

RF Test Data for 2.4G WiFi (Conducted Measurements)

General Description of EUT	
Product Name:	Mobile Lidar Scanner
Test Model:	LixelKity K1
Sample ID:	HC-C-202401-0032-02-02-1
Environmental Conditions	
Temperature:	23.7℃
Relative Humidity:	47%
Test Voltage:	DC 14.4V
Test Engineer:	Mike Yan
Note: For a more detailed features description, please refer to the report TBR-C-202401-0032-122 The report only show the worst case data.	

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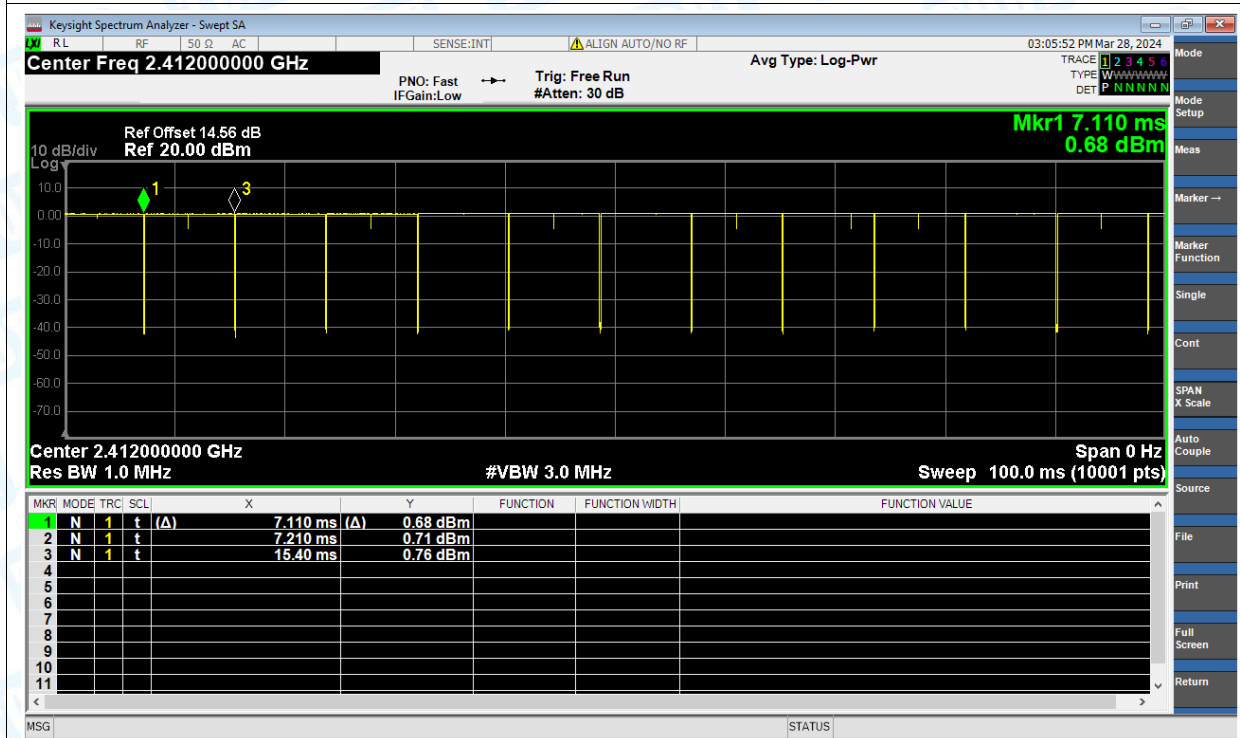
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1. Duty Cycle

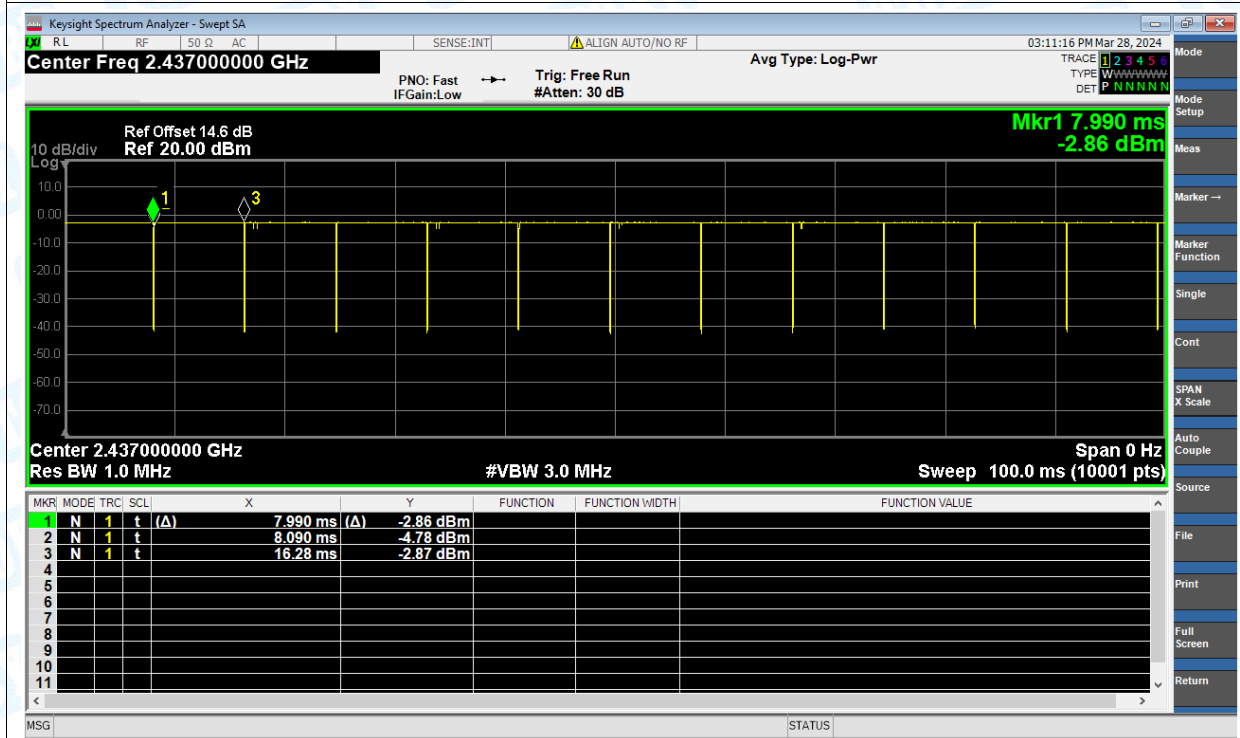
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	98.79	0.05	0.12
NVNT	b	2437	Ant1	98.79	0.05	0.12
NVNT	b	2462	Ant1	98.8	0.05	0.12
NVNT	b	2412	Ant2	98.67	0.06	0.12
NVNT	b	2437	Ant2	98.8	0.05	0.12
NVNT	b	2462	Ant2	98.79	0.05	0.12
NVNT	g	2412	Ant1	93.15	0.31	0.74
NVNT	g	2437	Ant1	93.15	0.31	0.74
NVNT	g	2462	Ant1	93.15	0.31	0.74
NVNT	g	2412	Ant2	93.15	0.31	0.74
NVNT	g	2437	Ant2	93.15	0.31	0.74
NVNT	g	2462	Ant2	93.15	0.31	0.74
NVNT	n(HT20)	2412	Ant1	92.7	0.33	0.79
NVNT	n(HT20)	2437	Ant1	92.75	0.33	0.78
NVNT	n(HT20)	2462	Ant1	92.03	0.36	0.79
NVNT	n(HT20)	2412	Ant2	92.75	0.33	0.78
NVNT	n(HT20)	2437	Ant2	92.03	0.36	0.79
NVNT	n(HT20)	2462	Ant2	92.75	0.33	0.78
NVNT	n(HT40)	2422	Sum	86.49	0.63	1.56
NVNT	n(HT40)	2437	Sum	85.14	0.7	1.59
NVNT	n(HT40)	2452	Sum	86.3	0.64	1.59

Test Graphs

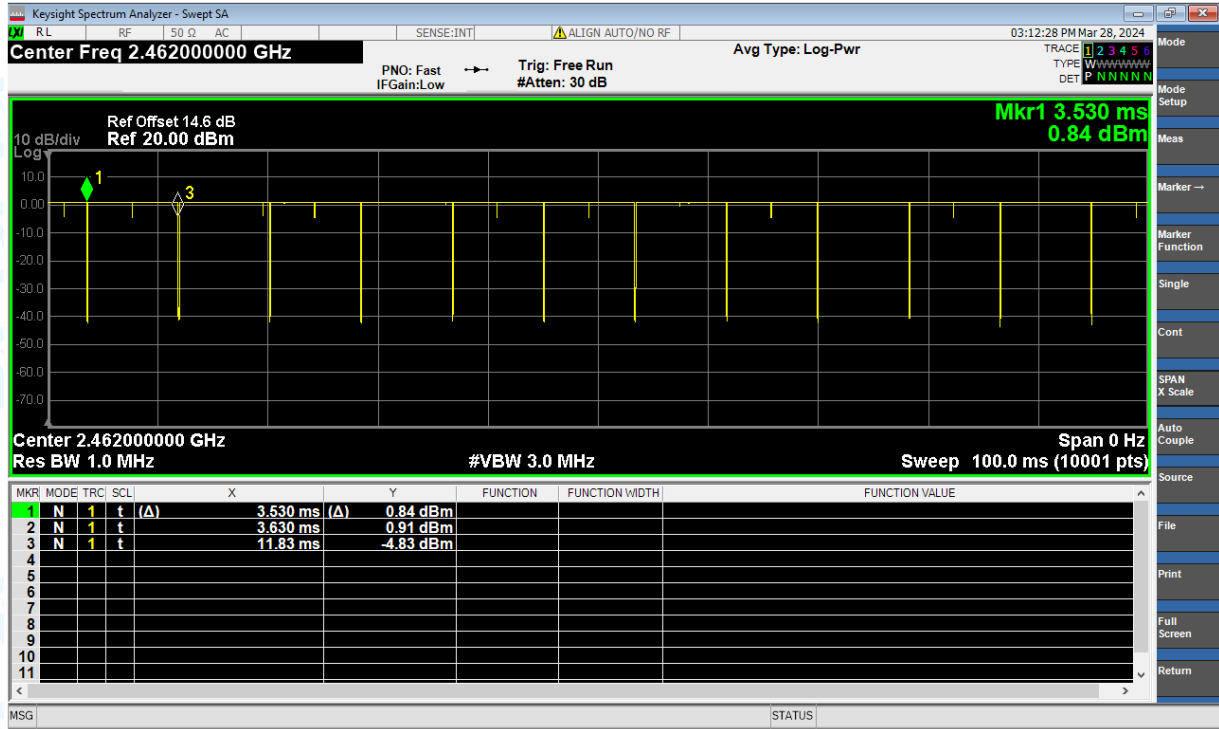
Duty Cycle NVNT b 2412MHz Ant1



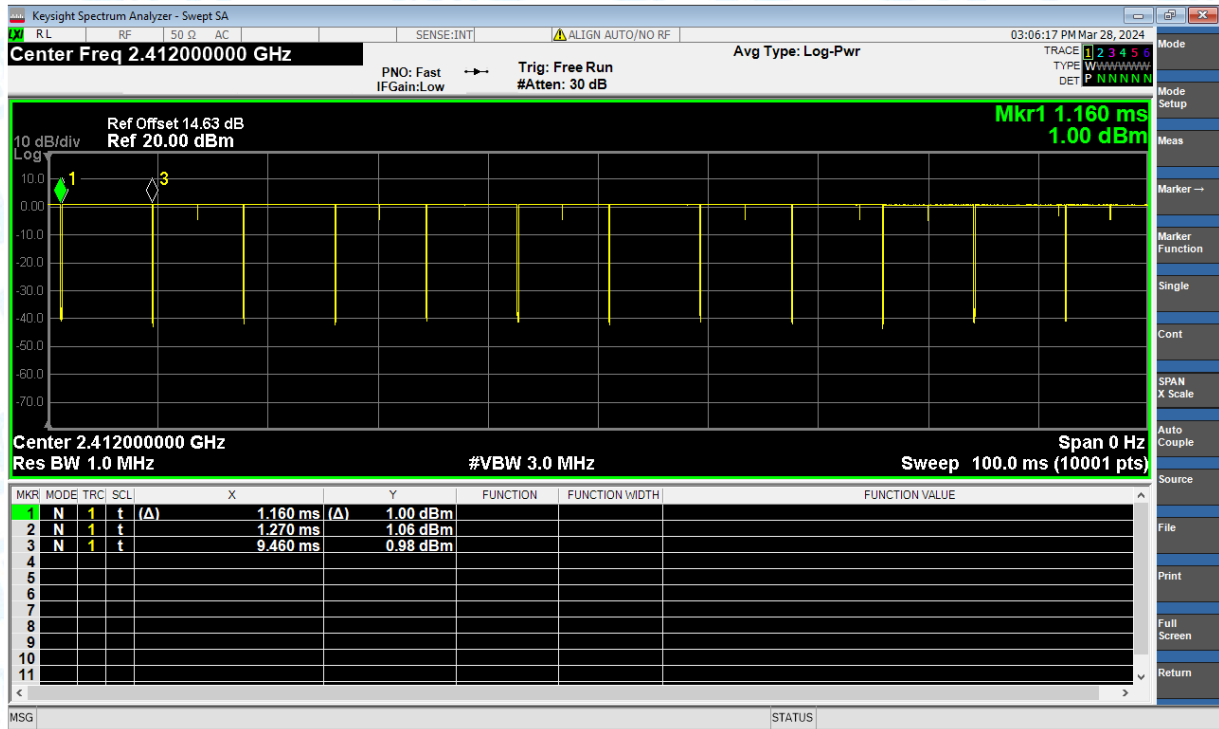
Duty Cycle NVNT b 2437MHz Ant1



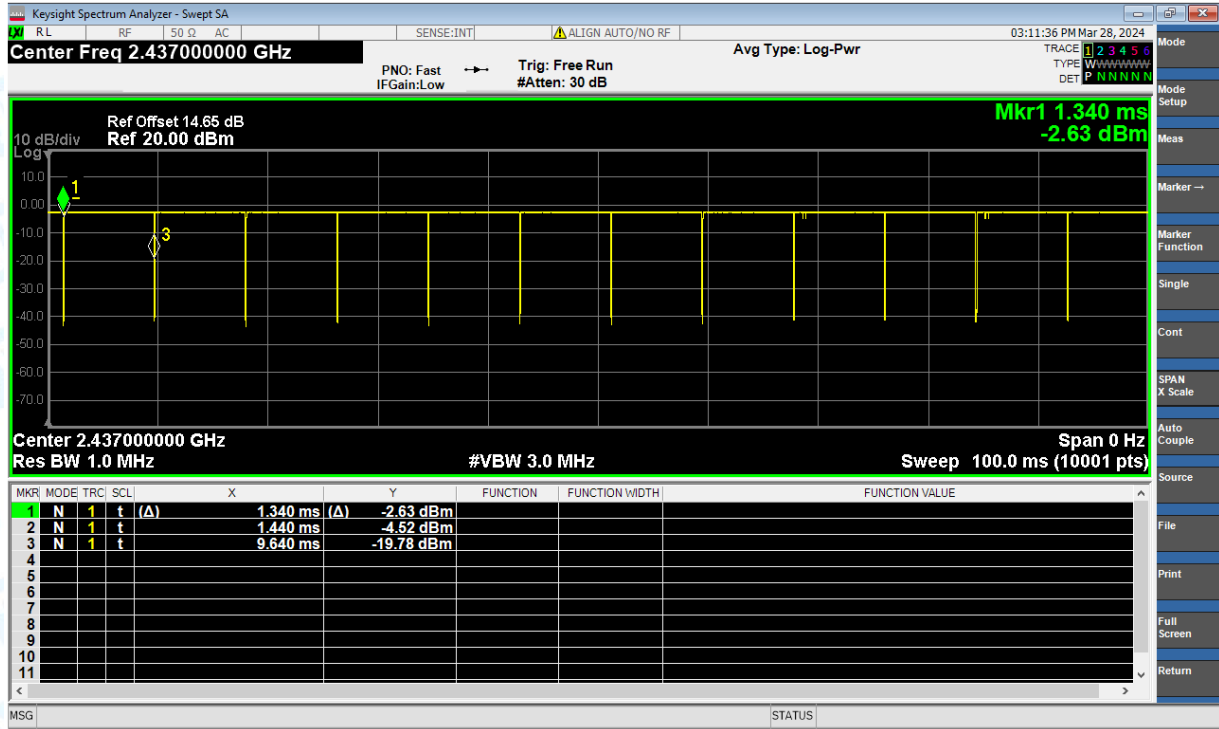
Duty Cycle NVNT b 2462MHz Ant1



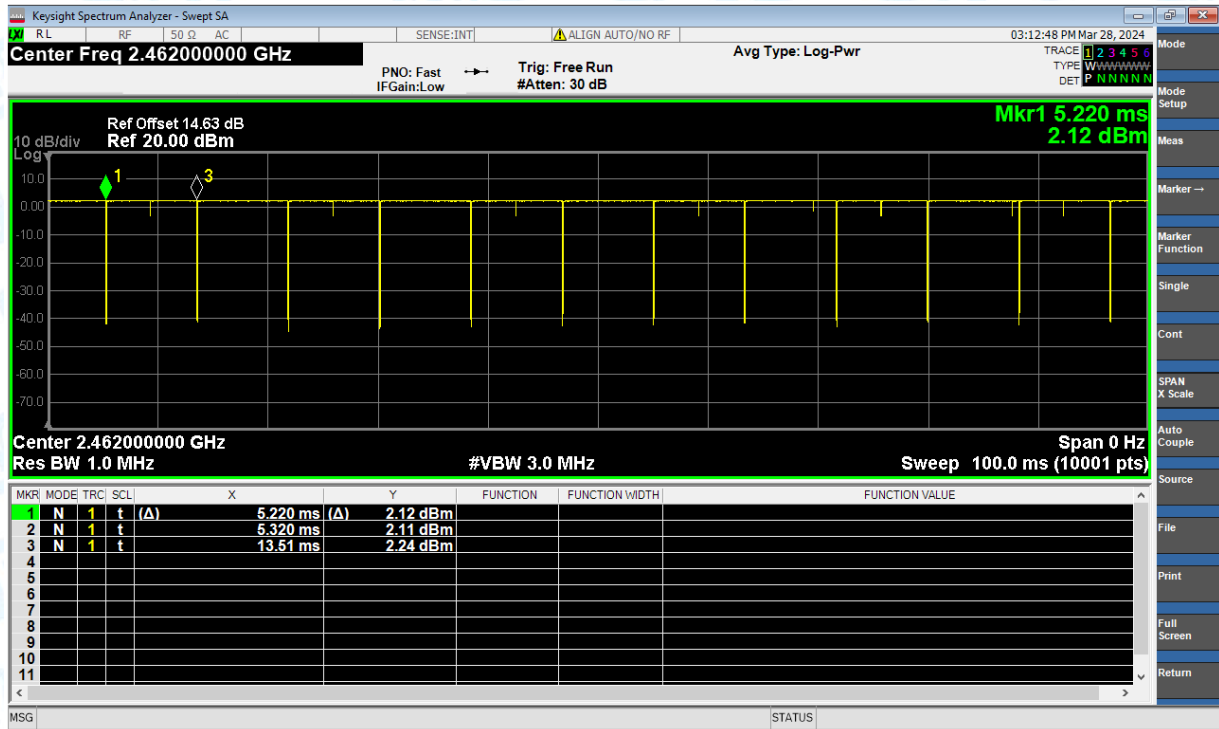
Duty Cycle NVNT b 2412MHz Ant2



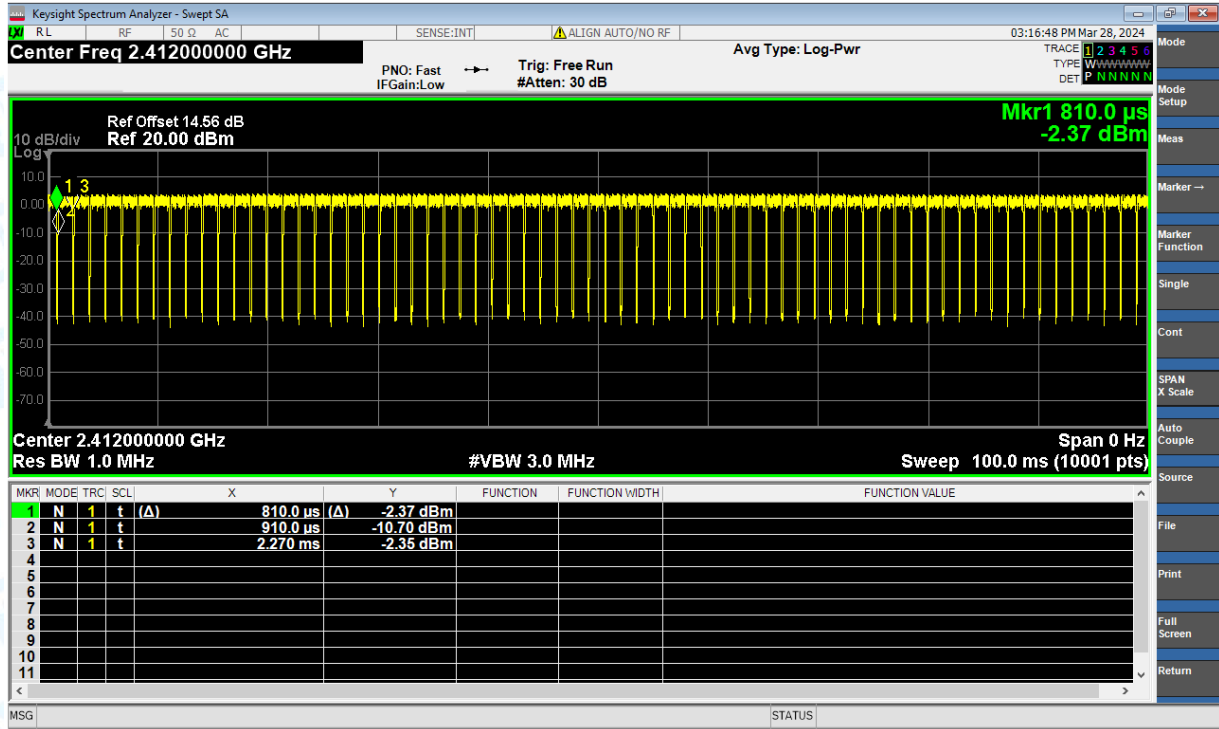
Duty Cycle NVNT b 2437MHz Ant2



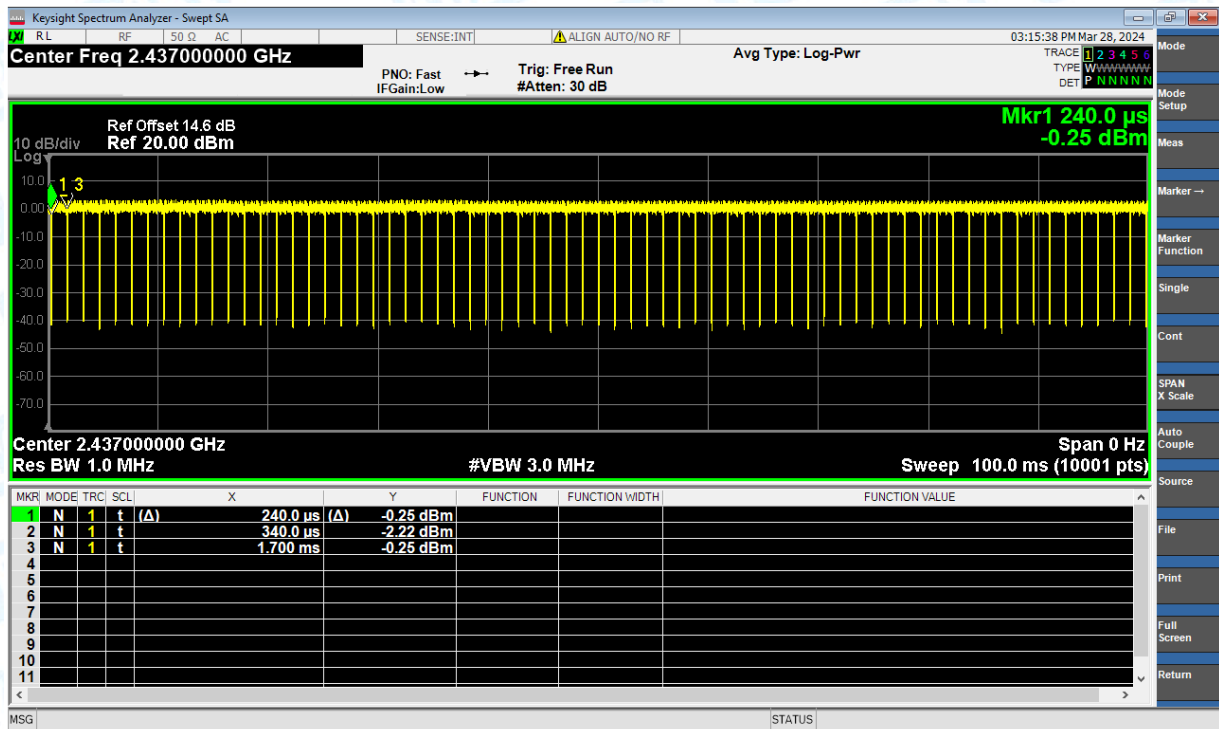
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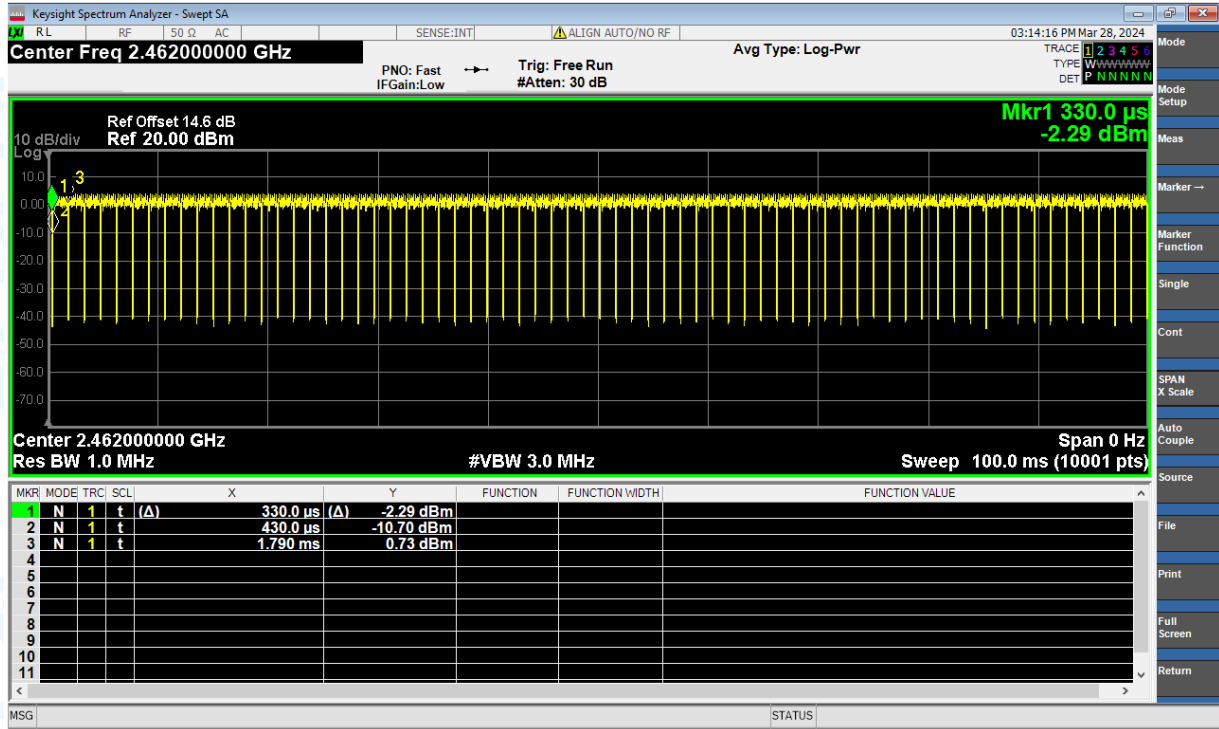
Duty Cycle NVNT g 2412MHz Ant1



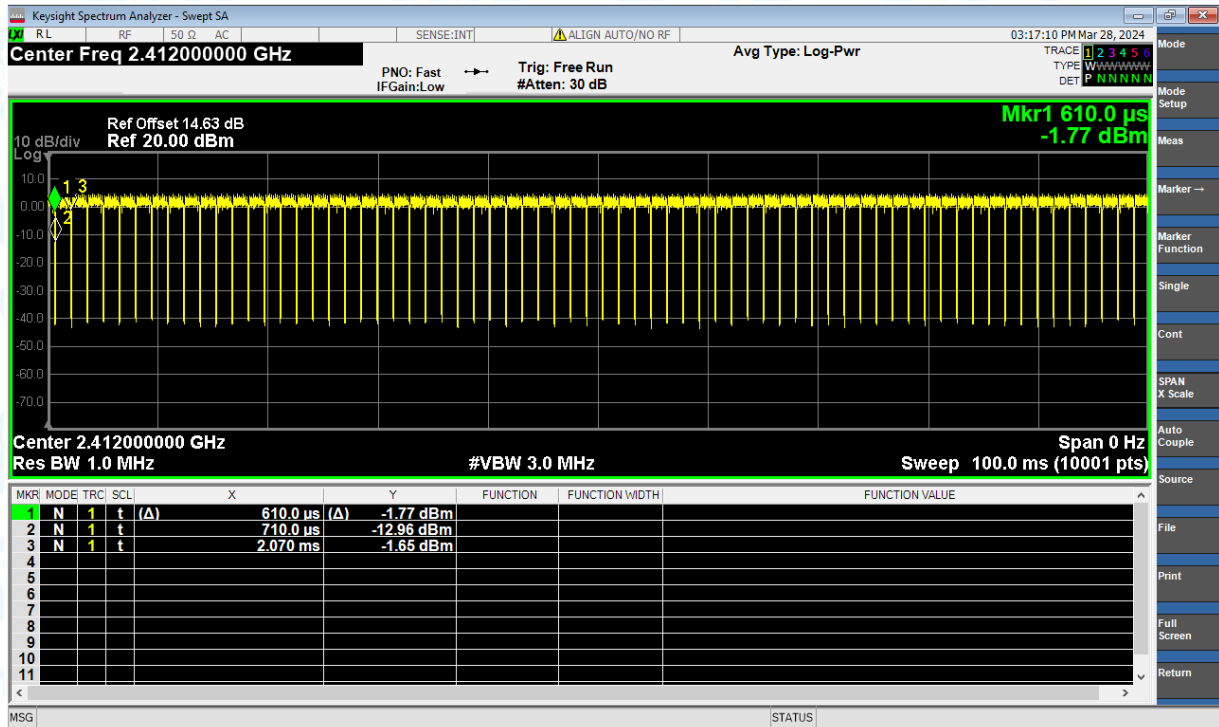
Duty Cycle NVNT g 2437MHz Ant1



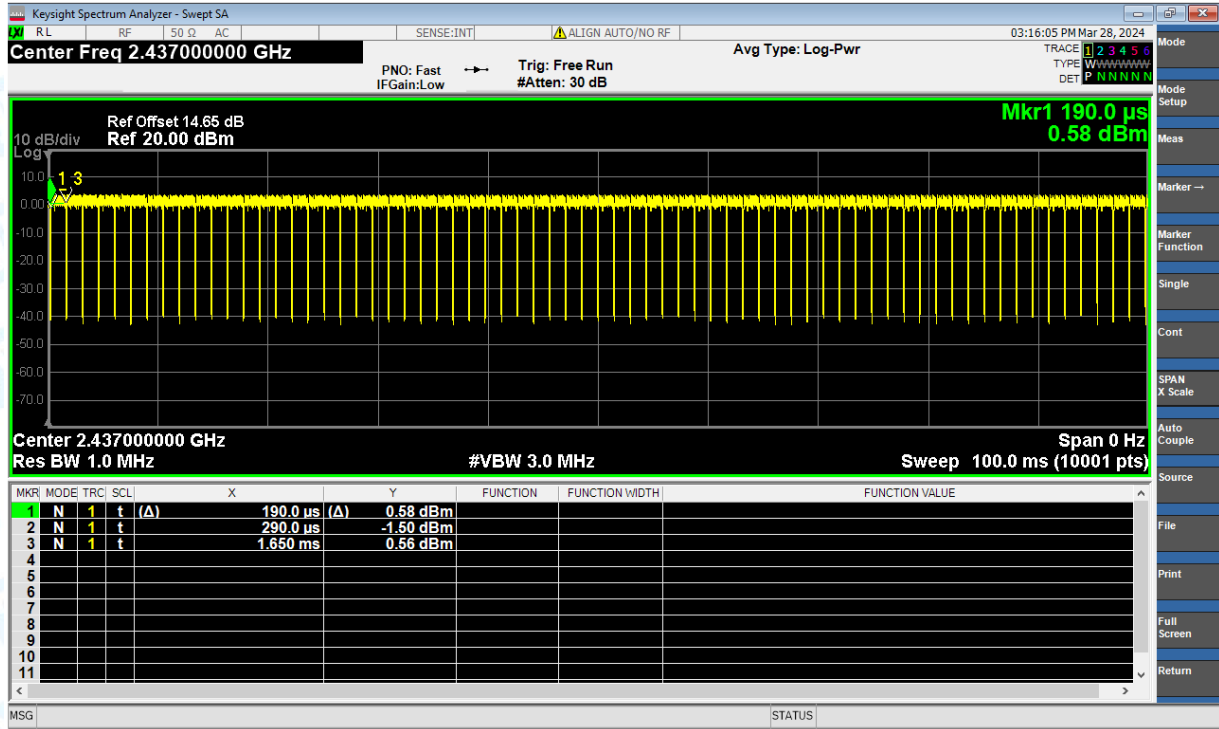
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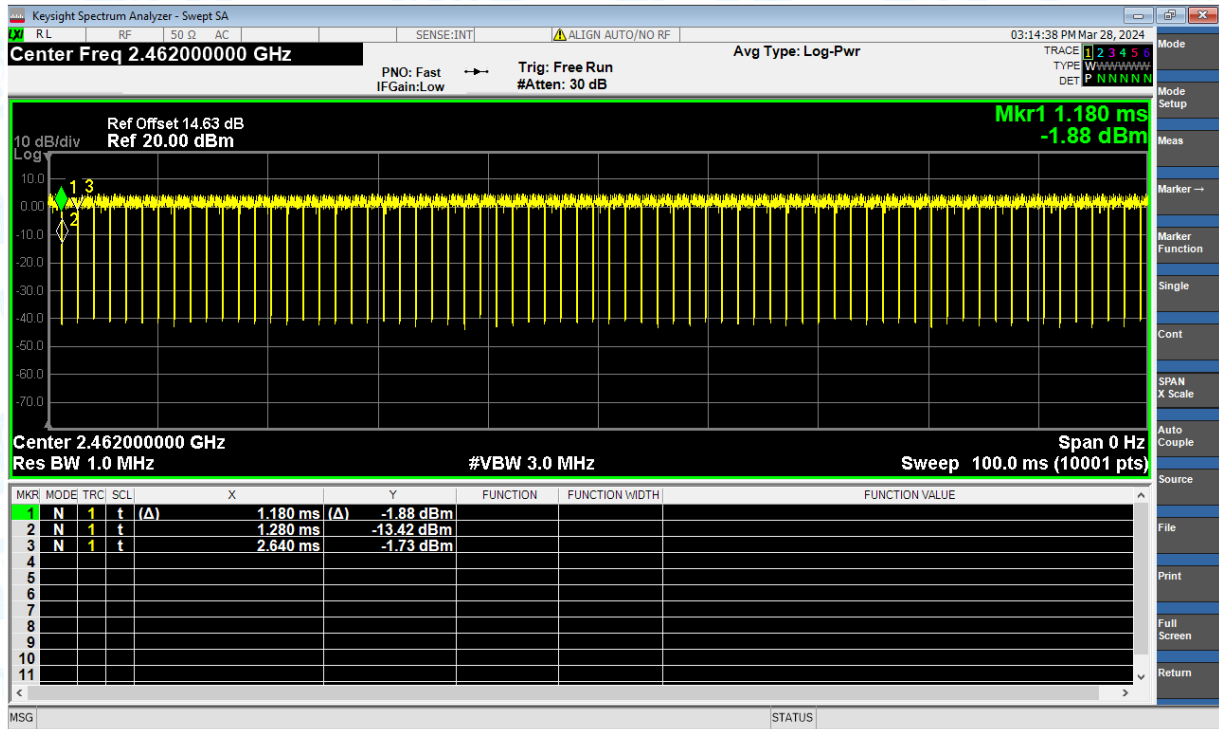
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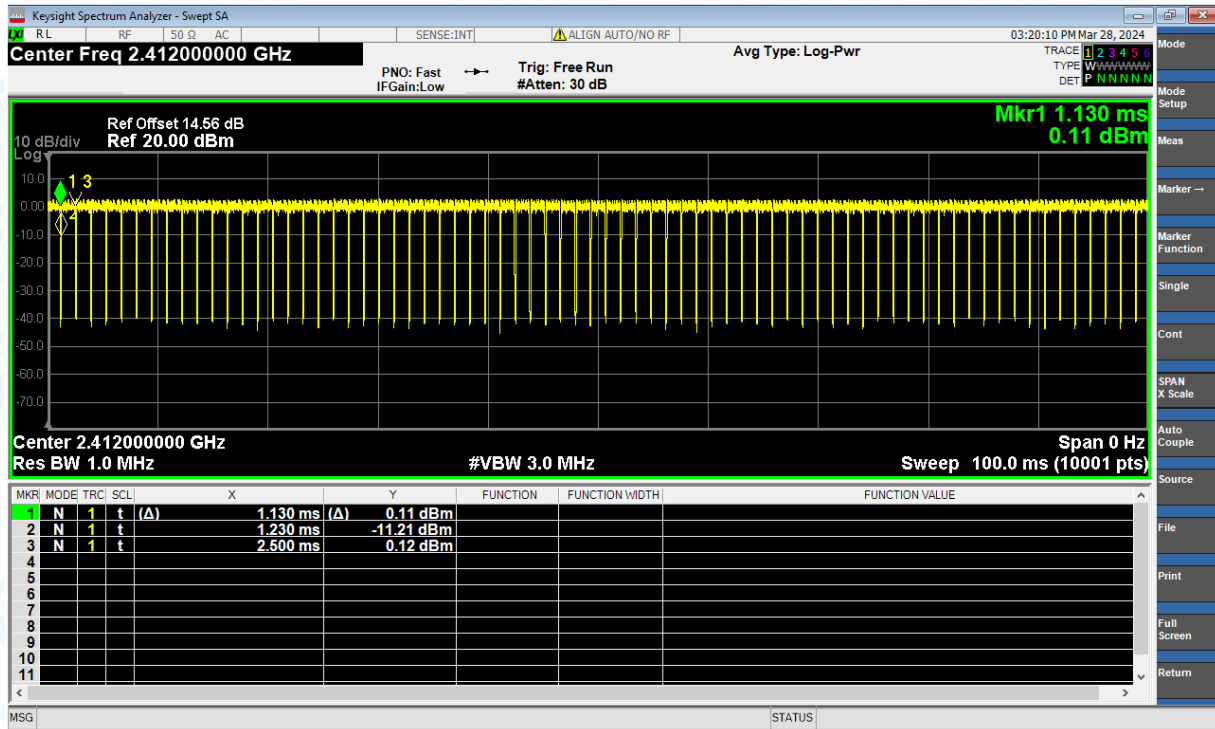
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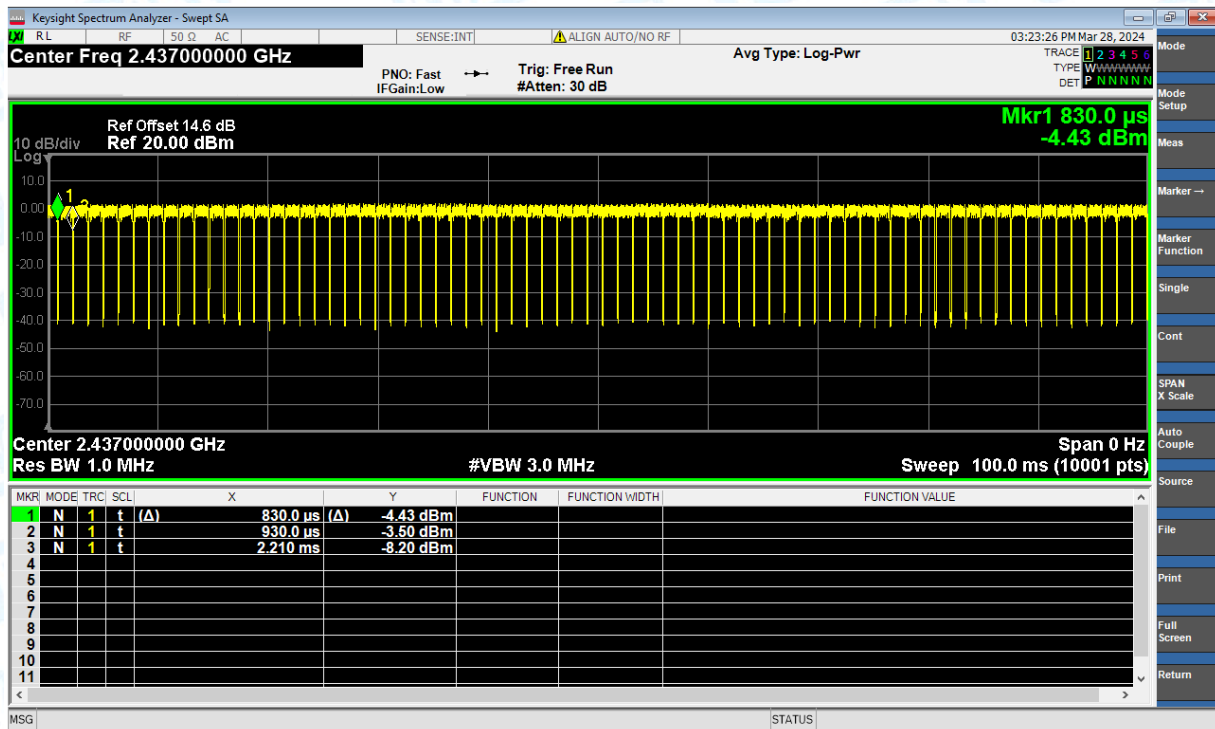
Duty Cycle NVNT g 2462MHz Ant2



