

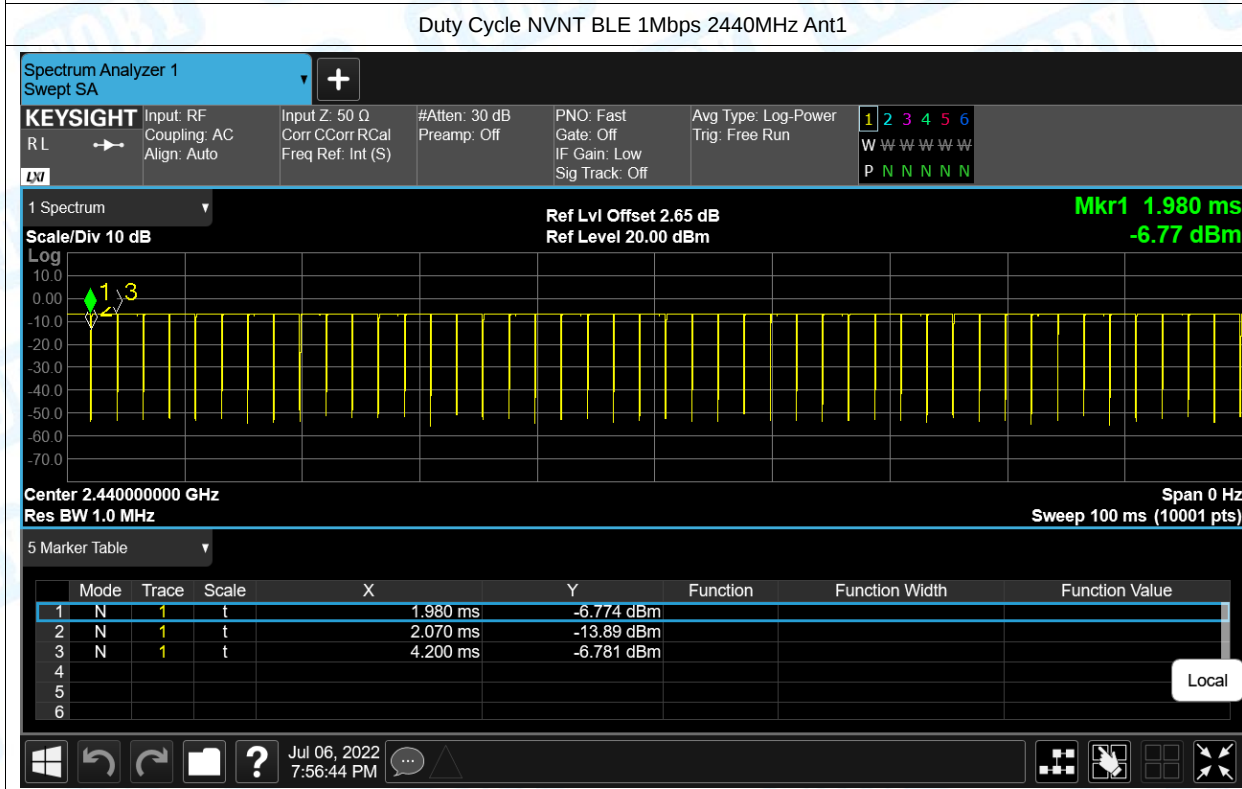
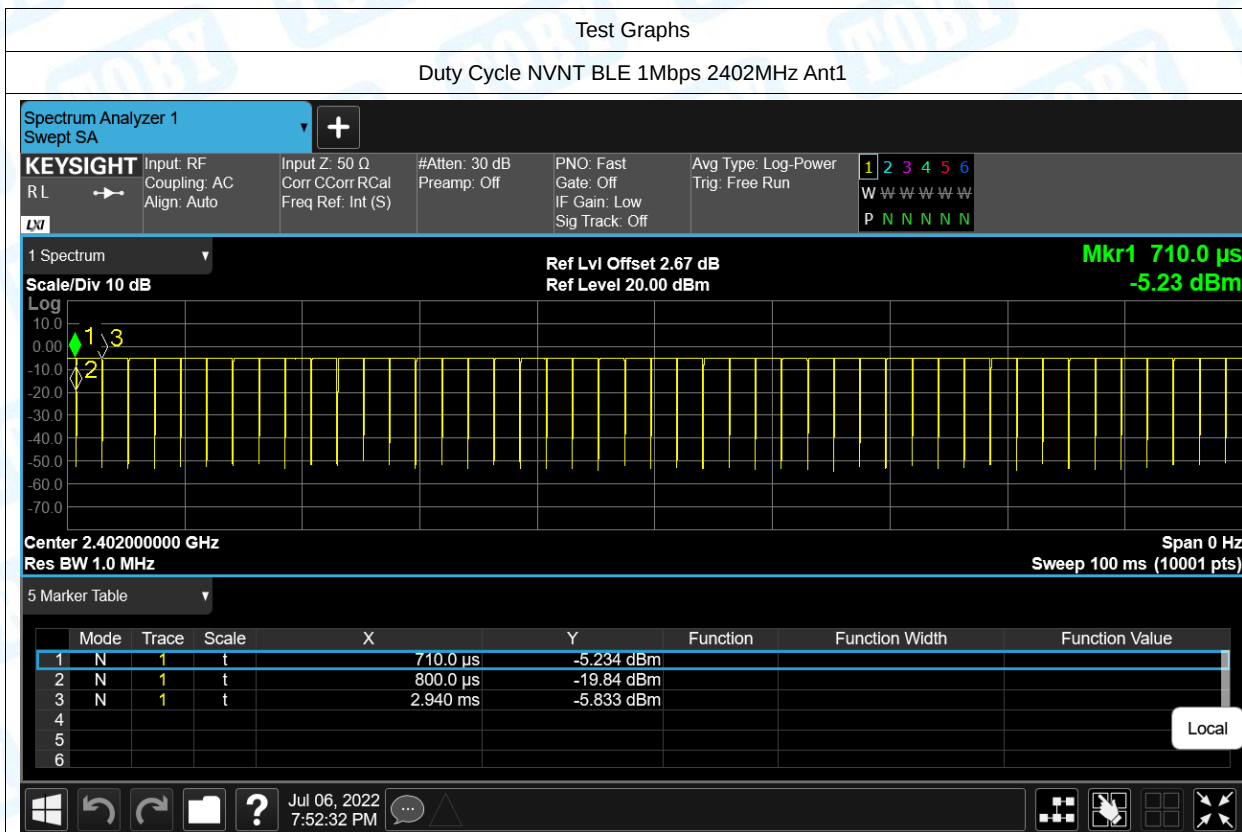
RF Test Data for Bluetooth LE

