

RF Test Data for Bluetooth LE (Conducted Measurements)

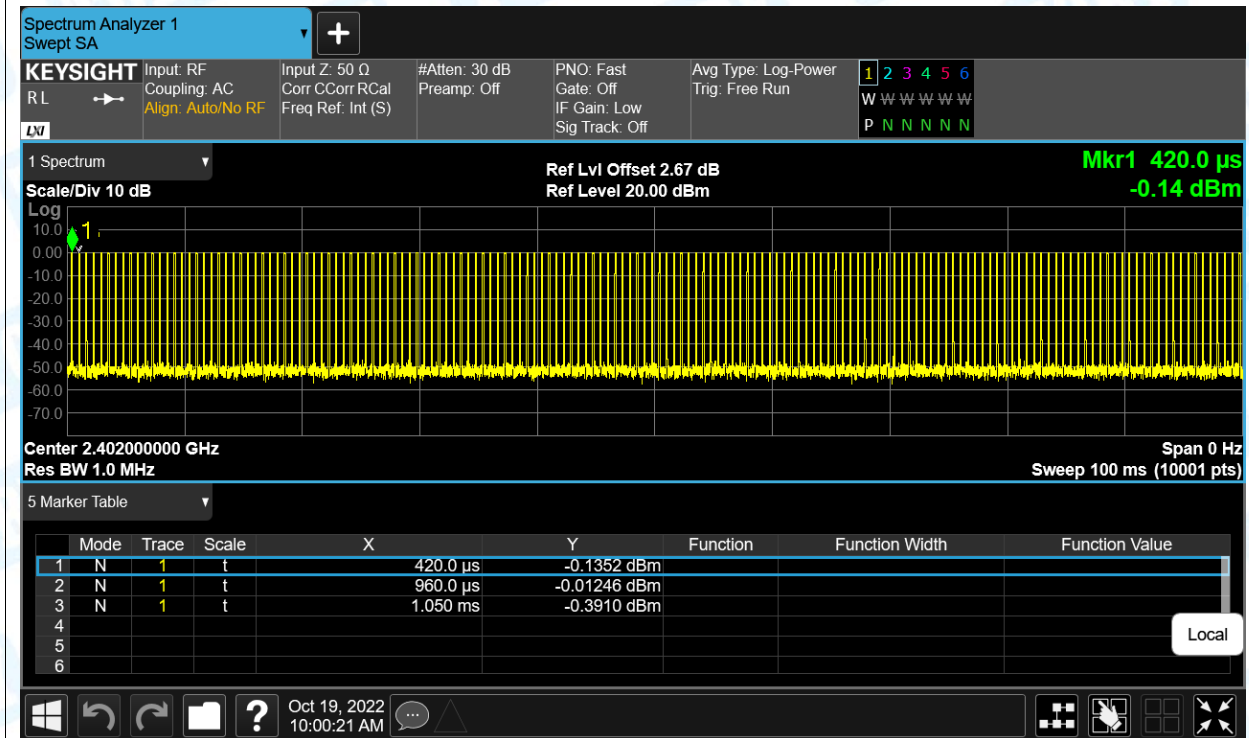
General Description of EUT	
Product Name:	RUN2
Test Model:	RUN2
Sample ID:	202210-0063-3-2#
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 3.7V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202210-0063-3.	

Duty Cycle

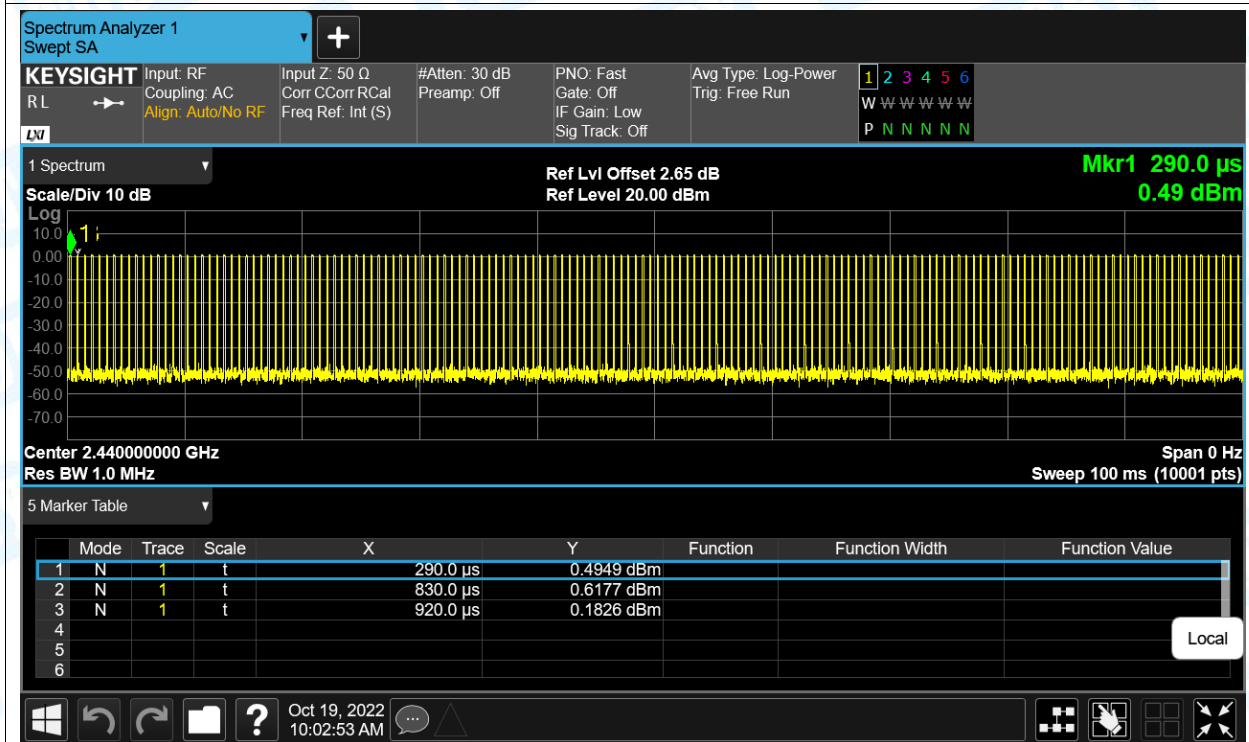
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1Mbps	2402	Ant1	14.29	8.45	11.11
NVNT	BLE 1Mbps	2440	Ant1	14.29	8.45	11.11
NVNT	BLE 1Mbps	2480	Ant1	12.9	8.89	12.5
NVNT	BLE 2Mbps	2402	Ant1	9.52	10.21	16.67
NVNT	BLE 2Mbps	2440	Ant1	9.52	10.21	16.67
NVNT	BLE 2Mbps	2480	Ant1	9.52	10.21	16.67

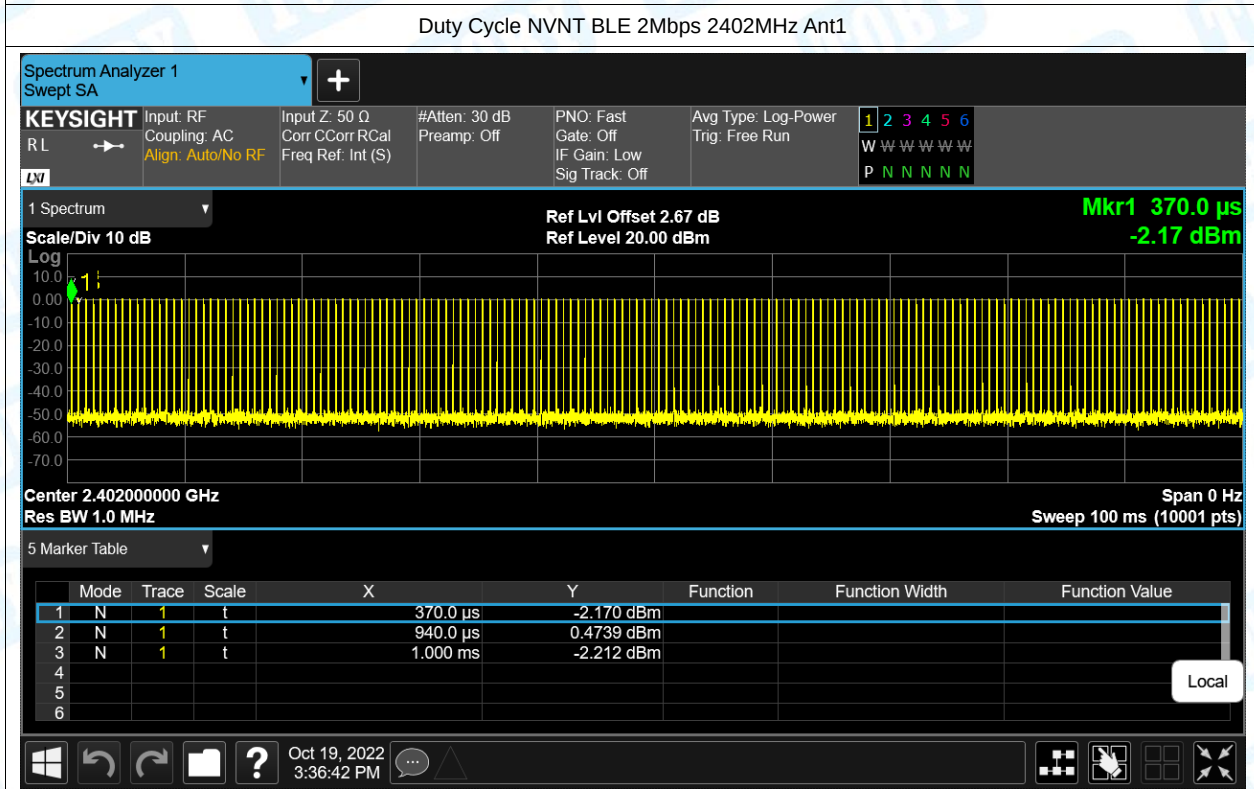
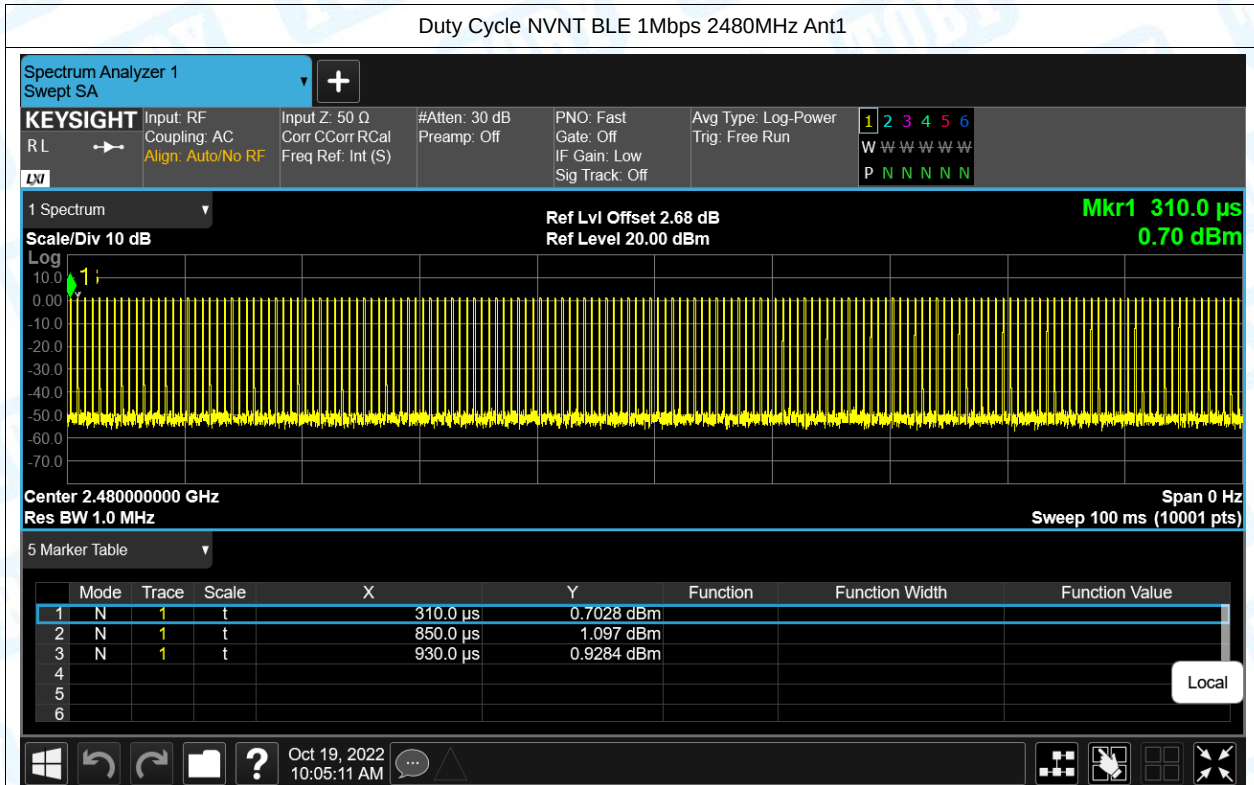
Test Graphs

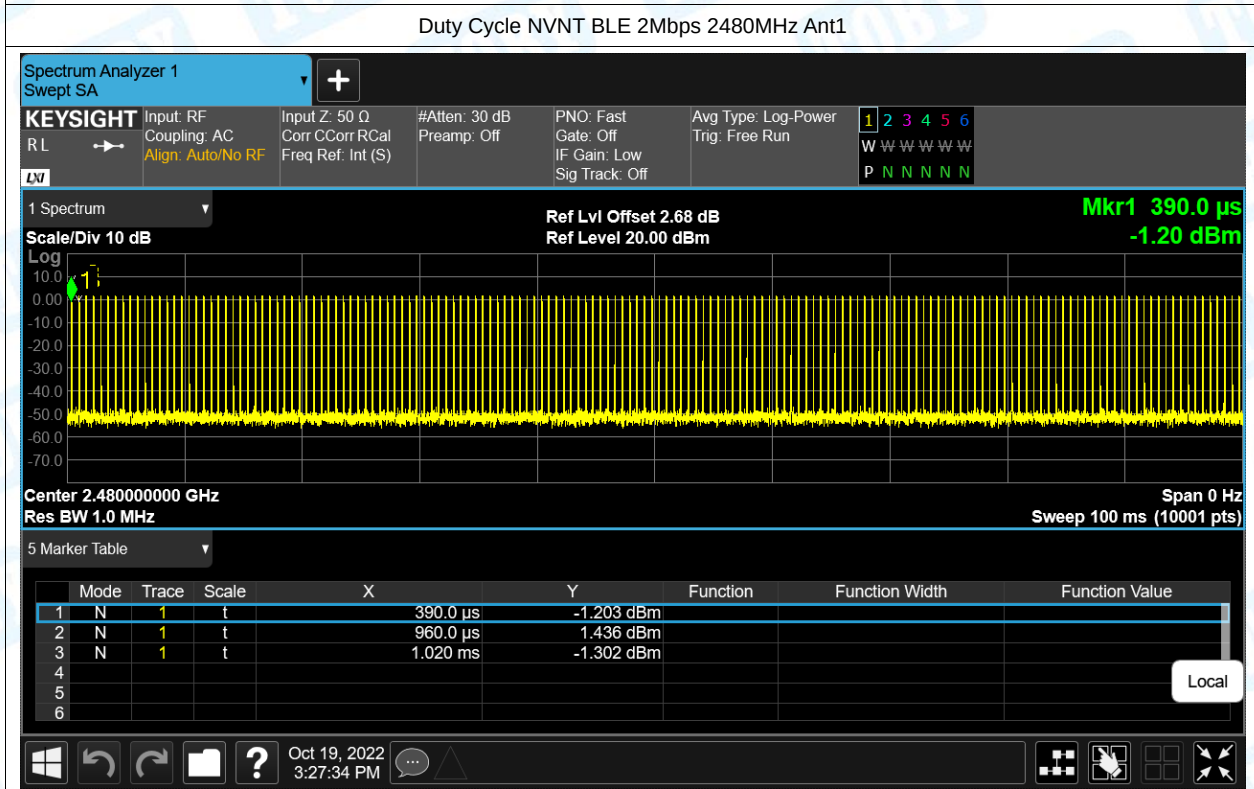
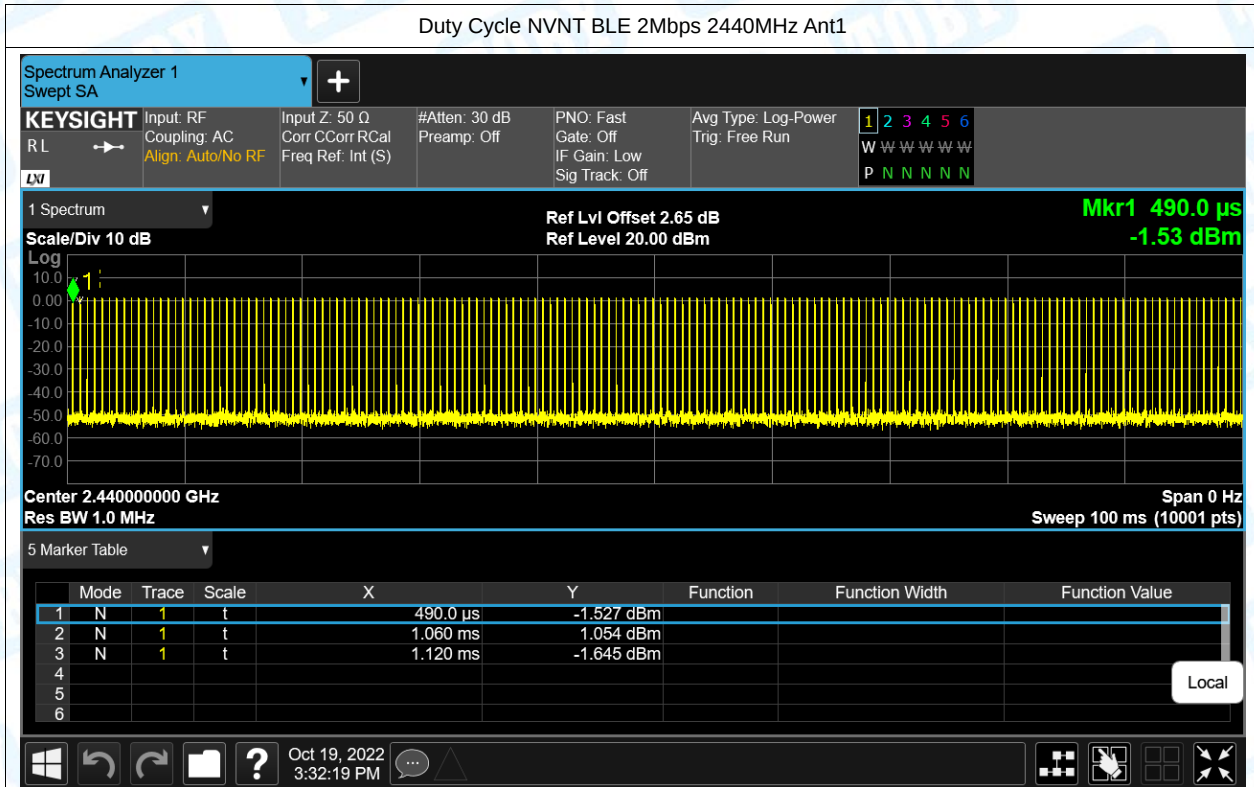
Duty Cycle NVNT BLE 1Mbps 2402MHz Ant1



