

RF Test Data for 2.4G WiFi (Conducted Measurements)

General Description of EUT	
Product Name:	SMART HD CAMERA
Test Model:	C492A-W6
Sample ID:	HC-C-202411-0234-01-01
Environmental Conditions	
Temperature:	25.6°C
Relative Humidity:	48.5%
Test Voltage:	DC 5V
Test Engineer:	ZKN.Zhou
Note: For a more detailed features description, please refer to the report TBR-C-202411-0234-2 The report only show the worst case data.	

Contents

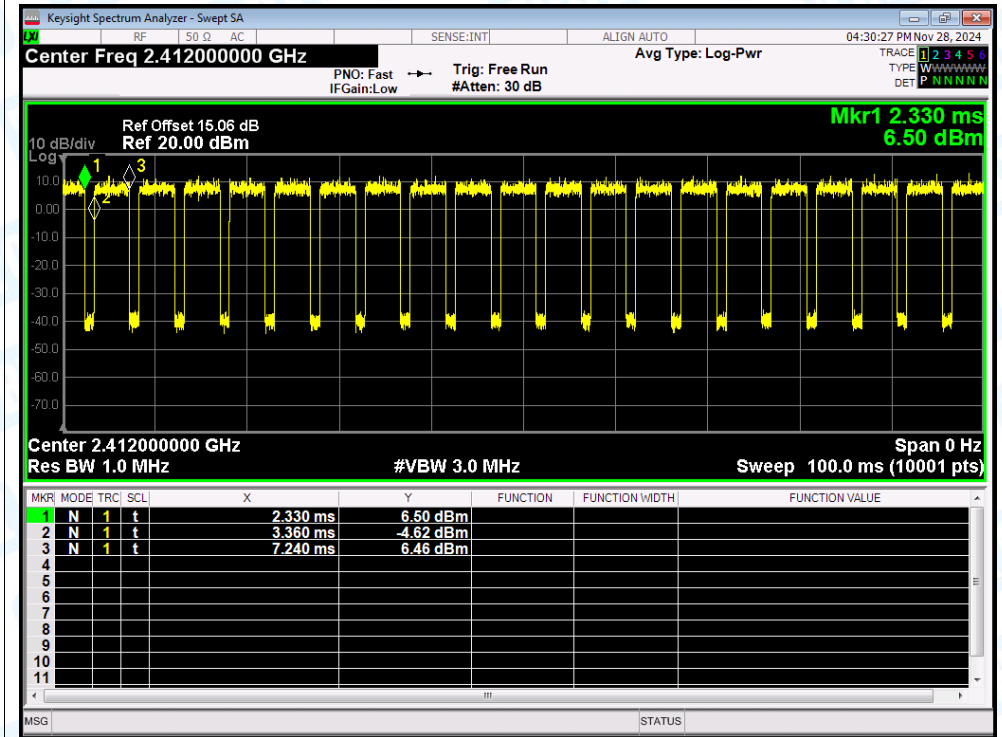
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1. Duty Cycle

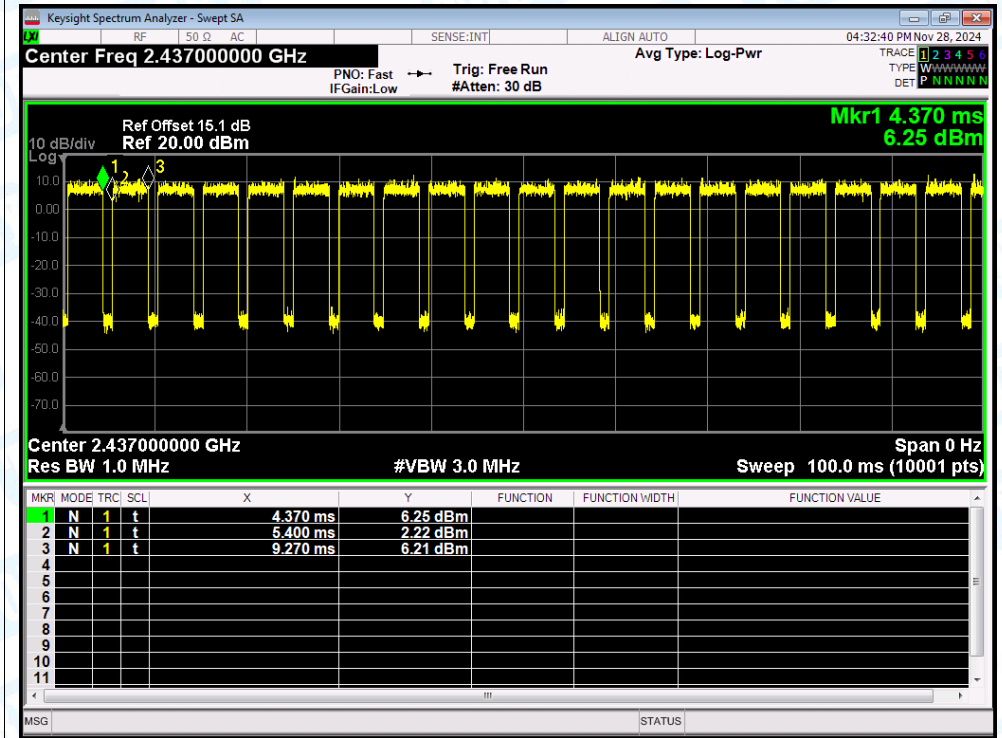
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	ax(VHT20)	2412	Ant1	79.02	1.02	0.26
NVNT	ax(VHT20)	2437	Ant1	78.98	1.02	0.26
NVNT	ax(VHT20)	2462	Ant1	62.38	2.05	0.26
NVNT	ax(VHT40)	2422	Ant1	79.14	1.02	0.26
NVNT	ax(VHT40)	2437	Ant1	78.98	1.02	0.26
NVNT	ax(VHT40)	2452	Ant1	78.98	1.02	0.26
NVNT	b	2412	Ant1	89.18	0.5	0.12
NVNT	b	2437	Ant1	89.18	0.5	0.12
NVNT	b	2462	Ant1	83.37	0.79	0.12
NVNT	g	2412	Ant1	57.85	2.38	0.71
NVNT	g	2437	Ant1	57.61	2.4	0.71
NVNT	g	2462	Ant1	57.85	2.38	0.71
NVNT	n(HT20)	2412	Ant1	83.31	0.79	0.2
NVNT	n(HT20)	2437	Ant1	83.14	0.8	0.2
NVNT	n(HT20)	2462	Ant1	83.17	0.8	0.2
NVNT	n(HT40)	2422	Ant1	82.77	0.82	0.2
NVNT	n(HT40)	2437	Ant1	82.77	0.82	0.2
NVNT	n(HT40)	2452	Ant1	82.63	0.83	0.2

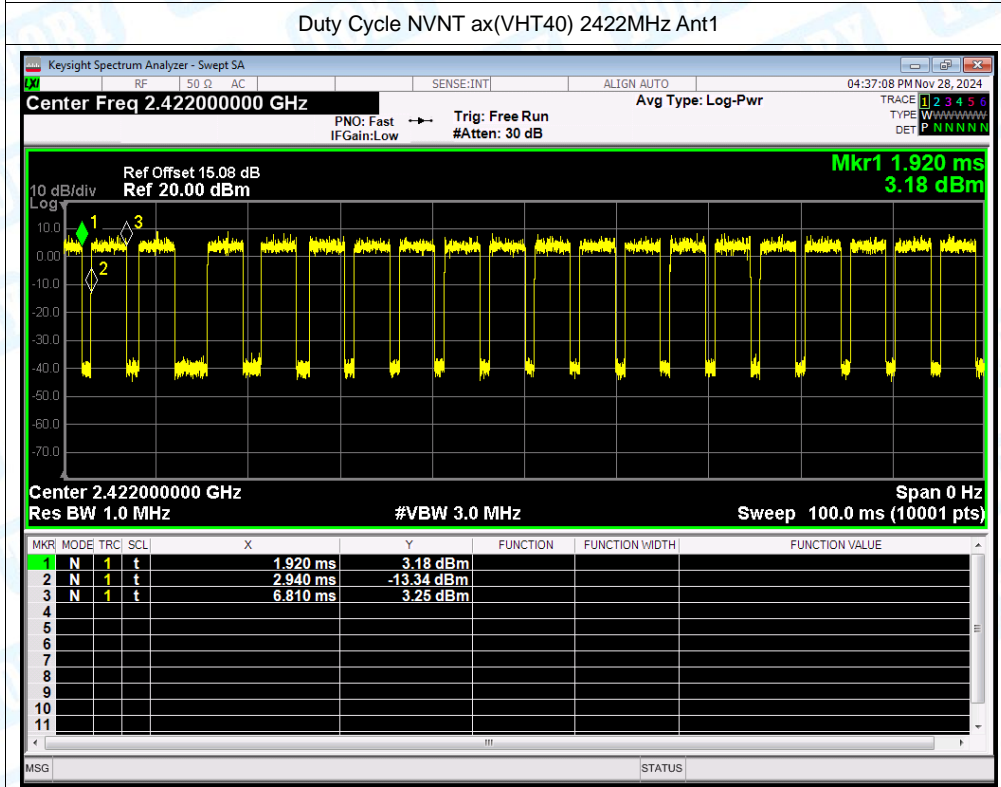
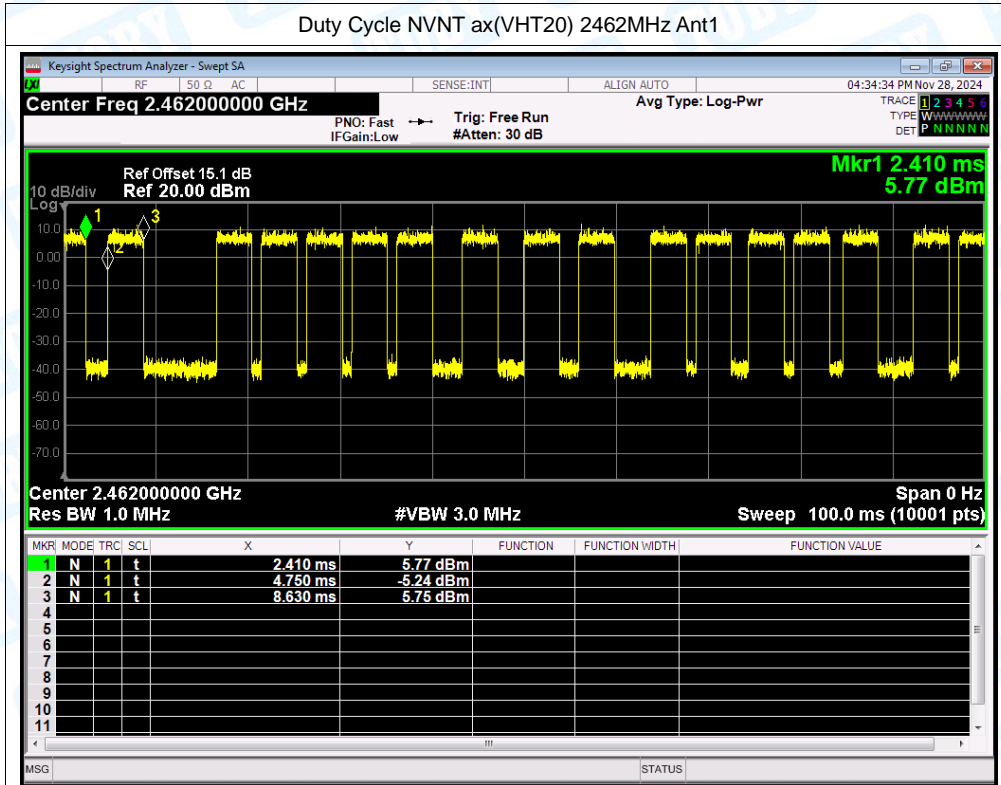
Test Graphs

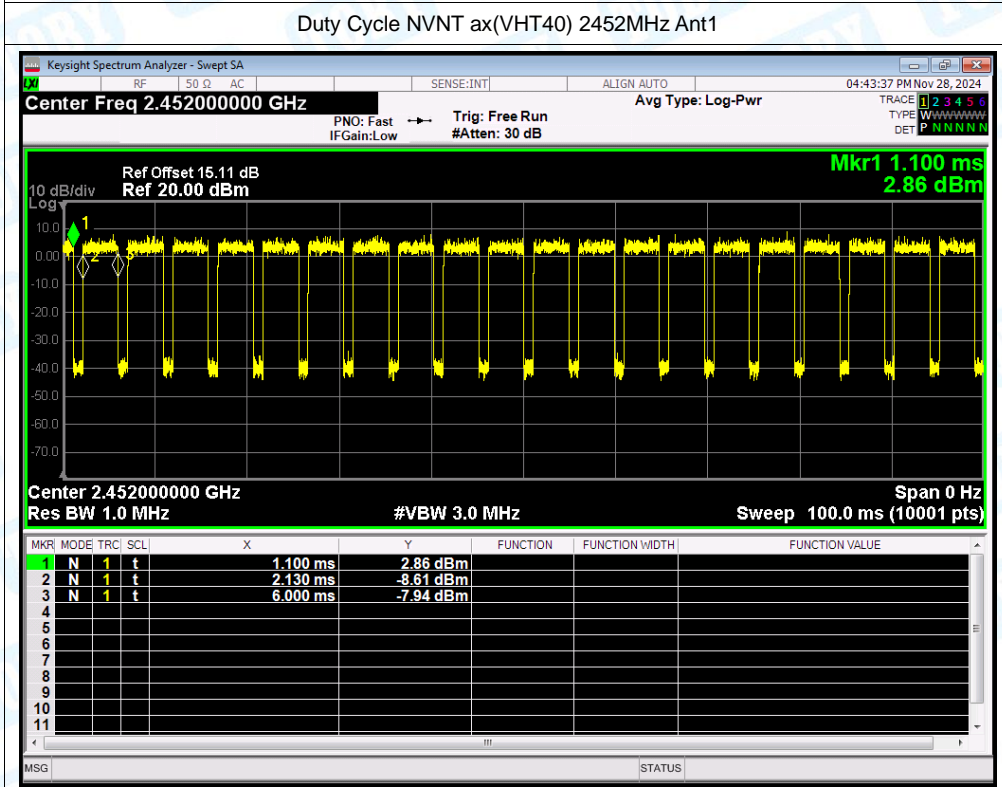
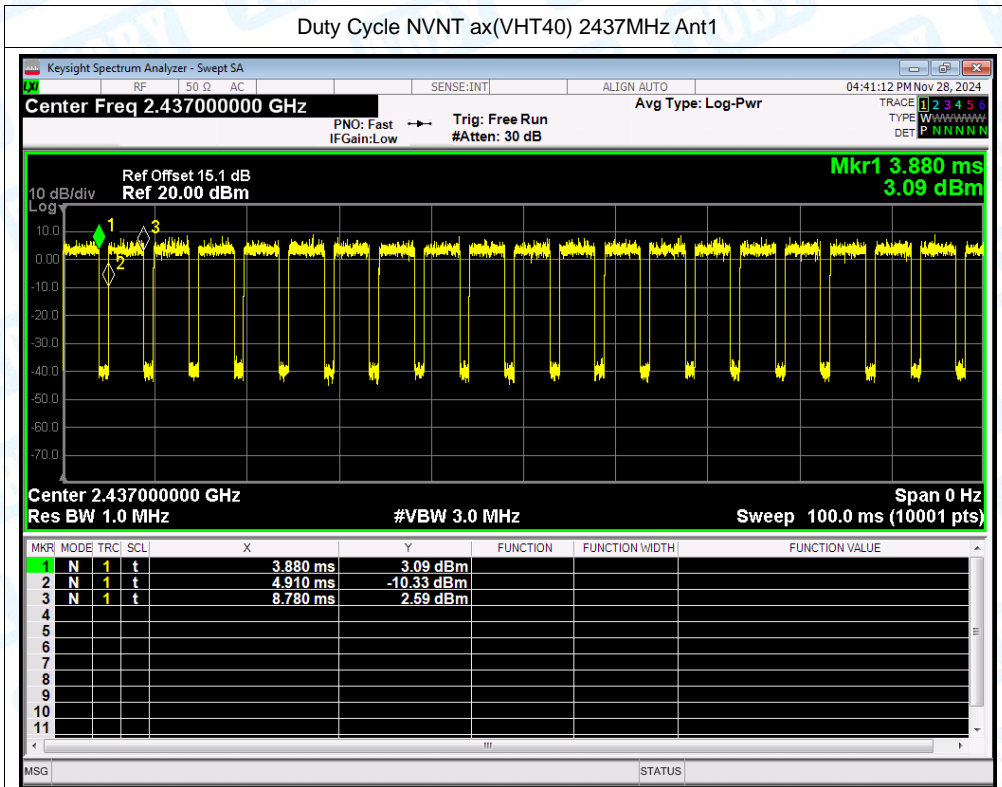
Duty Cycle NVNT ax(VHT20) 2412MHz Ant1