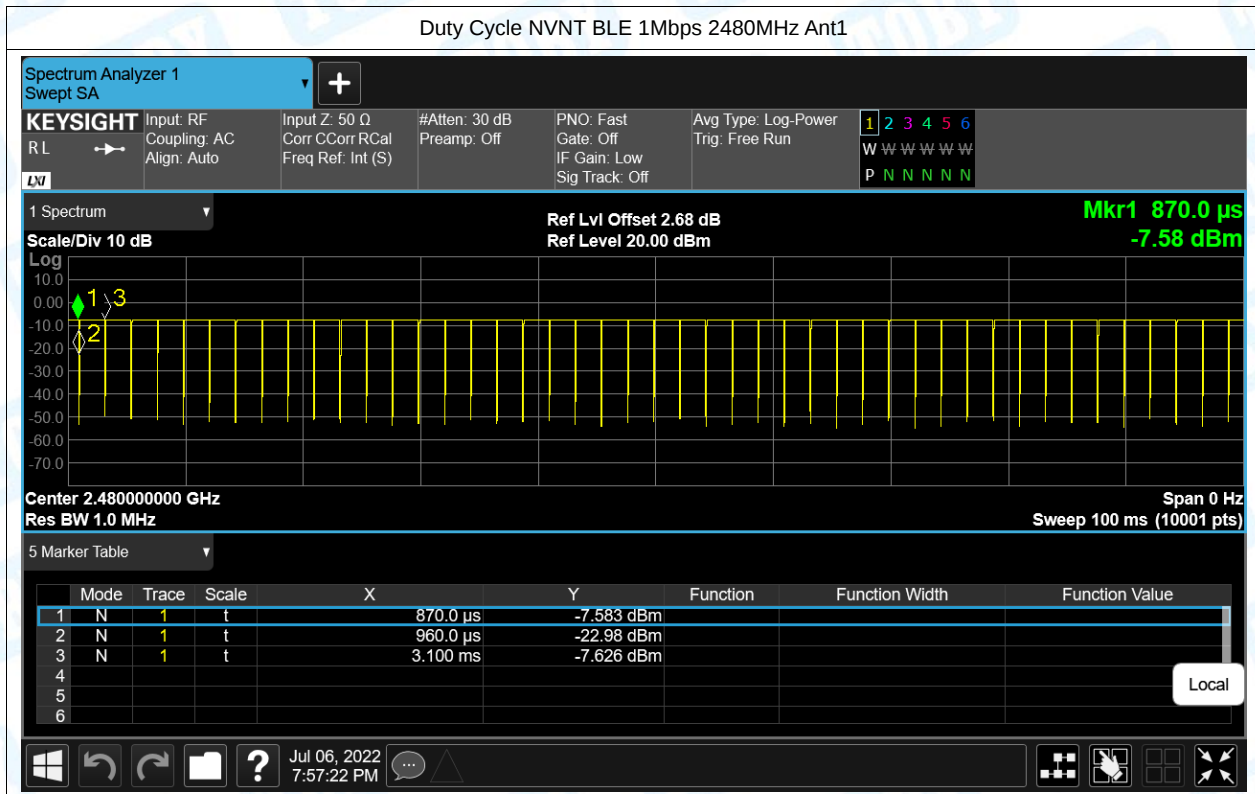
(Conducted Measurements)

General Description of EUT	
Product Name:	SmartAccess
Test Model:	X1
Sample ID:	202206-0142-1-2#
Environmental Conditions	
Temperature:	24℃
Relative Humidity:	50%
Test Voltage:	DC 5V
Test Engineer:	Huangjianping
Note: For a more detailed features description, please refer to the report TBR-C-202206-0142-2.	

Duty Cycle

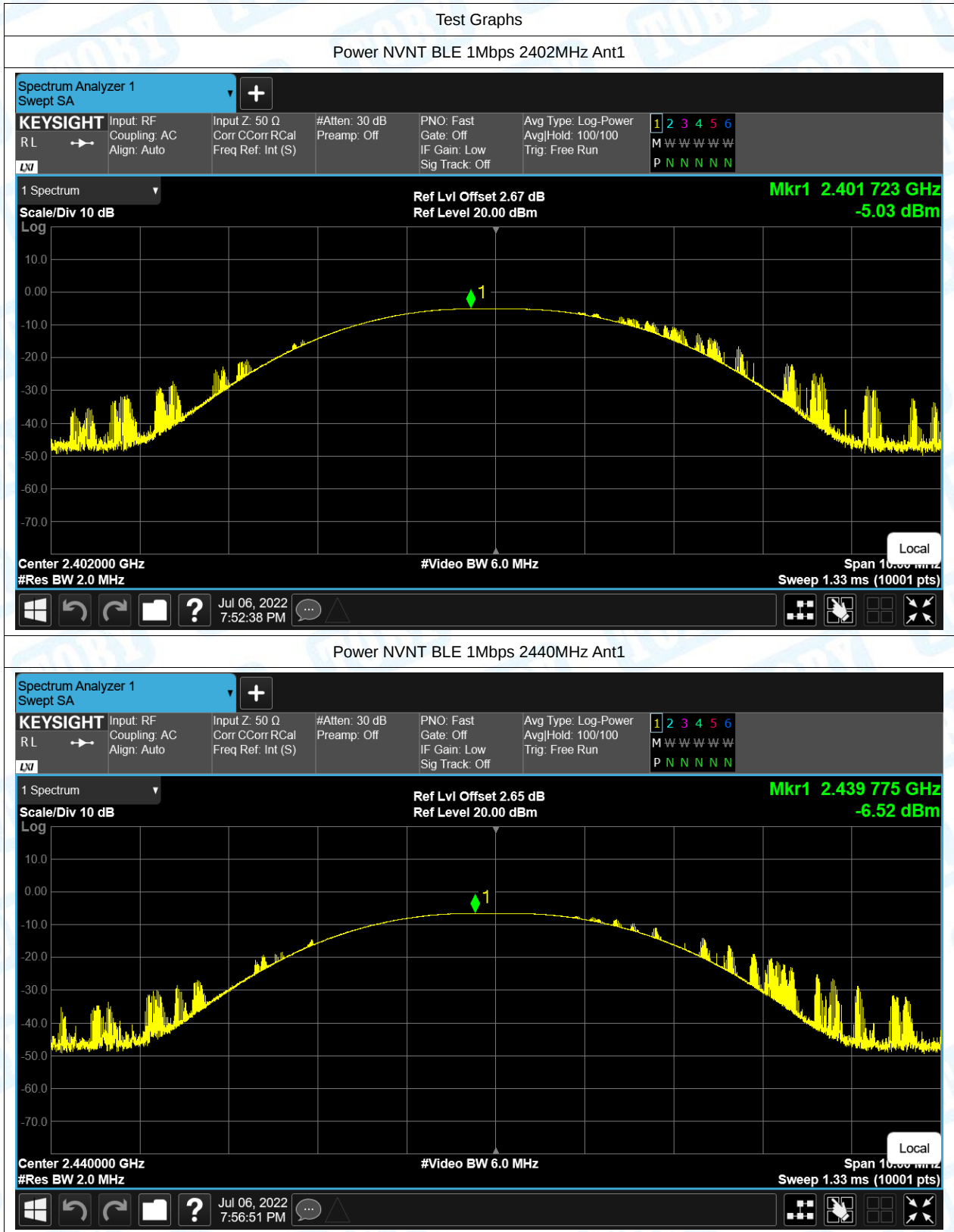
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1Mbps	2402	Ant1	96.39	0.16	0.47
NVNT	BLE 1Mbps	2440	Ant1	96.36	0.16	0.47
NVNT	BLE 1Mbps	2480	Ant1	96.36	0.16	0.47

