

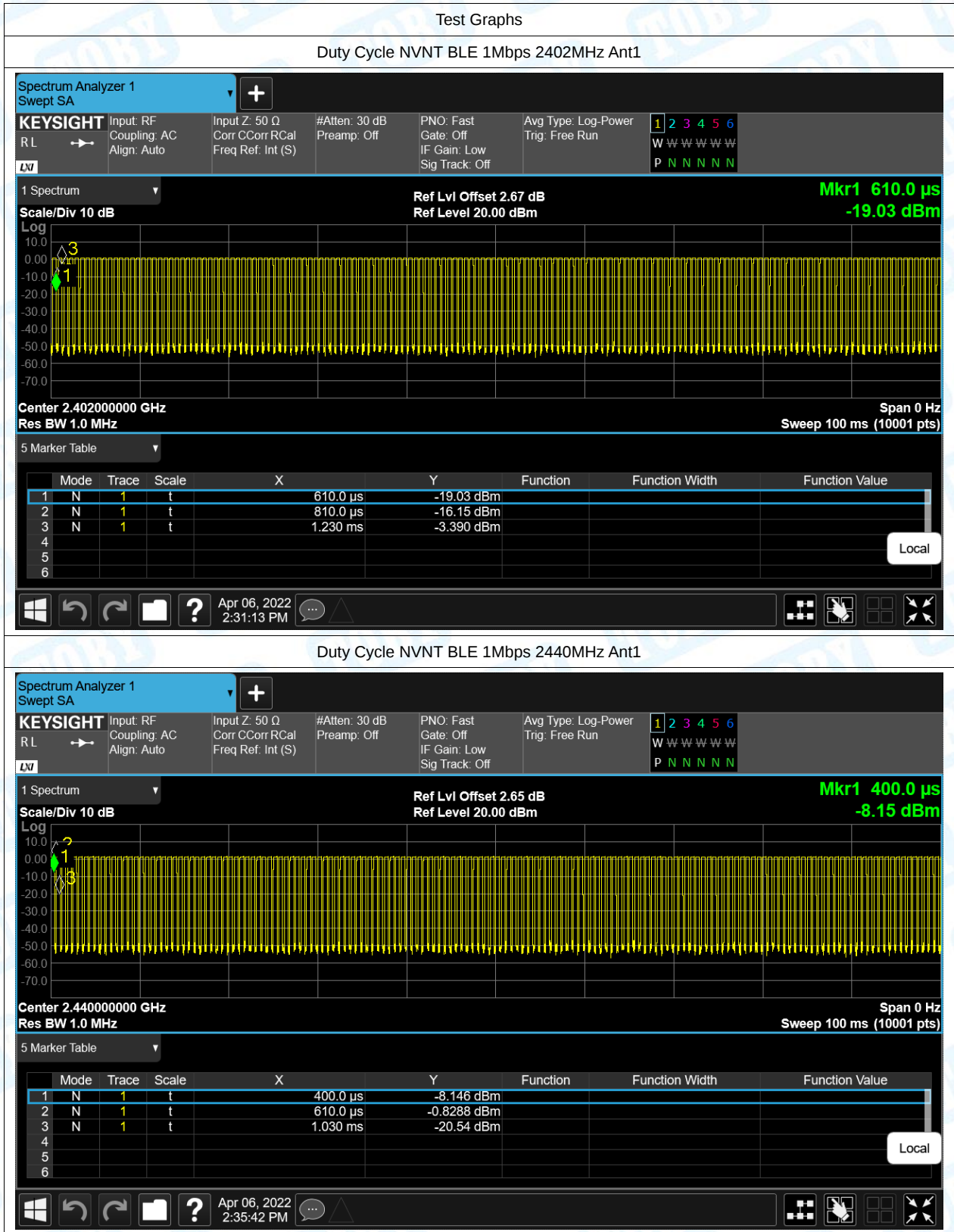
RF Test Data for Bluetooth LE

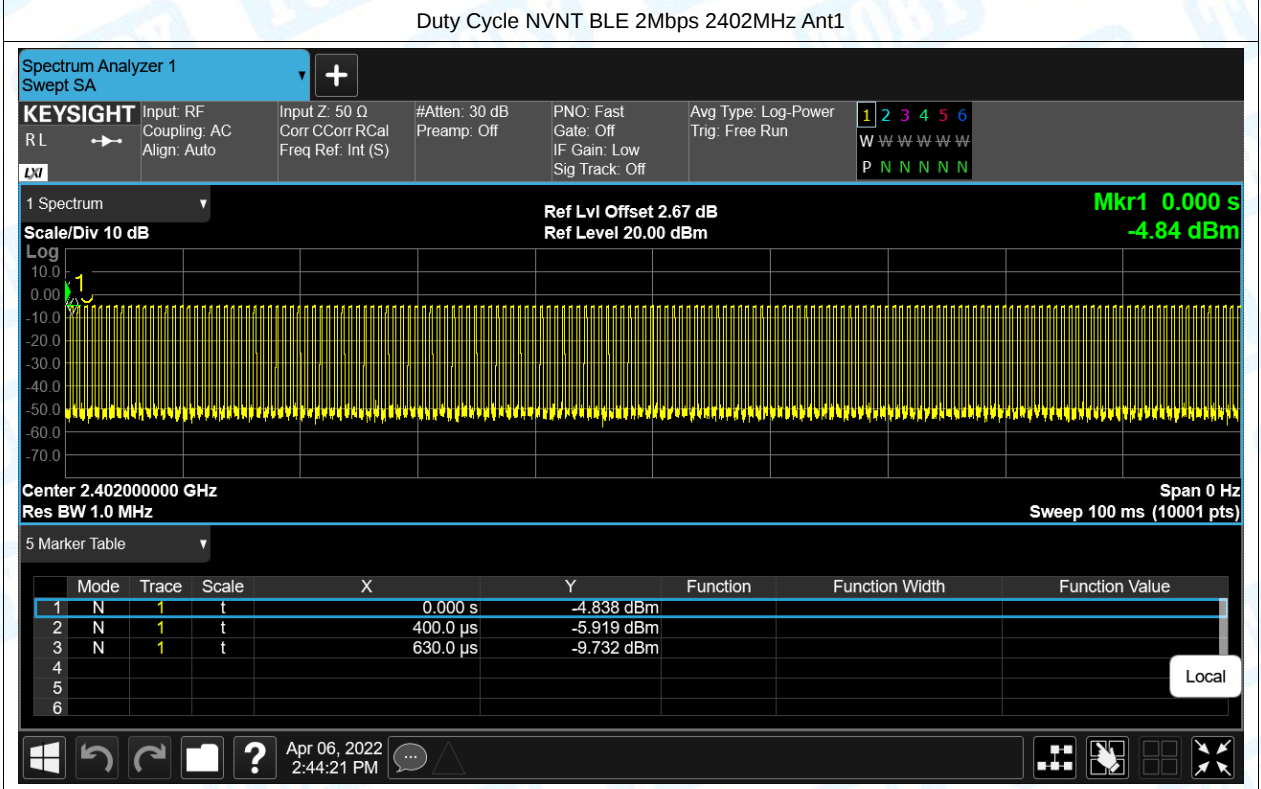
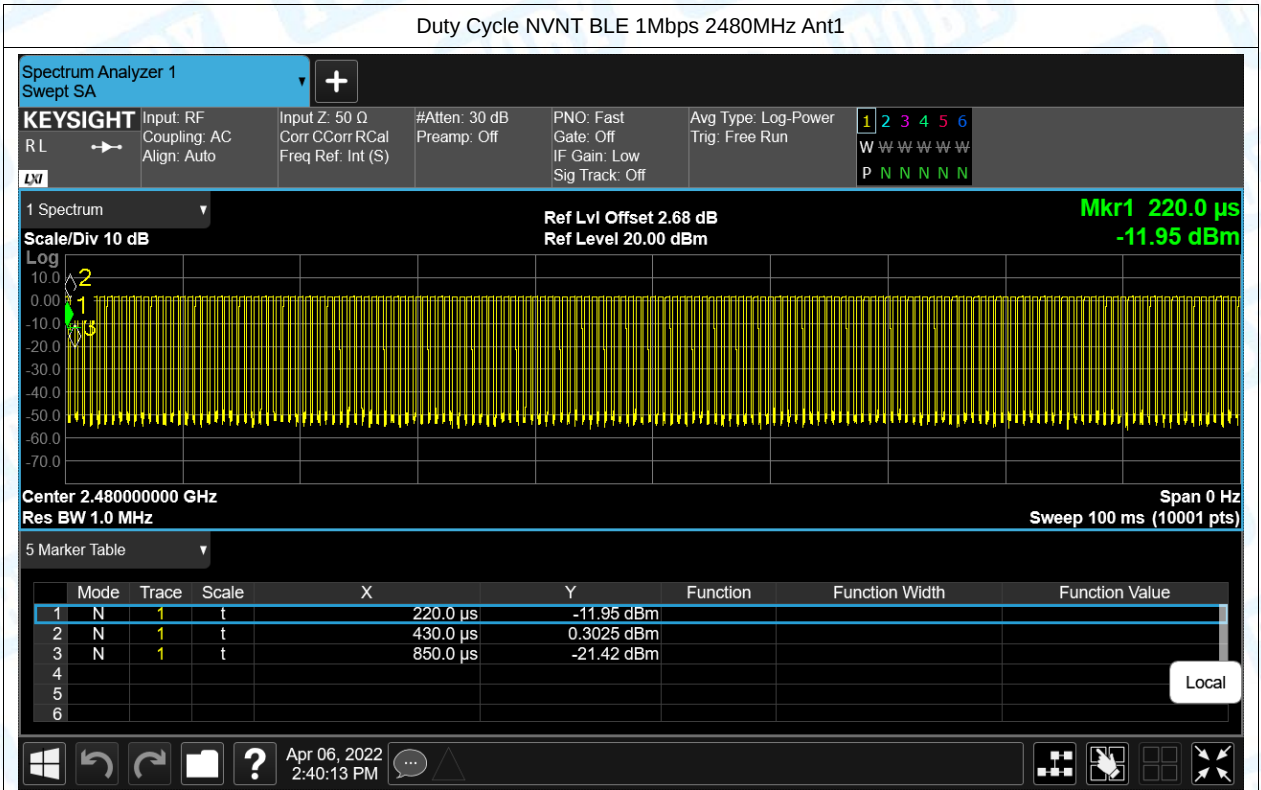
(Conducted Measurements)

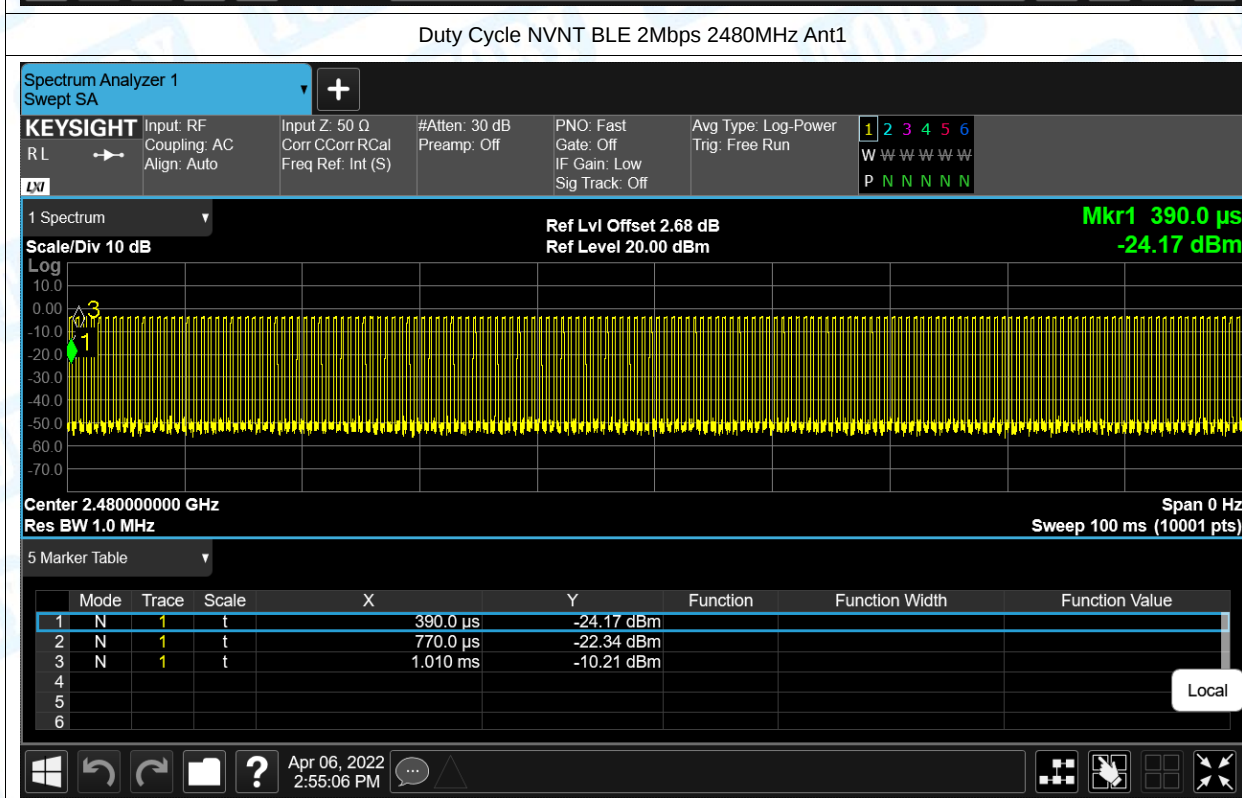
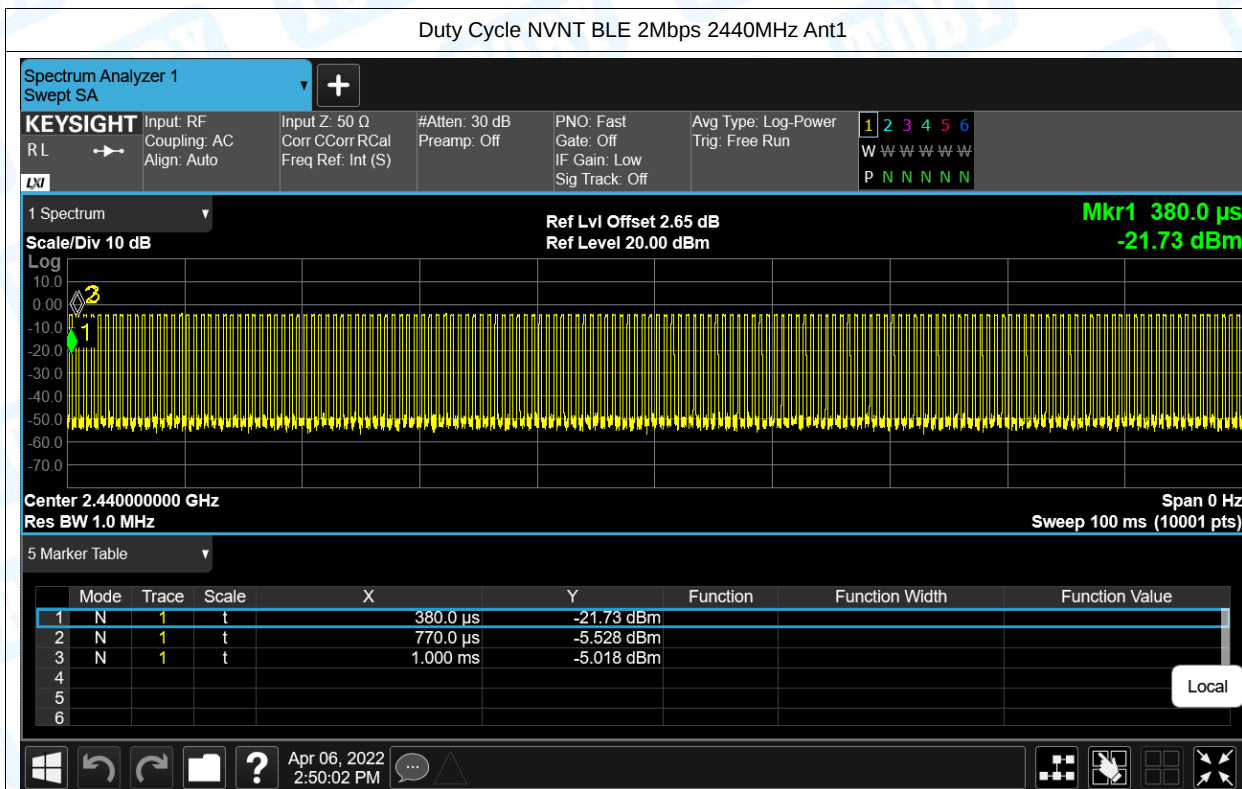
General Description of EUT	
Product Name:	A03
Test Model:	A03
Sample ID:	202204-0008-3-2#
Environmental Conditions	
Temperature:	24℃
Relative Humidity:	50%
Test Voltage:	DC 3.7V
Test Engineer:	Hejingchang
Note: For a more detailed features description, please refer to the report TBR-C-202204-0008-3.	

Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1Mbps	2402	Ant1	68.79	1.62	2.38
NVNT	BLE 1Mbps	2440	Ant1	68.8	1.62	2.38
NVNT	BLE 1Mbps	2480	Ant1	68.8	1.62	2.38
NVNT	BLE 2Mbps	2402	Ant1	38.41	4.16	4.35
NVNT	BLE 2Mbps	2440	Ant1	39.2	4.07	4.35
NVNT	BLE 2Mbps	2480	Ant1	40	3.98	4.17

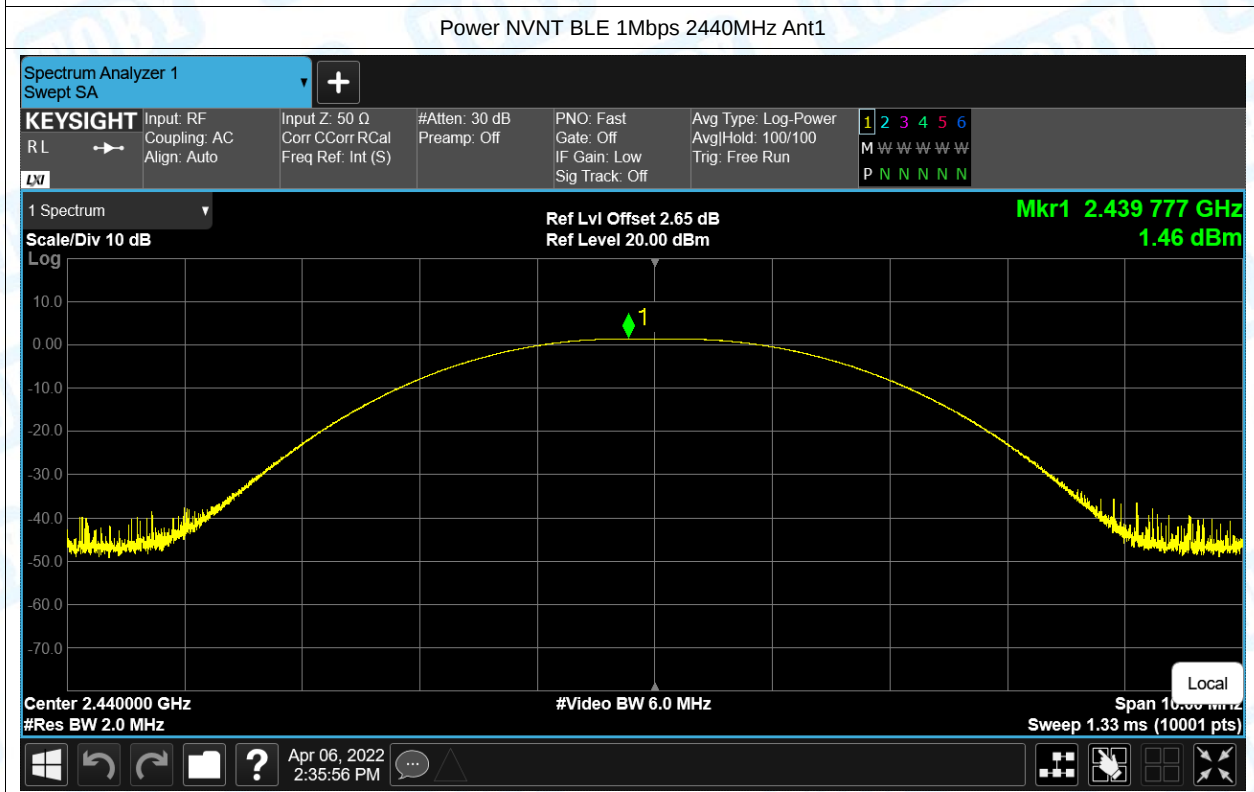
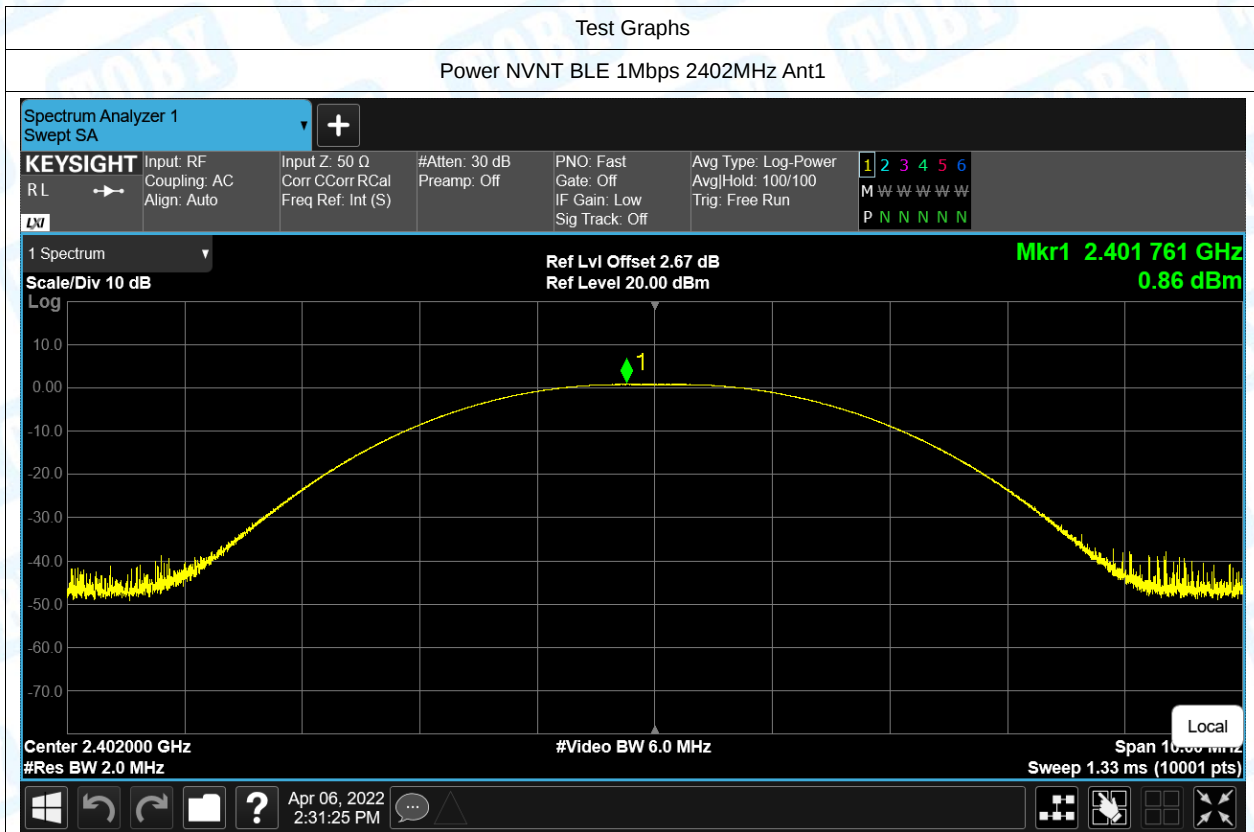


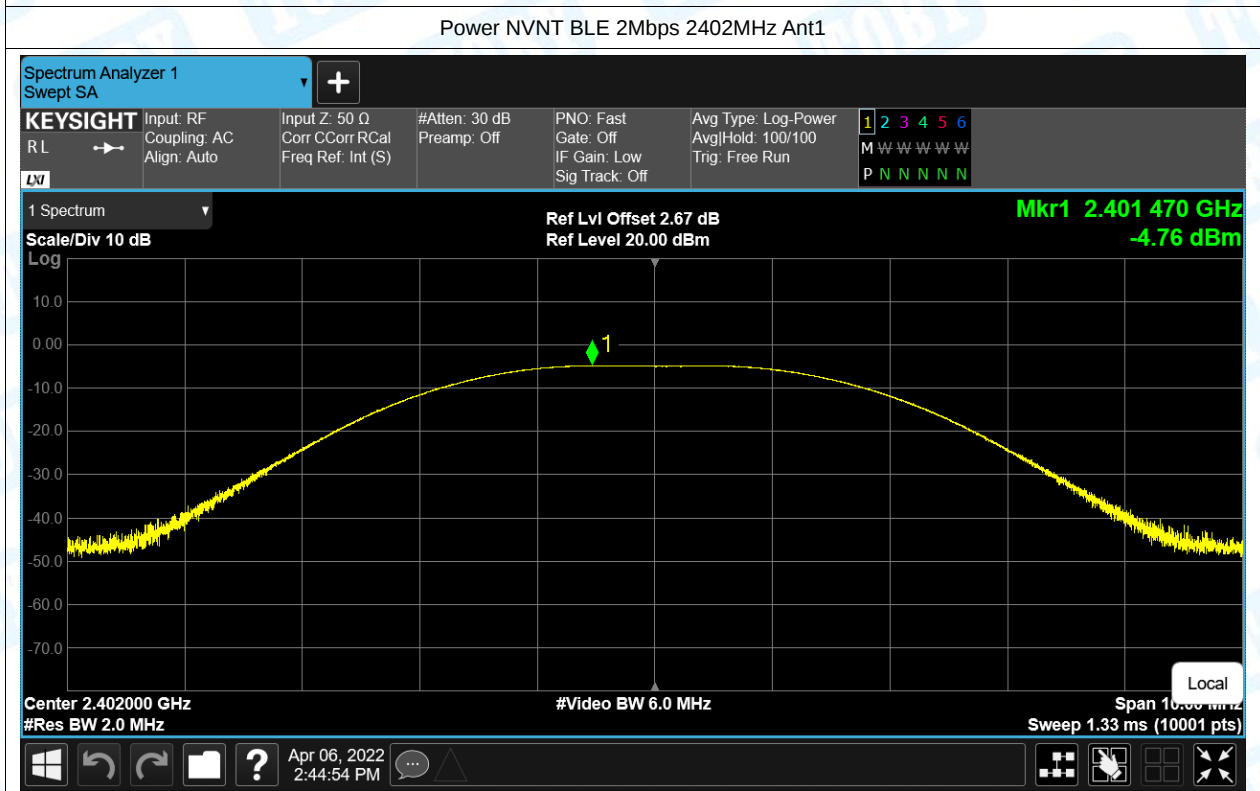
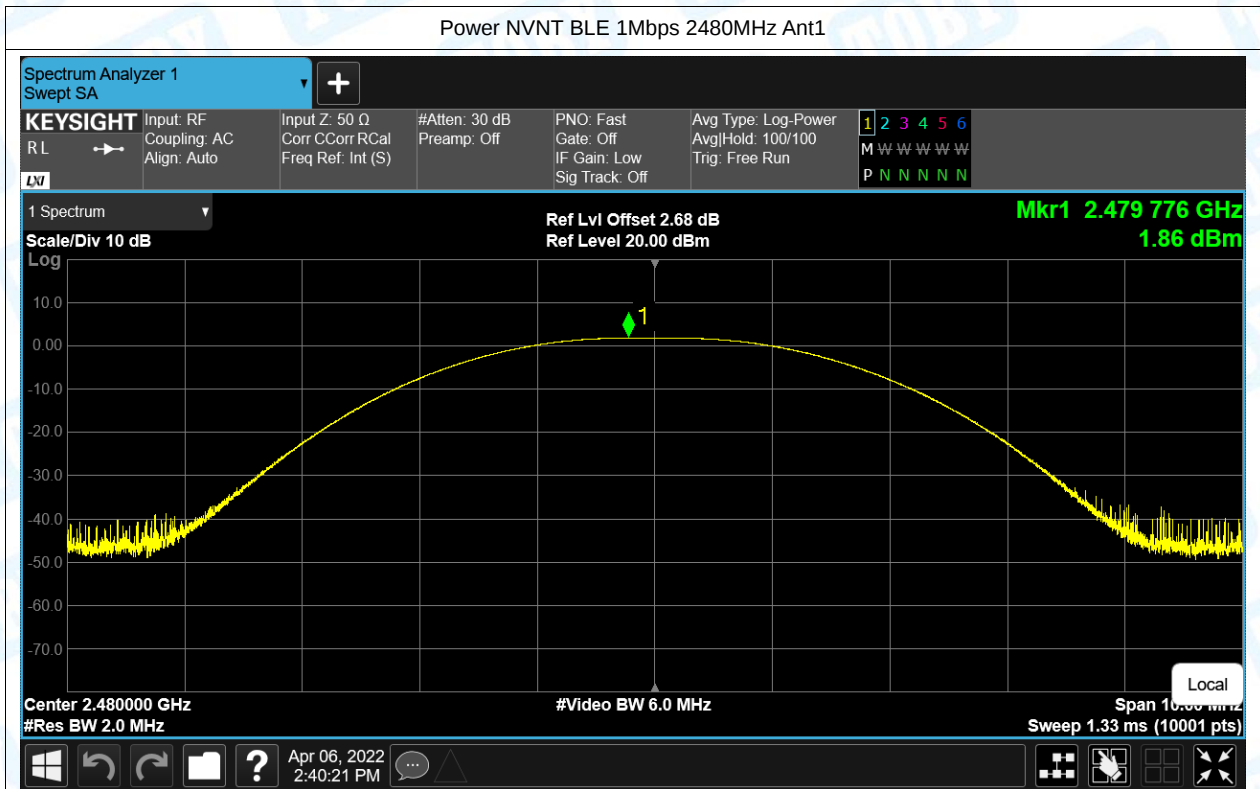




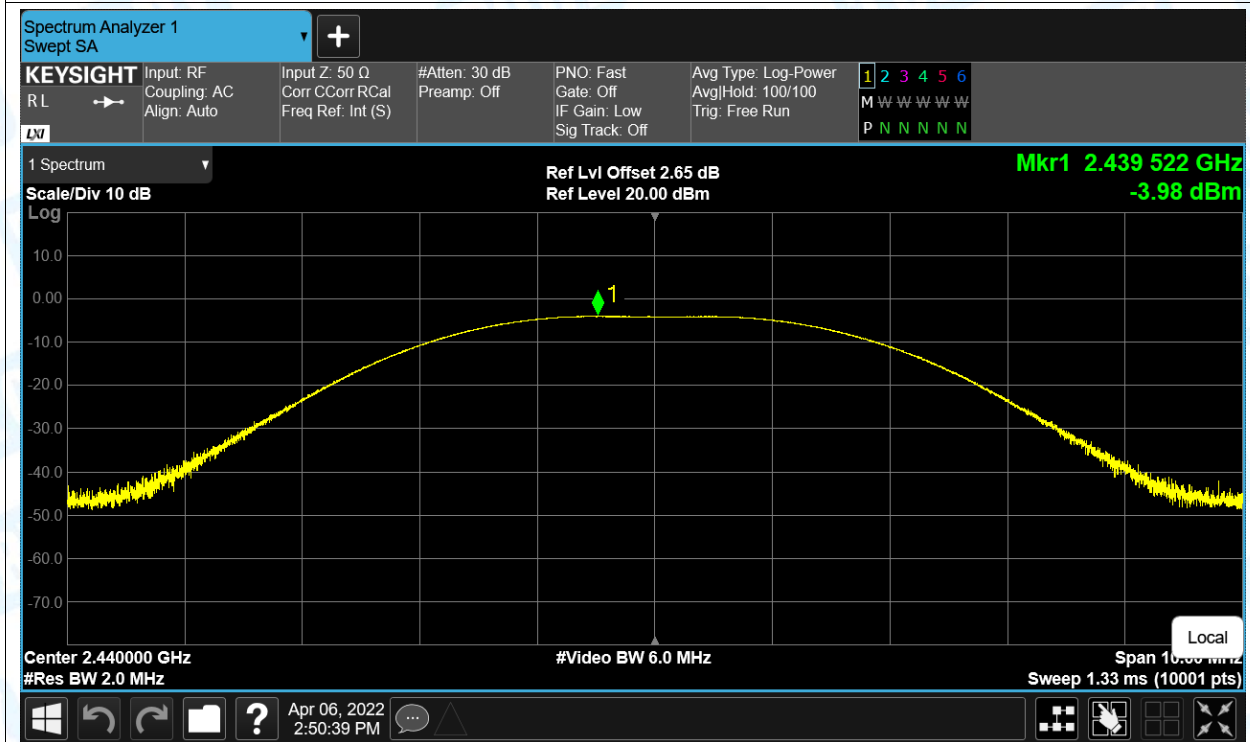
Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	0.859	30	Pass
NVNT	BLE 1Mbps	2440	Ant1	1.457	30	Pass
NVNT	BLE 1Mbps	2480	Ant1	1.856	30	Pass
NVNT	BLE 2Mbps	2402	Ant1	-4.759	30	Pass
NVNT	BLE 2Mbps	2440	Ant1	-3.982	30	Pass
NVNT	BLE 2Mbps	2480	Ant1	-3.449	30	Pass

