

Appendix: Bluetooth LE

Contents

Contents 2

Duty Cycle 3

Maximum Peak Conducted Output Power 7

-6dB Bandwidth 11

Occupied Channel Bandwidth 15

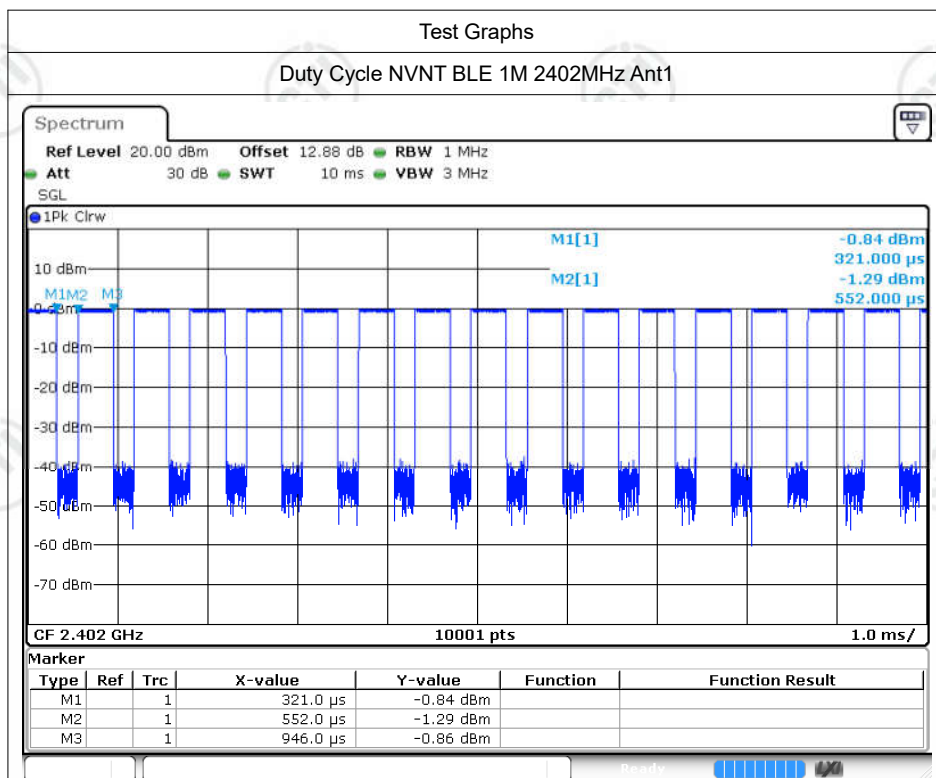
Maximum Power Spectral Density Level 19

Band Edge 23

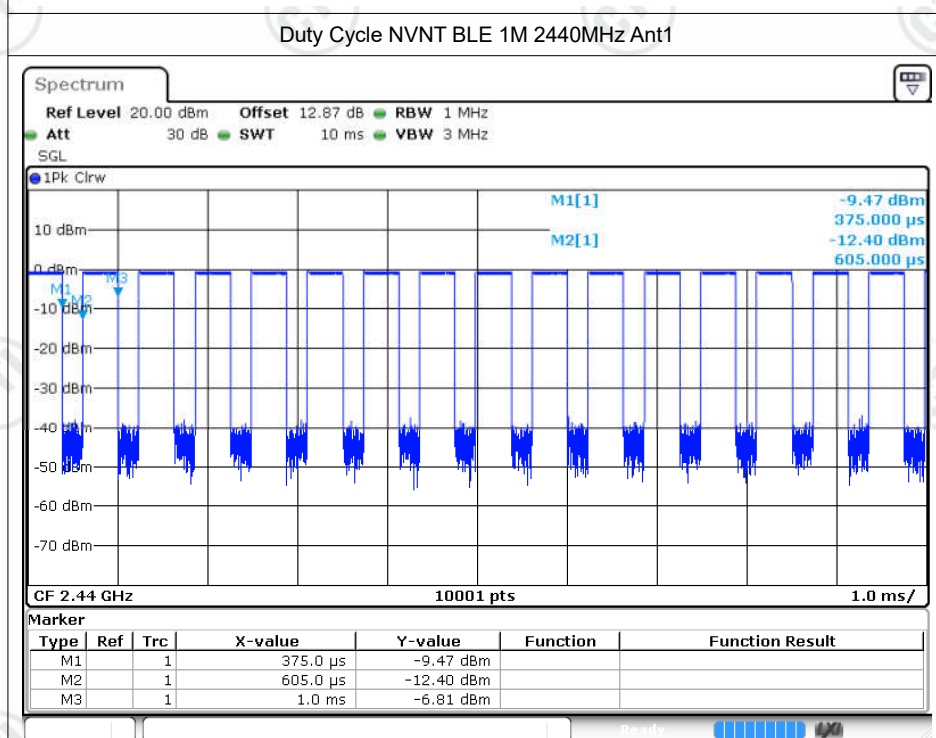
Conducted RF Spurious Emission 28

Duty Cycle

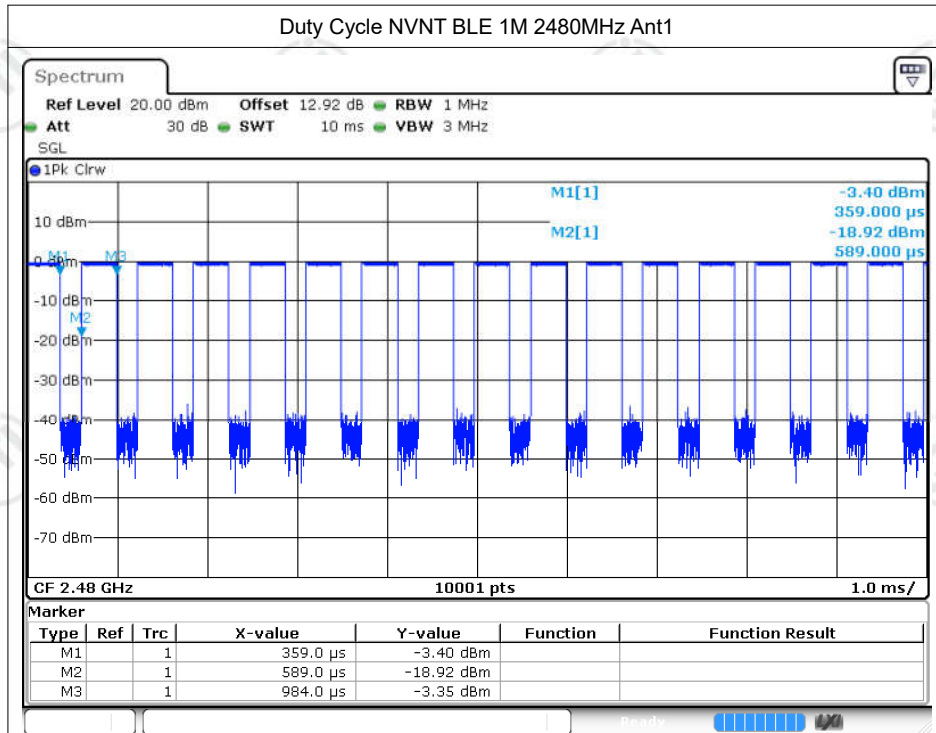
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1M	2402	Ant1	63.04	2	2.54
NVNT	BLE 1M	2440	Ant1	63.2	1.99	2.53
NVNT	BLE 1M	2480	Ant1	63.2	1.99	2.53
NVNT	BLE 2M	2402	Ant1	33.6	4.74	4.76
NVNT	BLE 2M	2440	Ant1	33.6	4.74	4.76
NVNT	BLE 2M	2480	Ant1	33.6	4.74	4.76



