

RF Test Data for 2.4G WiFi (Conducted Measurements)

General Description of EUT	
Product Name:	ORBIT Trio Pro
Test Model:	ORBIT Trio Pro/KR1516
Sample ID:	HC-C-202506-0212-02-02#
Environmental Conditions	
Temperature:	24℃
Relative Humidity:	49%RH
Test Voltage:	DC 3.8V
Test Engineer:	Lily Zhang
Note: For a more detailed features description, please refer to the report TBR-C-202506-0212-8 The report only show the worst case data.	

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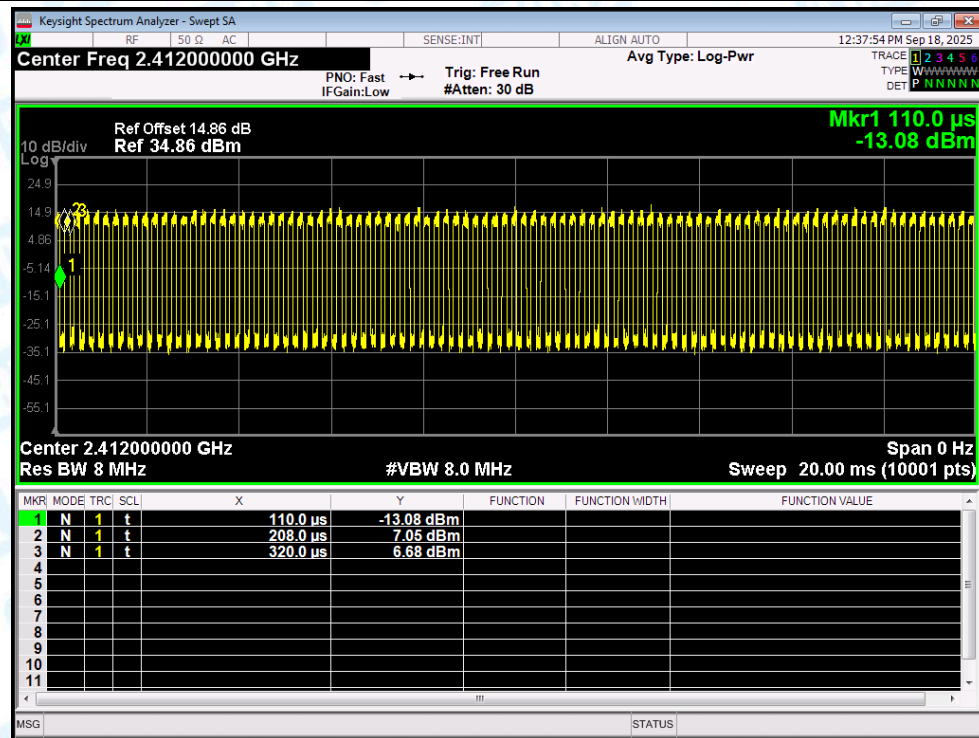
7. Conducted RF Spurious Emission.....70

1. Duty Cycle

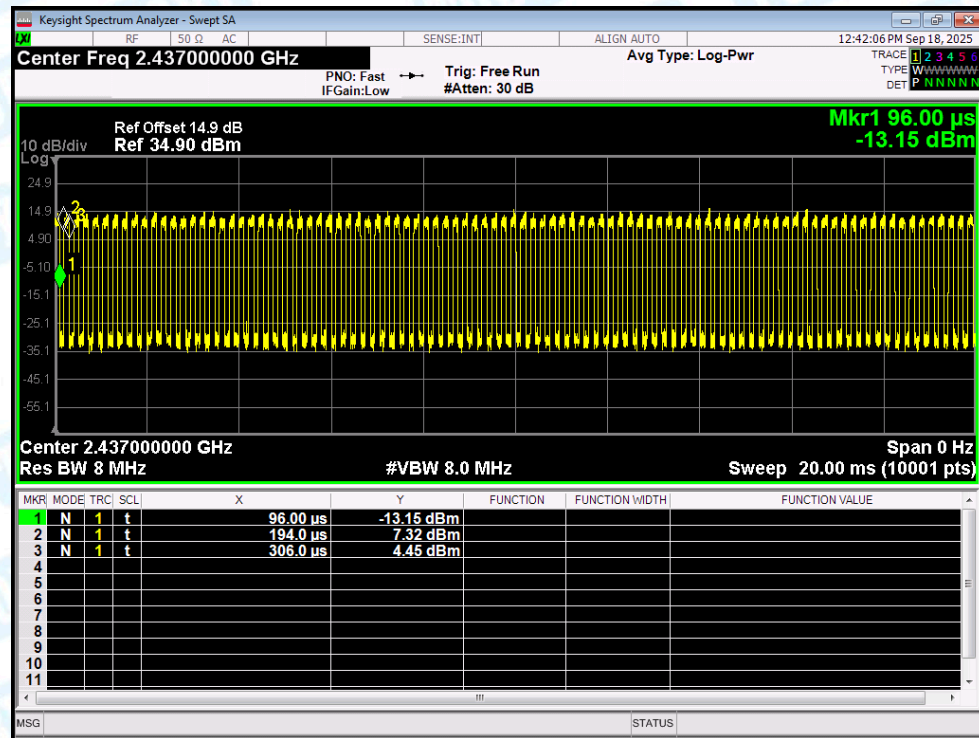
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	ax(VHT20)	2412	Sum	53.33	2.73	8.93
NVNT	ax(VHT20)	2437	Sum	53.33	2.73	8.93
NVNT	ax(VHT20)	2462	Sum	52.83	2.77	8.93
NVNT	b	2412	Ant1	98.9	0.05	0.12
NVNT	b	2437	Ant1	98.92	0.05	0.12
NVNT	b	2462	Ant1	98.9	0.05	0.12
NVNT	b	2412	Ant2	98.9	0.05	0.12
NVNT	b	2437	Ant2	98.9	0.05	0.12
NVNT	b	2462	Ant2	98.92	0.05	0.12
NVNT	g	2412	Ant1	93.45	0.29	0.72
NVNT	g	2437	Ant1	93.44	0.29	0.72
NVNT	g	2462	Ant1	93.32	0.3	0.72
NVNT	g	2412	Ant2	93.32	0.3	0.72
NVNT	g	2437	Ant2	93.32	0.3	0.72
NVNT	g	2462	Ant2	93.32	0.3	0.72
NVNT	n(HT20)	2412	Sum	78.7	1.04	2.76
NVNT	n(HT20)	2437	Sum	78.7	1.04	2.76
NVNT	n(HT20)	2462	Sum	78.26	1.06	2.78

Test Graphs

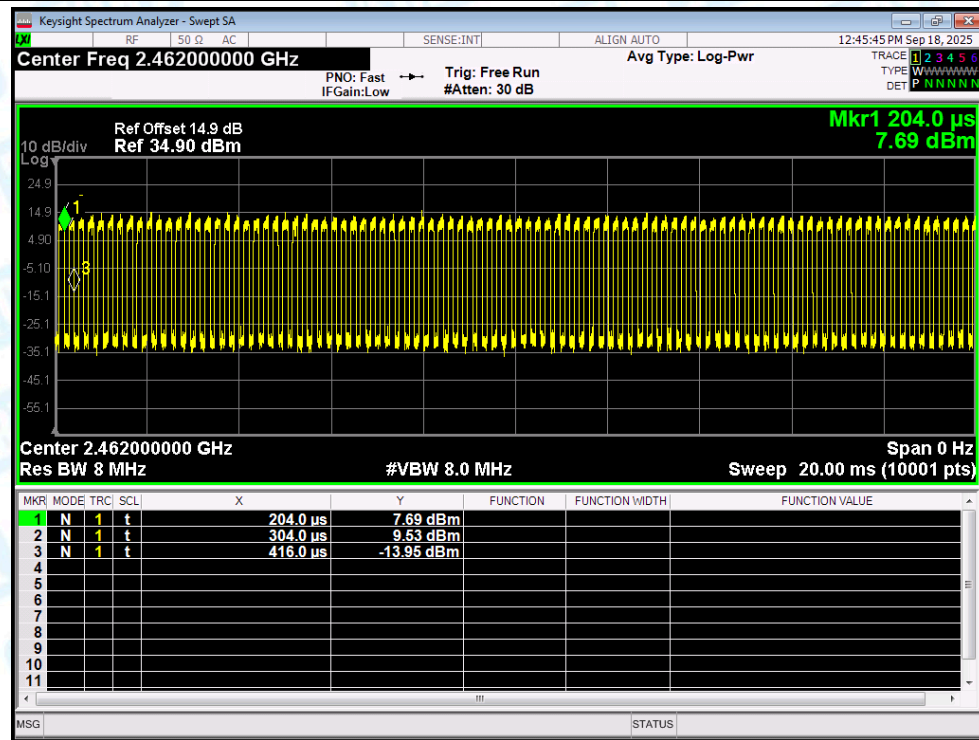
Duty Cycle NVNT ax(VHT20) 2412MHz Sum



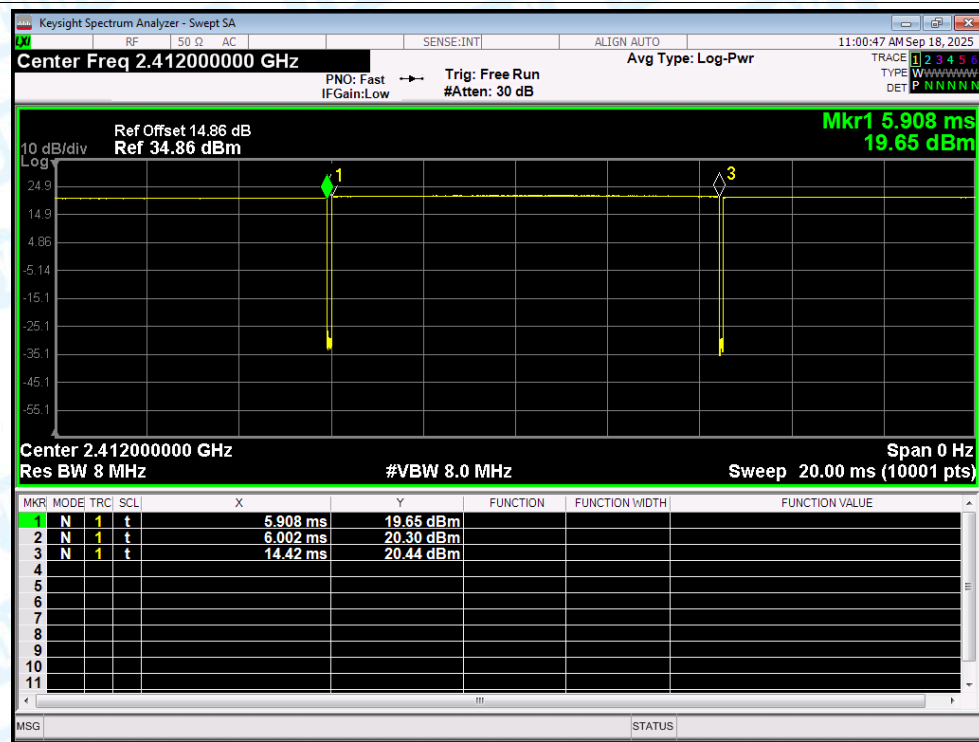
Duty Cycle NVNT ax(VHT20) 2437MHz Sum



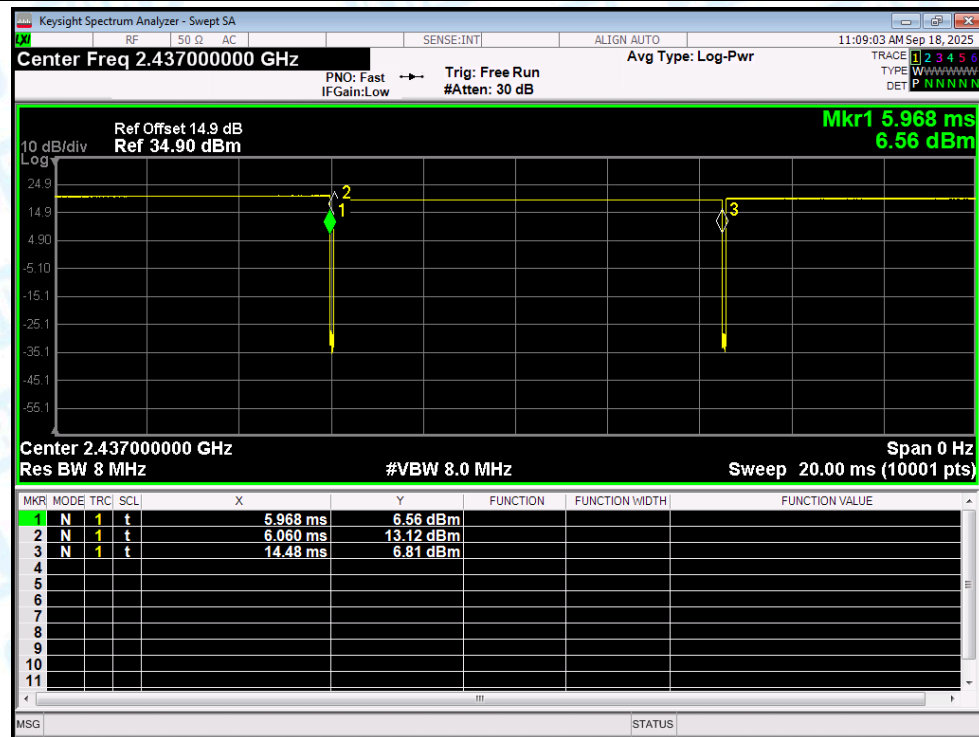
Duty Cycle NVNT ax(VHT20) 2462MHz Sum



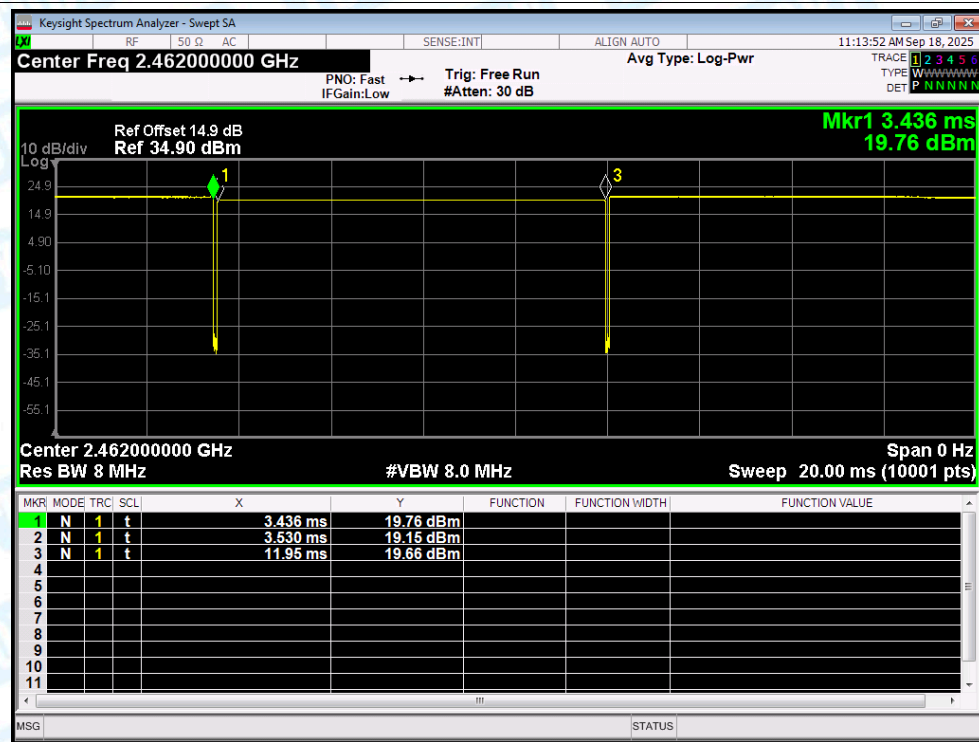
Duty Cycle NVNT b 2412MHz Ant1



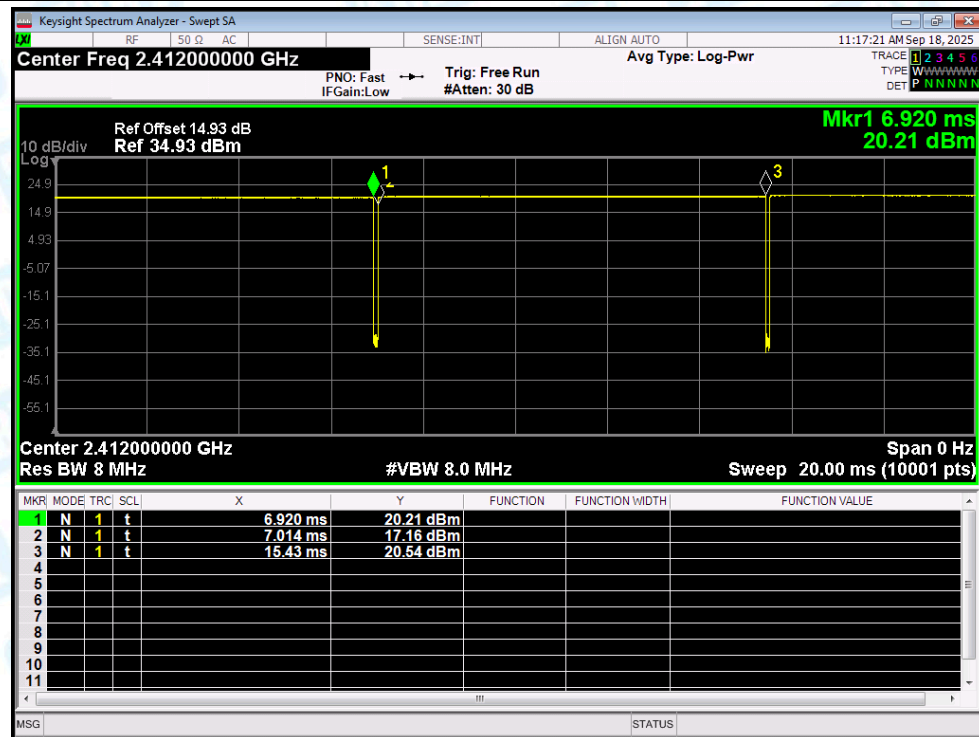
Duty Cycle NVNT b 2437MHz Ant1



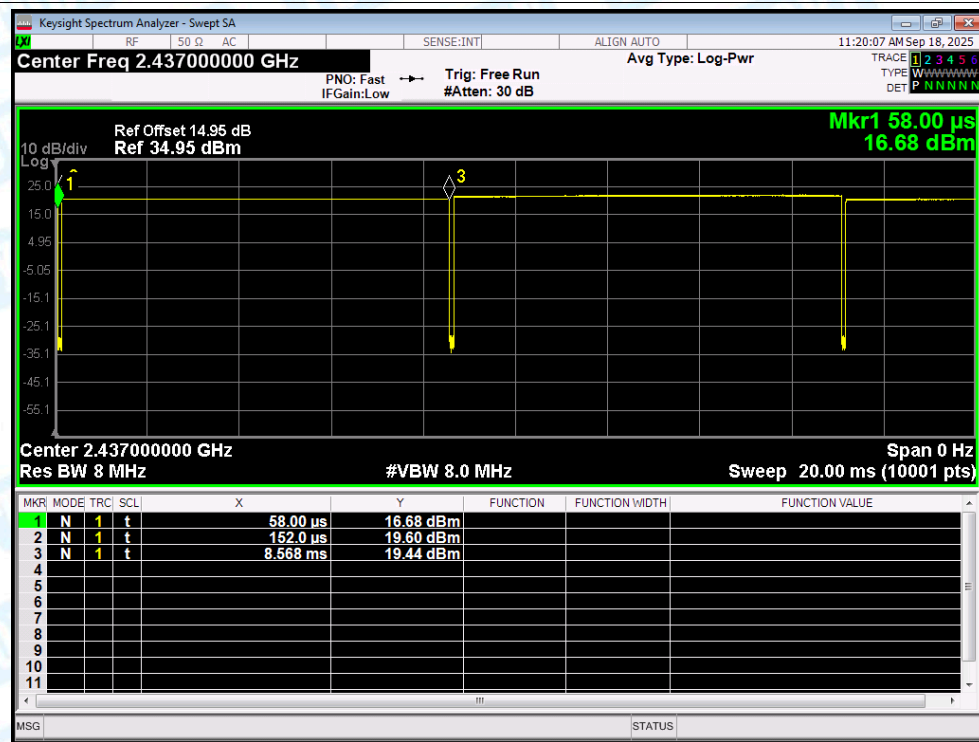
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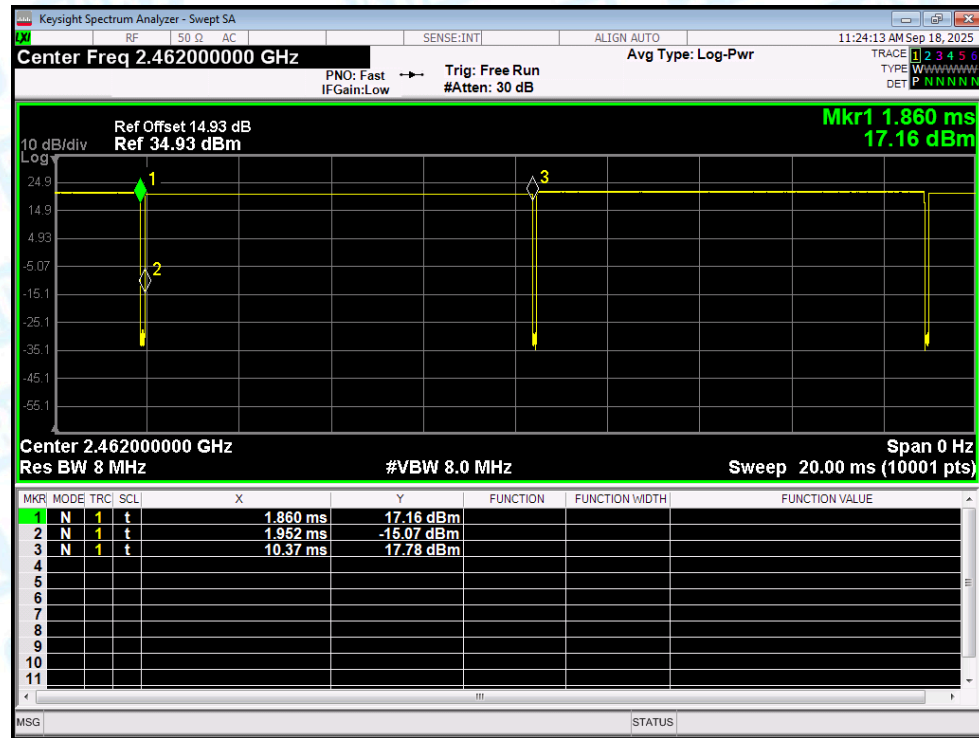
Duty Cycle NVNT b 2412MHz Ant2