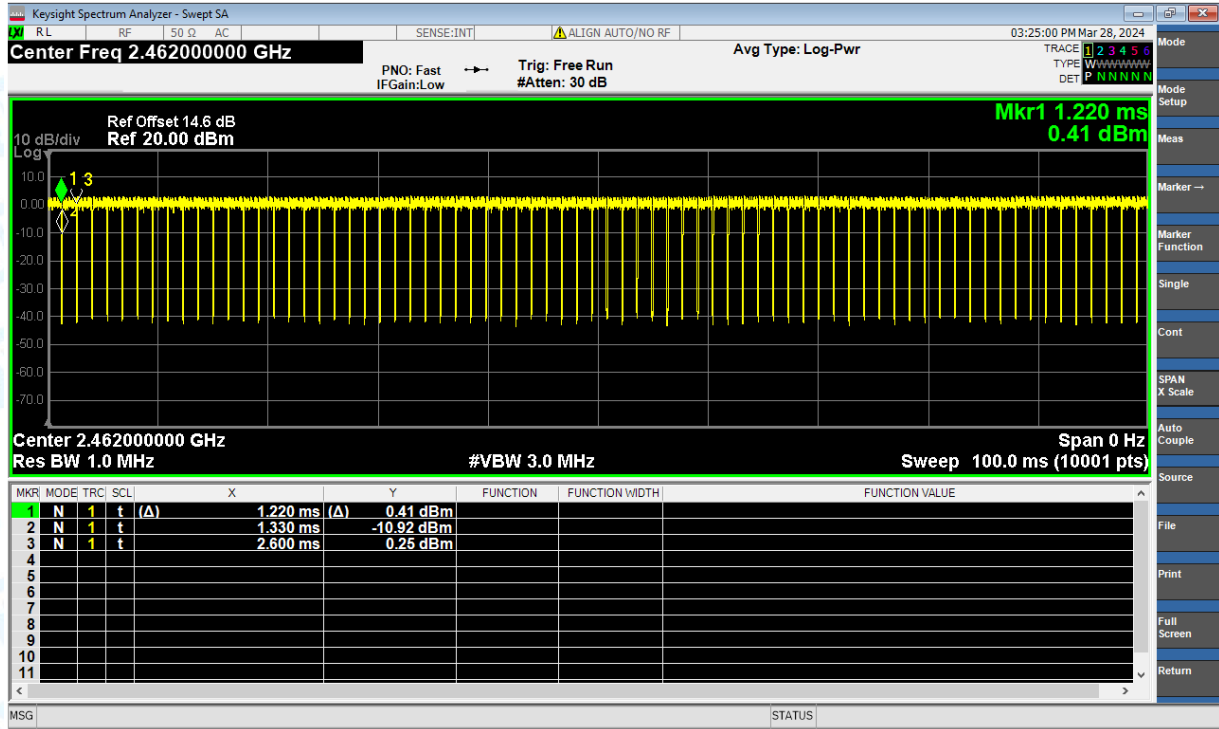
Duty Cycle NVNT n(HT20) 2412MHz Ant1



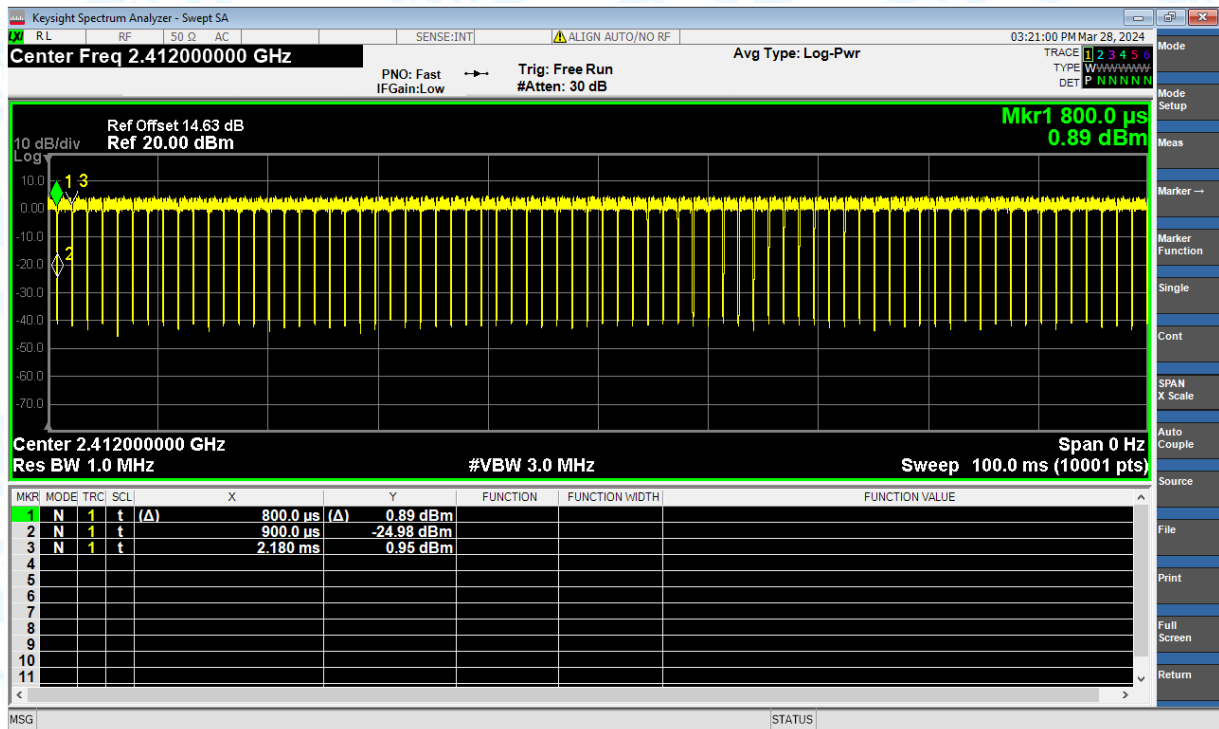
Duty Cycle NVNT n(HT20) 2437MHz Ant1



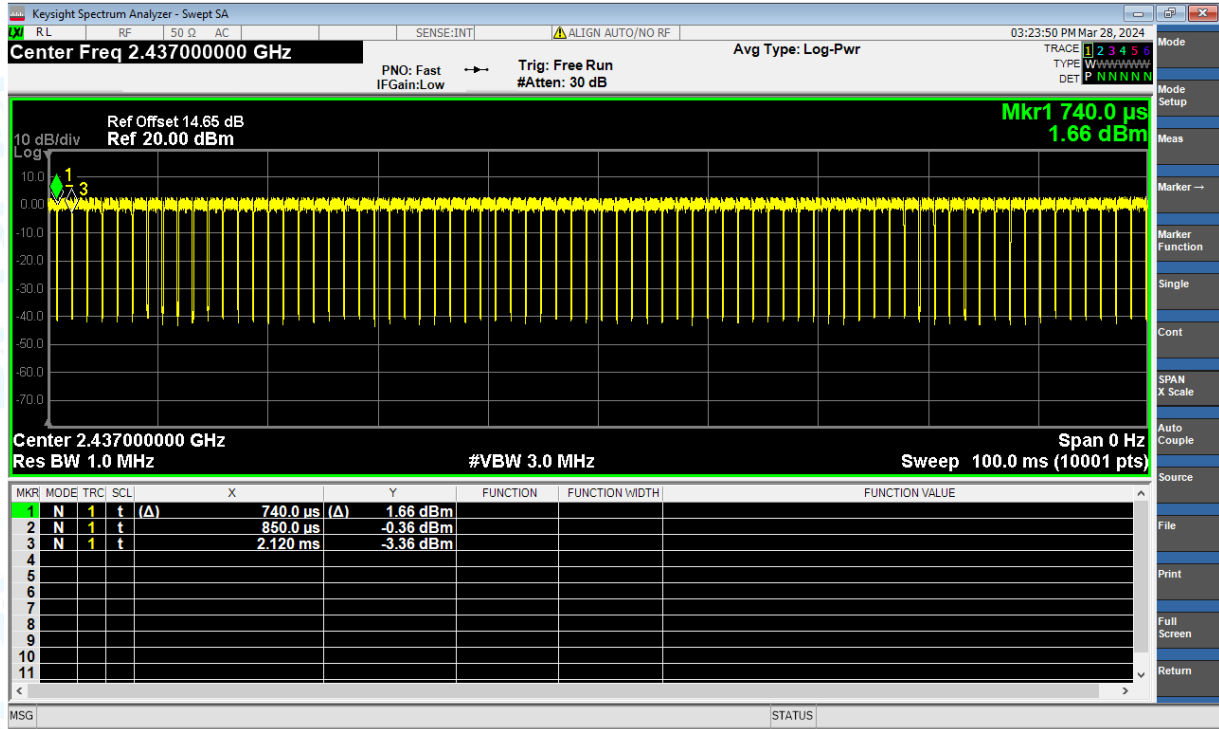
Duty Cycle NVNT n(HT20) 2462MHz Ant1



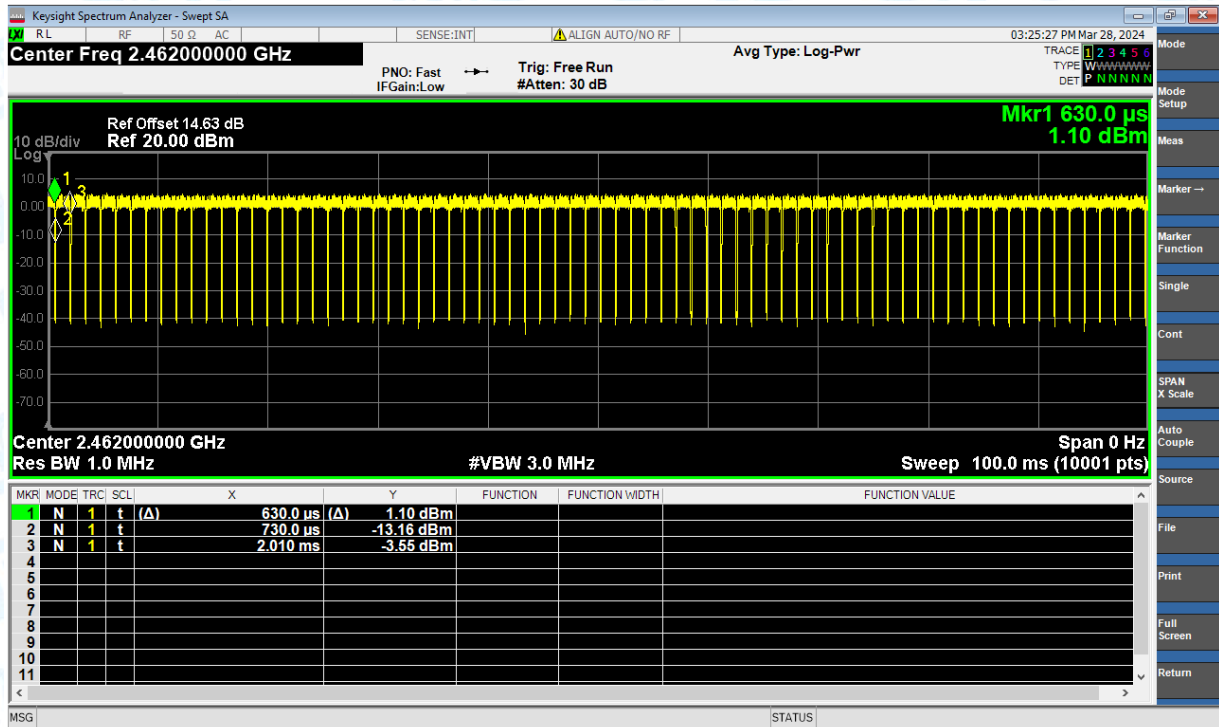
Duty Cycle NVNT n(HT20) 2412MHz Ant2



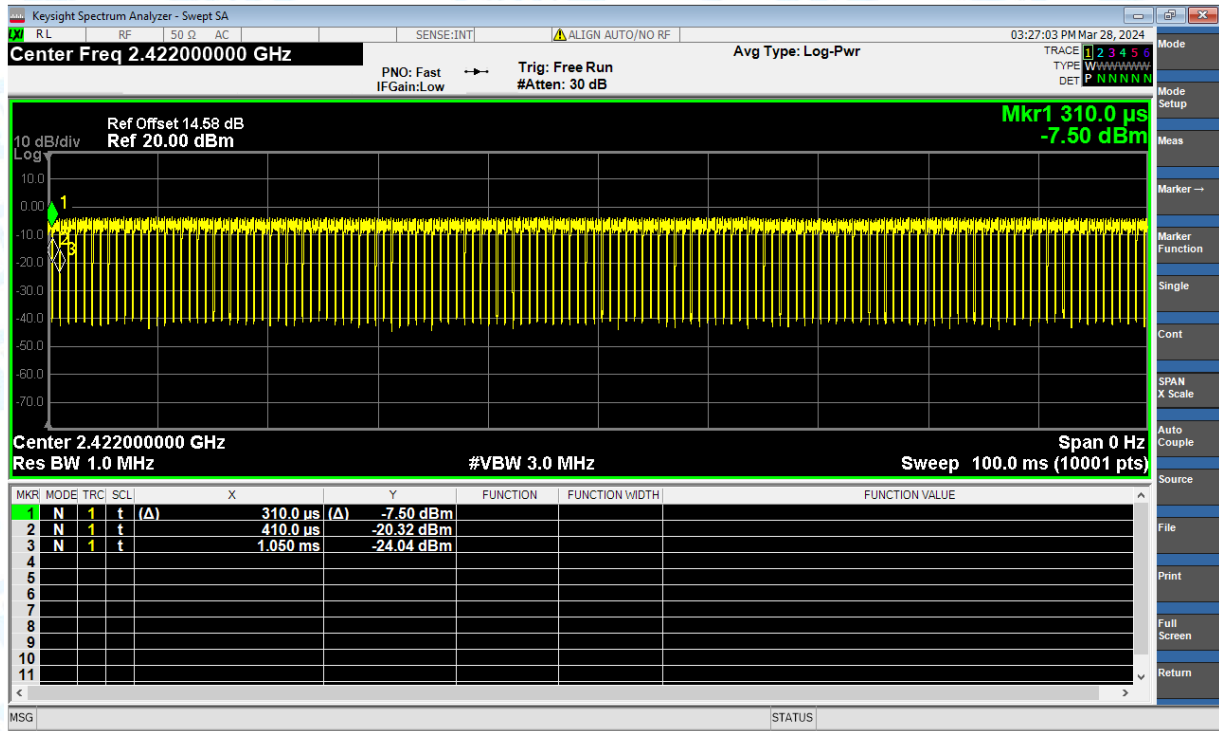
Duty Cycle NVNT n(HT20) 2437MHz Ant2



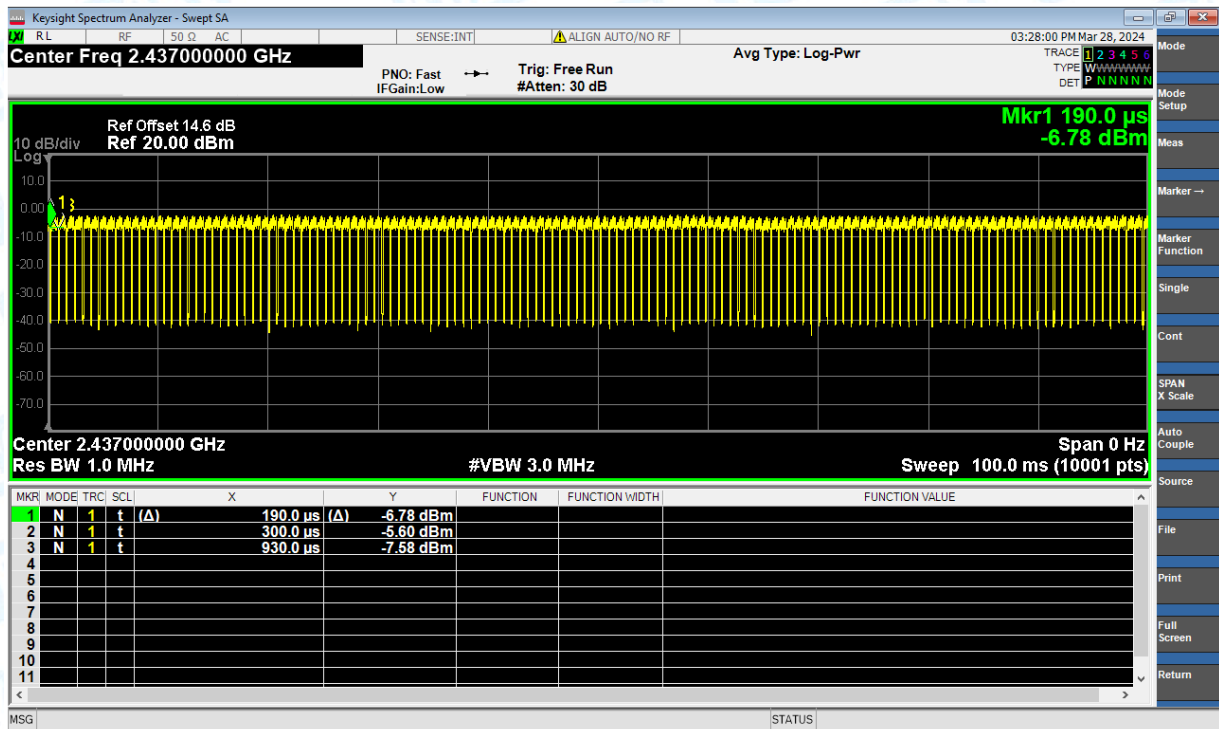
Duty Cycle NVNT n(HT20) 2462MHz Ant2

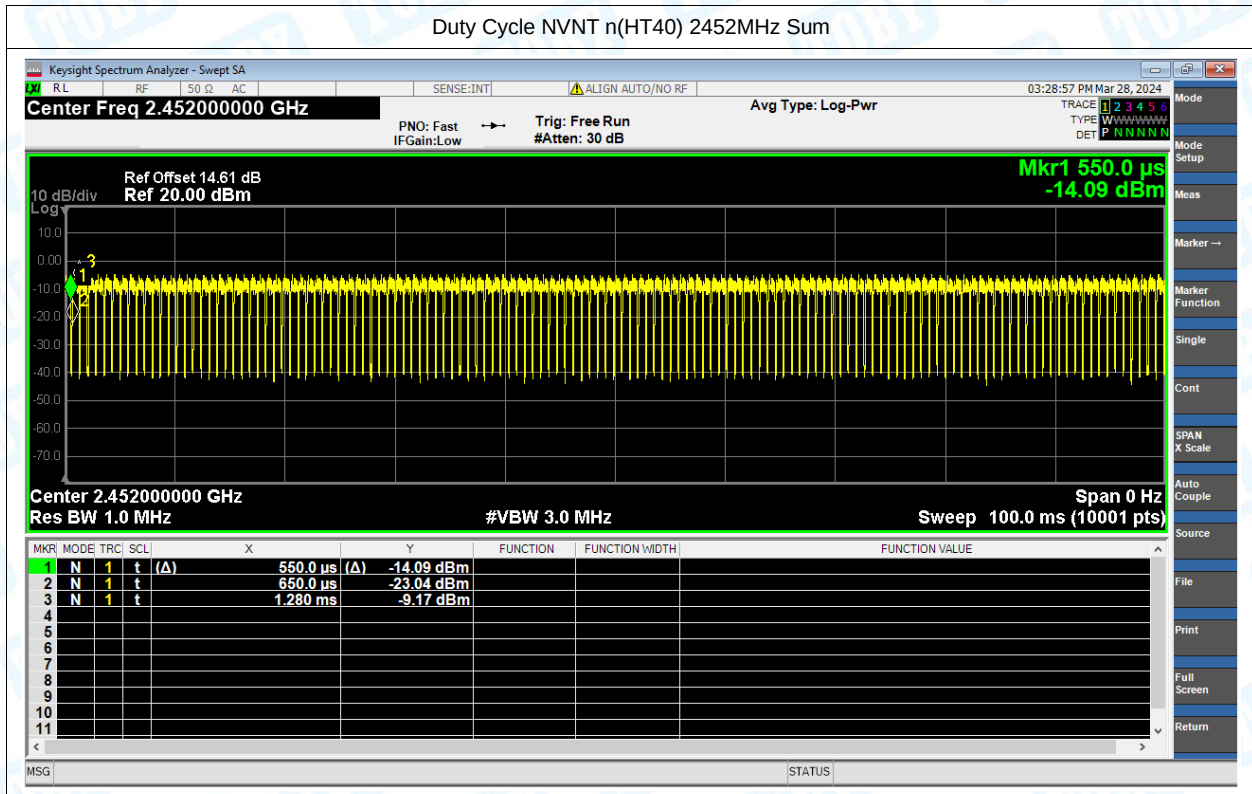


Duty Cycle NVNT n(HT40) 2422MHz Sum



Duty Cycle NVNT n(HT40) 2437MHz Sum





2. Maximum Conducted Output Power

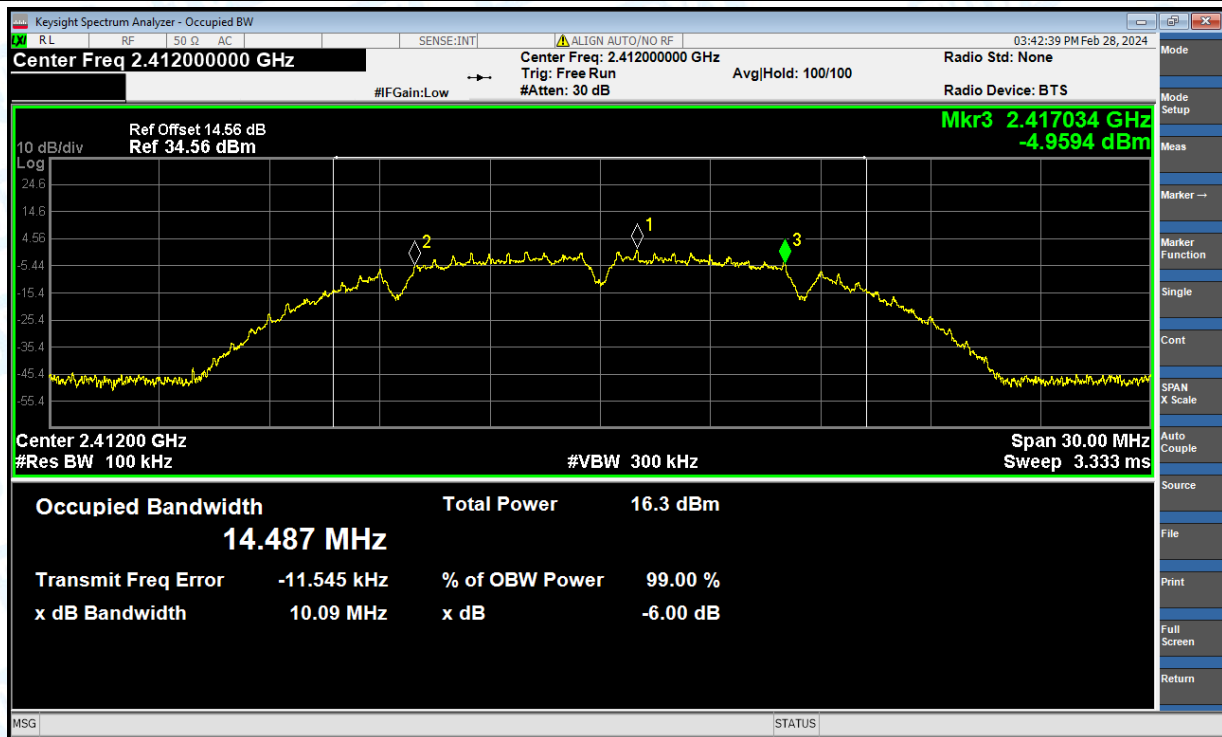
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	7.62	0.05	7.67	30	Pass
NVNT	b	2437	Ant1	7.86	0.05	7.91	30	Pass
NVNT	b	2462	Ant1	7.47	0.05	7.52	30	Pass
NVNT	b	2412	Ant2	8.08	0.06	8.14	30	Pass
NVNT	b	2437	Ant2	8.02	0.05	8.07	30	Pass
NVNT	b	2462	Ant2	7.33	0.05	7.38	30	Pass
NVNT	g	2412	Ant1	6.77	0.31	7.08	30	Pass
NVNT	g	2437	Ant1	6.85	0.31	7.16	30	Pass
NVNT	g	2462	Ant1	6.92	0.31	7.23	30	Pass
NVNT	g	2412	Ant2	7.51	0.31	7.82	30	Pass
NVNT	g	2437	Ant2	7.55	0.31	7.86	30	Pass
NVNT	g	2462	Ant2	7.42	0.31	7.73	30	Pass
NVNT	n(HT20)	2412	Ant1	6.75	0.33	7.08	30	Pass
NVNT	n(HT20)	2437	Ant1	6.97	0.33	7.3	30	Pass
NVNT	n(HT20)	2462	Ant1	6.93	0.36	7.29	30	Pass
NVNT	n(HT20)	2412	Ant2	7.11	0.33	7.44	30	Pass
NVNT	n(HT20)	2437	Ant2	7.05	0.36	7.41	30	Pass
NVNT	n(HT20)	2462	Ant2	7.11	0.33	7.44	30	Pass
NVNT	n(HT40)	2422	Ant1	3.8	0.63	4.43	30	Pass
NVNT	n(HT40)	2422	Ant2	4.46	0.63	5.09	30	Pass
NVNT	n(HT40)	2422	Sum	7.153	0.63	7.783	30	Pass
NVNT	n(HT40)	2437	Ant1	3.59	0.7	4.29	30	Pass
NVNT	n(HT40)	2437	Ant2	4.19	0.7	4.89	30	Pass
NVNT	n(HT40)	2437	Sum	6.911	0.7	7.611	30	Pass
NVNT	n(HT40)	2452	Ant1	3.64	0.64	4.28	30	Pass
NVNT	n(HT40)	2452	Ant2	4.06	0.64	4.7	30	Pass
NVNT	n(HT40)	2452	Sum	6.865	0.64	7.505	30	Pass

3. -6dB Bandwidth

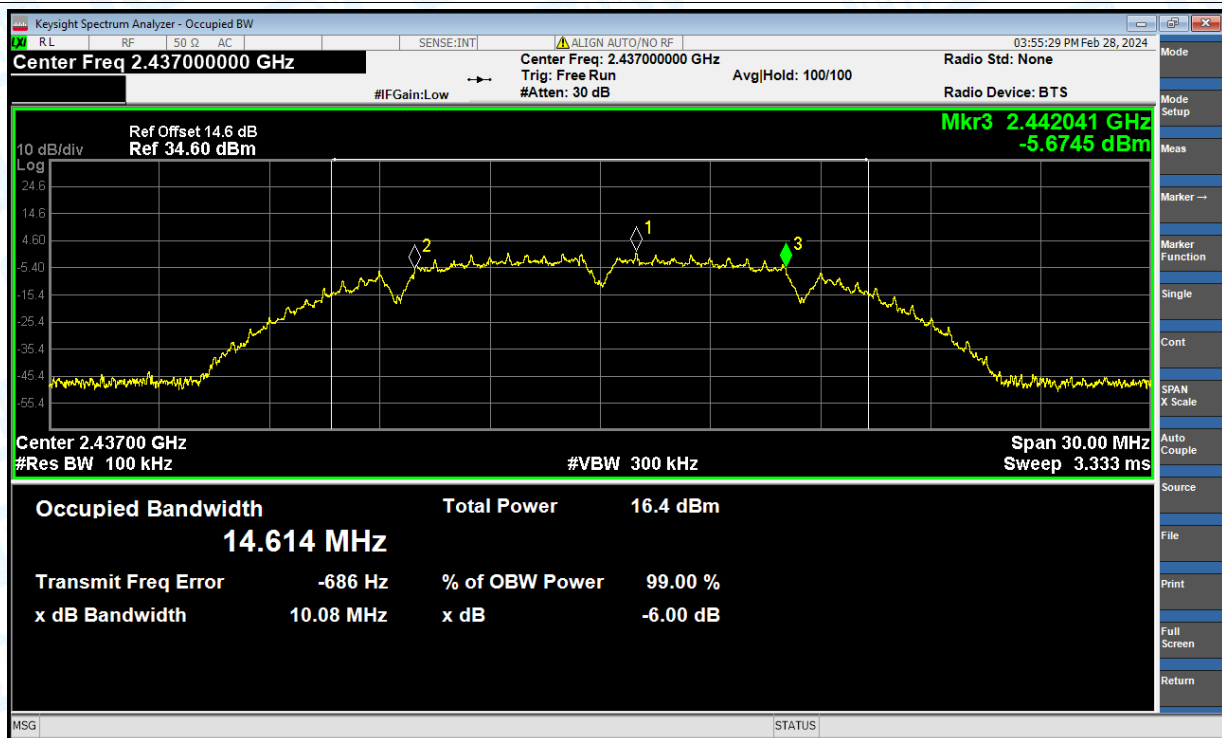
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	10.09	0.5	Pass
NVNT	b	2437	Ant1	10.08	0.5	Pass
NVNT	b	2462	Ant1	10.07	0.5	Pass
NVNT	b	2412	Ant2	10.05	0.5	Pass
NVNT	b	2437	Ant2	10.04	0.5	Pass
NVNT	b	2462	Ant2	10.08	0.5	Pass
NVNT	g	2412	Ant1	16.29	0.5	Pass
NVNT	g	2437	Ant1	16.31	0.5	Pass
NVNT	g	2462	Ant1	16.29	0.5	Pass
NVNT	g	2412	Ant2	16.29	0.5	Pass
NVNT	g	2437	Ant2	16.3	0.5	Pass
NVNT	g	2462	Ant2	15.96	0.5	Pass
NVNT	n(HT20)	2412	Ant1	16.97	0.5	Pass
NVNT	n(HT20)	2437	Ant1	16.87	0.5	Pass
NVNT	n(HT20)	2462	Ant1	16.37	0.5	Pass
NVNT	n(HT20)	2412	Ant2	17.05	0.5	Pass
NVNT	n(HT20)	2437	Ant2	15.99	0.5	Pass
NVNT	n(HT20)	2462	Ant2	16.39	0.5	Pass
NVNT	n(HT40)	2422	Ant1	34.23	0.5	Pass
NVNT	n(HT40)	2422	Ant2	33.87	0.5	Pass
NVNT	n(HT40)	2437	Ant1	35.12	0.5	Pass
NVNT	n(HT40)	2437	Ant2	35.03	0.5	Pass
NVNT	n(HT40)	2452	Ant1	35.28	0.5	Pass
NVNT	n(HT40)	2452	Ant2	35.05	0.5	Pass

