

RF Test Data for 2.4G WiFi (Conducted Measurements)

General Description of EUT	
Product Name:	Wireless Network Video Recorder
Test Model:	K8210-W6-CE-1
Sample ID:	HC-C-202407-0153-01-02#
Environmental Conditions	
Temperature:	25°C
Relative Humidity:	55%
Test Voltage:	DC 3.8V
Test Engineer:	ZKn Zhou
Note: For a more detailed features description, please refer to the report TBR-C-202407-0153-2 The report only show the worst case data.	

Contents

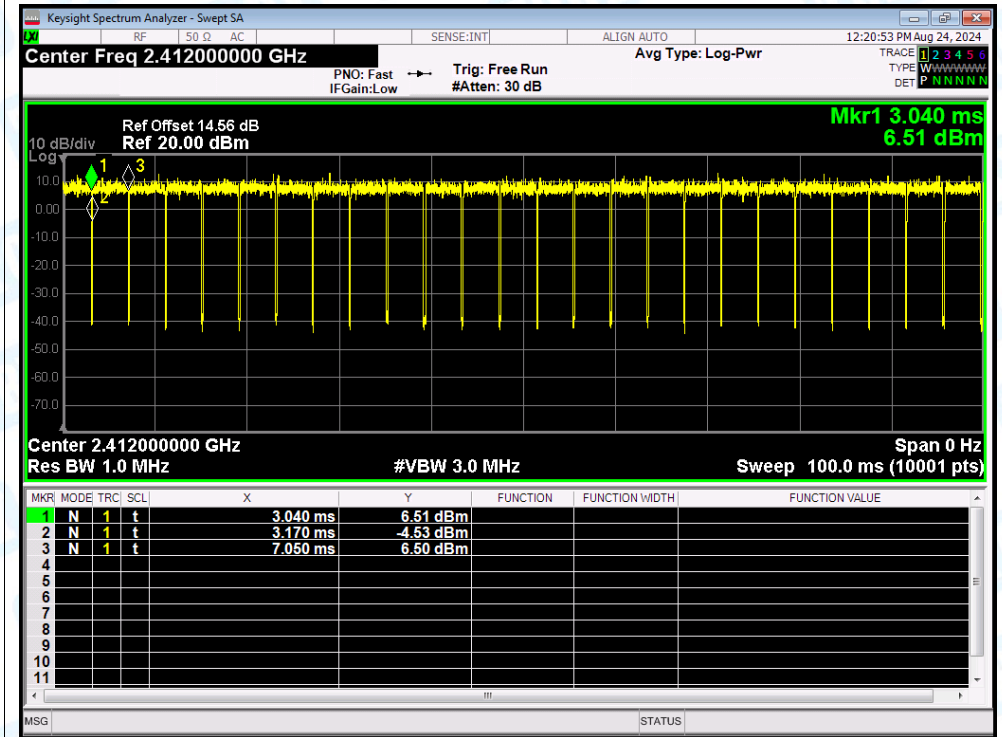
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1. Duty Cycle

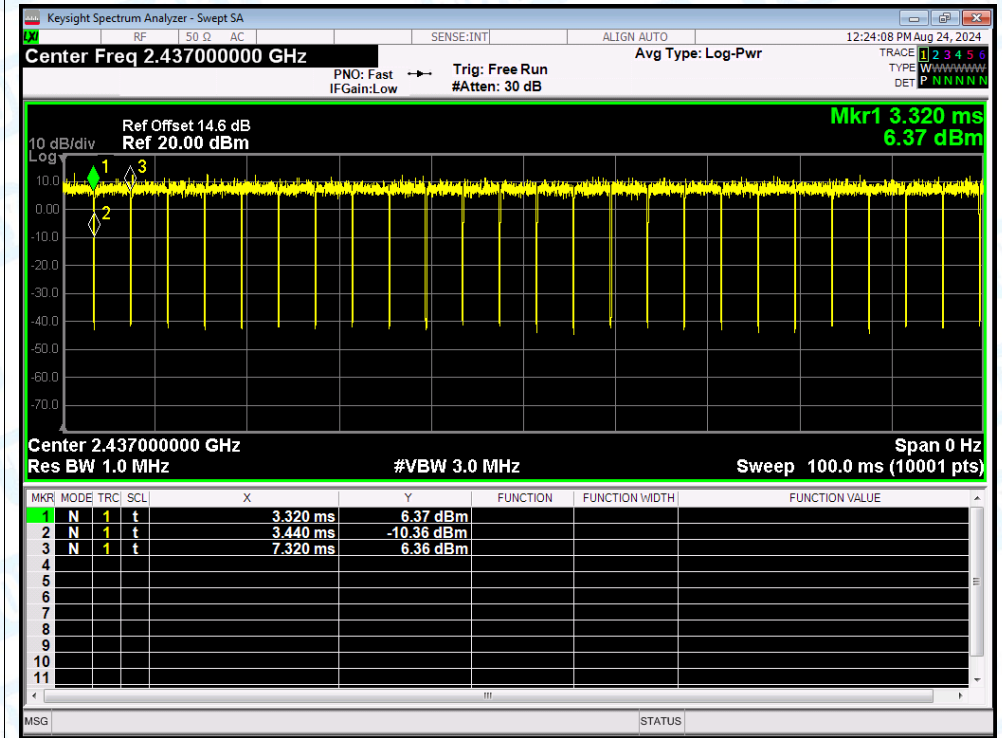
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	ax(VHT20)	2412	Ant3	96.76	0.14	0.26
NVNT	ax(VHT20)	2437	Ant3	97	0.13	0.26
NVNT	ax(VHT20)	2462	Ant3	96.75	0.14	0.26
NVNT	ax(VHT40)	2422	Ant3	97.22	0.12	0.2
NVNT	ax(VHT40)	2437	Ant3	97.22	0.12	0.2
NVNT	ax(VHT40)	2452	Ant3	96.64	0.15	0.2
NVNT	b	2412	Ant3	97.68	0.1	0.12
NVNT	b	2437	Ant3	97.79	0.1	0.12
NVNT	b	2462	Ant3	98.48	0.07	0.12
NVNT	g	2412	Ant3	89.1	0.5	0.72
NVNT	g	2437	Ant3	88.61	0.53	0.71
NVNT	g	2462	Ant3	91.5	0.39	0.71
NVNT	n(HT20)	2412	Ant3	96.4	0.16	0.2
NVNT	n(HT20)	2437	Ant3	96.22	0.17	0.2
NVNT	n(HT20)	2462	Ant3	97.14	0.13	0.2
NVNT	n(HT40)	2422	Ant3	96.26	0.17	0.2
NVNT	n(HT40)	2437	Ant3	97.41	0.11	0.2
NVNT	n(HT40)	2452	Ant3	95.88	0.18	0.2

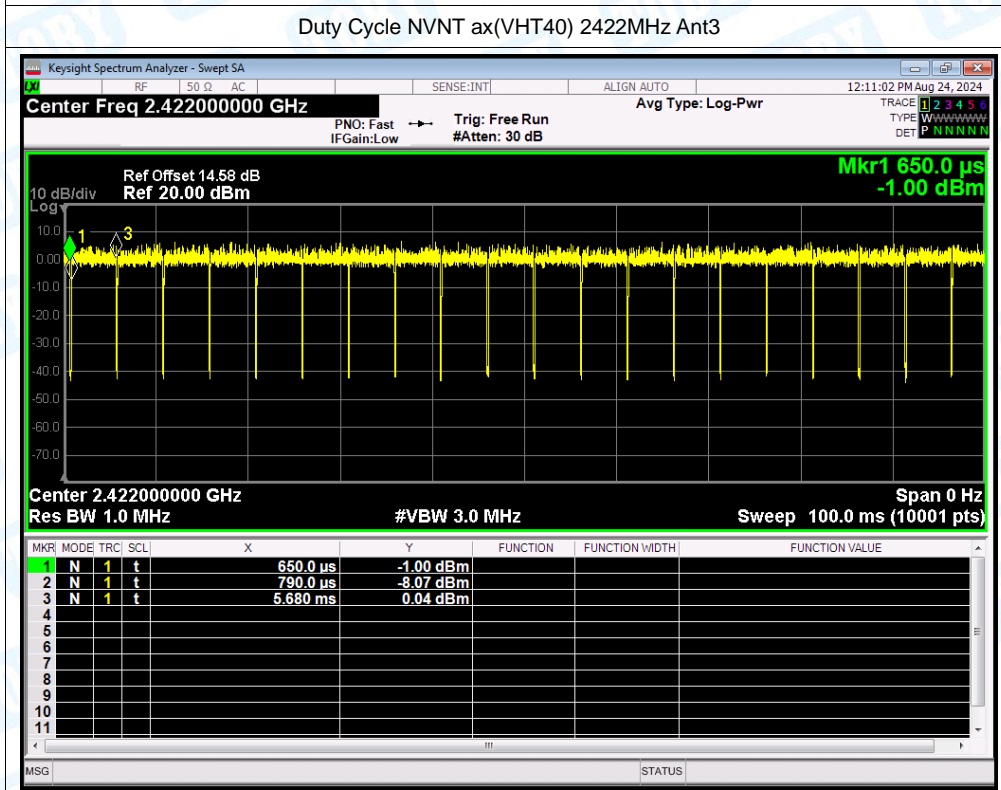
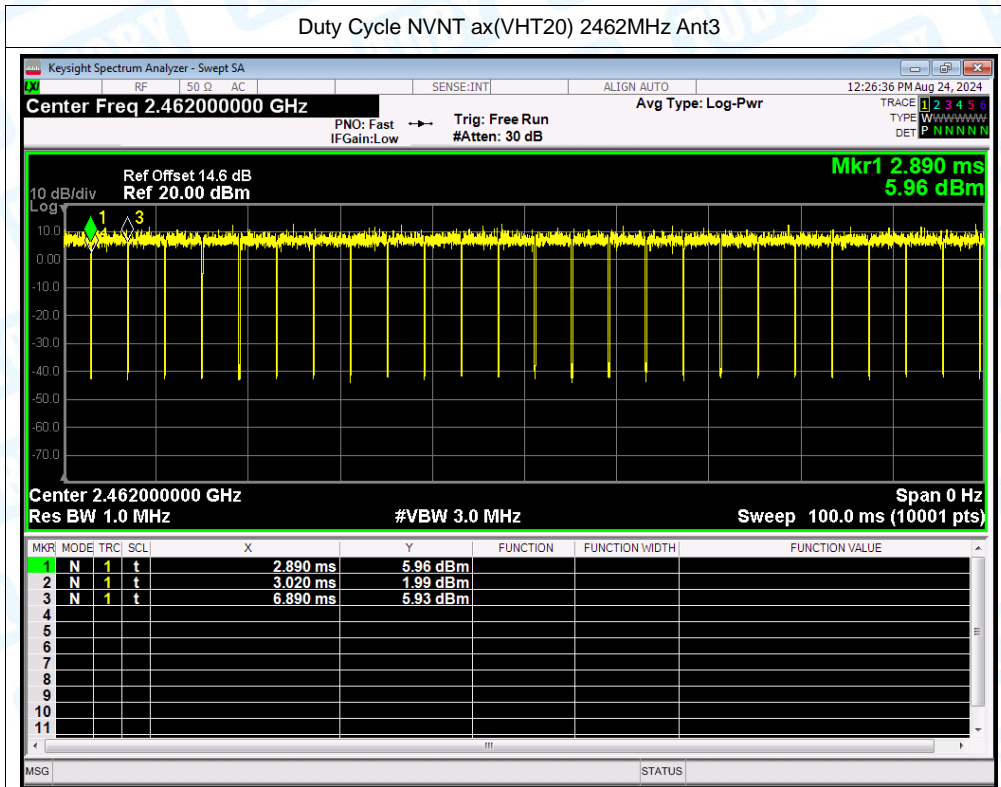
Test Graphs

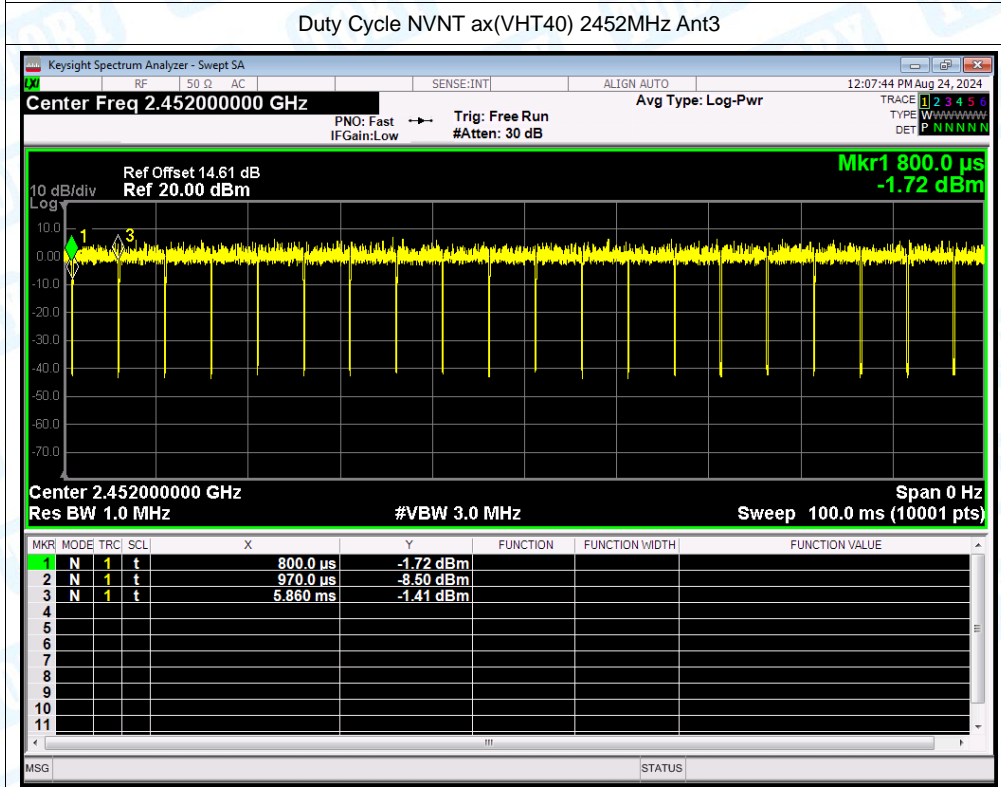
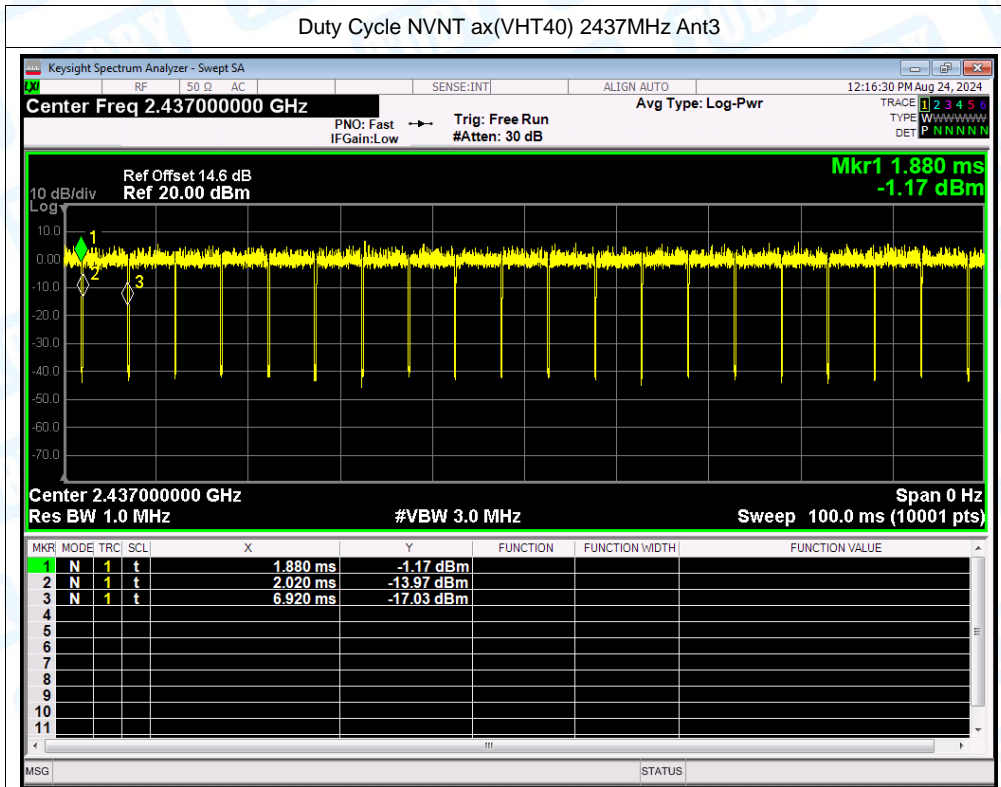
Duty Cycle NVNT ax(VHT20) 2412MHz Ant3



