

RF Test Data for 2.4G WiFi

(Conducted Measurements)

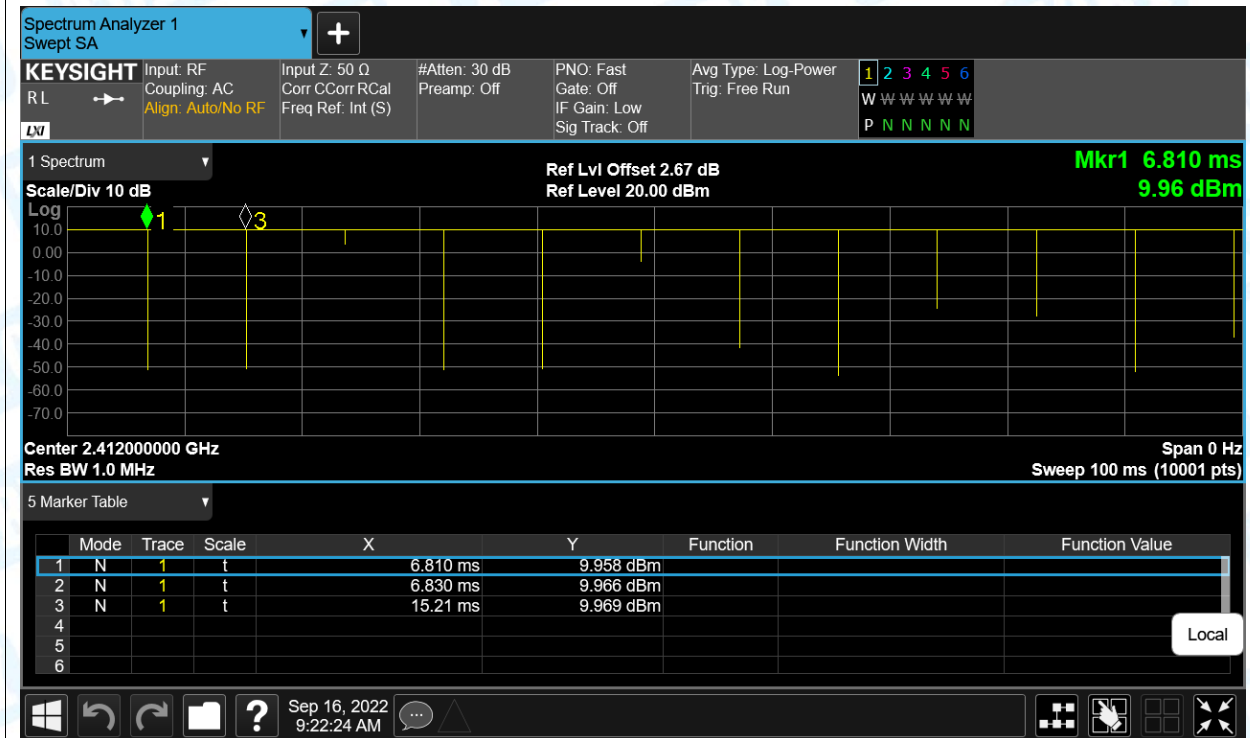
General Description of EUT	
Product Name:	Wireless monitor
Test Model:	M124
Sample ID:	202209-0050-1-2#
Environmental Conditions	
Temperature:	24℃
Relative Humidity:	50%
Test Voltage:	DC 3.7V
Test Engineer:	Liujiming
Note: For a more detailed features description, please refer to the report TBR-C-202209-0050-4.	

Duty Cycle

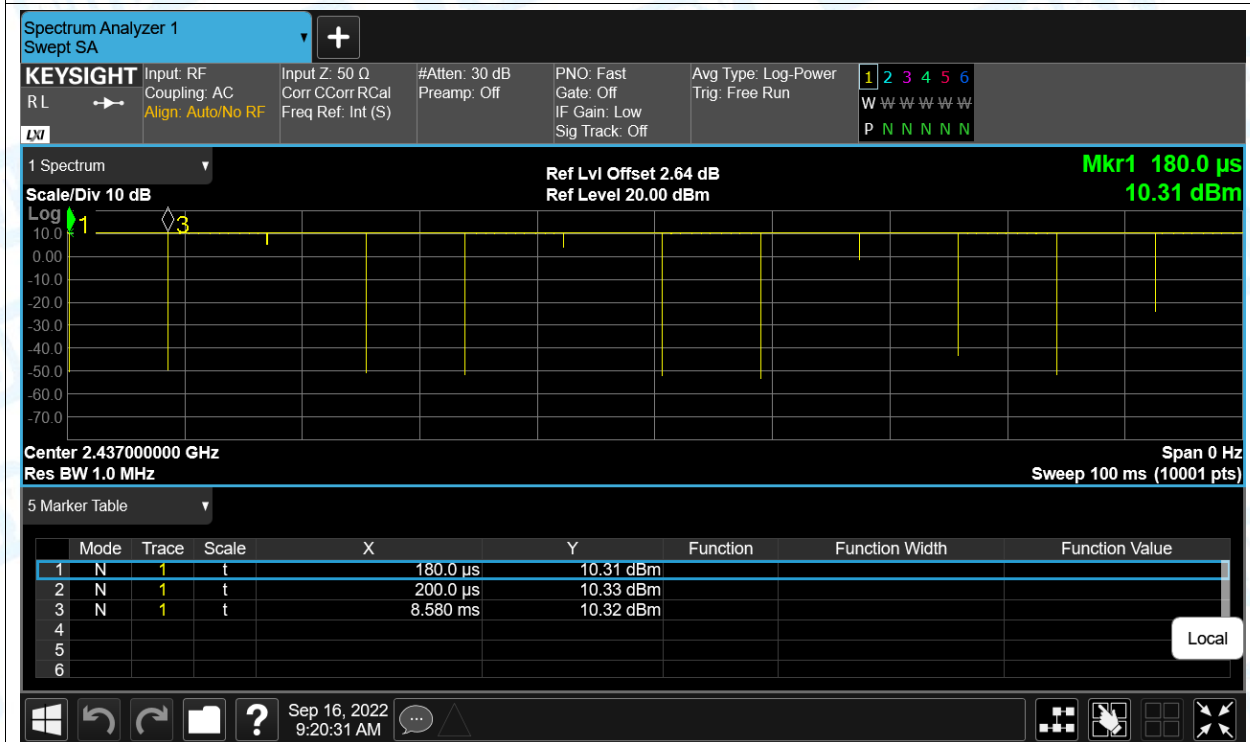
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	99.76	0.01	0.12
NVNT	b	2437	Ant1	99.76	0.01	0.12
NVNT	b	2462	Ant1	99.76	0.01	0.12
NVNT	g	2412	Ant1	98.58	0.06	0.72
NVNT	g	2437	Ant1	98.58	0.06	0.72
NVNT	g	2462	Ant1	98.58	0.06	0.72
Note: duty cycle ≥ 98%, set VBW ≤ RBW/100 (i.e., 10 kHz) but not less than 10 Hz.						

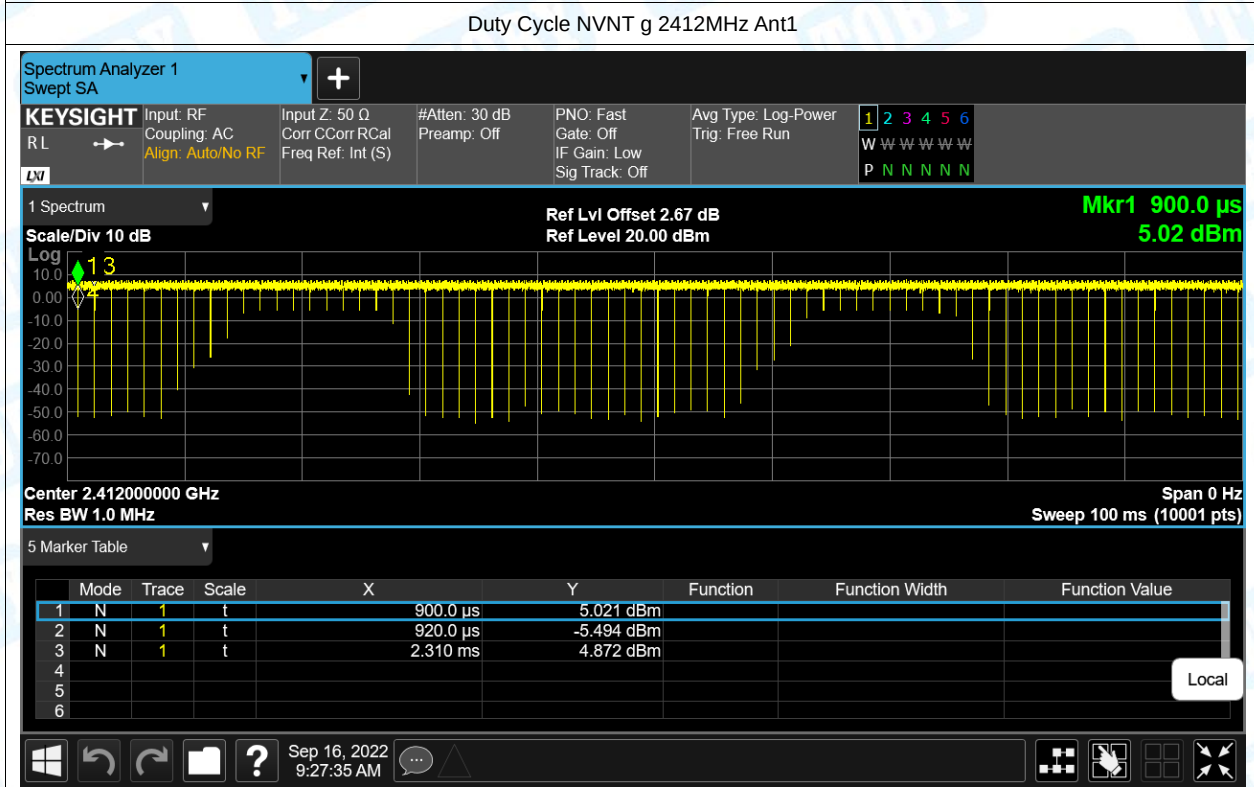
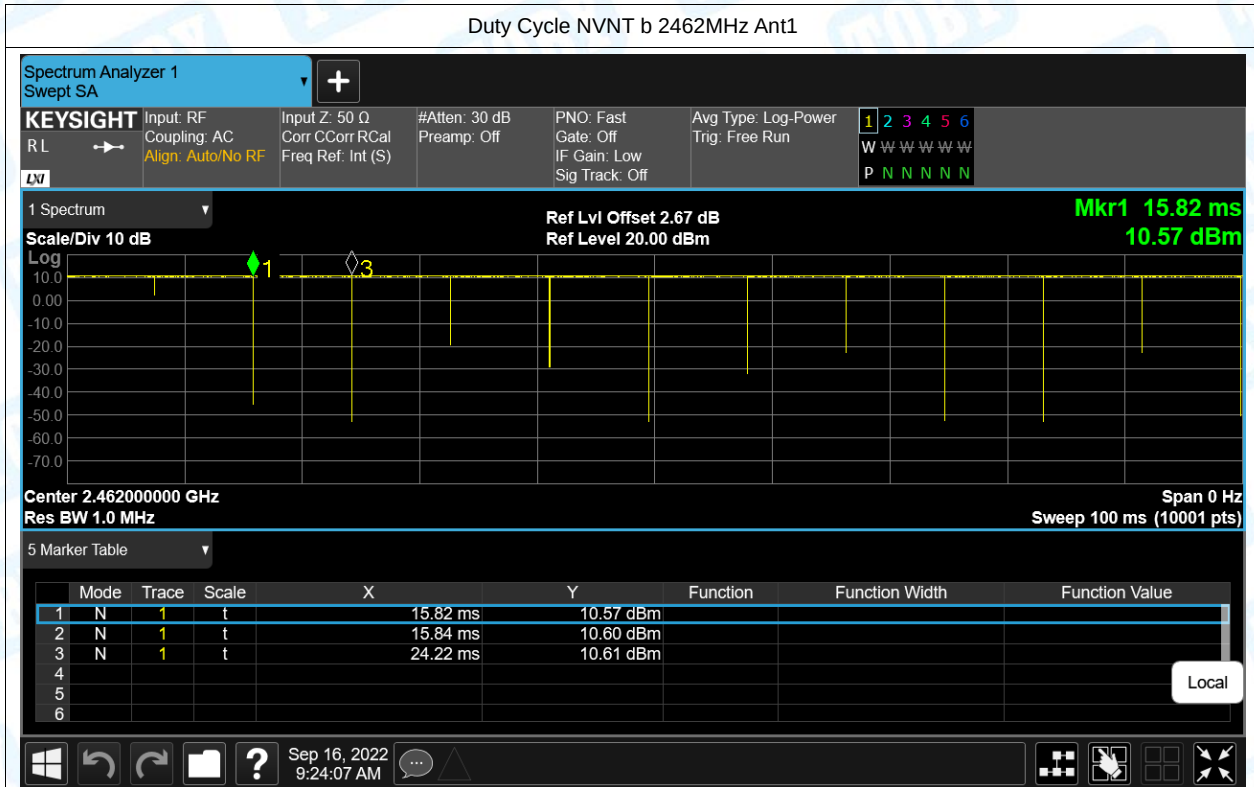
Test Graphs

