

# RF Test Data for 2.4G WiFi (Conducted Measurements)

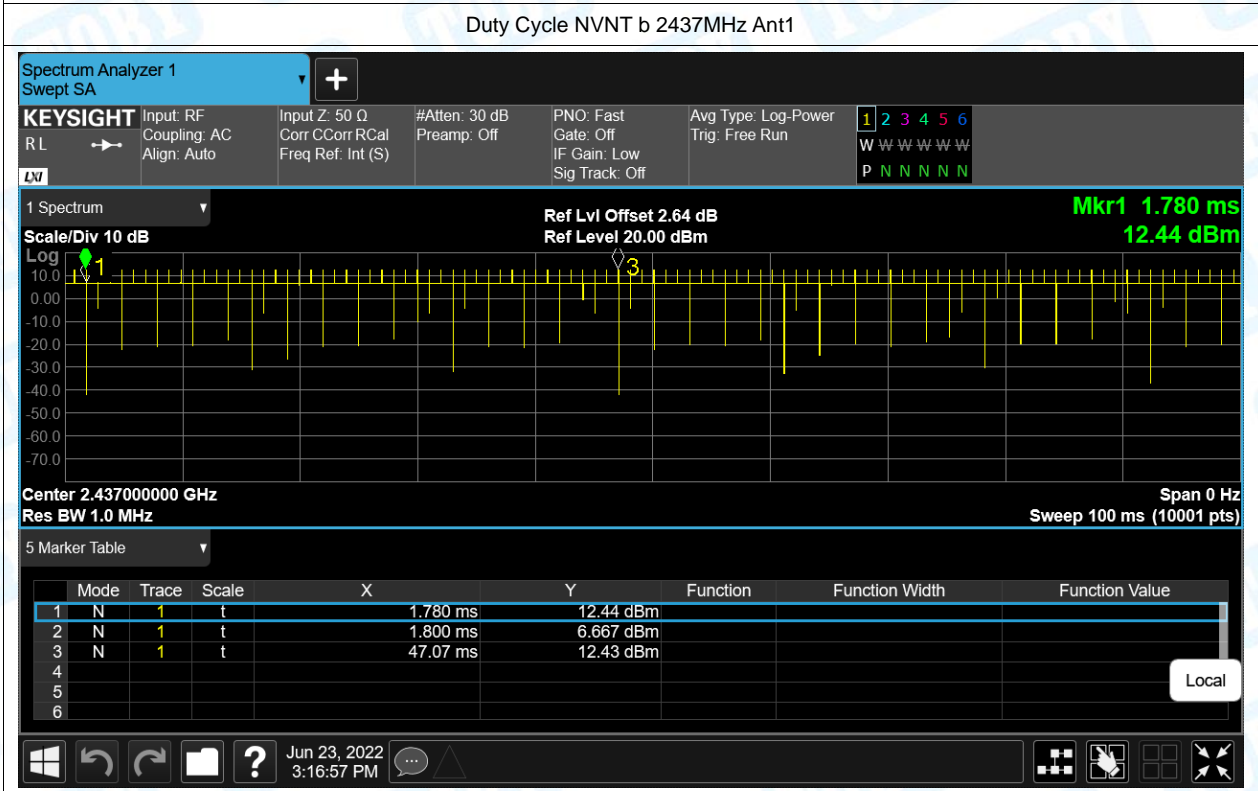
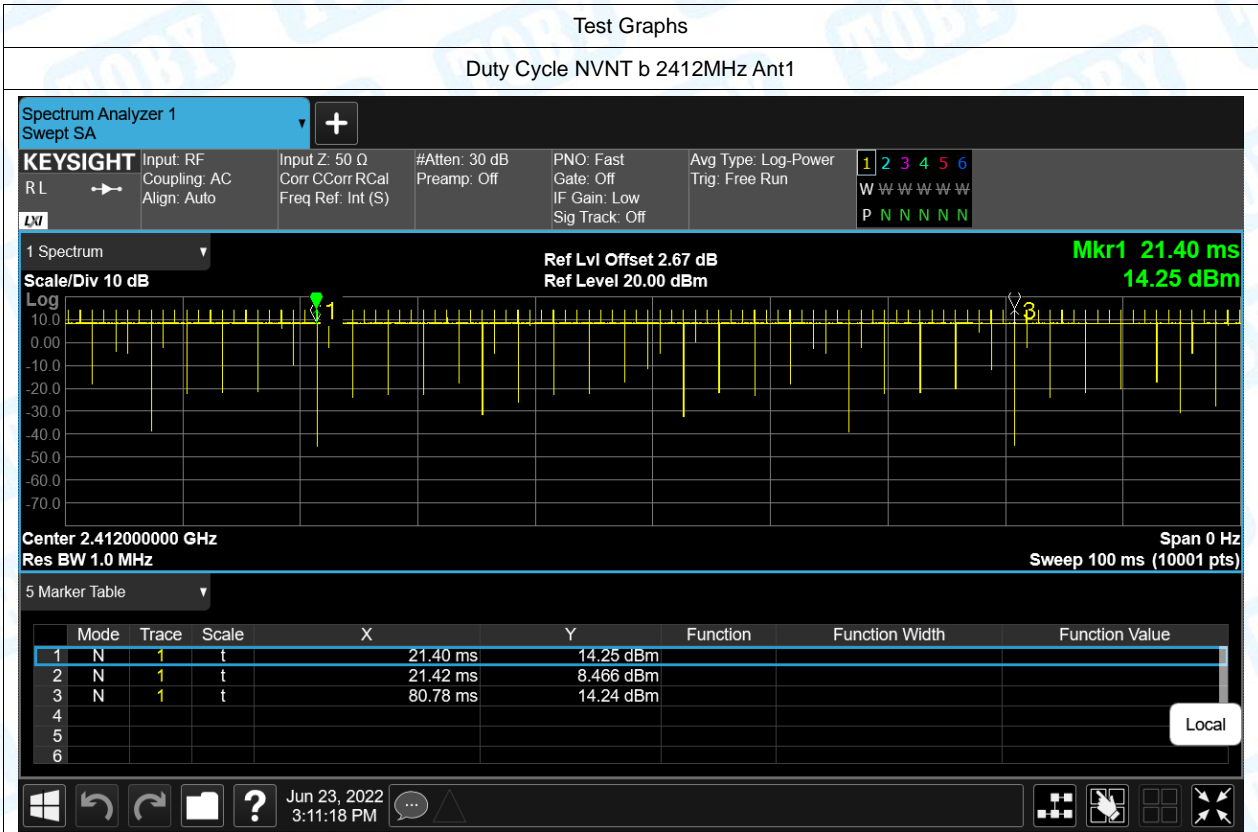
General Description of EUT	
<b>Product Name:</b>	Wi-Fi IR+RF Remote Control
<b>Test Model:</b>	S11
<b>Sample ID:</b>	202205-0291-1-2#
Environmental Conditions	
<b>Temperature:</b>	25°C
<b>Relative Humidity:</b>	55%
<b>Test Voltage:</b>	DC 5V
<b>Test Engineer:</b>	Huangjianping
Note: For a more detailed features description, please refer to the report TBR-C-202205-0291-20.	

## Contents

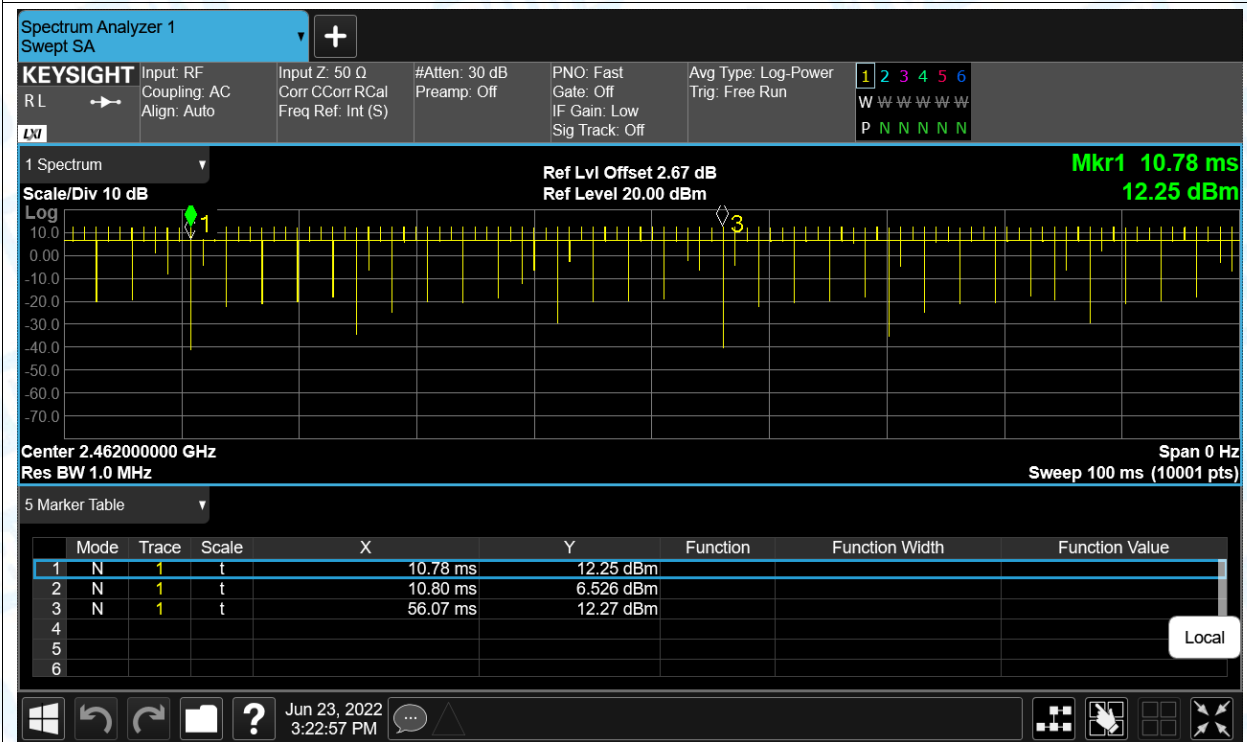
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## 1. Duty Cycle

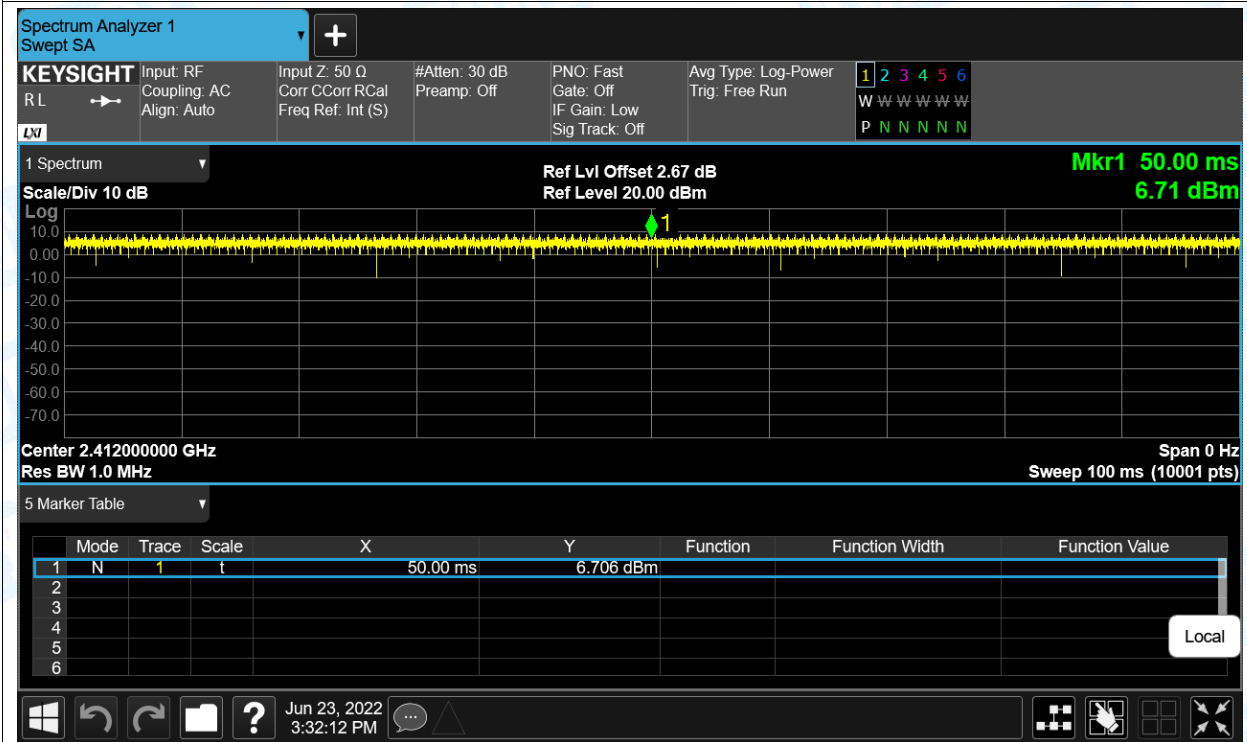
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	99.98	0	0.02
NVNT	b	2437	Ant1	99.98	0	0.02
NVNT	b	2462	Ant1	99.98	0	0.02
NVNT	g	2412	Ant1	100	0	0
NVNT	g	2437	Ant1	100	0	0
NVNT	g	2462	Ant1	100	0	0
NVNT	n(HT20)	2412	Ant1	100	0	0
NVNT	n(HT20)	2437	Ant1	100	0	0
NVNT	n(HT20)	2462	Ant1	100	0	0
NVNT	n(HT40)	2422	Ant1	100	0	0
NVNT	n(HT40)	2437	Ant1	100	0	0
NVNT	n(HT40)	2452	Ant1	100	0	0



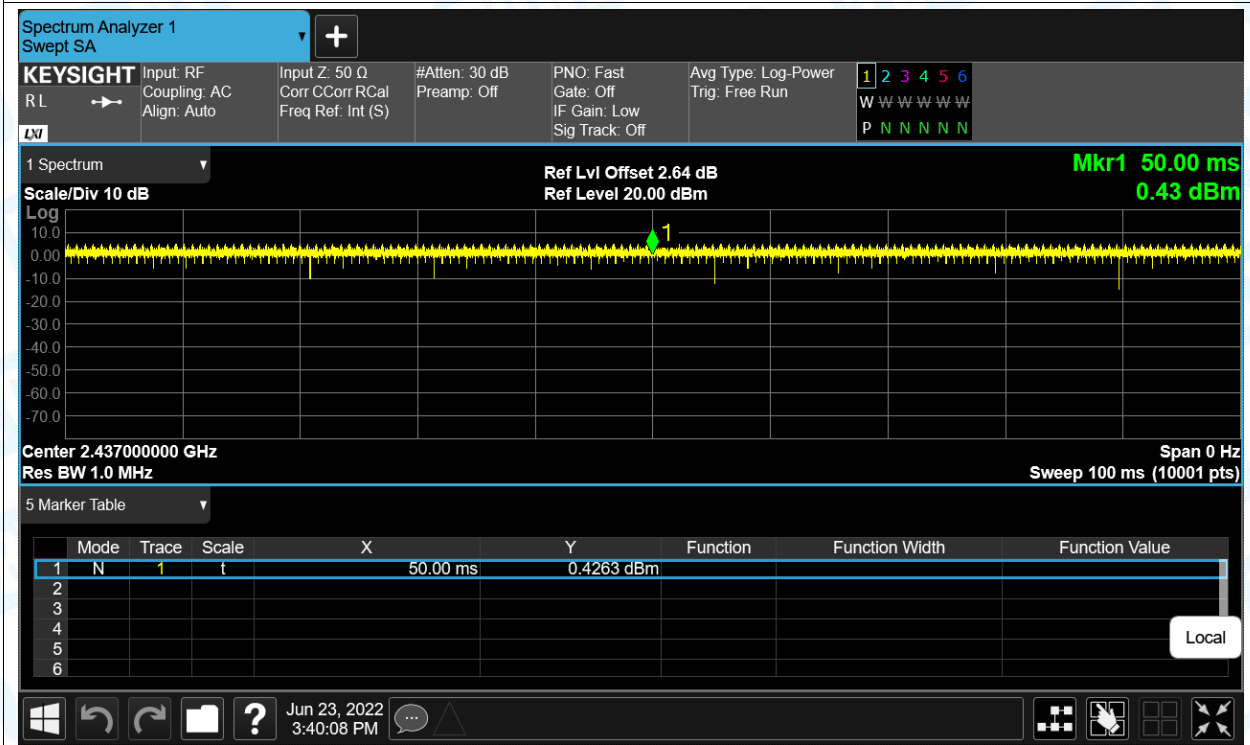
Duty Cycle NVNT b 2462MHz Ant1



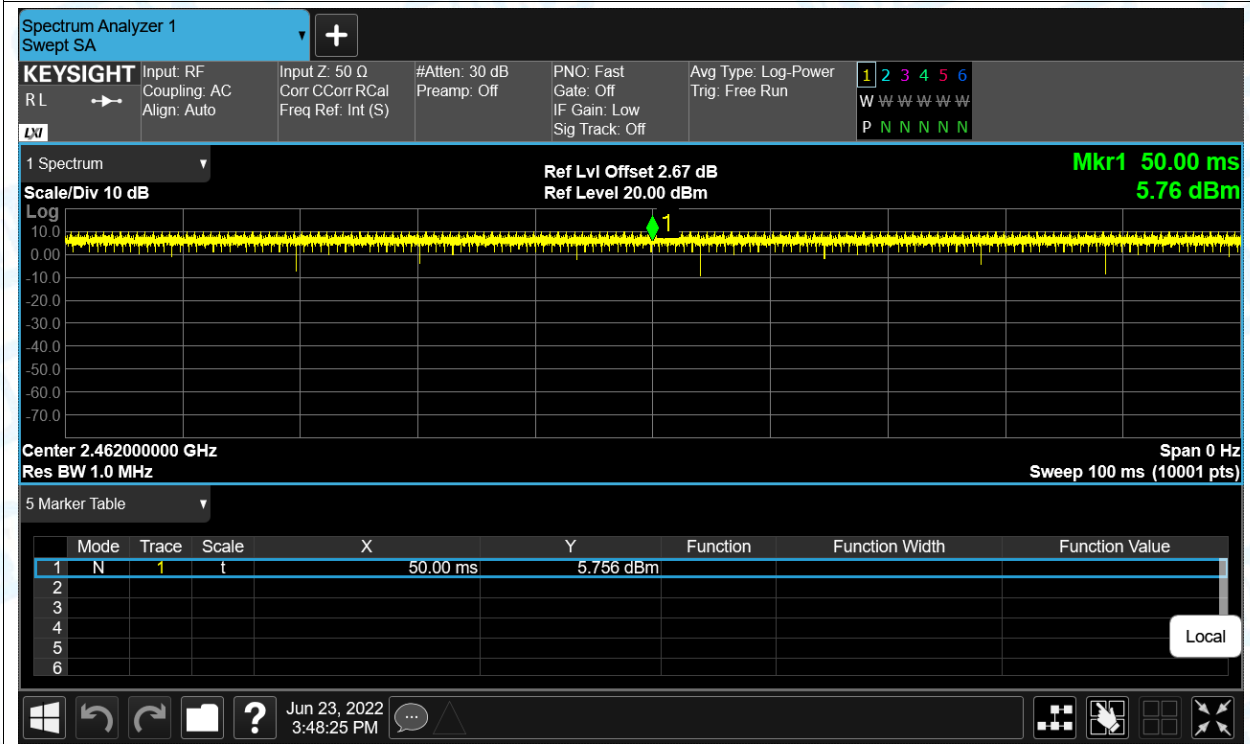
Duty Cycle NVNT g 2412MHz Ant1

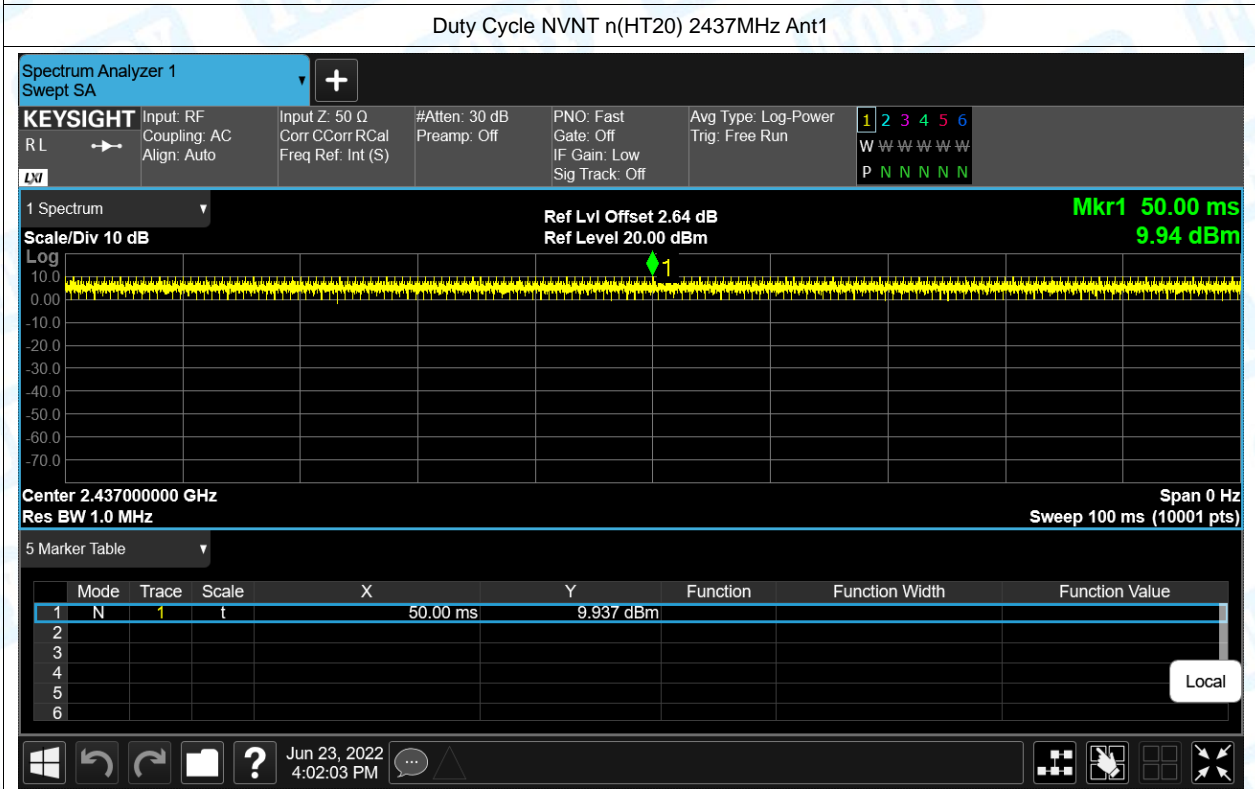
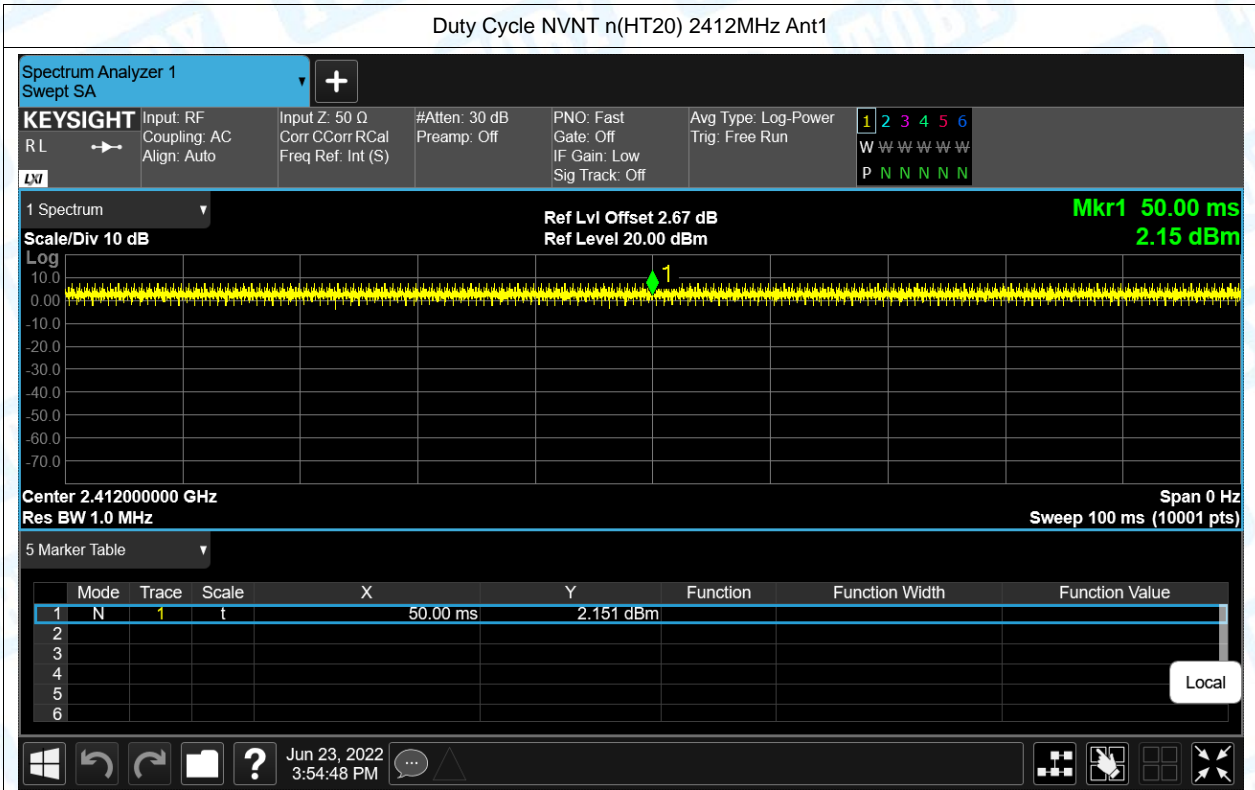