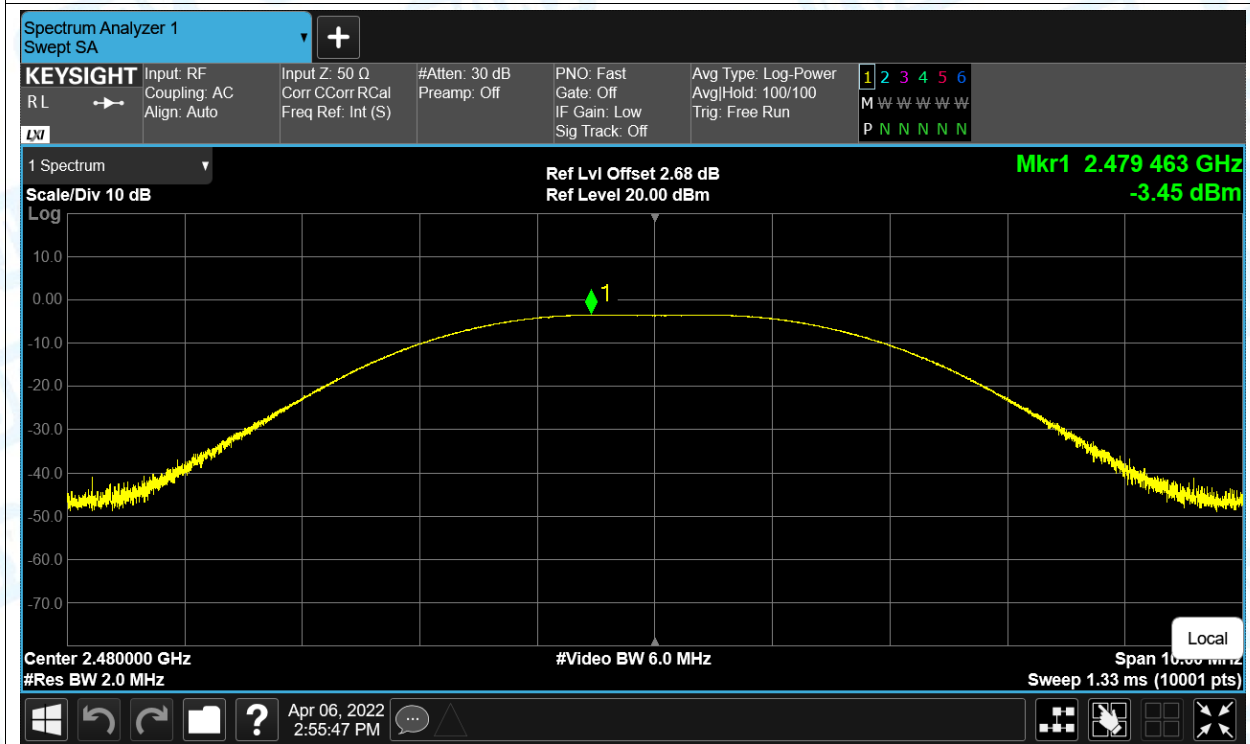




Power NVNT BLE 2Mbps 2440MHz Ant1



Power NVNT BLE 2Mbps 2480MHz Ant1

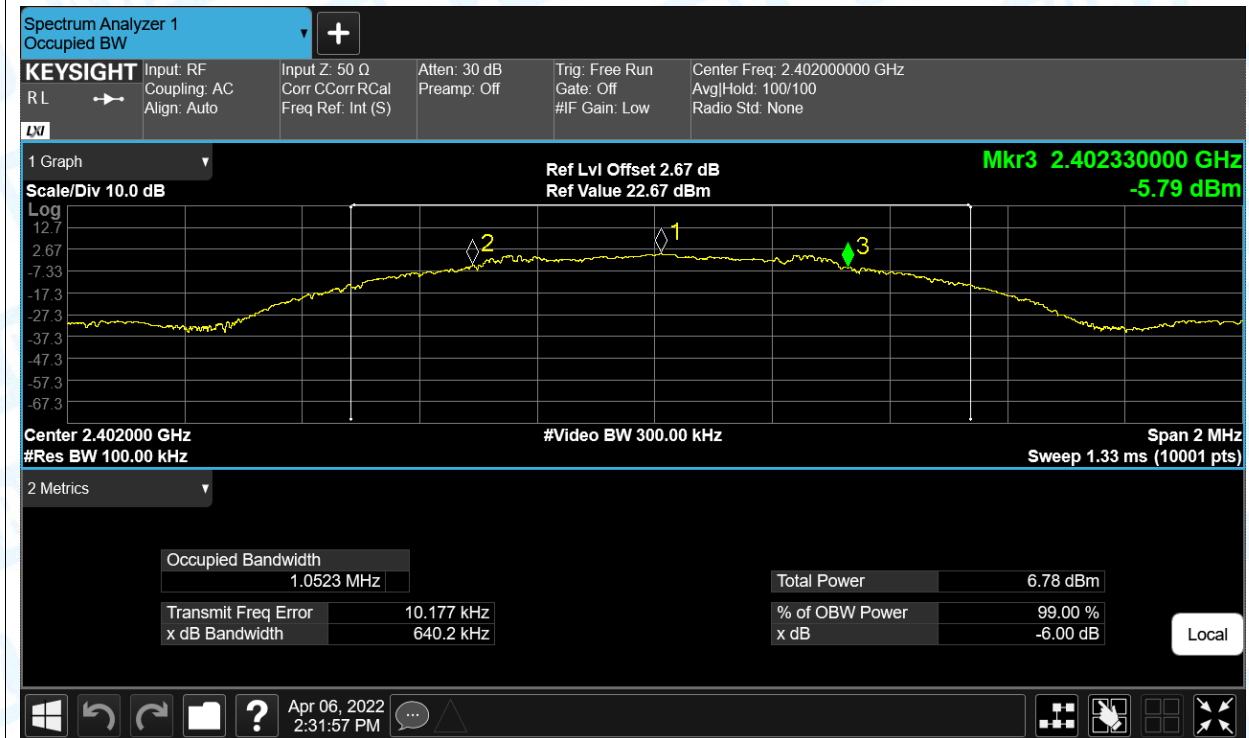


-6dB Bandwidth

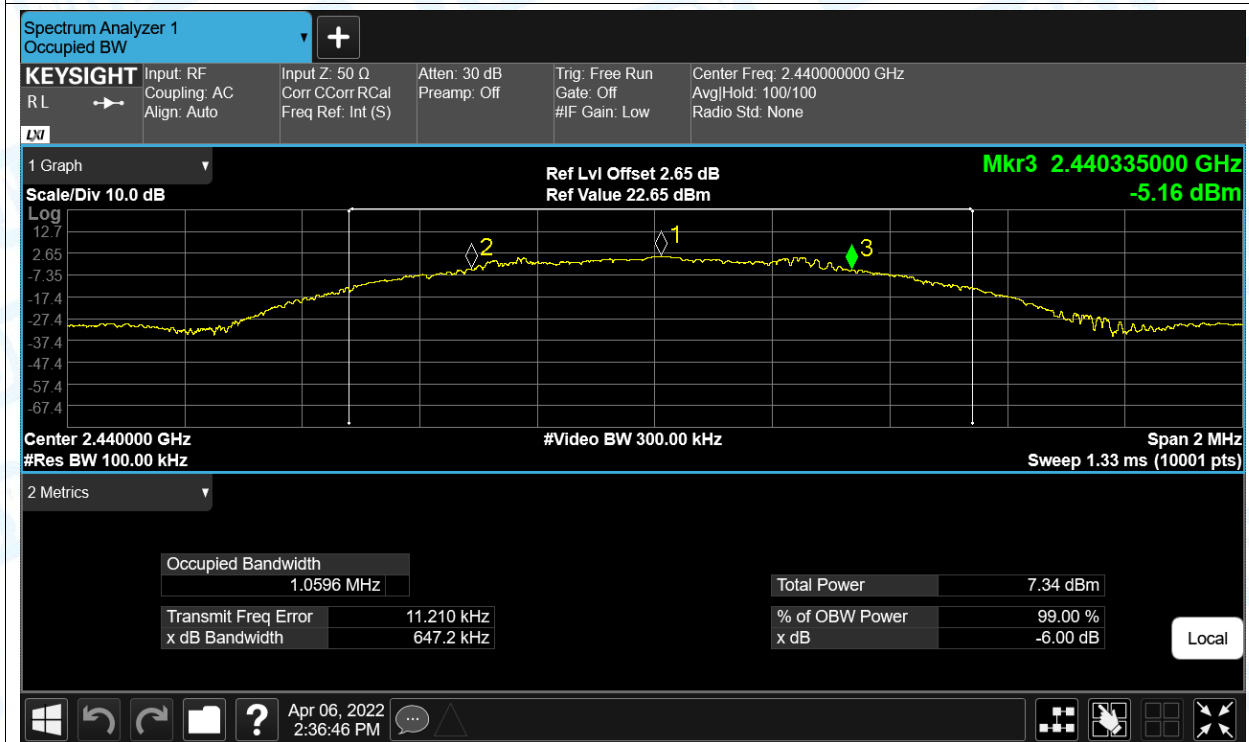
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	0.64	0.5	Pass
NVNT	BLE 1Mbps	2440	Ant1	0.65	0.5	Pass
NVNT	BLE 1Mbps	2480	Ant1	0.66	0.5	Pass
NVNT	BLE 2Mbps	2402	Ant1	0.74	0.5	Pass
NVNT	BLE 2Mbps	2440	Ant1	0.74	0.5	Pass
NVNT	BLE 2Mbps	2480	Ant1	1.13	0.5	Pass

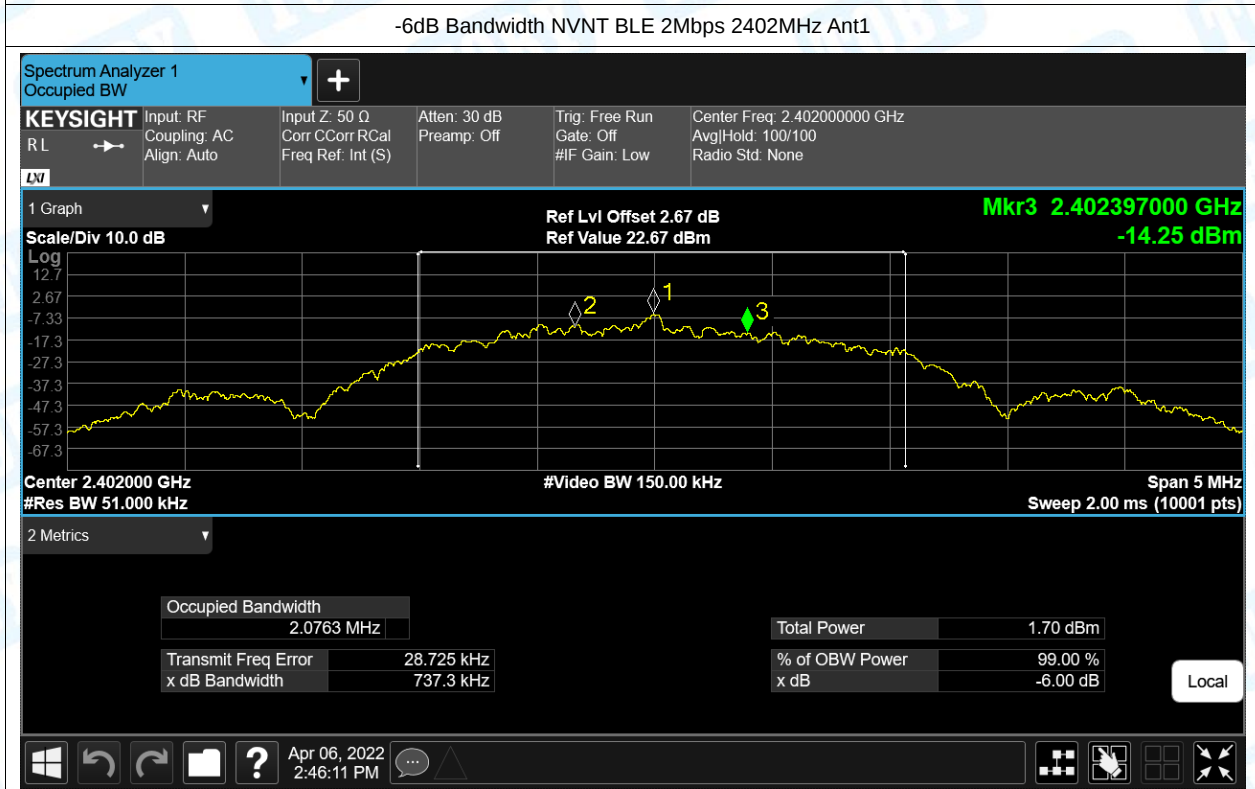
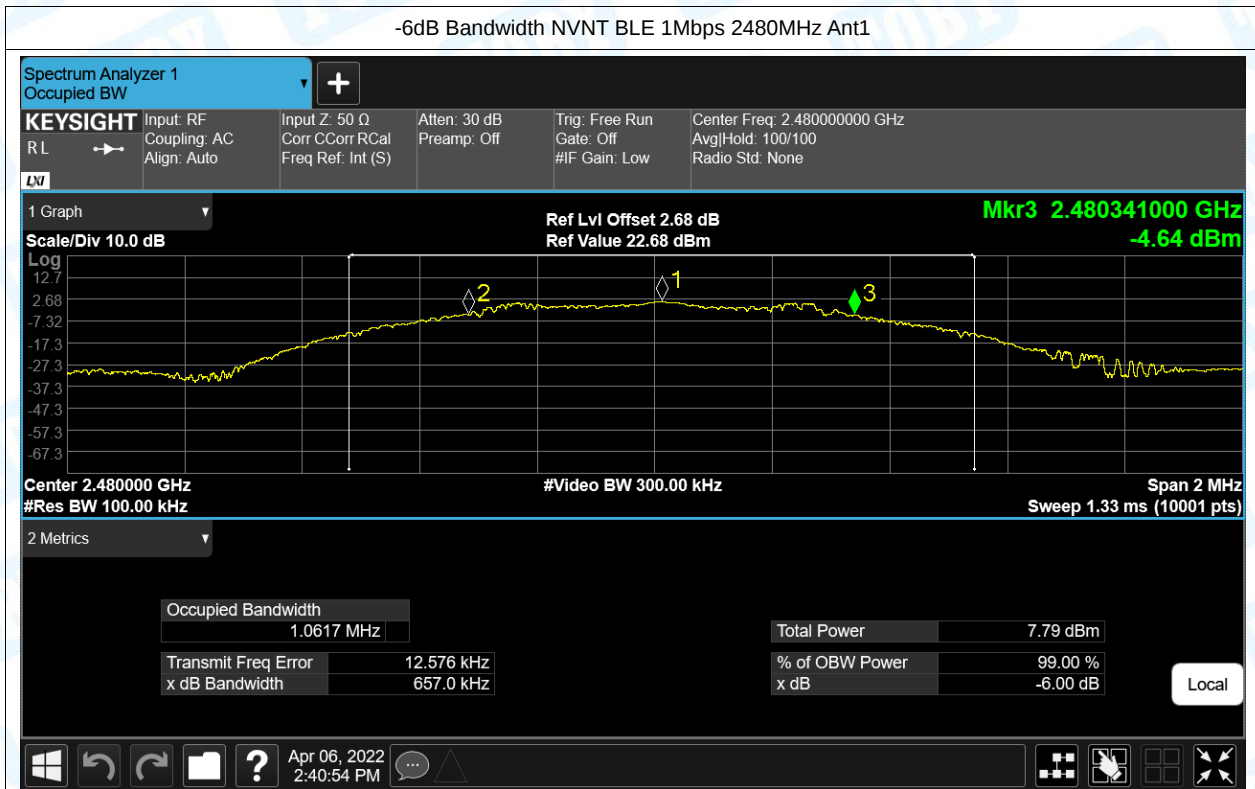
Test Graphs

