

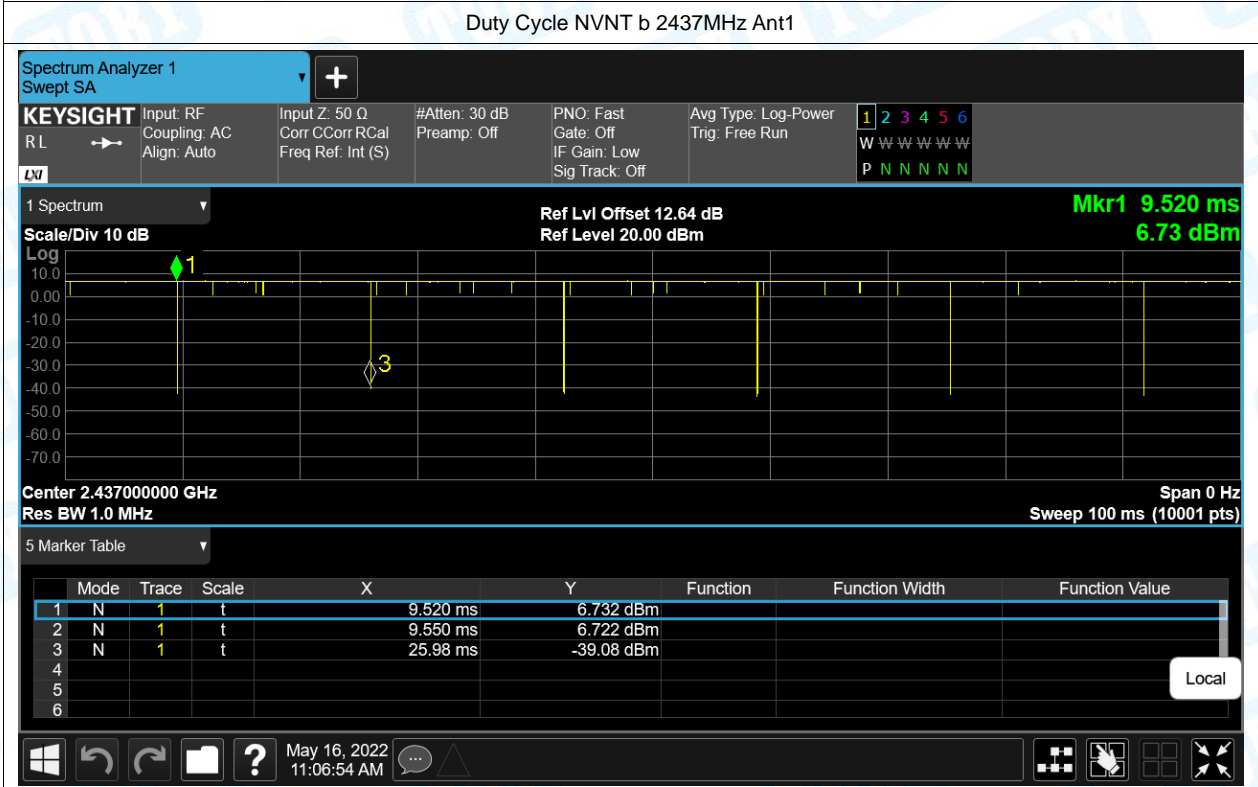
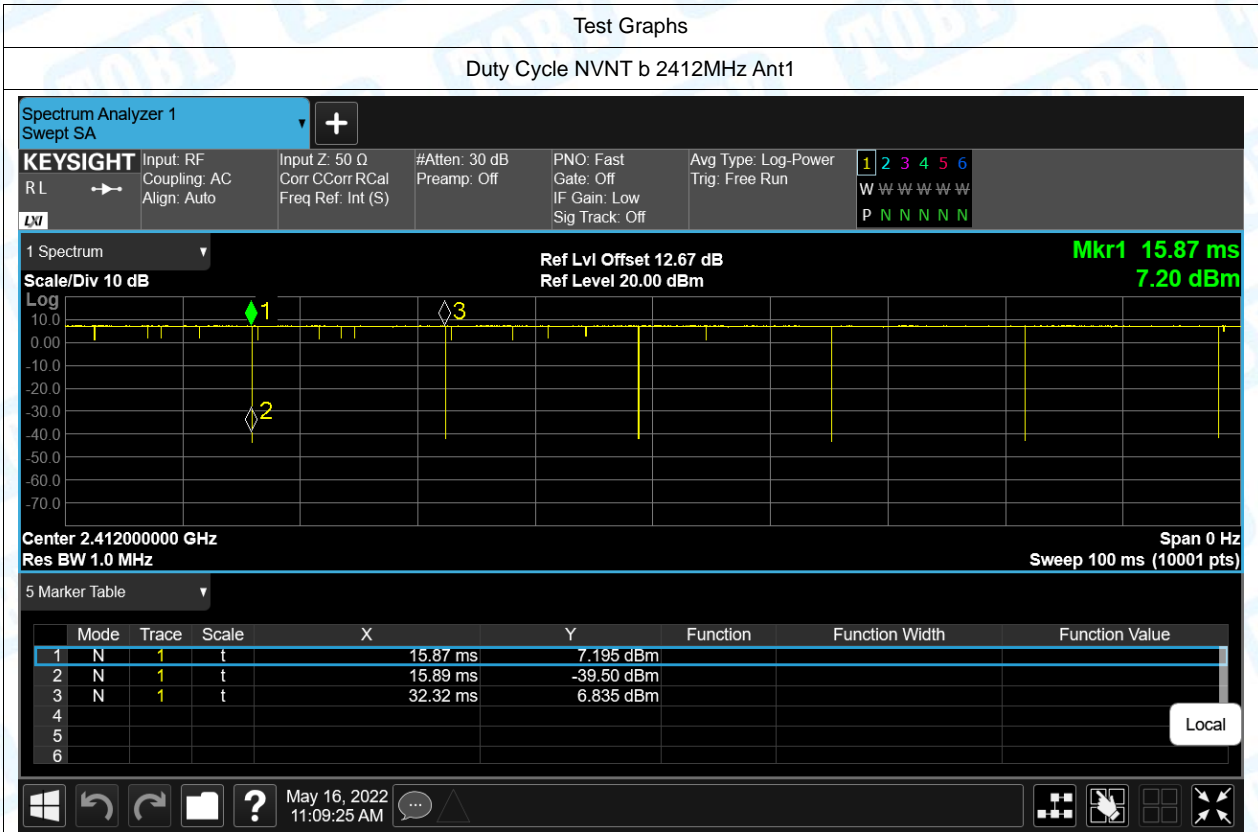
# RF Test Data for 2.4G WiFi (Conducted Measurements)

General Description of EUT	
<b>Product Name:</b>	Wireless Smart Battery Camera
<b>Test Model:</b>	CG1
<b>Sample ID:</b>	202204-0397-6-2#
Environmental Conditions	
<b>Temperature:</b>	24°C
<b>Relative Humidity:</b>	50%
<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-202204-0397-11.	

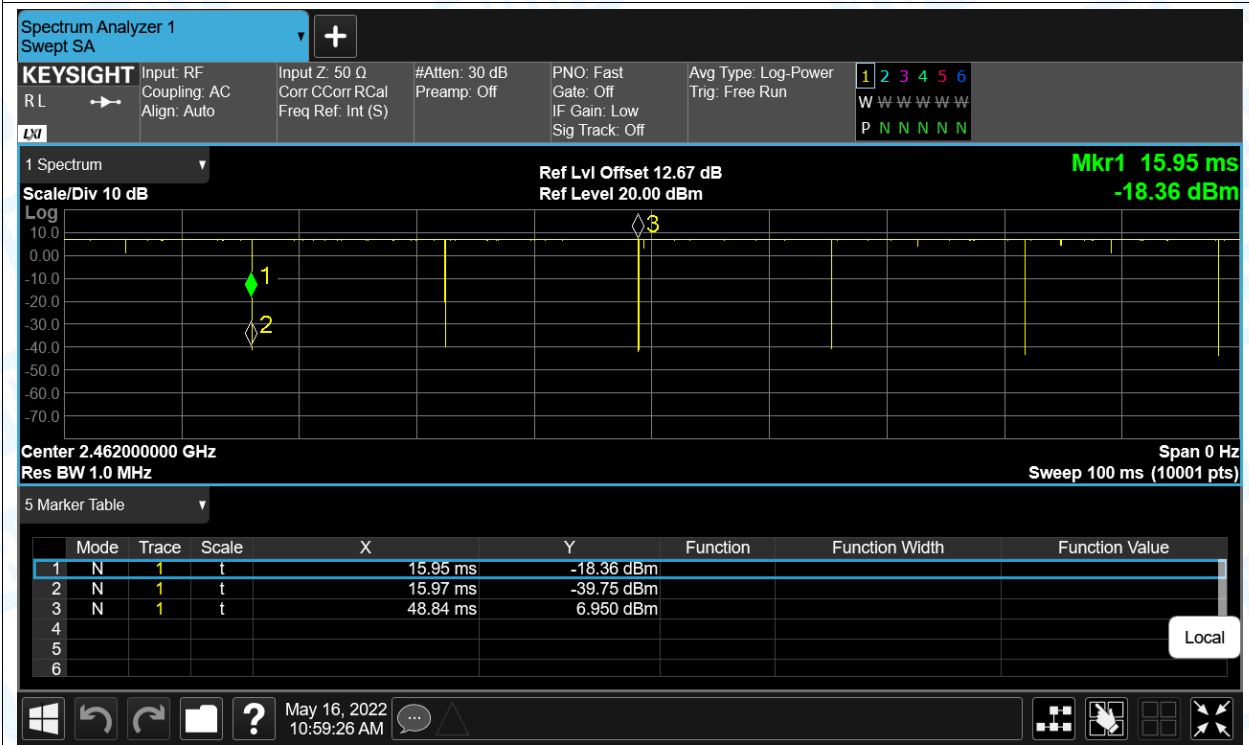
## Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	b	2412	Ant1	99.89	0
NVNT	b	2437	Ant1	99.89	0
NVNT	b	2462	Ant1	99.92	0
NVNT	g	2412	Ant1	99.19	0.04
NVNT	g	2437	Ant1	99.17	0.04
NVNT	g	2462	Ant1	99.28	0.03
NVNT	n(HT20)	2412	Ant1	99.21	0.03
NVNT	n(HT20)	2437	Ant1	99.24	0.03
NVNT	n(HT20)	2462	Ant1	99.12	0.04

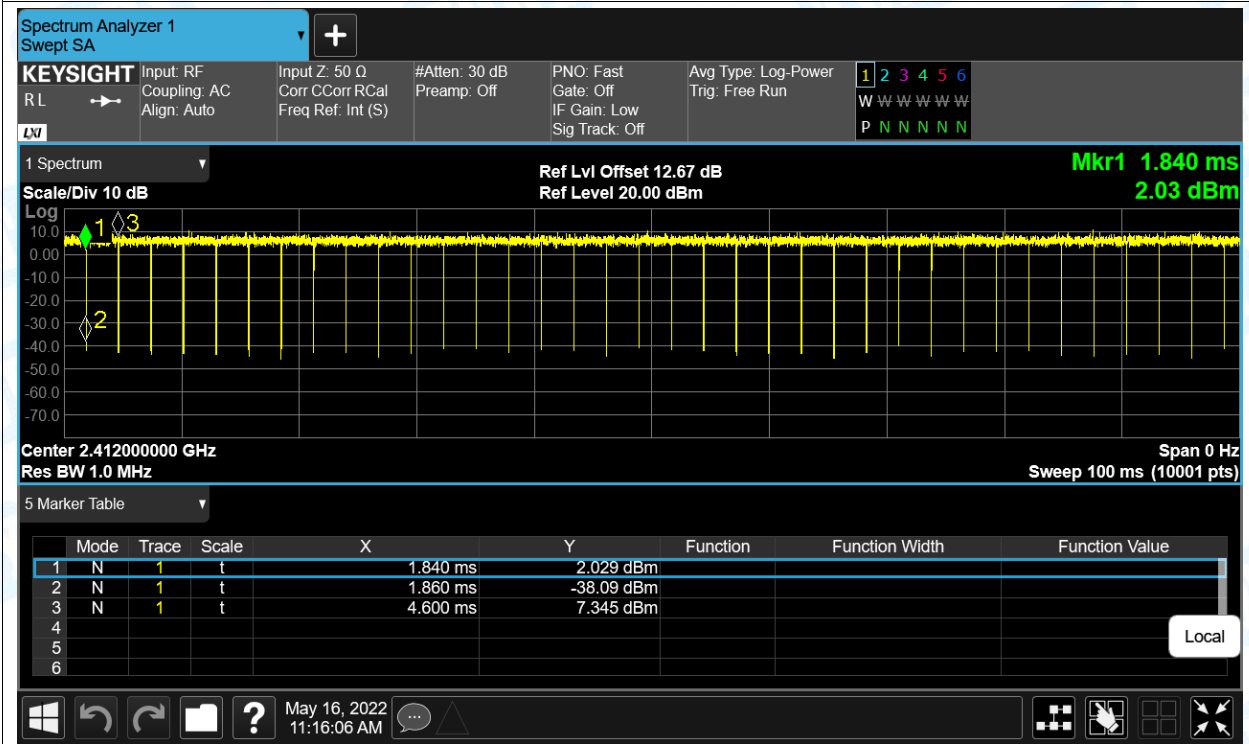
Note: duty cycle  $\geq$  98%, set VBW  $\leq$  RBW/100 (i.e., 10 kHz) but not less than 10 Hz.



