

# RF Test Data for 2.4G (Conducted Measurements)

General Description of EUT	
Product Name:	Dinosaur Toys
Test Model:	3700-1A
Sample ID:	202203-0100_02-02#
Environmental Conditions	
Temperature:	25°C
Relative Humidity:	55%
Test Voltage:	DC 3V
Test Engineer:	Huangjianping
Note: For a more detailed features description, please refer to the report TBR-C-202203-0100-1	

## Contents

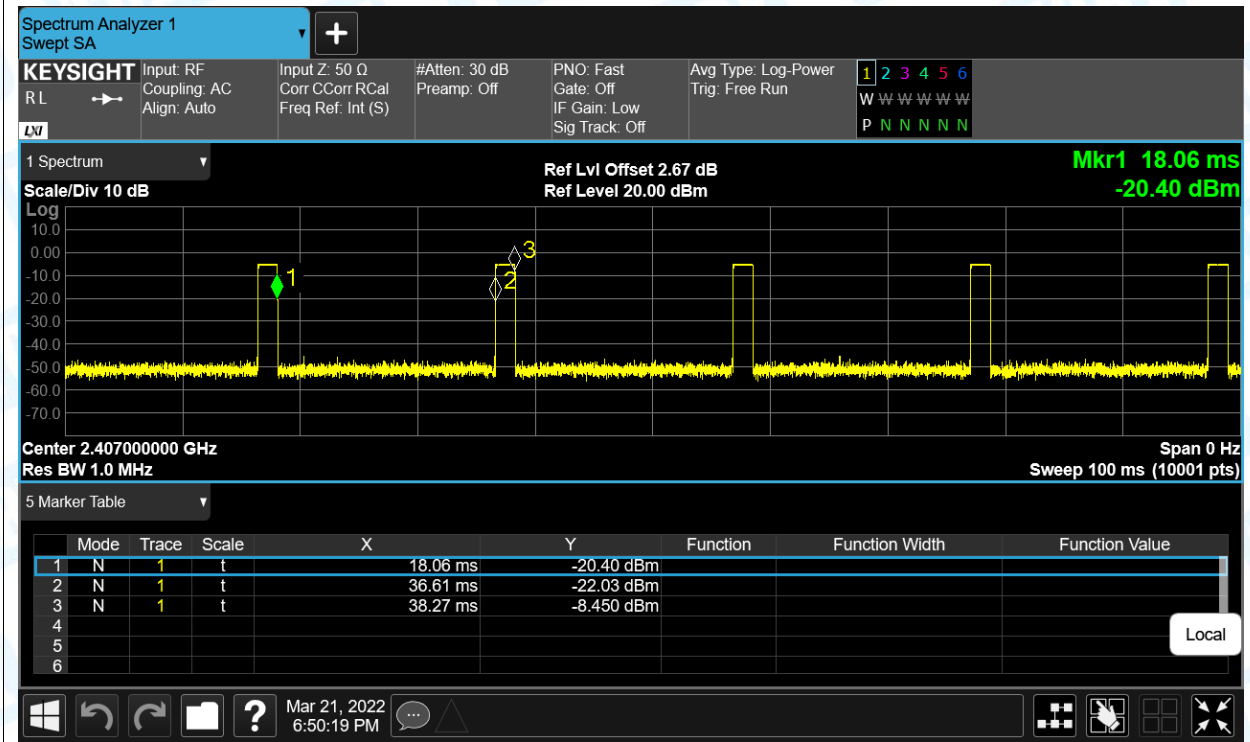
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## 1.Duty Cycle

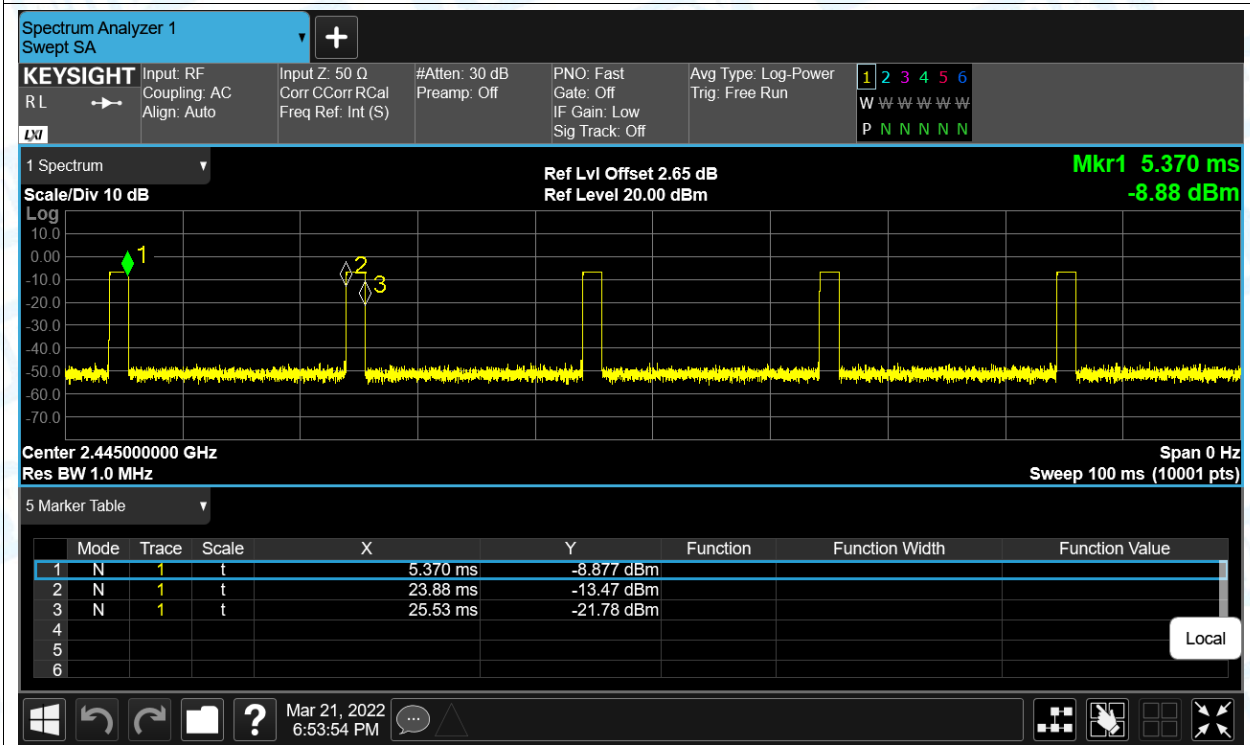
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	GFSK	2407	Ant1	8.35	10.78	0.6
NVNT	GFSK	2445	Ant1	8.3	10.81	0.61
NVNT	GFSK	2475	Ant1	8.34	10.79	0.6

