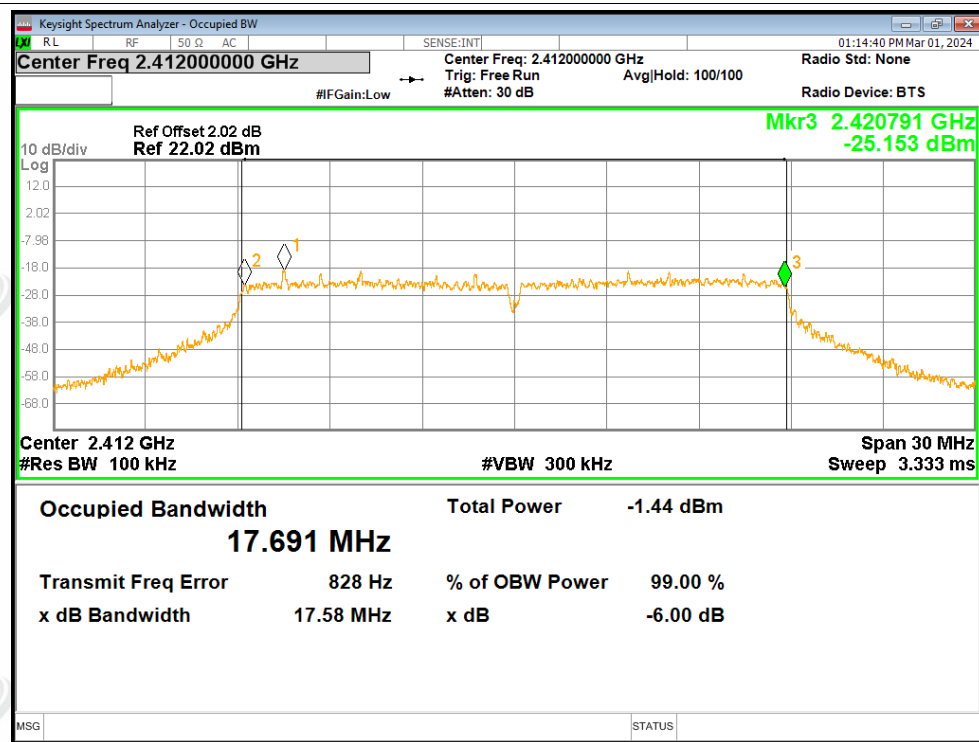




-6dB Bandwidth NVNT n20 2462MHz Ant1

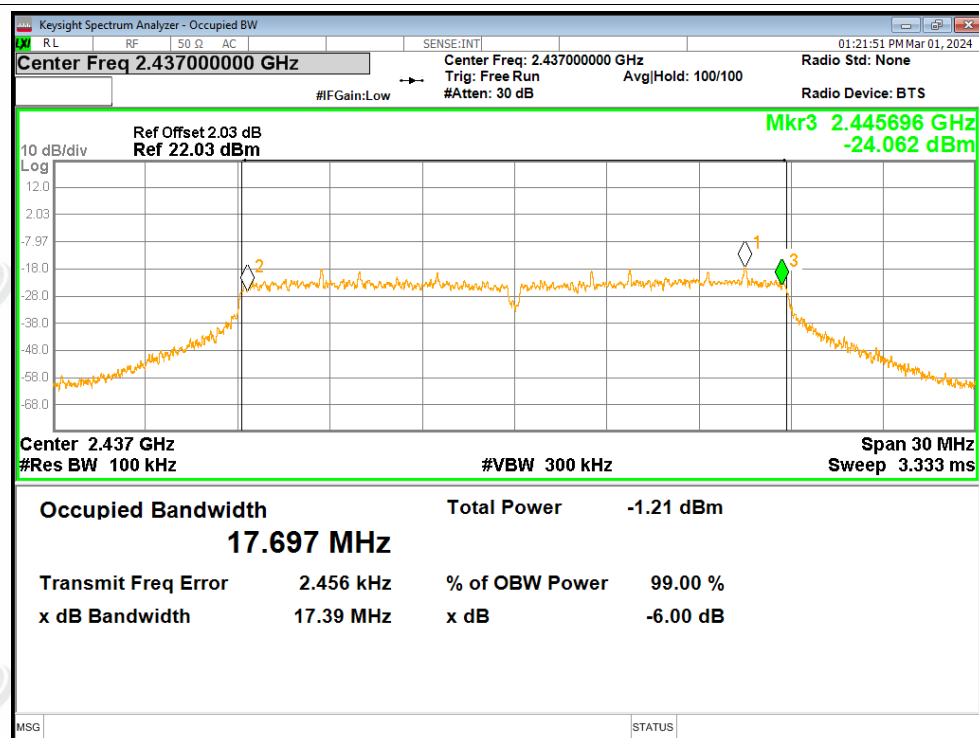


-6dB Bandwidth NVNT n20 2412MHz Ant2

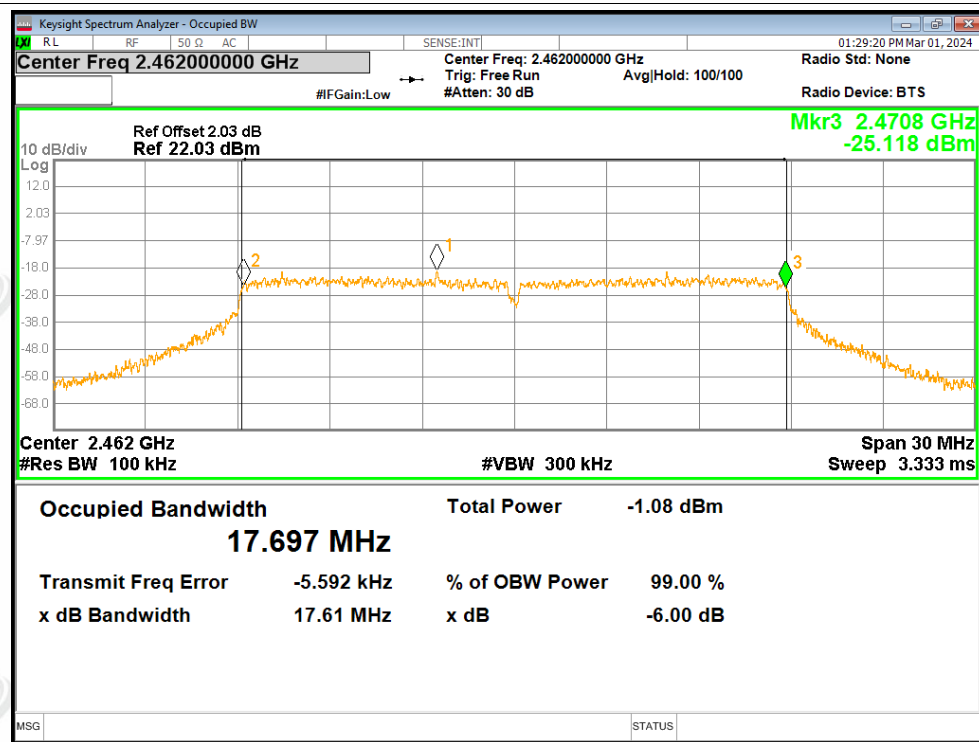




-6dB Bandwidth NVNT n20 2437MHz Ant2

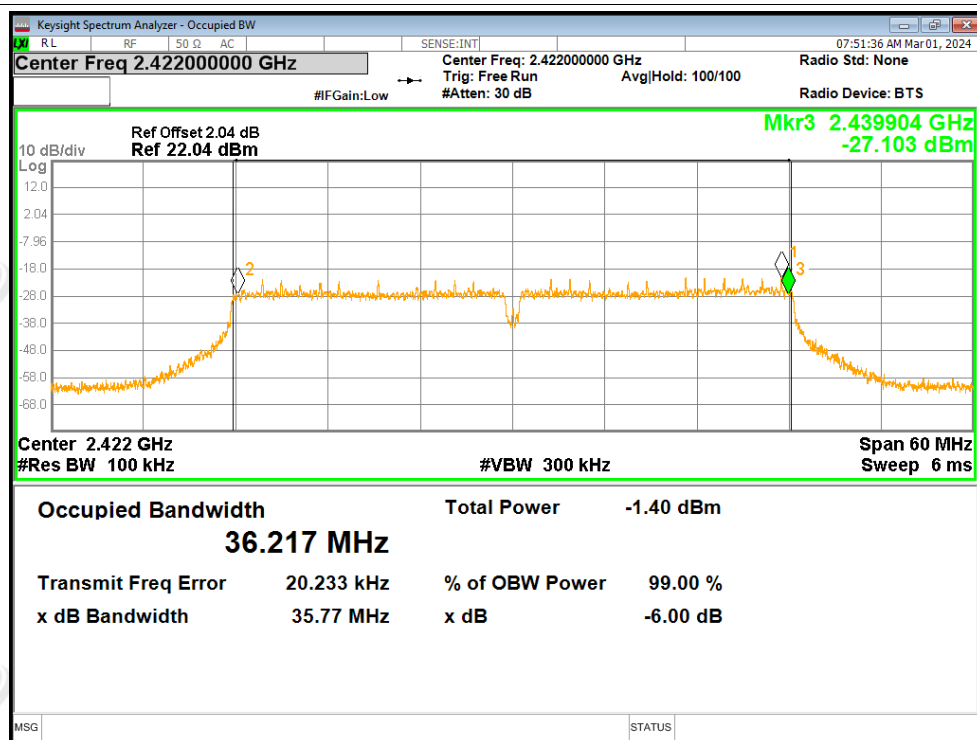


-6dB Bandwidth NVNT n20 2462MHz Ant2

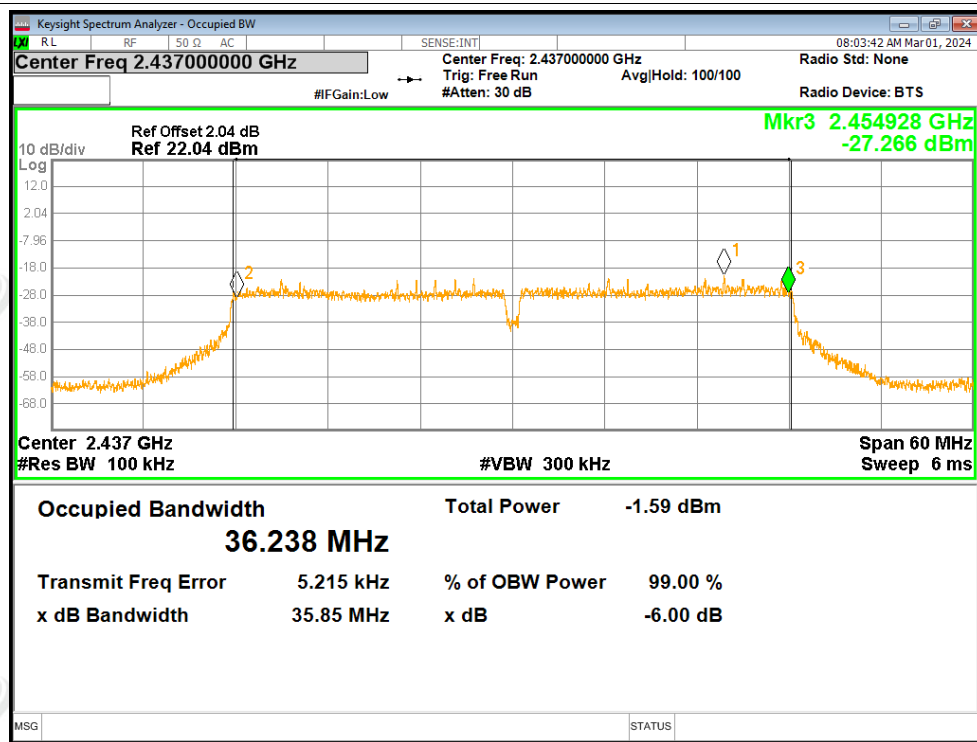




-6dB Bandwidth NVNT n40 2422MHz Ant1

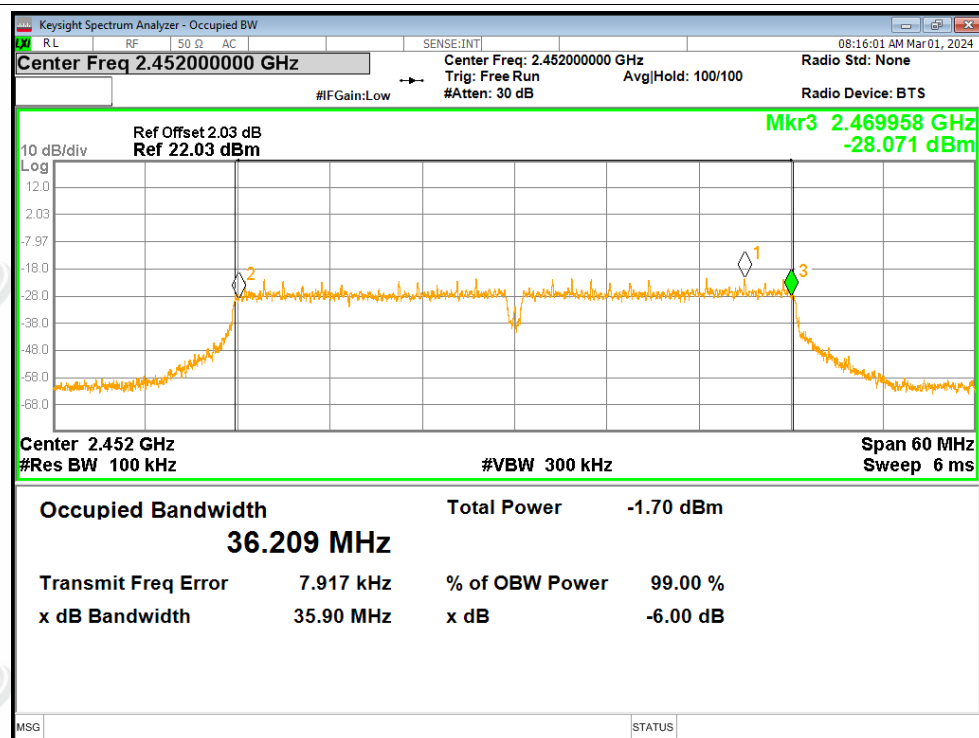


-6dB Bandwidth NVNT n40 2437MHz Ant1

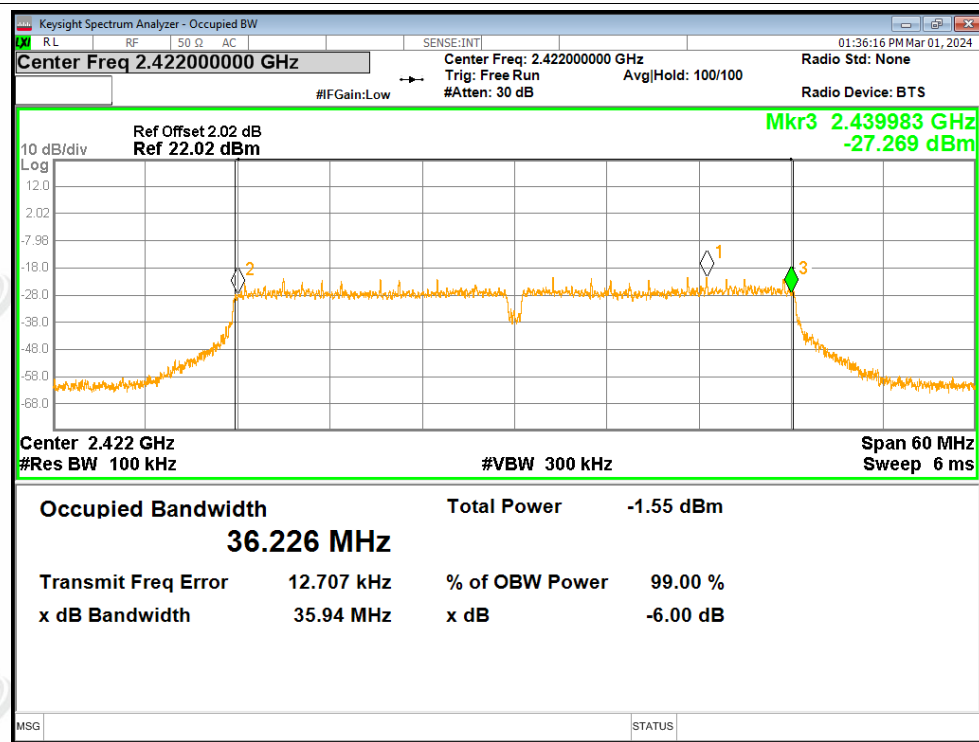




-6dB Bandwidth NVNT n40 2452MHz Ant1

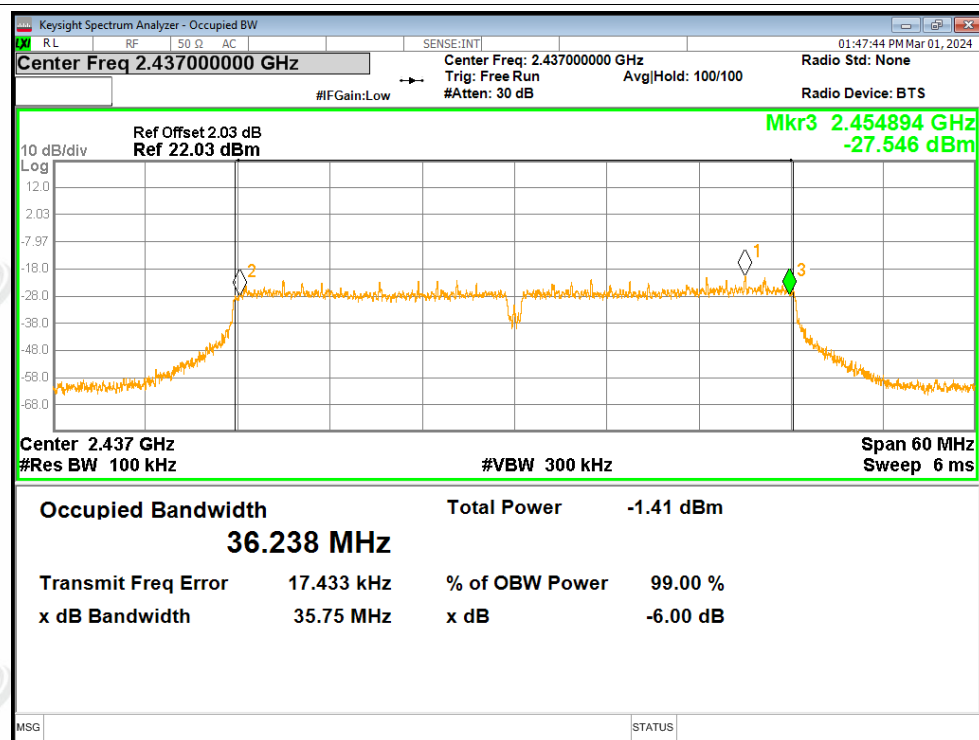


-6dB Bandwidth NVNT n40 2422MHz Ant2

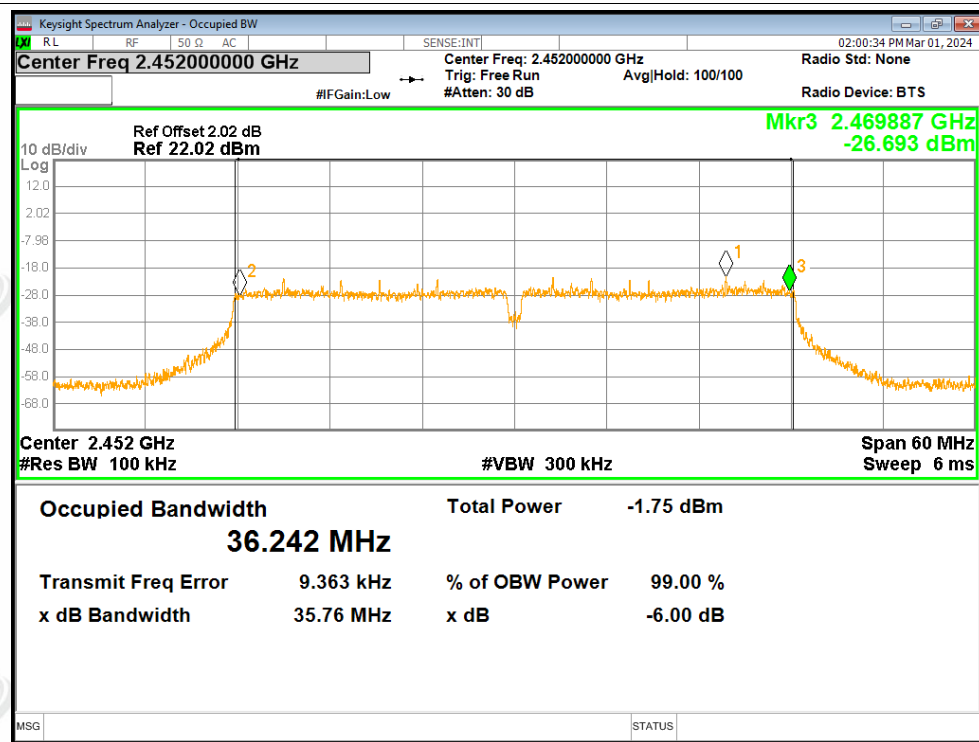




-6dB Bandwidth NVNT n40 2437MHz Ant2



-6dB Bandwidth NVNT n40 2452MHz Ant2



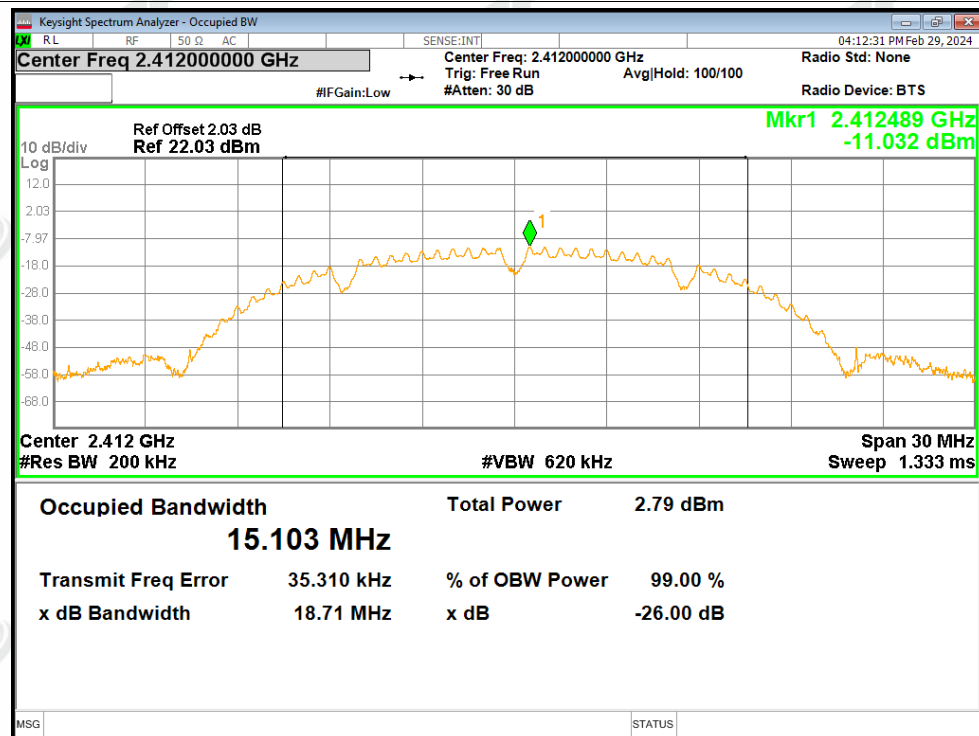
**A4. Occupied Channel Bandwidth**

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	15.103
NVNT	b	2437	Ant1	15.195
NVNT	b	2462	Ant1	15.151
NVNT	b	2412	Ant2	15.121
NVNT	b	2437	Ant2	15.162
NVNT	b	2462	Ant2	15.161
NVNT	g	2412	Ant1	16.646
NVNT	g	2437	Ant1	16.724
NVNT	g	2462	Ant1	16.718
NVNT	g	2412	Ant2	16.691
NVNT	g	2437	Ant2	16.703
NVNT	g	2462	Ant2	16.69
NVNT	n20	2412	Ant1	17.791
NVNT	n20	2437	Ant1	17.826
NVNT	n20	2462	Ant1	17.805
NVNT	n20	2412	Ant2	17.796
NVNT	n20	2437	Ant2	17.796
NVNT	n20	2462	Ant2	17.784
NVNT	n40	2422	Ant1	36.431
NVNT	n40	2437	Ant1	36.424
NVNT	n40	2452	Ant1	36.386
NVNT	n40	2422	Ant2	36.45
NVNT	n40	2437	Ant2	36.494
NVNT	n40	2452	Ant2	36.449