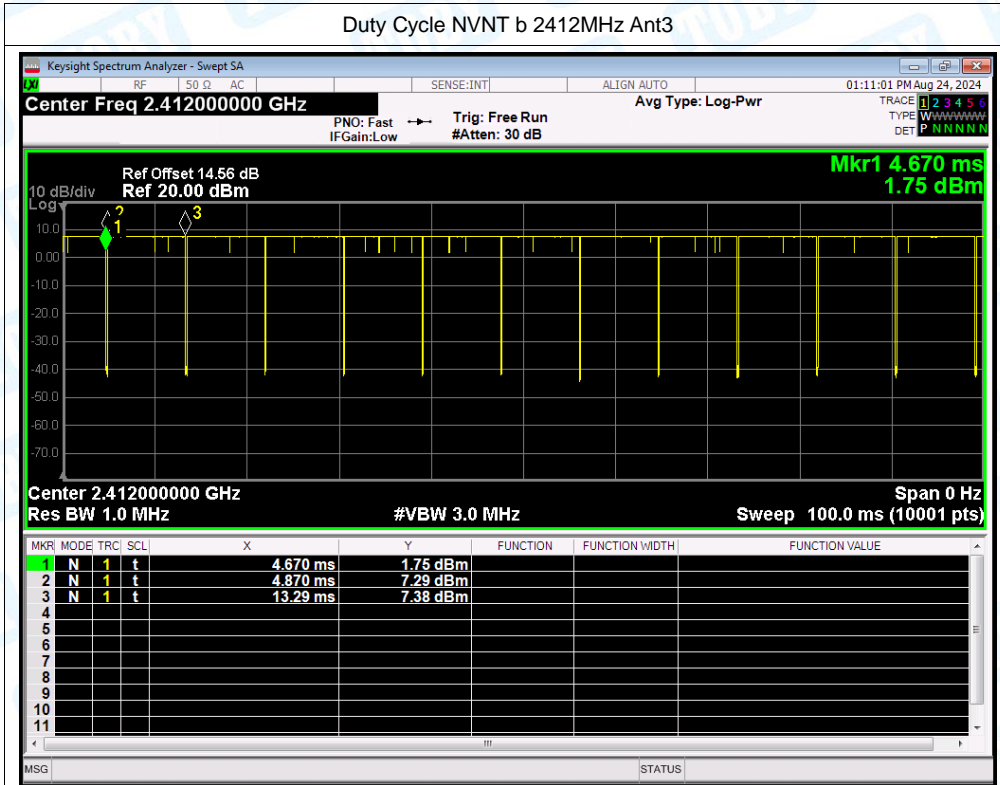
Duty Cycle NVNT ax(VHT20) 2437MHz Ant3



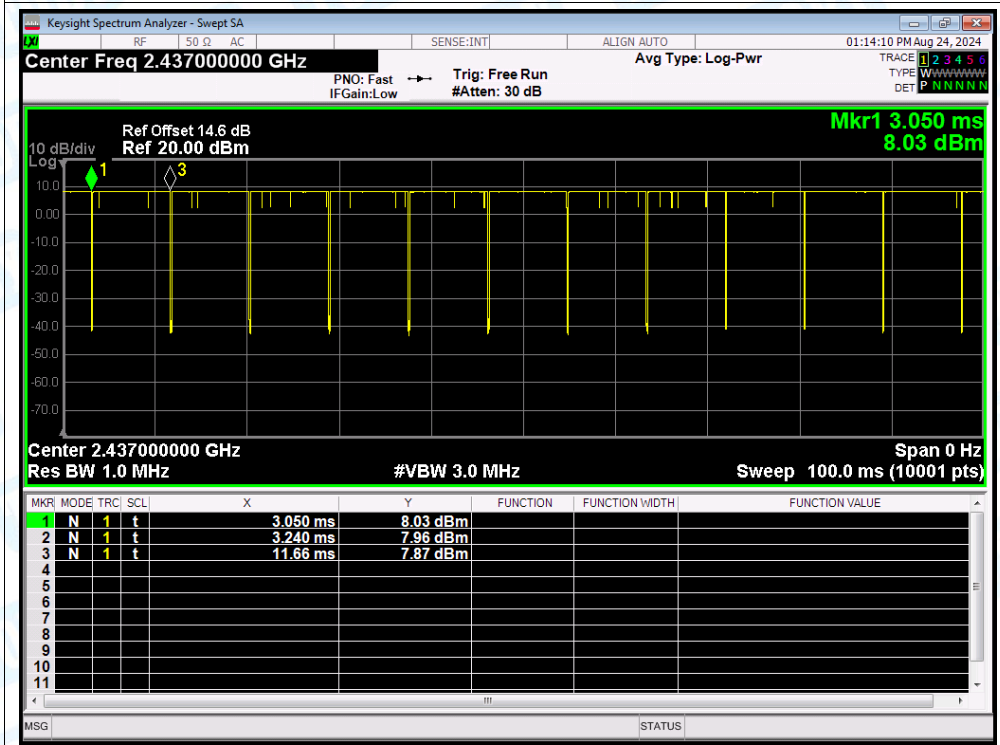




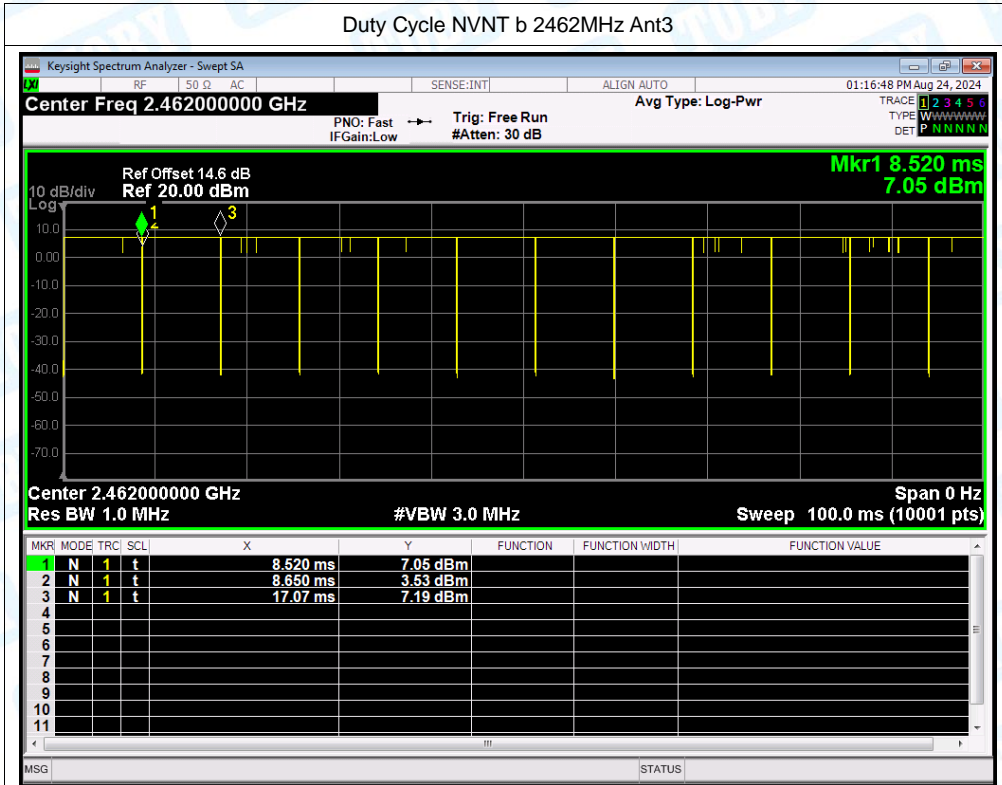
Duty Cycle NVNT b 2412MHz Ant3



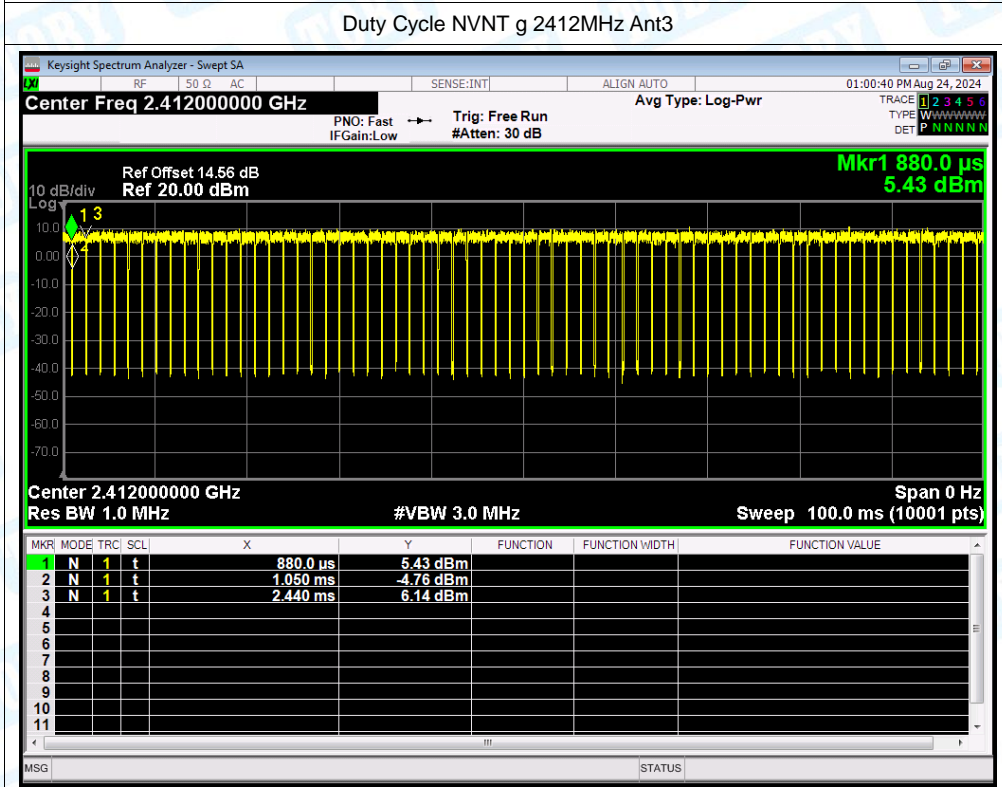
Duty Cycle NVNT b 2437MHz Ant3



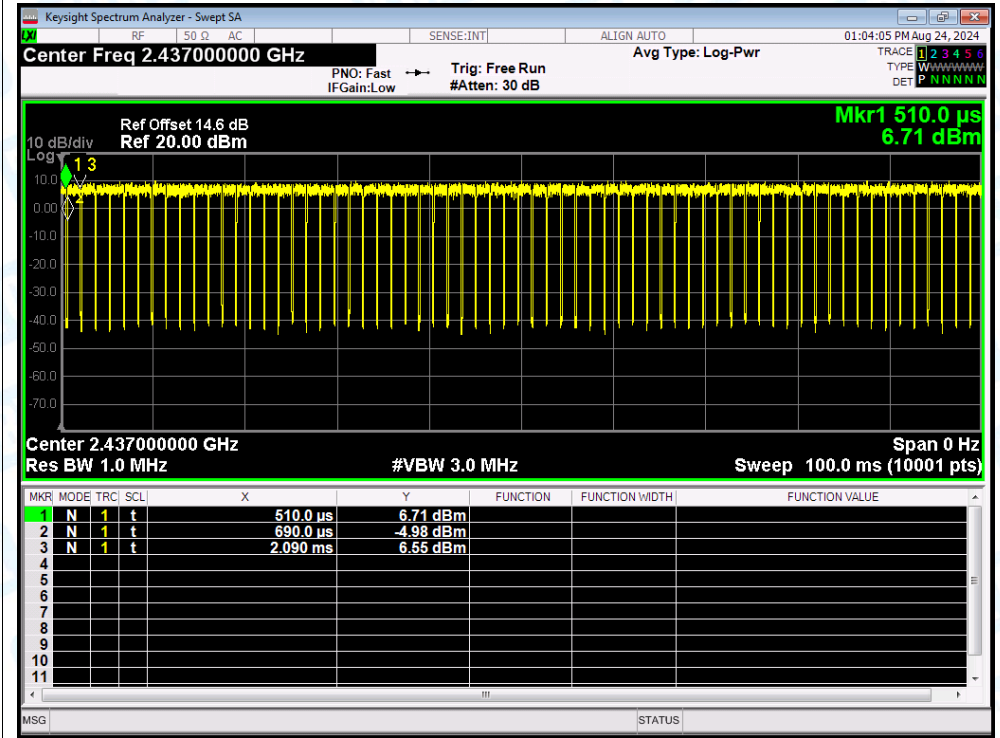
Duty Cycle NVNT b 2462MHz Ant3



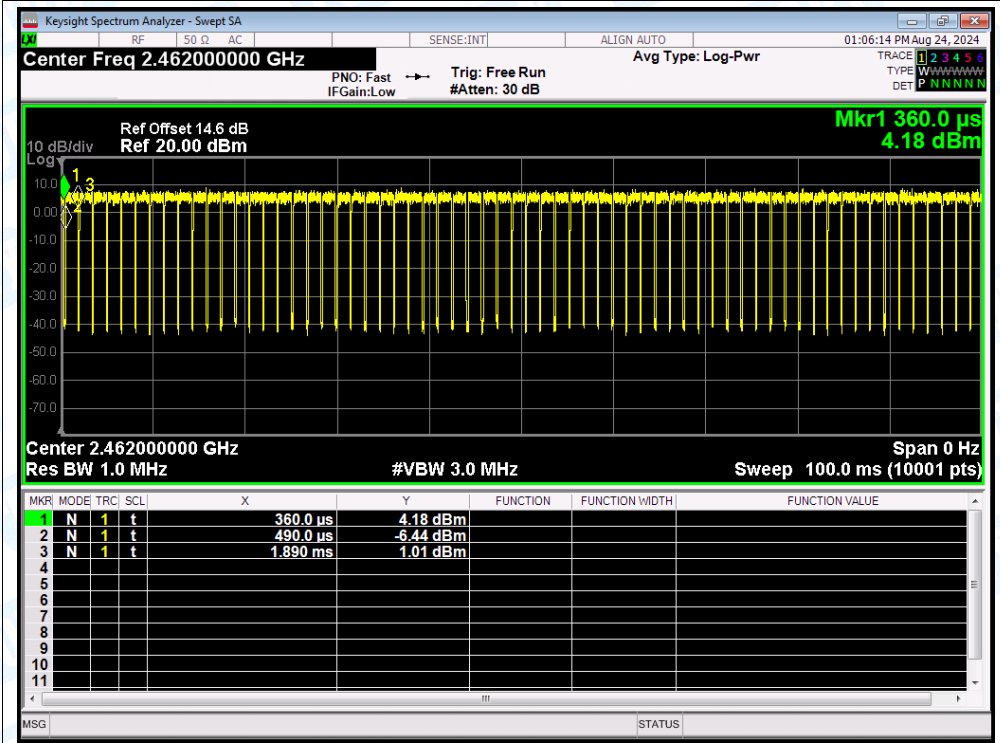
Duty Cycle NVNT g 2412MHz Ant3



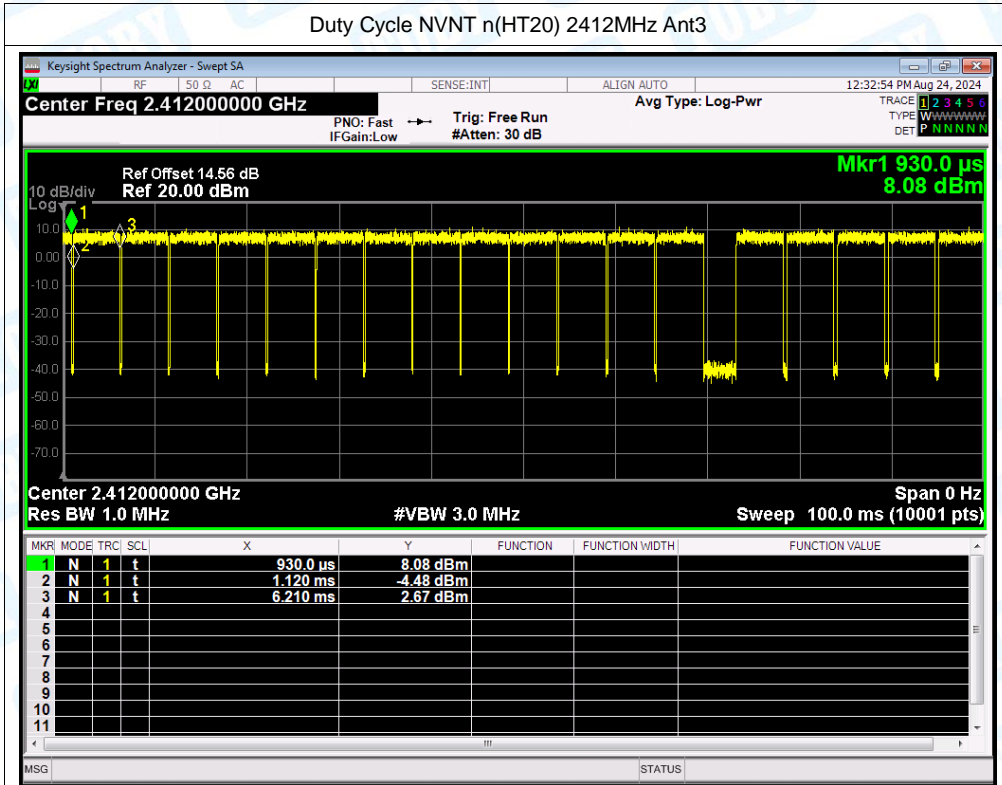
Duty Cycle NVNT g 2437MHz Ant3



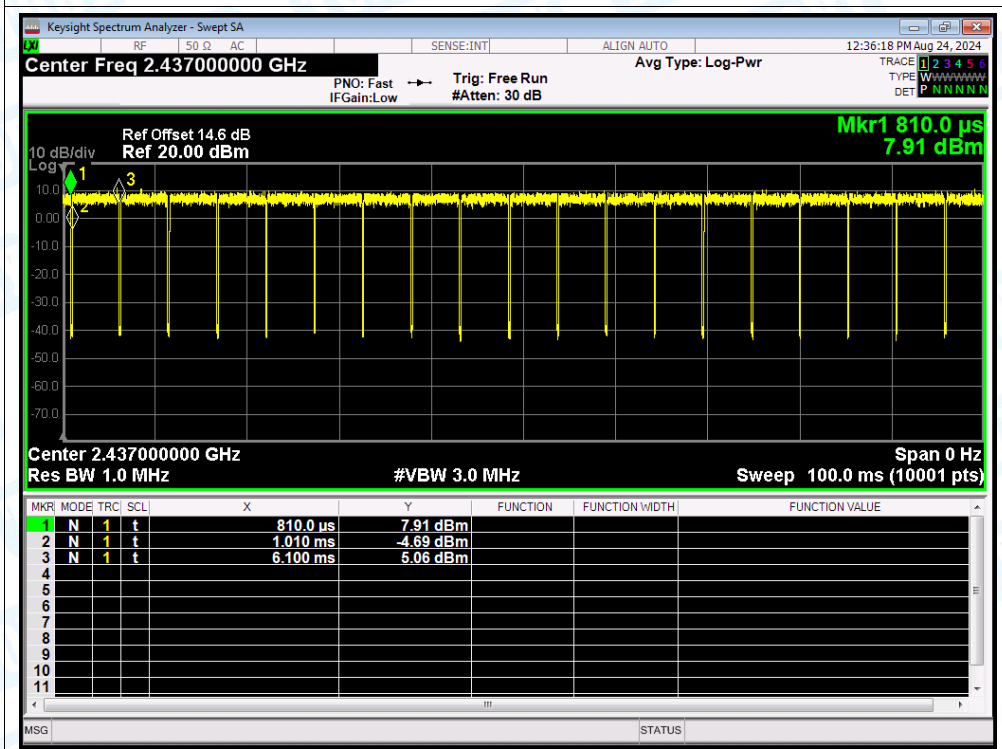
Duty Cycle NVNT g 2462MHz Ant3



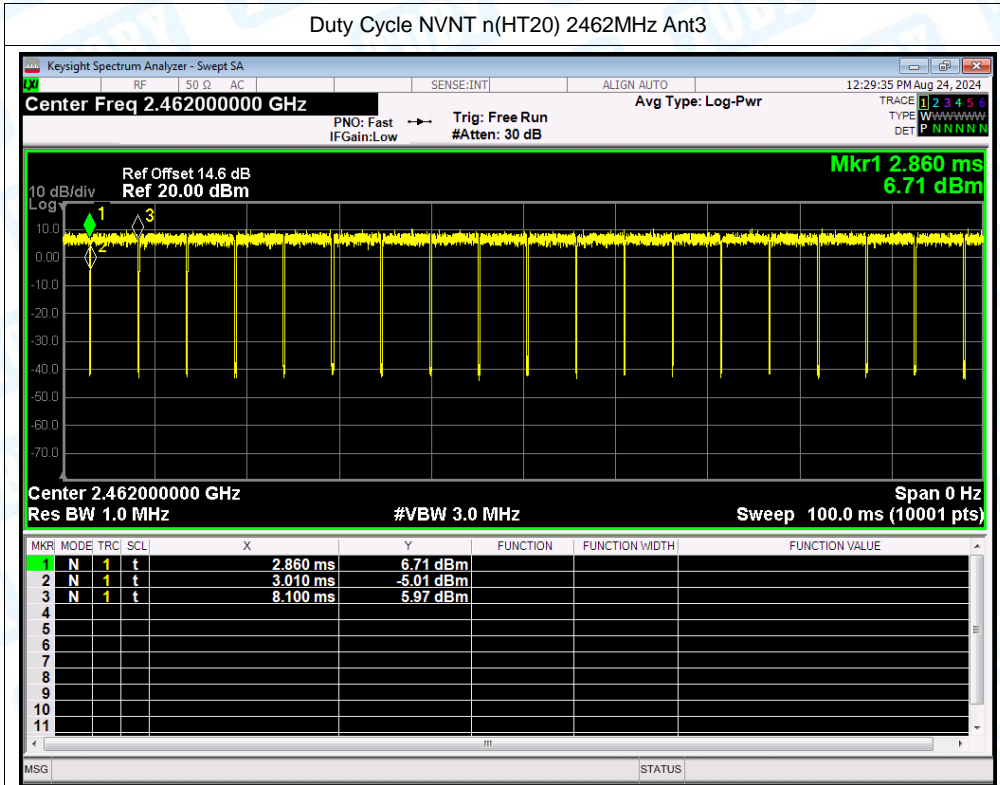
Duty Cycle NVNT n(HT20) 2412MHz Ant3



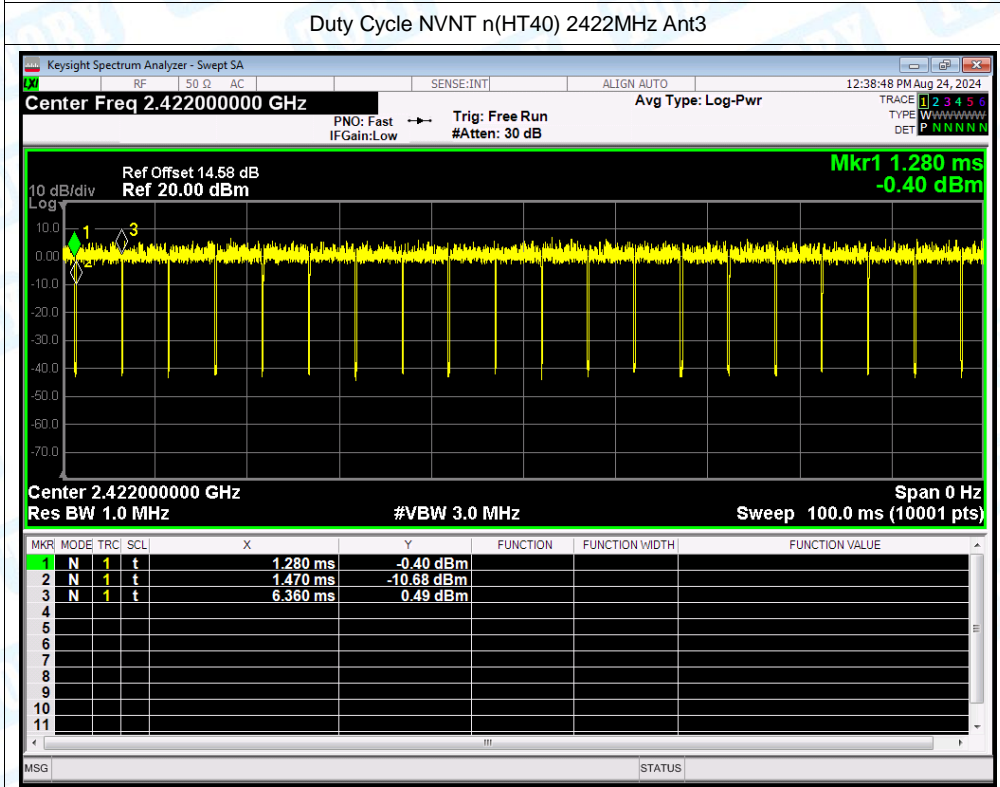
Duty Cycle NVNT n(HT20) 2437MHz Ant3



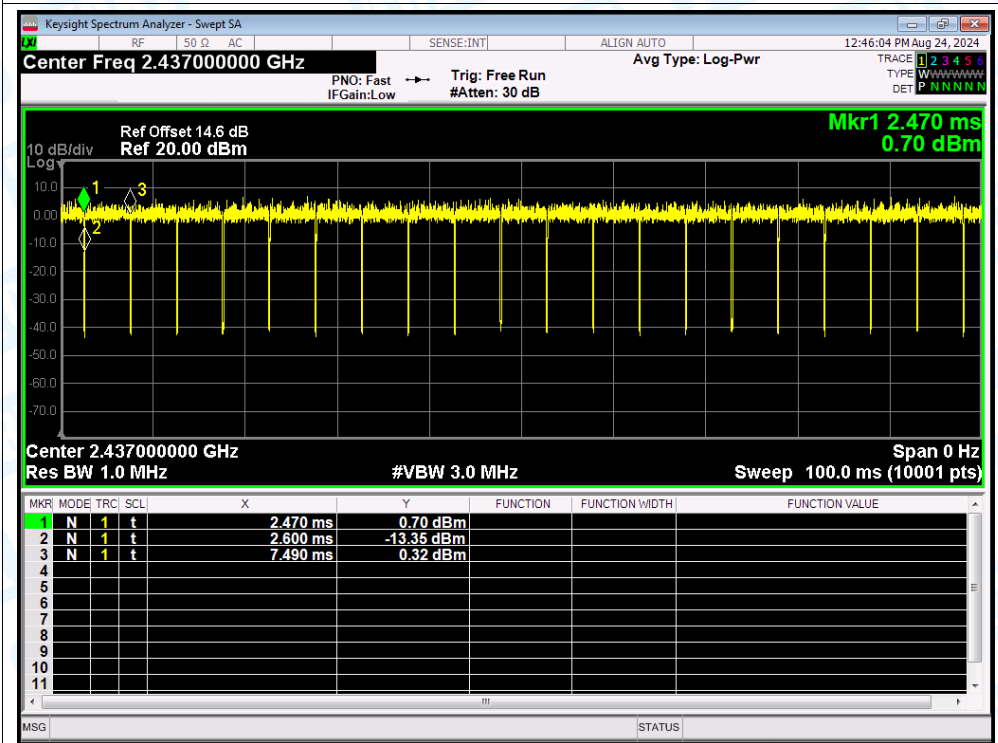
Duty Cycle NVNT n(HT20) 2462MHz Ant3



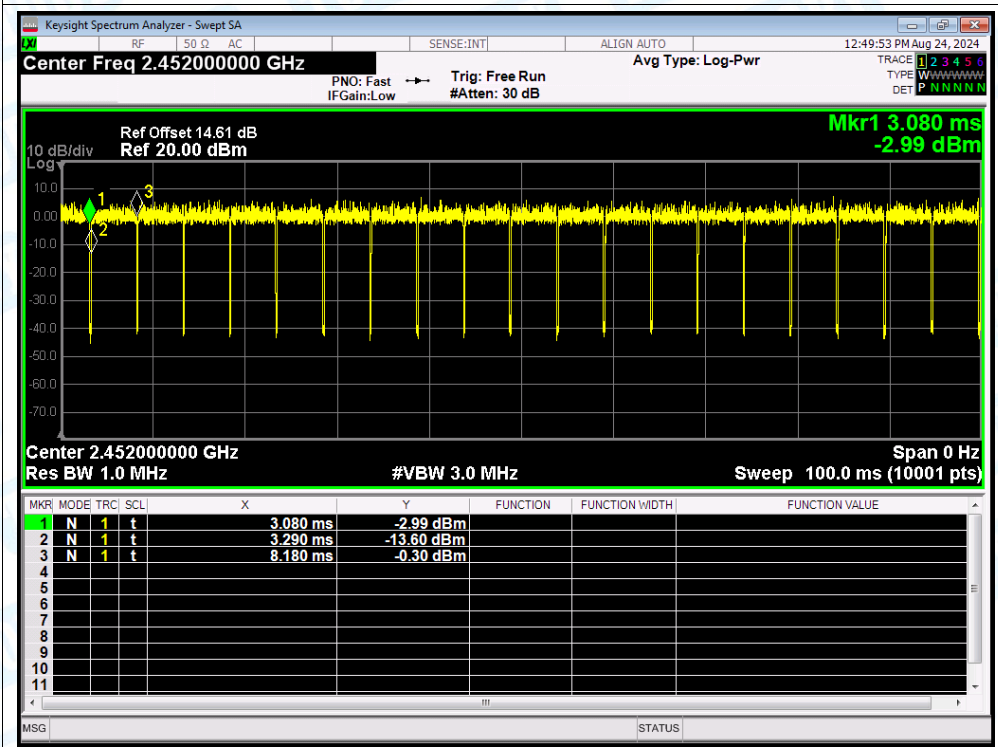
Duty Cycle NVNT n(HT40) 2422MHz Ant3



Duty Cycle NVNT n(HT40) 2437MHz Ant3



Duty Cycle NVNT n(HT40) 2452MHz Ant3



2. Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	ax(VHT20)	2412	Ant3	13.3	30	Pass
NVNT	ax(VHT20)	2437	Ant3	13.09	30	Pass
NVNT	ax(VHT20)	2462	Ant3	12.63	30	Pass
NVNT	ax(VHT40)	2422	Ant3	13.17	30	Pass
NVNT	ax(VHT40)	2437	Ant3	12.55	30	Pass
NVNT	ax(VHT40)	2452	Ant3	12.86	30	Pass
NVNT	b	2412	Ant3	13.11	30	Pass
NVNT	b	2437	Ant3	13.59	30	Pass
NVNT	b	2462	Ant3	12.64	30	Pass
NVNT	g	2412	Ant3	12.54	30	Pass
NVNT	g	2437	Ant3	13.23	30	Pass
NVNT	g	2462	Ant3	13.18	30	Pass
NVNT	n(HT20)	2412	Ant3	13.41	30	Pass
NVNT	n(HT20)	2437	Ant3	13.25	30	Pass
NVNT	n(HT20)	2462	Ant3	12.79	30	Pass
NVNT	n(HT40)	2422	Ant3	12.78	30	Pass
NVNT	n(HT40)	2437	Ant3	13.04	30	Pass
NVNT	n(HT40)	2452	Ant3	12.89	30	Pass

