

RF Test Data for 2.4G WiFi (Conducted Measurements)

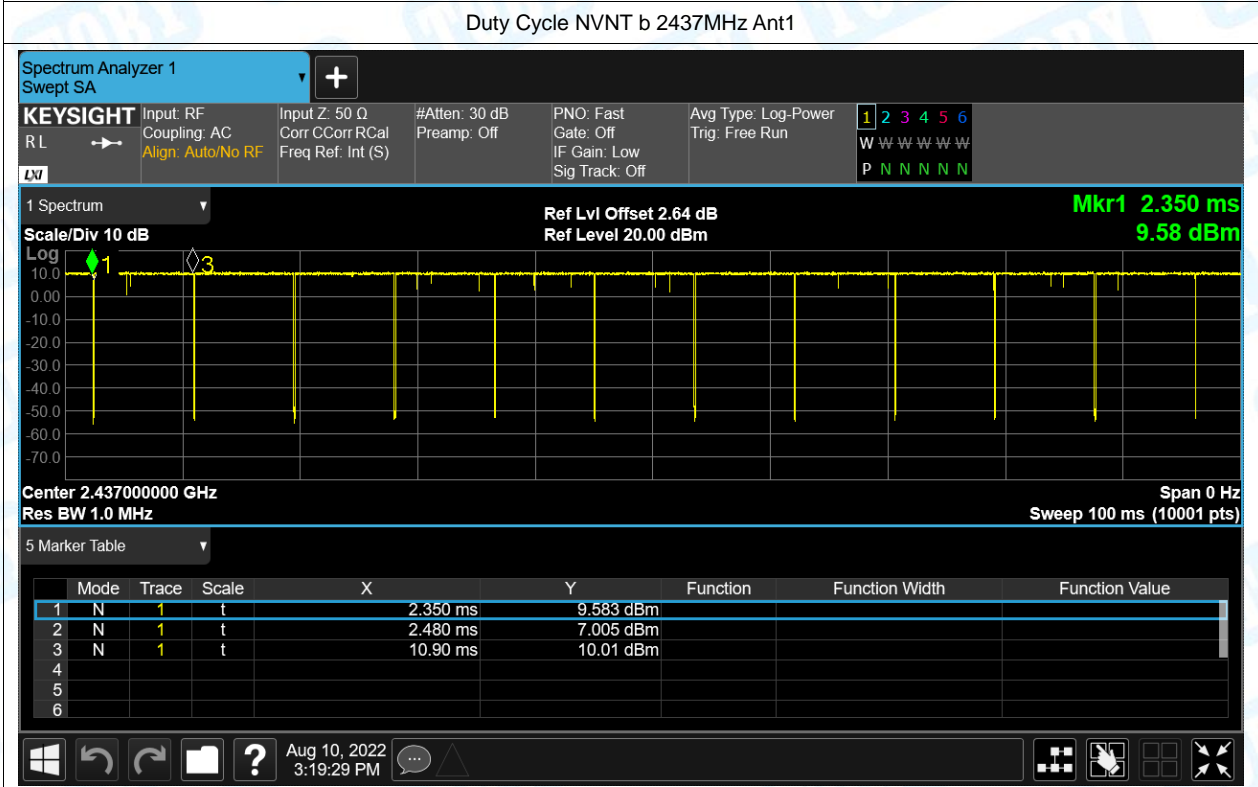
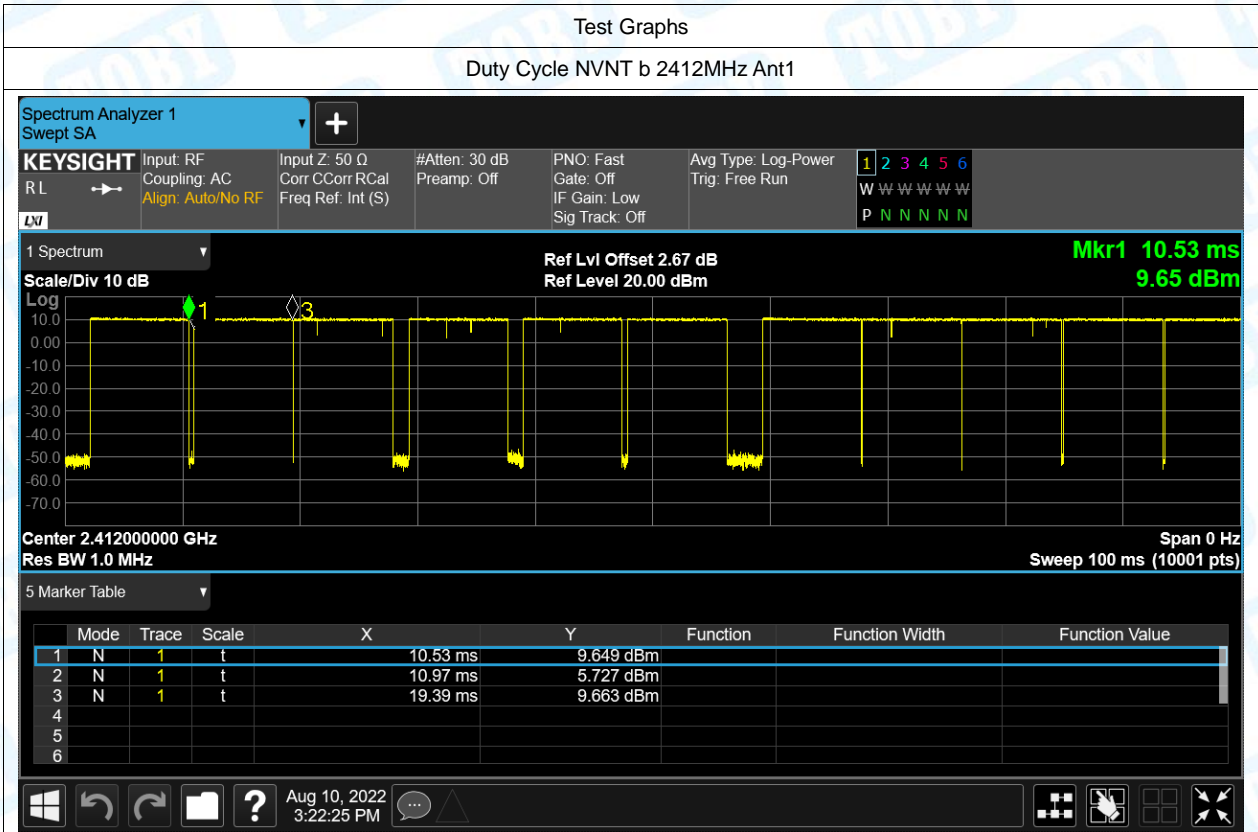
General Description of EUT	
Product Name:	Allegro X8
Test Model:	Allegro X8
Sample ID:	202206-0362-06#
Environmental Conditions	
Temperature:	25°C
Relative Humidity:	55%
Test Voltage:	AC 120V/60HZ
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202206-0362-122	

Contents

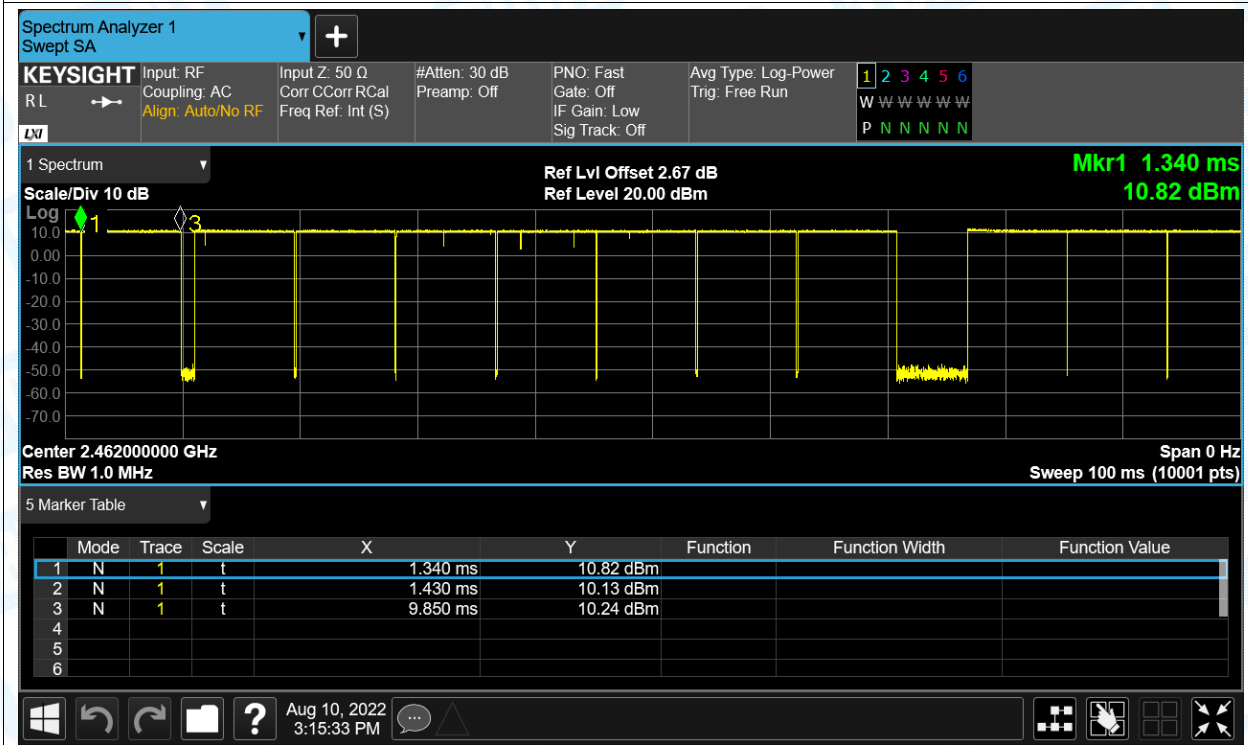
1. Duty Cycle.....	3
2. Maximum Conducted Output Power.....	10
3. -6dB Bandwidth.....	11
4. Occupied Channel Bandwidth.....	18
5. Maximum Power Spectral Density Level.....	25
6. Band Edge.....	32
7. Conducted RF Spurious Emission.....	41
8. Restrict Band.....	54

1. Duty Cycle

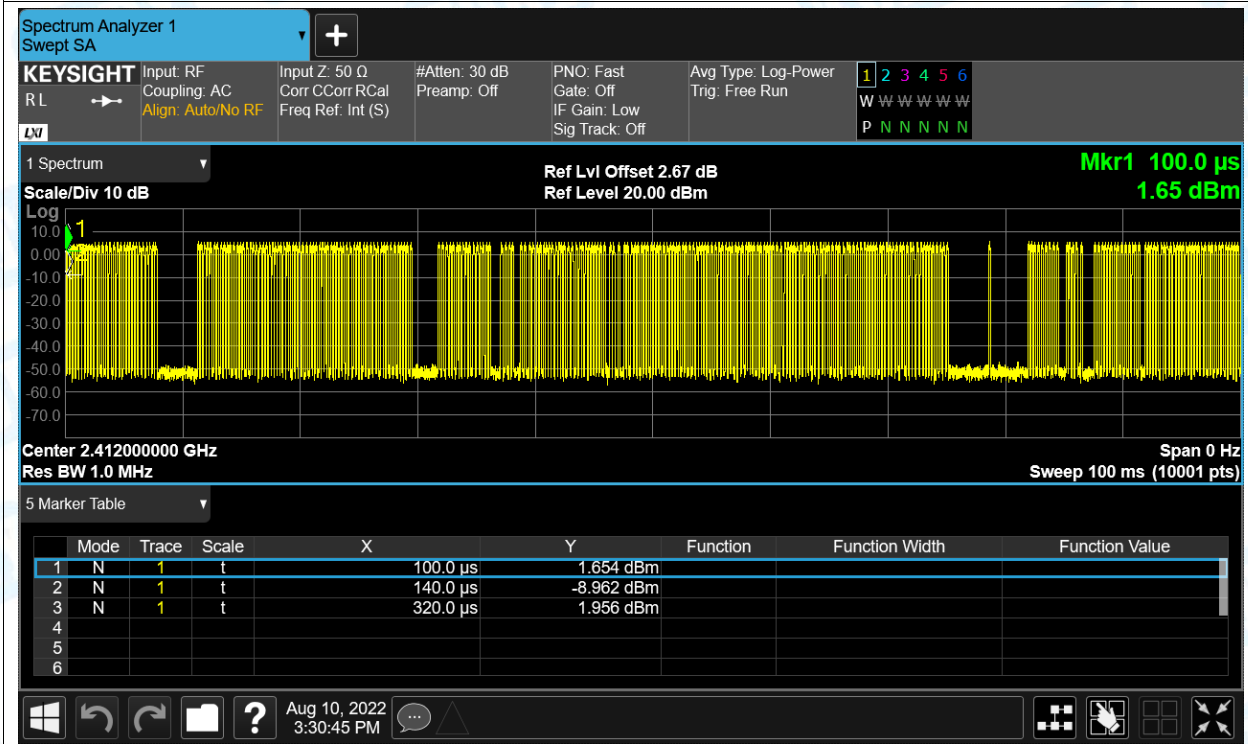
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	90.75	0.42	0.12
NVNT	b	2437	Ant1	98.92	0.05	0.12
NVNT	b	2462	Ant1	91.82	0.37	0.12
NVNT	g	2412	Ant1	56.68	2.47	5.56
NVNT	g	2437	Ant1	65.25	1.85	5.56
NVNT	g	2462	Ant1	59.65	2.24	5.88
NVNT	n(HT20)	2412	Ant1	53.34	2.73	5.88
NVNT	n(HT20)	2437	Ant1	64.1	1.93	5.88
NVNT	n(HT20)	2462	Ant1	59.74	2.24	5.88
NVNT	n(HT40)	2422	Ant1	38.03	4.2	9.09
NVNT	n(HT40)	2437	Ant1	51.34	2.9	10
NVNT	n(HT40)	2452	Ant1	54.28	2.65	10