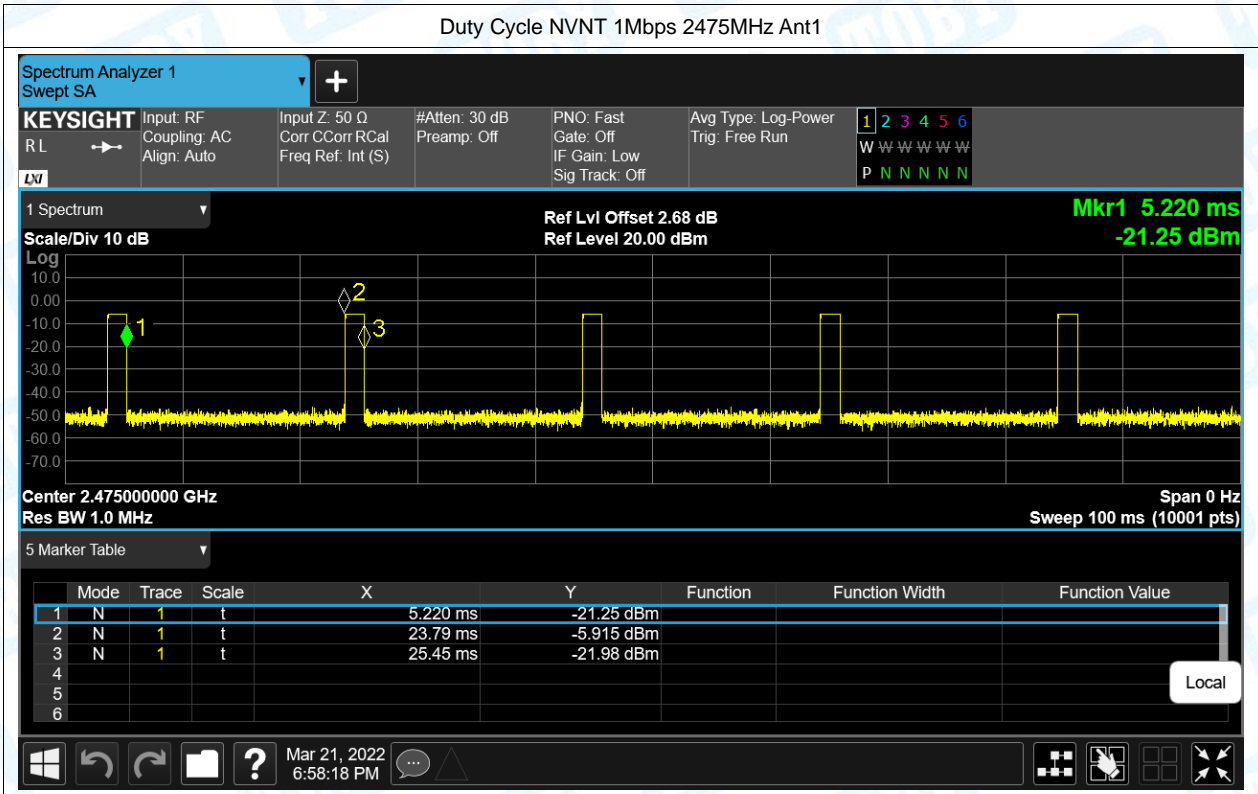
Test Graphs

Duty Cycle NVNT 1Mbps 2407MHz Ant1



Duty Cycle NVNT 1Mbps 2445MHz Ant1



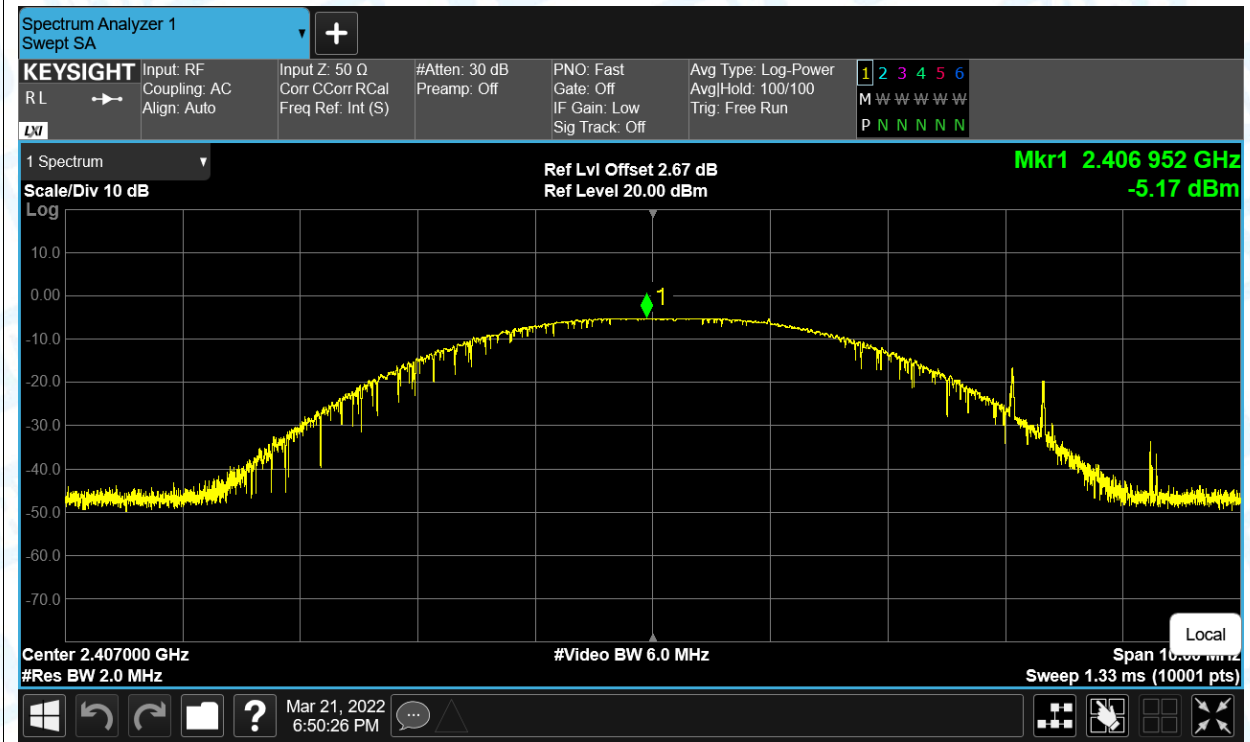


## 2.Maximum Conducted Output Power

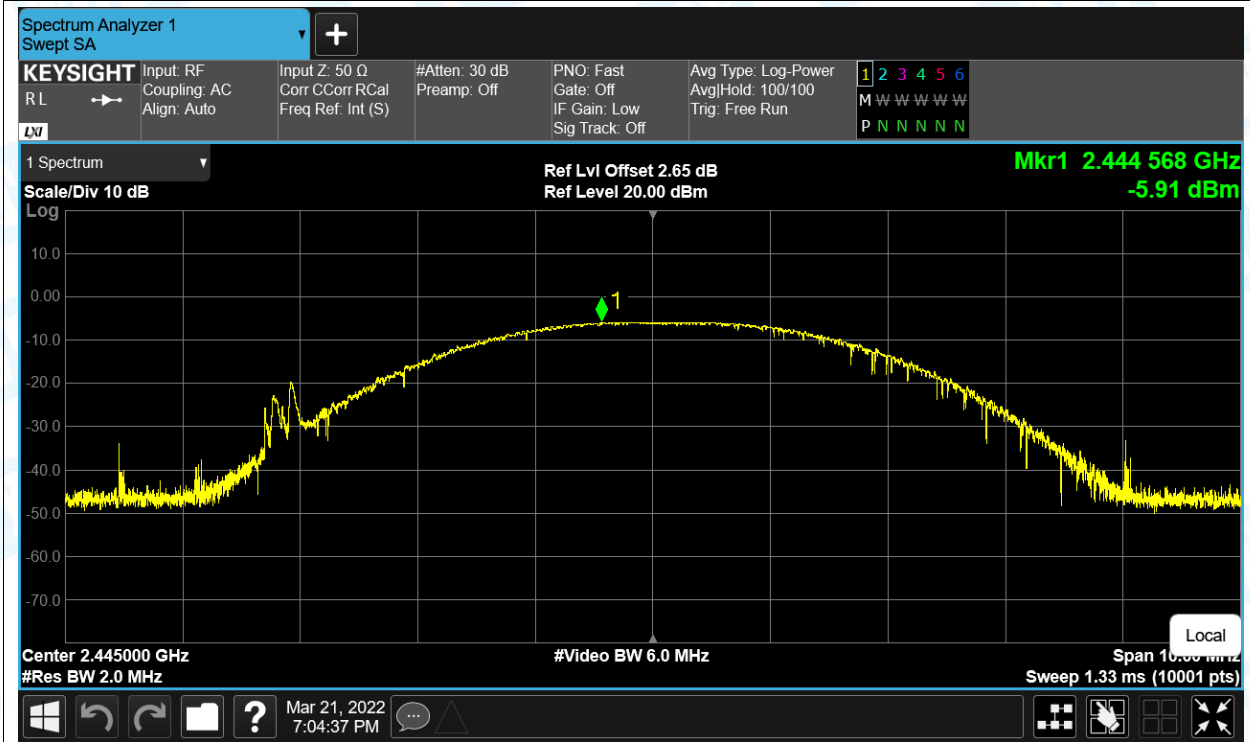
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	GFSK	2407	Ant1	-5.169	30	Pass
NVNT	GFSK	2445	Ant1	-5.907	30	Pass
NVNT	GFSK	2475	Ant1	-5.783	30	Pass

### Test Graphs

#### Power NVNT 1Mbps 2407MHz Ant1



#### Power NVNT 1Mbps 2445MHz Ant1

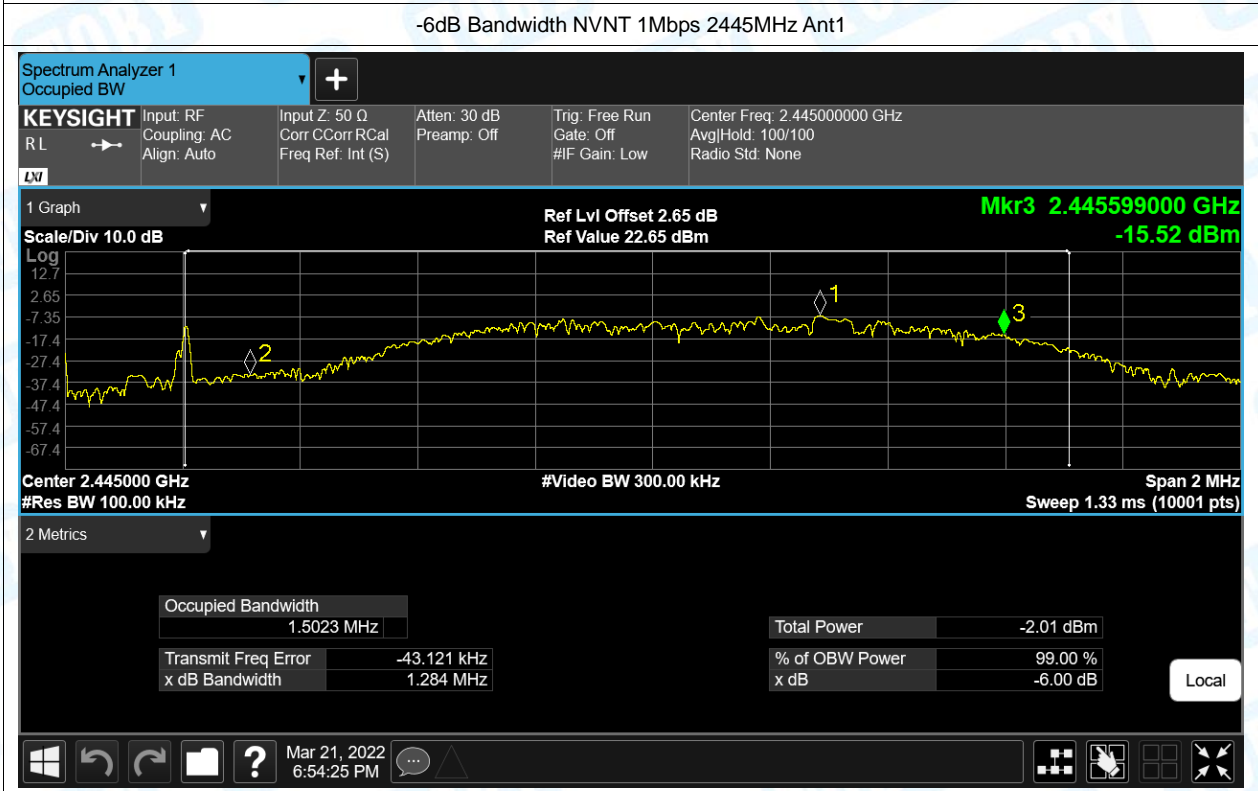
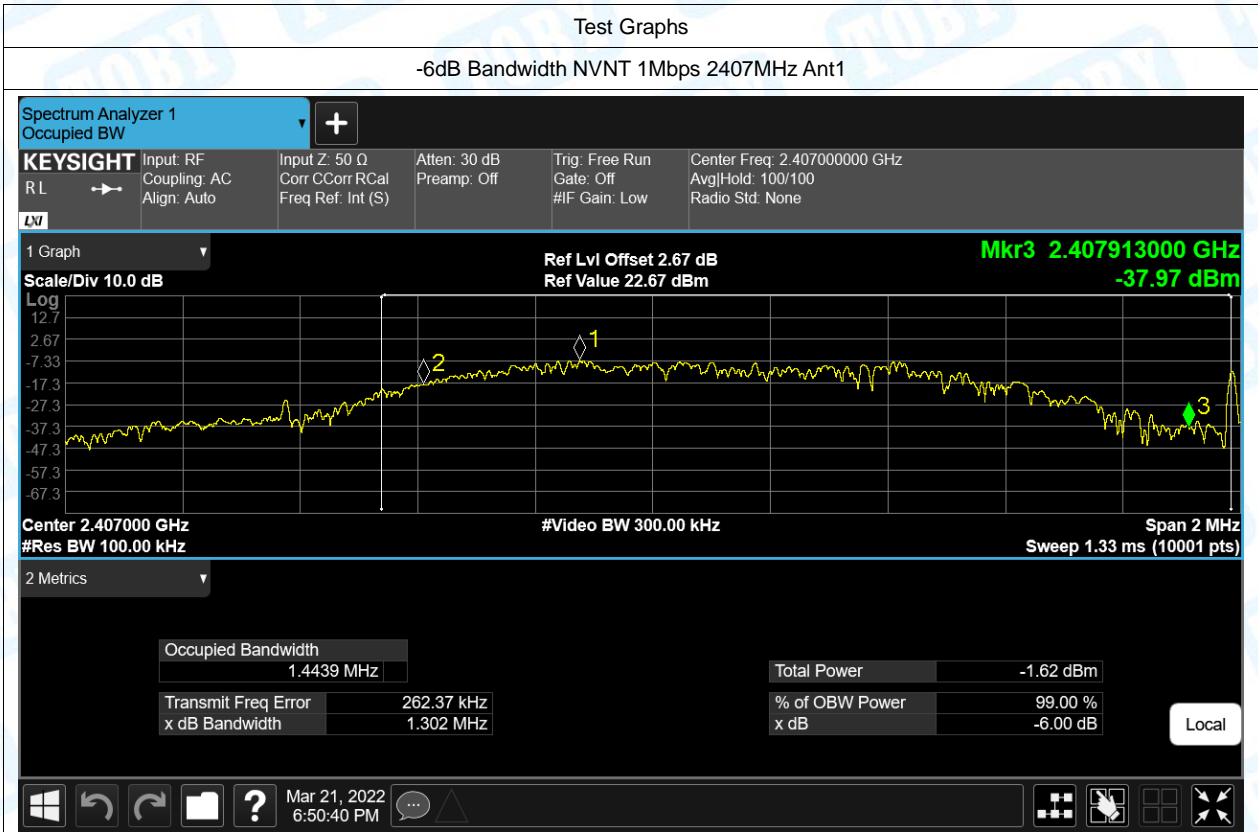