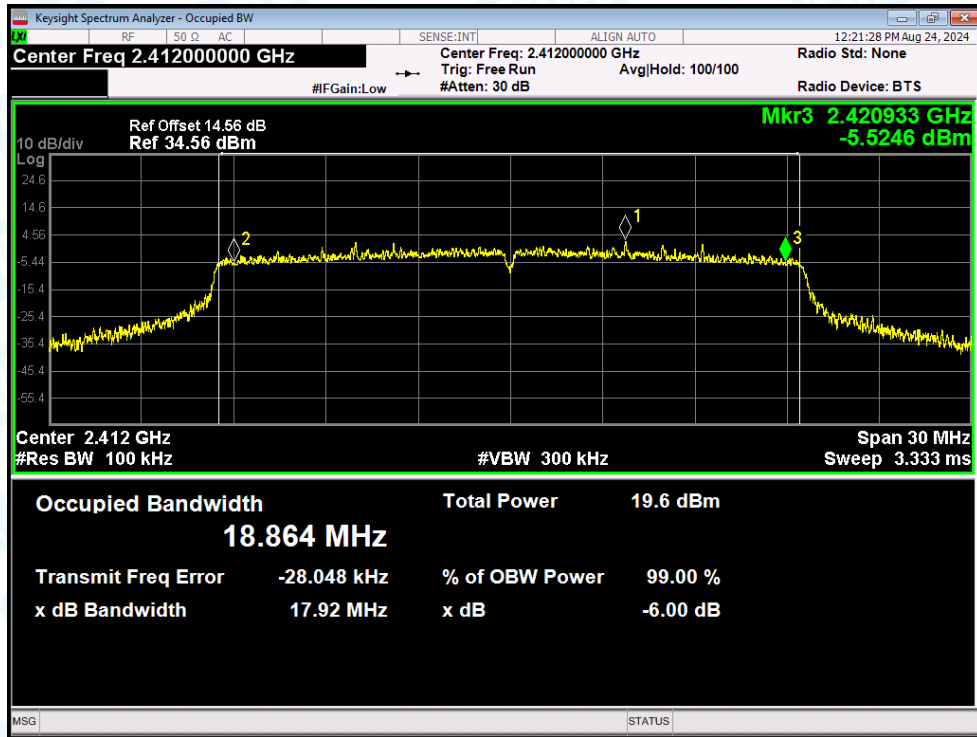
Note: The duty factor has been compensated into the result.

3.-6dB Bandwidth

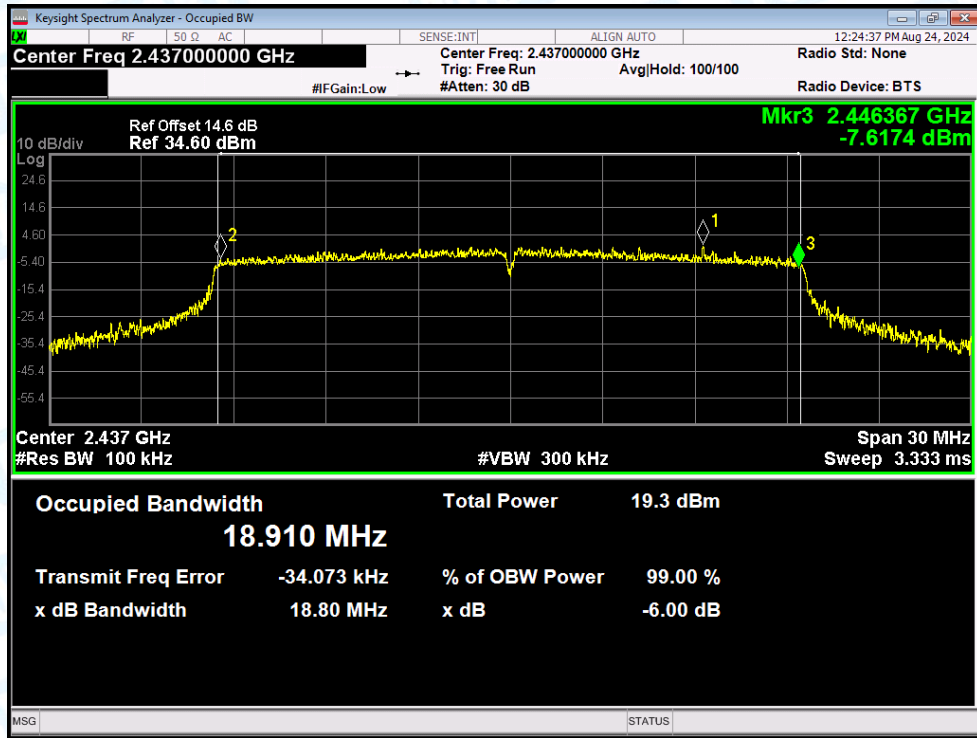
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	ax(VHT20)	2412	Ant3	17.92	0.5	Pass
NVNT	ax(VHT20)	2437	Ant3	18.8	0.5	Pass
NVNT	ax(VHT20)	2462	Ant3	17.19	0.5	Pass
NVNT	ax(VHT40)	2422	Ant3	33.77	0.5	Pass
NVNT	ax(VHT40)	2437	Ant3	33.82	0.5	Pass
NVNT	ax(VHT40)	2452	Ant3	35.37	0.5	Pass
NVNT	b	2412	Ant3	9.57	0.5	Pass
NVNT	b	2437	Ant3	9.6	0.5	Pass
NVNT	b	2462	Ant3	9.57	0.5	Pass
NVNT	g	2412	Ant3	15.99	0.5	Pass
NVNT	g	2437	Ant3	14.71	0.5	Pass
NVNT	g	2462	Ant3	15.44	0.5	Pass
NVNT	n(HT20)	2412	Ant3	17.52	0.5	Pass
NVNT	n(HT20)	2437	Ant3	16.15	0.5	Pass
NVNT	n(HT20)	2462	Ant3	17.6	0.5	Pass
NVNT	n(HT40)	2422	Ant3	33.52	0.5	Pass
NVNT	n(HT40)	2437	Ant3	30.43	0.5	Pass
NVNT	n(HT40)	2452	Ant3	33.53	0.5	Pass

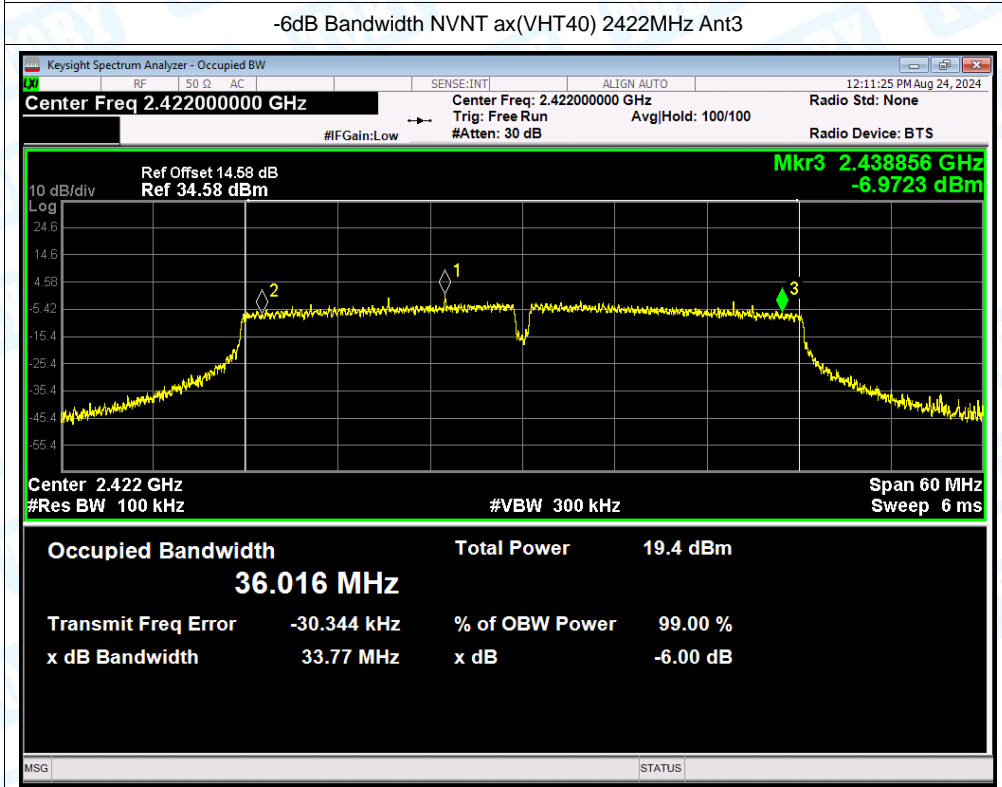
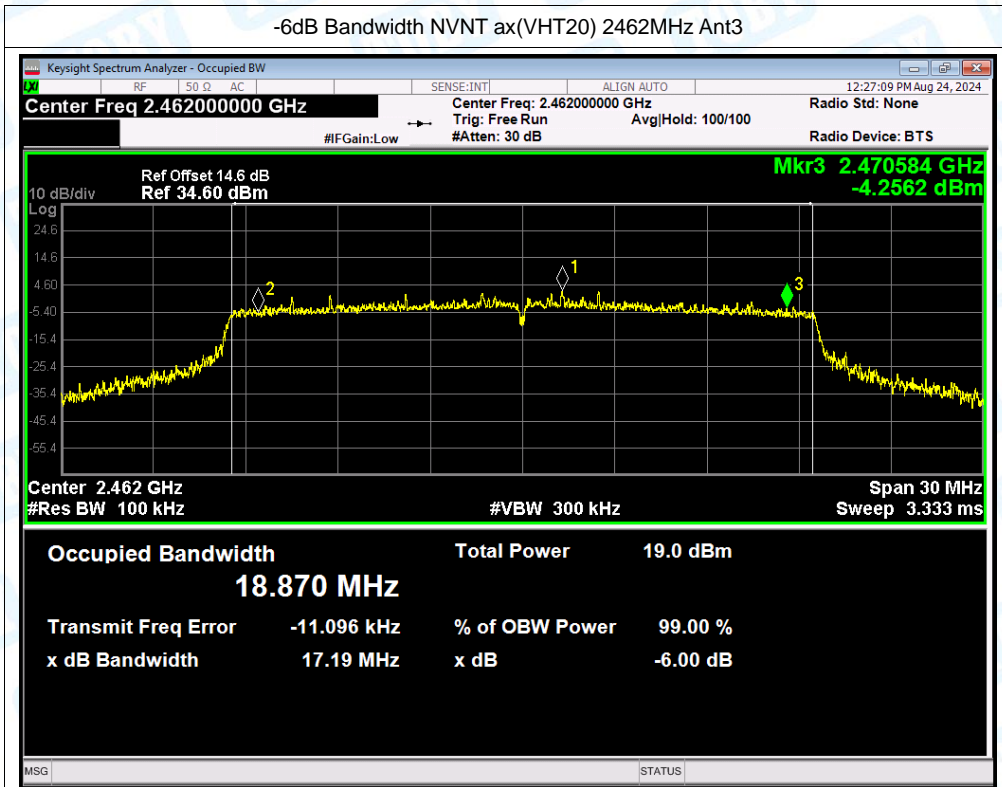
Test Graphs

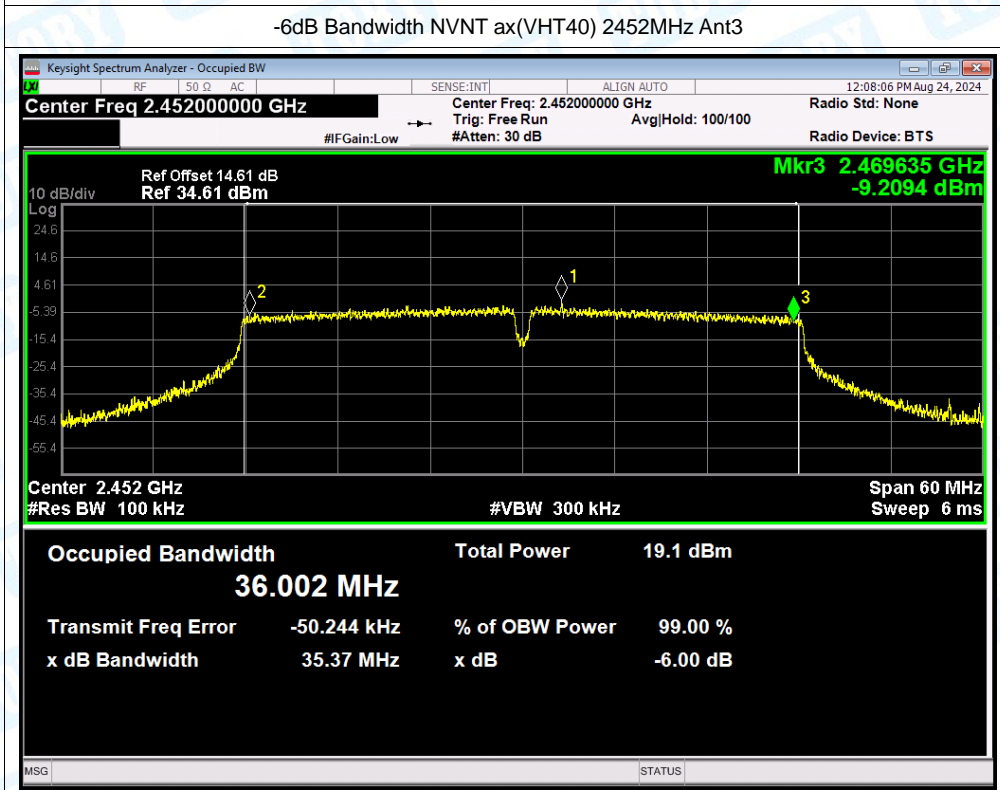
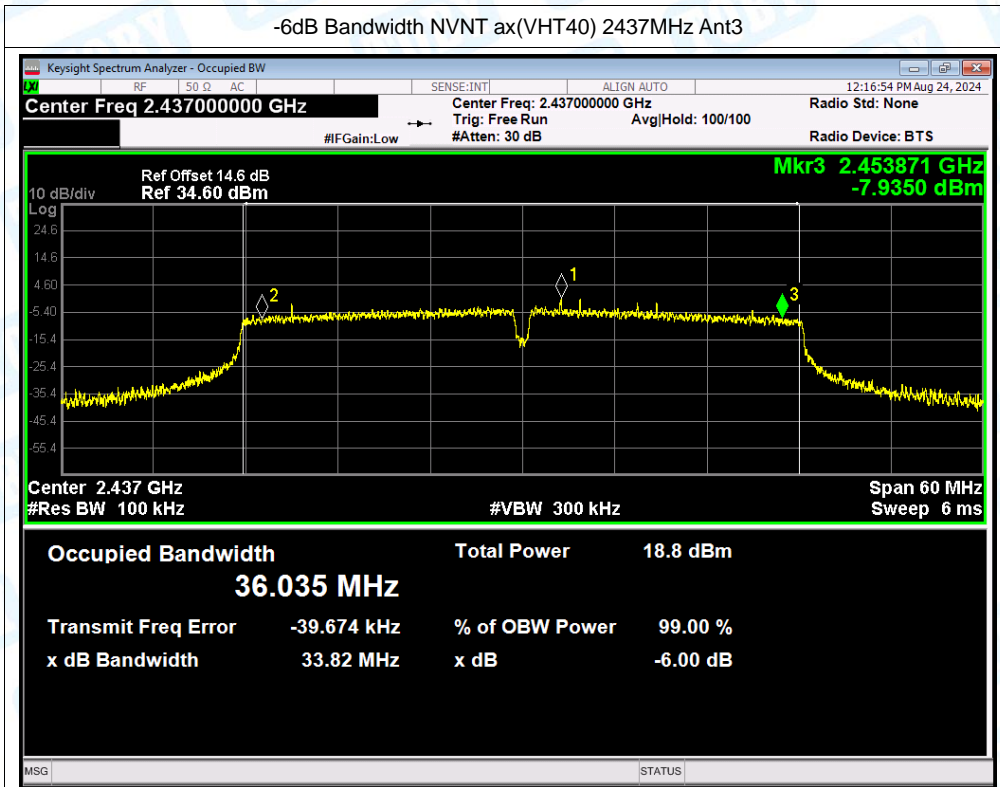
-6dB Bandwidth NVNT ax(VHT20) 2412MHz Ant3



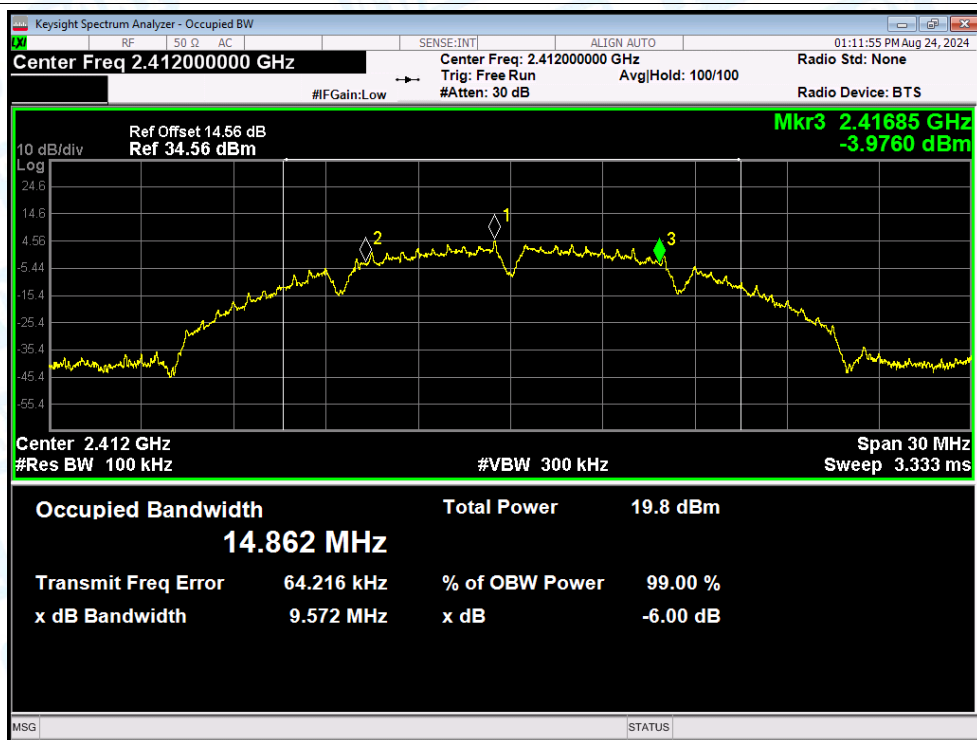
-6dB Bandwidth NVNT ax(VHT20) 2437MHz Ant3