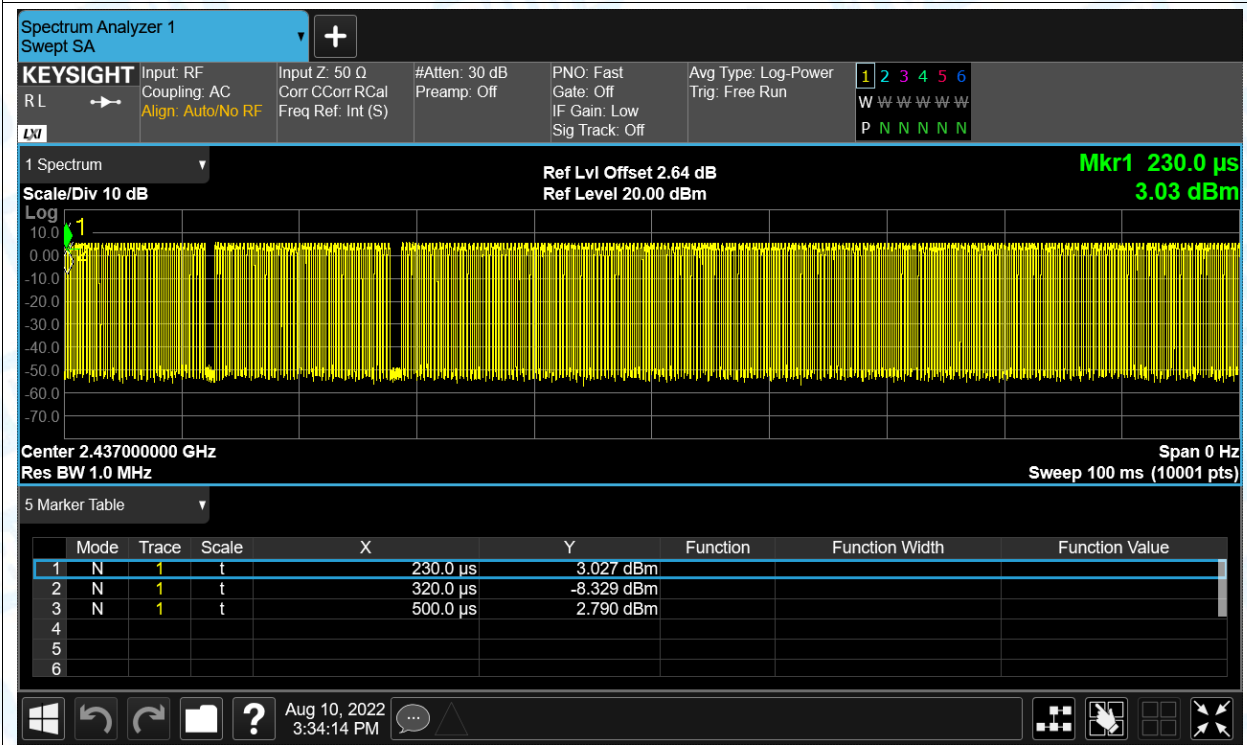
Duty Cycle NVNT b 2462MHz Ant1



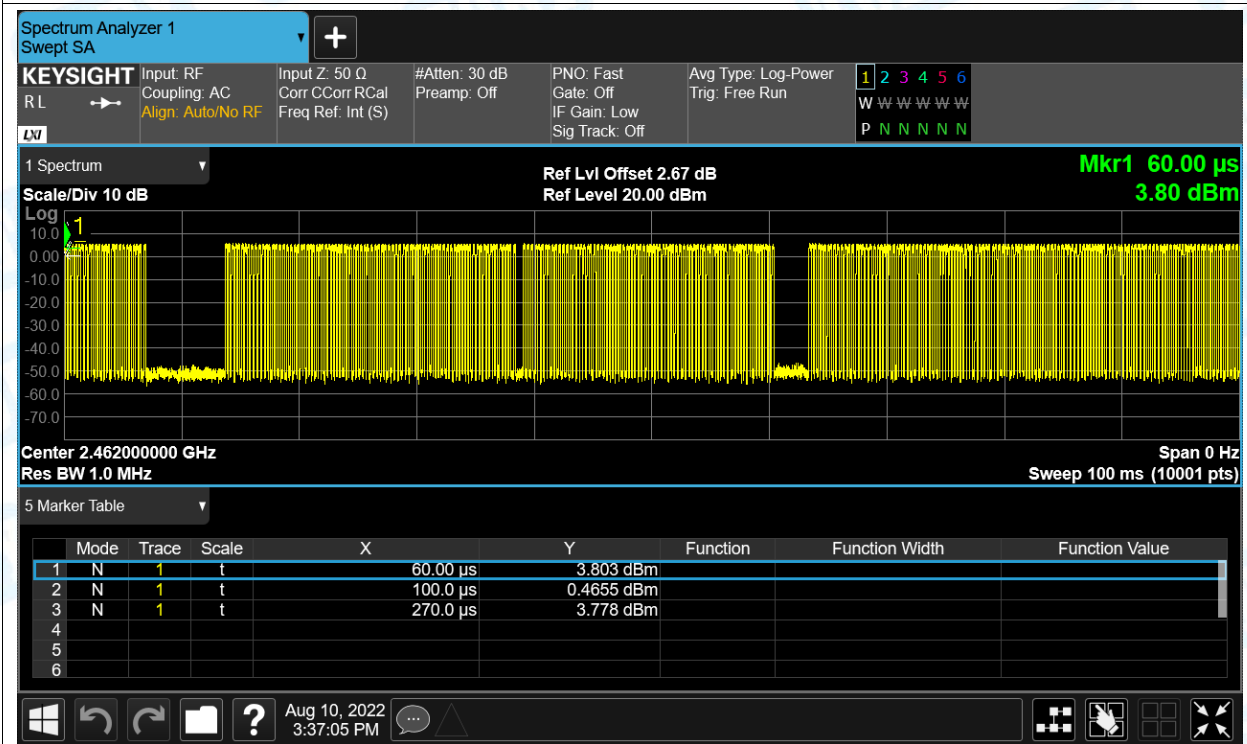
Duty Cycle NVNT g 2412MHz Ant1



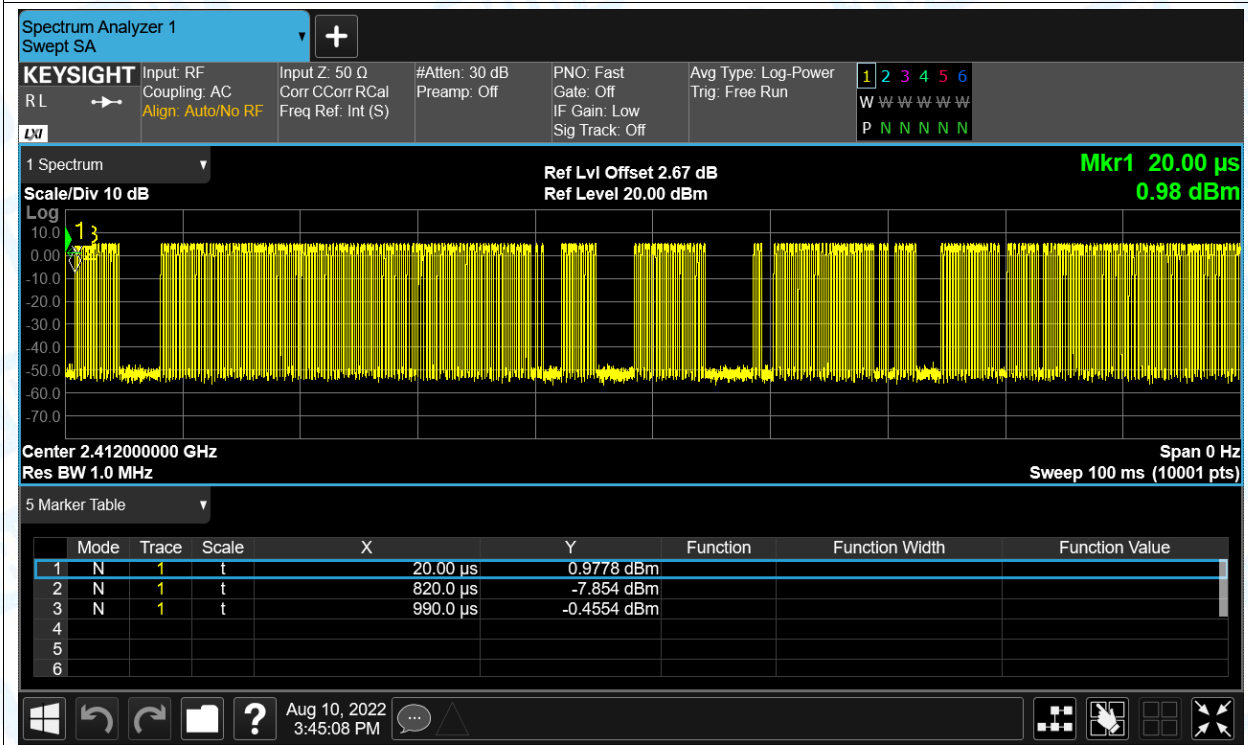
Duty Cycle NVNT g 2437MHz Ant1



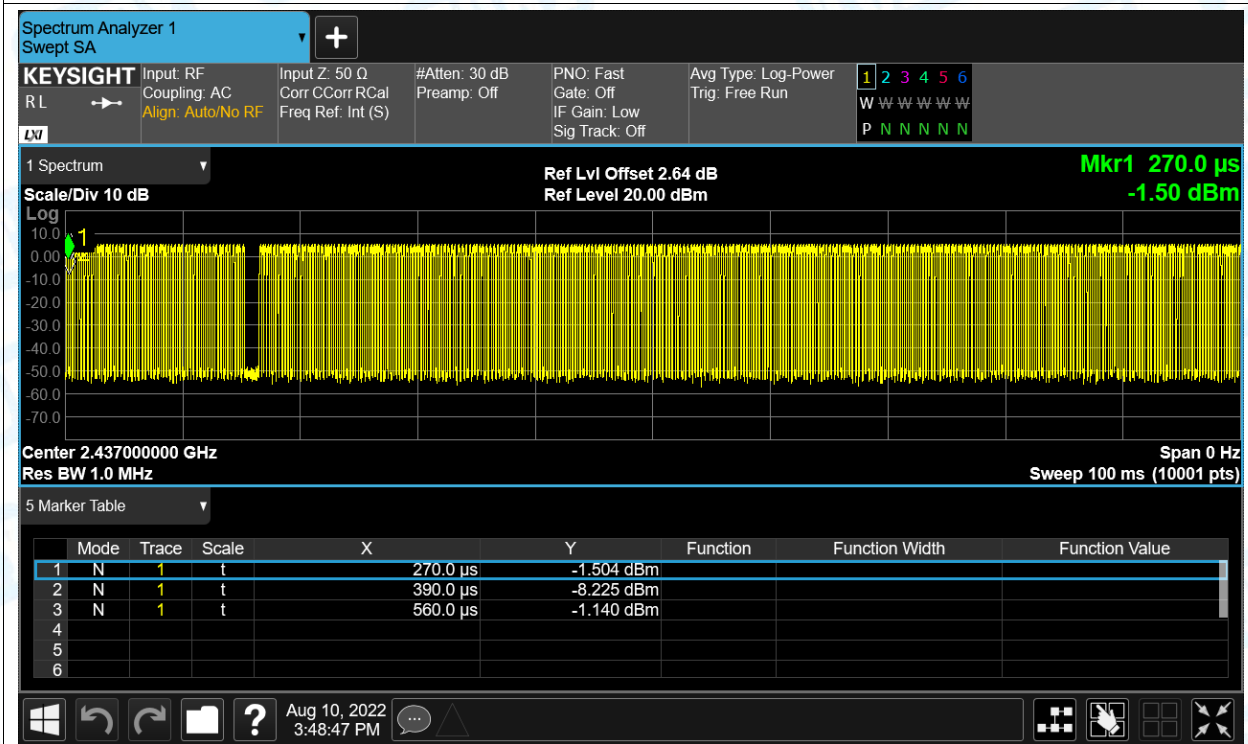
Duty Cycle NVNT g 2462MHz Ant1



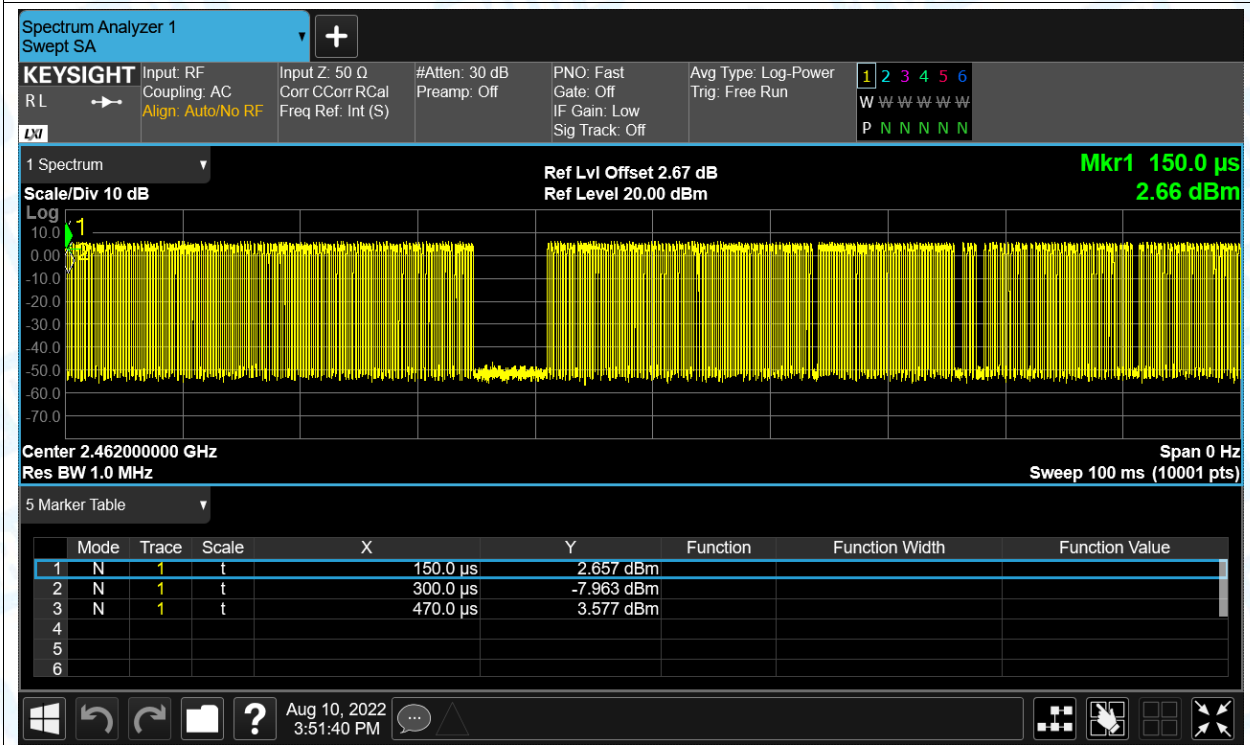
Duty Cycle NVNT n(HT20) 2412MHz Ant1



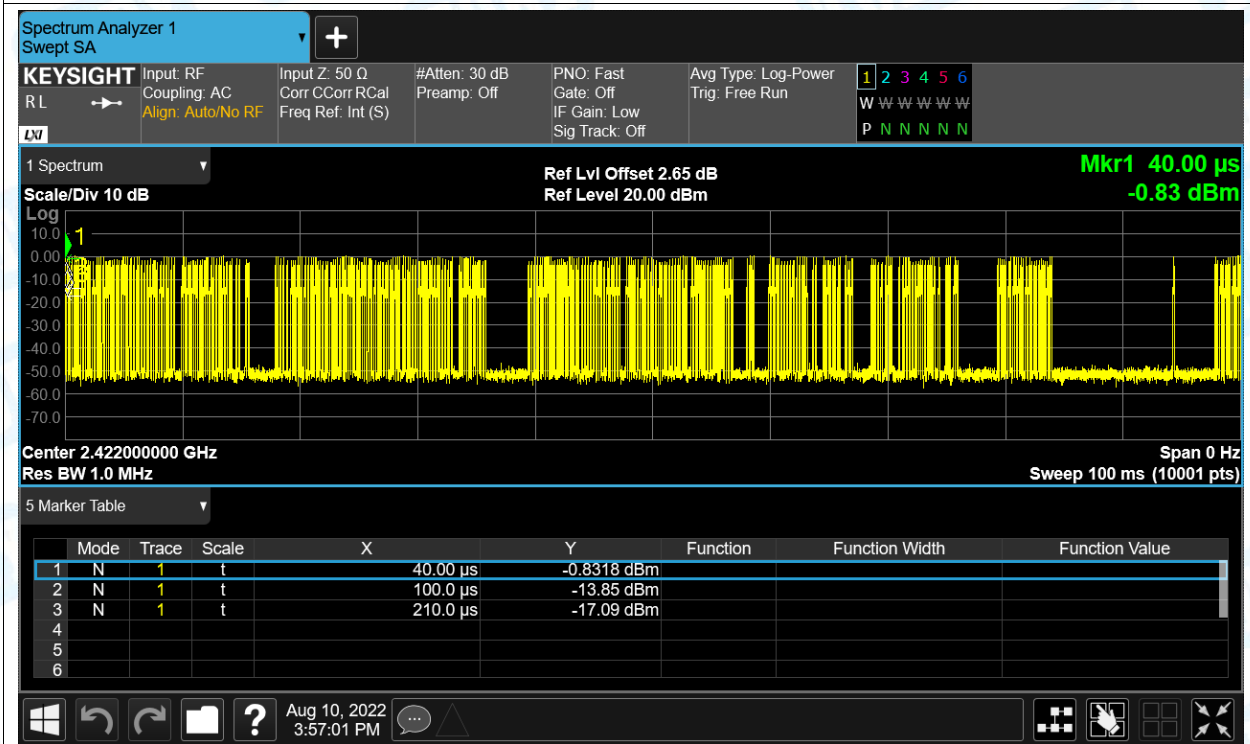
Duty Cycle NVNT n(HT20) 2437MHz Ant1



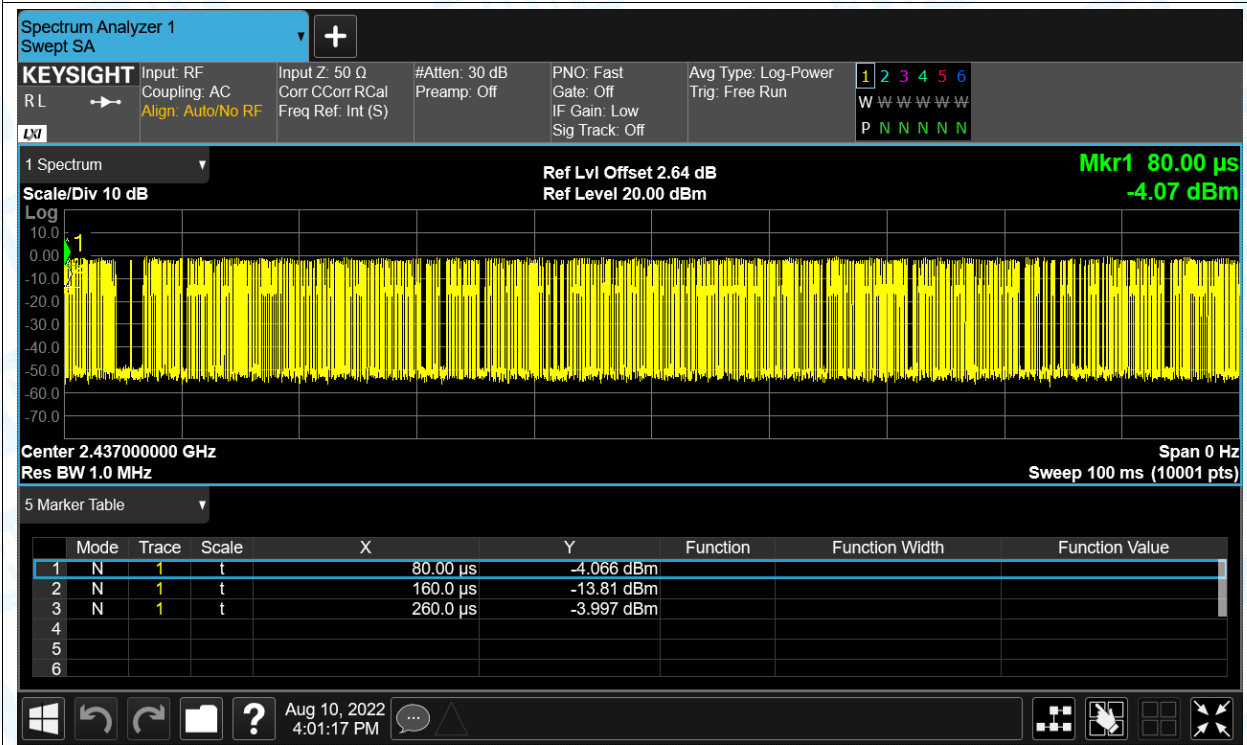
Duty Cycle NVNT n(HT20) 2462MHz Ant1



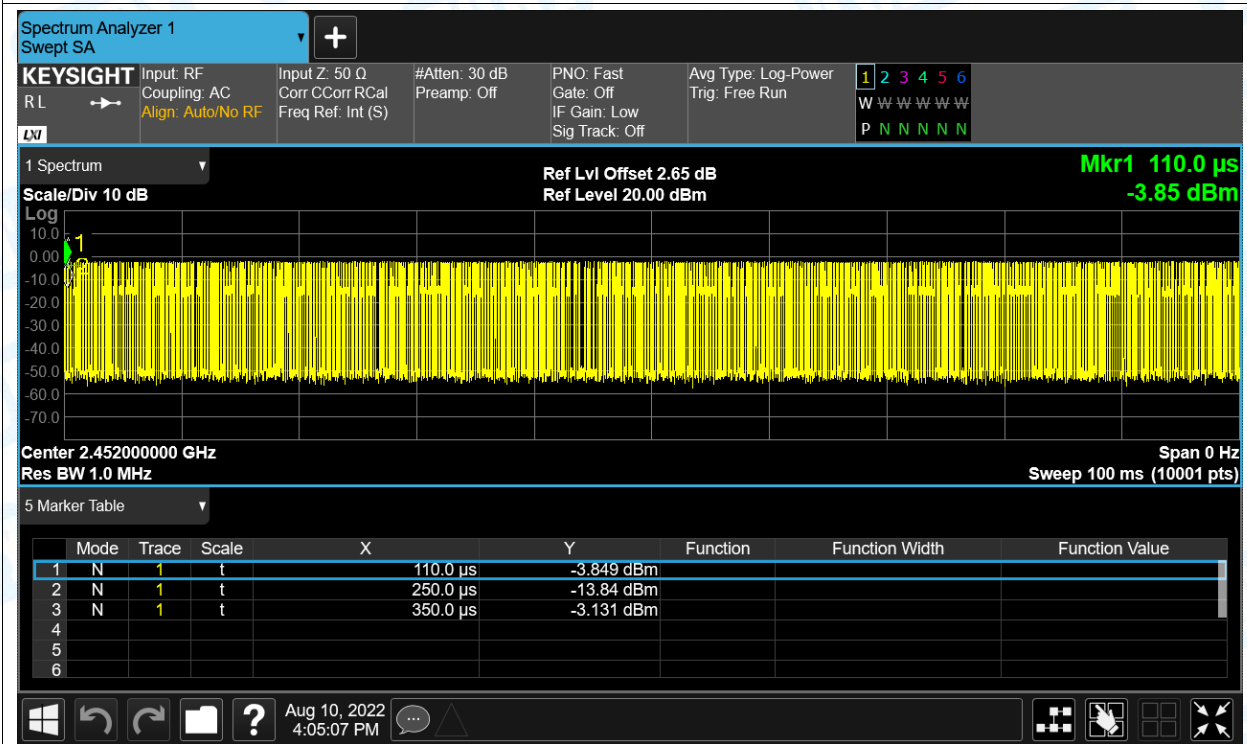
Duty Cycle NVNT n(HT40) 2422MHz Ant1



Duty Cycle NVNT n(HT40) 2437MHz Ant1



Duty Cycle NVNT n(HT40) 2452MHz Ant1

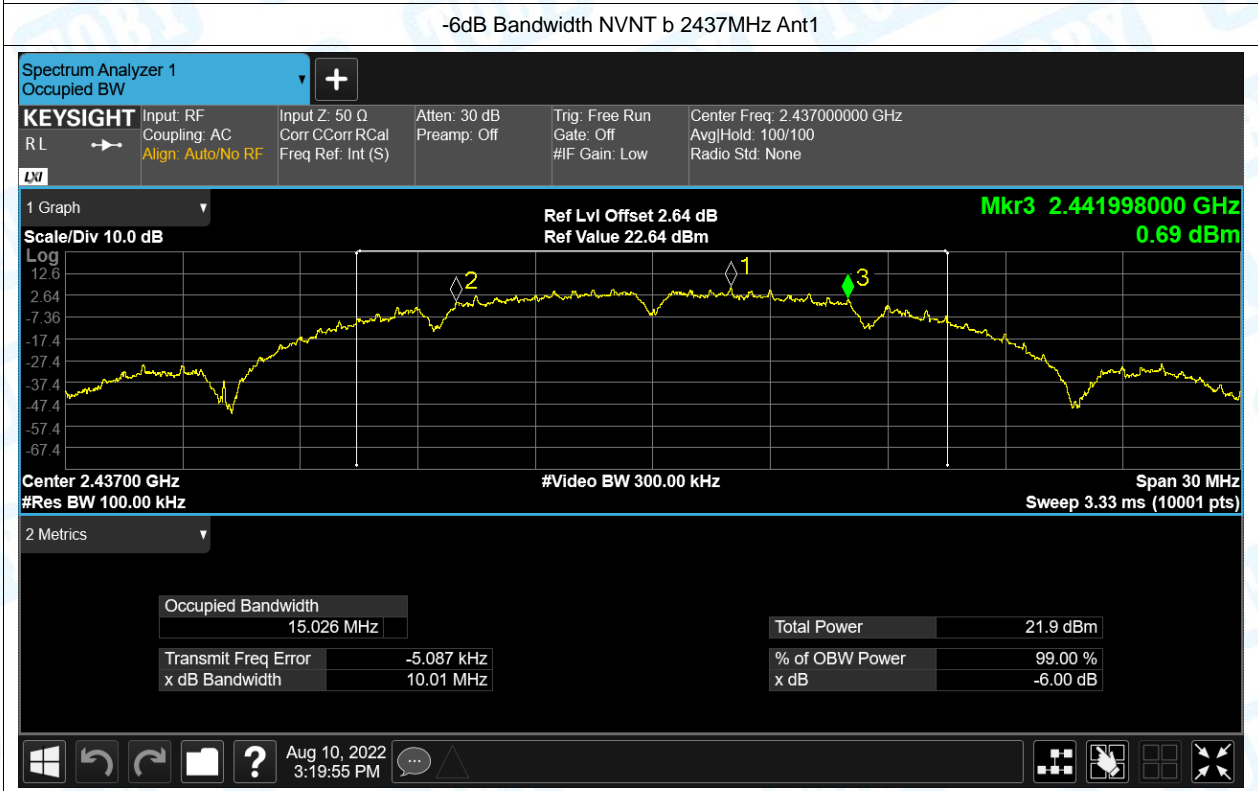