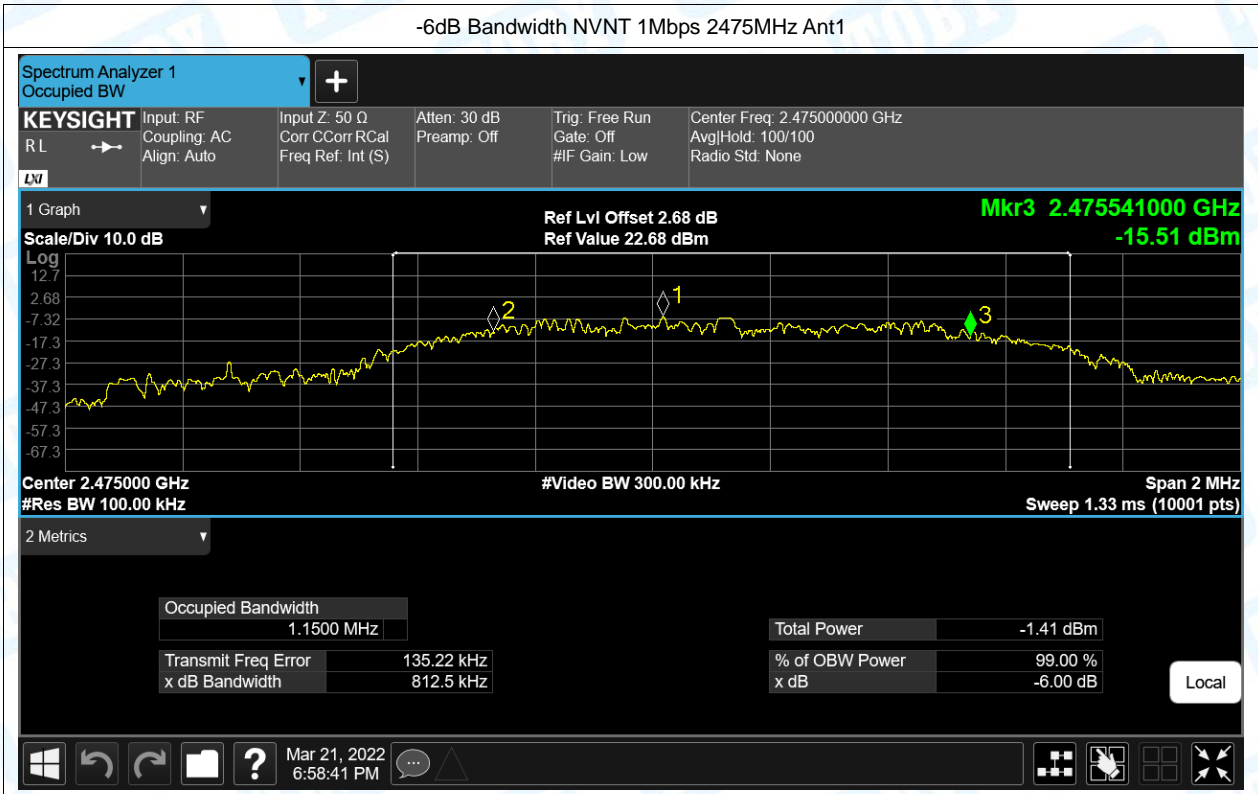




### 3.-6dB Bandwidth

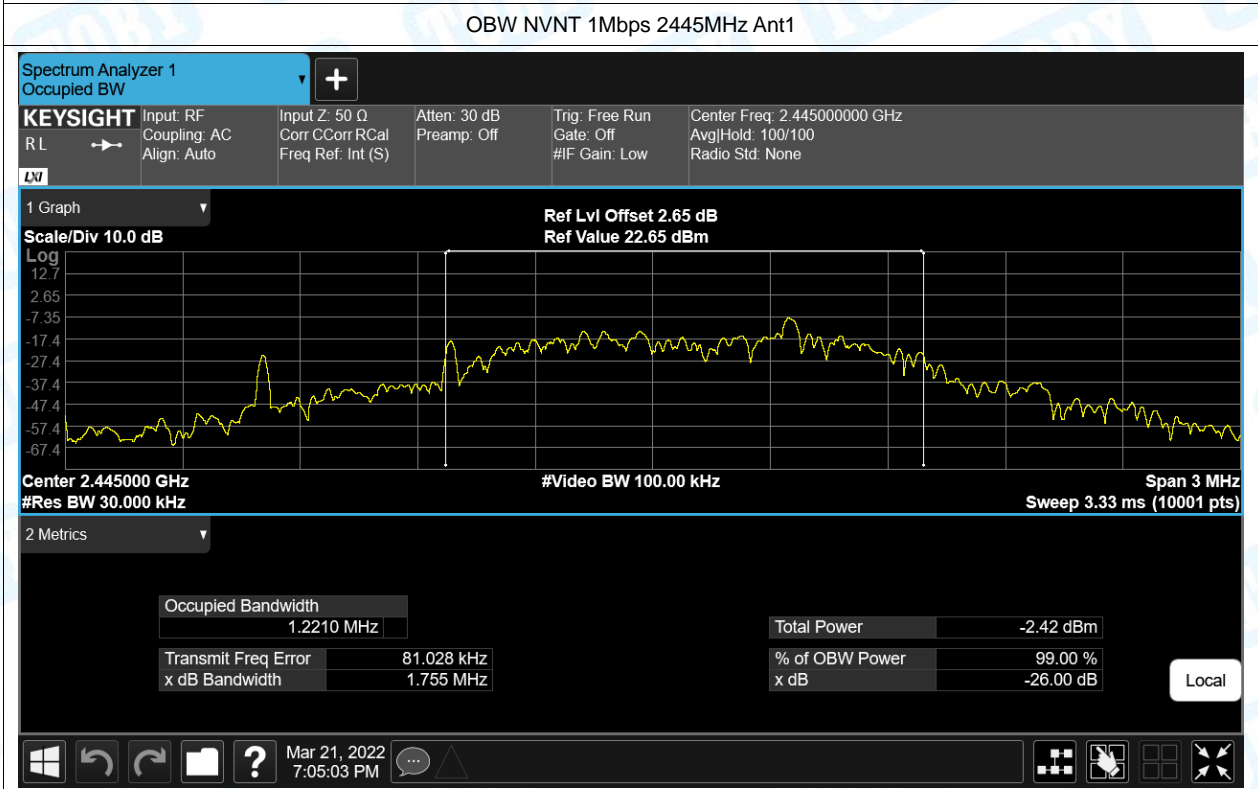
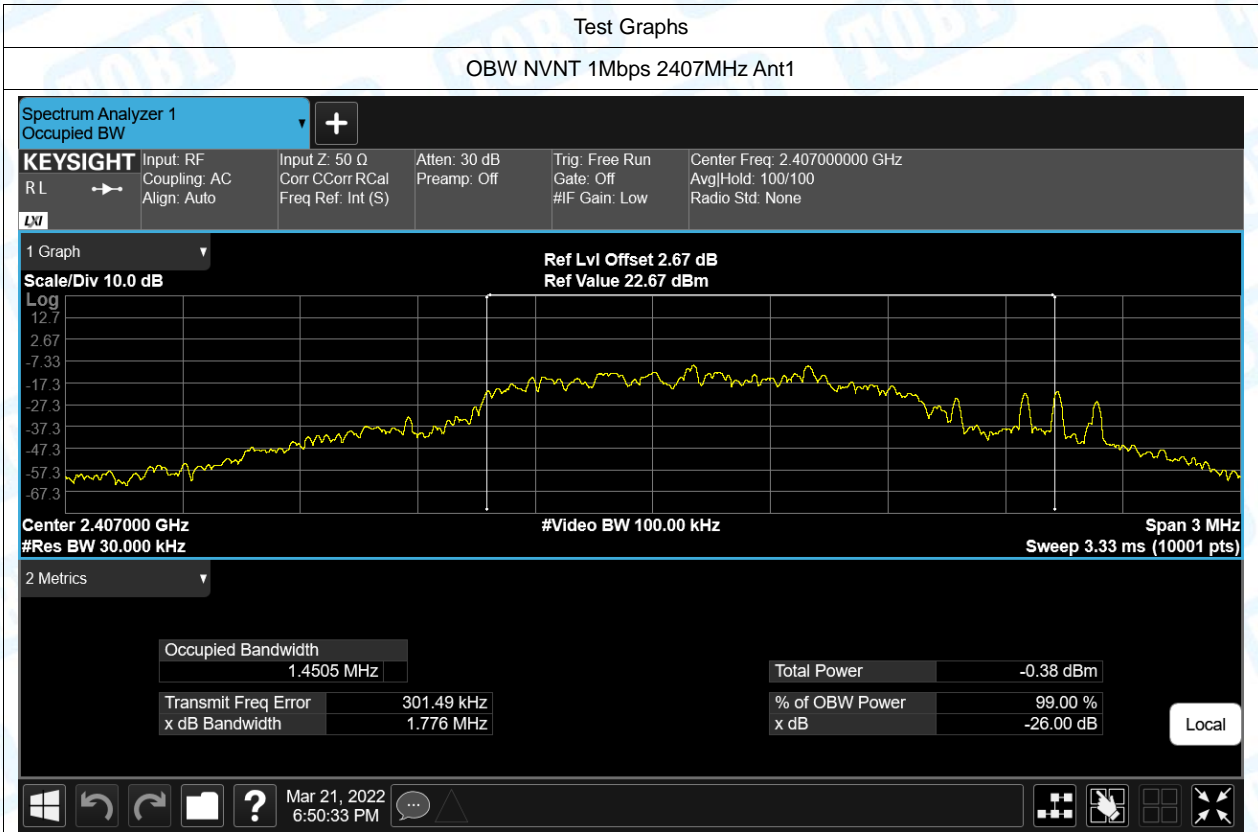
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	GFSK	2407	Ant1	1.3	0.5	Pass
NVNT	GFSK	2445	Ant1	1.28	0.5	Pass
NVNT	GFSK	2475	Ant1	0.81	0.5	Pass

