

Appendix: Bluetooth LE

Contents

Contents 2

Duty Cycle 3

Maximum Peak Conducted Output Power 7

-6dB Bandwidth 11

Occupied Channel Bandwidth 15

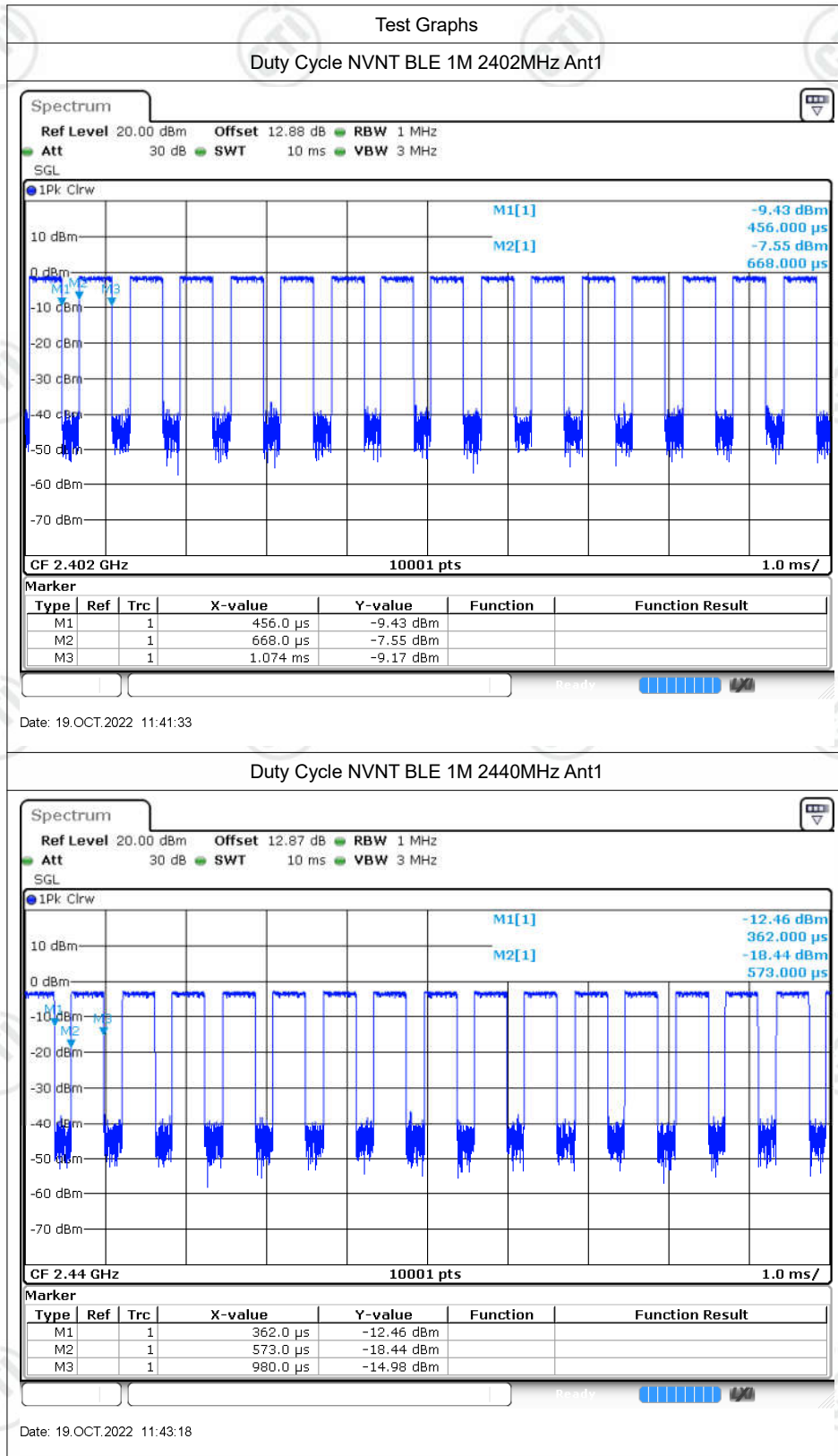
Maximum Power Spectral Density Level 19

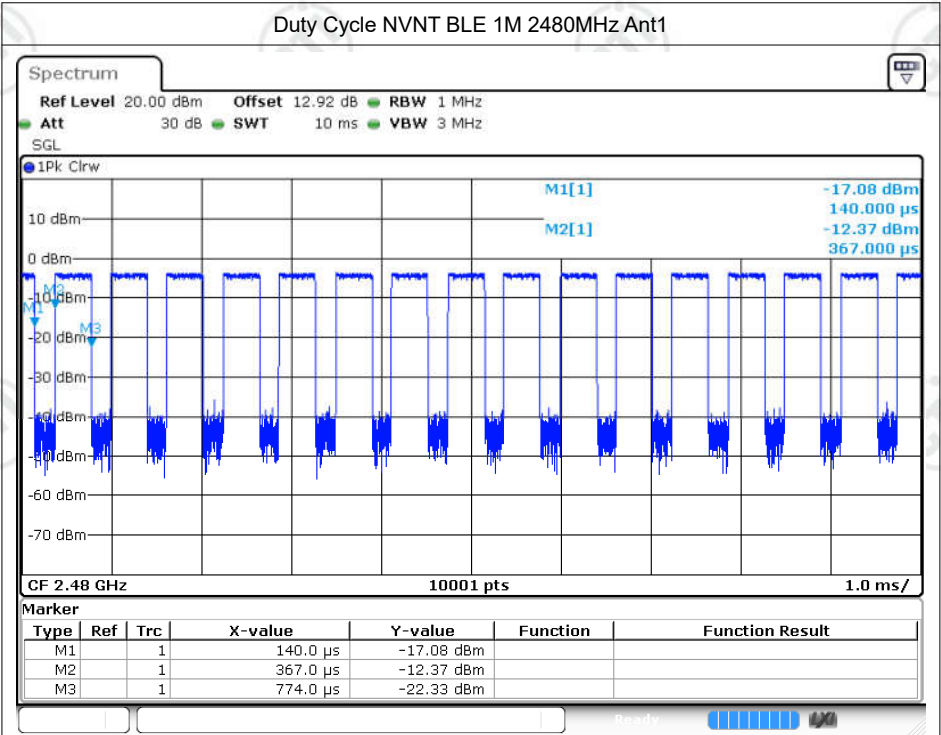
Band Edge 23

Conducted RF Spurious Emission 28

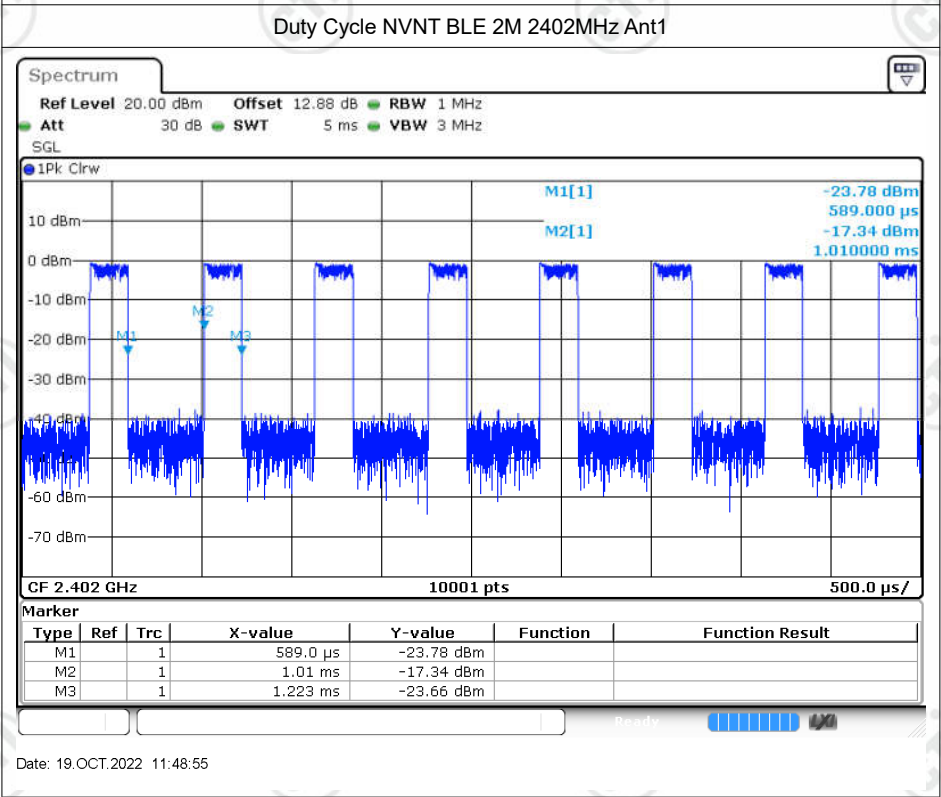
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1M	2402	Ant1	65.7	1.82	2.46
NVNT	BLE 1M	2440	Ant1	65.86	1.81	2.46
NVNT	BLE 1M	2480	Ant1	64.2	1.92	2.46
NVNT	BLE 2M	2402	Ant1	33.6	4.74	4.69
NVNT	BLE 2M	2440	Ant1	33.52	4.75	4.71
NVNT	BLE 2M	2480	Ant1	34.39	4.64	4.71