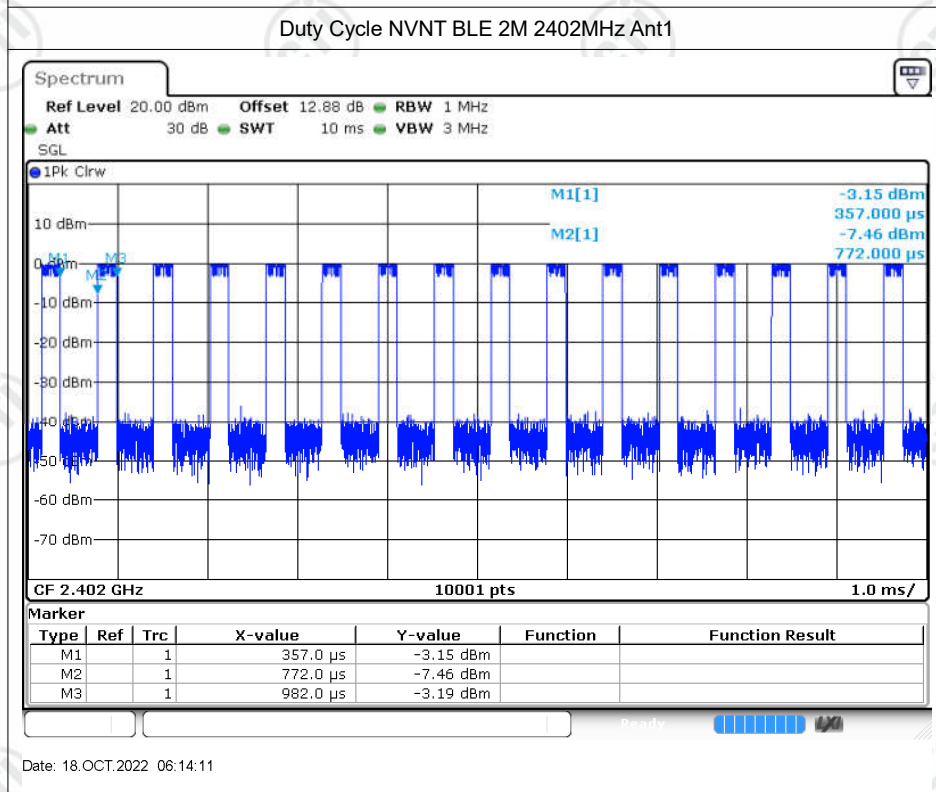
Date: 18.OCT.2022 05:48:02



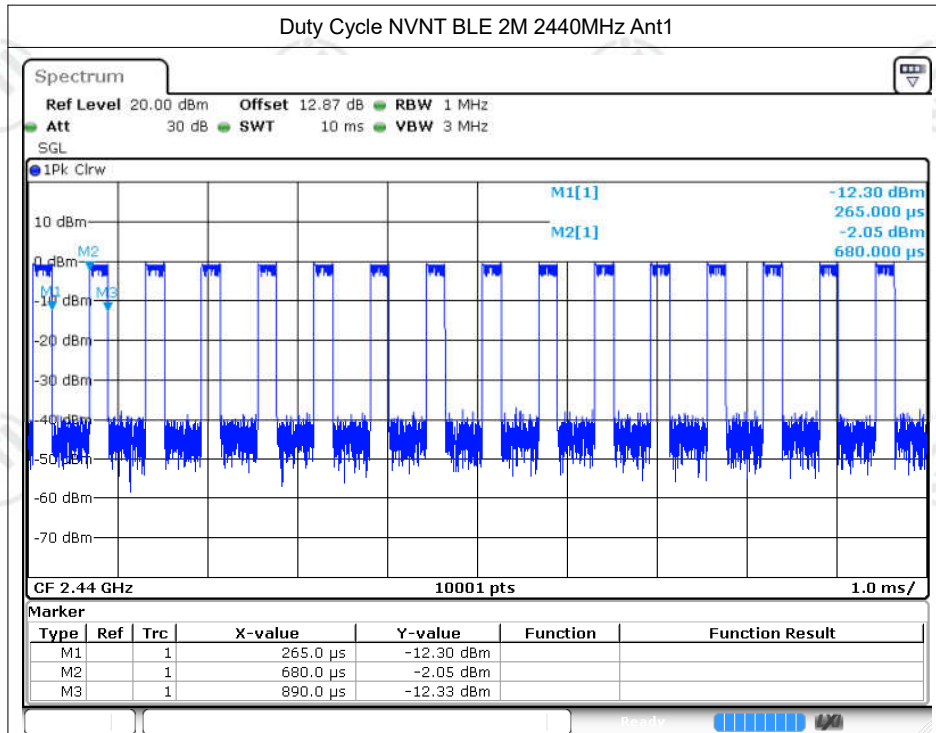
Date: 18.OCT.2022 06:05:31



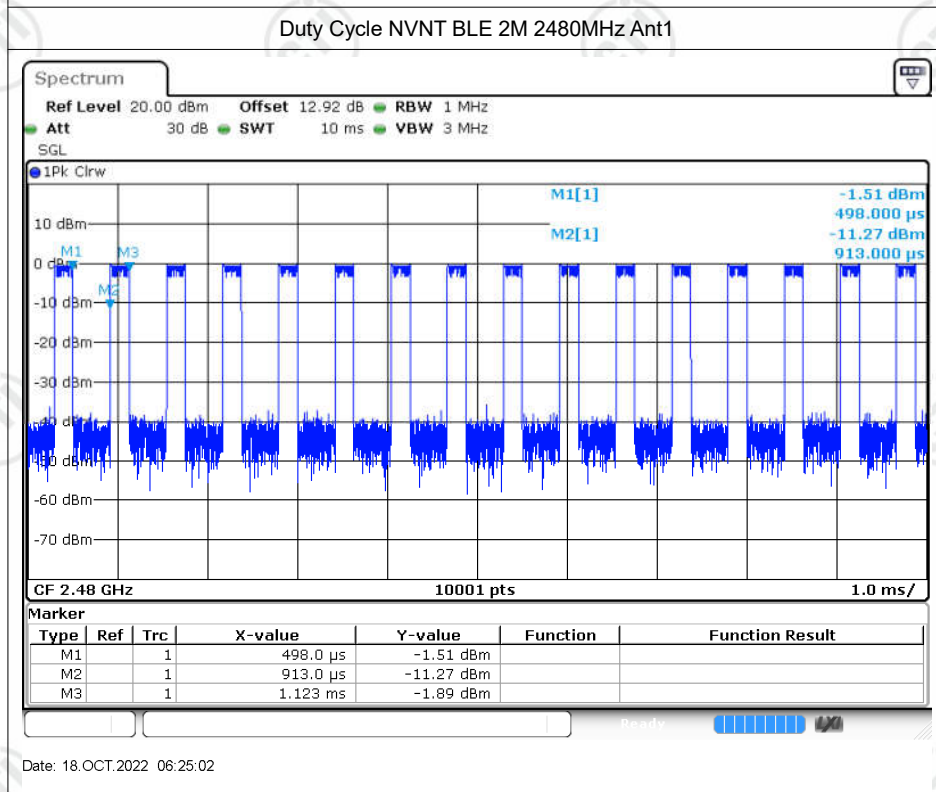
Date: 18.OCT.2022 06:12:01



Date: 18.OCT.2022 06:14:11



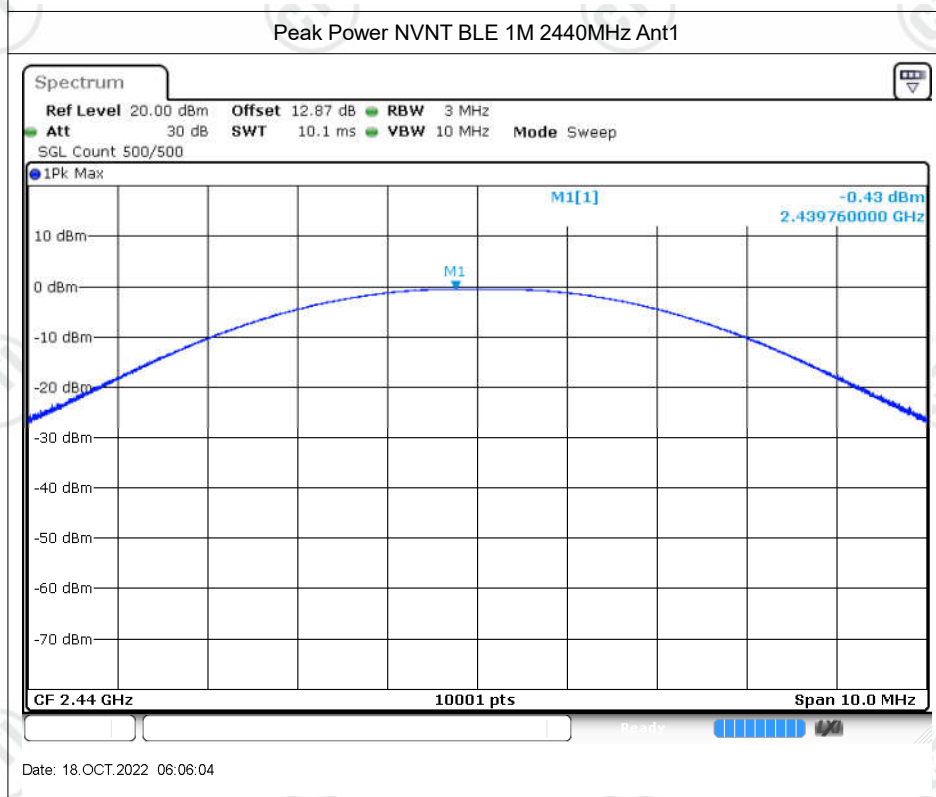
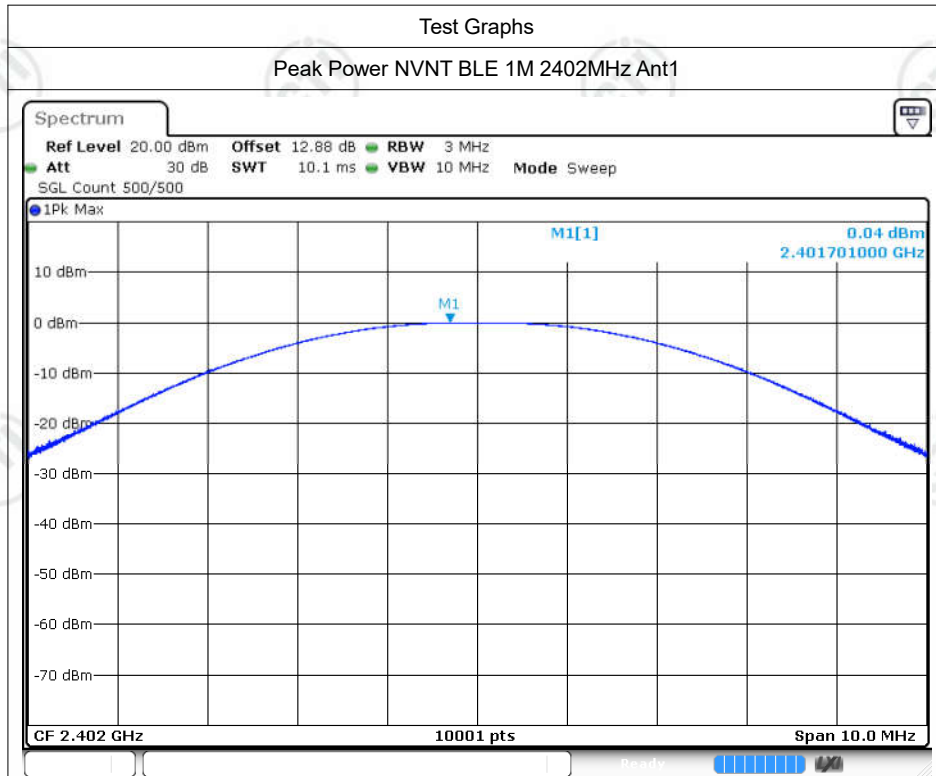
Date: 18.OCT.2022 06:19:23

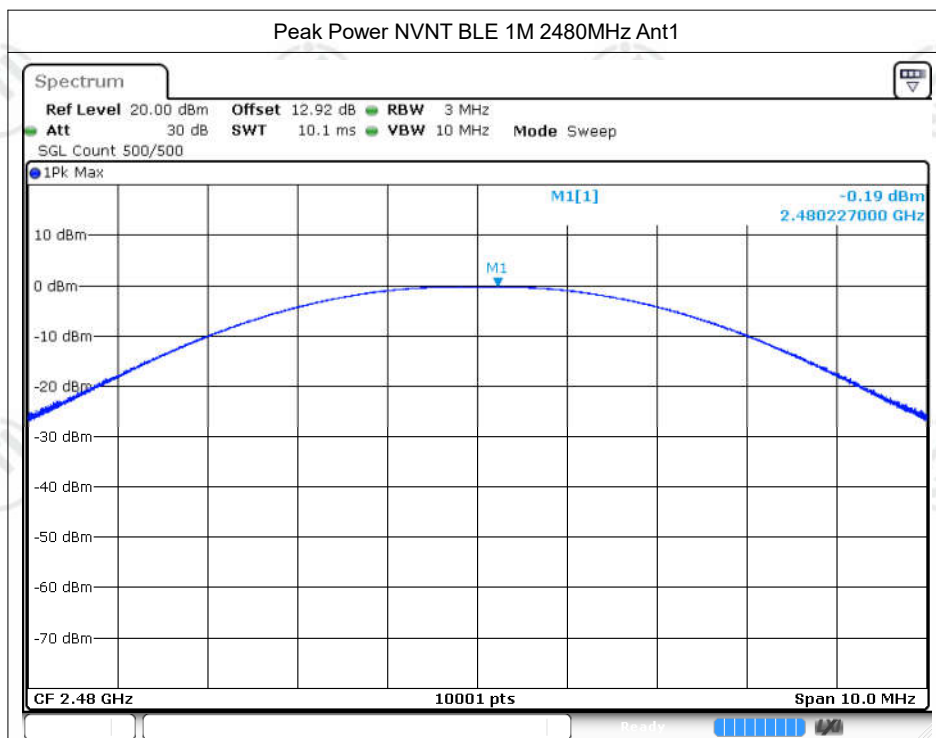


Date: 18.OCT.2022 06:25:02

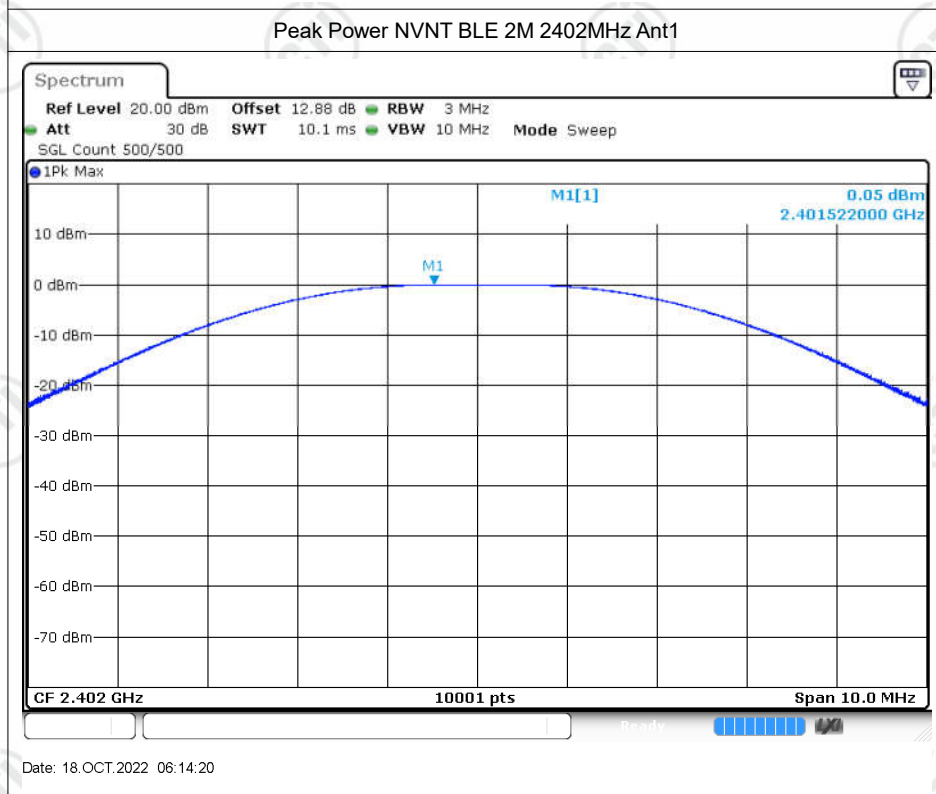
Maximum Peak Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	0.04	0	0.04	30	Pass
NVNT	BLE 1M	2440	Ant1	-0.43	0	-0.43	30	Pass
NVNT	BLE 1M	2480	Ant1	-0.19	0	-0.19	30	Pass
NVNT	BLE 2M	2402	Ant1	0.05	0	0.05	30	Pass
NVNT	BLE 2M	2440	Ant1	-0.41	0	-0.41	30	Pass
NVNT	BLE 2M	2480	Ant1	-0.16	0	-0.16	30	Pass