Test Graphs

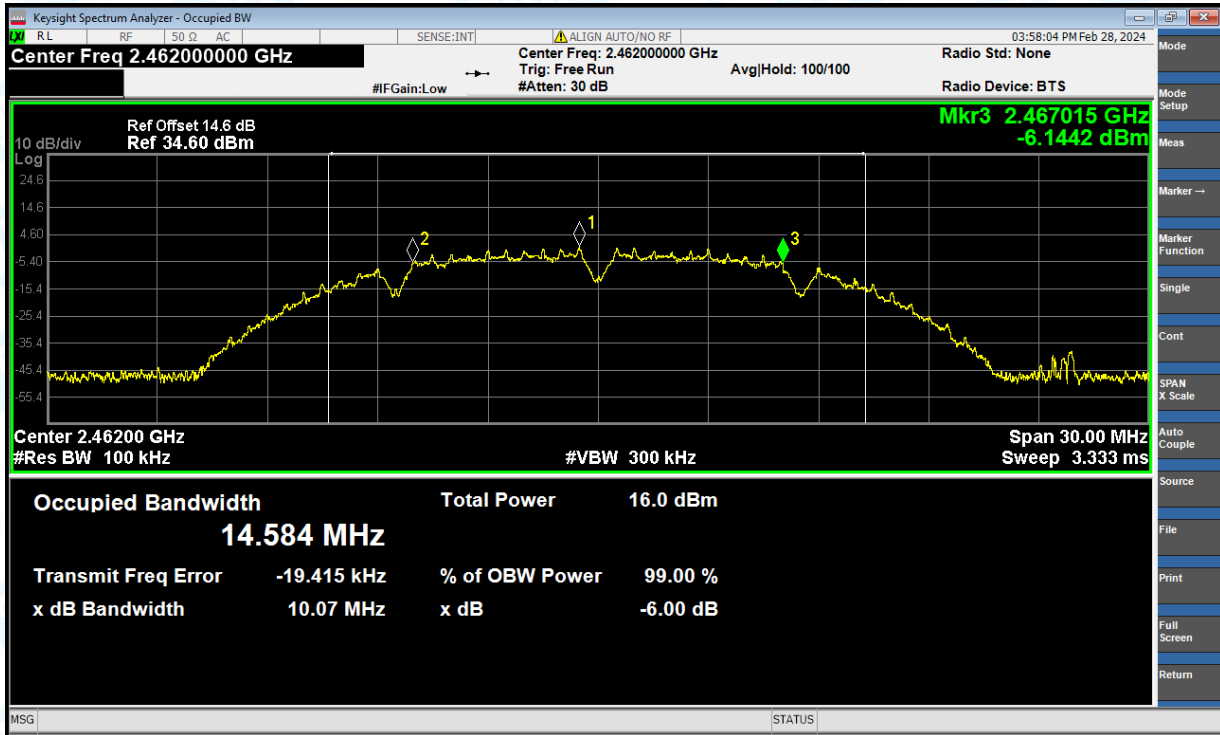
-6dB Bandwidth NVNT b 2412MHz Ant1



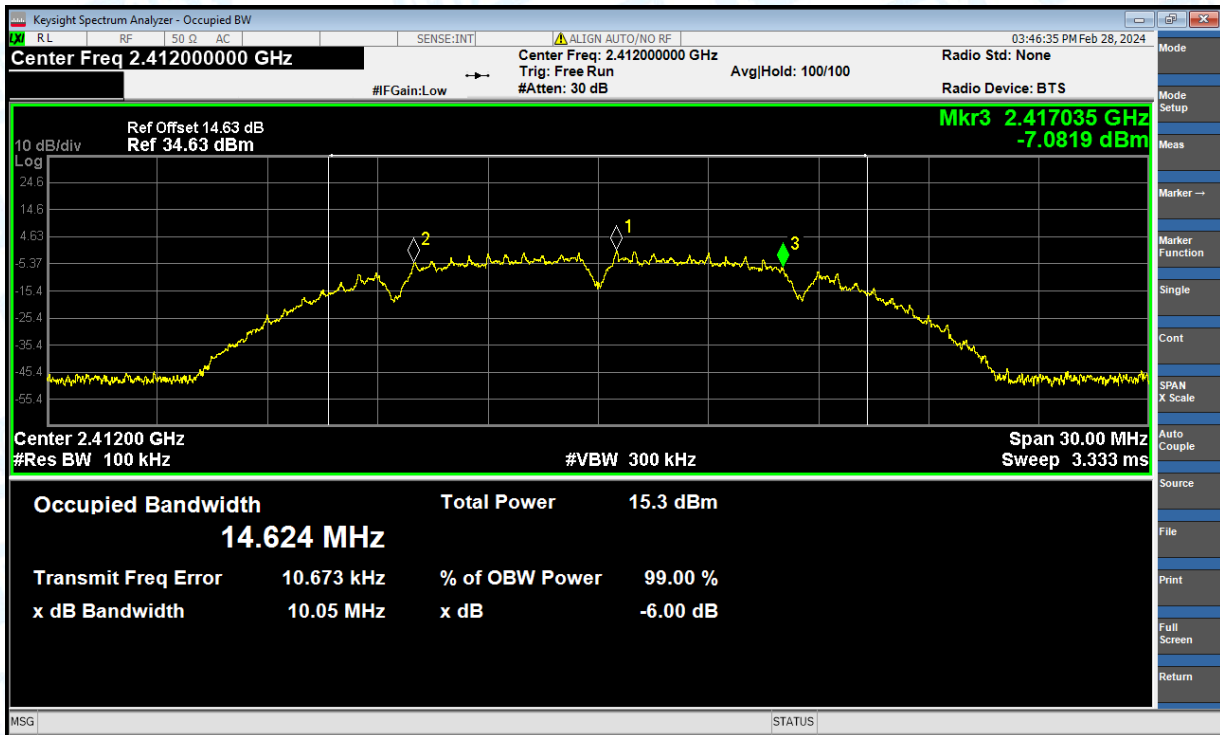
-6dB Bandwidth NVNT b 2437MHz Ant1



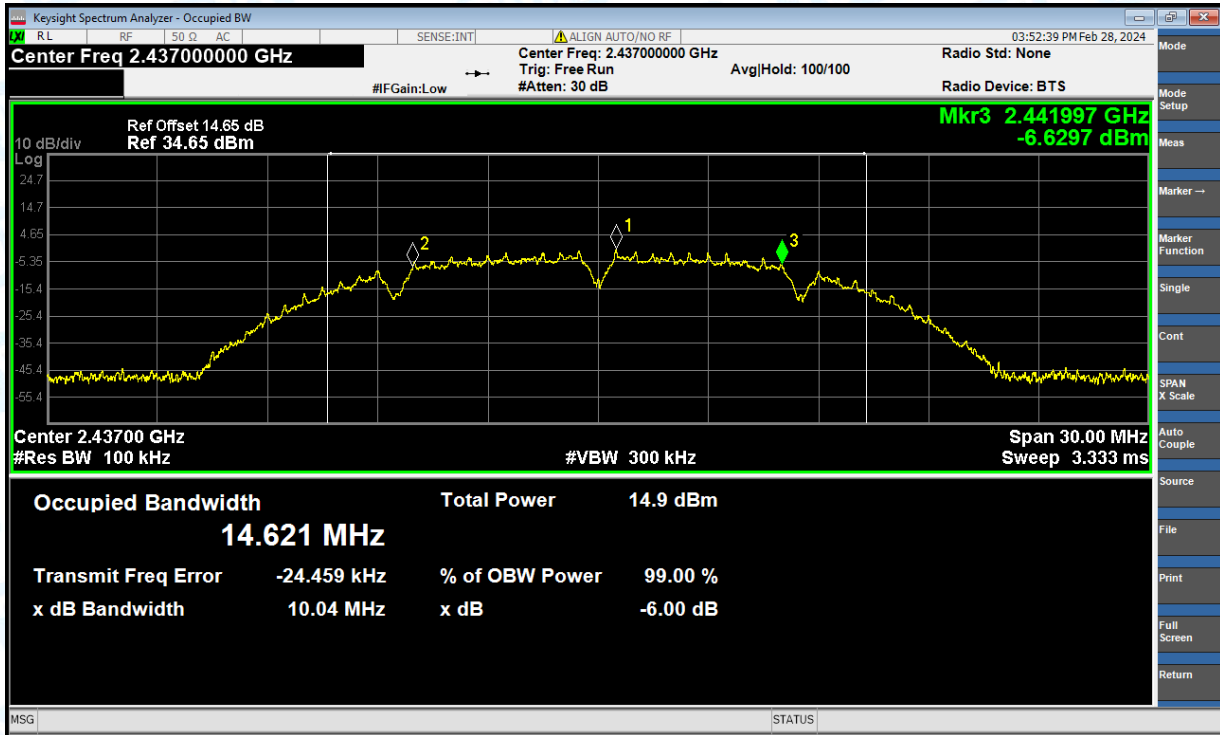
-6dB Bandwidth NVNT b 2462MHz Ant1



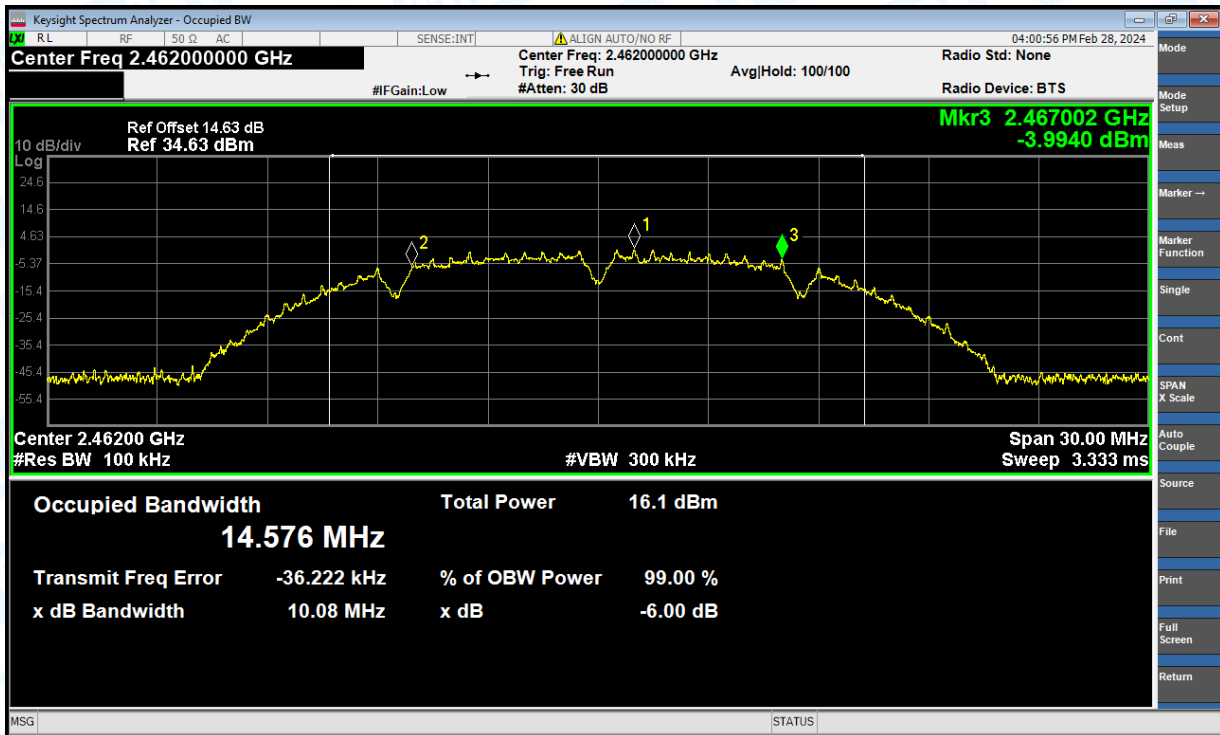
-6dB Bandwidth NVNT b 2412MHz Ant2



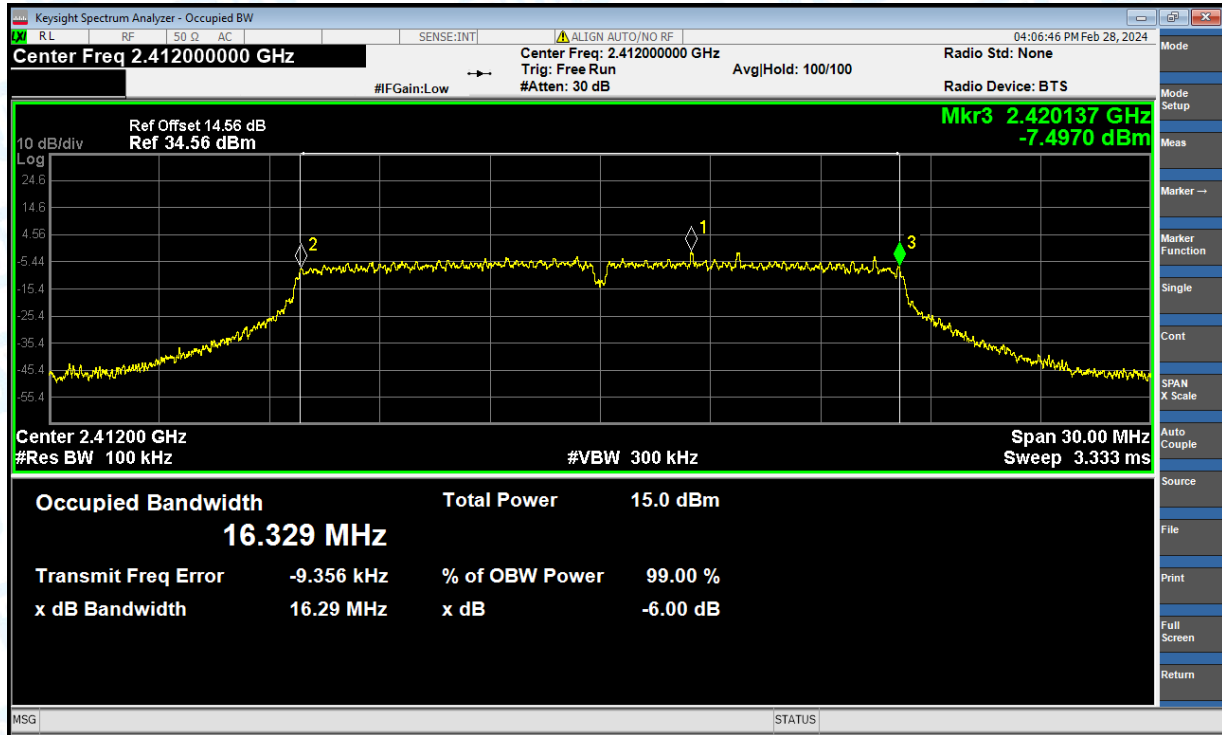
-6dB Bandwidth NVNT b 2437MHz Ant2



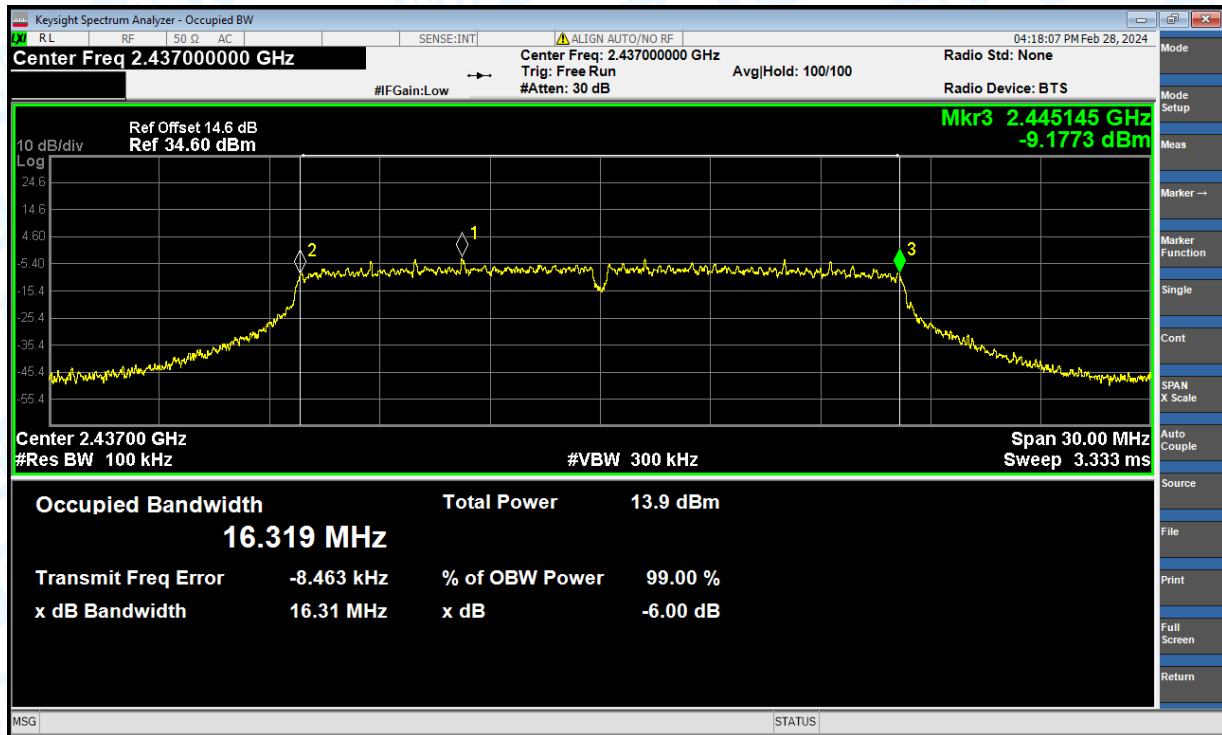
-6dB Bandwidth NVNT b 2462MHz Ant2



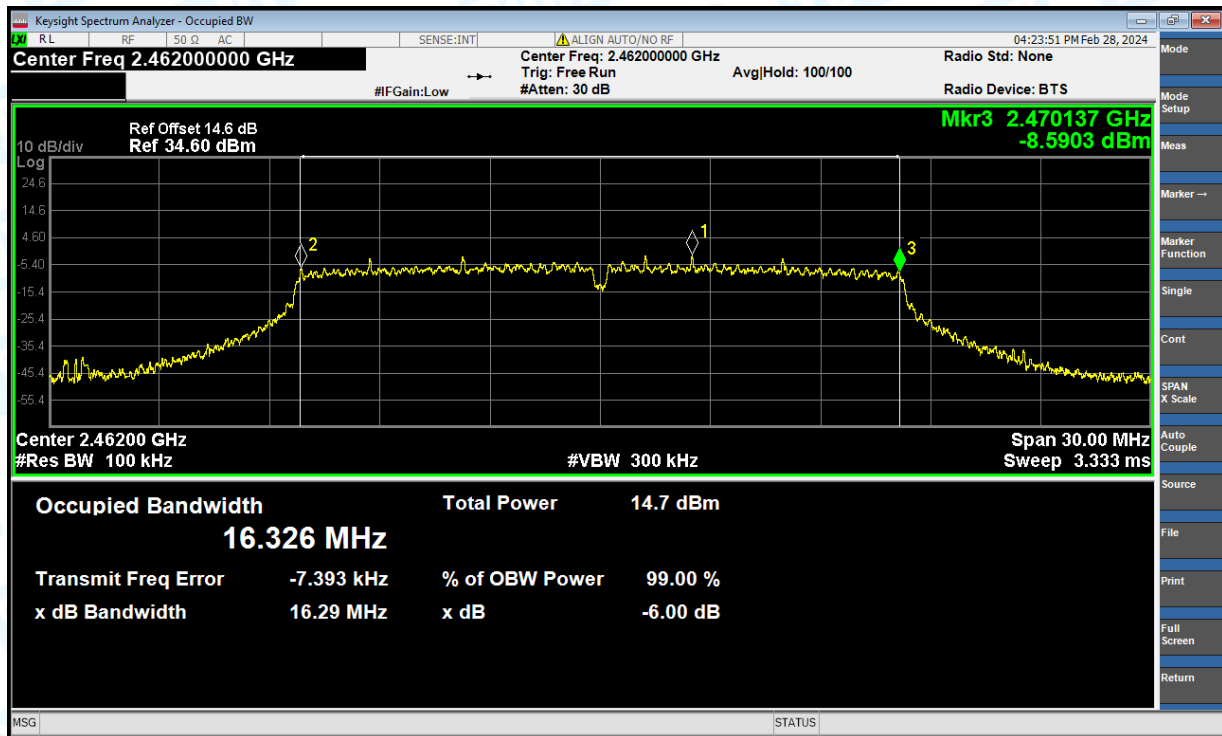
-6dB Bandwidth NVNT g 2412MHz Ant1



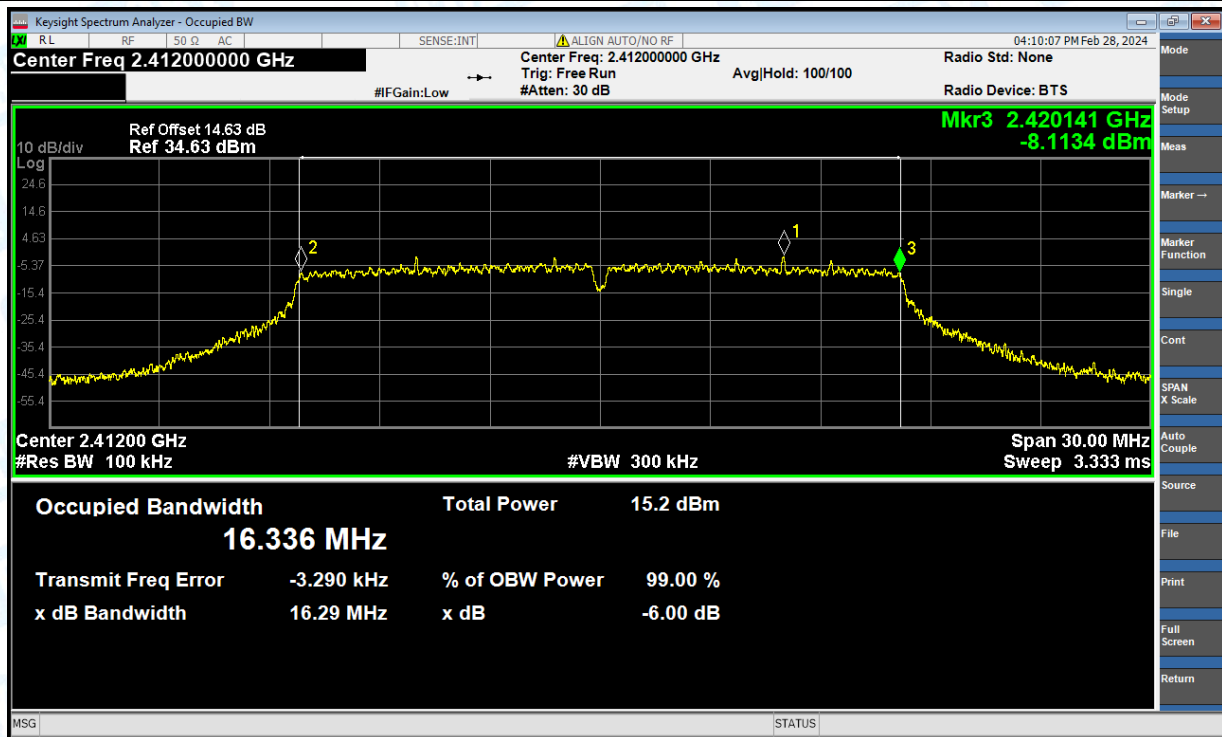
-6dB Bandwidth NVNT g 2437MHz Ant1



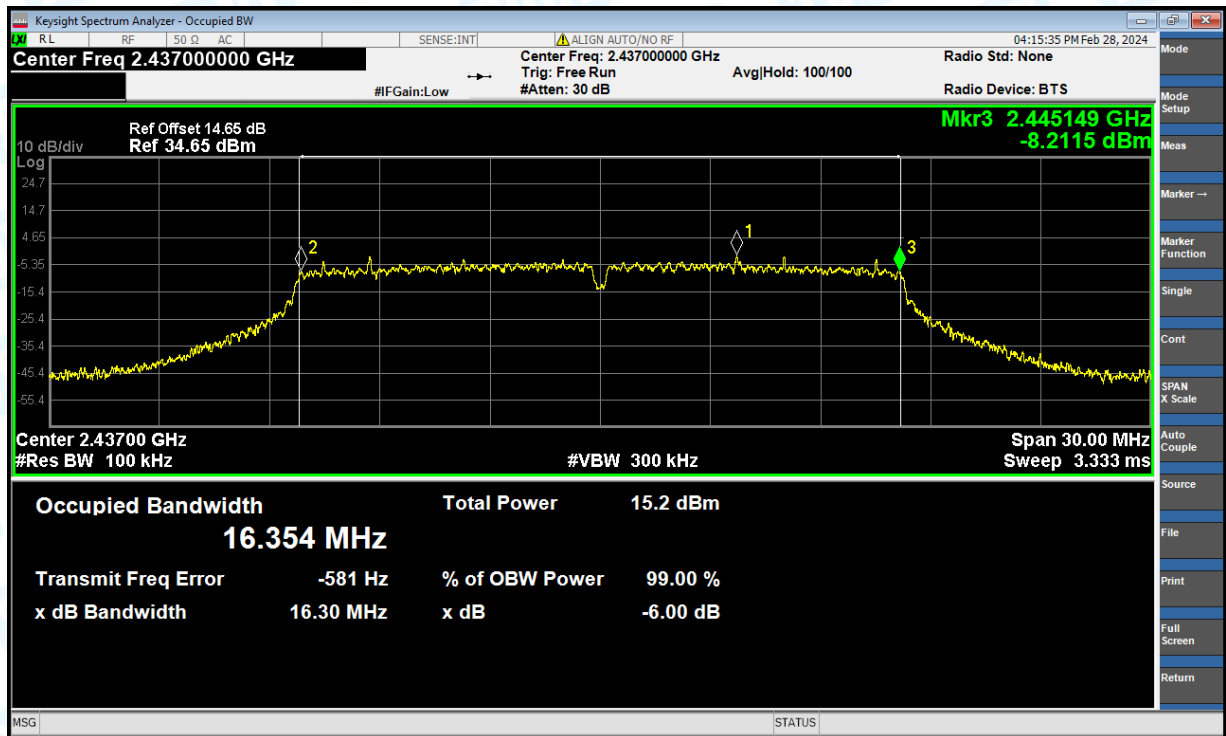
-6dB Bandwidth NVNT g 2462MHz Ant1



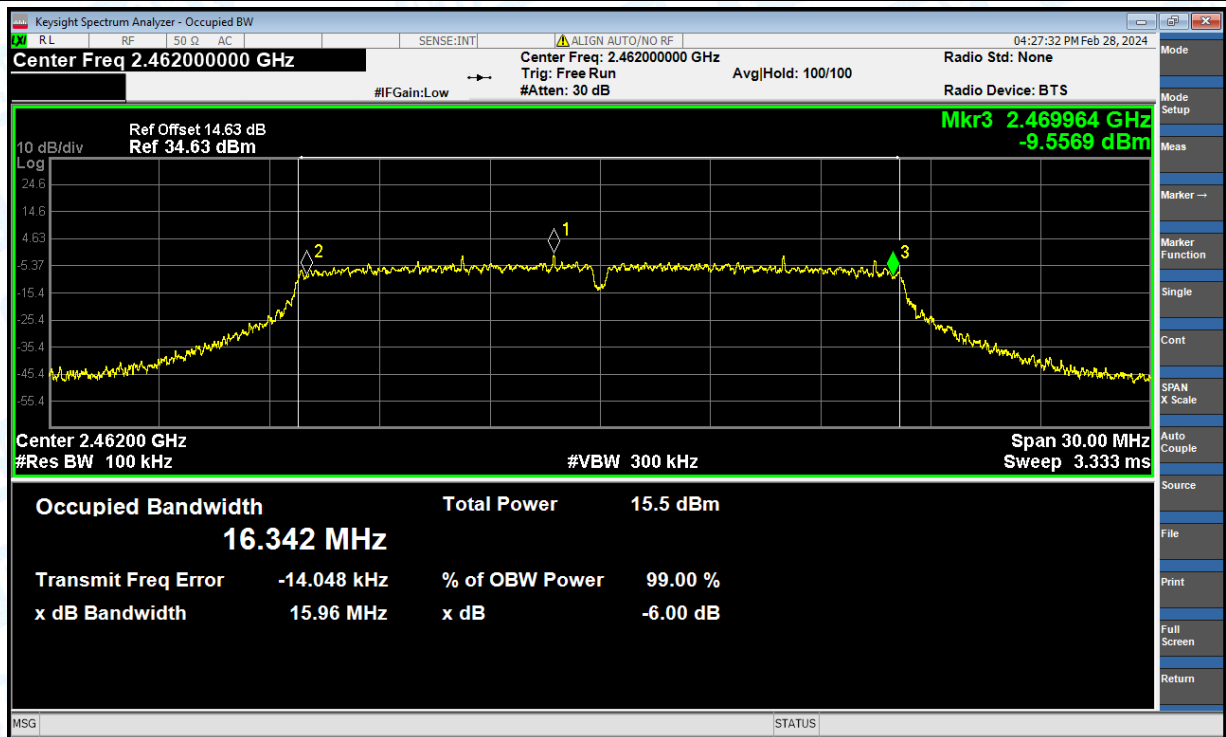
-6dB Bandwidth NVNT g 2412MHz Ant2



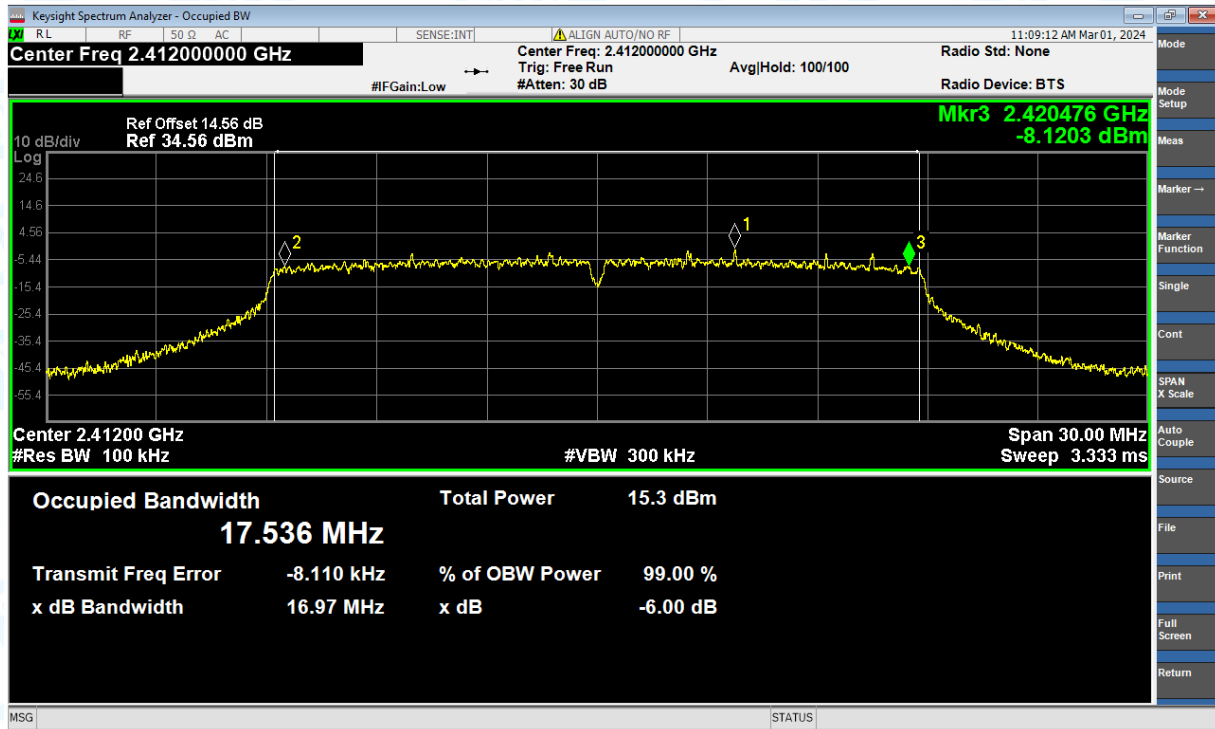
-6dB Bandwidth NVNT g 2437MHz Ant2



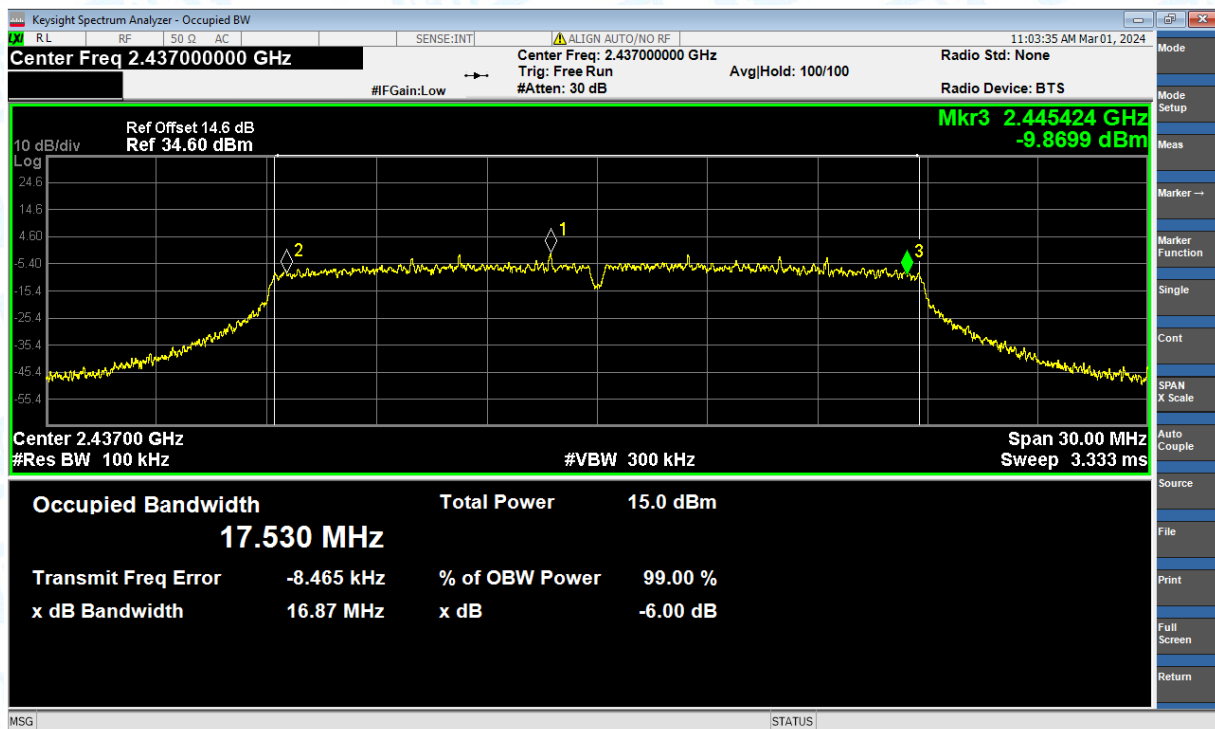
-6dB Bandwidth NVNT g 2462MHz Ant2



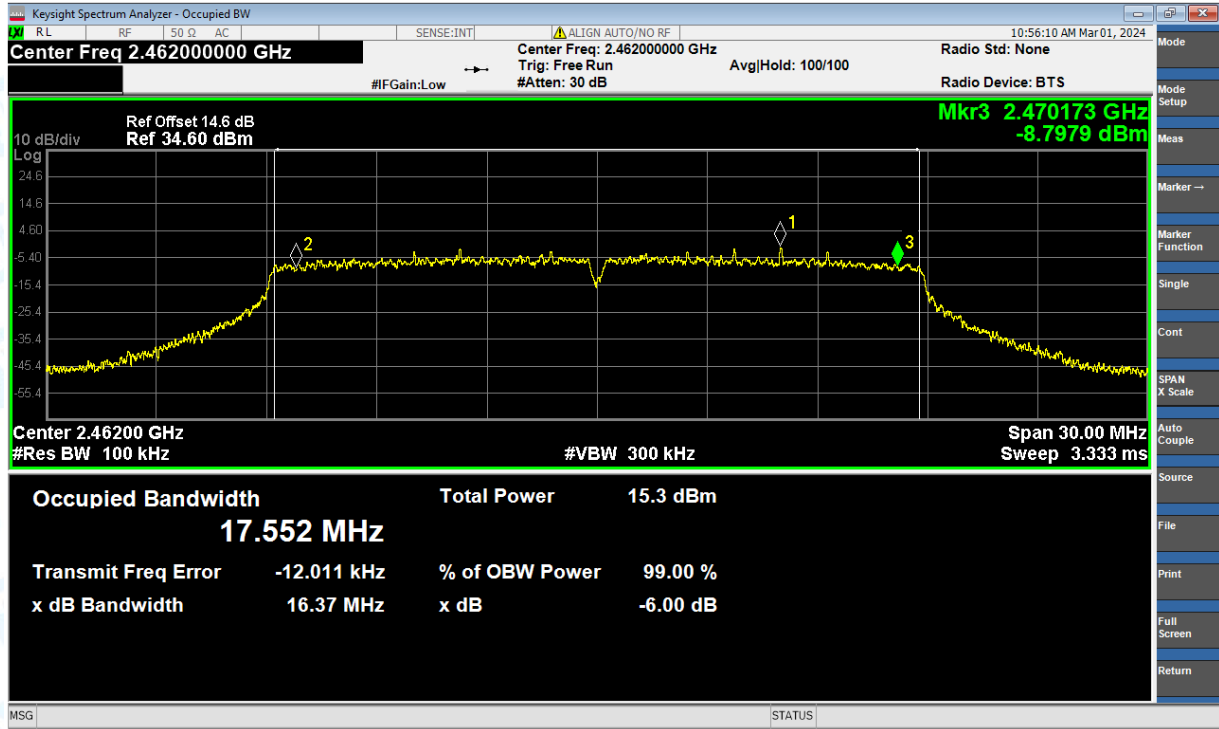
-6dB Bandwidth NVNT n(HT20) 2412MHz Ant1



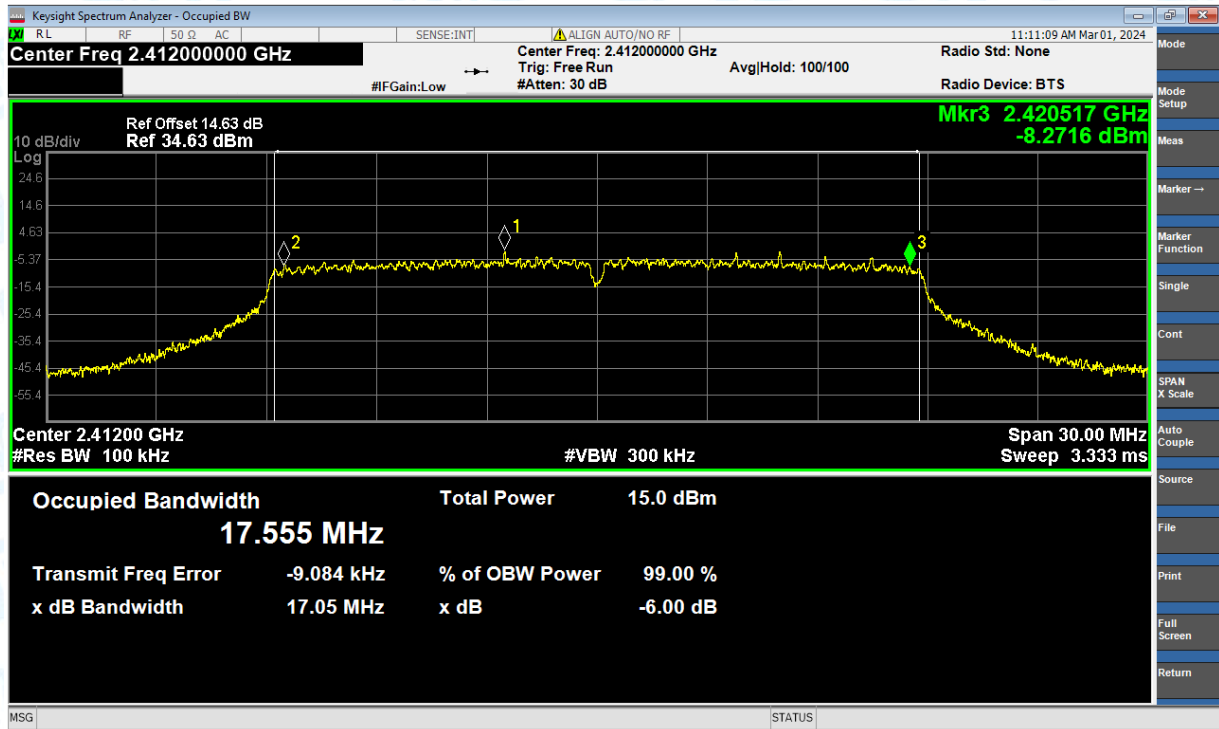
-6dB Bandwidth NVNT n(HT20) 2437MHz Ant1



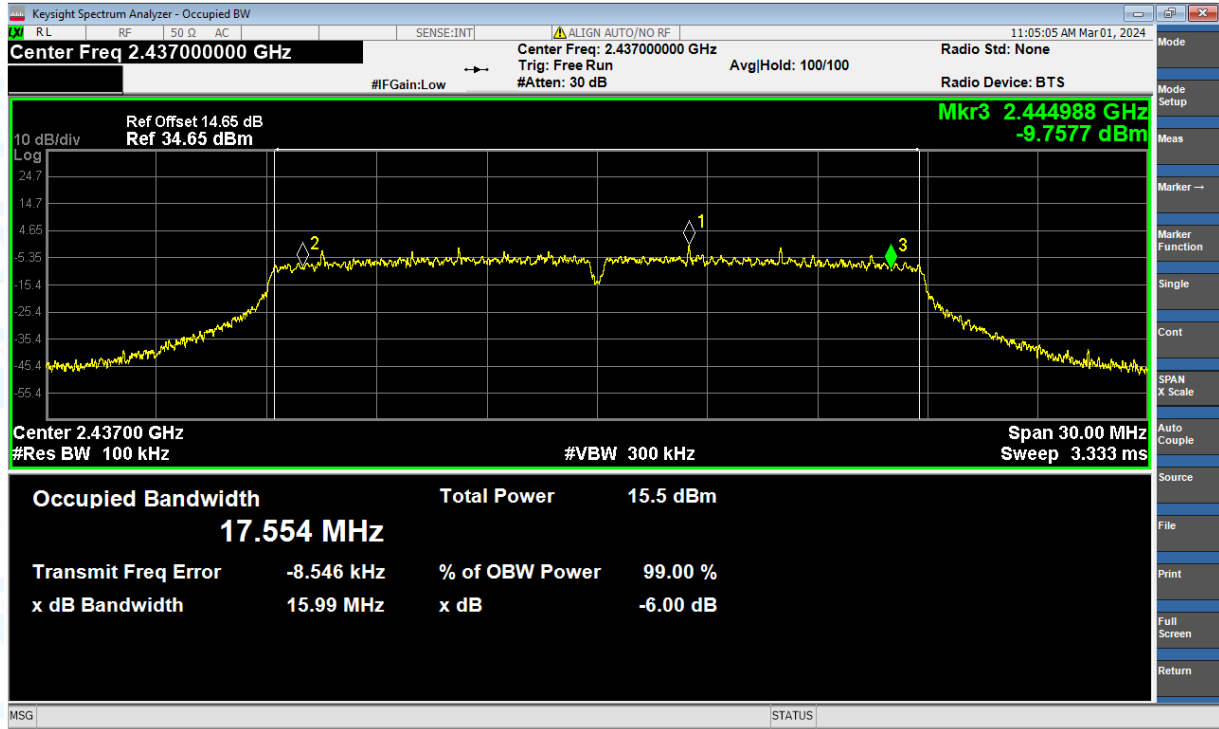
-6dB Bandwidth NVNT n(HT20) 2462MHz Ant1



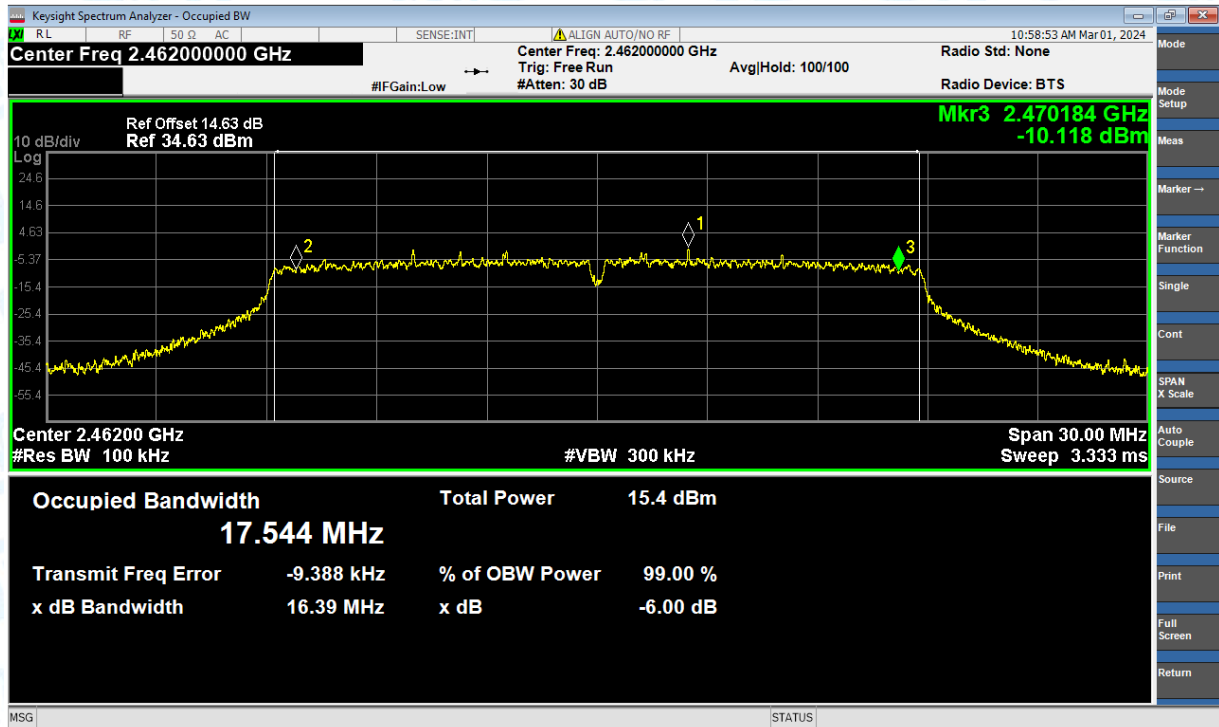
-6dB Bandwidth NVNT n(HT20) 2412MHz Ant2