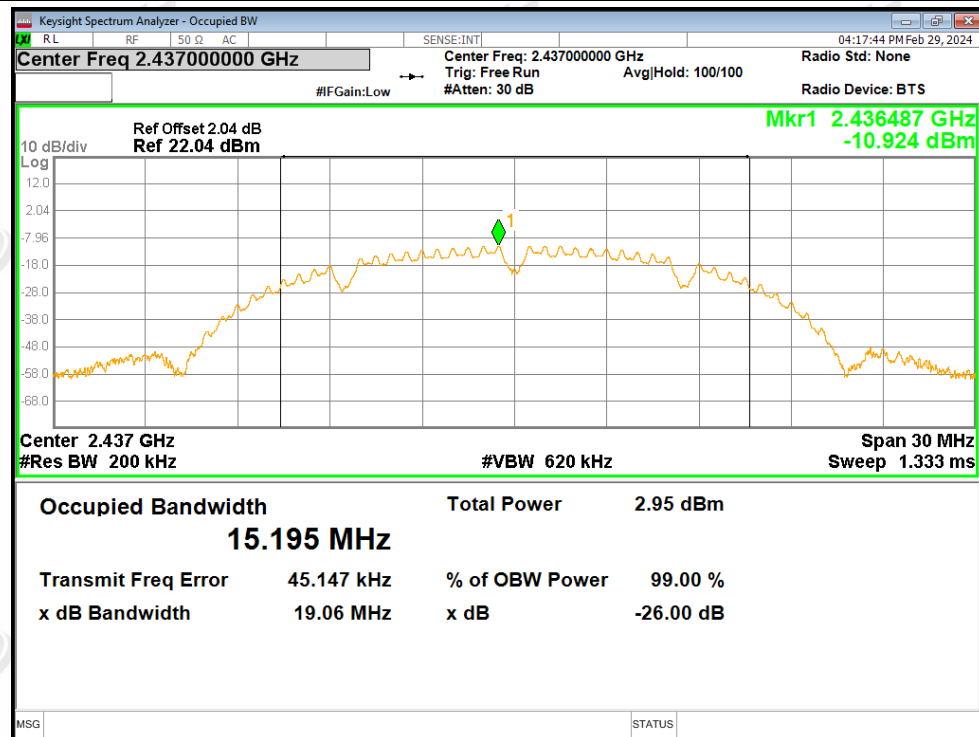


Test Graphs

OBW NVNT b 2412MHz Ant1

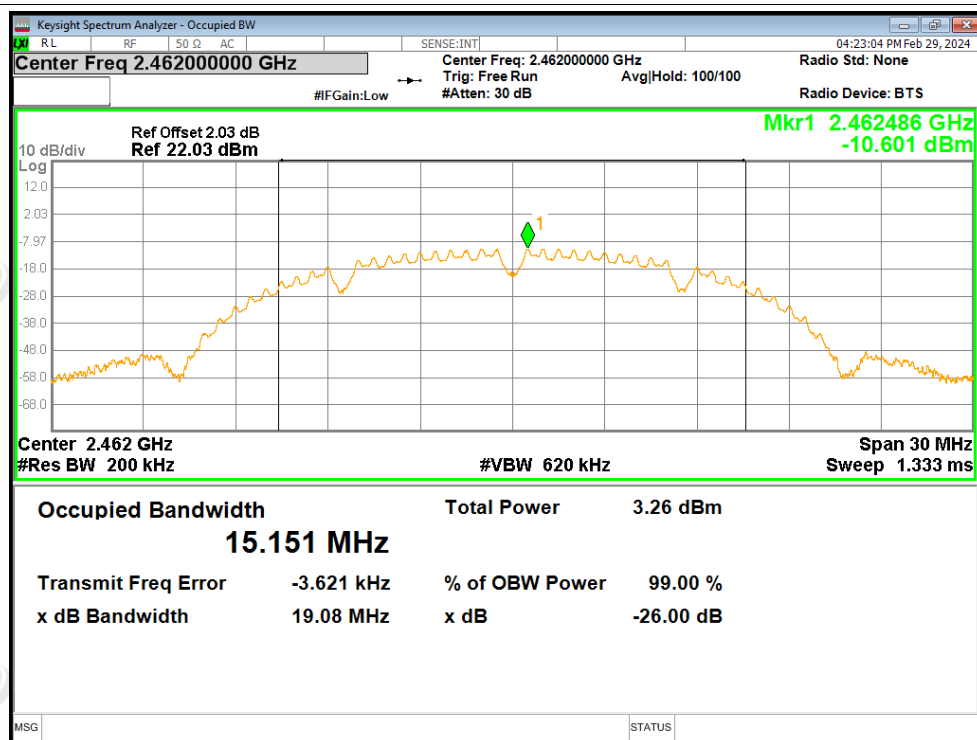


OBW NVNT b 2437MHz Ant1

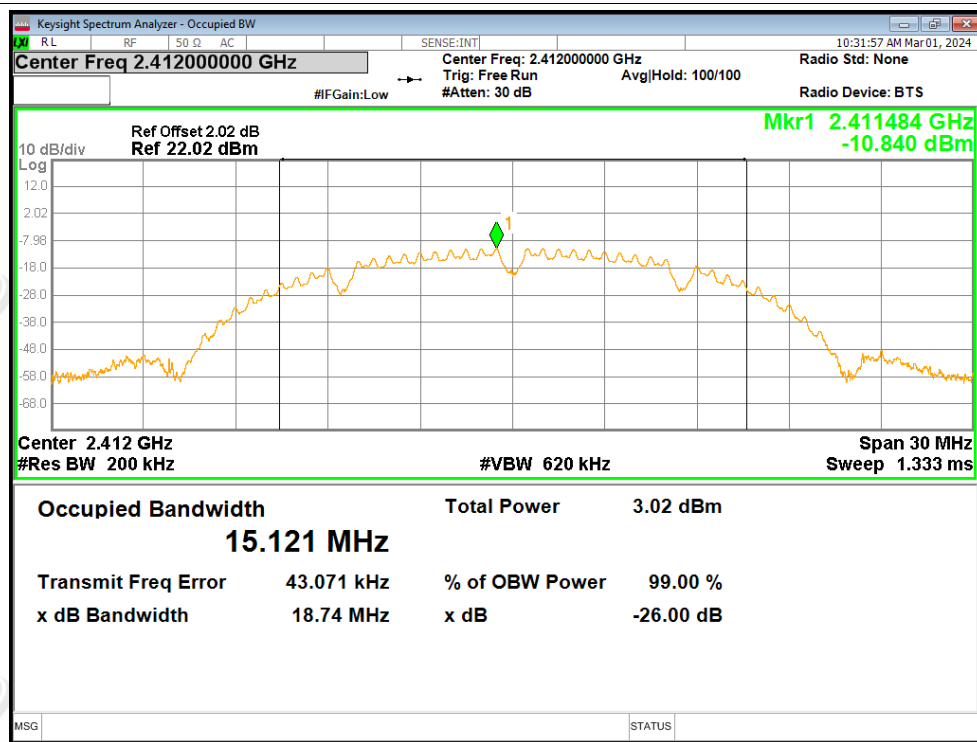




OBW NVNT b 2462MHz Ant1

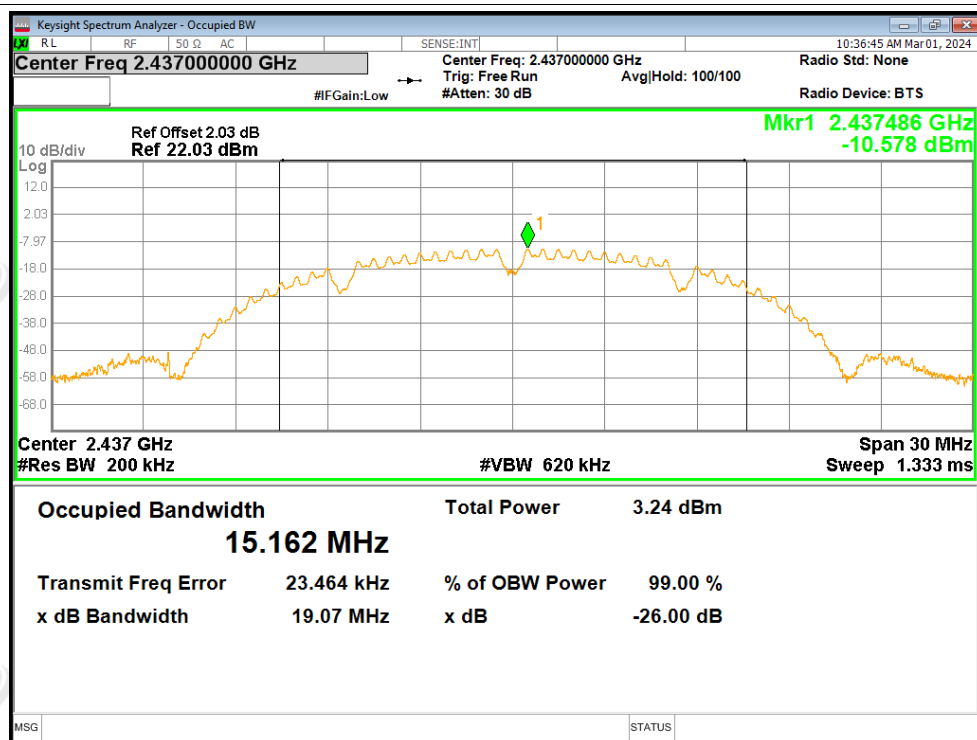


OBW NVNT b 2412MHz Ant2

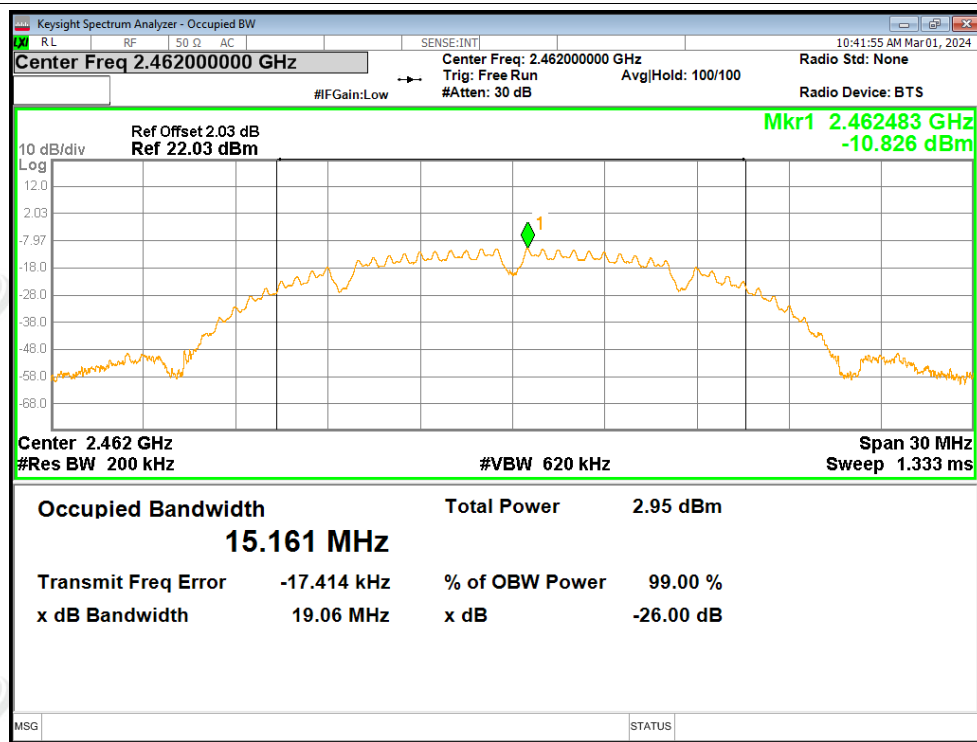




OBW NVNT b 2437MHz Ant2

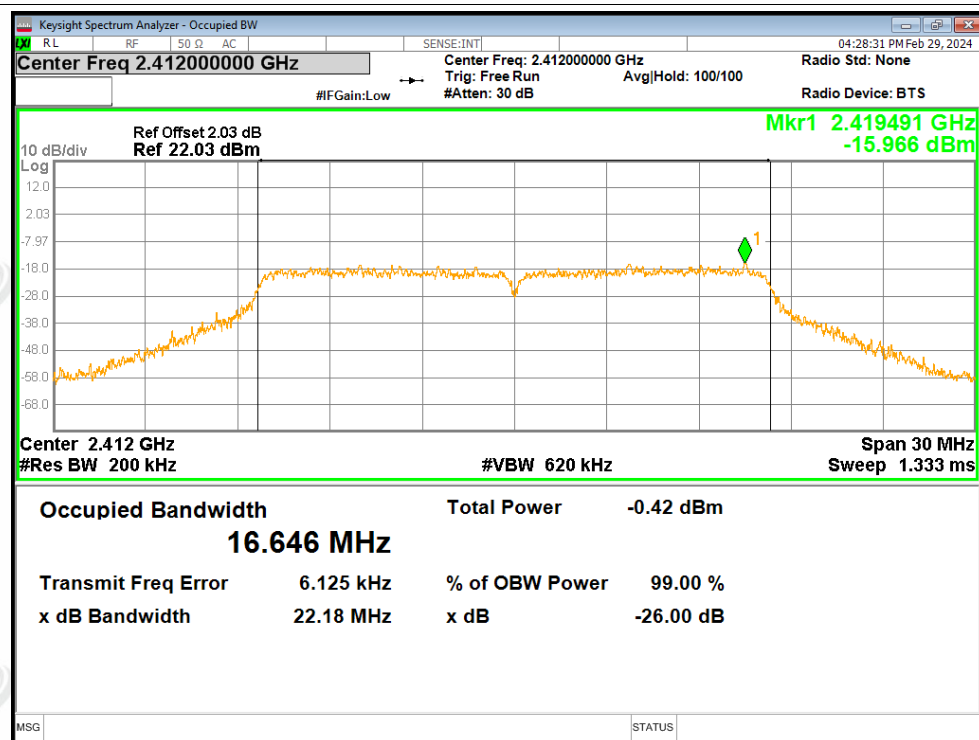


OBW NVNT b 2462MHz Ant2

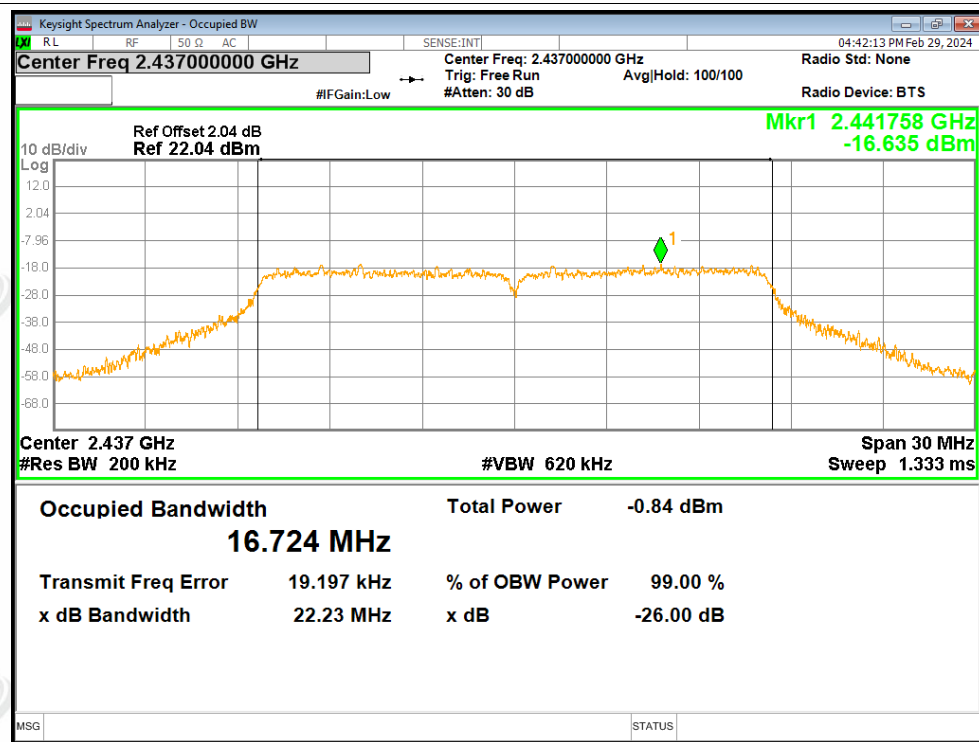




OBW NVNT g 2412MHz Ant1

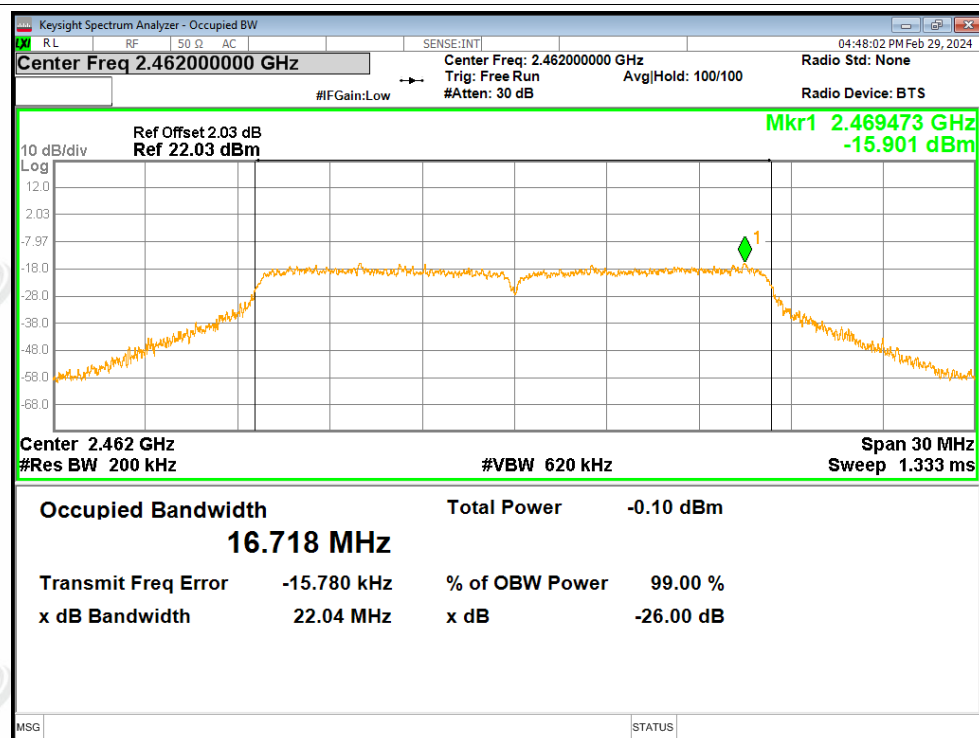


OBW NVNT g 2437MHz Ant1

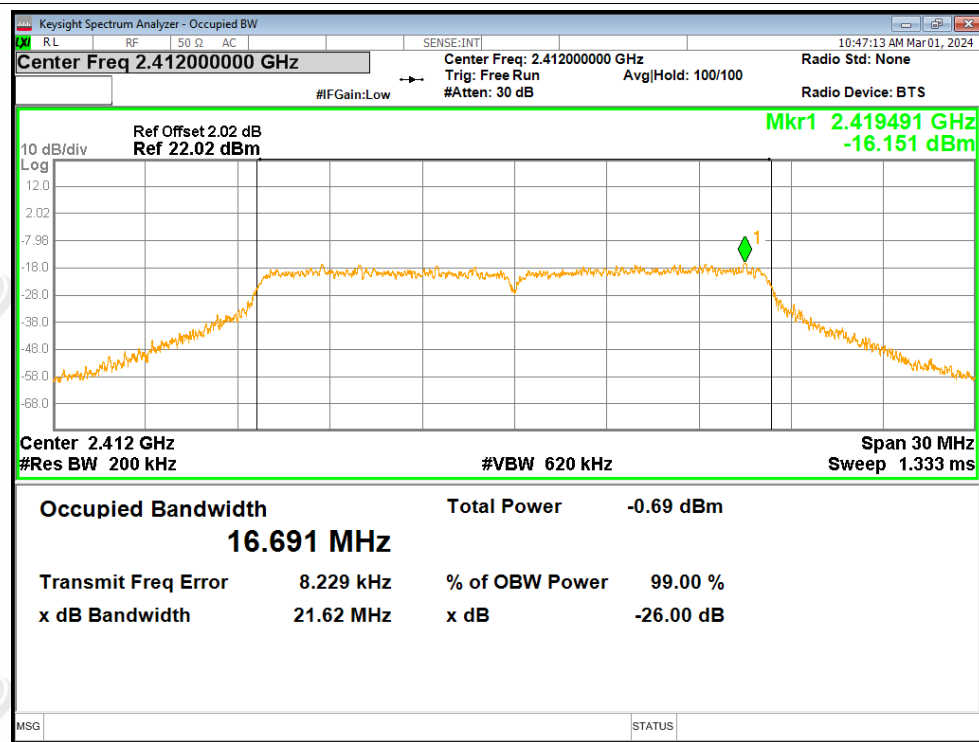




OBW NVNT g 2462MHz Ant1

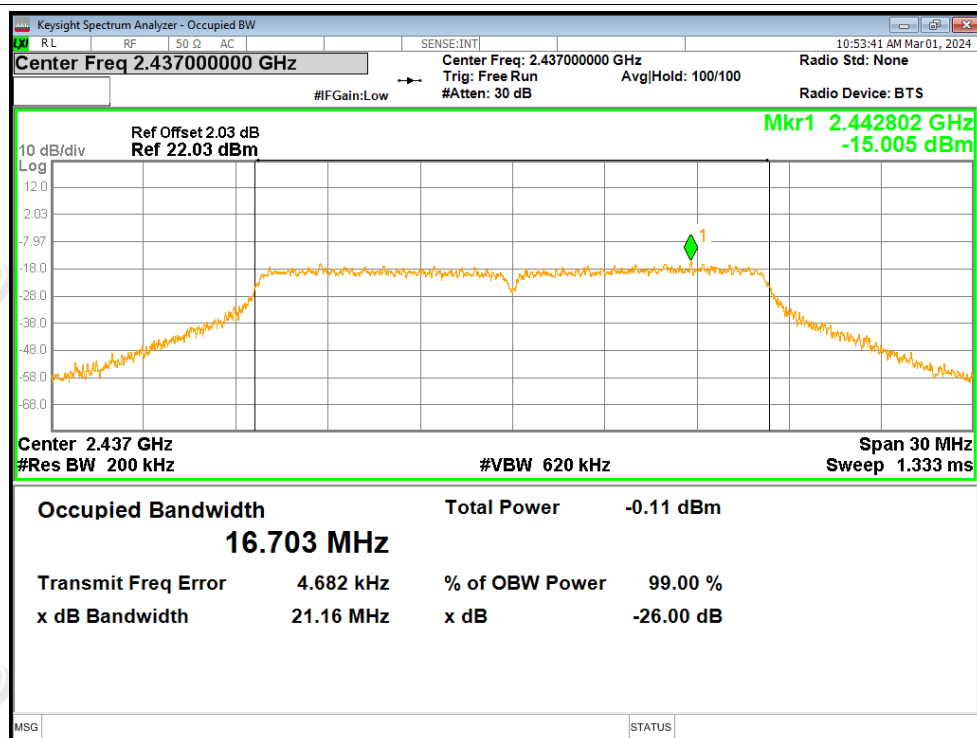


OBW NVNT g 2412MHz Ant2

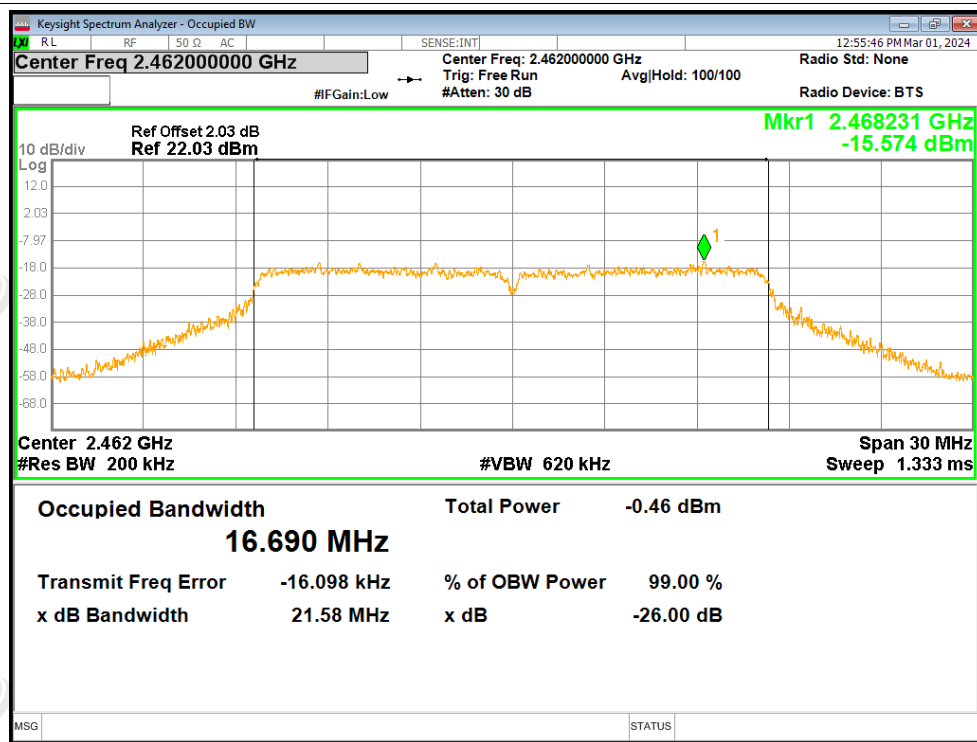




OBW NVNT g 2437MHz Ant2

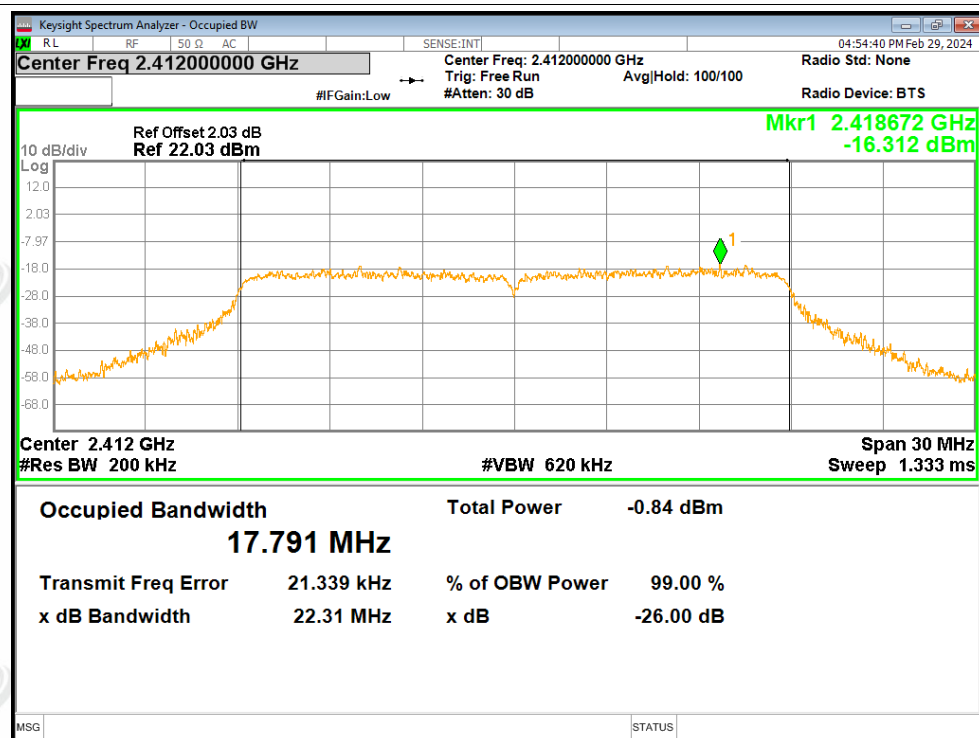


OBW NVNT g 2462MHz Ant2

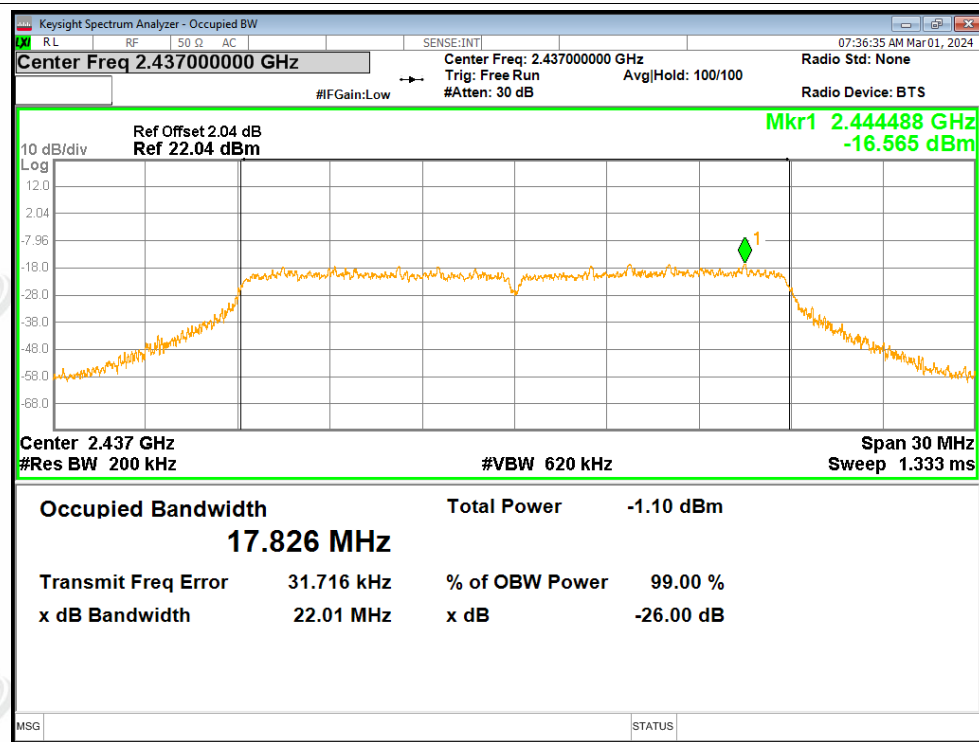