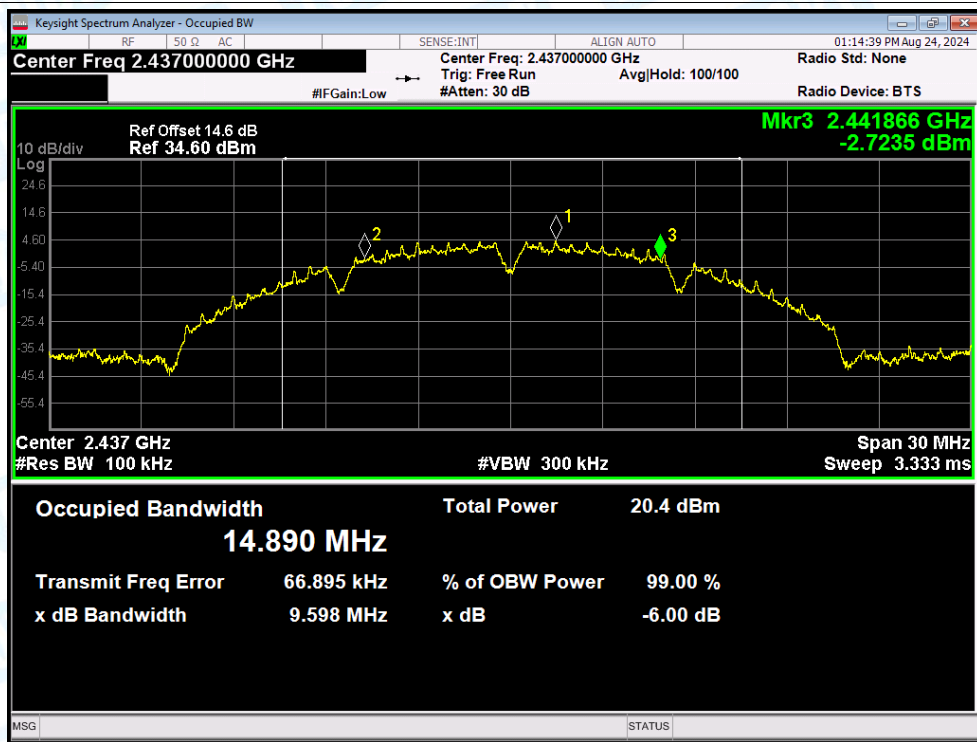




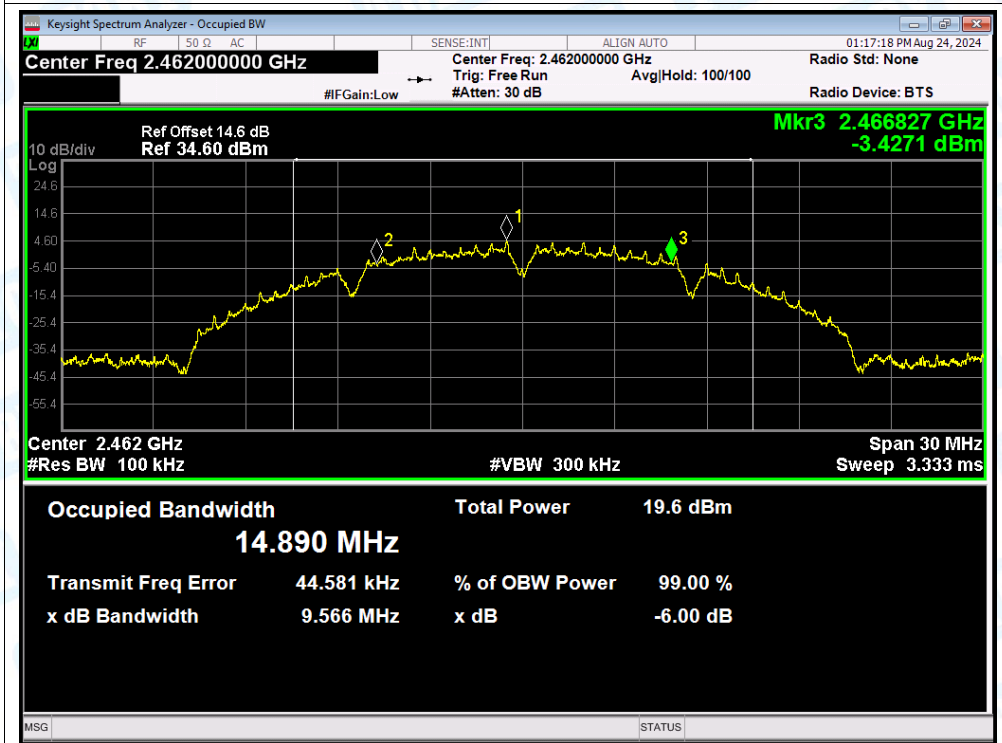
-6dB Bandwidth NVNT b 2412MHz Ant3



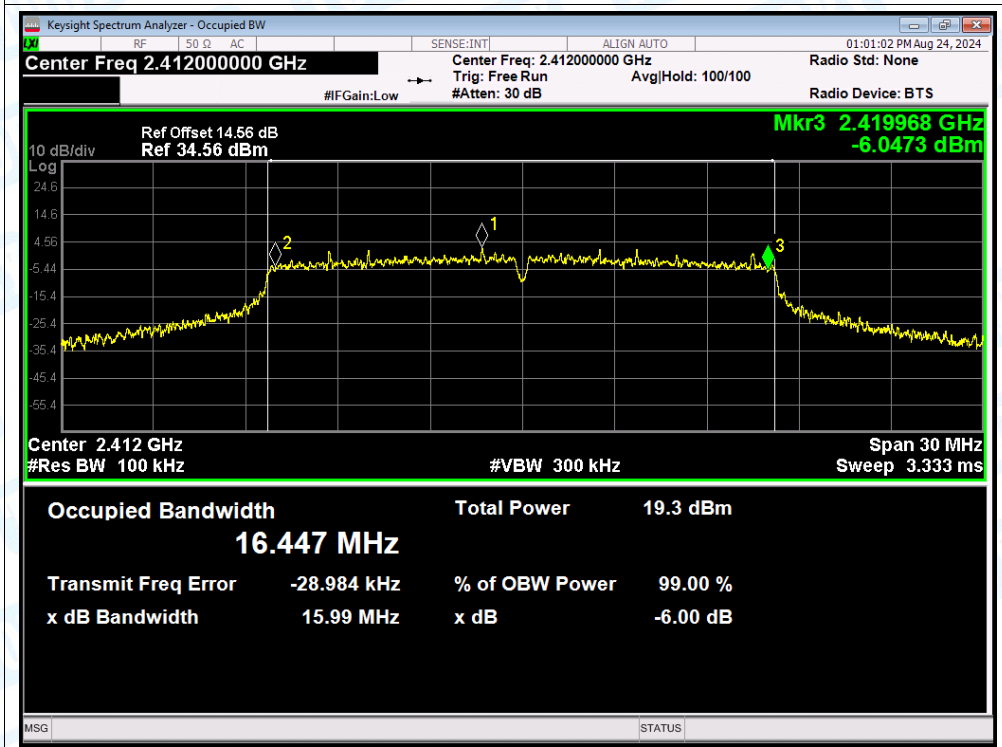
-6dB Bandwidth NVNT b 2437MHz Ant3



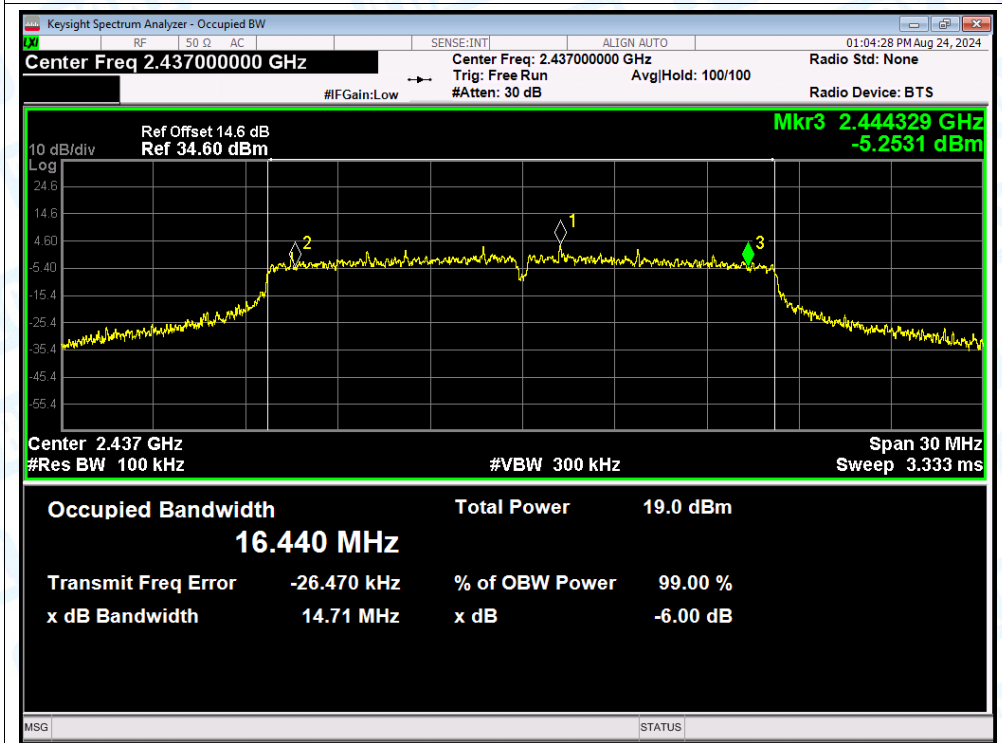
-6dB Bandwidth NVNT b 2462MHz Ant3



-6dB Bandwidth NVNT g 2412MHz Ant3

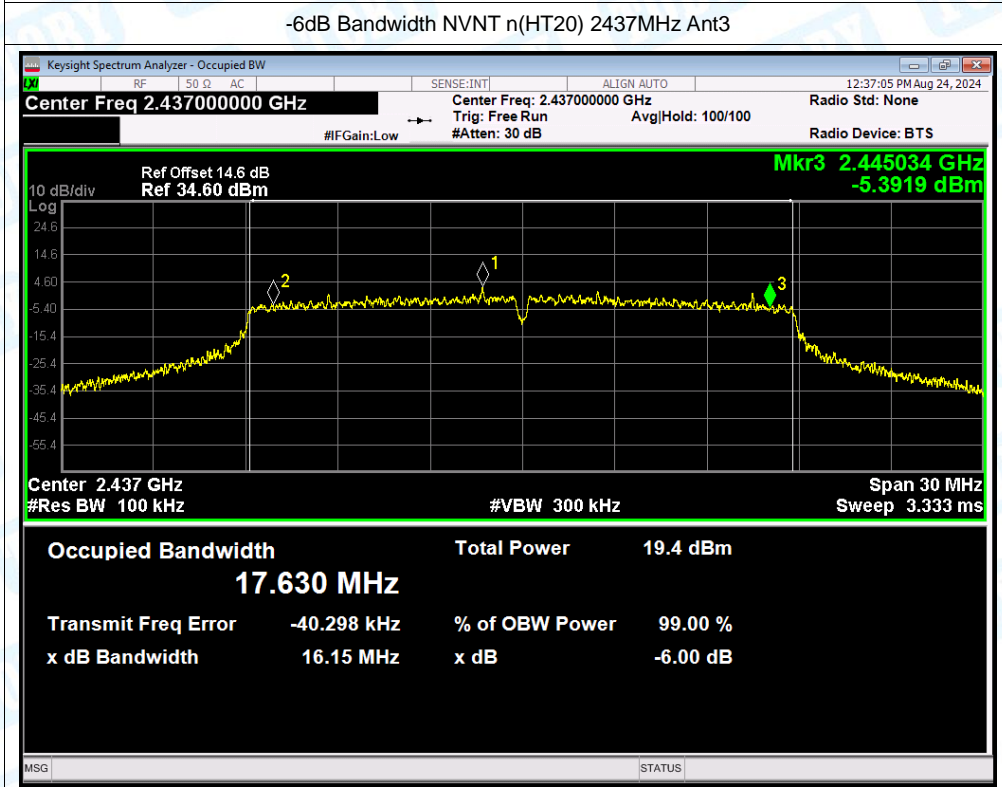
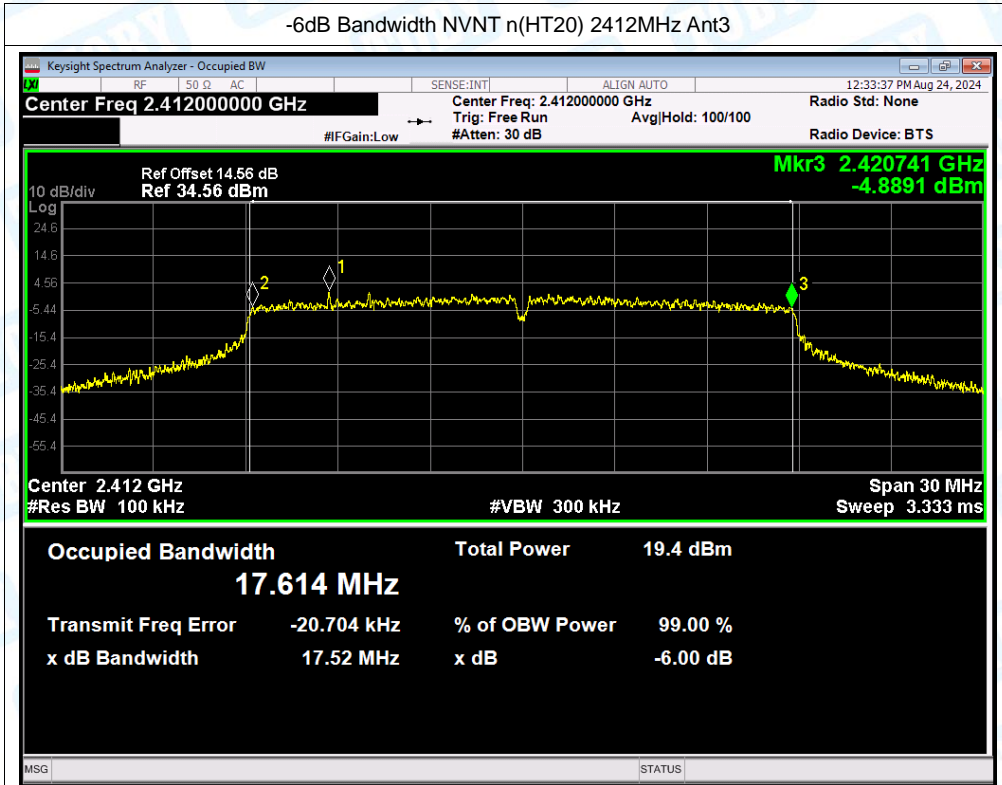


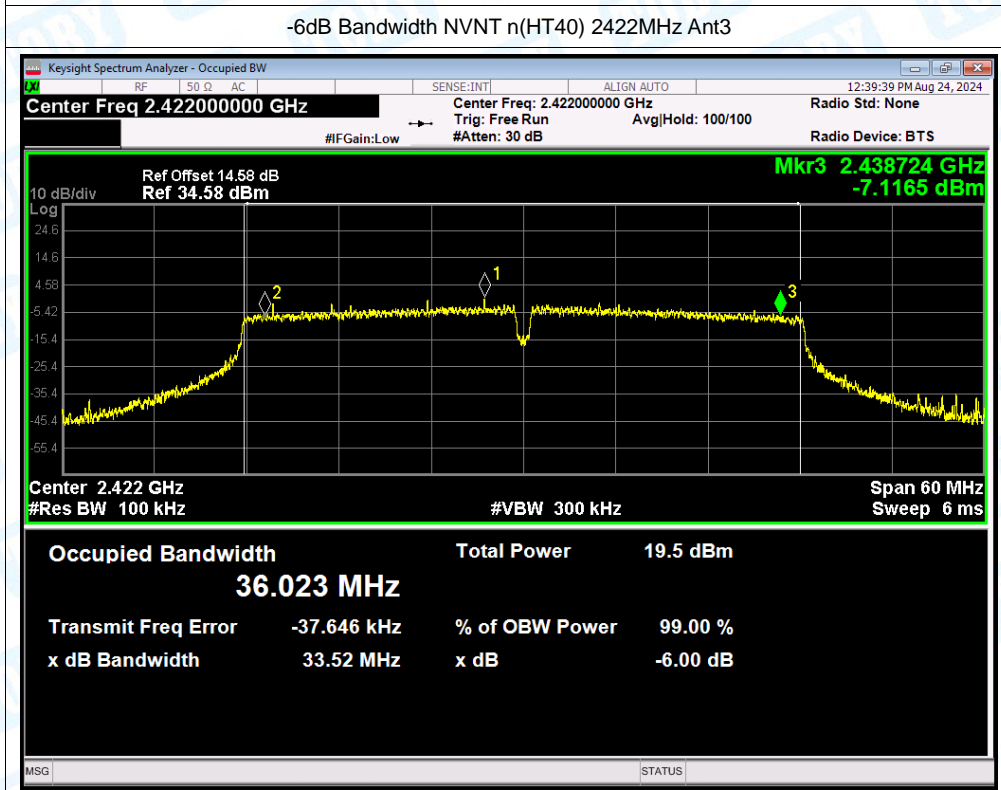
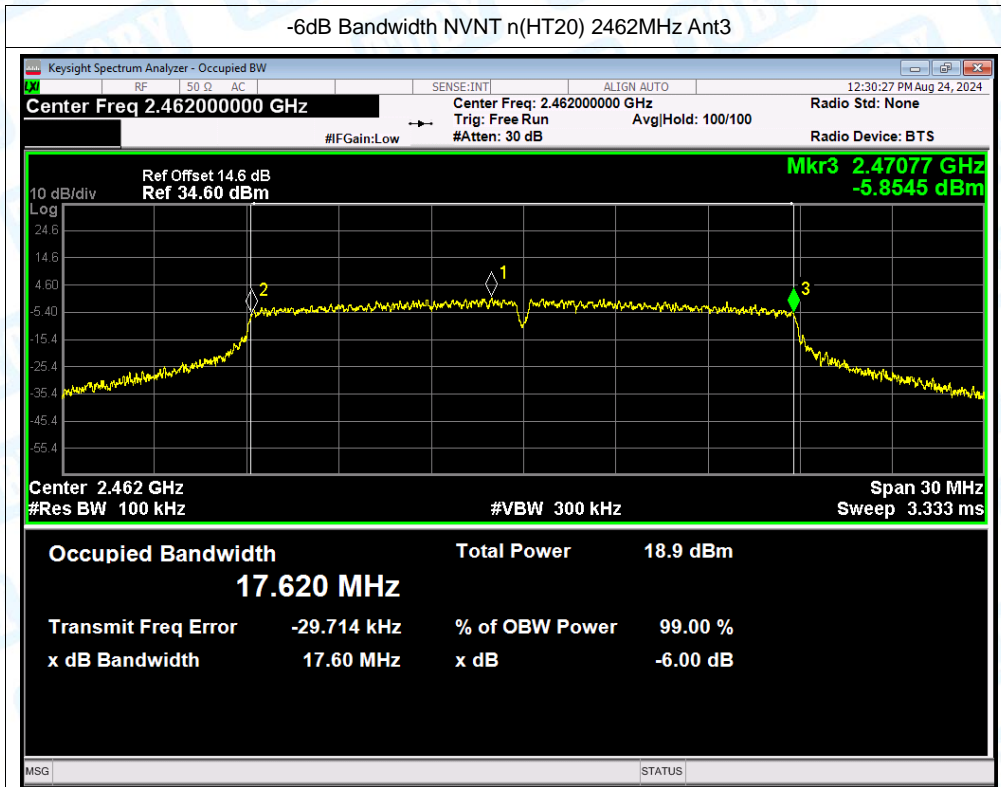
-6dB Bandwidth NVNT g 2437MHz Ant3