### Duty Cycle NVNT g 2437MHz Ant1

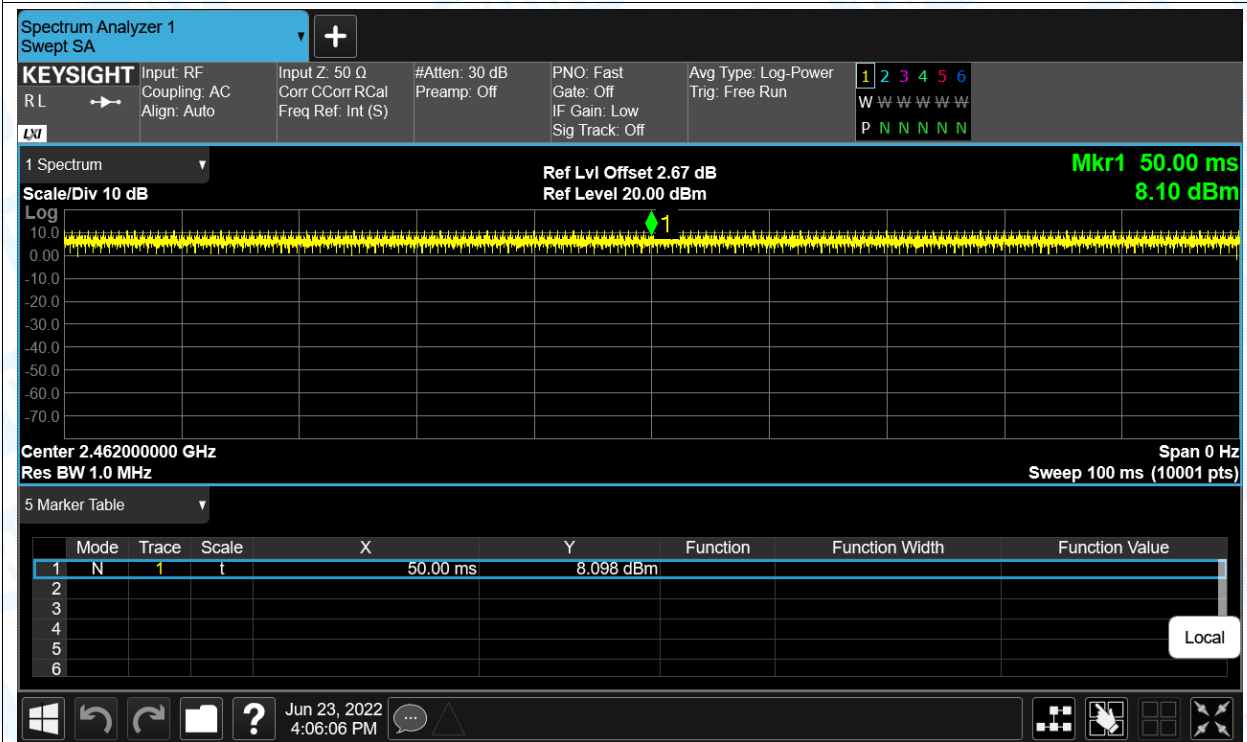


### Duty Cycle NVNT g 2462MHz Ant1

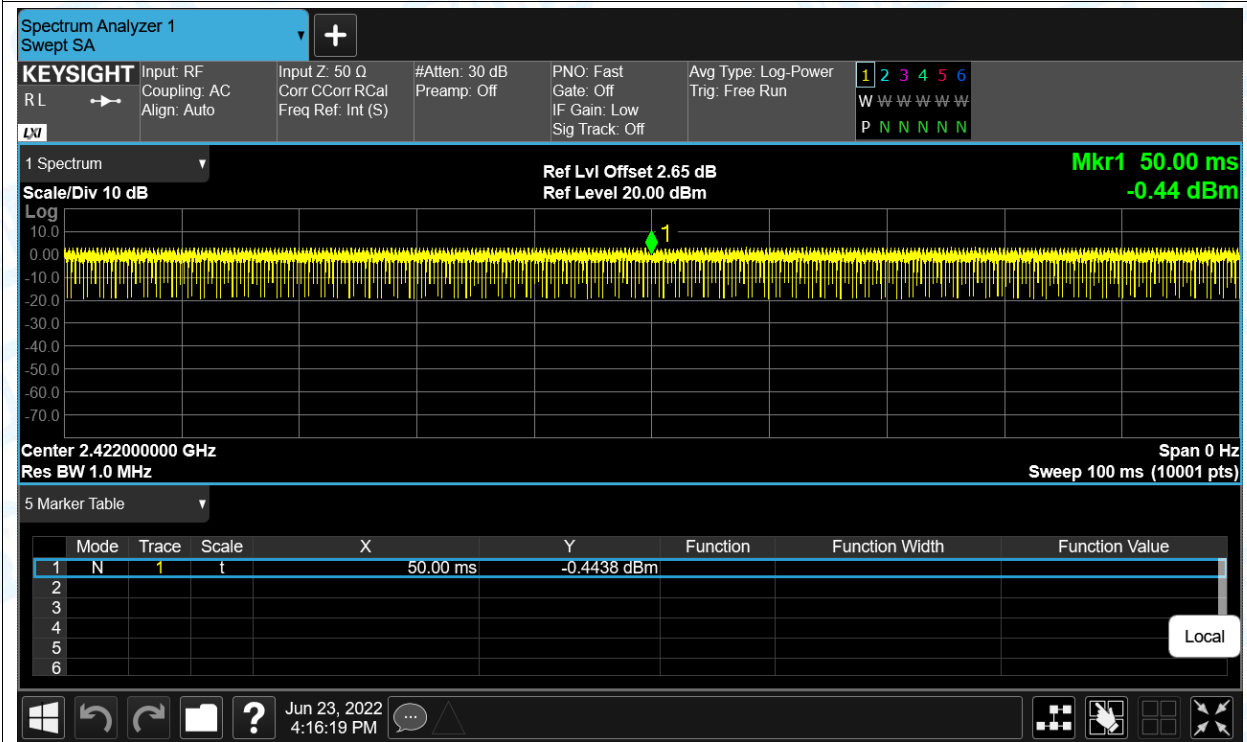




Duty Cycle NVNT n(HT20) 2462MHz Ant1

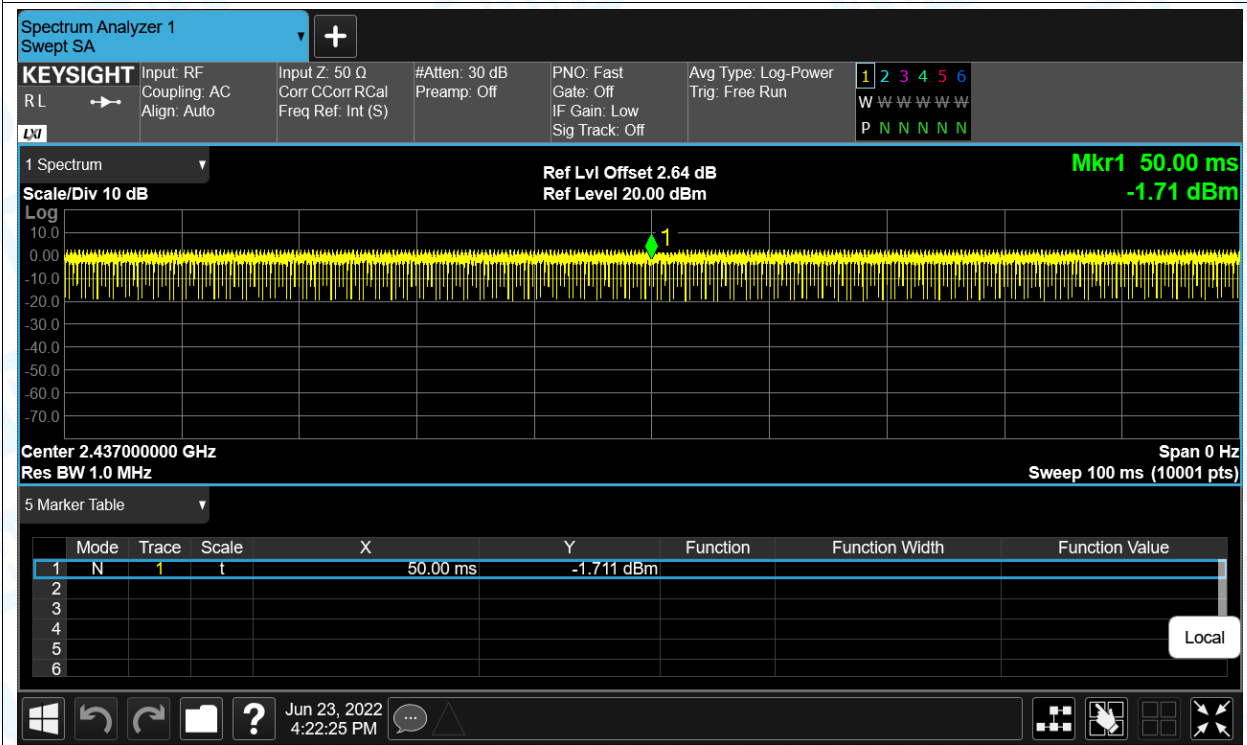


Duty Cycle NVNT n(HT40) 2422MHz Ant1

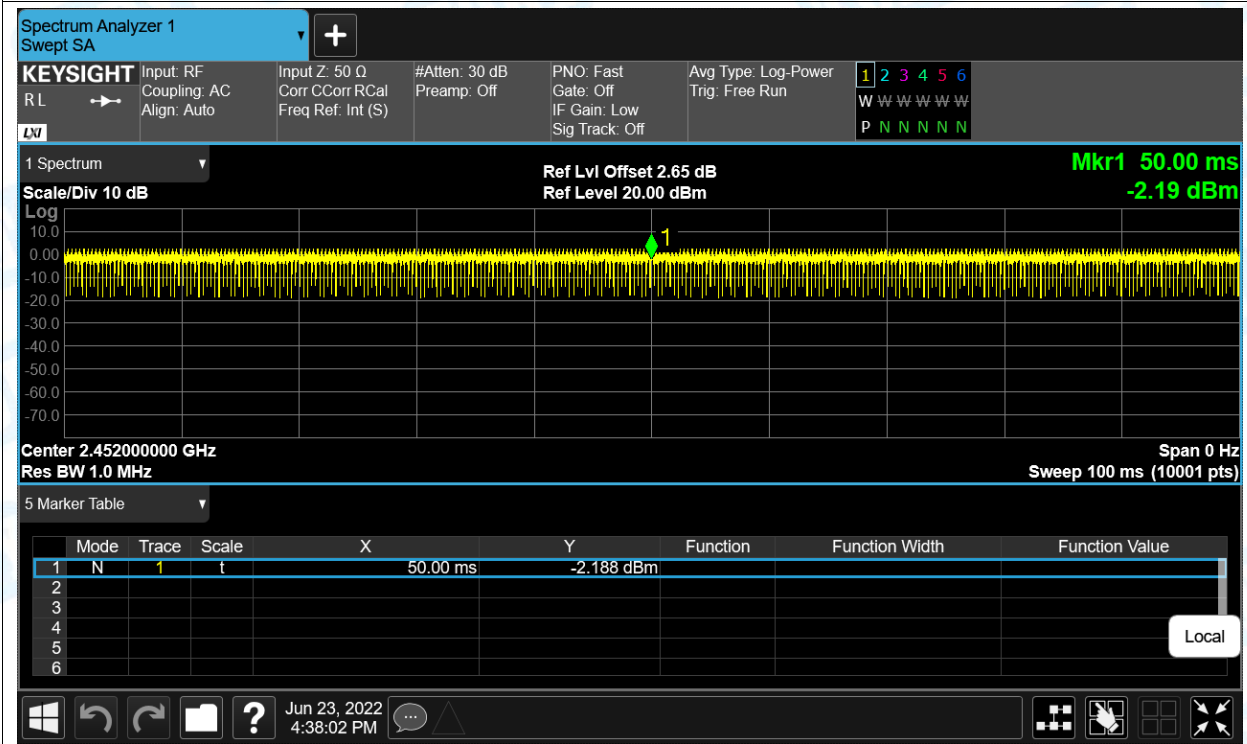




Duty Cycle NVNT n(HT40) 2437MHz Ant1



Duty Cycle NVNT n(HT40) 2452MHz Ant1

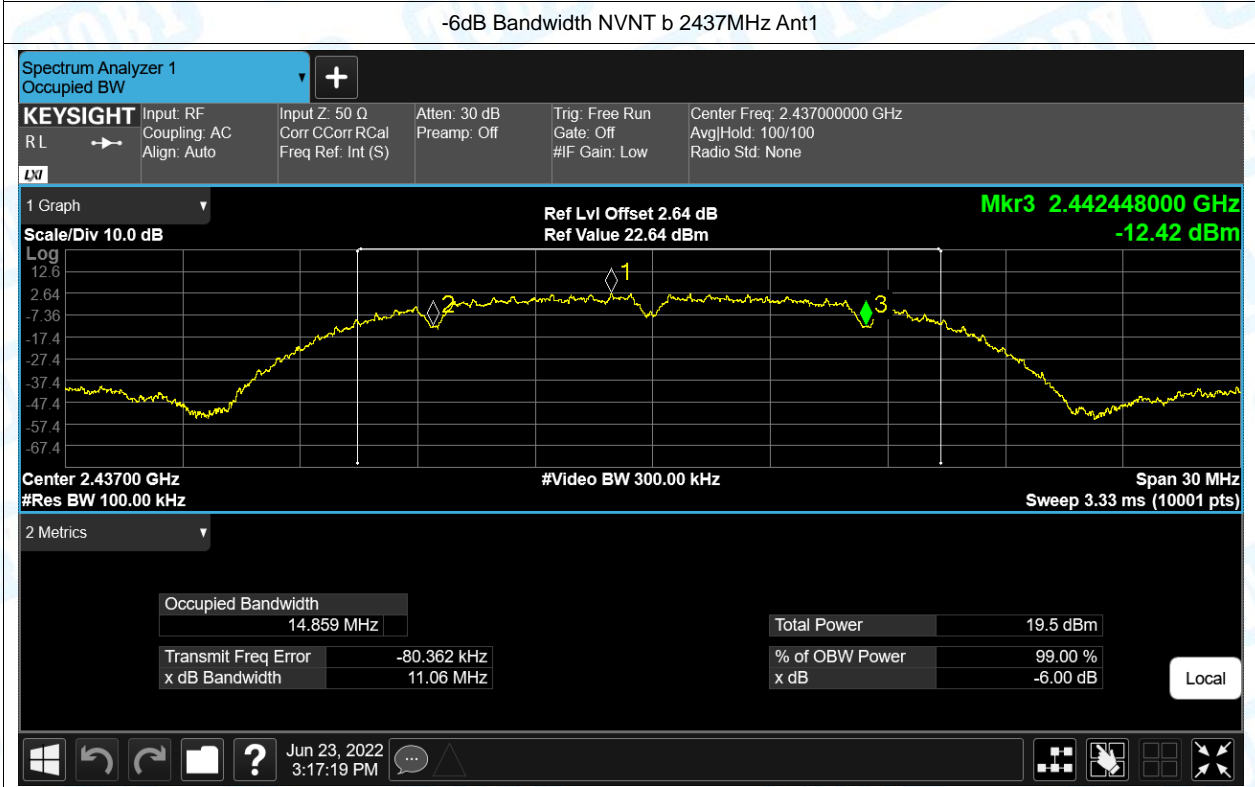
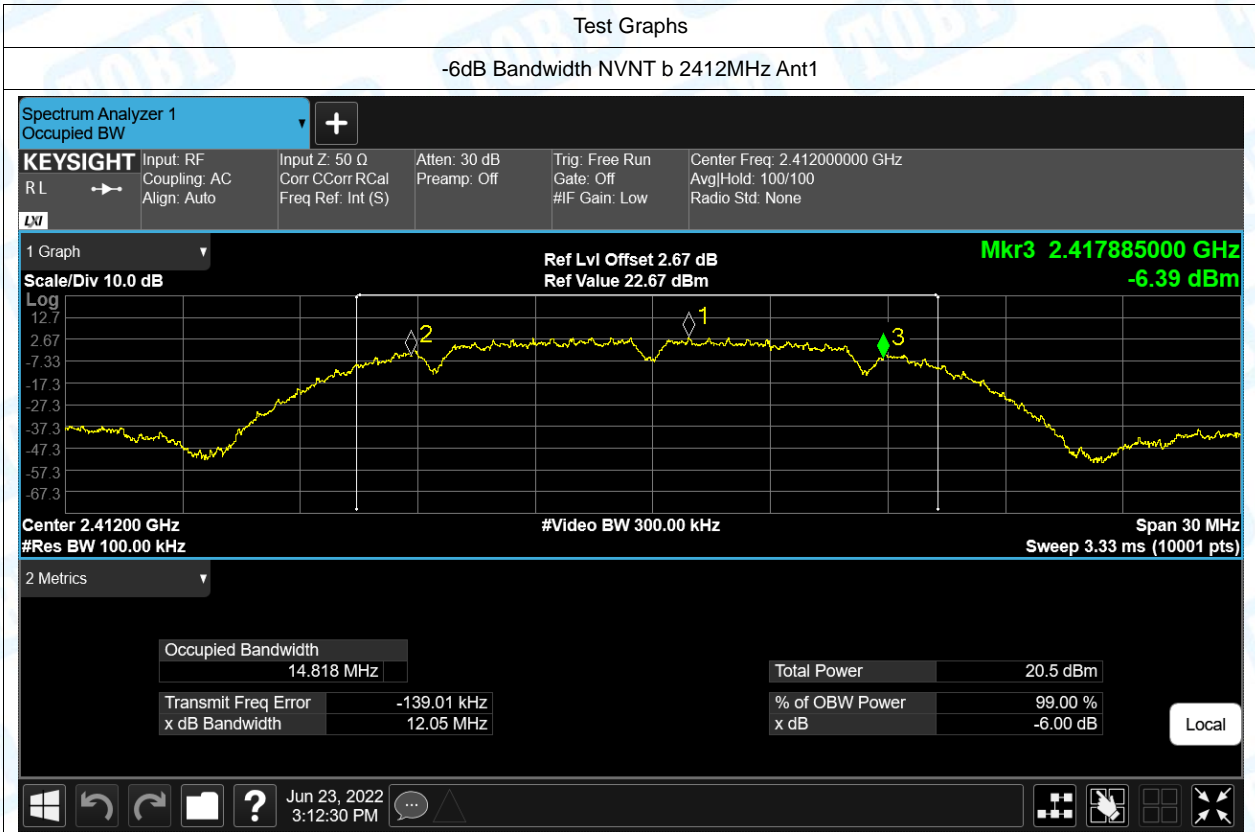


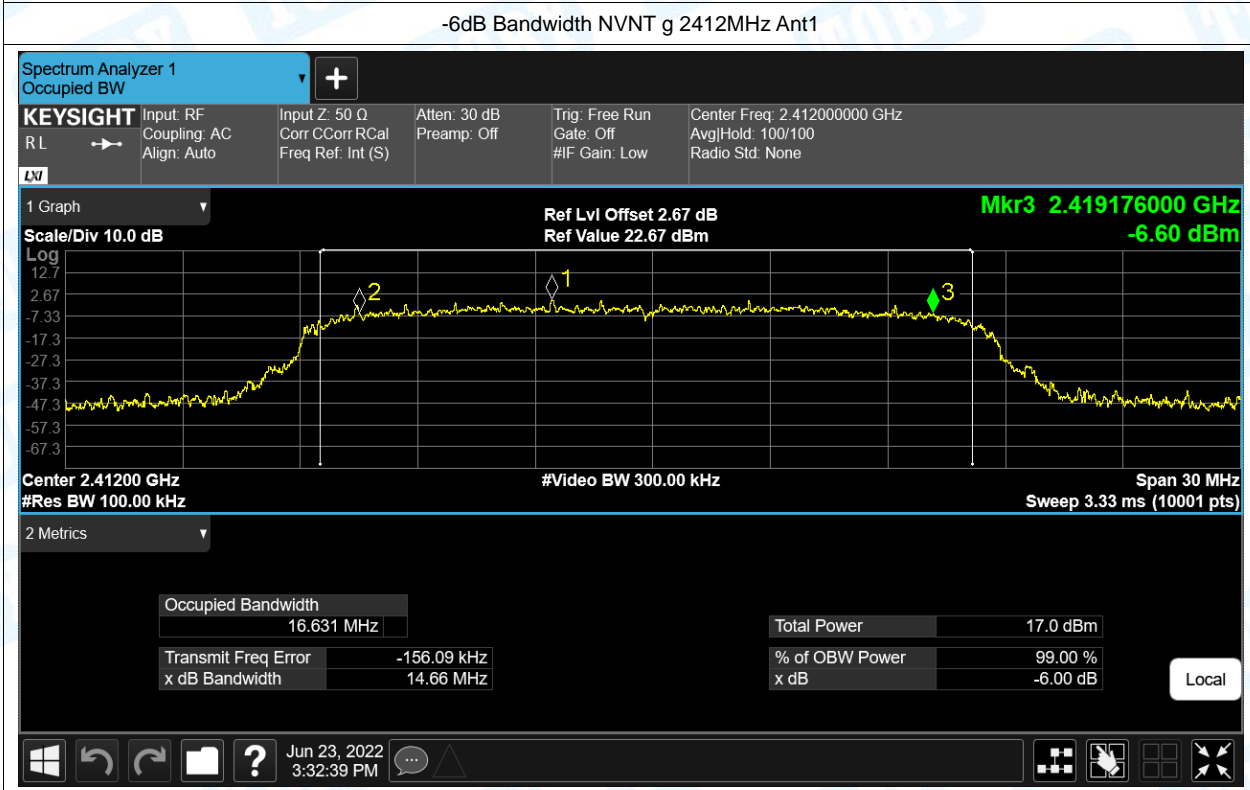
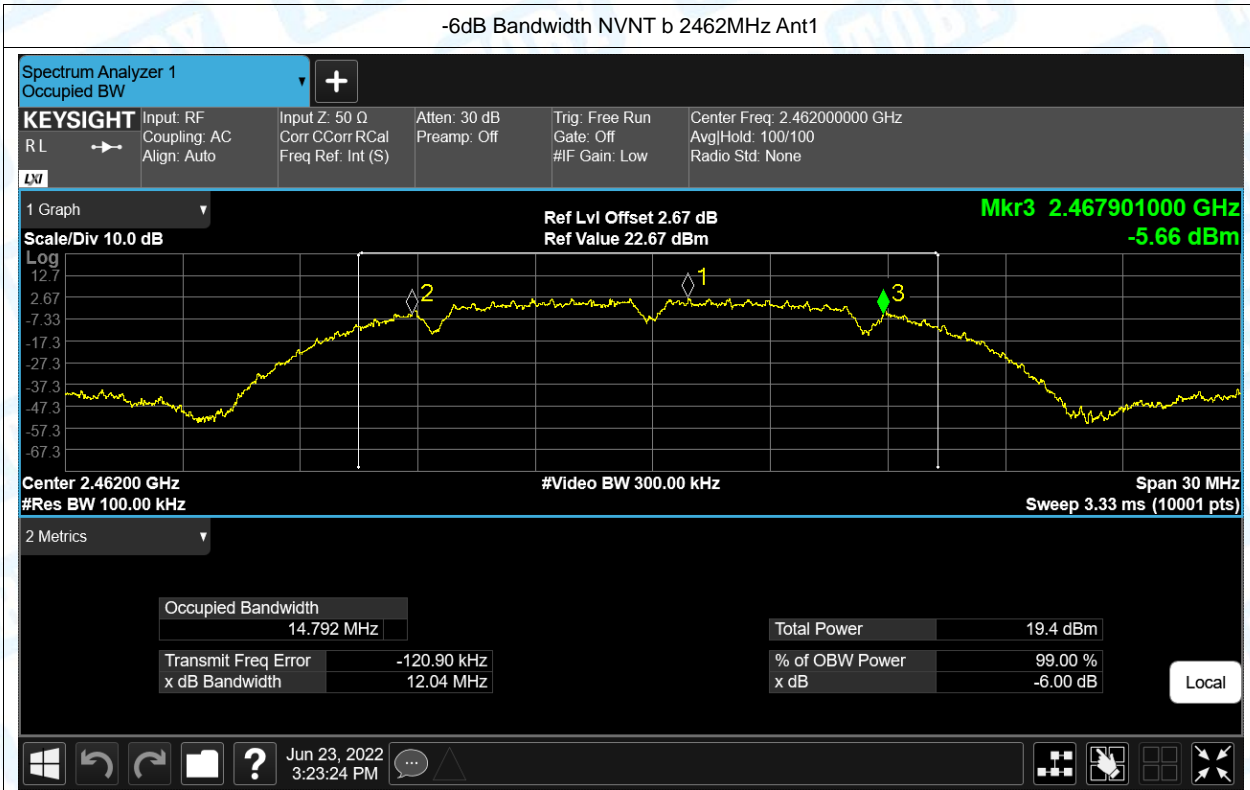
## 2. Maximum Conducted Output Power

