

RF Test Data for Bluetooth LE (Conducted Measurements)

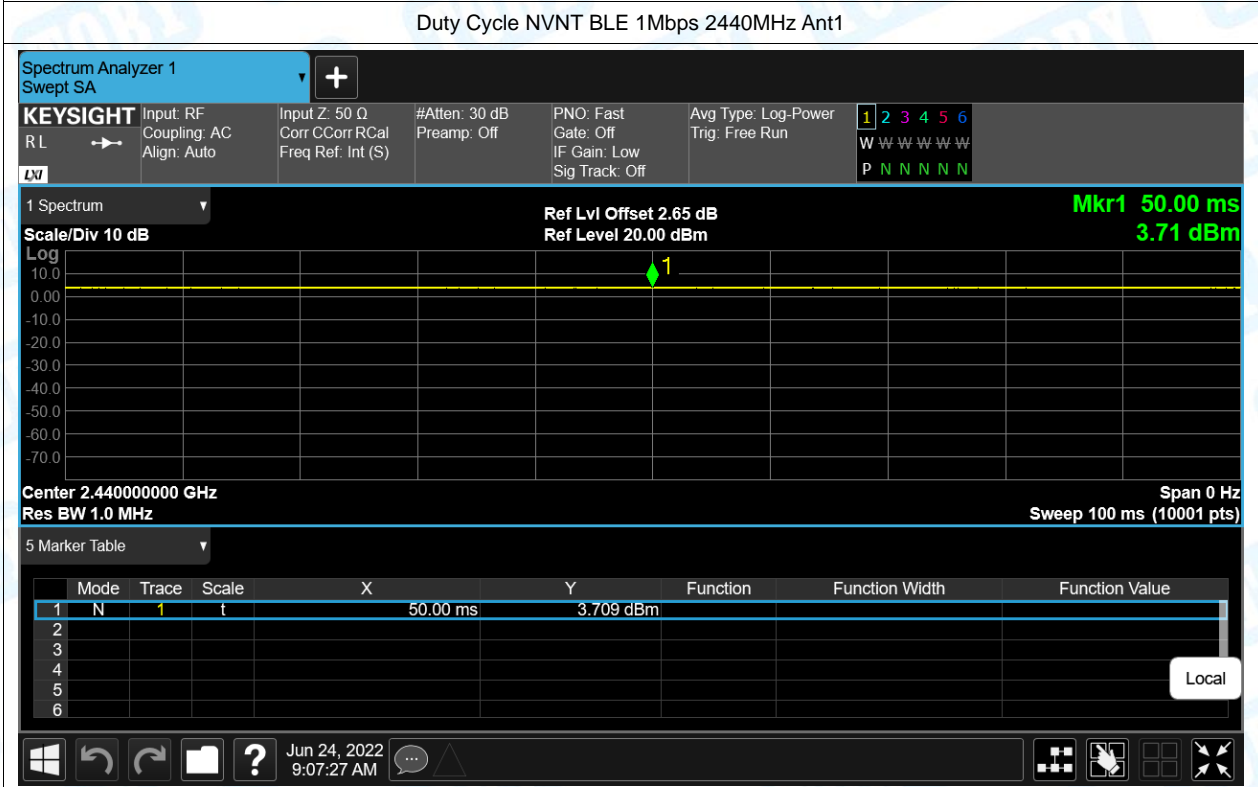
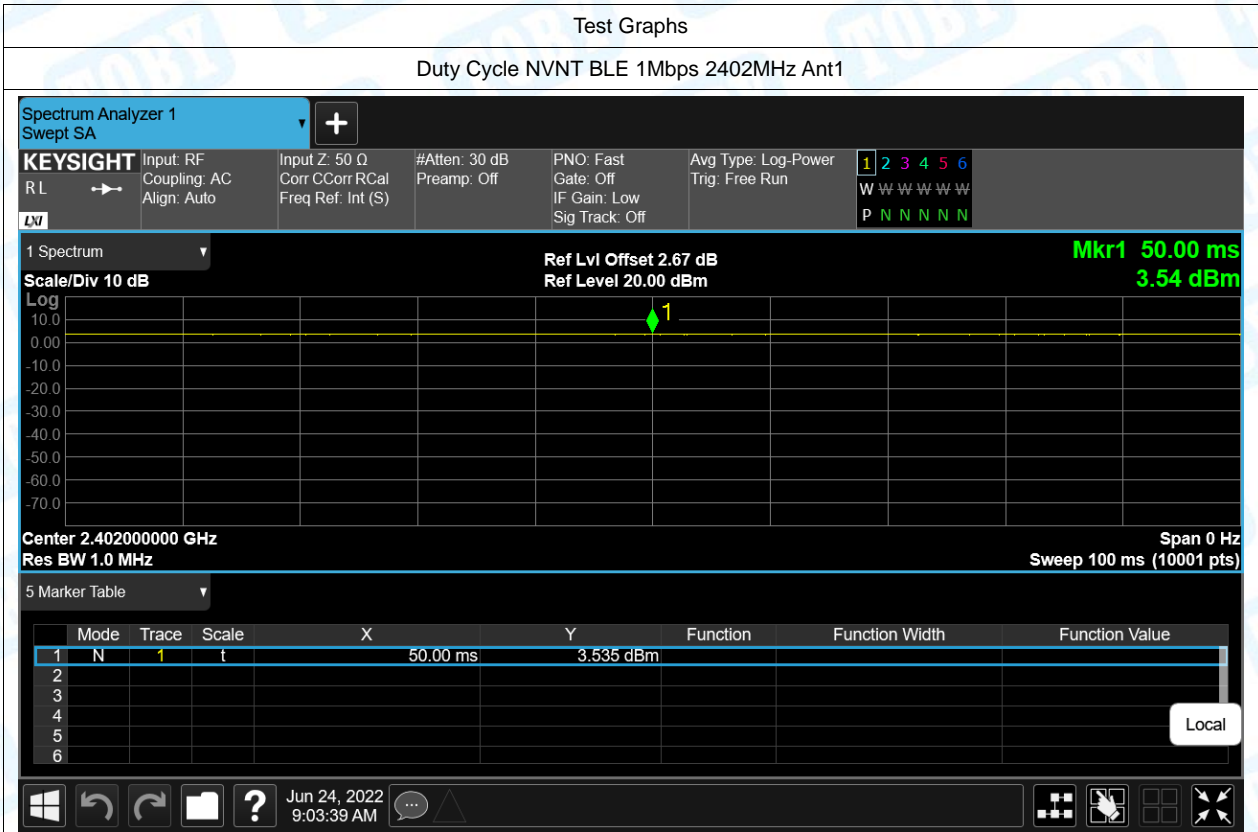
General Description of EUT	
Product Name:	Wi-Fi IR+RF Remote Control
Test Model:	S11
Sample ID:	202205-0291-1-2#
Environmental Conditions	
Temperature:	25°C
Relative Humidity:	55%
Test Voltage:	DC 5V
Test Engineer:	Huangjianping
Note: For a more detailed features description, please refer to the report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

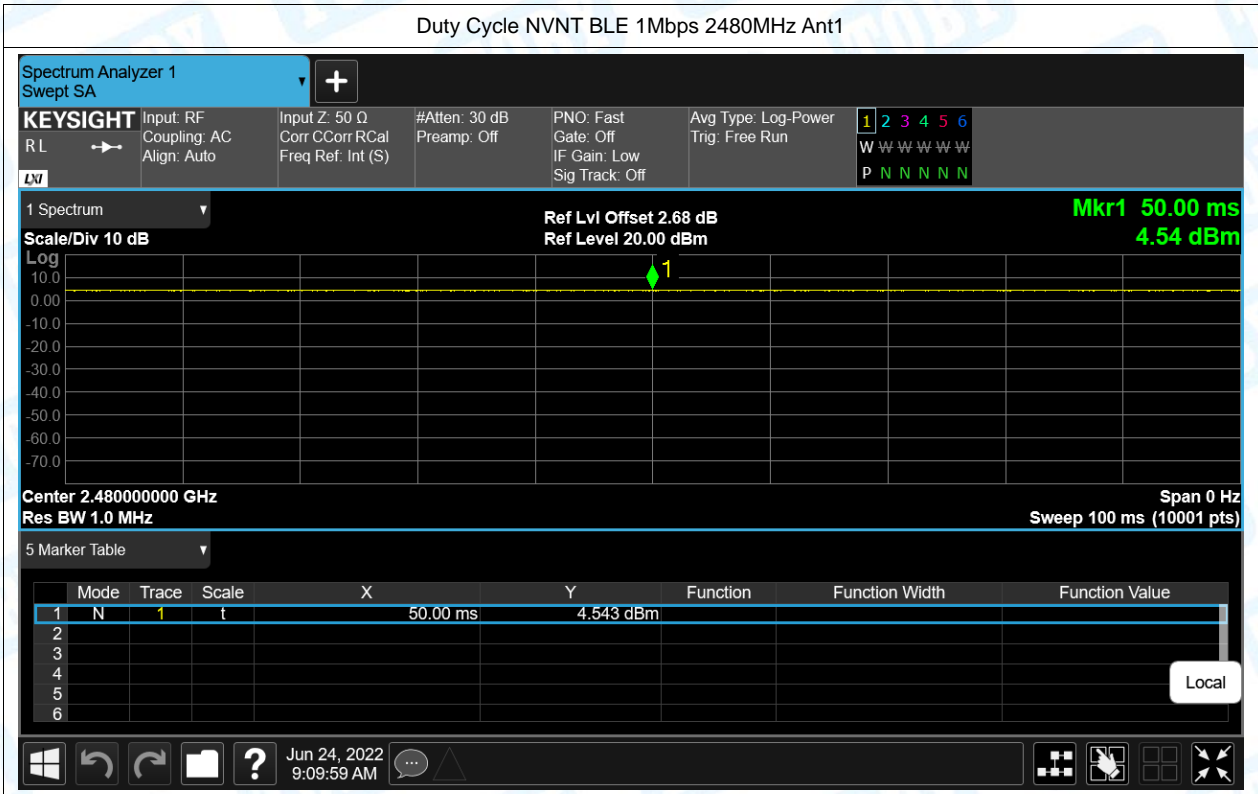
Contents

1. Duty Cycle.....	3
2. Maximum Conducted Output Power	6
3. -6dB Bandwidth	9
4. Occupied Channel Bandwidth	12
5. Maximum Power Spectral Density Level.....	15
6. Band Edge.....	18
7. Conducted RF Spurious Emission	21
8. Restrict Band	25