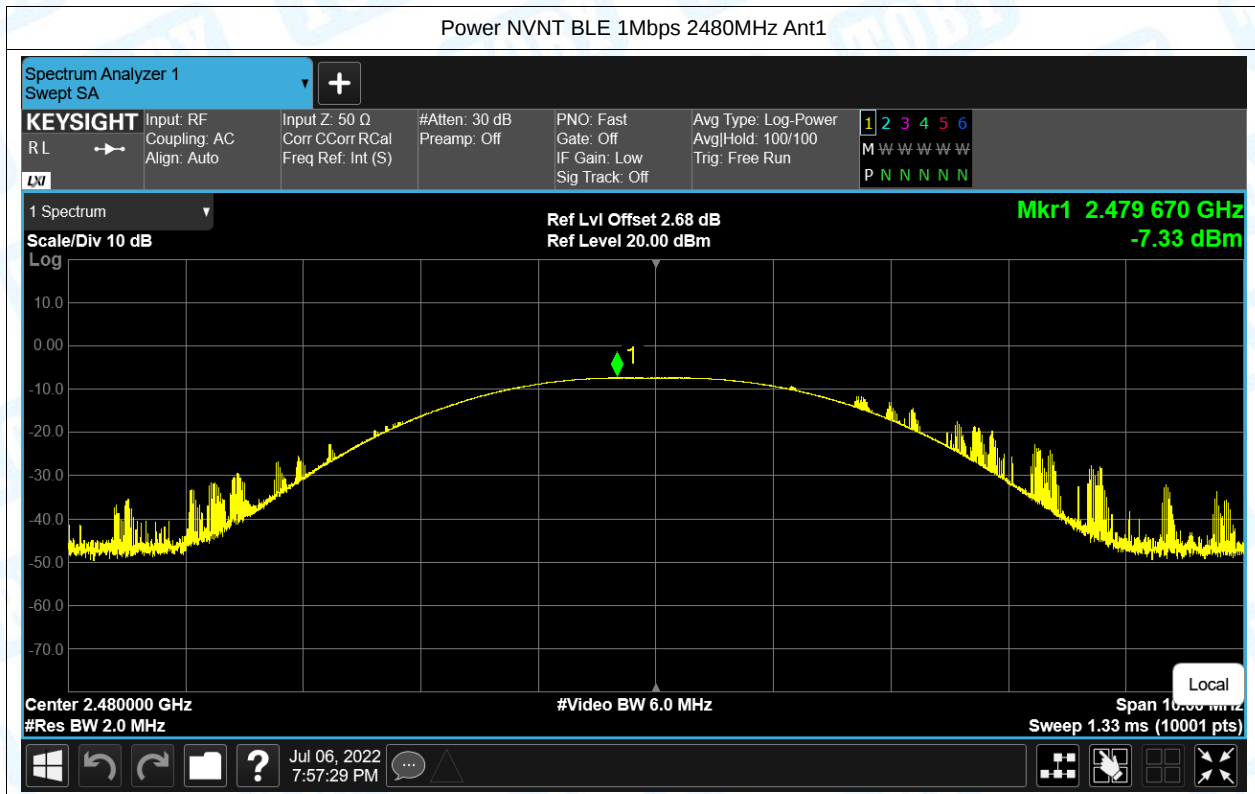




Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-5.033	30	Pass
NVNT	BLE 1Mbps	2440	Ant1	-6.522	30	Pass
NVNT	BLE 1Mbps	2480	Ant1	-7.334	30	Pass



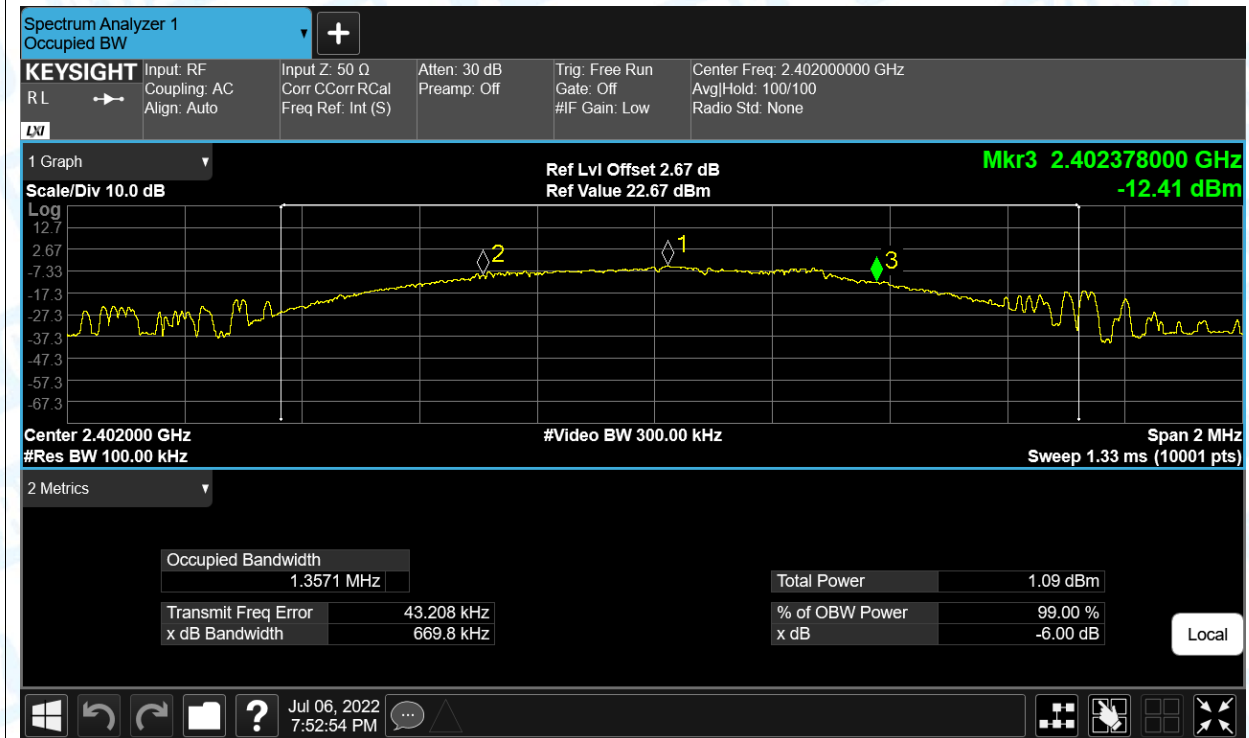


-6dB Bandwidth

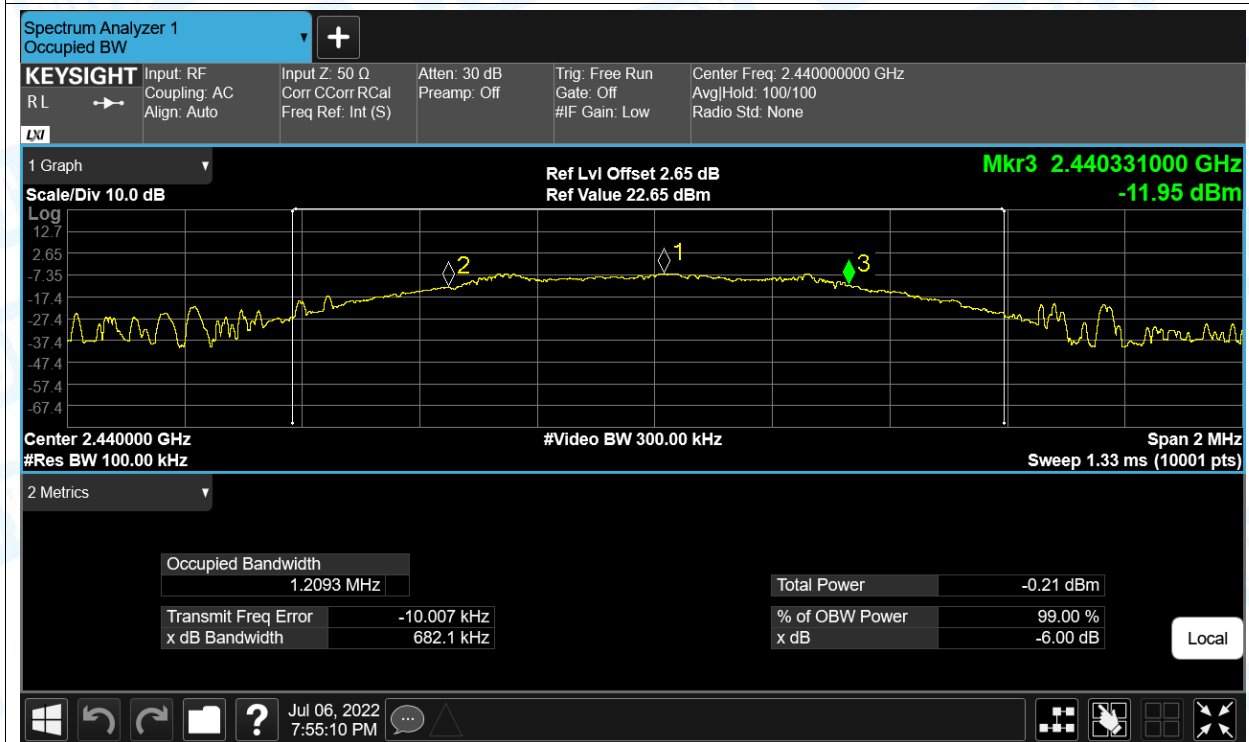
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	0.67	0.5	Pass
NVNT	BLE 1Mbps	2440	Ant1	0.68	0.5	Pass
NVNT	BLE 1Mbps	2480	Ant1	0.68	0.5	Pass