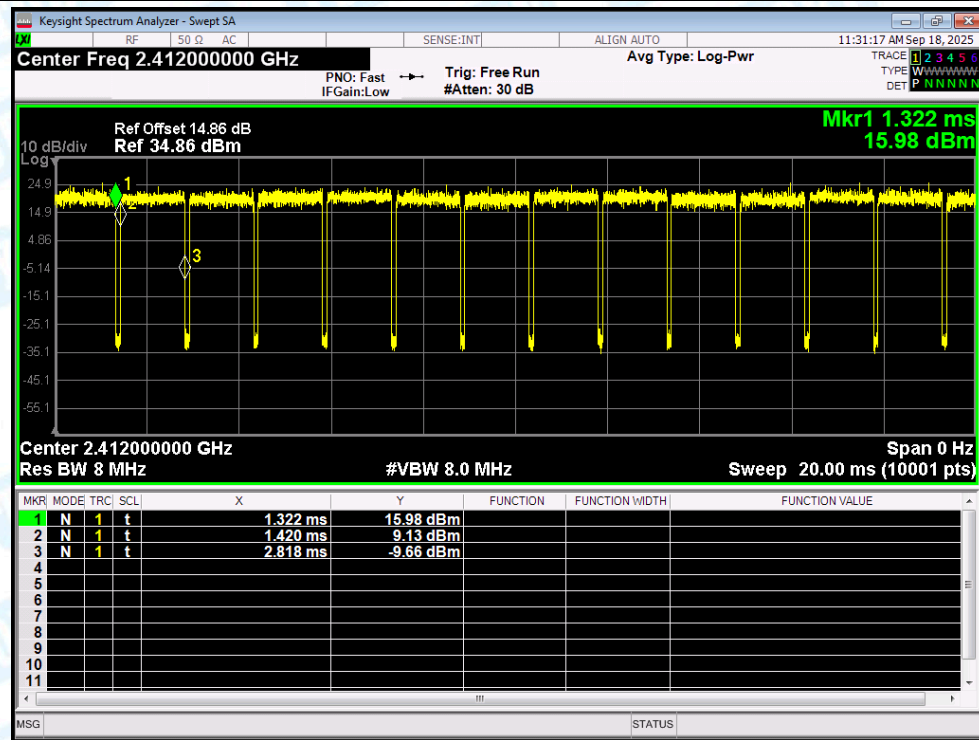
Duty Cycle NVNT b 2437MHz Ant2



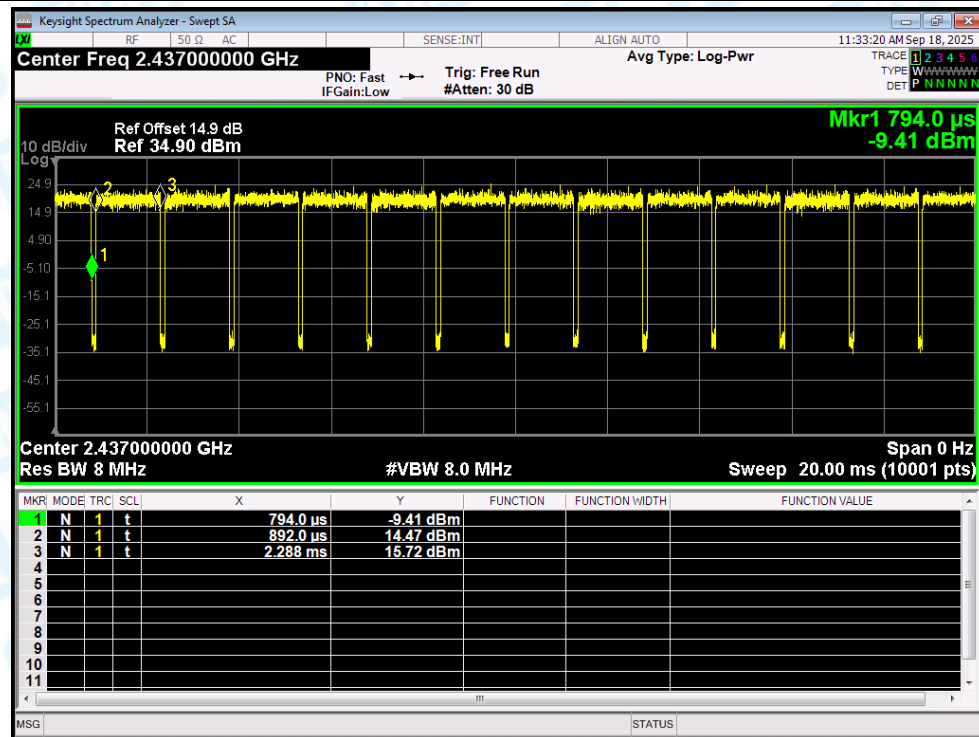
Duty Cycle NVNT b 2462MHz Ant2



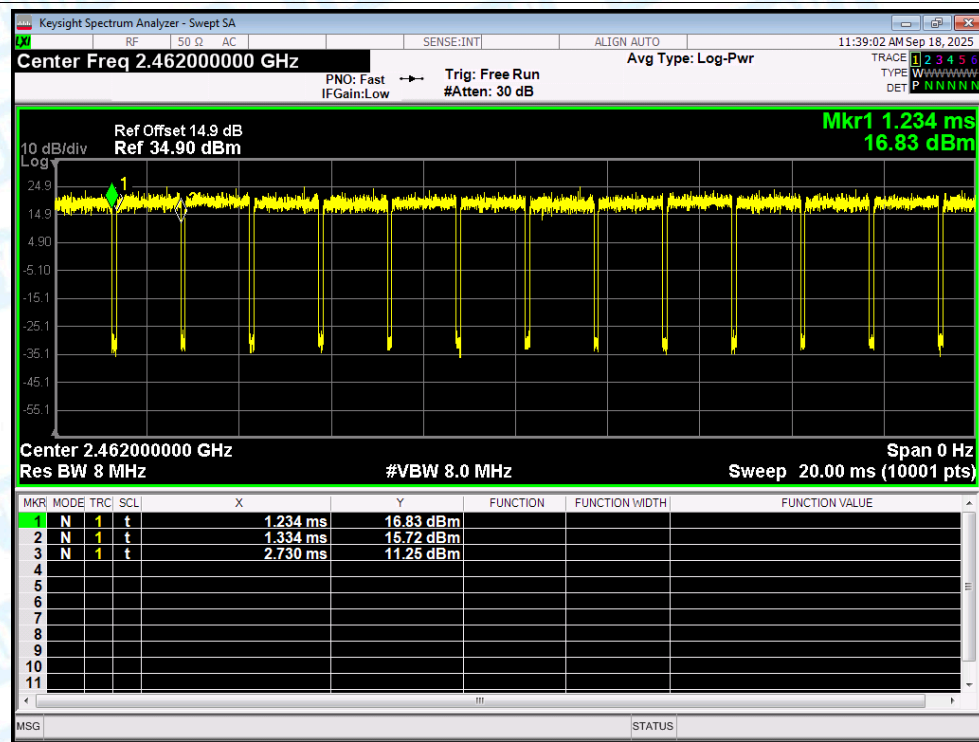
Duty Cycle NVNT g 2412MHz Ant1



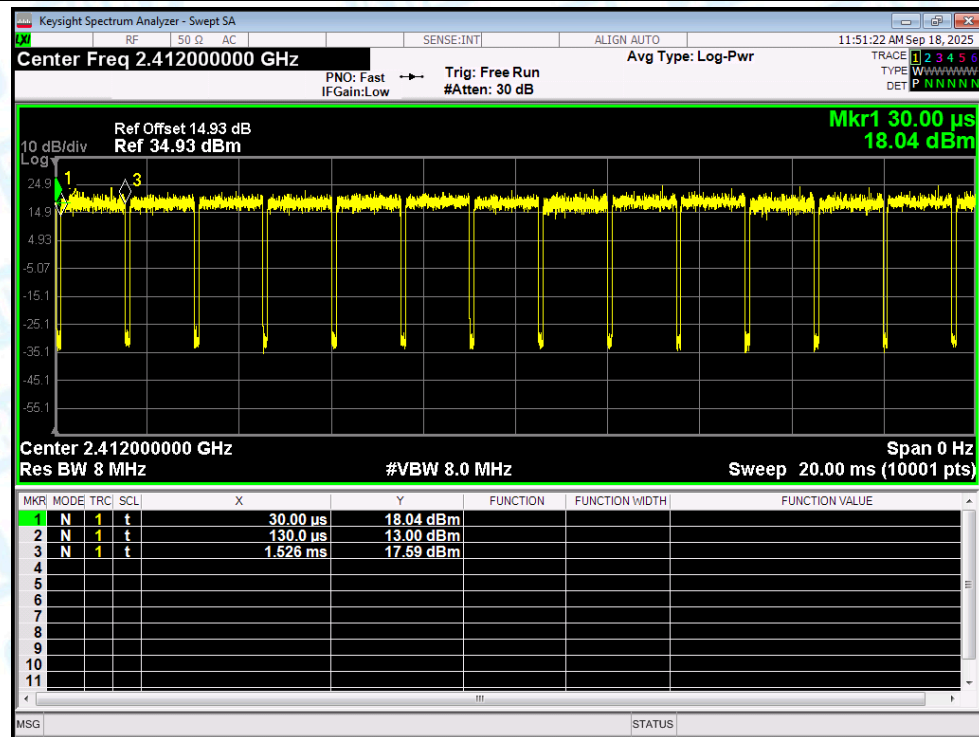
Duty Cycle NVNT g 2437MHz Ant1



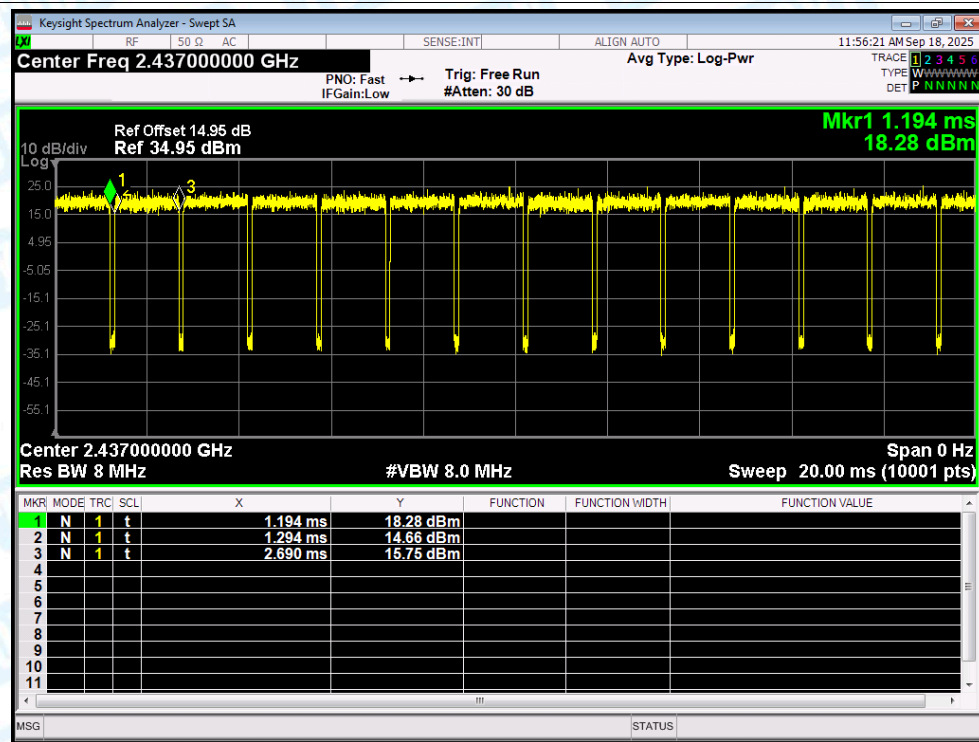
Duty Cycle NVNT g 2462MHz Ant1



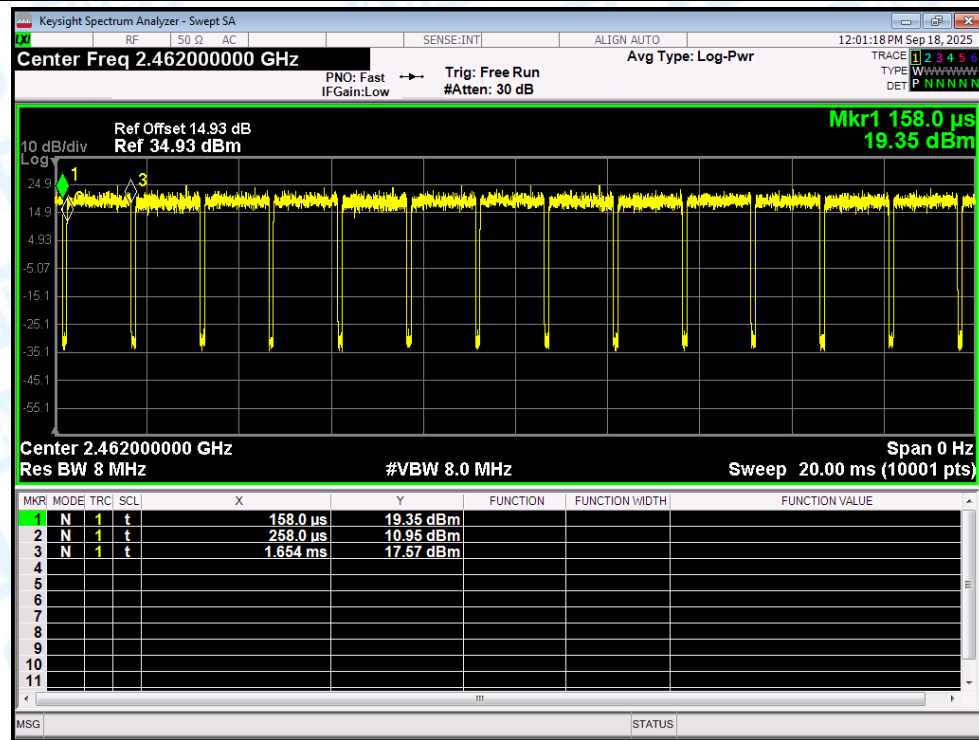
Duty Cycle NVNT g 2412MHz Ant2



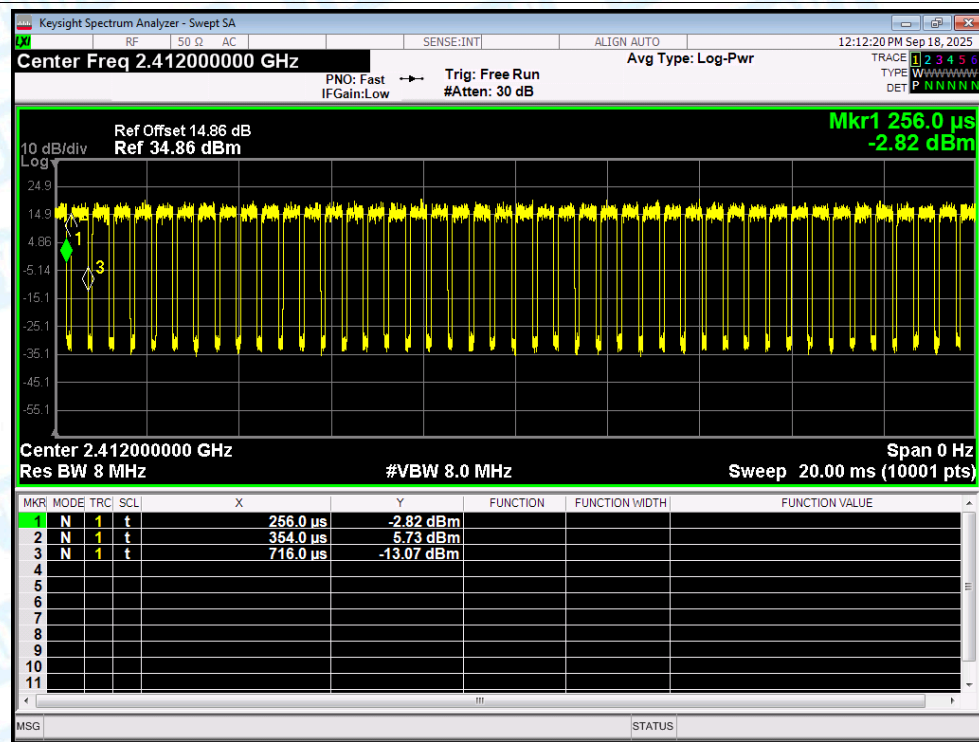
Duty Cycle NVNT g 2437MHz Ant2



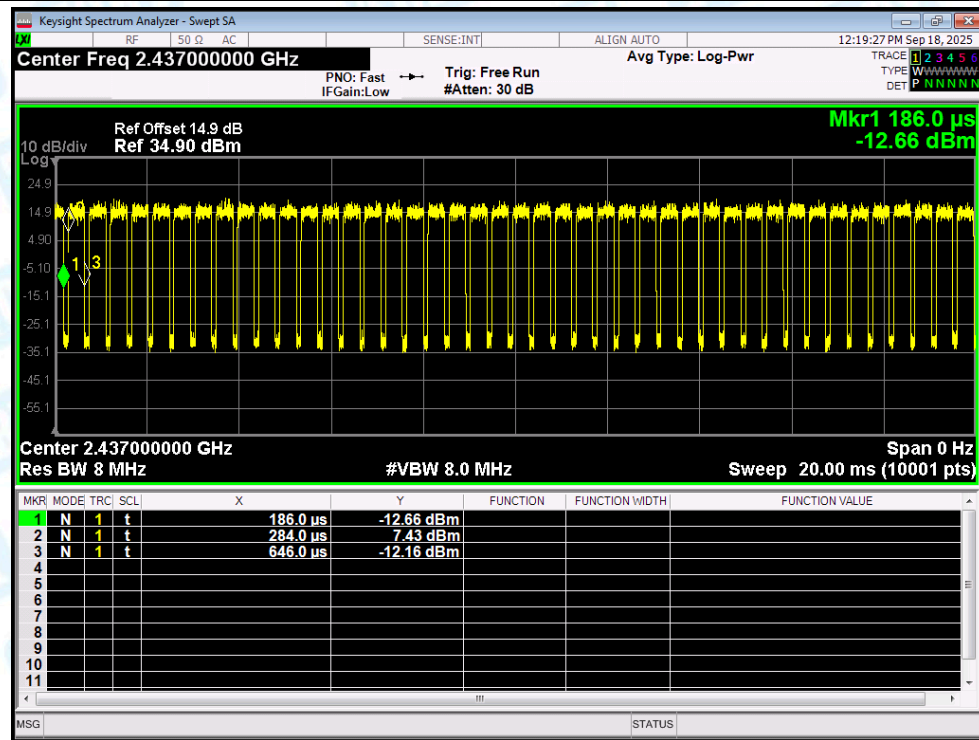
Duty Cycle NVNT g 2462MHz Ant2



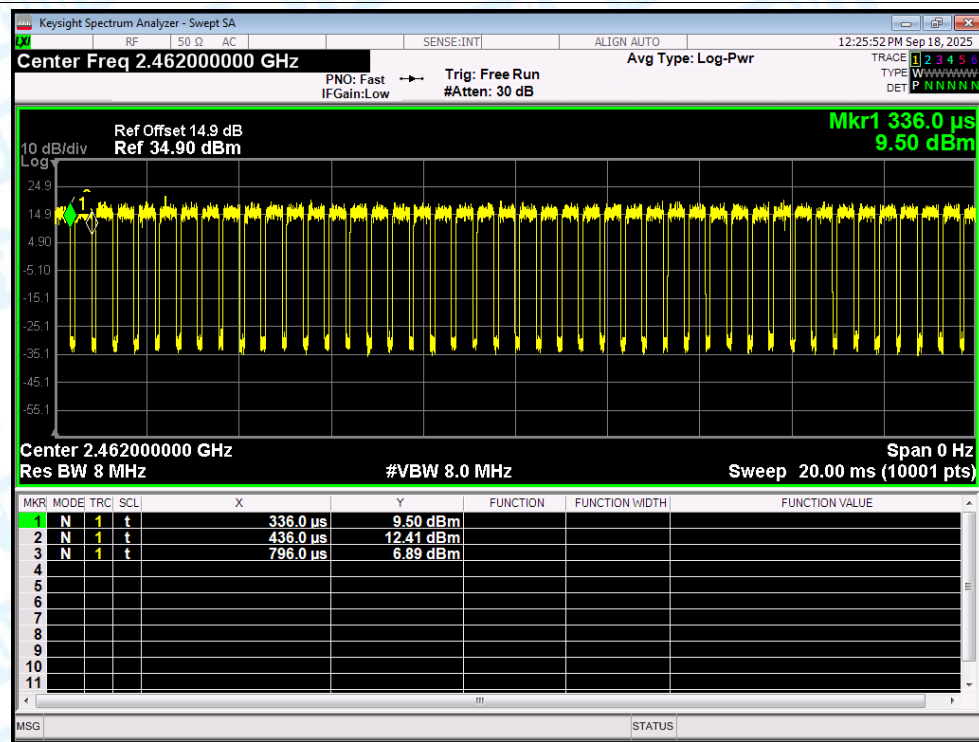
Duty Cycle NVNT n(HT20) 2412MHz Sum



Duty Cycle NVNT n(HT20) 2437MHz Sum



Duty Cycle NVNT n(HT20) 2462MHz Sum



2. Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	ax(VHT20)	2412	Ant1	13.05	30	Pass
NVNT	ax(VHT20)	2412	Ant2	13.13	30	Pass
NVNT	ax(VHT20)	2412	Sum	16.1	30	Pass
NVNT	ax(VHT20)	2437	Ant1	12.47	30	Pass
NVNT	ax(VHT20)	2437	Ant2	12.7	30	Pass
NVNT	ax(VHT20)	2437	Sum	15.597	30	Pass
NVNT	ax(VHT20)	2462	Ant1	12.08	30	Pass
NVNT	ax(VHT20)	2462	Ant2	12.56	30	Pass
NVNT	ax(VHT20)	2462	Sum	15.337	30	Pass
NVNT	b	2412	Ant1	16.22	30	Pass
NVNT	b	2437	Ant1	16.59	30	Pass
NVNT	b	2462	Ant1	15.96	30	Pass
NVNT	b	2412	Ant2	16.11	30	Pass
NVNT	b	2437	Ant2	16.12	30	Pass
NVNT	b	2462	Ant2	16.58	30	Pass
NVNT	g	2412	Ant1	16.47	30	Pass
NVNT	g	2437	Ant1	15.64	30	Pass
NVNT	g	2462	Ant1	15.49	30	Pass
NVNT	g	2412	Ant2	15.66	30	Pass
NVNT	g	2437	Ant2	15.64	30	Pass
NVNT	g	2462	Ant2	15.42	30	Pass
NVNT	n(HT20)	2412	Ant1	13.52	30	Pass
NVNT	n(HT20)	2412	Ant2	13.24	30	Pass
NVNT	n(HT20)	2412	Sum	16.393	30	Pass
NVNT	n(HT20)	2437	Ant1	12.83	30	Pass
NVNT	n(HT20)	2437	Ant2	12.81	30	Pass
NVNT	n(HT20)	2437	Sum	15.83	30	Pass
NVNT	n(HT20)	2462	Ant1	13.33	30	Pass
NVNT	n(HT20)	2462	Ant2	13.45	30	Pass
NVNT	n(HT20)	2462	Sum	16.401	30	Pass

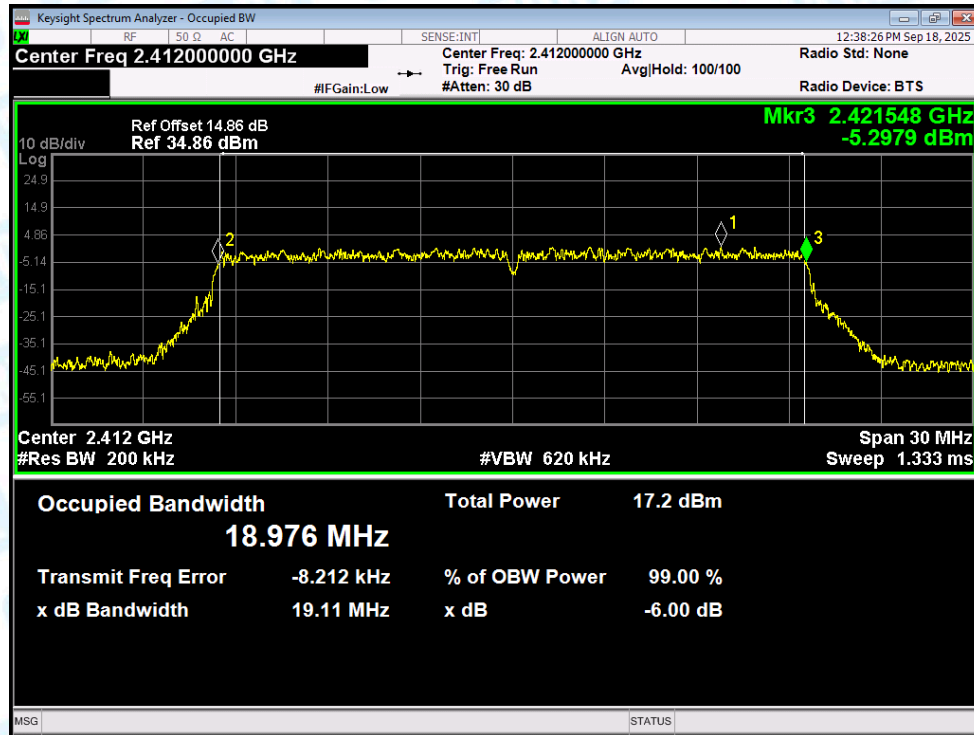
Note: The duty factor has been compensated into the result.

3. -6dB Bandwidth

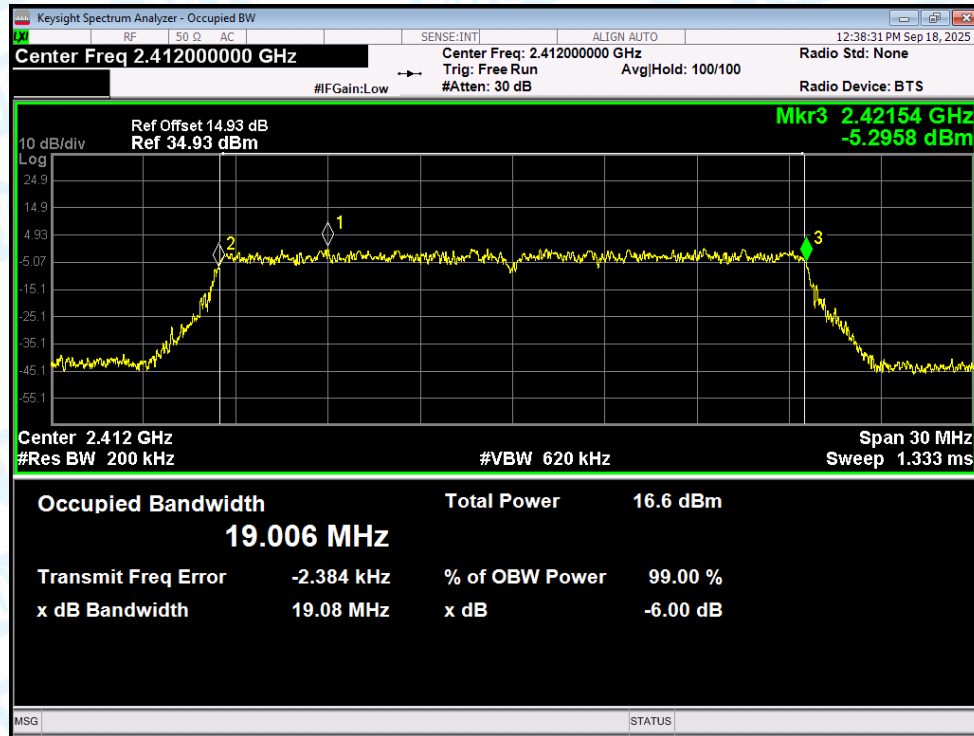
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	ax(VHT20)	2412	Ant1	19.11	0.5	Pass
NVNT	ax(VHT20)	2412	Ant2	19.08	0.5	Pass
NVNT	ax(VHT20)	2437	Ant1	19.11	0.5	Pass
NVNT	ax(VHT20)	2437	Ant2	19.12	0.5	Pass
NVNT	ax(VHT20)	2462	Ant1	19.12	0.5	Pass
NVNT	ax(VHT20)	2462	Ant2	19.1	0.5	Pass
NVNT	b	2412	Ant1	7.57	0.5	Pass
NVNT	b	2437	Ant1	7.14	0.5	Pass
NVNT	b	2462	Ant1	7.6	0.5	Pass
NVNT	b	2412	Ant2	7.11	0.5	Pass
NVNT	b	2437	Ant2	7.14	0.5	Pass
NVNT	b	2462	Ant2	7.76	0.5	Pass
NVNT	g	2412	Ant1	16.29	0.5	Pass
NVNT	g	2437	Ant1	16.28	0.5	Pass
NVNT	g	2462	Ant1	16.19	0.5	Pass
NVNT	g	2412	Ant2	16.23	0.5	Pass
NVNT	g	2437	Ant2	16.08	0.5	Pass
NVNT	g	2462	Ant2	16.09	0.5	Pass
NVNT	n(HT20)	2412	Ant1	17.49	0.5	Pass
NVNT	n(HT20)	2412	Ant2	17.5	0.5	Pass
NVNT	n(HT20)	2437	Ant1	17.61	0.5	Pass
NVNT	n(HT20)	2437	Ant2	17.55	0.5	Pass
NVNT	n(HT20)	2462	Ant1	17.55	0.5	Pass
NVNT	n(HT20)	2462	Ant2	17.56	0.5	Pass

Test Graphs

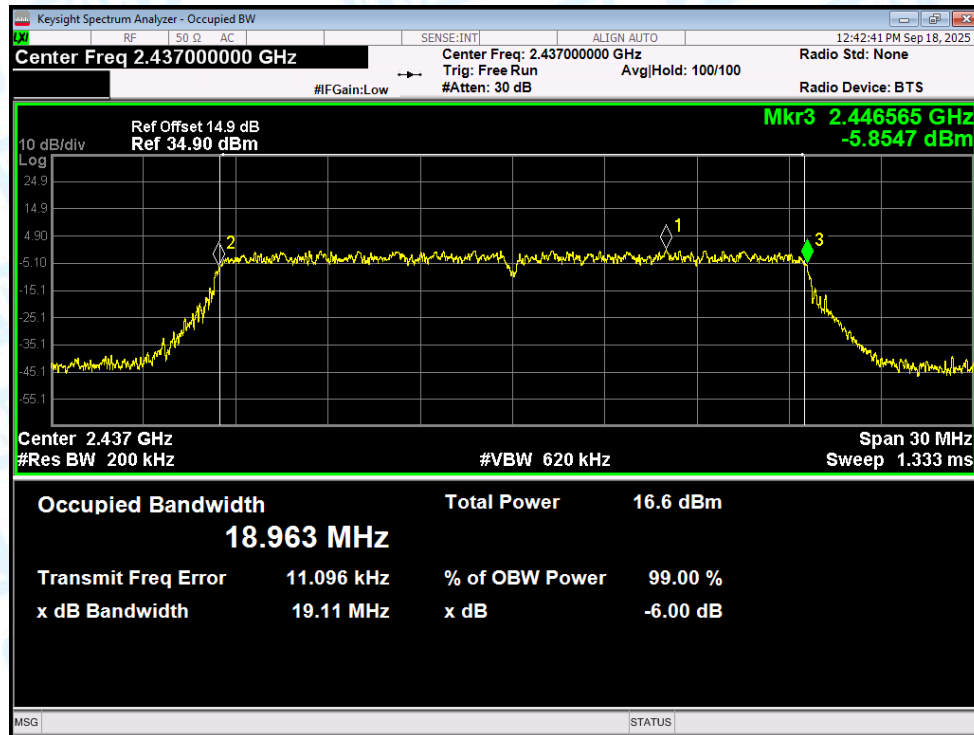
-6dB Bandwidth NVNT ax(VHT20) 2412MHz Ant1



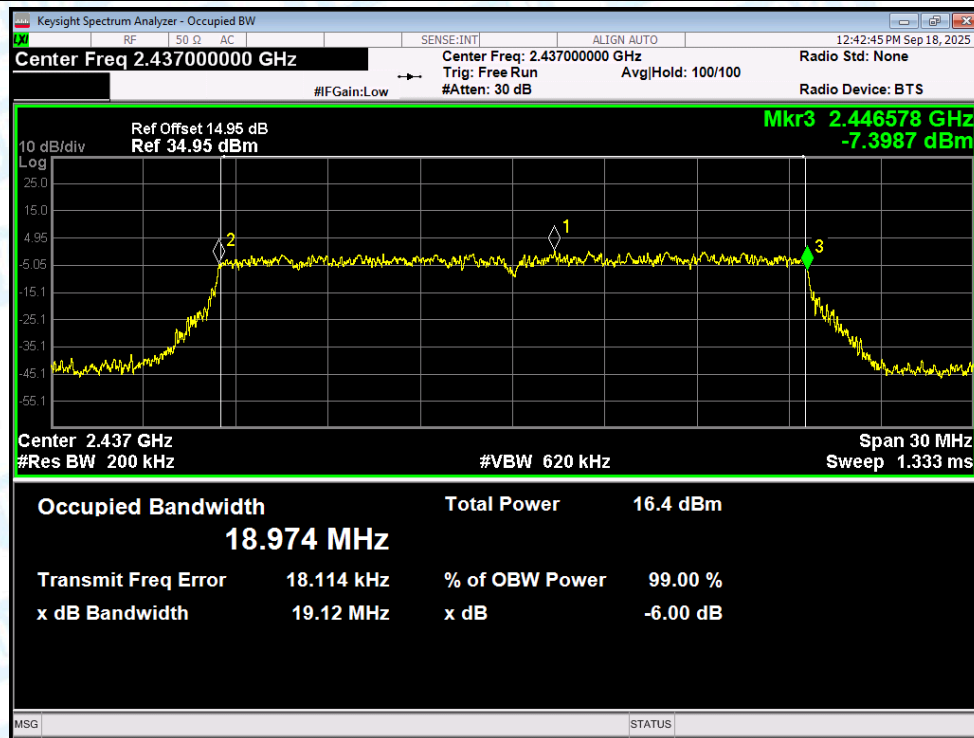
-6dB Bandwidth NVNT ax(VHT20) 2412MHz Ant2



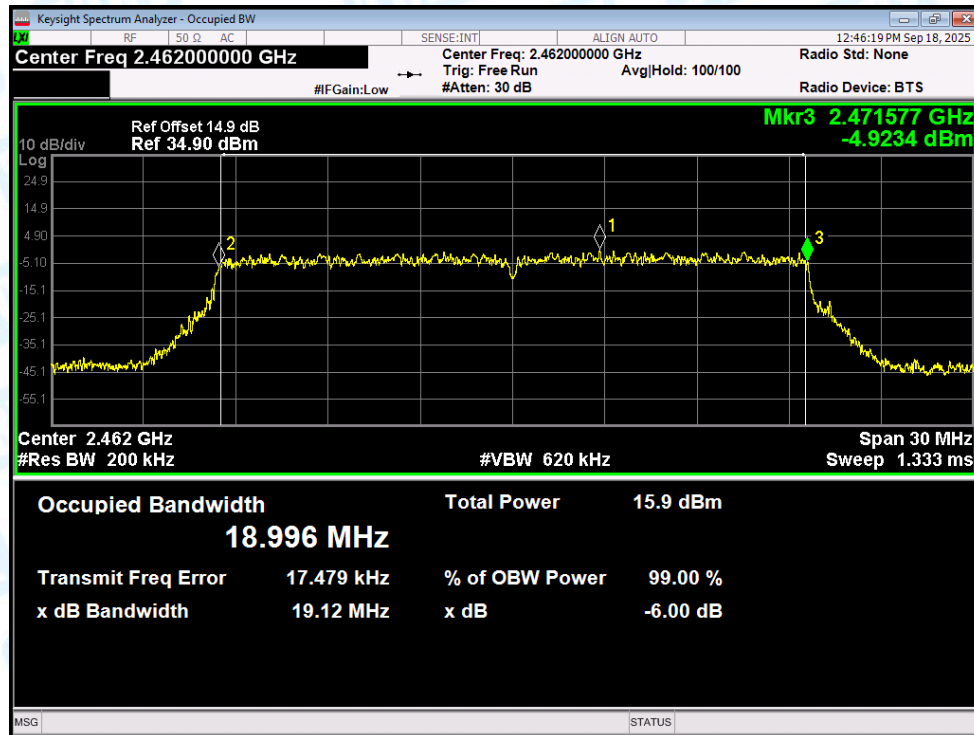
-6dB Bandwidth NVNT ax(VHT20) 2437MHz Ant1



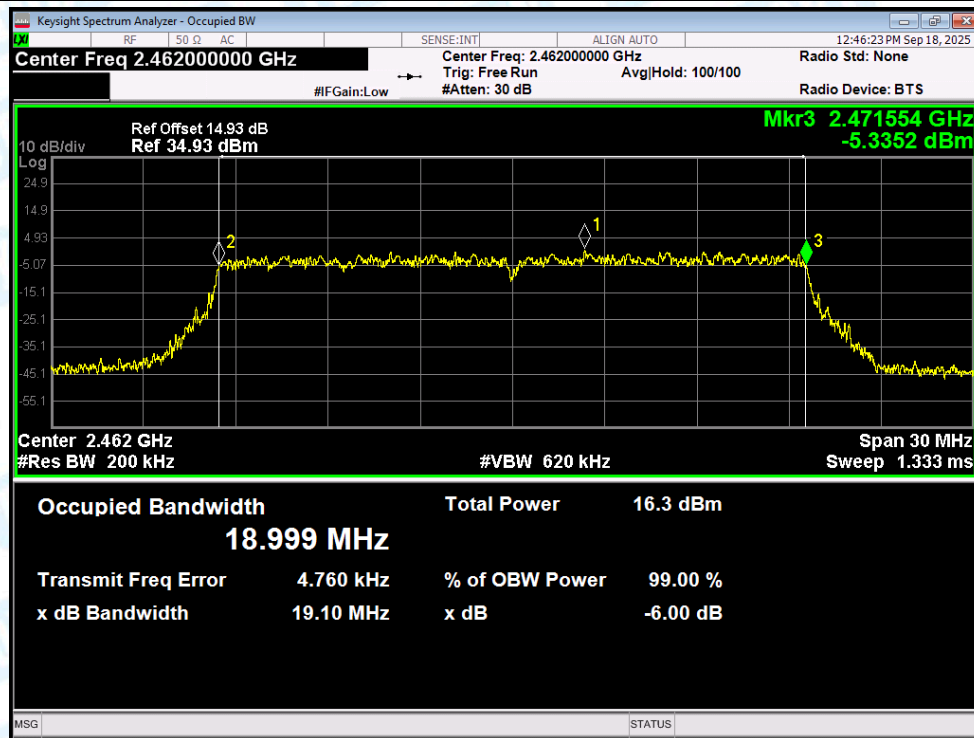
-6dB Bandwidth NVNT ax(VHT20) 2437MHz Ant2



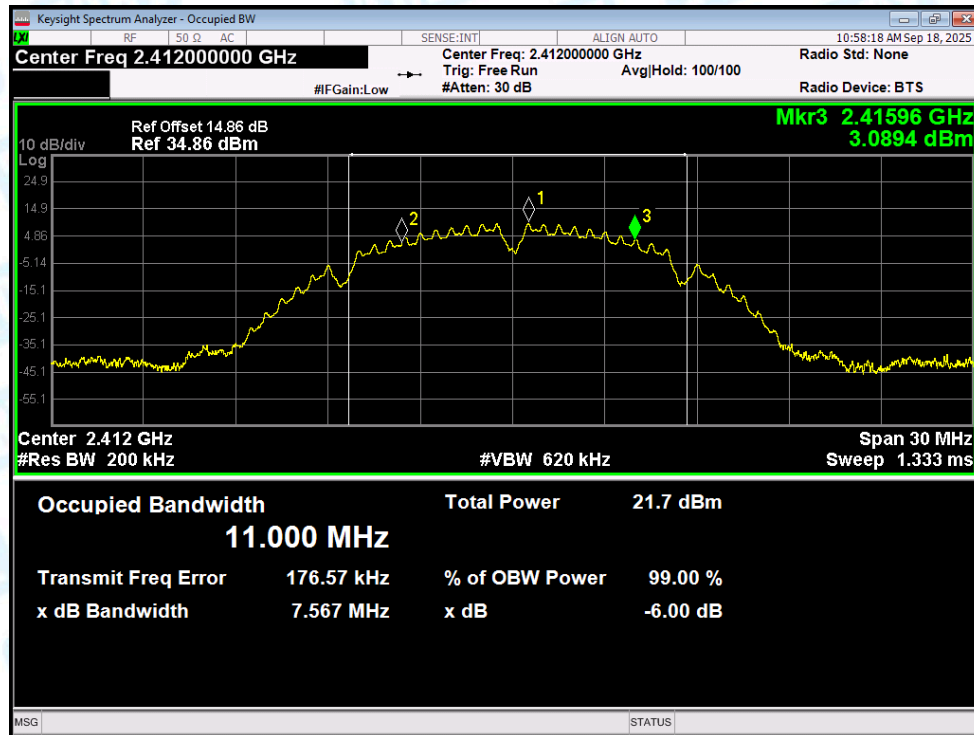
-6dB Bandwidth NVNT ax(VHT20) 2462MHz Ant1