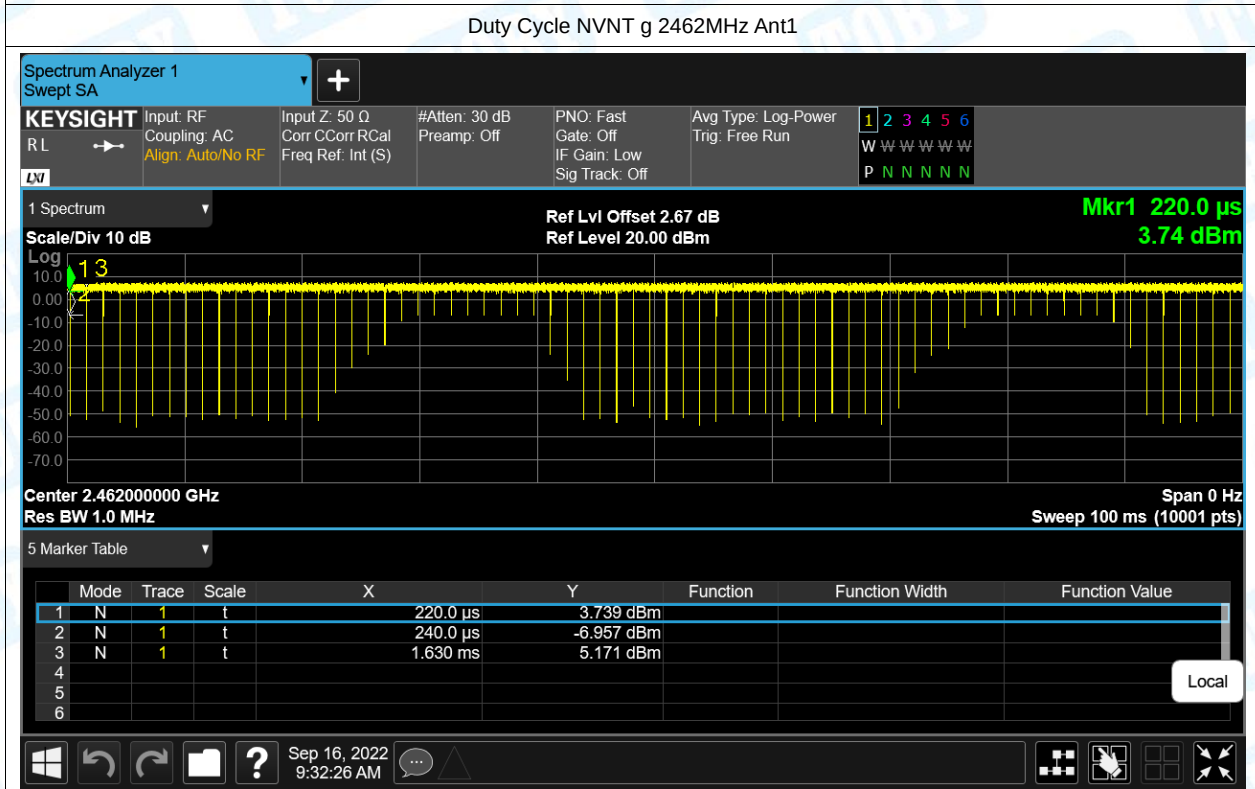
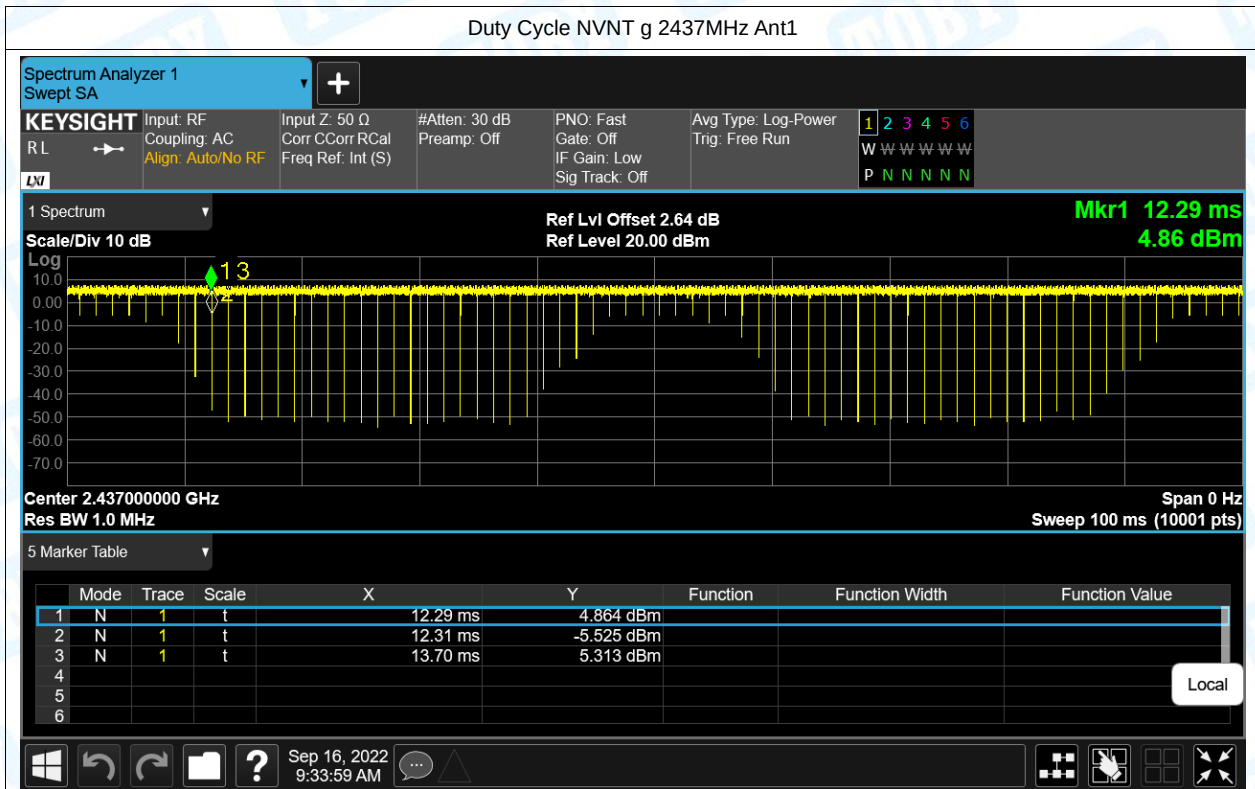
Duty Cycle NVNT b 2412MHz Ant1



Duty Cycle NVNT b 2437MHz Ant1







Maximum Conducted Output Power

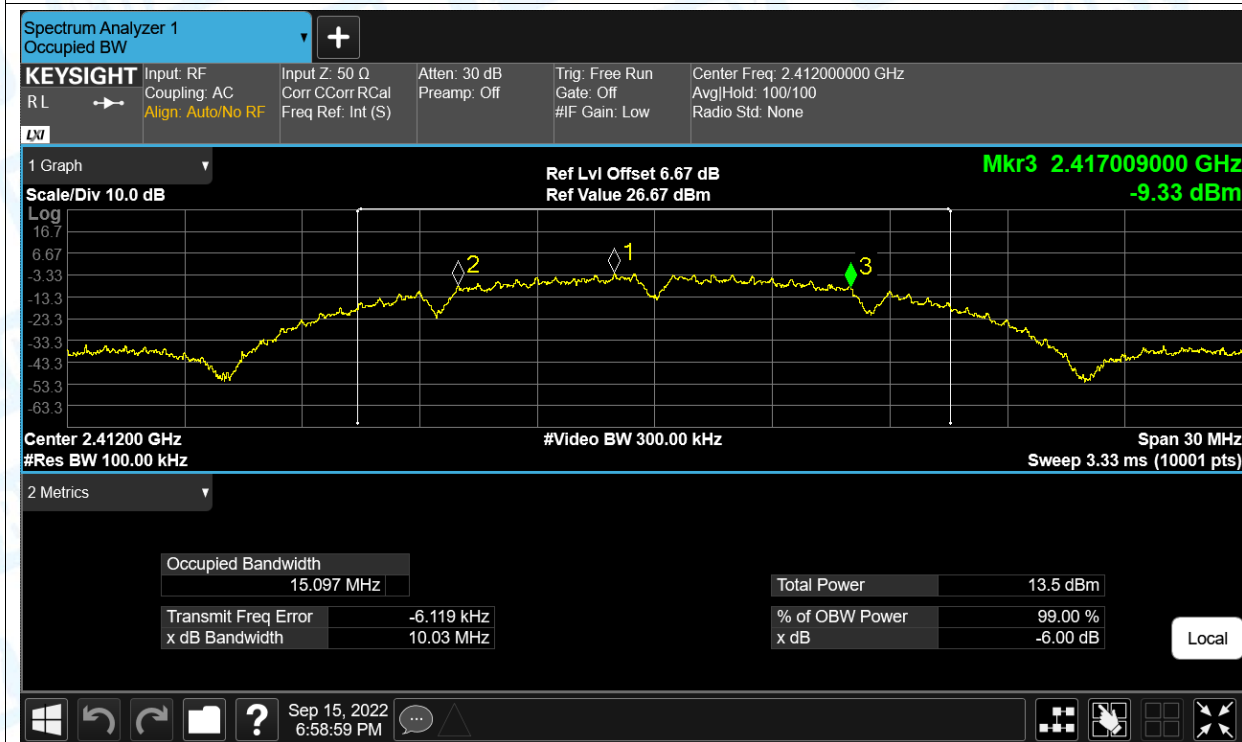
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	17.217	30	Pass
NVNT	b	2437	Ant1	17.517	30	Pass
NVNT	b	2462	Ant1	17.76	30	Pass
NVNT	g	2412	Ant1	17.665	30	Pass
NVNT	g	2437	Ant1	17.527	30	Pass
NVNT	g	2462	Ant1	17.689	30	Pass

-6dB Bandwidth

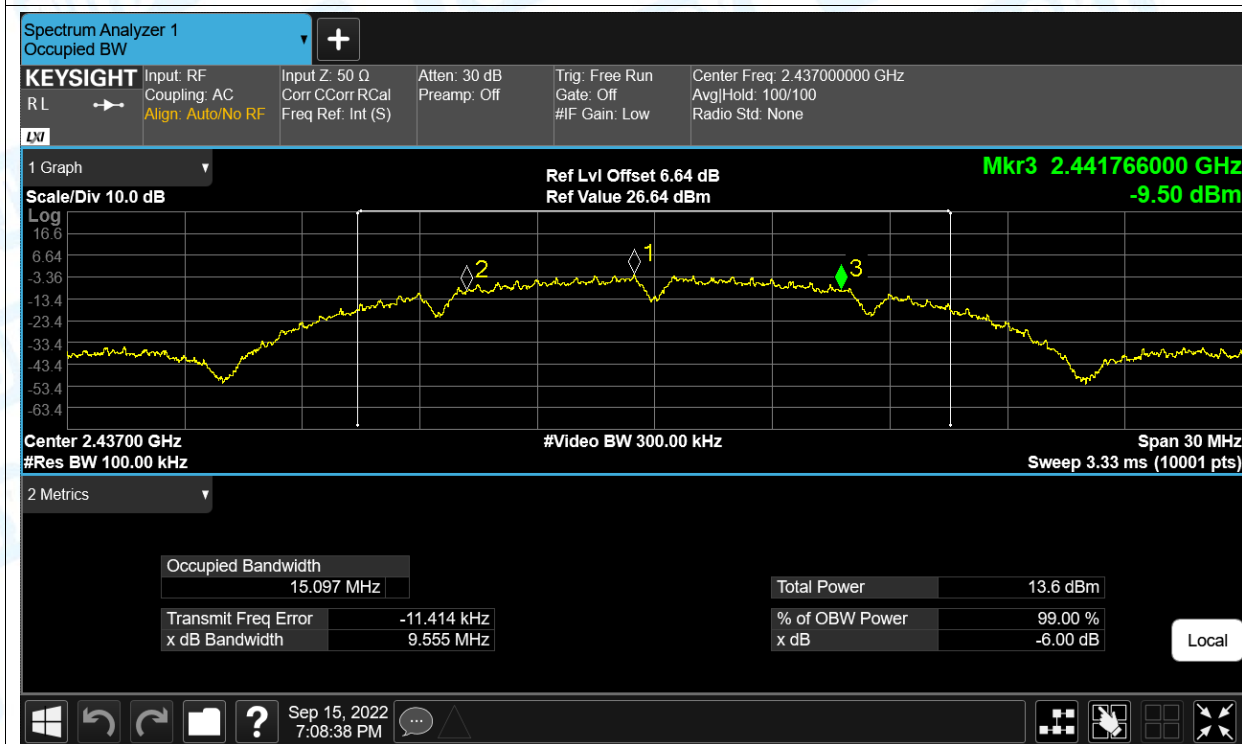
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	10.03	0.5	Pass
NVNT	b	2437	Ant1	9.55	0.5	Pass
NVNT	b	2462	Ant1	9.54	0.5	Pass
NVNT	g	2412	Ant1	16.34	0.5	Pass
NVNT	g	2437	Ant1	16.35	0.5	Pass
NVNT	g	2462	Ant1	16.34	0.5	Pass