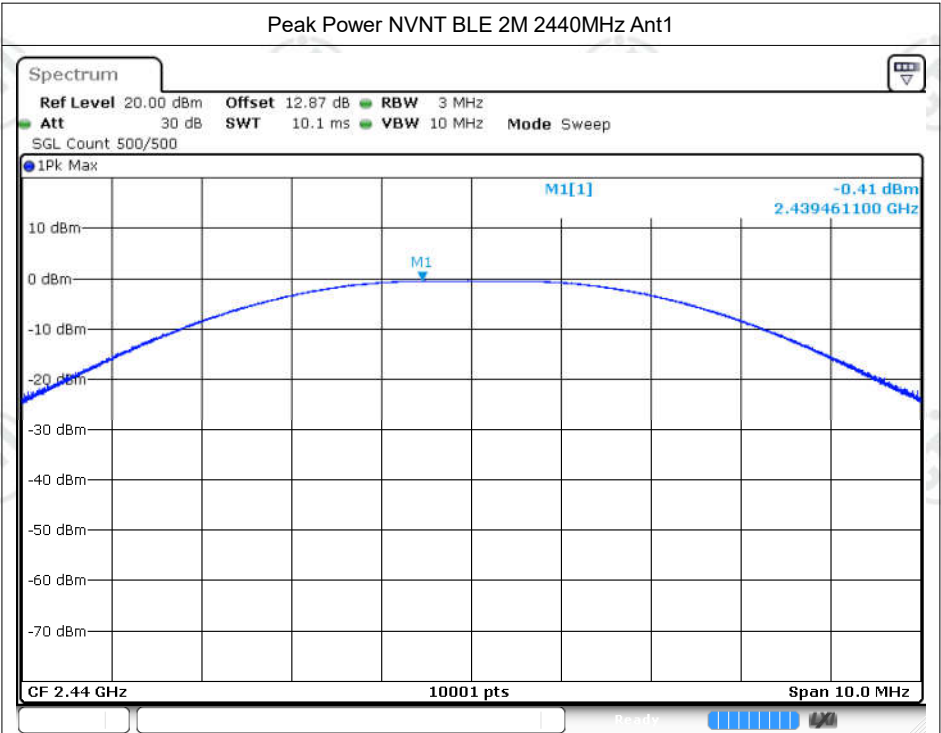




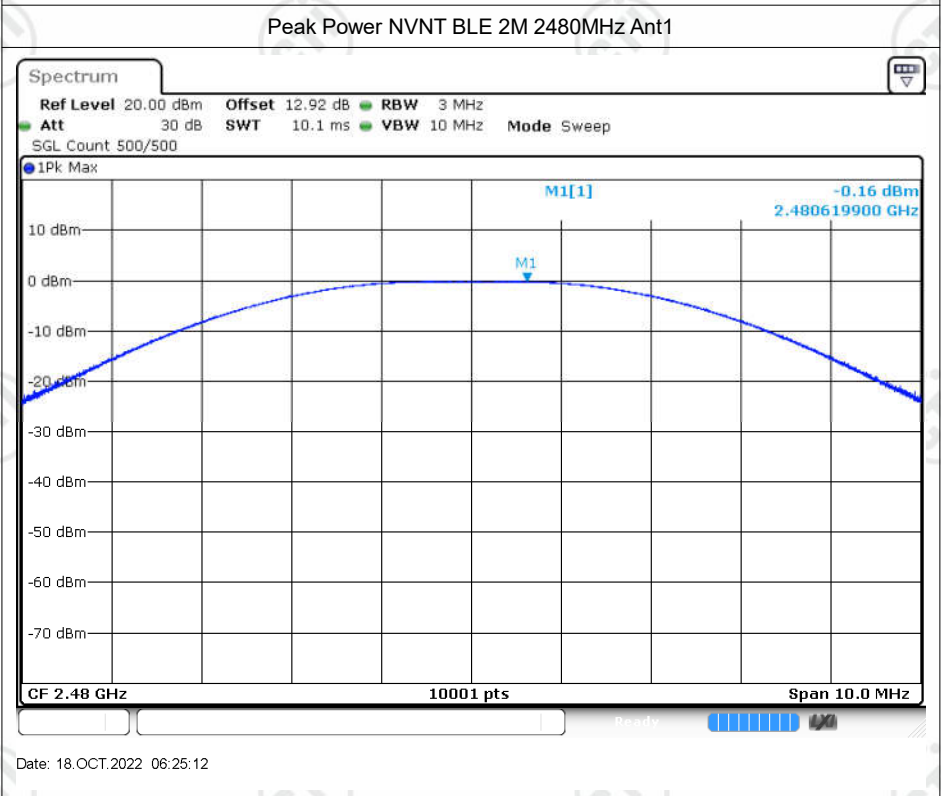
Date: 18.OCT.2022 06:12:11



Date: 18.OCT.2022 06:14:20



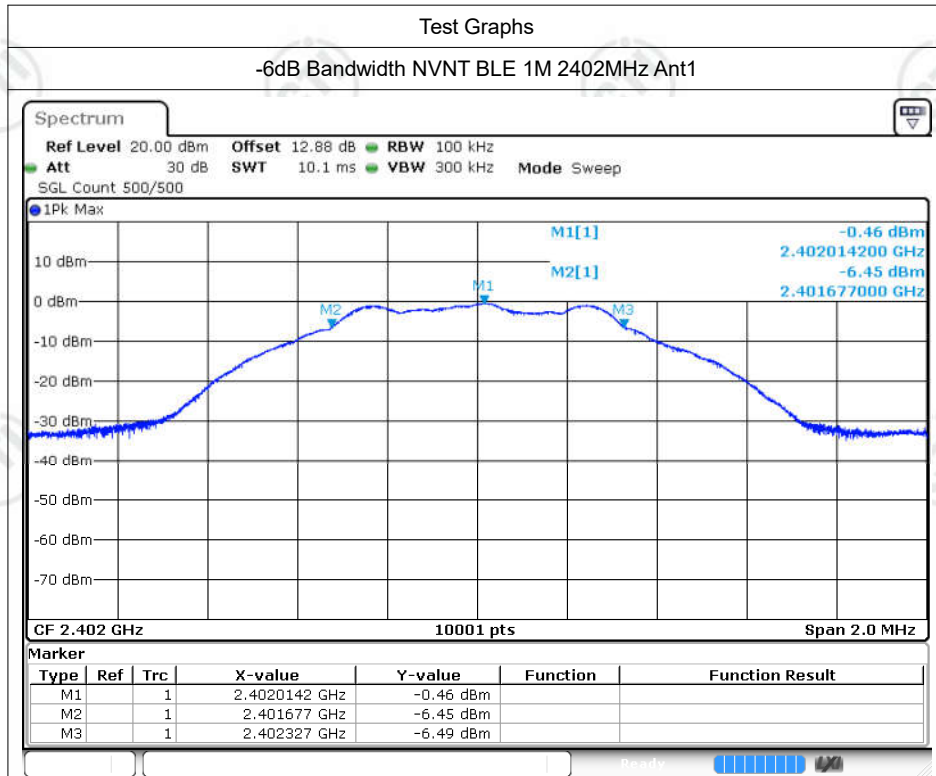
Date: 18.OCT.2022 06:19:33



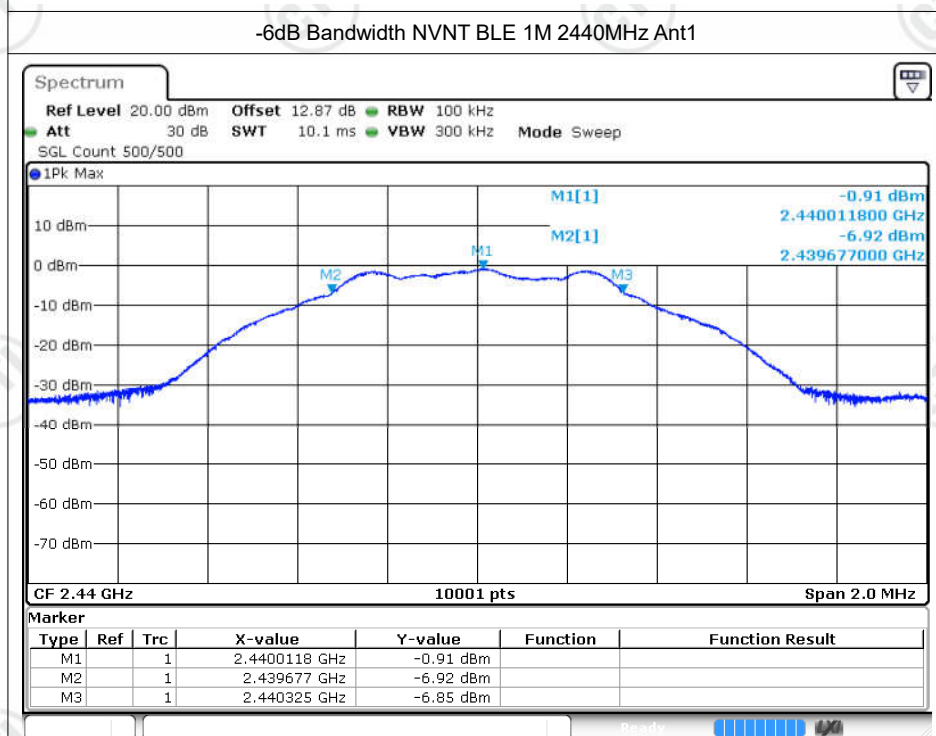
Date: 18.OCT.2022 06:25:12

-6dB Bandwidth

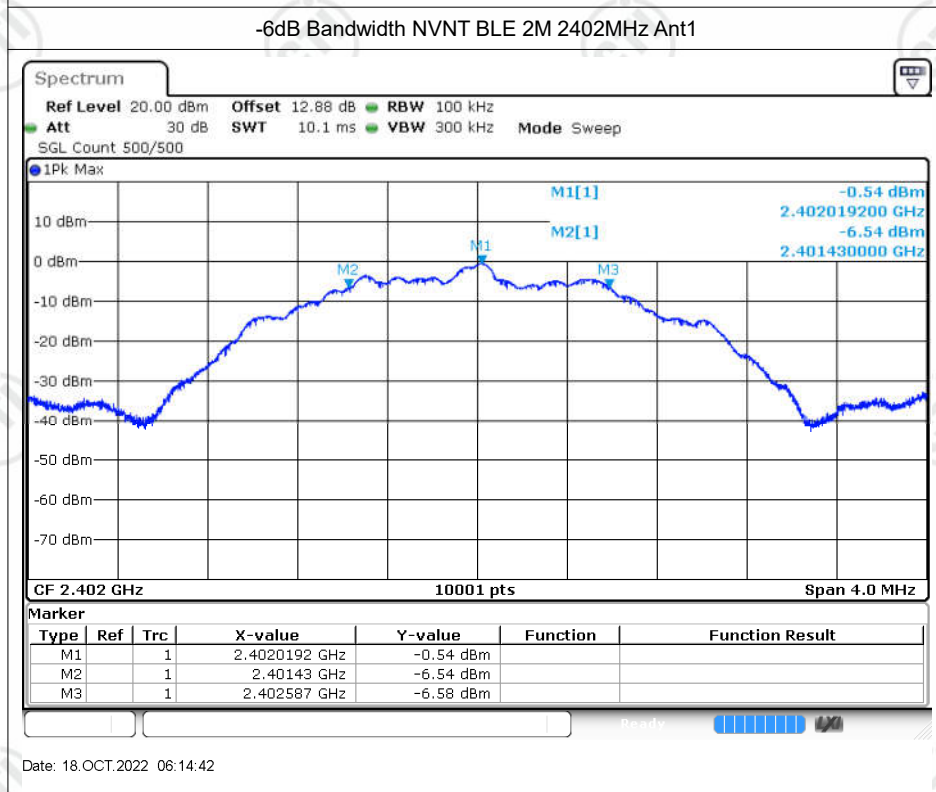
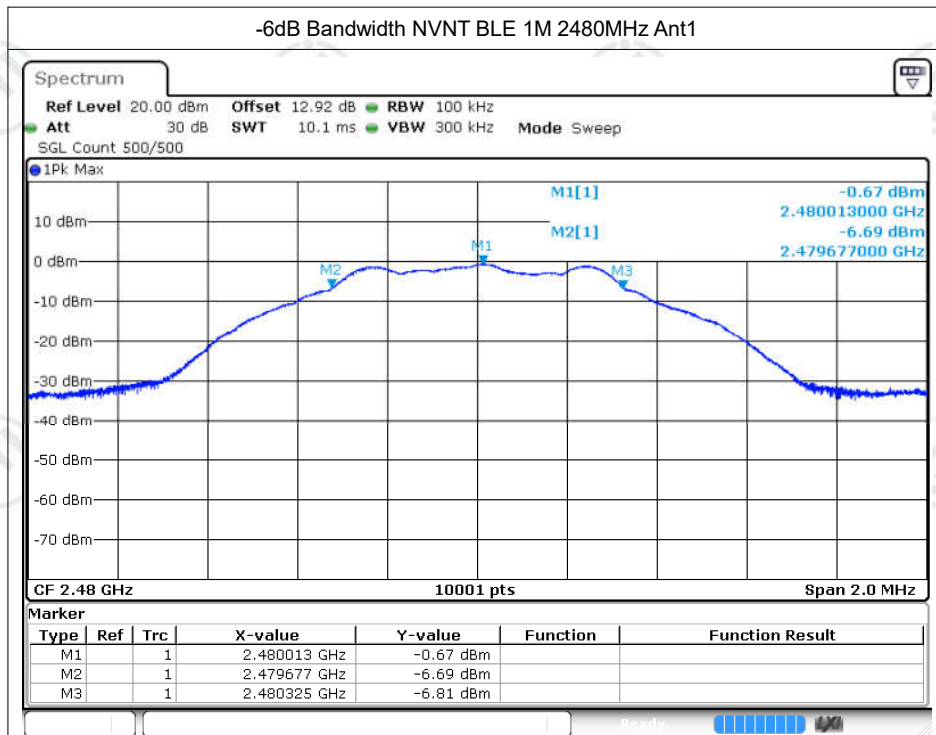
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	Ant1	0.65	0.5	Pass
NVNT	BLE 1M	2440	Ant1	0.648	0.5	Pass
NVNT	BLE 1M	2480	Ant1	0.648	0.5	Pass
NVNT	BLE 2M	2402	Ant1	1.157	0.5	Pass
NVNT	BLE 2M	2440	Ant1	1.155	0.5	Pass
NVNT	BLE 2M	2480	Ant1	1.153	0.5	Pass