1. Duty Cycle

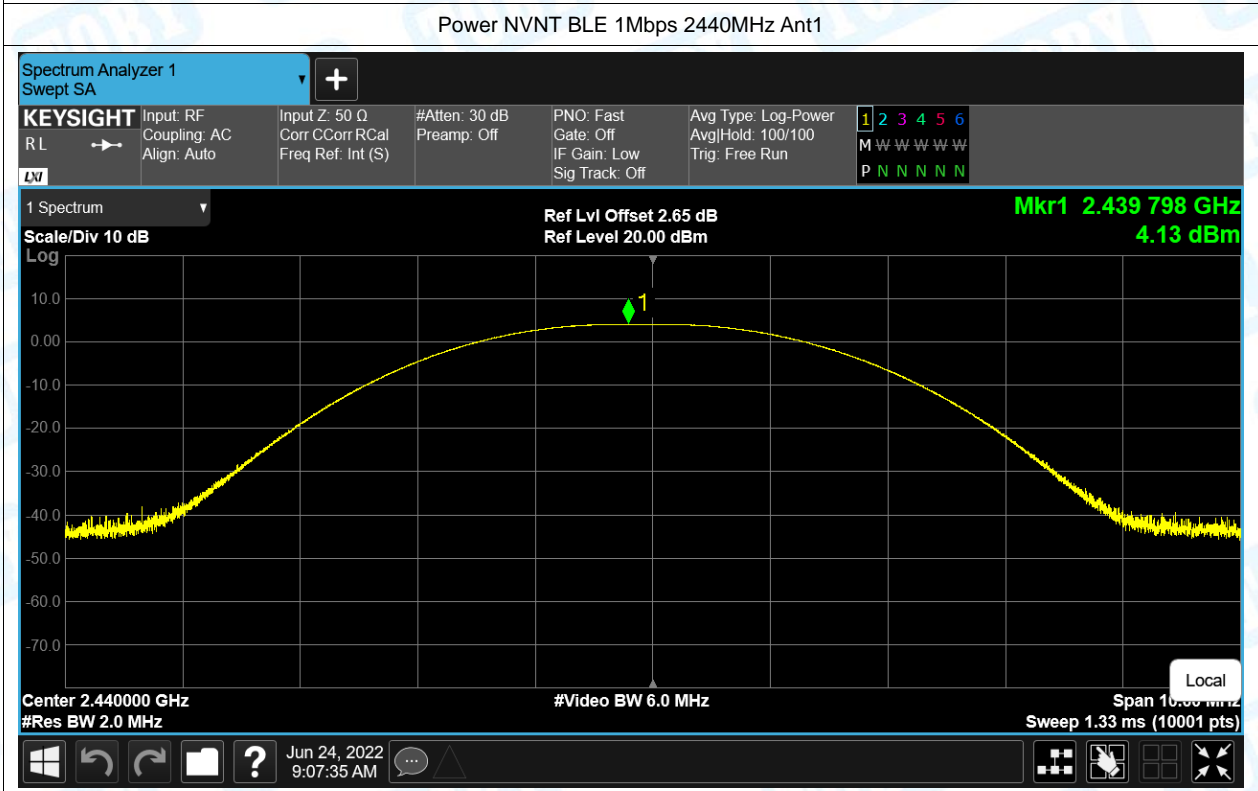
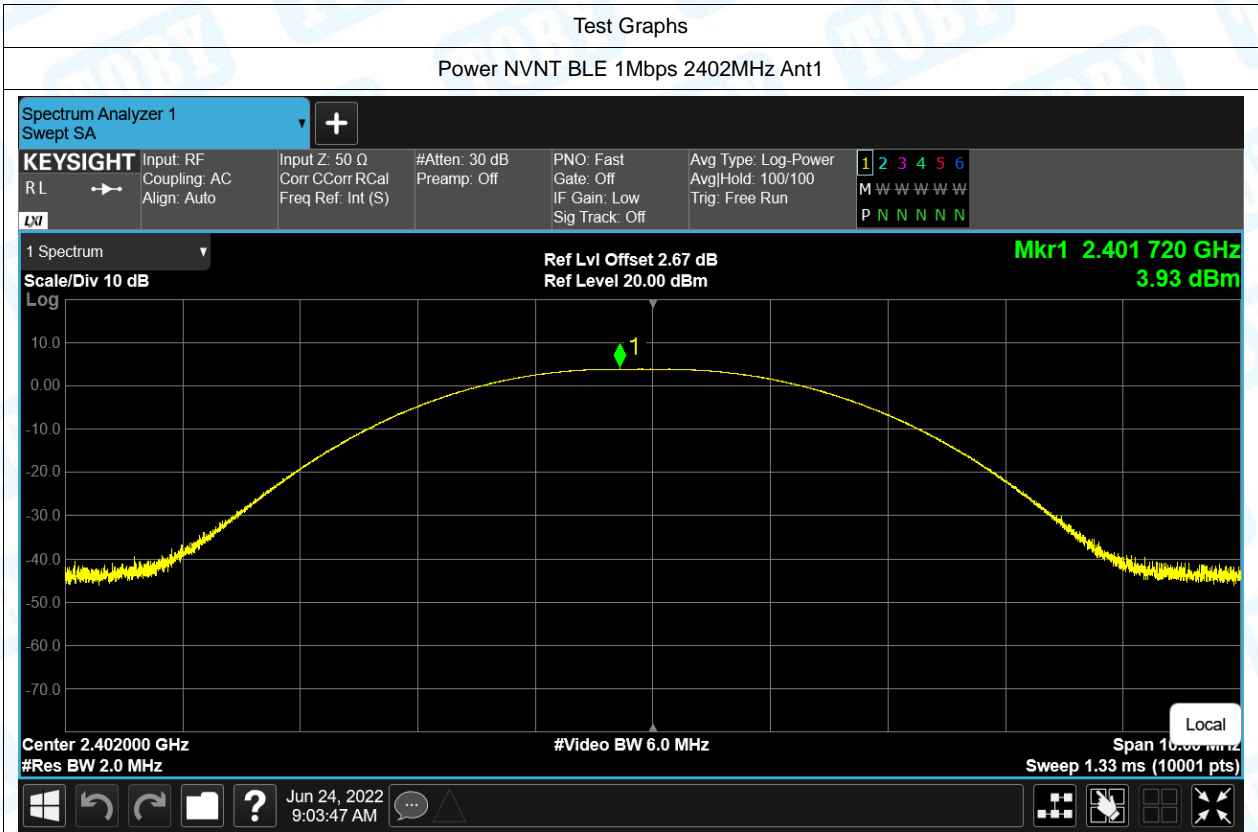
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1Mbps	2402	Ant1	100	0	0
NVNT	BLE 1Mbps	2440	Ant1	100	0	0
NVNT	BLE 1Mbps	2480	Ant1	100	0	0

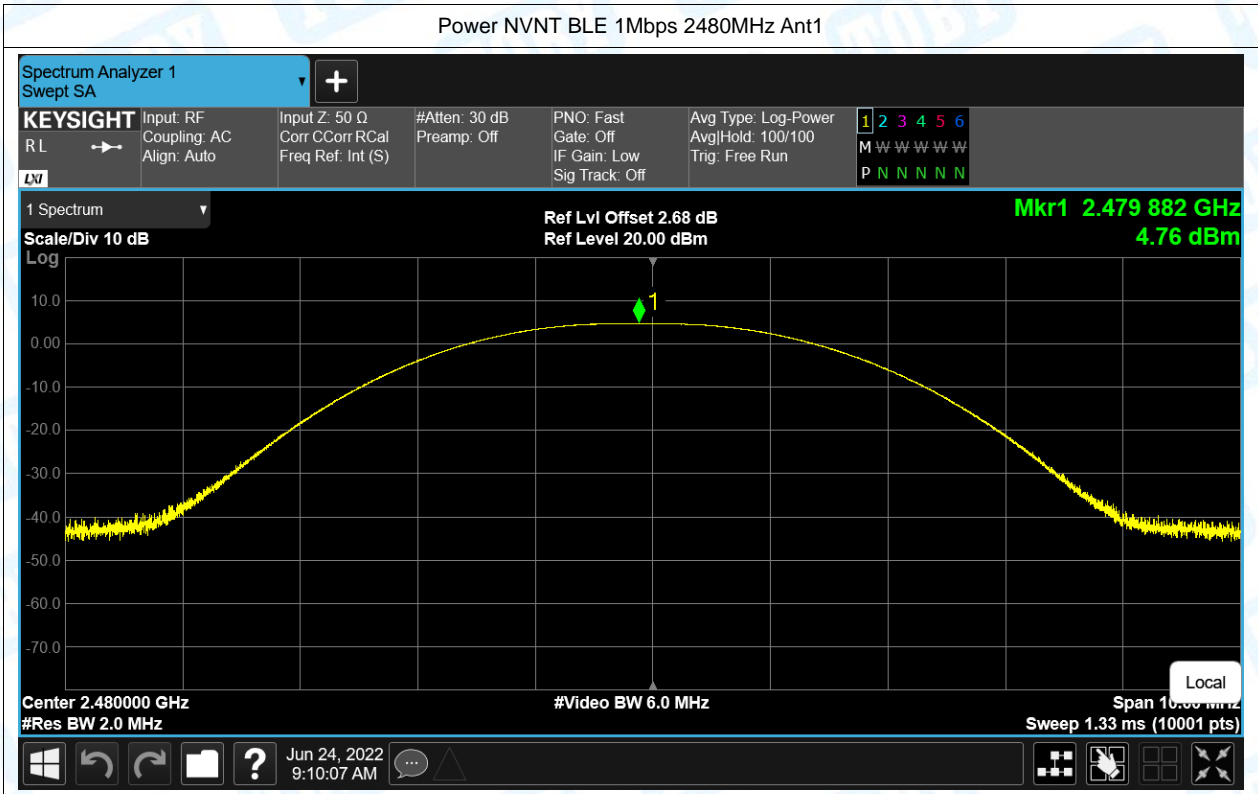




2. Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	3.933	30	Pass
NVNT	BLE 1Mbps	2440	Ant1	4.132	30	Pass
NVNT	BLE 1Mbps	2480	Ant1	4.76	30	Pass