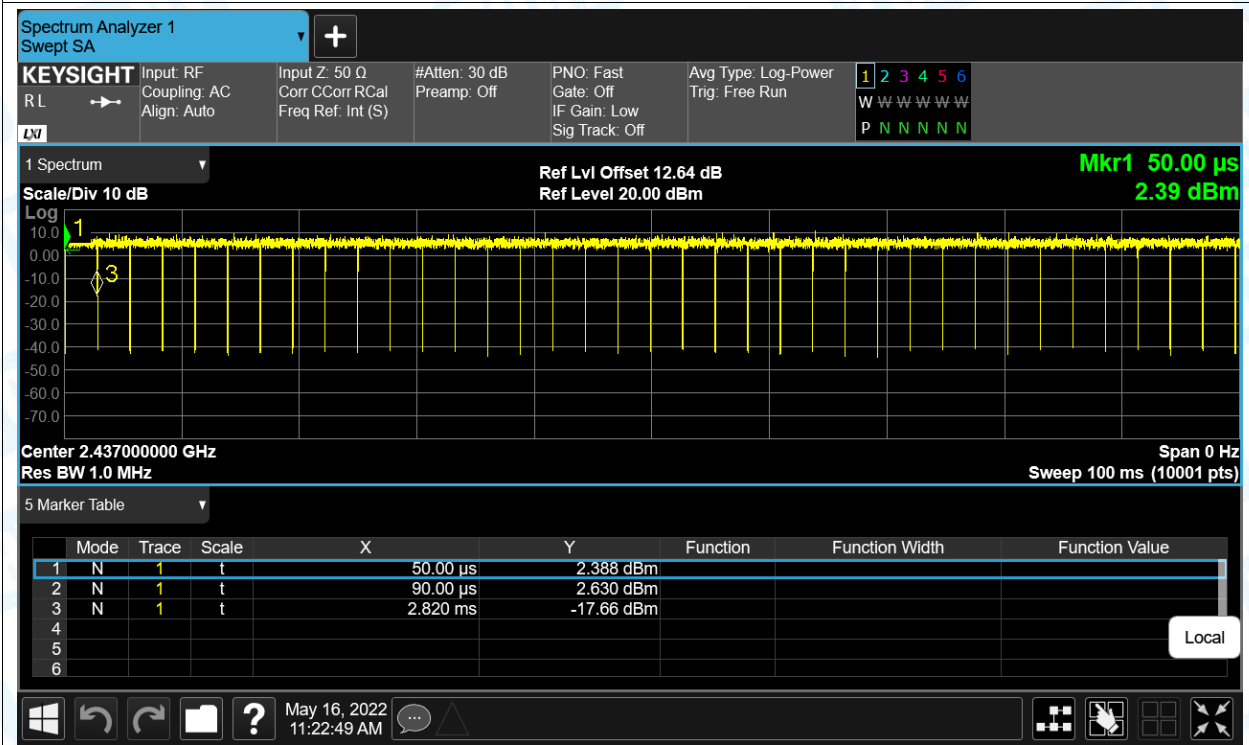
Duty Cycle NVNT b 2462MHz Ant1



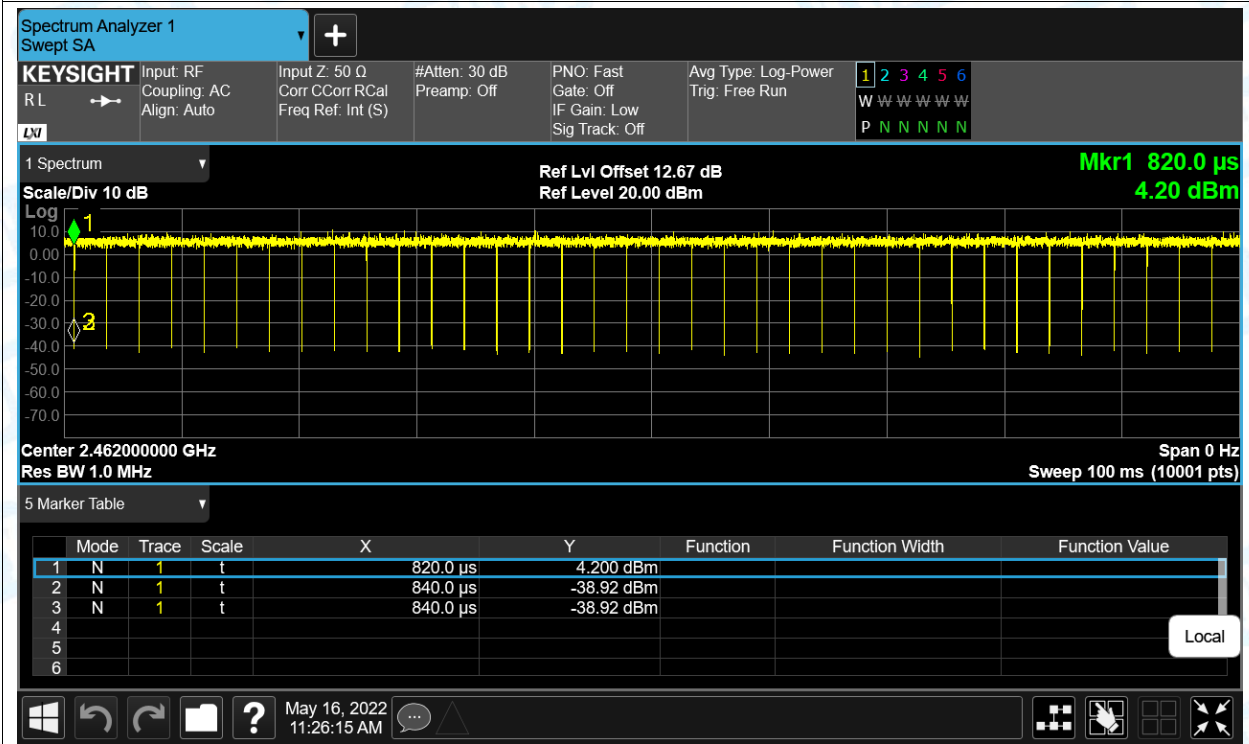
Duty Cycle NVNT g 2412MHz Ant1



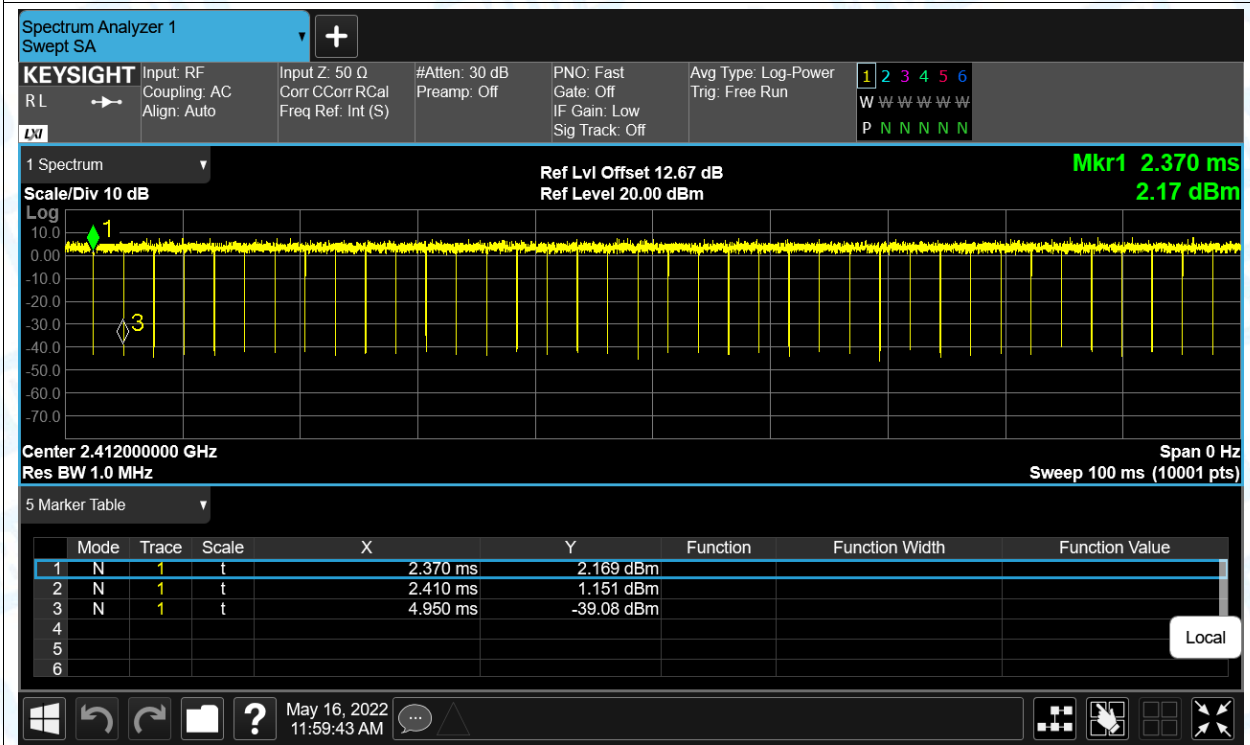
Duty Cycle NVNT g 2437MHz Ant1



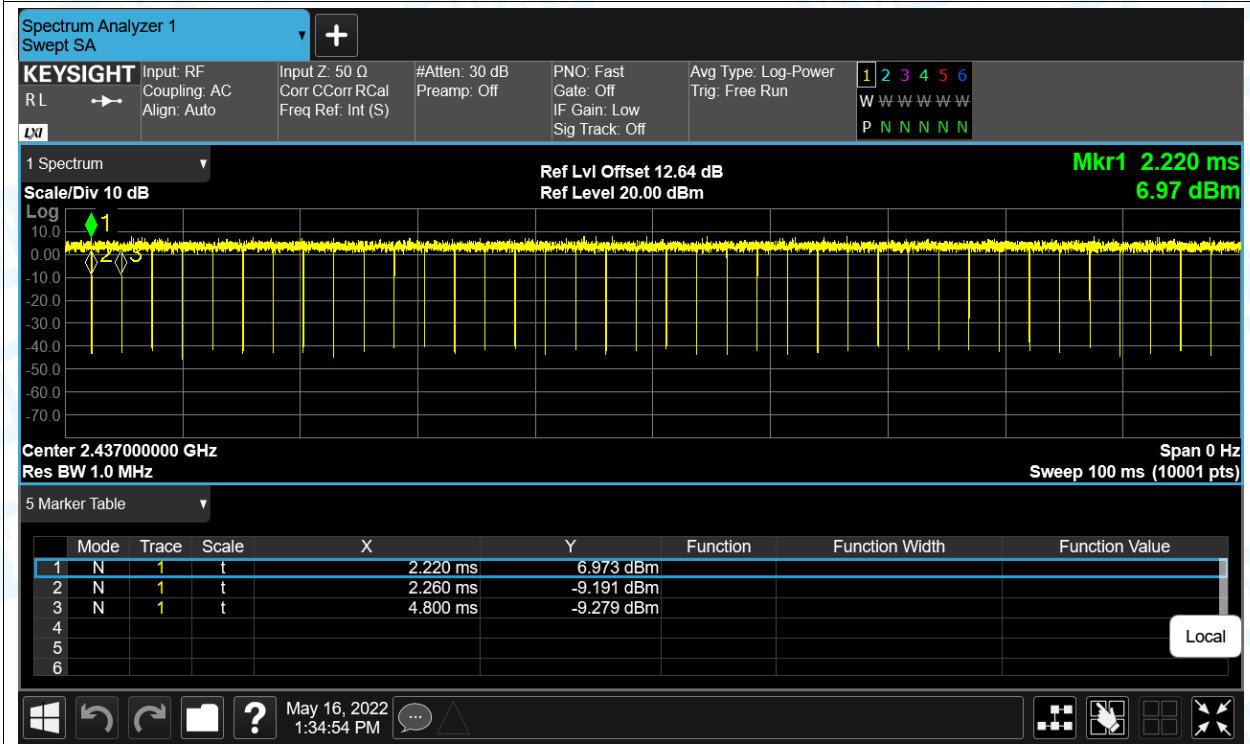
Duty Cycle NVNT g 2462MHz Ant1

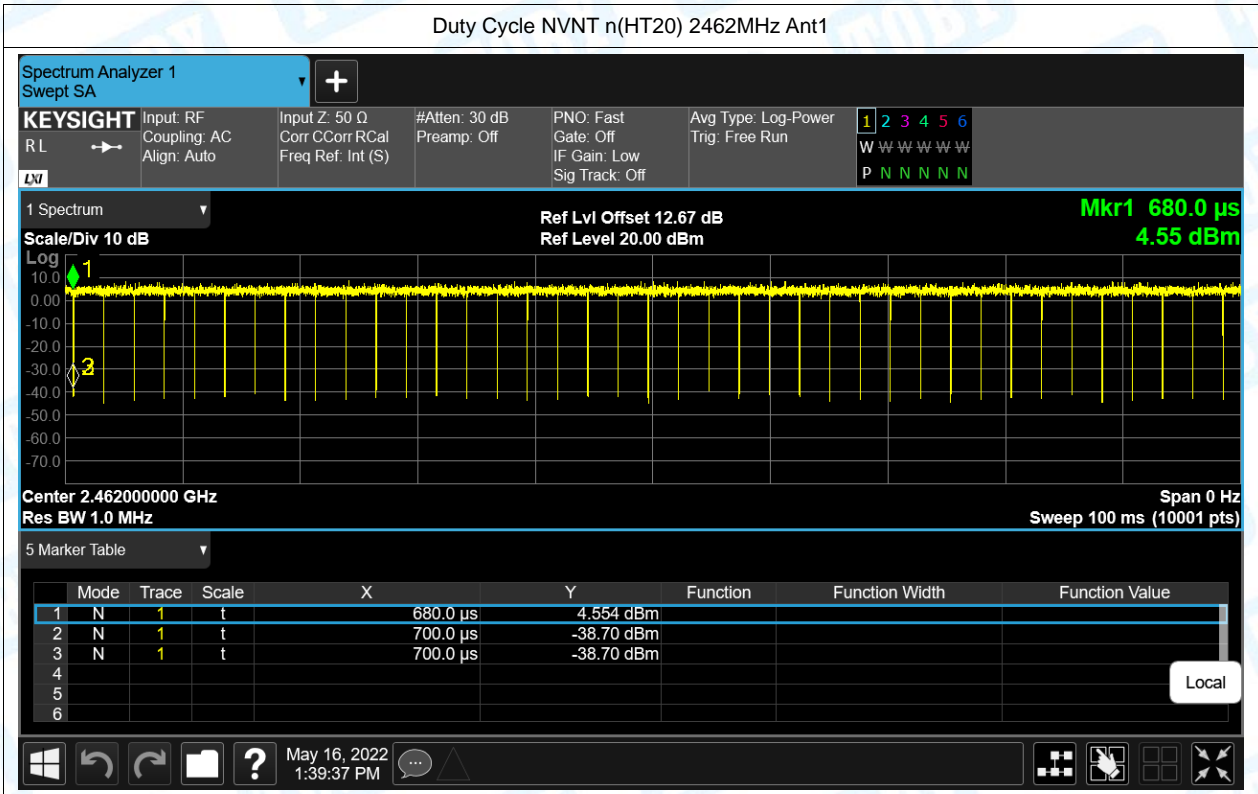


### Duty Cycle NVNT n(HT20) 2412MHz Ant1



### Duty Cycle NVNT n(HT20) 2437MHz Ant1





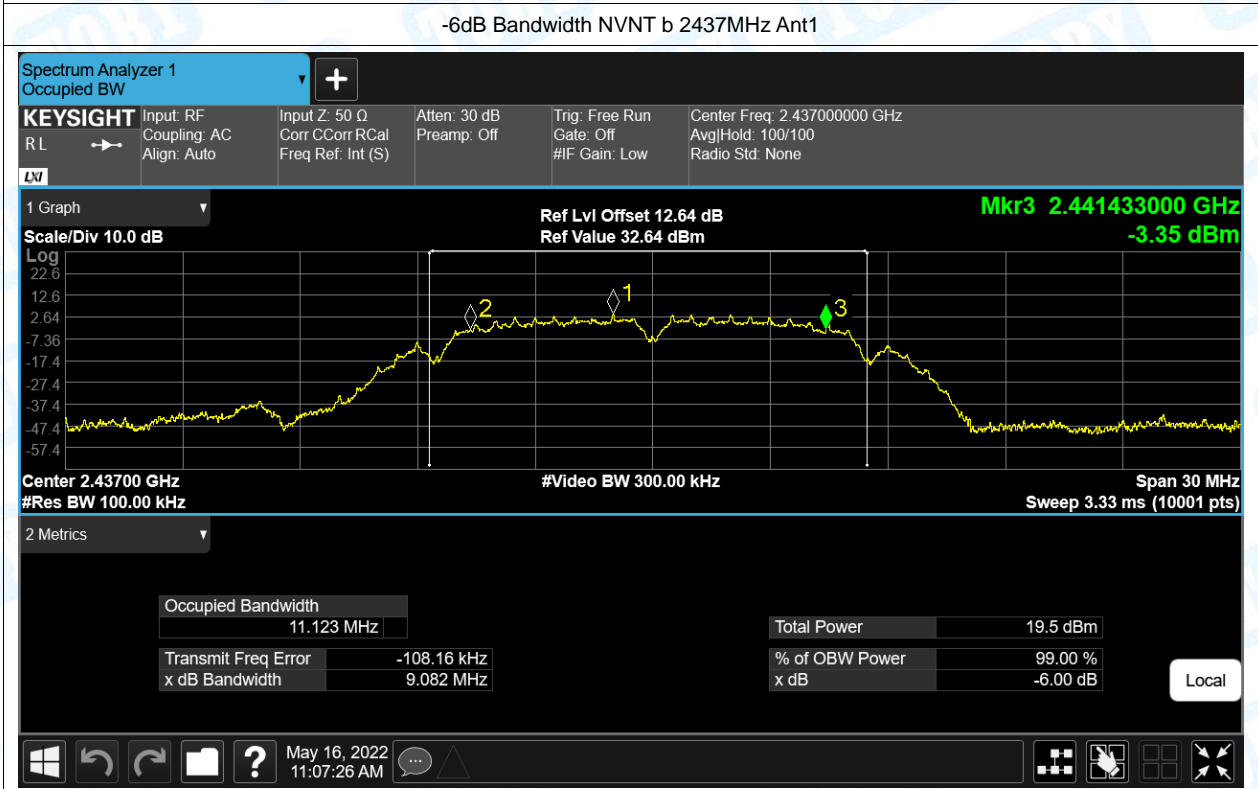
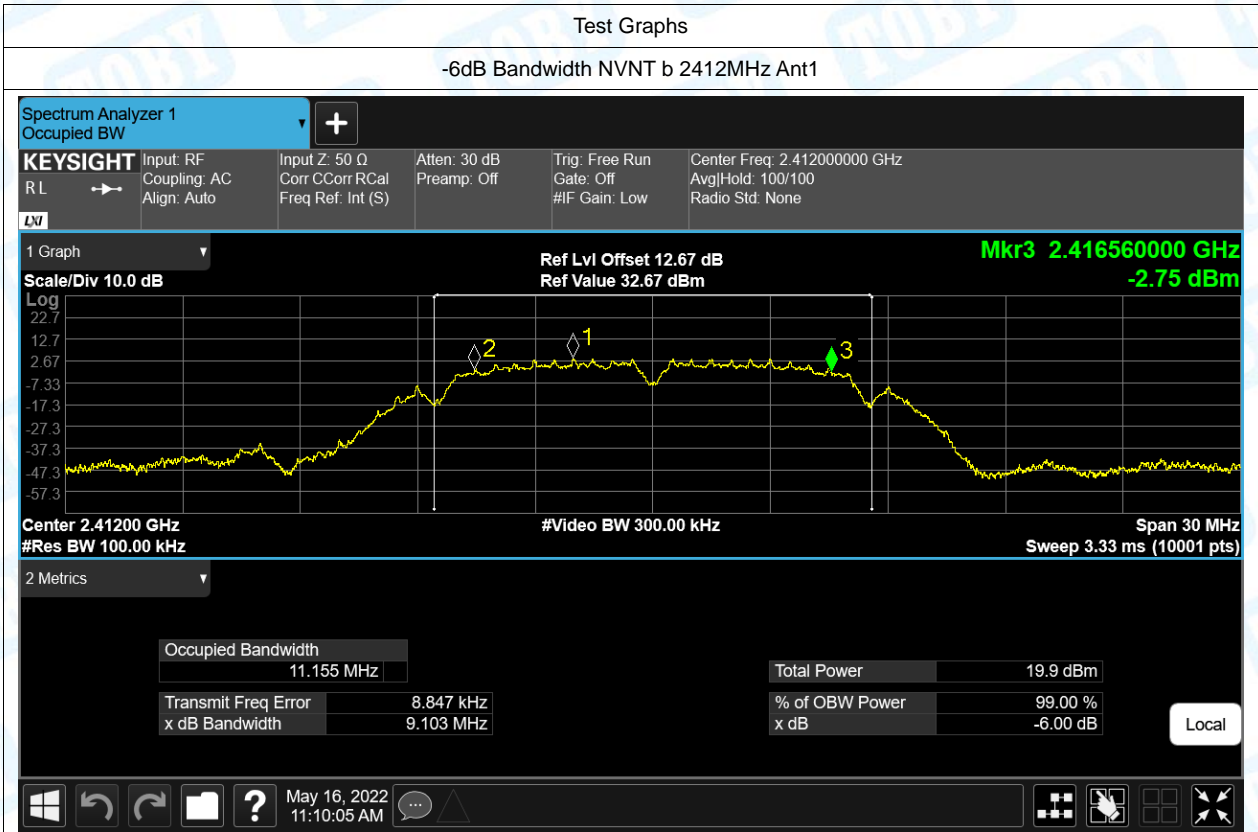
## Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	14.786	30	Pass
NVNT	b	2437	Ant1	14.351	30	Pass
NVNT	b	2462	Ant1	14.501	30	Pass
NVNT	g	2412	Ant1	18.421	30	Pass
NVNT	g	2437	Ant1	17.849	30	Pass
NVNT	g	2462	Ant1	17.945	30	Pass
NVNT	n(HT20)	2412	Ant1	16.248	30	Pass
NVNT	n(HT20)	2437	Ant1	16.278	30	Pass
NVNT	n(HT20)	2462	Ant1	16.904	30	Pass

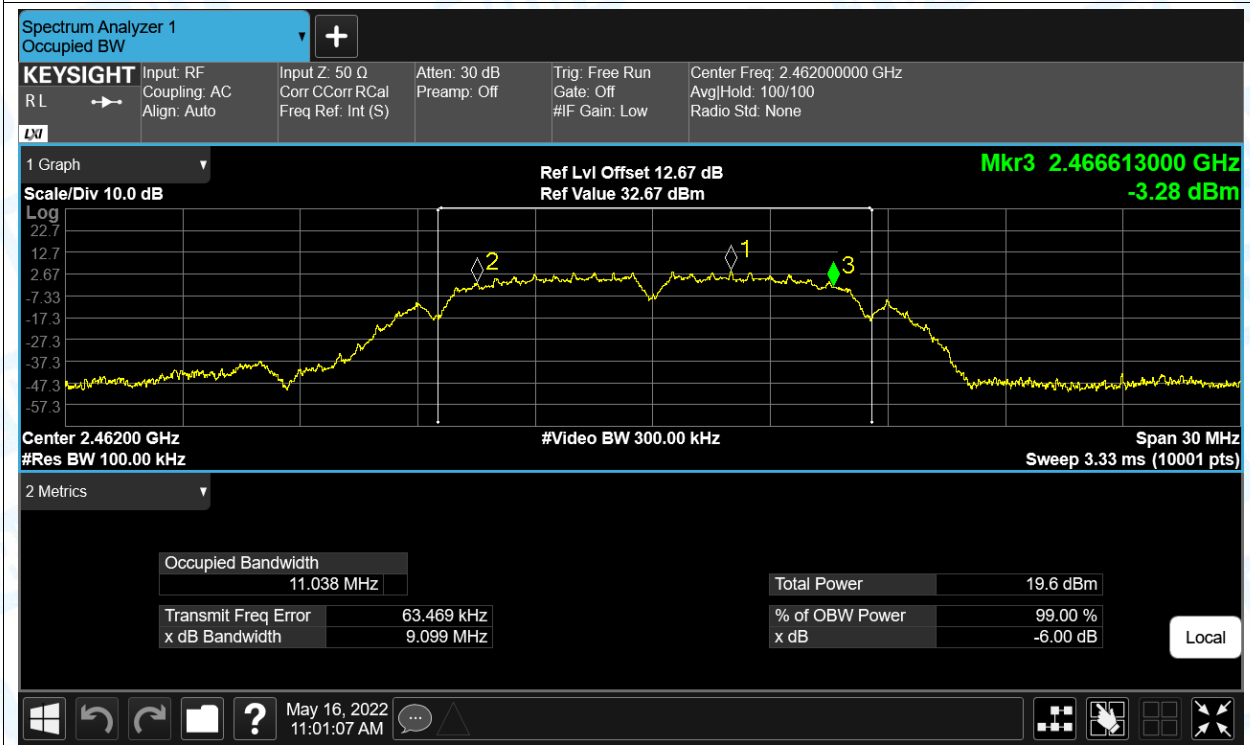


**-6dB Bandwidth**

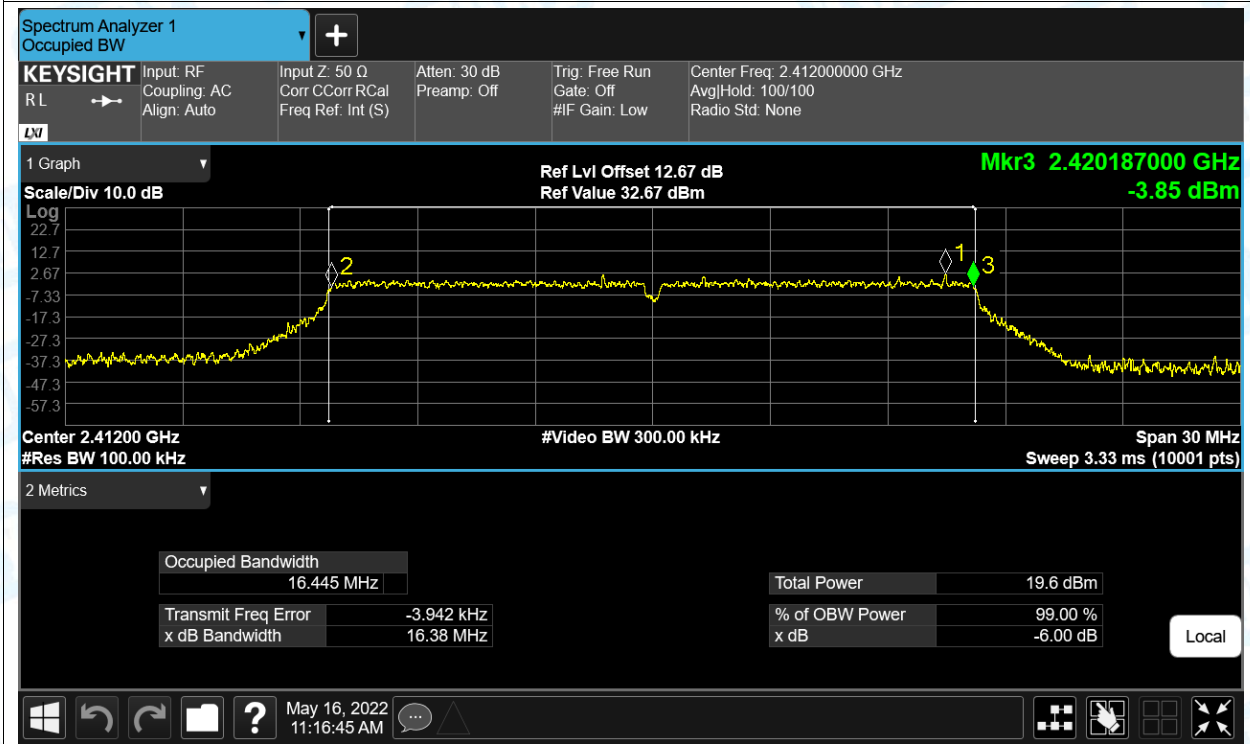
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	9.103	0.5	Pass
NVNT	b	2437	Ant1	9.082	0.5	Pass
NVNT	b	2462	Ant1	9.099	0.5	Pass
NVNT	g	2412	Ant1	16.38	0.5	Pass
NVNT	g	2437	Ant1	16.37	0.5	Pass
NVNT	g	2462	Ant1	16.36	0.5	Pass
NVNT	n(HT20)	2412	Ant1	17.60	0.5	Pass
NVNT	n(HT20)	2437	Ant1	17.60	0.5	Pass
NVNT	n(HT20)	2462	Ant1	17.59	0.5	Pass