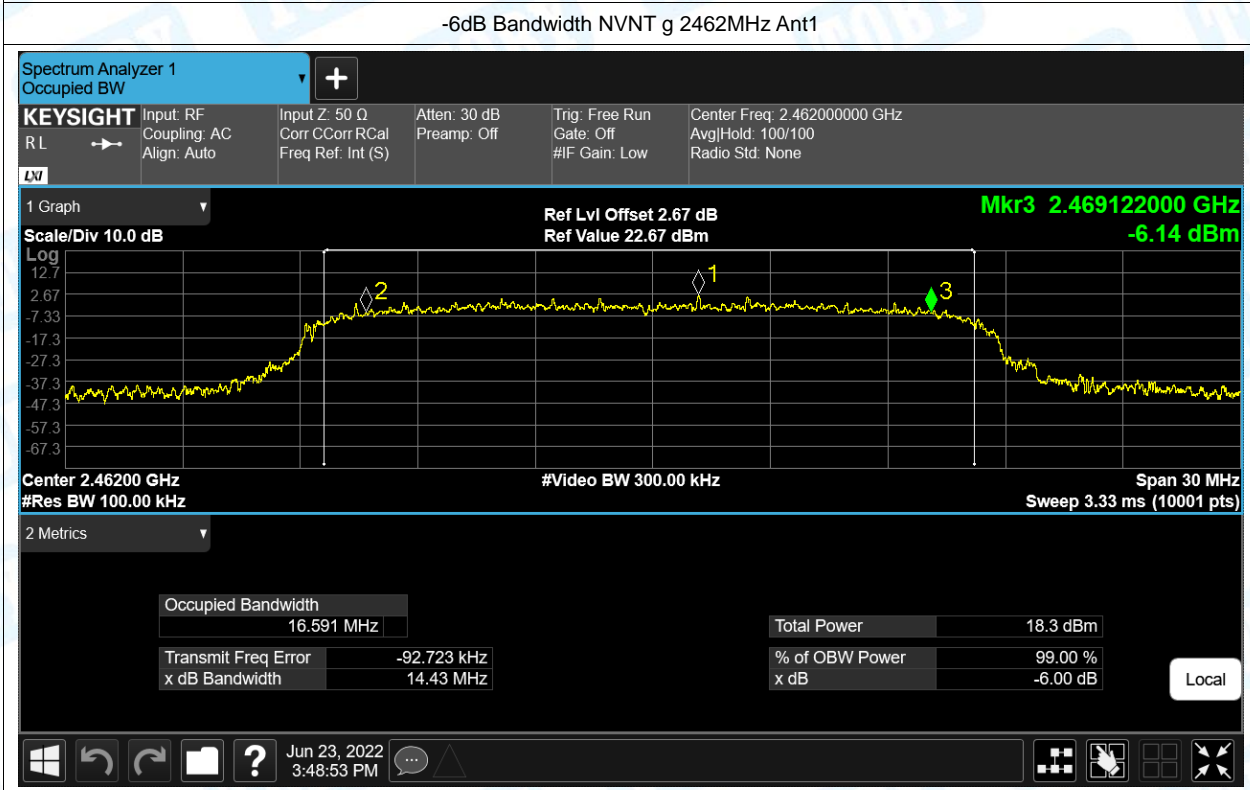
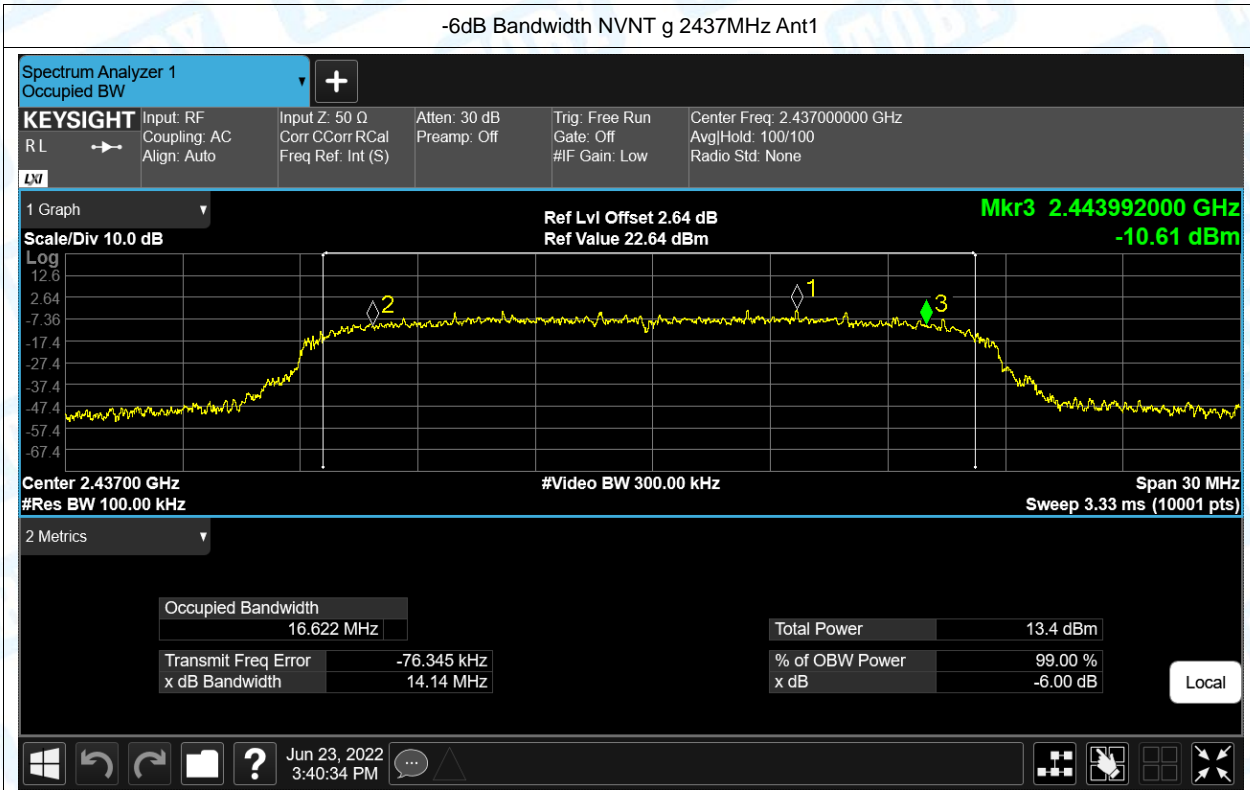
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	16.368	30	Pass
NVNT	b	2437	Ant1	17.69	30	Pass
NVNT	b	2462	Ant1	17.345	30	Pass
NVNT	g	2412	Ant1	17.17	30	Pass
NVNT	g	2437	Ant1	17.235	30	Pass
NVNT	g	2462	Ant1	17.131	30	Pass
NVNT	n(HT20)	2412	Ant1	16.813	30	Pass
NVNT	n(HT20)	2437	Ant1	16.899	30	Pass
NVNT	n(HT20)	2462	Ant1	16.683	30	Pass
NVNT	n(HT40)	2422	Ant1	16.219	30	Pass
NVNT	n(HT40)	2437	Ant1	16.444	30	Pass
NVNT	n(HT40)	2452	Ant1	16.153	30	Pass

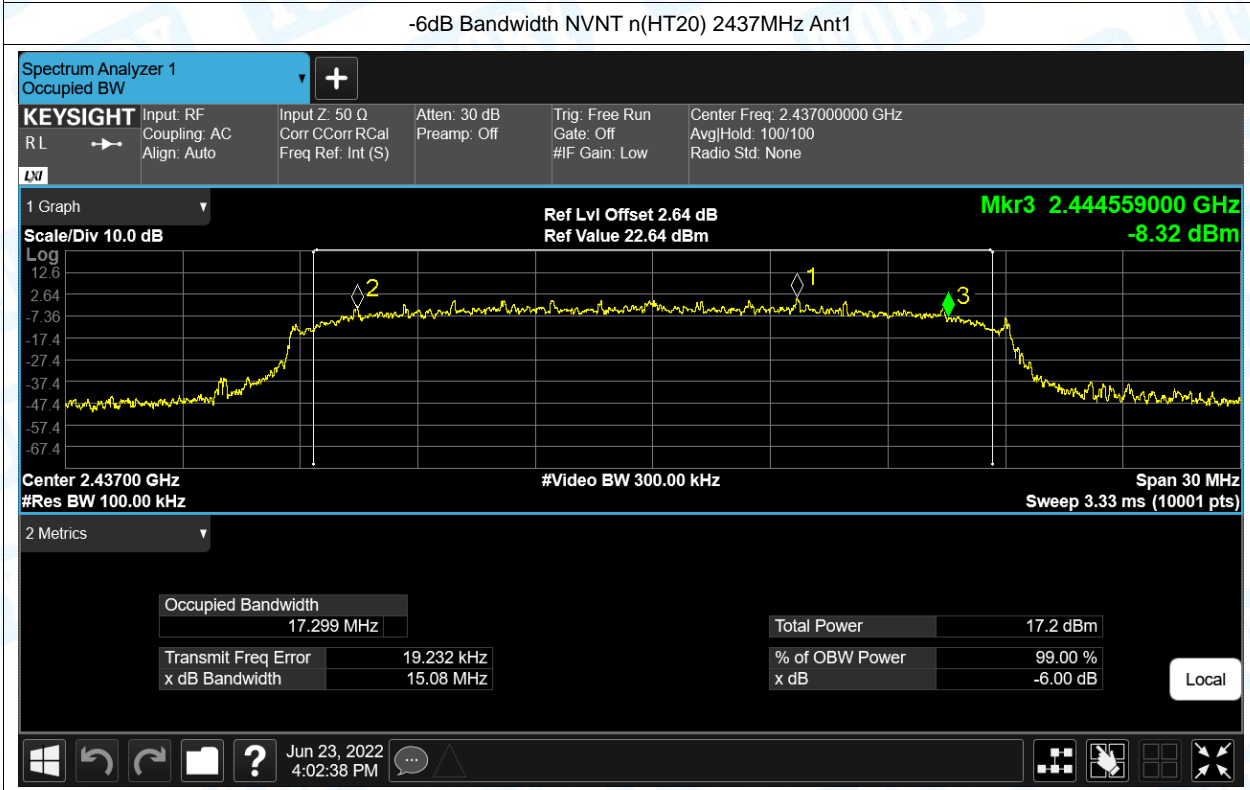
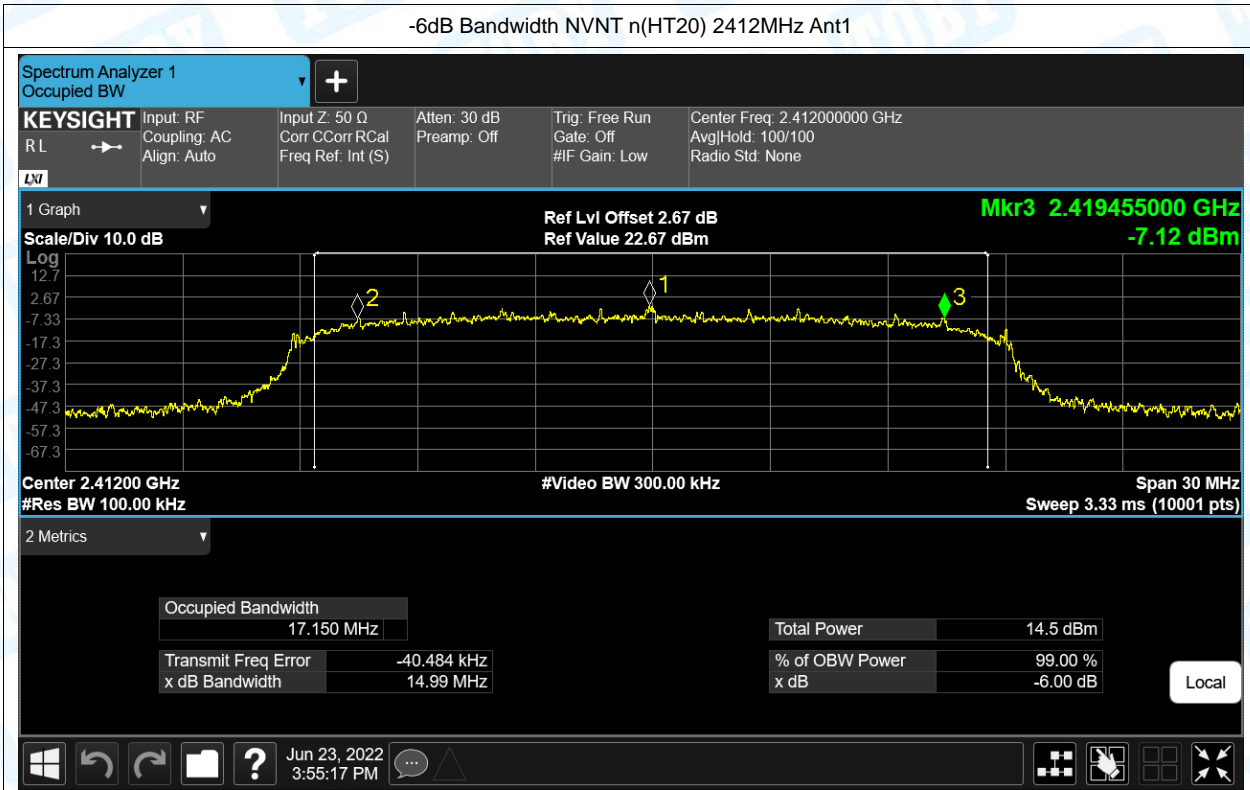
### 3. -6dB Bandwidth

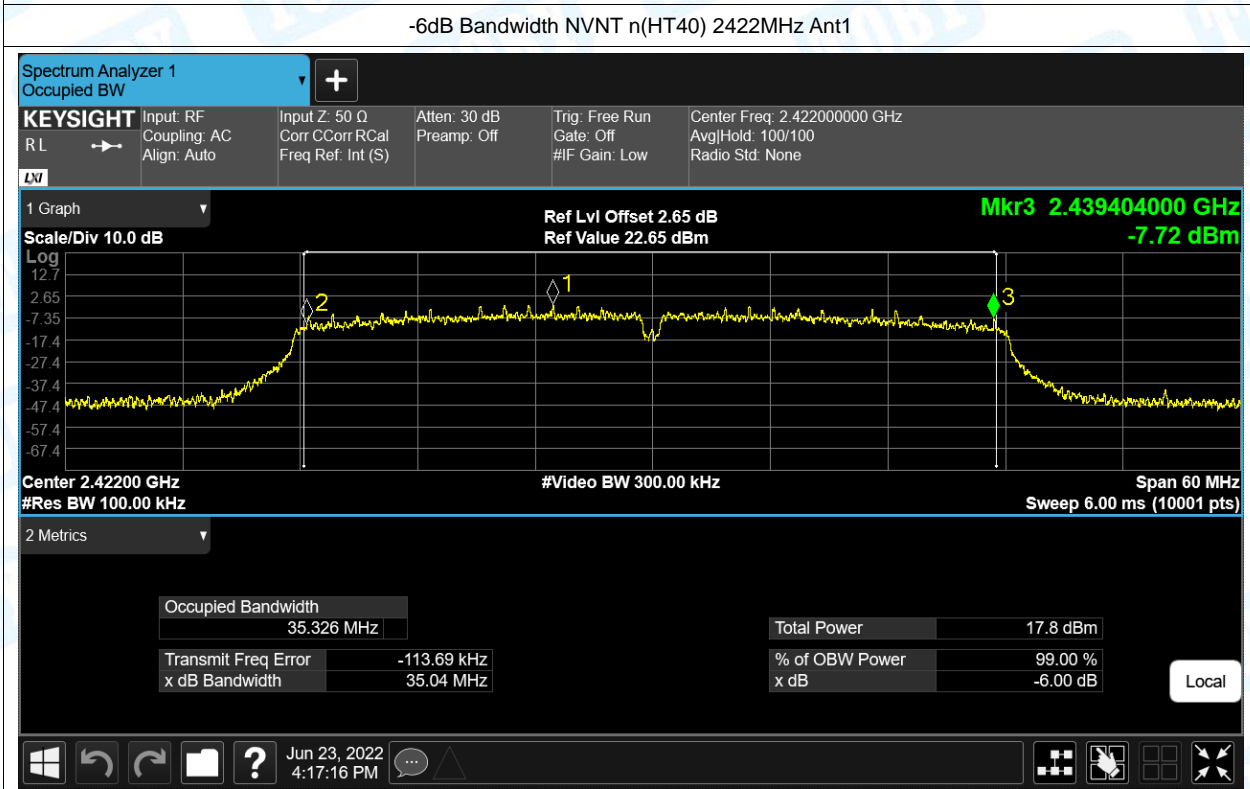
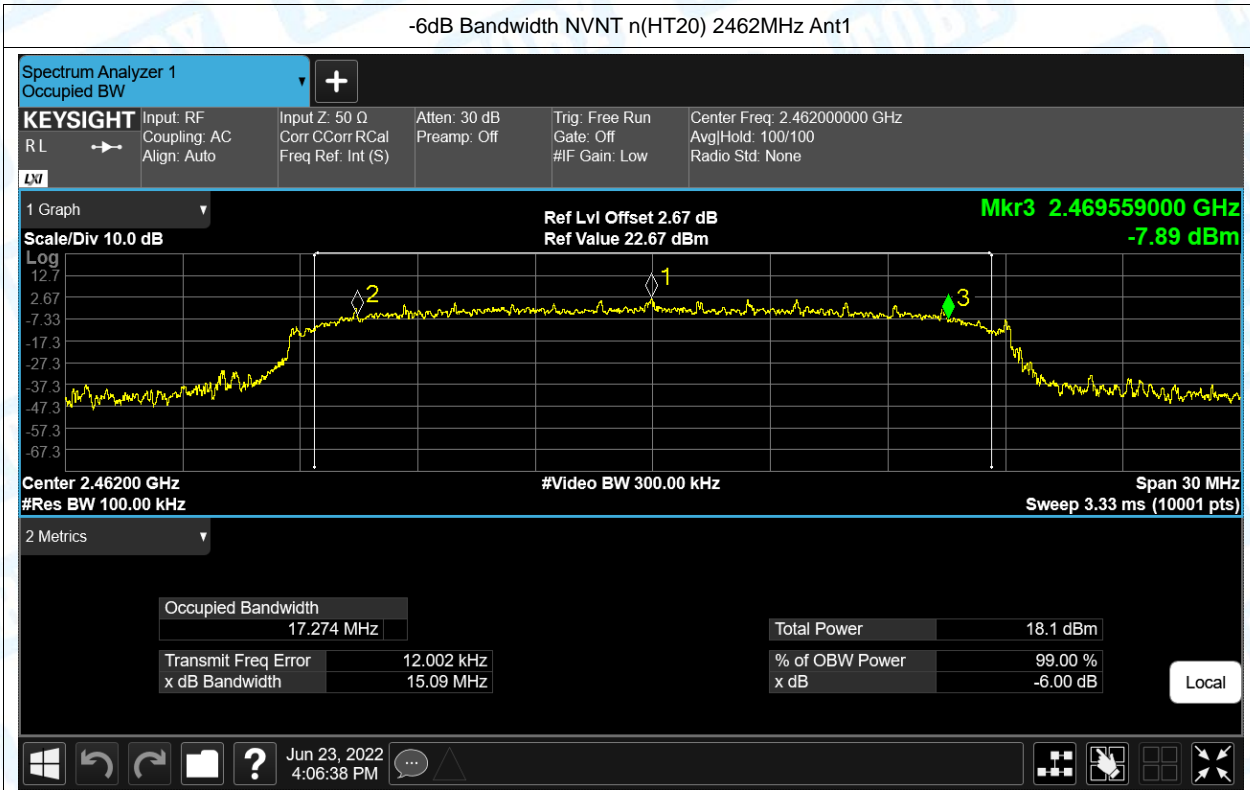
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	12.05	0.5	Pass
NVNT	b	2437	Ant1	11.06	0.5	Pass
NVNT	b	2462	Ant1	12.04	0.5	Pass
NVNT	g	2412	Ant1	14.66	0.5	Pass
NVNT	g	2437	Ant1	14.14	0.5	Pass
NVNT	g	2462	Ant1	14.43	0.5	Pass
NVNT	n(HT20)	2412	Ant1	14.99	0.5	Pass
NVNT	n(HT20)	2437	Ant1	15.08	0.5	Pass
NVNT	n(HT20)	2462	Ant1	15.09	0.5	Pass
NVNT	n(HT40)	2422	Ant1	35.04	0.5	Pass
NVNT	n(HT40)	2437	Ant1	34.97	0.5	Pass
NVNT	n(HT40)	2452	Ant1	35.01	0.5	Pass



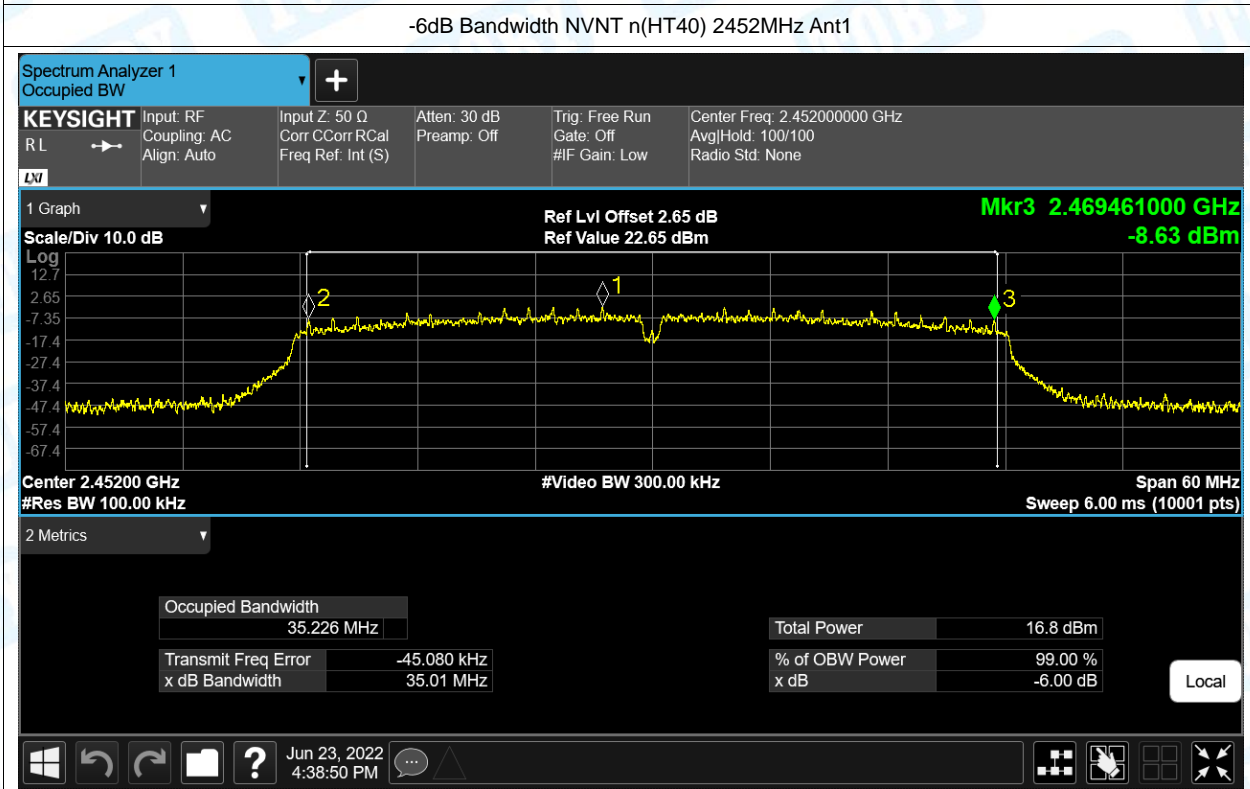
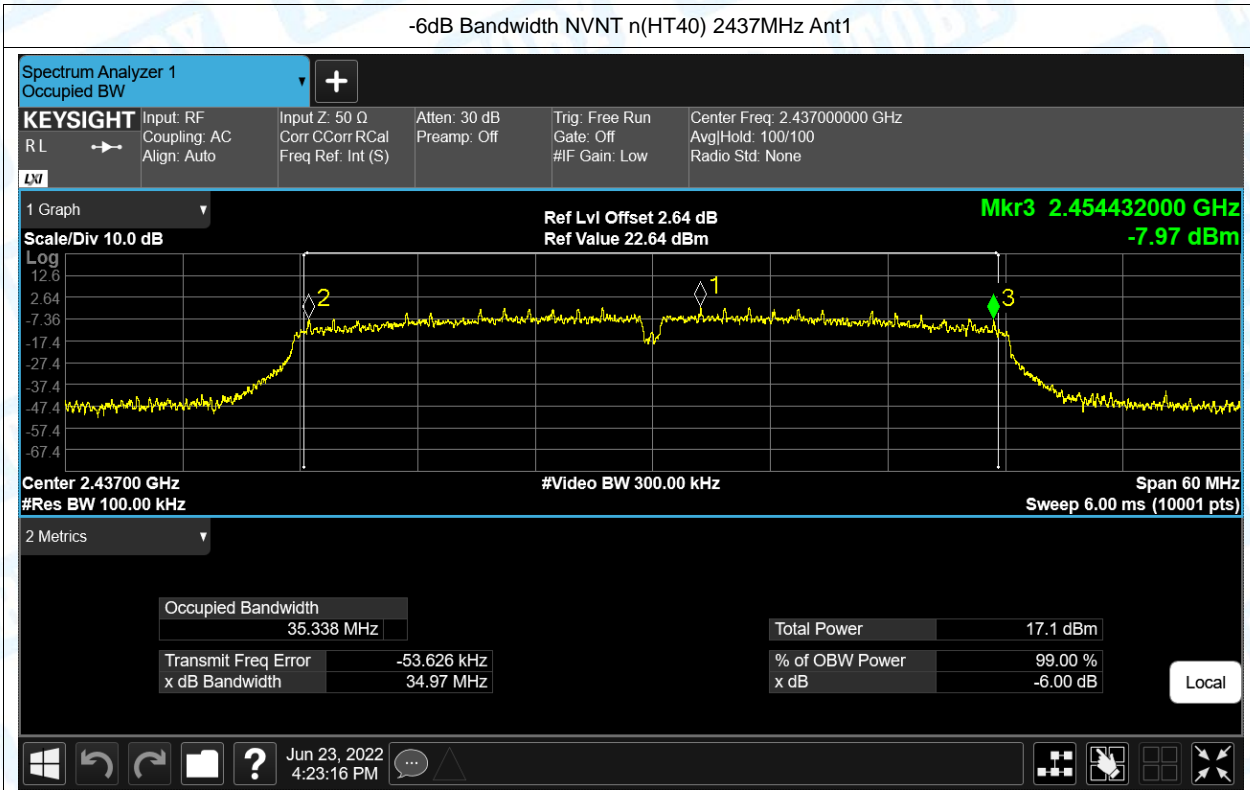