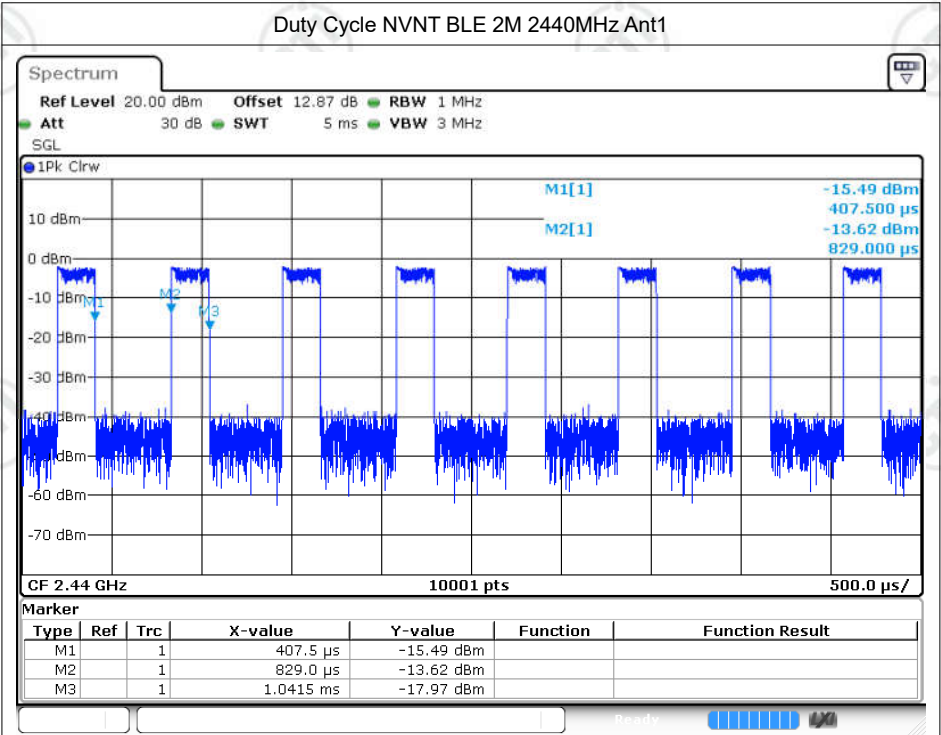




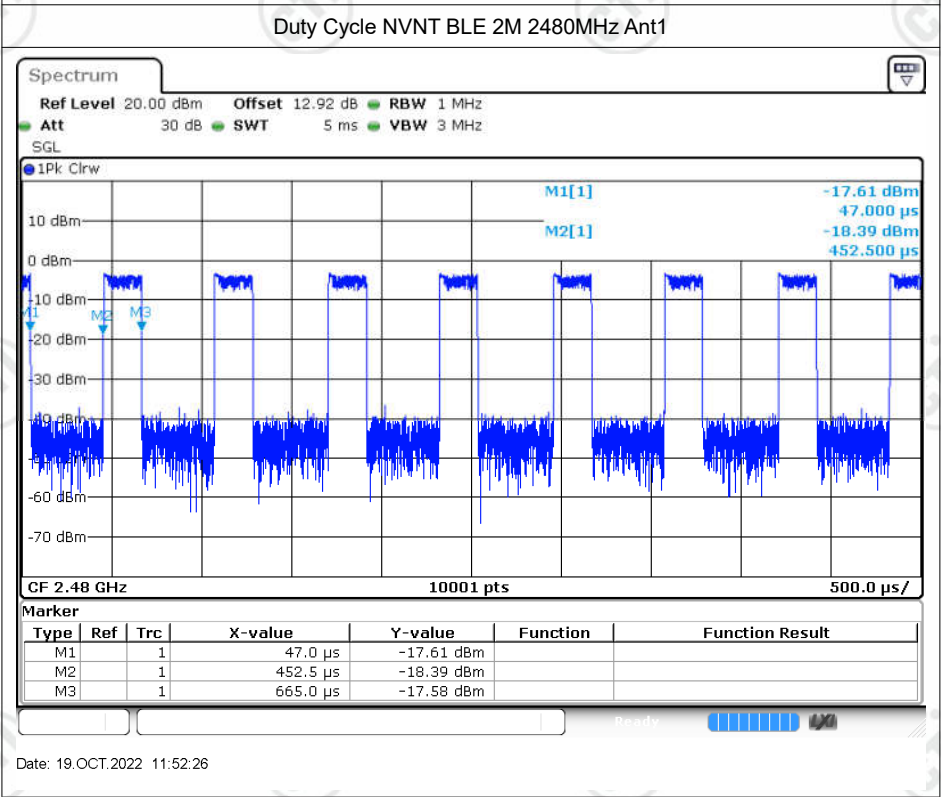
Date: 19.OCT.2022 11:47:11



Date: 19.OCT.2022 11:48:55



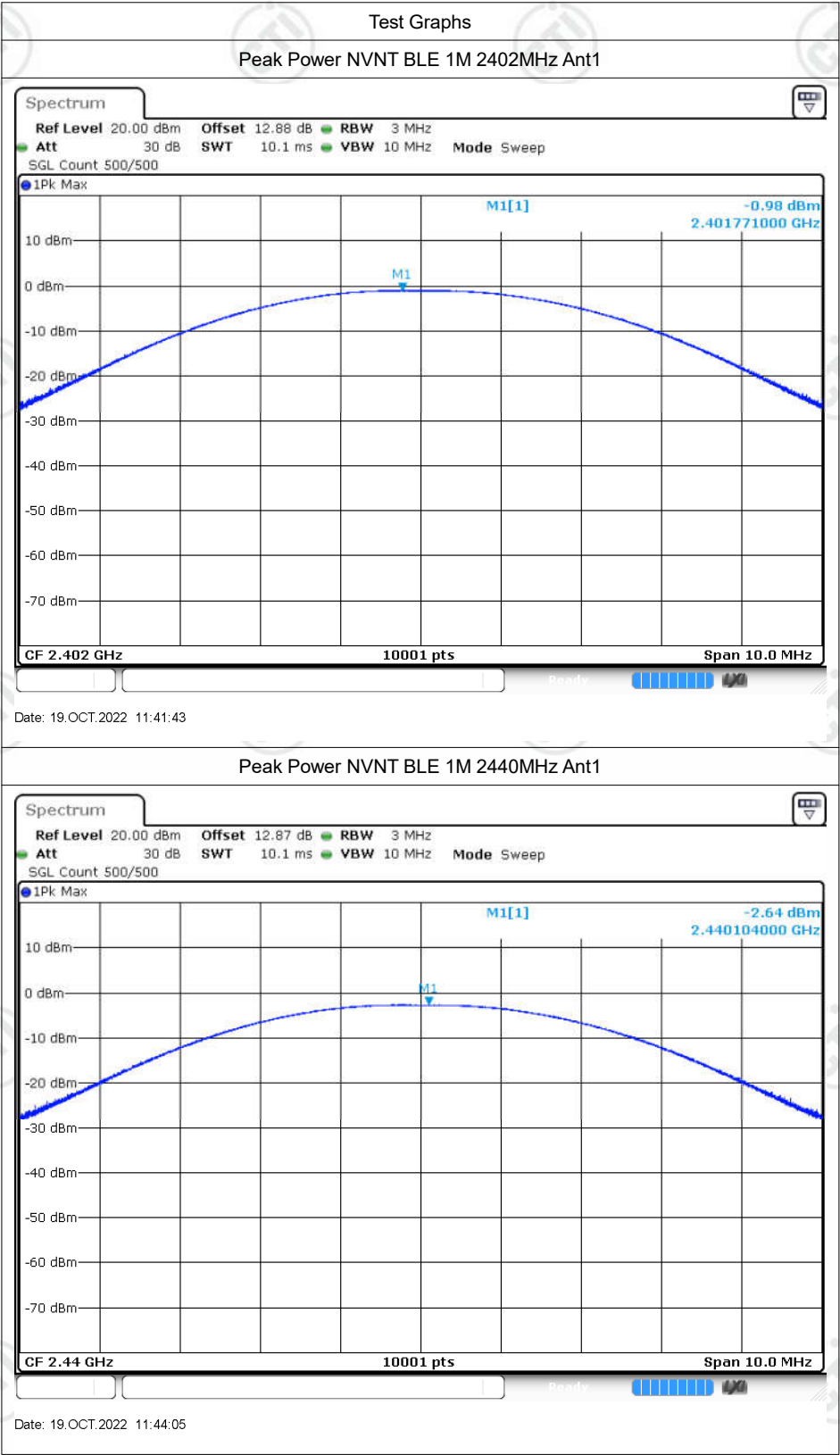
Date: 19.OCT.2022 11:50:45

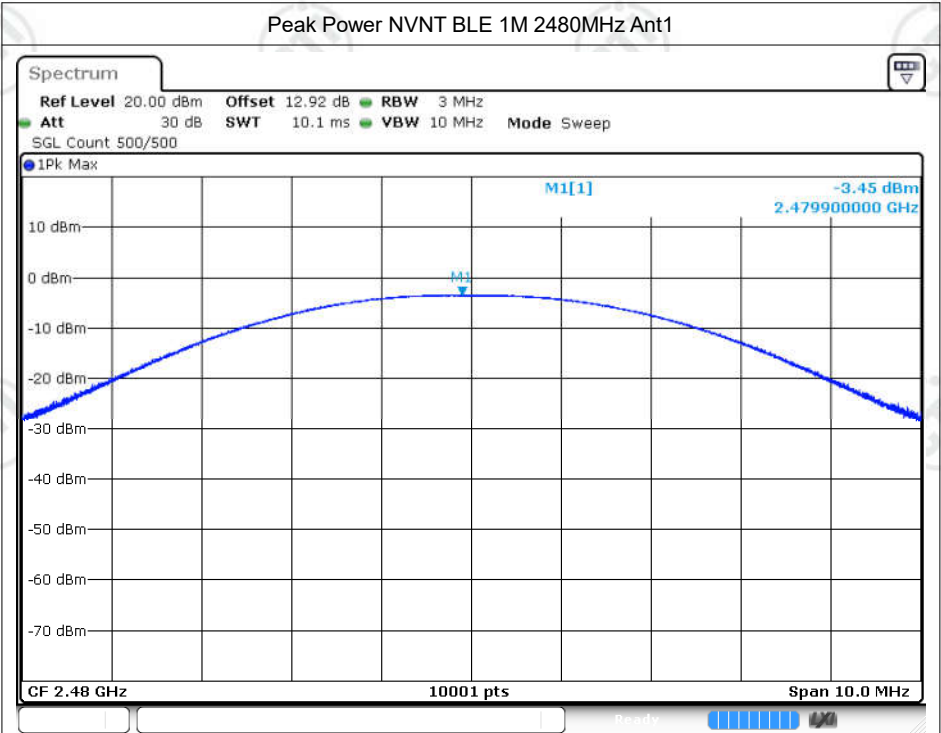


Date: 19.OCT.2022 11:52:26

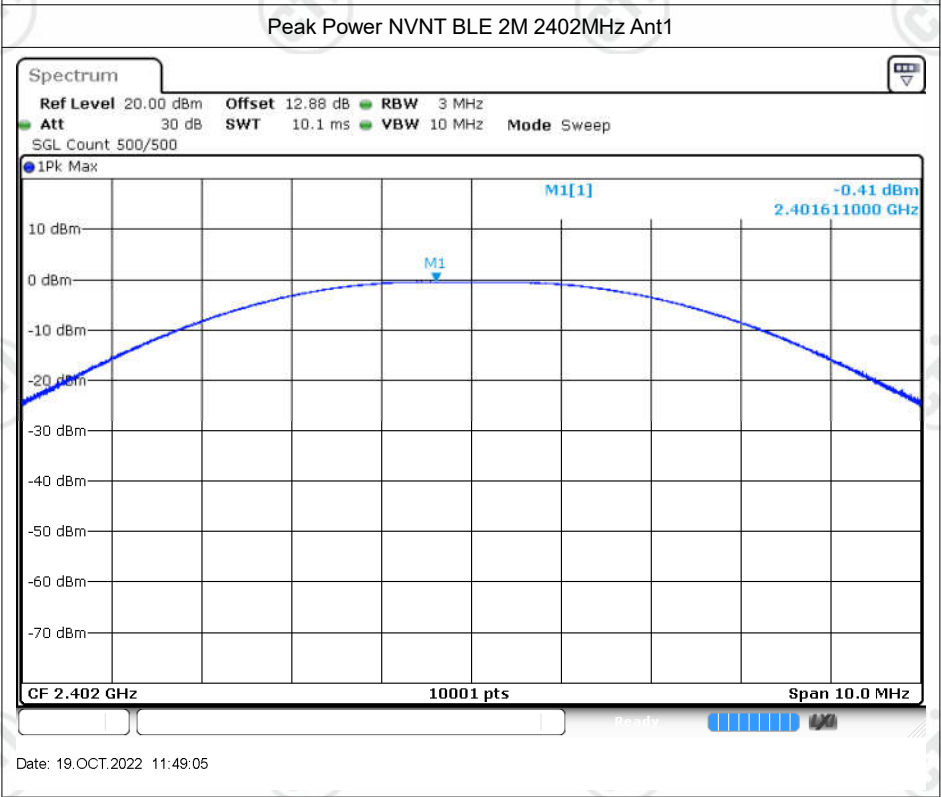
Maximum Peak Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	-0.98	30	Pass
NVNT	BLE 1M	2440	Ant1	-2.64	30	Pass
NVNT	BLE 1M	2480	Ant1	-3.45	30	Pass
NVNT	BLE 2M	2402	Ant1	-0.41	30	Pass
NVNT	BLE 2M	2440	Ant1	-1.82	30	Pass
NVNT	BLE 2M	2480	Ant1	-3.09	30	Pass