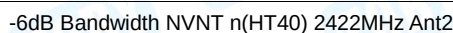


-6dB Bandwidth NVNT n(HT20) 2437MHz Ant2

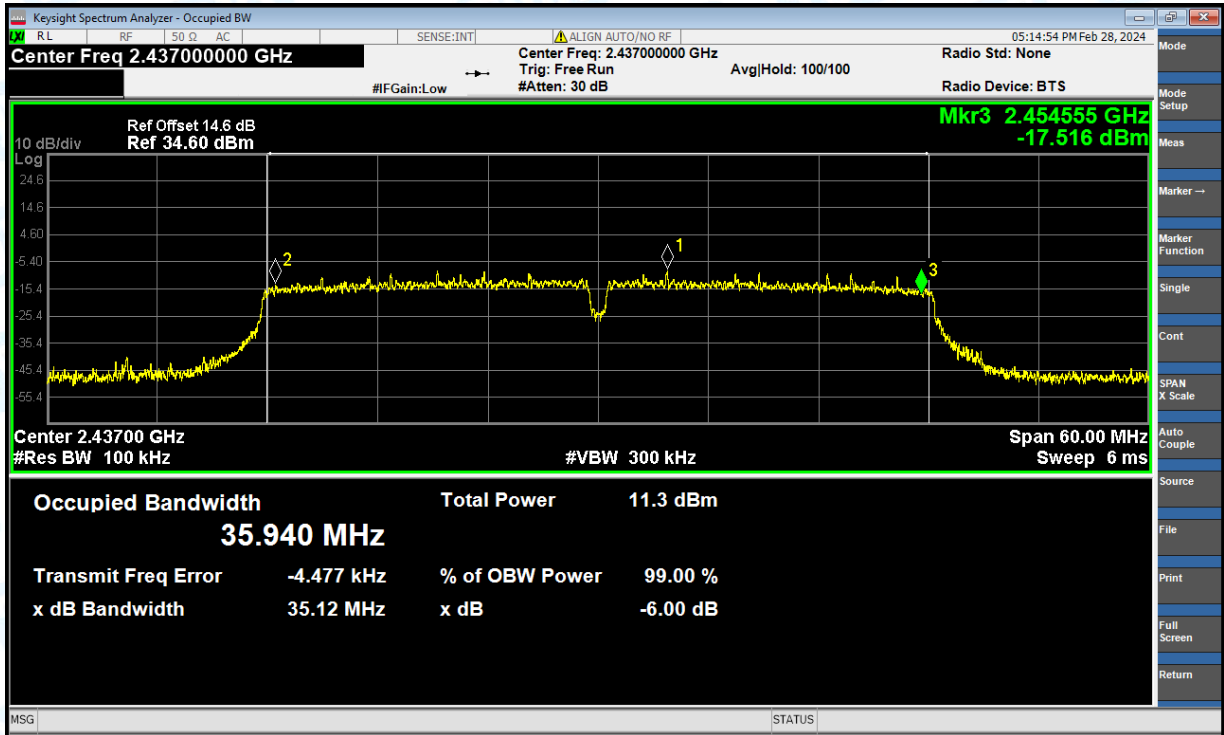


-6dB Bandwidth NVNT n(HT20) 2462MHz Ant2

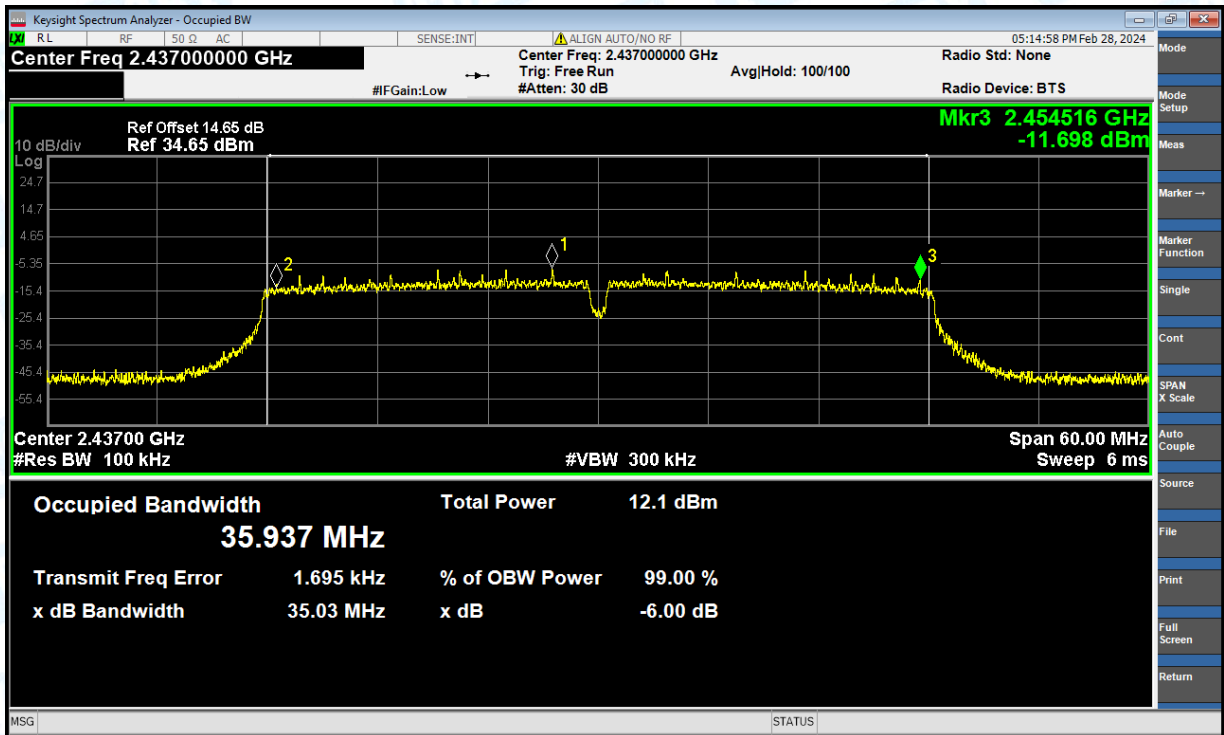




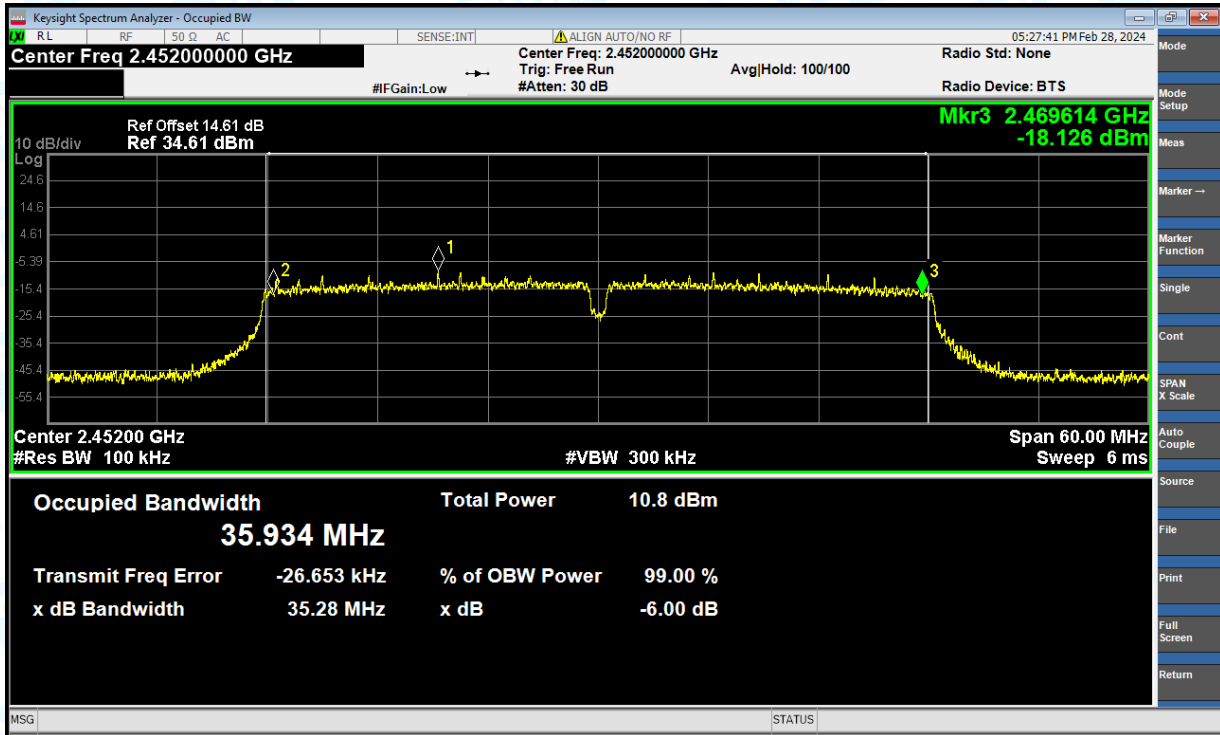
-6dB Bandwidth NVNT n(HT40) 2437MHz Ant1



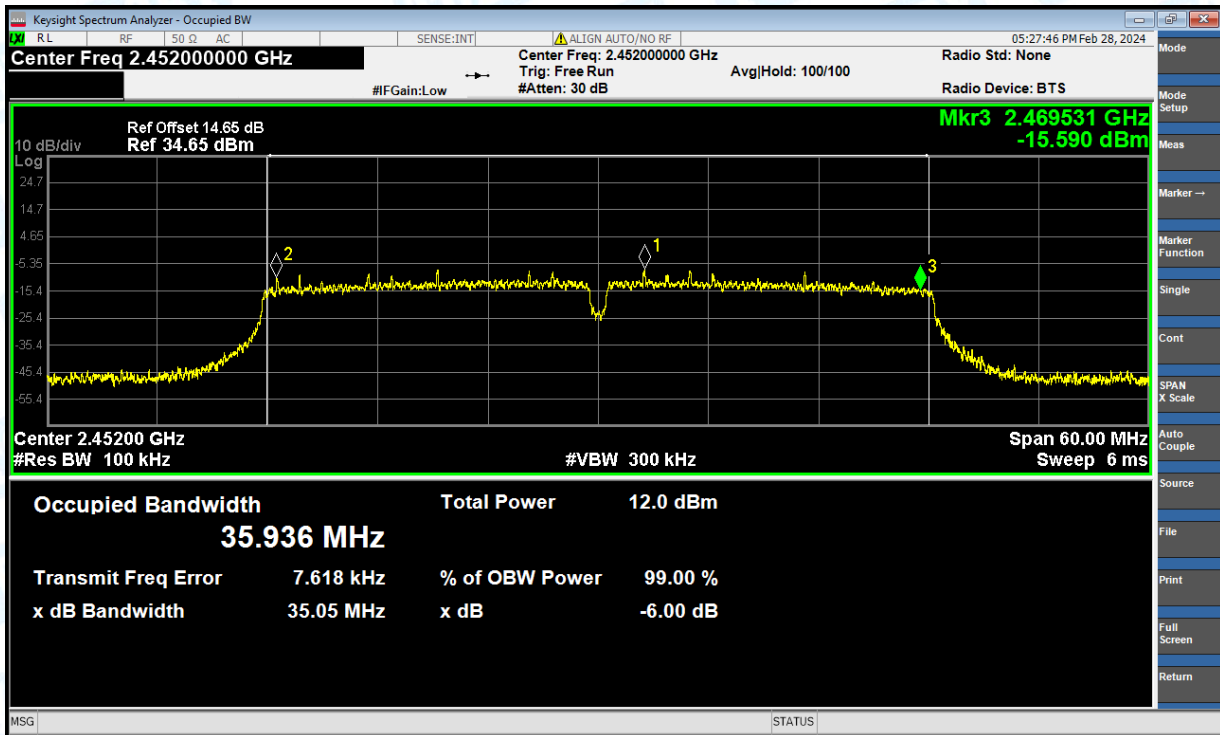
-6dB Bandwidth NVNT n(HT40) 2437MHz Ant2



-6dB Bandwidth NVNT n(HT40) 2452MHz Ant1



-6dB Bandwidth NVNT n(HT40) 2452MHz Ant2

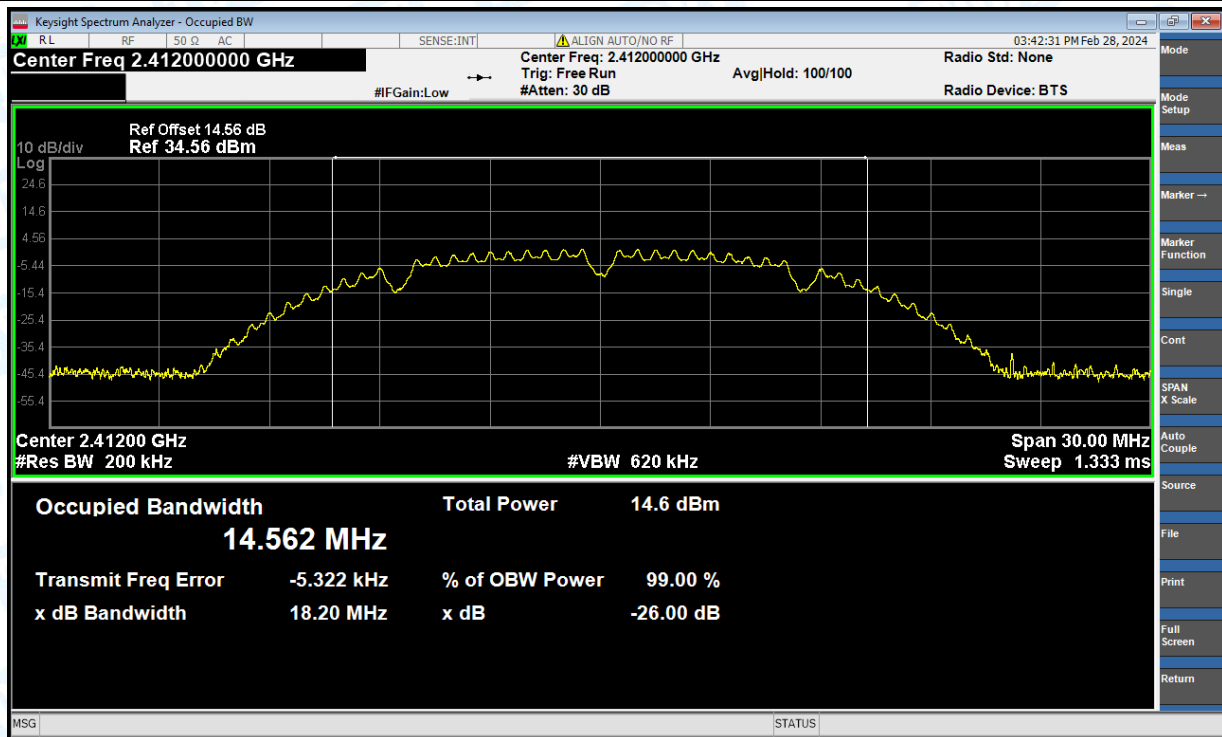


4. Occupied Channel Bandwidth

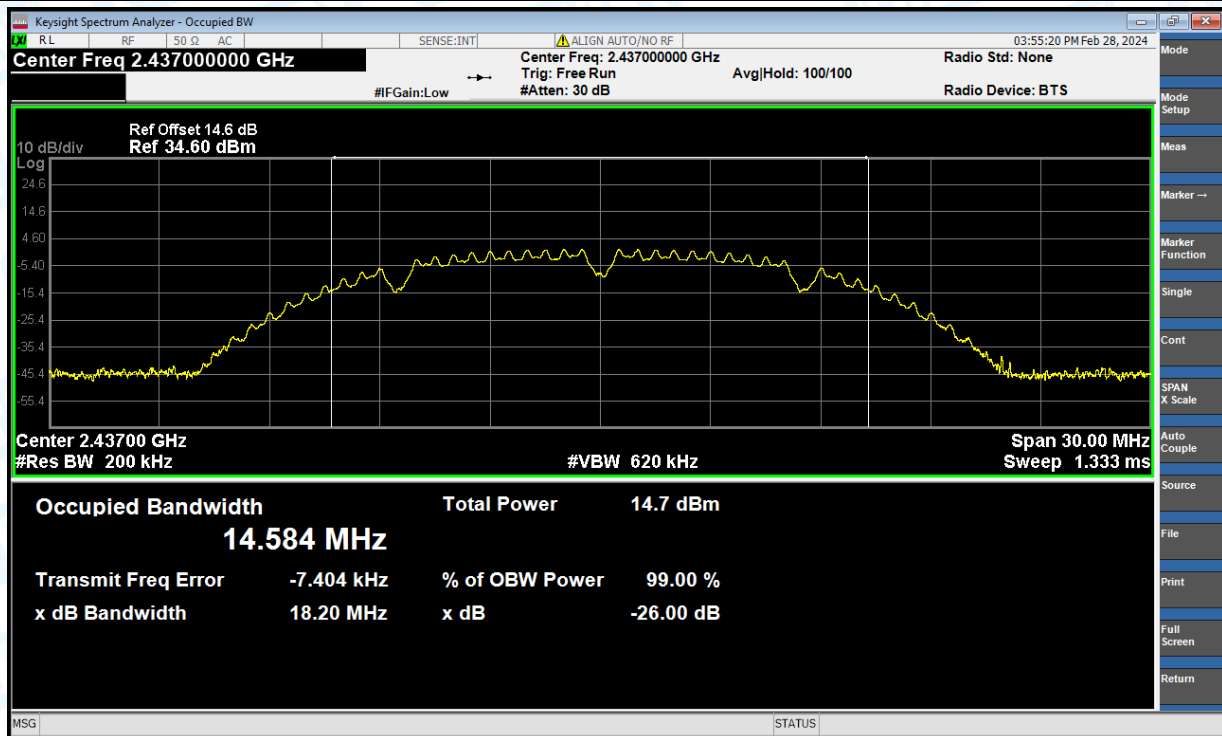
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	14.562
NVNT	b	2437	Ant1	14.584
NVNT	b	2462	Ant1	14.584
NVNT	b	2412	Ant2	14.664
NVNT	b	2437	Ant2	14.646
NVNT	b	2462	Ant2	14.641
NVNT	g	2412	Ant1	16.368
NVNT	g	2437	Ant1	16.376
NVNT	g	2462	Ant1	16.374
NVNT	g	2412	Ant2	16.391
NVNT	g	2437	Ant2	16.405
NVNT	g	2462	Ant2	16.391
NVNT	n(HT20)	2412	Ant1	17.564
NVNT	n(HT20)	2437	Ant1	17.563
NVNT	n(HT20)	2462	Ant1	17.568
NVNT	n(HT20)	2412	Ant2	17.585
NVNT	n(HT20)	2437	Ant2	17.566
NVNT	n(HT20)	2462	Ant2	17.592
NVNT	n(HT40)	2422	Ant1	36.037
NVNT	n(HT40)	2422	Ant2	36.06
NVNT	n(HT40)	2437	Ant1	36.067
NVNT	n(HT40)	2437	Ant2	36.001
NVNT	n(HT40)	2452	Ant1	36.036
NVNT	n(HT40)	2452	Ant2	36.056

