

RF Test Data for 2.4G WiFi (Conducted Measurements)

General Description of EUT	
Product Name:	Floor Standing Advertizing Digital Signage
Test Model:	MWE813
Sample ID:	202311-0214-1-2#
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	AC 110V
Test Engineer:	Zhou zhen
Note: For a more detailed features description, please refer to the report TBR-C-202311-0214-3 The report only show the worst case data.	

Contents

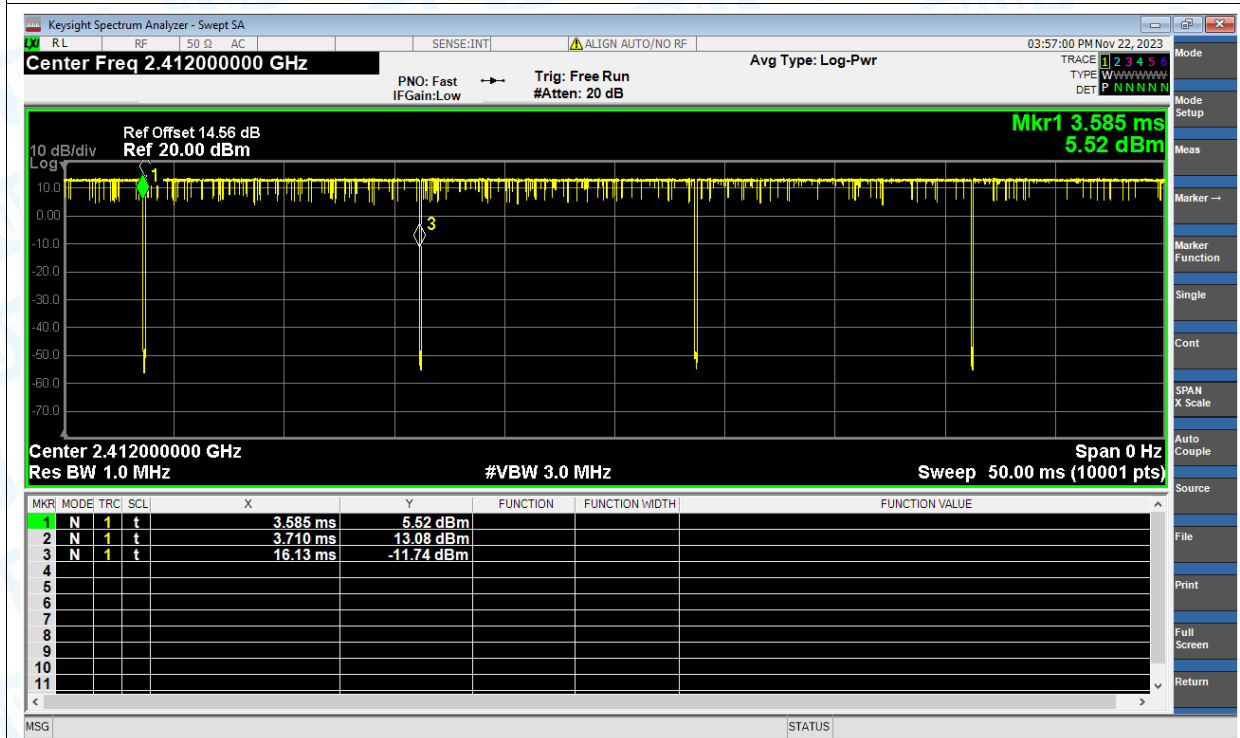
1. Duty Cycle.....	3
2. Maximum Conducted Output Power	10
3. -6dB Bandwidth	11
4. Occupied Channel Bandwidth	18
5. Maximum Power Spectral Density Level.....	25
6. Band Edge	32
7. Conducted RF Spurious Emission	41

1. Duty Cycle

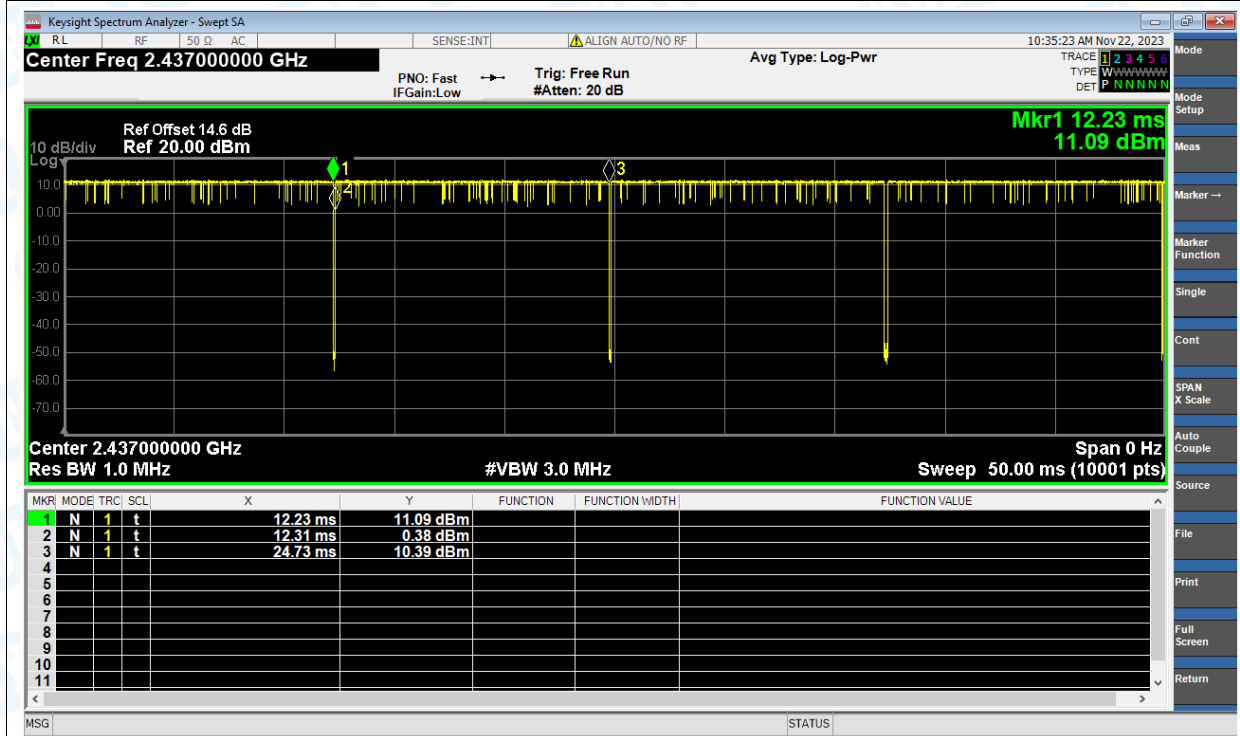
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	99	0.04	0.08
NVNT	b	2437	Ant1	99.36	0.03	0.08
NVNT	b	2462	Ant1	99.16	0.04	0.08
NVNT	g	2412	Ant1	96.72	0.14	0.48
NVNT	g	2437	Ant1	97.18	0.12	0.48
NVNT	g	2462	Ant1	94.29	0.26	0.48
NVNT	n(HT20)	2412	Ant1	96.73	0.14	0.52
NVNT	n(HT20)	2437	Ant1	97.71	0.1	0.52
NVNT	n(HT20)	2462	Ant1	93.43	0.3	0.52
NVNT	n(HT40)	2422	Ant1	92.38	0.34	1.06
NVNT	n(HT40)	2437	Ant1	91.3	0.4	1.06
NVNT	n(HT40)	2452	Ant1	92.92	0.32	1.06