-6dB Bandwidth NVNT BLE 1Mbps 2402MHz Ant1



-6dB Bandwidth NVNT BLE 1Mbps 2440MHz Ant1

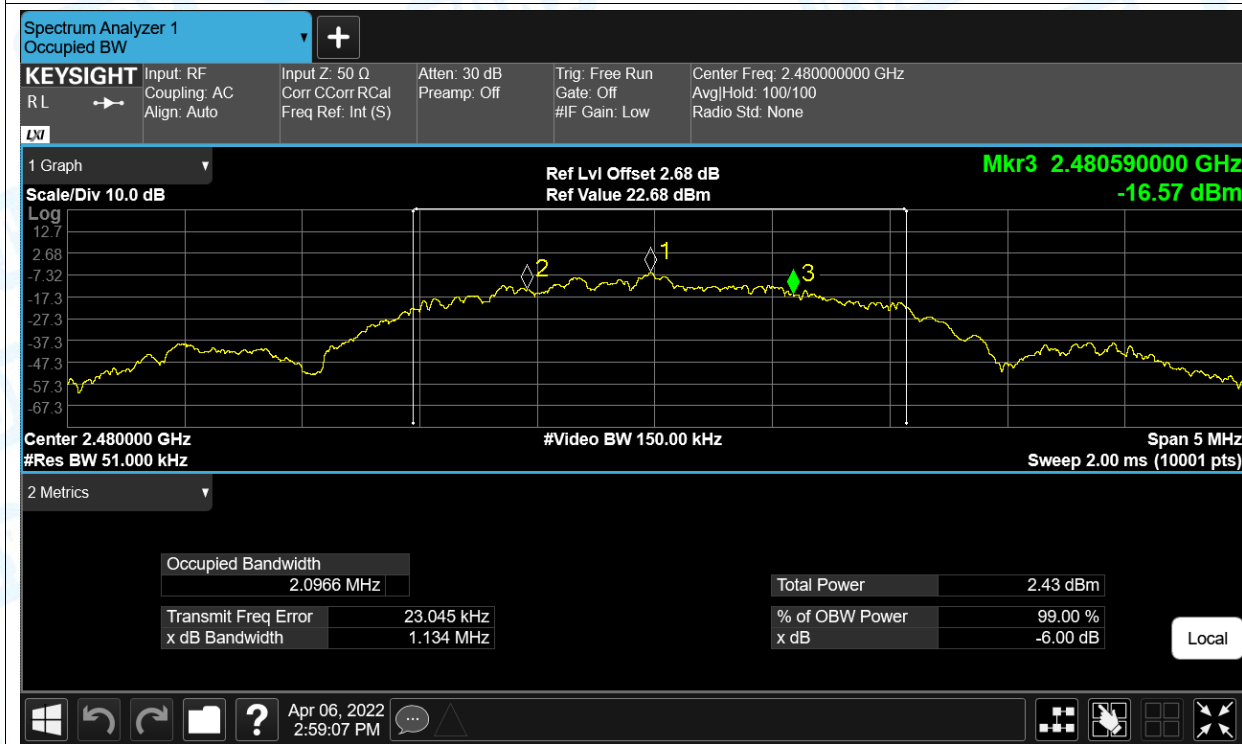




-6dB Bandwidth NVNT BLE 2Mbps 2440MHz Ant1



-6dB Bandwidth NVNT BLE 2Mbps 2480MHz Ant1

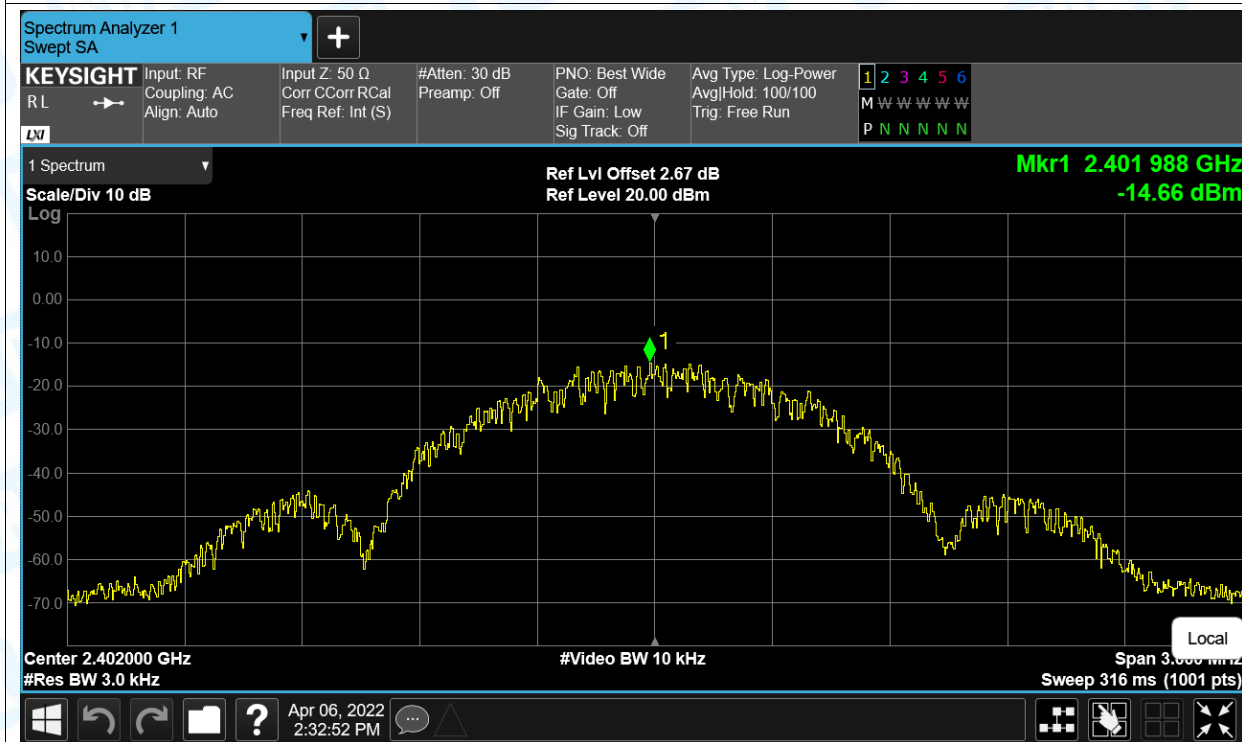


Maximum Power Spectral Density Level

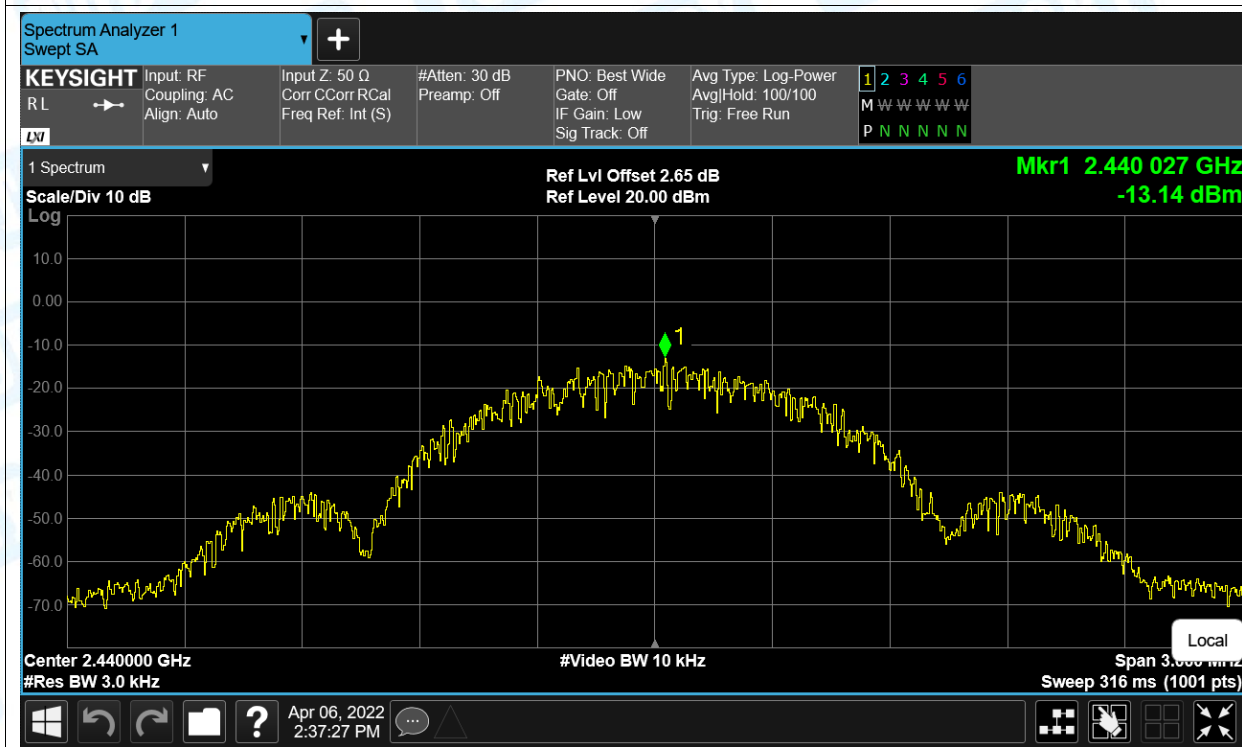
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-14.659	8	Pass
NVNT	BLE 1Mbps	2440	Ant1	-13.138	8	Pass
NVNT	BLE 1Mbps	2480	Ant1	-13.555	8	Pass
NVNT	BLE 2Mbps	2402	Ant1	-21.335	8	Pass
NVNT	BLE 2Mbps	2440	Ant1	-20.506	8	Pass
NVNT	BLE 2Mbps	2480	Ant1	-21.648	8	Pass

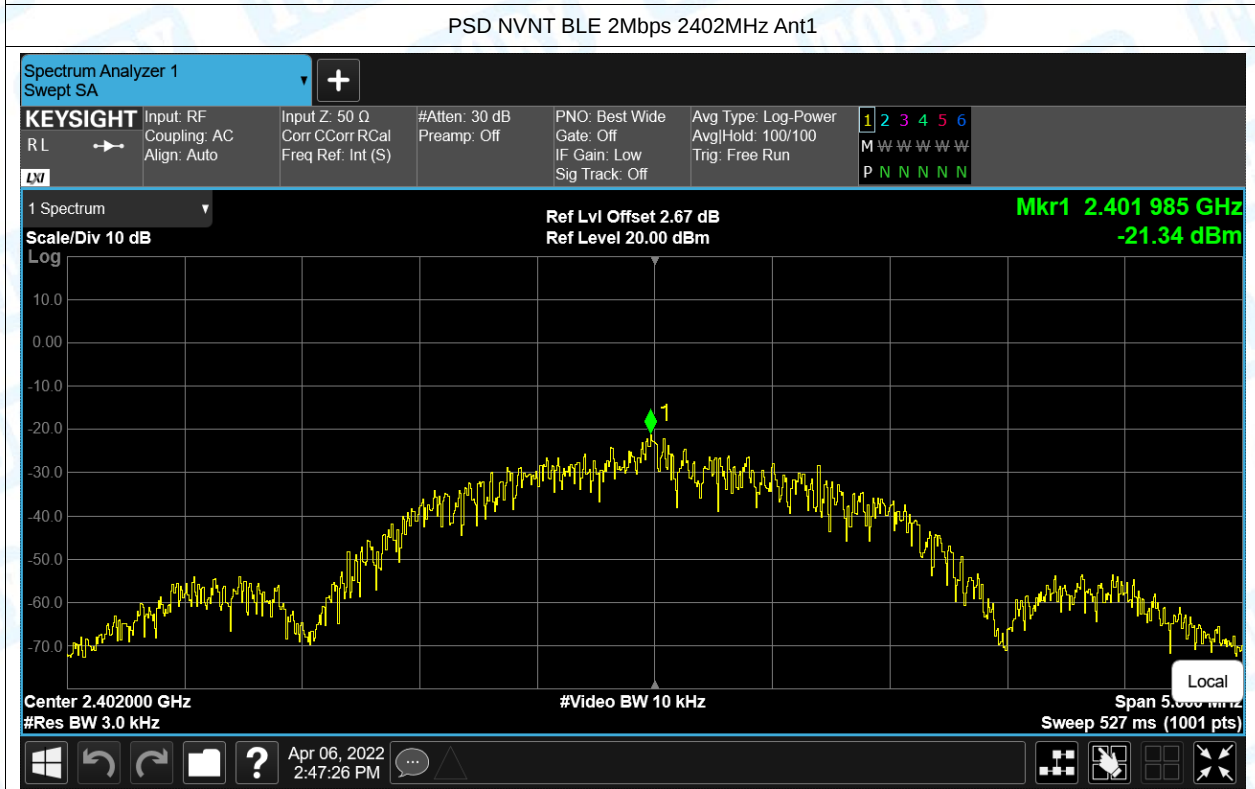
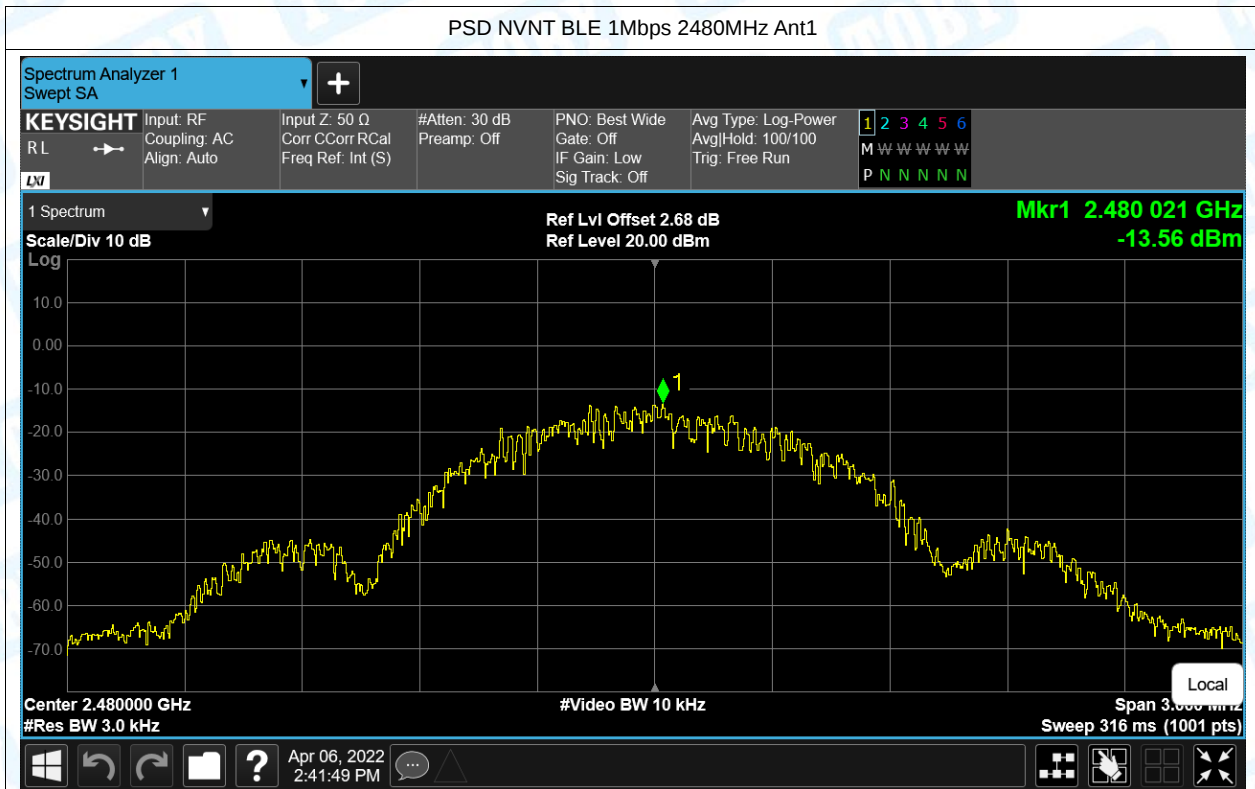
Test Graphs