Duty Cycle NVNT BLE 1Mbps 2440MHz Ant1





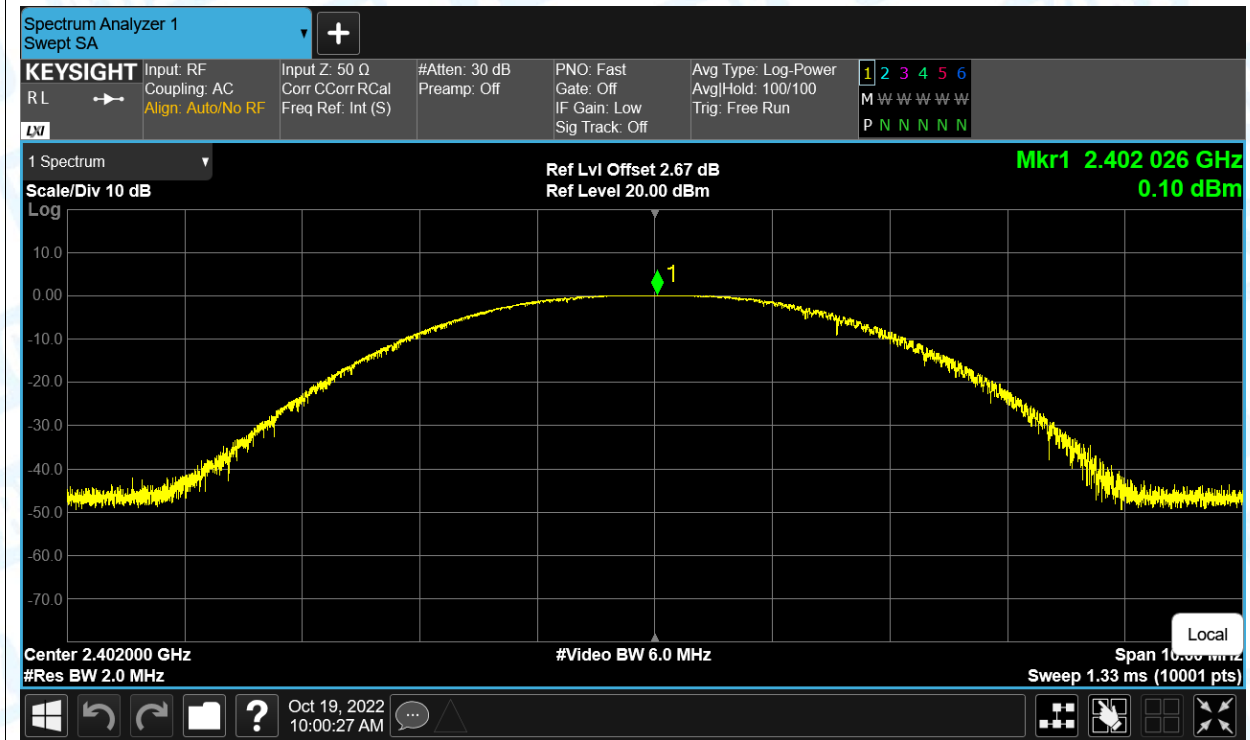


Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	0.098	30	Pass
NVNT	BLE 1Mbps	2440	Ant1	0.664	30	Pass
NVNT	BLE 1Mbps	2480	Ant1	1.128	30	Pass
NVNT	BLE 2Mbps	2402	Ant1	0.519	30	Pass
NVNT	BLE 2Mbps	2440	Ant1	1.088	30	Pass
NVNT	BLE 2Mbps	2480	Ant1	1.509	30	Pass

Test Graphs

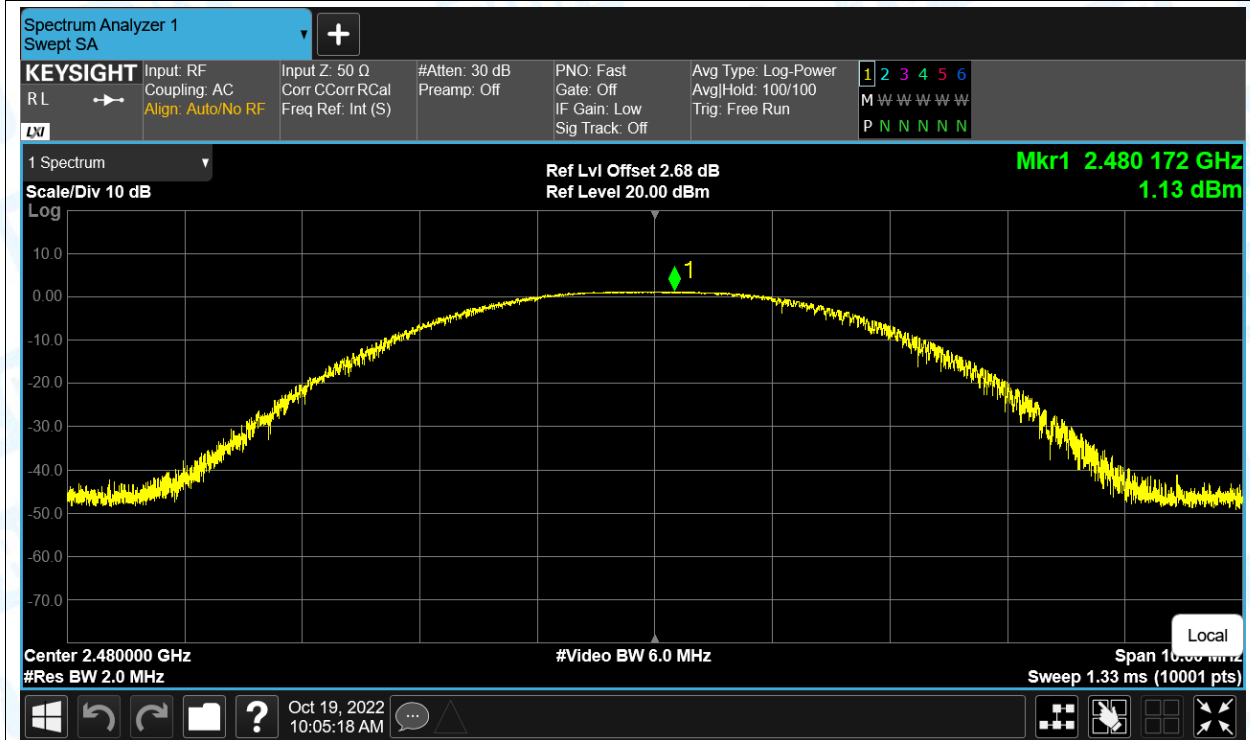
Power NVNT BLE 1Mbps 2402MHz Ant1



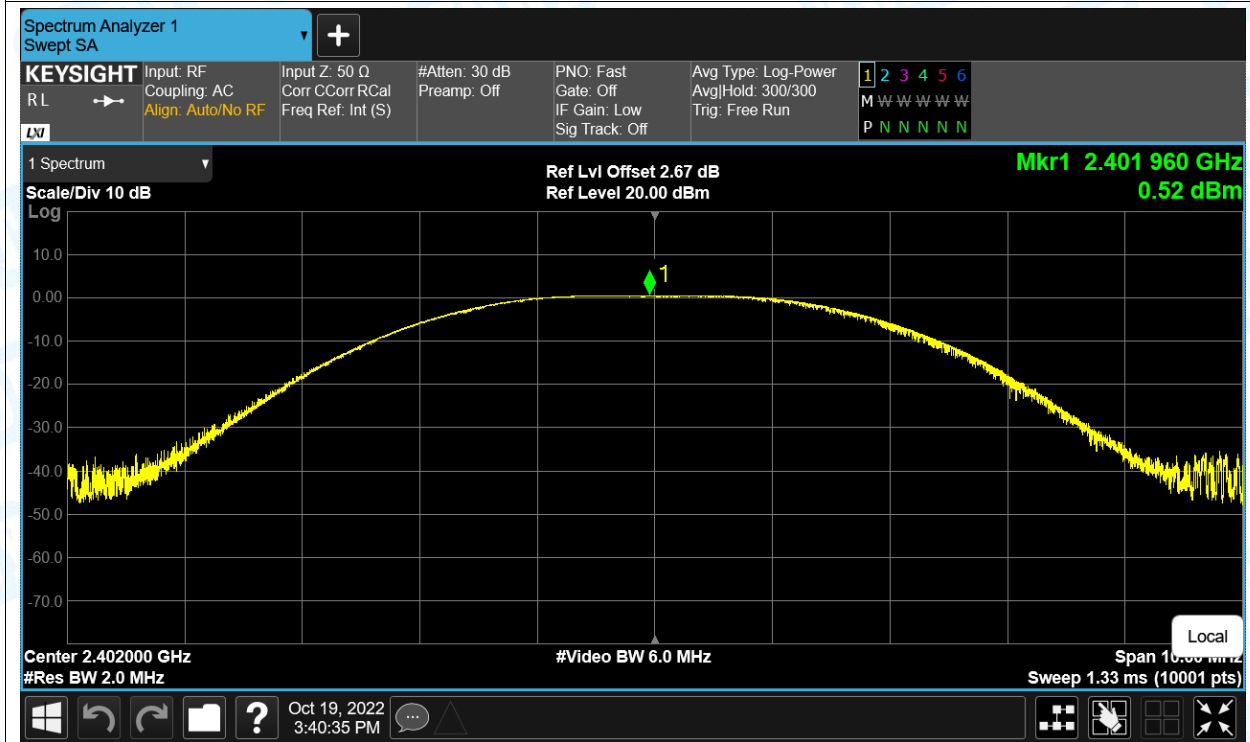
Power NVNT BLE 1Mbps 2440MHz Ant1



Power NVNT BLE 1Mbps 2480MHz Ant1



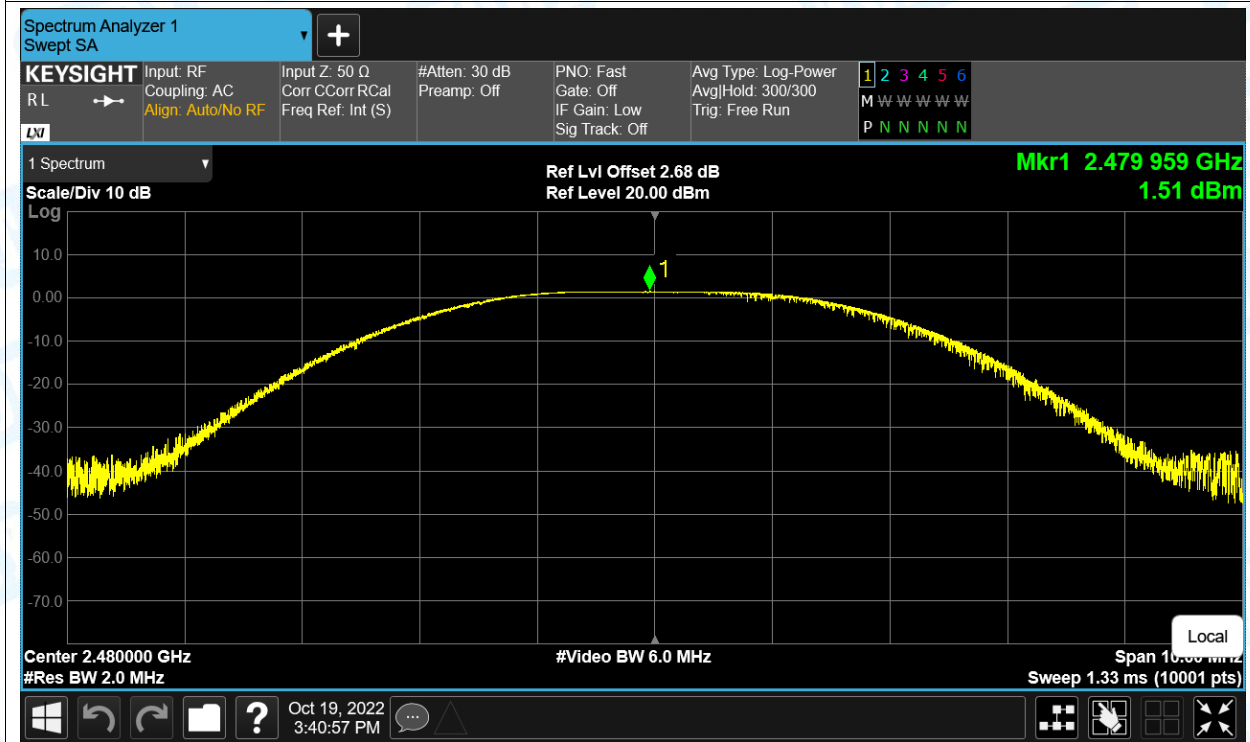
Power NVNT BLE 2Mbps 2402MHz Ant1



Power NVNT BLE 2Mbps 2440MHz Ant1



Power NVNT BLE 2Mbps 2480MHz Ant1

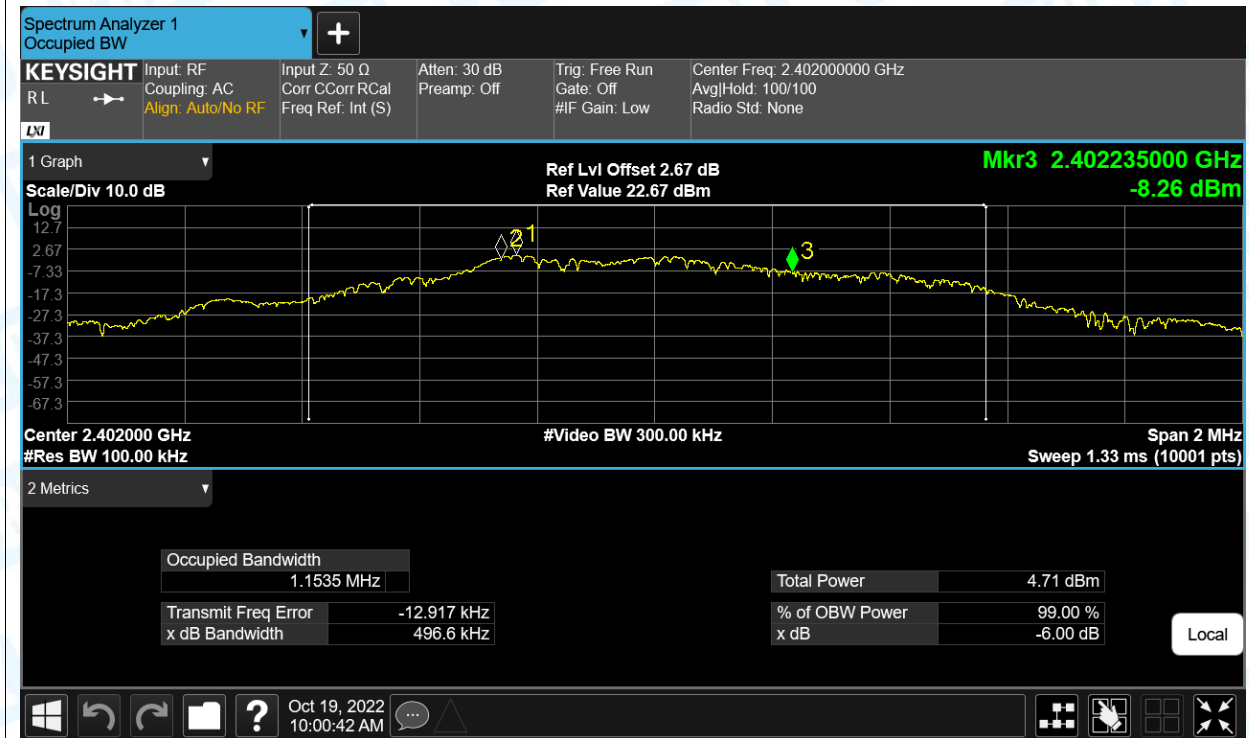


-6dB Bandwidth

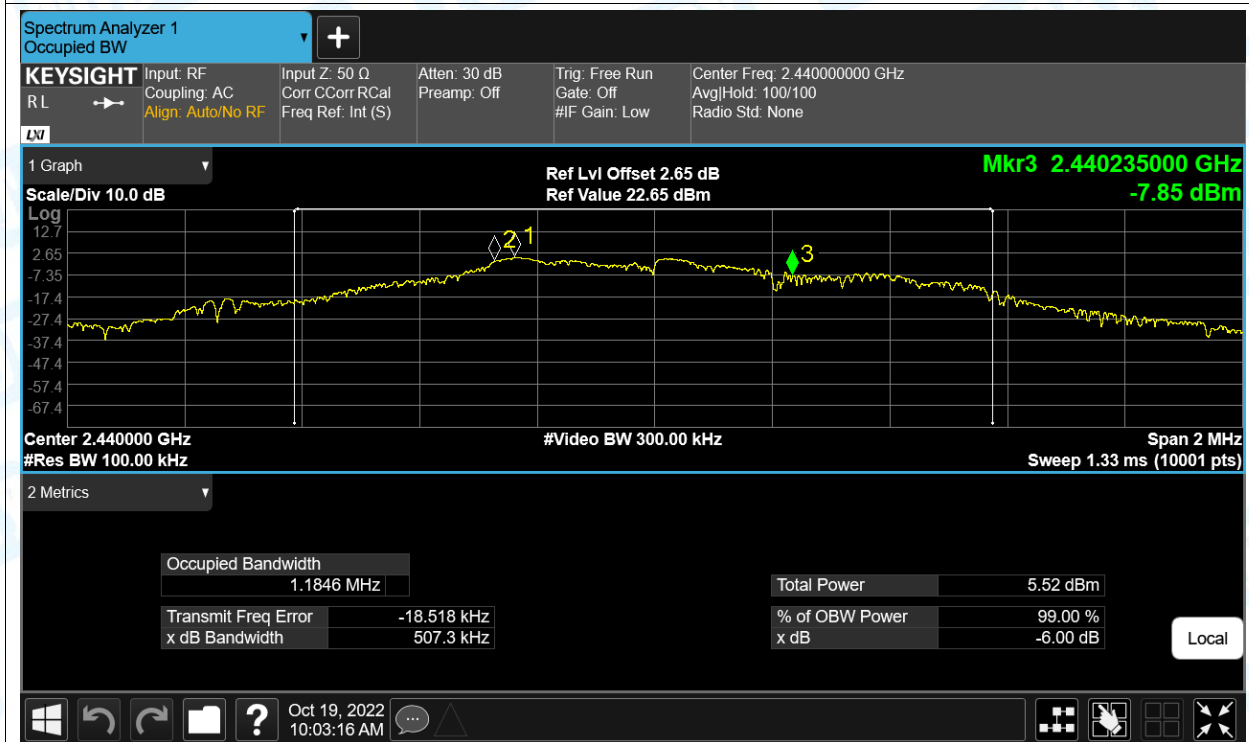
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	0.5	0.5	Pass
NVNT	BLE 1Mbps	2440	Ant1	0.51	0.5	Pass
NVNT	BLE 1Mbps	2480	Ant1	0.5	0.5	Pass
NVNT	BLE 2Mbps	2402	Ant1	0.84	0.5	Pass
NVNT	BLE 2Mbps	2440	Ant1	0.81	0.5	Pass
NVNT	BLE 2Mbps	2480	Ant1	0.83	0.5	Pass

Test Graphs

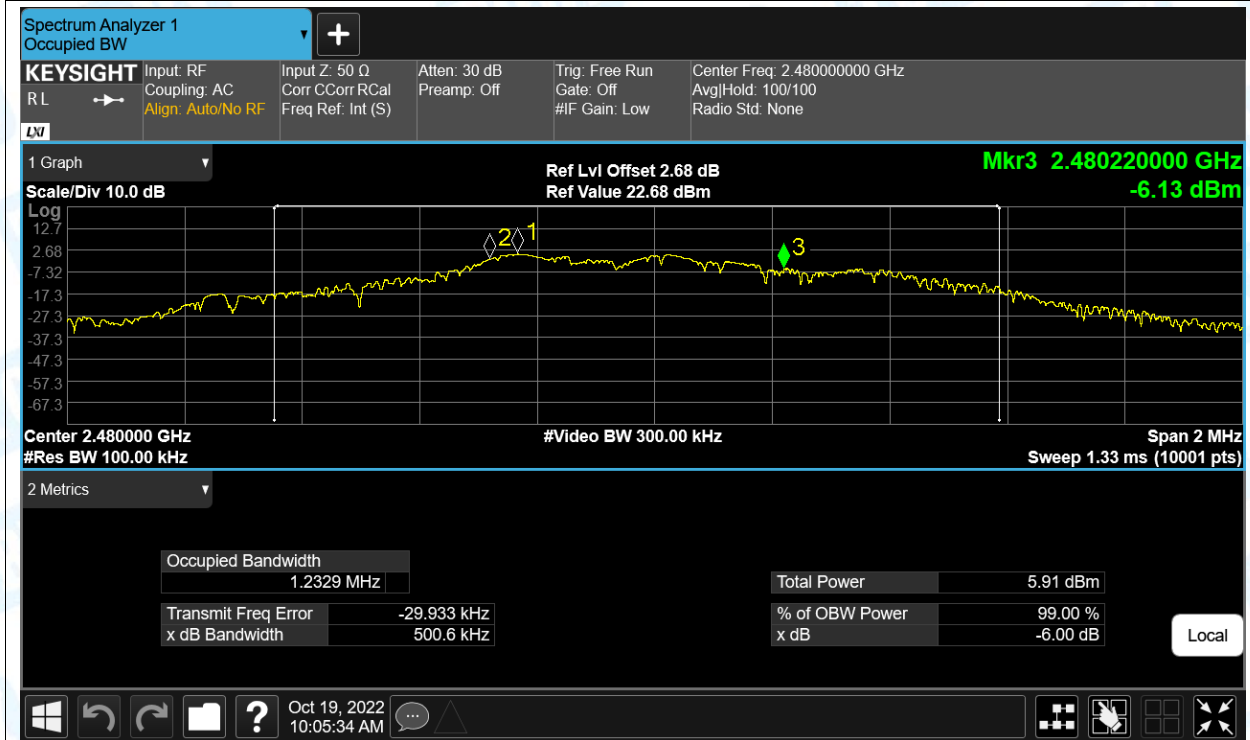
-6dB Bandwidth NVNT BLE 1Mbps 2402MHz Ant1