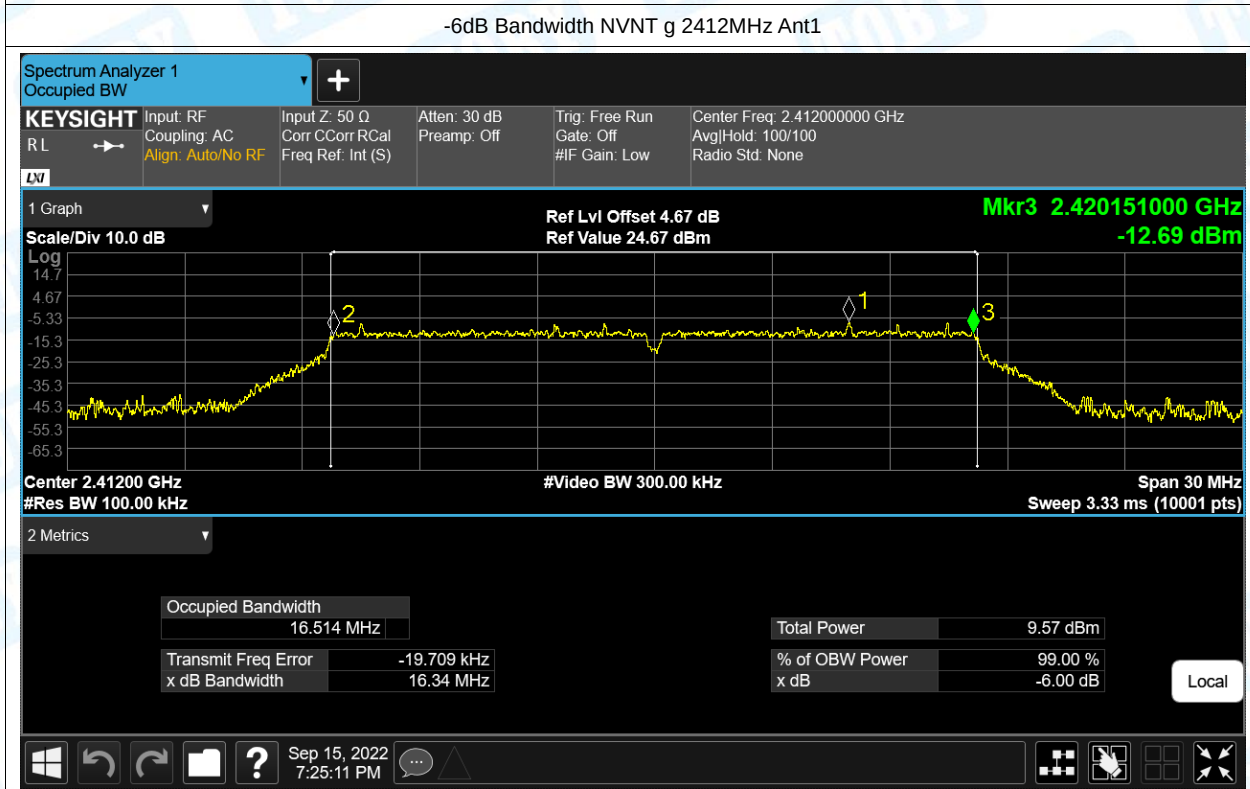
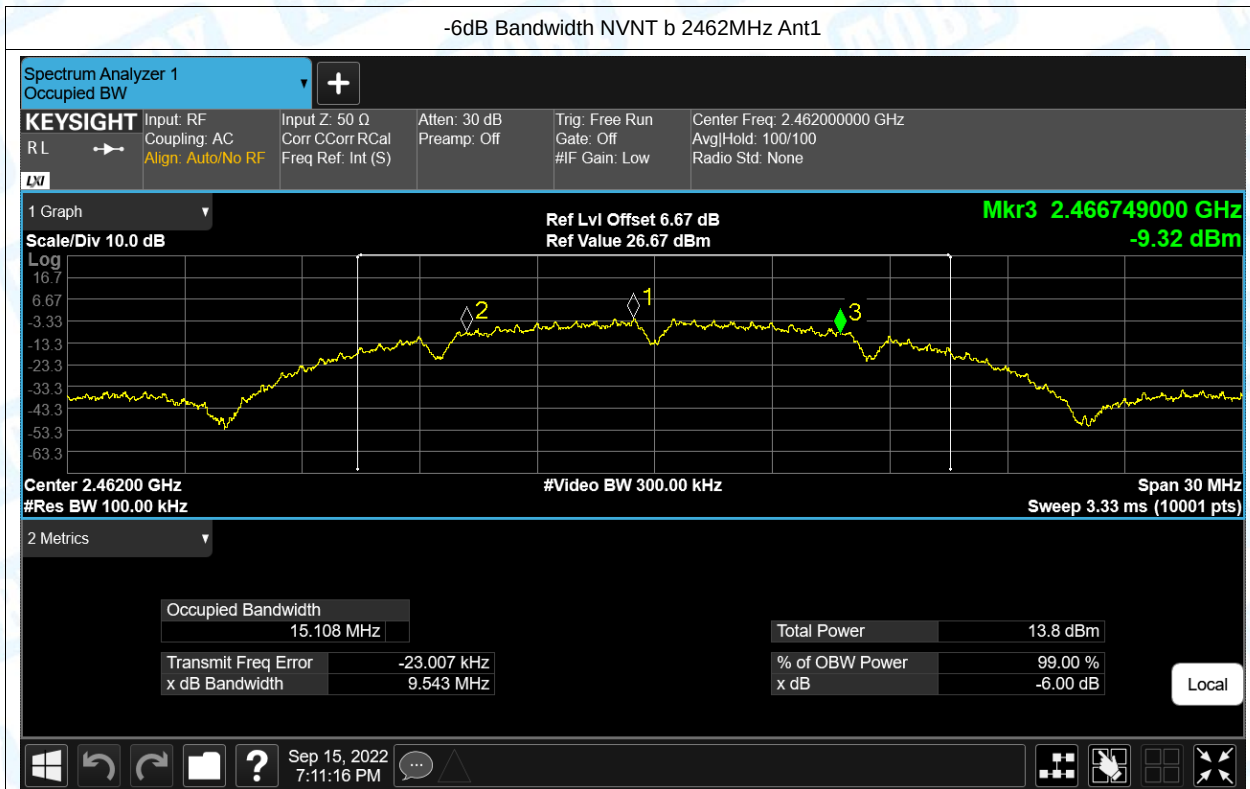
Test Graphs