PSD NVNT BLE 1Mbps 2402MHz Ant1

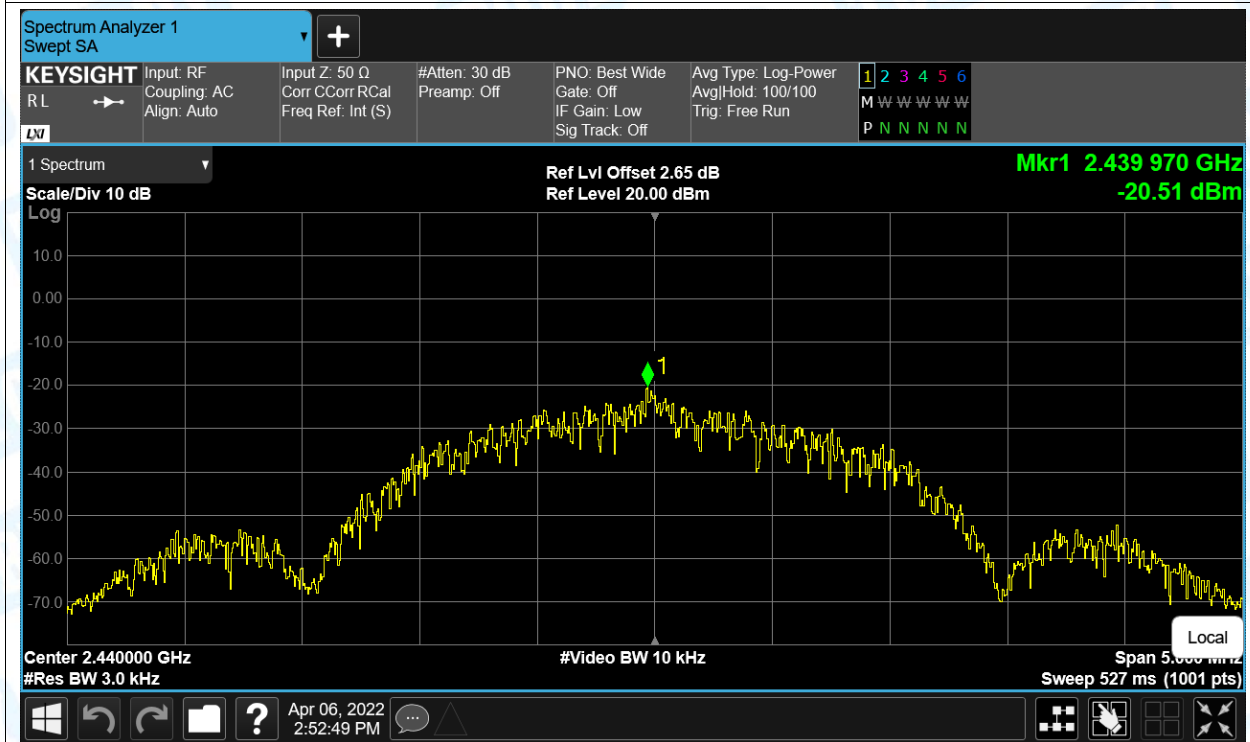


PSD NVNT BLE 1Mbps 2440MHz Ant1

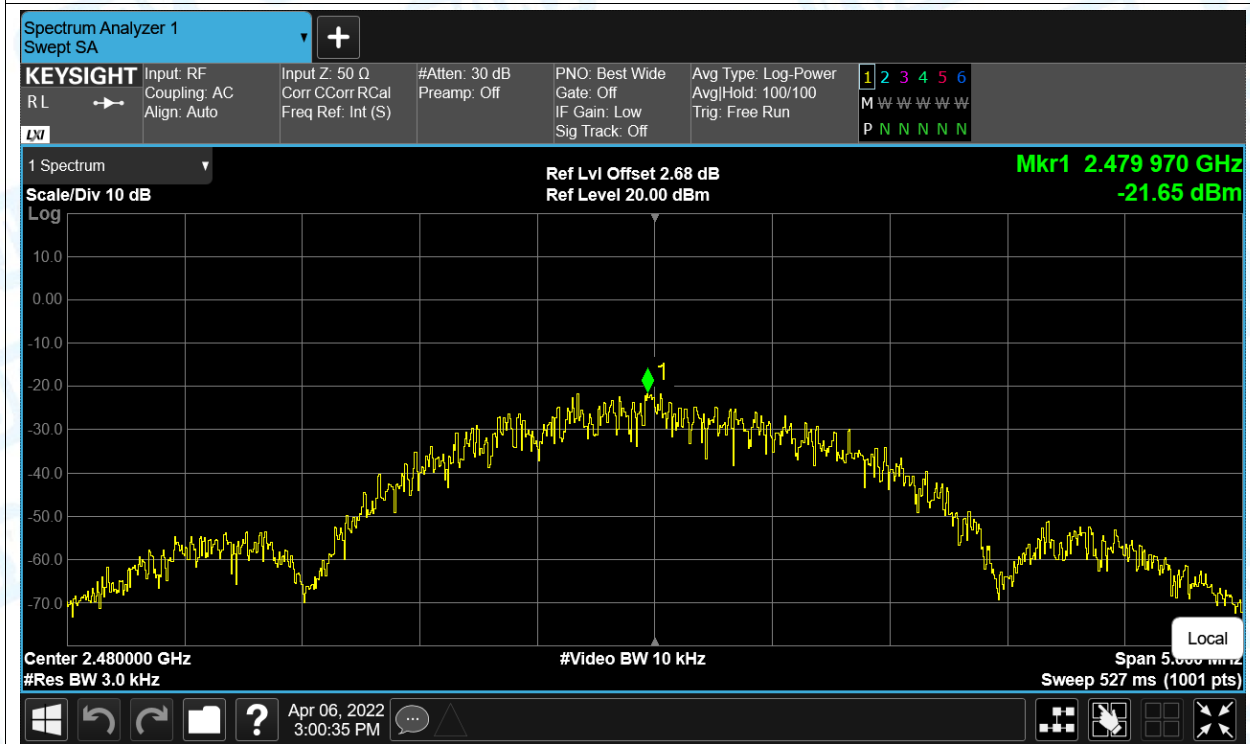




PSD NVNT BLE 2Mbps 2440MHz Ant1

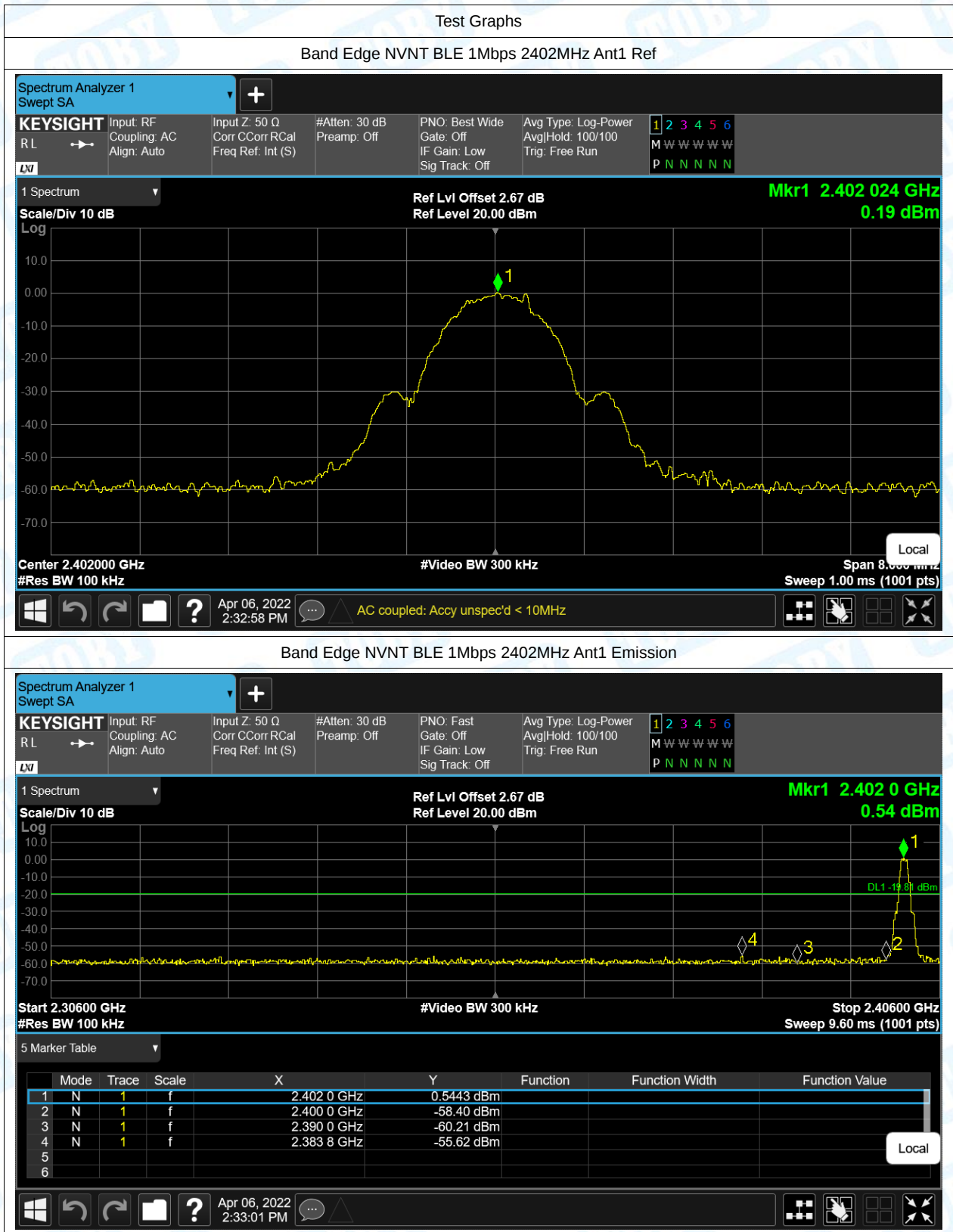


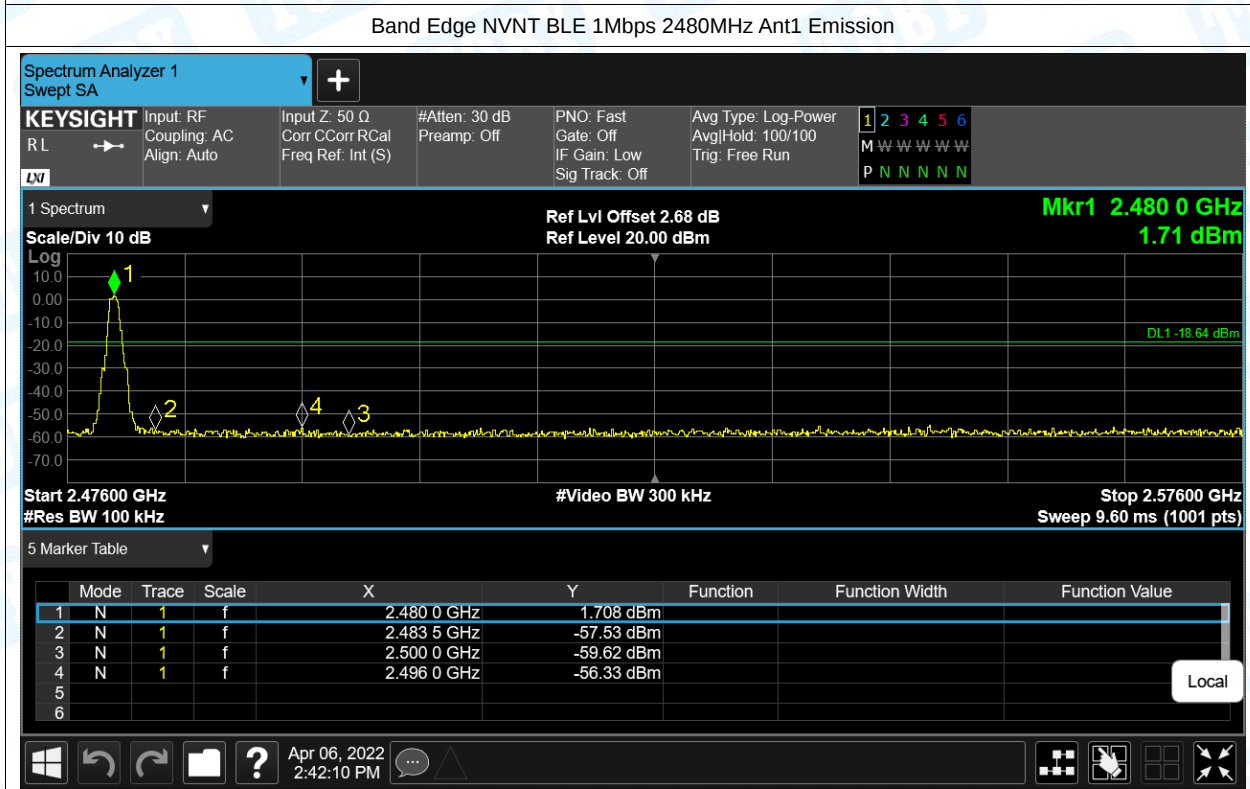
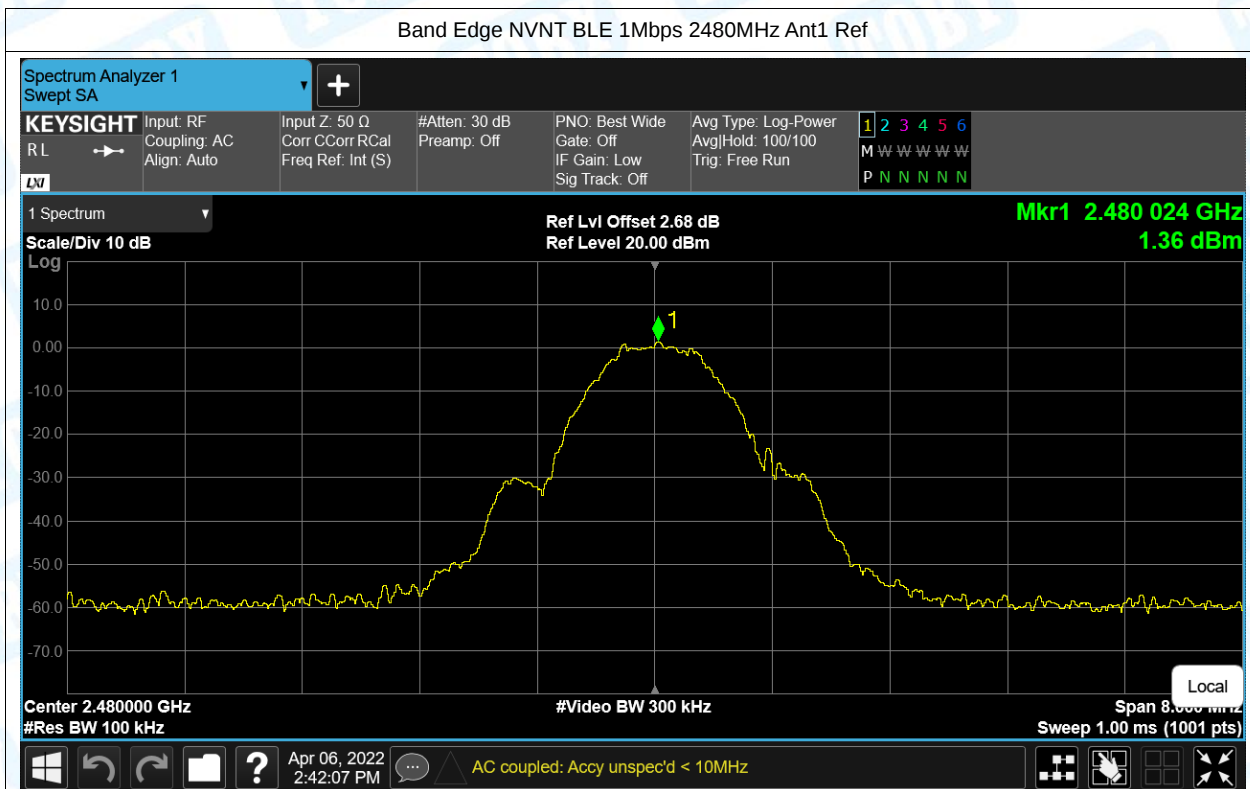
PSD NVNT BLE 2Mbps 2480MHz Ant1