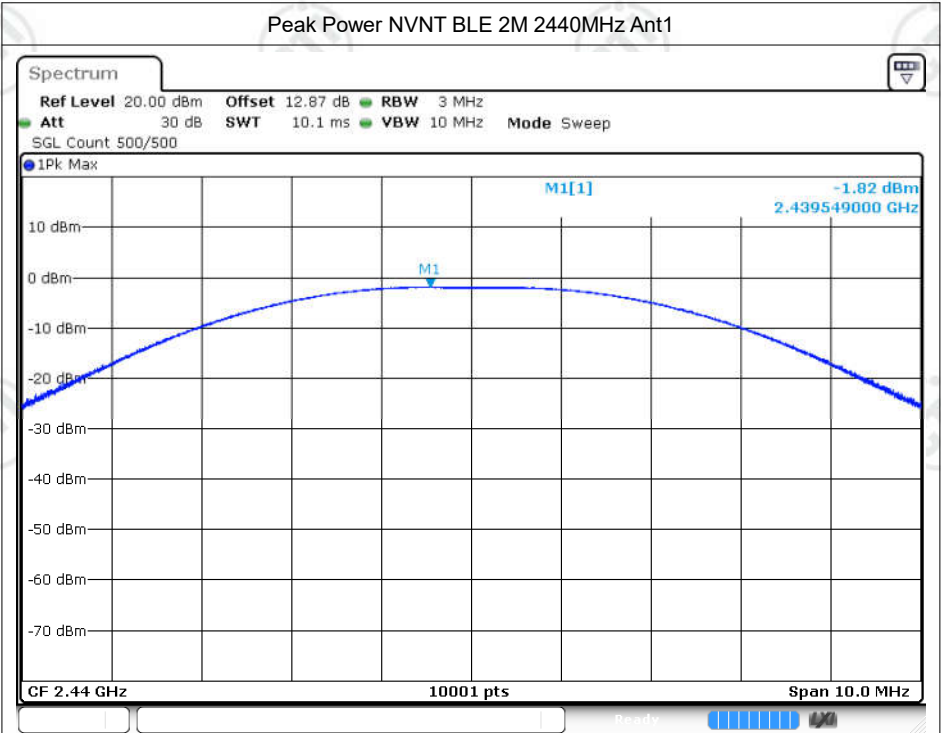




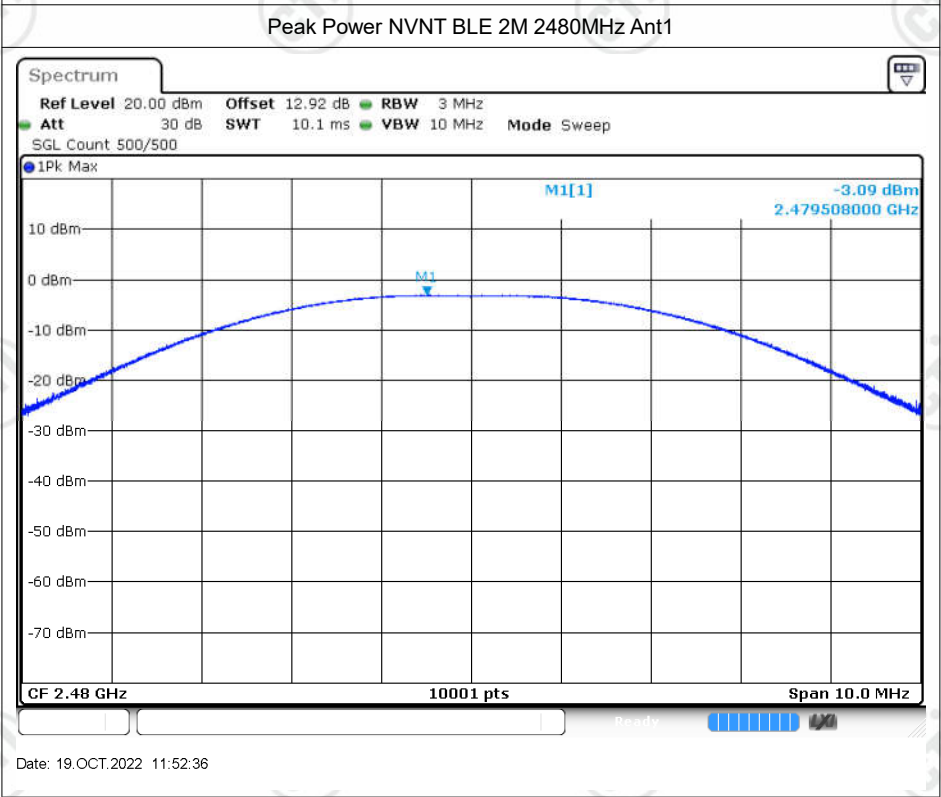
Date: 19.OCT.2022 11:47:21



Date: 19.OCT.2022 11:49:05



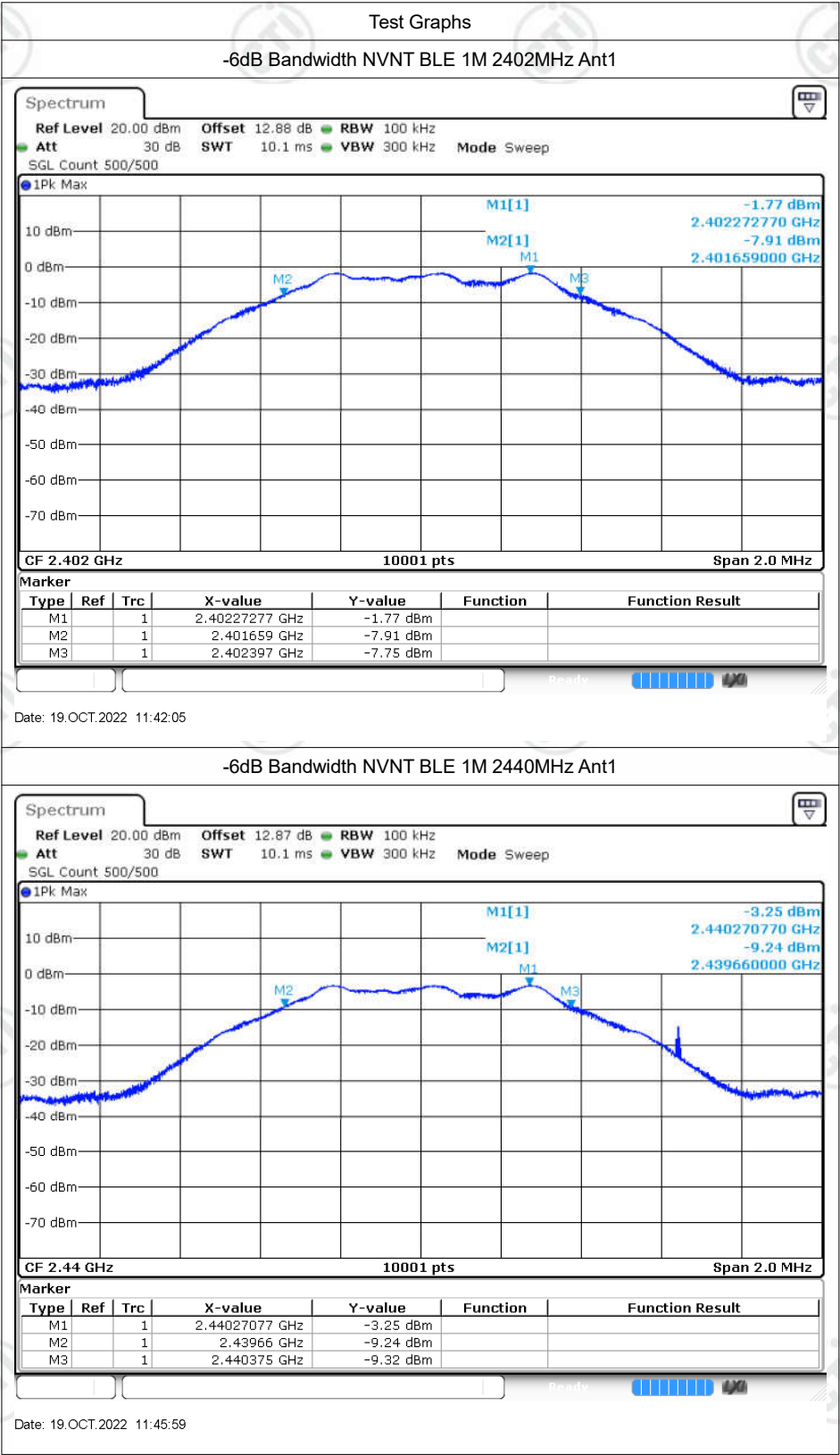
Date: 19.OCT.2022 11:50:55

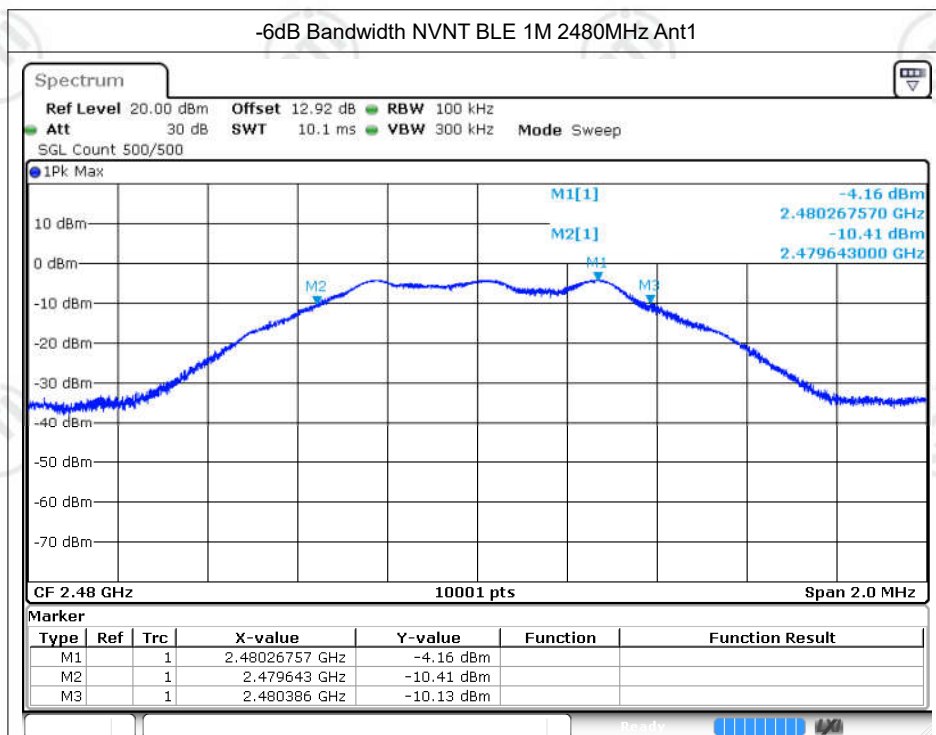


Date: 19.OCT.2022 11:52:36

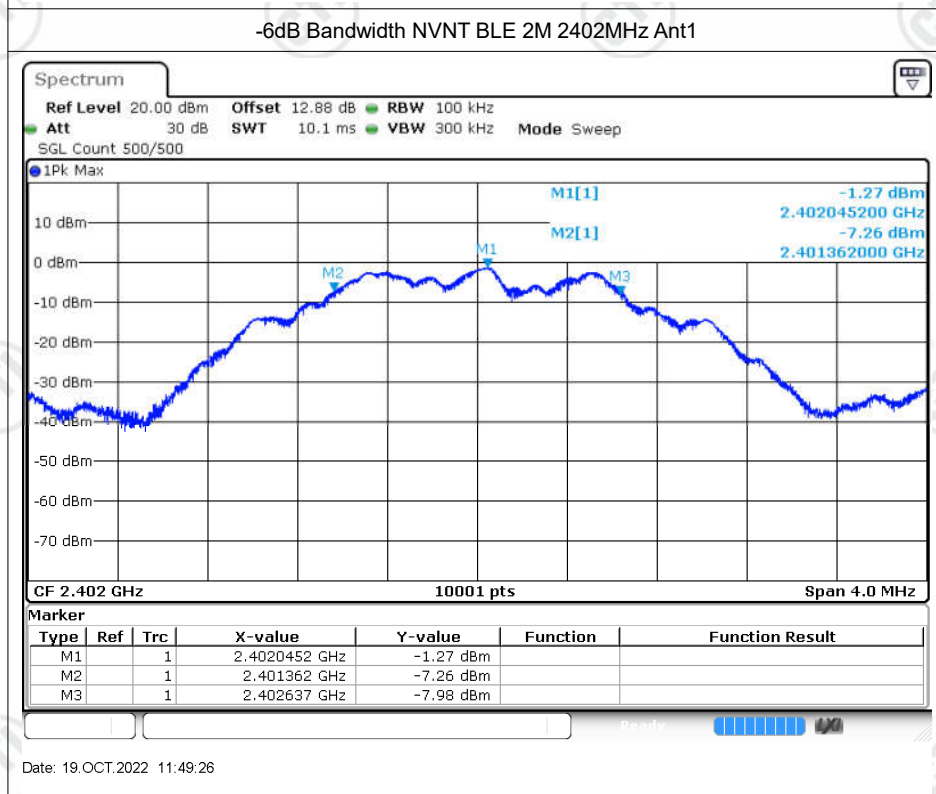
-6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	Ant1	0.739	0.5	Pass
NVNT	BLE 1M	2440	Ant1	0.715	0.5	Pass
NVNT	BLE 1M	2480	Ant1	0.743	0.5	Pass
NVNT	BLE 2M	2402	Ant1	1.275	0.5	Pass
NVNT	BLE 2M	2440	Ant1	1.276	0.5	Pass
NVNT	BLE 2M	2480	Ant1	1.271	0.5	Pass

