

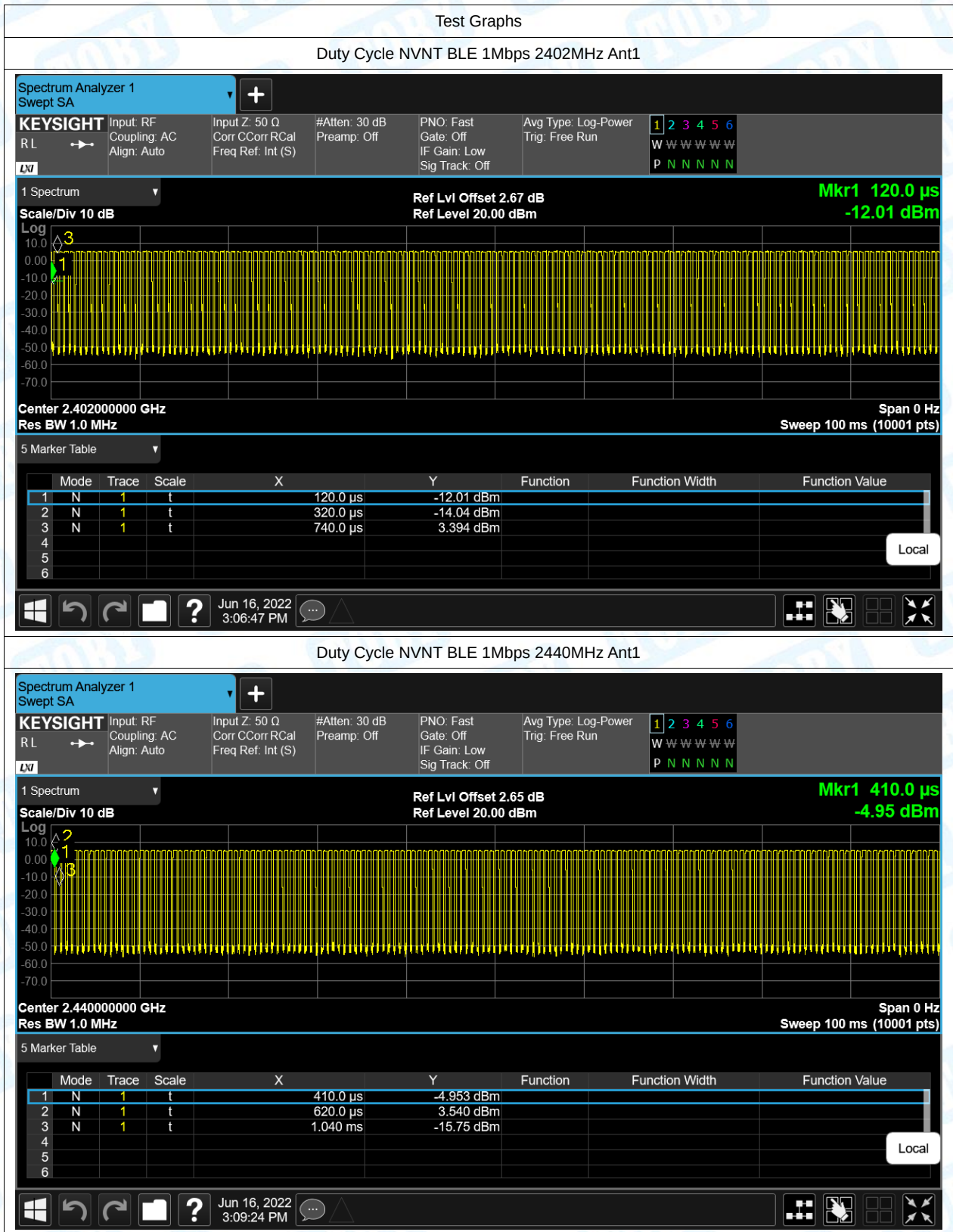
RF Test Data for Bluetooth LE

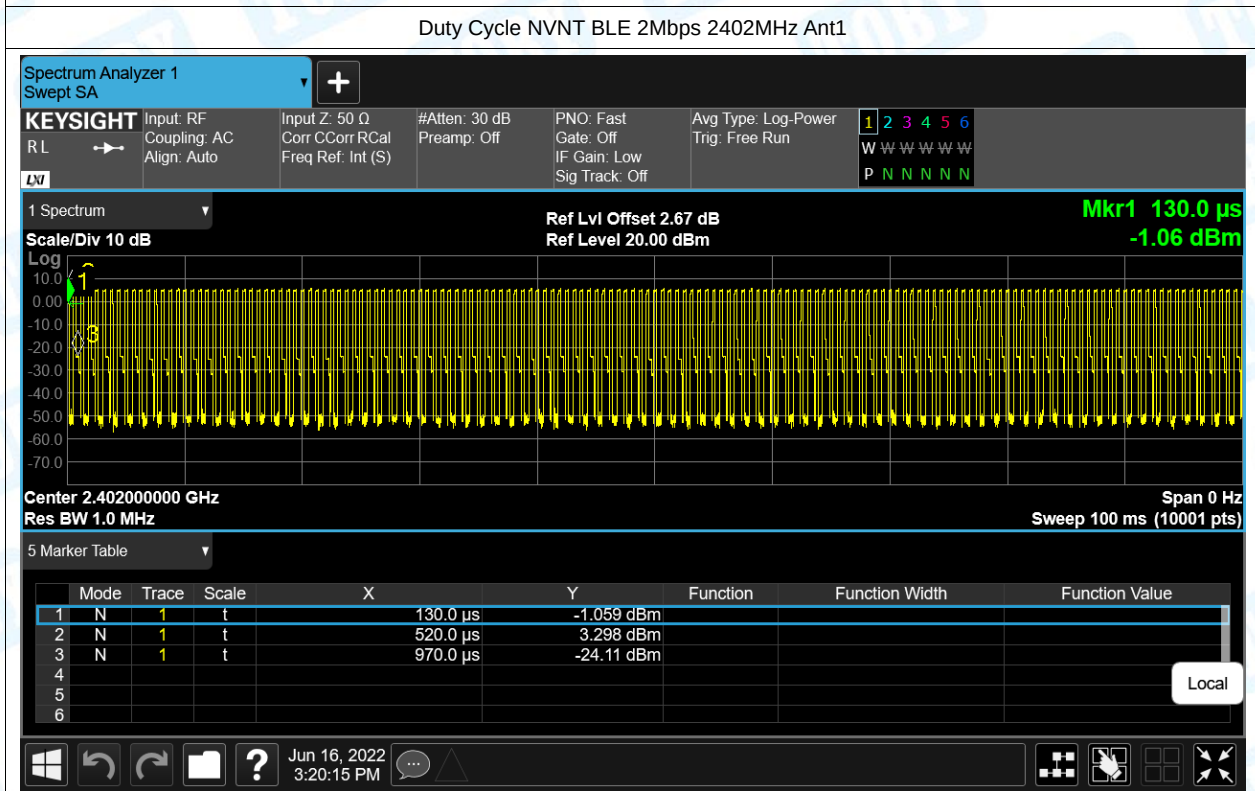
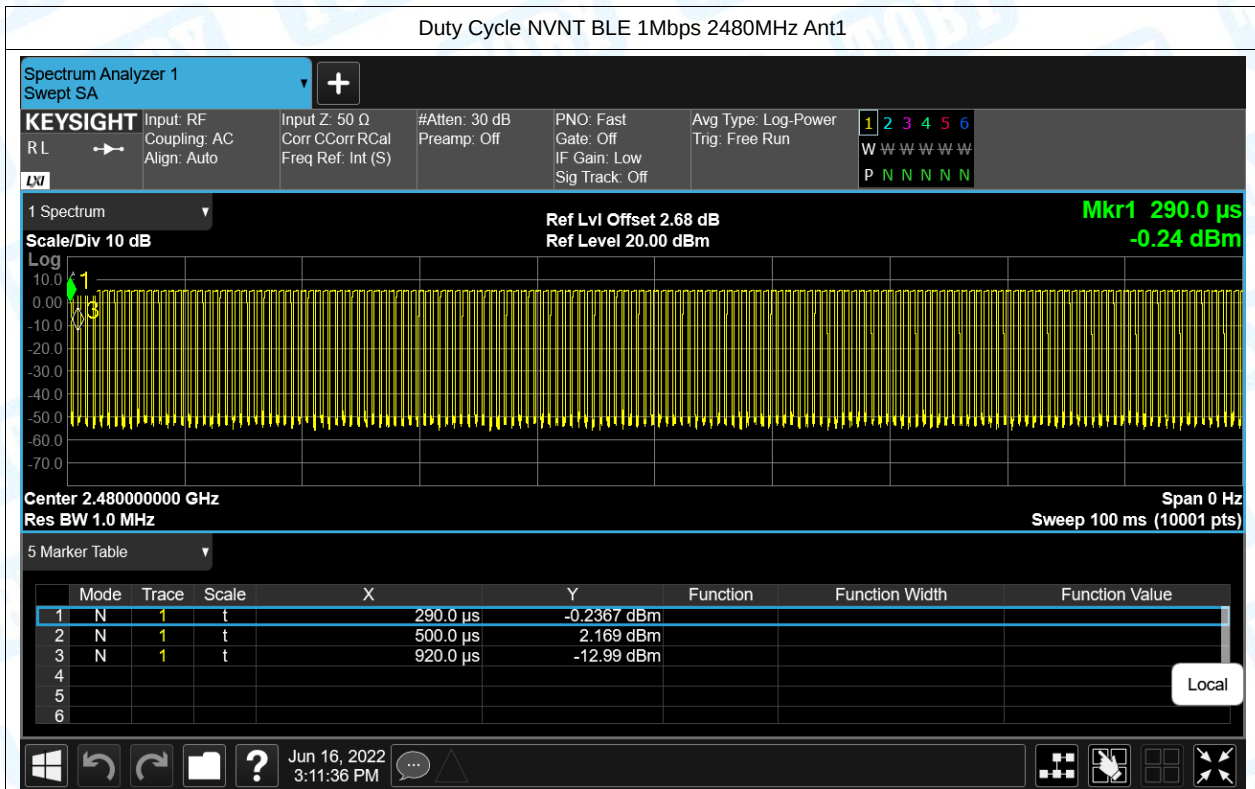
(Conducted Measurements)

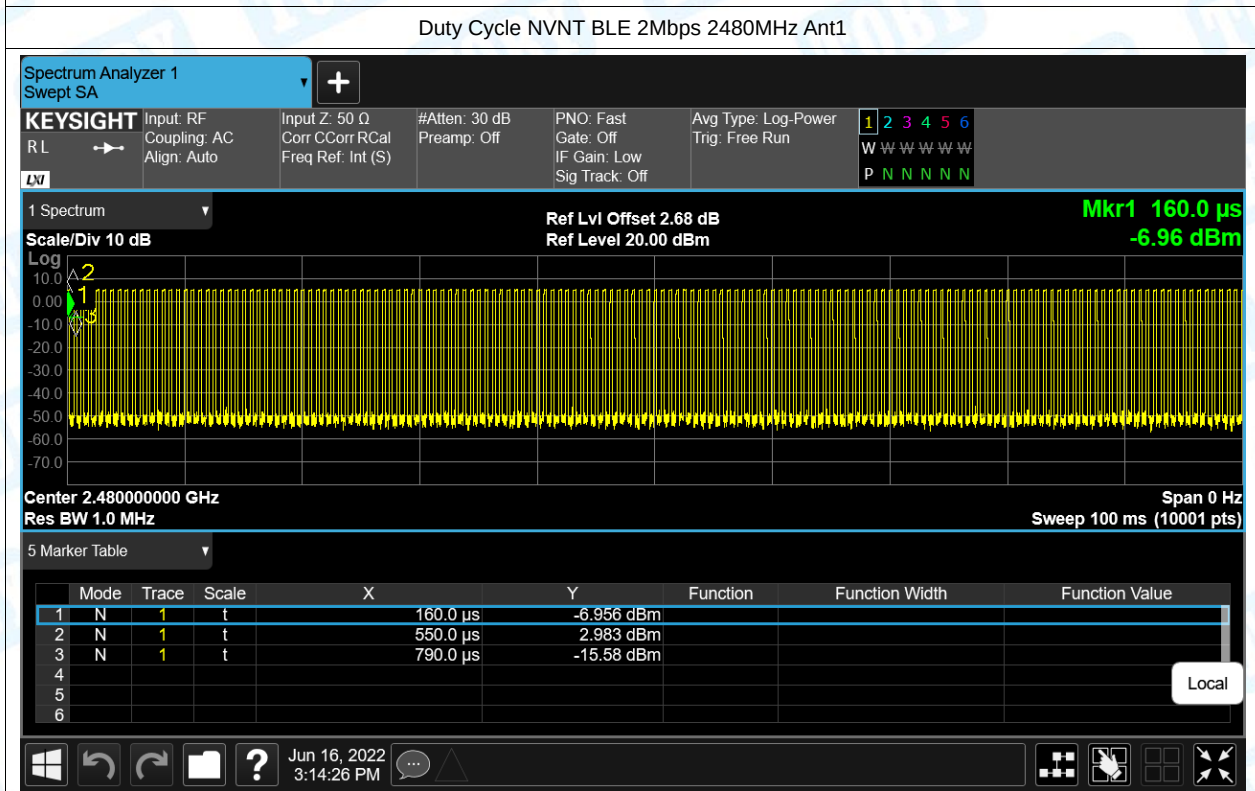
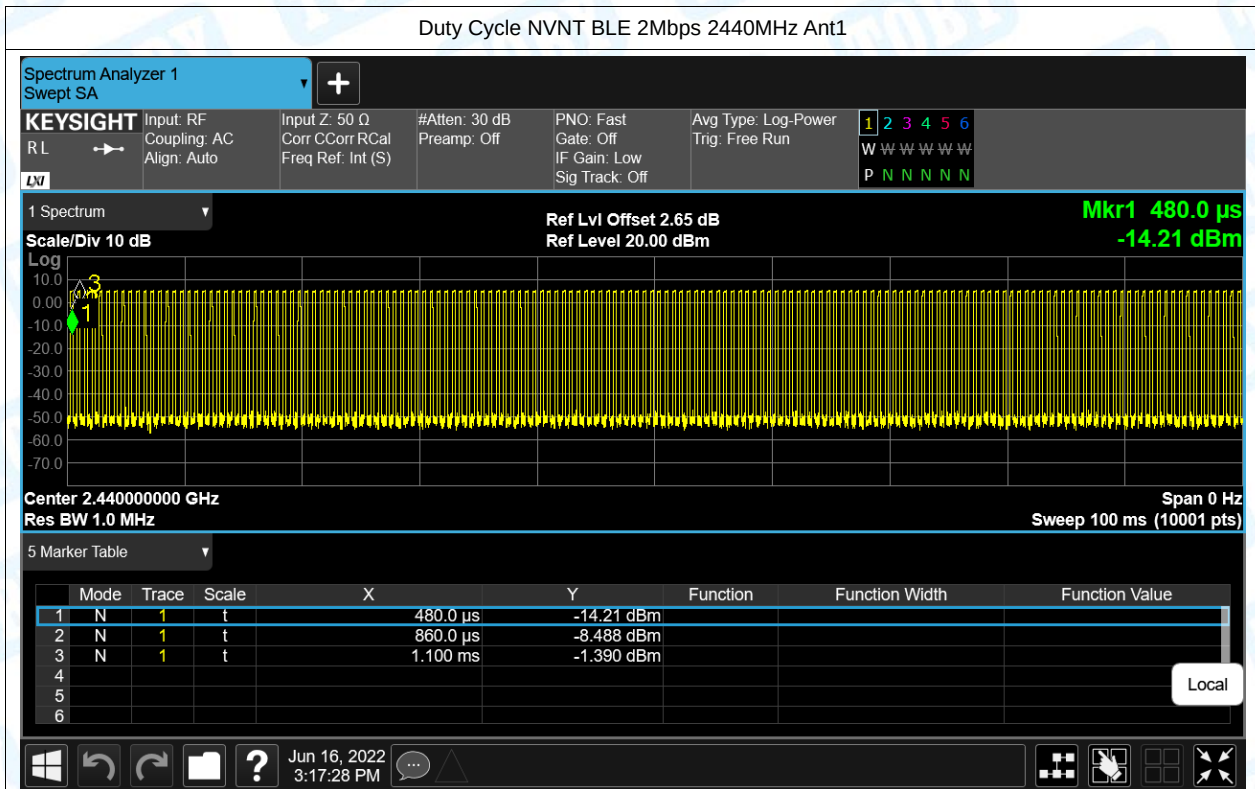
General Description of EUT	
Product Name:	GT4
Test Model:	GT4
Sample ID:	202206-0047-2-2#
Environmental Conditions	
Temperature:	24℃
Relative Humidity:	50%
Test Voltage:	DC 3.7V
Test Engineer:	Liufeng
Note: For a more detailed features description, please refer to the report TBR-C-202206-0047-8.	

Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1Mbps	2402	Ant1	69.28	1.59	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	53.52	2.71	2.22
NVNT	BLE 2Mbps	2440	Ant1	40	3.98	4.17
NVNT	BLE 2Mbps	2480	Ant1	40.01	3.98	4.17