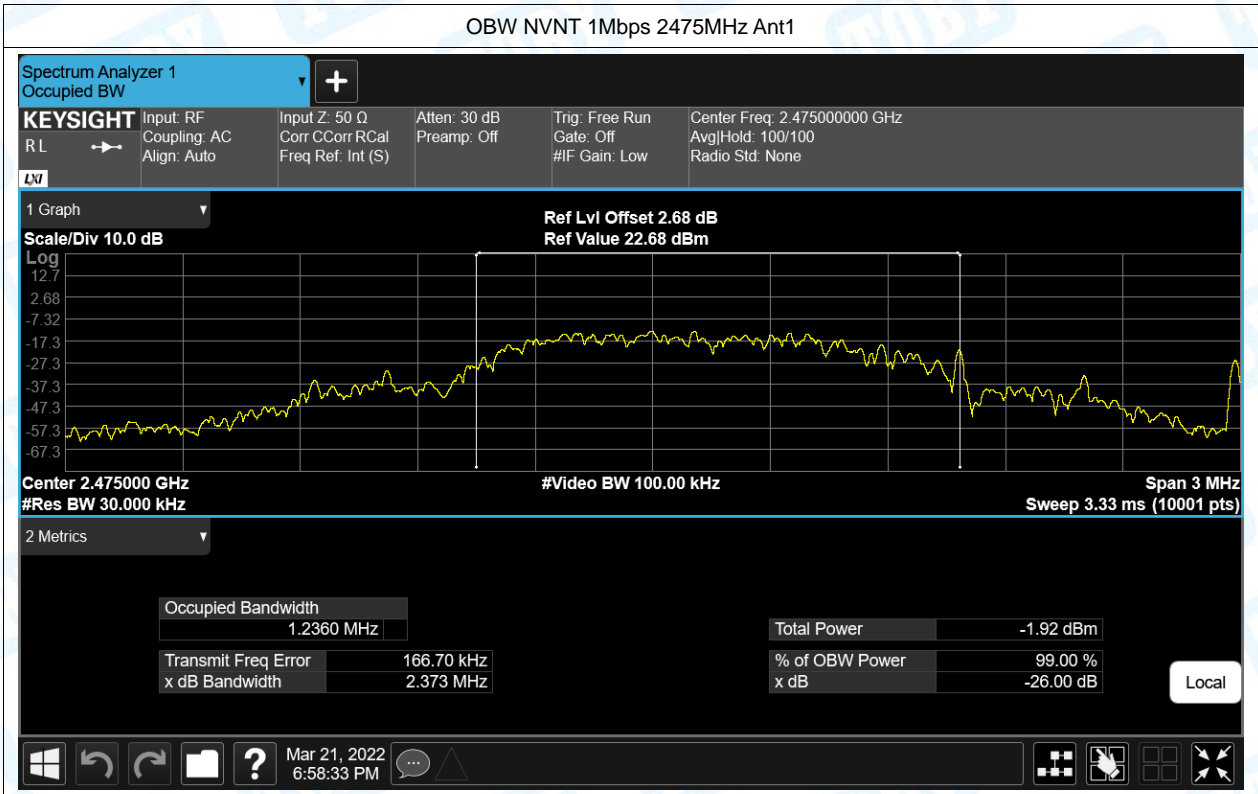




## 4.Occupied Channel Bandwidth

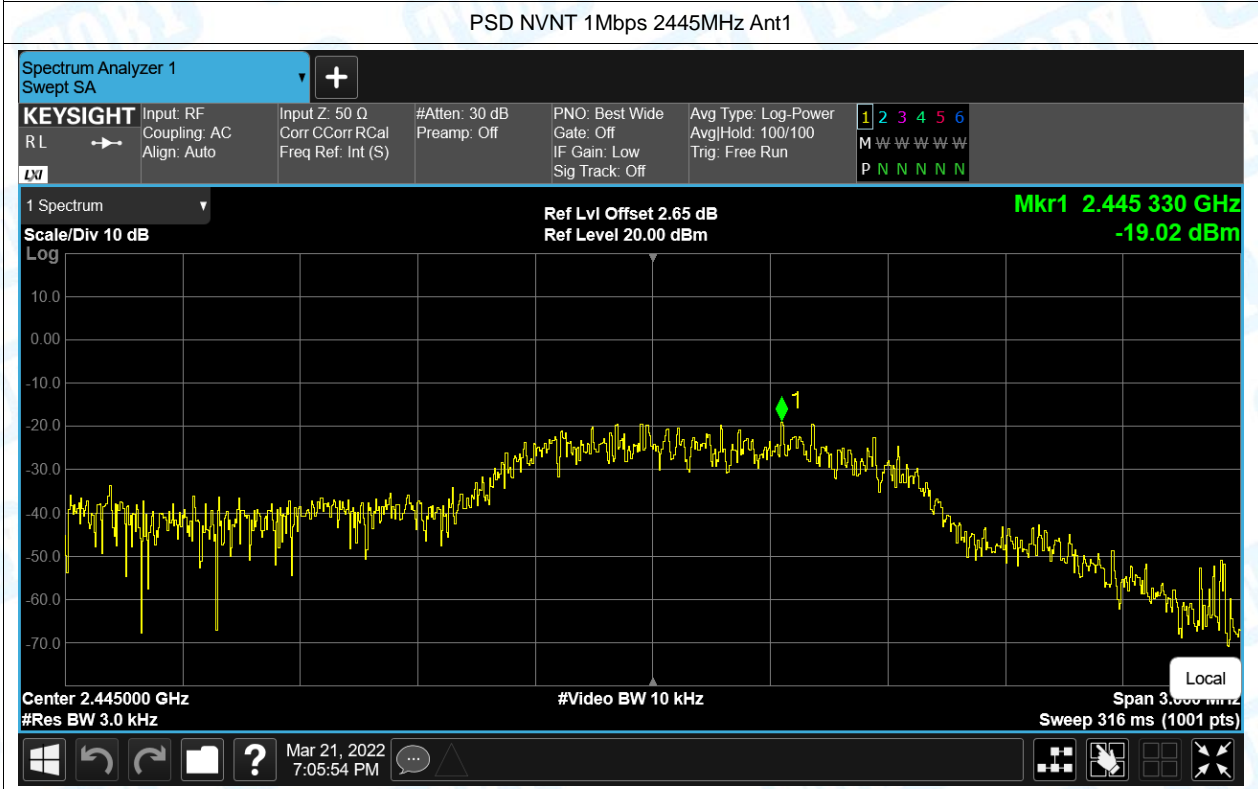
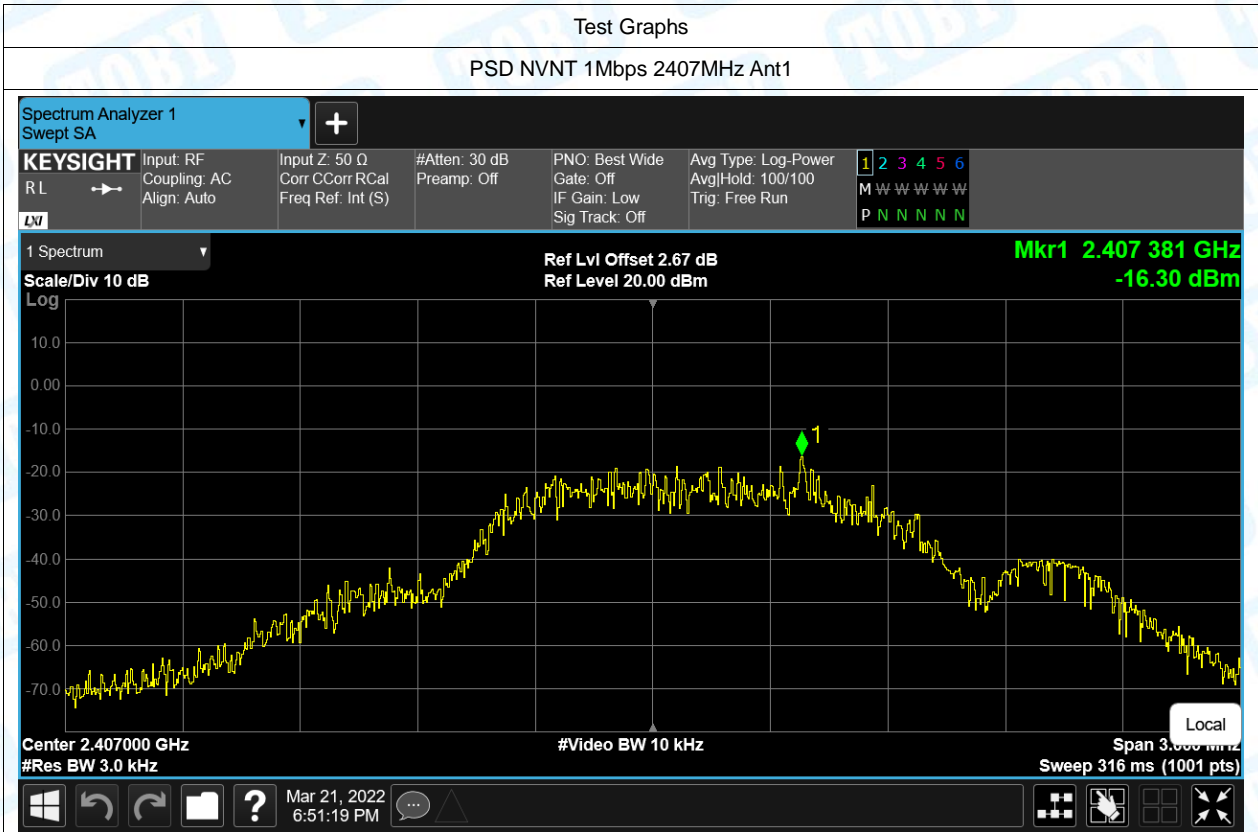
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	GFSK	2407	Ant1	1.451
NVNT	GFSK	2445	Ant1	1.221
NVNT	GFSK	2475	Ant1	1.236