Test Graphs

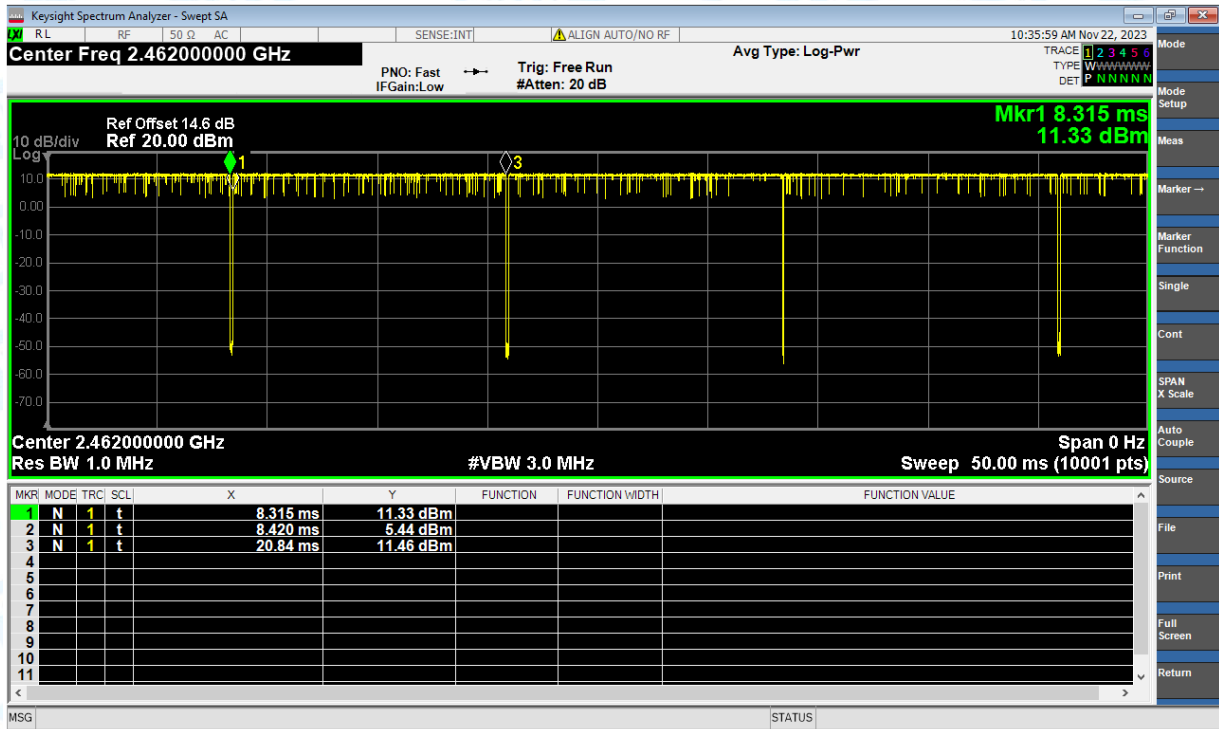
Duty Cycle NVNT b 2412MHz Ant1



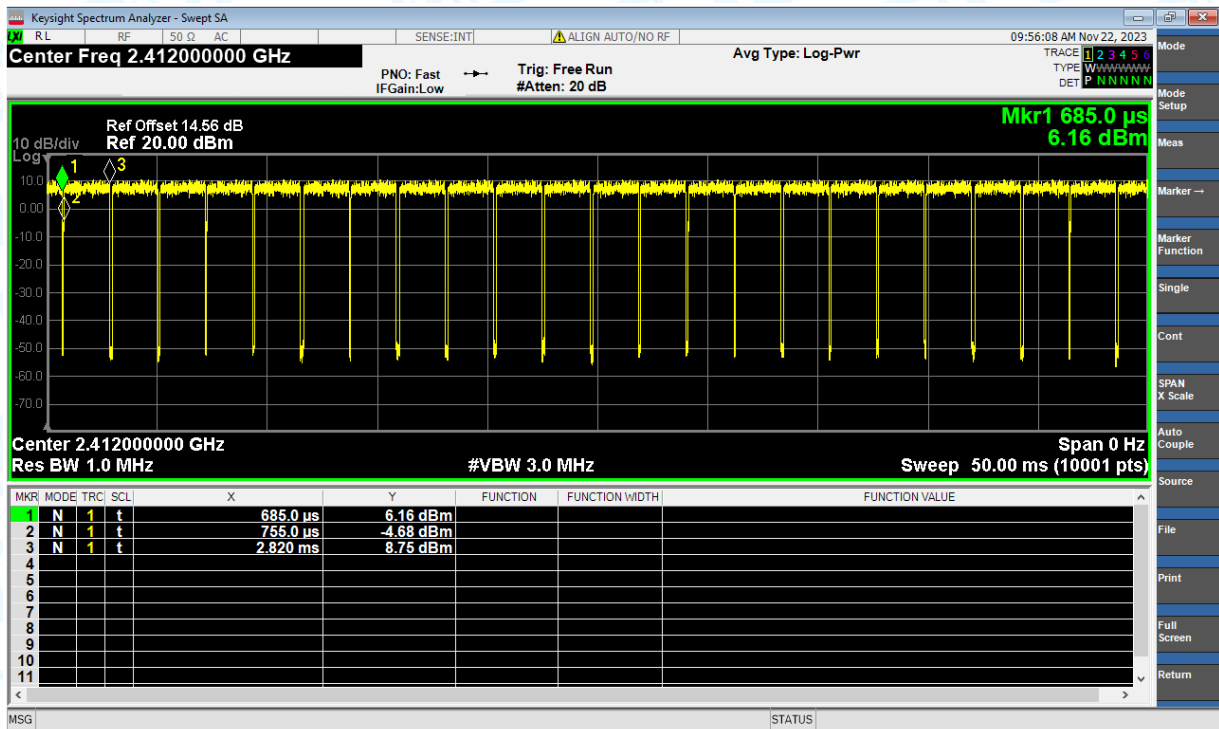
Duty Cycle NVNT b 2437MHz Ant1



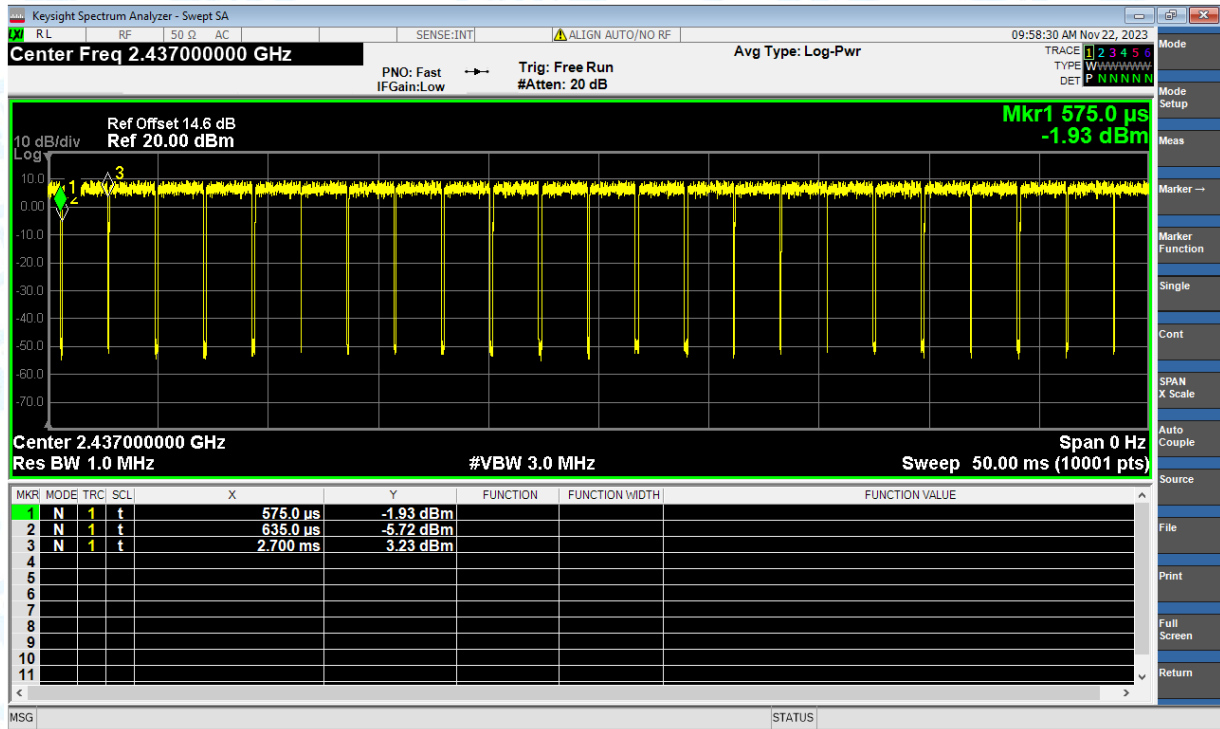
Duty Cycle NVNT b 2462MHz Ant1



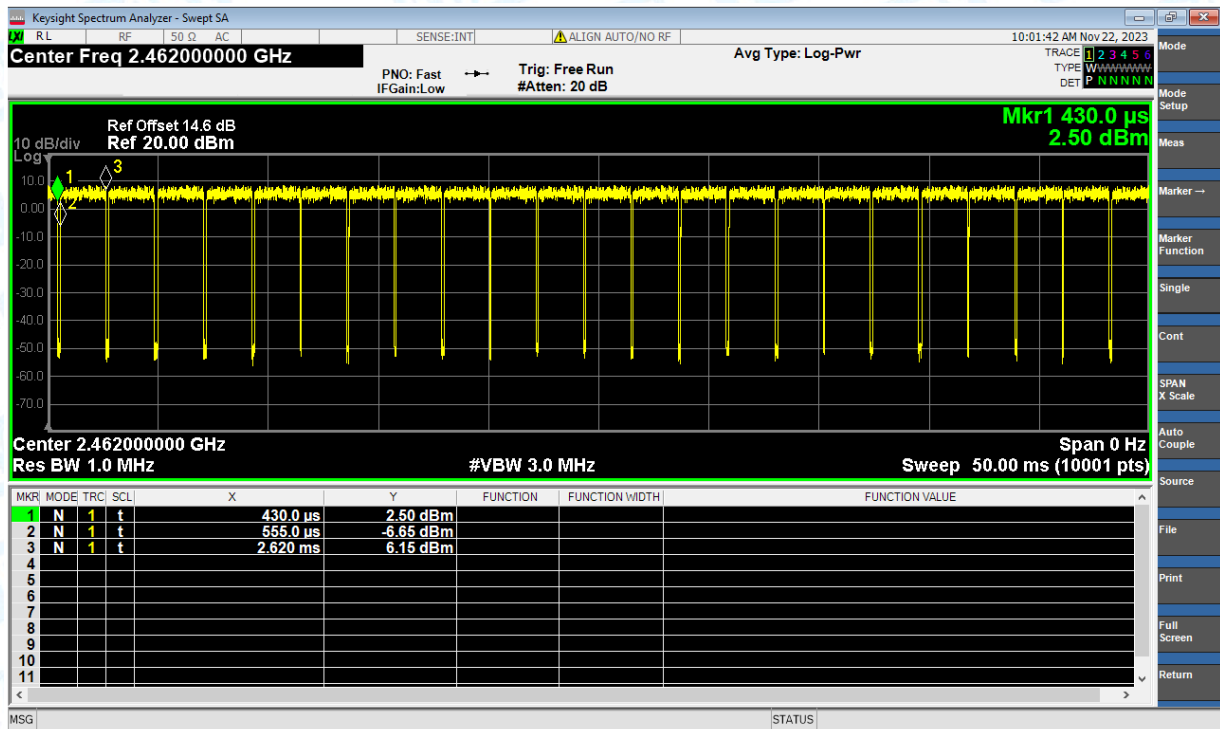
Duty Cycle NVNT g 2412MHz Ant1



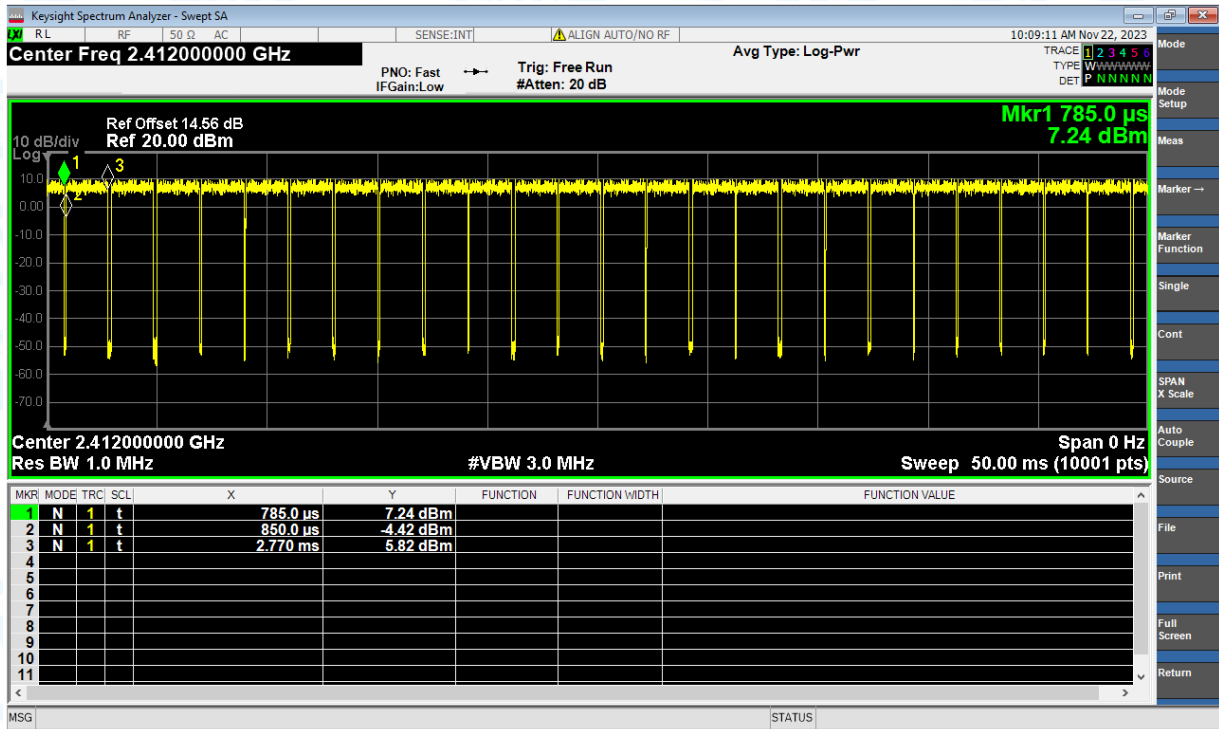
Duty Cycle NVNT g 2437MHz Ant1



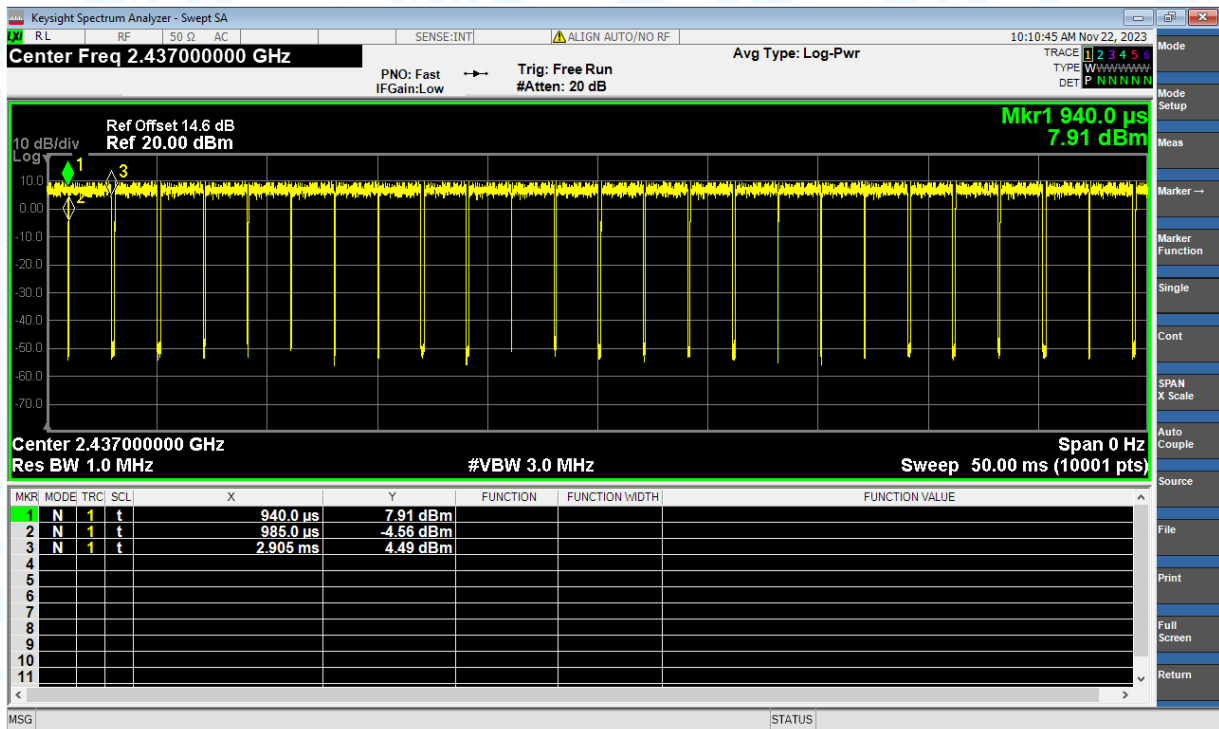
Duty Cycle NVNT g 2462MHz Ant1



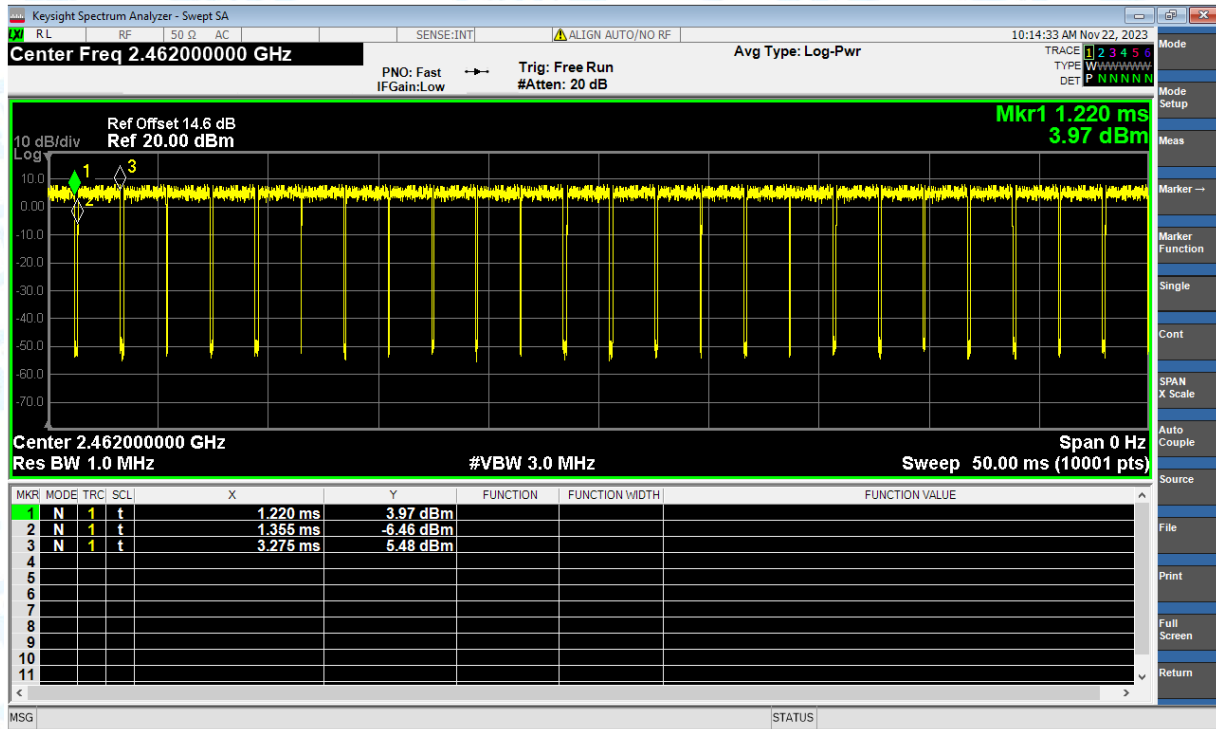
Duty Cycle NVNT n(HT20) 2412MHz Ant1



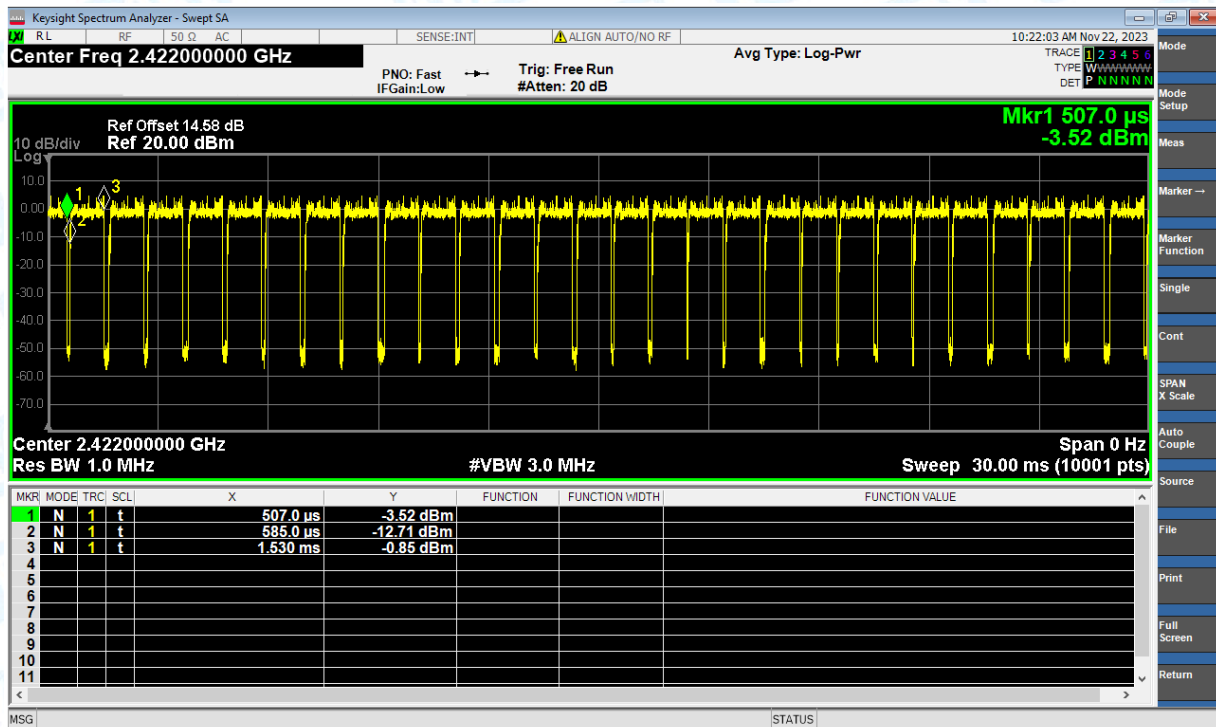
Duty Cycle NVNT n(HT20) 2437MHz Ant1



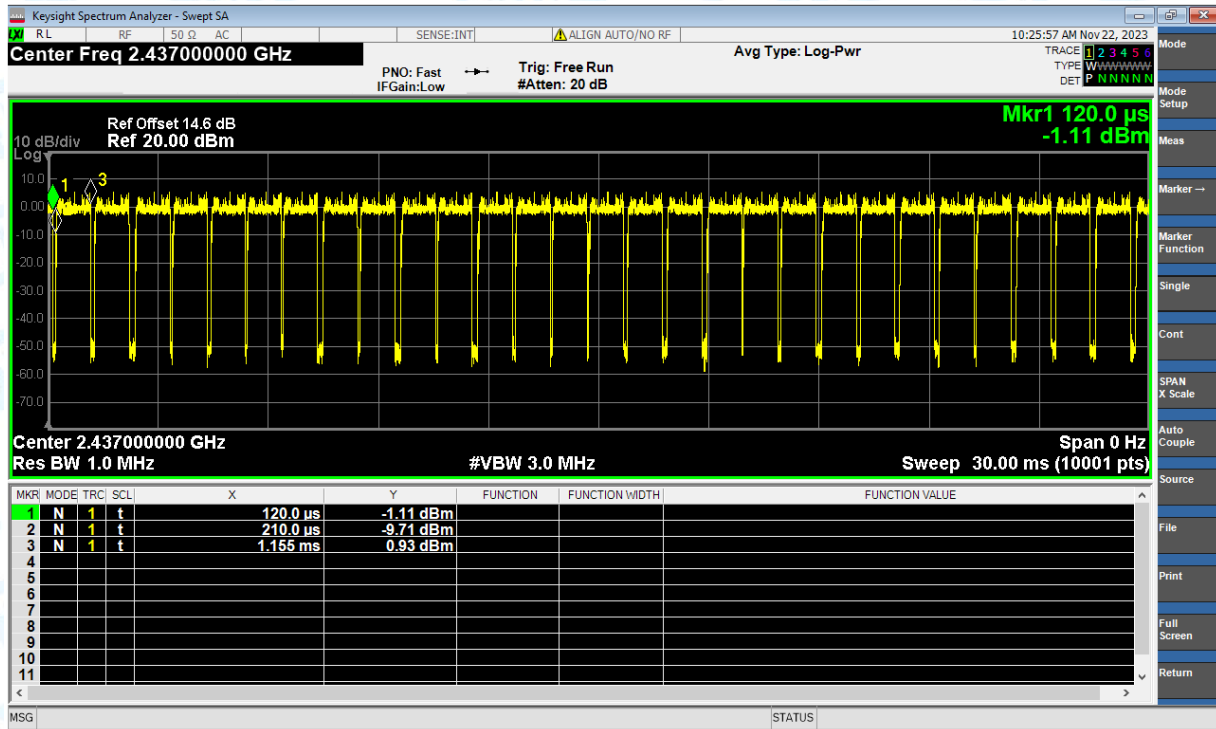
Duty Cycle NVNT n(HT20) 2462MHz Ant1



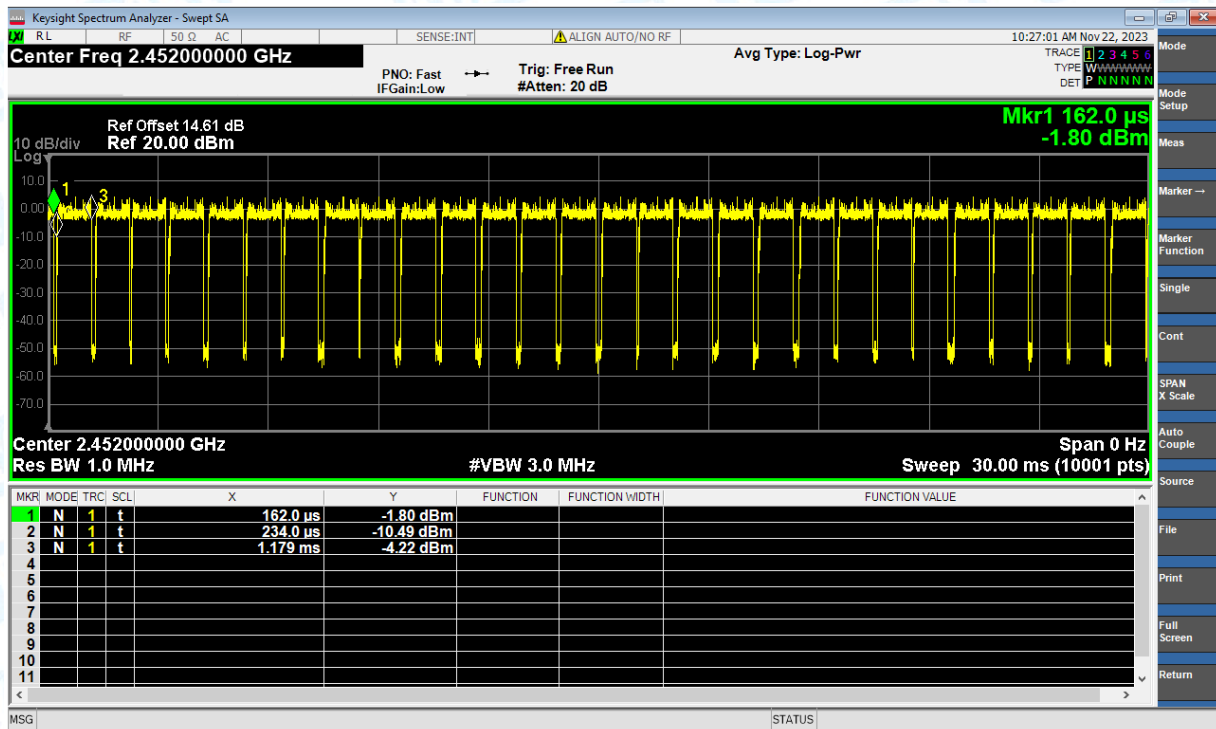
Duty Cycle NVNT n(HT40) 2422MHz Ant1



Duty Cycle NVNT n(HT40) 2437MHz Ant1



Duty Cycle NVNT n(HT40) 2452MHz Ant1



2. Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	15.49	30	Pass
NVNT	b	2437	Ant1	15.11	30	Pass
NVNT	b	2462	Ant1	15.44	30	Pass
NVNT	g	2412	Ant1	12.94	30	Pass
NVNT	g	2437	Ant1	14	30	Pass
NVNT	g	2462	Ant1	10.27	30	Pass
NVNT	n(HT20)	2412	Ant1	12.47	30	Pass
NVNT	n(HT20)	2437	Ant1	15.81	30	Pass
NVNT	n(HT20)	2462	Ant1	10.42	30	Pass
NVNT	n(HT40)	2422	Ant1	10.57	30	Pass
NVNT	n(HT40)	2437	Ant1	15.37	30	Pass
NVNT	n(HT40)	2452	Ant1	10.23	30	Pass

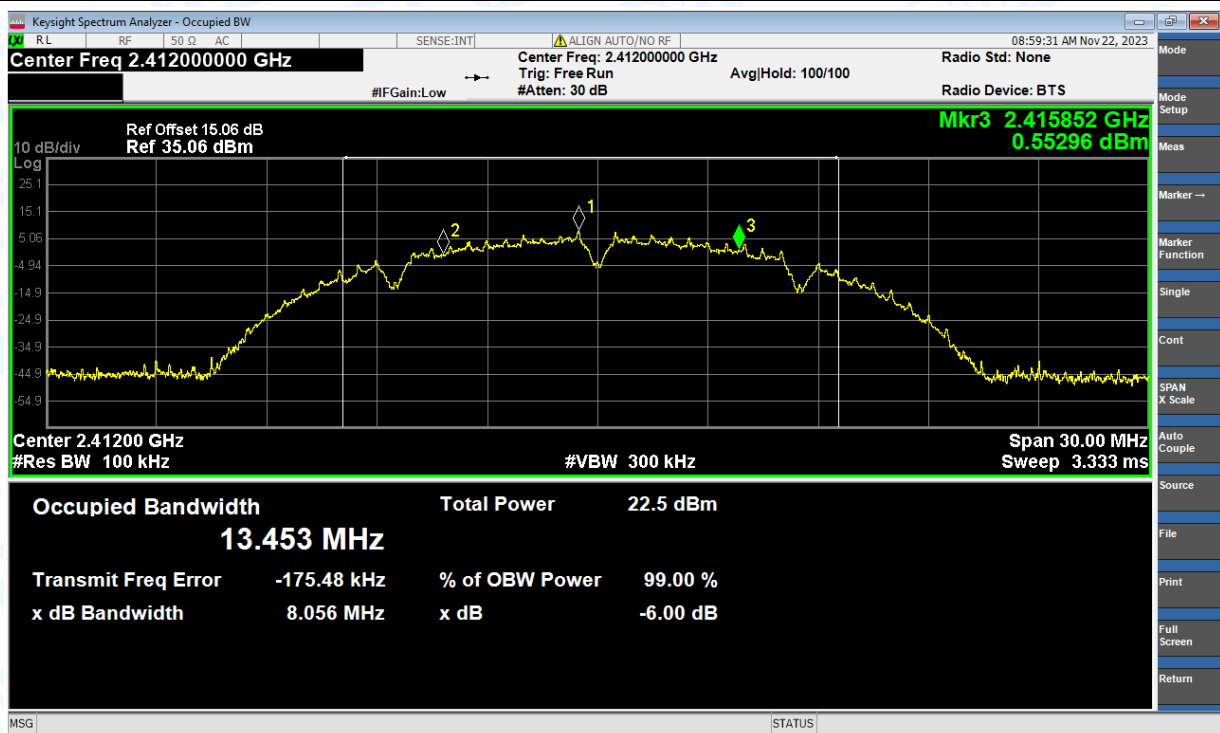
Note: The Duty Cycle Factor is compensated in the graph.

3. -6dB Bandwidth

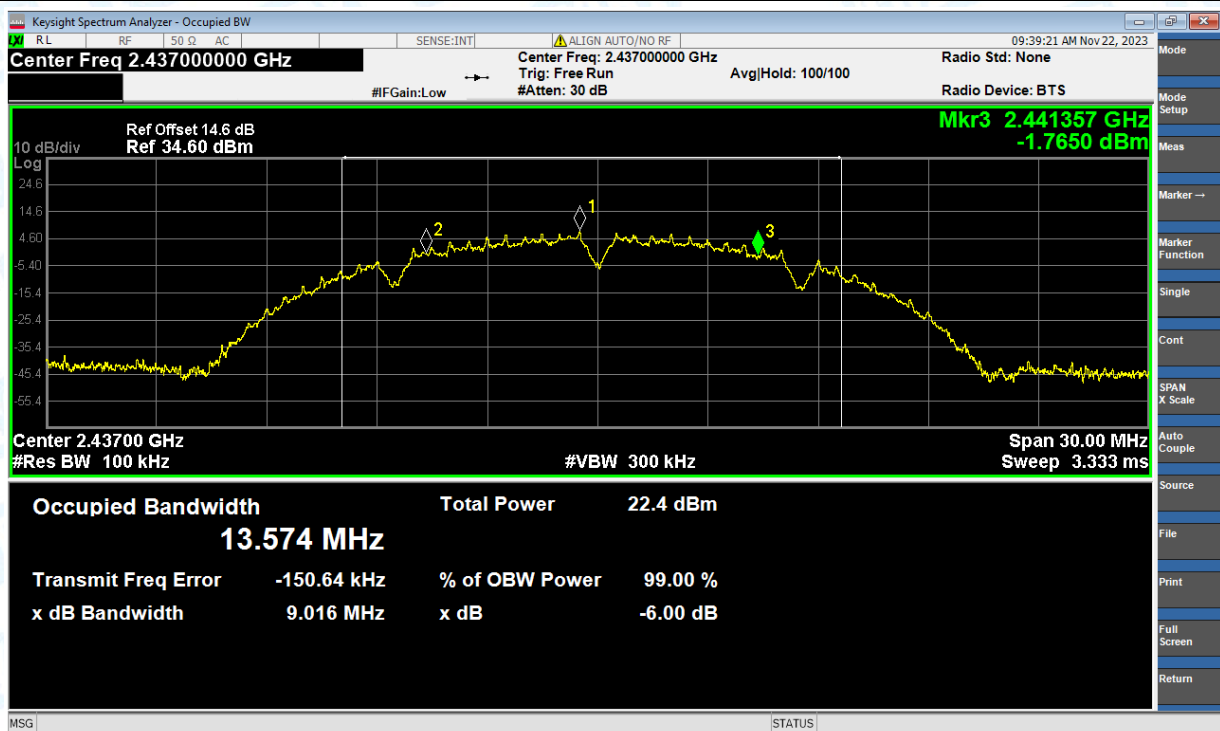
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	8.06	0.5	Pass
NVNT	b	2437	Ant1	9.02	0.5	Pass
NVNT	b	2462	Ant1	8.56	0.5	Pass
NVNT	g	2412	Ant1	16.34	0.5	Pass
NVNT	g	2437	Ant1	16.09	0.5	Pass
NVNT	g	2462	Ant1	16.47	0.5	Pass
NVNT	n(HT20)	2412	Ant1	17.31	0.5	Pass
NVNT	n(HT20)	2437	Ant1	17.17	0.5	Pass
NVNT	n(HT20)	2462	Ant1	17.58	0.5	Pass
NVNT	n(HT40)	2422	Ant1	35.73	0.5	Pass
NVNT	n(HT40)	2437	Ant1	34.43	0.5	Pass
NVNT	n(HT40)	2452	Ant1	35.7	0.5	Pass

Test Graphs

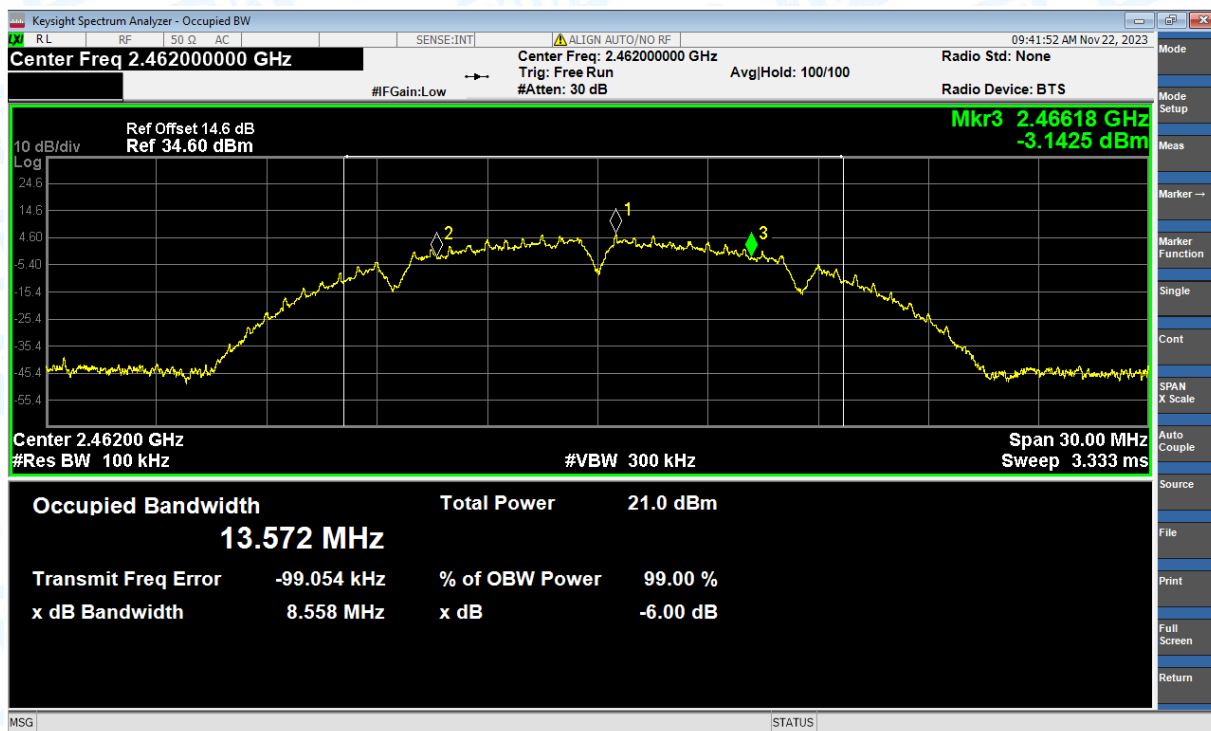
-6dB Bandwidth NVNT b 2412MHz Ant1



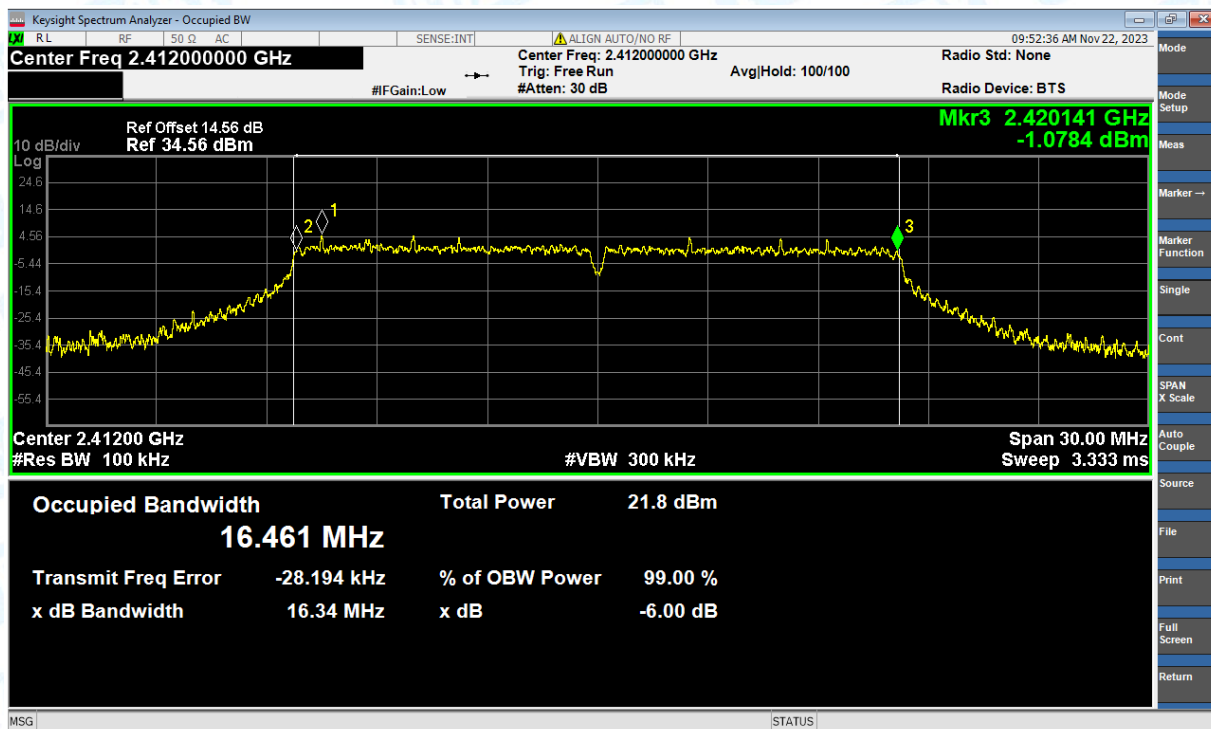
-6dB Bandwidth NVNT b 2437MHz Ant1



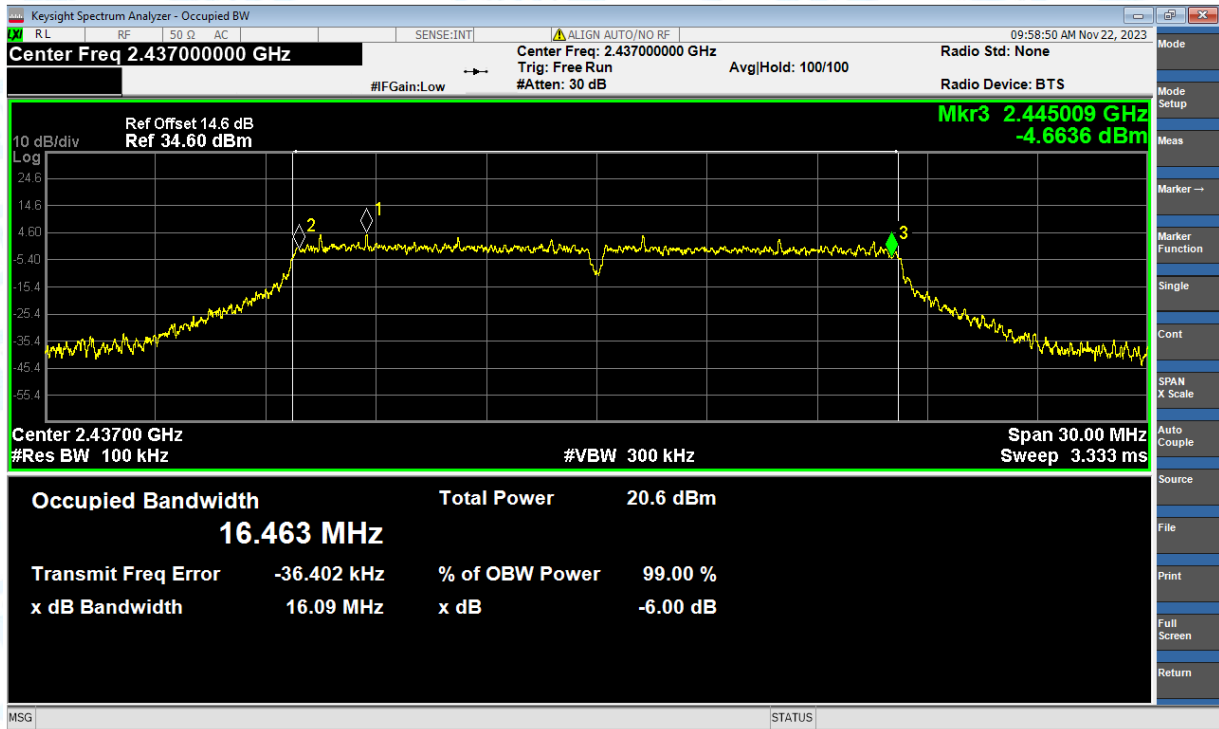
-6dB Bandwidth NVNT b 2462MHz Ant1



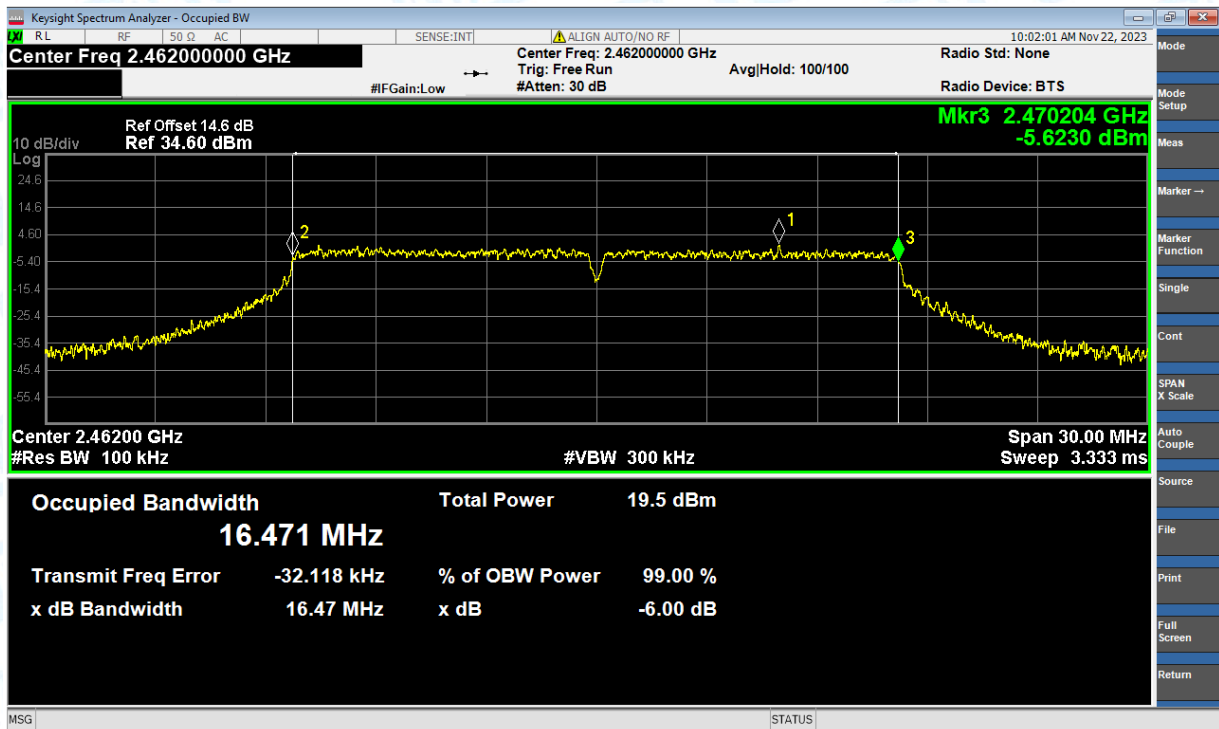
-6dB Bandwidth NVNT g 2412MHz Ant1



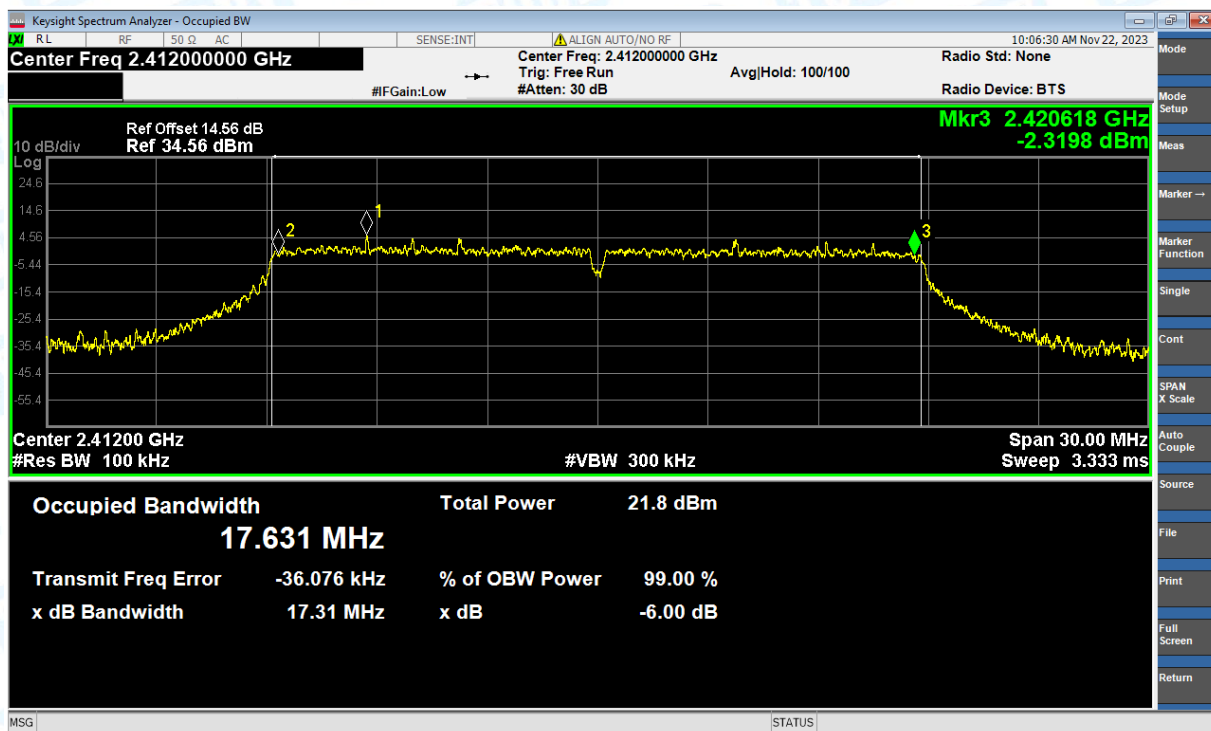
-6dB Bandwidth NVNT g 2437MHz Ant1



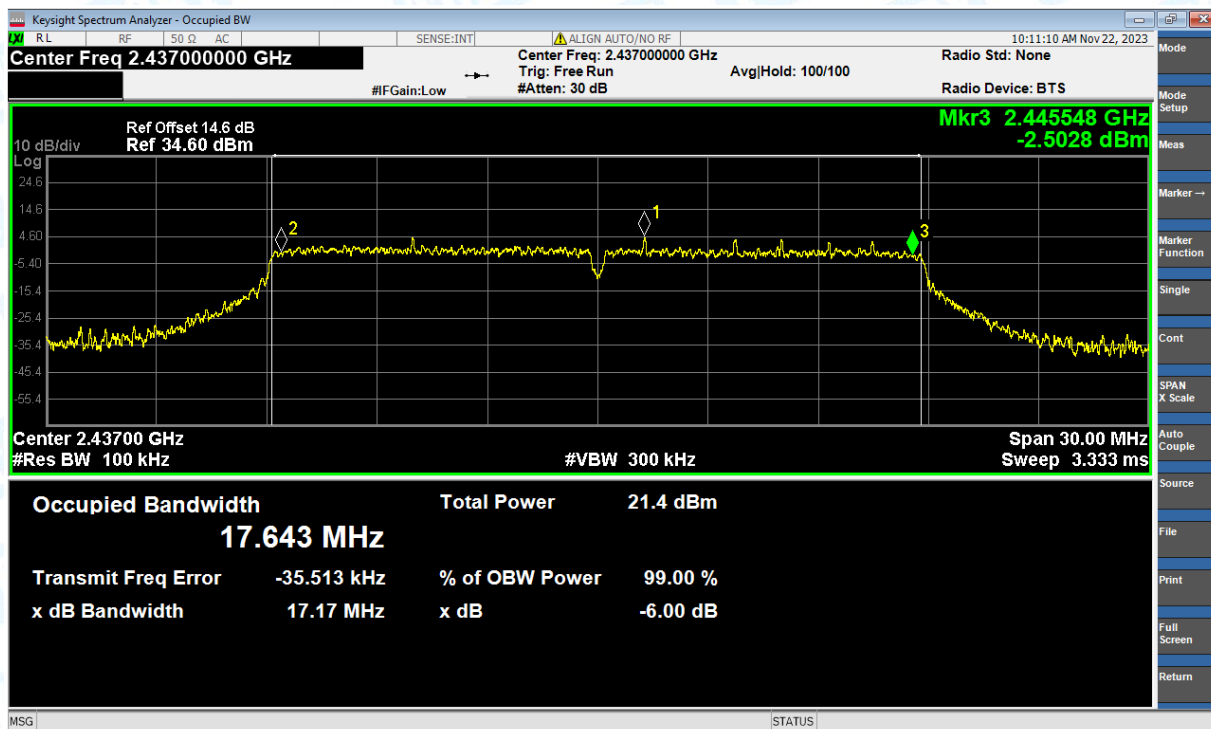
-6dB Bandwidth NVNT g 2462MHz Ant1



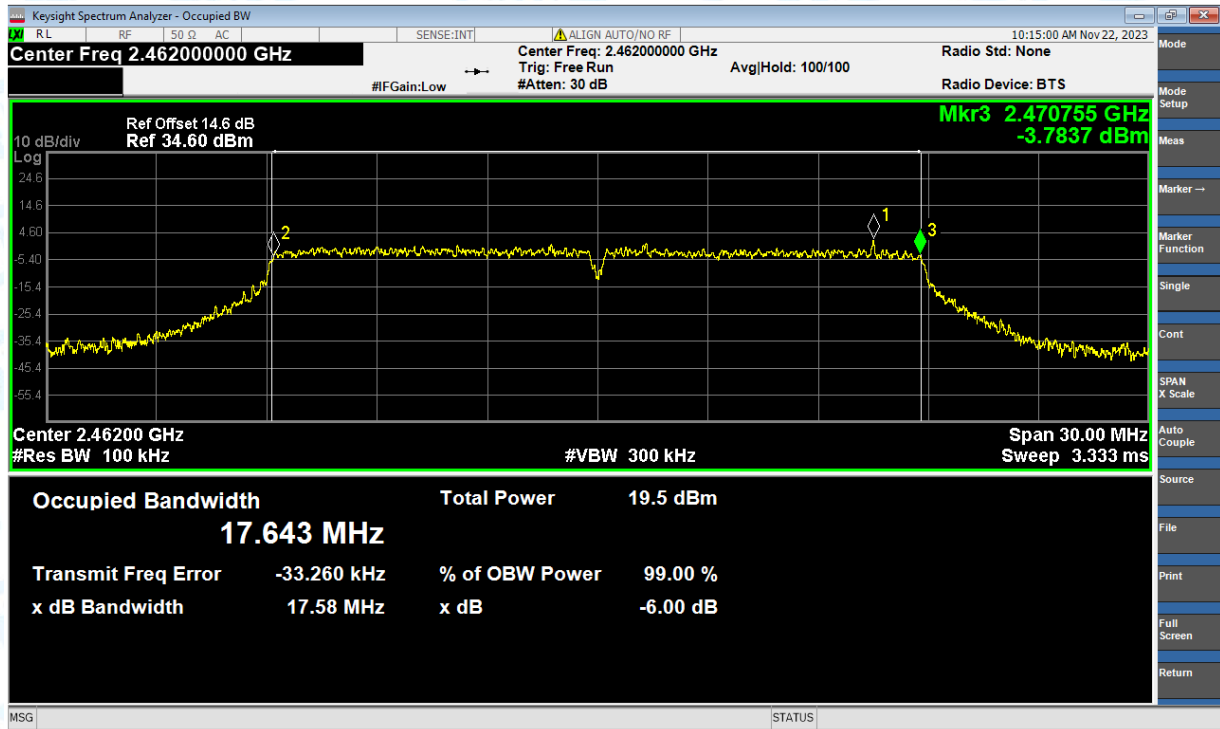
-6dB Bandwidth NVNT n(HT20) 2412MHz Ant1