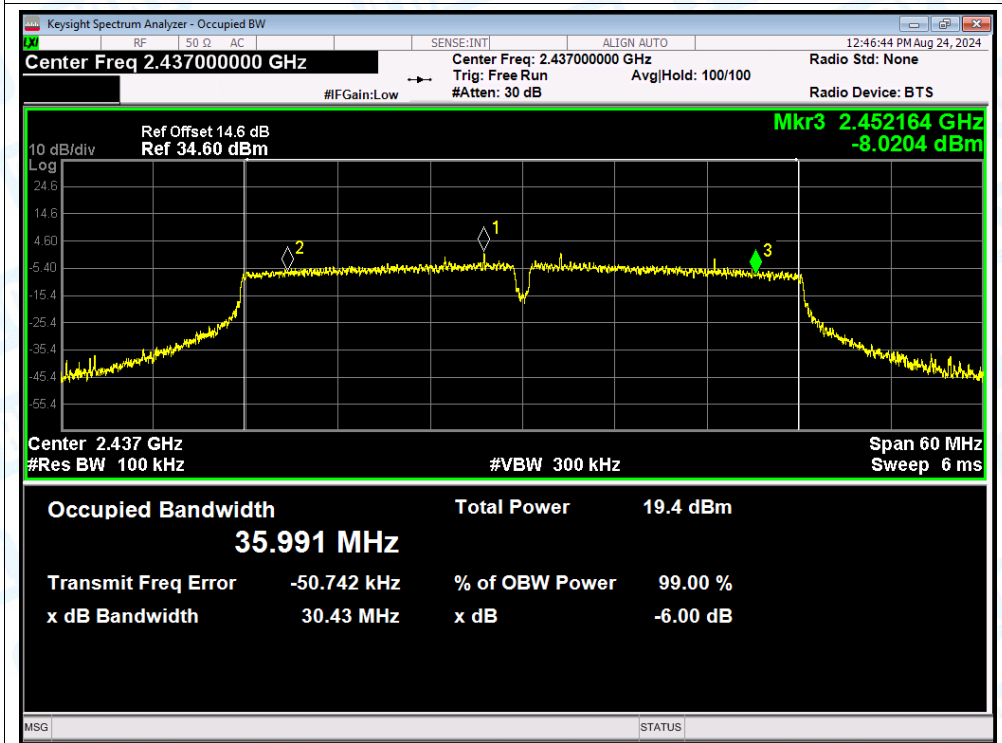
-6dB Bandwidth NVNT g 2462MHz Ant3







-6dB Bandwidth NVNT n(HT40) 2437MHz Ant3



-6dB Bandwidth NVNT n(HT40) 2452MHz Ant3

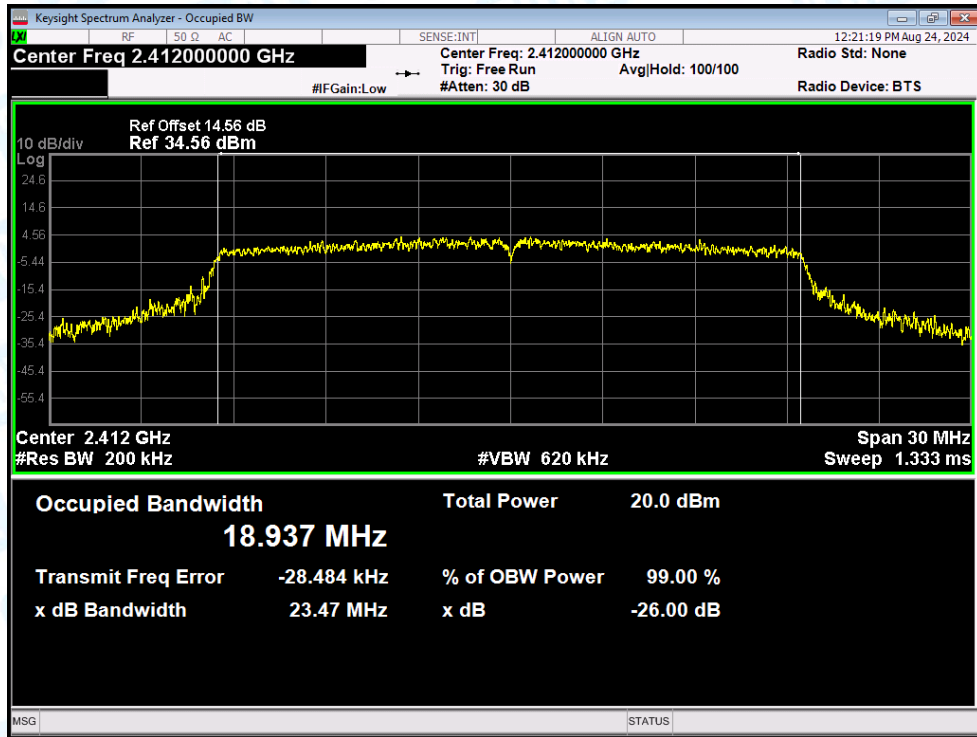


4.Occupied Channel Bandwidth

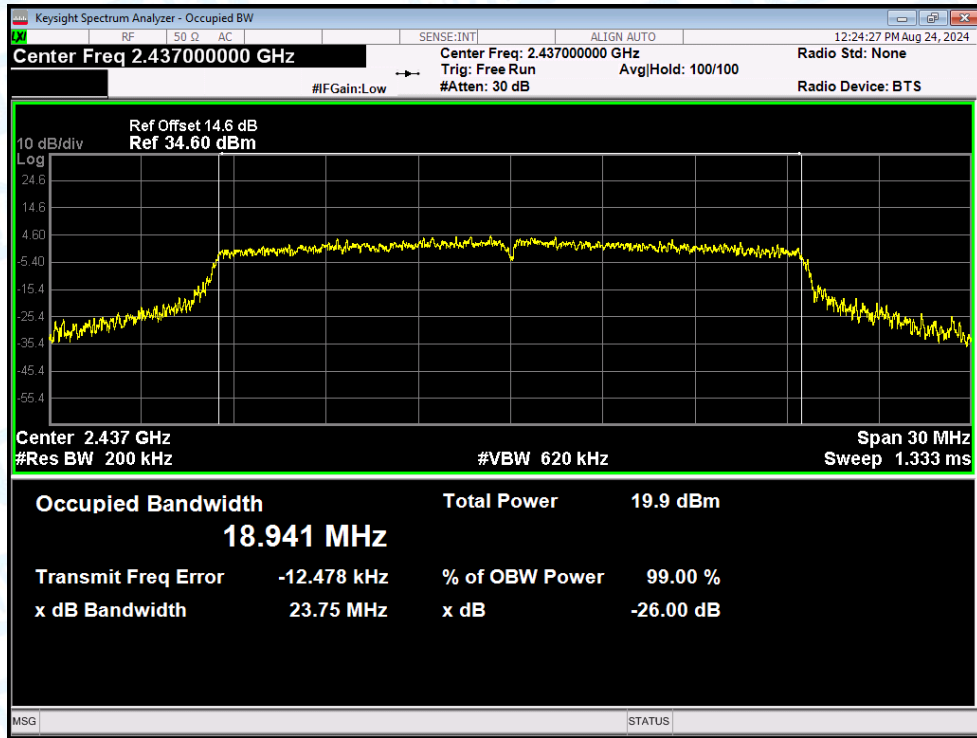
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	ax(VHT20)	2412	Ant3	18.937
NVNT	ax(VHT20)	2437	Ant3	18.941
NVNT	ax(VHT20)	2462	Ant3	18.919
NVNT	ax(VHT40)	2422	Ant3	36.198
NVNT	ax(VHT40)	2437	Ant3	36.226
NVNT	ax(VHT40)	2452	Ant3	36.182
NVNT	b	2412	Ant3	14.891
NVNT	b	2437	Ant3	14.919
NVNT	b	2462	Ant3	14.894
NVNT	g	2412	Ant3	16.589
NVNT	g	2437	Ant3	16.598
NVNT	g	2462	Ant3	16.533
NVNT	n(HT20)	2412	Ant3	17.74
NVNT	n(HT20)	2437	Ant3	17.754
NVNT	n(HT20)	2462	Ant3	17.713
NVNT	n(HT40)	2422	Ant3	36.209
NVNT	n(HT40)	2437	Ant3	36.195
NVNT	n(HT40)	2452	Ant3	36.175

Test Graphs

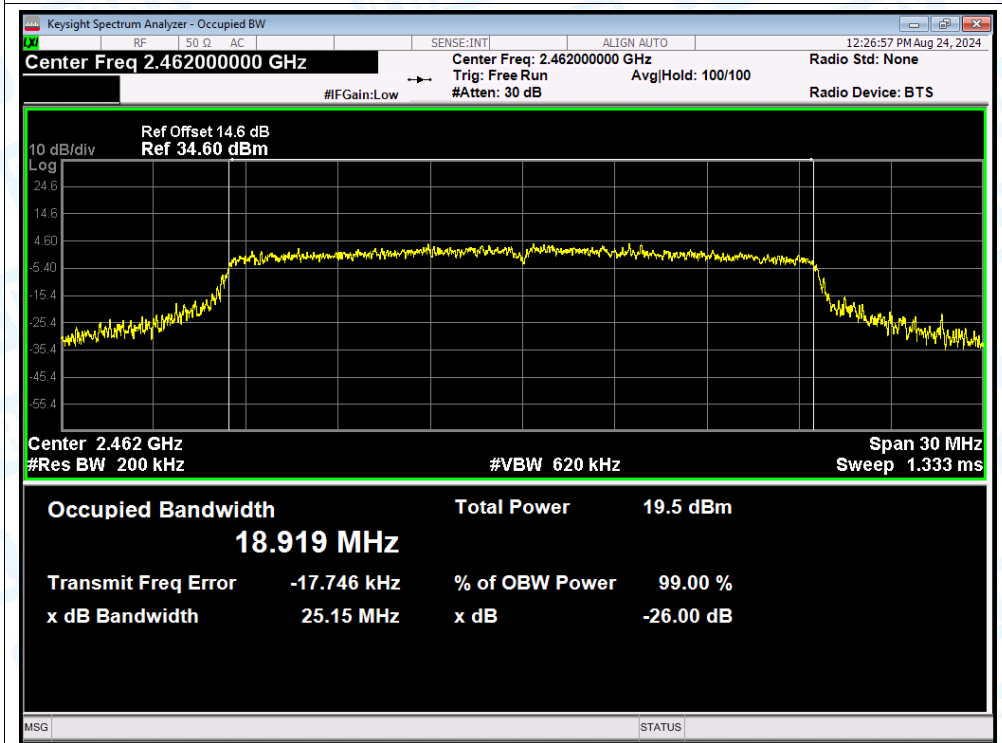
OBW NVNT ax(VHT20) 2412MHz Ant3



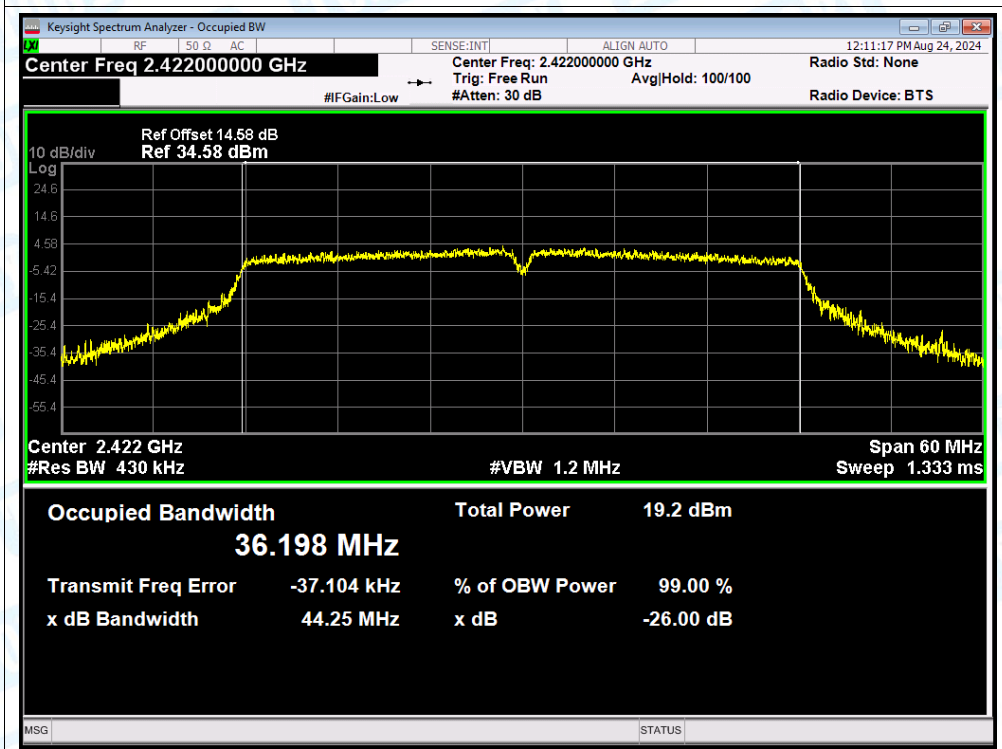
OBW NVNT ax(VHT20) 2437MHz Ant3



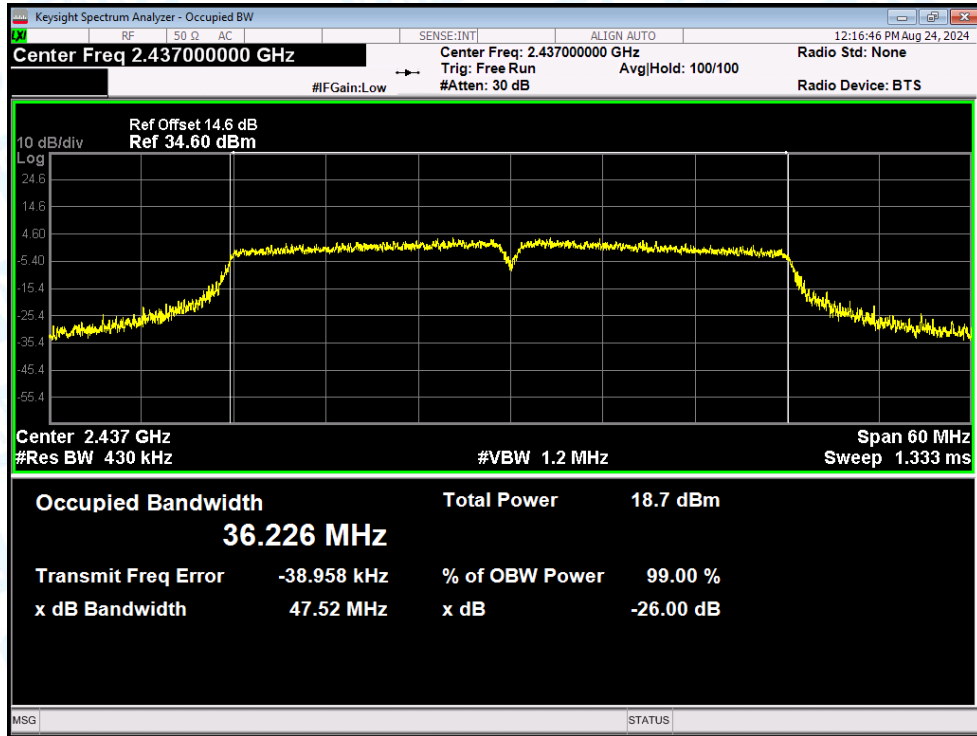
OBW NVNT ax(VHT20) 2462MHz Ant3



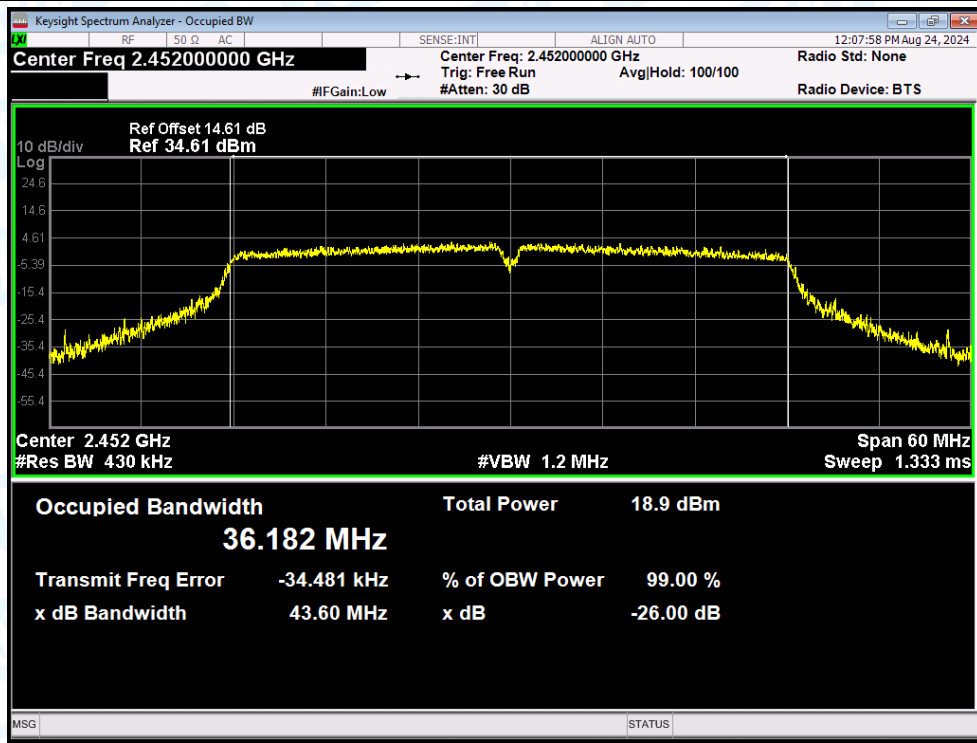
OBW NVNT ax(VHT40) 2422MHz Ant3

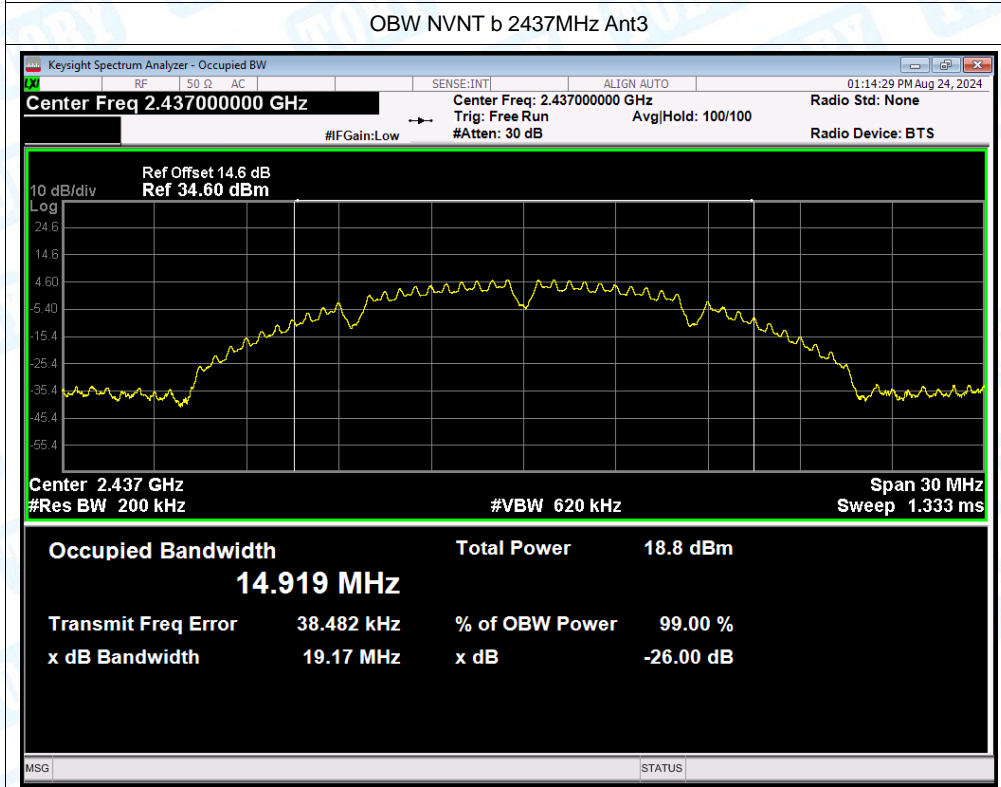
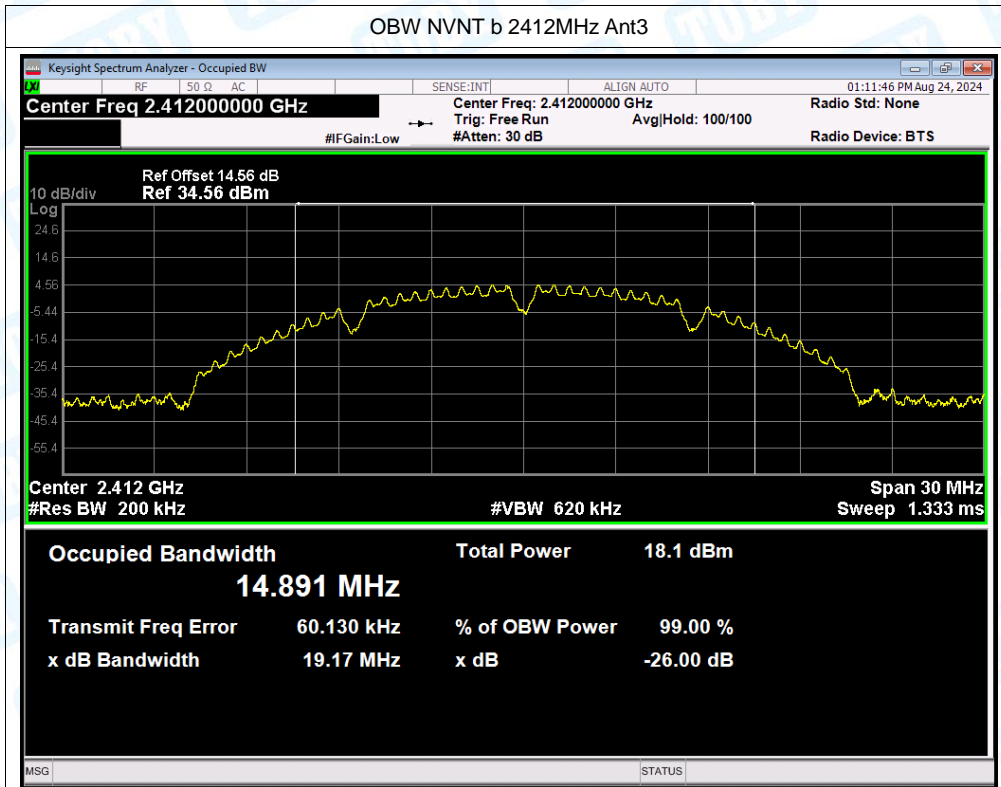


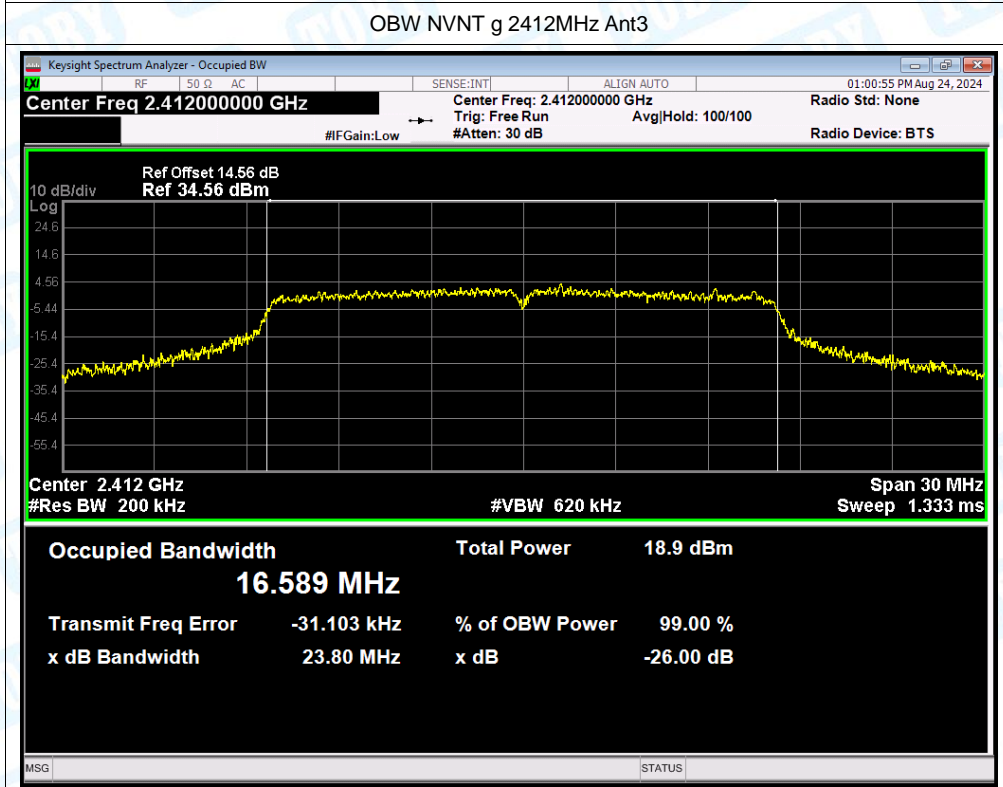
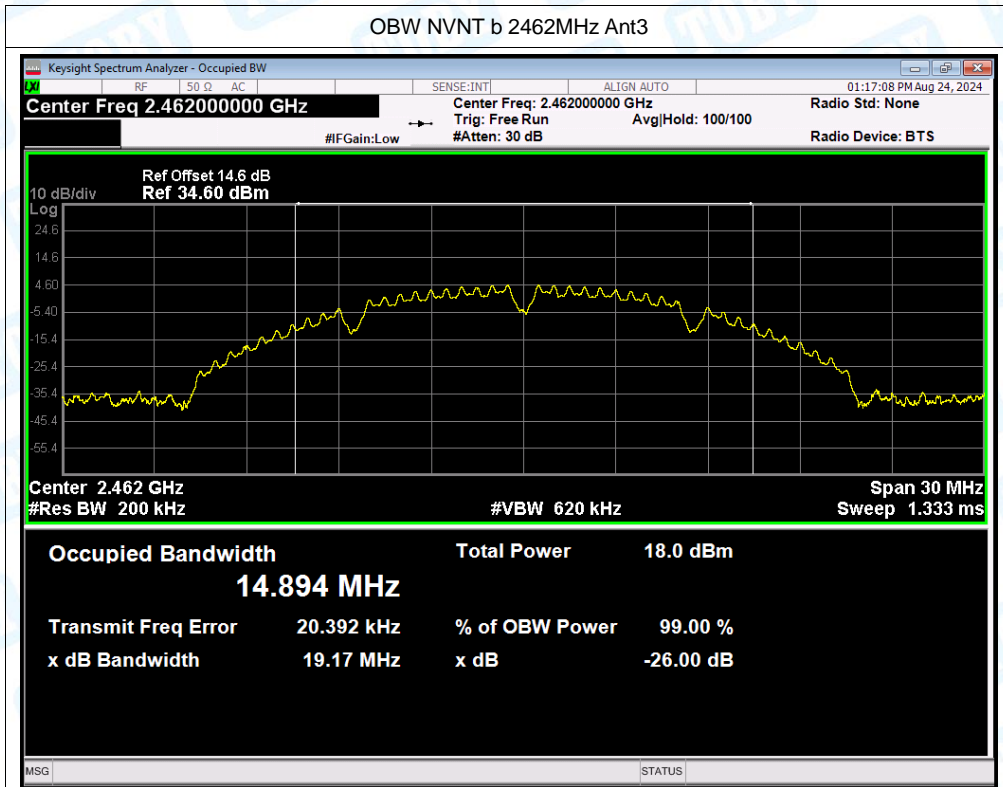
OBW NVNT ax(VHT40) 2437MHz Ant3