-6dB Bandwidth NVNT b 2412MHz Ant1

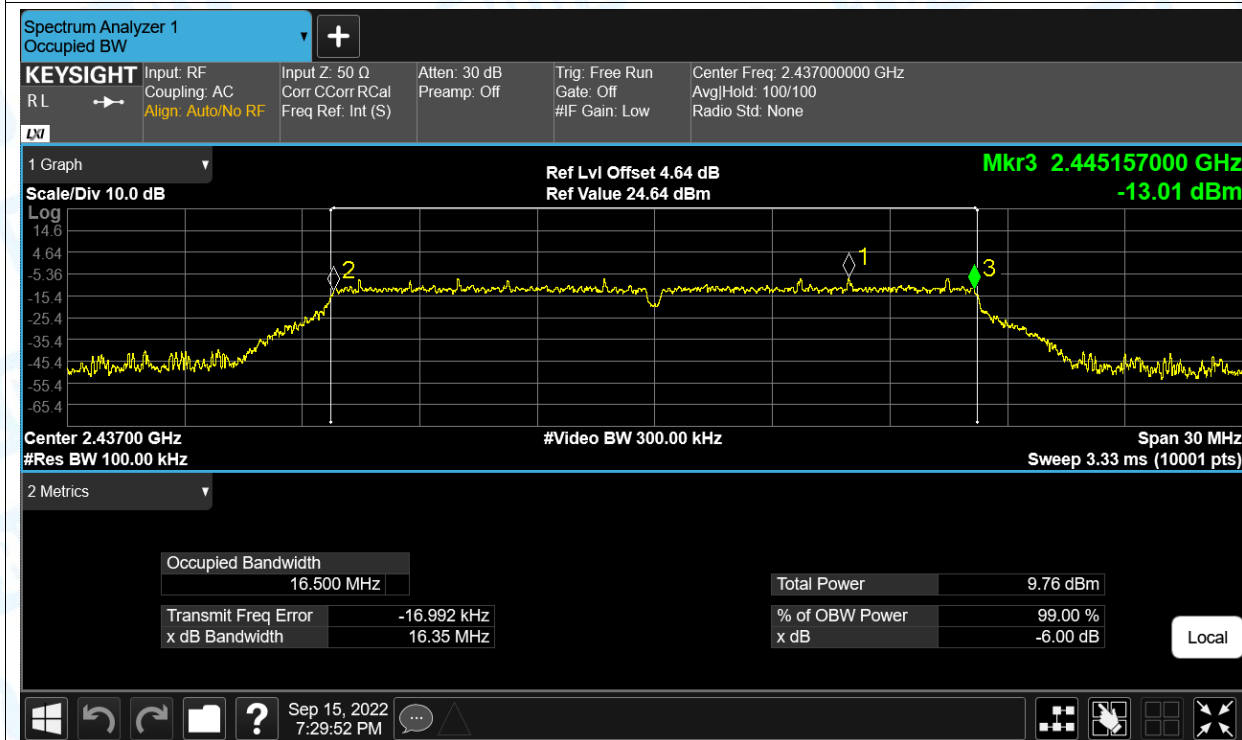


-6dB Bandwidth NVNT b 2437MHz Ant1

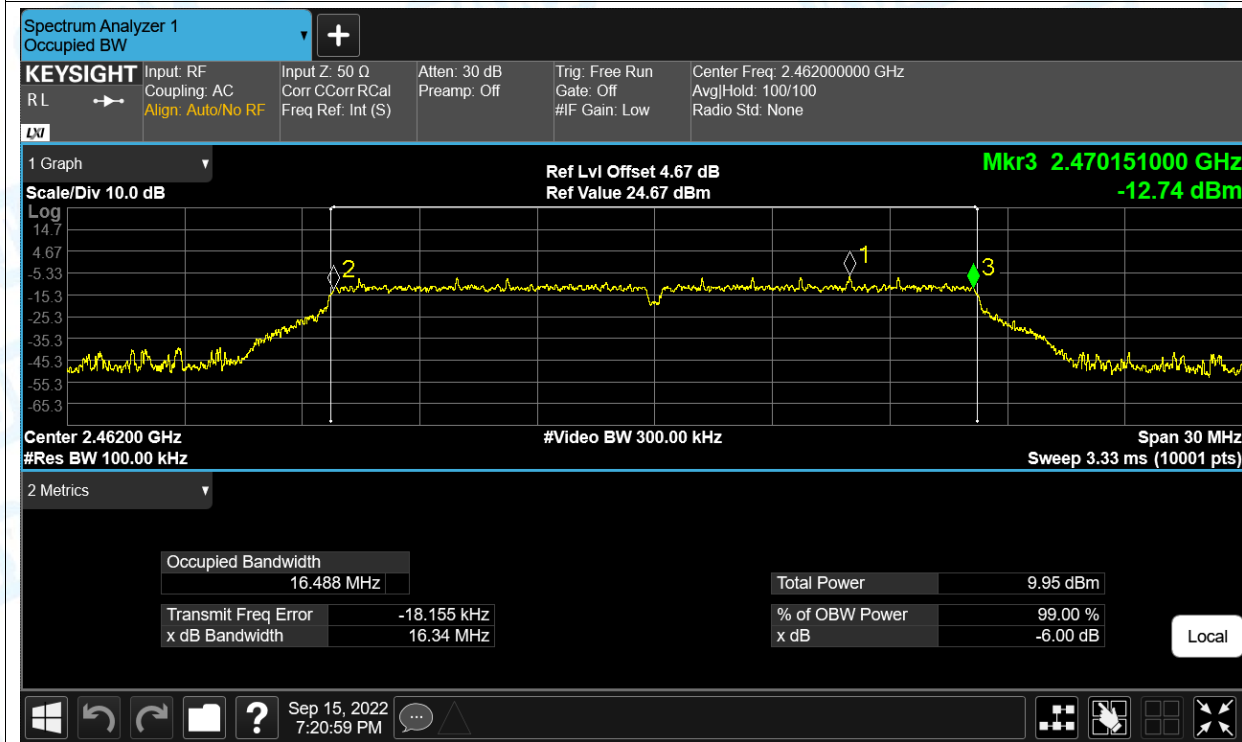




-6dB Bandwidth NVNT g 2437MHz Ant1

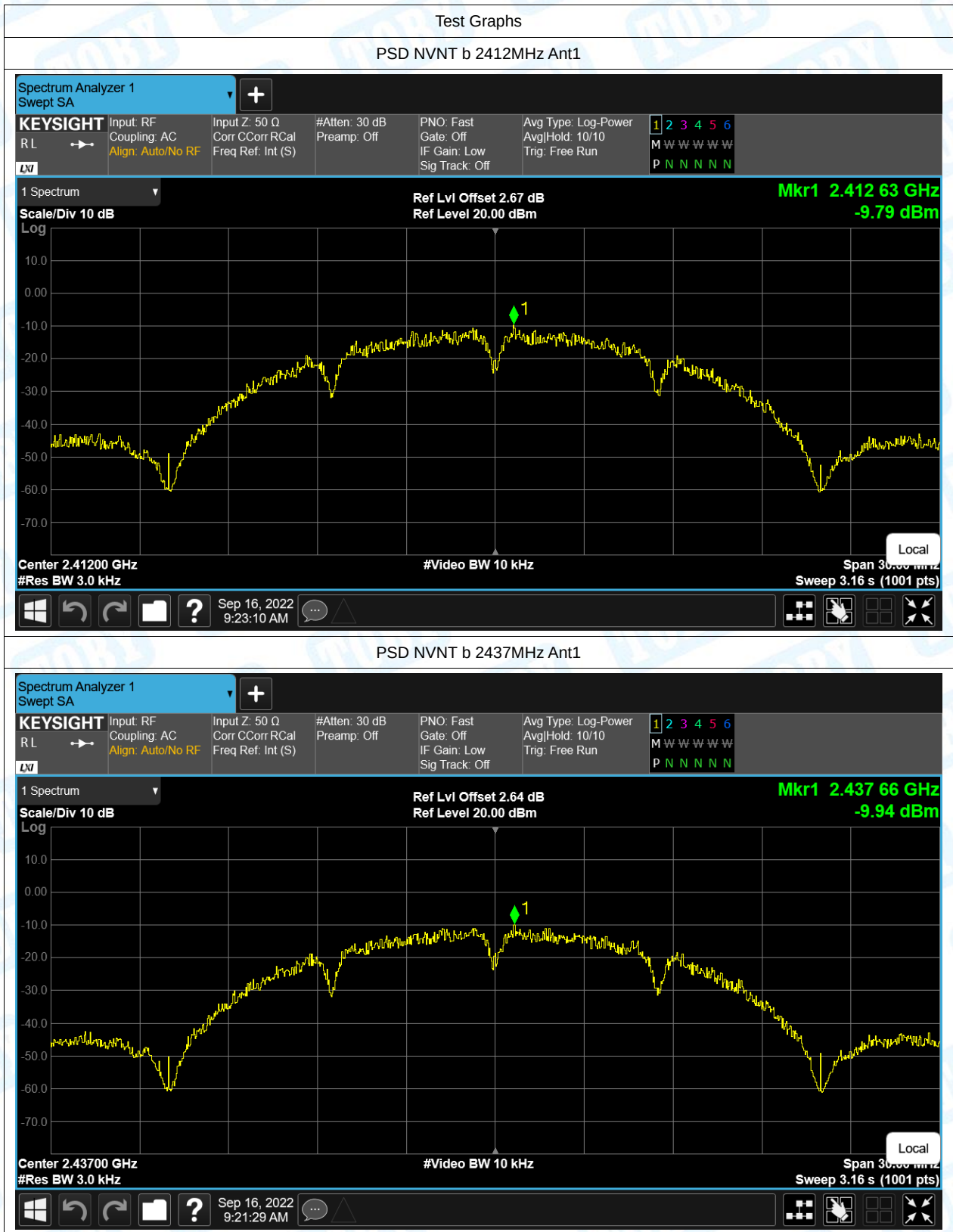


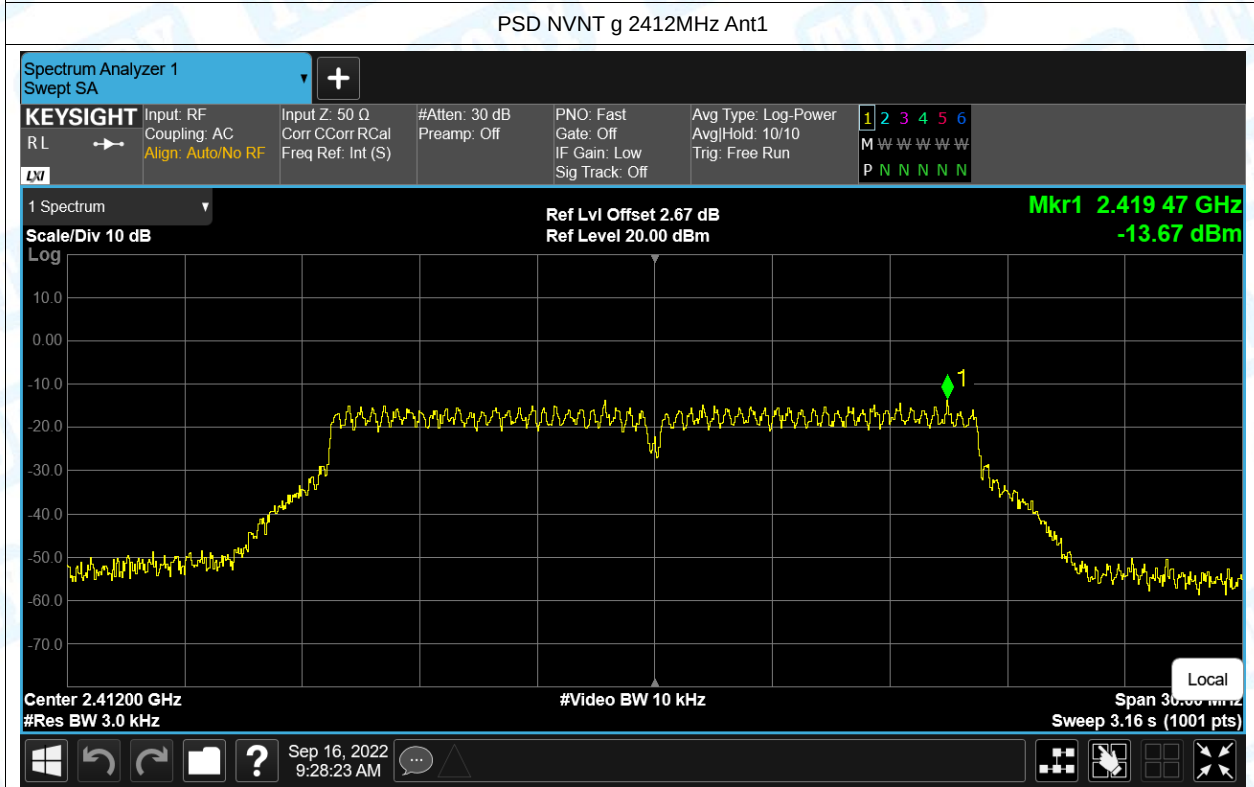
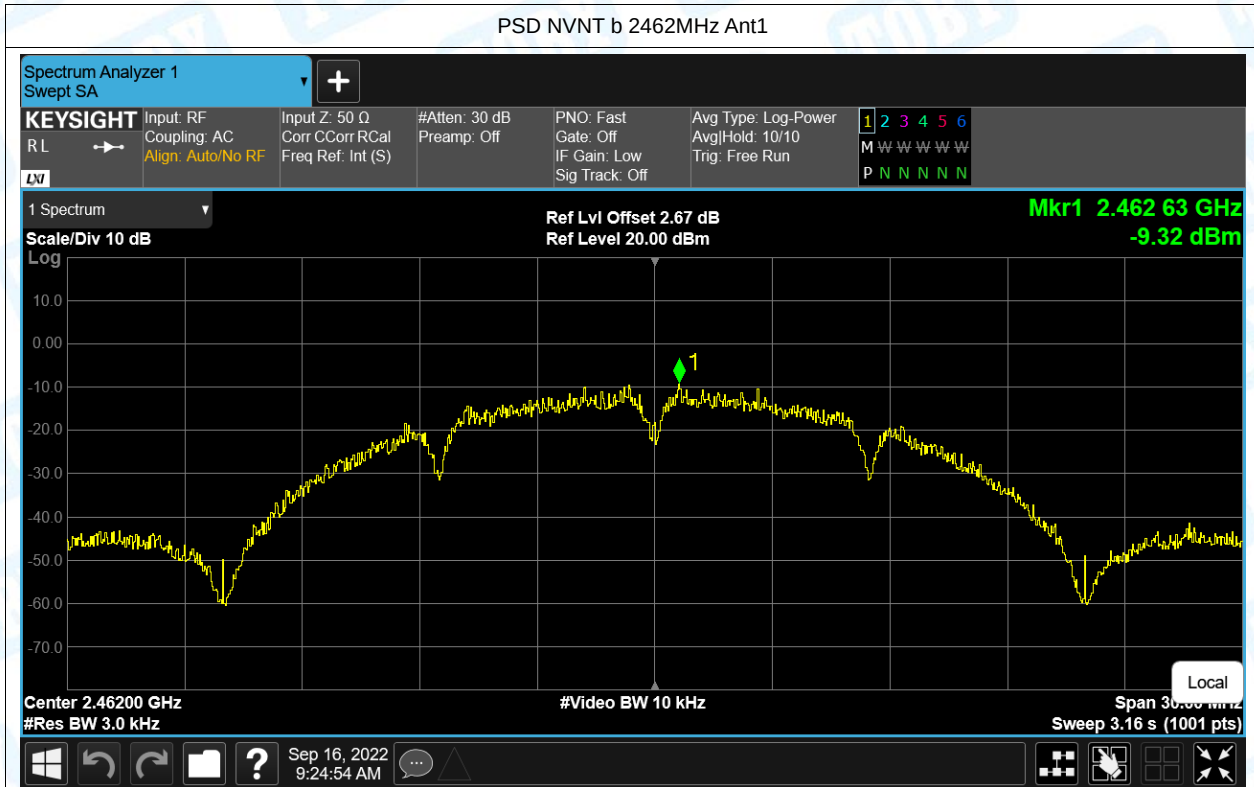
-6dB Bandwidth NVNT g 2462MHz Ant1

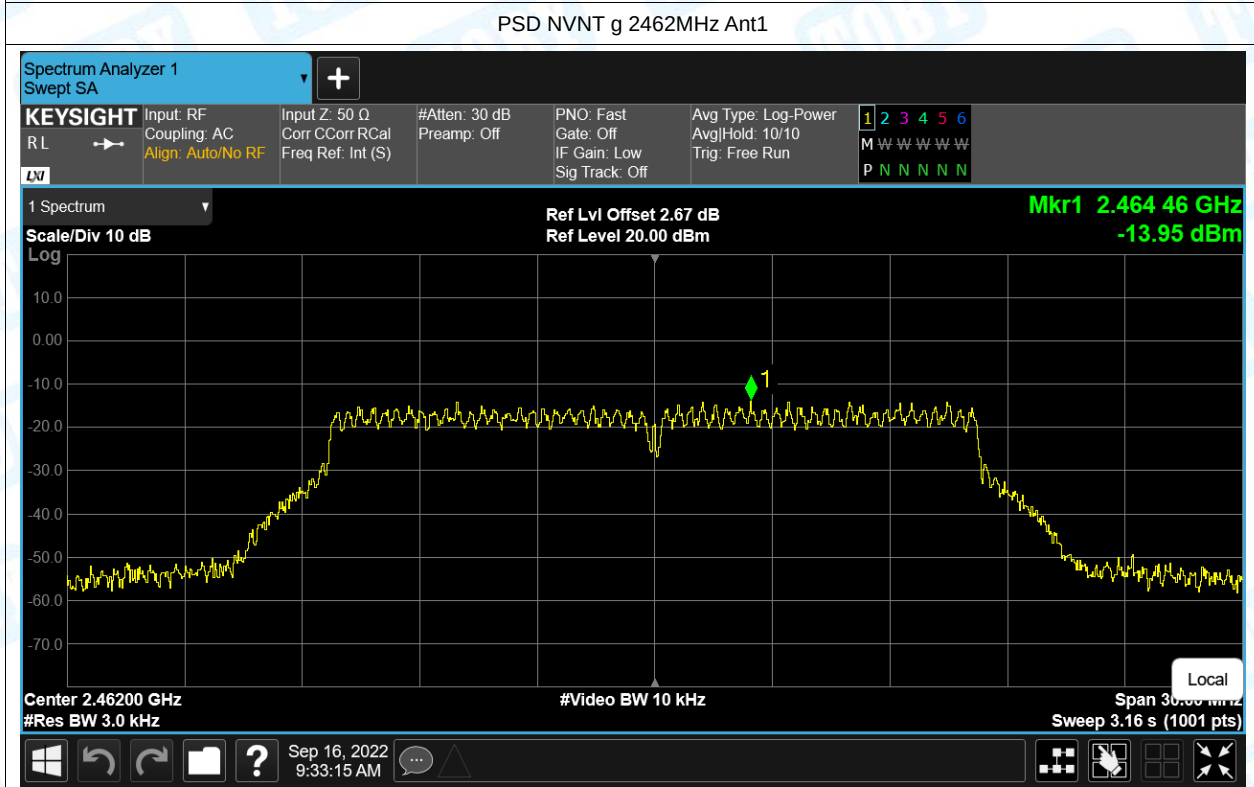
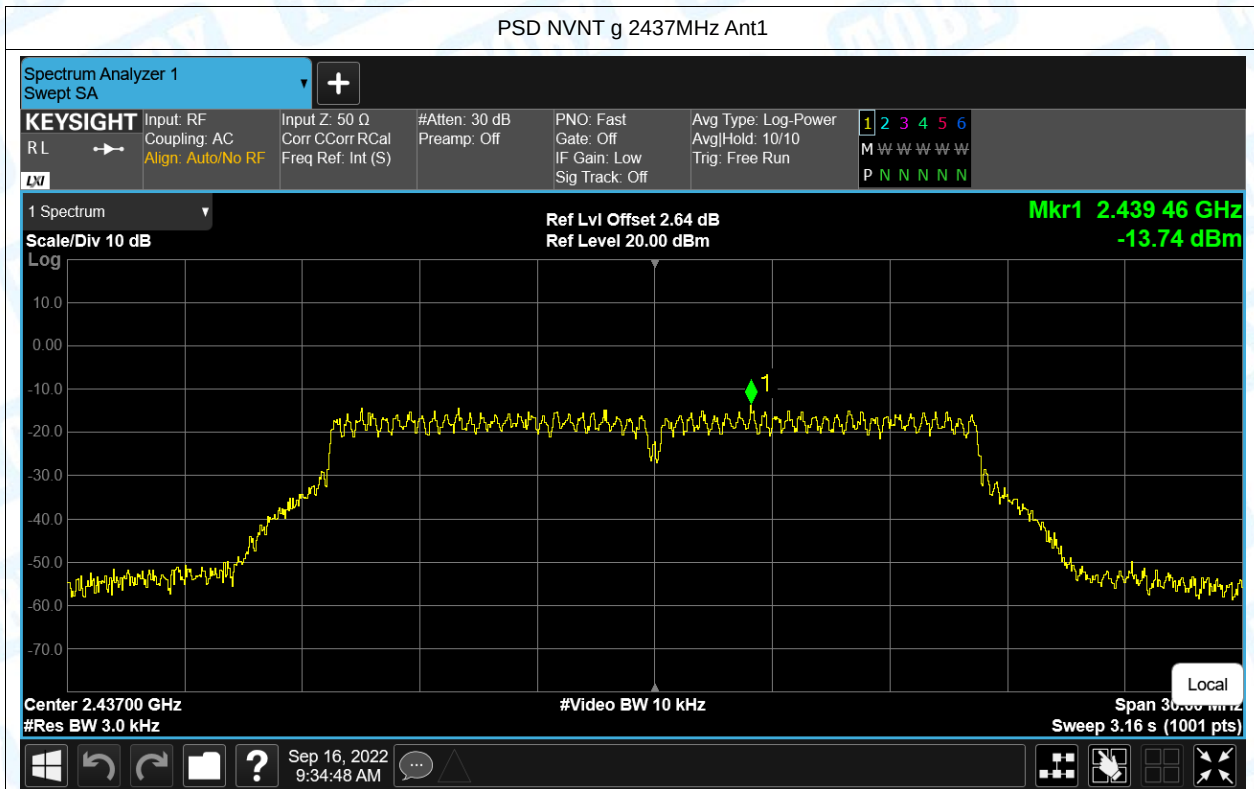


Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	-9.794	8	Pass
NVNT	b	2437	Ant1	-9.935	8	Pass
NVNT	b	2462	Ant1	-9.319	8	Pass
NVNT	g	2412	Ant1	-13.671	8	Pass
NVNT	g	2437	Ant1	-13.745	8	Pass
NVNT	g	2462	Ant1	-13.949	8	Pass