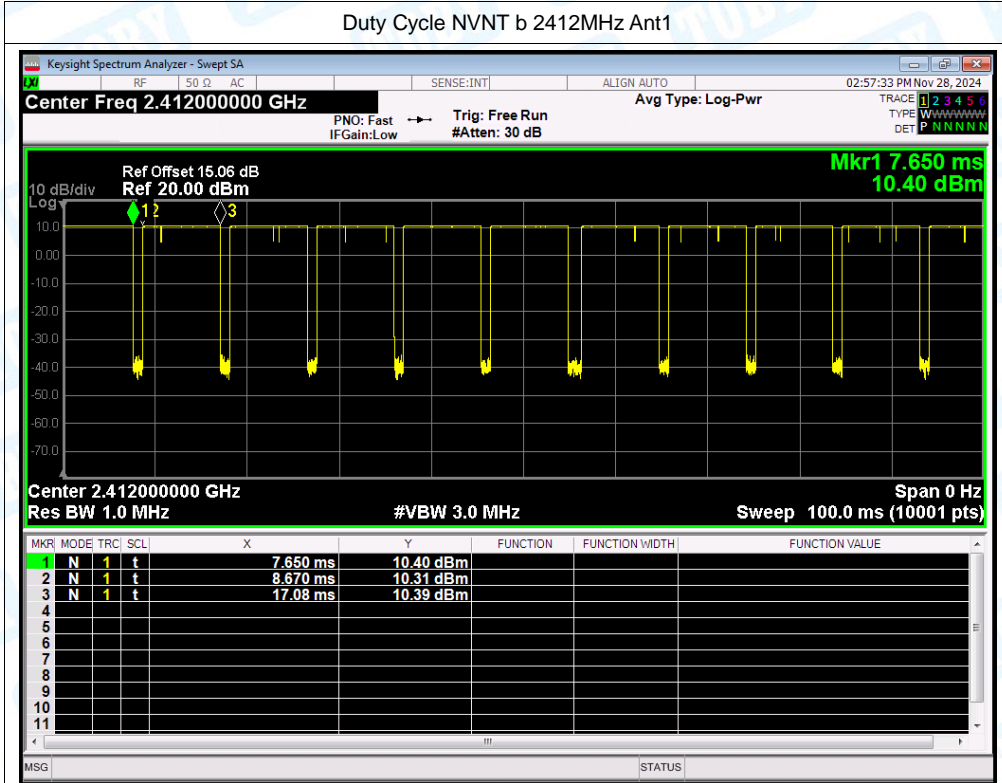
Duty Cycle NVNT ax(VHT20) 2437MHz Ant1



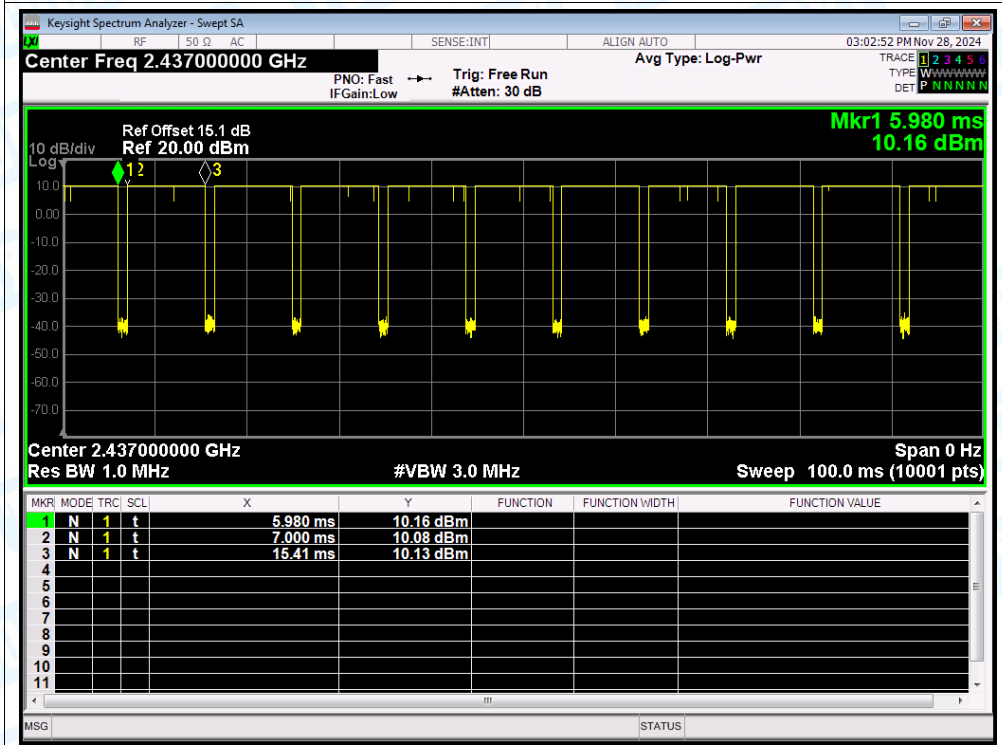




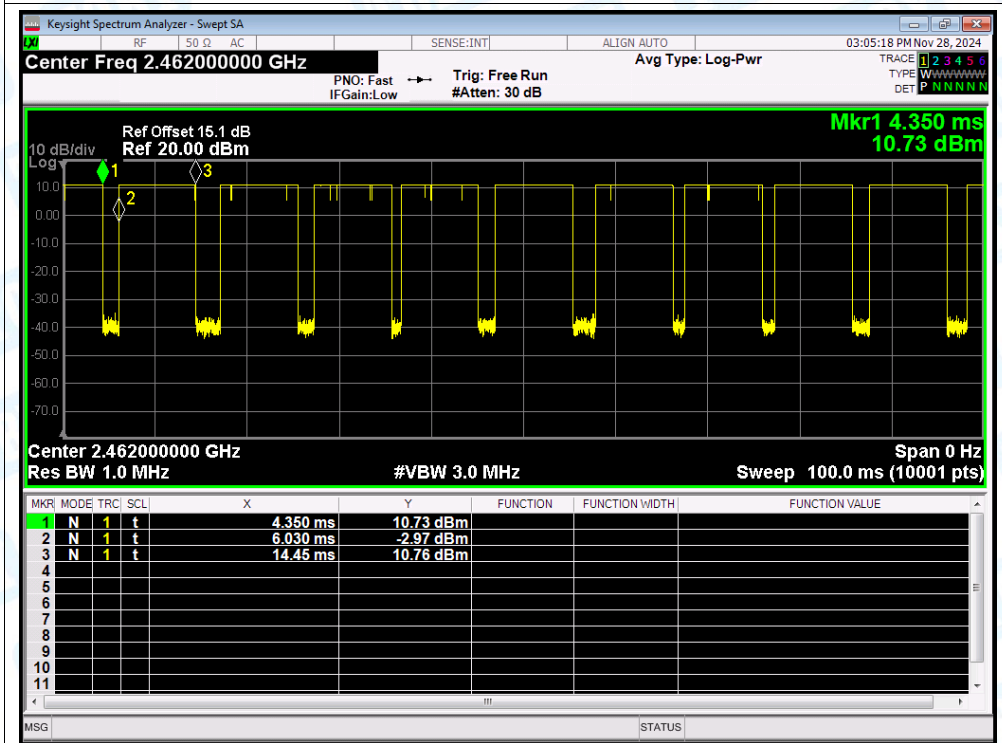
Duty Cycle NVNT b 2412MHz Ant1



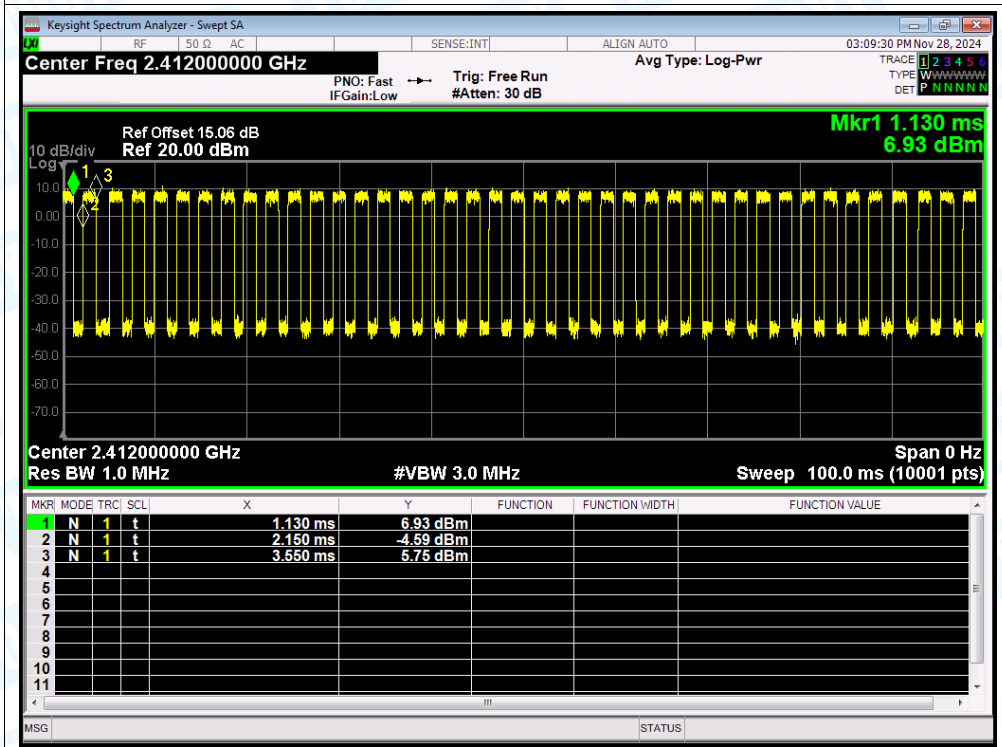
Duty Cycle NVNT b 2437MHz Ant1



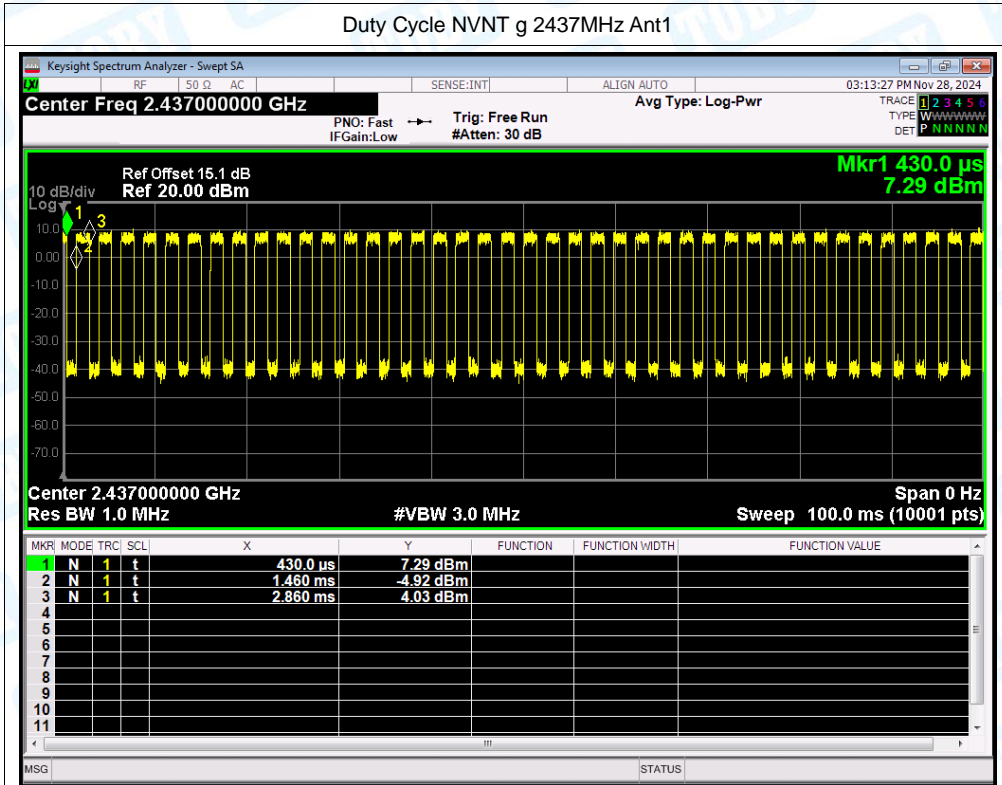
Duty Cycle NVNT b 2462MHz Ant1



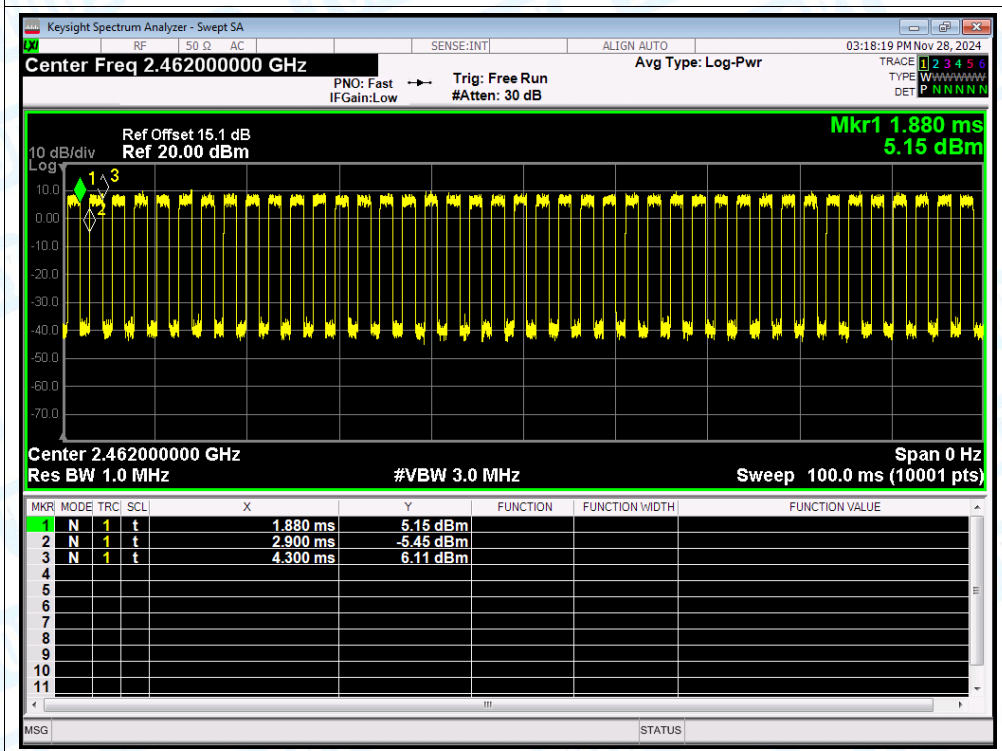
Duty Cycle NVNT g 2412MHz Ant1



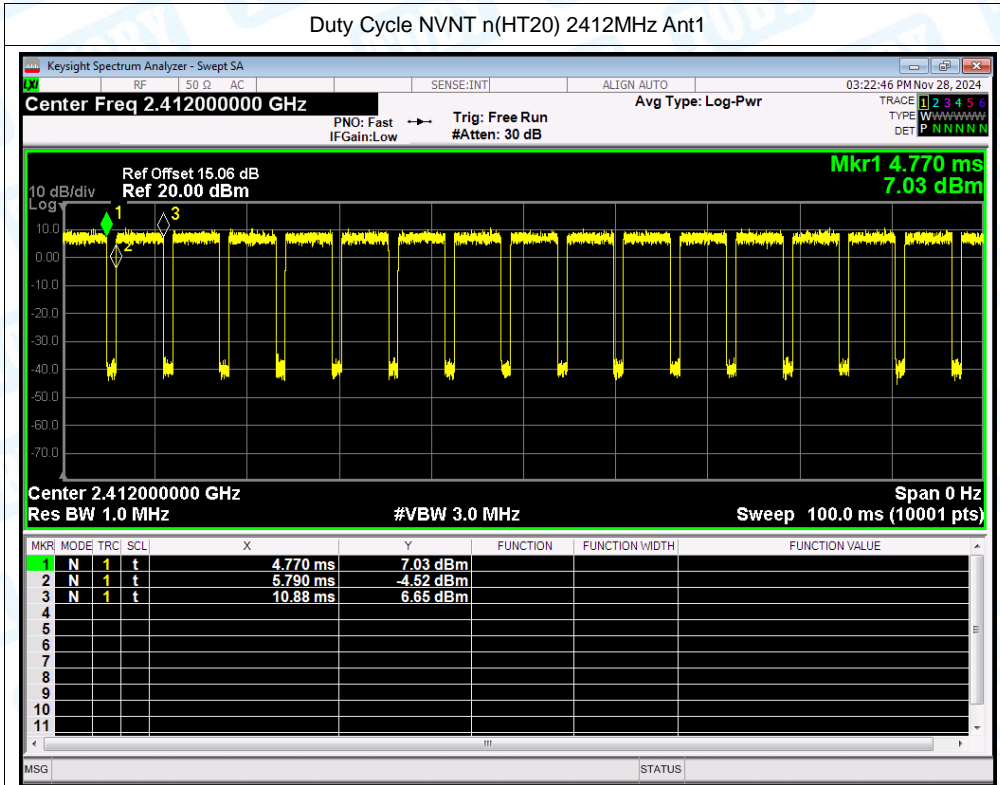
Duty Cycle NVNT g 2437MHz Ant1



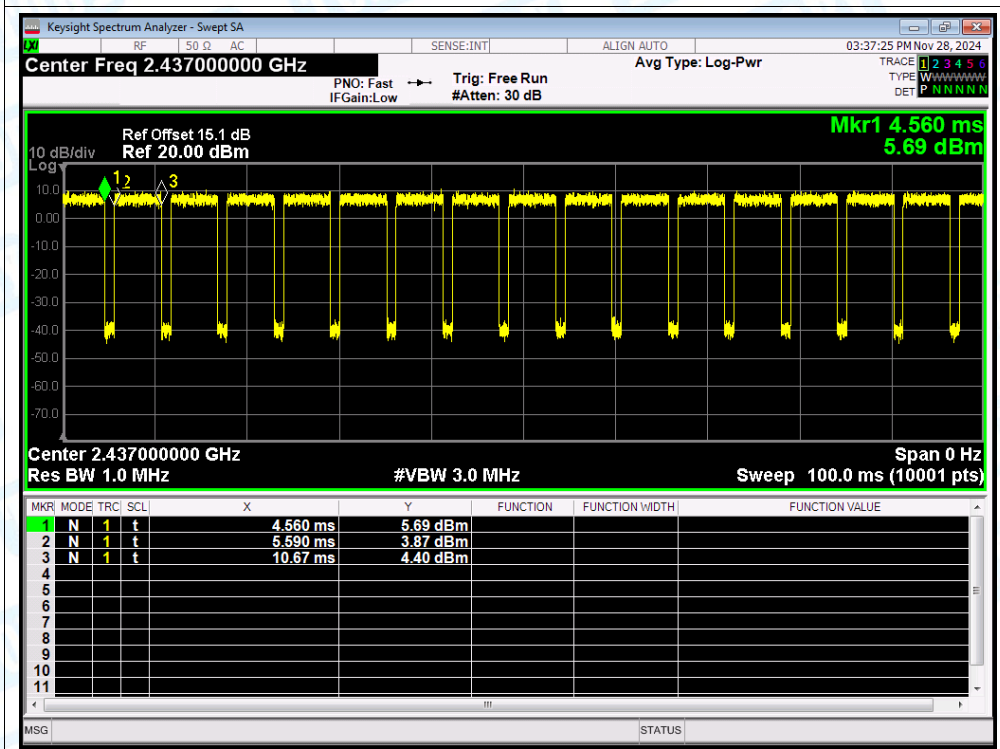
Duty Cycle NVNT g 2462MHz Ant1



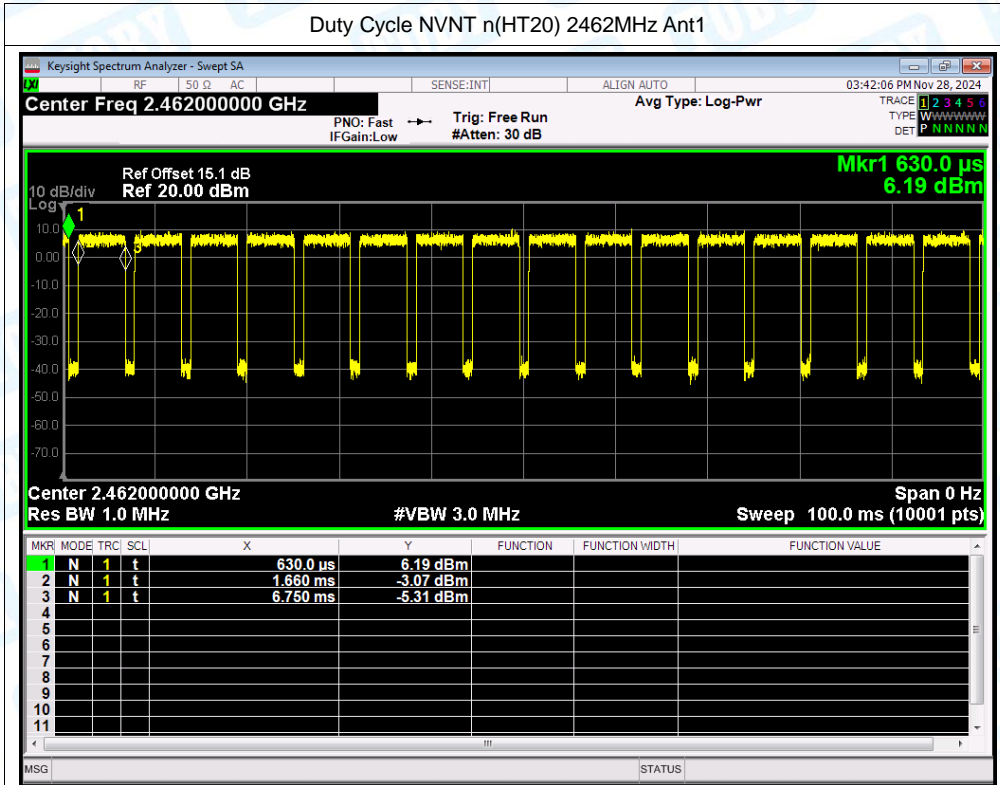
Duty Cycle NVNT n(HT20) 2412MHz Ant1



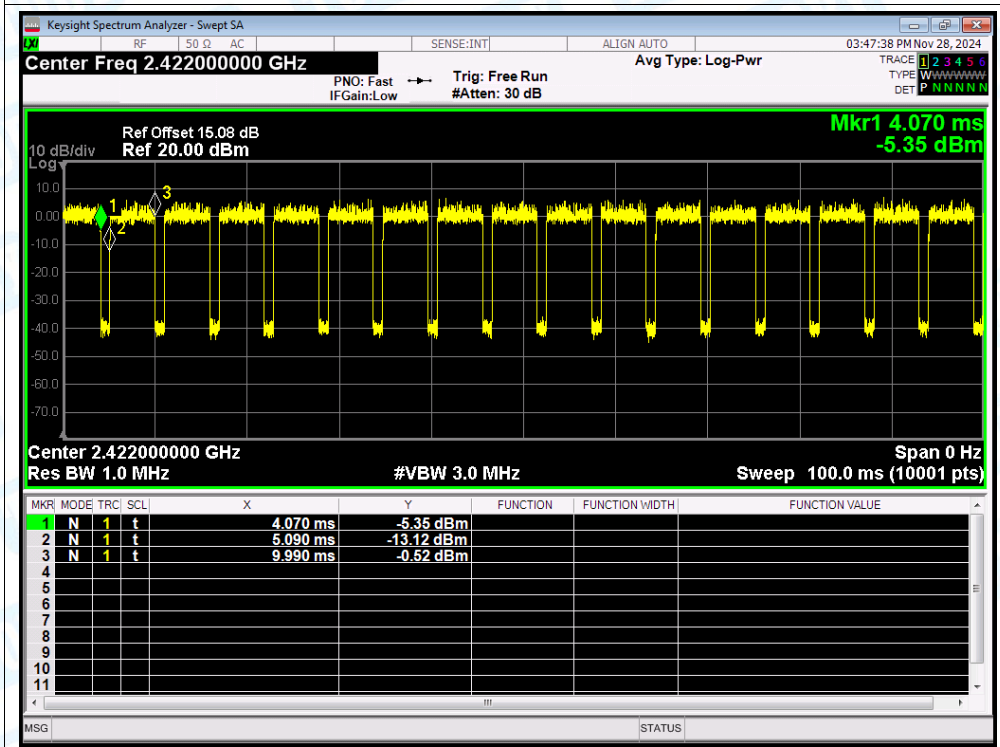
Duty Cycle NVNT n(HT20) 2437MHz Ant1



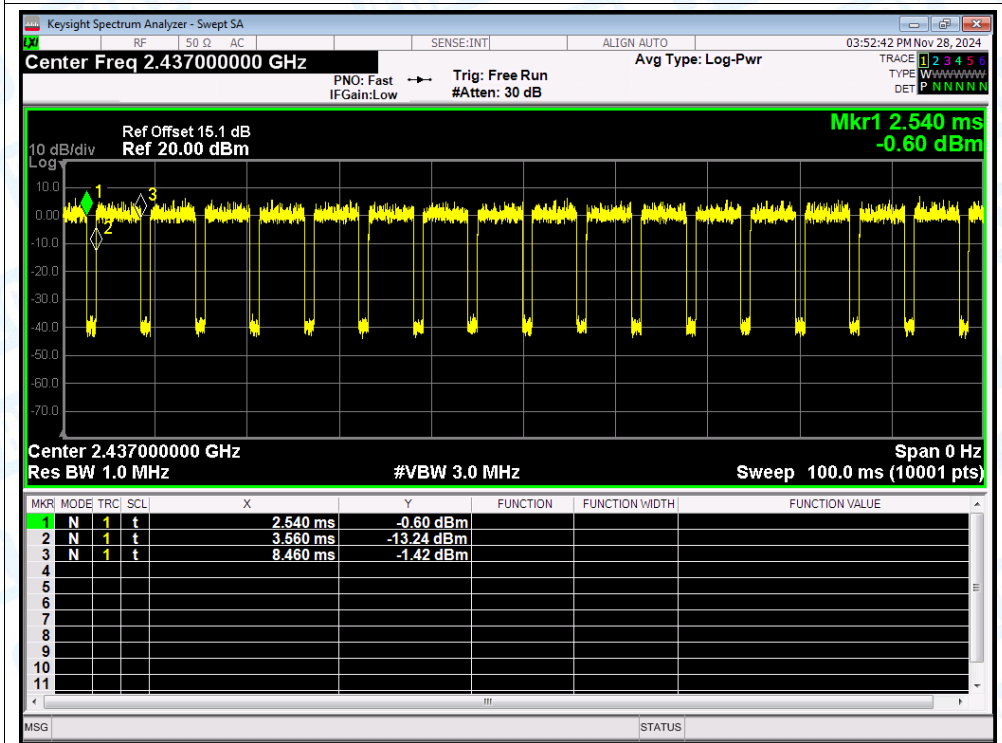
Duty Cycle NVNT n(HT20) 2462MHz Ant1



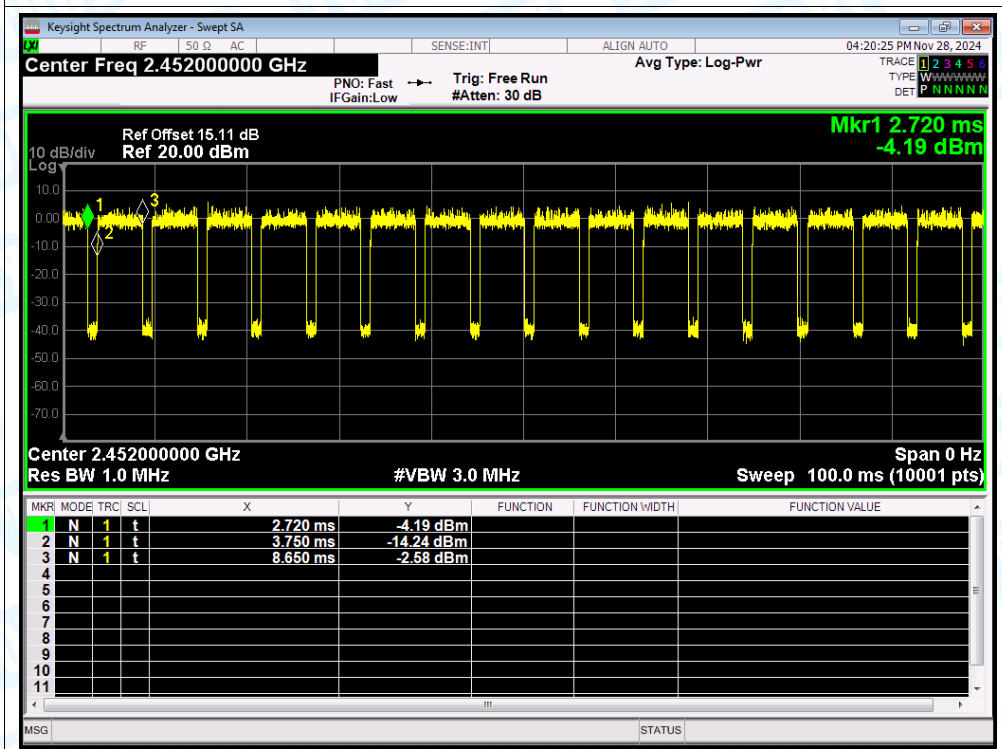
Duty Cycle NVNT n(HT40) 2422MHz Ant1



Duty Cycle NVNT n(HT40) 2437MHz Ant1



Duty Cycle NVNT n(HT40) 2452MHz Ant1



2. Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	ax(VHT20)	2412	Ant1	13.97	30	Pass
NVNT	ax(VHT20)	2437	Ant1	13.75	30	Pass
NVNT	ax(VHT20)	2462	Ant1	14.15	30	Pass
NVNT	ax(VHT40)	2422	Ant1	13.85	30	Pass
NVNT	ax(VHT40)	2437	Ant1	13.7	30	Pass
NVNT	ax(VHT40)	2452	Ant1	13.35	30	Pass
NVNT	b	2412	Ant1	15.83	30	Pass
NVNT	b	2437	Ant1	15.69	30	Pass
NVNT	b	2462	Ant1	16.11	30	Pass
NVNT	g	2412	Ant1	15.59	30	Pass
NVNT	g	2437	Ant1	15.37	30	Pass
NVNT	g	2462	Ant1	14.81	30	Pass
NVNT	n(HT20)	2412	Ant1	13.87	30	Pass
NVNT	n(HT20)	2437	Ant1	13.65	30	Pass
NVNT	n(HT20)	2462	Ant1	13.05	30	Pass
NVNT	n(HT40)	2422	Ant1	13.74	30	Pass
NVNT	n(HT40)	2437	Ant1	13.52	30	Pass
NVNT	n(HT40)	2452	Ant1	13.19	30	Pass

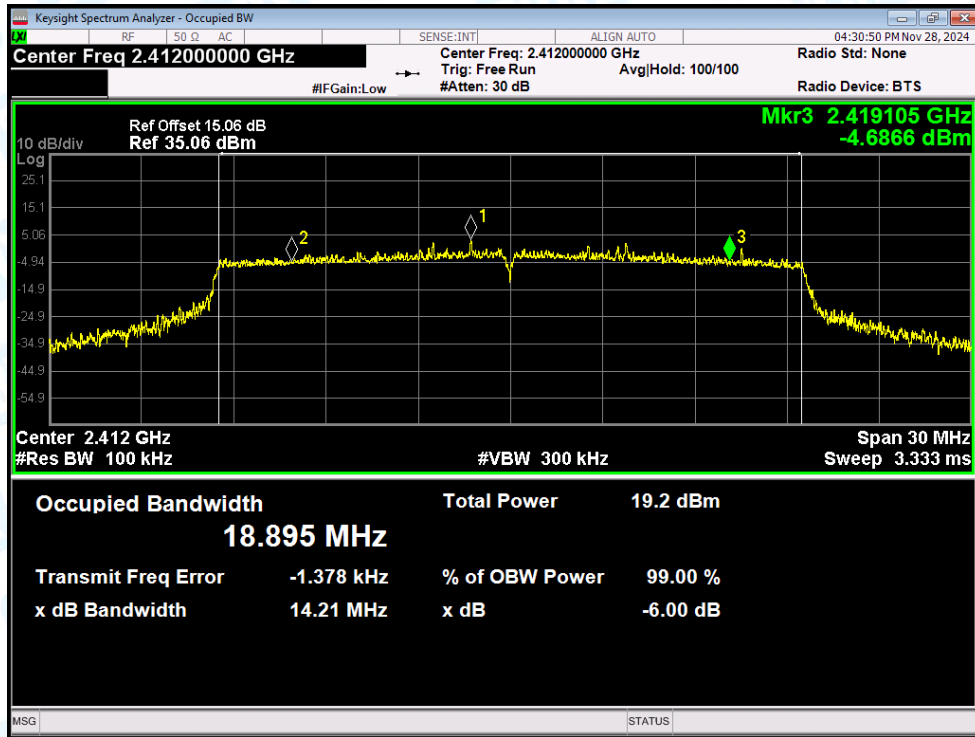
Note: The Duty Cycle Factor is compensated in the graph.

3. -6dB Bandwidth

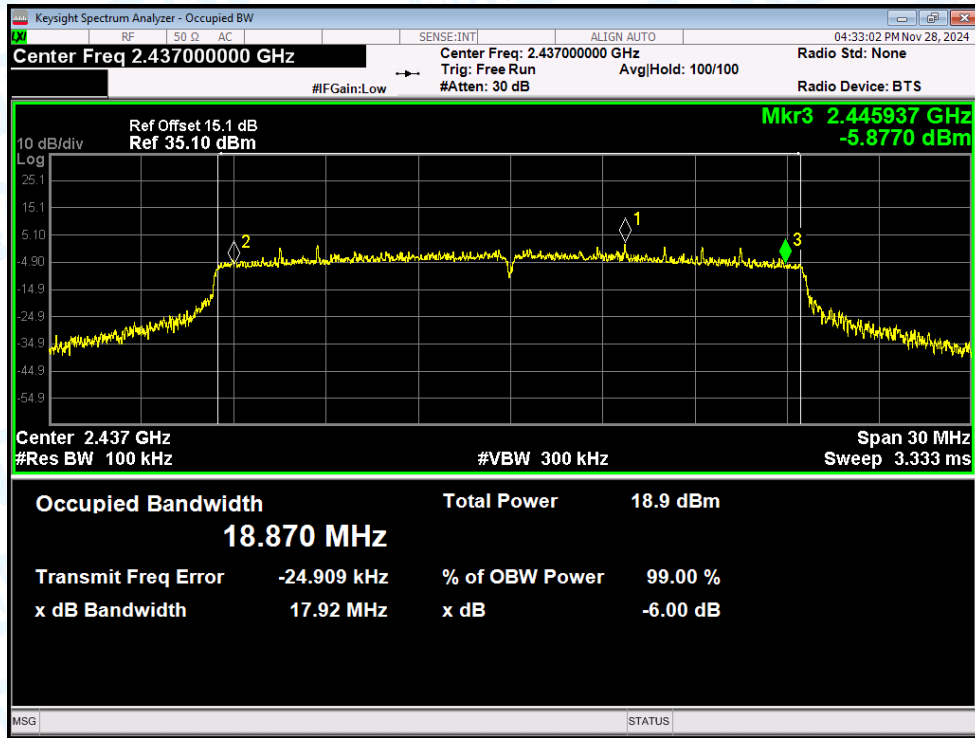
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	ax(VHT20)	2412	Ant1	14.21	0.5	Pass
NVNT	ax(VHT20)	2437	Ant1	17.92	0.5	Pass
NVNT	ax(VHT20)	2462	Ant1	18.92	0.5	Pass
NVNT	ax(VHT40)	2422	Ant1	36.74	0.5	Pass
NVNT	ax(VHT40)	2437	Ant1	36.84	0.5	Pass
NVNT	ax(VHT40)	2452	Ant1	31.63	0.5	Pass
NVNT	b	2412	Ant1	7.07	0.5	Pass
NVNT	b	2437	Ant1	7.05	0.5	Pass
NVNT	b	2462	Ant1	7.56	0.5	Pass
NVNT	g	2412	Ant1	15.75	0.5	Pass
NVNT	g	2437	Ant1	14.76	0.5	Pass
NVNT	g	2462	Ant1	15.4	0.5	Pass
NVNT	n(HT20)	2412	Ant1	17.27	0.5	Pass
NVNT	n(HT20)	2437	Ant1	17.16	0.5	Pass
NVNT	n(HT20)	2462	Ant1	15.57	0.5	Pass
NVNT	n(HT40)	2422	Ant1	36.26	0.5	Pass
NVNT	n(HT40)	2437	Ant1	33.85	0.5	Pass
NVNT	n(HT40)	2452	Ant1	36.29	0.5	Pass

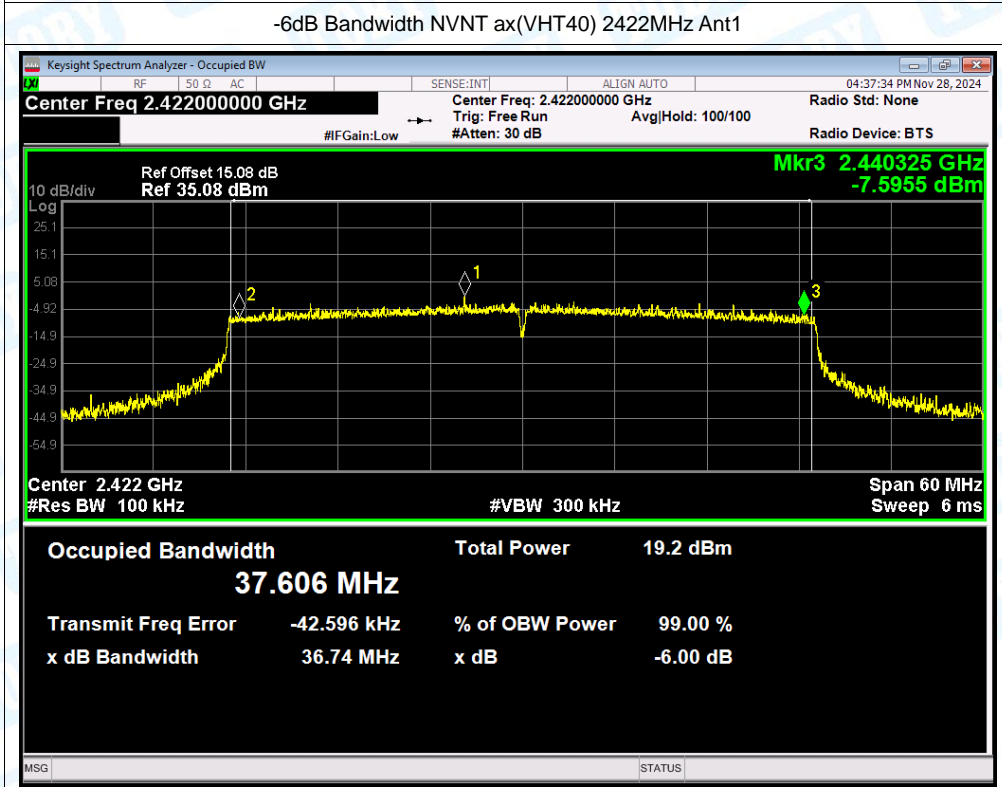
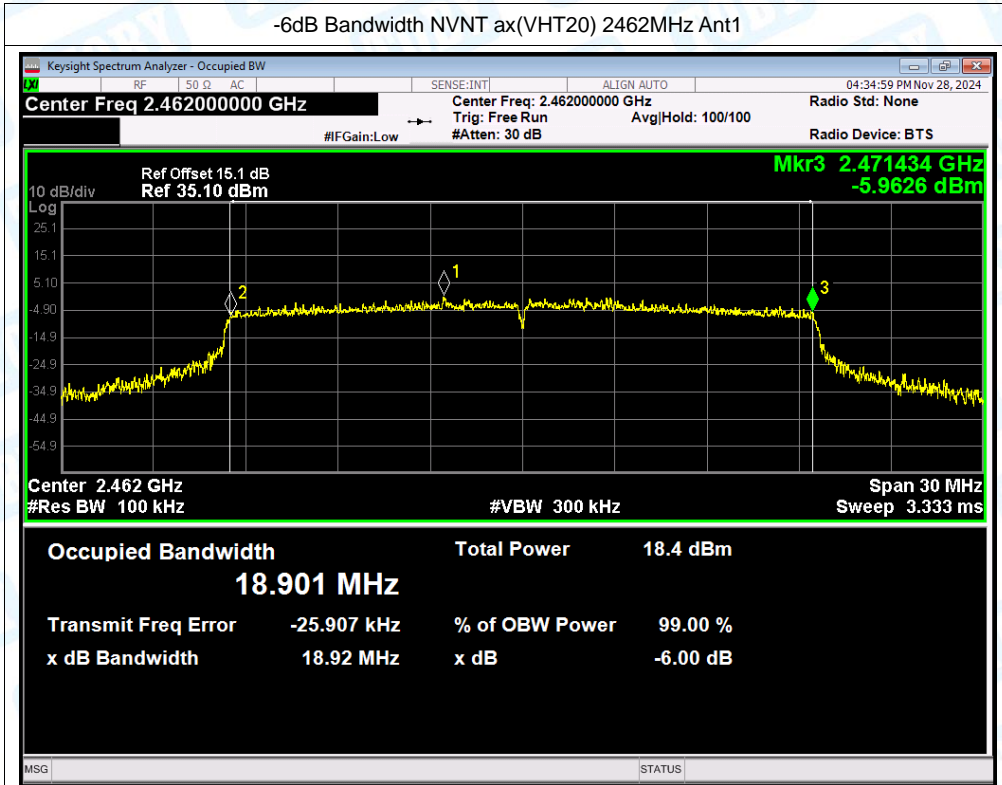
Test Graphs

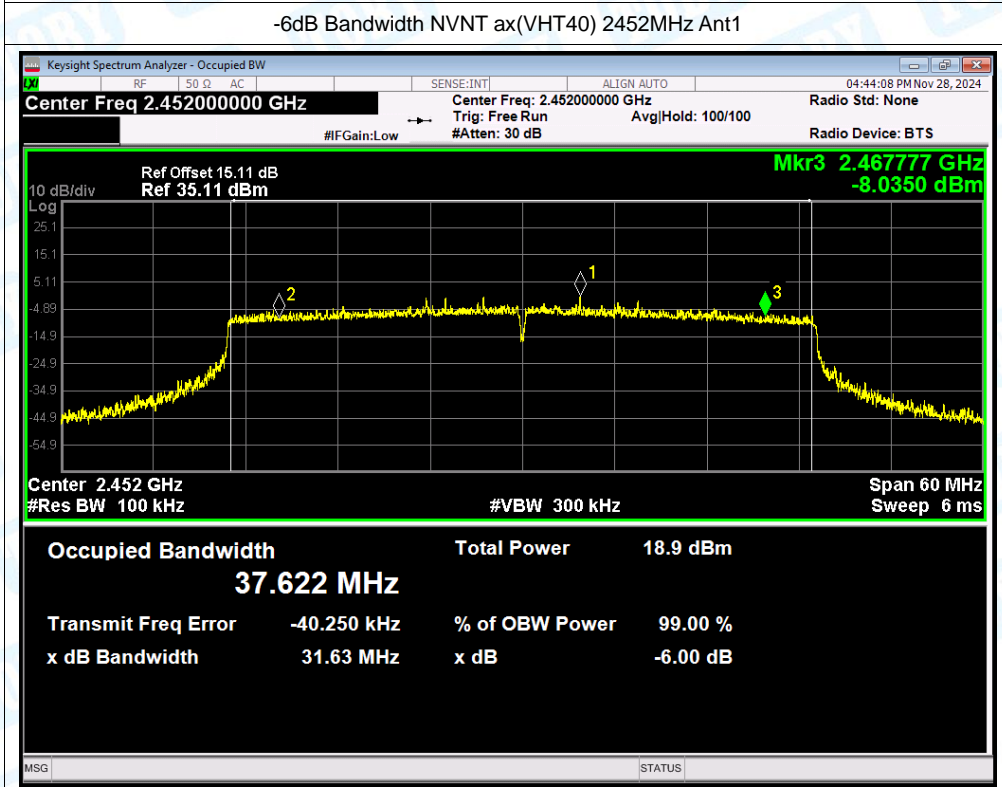
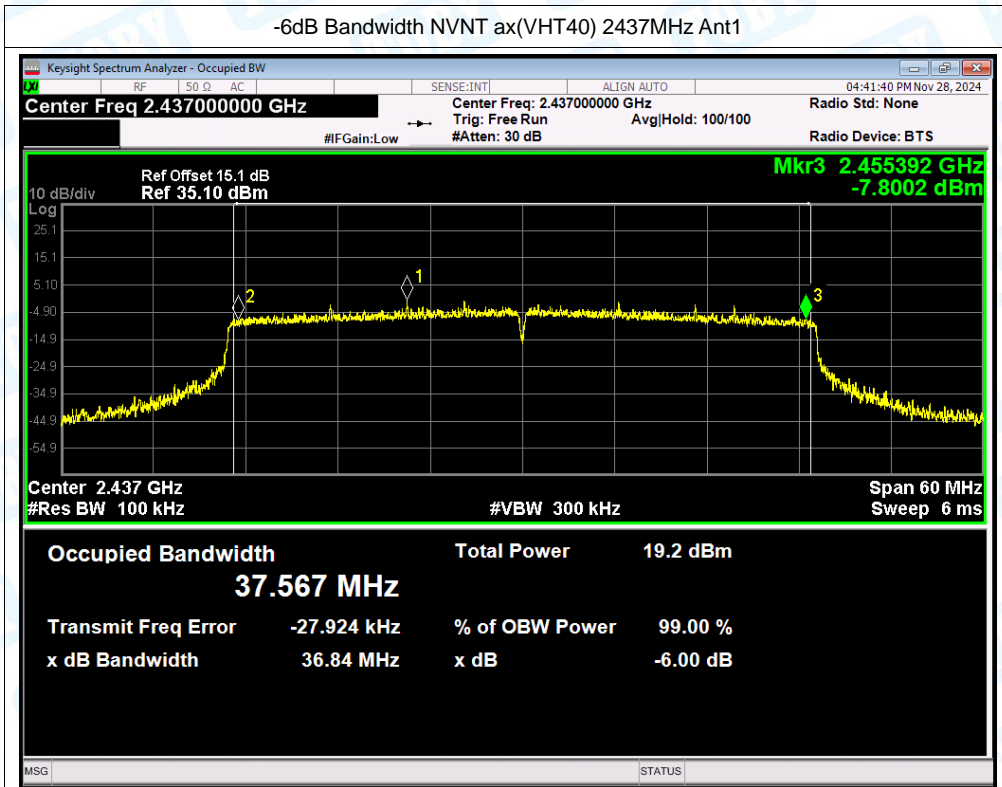
-6dB Bandwidth NVNT ax(VHT20) 2412MHz Ant1