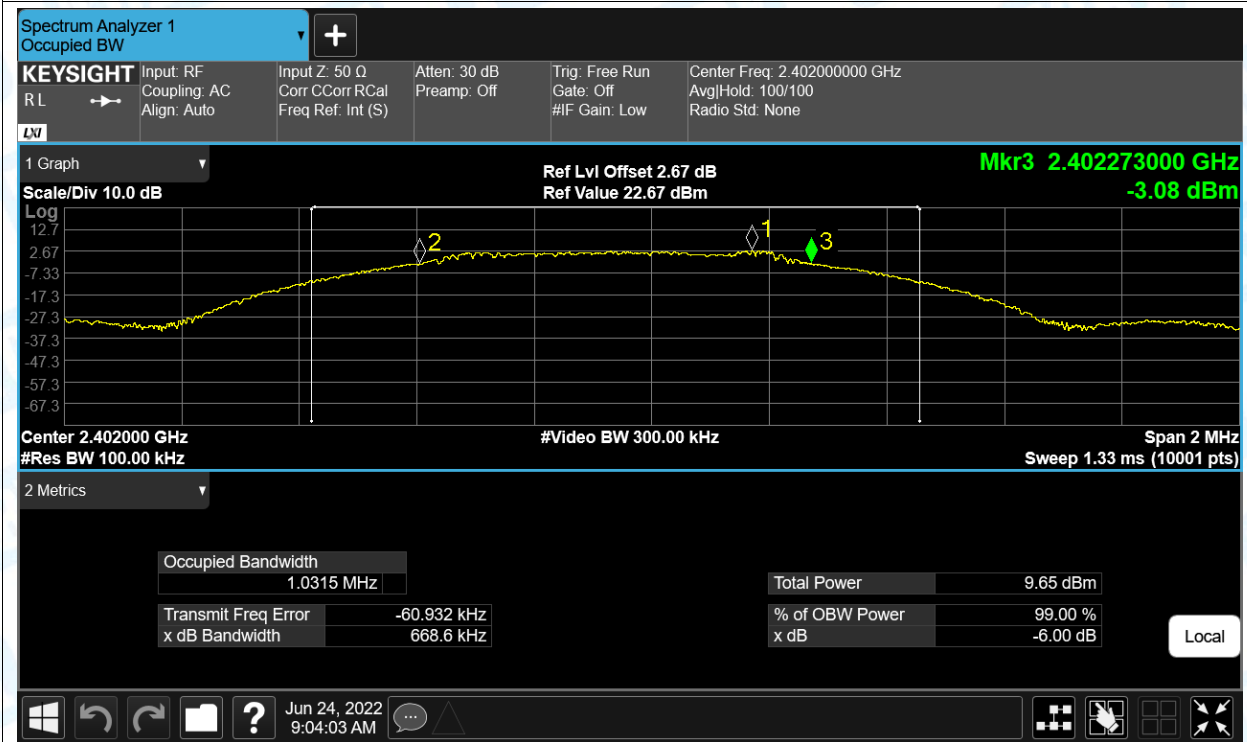


3. -6dB Bandwidth

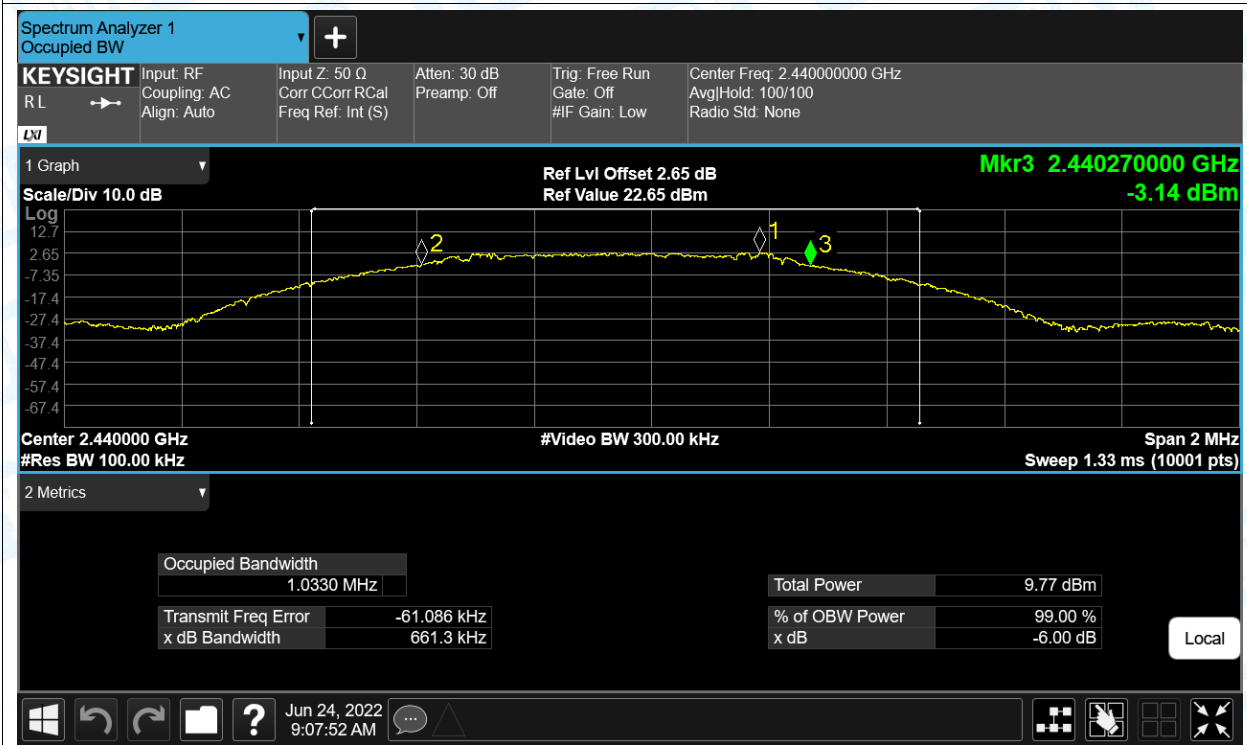
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	0.67	0.5	Pass
NVNT	BLE 1Mbps	2440	Ant1	0.66	0.5	Pass
NVNT	BLE 1Mbps	2480	Ant1	0.66	0.5	Pass

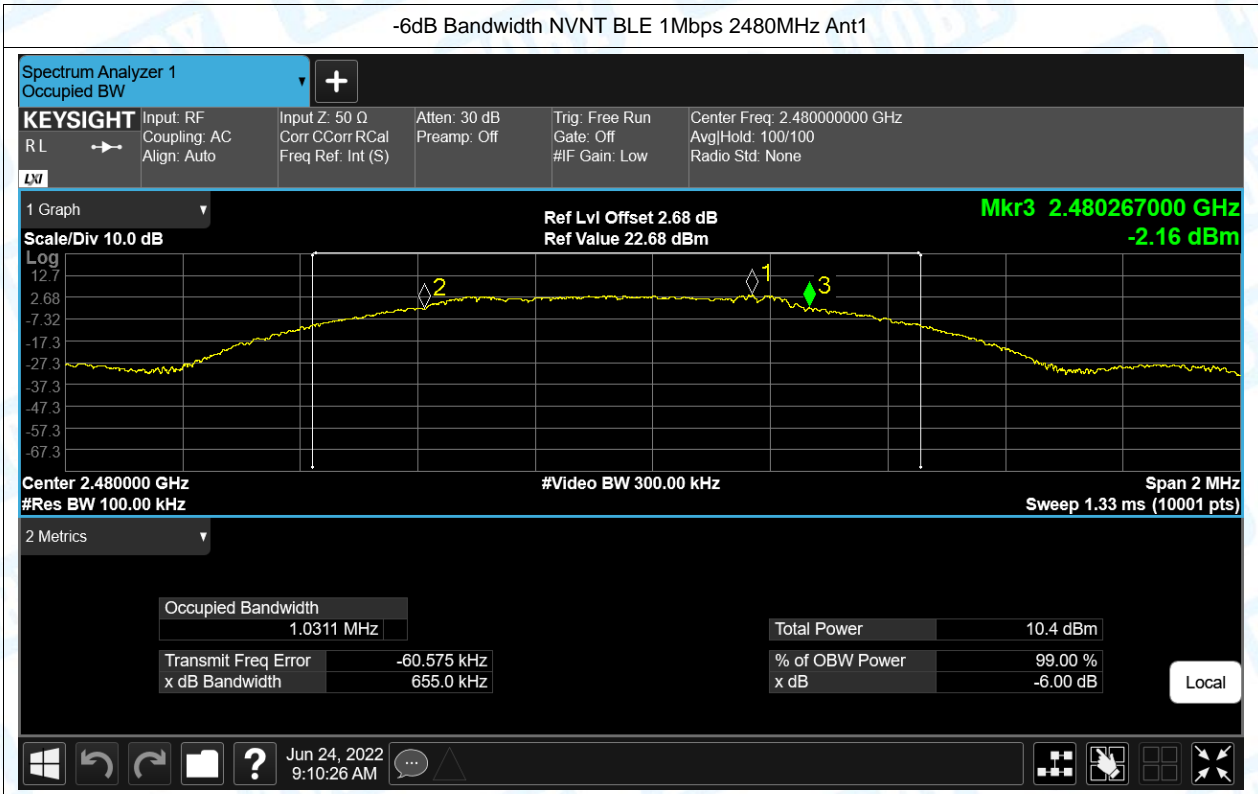
Test Graphs

-6dB Bandwidth NVNT BLE 1Mbps 2402MHz Ant1



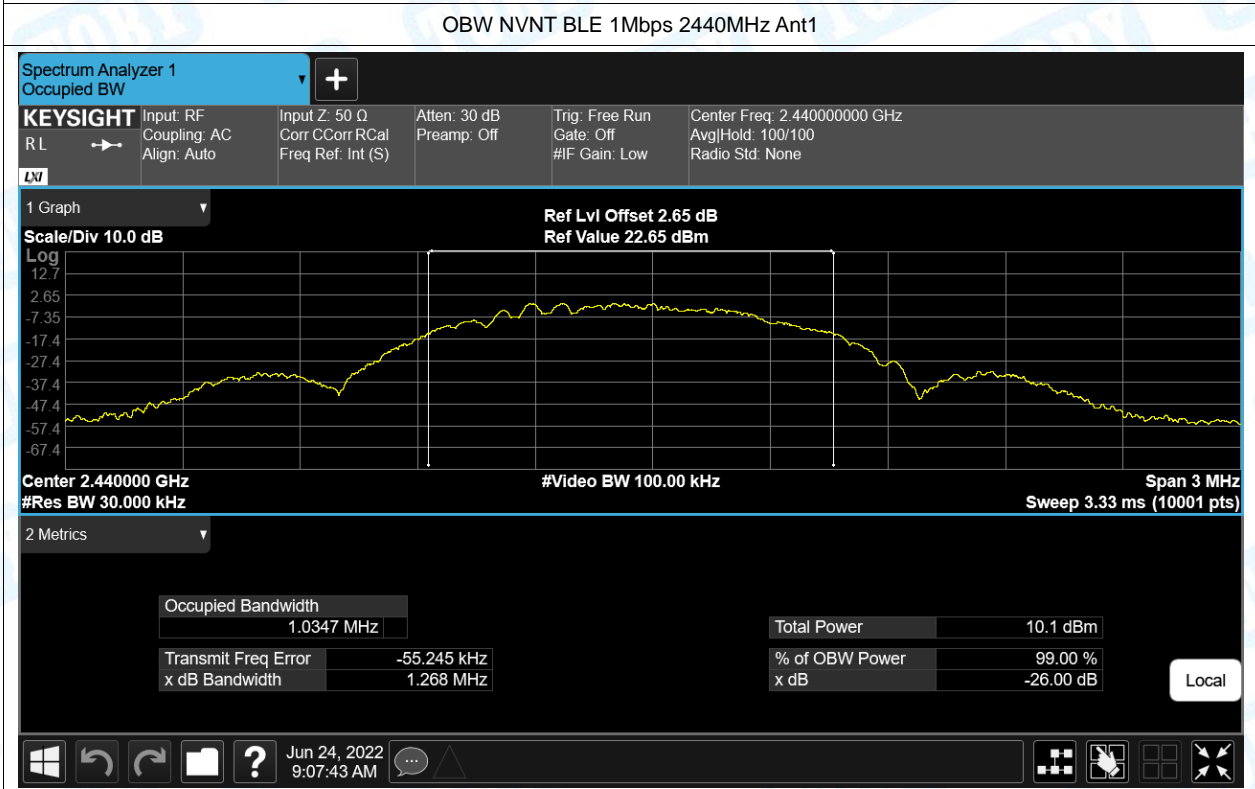
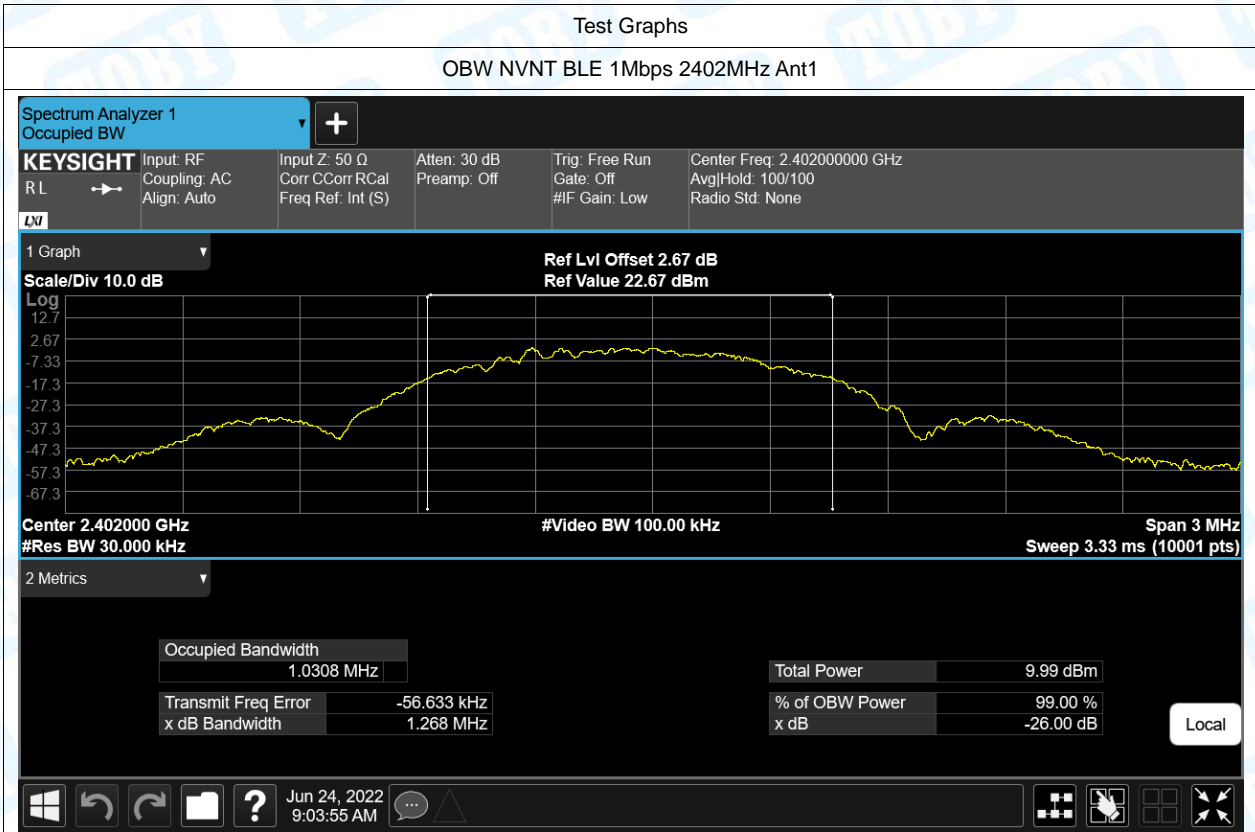
-6dB Bandwidth NVNT BLE 1Mbps 2440MHz Ant1