Test Graphs

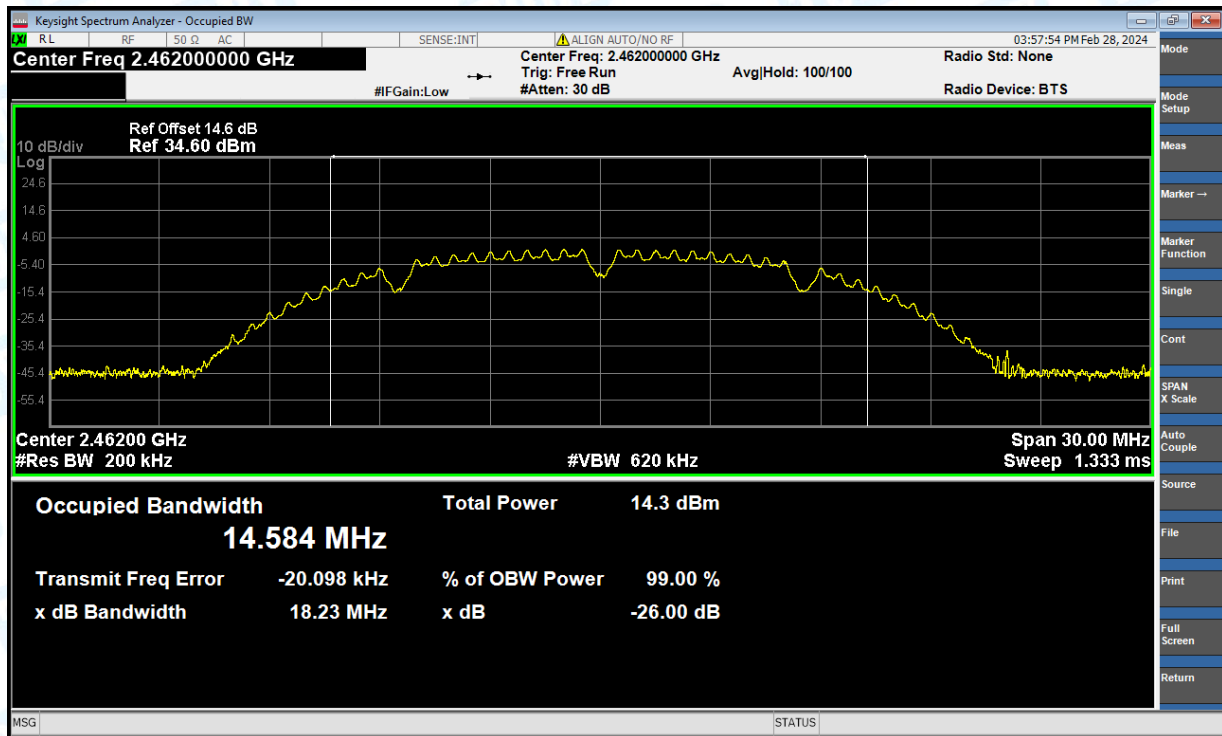
OBW NVNT b 2412MHz Ant1



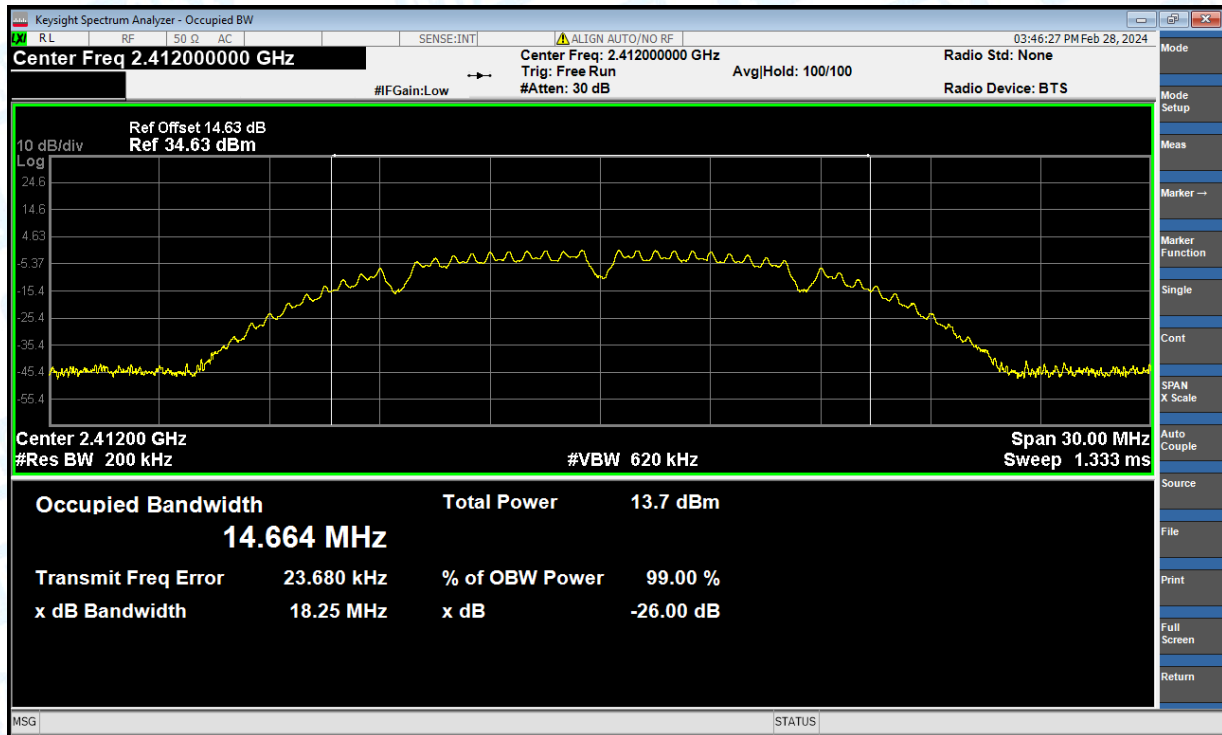
OBW NVNT b 2437MHz Ant1



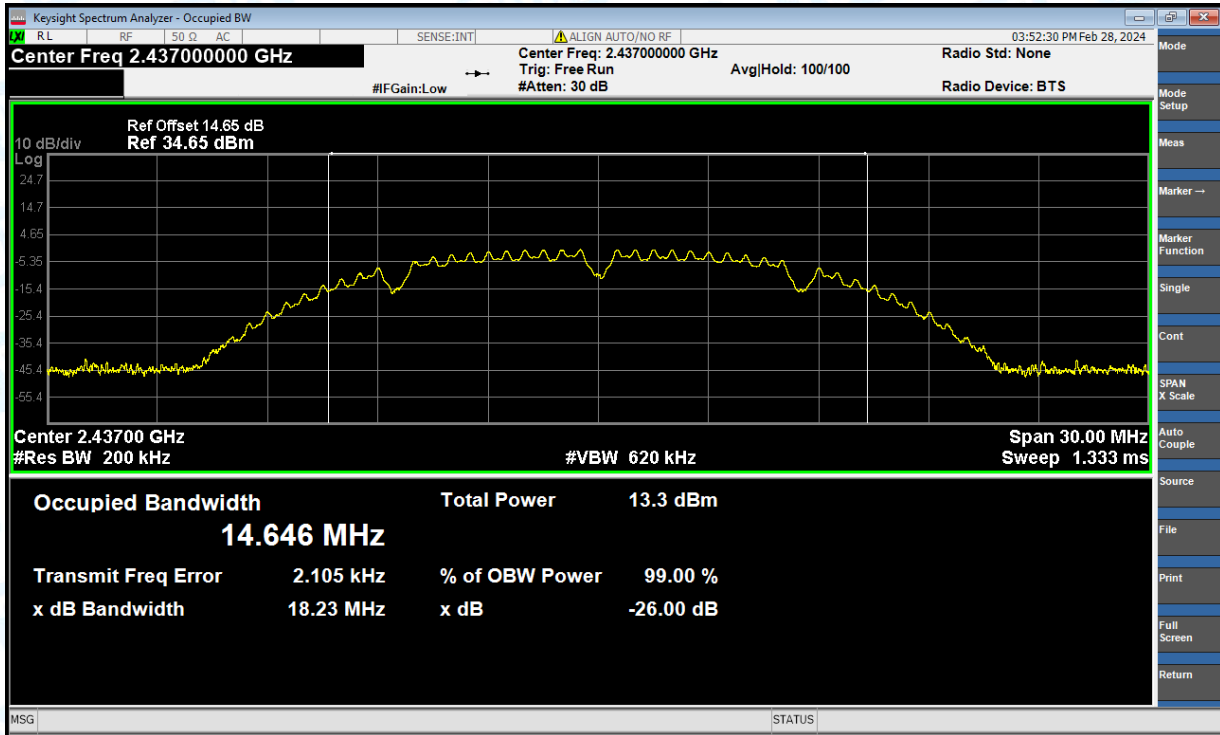
OBW NVNT b 2462MHz Ant1



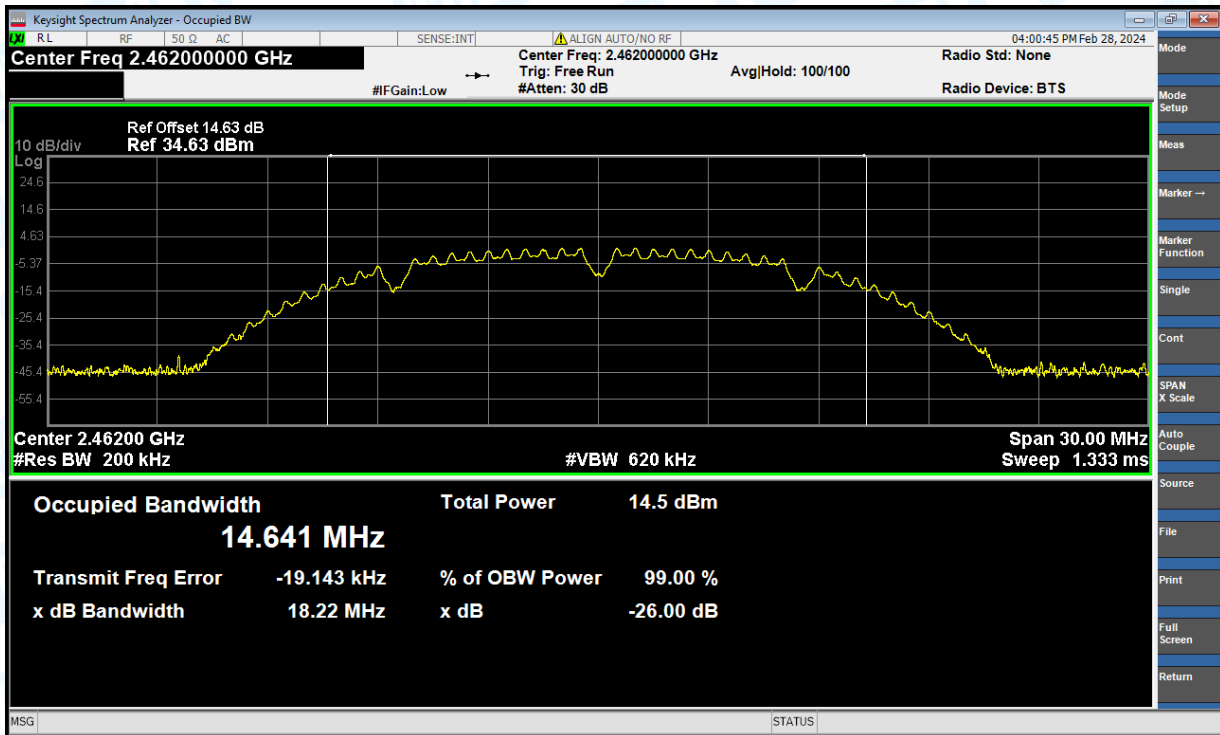
OBW NVNT b 2412MHz Ant2



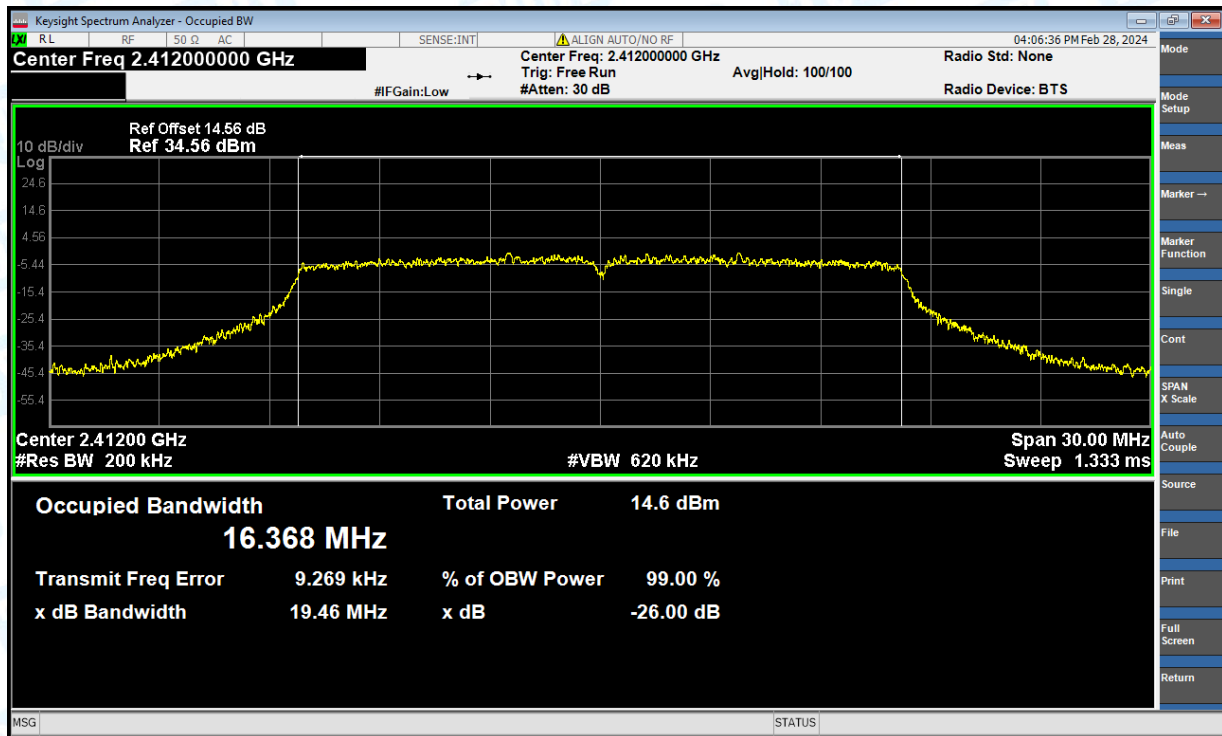
OBW NVNT b 2437MHz Ant2



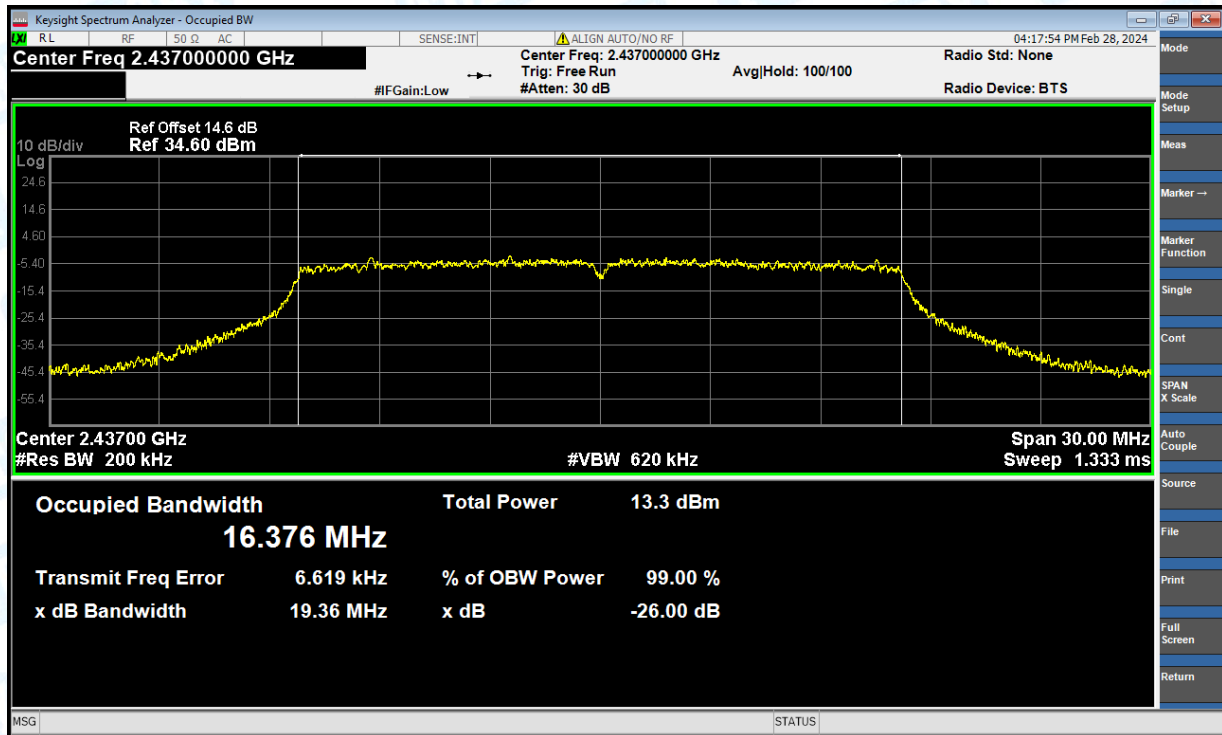
OBW NVNT b 2462MHz Ant2



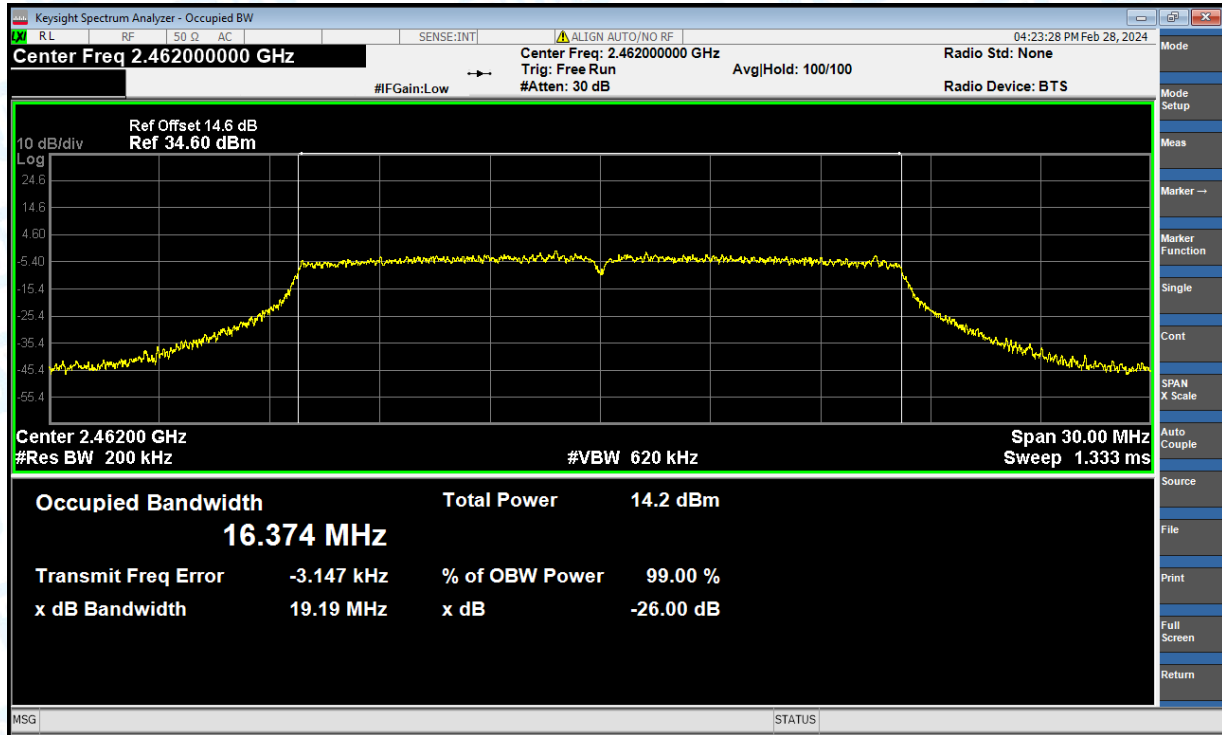
OBW NVNT g 2412MHz Ant1



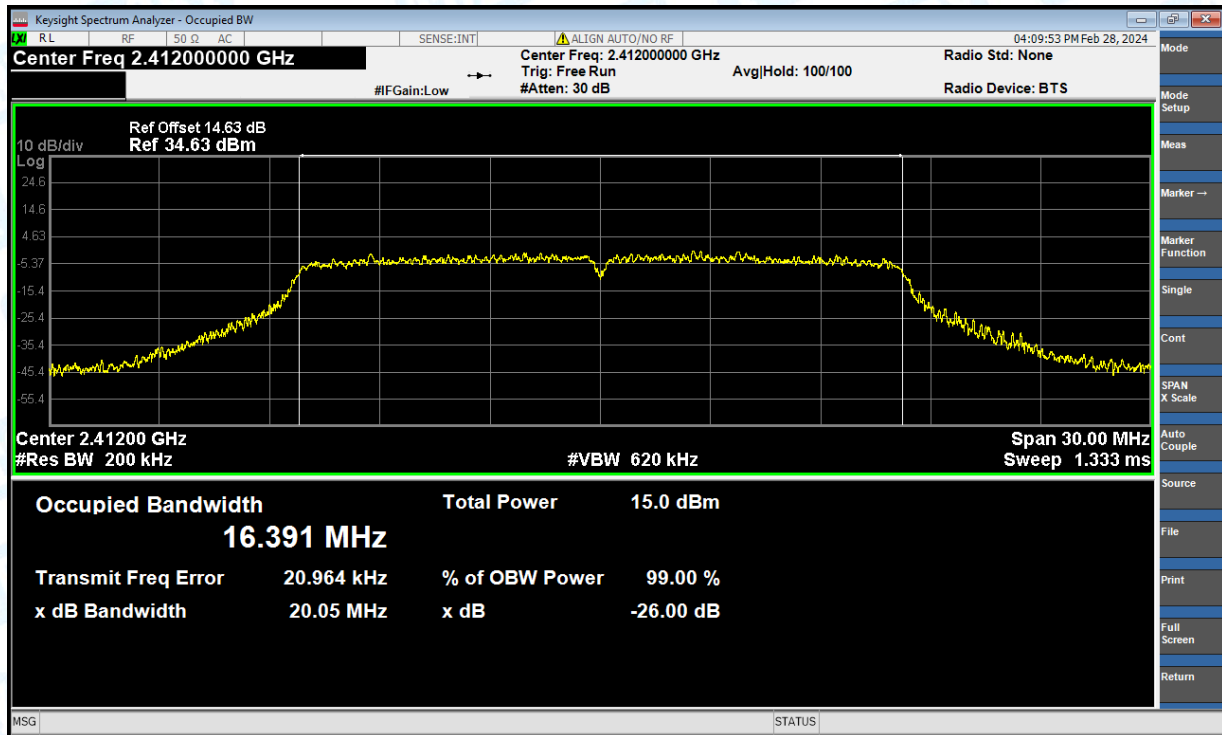
OBW NVNT g 2437MHz Ant1



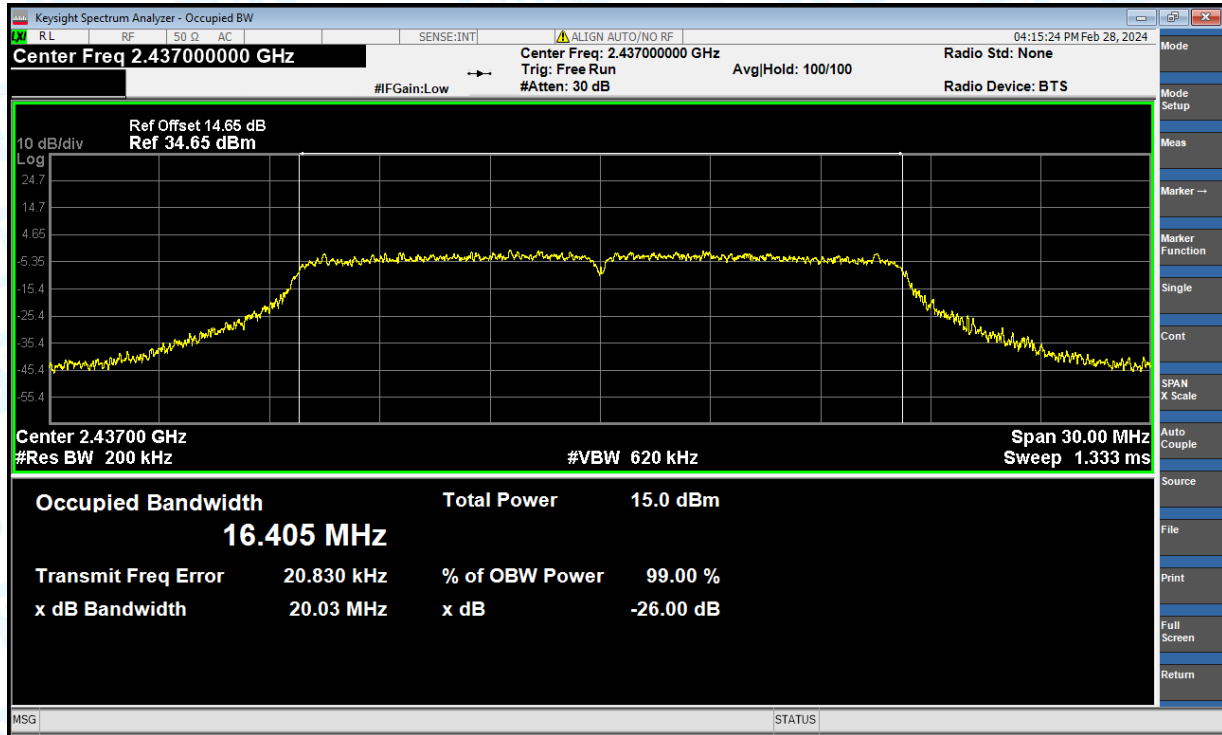
OBW NVNT g 2462MHz Ant1



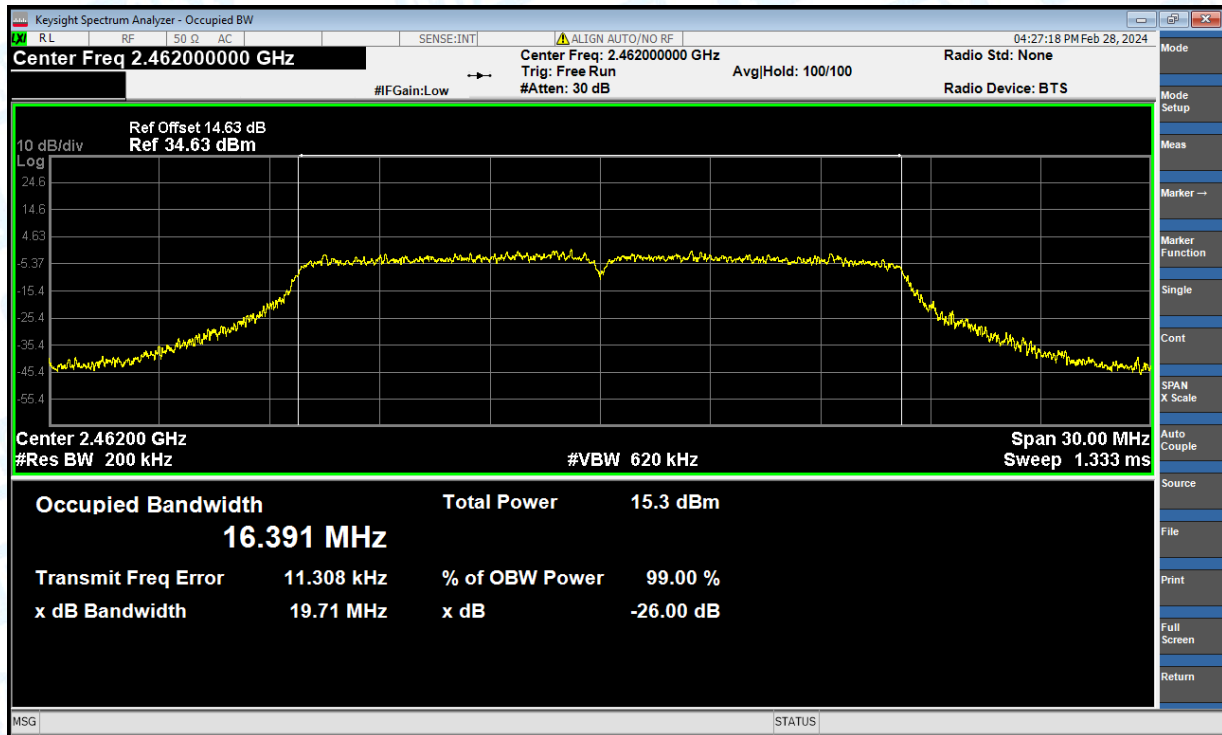
OBW NVNT g 2412MHz Ant2



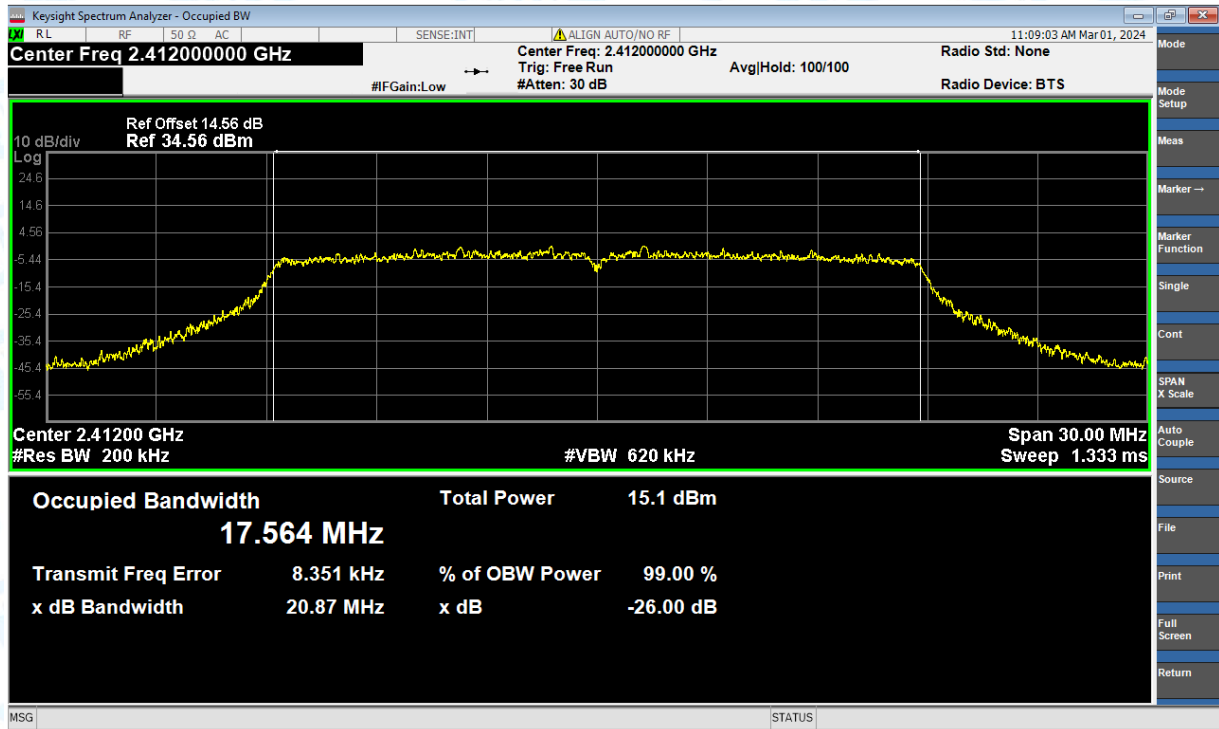
OBW NVNT g 2437MHz Ant2



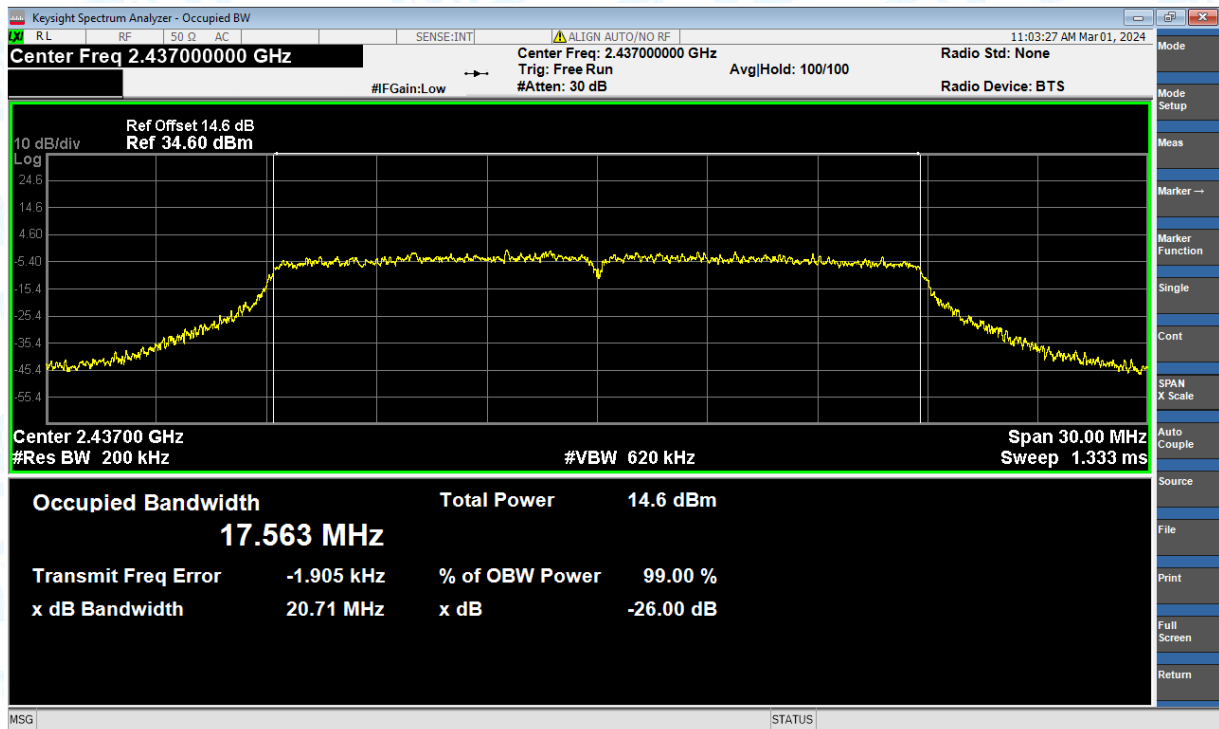
OBW NVNT g 2462MHz Ant2



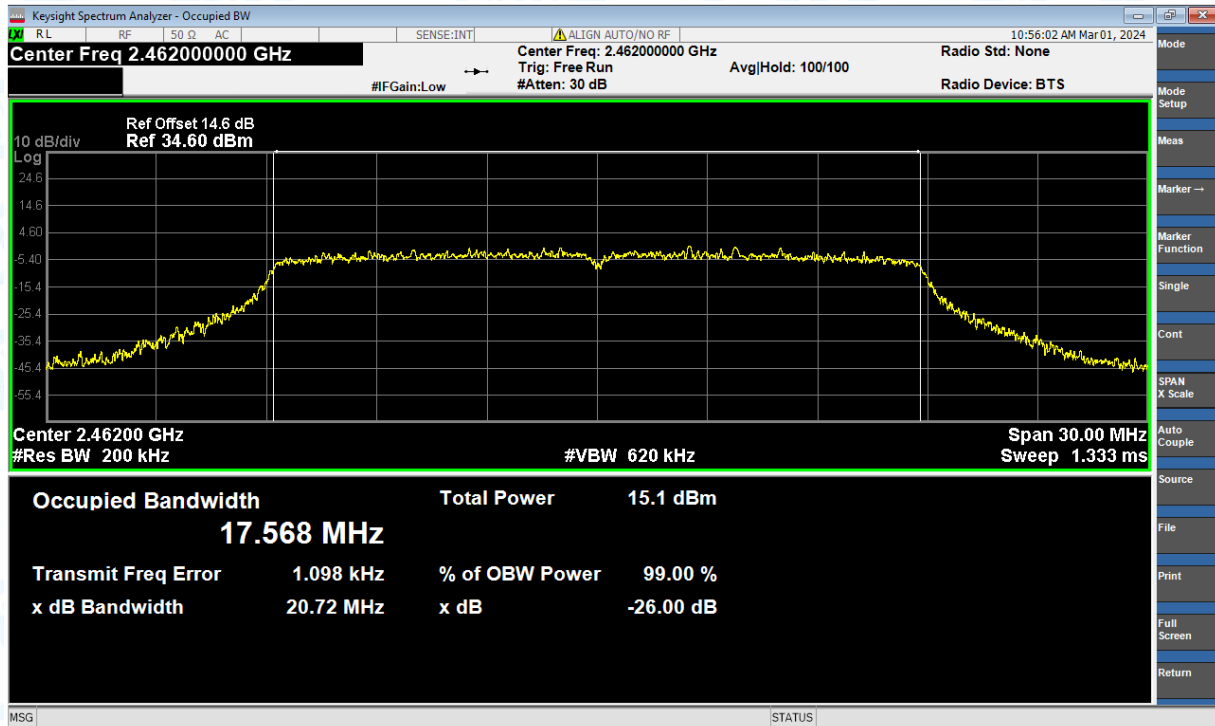
OBW NVNT n(HT20) 2412MHz Ant1



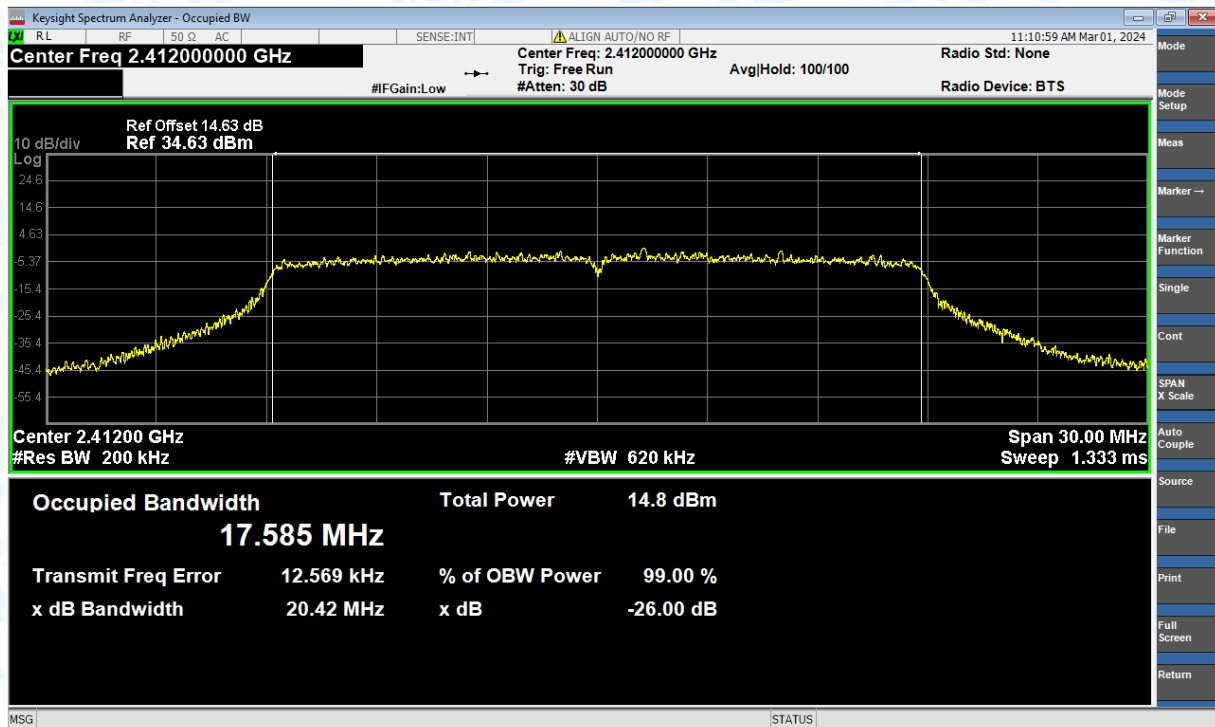
OBW NVNT n(HT20) 2437MHz Ant1



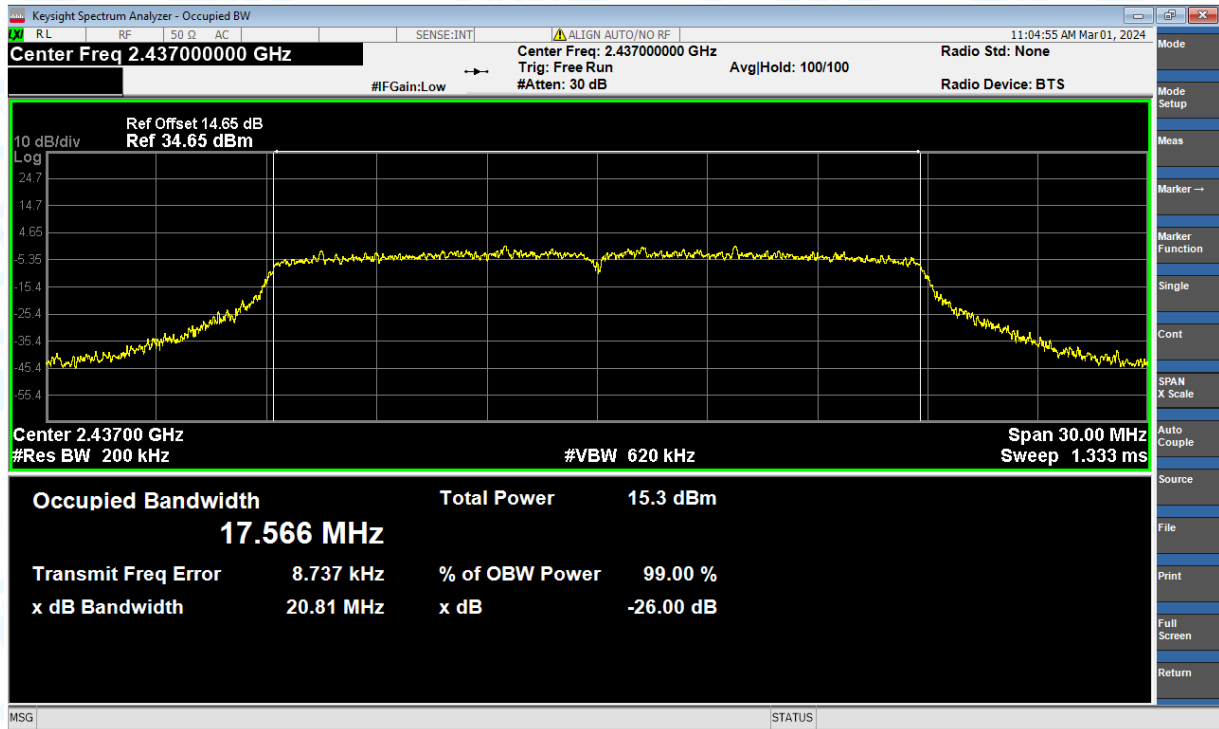
OBW NVNT n(HT20) 2462MHz Ant1



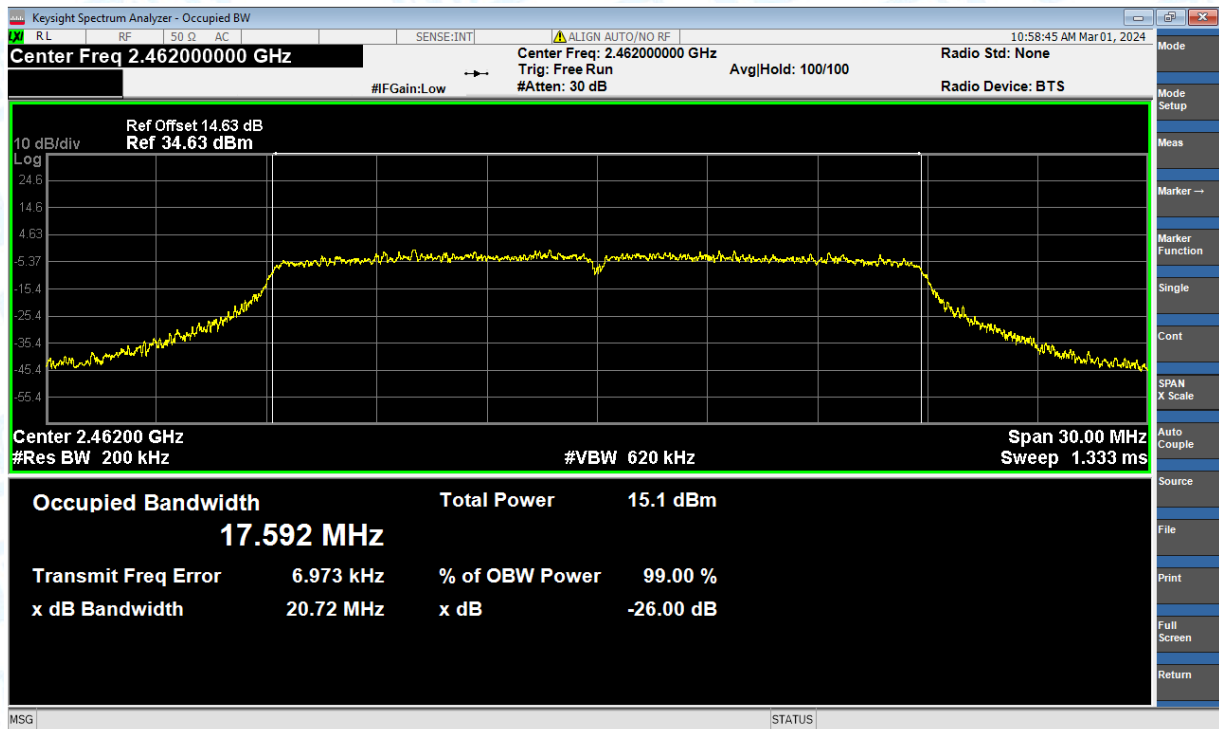
OBW NVNT n(HT20) 2412MHz Ant2



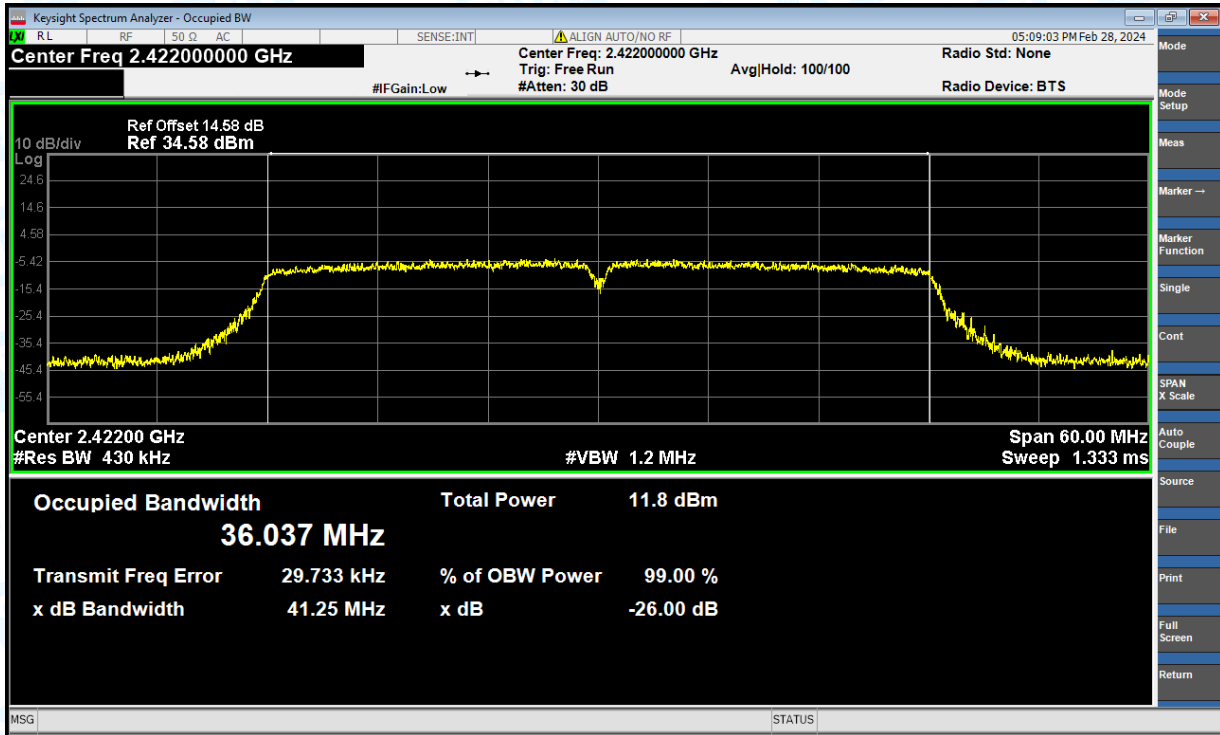
OBW NVNT n(HT20) 2437MHz Ant2



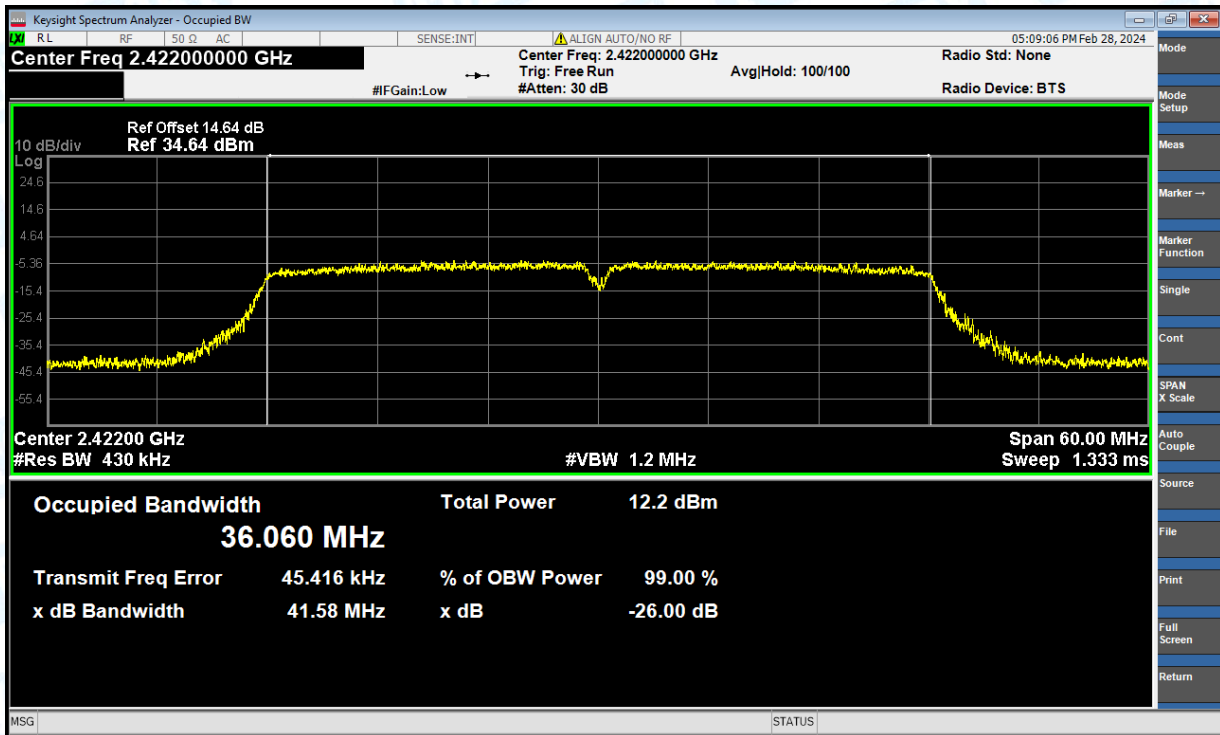
OBW NVNT n(HT20) 2462MHz Ant2



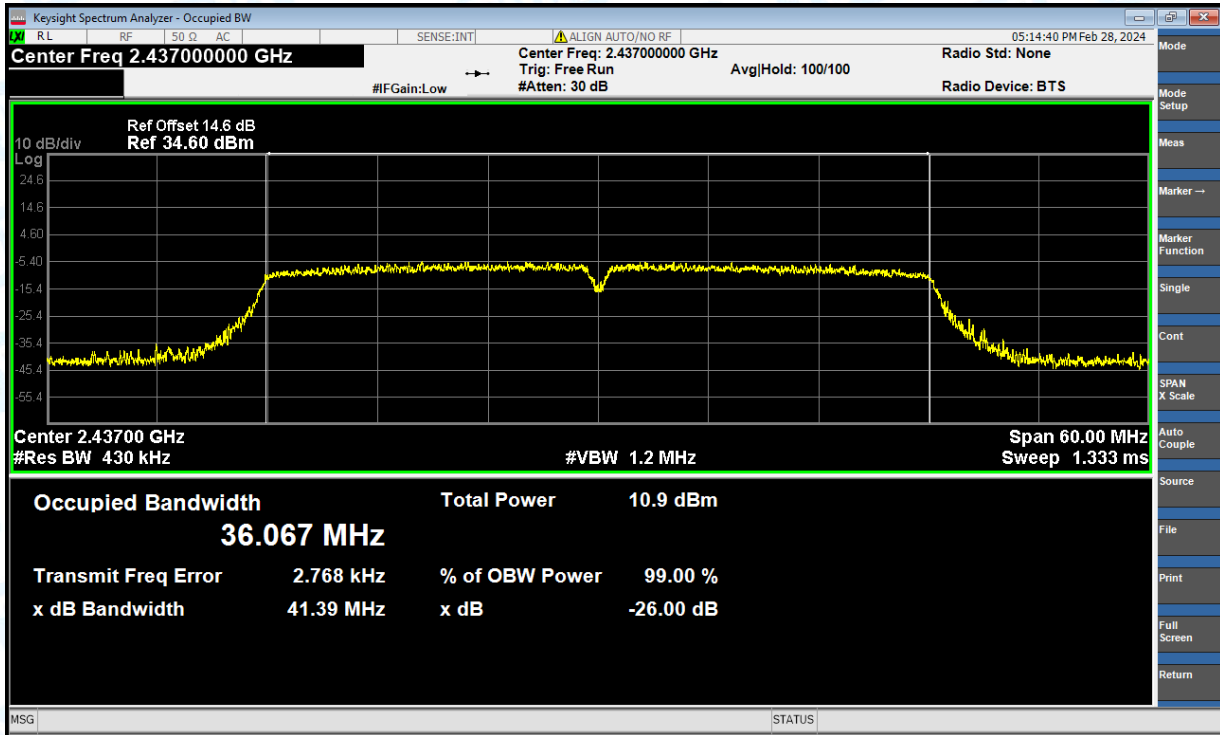