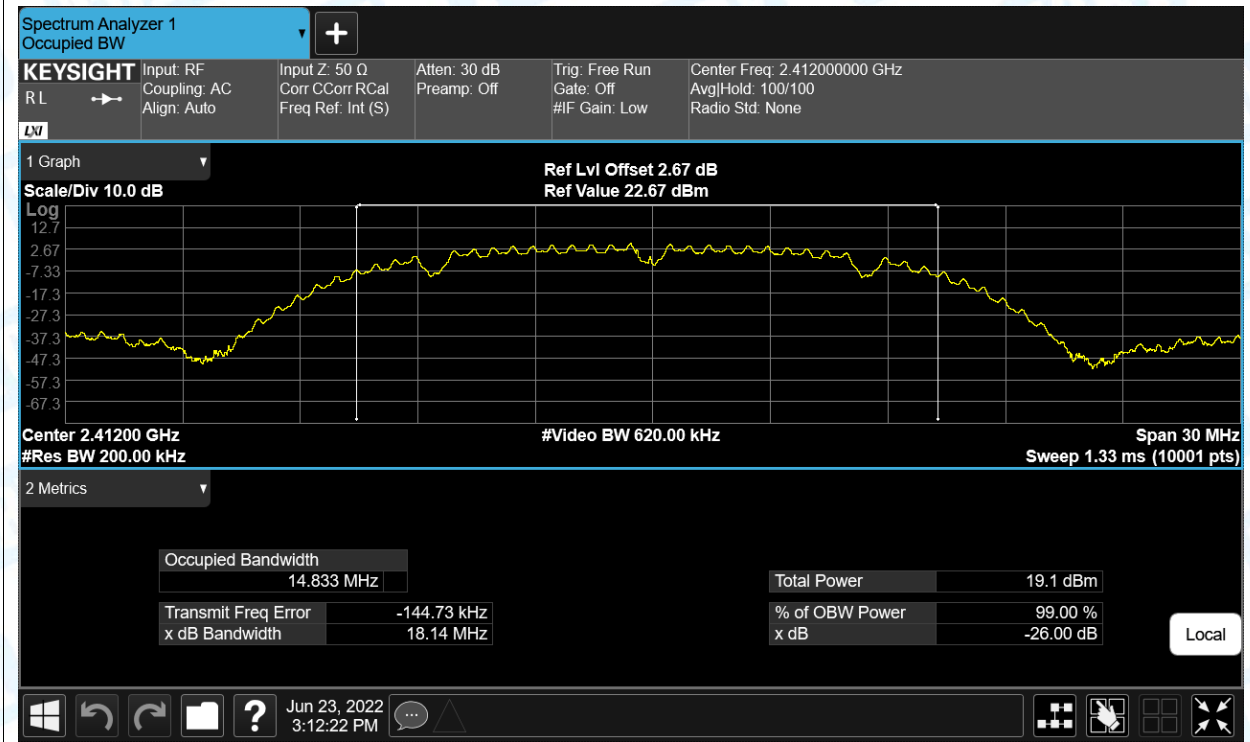


#### 4. Occupied Channel Bandwidth

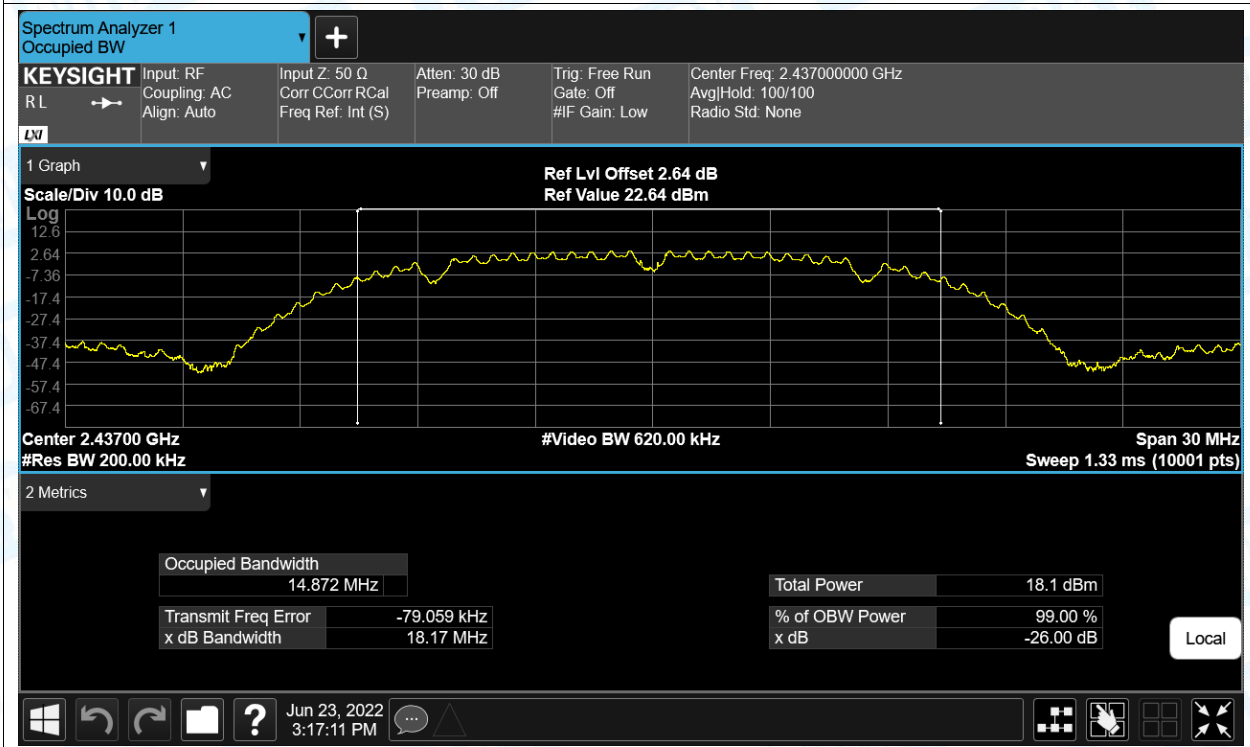
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	14.833
NVNT	b	2437	Ant1	14.872
NVNT	b	2462	Ant1	14.859
NVNT	g	2412	Ant1	16.724
NVNT	g	2437	Ant1	16.736
NVNT	g	2462	Ant1	16.724
NVNT	n(HT20)	2412	Ant1	17.605
NVNT	n(HT20)	2437	Ant1	17.505
NVNT	n(HT20)	2462	Ant1	17.495
NVNT	n(HT40)	2422	Ant1	35.54
NVNT	n(HT40)	2437	Ant1	35.474
NVNT	n(HT40)	2452	Ant1	35.435

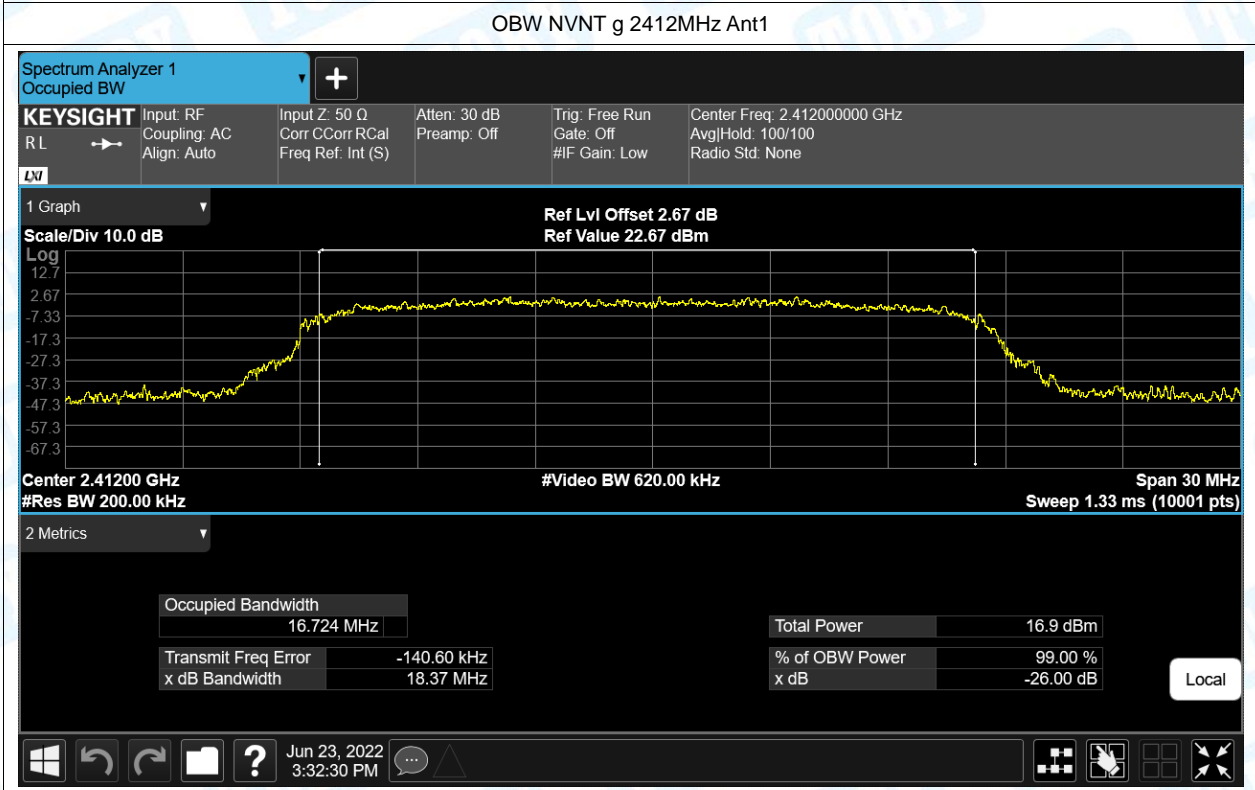
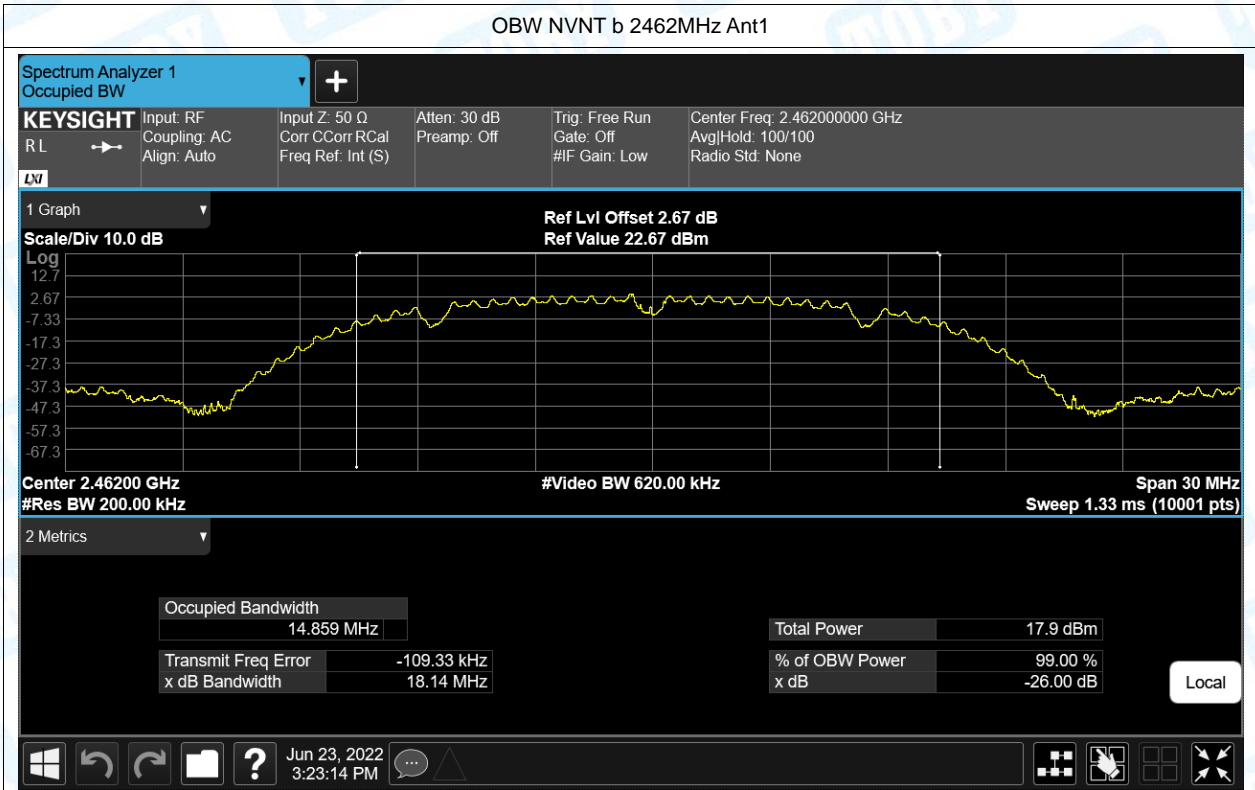
Test Graphs

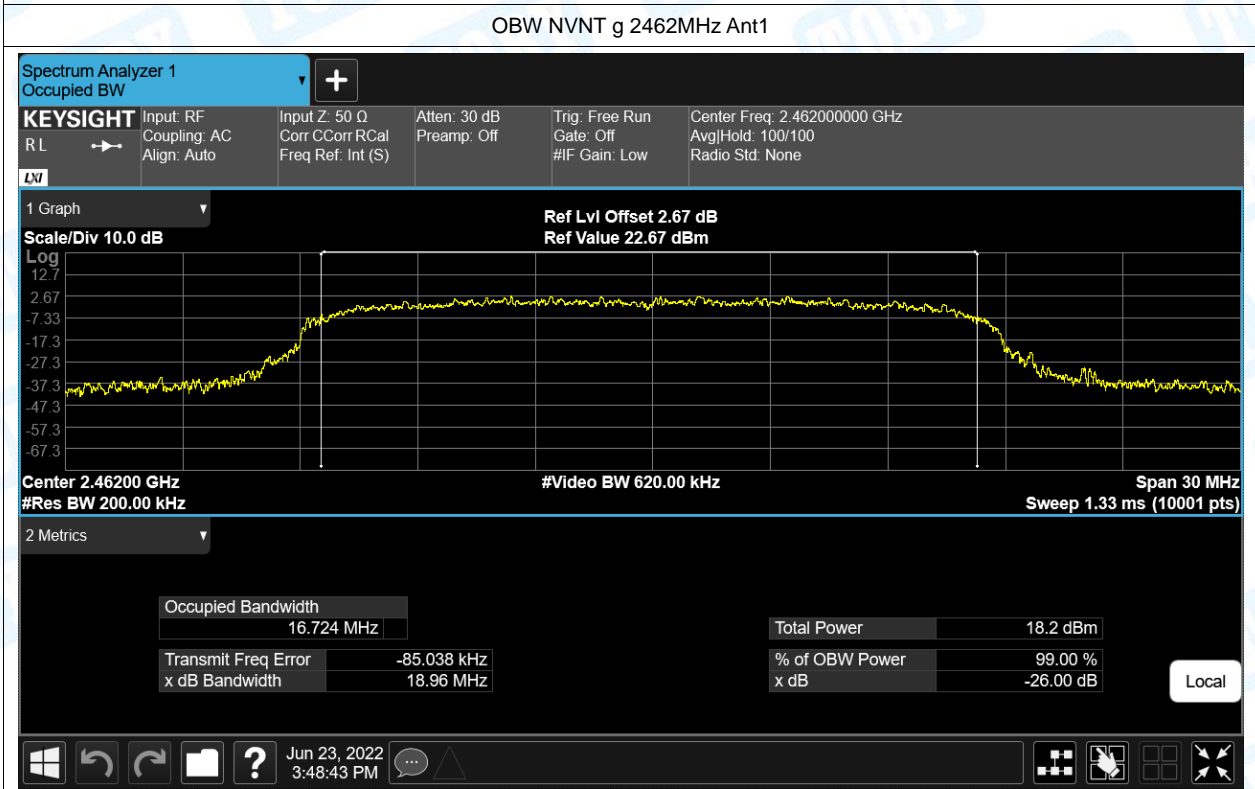
OBW NVNT b 2412MHz Ant1

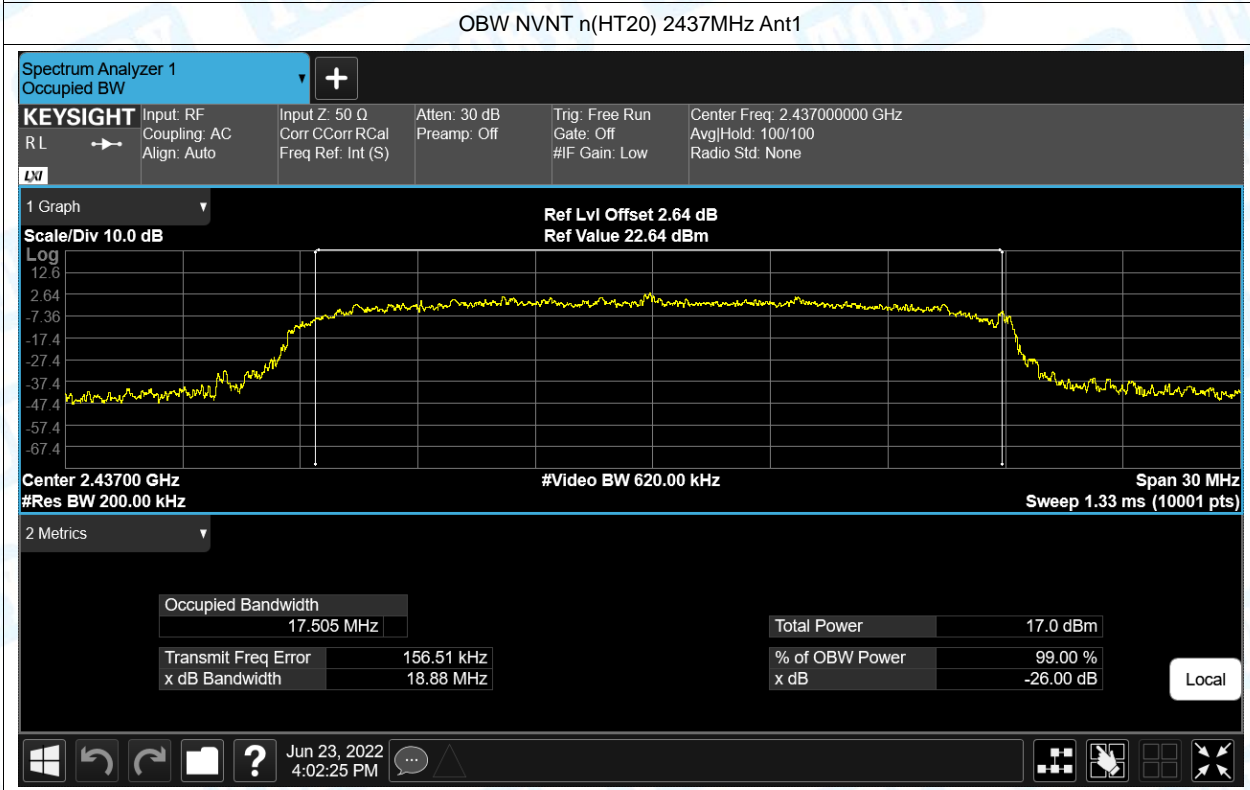
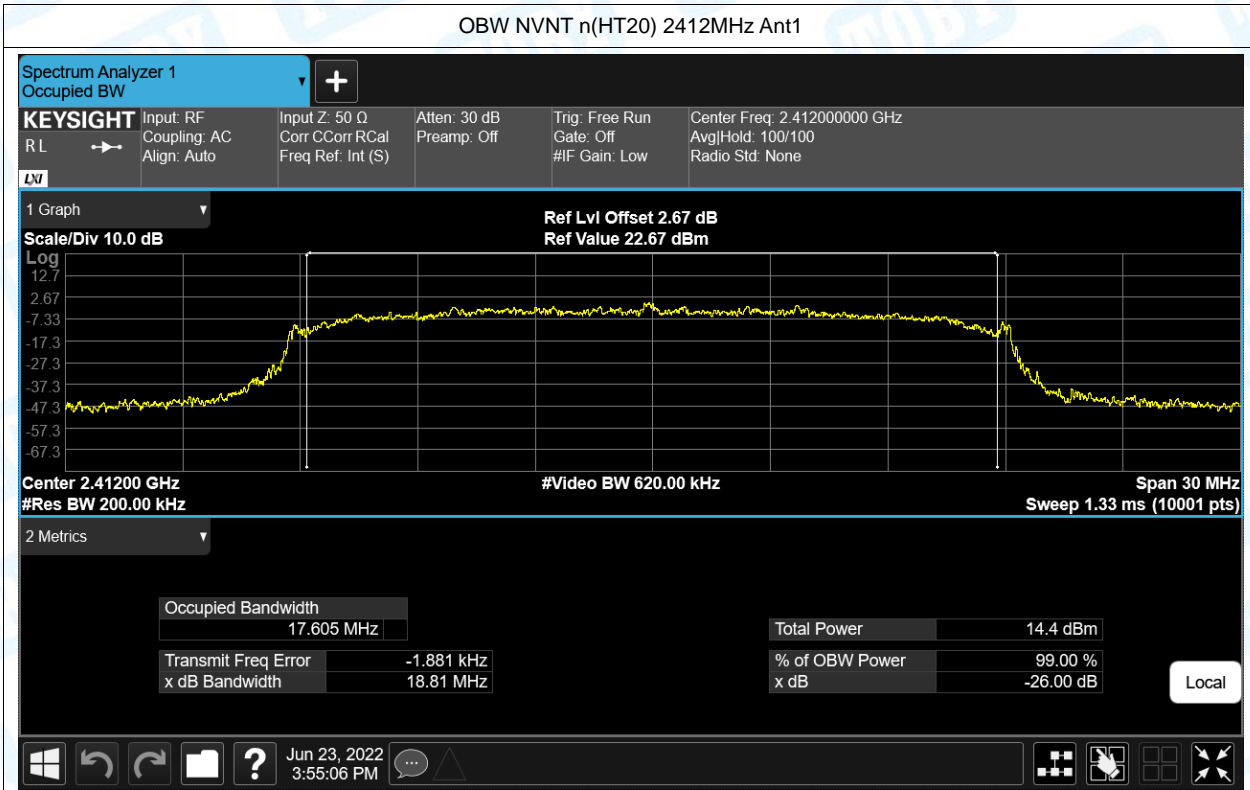


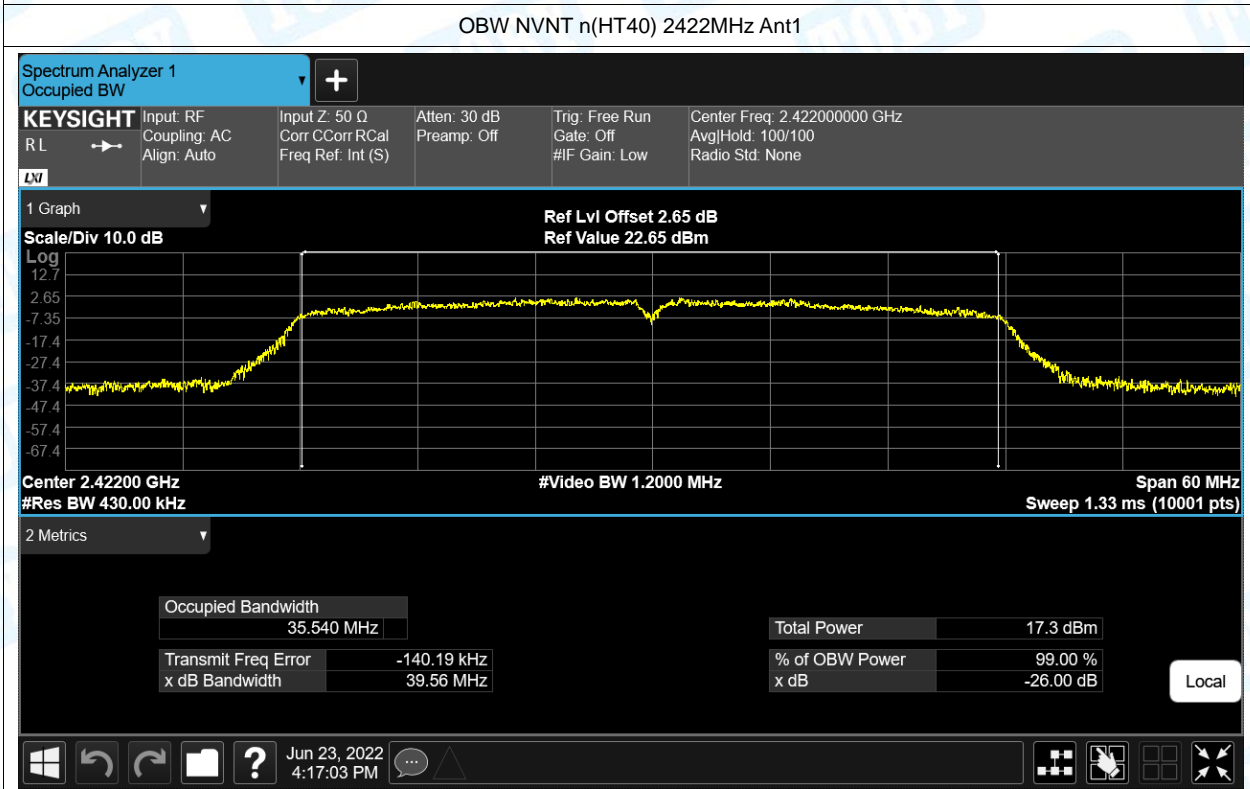
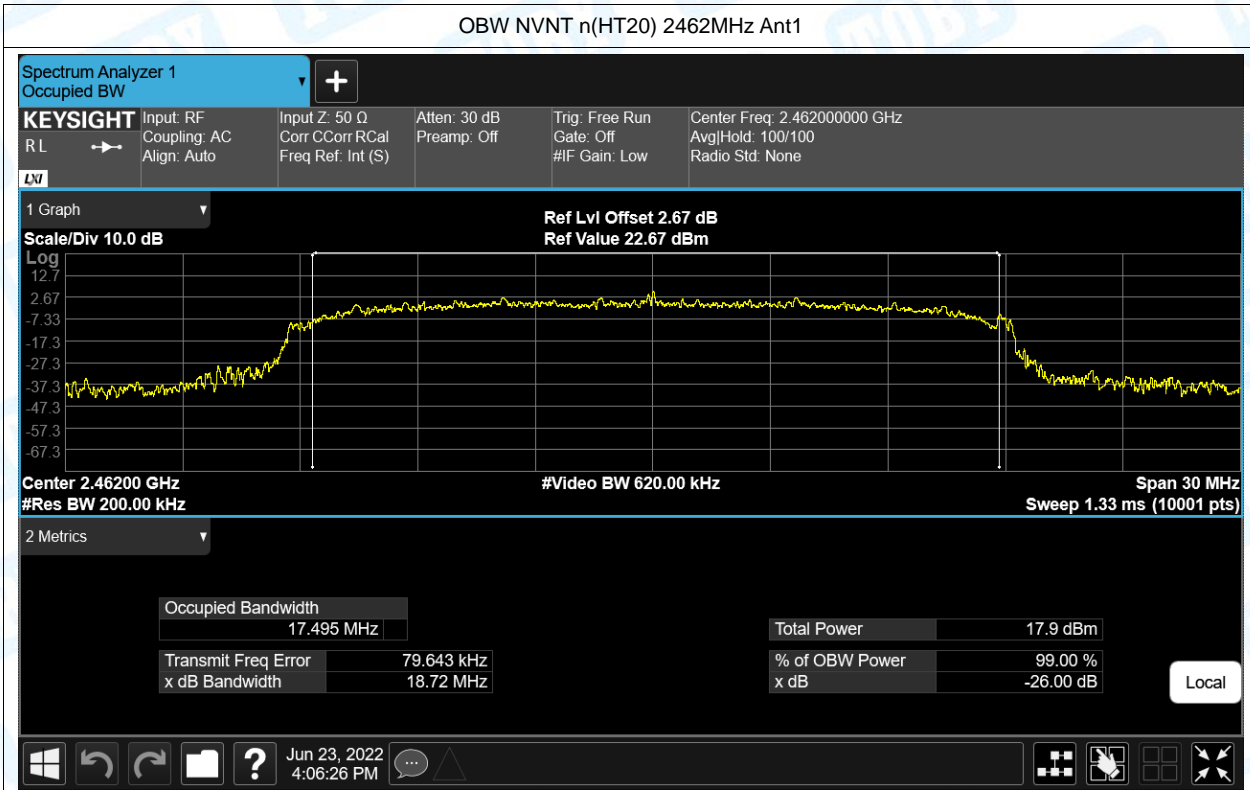
OBW NVNT b 2437MHz Ant1