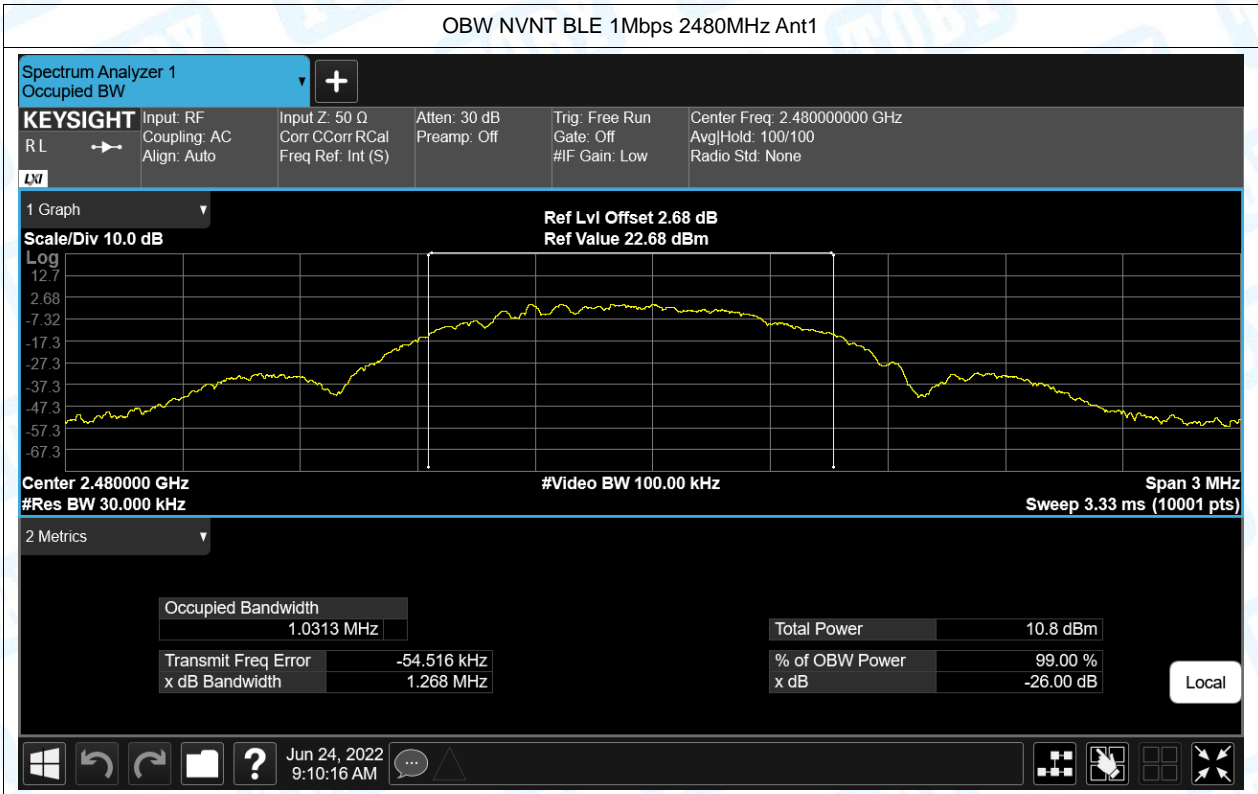




4. Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE 1Mbps	2402	Ant1	1.031
NVNT	BLE 1Mbps	2440	Ant1	1.035
NVNT	BLE 1Mbps	2480	Ant1	1.031



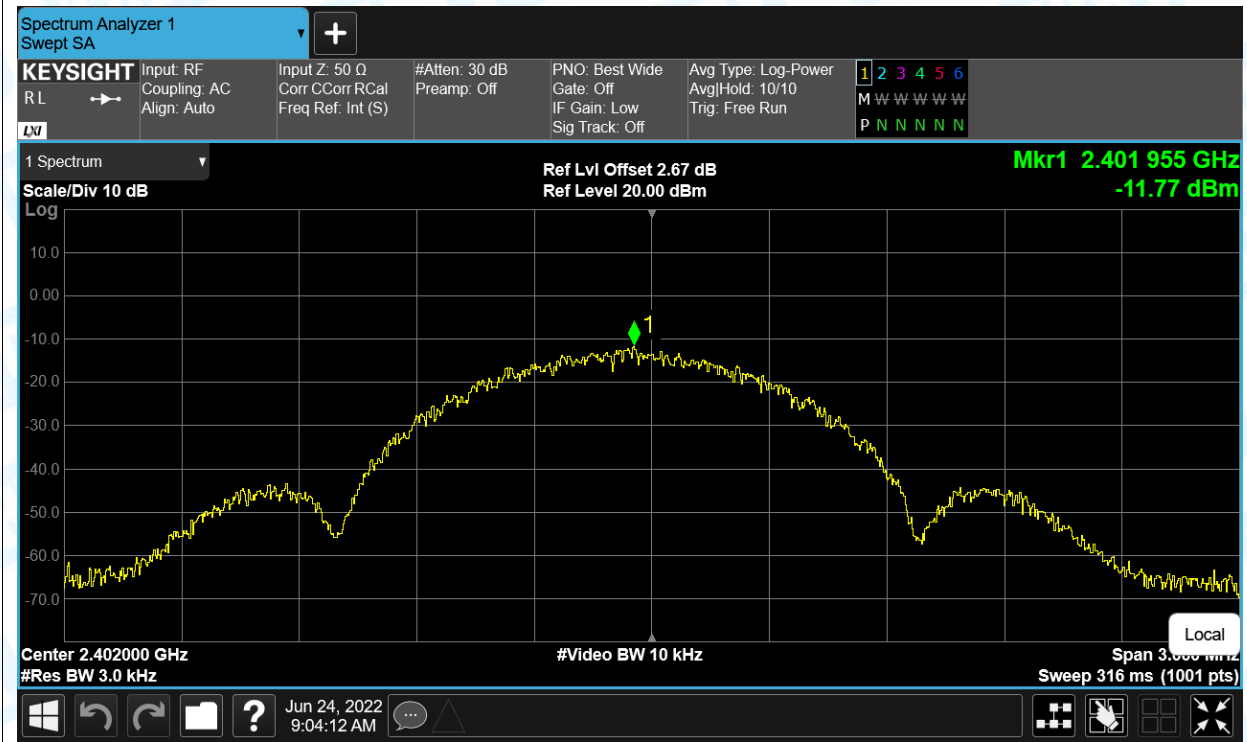


5. Maximum Power Spectral Density Level

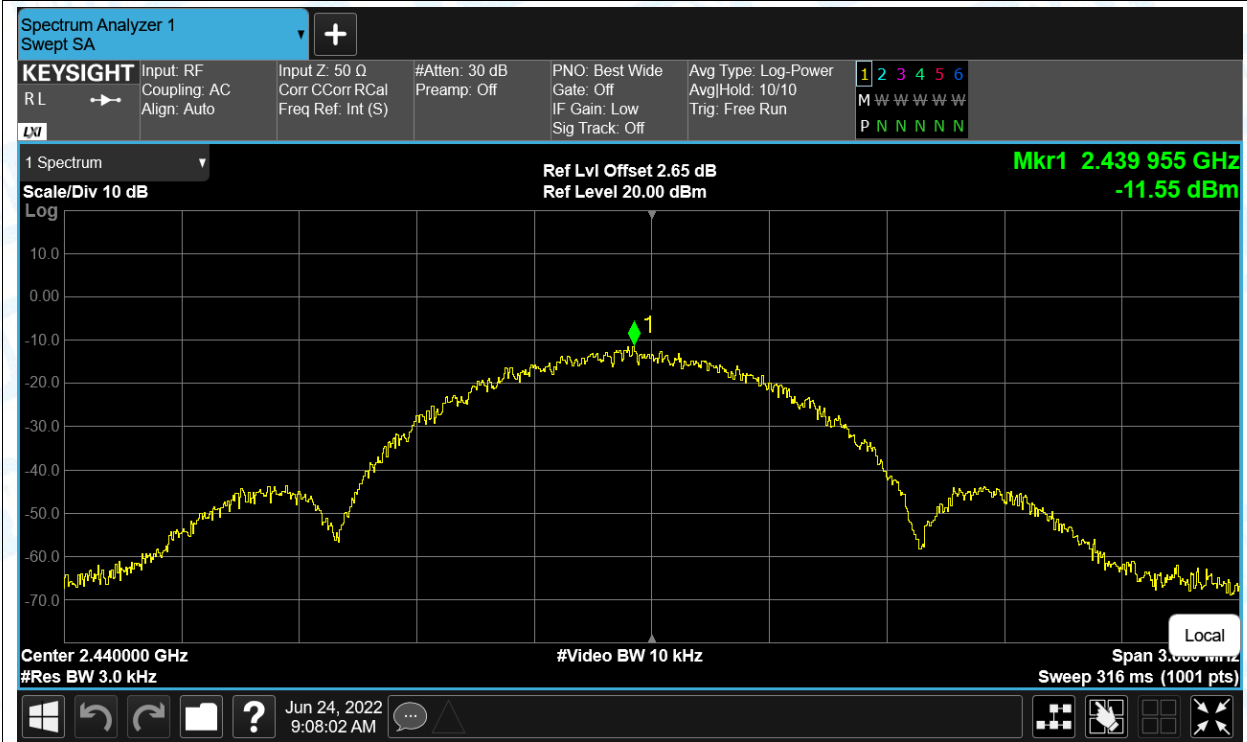
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-11.767	8	Pass
NVNT	BLE 1Mbps	2440	Ant1	-11.551	8	Pass
NVNT	BLE 1Mbps	2480	Ant1	-11.1	8	Pass