OBW NVNT n20 2412MHz Ant1

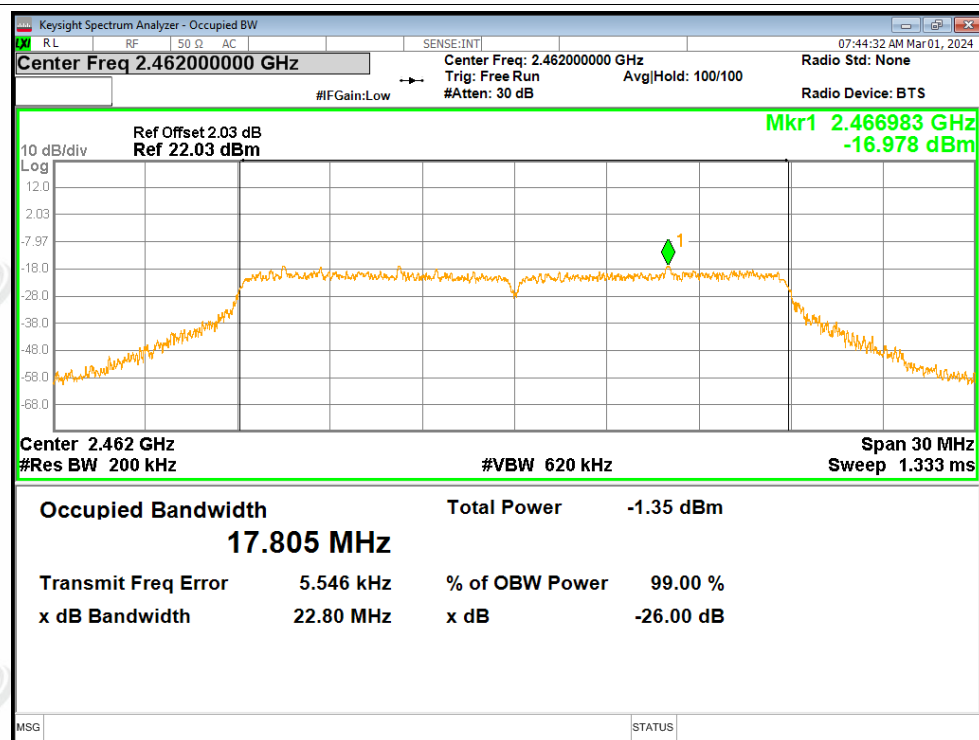


OBW NVNT n20 2437MHz Ant1

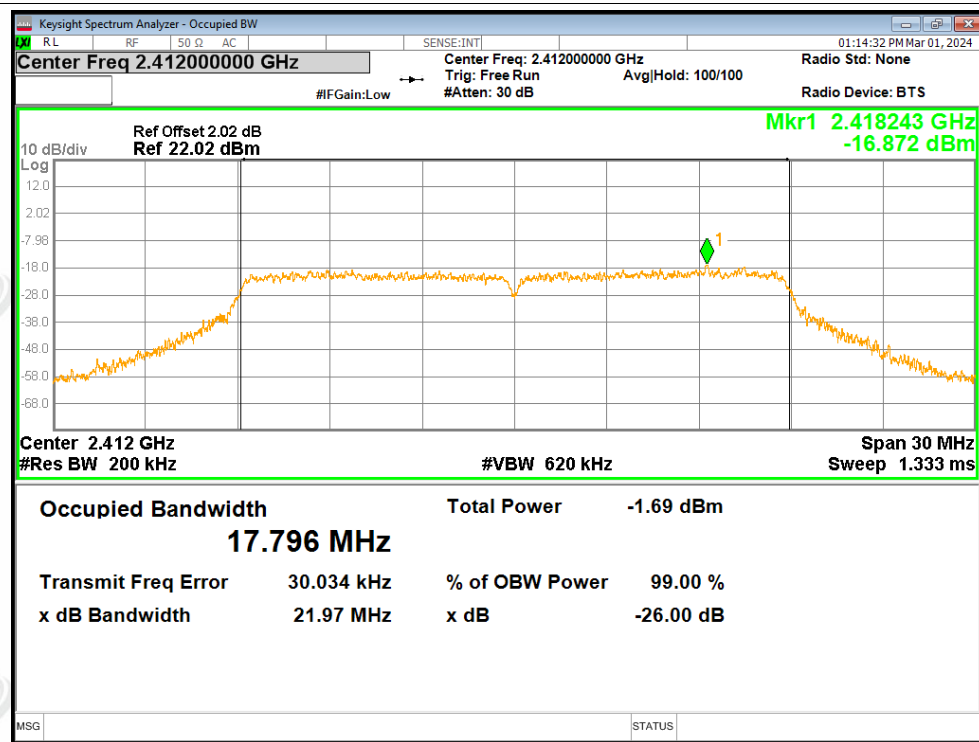




OBW NVNT n20 2462MHz Ant1

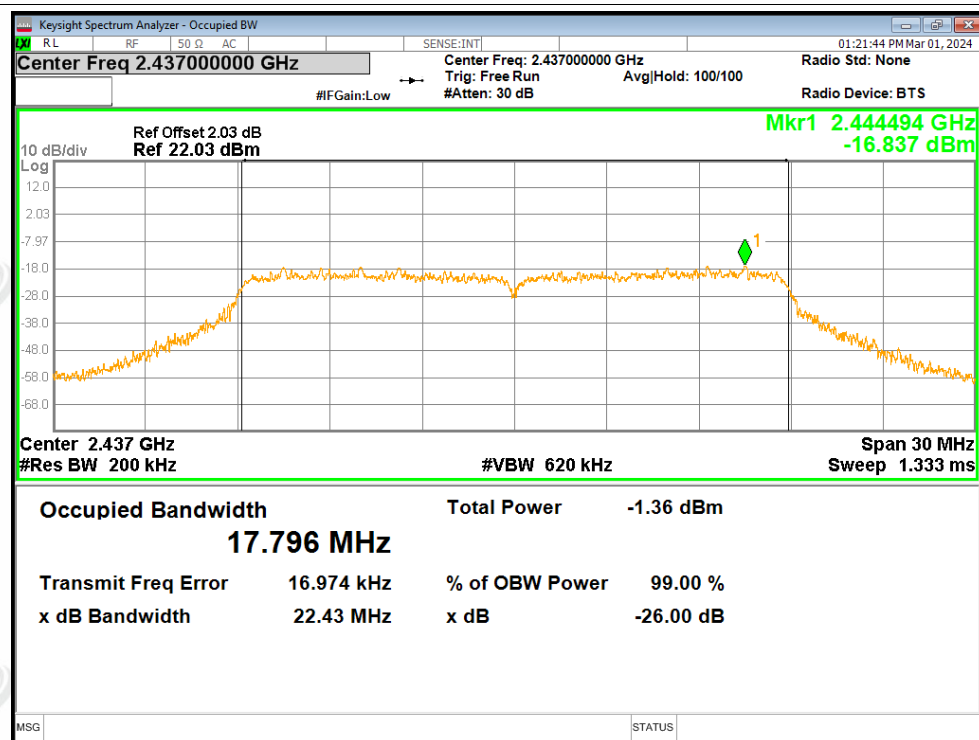


OBW NVNT n20 2412MHz Ant2

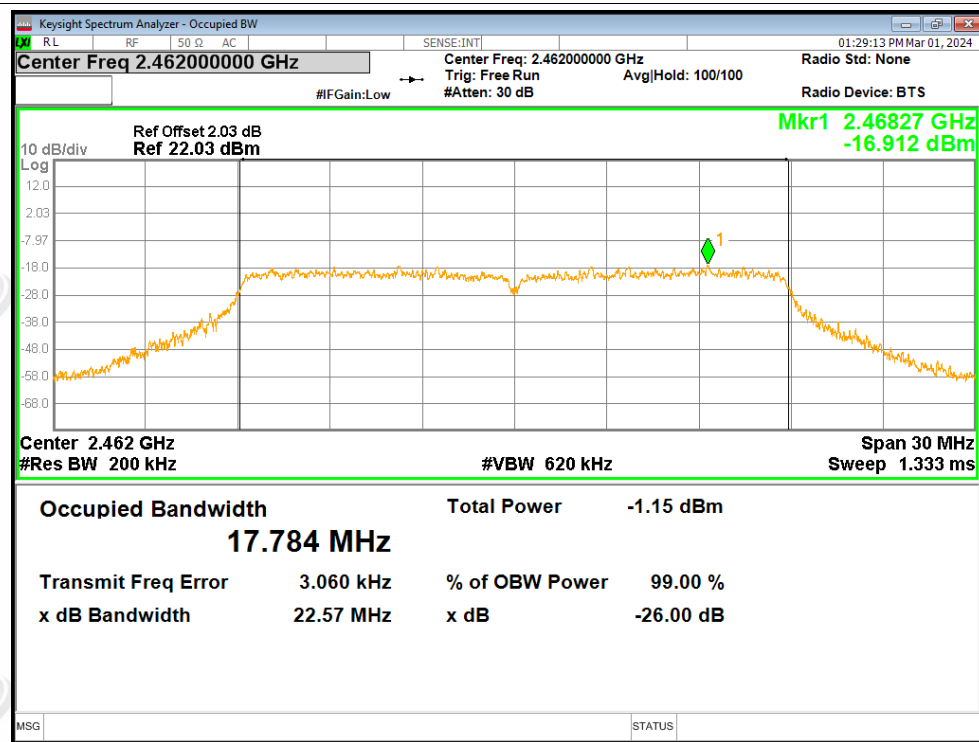




OBW NVNT n20 2437MHz Ant2

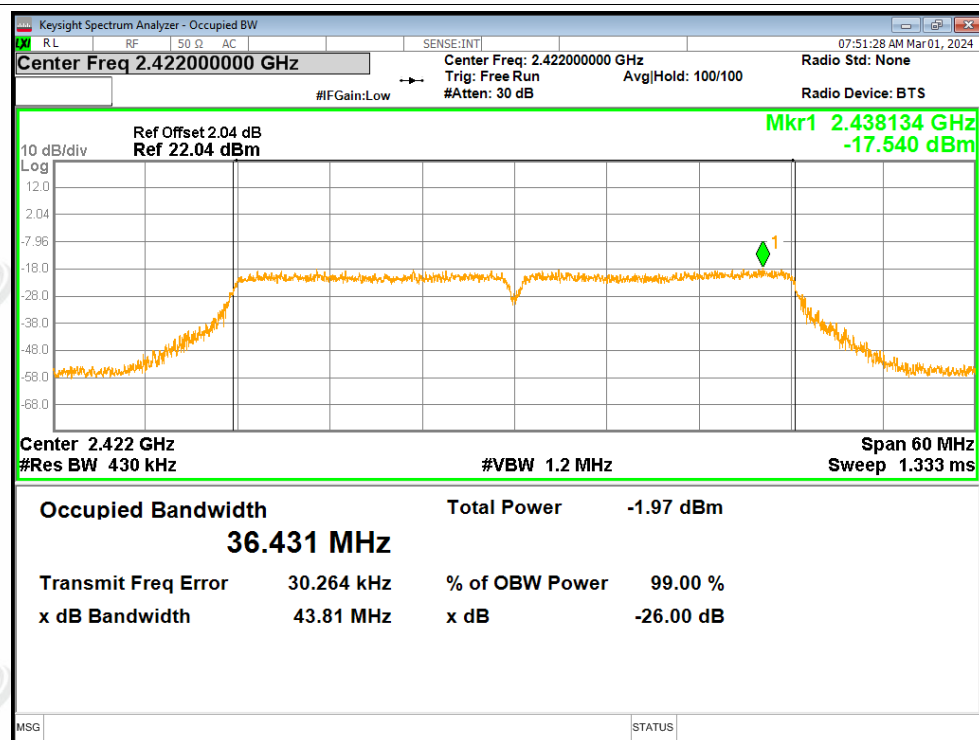


OBW NVNT n20 2462MHz Ant2

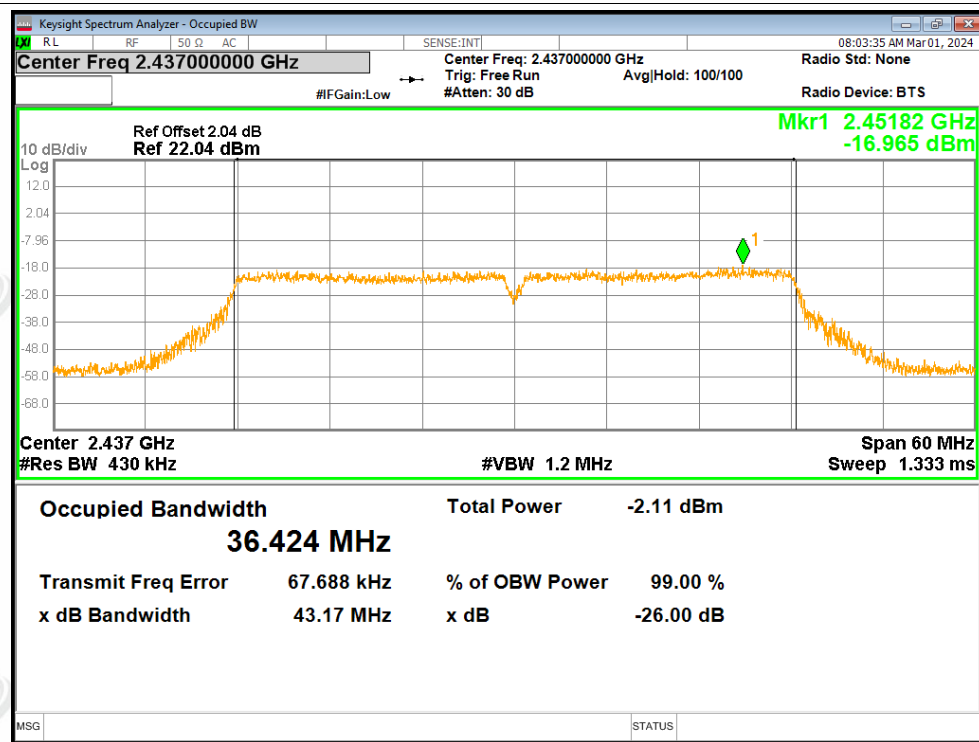




OBW NVNT n40 2422MHz Ant1

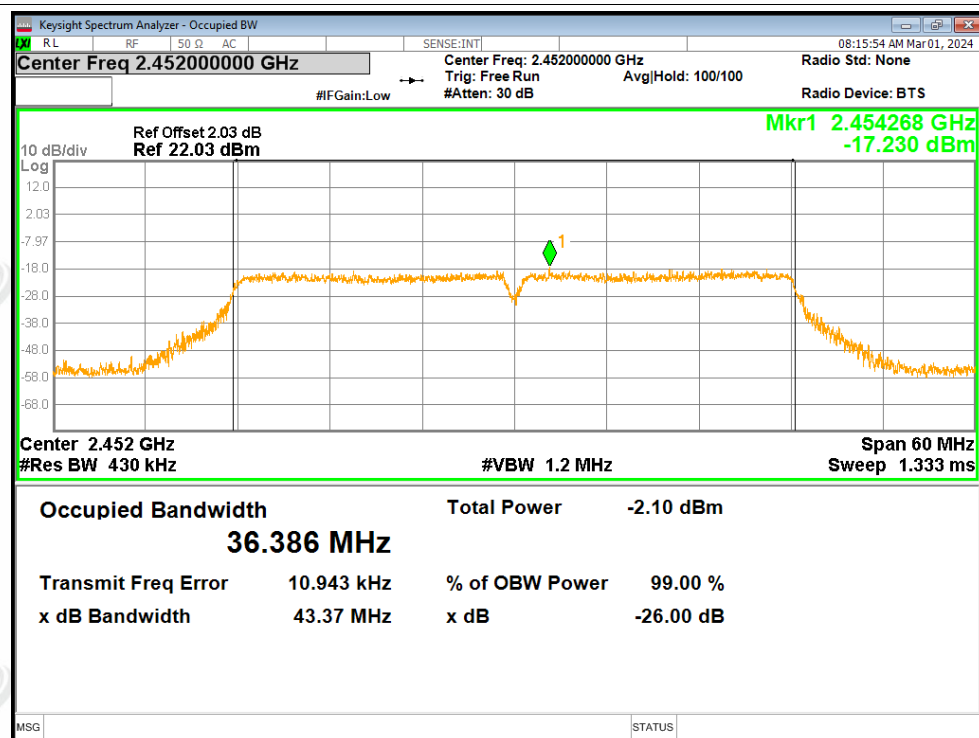


OBW NVNT n40 2437MHz Ant1

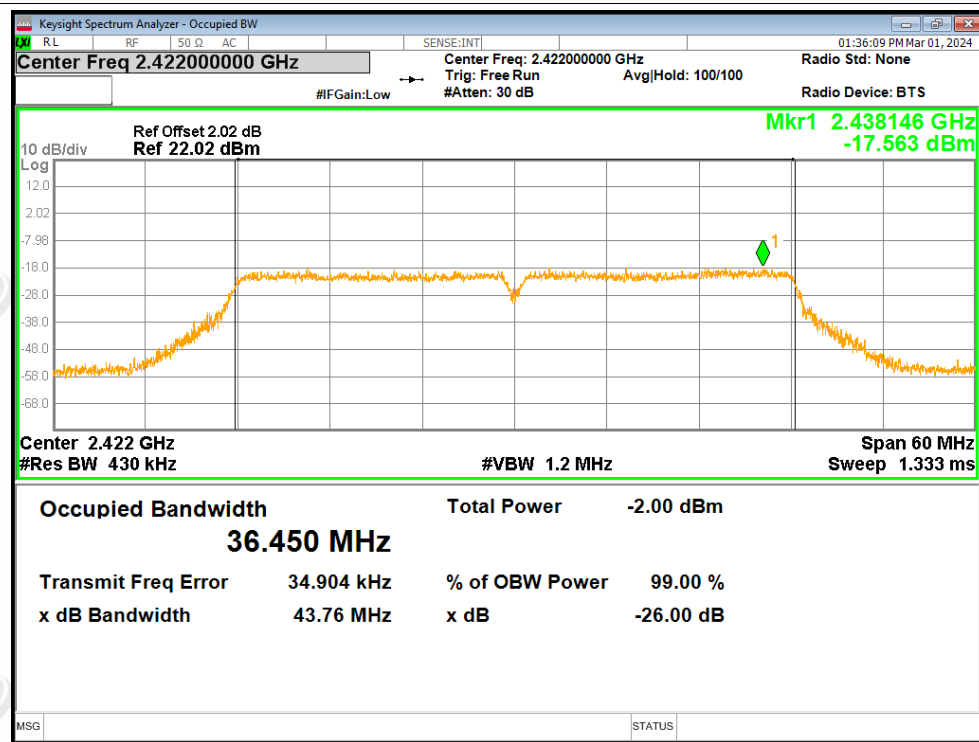




OBW NVNT n40 2452MHz Ant1

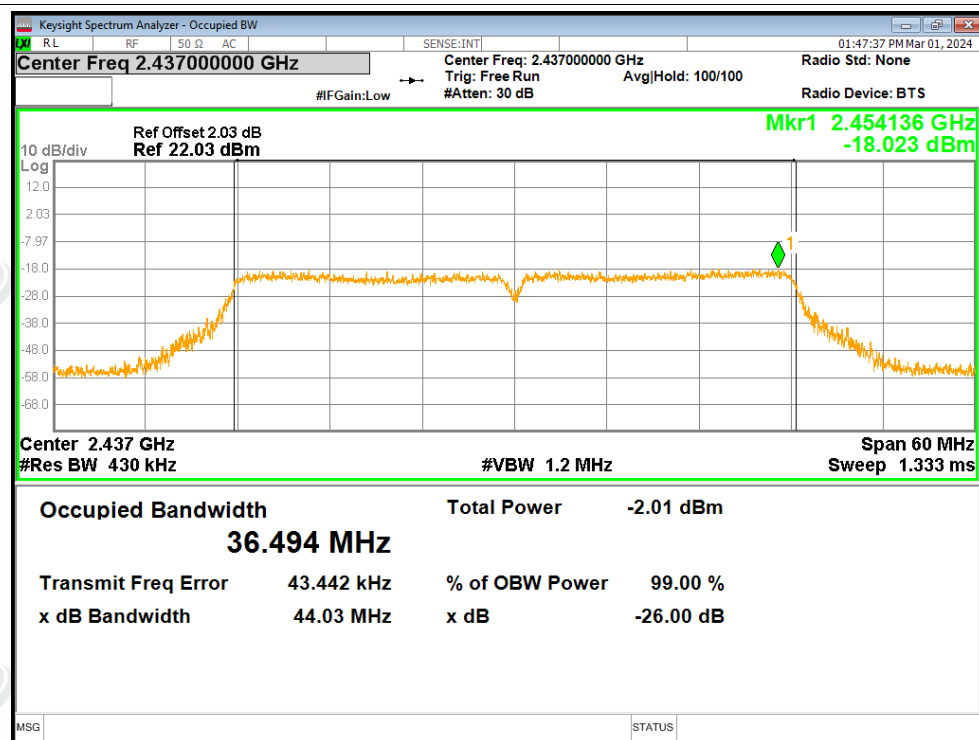


OBW NVNT n40 2422MHz Ant2

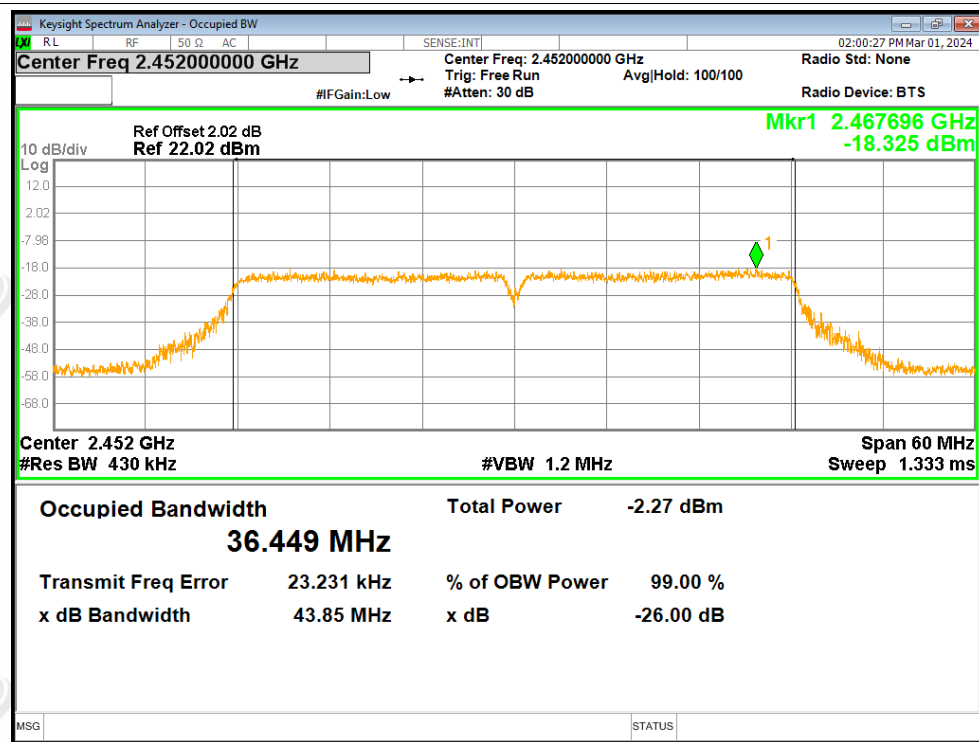




OBW NVNT n40 2437MHz Ant2



OBW NVNT n40 2452MHz Ant2



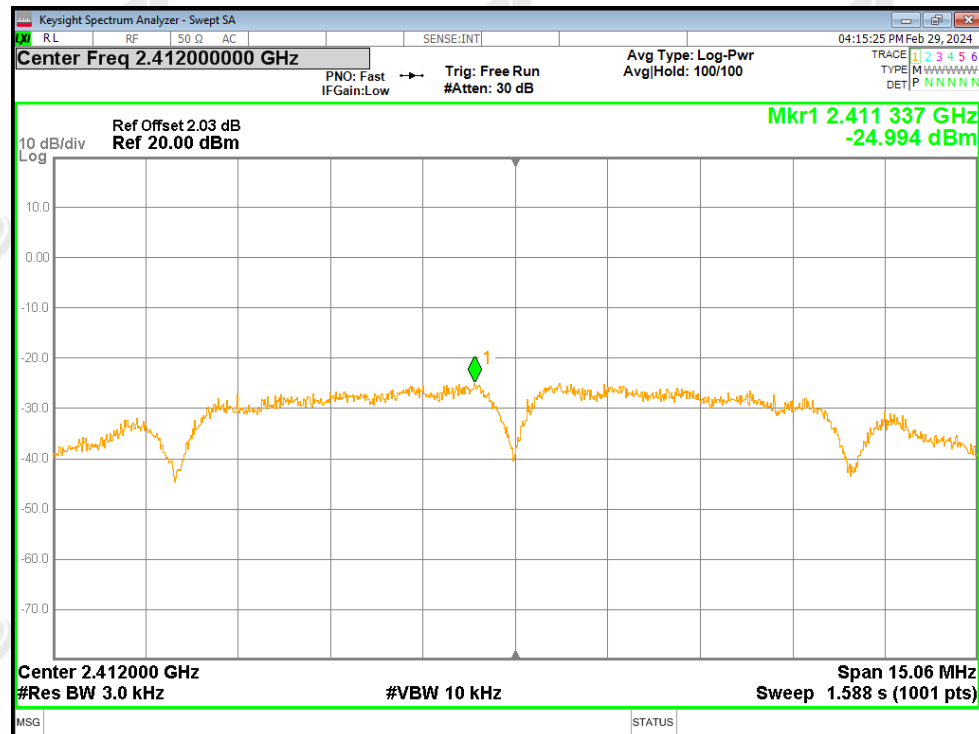
**A5. Maximum Power Spectral Density Level**