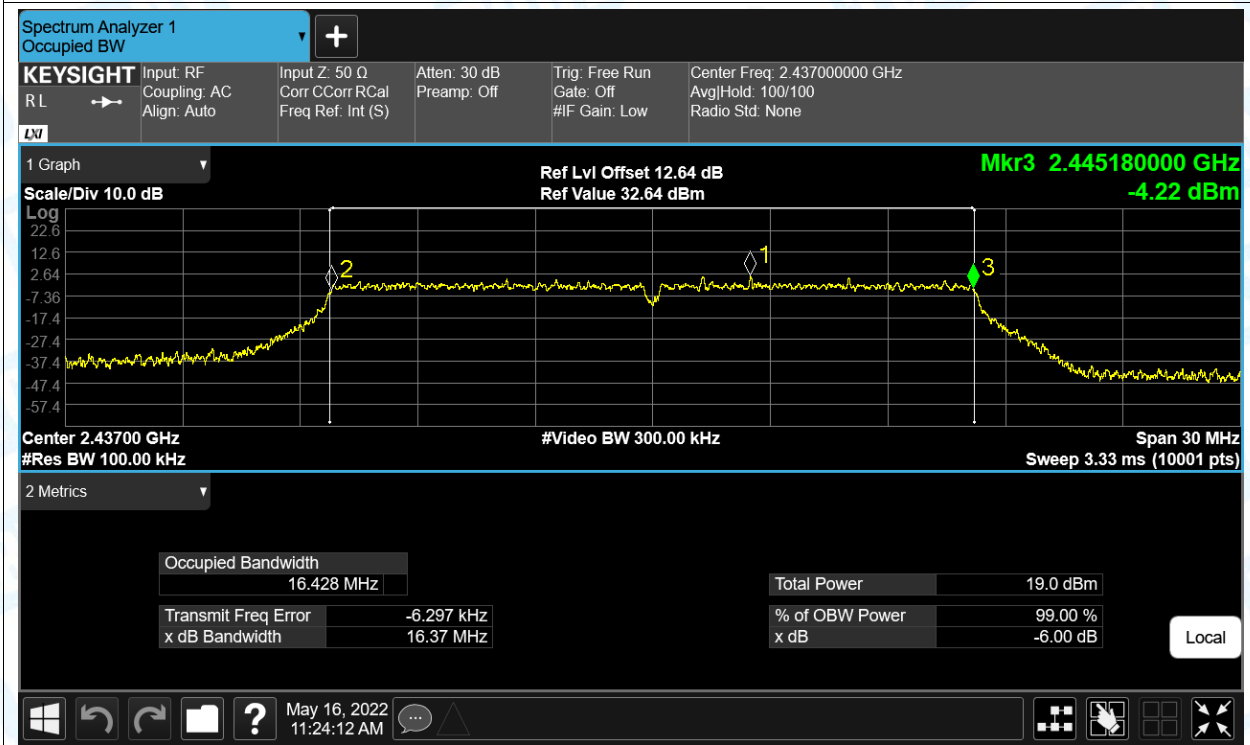
### -6dB Bandwidth NVNT b 2462MHz Ant1



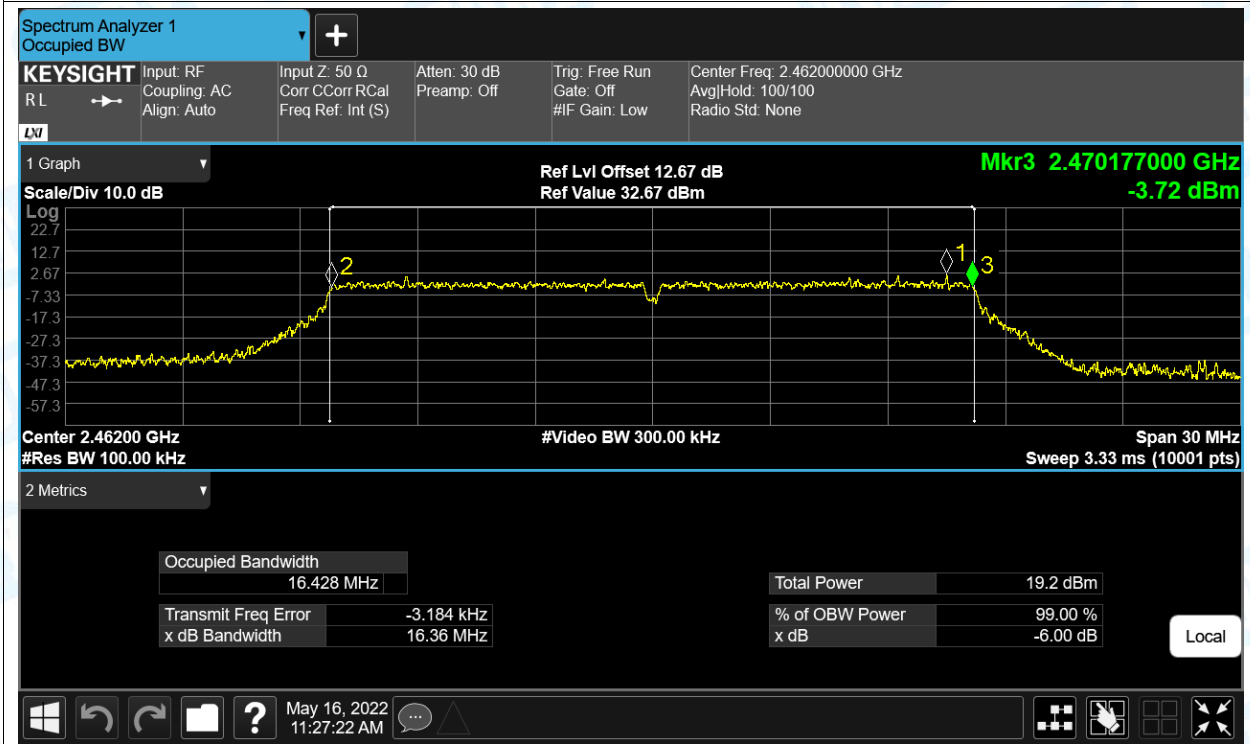
### -6dB Bandwidth NVNT g 2412MHz Ant1



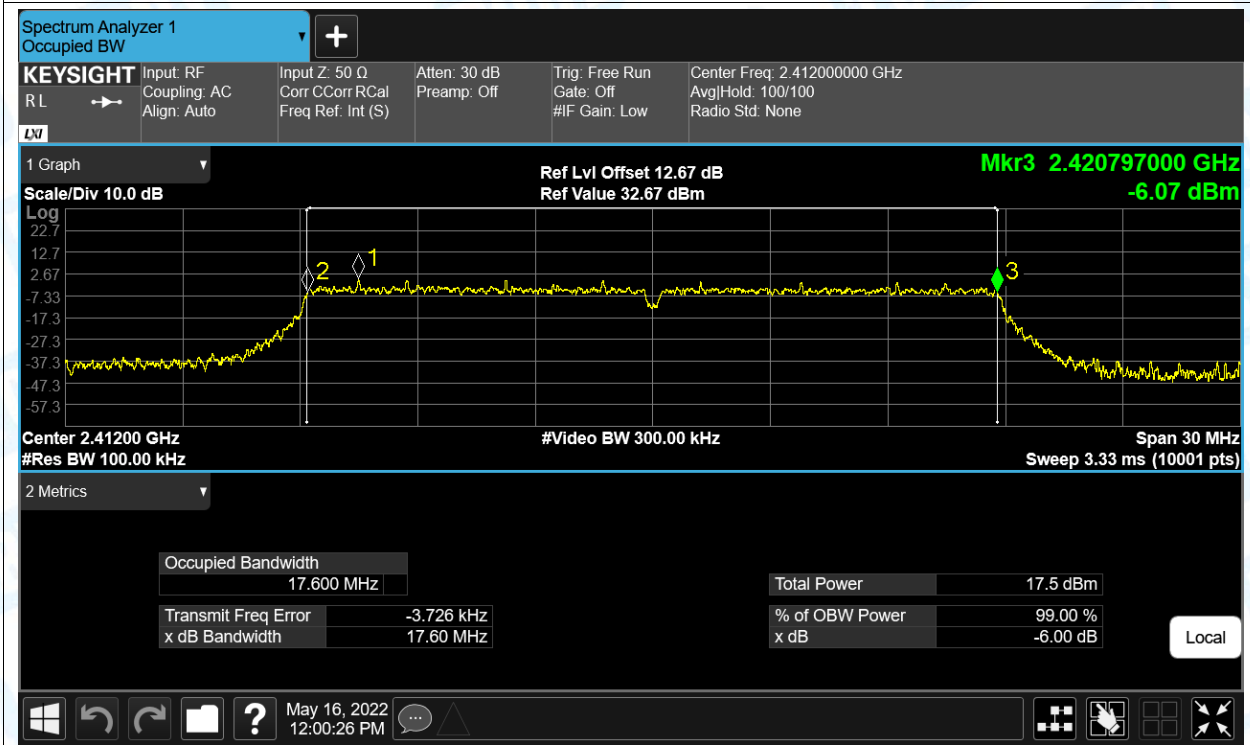
### -6dB Bandwidth NVNT g 2437MHz Ant1



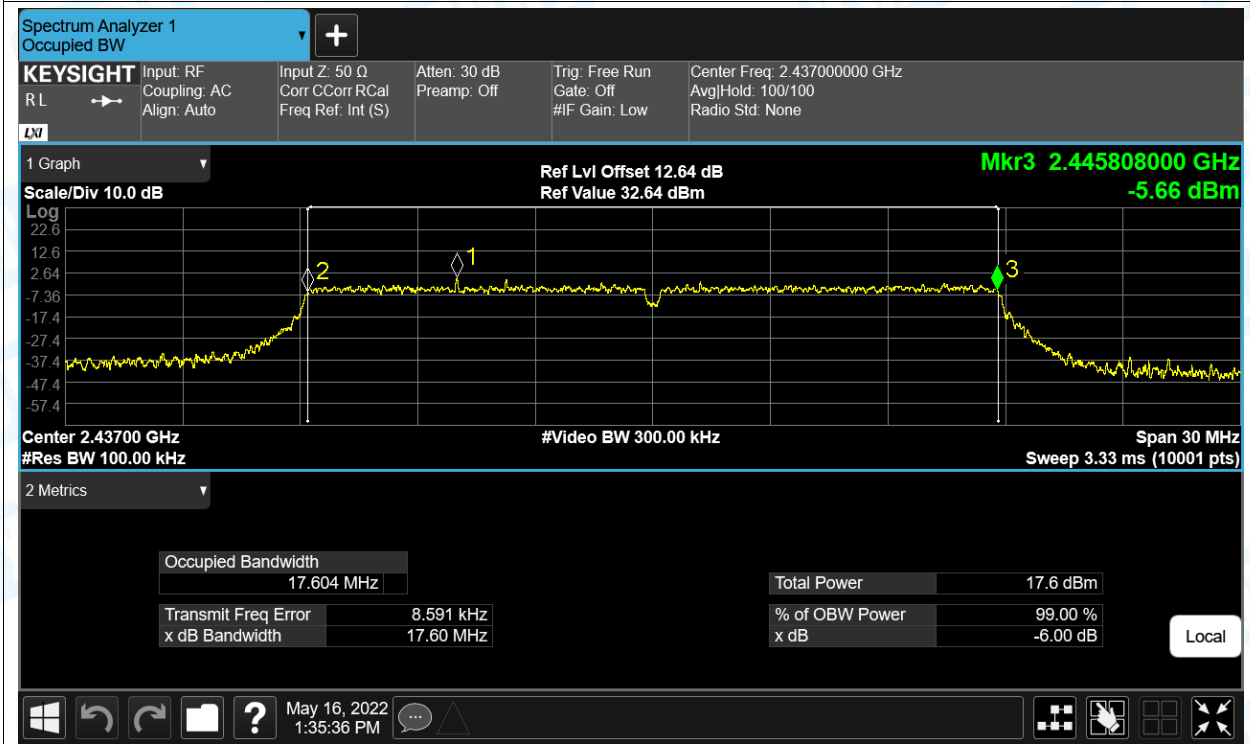
### -6dB Bandwidth NVNT g 2462MHz Ant1

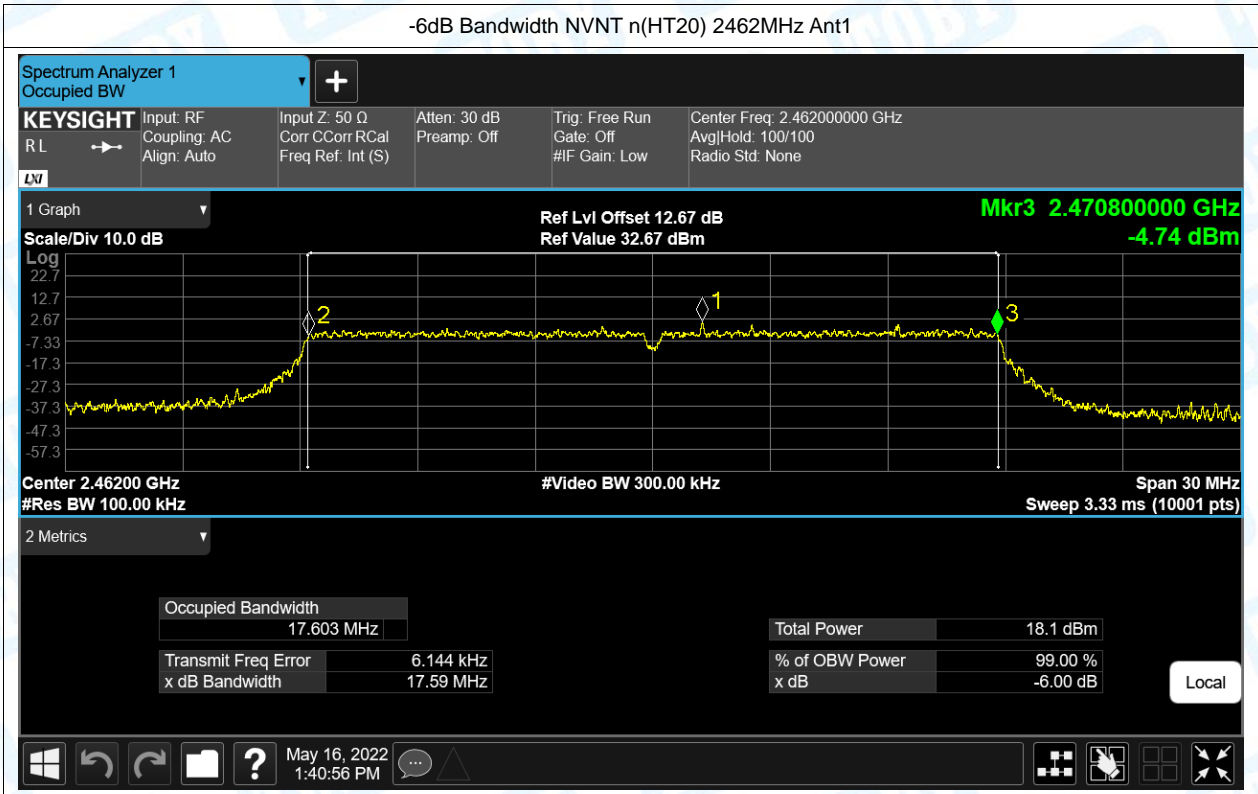


### -6dB Bandwidth NVNT n(HT20) 2412MHz Ant1



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



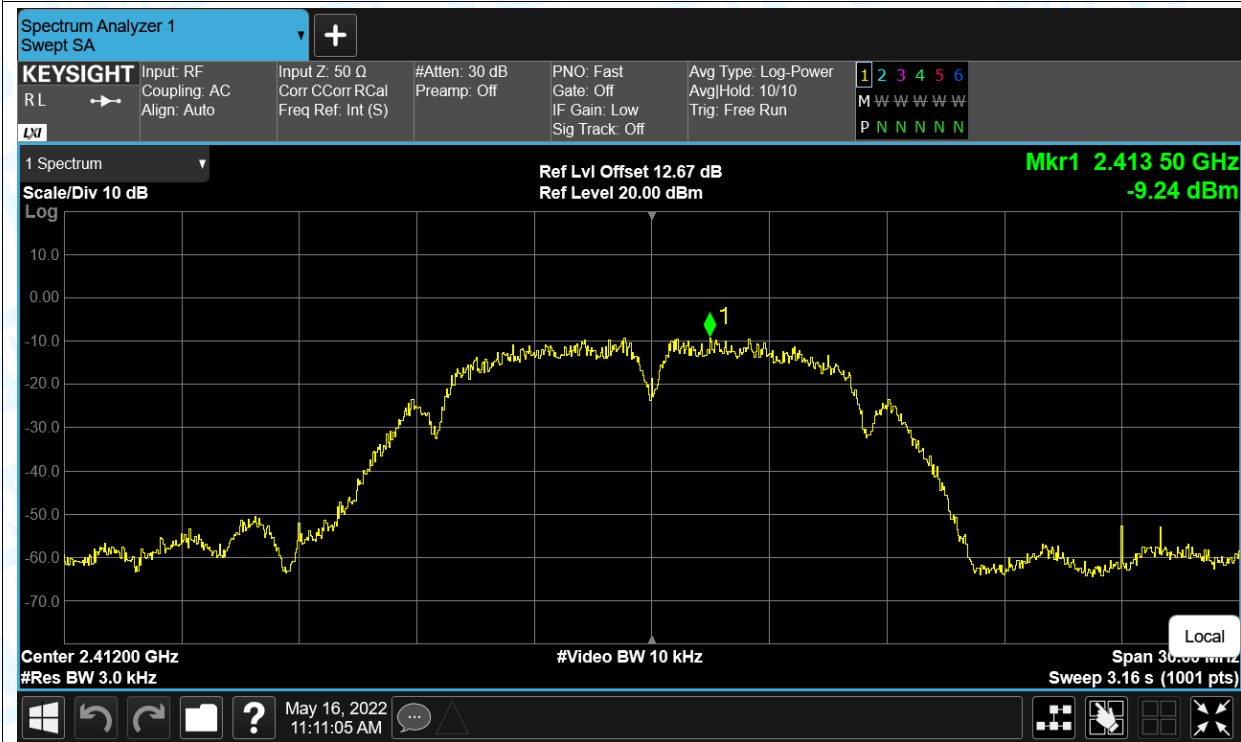


## Maximum Power Spectral Density Level

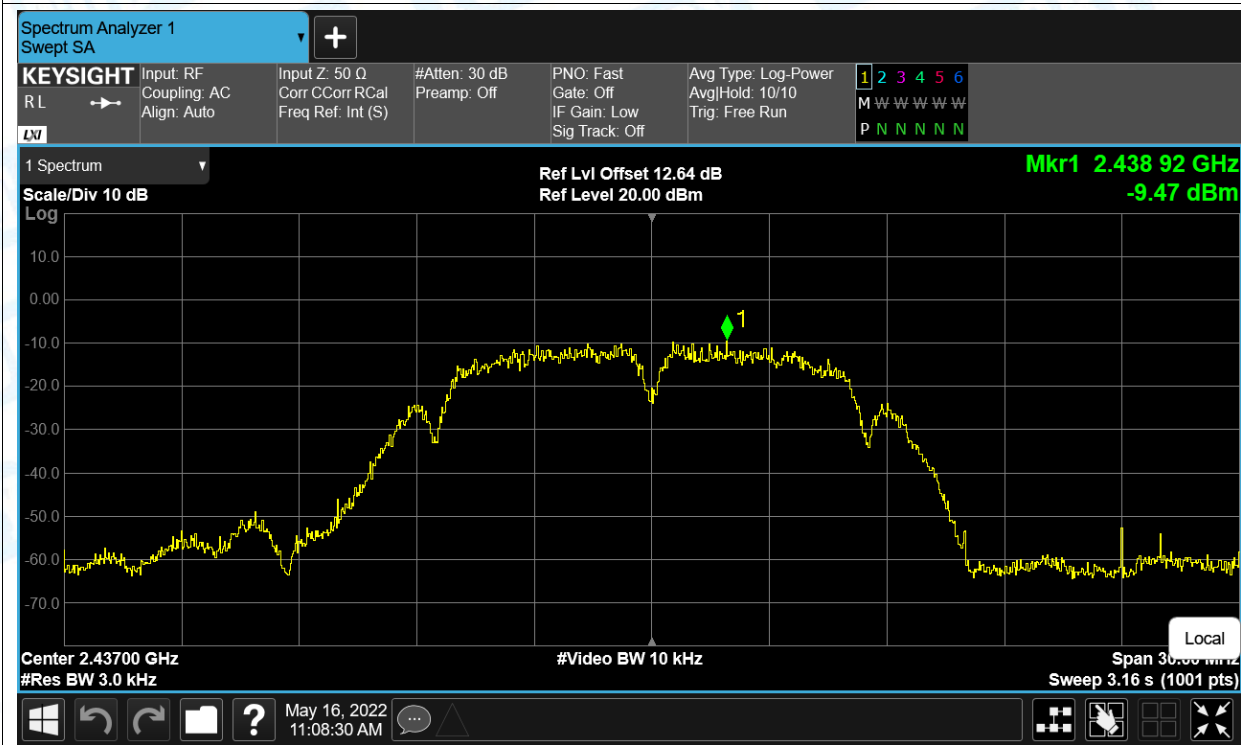
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm/3KHz)	Limit ((dBm/3KHz))	Verdict
NVNT	b	2412	Ant1	-9.236	8	Pass
NVNT	b	2437	Ant1	-9.474	8	Pass
NVNT	b	2462	Ant1	-9.721	8	Pass
NVNT	g	2412	Ant1	-10.853	8	Pass
NVNT	g	2437	Ant1	-12.078	8	Pass
NVNT	g	2462	Ant1	-11.28	8	Pass
NVNT	n(HT20)	2412	Ant1	-12.83	8	Pass
NVNT	n(HT20)	2437	Ant1	-14.352	8	Pass
NVNT	n(HT20)	2462	Ant1	-12.894	8	Pass

### Test Graphs

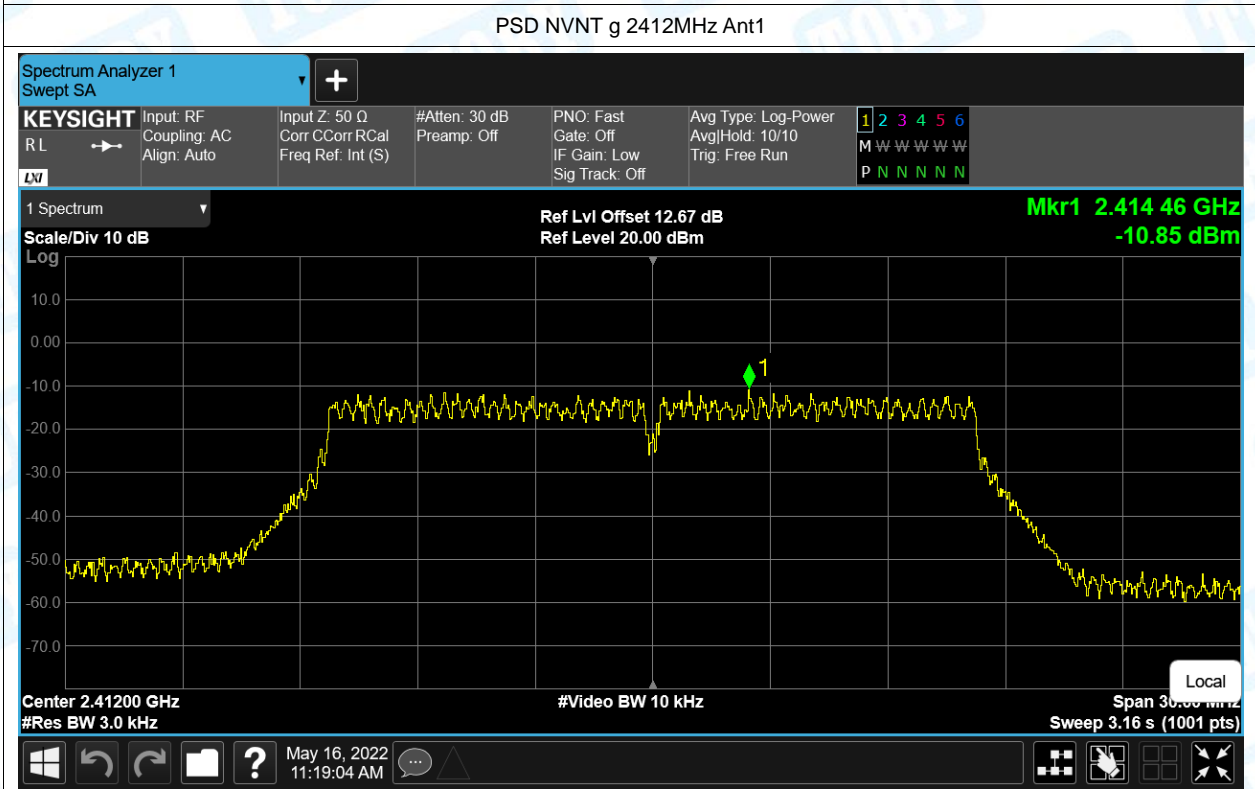
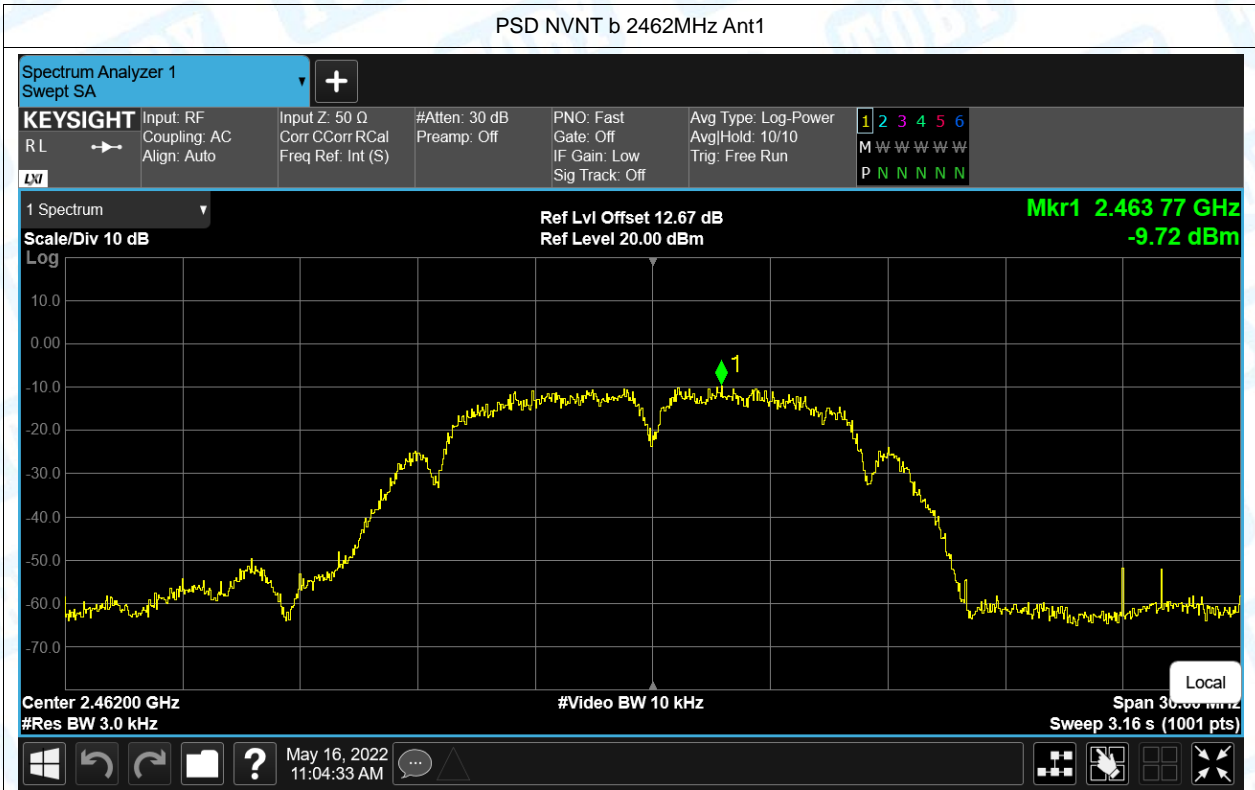
#### PSD NVNT b 2412MHz Ant1

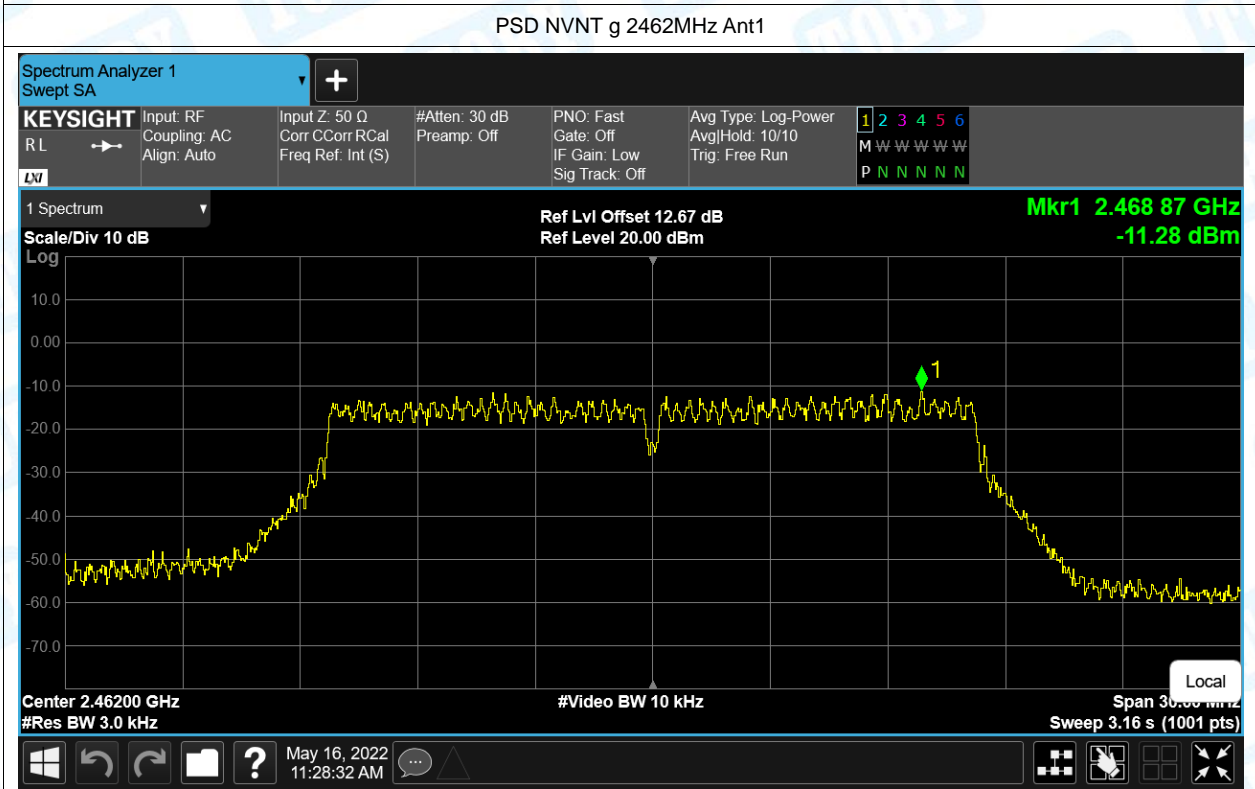
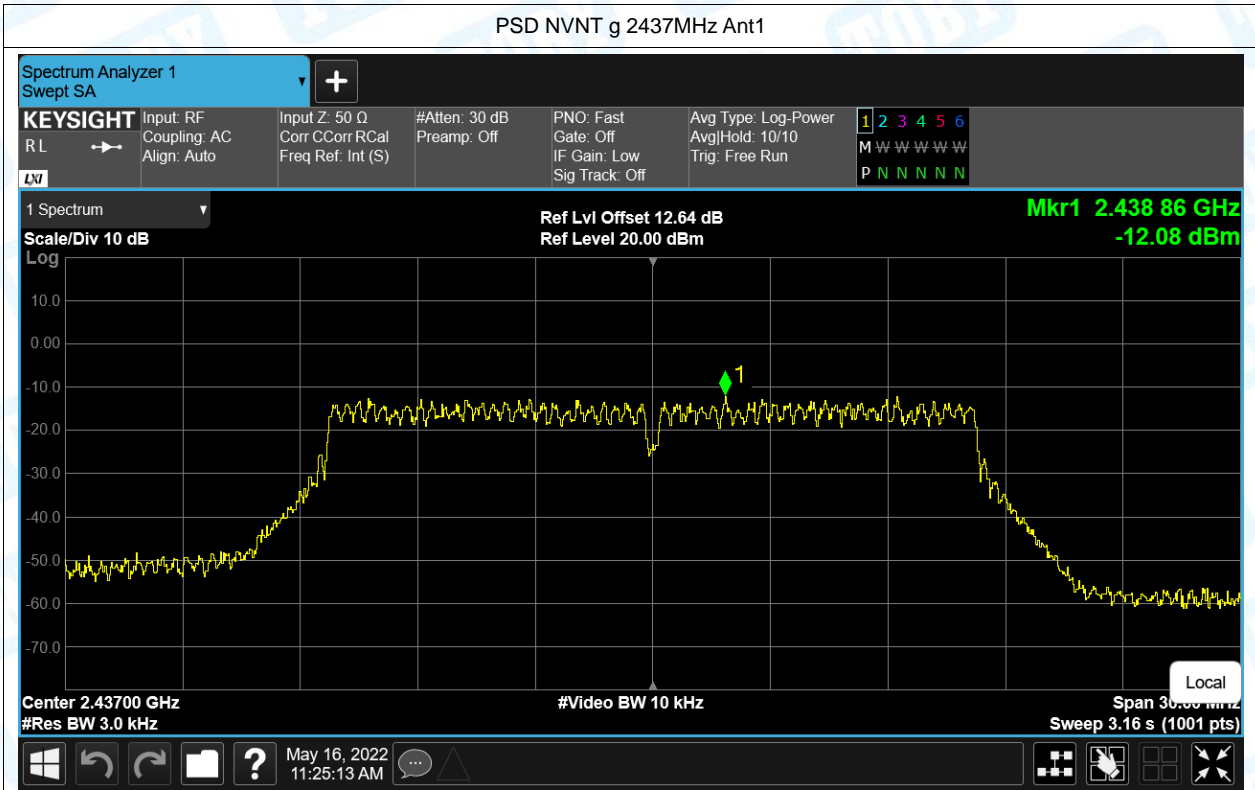


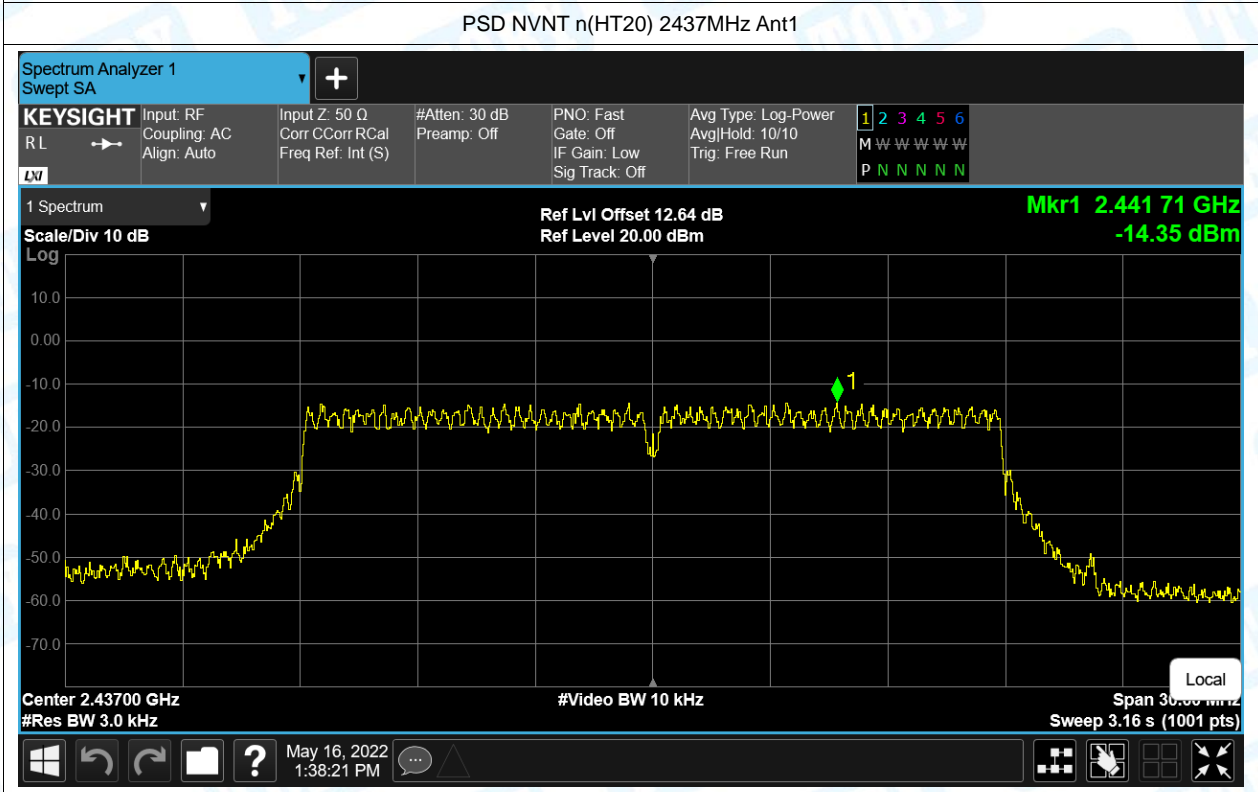
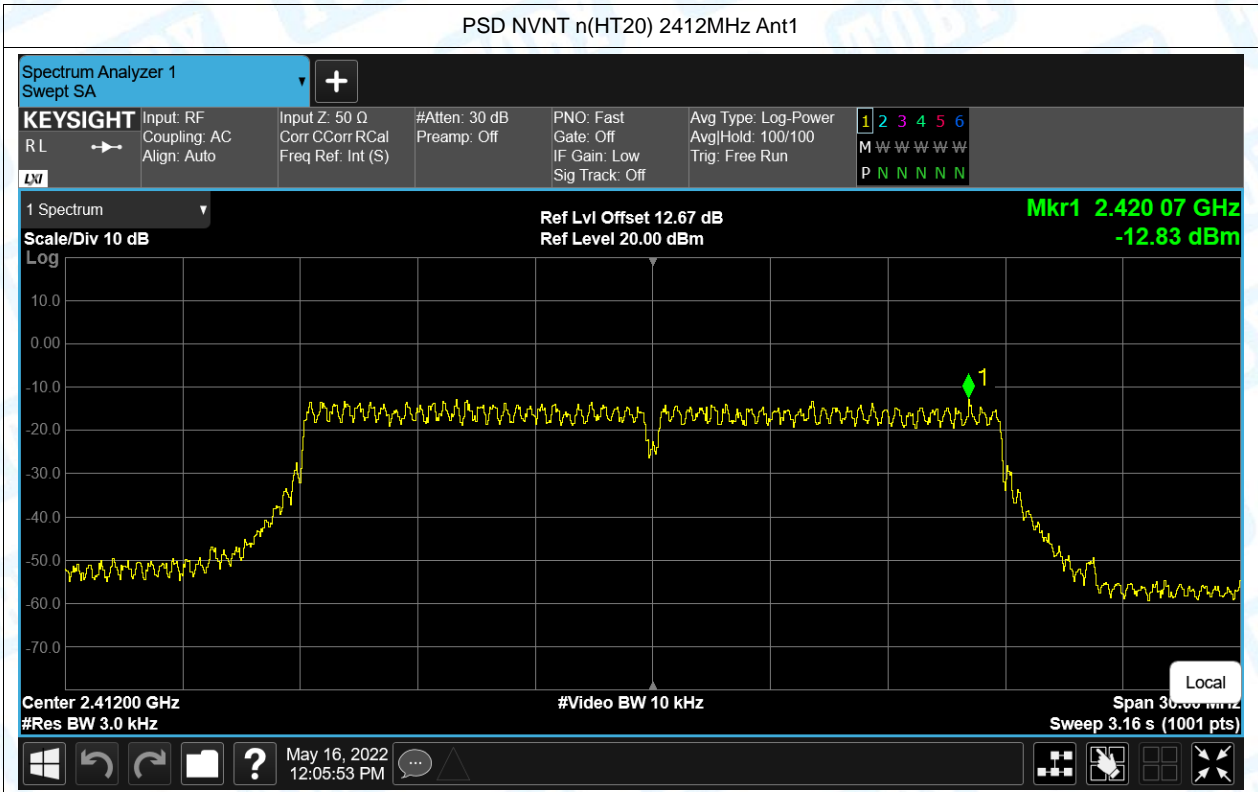
#### PSD NVNT b 2437MHz Ant1