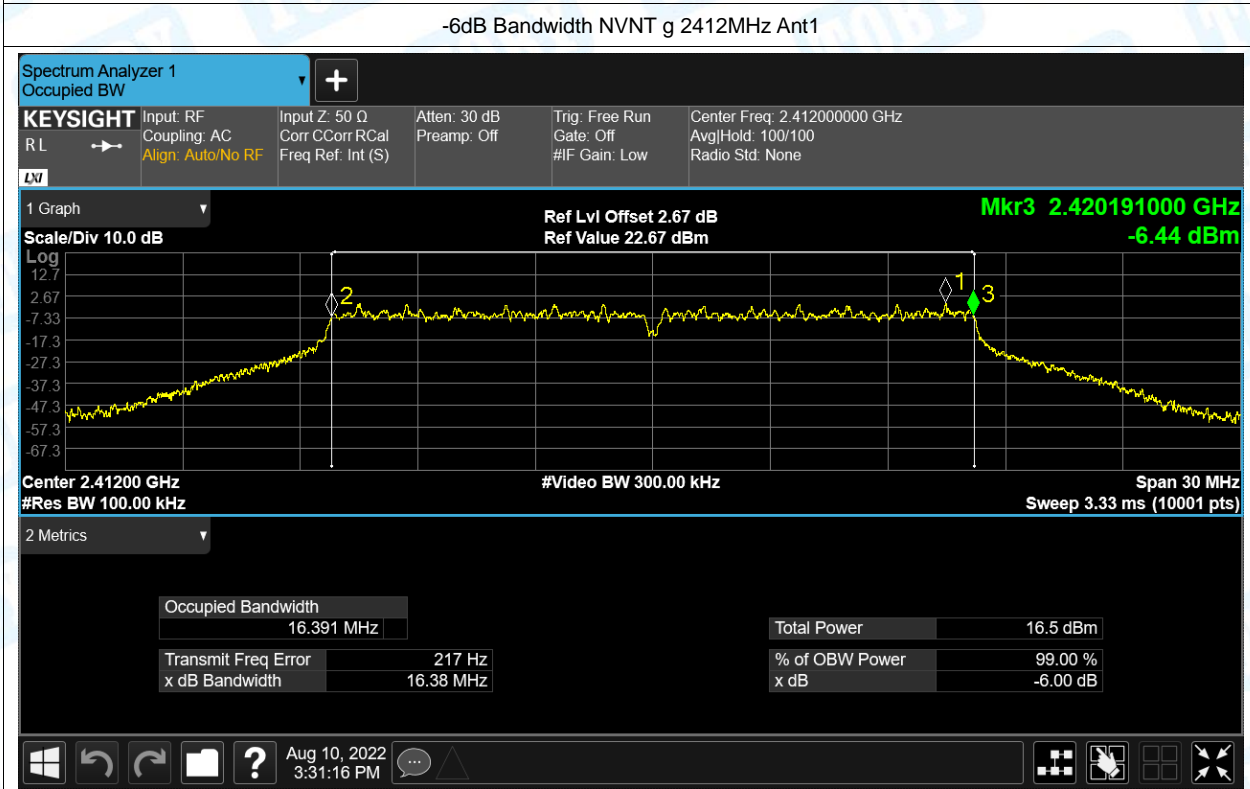
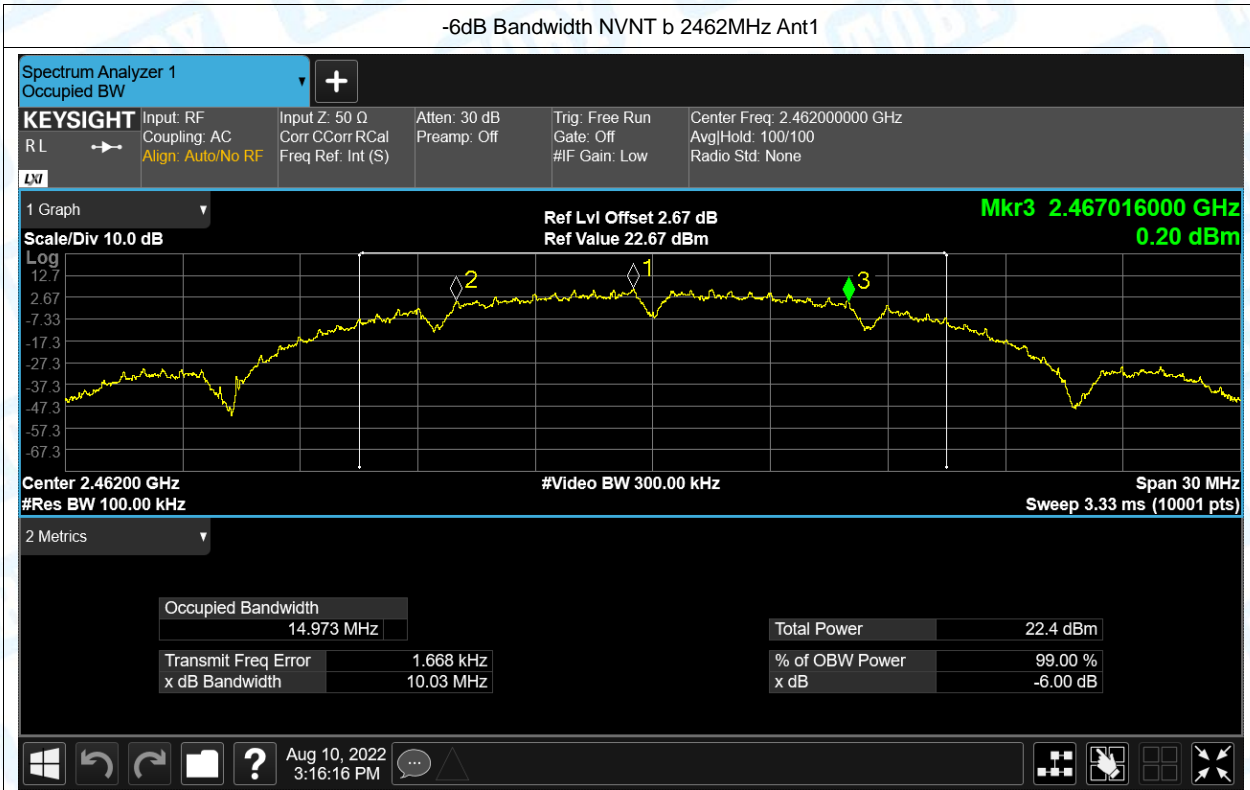
2. Maximum Conducted Output Power

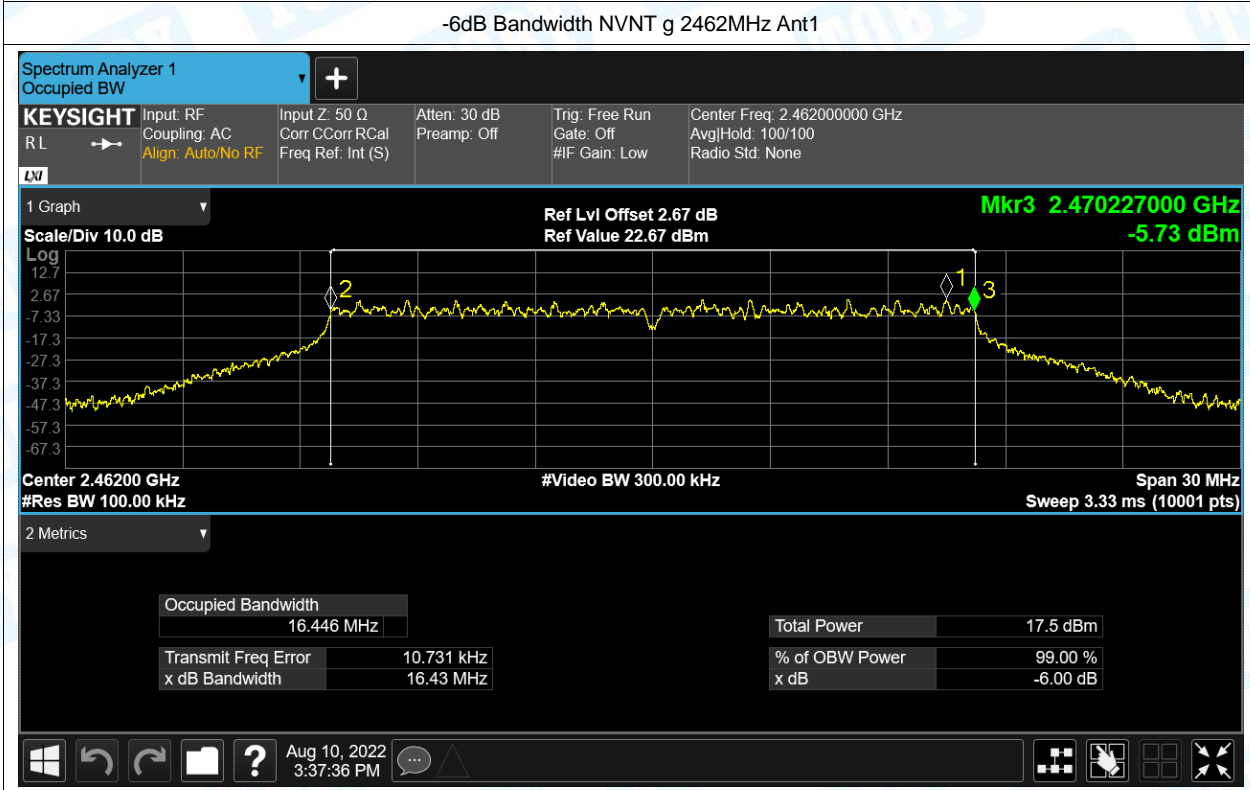
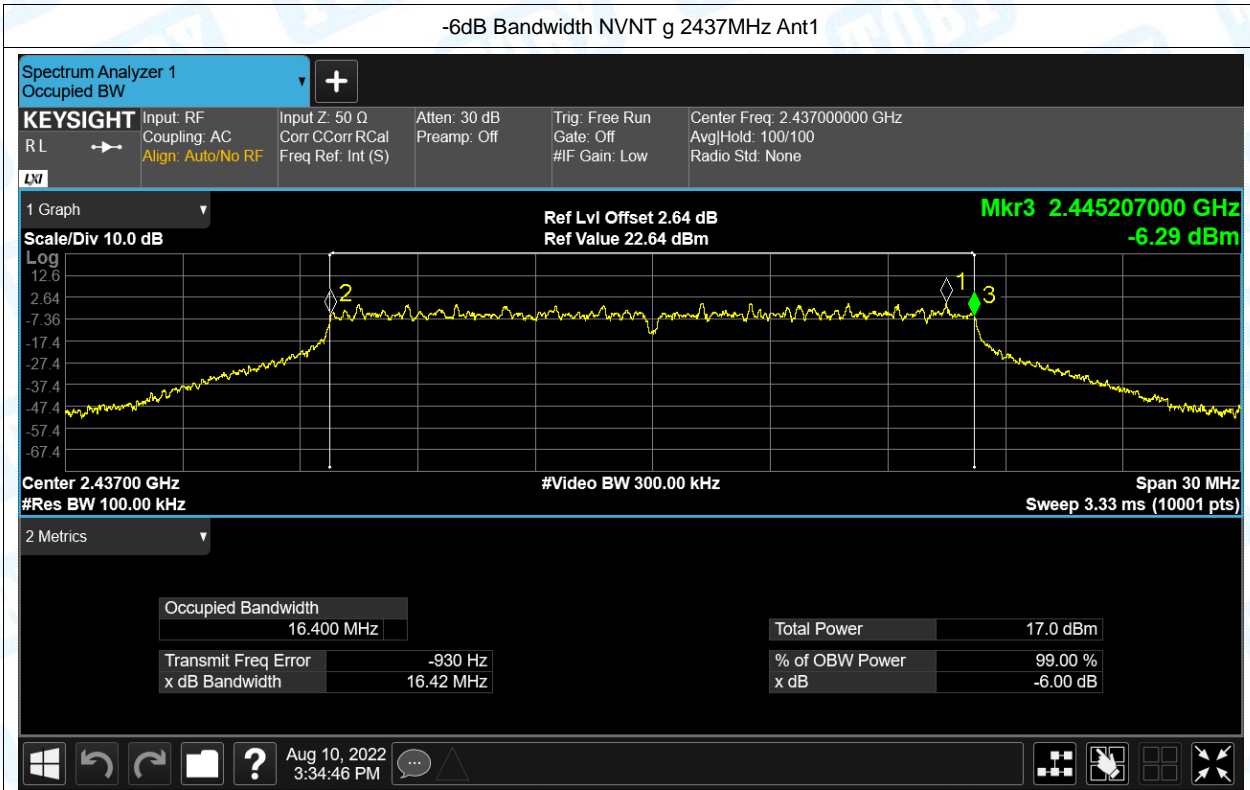
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	16.965	30	Pass
NVNT	b	2437	Ant1	16.953	30	Pass
NVNT	b	2462	Ant1	17.434	30	Pass
NVNT	g	2412	Ant1	15.067	30	Pass
NVNT	g	2437	Ant1	15.506	30	Pass
NVNT	g	2462	Ant1	15.942	30	Pass
NVNT	n(HT20)	2412	Ant1	15.18	30	Pass
NVNT	n(HT20)	2437	Ant1	15.648	30	Pass
NVNT	n(HT20)	2462	Ant1	15.985	30	Pass
NVNT	n(HT40)	2422	Ant1	14.18	30	Pass
NVNT	n(HT40)	2437	Ant1	14.453	30	Pass
NVNT	n(HT40)	2452	Ant1	14.691	30	Pass

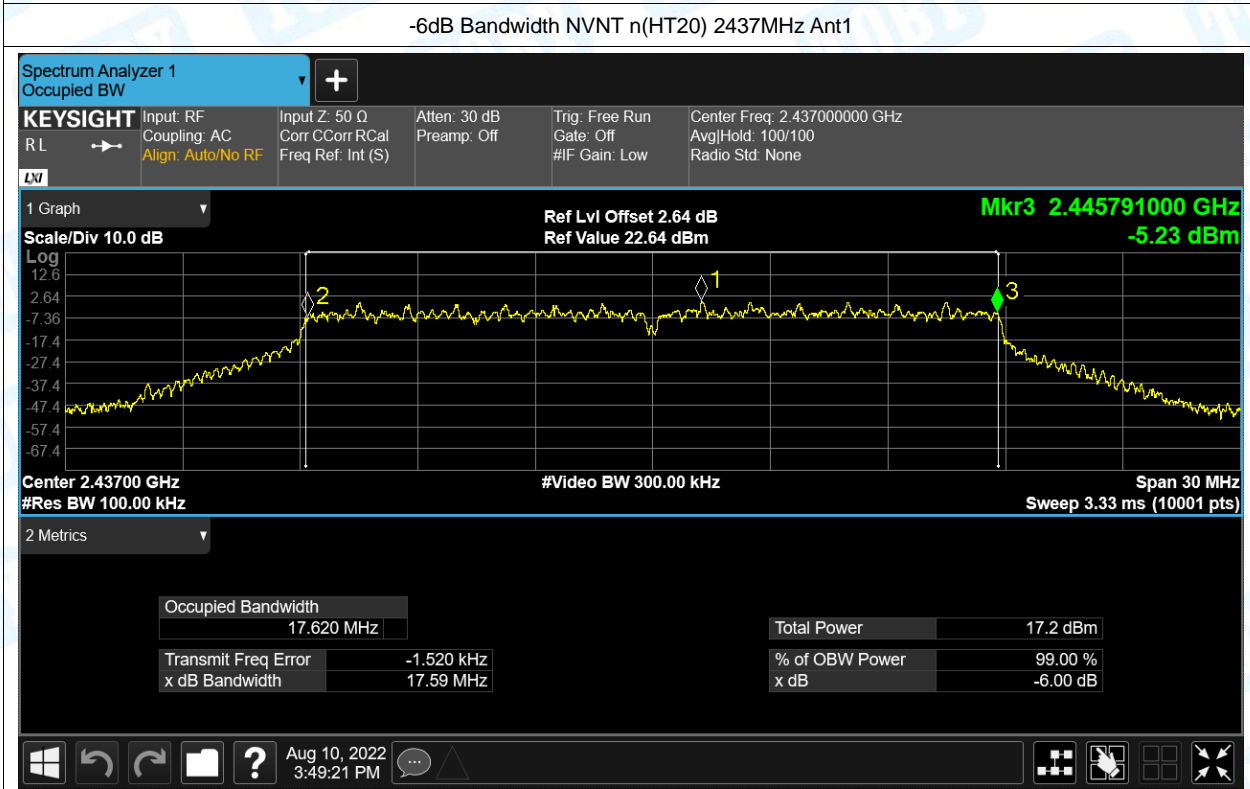
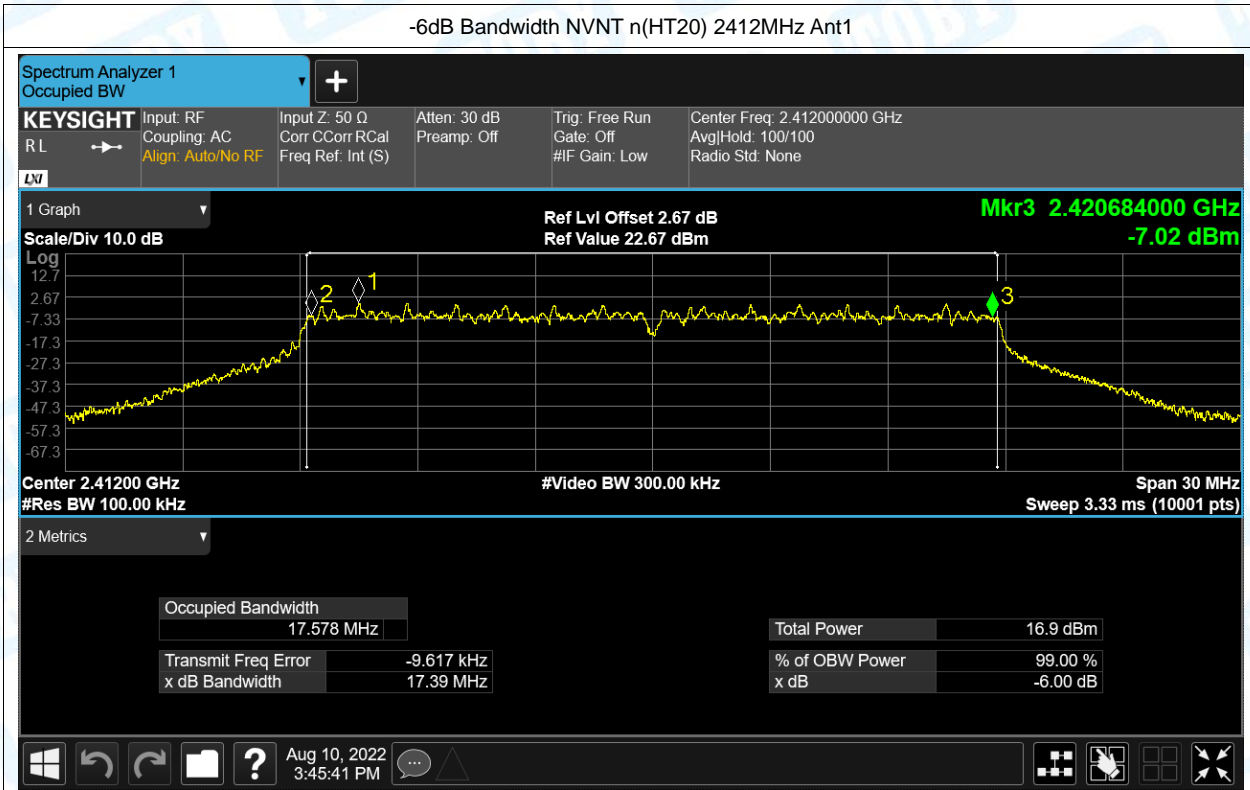
3. -6dB Bandwidth