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant1	-24.99	8	Pass
NVNT	b	2437	Ant1	-24.33	8	Pass
NVNT	b	2462	Ant1	-23.24	8	Pass
NVNT	b	2412	Ant2	-23.57	8	Pass
NVNT	b	2437	Ant2	-23.59	8	Pass
NVNT	b	2462	Ant2	-23.95	8	Pass
NVNT	g	2412	Ant1	-30.04	8	Pass
NVNT	g	2437	Ant1	-30.09	8	Pass
NVNT	g	2462	Ant1	-28.21	8	Pass
NVNT	g	2412	Ant2	-29.07	8	Pass
NVNT	g	2437	Ant2	-29.35	8	Pass
NVNT	g	2462	Ant2	-30.3	8	Pass
NVNT	n20	2412	Ant1	-30.84	8	Pass
NVNT	n20	2437	Ant1	-30.8	8	Pass
NVNT	n20	2462	Ant1	-31.11	8	Pass
NVNT	n20	2412	Ant2	-30.44	8	Pass
NVNT	n20	2437	Ant2	-30.34	8	Pass
NVNT	n20	2462	Ant2	-30.96	8	Pass
NVNT	n40	2422	Ant1	-34	8	Pass
NVNT	n40	2437	Ant1	-33.65	8	Pass
NVNT	n40	2452	Ant1	-34.3	8	Pass
NVNT	n40	2422	Ant2	-33.13	8	Pass
NVNT	n40	2437	Ant2	-33.64	8	Pass
NVNT	n40	2452	Ant2	-33.95	8	Pass
NVNT	n20	n20	MIMO	-27.63	8	Pass
NVNT	n20	n20	MIMO	-27.55	8	Pass
NVNT	n20	n20	MIMO	-28.02	8	Pass
NVNT	n40	2422	MIMO	-30.53	8	Pass
NVNT	n40	2437	MIMO	-30.63	8	Pass
NVNT	n40	2452	MIMO	-31.11	8	Pass