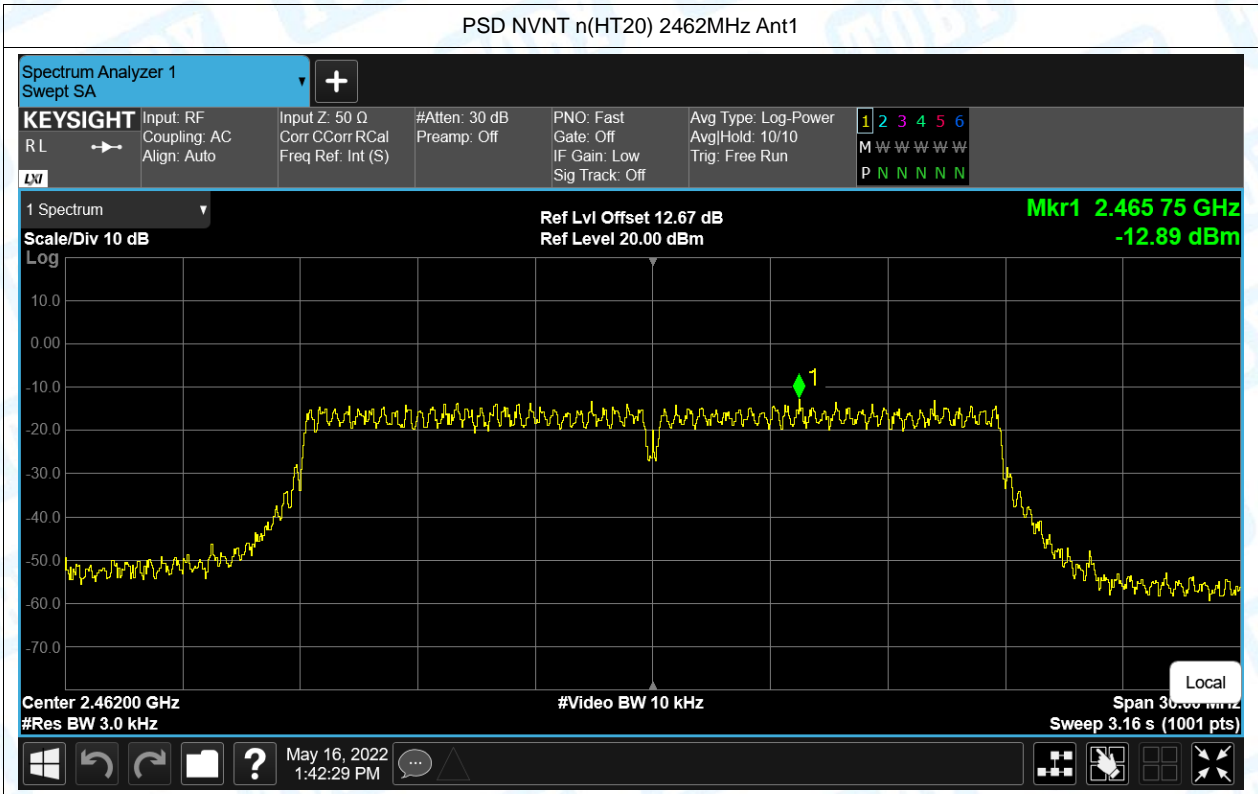










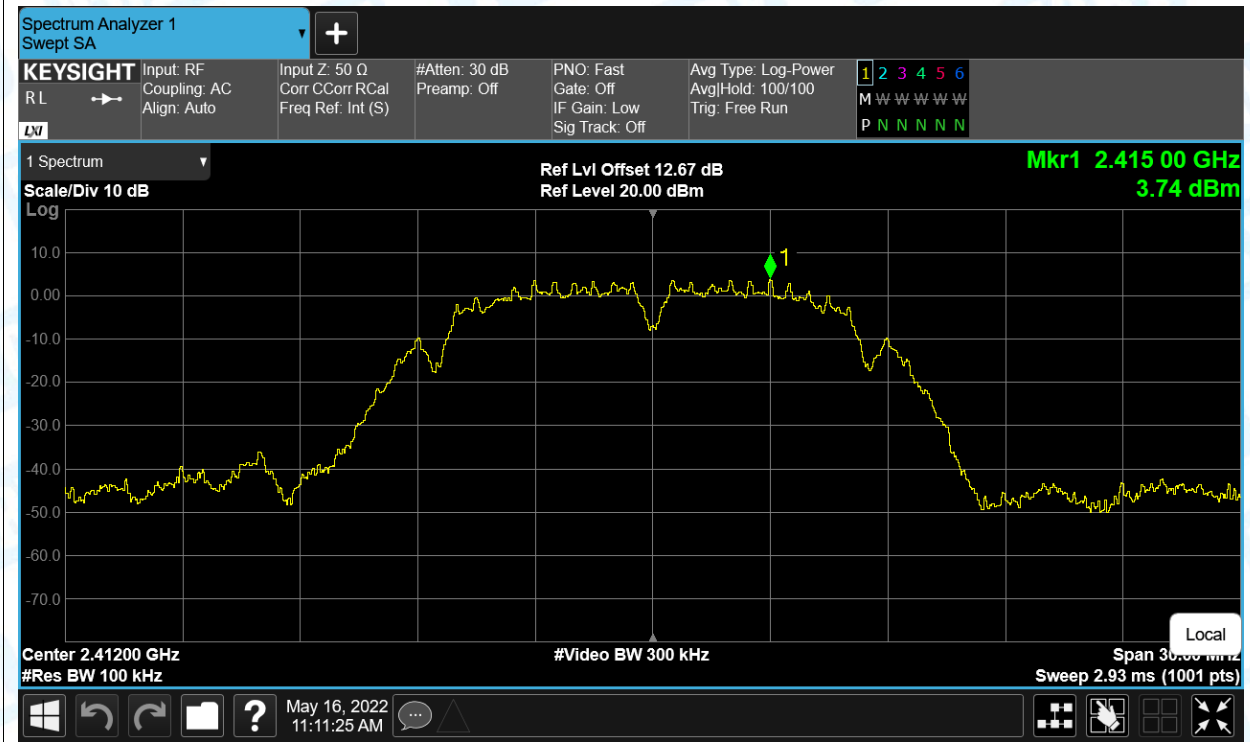


## Band Edge

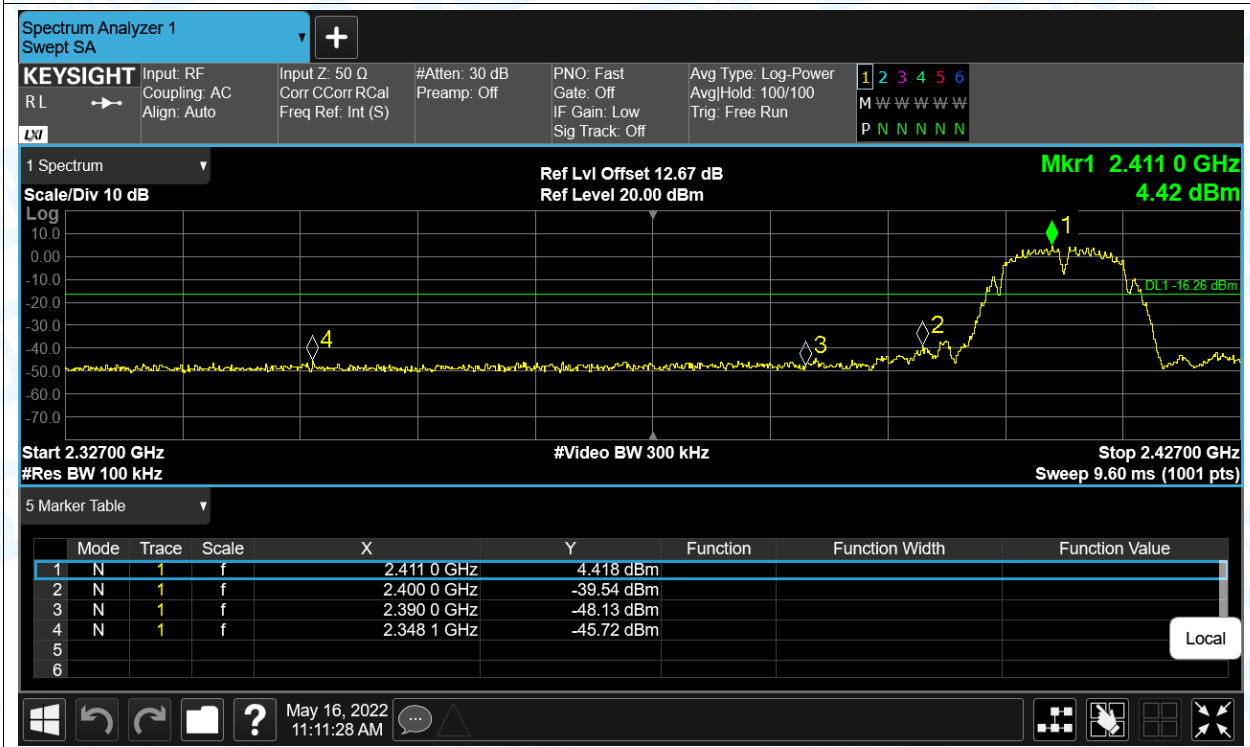
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-49.46	-20	Pass
NVNT	b	2462	Ant1	-49.22	-20	Pass
NVNT	g	2412	Ant1	-43.31	-20	Pass
NVNT	g	2462	Ant1	-45.21	-20	Pass
NVNT	n(HT20)	2412	Ant1	-40.7	-20	Pass
NVNT	n(HT20)	2462	Ant1	-42.48	-20	Pass

Test Graphs

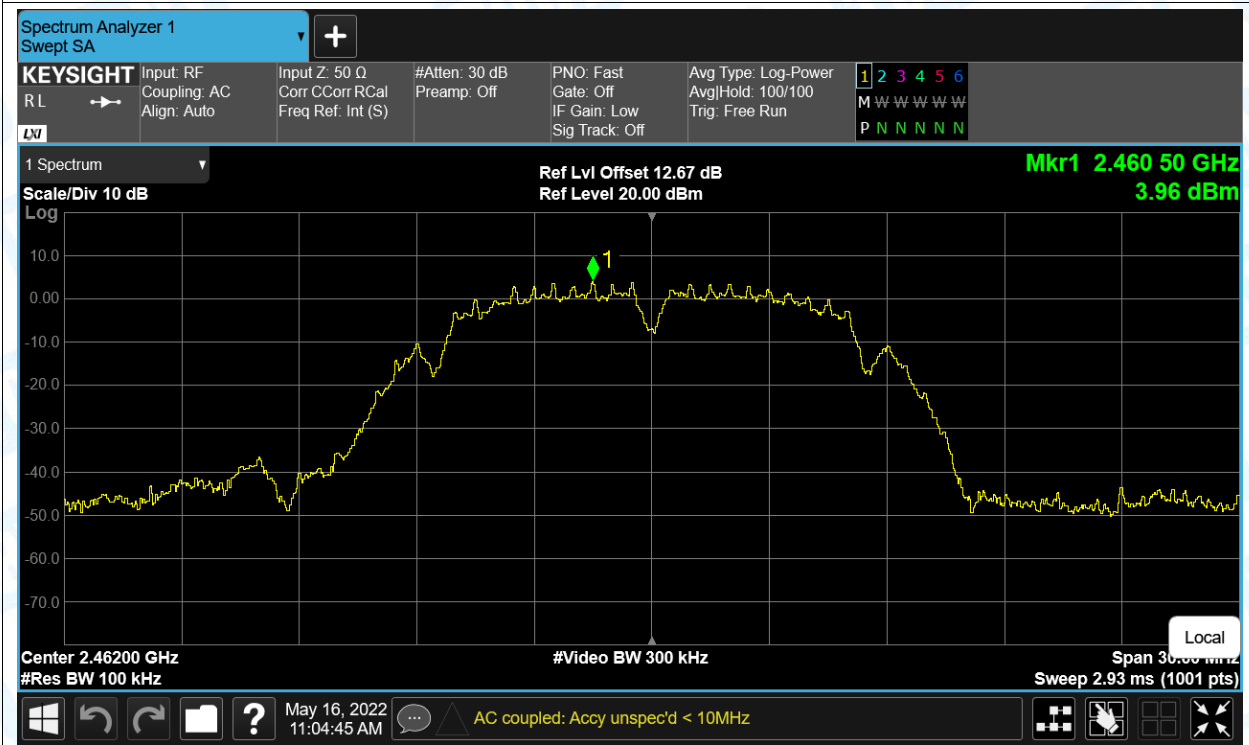
Band Edge NVNT b 2412MHz Ant1 Ref



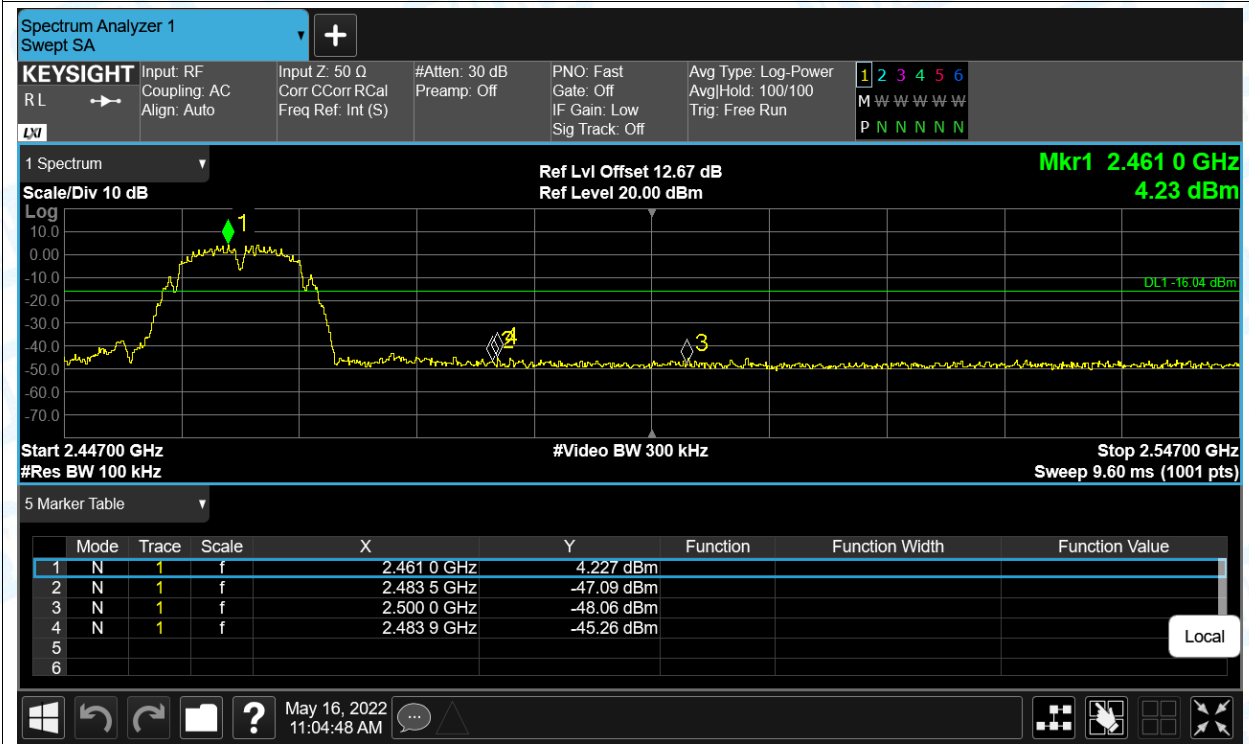
Band Edge NVNT b 2412MHz Ant1 Emission

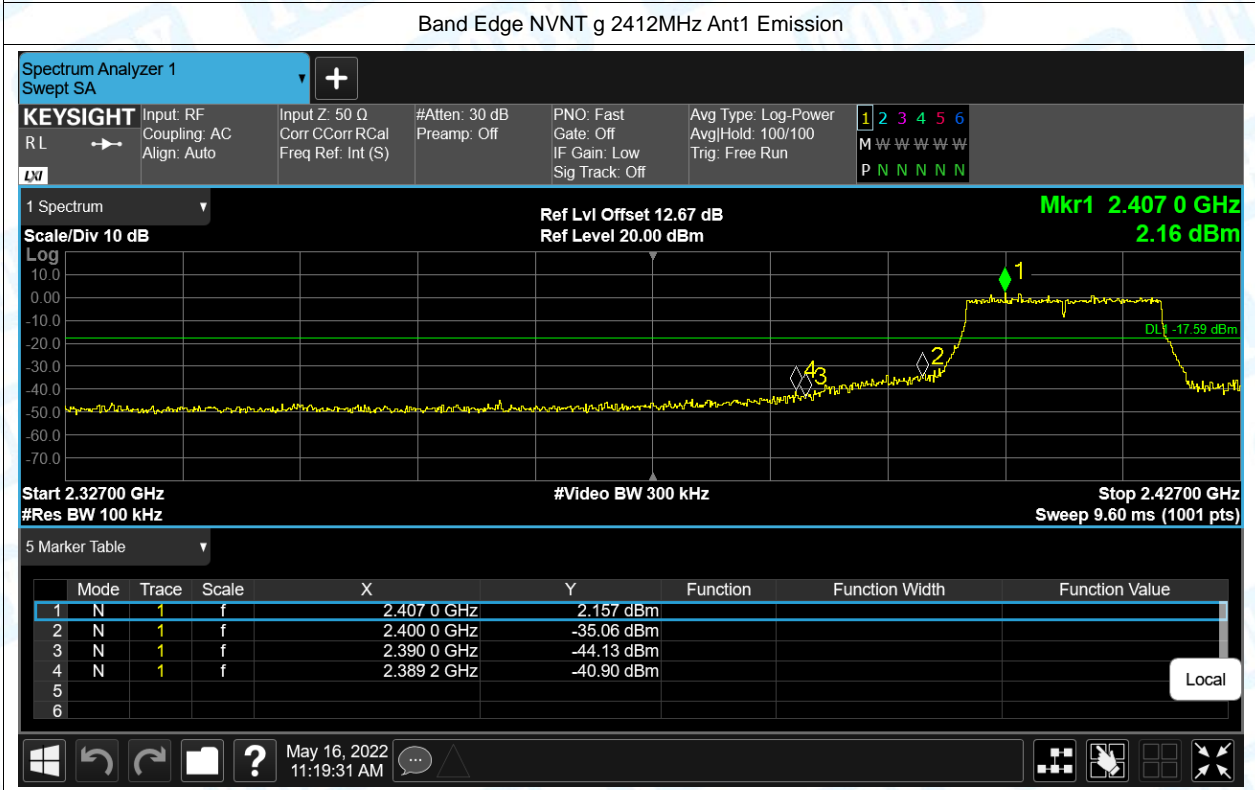
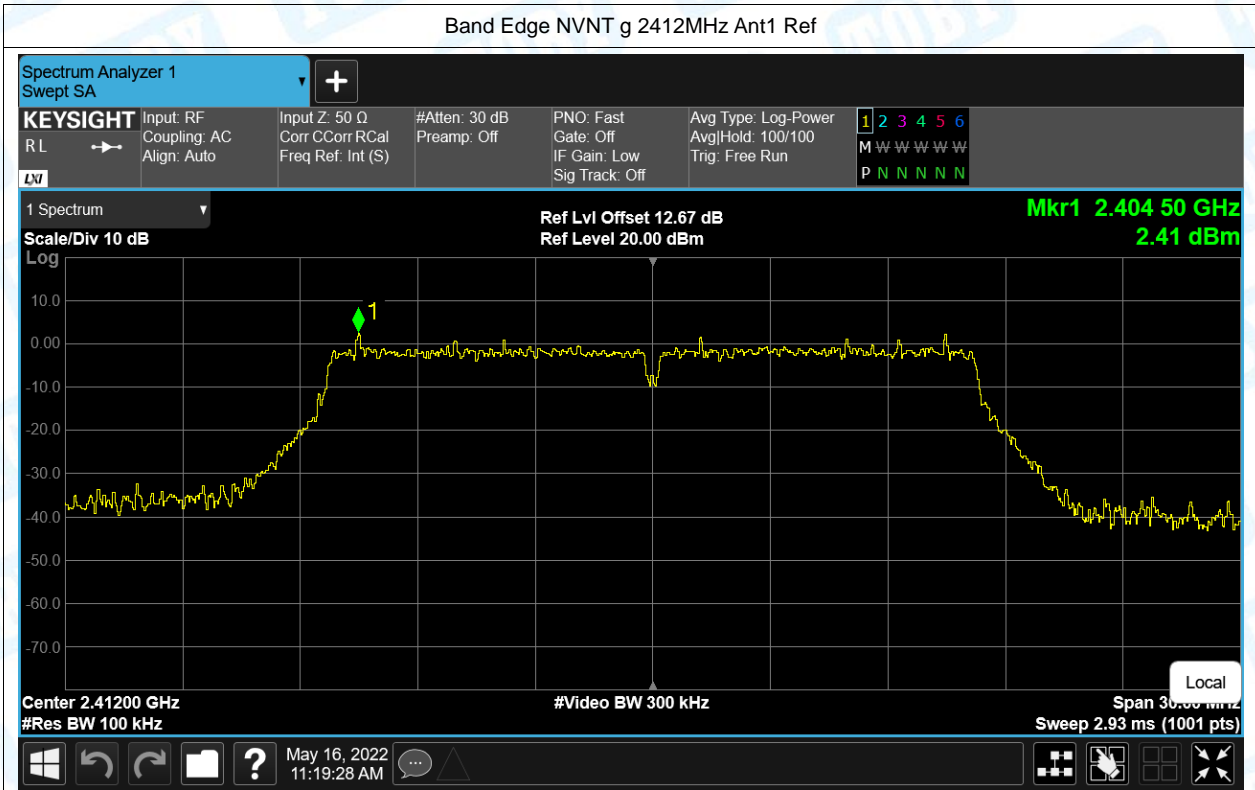


### Band Edge NVNT b 2462MHz Ant1 Ref



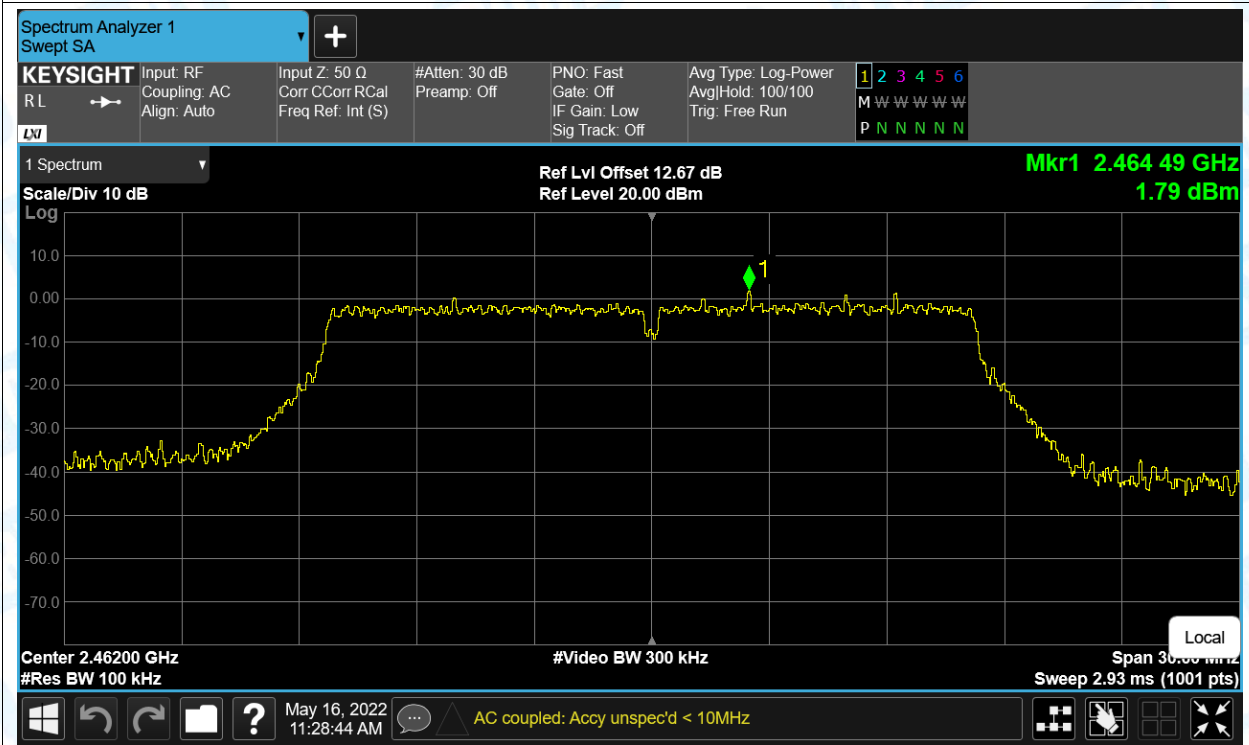
### Band Edge NVNT b 2462MHz Ant1 Emission