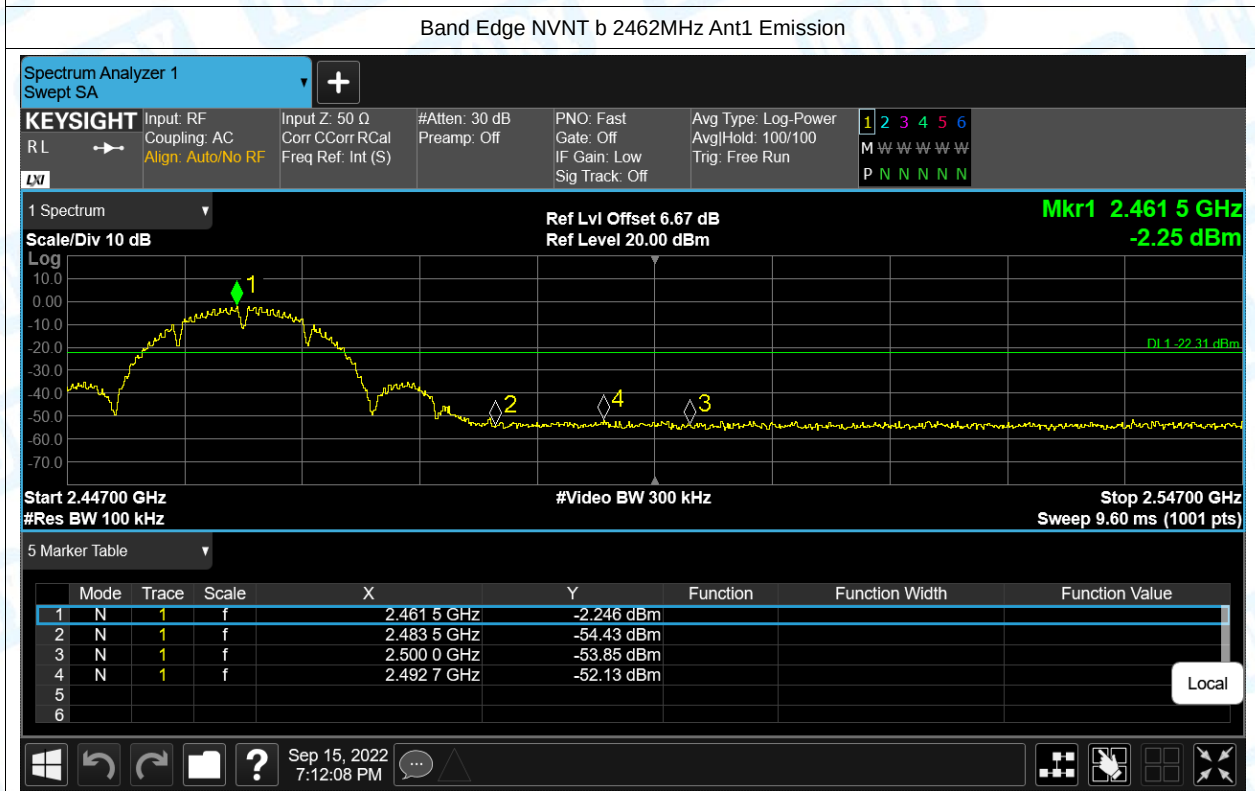
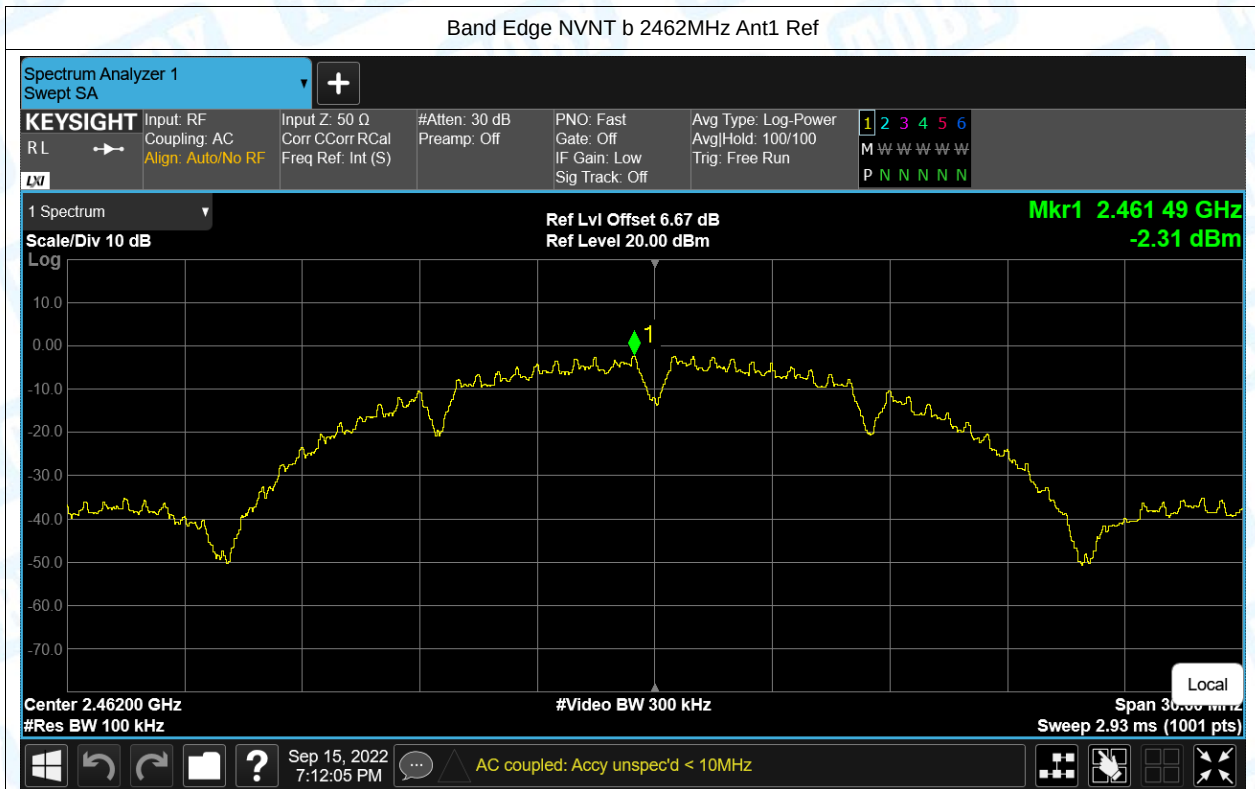


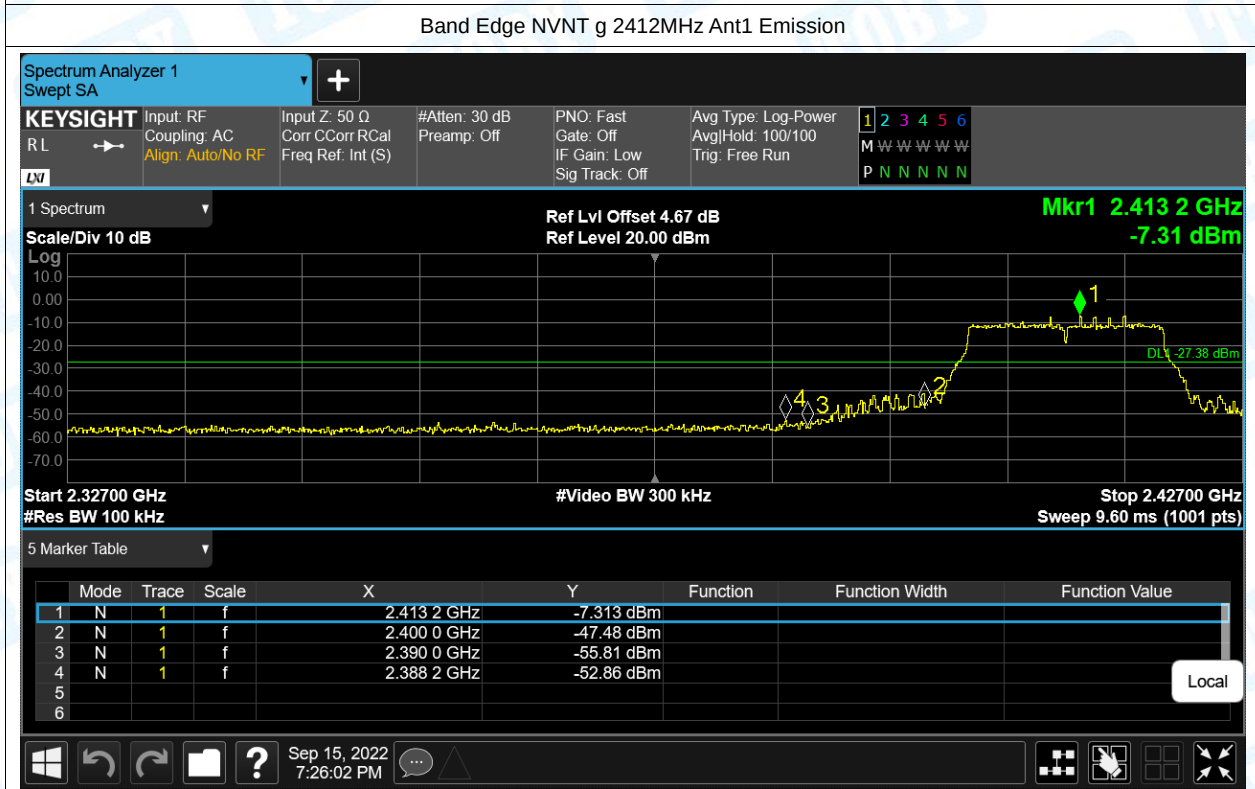
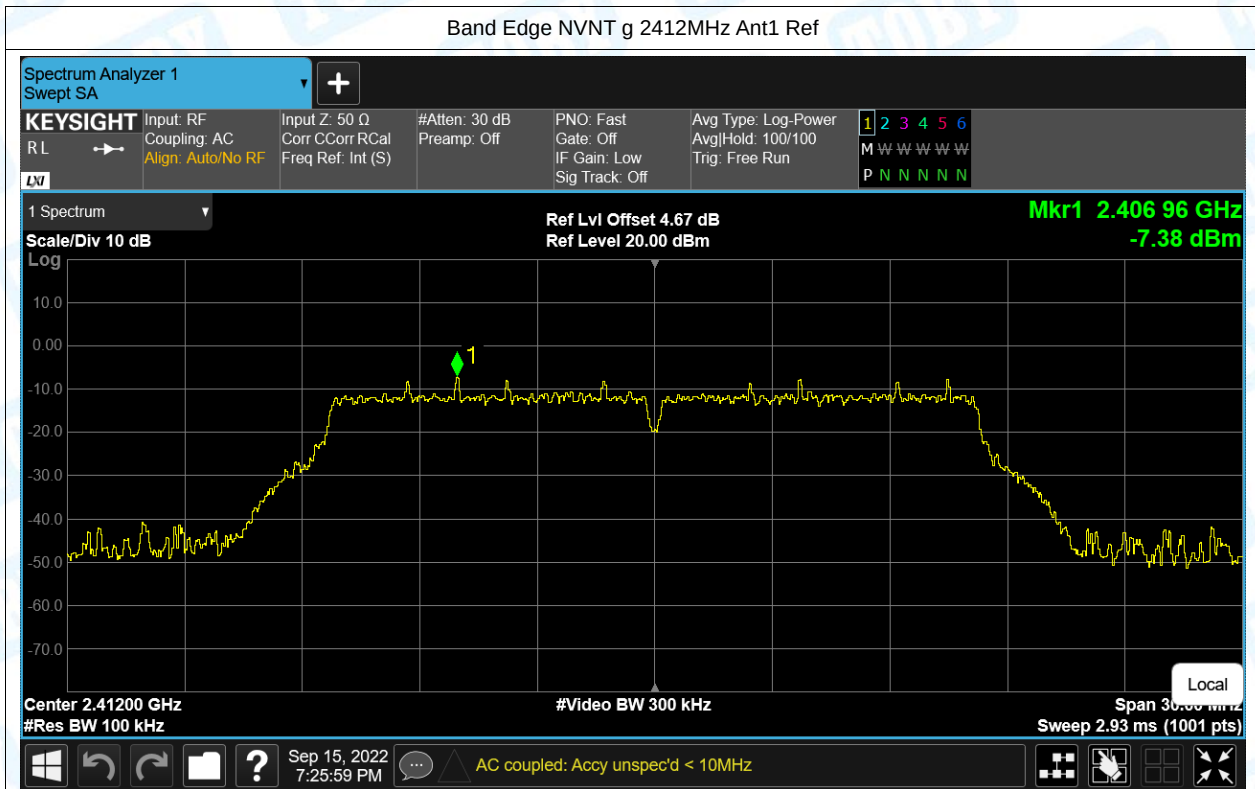


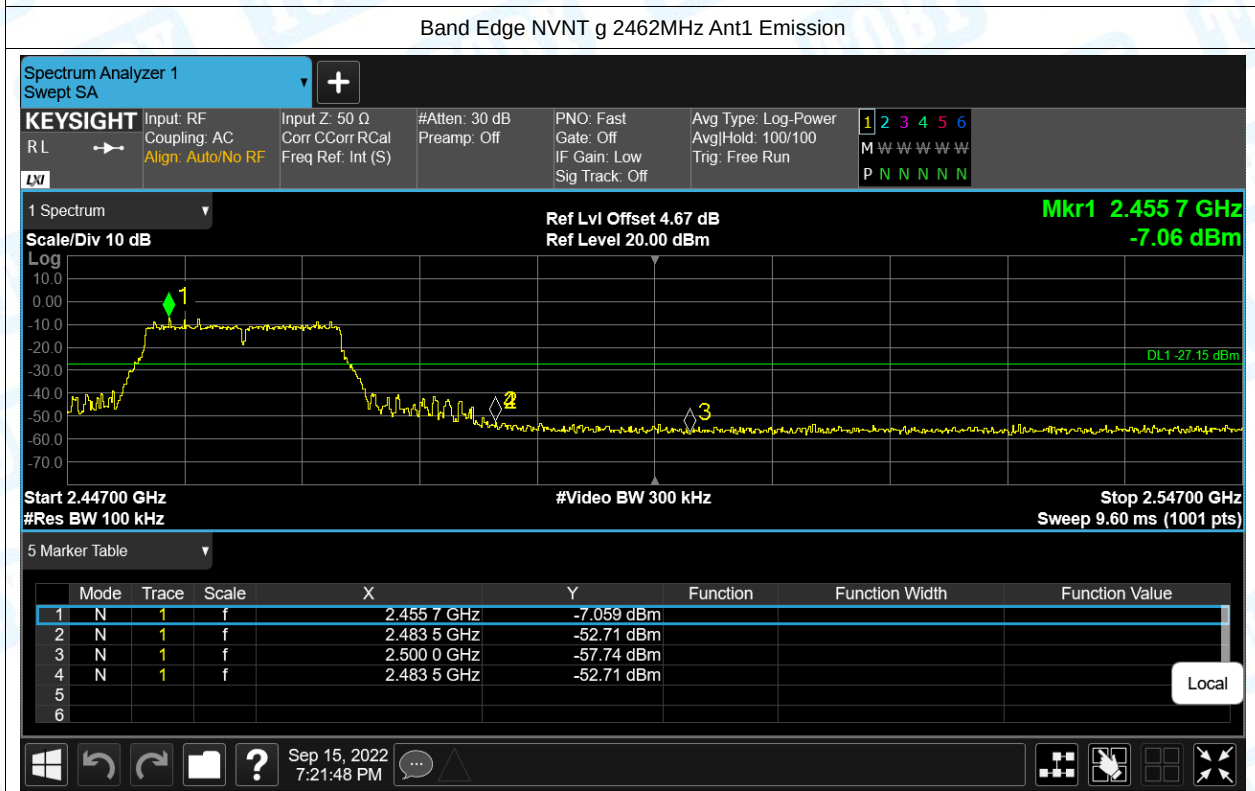
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-48.98	-20	Pass
NVNT	b	2462	Ant1	-49.82	-20	Pass
NVNT	g	2412	Ant1	-45.48	-20	Pass
NVNT	g	2462	Ant1	-45.56	-20	Pass









Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-34.67	-20	Pass
NVNT	b	2437	Ant1	-35.83	-20	Pass
NVNT	b	2462	Ant1	-35.5	-20	Pass
NVNT	g	2412	Ant1	-33.35	-20	Pass
NVNT	g	2437	Ant1	-32.56	-20	Pass
NVNT	g	2462	Ant1	-32.67	-20	Pass



Tx. Spurious NVNT b 2412MHz Ant1 Emission

Spectrum Analyzer 1

Swept SA

KEYSIGHT

Input: RF

Coupling: AC

Align: Auto/No RF

Input Z: 50 Ω

Corr C: Corr

RCal

Freq Ref: Int (S)

#Atten: 30 dB

Preamp: Off

PNO: Fast

Gate: Off

IF Gain: Low

Sig Track: Off

Avg Type: Log-Power

Avg/Hold: 10/10

Trig: Free Run

1 2 3 4 5 6

M W W W W W

P N N N N N

1 Spectrum

Scale/Div 10 dB

Log

Ref Lvl Offset 6.67 dB

Ref Level 20.00 dBm

Mkr1 2.412 GHz

-3.55 dBm

DL1 -22.69 dBm

Start 30 MHz

#Res BW 100 kHz

#Video BW 300 kHz

Stop 26.50 GHz

Sweep ~2.57 s (1001 pts)

Local

5 Marker Table

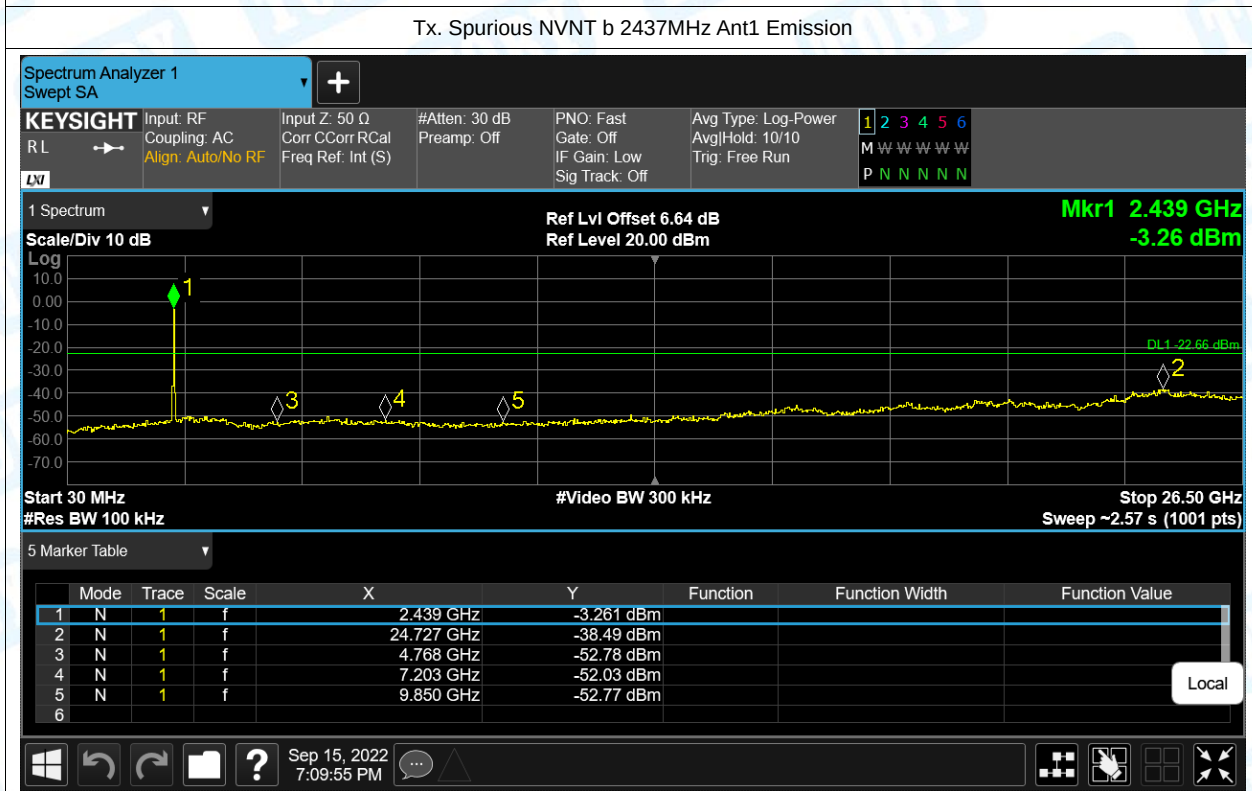
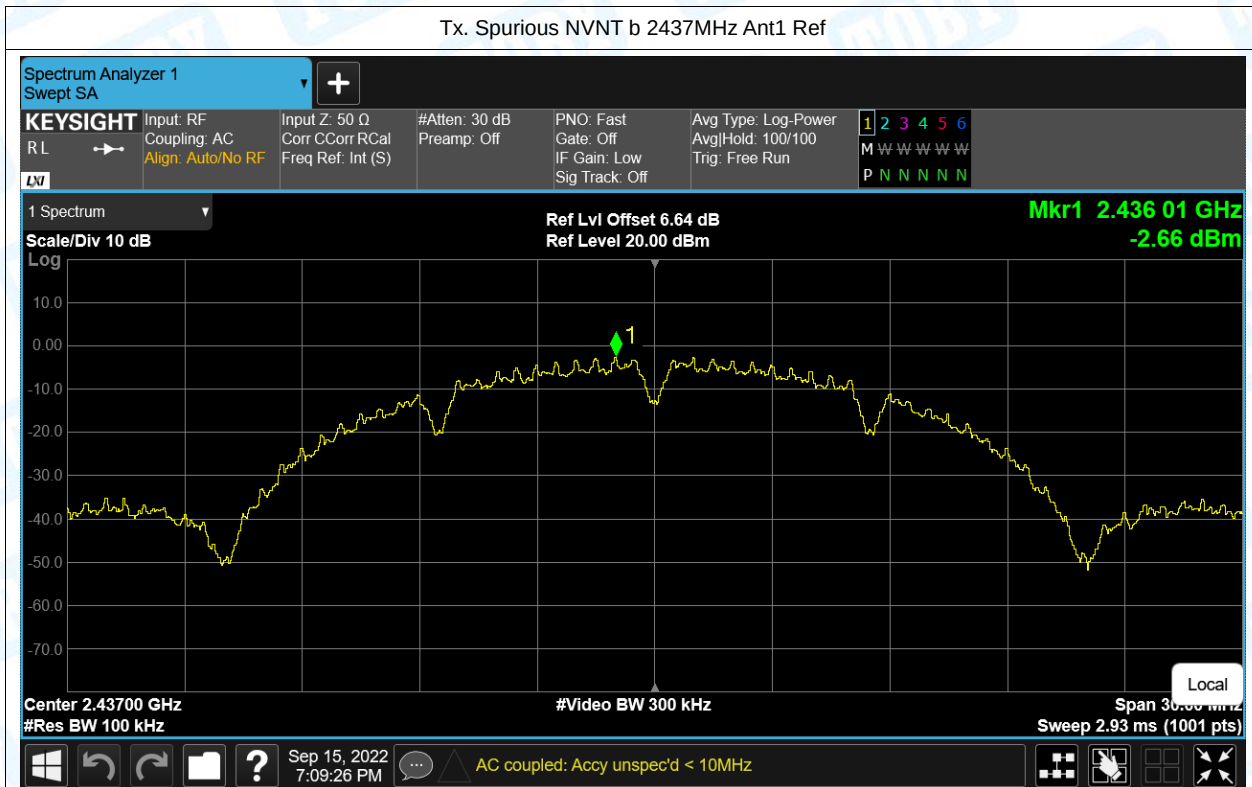
	Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	2.412 GHz	-3.551 dBm			
2	N	1	f	24.753 GHz	-37.36 dBm			
3	N	1	f	5.006 GHz	-52.52 dBm			
4	N	1	f	7.071 GHz	-52.13 dBm			
5	N	1	f	9.586 GHz	-52.79 dBm			
6								

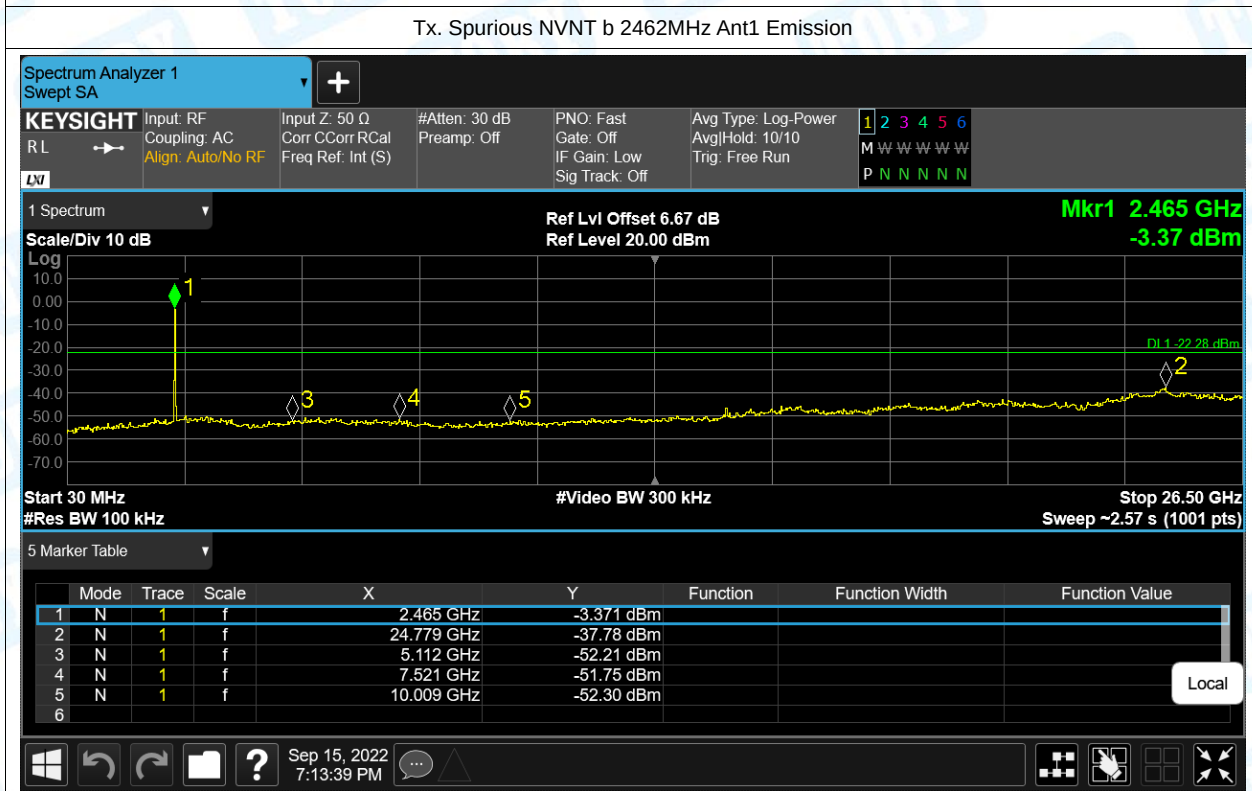
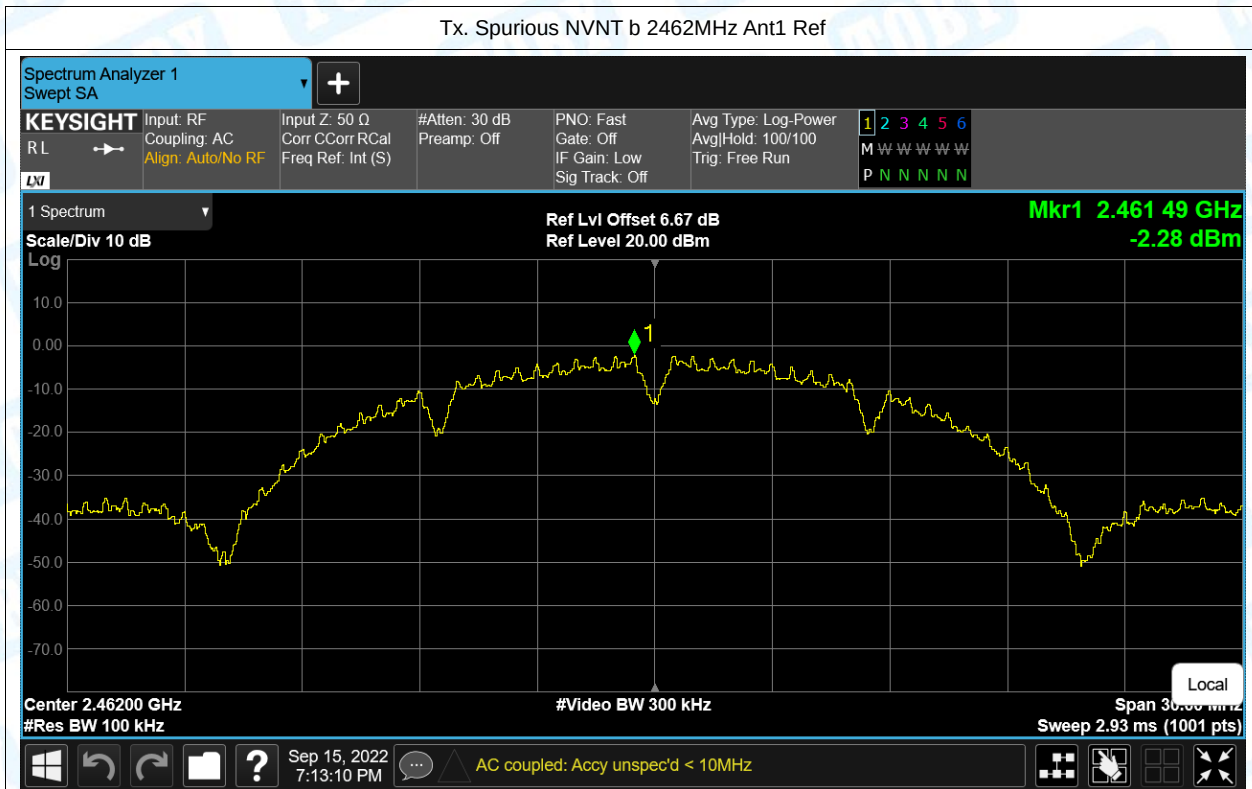
Local