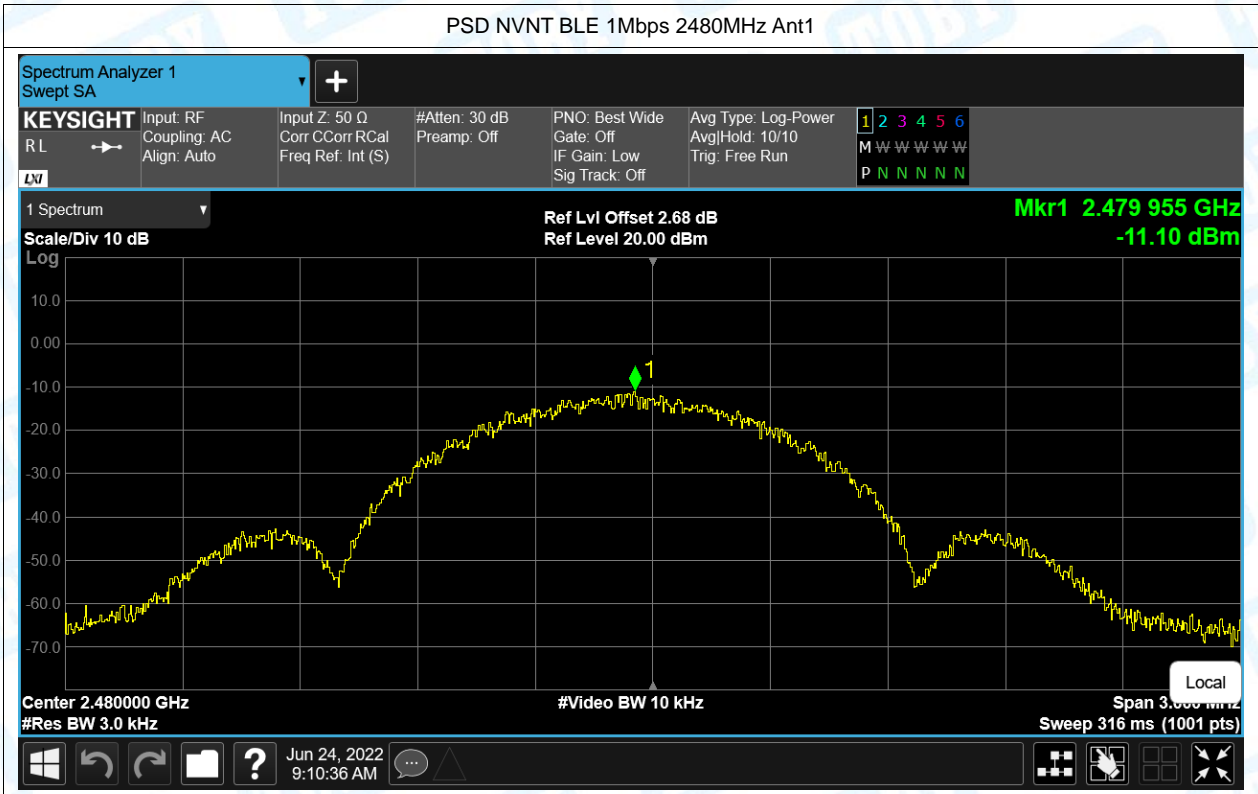
Test Graphs

PSD NVNT BLE 1Mbps 2402MHz Ant1



PSD NVNT BLE 1Mbps 2440MHz Ant1



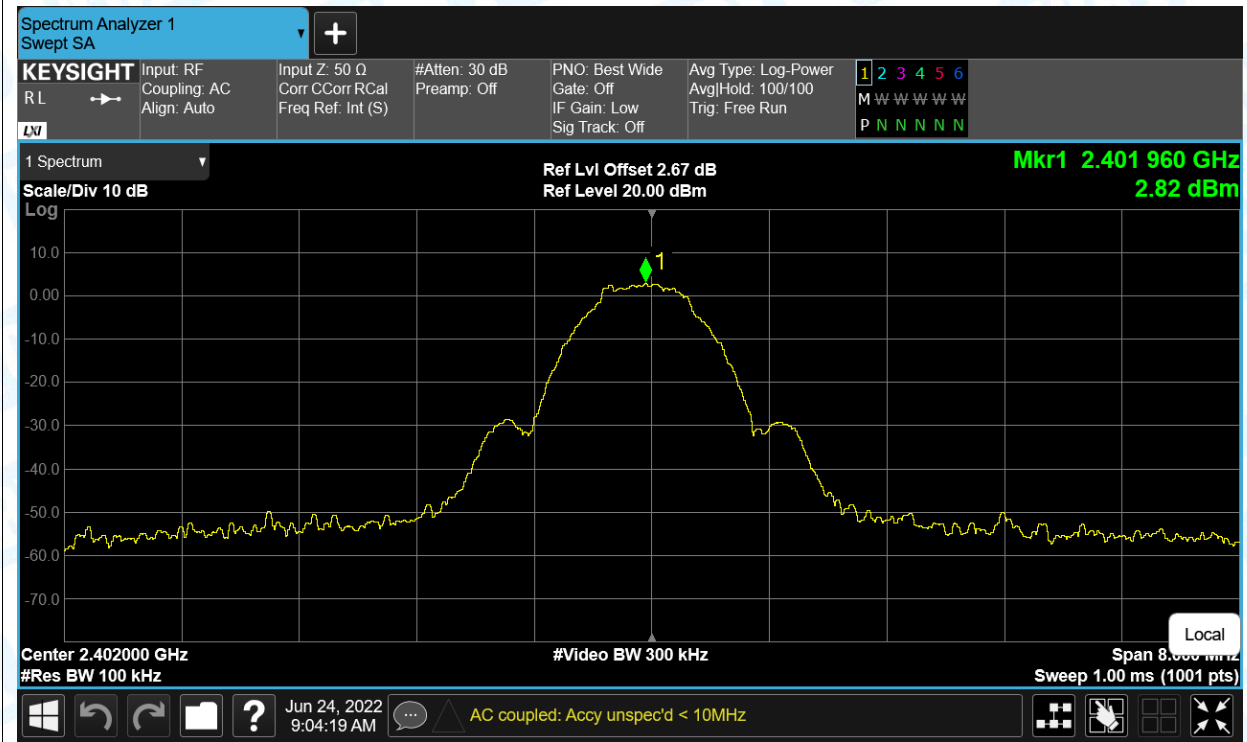


6. Band Edge

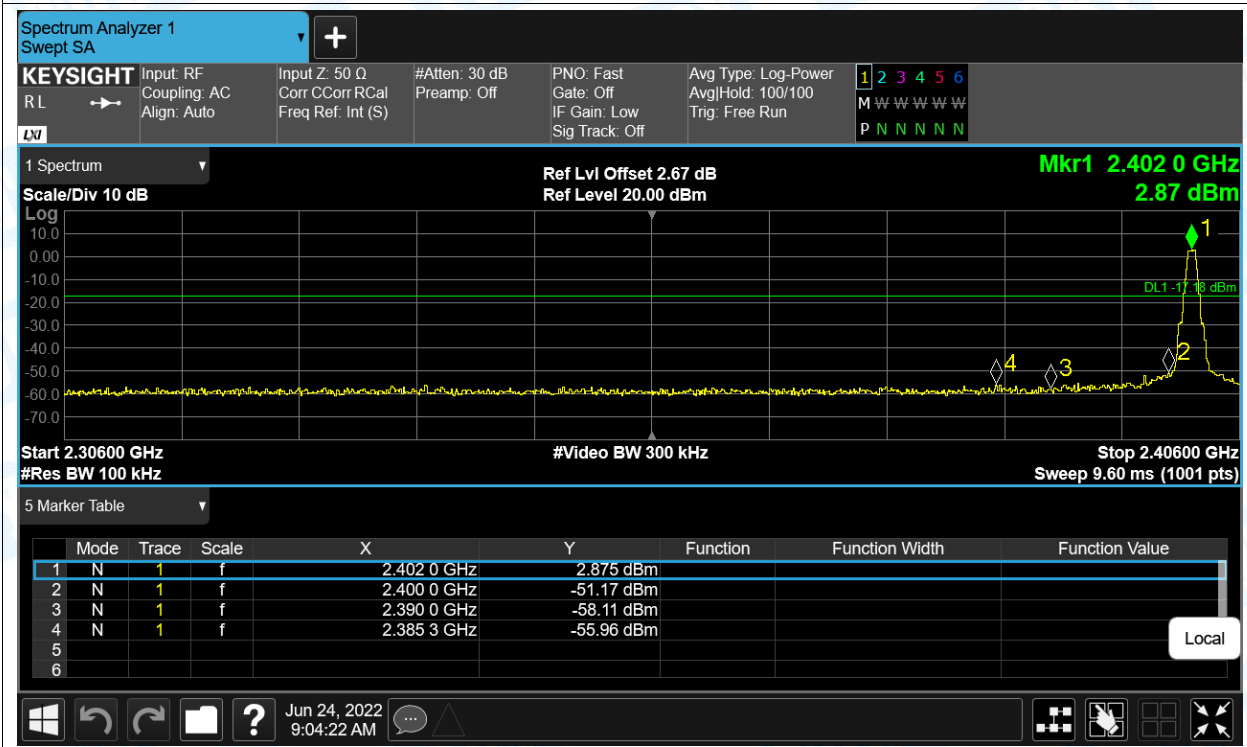
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-58.78	-20	Pass
NVNT	BLE 1Mbps	2480	Ant1	-57	-20	Pass