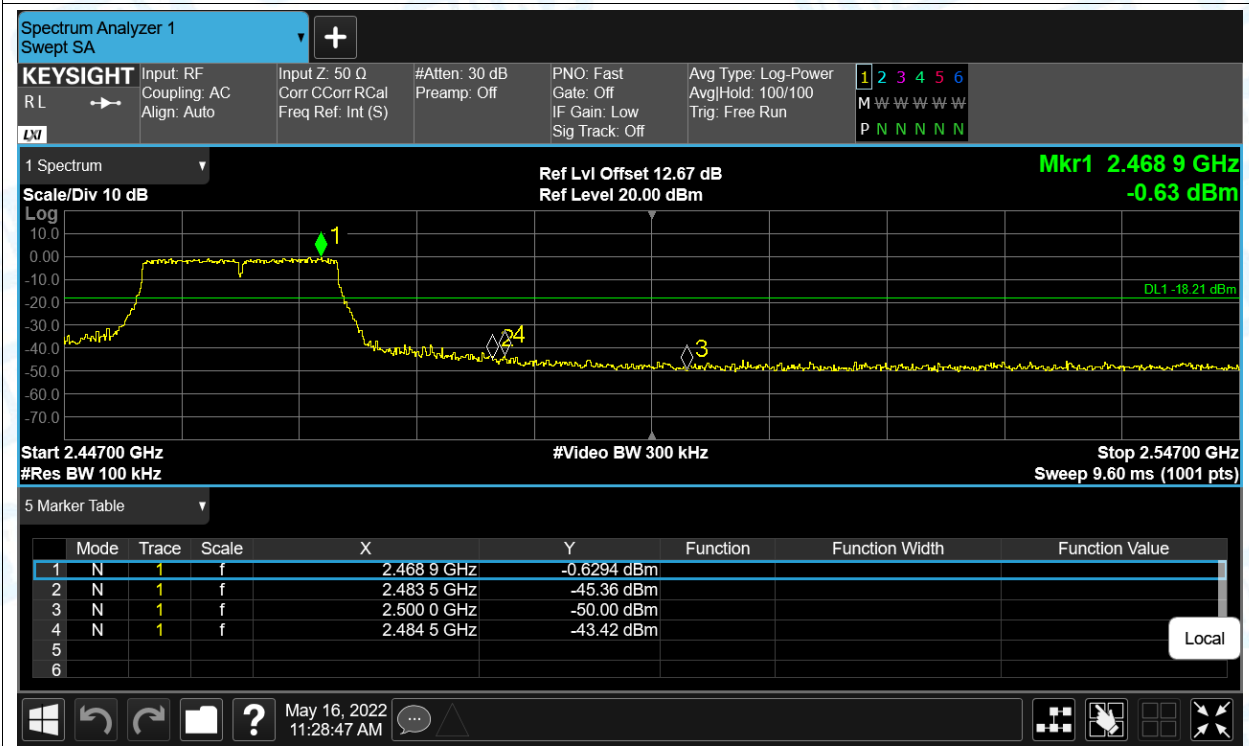


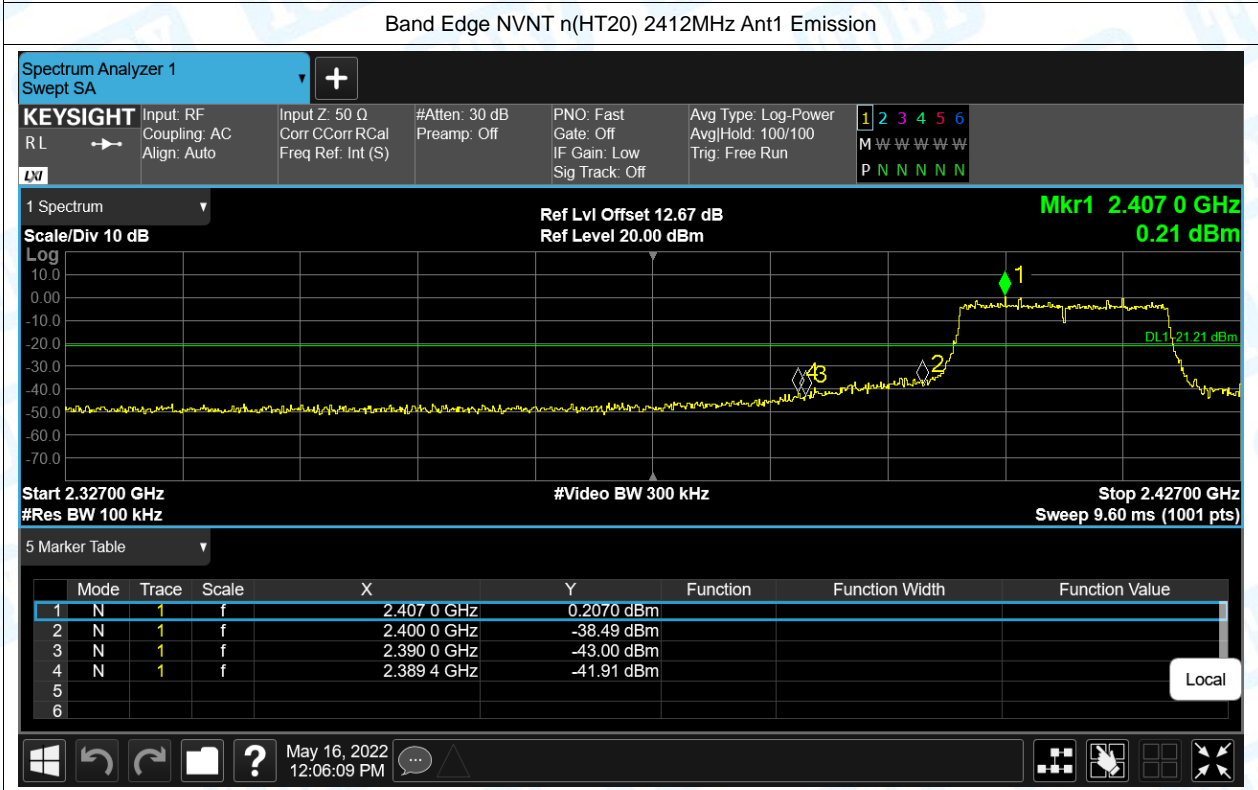
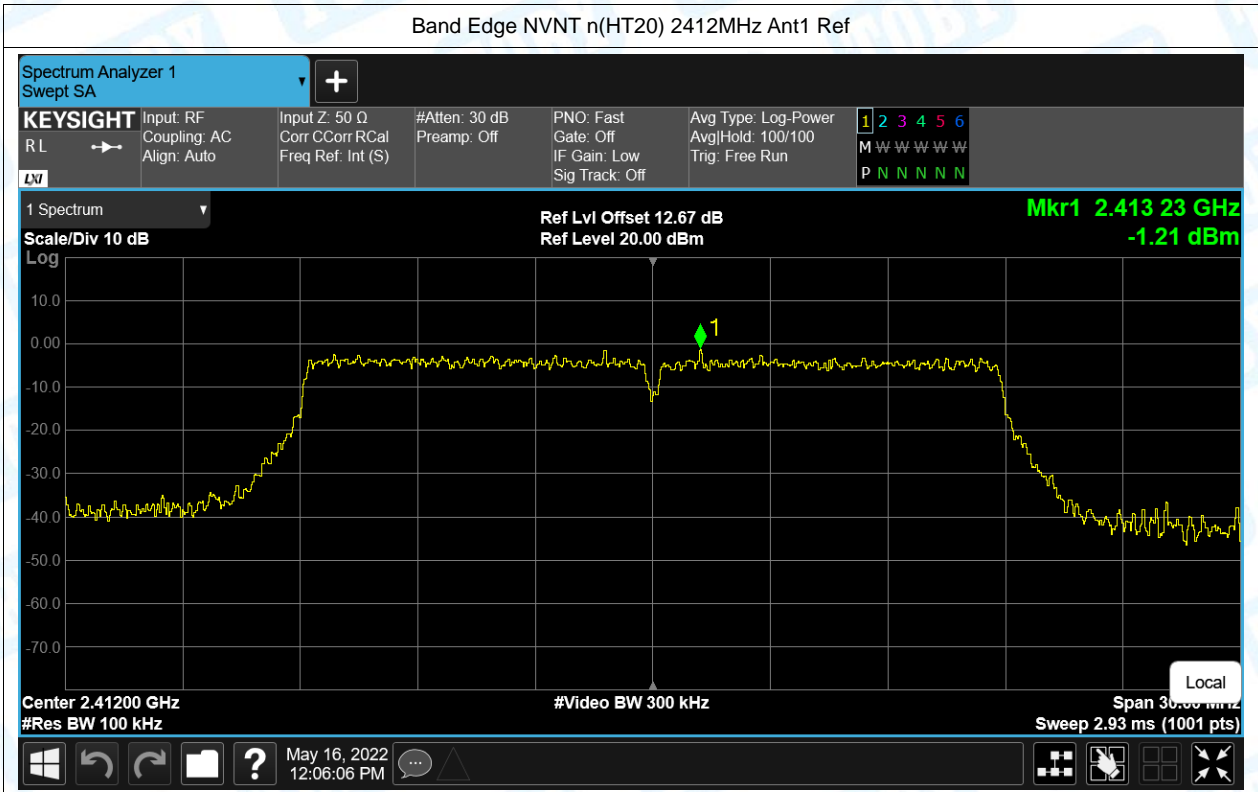


Band Edge NVNT g 2462MHz Ant1 Ref

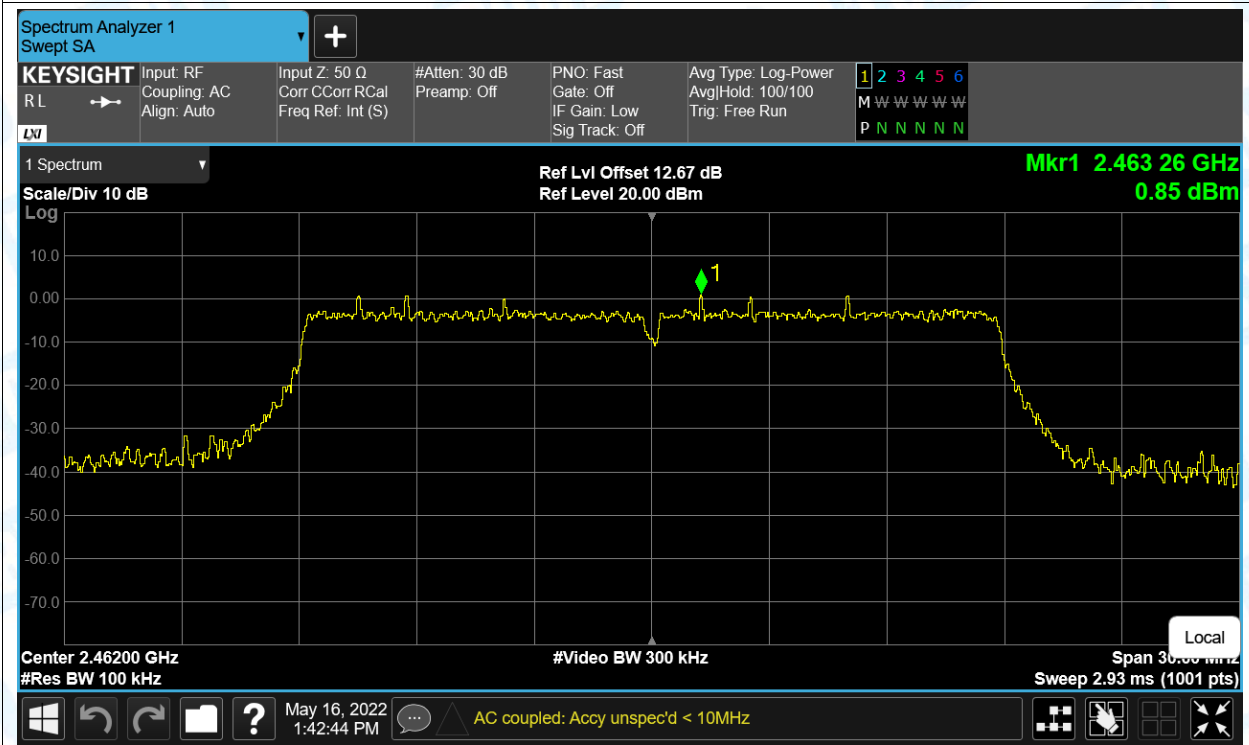


Band Edge NVNT g 2462MHz Ant1 Emission

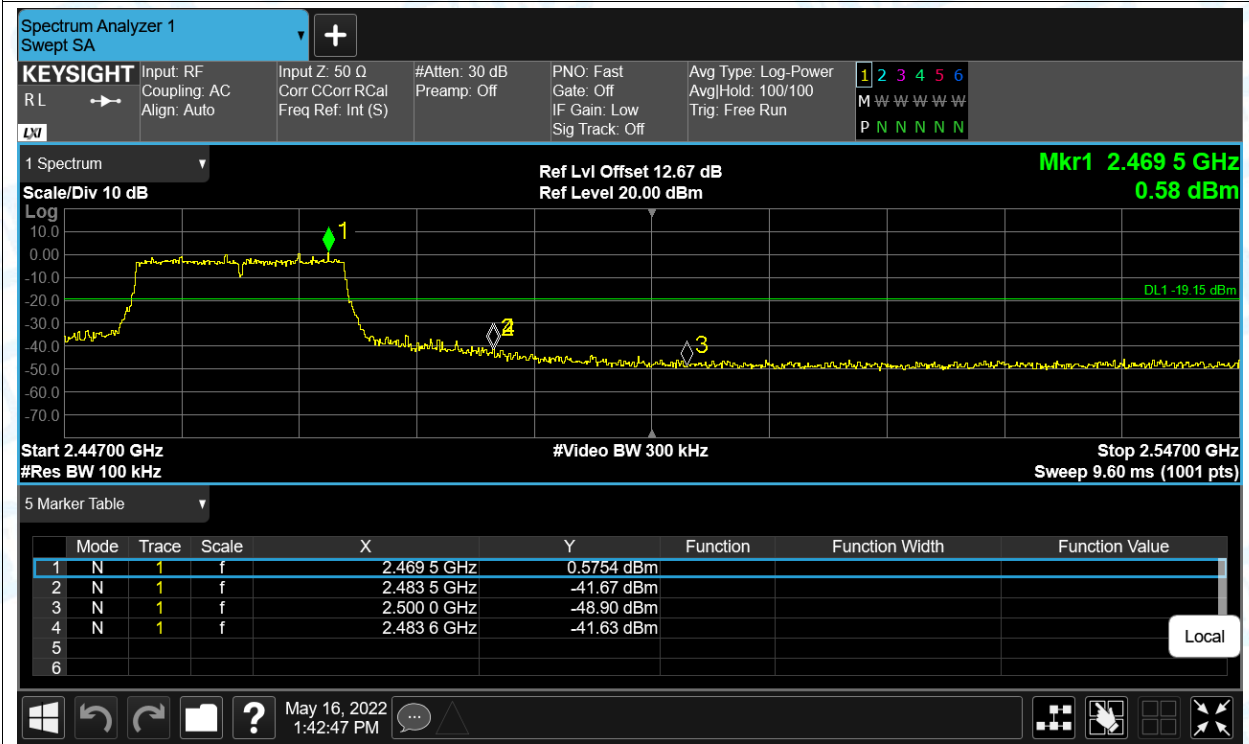




### Band Edge NVNT n(HT20) 2462MHz Ant1 Ref



### Band Edge NVNT n(HT20) 2462MHz Ant1 Emission

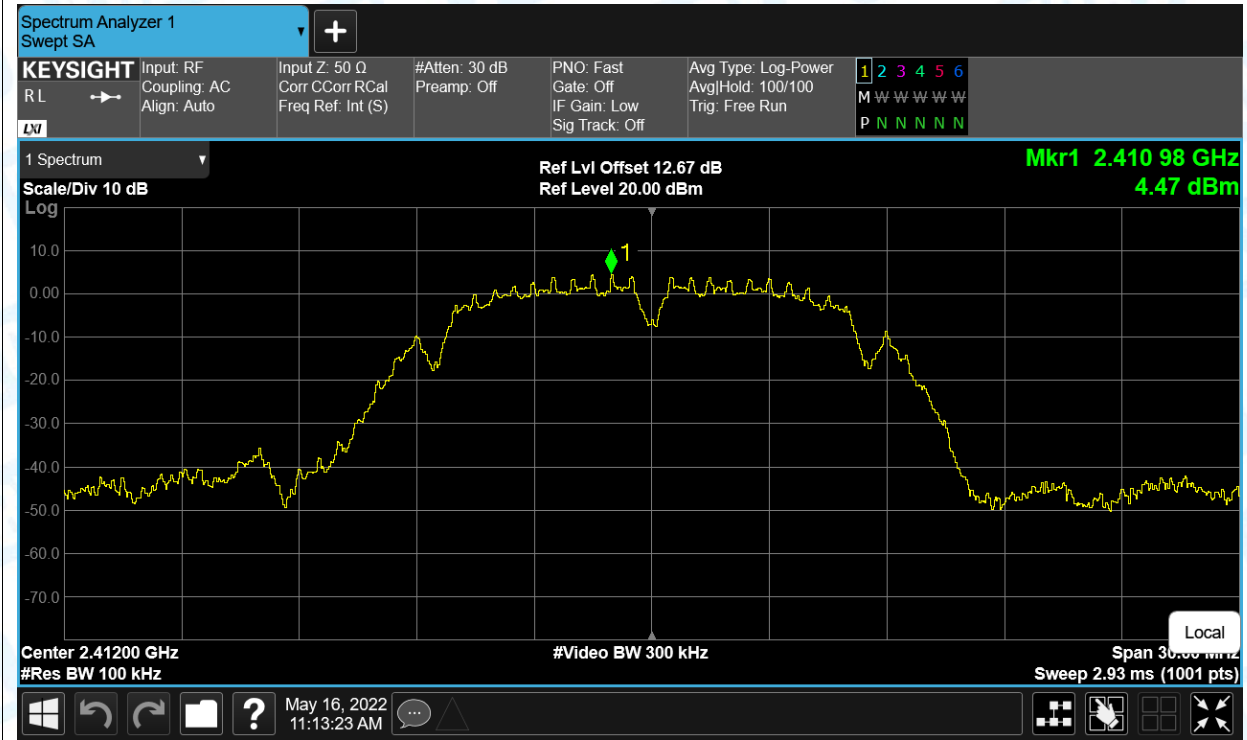


## Conducted RF Spurious Emission

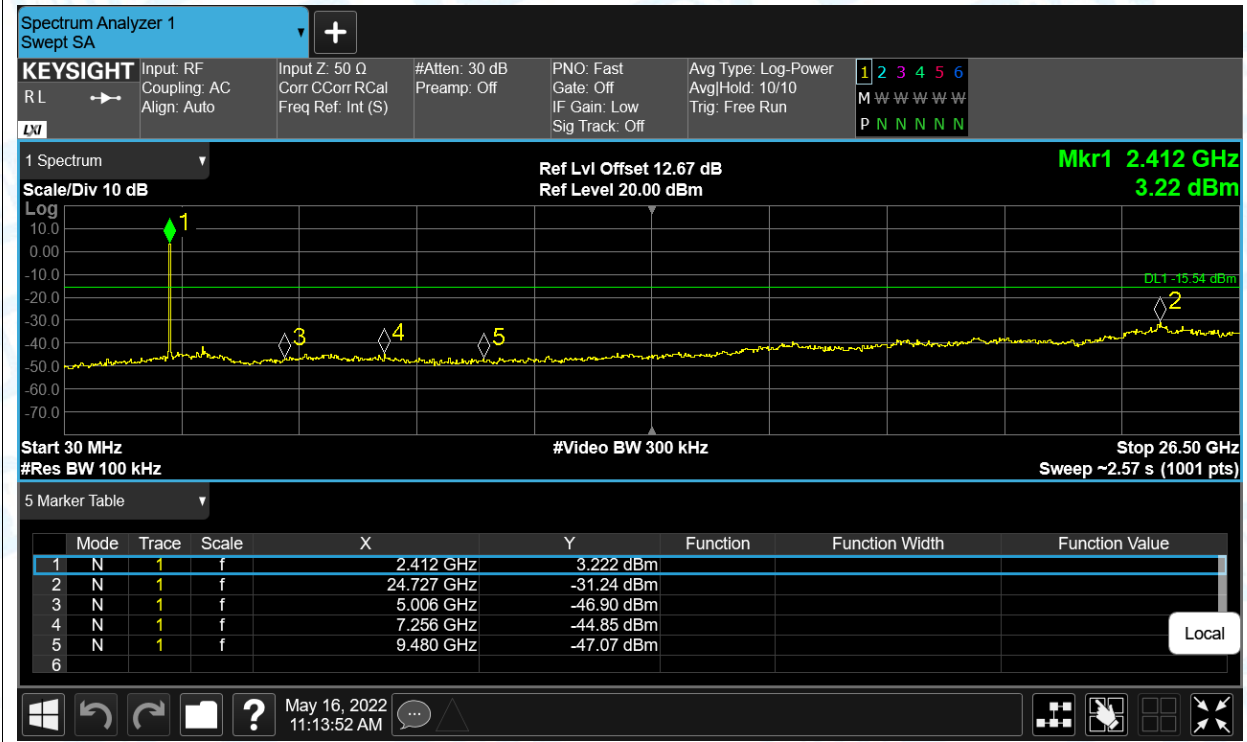
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-35.71	-20	Pass
NVNT	b	2437	Ant1	-35.3	-20	Pass
NVNT	b	2462	Ant1	-35.96	-20	Pass
NVNT	g	2412	Ant1	-34.66	-20	Pass
NVNT	g	2437	Ant1	-34.2	-20	Pass
NVNT	g	2462	Ant1	-33.46	-20	Pass
NVNT	n(HT20)	2412	Ant1	-32.23	-20	Pass
NVNT	n(HT20)	2437	Ant1	-32.58	-20	Pass
NVNT	n(HT20)	2462	Ant1	-31.68	-20	Pass

### Test Graphs

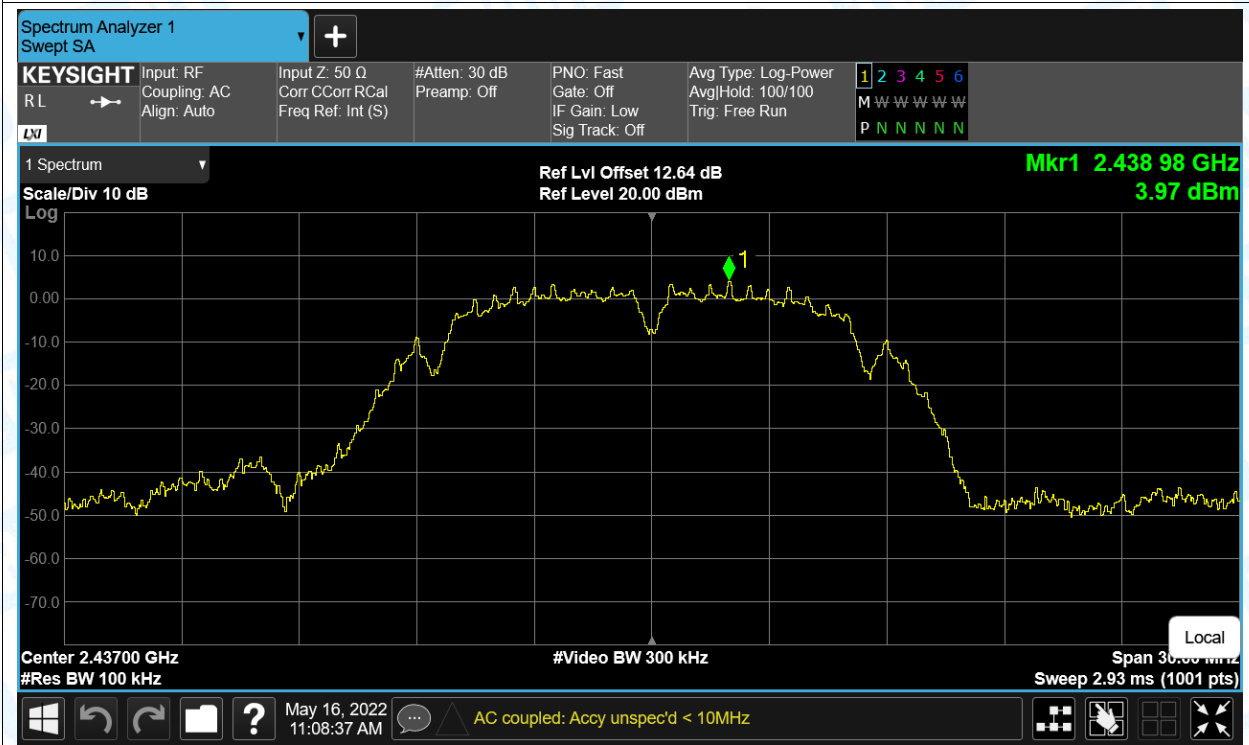
Tx. Spurious NVNT b 2412MHz Ant1 Ref



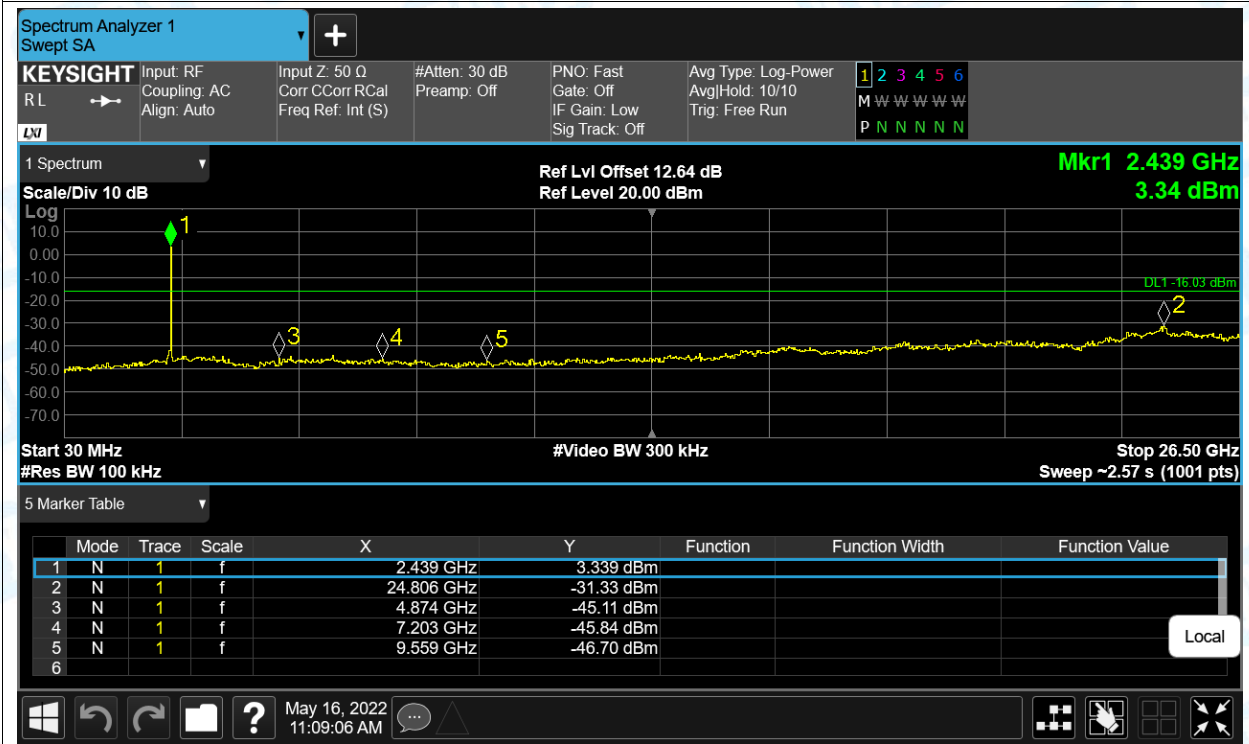
Tx. Spurious NVNT b 2412MHz Ant1 Emission