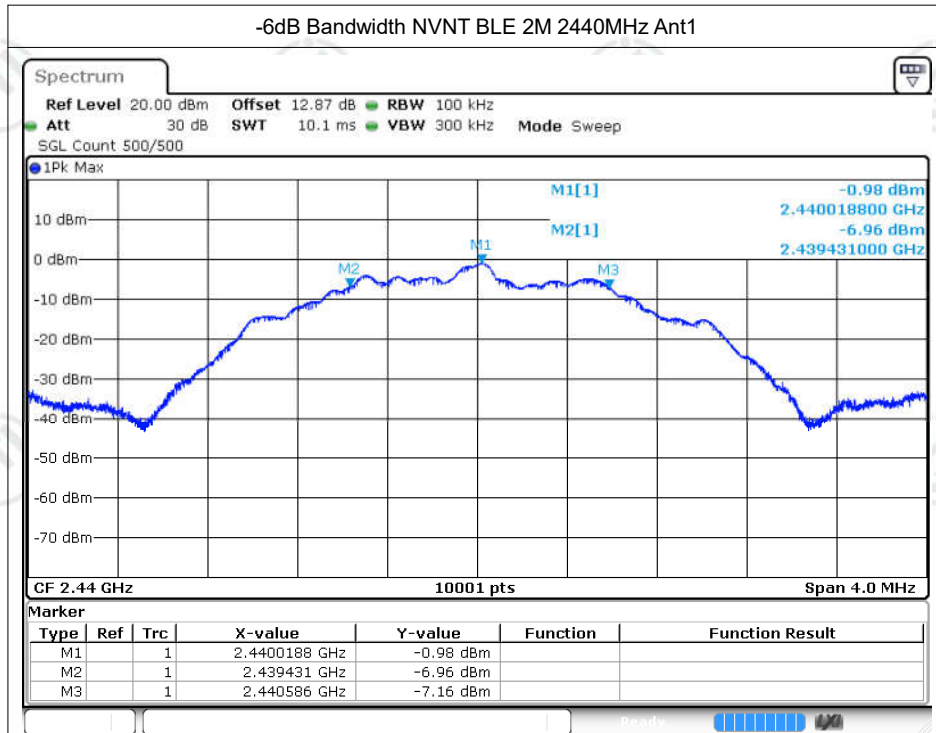


Date: 18.OCT.2022 06:04:18

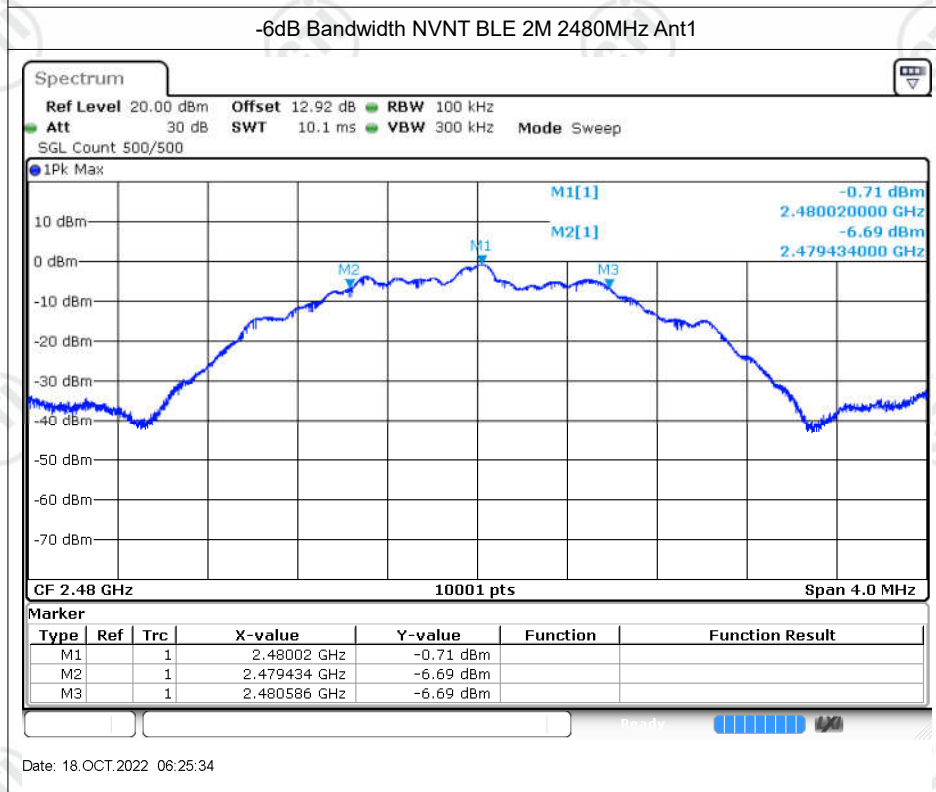


Date: 18.OCT.2022 06:06:27





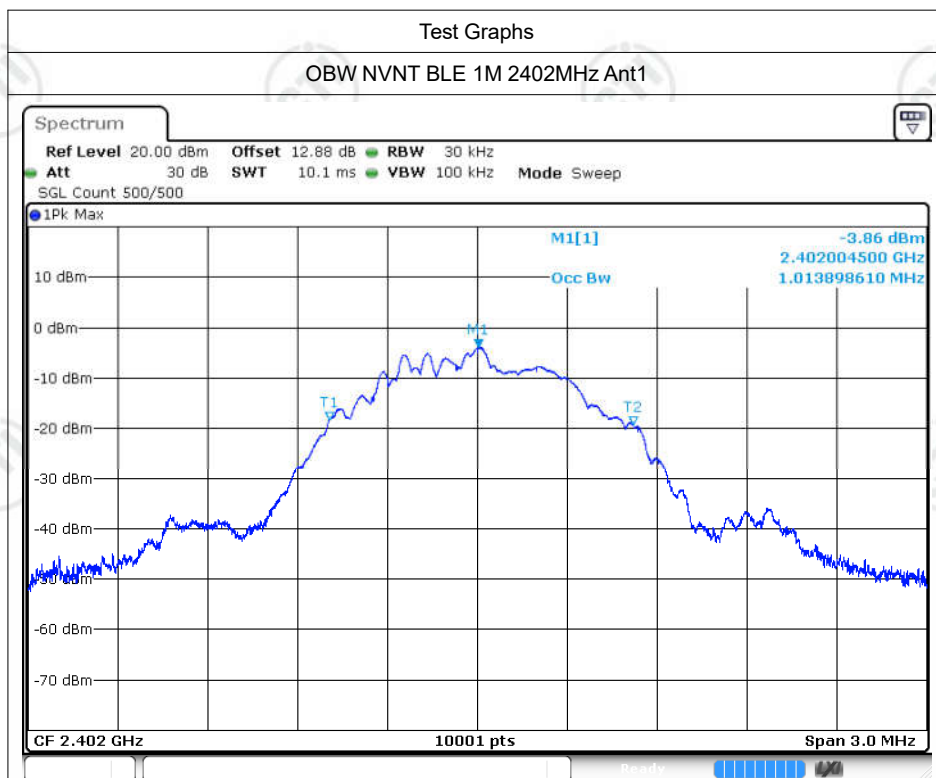
Date: 18.OCT.2022 06:19:55



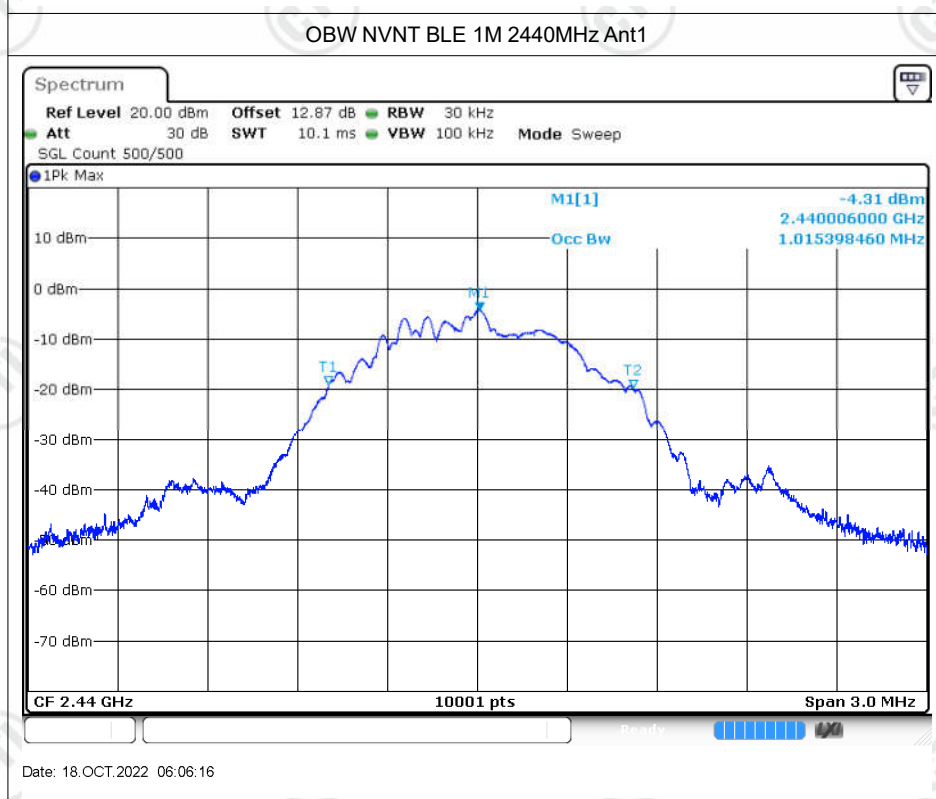
Date: 18.OCT.2022 06:25:34

Occupied Channel Bandwidth

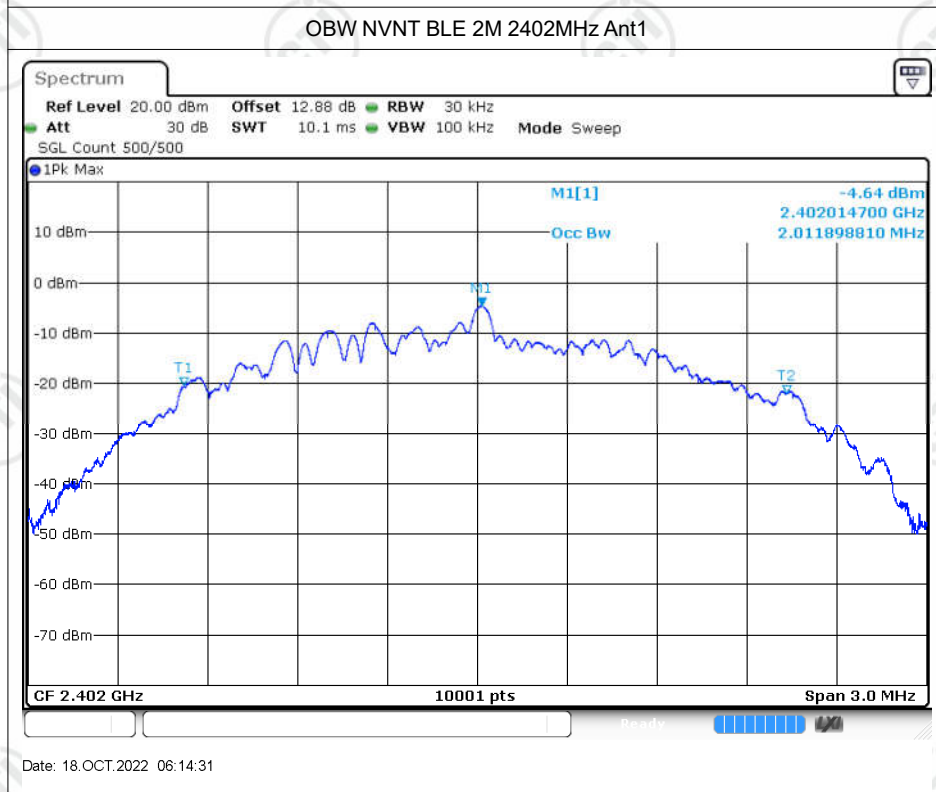
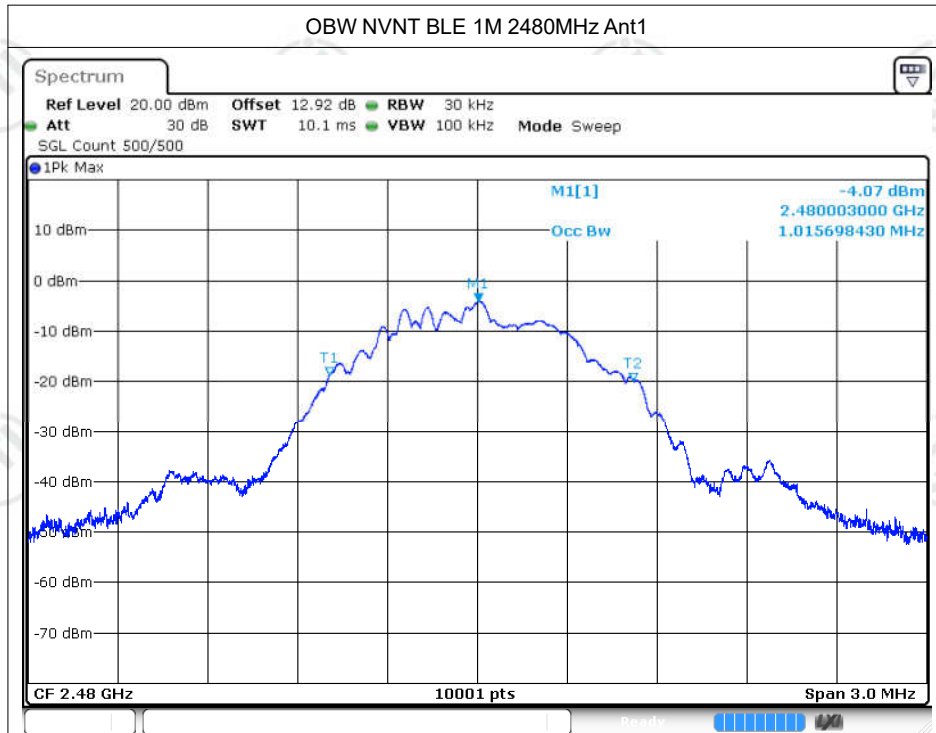
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE 1M	2402	Ant1	1.014
NVNT	BLE 1M	2440	Ant1	1.015
NVNT	BLE 1M	2480	Ant1	1.016
NVNT	BLE 2M	2402	Ant1	2.012
NVNT	BLE 2M	2440	Ant1	2.011
NVNT	BLE 2M	2480	Ant1	2.014