OBW NVNT n(HT40) 2422MHz Ant1



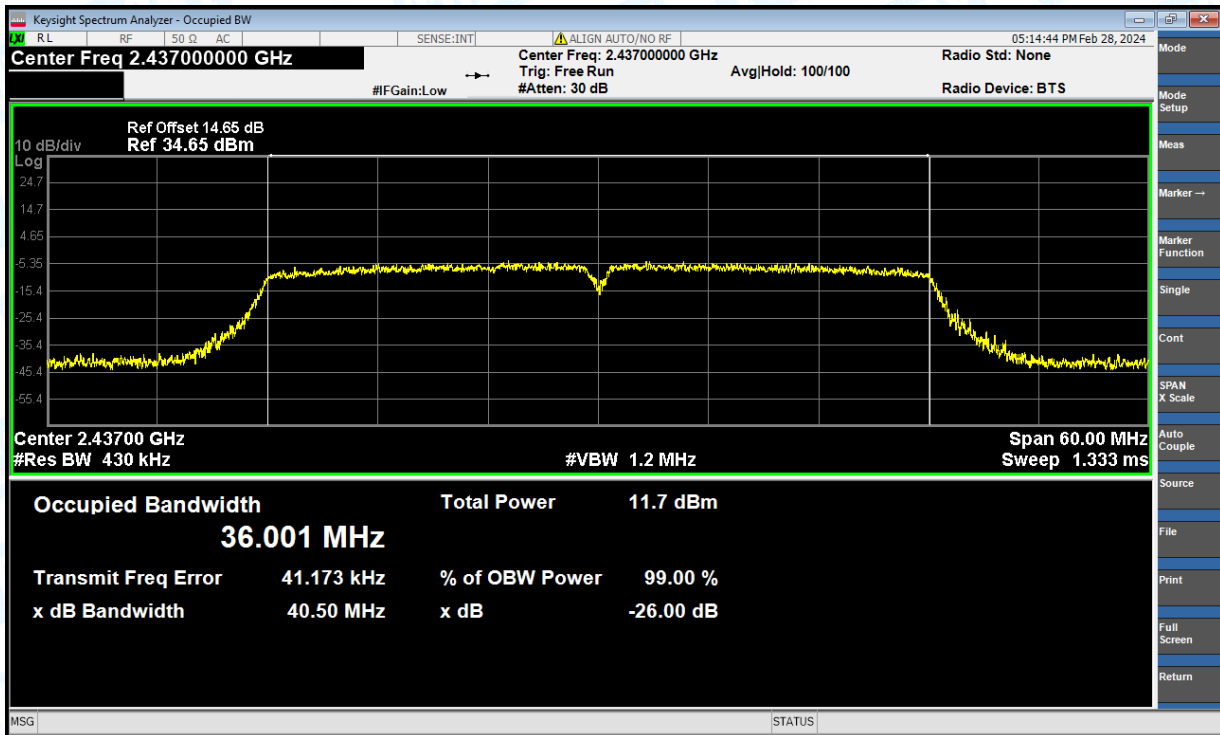
OBW NVNT n(HT40) 2422MHz Ant2



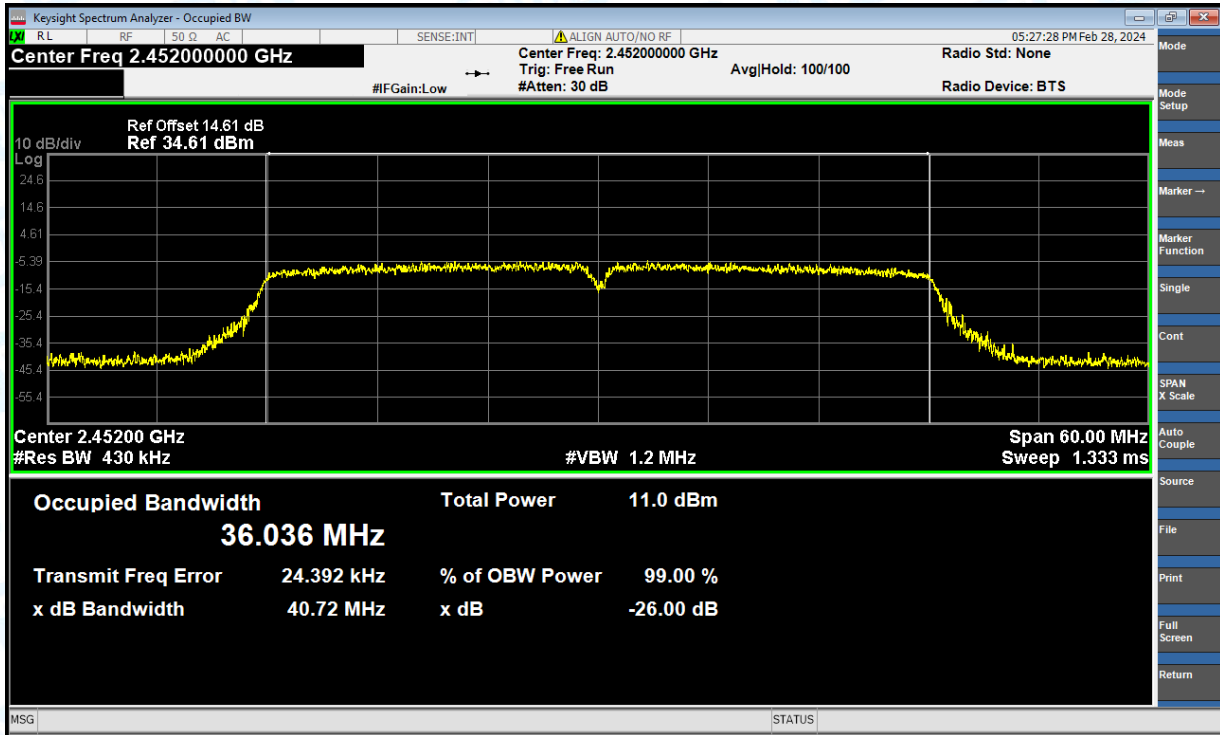
OBW NVNT n(HT40) 2437MHz Ant1



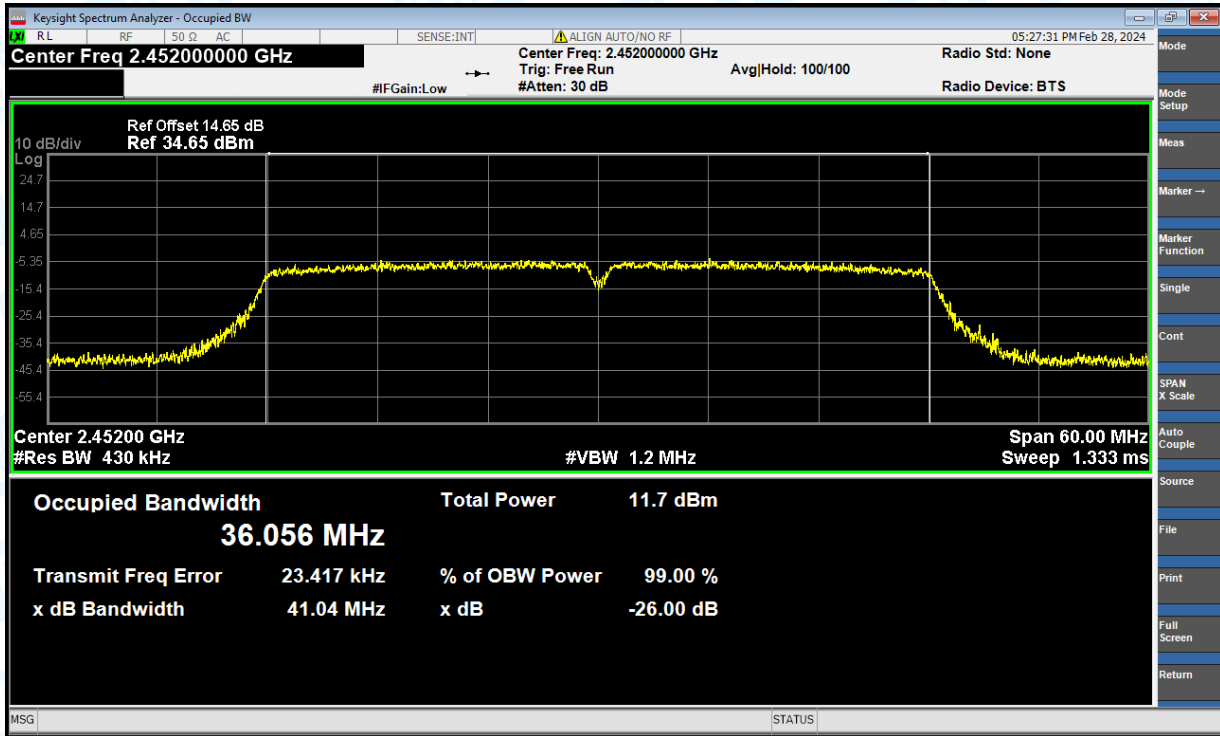
OBW NVNT n(HT40) 2437MHz Ant2



OBW NVNT n(HT40) 2452MHz Ant1



OBW NVNT n(HT40) 2452MHz Ant2



5. Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant1	-22.729	8	Pass
NVNT	b	2437	Ant1	-22.797	8	Pass
NVNT	b	2462	Ant1	-23.547	8	Pass
NVNT	b	2412	Ant2	-23.661	8	Pass
NVNT	b	2437	Ant2	-24.157	8	Pass
NVNT	b	2462	Ant2	-23.303	8	Pass
NVNT	g	2412	Ant1	-24.554	8	Pass
NVNT	g	2437	Ant1	-25.416	8	Pass
NVNT	g	2462	Ant1	-24.488	8	Pass
NVNT	g	2412	Ant2	-24.175	8	Pass
NVNT	g	2437	Ant2	-24.197	8	Pass
NVNT	g	2462	Ant2	-24.259	8	Pass
NVNT	n(HT20)	2412	Ant1	-25.471	8	Pass
NVNT	n(HT20)	2437	Ant1	-24.261	8	Pass
NVNT	n(HT20)	2462	Ant1	-25.042	8	Pass
NVNT	n(HT20)	2412	Ant2	-24.403	8	Pass
NVNT	n(HT20)	2437	Ant2	-24.279	8	Pass
NVNT	n(HT20)	2462	Ant2	-24.263	8	Pass
NVNT	n(HT40)	2422	Ant1	-32.037	8	Pass
NVNT	n(HT40)	2422	Ant2	-31.259	8	Pass
NVNT	n(HT40)	2422	Sum	-28.62	8	Pass
NVNT	n(HT40)	2437	Ant1	-32.723	8	Pass
NVNT	n(HT40)	2437	Ant2	-31.48	8	Pass
NVNT	n(HT40)	2437	Sum	-29.047	8	Pass
NVNT	n(HT40)	2452	Ant1	-32.897	8	Pass
NVNT	n(HT40)	2452	Ant2	-31.853	8	Pass
NVNT	n(HT40)	2452	Sum	-29.333	8	Pass