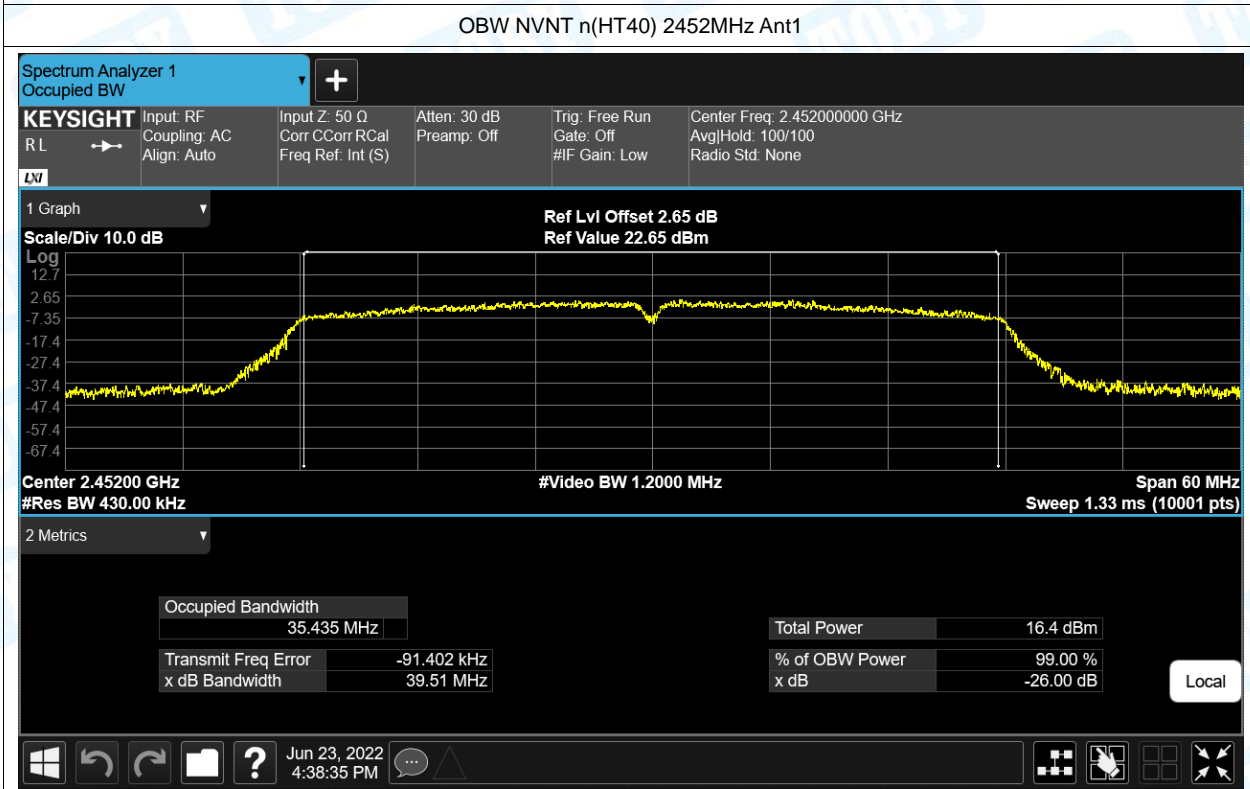
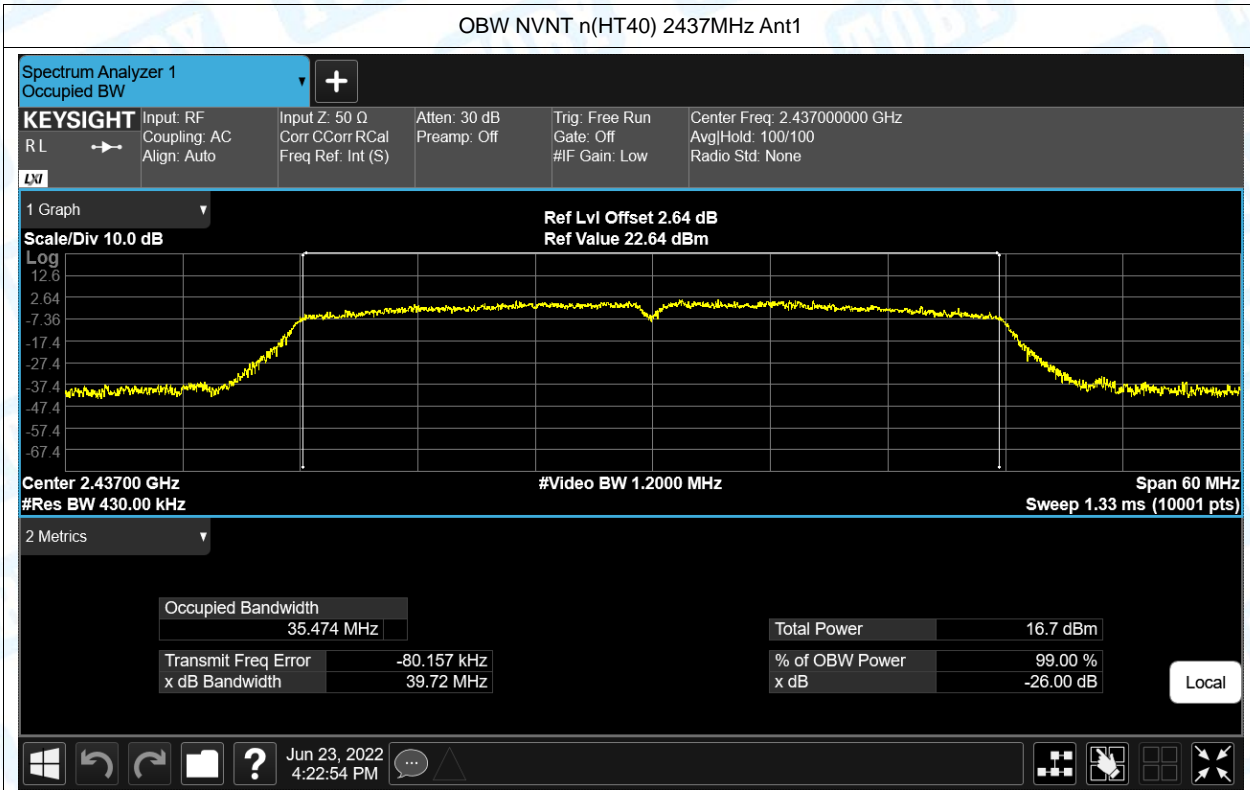












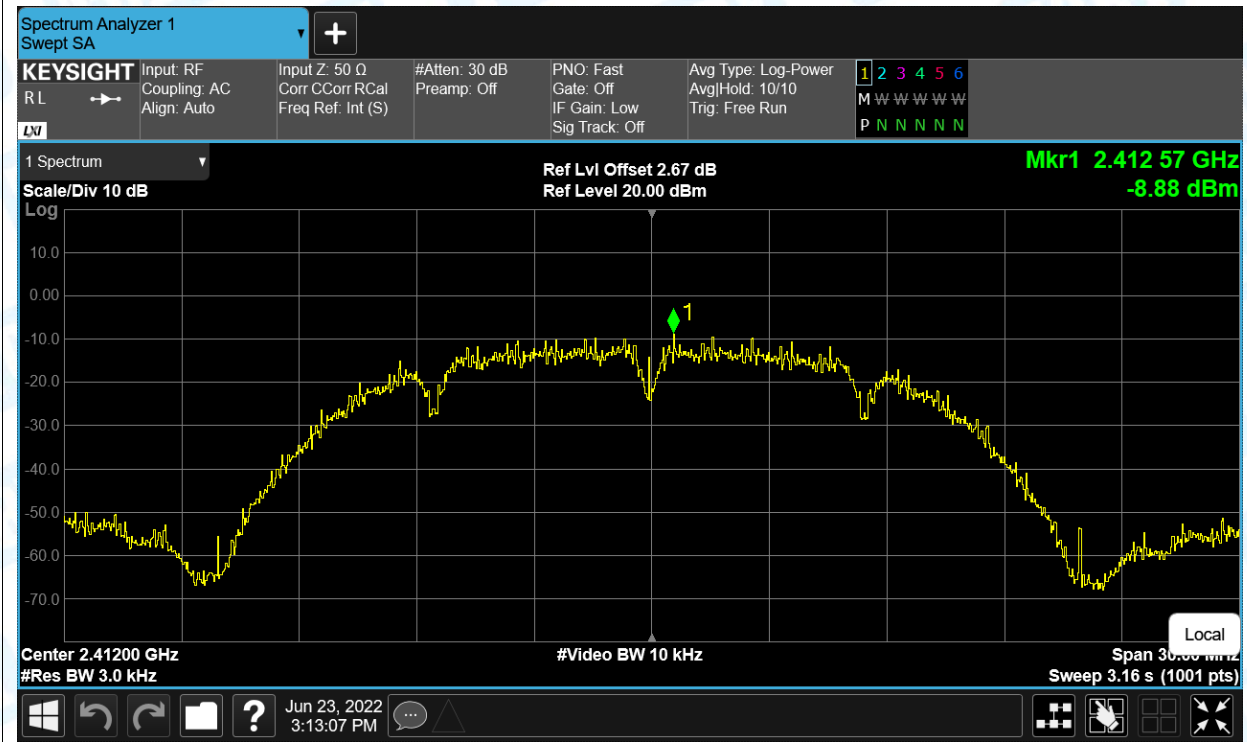


## 5. Maximum Power Spectral Density Level

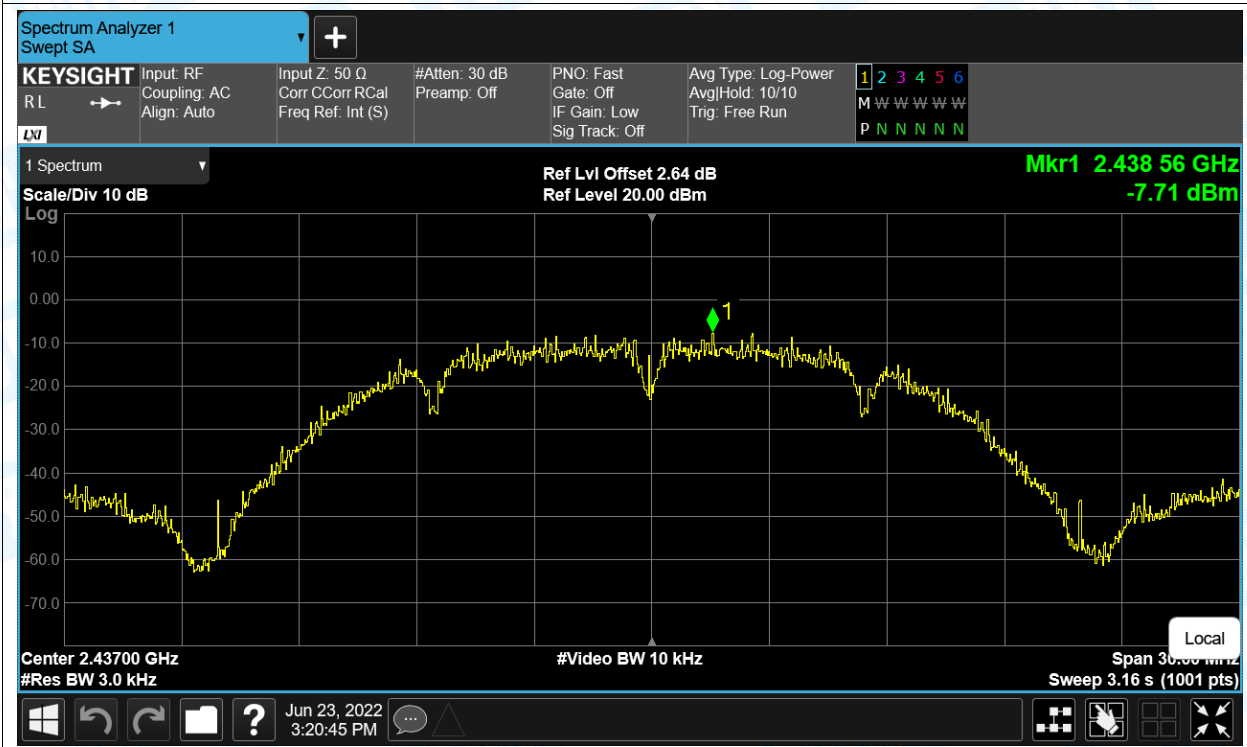
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	-8.884	8	Pass
NVNT	b	2437	Ant1	-7.712	8	Pass
NVNT	b	2462	Ant1	-7.672	8	Pass
NVNT	g	2412	Ant1	-12.229	8	Pass
NVNT	g	2437	Ant1	-11.291	8	Pass
NVNT	g	2462	Ant1	-11.93	8	Pass
NVNT	n(HT20)	2412	Ant1	-13.074	8	Pass
NVNT	n(HT20)	2437	Ant1	-12.986	8	Pass
NVNT	n(HT20)	2462	Ant1	-13.08	8	Pass
NVNT	n(HT40)	2422	Ant1	-14.771	8	Pass
NVNT	n(HT40)	2437	Ant1	-14.638	8	Pass
NVNT	n(HT40)	2452	Ant1	-14.782	8	Pass

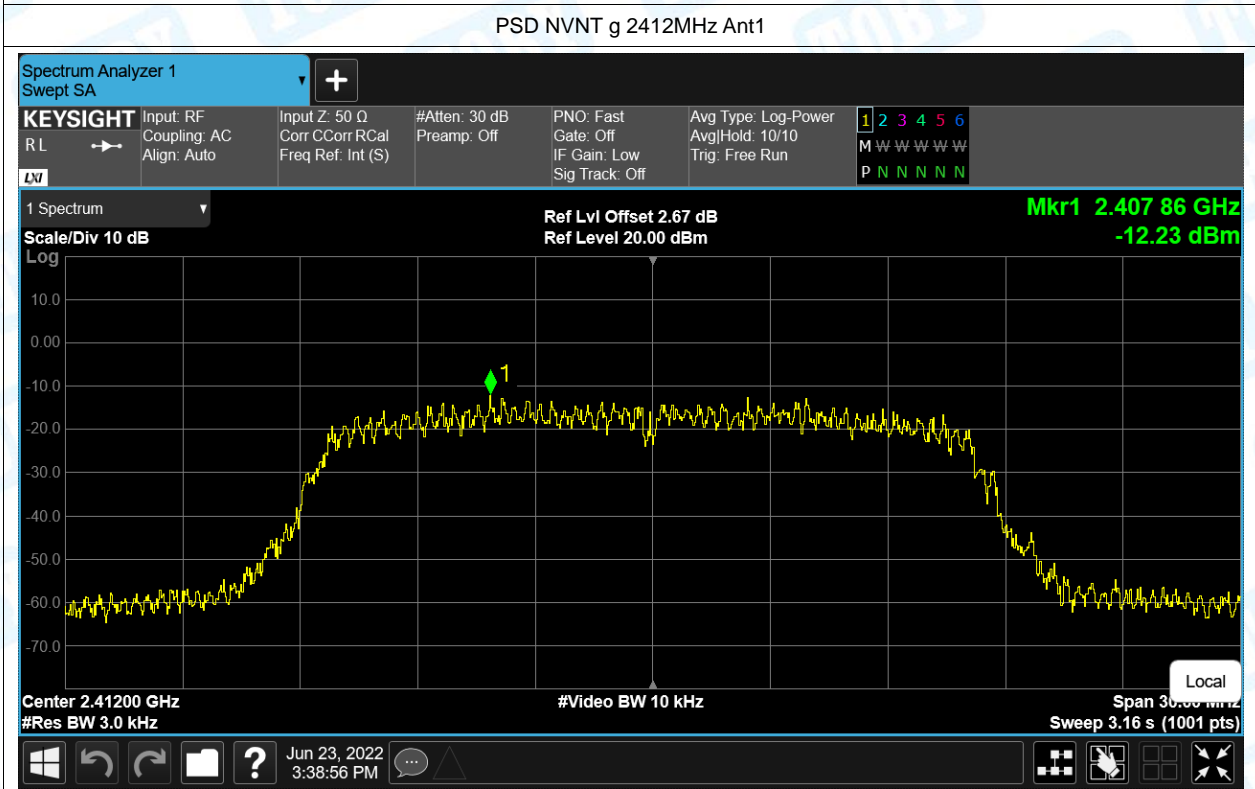
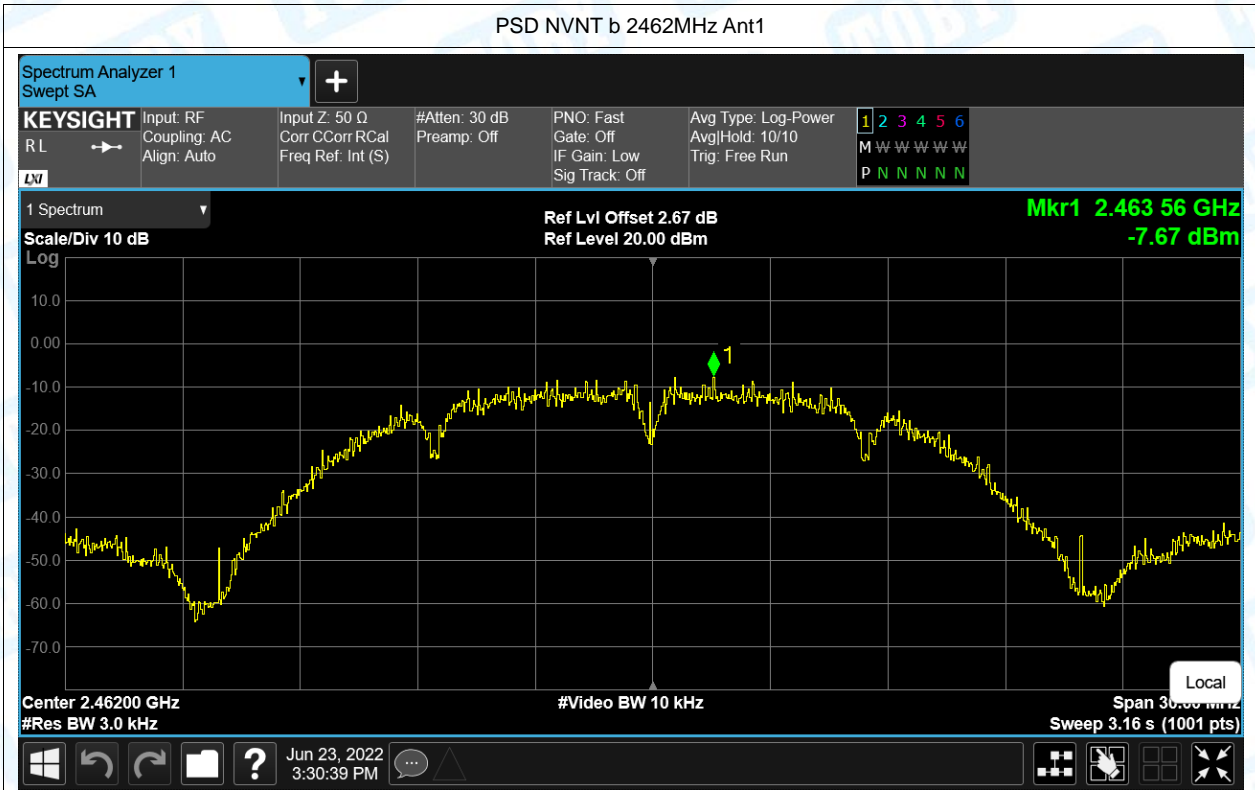
Test Graphs

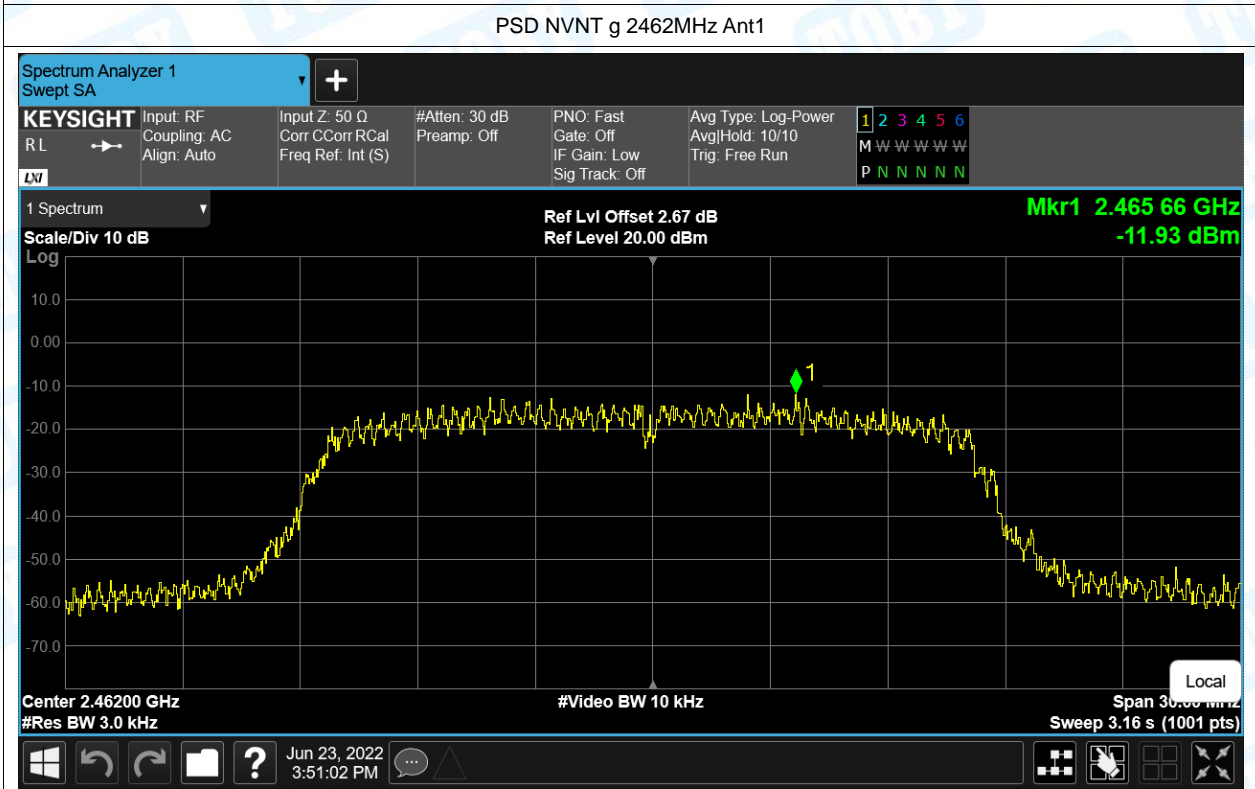
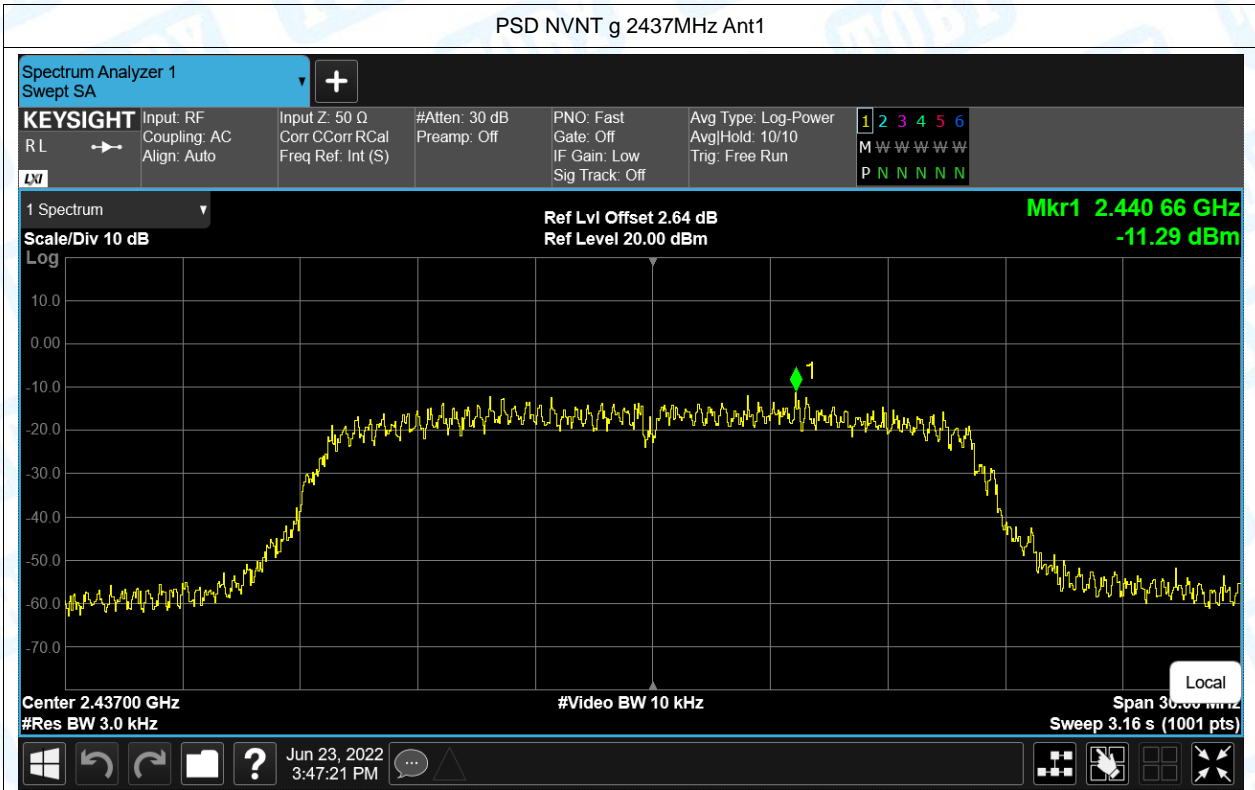
PSD NVNT b 2412MHz Ant1