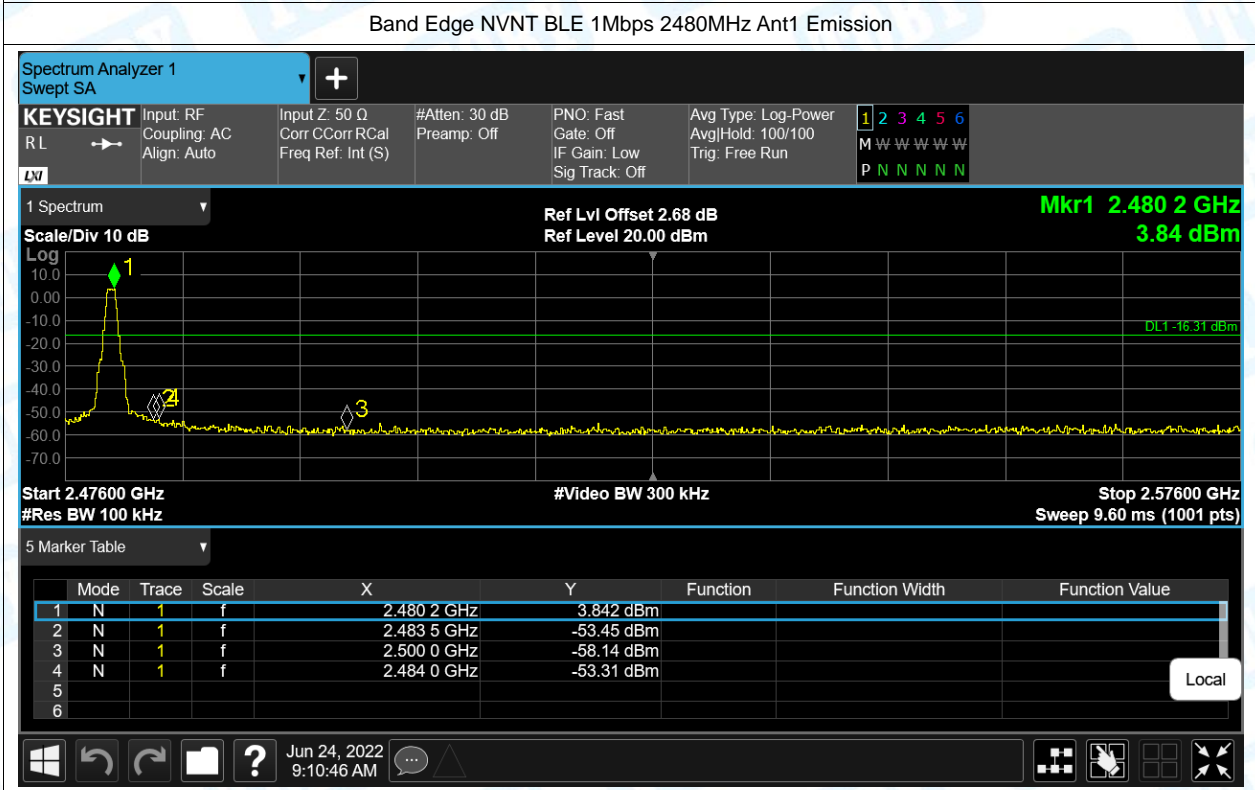
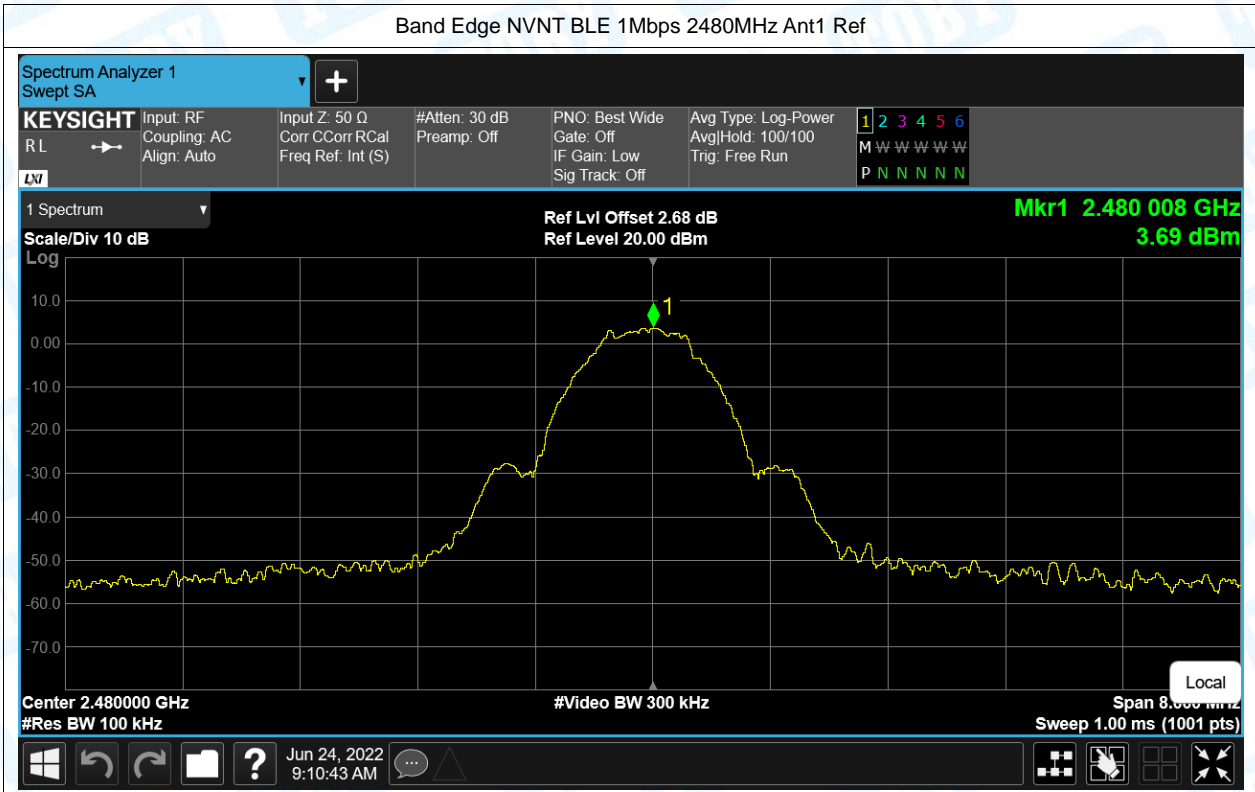
Test Graphs

Band Edge NVNT BLE 1Mbps 2402MHz Ant1 Ref



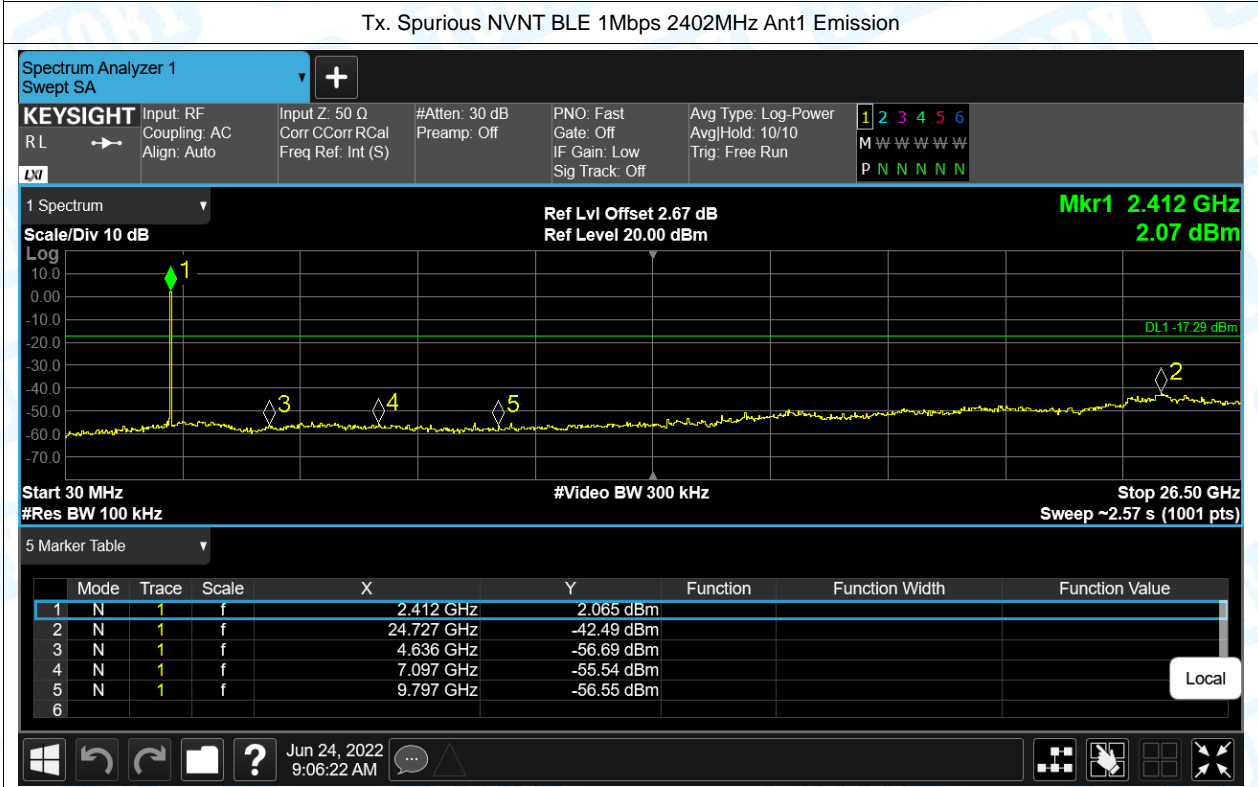
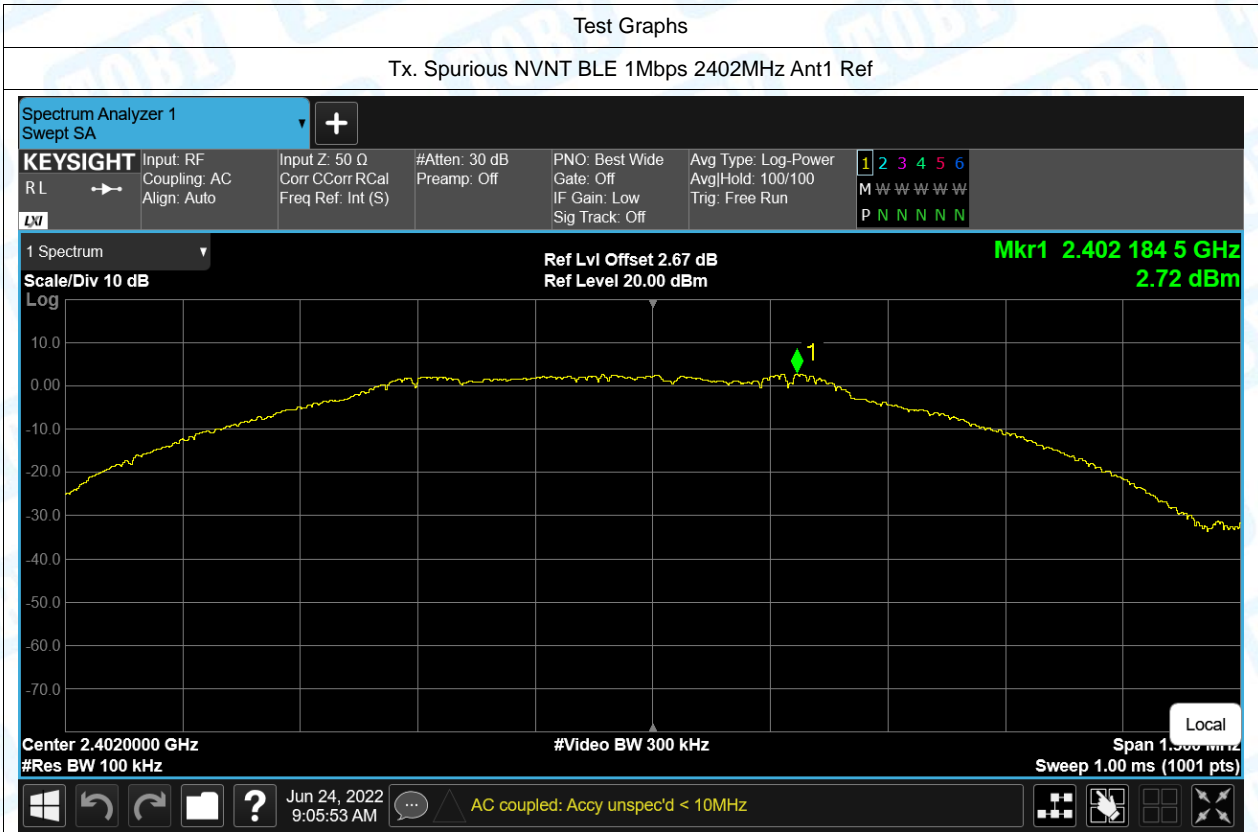
Band Edge NVNT BLE 1Mbps 2402MHz Ant1 Emission