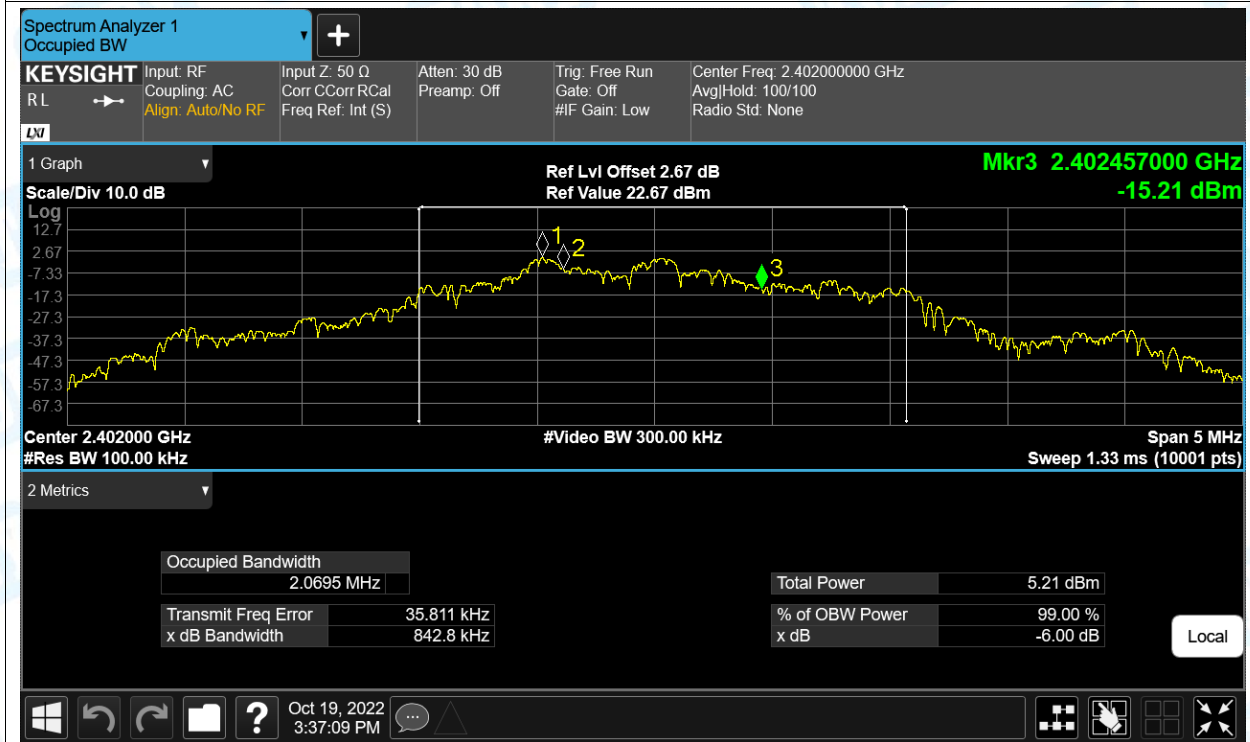
-6dB Bandwidth NVNT BLE 1Mbps 2440MHz Ant1



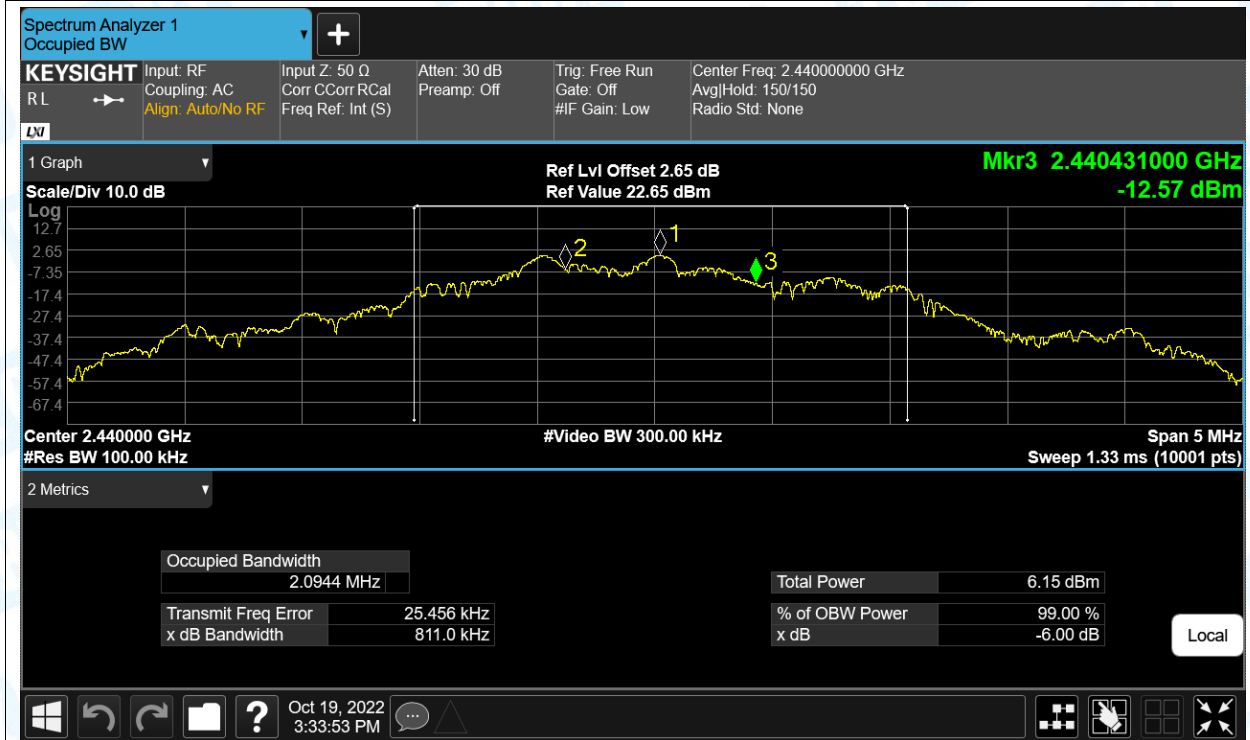
-6dB Bandwidth NVNT BLE 1Mbps 2480MHz Ant1



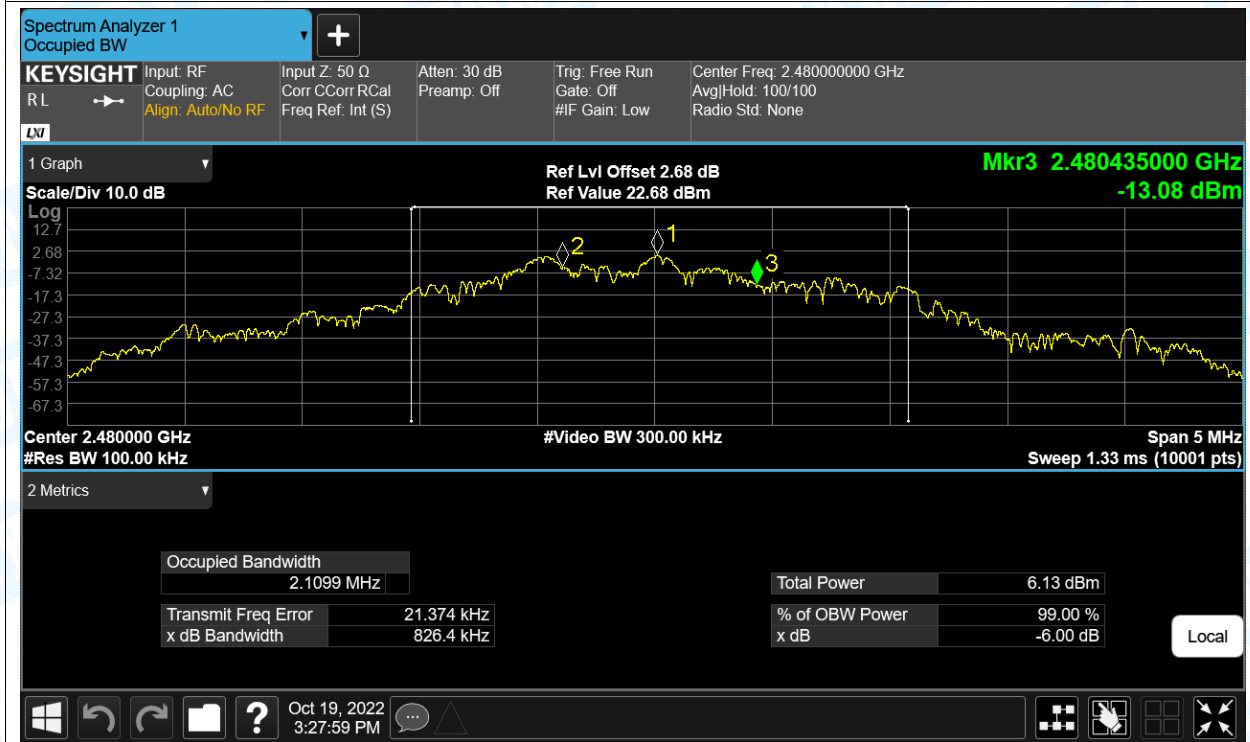
-6dB Bandwidth NVNT BLE 2Mbps 2402MHz Ant1



-6dB Bandwidth NVNT BLE 2Mbps 2440MHz Ant1



-6dB Bandwidth NVNT BLE 2Mbps 2480MHz Ant1

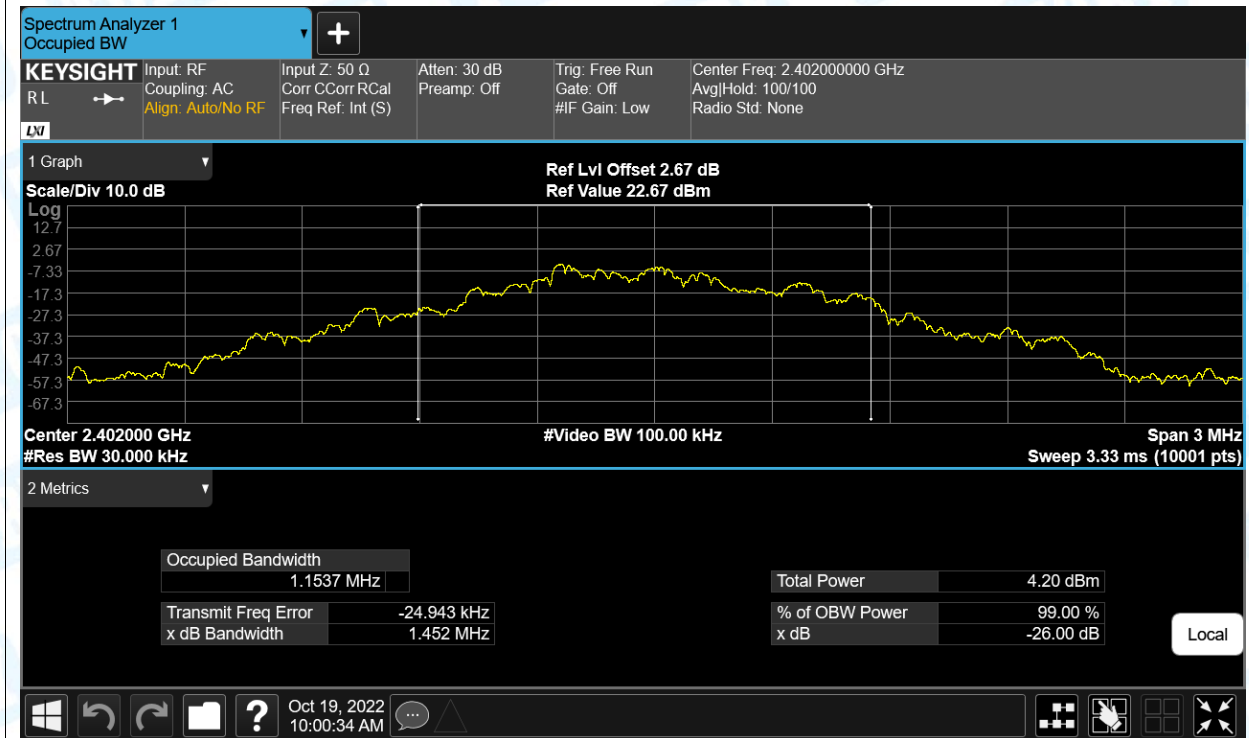


Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE 1Mbps	2402	Ant1	1.154
NVNT	BLE 1Mbps	2440	Ant1	1.206
NVNT	BLE 1Mbps	2480	Ant1	1.233
NVNT	BLE 2Mbps	2402	Ant1	2.062
NVNT	BLE 2Mbps	2440	Ant1	2.081
NVNT	BLE 2Mbps	2480	Ant1	2.098

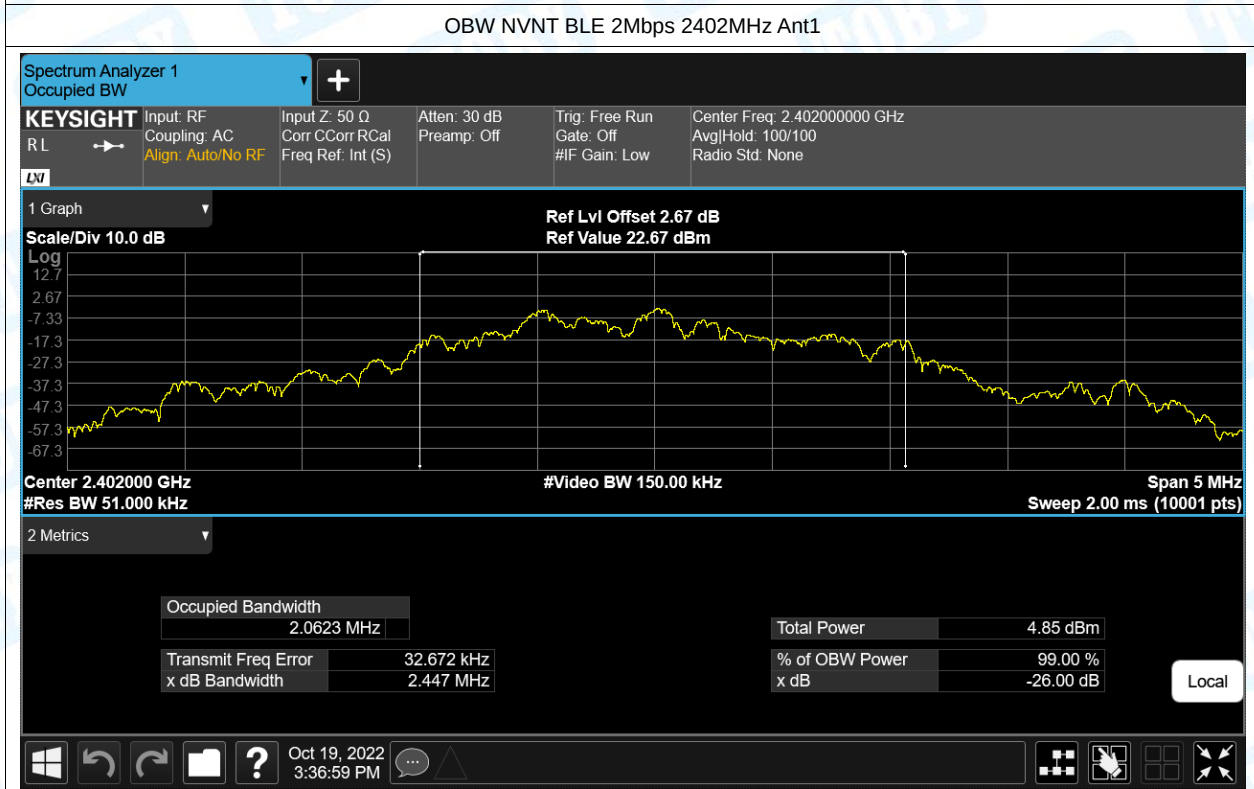
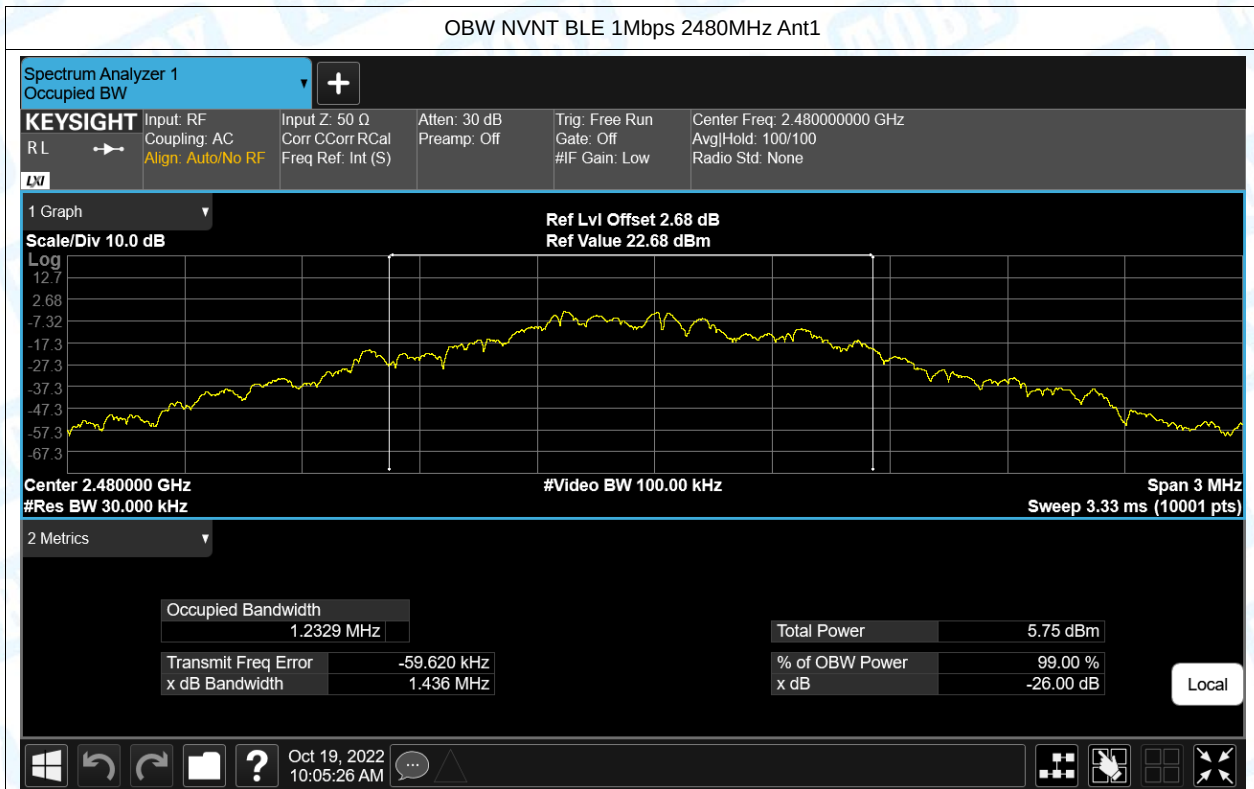
Test Graphs