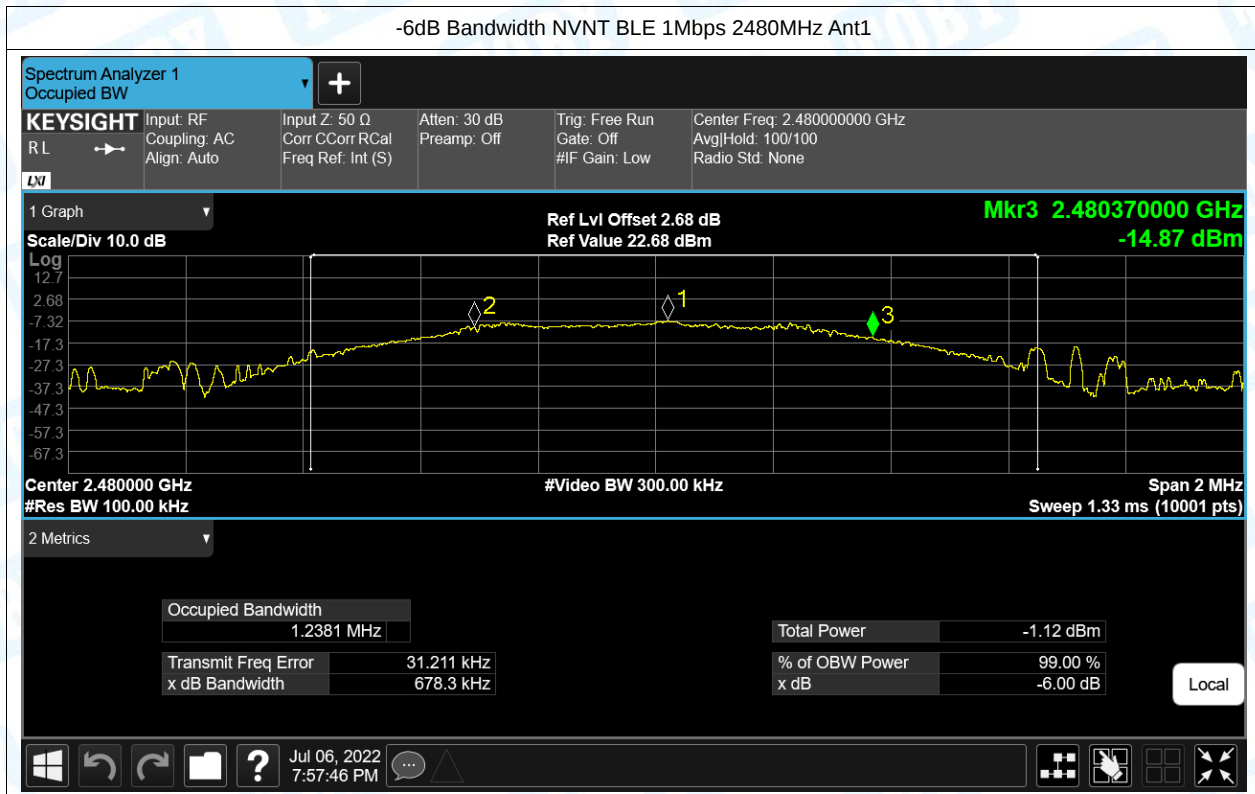
Test Graphs

-6dB Bandwidth NVNT BLE 1Mbps 2402MHz Ant1



-6dB Bandwidth NVNT BLE 1Mbps 2440MHz Ant1





Occupied Channel Bandwidth

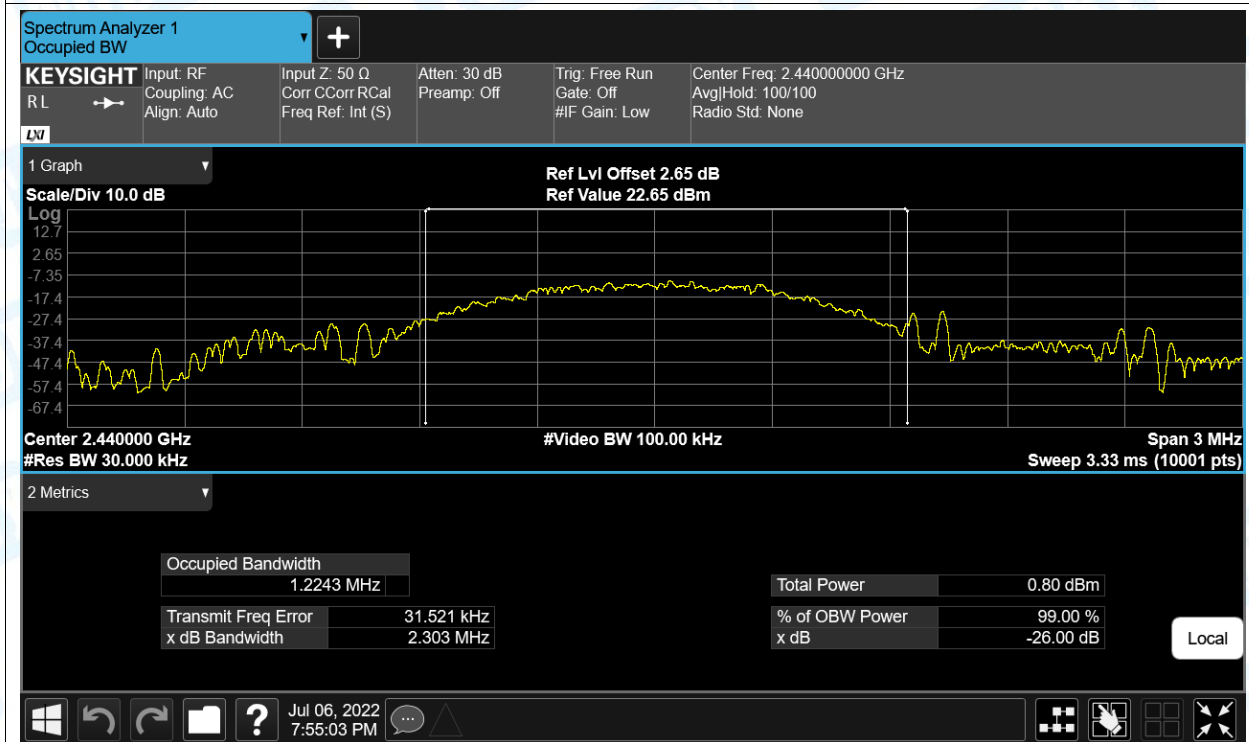
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE 1Mbps	2402	Ant1	1.27
NVNT	BLE 1Mbps	2440	Ant1	1.224
NVNT	BLE 1Mbps	2480	Ant1	1.199