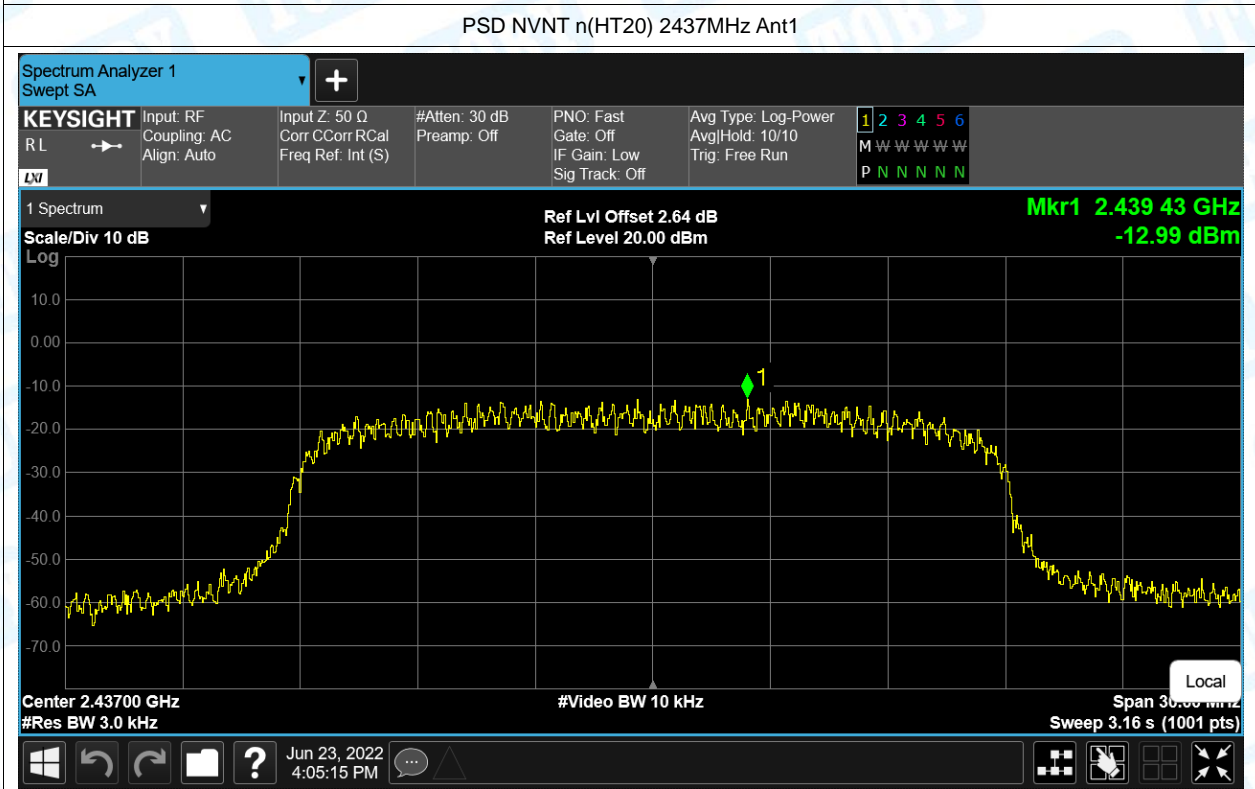
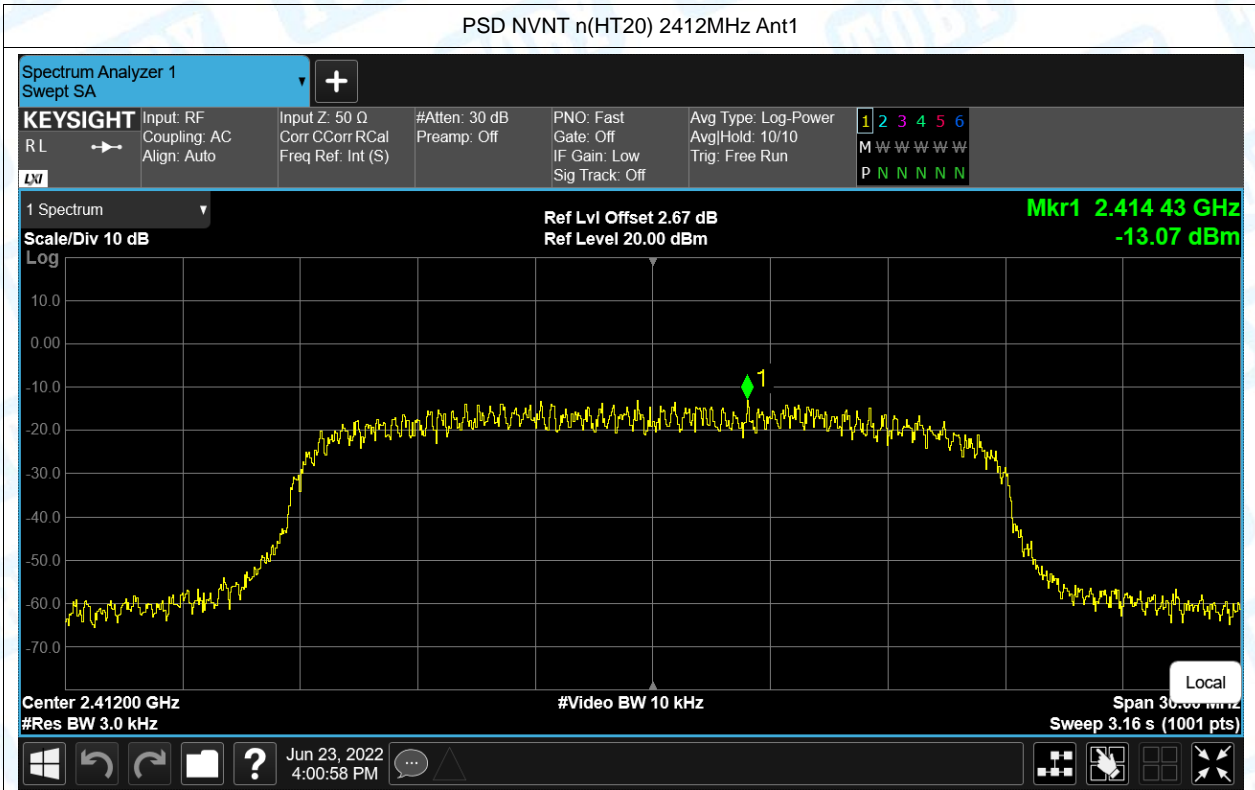


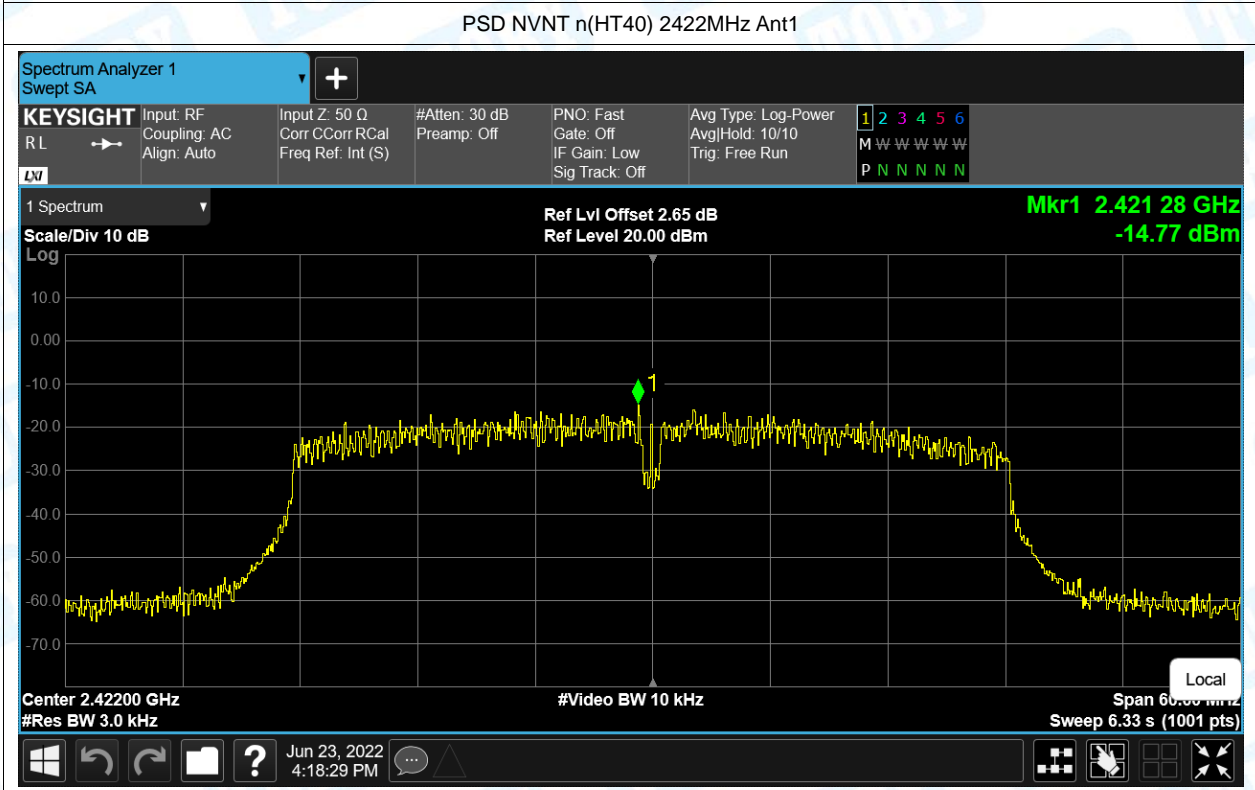
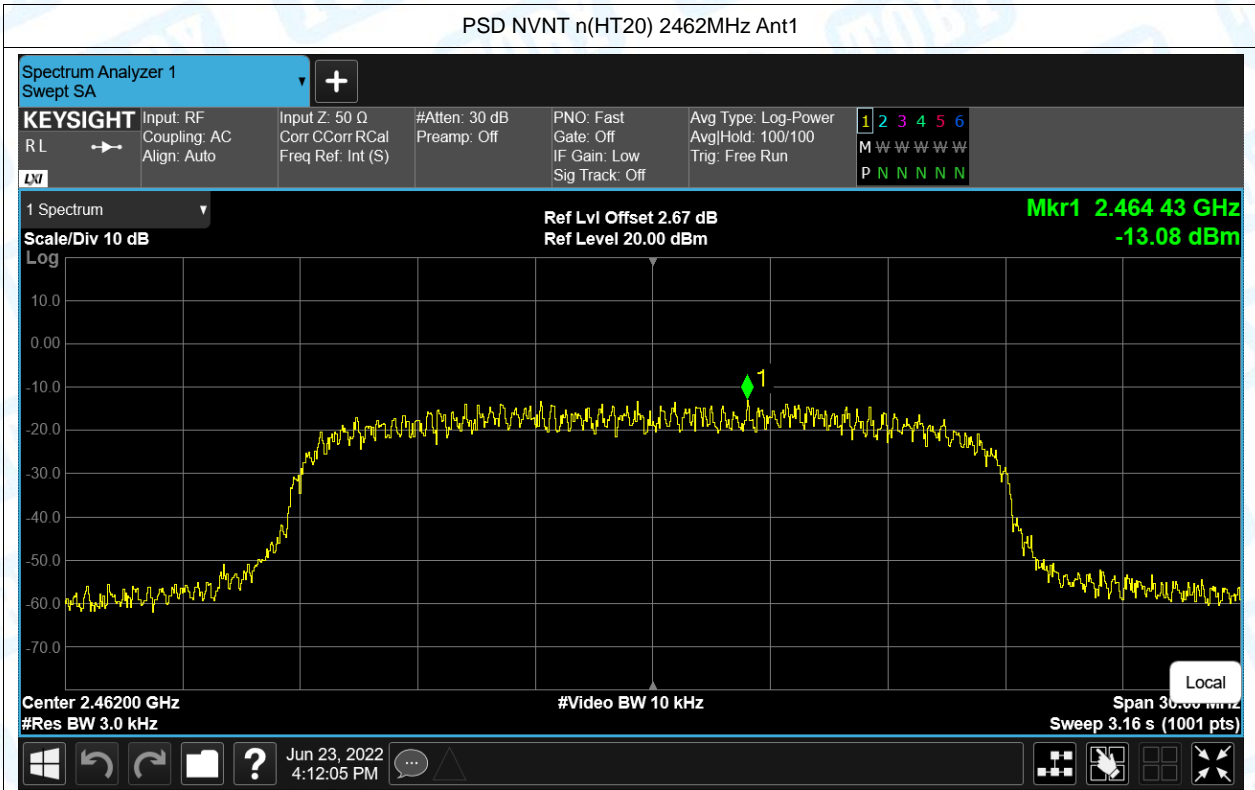
PSD NVNT b 2437MHz Ant1

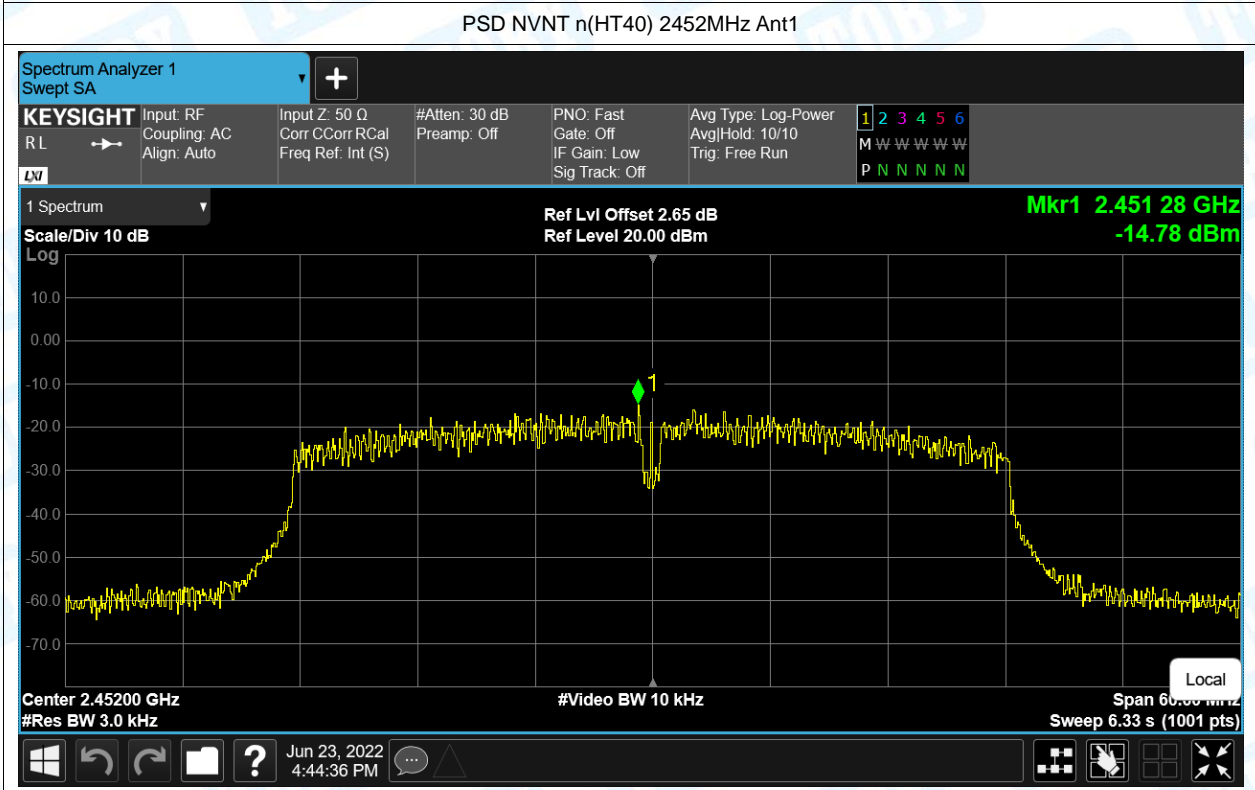
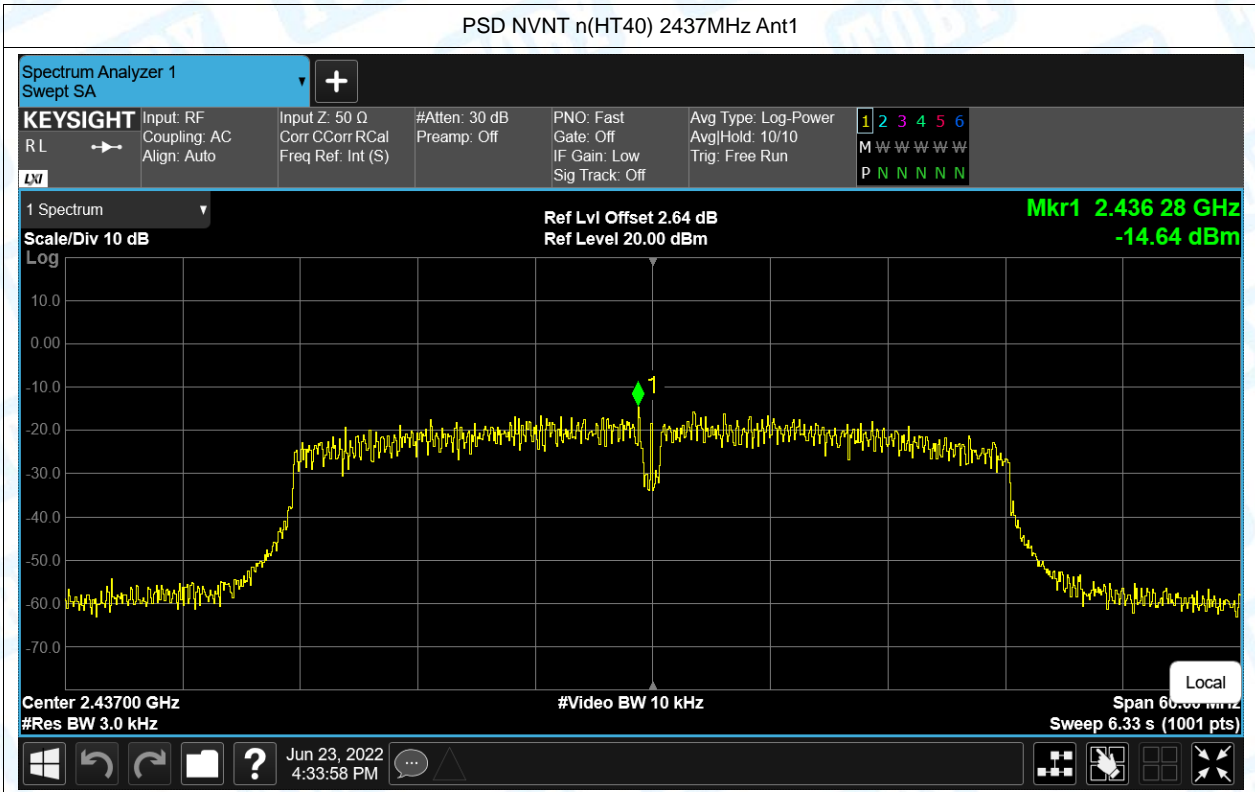












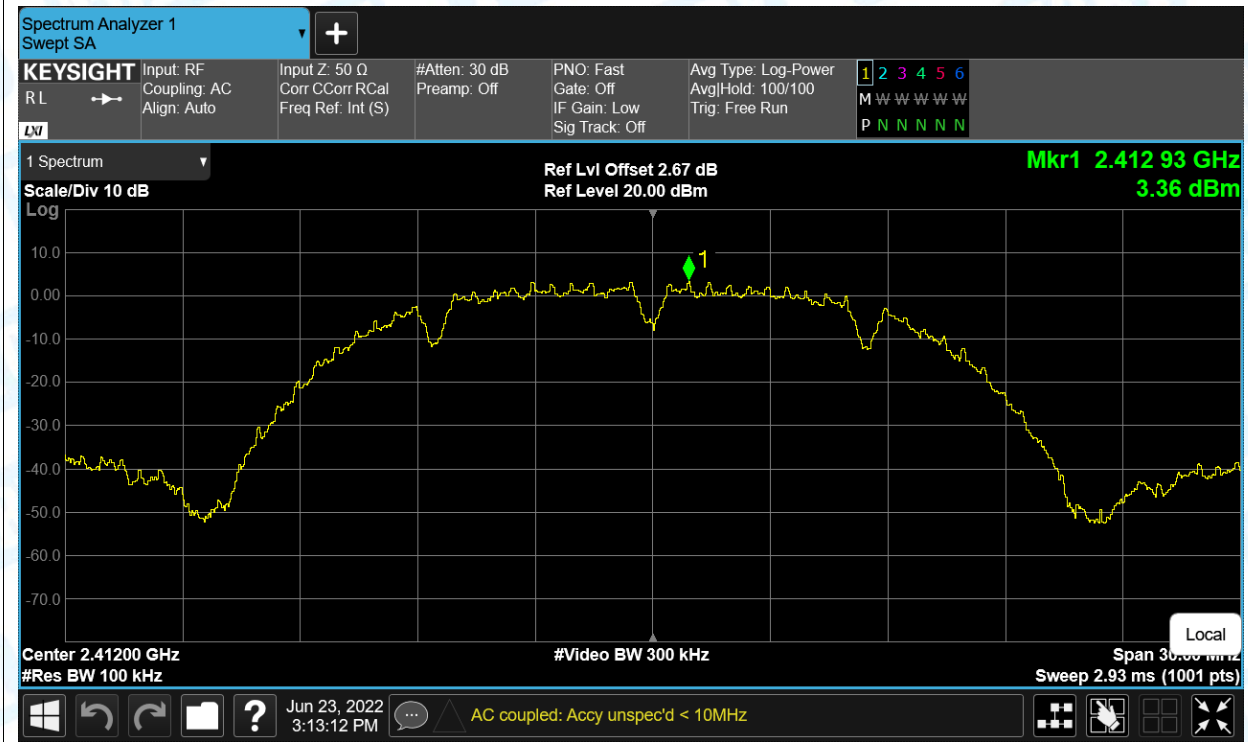
## 6. Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-56.49	-20	Pass
NVNT	b	2462	Ant1	-56.91	-20	Pass
NVNT	g	2412	Ant1	-51.5	-20	Pass
NVNT	g	2462	Ant1	-48.31	-20	Pass
NVNT	n(HT20)	2412	Ant1	-52.31	-20	Pass
NVNT	n(HT20)	2462	Ant1	-47.41	-20	Pass
NVNT	n(HT40)	2422	Ant1	-42.84	-20	Pass
NVNT	n(HT40)	2452	Ant1	-42.53	-20	Pass