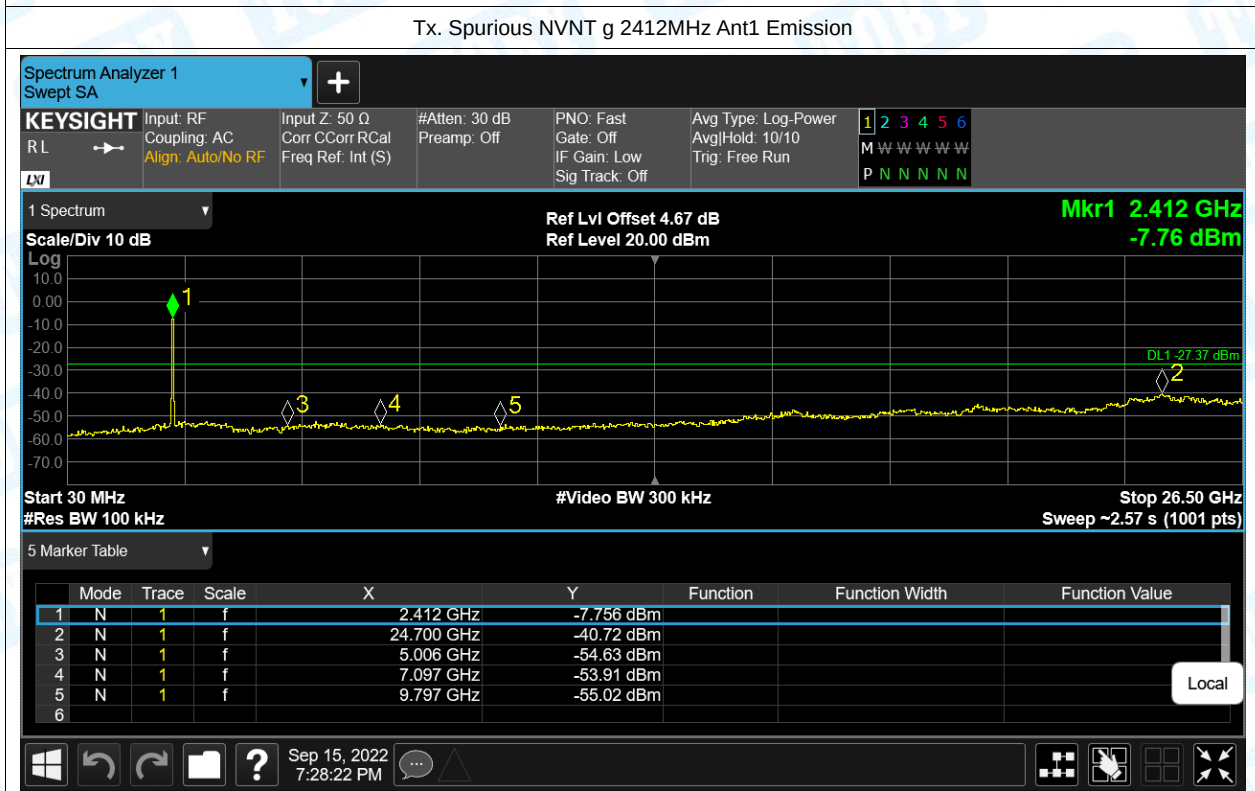
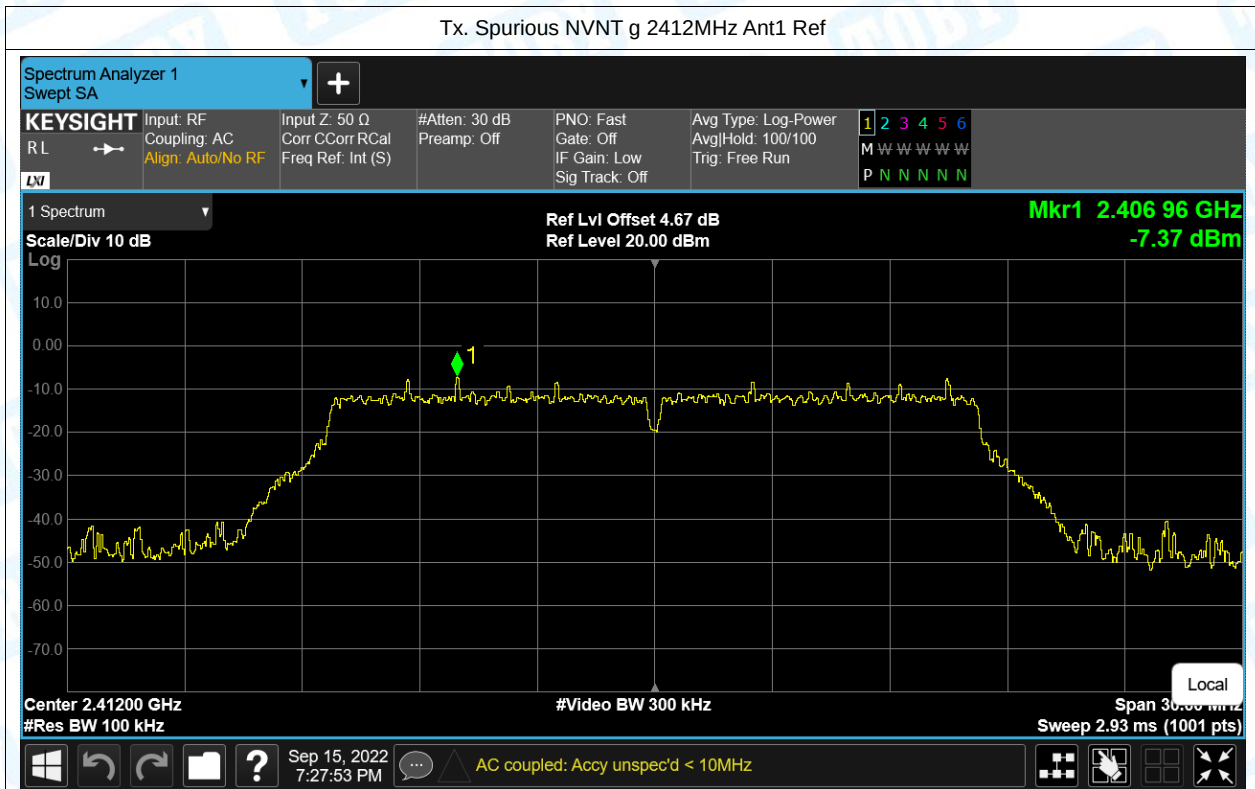
Windows

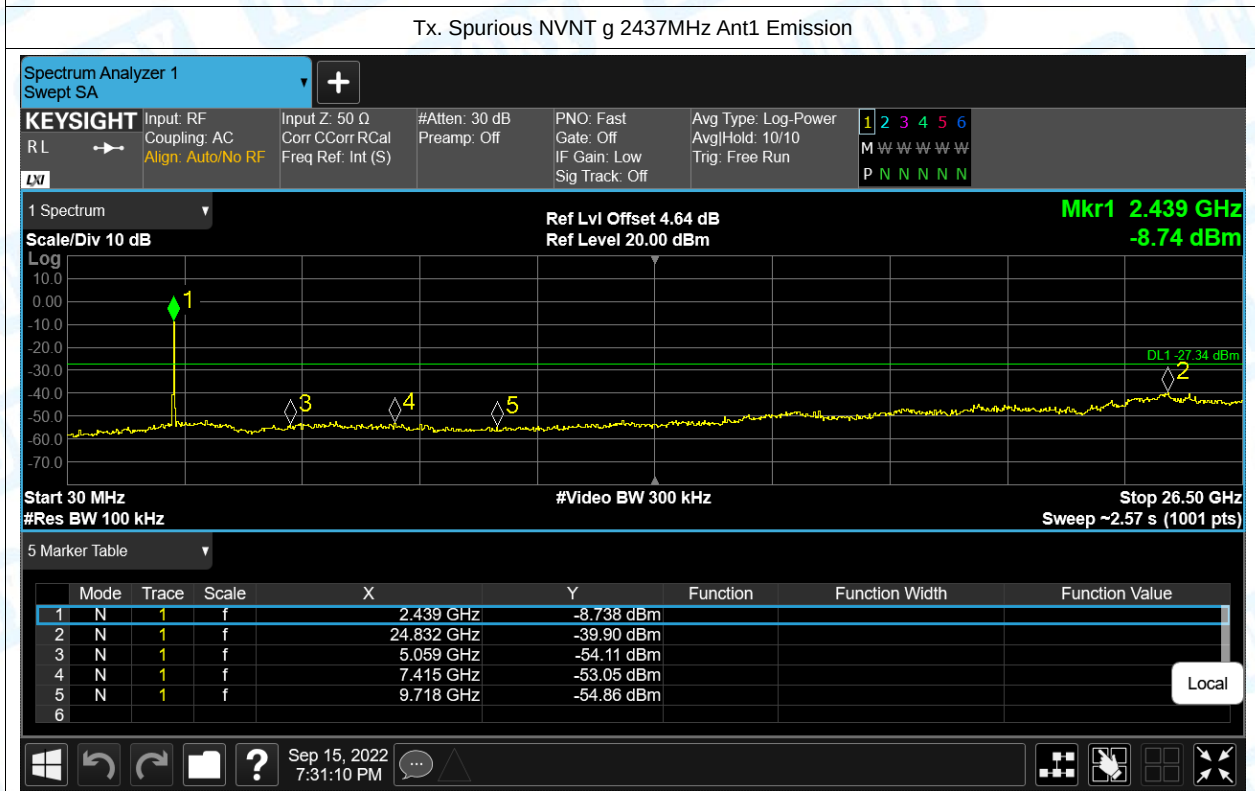
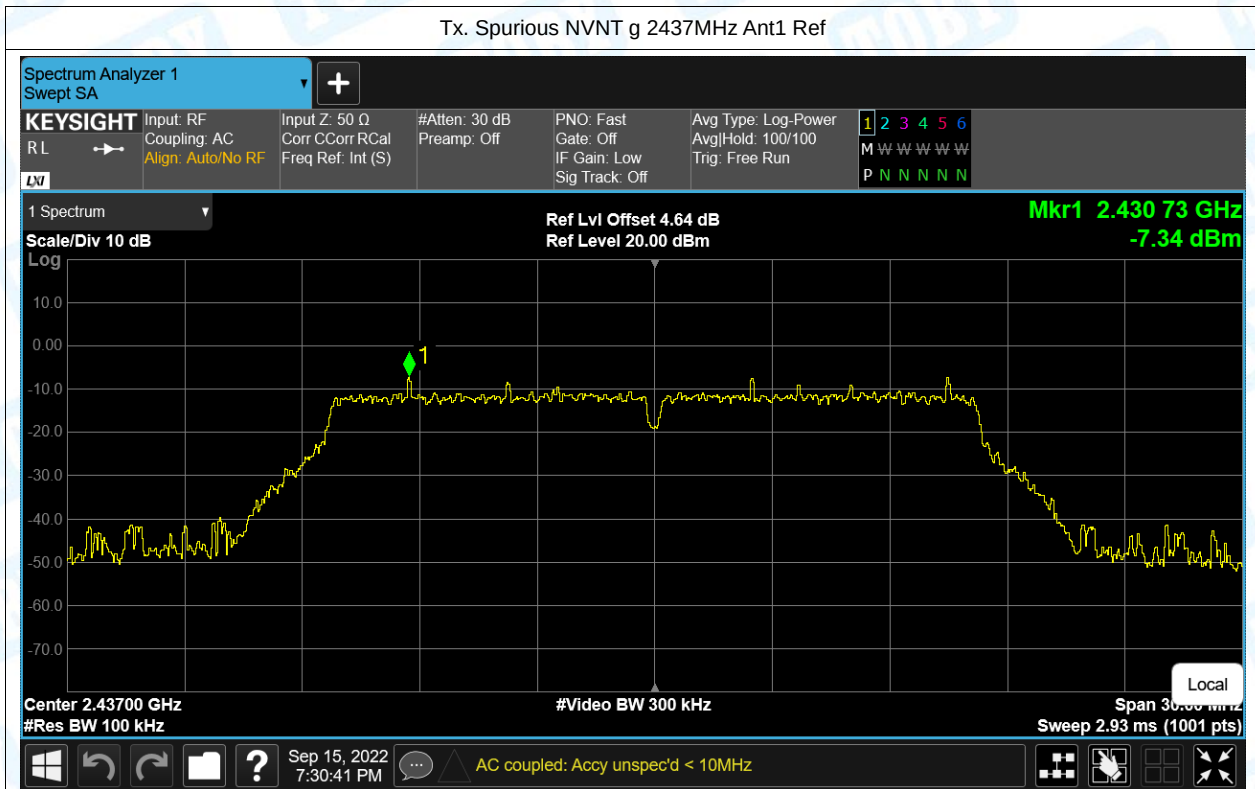
7:02:08 PM