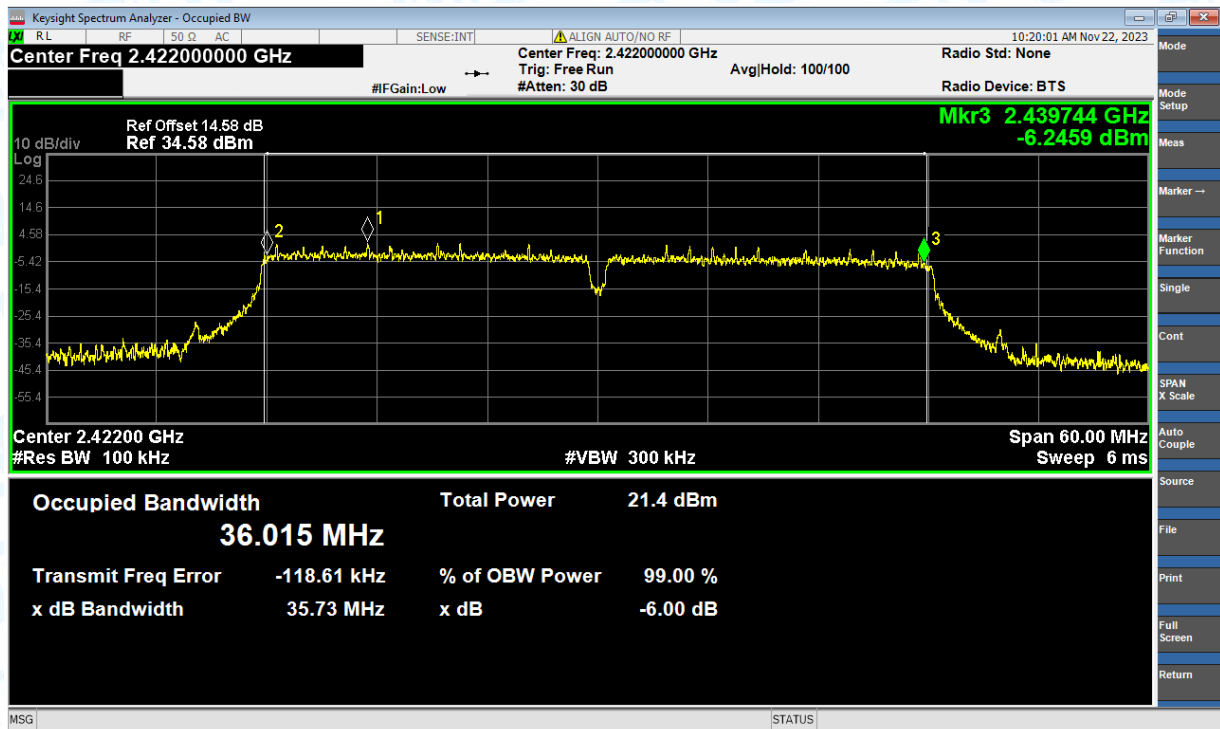
-6dB Bandwidth NVNT n(HT20) 2437MHz Ant1



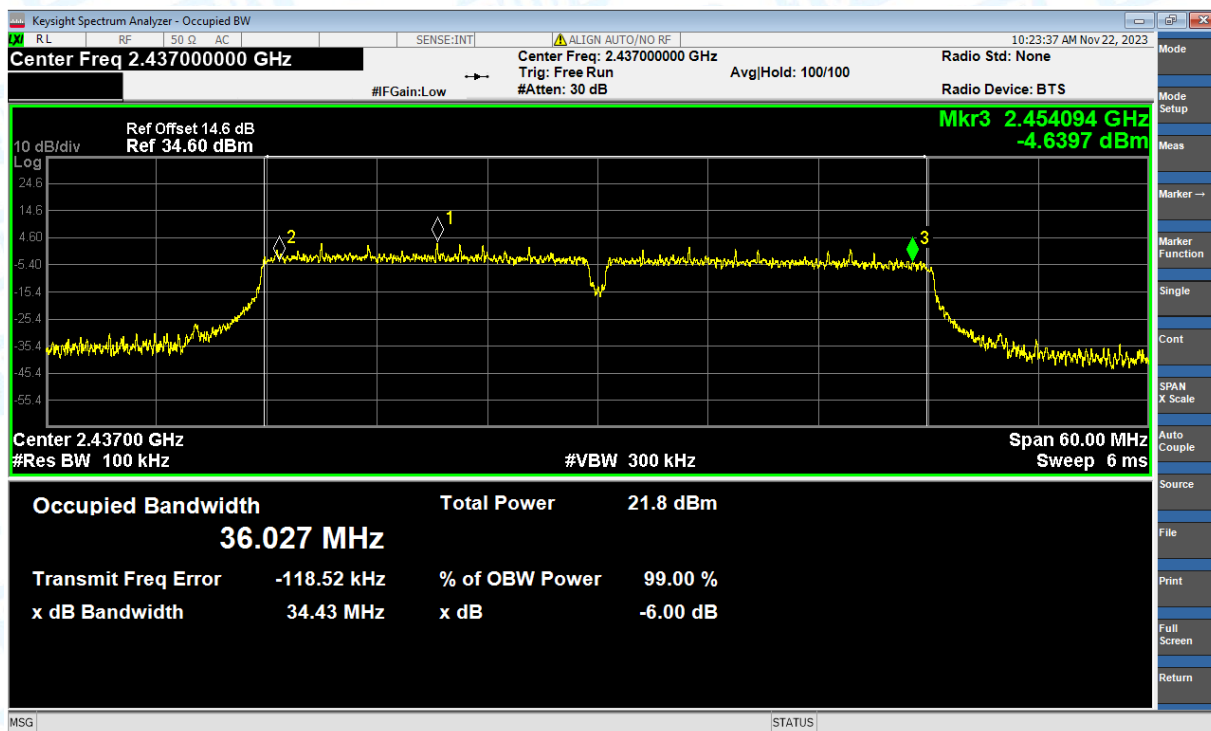
-6dB Bandwidth NVNT n(HT20) 2462MHz Ant1



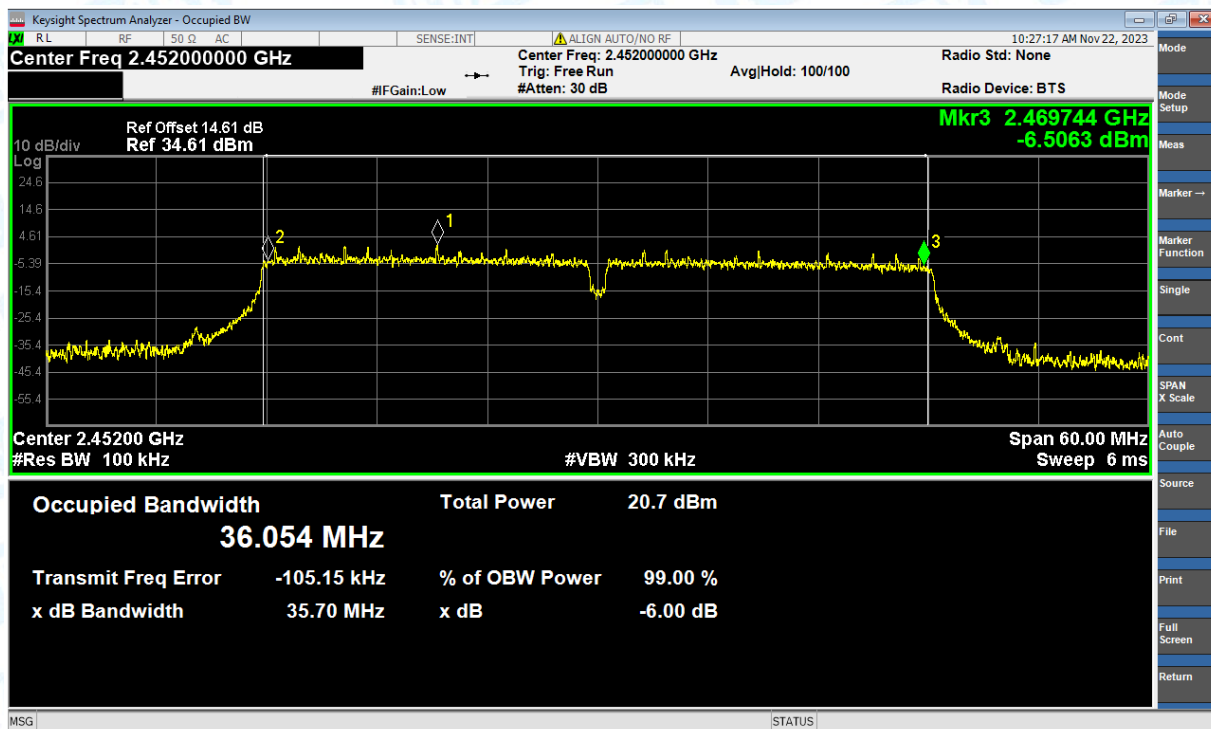
-6dB Bandwidth NVNT n(HT40) 2422MHz Ant1



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



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

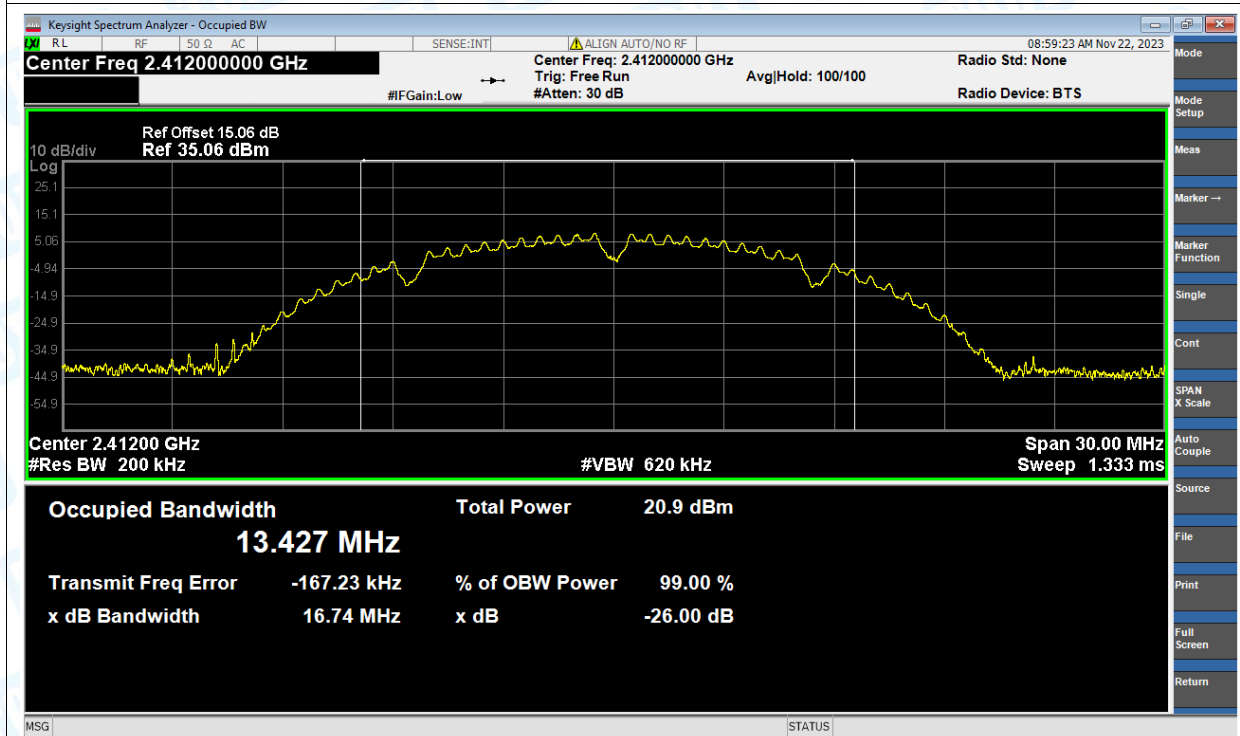


4. Occupied Channel Bandwidth

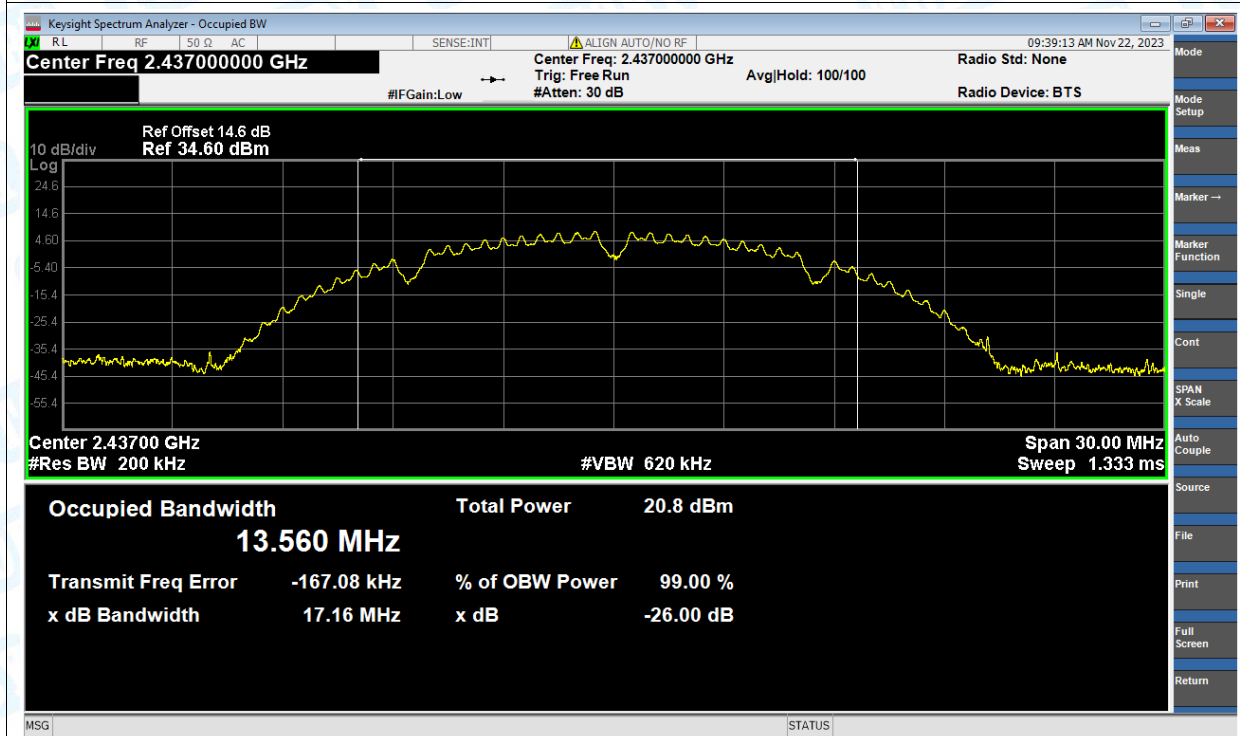
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	13.427
NVNT	b	2437	Ant1	13.56
NVNT	b	2462	Ant1	13.601
NVNT	g	2412	Ant1	16.598
NVNT	g	2437	Ant1	16.585
NVNT	g	2462	Ant1	16.592
NVNT	n(HT20)	2412	Ant1	17.7
NVNT	n(HT20)	2437	Ant1	17.703
NVNT	n(HT20)	2462	Ant1	17.697
NVNT	n(HT40)	2422	Ant1	36.204
NVNT	n(HT40)	2437	Ant1	36.198
NVNT	n(HT40)	2452	Ant1	36.226