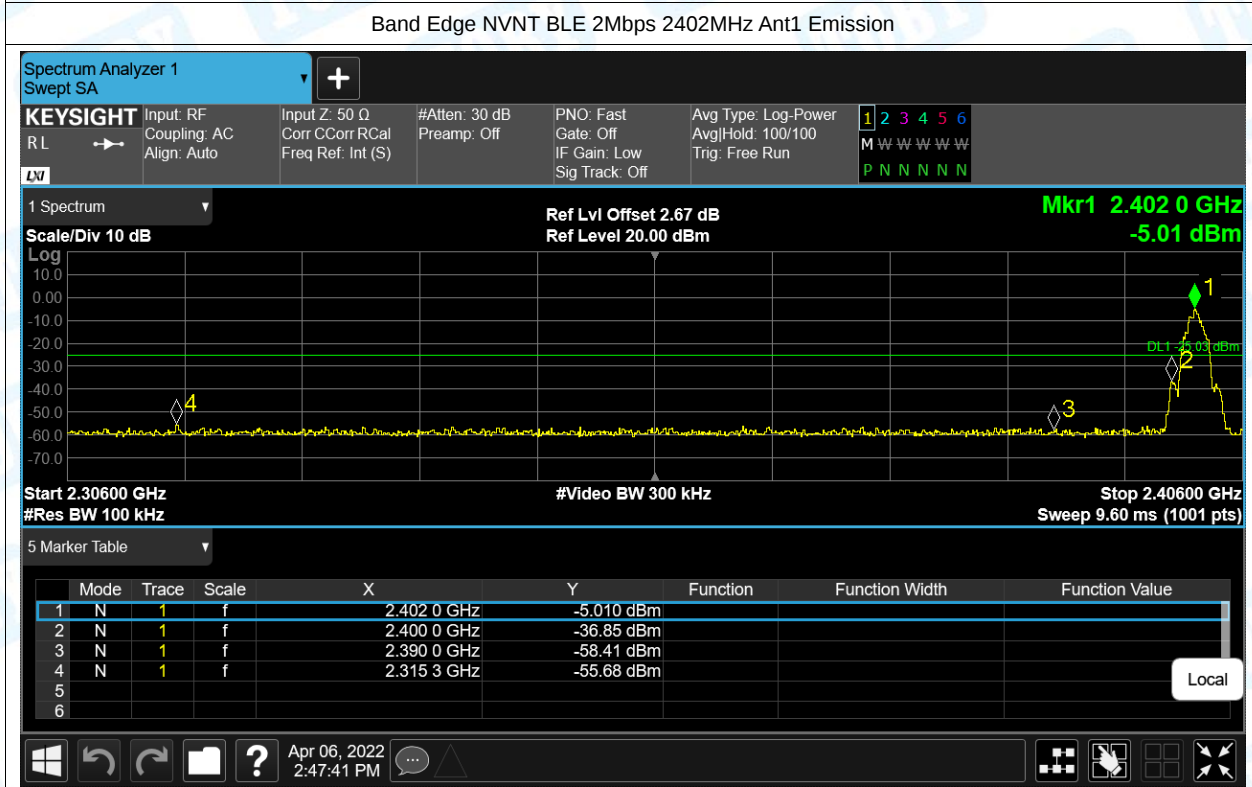
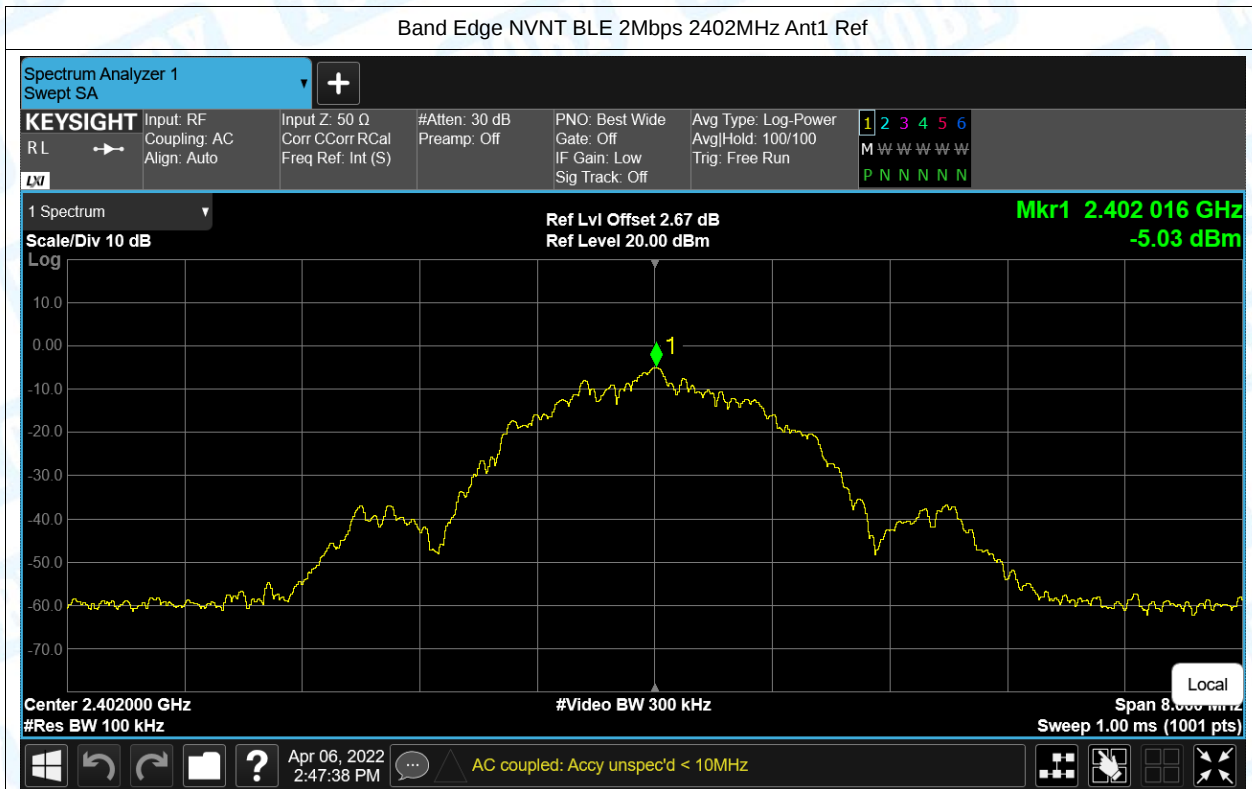


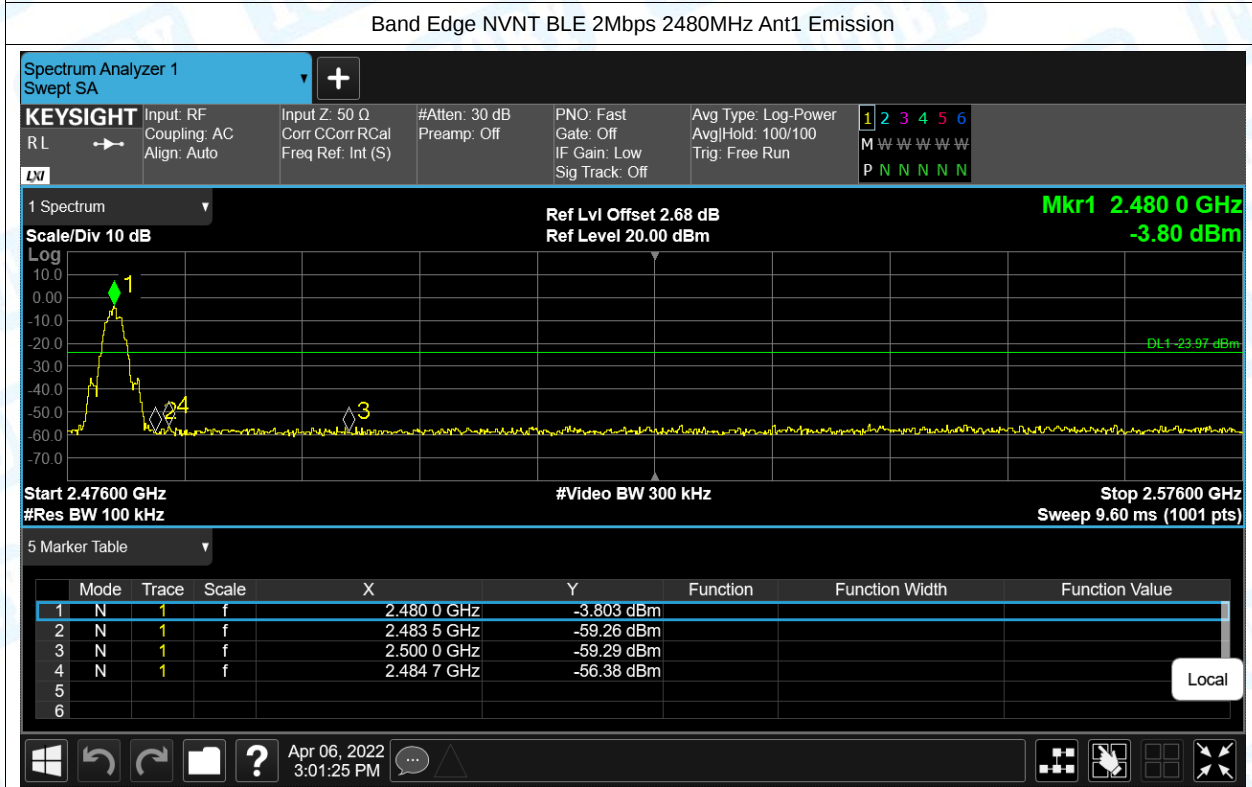
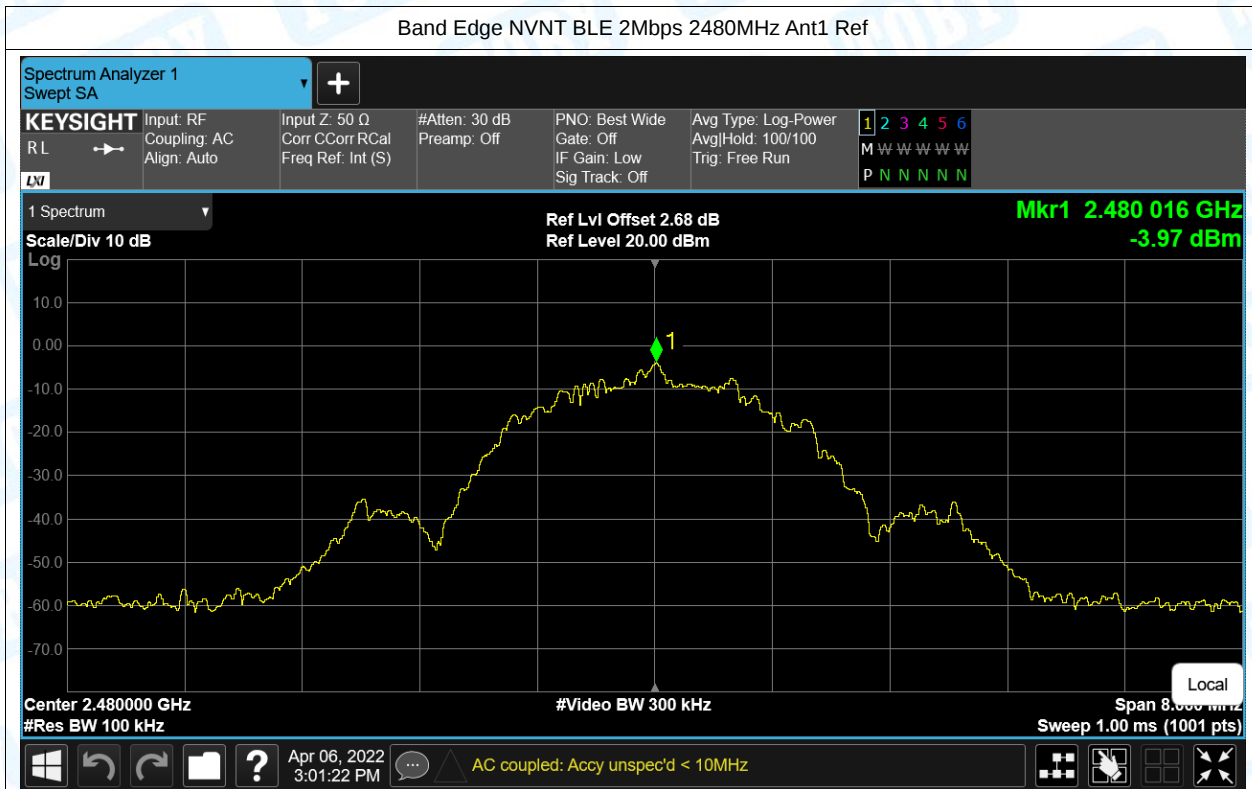
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-55.81	-20	Pass
NVNT	BLE 1Mbps	2480	Ant1	-57.69	-20	Pass
NVNT	BLE 2Mbps	2402	Ant1	-50.65	-20	Pass
NVNT	BLE 2Mbps	2480	Ant1	-52.41	-20	Pass