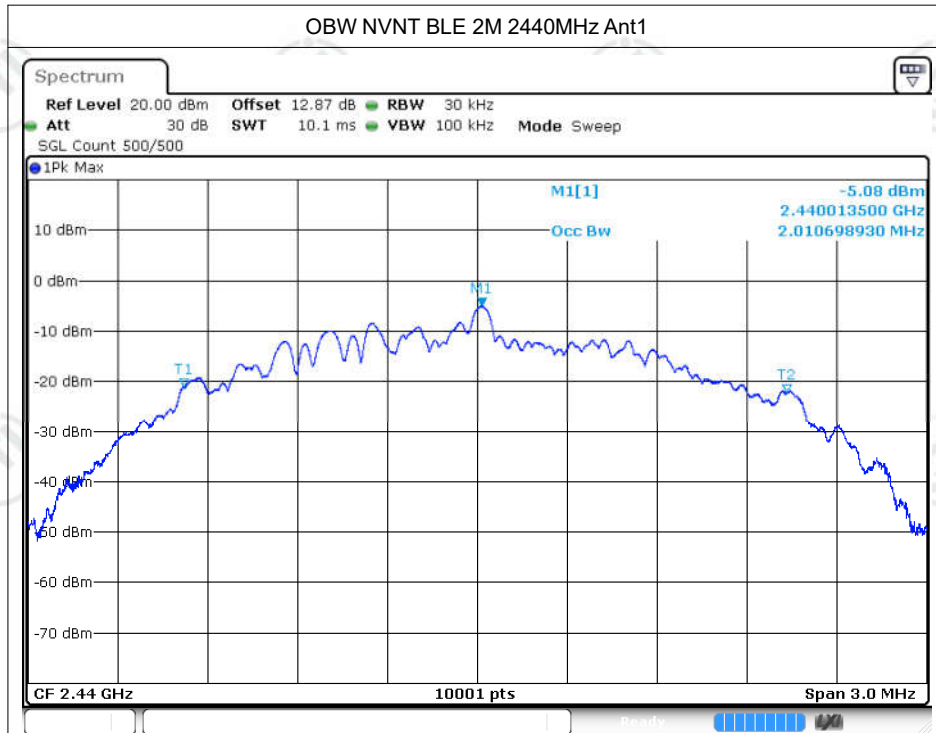


Date: 18.OCT.2022 06:04:07

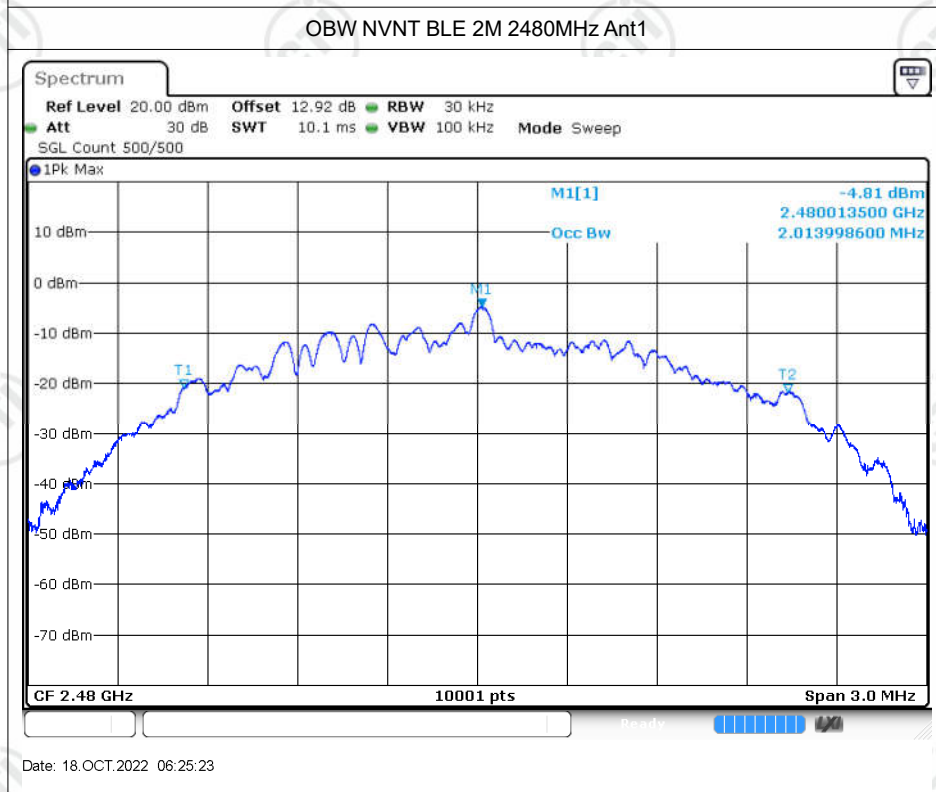


Date: 18.OCT.2022 06:06:16





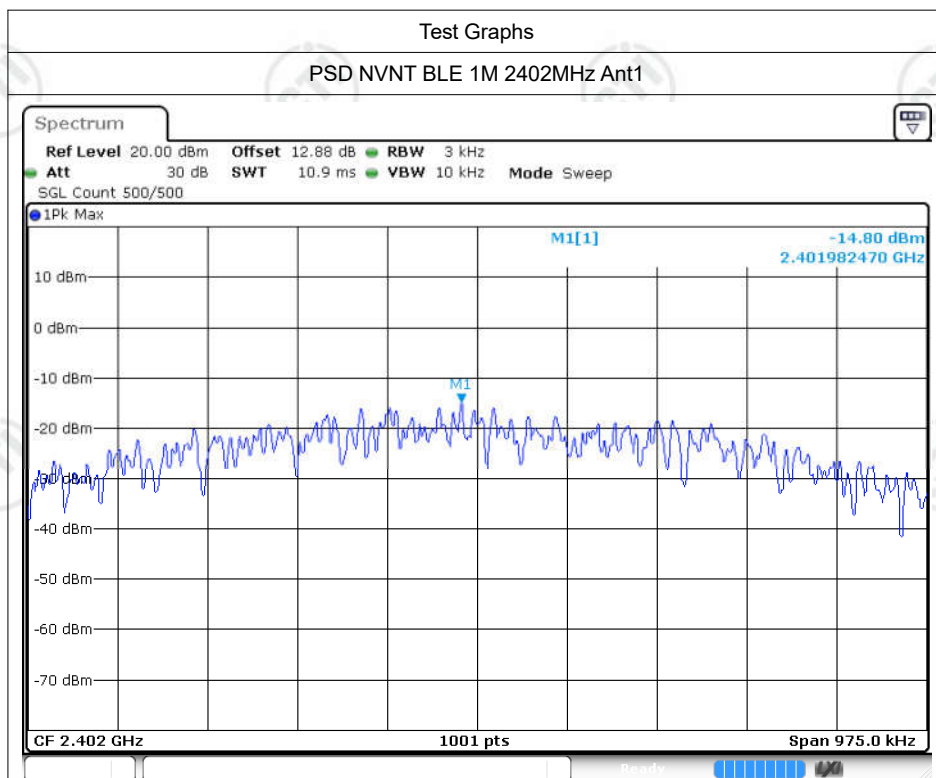
Date: 18.OCT.2022 06:19:44



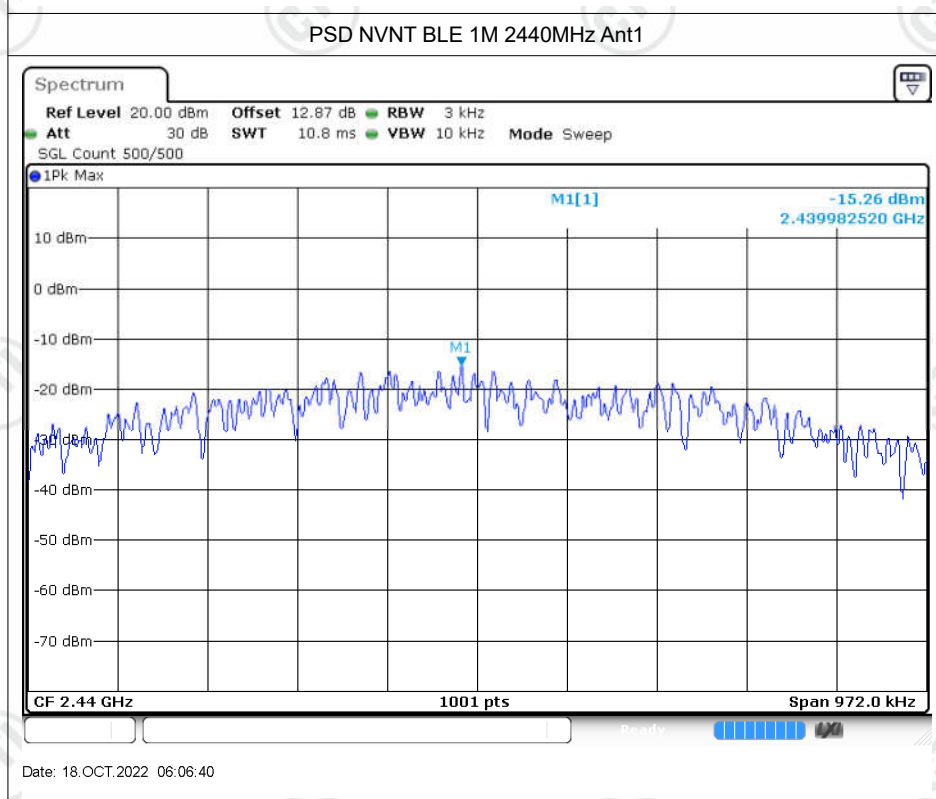
Date: 18.OCT.2022 06:25:23

Maximum Power Spectral Density Level

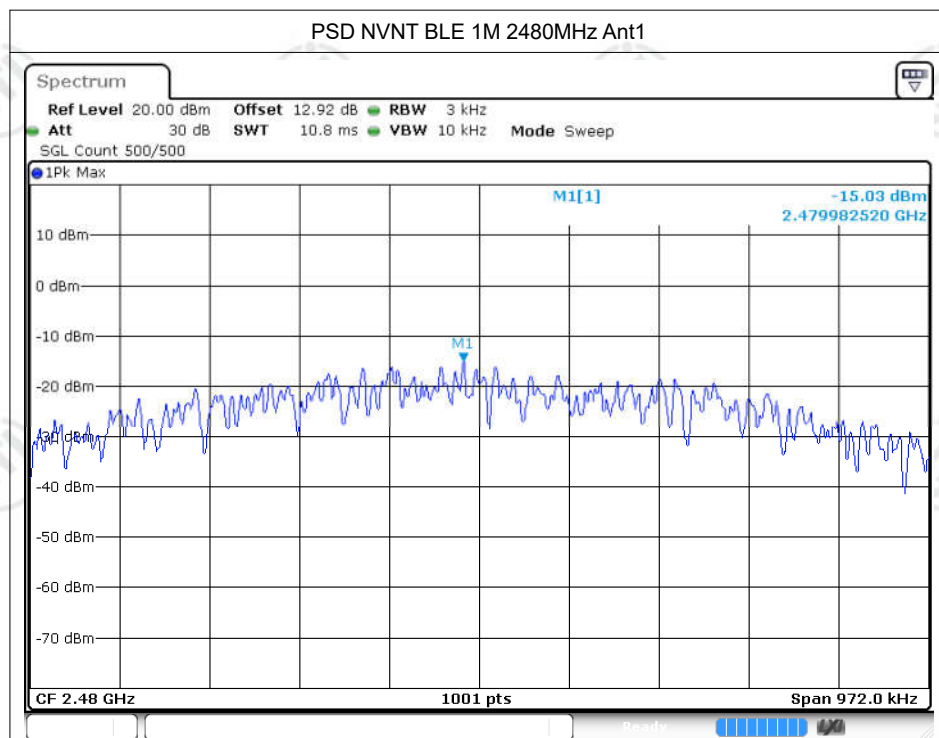
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	Ant1	-14.8	0	-14.8	8	Pass
NVNT	BLE 1M	2440	Ant1	-15.26	0	-15.26	8	Pass
NVNT	BLE 1M	2480	Ant1	-15.03	0	-15.03	8	Pass
NVNT	BLE 2M	2402	Ant1	-18.26	0	-18.26	8	Pass
NVNT	BLE 2M	2440	Ant1	-18.7	0	-18.7	8	Pass
NVNT	BLE 2M	2480	Ant1	-18.4	0	-18.4	8	Pass