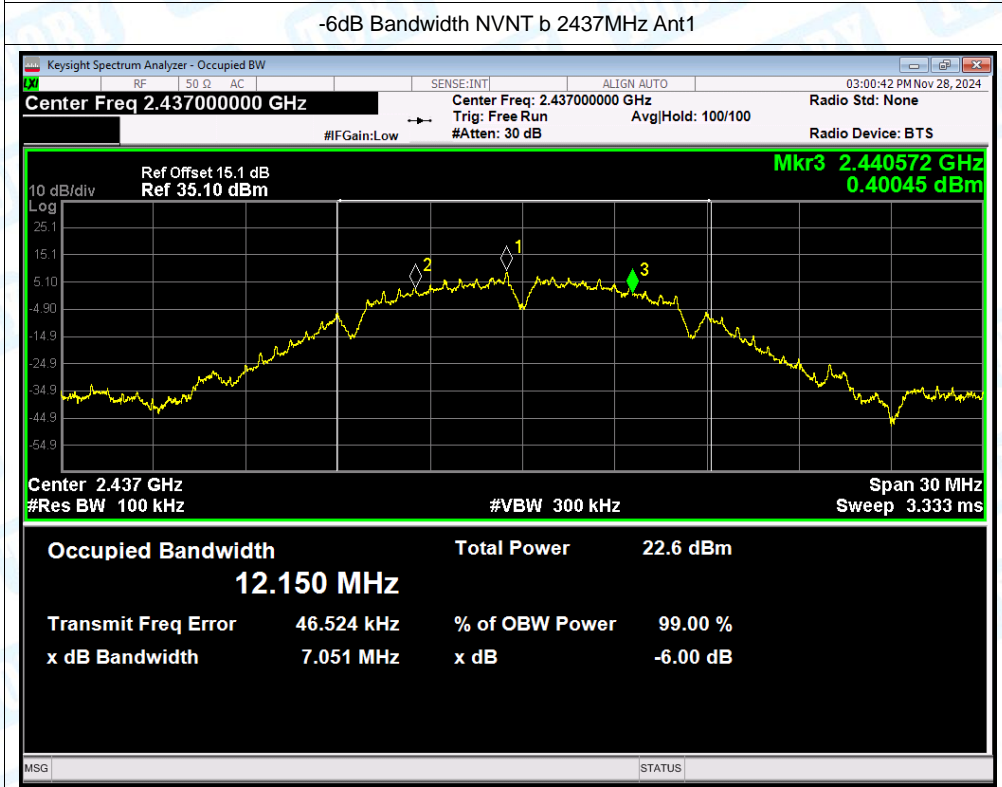
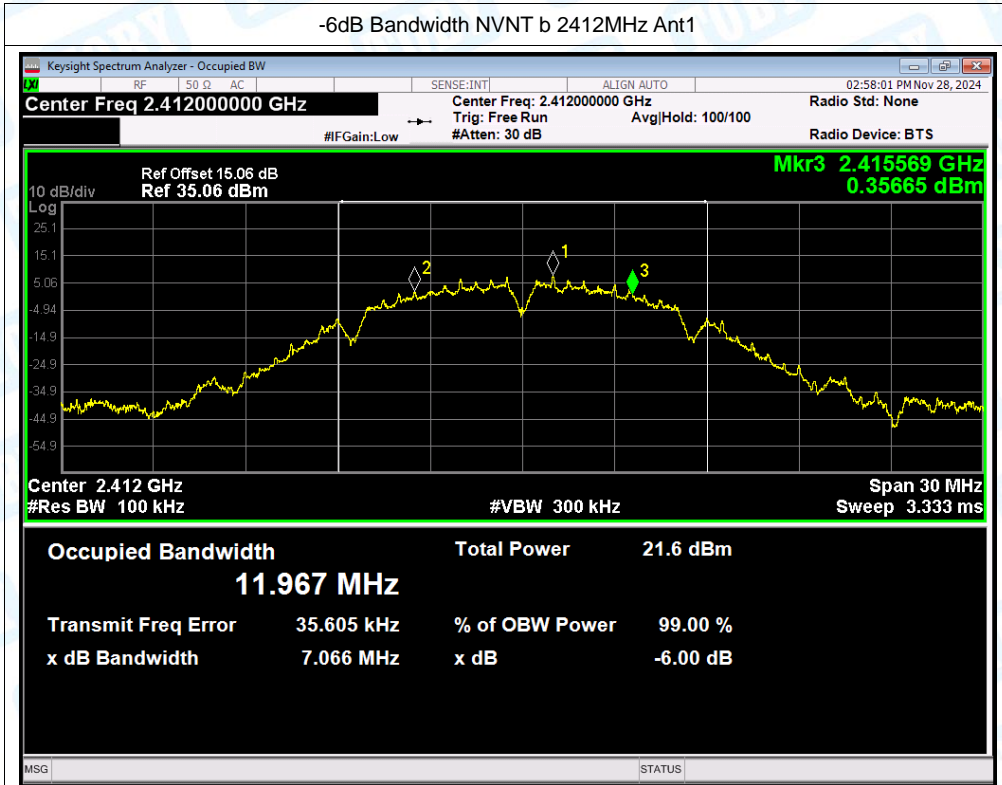


-6dB Bandwidth NVNT ax(VHT20) 2437MHz Ant1





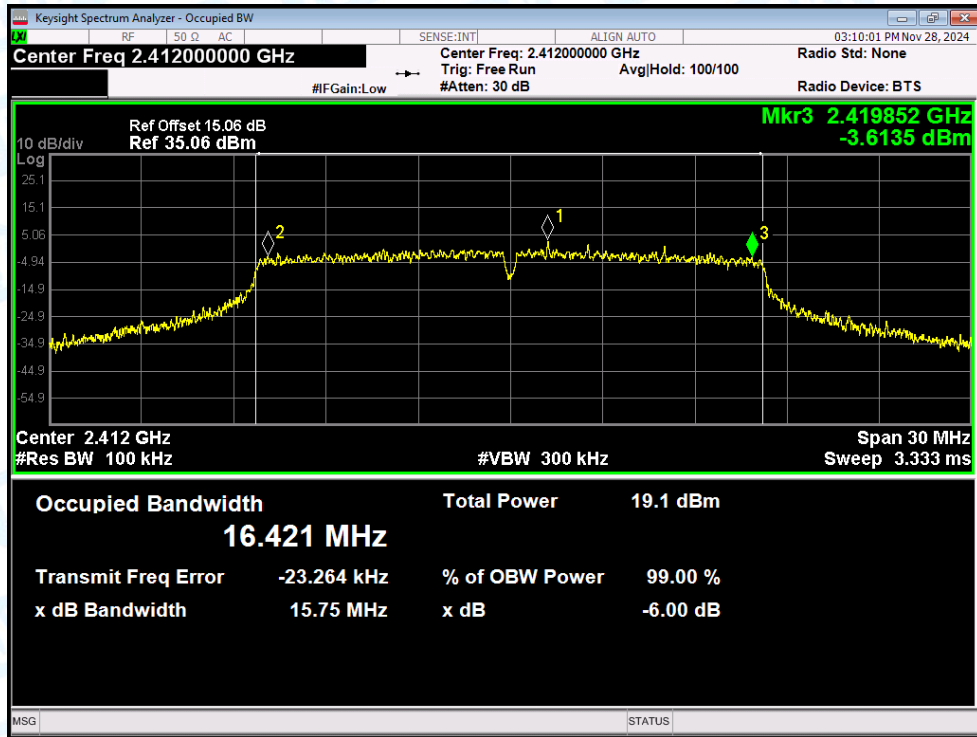




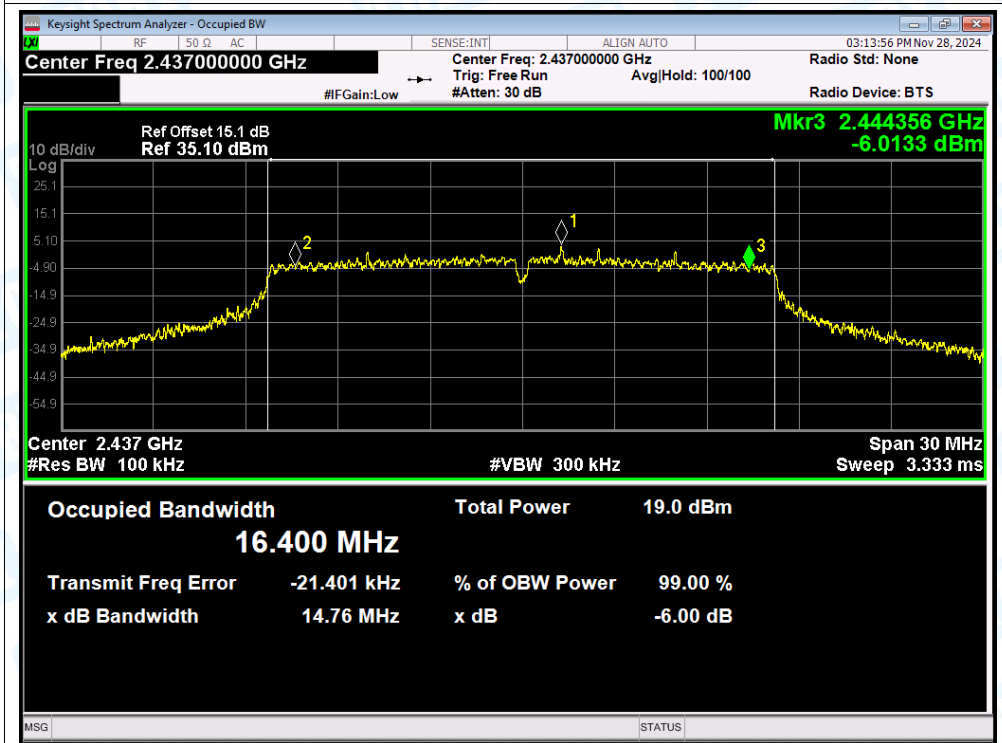
-6dB Bandwidth NVNT b 2462MHz Ant1



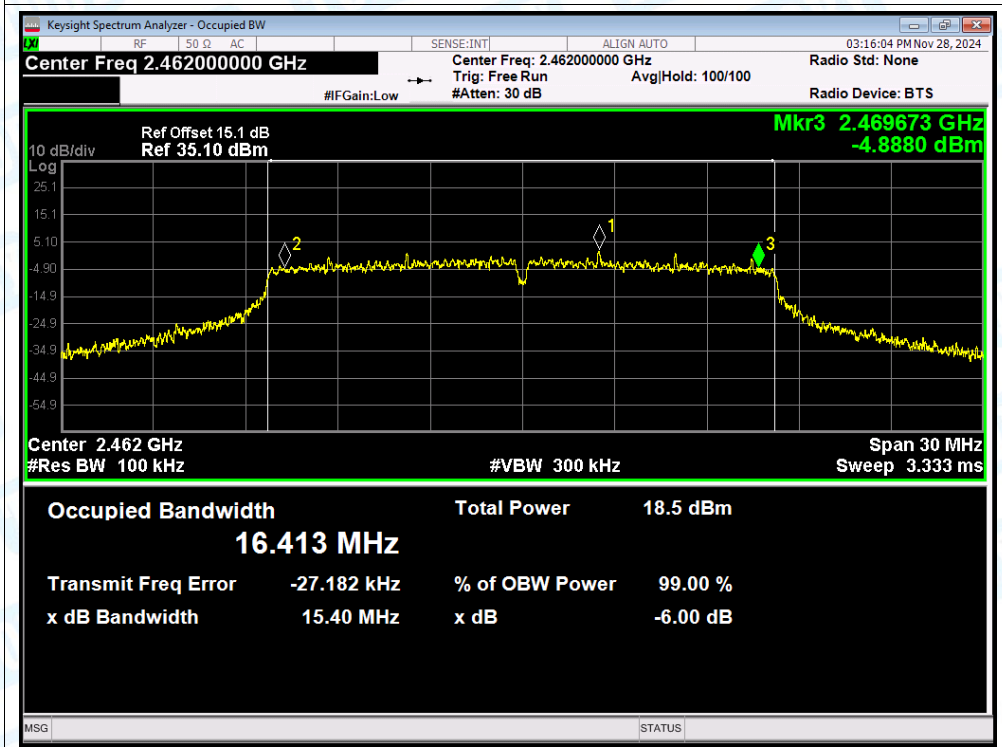
-6dB Bandwidth NVNT g 2412MHz Ant1

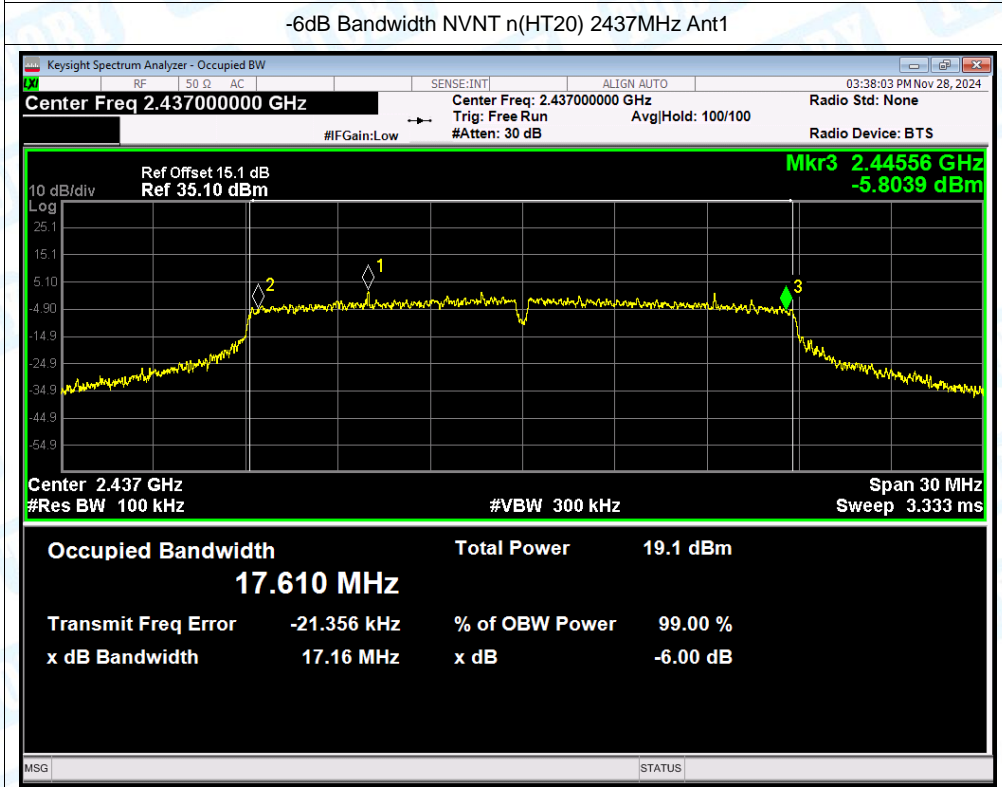
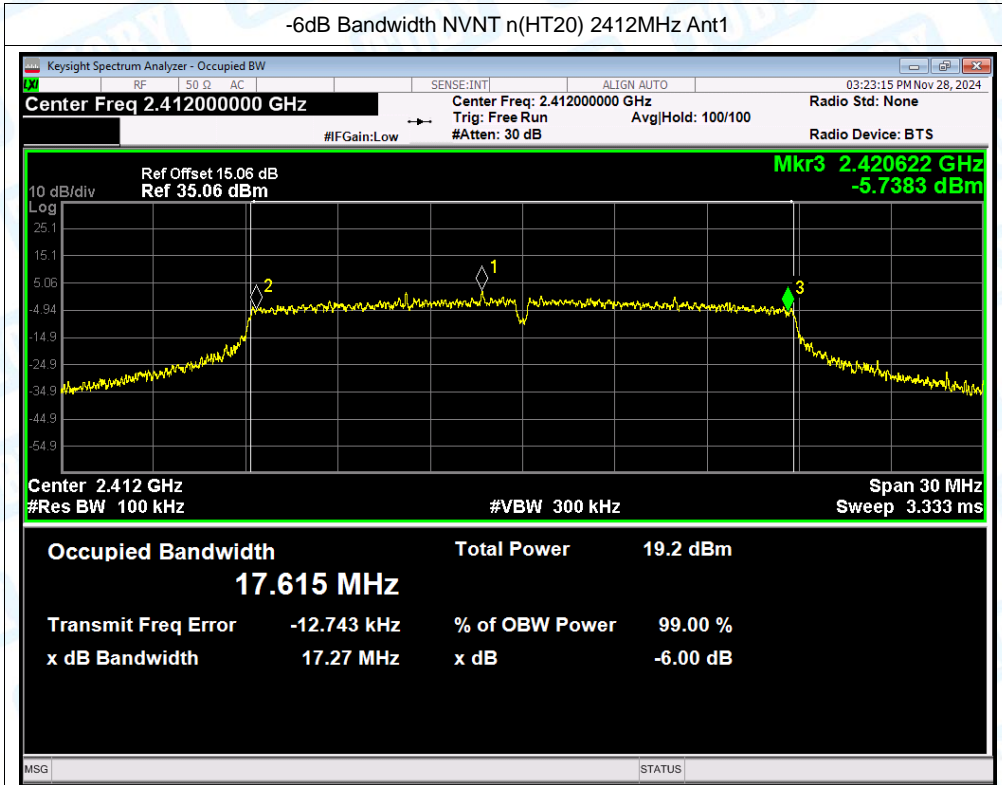


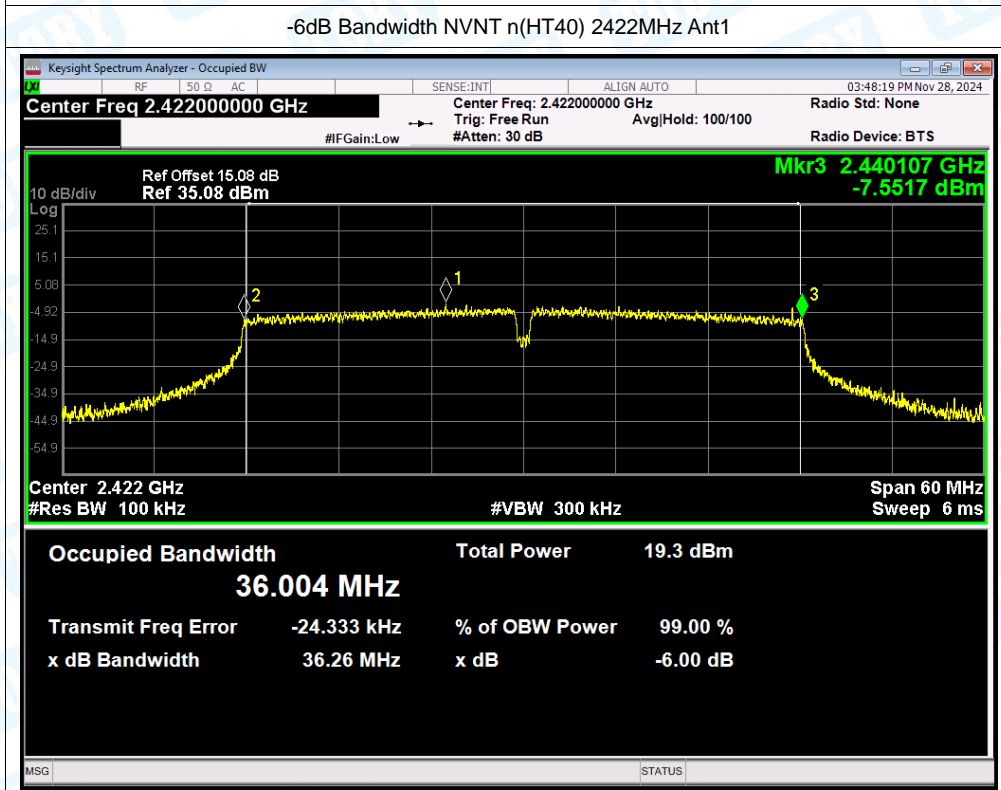
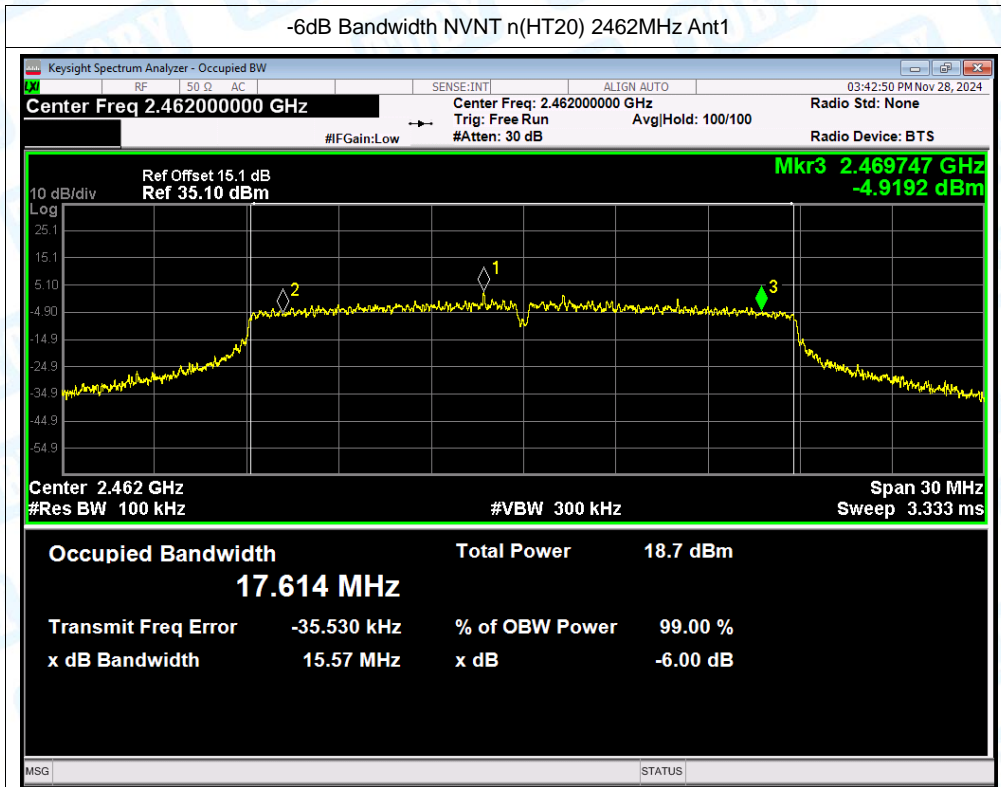
-6dB Bandwidth NVNT g 2437MHz Ant1



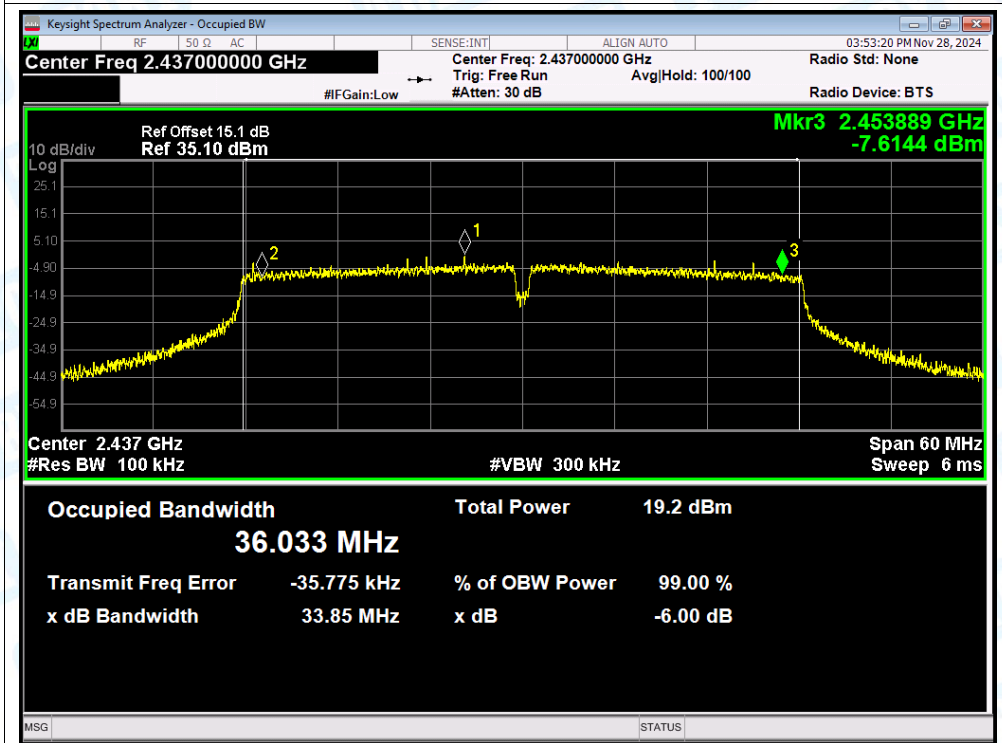
-6dB Bandwidth NVNT g 2462MHz Ant1



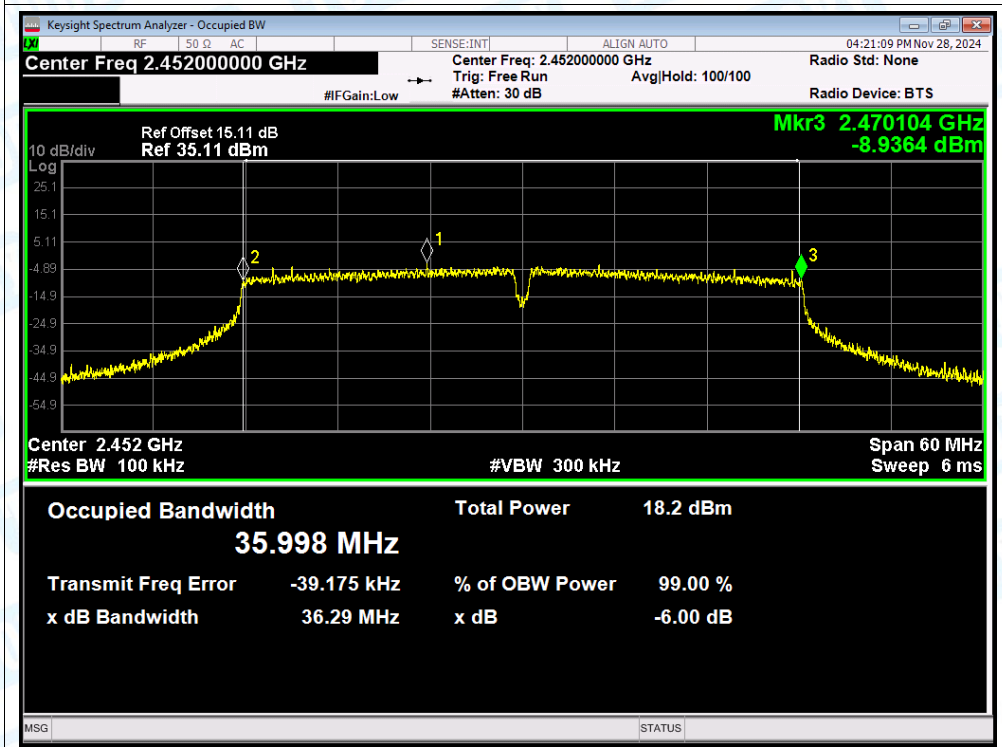




-6dB Bandwidth NVNT n(HT40) 2437MHz Ant1



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

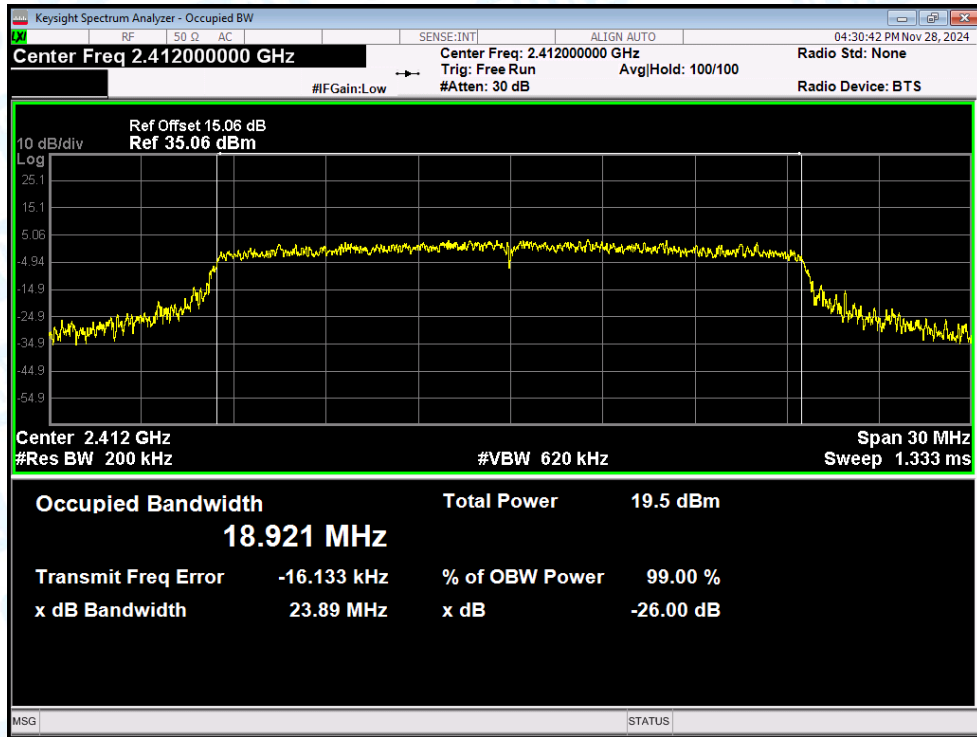


4. Occupied Channel Bandwidth

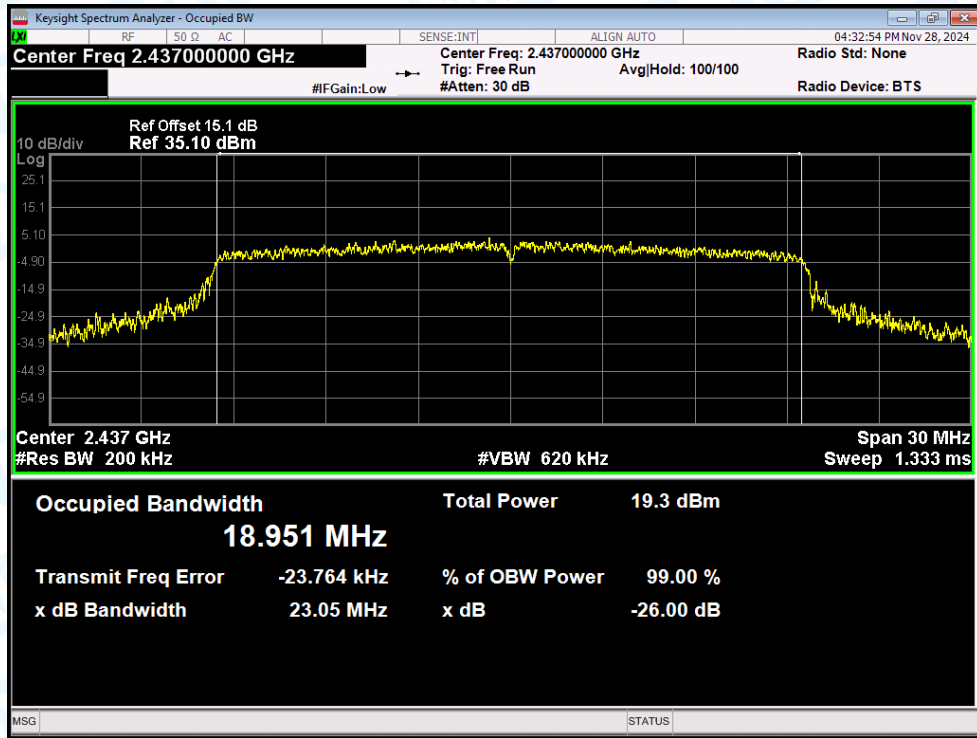
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	ax(VHT20)	2412	Ant1	18.921
NVNT	ax(VHT20)	2437	Ant1	18.951
NVNT	ax(VHT20)	2462	Ant1	18.954
NVNT	ax(VHT40)	2422	Ant1	37.669
NVNT	ax(VHT40)	2437	Ant1	37.654
NVNT	ax(VHT40)	2452	Ant1	37.642
NVNT	b	2412	Ant1	11.985
NVNT	b	2437	Ant1	12.128
NVNT	b	2462	Ant1	12.048
NVNT	g	2412	Ant1	16.535
NVNT	g	2437	Ant1	16.5
NVNT	g	2462	Ant1	16.516
NVNT	n(HT20)	2412	Ant1	17.676
NVNT	n(HT20)	2437	Ant1	17.72
NVNT	n(HT20)	2462	Ant1	17.728
NVNT	n(HT40)	2422	Ant1	36.173
NVNT	n(HT40)	2437	Ant1	36.176
NVNT	n(HT40)	2452	Ant1	36.154