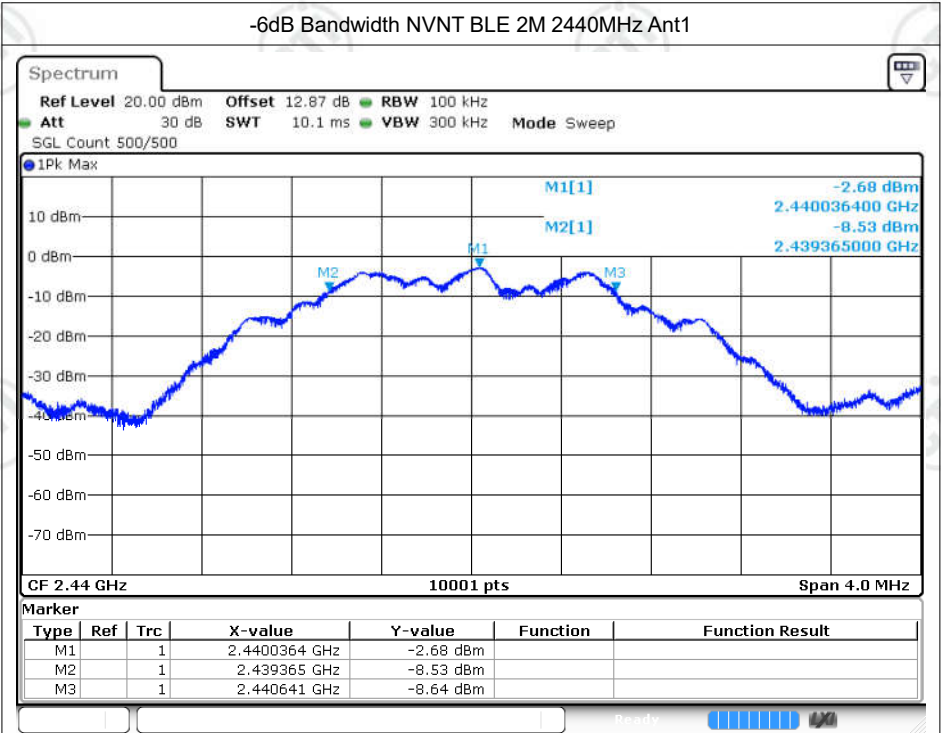




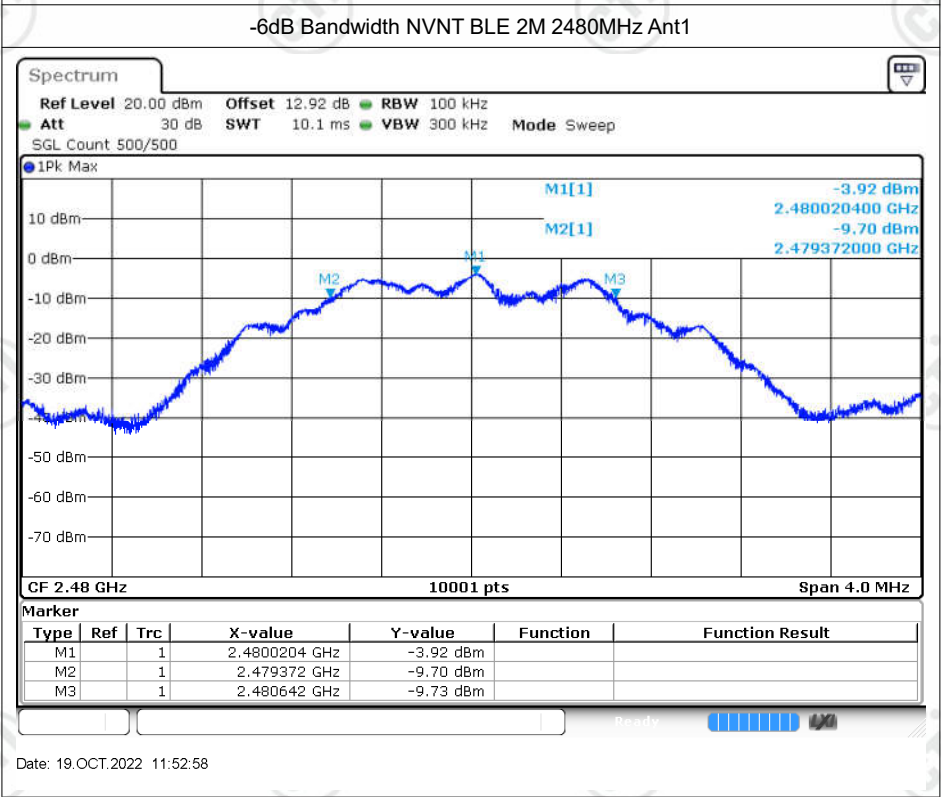
Date: 19.OCT.2022 11:47:43



Date: 19.OCT.2022 11:49:26



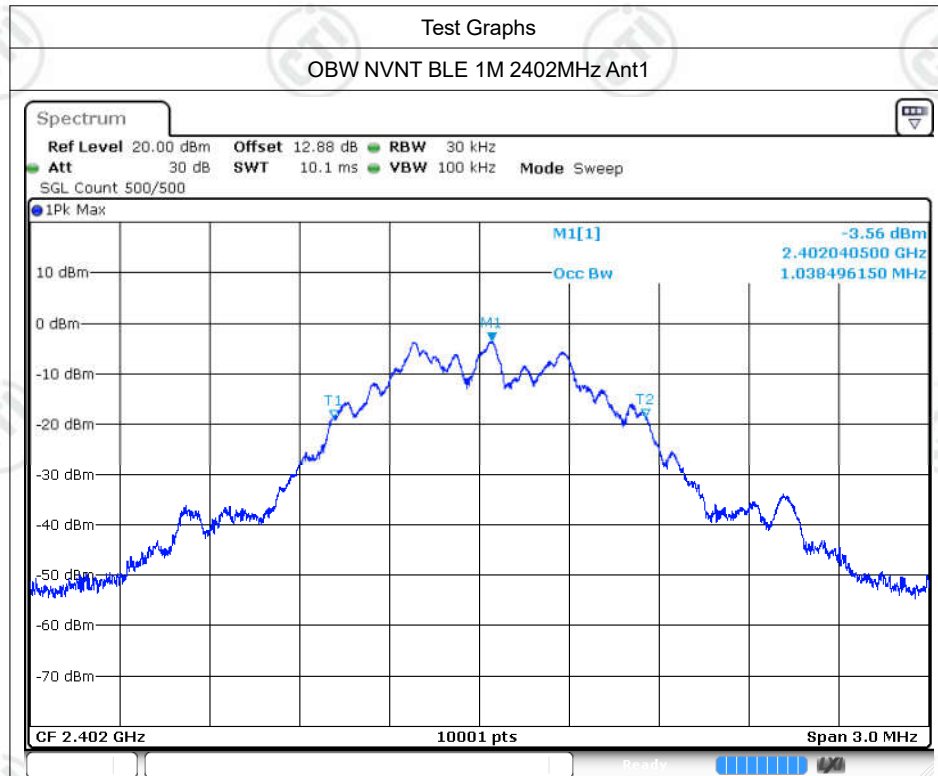
Date: 19.OCT.2022 11:51:17



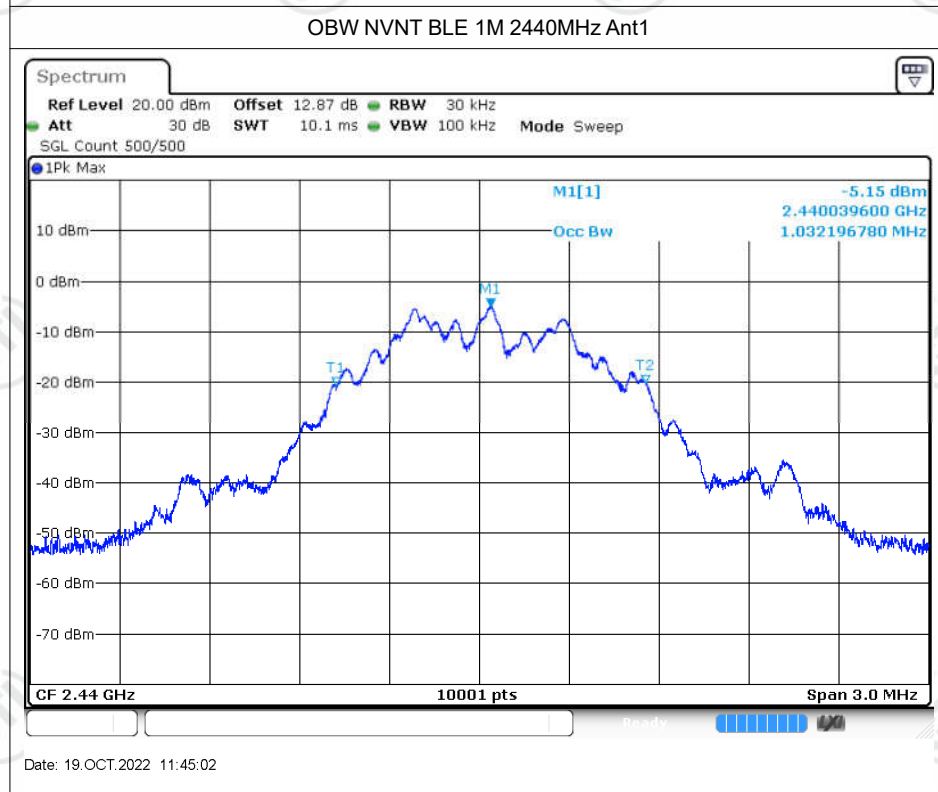
Date: 19.OCT.2022 11:52:58

Occupied Channel Bandwidth

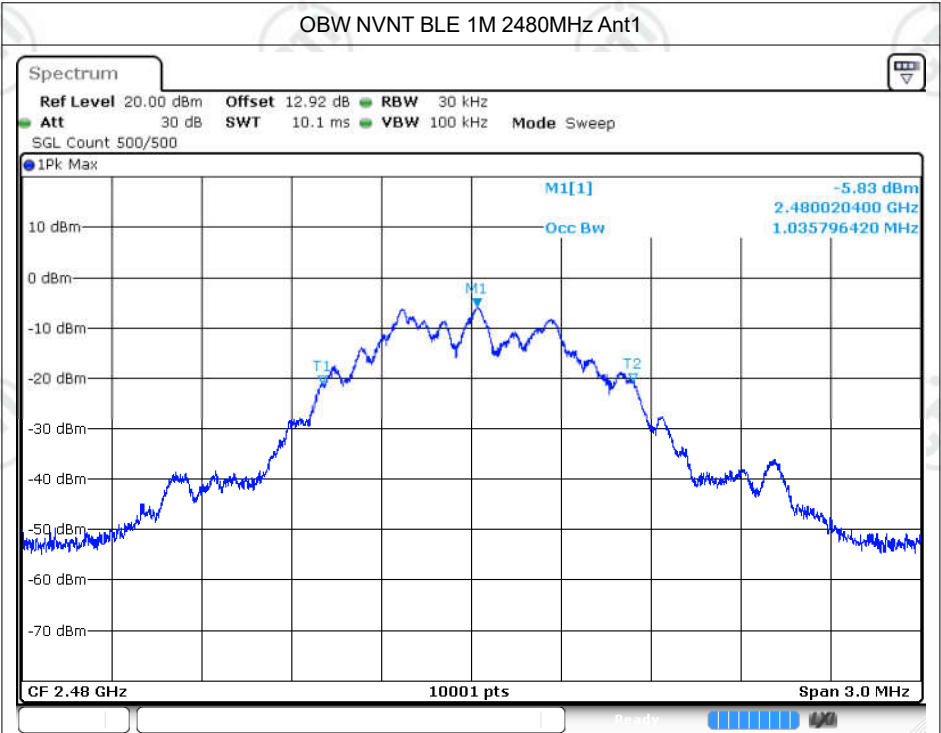
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE 1M	2402	Ant1	1.038
NVNT	BLE 1M	2440	Ant1	1.032
NVNT	BLE 1M	2480	Ant1	1.036
NVNT	BLE 2M	2402	Ant1	2.02
NVNT	BLE 2M	2440	Ant1	2.023
NVNT	BLE 2M	2480	Ant1	2.026