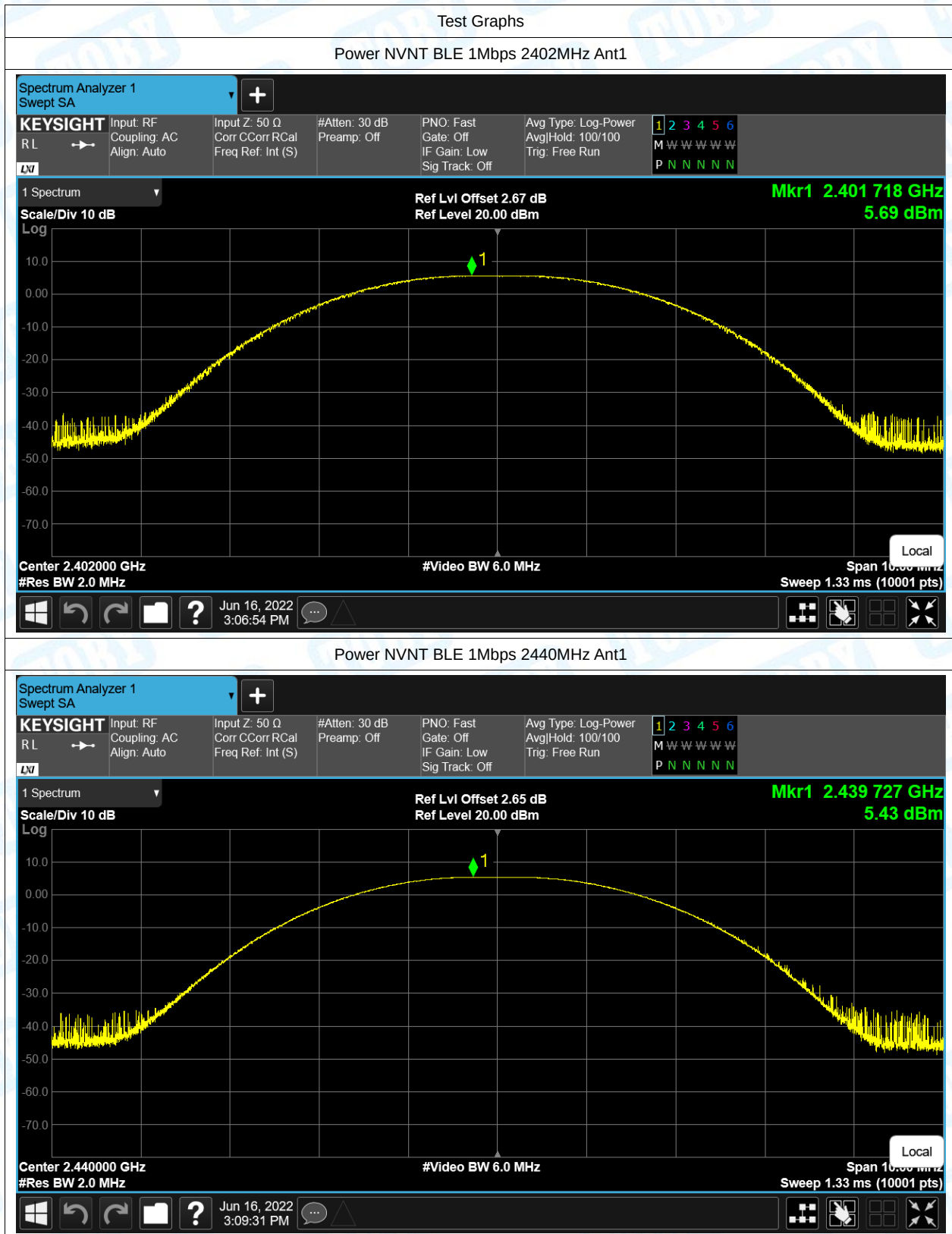


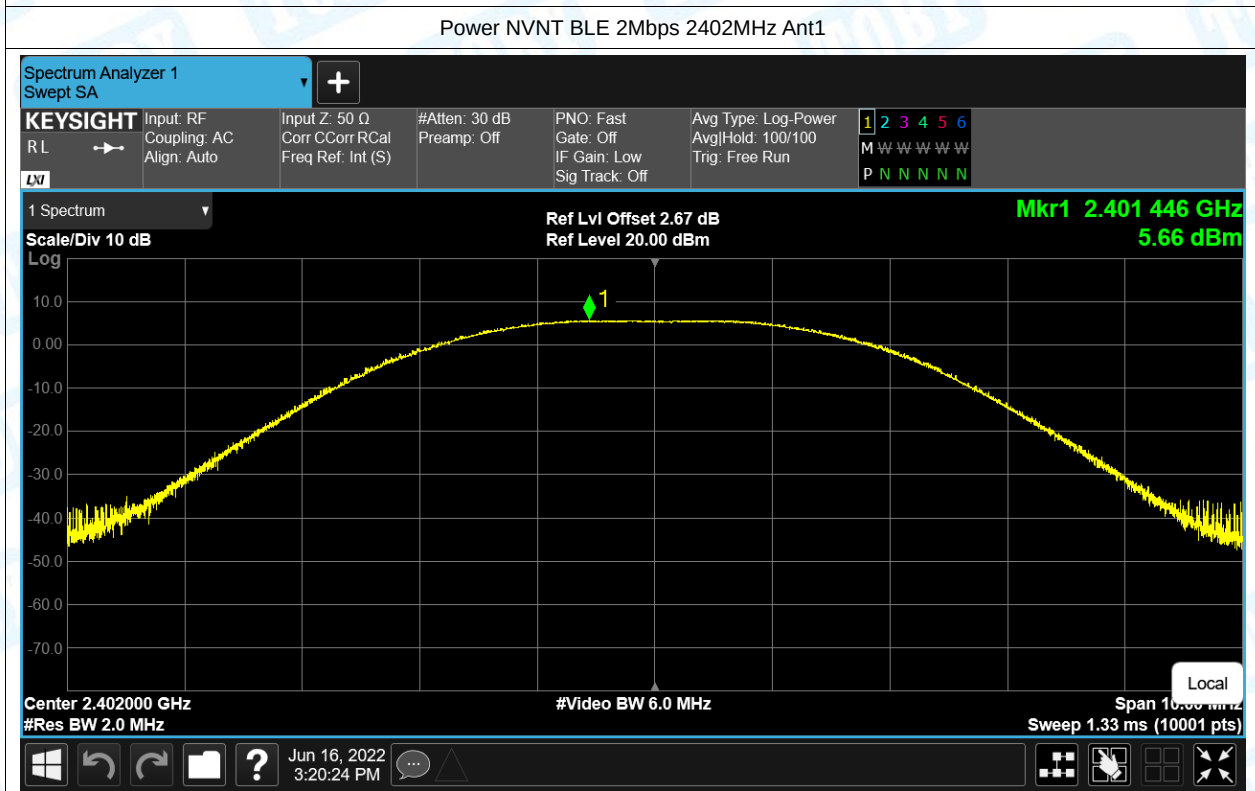
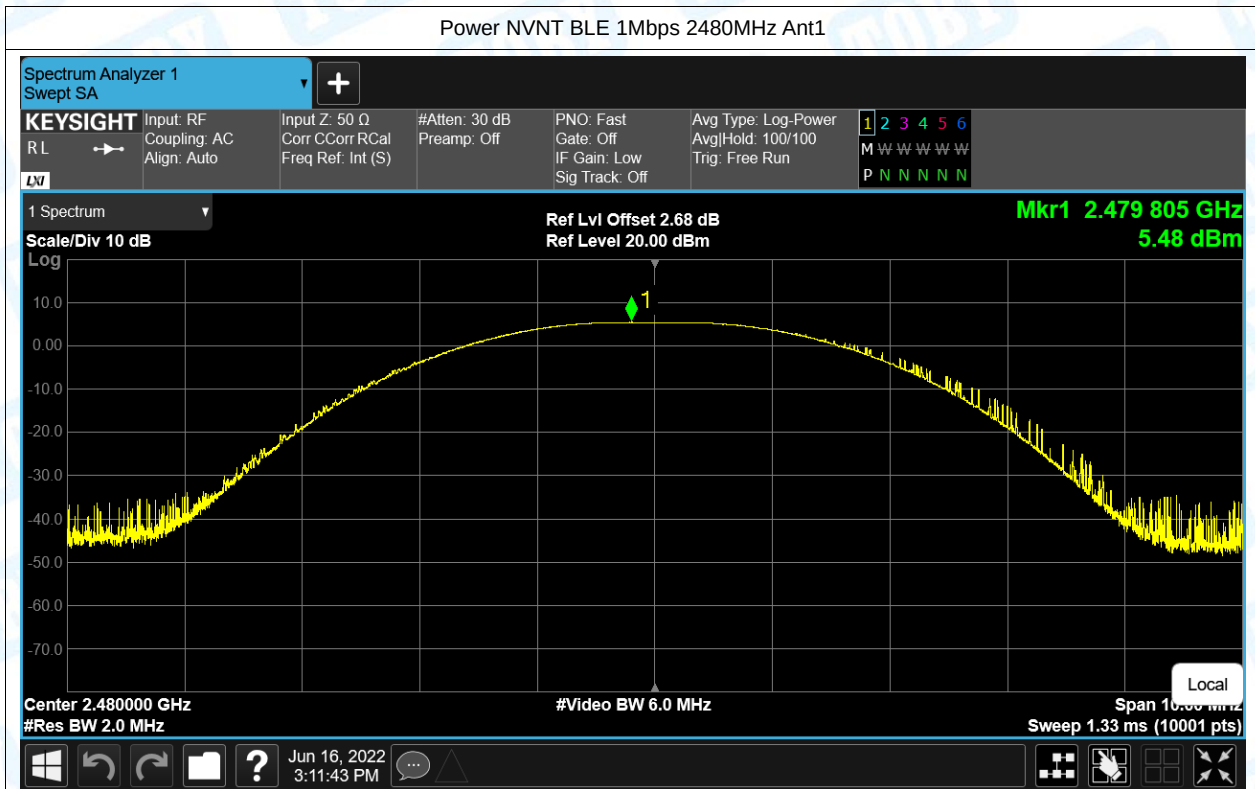


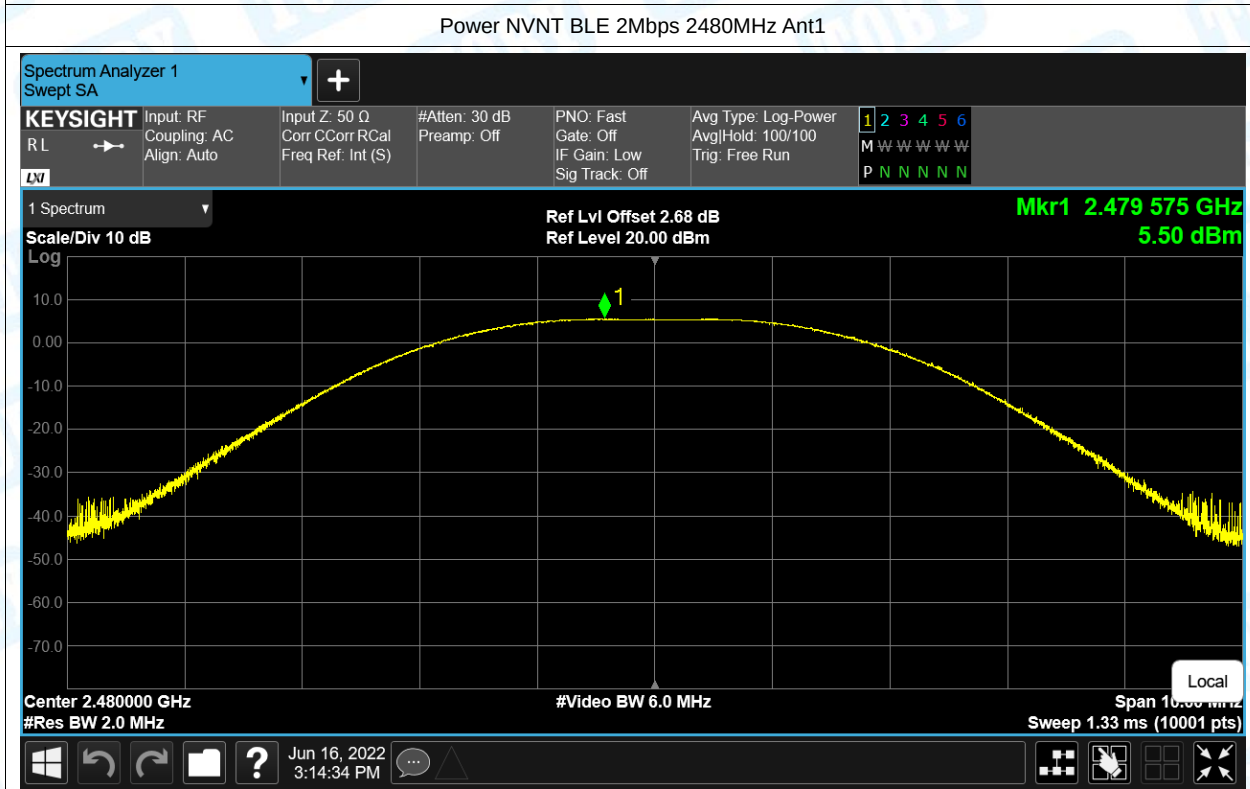
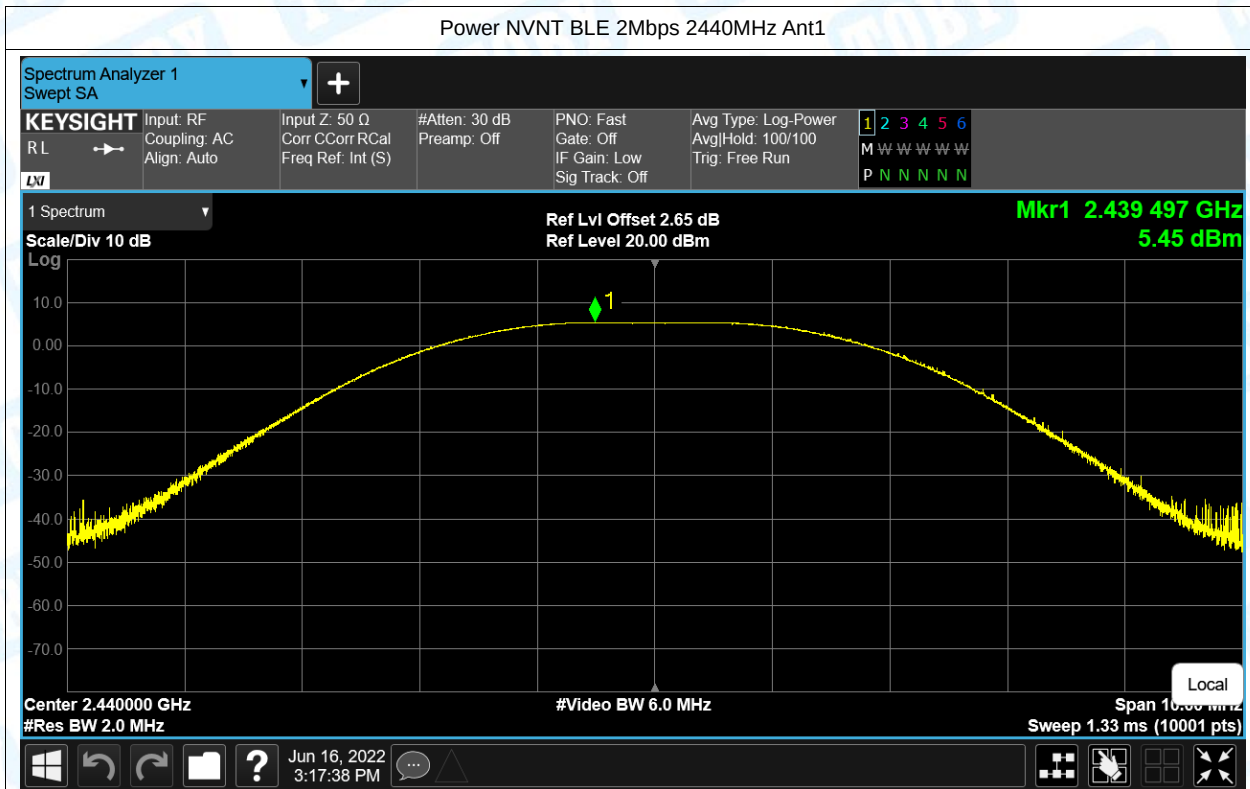


Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	5.69	30	Pass
NVNT	BLE 1Mbps	2440	Ant1	5.43	30	Pass
NVNT	BLE 1Mbps	2480	Ant1	5.48	30	Pass
NVNT	BLE 2Mbps	2402	Ant1	5.66	30	Pass
NVNT	BLE 2Mbps	2440	Ant1	5.45	30	Pass
NVNT	BLE 2Mbps	2480	Ant1	5.50	30	Pass





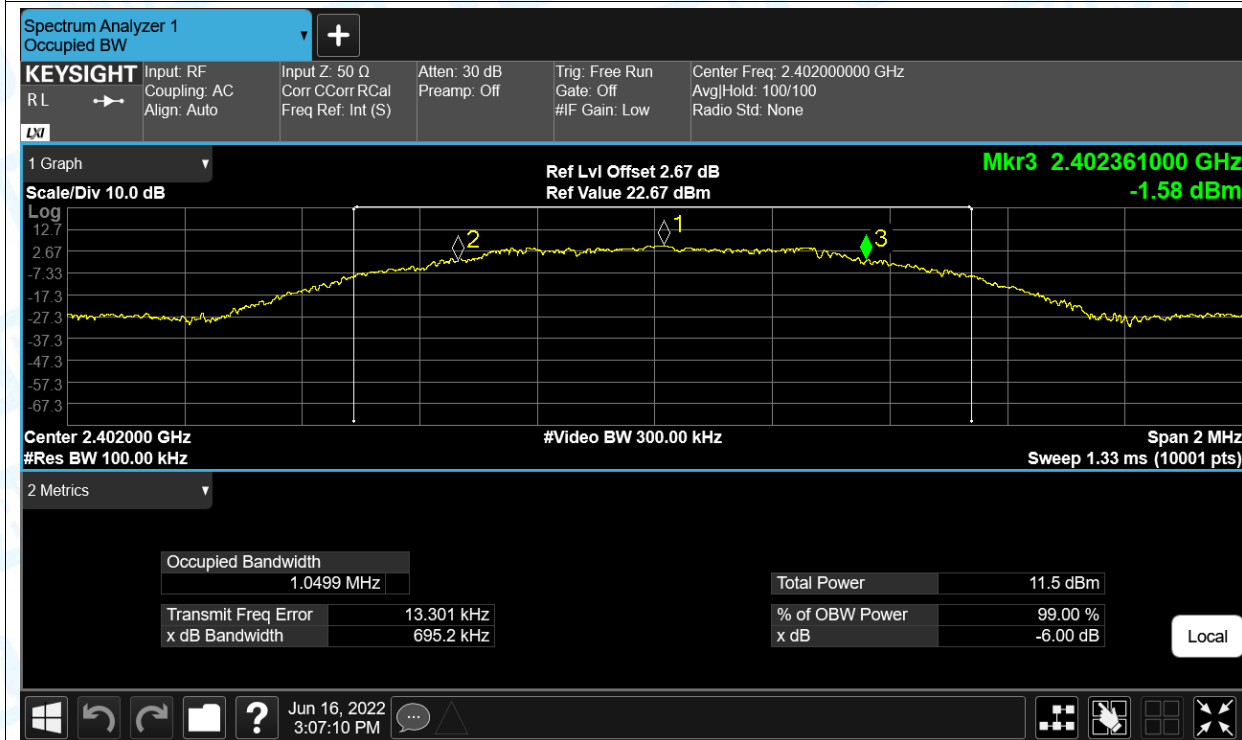


-6dB Bandwidth

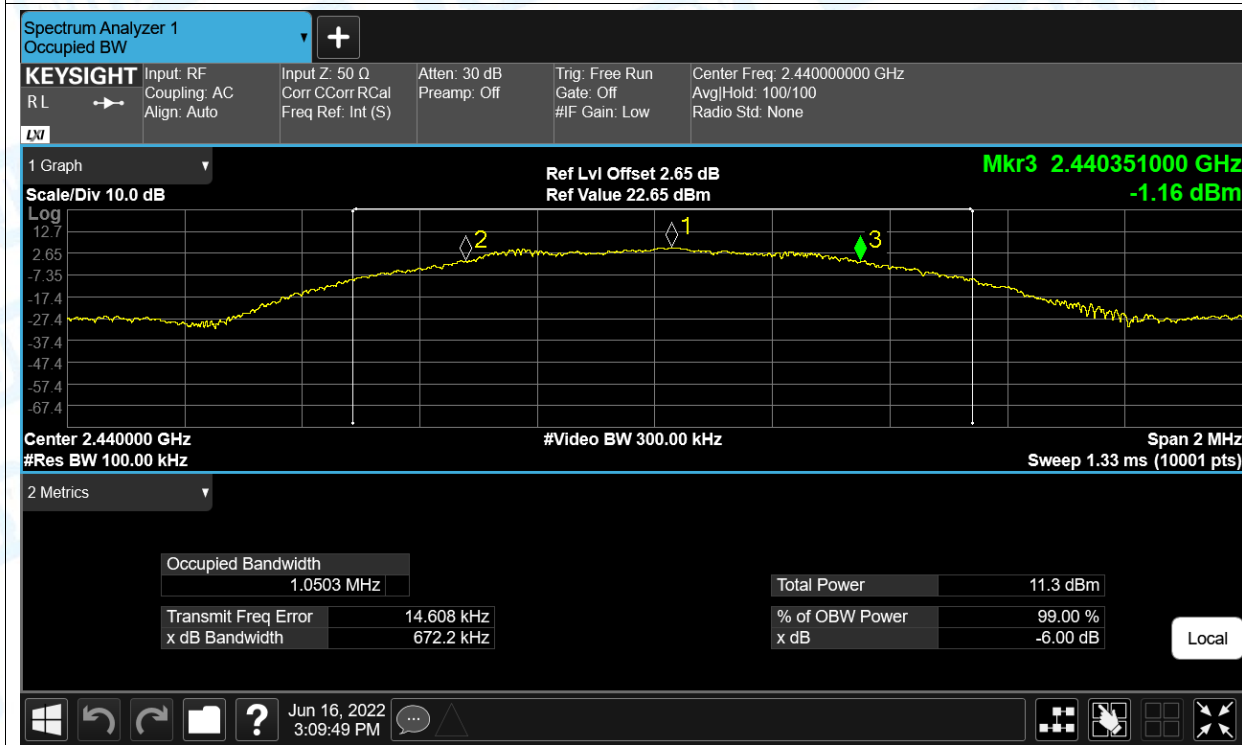
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	0.7	0.5	Pass
NVNT	BLE 1Mbps	2440	Ant1	0.67	0.5	Pass
NVNT	BLE 1Mbps	2480	Ant1	0.73	0.5	Pass
NVNT	BLE 2Mbps	2402	Ant1	1.11	0.5	Pass
NVNT	BLE 2Mbps	2440	Ant1	1.04	0.5	Pass
NVNT	BLE 2Mbps	2480	Ant1	0.92	0.5	Pass

