

RF Test Data for Bluetooth LE

(Conducted Measurements)

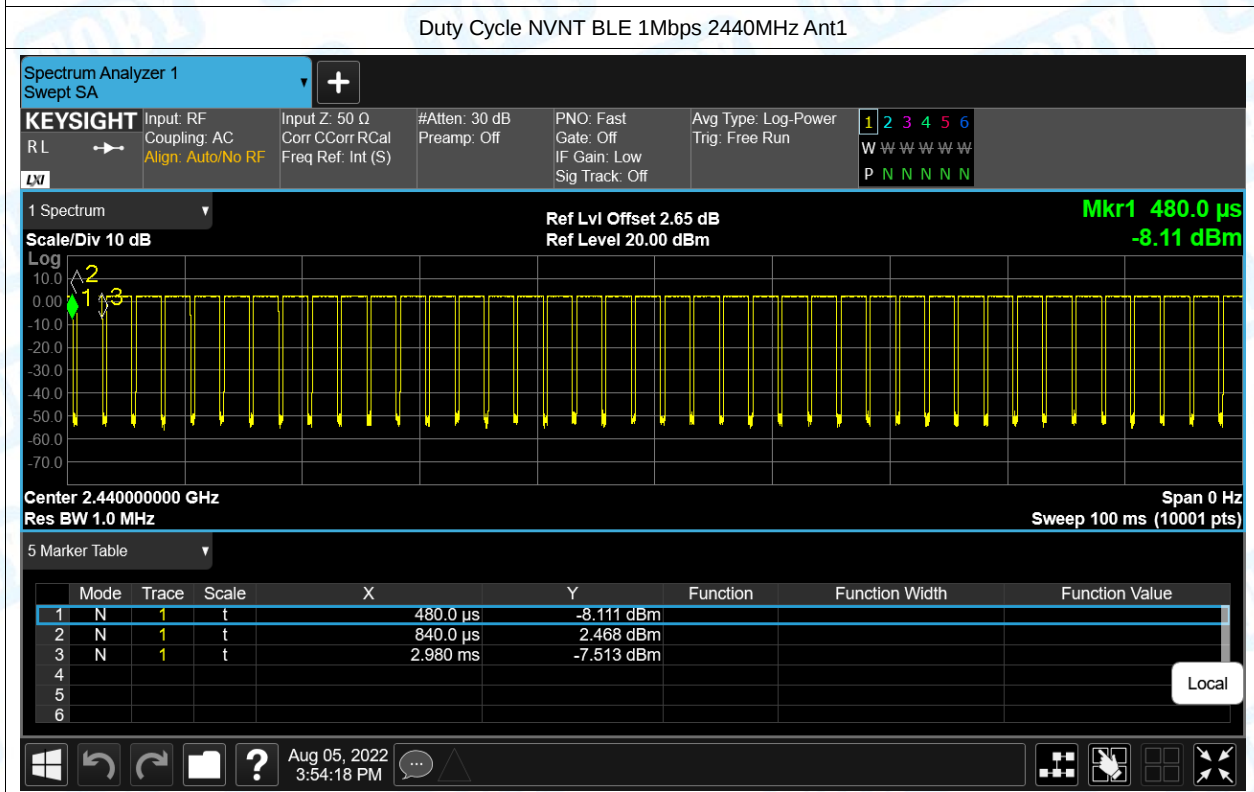
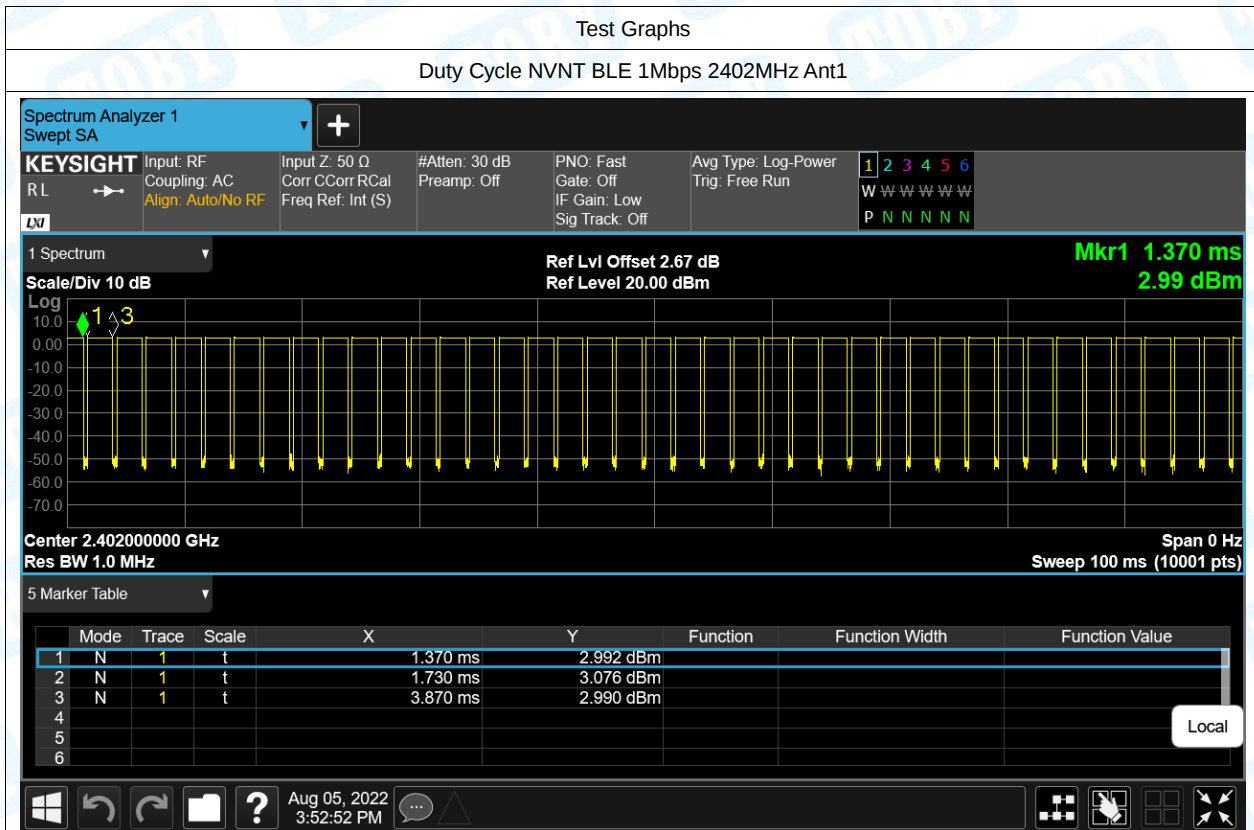
General Description of EUT	
Product Name:	Watch 8Pro
Test Model:	Watch 8Pro
Sample ID:	202207-0335-02#
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 3.7V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202207-0335-31	

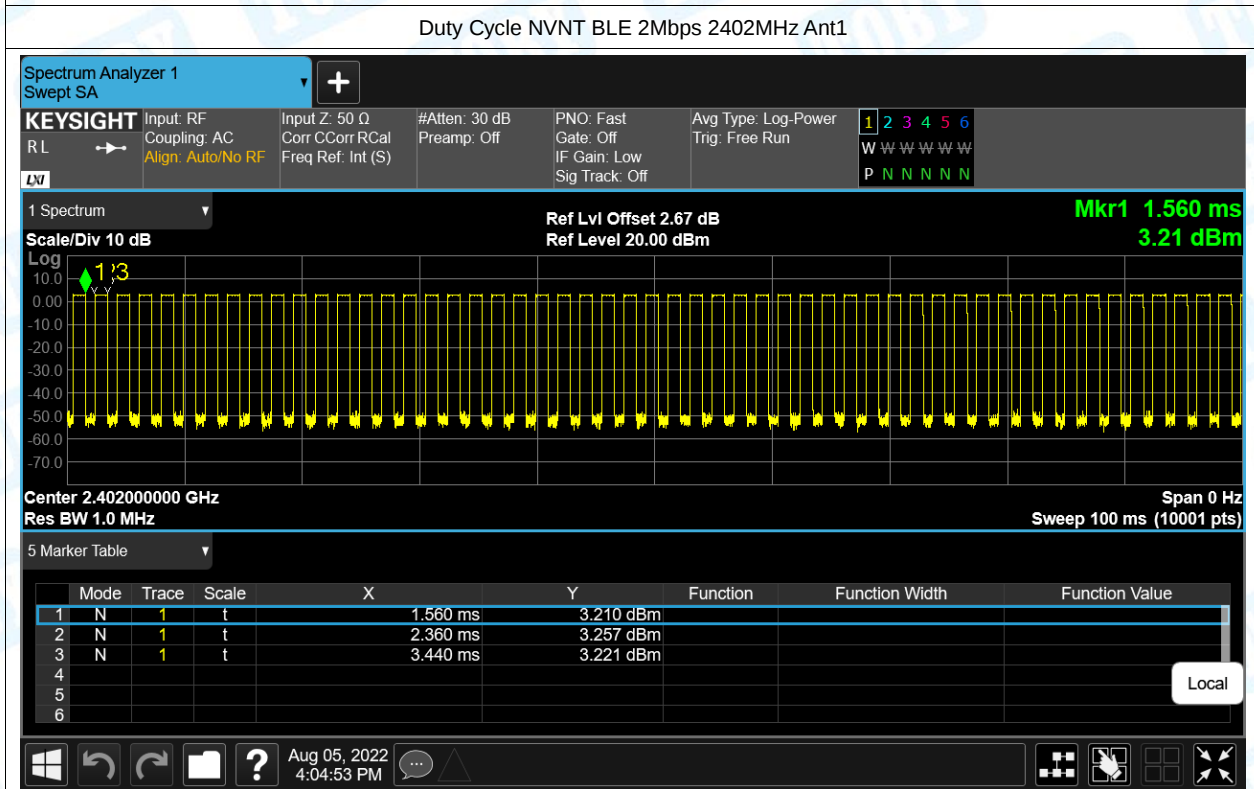
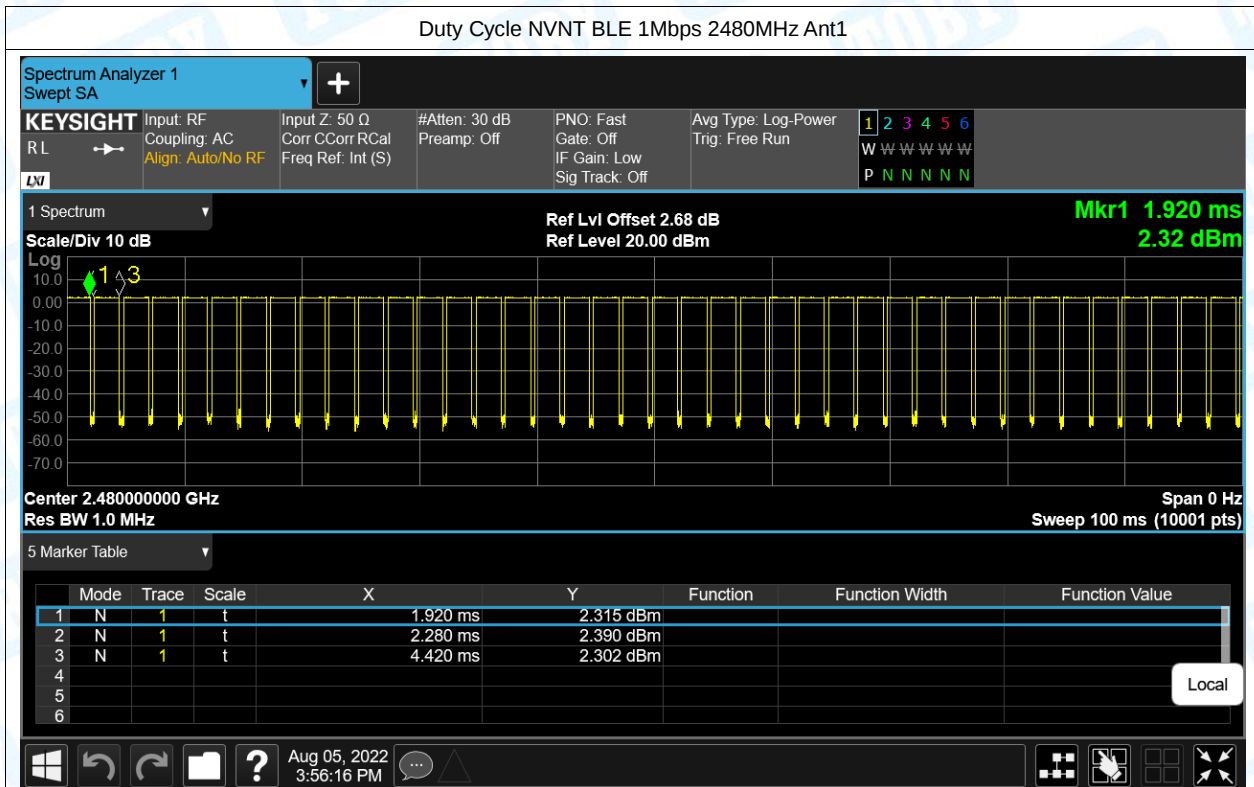
Contents

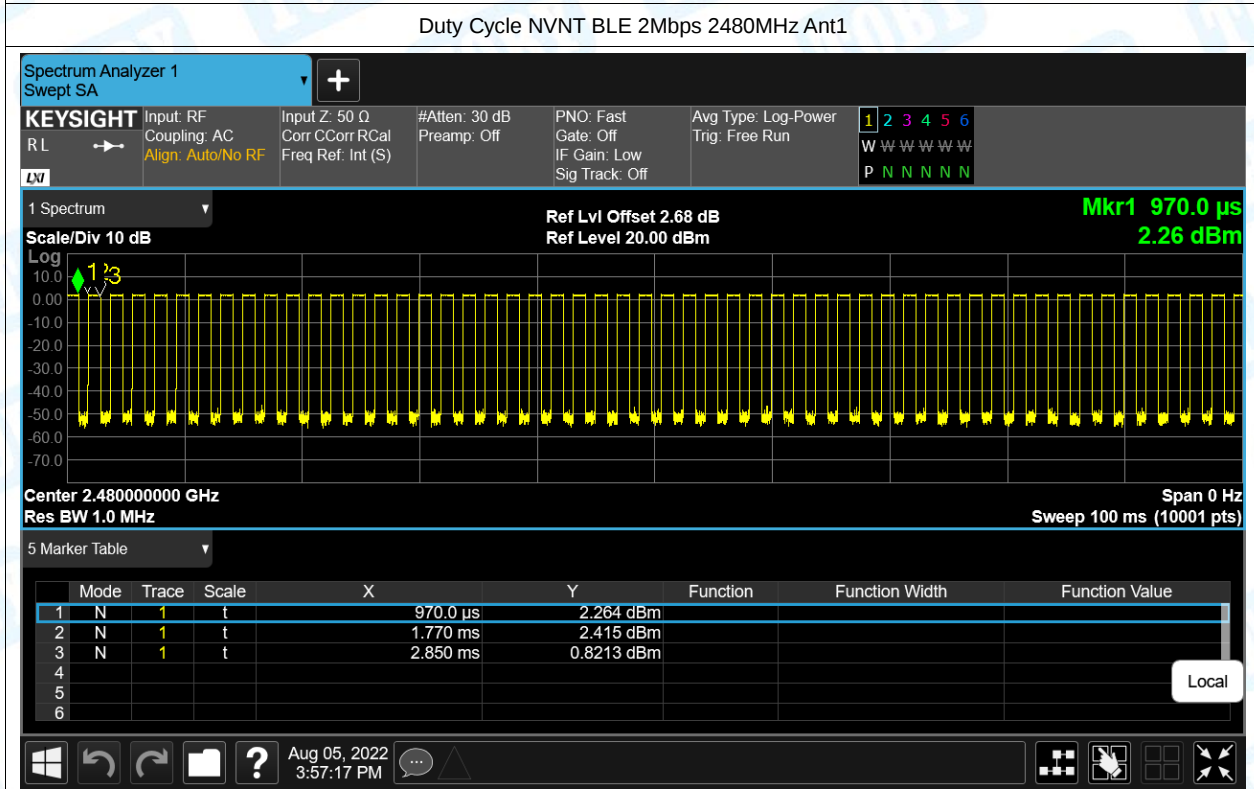
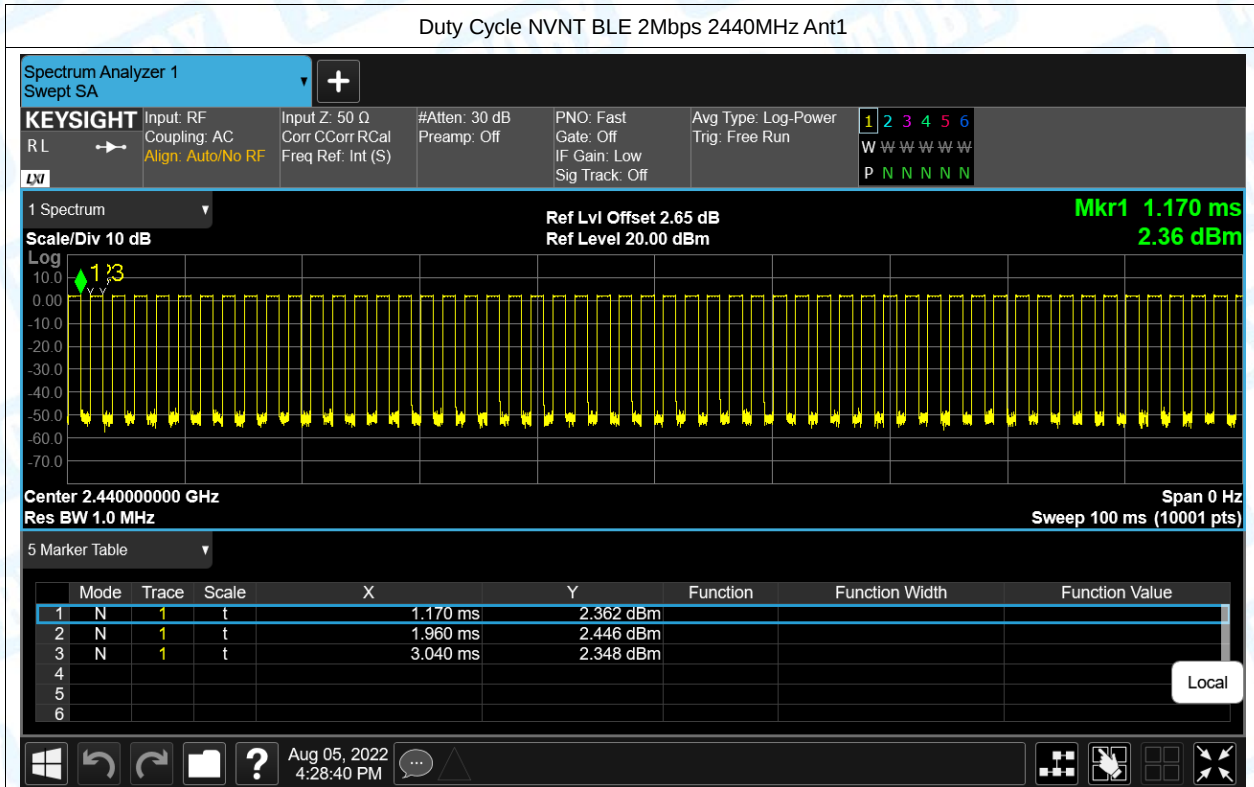
1. Duty Cycle.....	3
2. Maximum Conducted Output Power	7
3. -6dB Bandwidth	11
4. Occupied Channel Bandwidth	15
5. Maximum Power Spectral Density Level.....	19
6. Band Edge	23
7. Conducted RF Spurious Emission	28
8. Restrict Band	35

1. Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1Mbps	2402	Ant1	85.6	0.68	0.47
NVNT	BLE 1Mbps	2440	Ant1	85.6	0.68	0.47
NVNT	BLE 1Mbps	2480	Ant1	85.6	0.68	0.47
NVNT	BLE 2Mbps	2402	Ant1	57.45	2.41	0.93
NVNT	BLE 2Mbps	2440	Ant1	57.75	2.38	0.93
NVNT	BLE 2Mbps	2480	Ant1	57.45	2.41	0.93