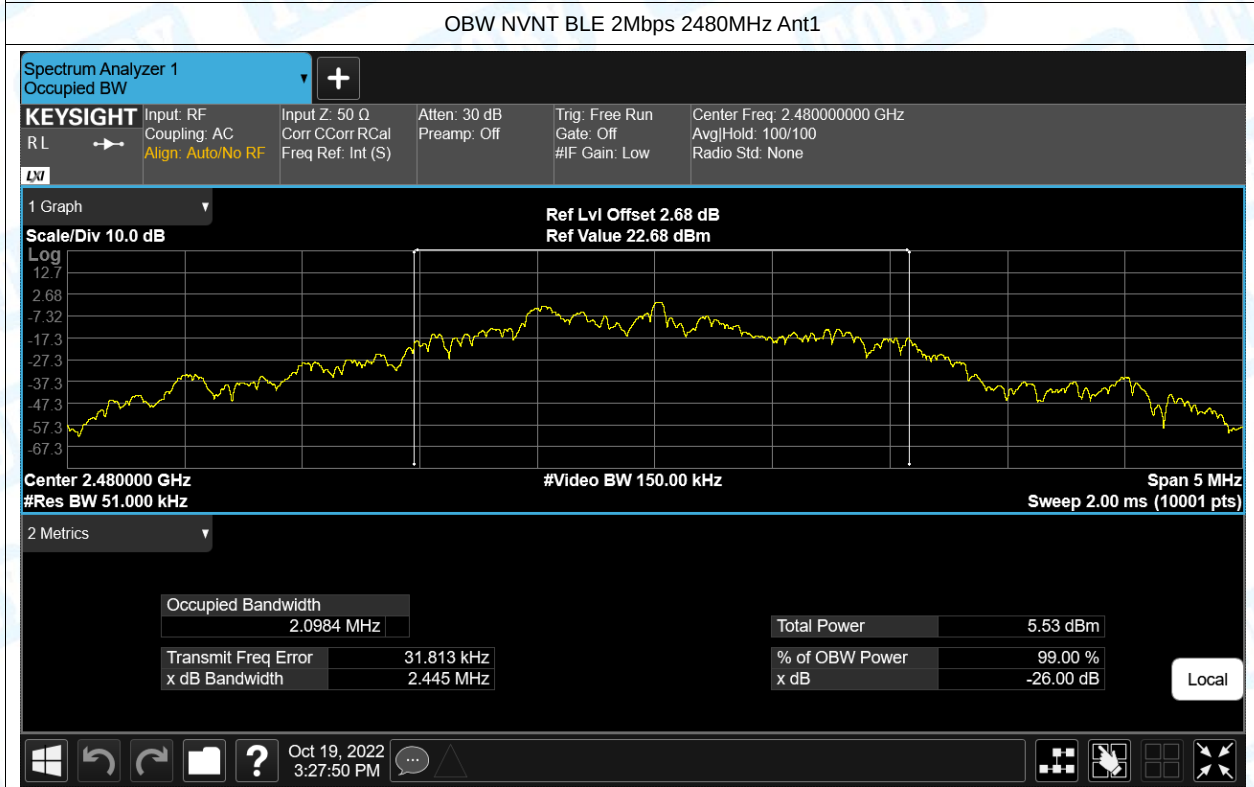
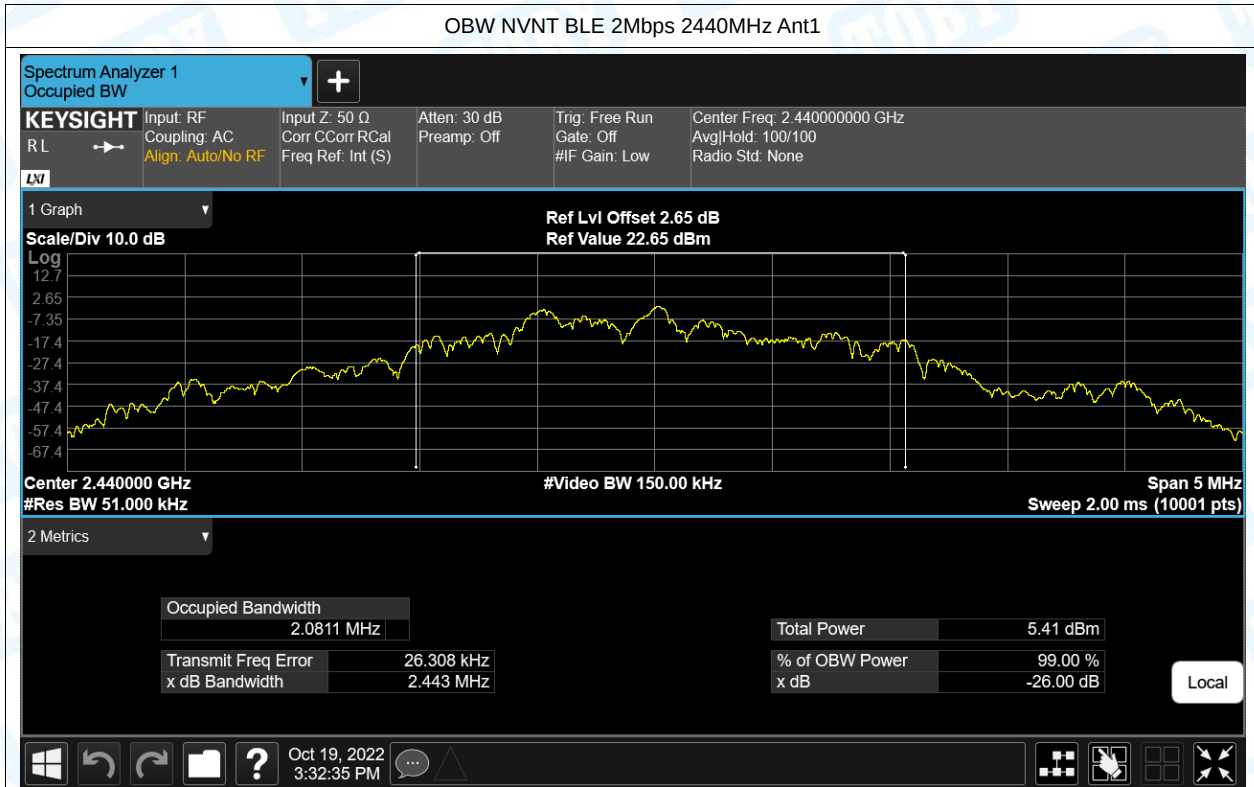
OBW NVNT BLE 1Mbps 2402MHz Ant1



OBW NVNT BLE 1Mbps 2440MHz Ant1





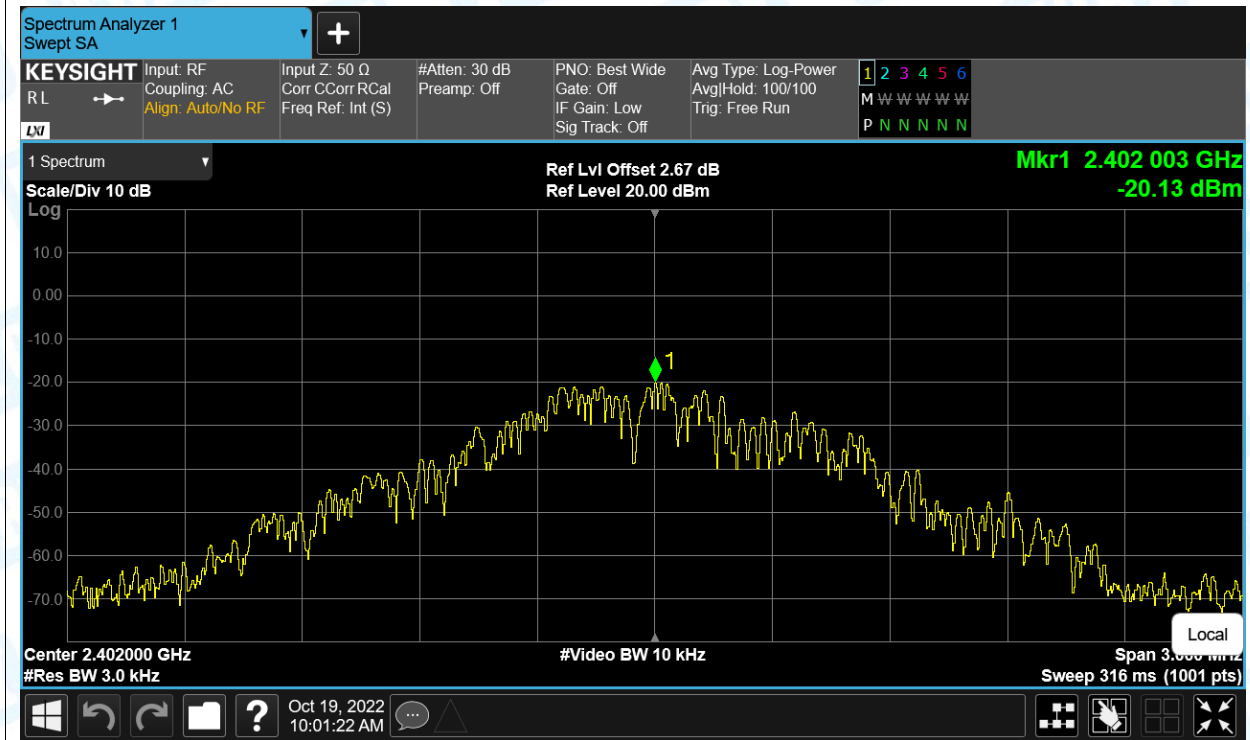


Maximum Power Spectral Density Level

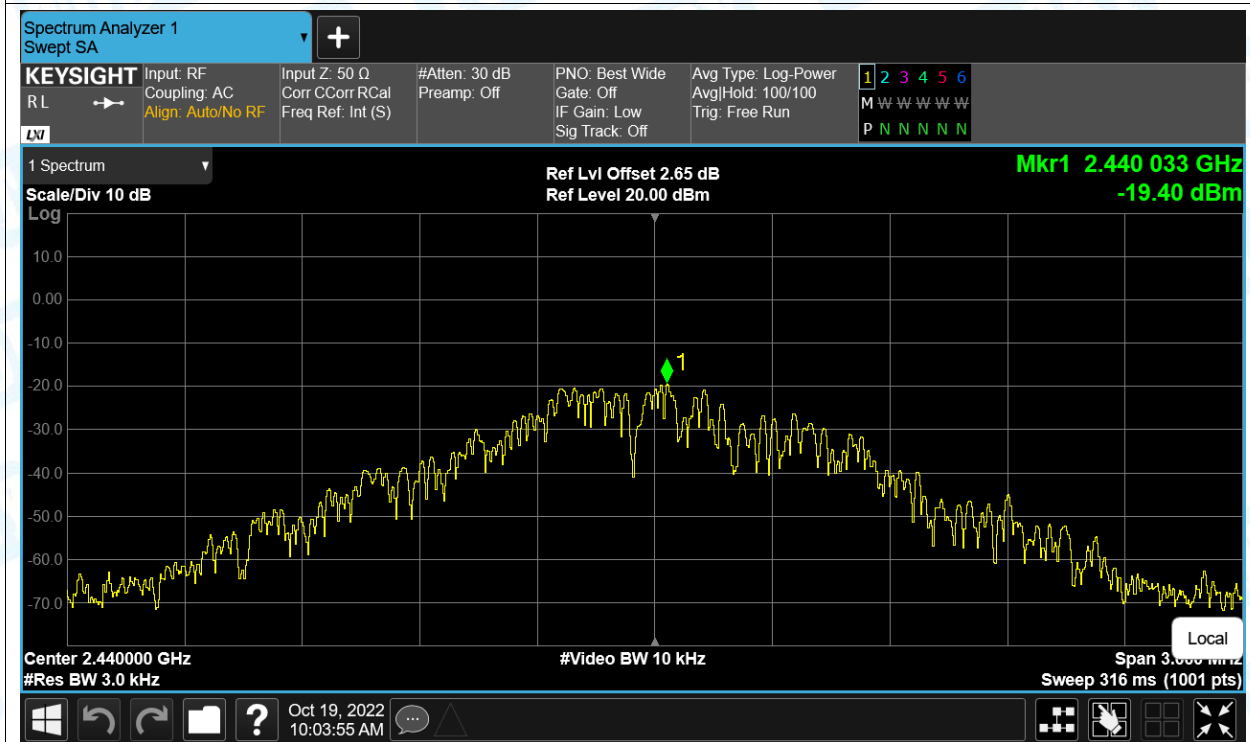
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-20.13	8	Pass
NVNT	BLE 1Mbps	2440	Ant1	-19.396	8	Pass
NVNT	BLE 1Mbps	2480	Ant1	-19.172	8	Pass
NVNT	BLE 2Mbps	2402	Ant1	-21.935	8	Pass
NVNT	BLE 2Mbps	2440	Ant1	-21.267	8	Pass
NVNT	BLE 2Mbps	2480	Ant1	-20.847	8	Pass

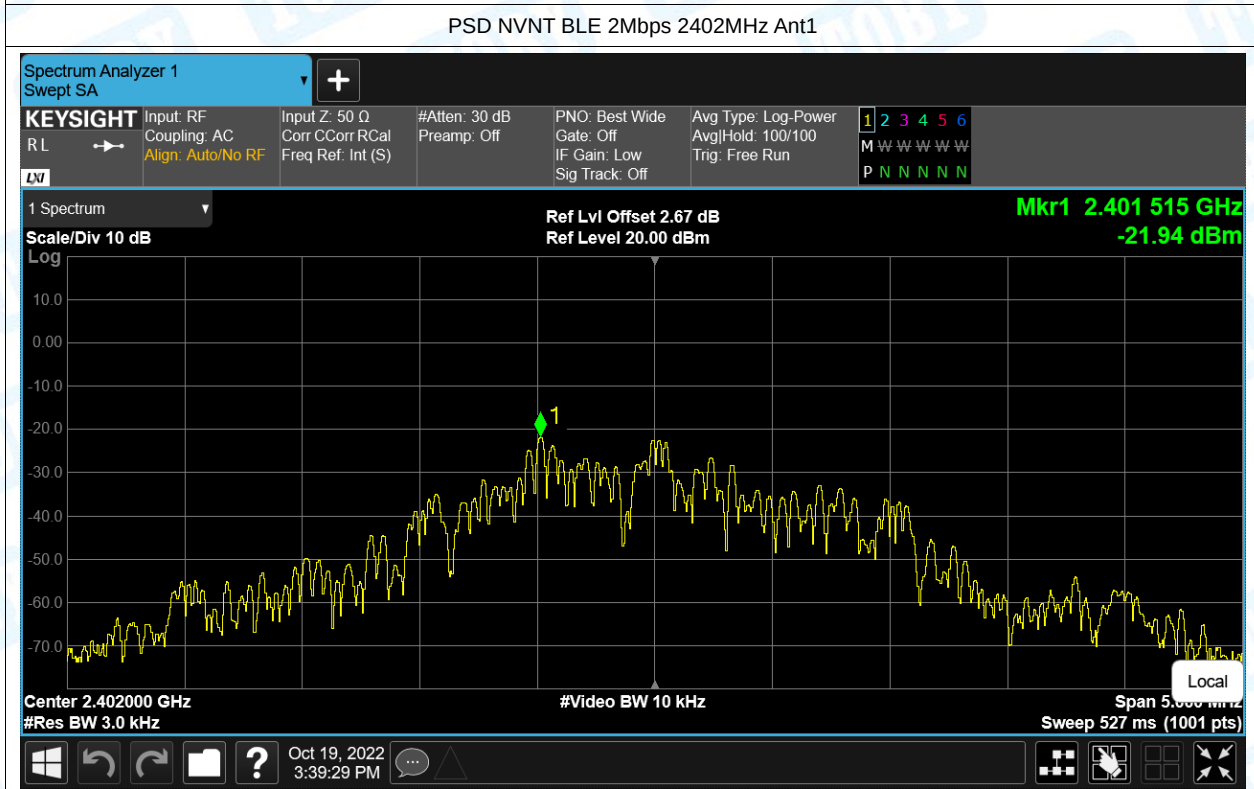
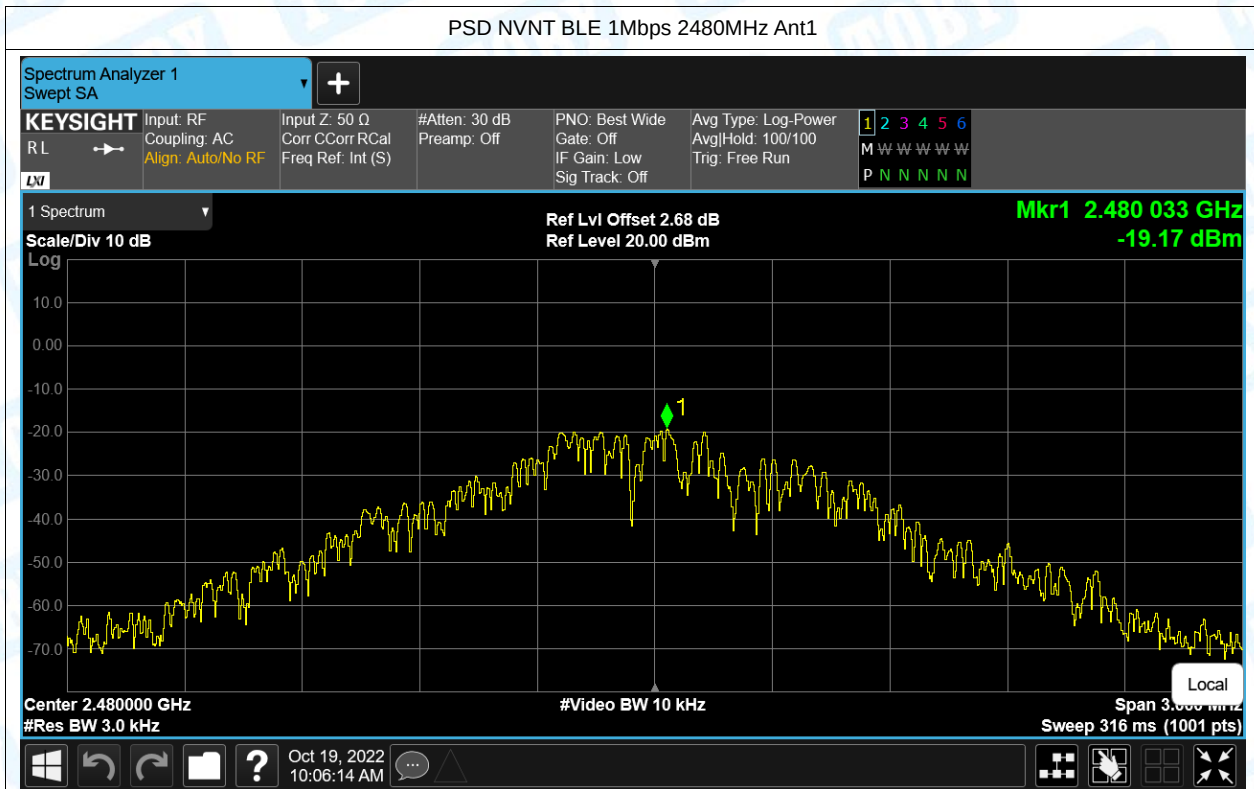
Test Graphs