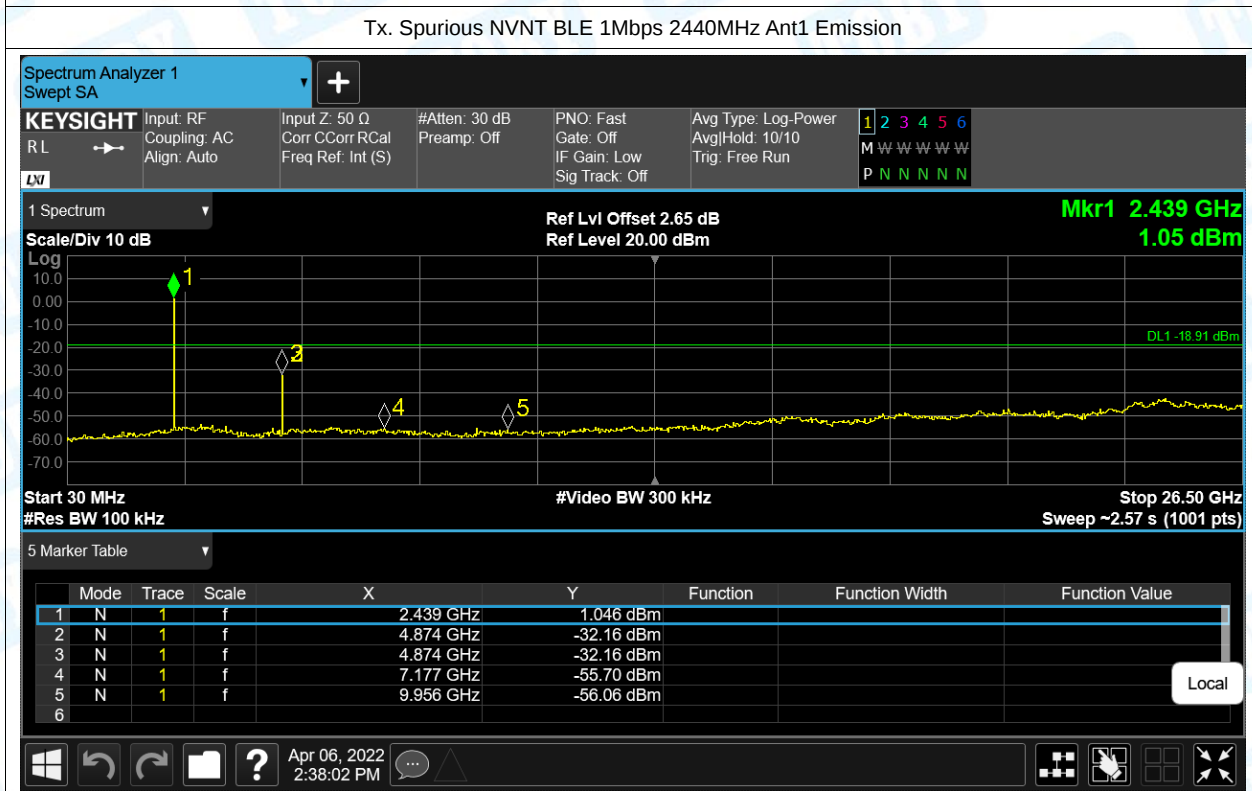
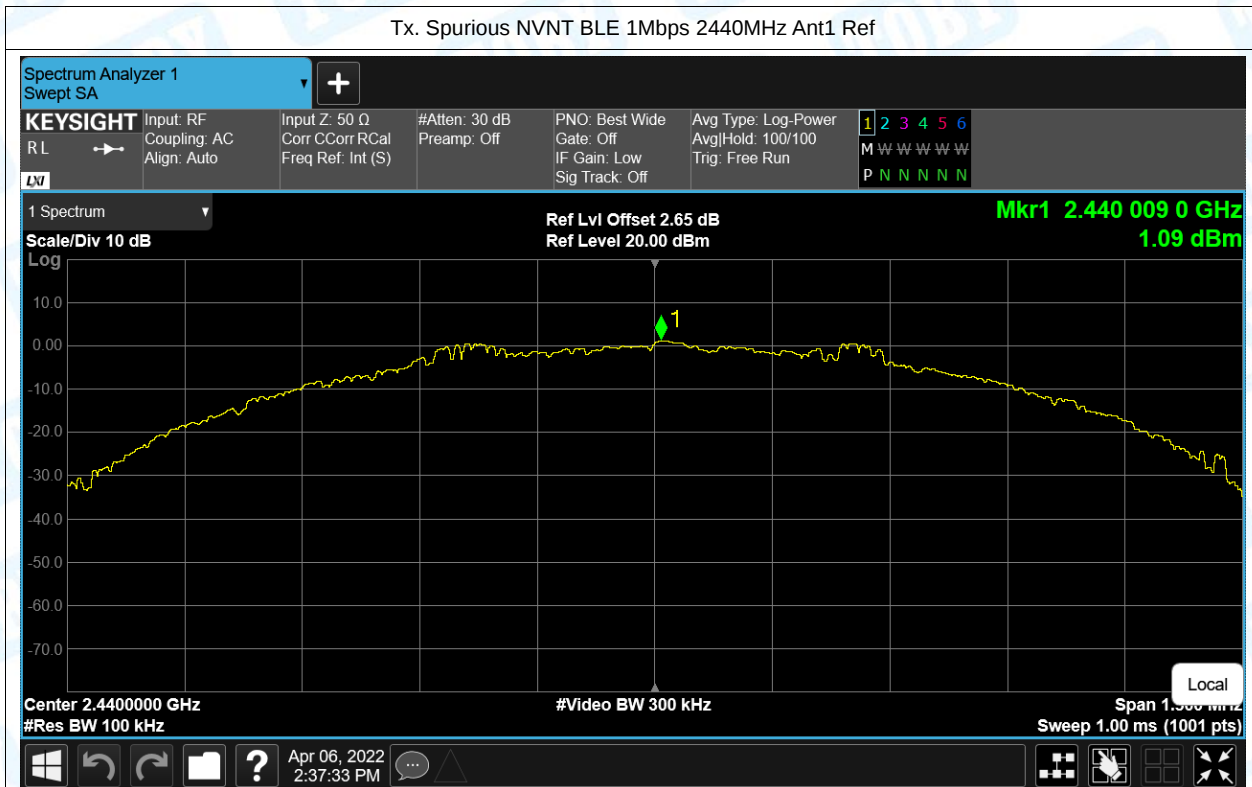


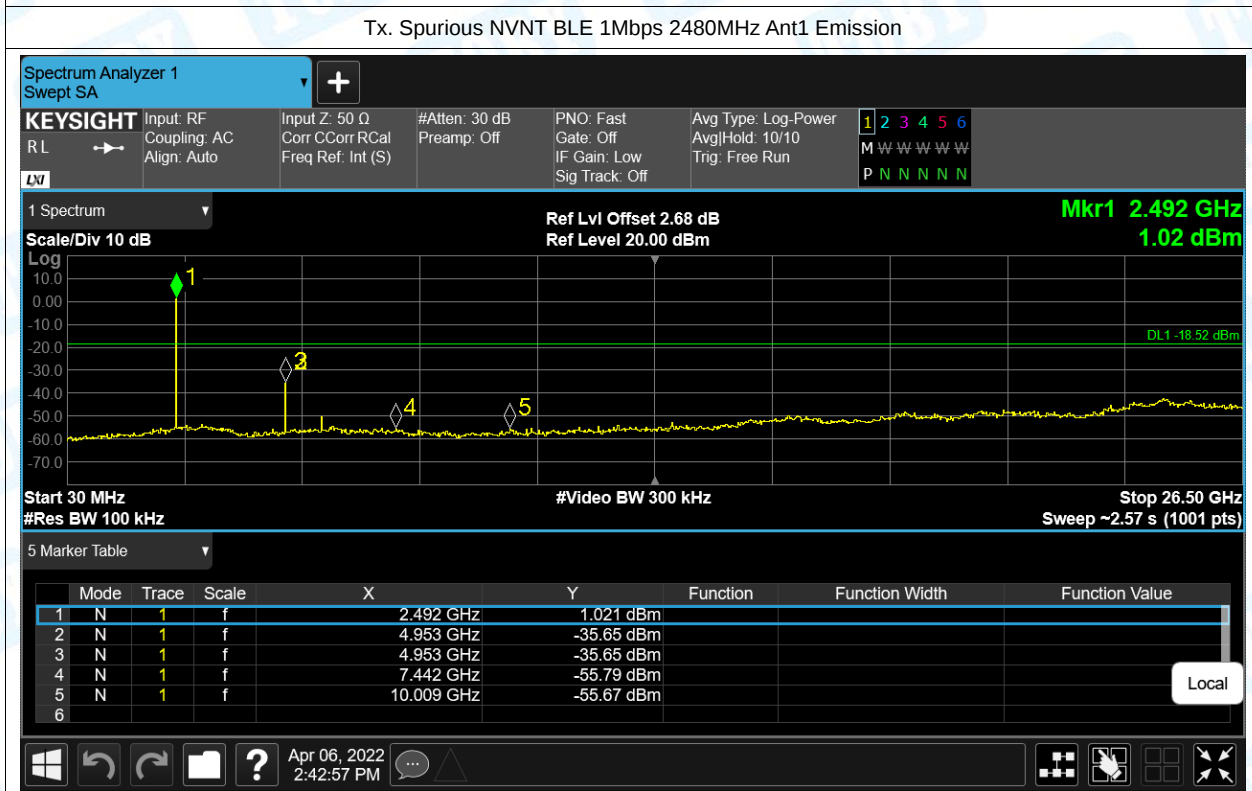
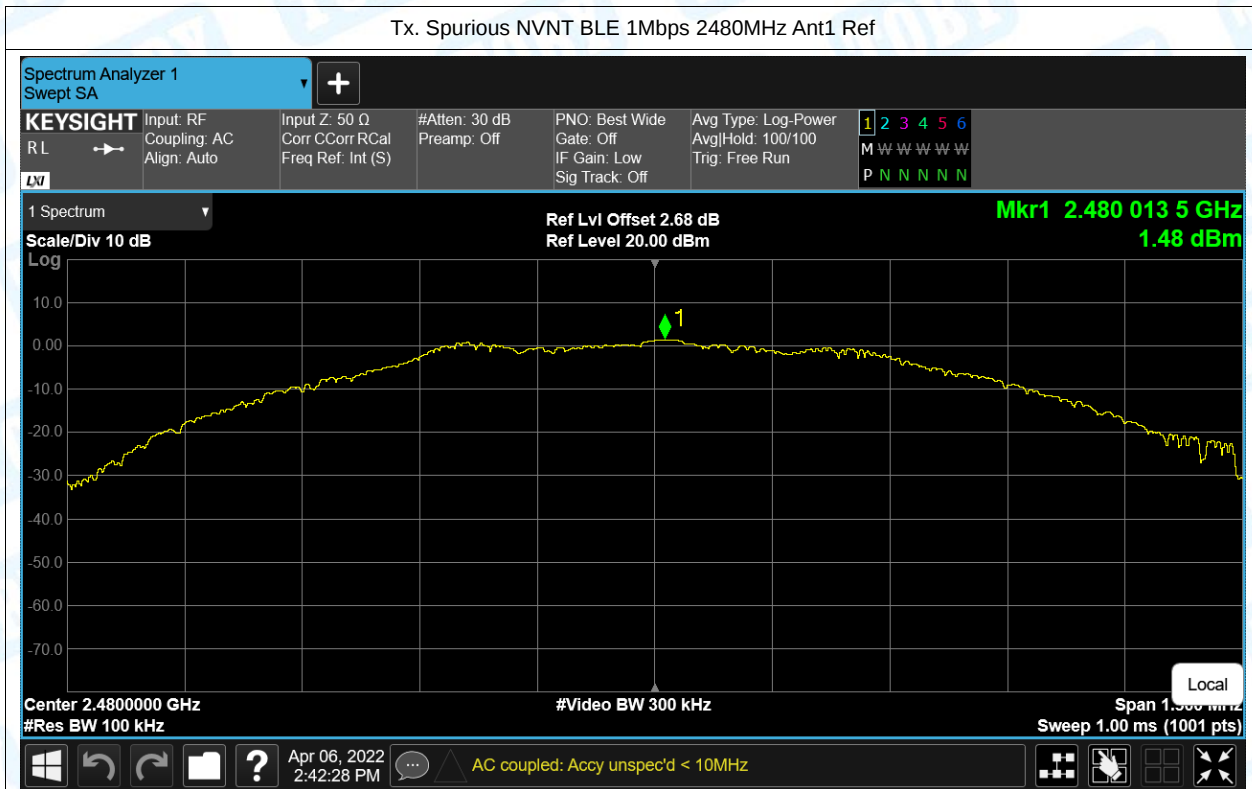


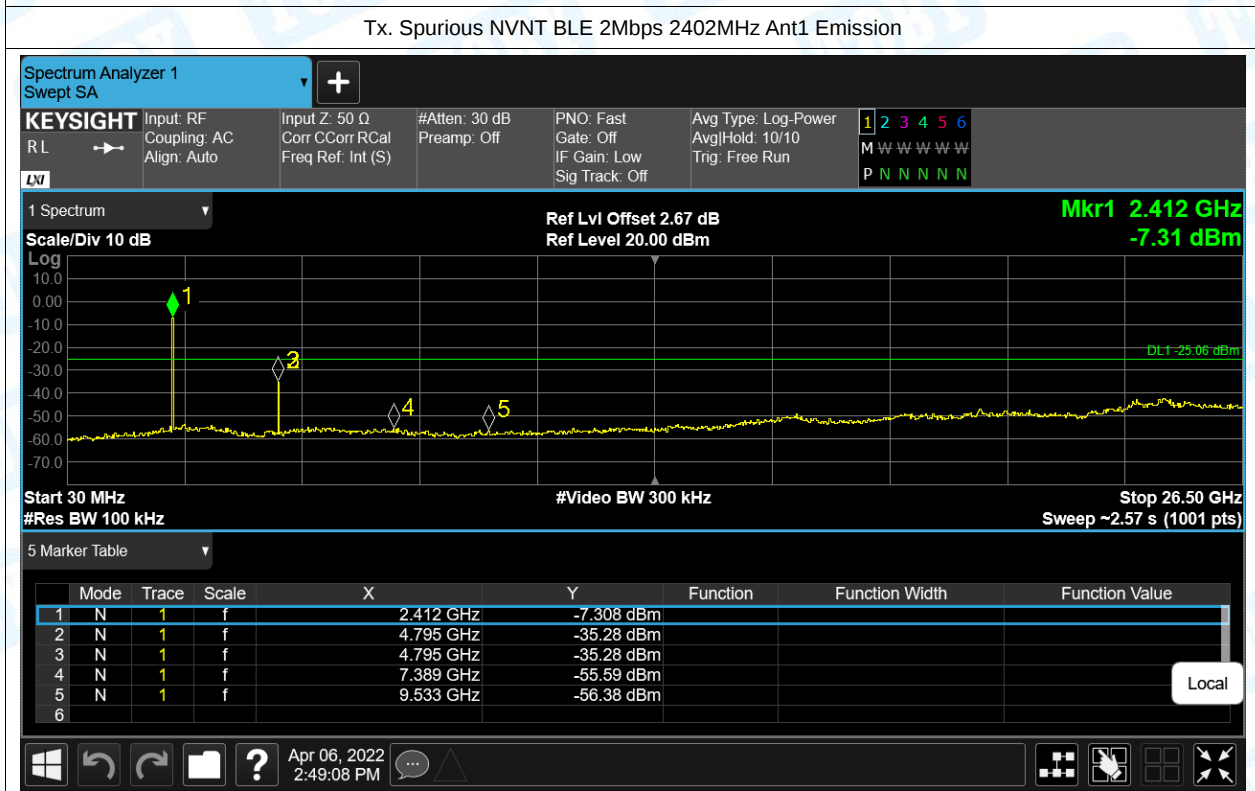
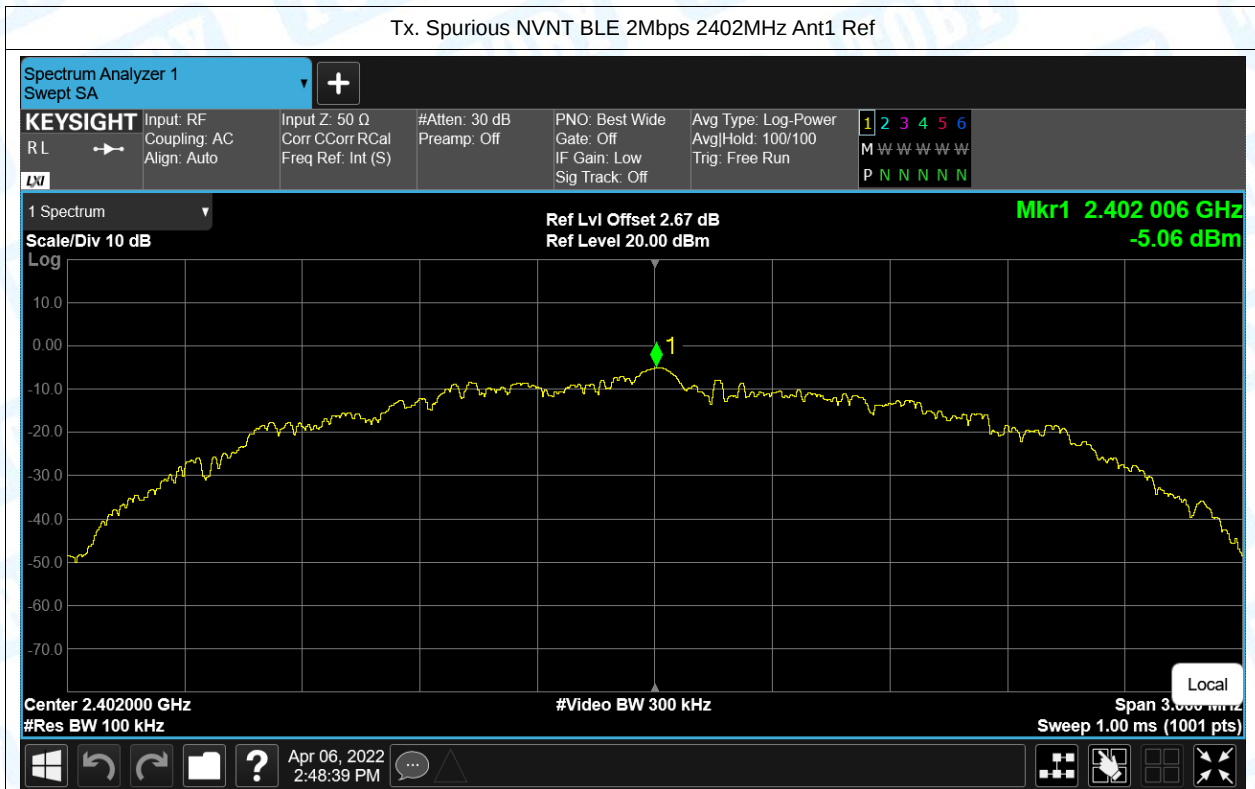
Conducted RF Spurious Emission