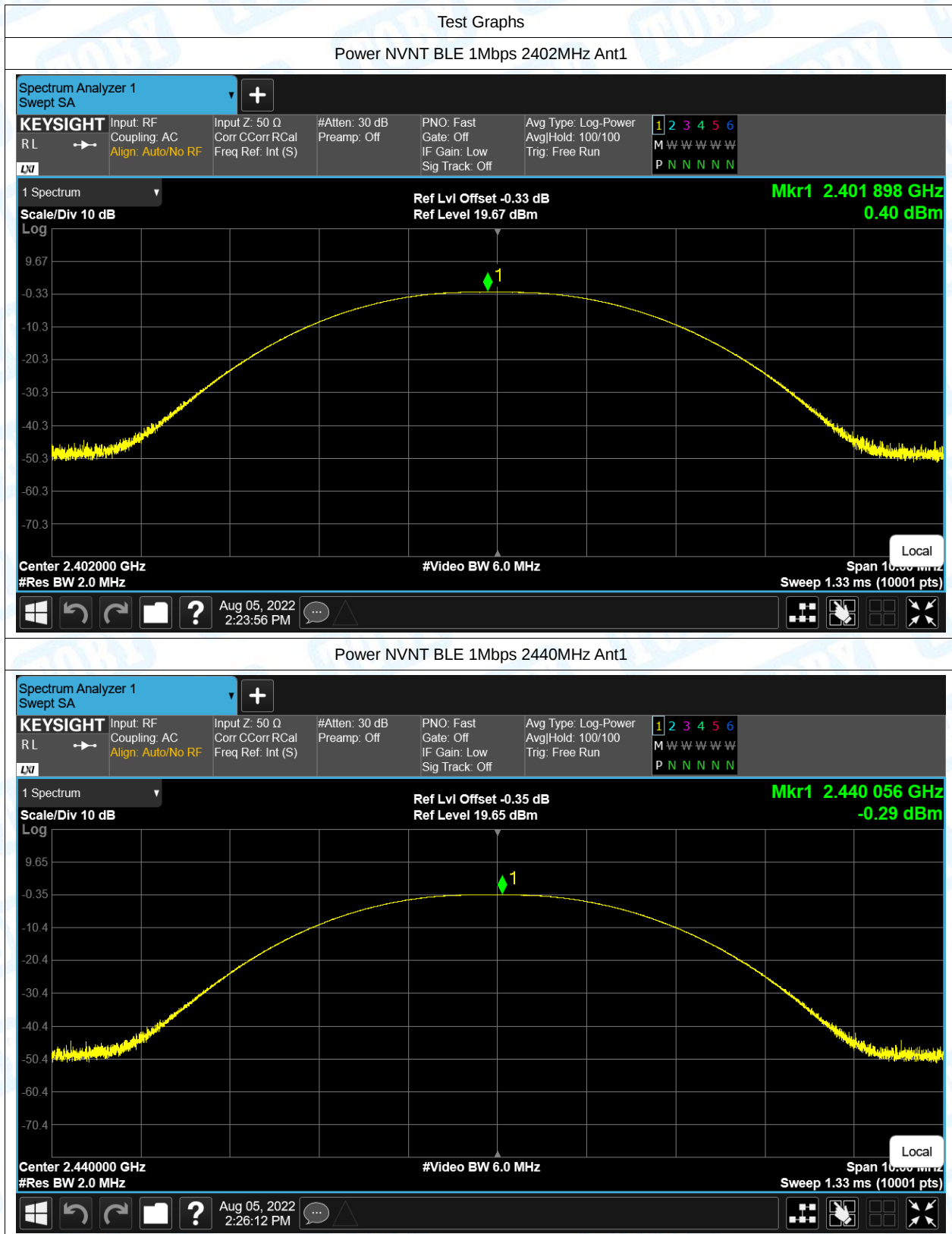


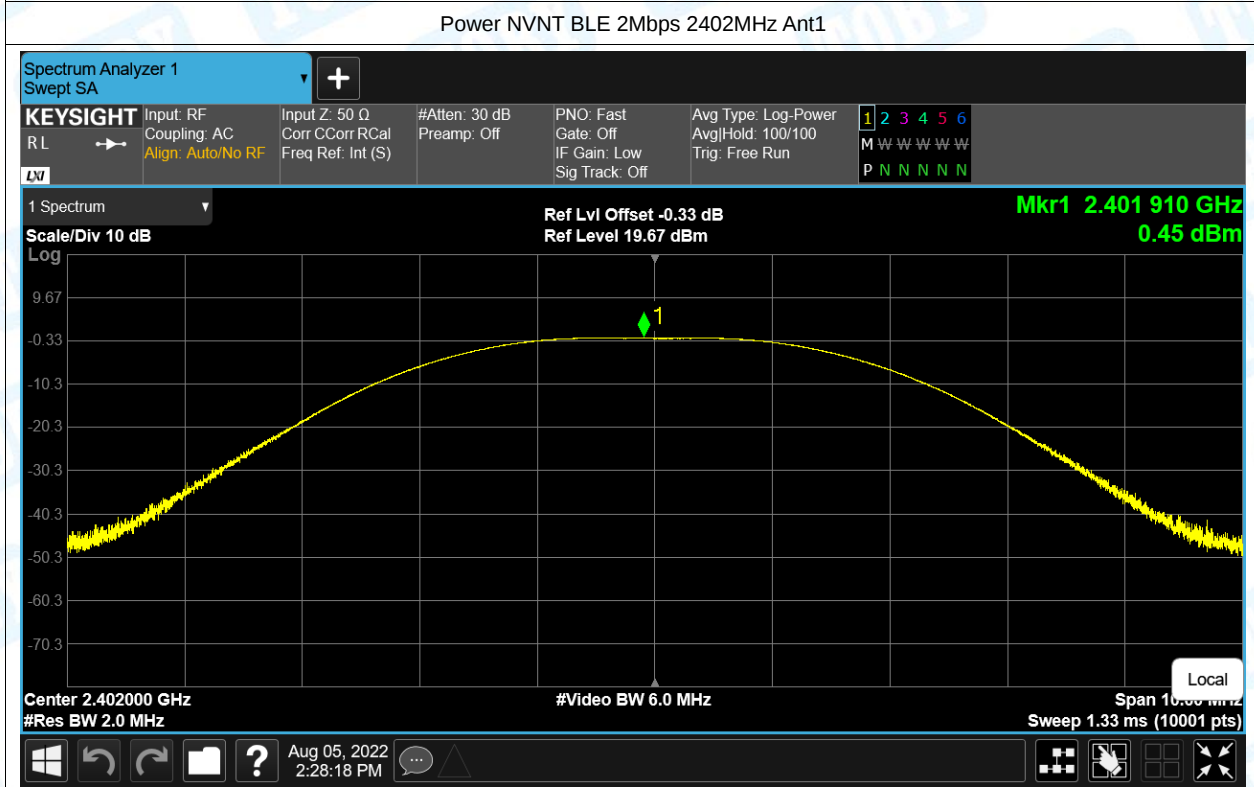
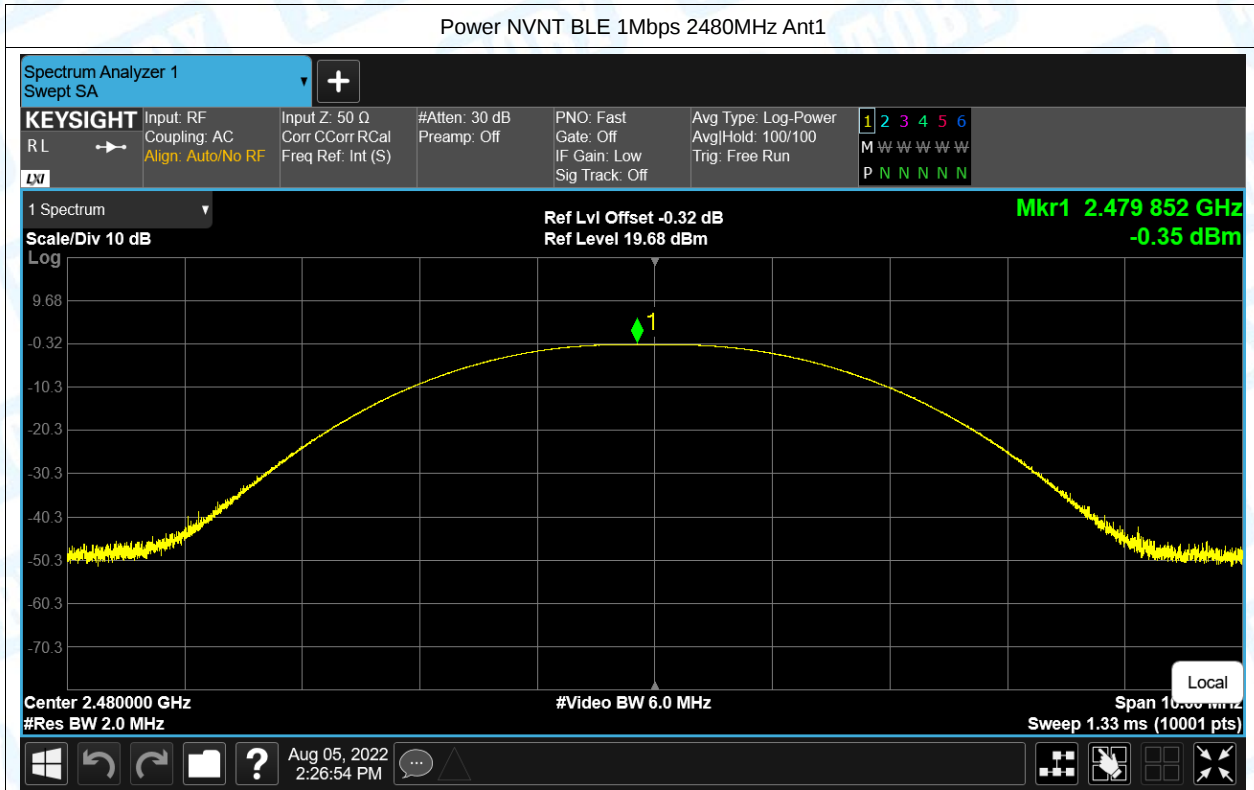




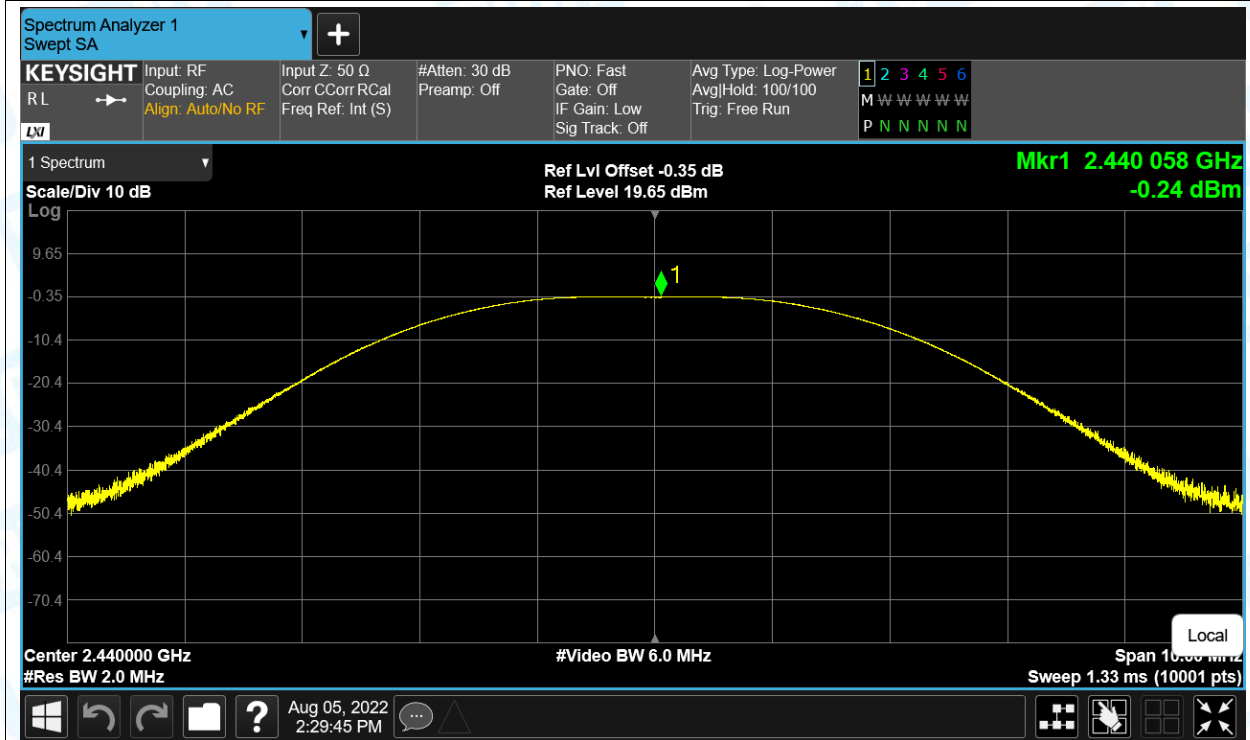
2. Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	0.398	30	Pass
NVNT	BLE 1Mbps	2440	Ant1	-0.294	30	Pass
NVNT	BLE 1Mbps	2480	Ant1	-0.352	30	Pass
NVNT	BLE 2Mbps	2402	Ant1	0.445	30	Pass
NVNT	BLE 2Mbps	2440	Ant1	-0.238	30	Pass
NVNT	BLE 2Mbps	2480	Ant1	-0.281	30	Pass

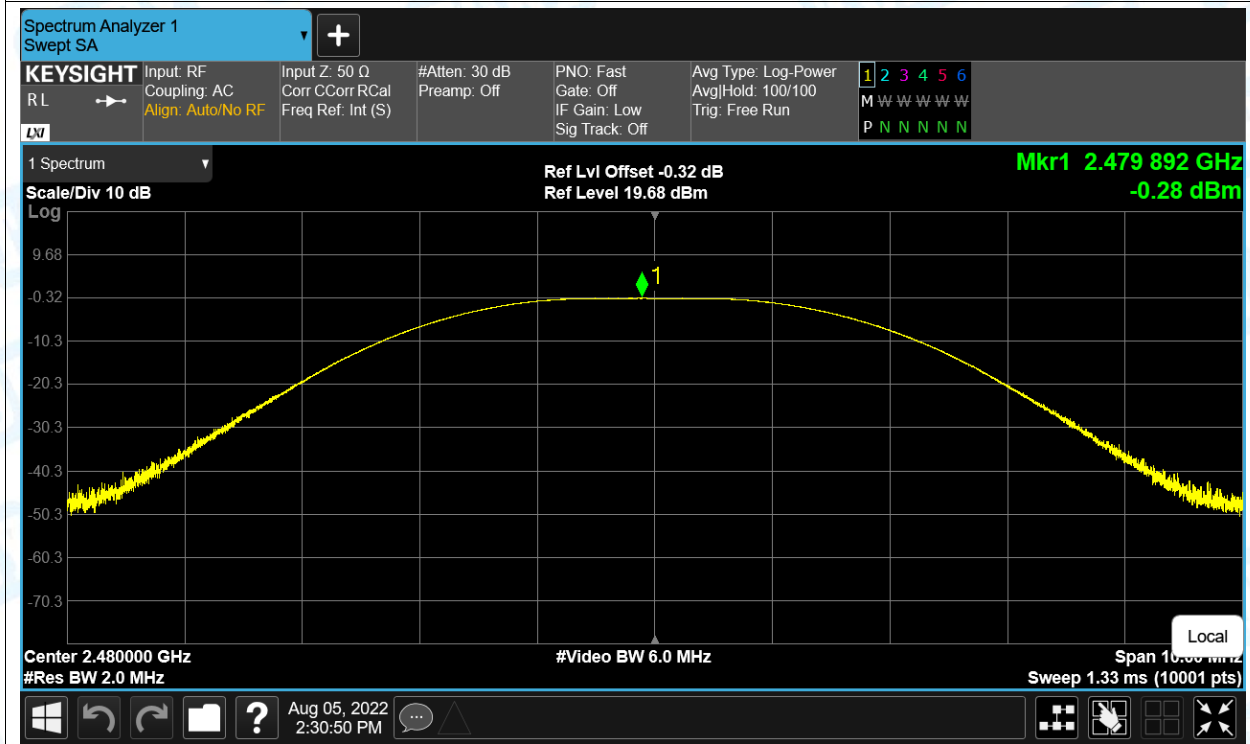




Power NVNT BLE 2Mbps 2440MHz Ant1



Power NVNT BLE 2Mbps 2480MHz Ant1

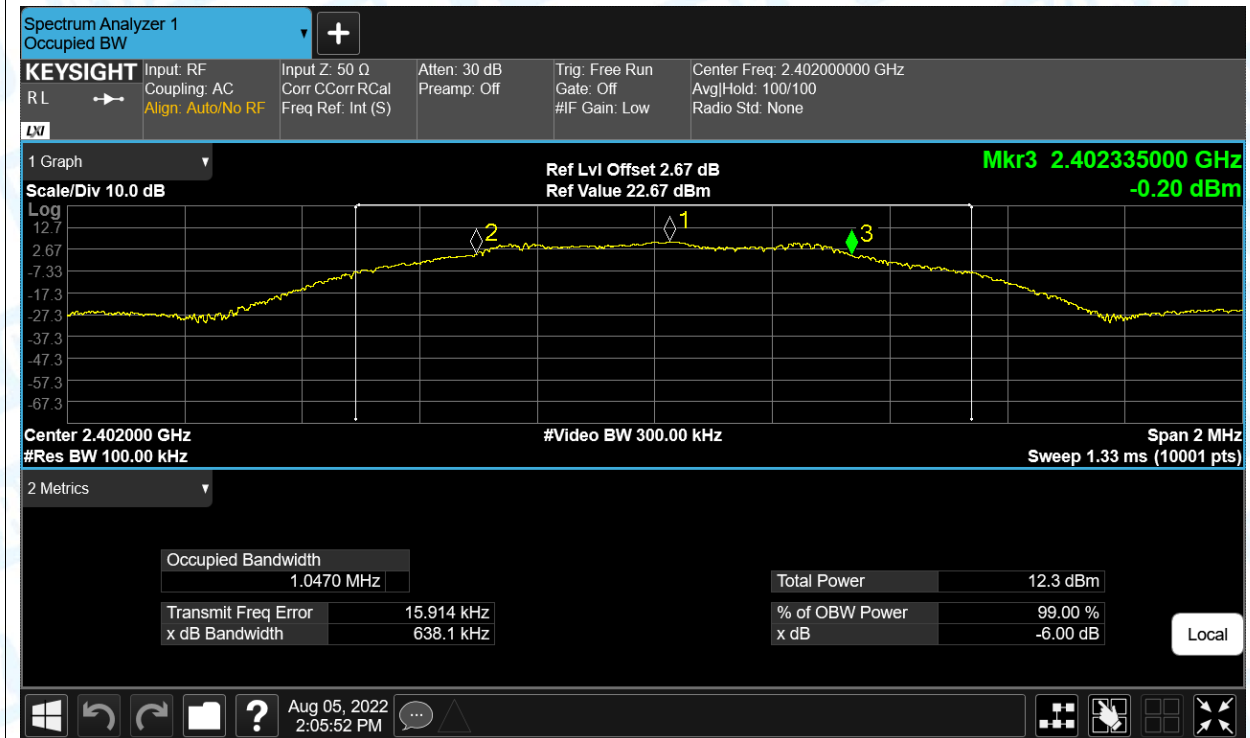


3. -6dB Bandwidth

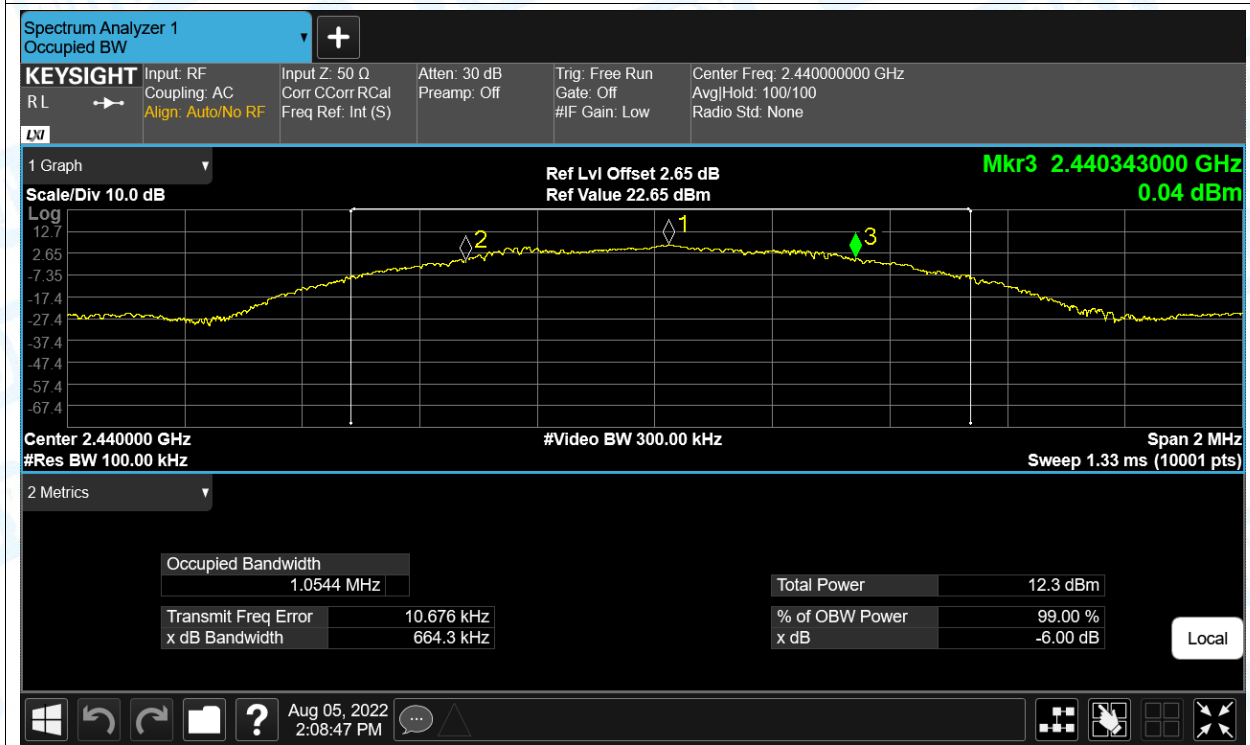
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	0.64	0.5	Pass
NVNT	BLE 1Mbps	2440	Ant1	0.66	0.5	Pass
NVNT	BLE 1Mbps	2480	Ant1	0.67	0.5	Pass
NVNT	BLE 2Mbps	2402	Ant1	1.1	0.5	Pass
NVNT	BLE 2Mbps	2440	Ant1	1.06	0.5	Pass
NVNT	BLE 2Mbps	2480	Ant1	1.07	0.5	Pass