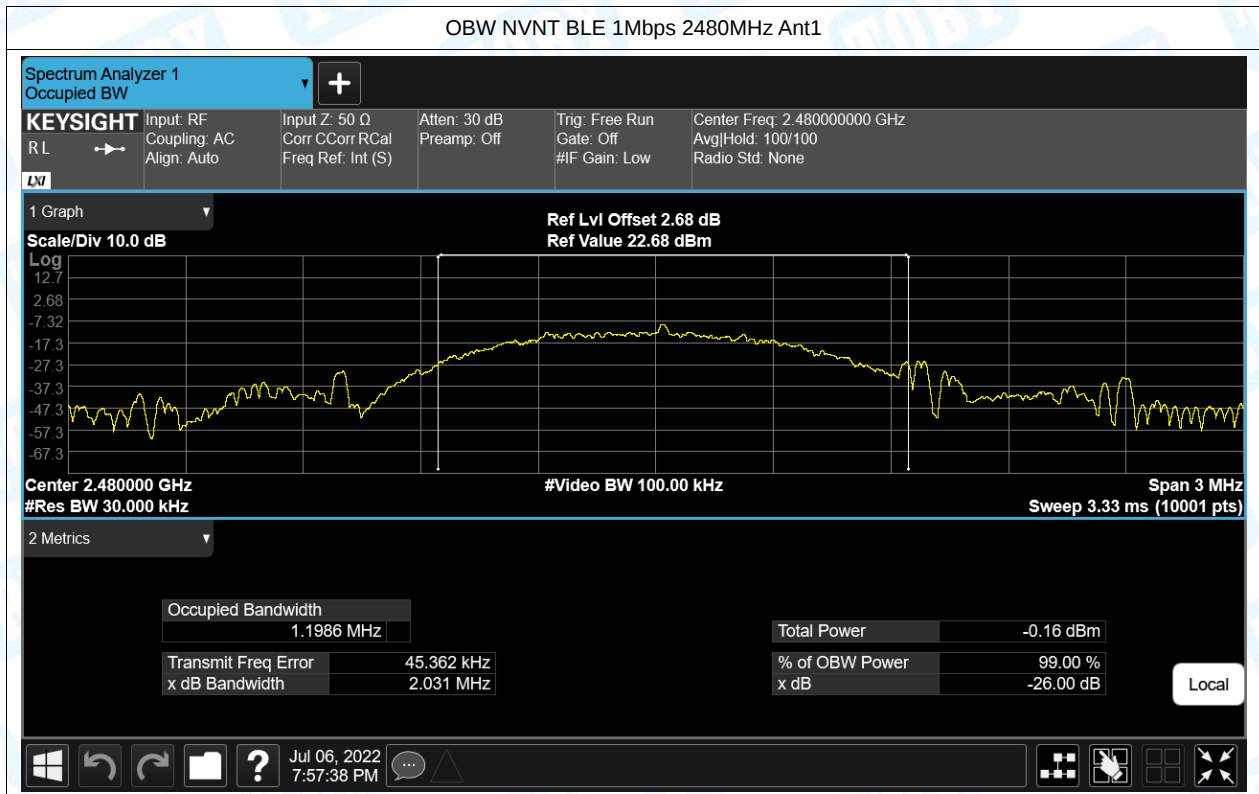
Test Graphs

OBW NVNT BLE 1Mbps 2402MHz Ant1



OBW NVNT BLE 1Mbps 2440MHz Ant1



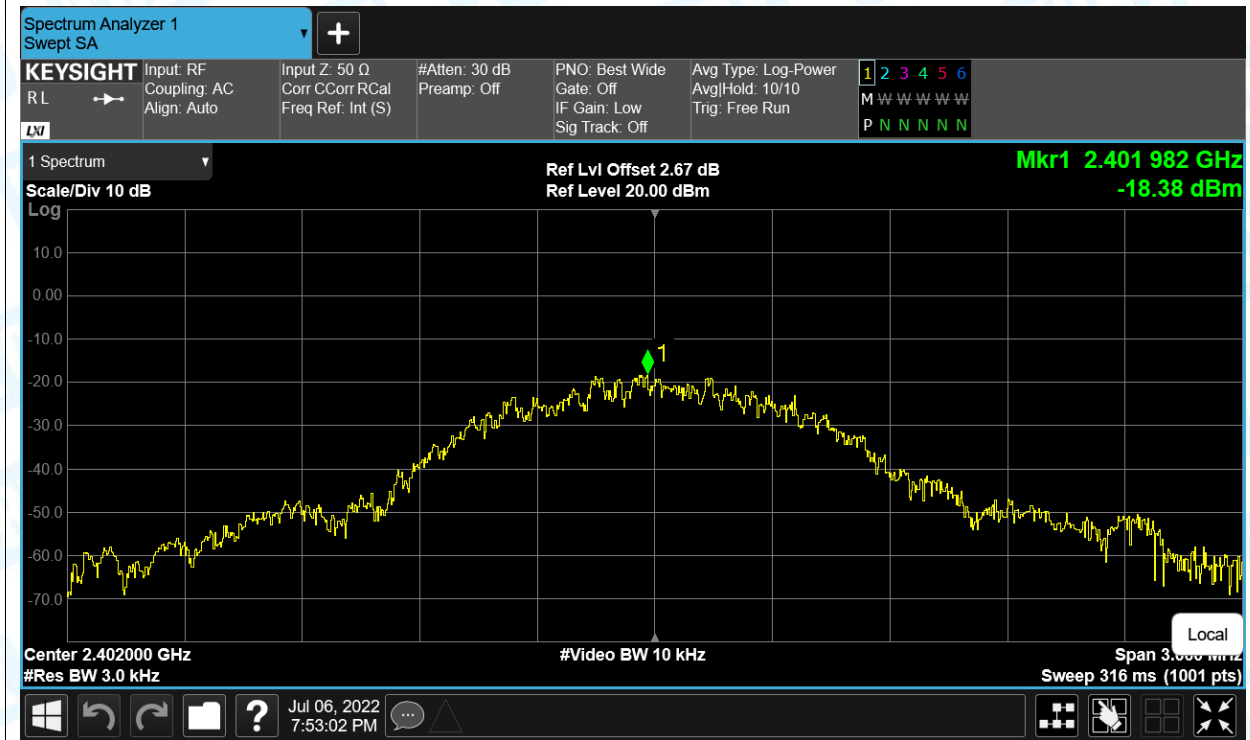


Maximum Power Spectral Density Level

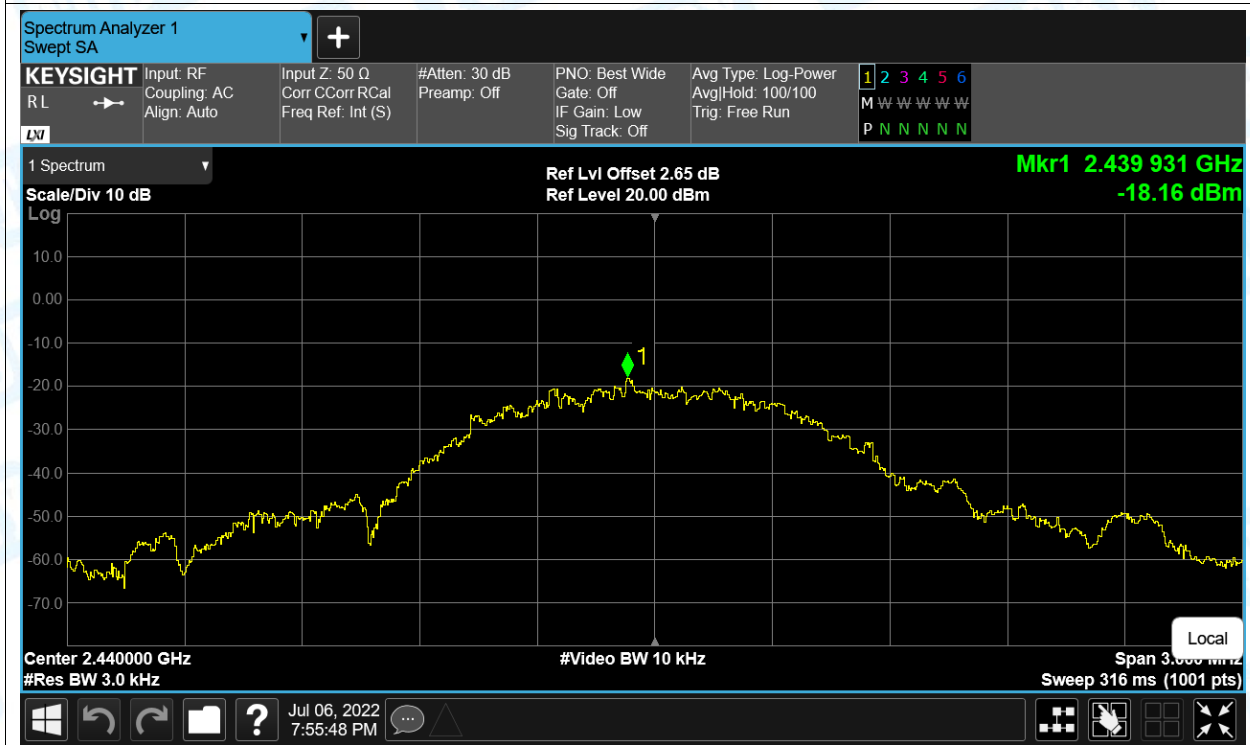
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-18.383	8	Pass
NVNT	BLE 1Mbps	2440	Ant1	-18.158	8	Pass
NVNT	BLE 1Mbps	2480	Ant1	-19.22	8	Pass