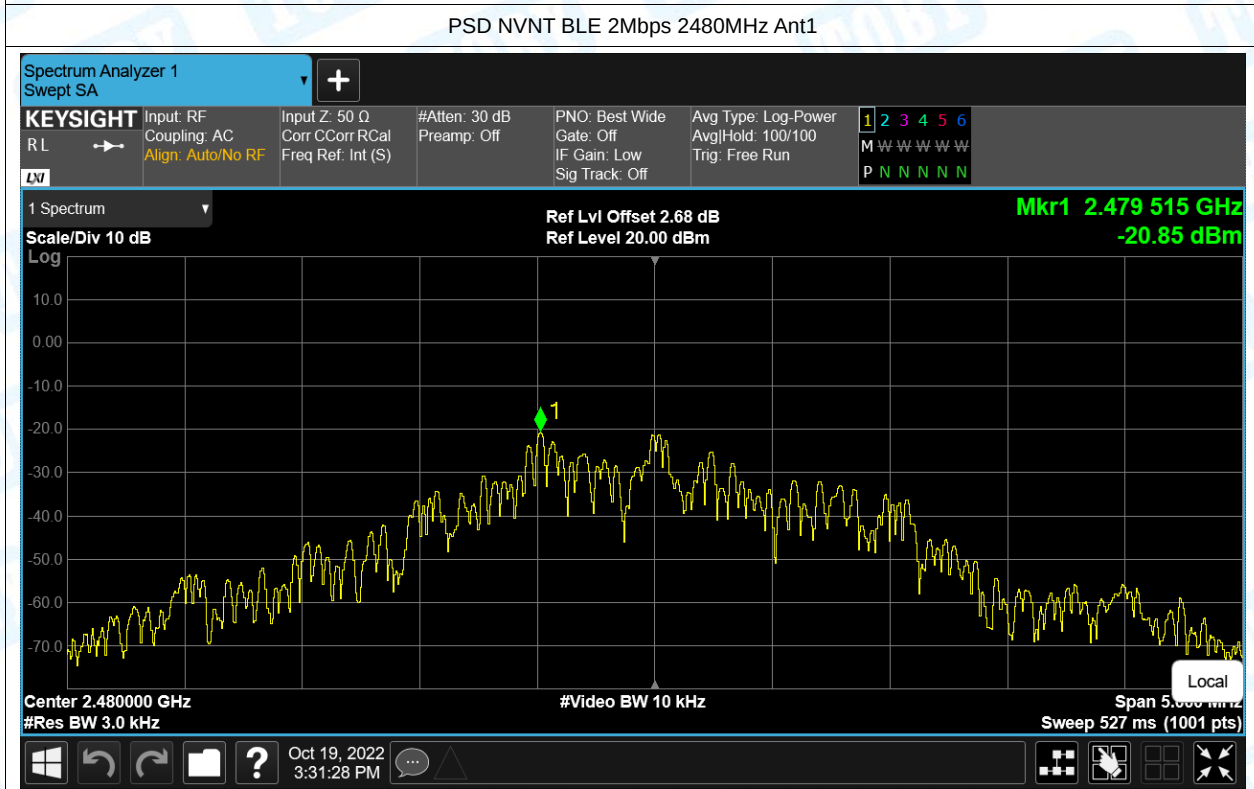
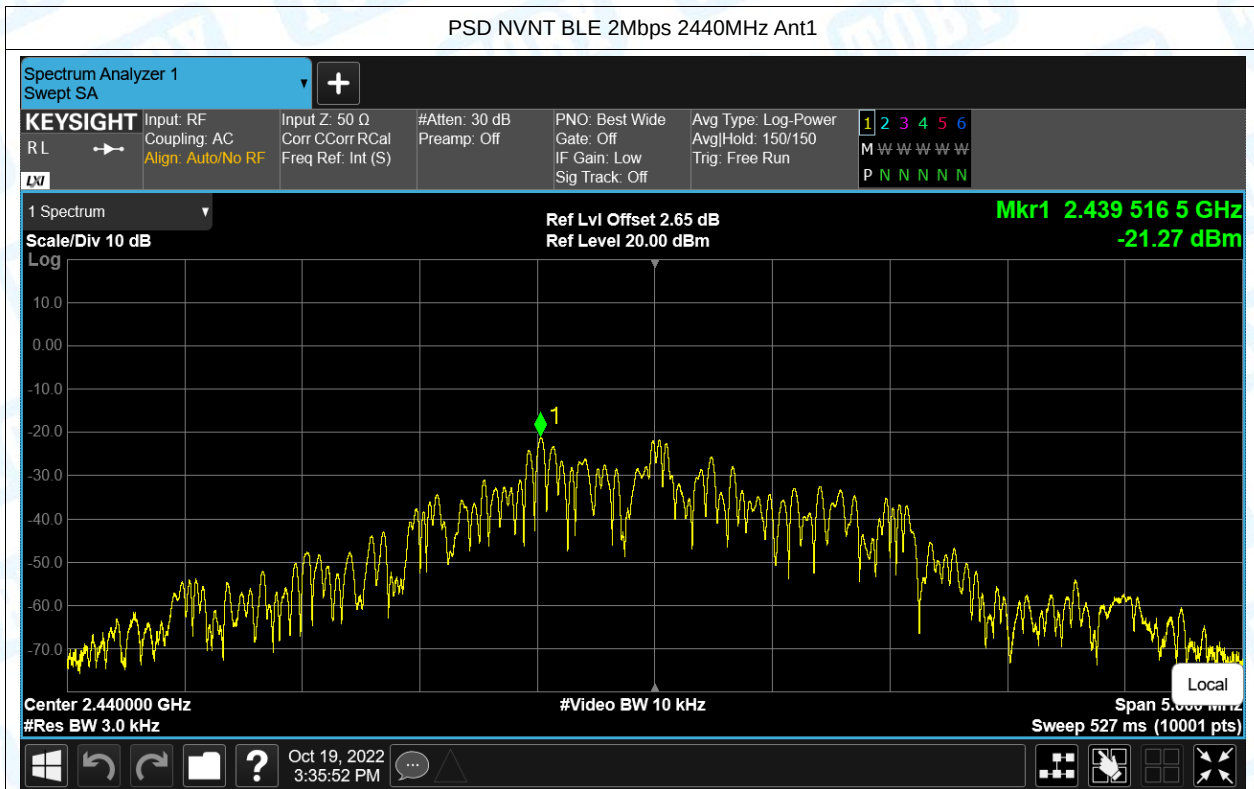
PSD NVNT BLE 1Mbps 2402MHz Ant1



PSD NVNT BLE 1Mbps 2440MHz Ant1





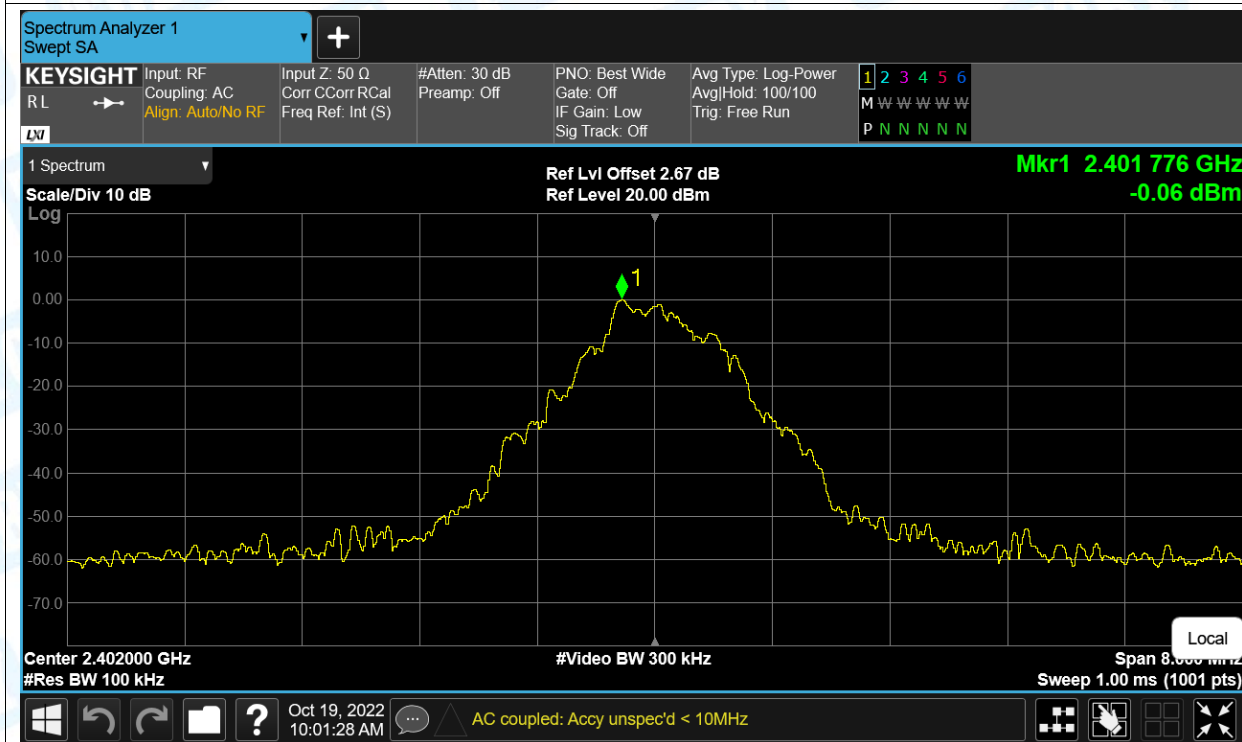


Band Edge

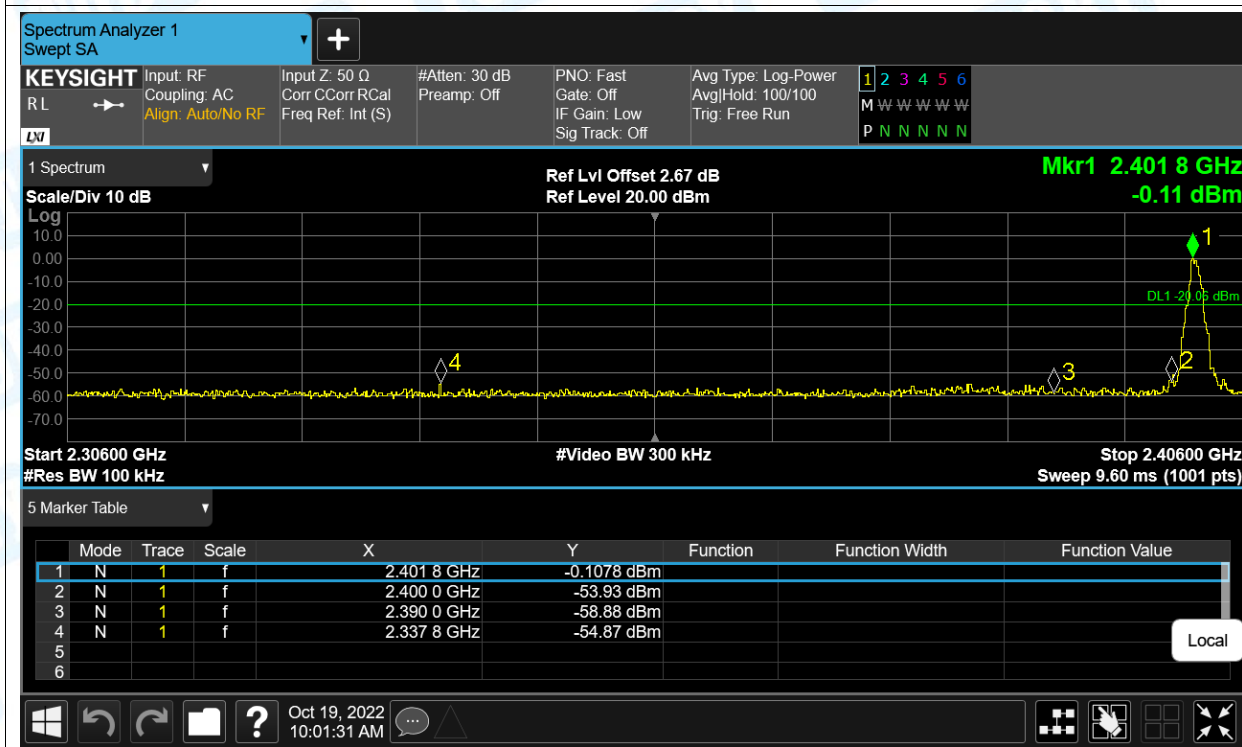
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-54.81	-20	Pass
NVNT	BLE 1Mbps	2480	Ant1	-54.82	-20	Pass
NVNT	BLE 2Mbps	2402	Ant1	-52.46	-20	Pass
NVNT	BLE 2Mbps	2480	Ant1	-50.68	-20	Pass

Test Graphs

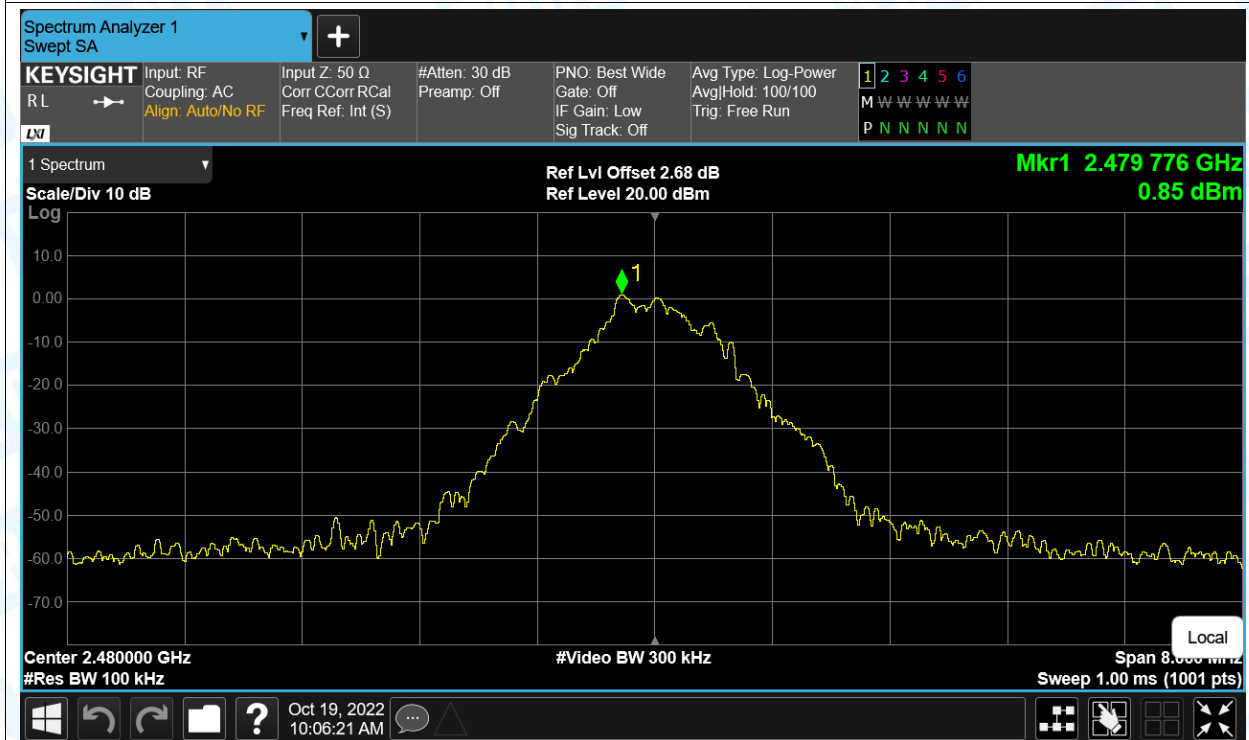
Band Edge NVNT BLE 1Mbps 2402MHz Ant1 Ref



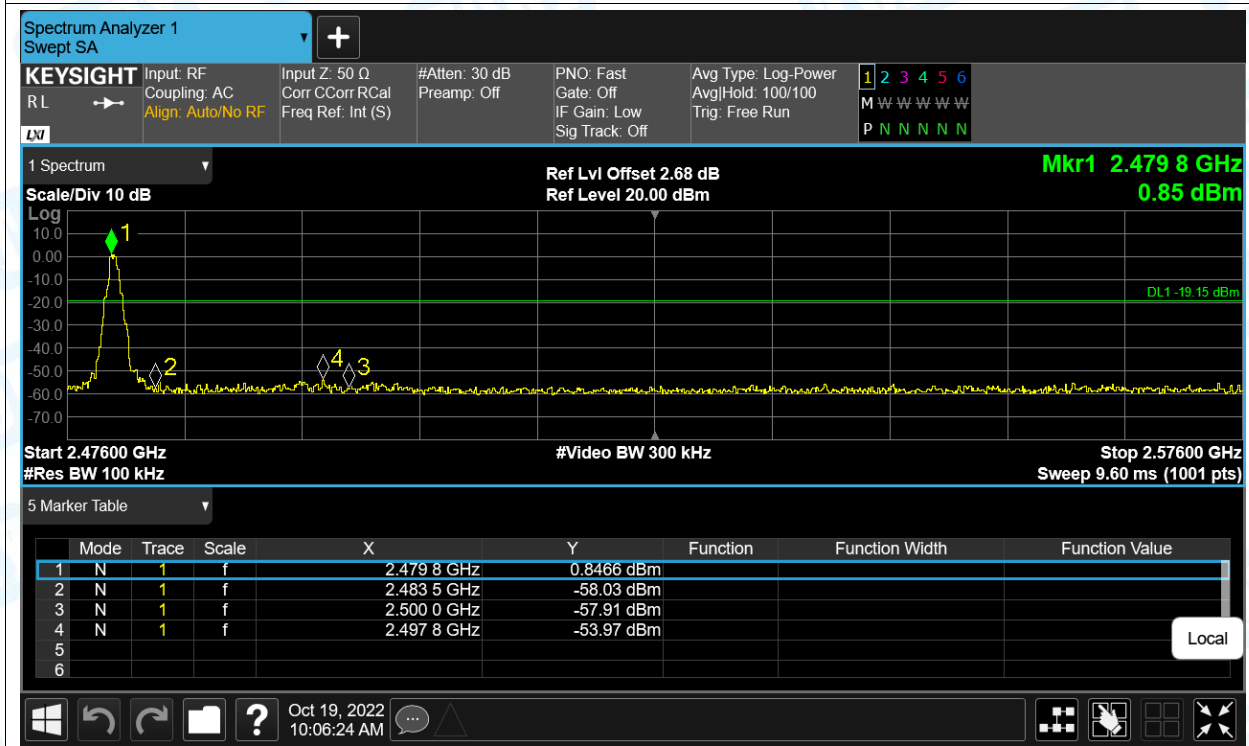
Band Edge NVNT BLE 1Mbps 2402MHz Ant1 Emission