Test Graphs

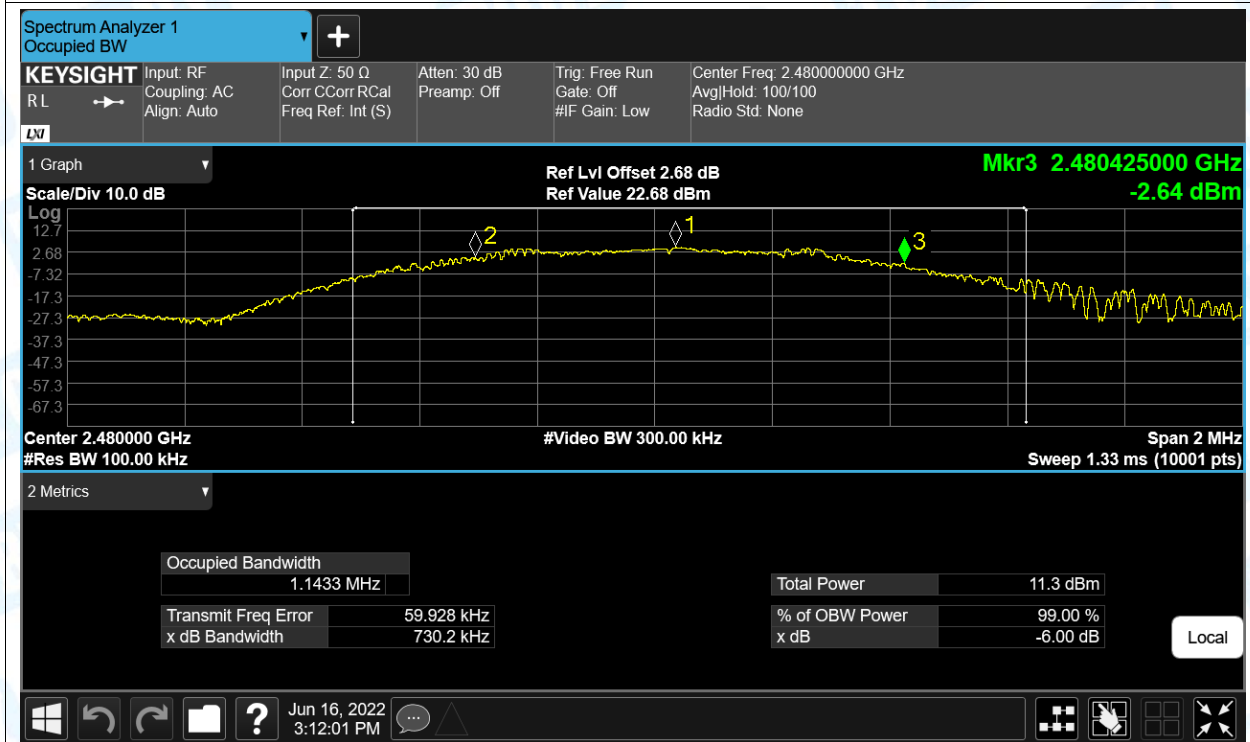
-6dB Bandwidth NVNT BLE 1Mbps 2402MHz Ant1



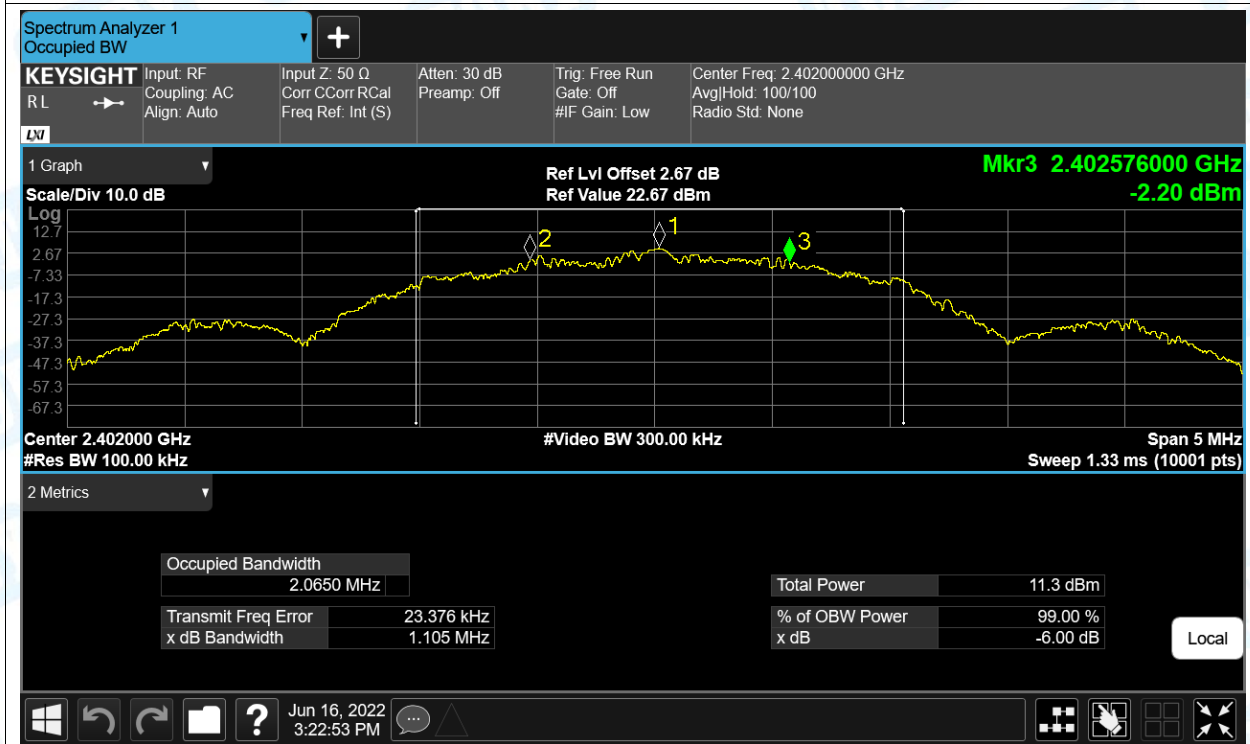
-6dB Bandwidth NVNT BLE 1Mbps 2440MHz Ant1



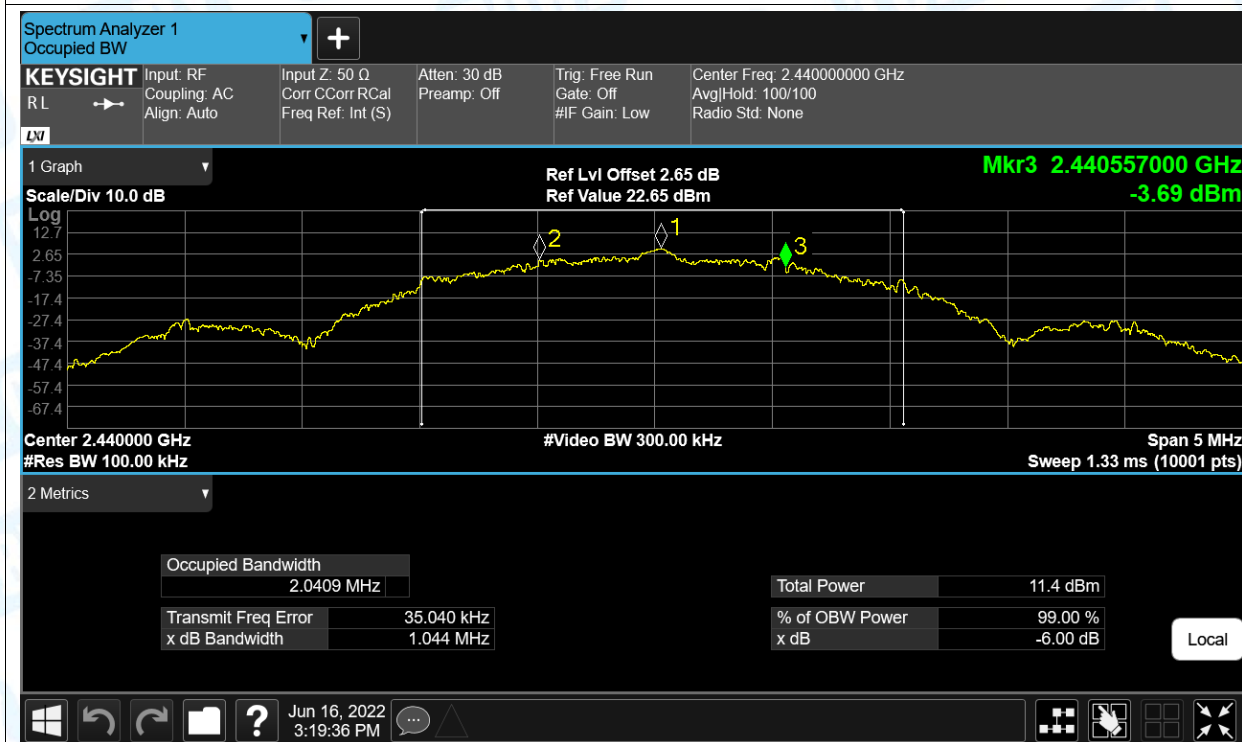
-6dB Bandwidth NVNT BLE 1Mbps 2480MHz Ant1



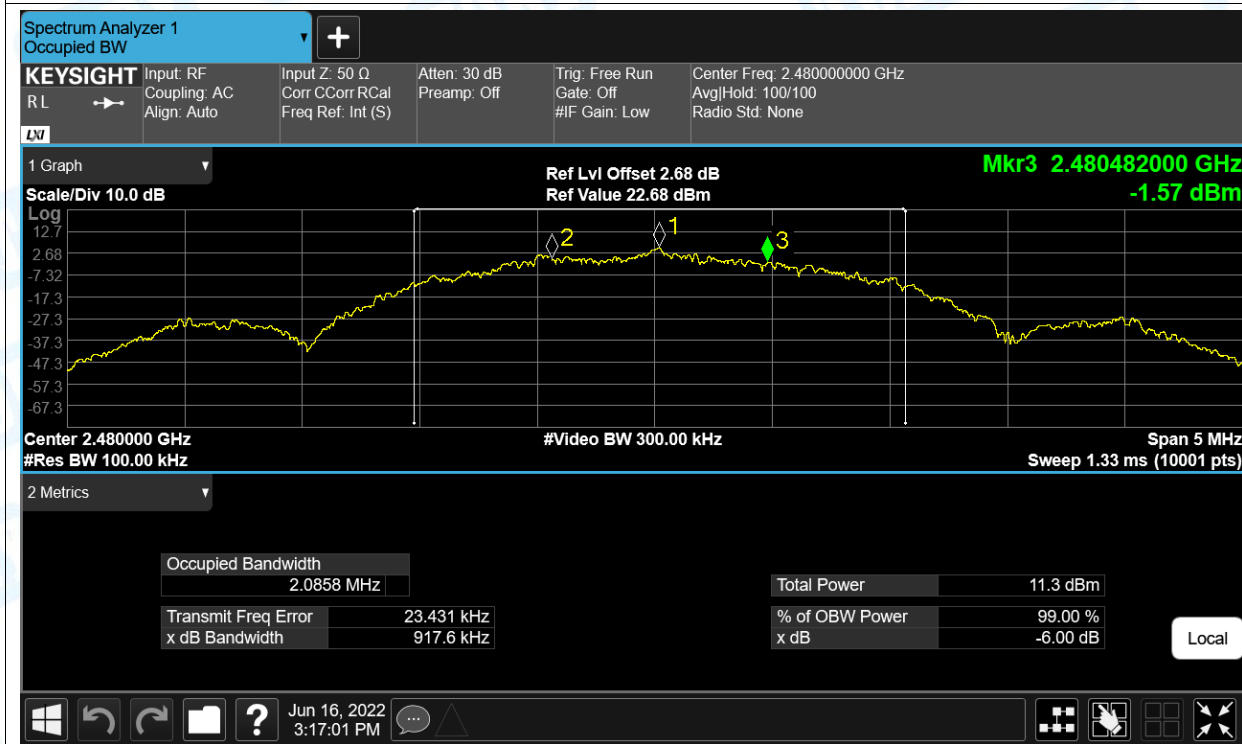
-6dB Bandwidth NVNT BLE 2Mbps 2402MHz Ant1



-6dB Bandwidth NVNT BLE 2Mbps 2440MHz Ant1



-6dB Bandwidth NVNT BLE 2Mbps 2480MHz Ant1

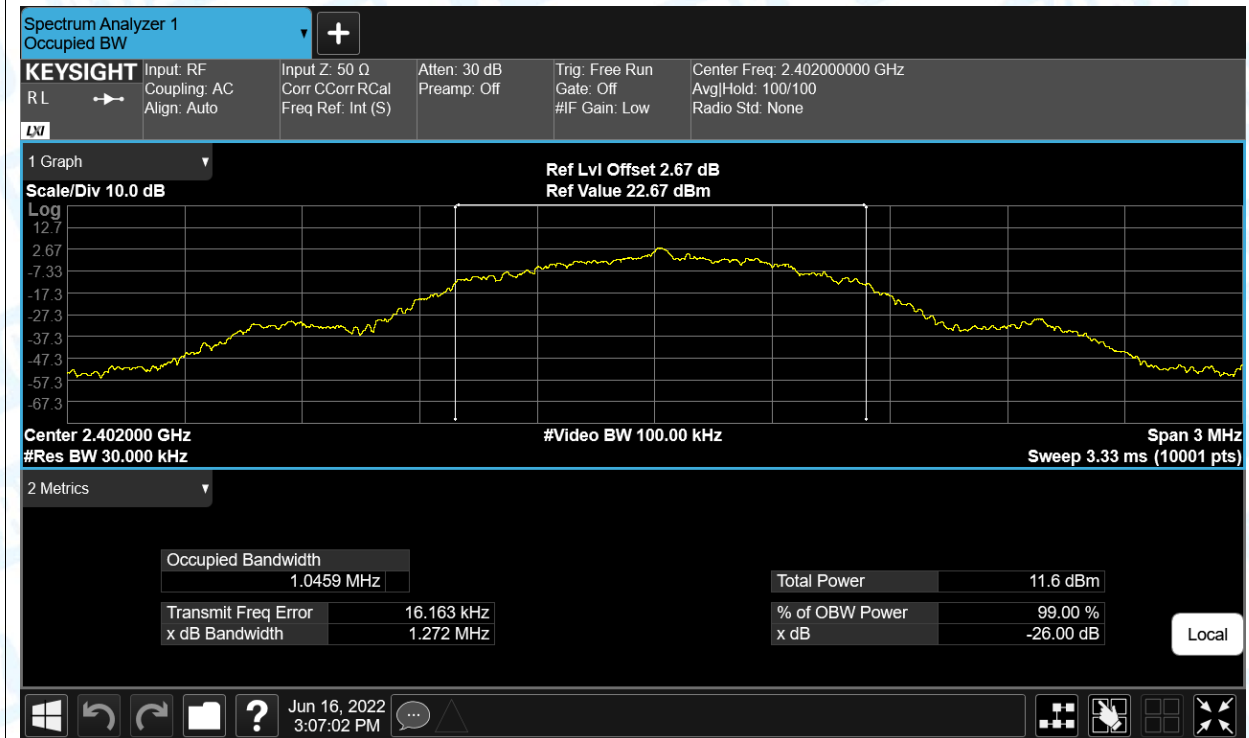


Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE 1Mbps	2402	Ant1	1.046
NVNT	BLE 1Mbps	2440	Ant1	1.03
NVNT	BLE 1Mbps	2480	Ant1	1.067
NVNT	BLE 2Mbps	2402	Ant1	2.064
NVNT	BLE 2Mbps	2440	Ant1	2.029
NVNT	BLE 2Mbps	2480	Ant1	2.05

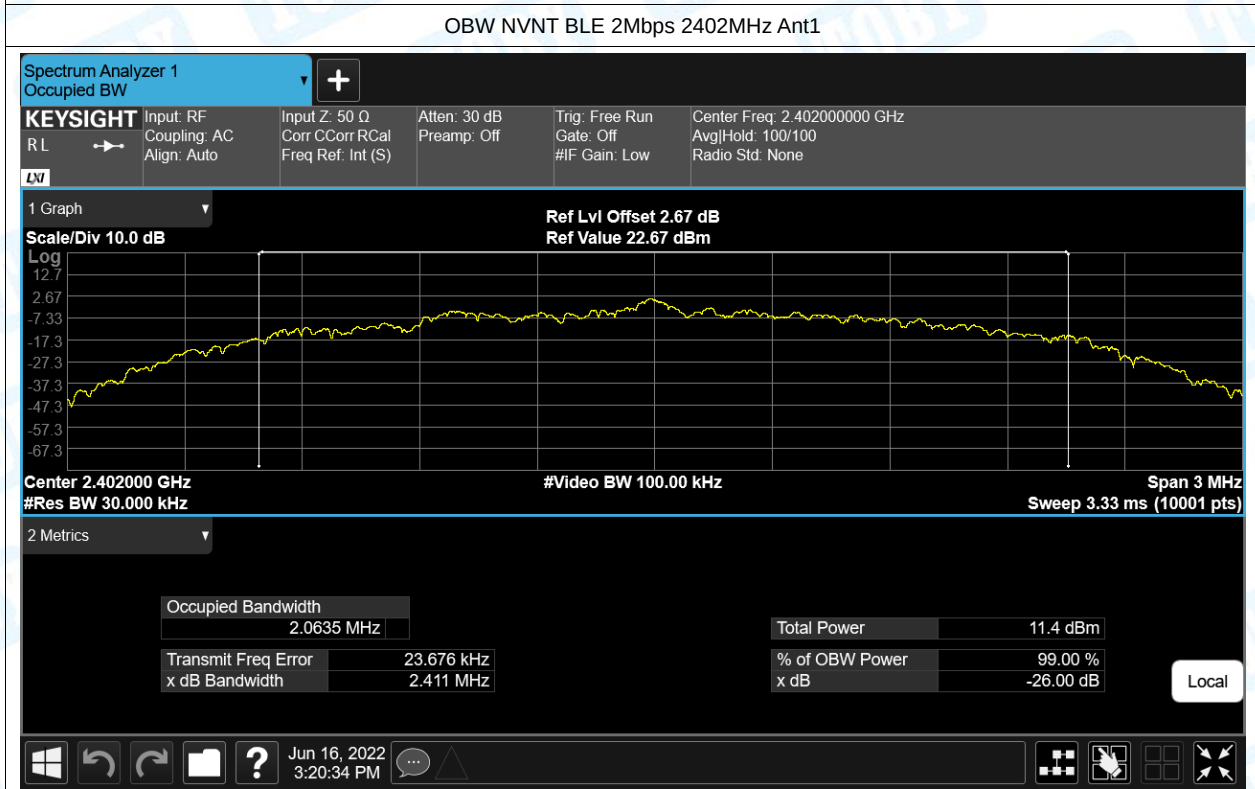
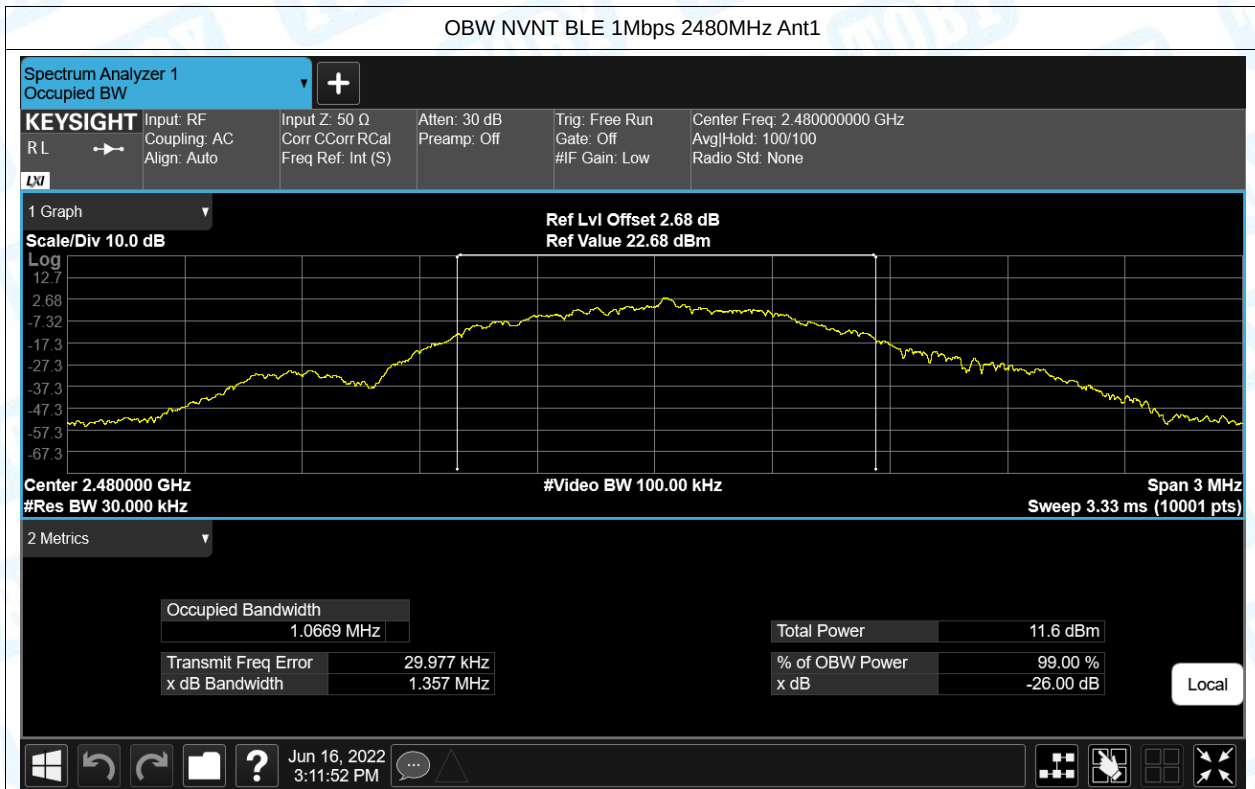
Test Graphs