Test Graphs

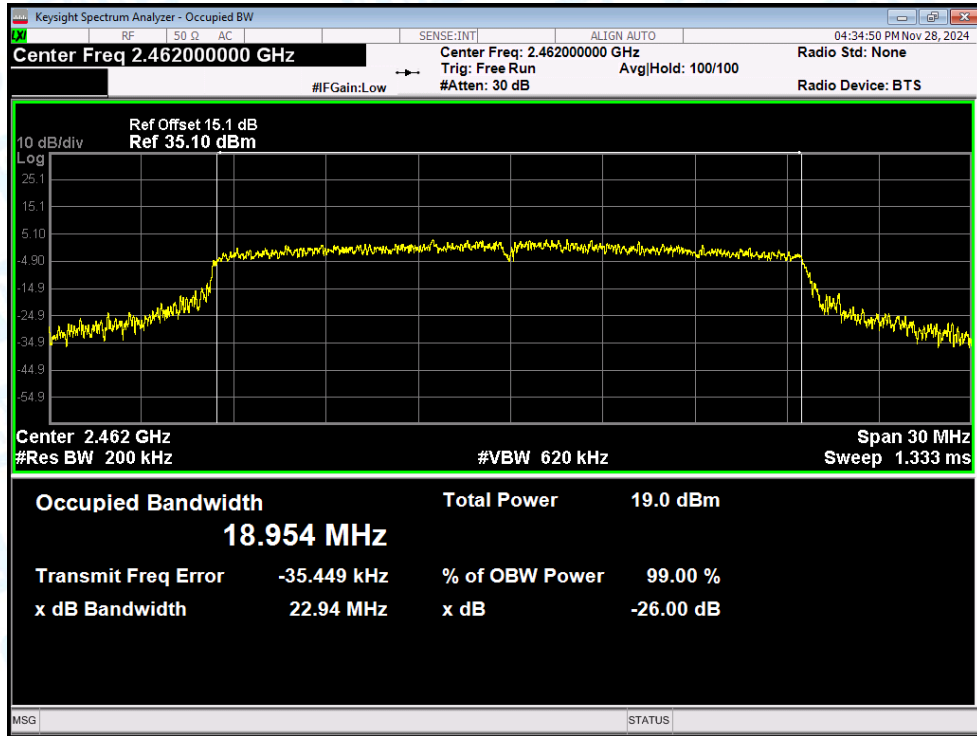
OBW NVNT ax(VHT20) 2412MHz Ant1



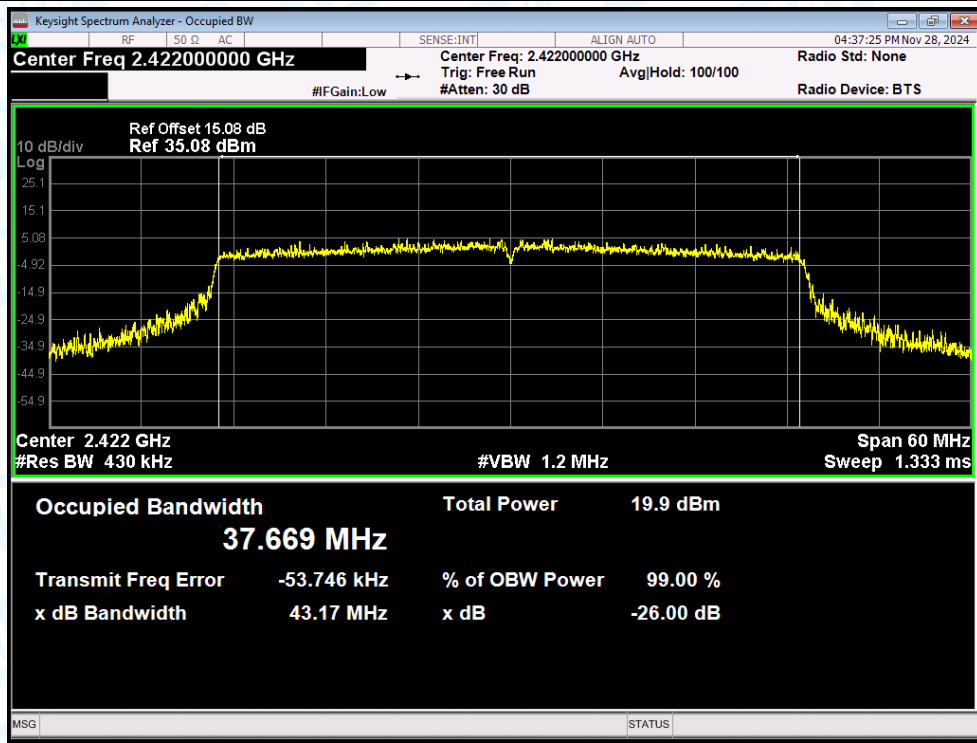
OBW NVNT ax(VHT20) 2437MHz Ant1



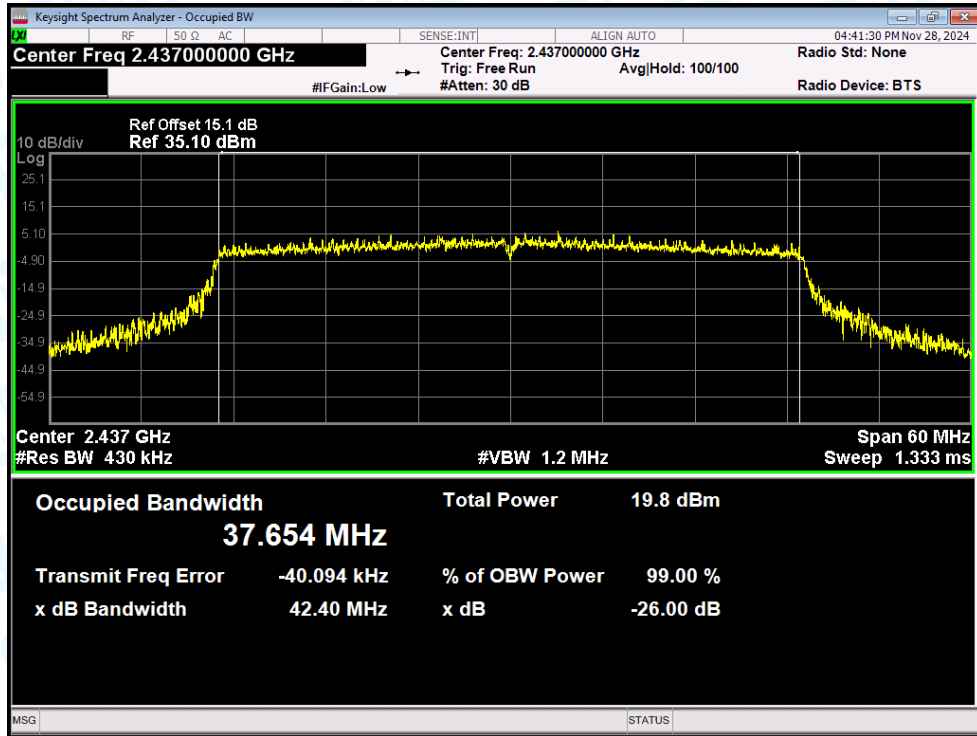
OBW NVNT ax(VHT20) 2462MHz Ant1



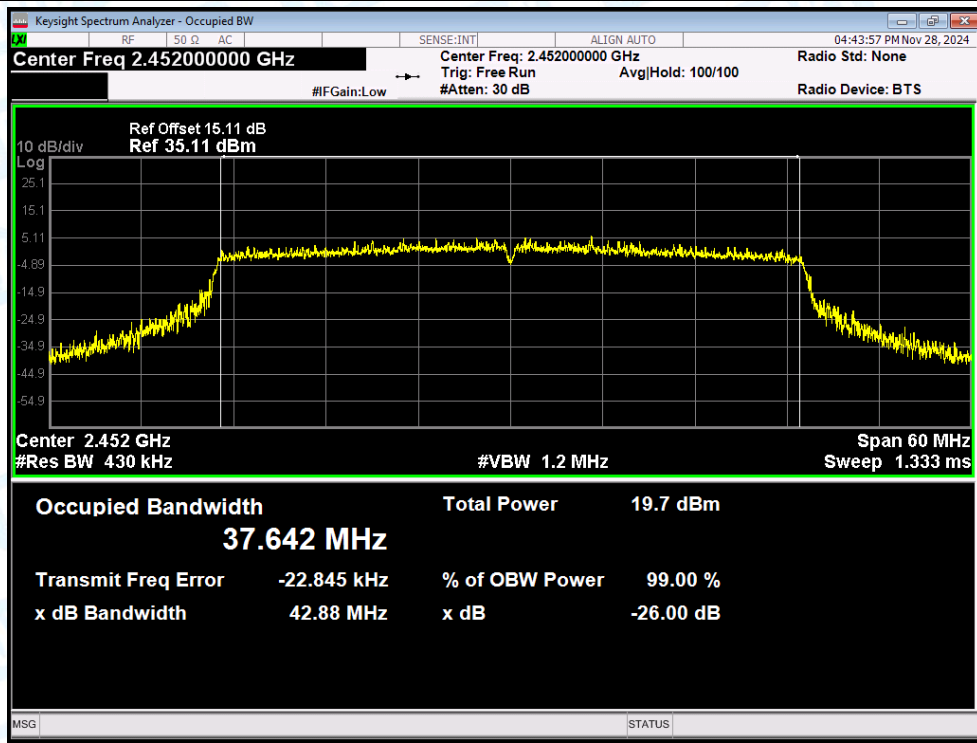
OBW NVNT ax(VHT40) 2422MHz Ant1

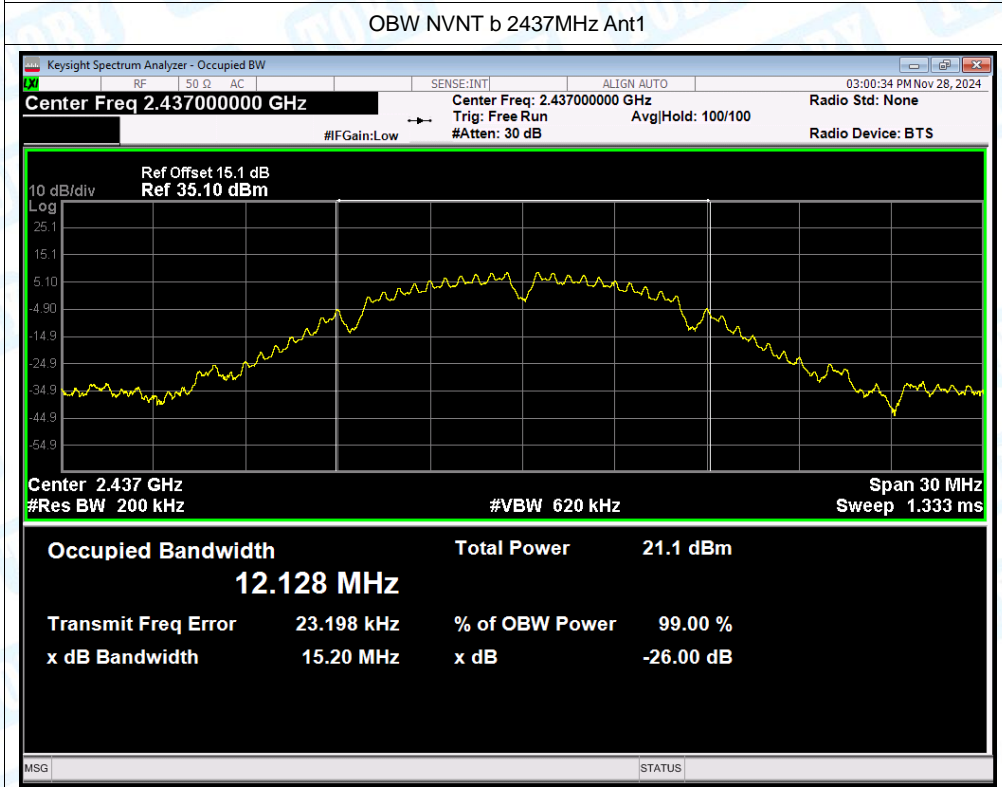
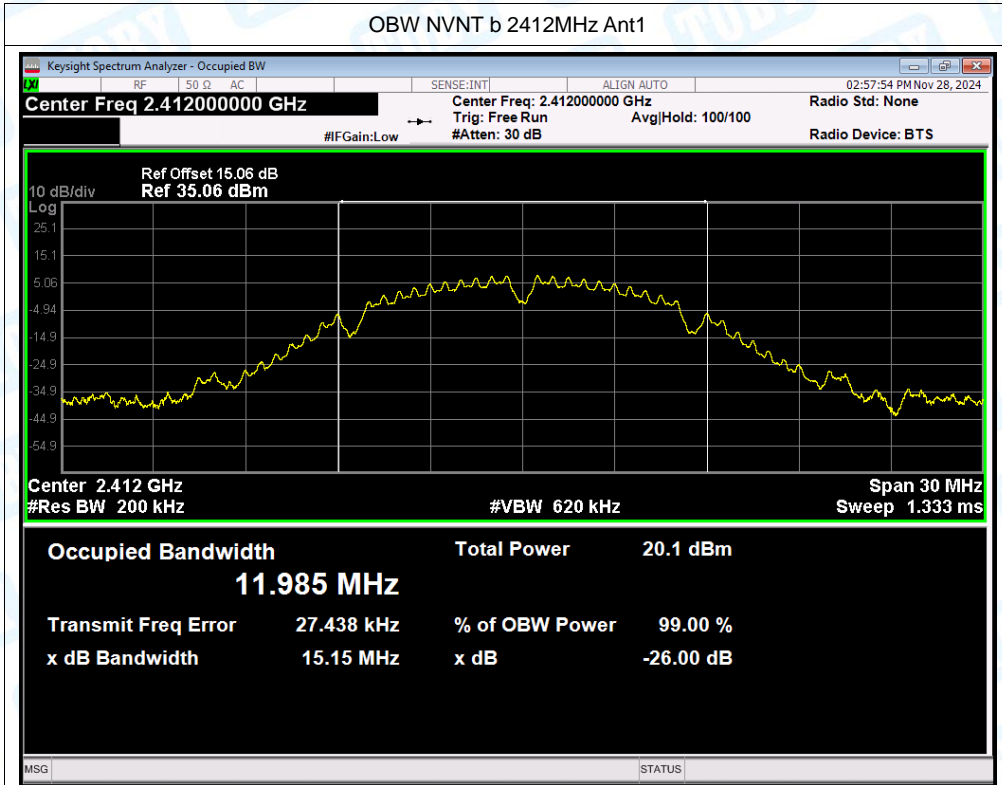


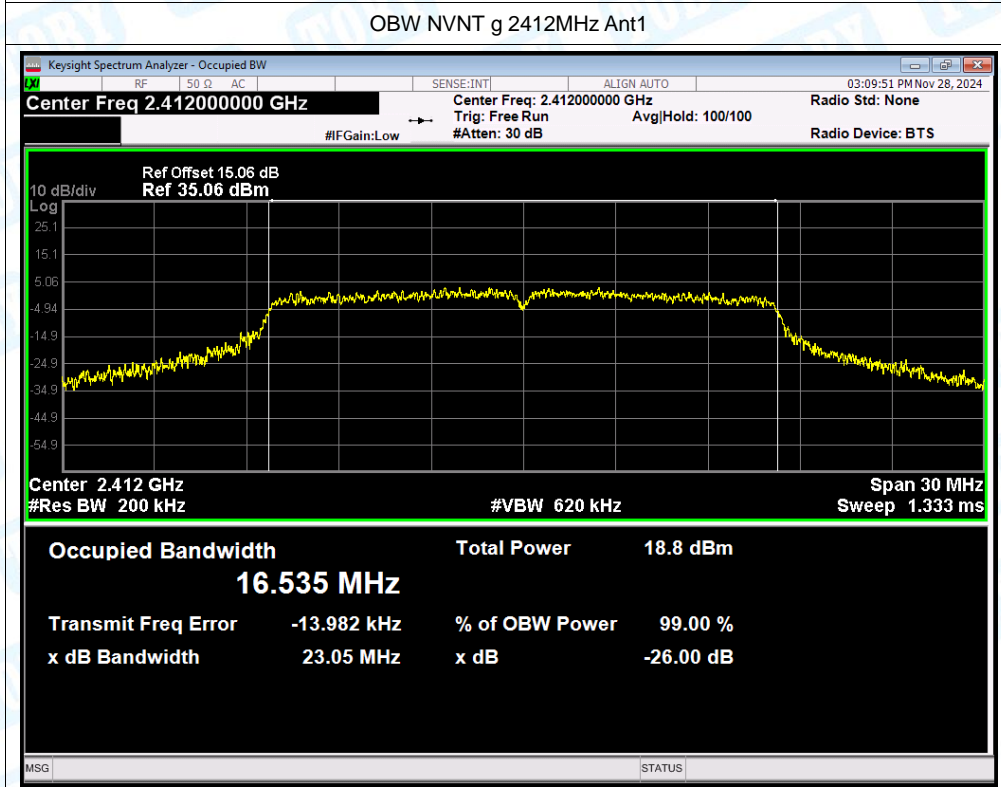
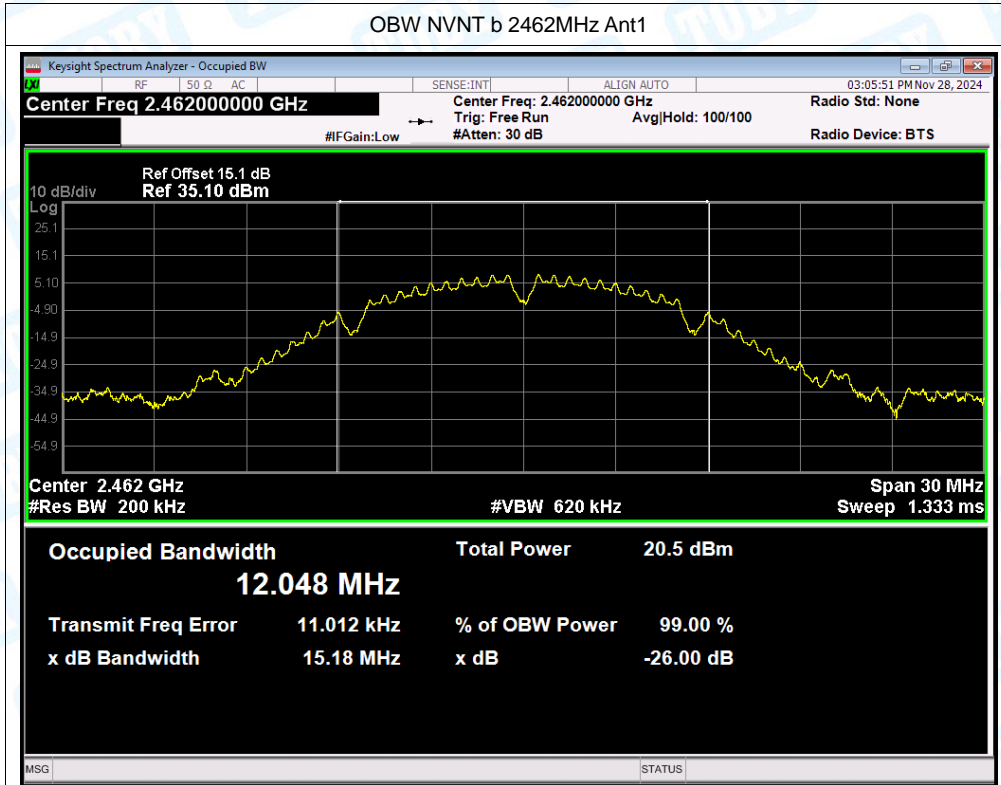
OBW NVNT ax(VHT40) 2437MHz Ant1

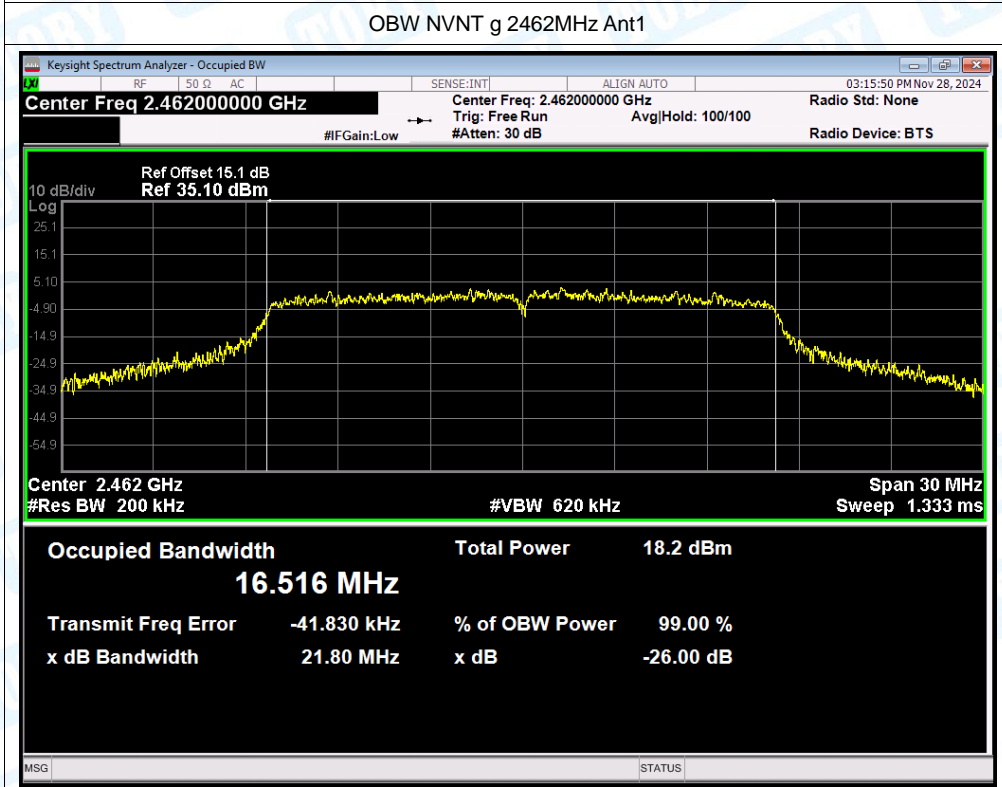
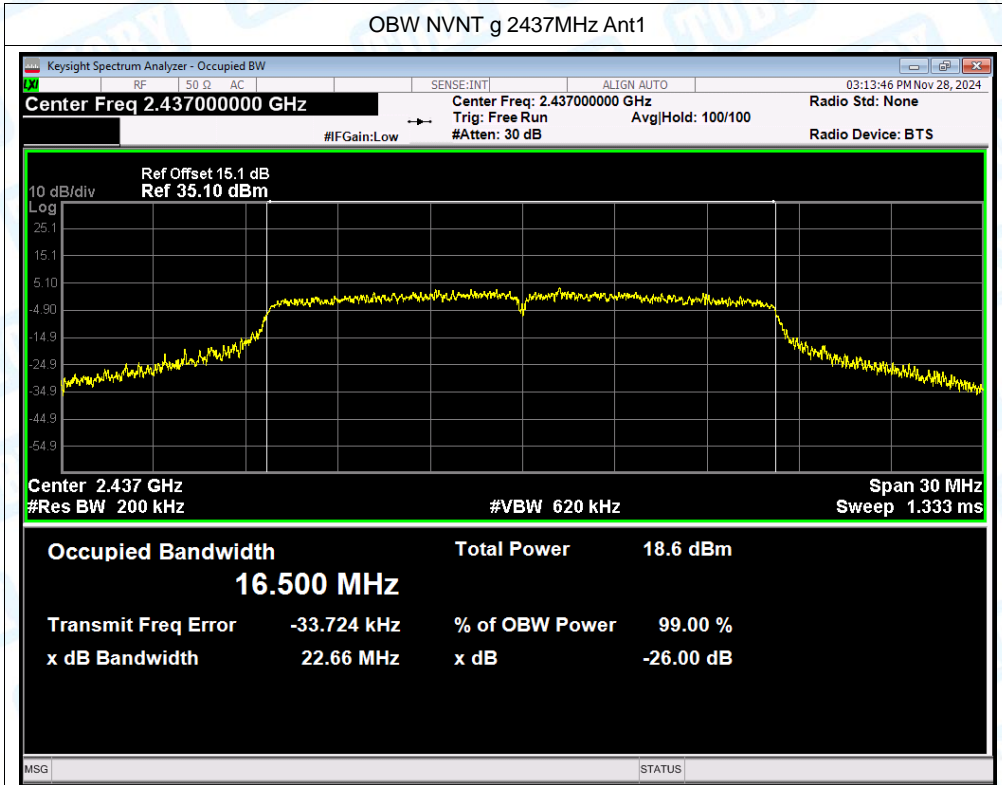


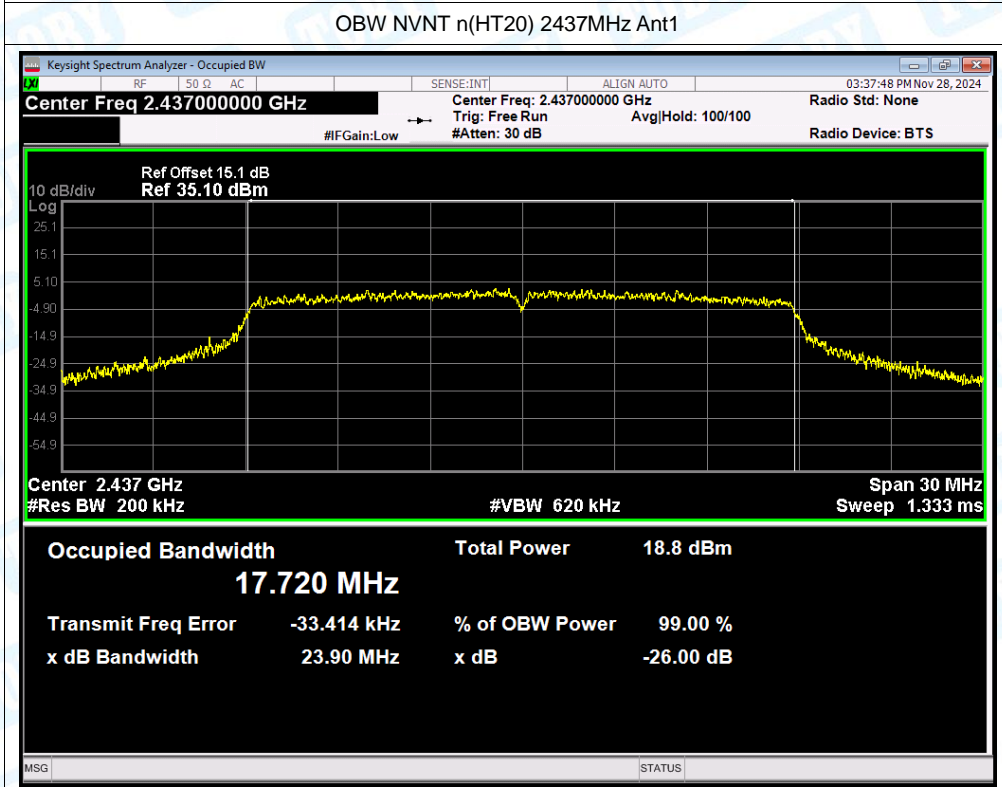
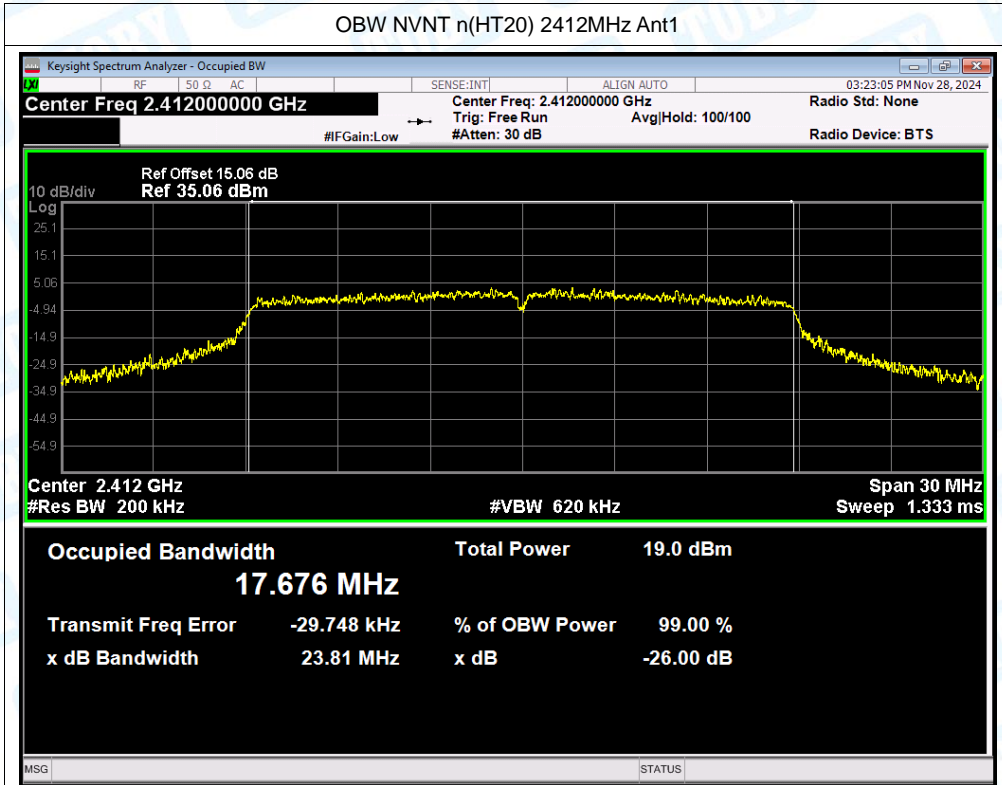
OBW NVNT ax(VHT40) 2452MHz Ant1

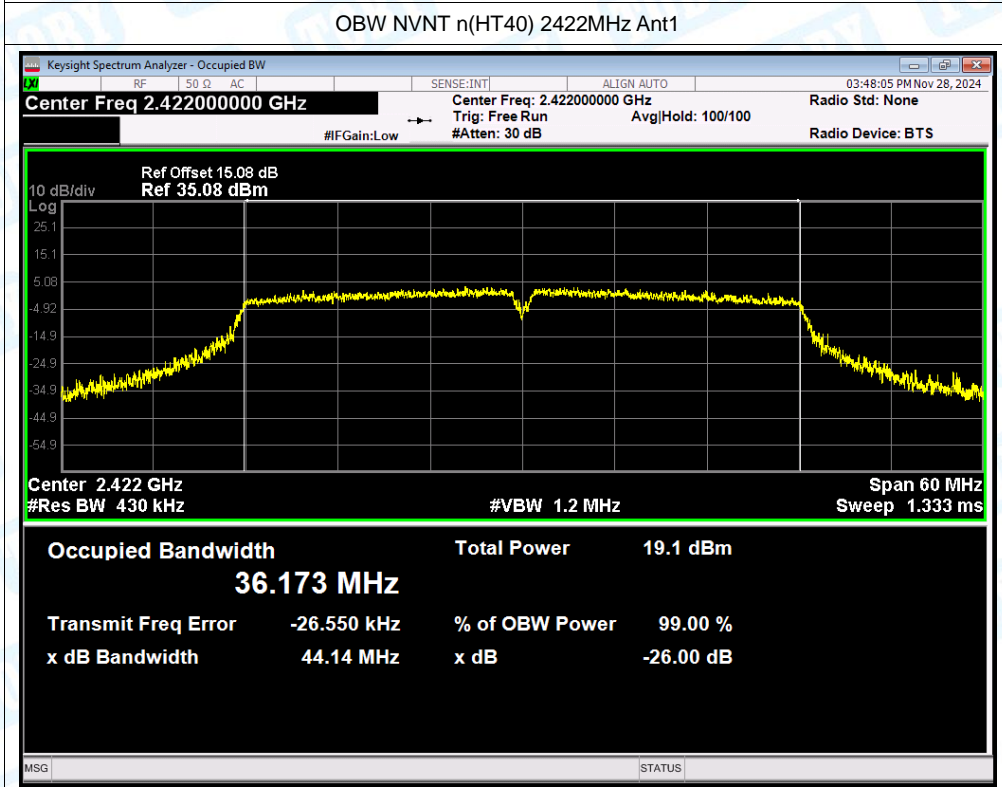
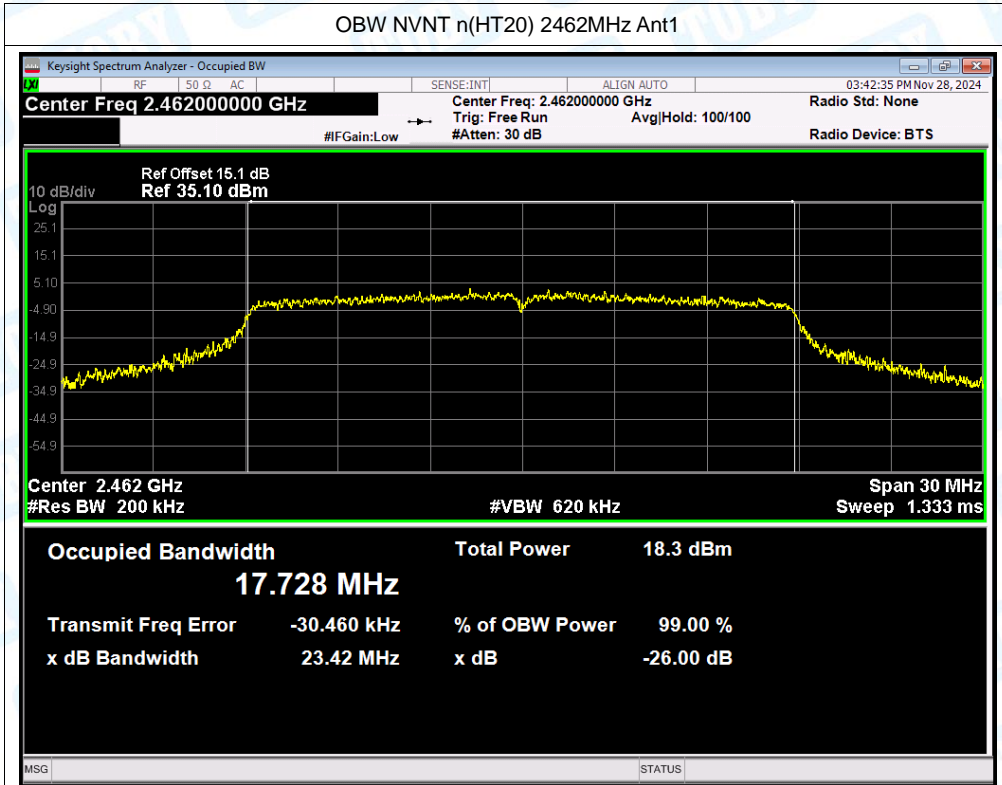