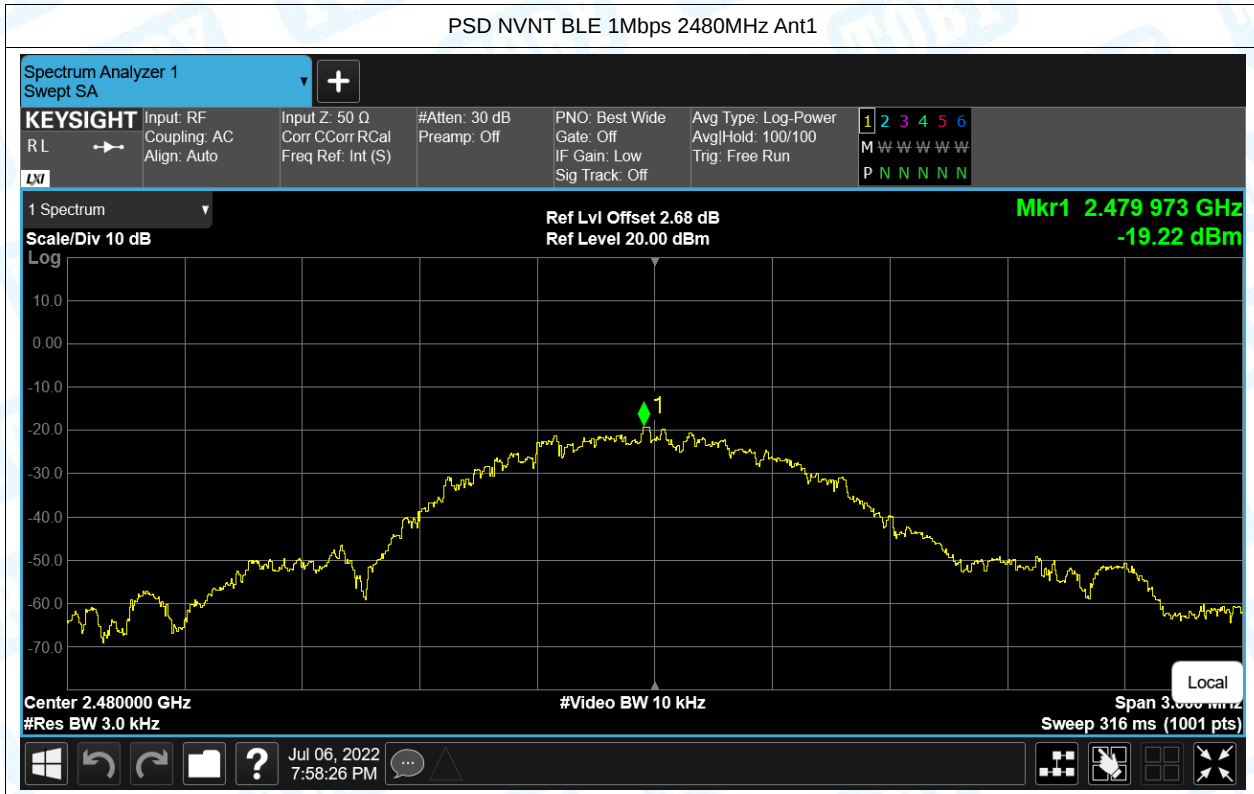
Test Graphs

PSD NVNT BLE 1Mbps 2402MHz Ant1



PSD NVNT BLE 1Mbps 2440MHz Ant1

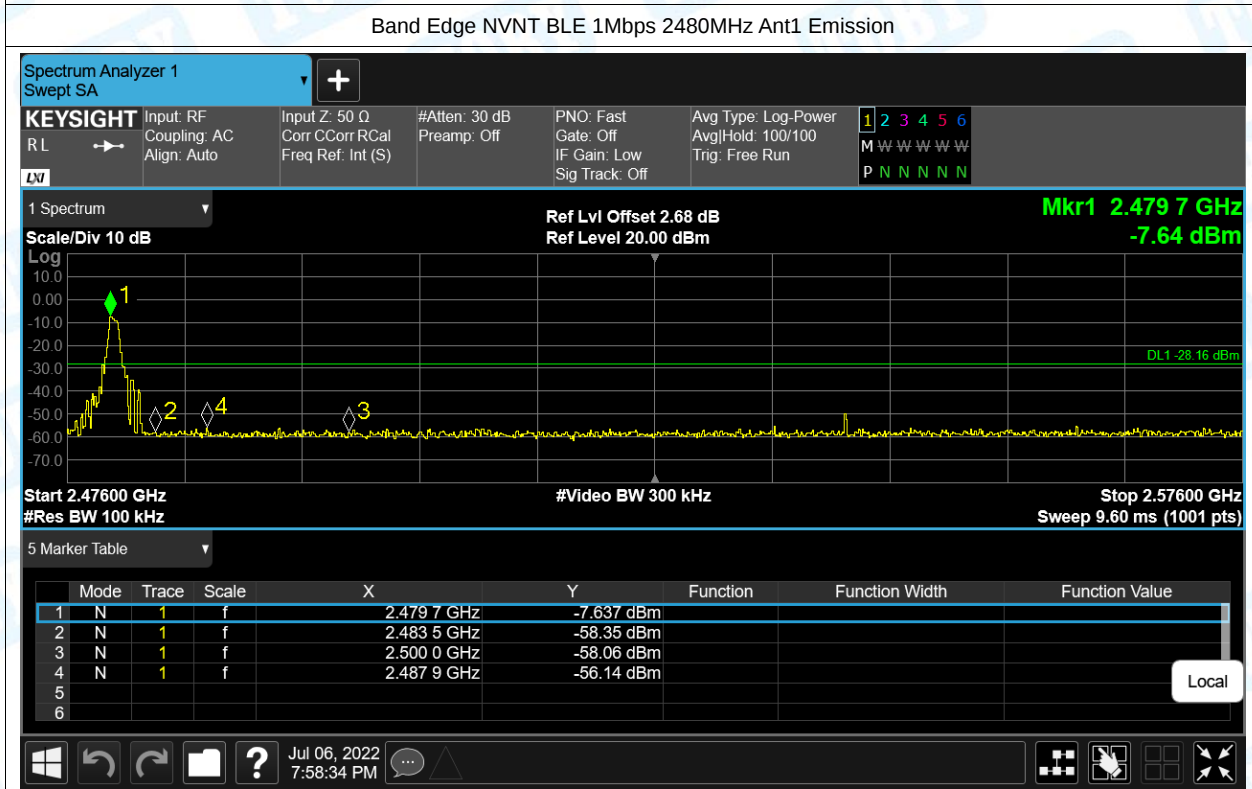
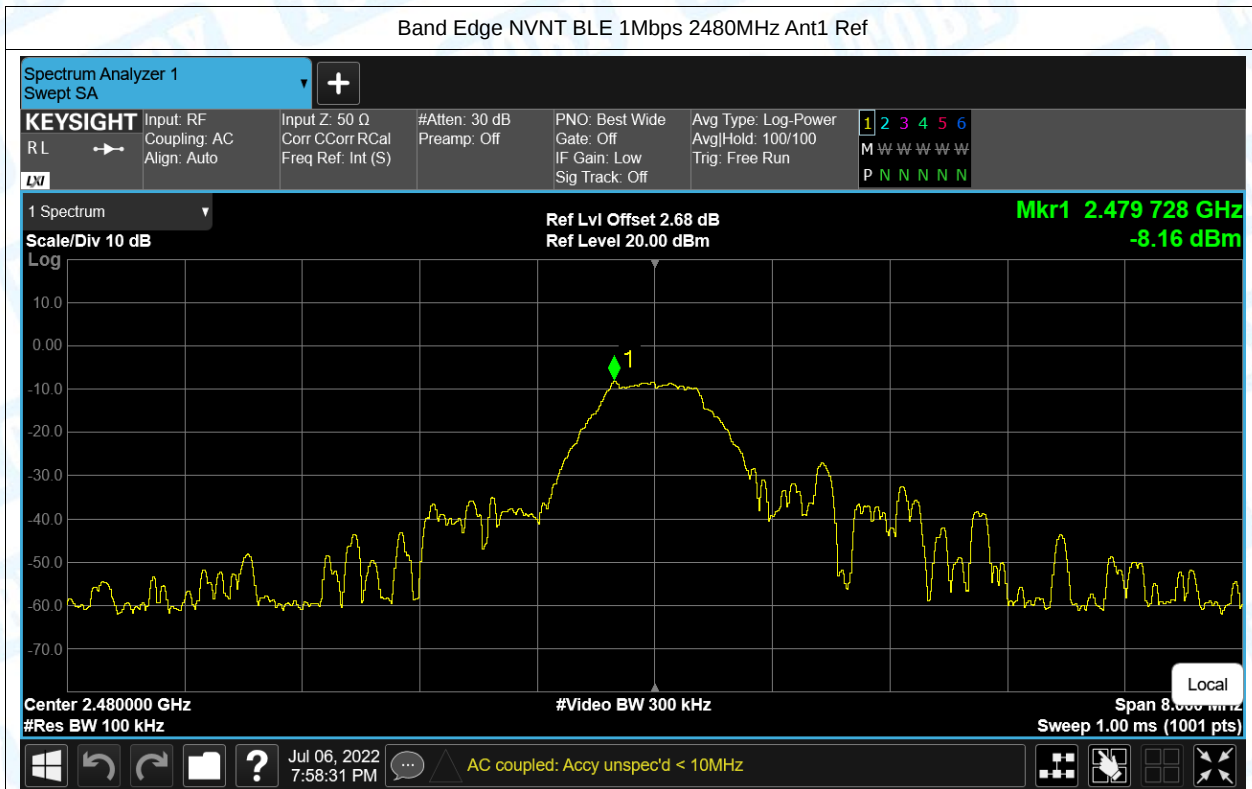




Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-38.97	-20	Pass
NVNT	BLE 1Mbps	2480	Ant1	-47.98	-20	Pass

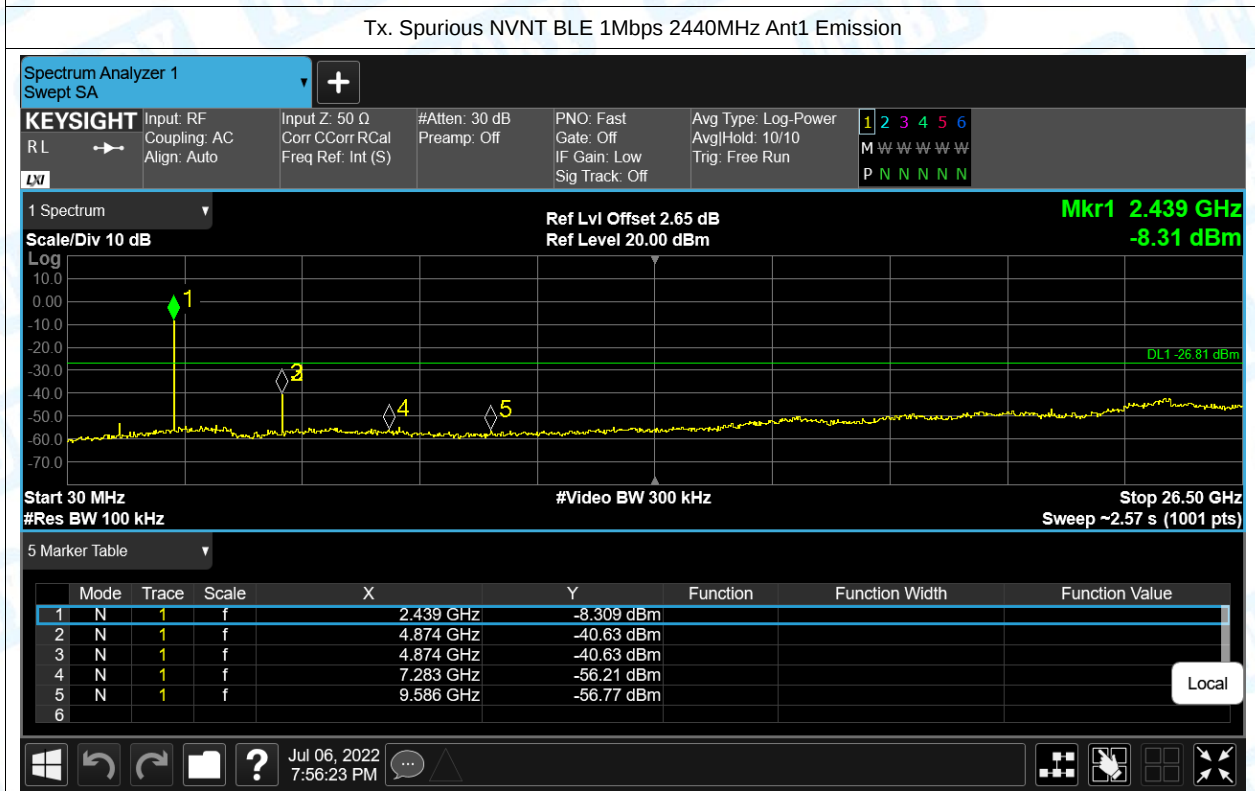
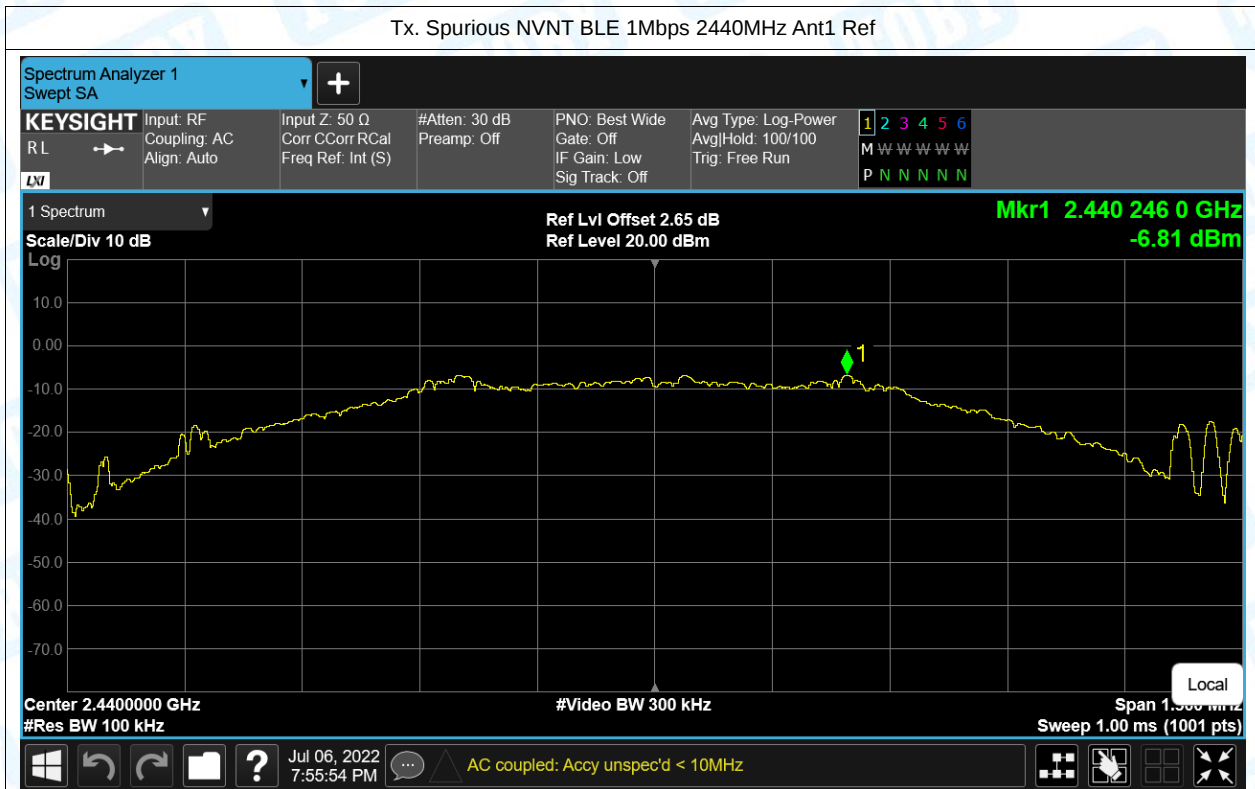