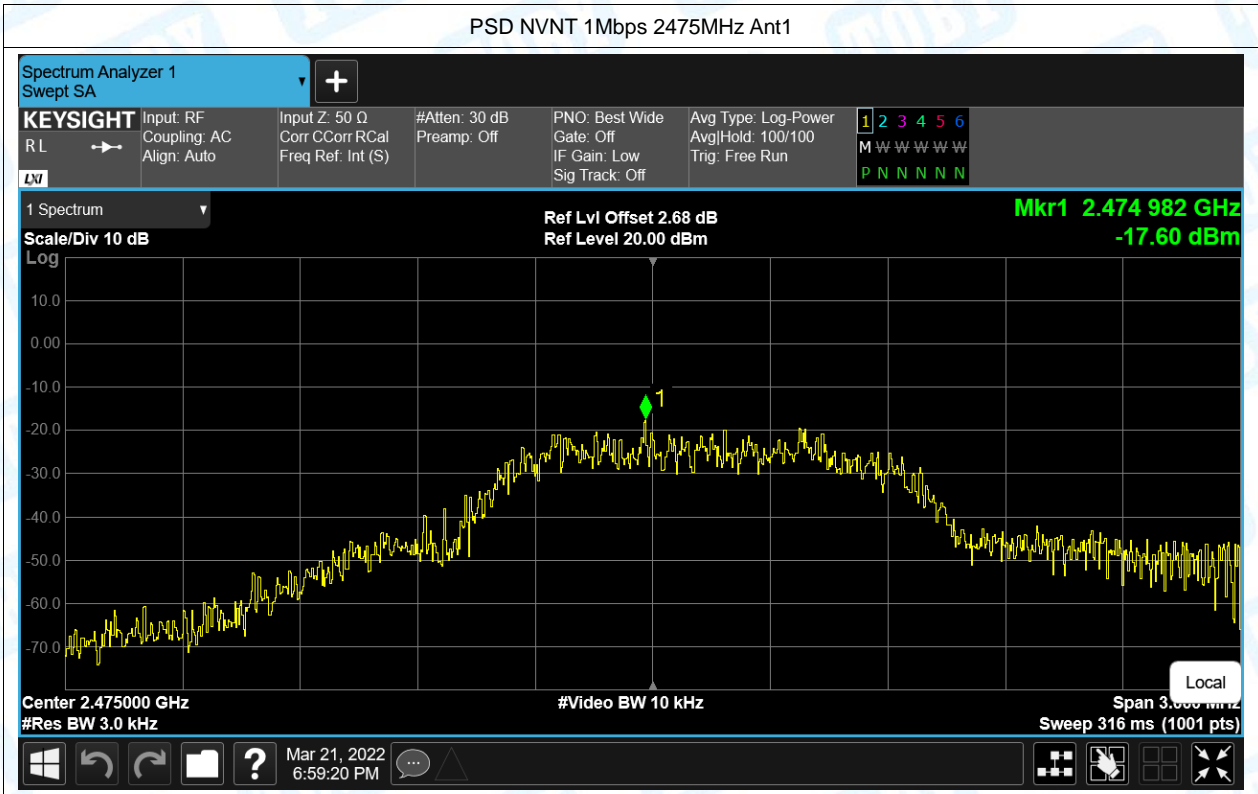


## 5. Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	GFSK	2407	Ant1	-16.3	8	Pass
NVNT	GFSK	2445	Ant1	-19.019	8	Pass
NVNT	GFSK	2475	Ant1	-17.596	8	Pass





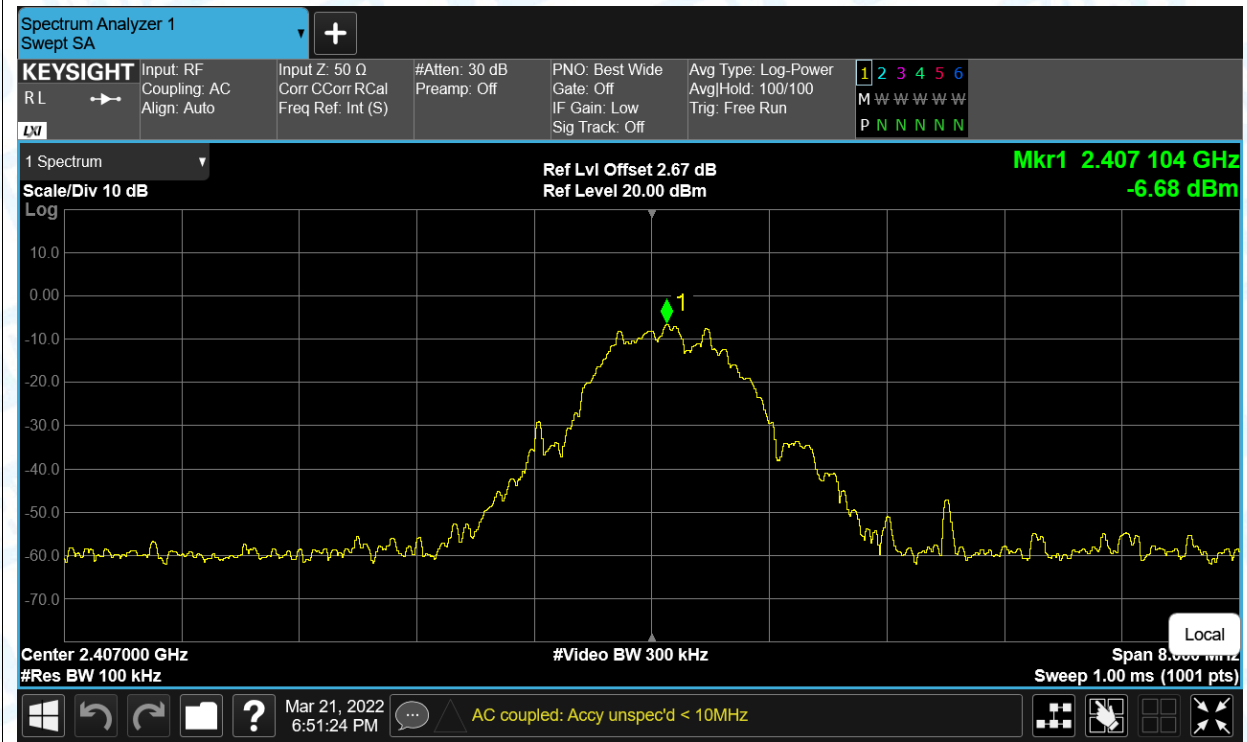


## 6.Band Edge

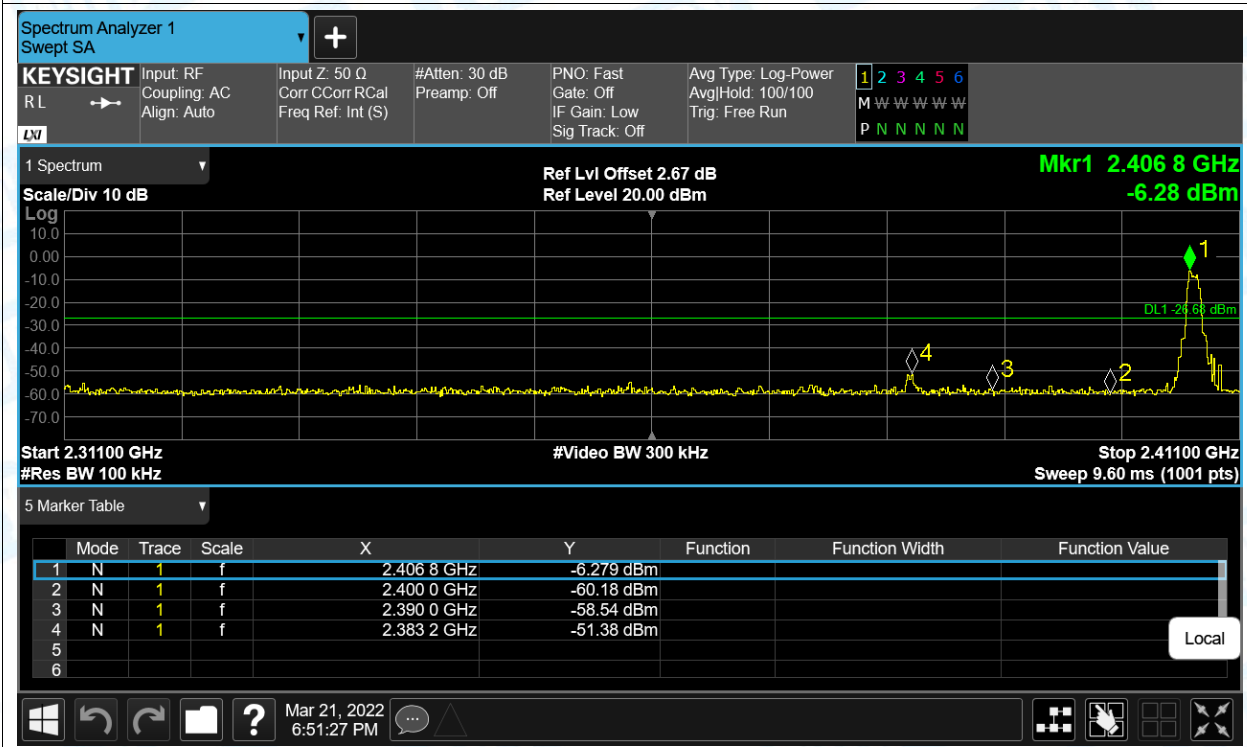
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	GFSK	2407	Ant1	-44.7	-20	Pass
NVNT	GFSK	2475	Ant1	-43.24	-20	Pass