-6dB Bandwidth NVNT ax(VHT20) 2462MHz Ant2



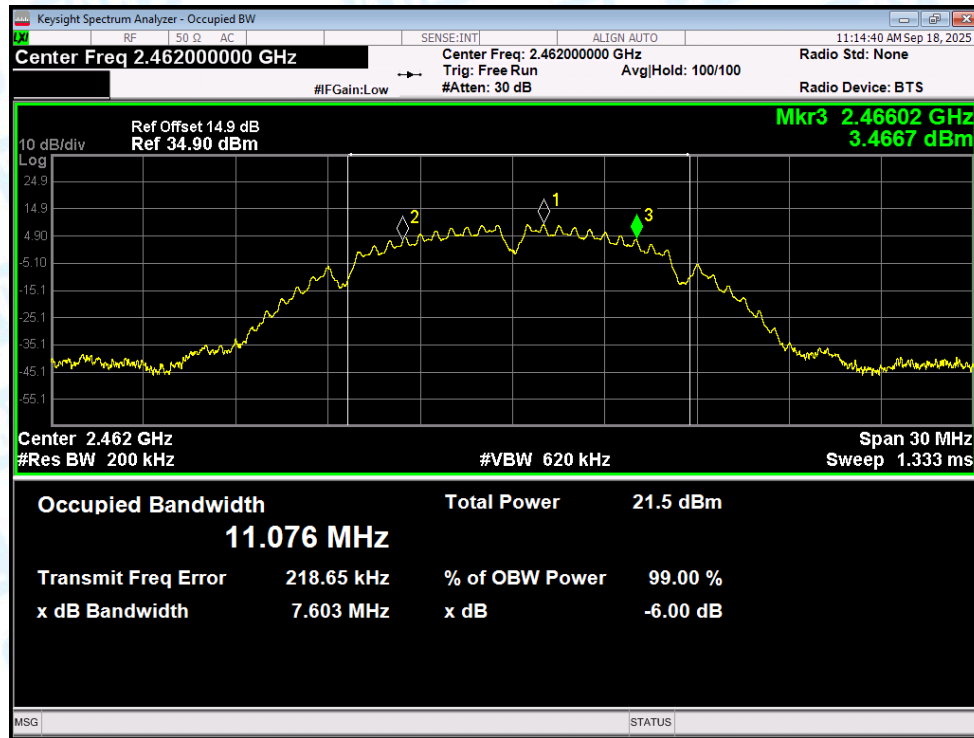
-6dB Bandwidth NVNT b 2412MHz Ant1



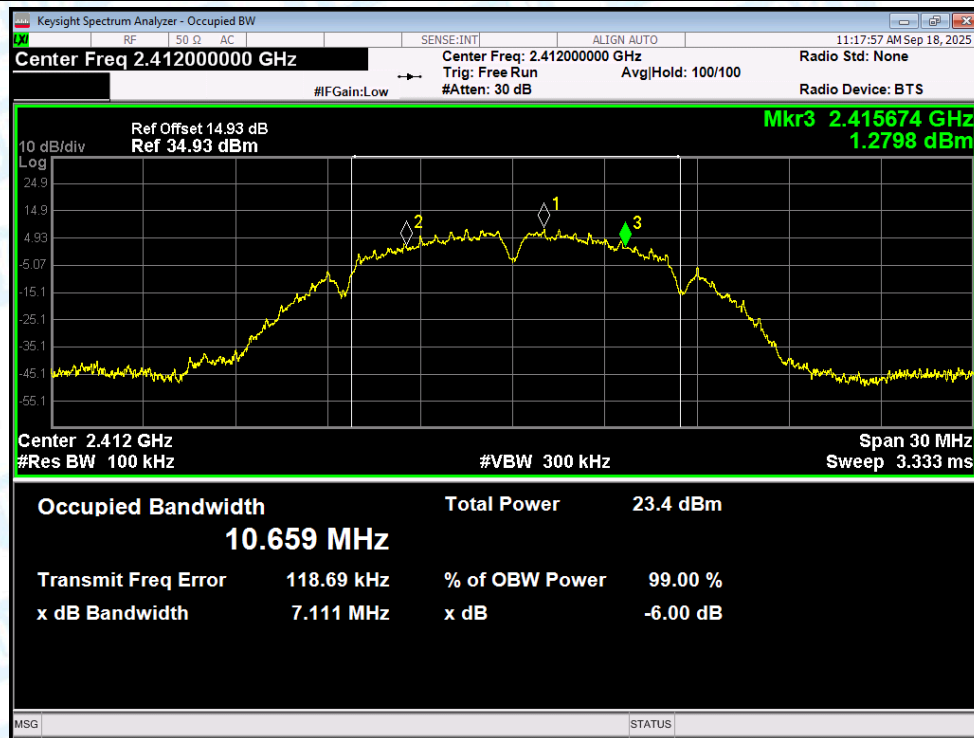
-6dB Bandwidth NVNT b 2437MHz Ant1



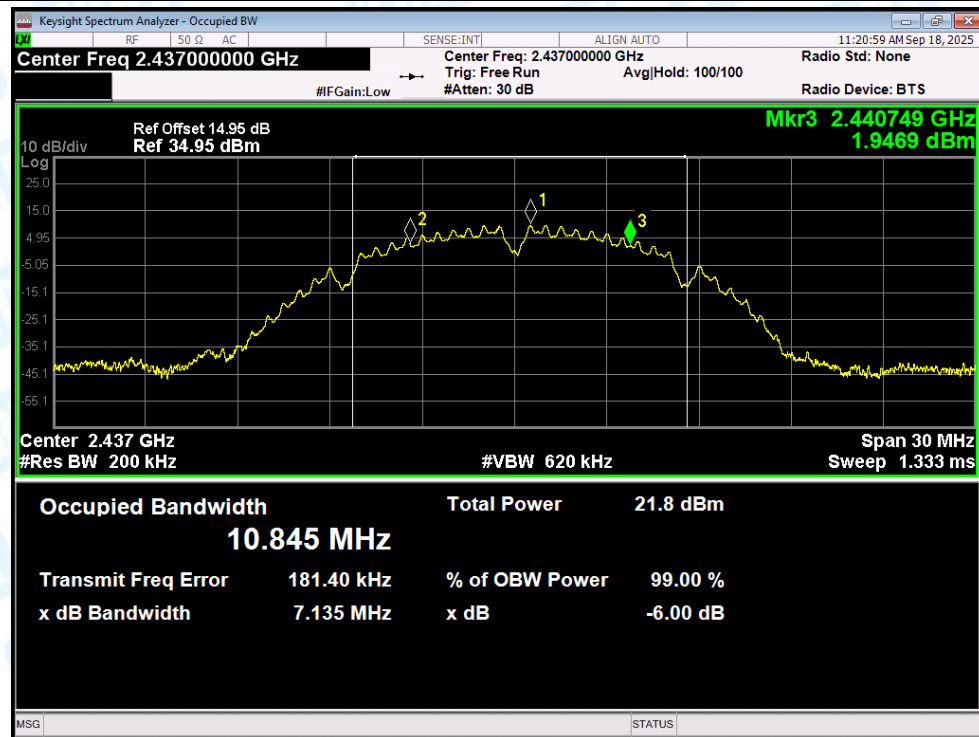
-6dB Bandwidth NVNT b 2462MHz Ant1



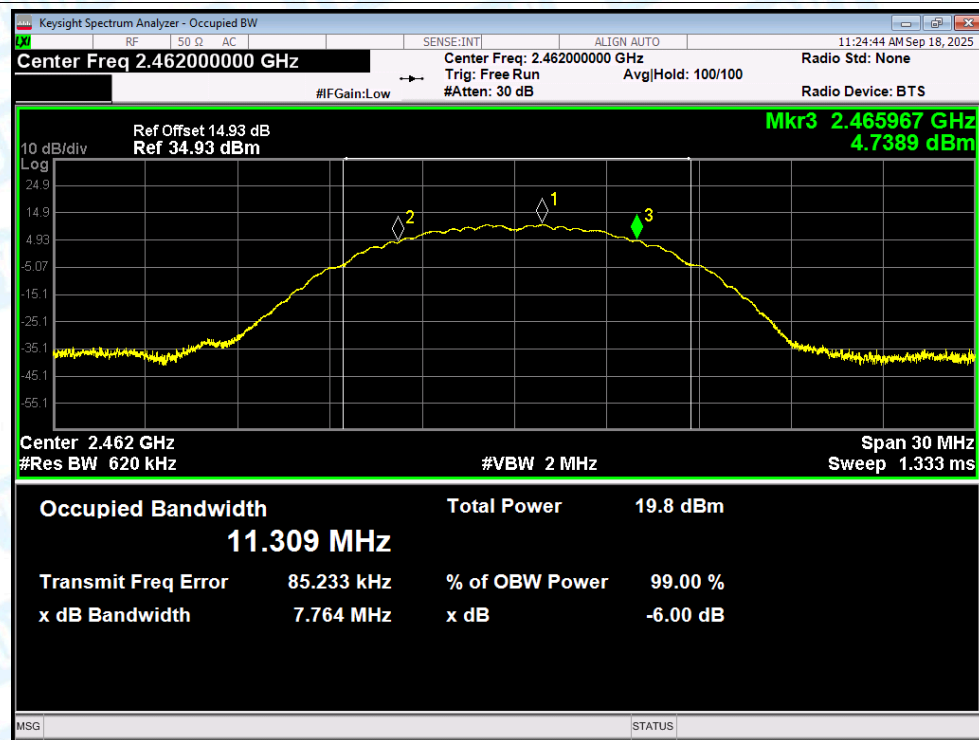
-6dB Bandwidth NVNT b 2412MHz Ant2



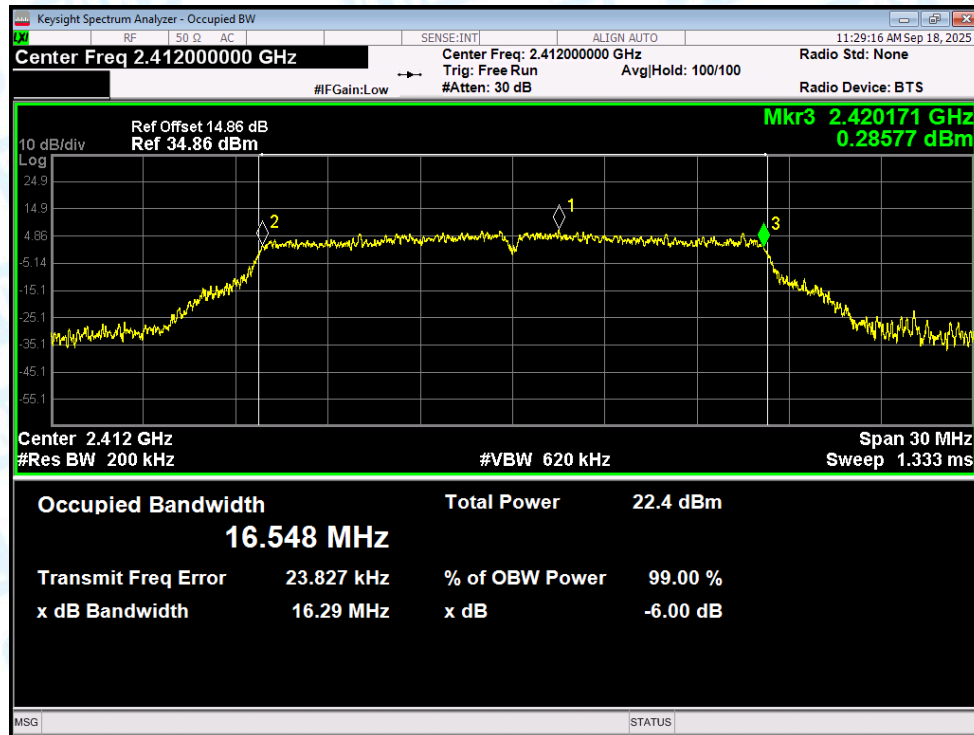
-6dB Bandwidth NVNT b 2437MHz Ant2



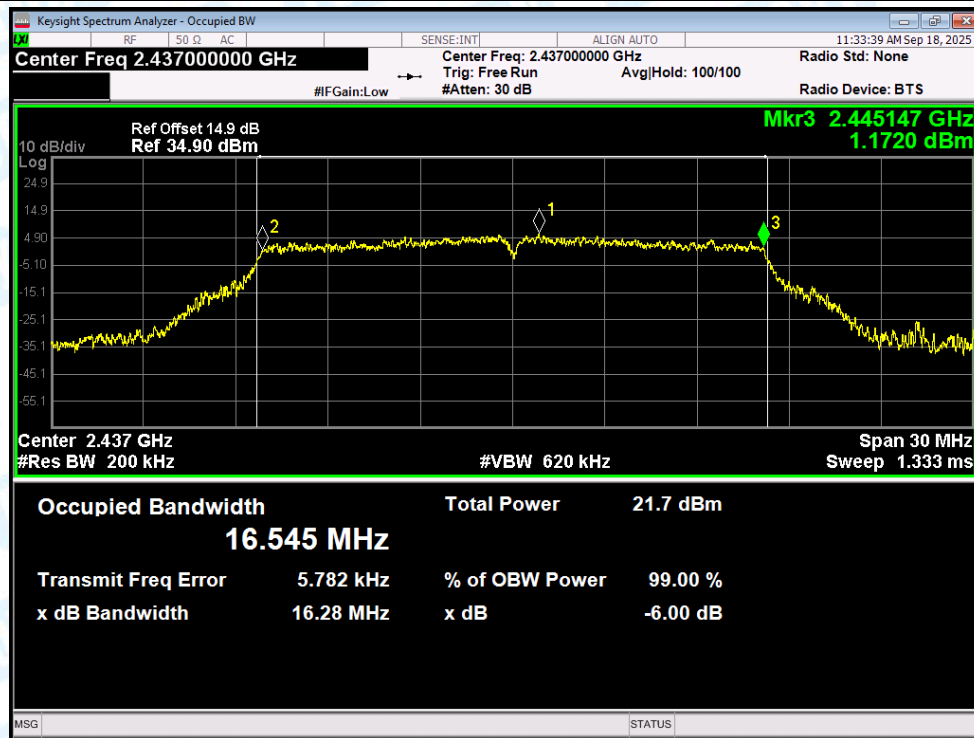
-6dB Bandwidth NVNT b 2462MHz Ant2



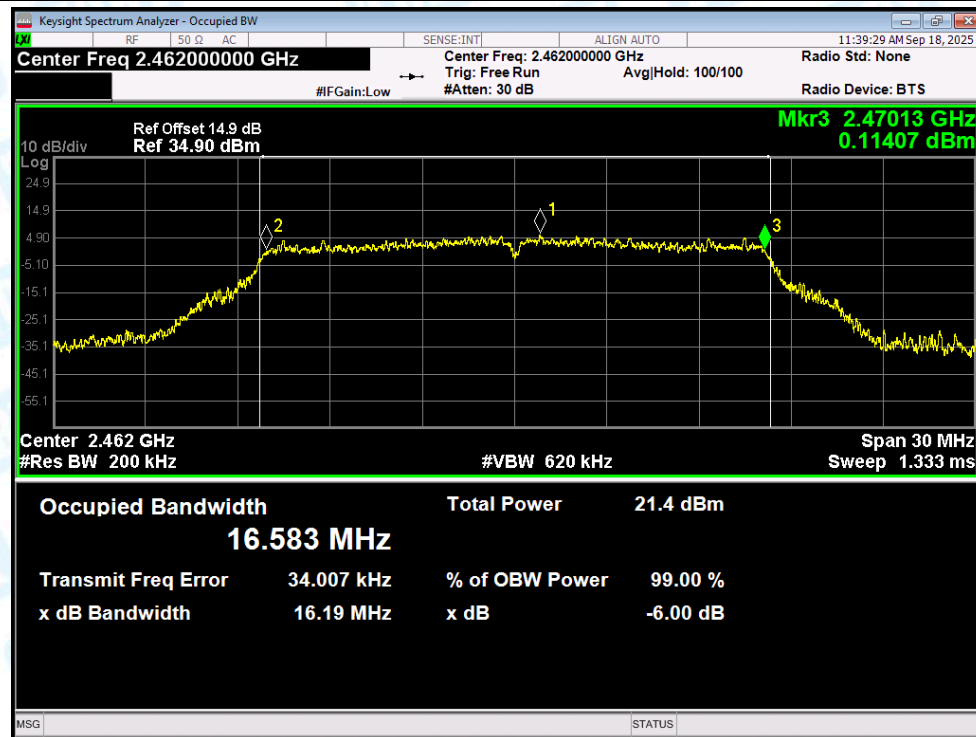
-6dB Bandwidth NVNT g 2412MHz Ant1



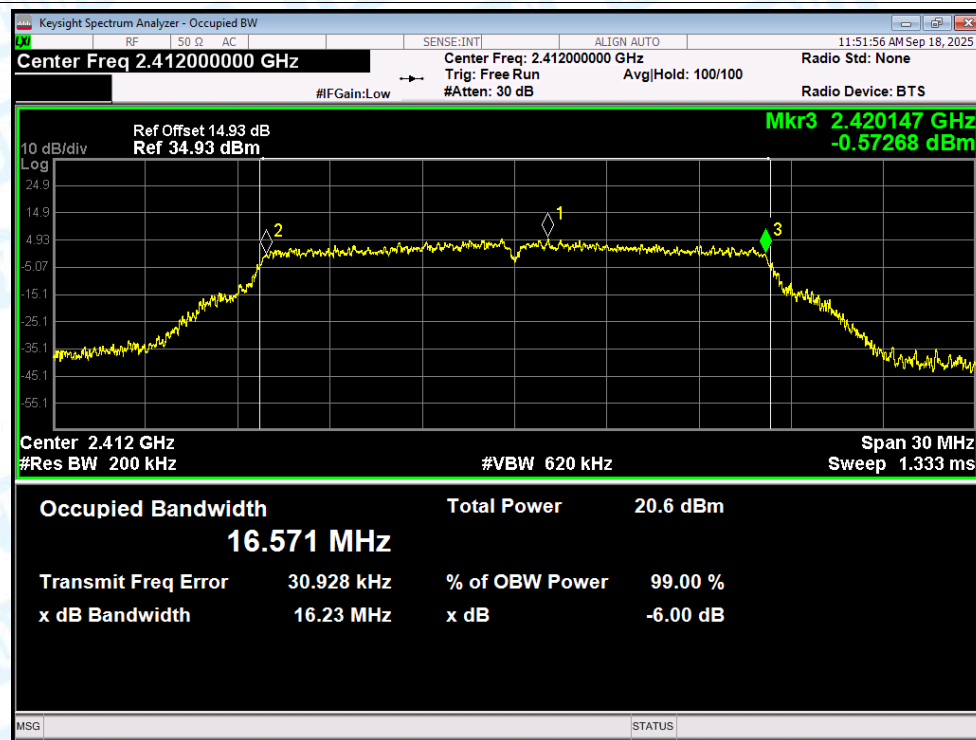
-6dB Bandwidth NVNT g 2437MHz Ant1



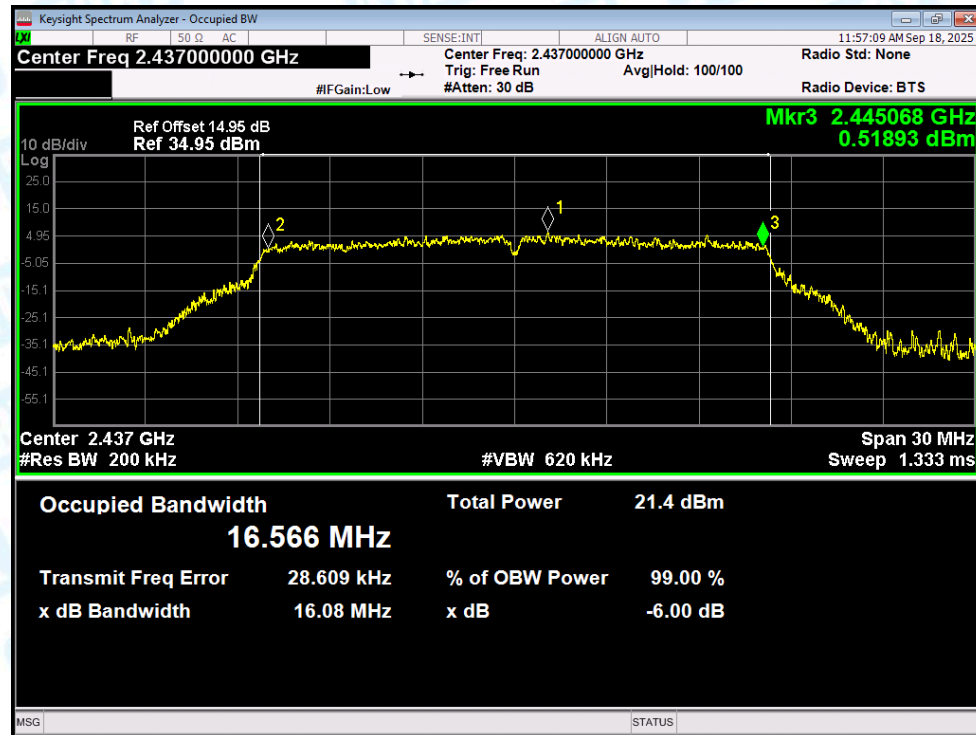
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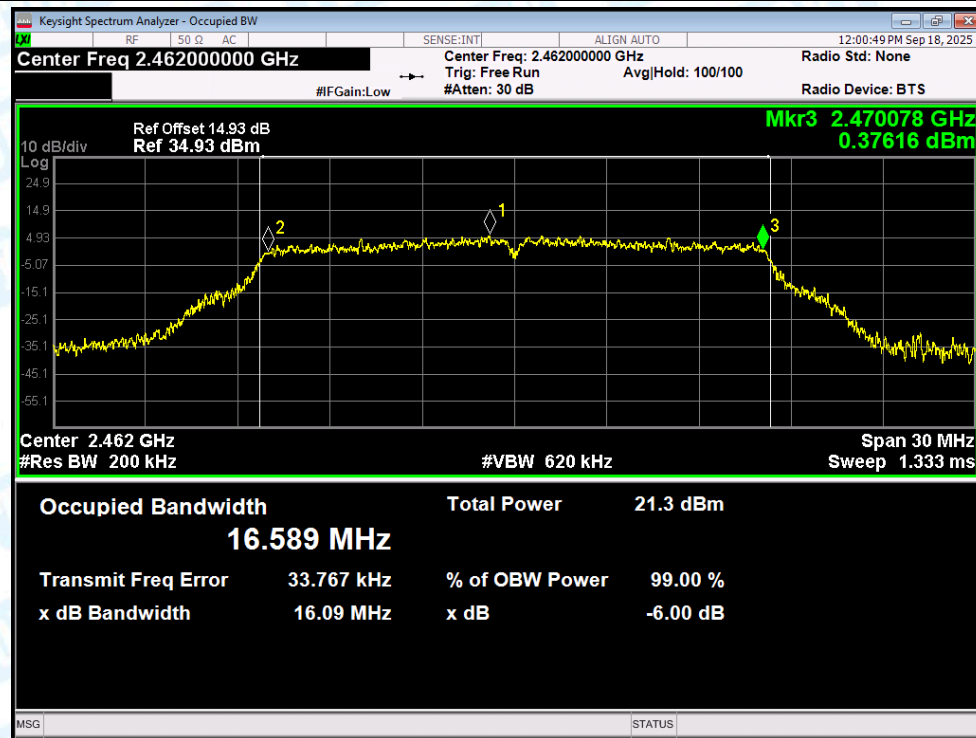
-6dB Bandwidth NVNT g 2412MHz Ant2



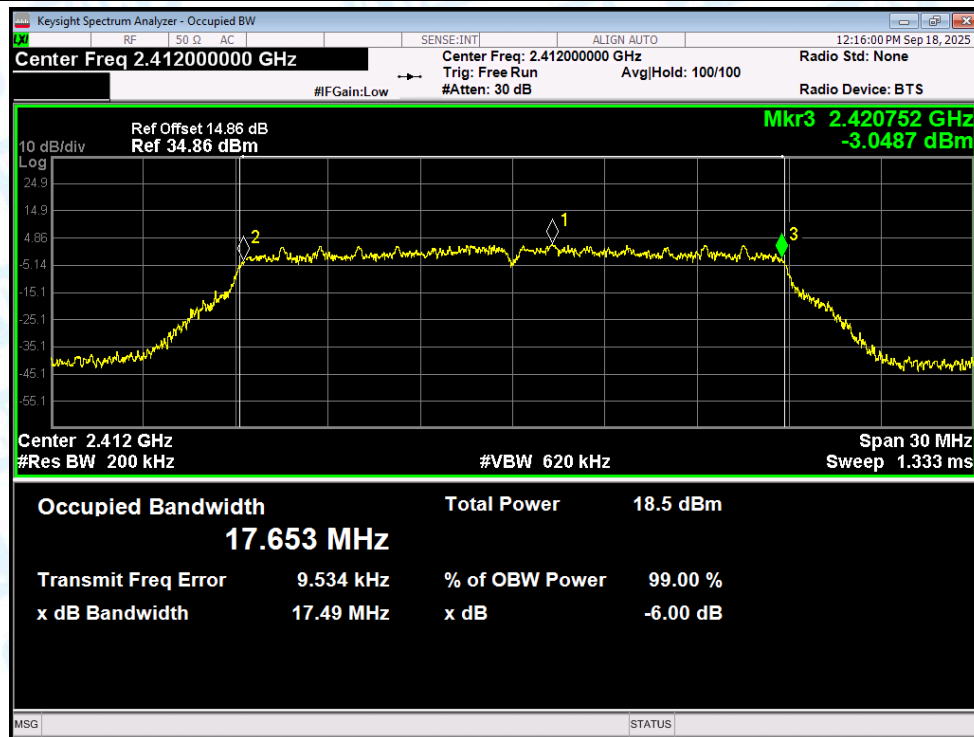
-6dB Bandwidth NVNT g 2437MHz Ant2



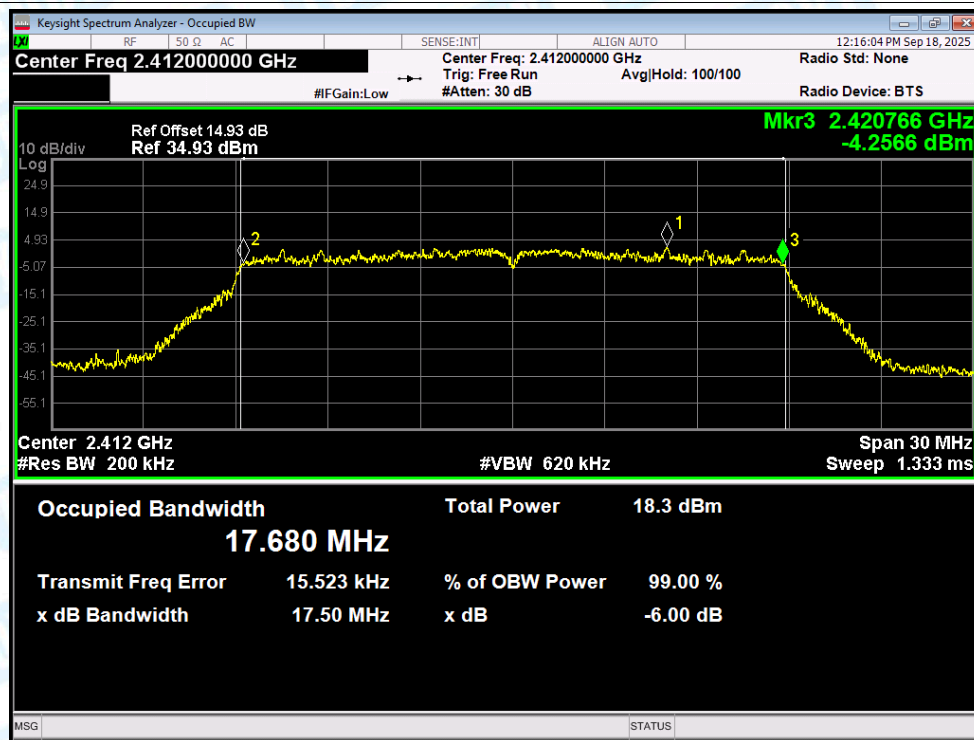
-6dB Bandwidth NVNT g 2462MHz Ant2



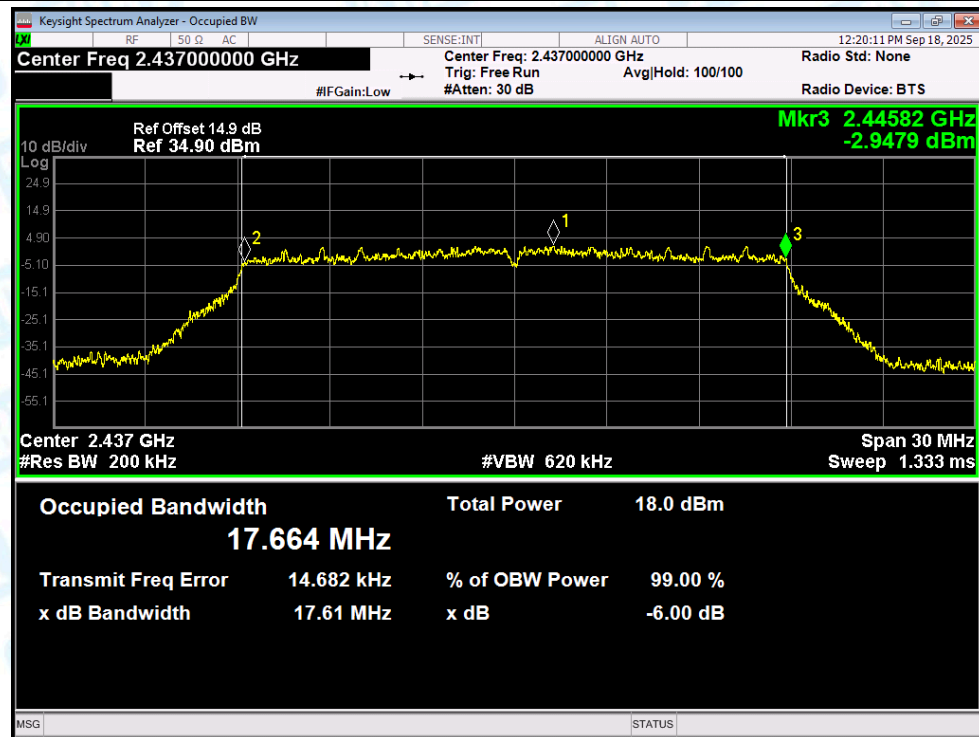
-6dB Bandwidth NVNT n(HT20) 2412MHz Ant1



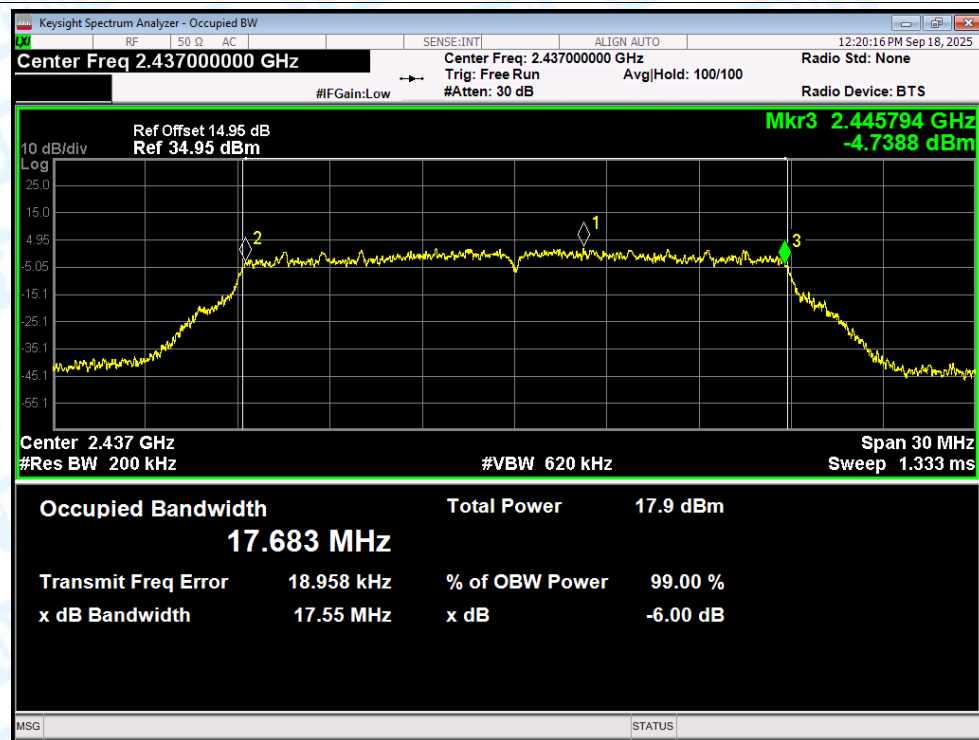
-6dB Bandwidth NVNT n(HT20) 2412MHz Ant2



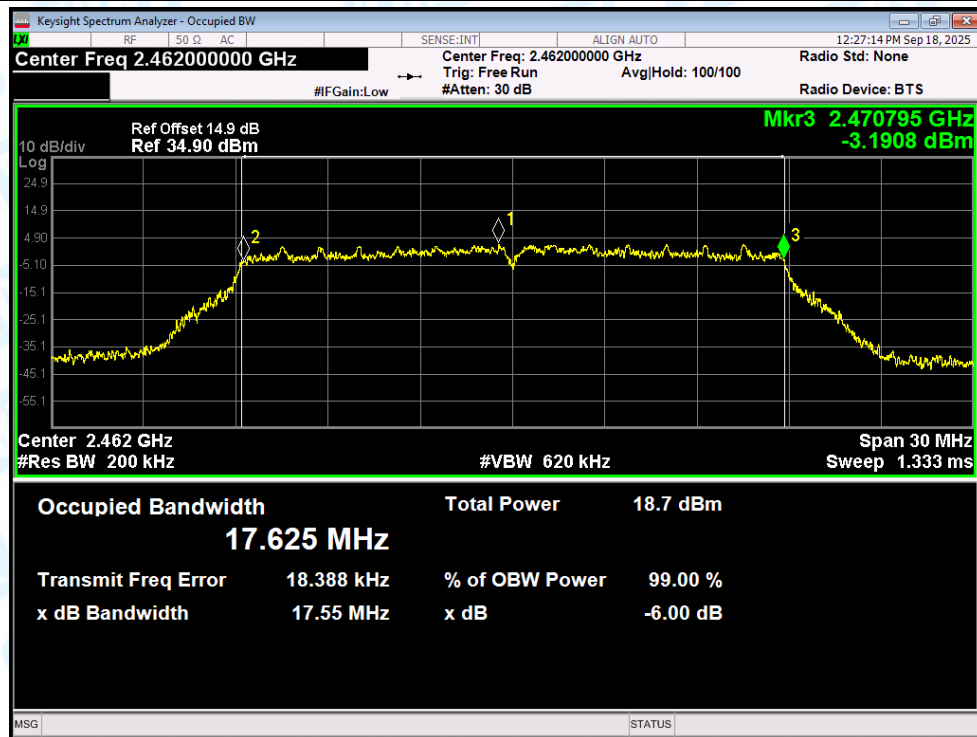
-6dB Bandwidth NVNT n(HT20) 2437MHz Ant1



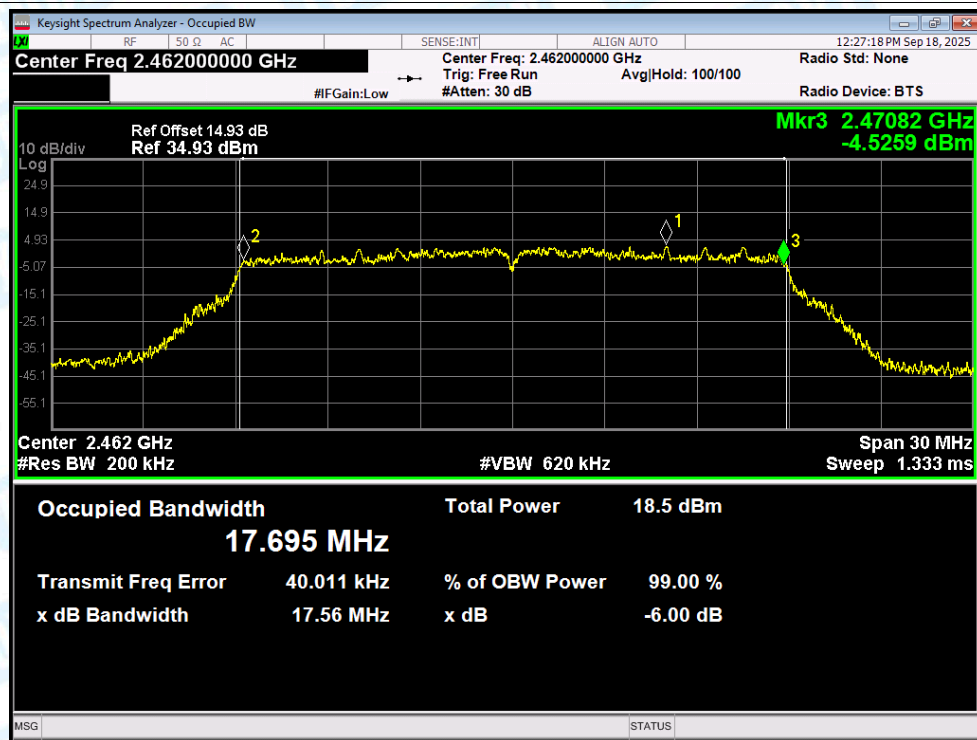
-6dB Bandwidth NVNT n(HT20) 2437MHz Ant2



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



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

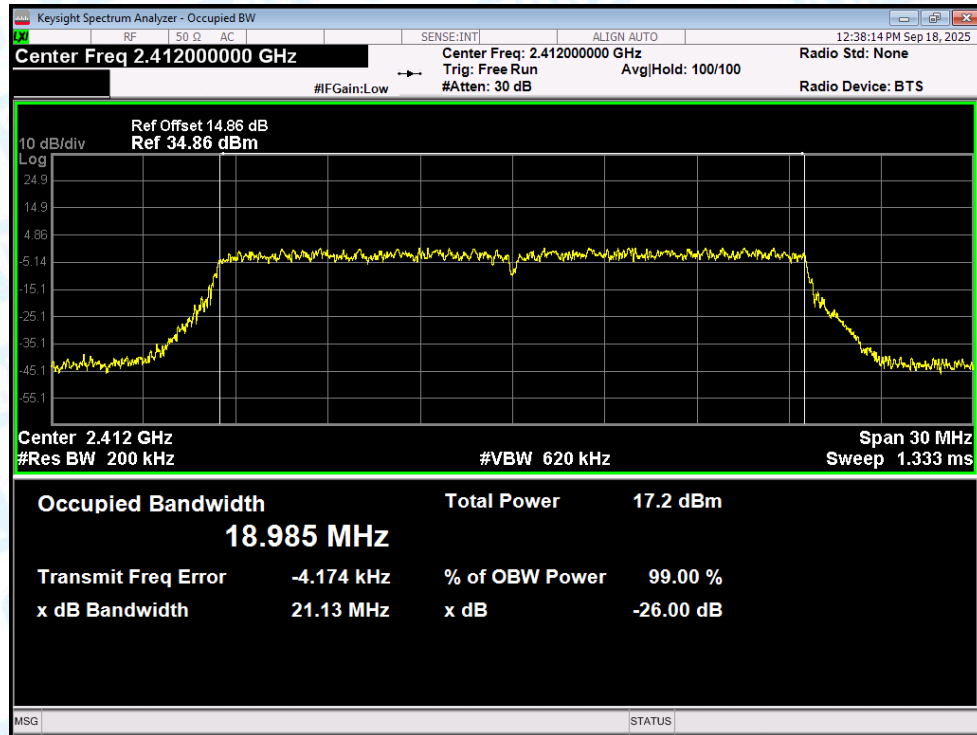


4. Occupied Channel Bandwidth

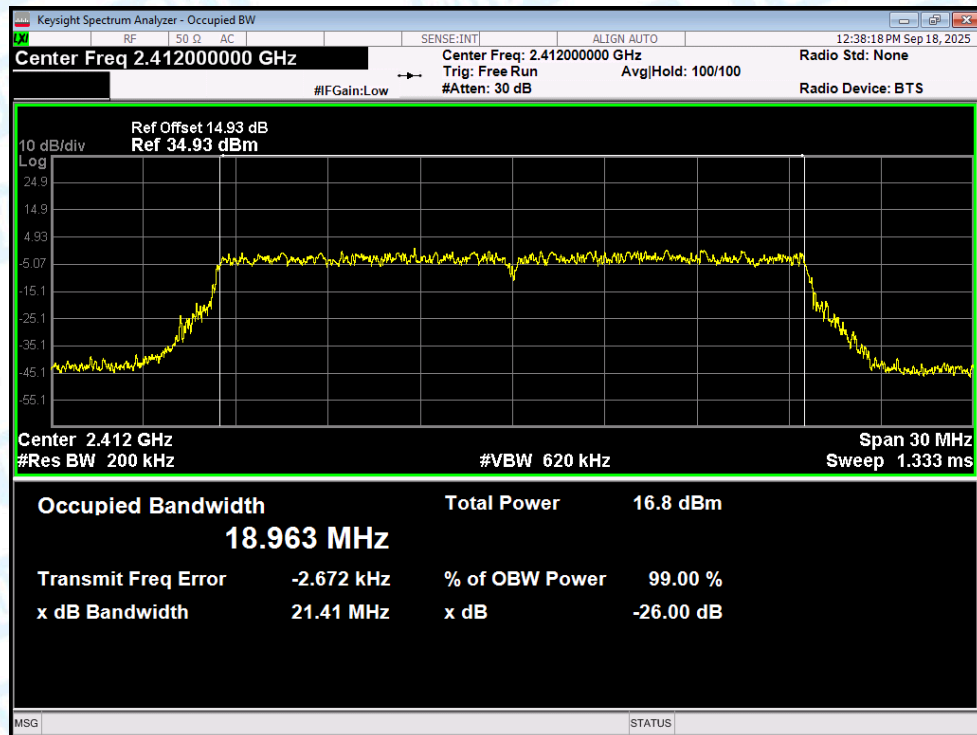
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	ax(VHT20)	2412	Ant1	18.985
NVNT	ax(VHT20)	2412	Ant2	18.963
NVNT	ax(VHT20)	2437	Ant1	18.987
NVNT	ax(VHT20)	2437	Ant2	19.011
NVNT	ax(VHT20)	2462	Ant1	18.974
NVNT	ax(VHT20)	2462	Ant2	18.973
NVNT	b	2412	Ant1	11.009
NVNT	b	2437	Ant1	11.012
NVNT	b	2462	Ant1	11.09
NVNT	b	2412	Ant2	10.722
NVNT	b	2437	Ant2	10.841
NVNT	b	2462	Ant2	10.909
NVNT	g	2412	Ant1	16.56
NVNT	g	2437	Ant1	16.579
NVNT	g	2462	Ant1	16.557
NVNT	g	2412	Ant2	16.603
NVNT	g	2437	Ant2	16.584
NVNT	g	2462	Ant2	16.54
NVNT	n(HT20)	2412	Ant1	17.671
NVNT	n(HT20)	2412	Ant2	17.695
NVNT	n(HT20)	2437	Ant1	17.689
NVNT	n(HT20)	2437	Ant2	17.672
NVNT	n(HT20)	2462	Ant1	17.68
NVNT	n(HT20)	2462	Ant2	17.689