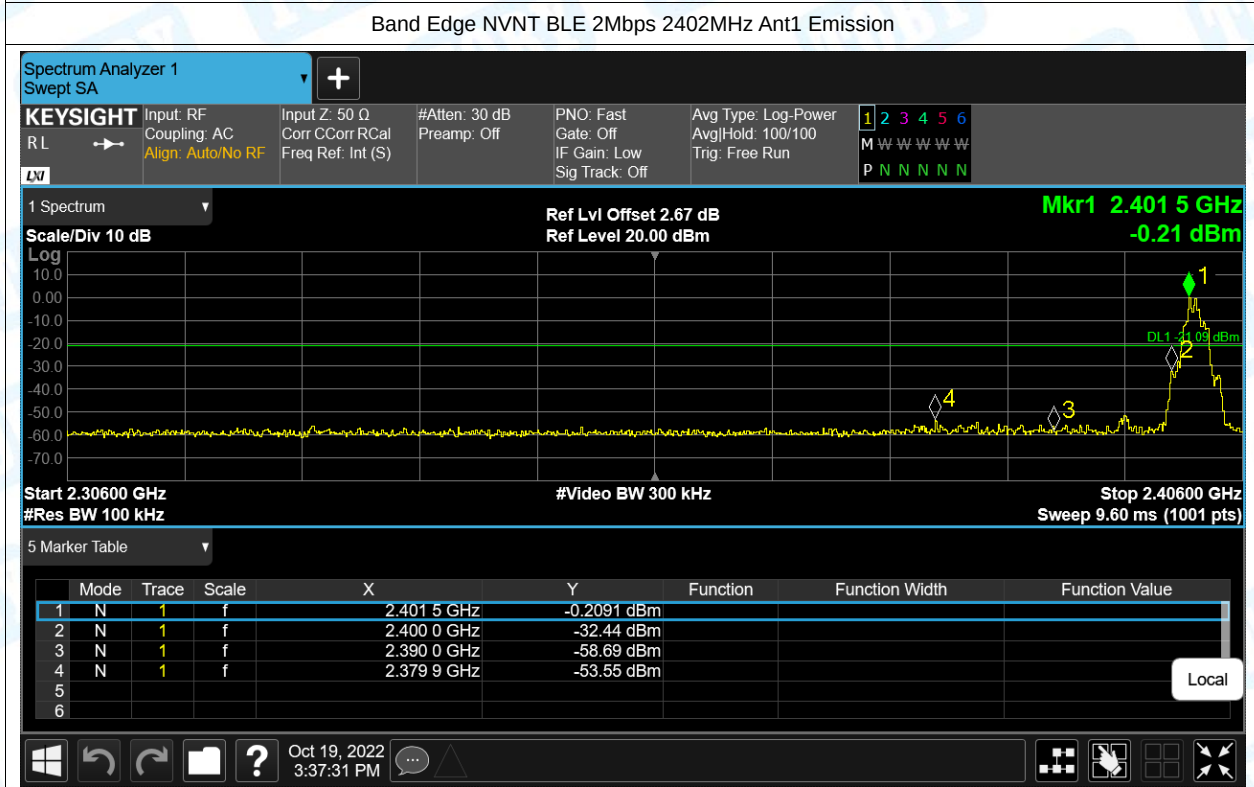
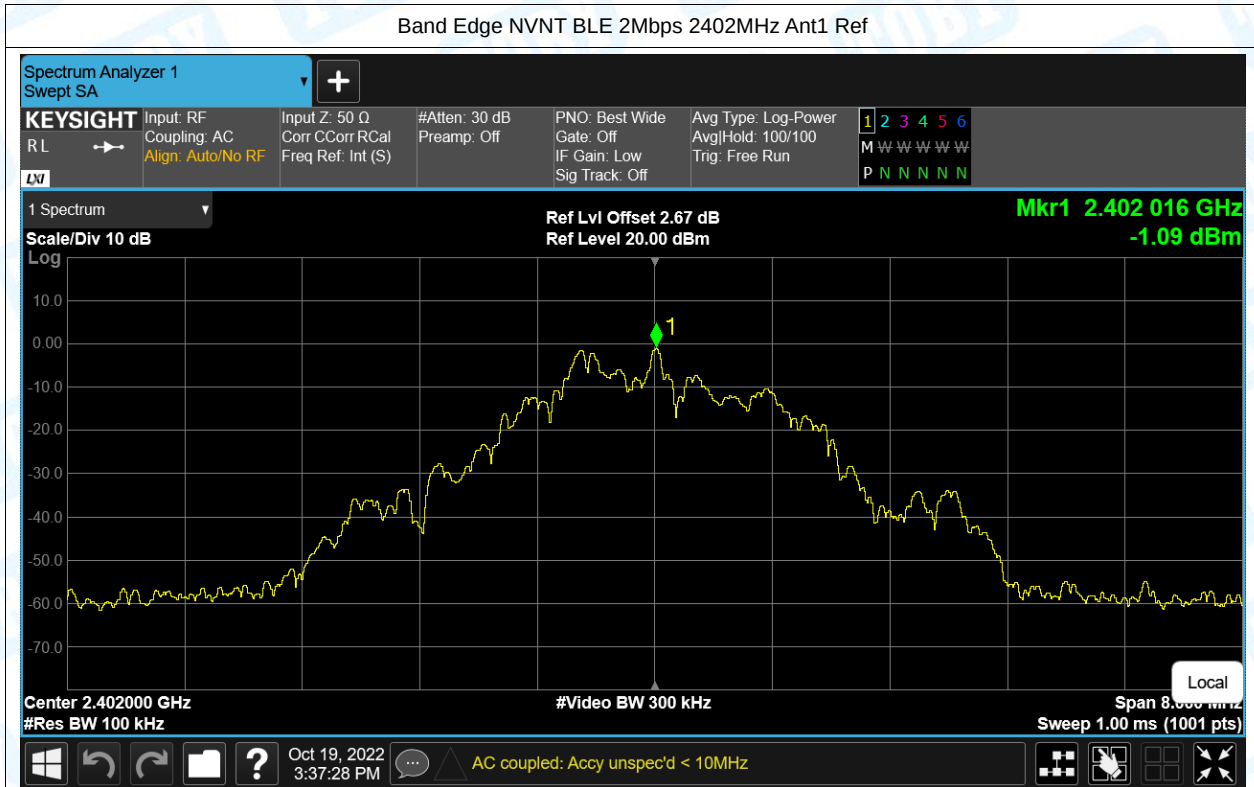


Band Edge NVNT BLE 1Mbps 2480MHz Ant1 Ref

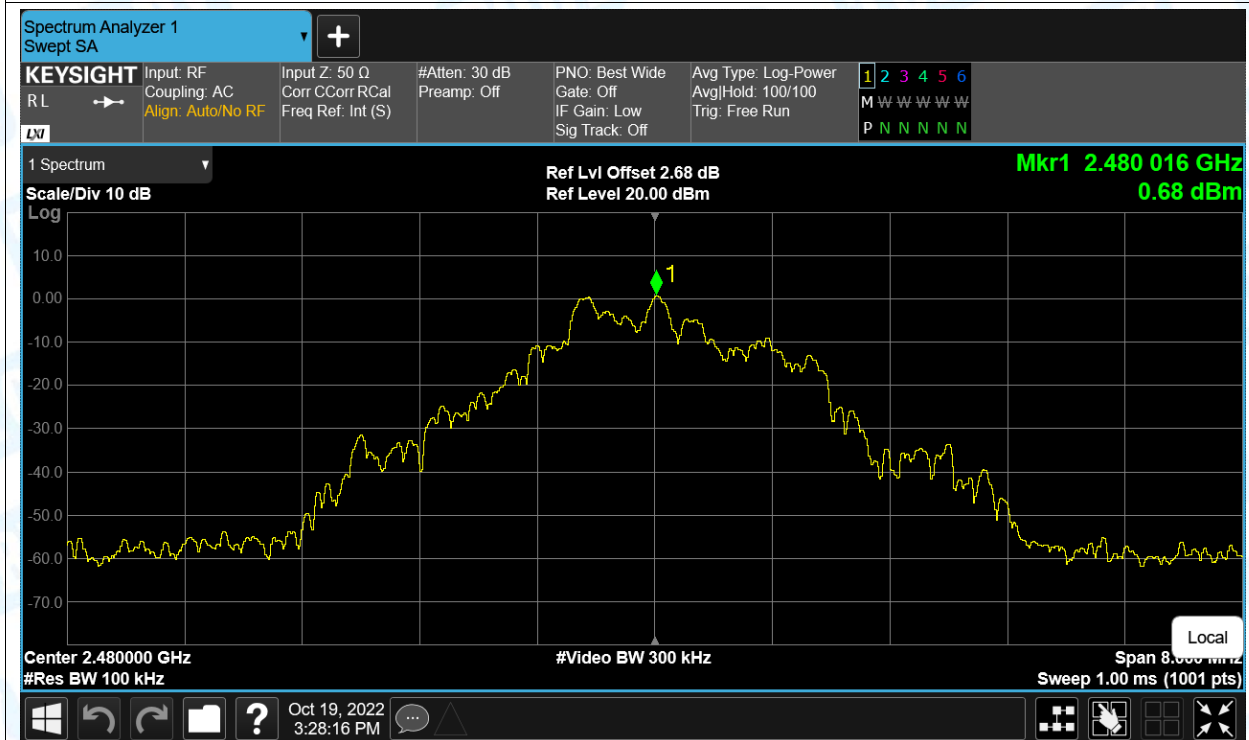


Band Edge NVNT BLE 1Mbps 2480MHz Ant1 Emission

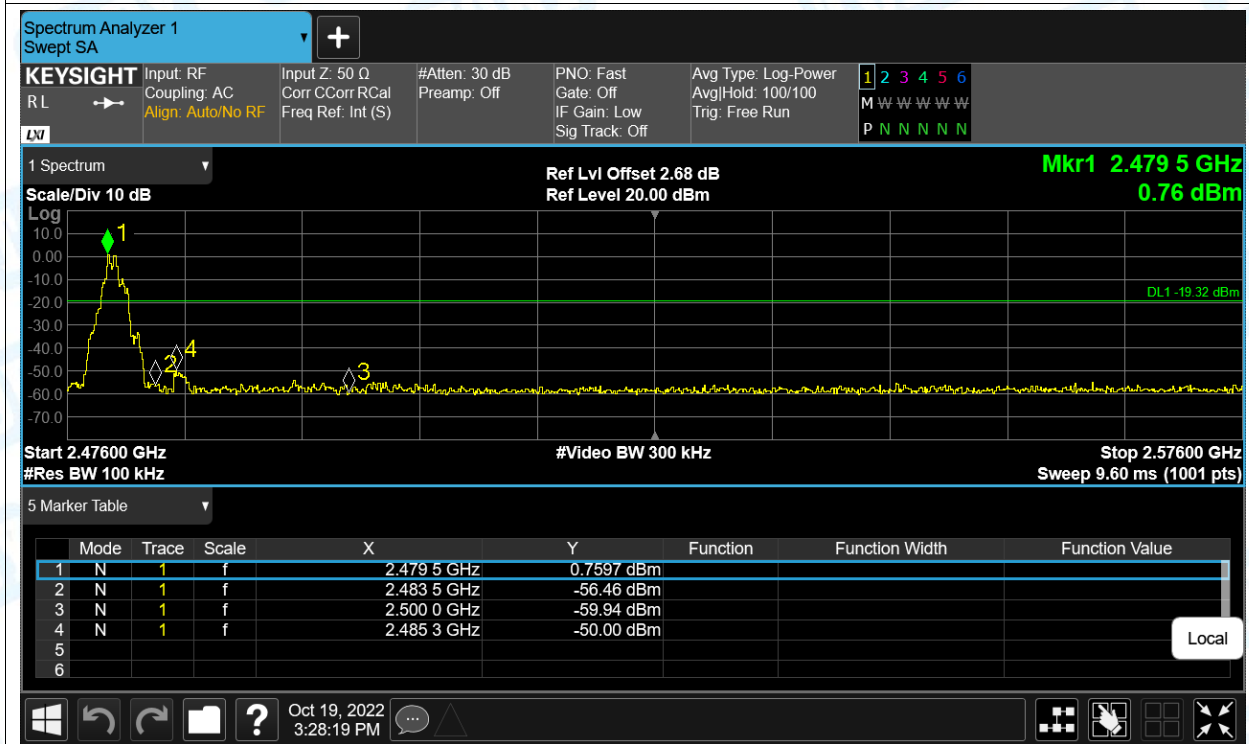




Band Edge NVNT BLE 2Mbps 2480MHz Ant1 Ref



Band Edge NVNT BLE 2Mbps 2480MHz Ant1 Emission



Conducted RF Spurious Emission

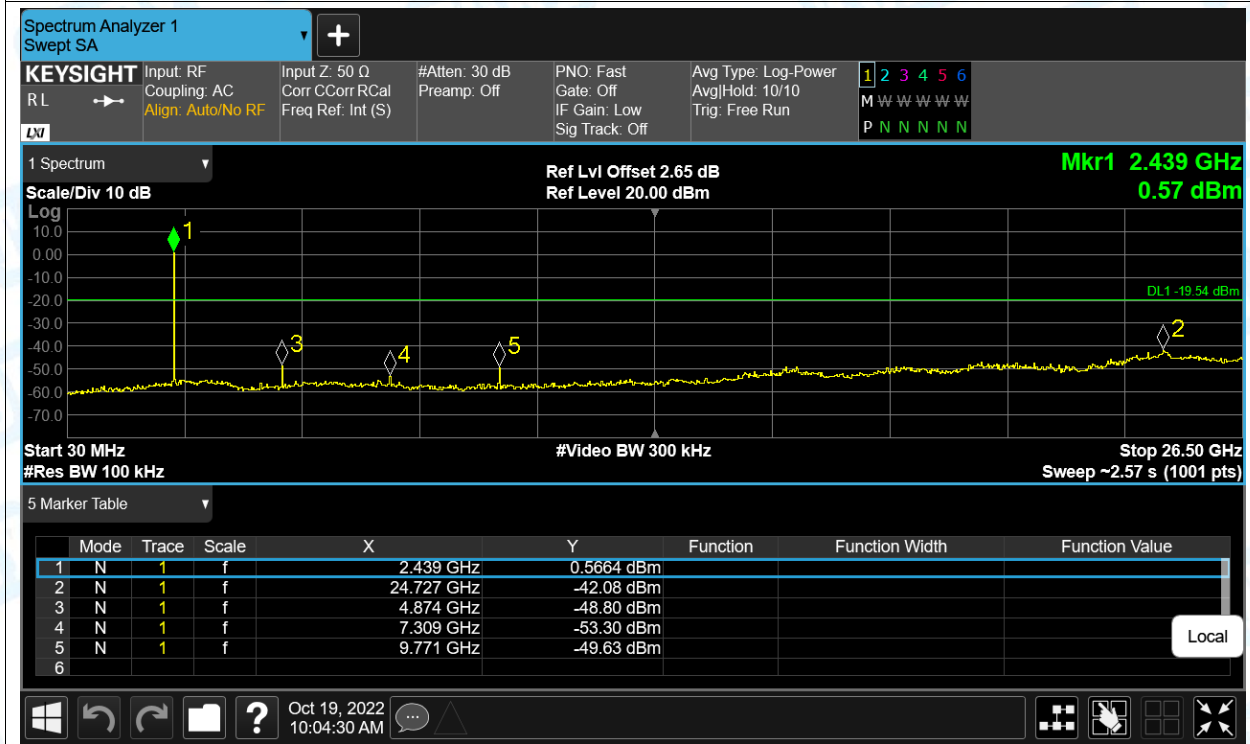
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-41.26	-20	Pass
NVNT	BLE 1Mbps	2440	Ant1	-42.54	-20	Pass
NVNT	BLE 1Mbps	2480	Ant1	-43.69	-20	Pass
NVNT	BLE 2Mbps	2402	Ant1	-41.79	-20	Pass
NVNT	BLE 2Mbps	2440	Ant1	-41.89	-20	Pass
NVNT	BLE 2Mbps	2480	Ant1	-42.31	-20	Pass



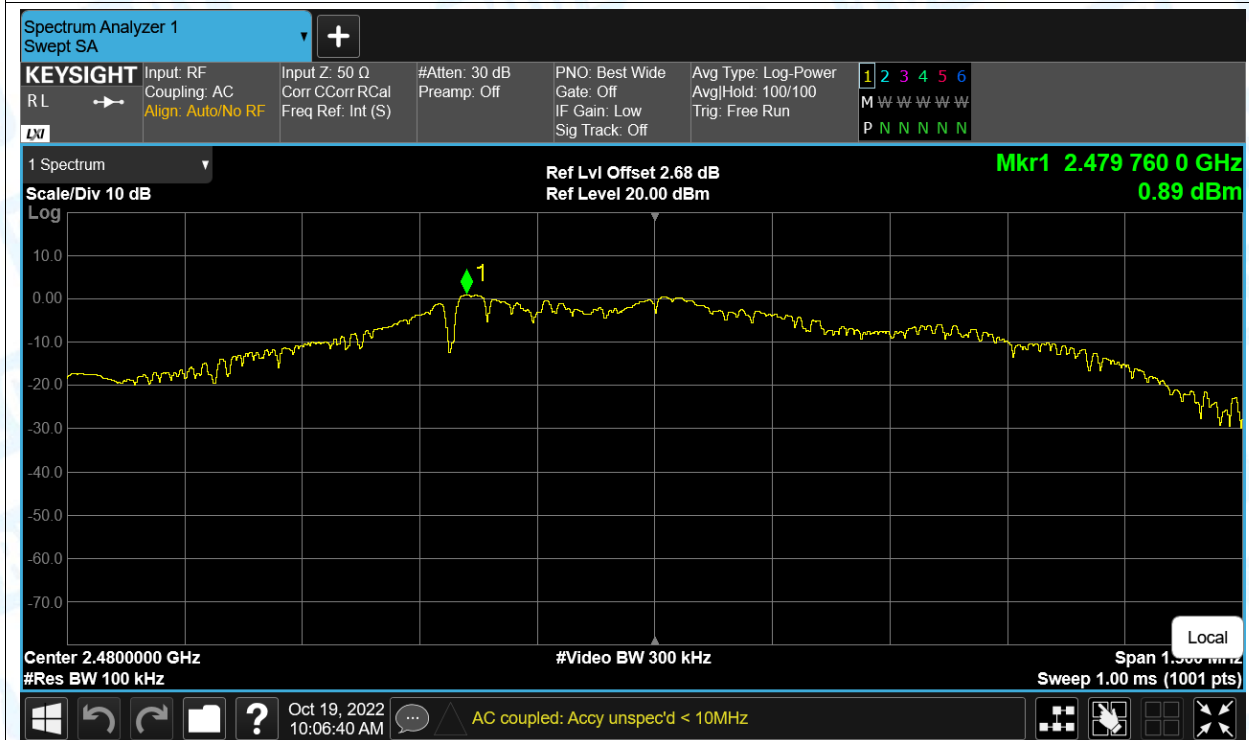
Tx. Spurious NVNT BLE 1Mbps 2440MHz Ant1 Ref



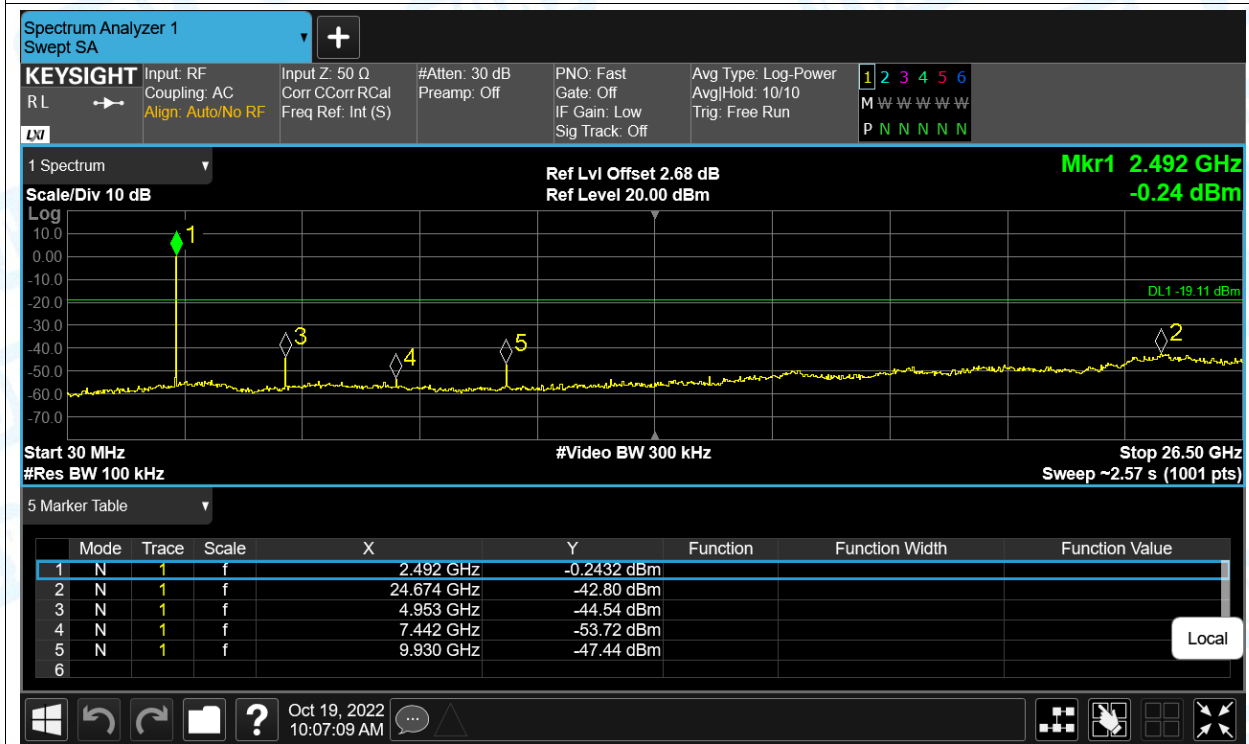
Tx. Spurious NVNT BLE 1Mbps 2440MHz Ant1 Emission