Test Graphs

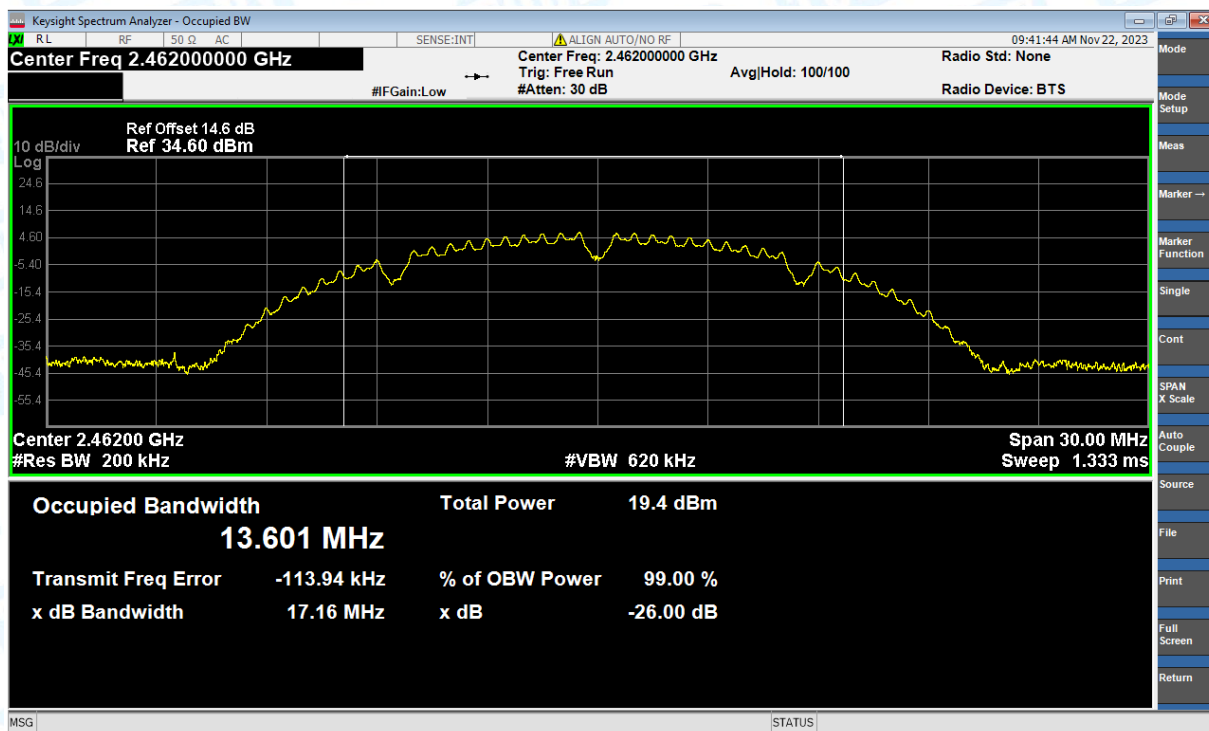
OBW NVNT b 2412MHz Ant1



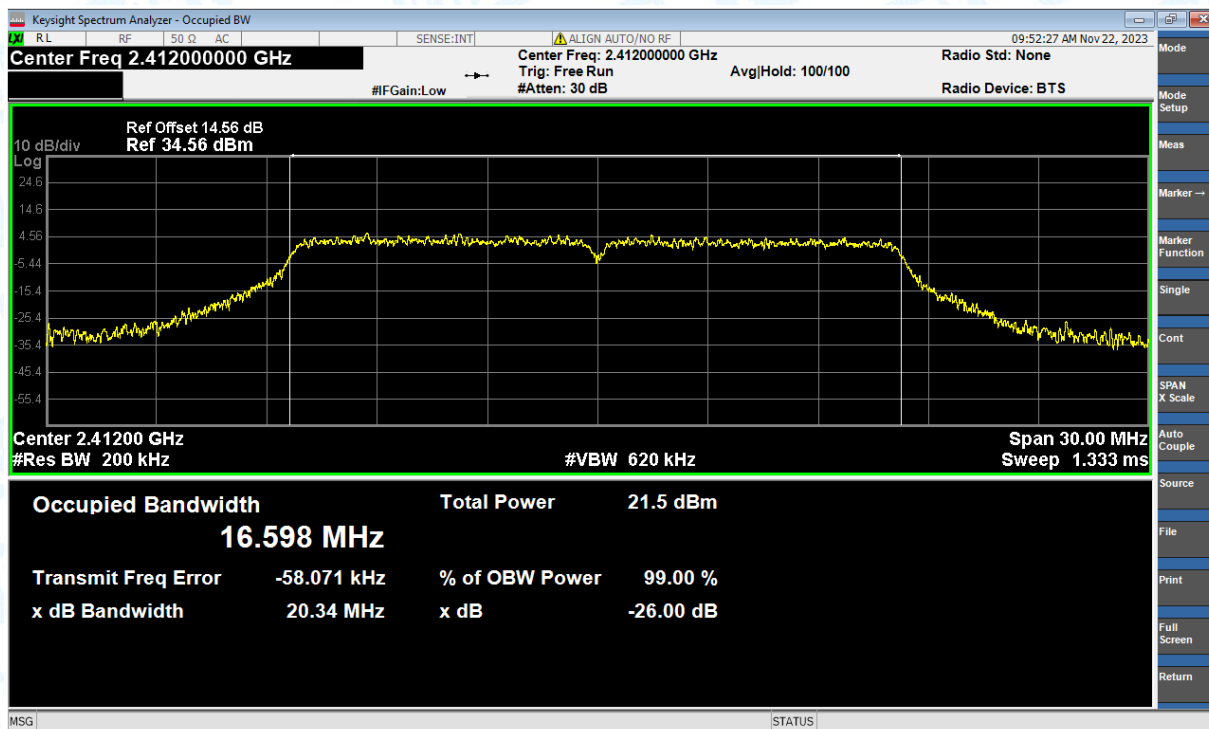
OBW NVNT b 2437MHz Ant1



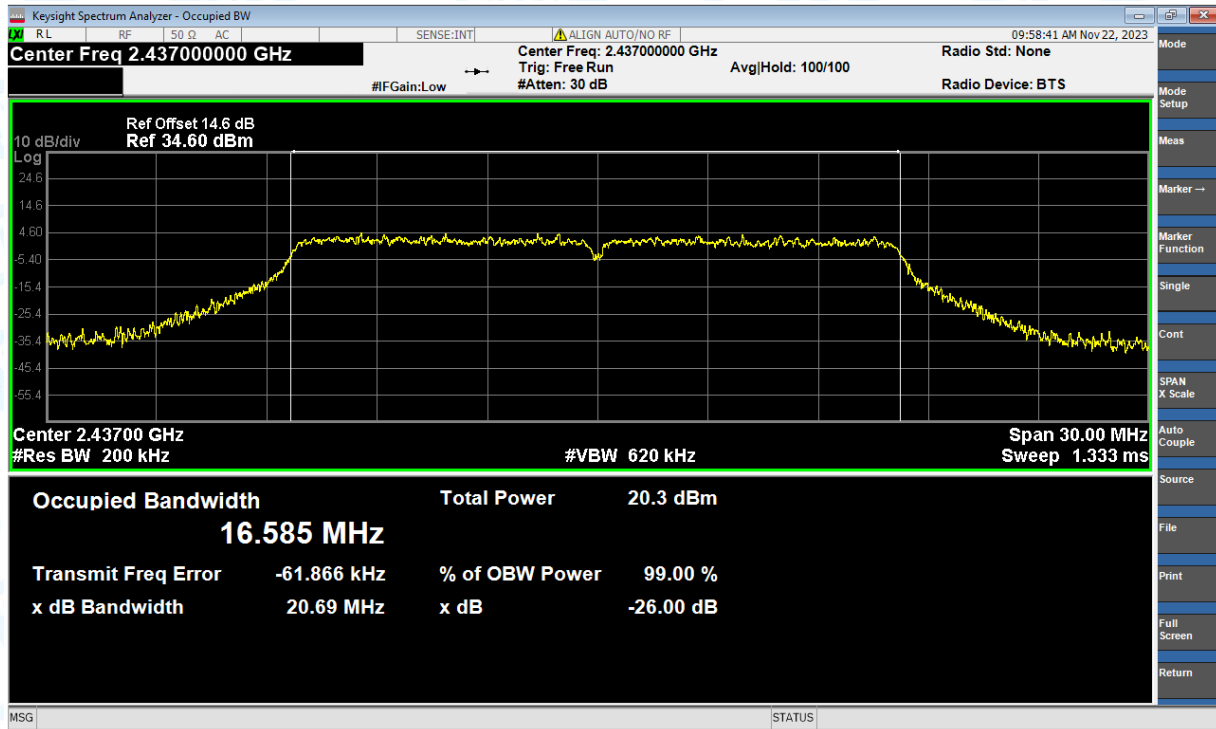
OBW NVNT b 2462MHz Ant1



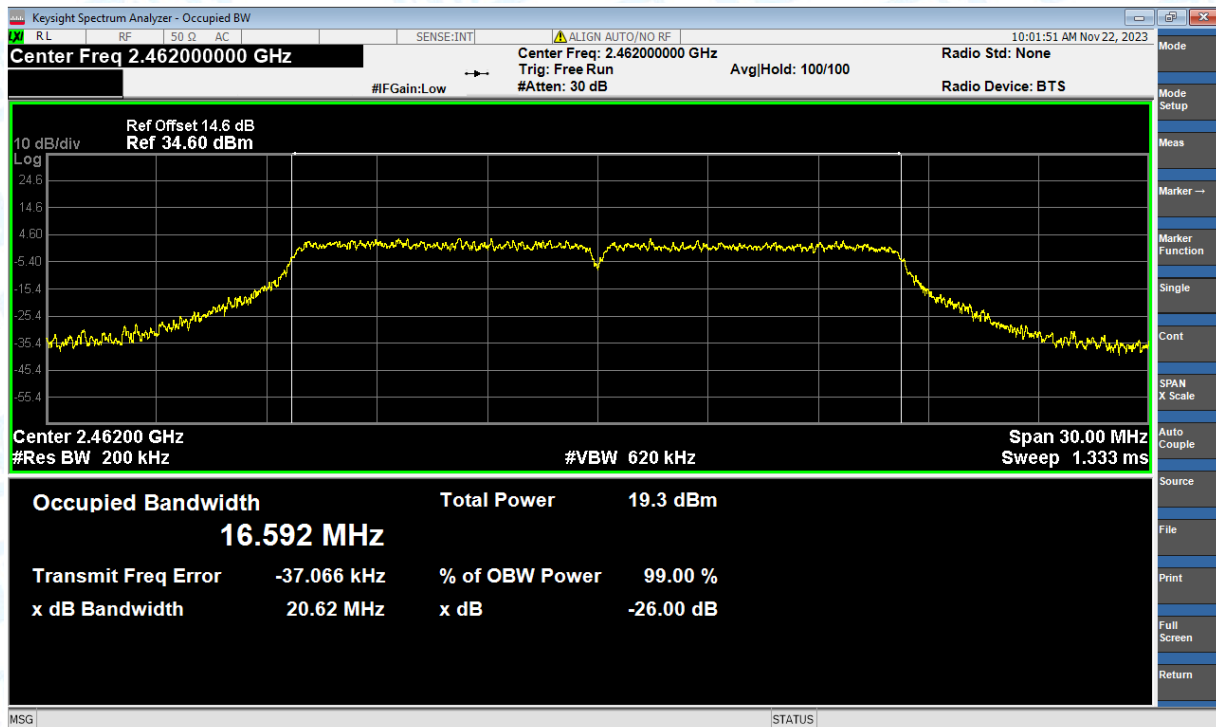
OBW NVNT g 2412MHz Ant1



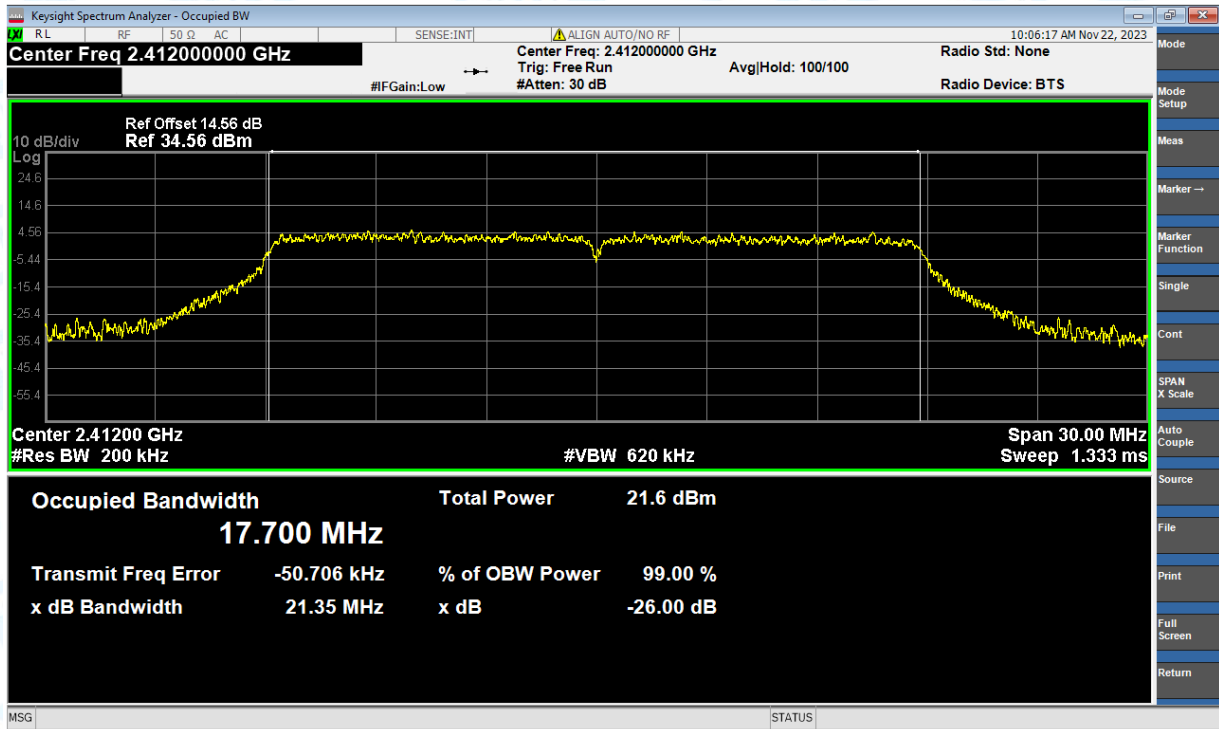
OBW NVNT g 2437MHz Ant1



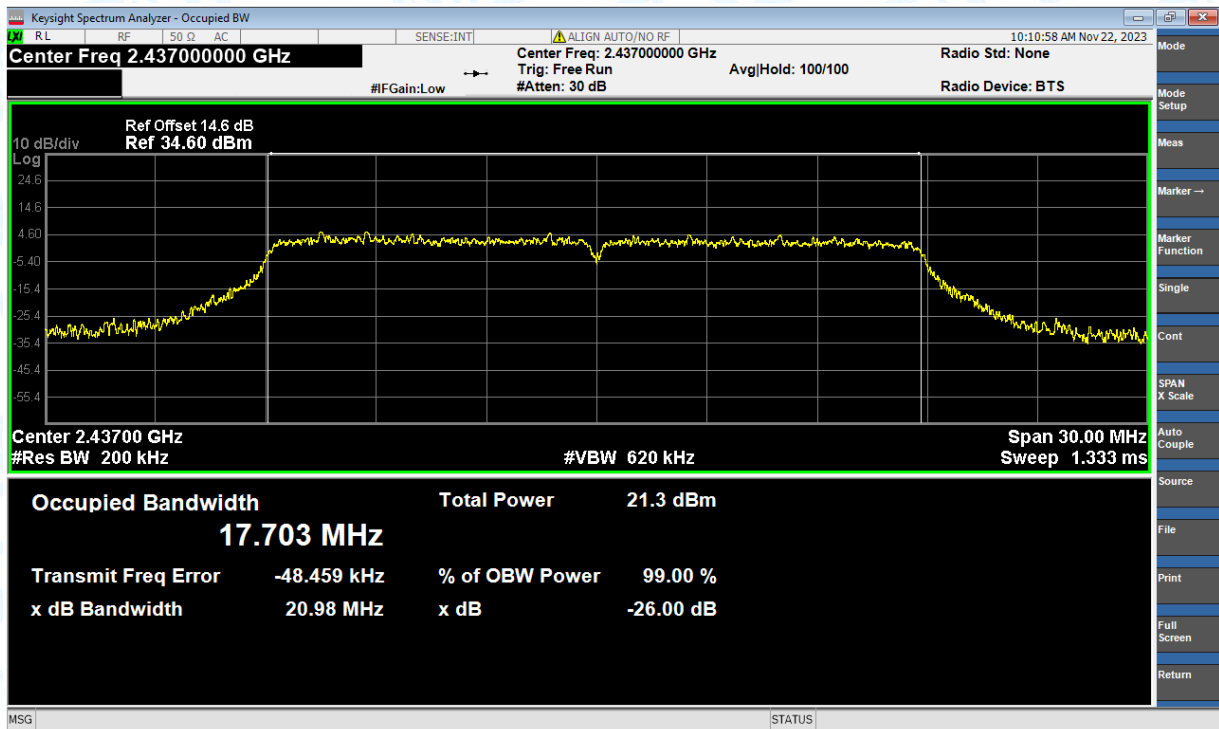
OBW NVNT g 2462MHz Ant1



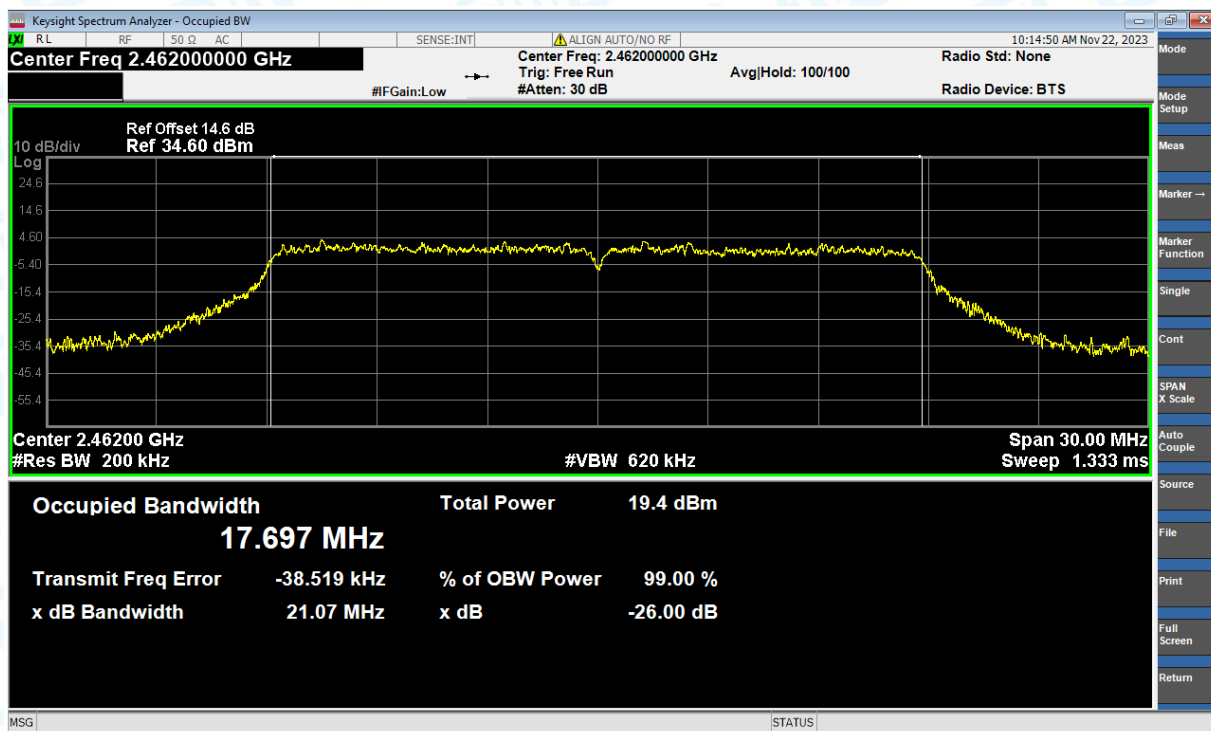
OBW NVNT n(HT20) 2412MHz Ant1



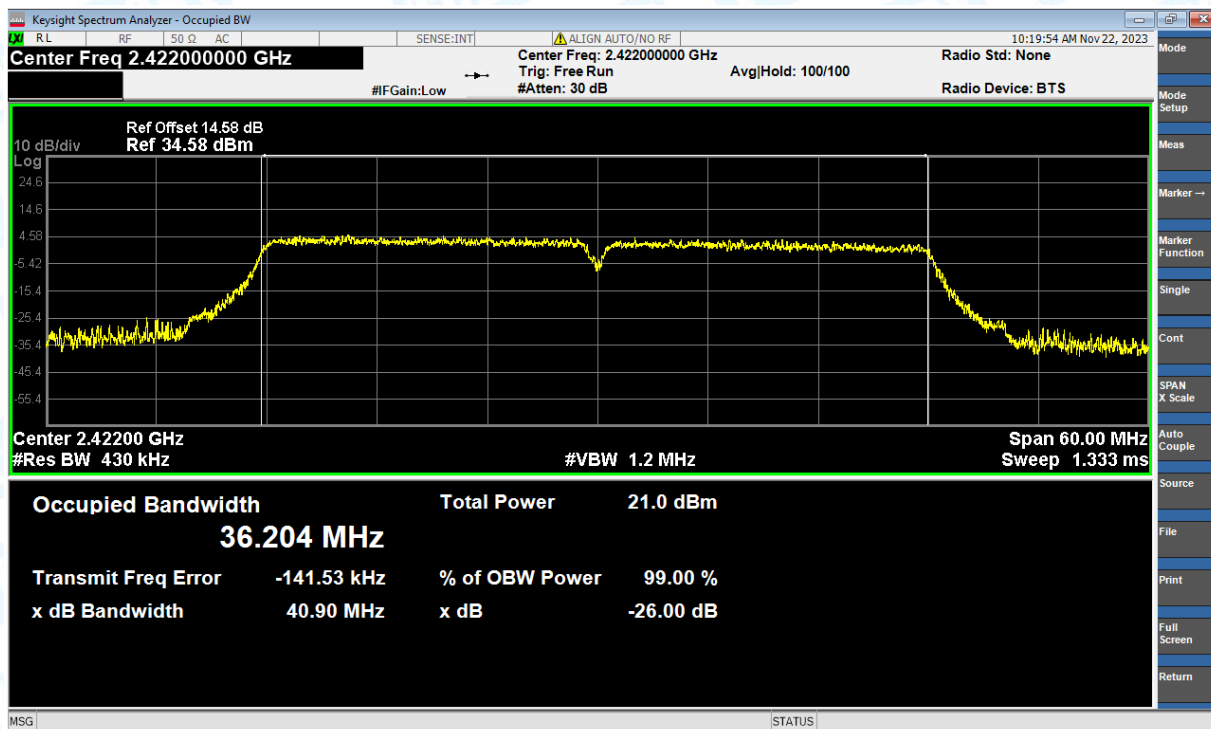
OBW NVNT n(HT20) 2437MHz Ant1



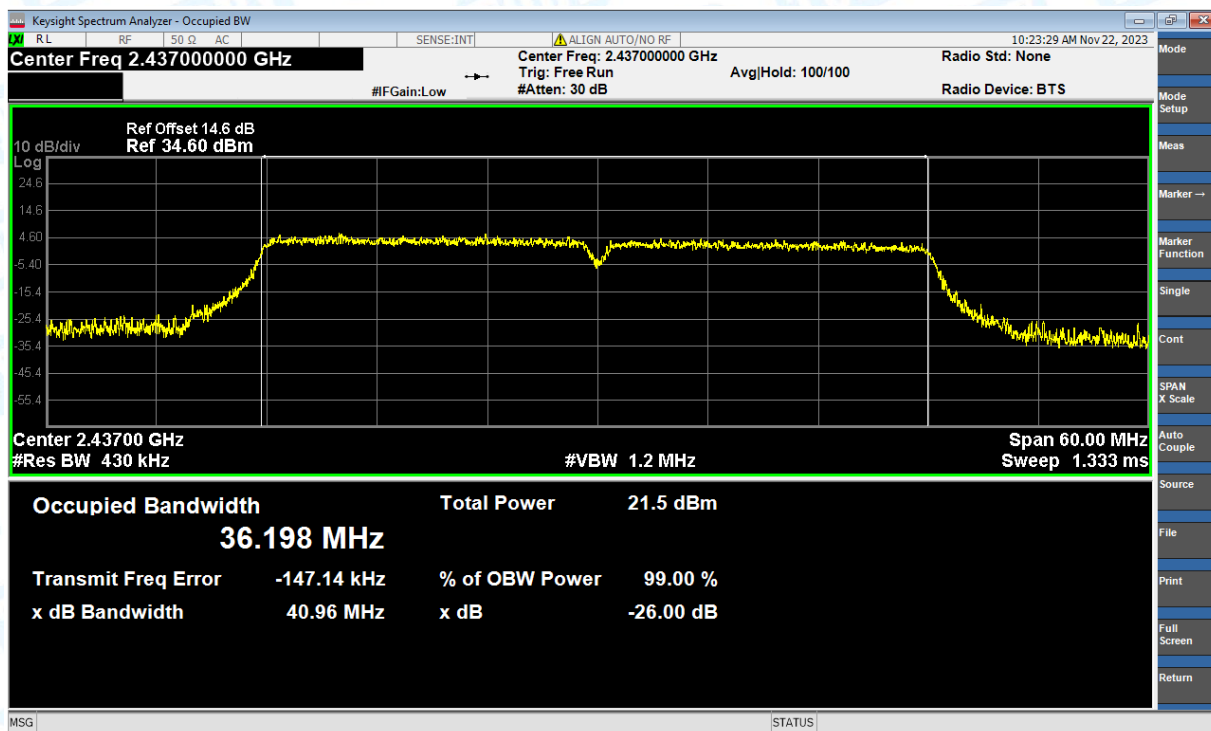
OBW NVNT n(HT20) 2462MHz Ant1



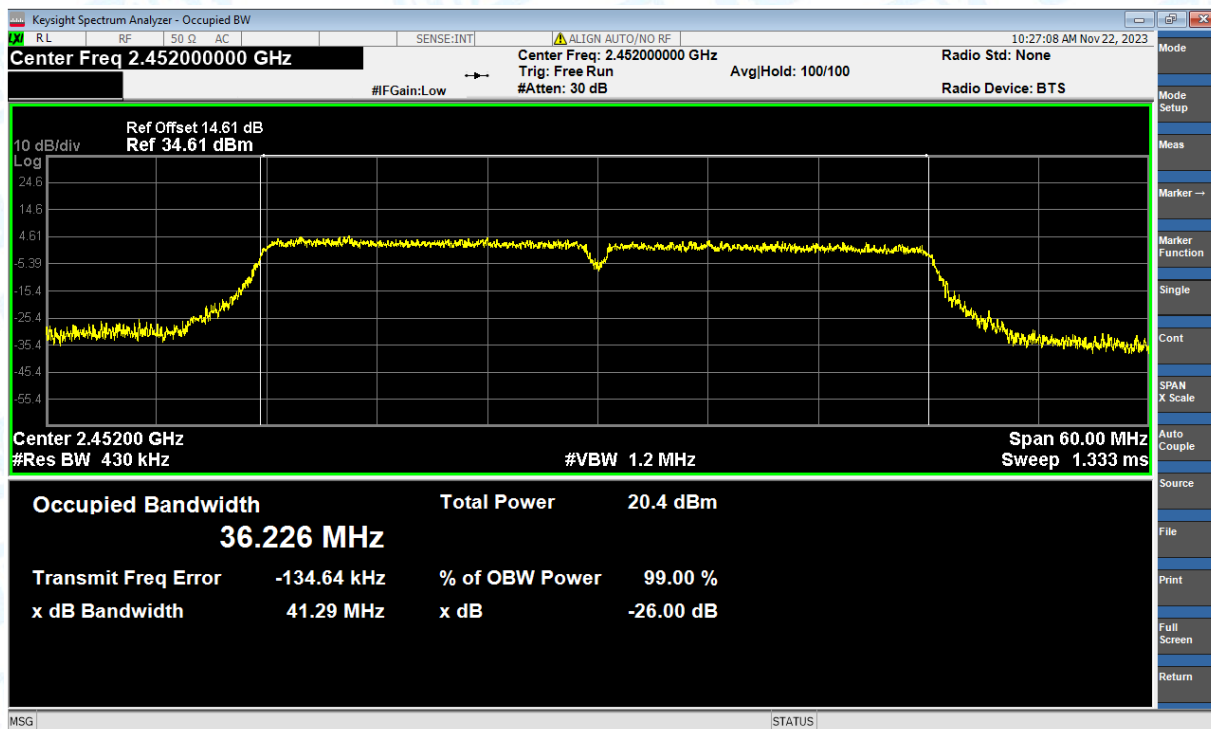
OBW NVNT n(HT40) 2422MHz Ant1



OBW NVNT n(HT40) 2437MHz Ant1



OBW NVNT n(HT40) 2452MHz Ant1



5. Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	-14.897	8	Pass
NVNT	b	2437	Ant1	-15.675	8	Pass
NVNT	b	2462	Ant1	-15.267	8	Pass
NVNT	g	2412	Ant1	-20.81	8	Pass
NVNT	g	2437	Ant1	-18.829	8	Pass
NVNT	g	2462	Ant1	-23.017	8	Pass
NVNT	n(HT20)	2412	Ant1	-21.065	8	Pass
NVNT	n(HT20)	2437	Ant1	-18.798	8	Pass
NVNT	n(HT20)	2462	Ant1	-23.109	8	Pass
NVNT	n(HT40)	2422	Ant1	-25.933	8	Pass
NVNT	n(HT40)	2437	Ant1	-21.31	8	Pass
NVNT	n(HT40)	2452	Ant1	-26.655	8	Pass

Note: The Duty Cycle Factor is compensated in the graph.