Test Graphs

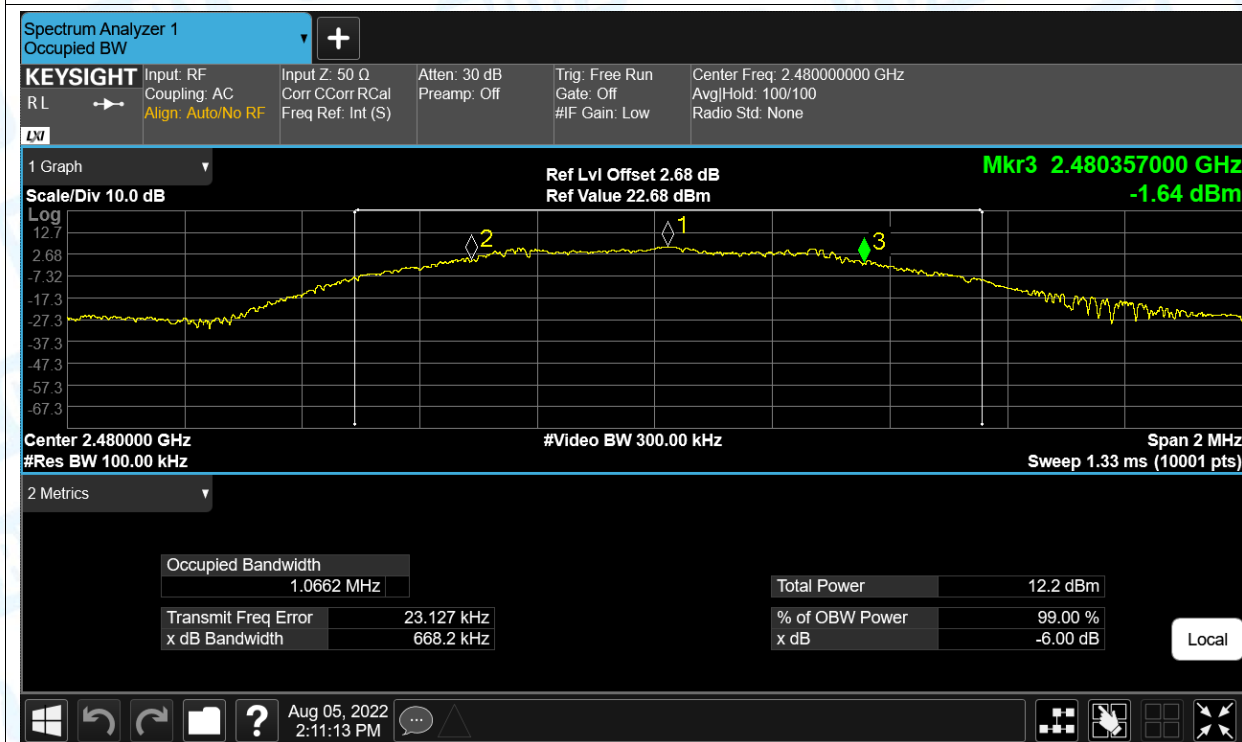
-6dB Bandwidth NVNT BLE 1Mbps 2402MHz Ant1



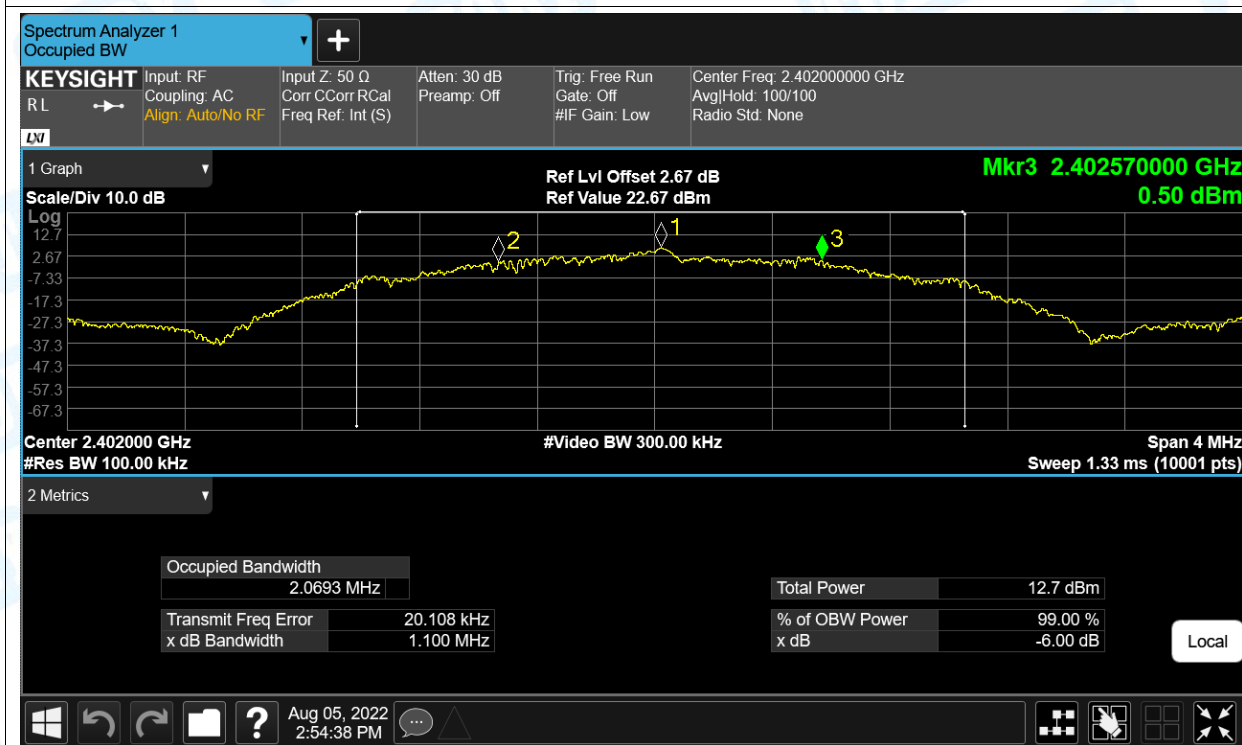
-6dB Bandwidth NVNT BLE 1Mbps 2440MHz Ant1



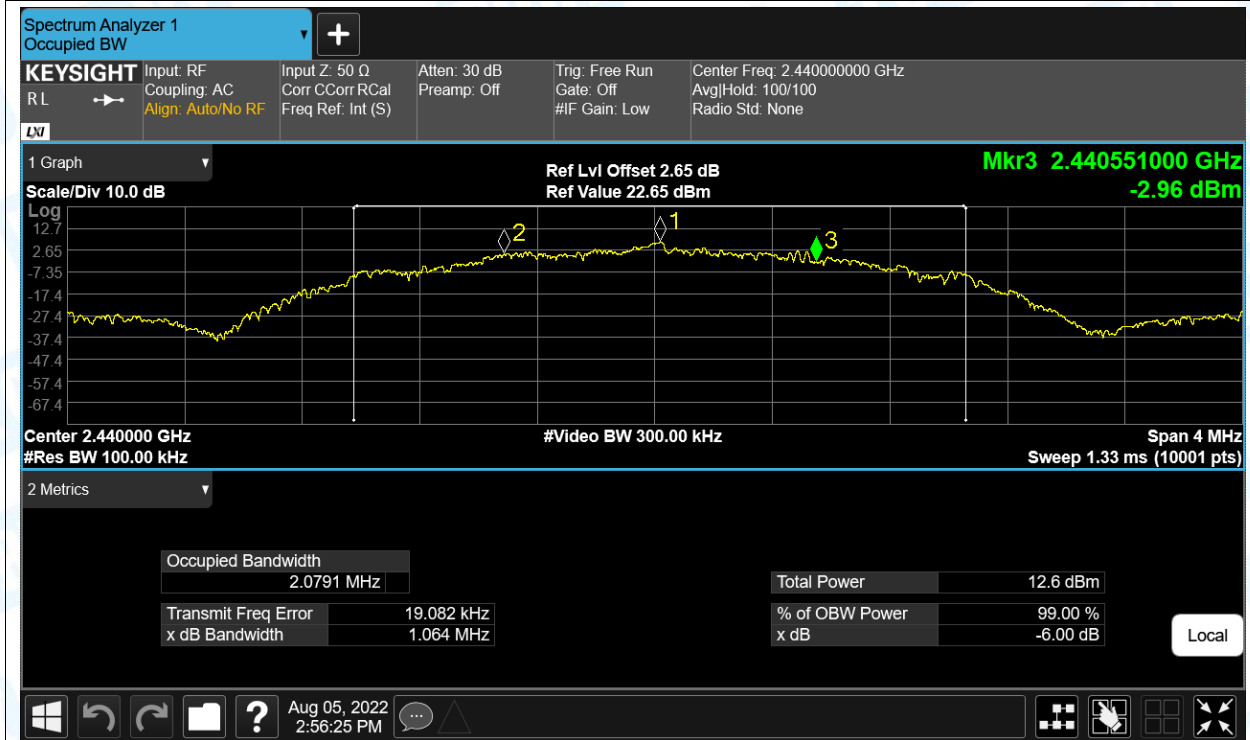
-6dB Bandwidth NVNT BLE 1Mbps 2480MHz Ant1



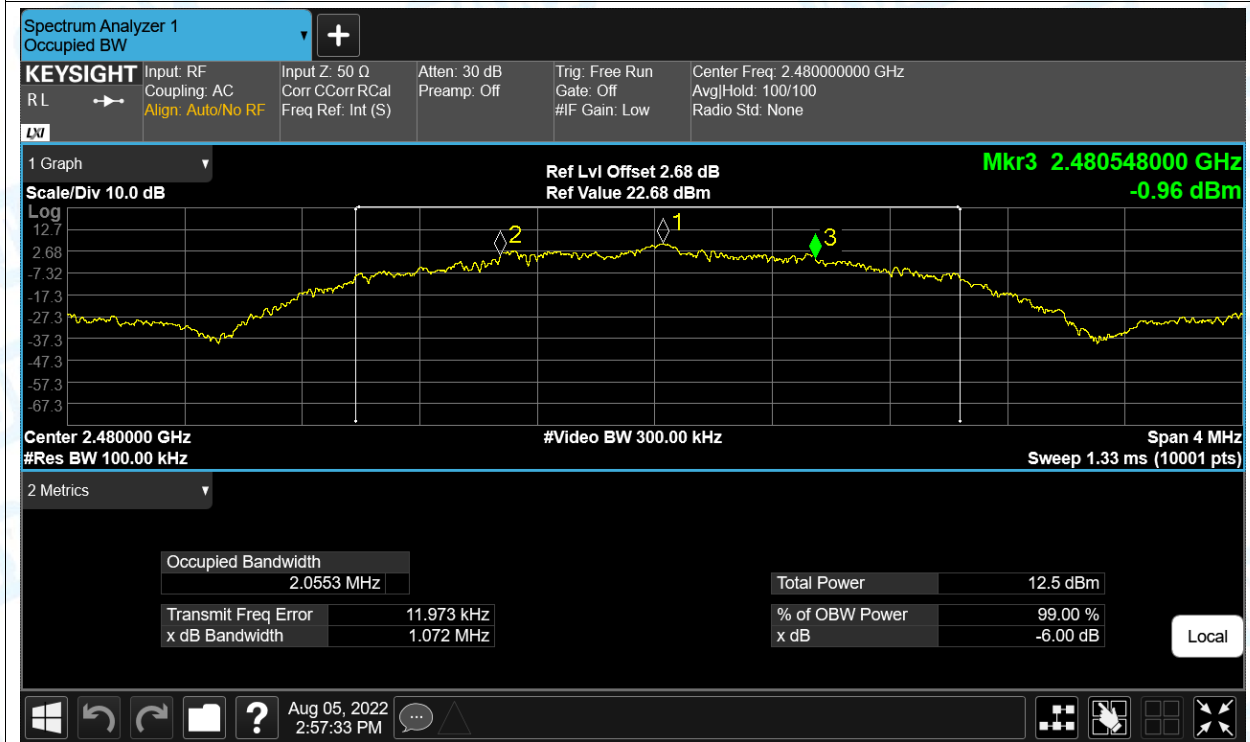
-6dB Bandwidth NVNT BLE 2Mbps 2402MHz Ant1



-6dB Bandwidth NVNT BLE 2Mbps 2440MHz Ant1



-6dB Bandwidth NVNT BLE 2Mbps 2480MHz Ant1



4. Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE 1Mbps	2402	Ant1	1.034
NVNT	BLE 1Mbps	2440	Ant1	1.049
NVNT	BLE 1Mbps	2480	Ant1	1.034
NVNT	BLE 2Mbps	2402	Ant1	2.06
NVNT	BLE 2Mbps	2440	Ant1	2.068
NVNT	BLE 2Mbps	2480	Ant1	2.042