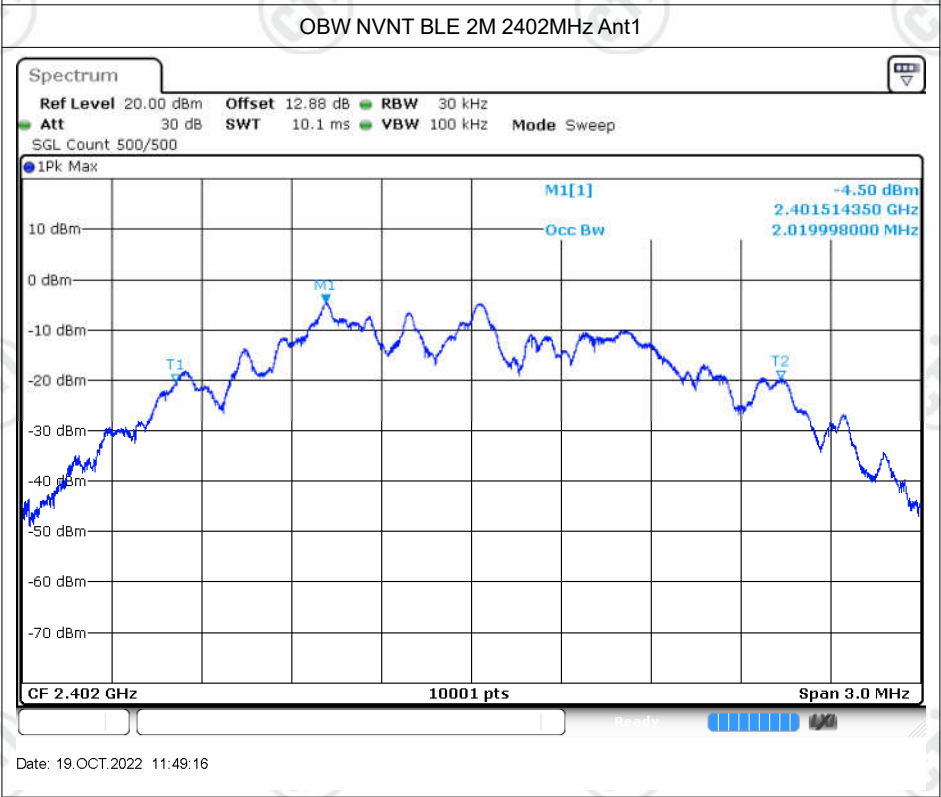
Date: 19.OCT.2022 11:41:54



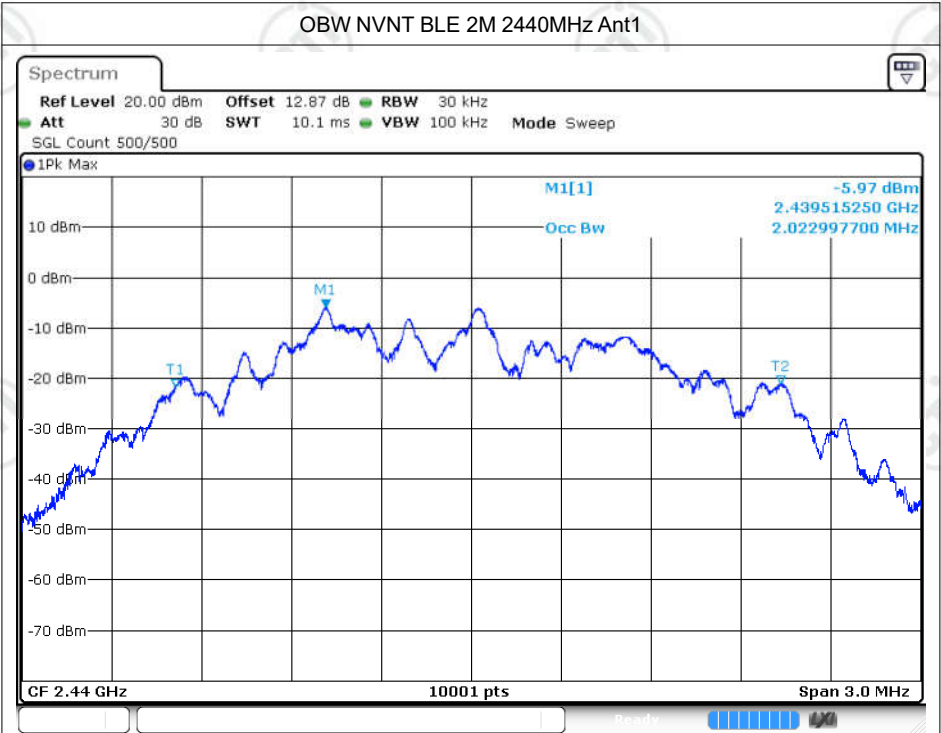
Date: 19.OCT.2022 11:45:02



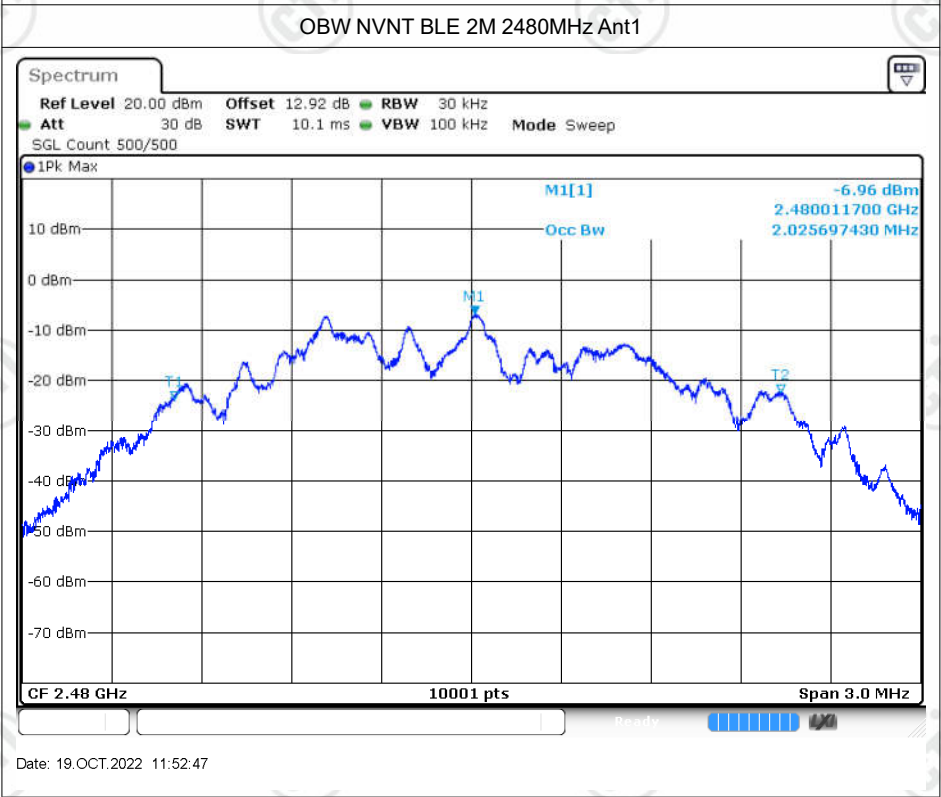
Date: 19.OCT.2022 11:47:32



Date: 19.OCT.2022 11:49:16



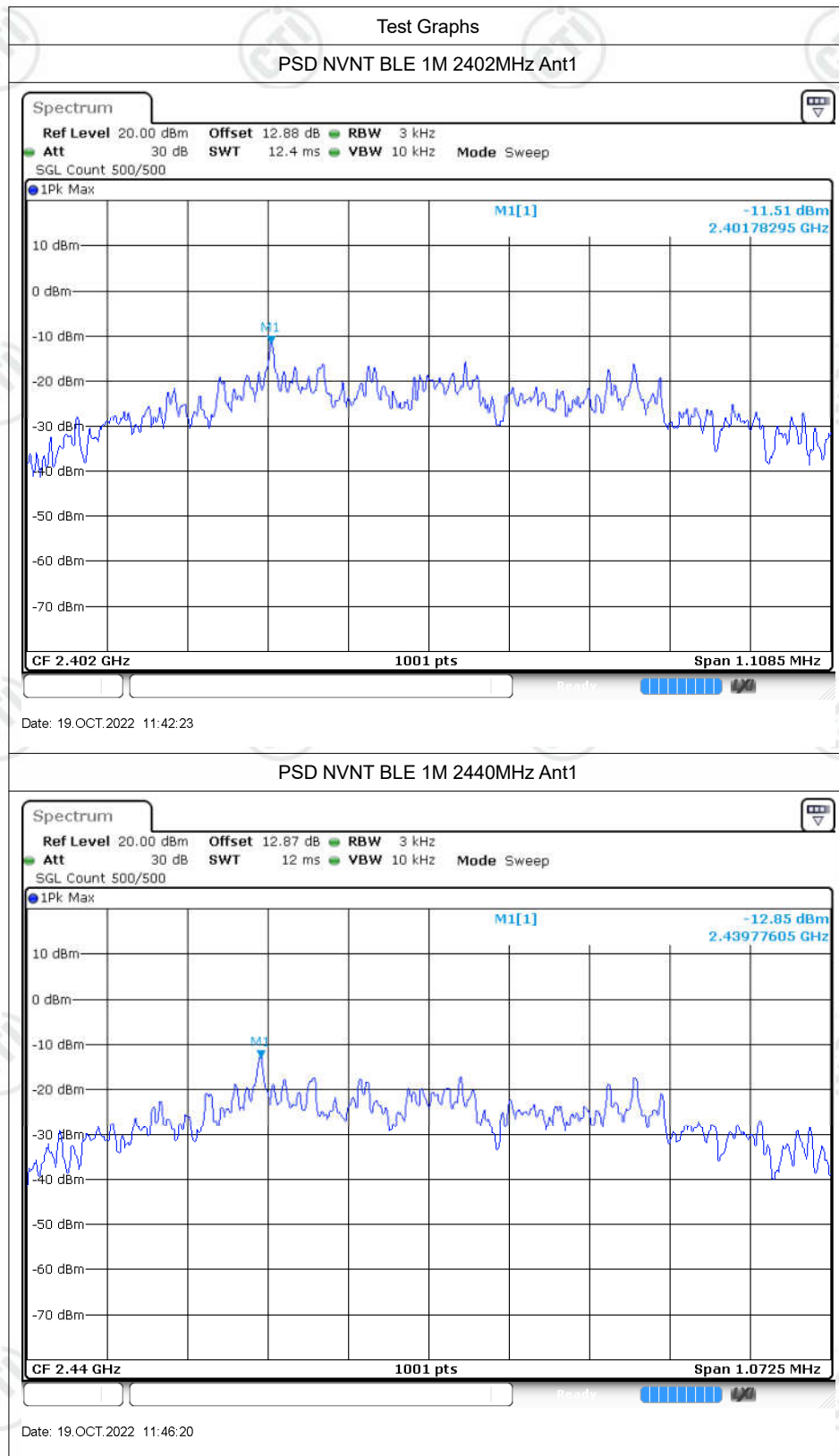
Date: 19.OCT.2022 11:51:06

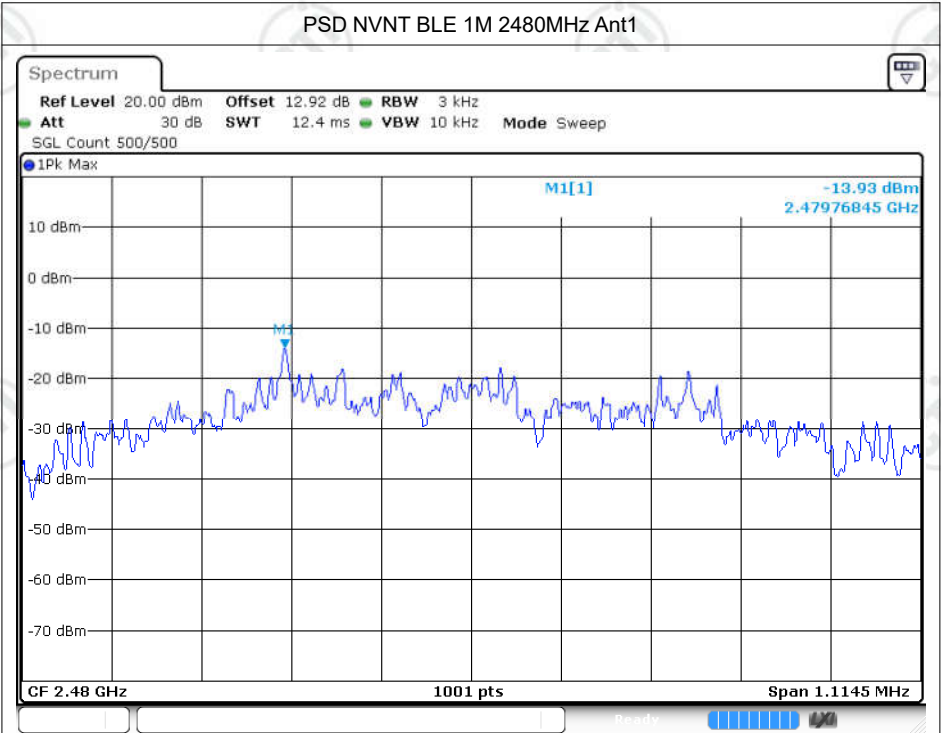


Date: 19.OCT.2022 11:52:47

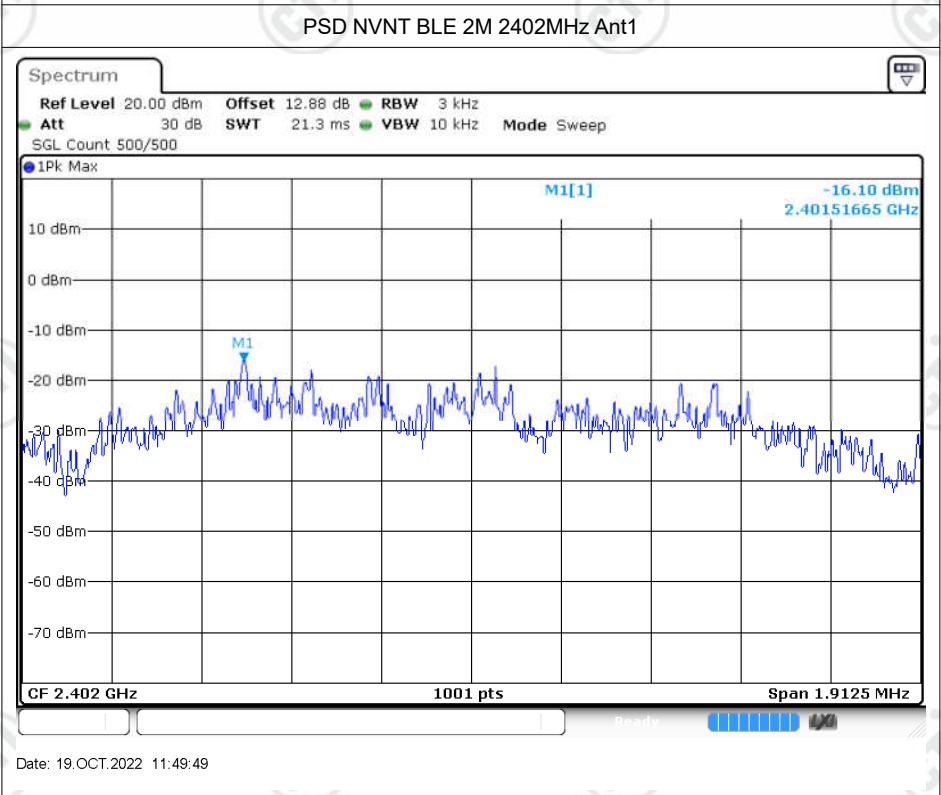
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	Ant1	-11.51	0	-11.51	8	Pass
NVNT	BLE 1M	2440	Ant1	-12.85	0	-12.85	8	Pass
NVNT	BLE 1M	2480	Ant1	-13.93	0	-13.93	8	Pass
NVNT	BLE 2M	2402	Ant1	-16.1	0	-16.1	8	Pass
NVNT	BLE 2M	2440	Ant1	-17.43	0	-17.43	8	Pass
NVNT	BLE 2M	2480	Ant1	-18.72	0	-18.72	8	Pass