Test Graphs

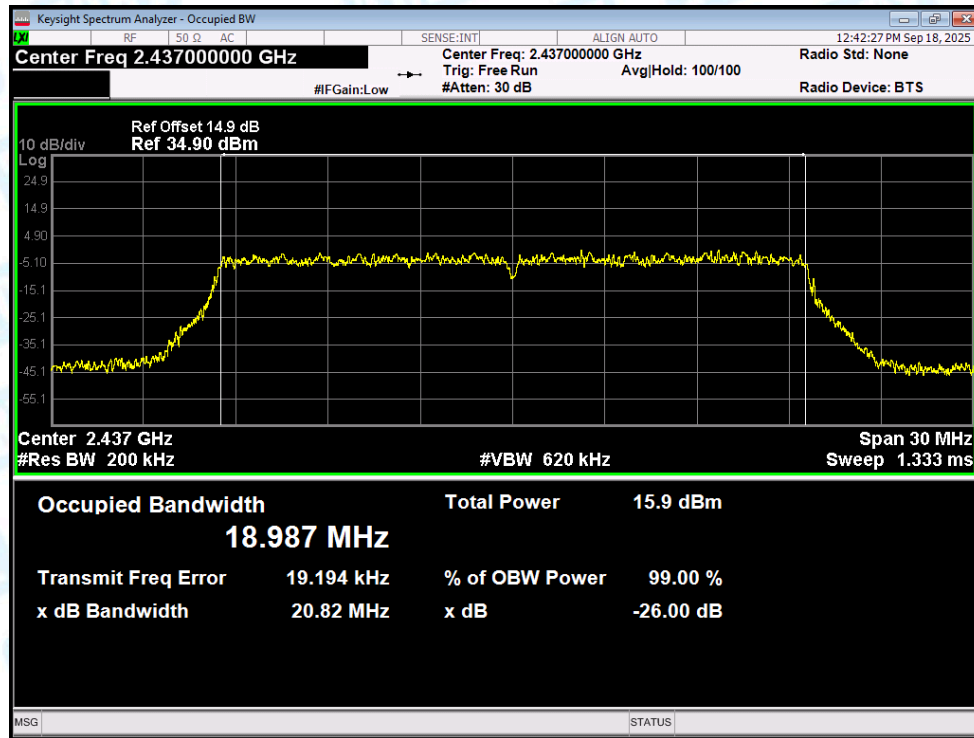
OBW NVNT ax(VHT20) 2412MHz Ant1



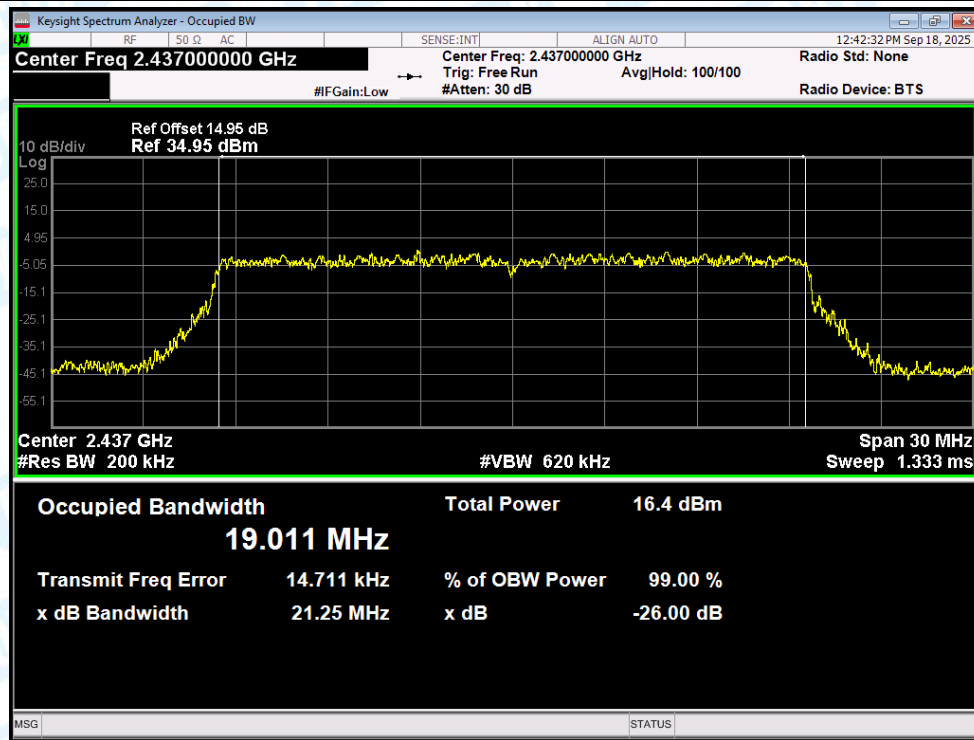
OBW NVNT ax(VHT20) 2412MHz Ant2



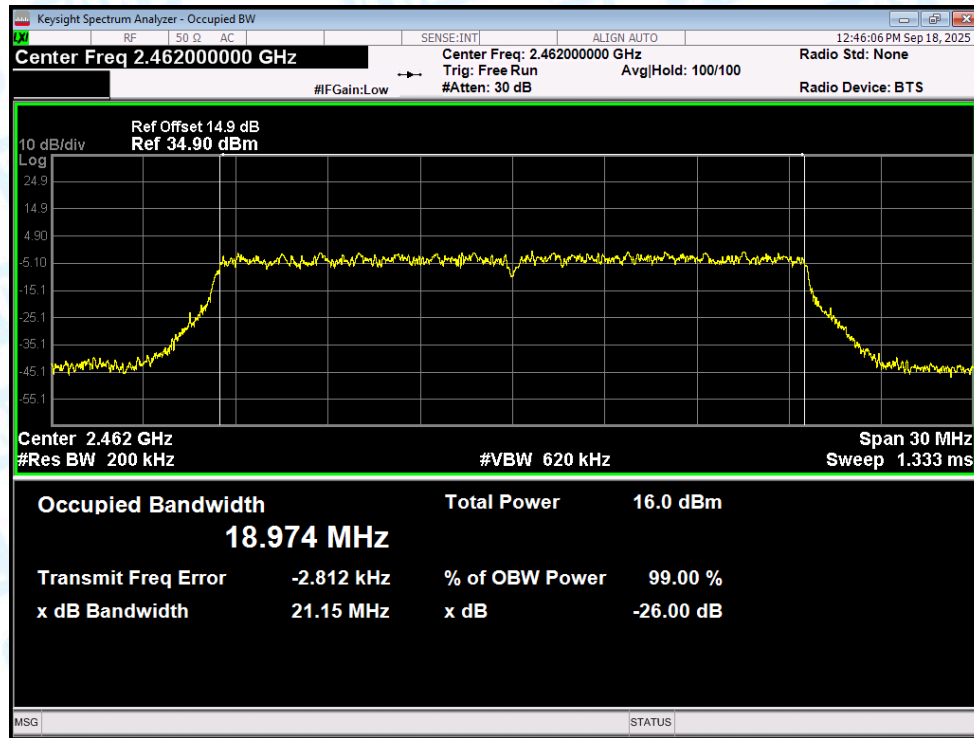
OBW NVNT ax(VHT20) 2437MHz Ant1



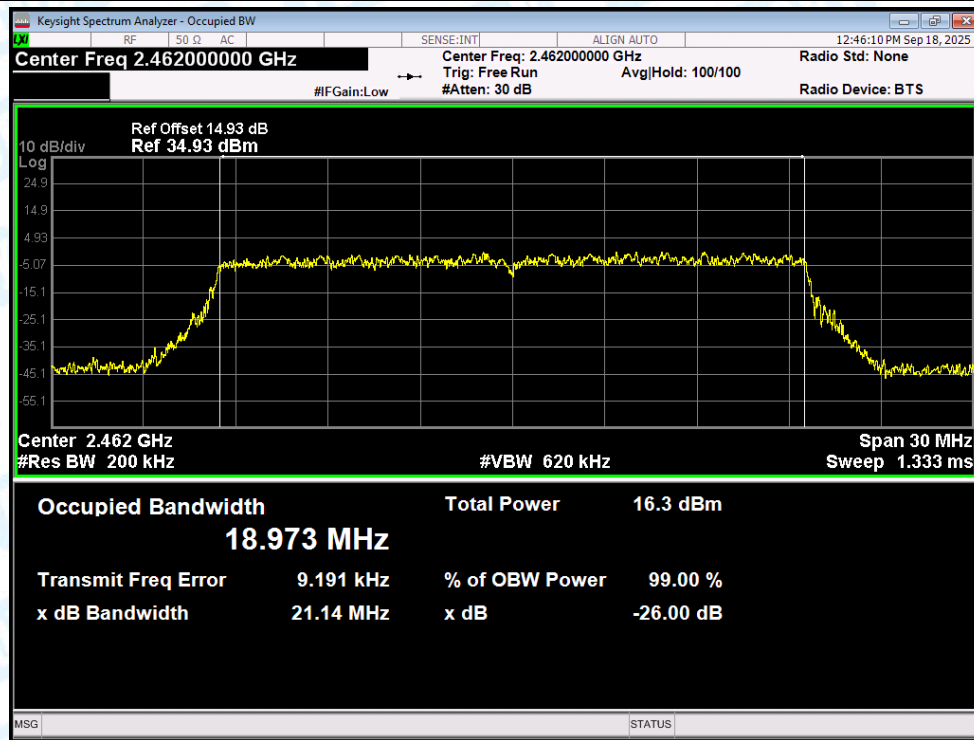
OBW NVNT ax(VHT20) 2437MHz Ant2



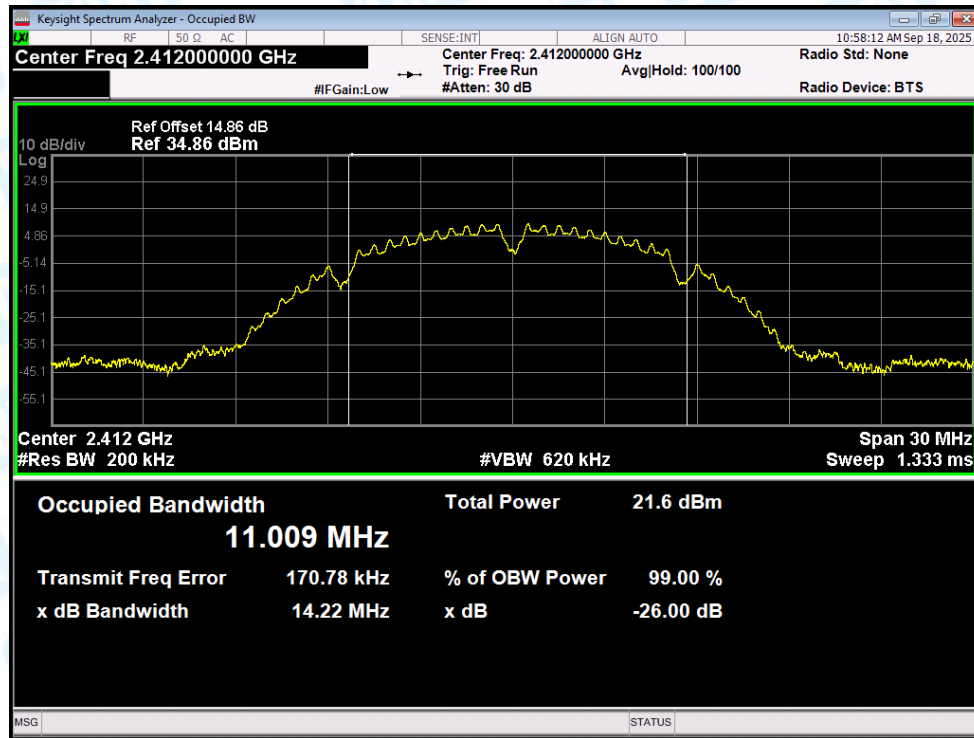
OBW NVNT ax(VHT20) 2462MHz Ant1



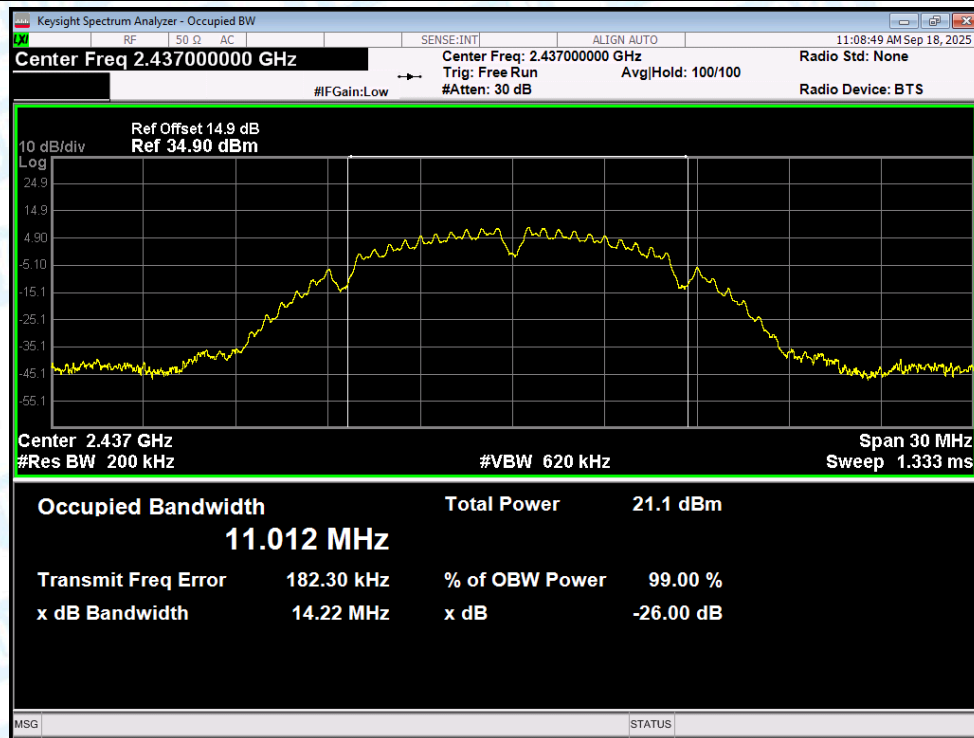
OBW NVNT ax(VHT20) 2462MHz Ant2

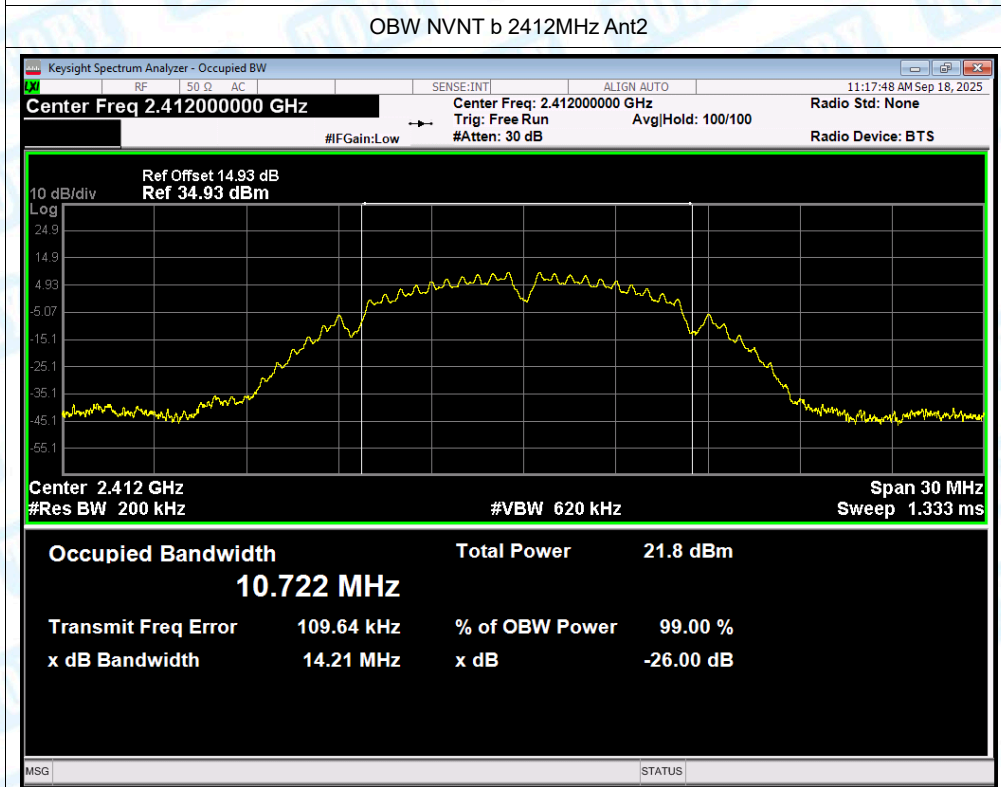
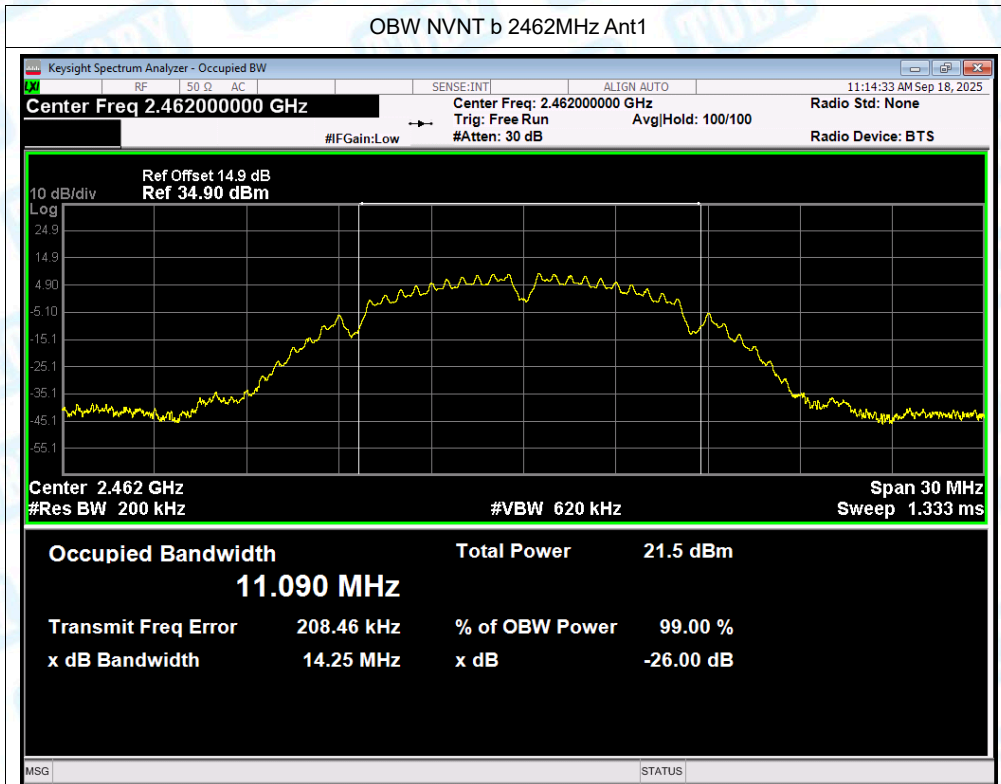


OBW NVNT b 2412MHz Ant1

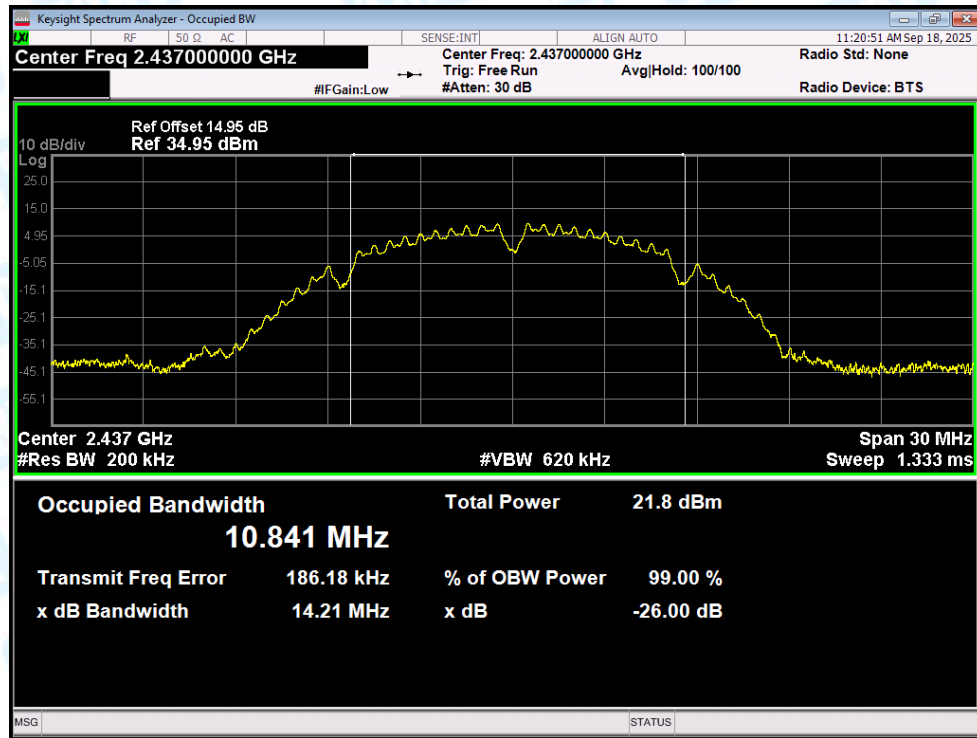


OBW NVNT b 2437MHz Ant1

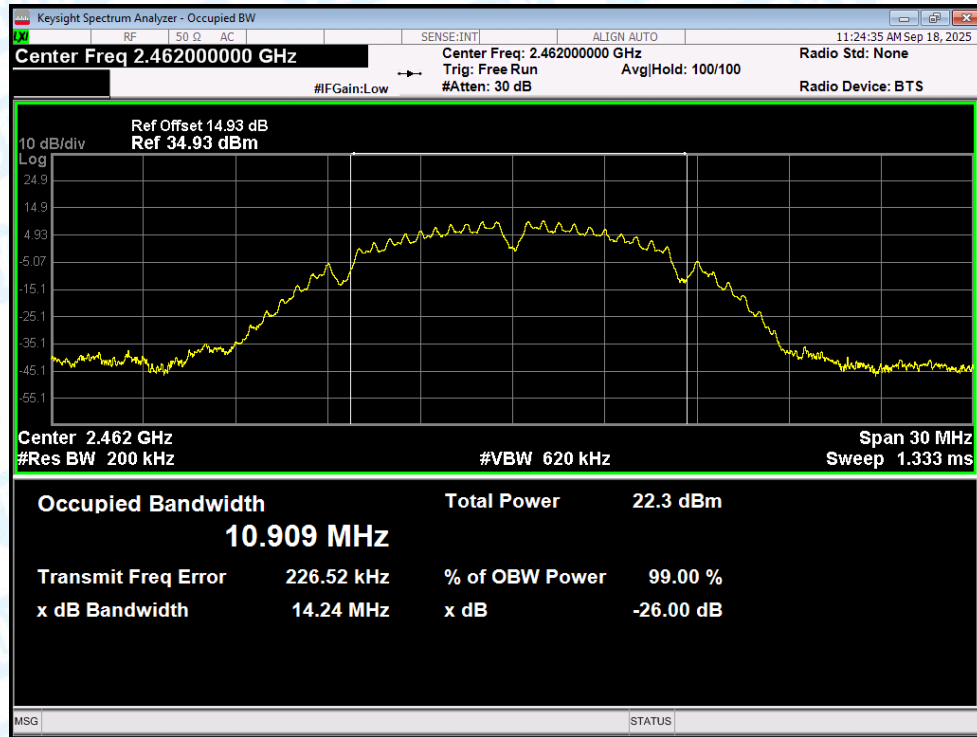




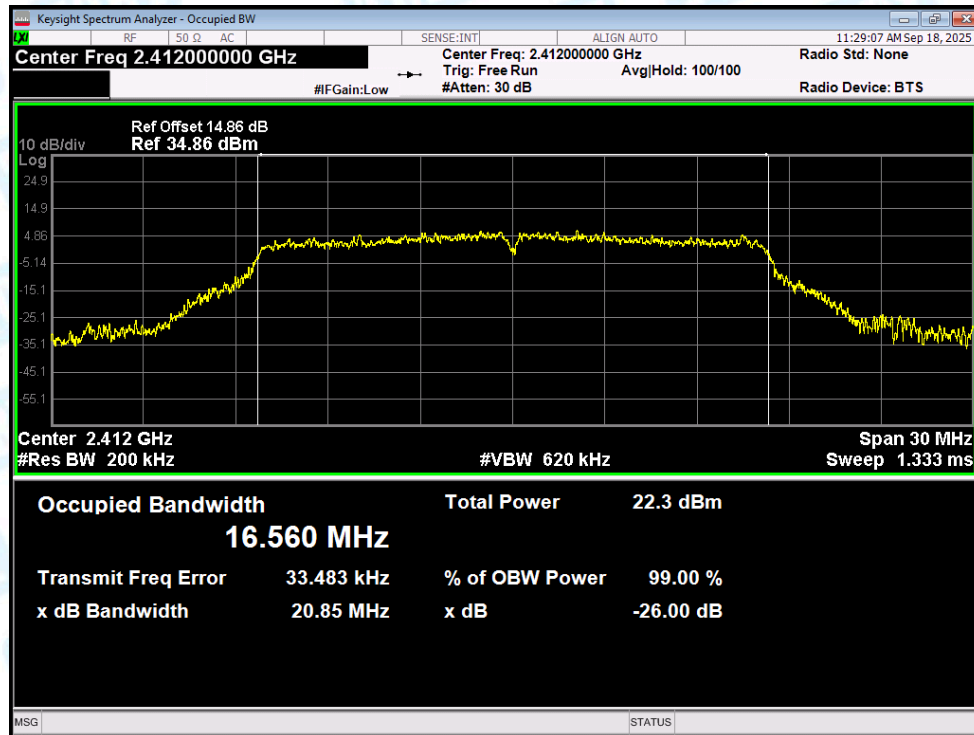
OBW NVNT b 2437MHz Ant2



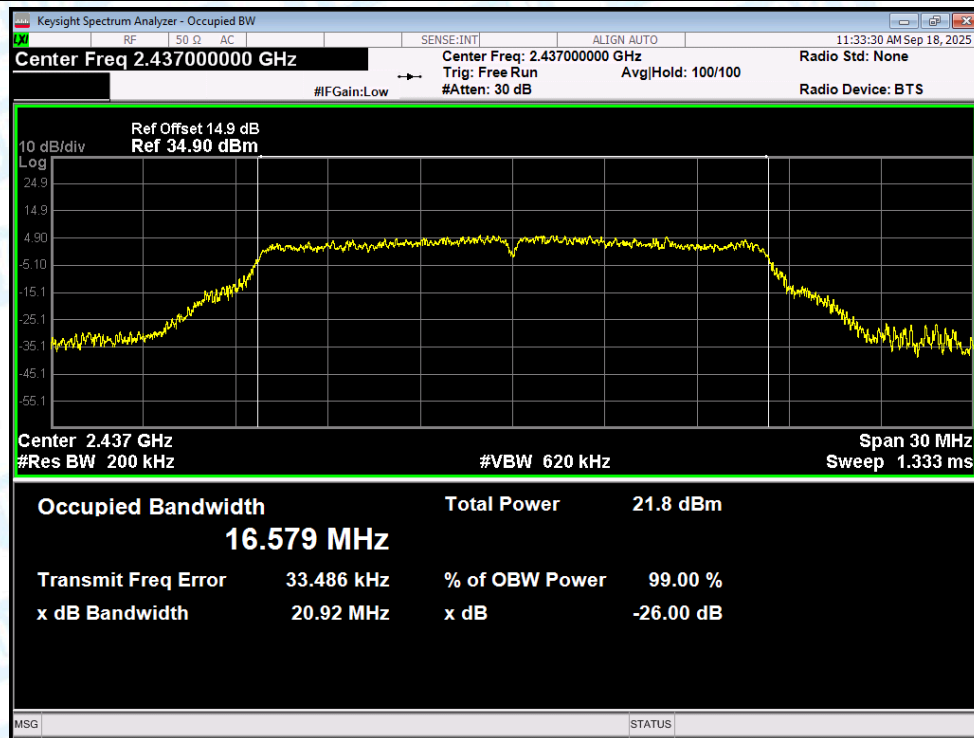
OBW NVNT b 2462MHz Ant2



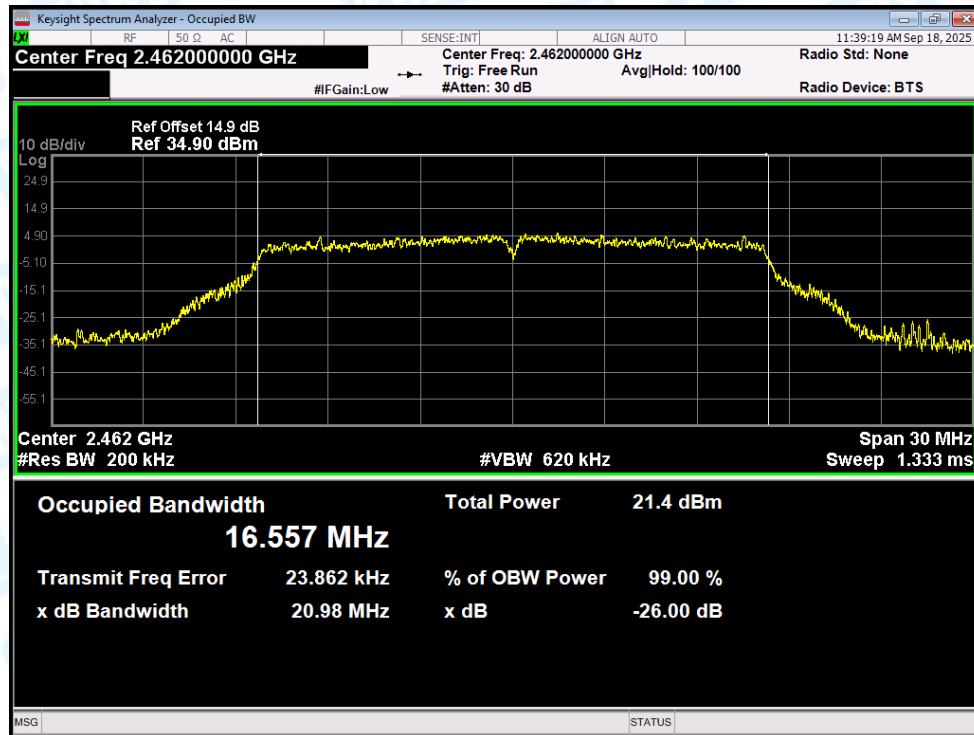
OBW NVNT g 2412MHz Ant1



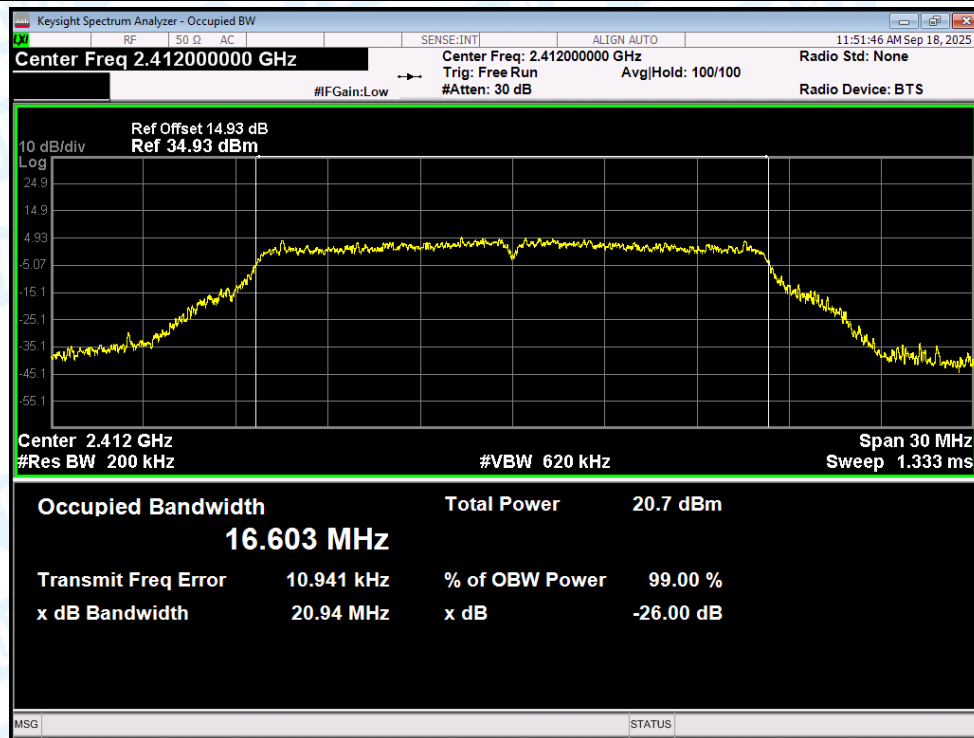
OBW NVNT g 2437MHz Ant1

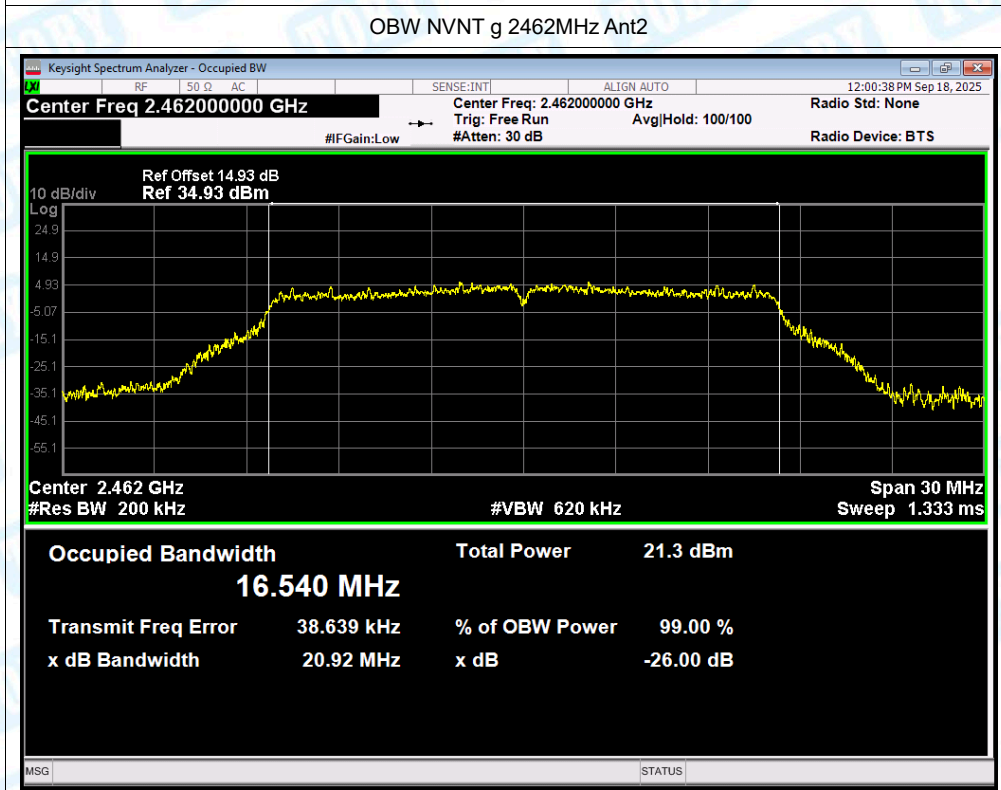
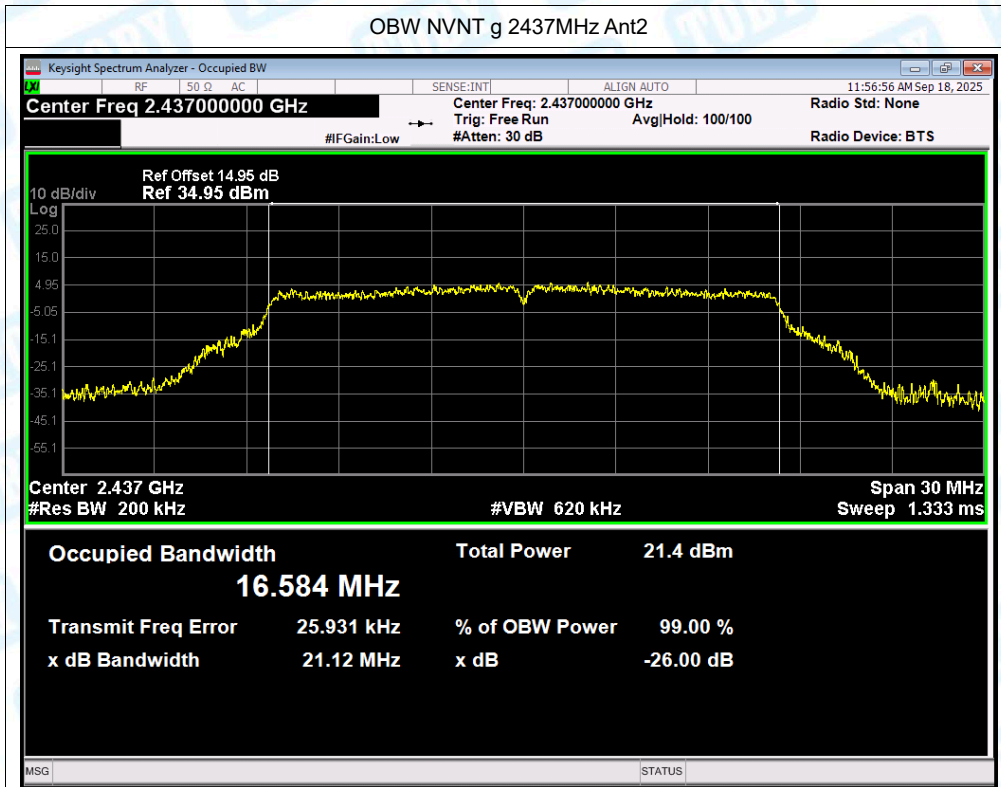