Test Graphs

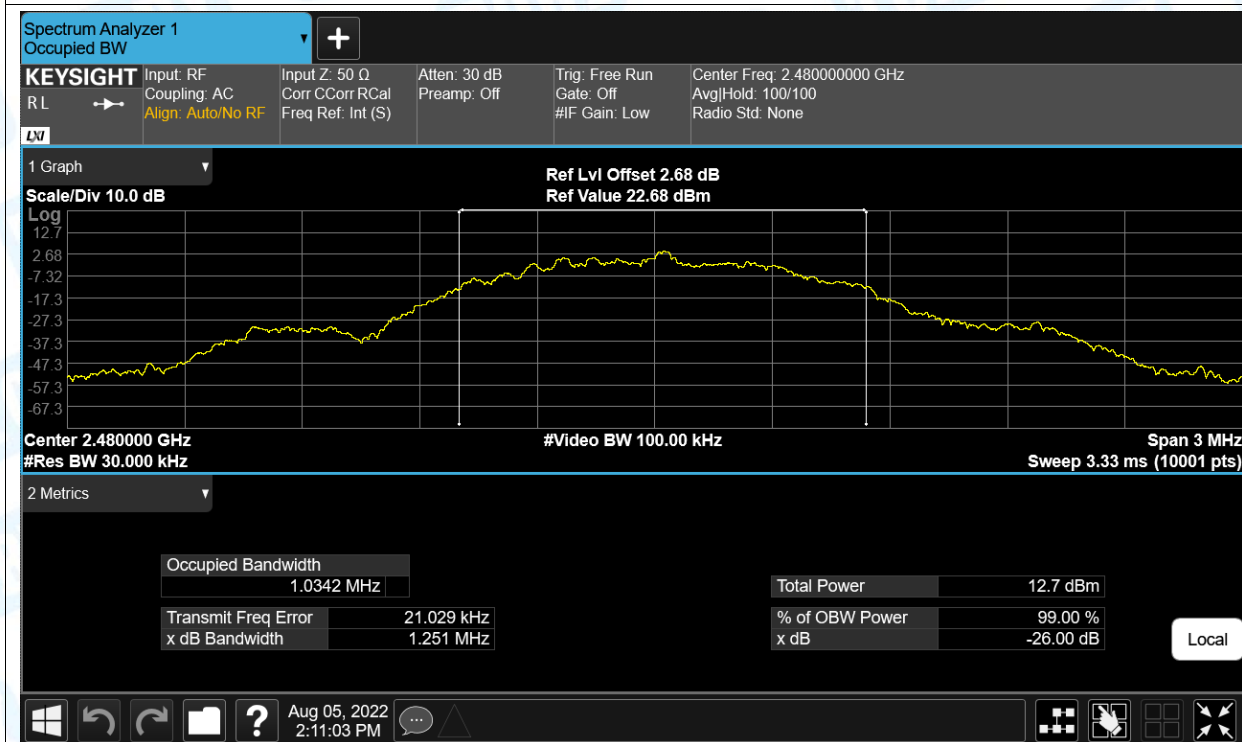
OBW NVNT BLE 1Mbps 2402MHz Ant1



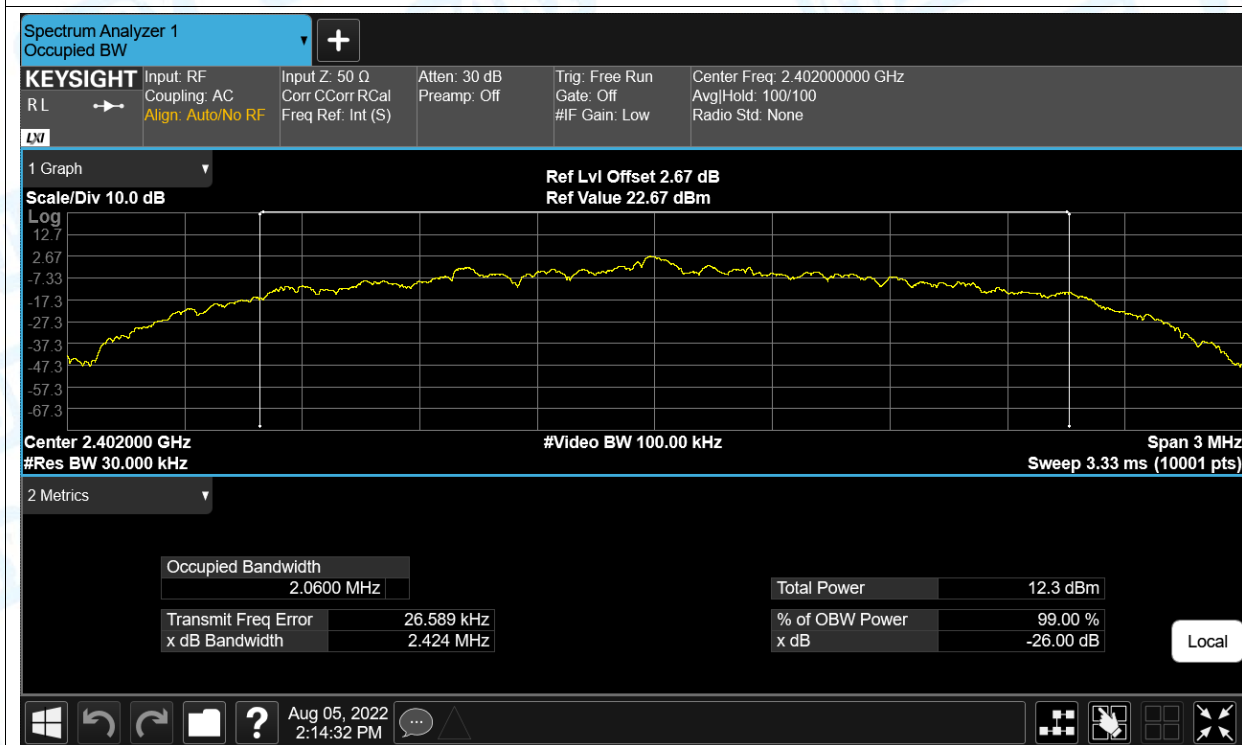
OBW NVNT BLE 1Mbps 2440MHz Ant1

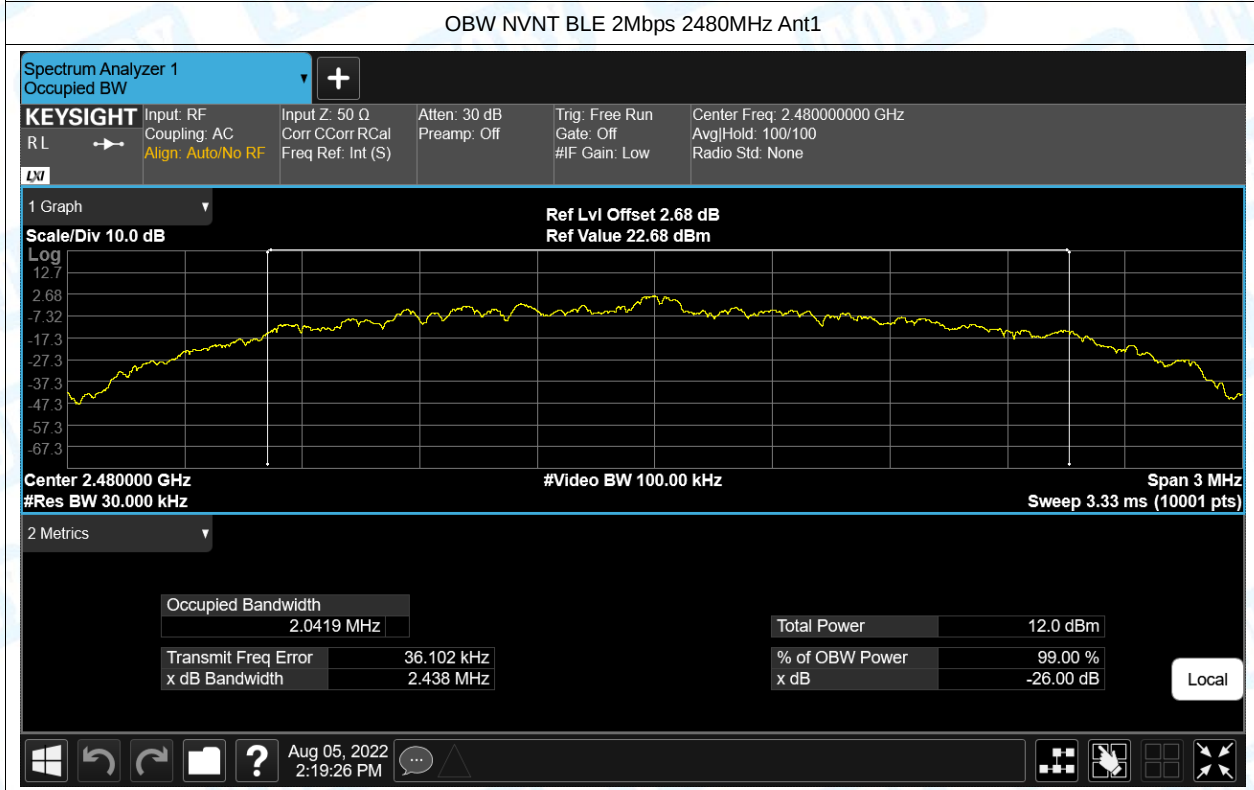
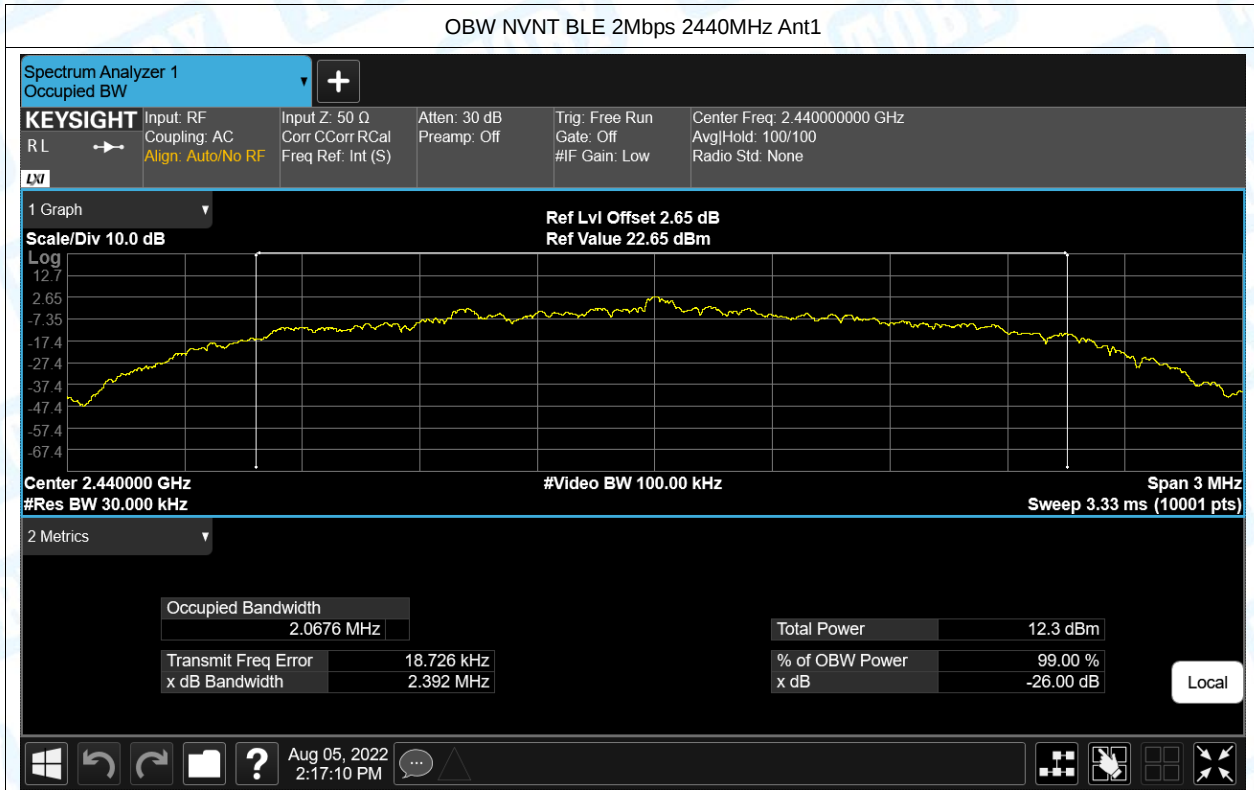


OBW NVNT BLE 1Mbps 2480MHz Ant1



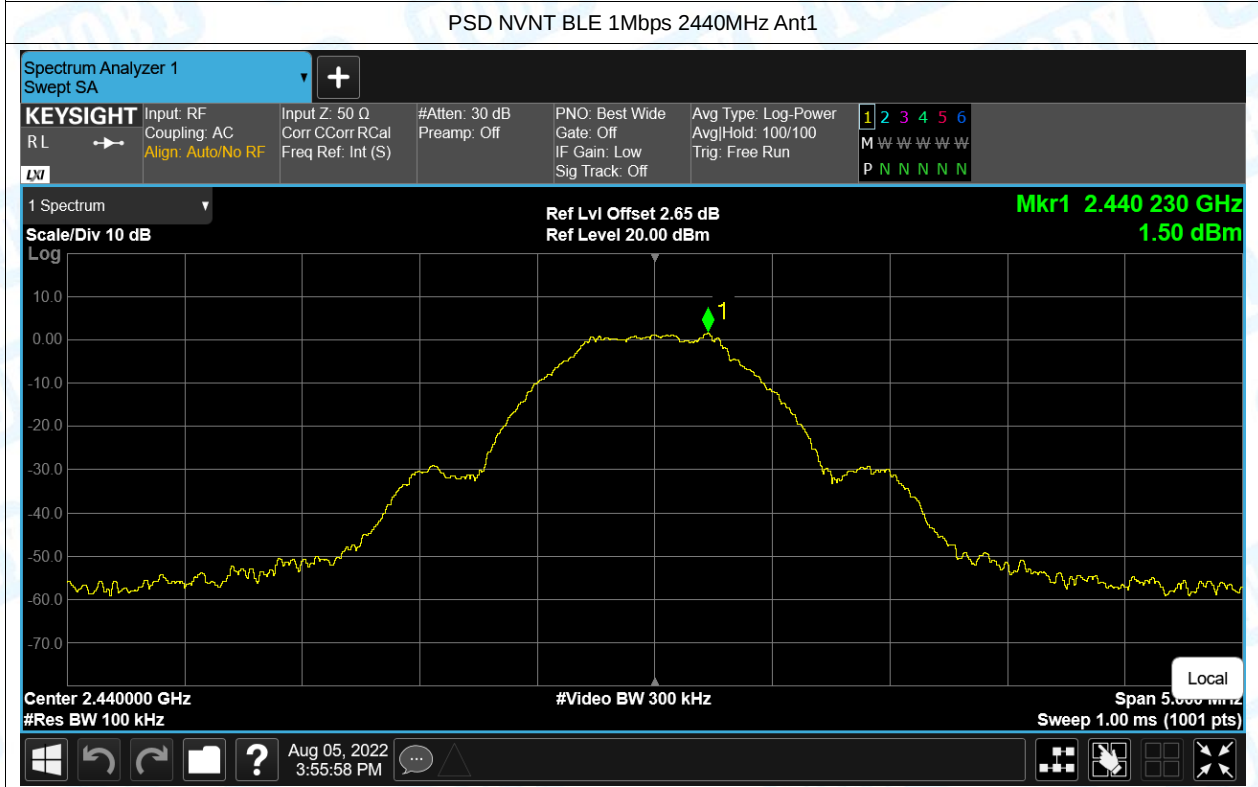
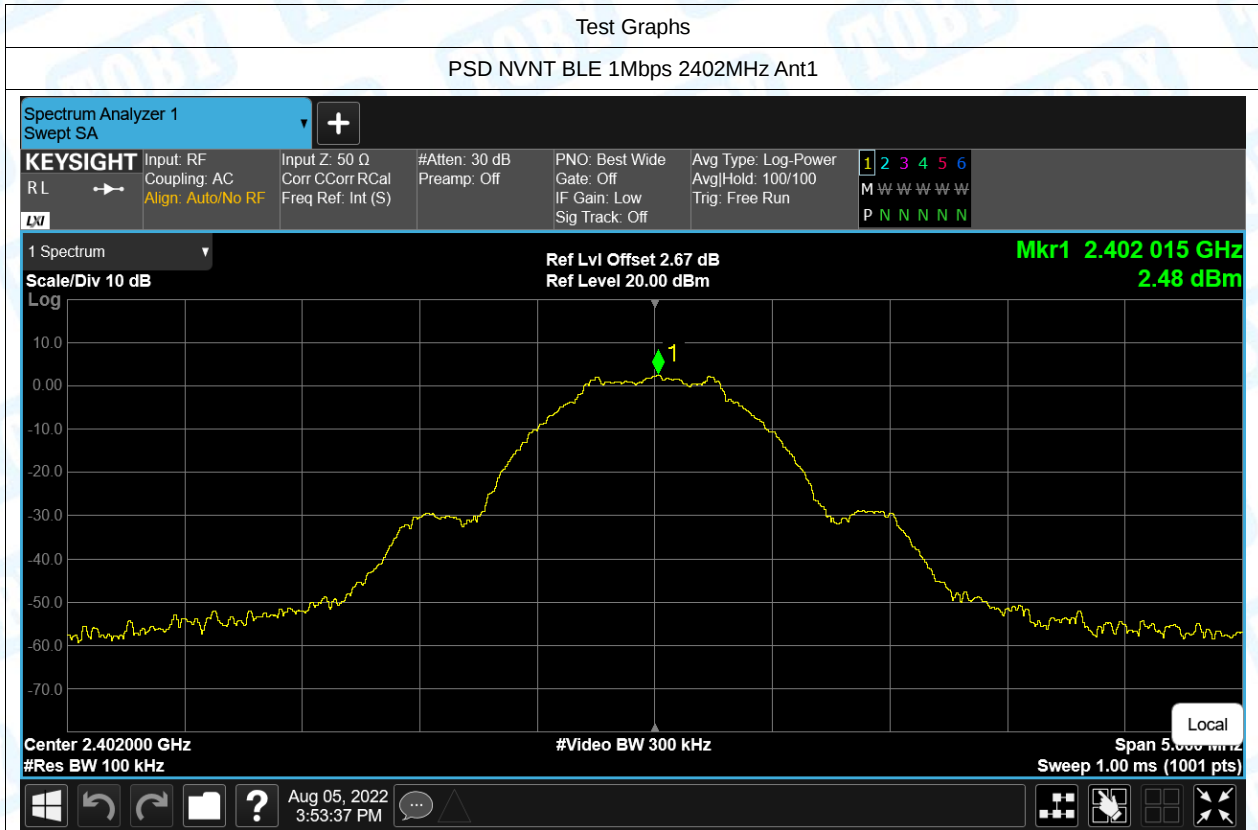
OBW NVNT BLE 2Mbps 2402MHz Ant1

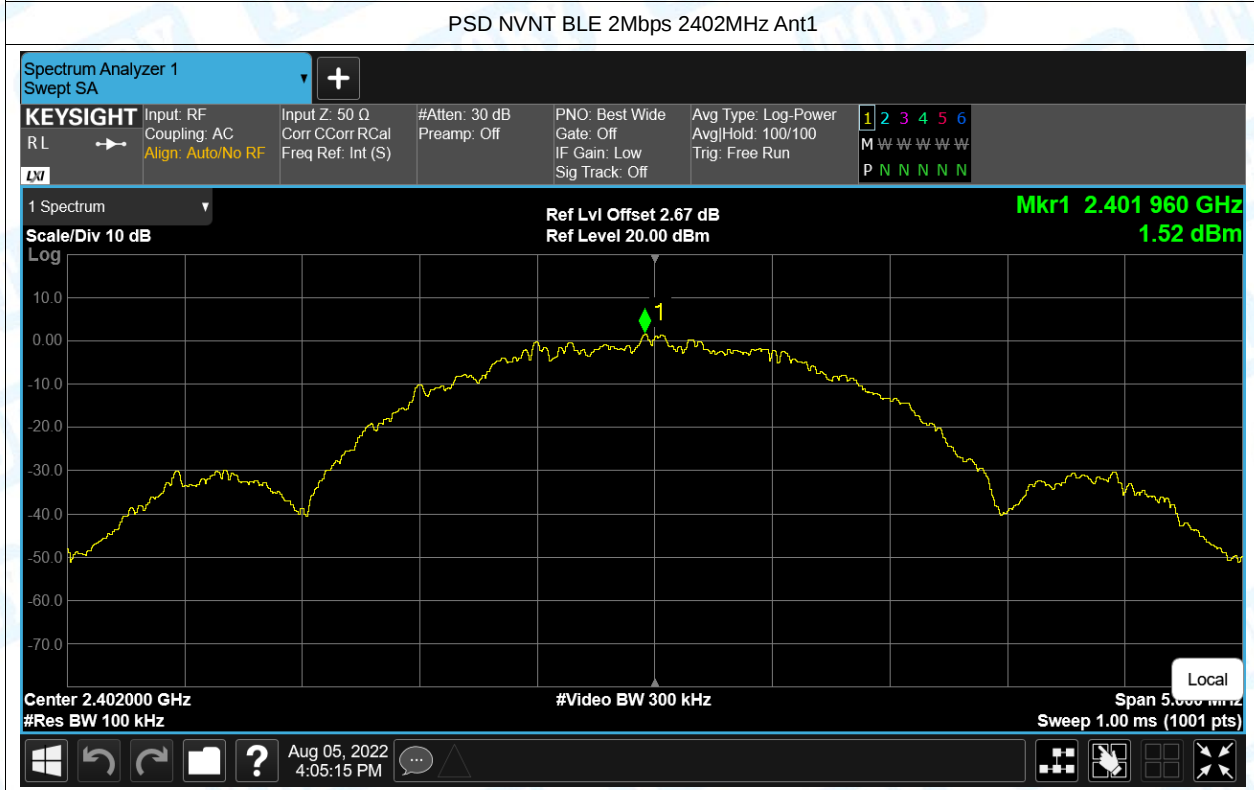
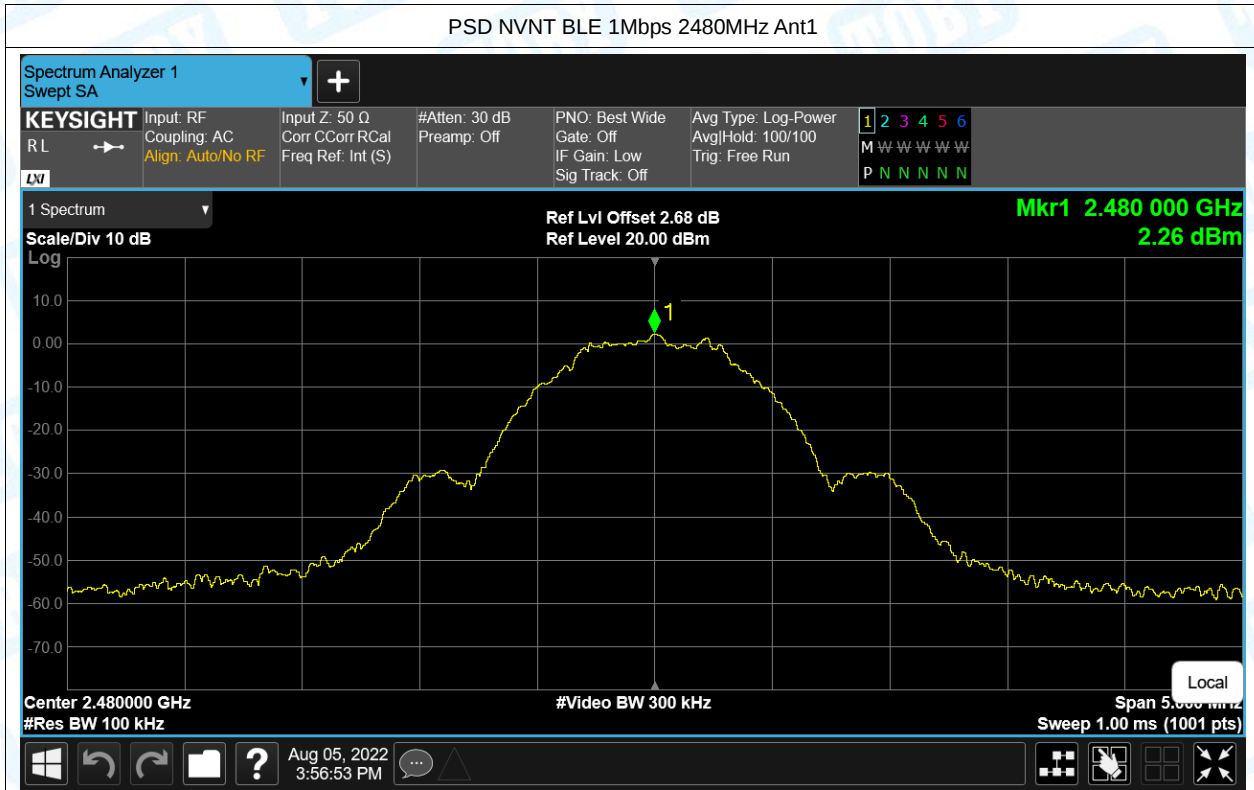


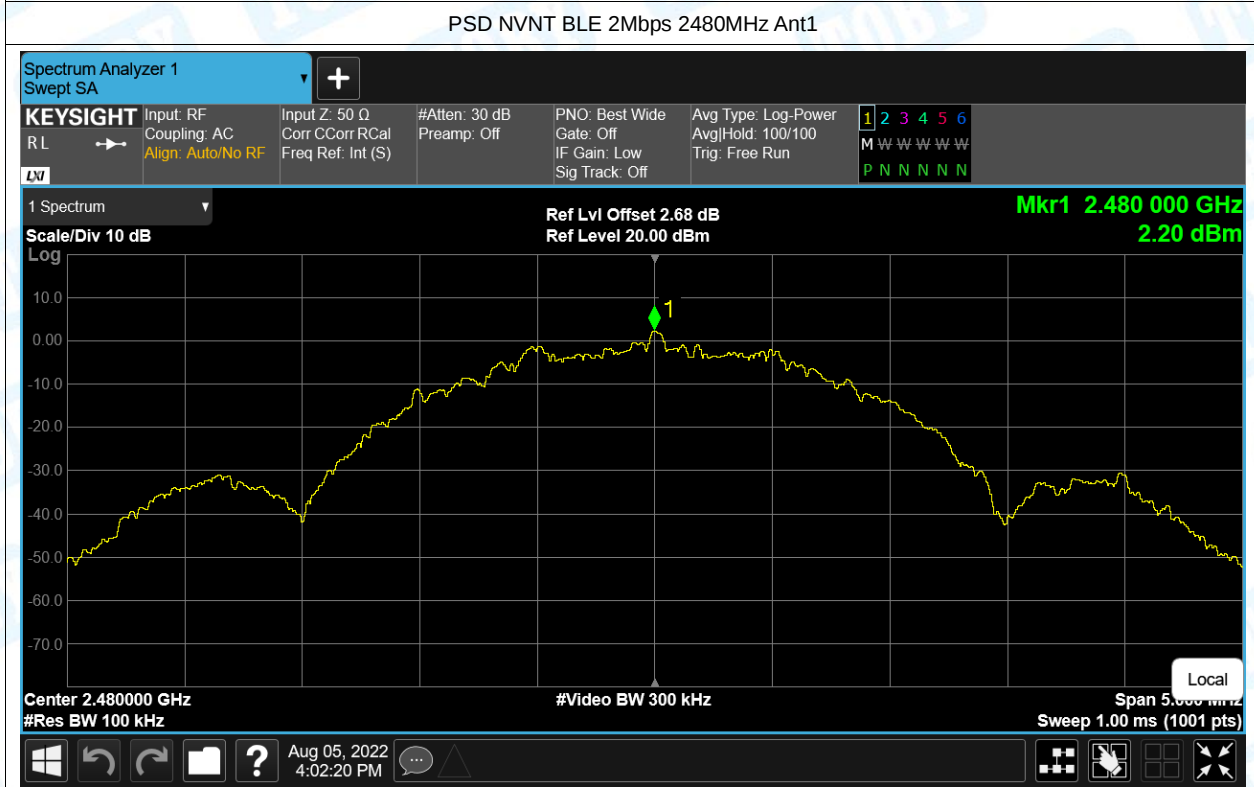
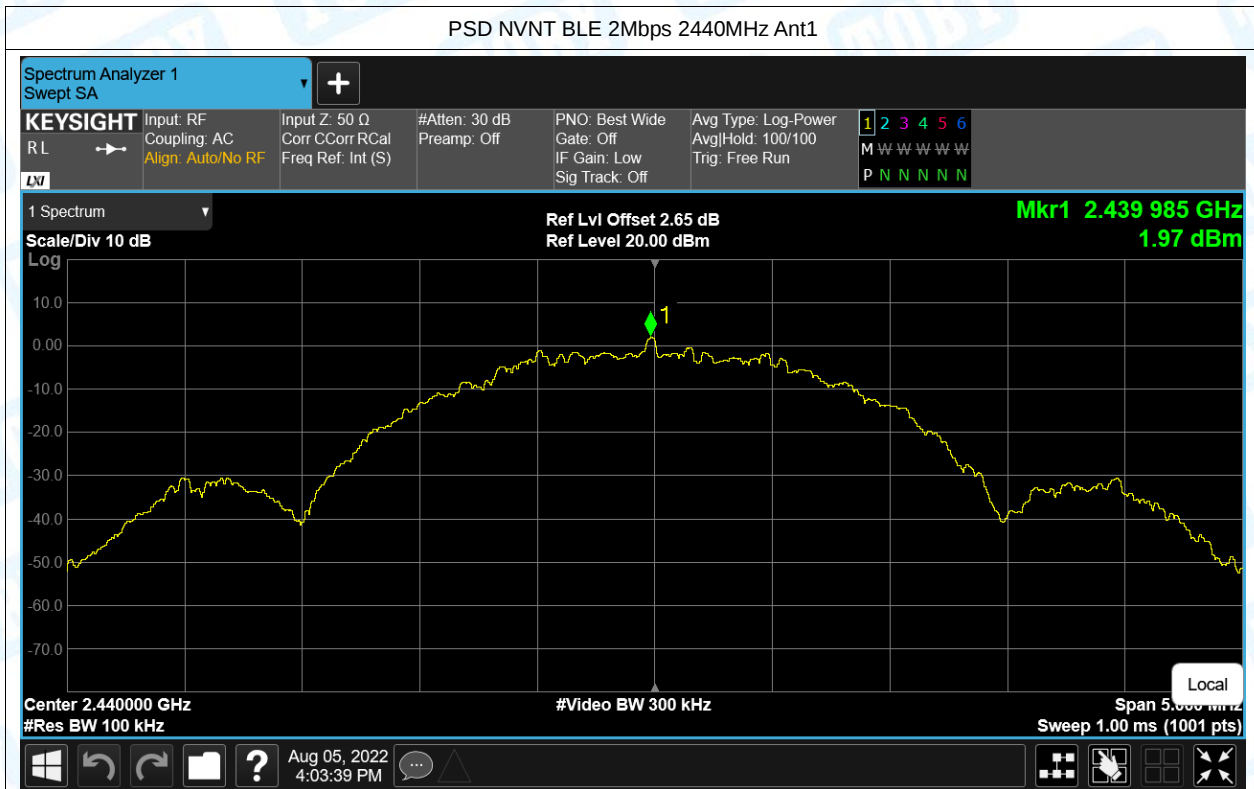


5. Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	2.483	8	Pass
NVNT	BLE 1Mbps	2440	Ant1	1.504	8	Pass
NVNT	BLE 1Mbps	2480	Ant1	2.262	8	Pass
NVNT	BLE 2Mbps	2402	Ant1	1.523	8	Pass
NVNT	BLE 2Mbps	2440	Ant1	1.974	8	Pass
NVNT	BLE 2Mbps	2480	Ant1	2.205	8	Pass

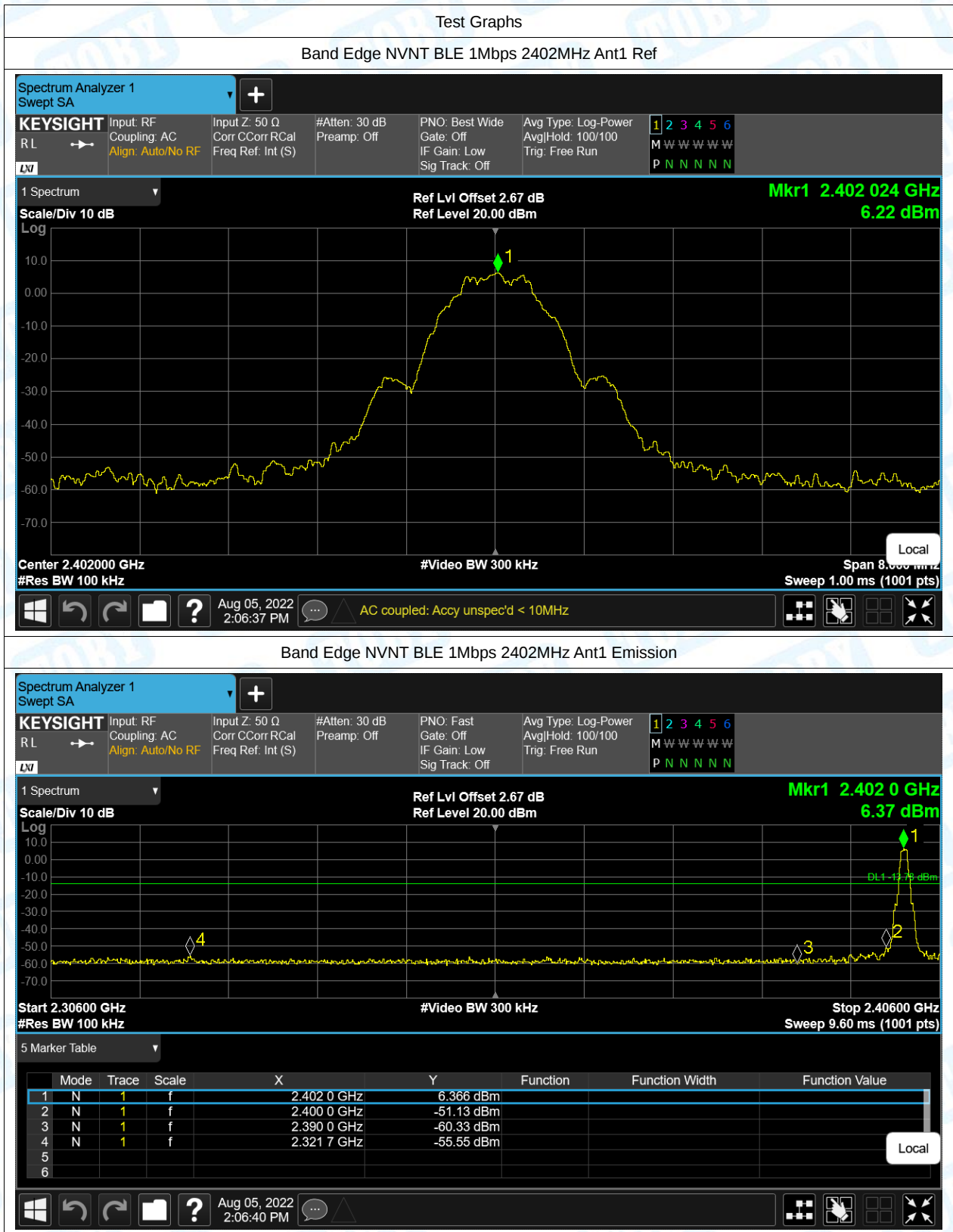


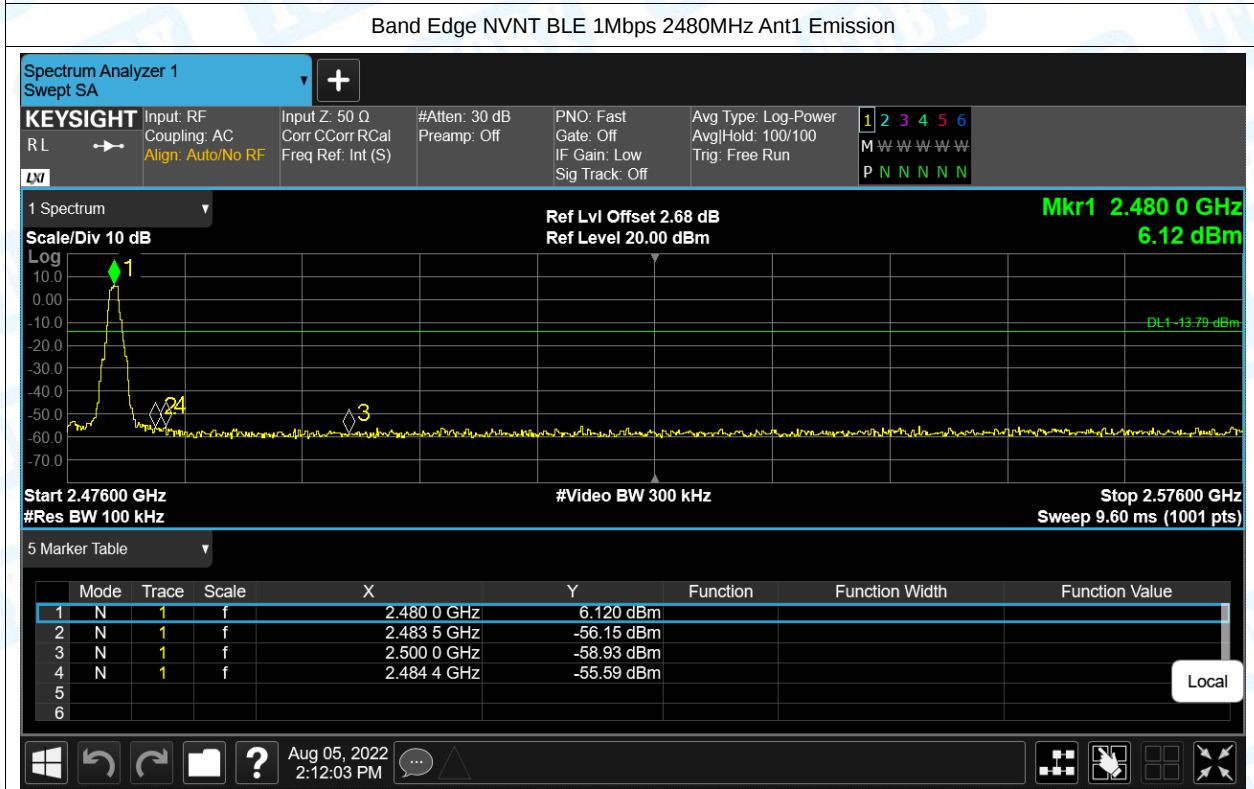
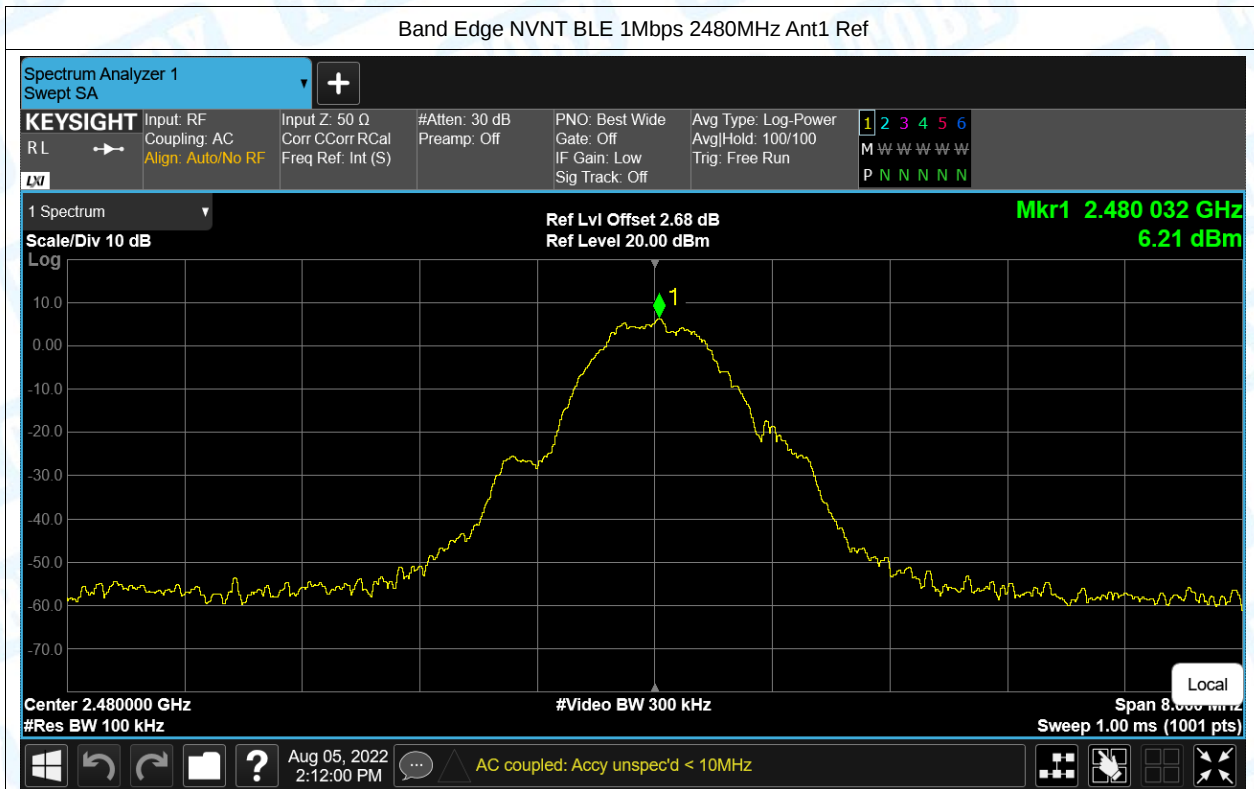


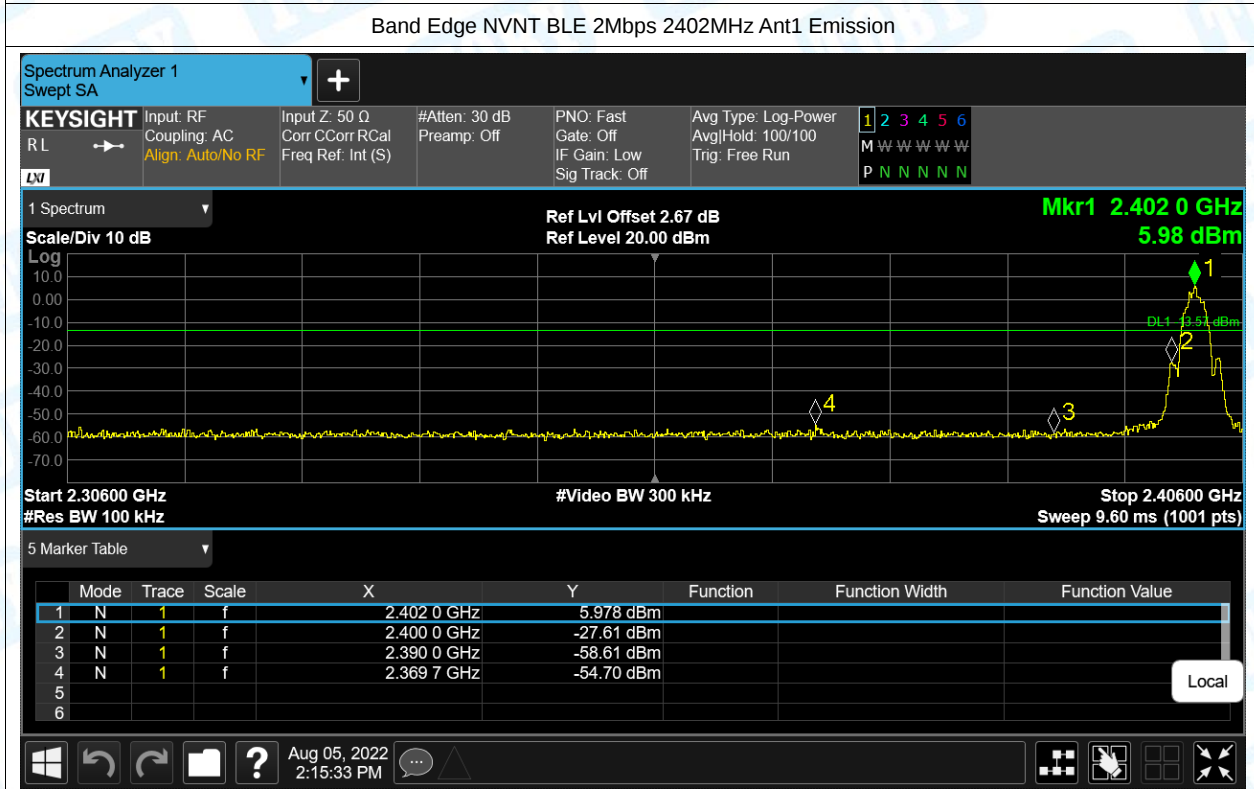
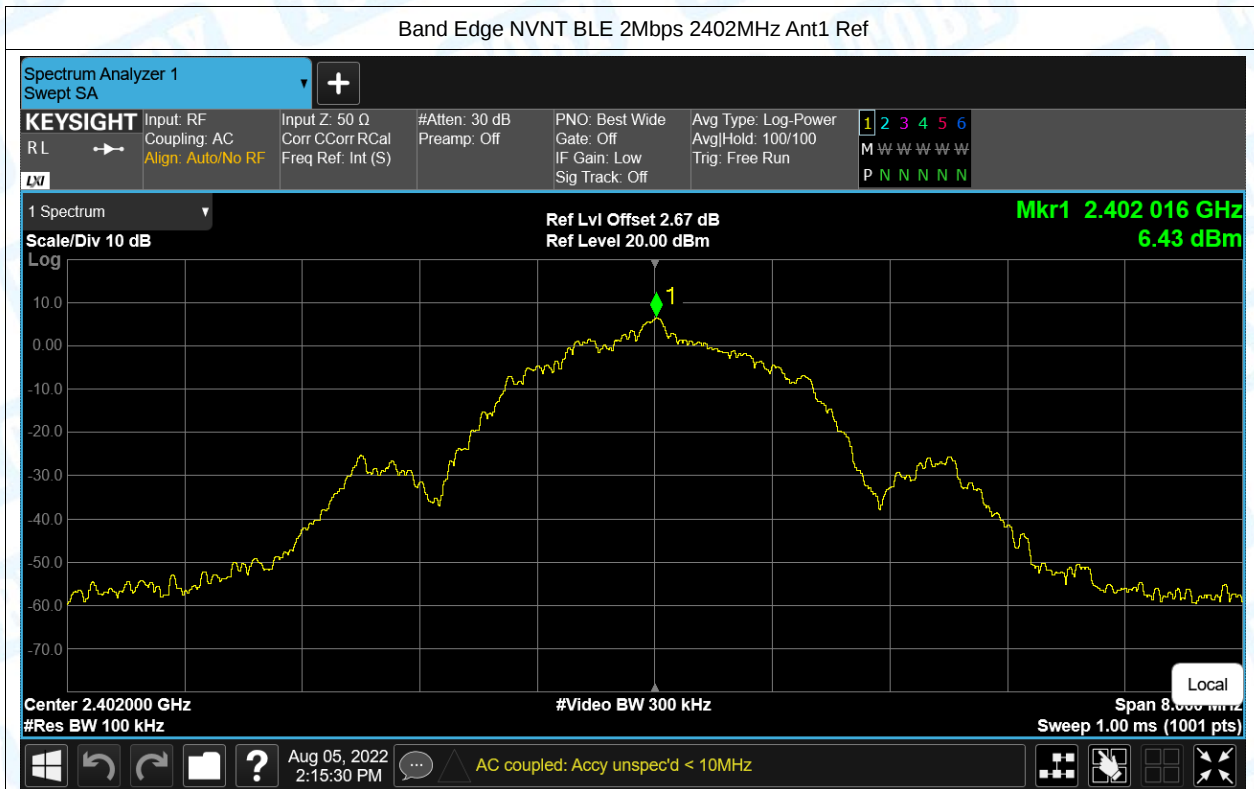