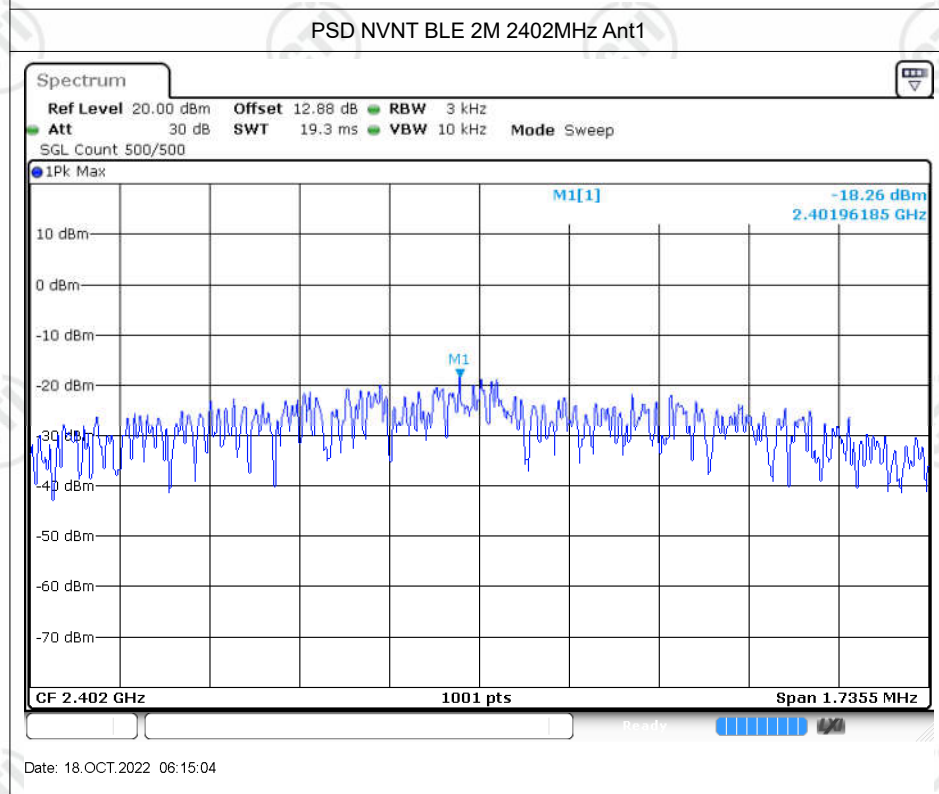
Date: 18.OCT.2022 06:04:31



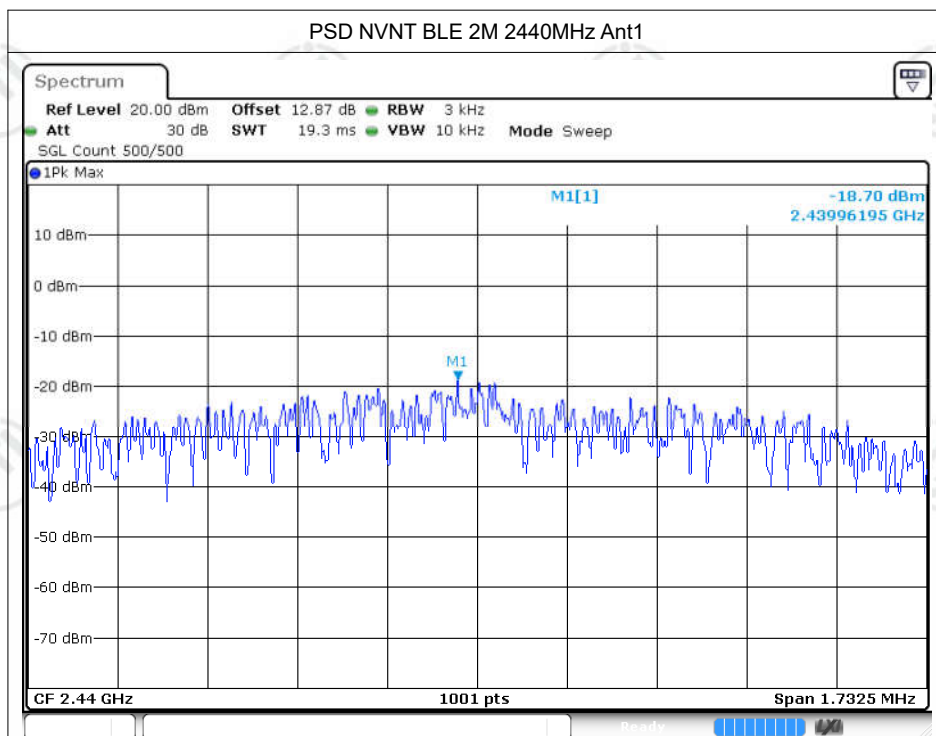
Date: 18.OCT.2022 06:06:40



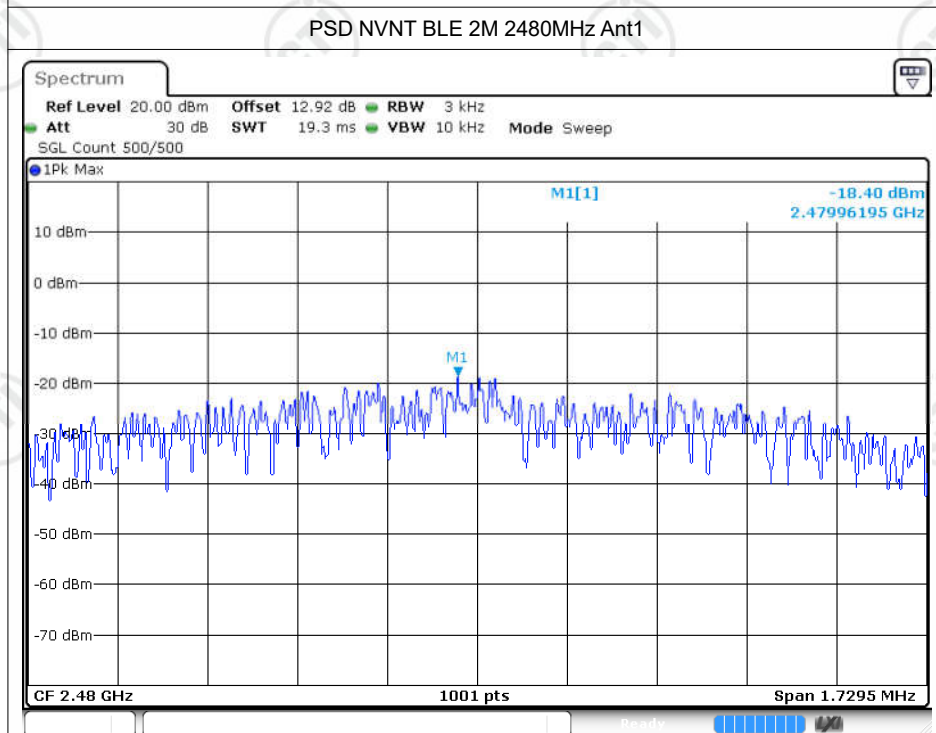
Date: 18.OCT.2022 06:12:46



Date: 18.OCT.2022 06:15:04



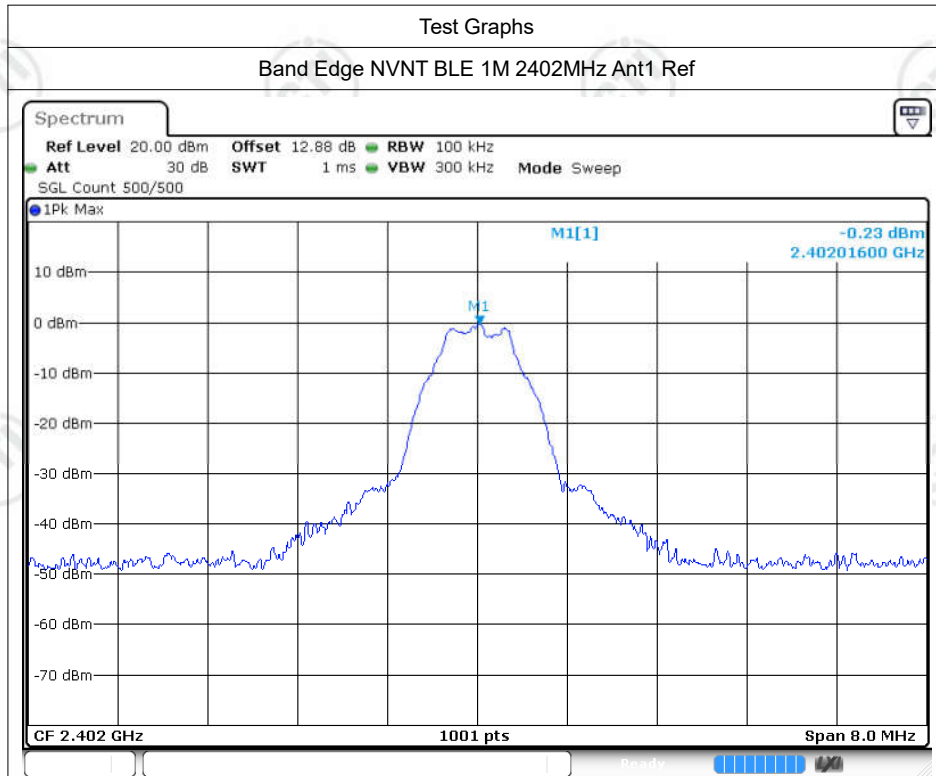
Date: 18.OCT.2022 06:20:17



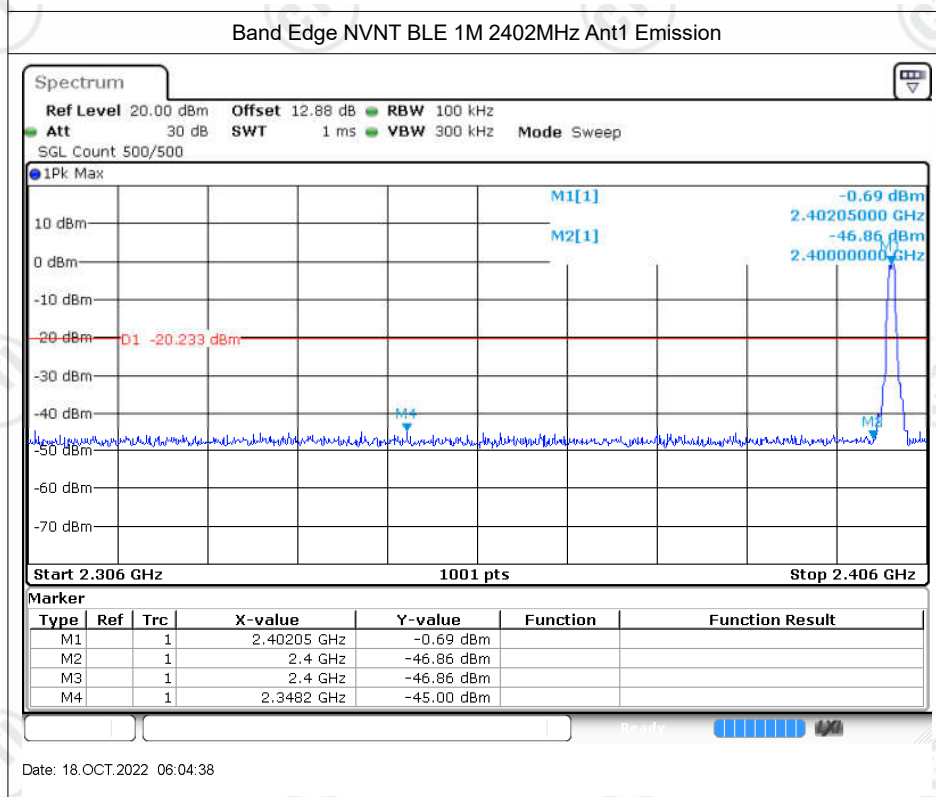
Date: 18.OCT.2022 06:25:56

Band Edge

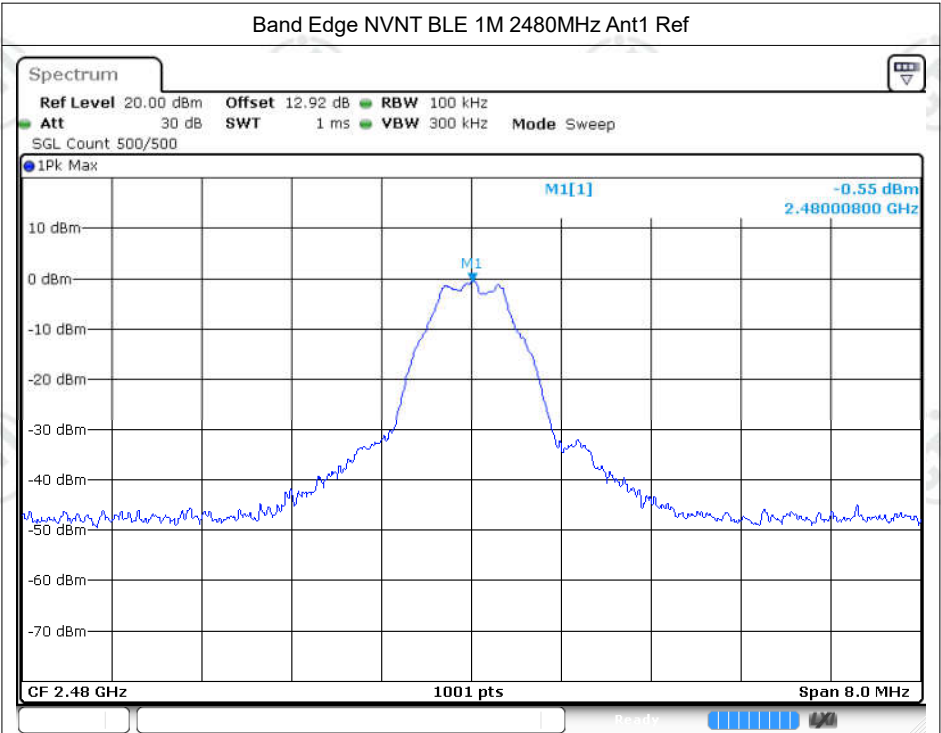
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-44.77	-20	Pass
NVNT	BLE 1M	2480	Ant1	-44.07	-20	Pass
NVNT	BLE 2M	2402	Ant1	-35.91	-20	Pass
NVNT	BLE 2M	2480	Ant1	-44.5	-20	Pass