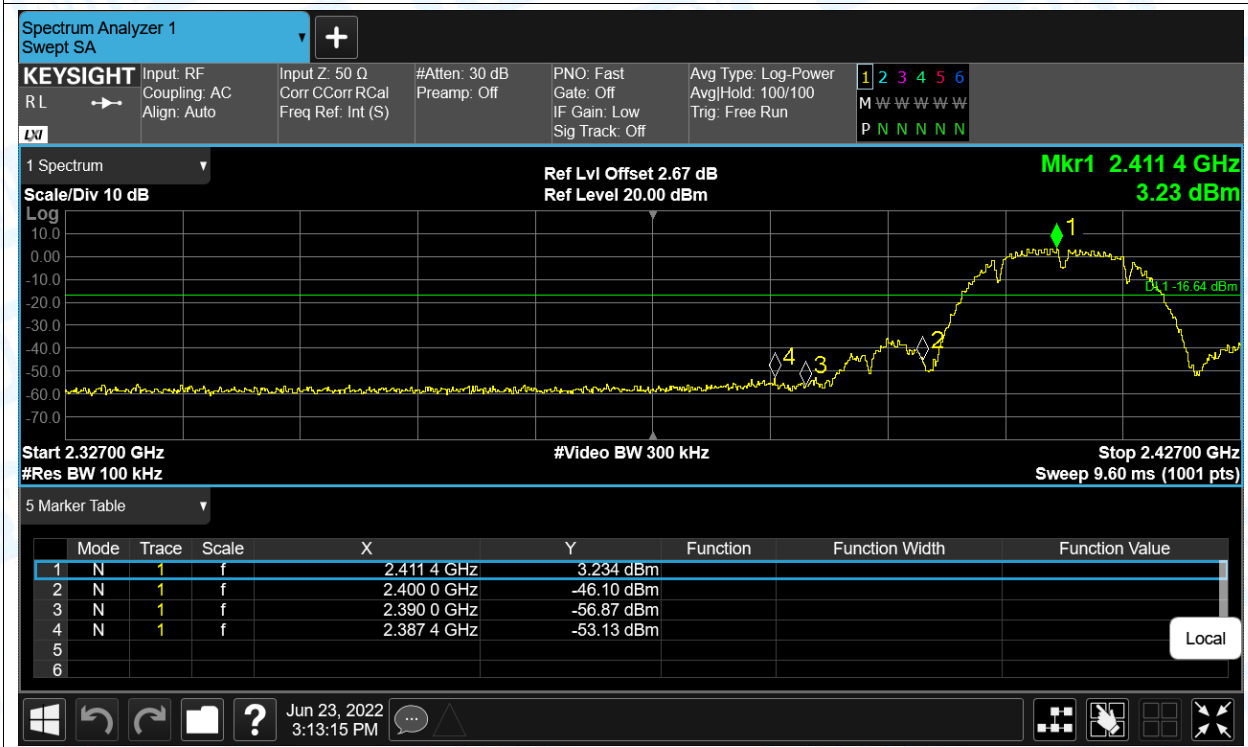


### Test Graphs

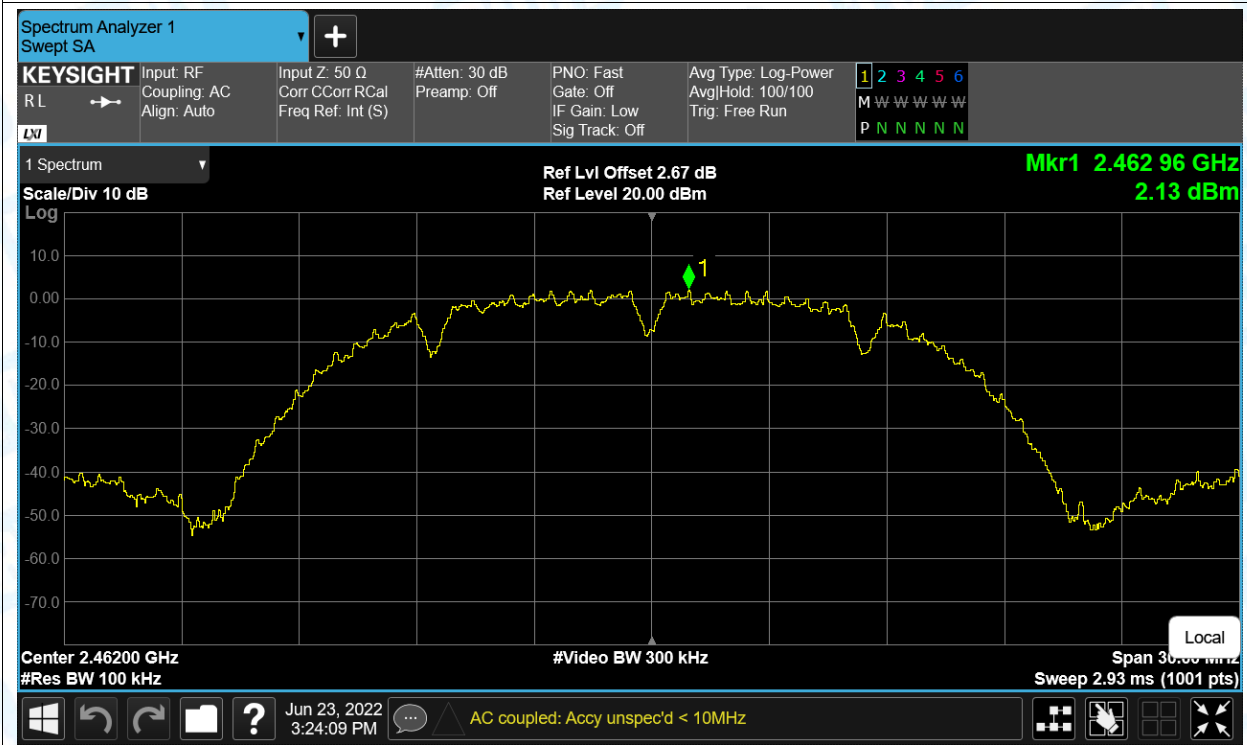
#### Band Edge NVNT b 2412MHz Ant1 Ref



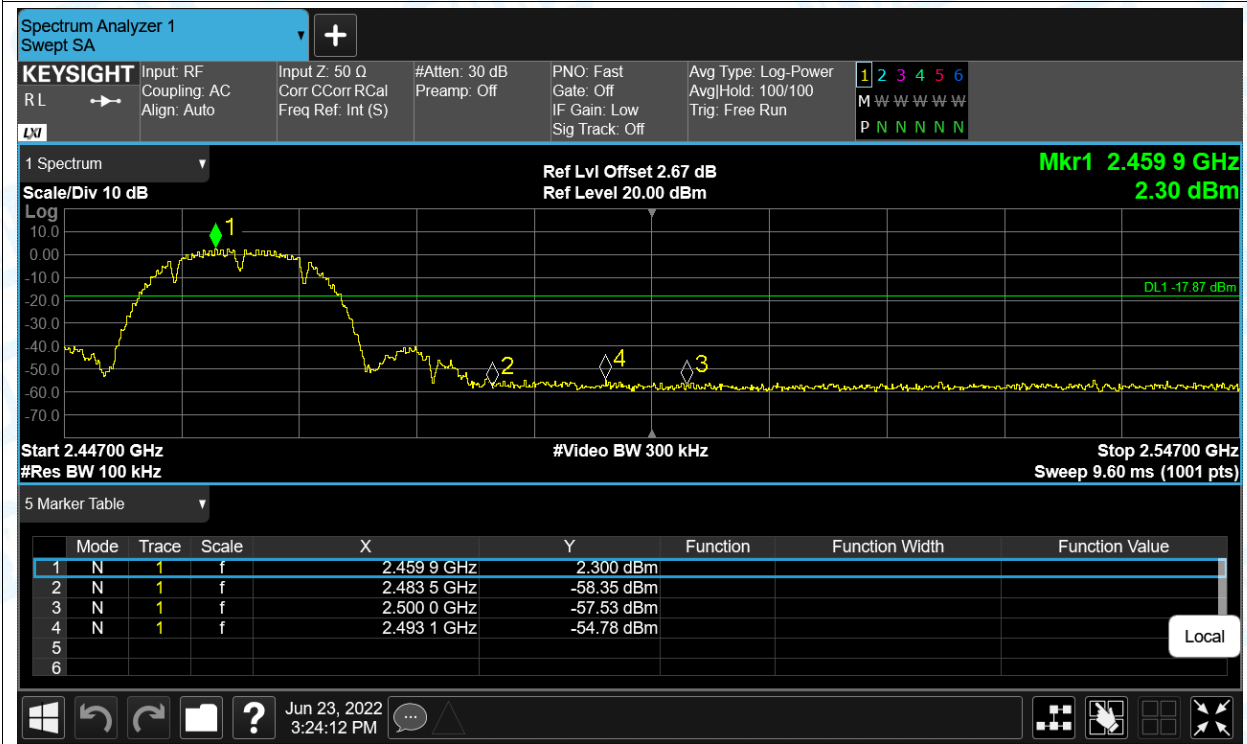
#### Band Edge NVNT b 2412MHz Ant1 Emission

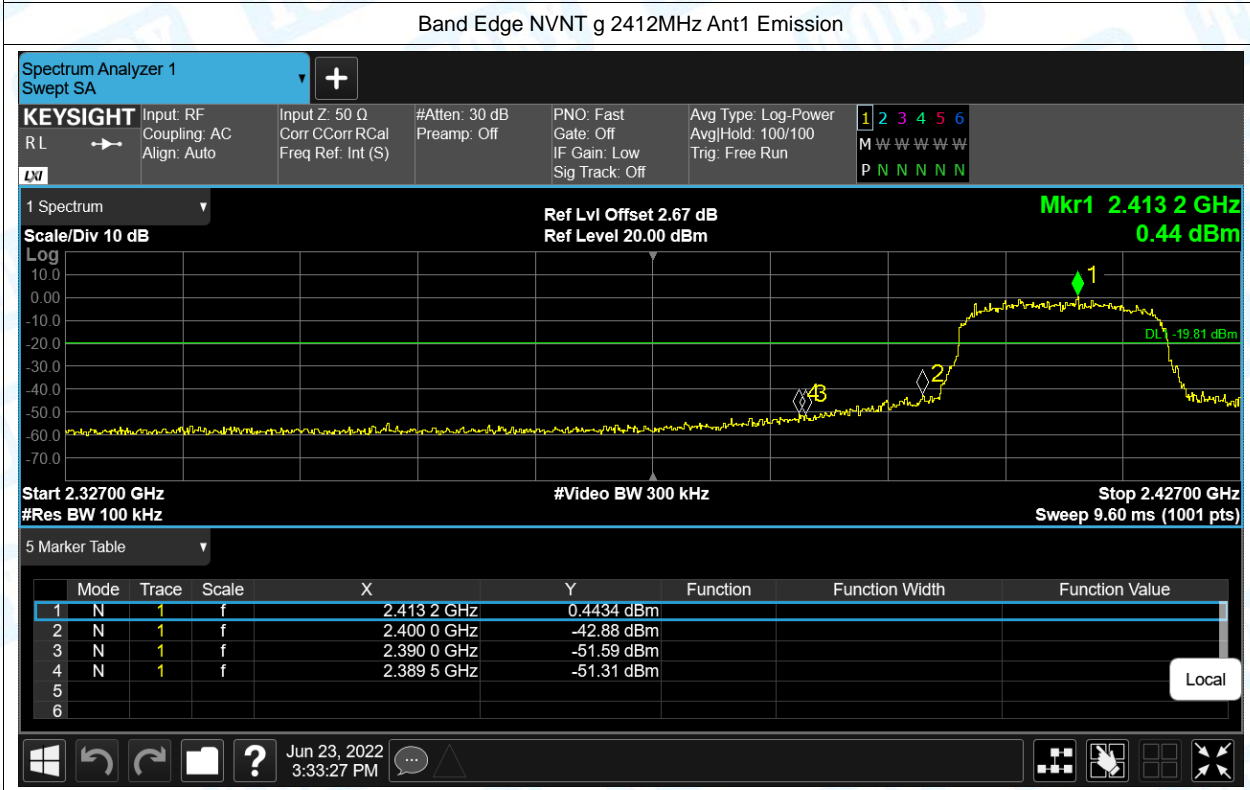
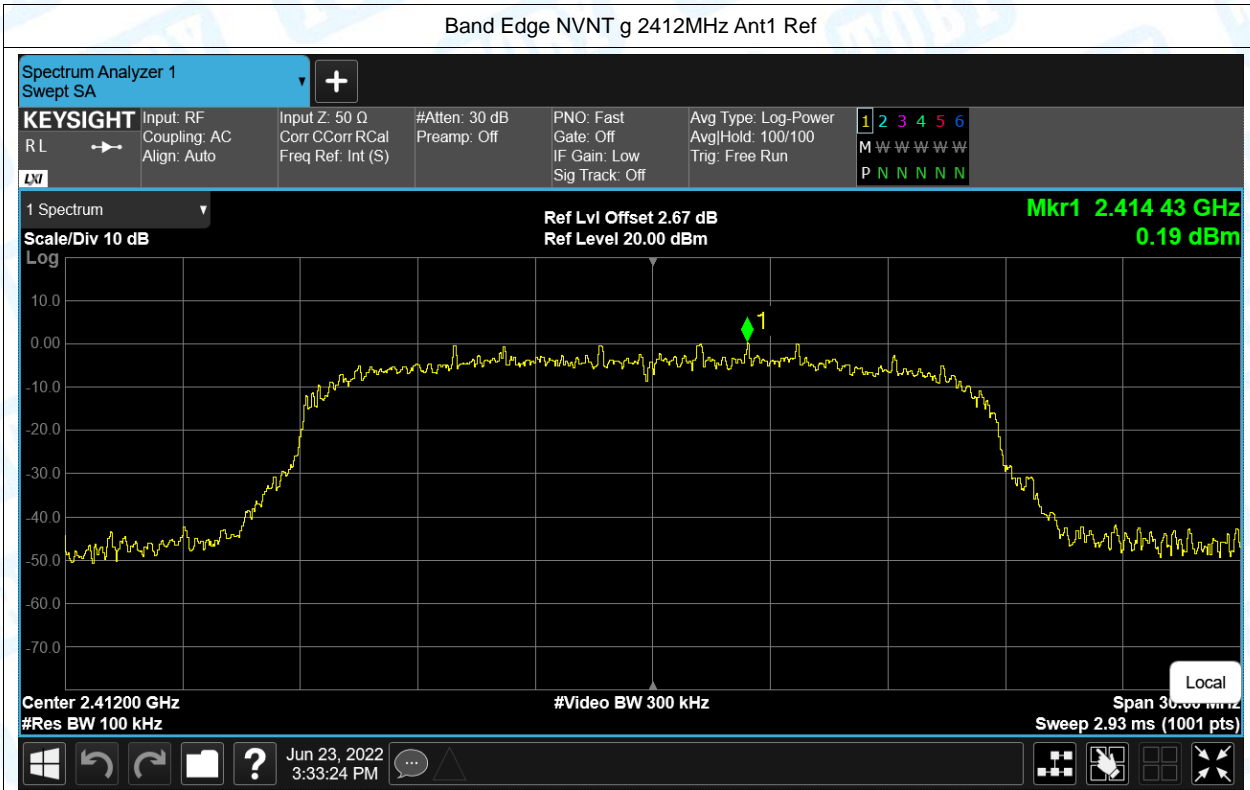


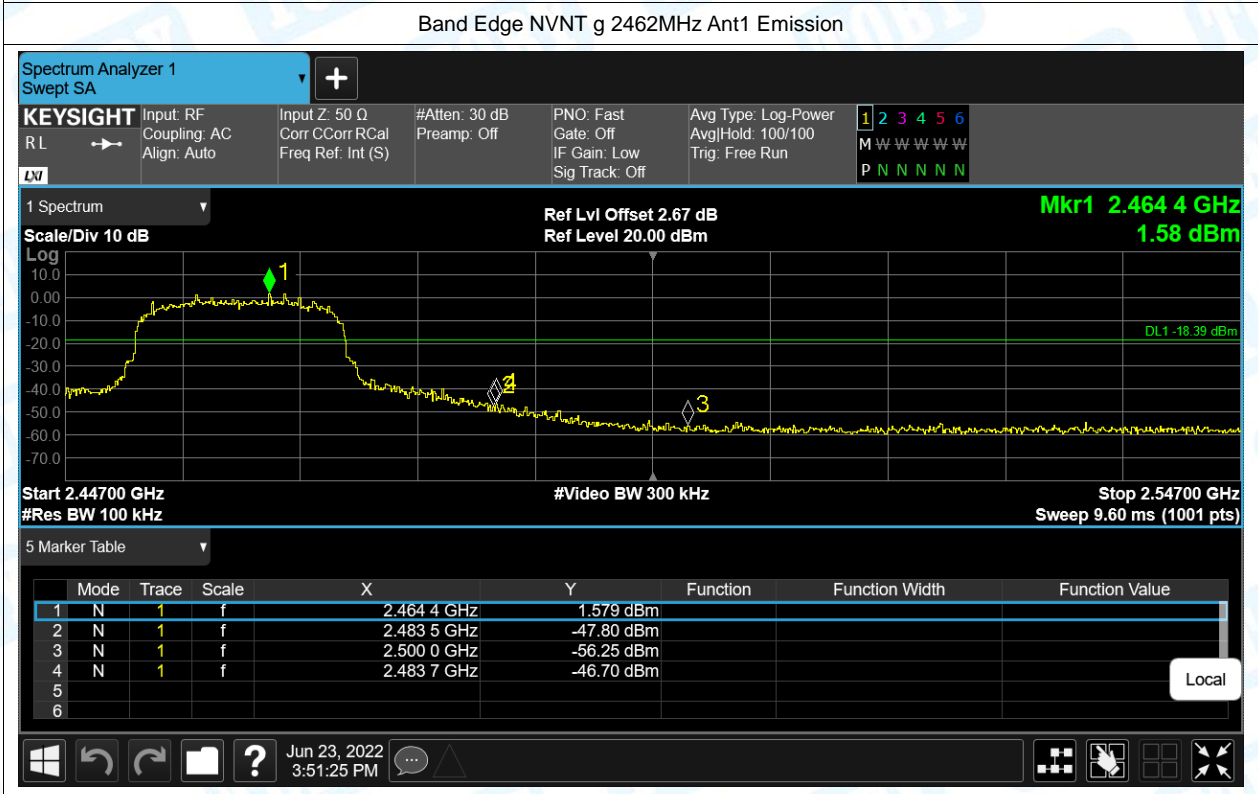
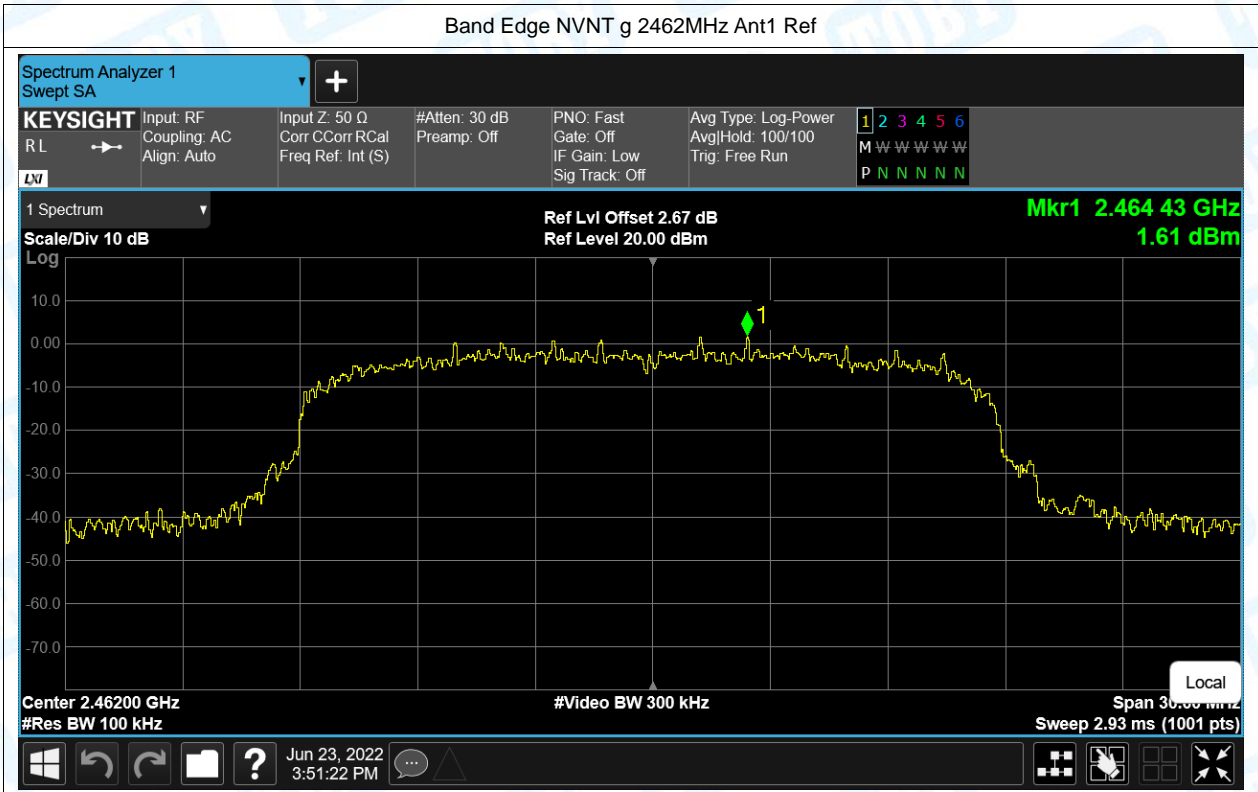
Band Edge NVNT b 2462MHz Ant1 Ref

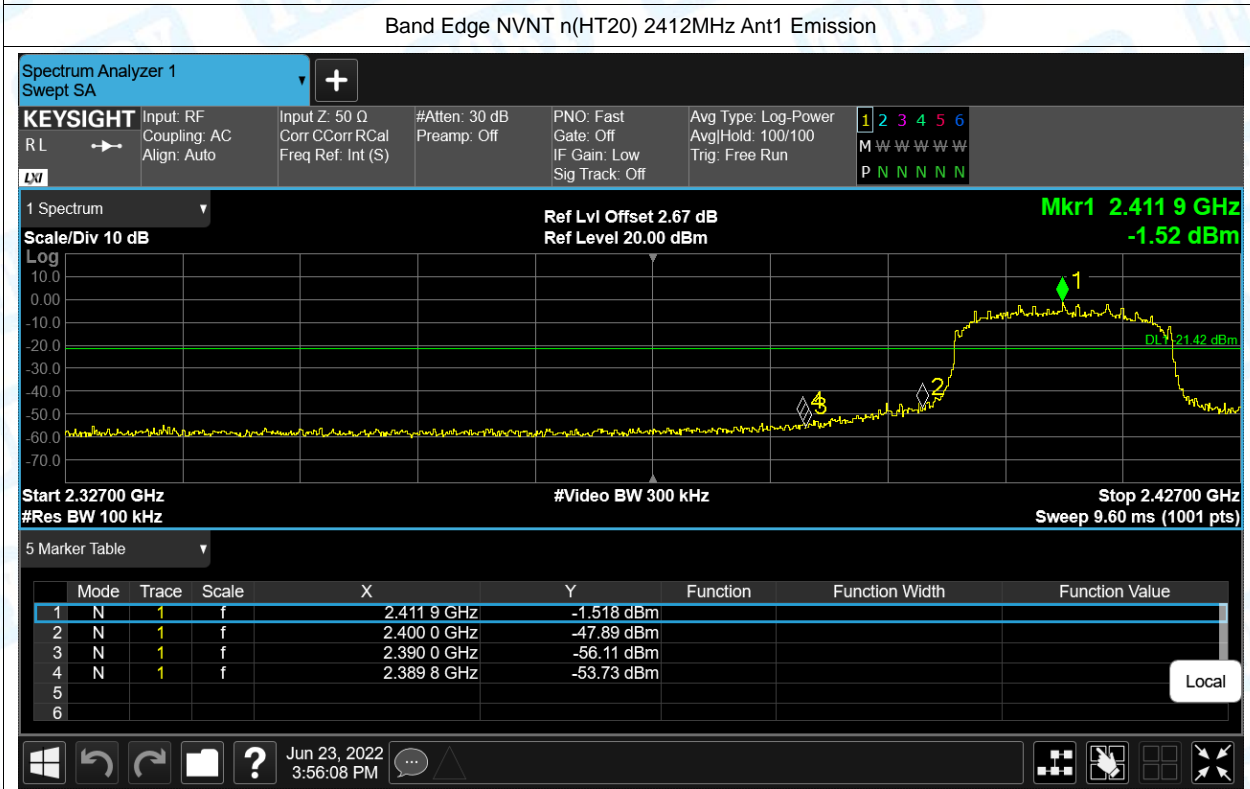
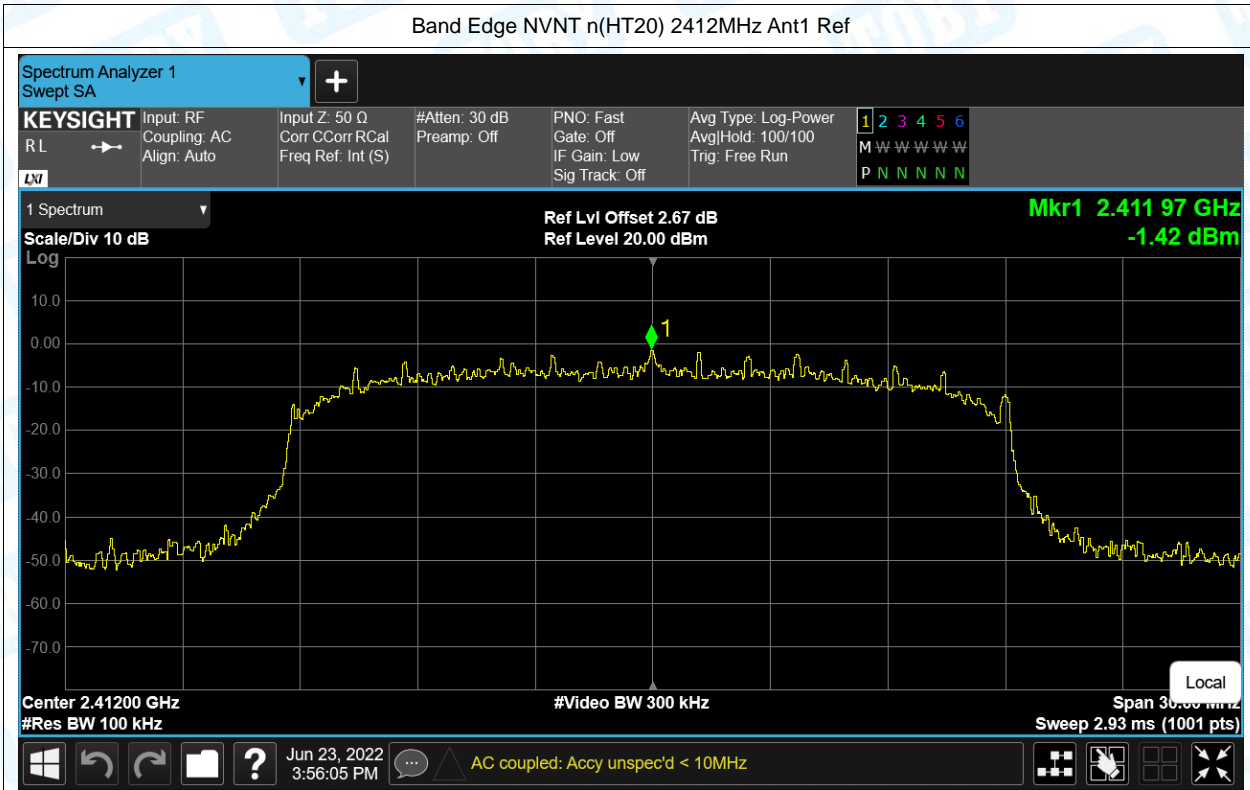