OBW NVNT BLE 1Mbps 2402MHz Ant1

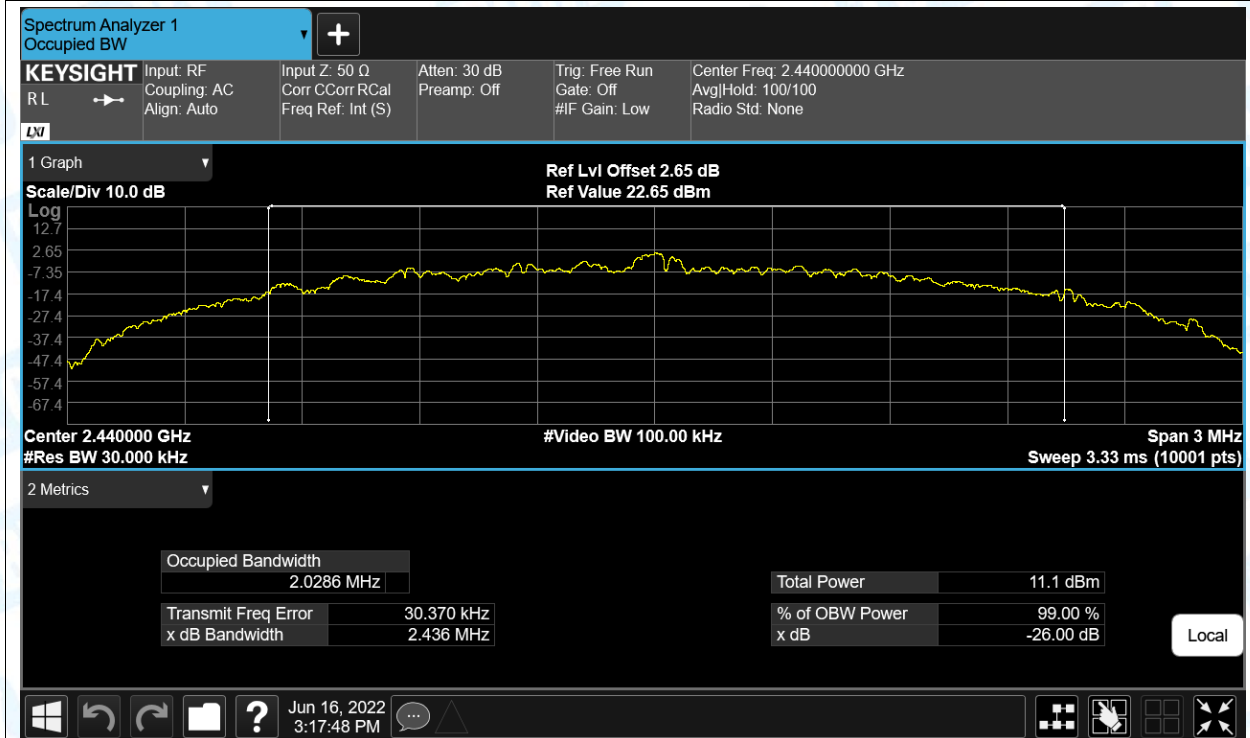


OBW NVNT BLE 1Mbps 2440MHz Ant1

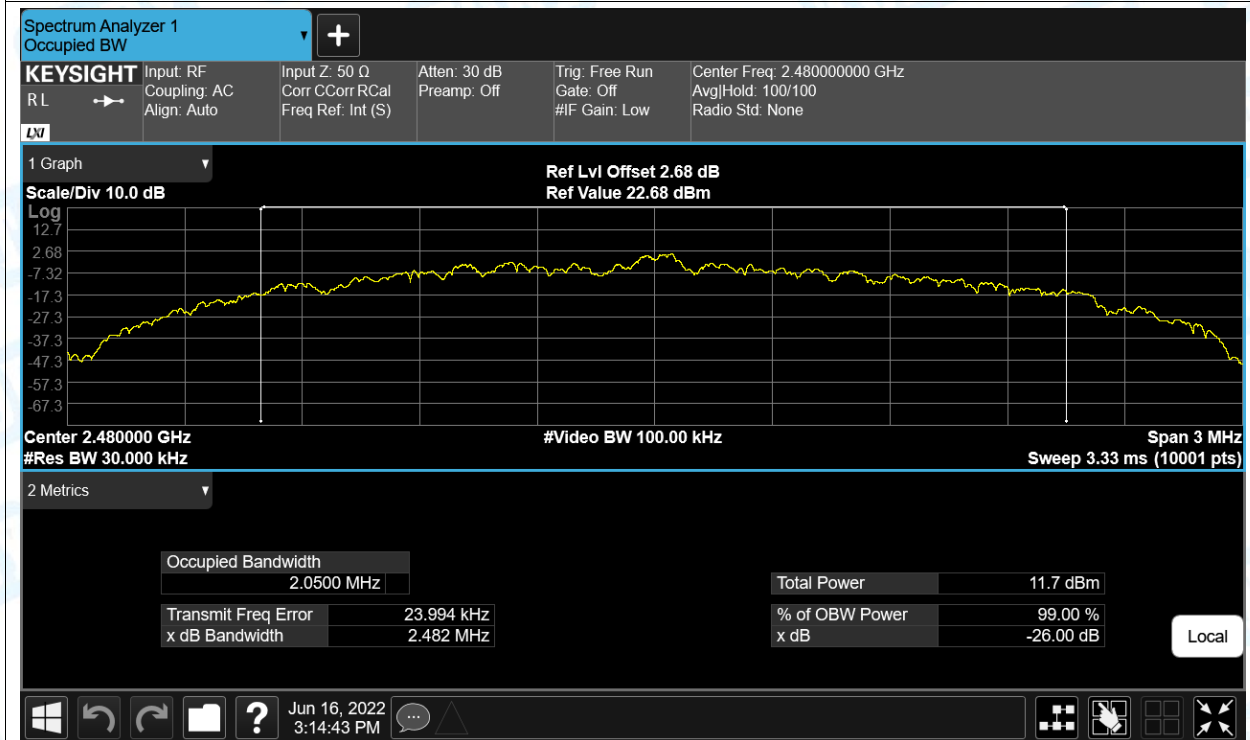




OBW NVNT BLE 2Mbps 2440MHz Ant1



OBW NVNT BLE 2Mbps 2480MHz Ant1

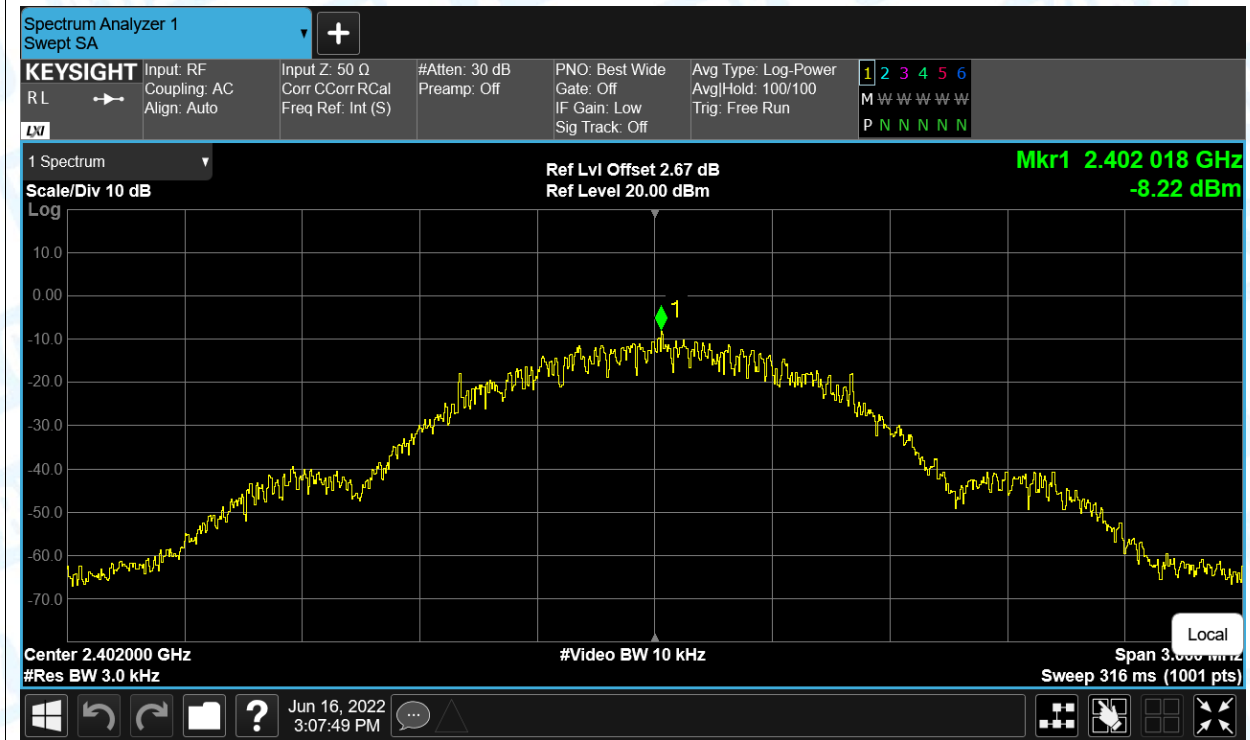


Maximum Power Spectral Density Level

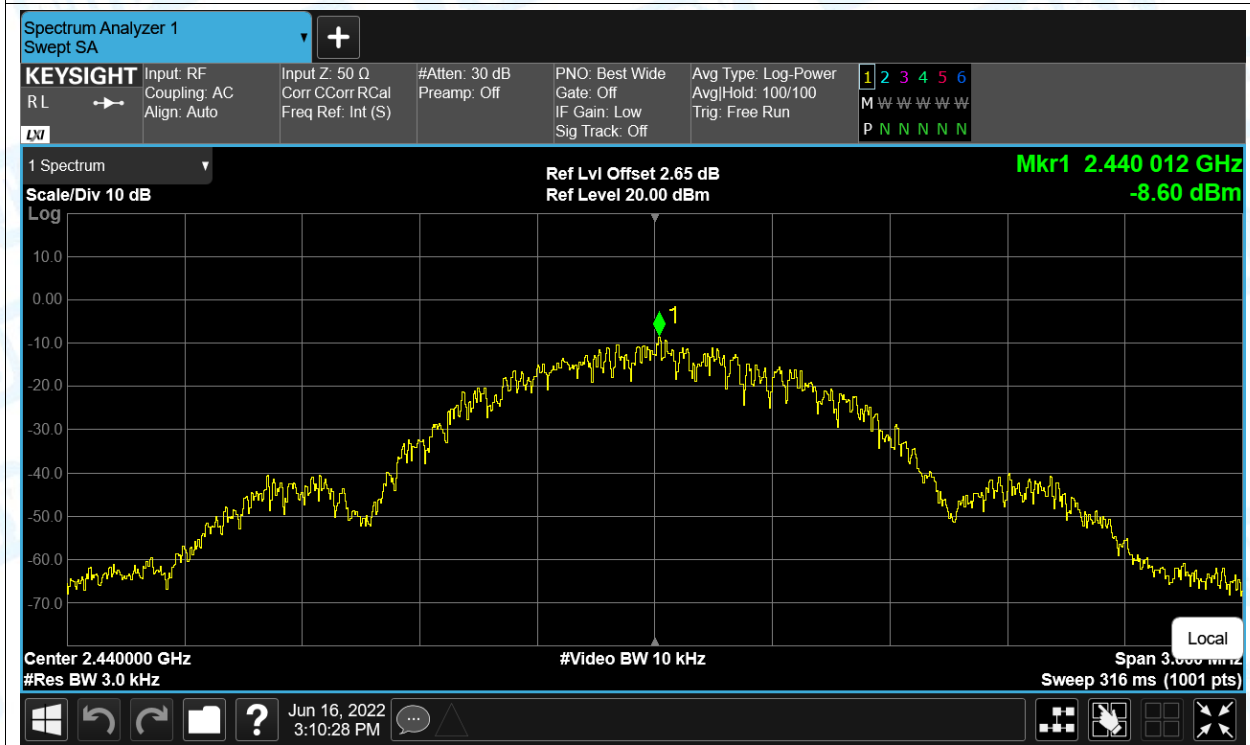
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-8.224	8	Pass
NVNT	BLE 1Mbps	2440	Ant1	-8.604	8	Pass
NVNT	BLE 1Mbps	2480	Ant1	-8.25	8	Pass
NVNT	BLE 2Mbps	2402	Ant1	-11.44	8	Pass
NVNT	BLE 2Mbps	2440	Ant1	-11.111	8	Pass
NVNT	BLE 2Mbps	2480	Ant1	-10.886	8	Pass