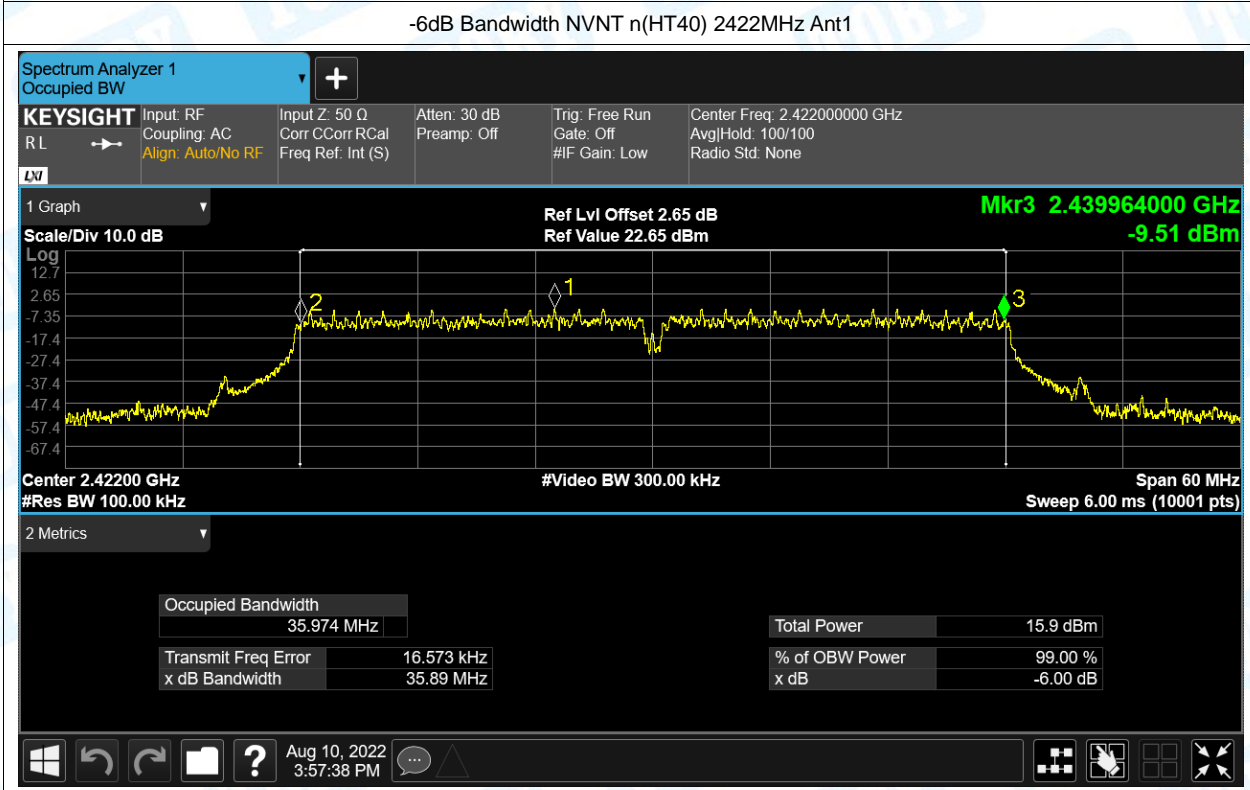
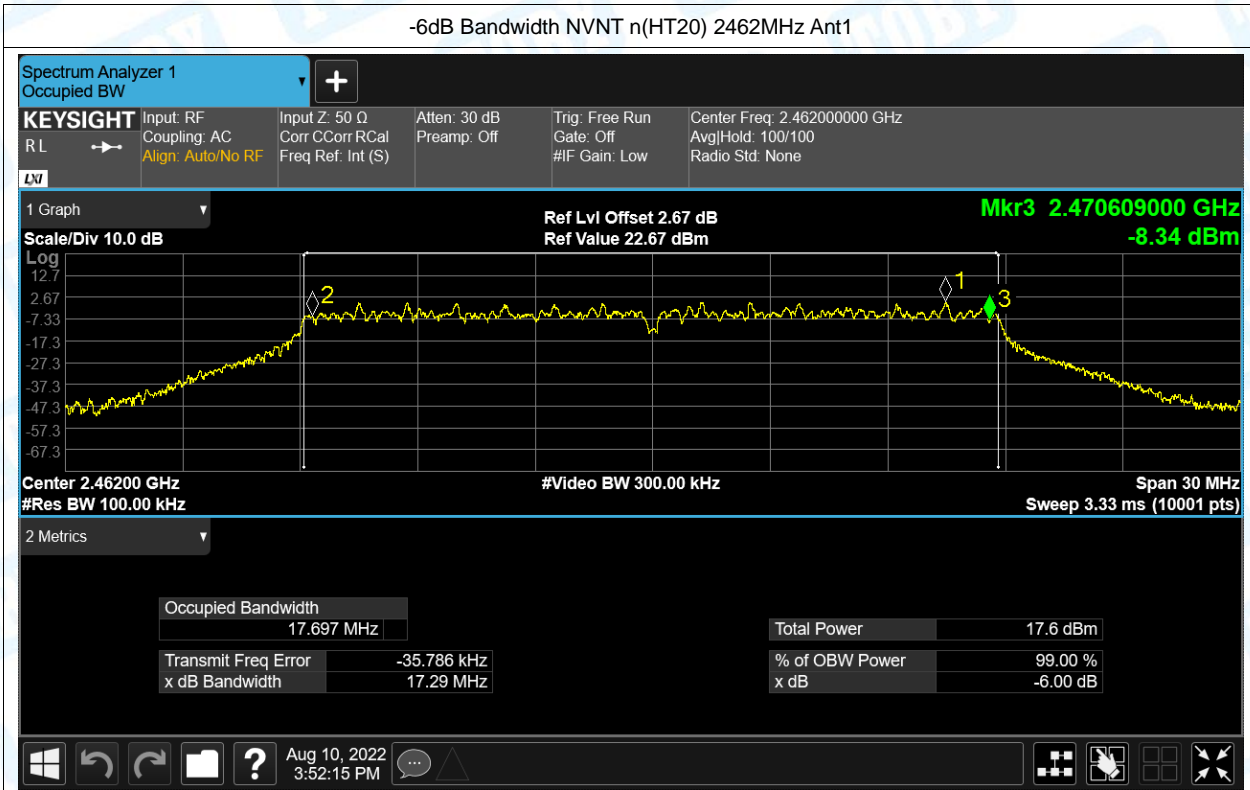
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	9.55	0.5	Pass
NVNT	b	2437	Ant1	10.01	0.5	Pass
NVNT	b	2462	Ant1	10.03	0.5	Pass
NVNT	g	2412	Ant1	16.38	0.5	Pass
NVNT	g	2437	Ant1	16.42	0.5	Pass
NVNT	g	2462	Ant1	16.43	0.5	Pass
NVNT	n(HT20)	2412	Ant1	17.39	0.5	Pass
NVNT	n(HT20)	2437	Ant1	17.59	0.5	Pass
NVNT	n(HT20)	2462	Ant1	17.29	0.5	Pass
NVNT	n(HT40)	2422	Ant1	35.89	0.5	Pass
NVNT	n(HT40)	2437	Ant1	35.72	0.5	Pass
NVNT	n(HT40)	2452	Ant1	36.13	0.5	Pass

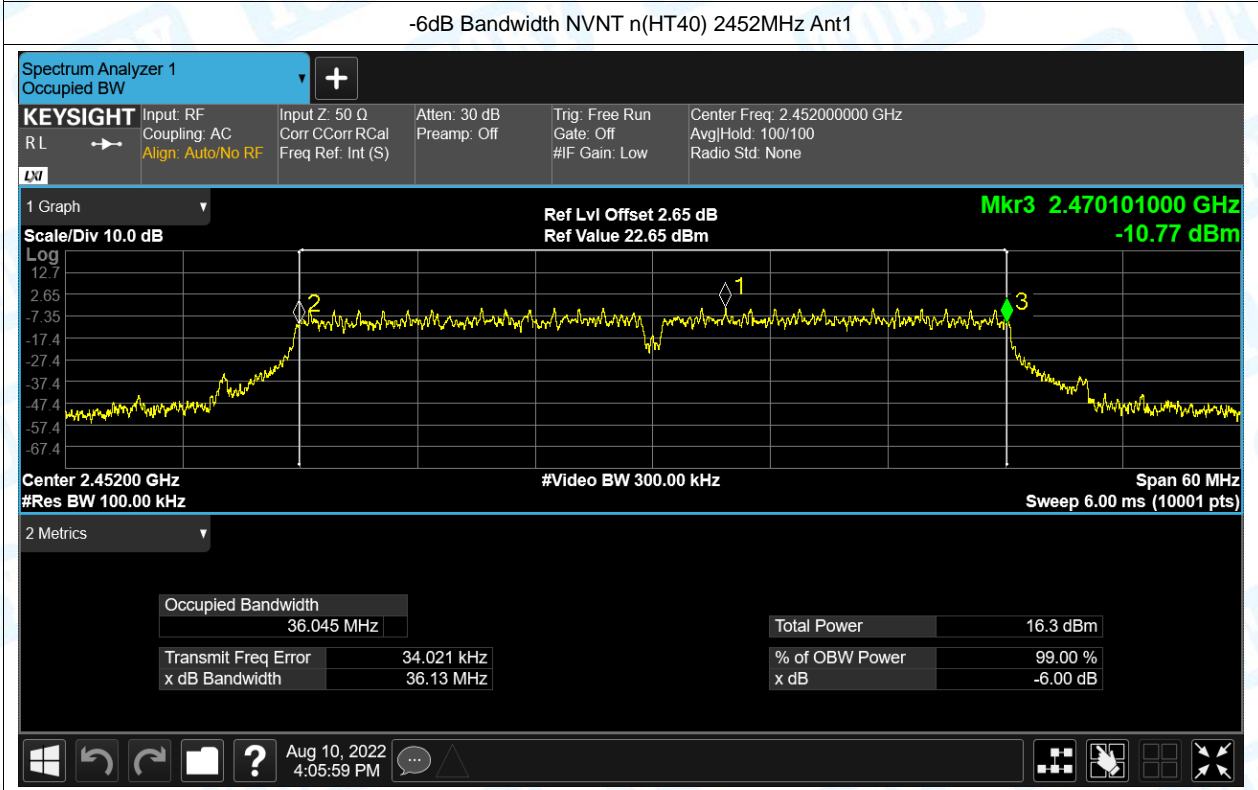
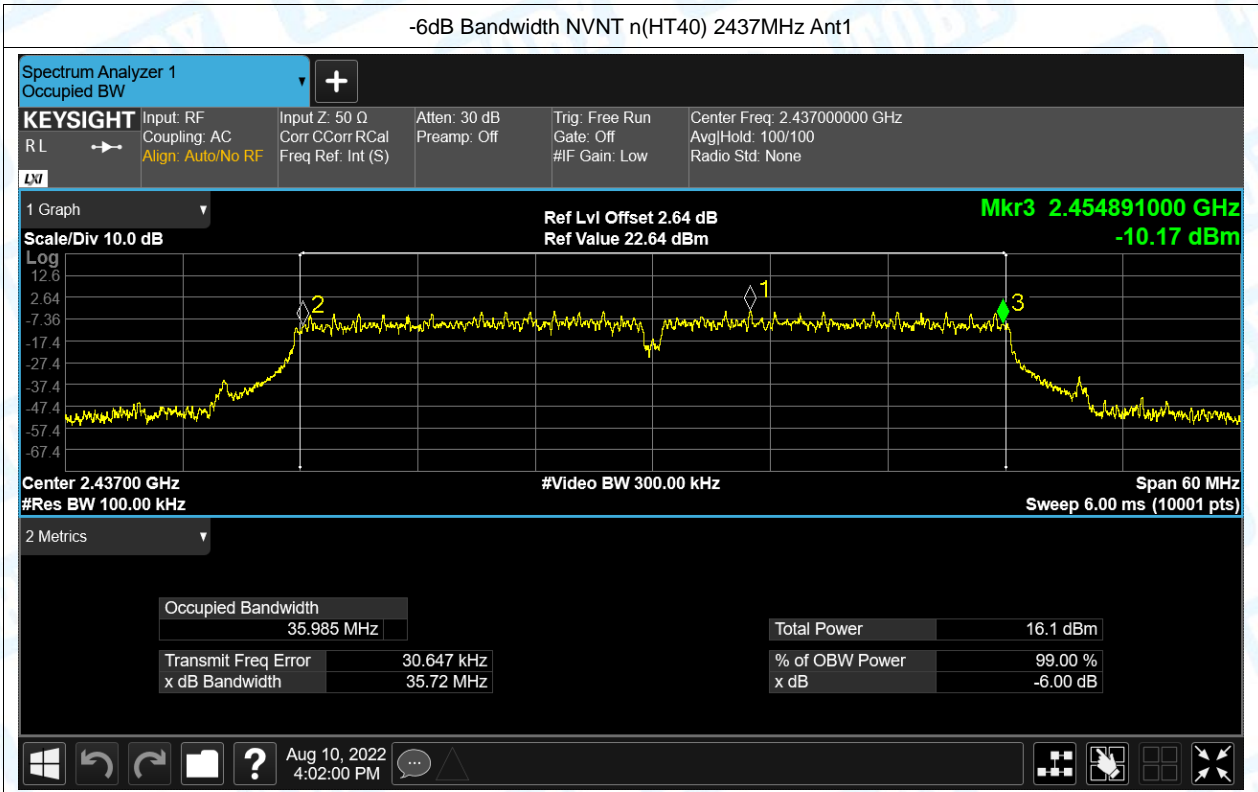