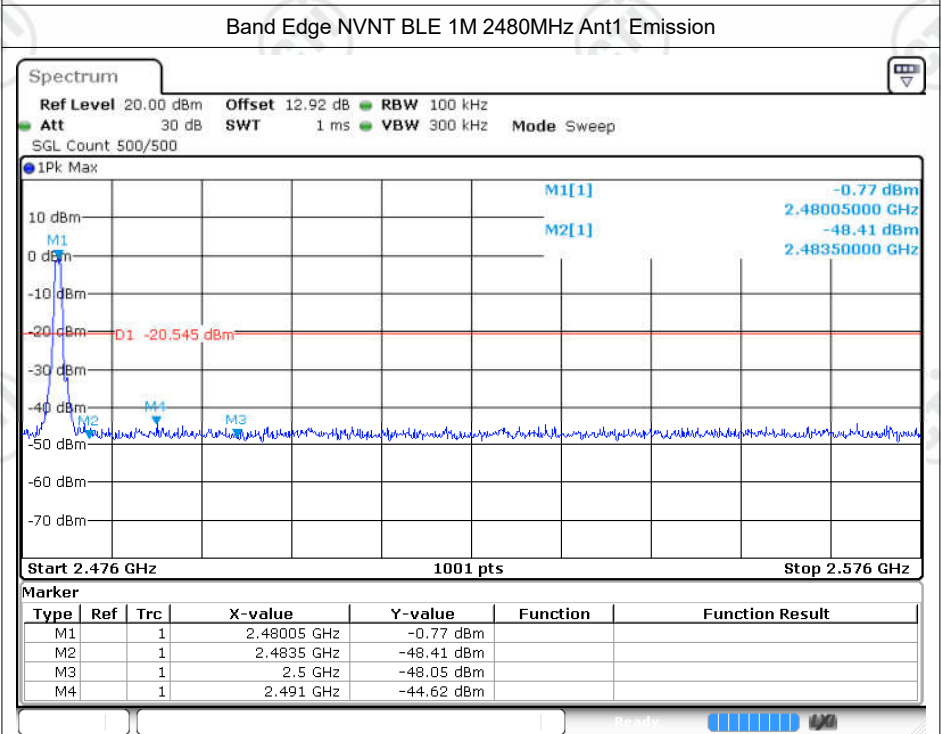
Date: 18.OCT.2022 06:04:35



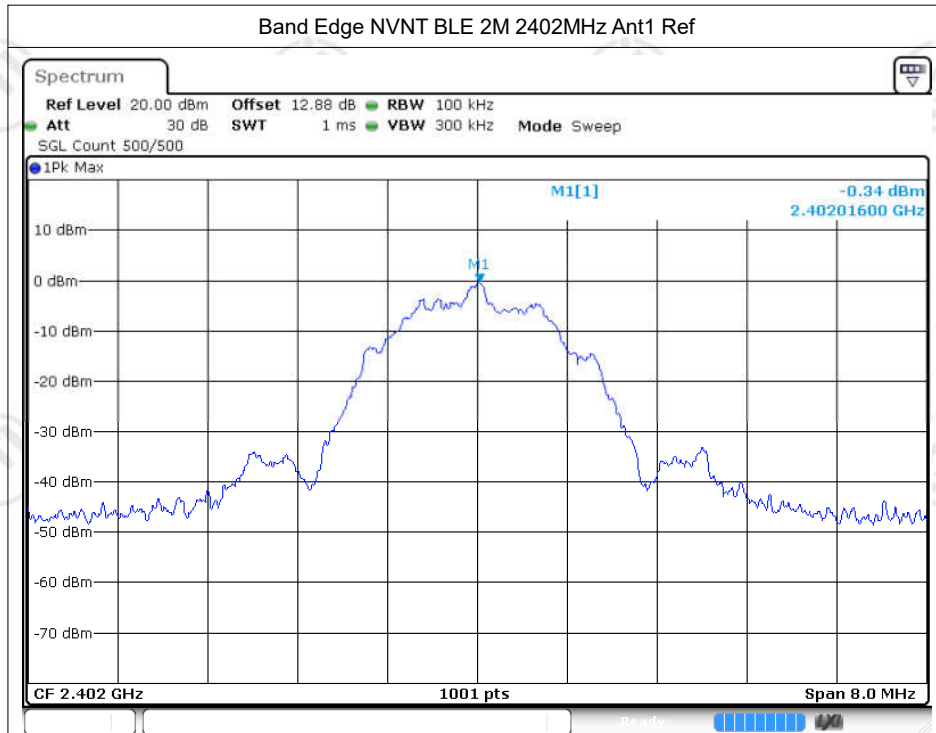
Date: 18.OCT.2022 06:04:38



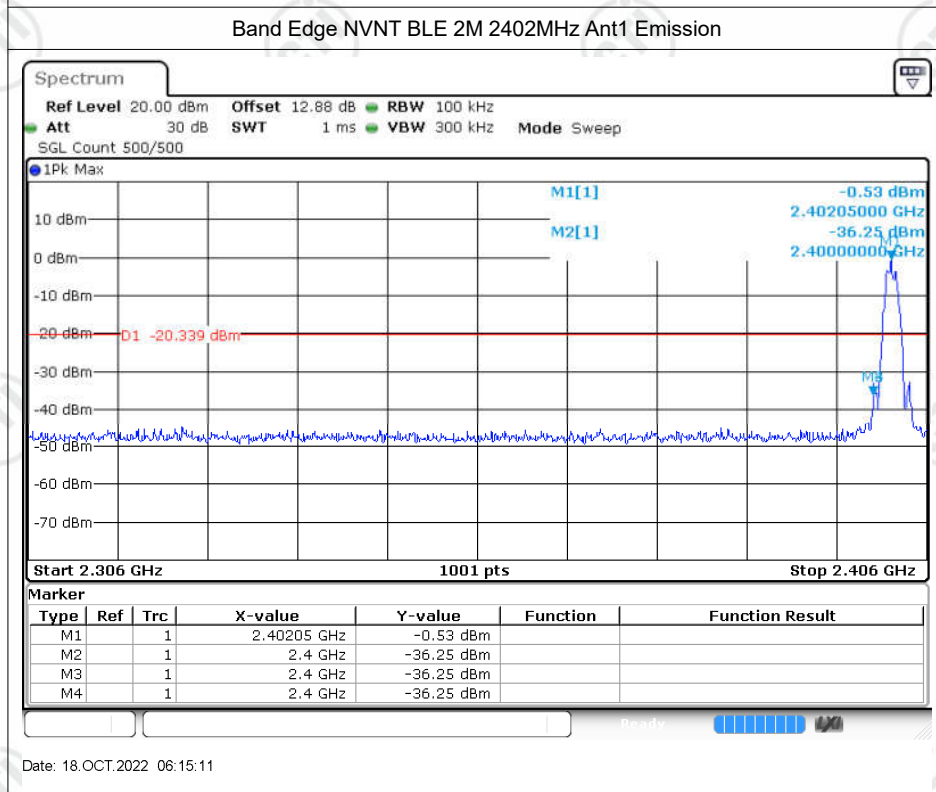
Date: 18.OCT.2022 06:12:50



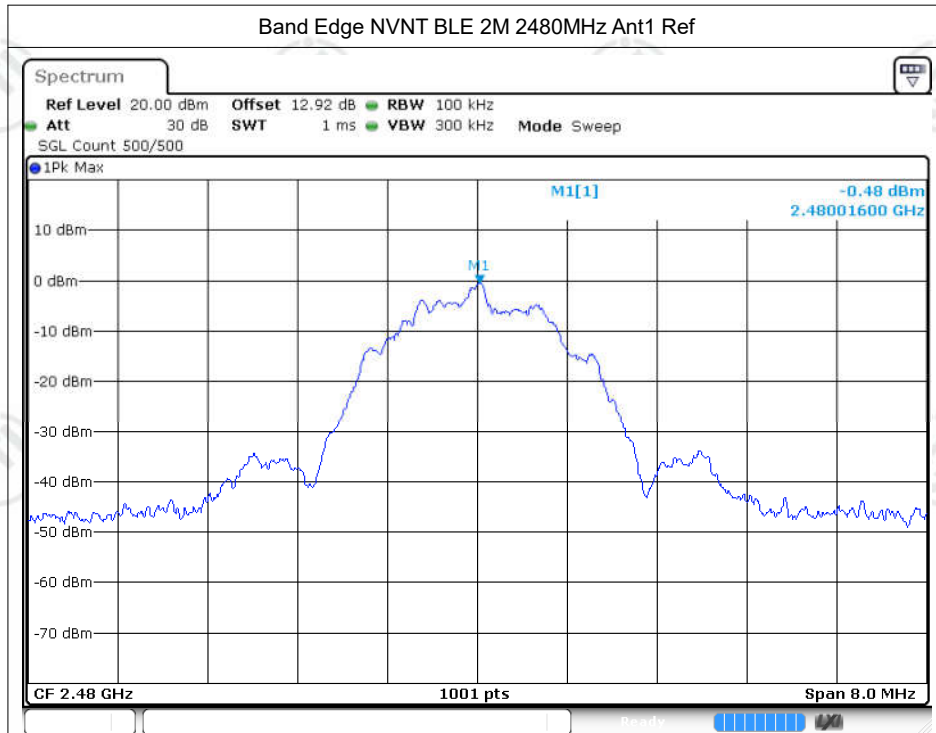
Date: 18.OCT.2022 06:12:52



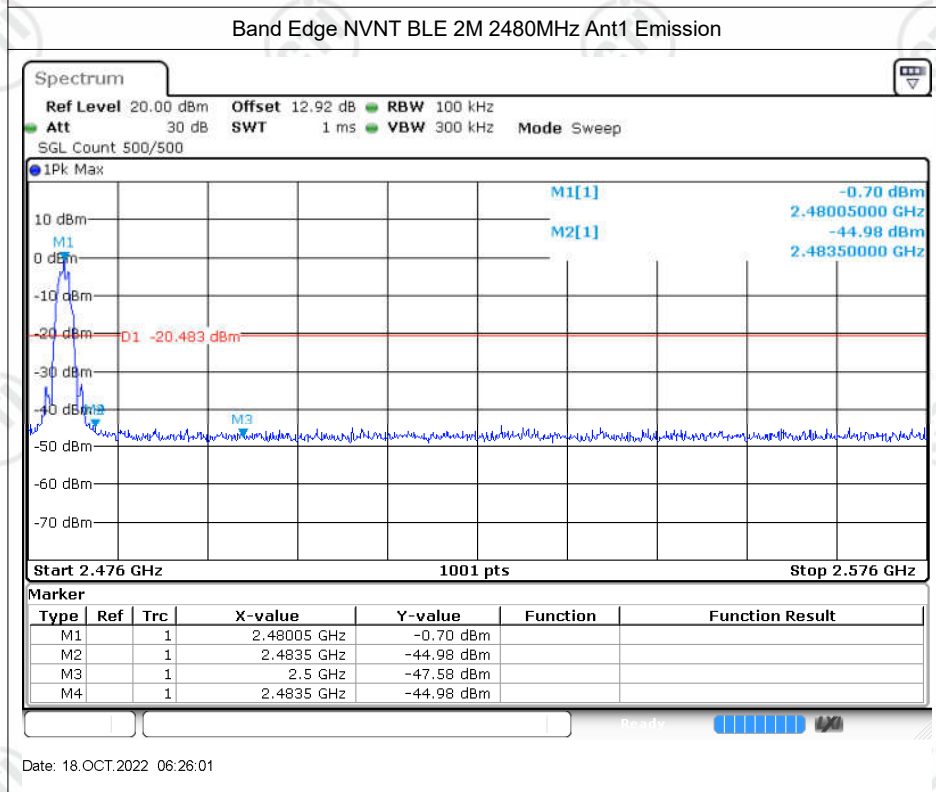
Date: 18.OCT.2022 06:15:07



Date: 18.OCT.2022 06:15:11



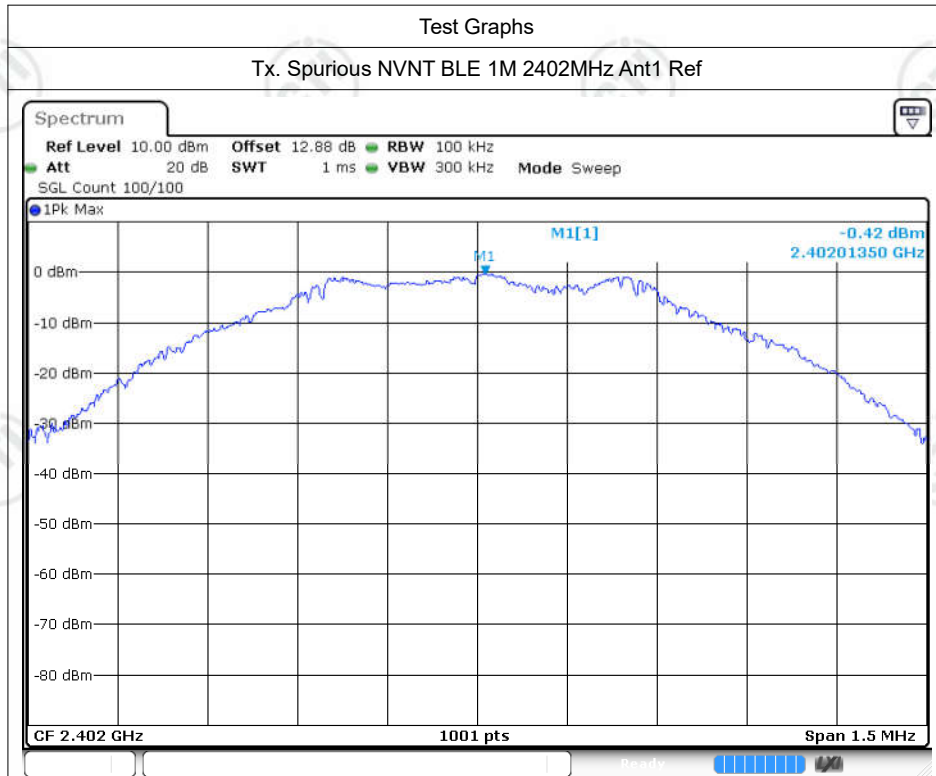
Date: 18.OCT.2022 06:25:59



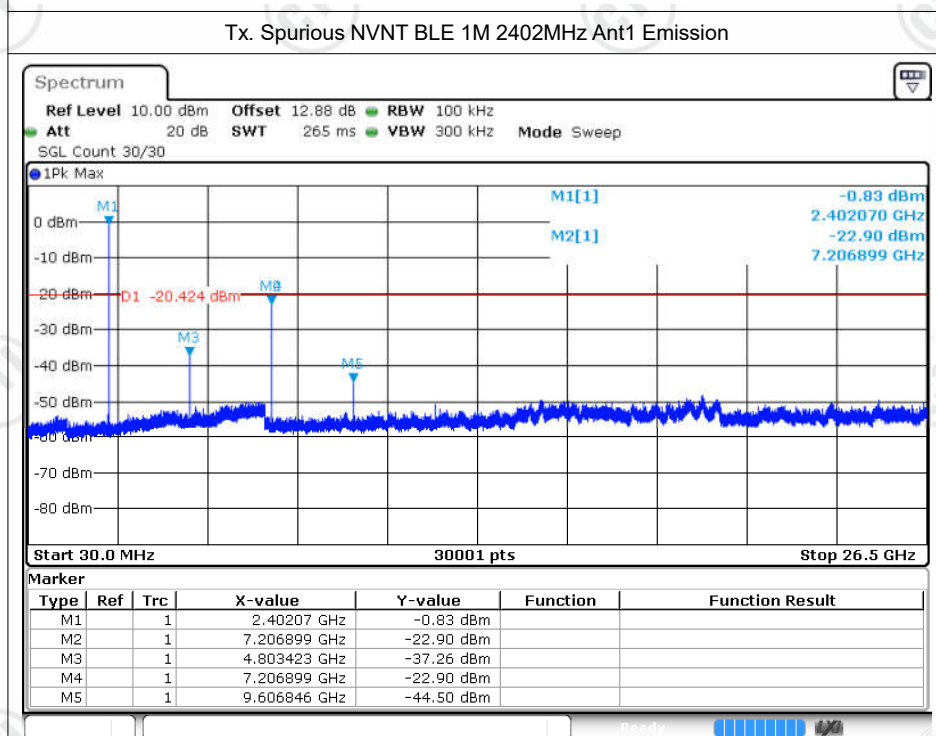
Date: 18.OCT.2022 06:26:01

Conducted RF Spurious Emission

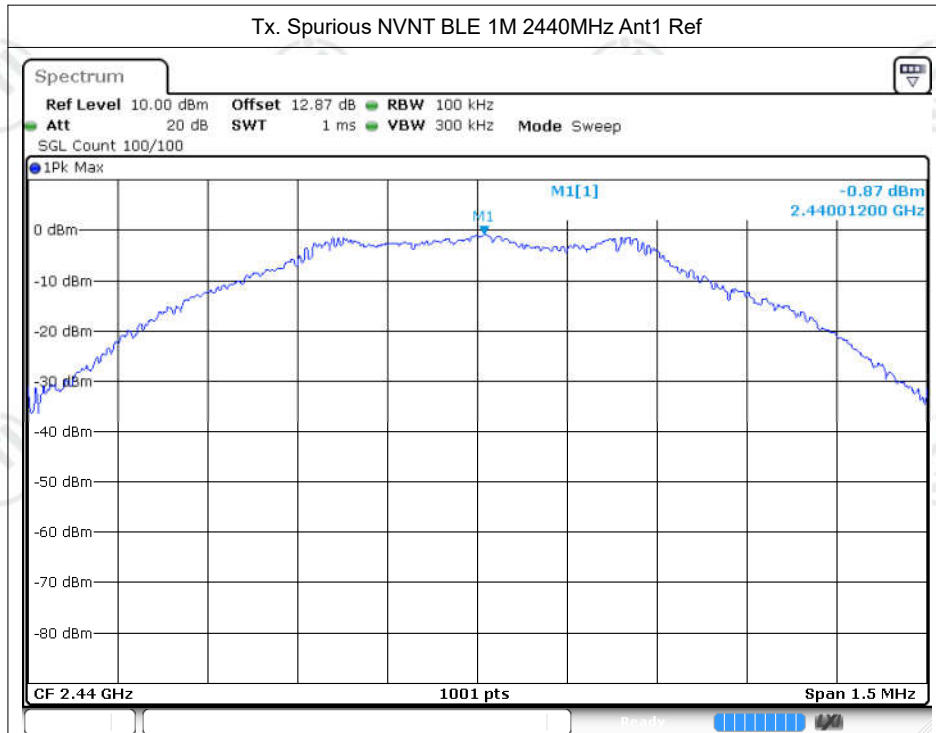
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-22.47	-20	Pass
NVNT	BLE 1M	2440	Ant1	-22.45	-20	Pass
NVNT	BLE 1M	2480	Ant1	-21.03	-20	Pass
NVNT	BLE 2M	2402	Ant1	-26.54	-20	Pass
NVNT	BLE 2M	2440	Ant1	-21.34	-20	Pass
NVNT	BLE 2M	2480	Ant1	-21.73	-20	Pass