Test Graphs

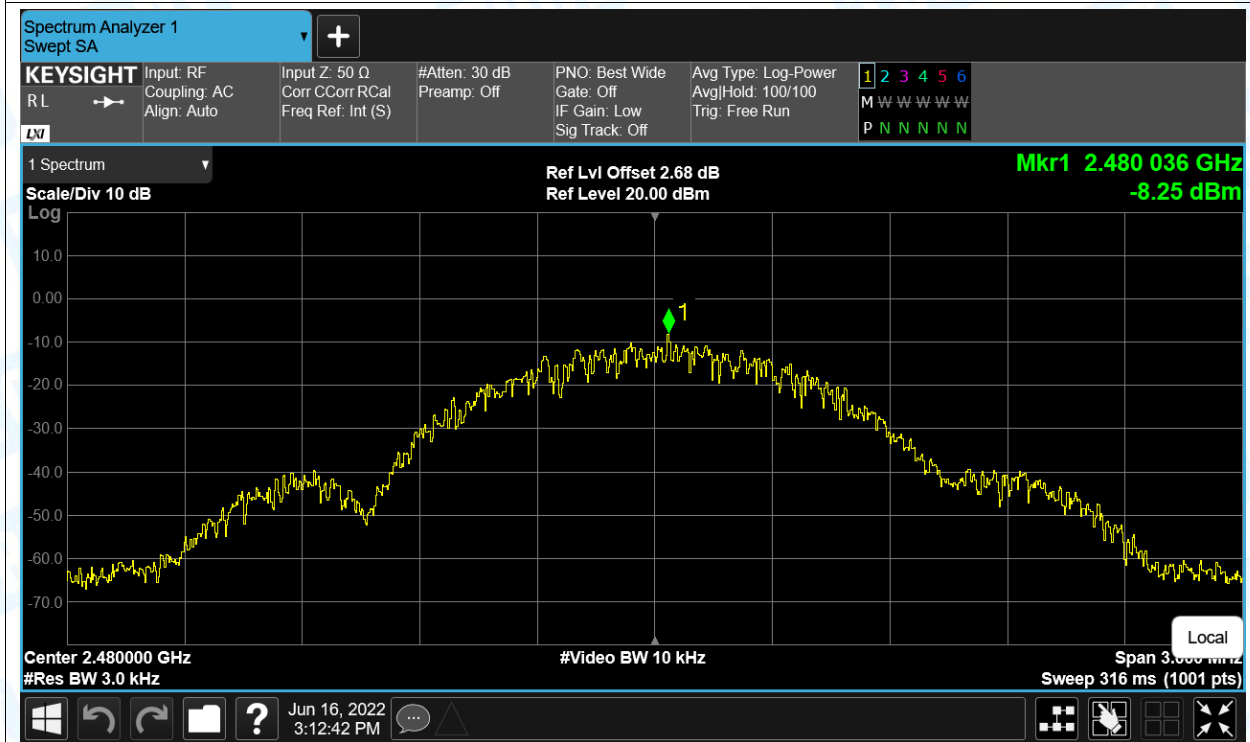
PSD NVNT BLE 1Mbps 2402MHz Ant1



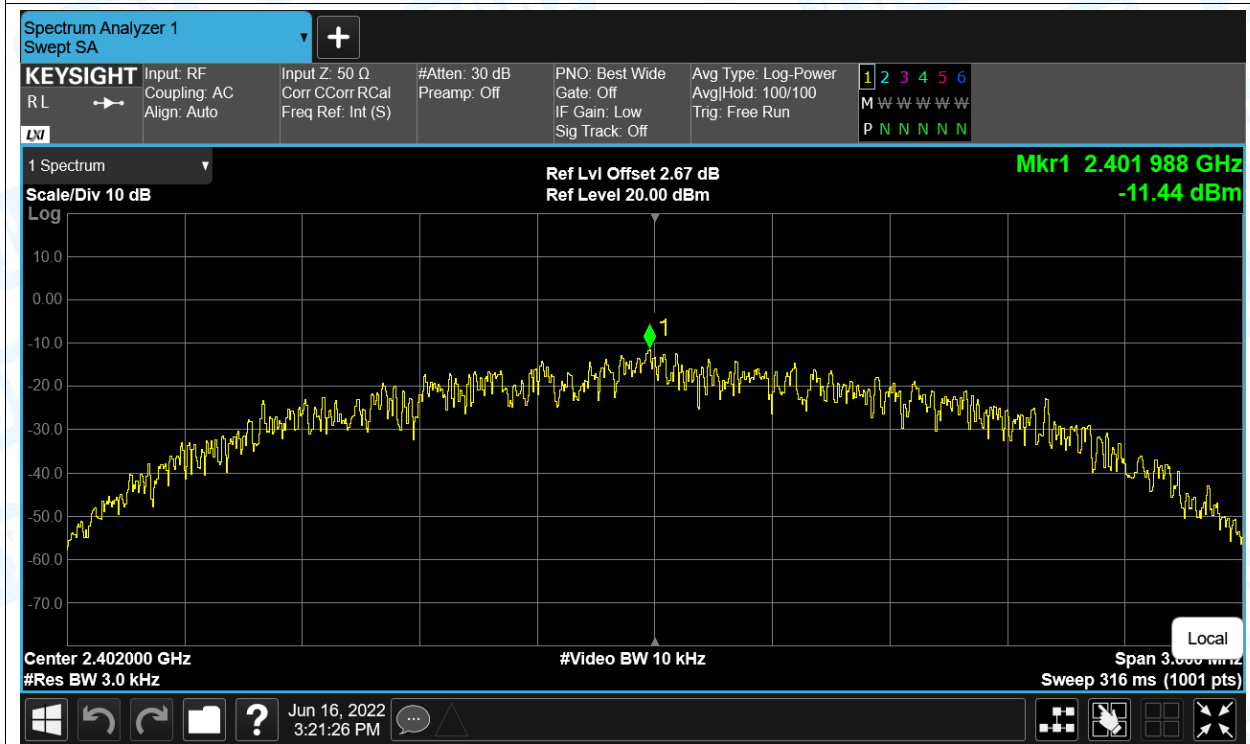
PSD NVNT BLE 1Mbps 2440MHz Ant1

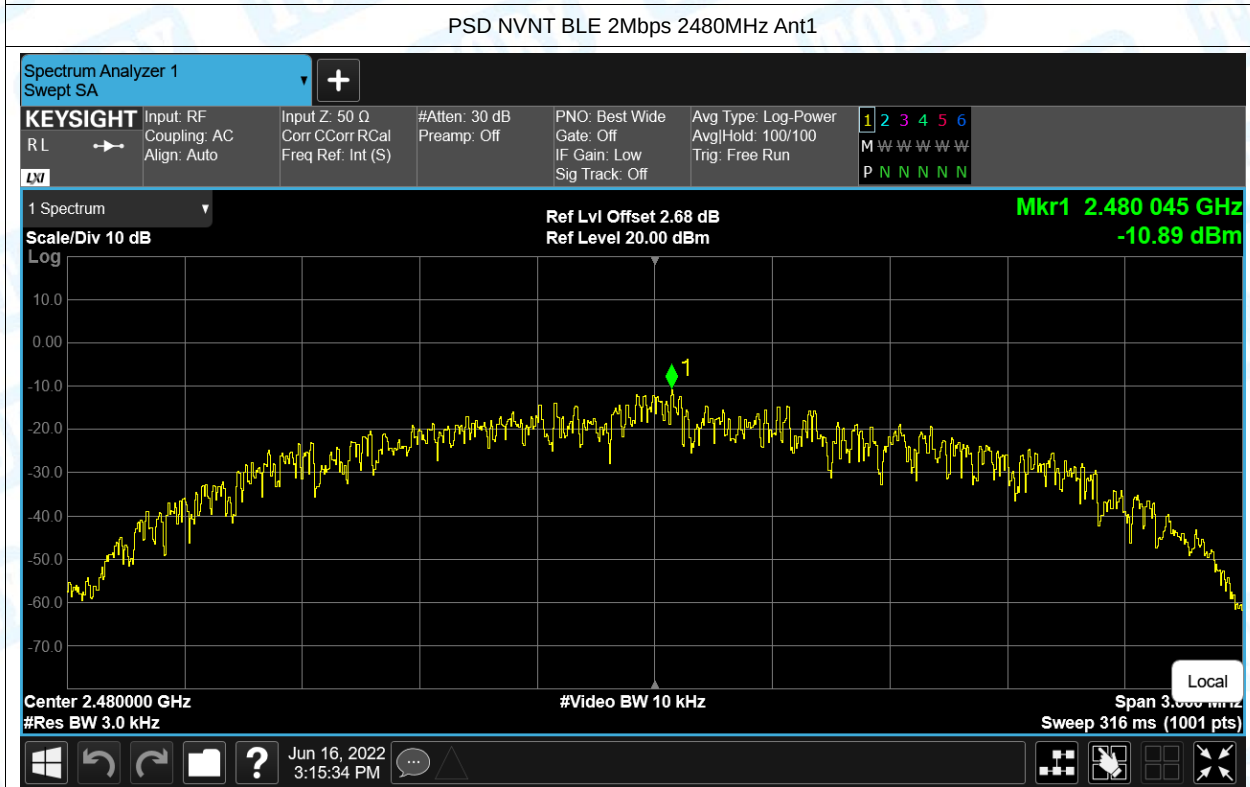
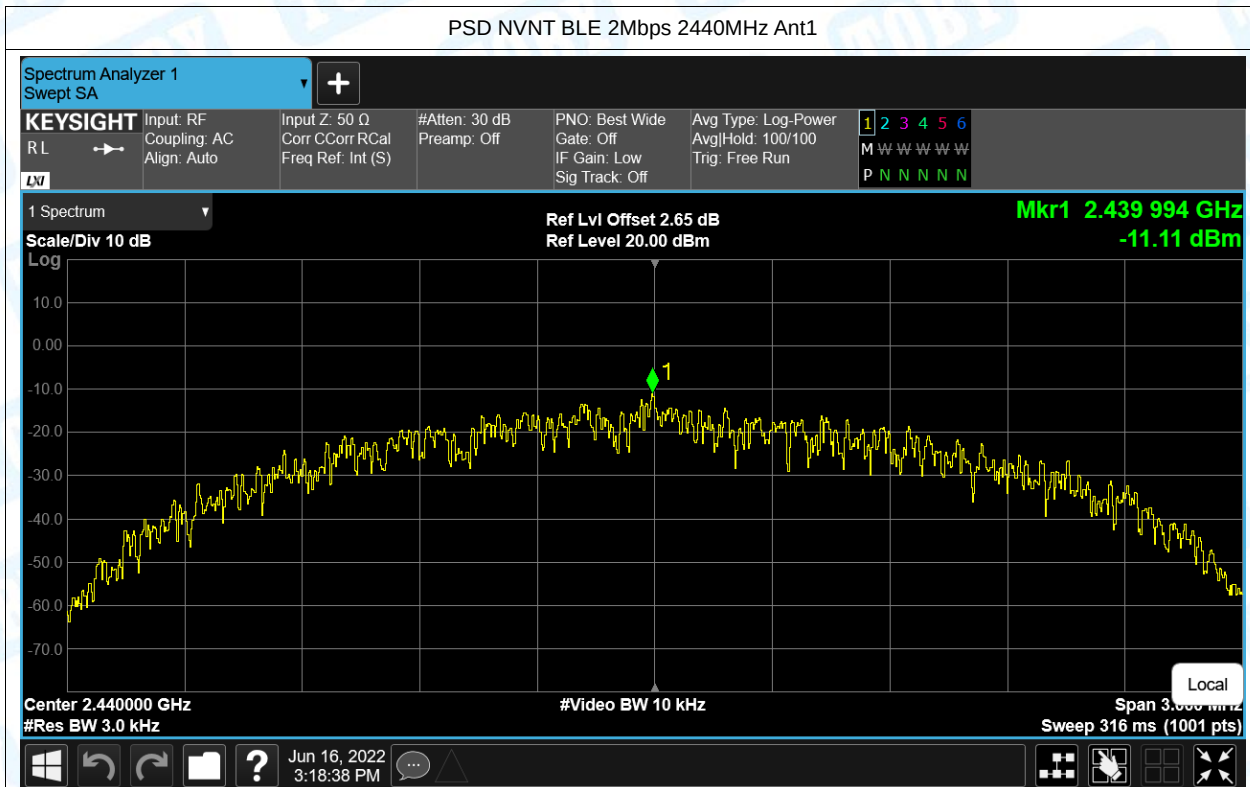


PSD NVNT BLE 1Mbps 2480MHz Ant1



PSD NVNT BLE 2Mbps 2402MHz Ant1



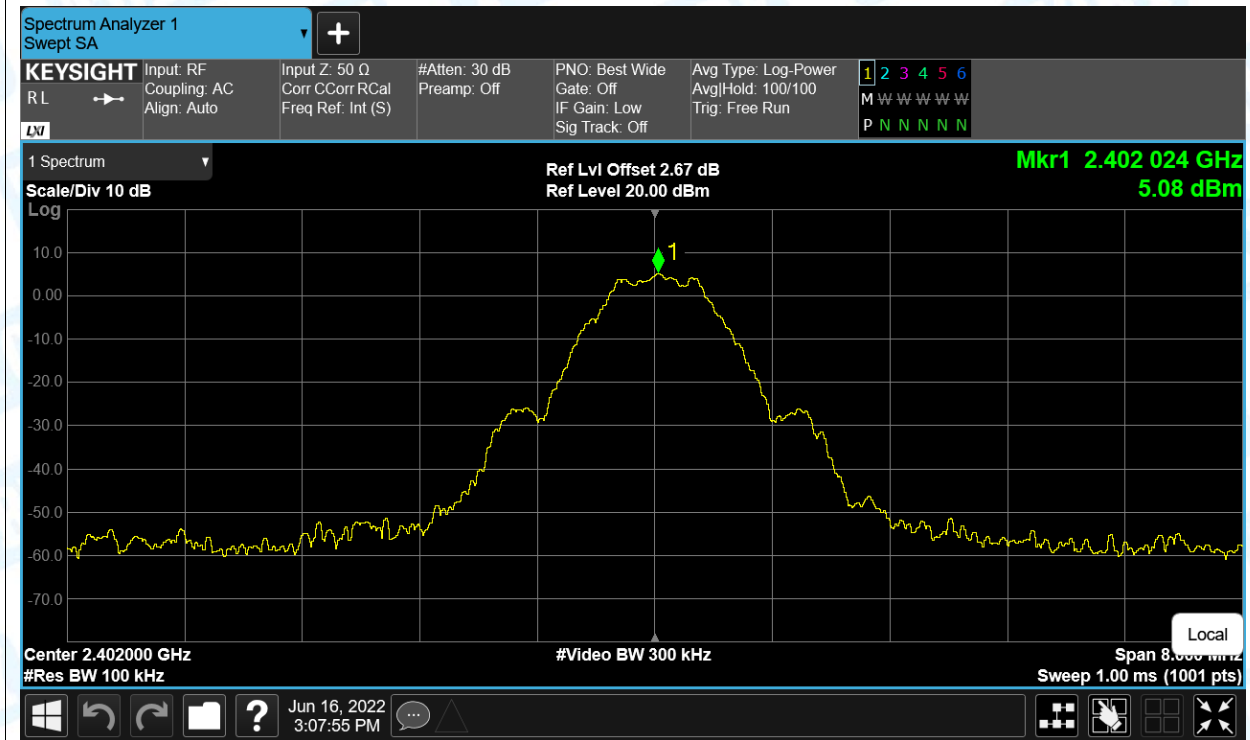


Band Edge

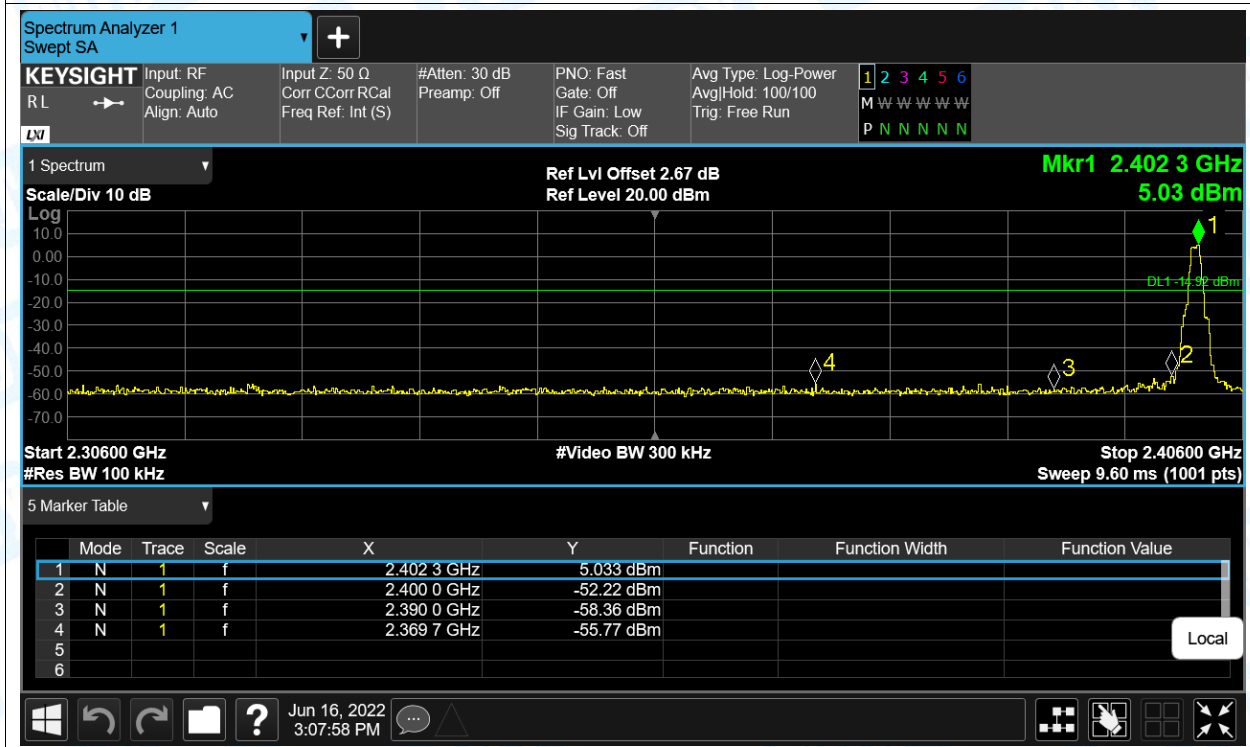
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-60.85	-20	Pass
NVNT	BLE 1Mbps	2480	Ant1	-59.89	-20	Pass
NVNT	BLE 2Mbps	2402	Ant1	-59.62	-20	Pass
NVNT	BLE 2Mbps	2480	Ant1	-60.04	-20	Pass

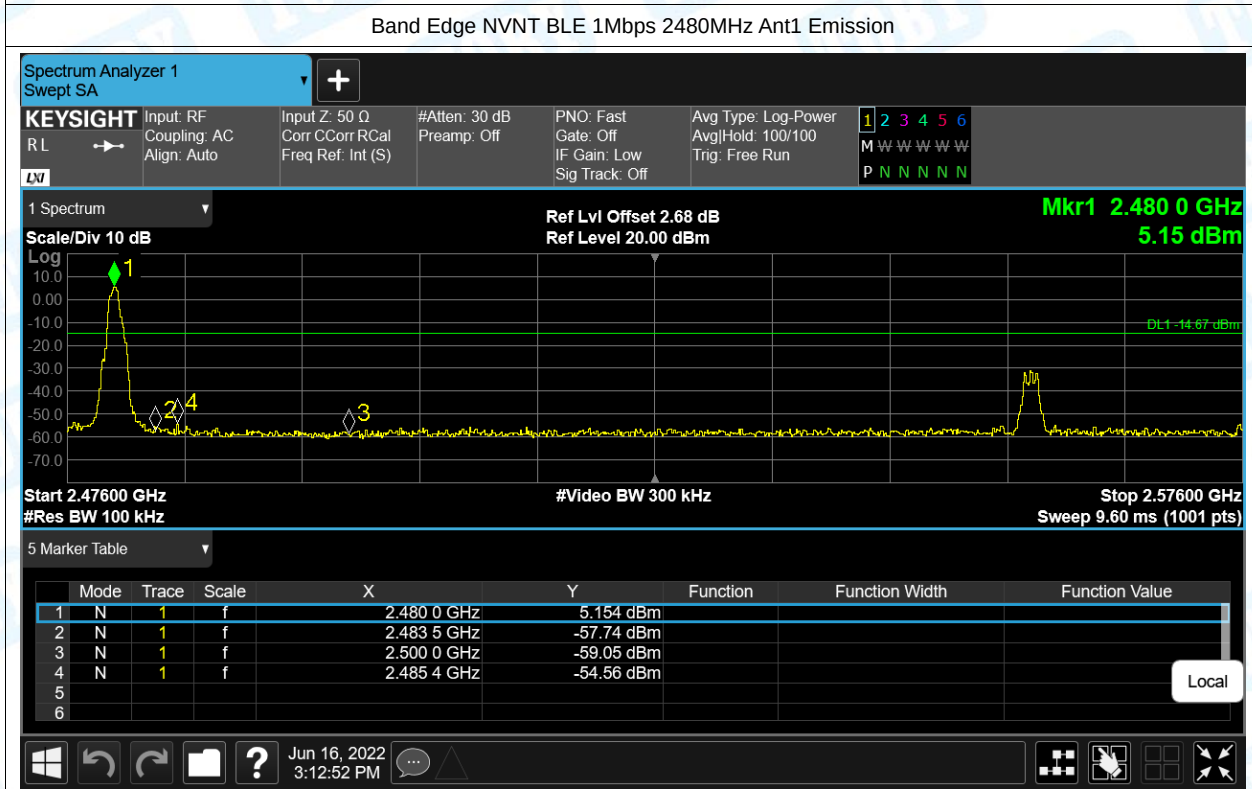
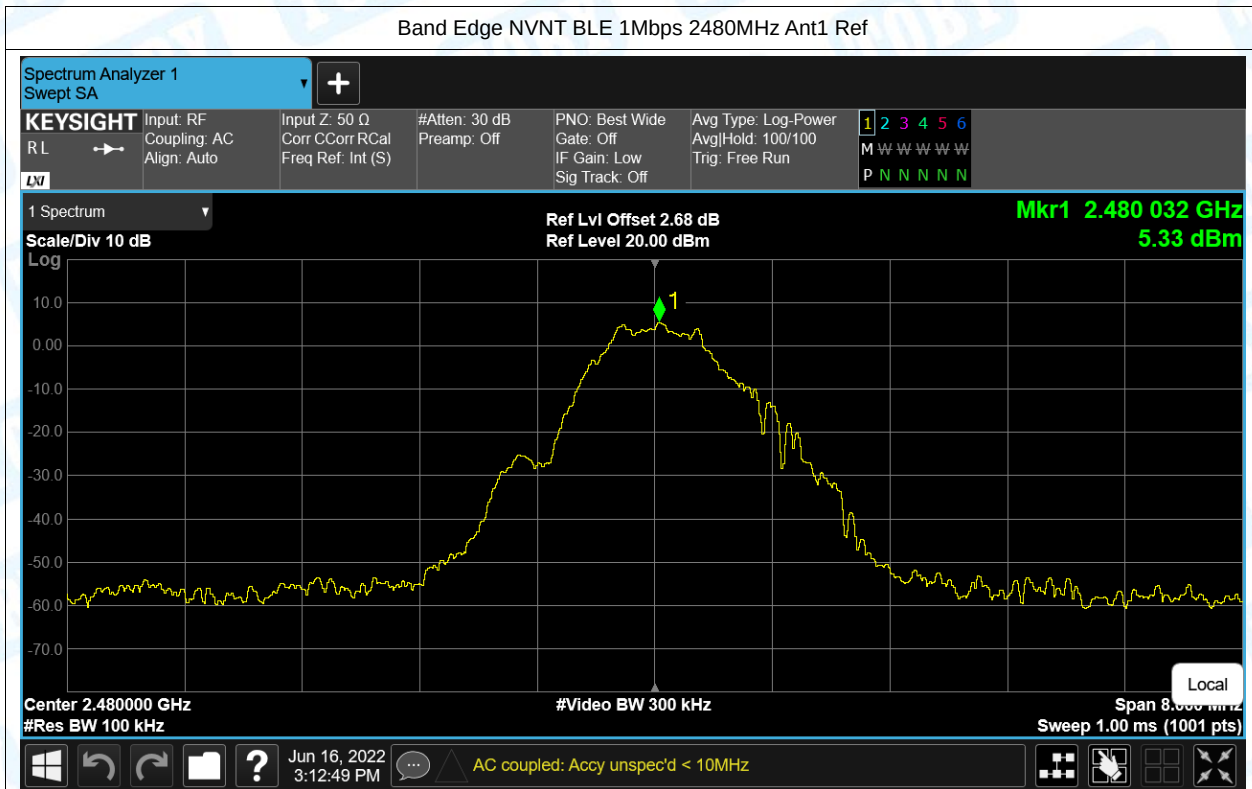
Test Graphs

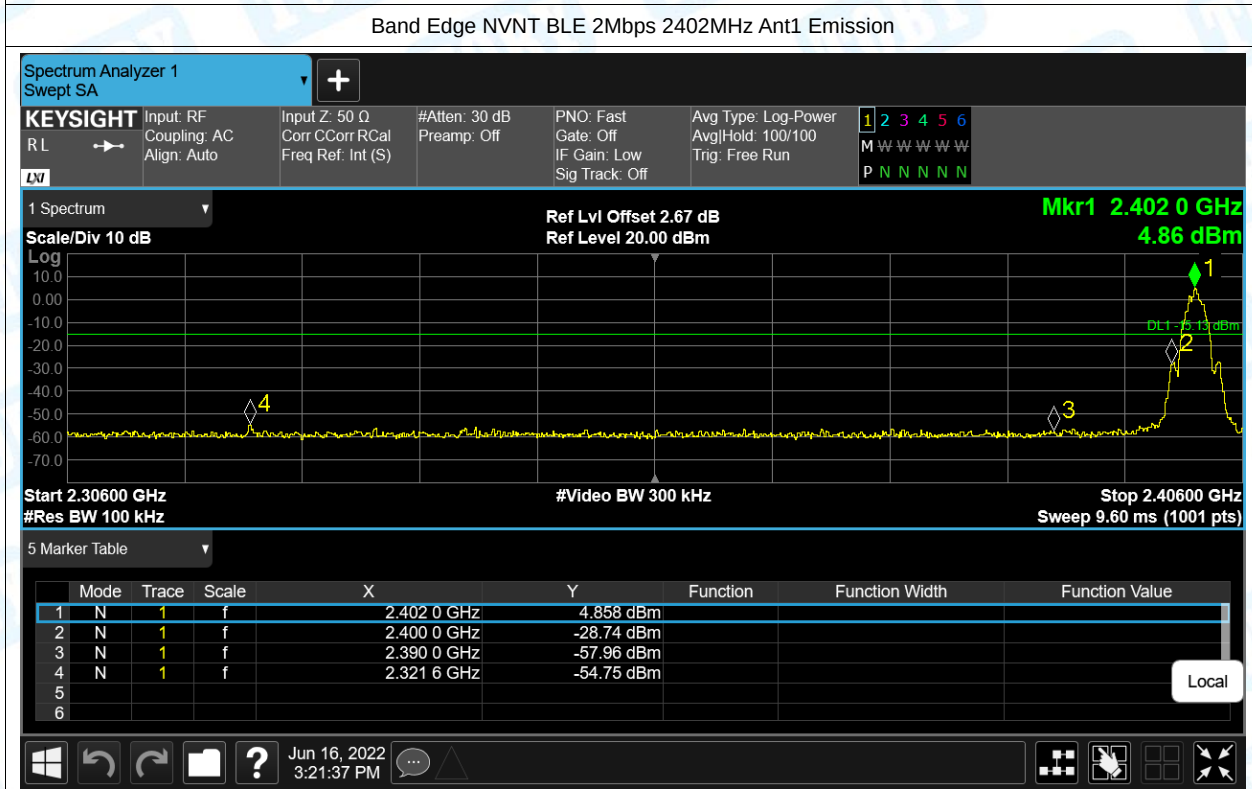
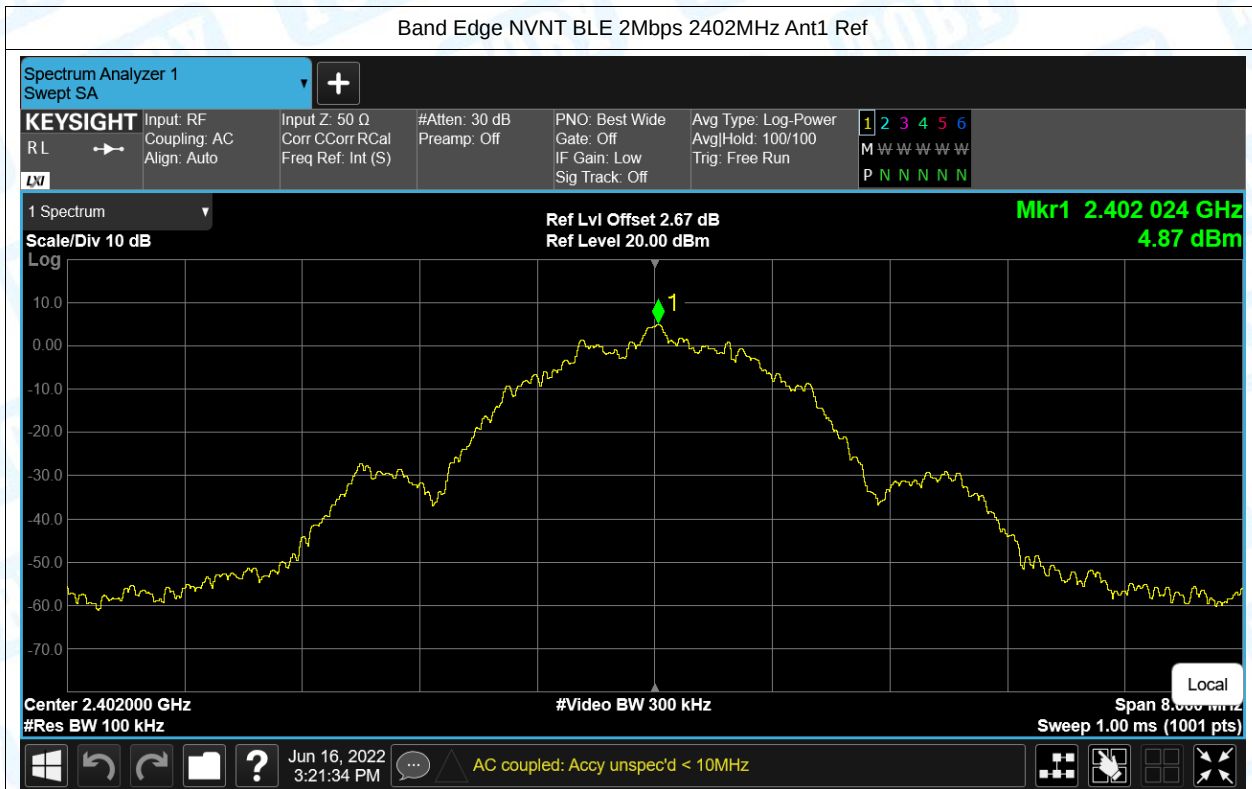
Band Edge NVNT BLE 1Mbps 2402MHz Ant1 Ref