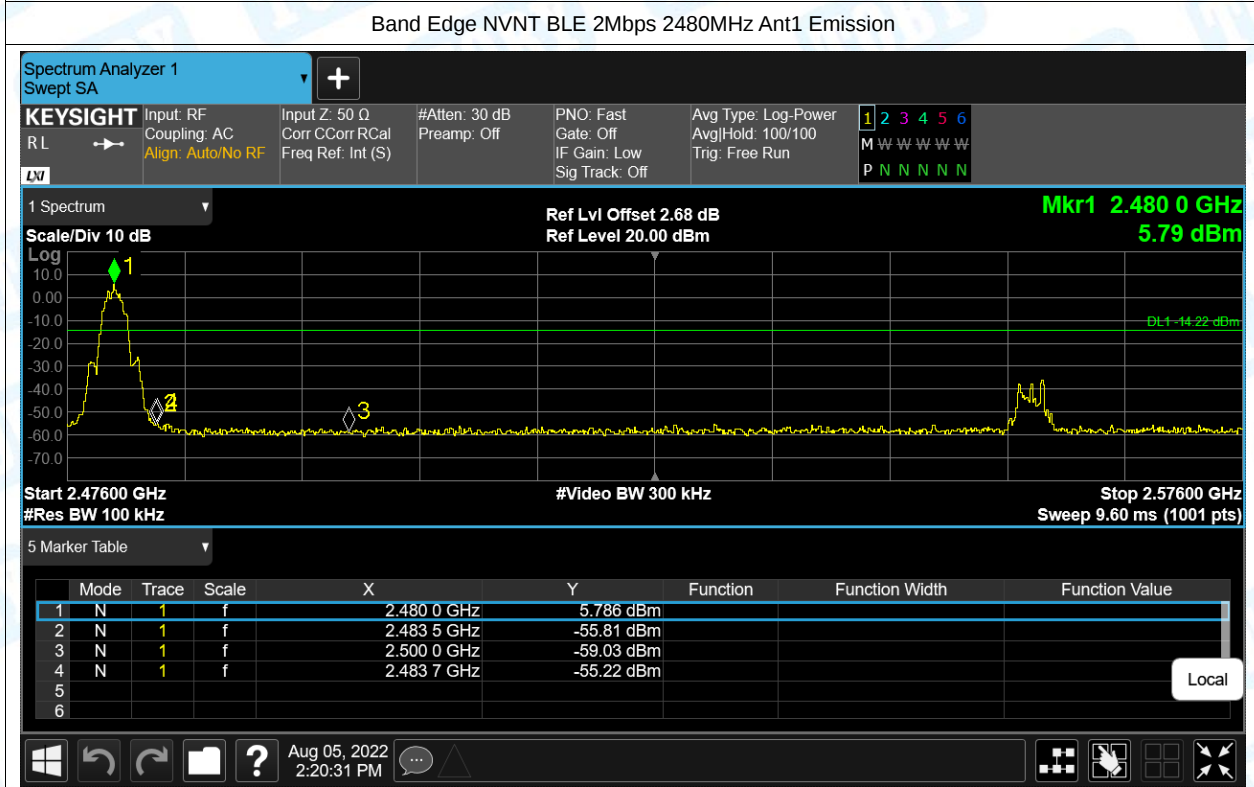
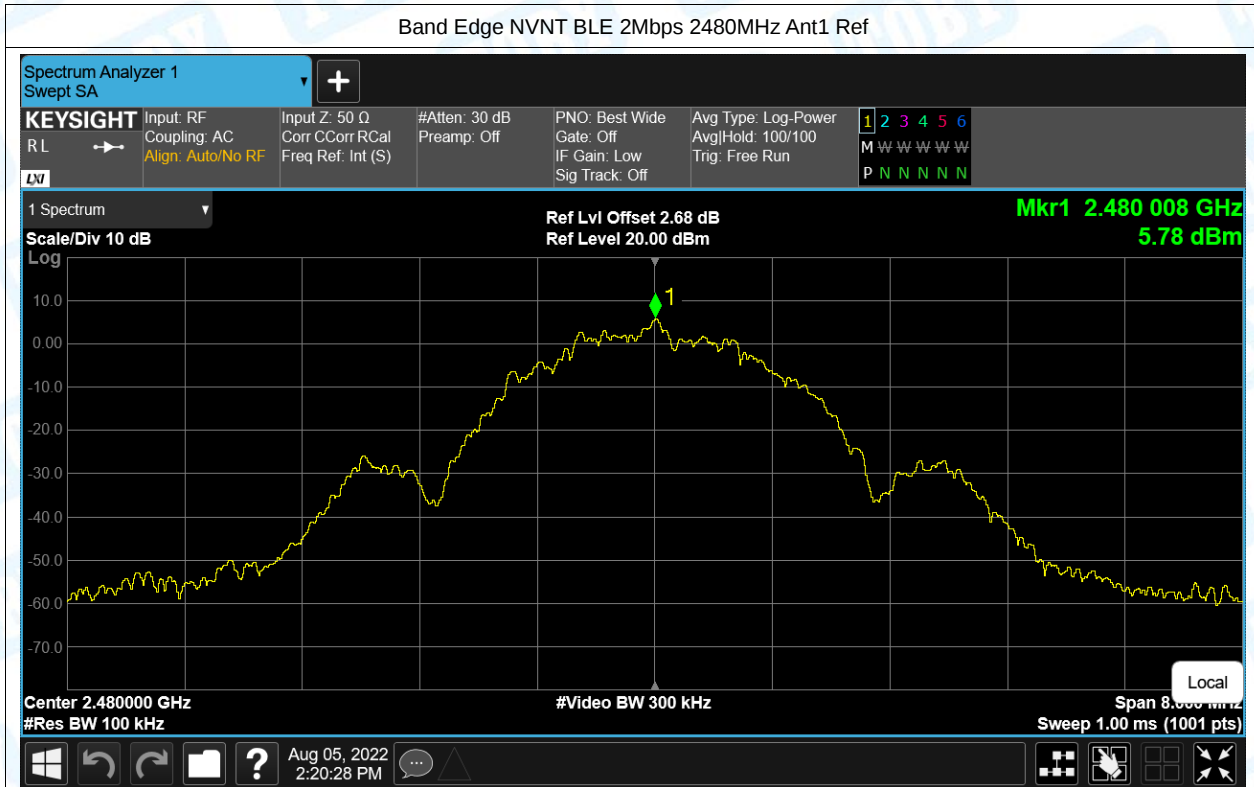
6. Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-61.77	-20	Pass
NVNT	BLE 1Mbps	2480	Ant1	-61.8	-20	Pass
NVNT	BLE 2Mbps	2402	Ant1	-61.13	-20	Pass
NVNT	BLE 2Mbps	2480	Ant1	-61	-20	Pass







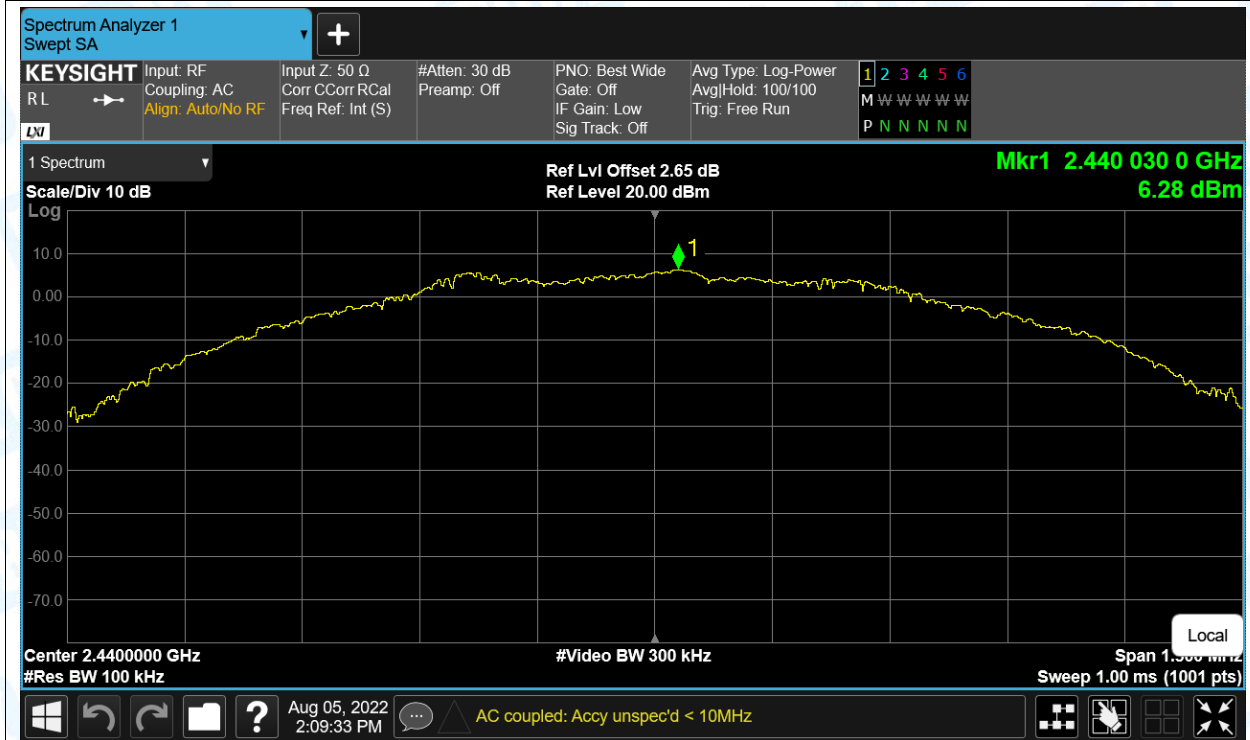


7. Conducted RF Spurious Emission

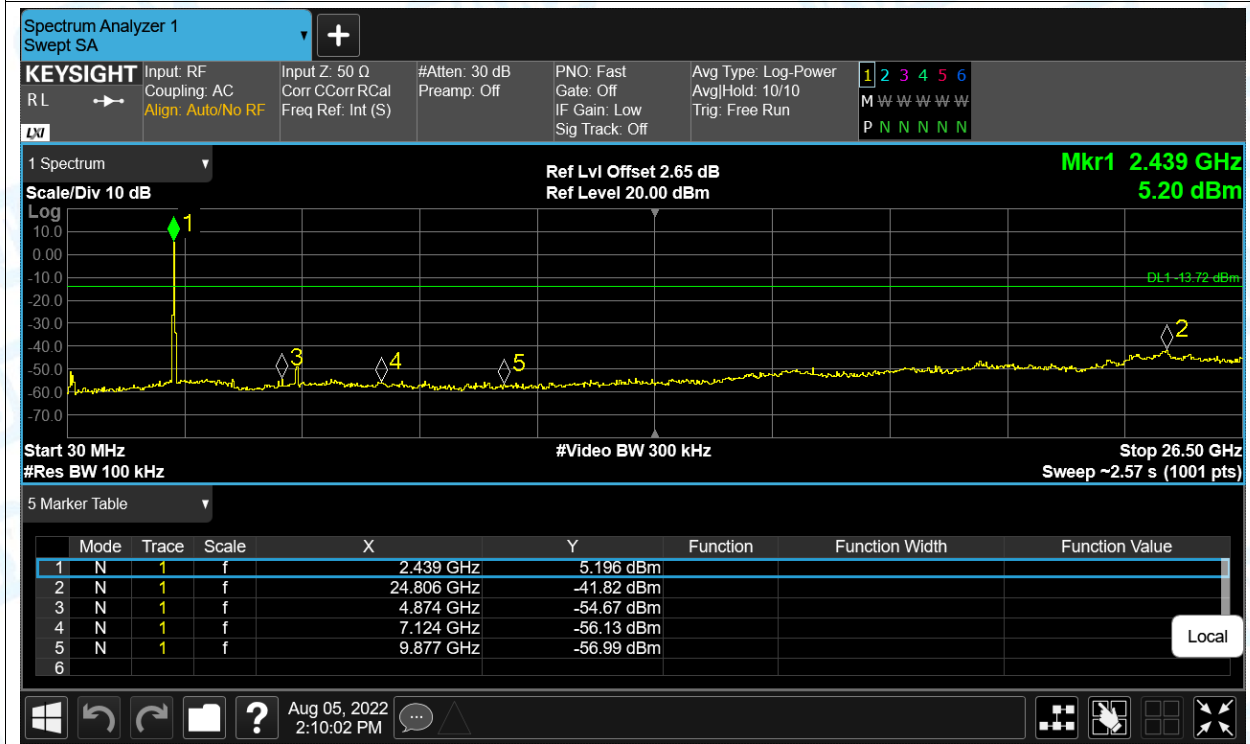
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-48.49	-20	Pass
NVNT	BLE 1Mbps	2440	Ant1	-48.1	-20	Pass
NVNT	BLE 1Mbps	2480	Ant1	-48.45	-20	Pass
NVNT	BLE 2Mbps	2402	Ant1	-48.73	-20	Pass
NVNT	BLE 2Mbps	2440	Ant1	-46.71	-20	Pass
NVNT	BLE 2Mbps	2480	Ant1	-45.23	-20	Pass



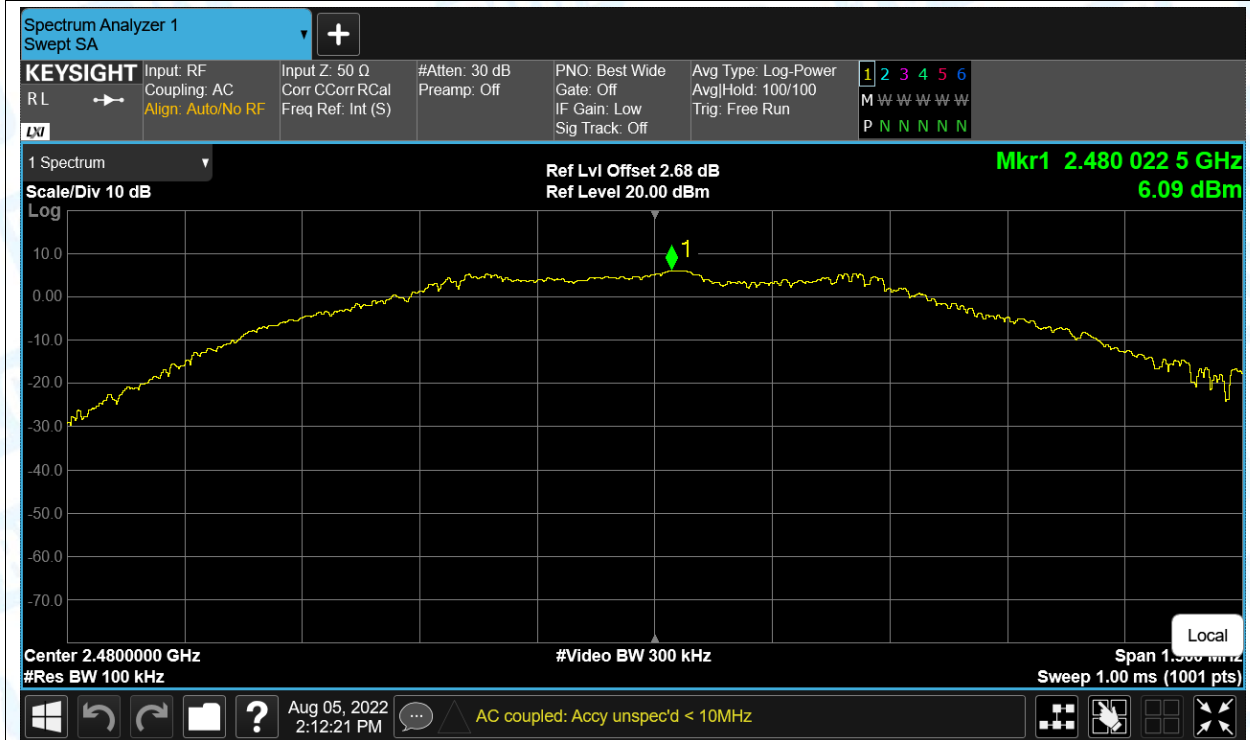
Tx. Spurious NVNT BLE 1Mbps 2440MHz Ant1 Ref



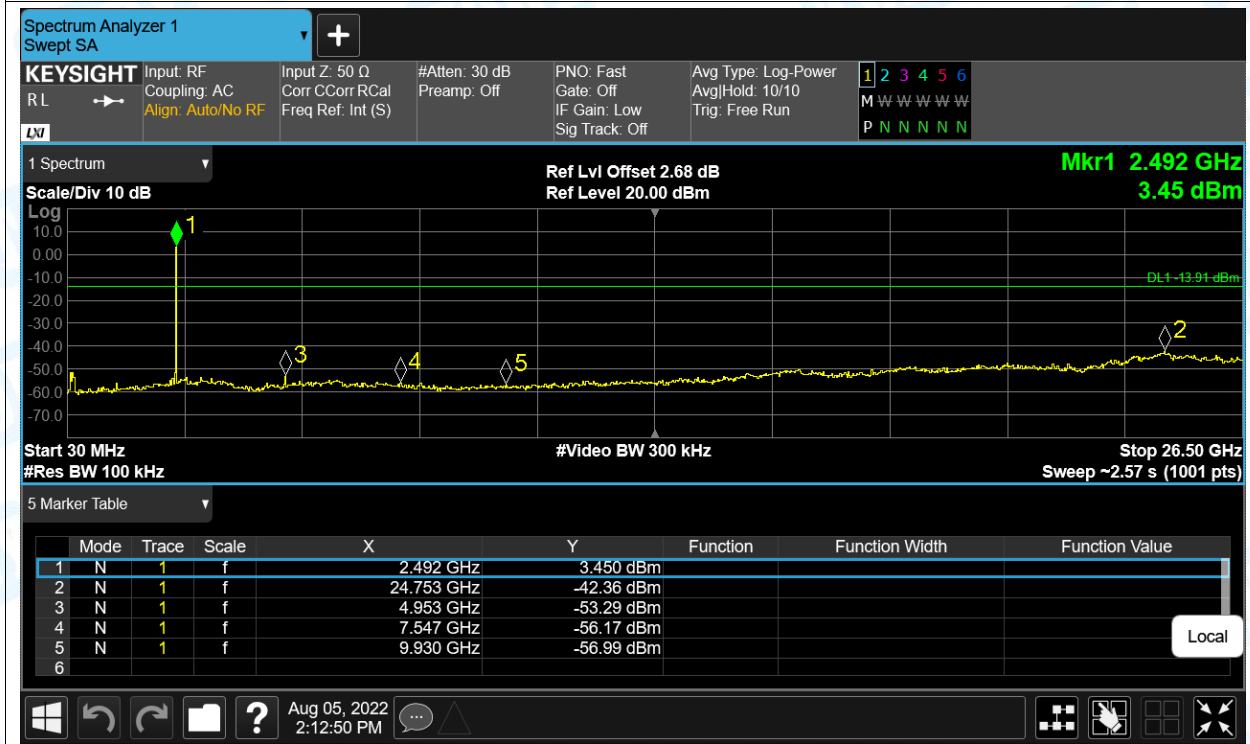
Tx. Spurious NVNT BLE 1Mbps 2440MHz Ant1 Emission



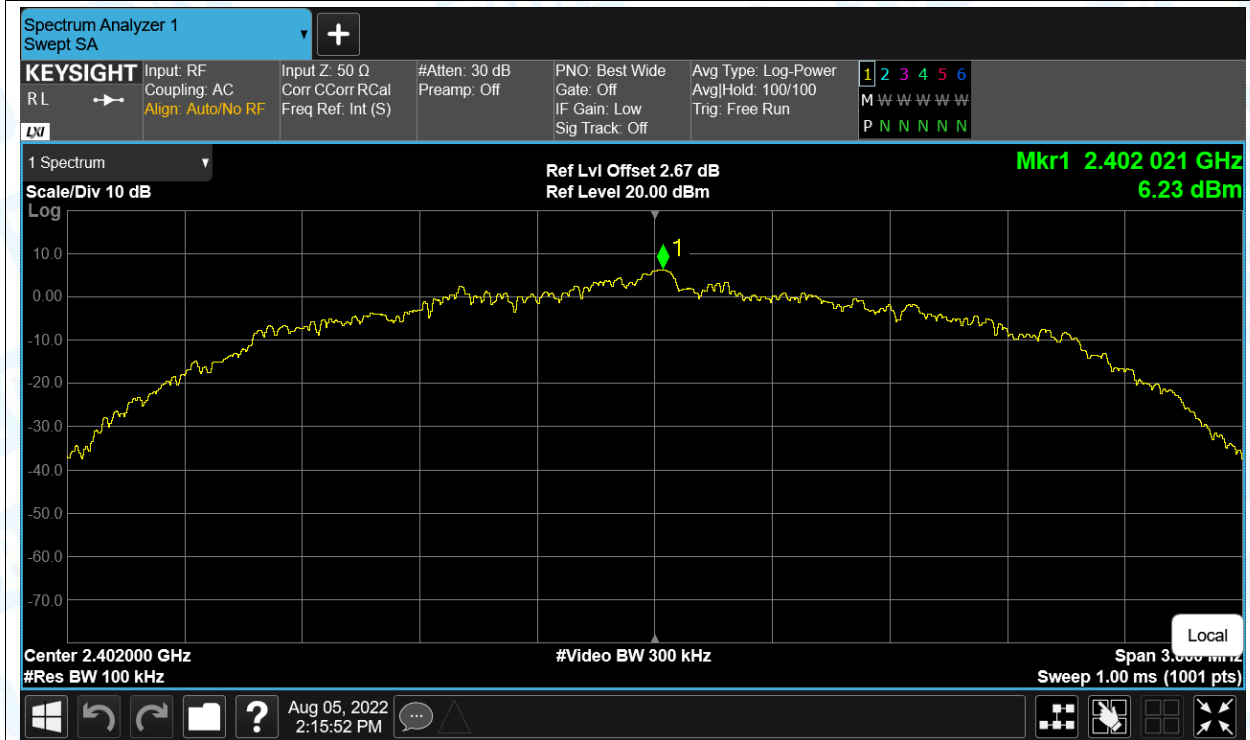
Tx. Spurious NVNT BLE 1Mbps 2480MHz Ant1 Ref