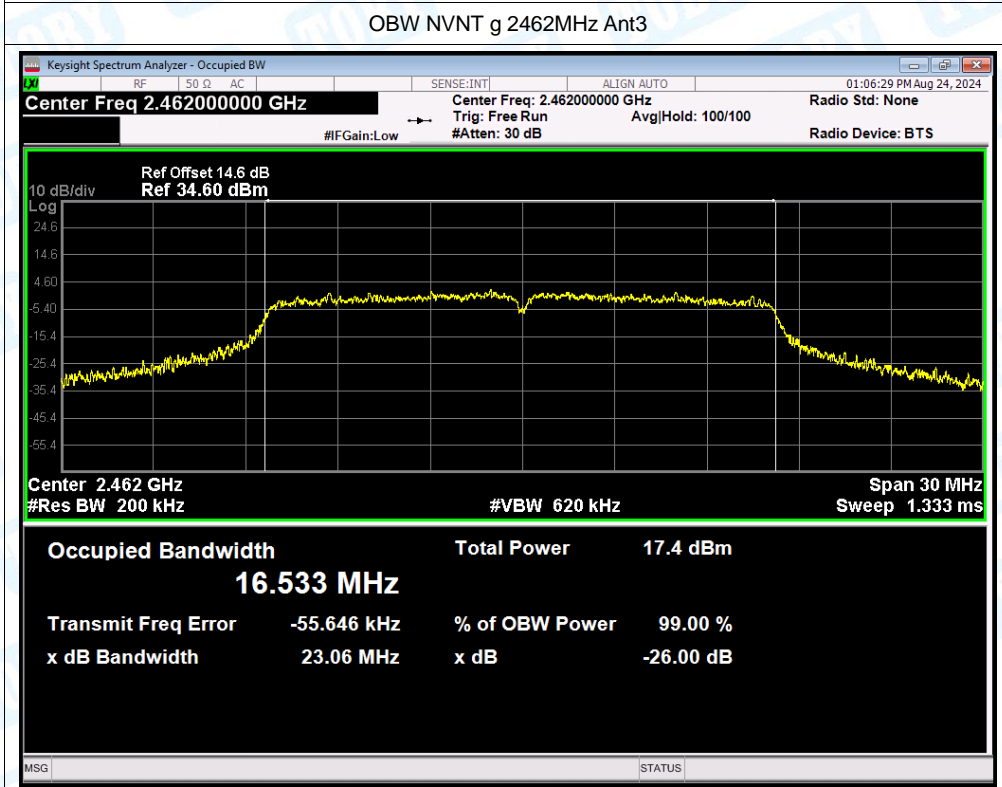
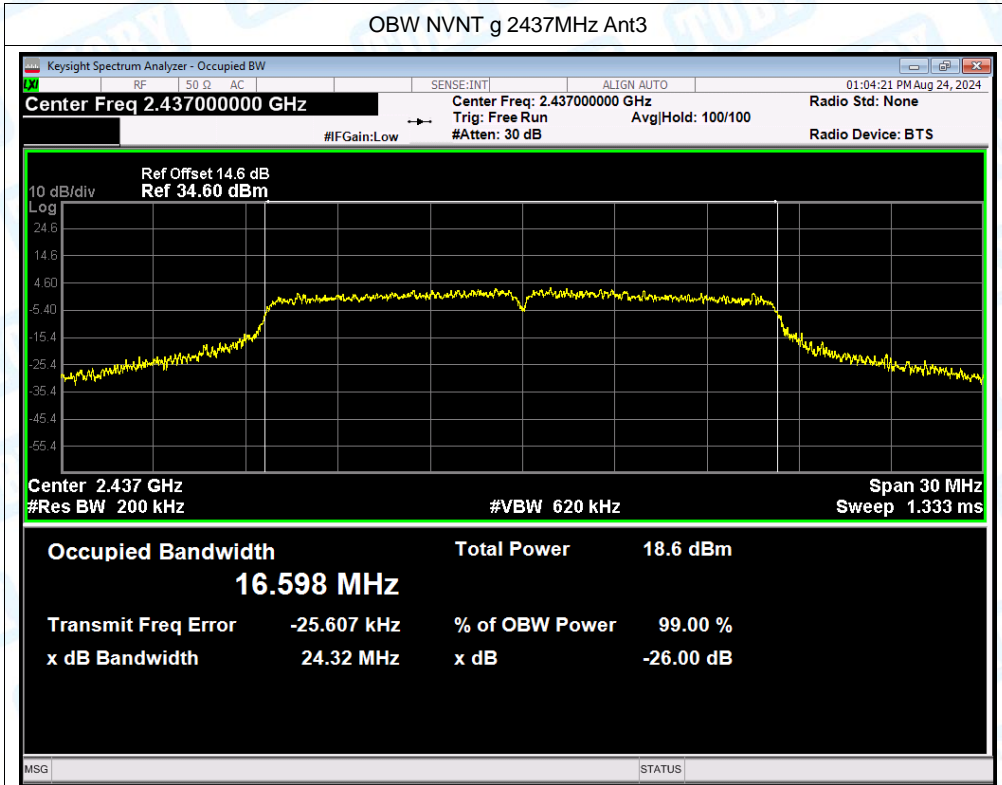


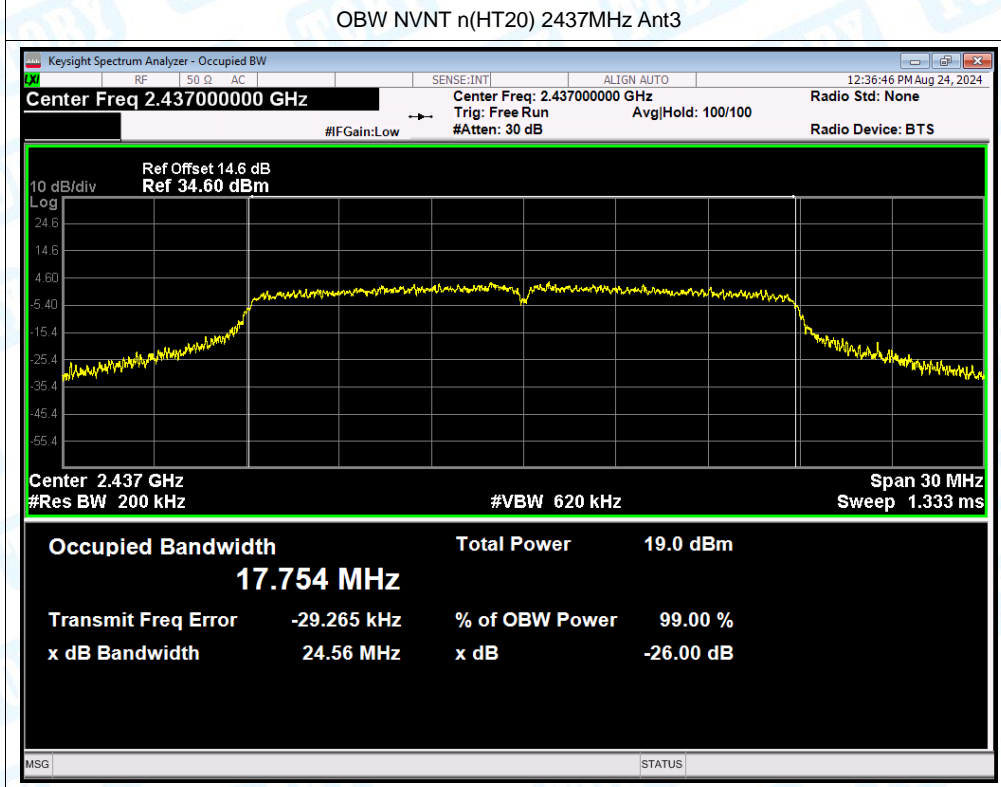
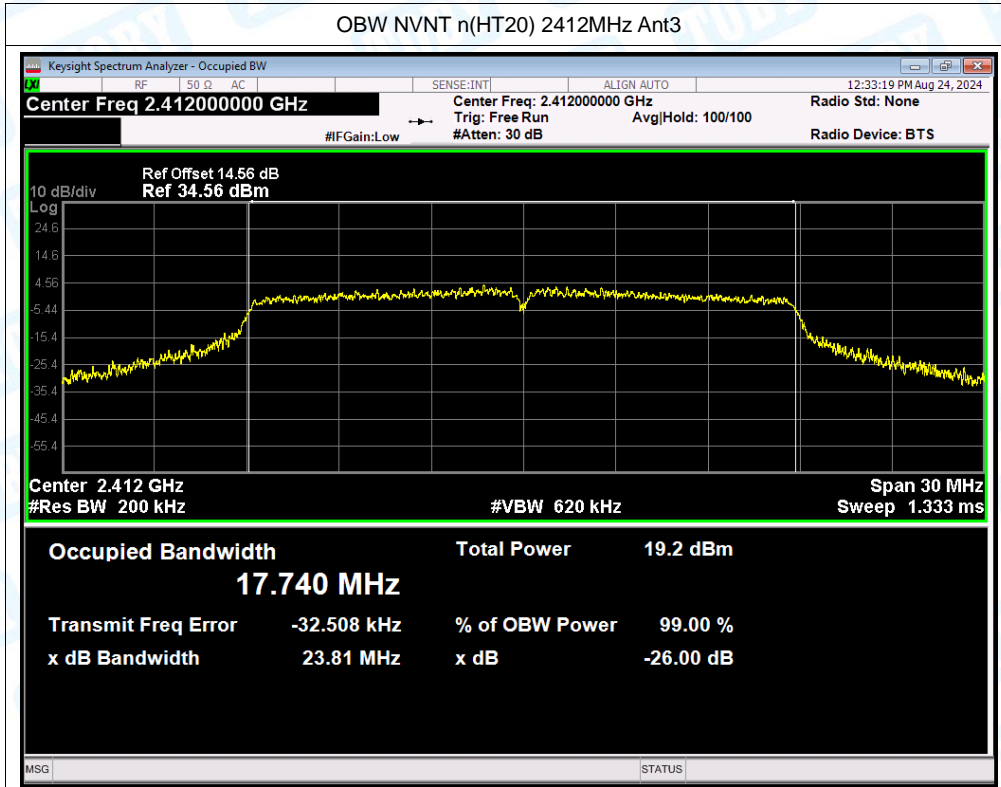
OBW NVNT ax(VHT40) 2452MHz Ant3

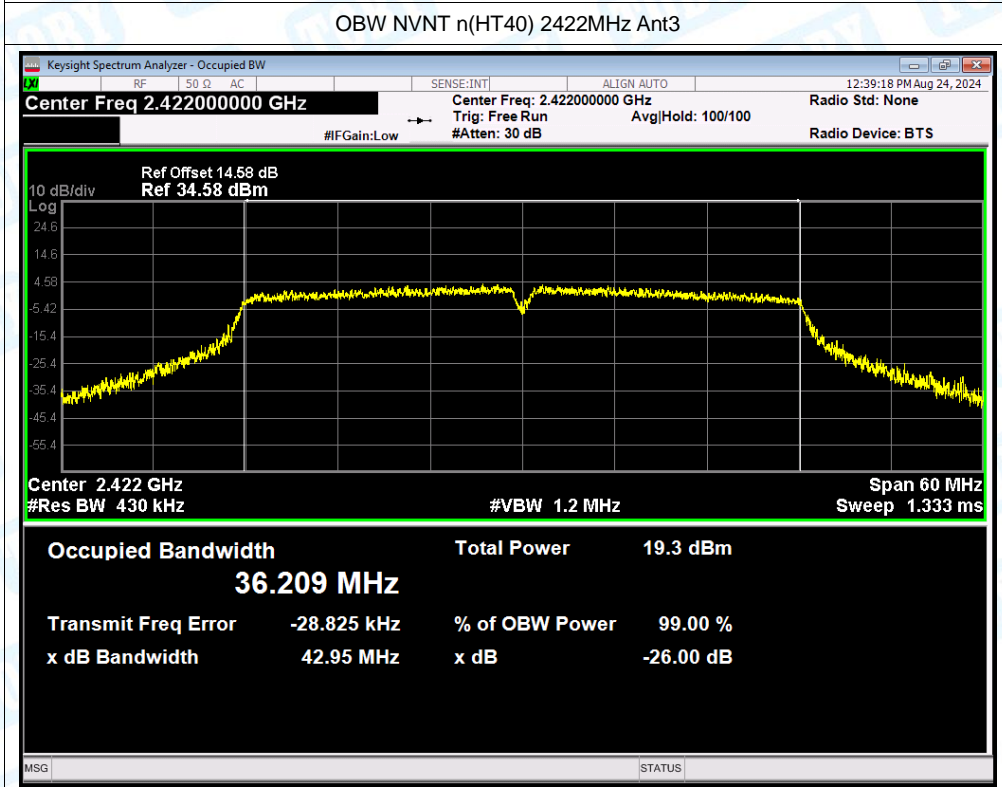
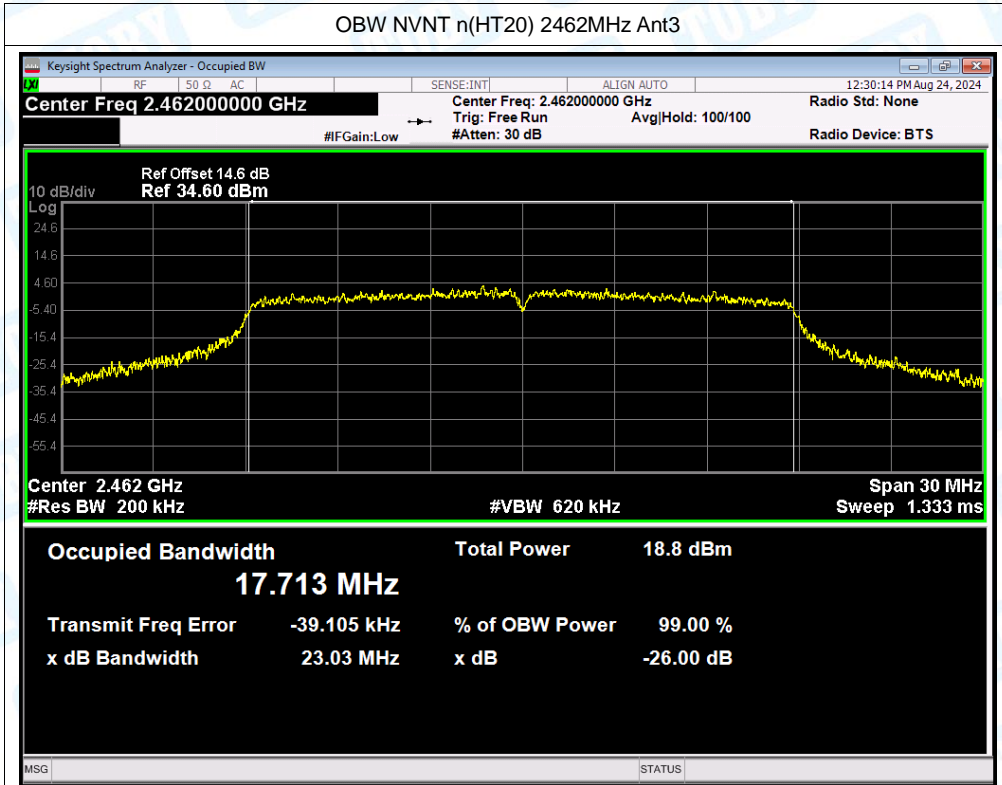


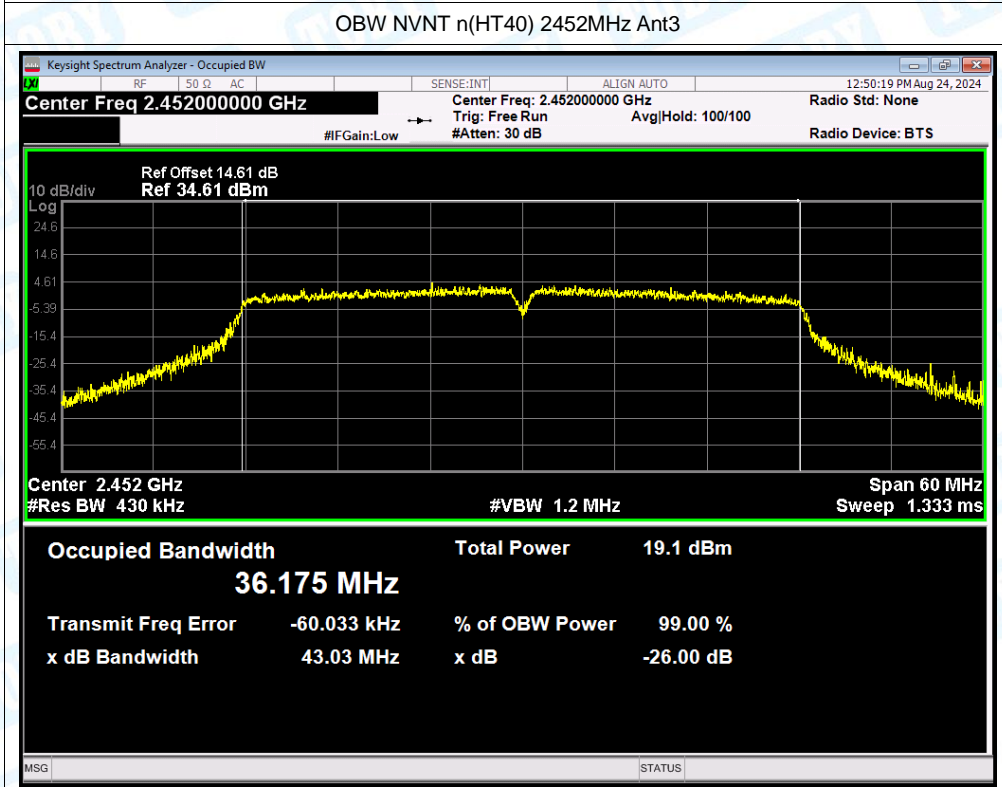
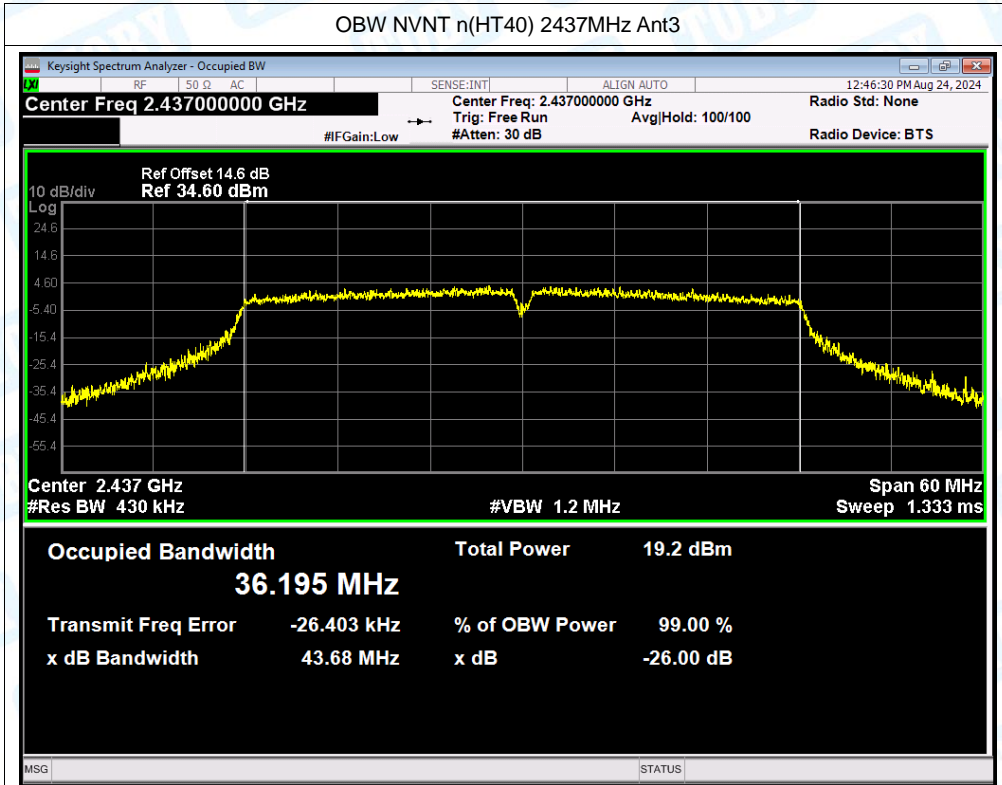