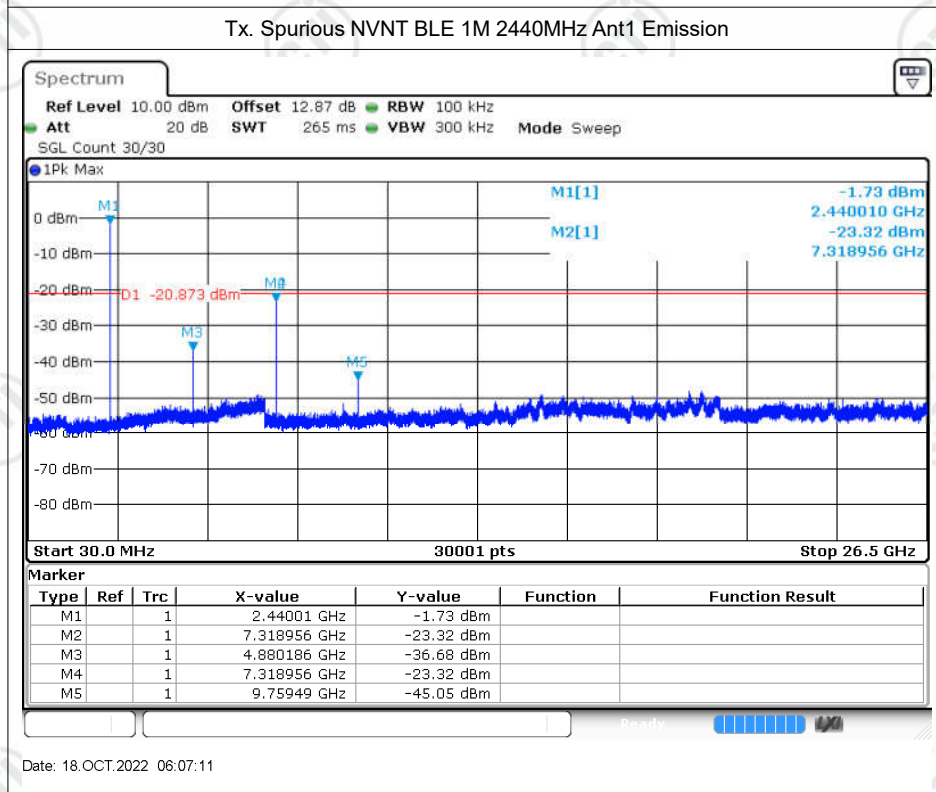
Date: 18.OCT.2022 06:03:06



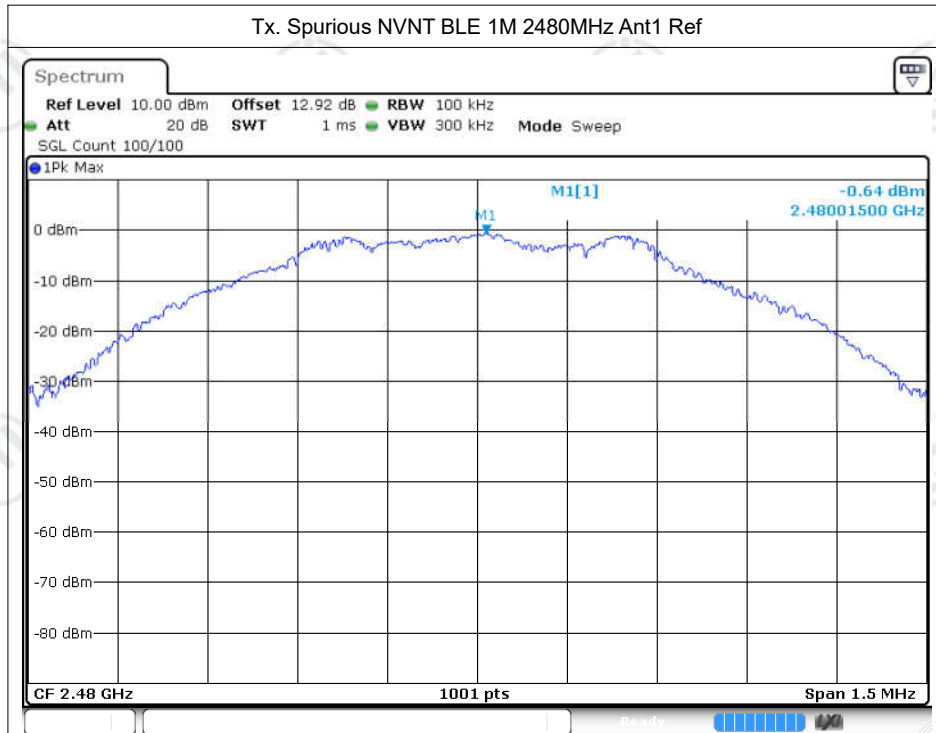
Date: 18.OCT.2022 06:03:34



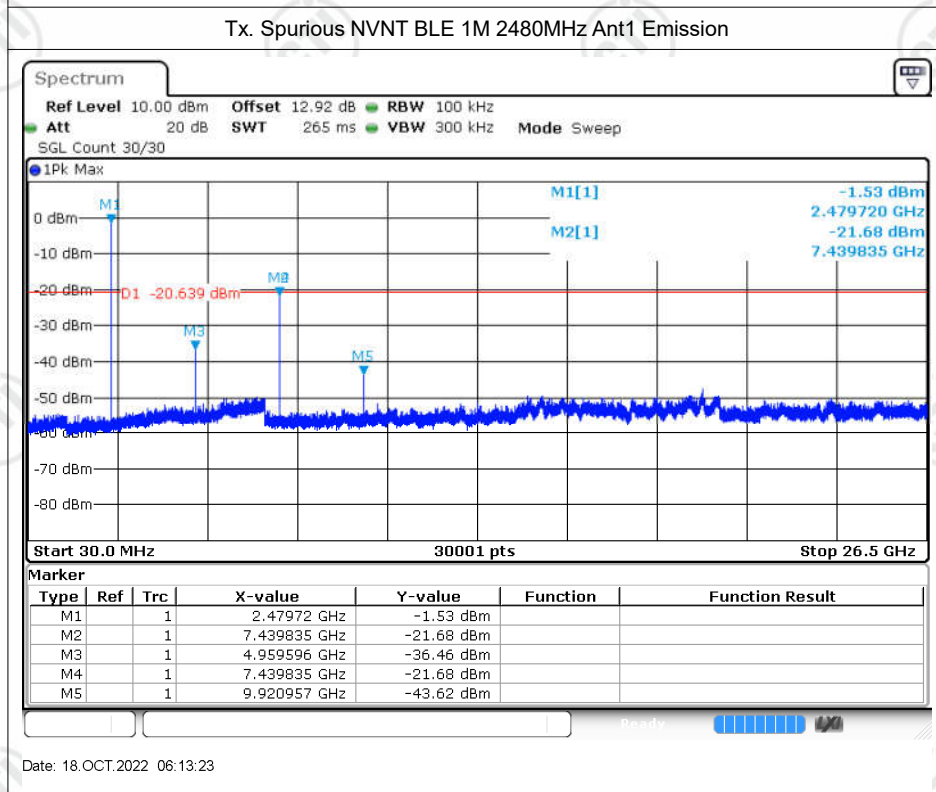
Date: 18.OCT.2022 06:06:43



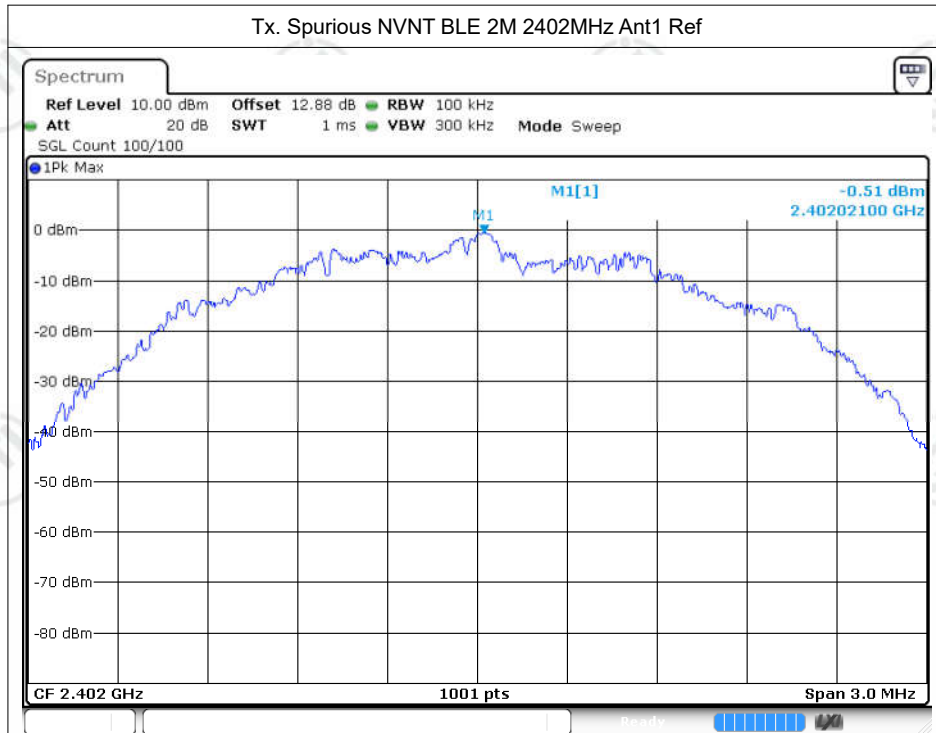
Date: 18.OCT.2022 06:07:11



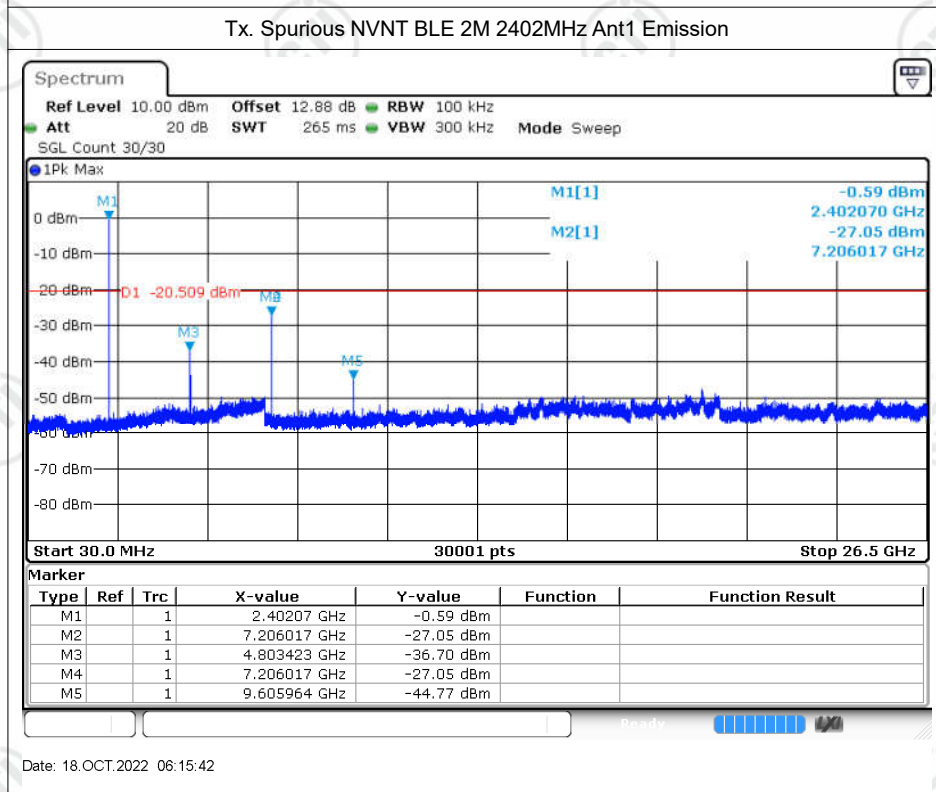
Date: 18.OCT.2022 06:12:55



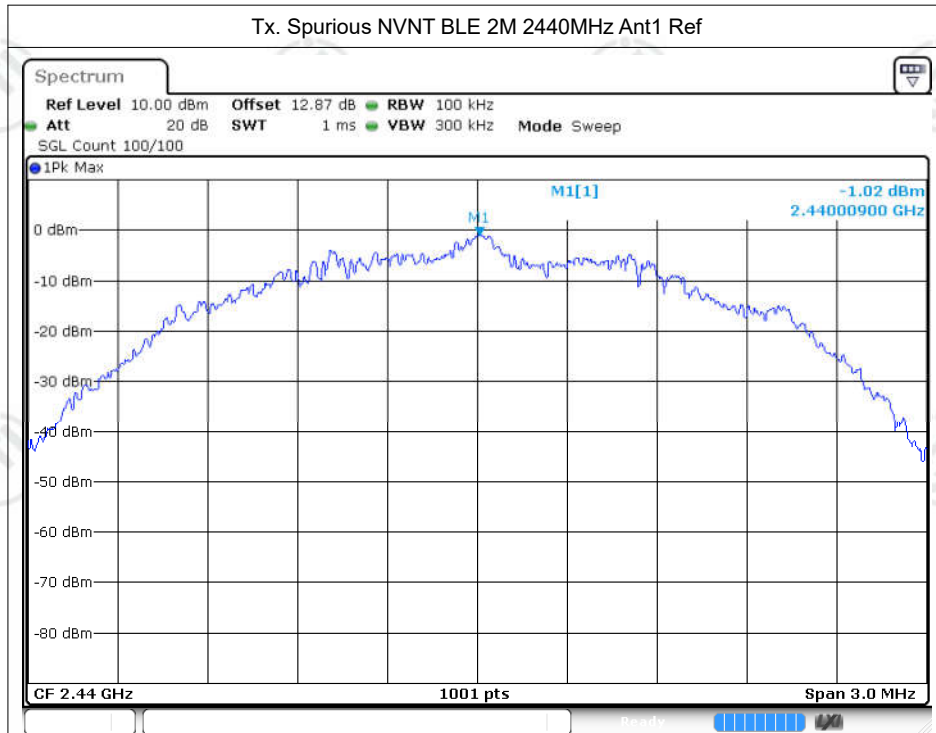
Date: 18.OCT.2022 06:13:23



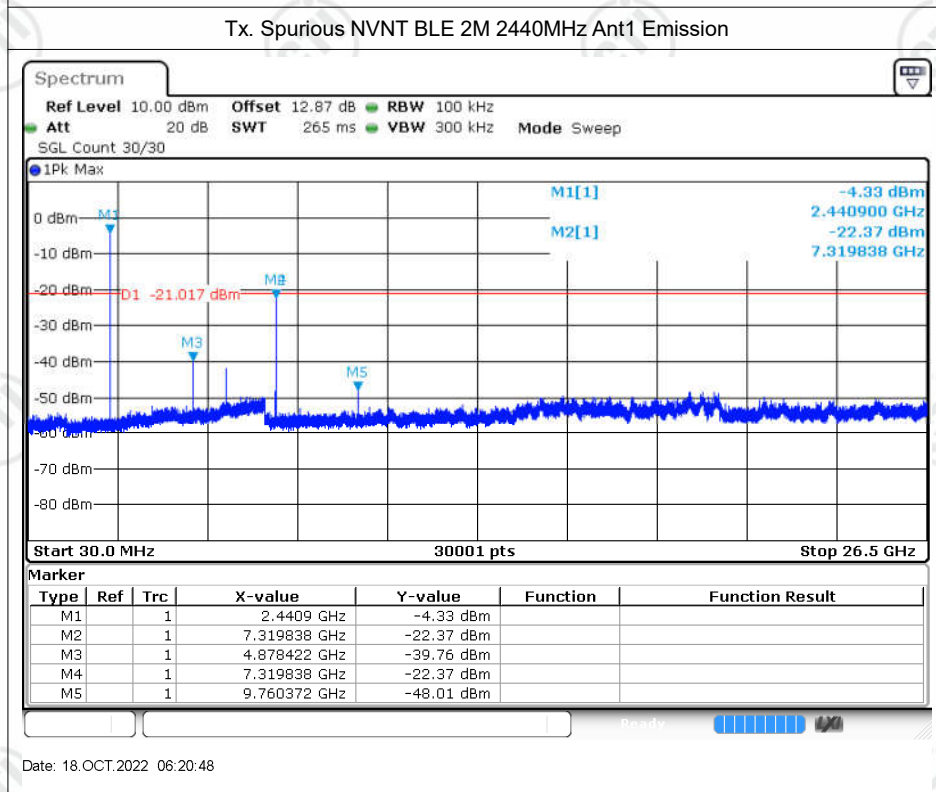
Date: 18.OCT.2022 06:15:14



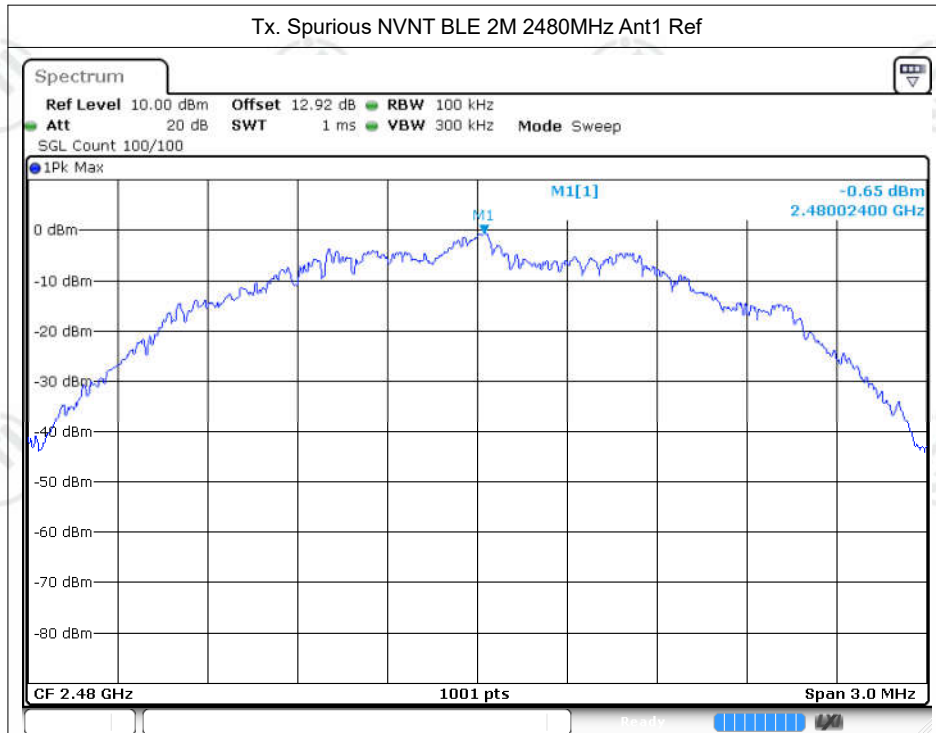
Date: 18.OCT.2022 06:15:42



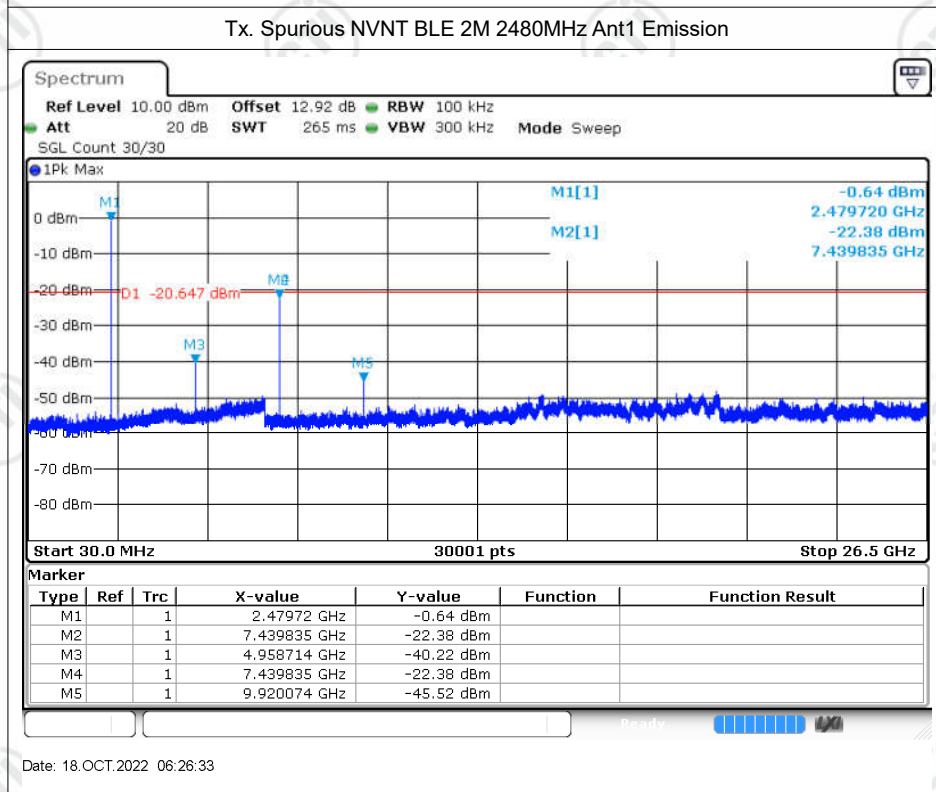
Date: 18.OCT.2022 06:20:19



Date: 18.OCT.2022 06:20:48



Date: 18.OCT.2022 06:26:04



Date: 18.OCT.2022 06:26:33

*** End of Report ***