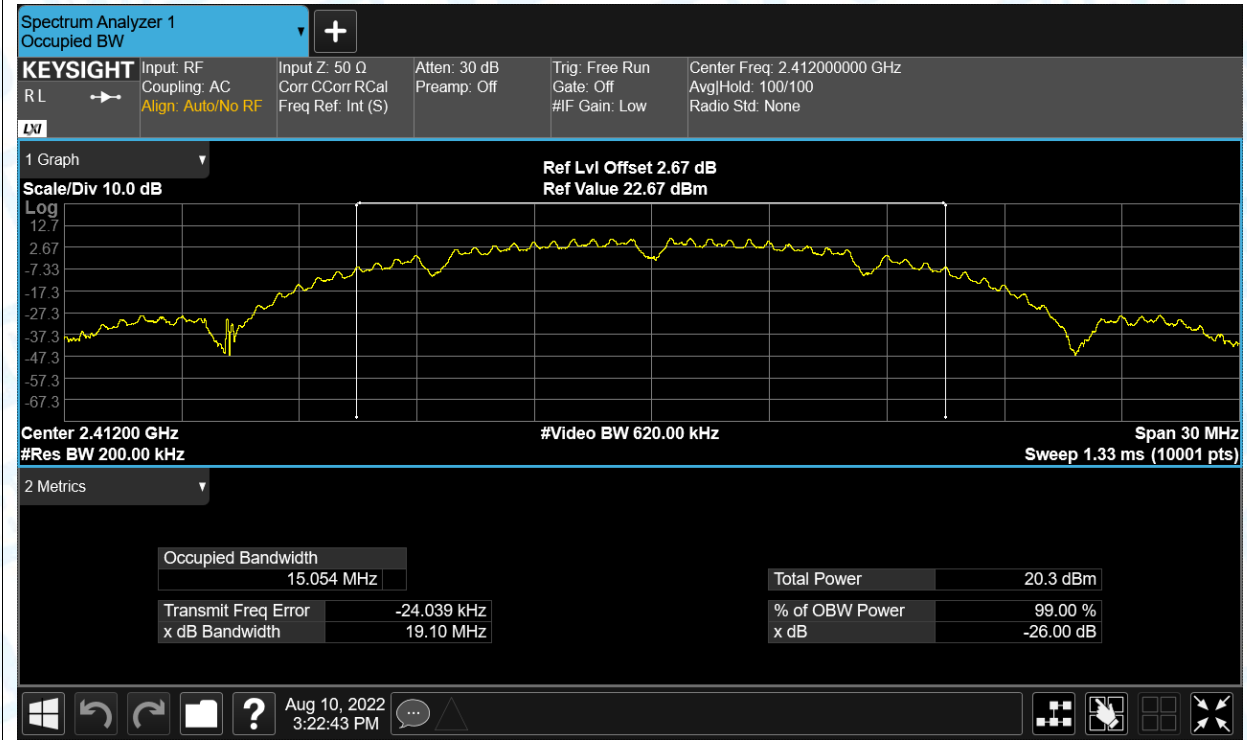


4. Occupied Channel Bandwidth

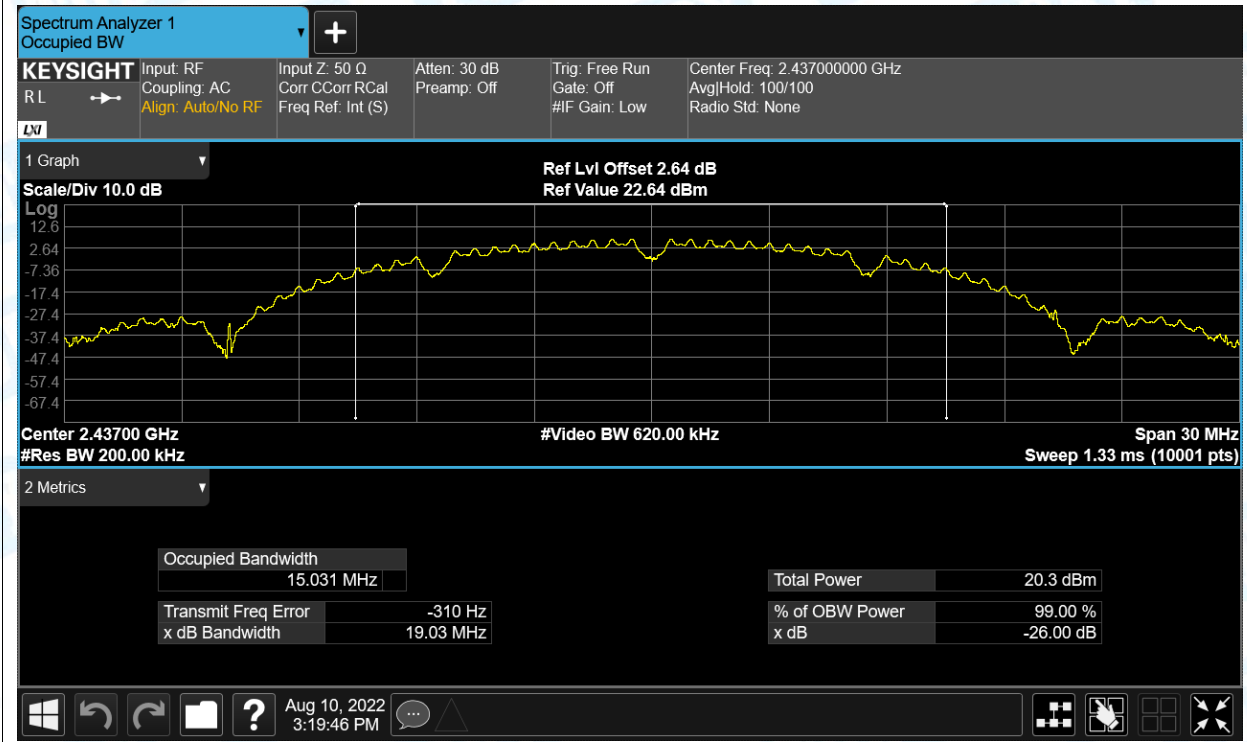
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	15.054
NVNT	b	2437	Ant1	15.031
NVNT	b	2462	Ant1	15.017
NVNT	g	2412	Ant1	16.47
NVNT	g	2437	Ant1	16.478
NVNT	g	2462	Ant1	16.576
NVNT	n(HT20)	2412	Ant1	17.627
NVNT	n(HT20)	2437	Ant1	17.711
NVNT	n(HT20)	2462	Ant1	17.751
NVNT	n(HT40)	2422	Ant1	36.179
NVNT	n(HT40)	2437	Ant1	36.158
NVNT	n(HT40)	2452	Ant1	36.183

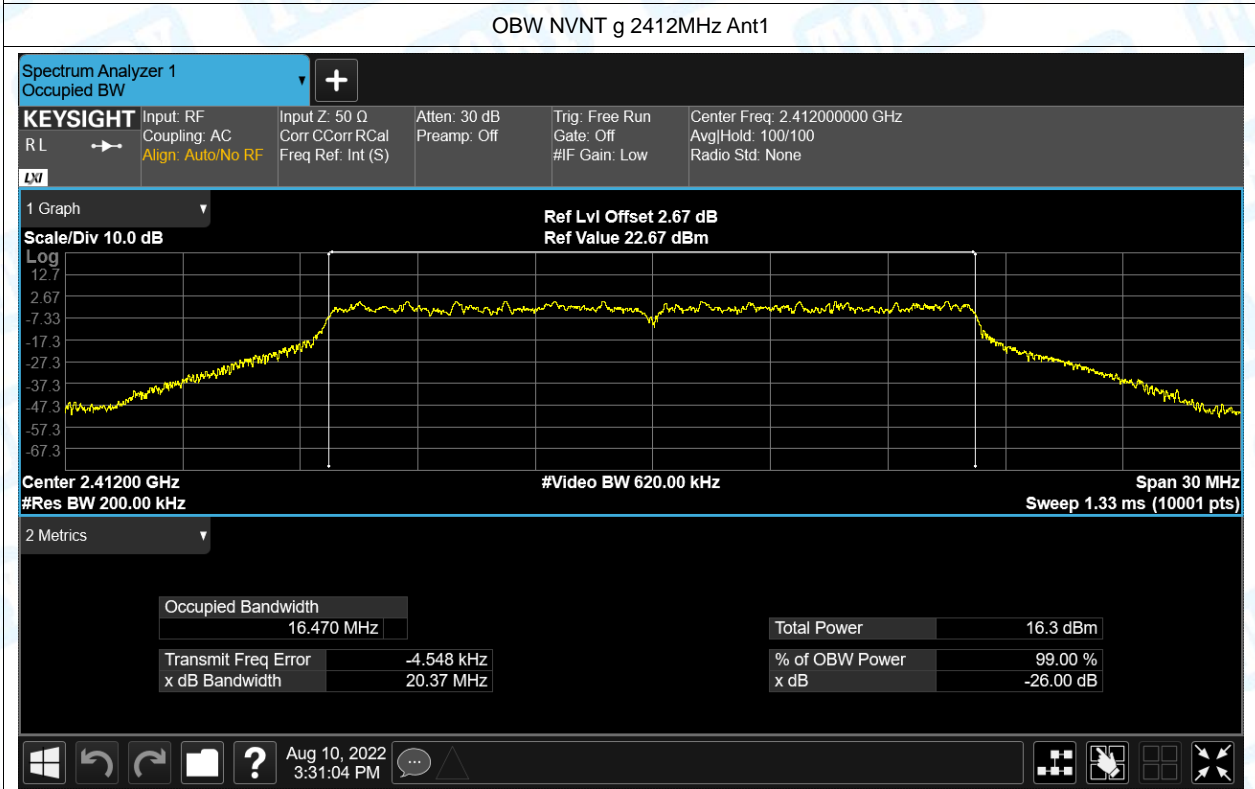
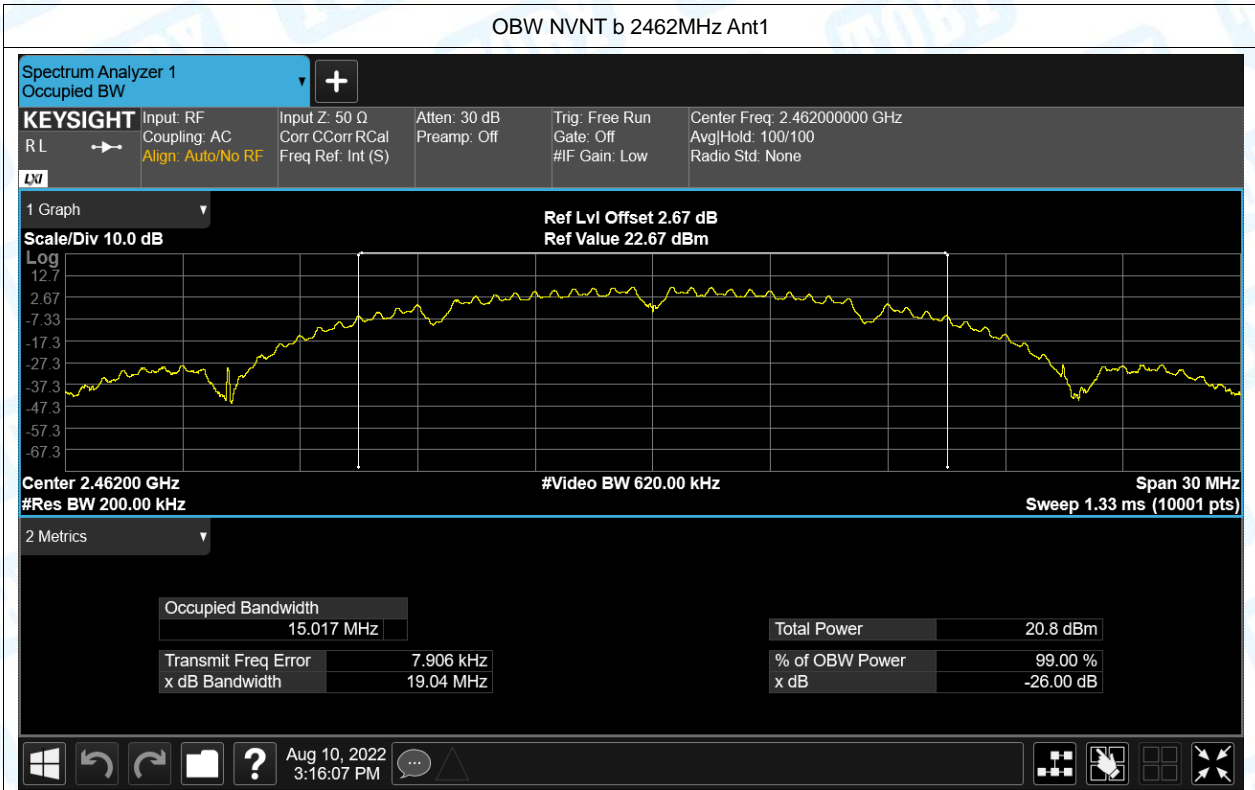
Test Graphs

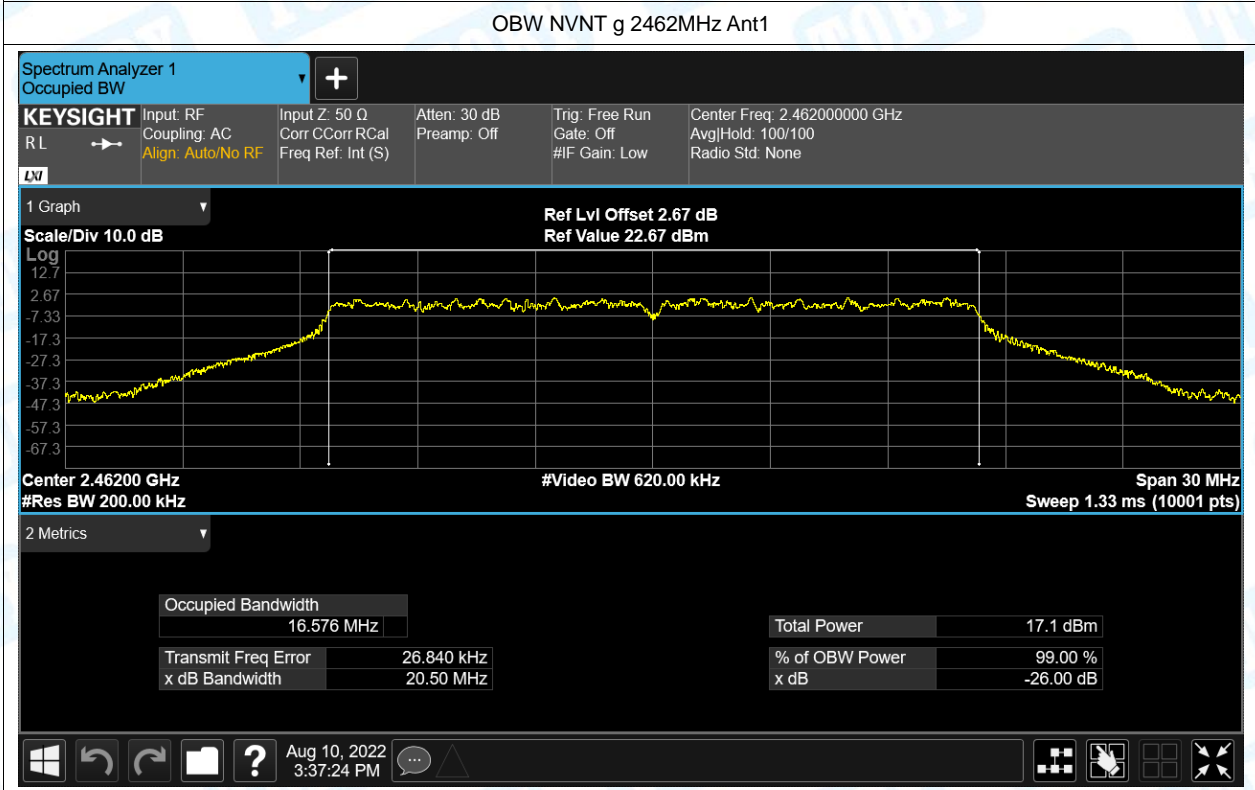
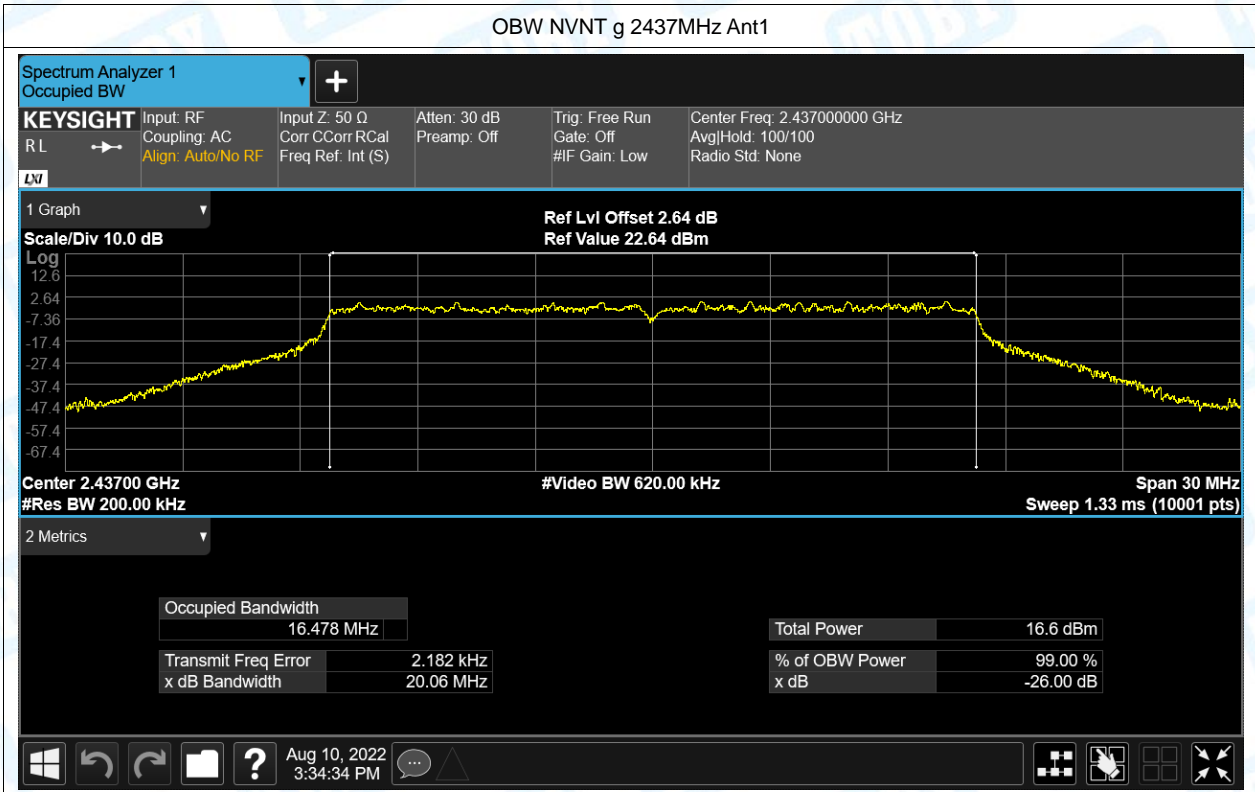
OBW NVNT b 2412MHz Ant1