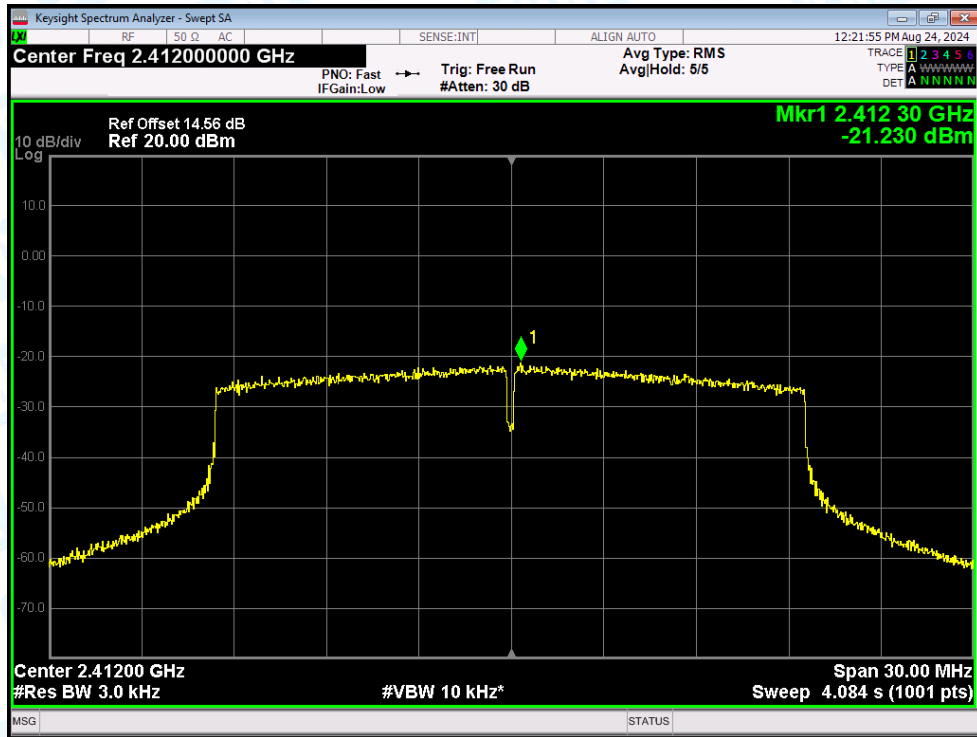
5. Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	ax(VHT20)	2412	Ant3	-21.23	8	Pass
NVNT	ax(VHT20)	2437	Ant3	-21.914	8	Pass
NVNT	ax(VHT20)	2462	Ant3	-21.498	8	Pass
NVNT	ax(VHT40)	2422	Ant3	-23.751	8	Pass
NVNT	ax(VHT40)	2437	Ant3	-24.17	8	Pass
NVNT	ax(VHT40)	2452	Ant3	-23.906	8	Pass
NVNT	b	2412	Ant3	-18.6	8	Pass
NVNT	b	2437	Ant3	-18.161	8	Pass
NVNT	b	2462	Ant3	-19.056	8	Pass
NVNT	g	2412	Ant3	-20.386	8	Pass
NVNT	g	2437	Ant3	-20.586	8	Pass
NVNT	g	2462	Ant3	-20.636	8	Pass
NVNT	n(HT20)	2412	Ant3	-20.015	8	Pass
NVNT	n(HT20)	2437	Ant3	-20.34	8	Pass
NVNT	n(HT20)	2462	Ant3	-20.572	8	Pass
NVNT	n(HT40)	2422	Ant3	-24.092	8	Pass
NVNT	n(HT40)	2437	Ant3	-23.423	8	Pass
NVNT	n(HT40)	2452	Ant3	-24.088	8	Pass

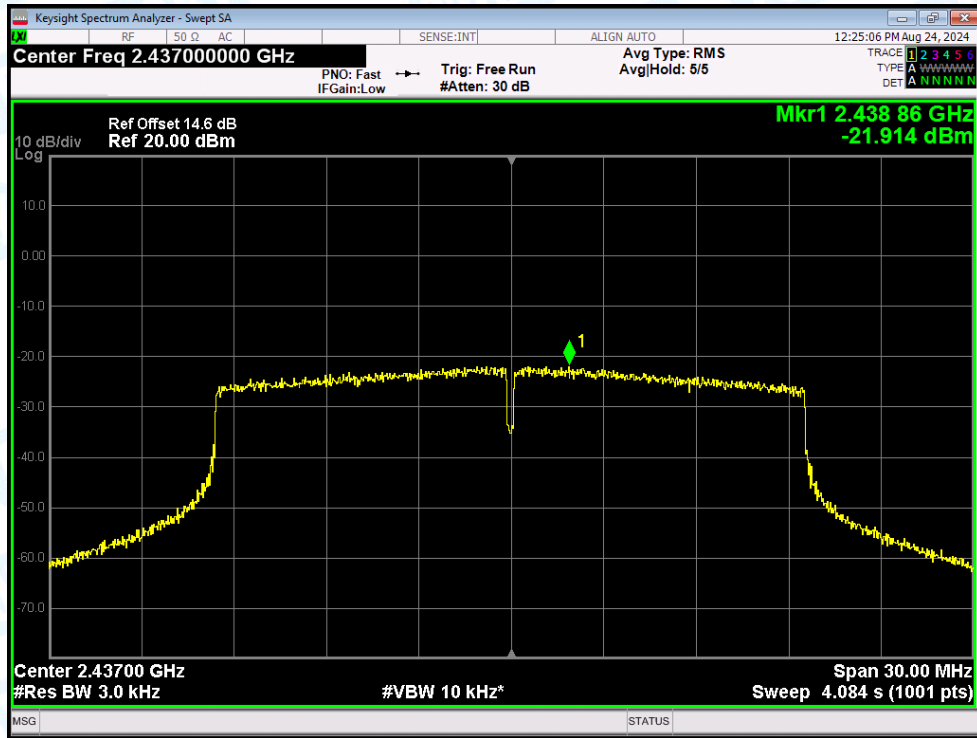
Note: The duty factor has been compensated into the result.

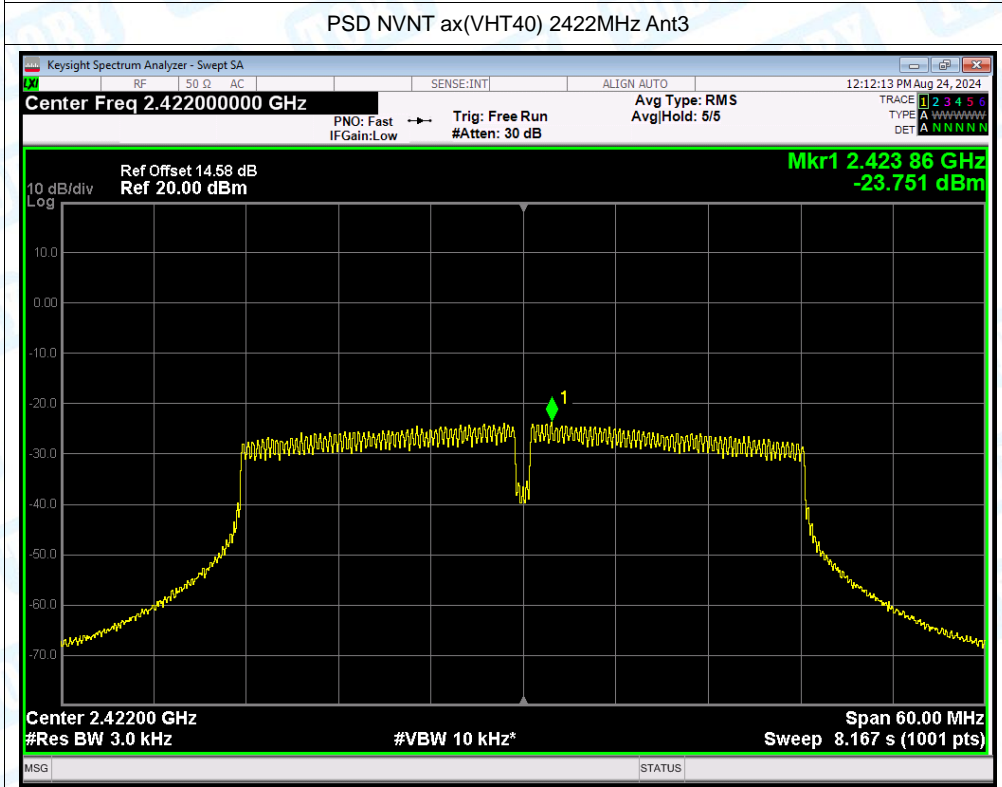
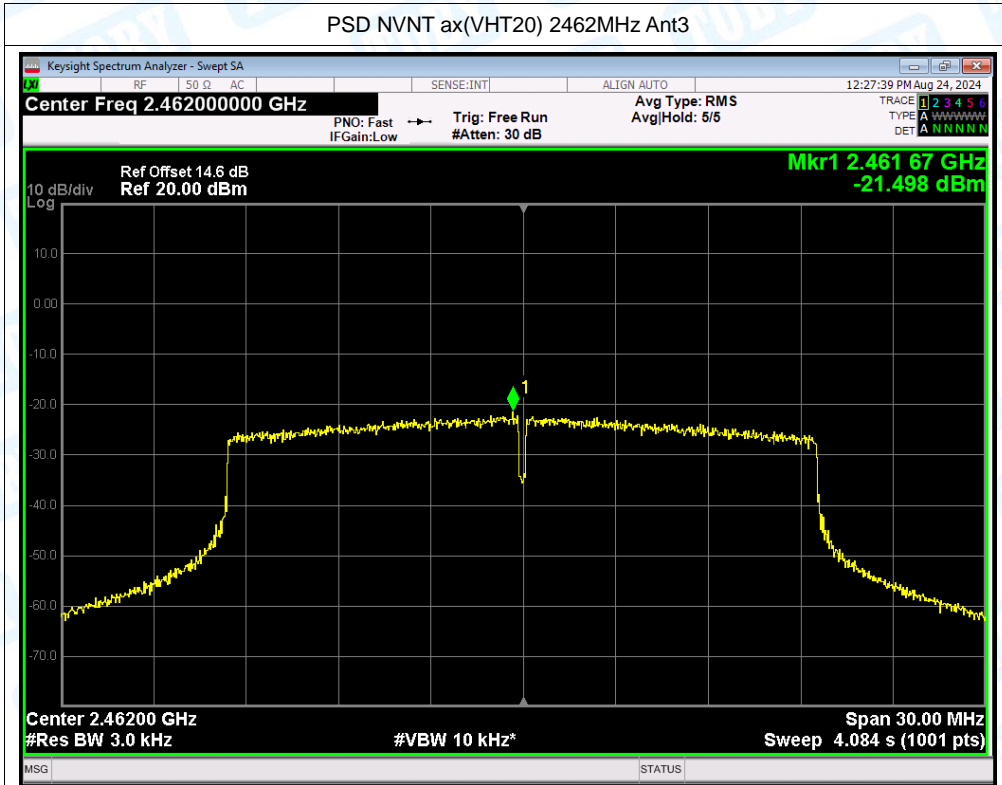
Test Graphs

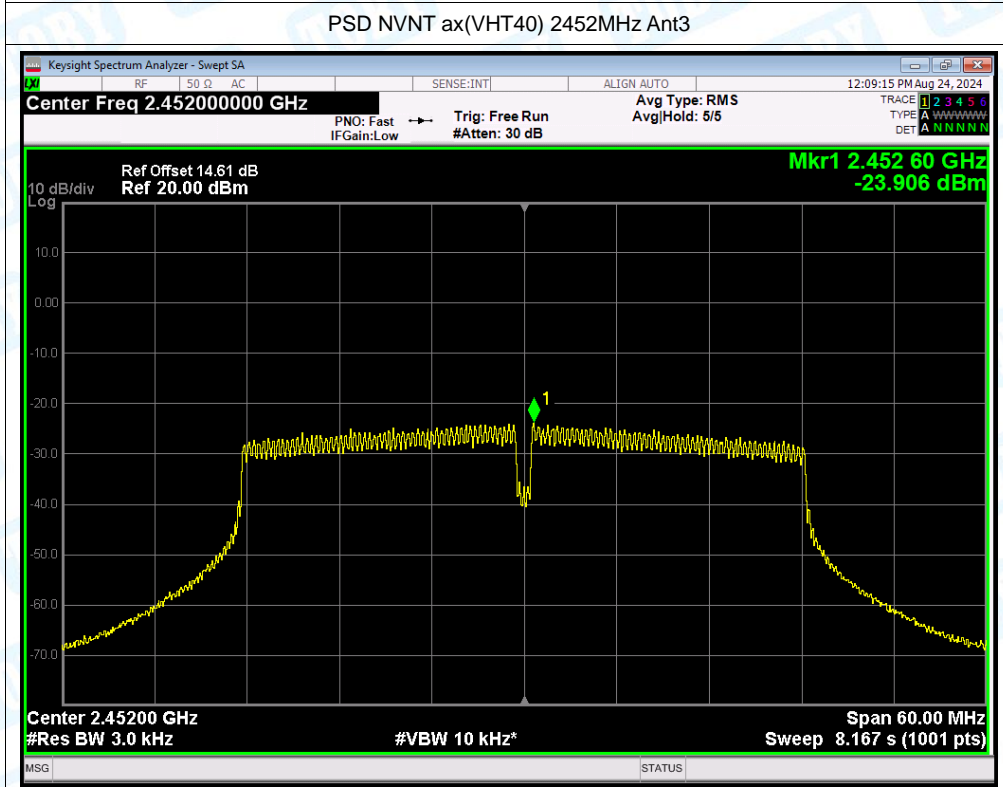
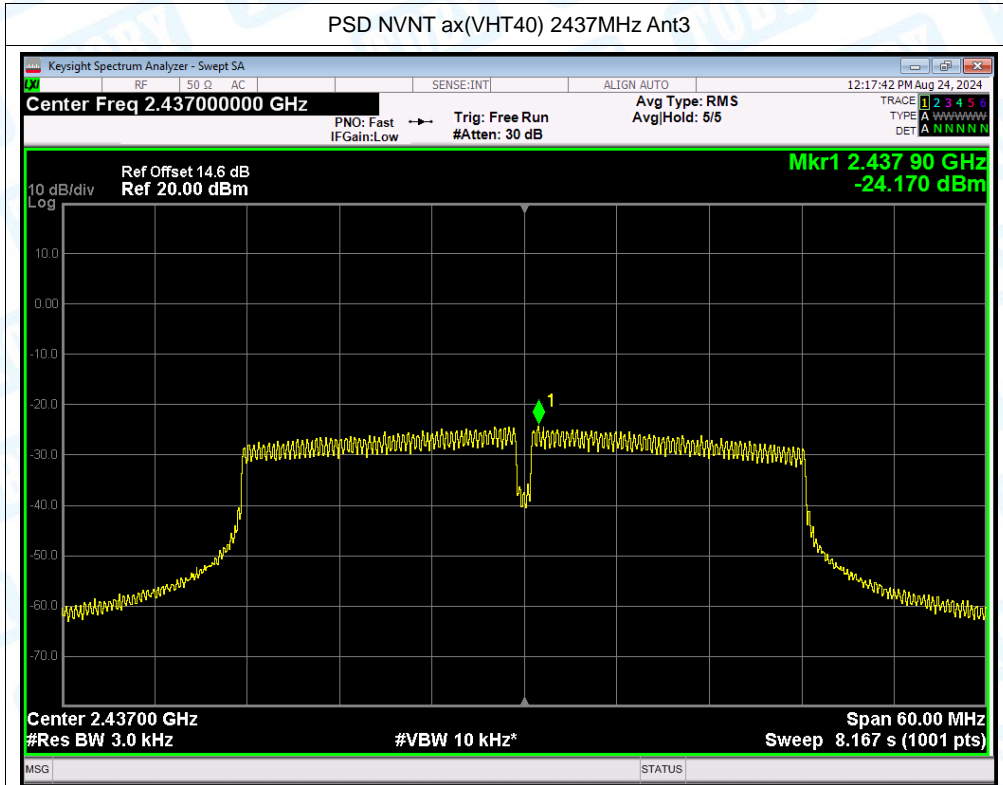
PSD NVNT ax(VHT20) 2412MHz Ant3