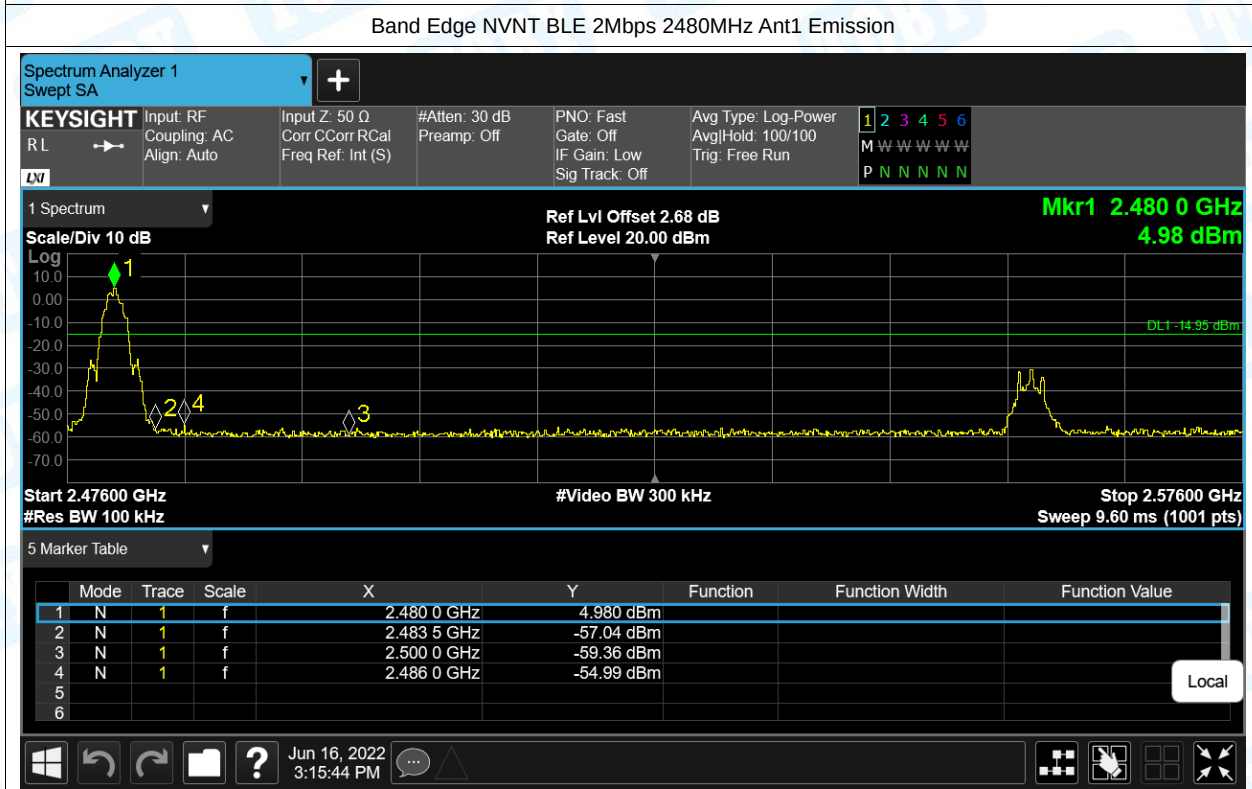
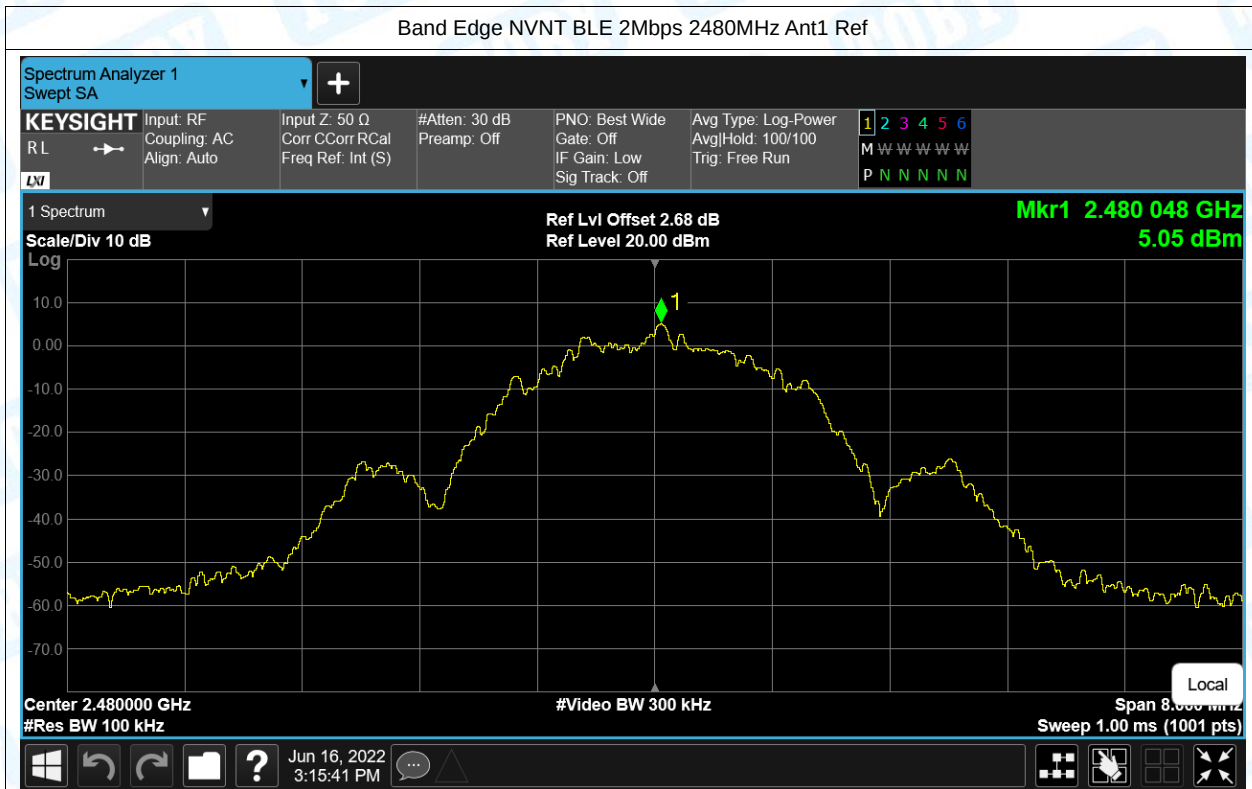


Band Edge NVNT BLE 1Mbps 2402MHz Ant1 Emission





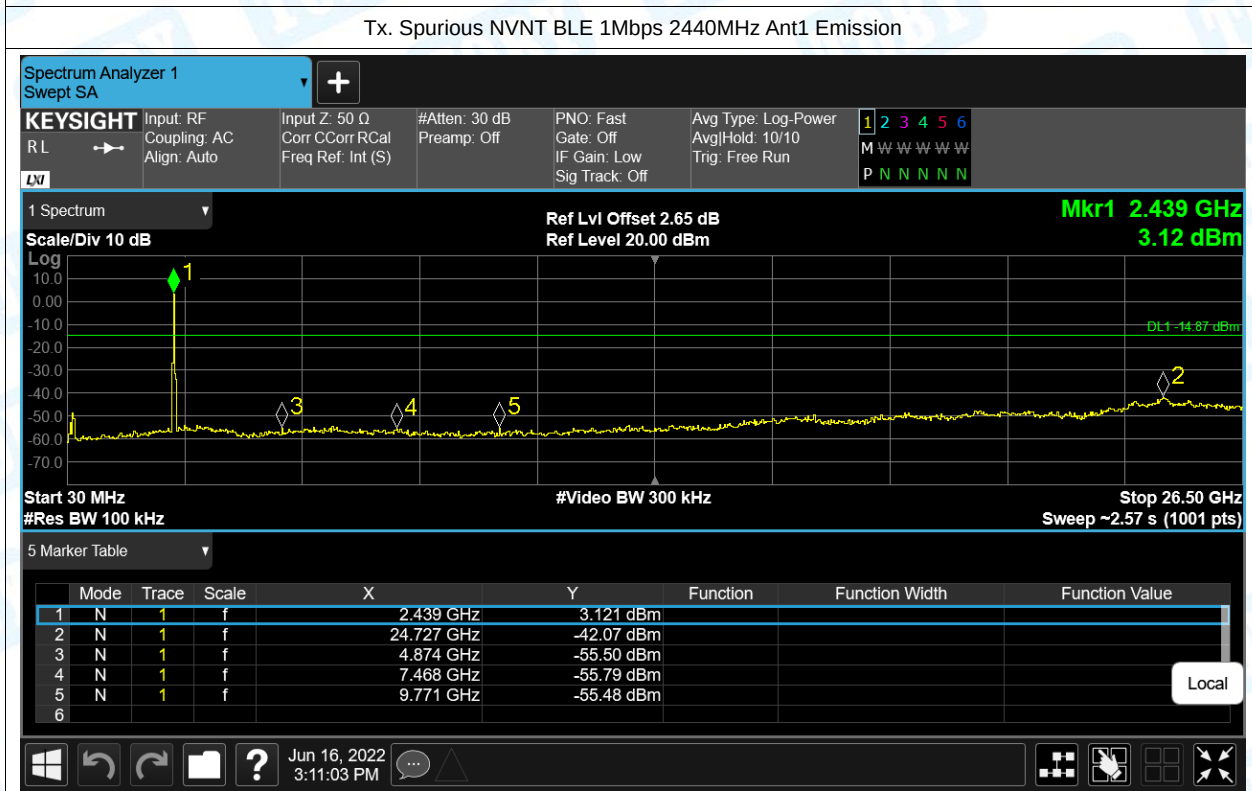
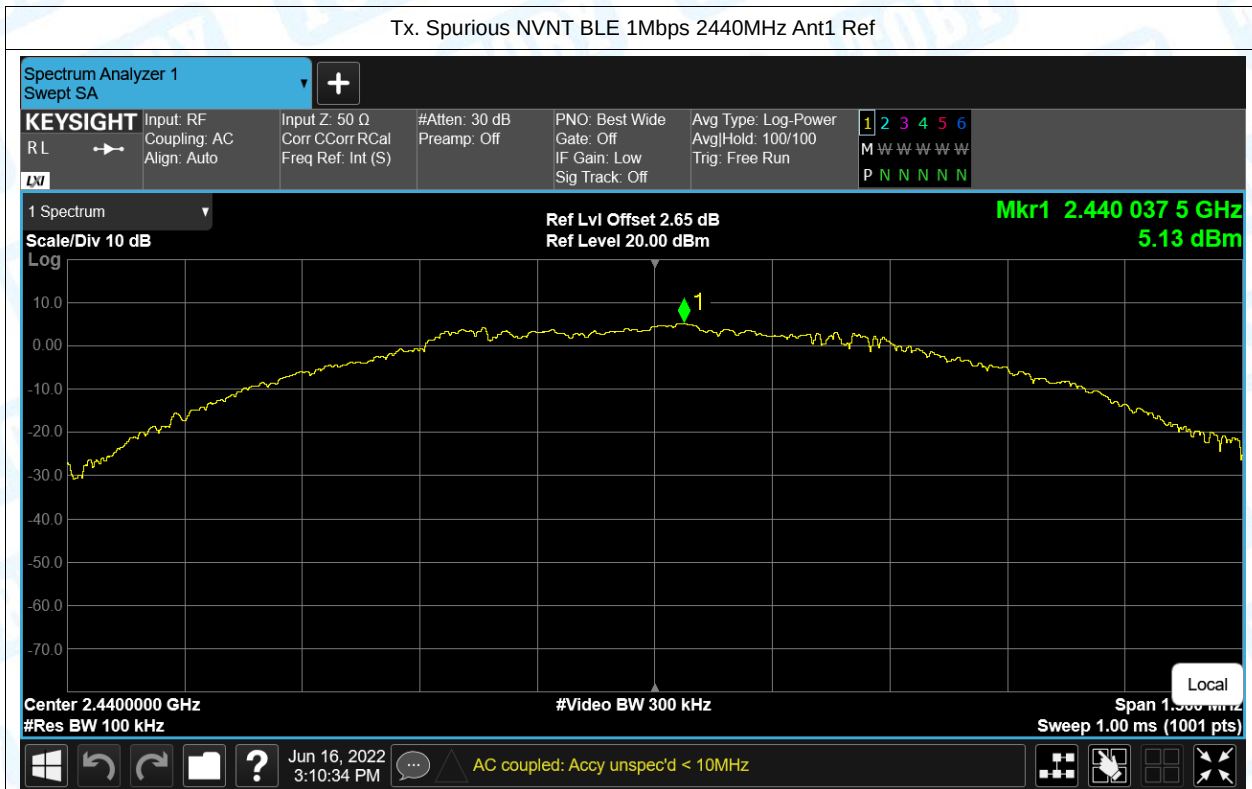


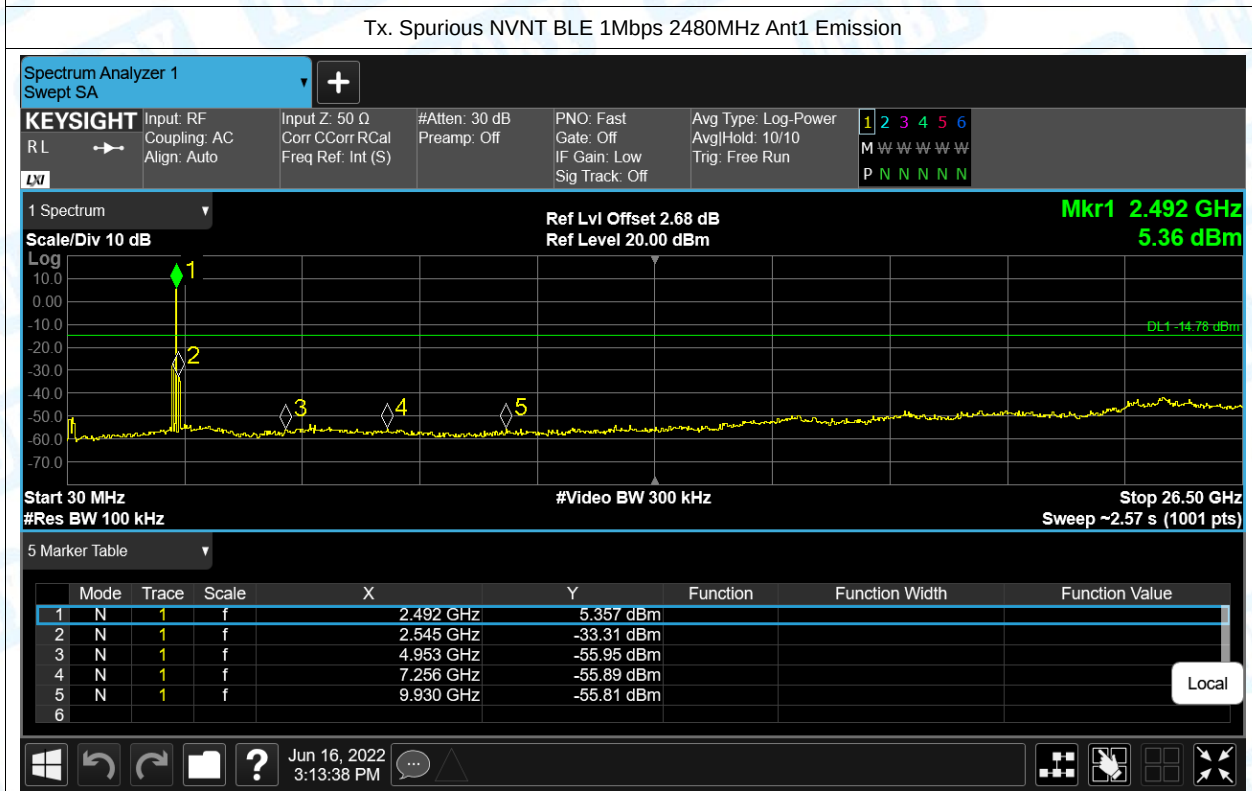
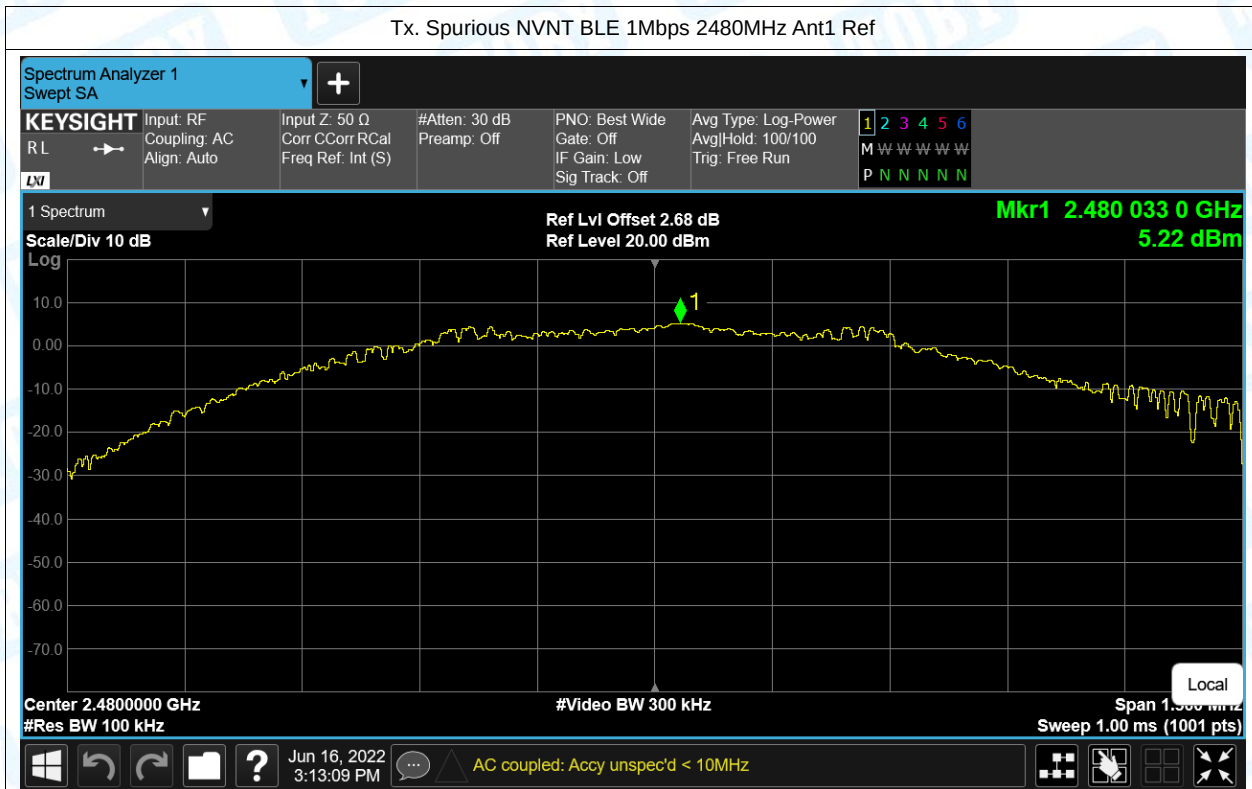