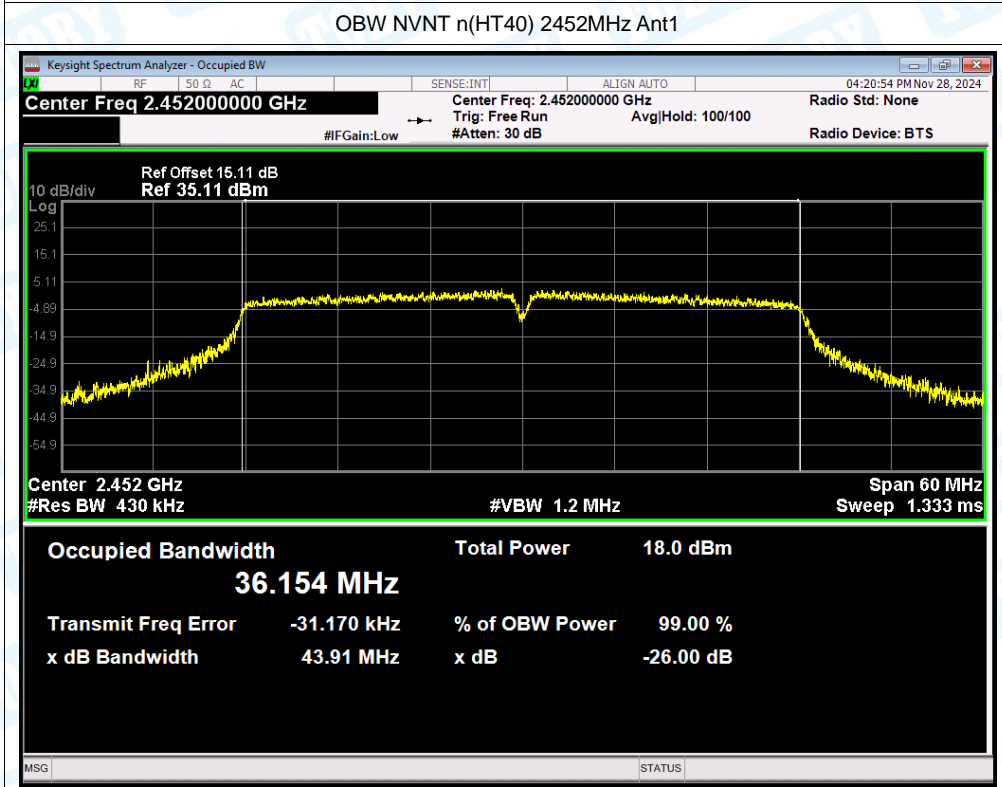
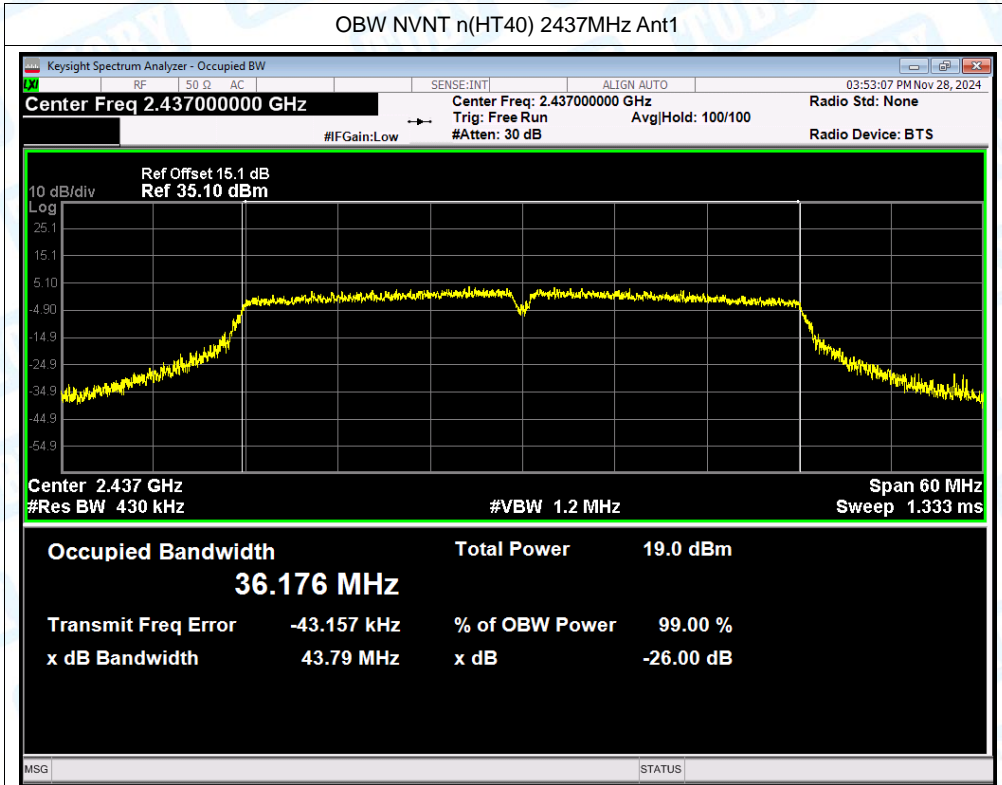












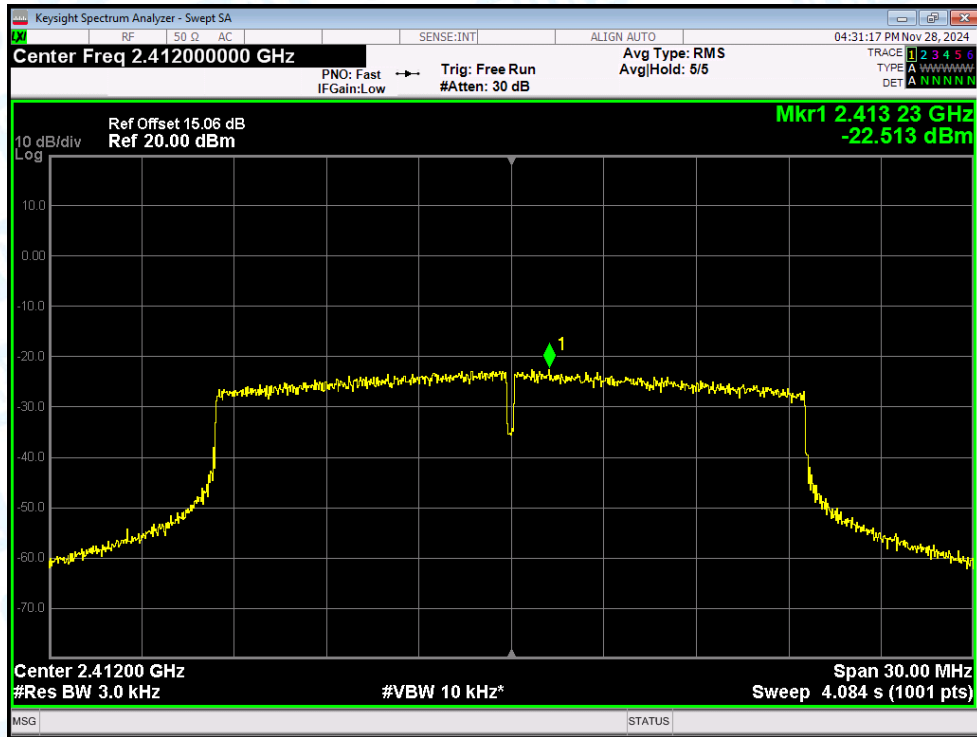
5. Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	ax(VHT20)	2412	Ant1	-22.513	8	Pass
NVNT	ax(VHT20)	2437	Ant1	-22.678	8	Pass
NVNT	ax(VHT20)	2462	Ant1	-23.13	8	Pass
NVNT	ax(VHT40)	2422	Ant1	-25.902	8	Pass
NVNT	ax(VHT40)	2437	Ant1	-26.048	8	Pass
NVNT	ax(VHT40)	2452	Ant1	-26.328	8	Pass
NVNT	b	2412	Ant1	-16.228	8	Pass
NVNT	b	2437	Ant1	-16.412	8	Pass
NVNT	b	2462	Ant1	-15.63	8	Pass
NVNT	g	2412	Ant1	-22.218	8	Pass
NVNT	g	2437	Ant1	-21.008	8	Pass
NVNT	g	2462	Ant1	-22.553	8	Pass
NVNT	n(HT20)	2412	Ant1	-20.837	8	Pass
NVNT	n(HT20)	2437	Ant1	-21.042	8	Pass
NVNT	n(HT20)	2462	Ant1	-21.39	8	Pass
NVNT	n(HT40)	2422	Ant1	-24.352	8	Pass
NVNT	n(HT40)	2437	Ant1	-24.517	8	Pass
NVNT	n(HT40)	2452	Ant1	-25.356	8	Pass

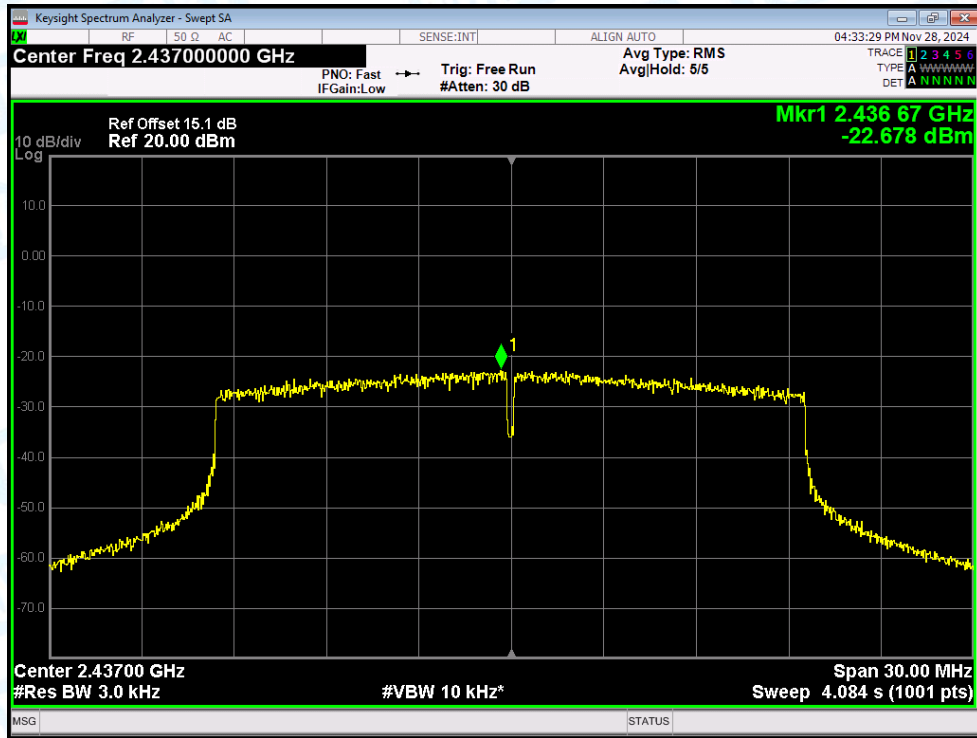
Note: The Duty Cycle Factor is compensated in the graph.

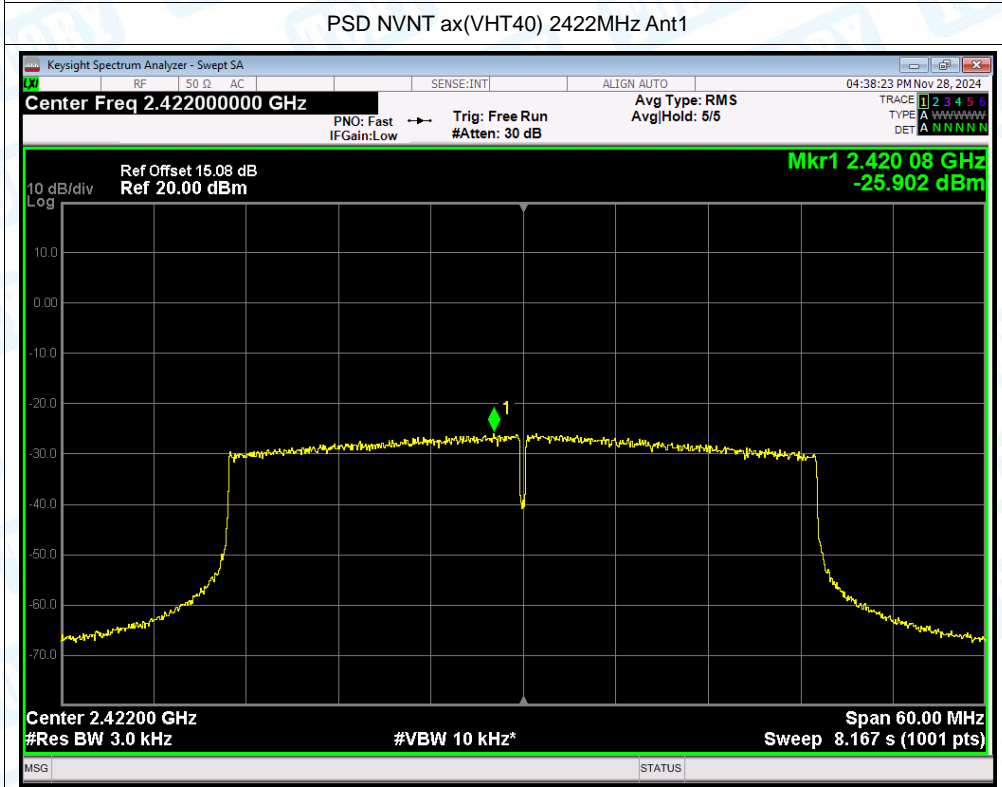
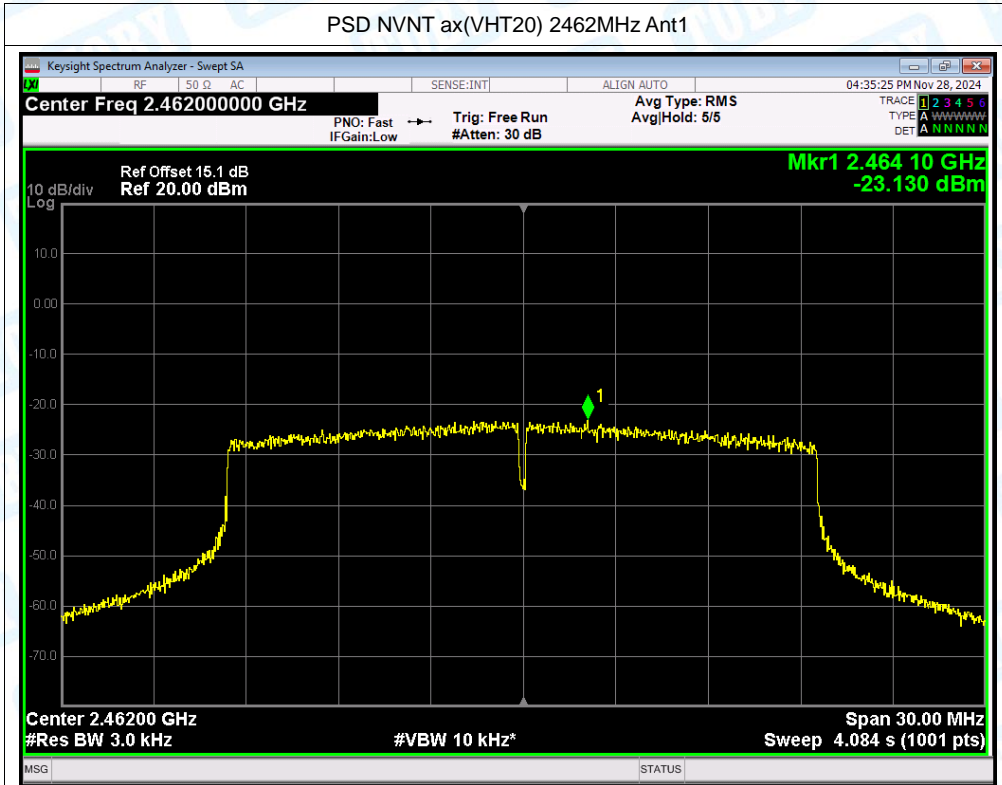
Test Graphs

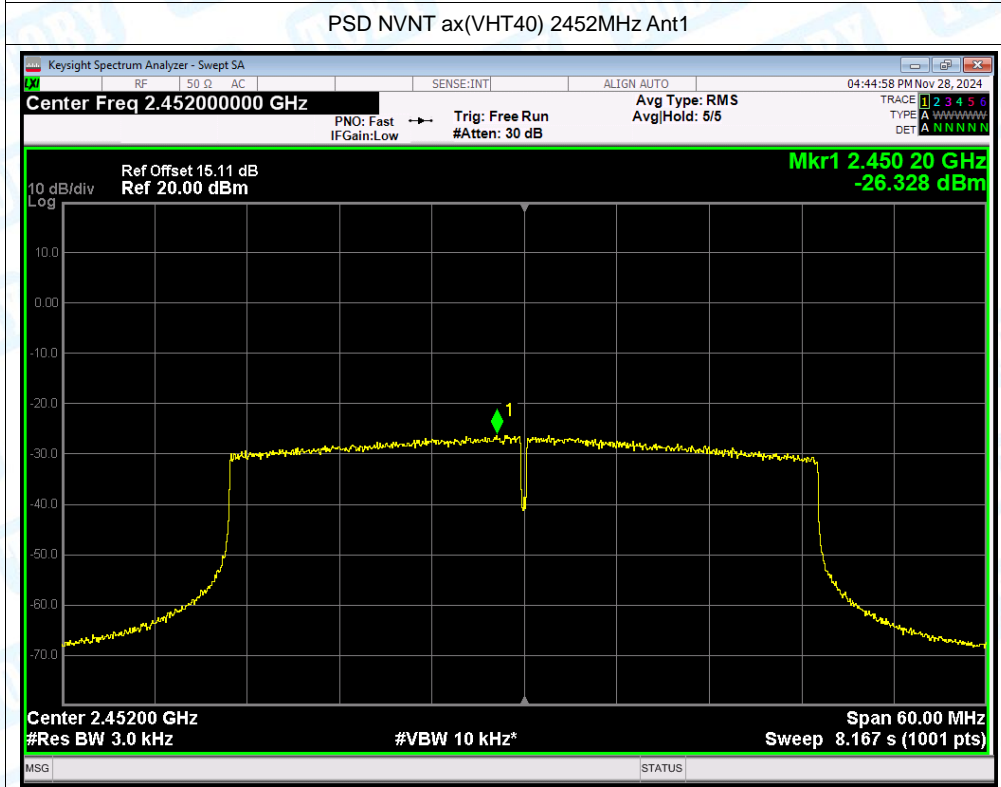
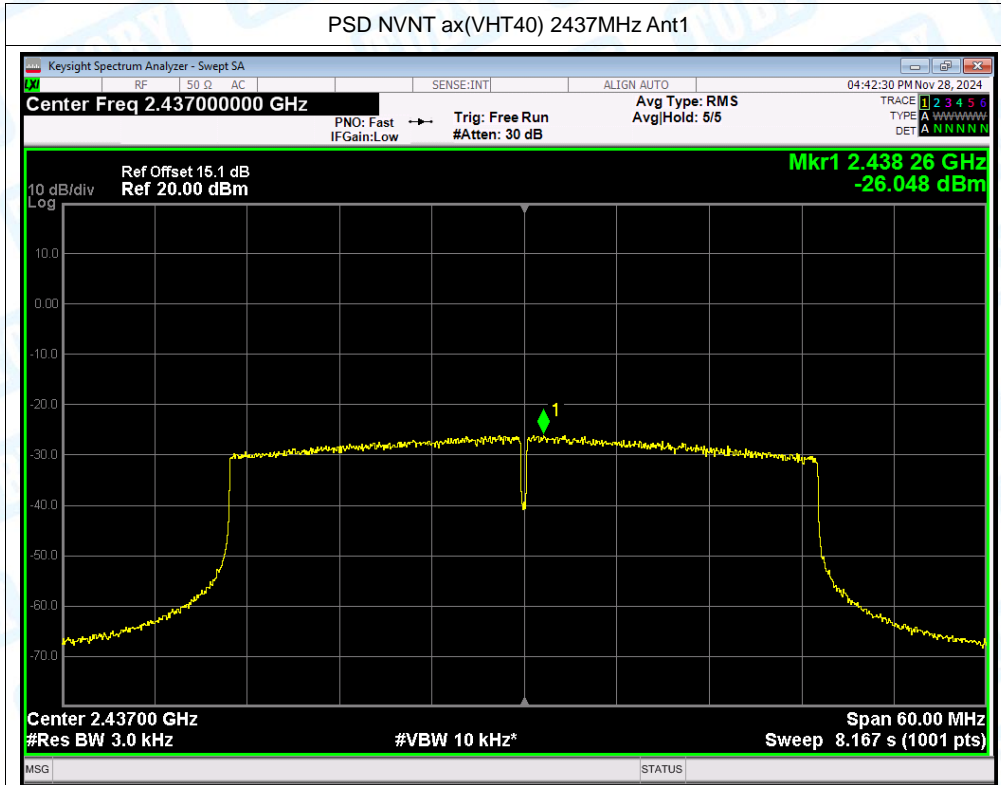
PSD NVNT ax(VHT20) 2412MHz Ant1



PSD NVNT ax(VHT20) 2437MHz Ant1







PSD NVNT b 2412MHz Ant1



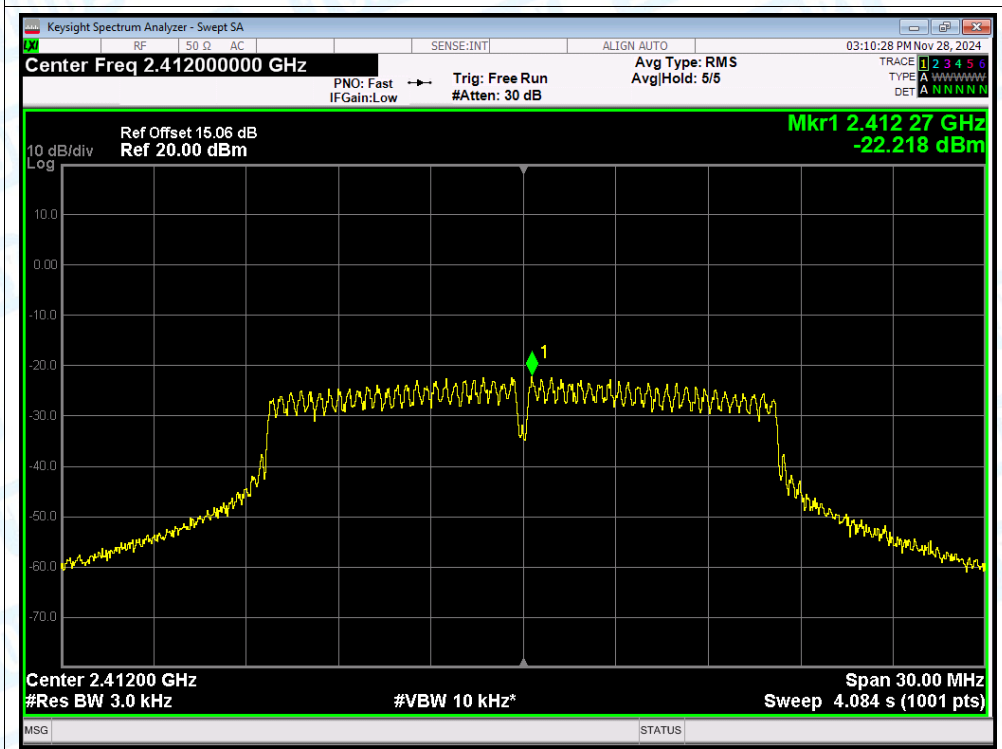
PSD NVNT b 2437MHz Ant1



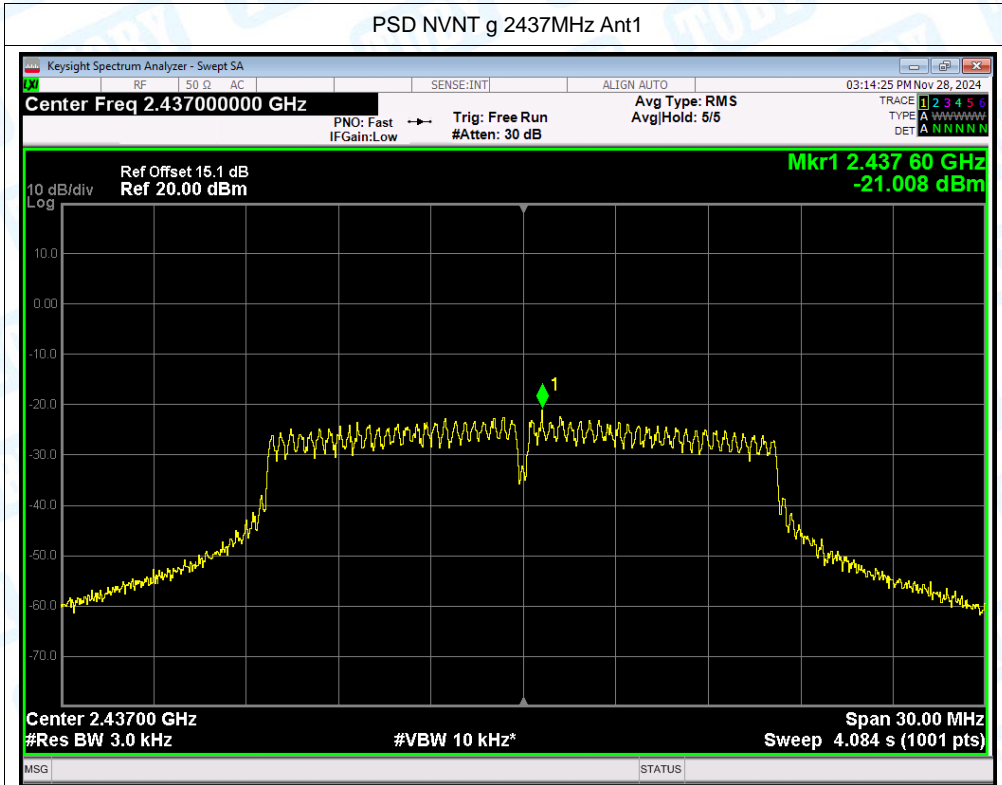
PSD NVNT b 2462MHz Ant1



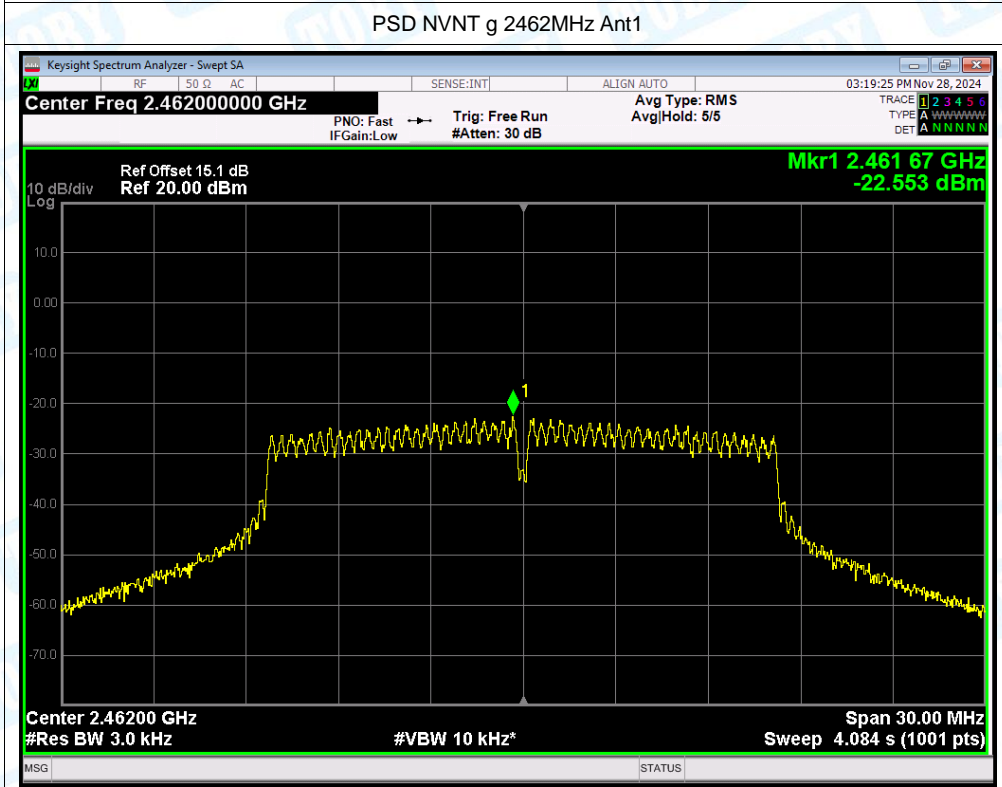
PSD NVNT g 2412MHz Ant1

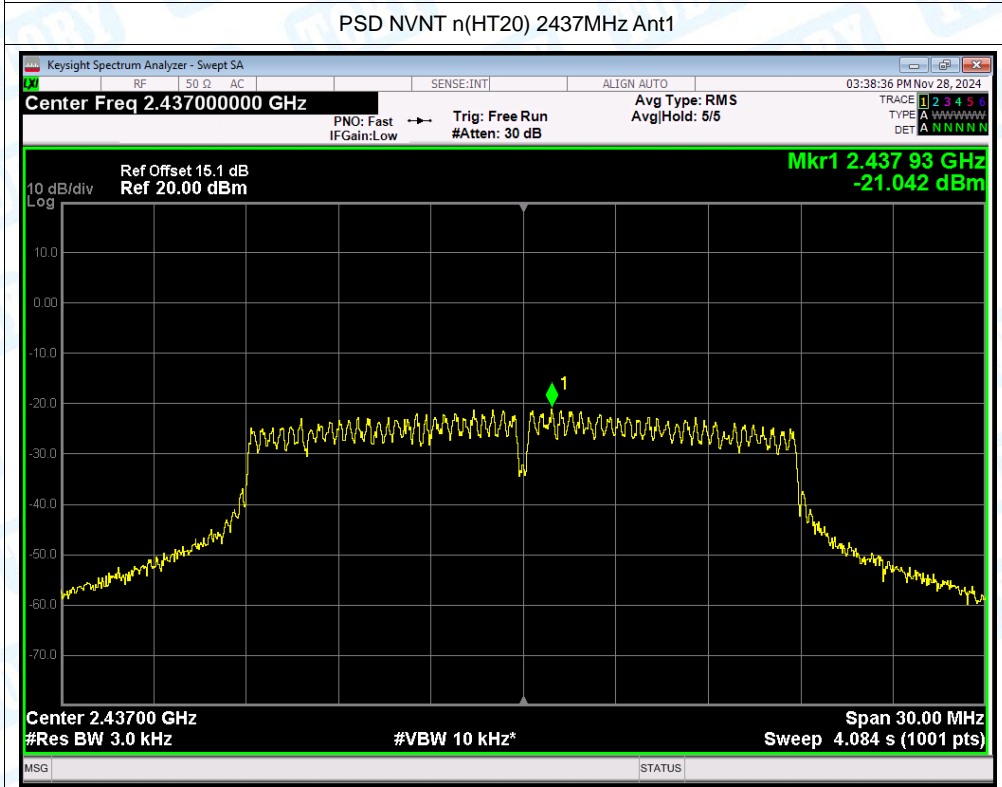
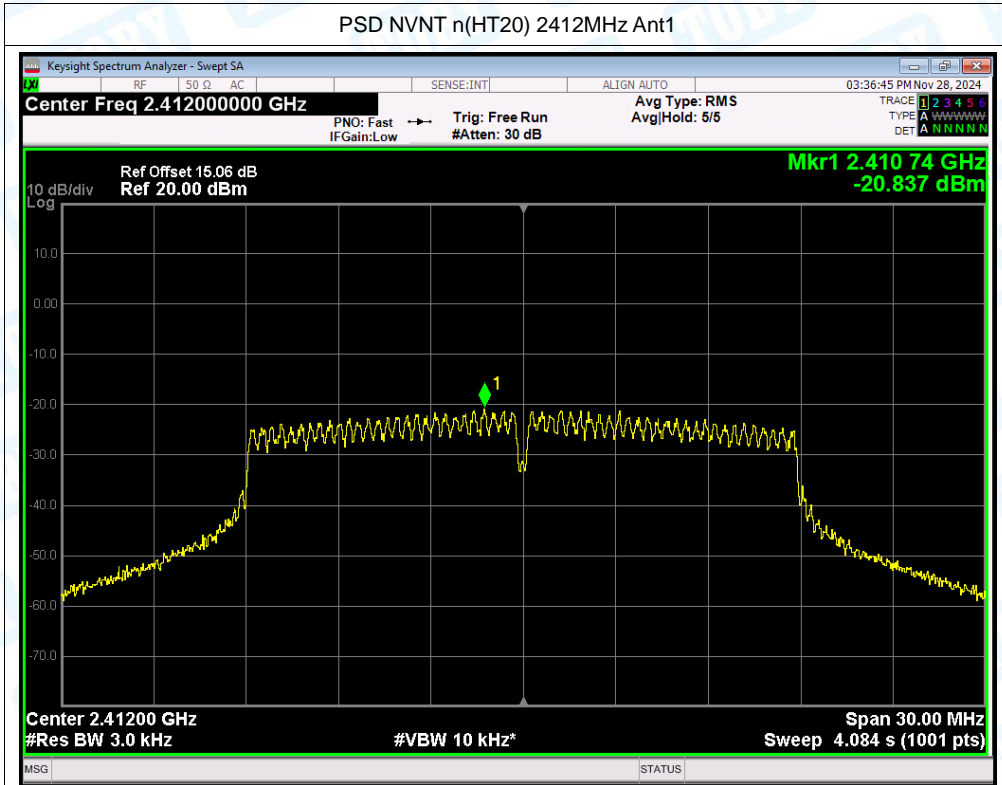