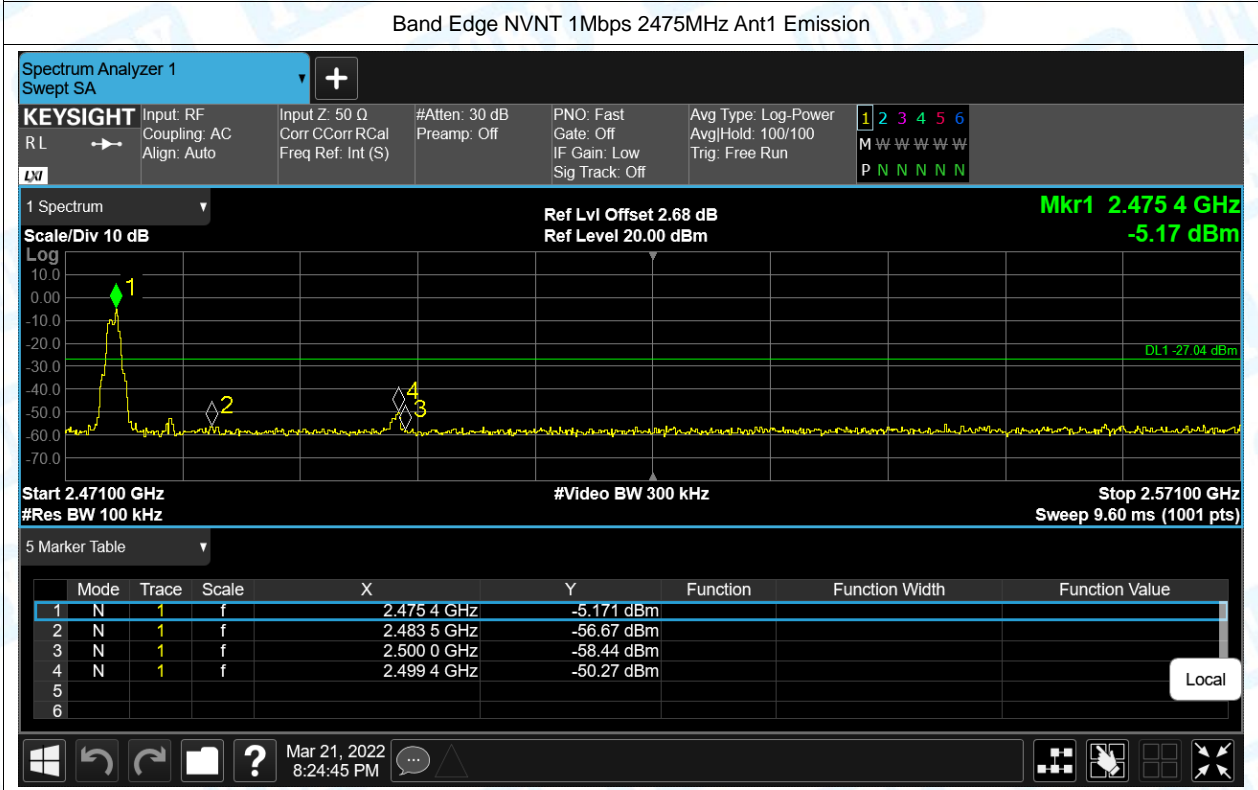
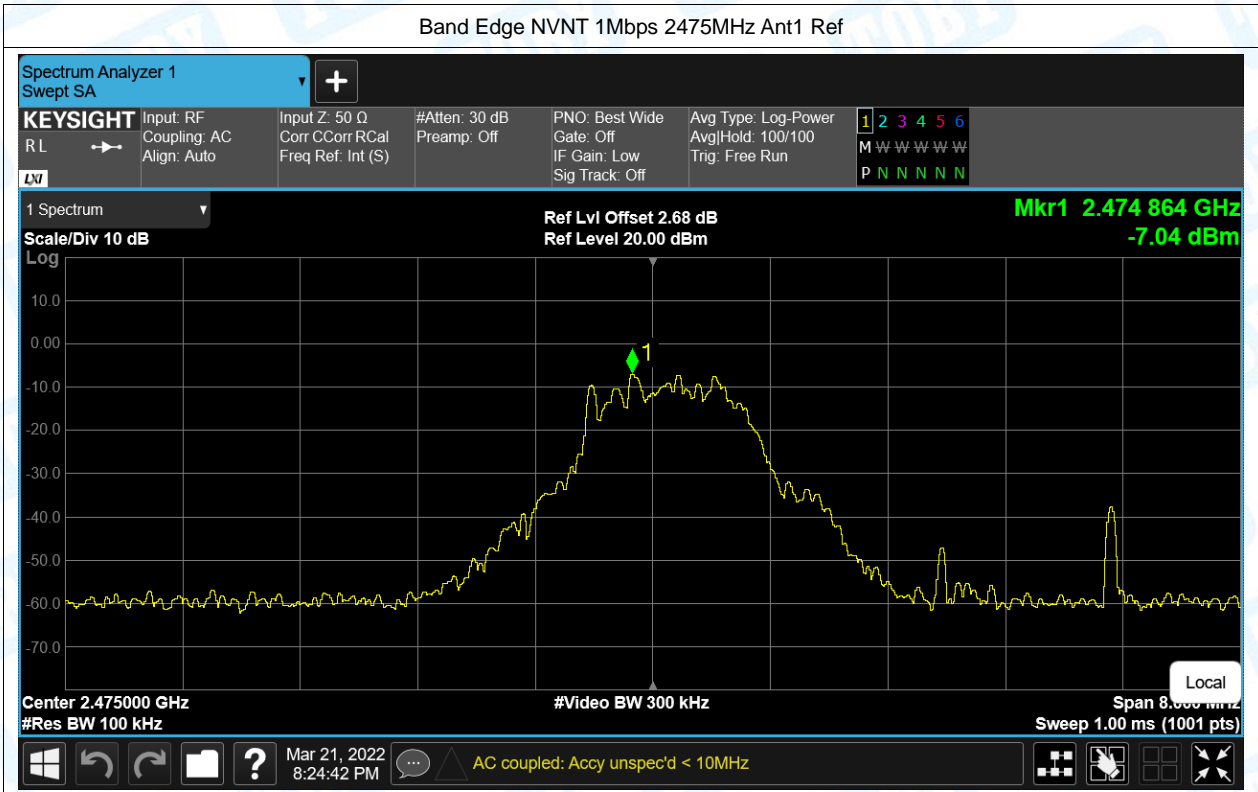
Test Graphs

Band Edge NVNT 1Mbps 2407MHz Ant1 Ref



Band Edge NVNT 1Mbps 2407MHz Ant1 Emission



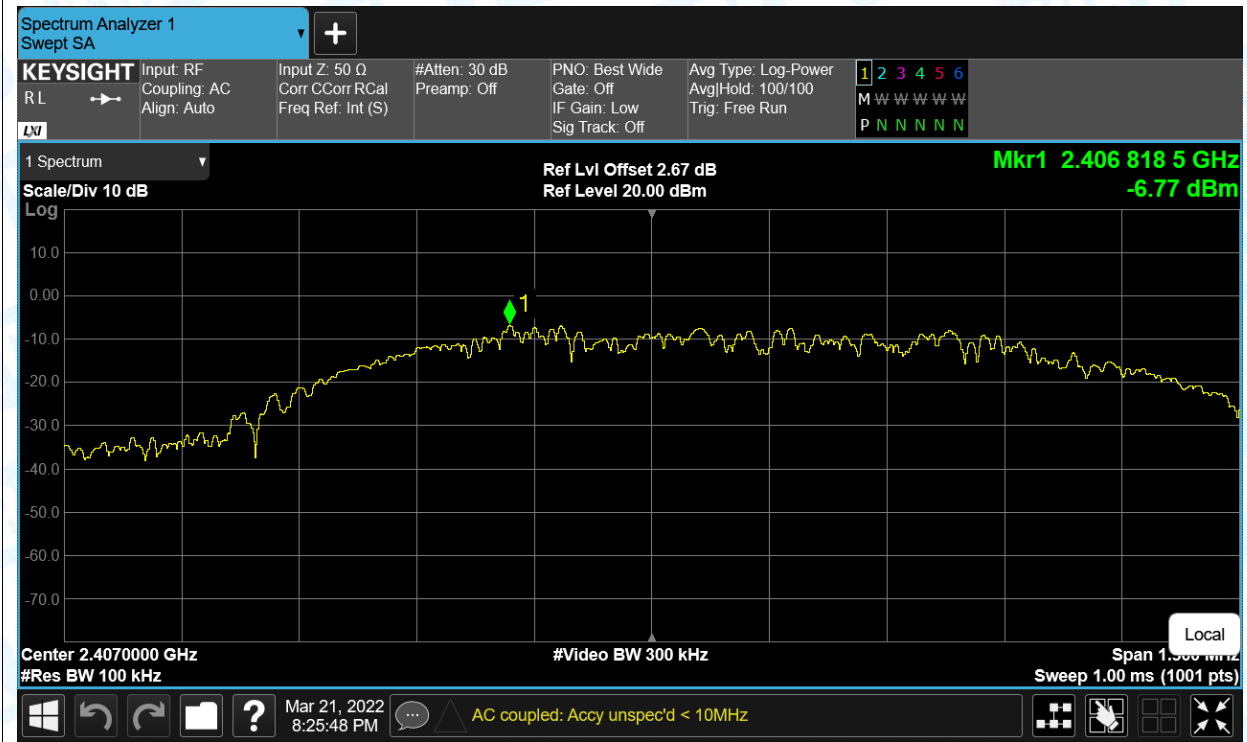


## 7. Conducted RF Spurious Emission

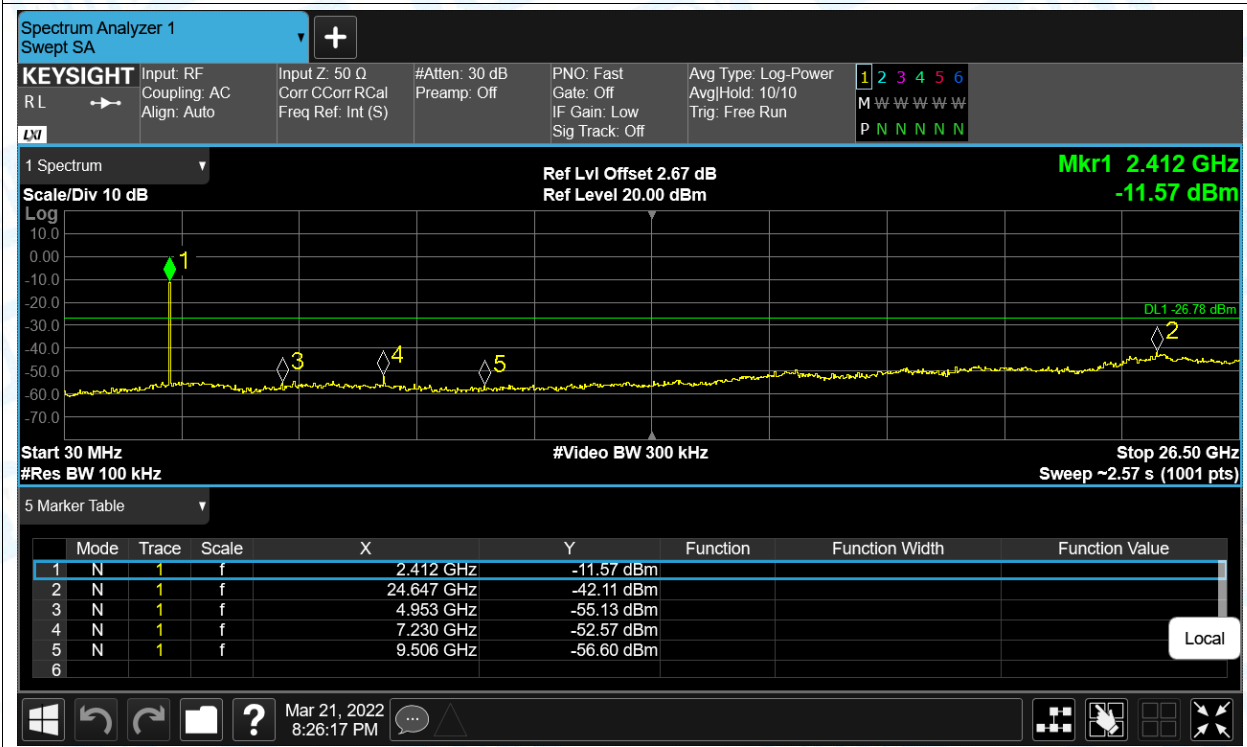
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	GFSK	2407	Ant1	-35.34	-20	Pass
NVNT	GFSK	2445	Ant1	-34.26	-20	Pass
NVNT	GFSK	2475	Ant1	-34.74	-20	Pass