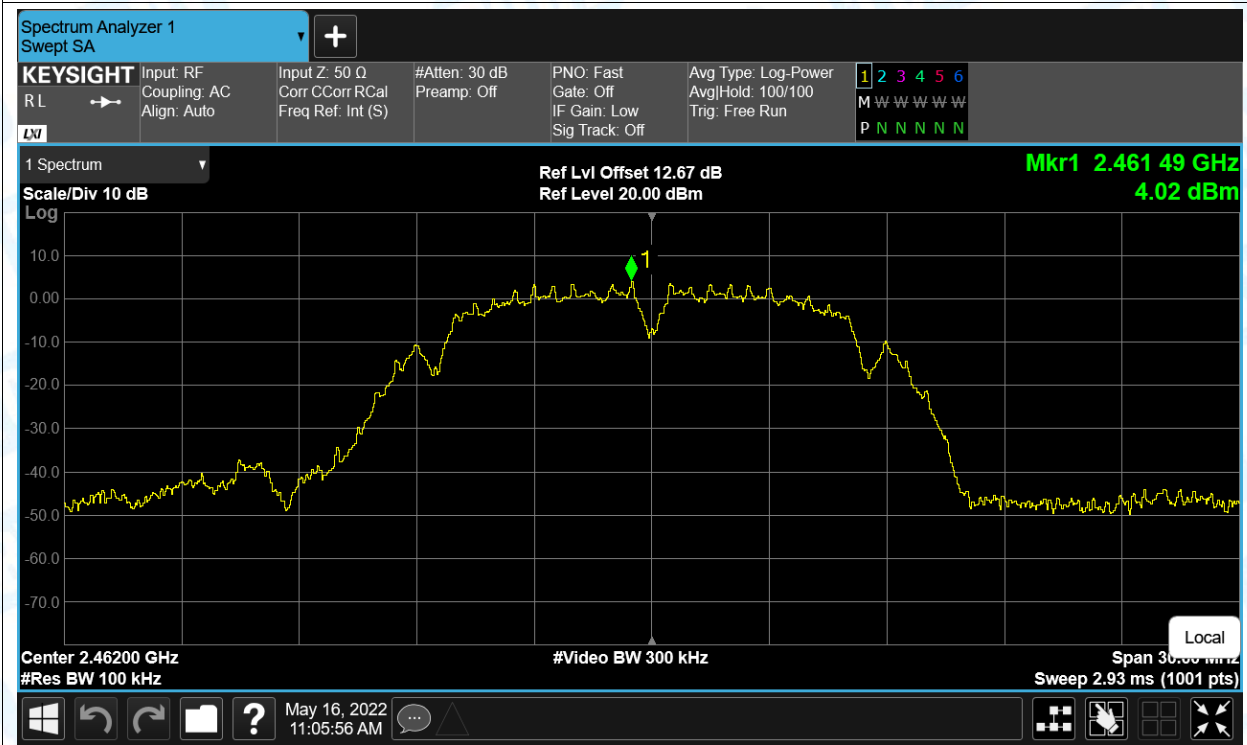
### Tx. Spurious NVNT b 2437MHz Ant1 Ref



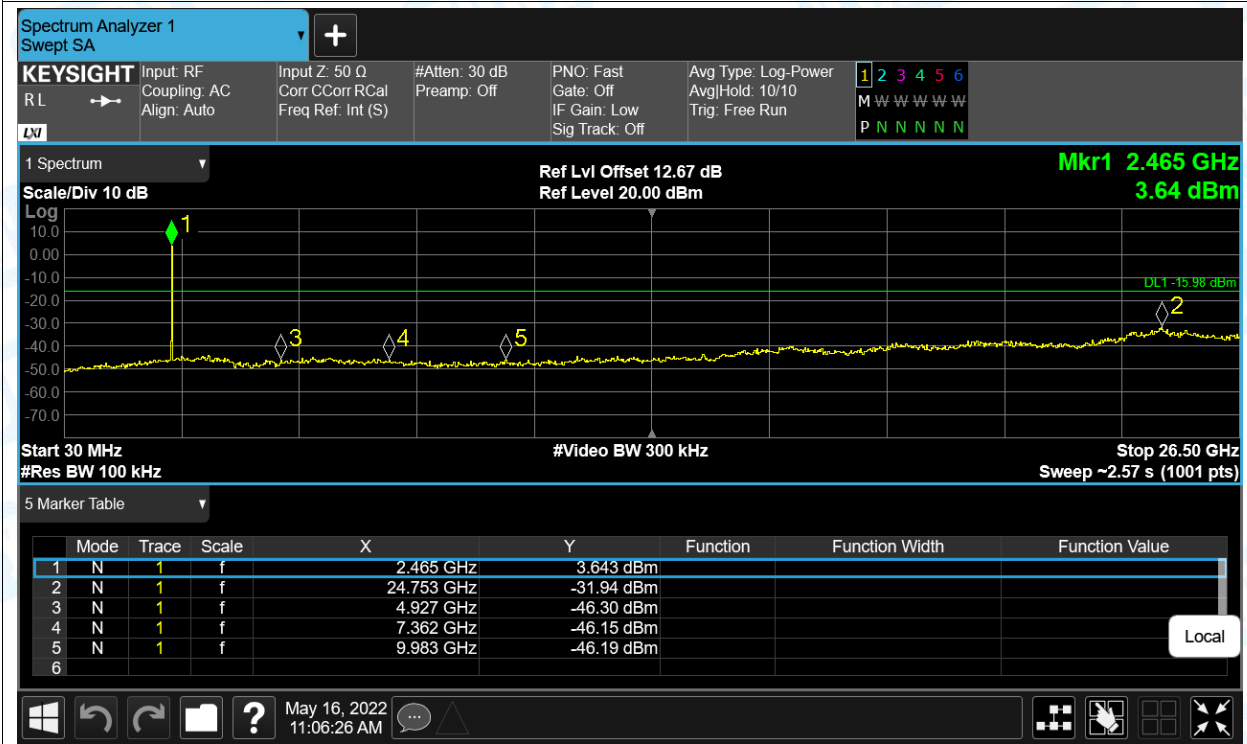
### Tx. Spurious NVNT b 2437MHz Ant1 Emission



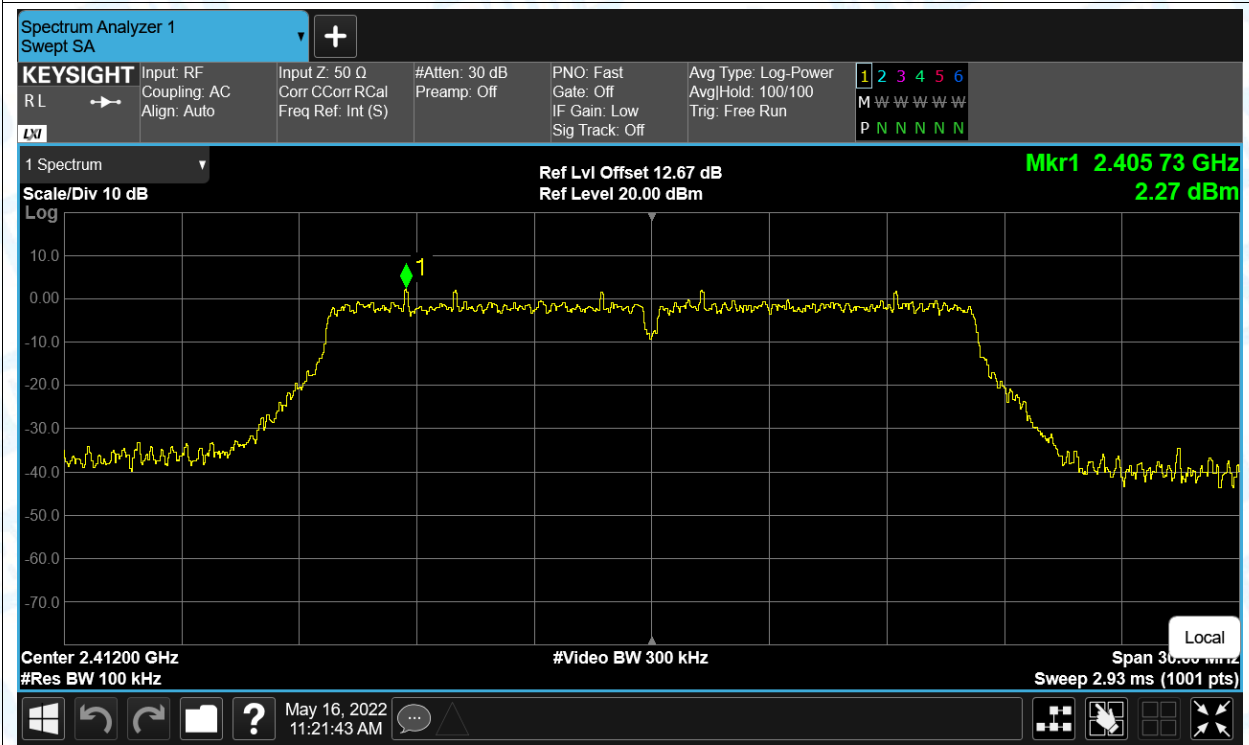
### Tx. Spurious NVNT b 2462MHz Ant1 Ref



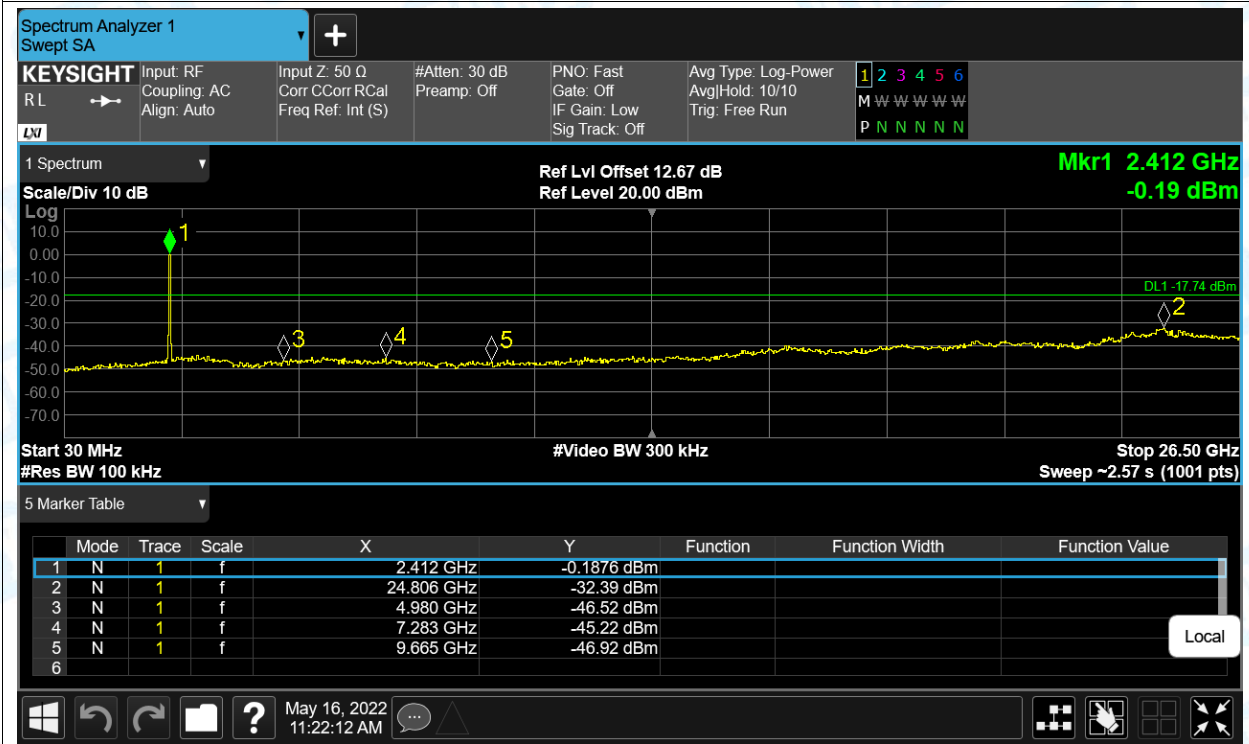
### Tx. Spurious NVNT b 2462MHz Ant1 Emission



Tx. Spurious NVNT g 2412MHz Ant1 Ref

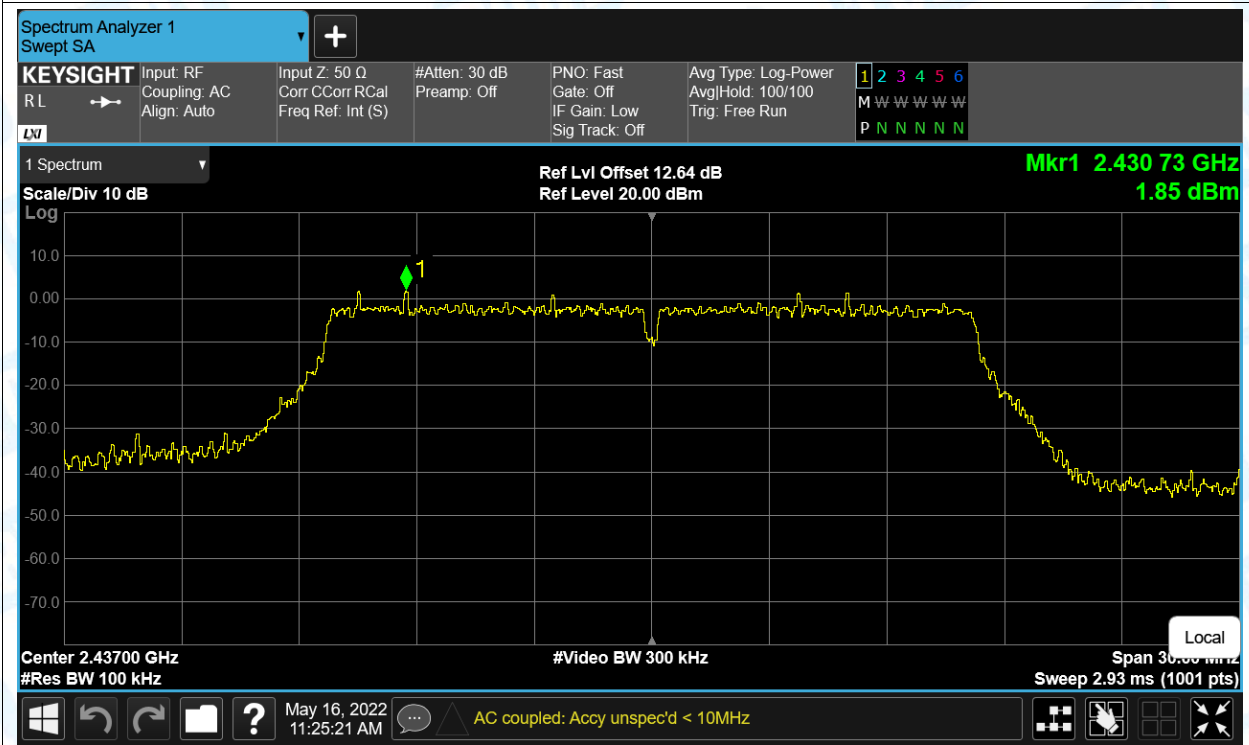


Tx. Spurious NVNT g 2412MHz Ant1 Emission

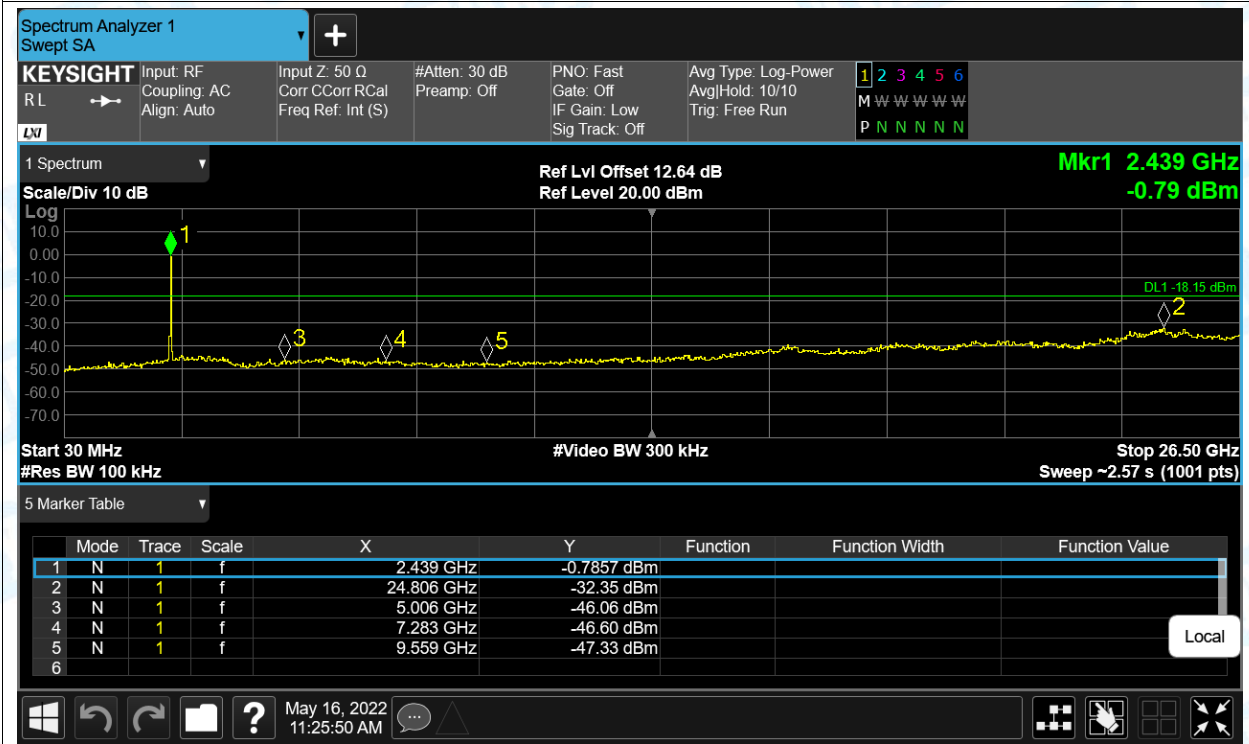




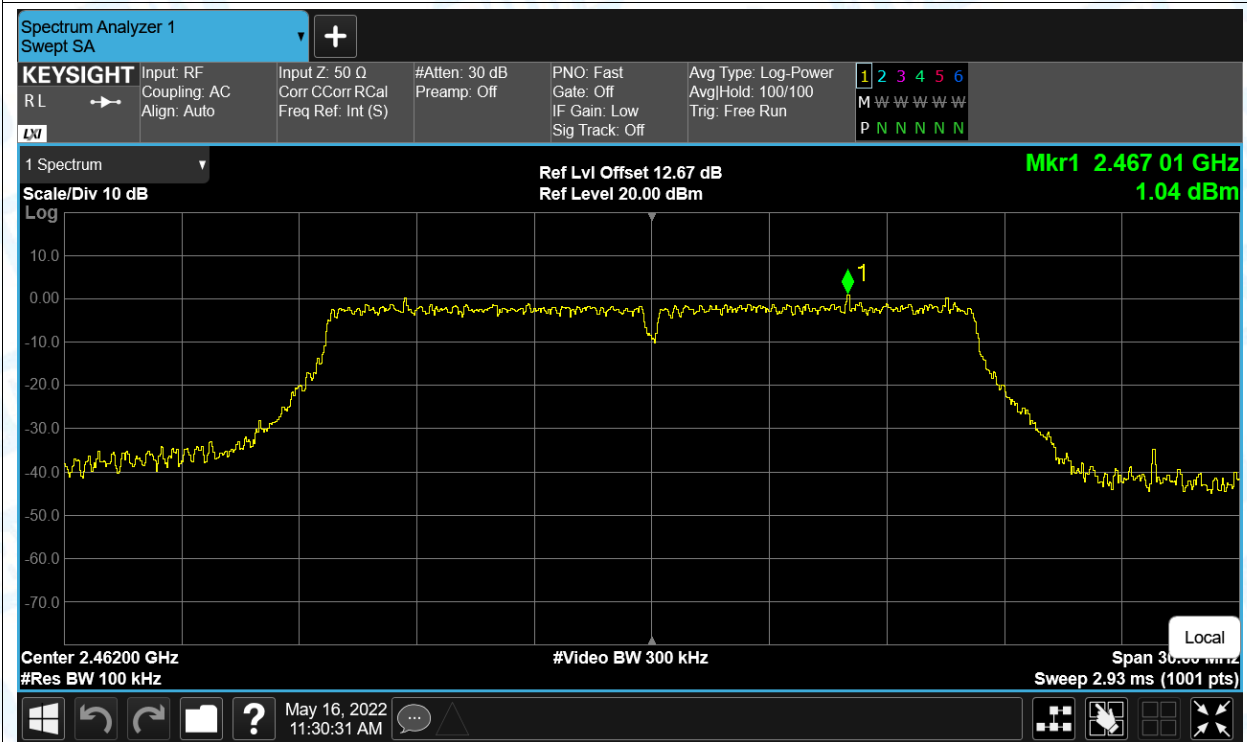
Tx. Spurious NVNT g 2437MHz Ant1 Ref



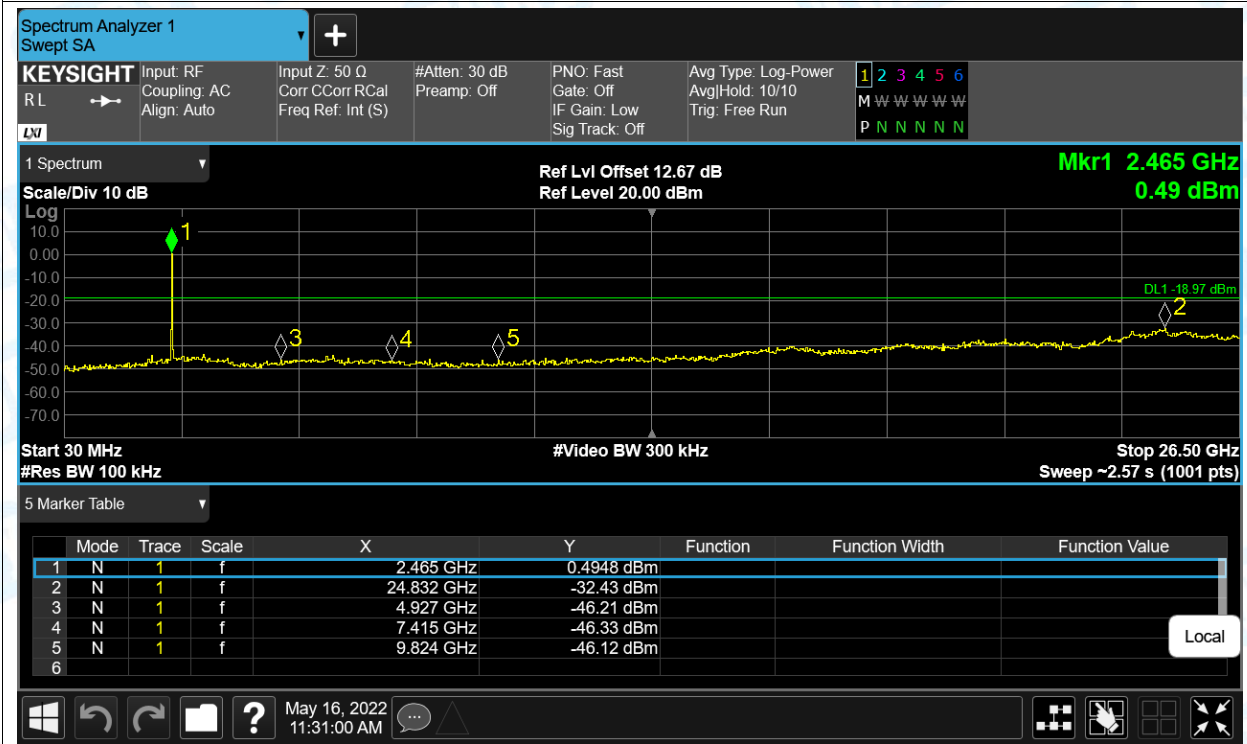
Tx. Spurious NVNT g 2437MHz Ant1 Emission