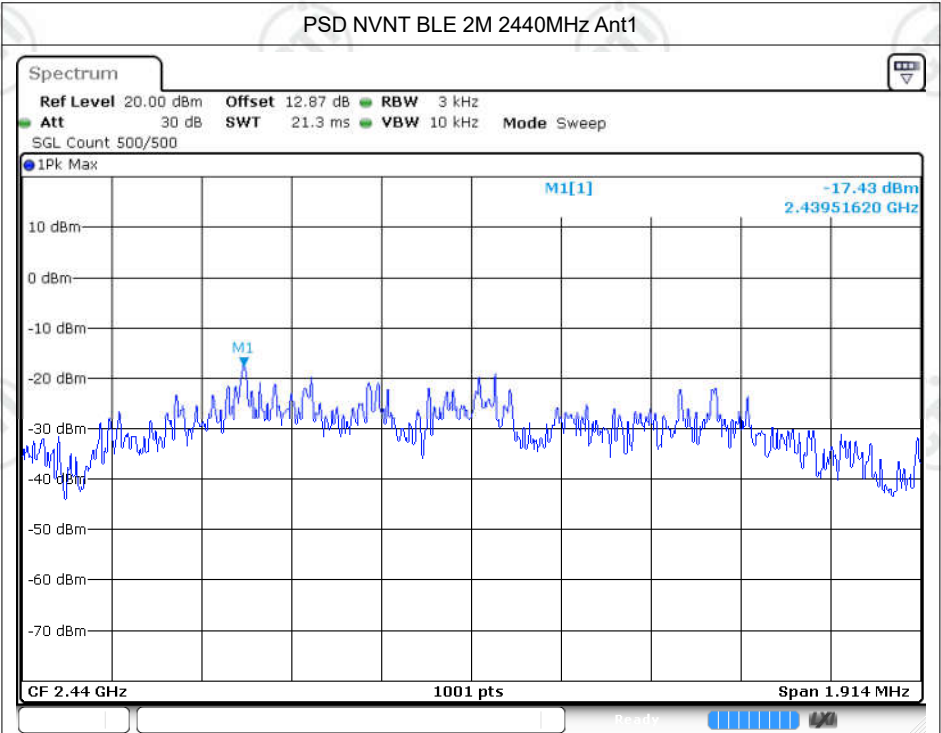




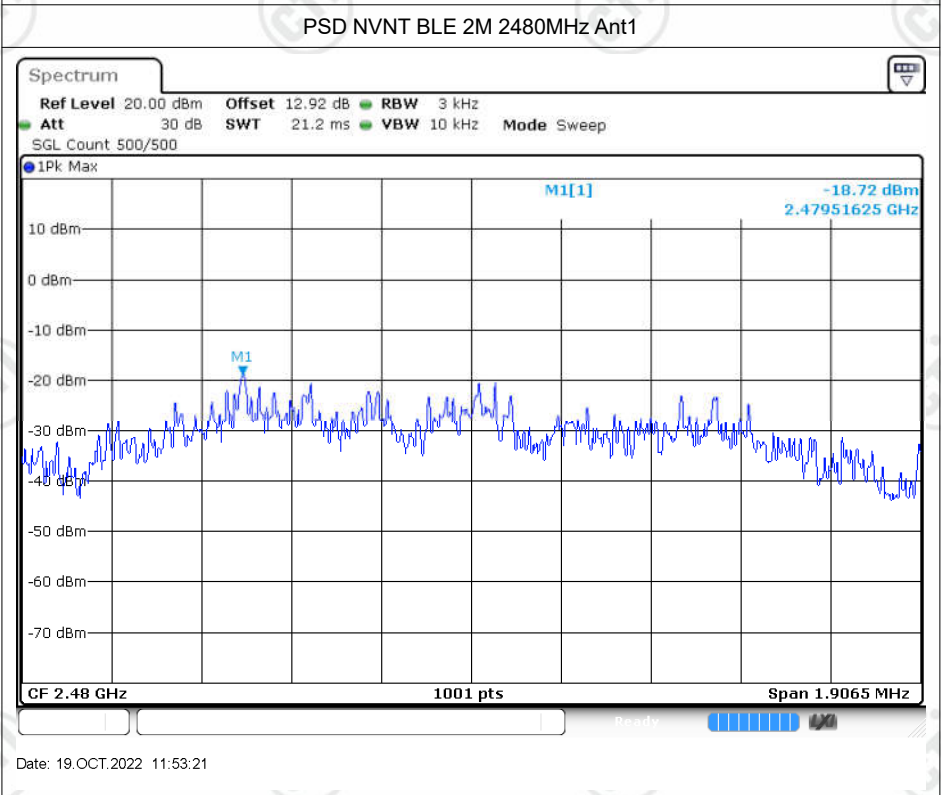
Date: 19.OCT.2022 11:48:01



Date: 19.OCT.2022 11:49:49



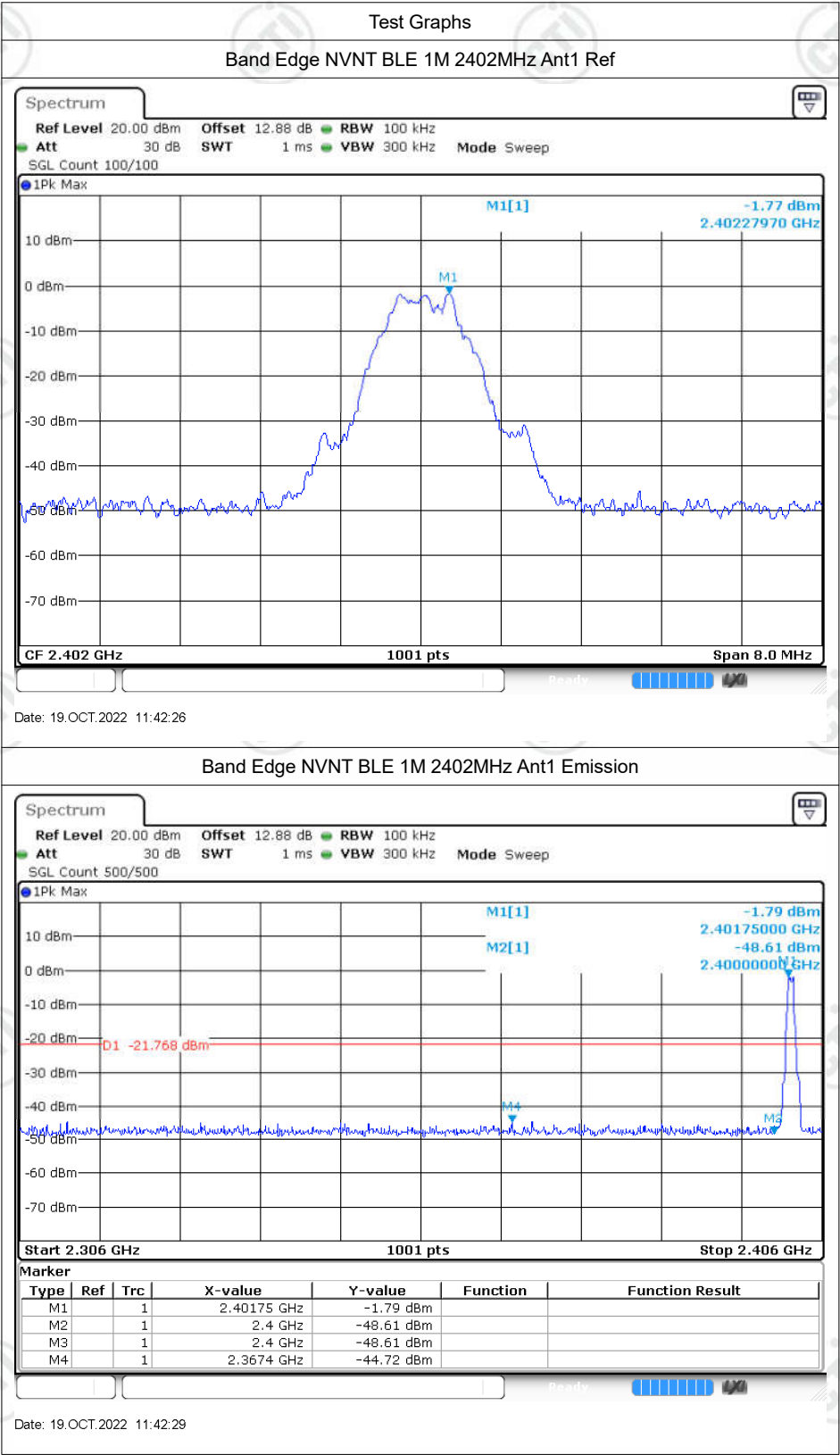
Date: 19.OCT.2022 11:51:40

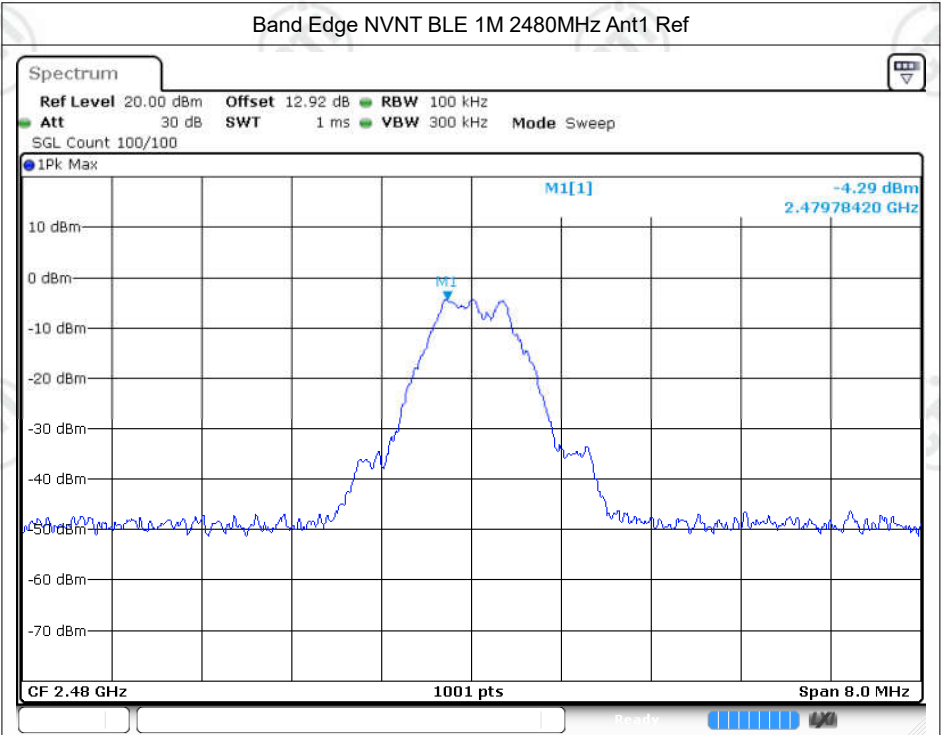


Date: 19.OCT.2022 11:53:21

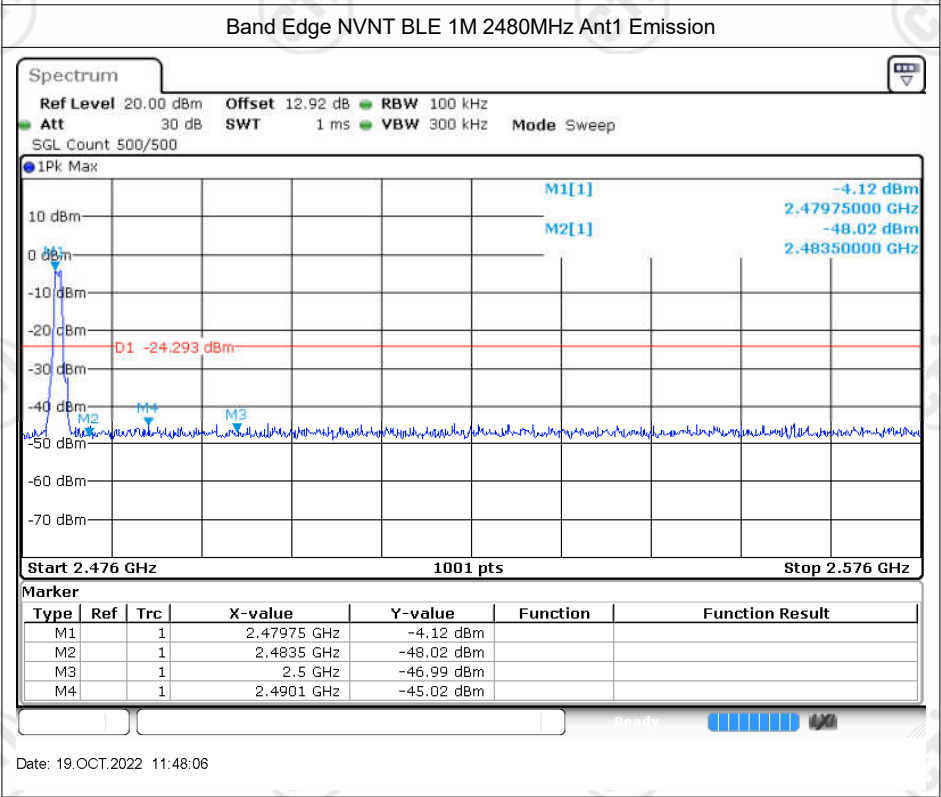
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-42.94	-20	Pass
NVNT	BLE 1M	2480	Ant1	-40.72	-20	Pass
NVNT	BLE 2M	2402	Ant1	-36.35	-20	Pass
NVNT	BLE 2M	2480	Ant1	-41.38	-20	Pass