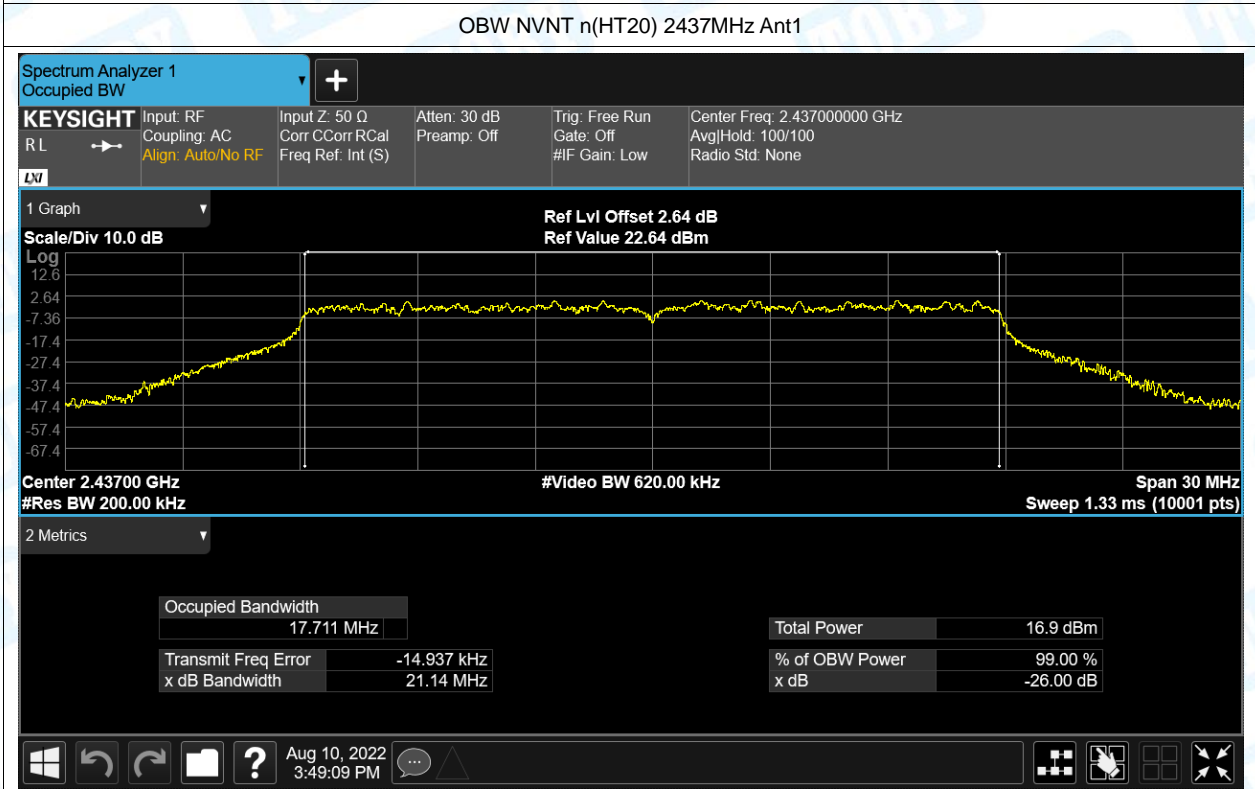
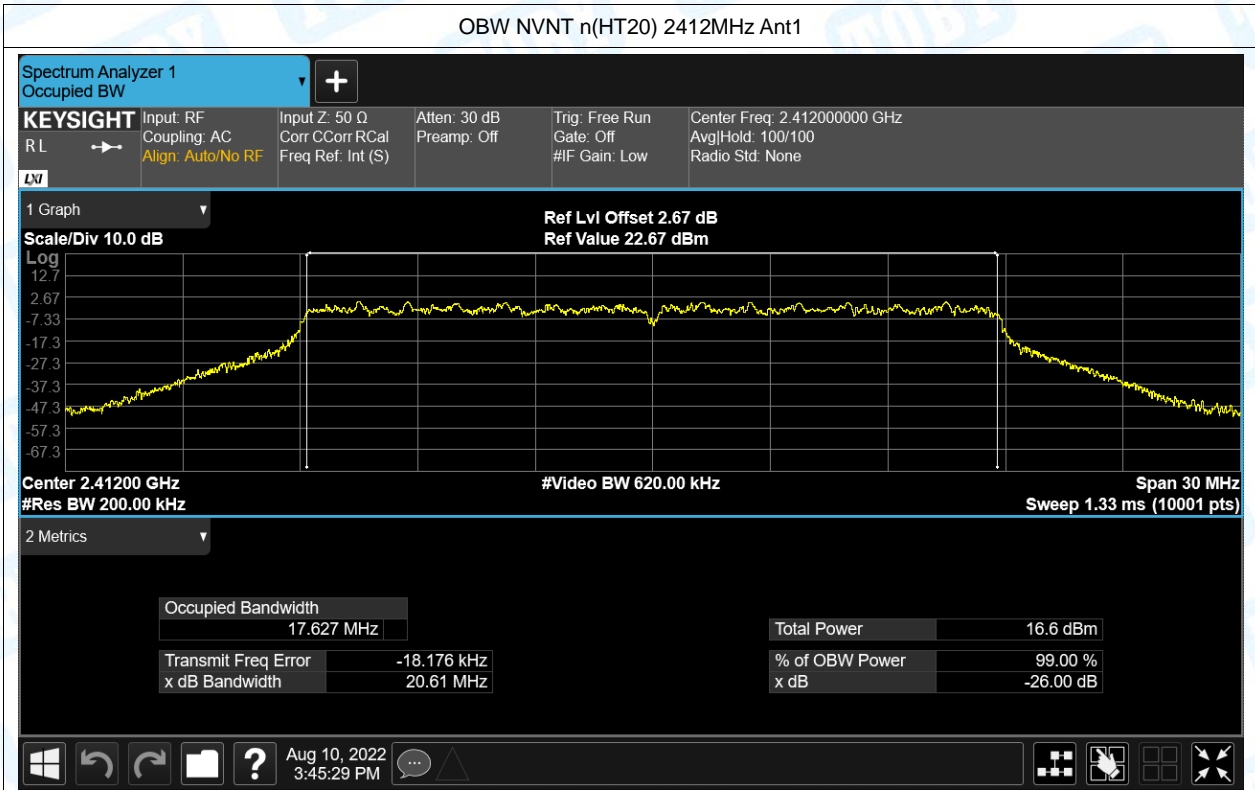


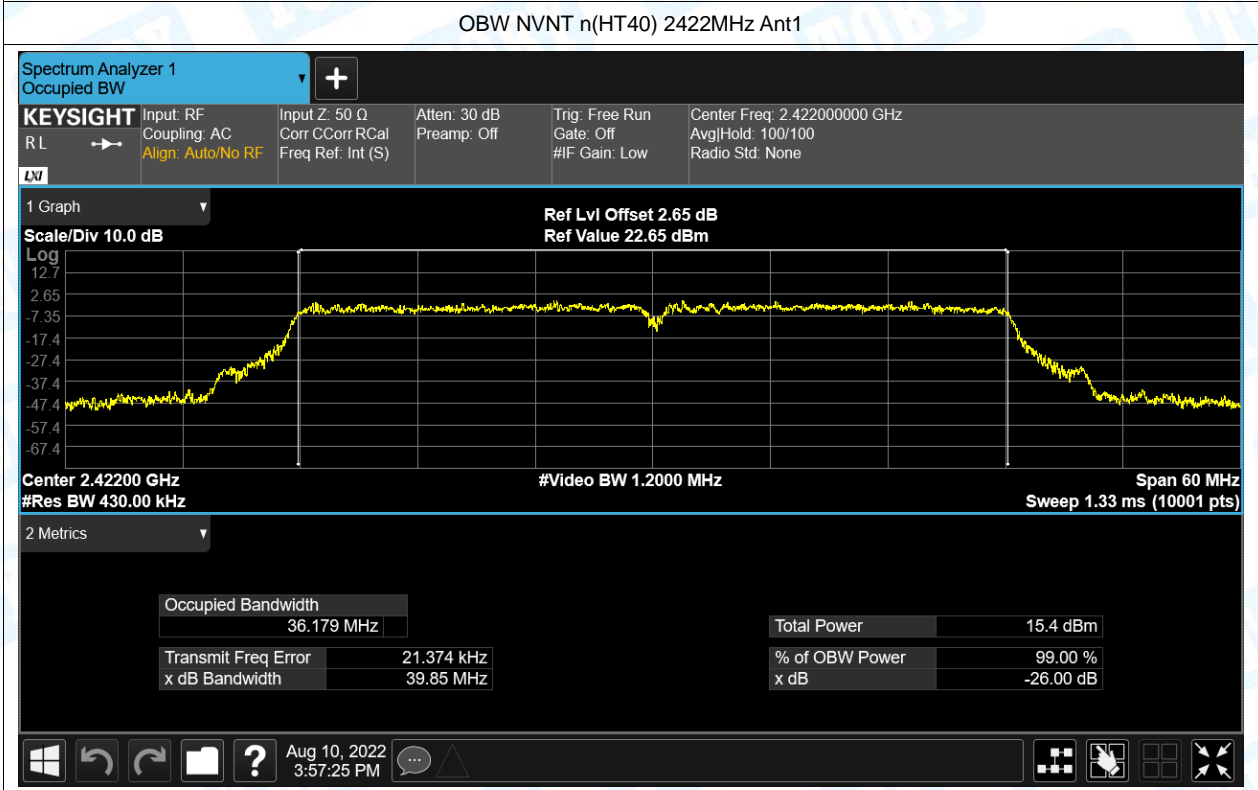
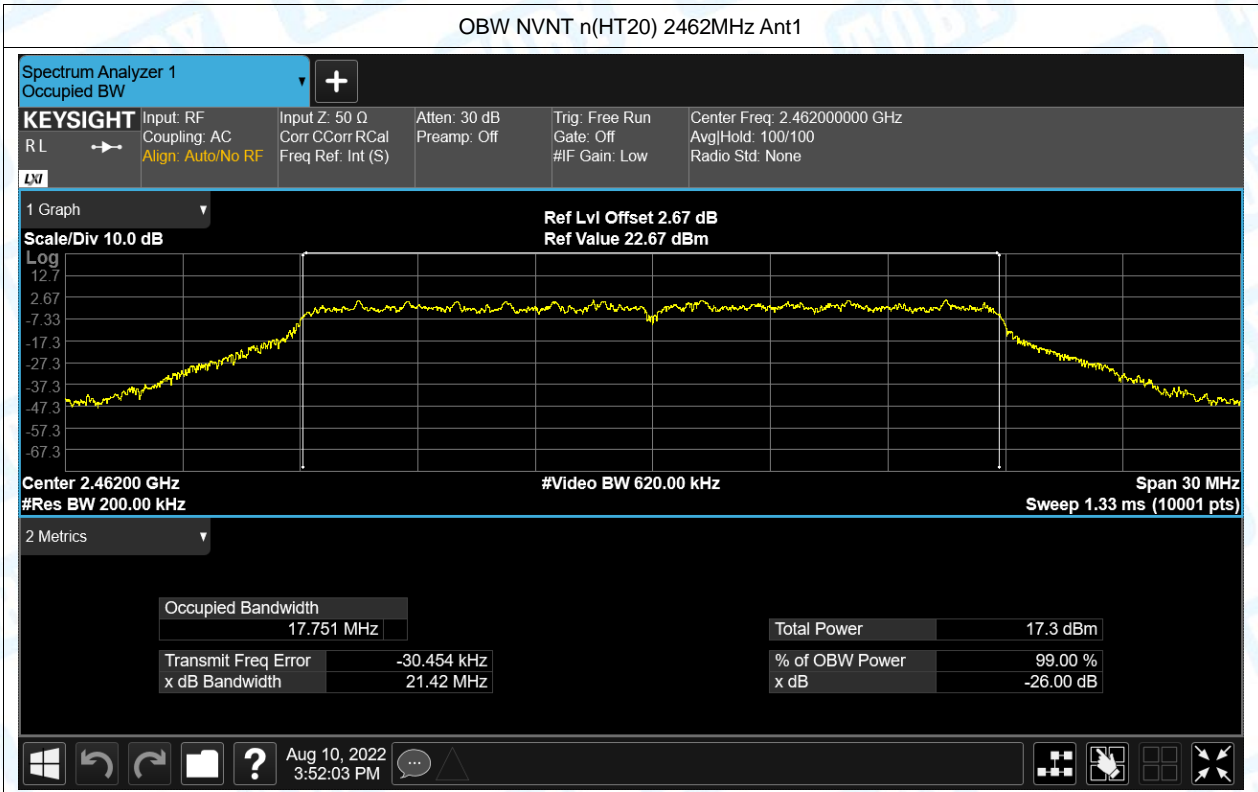
OBW NVNT b 2437MHz Ant1

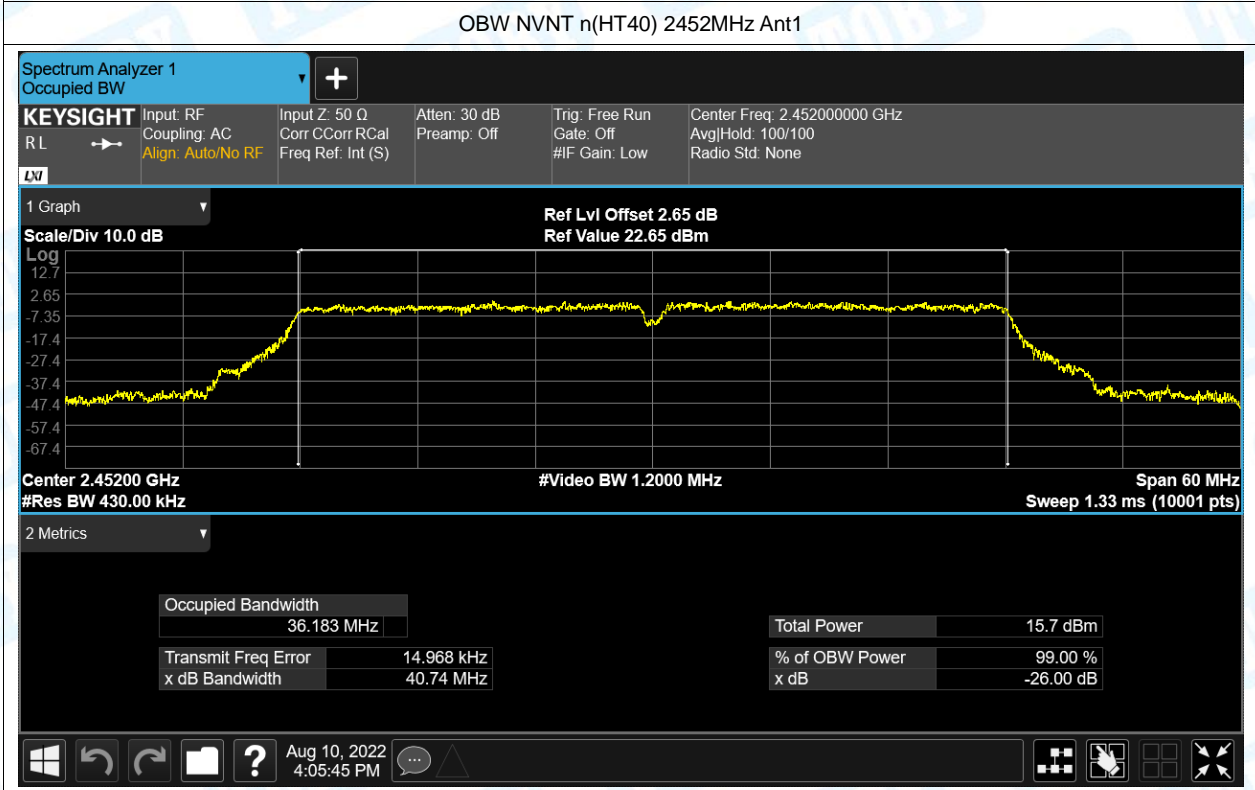
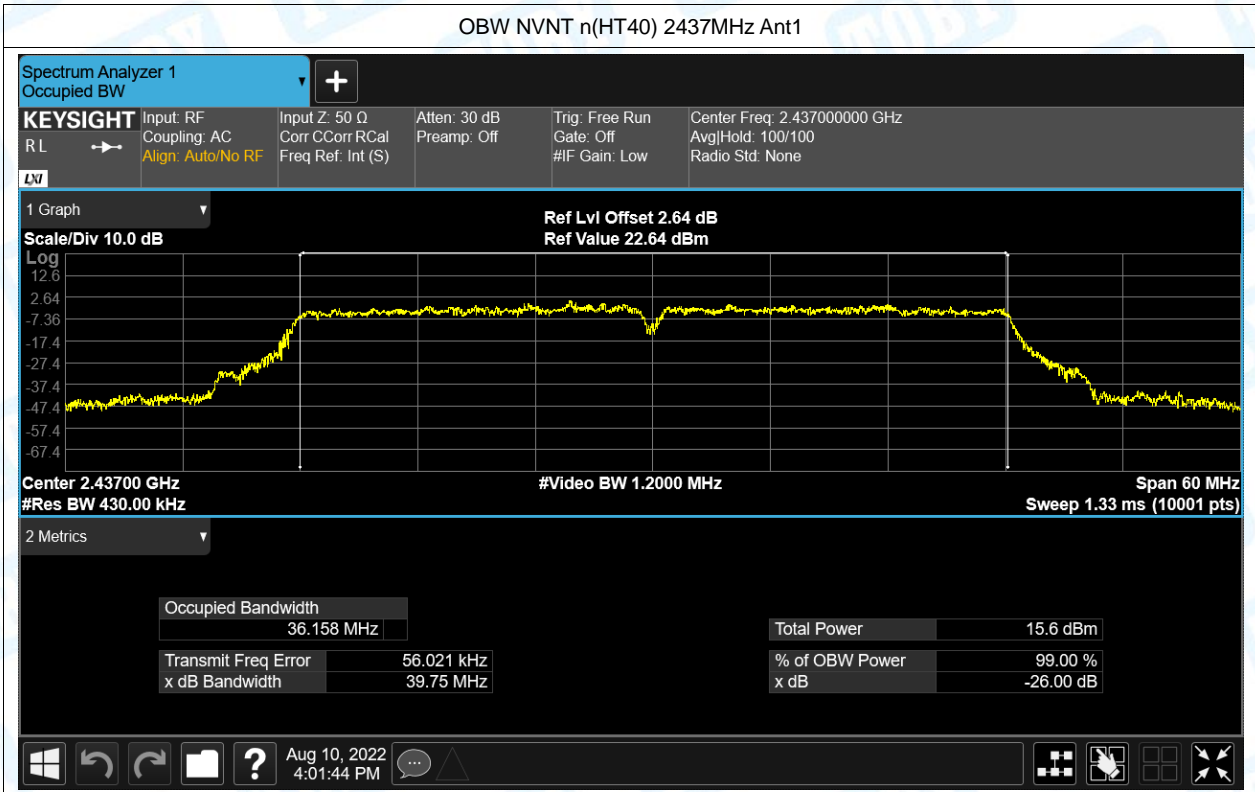