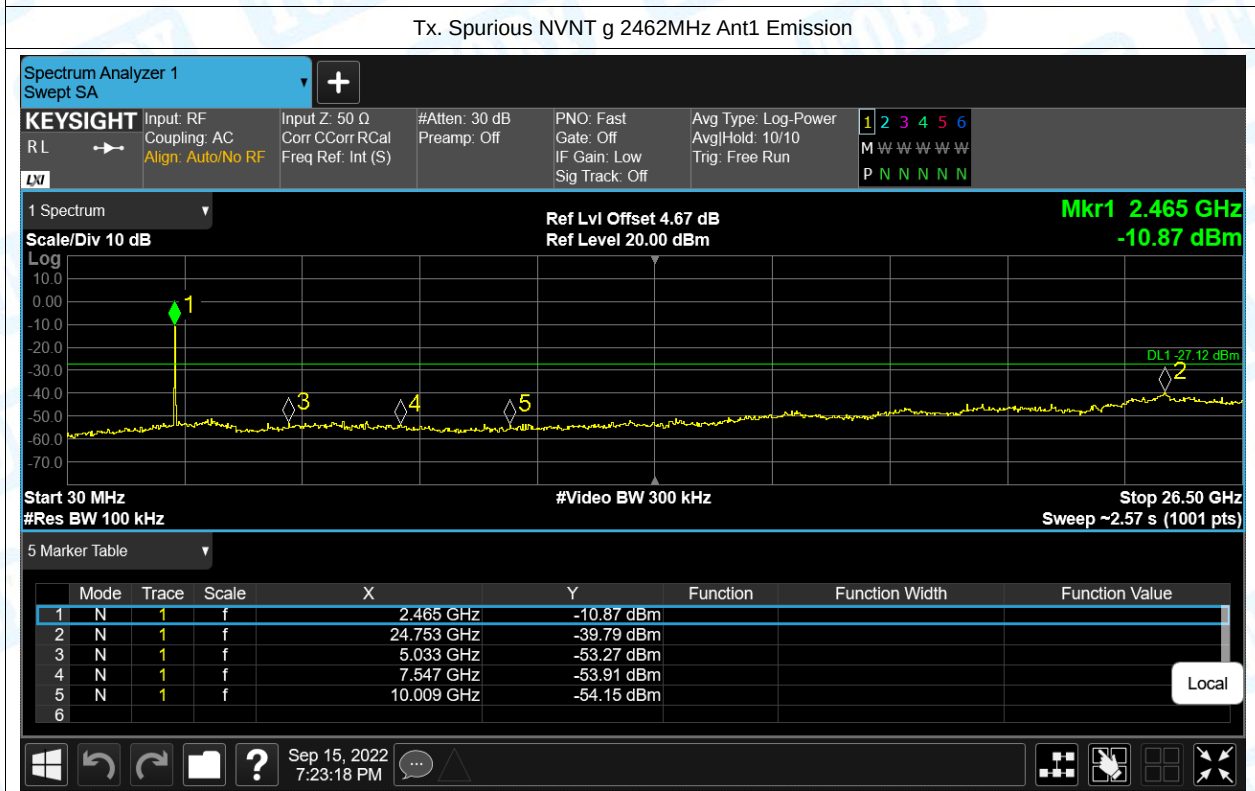
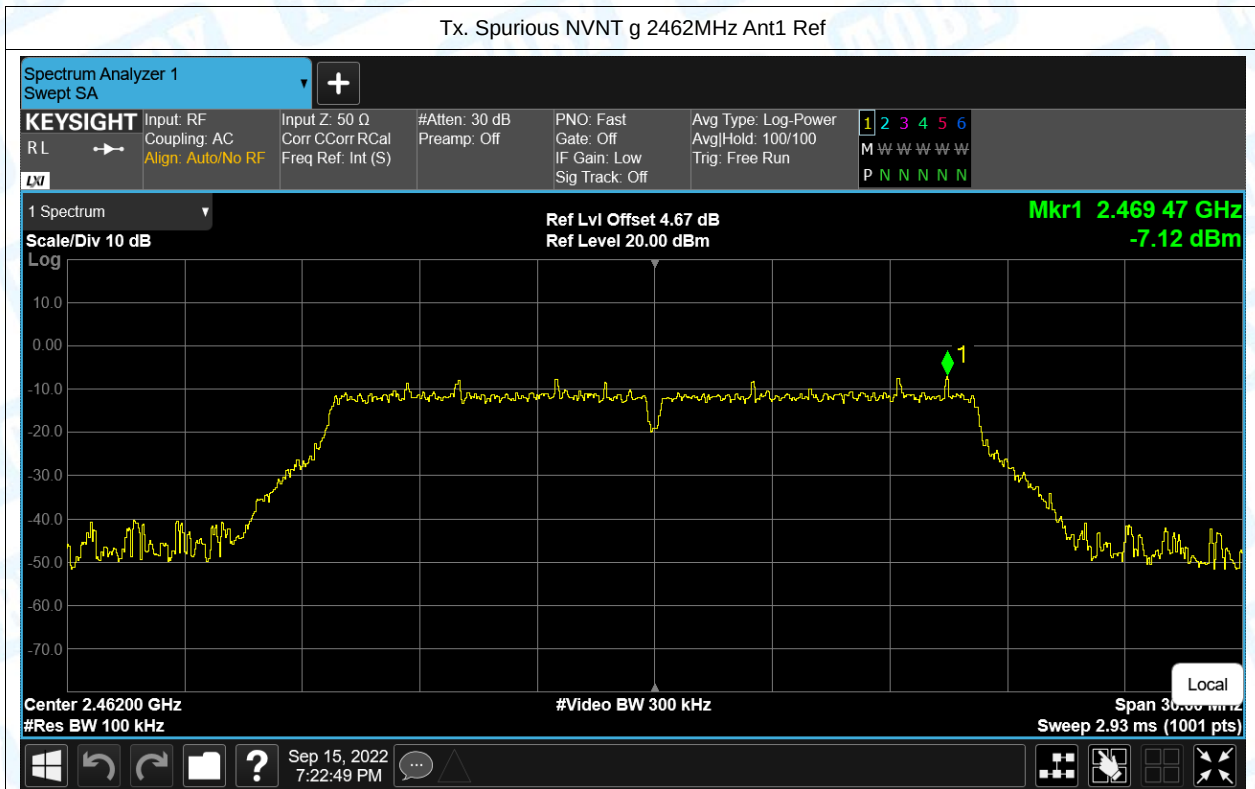
Navigation icons





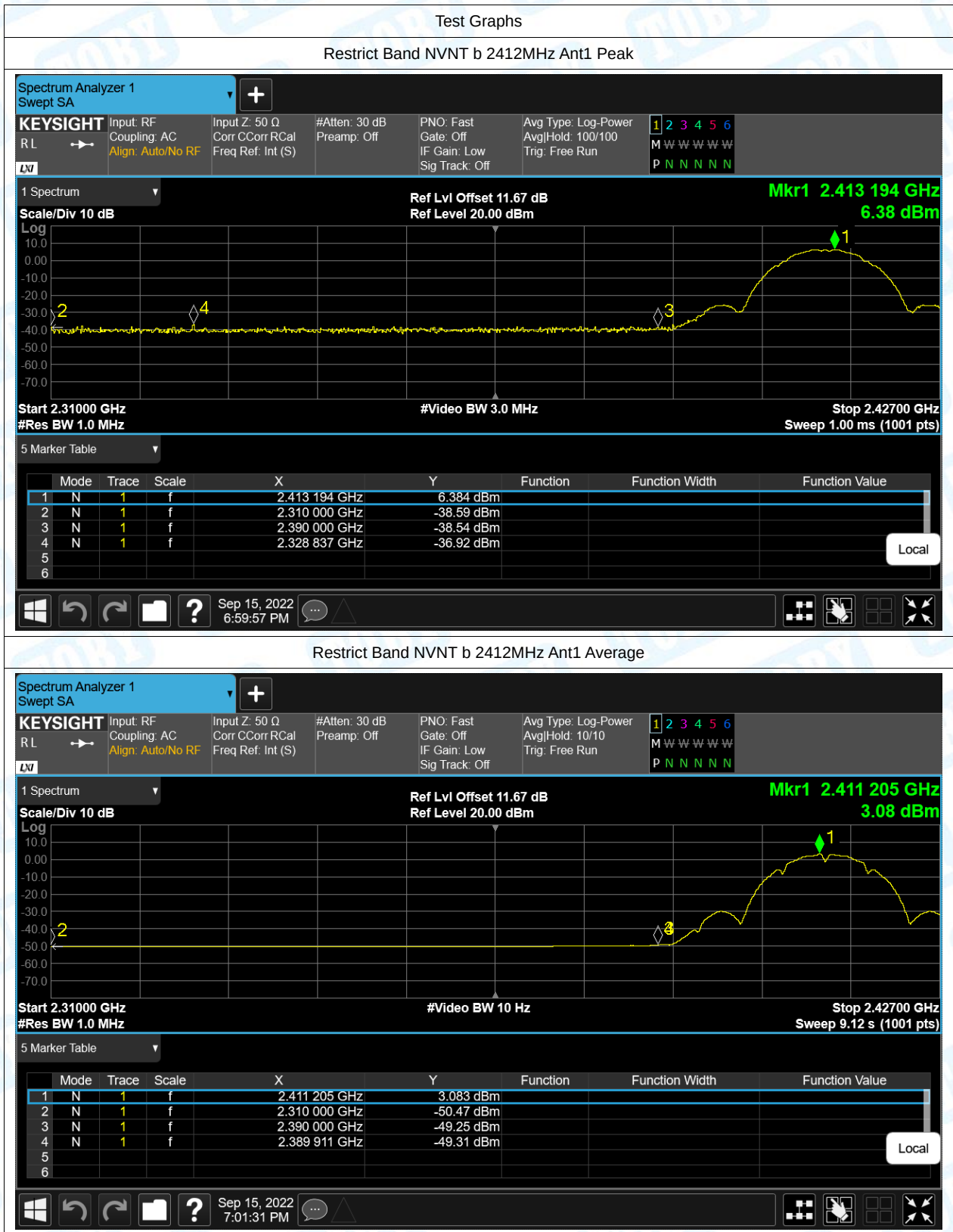




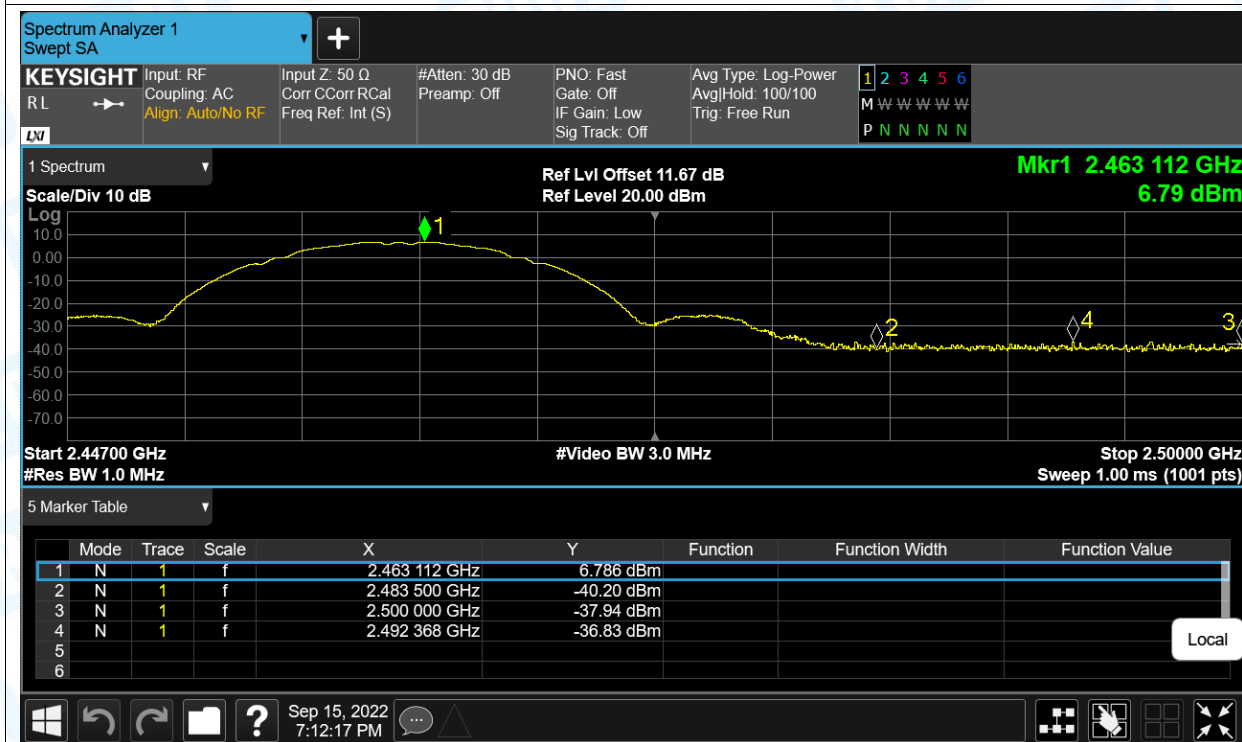


Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	b	2412	Ant1	2310	-38.59	4.7	61.37	Peak	74	Pass
NVNT	b	2412	Ant1	2310	-50.47	4.7	49.49	Average	54	Pass
NVNT	b	2412	Ant1	2328.837	-36.92	4.7	63.04	Peak	74	Pass
NVNT	b	2412	Ant1	2389.911	-49.31	4.7	50.65	Average	54	Pass
NVNT	b	2412	Ant1	2390	-38.54	4.7	61.32	Peak	74	Pass
NVNT	b	2412	Ant1	2390	-49.25	4.7	50.71	Average	54	Pass
NVNT	b	2462	Ant1	2483.5	-40.2	4.7	59.76	Peak	74	Pass
NVNT	b	2462	Ant1	2483.5	-49.27	4.7	50.69	Average	54	Pass
NVNT	b	2462	Ant1	2492.368	-36.83	4.7	63.13	Peak	74	Pass
NVNT	b	2462	Ant1	2485.107	-49.13	4.7	50.83	Average	54	Pass
NVNT	b	2462	Ant1	2500	-37.94	4.7	62.02	Peak	74	Pass
NVNT	b	2462	Ant1	2500	-49.84	4.7	50.12	Average	54	Pass
NVNT	g	2412	Ant1	2310	-42.48	4.7	57.48	Peak	74	Pass
NVNT	g	2412	Ant1	2310	-52.46	4.7	47.50	Average	54	Pass
NVNT	g	2412	Ant1	2387.103	-36.12	4.7	63.84	Peak	74	Pass
NVNT	g	2412	Ant1	2389.911	-50	4.7	49.96	Average	54	Pass
NVNT	g	2412	Ant1	2390	-38.47	4.7	61.49	Peak	74	Pass
NVNT	g	2412	Ant1	2390	-49.93	4.7	50.03	Average	54	Pass
NVNT	g	2462	Ant1	2483.5	-39.23	4.7	60.73	Peak	74	Pass
NVNT	g	2462	Ant1	2483.5	-50.06	4.7	49.90	Average	54	Pass
NVNT	g	2462	Ant1	2485.16	-36.59	4.7	63.37	Peak	74	Pass
NVNT	g	2462	Ant1	2483.517	-50.06	4.7	49.90	Average	54	Pass
NVNT	g	2462	Ant1	2500	-41.03	4.7	58.93	Peak	74	Pass
NVNT	g	2462	Ant1	2500	-51.76	4.7	48.40	Average	54	Pass



Restrict Band NVNT b 2462MHz Ant1 Peak



Restrict Band NVNT b 2462MHz Ant1 Average