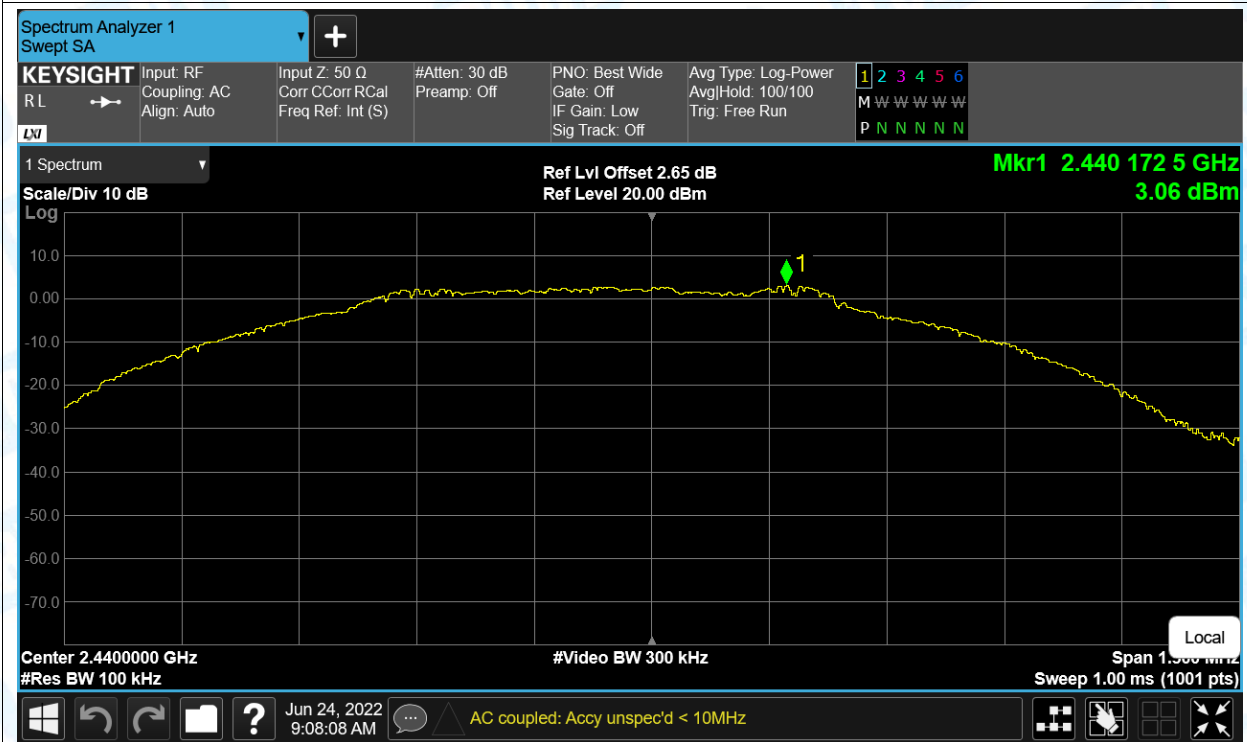


7. Conducted RF Spurious Emission

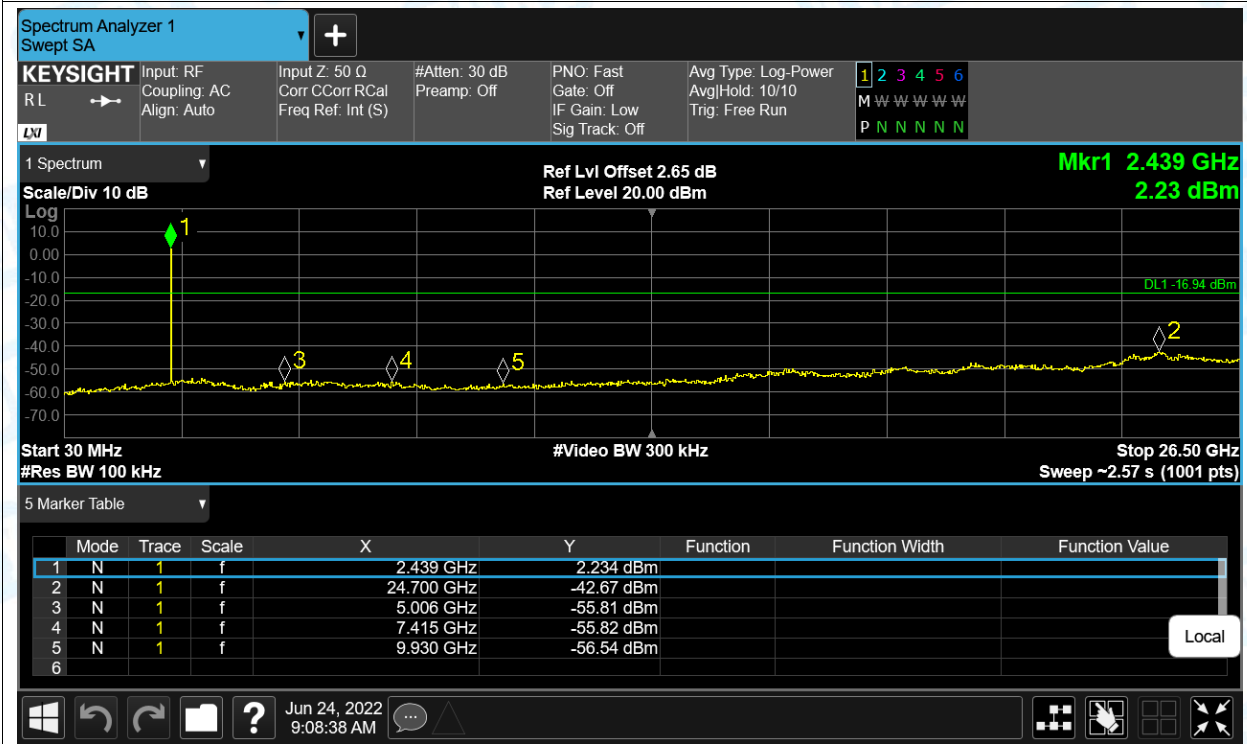
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-45.21	-20	Pass
NVNT	BLE 1Mbps	2440	Ant1	-45.73	-20	Pass
NVNT	BLE 1Mbps	2480	Ant1	-45.73	-20	Pass



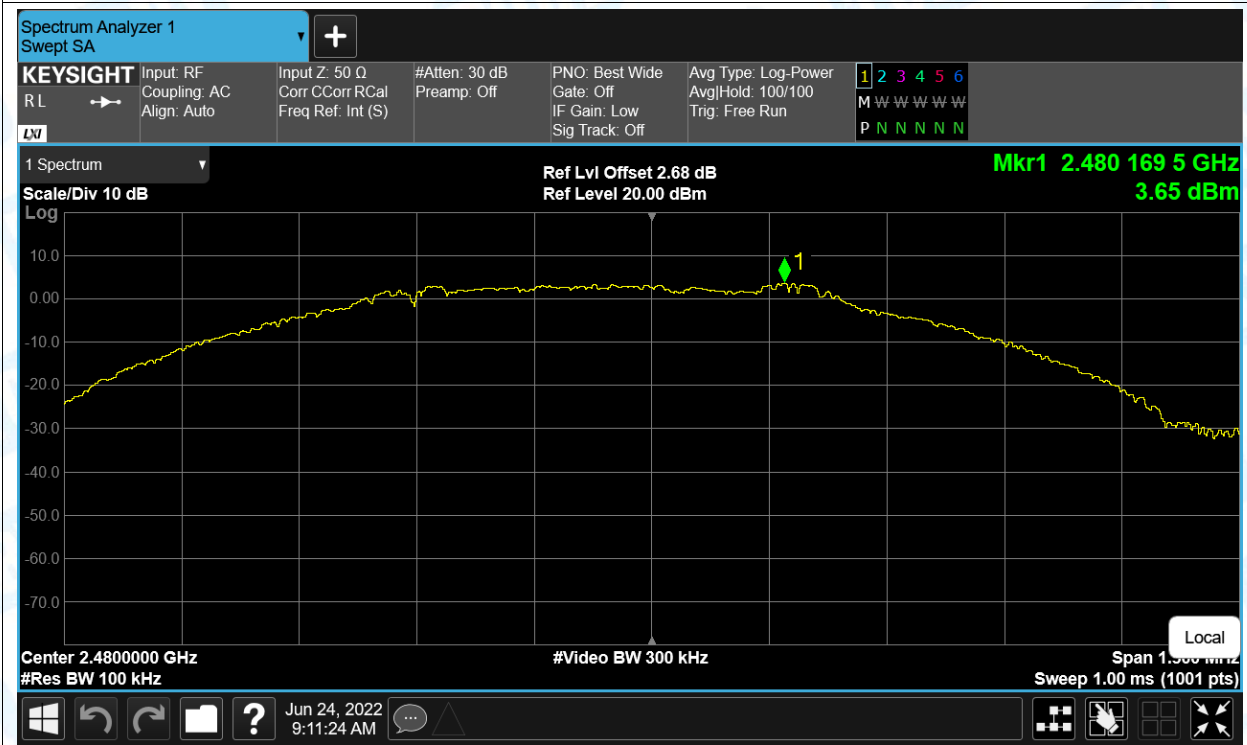
Tx. Spurious NVNT BLE 1Mbps 2440MHz Ant1 Ref



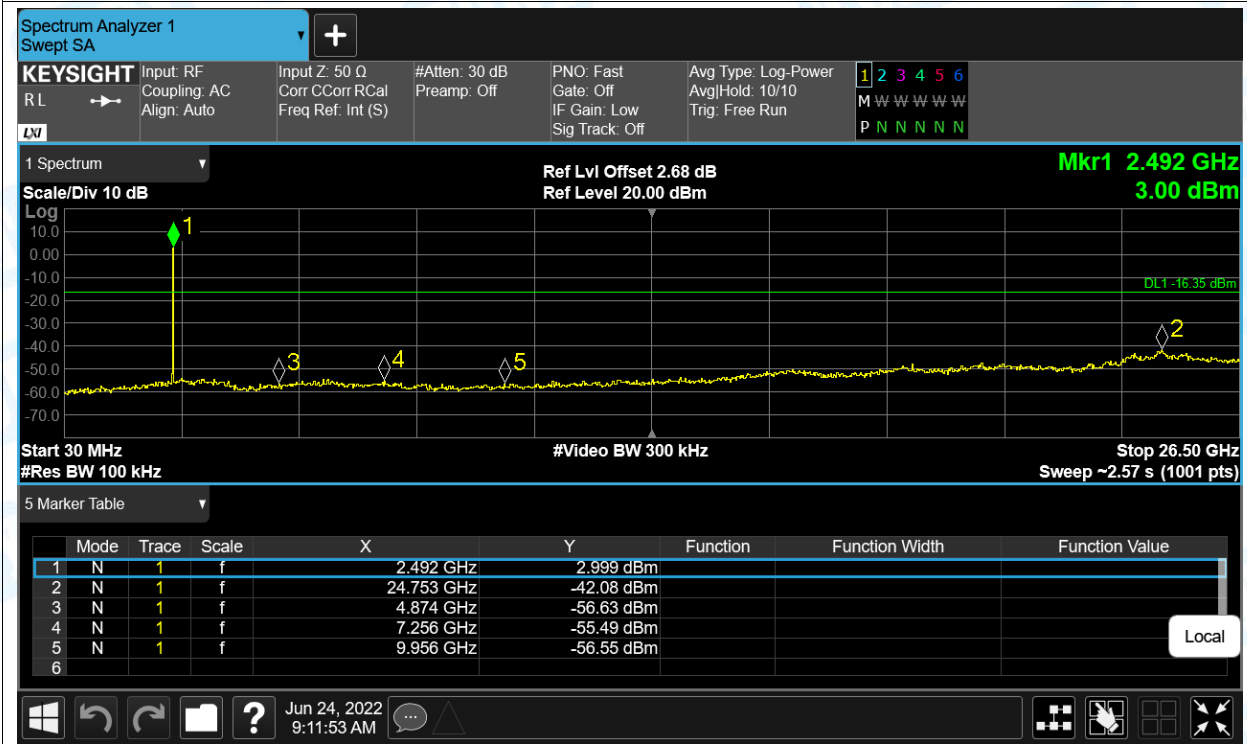
Tx. Spurious NVNT BLE 1Mbps 2440MHz Ant1 Emission