Test Graphs

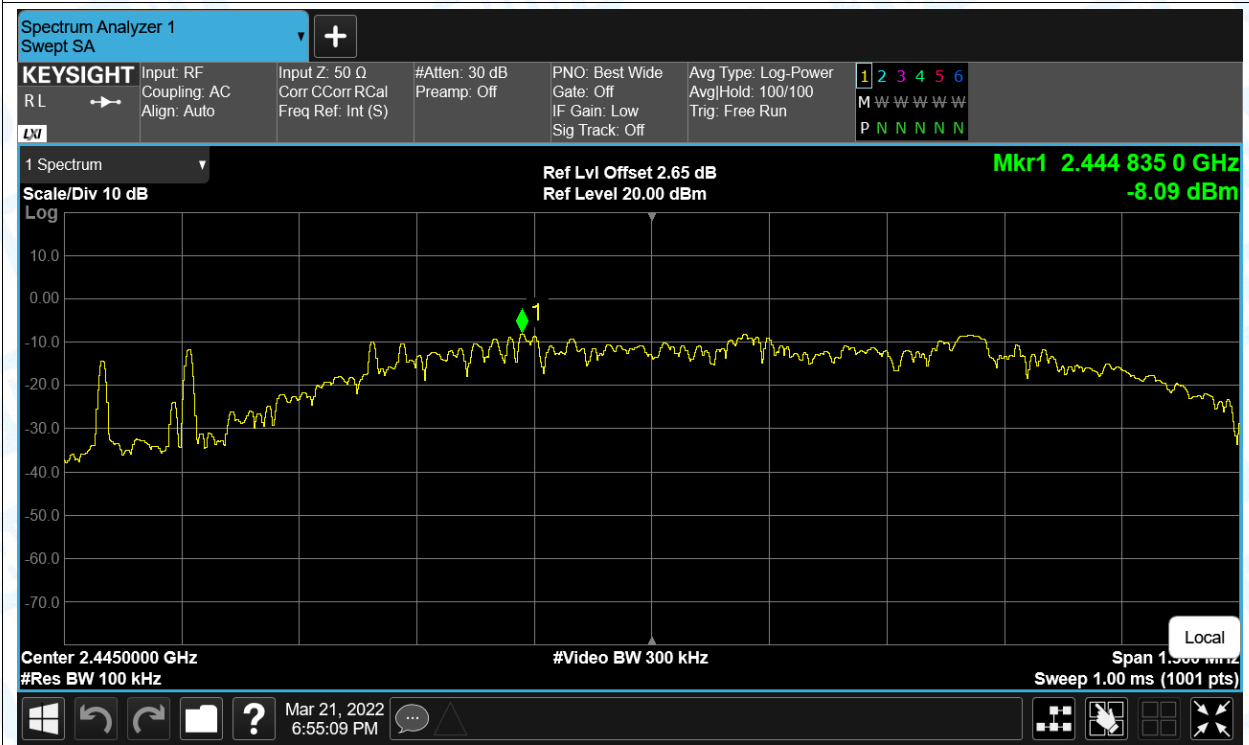
Tx. Spurious NVNT 1Mbps 2407MHz Ant1 Ref



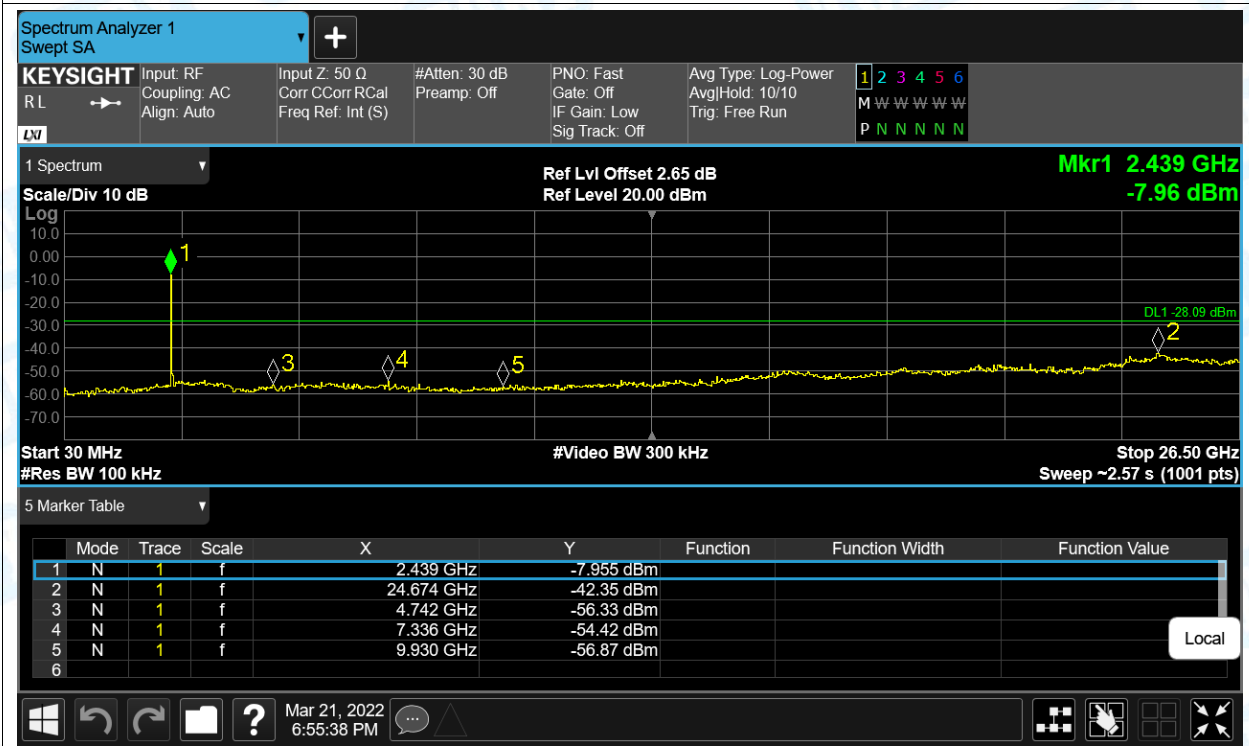
Tx. Spurious NVNT 1Mbps 2407MHz Ant1 Emission



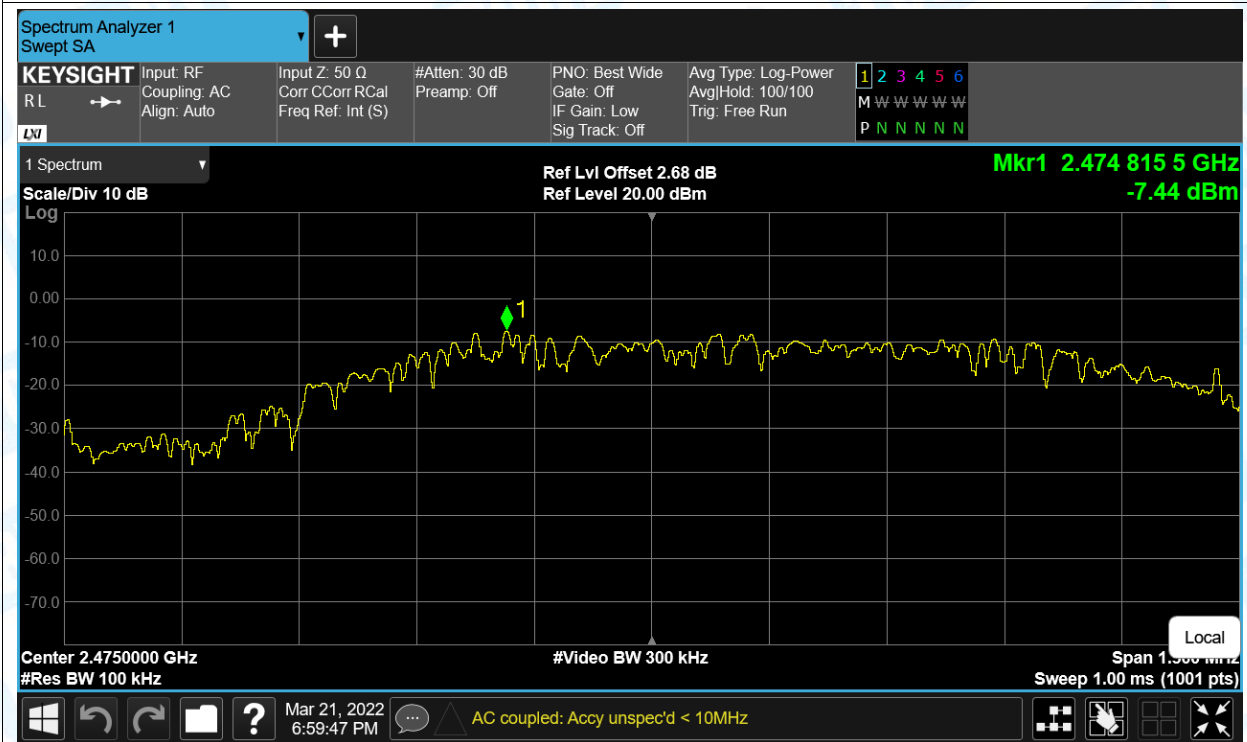
Tx. Spurious NVNT 1Mbps 2445MHz Ant1 Ref



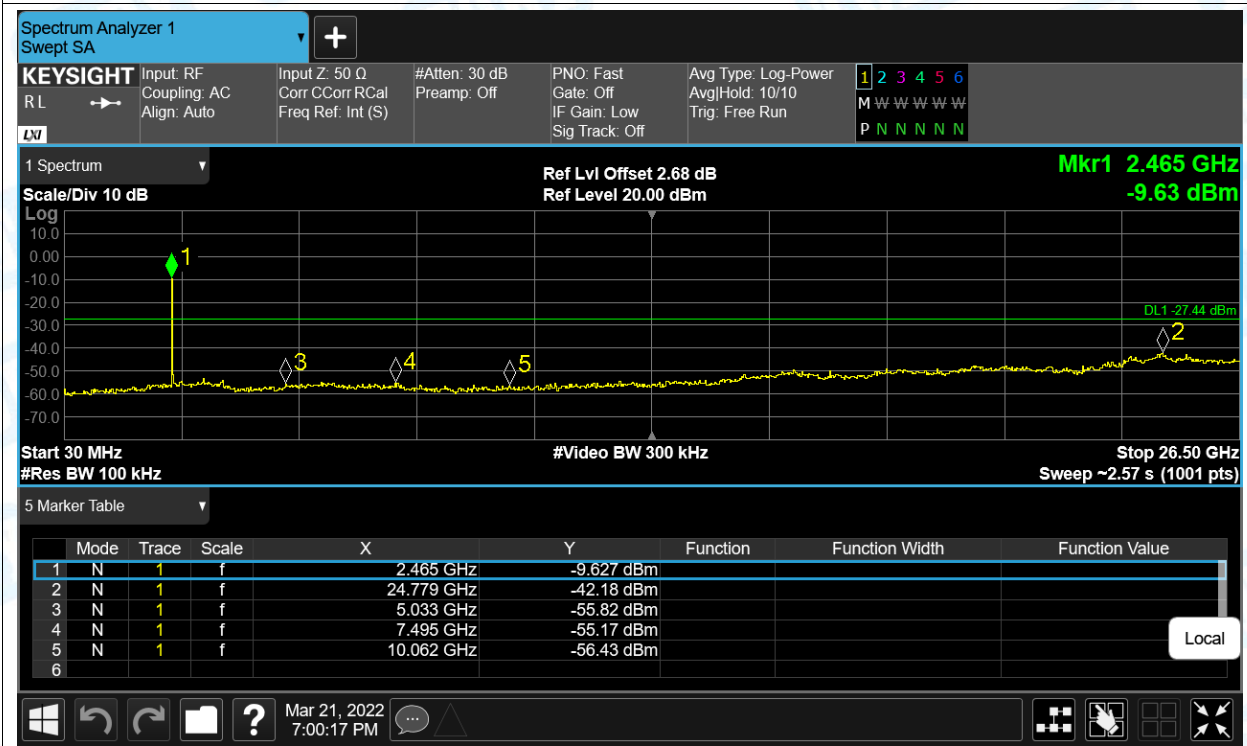
Tx. Spurious NVNT 1Mbps 2445MHz Ant1 Emission