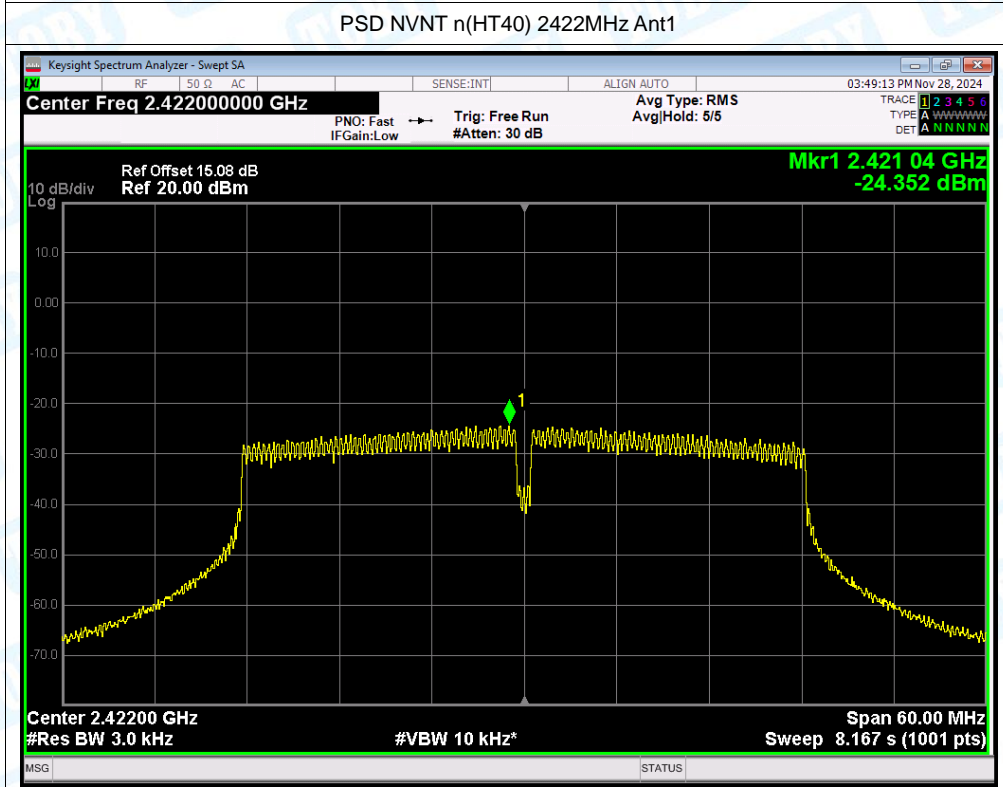
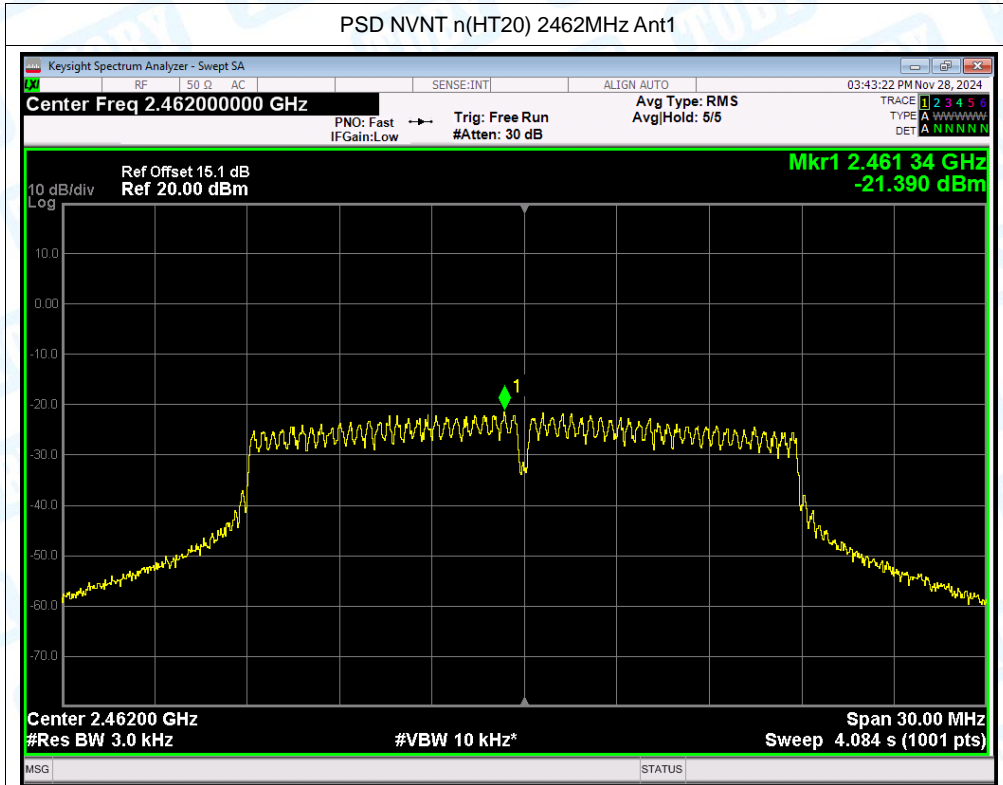
PSD NVNT g 2437MHz Ant1

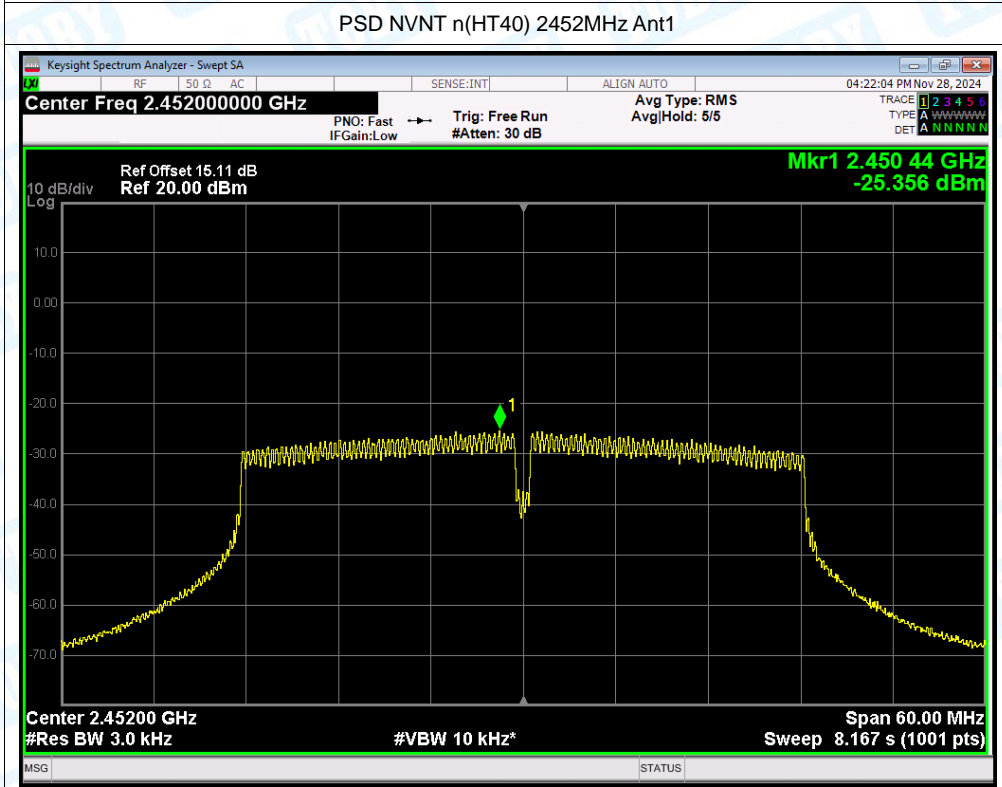
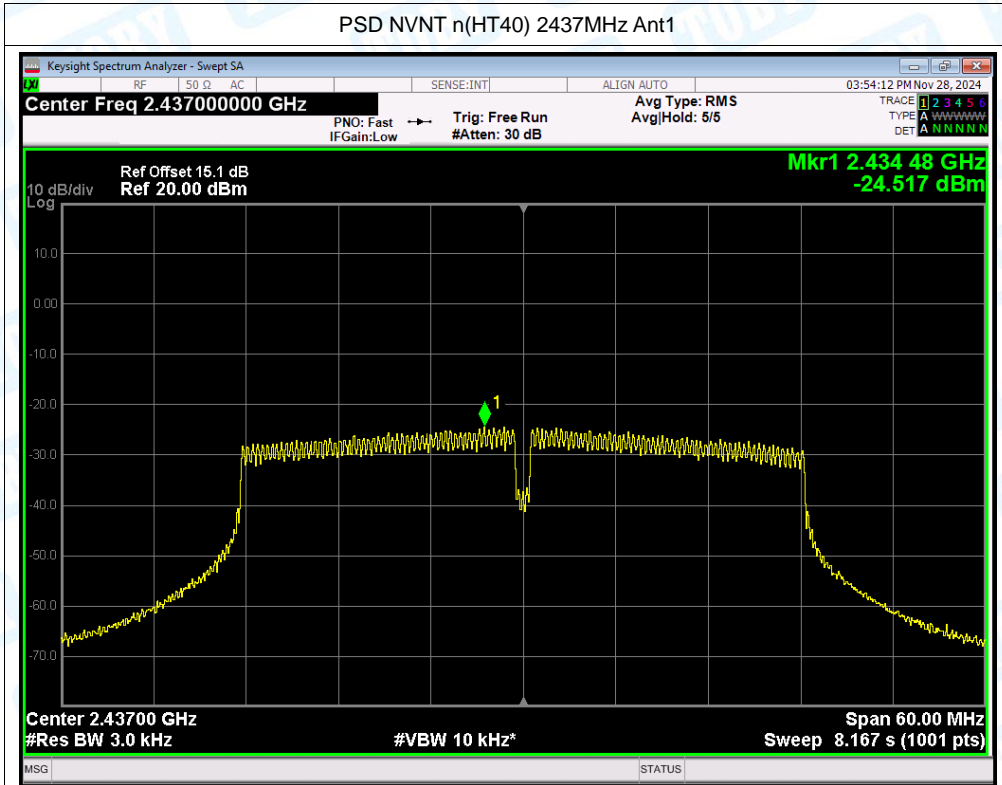


PSD NVNT g 2462MHz Ant1







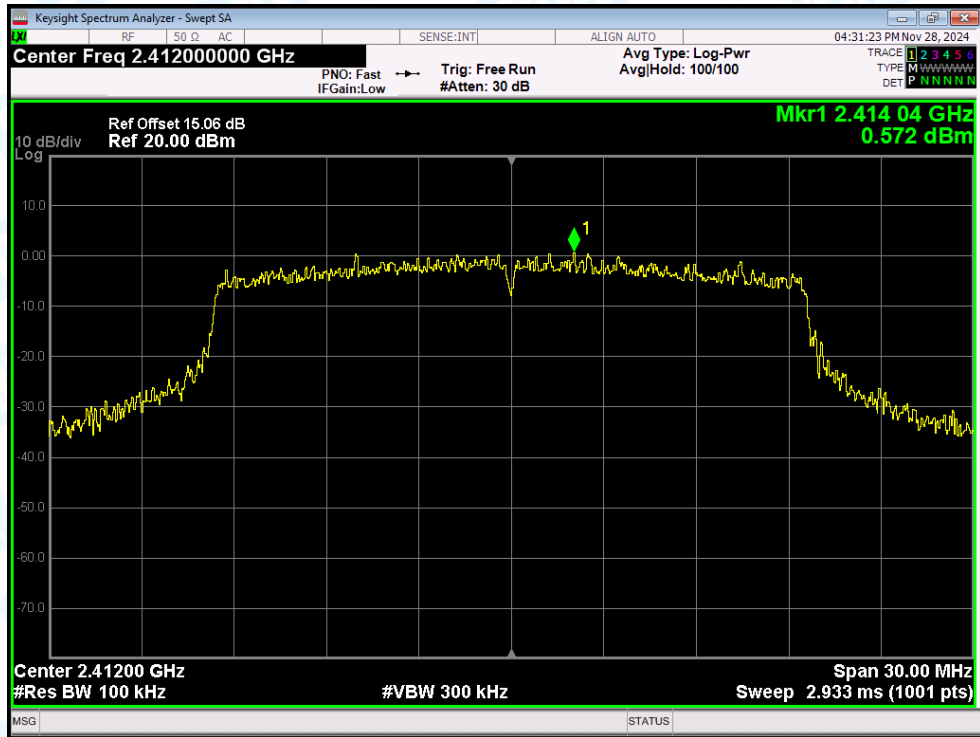


6. Band Edge

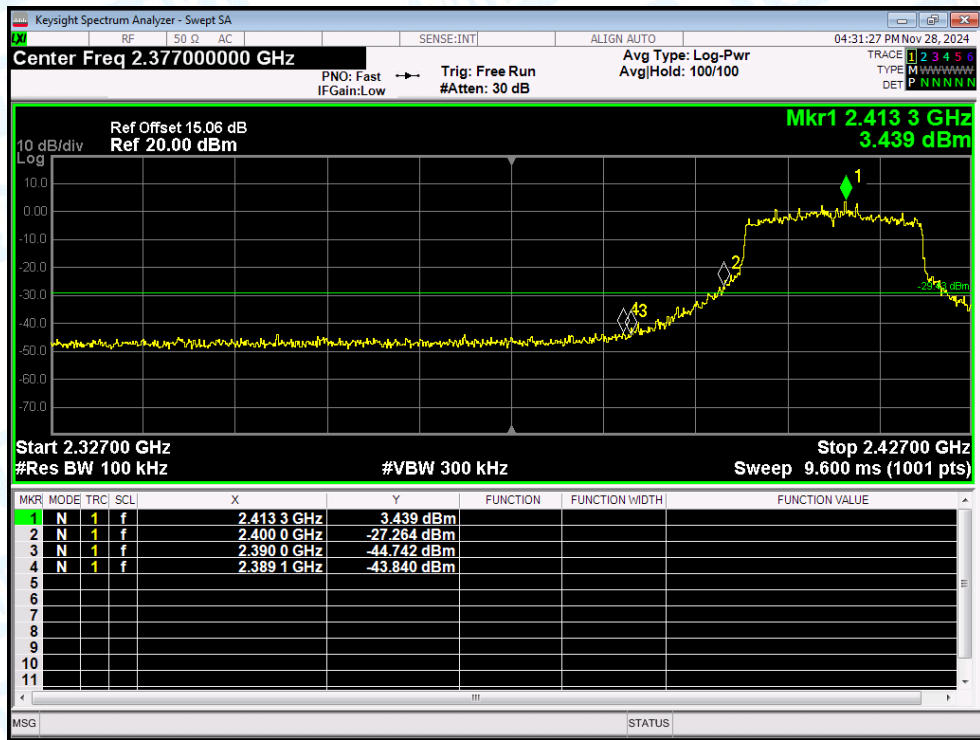
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	ax(VHT20)	2412	Ant1	-44.41	-30	Pass
NVNT	ax(VHT20)	2462	Ant1	-42.68	-30	Pass
NVNT	ax(VHT40)	2422	Ant1	-40.17	-30	Pass
NVNT	ax(VHT40)	2452	Ant1	-42.12	-30	Pass
NVNT	b	2412	Ant1	-52.01	-30	Pass
NVNT	b	2462	Ant1	-51.94	-30	Pass
NVNT	g	2412	Ant1	-45.46	-30	Pass
NVNT	g	2462	Ant1	-43.15	-30	Pass
NVNT	n(HT20)	2412	Ant1	-42.35	-30	Pass
NVNT	n(HT20)	2462	Ant1	-43.81	-30	Pass
NVNT	n(HT40)	2422	Ant1	-37.95	-30	Pass
NVNT	n(HT40)	2452	Ant1	-38.92	-30	Pass

Test Graphs

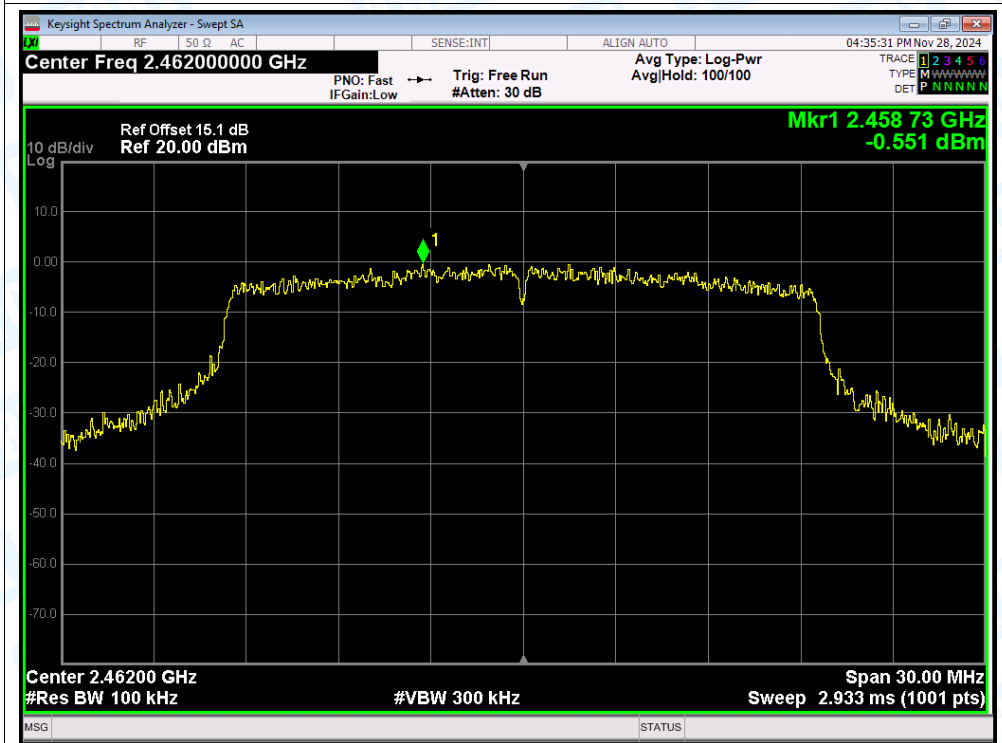
Band Edge NVNT ax(VHT20) 2412MHz Ant1 Ref



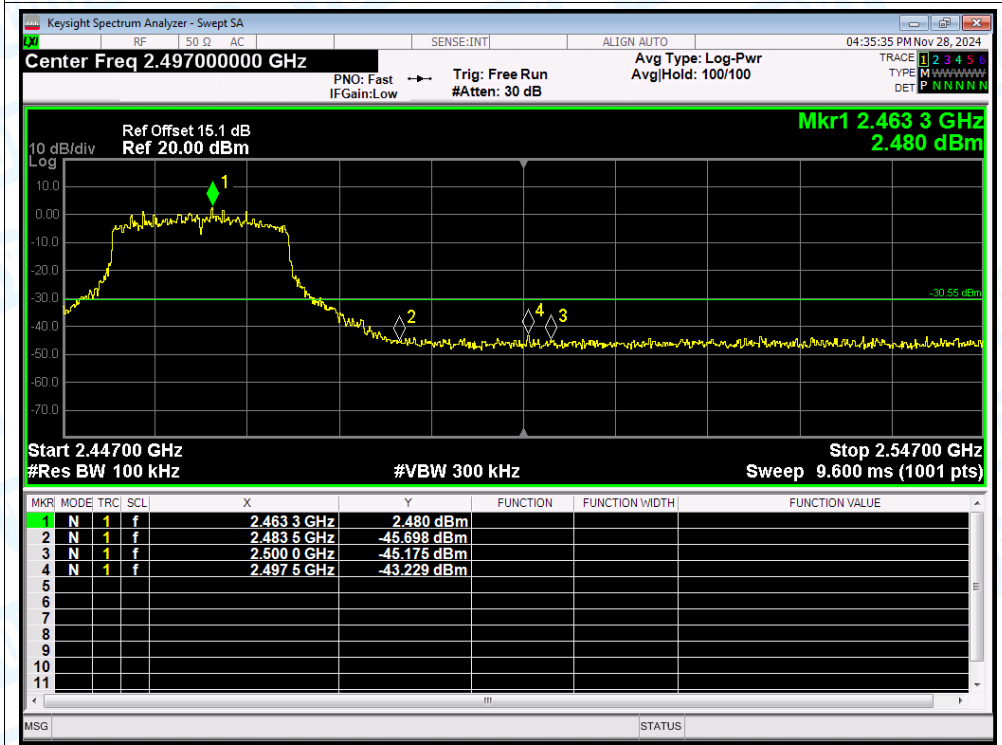
Band Edge NVNT ax(VHT20) 2412MHz Ant1 Emission



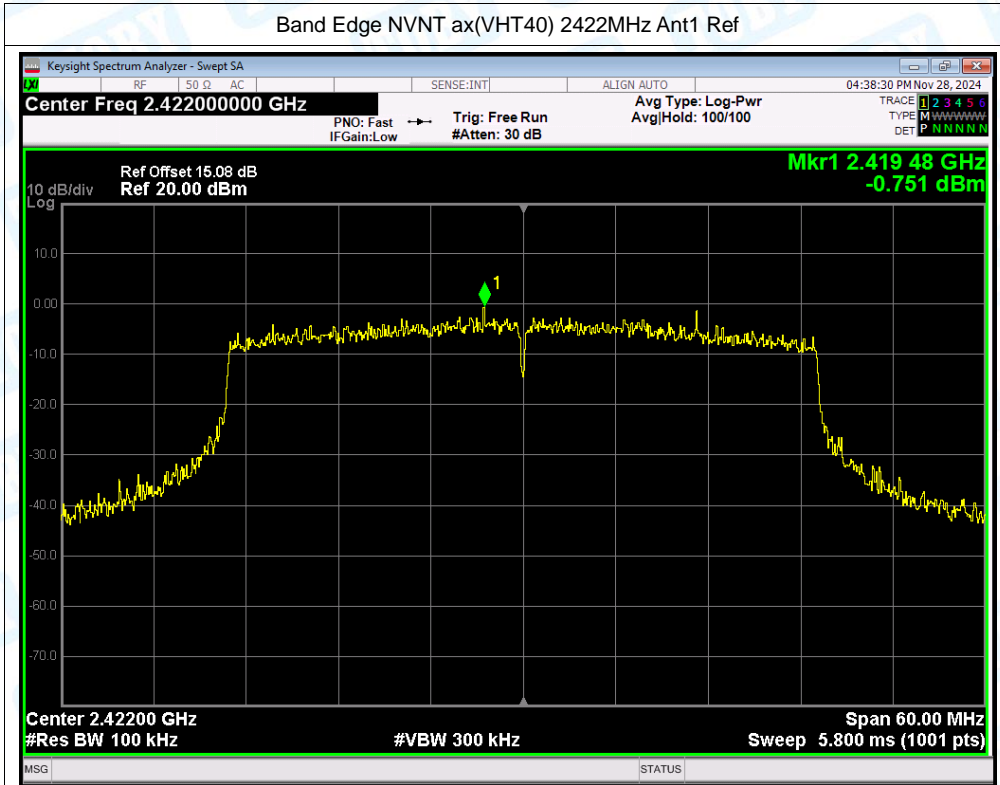
Band Edge NVNT ax(VHT20) 2462MHz Ant1 Ref



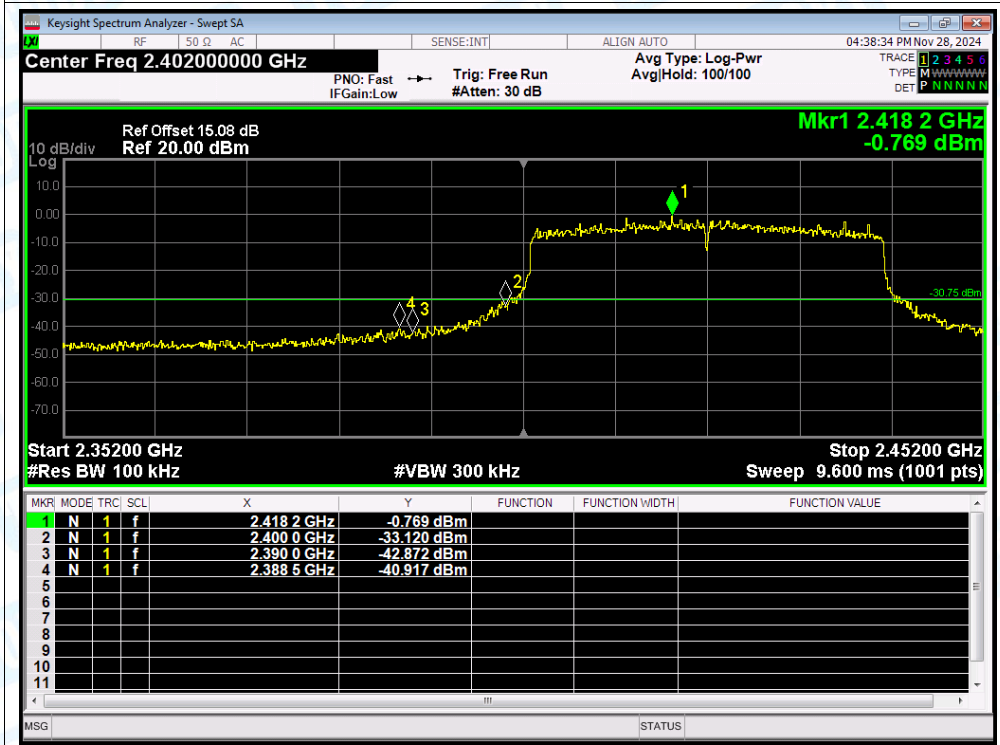
Band Edge NVNT ax(VHT20) 2462MHz Ant1 Emission

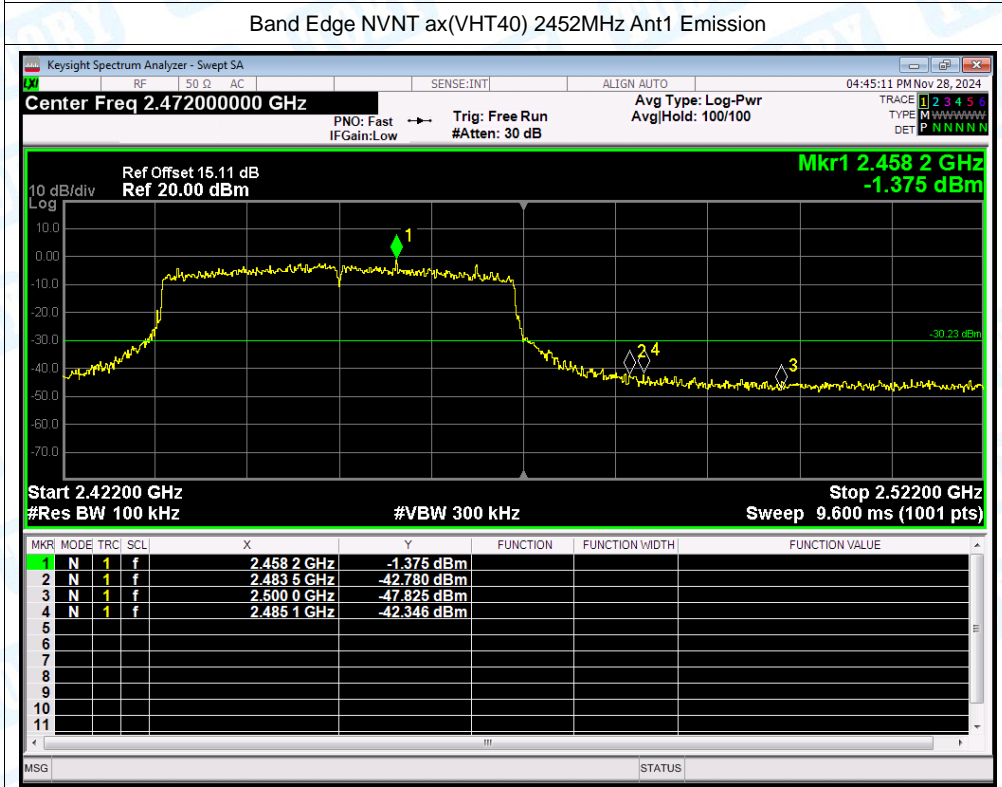
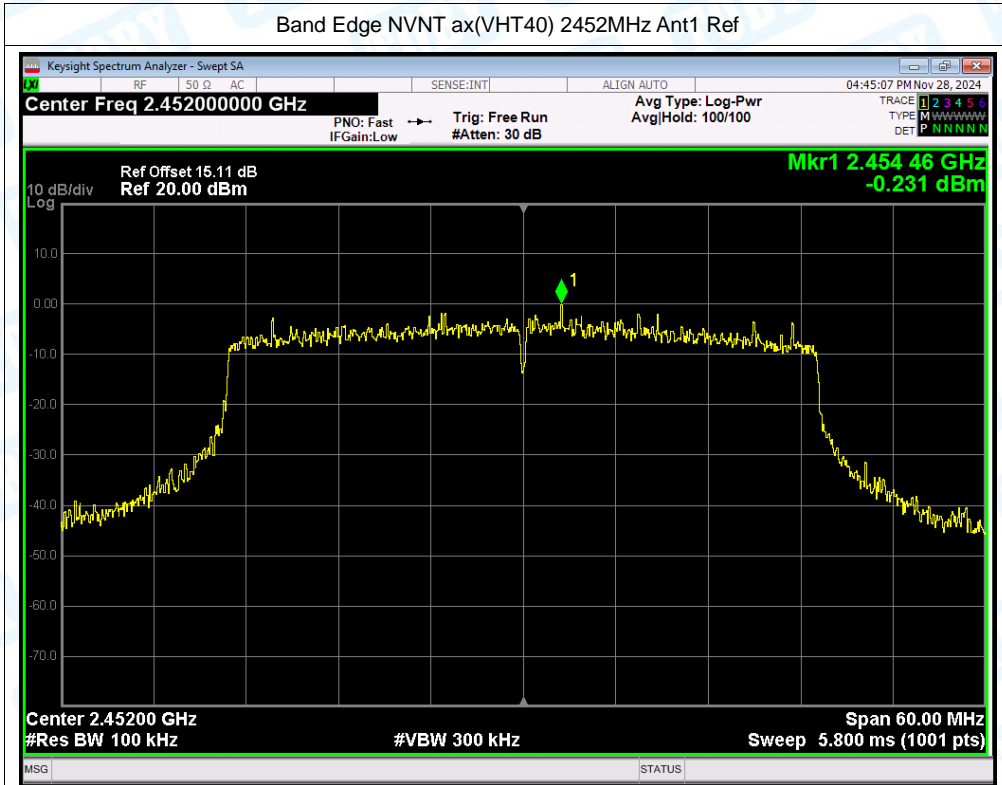