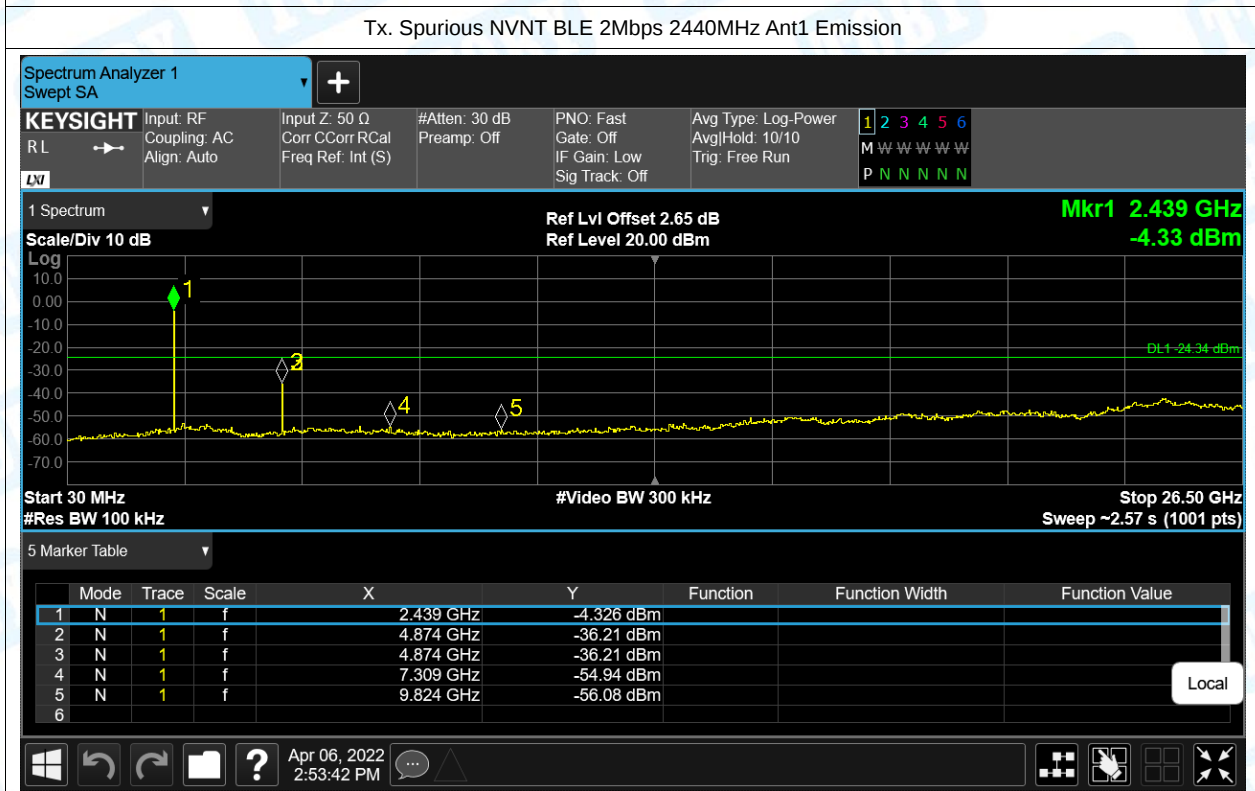
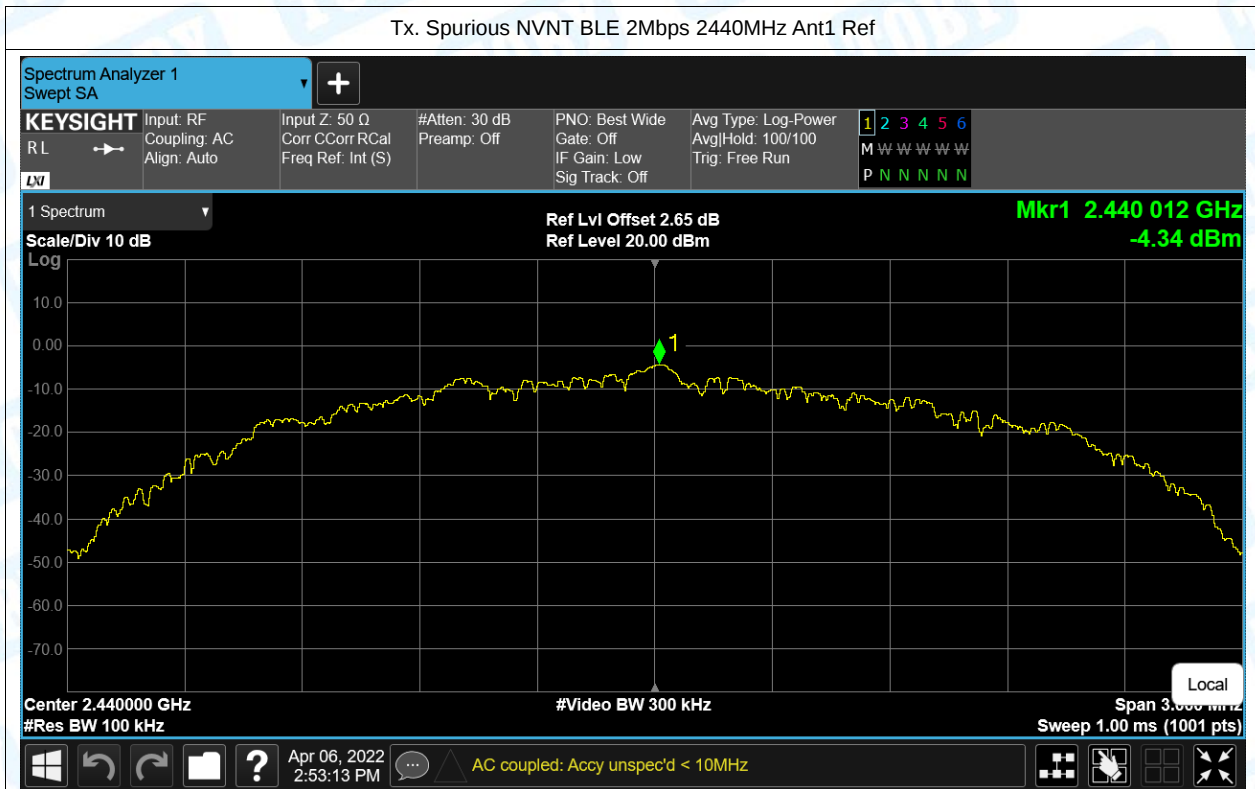
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-30.74	-20	Pass
NVNT	BLE 1Mbps	2440	Ant1	-33.25	-20	Pass
NVNT	BLE 1Mbps	2480	Ant1	-37.13	-20	Pass
NVNT	BLE 2Mbps	2402	Ant1	-30.22	-20	Pass
NVNT	BLE 2Mbps	2440	Ant1	-31.87	-20	Pass
NVNT	BLE 2Mbps	2480	Ant1	-34.06	-20	Pass

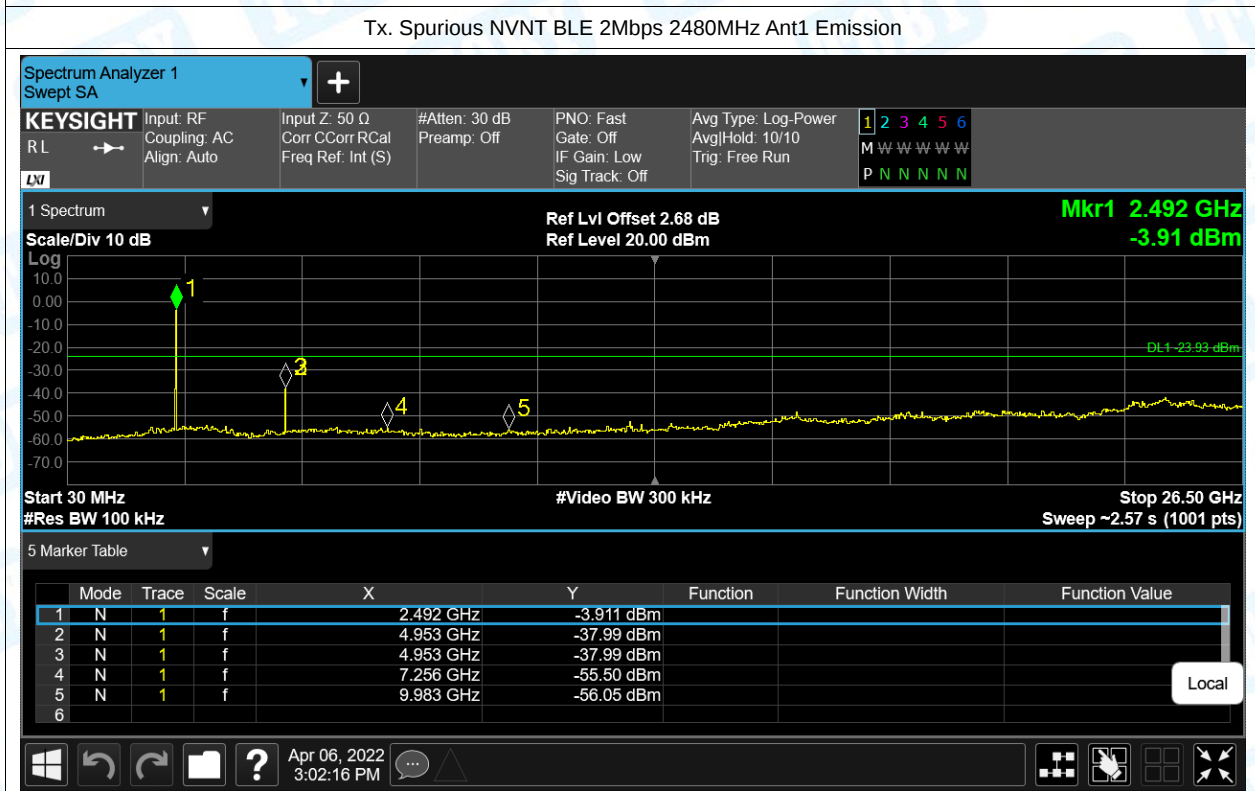
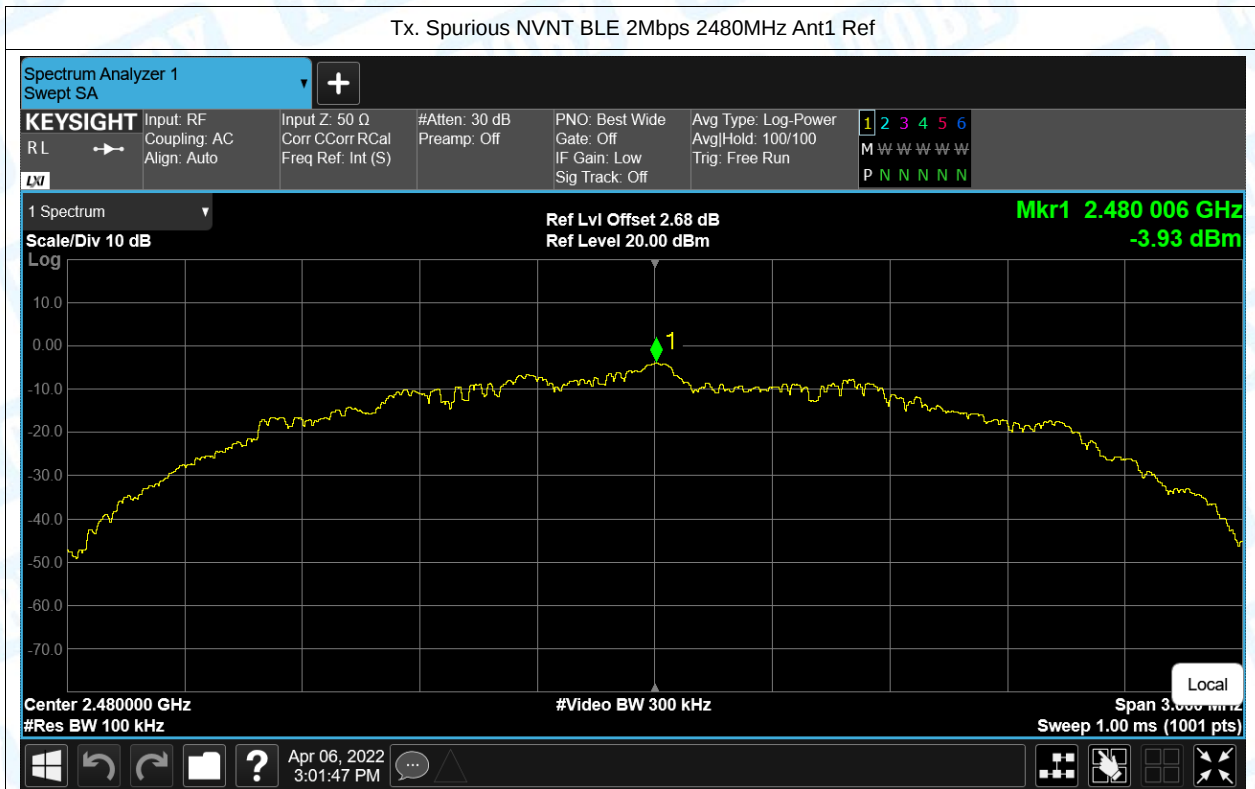












Restrict Band

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	-48.97	2	48.29	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2310	-57.77	2	39.49	Average	54	Pass
NVNT	BLE 1Mbps	2402	Ant1	2328.048	-46.09	2	51.17	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2389.104	-57.38	2	39.88	Average	54	Pass
NVNT	BLE 1Mbps	2402	Ant1	2390	-48.37	2	48.89	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2390	-57.47	2	39.79	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.5	-44.42	2	52.84	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.5	-57.54	2	39.72	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2484.376	-42.67	2	54.59	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.872	-57.15	2	40.11	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2500	-48.91	2	48.35	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2500	-57.56	2	39.7	Average	54	Pass
NVNT	BLE 2Mbps	2402	Ant1	2310	-48.69	2	48.57	Peak	74	Pass
NVNT	BLE 2Mbps	2402	Ant1	2310	-57.74	2	39.52	Average	54	Pass
NVNT	BLE 2Mbps	2402	Ant1	2373.168	-45.72	2	51.54	Peak	74	Pass
NVNT	BLE 2Mbps	2402	Ant1	2335.824	-56.92	2	40.34	Average	54	Pass
NVNT	BLE 2Mbps	2402	Ant1	2390	-49.41	2	47.85	Peak	74	Pass
NVNT	BLE 2Mbps	2402	Ant1	2390	-57.12	2	40.14	Average	54	Pass
NVNT	BLE 2Mbps	2480	Ant1	2483.5	-47.34	2	49.92	Peak	74	Pass
NVNT	BLE 2Mbps	2480	Ant1	2483.5	-56.46	2	40.8	Average	54	Pass
NVNT	BLE 2Mbps	2480	Ant1	2484.208	-44.89	2	52.37	Peak	74	Pass
NVNT	BLE 2Mbps	2480	Ant1	2483.512	-56.46	2	40.8	Average	54	Pass

NVNT	BLE 2Mbps	2480	Ant1	2500	-48.89	2	48.37	Peak	74	Pass
NVNT	BLE 2Mbps	2480	Ant1	2500	-57.49	2	39.77	Average	54	Pass