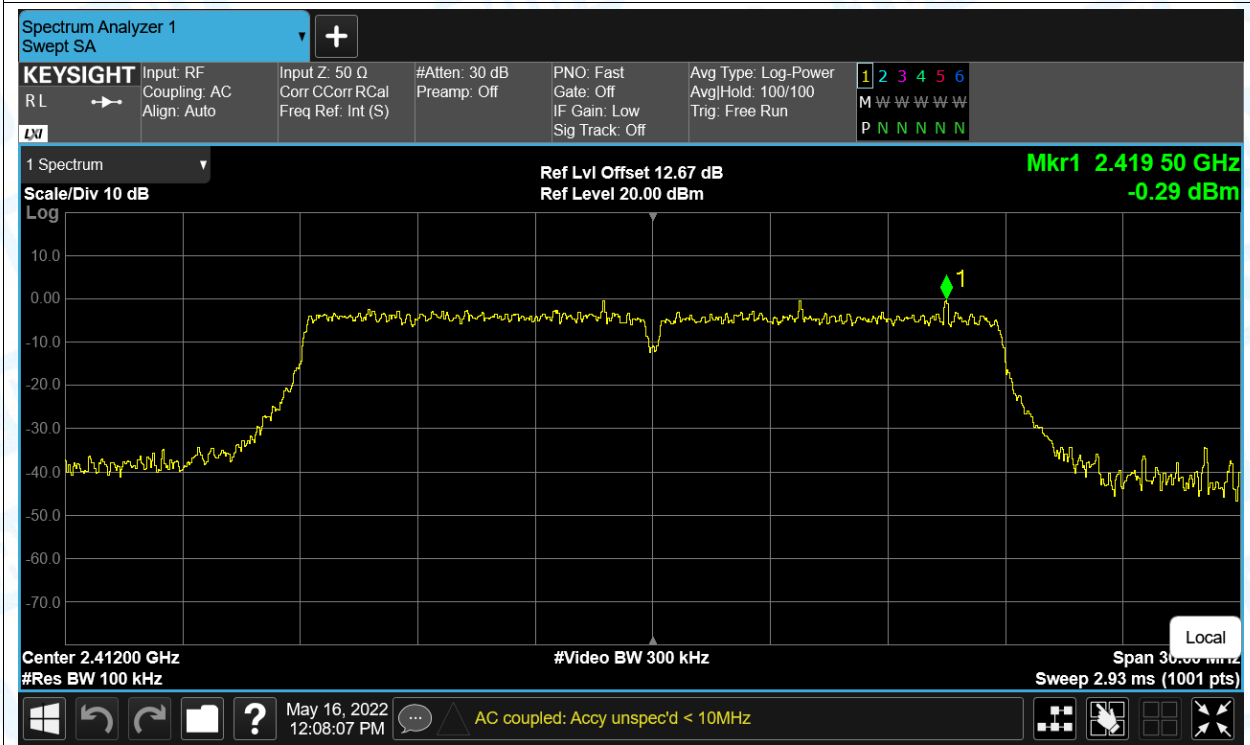
### Tx. Spurious NVNT g 2462MHz Ant1 Ref



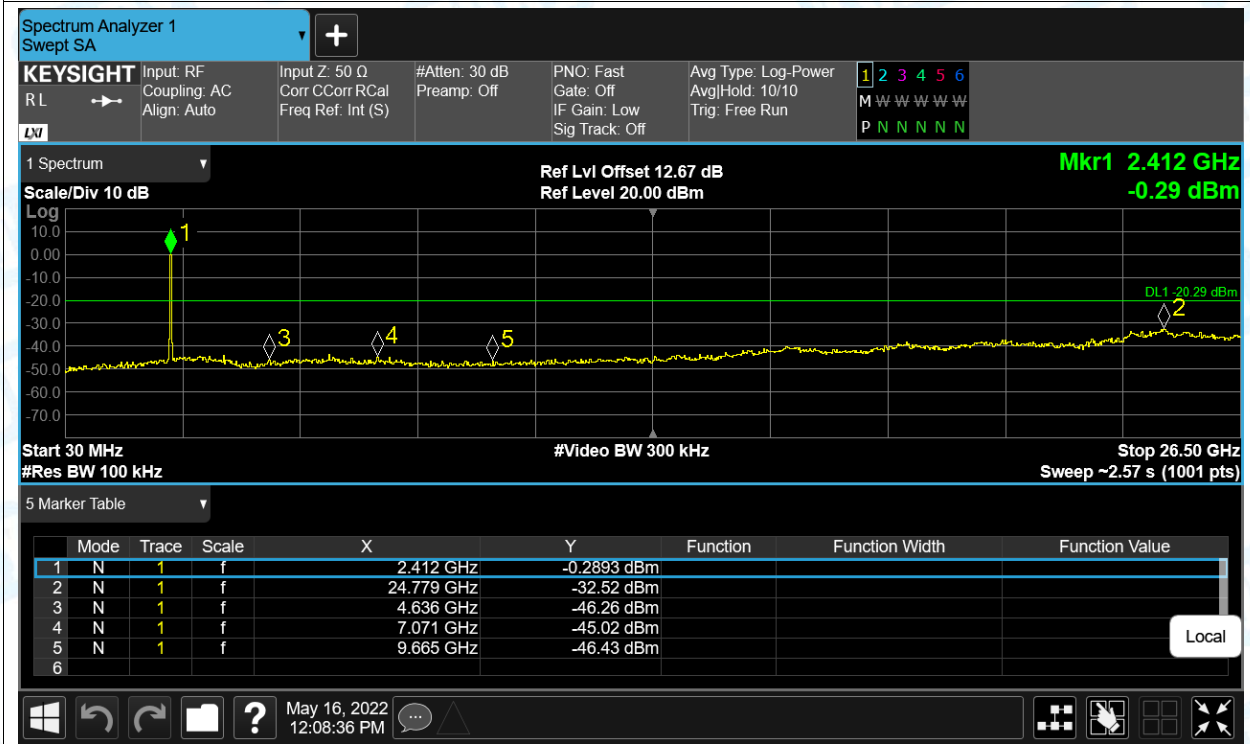
### Tx. Spurious NVNT g 2462MHz Ant1 Emission



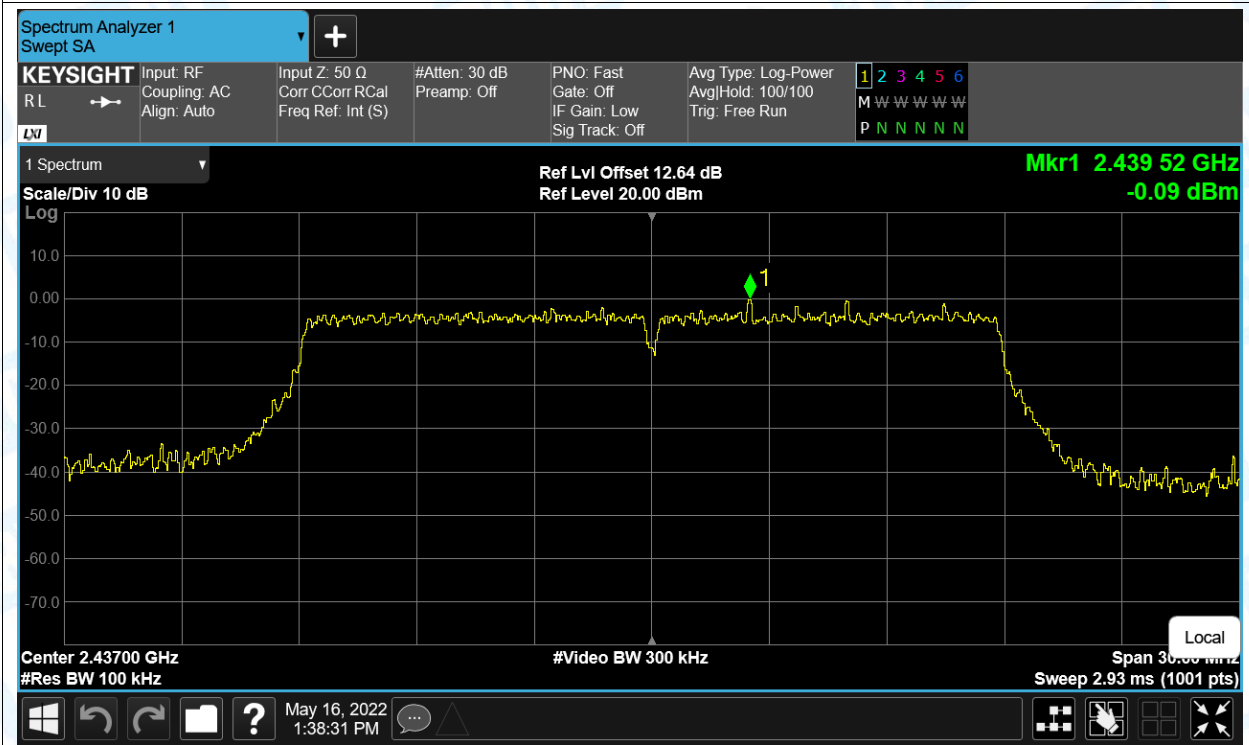
### Tx. Spurious NVNT n(HT20) 2412MHz Ant1 Ref



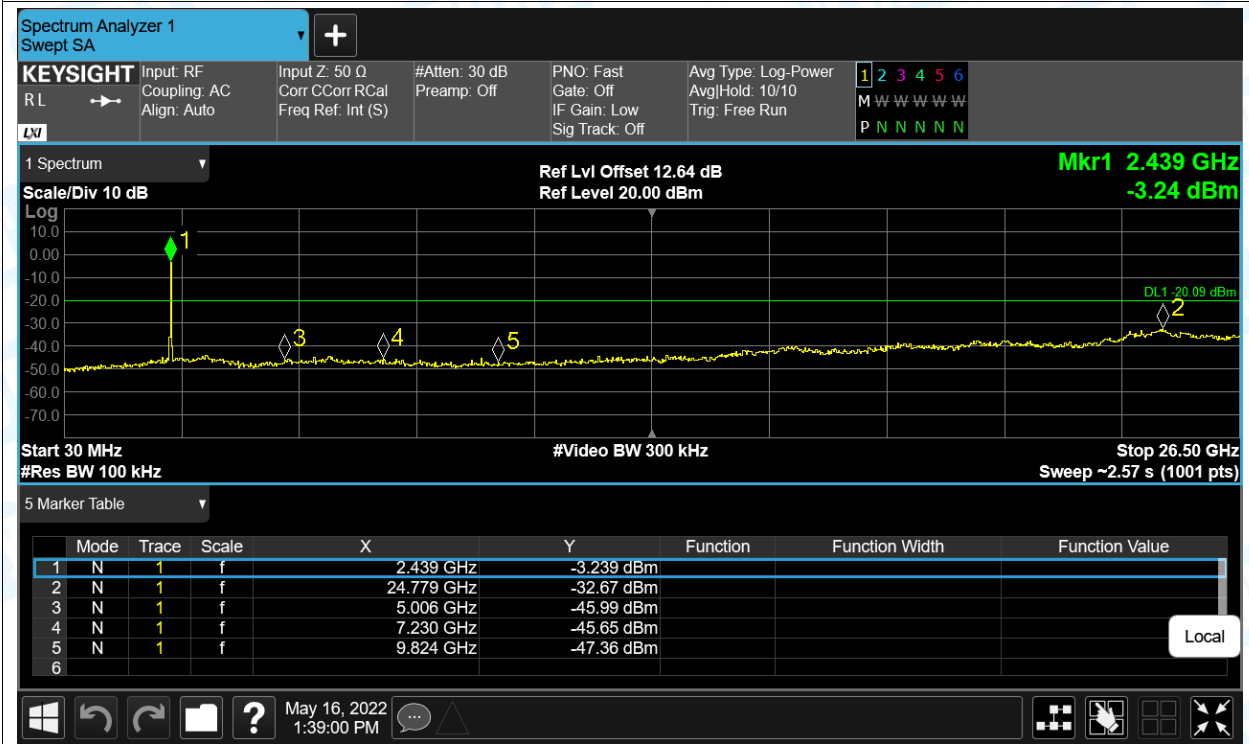
### Tx. Spurious NVNT n(HT20) 2412MHz Ant1 Emission



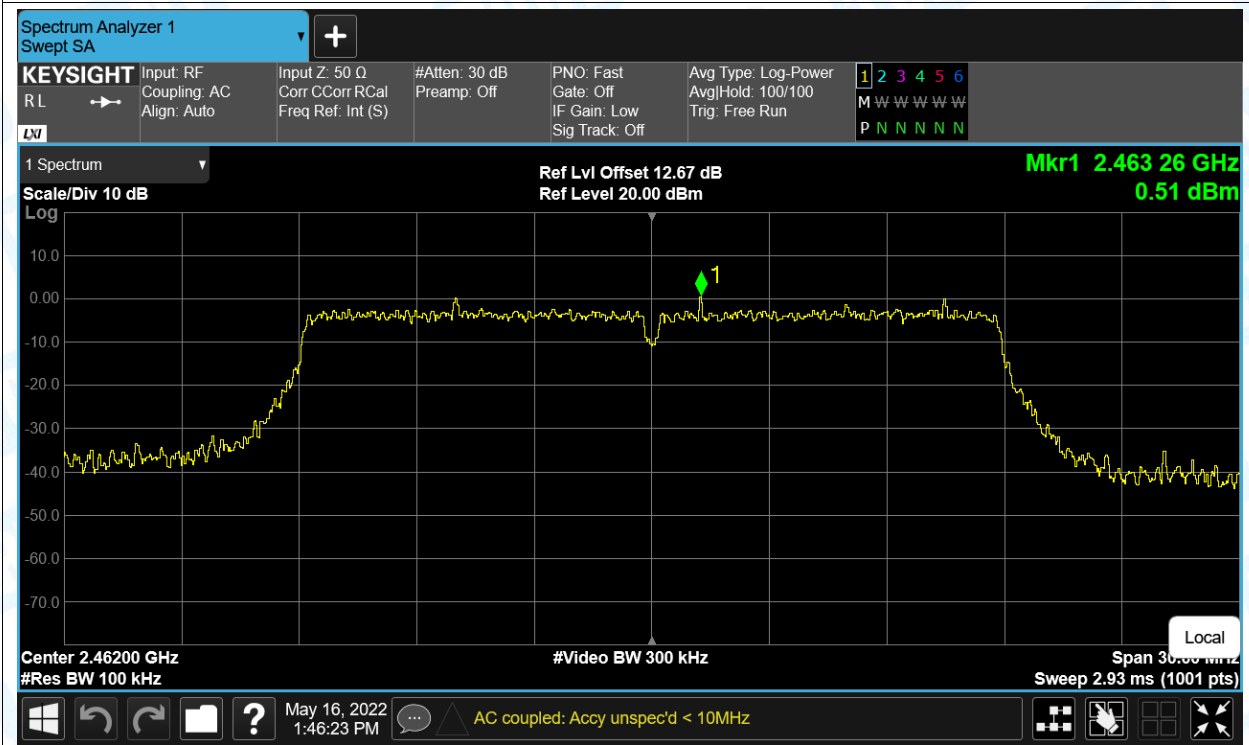
Tx. Spurious NVNT n(HT20) 2437MHz Ant1 Ref



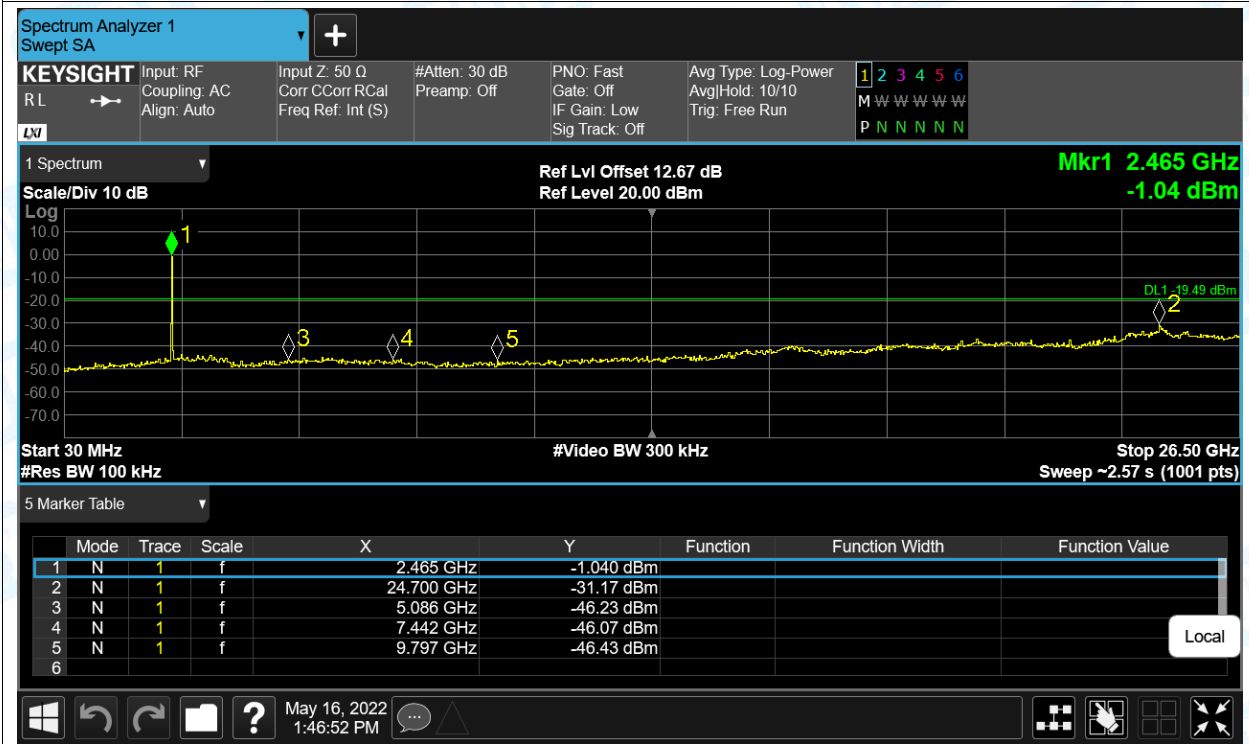
Tx. Spurious NVNT n(HT20) 2437MHz Ant1 Emission



Tx. Spurious NVNT n(HT20) 2462MHz Ant1 Ref



Tx. Spurious NVNT n(HT20) 2462MHz Ant1 Emission

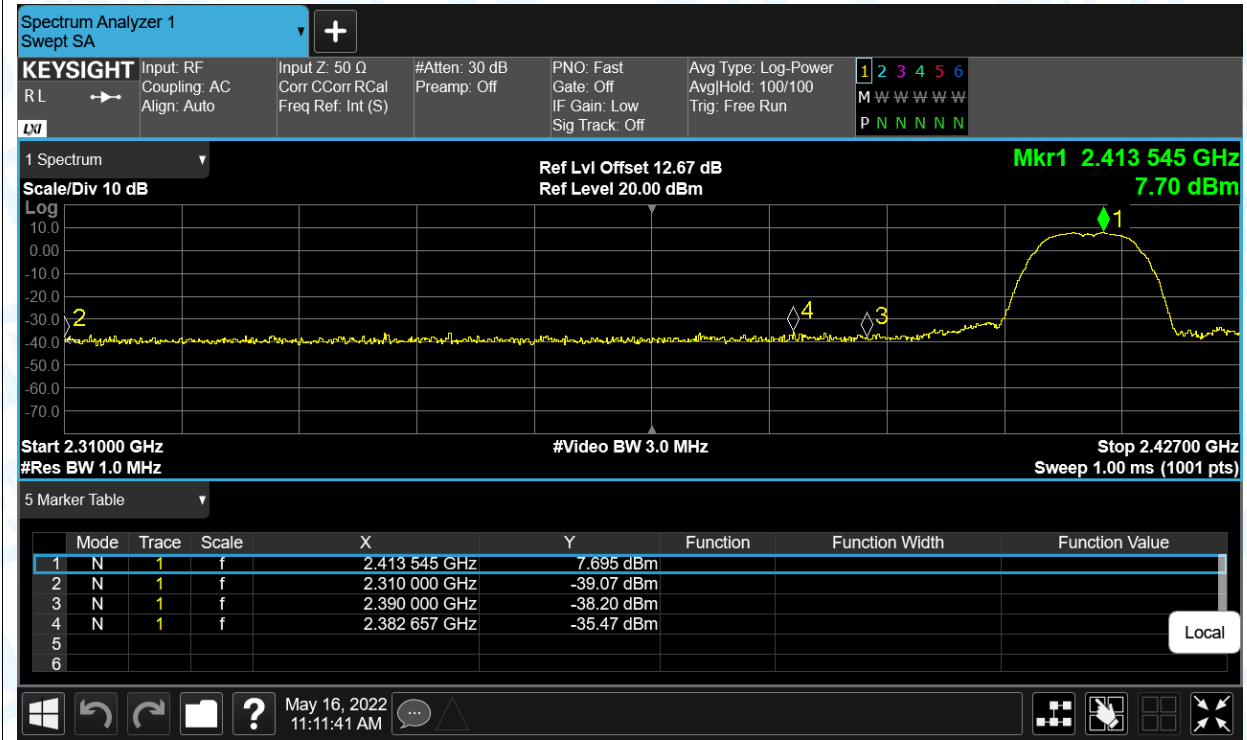


## Restrict Band

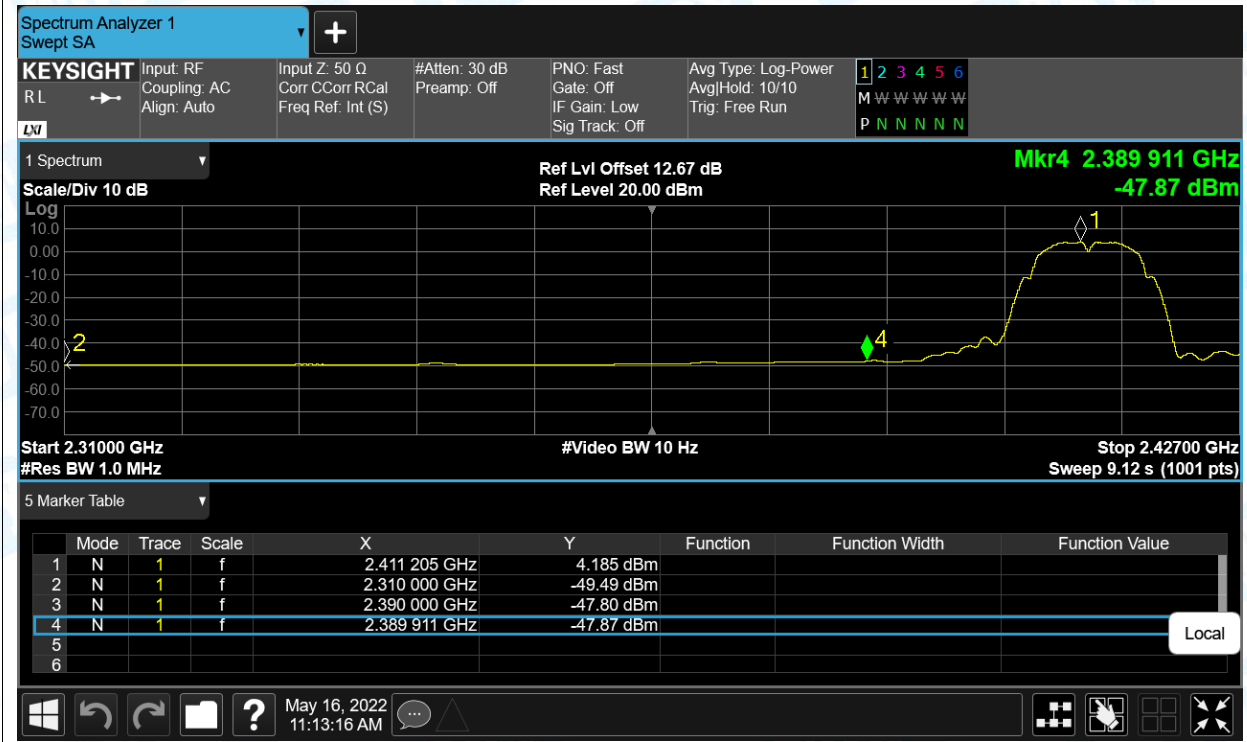
Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	b	2412	Ant1	2310	-39.07	2.62	58.81	Peak	74	Pass
NVNT	b	2412	Ant1	2310	-49.49	2.62	48.39	Average	54	Pass
NVNT	b	2412	Ant1	2382.657	-35.47	2.62	62.41	Peak	74	Pass
NVNT	b	2412	Ant1	2389.911	-47.87	2.62	50.01	Average	54	Pass
NVNT	b	2412	Ant1	2390	-38.2	2.62	59.68	Peak	74	Pass
NVNT	b	2412	Ant1	2390	-47.8	2.62	50.03	Average	54	Pass
NVNT	b	2462	Ant1	2483.5	-37.89	2.62	59.99	Peak	74	Pass
NVNT	b	2462	Ant1	2483.5	-47.92	2.62	49.96	Average	54	Pass
NVNT	b	2462	Ant1	2489.559	-35.03	2.62	62.85	Peak	74	Pass
NVNT	b	2462	Ant1	2483.517	-47.92	2.62	49.34	Average	54	Pass
NVNT	b	2462	Ant1	2500	-37.52	2.62	60.36	Peak	74	Pass
NVNT	b	2462	Ant1	2500	-48.15	2.62	49.73	Average	54	Pass
NVNT	g	2412	Ant1	2310	-38.68	2.62	59.20	Peak	74	Pass
NVNT	g	2412	Ant1	2310	-49.51	2.62	48.37	Average	54	Pass
NVNT	g	2412	Ant1	2387.571	-28.74	2.62	69.14	Peak	74	Pass
NVNT	g	2412	Ant1	2389.911	-44.02	2.62	53.86	Average	54	Pass
NVNT	g	2412	Ant1	2390	-32.78	2.62	65.10	Peak	74	Pass
NVNT	g	2412	Ant1	2390	-43.95	2.62	53.93	Average	54	Pass
NVNT	g	2462	Ant1	2483.5	-32.74	2.62	65.14	Peak	74	Pass
NVNT	g	2462	Ant1	2483.5	-46.59	2.62	51.29	Average	54	Pass
NVNT	g	2462	Ant1	2486.591	-28.46	2.62	69.42	Peak	74	Pass
NVNT	g	2462	Ant1	2483.517	-46.59	2.62	51.29	Average	54	Pass
NVNT	g	2462	Ant1	2500	-39.42	2.62	58.46	Peak	74	Pass
NVNT	g	2462	Ant1	2500	-48.71	2.62	49.17	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2310	-39.88	2.62	58.00	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2310	-49.56	2.62	48.32	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2385.582	-29.8	2.62	68.08	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2389.911	-44.27	2.62	53.61	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2390	-31.97	2.62	65.91	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2390	-44.19	2.62	53.69	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2483.5	-30.36	2.62	67.52	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2483.5	-45.63	2.62	52.25	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2483.57	-29	2.62	68.88	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2483.517	-45.63	2.62	52.25	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2500	-37.22	2.62	60.66	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2500	-48.64	2.62	49.24	Average	54	Pass