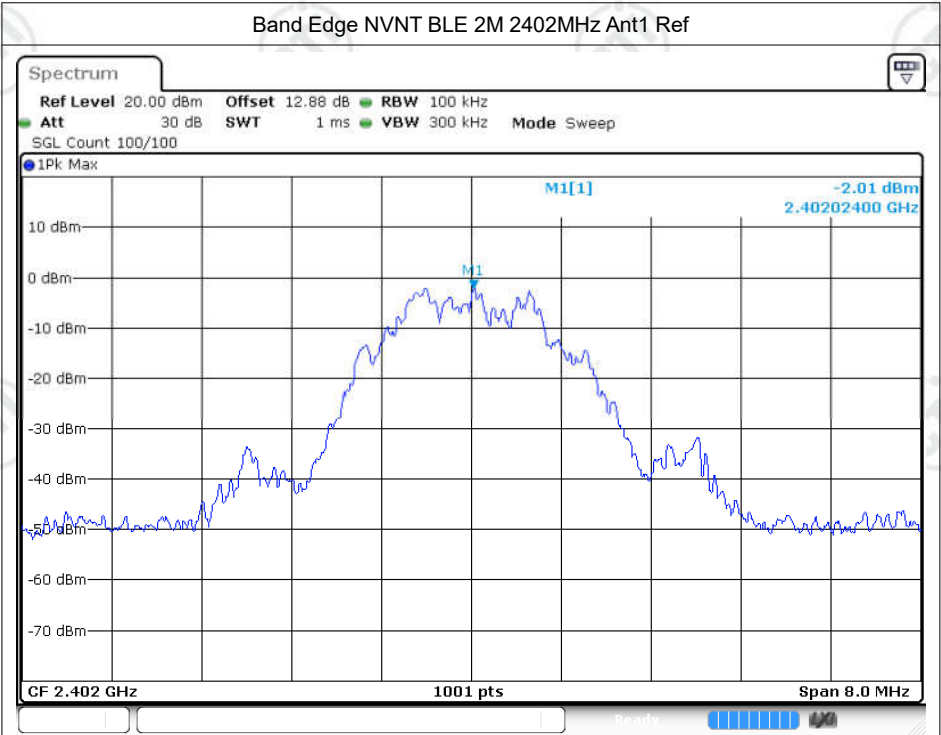




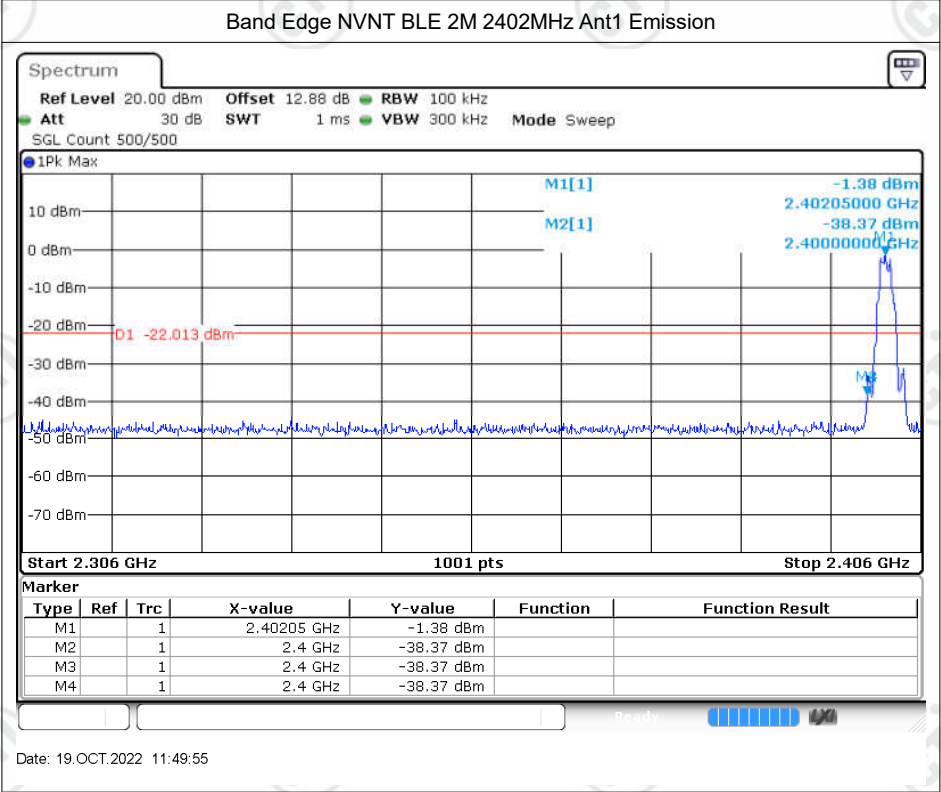
Date: 19.OCT.2022 11:48:04



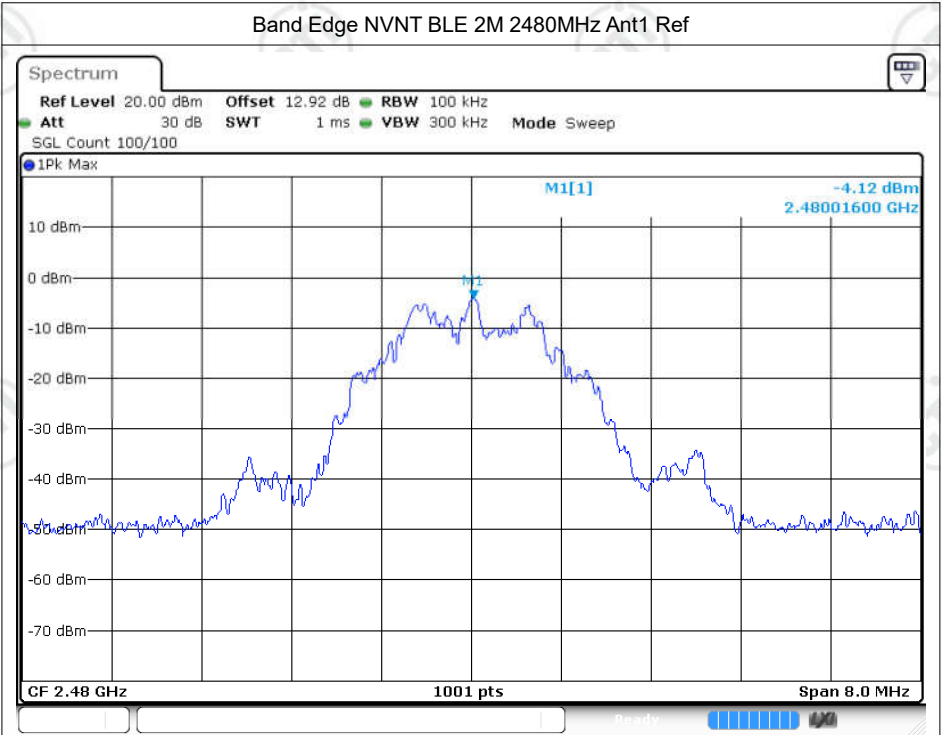
Date: 19.OCT.2022 11:48:06



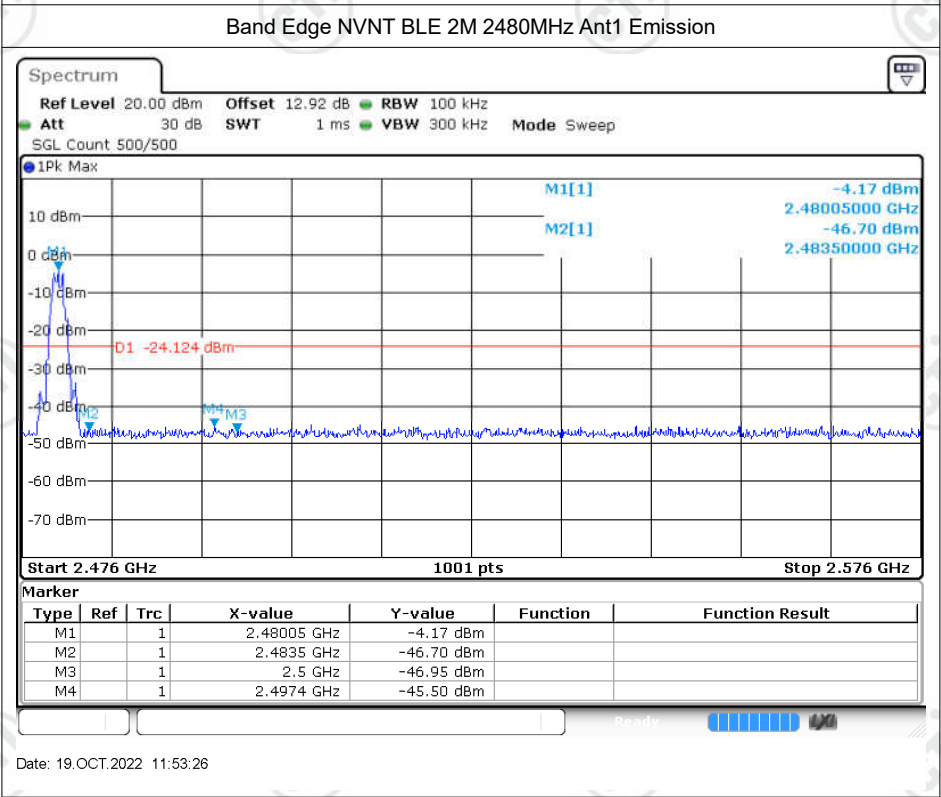
Date: 19.OCT.2022 11:49:52



Date: 19.OCT.2022 11:49:55



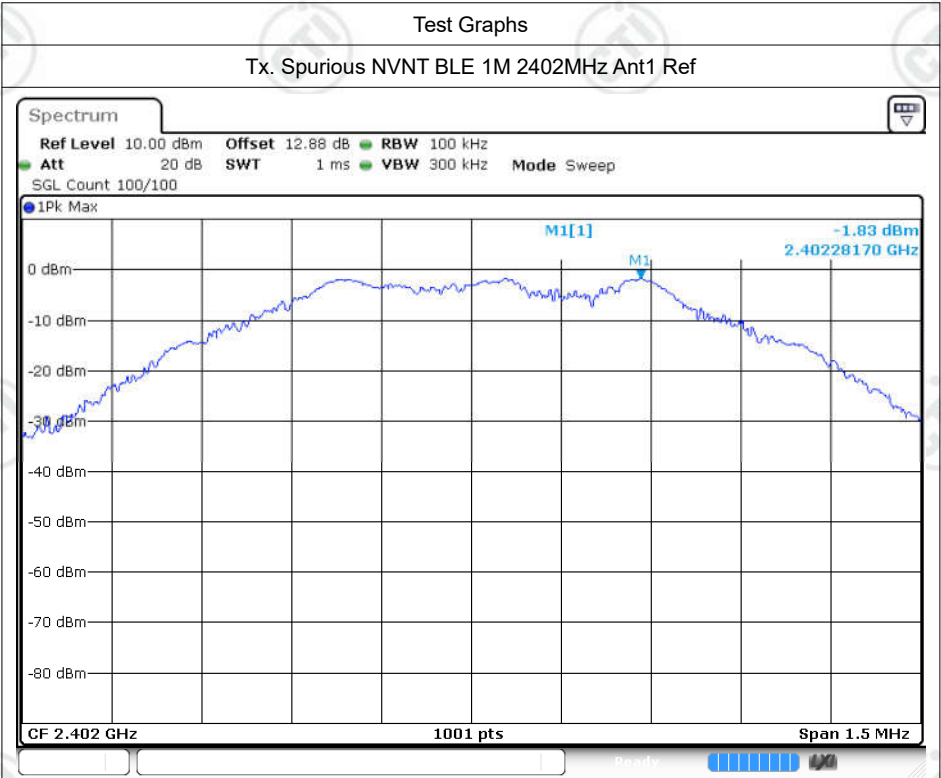
Date: 19.OCT.2022 11:53:23



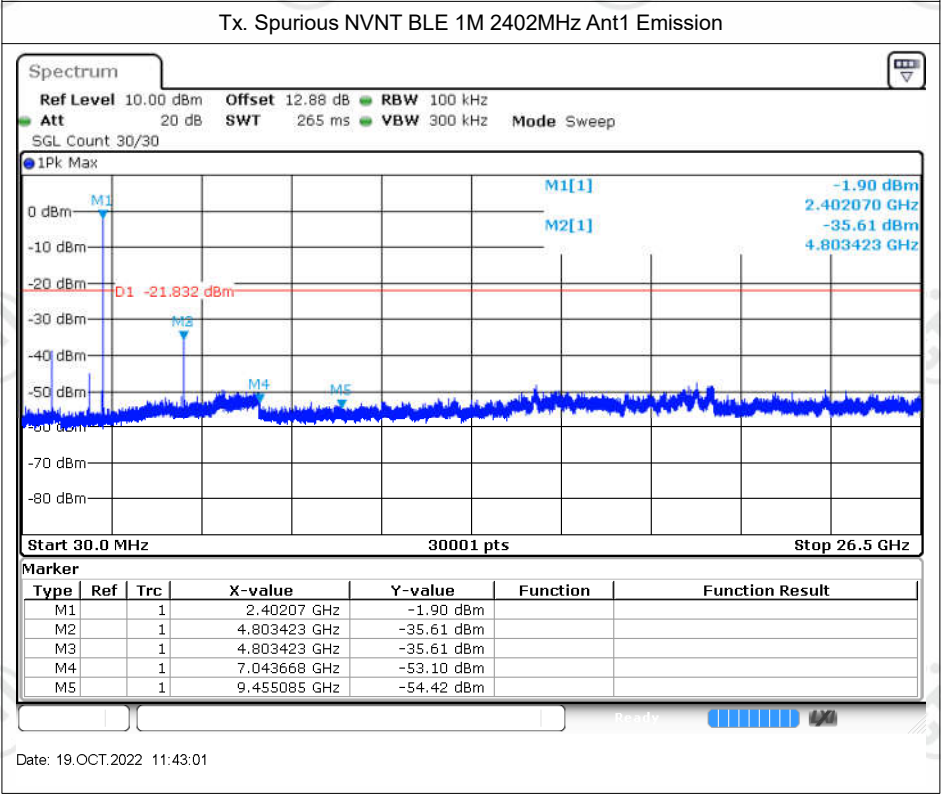
Date: 19.OCT.2022 11:53:26

Conducted RF Spurious Emission

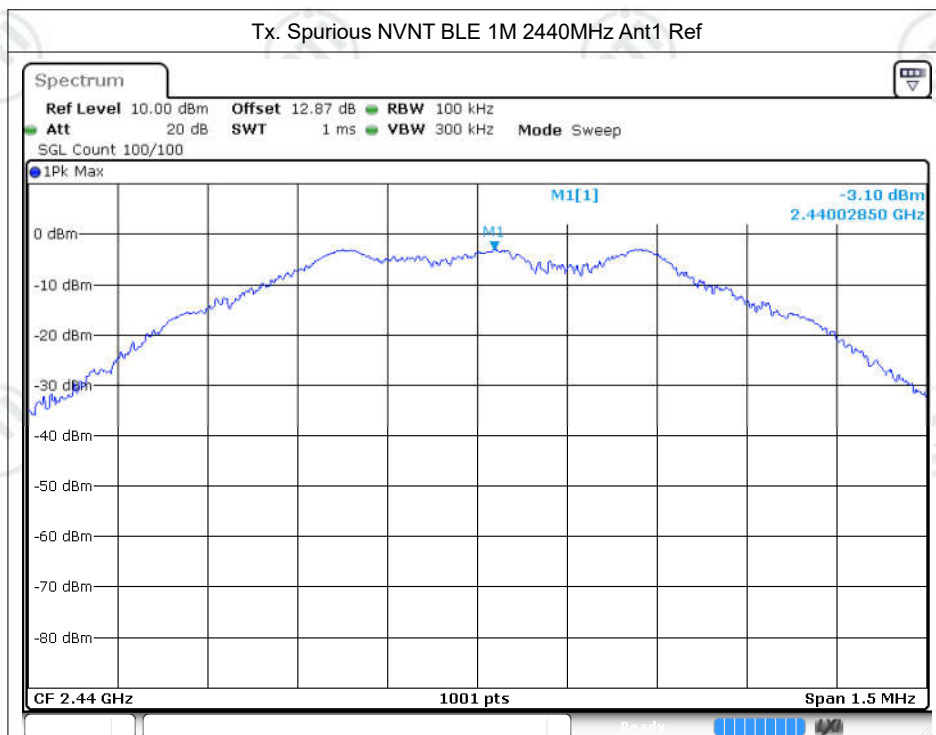
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-33.78	-20	Pass
NVNT	BLE 1M	2440	Ant1	-33.24	-20	Pass
NVNT	BLE 1M	2480	Ant1	-33.96	-20	Pass
NVNT	BLE 2M	2402	Ant1	-33.86	-20	Pass
NVNT	BLE 2M	2440	Ant1	-34.69	-20	Pass
NVNT	BLE 2M	2480	Ant1	-34.72	-20	Pass