Test Graphs

PSD NVNT b 2412MHz Ant1



PSD NVNT b 2437MHz Ant1



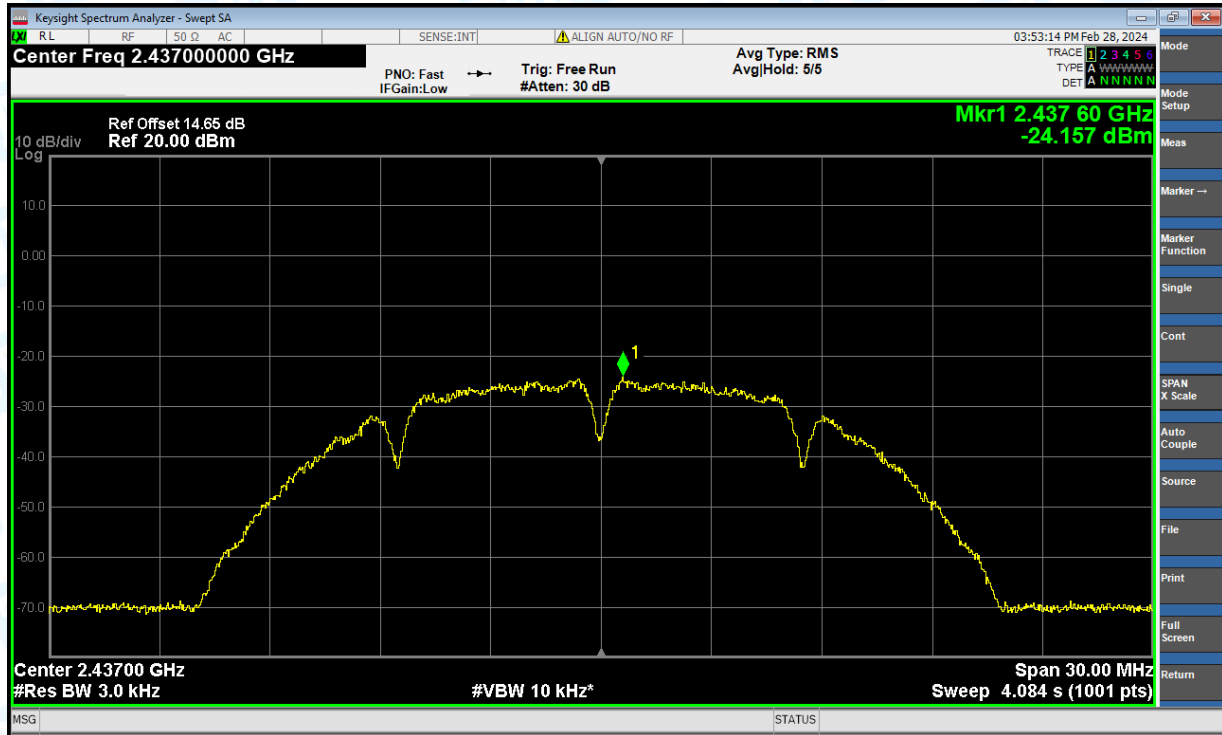
PSD NVNT b 2462MHz Ant1



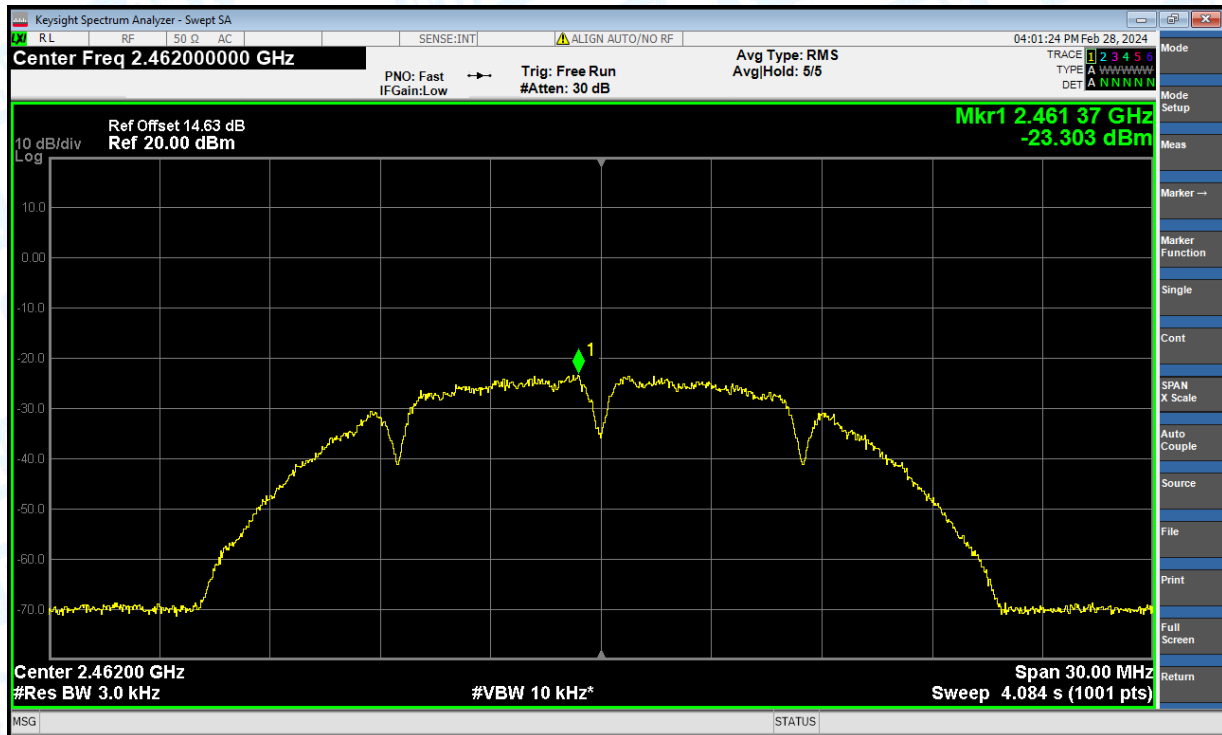
PSD NVNT b 2412MHz Ant2



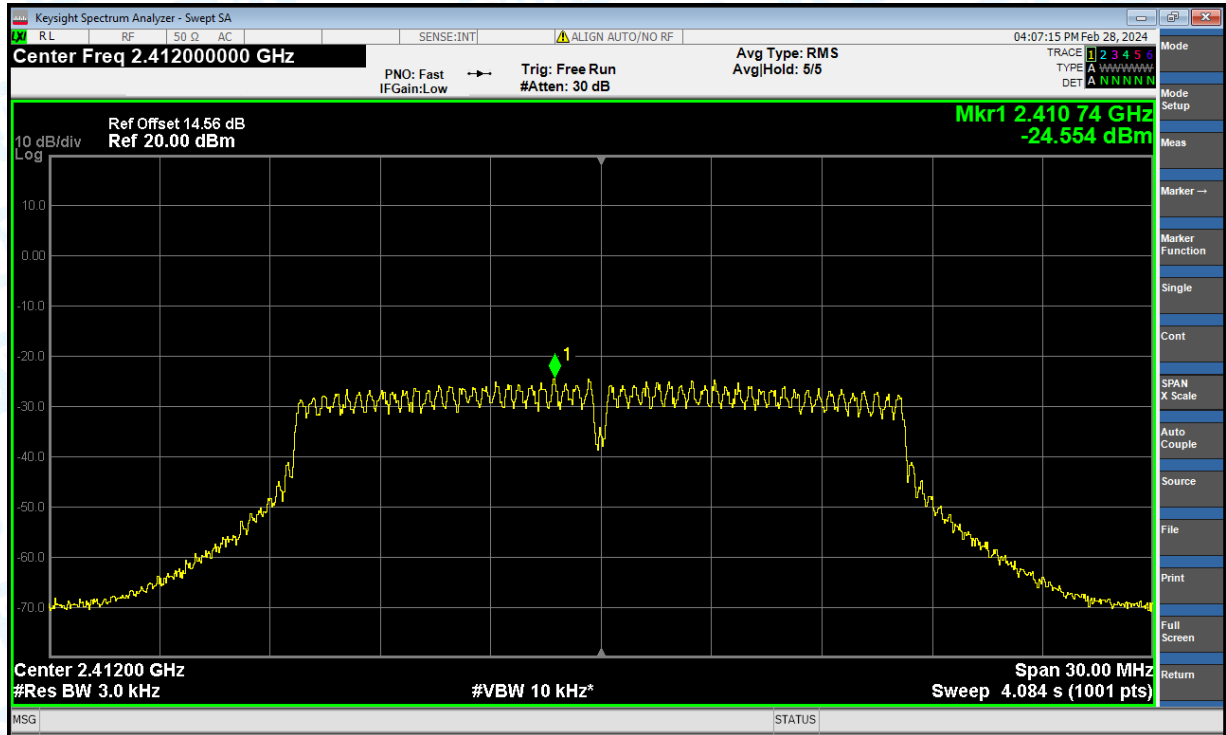
PSD NVNT b 2437MHz Ant2



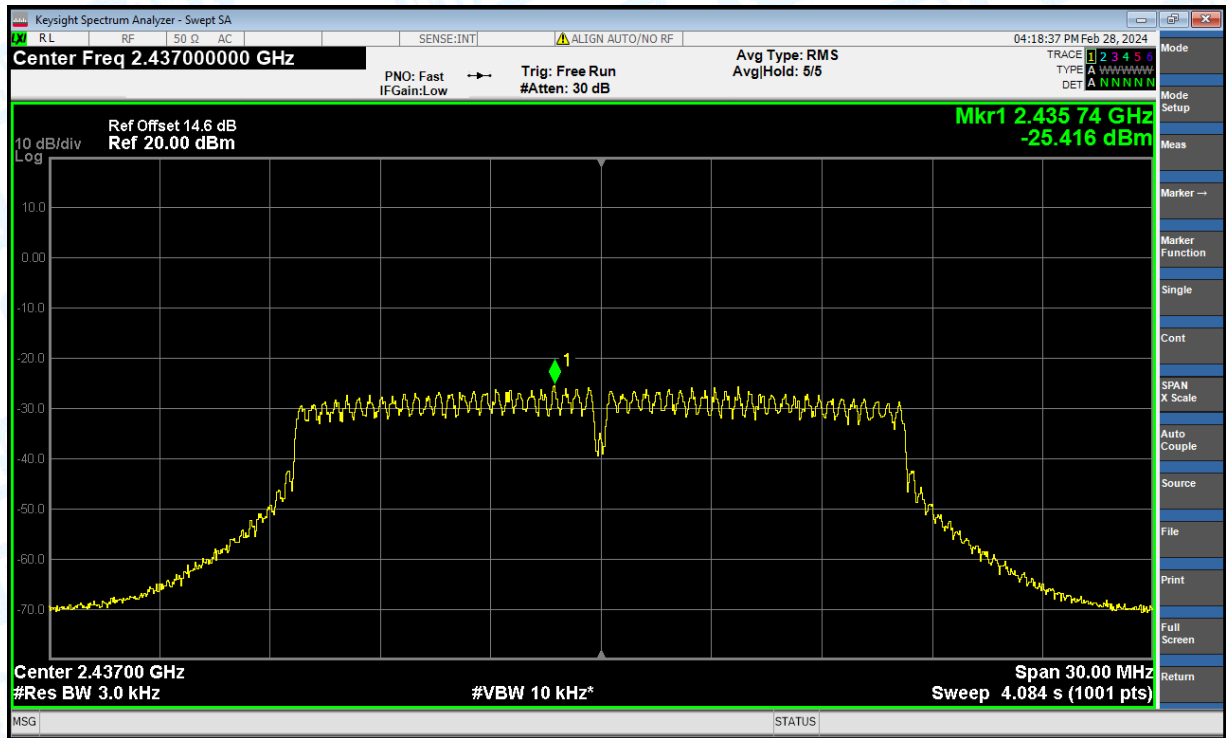
PSD NVNT b 2462MHz Ant2



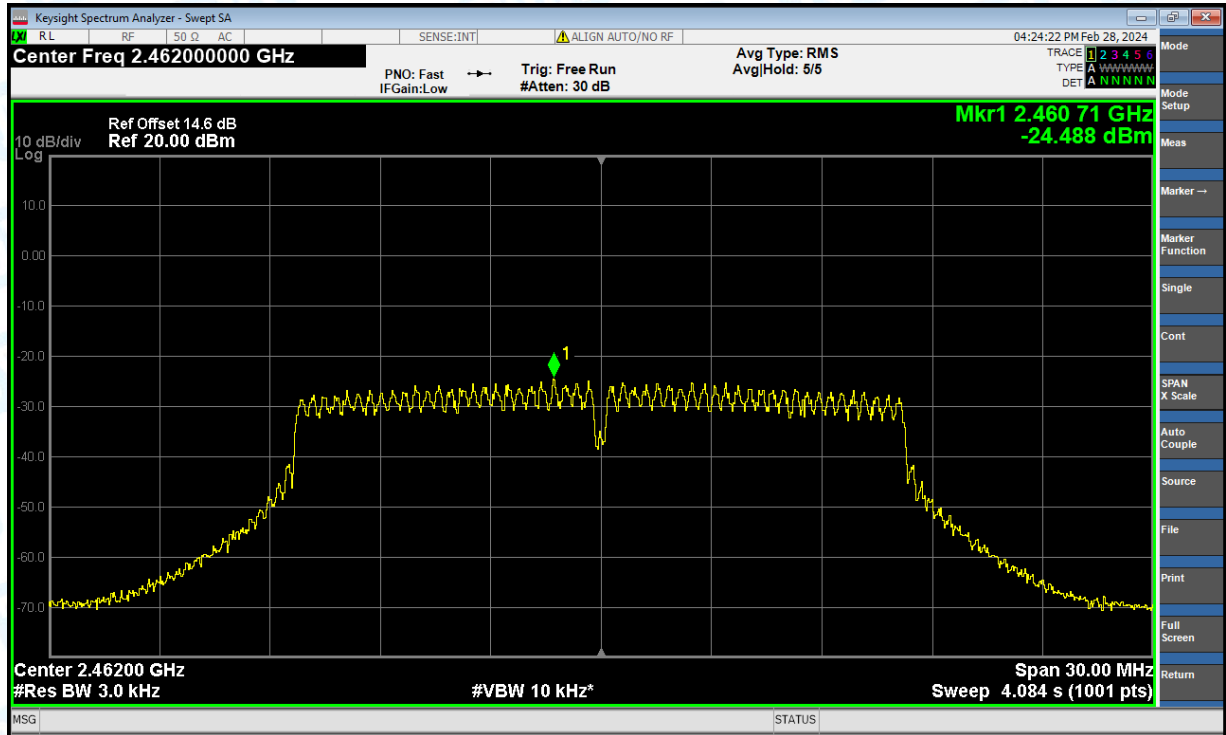
PSD NVNT g 2412MHz Ant1



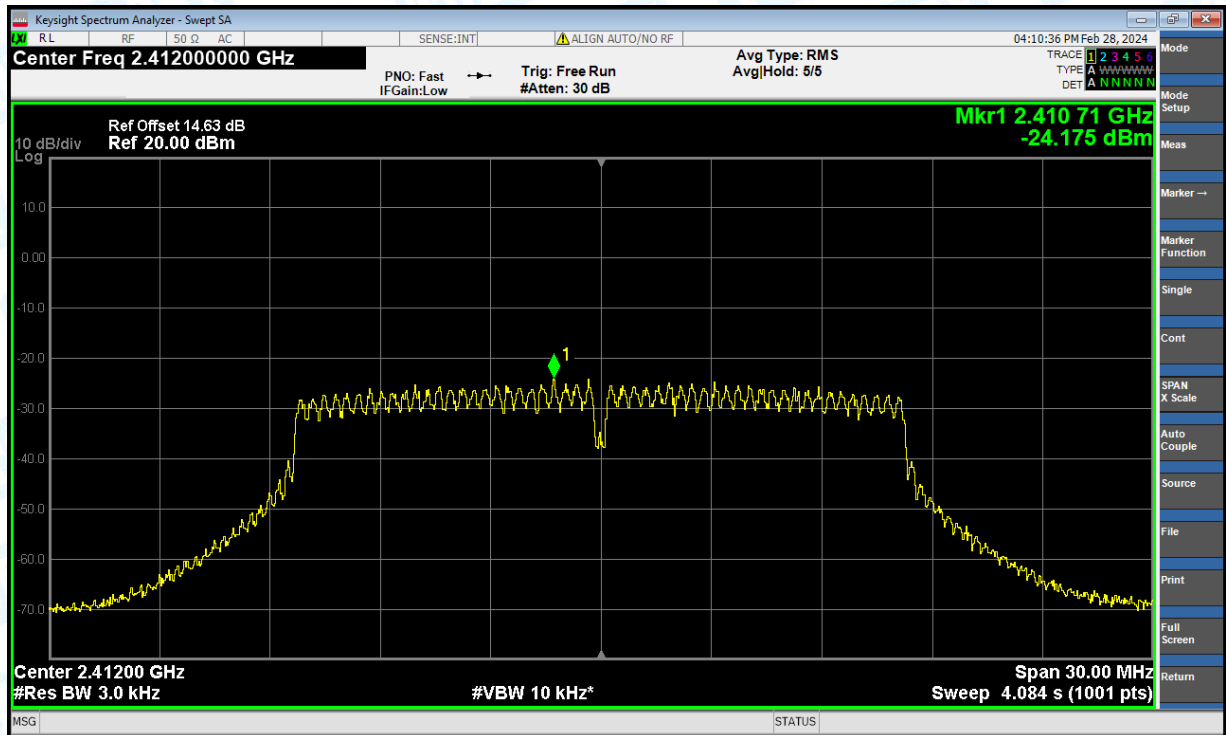
PSD NVNT g 2437MHz Ant1



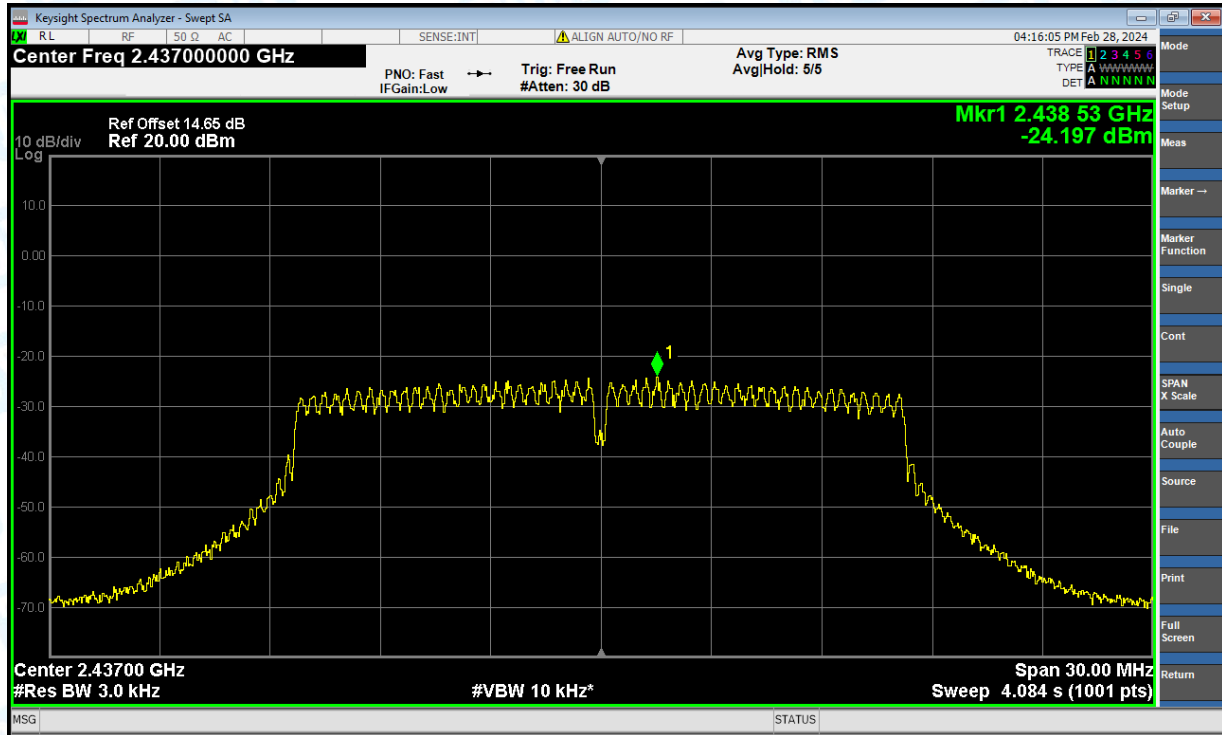
PSD NVNT g 2462MHz Ant1



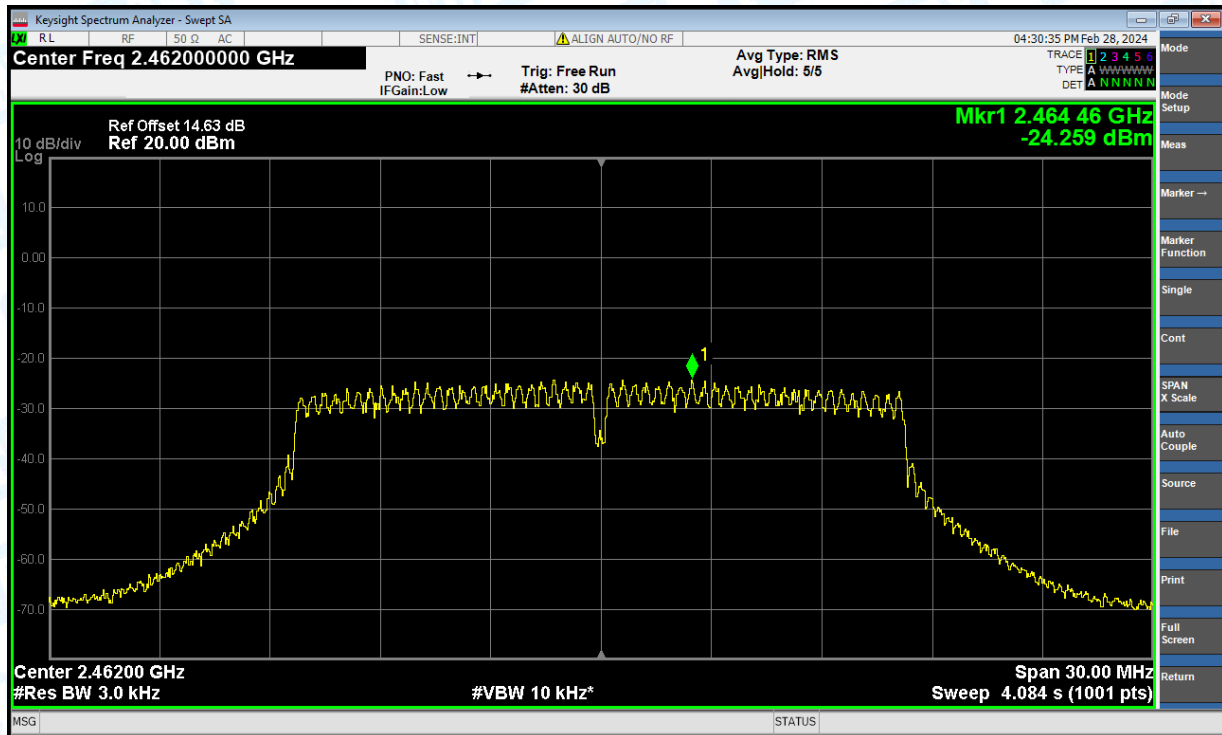
PSD NVNT g 2412MHz Ant2



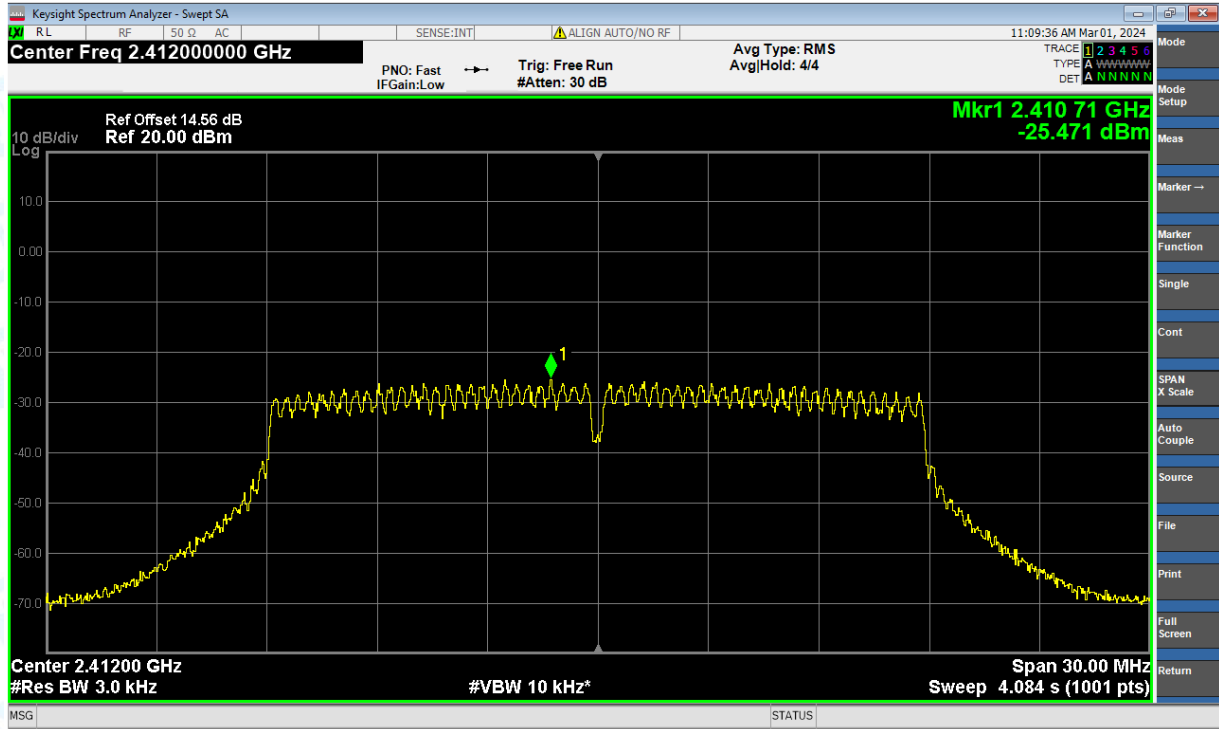
PSD NVNT g 2437MHz Ant2



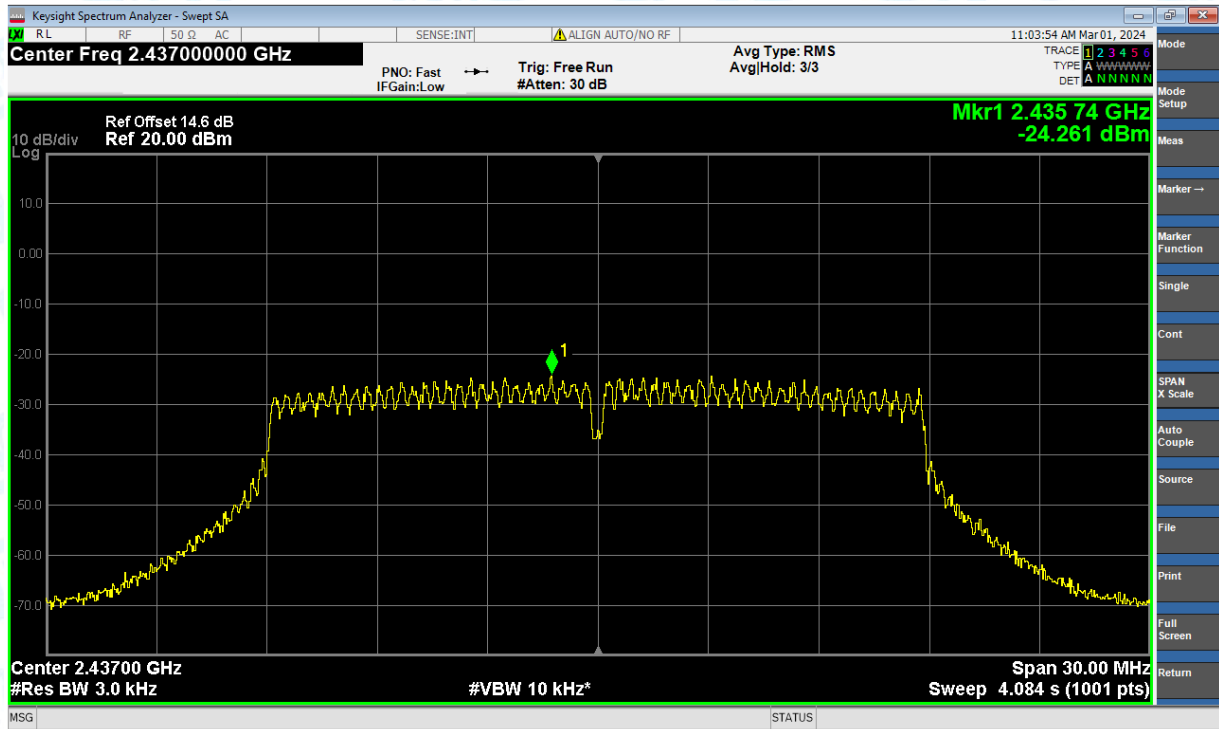
PSD NVNT g 2462MHz Ant2



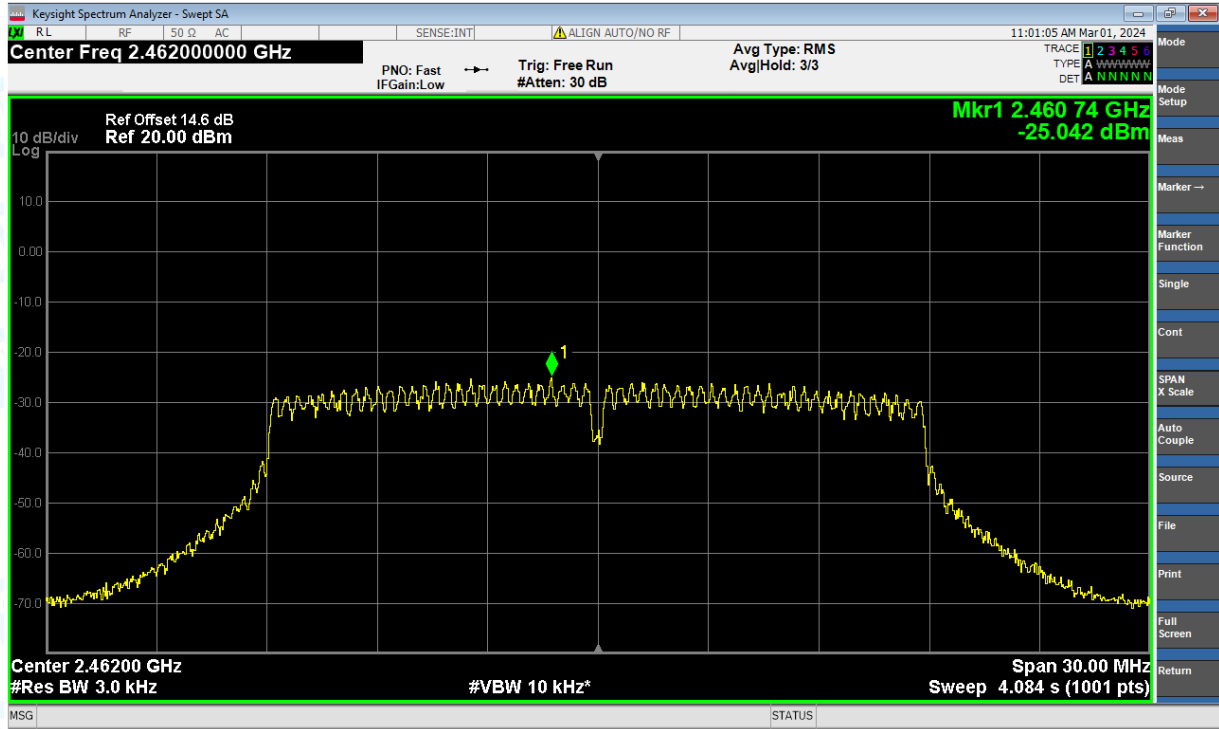
PSD NVNT n(HT20) 2412MHz Ant1



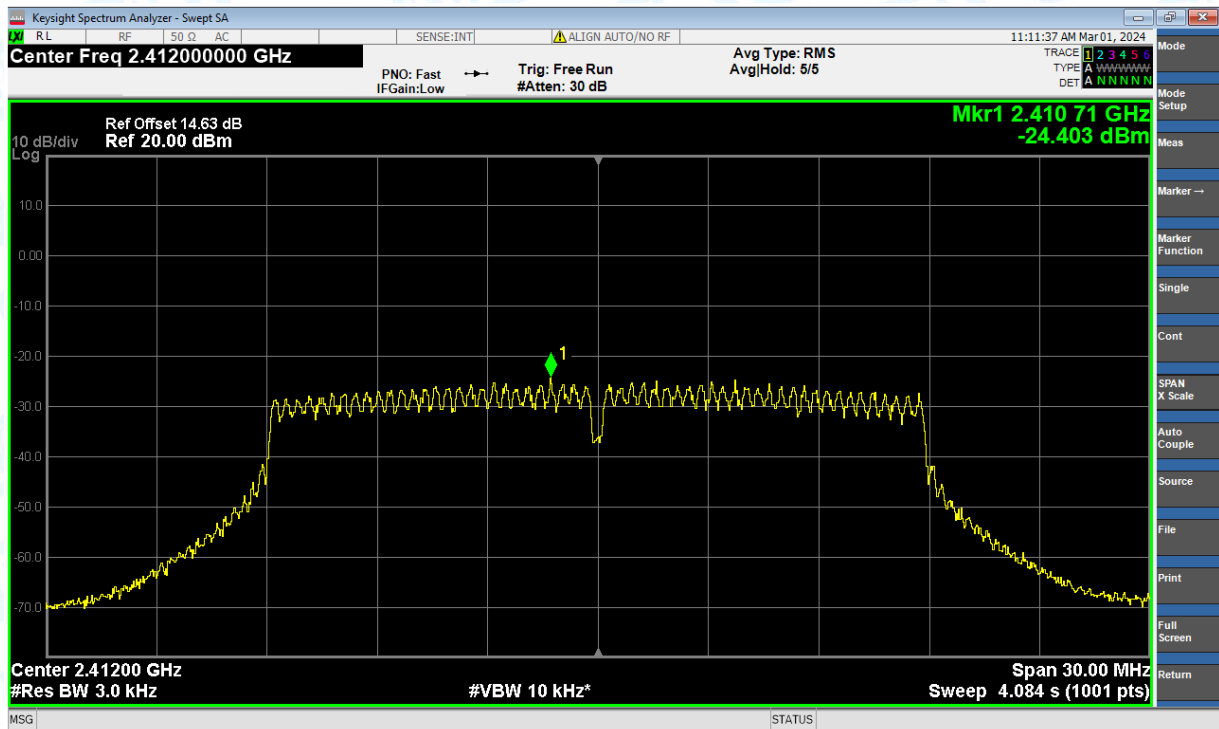
PSD NVNT n(HT20) 2437MHz Ant1



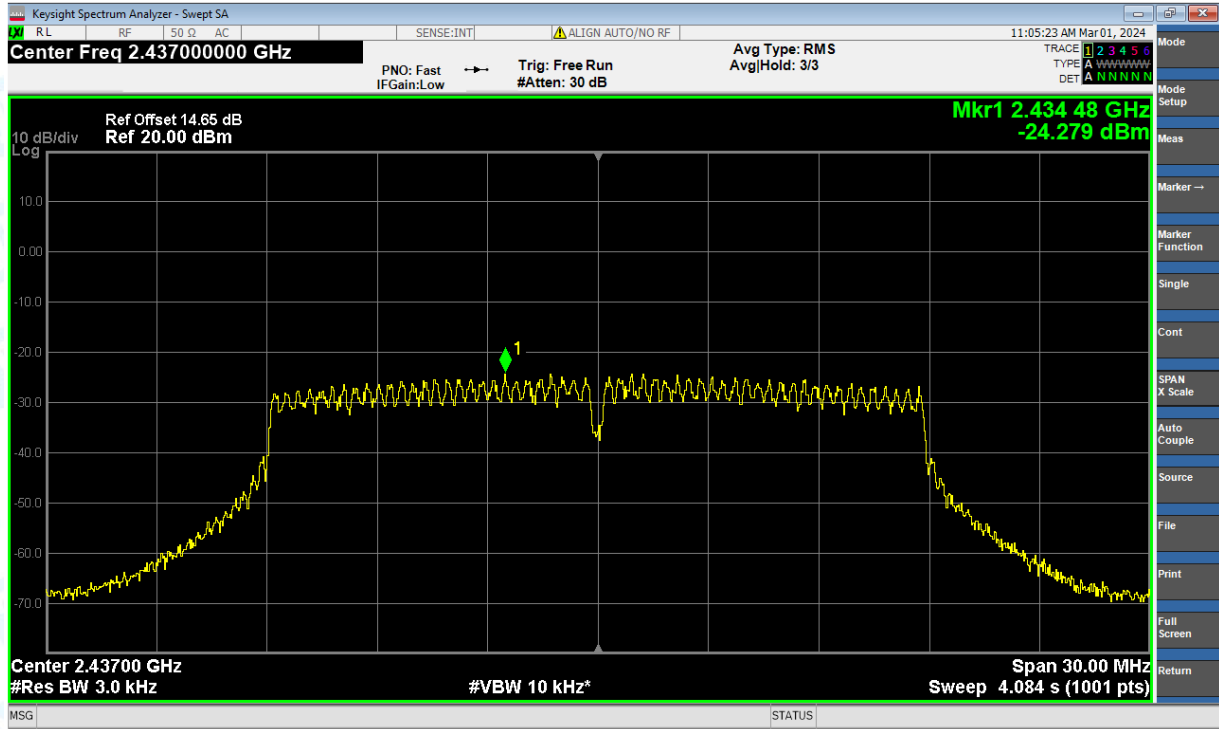
PSD NVNT n(HT20) 2462MHz Ant1



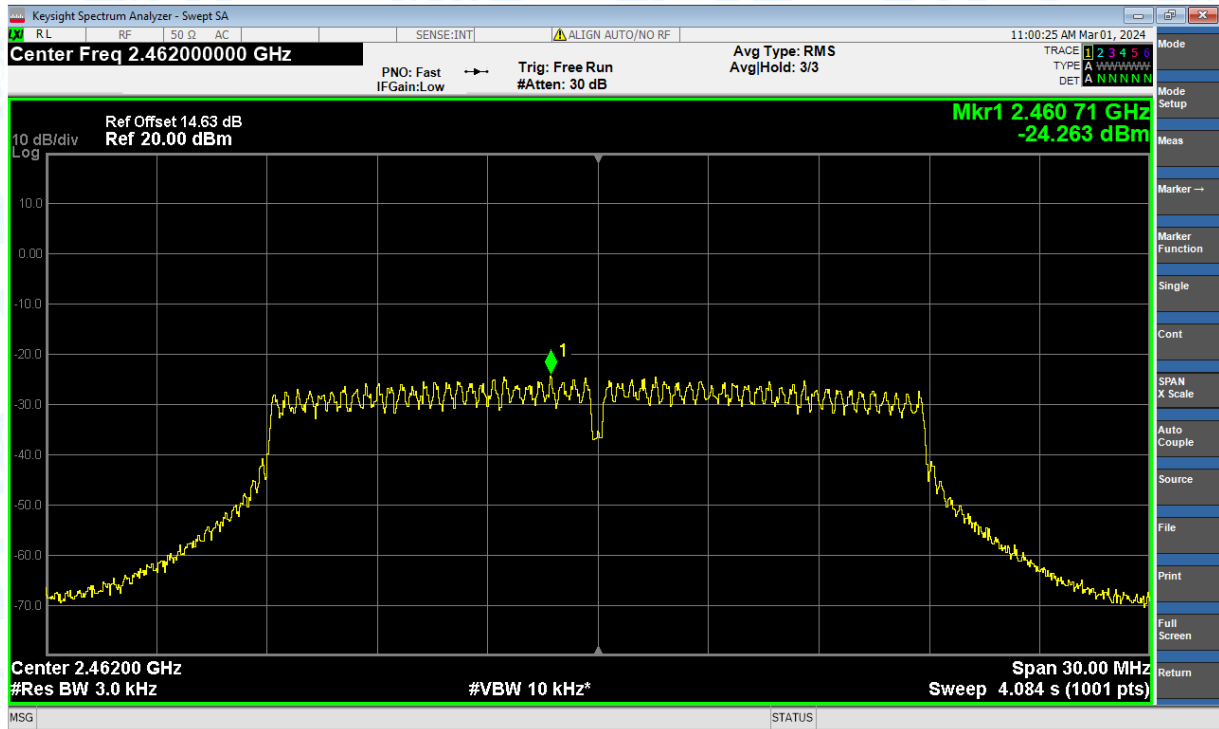
PSD NVNT n(HT20) 2412MHz Ant2



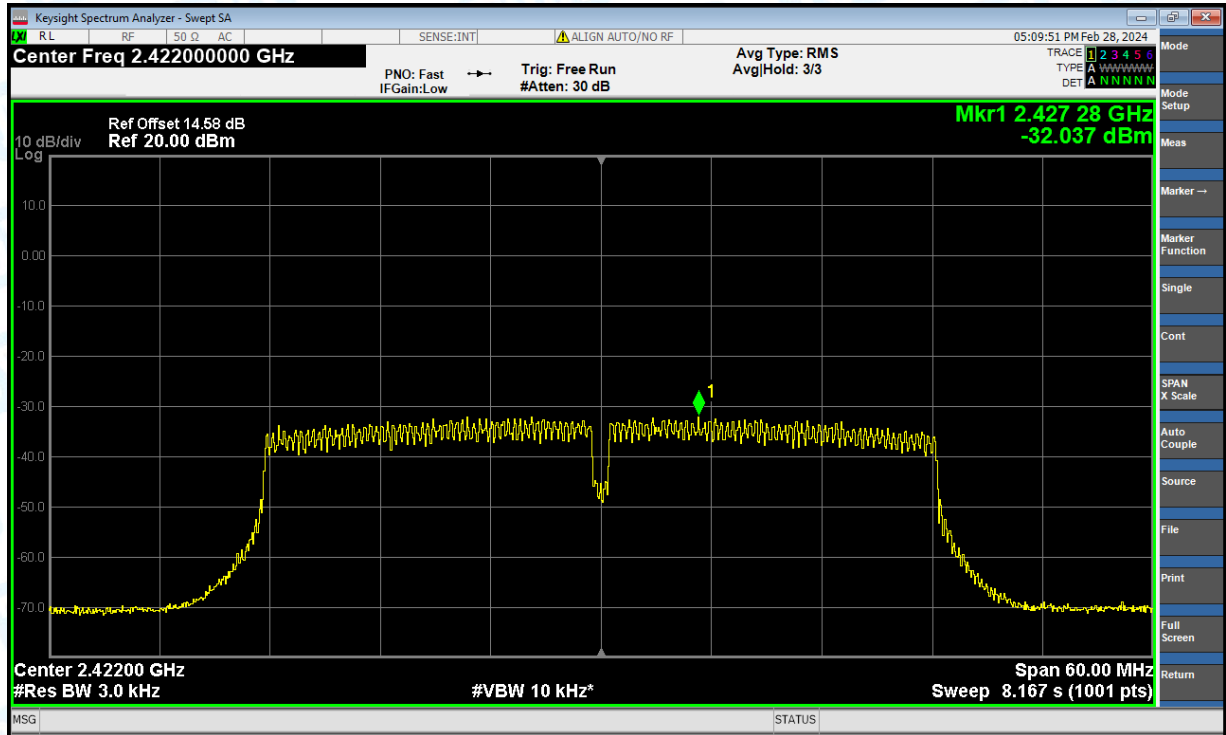
PSD NVNT n(HT20) 2437MHz Ant2



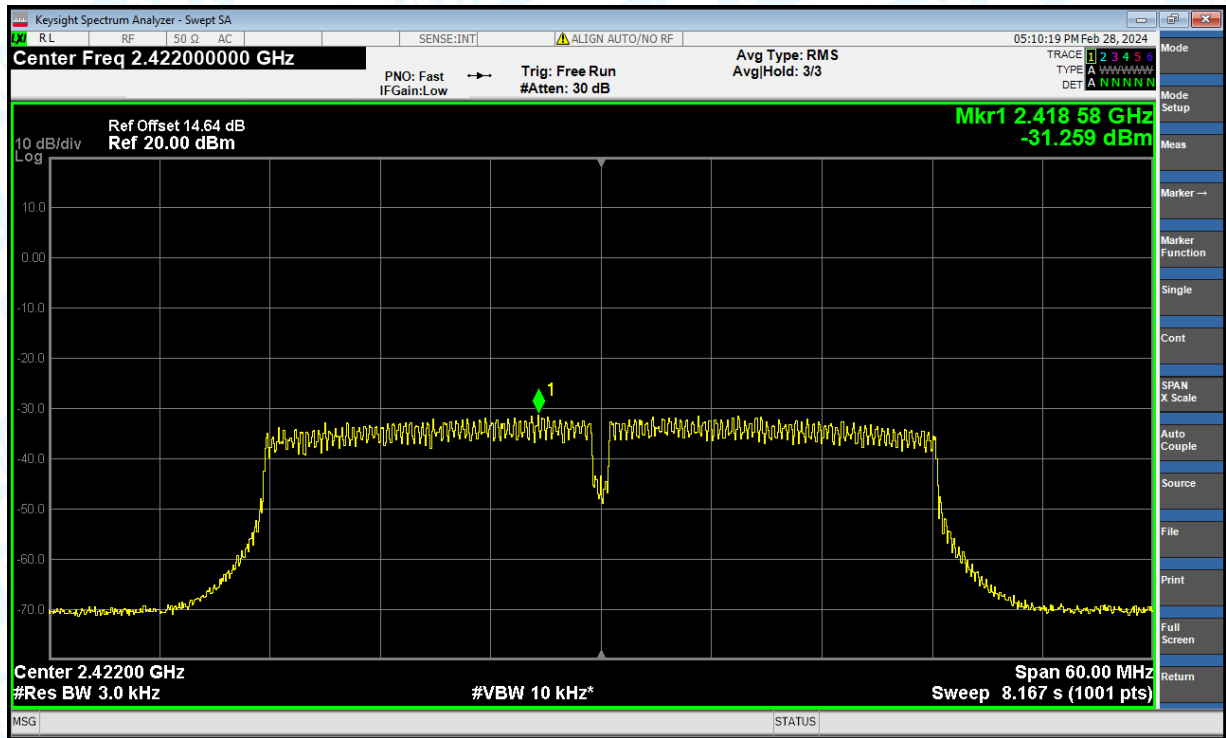
PSD NVNT n(HT20) 2462MHz Ant2



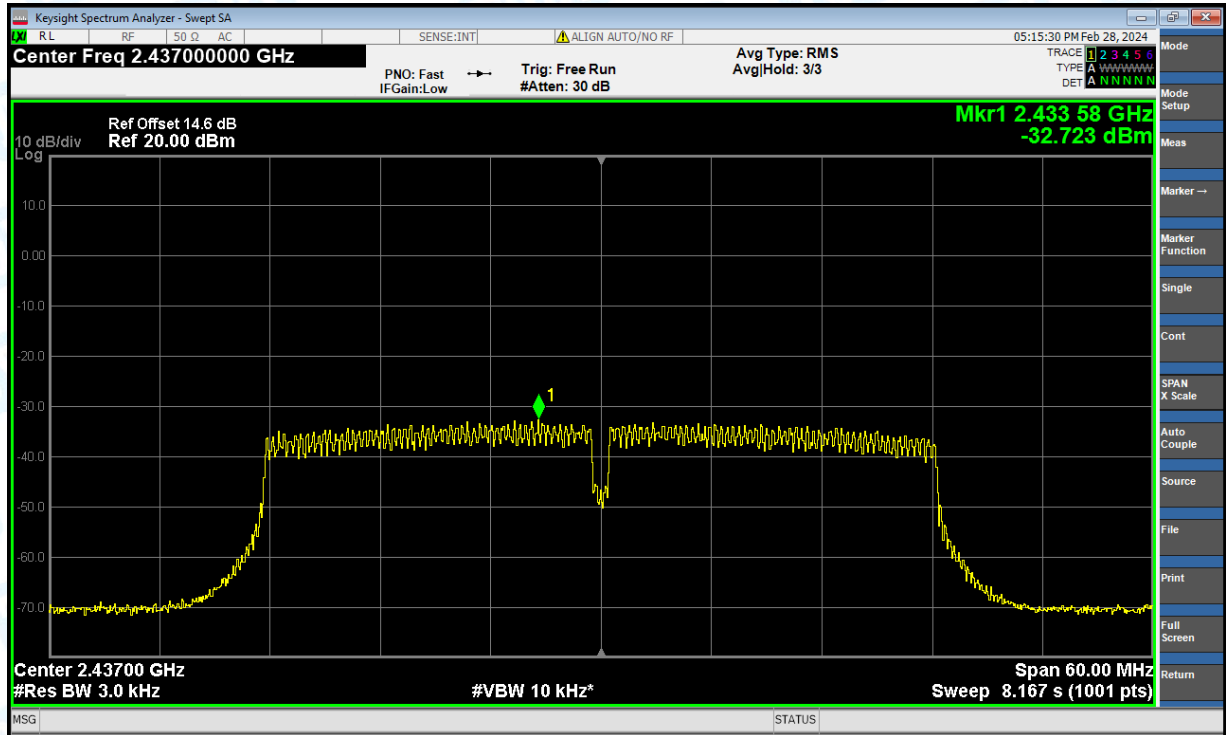
PSD NVNT n(HT40) 2422MHz Ant1



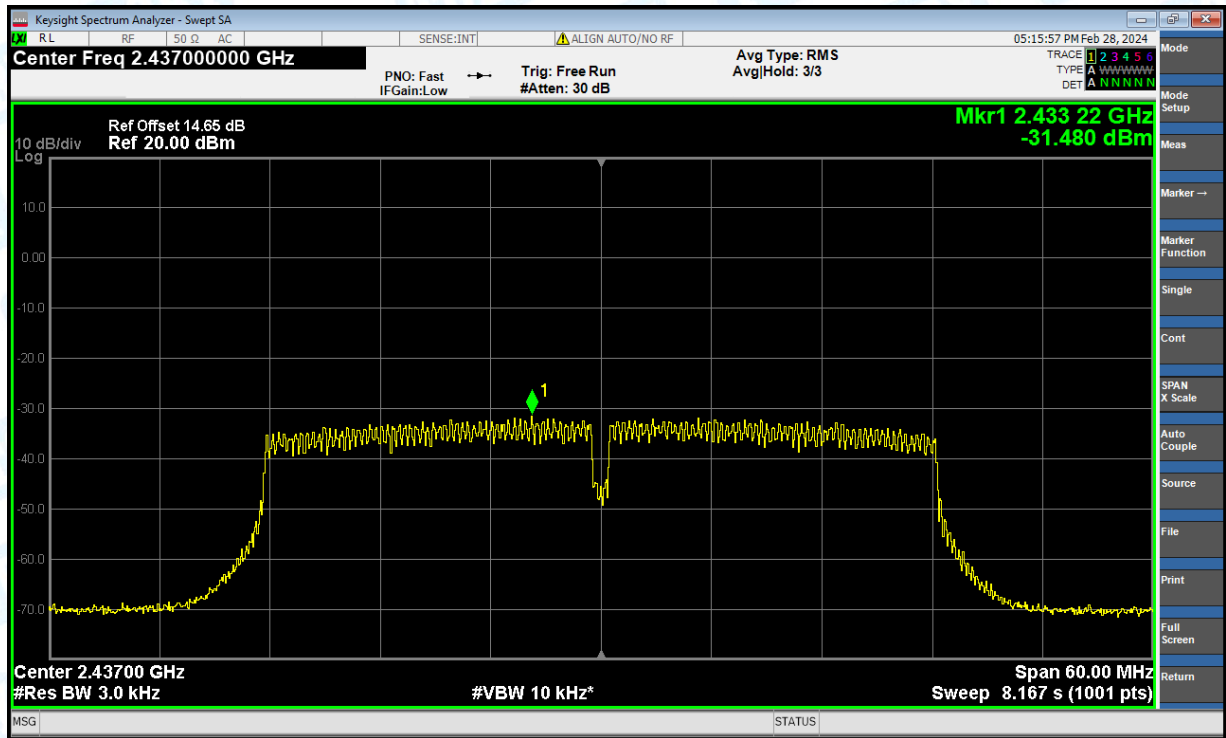
PSD NVNT n(HT40) 2422MHz Ant2



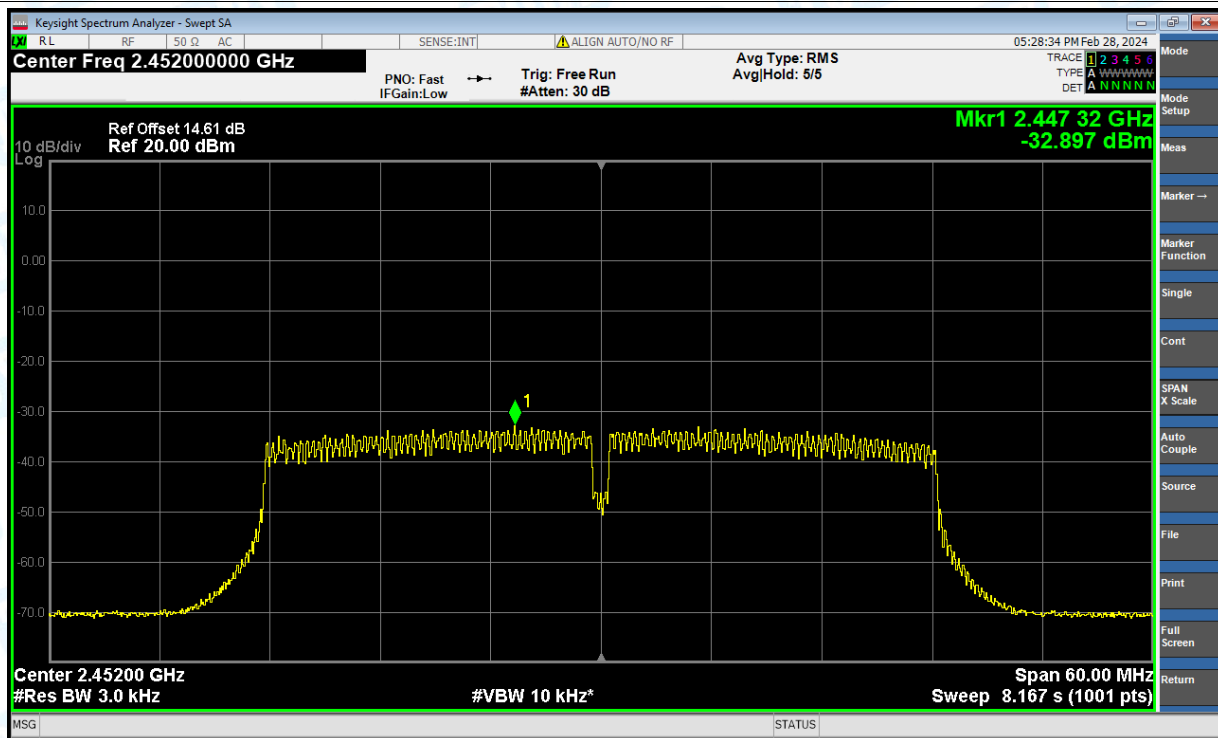
PSD NVNT n(HT40) 2437MHz Ant1



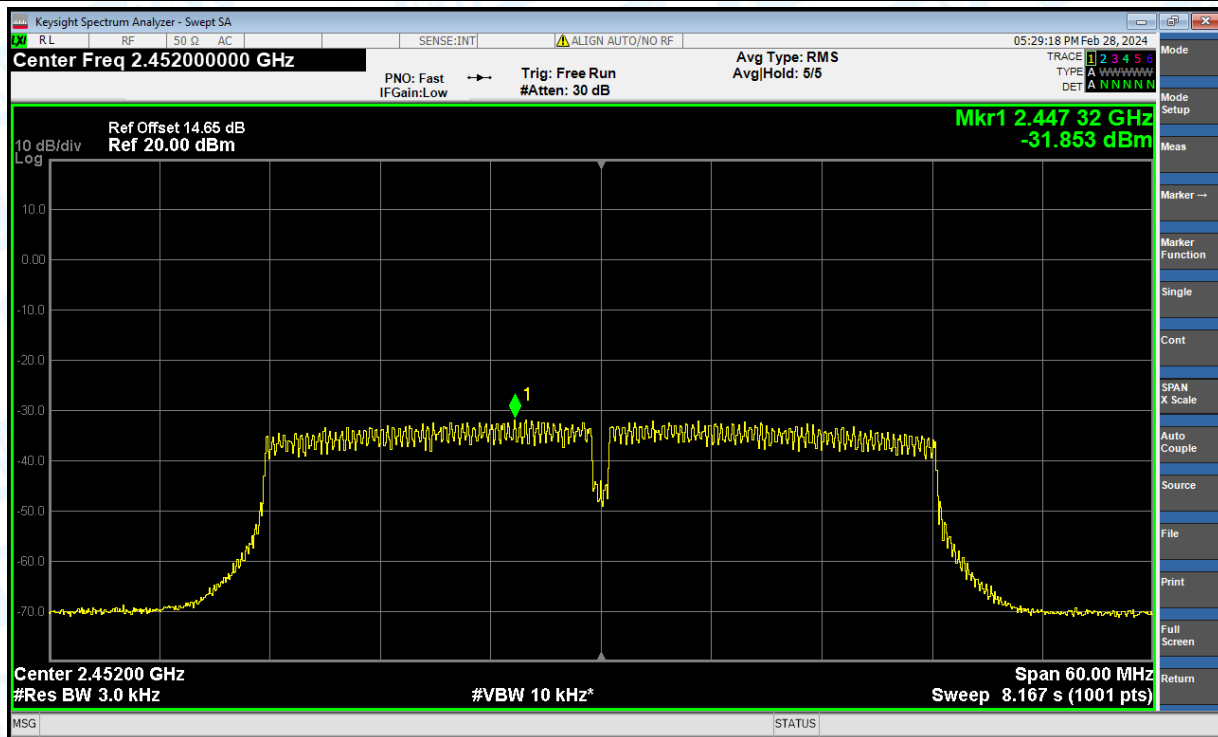
PSD NVNT n(HT40) 2437MHz Ant2



PSD NVNT n(HT40) 2452MHz Ant1



PSD NVNT n(HT40) 2452MHz Ant2

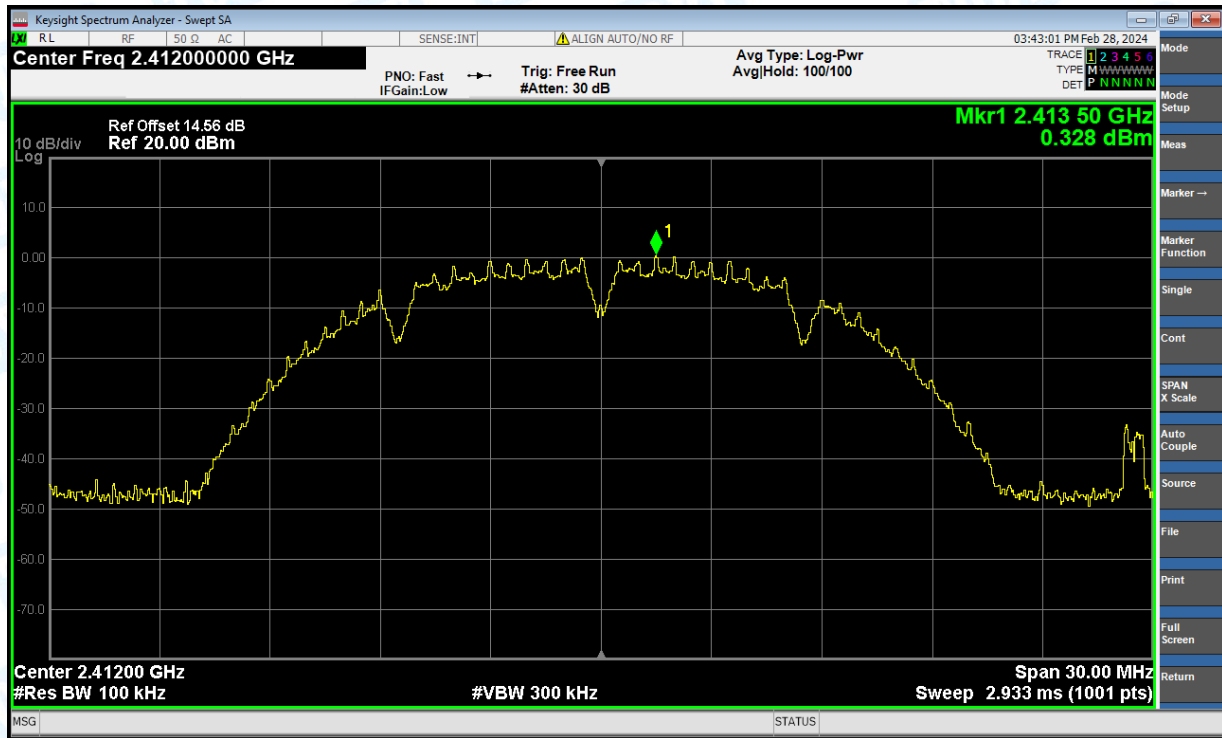


6. Band Edge

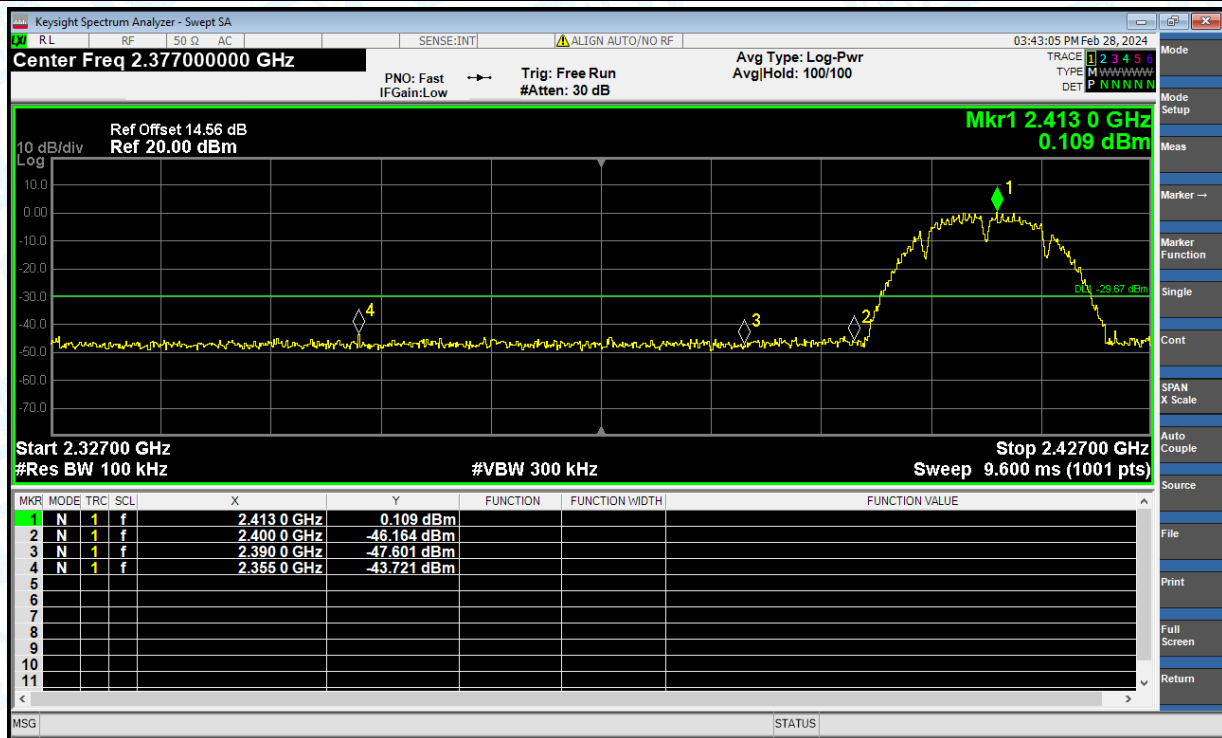
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-44.05	-30	Pass
NVNT	b	2462	Ant1	-43.9	-30	Pass
NVNT	b	2412	Ant2	-44.01	-30	Pass
NVNT	b	2462	Ant2	-44.74	-30	Pass
NVNT	g	2412	Ant1	-41.01	-30	Pass
NVNT	g	2462	Ant1	-41.52	-30	Pass
NVNT	g	2412	Ant2	-41.02	-30	Pass
NVNT	g	2462	Ant2	-44.24	-30	Pass
NVNT	n(HT20)	2412	Ant1	-41.23	-30	Pass
NVNT	n(HT20)	2462	Ant1	-42.79	-30	Pass
NVNT	n(HT20)	2412	Ant2	-42.06	-30	Pass
NVNT	n(HT20)	2462	Ant2	-43.25	-30	Pass
NVNT	n(HT40)	2422	Ant1	-36.23	-30	Pass
NVNT	n(HT40)	2422	Ant2	-37.44	-30	Pass
NVNT	n(HT40)	2452	Ant1	-36.17	-30	Pass
NVNT	n(HT40)	2452	Ant2	-37.16	-30	Pass