Test Graphs

PSD NVNT b 2412MHz Ant1



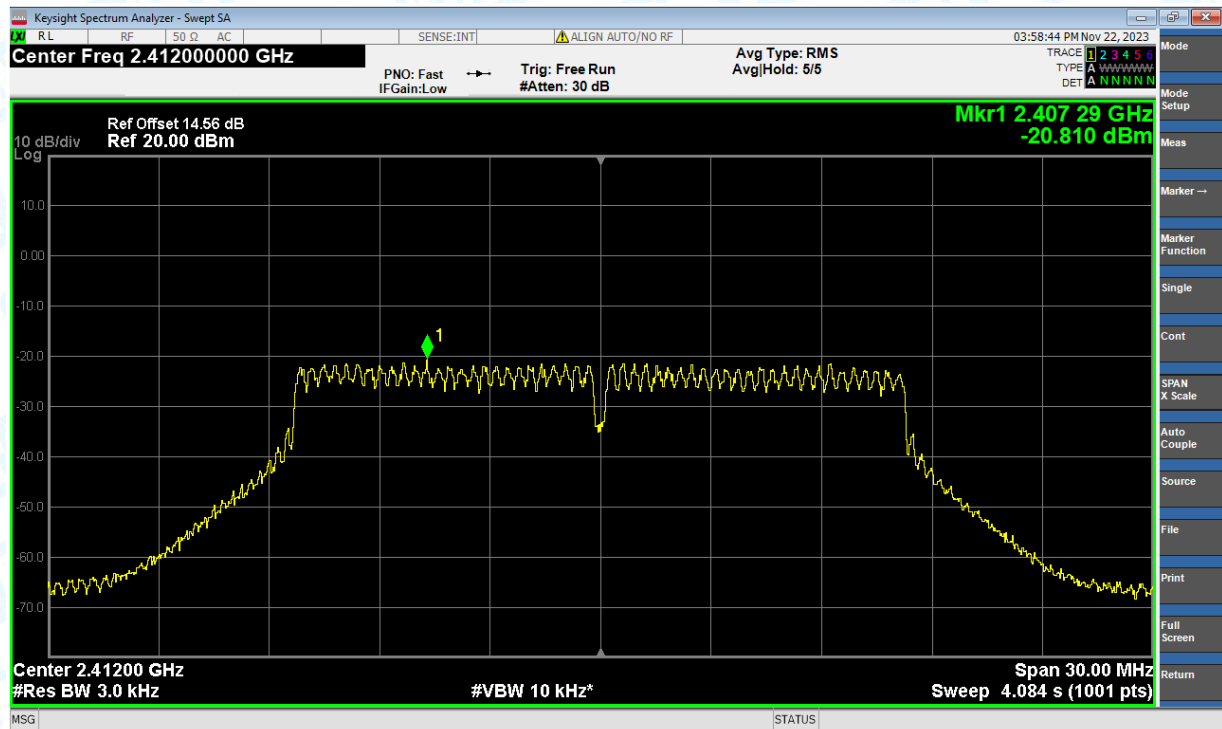
PSD NVNT b 2437MHz Ant1



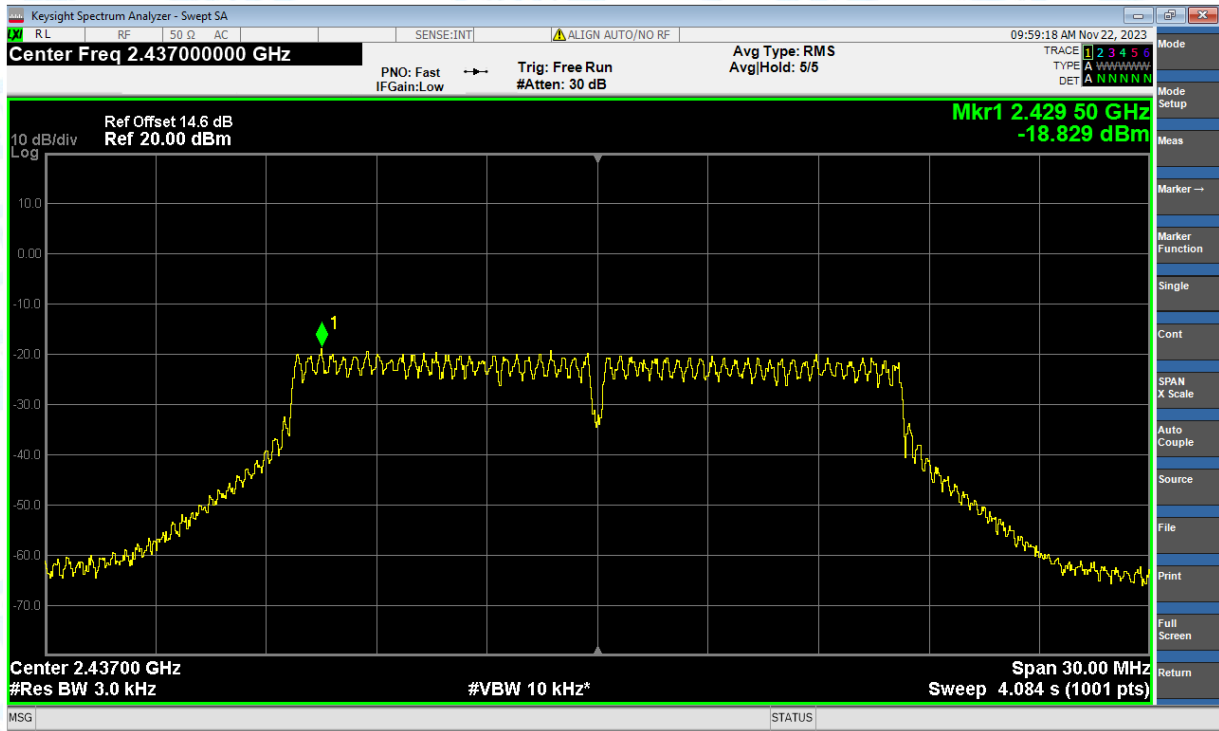
PSD NVNT b 2462MHz Ant1



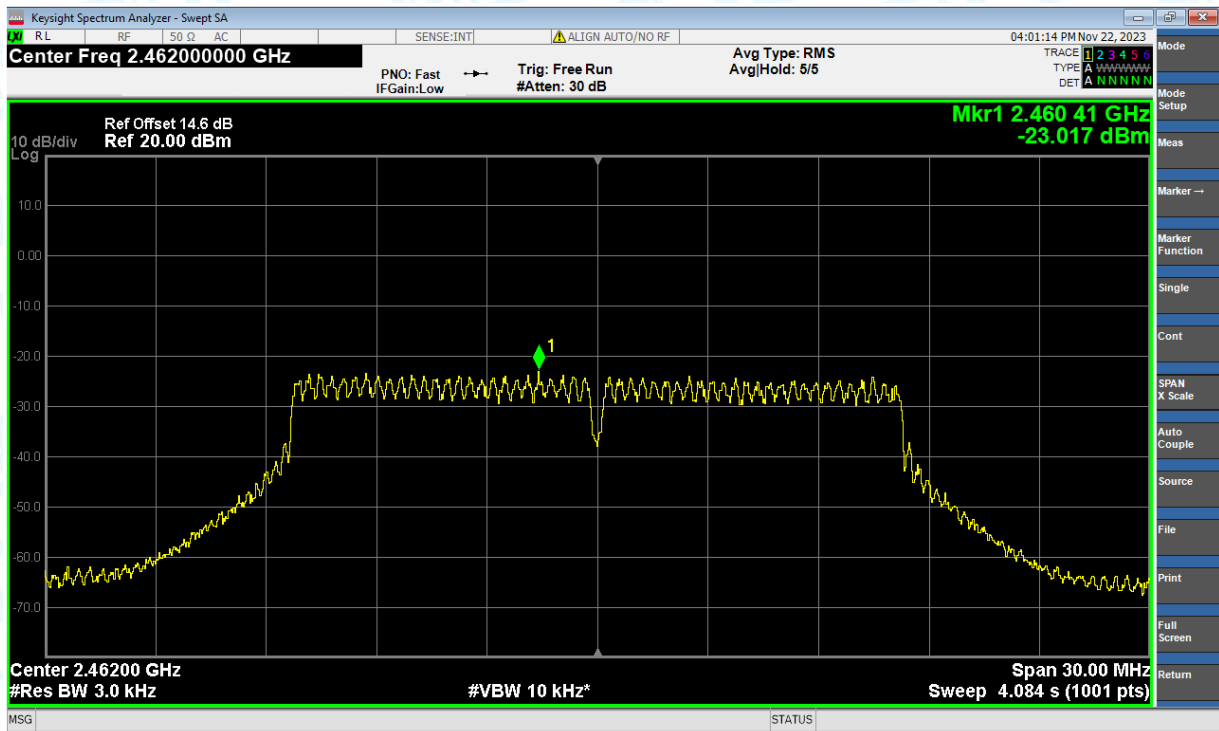
PSD NVNT g 2412MHz Ant1



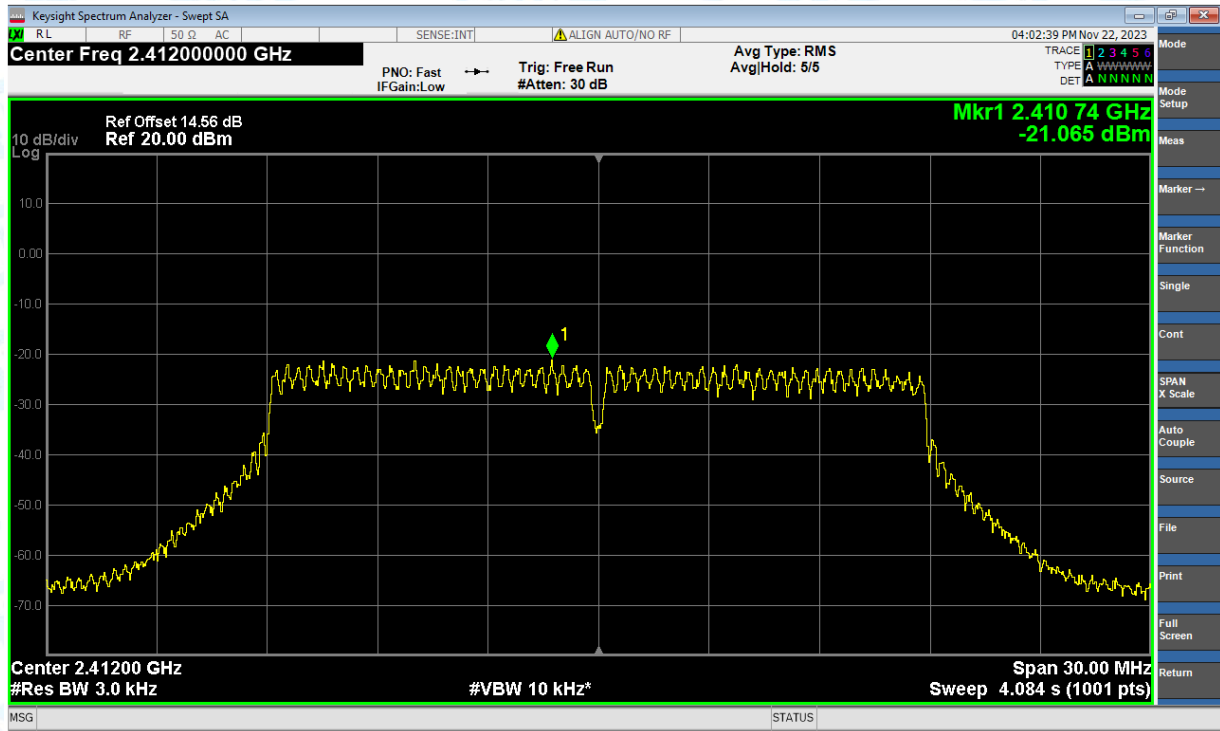
PSD NVNT g 2437MHz Ant1



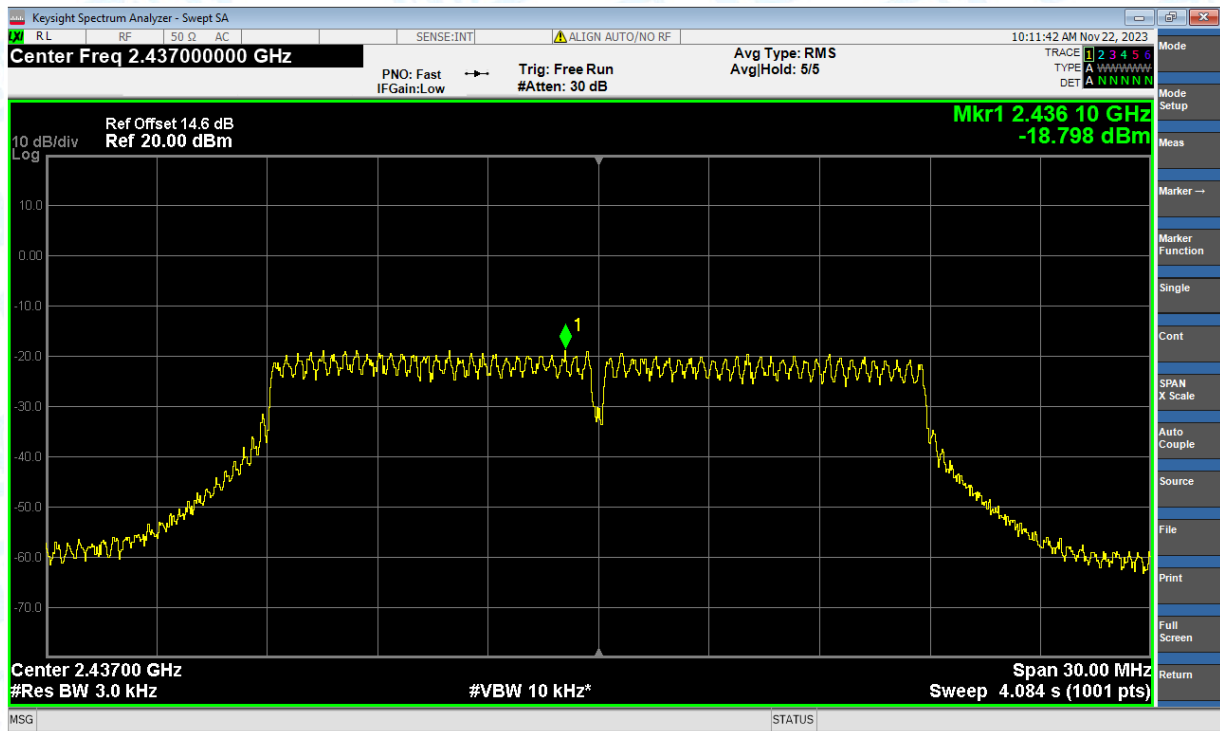
PSD NVNT g 2462MHz Ant1

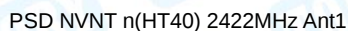


PSD NVNT n(HT20) 2412MHz Ant1

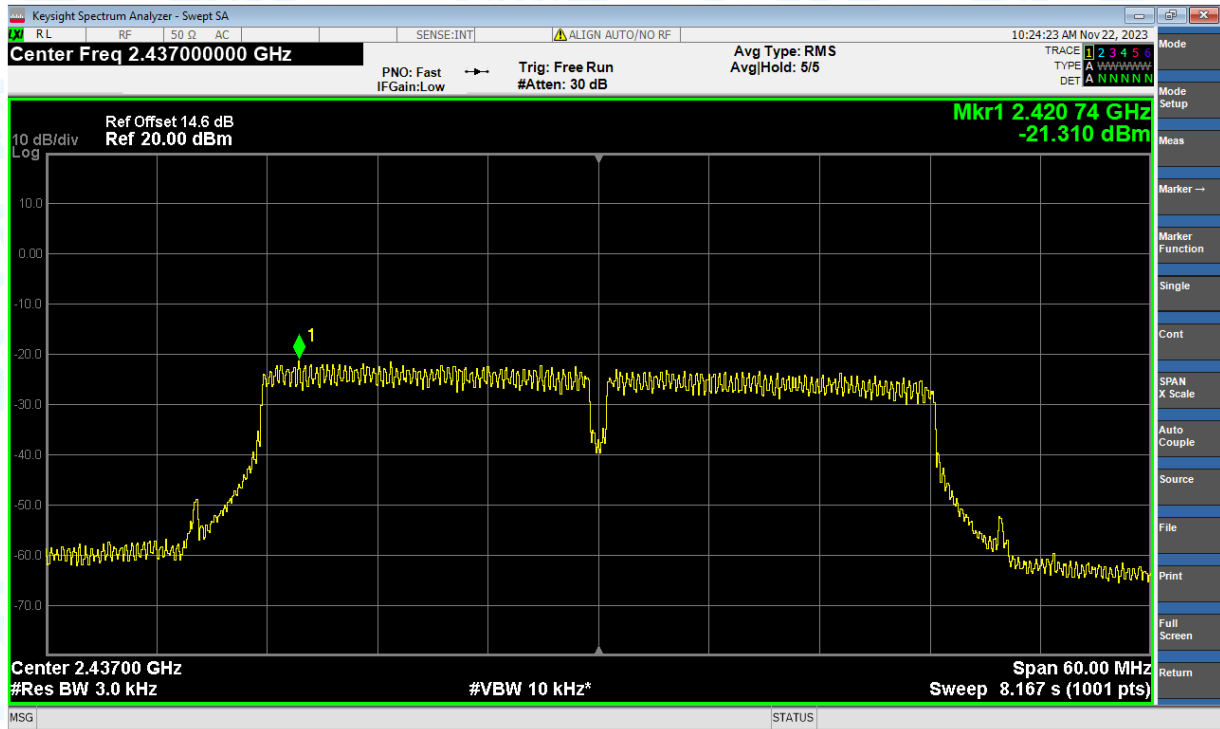


PSD NVNT n(HT20) 2437MHz Ant1

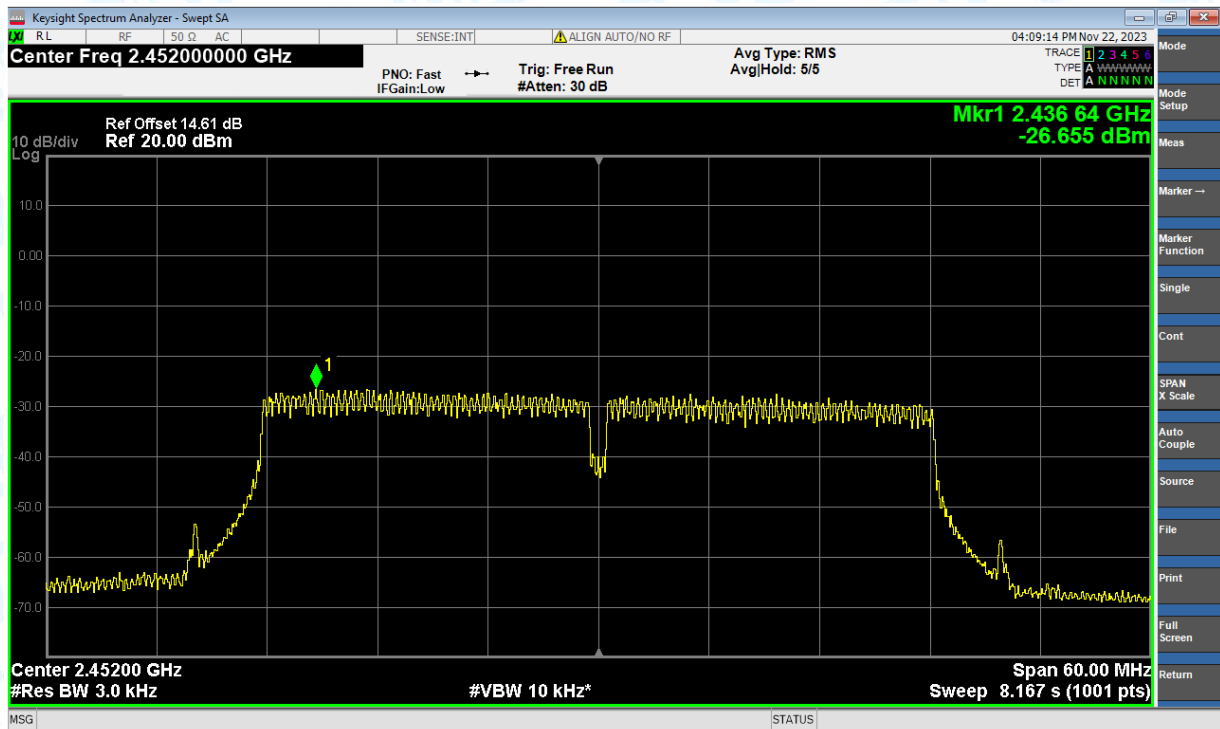




PSD NVNT n(HT40) 2437MHz Ant1



PSD NVNT n(HT40) 2452MHz Ant1

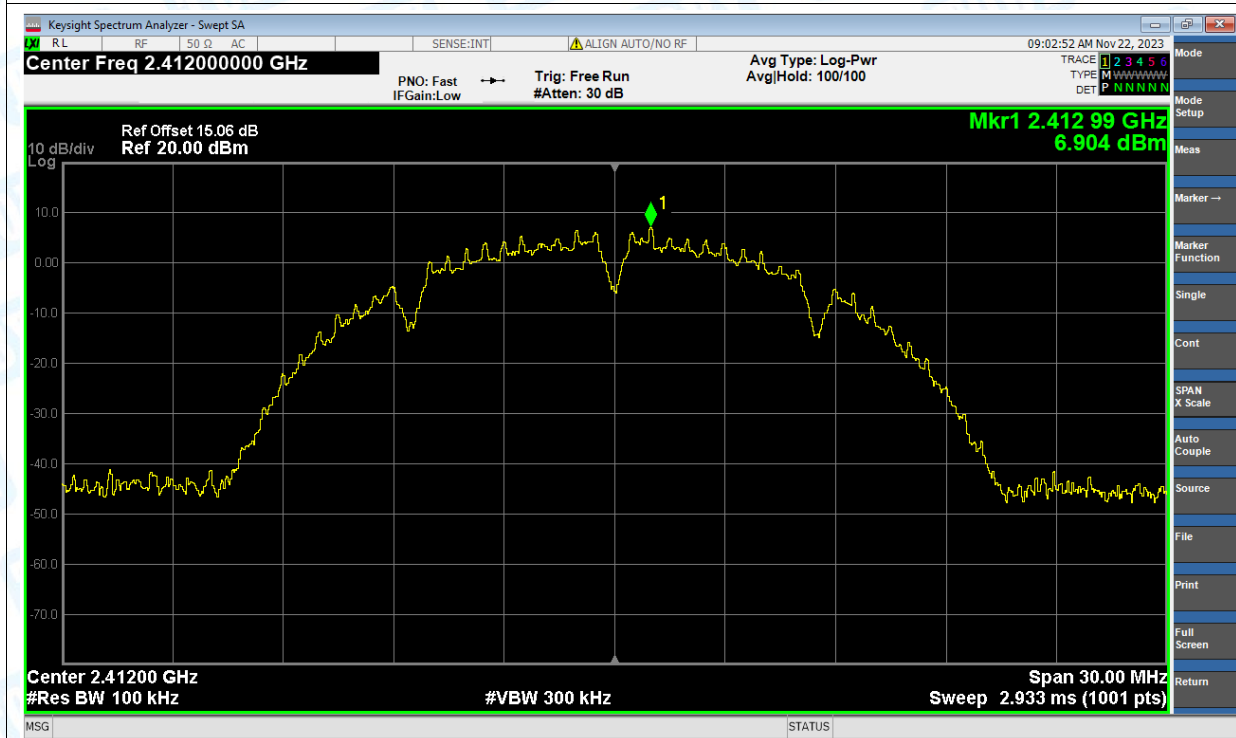


6. Band Edge

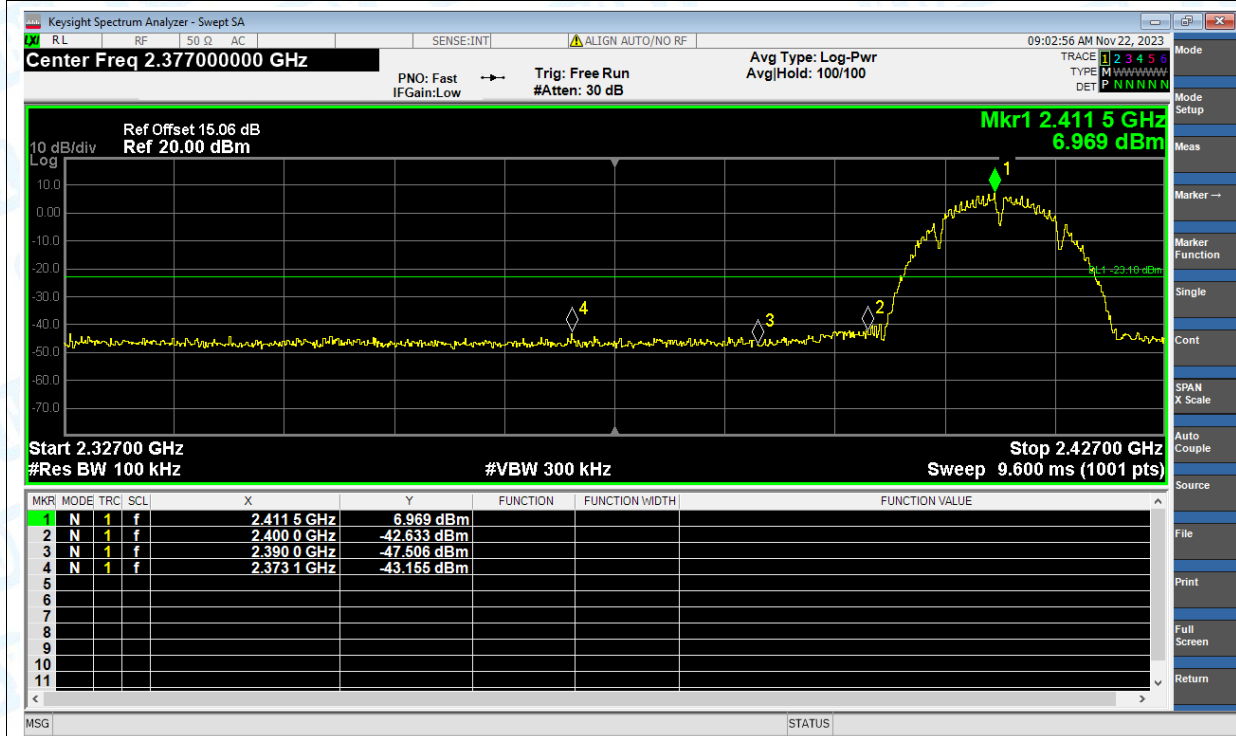
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-50.05	-30	Pass
NVNT	b	2462	Ant1	-50.15	-30	Pass
NVNT	g	2412	Ant1	-44.6	-30	Pass
NVNT	g	2462	Ant1	-45.45	-30	Pass
NVNT	n(HT20)	2412	Ant1	-41.88	-30	Pass
NVNT	n(HT20)	2462	Ant1	-41.87	-30	Pass
NVNT	n(HT40)	2422	Ant1	-38.07	-30	Pass
NVNT	n(HT40)	2452	Ant1	-41.37	-30	Pass