### Test Graphs

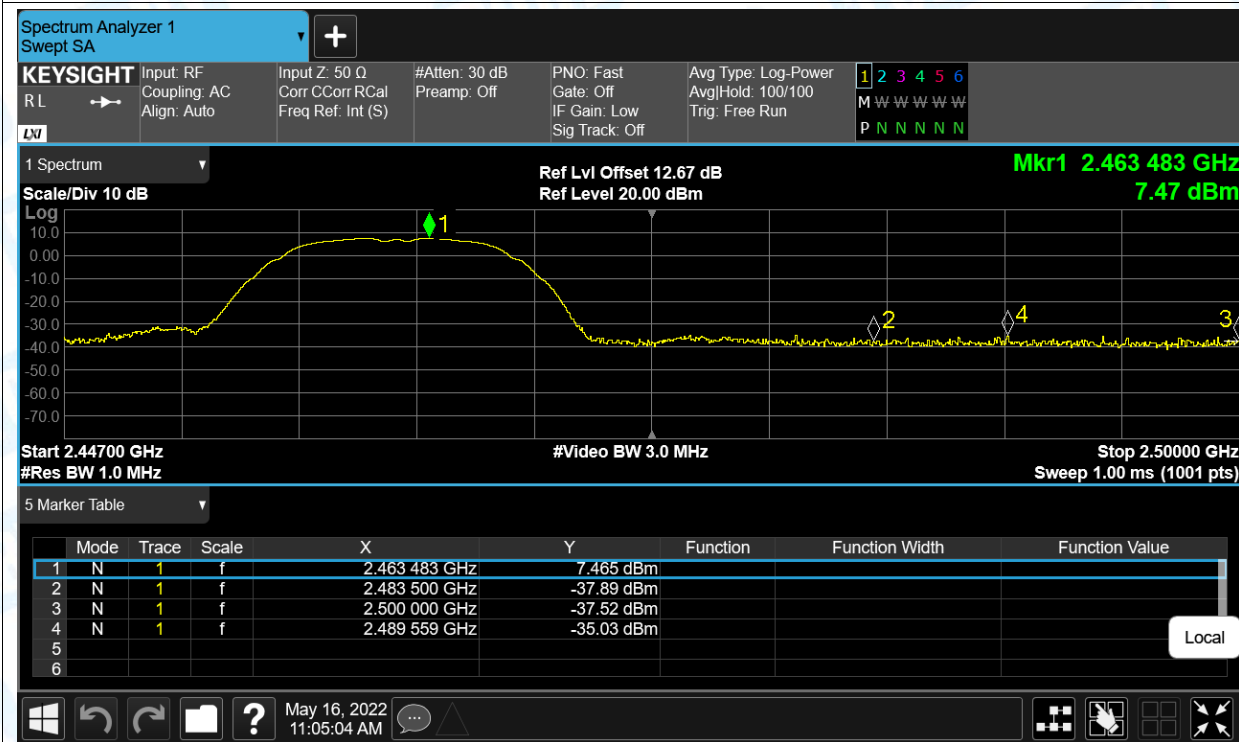
#### Restrict Band NVNT b 2412MHz Ant1 Peak



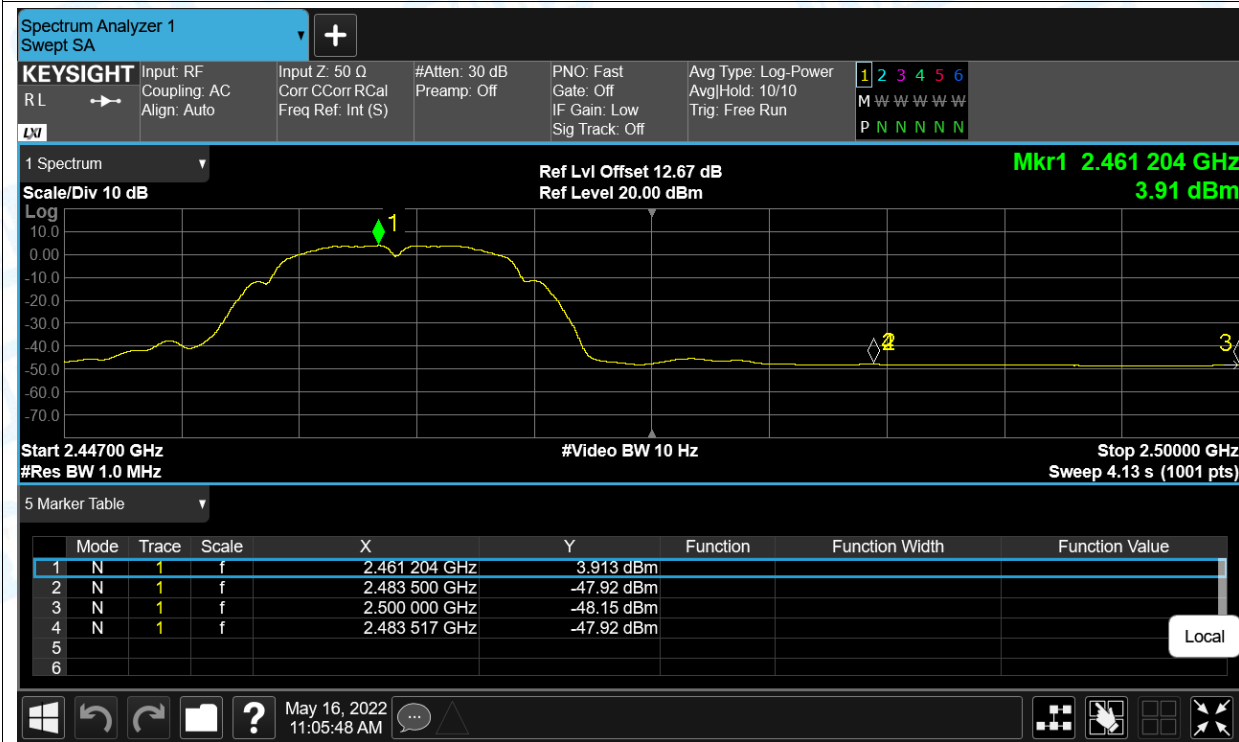
#### Restrict Band NVNT b 2412MHz Ant1 Average



Restrict Band NVNT b 2462MHz Ant1 Peak

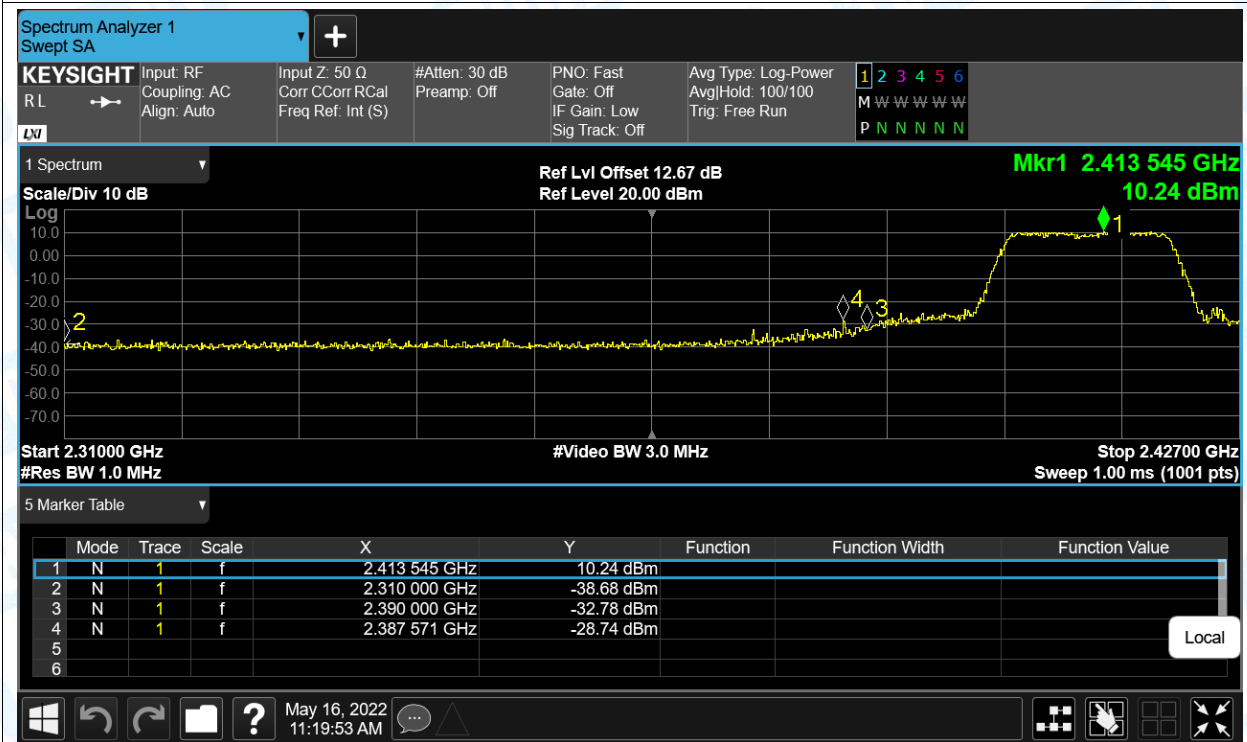


Restrict Band NVNT b 2462MHz Ant1 Average

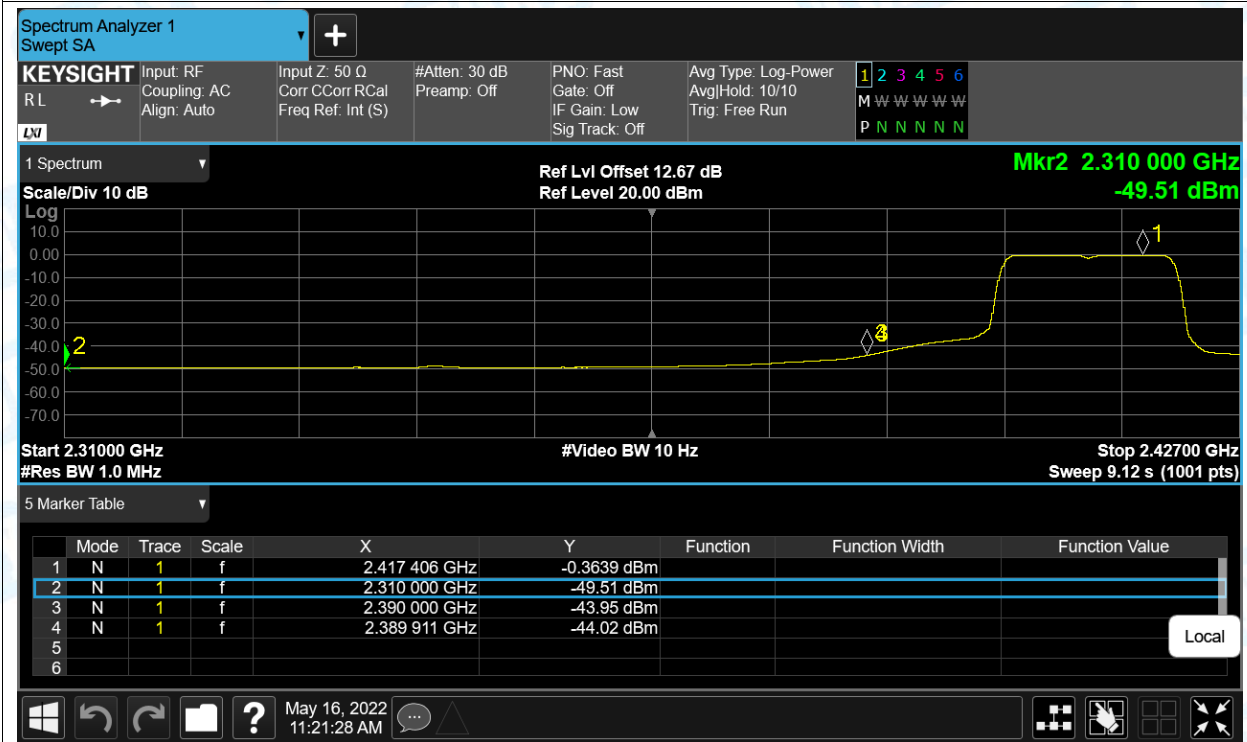




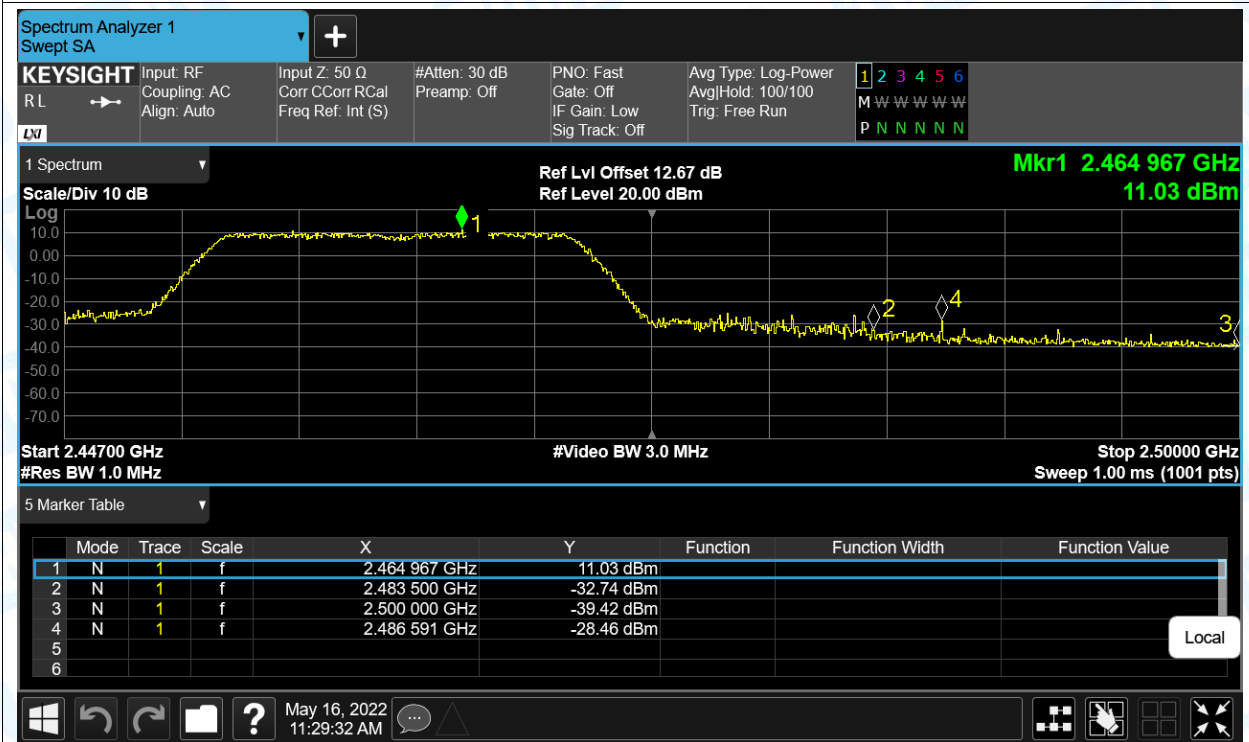
### Restrict Band NVNT g 2412MHz Ant1 Peak



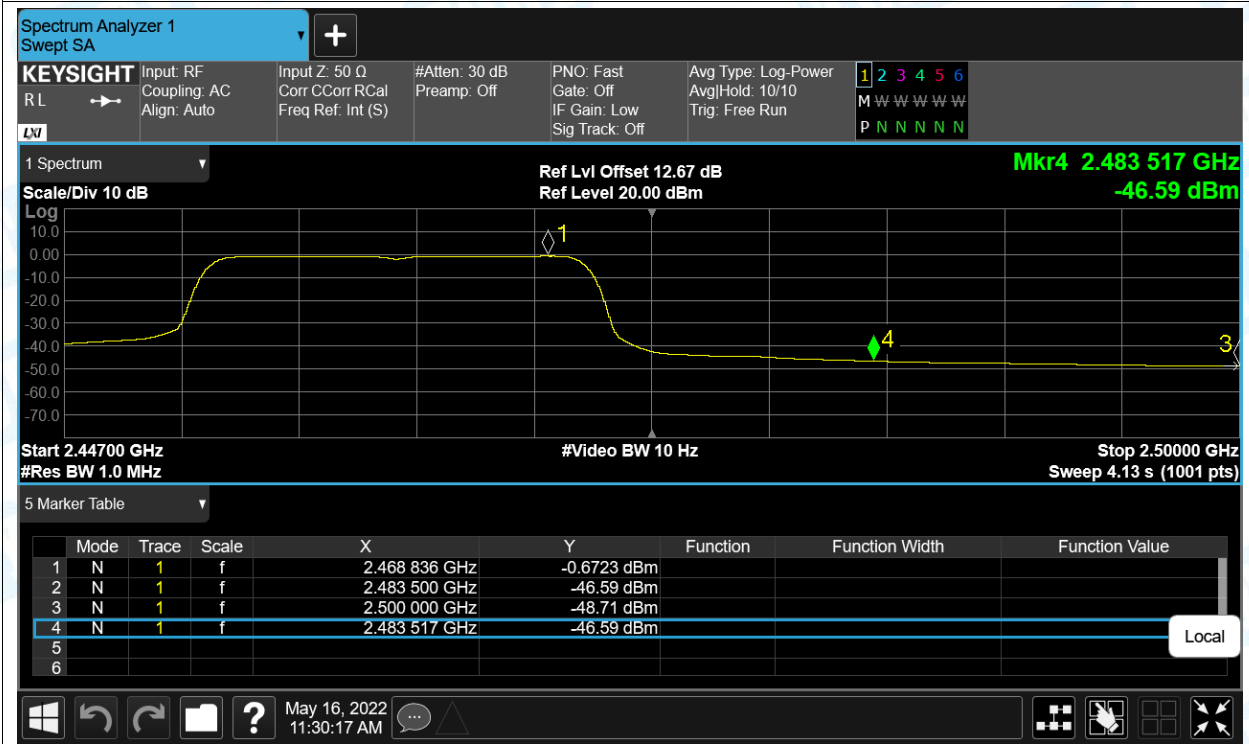
### Restrict Band NVNT g 2412MHz Ant1 Average



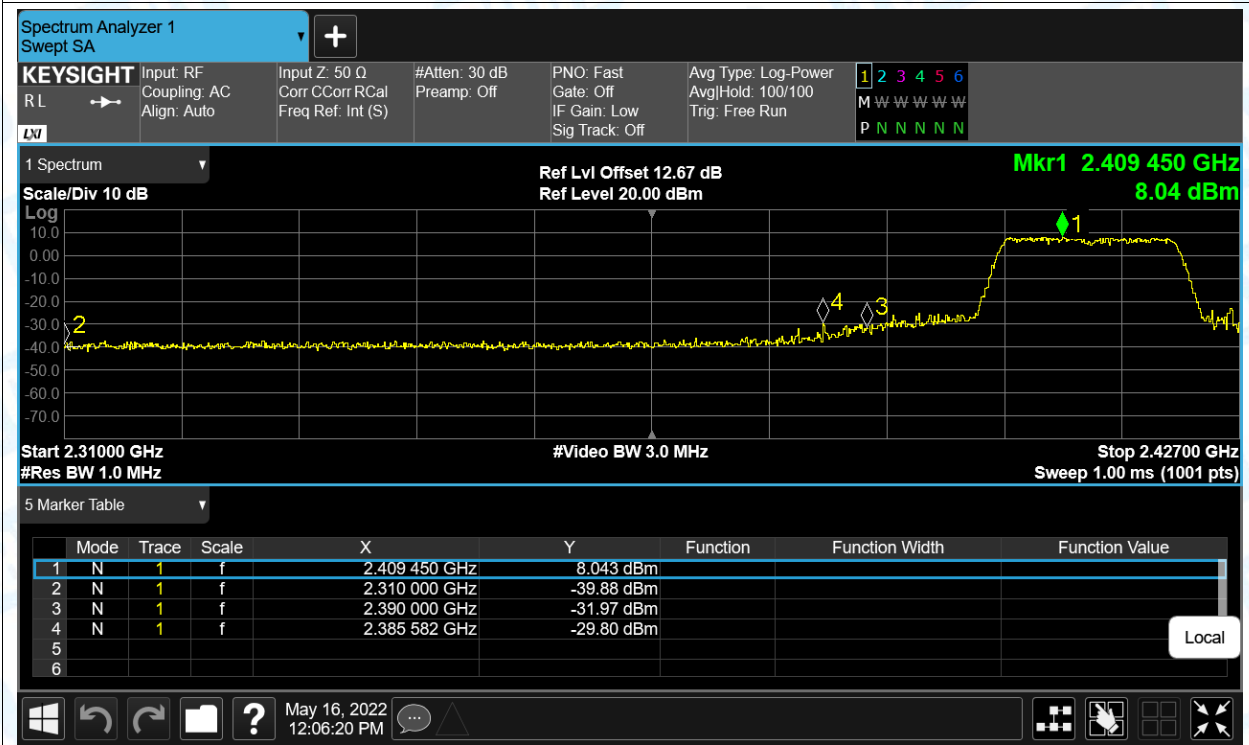
Restrict Band NVNT g 2462MHz Ant1 Peak



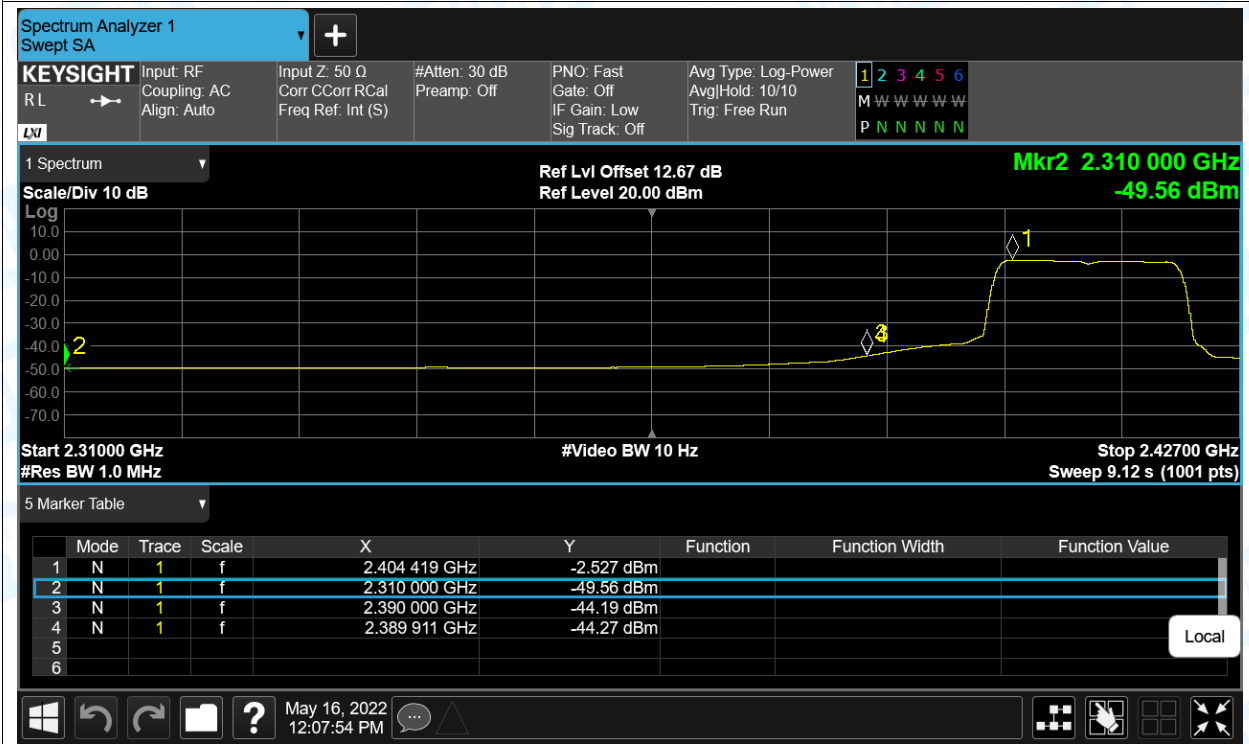
Restrict Band NVNT g 2462MHz Ant1 Average



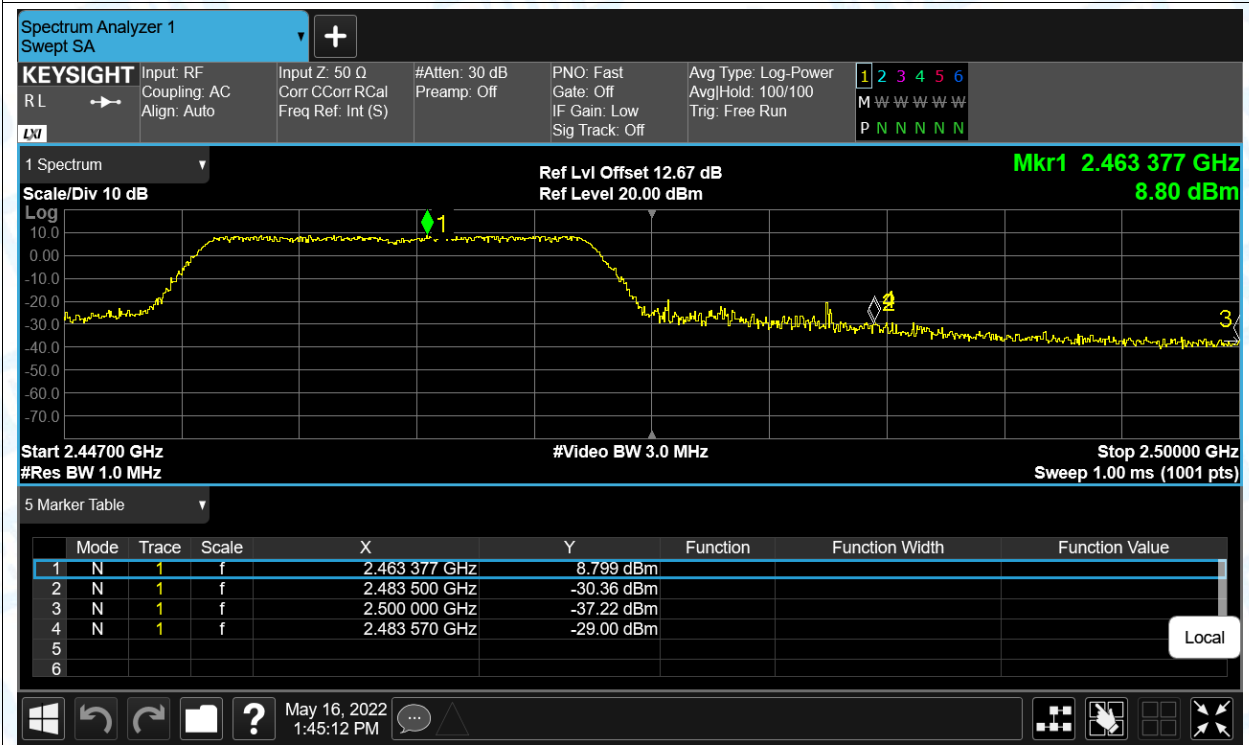
Restrict Band NVNT n(HT20) 2412MHz Ant1 Peak



Restrict Band NVNT n(HT20) 2412MHz Ant1 Average



Restrict Band NVNT n(HT20) 2462MHz Ant1 Peak



Restrict Band NVNT n(HT20) 2462MHz Ant1 Average