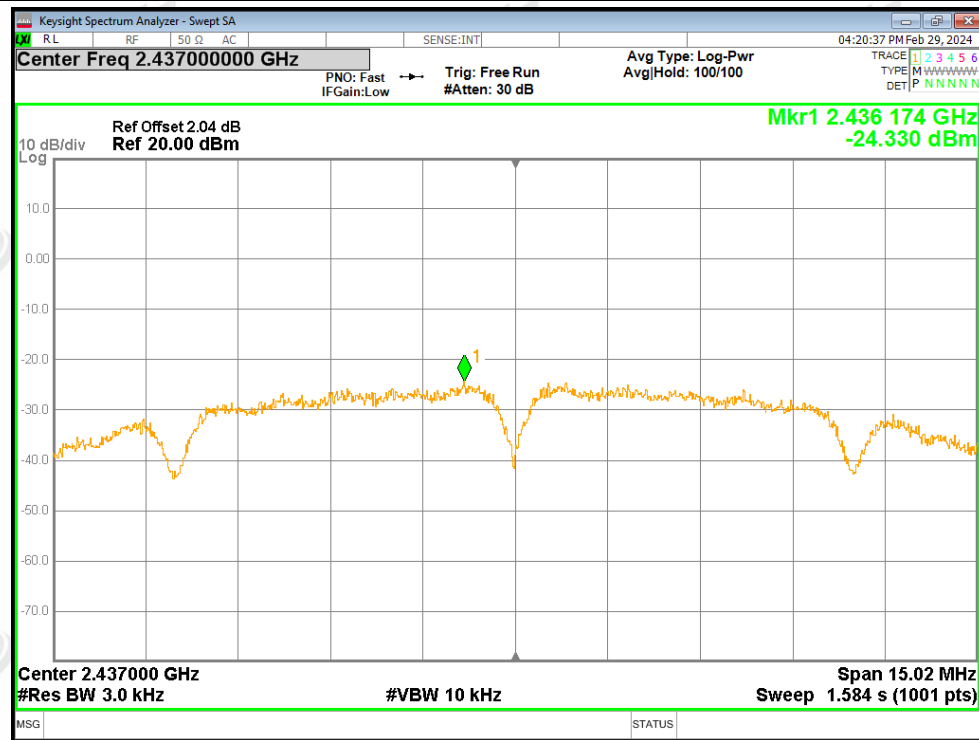


Test Graphs

PSD NVNT b 2412MHz Ant1

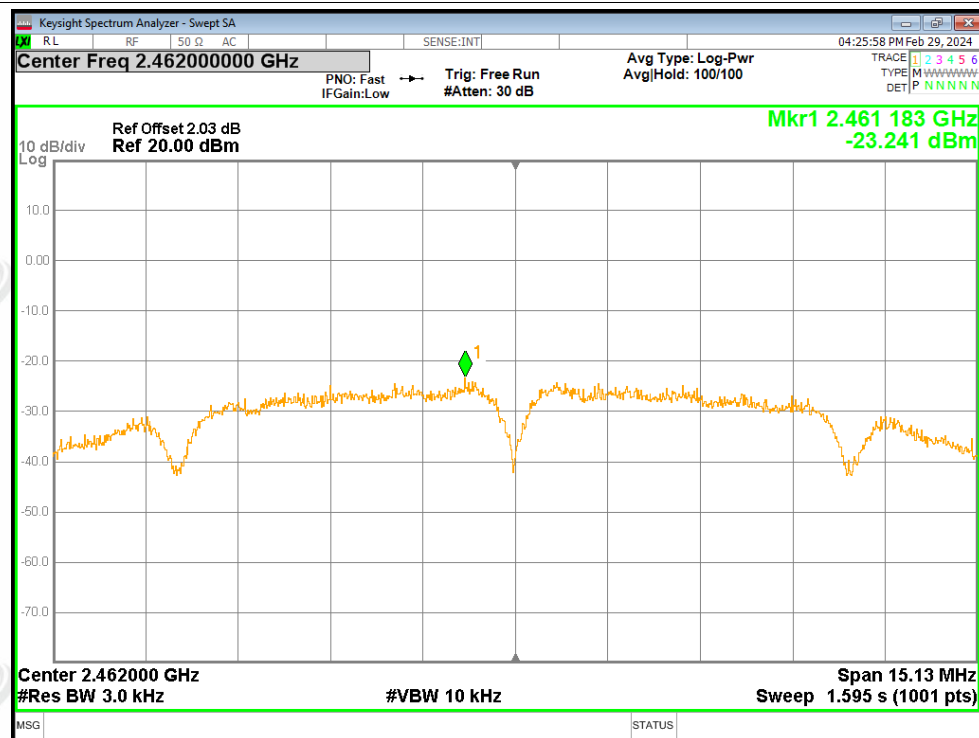


PSD NVNT b 2437MHz Ant1

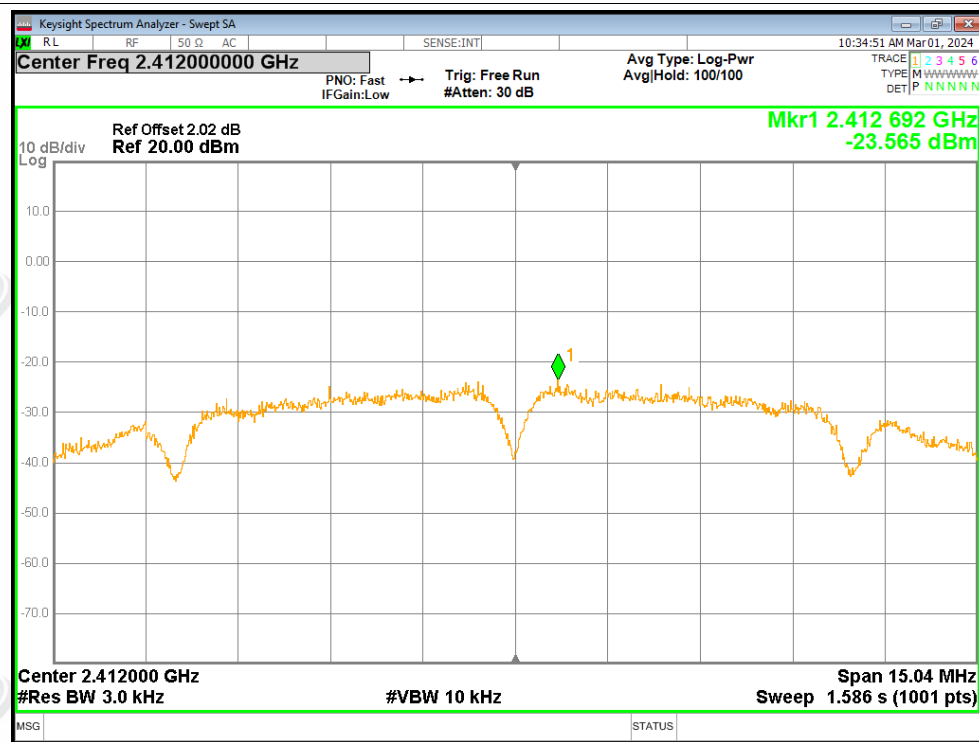




PSD NVNT b 2462MHz Ant1

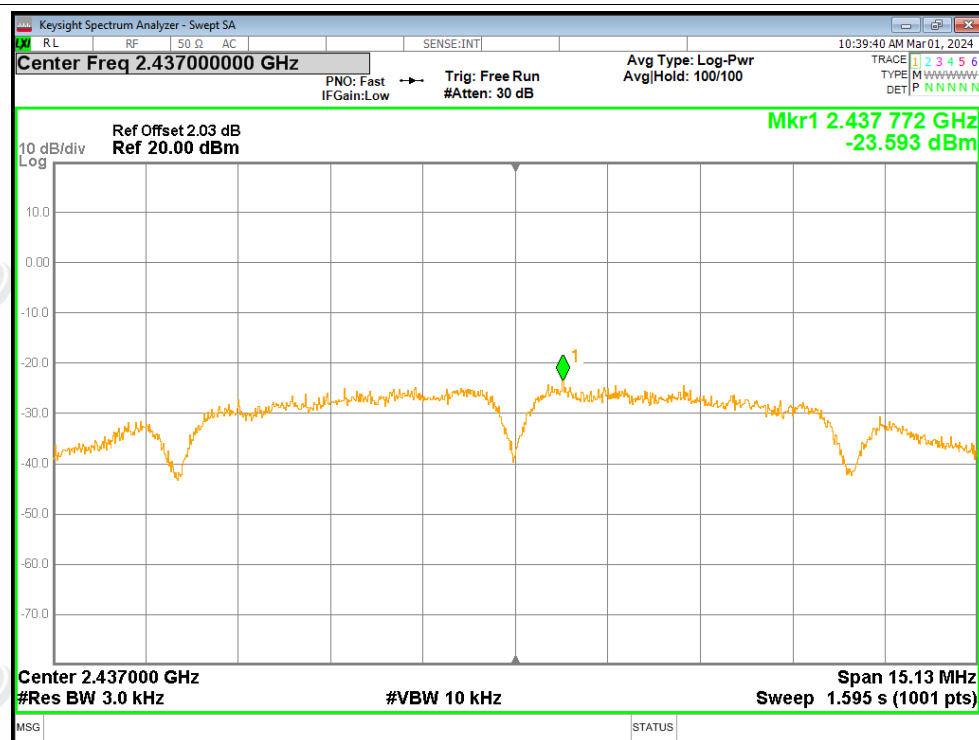


PSD NVNT b 2412MHz Ant2

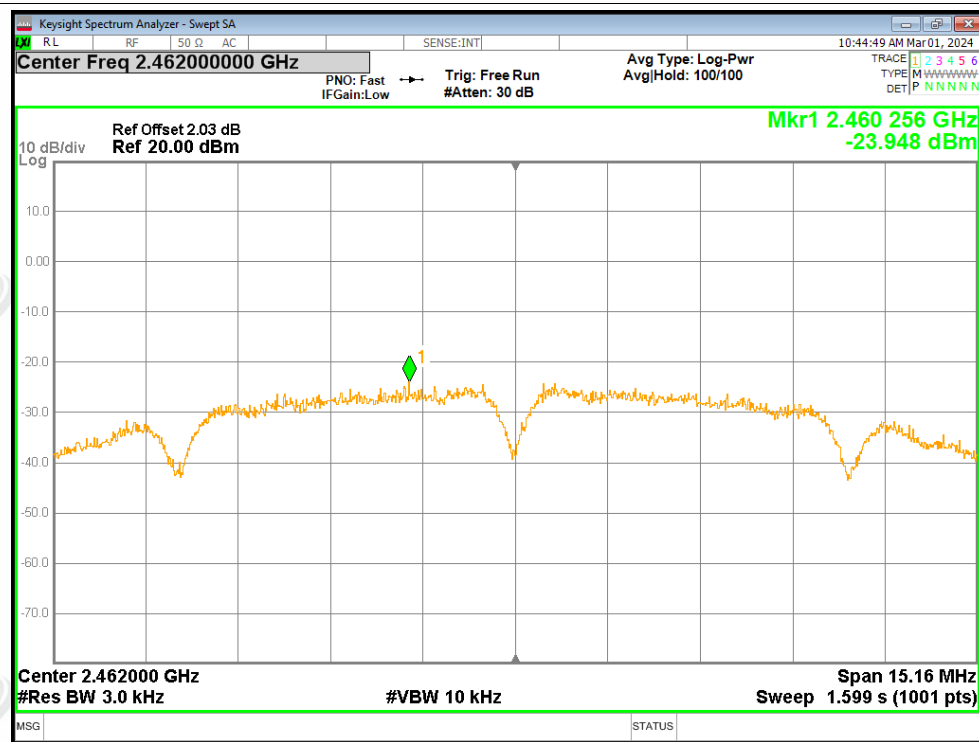




PSD NVNT b 2437MHz Ant2

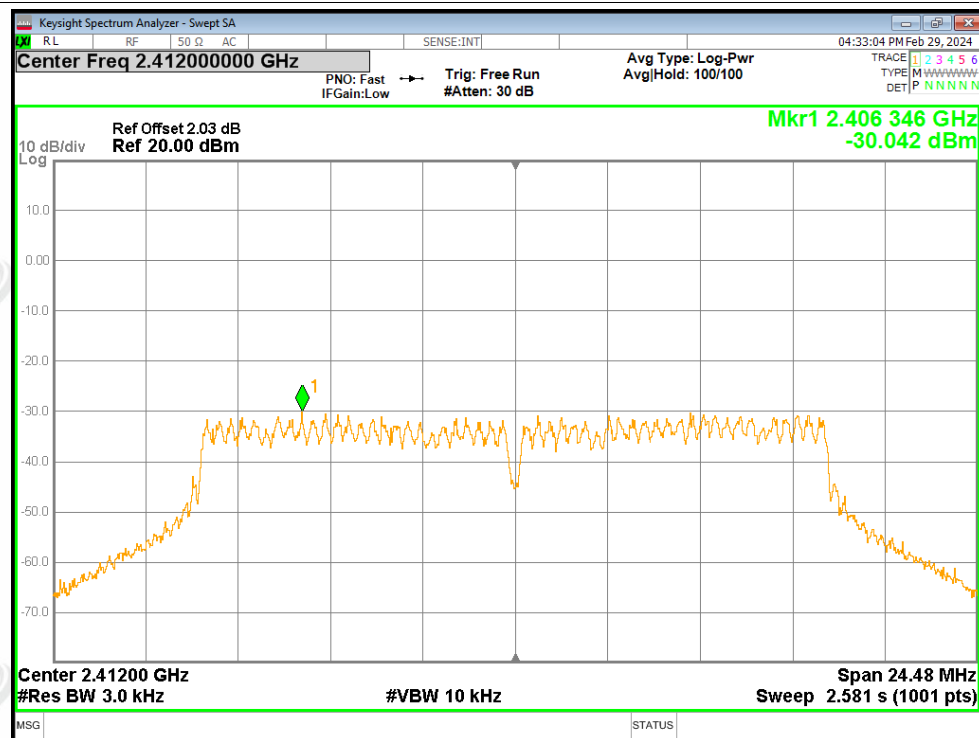


PSD NVNT b 2462MHz Ant2

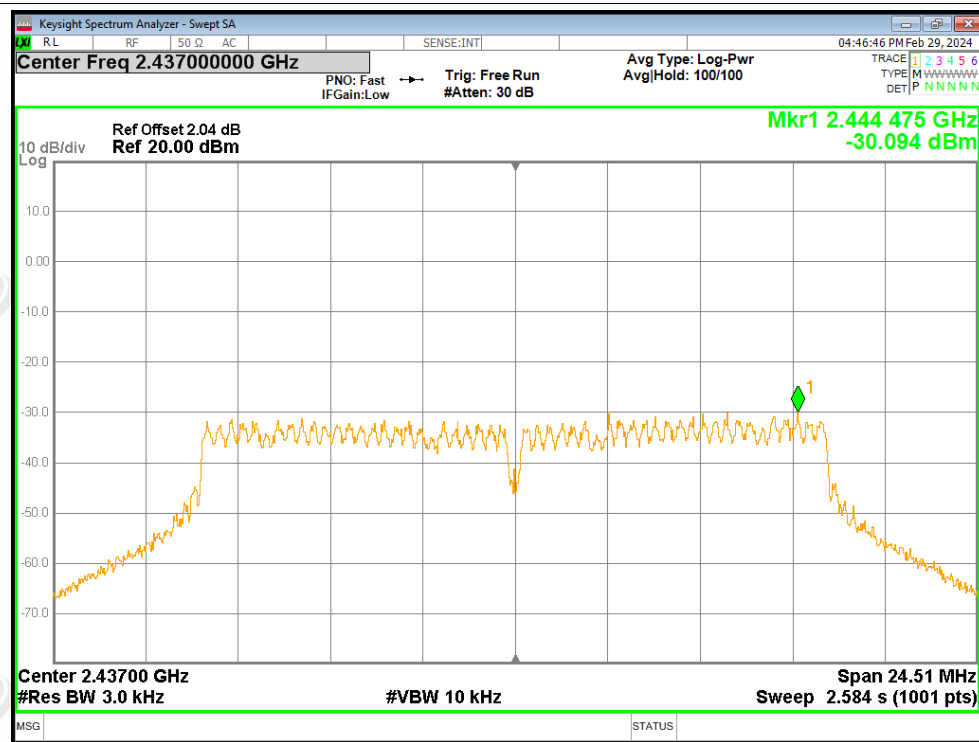




PSD NVNT g 2412MHz Ant1

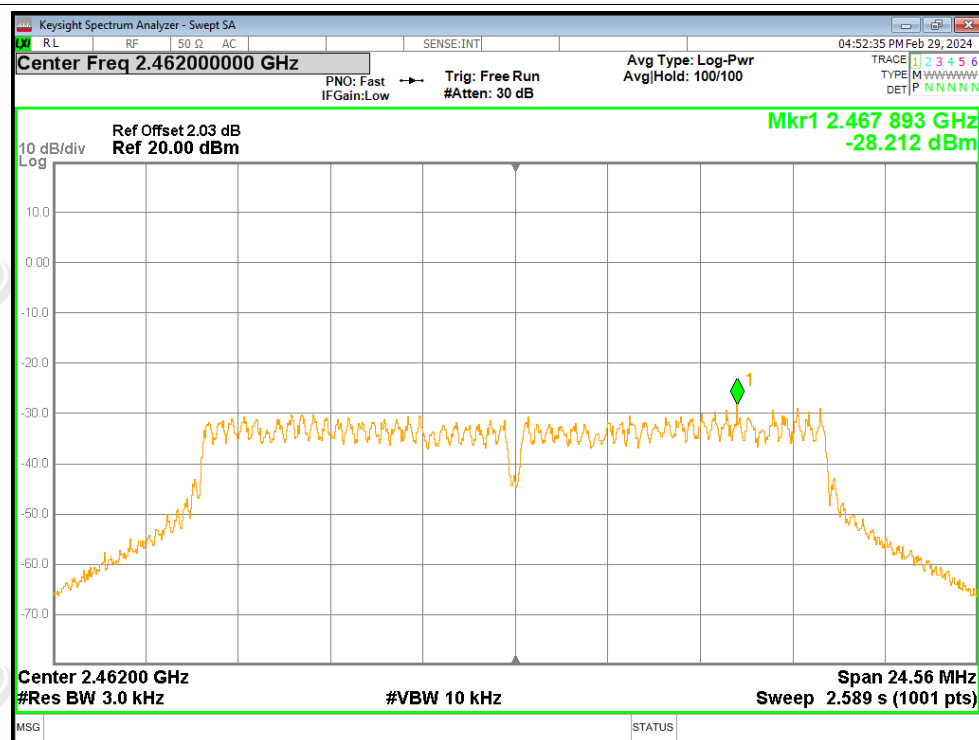


PSD NVNT g 2437MHz Ant1

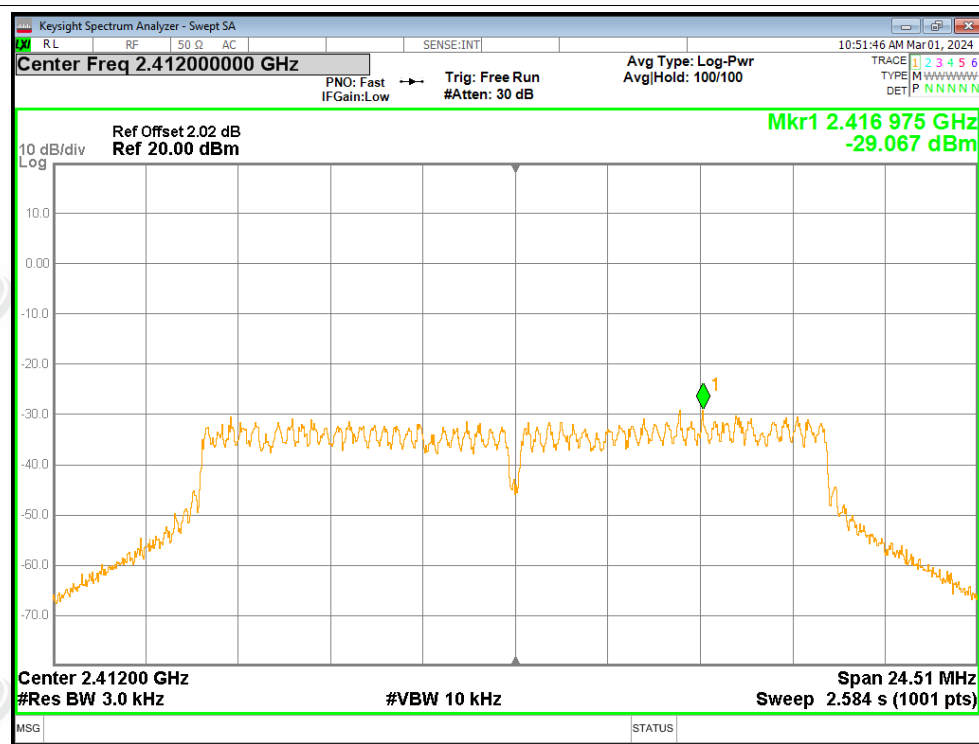




PSD NVNT g 2462MHz Ant1

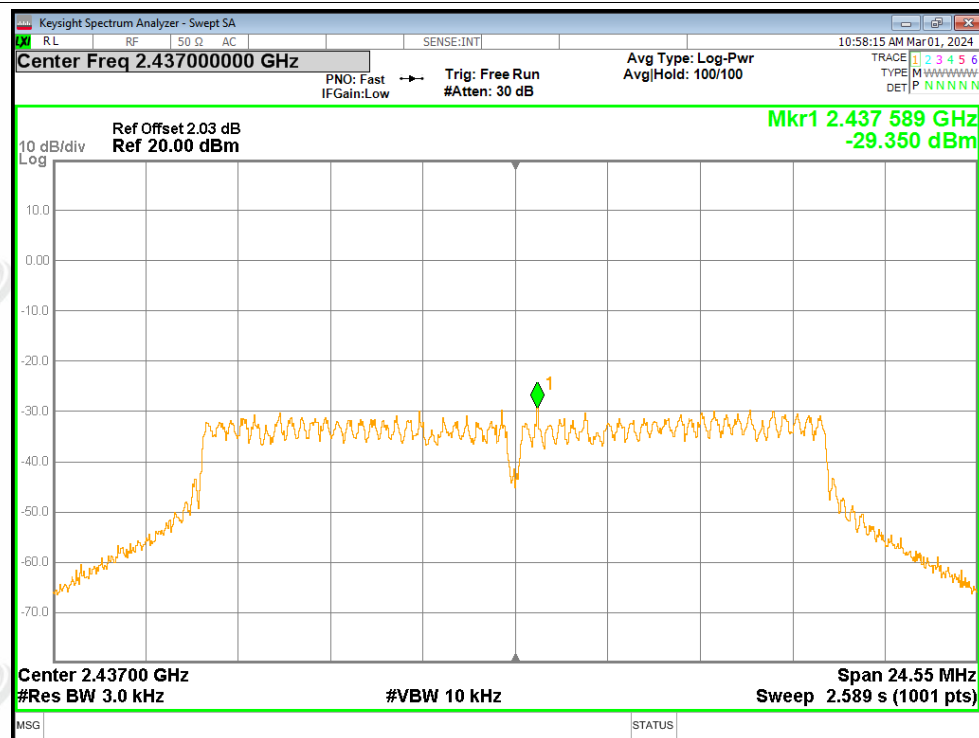


PSD NVNT g 2412MHz Ant2

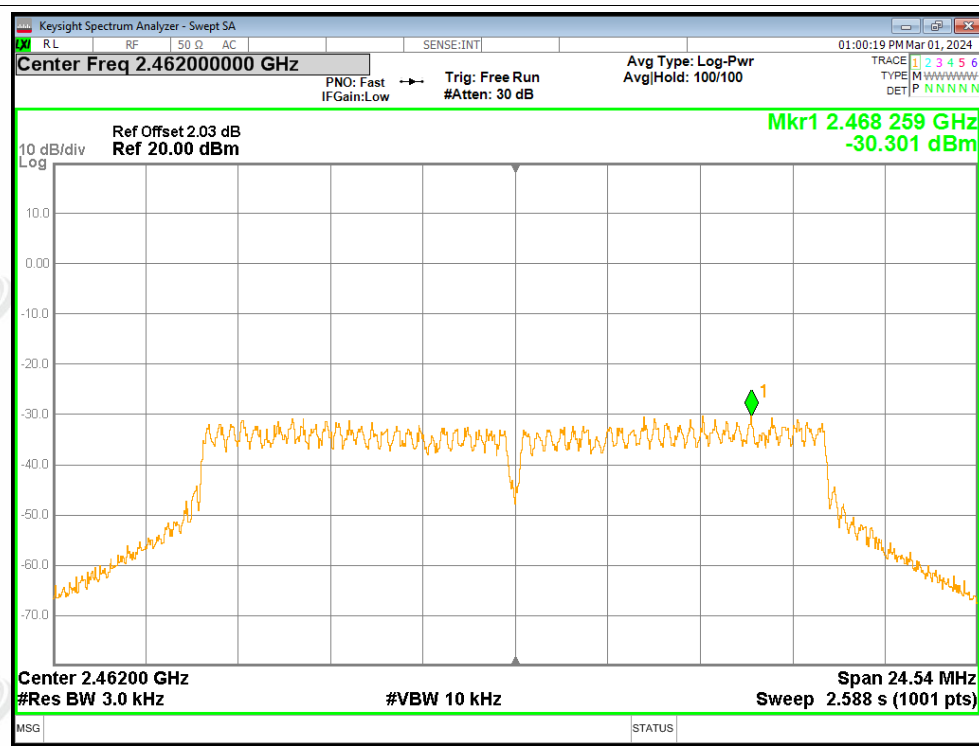




PSD NVNT g 2437MHz Ant2

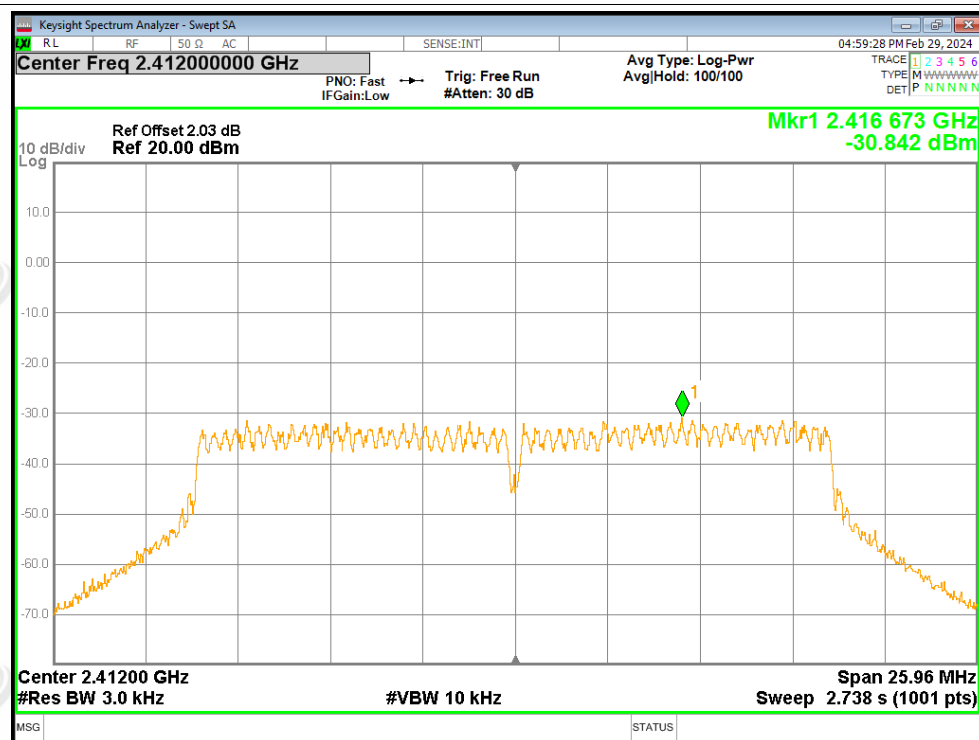


PSD NVNT g 2462MHz Ant2

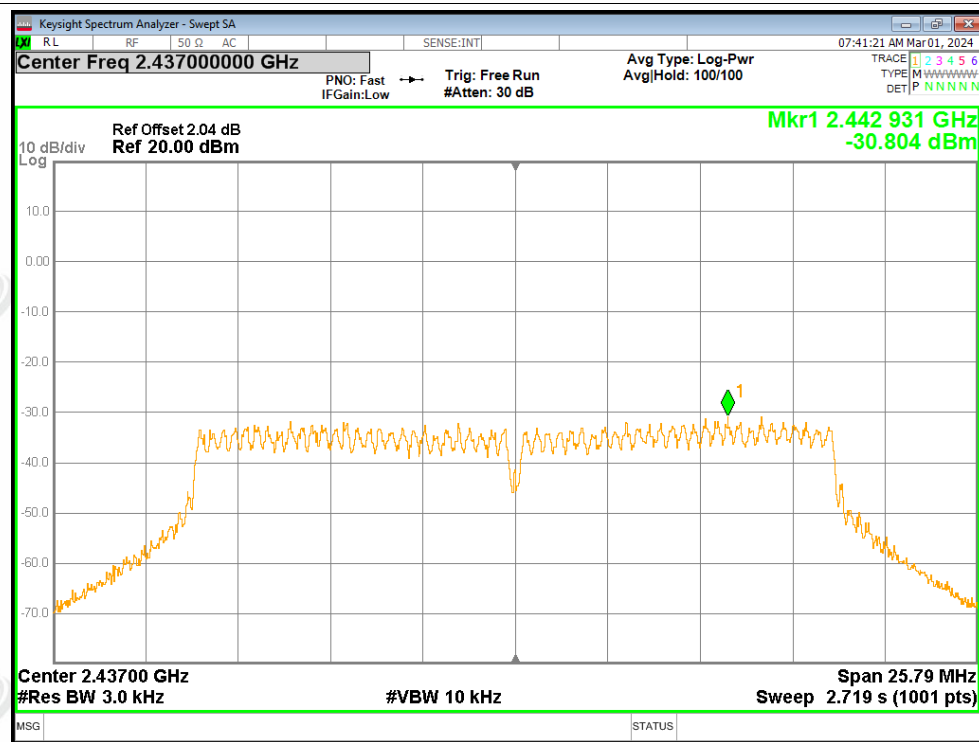




PSD NVNT n20 2412MHz Ant1

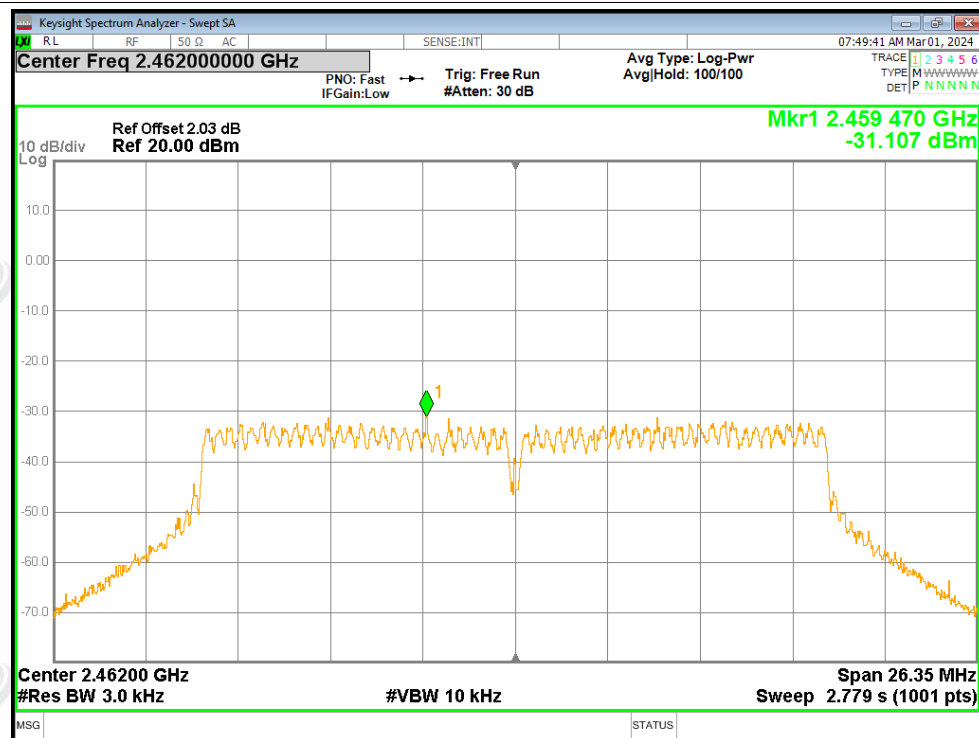


PSD NVNT n20 2437MHz Ant1

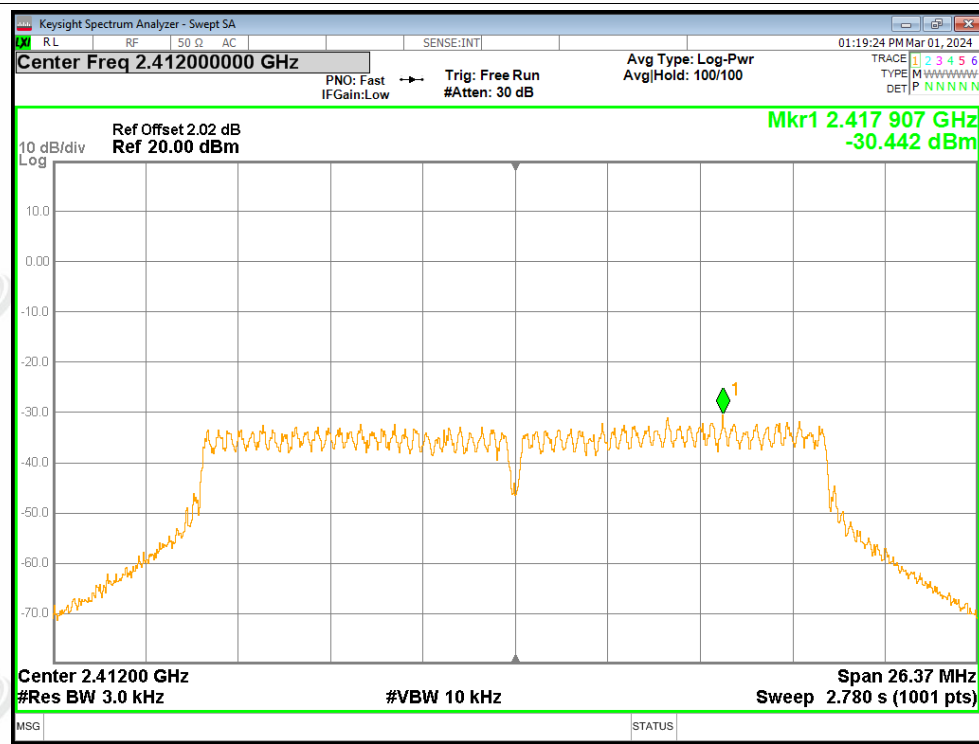




PSD NVNT n20 2462MHz Ant1

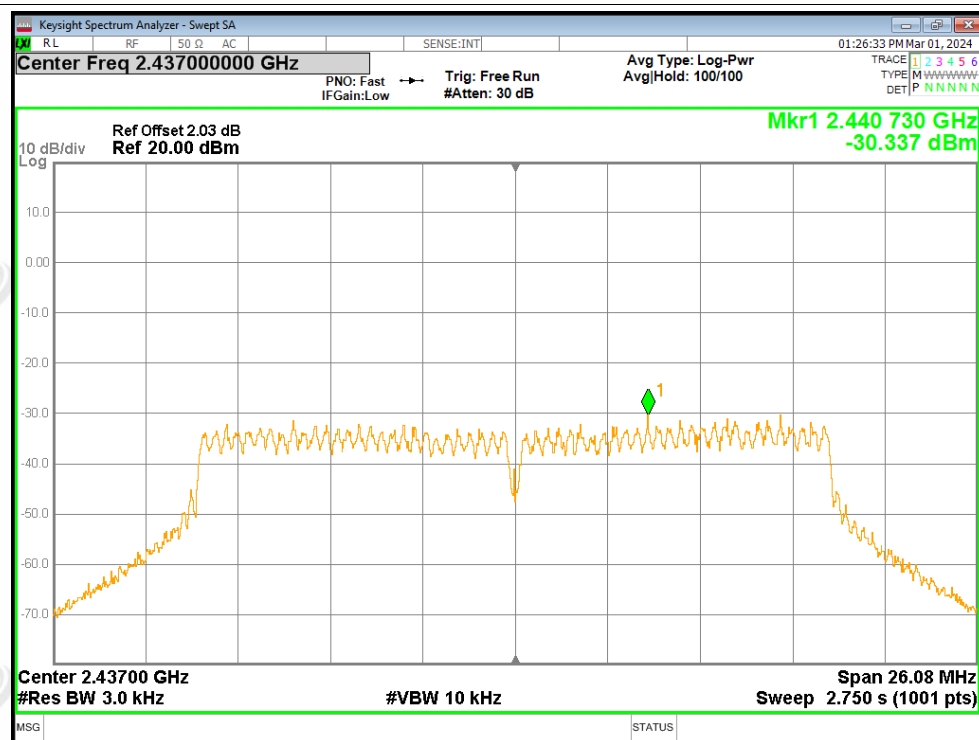


PSD NVNT n20 2412MHz Ant2