Test Graphs

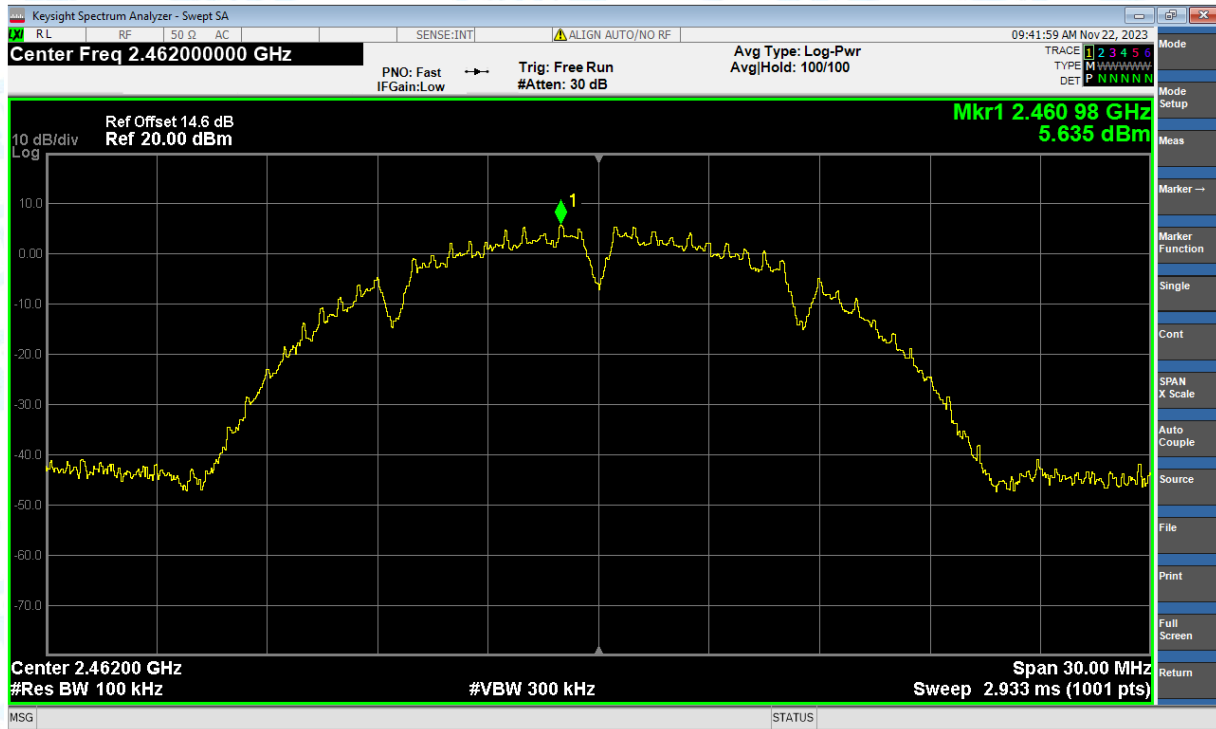
Band Edge NVNT b 2412MHz Ant1 Ref



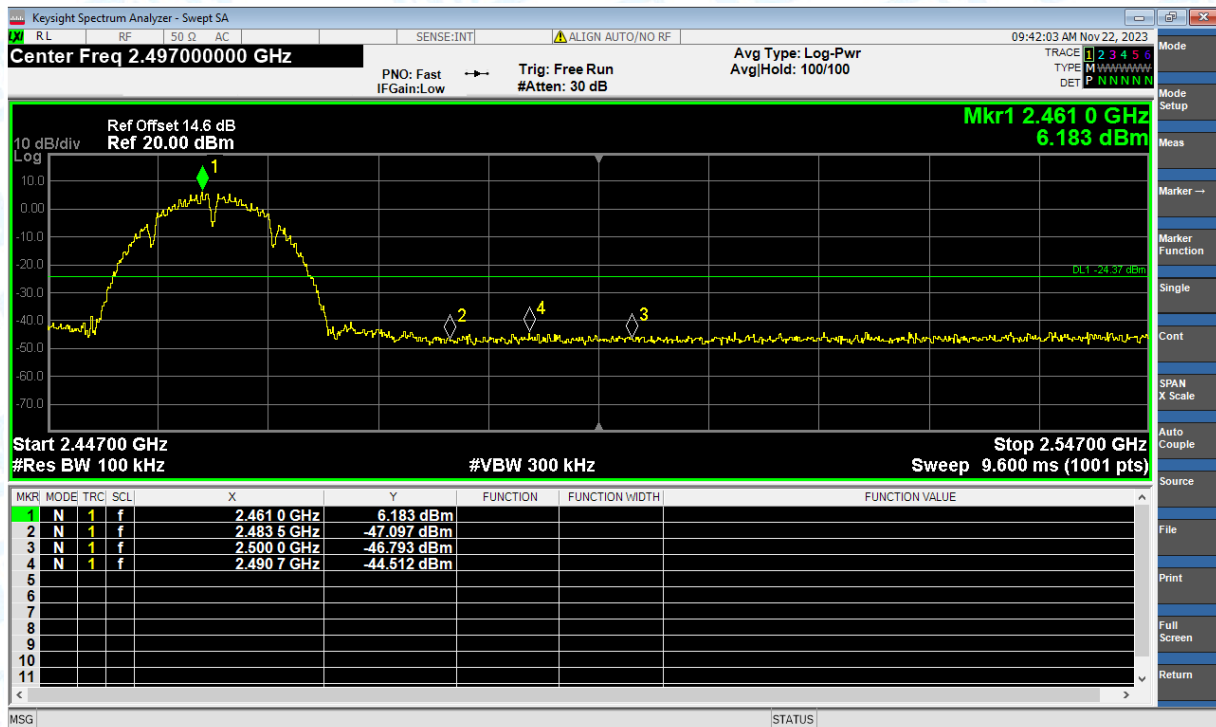
Band Edge NVNT b 2412MHz Ant1 Emission



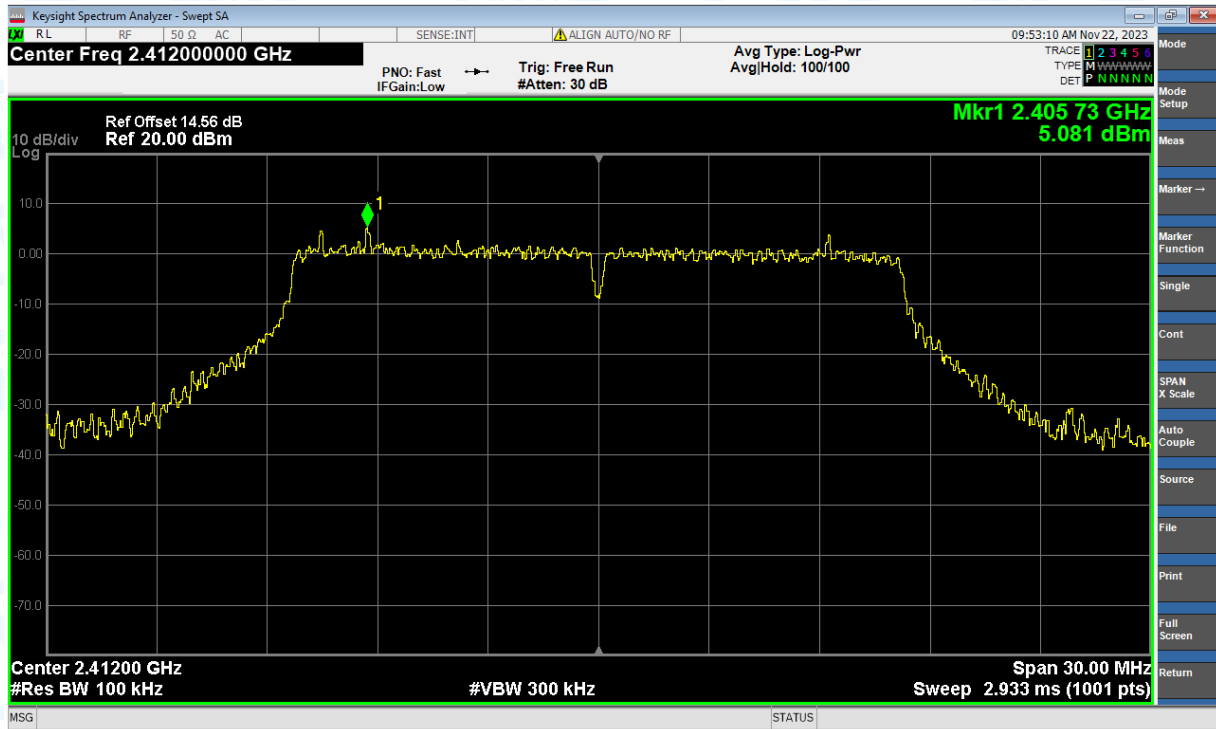
Band Edge NVNT b 2462MHz Ant1 Ref



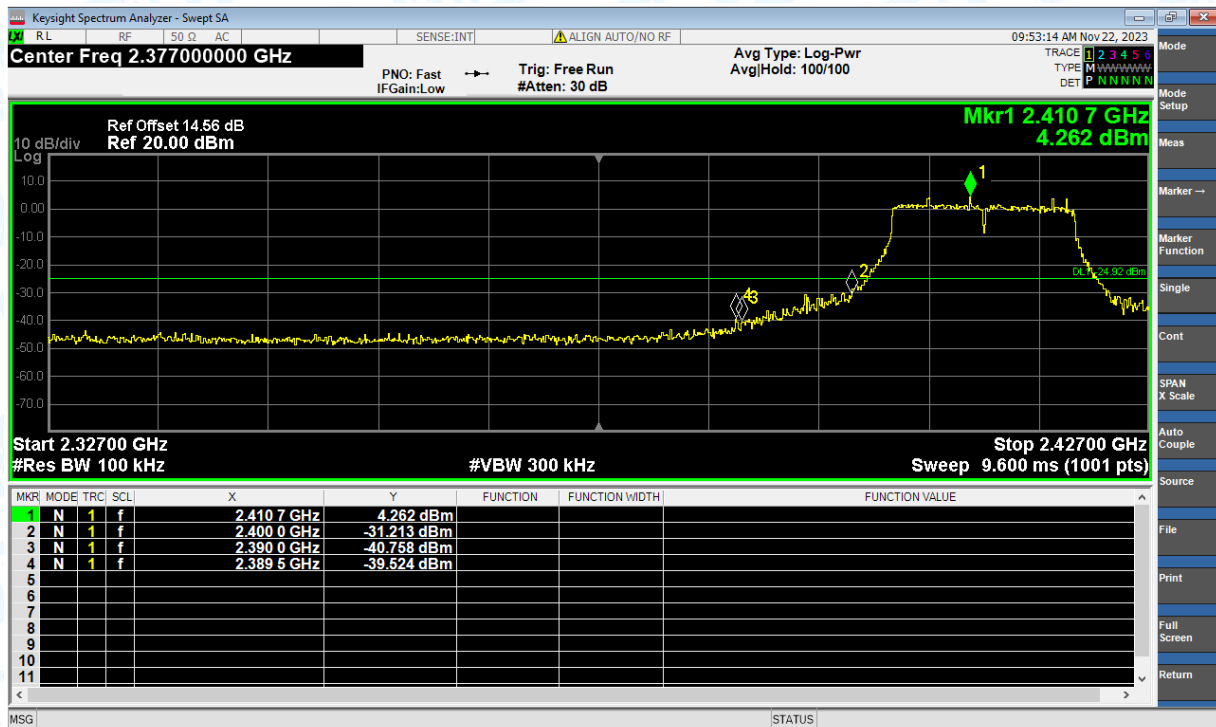
Band Edge NVNT b 2462MHz Ant1 Emission



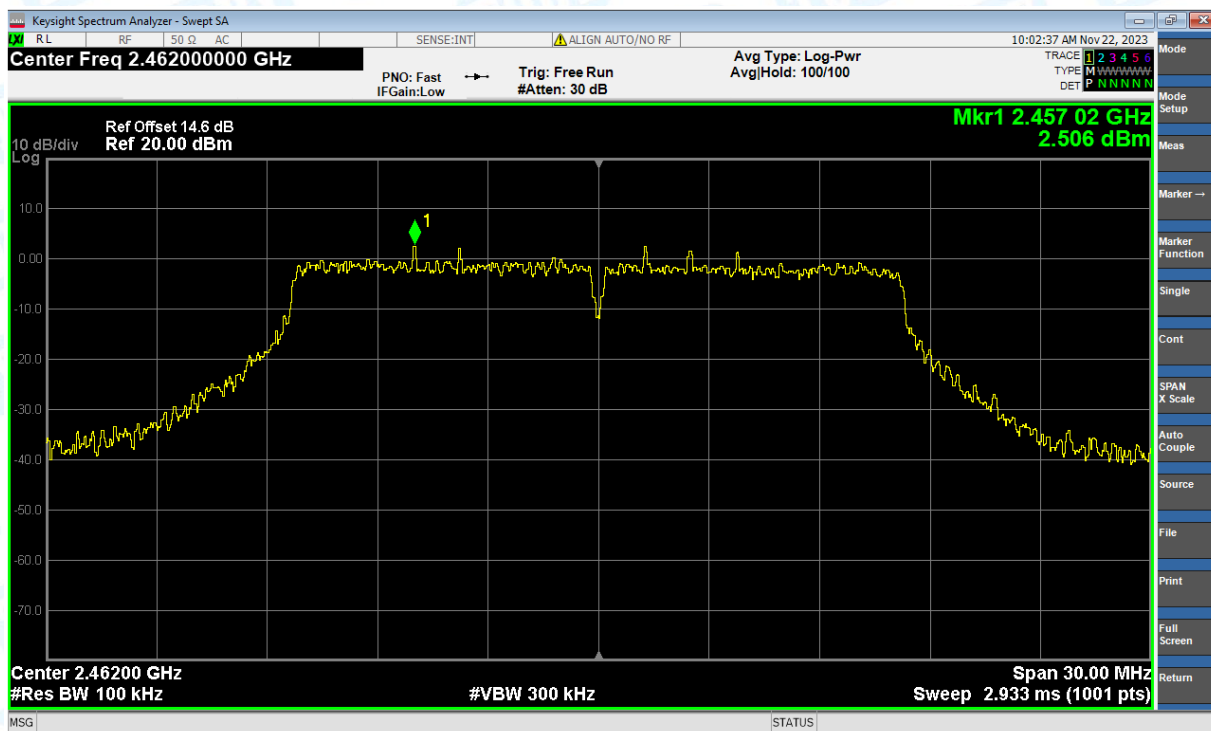
Band Edge NVNT g 2412MHz Ant1 Ref



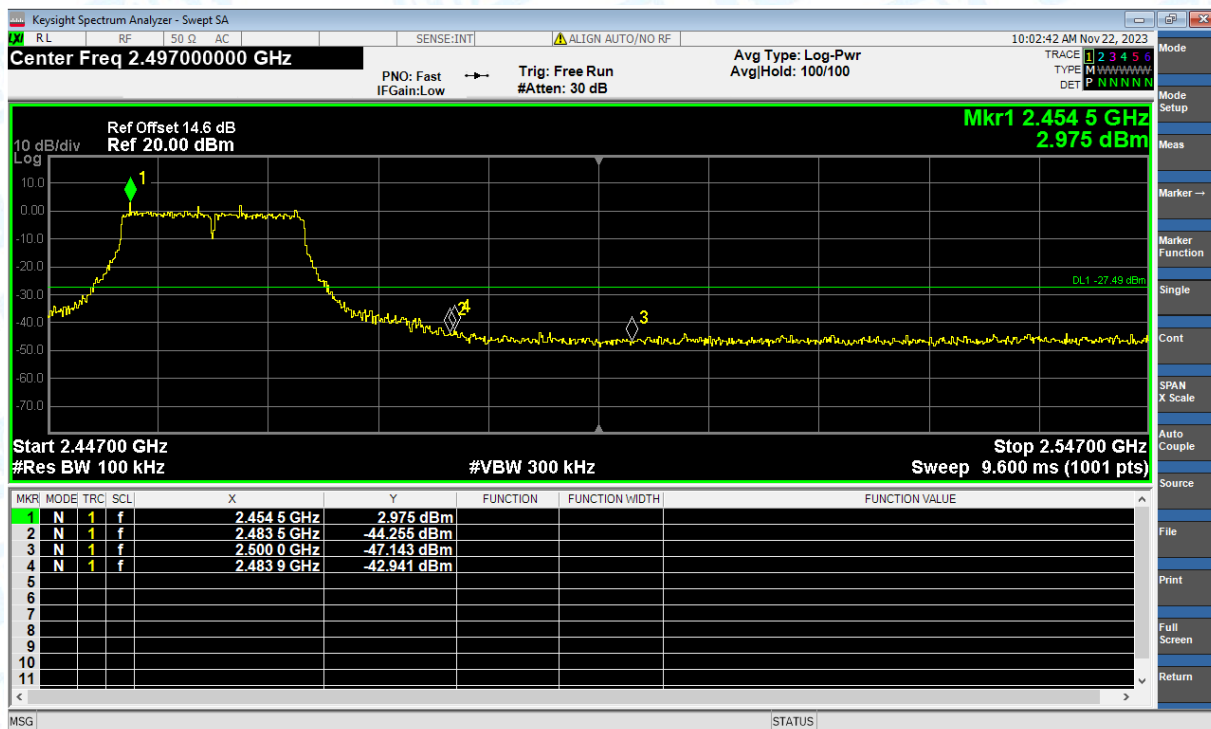
Band Edge NVNT g 2412MHz Ant1 Emission



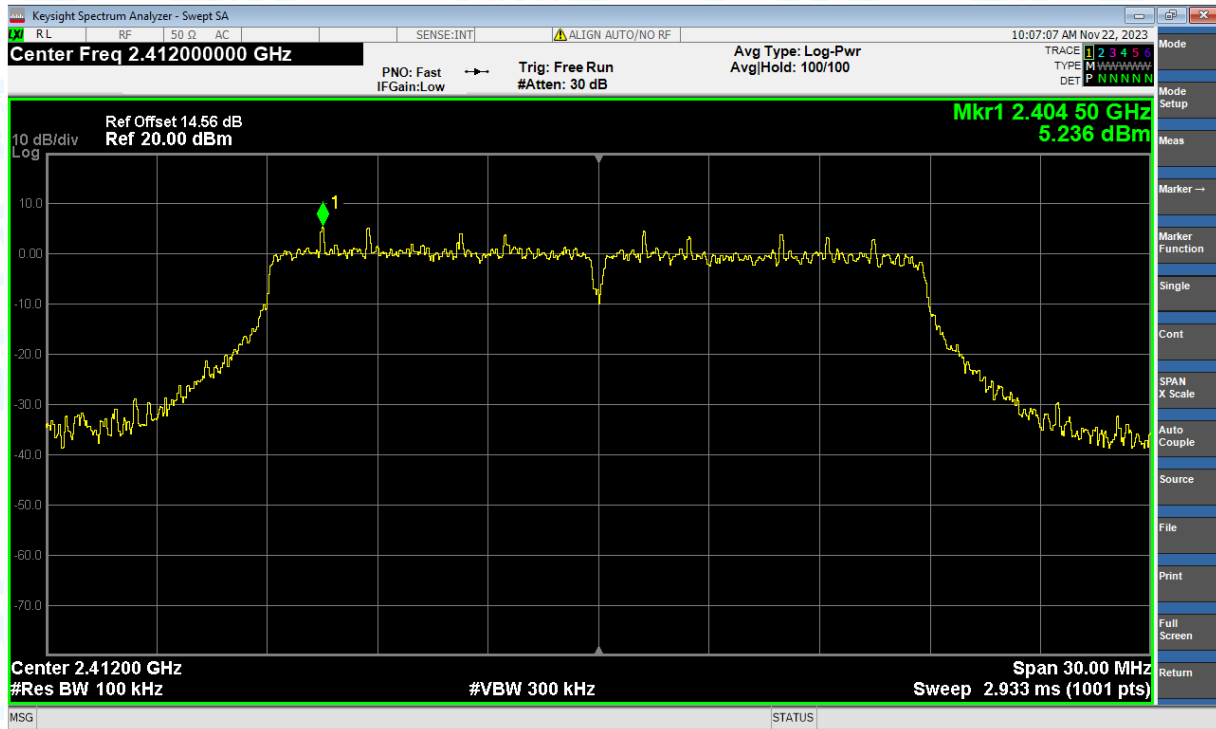
Band Edge NVNT g 2462MHz Ant1 Ref



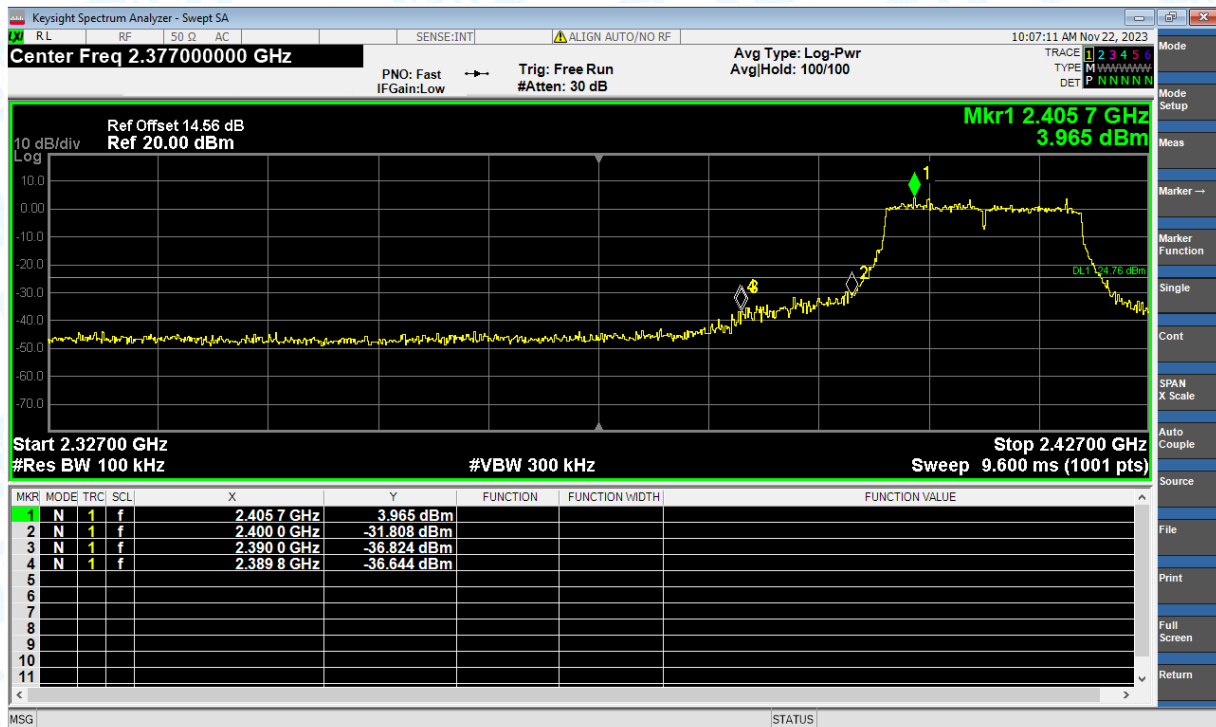
Band Edge NVNT g 2462MHz Ant1 Emission



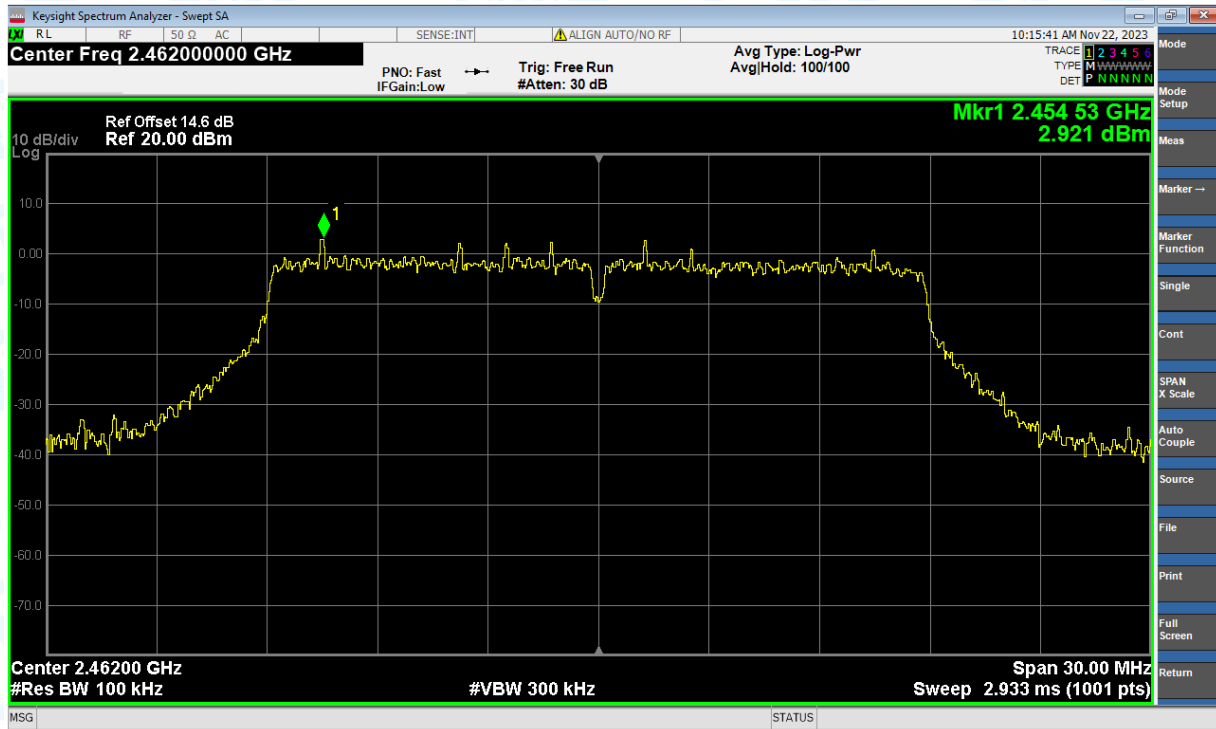
Band Edge NVNT n(HT20) 2412MHz Ant1 Ref



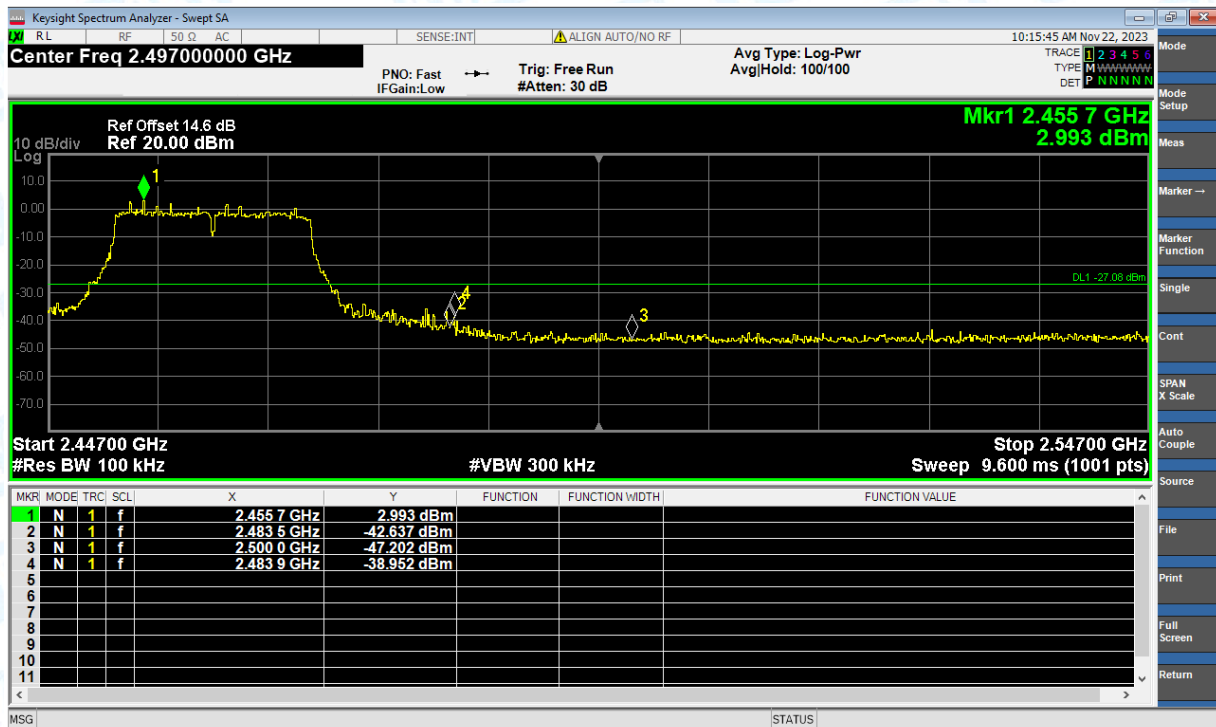
Band Edge NVNT n(HT20) 2412MHz Ant1 Emission



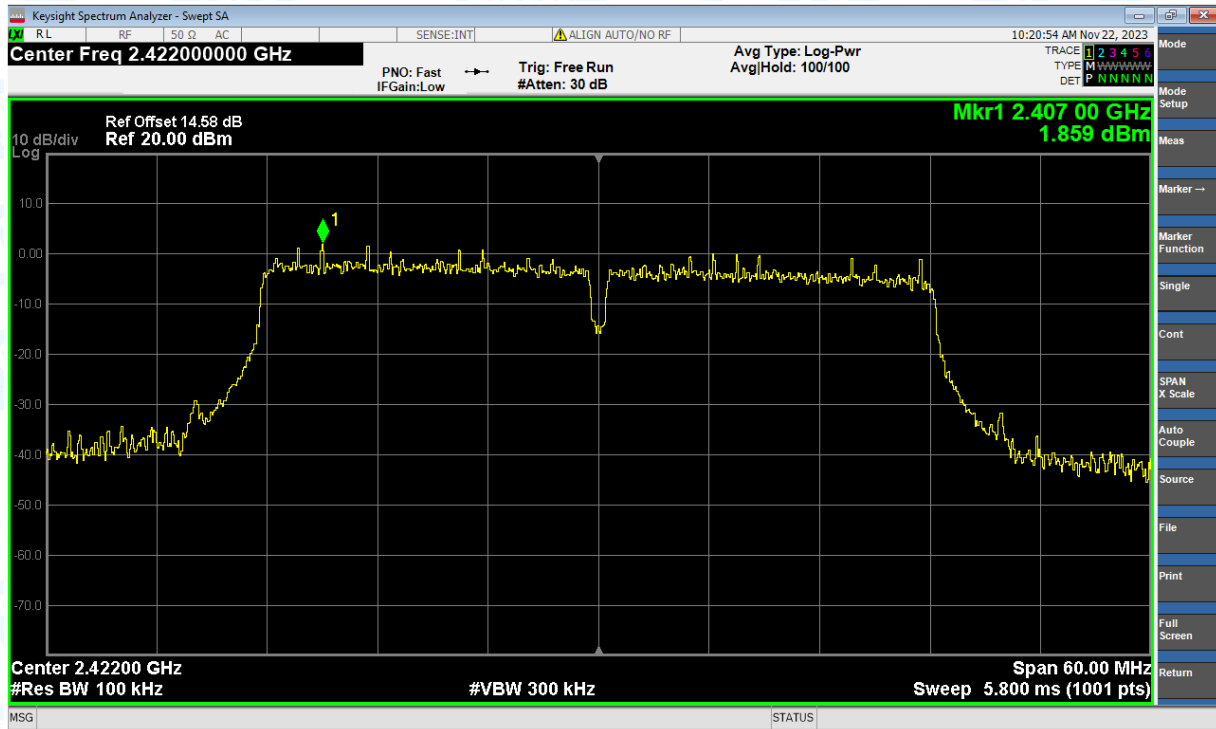
Band Edge NVNT n(HT20) 2462MHz Ant1 Ref



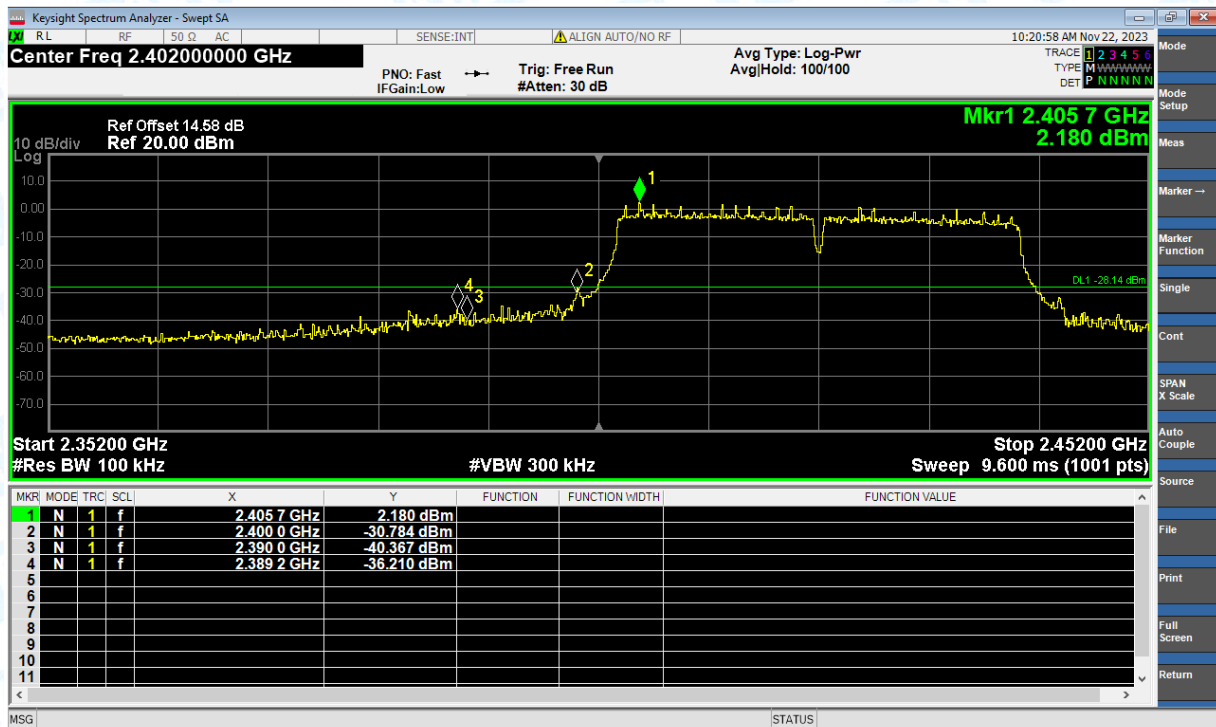
Band Edge NVNT n(HT20) 2462MHz Ant1 Emission



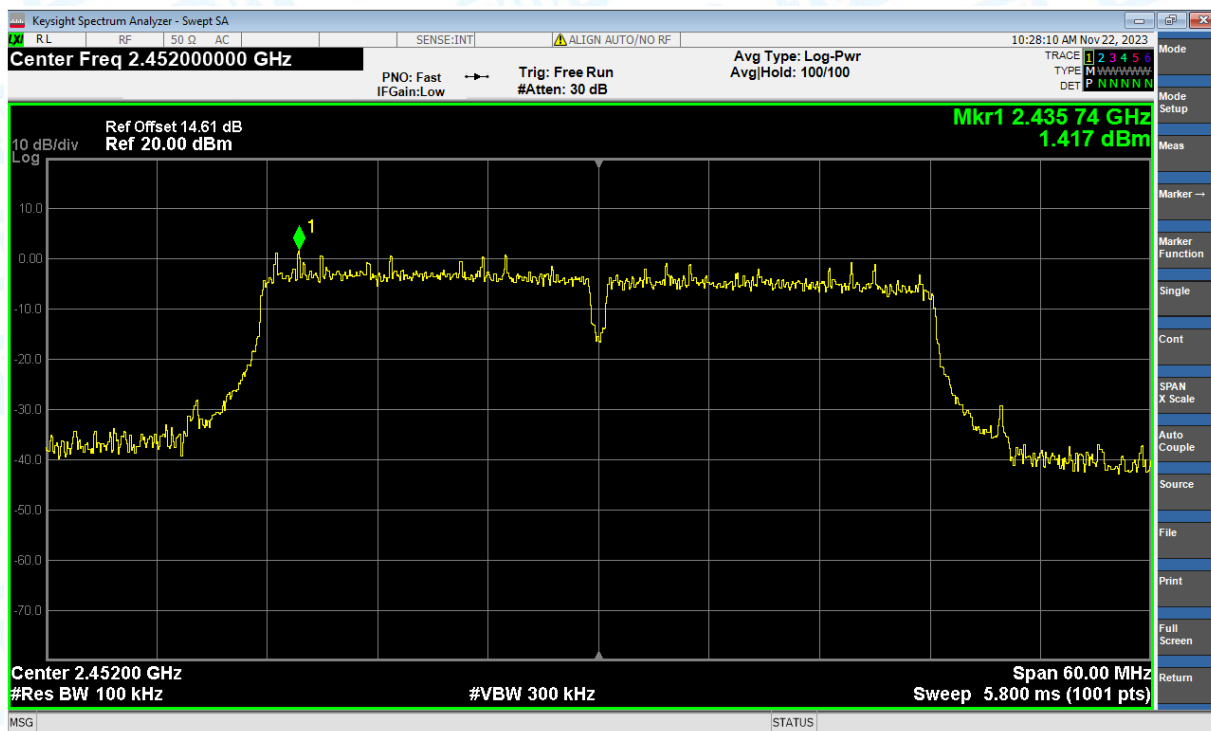
Band Edge NVNT n(HT40) 2422MHz Ant1 Ref



Band Edge NVNT n(HT40) 2422MHz Ant1 Emission



Band Edge NVNT n(HT40) 2452MHz Ant1 Ref



Band Edge NVNT n(HT40) 2452MHz Ant1 Emission

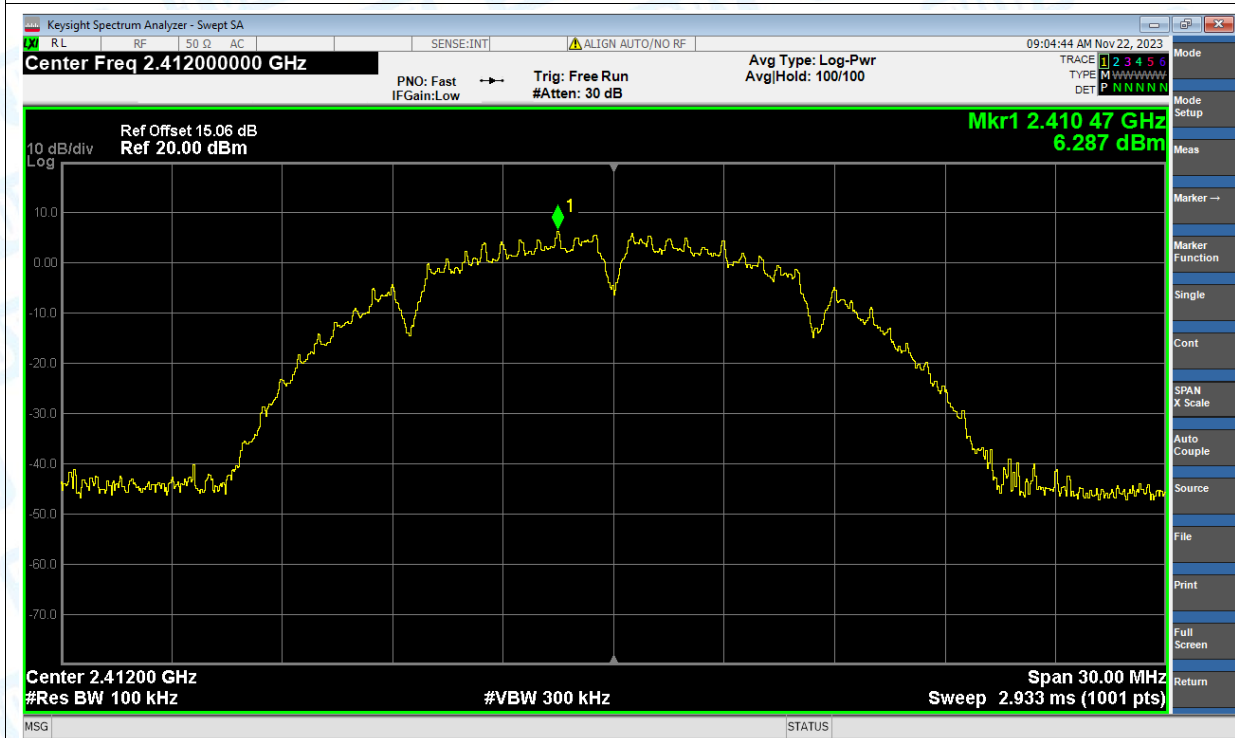


7. Conducted RF Spurious Emission

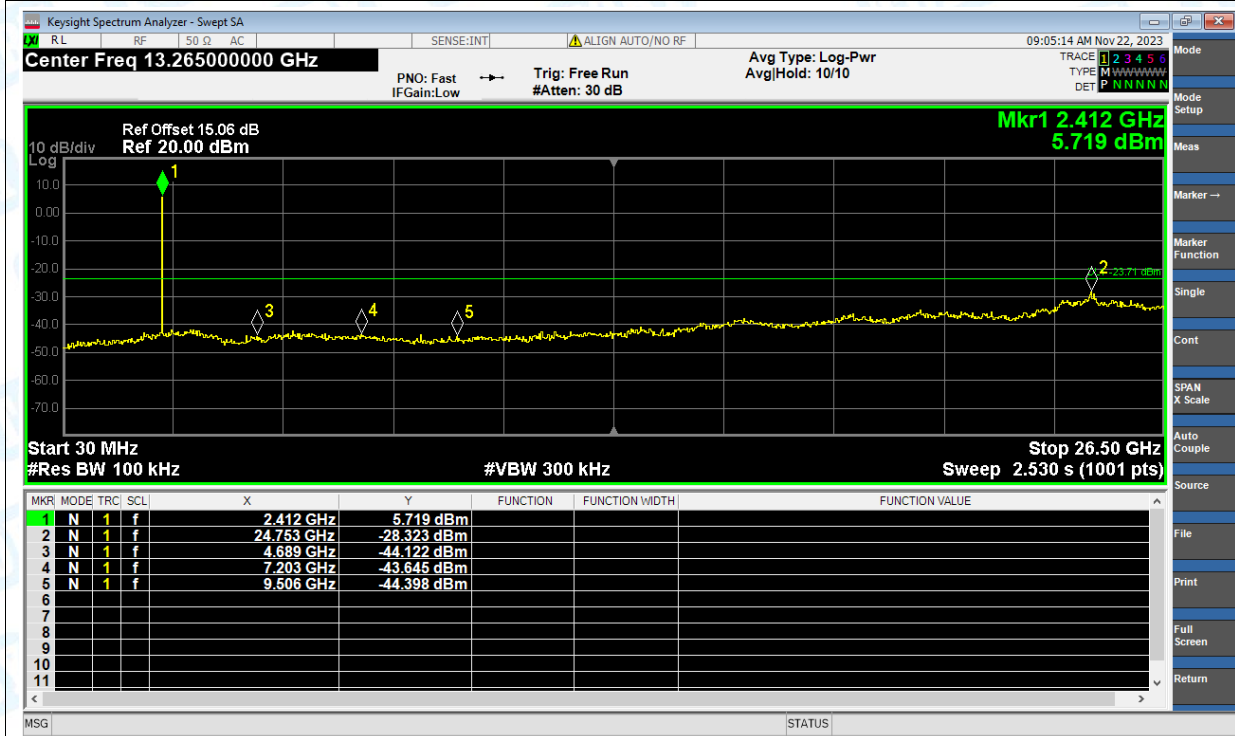
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-34.61	-30	Pass
NVNT	b	2437	Ant1	-37.87	-30	Pass
NVNT	b	2462	Ant1	-35.9	-30	Pass
NVNT	g	2412	Ant1	-35.95	-30	Pass
NVNT	g	2437	Ant1	-34.56	-30	Pass
NVNT	g	2462	Ant1	-32.69	-30	Pass
NVNT	n(HT20)	2412	Ant1	-35.49	-30	Pass
NVNT	n(HT20)	2437	Ant1	-35.07	-30	Pass
NVNT	n(HT20)	2462	Ant1	-31.64	-30	Pass
NVNT	n(HT40)	2422	Ant1	-32.06	-30	Pass
NVNT	n(HT40)	2437	Ant1	-32.73	-30	Pass
NVNT	n(HT40)	2452	Ant1	-31.75	-30	Pass

Test Graphs

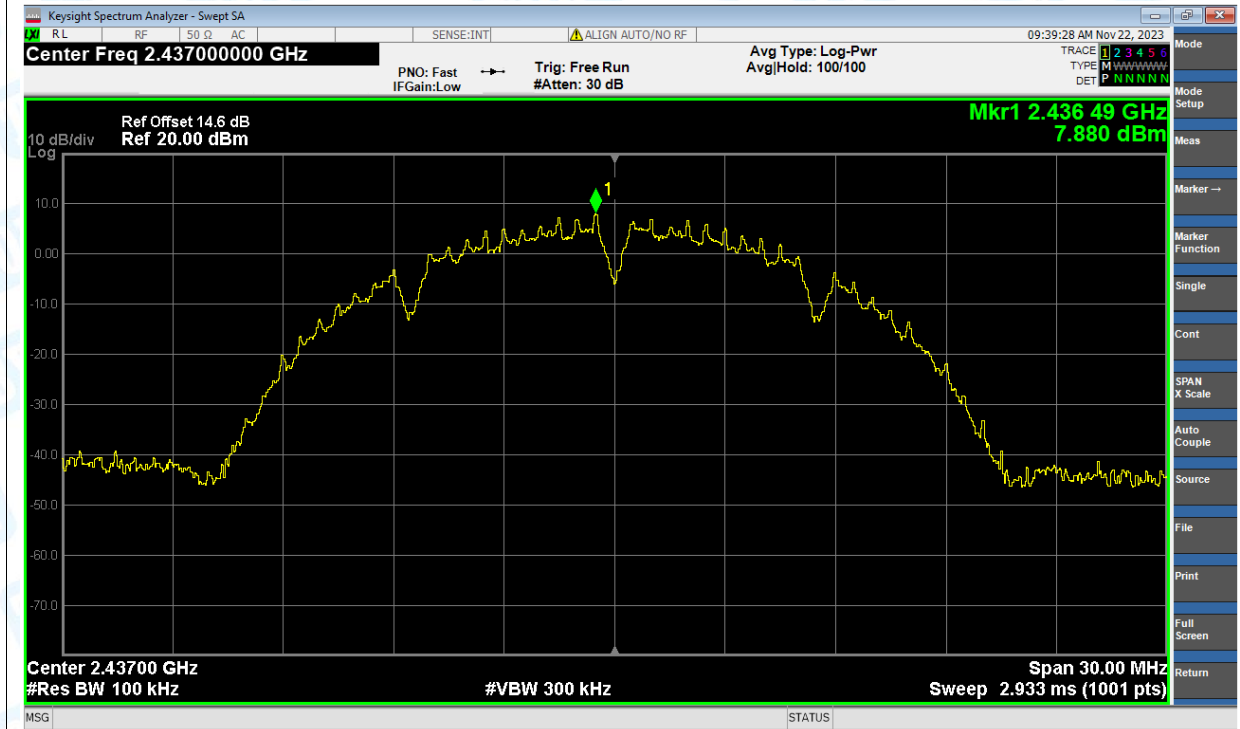
Tx. Spurious NVNT b 2412MHz Ant1 Ref



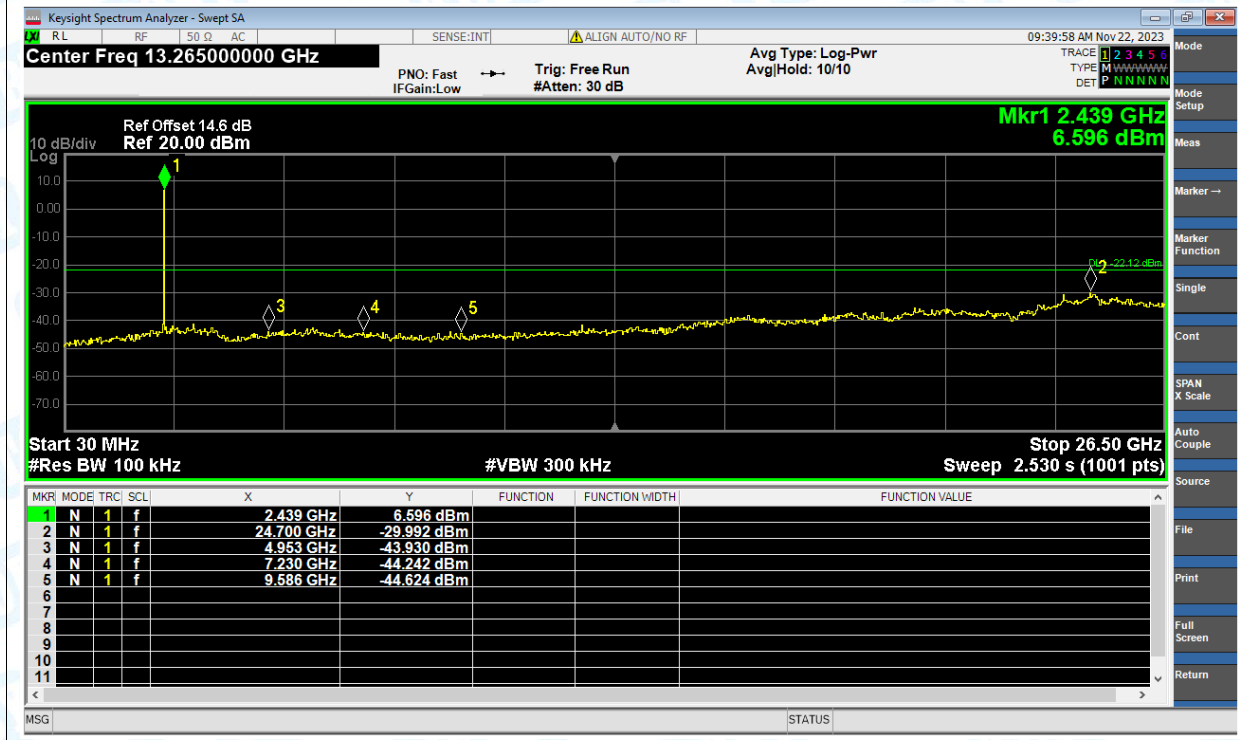
Tx. Spurious NVNT b 2412MHz Ant1 Emission