OBW NVNT g 2462MHz Ant1

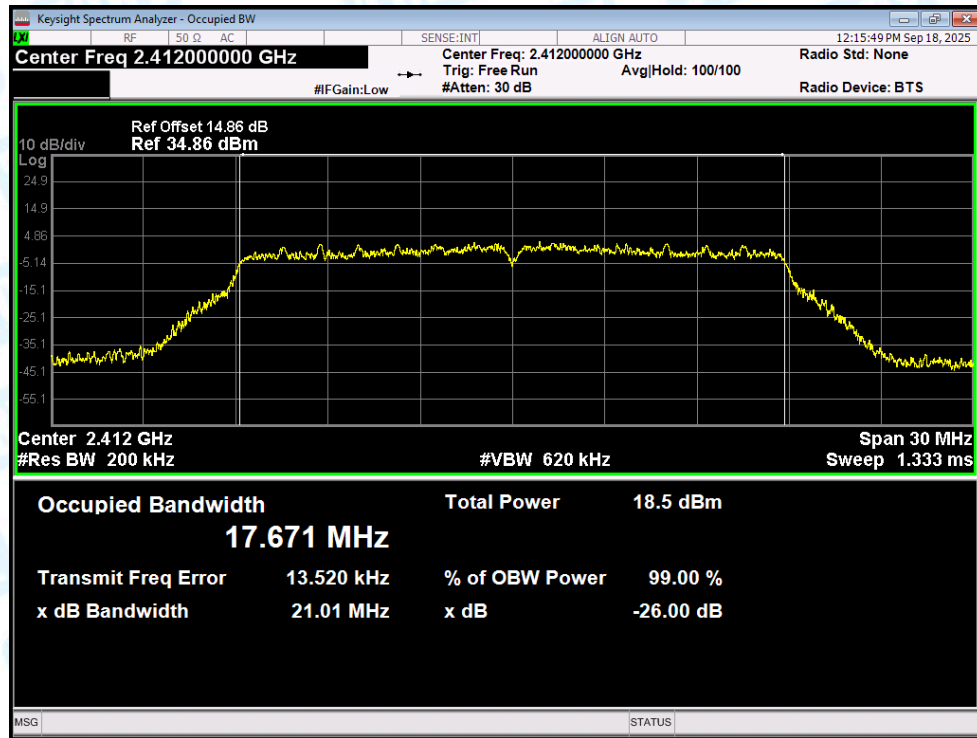


OBW NVNT g 2412MHz Ant2

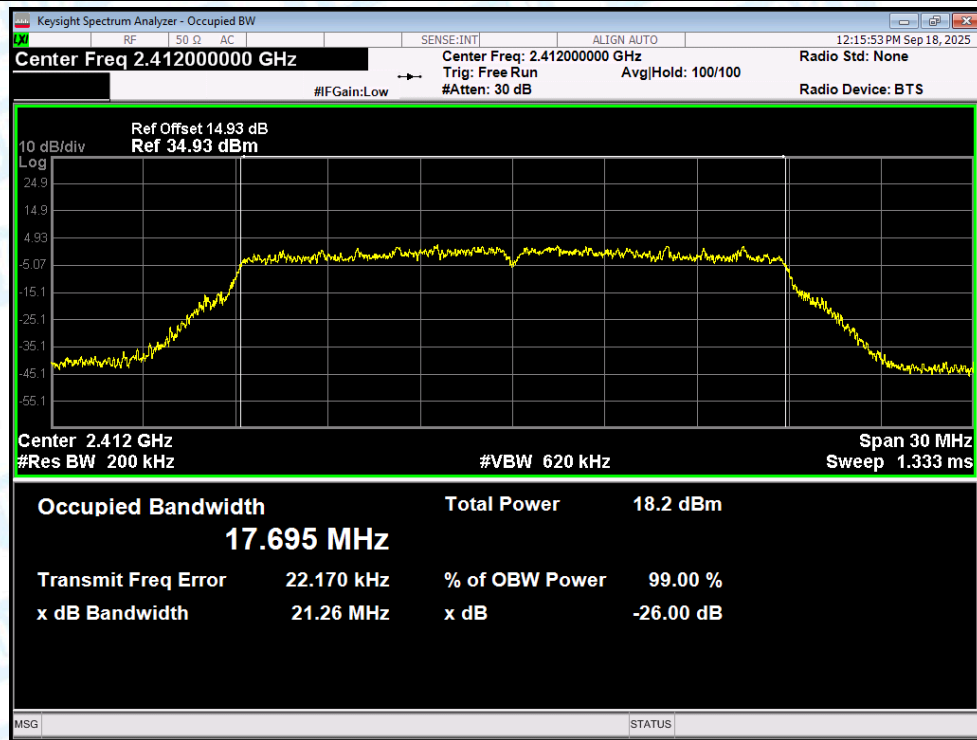




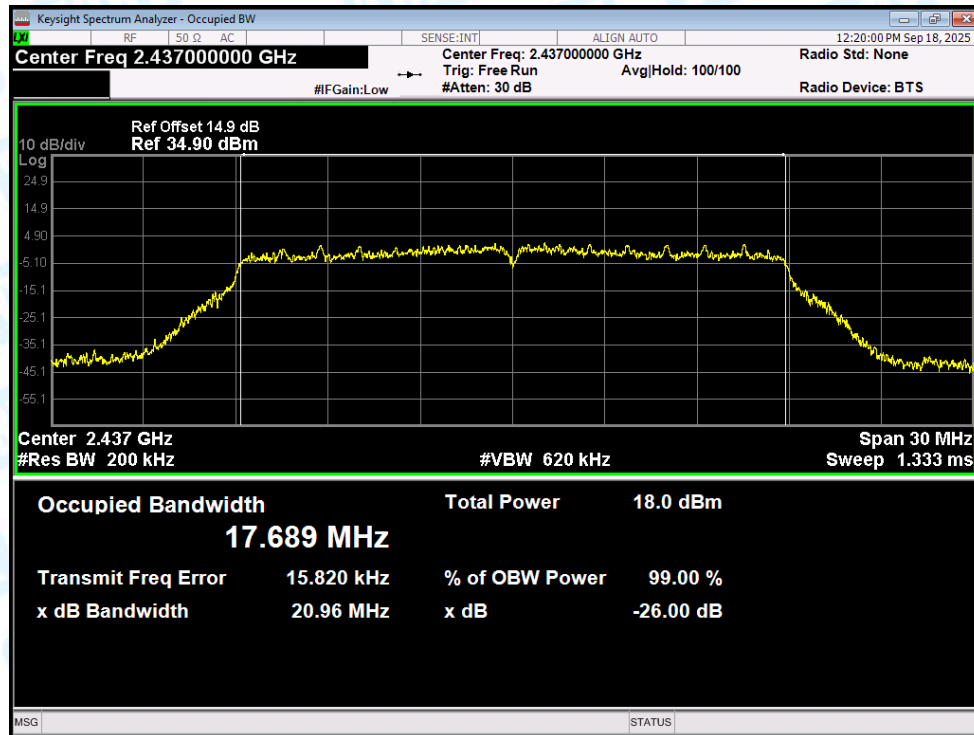
OBW NVNT n(HT20) 2412MHz Ant1



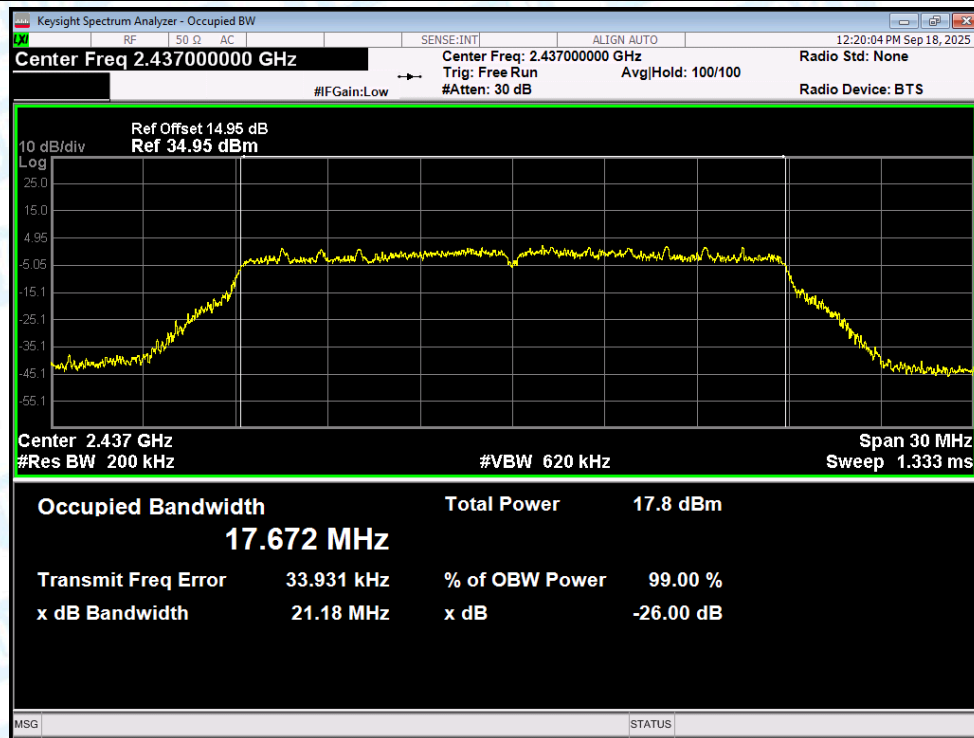
OBW NVNT n(HT20) 2412MHz Ant2



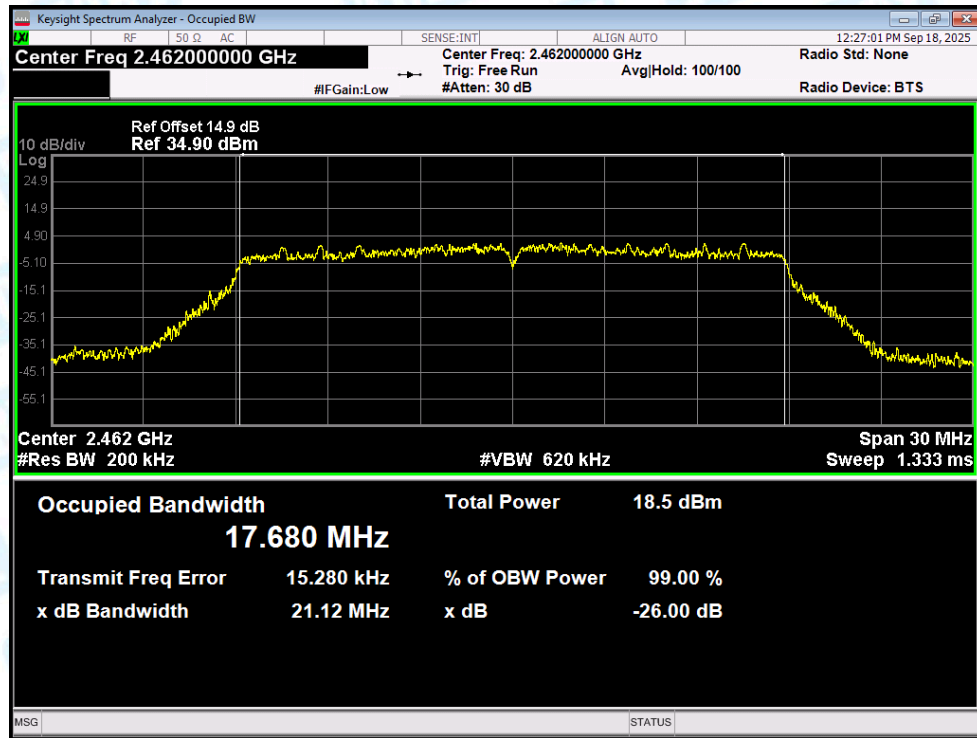
OBW NVNT n(HT20) 2437MHz Ant1



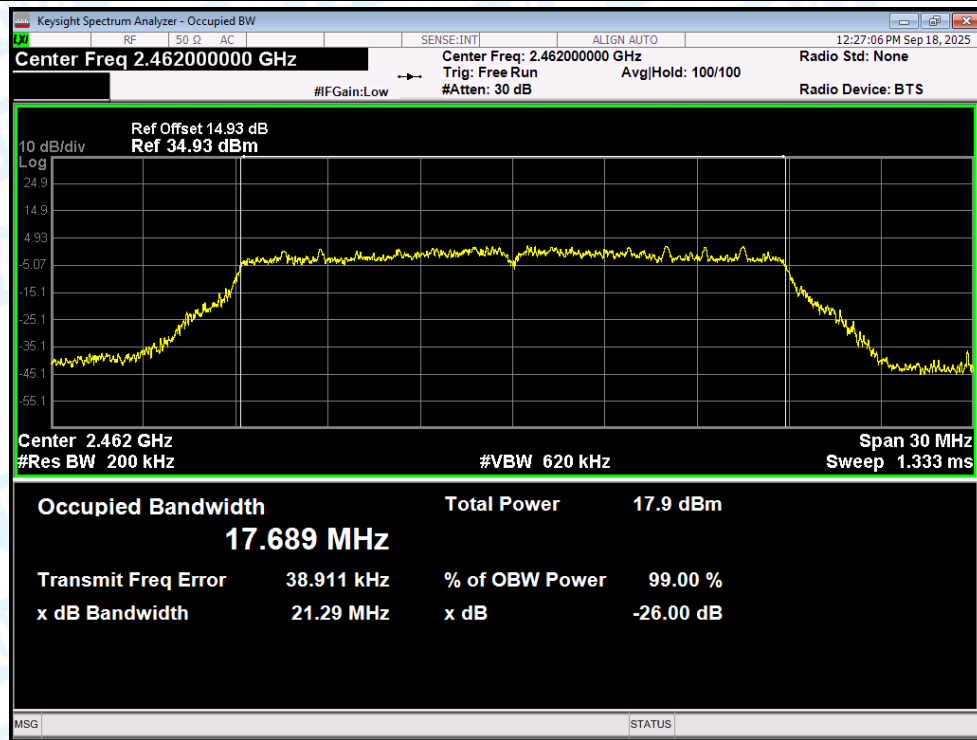
OBW NVNT n(HT20) 2437MHz Ant2



OBW NVNT n(HT20) 2462MHz Ant1



OBW NVNT n(HT20) 2462MHz Ant2

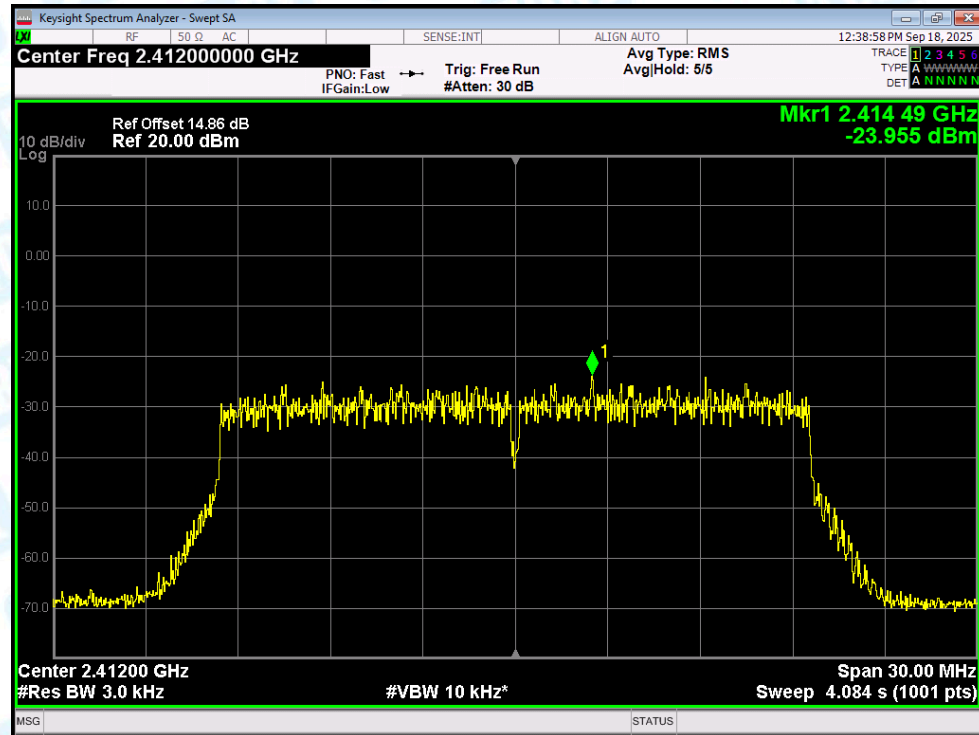


5. Maximum Power Spectral Density Level

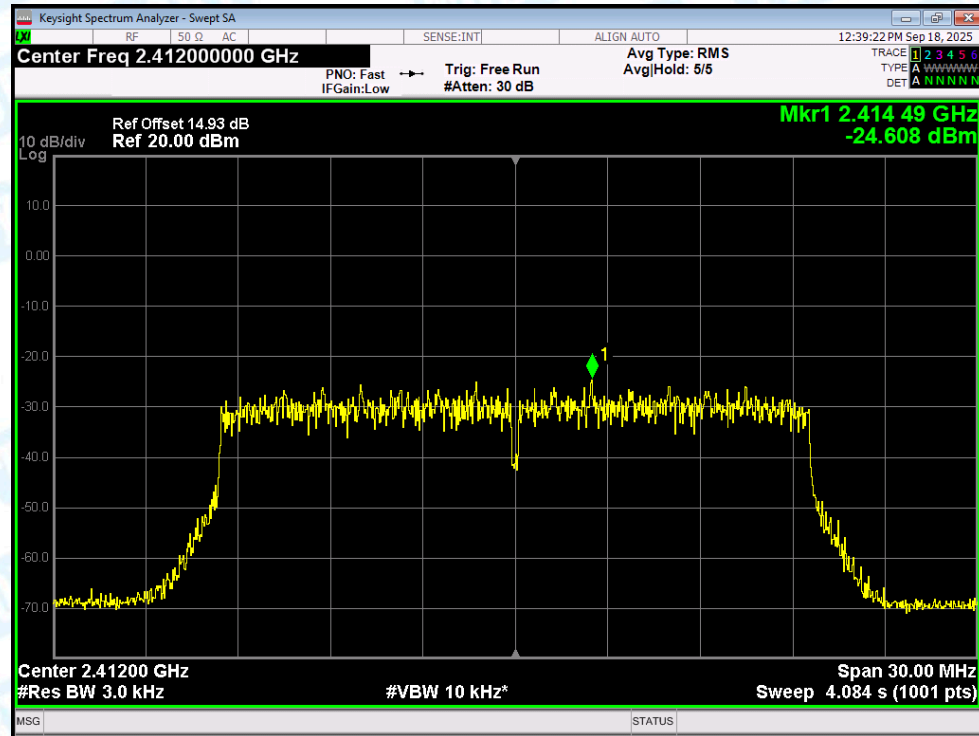
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	ax(VHT20)	2412	Ant1	-23.955	8	Pass
NVNT	ax(VHT20)	2412	Ant2	-24.608	8	Pass
NVNT	ax(VHT20)	2412	Sum	-21.259	8	Pass
NVNT	ax(VHT20)	2437	Ant1	-24.327	8	Pass
NVNT	ax(VHT20)	2437	Ant2	-24.734	8	Pass
NVNT	ax(VHT20)	2437	Sum	-21.515	8	Pass
NVNT	ax(VHT20)	2462	Ant1	-24.311	8	Pass
NVNT	ax(VHT20)	2462	Ant2	-24.82	8	Pass
NVNT	ax(VHT20)	2462	Sum	-21.548	8	Pass
NVNT	b	2412	Ant1	-13.818	8	Pass
NVNT	b	2437	Ant1	-13.763	8	Pass
NVNT	b	2462	Ant1	-14.778	8	Pass
NVNT	b	2412	Ant2	-14.022	8	Pass
NVNT	b	2437	Ant2	-13.972	8	Pass
NVNT	b	2462	Ant2	-13.895	8	Pass
NVNT	g	2412	Ant1	-16.515	8	Pass
NVNT	g	2437	Ant1	-16.891	8	Pass
NVNT	g	2462	Ant1	-16.605	8	Pass
NVNT	g	2412	Ant2	-17.964	8	Pass
NVNT	g	2437	Ant2	-17.421	8	Pass
NVNT	g	2462	Ant2	-17.299	8	Pass
NVNT	n(HT20)	2412	Ant1	-20.952	8	Pass
NVNT	n(HT20)	2412	Ant2	-20.643	8	Pass
NVNT	n(HT20)	2412	Sum	-17.784	8	Pass
NVNT	n(HT20)	2437	Ant1	-21.8	8	Pass
NVNT	n(HT20)	2437	Ant2	-21.311	8	Pass
NVNT	n(HT20)	2437	Sum	-18.538	8	Pass
NVNT	n(HT20)	2462	Ant1	-21.813	8	Pass
NVNT	n(HT20)	2462	Ant2	-20.469	8	Pass
NVNT	n(HT20)	2462	Sum	-18.079	8	Pass