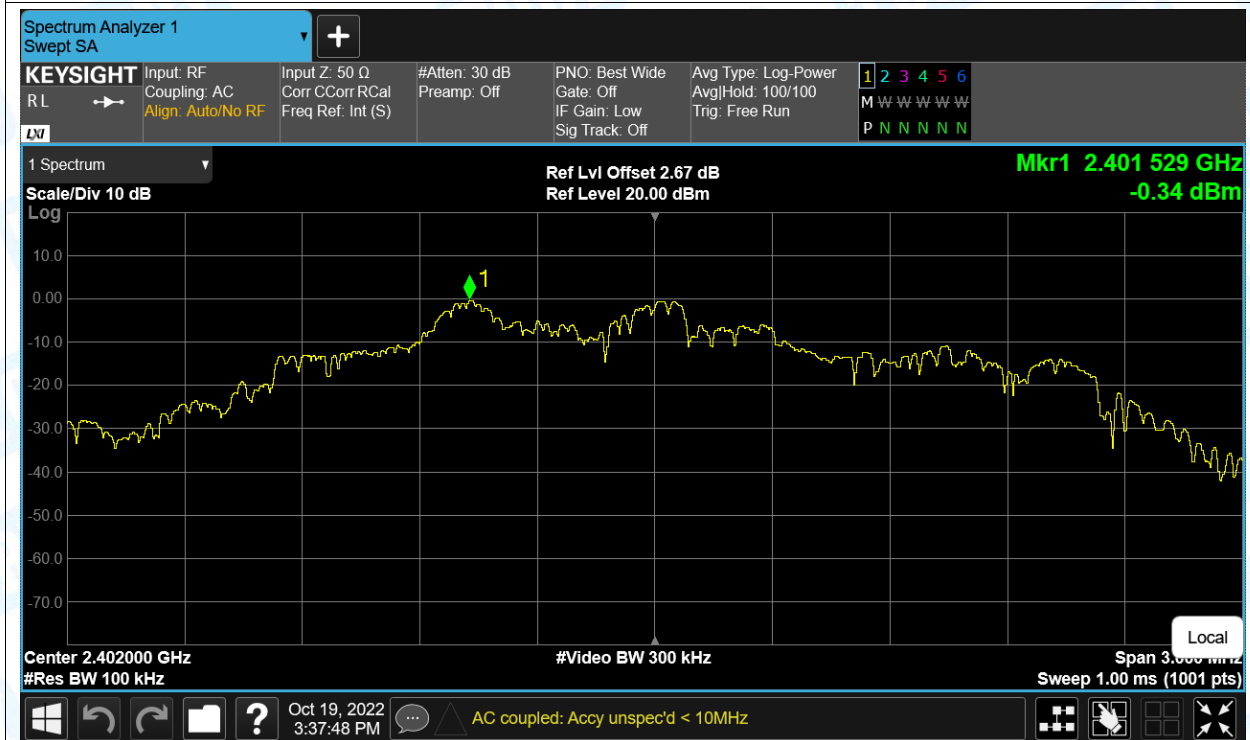
Tx. Spurious NVNT BLE 1Mbps 2480MHz Ant1 Ref



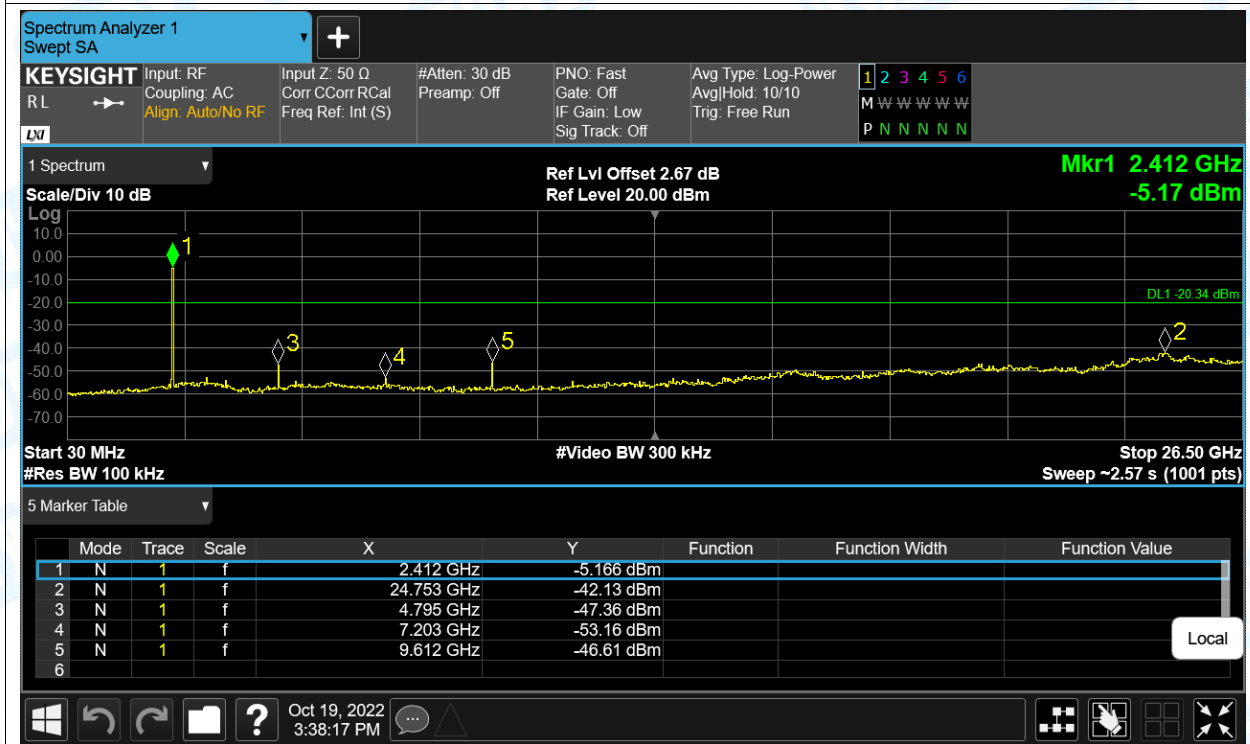
Tx. Spurious NVNT BLE 1Mbps 2480MHz Ant1 Emission



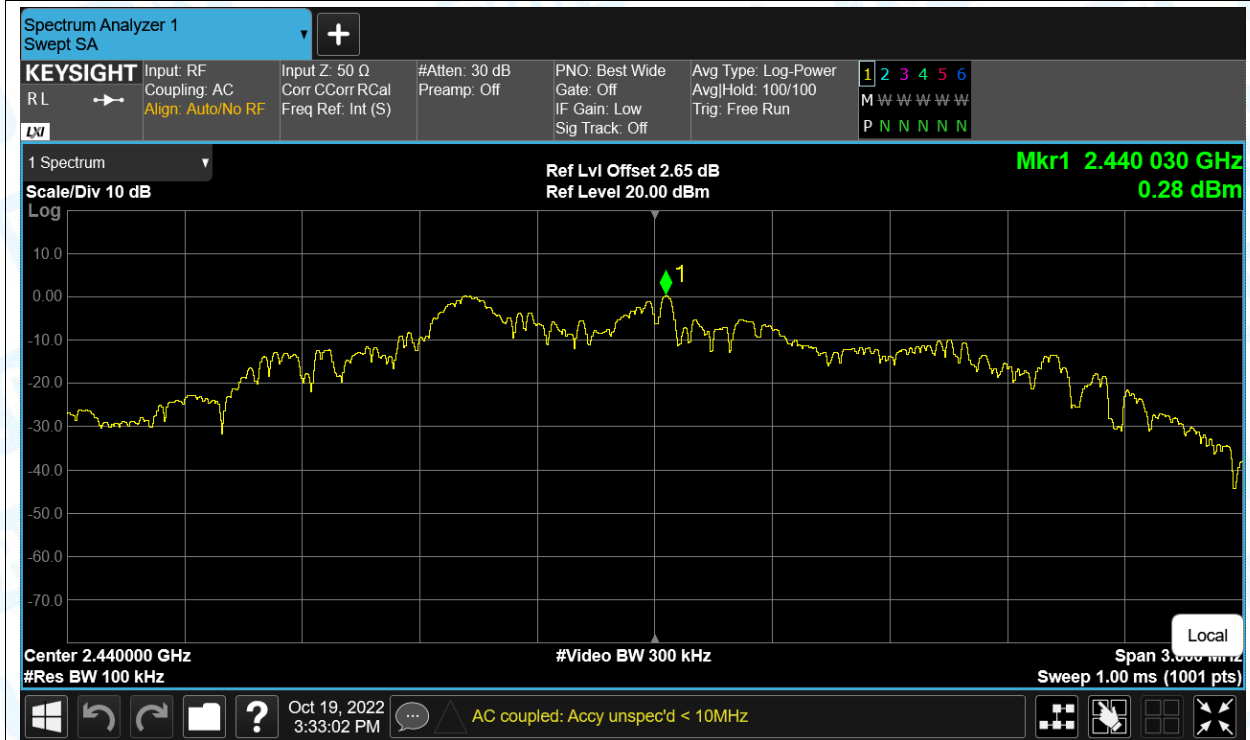
Tx. Spurious NVNT BLE 2Mbps 2402MHz Ant1 Ref



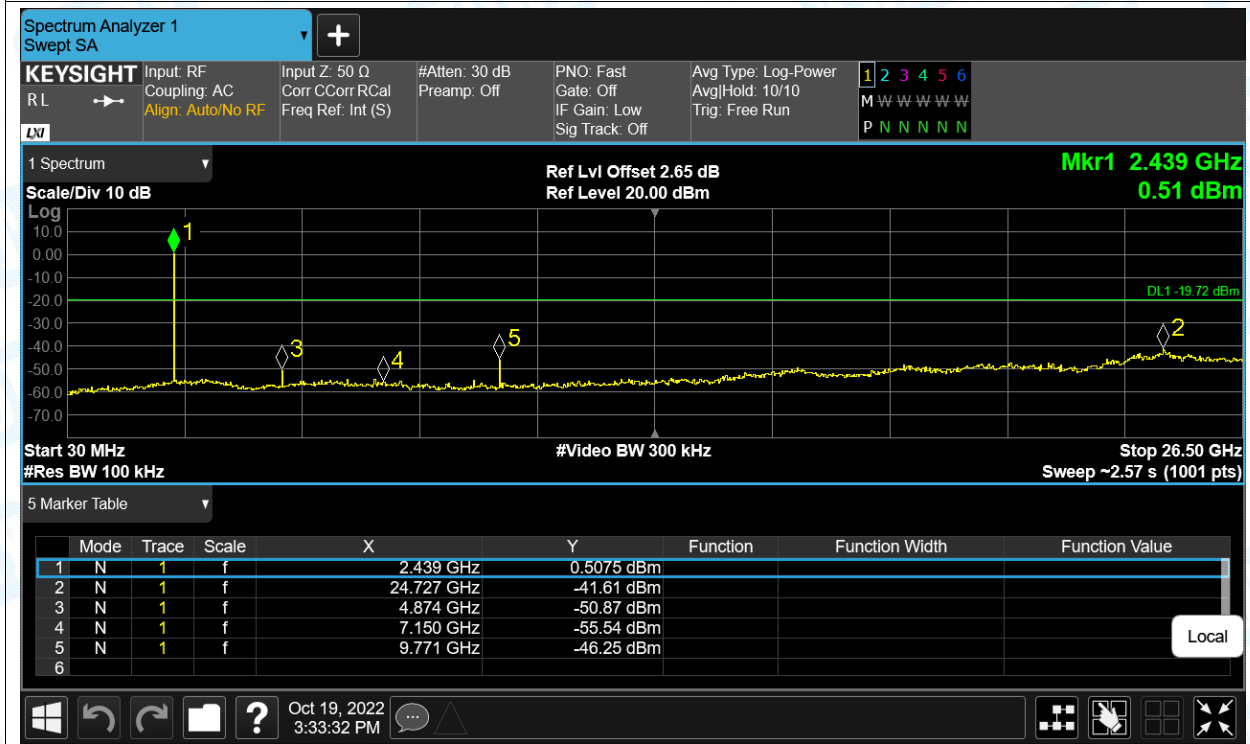
Tx. Spurious NVNT BLE 2Mbps 2402MHz Ant1 Emission



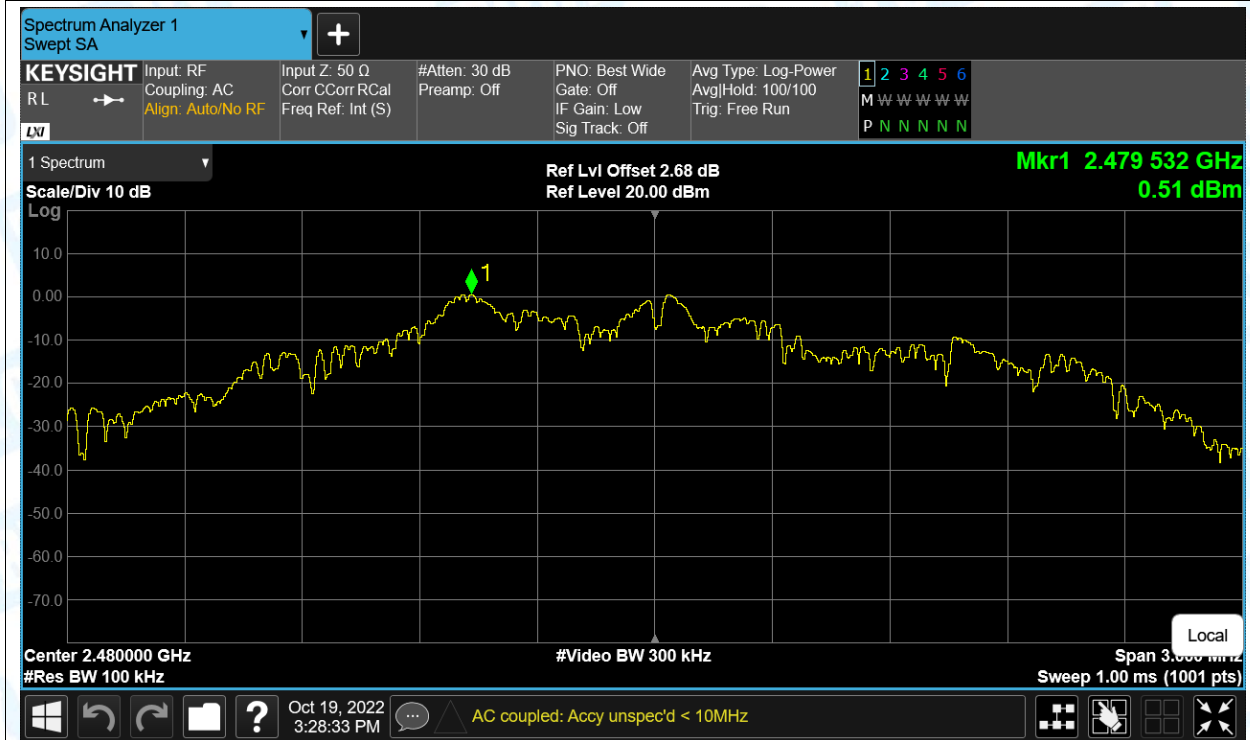
Tx. Spurious NVNT BLE 2Mbps 2440MHz Ant1 Ref



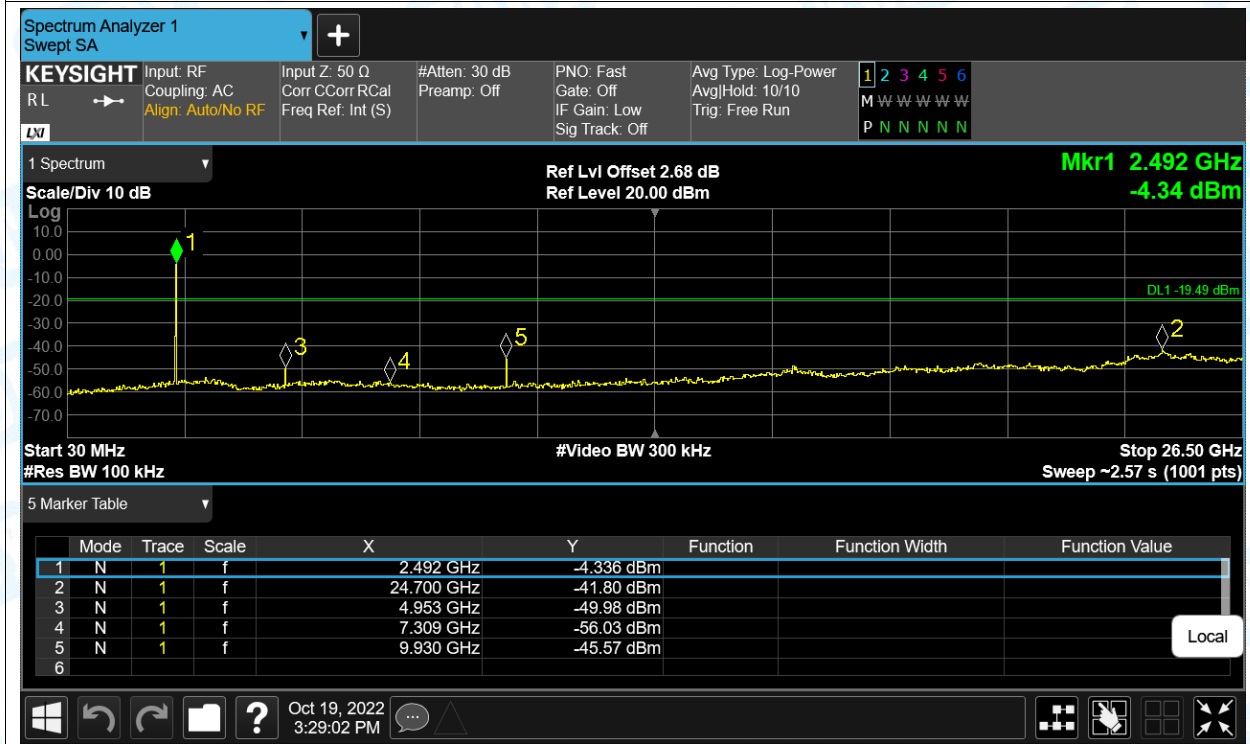
Tx. Spurious NVNT BLE 2Mbps 2440MHz Ant1 Emission



Tx. Spurious NVNT BLE 2Mbps 2480MHz Ant1 Ref



Tx. Spurious NVNT BLE 2Mbps 2480MHz Ant1 Emission



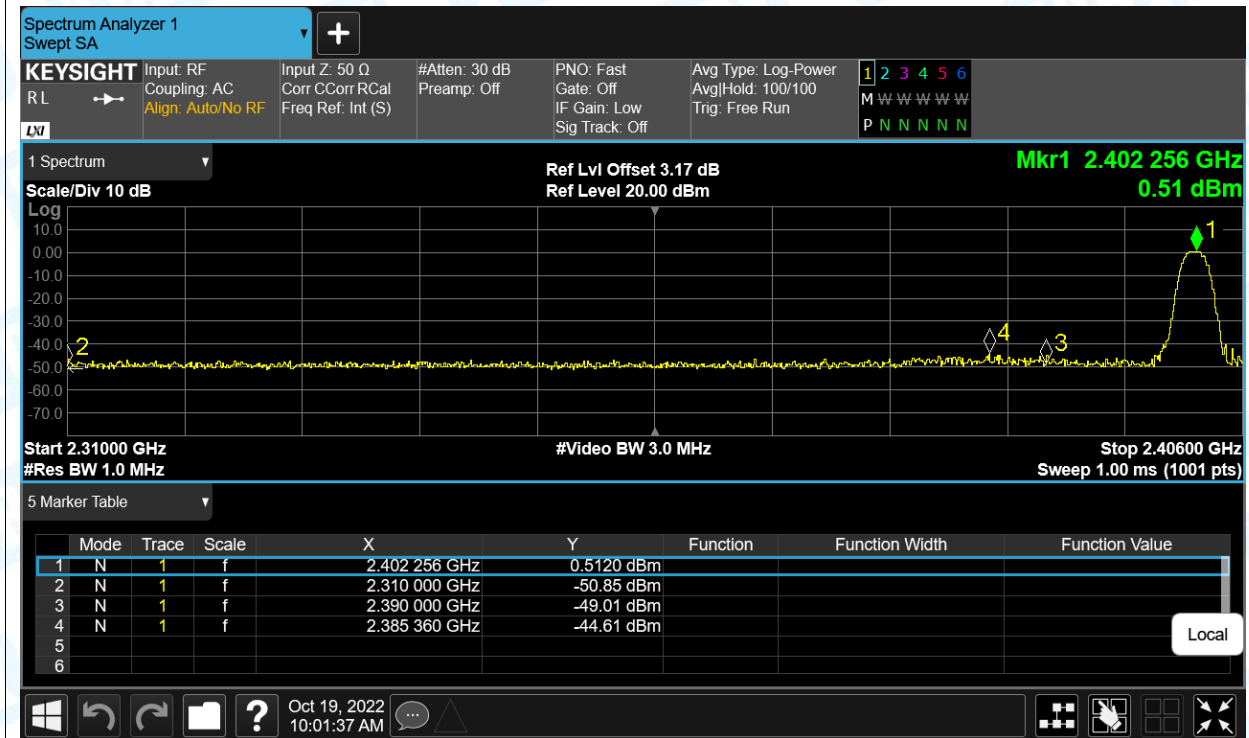
Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	2310	-50.85	2	46.41	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2310	-57.14	2	40.12	Average	54	Pass
NVNT	BLE 1Mbps	2402	Ant1	2385.36	-44.61	2	52.65	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2382.864	-53.41	2	43.85	Average	54	Pass
NVNT	BLE 1Mbps	2402	Ant1	2390	-44.77	2	52.49	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2390	-54.57	2	42.69	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.5	-48.88	2	48.38	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.5	-56.3	2	40.96	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2493.328	-43.24	2	54.02	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2498.2	-53.3	2	43.96	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2500	-47.4	2	49.86	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2500	-54.57	2	42.69	Average	54	Pass
NVNT	BLE 2Mbps	2402	Ant1	2310	-49.41	2	47.85	Peak	74	Pass
NVNT	BLE 2Mbps	2402	Ant1	2310	-56.9	2	40.36	Average	54	Pass
NVNT	BLE 2Mbps	2402	Ant1	2382.48	-44.14	2	53.12	Peak	74	Pass
NVNT	BLE 2Mbps	2402	Ant1	2382.96	-52.59	2	44.67	Average	54	Pass
NVNT	BLE 2Mbps	2402	Ant1	2390	-48.58	2	48.68	Peak	74	Pass
NVNT	BLE 2Mbps	2402	Ant1	2390	-54.86	2	42.4	Average	54	Pass
NVNT	BLE 2Mbps	2480	Ant1	2483.5	-46.44	2	50.82	Peak	74	Pass
NVNT	BLE 2Mbps	2480	Ant1	2483.5	-52.9	2	44.36	Average	54	Pass
NVNT	BLE 2Mbps	2480	Ant1	2485.552	-35.78	2	61.48	Peak	74	Pass
NVNT	BLE 2Mbps	2480	Ant1	2497.864	-51.95	2	45.31	Average	54	Pass