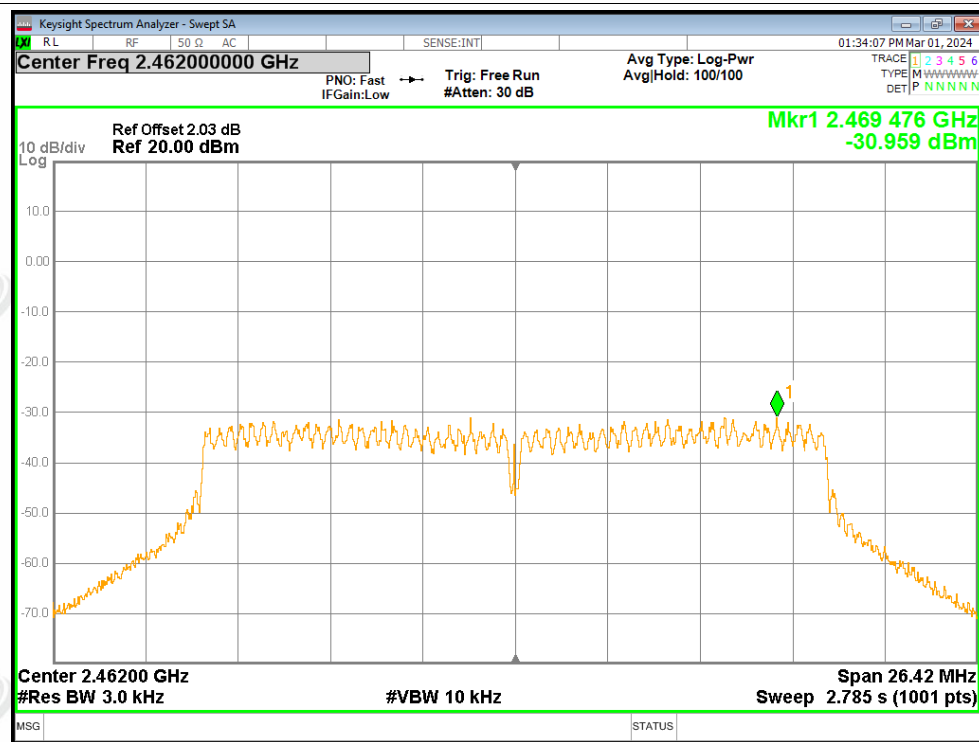




PSD NVNT n20 2437MHz Ant2

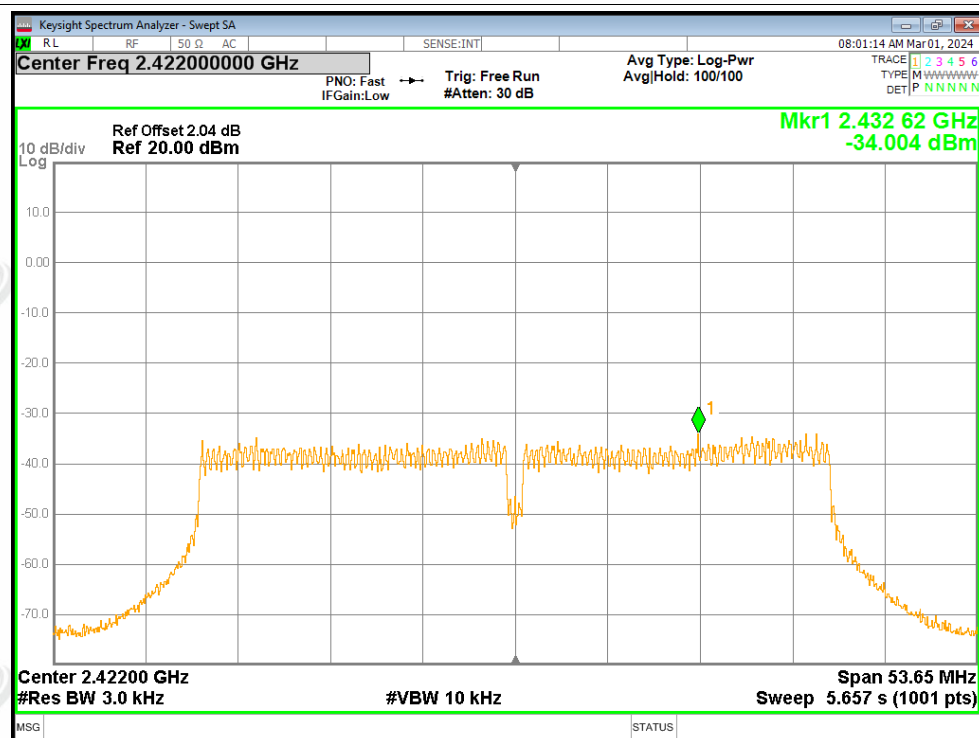


PSD NVNT n20 2462MHz Ant2

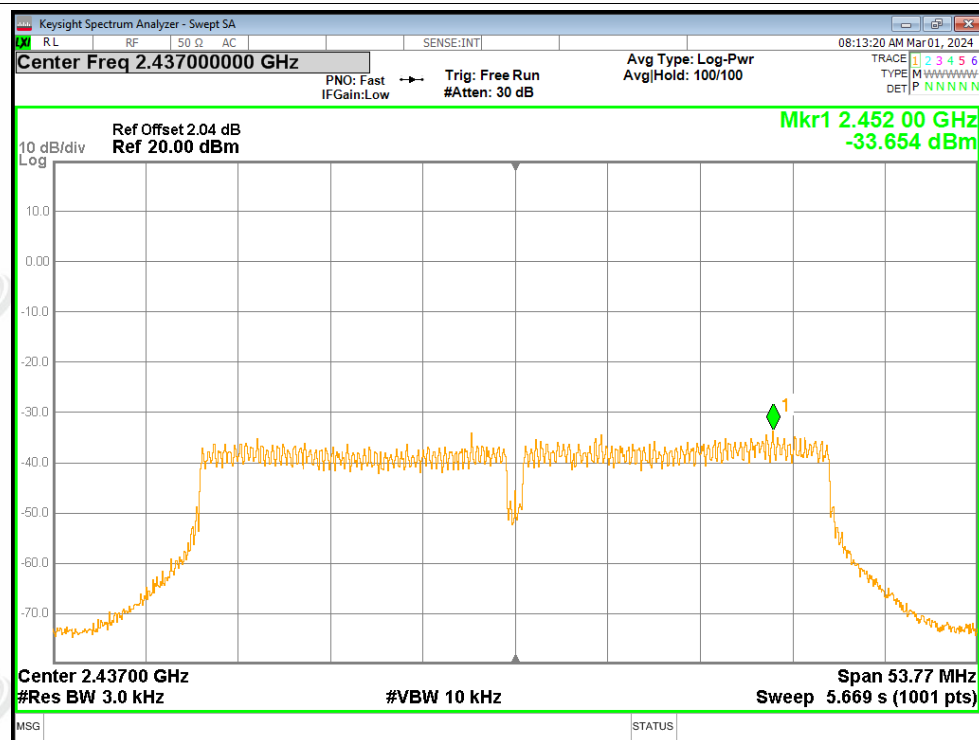




PSD NVNT n40 2422MHz Ant1

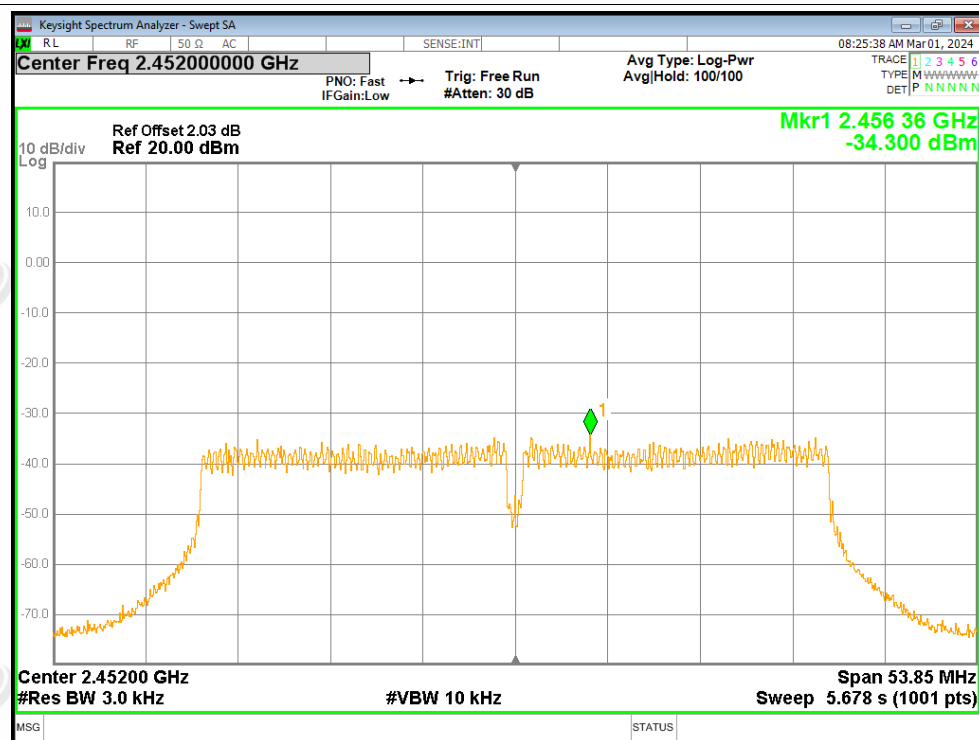


PSD NVNT n40 2437MHz Ant1

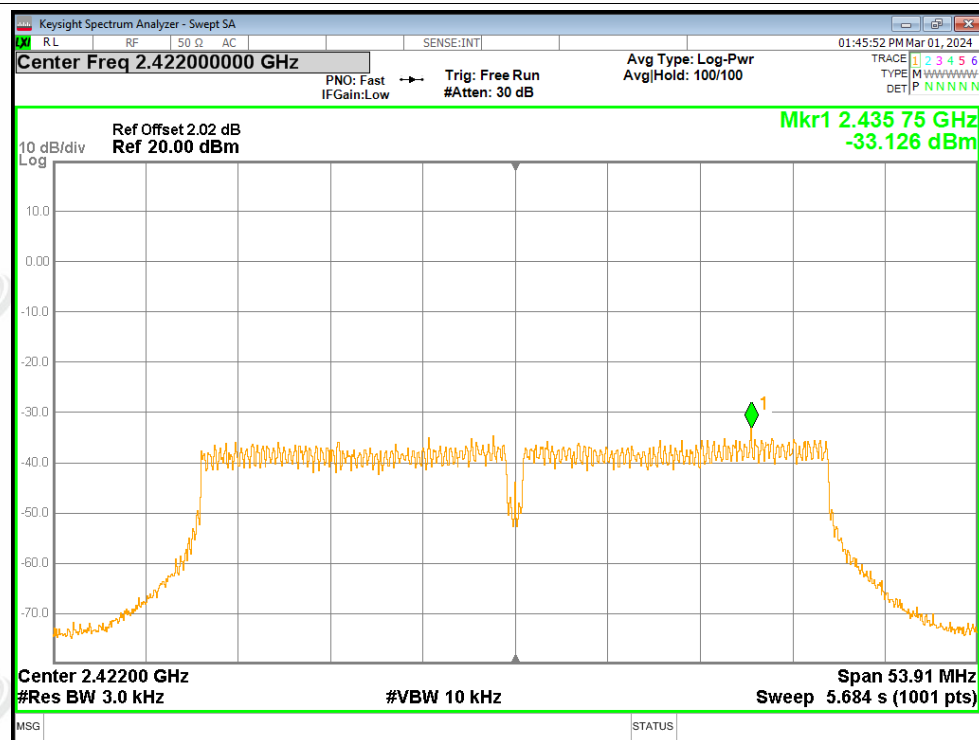




PSD NVNT n40 2452MHz Ant1

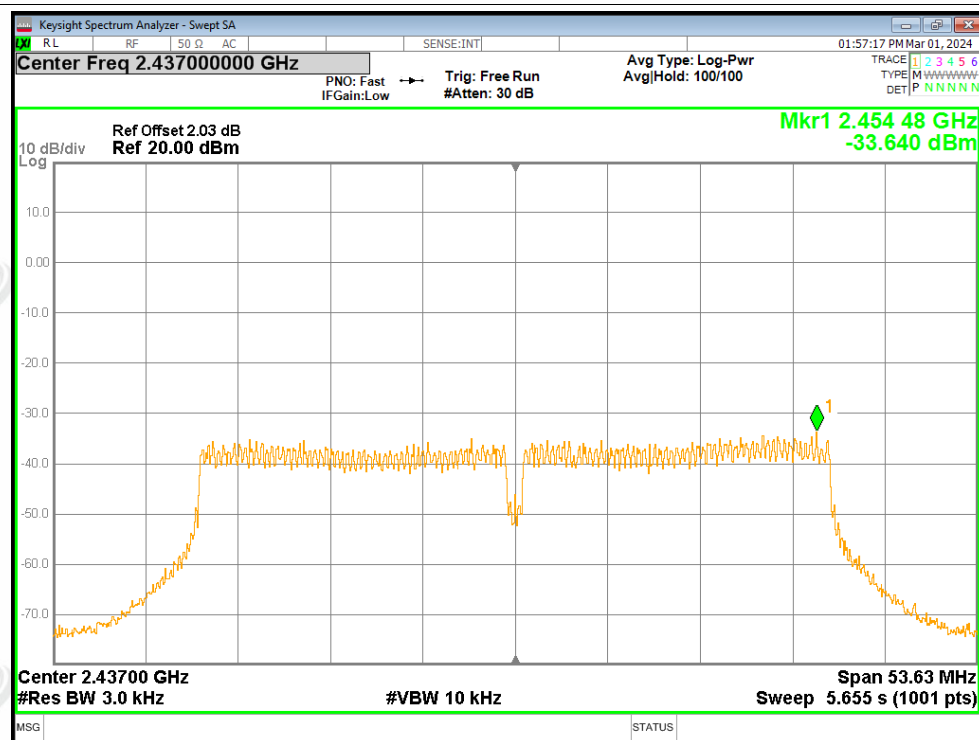


PSD NVNT n40 2422MHz Ant2

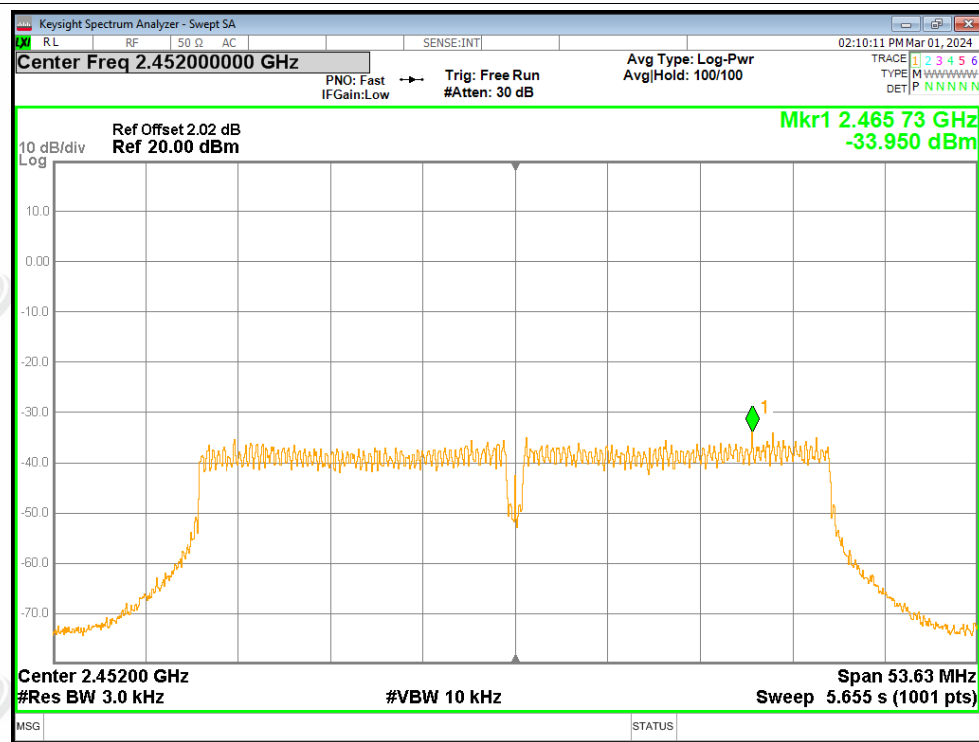




PSD NVNT n40 2437MHz Ant2



PSD NVNT n40 2452MHz Ant2





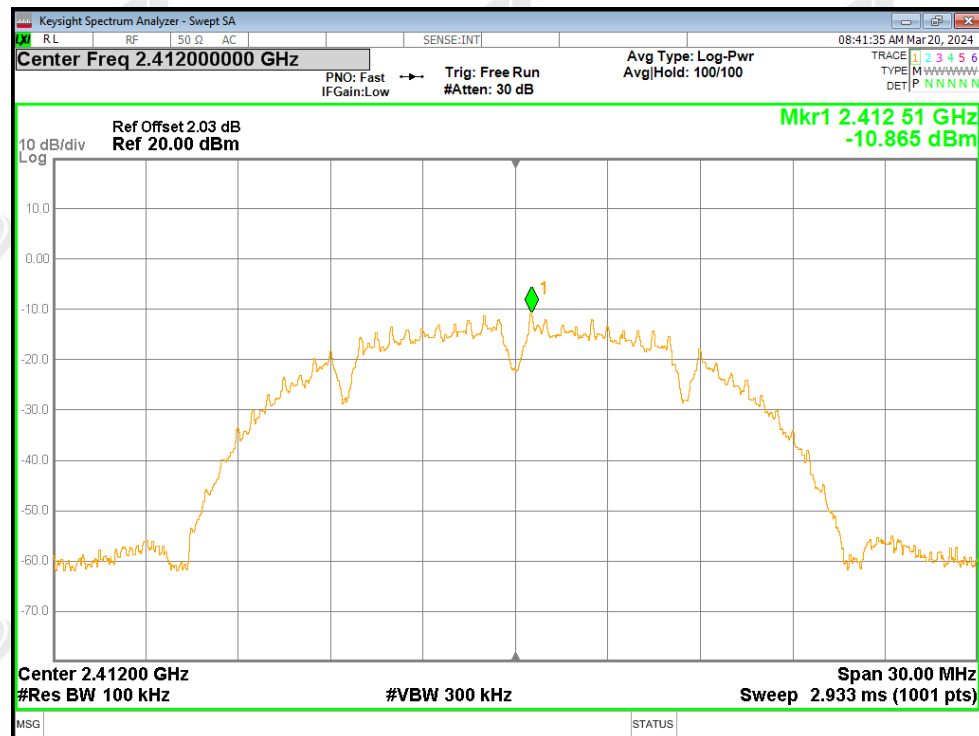
A6. Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-44.3	-30	Pass
NVNT	b	2462	Ant1	-46.26	-30	Pass
NVNT	b	2412	Ant2	-44.17	-30	Pass
NVNT	b	2462	Ant2	-46.3	-30	Pass
NVNT	g	2412	Ant1	-36.79	-30	Pass
NVNT	g	2462	Ant1	-41.16	-30	Pass
NVNT	g	2412	Ant2	-37.48	-30	Pass
NVNT	g	2462	Ant2	-40.57	-30	Pass
NVNT	n20	2412	Ant1	-35.84	-30	Pass
NVNT	n20	2462	Ant1	-39.15	-30	Pass
NVNT	n20	2412	Ant2	-36.05	-30	Pass
NVNT	n20	2462	Ant2	-37.42	-30	Pass
NVNT	n40	2422	Ant1	-35.46	-30	Pass
NVNT	n40	2452	Ant1	-35.37	-30	Pass
NVNT	n40	2422	Ant2	-35.57	-30	Pass
NVNT	n40	2452	Ant2	-36.28	-30	Pass