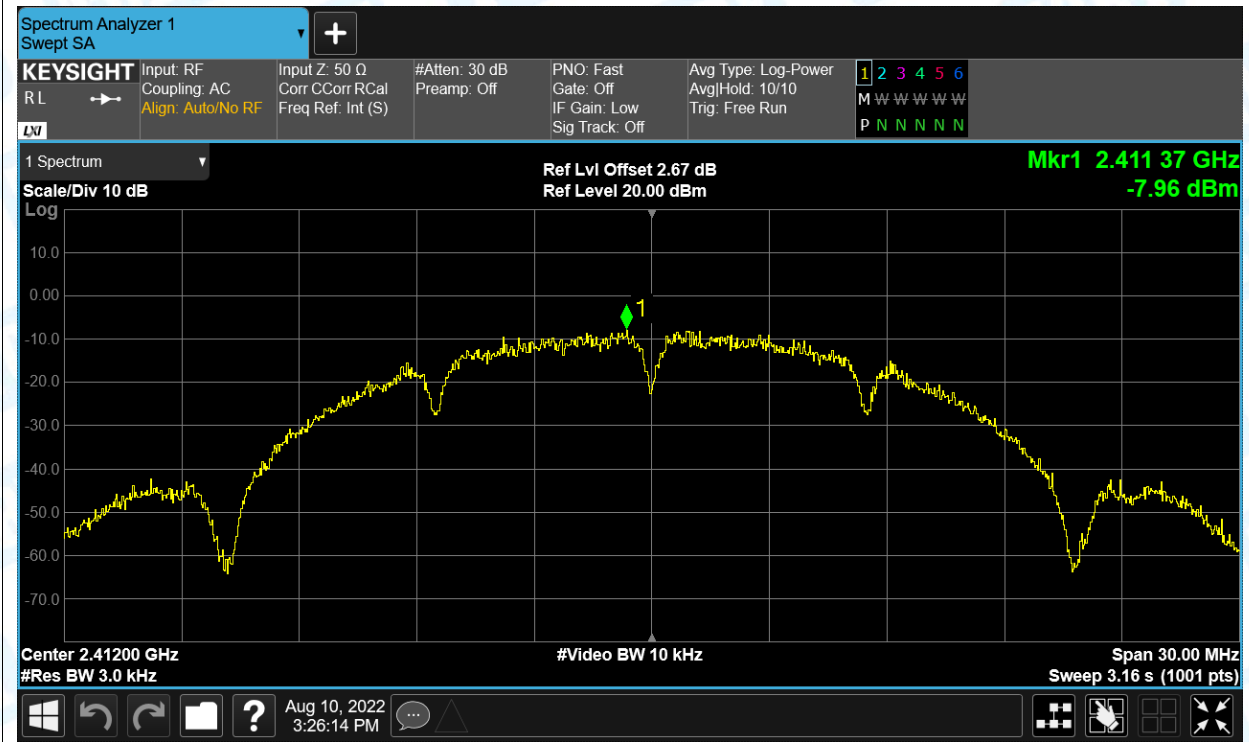


5. Maximum Power Spectral Density Level

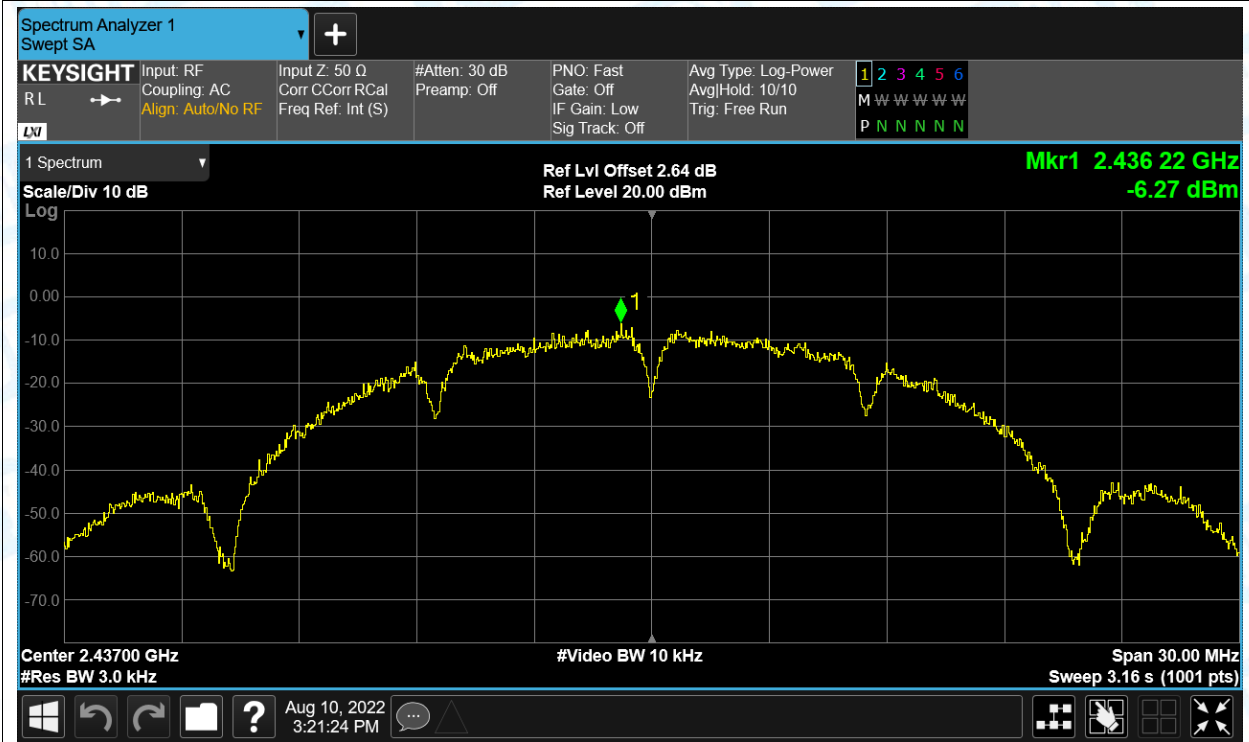
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	-7.959	8	Pass
NVNT	b	2437	Ant1	-6.265	8	Pass
NVNT	b	2462	Ant1	-6.822	8	Pass
NVNT	g	2412	Ant1	-15.287	8	Pass
NVNT	g	2437	Ant1	-15.043	8	Pass
NVNT	g	2462	Ant1	-13.289	8	Pass
NVNT	n(HT20)	2412	Ant1	-15.603	8	Pass
NVNT	n(HT20)	2437	Ant1	-15.789	8	Pass
NVNT	n(HT20)	2462	Ant1	-14.57	8	Pass
NVNT	n(HT40)	2422	Ant1	-17.158	8	Pass
NVNT	n(HT40)	2437	Ant1	-18.721	8	Pass
NVNT	n(HT40)	2452	Ant1	-17.876	8	Pass

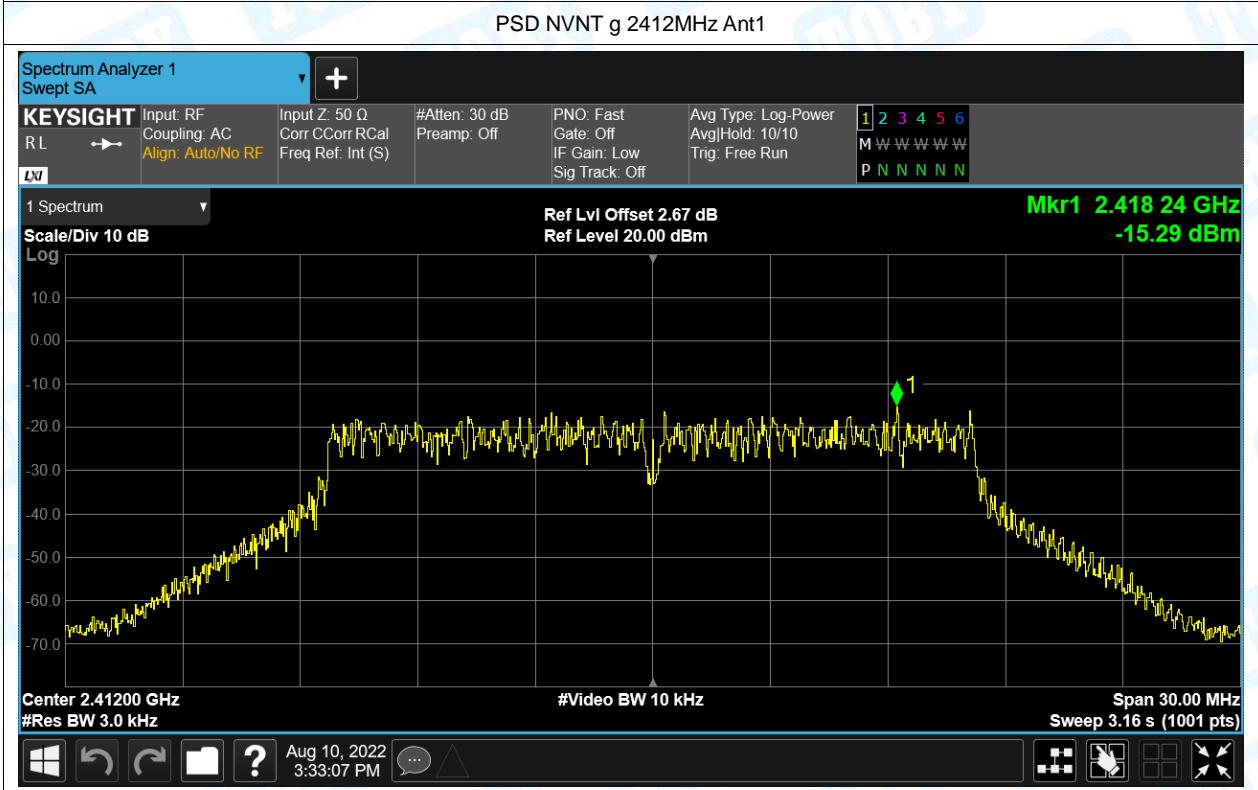
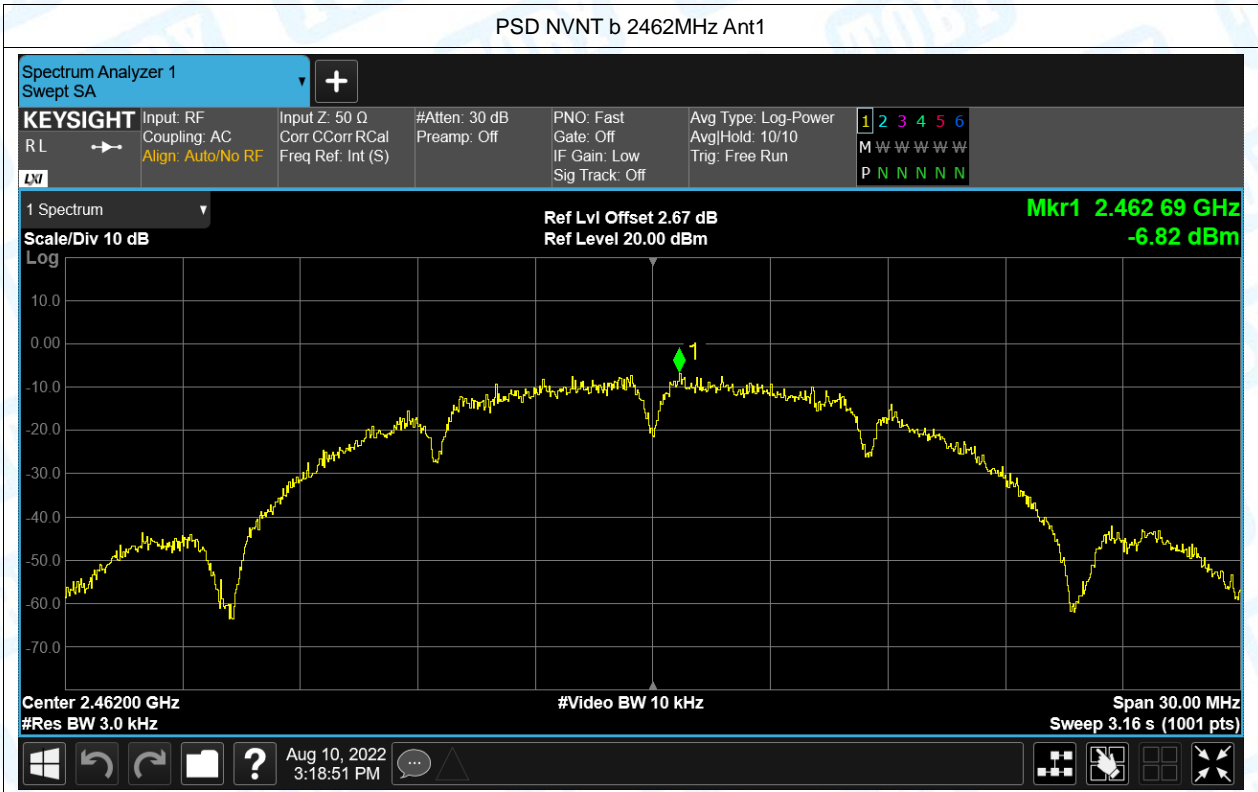
Test Graphs

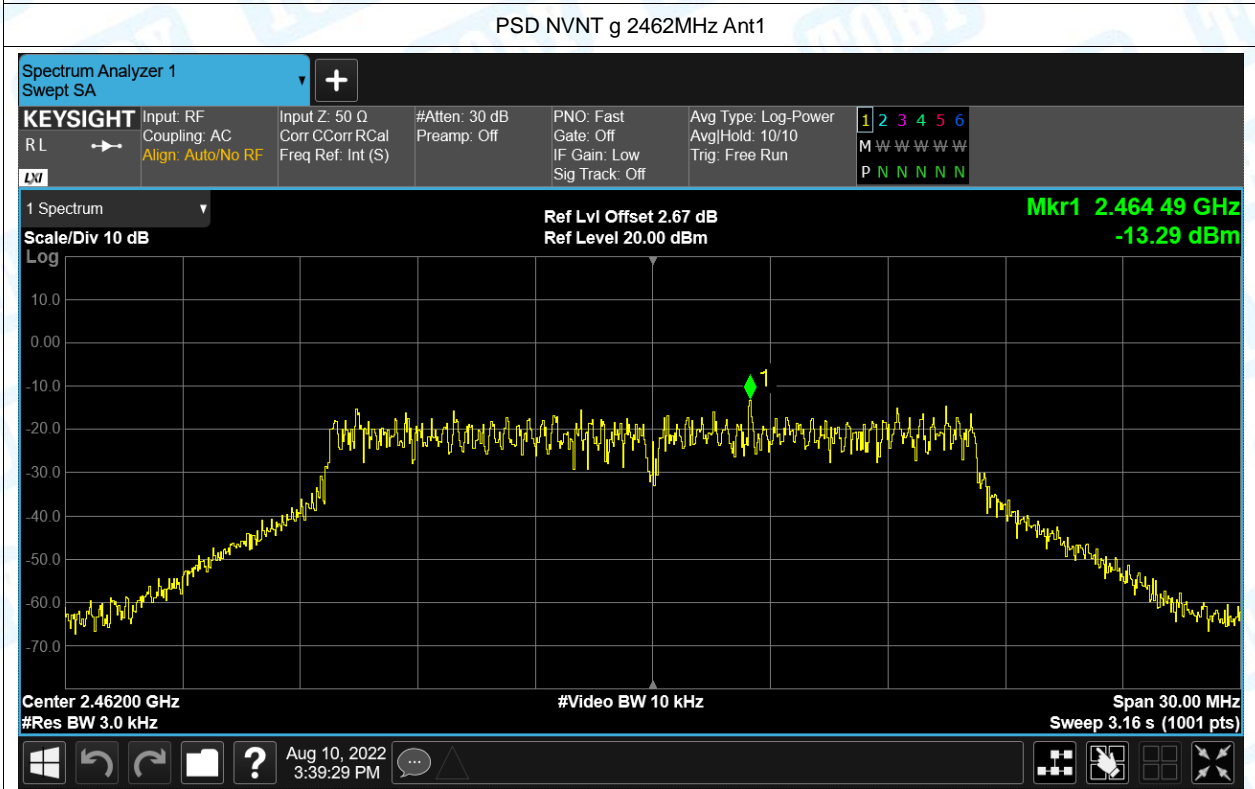
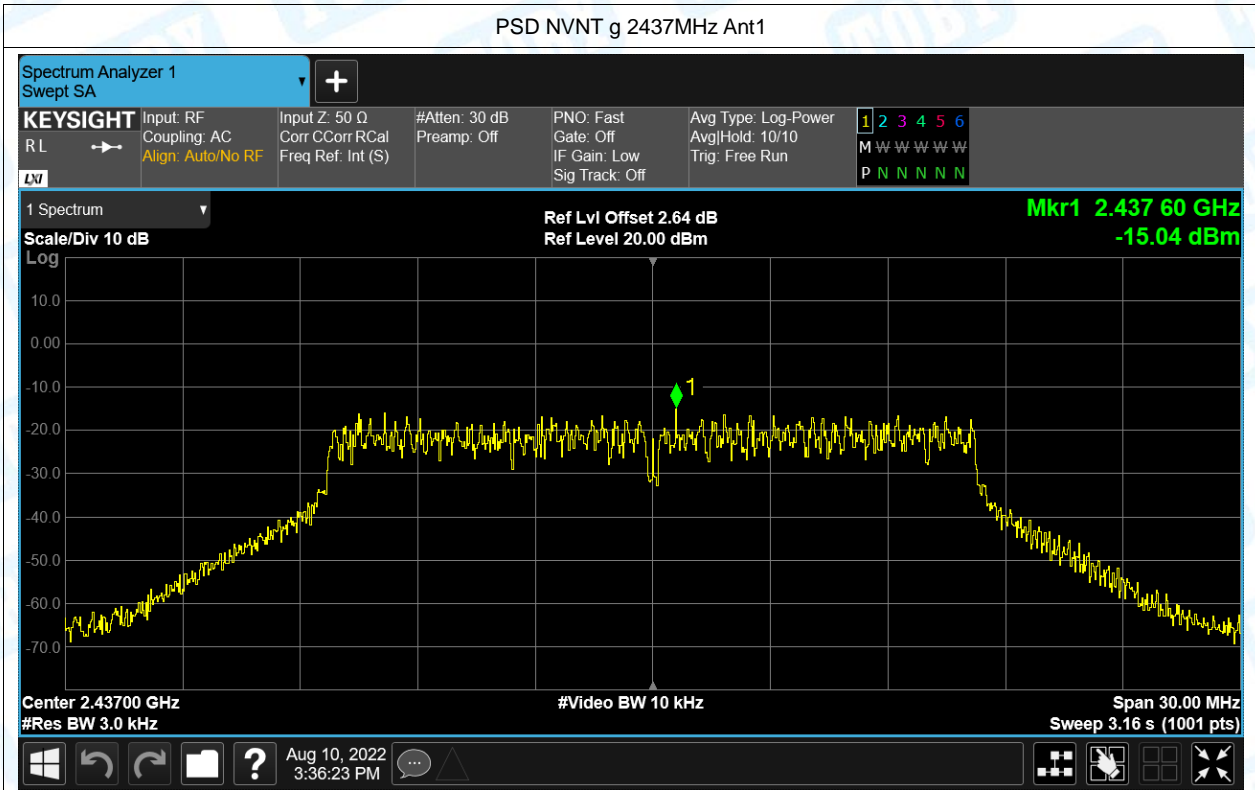
PSD NVNT b 2412MHz Ant1

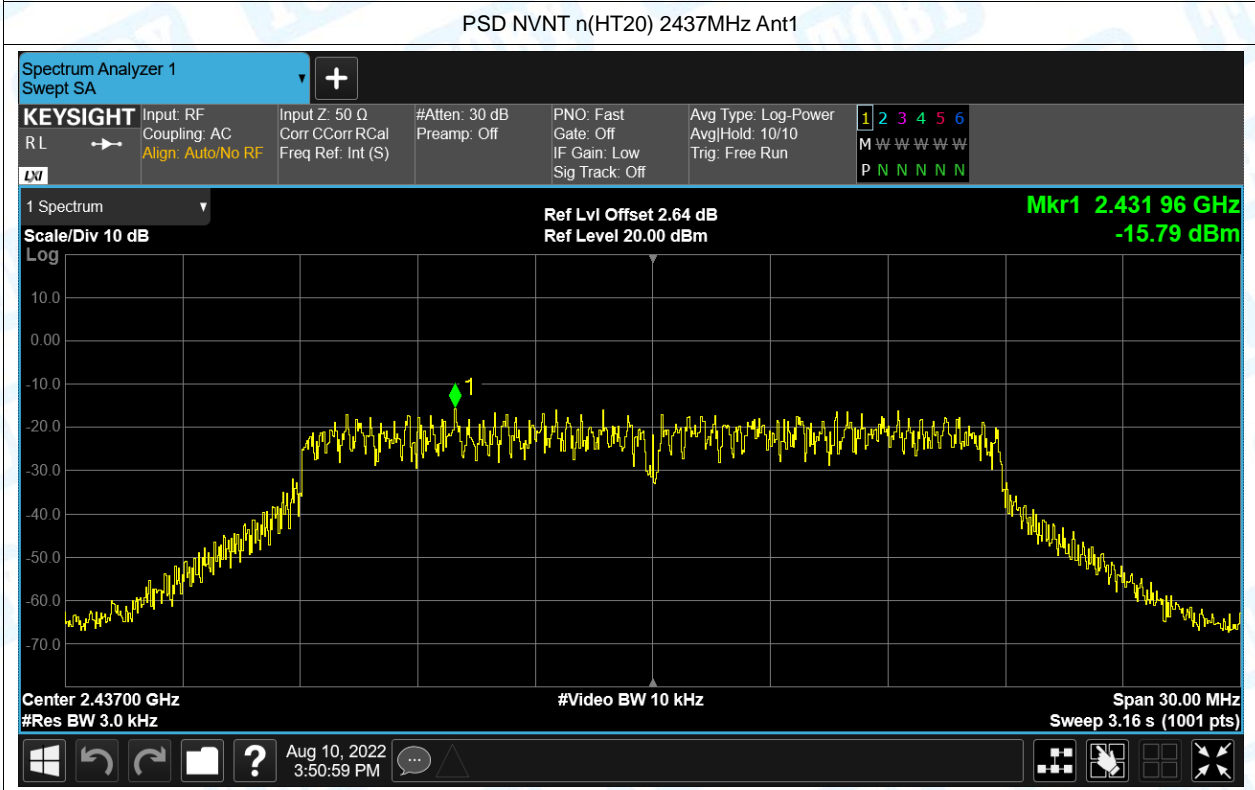
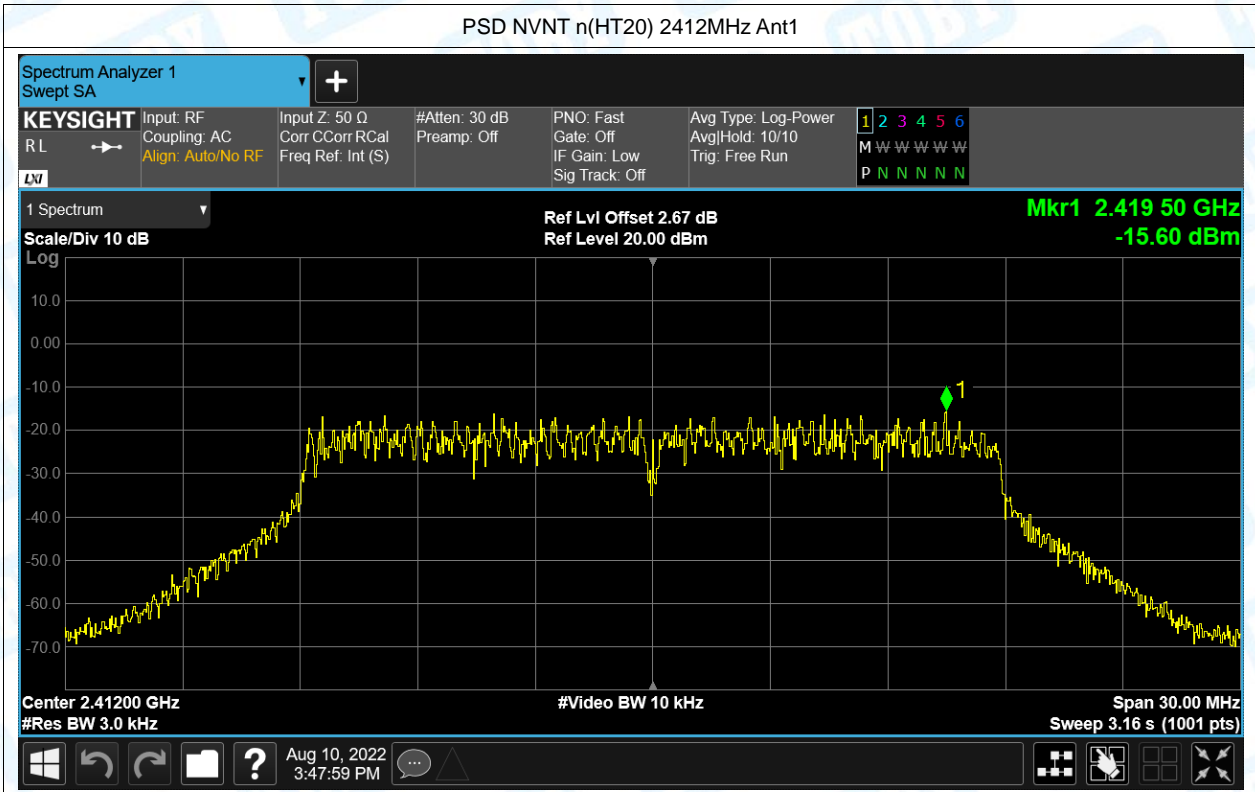