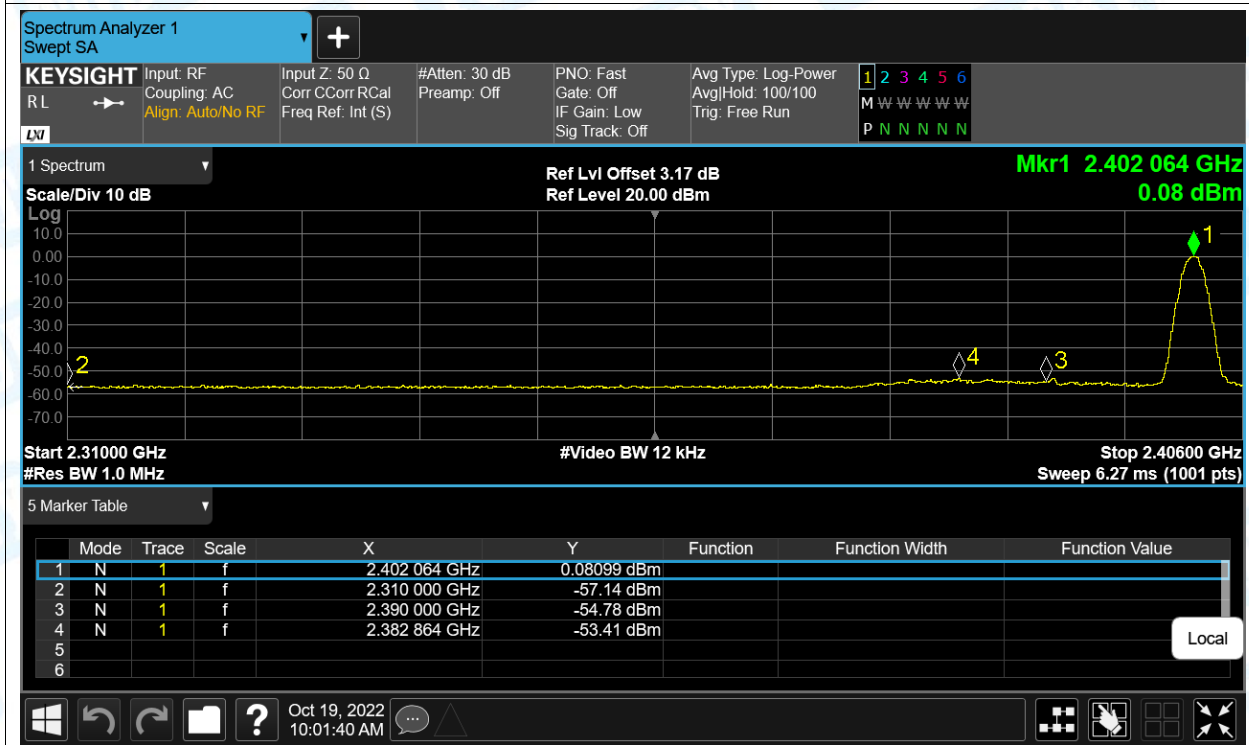
NVNT	BLE 2Mbps	2480	Ant1	2500	-46.9	2	50.36	Peak	74	Pass
NVNT	BLE 2Mbps	2480	Ant1	2500	-53.22	2	44.04	Average	54	Pass

Test Graphs

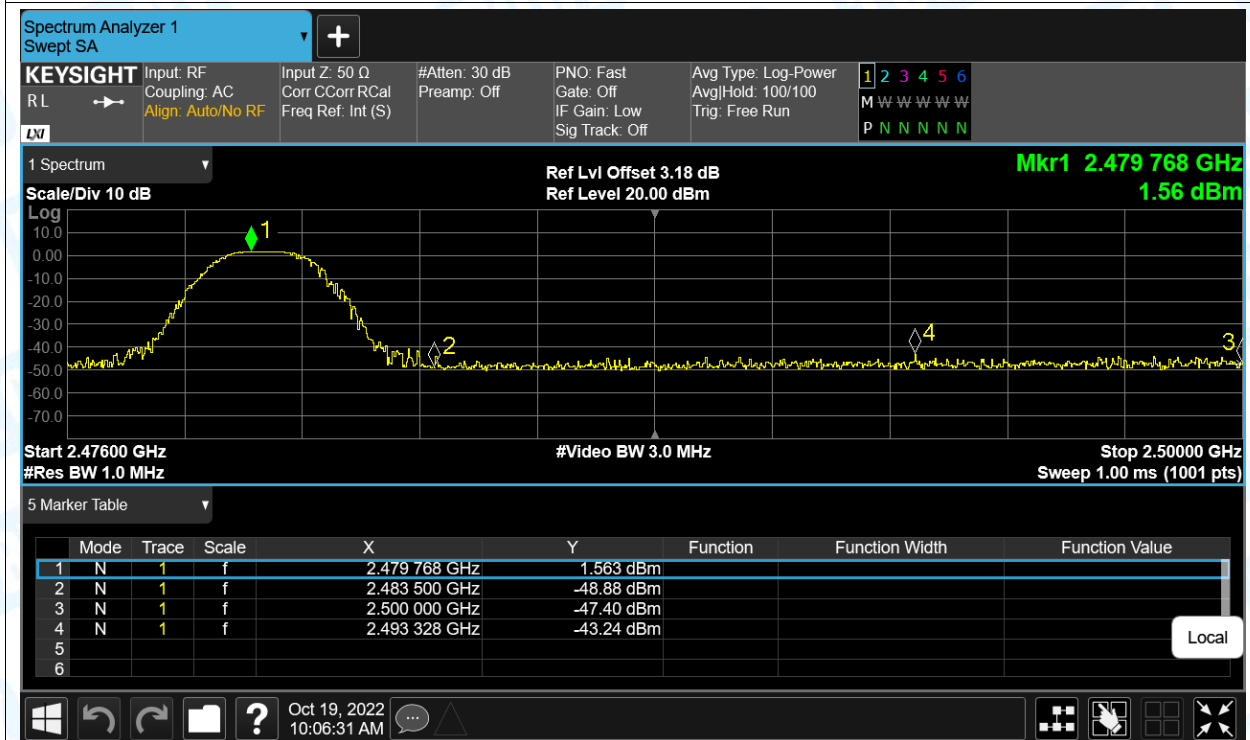
Restrict Band NVNT BLE 1Mbps 2402MHz Ant1 Peak



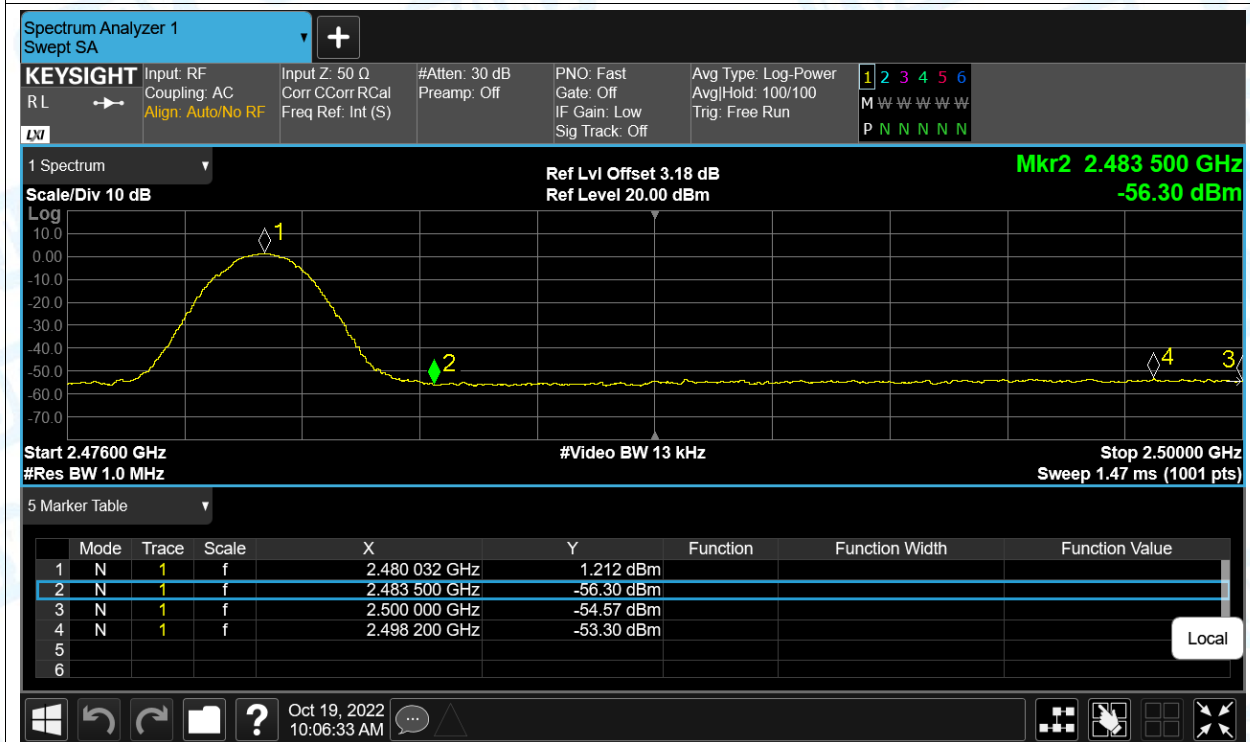
Restrict Band NVNT BLE 1Mbps 2402MHz Ant1 Average



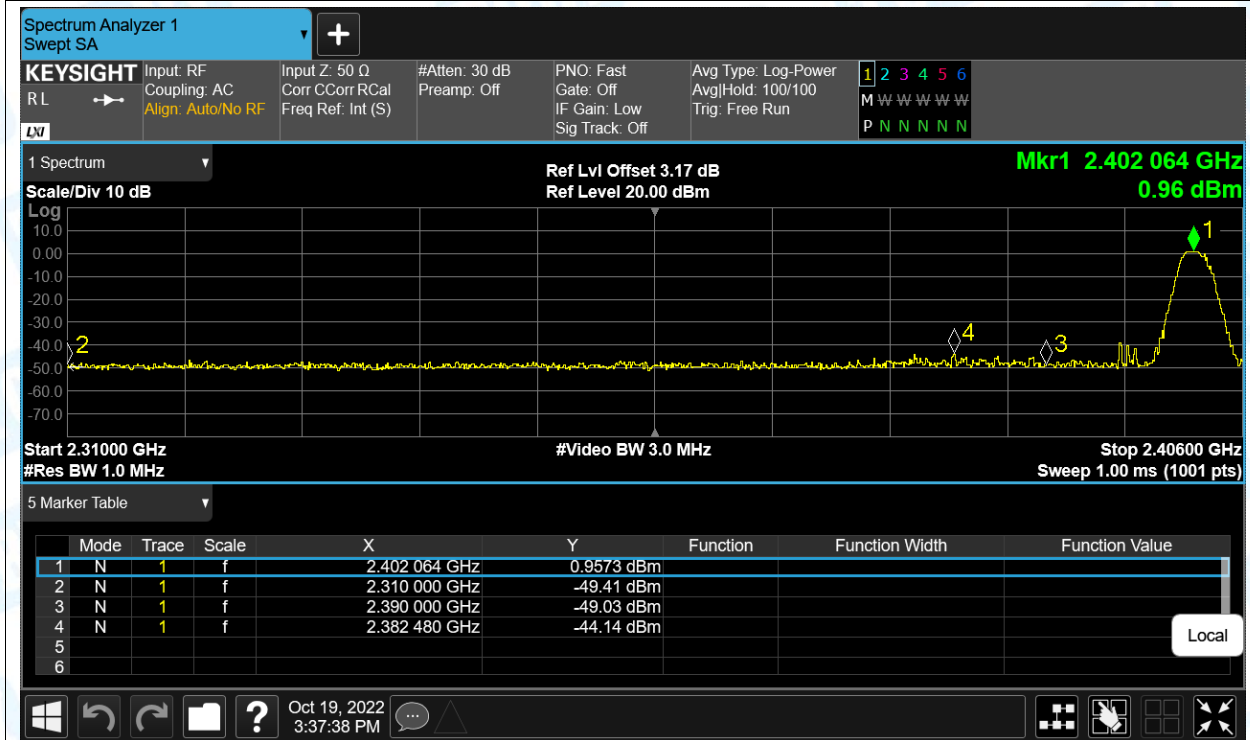
Restrict Band NVNT BLE 1Mbps 2480MHz Ant1 Peak



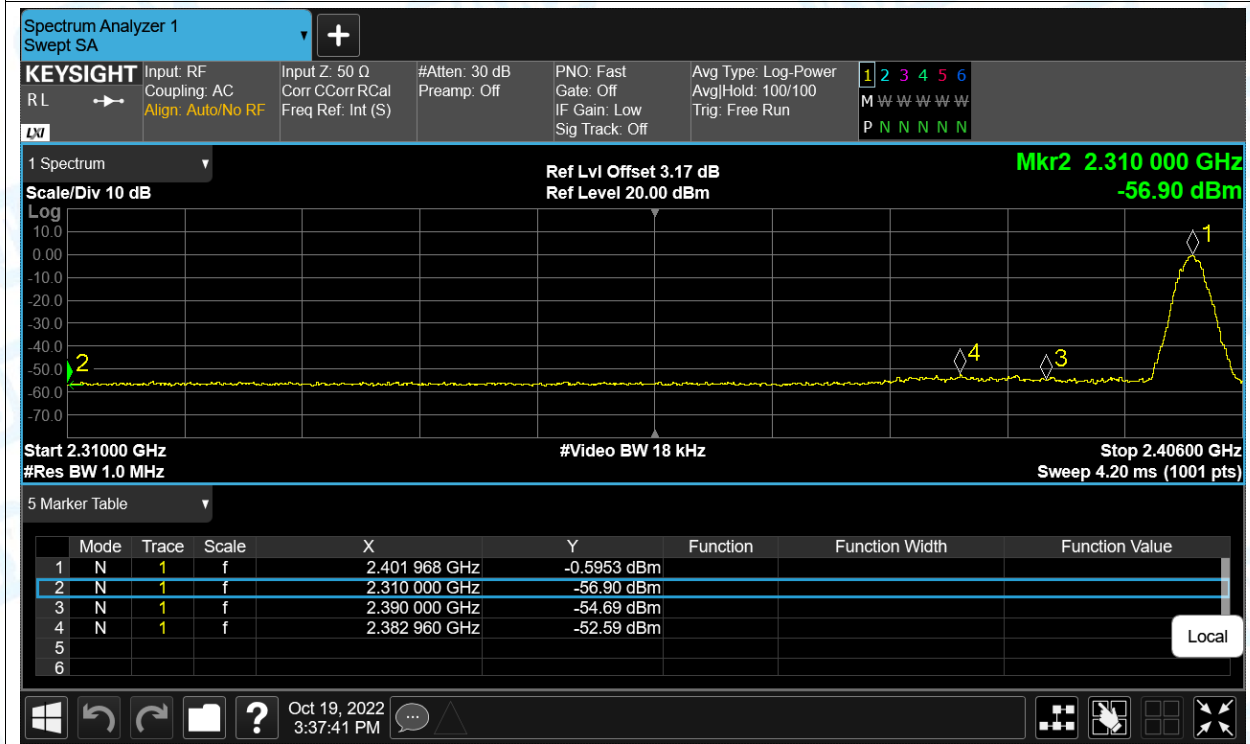
Restrict Band NVNT BLE 1Mbps 2480MHz Ant1 Average



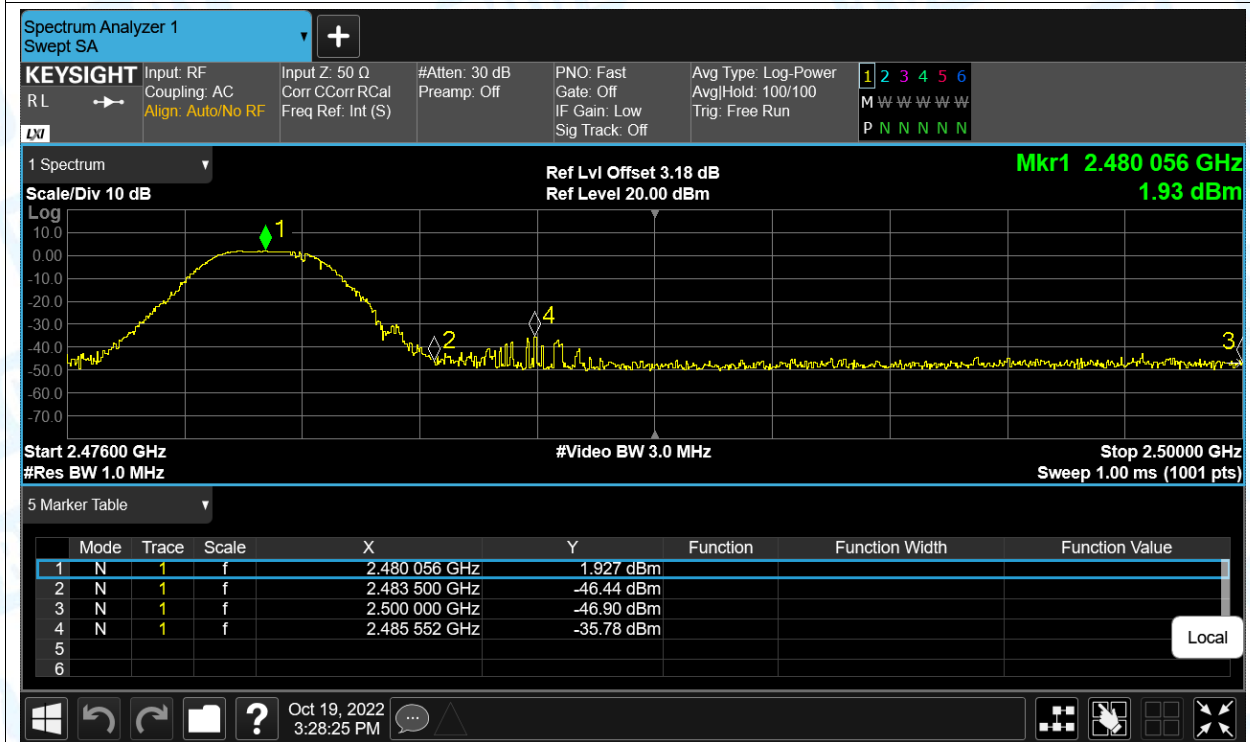
Restrict Band NVNT BLE 2Mbps 2402MHz Ant1 Peak



Restrict Band NVNT BLE 2Mbps 2402MHz Ant1 Average



Restrict Band NVNT BLE 2Mbps 2480MHz Ant1 Peak



Restrict Band NVNT BLE 2Mbps 2480MHz Ant1 Average