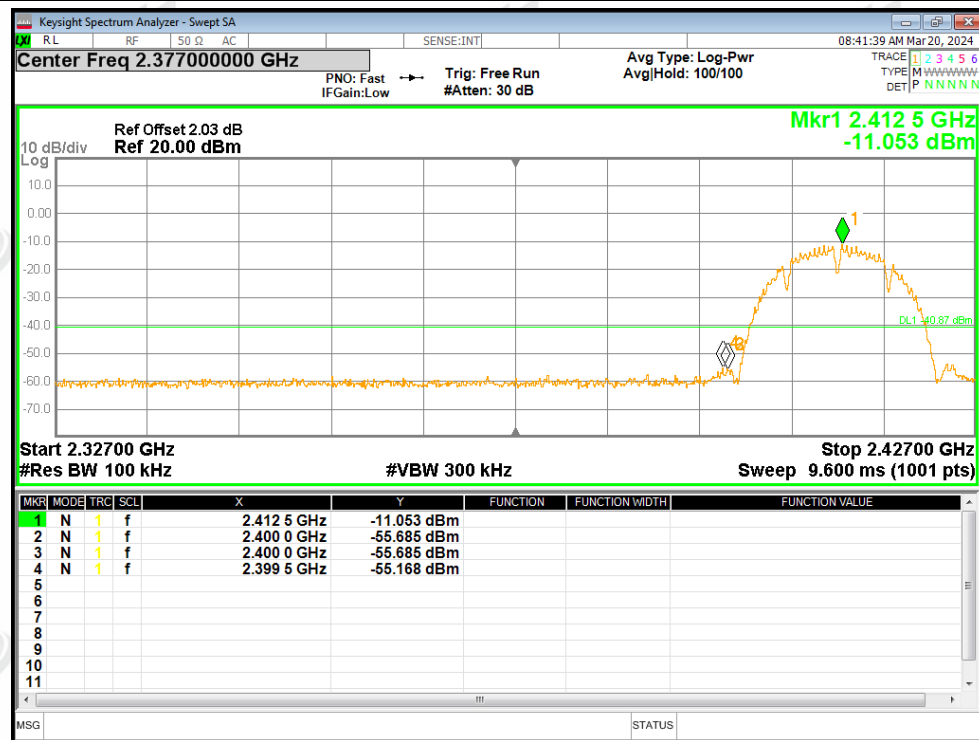


Test Graphs

Band Edge NVNT b 2412MHz Ant1 Ref

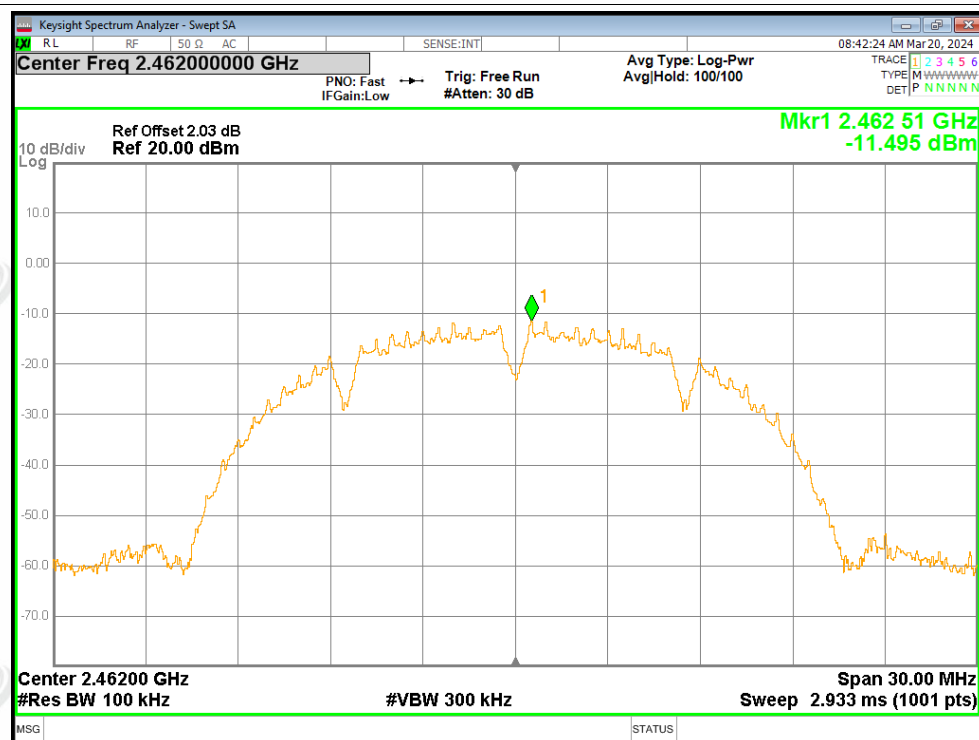


Band Edge NVNT b 2412MHz Ant1 Emission

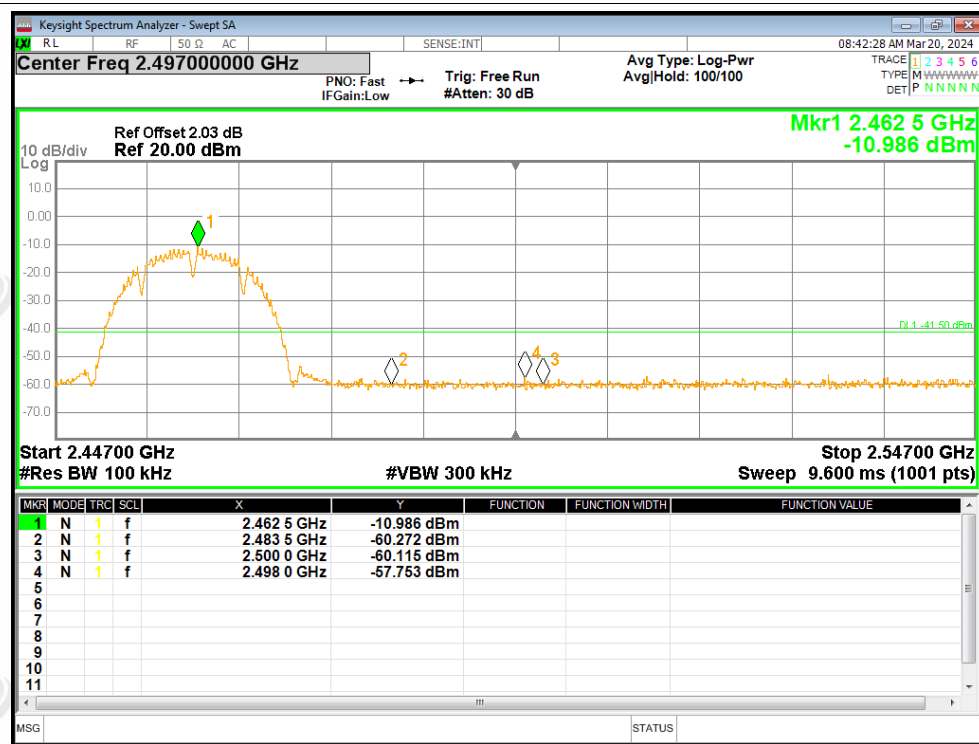




Band Edge NVNT b 2462MHz Ant1 Ref

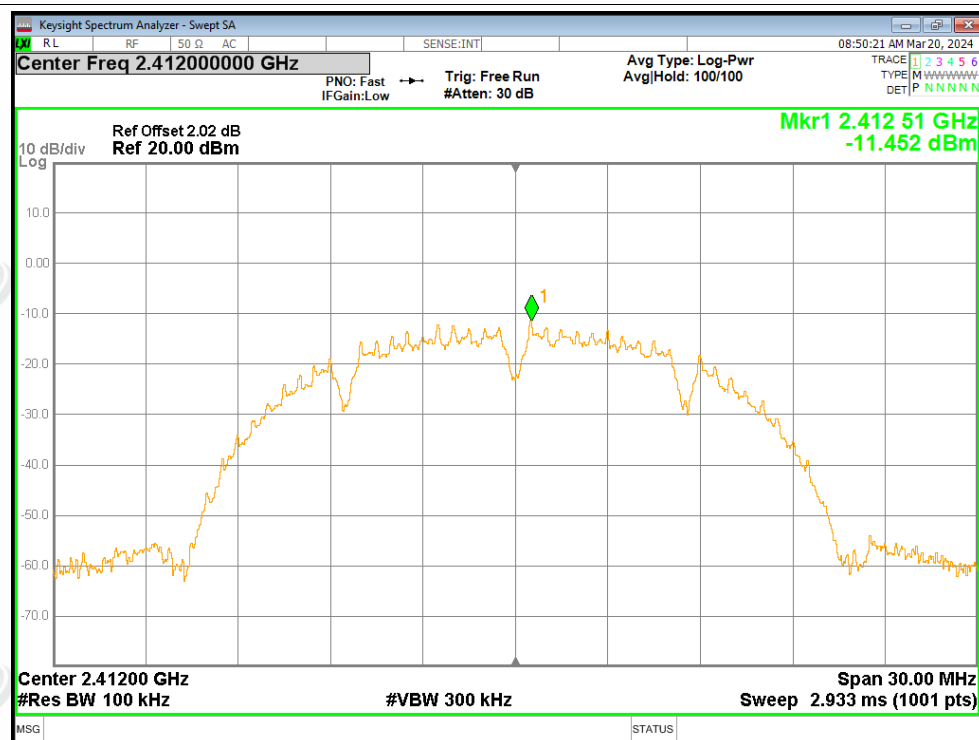


Band Edge NVNT b 2462MHz Ant1 Emission

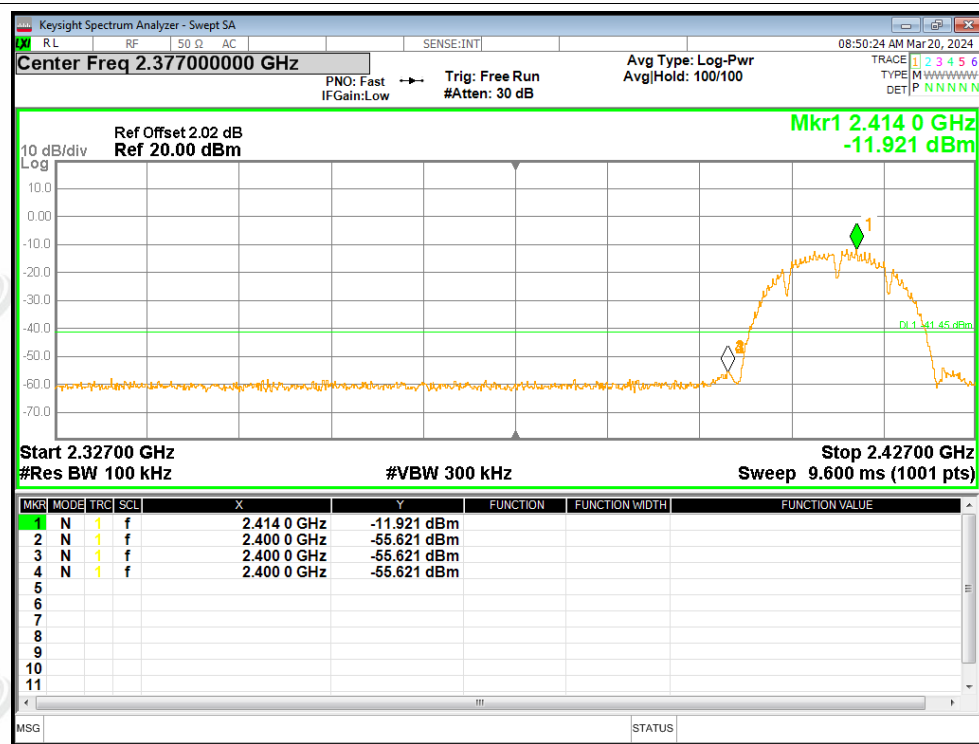




Band Edge NVNT b 2412MHz Ant2 Ref

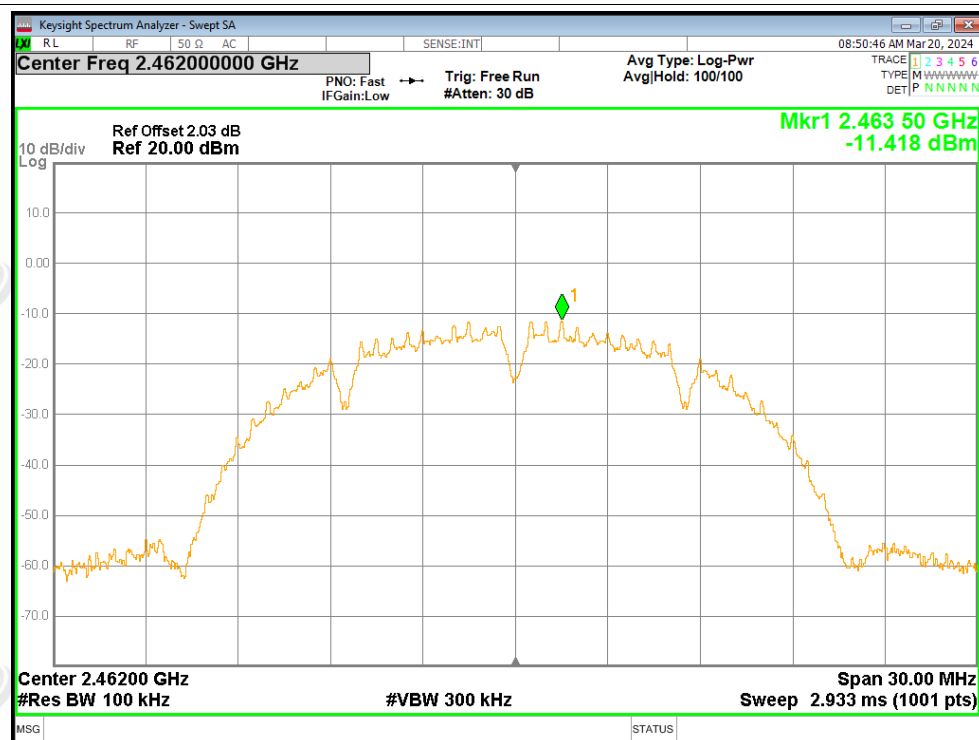


Band Edge NVNT b 2412MHz Ant2 Emission

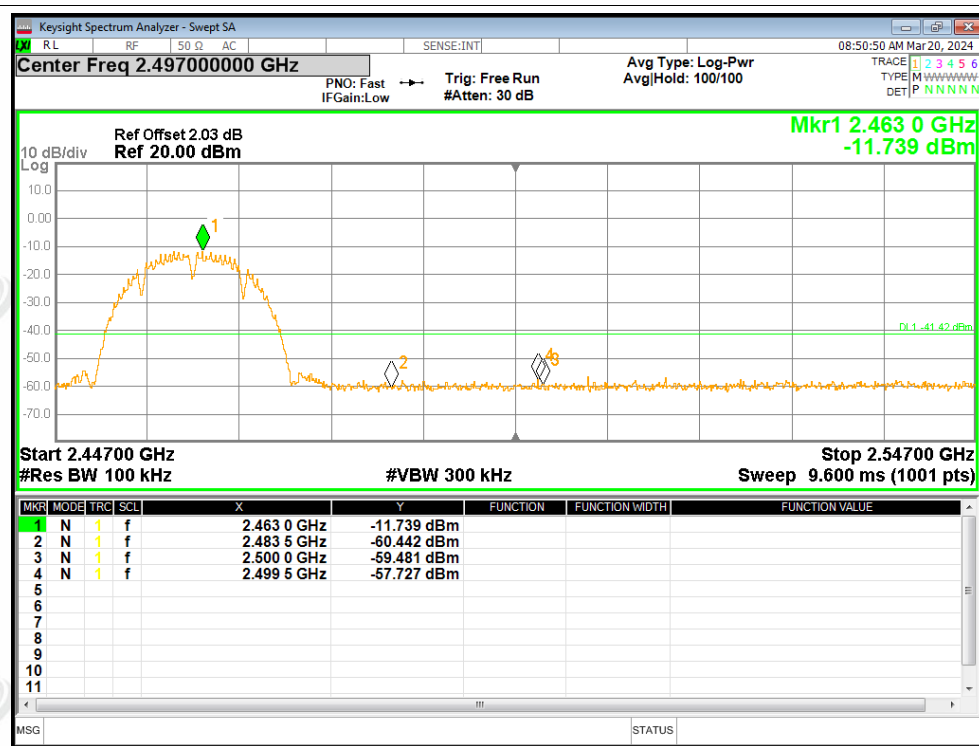




Band Edge NVNT b 2462MHz Ant2 Ref

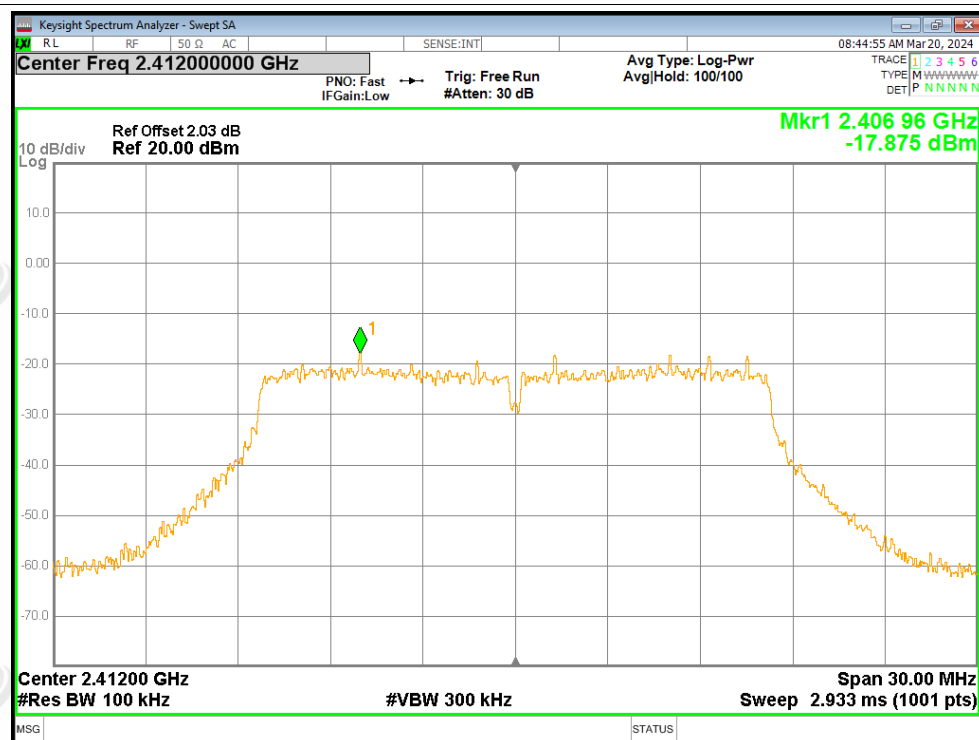


Band Edge NVNT b 2462MHz Ant2 Emission

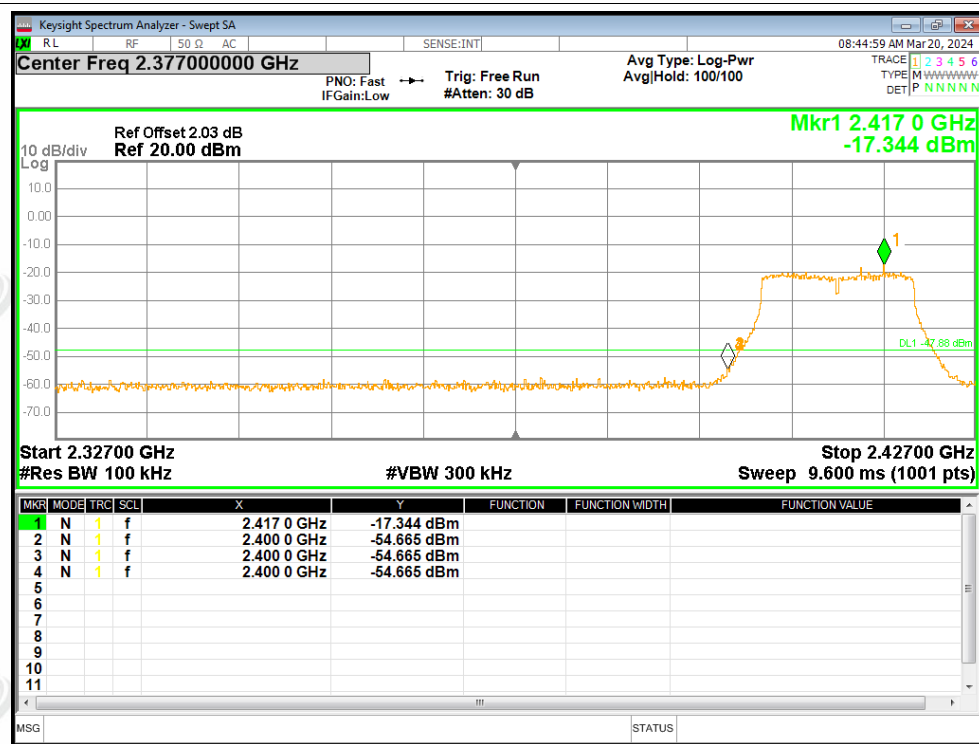




Band Edge NVNT g 2412MHz Ant1 Ref

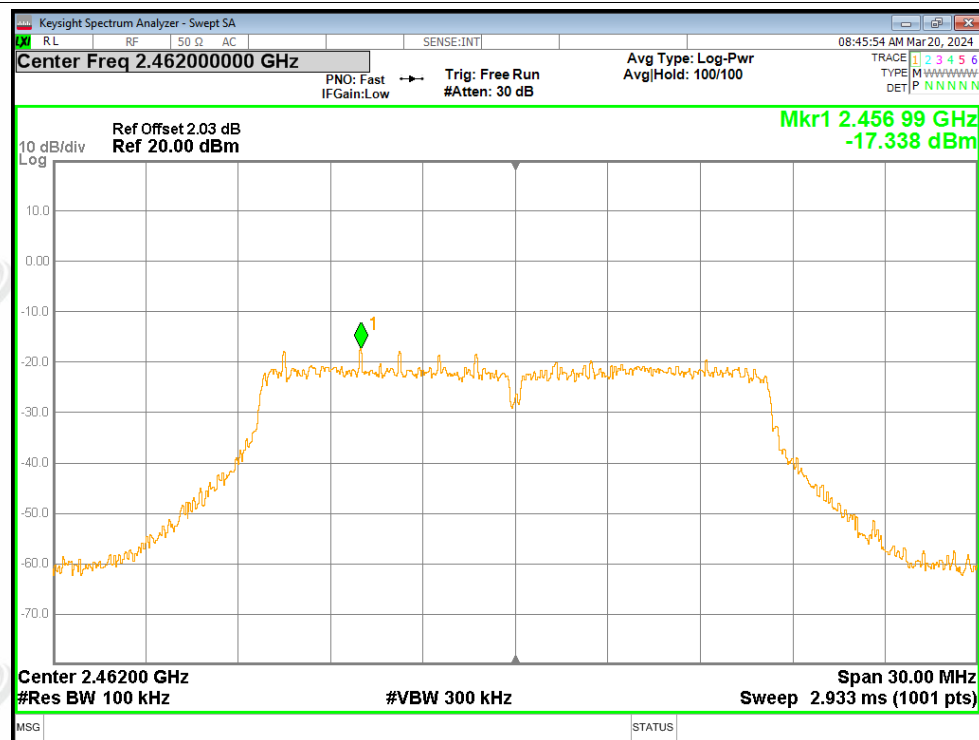


Band Edge NVNT g 2412MHz Ant1 Emission

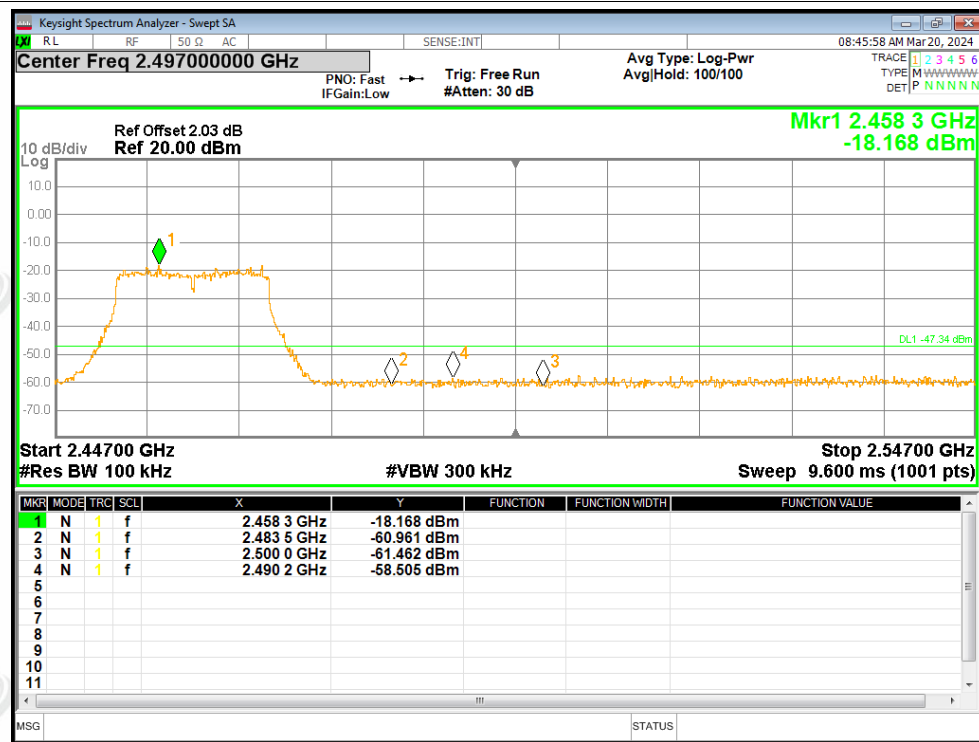




Band Edge NVNT g 2462MHz Ant1 Ref

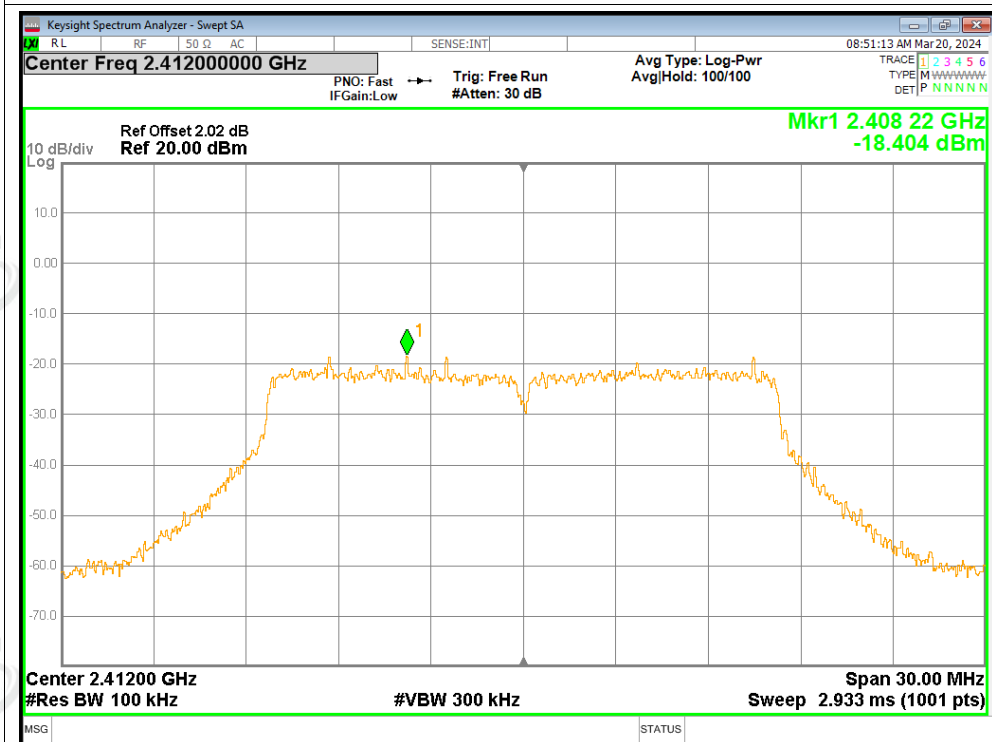


Band Edge NVNT g 2462MHz Ant1 Emission

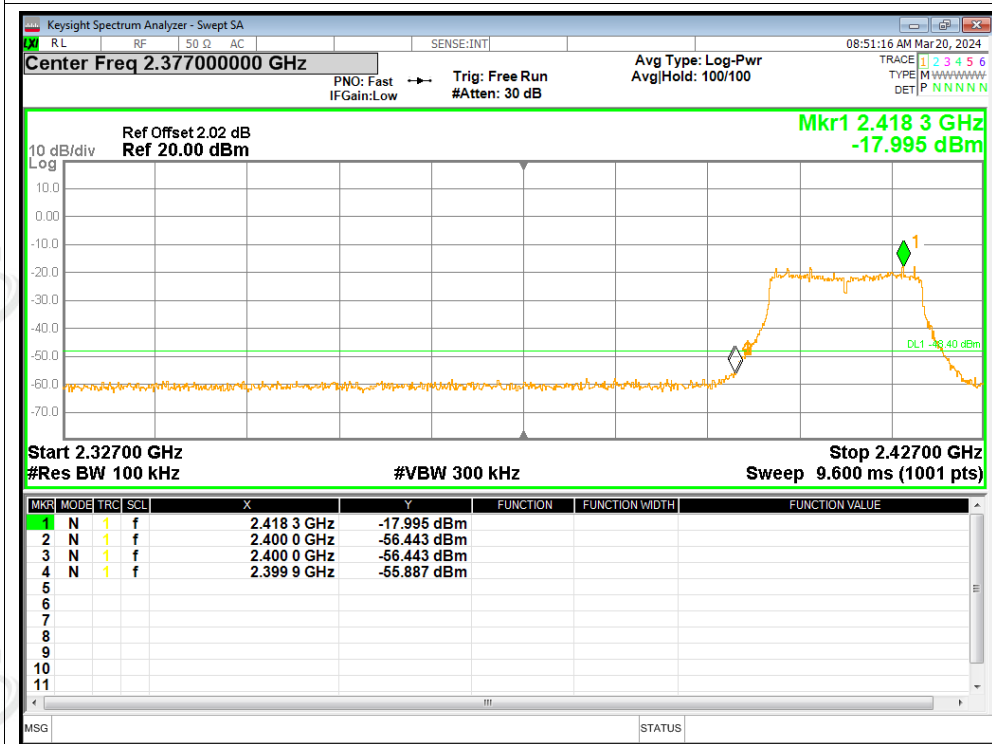




Band Edge NVNT g 2412MHz Ant2 Ref

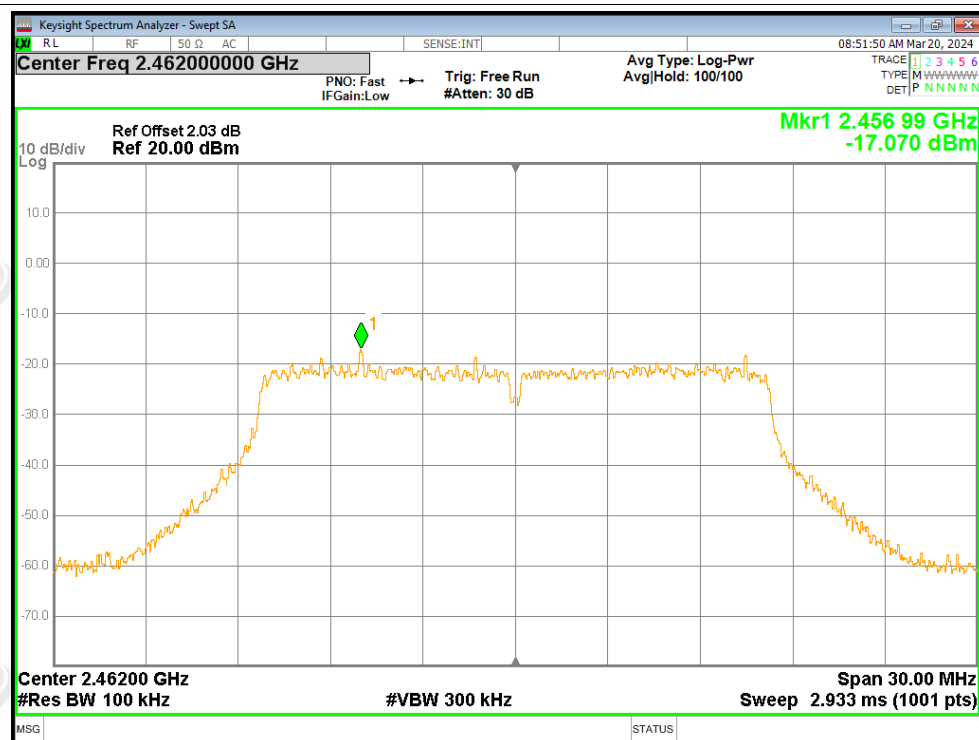


Band Edge NVNT g 2412MHz Ant2 Emission

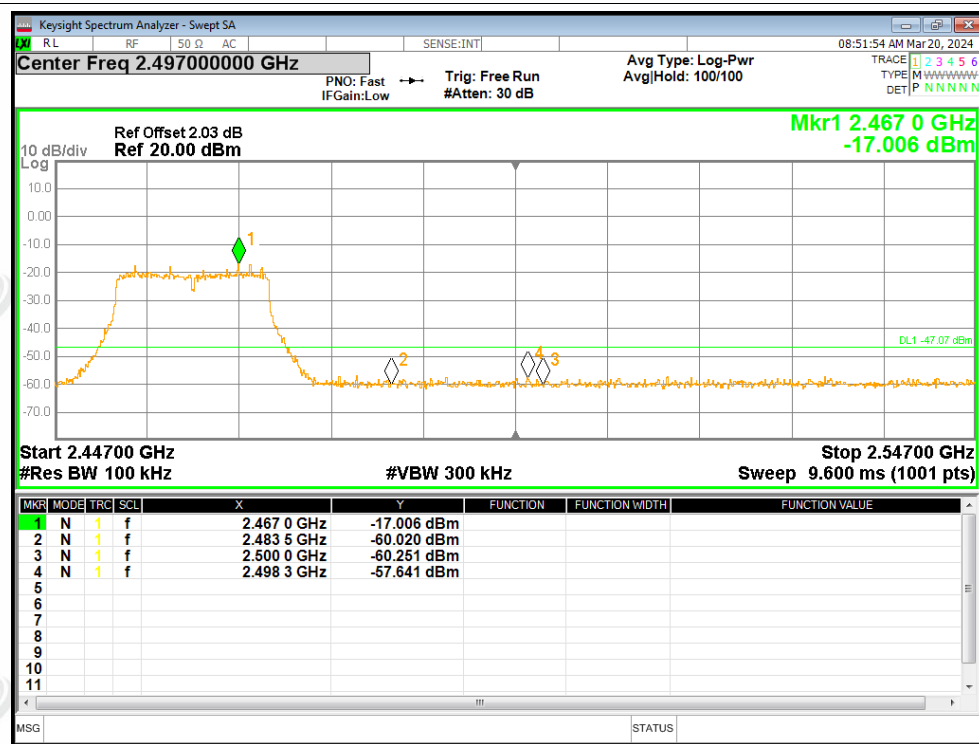




Band Edge NVNT g 2462MHz Ant2 Ref

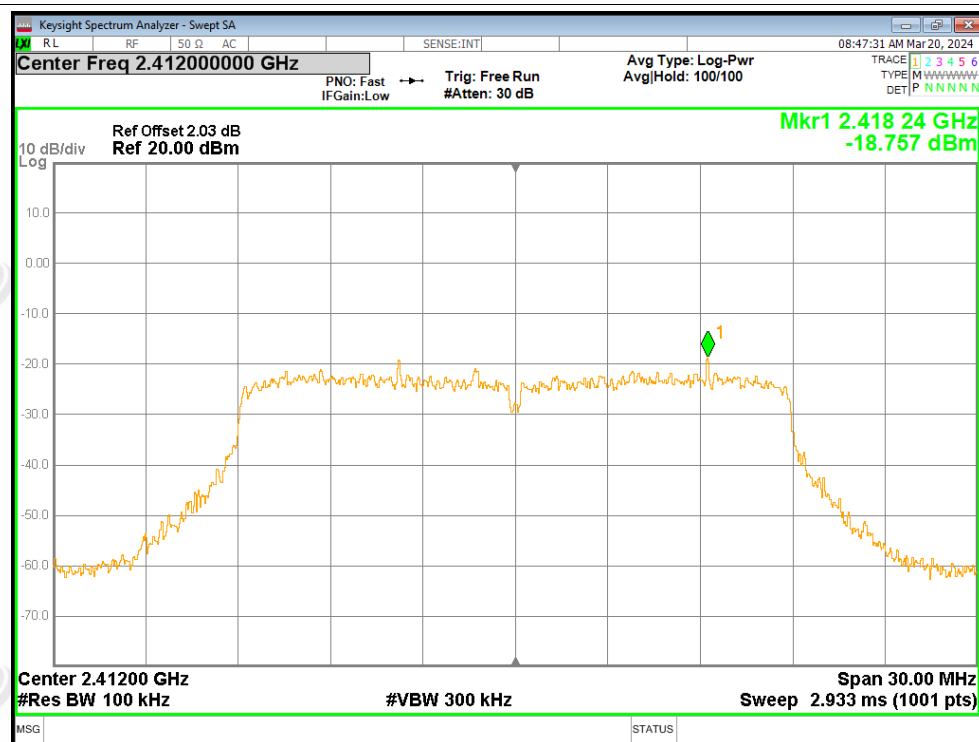


Band Edge NVNT g 2462MHz Ant2 Emission

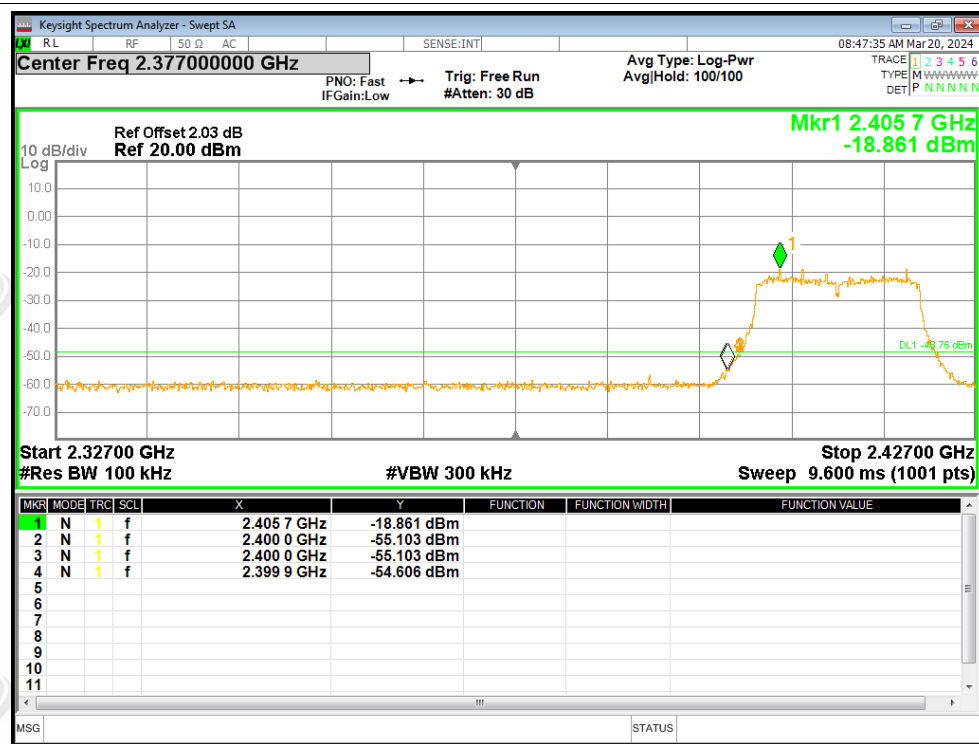




Band Edge NVNT n20 2412MHz Ant1 Ref

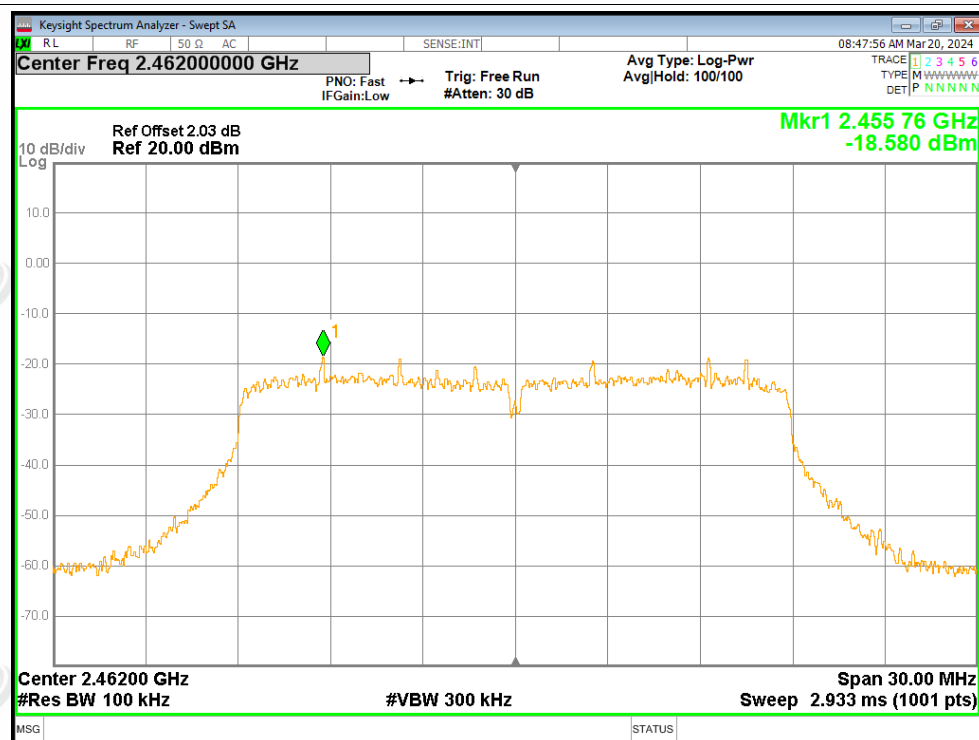


Band Edge NVNT n20 2412MHz Ant1 Emission

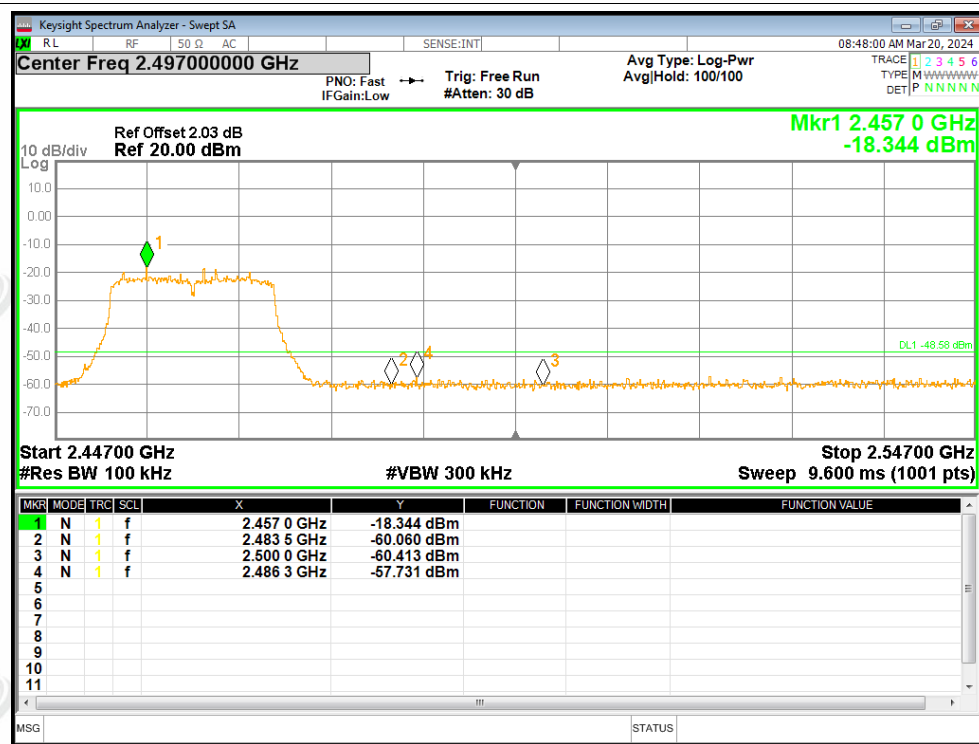




Band Edge NVNT n20 2462MHz Ant1 Ref

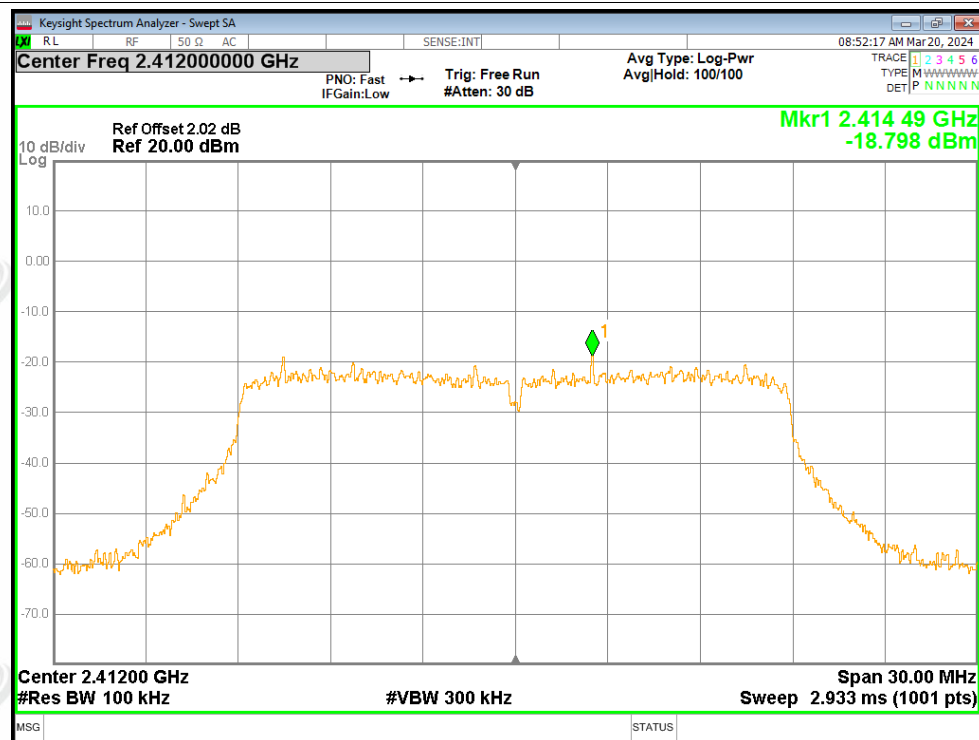


Band Edge NVNT n20 2462MHz Ant1 Emission

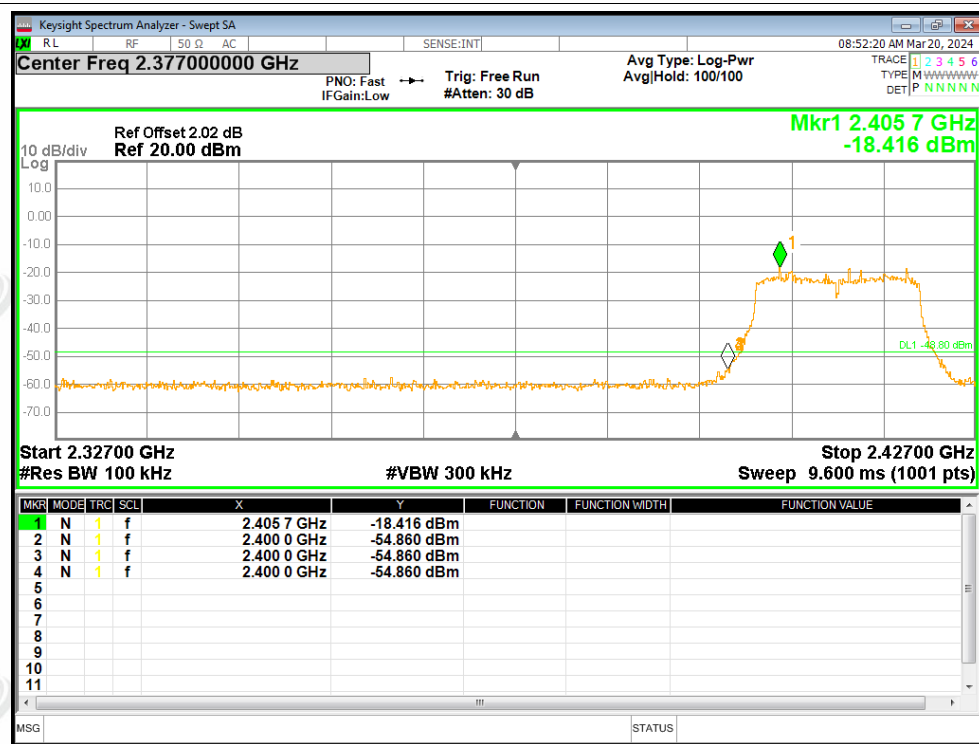




Band Edge NVNT n20 2412MHz Ant2 Ref