Test Graphs

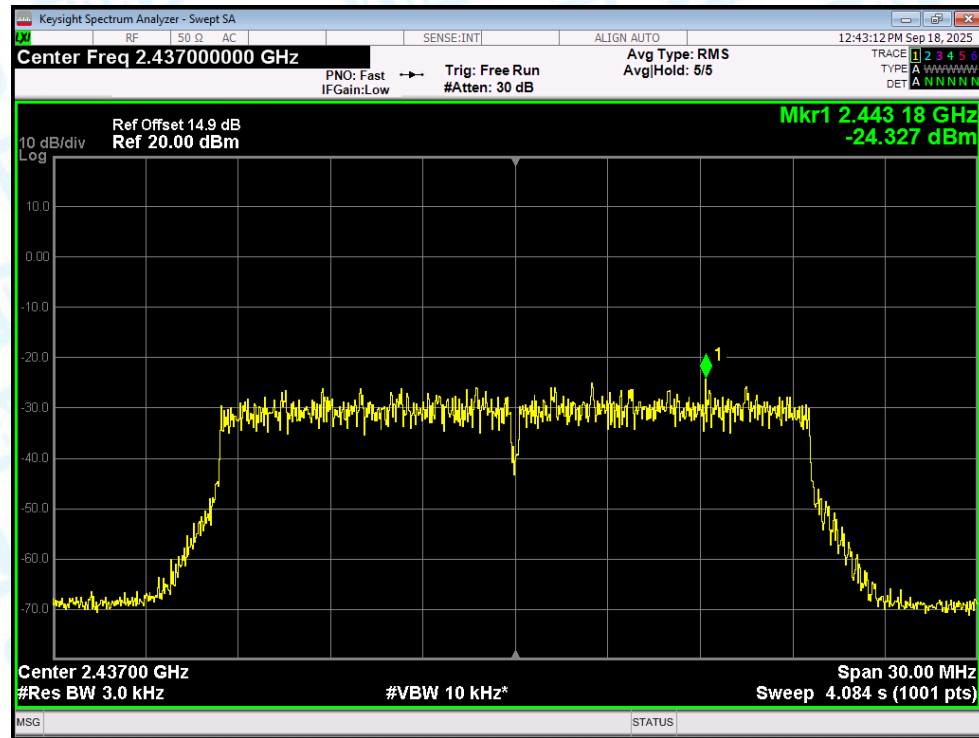
PSD NVNT ax(VHT20) 2412MHz Ant1



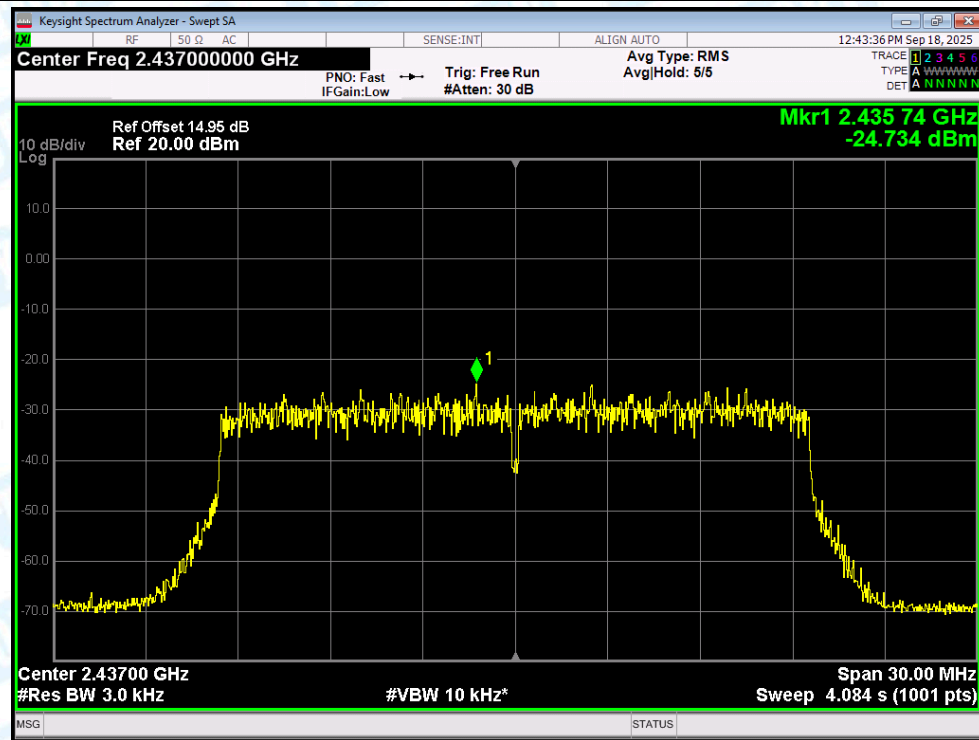
PSD NVNT ax(VHT20) 2412MHz Ant2



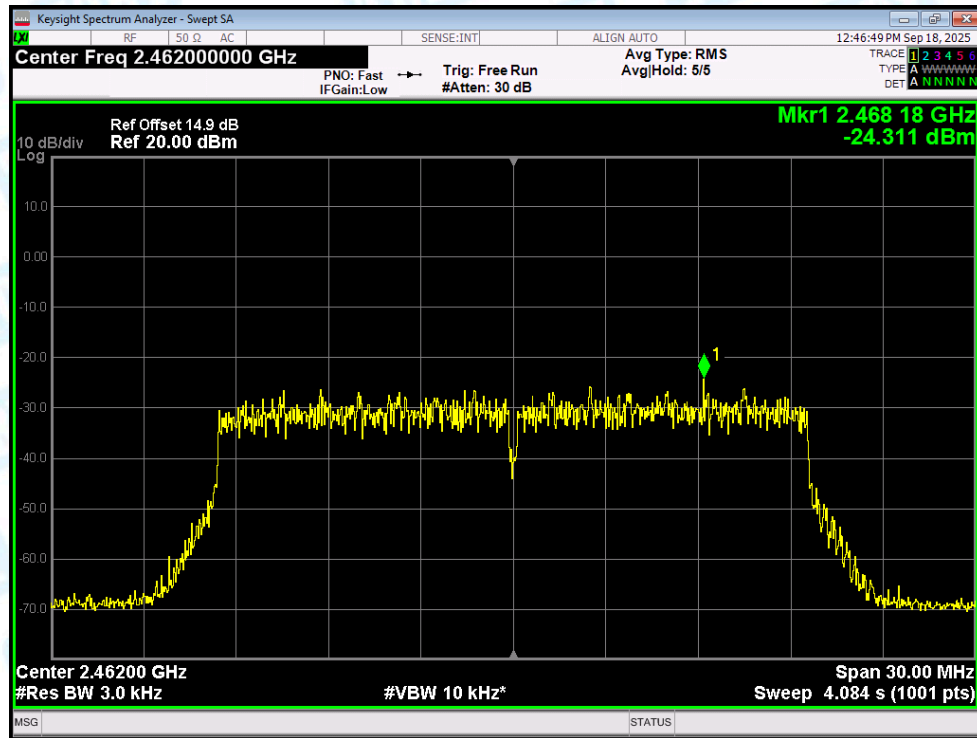
PSD NVNT ax(VHT20) 2437MHz Ant1



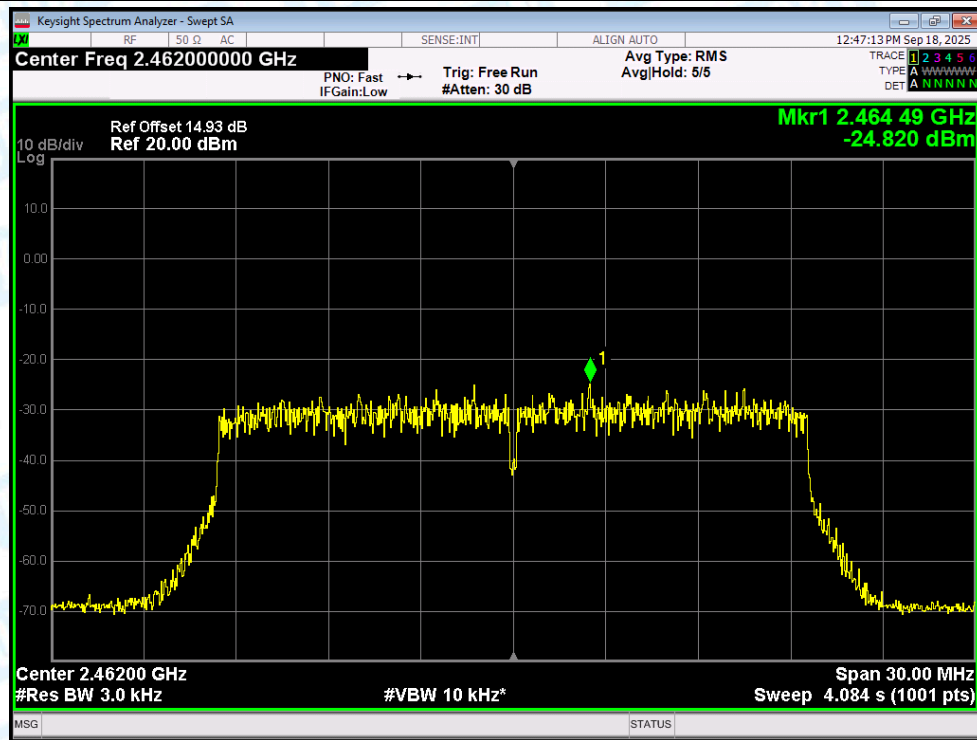
PSD NVNT ax(VHT20) 2437MHz Ant2



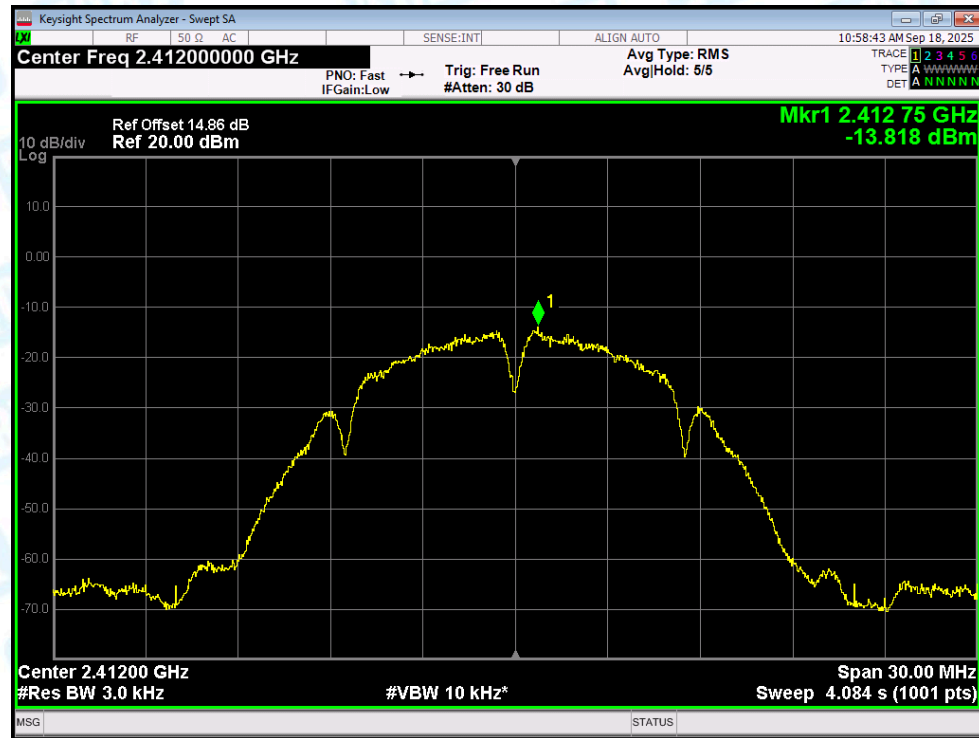
PSD NVNT ax(VHT20) 2462MHz Ant1



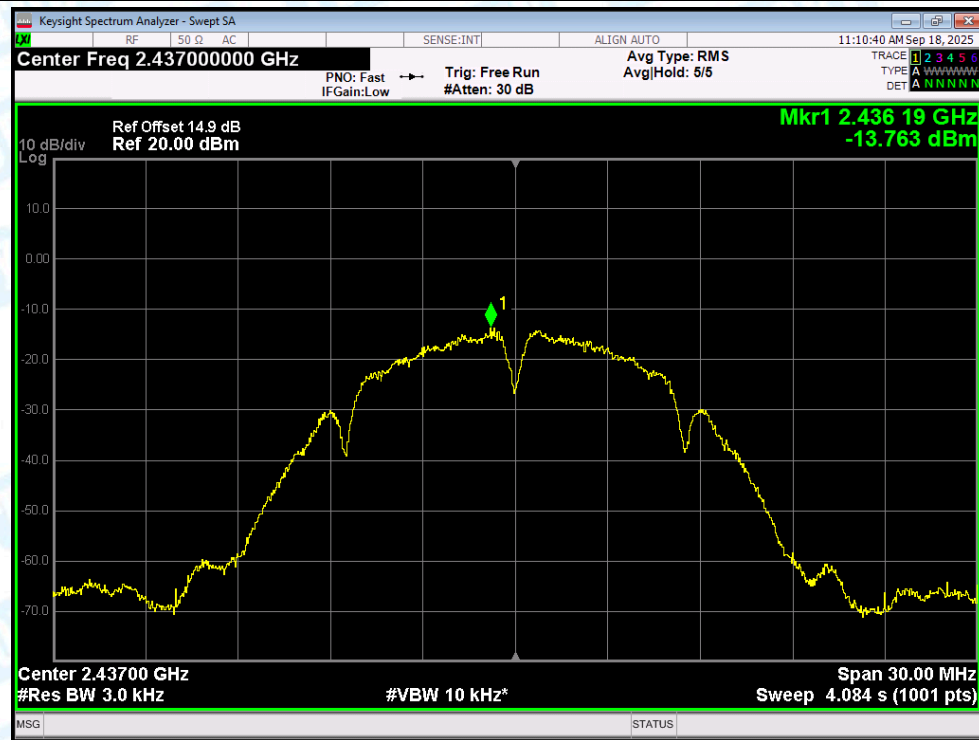
PSD NVNT ax(VHT20) 2462MHz Ant2



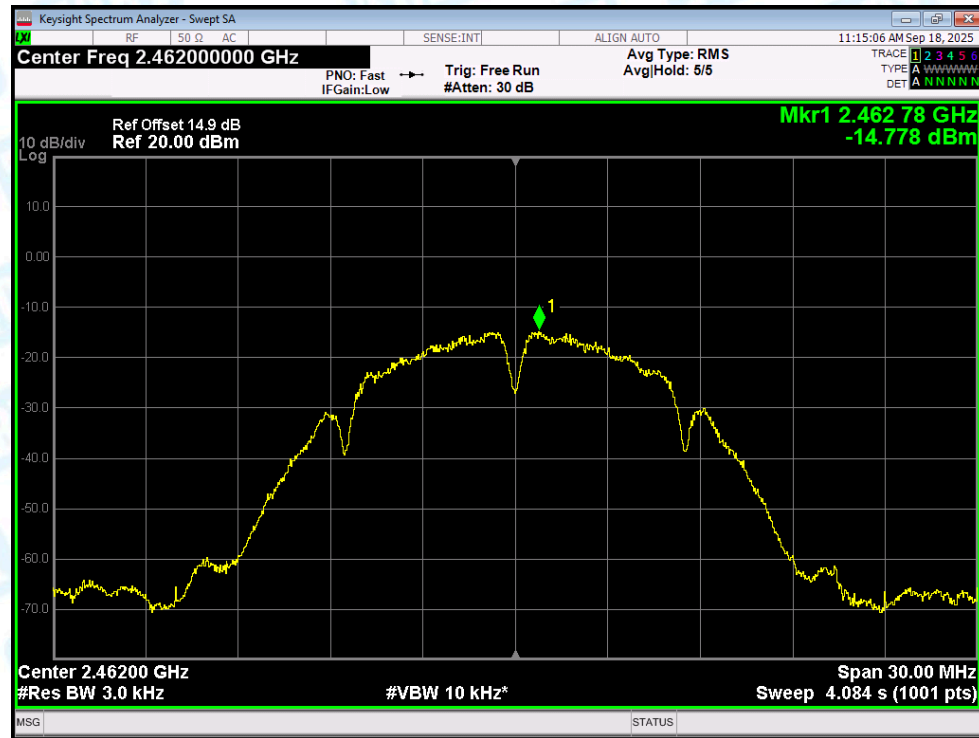
PSD NVNT b 2412MHz Ant1



PSD NVNT b 2437MHz Ant1



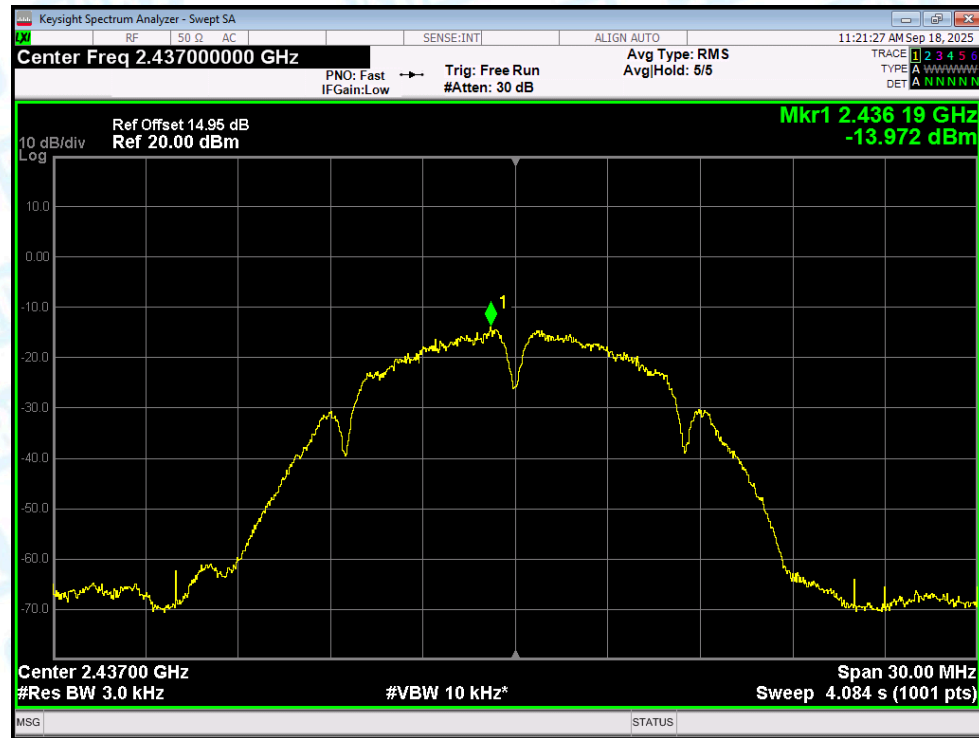
PSD NVNT b 2462MHz Ant1



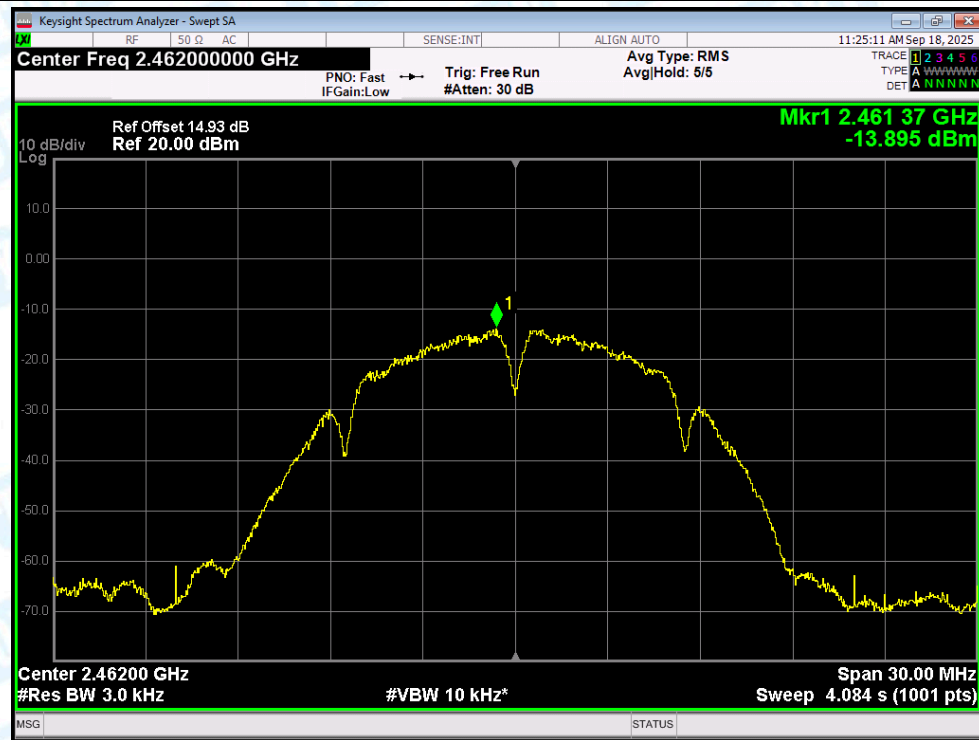
PSD NVNT b 2412MHz Ant2



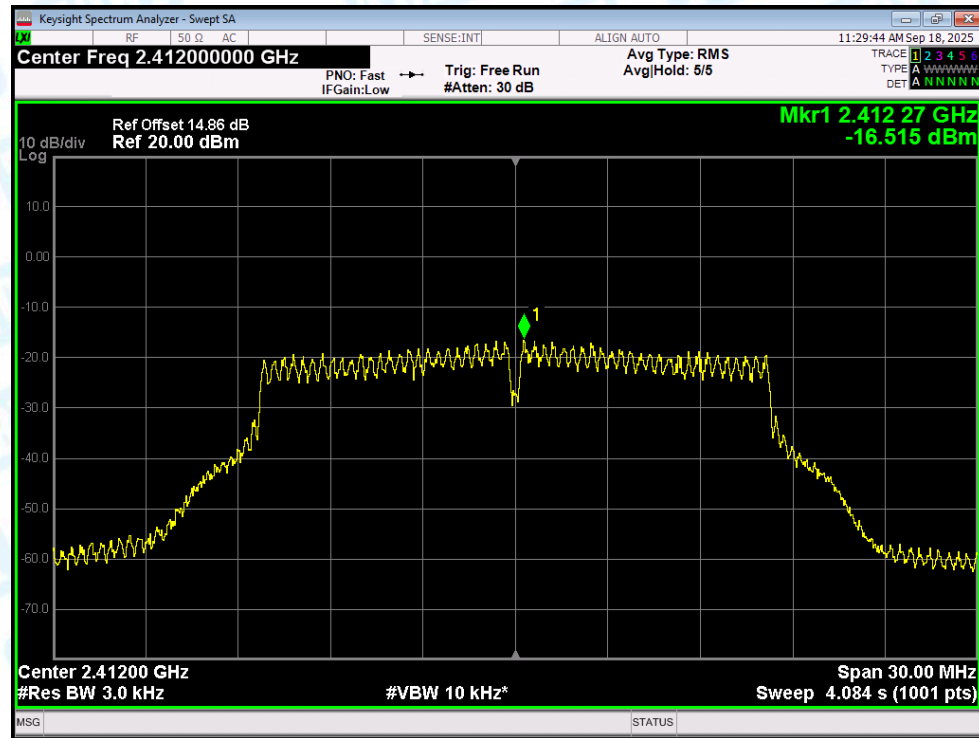
PSD NVNT b 2437MHz Ant2



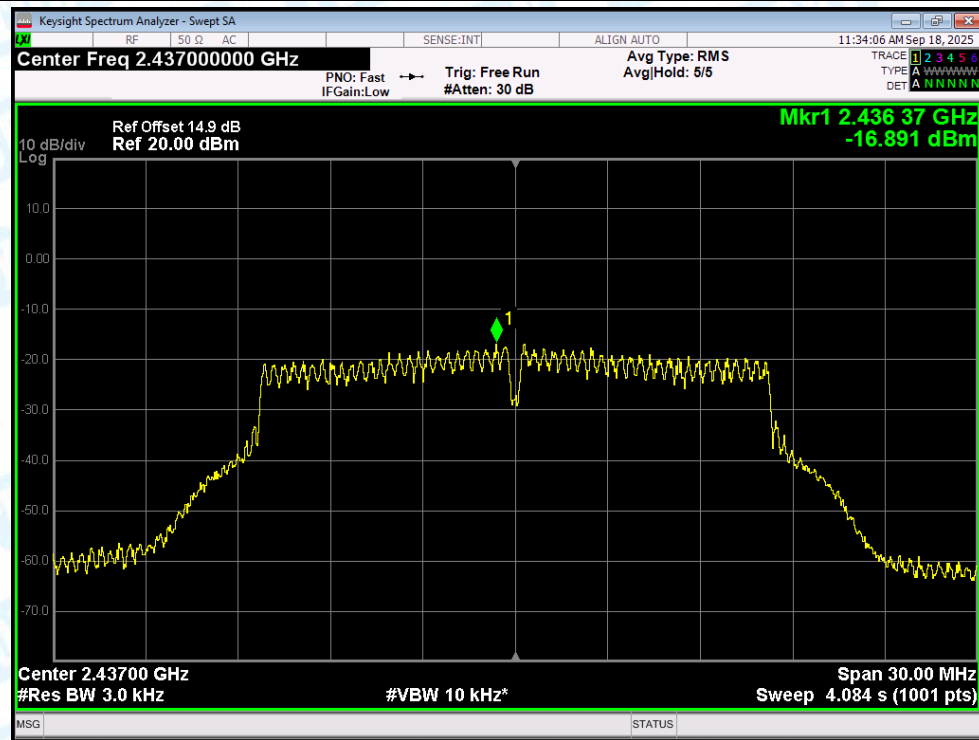
PSD NVNT b 2462MHz Ant2



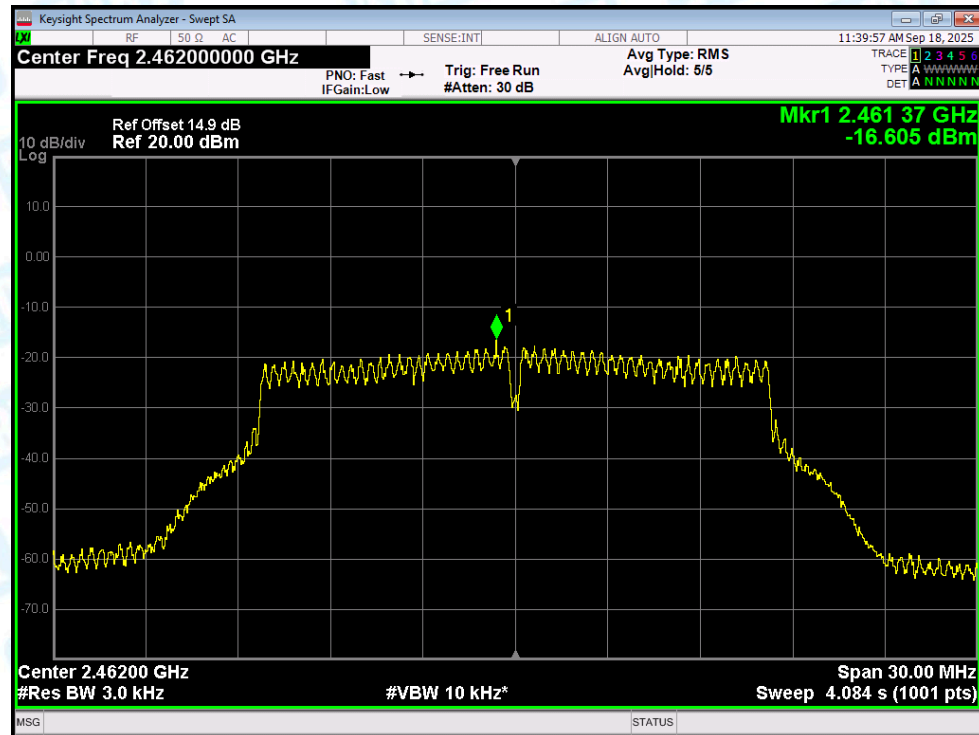
PSD NVNT g 2412MHz Ant1



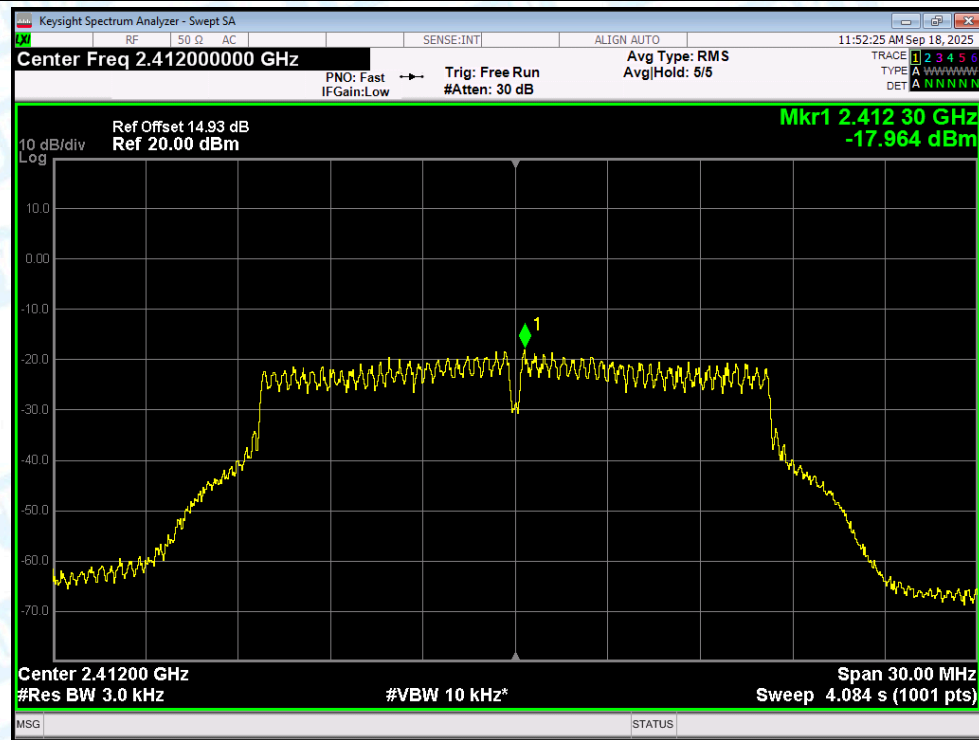
PSD NVNT g 2437MHz Ant1



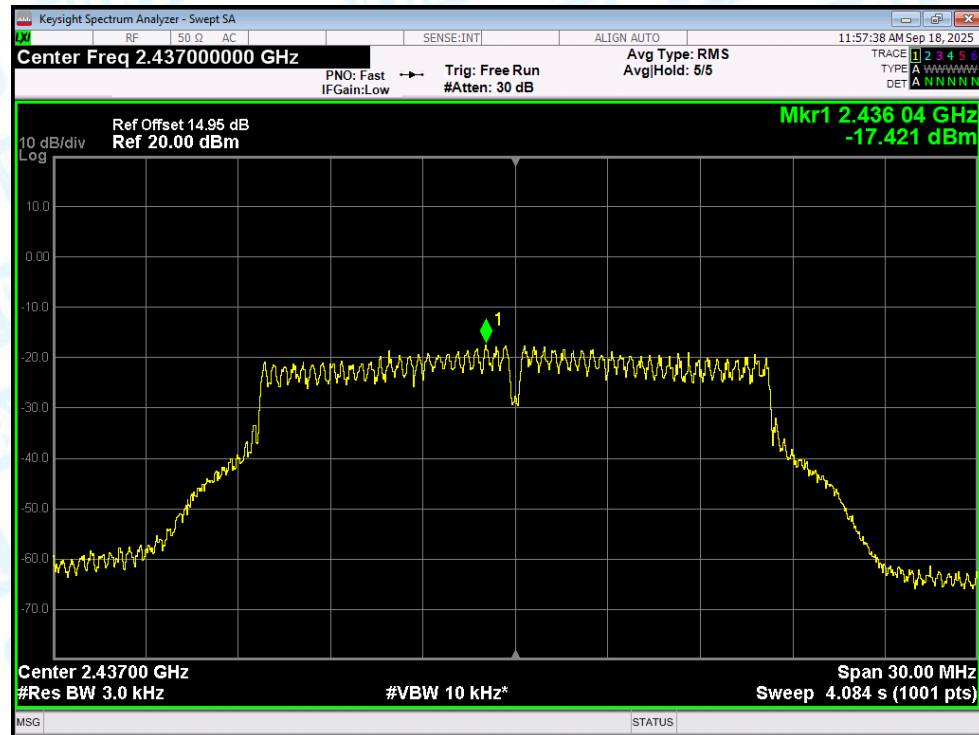
PSD NVNT g 2462MHz Ant1



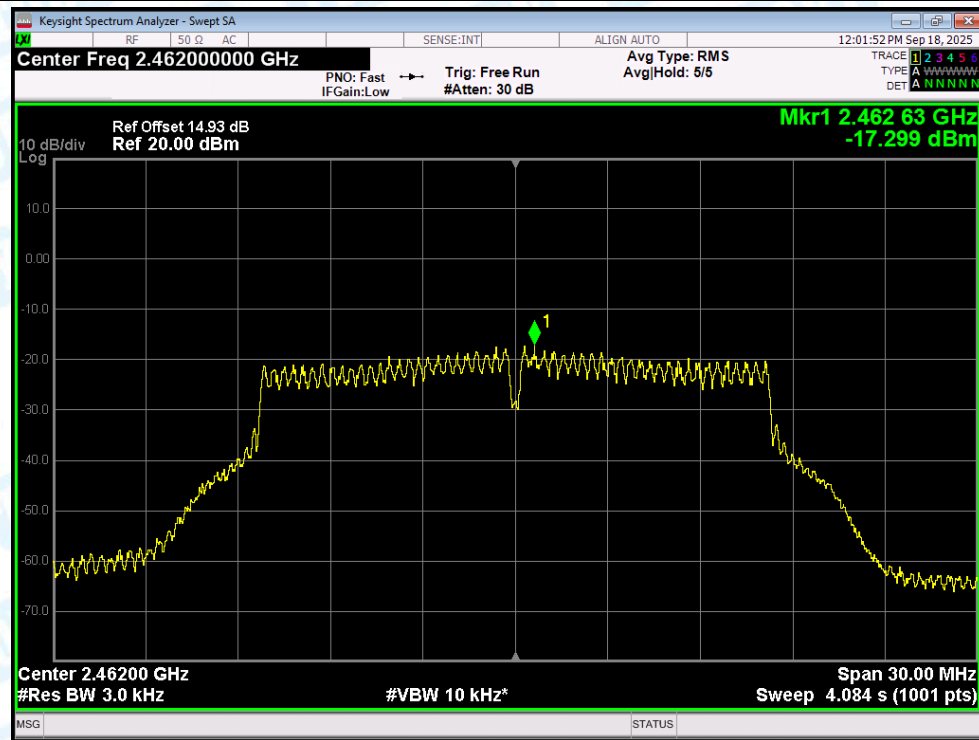
PSD NVNT g 2412MHz Ant2



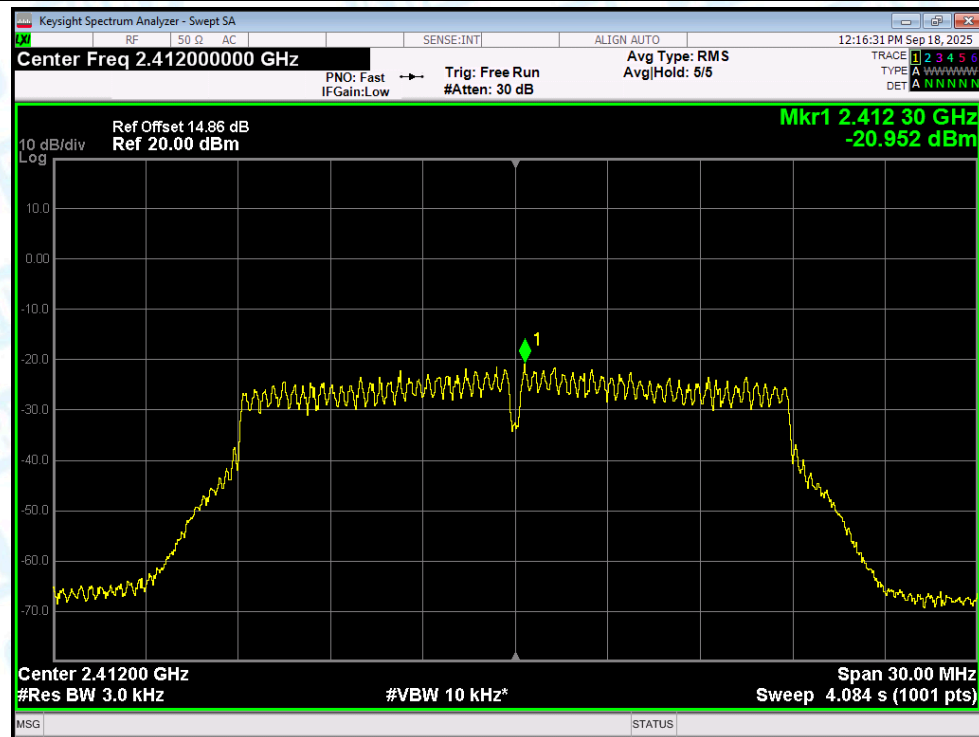
PSD NVNT g 2437MHz Ant2



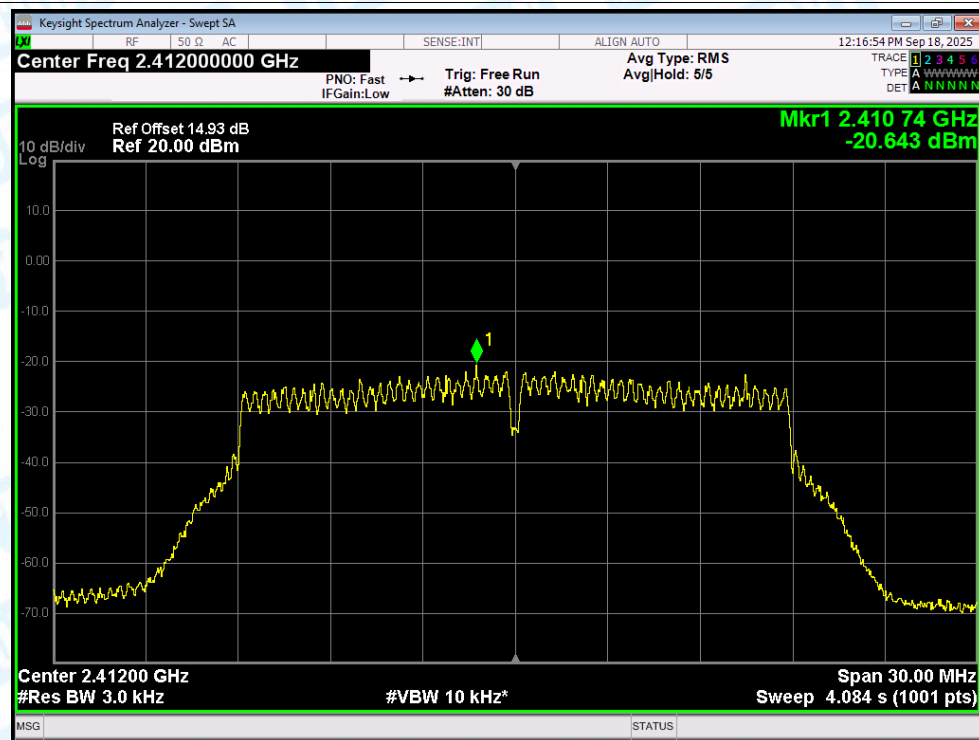
PSD NVNT g 2462MHz Ant2



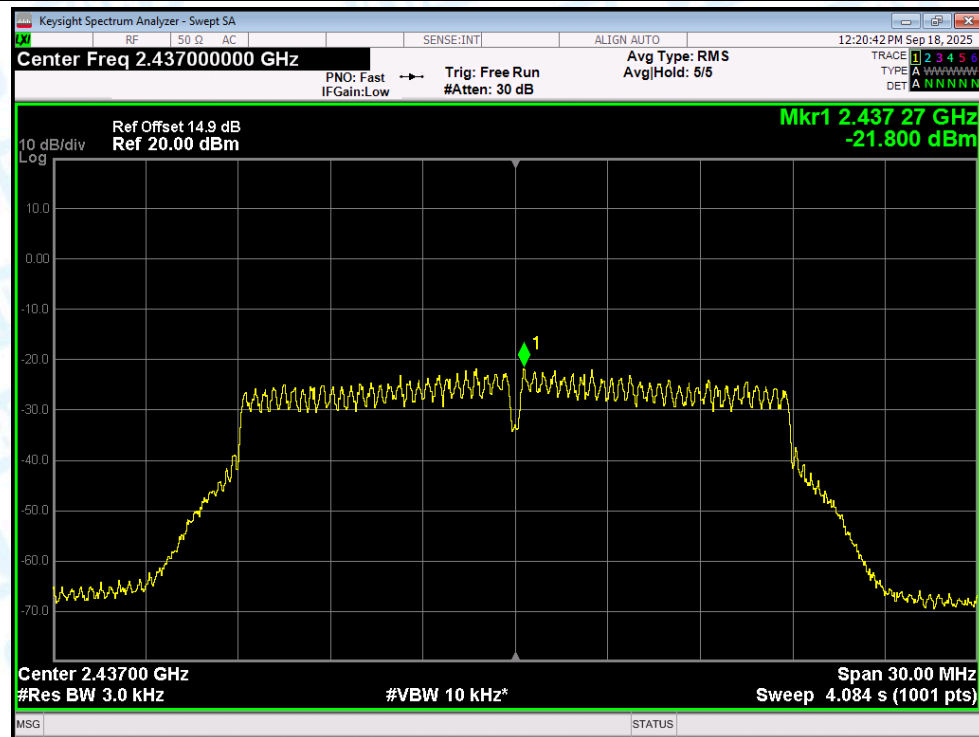
PSD NVNT n(HT20) 2412MHz Ant1



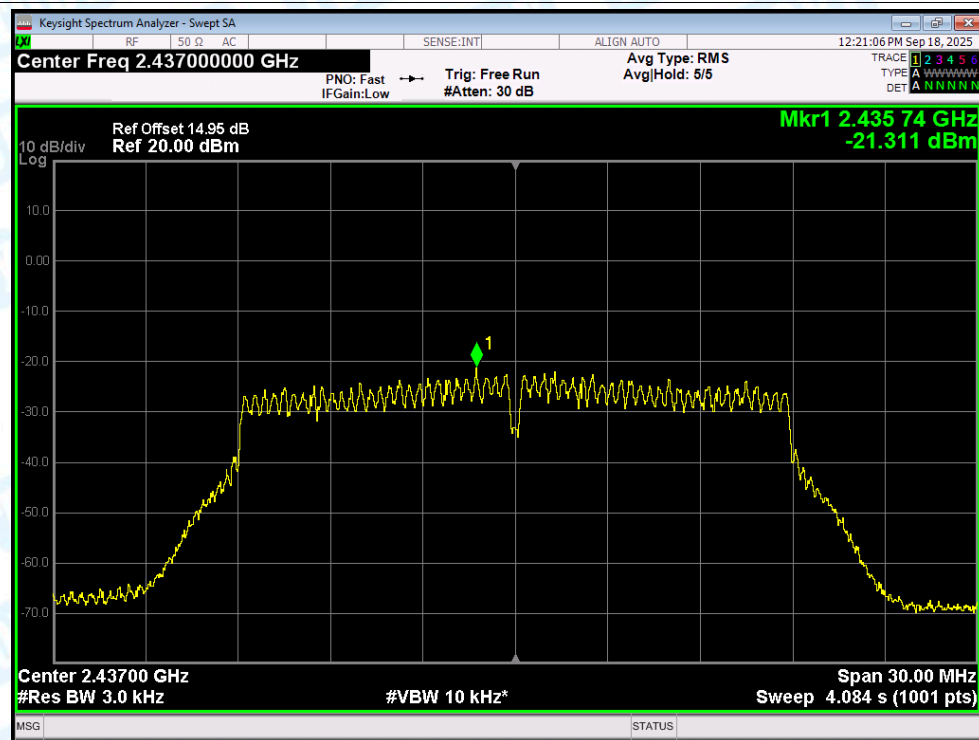
PSD NVNT n(HT20) 2412MHz Ant2



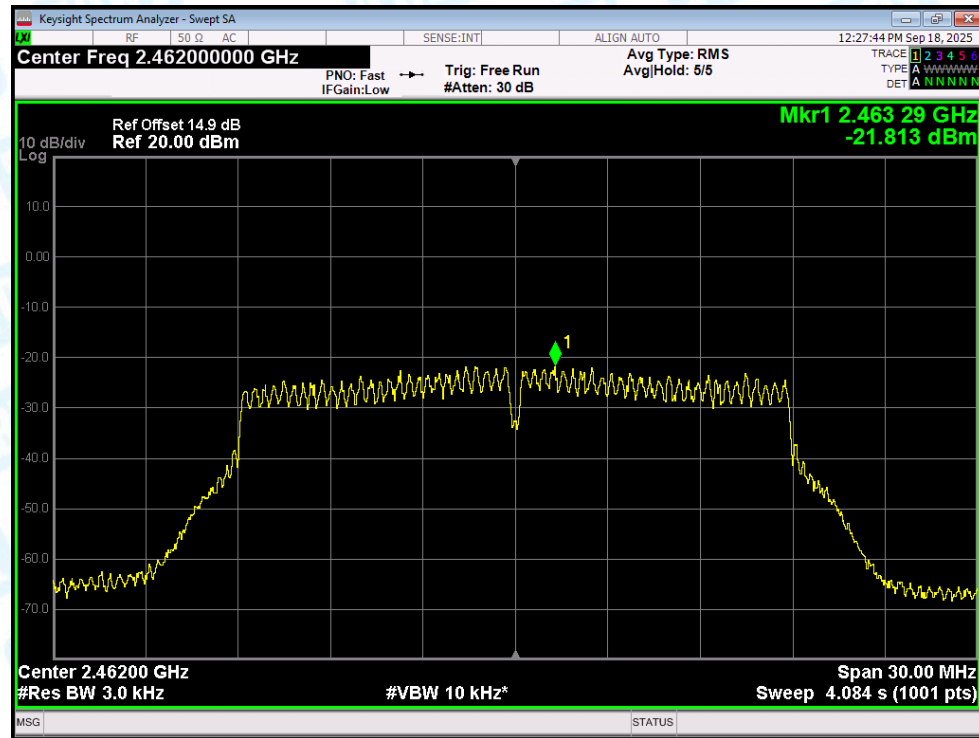