Test Graphs

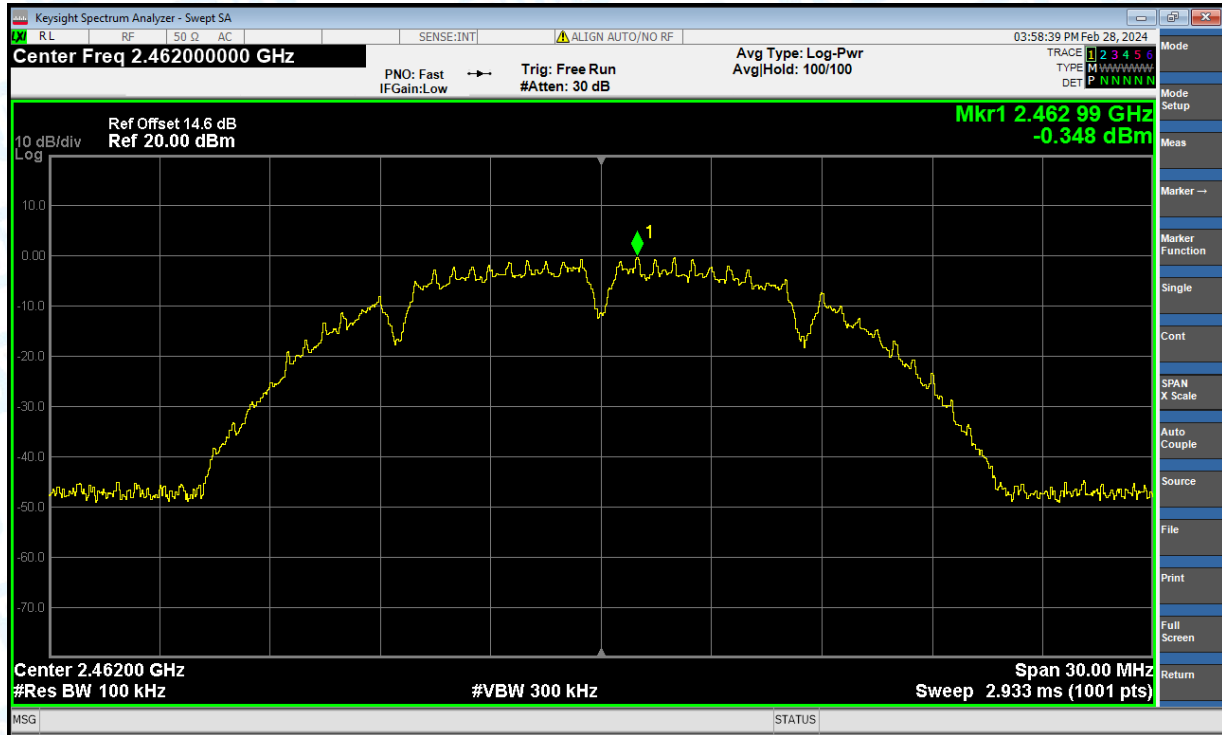
Band Edge NVNT b 2412MHz Ant1 Ref



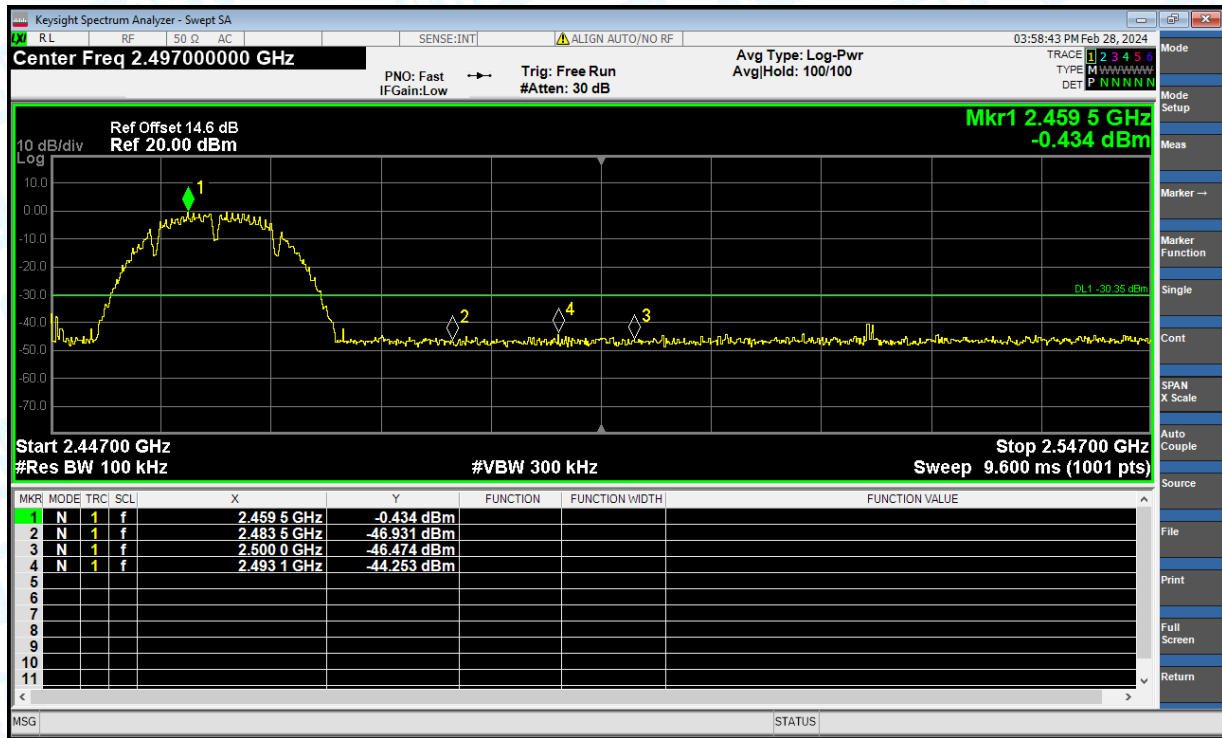
Band Edge NVNT b 2412MHz Ant1 Emission



Band Edge NVNT b 2462MHz Ant1 Ref



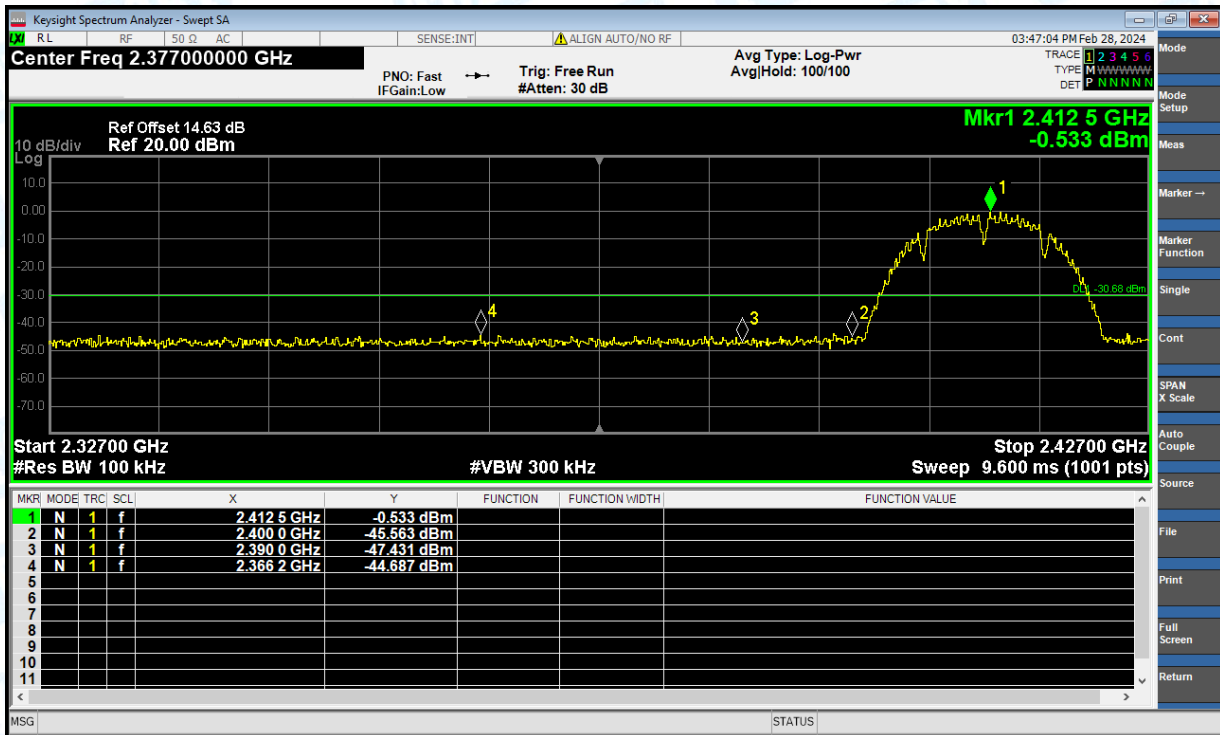
Band Edge NVNT b 2462MHz Ant1 Emission



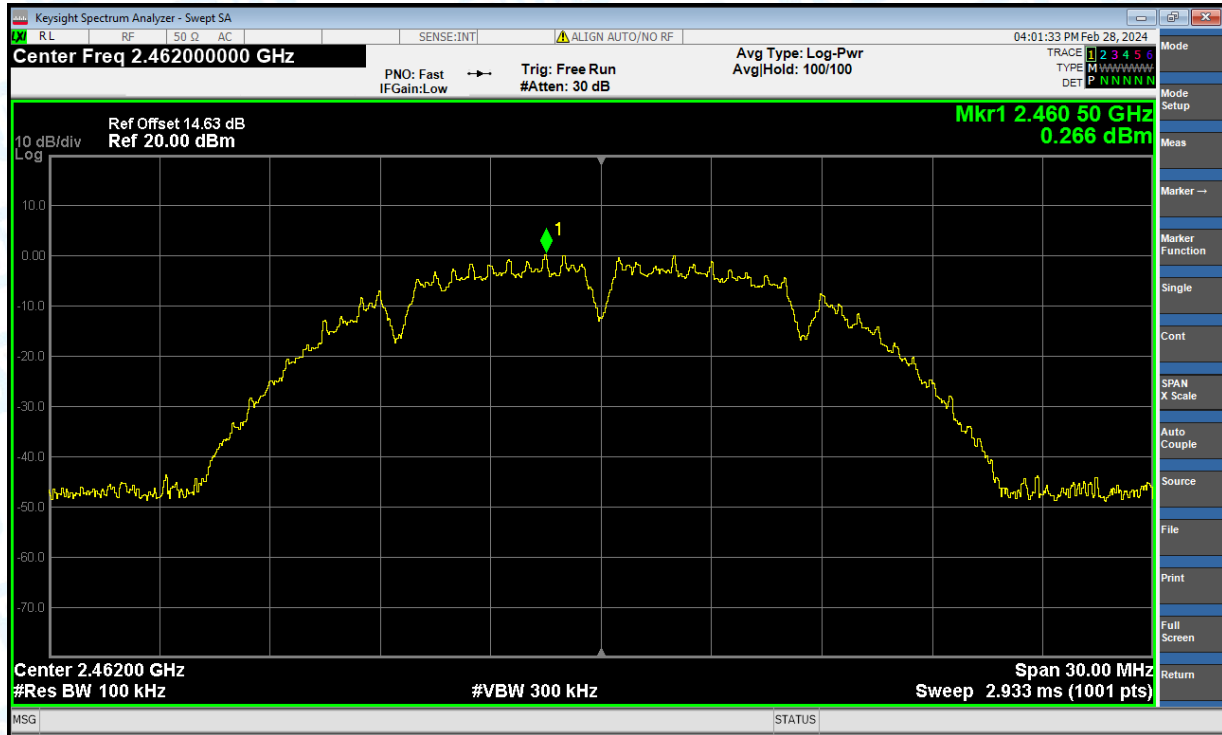
Band Edge NVNT b 2412MHz Ant2 Ref



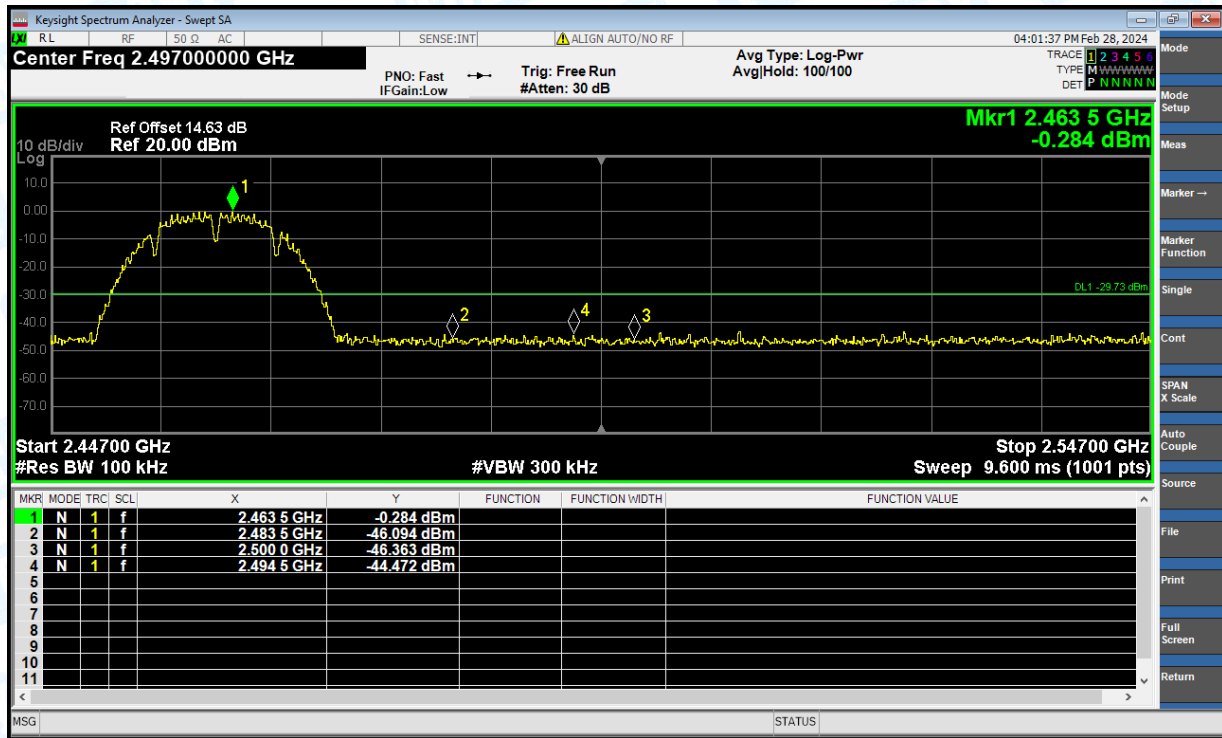
Band Edge NVNT b 2412MHz Ant2 Emission



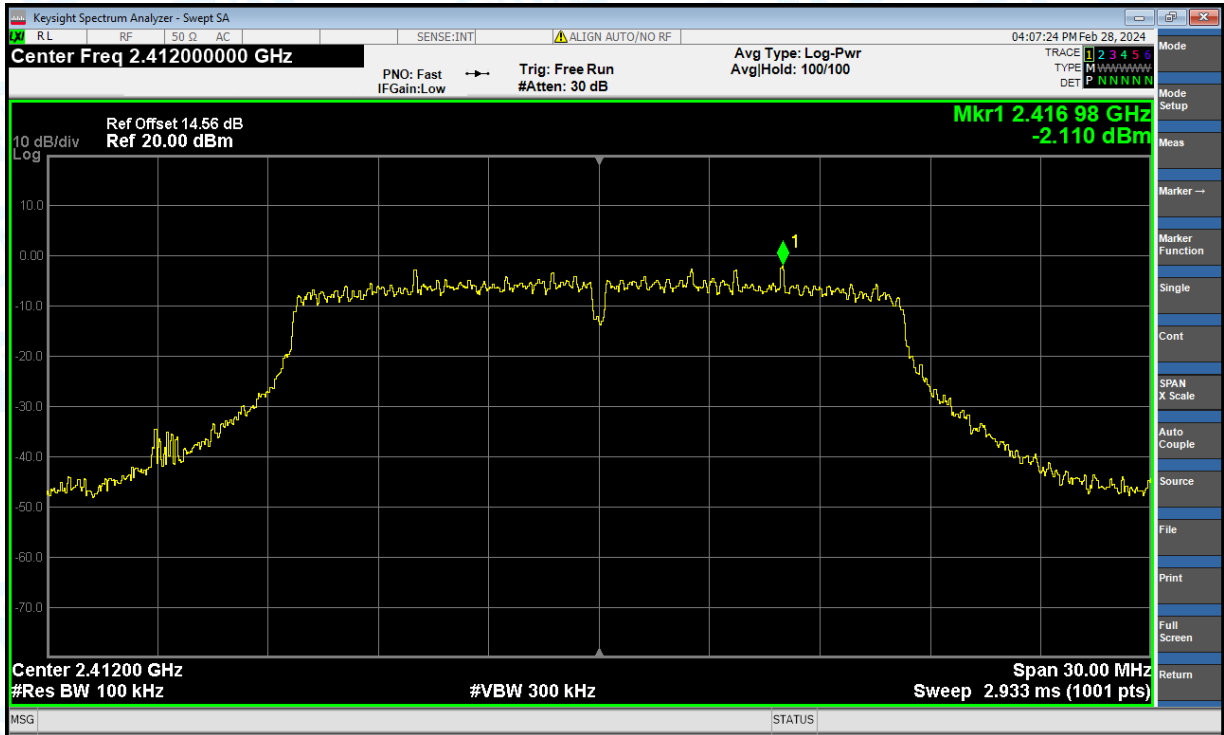
Band Edge NVNT b 2462MHz Ant2 Ref



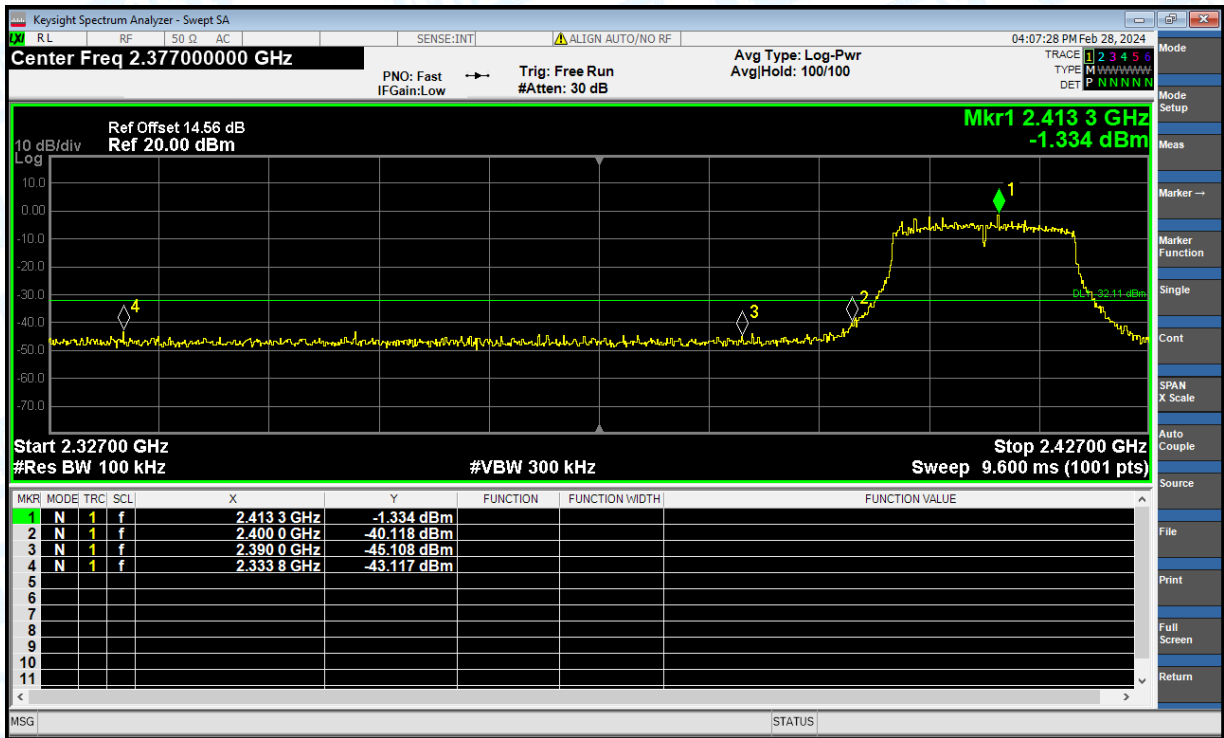
Band Edge NVNT b 2462MHz Ant2 Emission



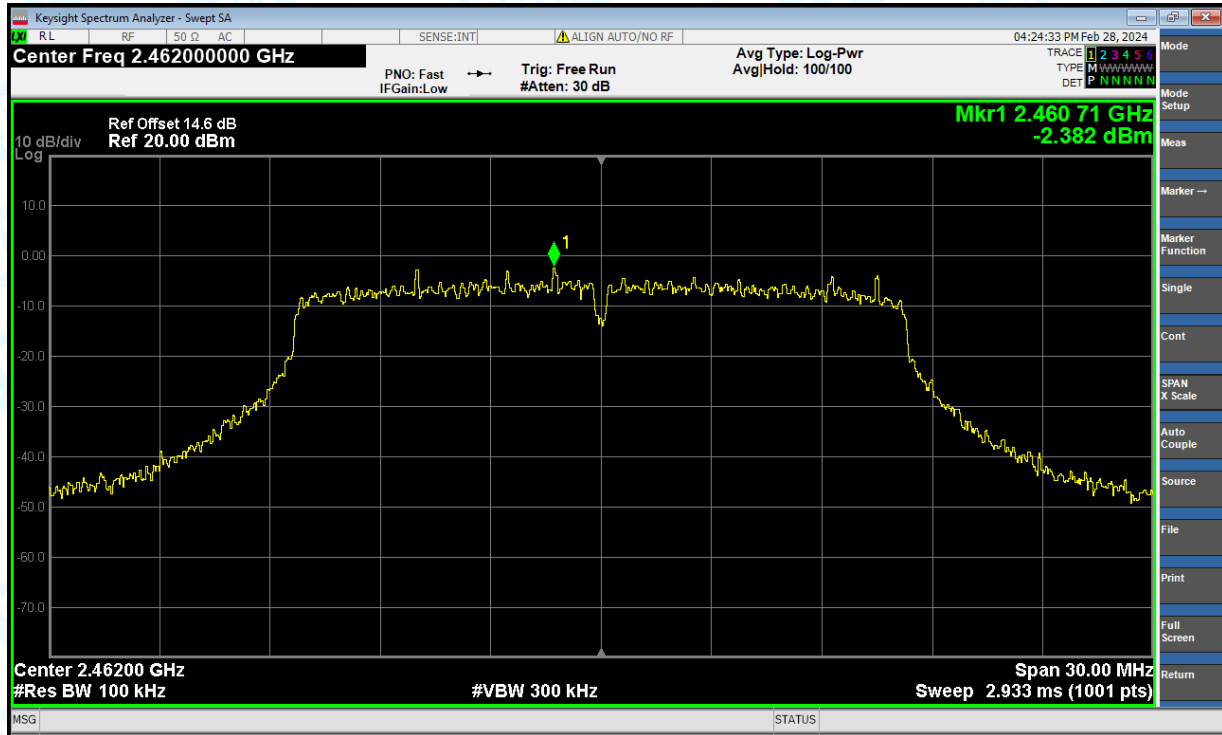
Band Edge NVNT g 2412MHz Ant1 Ref



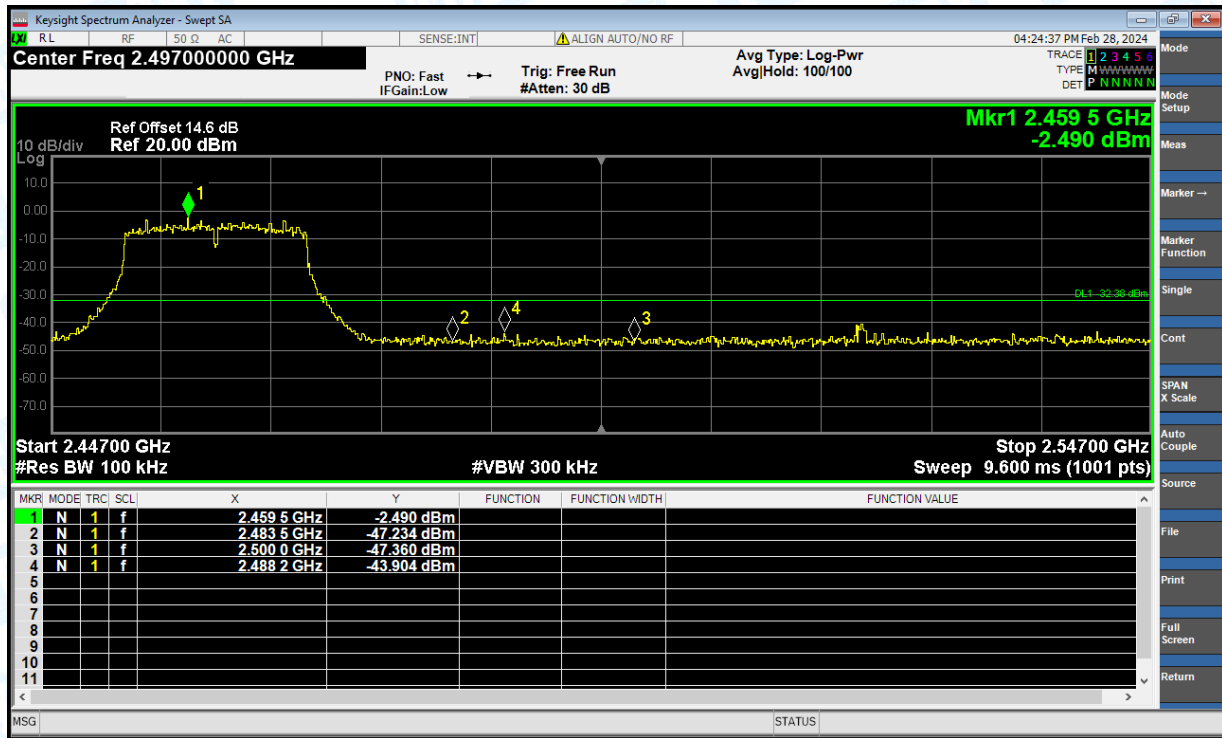
Band Edge NVNT g 2412MHz Ant1 Emission



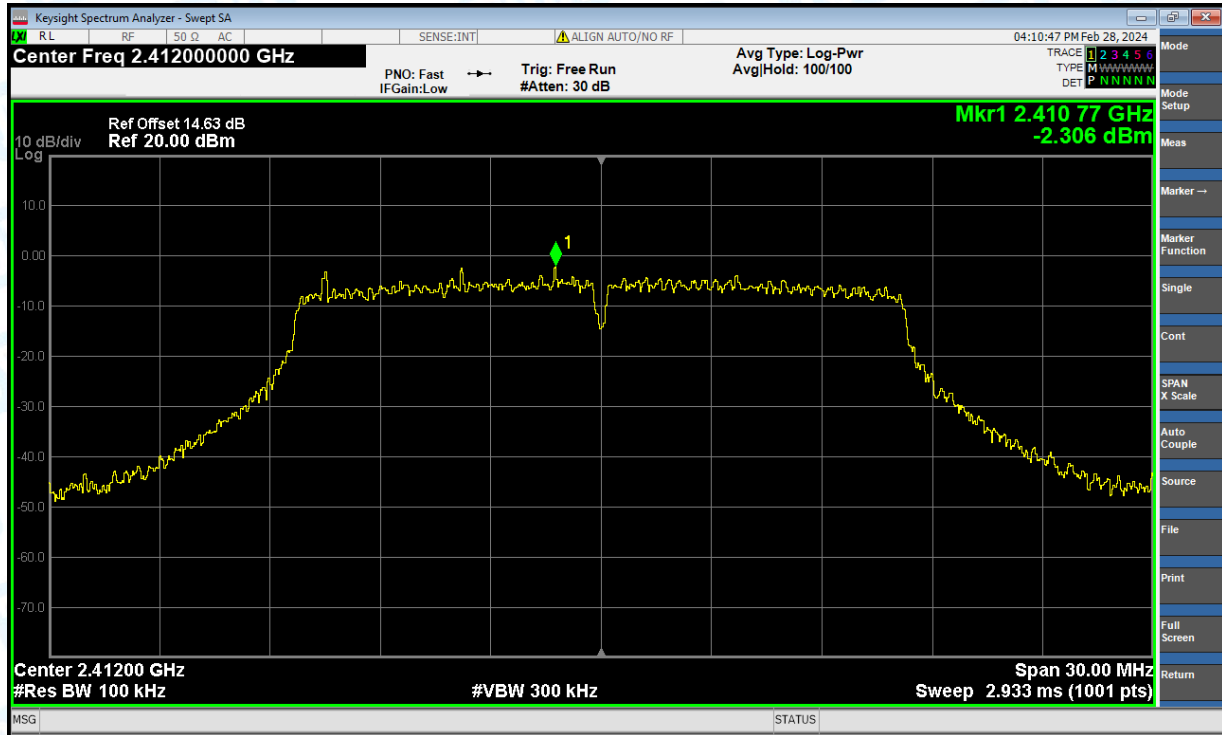
Band Edge NVNT g 2462MHz Ant1 Ref



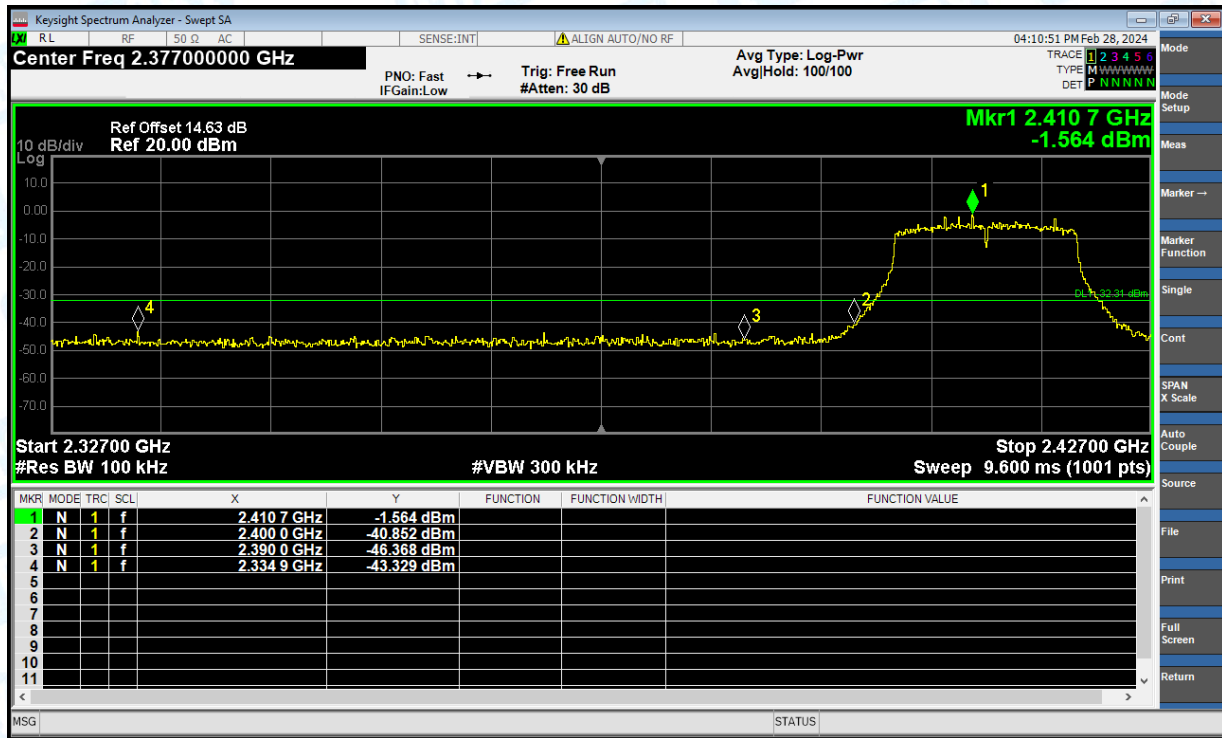
Band Edge NVNT g 2462MHz Ant1 Emission



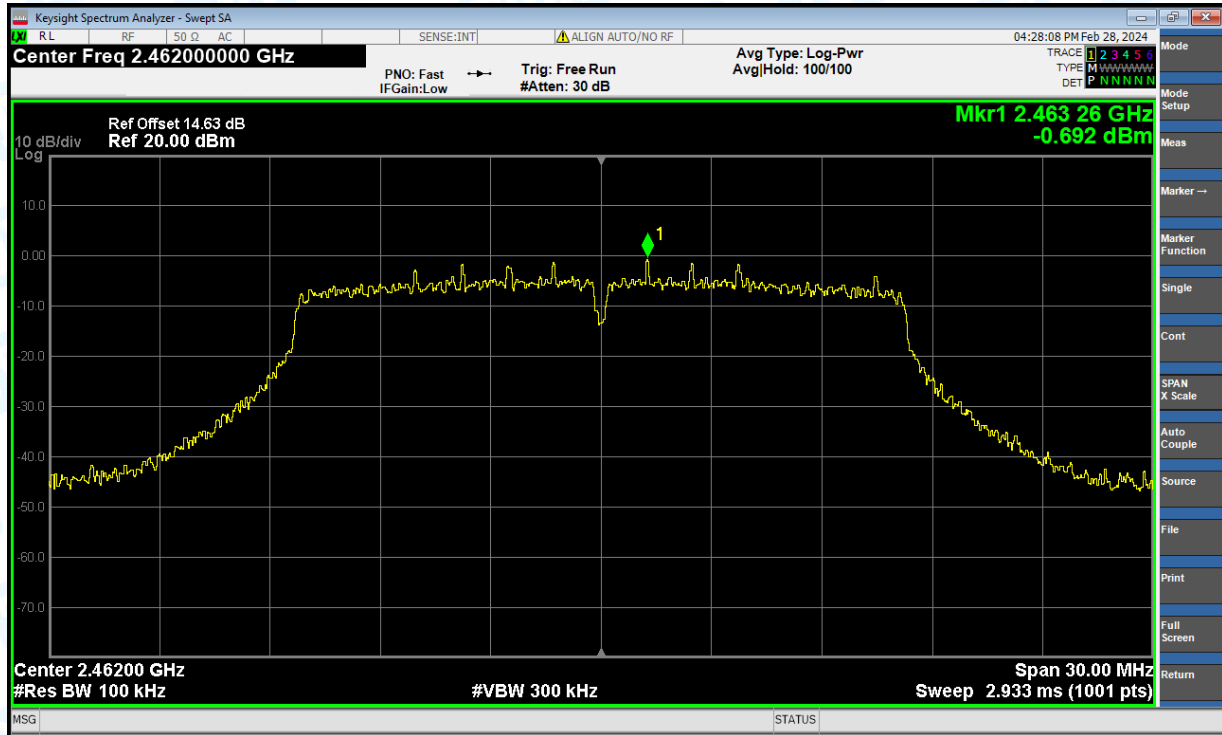
Band Edge NVNT g 2412MHz Ant2 Ref



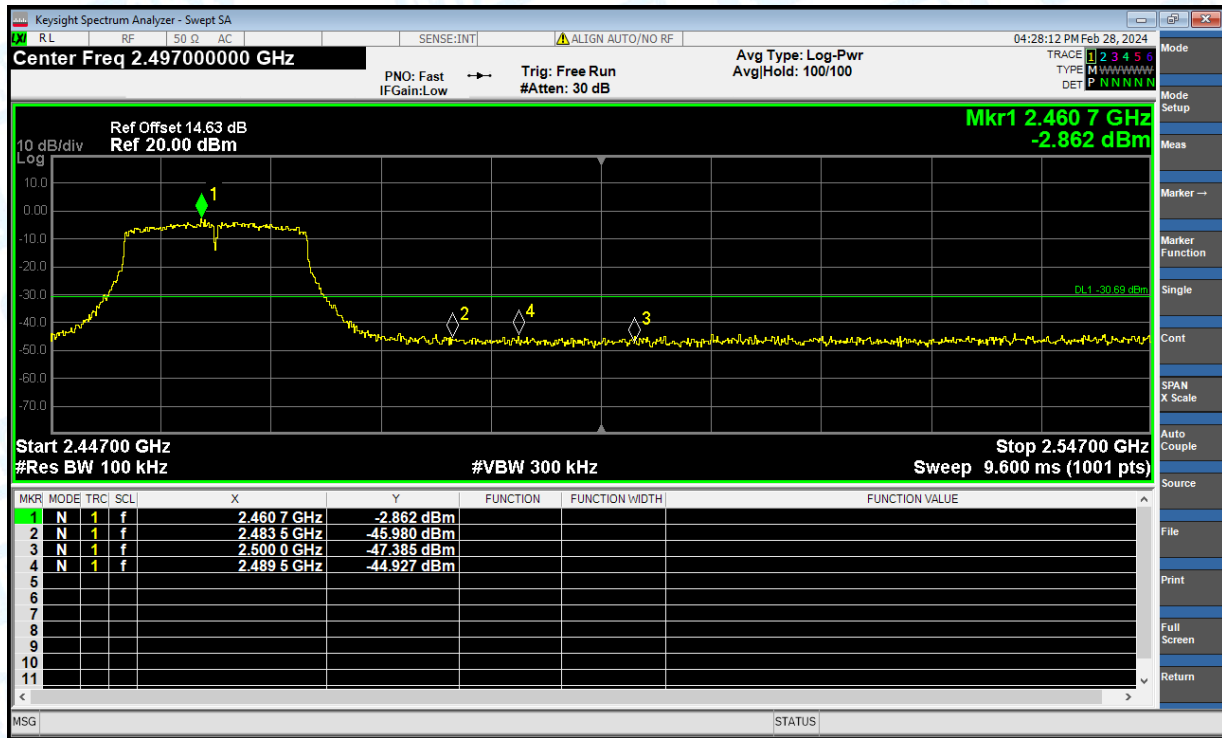
Band Edge NVNT g 2412MHz Ant2 Emission



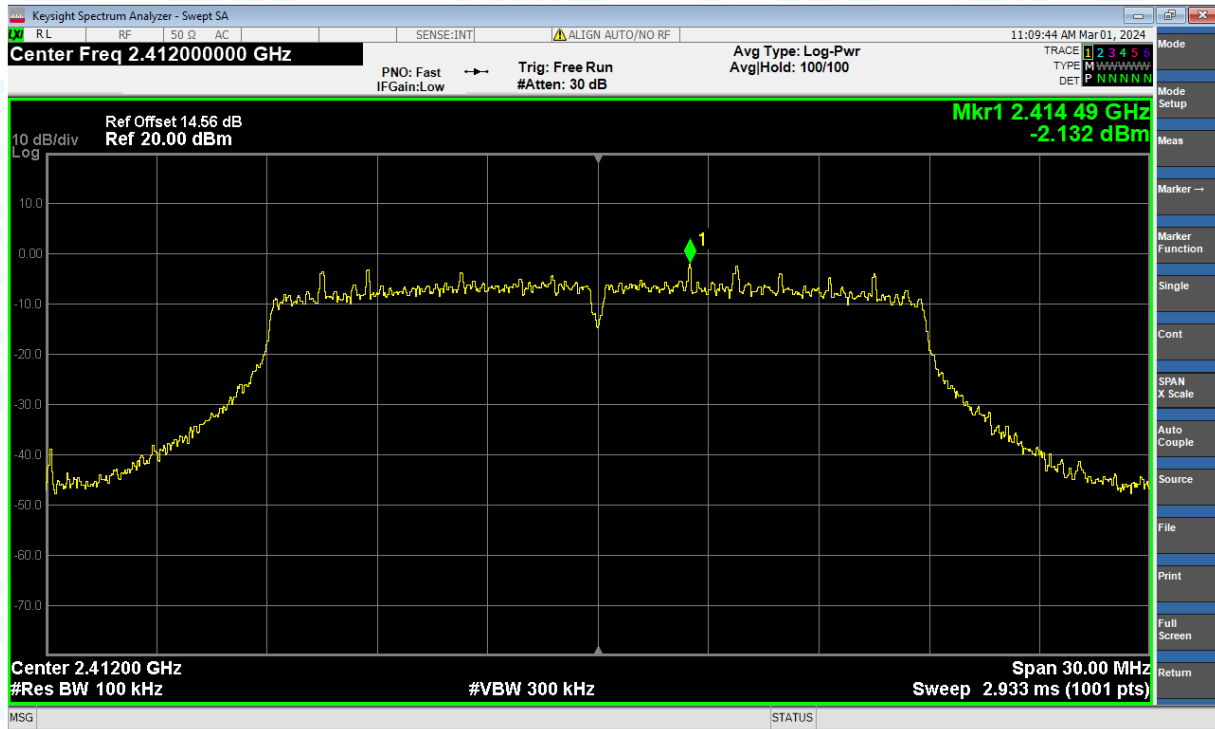
Band Edge NVNT g 2462MHz Ant2 Ref



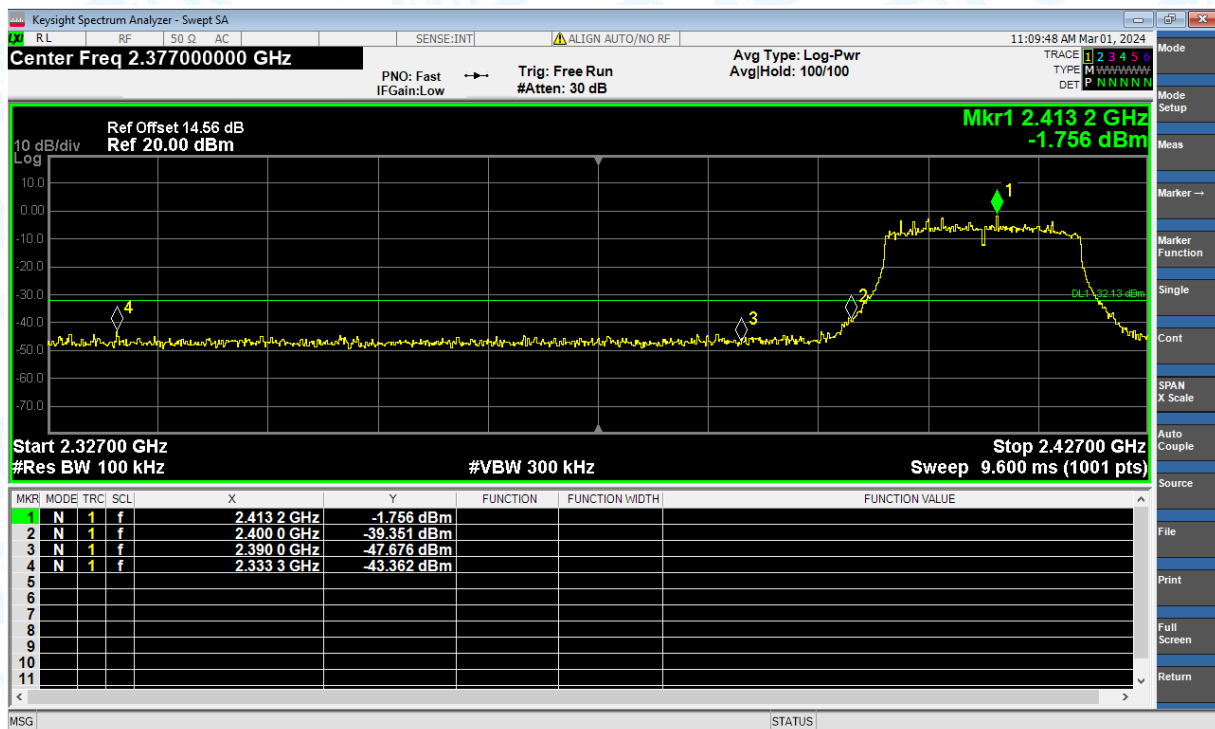
Band Edge NVNT g 2462MHz Ant2 Emission



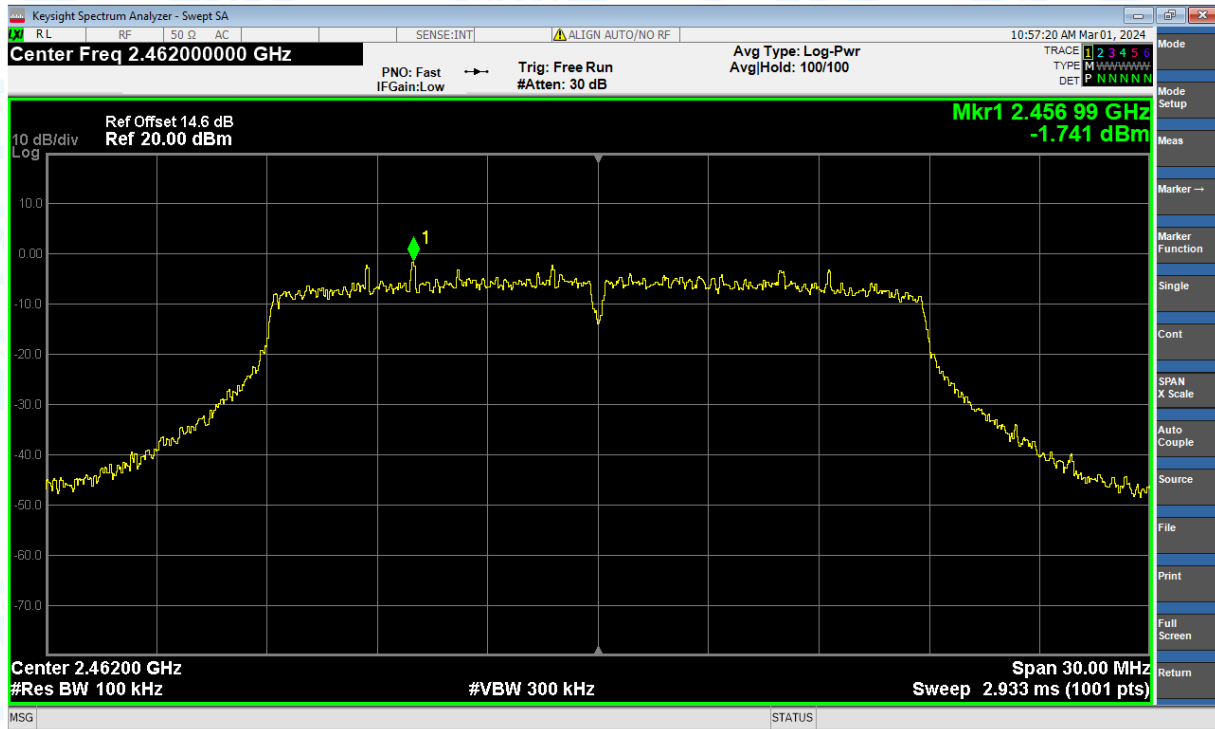
Band Edge NVNT n(HT20) 2412MHz Ant1 Ref



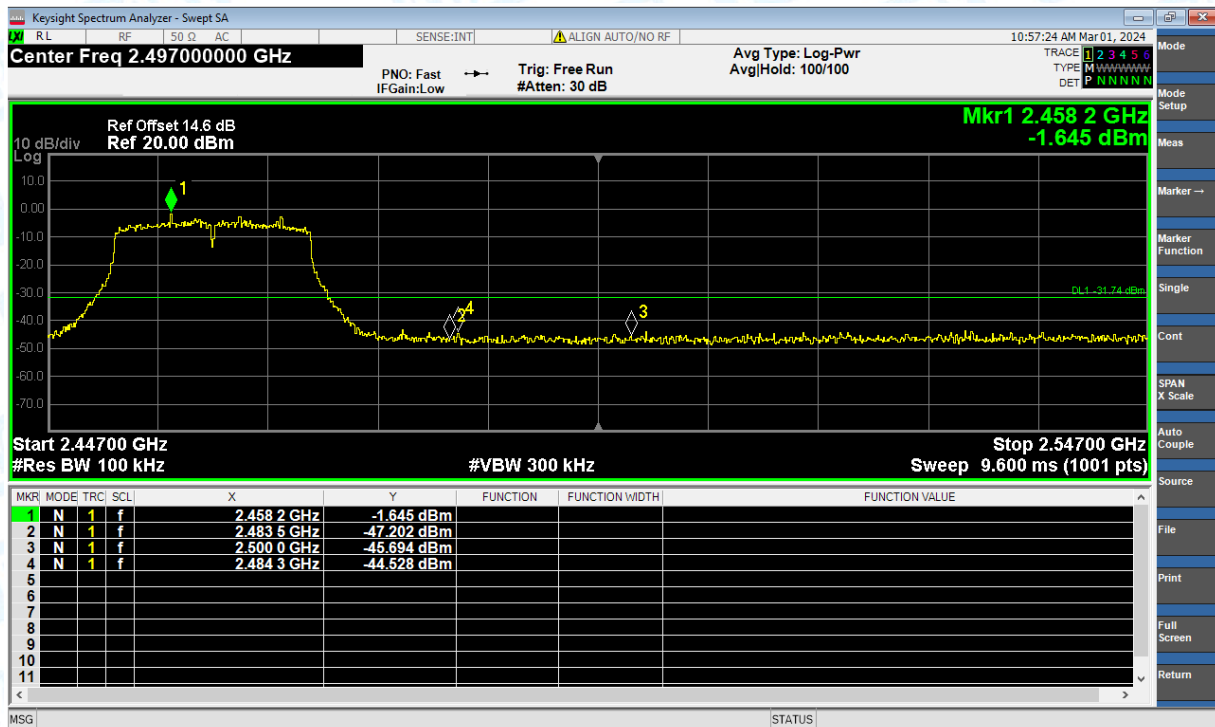
Band Edge NVNT n(HT20) 2412MHz Ant1 Emission



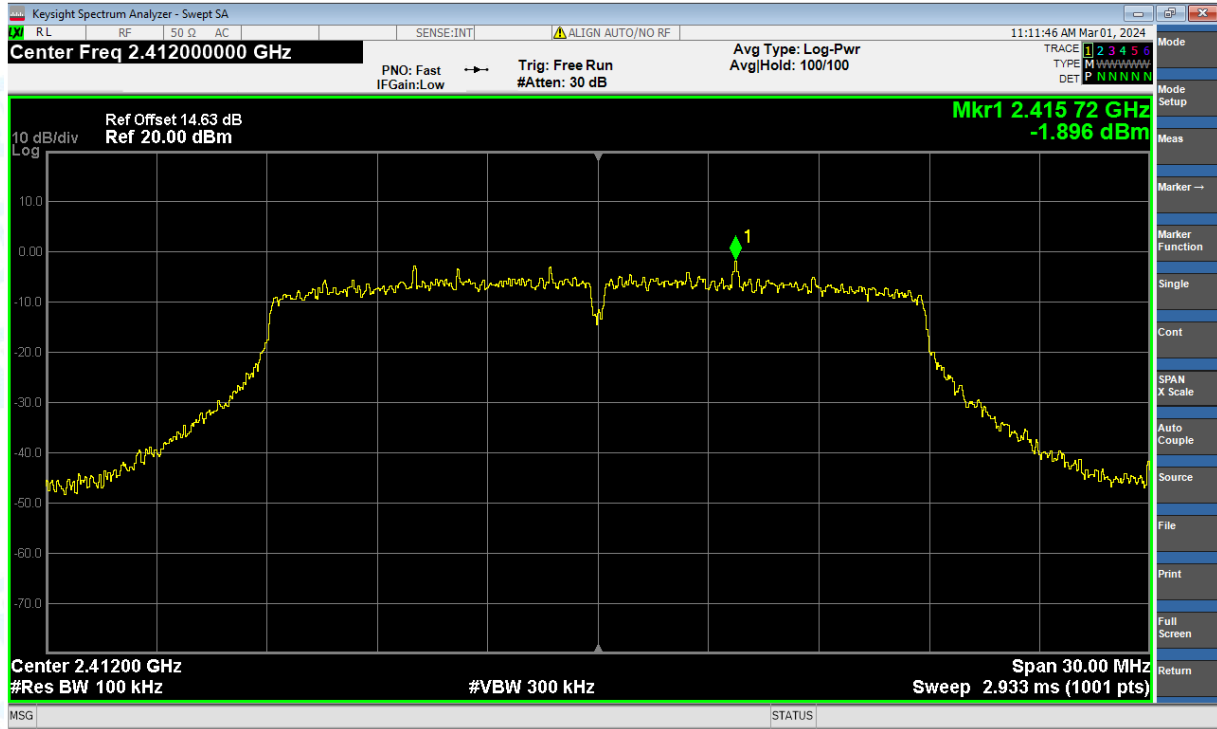
Band Edge NVNT n(HT20) 2462MHz Ant1 Ref



Band Edge NVNT n(HT20) 2462MHz Ant1 Emission



Band Edge NVNT n(HT20) 2412MHz Ant2 Ref



Band Edge NVNT n(HT20) 2412MHz Ant2 Emission