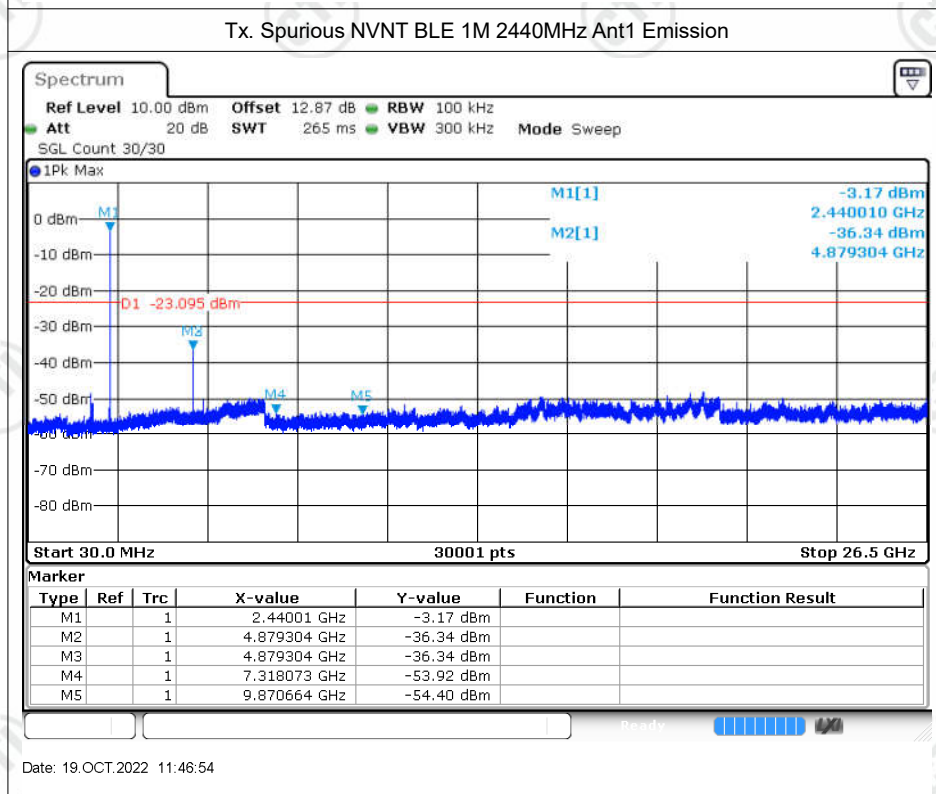
Date: 19.OCT.2022 11:42:32



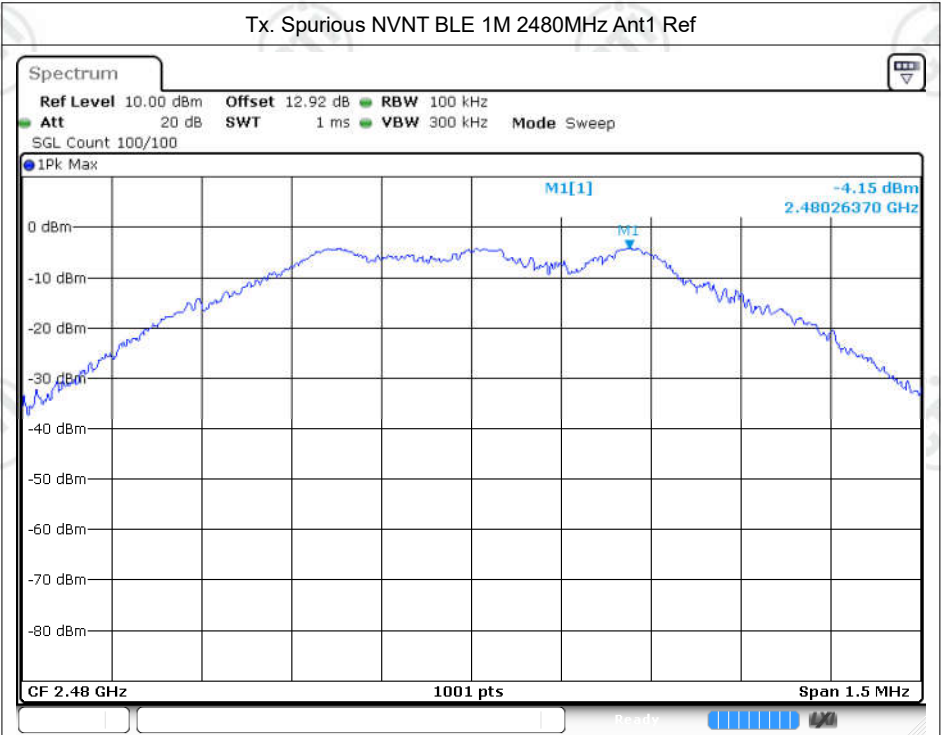
Date: 19.OCT.2022 11:43:01



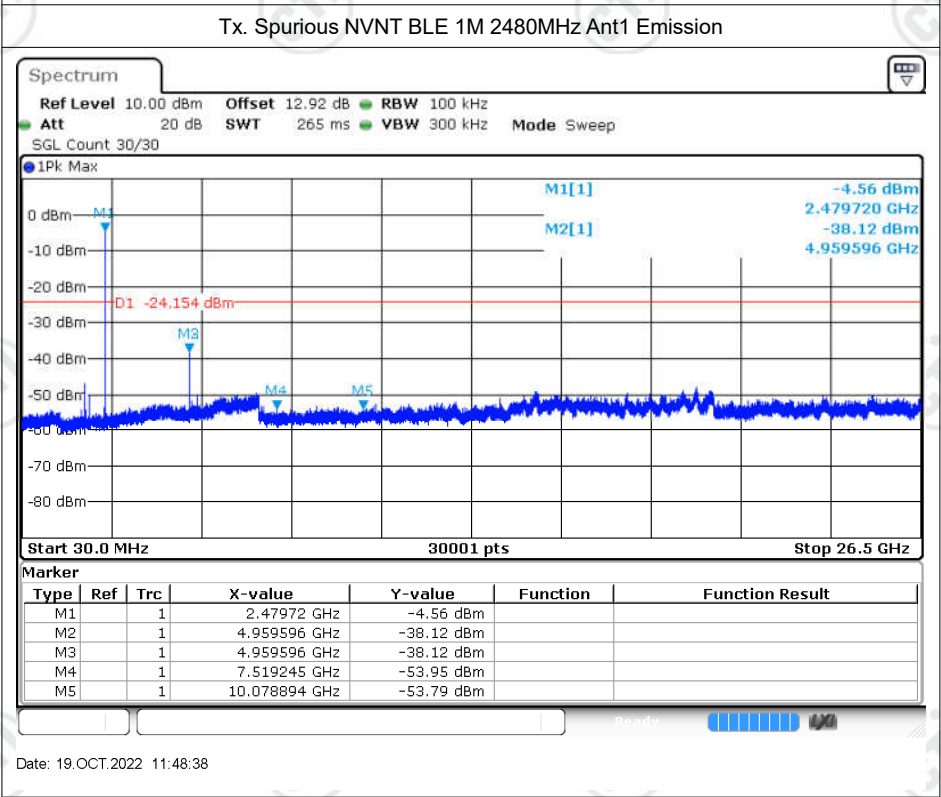
Date: 19.OCT.2022 11:46:26



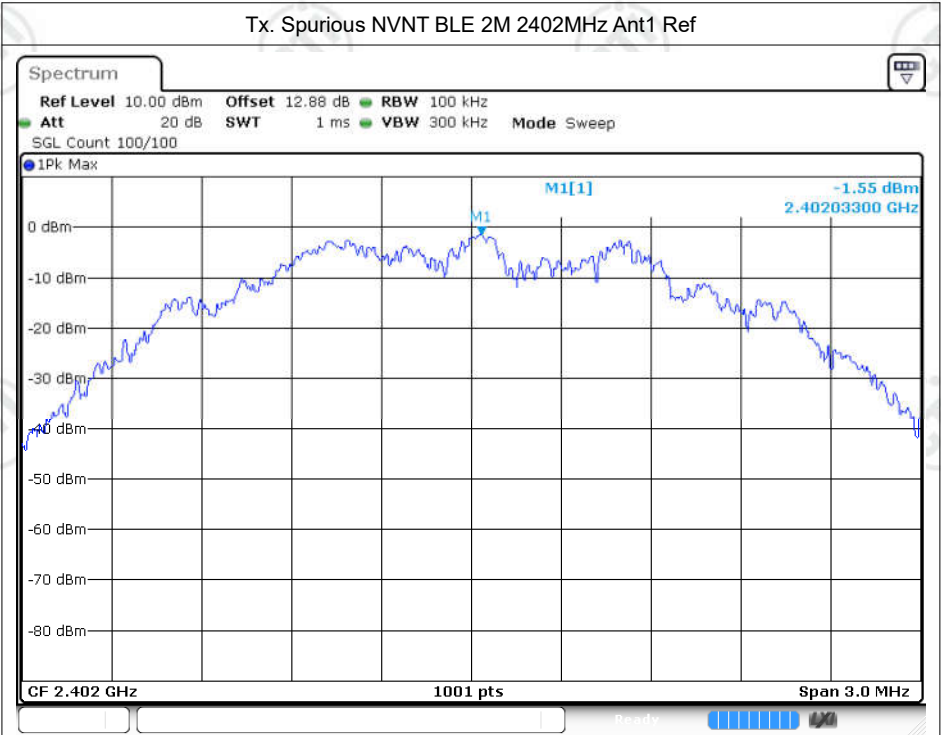
Date: 19.OCT.2022 11:46:54



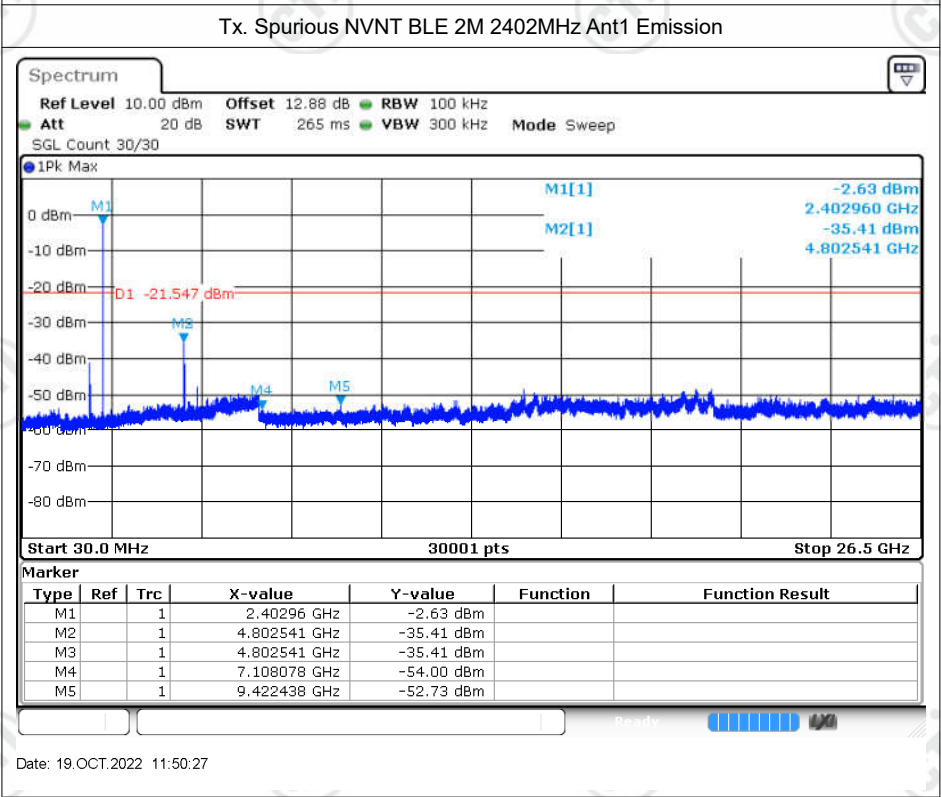
Date: 19.OCT.2022 11:48:09



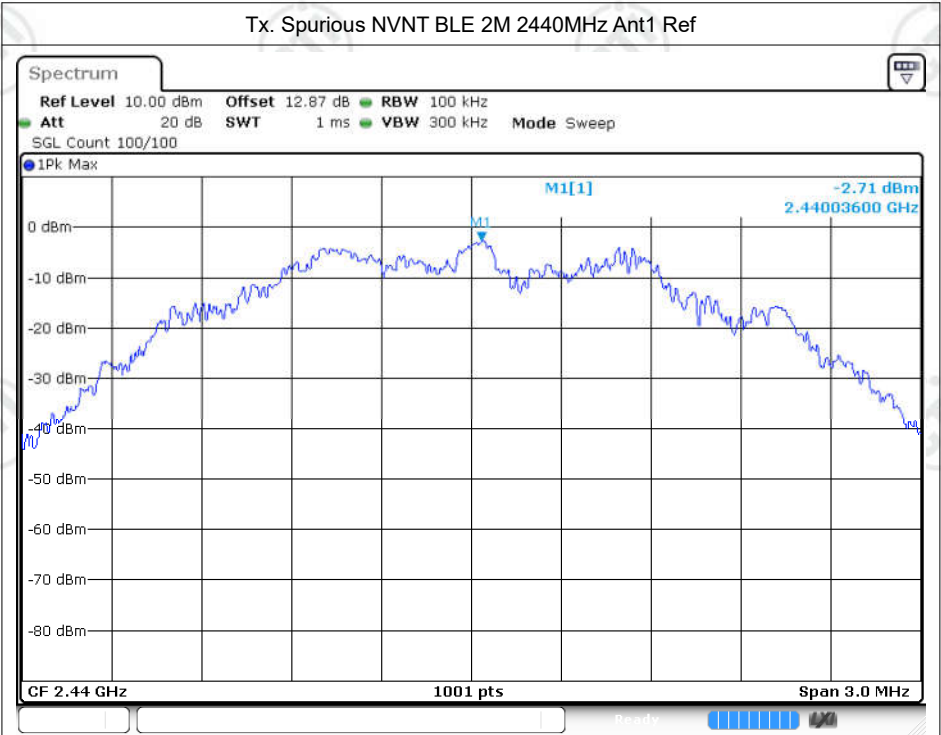
Date: 19.OCT.2022 11:48:38



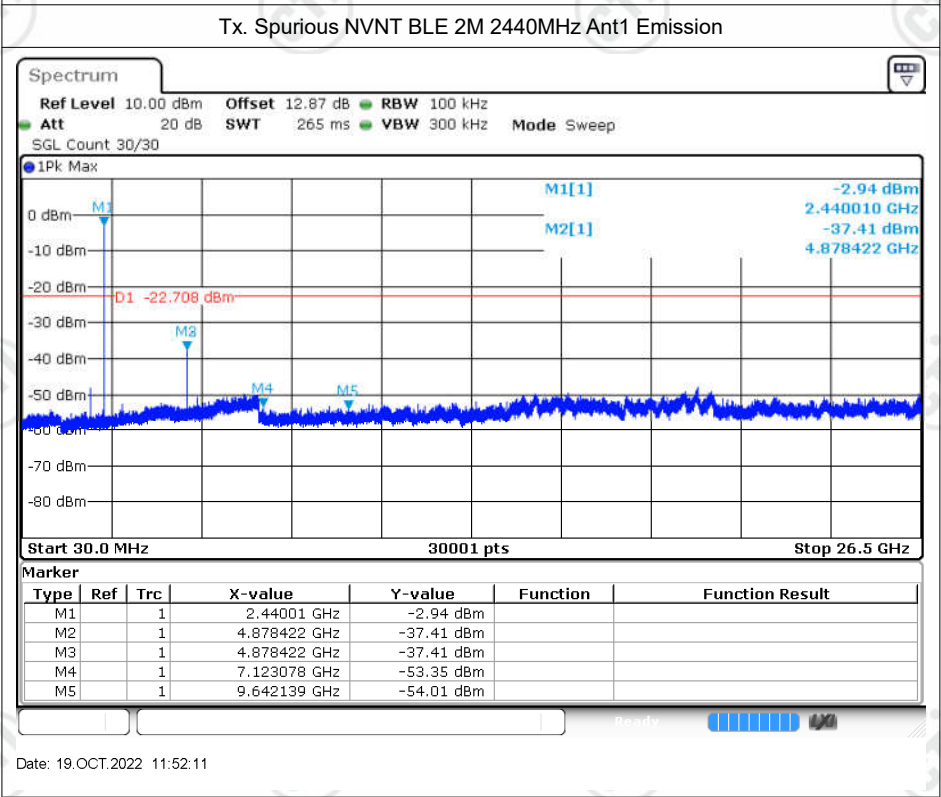
Date: 19.OCT.2022 11:49:59



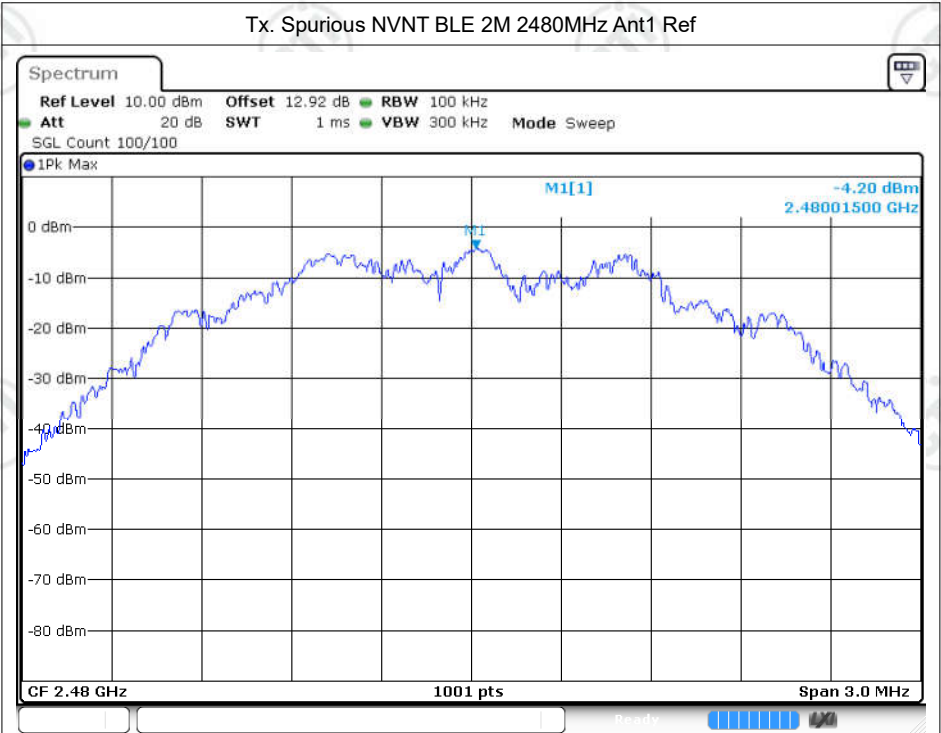
Date: 19.OCT.2022 11:50:27



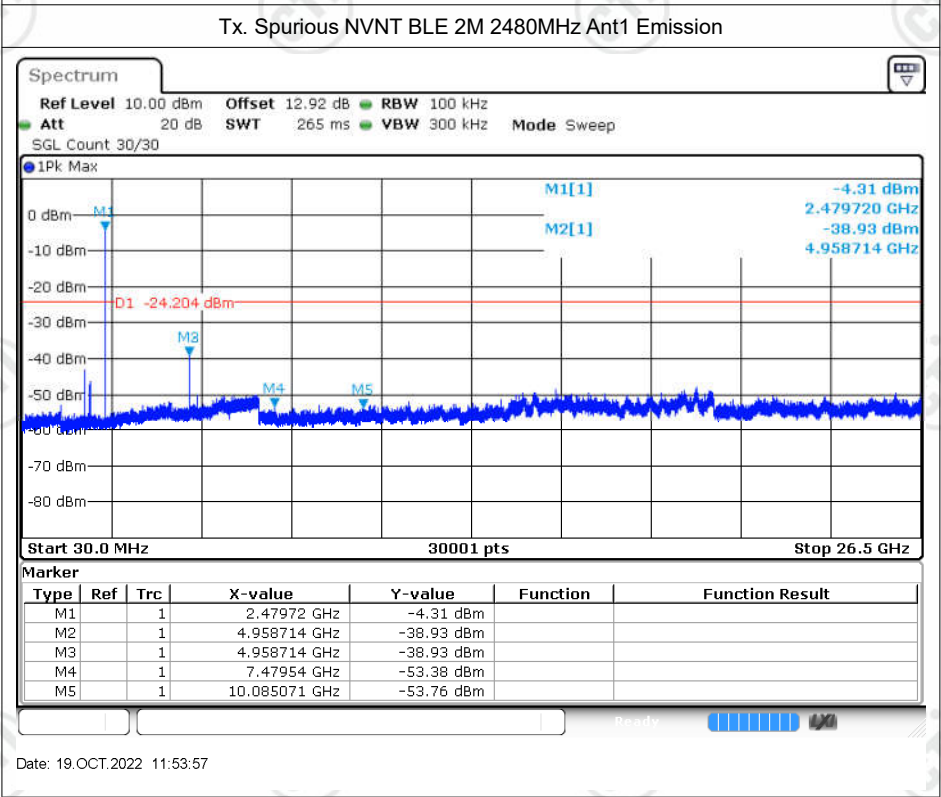
Date: 19.OCT.2022 11:51:43



Date: 19.OCT.2022 11:52:11



Date: 19.OCT.2022 11:53:29



*** End of Report ***