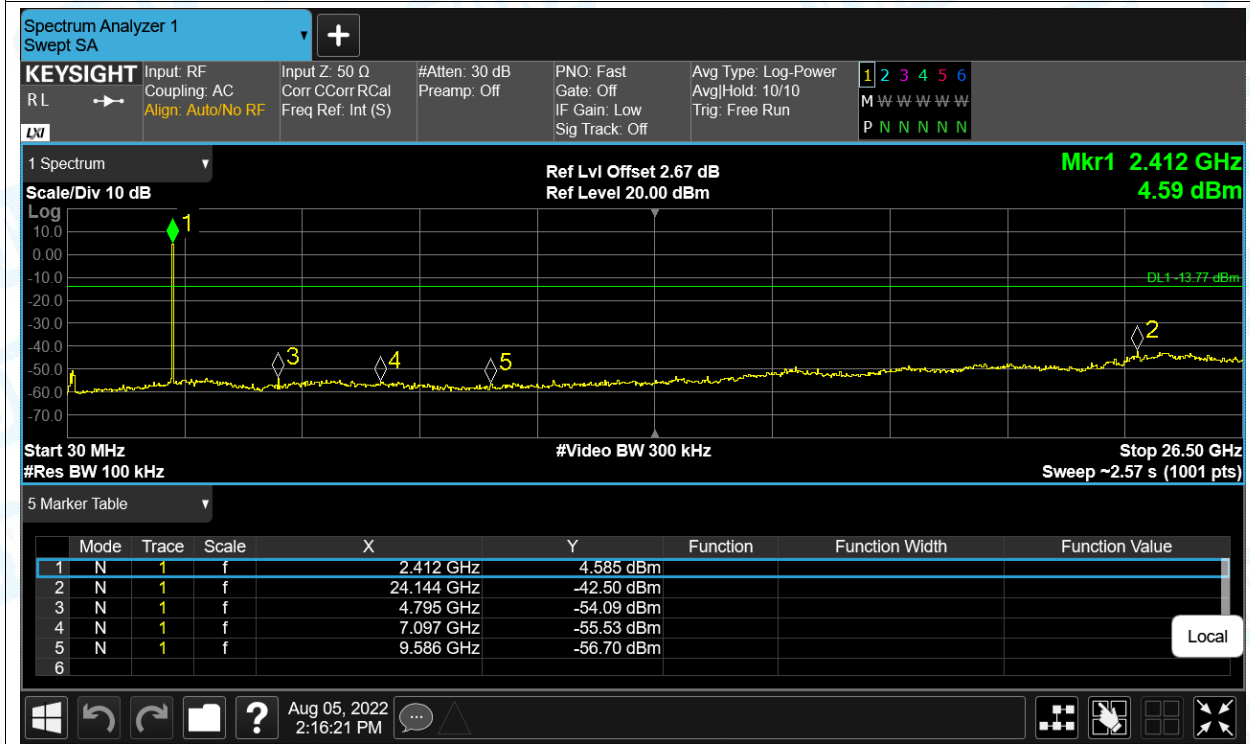
Tx. Spurious NVNT BLE 1Mbps 2480MHz Ant1 Emission

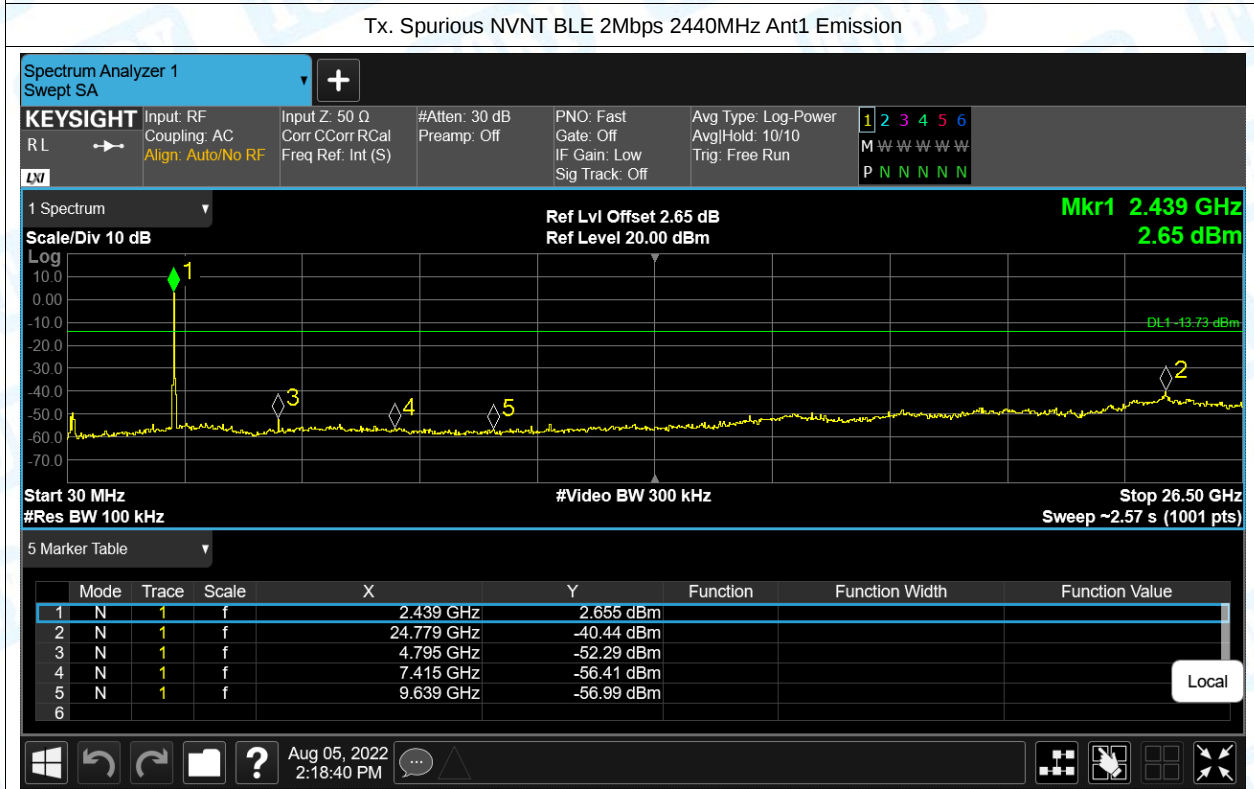
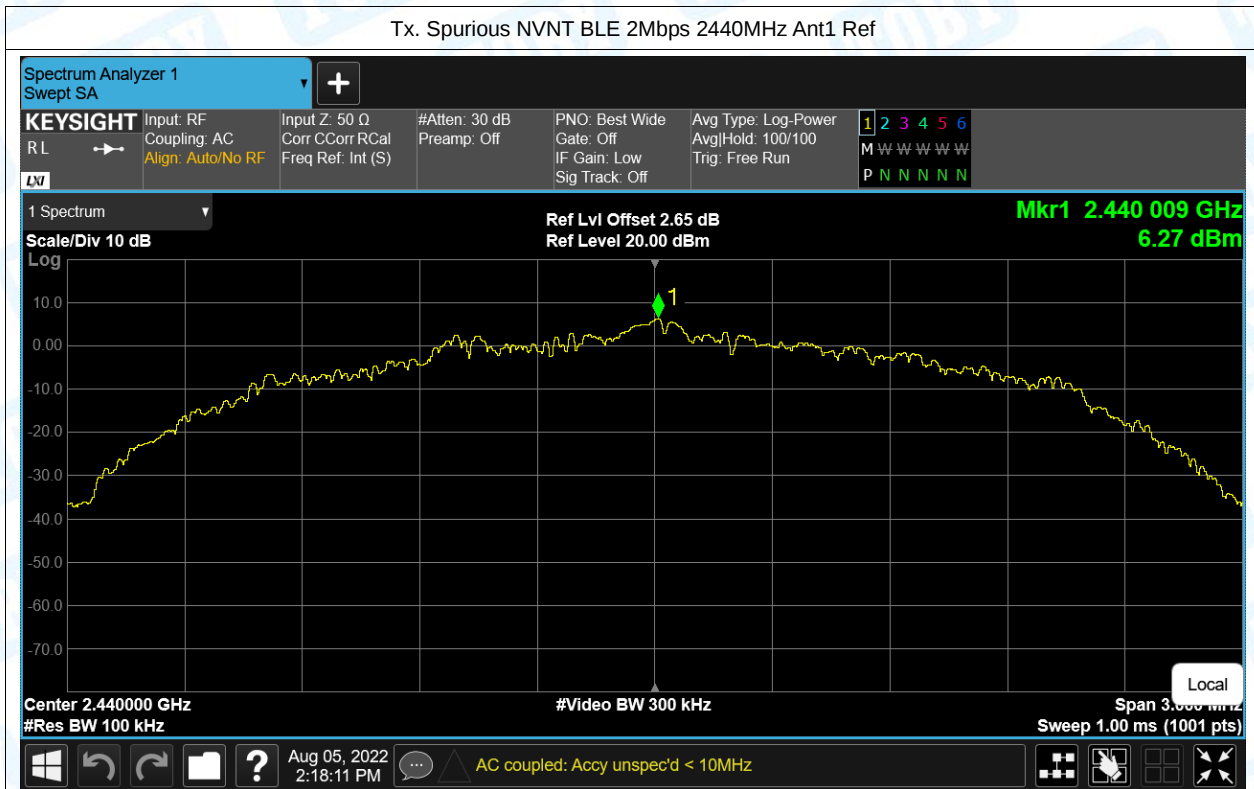


Tx. Spurious NVNT BLE 2Mbps 2402MHz Ant1 Ref

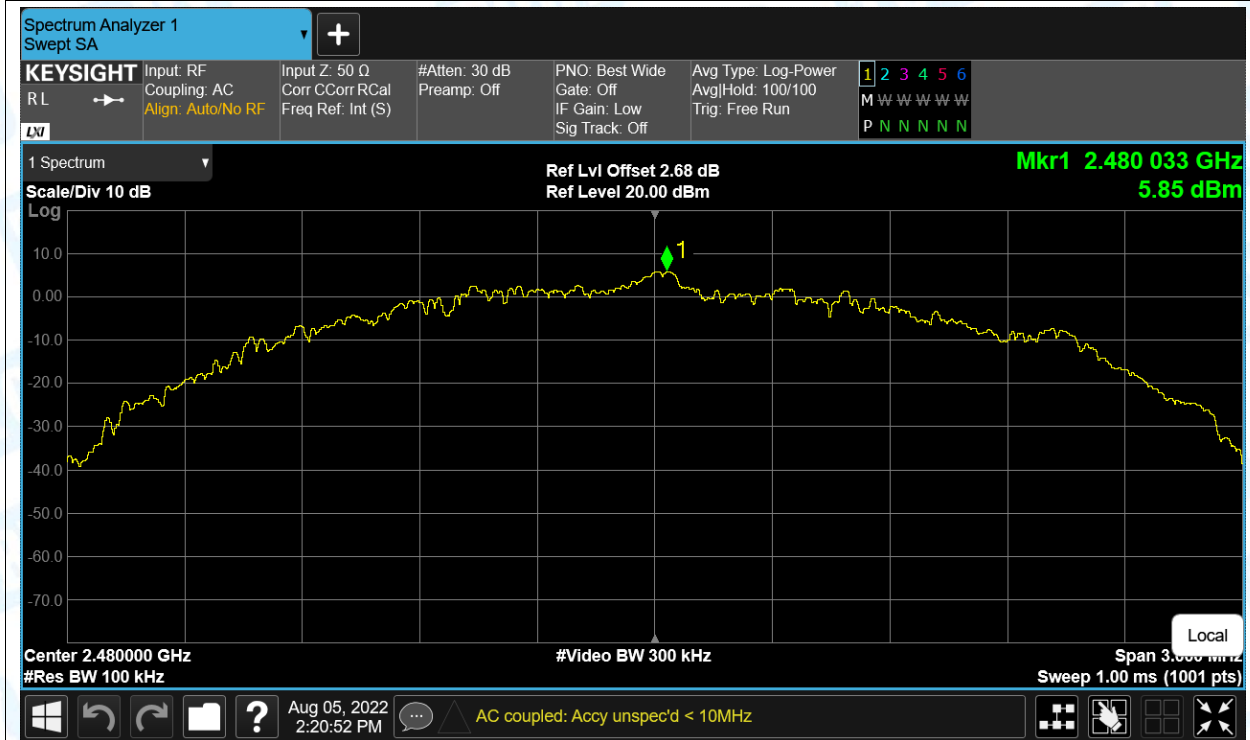


Tx. Spurious NVNT BLE 2Mbps 2402MHz Ant1 Emission

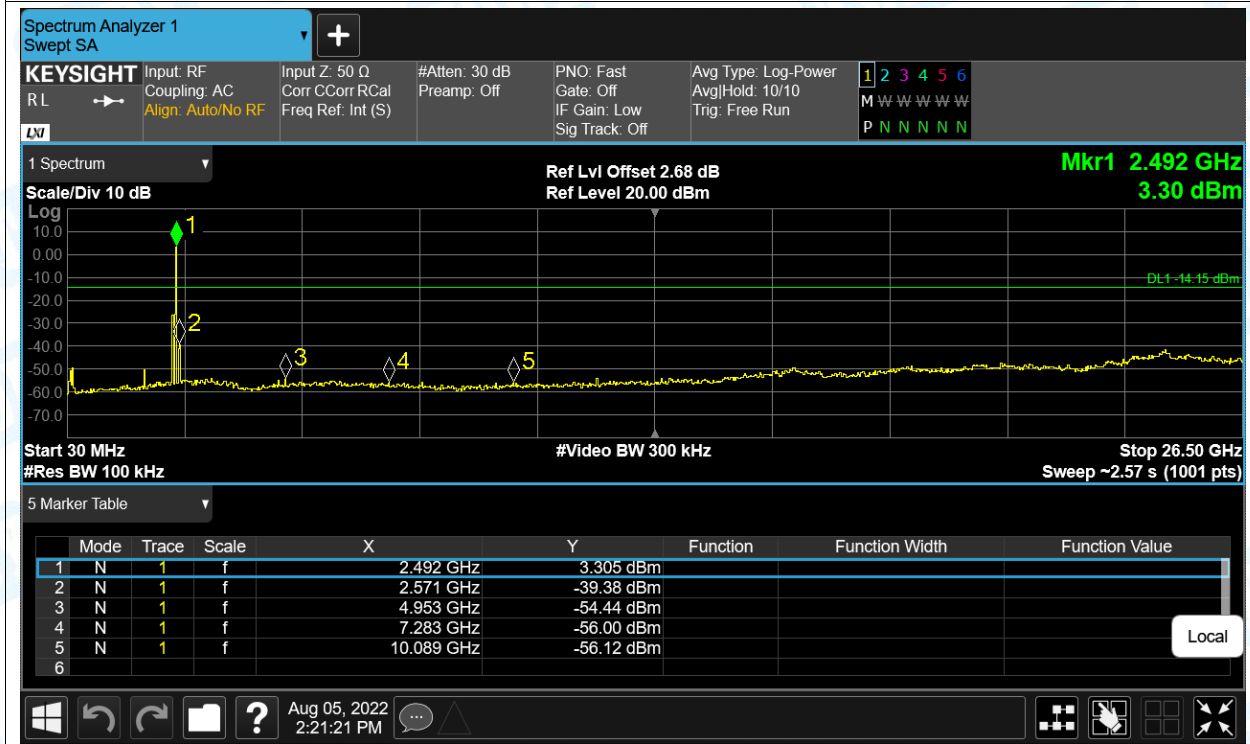




Tx. Spurious NVNT BLE 2Mbps 2480MHz Ant1 Ref



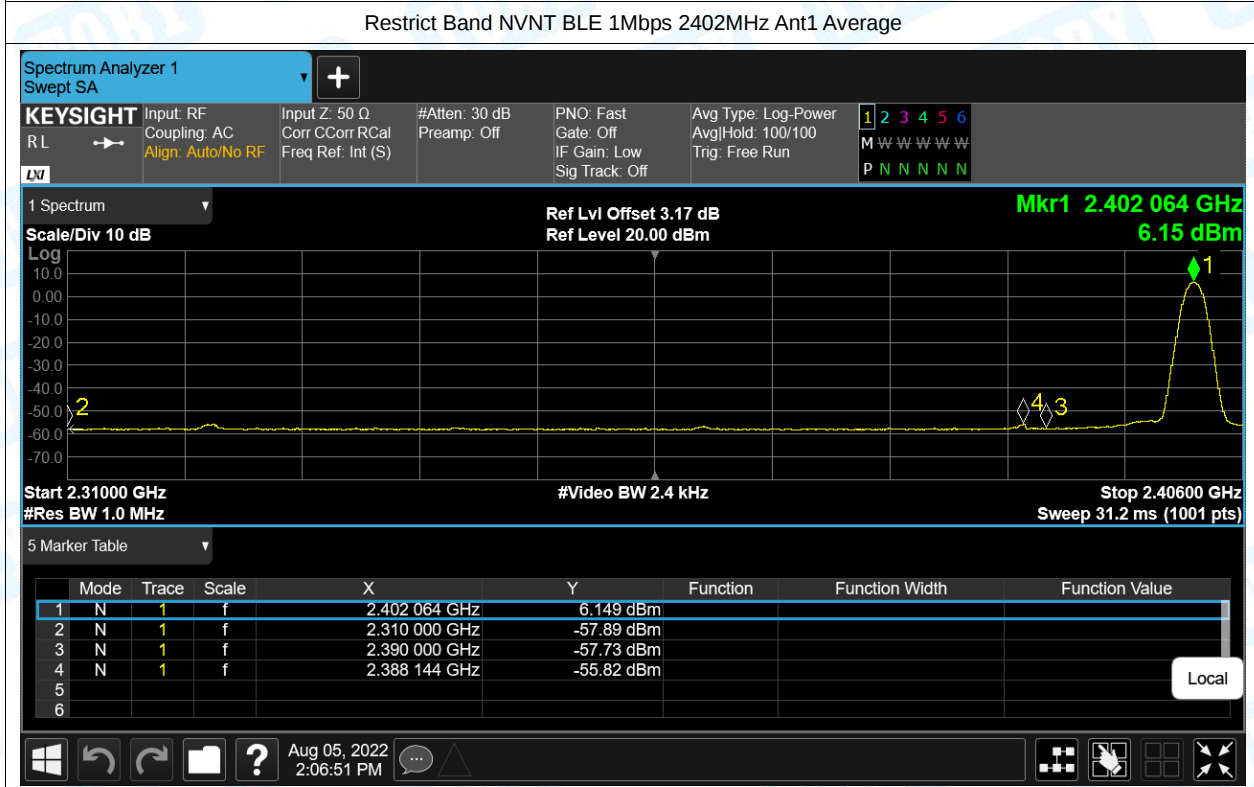
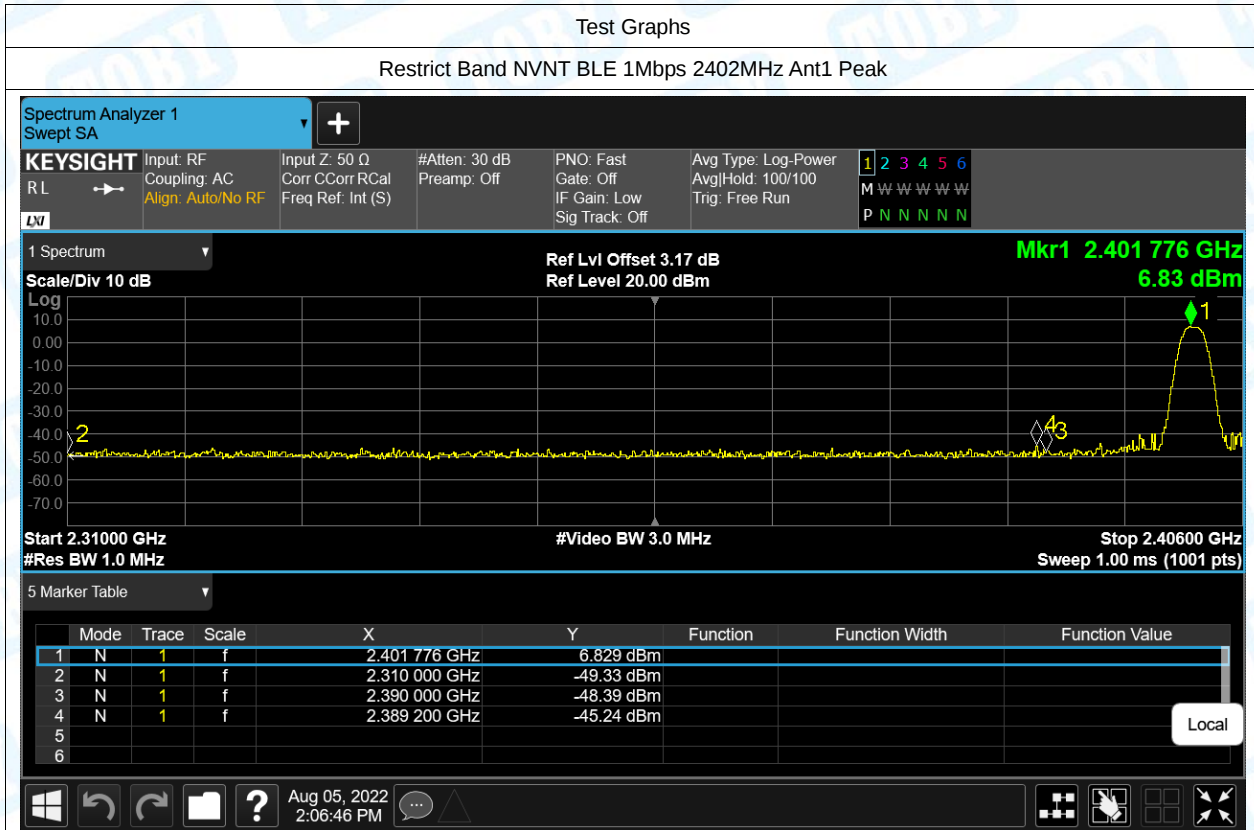
Tx. Spurious NVNT BLE 2Mbps 2480MHz Ant1 Emission