Tx. Spurious NVNT BLE 1Mbps 2480MHz Ant1 Ref

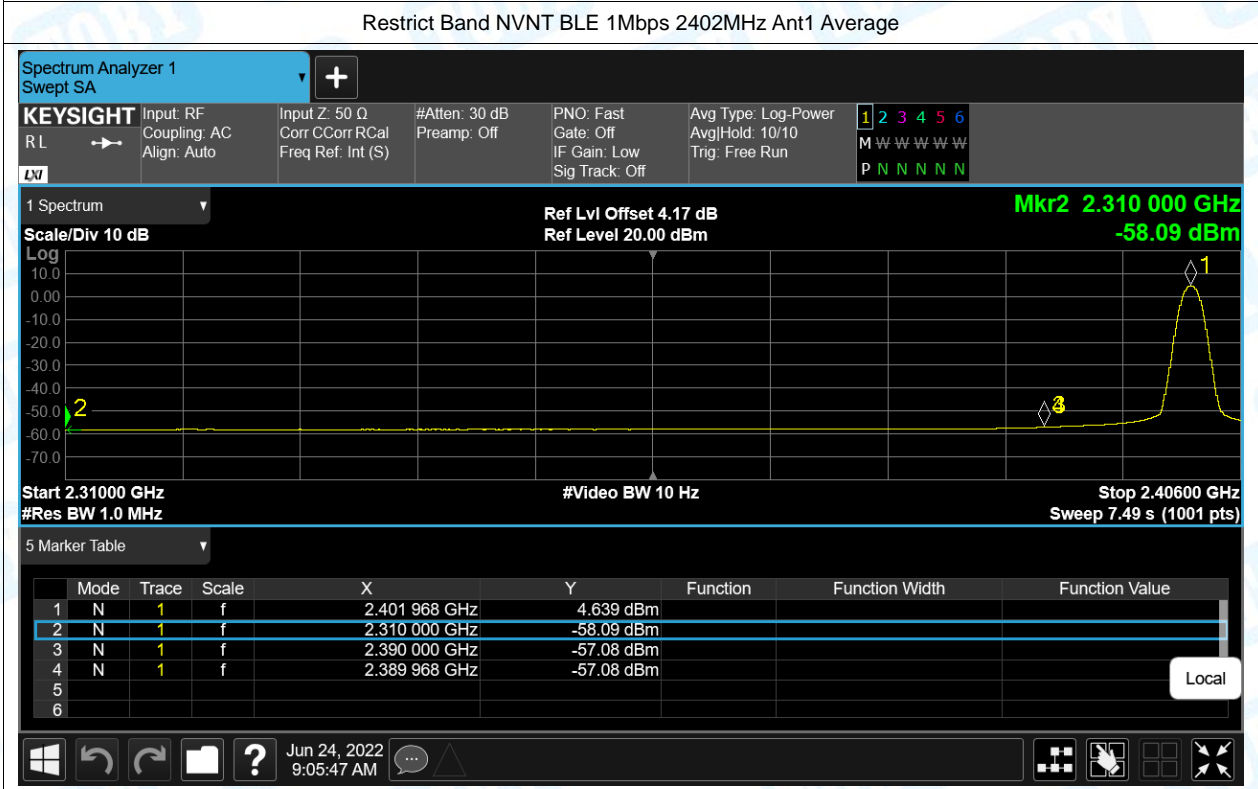
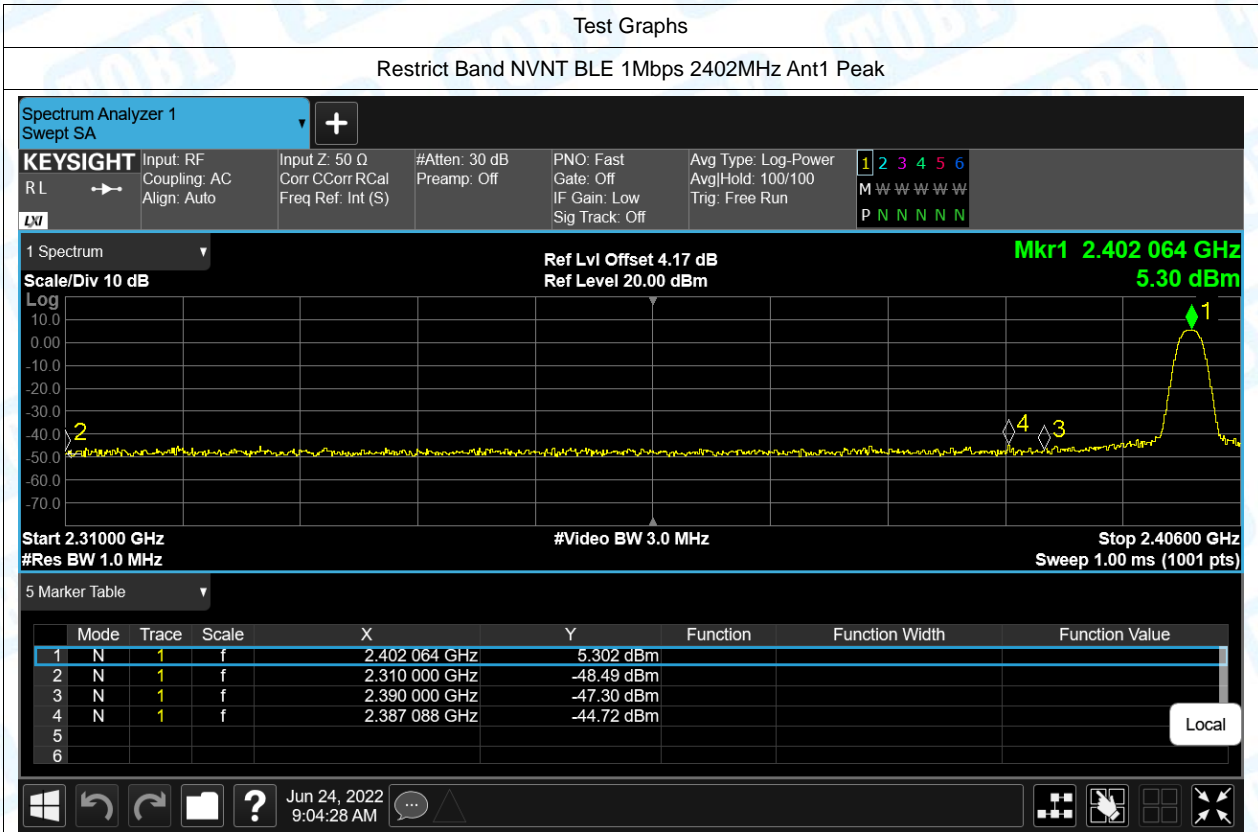


Tx. Spurious NVNT BLE 1Mbps 2480MHz Ant1 Emission

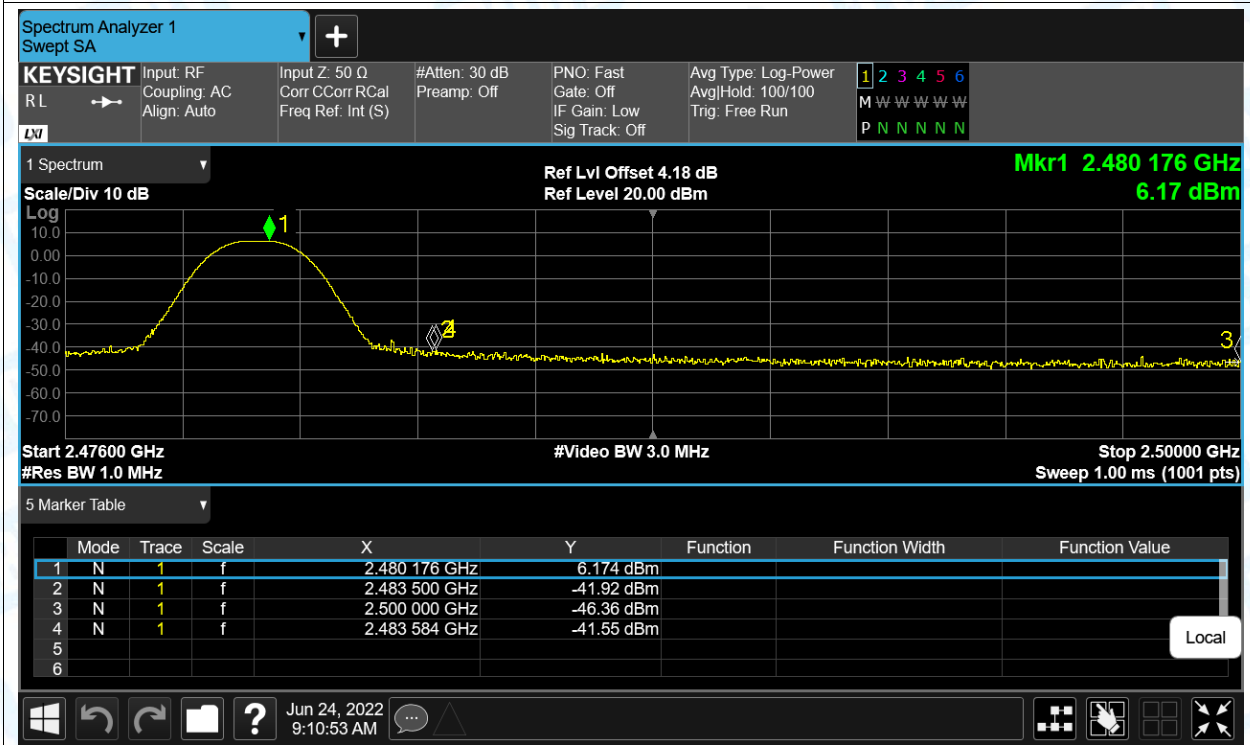


8. Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	2310	-48.49	2.21	48.98	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2310	-58.09	2.21	39.38	Average	54	Pass
NVNT	BLE 1Mbps	2402	Ant1	2387.088	-44.72	2.21	52.75	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2389.968	-57.08	2.21	40.39	Average	54	Pass
NVNT	BLE 1Mbps	2402	Ant1	2390	-46.37	2.21	51.10	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2390	-57.05	2.21	40.42	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.5	-41.92	2.21	55.55	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.5	-52.61	2.21	44.86	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.584	-41.55	2.21	55.92	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.512	-52.61	2.21	44.86	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2500	-46.36	2.21	51.11	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2500	-57.48	2.21	39.99	Average	54	Pass



Restrict Band NVNT BLE 1Mbps 2480MHz Ant1 Peak



Restrict Band NVNT BLE 1Mbps 2480MHz Ant1 Average