PSD NVNT n(HT20) 2437MHz Ant1



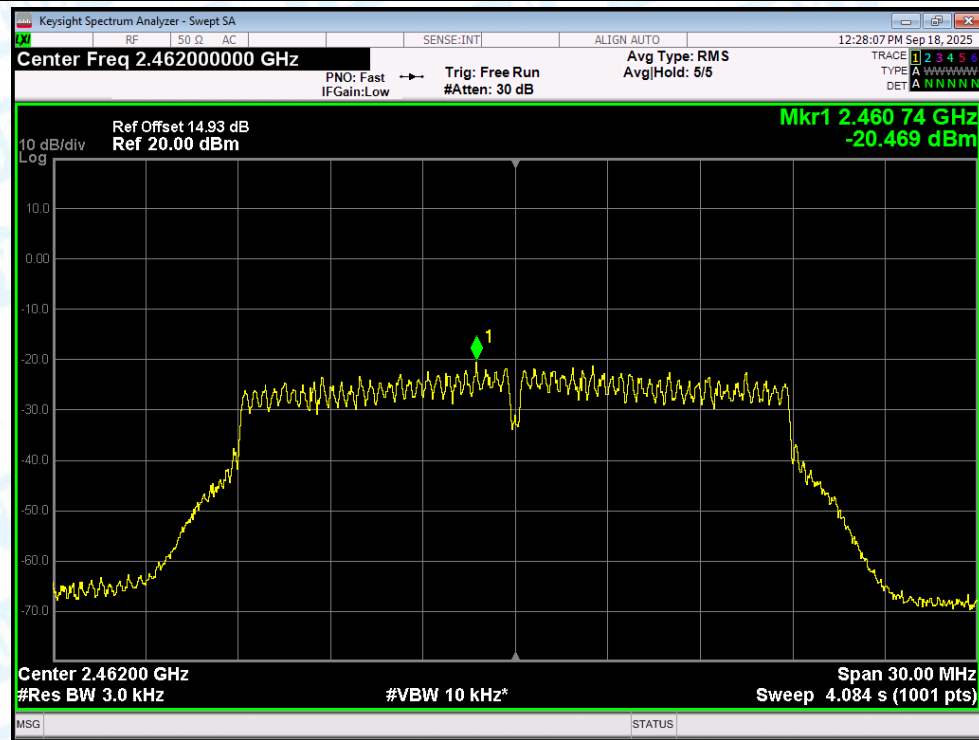
PSD NVNT n(HT20) 2437MHz Ant2



PSD NVNT n(HT20) 2462MHz Ant1



PSD NVNT n(HT20) 2462MHz Ant2

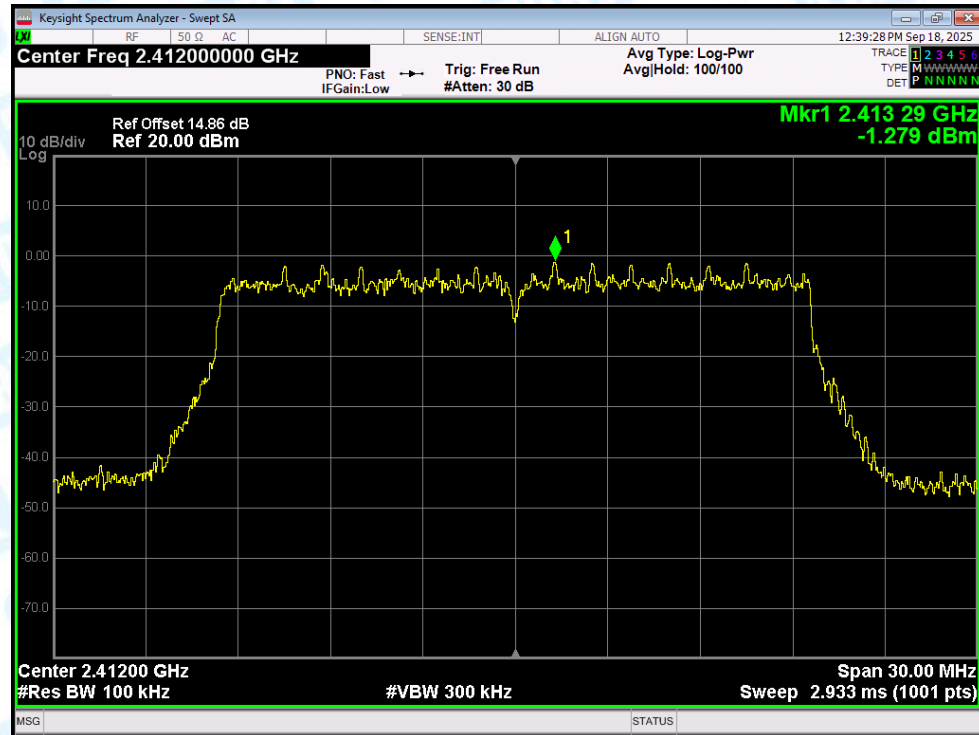


6. Band Edge

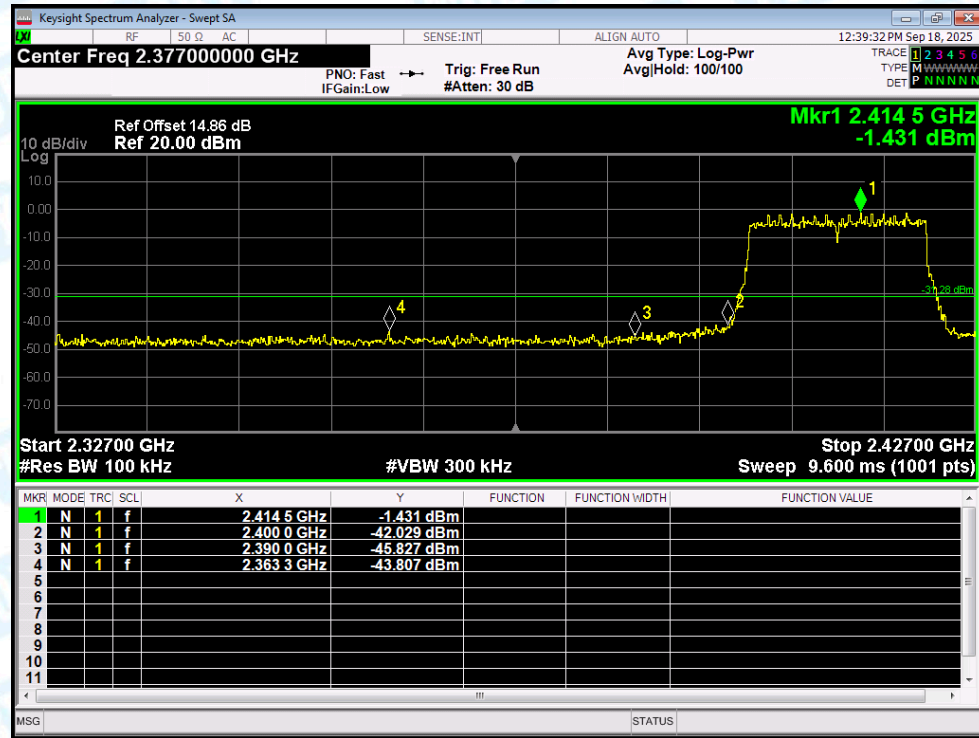
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	ax(VHT20)	2412	Ant1	-42.53	-30	Pass
NVNT	ax(VHT20)	2412	Ant2	-42.96	-30	Pass
NVNT	ax(VHT20)	2462	Ant1	-42.19	-30	Pass
NVNT	ax(VHT20)	2462	Ant2	-42.11	-30	Pass
NVNT	b	2412	Ant1	-52.89	-30	Pass
NVNT	b	2462	Ant1	-52.32	-30	Pass
NVNT	b	2412	Ant2	-52.84	-30	Pass
NVNT	b	2462	Ant2	-51.38	-30	Pass
NVNT	g	2412	Ant1	-46.13	-30	Pass
NVNT	g	2462	Ant1	-45.05	-30	Pass
NVNT	g	2412	Ant2	-46.87	-30	Pass
NVNT	g	2462	Ant2	-45.14	-30	Pass
NVNT	n(HT20)	2412	Ant1	-45.55	-30	Pass
NVNT	n(HT20)	2412	Ant2	-44.91	-30	Pass
NVNT	n(HT20)	2462	Ant1	-44.66	-30	Pass
NVNT	n(HT20)	2462	Ant2	-44.97	-30	Pass

Test Graphs

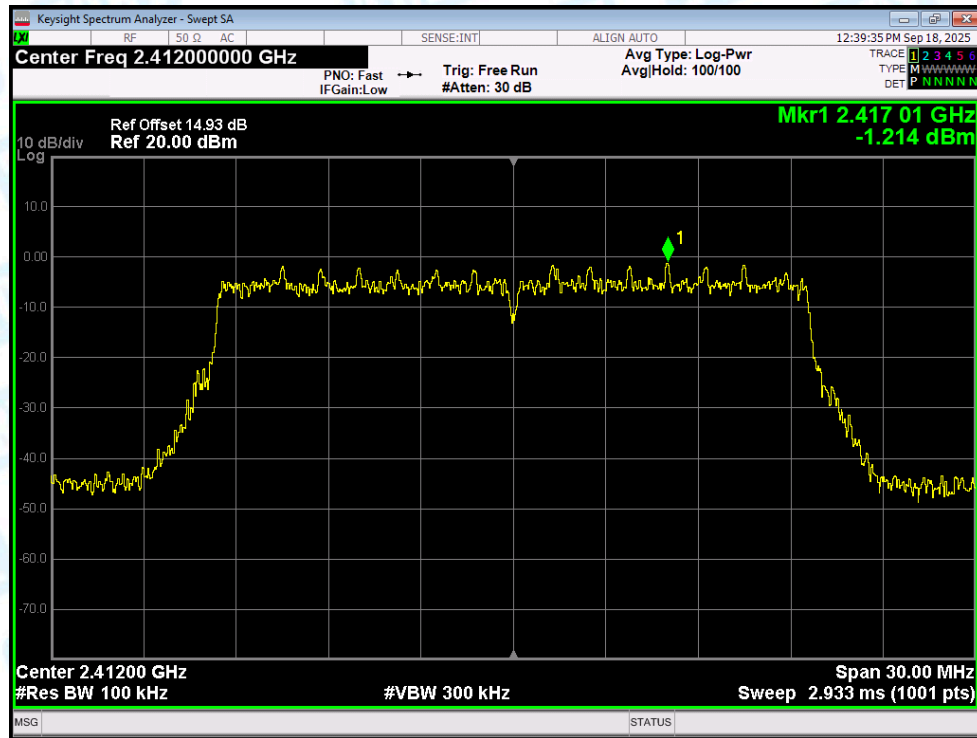
Band Edge NVNT ax(VHT20) 2412MHz Ant1 Ref



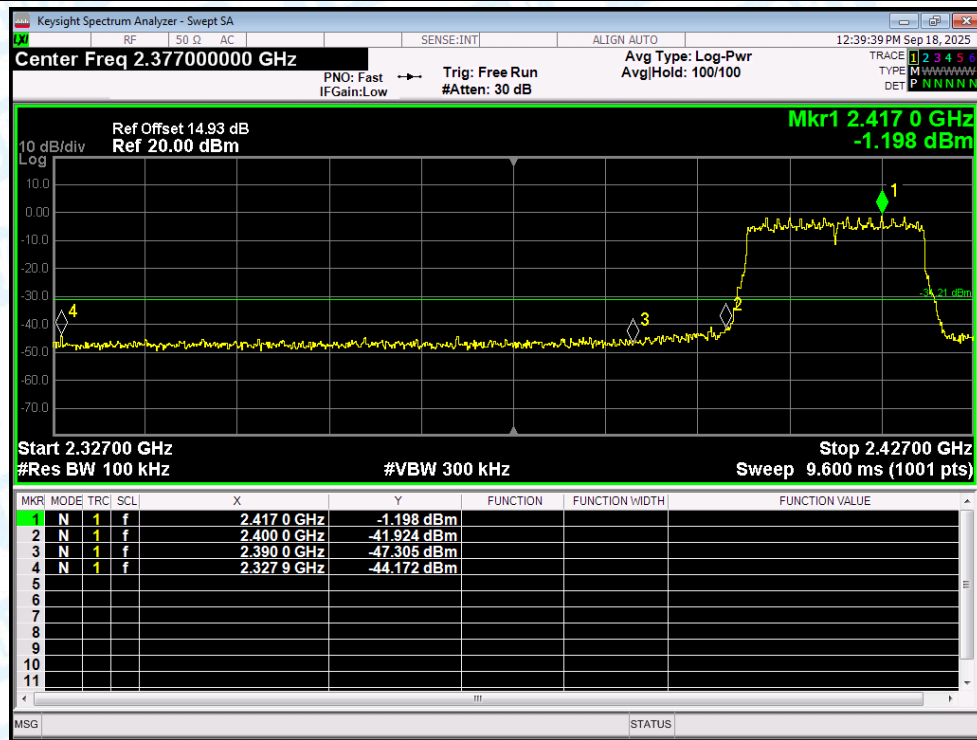
Band Edge NVNT ax(VHT20) 2412MHz Ant1 Emission

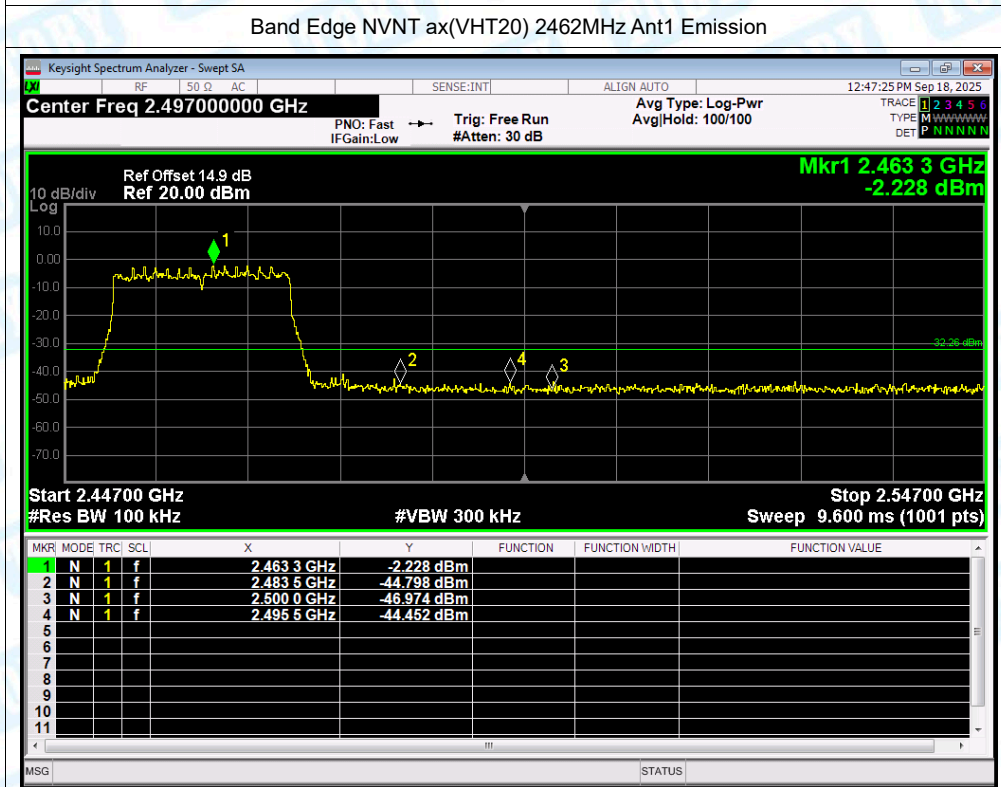
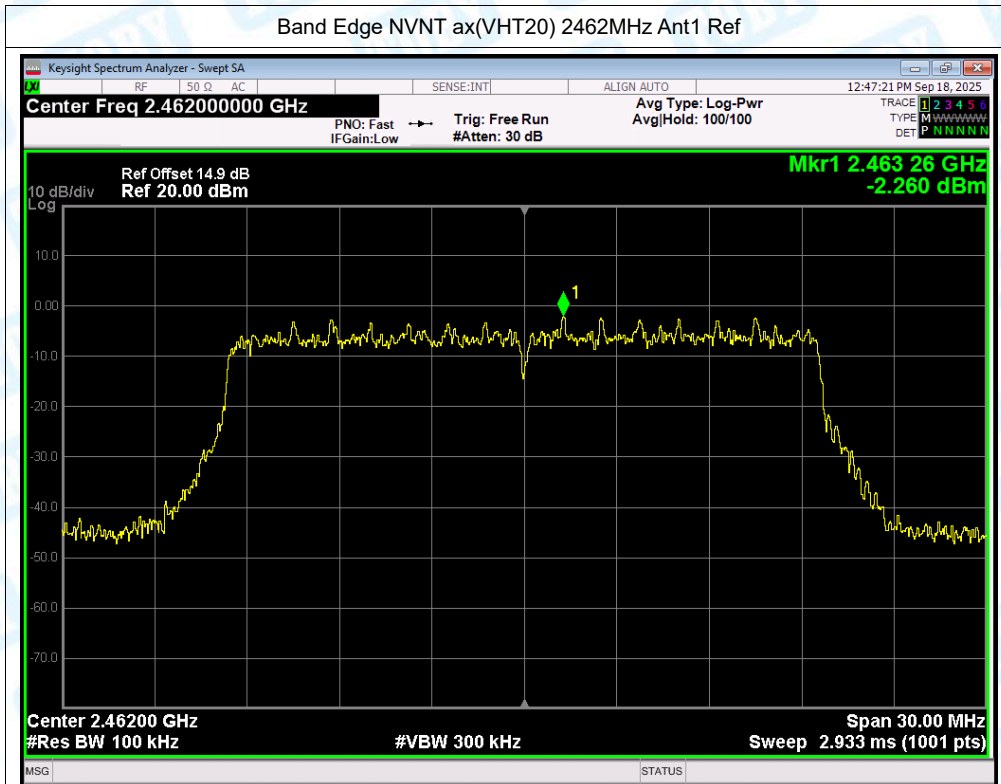


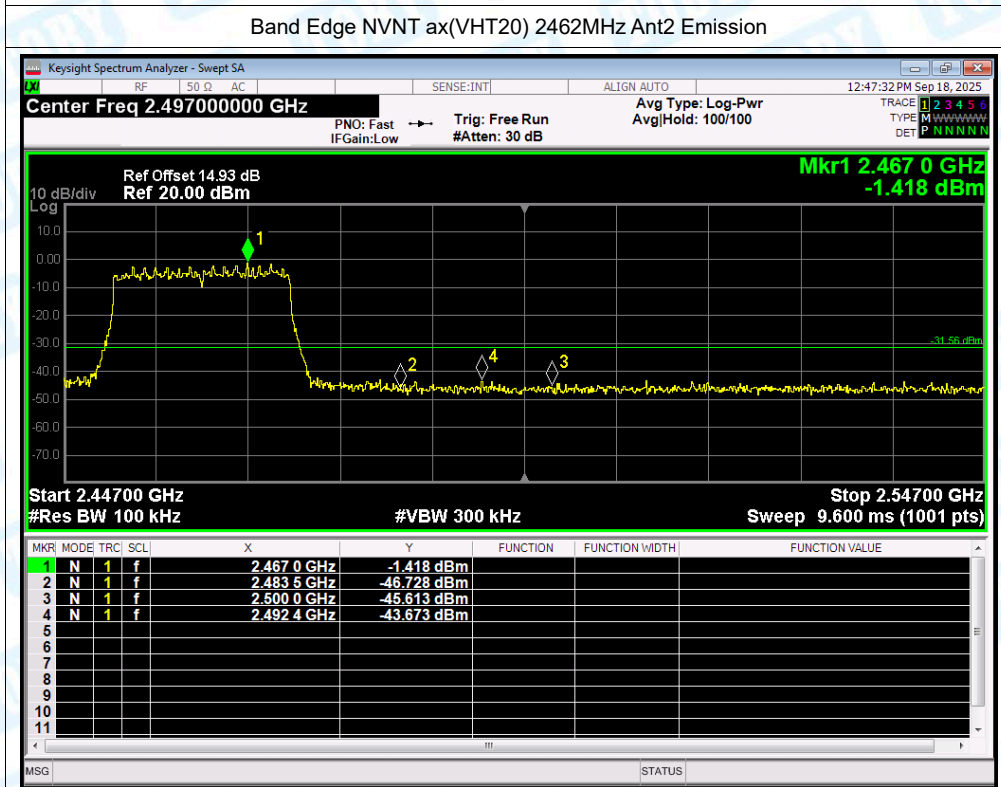
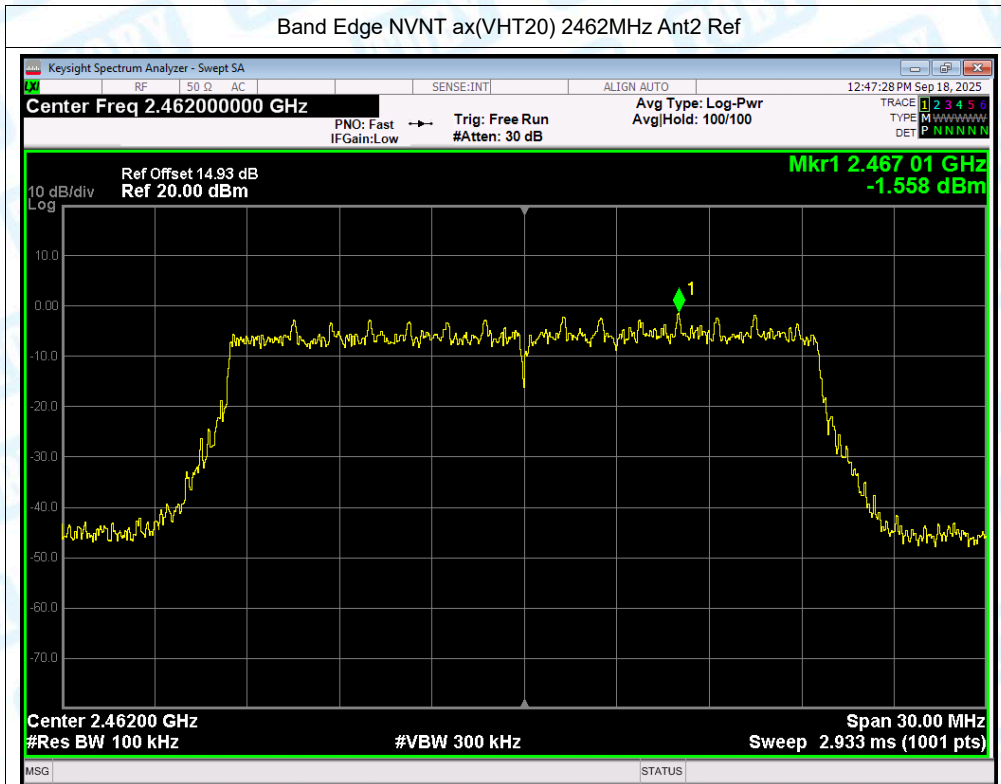
Band Edge NVNT ax(VHT20) 2412MHz Ant2 Ref



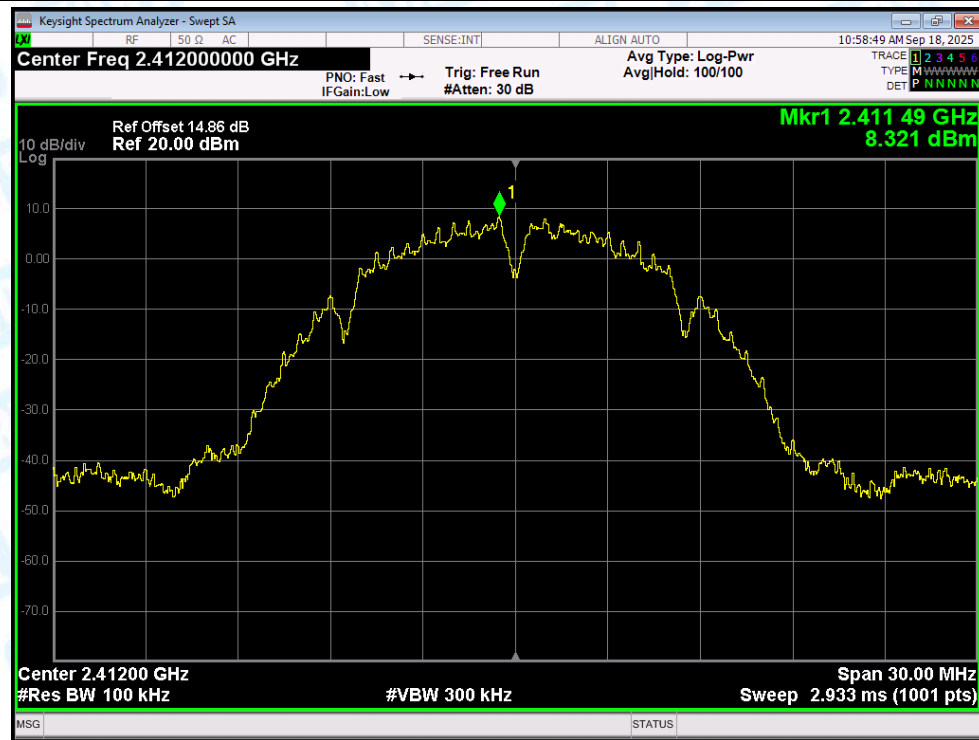
Band Edge NVNT ax(VHT20) 2412MHz Ant2 Emission