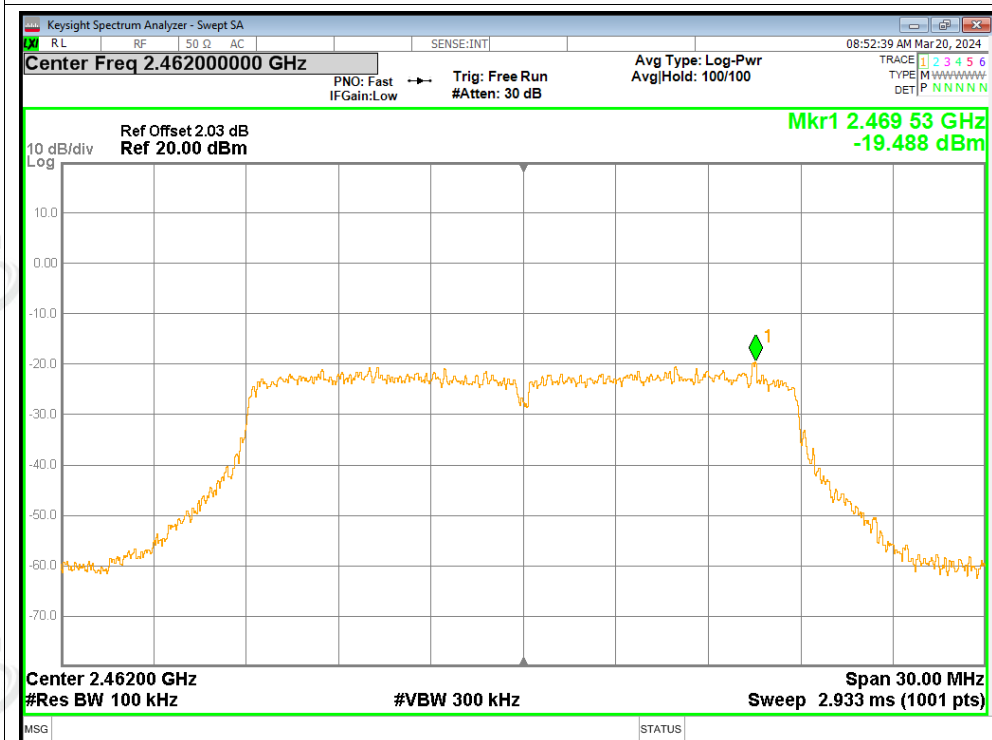


Band Edge NVNT n20 2412MHz Ant2 Emission

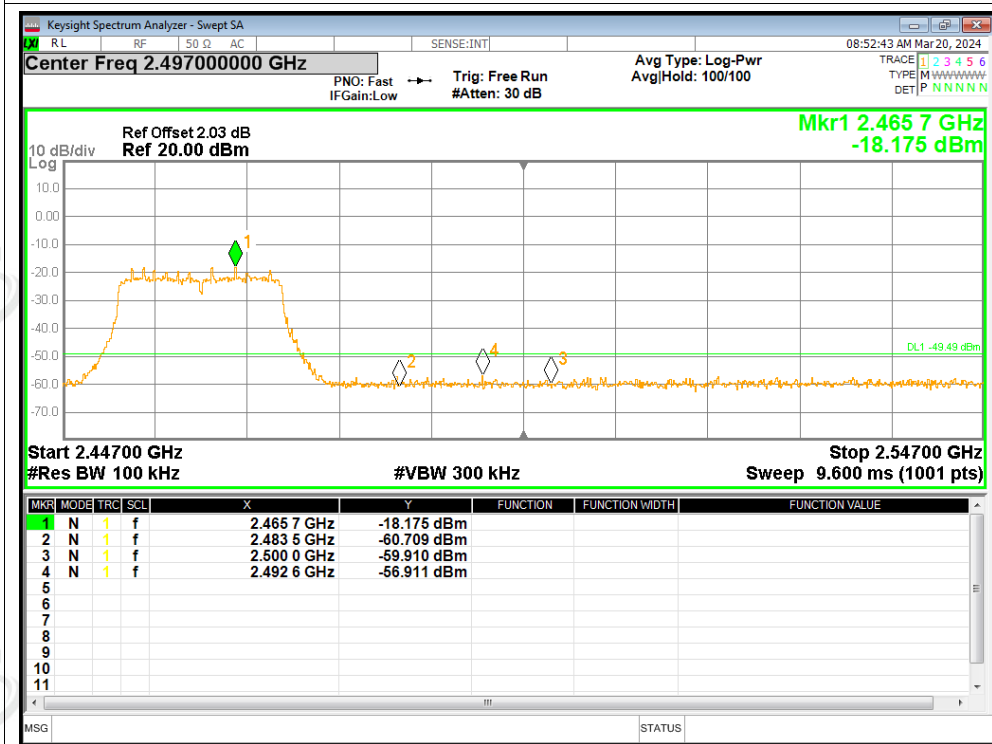




Band Edge NVNT n20 2462MHz Ant2 Ref

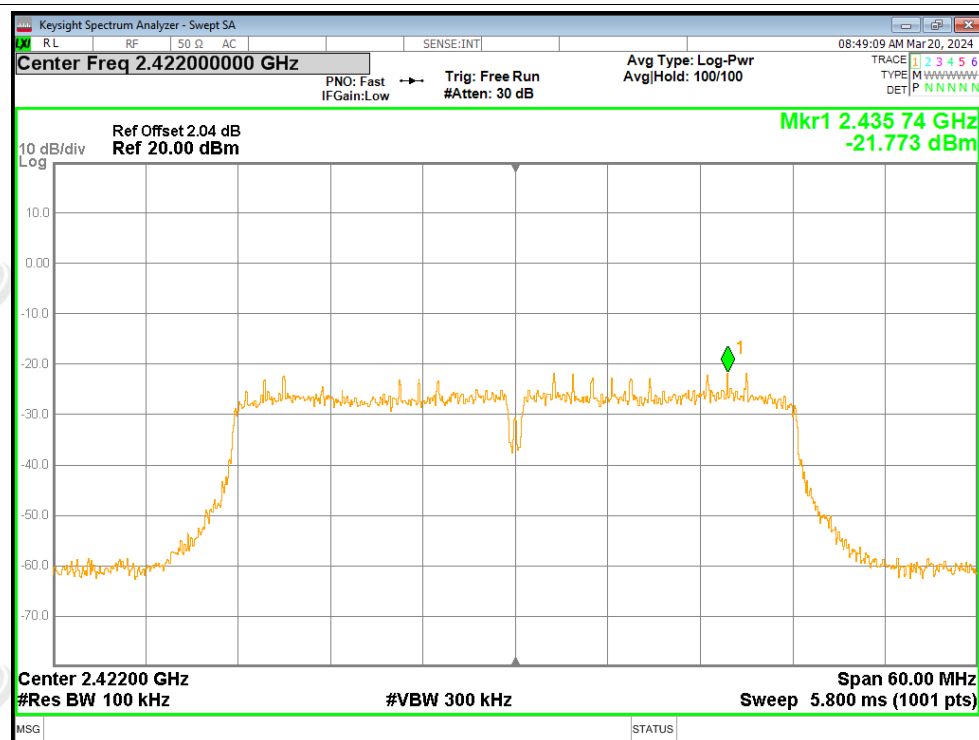


Band Edge NVNT n20 2462MHz Ant2 Emission

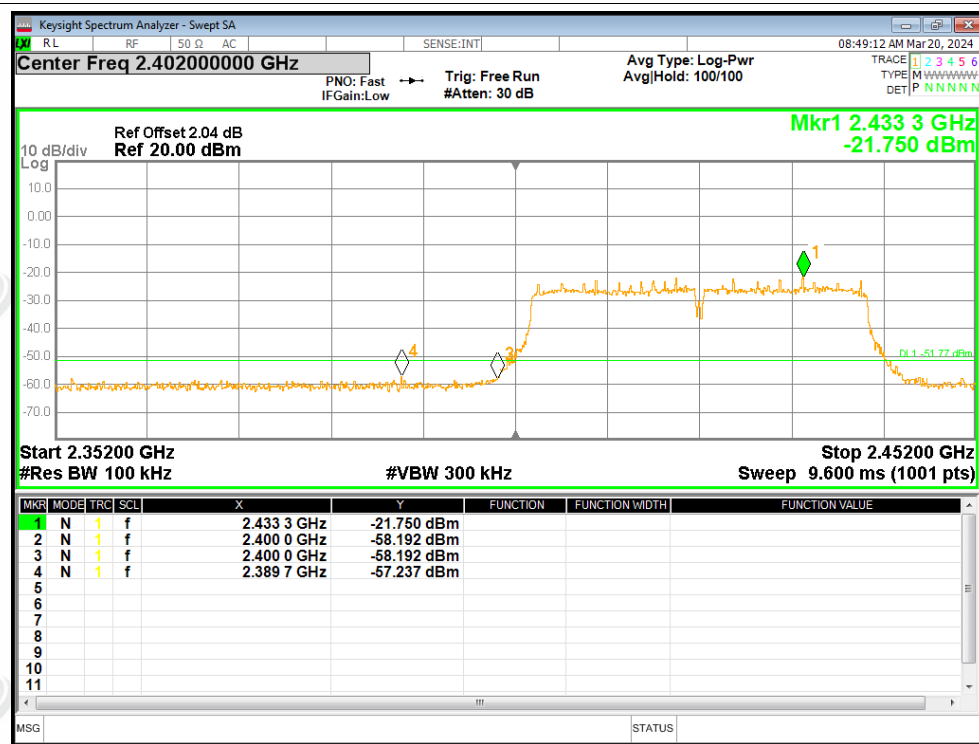




Band Edge NVNT n40 2422MHz Ant1 Ref

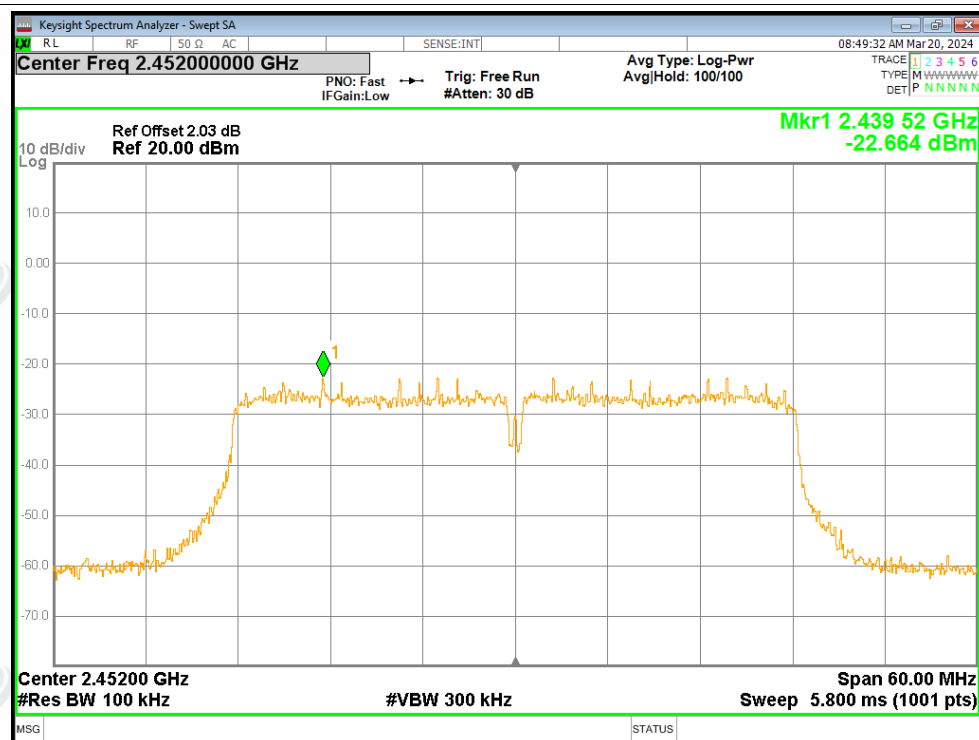


Band Edge NVNT n40 2422MHz Ant1 Emission

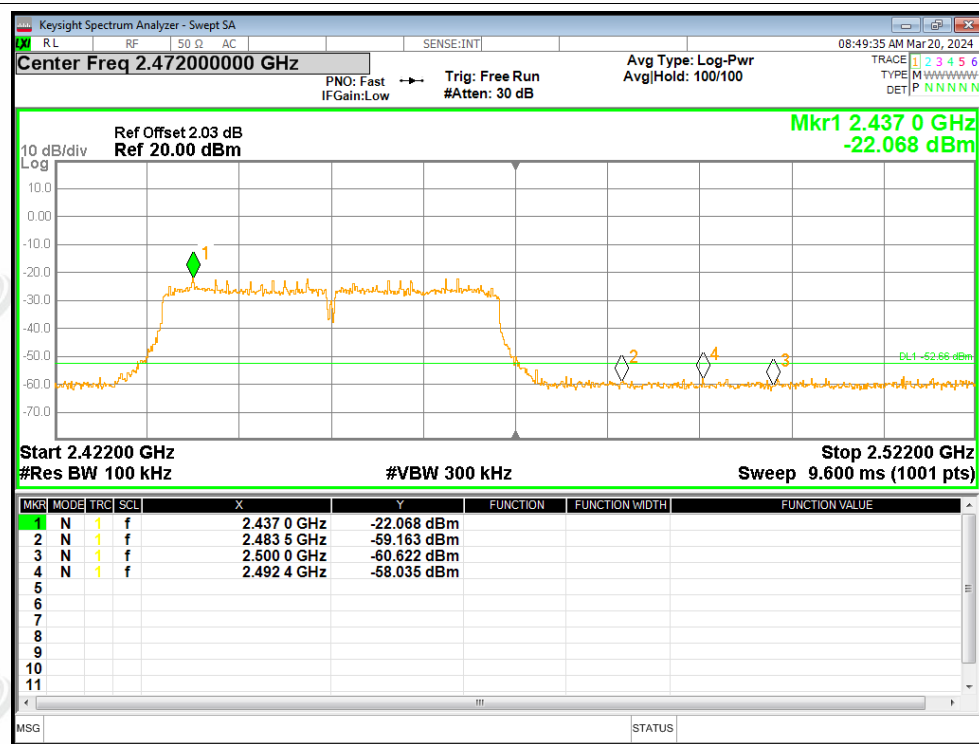




Band Edge NVNT n40 2452MHz Ant1 Ref

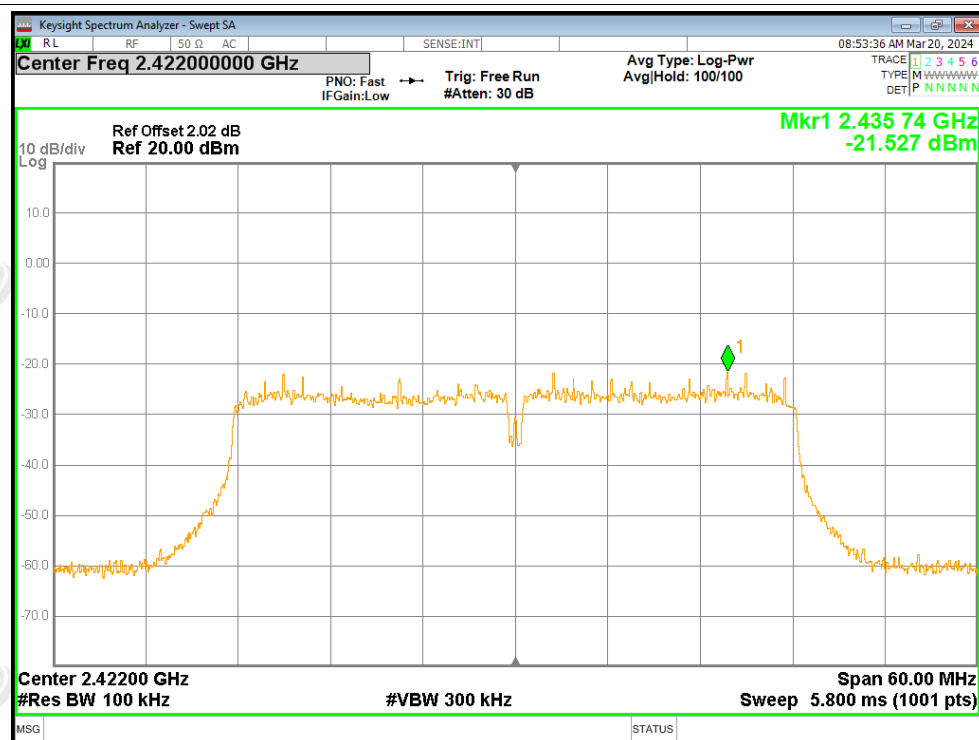


Band Edge NVNT n40 2452MHz Ant1 Emission

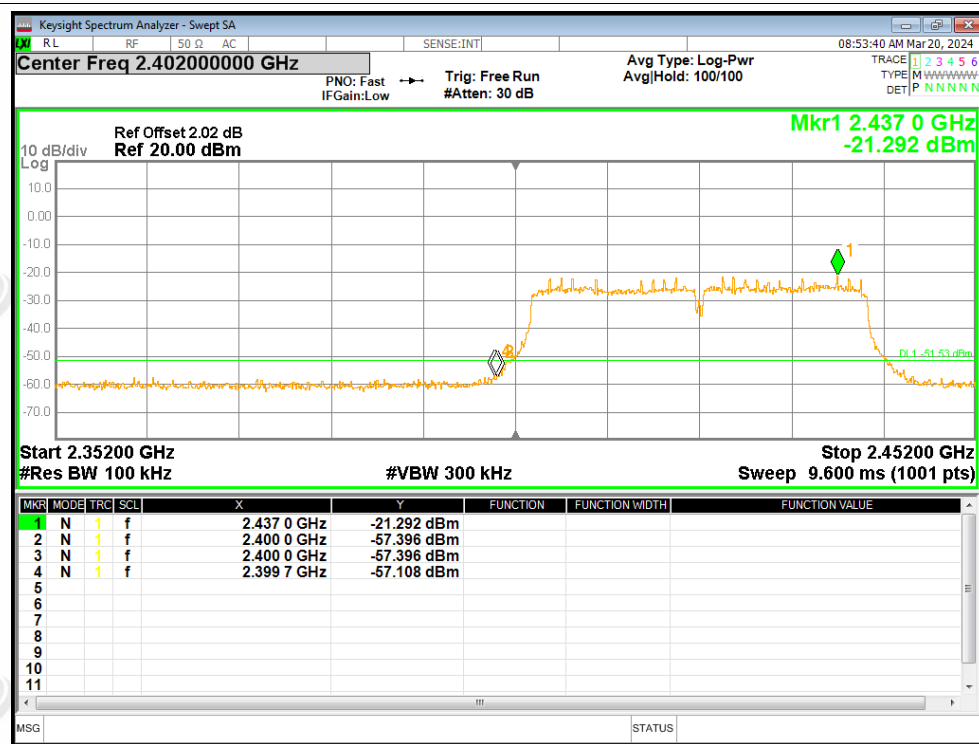




Band Edge NVNT n40 2422MHz Ant2 Ref

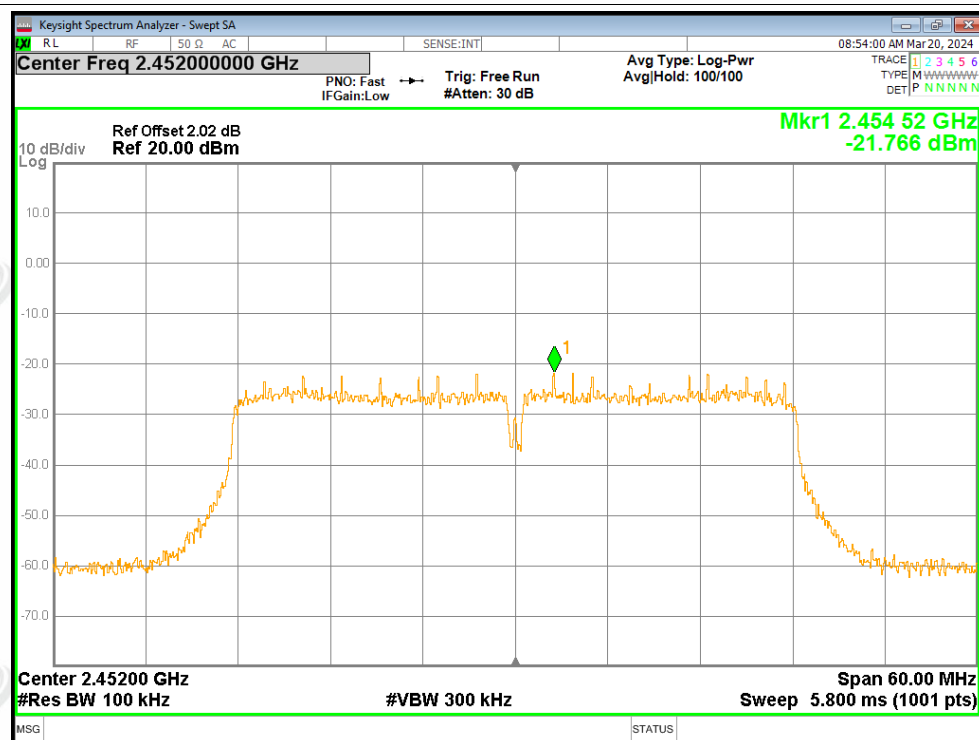


Band Edge NVNT n40 2422MHz Ant2 Emission

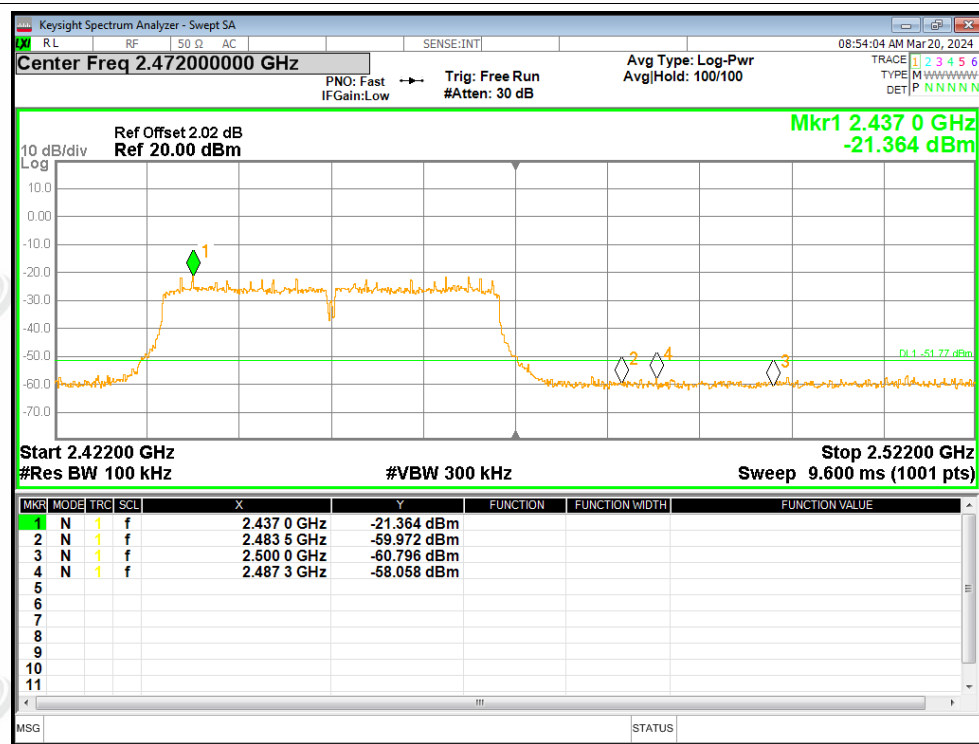




Band Edge NVNT n40 2452MHz Ant2 Ref



Band Edge NVNT n40 2452MHz Ant2 Emission





A7. Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-35.11	-30	Pass
NVNT	b	2437	Ant1	-35.73	-30	Pass
NVNT	b	2462	Ant1	-35.41	-30	Pass
NVNT	b	2412	Ant2	-35.91	-30	Pass
NVNT	b	2437	Ant2	-35.72	-30	Pass
NVNT	b	2462	Ant2	-35.13	-30	Pass
NVNT	g	2412	Ant1	-38.24	-30	Pass
NVNT	g	2437	Ant1	-39.66	-30	Pass
NVNT	g	2462	Ant1	-39.66	-30	Pass
NVNT	g	2412	Ant2	-39.05	-30	Pass
NVNT	g	2437	Ant2	-39.4	-30	Pass
NVNT	g	2462	Ant2	-39.13	-30	Pass
NVNT	n20	2412	Ant1	-38.43	-30	Pass
NVNT	n20	2437	Ant1	-39.59	-30	Pass
NVNT	n20	2462	Ant1	-39.44	-30	Pass
NVNT	n20	2412	Ant2	-38.47	-30	Pass
NVNT	n20	2437	Ant2	-38.26	-30	Pass
NVNT	n20	2462	Ant2	-38.88	-30	Pass
NVNT	n40	2422	Ant1	-35.79	-30	Pass
NVNT	n40	2437	Ant1	-36.03	-30	Pass
NVNT	n40	2452	Ant1	-34.48	-30	Pass
NVNT	n40	2422	Ant2	-35.85	-30	Pass
NVNT	n40	2437	Ant2	-35.35	-30	Pass
NVNT	n40	2452	Ant2	-35.29	-30	Pass