Band Edge NVNT ax(VHT40) 2422MHz Ant1 Ref

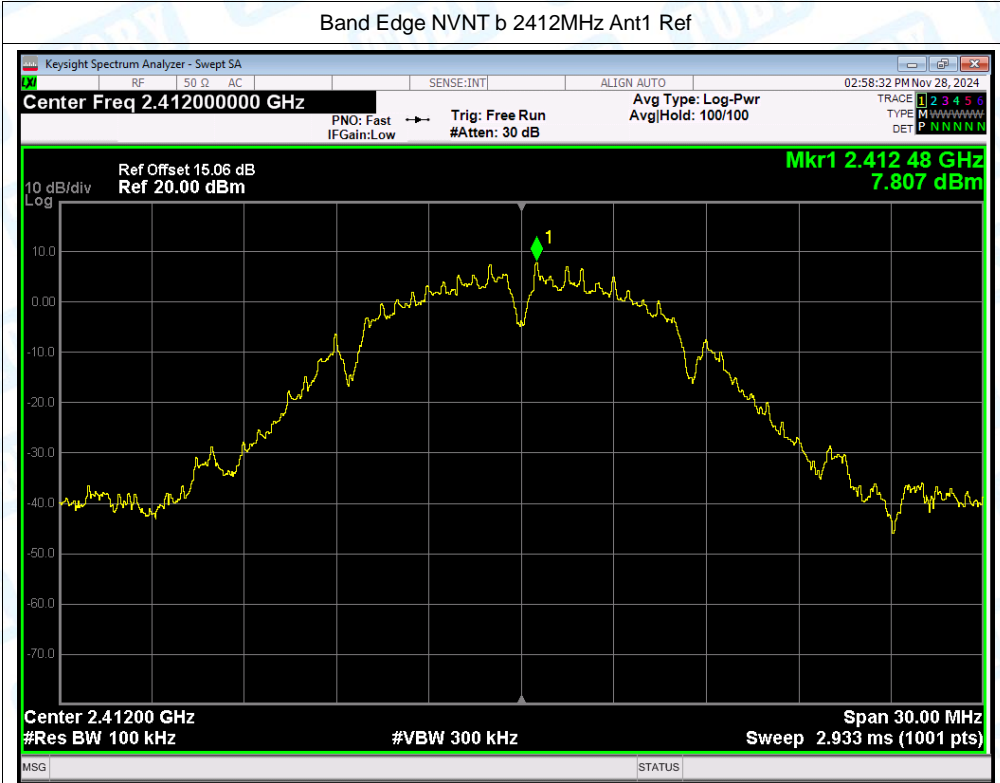


Band Edge NVNT ax(VHT40) 2422MHz Ant1 Emission

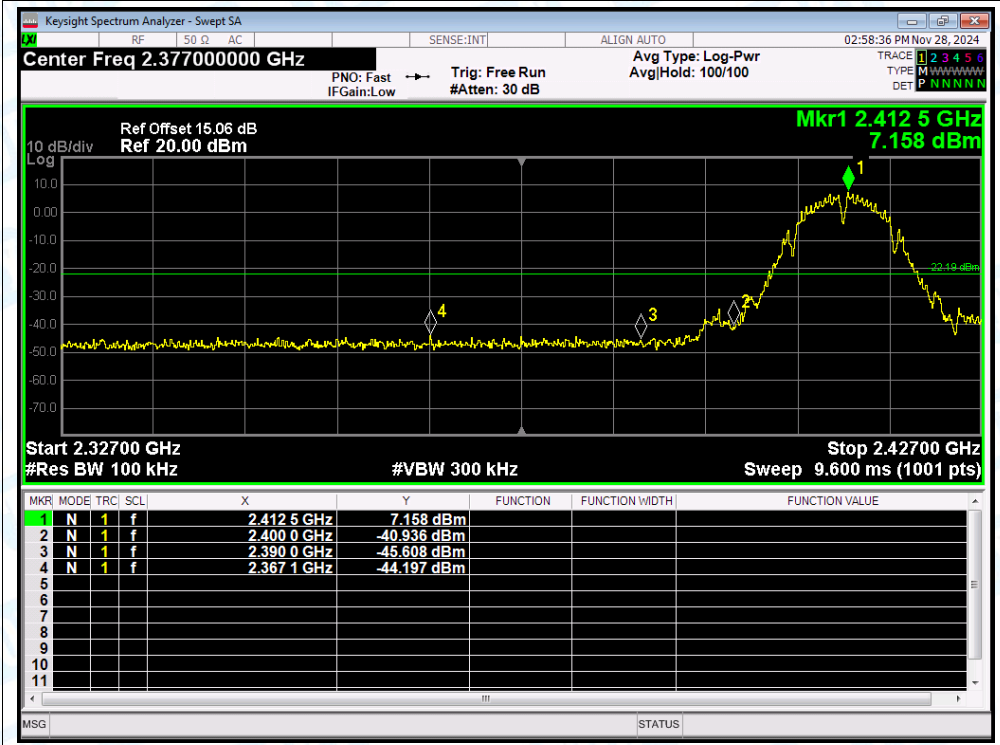




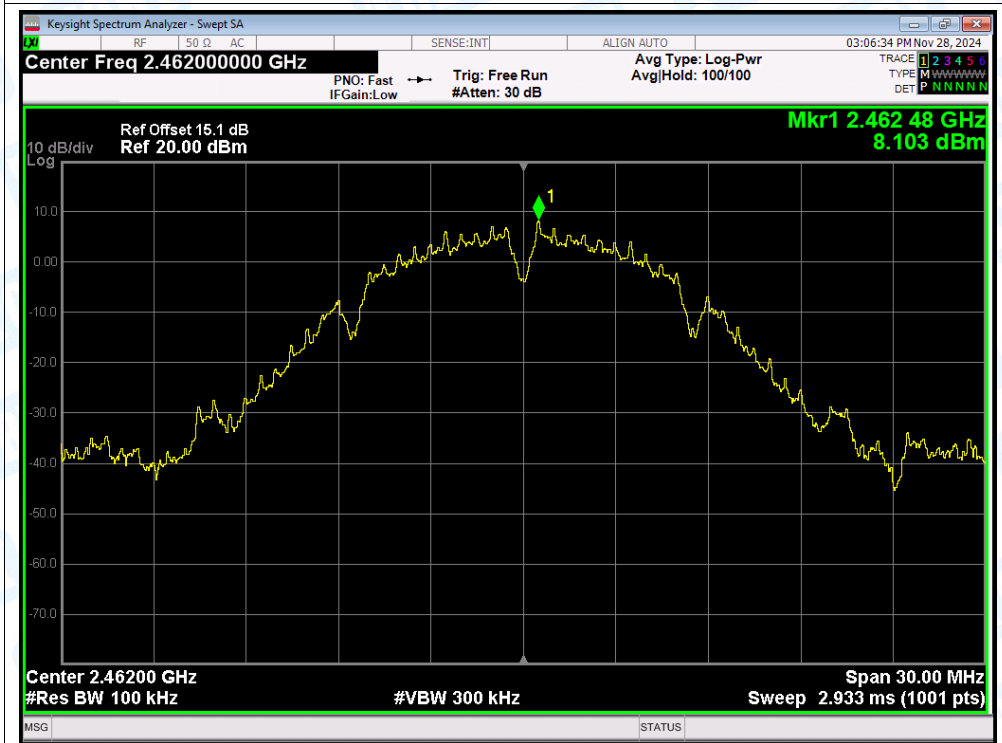
Band Edge NVNT b 2412MHz Ant1 Ref



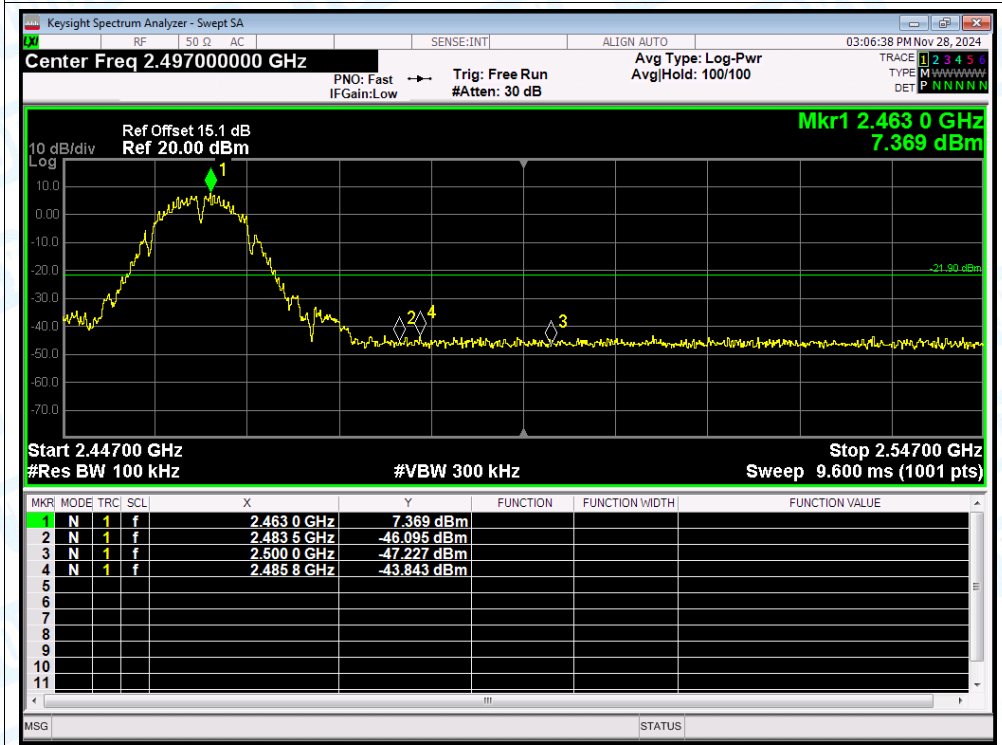
Band Edge NVNT b 2412MHz Ant1 Emission



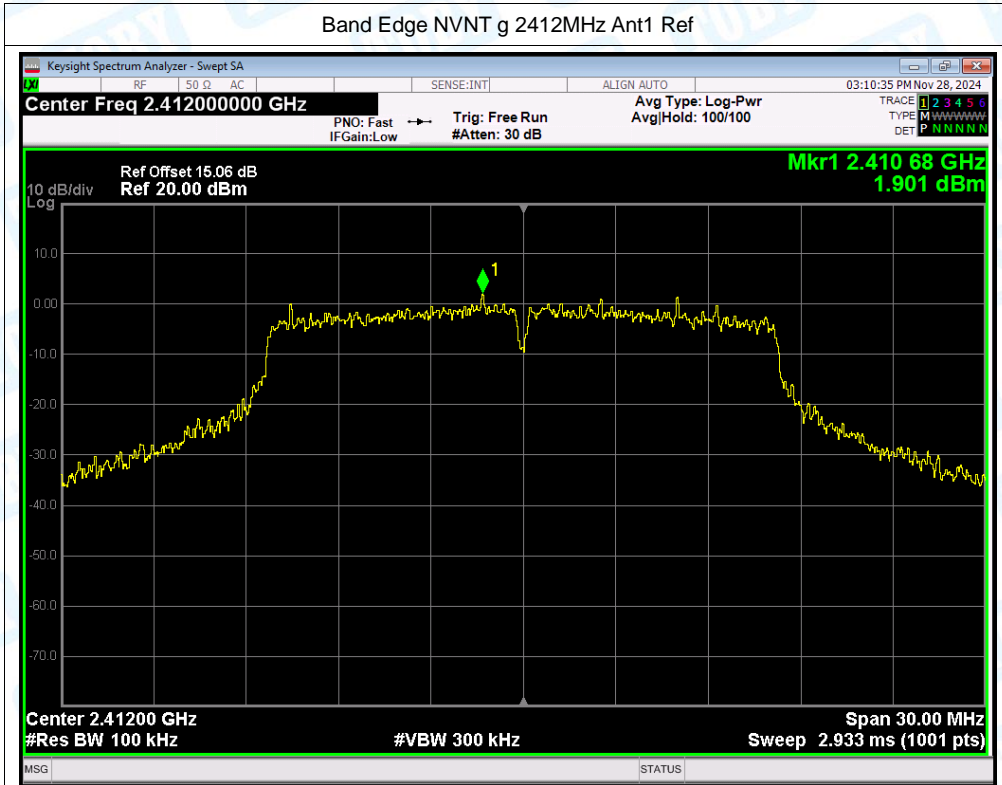
Band Edge NVNT b 2462MHz Ant1 Ref



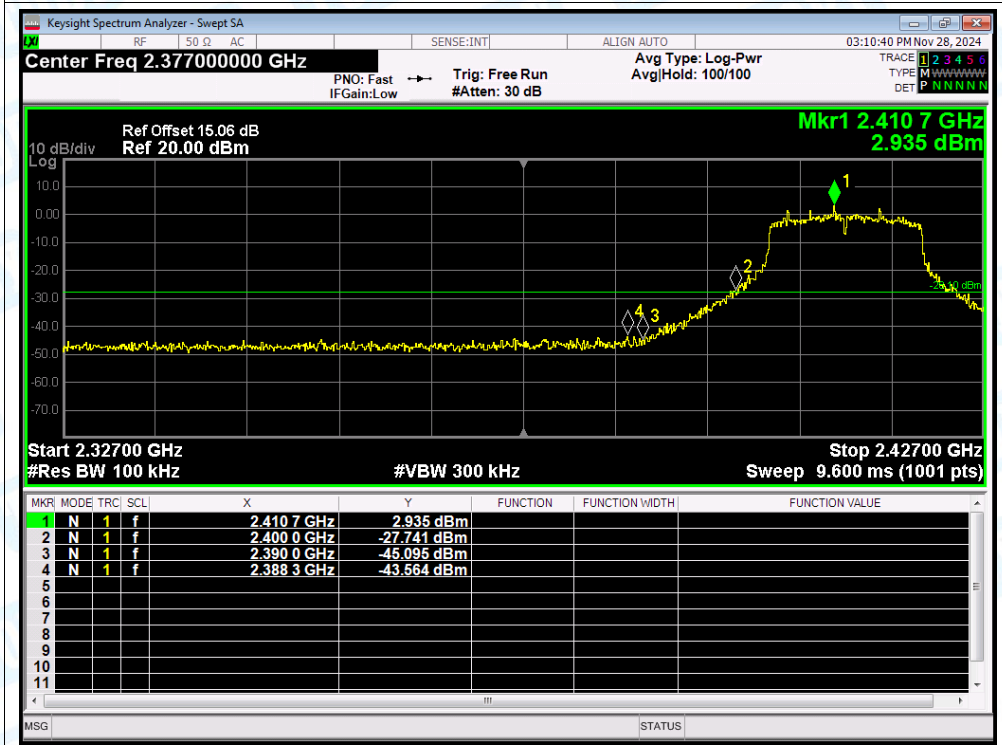
Band Edge NVNT b 2462MHz Ant1 Emission



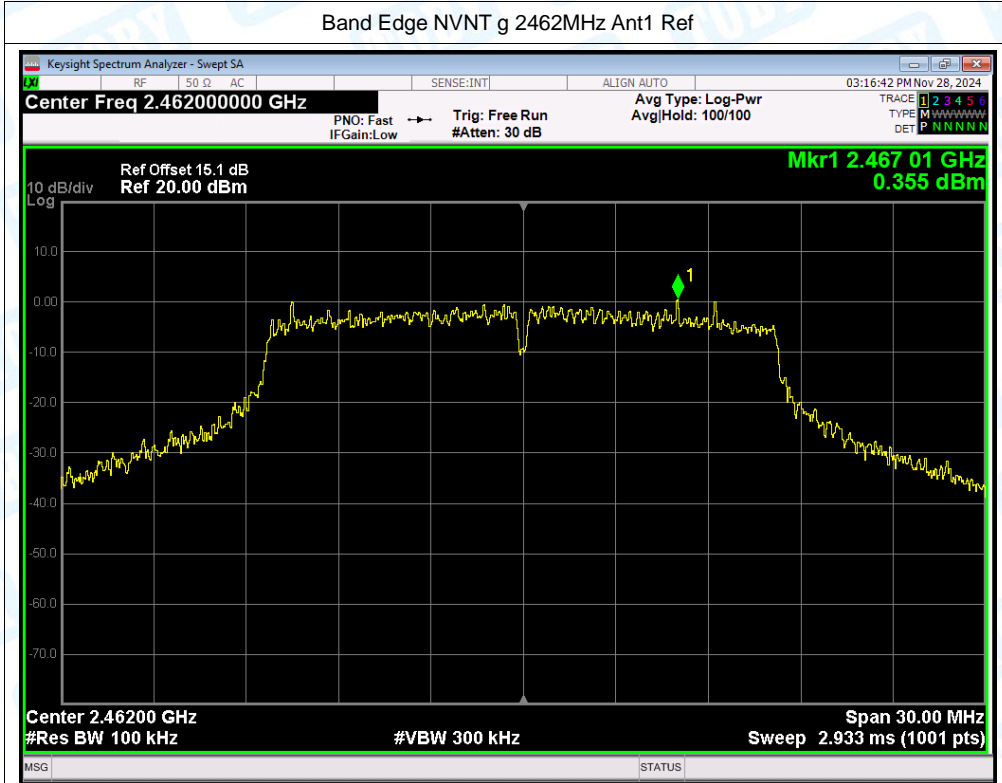
Band Edge NVNT g 2412MHz Ant1 Ref



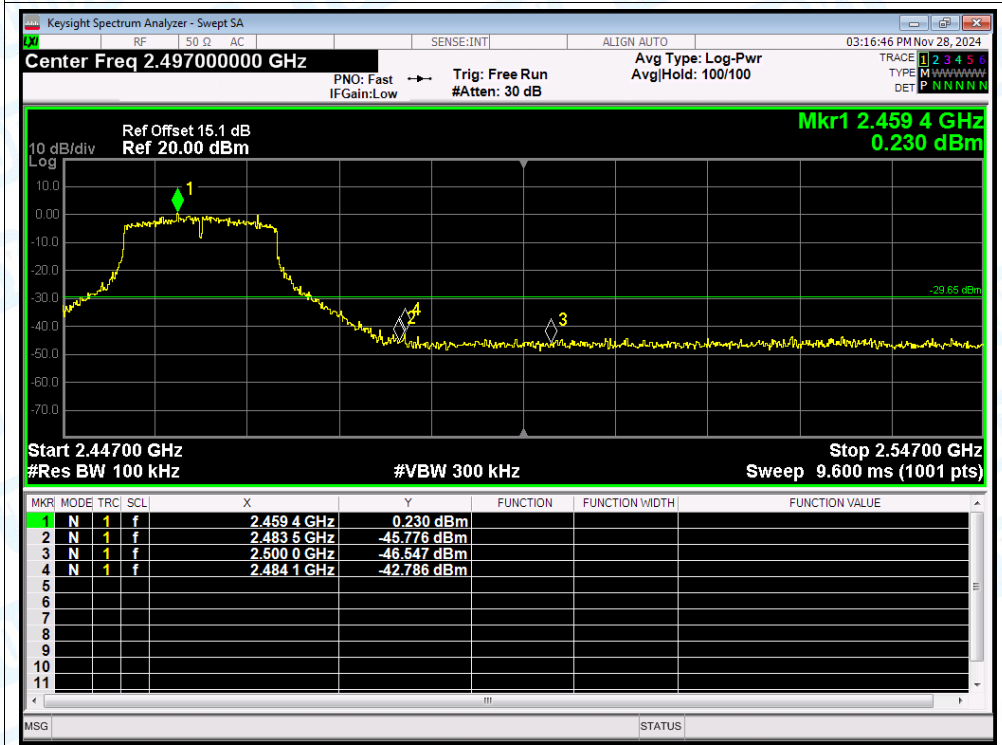
Band Edge NVNT g 2412MHz Ant1 Emission



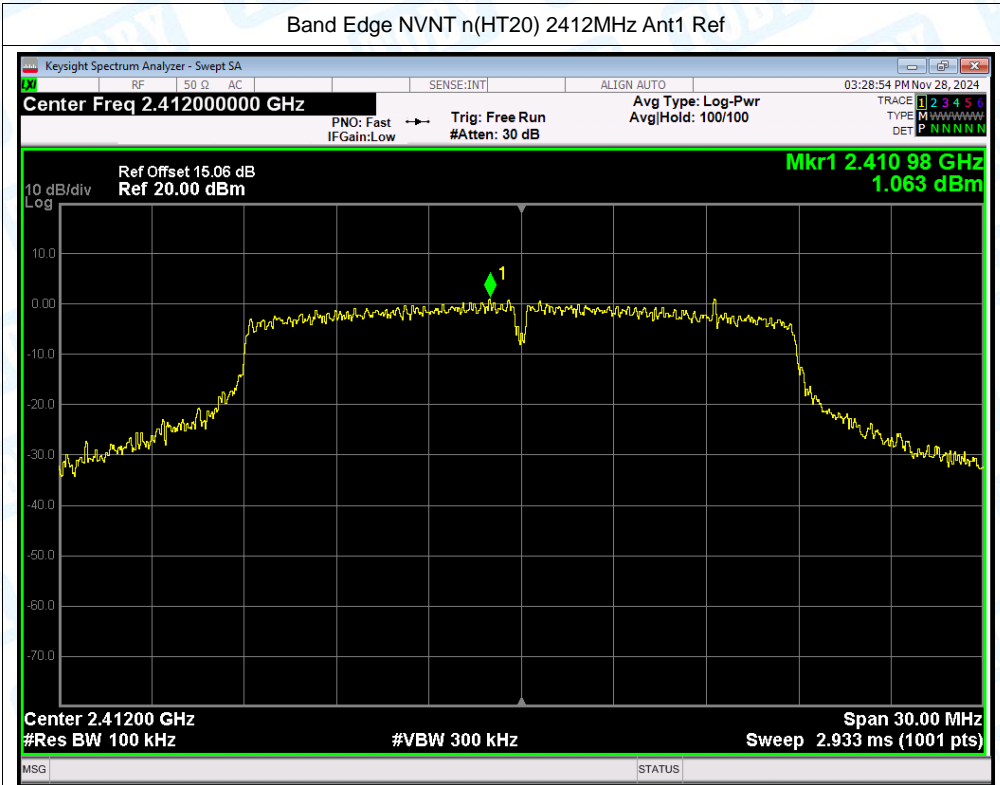
Band Edge NVNT g 2462MHz Ant1 Ref



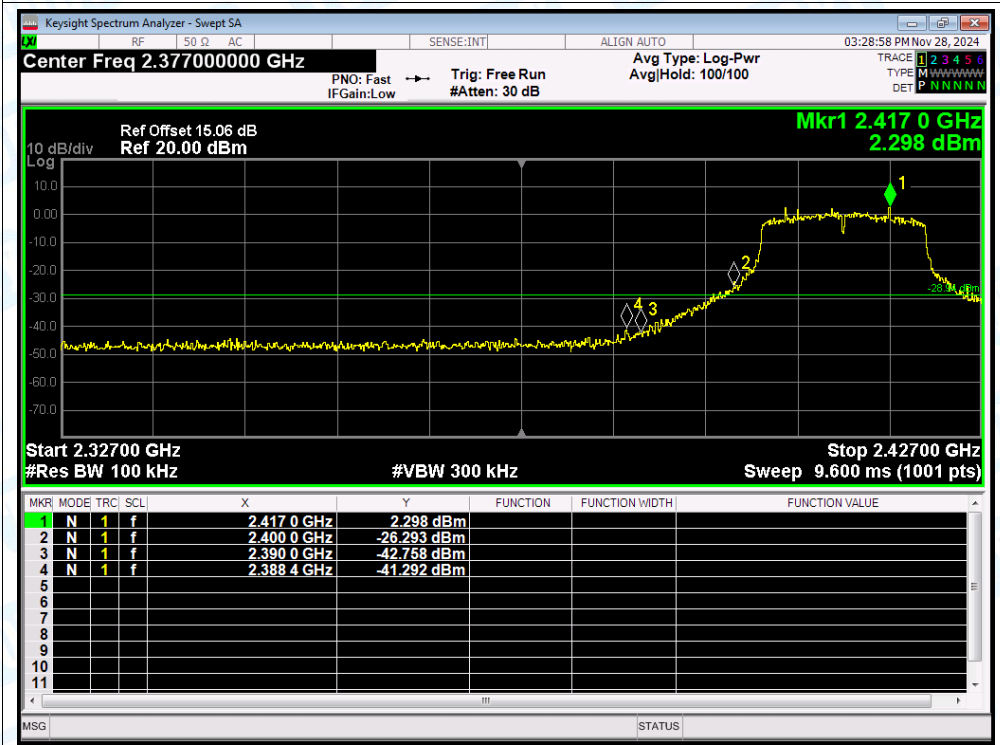
Band Edge NVNT g 2462MHz Ant1 Emission



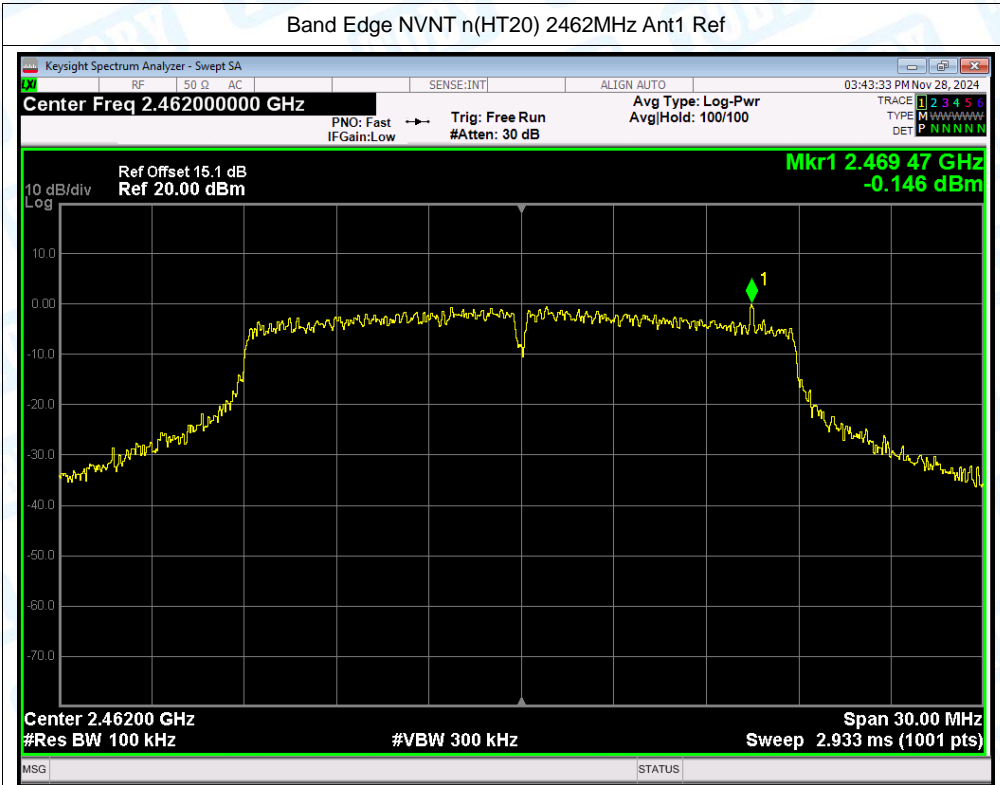
Band Edge NVNT n(HT20) 2412MHz Ant1 Ref



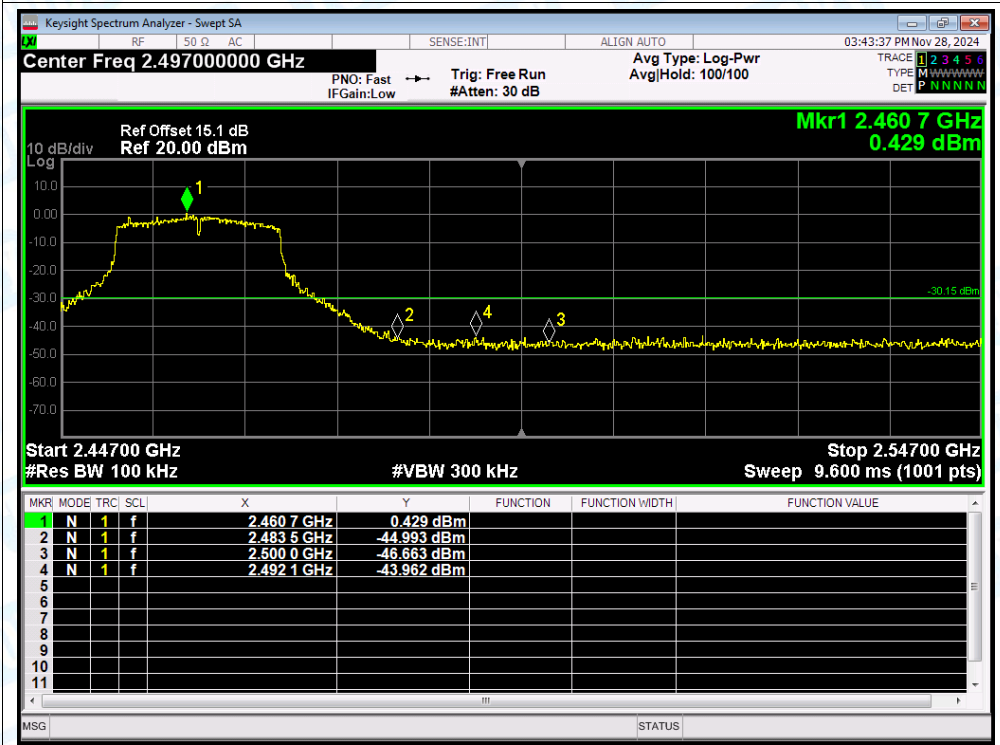
Band Edge NVNT n(HT20) 2412MHz Ant1 Emission



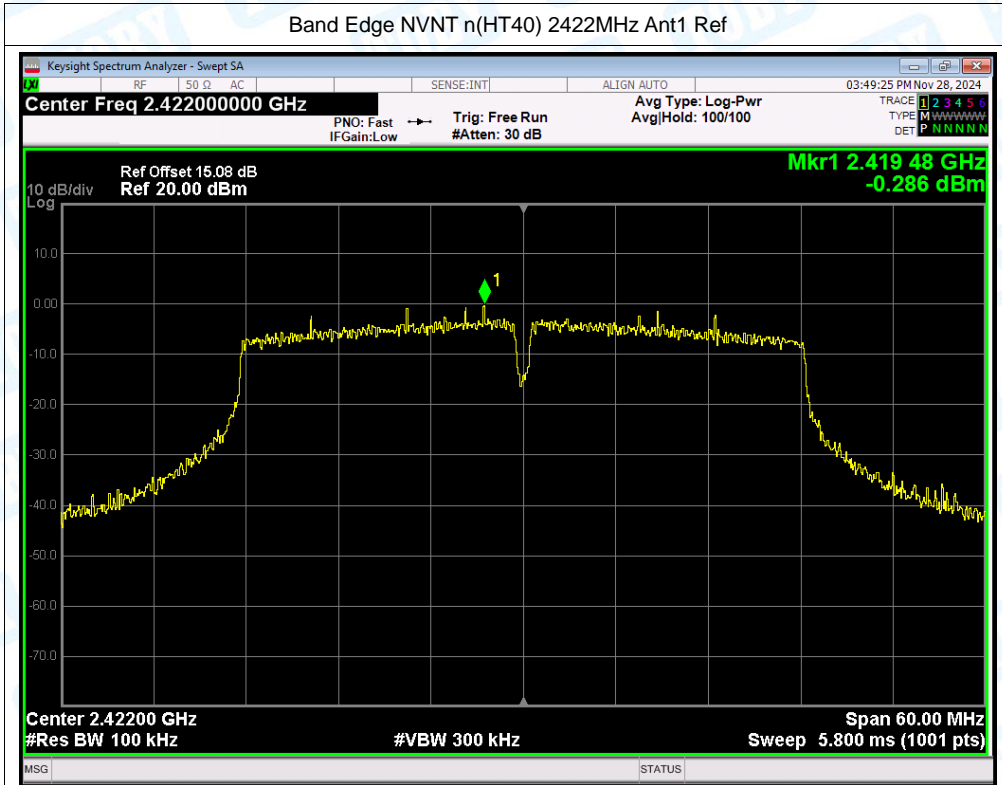
Band Edge NVNT n(HT20) 2462MHz Ant1 Ref



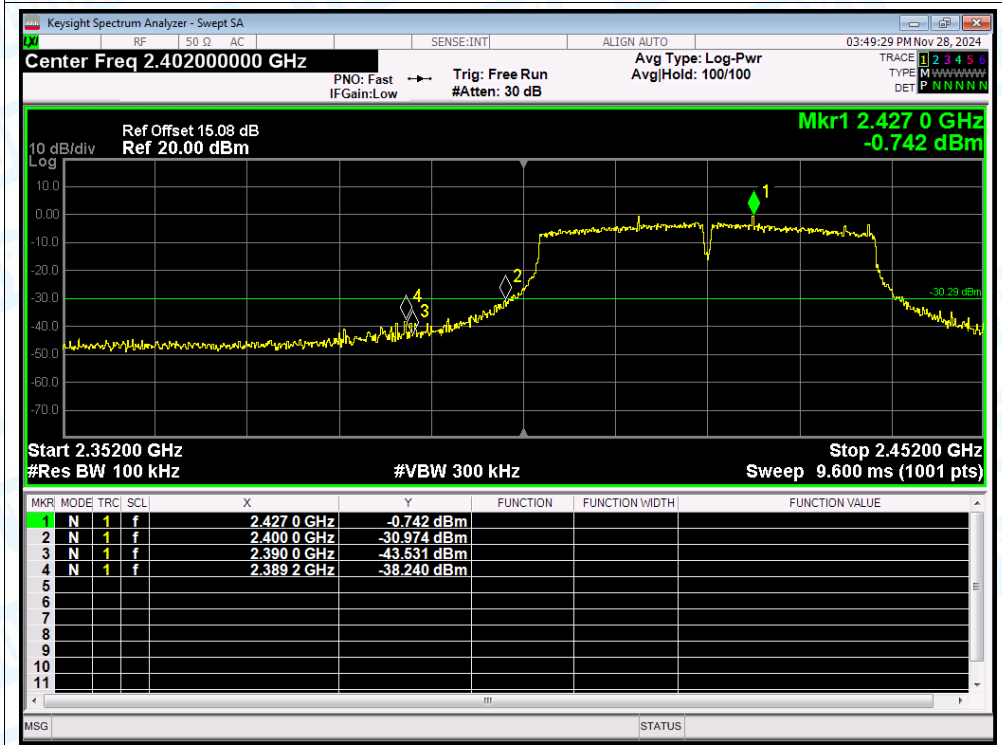
Band Edge NVNT n(HT20) 2462MHz Ant1 Emission