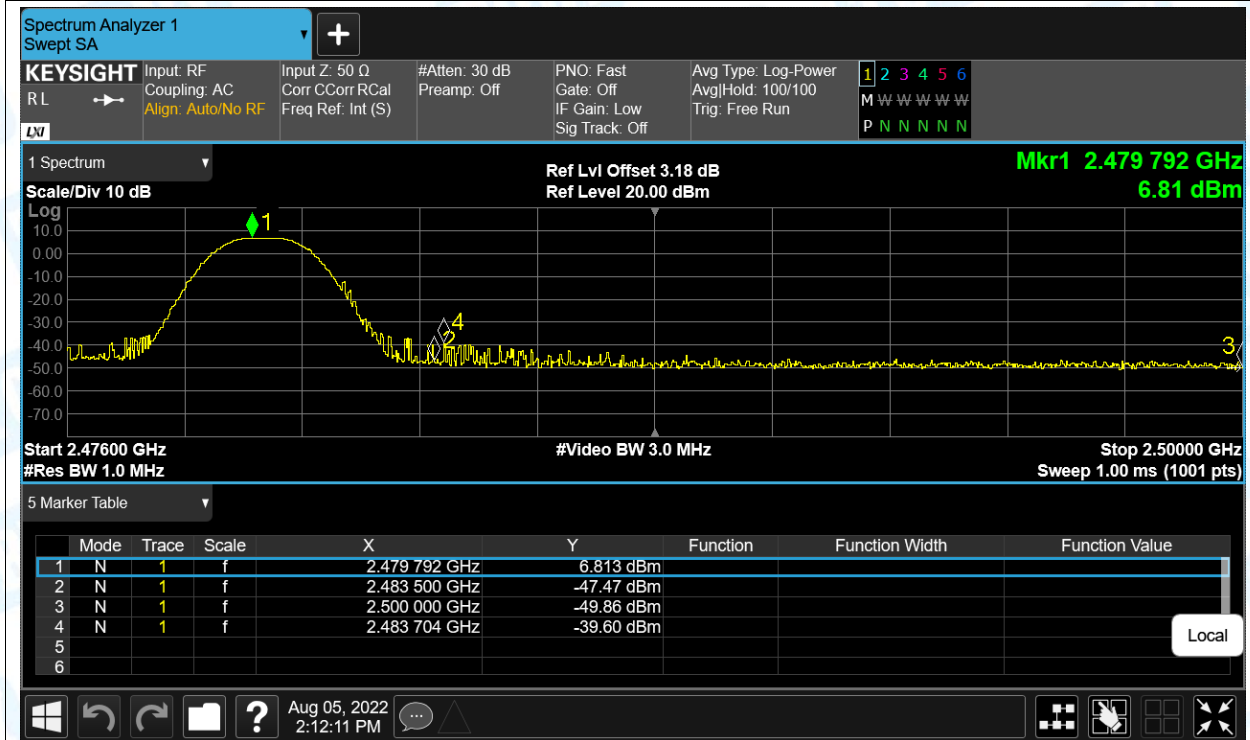
8. Restrict Band

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	-49.33	2	47.93	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2310	-57.89	2	39.37	Average	54	Pass
NVNT	BLE 1Mbps	2402	Ant1	2389.2	-45.24	2	52.02	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2388.144	-55.82	2	41.44	Average	54	Pass
NVNT	BLE 1Mbps	2402	Ant1	2390	-47.48	2	49.78	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2390	-57.74	2	39.52	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.5	-47.47	2	49.79	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.5	-56.07	2	41.19	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.704	-39.6	2	57.66	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.56	-56.01	2	41.25	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2500	-49.86	2	47.4	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2500	-57.88	2	39.38	Average	54	Pass
NVNT	BLE 2Mbps	2402	Ant1	2310	-49.4	2	47.86	Peak	74	Pass
NVNT	BLE 2Mbps	2402	Ant1	2310	-57.69	2	39.57	Average	54	Pass
NVNT	BLE 2Mbps	2402	Ant1	2373.84	-45.55	2	51.71	Peak	74	Pass
NVNT	BLE 2Mbps	2402	Ant1	2321.712	-55.74	2	41.52	Average	54	Pass
NVNT	BLE 2Mbps	2402	Ant1	2390	-49.04	2	48.22	Peak	74	Pass
NVNT	BLE 2Mbps	2402	Ant1	2390	-57.39	2	39.87	Average	54	Pass
NVNT	BLE 2Mbps	2480	Ant1	2483.5	-45.64	2	51.62	Peak	74	Pass
NVNT	BLE 2Mbps	2480	Ant1	2483.5	-50.74	2	46.52	Average	54	Pass
NVNT	BLE 2Mbps	2480	Ant1	2483.704	-37.56	2	59.7	Peak	74	Pass
NVNT	BLE 2Mbps	2480	Ant1	2483.512	-50.74	2	46.52	Average	54	Pass

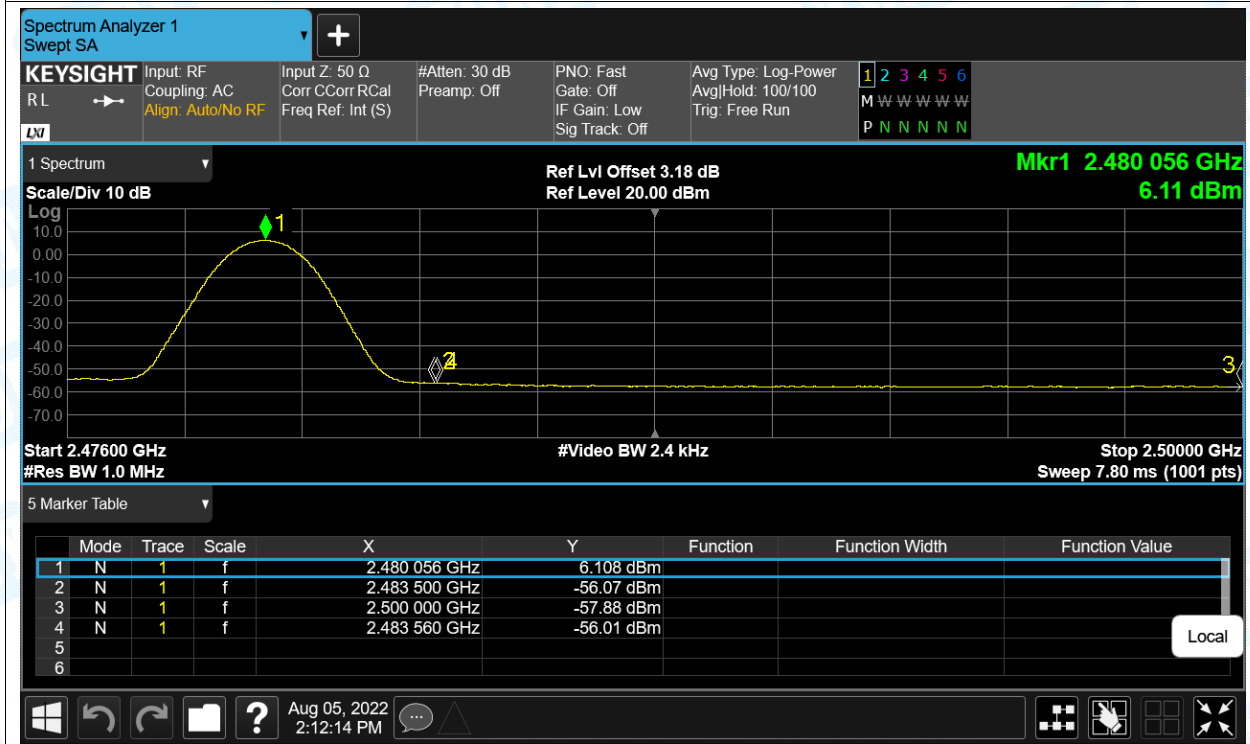
NVNT	BLE 2Mbps	2480	Ant1	2500	-49.49	2	47.77	Peak	74	Pass
NVNT	BLE 2Mbps	2480	Ant1	2500	-57.57	2	39.69	Average	54	Pass



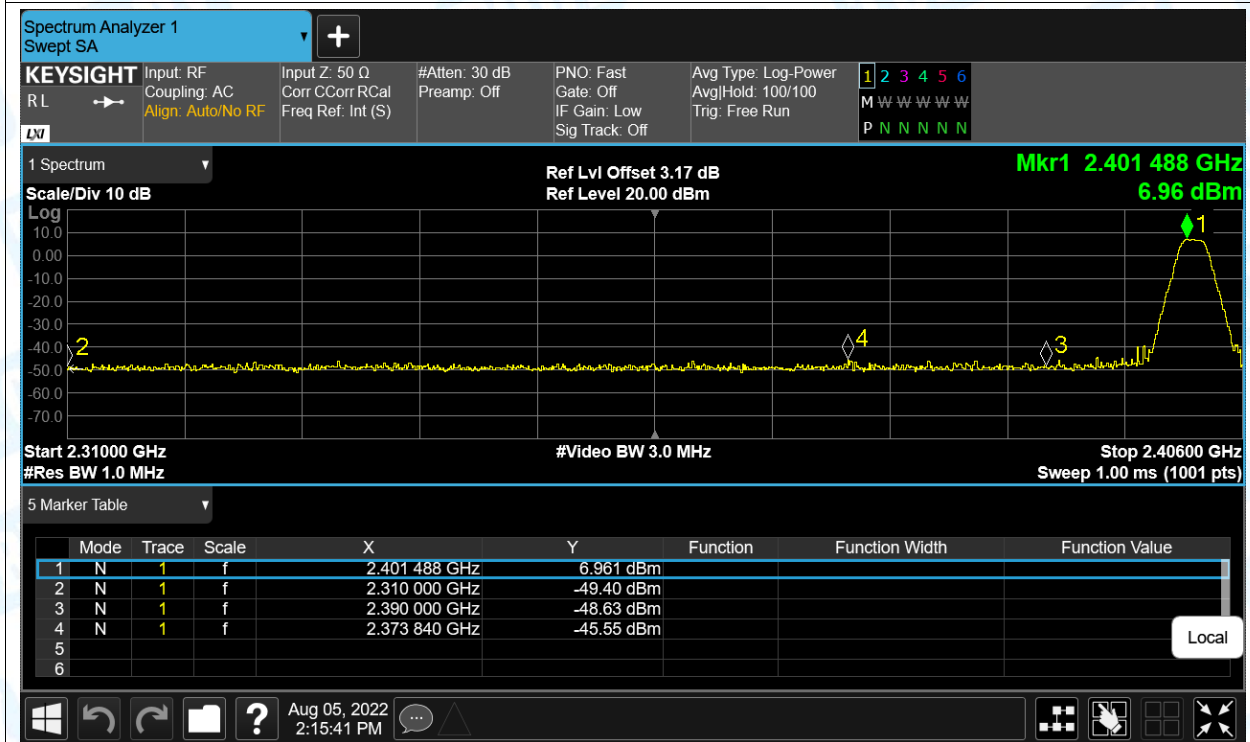
Restrict Band NVNT BLE 1Mbps 2480MHz Ant1 Peak



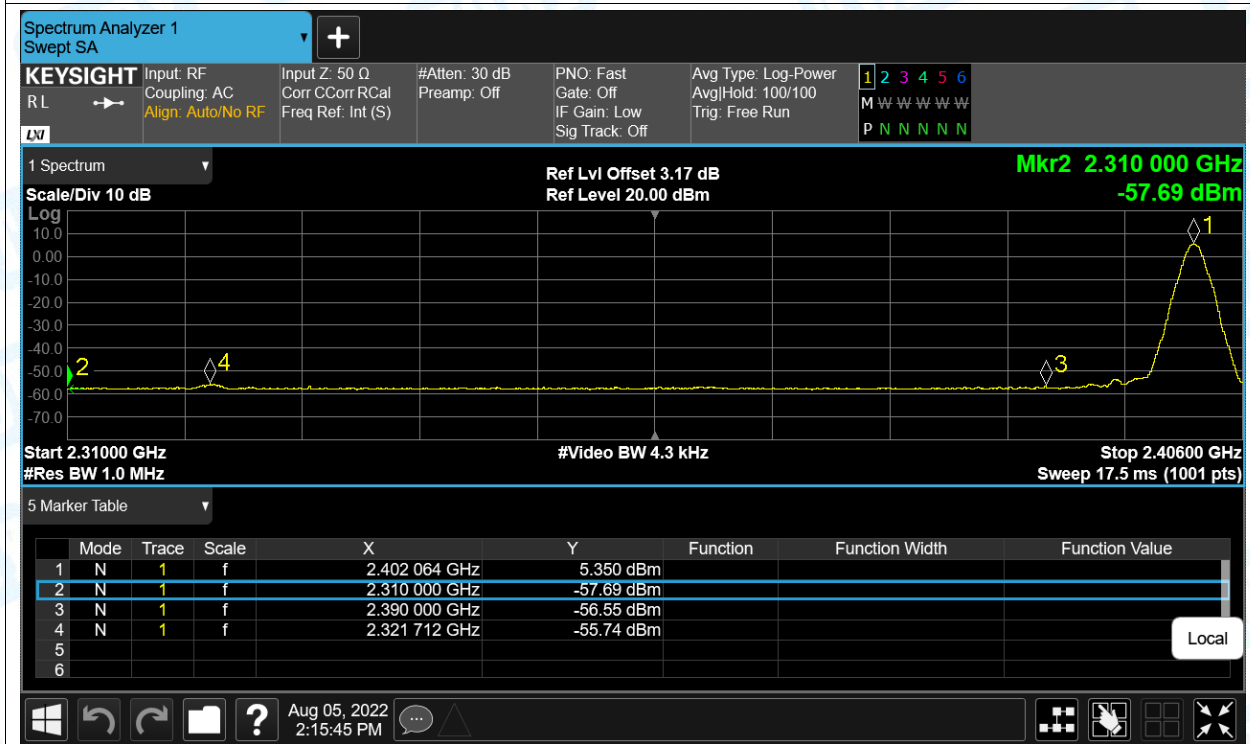
Restrict Band NVNT BLE 1Mbps 2480MHz Ant1 Average



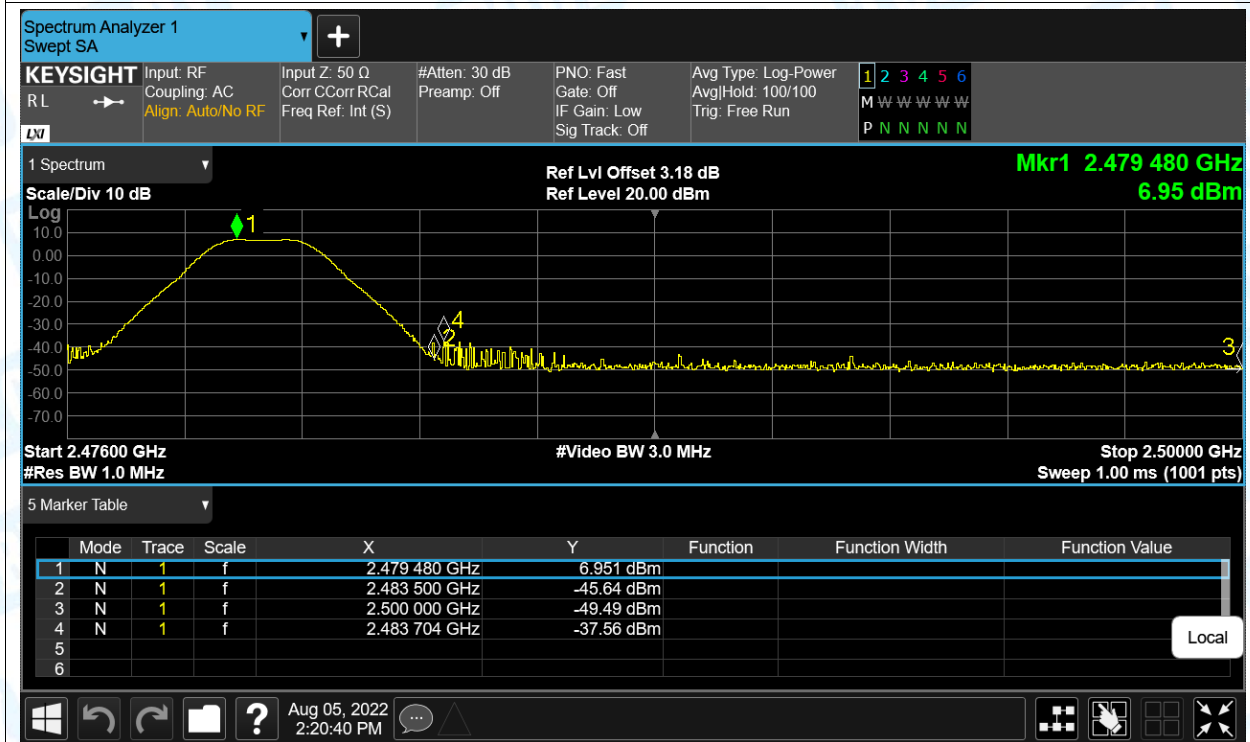
Restrict Band NVNT BLE 2Mbps 2402MHz Ant1 Peak



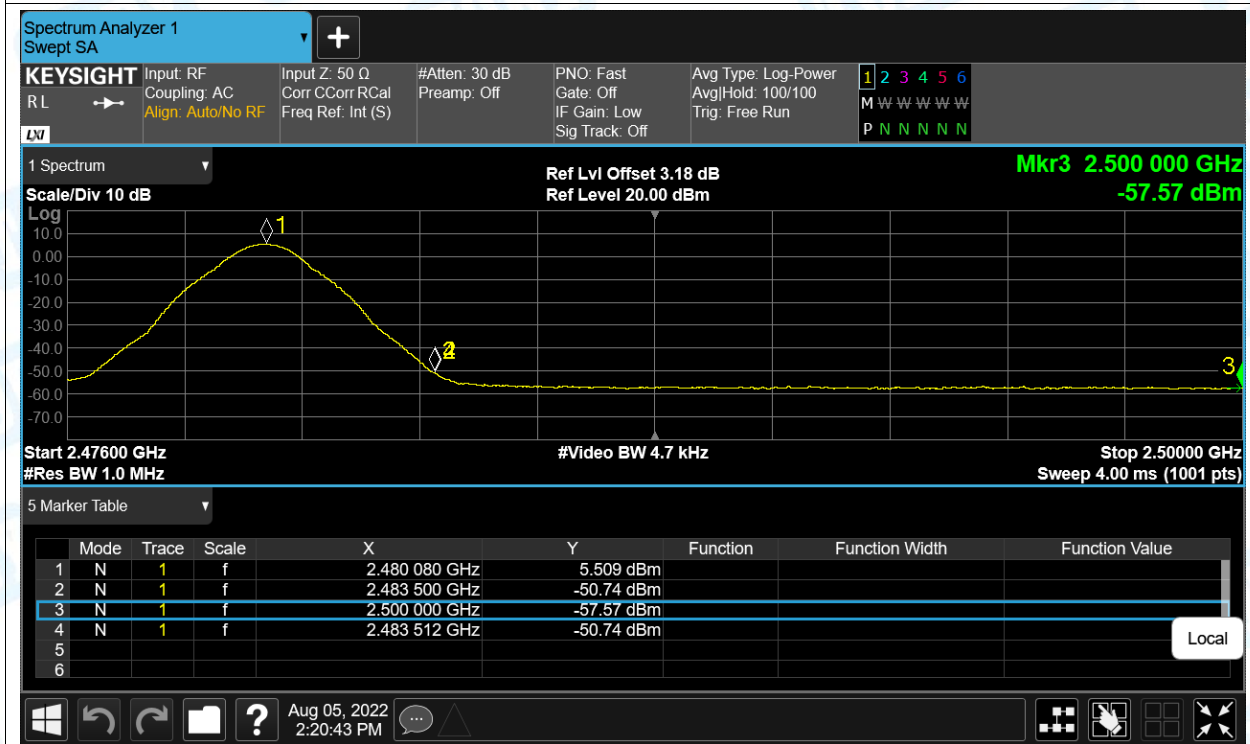
Restrict Band NVNT BLE 2Mbps 2402MHz Ant1 Average



Restrict Band NVNT BLE 2Mbps 2480MHz Ant1 Peak



Restrict Band NVNT BLE 2Mbps 2480MHz Ant1 Average



-----END OF THE REPORT-----