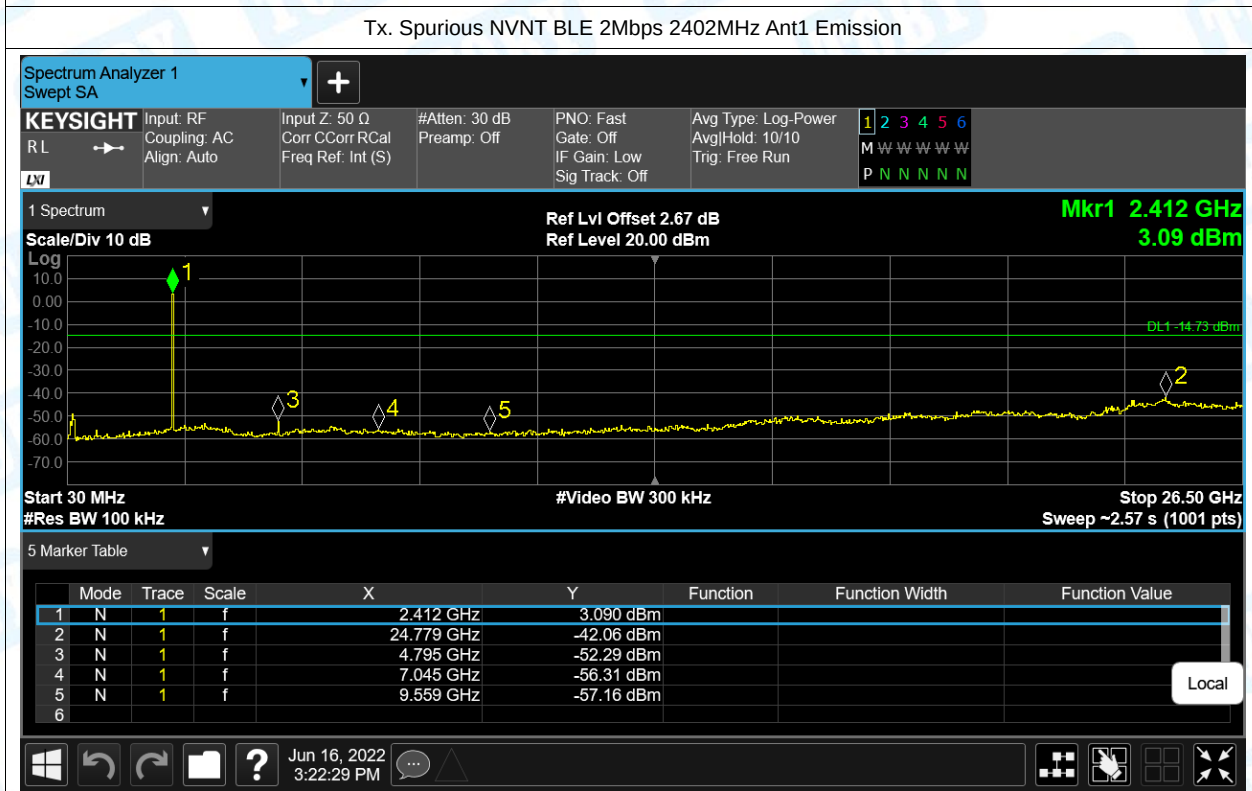
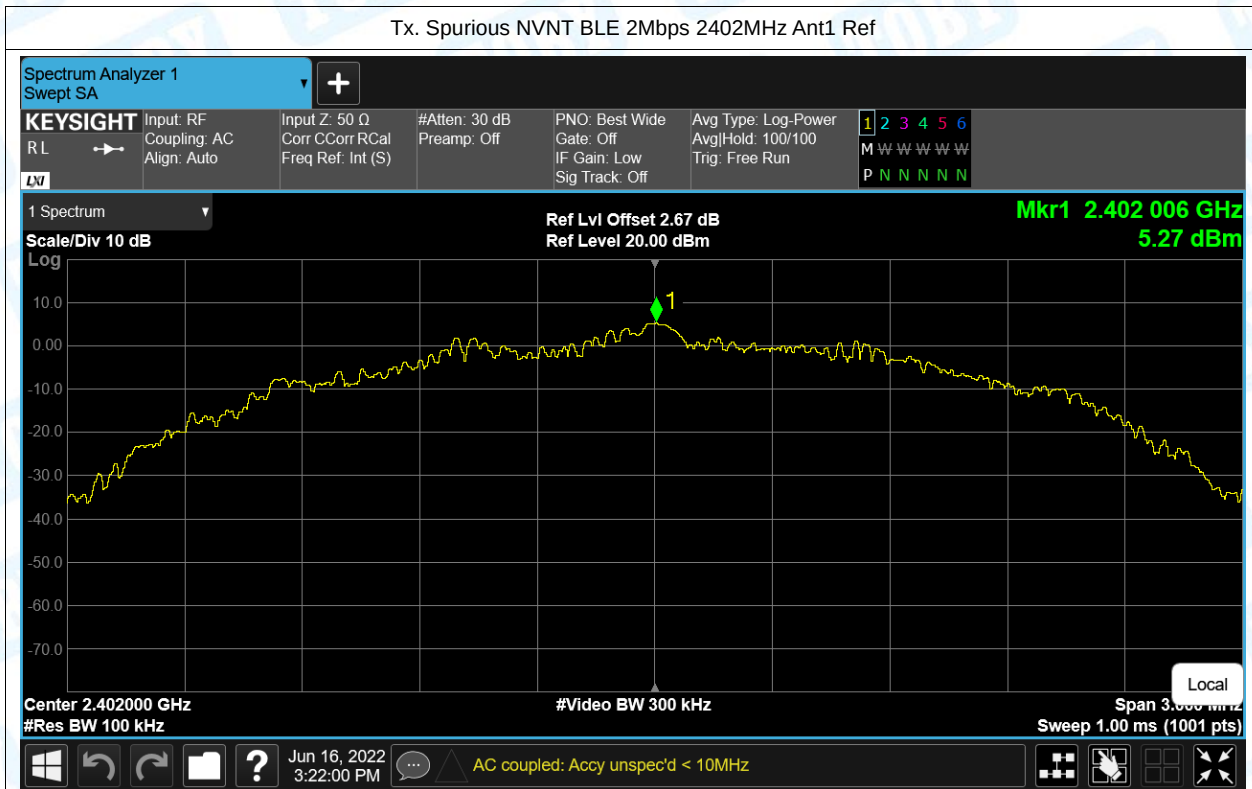
Conducted RF Spurious Emission

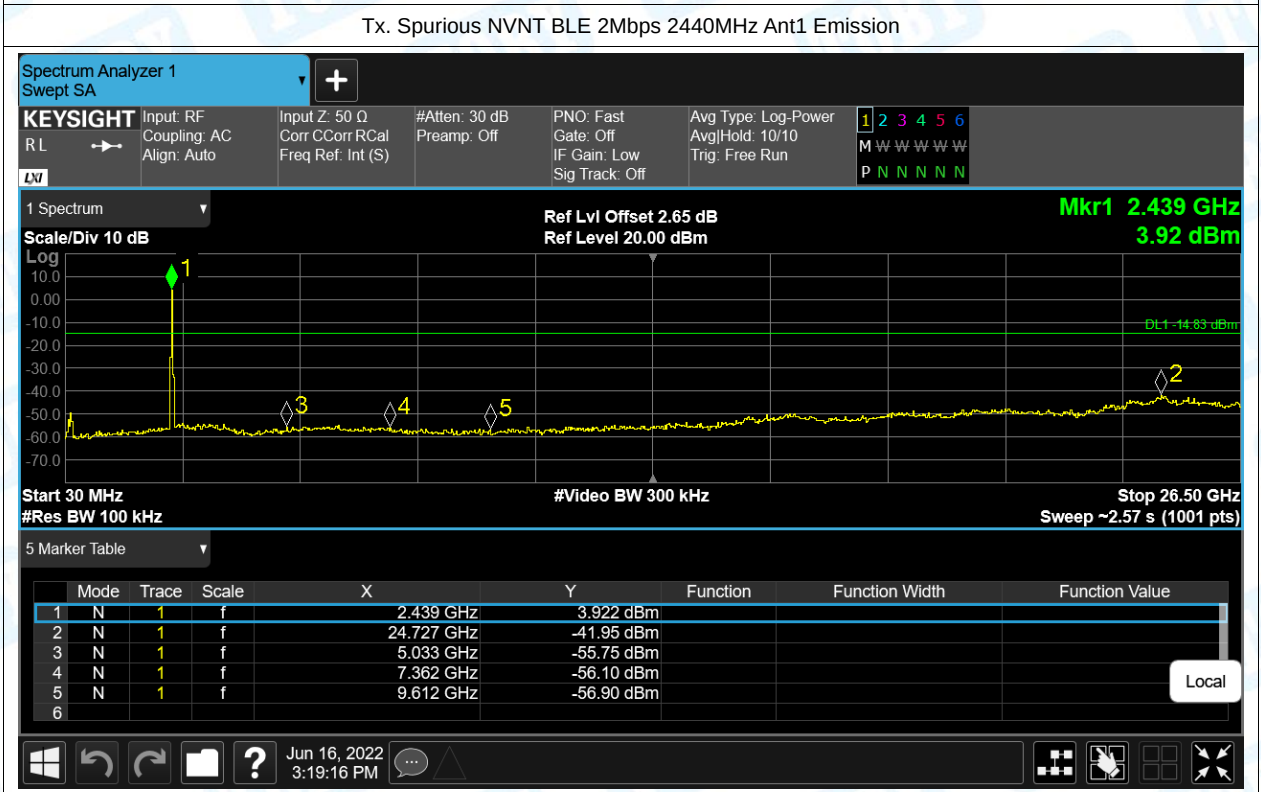
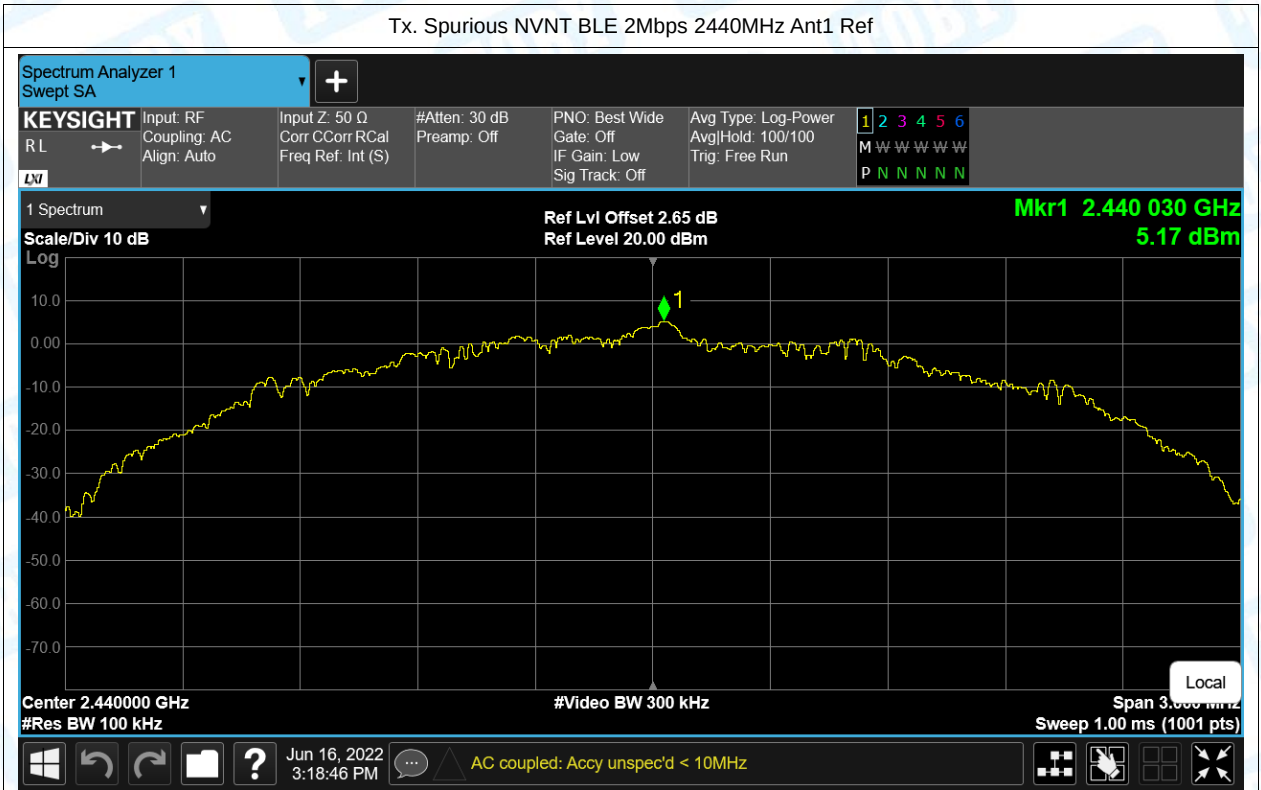
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-47.11	-20	Pass
NVNT	BLE 1Mbps	2440	Ant1	-47.2	-20	Pass
NVNT	BLE 1Mbps	2480	Ant1	-38.53	-20	Pass
NVNT	BLE 2Mbps	2402	Ant1	-47.33	-20	Pass
NVNT	BLE 2Mbps	2440	Ant1	-47.12	-20	Pass
NVNT	BLE 2Mbps	2480	Ant1	-39.25	-20	Pass

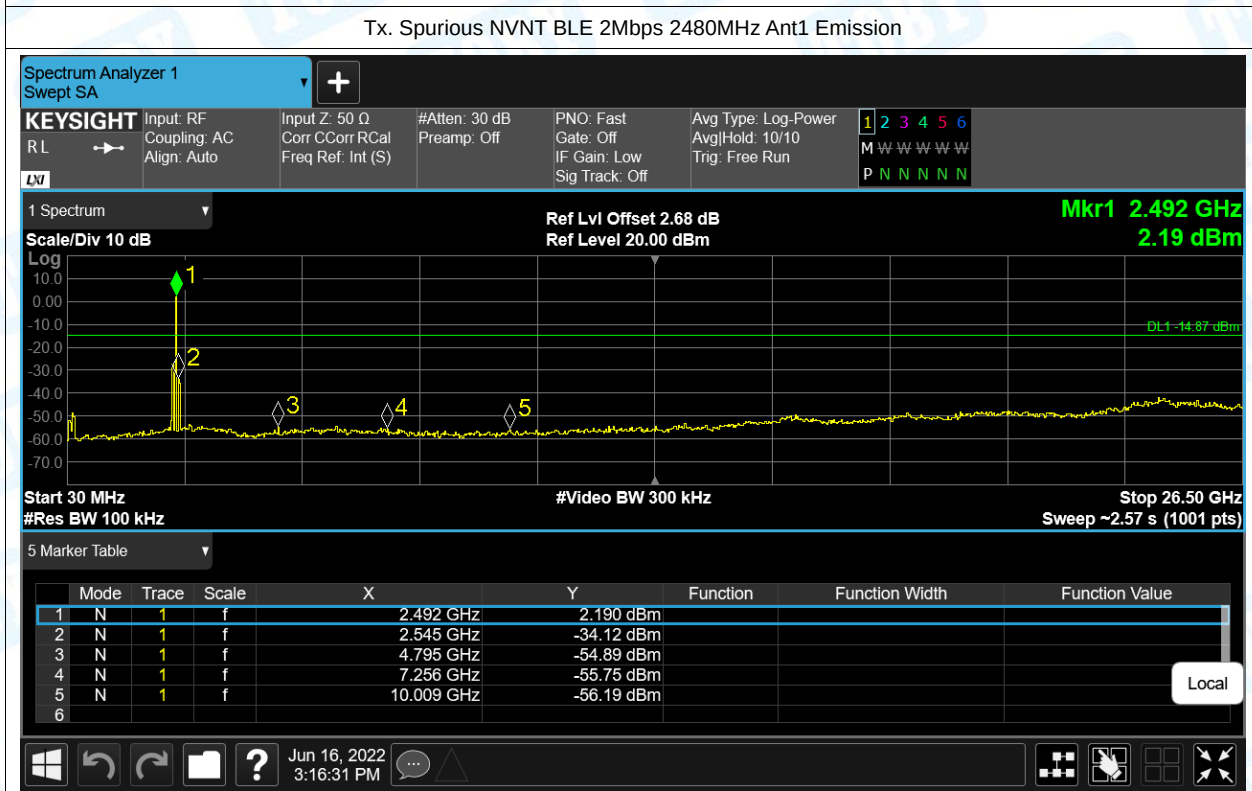
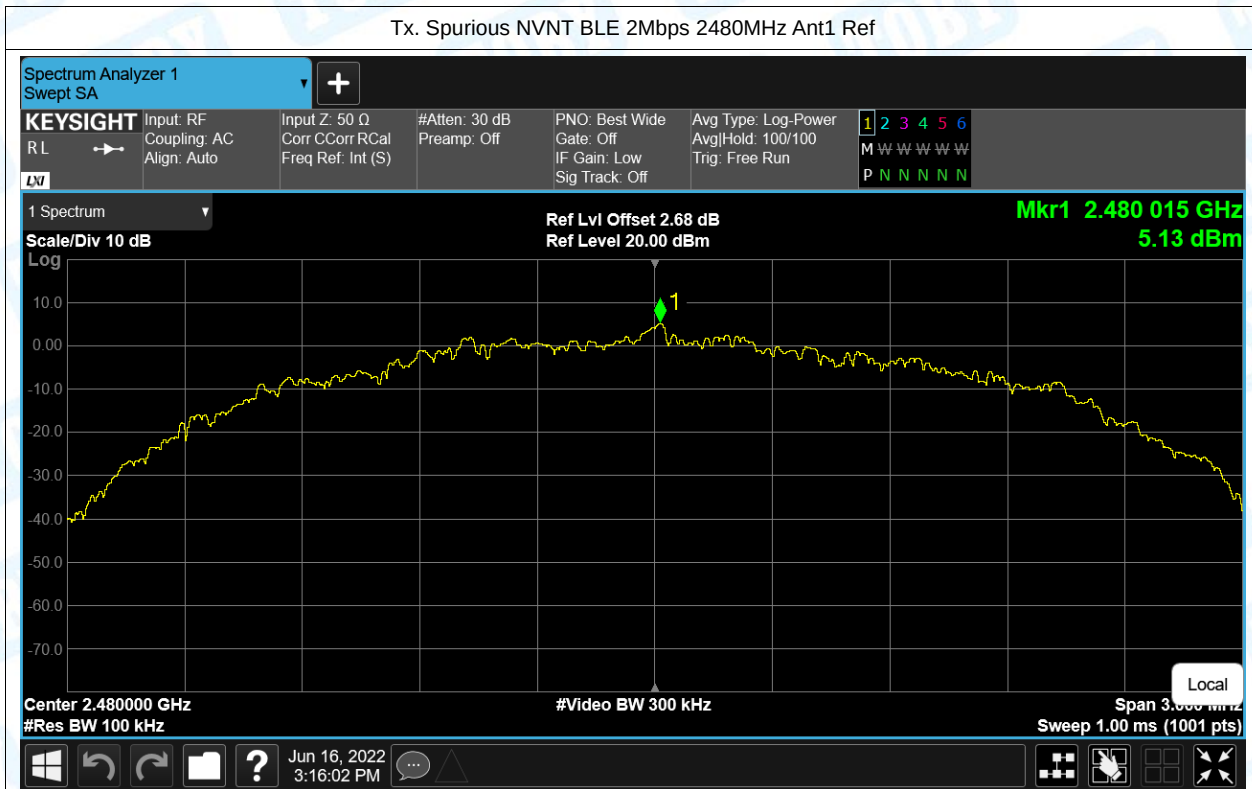