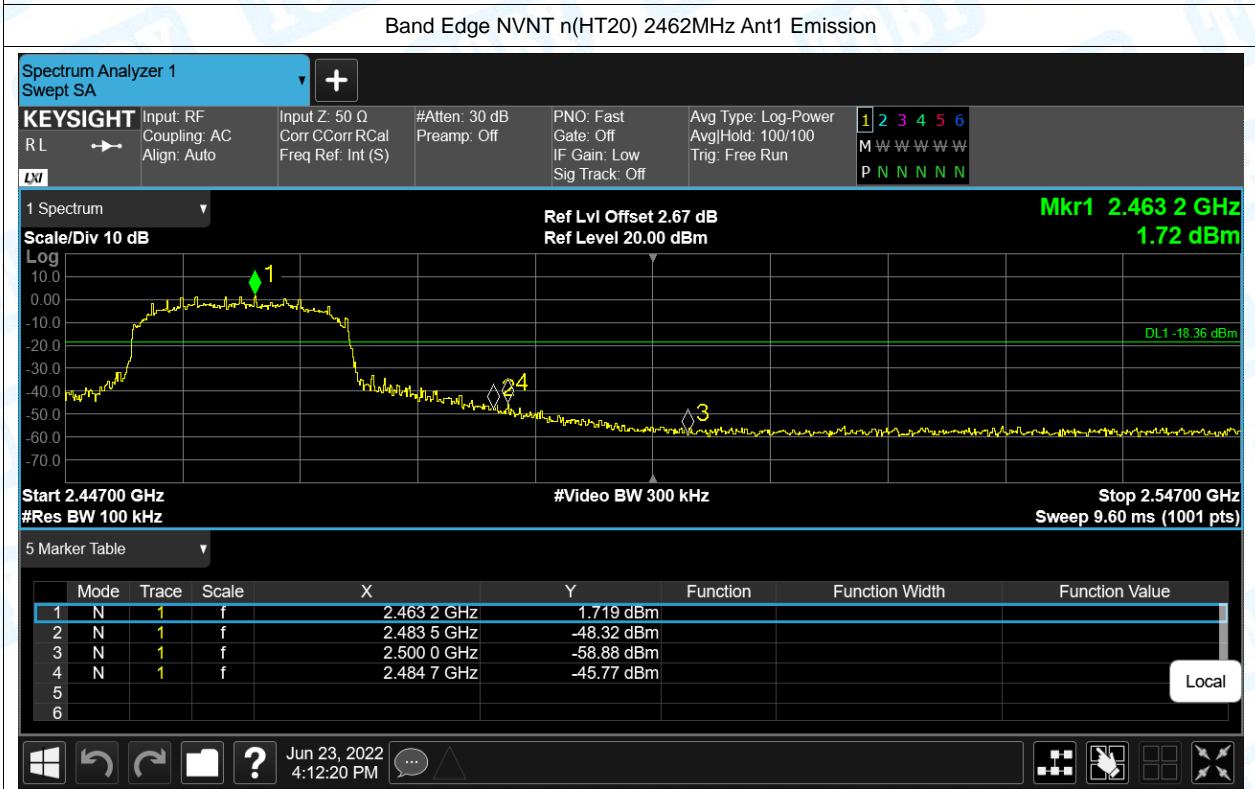
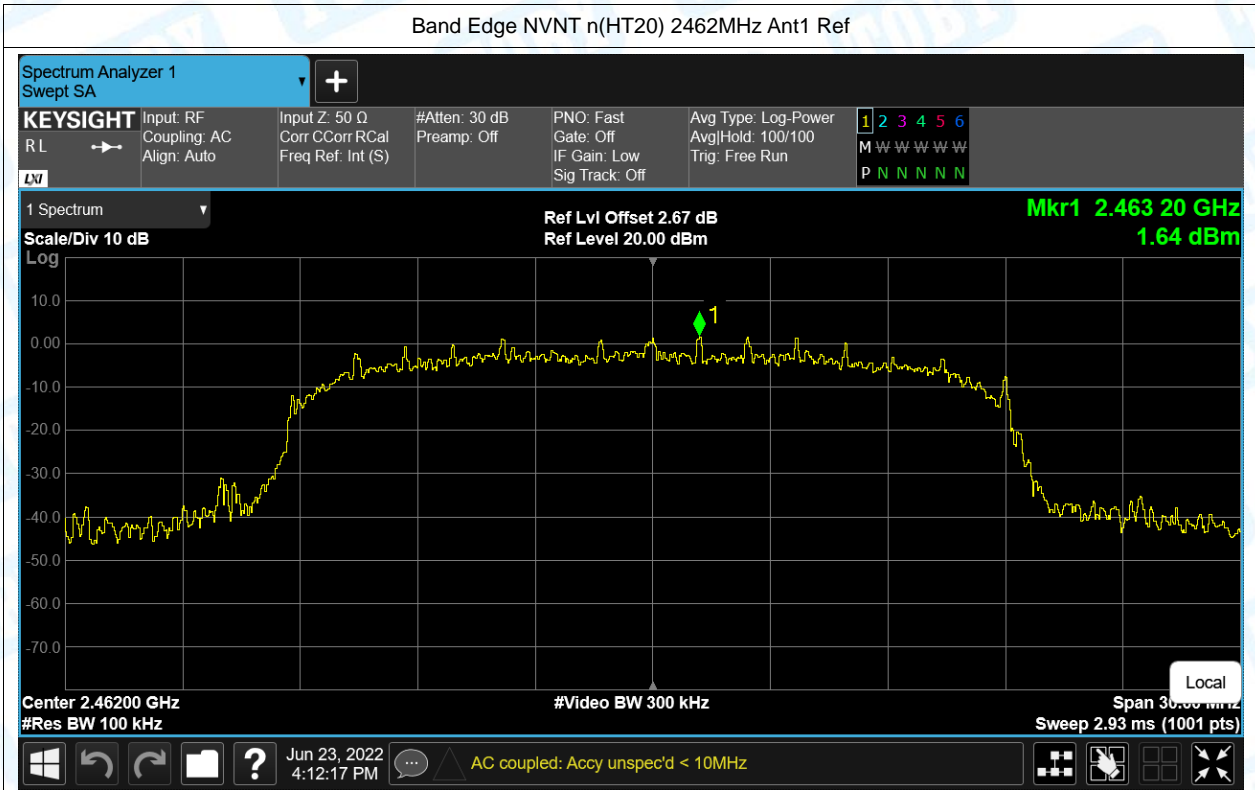
Band Edge NVNT b 2462MHz Ant1 Emission

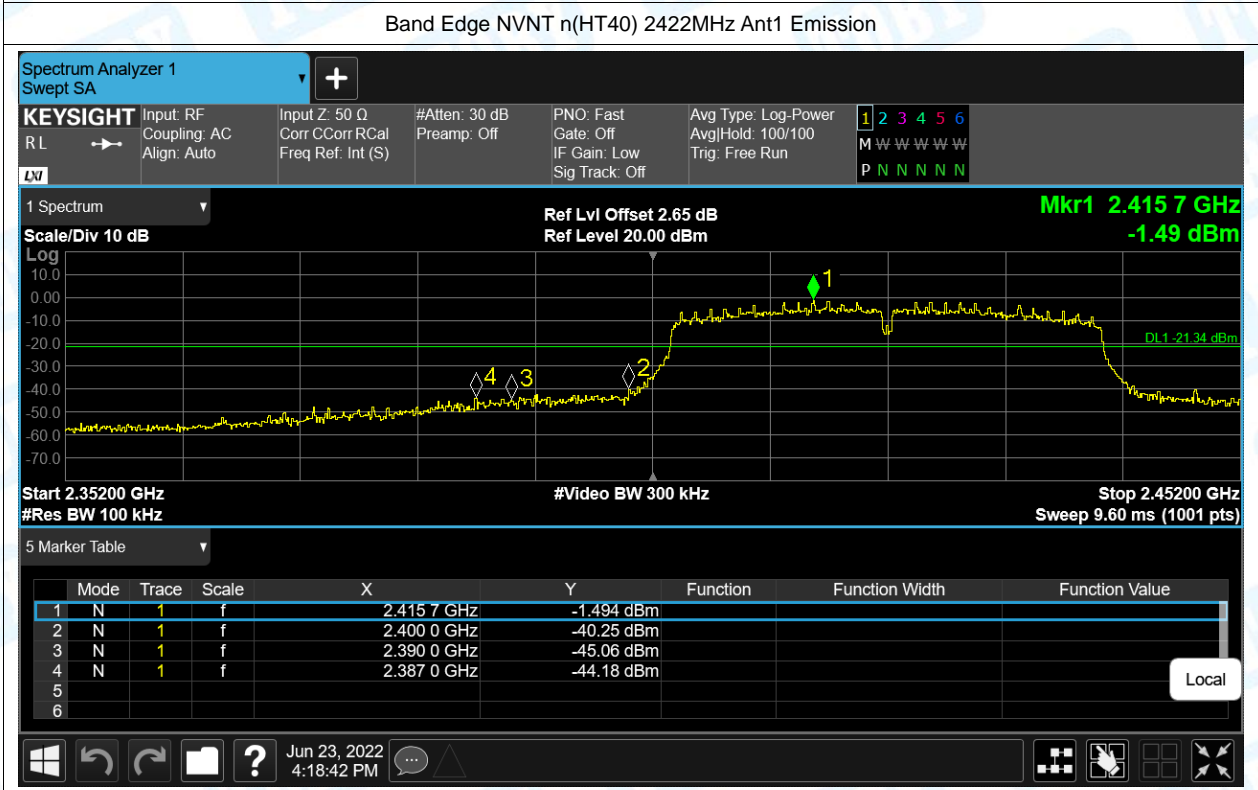
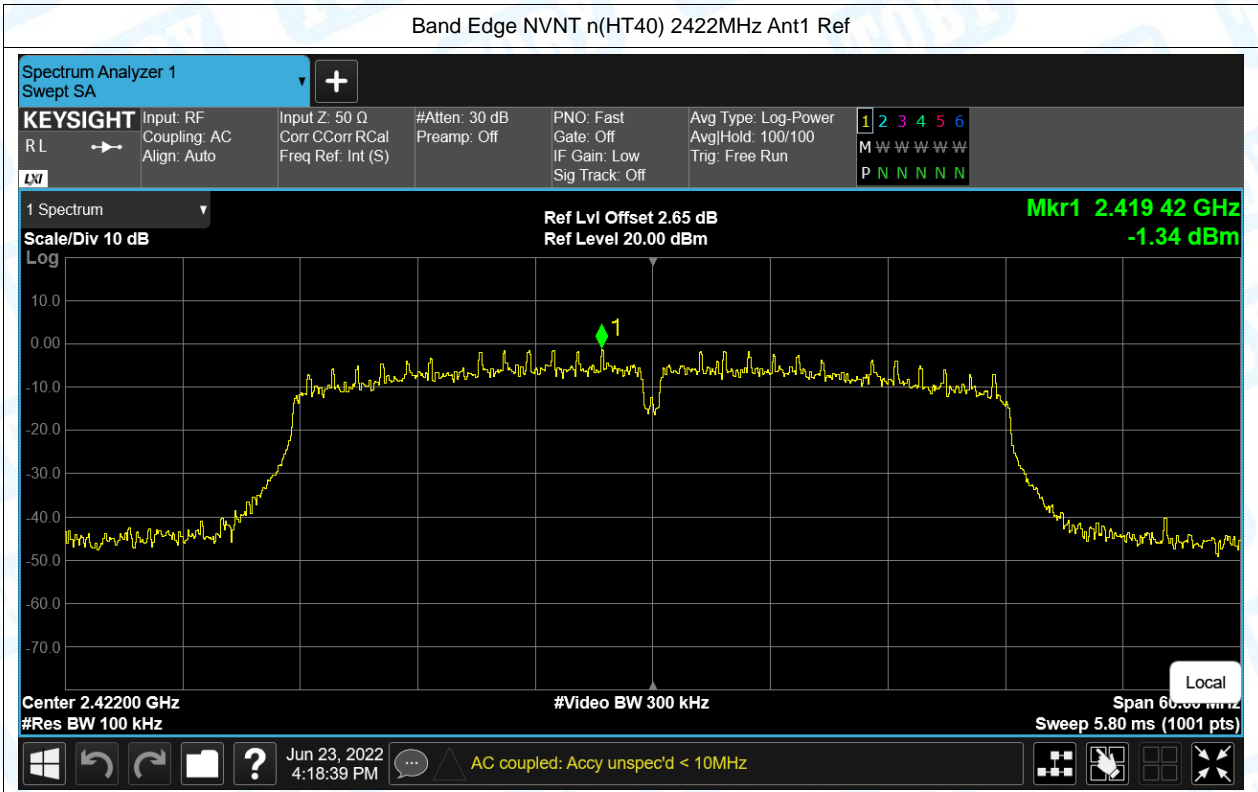


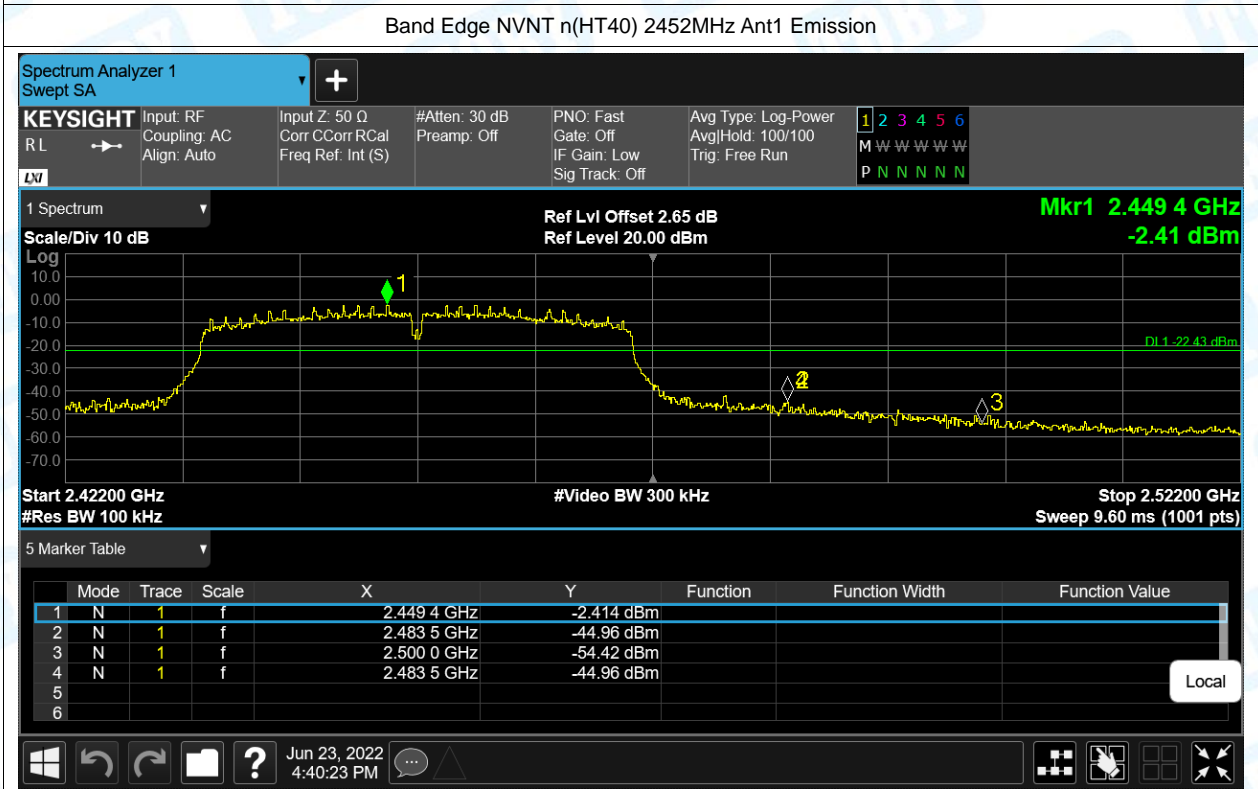
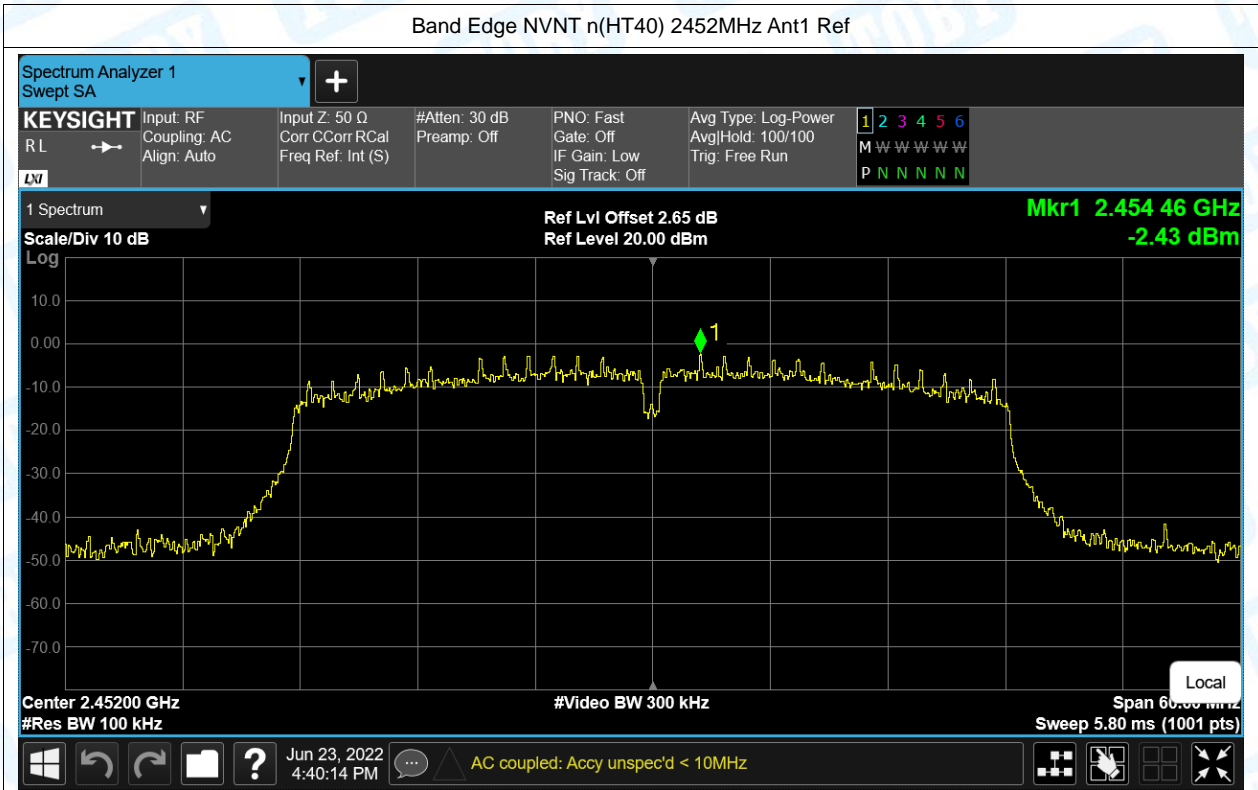












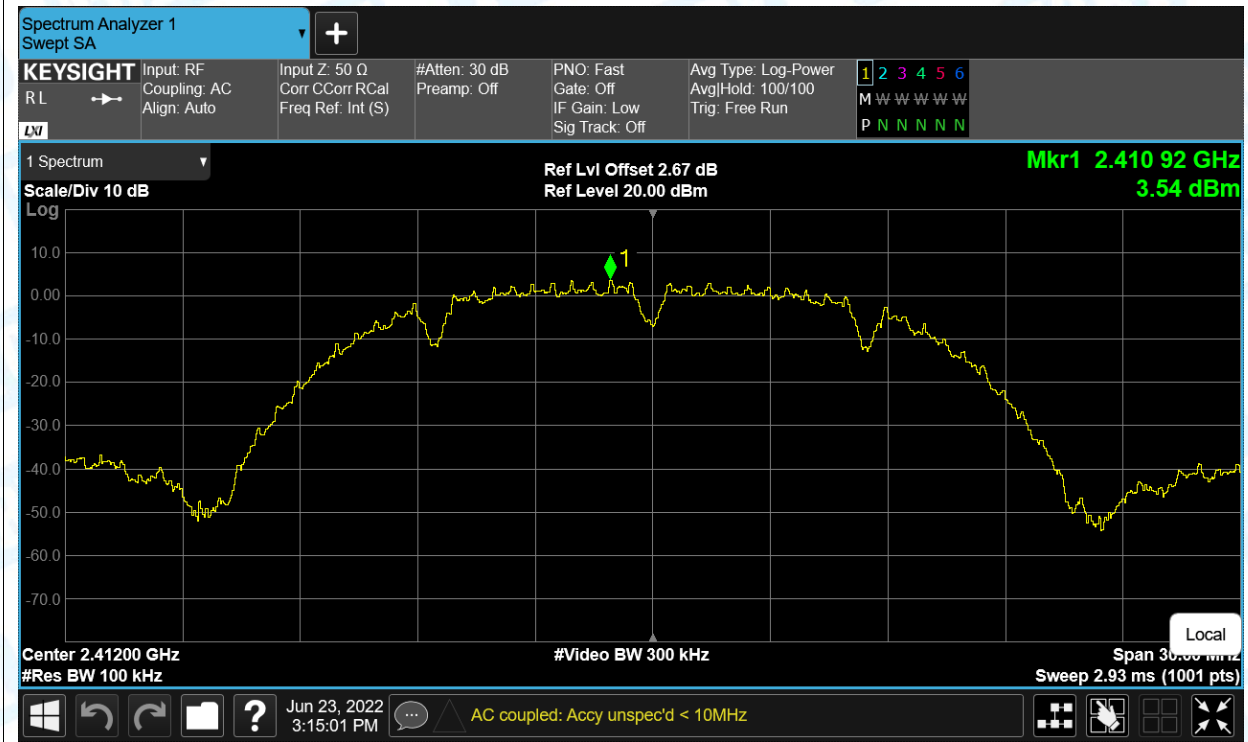


## 7. Conducted RF Spurious Emission

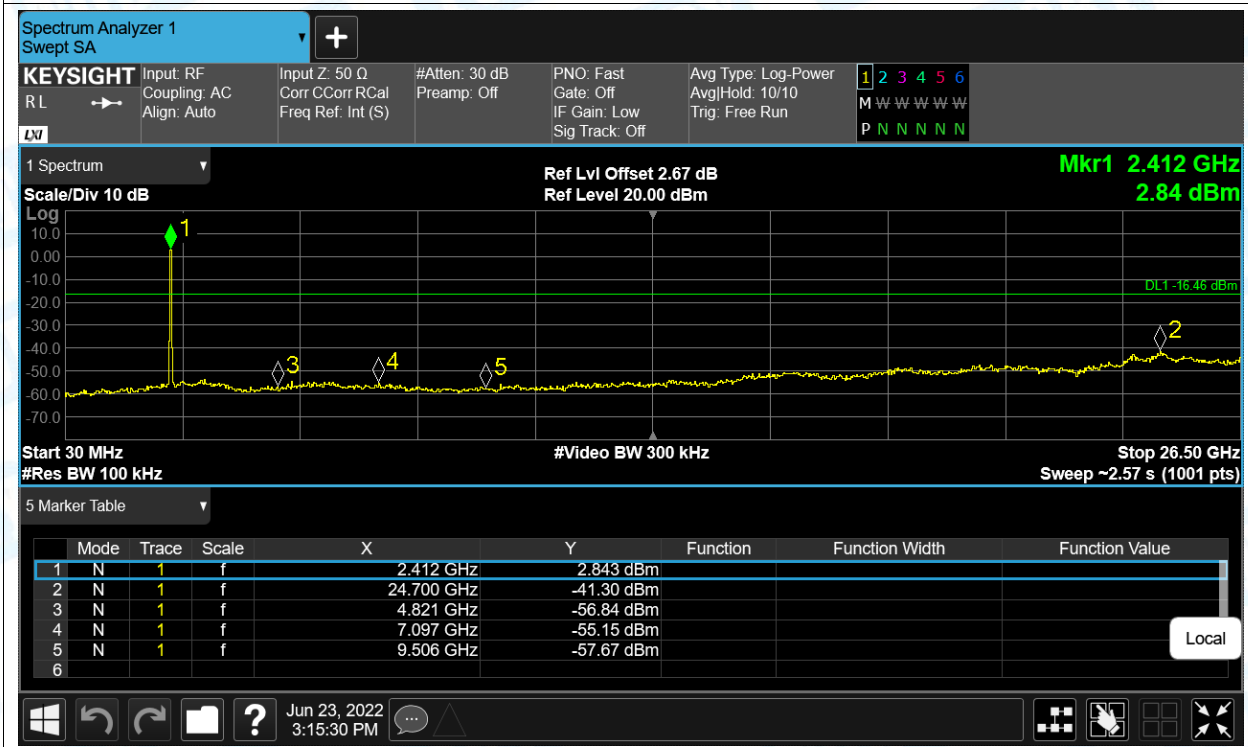
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-44.84	-20	Pass
NVNT	b	2437	Ant1	-44.81	-20	Pass
NVNT	b	2462	Ant1	-44.48	-20	Pass
NVNT	g	2412	Ant1	-42.12	-20	Pass
NVNT	g	2437	Ant1	-38.66	-20	Pass
NVNT	g	2462	Ant1	-44.18	-20	Pass
NVNT	n(HT20)	2412	Ant1	-40.25	-20	Pass
NVNT	n(HT20)	2437	Ant1	-43.22	-20	Pass
NVNT	n(HT20)	2462	Ant1	-43.47	-20	Pass
NVNT	n(HT40)	2422	Ant1	-40.63	-20	Pass
NVNT	n(HT40)	2437	Ant1	-40.9	-20	Pass
NVNT	n(HT40)	2452	Ant1	-39.14	-20	Pass

Test Graphs

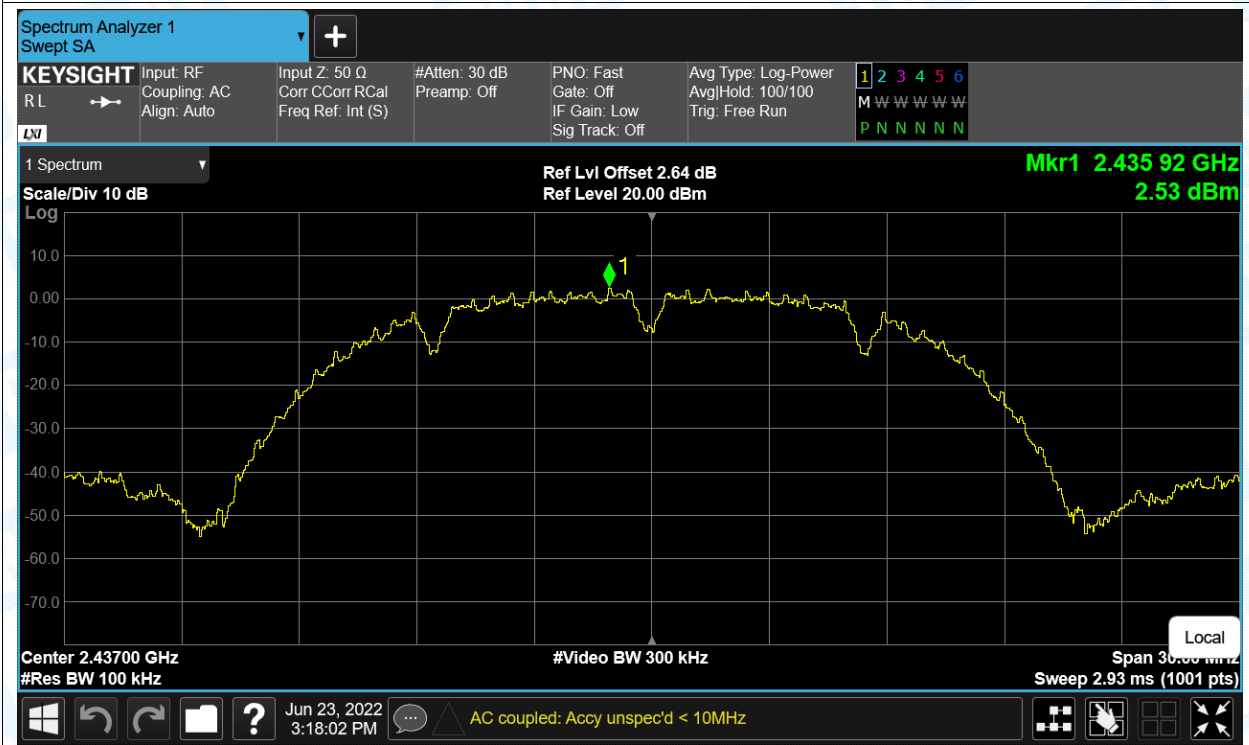
Tx. Spurious NVNT b 2412MHz Ant1 Ref



Tx. Spurious NVNT b 2412MHz Ant1 Emission



Tx. Spurious NVNT b 2437MHz Ant1 Ref



Tx. Spurious NVNT b 2437MHz Ant1 Emission