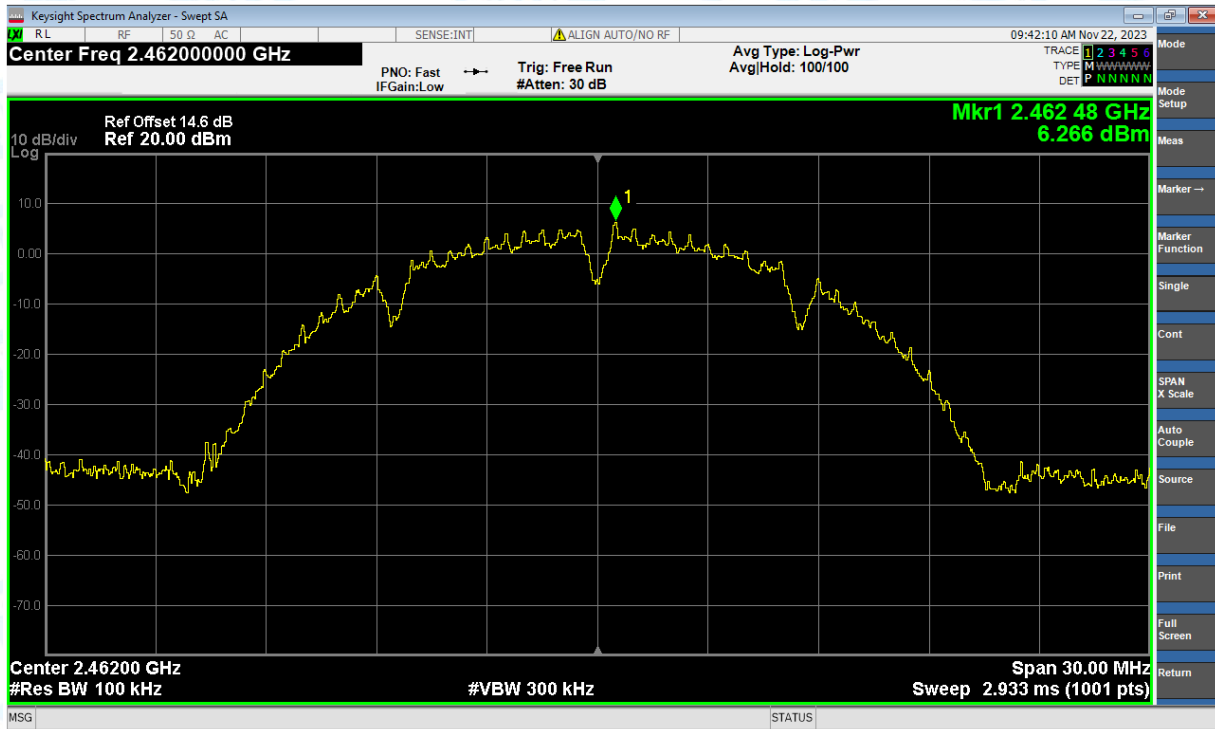
Tx. Spurious NVNT b 2437MHz Ant1 Ref



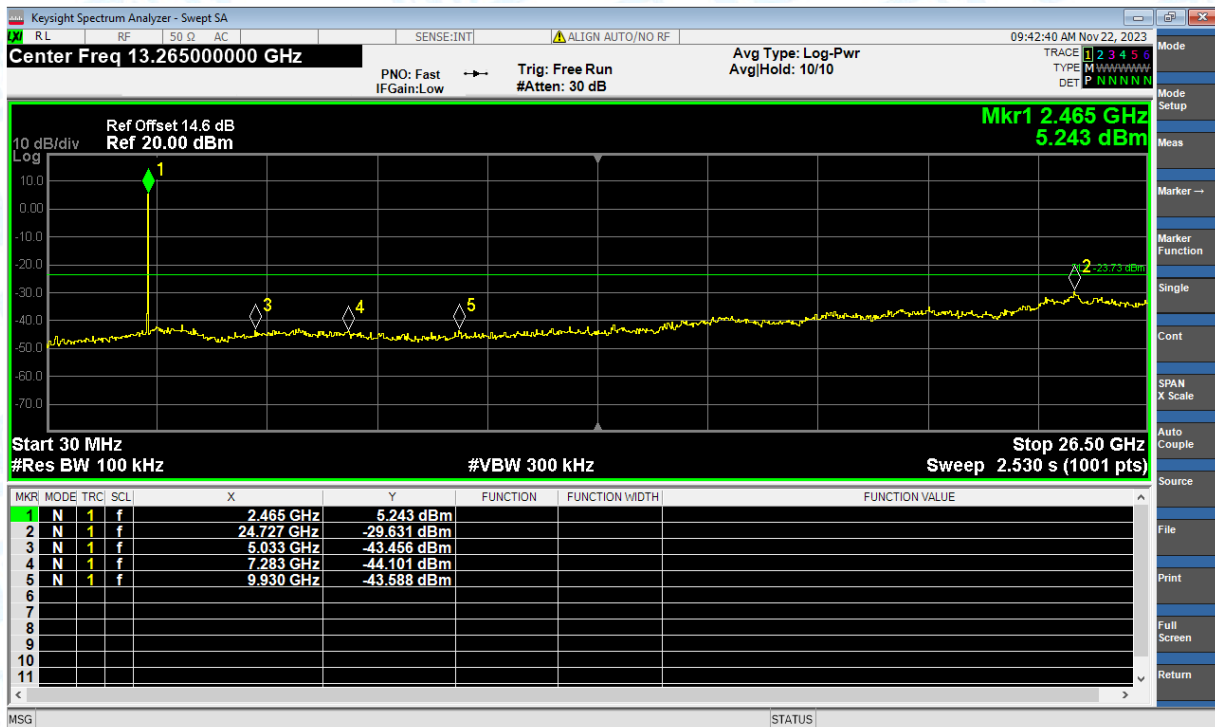
Tx. Spurious NVNT b 2437MHz Ant1 Emission



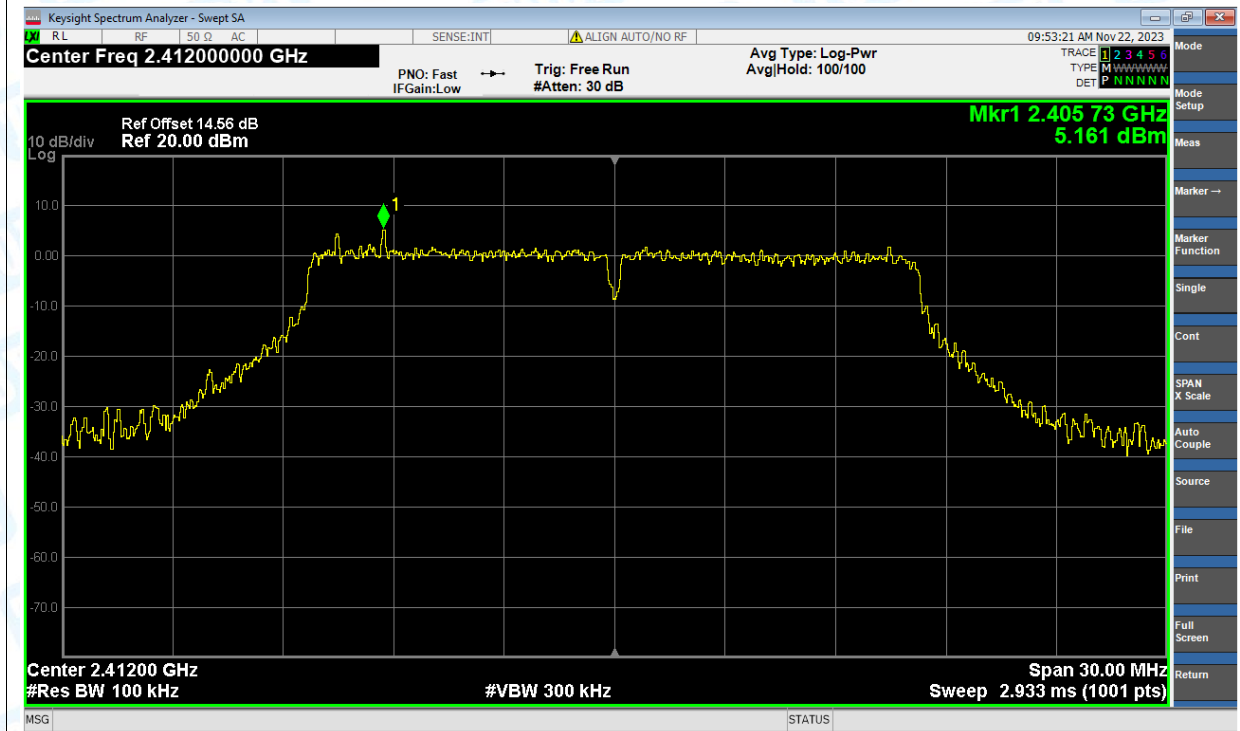
Tx. Spurious NVNT b 2462MHz Ant1 Ref



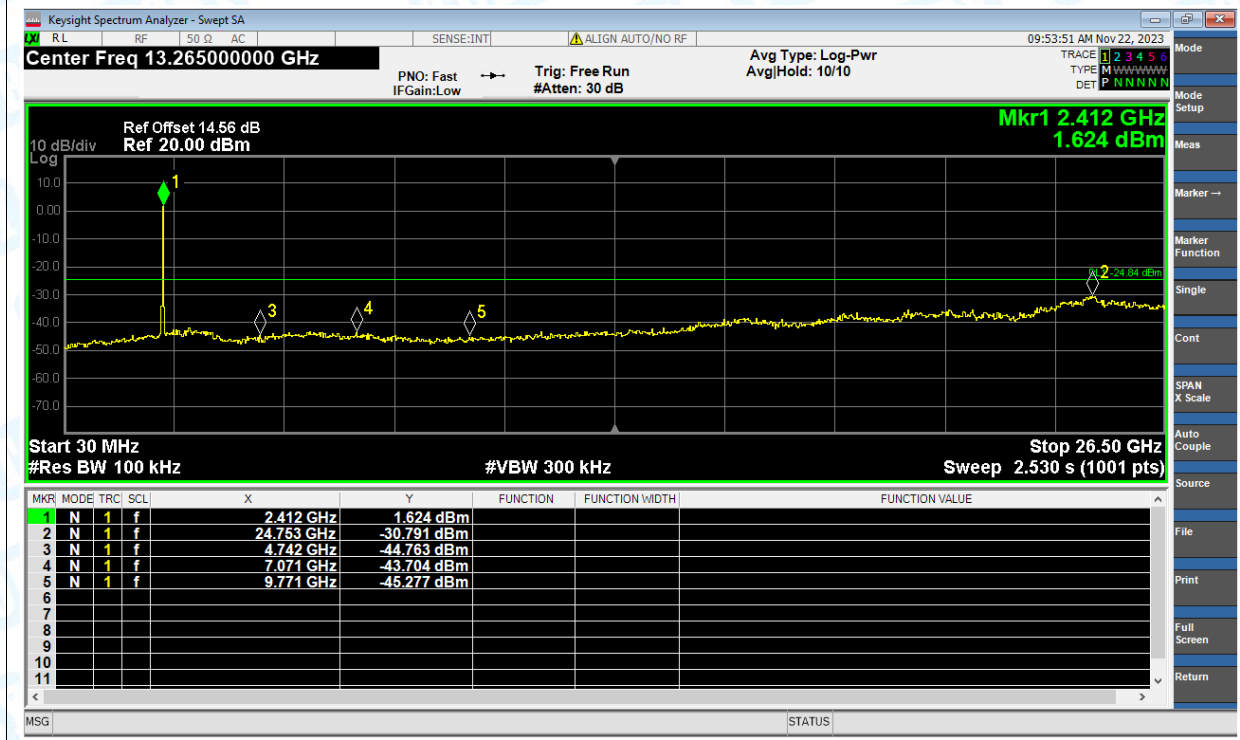
Tx. Spurious NVNT b 2462MHz Ant1 Emission



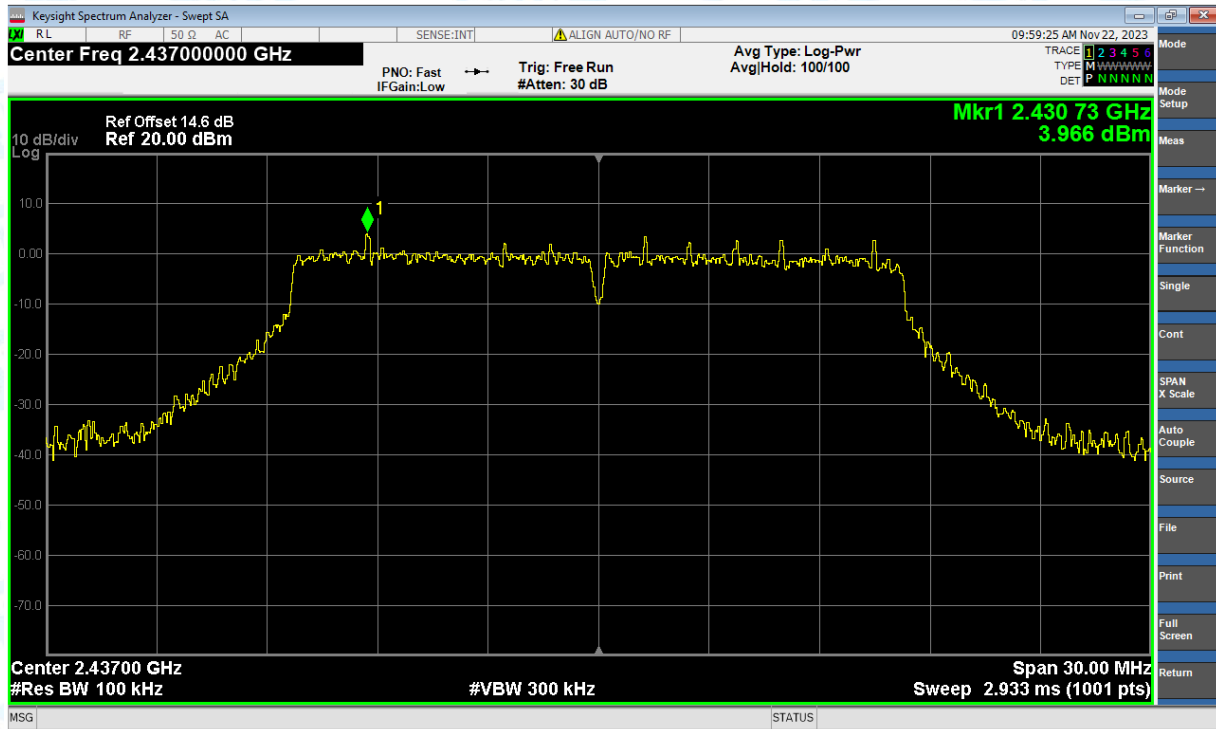
Tx. Spurious NVNT g 2412MHz Ant1 Ref



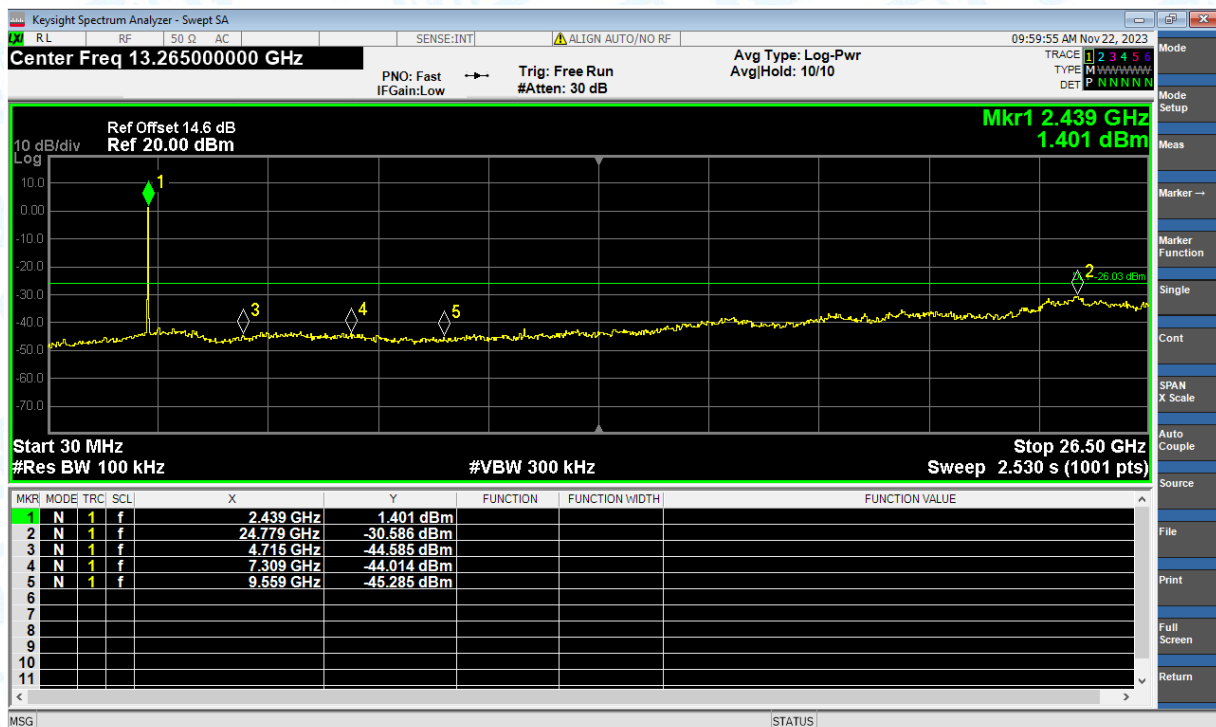
Tx. Spurious NVNT g 2412MHz Ant1 Emission



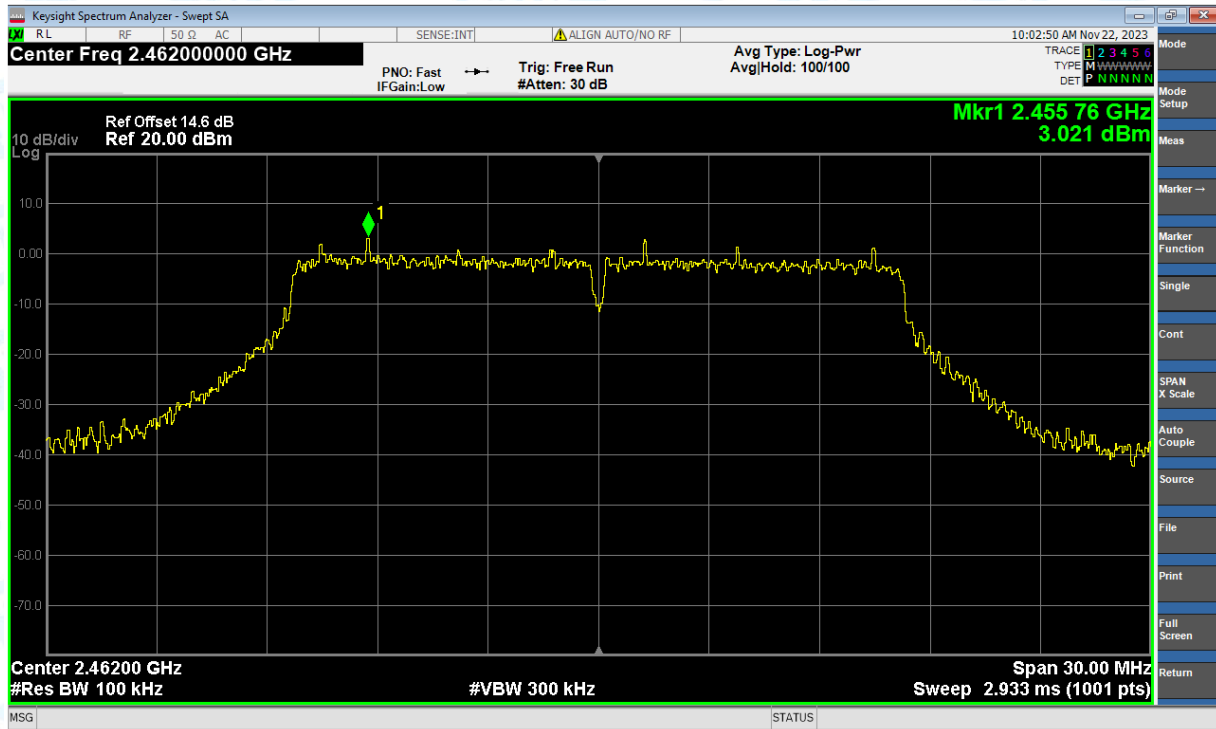
Tx. Spurious NVNT g 2437MHz Ant1 Ref



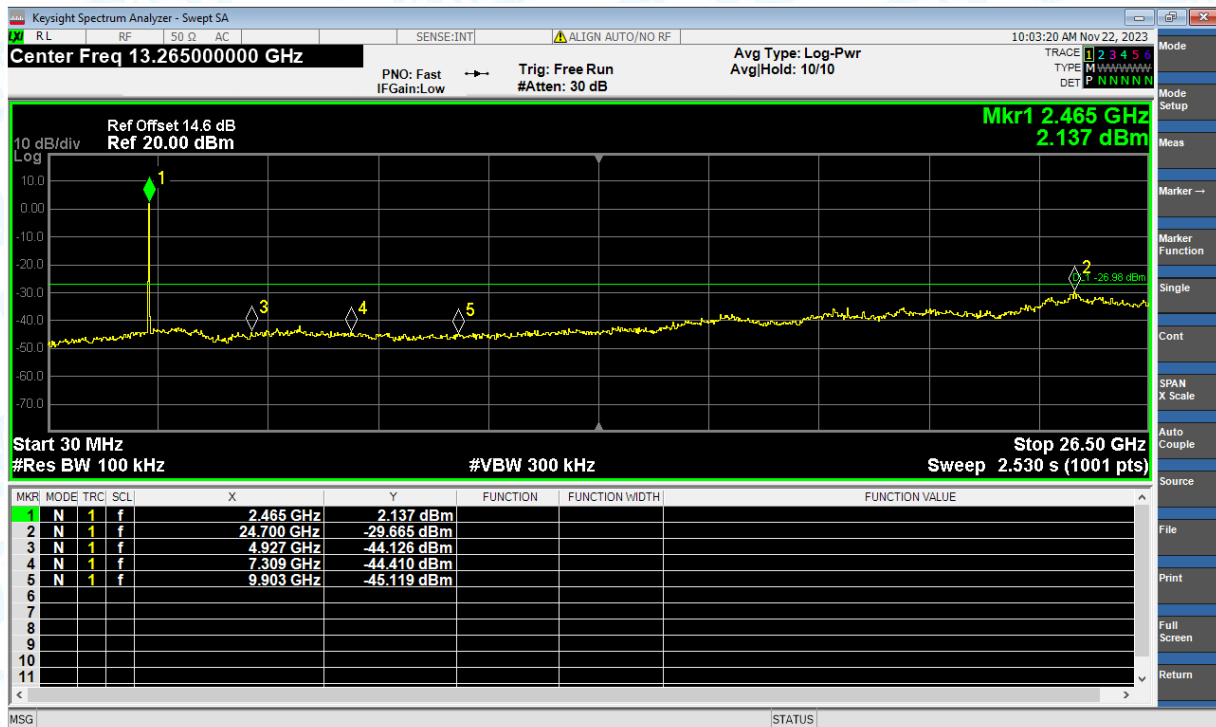
Tx. Spurious NVNT g 2437MHz Ant1 Emission



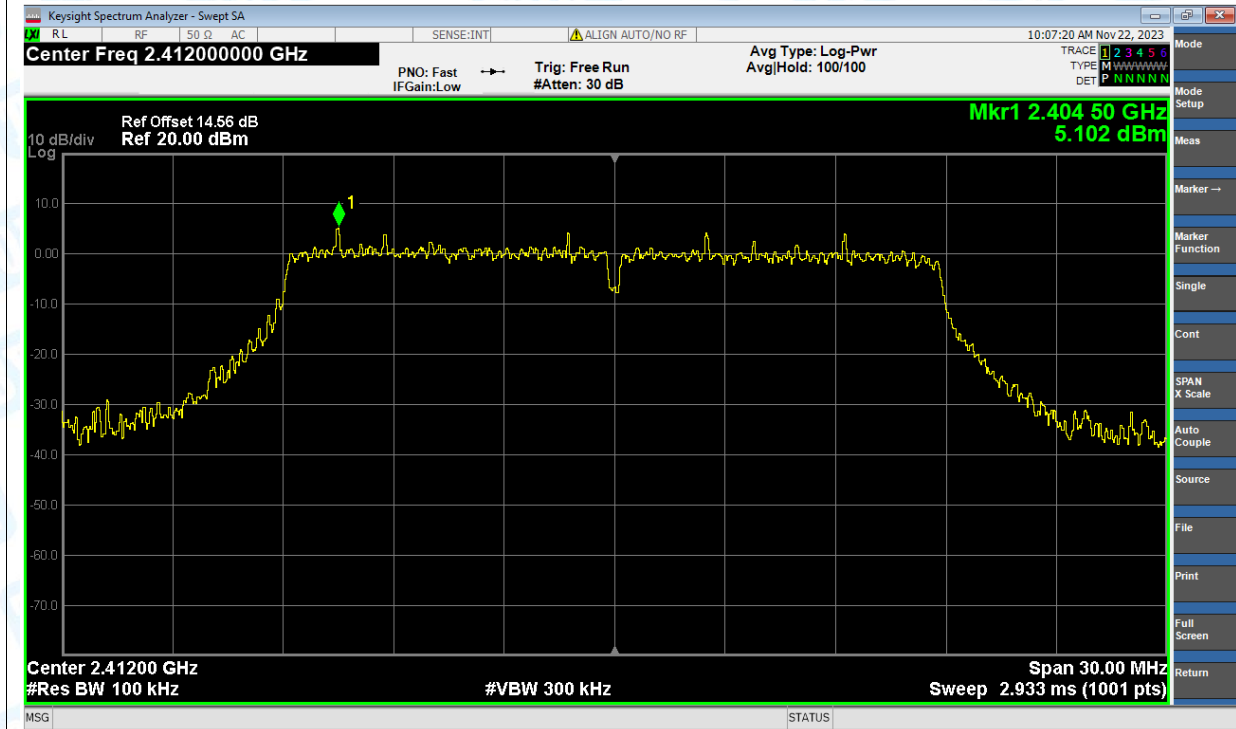
Tx. Spurious NVNT g 2462MHz Ant1 Ref



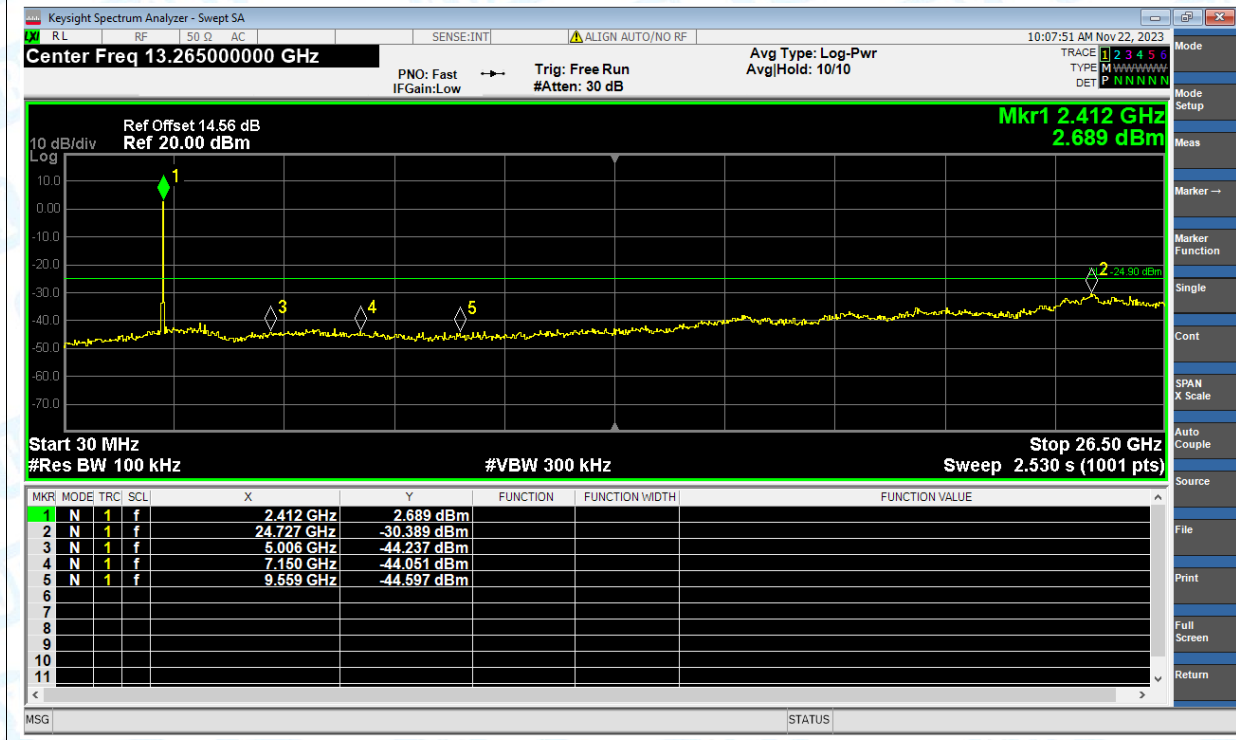
Tx. Spurious NVNT g 2462MHz Ant1 Emission