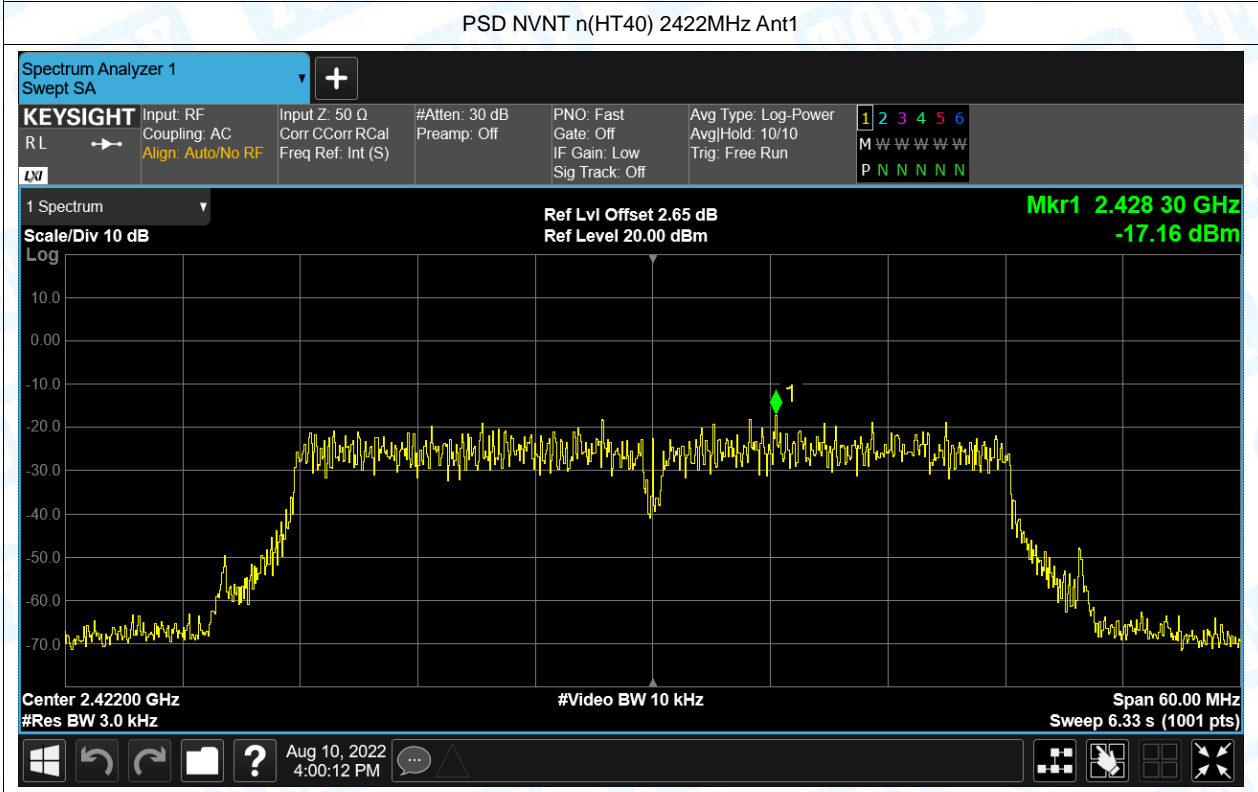
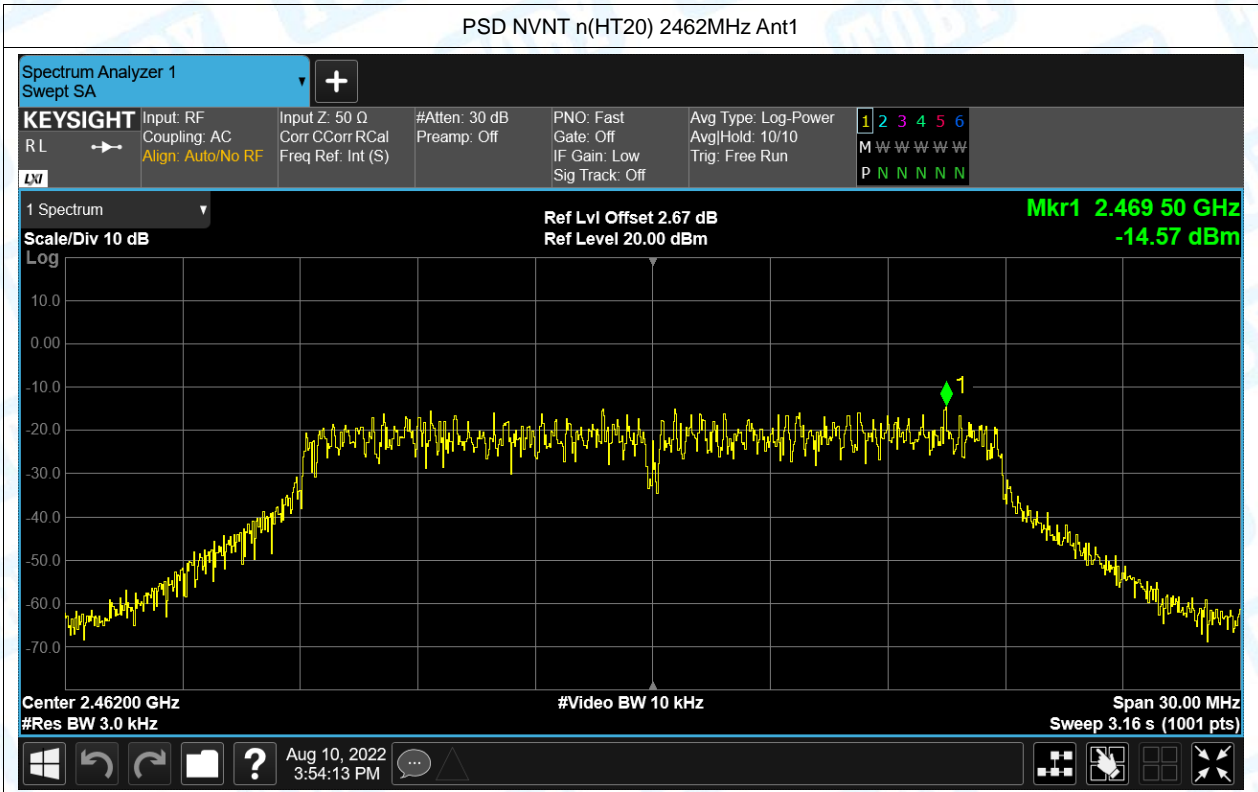
PSD NVNT b 2437MHz Ant1

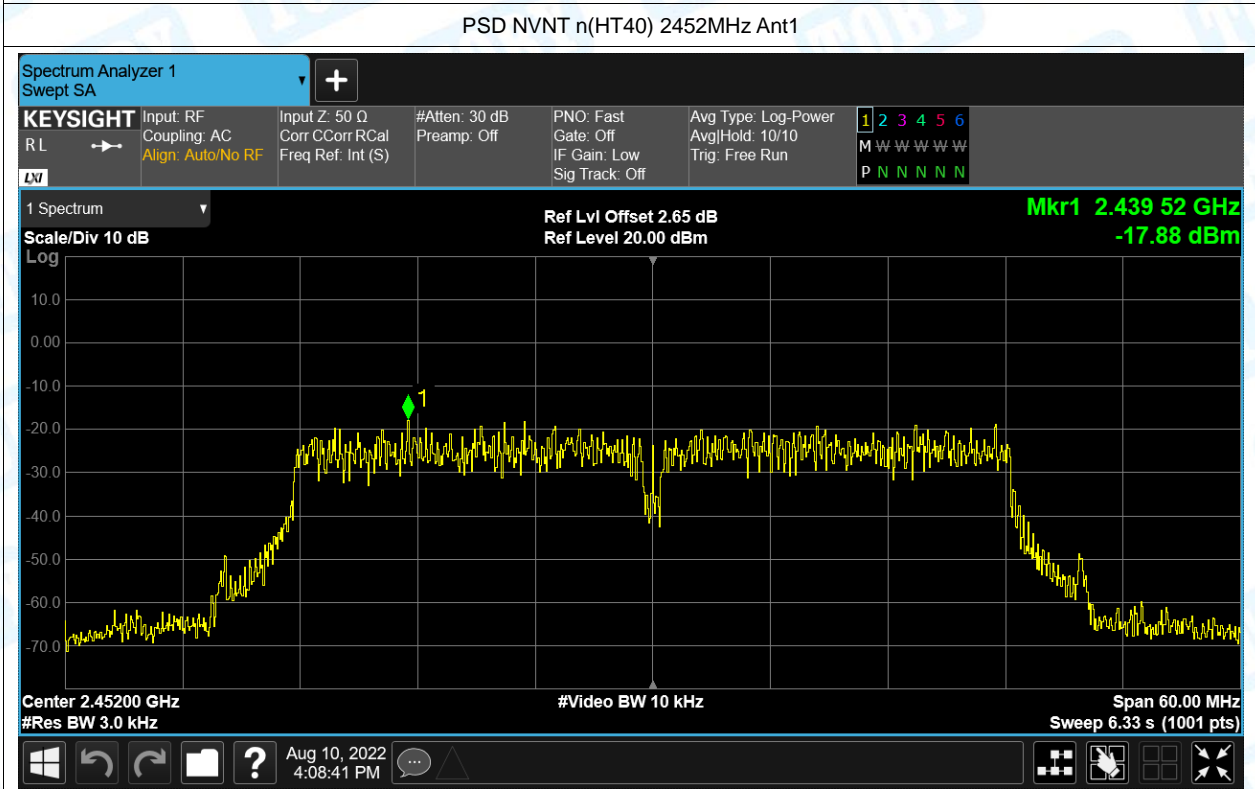
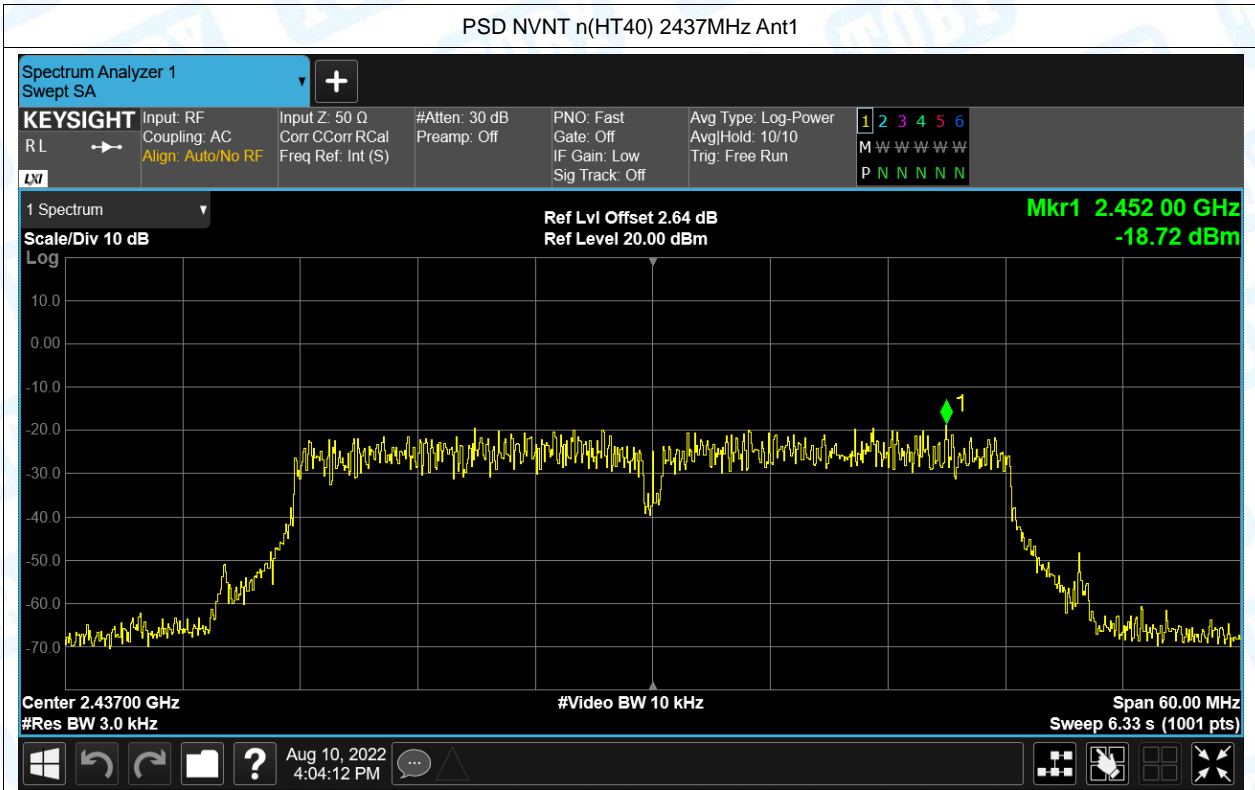










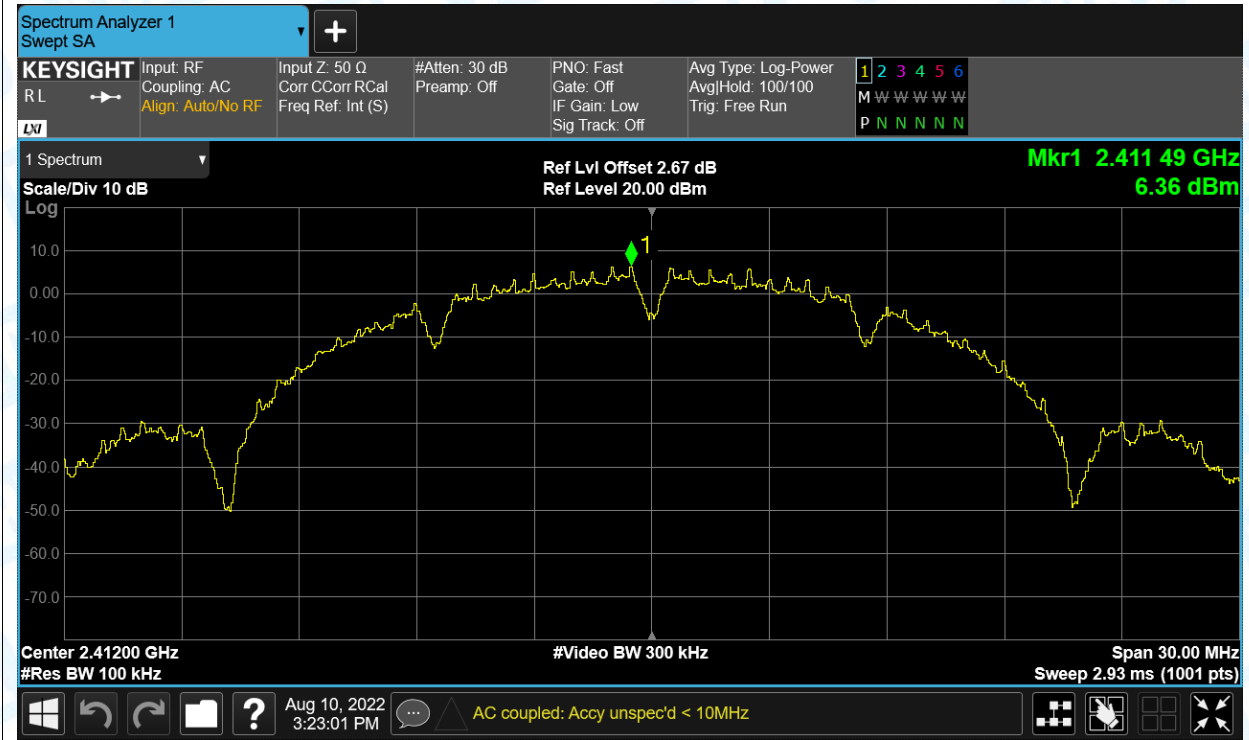


6. Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-57.56	-20	Pass
NVNT	b	2462	Ant1	-57.58	-20	Pass
NVNT	g	2412	Ant1	-46.83	-20	Pass
NVNT	g	2462	Ant1	-51.14	-20	Pass
NVNT	n(HT20)	2412	Ant1	-42.1	-20	Pass
NVNT	n(HT20)	2462	Ant1	-41.18	-20	Pass
NVNT	n(HT40)	2422	Ant1	-46.62	-20	Pass
NVNT	n(HT40)	2452	Ant1	-41.51	-20	Pass

Test Graphs

Band Edge NVNT b 2412MHz Ant1 Ref



Band Edge NVNT b 2412MHz Ant1 Emission