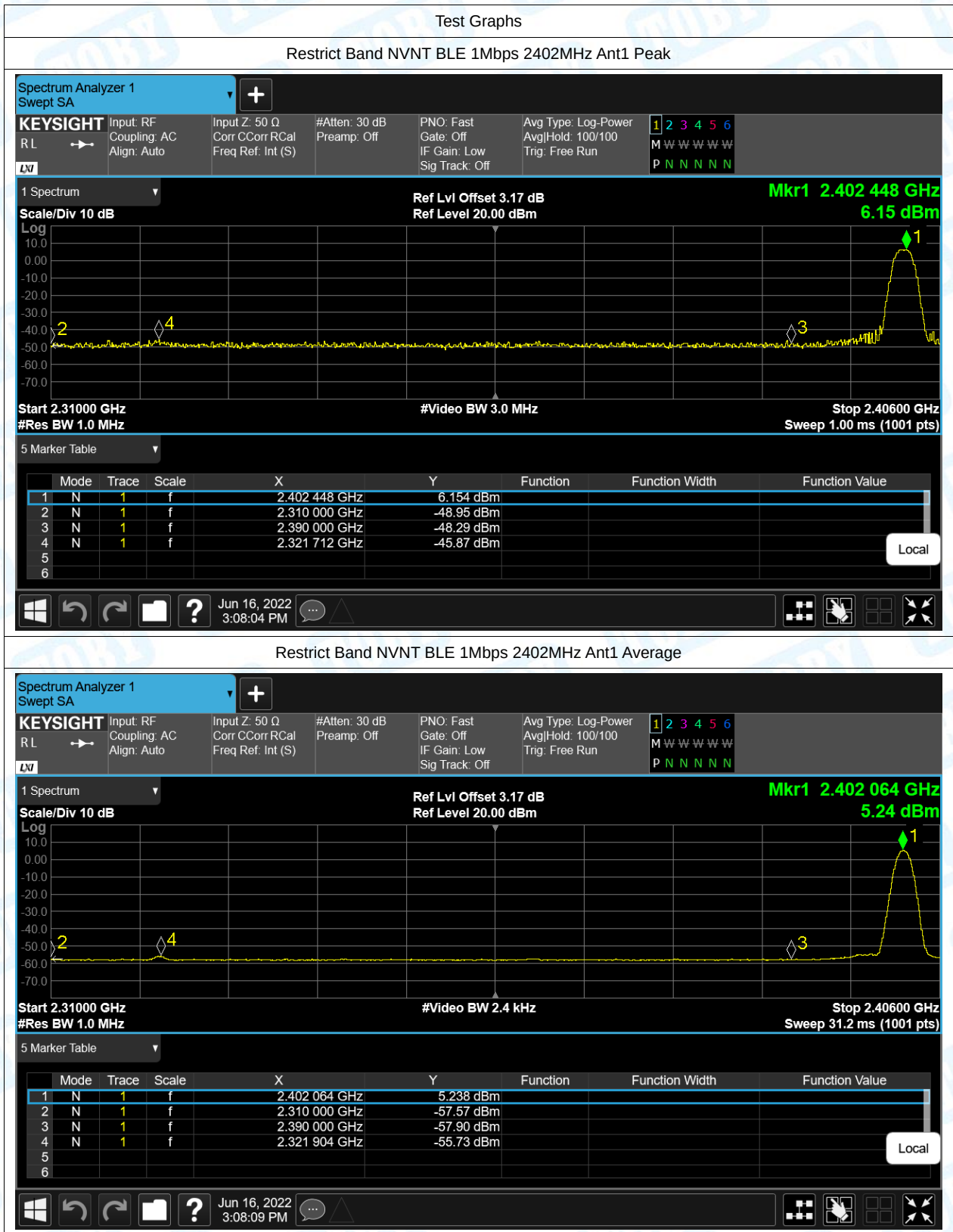




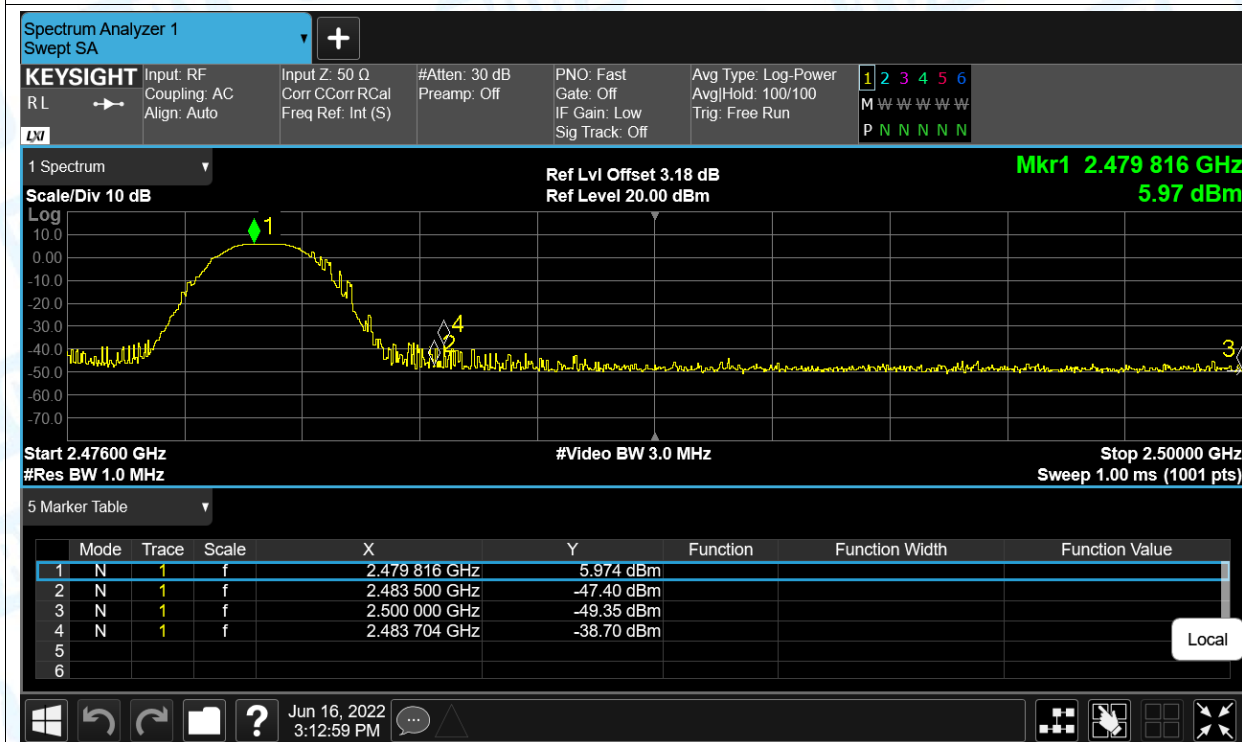
Restrict Band

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	-48.95	2	48.31	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2310	-57.57	2	39.69	Average	54	Pass
NVNT	BLE 1Mbps	2402	Ant1	2321.712	-45.87	2	51.39	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2321.904	-55.73	2	41.53	Average	54	Pass
NVNT	BLE 1Mbps	2402	Ant1	2390	-47.73	2	49.53	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2390	-57.89	2	39.37	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.5	-47.4	2	49.86	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.5	-56.61	2	40.65	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.704	-38.7	2	58.56	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.56	-56.45	2	40.81	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2500	-49.35	2	47.91	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2500	-57.78	2	39.48	Average	54	Pass
NVNT	BLE 2Mbps	2402	Ant1	2310	-47.98	2	49.28	Peak	74	Pass
NVNT	BLE 2Mbps	2402	Ant1	2310	-58.02	2	39.24	Average	54	Pass
NVNT	BLE 2Mbps	2402	Ant1	2336.112	-46.24	2	51.02	Peak	74	Pass
NVNT	BLE 2Mbps	2402	Ant1	2321.712	-56.23	2	41.03	Average	54	Pass
NVNT	BLE 2Mbps	2402	Ant1	2390	-49.78	2	47.48	Peak	74	Pass
NVNT	BLE 2Mbps	2402	Ant1	2390	-57.98	2	39.28	Average	54	Pass
NVNT	BLE 2Mbps	2480	Ant1	2483.5	-45.18	2	52.08	Peak	74	Pass
NVNT	BLE 2Mbps	2480	Ant1	2483.5	-51.87	2	45.39	Average	54	Pass
NVNT	BLE 2Mbps	2480	Ant1	2484.16	-39.43	2	57.83	Peak	74	Pass
NVNT	BLE 2Mbps	2480	Ant1	2483.512	-51.87	2	45.39	Average	54	Pass

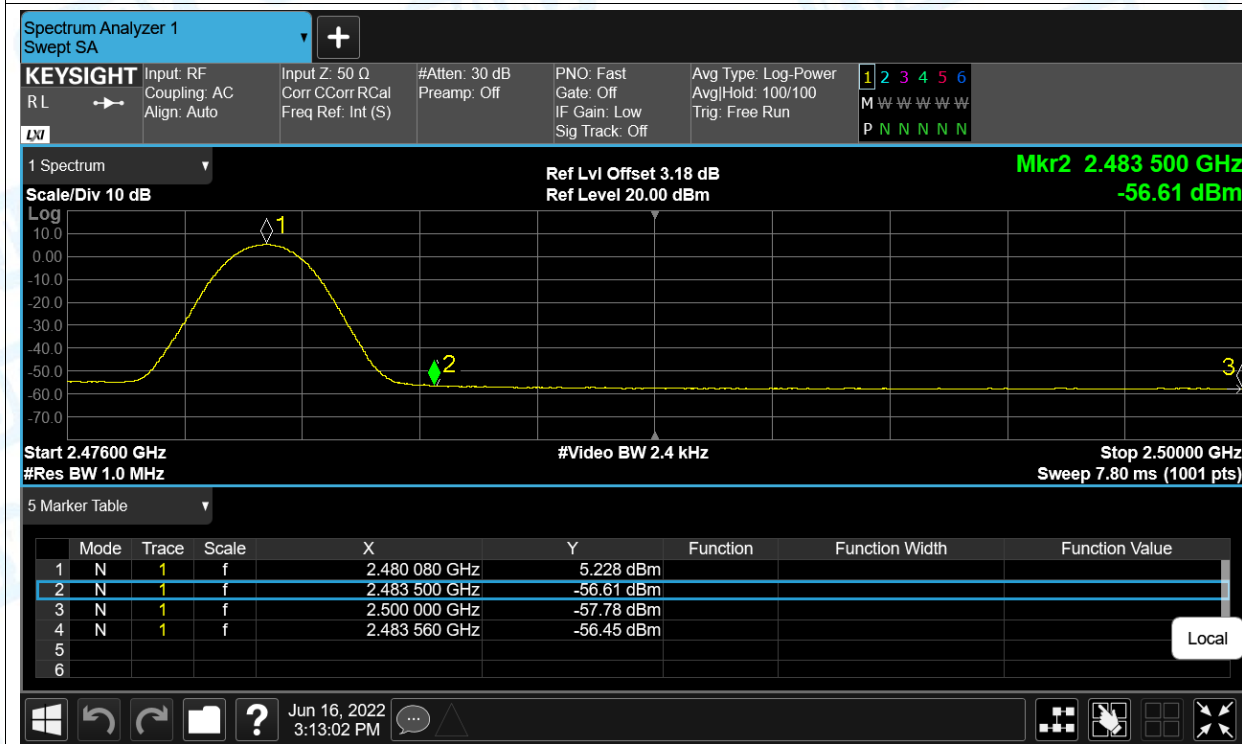
NVNT	BLE 2Mbps	2480	Ant1	2500	-49.79	2	47.47	Peak	74	Pass
NVNT	BLE 2Mbps	2480	Ant1	2500	-57.44	2	39.82	Average	54	Pass

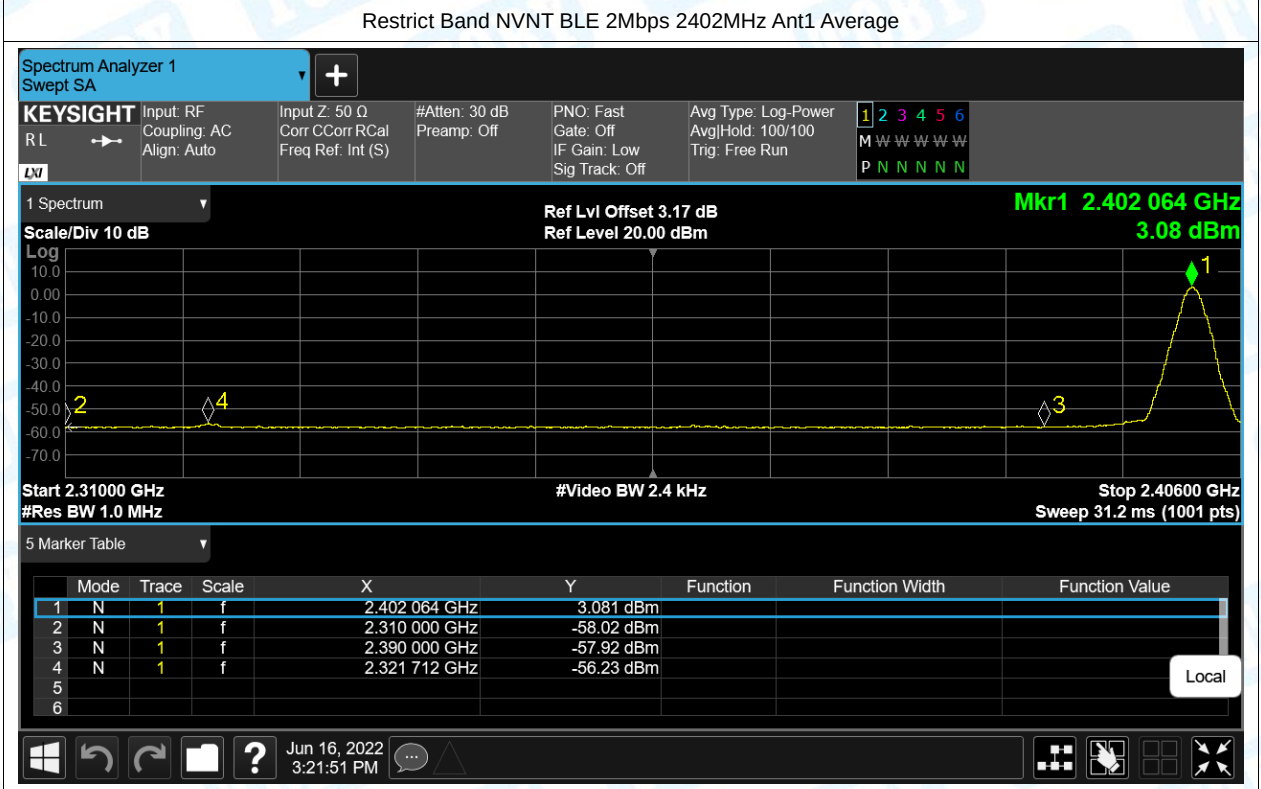
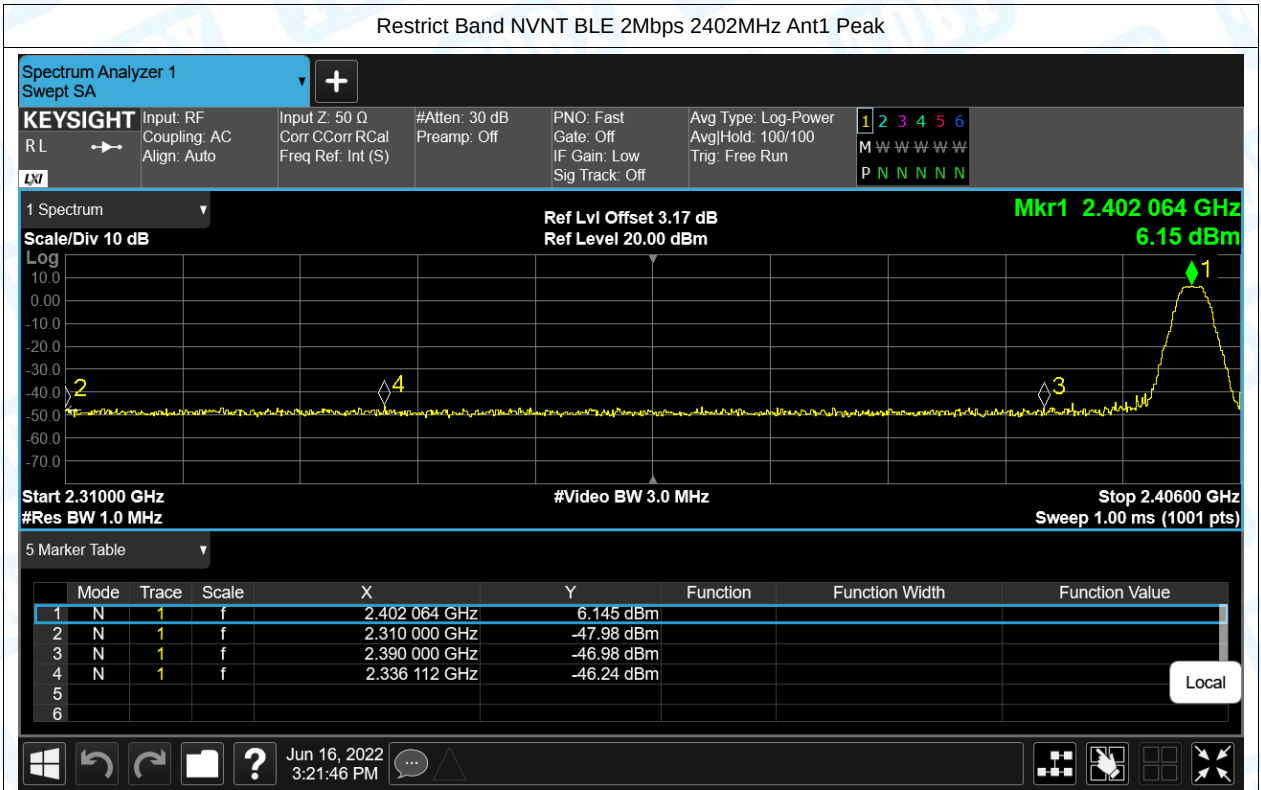


Restrict Band NVNT BLE 1Mbps 2480MHz Ant1 Peak

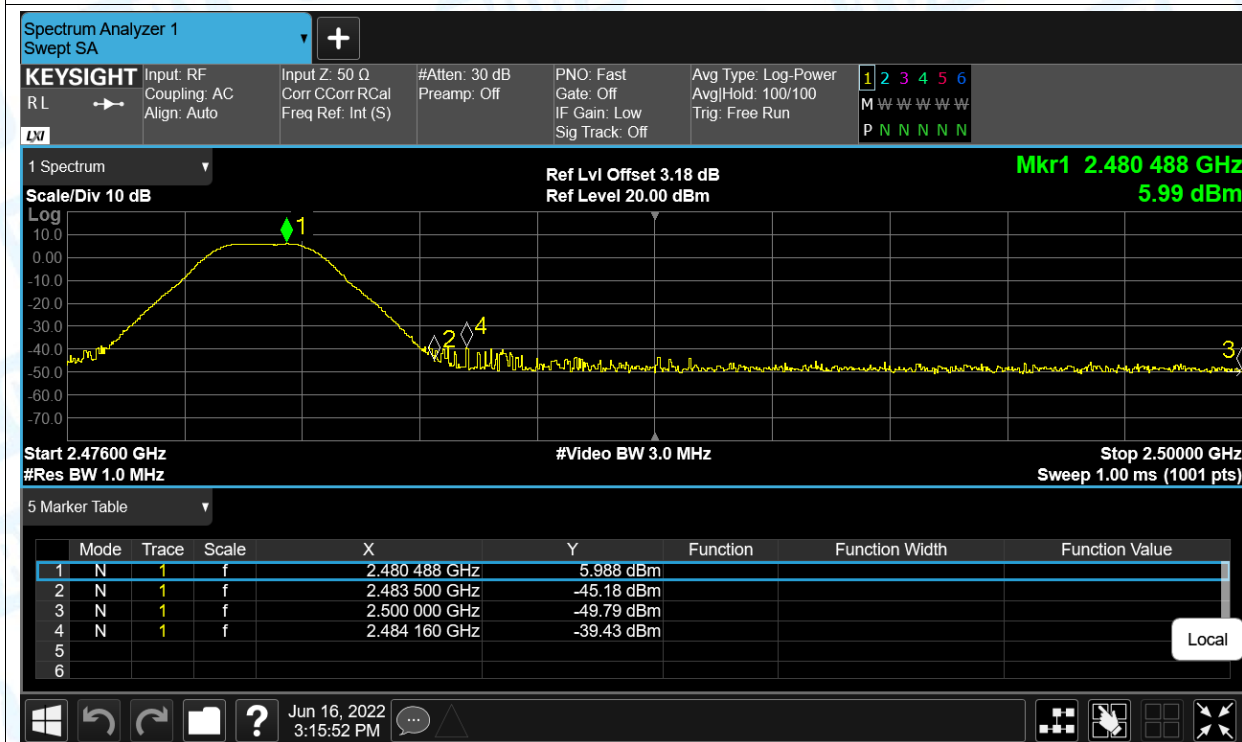


Restrict Band NVNT BLE 1Mbps 2480MHz Ant1 Average





Restrict Band NVNT BLE 2Mbps 2480MHz Ant1 Peak



Restrict Band NVNT BLE 2Mbps 2480MHz Ant1 Average