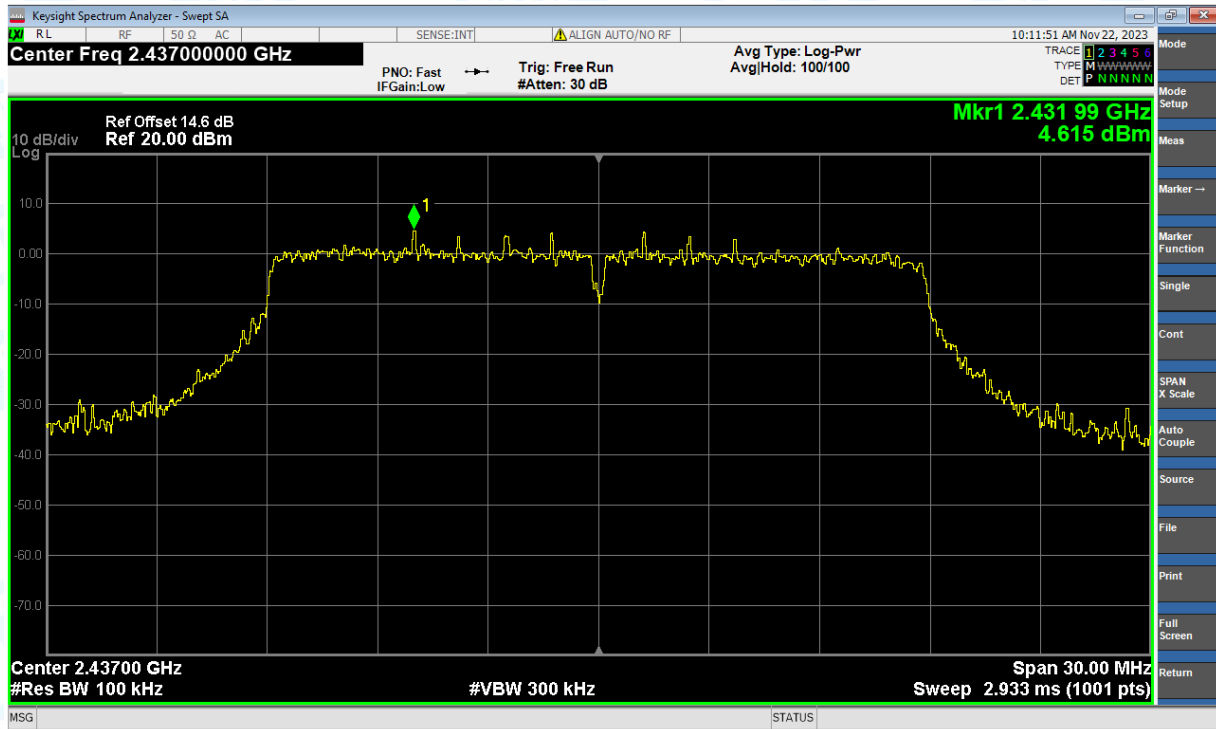
Tx. Spurious NVNT n(HT20) 2412MHz Ant1 Ref



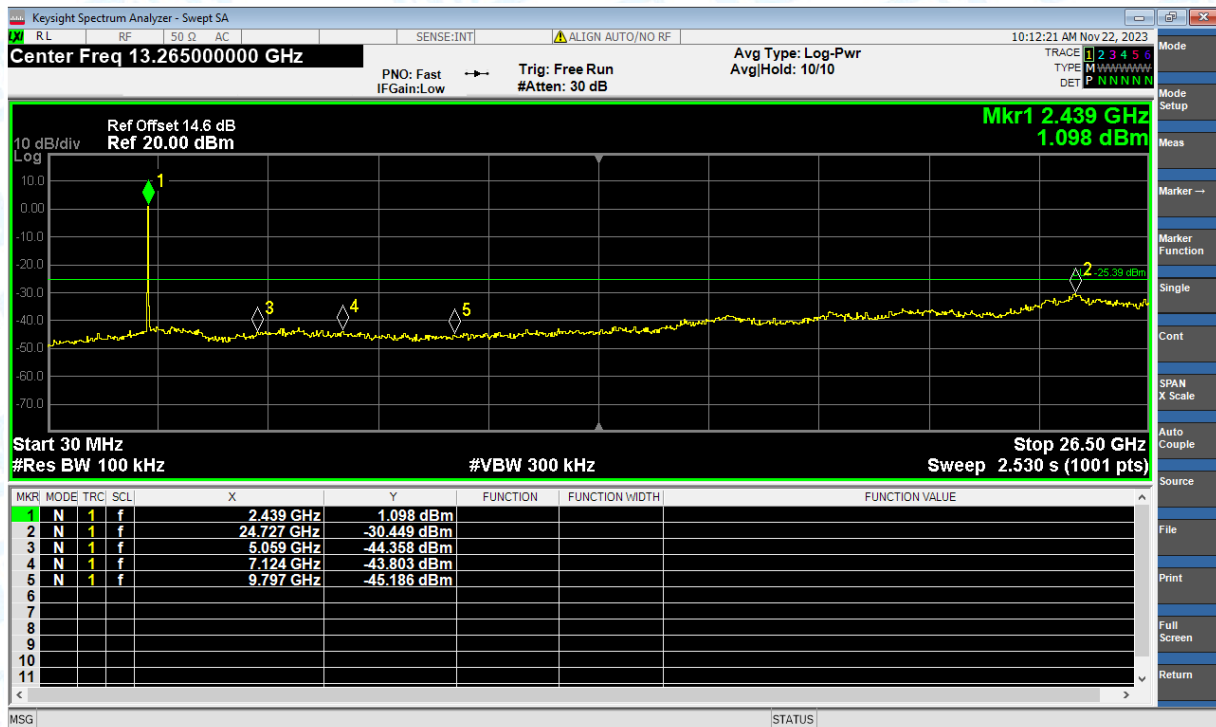
Tx. Spurious NVNT n(HT20) 2412MHz Ant1 Emission



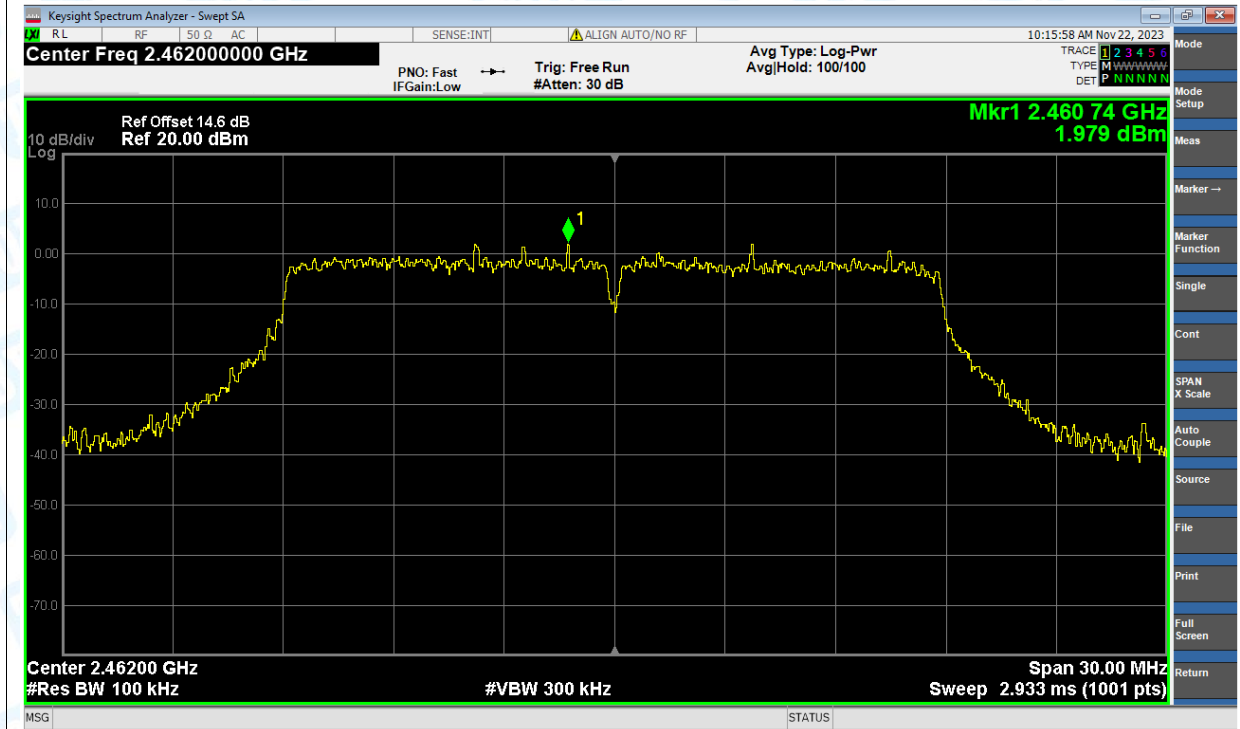
Tx. Spurious NVNT n(HT20) 2437MHz Ant1 Ref



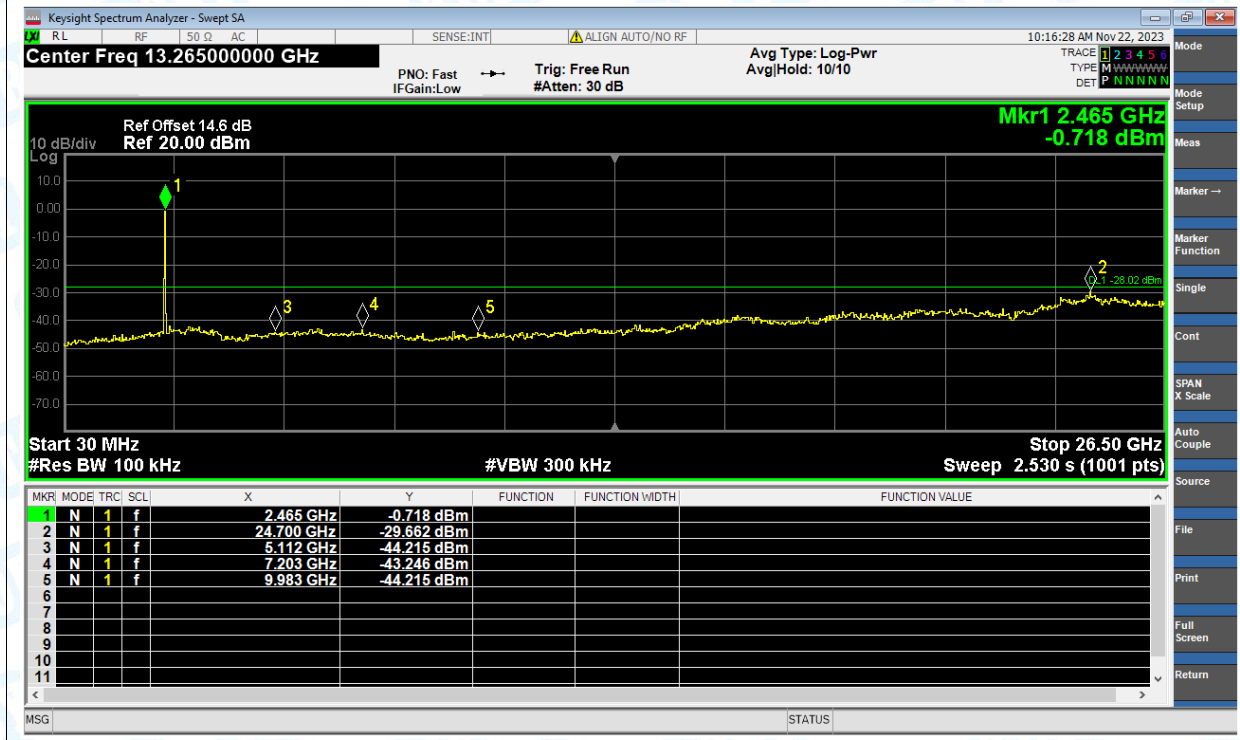
Tx. Spurious NVNT n(HT20) 2437MHz Ant1 Emission



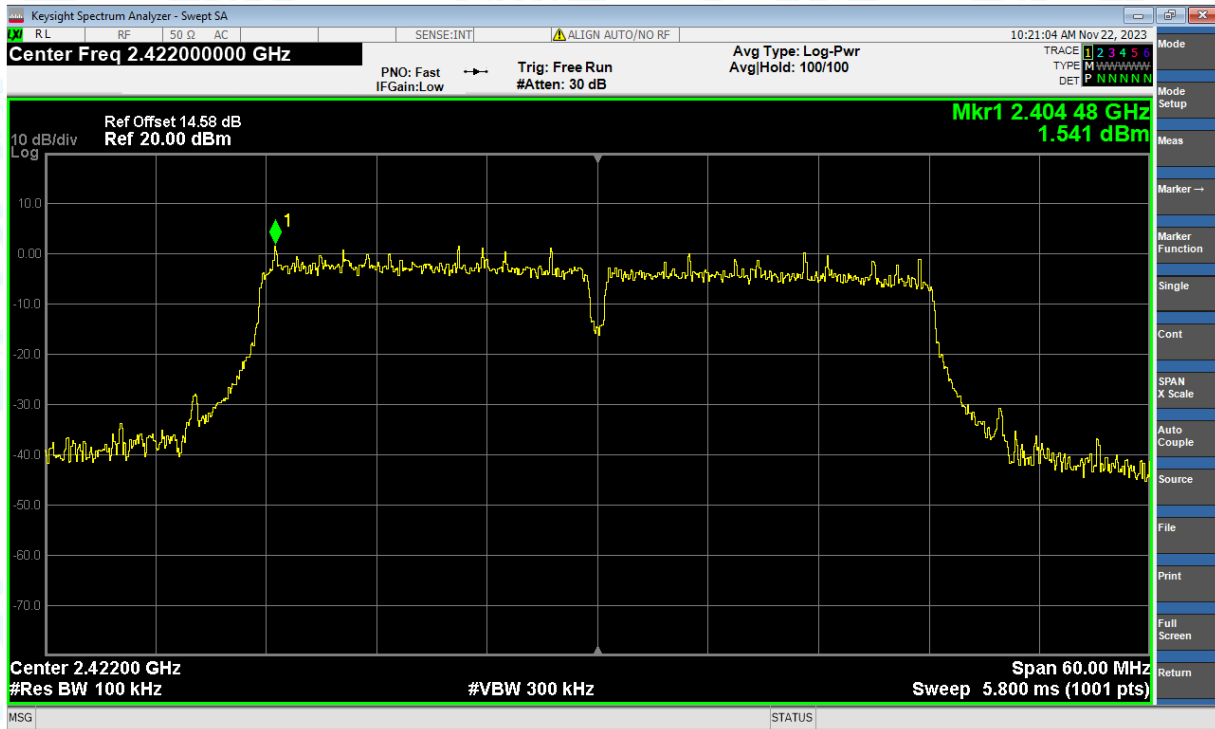
Tx. Spurious NVNT n(HT20) 2462MHz Ant1 Ref



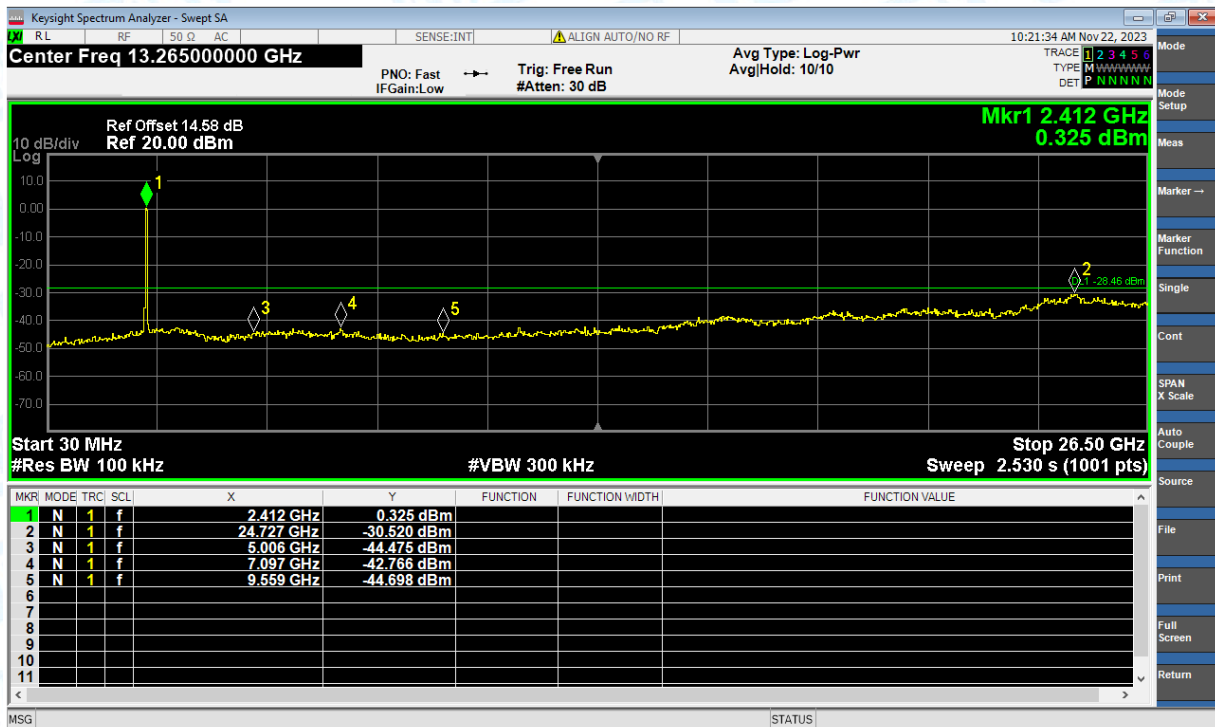
Tx. Spurious NVNT n(HT20) 2462MHz Ant1 Emission



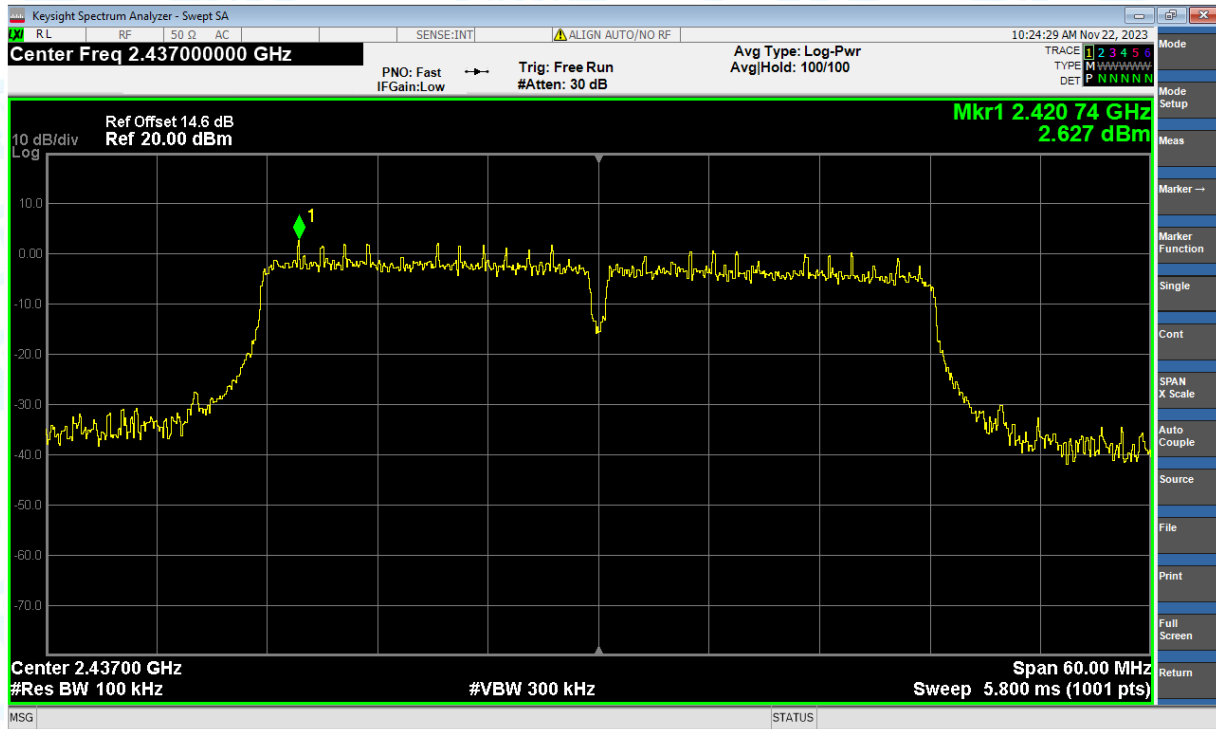
Tx. Spurious NVNT n(HT40) 2422MHz Ant1 Ref



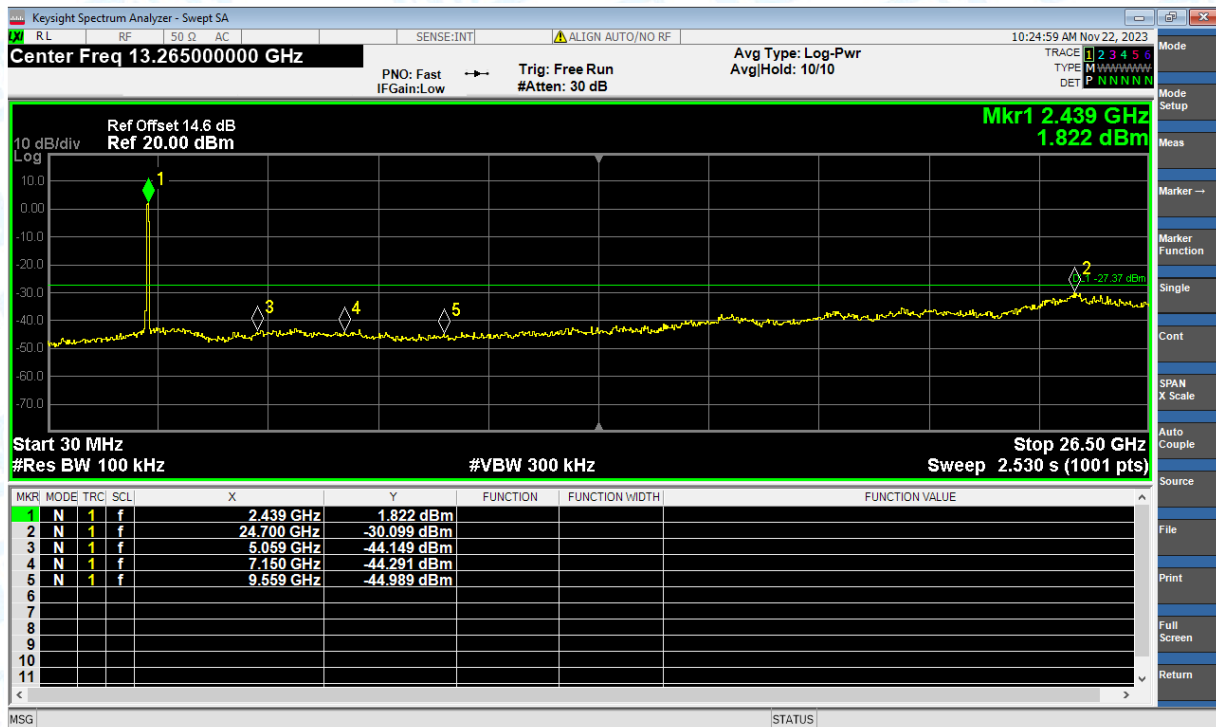
Tx. Spurious NVNT n(HT40) 2422MHz Ant1 Emission



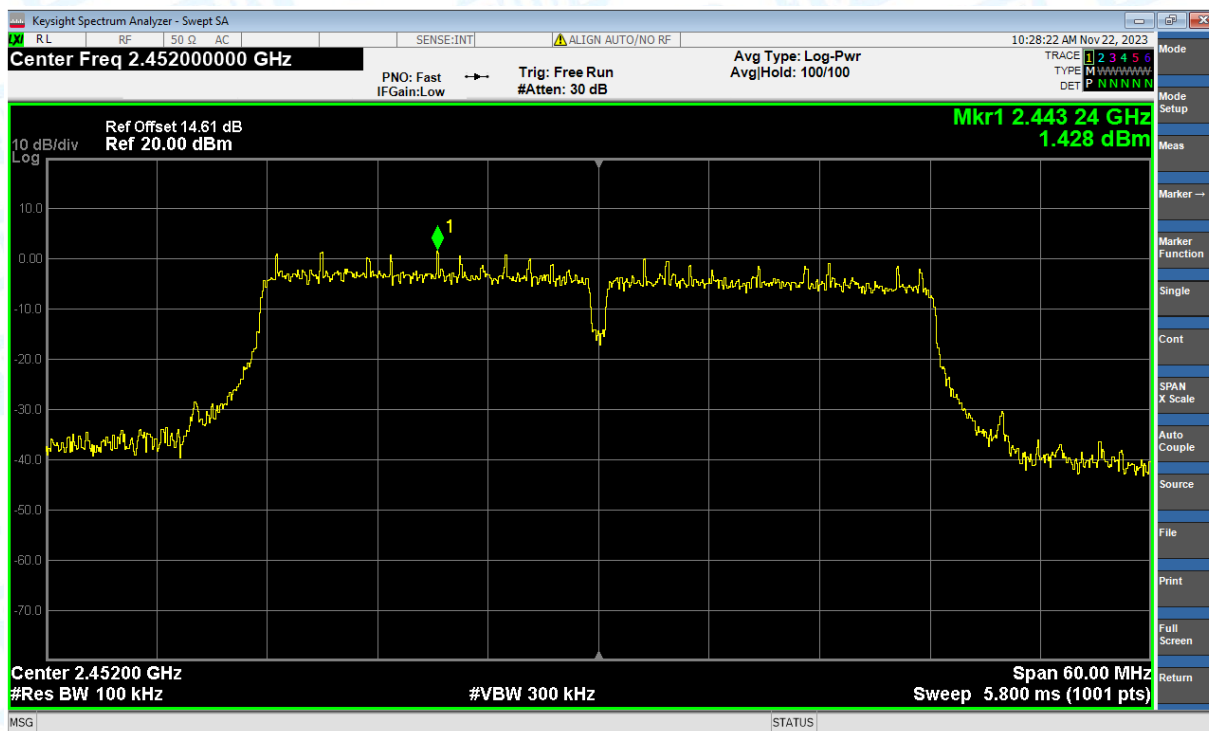
Tx. Spurious NVNT n(HT40) 2437MHz Ant1 Ref



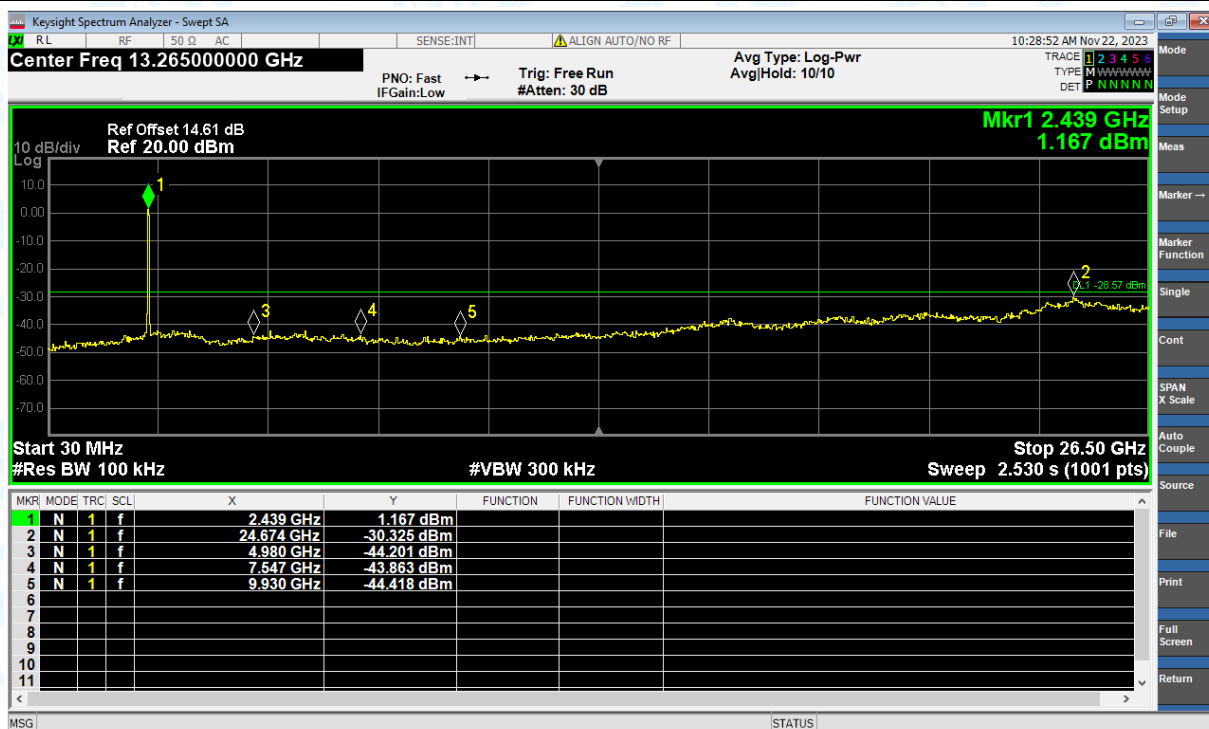
Tx. Spurious NVNT n(HT40) 2437MHz Ant1 Emission



Tx. Spurious NVNT n(HT40) 2452MHz Ant1 Ref



Tx. Spurious NVNT n(HT40) 2452MHz Ant1 Emission



-----END OF THE REPORT-----