PSD NVNT ax(VHT20) 2437MHz Ant3



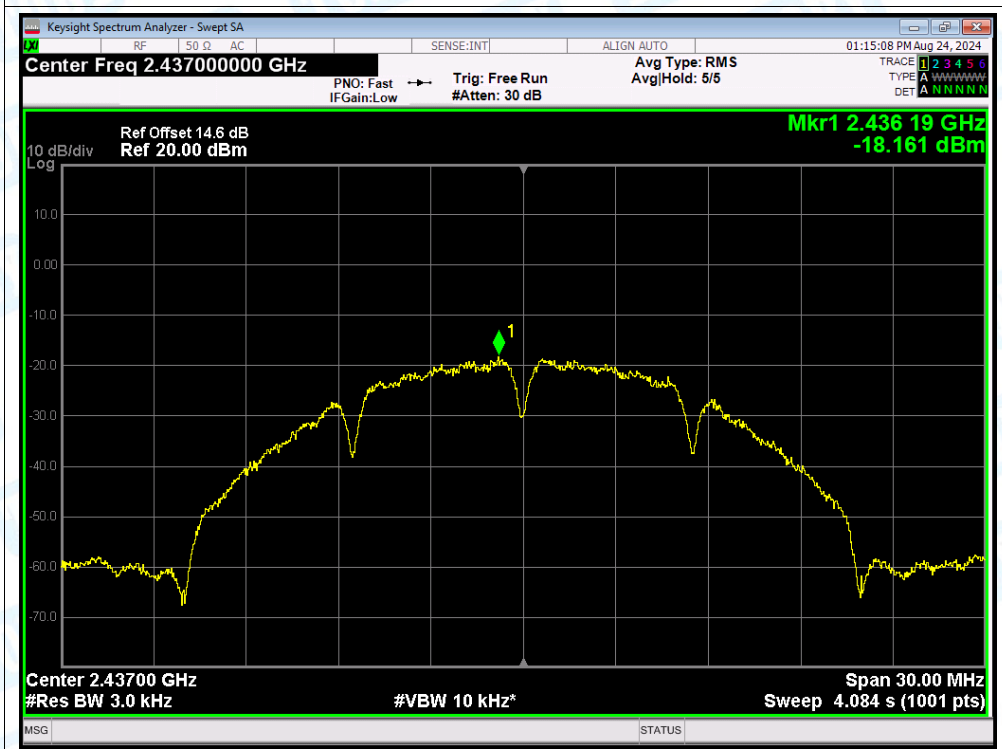




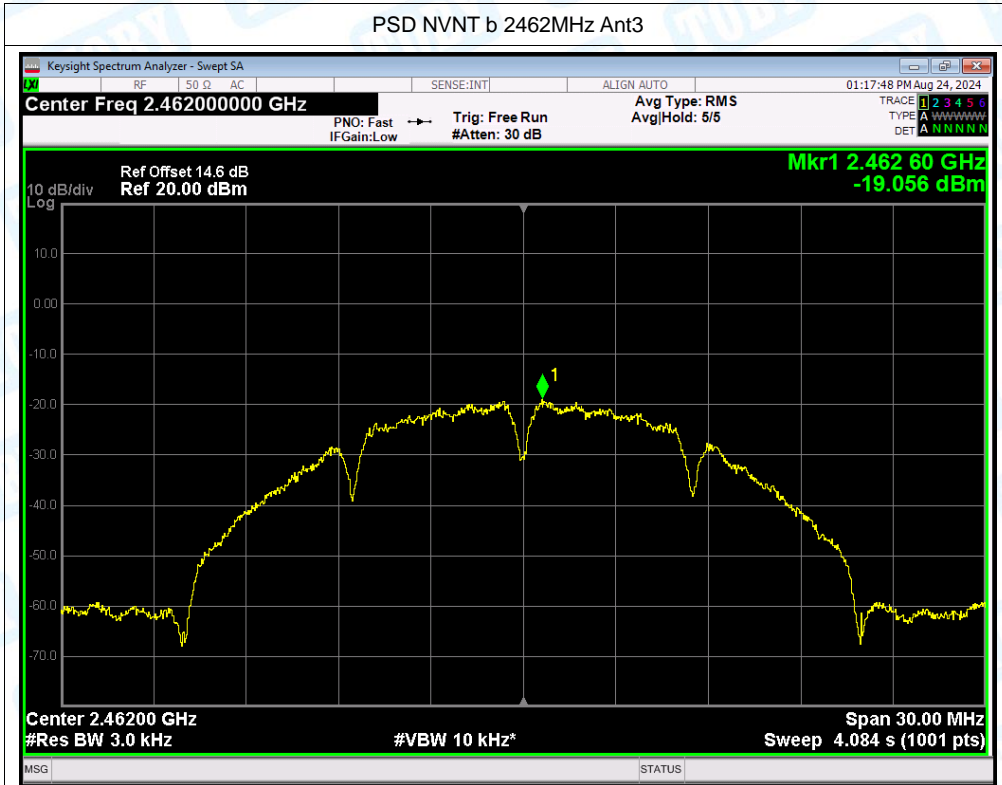
PSD NVNT b 2412MHz Ant3



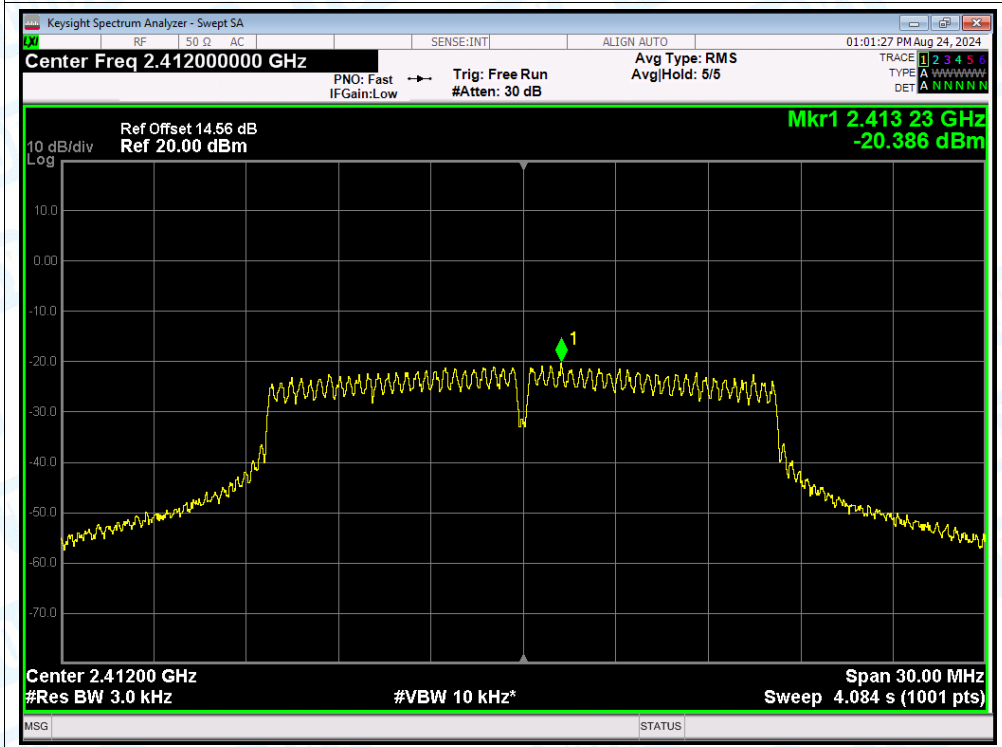
PSD NVNT b 2437MHz Ant3



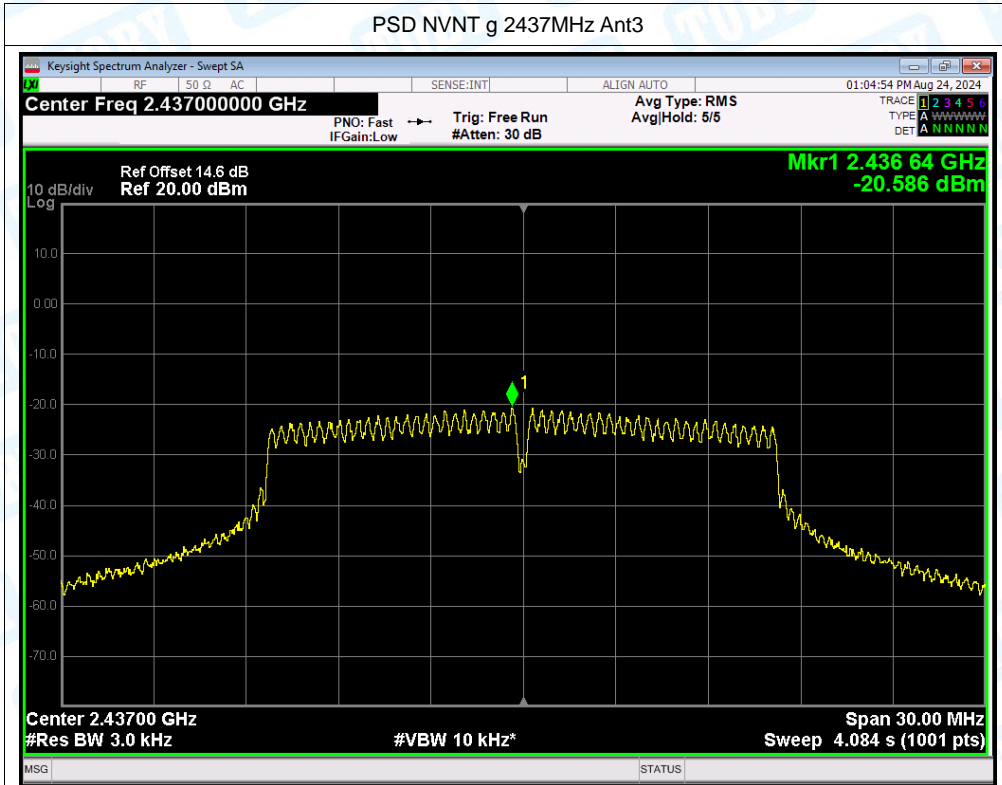
PSD NVNT b 2462MHz Ant3



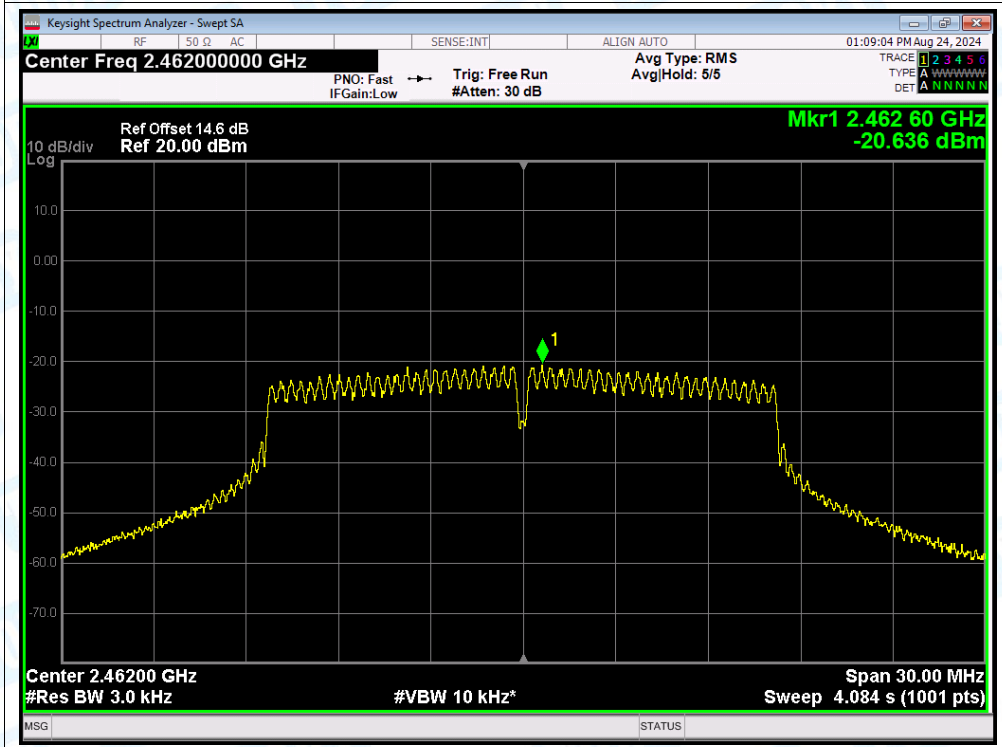
PSD NVNT g 2412MHz Ant3



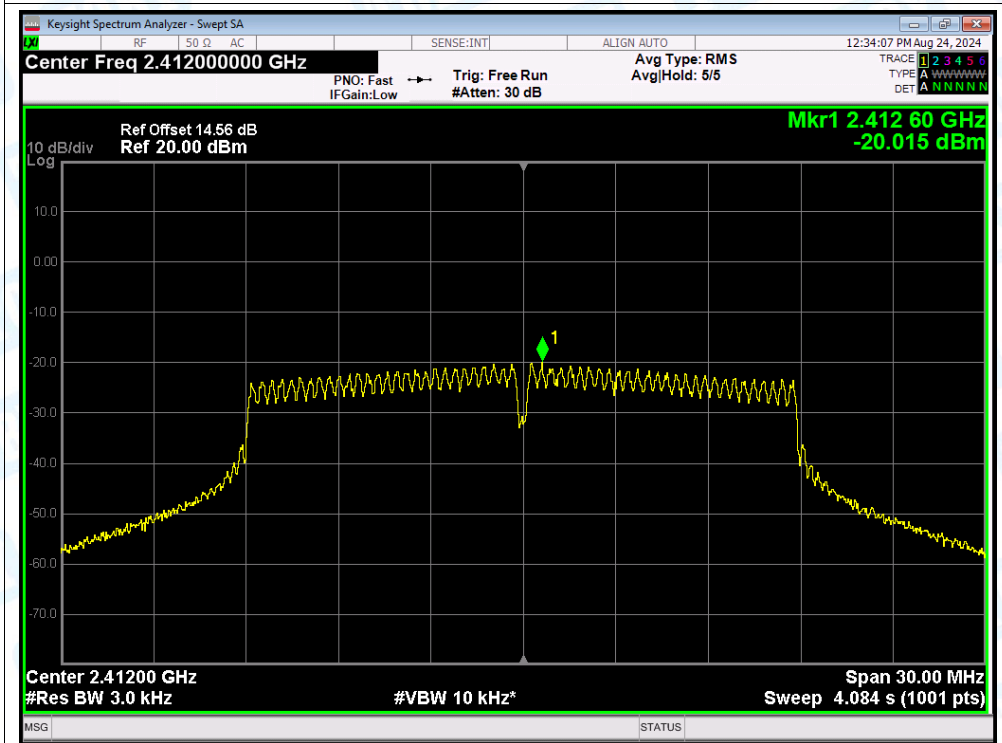
PSD NVNT g 2437MHz Ant3



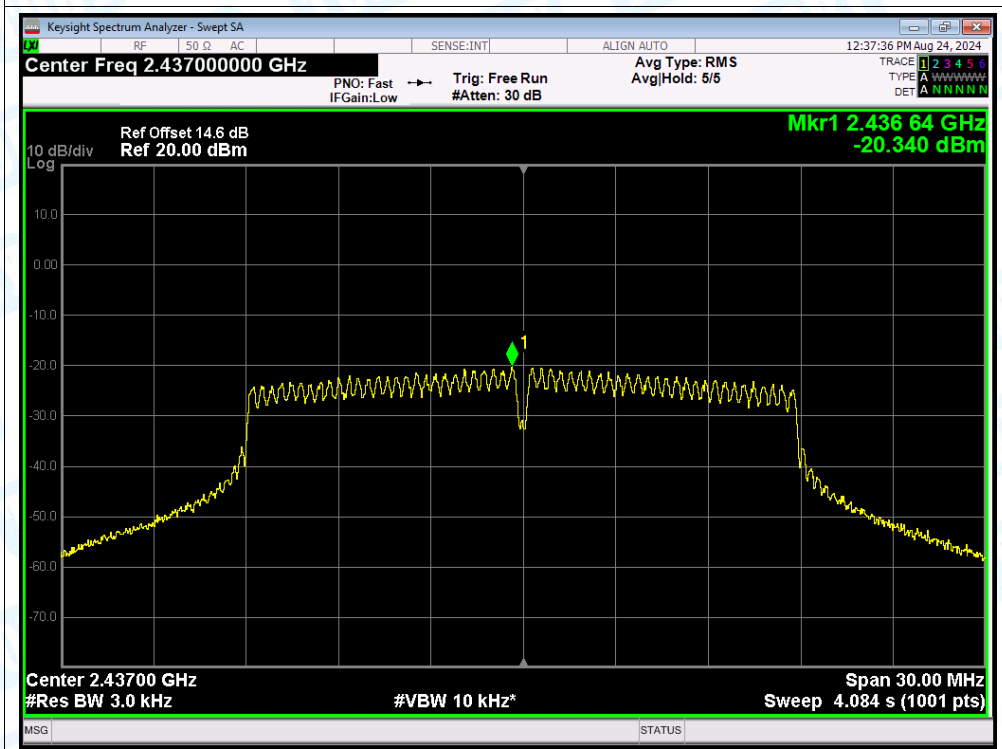
PSD NVNT g 2462MHz Ant3

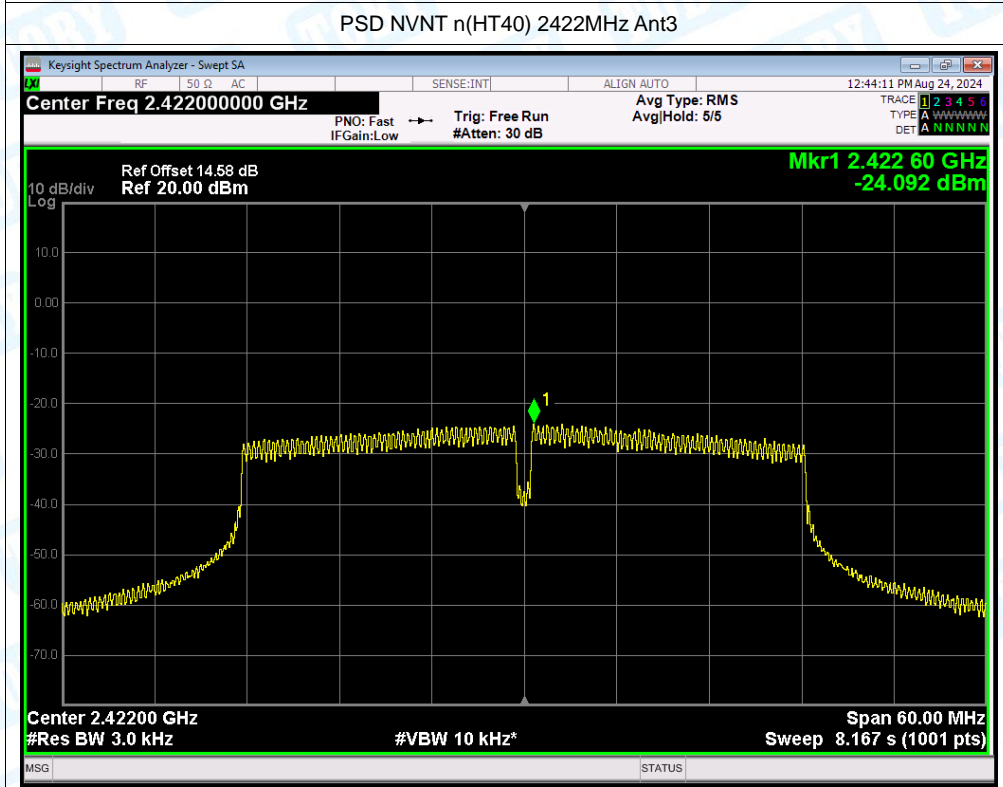
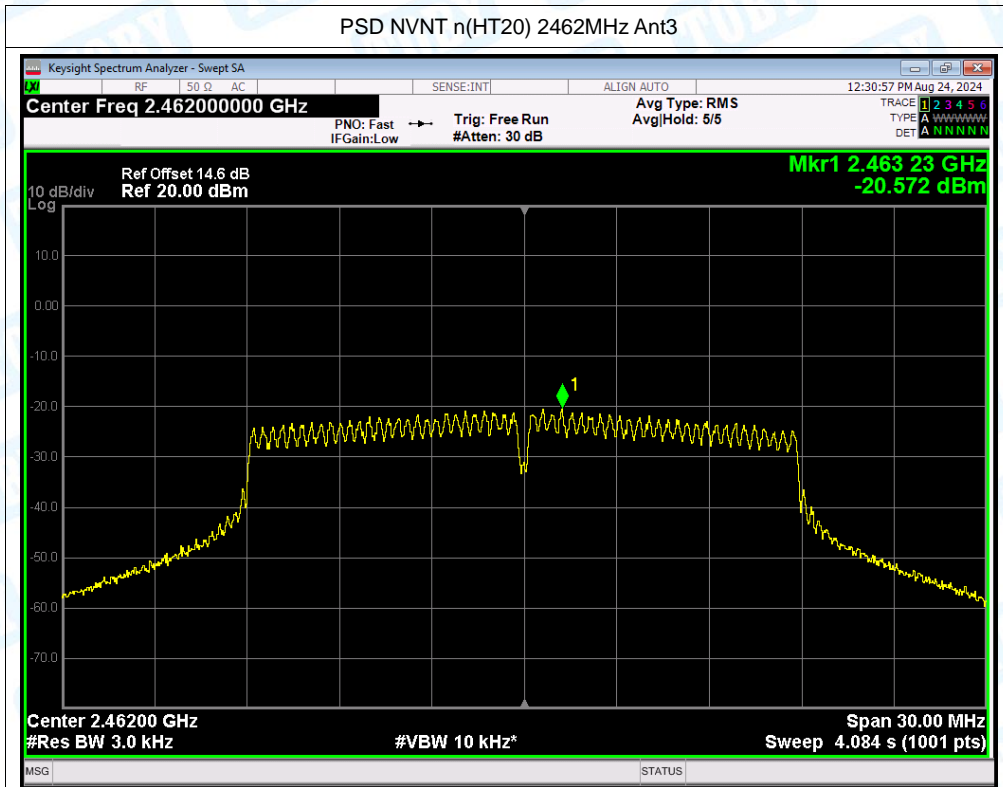


PSD NVNT n(HT20) 2412MHz Ant3

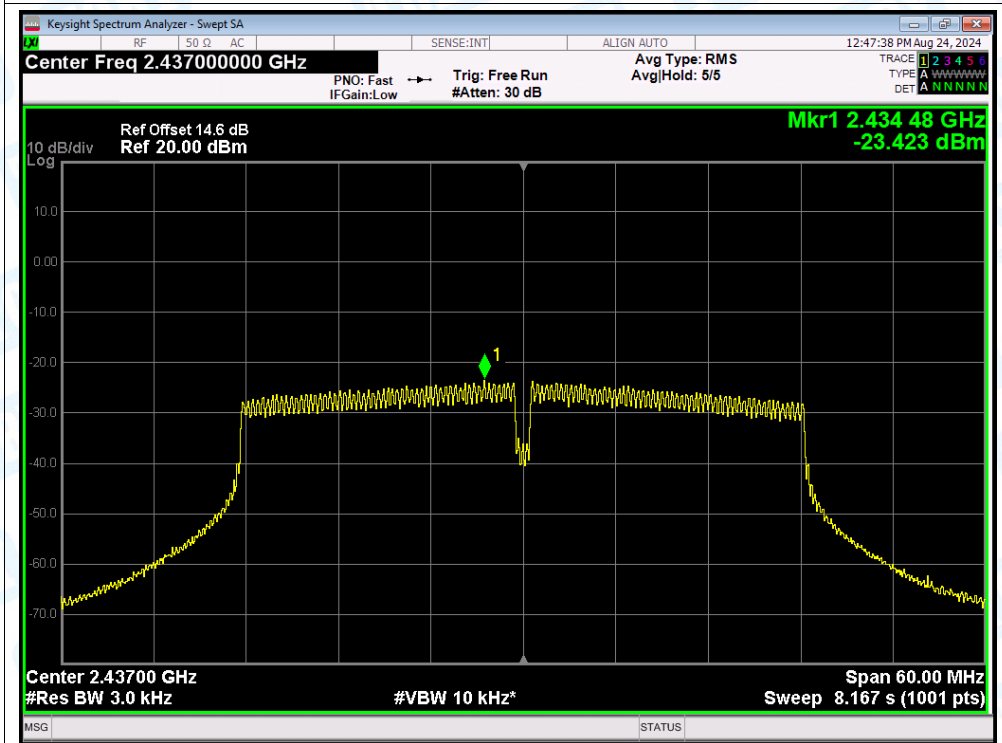


PSD NVNT n(HT20) 2437MHz Ant3

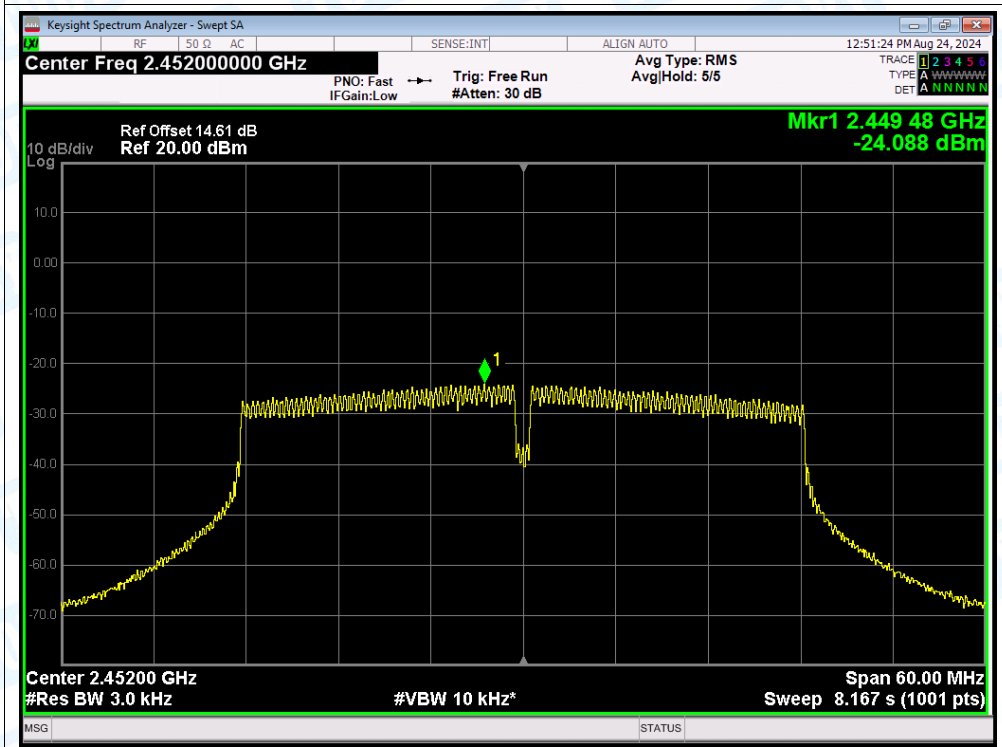




PSD NVNT n(HT40) 2437MHz Ant3



PSD NVNT n(HT40) 2452MHz Ant3

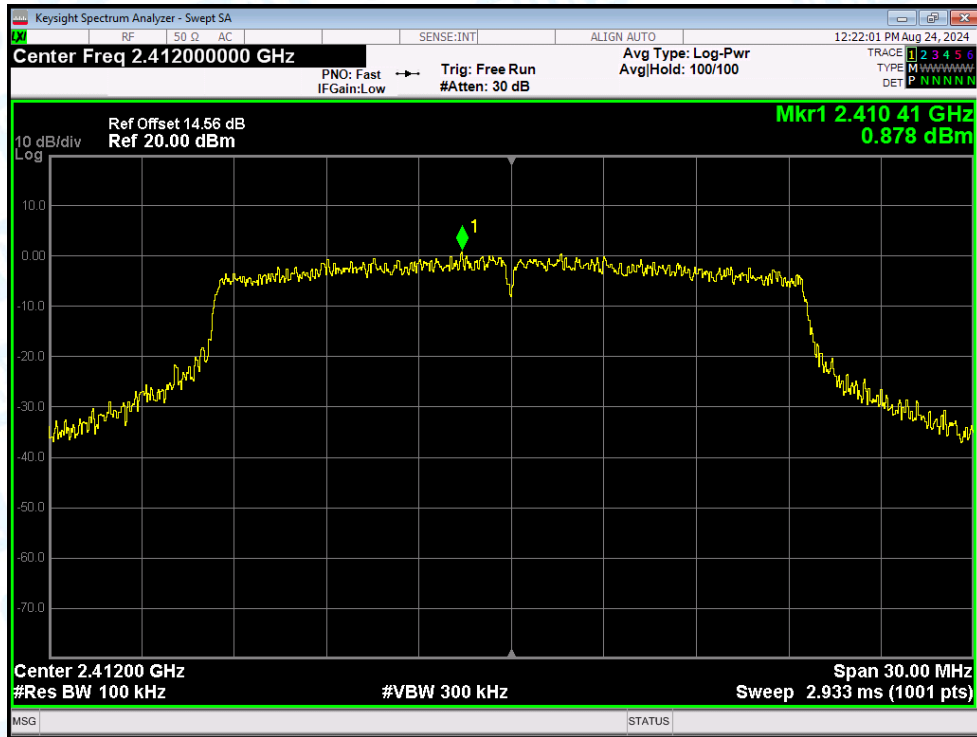


6. Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	ax(VHT20)	2412	Ant3	-40.4	-30	Pass
NVNT	ax(VHT20)	2462	Ant3	-44.98	-30	Pass
NVNT	ax(VHT40)	2422	Ant3	-40	-30	Pass
NVNT	ax(VHT40)	2452	Ant3	-39.68	-30	Pass
NVNT	b	2412	Ant3	-49.26	-30	Pass
NVNT	b	2462	Ant3	-48.37	-30	Pass
NVNT	g	2412	Ant3	-43.32	-30	Pass
NVNT	g	2462	Ant3	-44.91	-30	Pass
NVNT	n(HT20)	2412	Ant3	-40.34	-30	Pass
NVNT	n(HT20)	2462	Ant3	-44.38	-30	Pass
NVNT	n(HT40)	2422	Ant3	-37.74	-30	Pass
NVNT	n(HT40)	2452	Ant3	-40.26	-30	Pass

Test Graphs

Band Edge NVNT ax(VHT20) 2412MHz Ant3 Ref



Band Edge NVNT ax(VHT20) 2412MHz Ant3 Emission