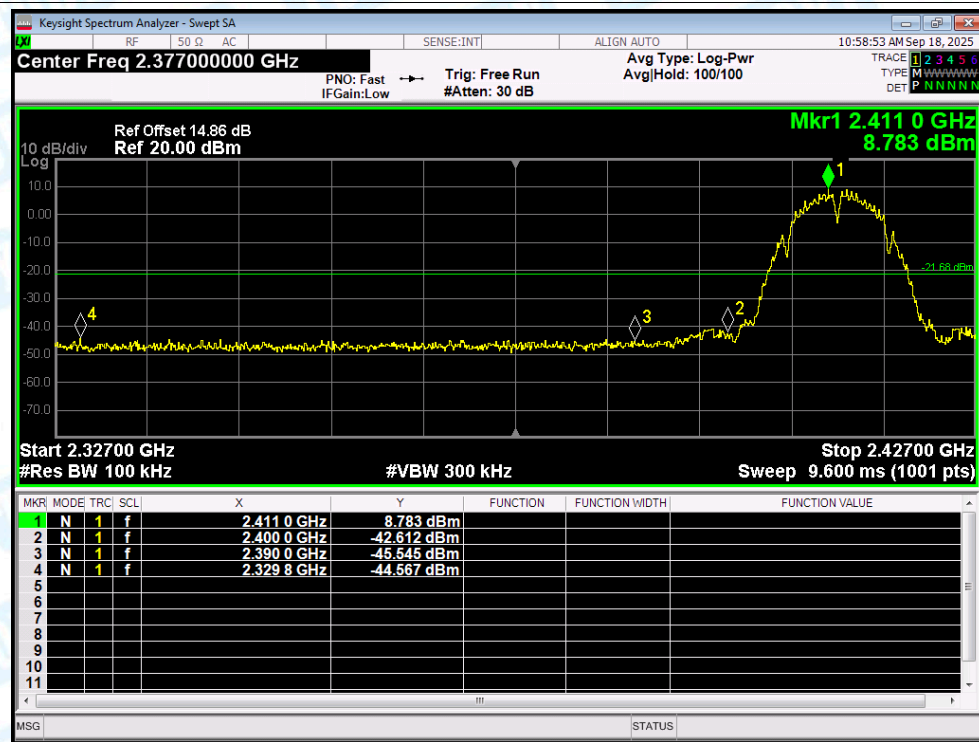




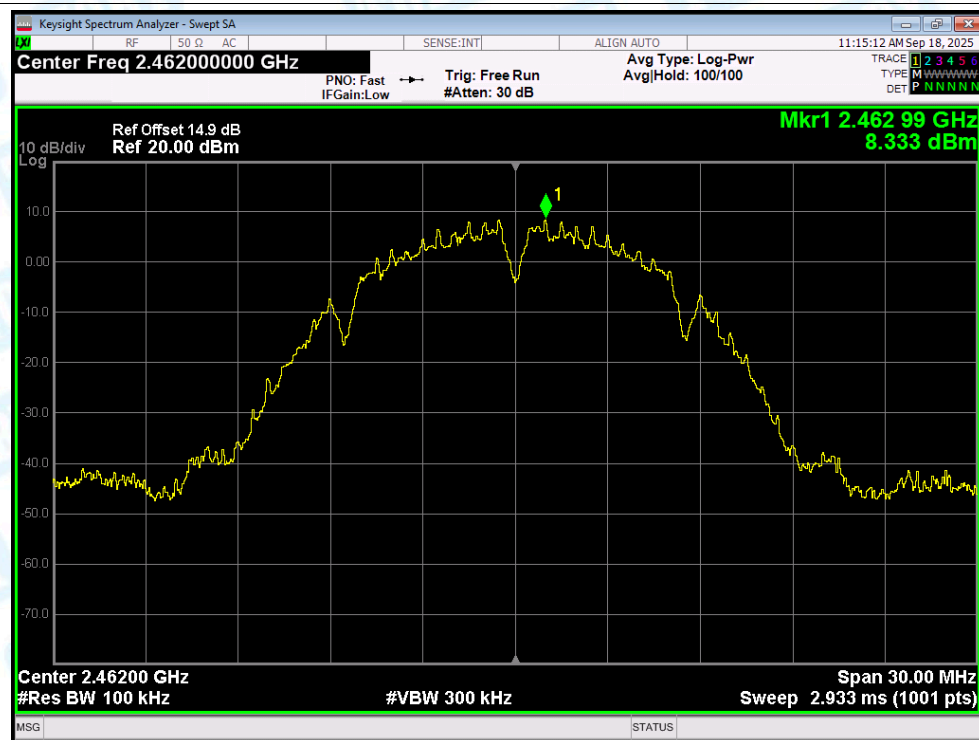
Band Edge NVNT b 2412MHz Ant1 Ref



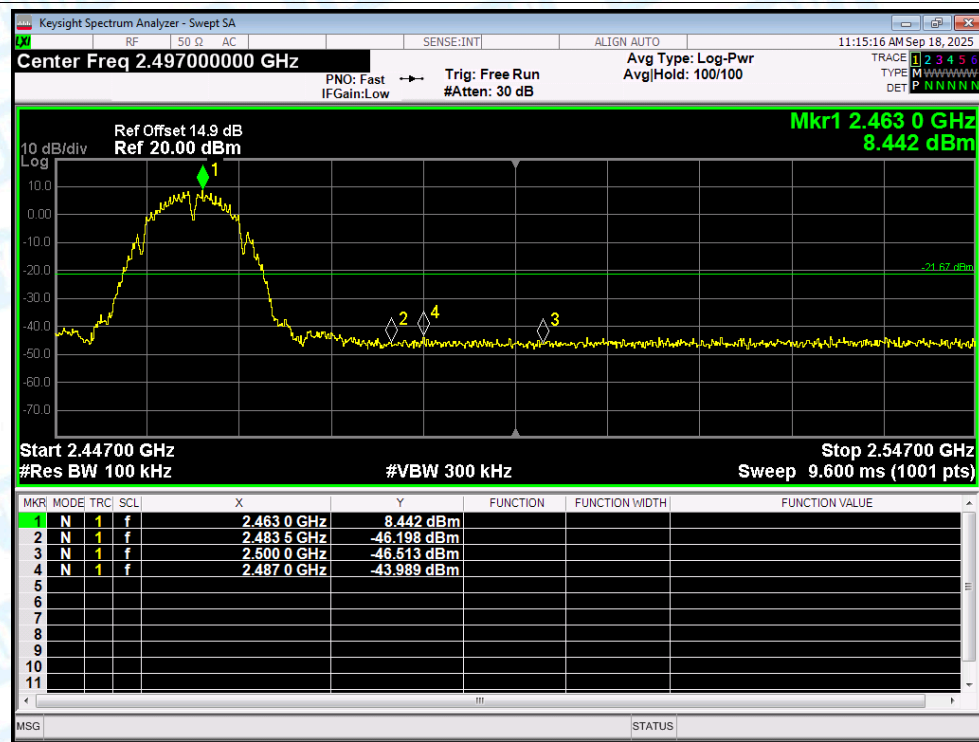
Band Edge NVNT b 2412MHz Ant1 Emission



Band Edge NVNT b 2462MHz Ant1 Ref



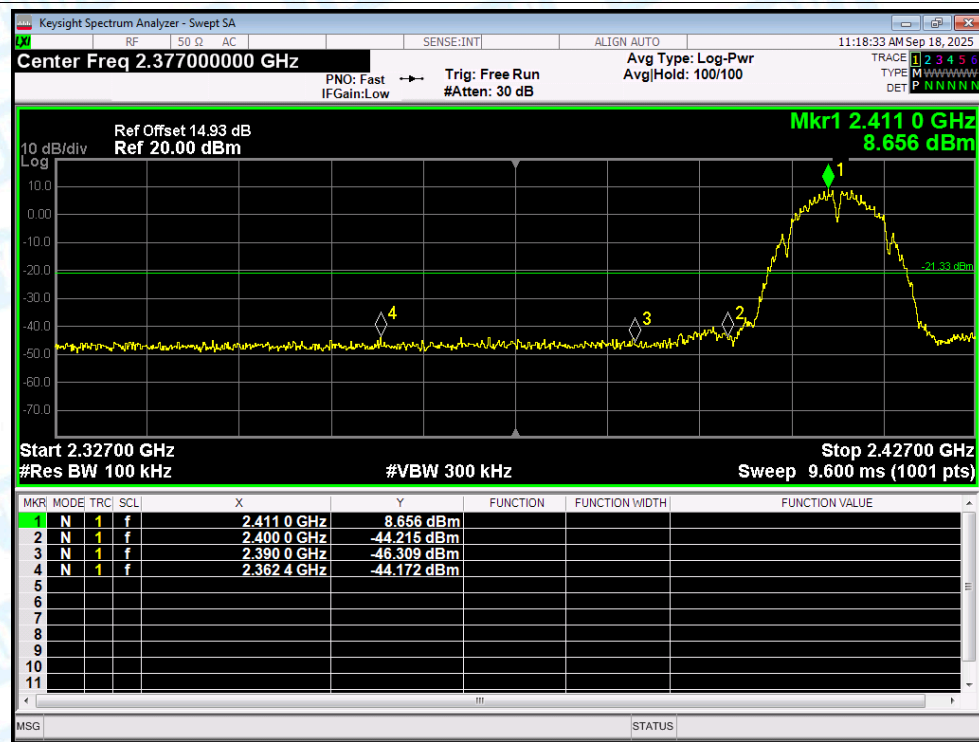
Band Edge NVNT b 2462MHz Ant1 Emission



Band Edge NVNT b 2412MHz Ant2 Ref



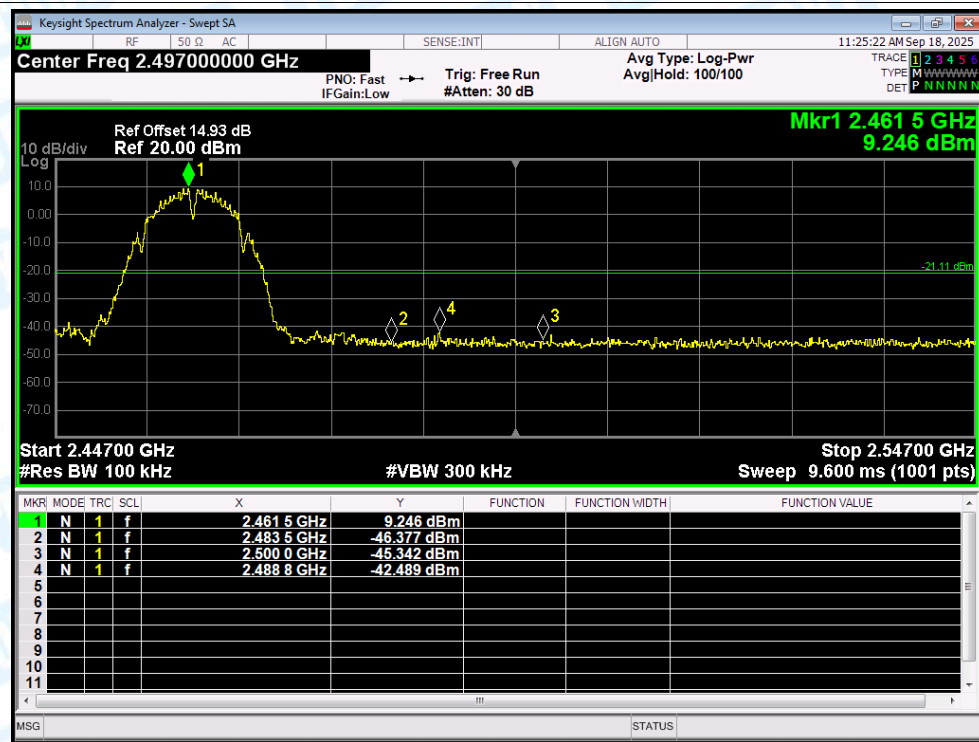
Band Edge NVNT b 2412MHz Ant2 Emission



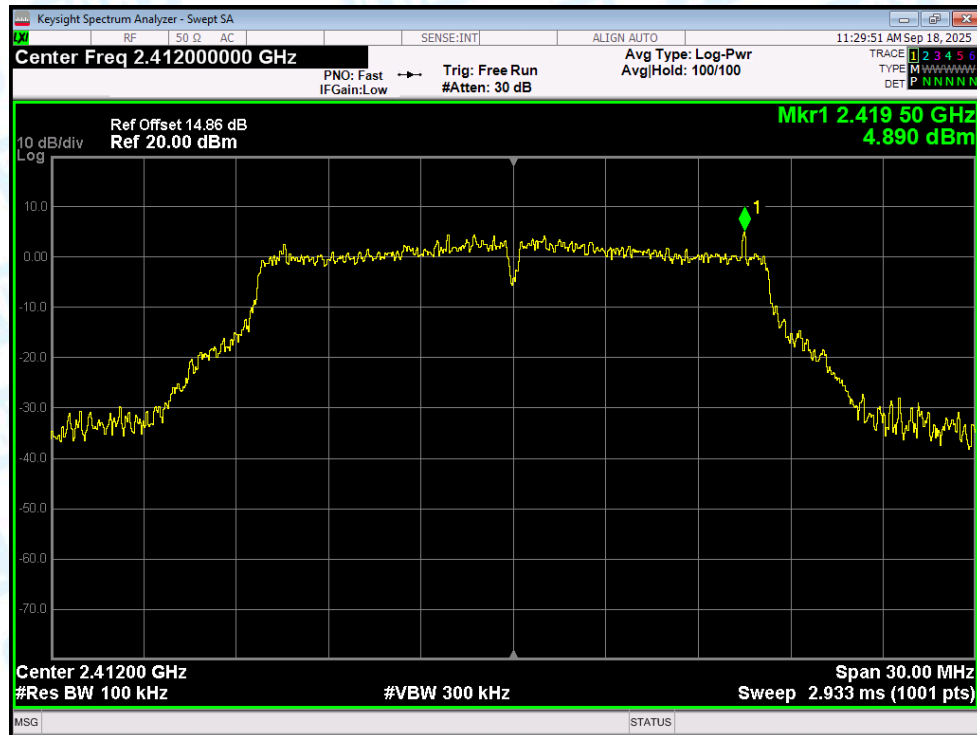
Band Edge NVNT b 2462MHz Ant2 Ref



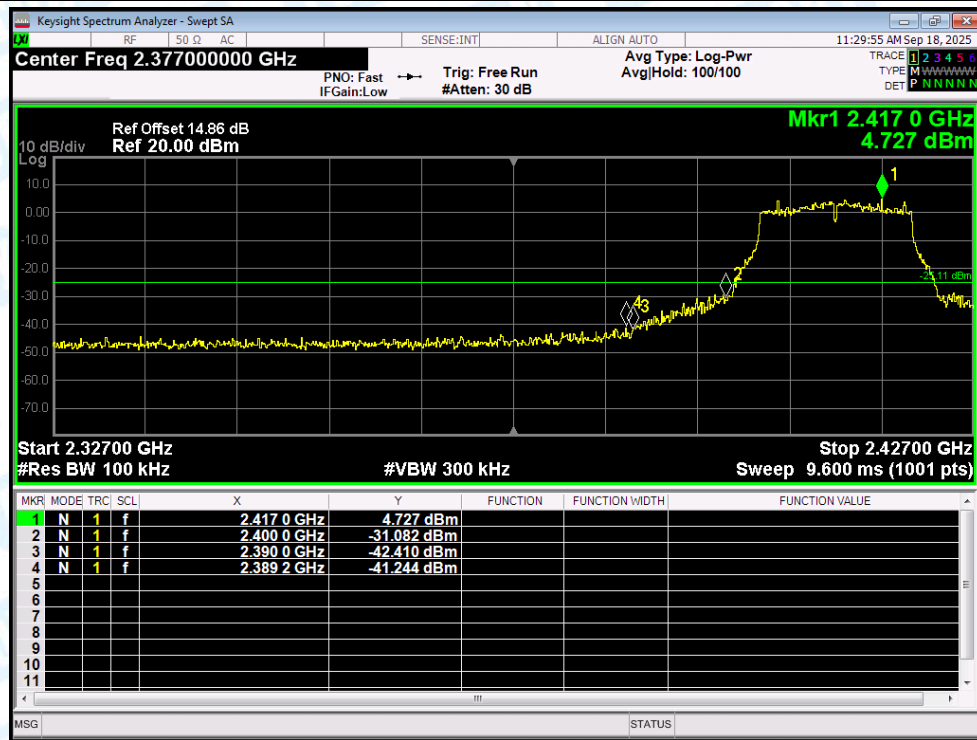
Band Edge NVNT b 2462MHz Ant2 Emission



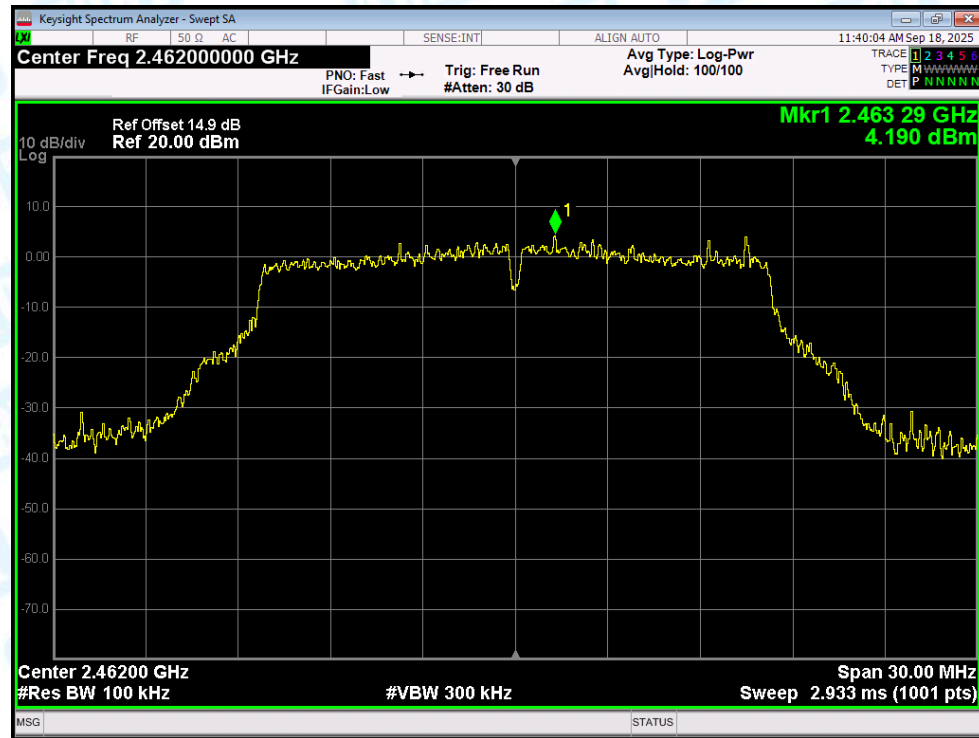
Band Edge NVNT g 2412MHz Ant1 Ref



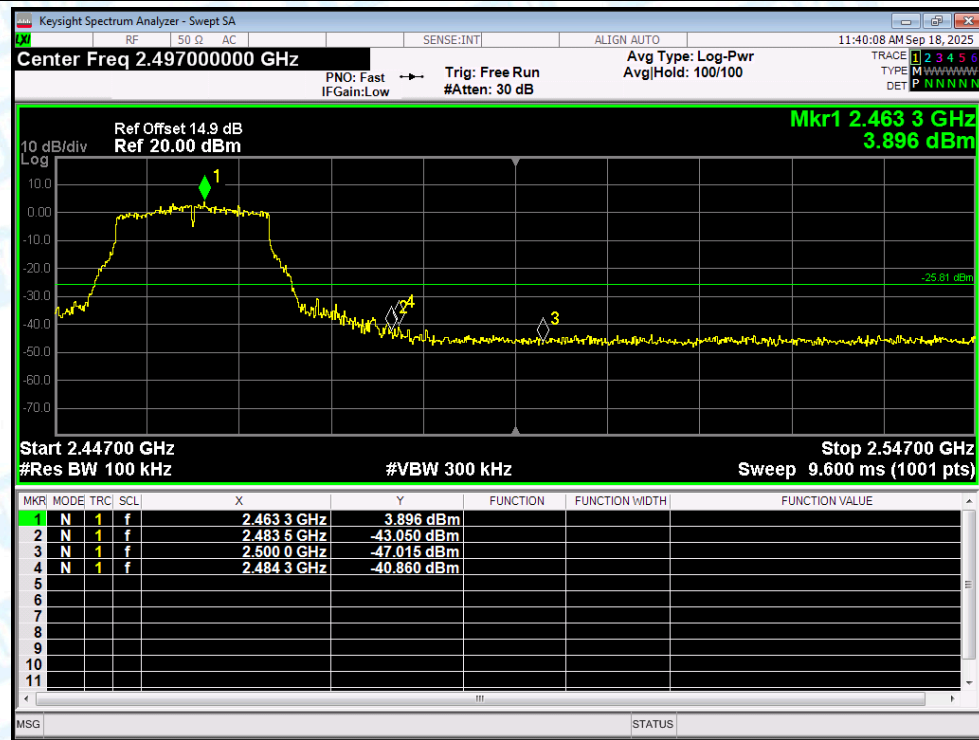
Band Edge NVNT g 2412MHz Ant1 Emission



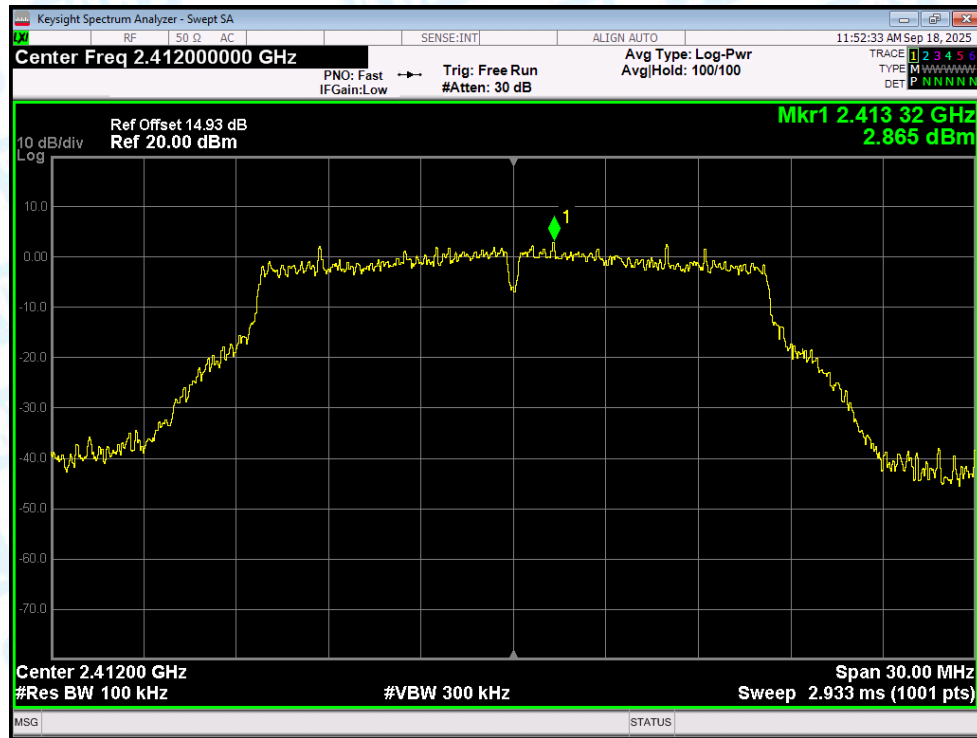
Band Edge NVNT g 2462MHz Ant1 Ref



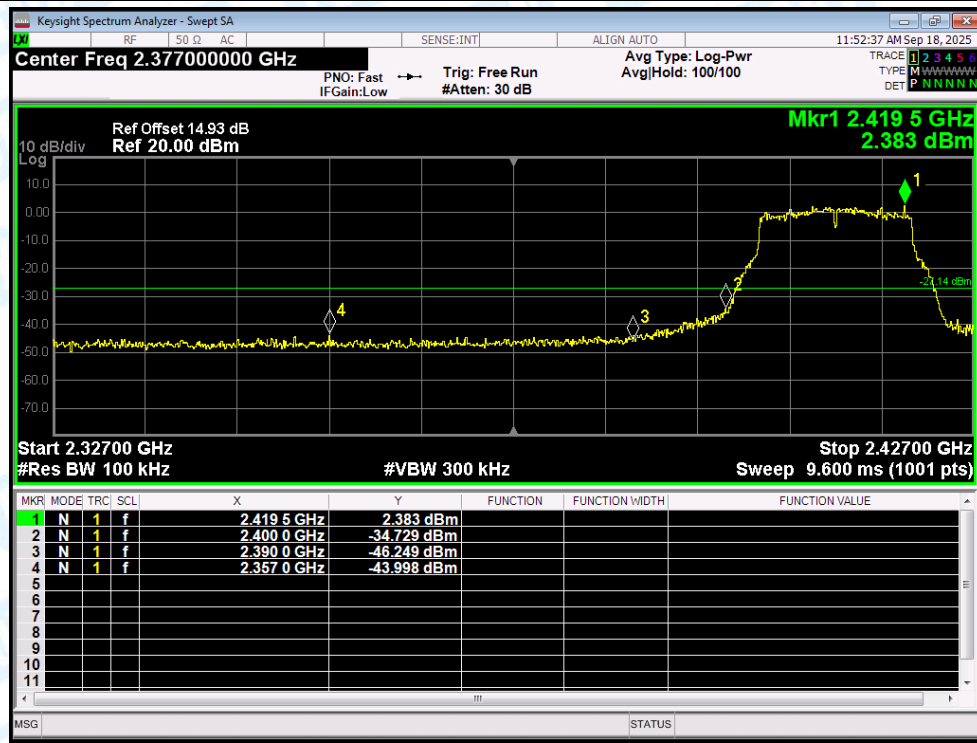
Band Edge NVNT g 2462MHz Ant1 Emission



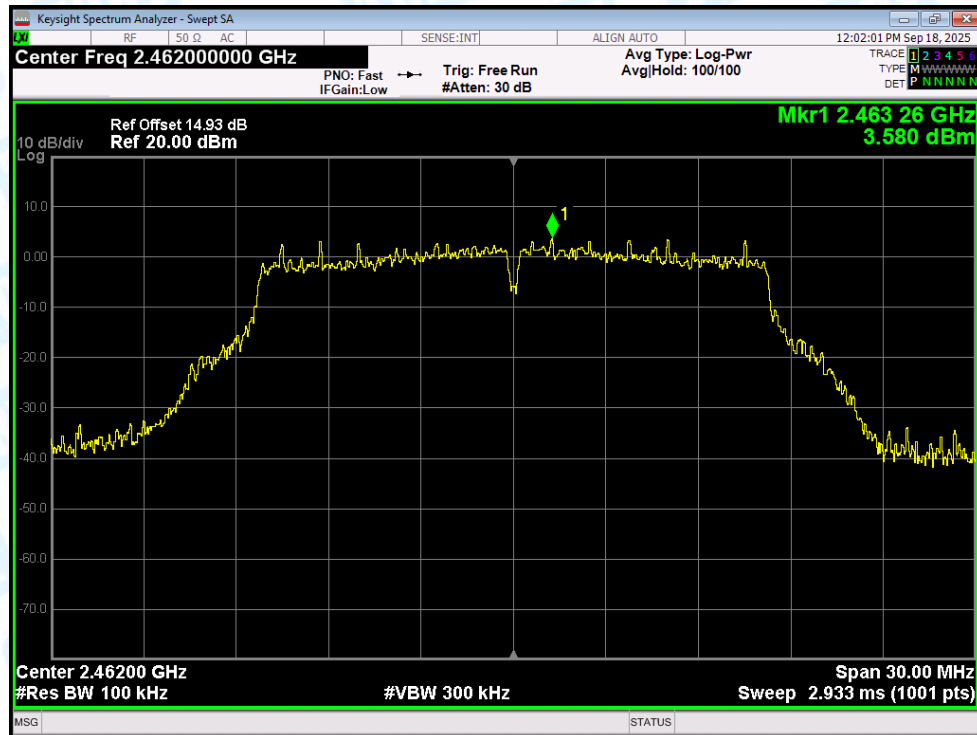
Band Edge NVNT g 2412MHz Ant2 Ref



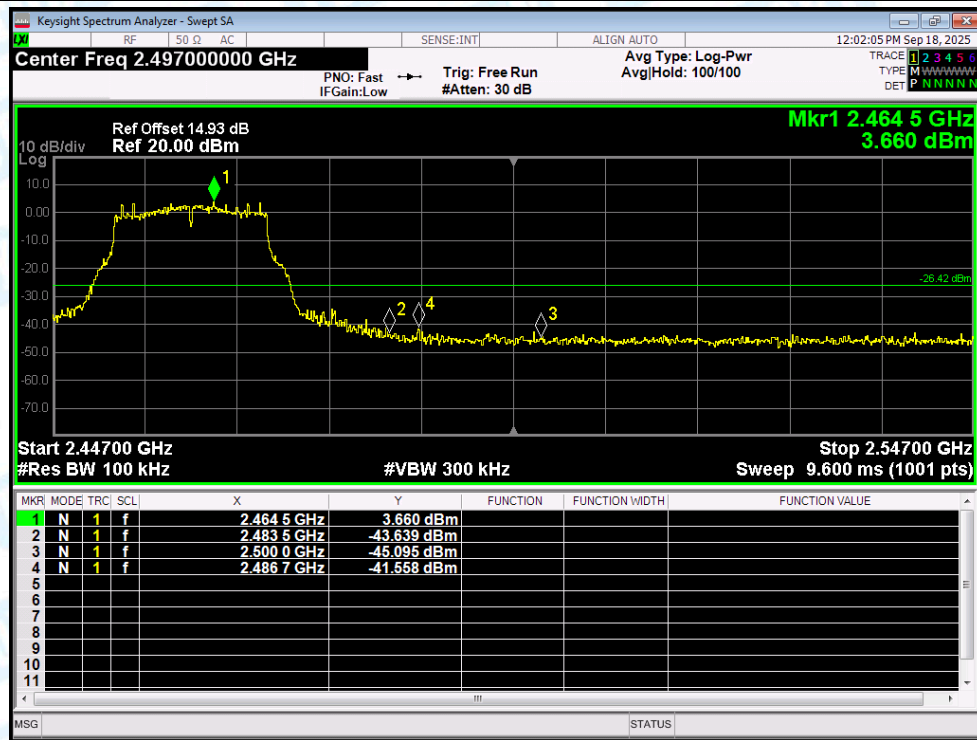
Band Edge NVNT g 2412MHz Ant2 Emission



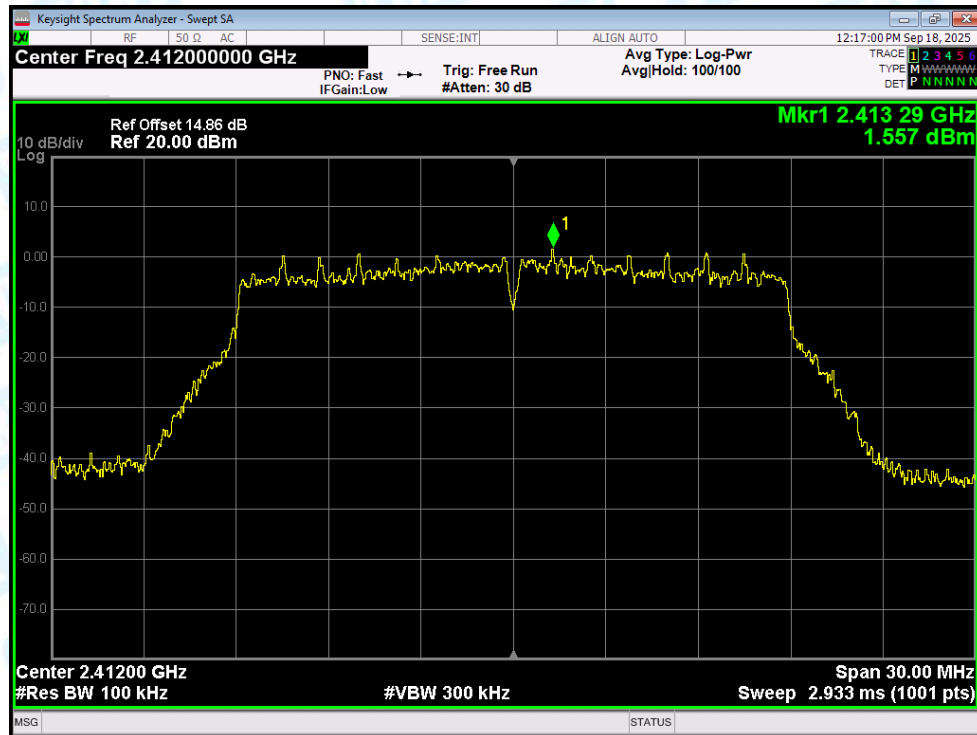
Band Edge NVNT g 2462MHz Ant2 Ref



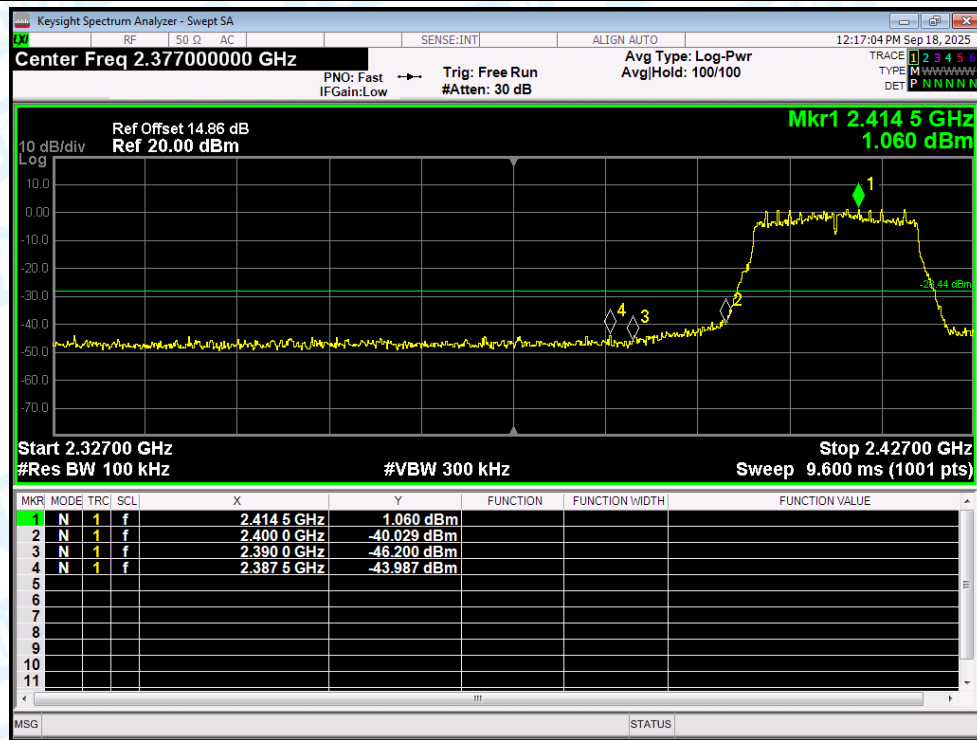
Band Edge NVNT g 2462MHz Ant2 Emission



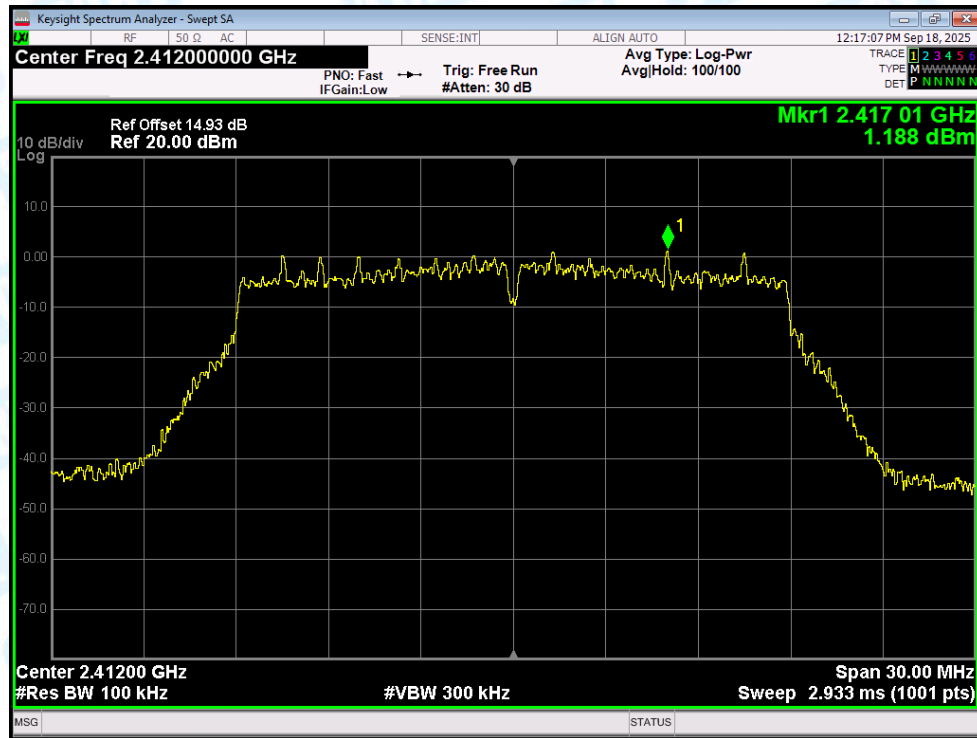
Band Edge NVNT n(HT20) 2412MHz Ant1 Ref



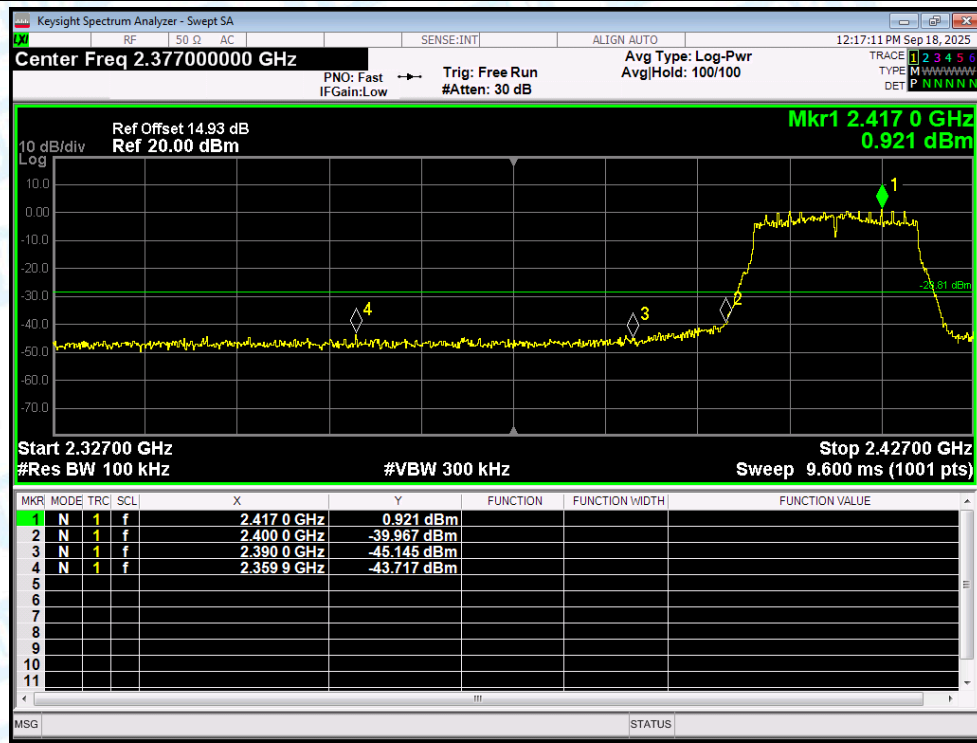
Band Edge NVNT n(HT20) 2412MHz Ant1 Emission



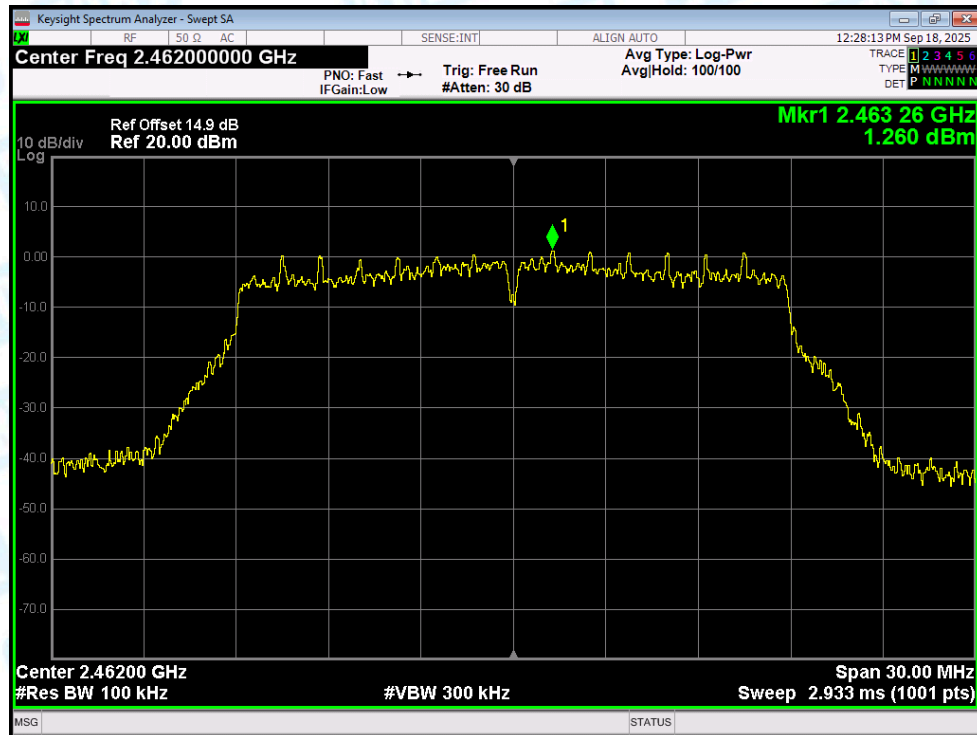
Band Edge NVNT n(HT20) 2412MHz Ant2 Ref



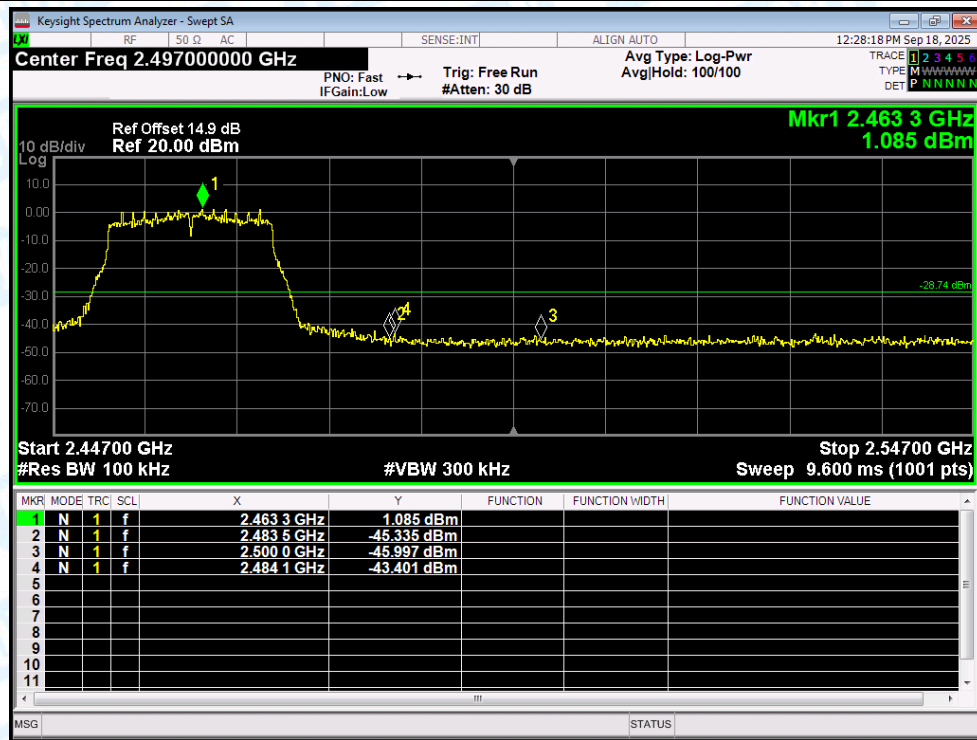
Band Edge NVNT n(HT20) 2412MHz Ant2 Emission



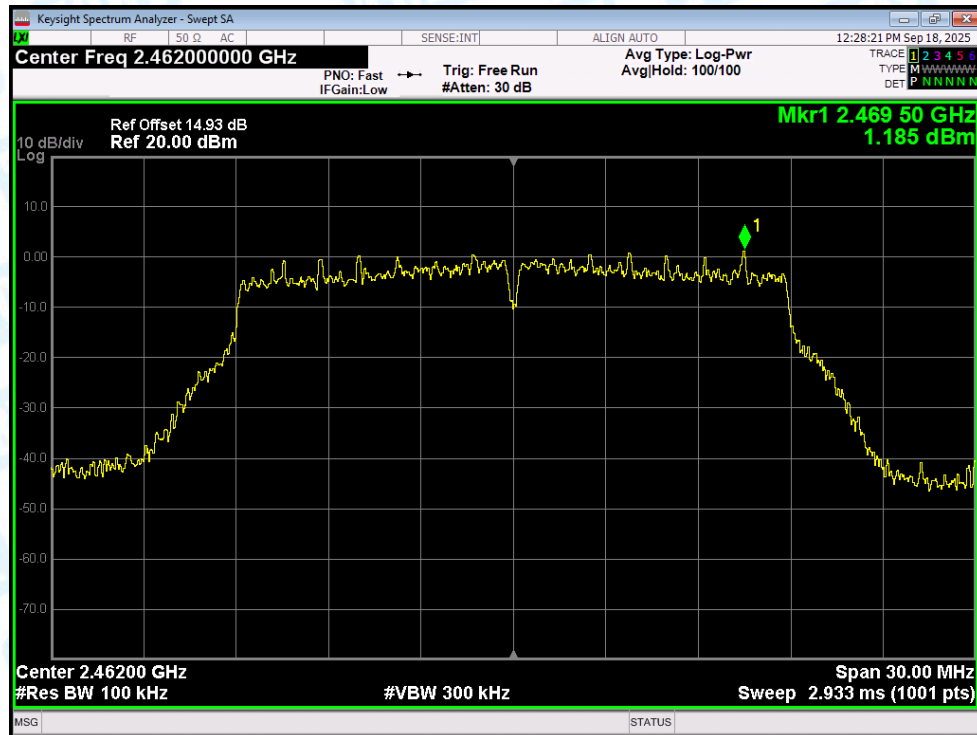
Band Edge NVNT n(HT20) 2462MHz Ant1 Ref



Band Edge NVNT n(HT20) 2462MHz Ant1 Emission



Band Edge NVNT n(HT20) 2462MHz Ant2 Ref



Band Edge NVNT n(HT20) 2462MHz Ant2 Emission