Tx. Spurious NVNT 1Mbps 2475MHz Ant1 Ref



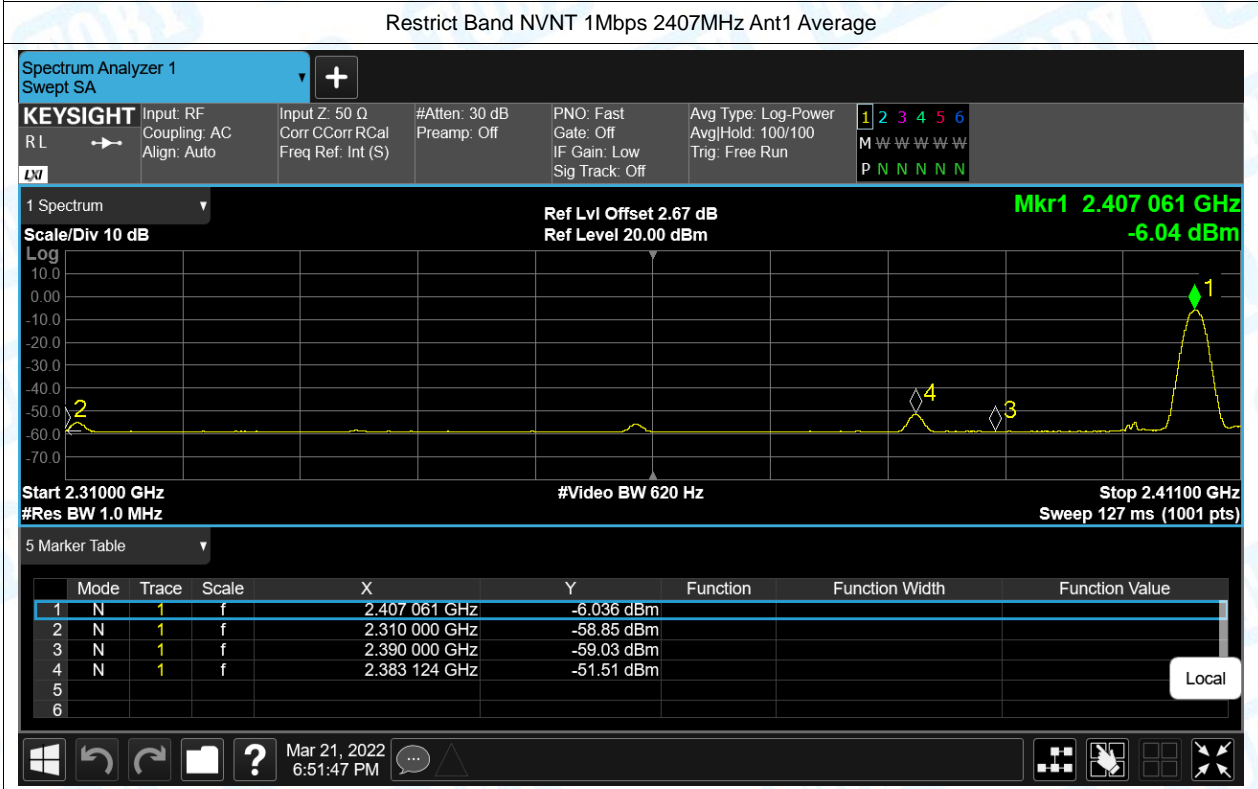
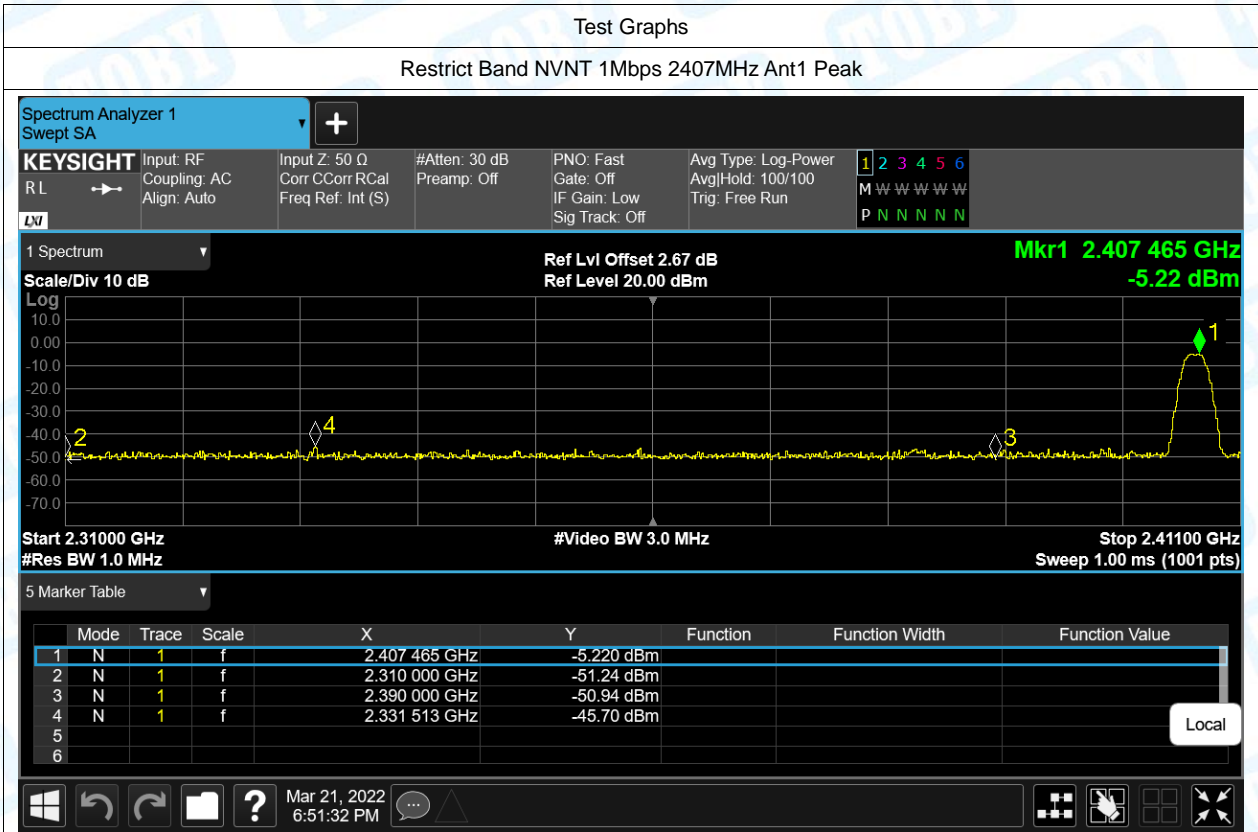
Tx. Spurious NVNT 1Mbps 2475MHz Ant1 Emission



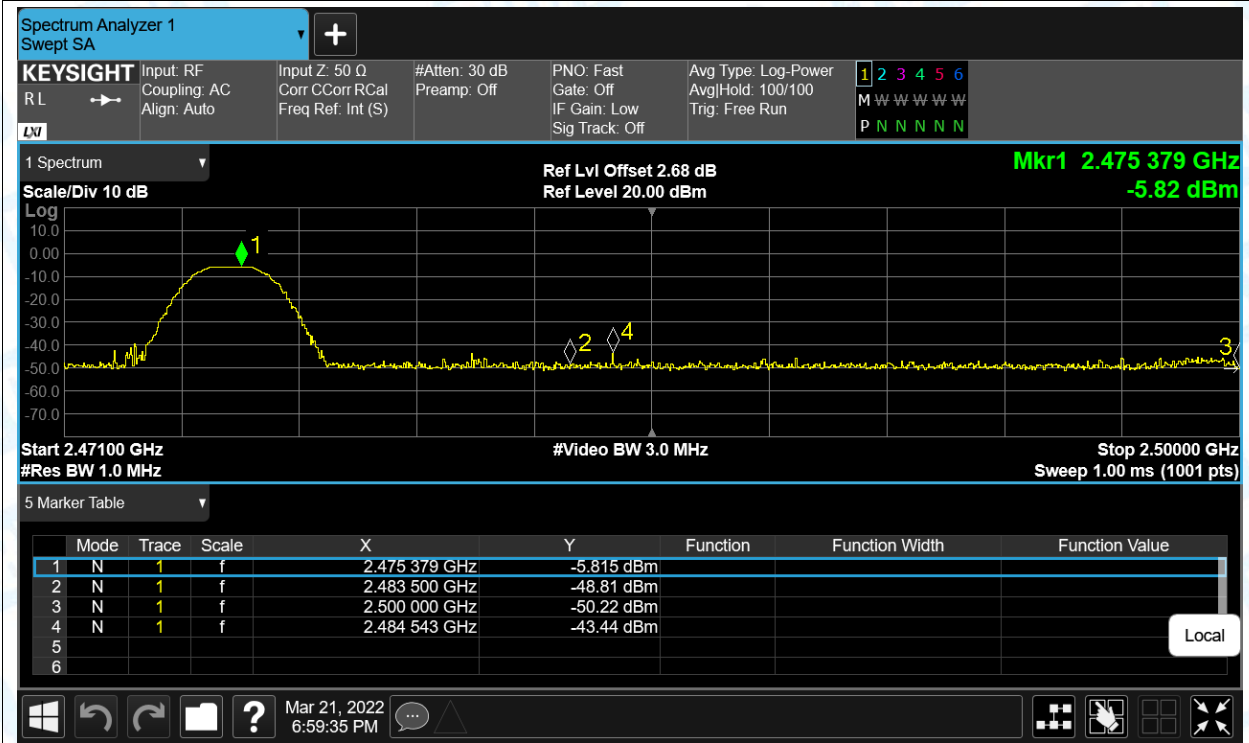


## 8.Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	GFSK	2407	Ant1	2310	-51.24	2	46.02	Peak	74	Pass
NVNT	GFSK	2407	Ant1	2310	-58.85	2	38.41	Average	54	Pass
NVNT	GFSK	2407	Ant1	2331.513	-45.7	2	51.56	Peak	74	Pass
NVNT	GFSK	2407	Ant1	2383.124	-51.51	2	45.75	Average	54	Pass
NVNT	GFSK	2407	Ant1	2390	-49.62	2	47.64	Peak	74	Pass
NVNT	GFSK	2407	Ant1	2390	-58.95	2	38.31	Average	54	Pass
NVNT	GFSK	2475	Ant1	2483.5	-49.04	2	48.22	Peak	74	Pass
NVNT	GFSK	2475	Ant1	2483.5	-58.85	2	38.41	Average	54	Pass
NVNT	GFSK	2475	Ant1	2484.543	-43.44	2	53.82	Peak	74	Pass
NVNT	GFSK	2475	Ant1	2499.13	-50.58	2	46.68	Average	54	Pass
NVNT	GFSK	2475	Ant1	2500	-50.22	2	47.04	Peak	74	Pass
NVNT	GFSK	2475	Ant1	2500	-56.13	2	41.13	Average	54	Pass



Restrict Band NVNT 1Mbps 2475MHz Ant1 Peak



Restrict Band NVNT 1Mbps 2475MHz Ant1 Average