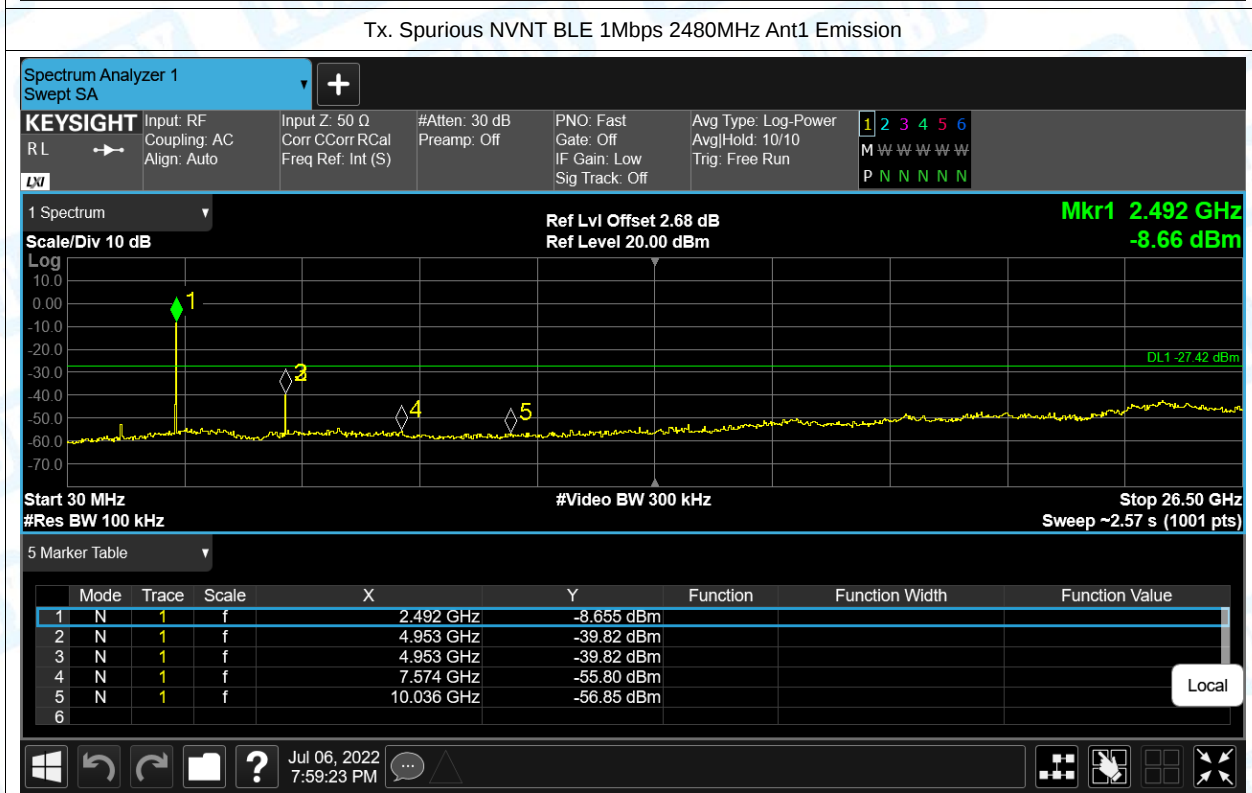
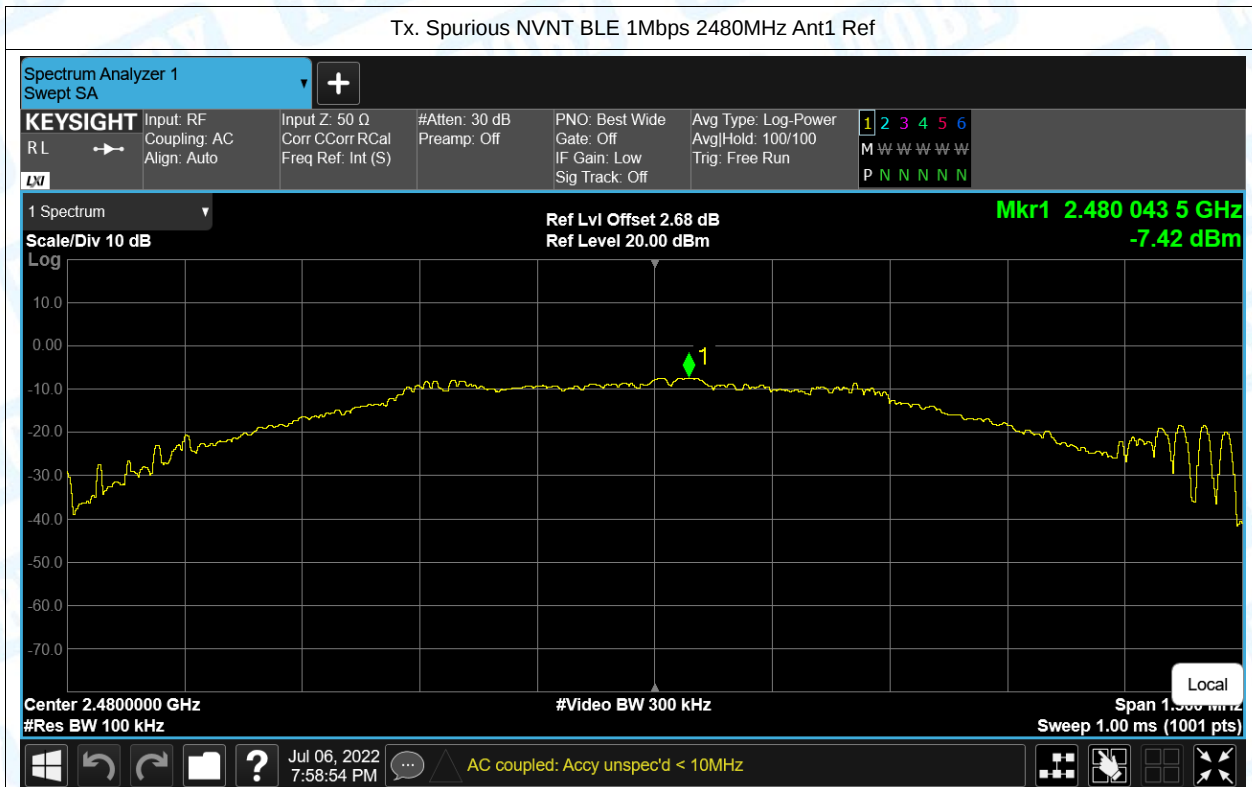


Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-34.17	-20	Pass
NVNT	BLE 1Mbps	2440	Ant1	-33.82	-20	Pass
NVNT	BLE 1Mbps	2480	Ant1	-32.4	-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	-48.47	2	48.79	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2310	-59.32	2	37.94	Average	54	Pass
NVNT	BLE 1Mbps	2402	Ant1	2340.336	-38.58	2	58.68	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2385.936	-59.04	2	38.22	Average	54	Pass
NVNT	BLE 1Mbps	2402	Ant1	2390	-50.07	2	47.19	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2390	-59.15	2	38.11	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.5	-42.36	2	54.9	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.5	-58.4	2	38.86	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.704	-36.63	2	60.63	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.632	-58.39	2	38.87	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2500	-48.84	2	48.42	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2500	-59.12	2	38.14	Average	54	Pass