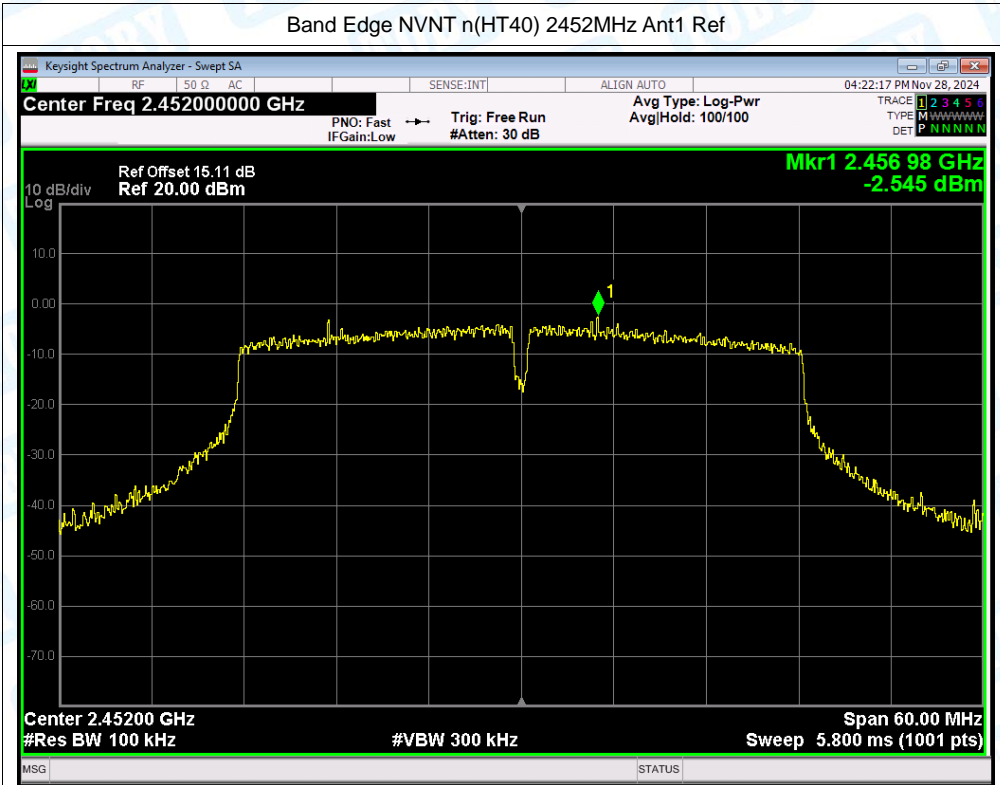
Band Edge NVNT n(HT40) 2422MHz Ant1 Ref



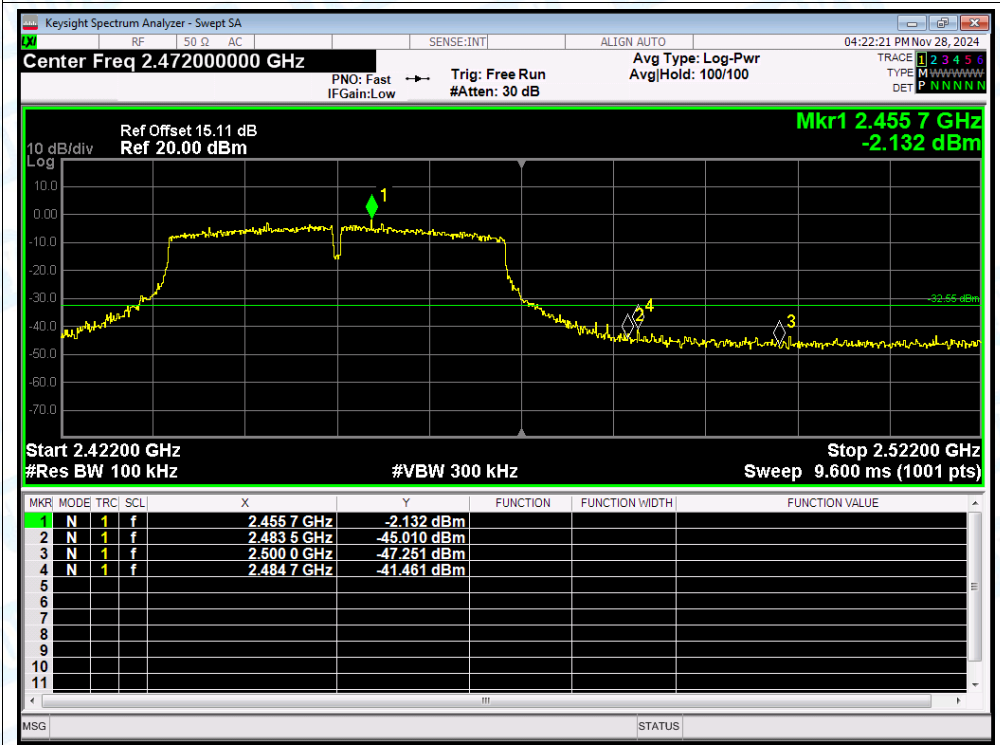
Band Edge NVNT n(HT40) 2422MHz Ant1 Emission



Band Edge NVNT n(HT40) 2452MHz Ant1 Ref



Band Edge NVNT n(HT40) 2452MHz Ant1 Emission

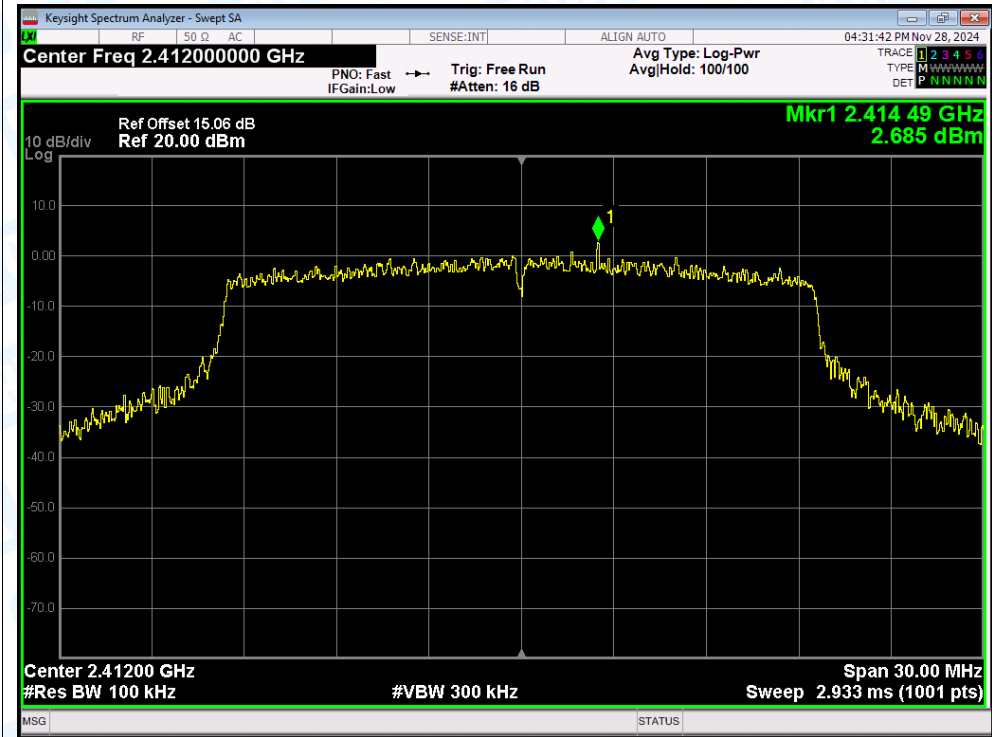


7. Conducted RF Spurious Emission

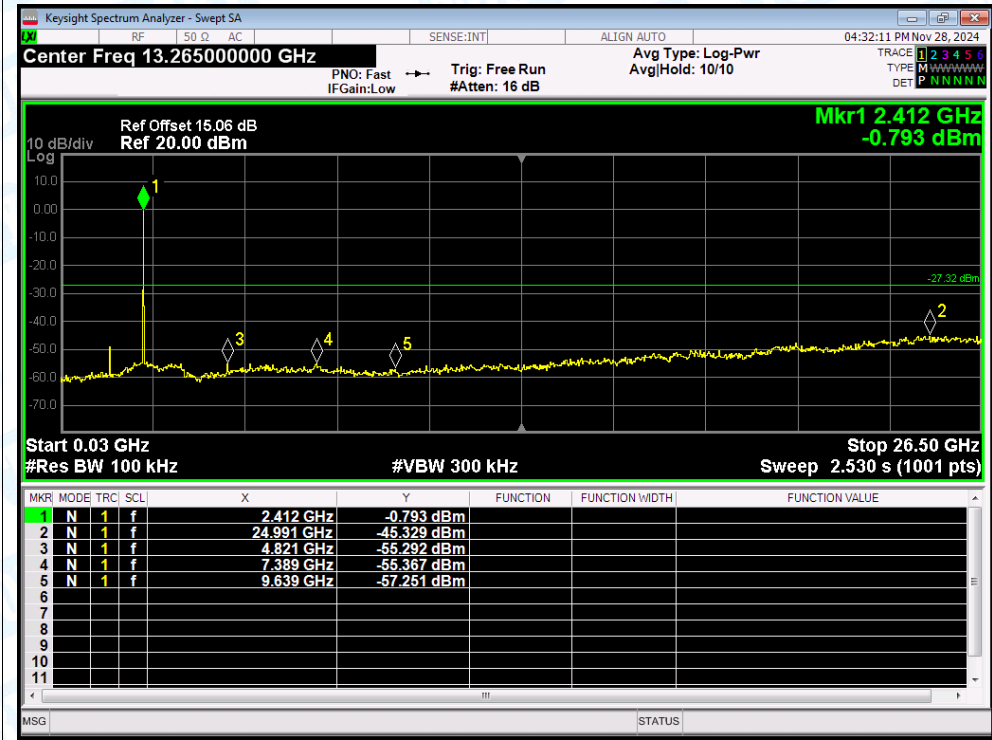
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	ax(VHT20)	2412	Ant1	-48.02	-30	Pass
NVNT	ax(VHT20)	2437	Ant1	-39.99	-30	Pass
NVNT	ax(VHT20)	2462	Ant1	-45.91	-30	Pass
NVNT	ax(VHT40)	2422	Ant1	-44.27	-30	Pass
NVNT	ax(VHT40)	2437	Ant1	-42.56	-30	Pass
NVNT	ax(VHT40)	2452	Ant1	-43.25	-30	Pass
NVNT	b	2412	Ant1	-50.39	-30	Pass
NVNT	b	2437	Ant1	-50.71	-30	Pass
NVNT	b	2462	Ant1	-51.5	-30	Pass
NVNT	g	2412	Ant1	-47.5	-30	Pass
NVNT	g	2437	Ant1	-47.87	-30	Pass
NVNT	g	2462	Ant1	-45.73	-30	Pass
NVNT	n(HT20)	2412	Ant1	-46.39	-30	Pass
NVNT	n(HT20)	2437	Ant1	-45.41	-30	Pass
NVNT	n(HT20)	2462	Ant1	-44.59	-30	Pass
NVNT	n(HT40)	2422	Ant1	-45.2	-30	Pass
NVNT	n(HT40)	2437	Ant1	-44.13	-30	Pass
NVNT	n(HT40)	2452	Ant1	-43.55	-30	Pass

Test Graphs

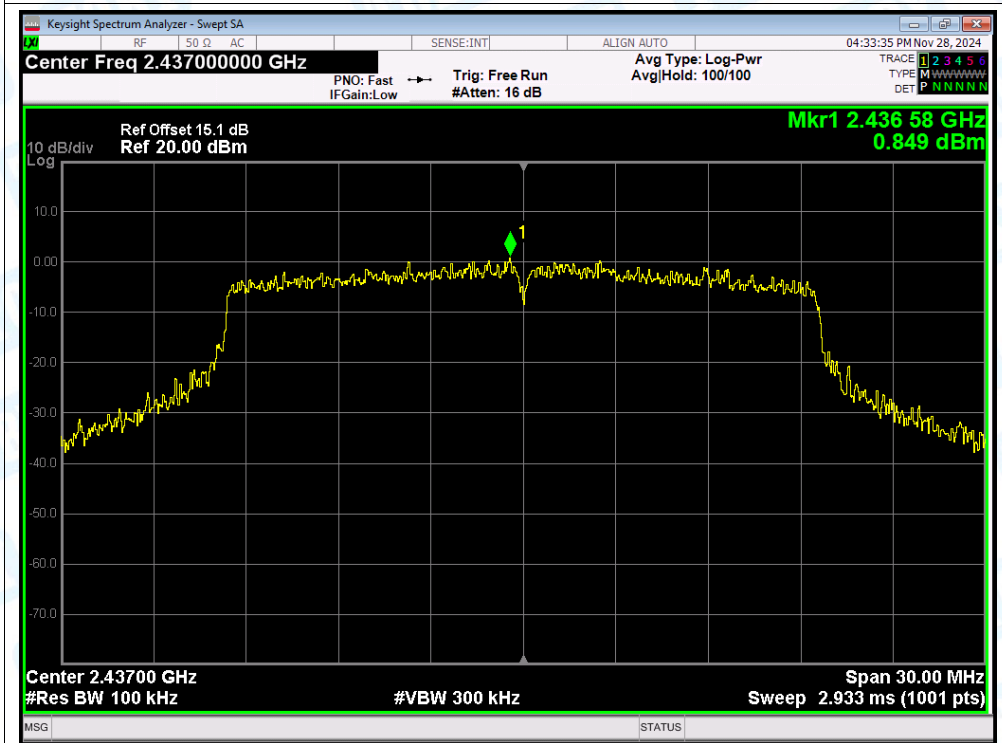
Tx. Spurious NVNT ax(VHT20) 2412MHz Ant1 Ref



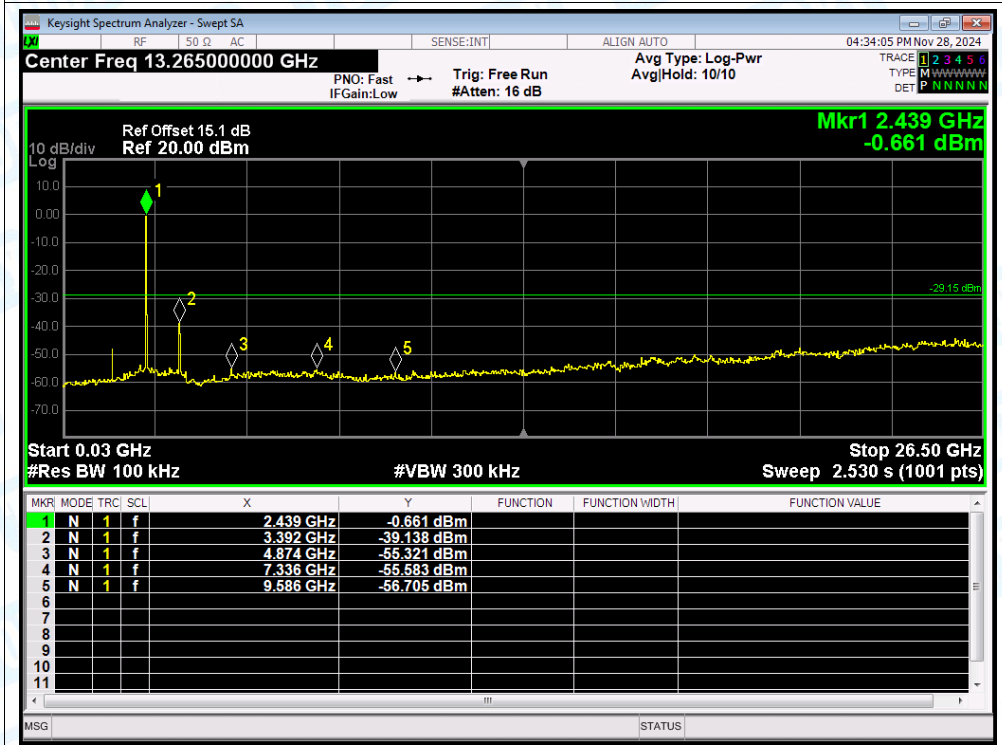
Tx. Spurious NVNT ax(VHT20) 2412MHz Ant1 Emission



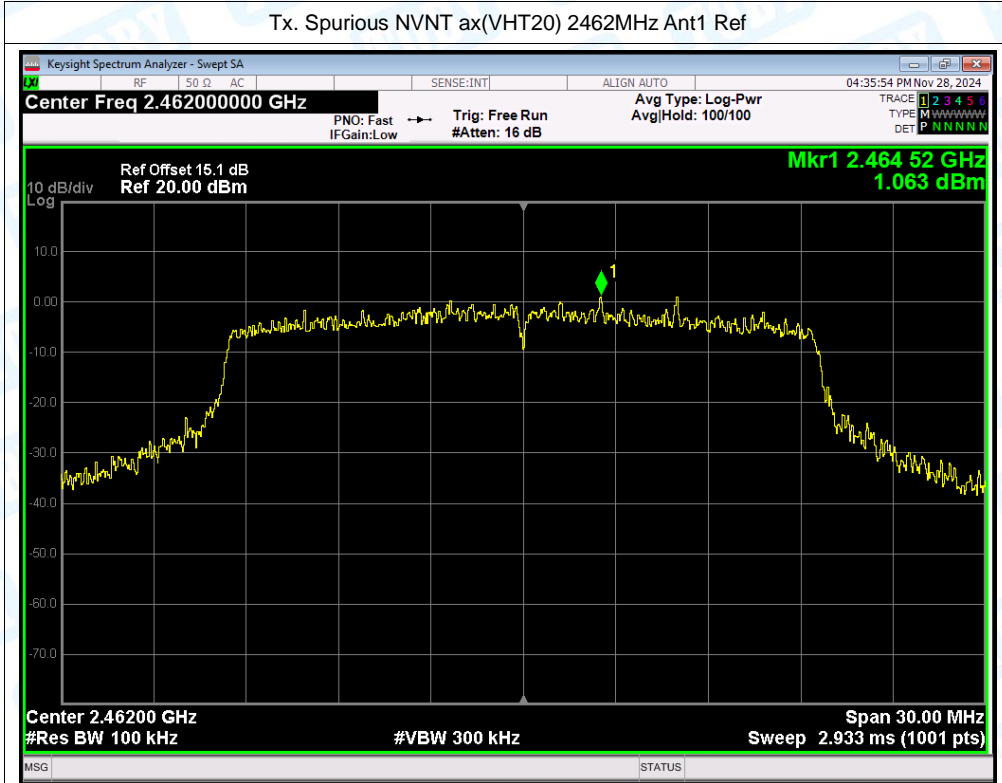
Tx. Spurious NVNT ax(VHT20) 2437MHz Ant1 Ref



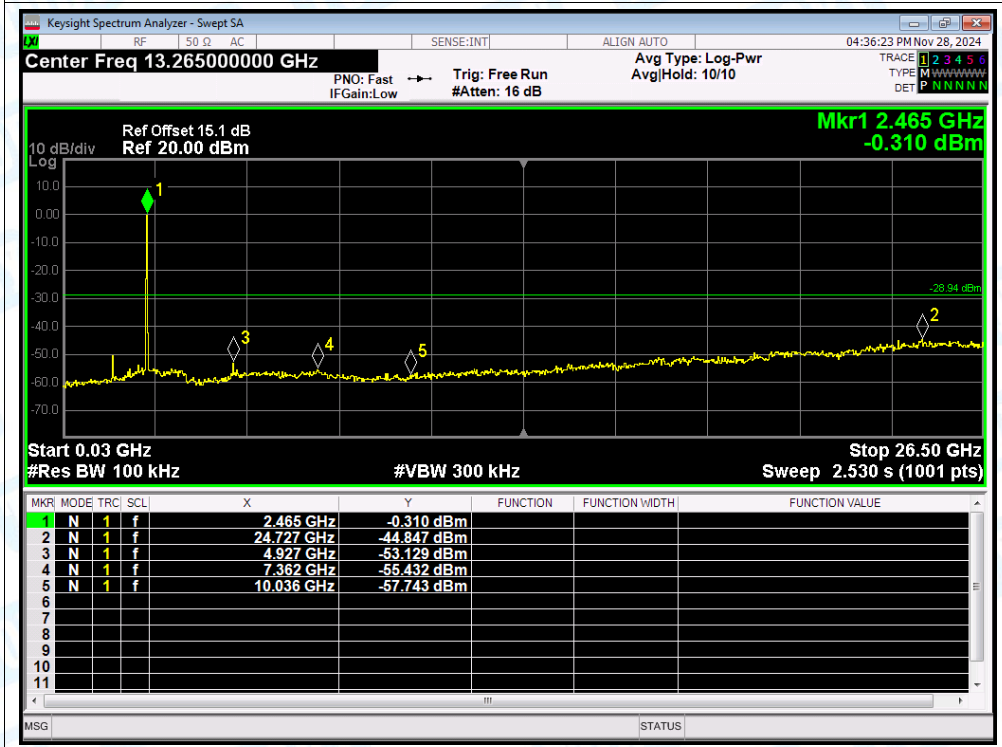
Tx. Spurious NVNT ax(VHT20) 2437MHz Ant1 Emission



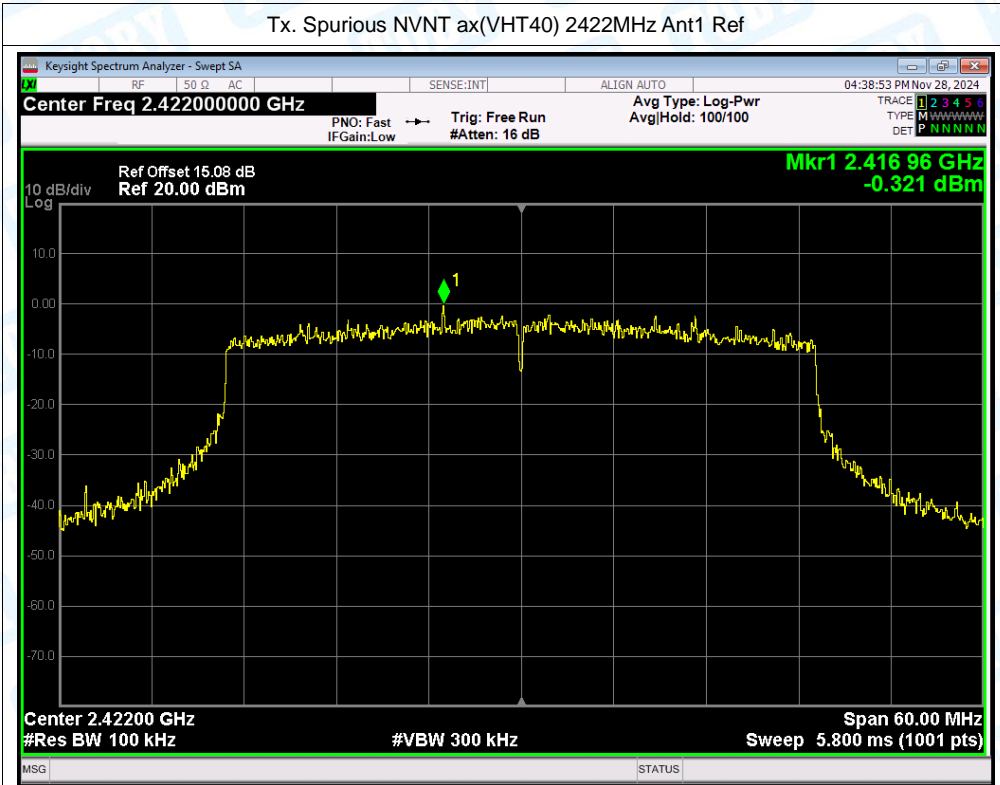
Tx. Spurious NVNT ax(VHT20) 2462MHz Ant1 Ref



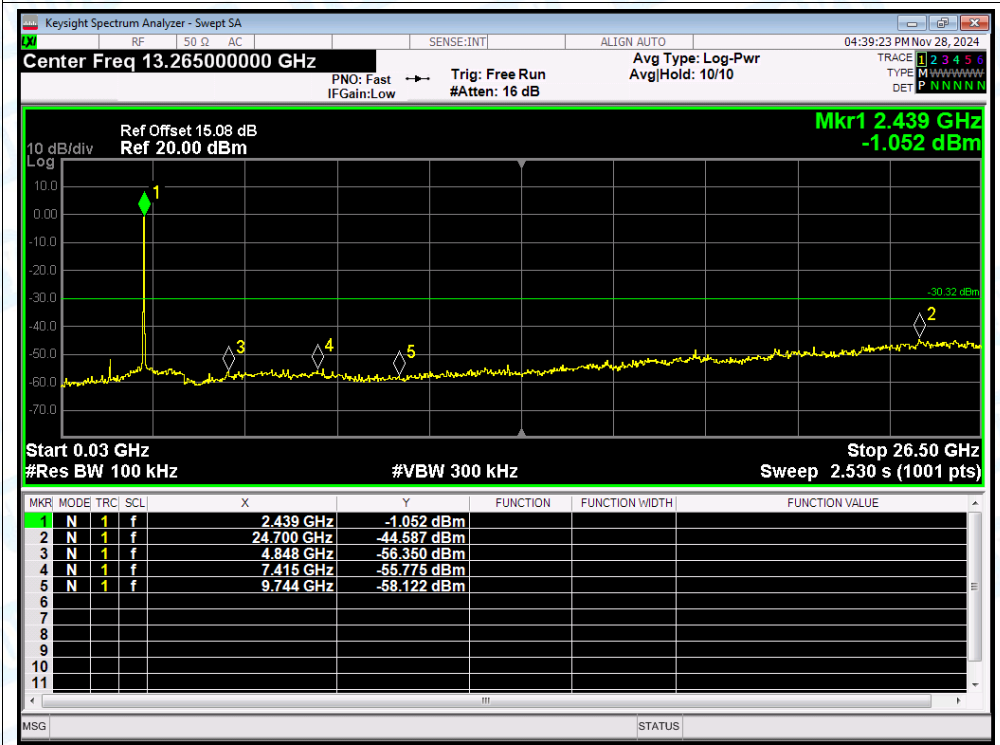
Tx. Spurious NVNT ax(VHT20) 2462MHz Ant1 Emission



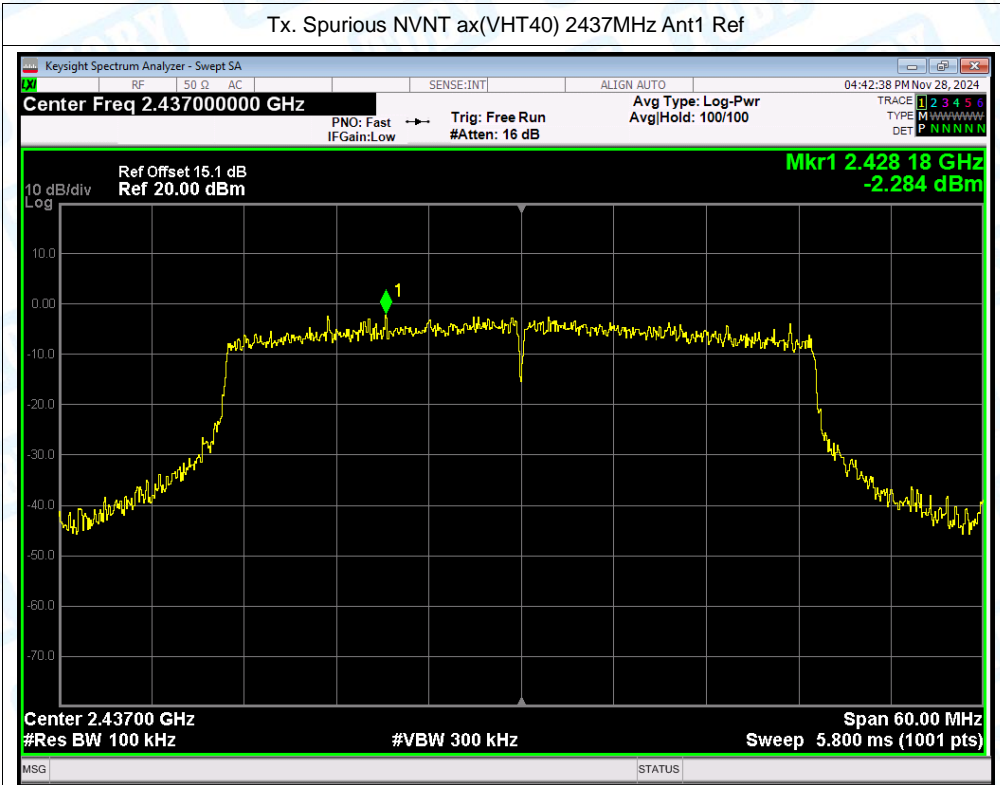
Tx. Spurious NVNT ax(VHT40) 2422MHz Ant1 Ref



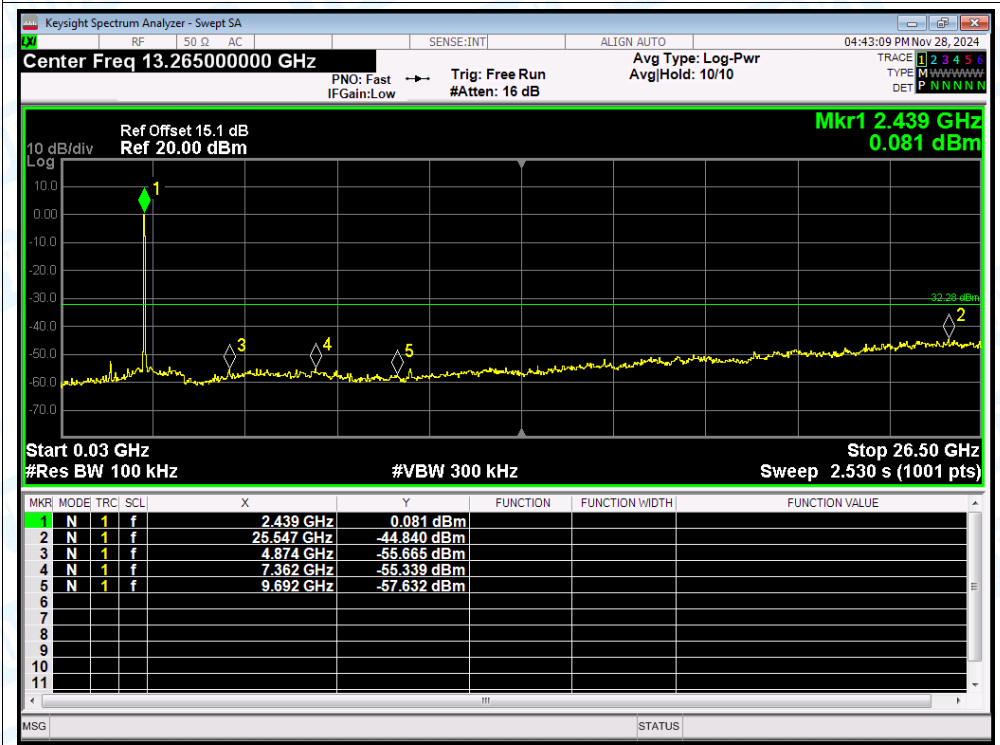
Tx. Spurious NVNT ax(VHT40) 2422MHz Ant1 Emission



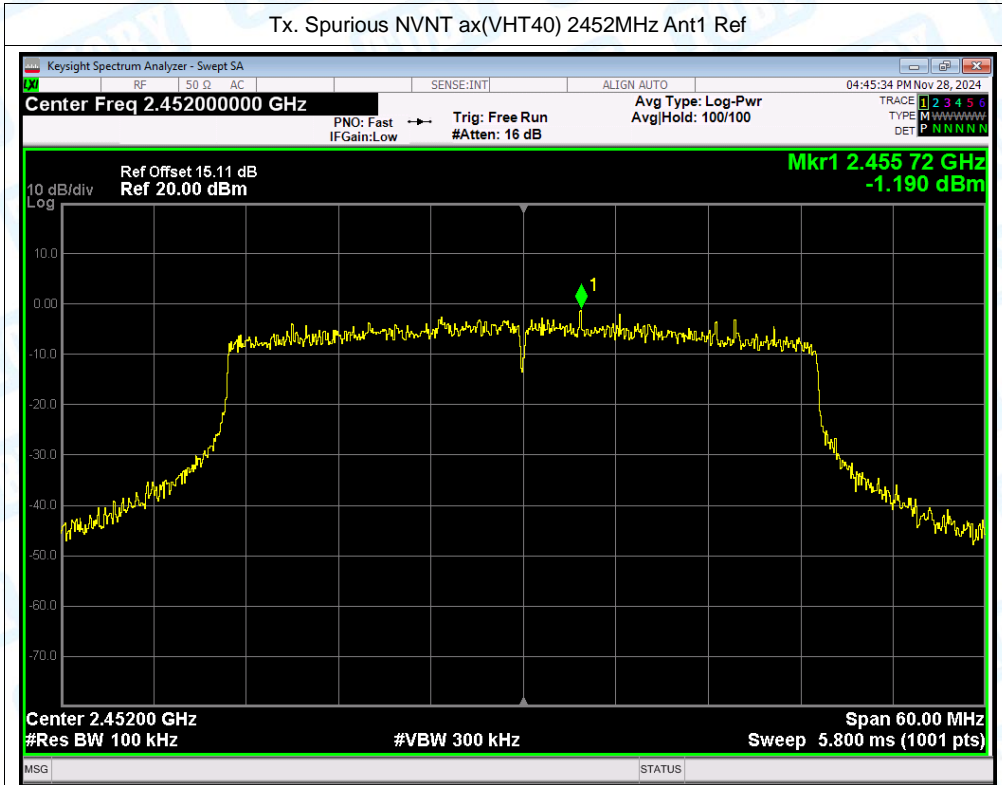
Tx. Spurious NVNT ax(VHT40) 2437MHz Ant1 Ref



Tx. Spurious NVNT ax(VHT40) 2437MHz Ant1 Emission



Tx. Spurious NVNT ax(VHT40) 2452MHz Ant1 Ref



Tx. Spurious NVNT ax(VHT40) 2452MHz Ant1 Emission

