

Appendix:Bluetooth LE

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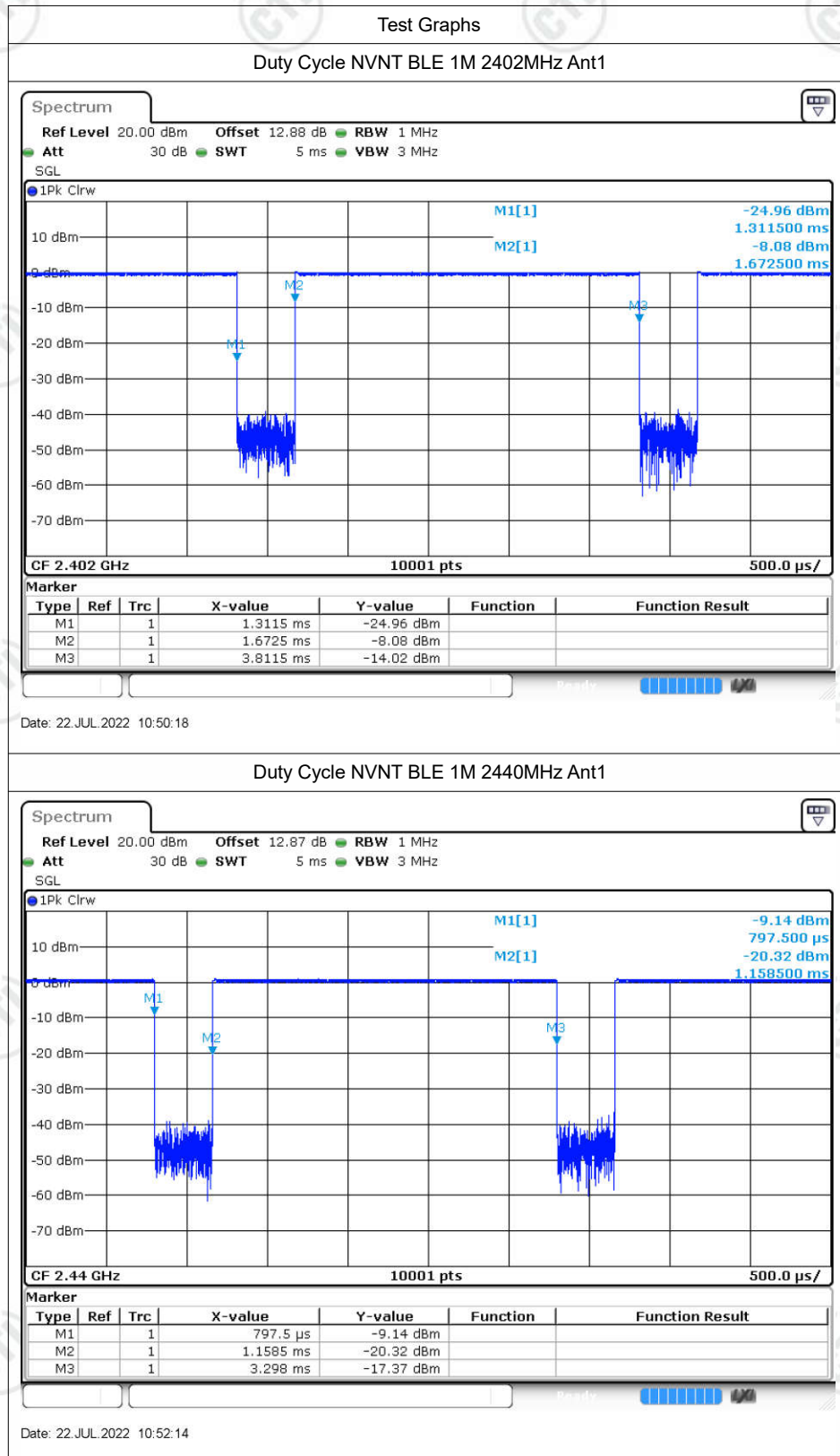
Test graphs: 29

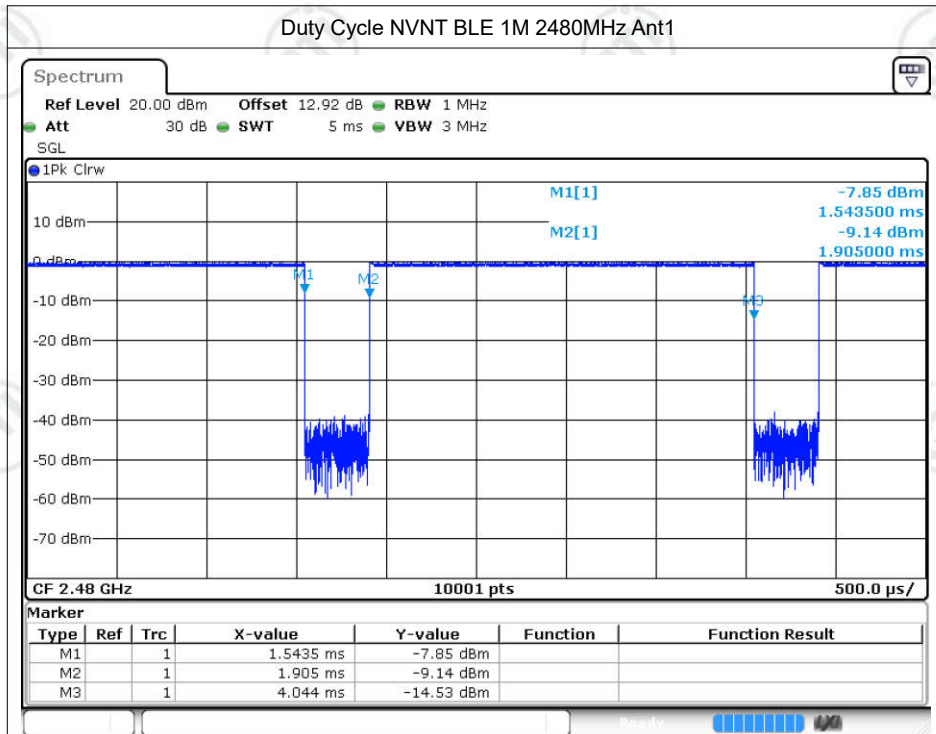
1.Duty Cycle

Test data:

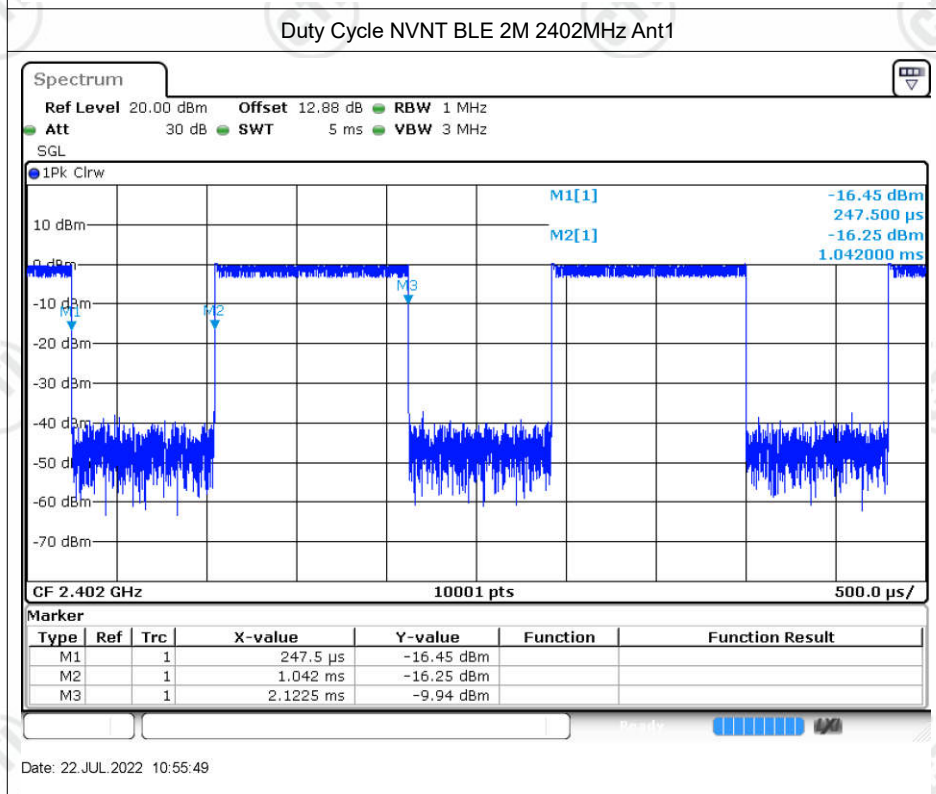
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1M	2402	Ant1	85.56	0.68	0.47
NVNT	BLE 1M	2440	Ant1	85.56	0.68	0.47
NVNT	BLE 1M	2480	Ant1	85.54	0.68	0.47
NVNT	BLE 2M	2402	Ant1	57.63	2.39	0.93
NVNT	BLE 2M	2440	Ant1	57.64	2.39	0.93
NVNT	BLE 2M	2480	Ant1	57.63	2.39	0.93

Test graphs:

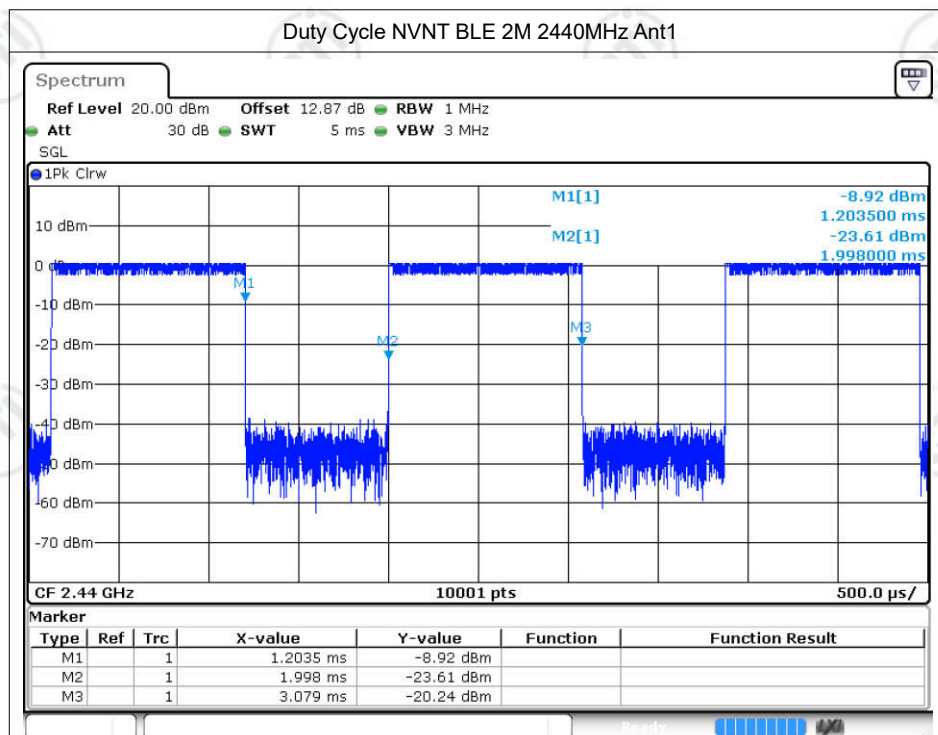




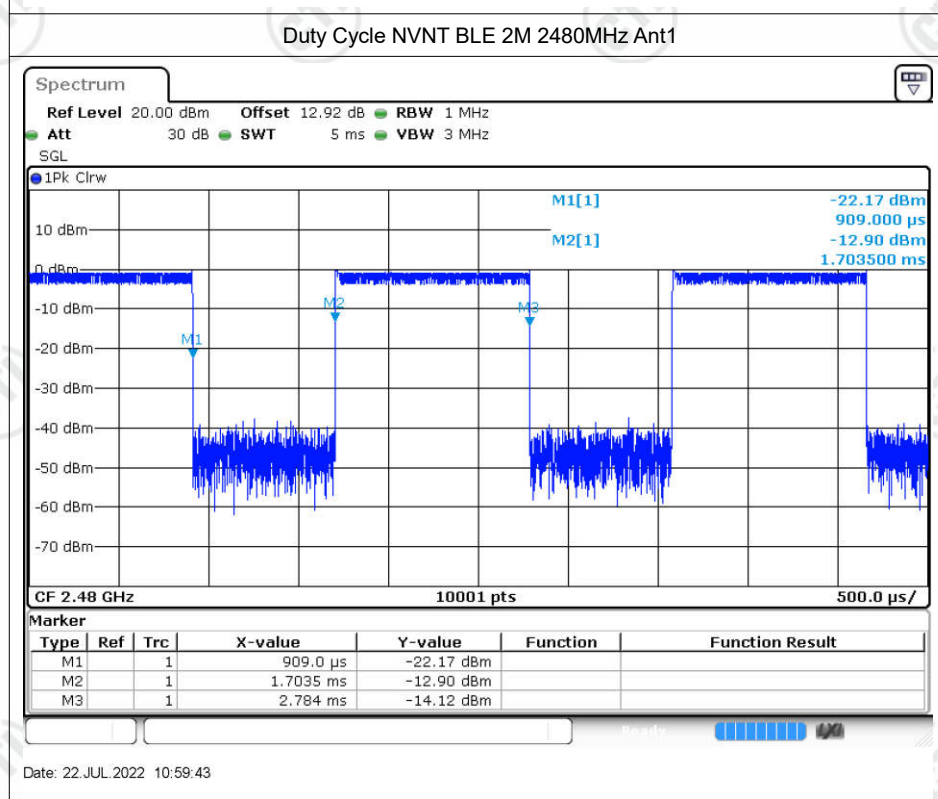
Date: 22 JUL 2022 11:03:17



Date: 22 JUL 2022 10:55:49



Date: 22 JUL 2022 10:57:42



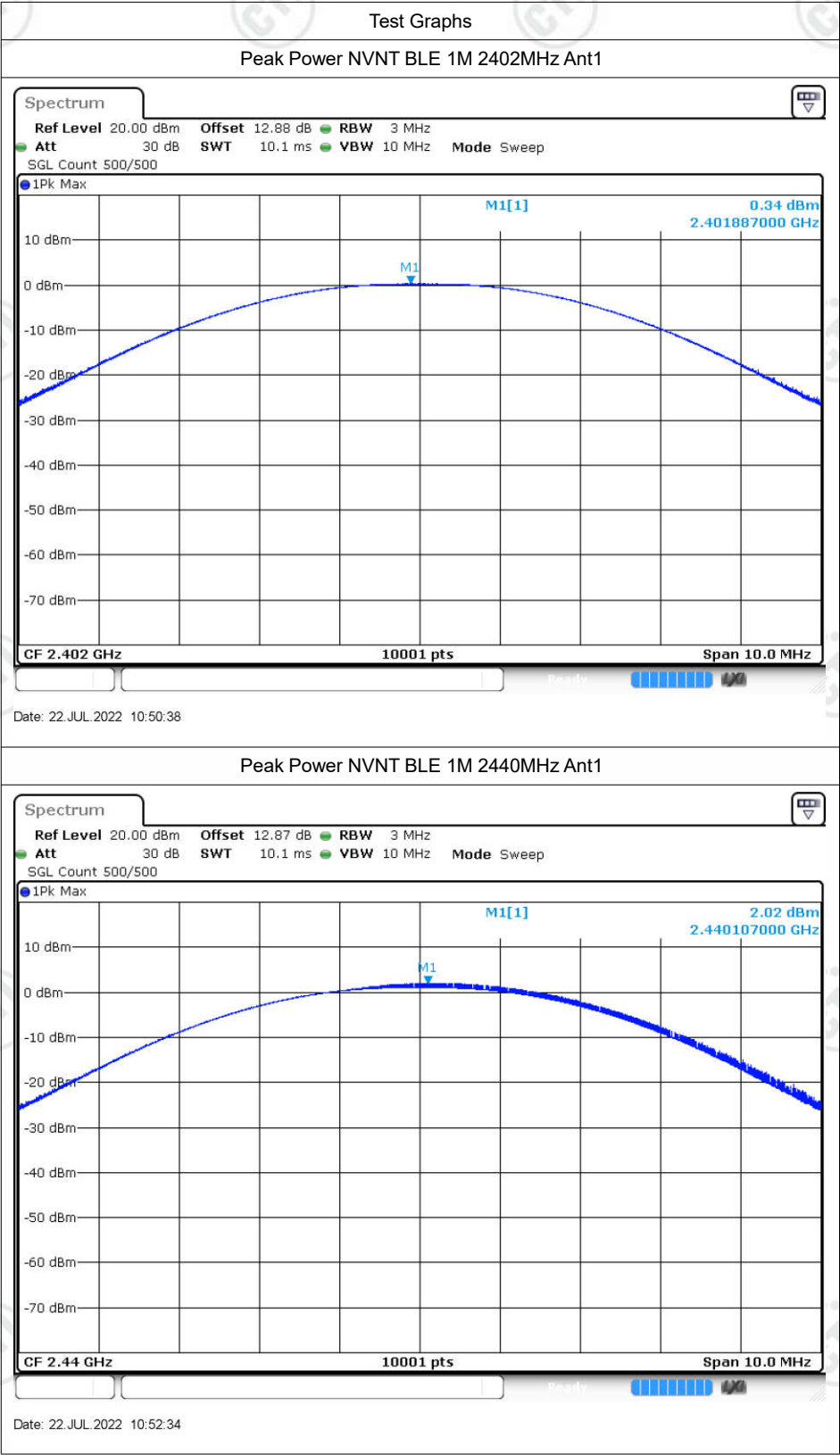
Date: 22 JUL 2022 10:59:43

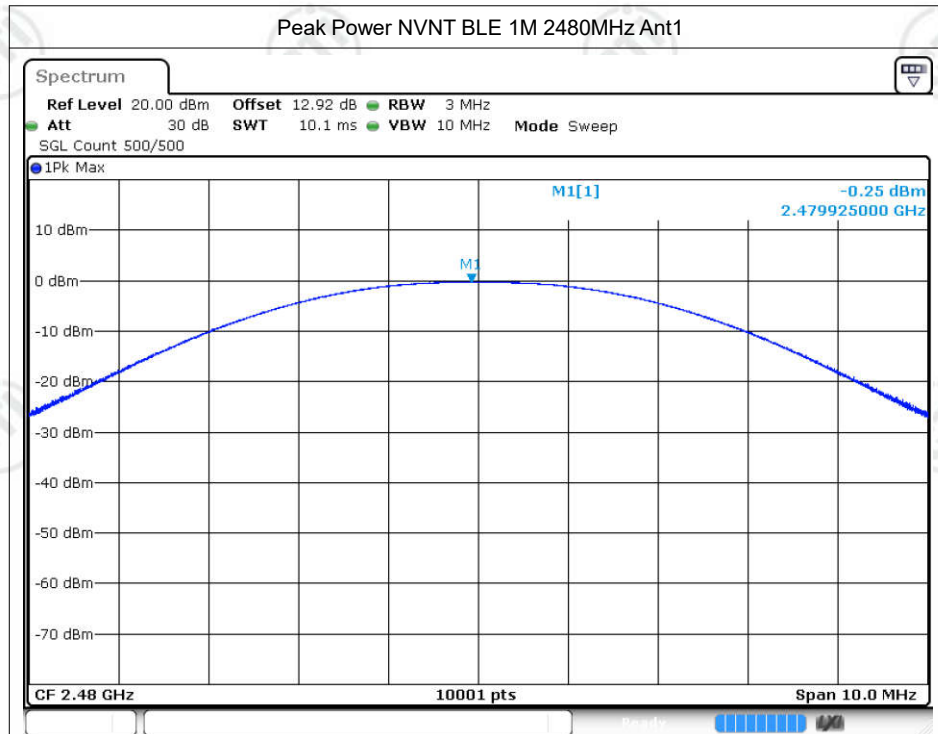
2.Maximum Peak Conducted Output Power

Test data:

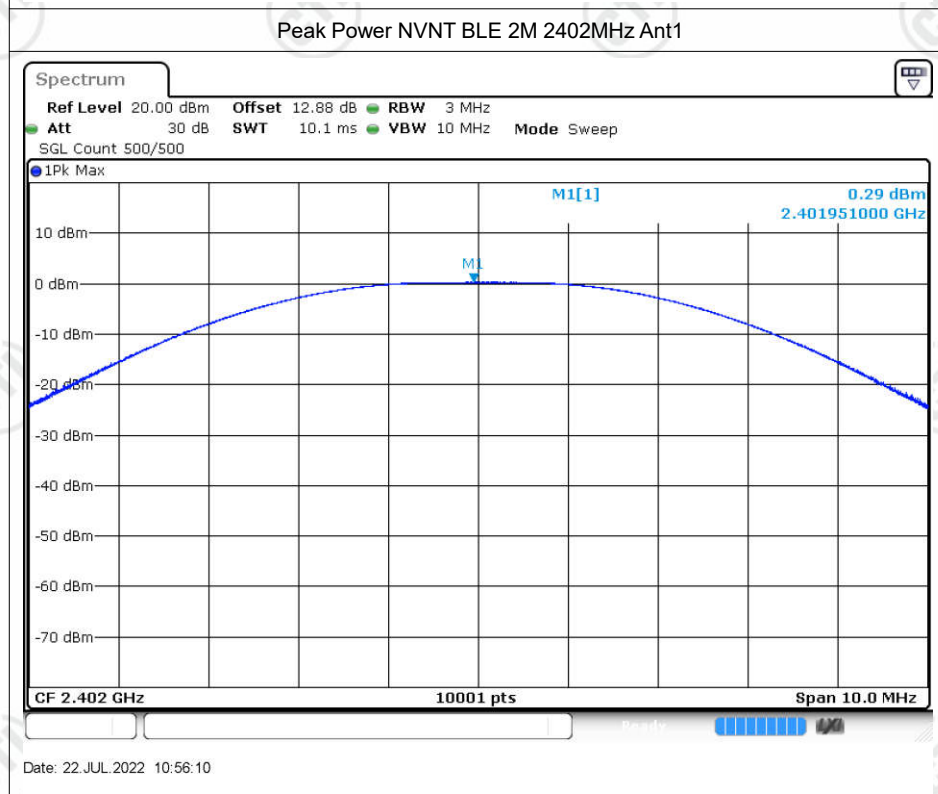
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	0.34	0	0.34	30	Pass
NVNT	BLE 1M	2440	Ant1	2.02	0	2.02	30	Pass
NVNT	BLE 1M	2480	Ant1	-0.25	0	-0.25	30	Pass
NVNT	BLE 2M	2402	Ant1	0.29	0	0.29	30	Pass
NVNT	BLE 2M	2440	Ant1	2.09	0	2.09	30	Pass
NVNT	BLE 2M	2480	Ant1	-0.26	0	-0.26	30	Pass

Test graphs:

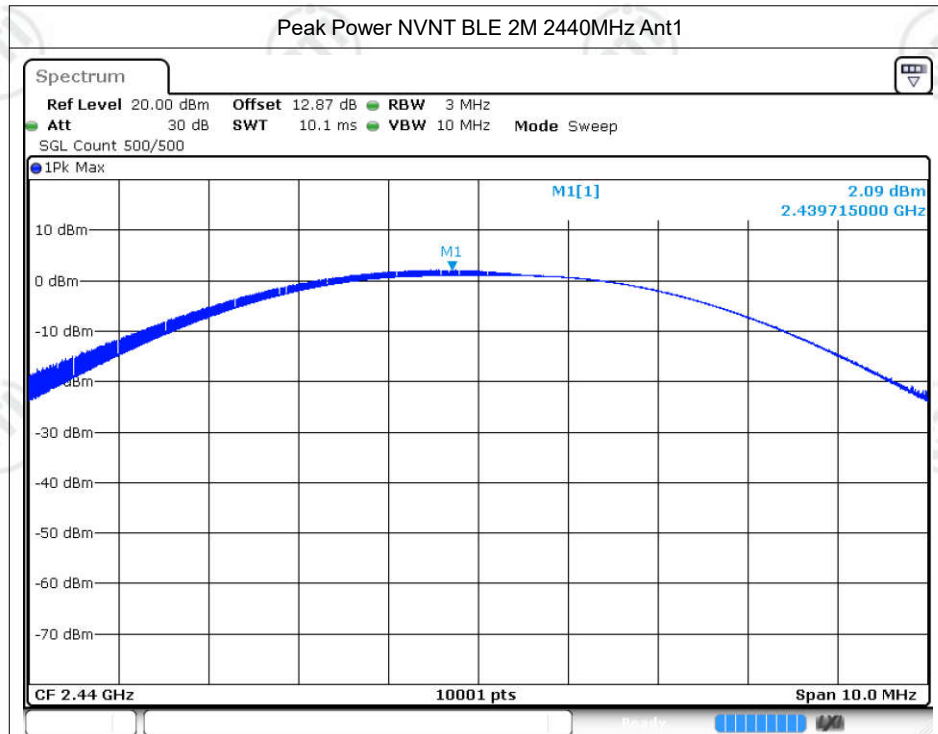




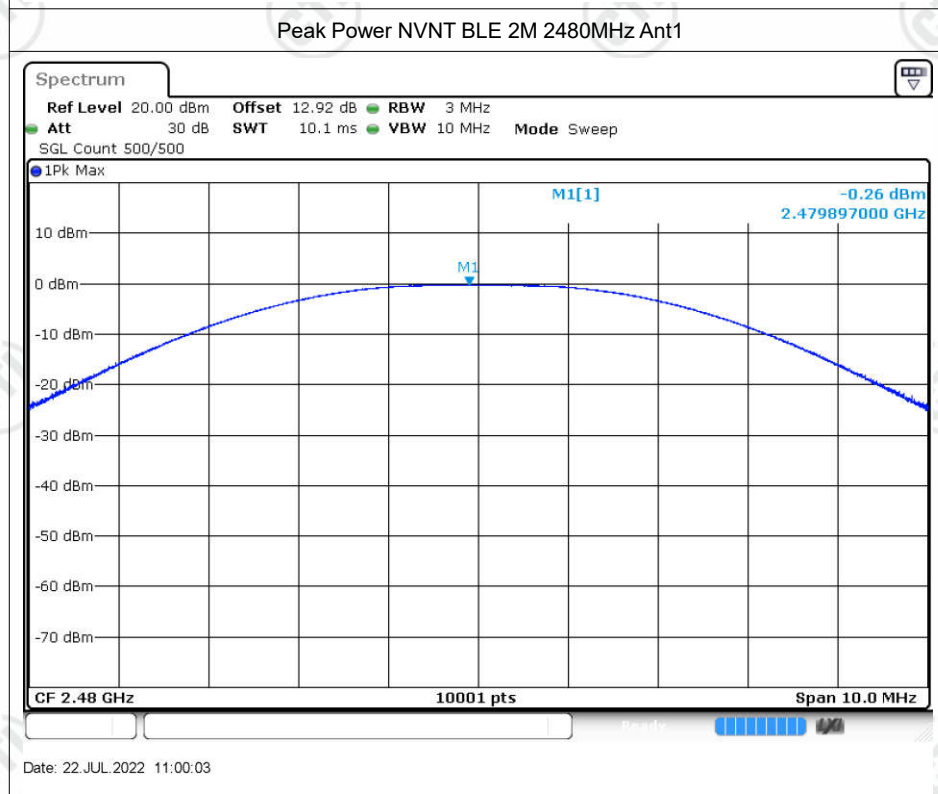
Date: 22.JUL.2022 10:54:19



Date: 22.JUL.2022 10:56:10



Date: 22.JUL.2022 10:58:03



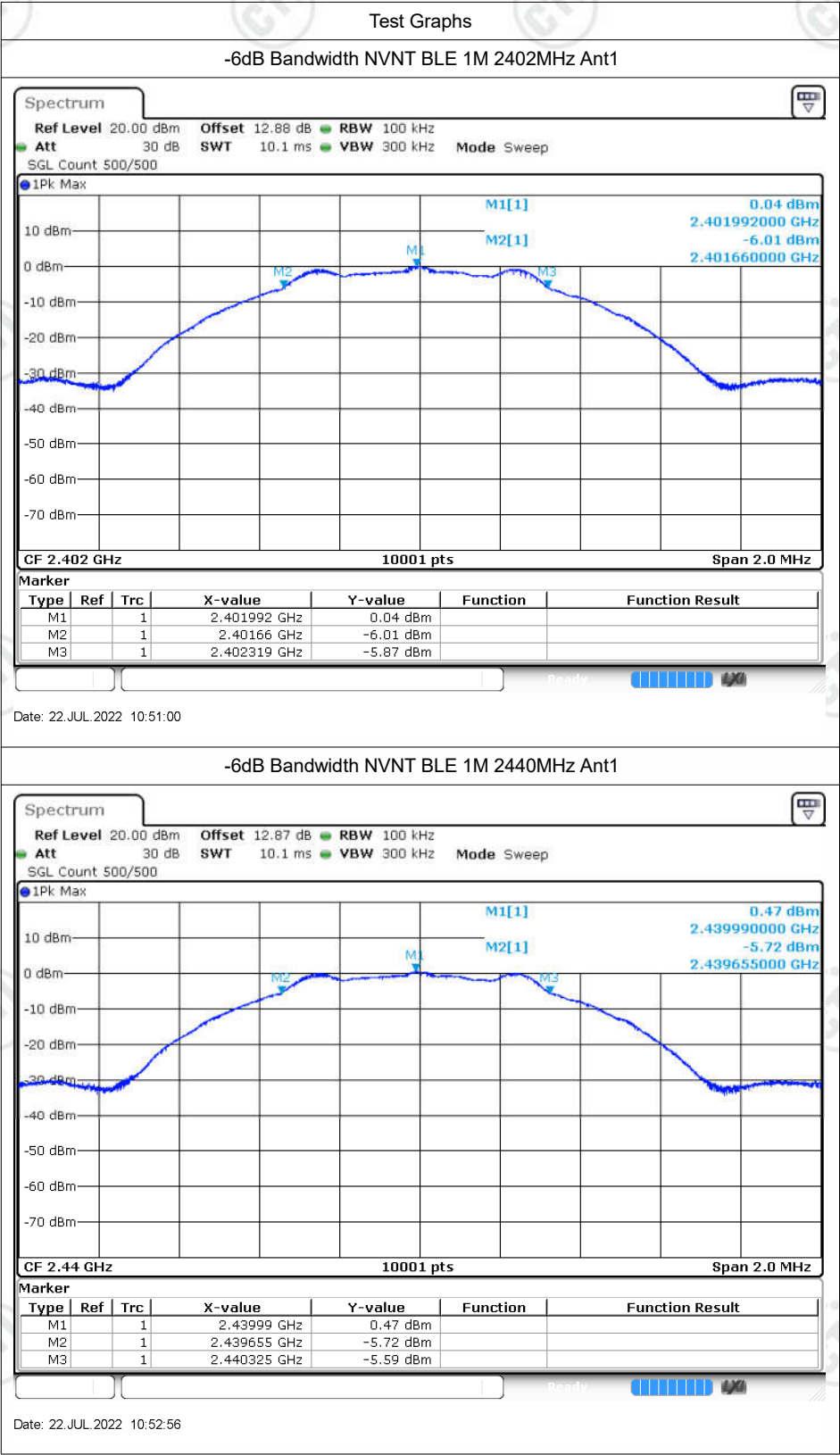
Date: 22.JUL.2022 11:00:03

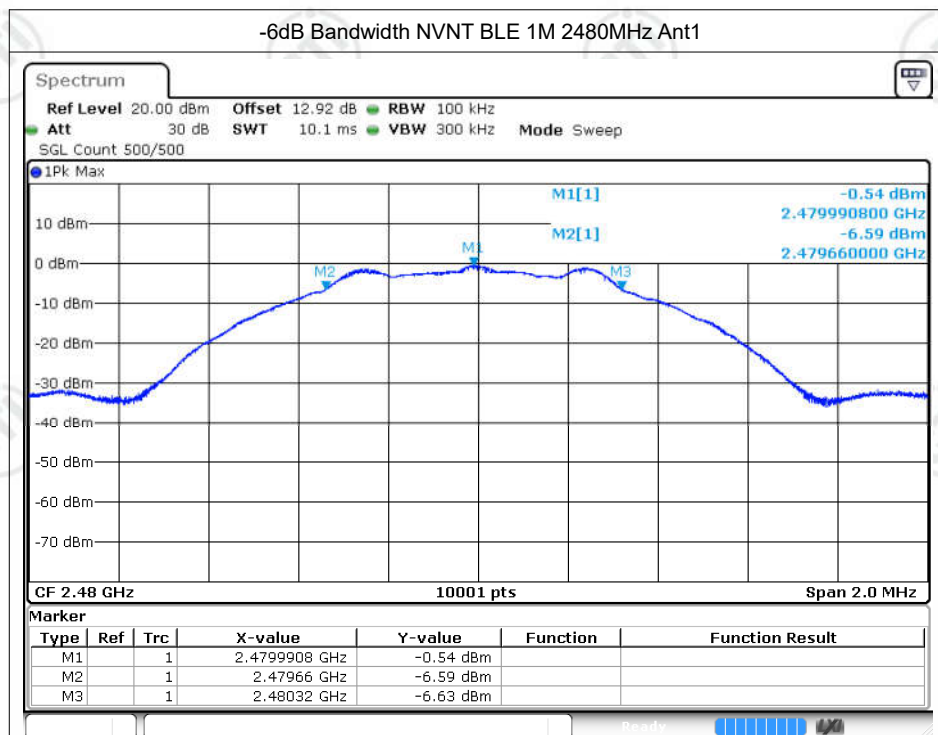
3.-6dB Bandwidth

Test data:

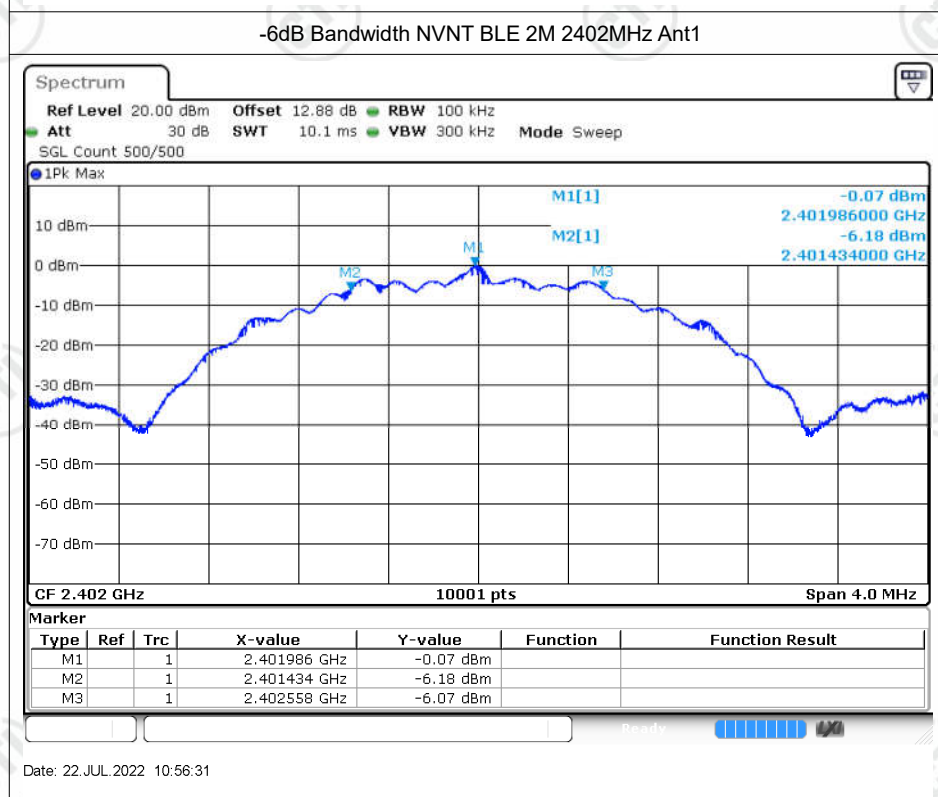
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	Ant1	0.659	0.5	Pass
NVNT	BLE 1M	2440	Ant1	0.669	0.5	Pass
NVNT	BLE 1M	2480	Ant1	0.659	0.5	Pass
NVNT	BLE 2M	2402	Ant1	1.124	0.5	Pass
NVNT	BLE 2M	2440	Ant1	1.142	0.5	Pass
NVNT	BLE 2M	2480	Ant1	1.136	0.5	Pass

Test graphs:

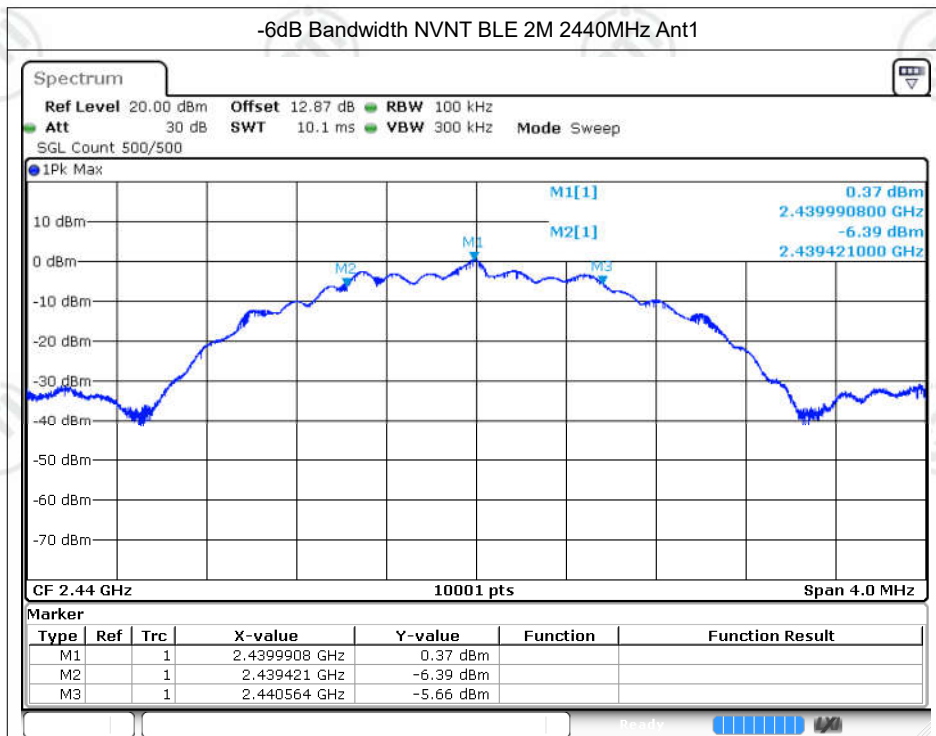




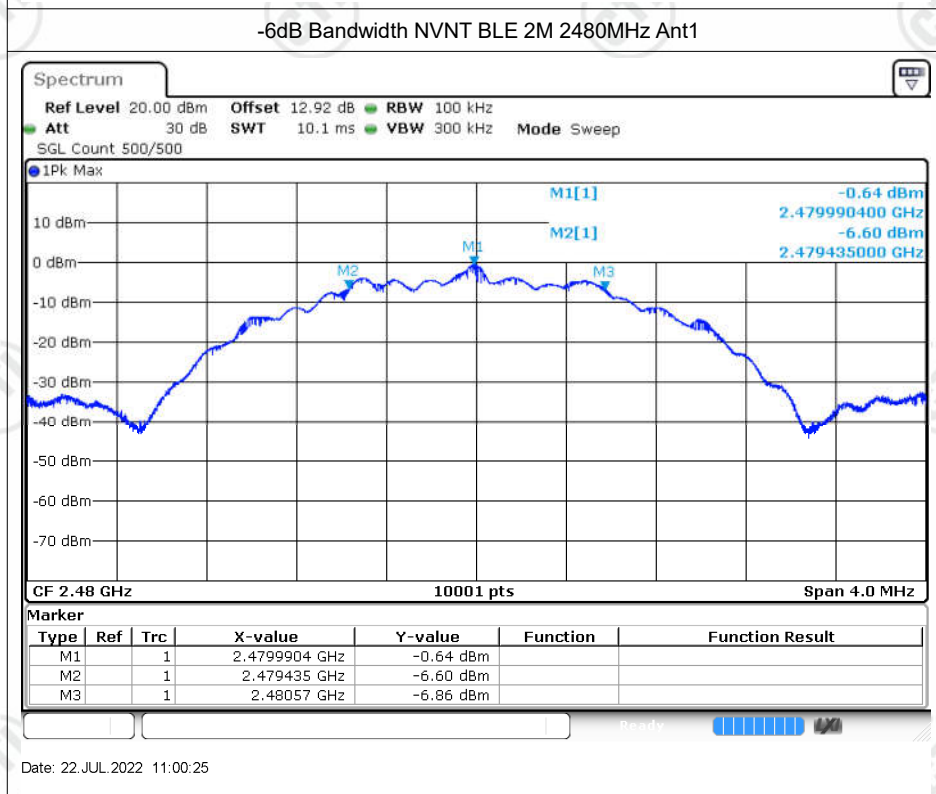
Date: 22.JUL.2022 10:54:40



Date: 22.JUL.2022 10:56:31



Date: 22 JUL 2022 10:58:25



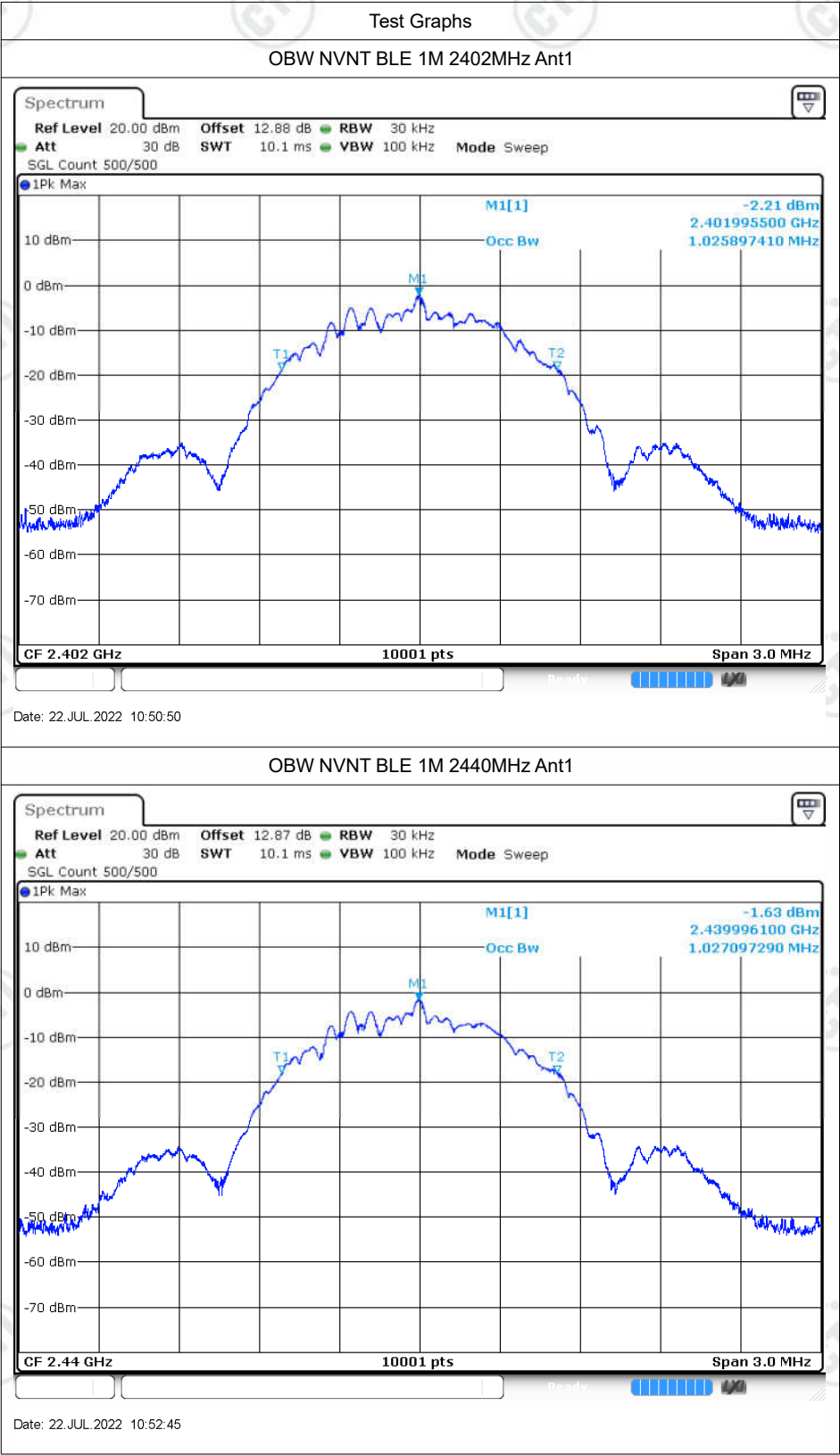
Date: 22 JUL 2022 11:00:25

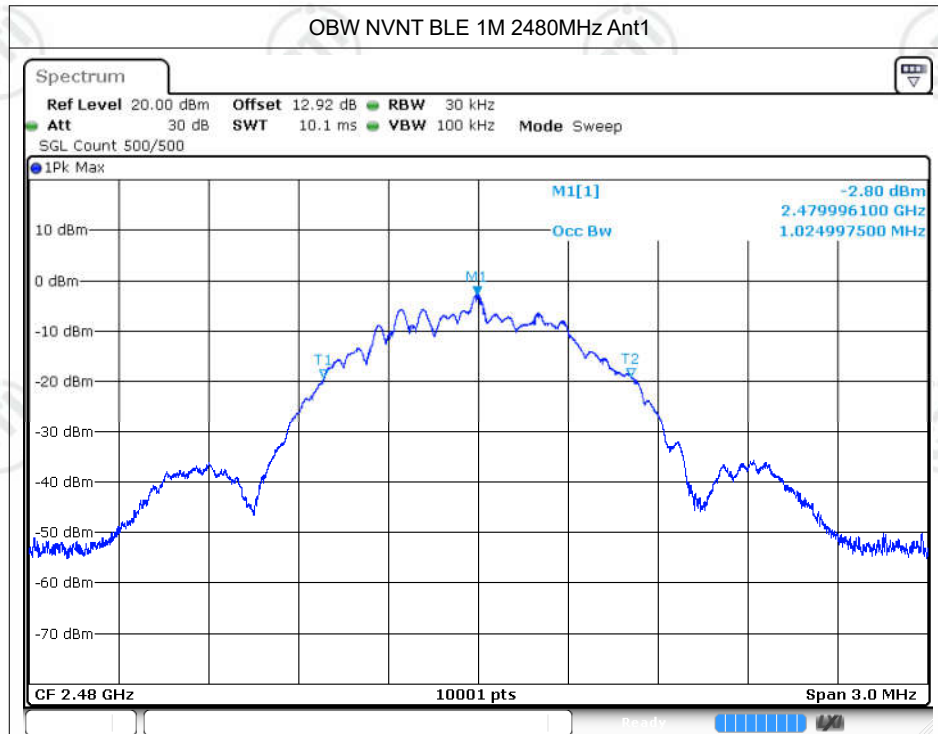
4.Occupied Channel Bandwidth

Test data:

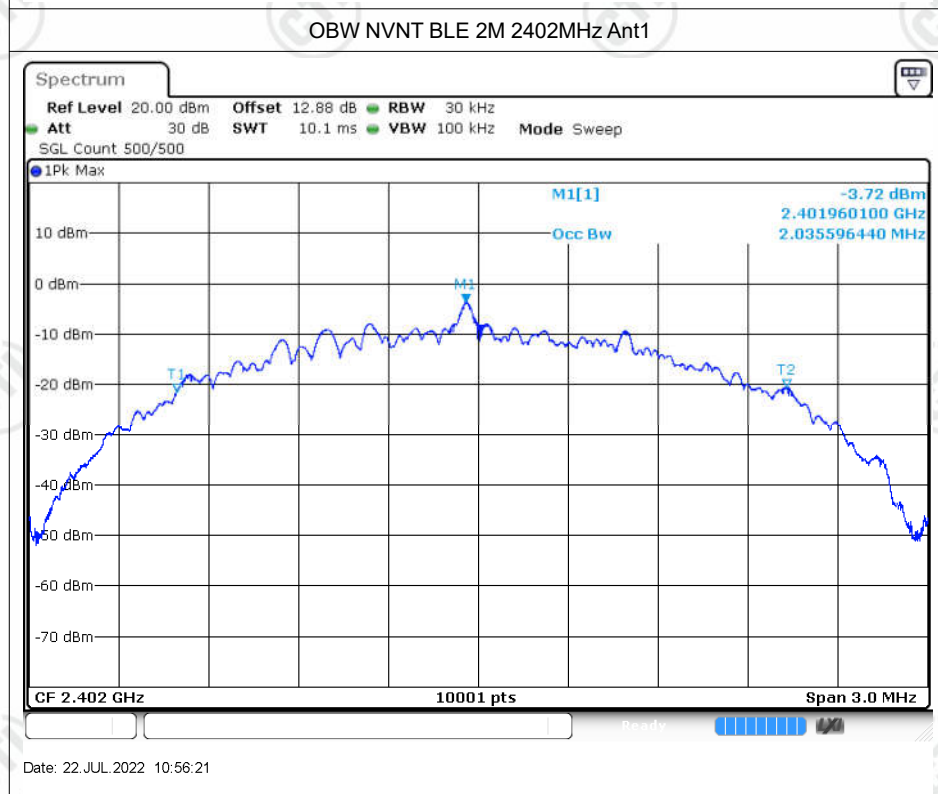
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE 1M	2402	Ant1	1.026
NVNT	BLE 1M	2440	Ant1	1.027
NVNT	BLE 1M	2480	Ant1	1.025
NVNT	BLE 2M	2402	Ant1	2.036
NVNT	BLE 2M	2440	Ant1	2.036
NVNT	BLE 2M	2480	Ant1	2.037

Test graphs:

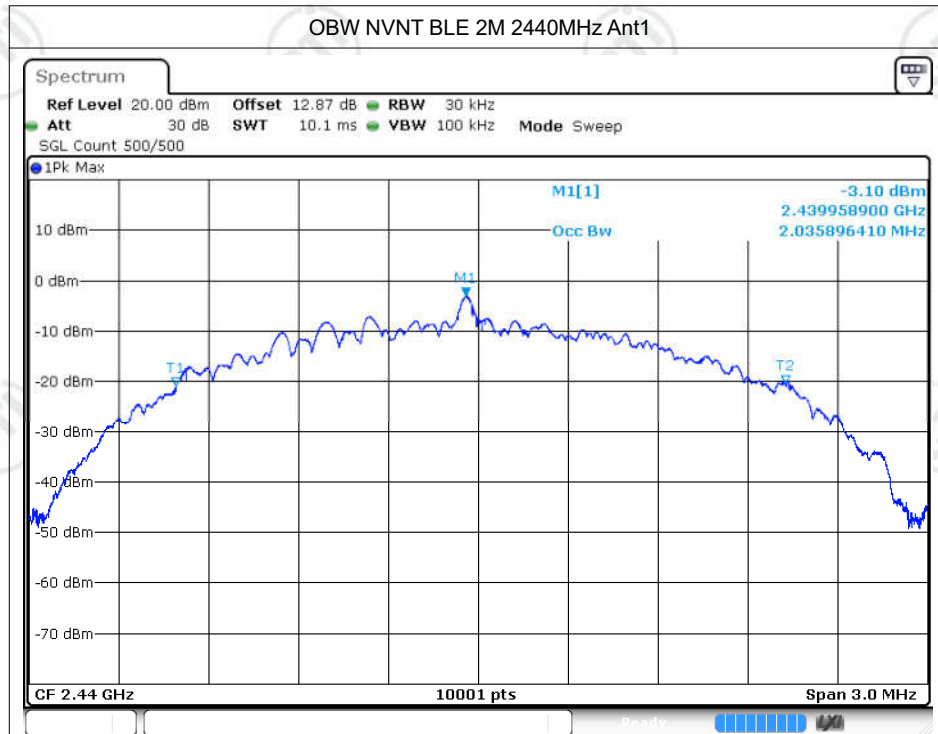




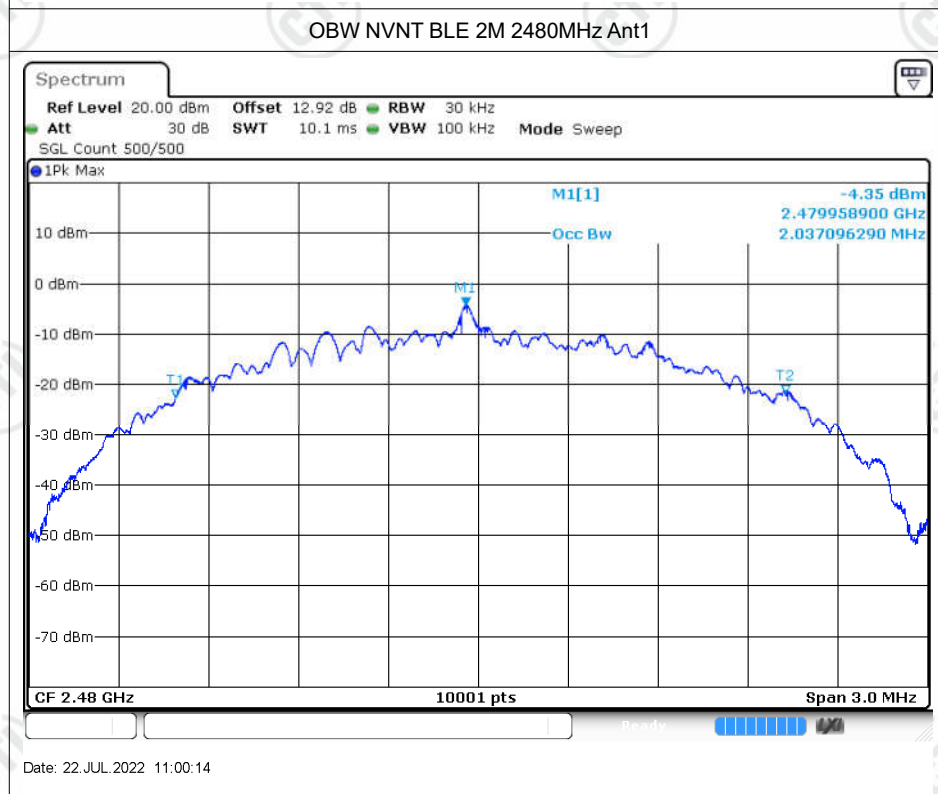
Date: 22.JUL.2022 10:54:30



Date: 22.JUL.2022 10:56:21



Date: 22.JUL.2022 10:58:14



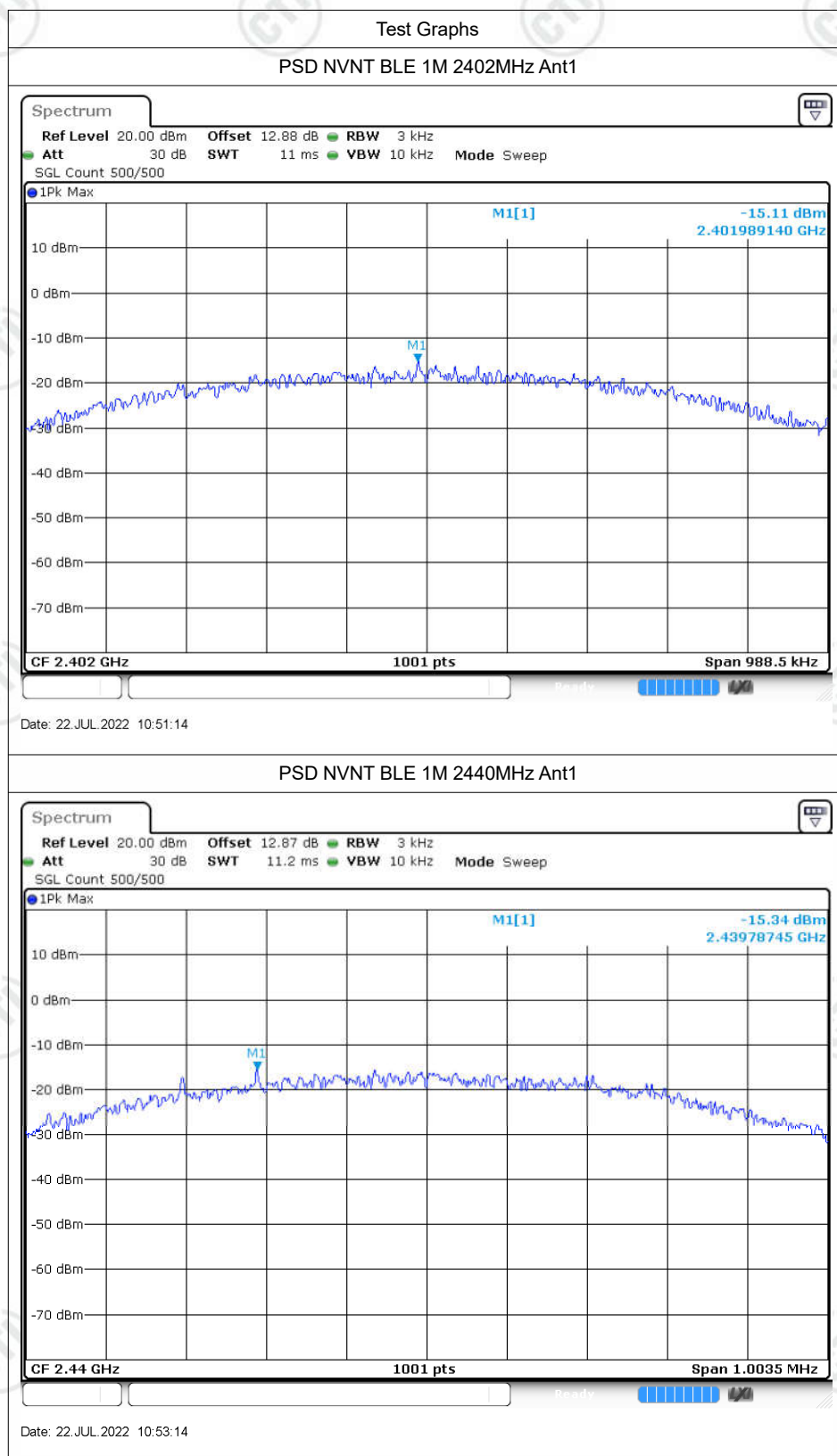
Date: 22.JUL.2022 11:00:14

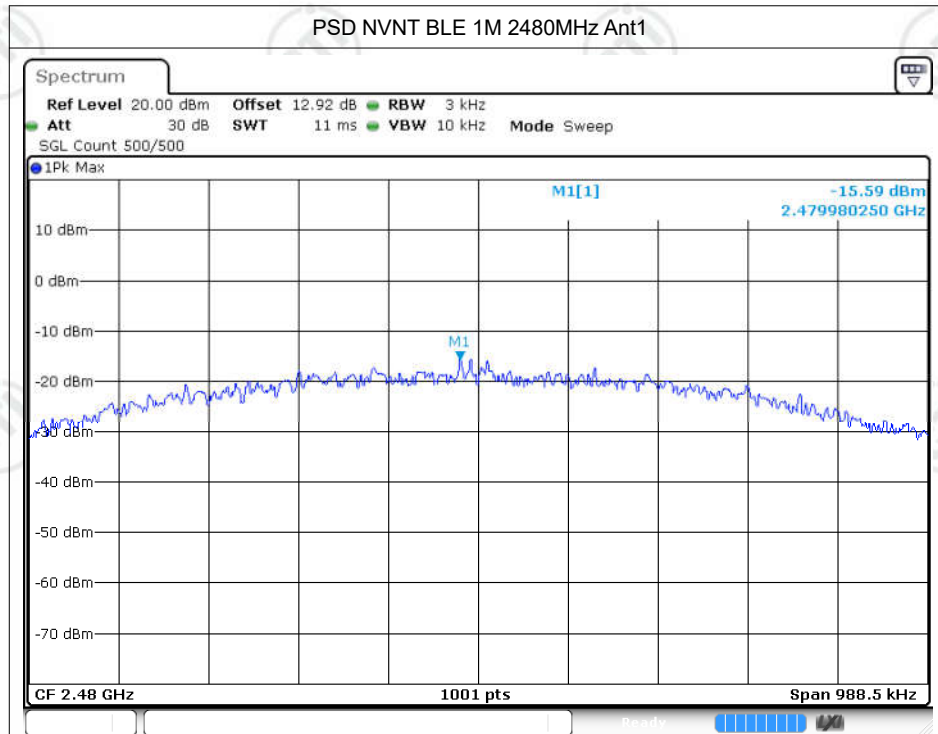
5.Maximum Power Spectral Density Level

Test data:

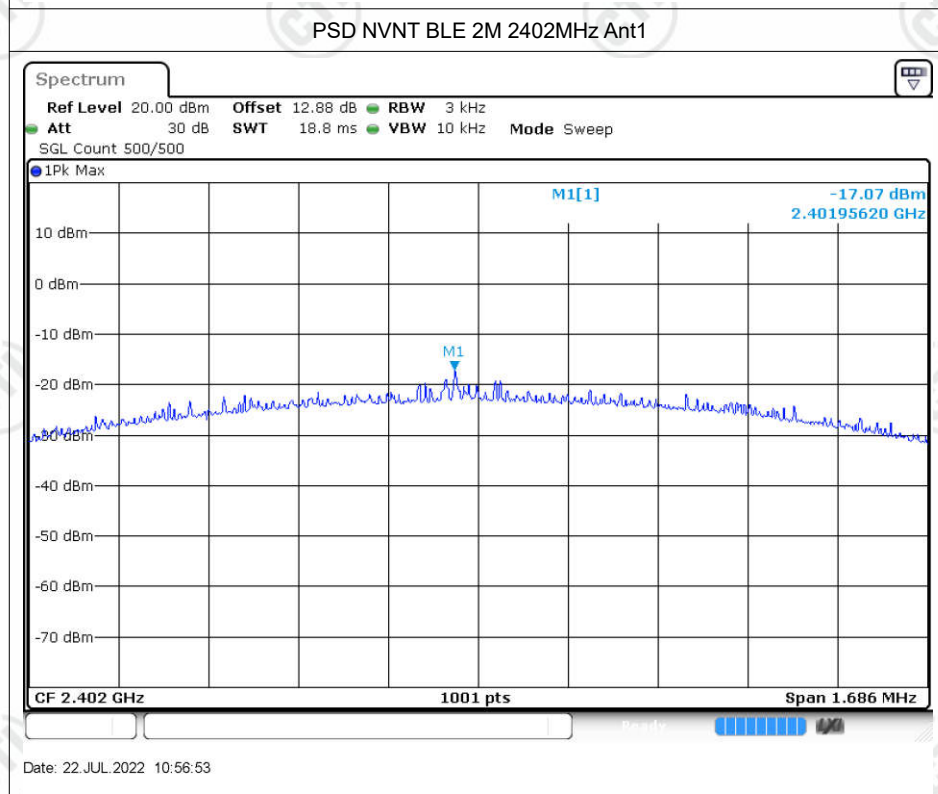
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	Ant1	-15.11	0	-15.11	8	Pass
NVNT	BLE 1M	2440	Ant1	-15.34	0	-15.34	8	Pass
NVNT	BLE 1M	2480	Ant1	-15.59	0	-15.59	8	Pass
NVNT	BLE 2M	2402	Ant1	-17.07	0	-17.07	8	Pass
NVNT	BLE 2M	2440	Ant1	-17.41	0	-17.41	8	Pass
NVNT	BLE 2M	2480	Ant1	-18.37	0	-18.37	8	Pass

Test graphs:

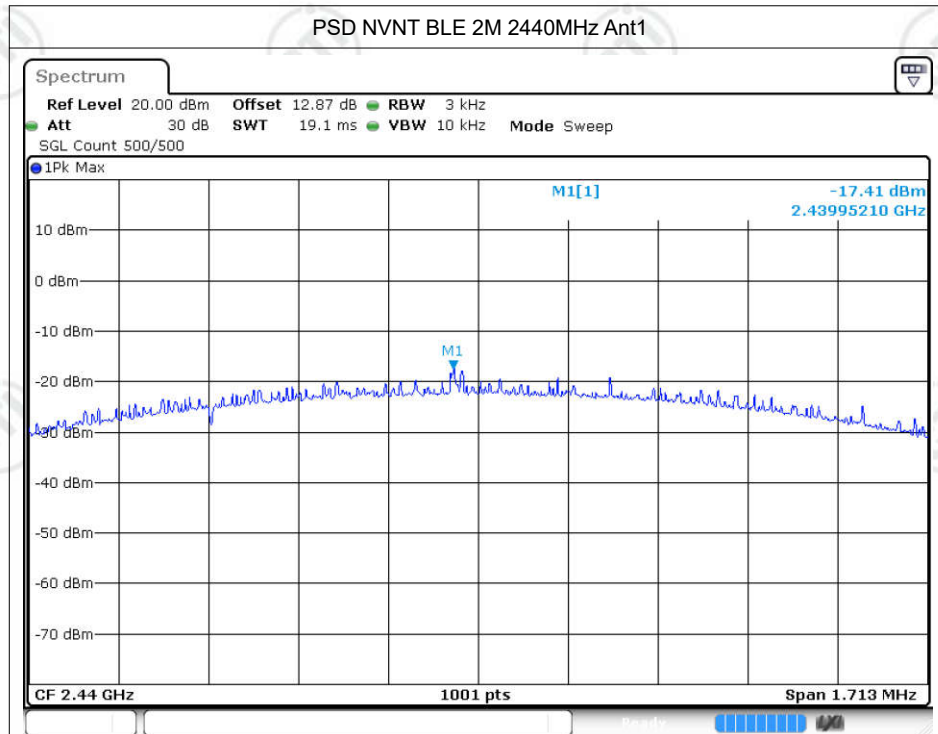




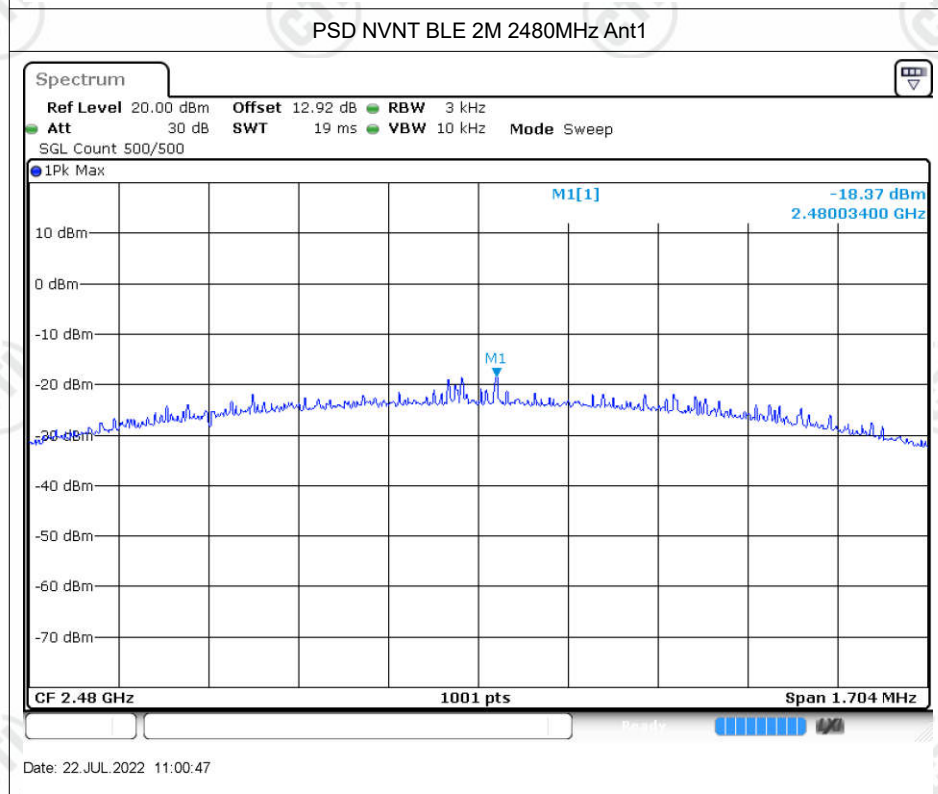
Date: 22.JUL.2022 10:54:54



Date: 22.JUL.2022 10:56:53



Date: 22.JUL.2022 10:58:46



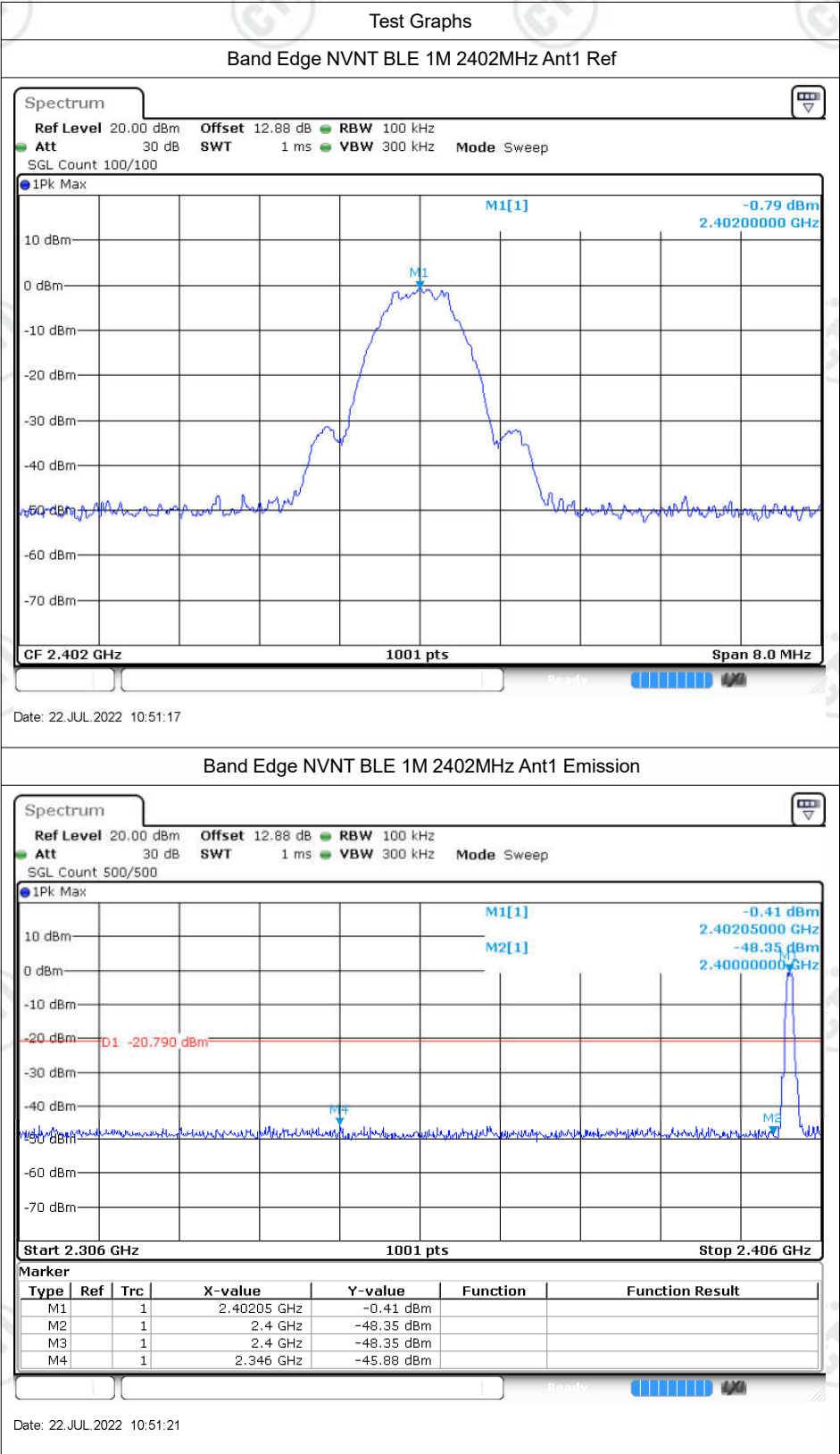
Date: 22.JUL.2022 11:00:47

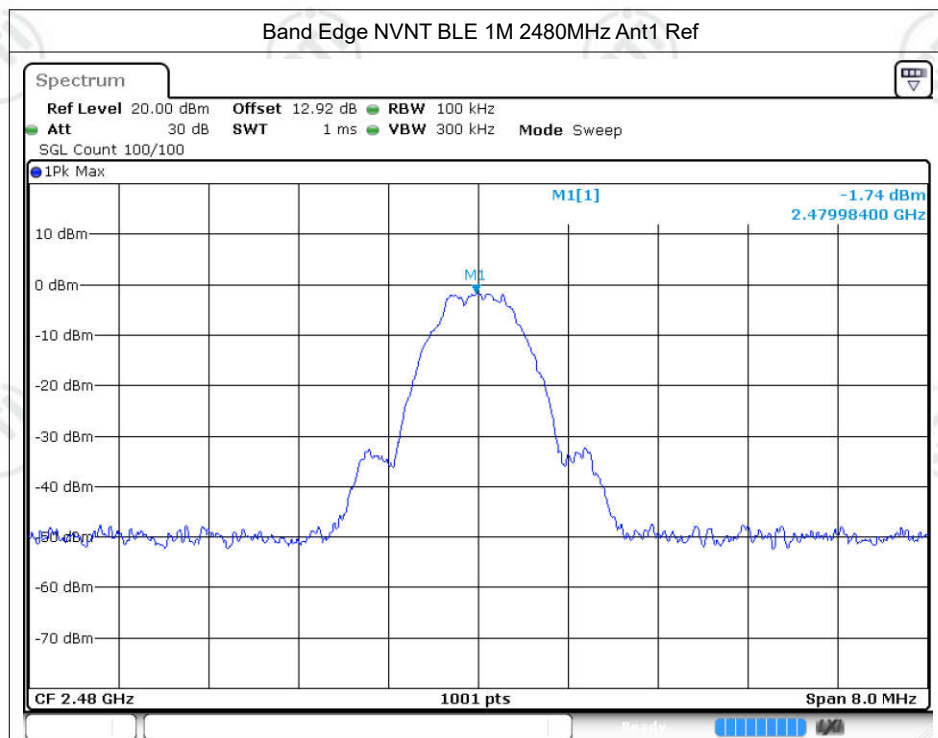
6.Band Edge

Test data:

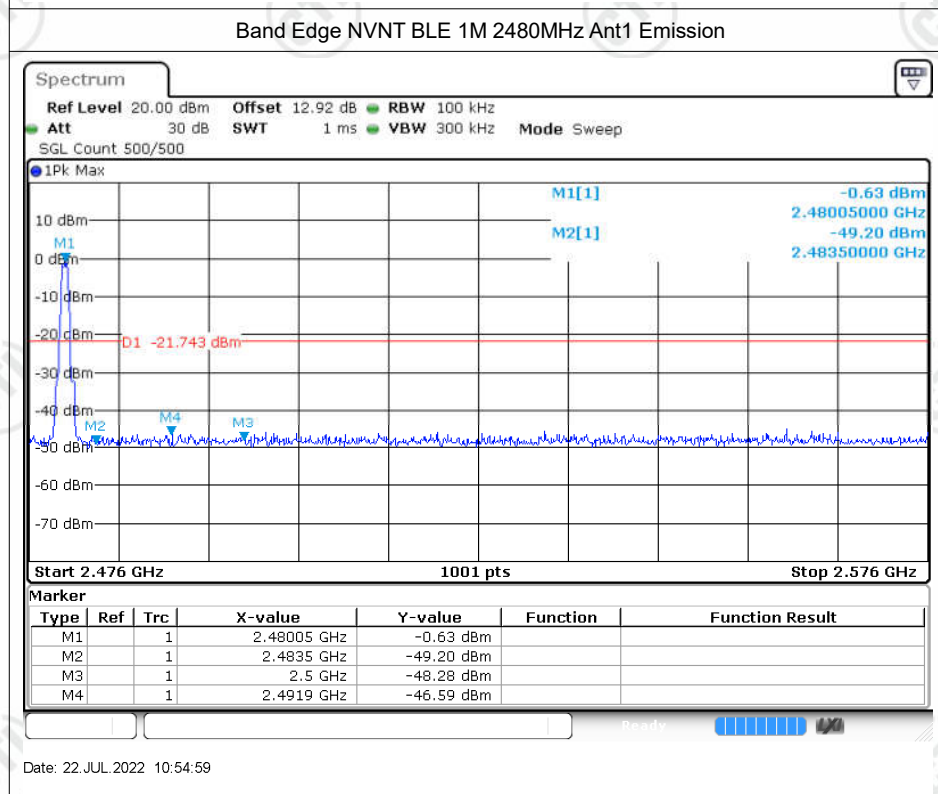
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-45.09	-20	Pass
NVNT	BLE 1M	2480	Ant1	-44.85	-20	Pass
NVNT	BLE 2M	2402	Ant1	-33.59	-20	Pass
NVNT	BLE 2M	2480	Ant1	-43.28	-20	Pass

Test graphs:

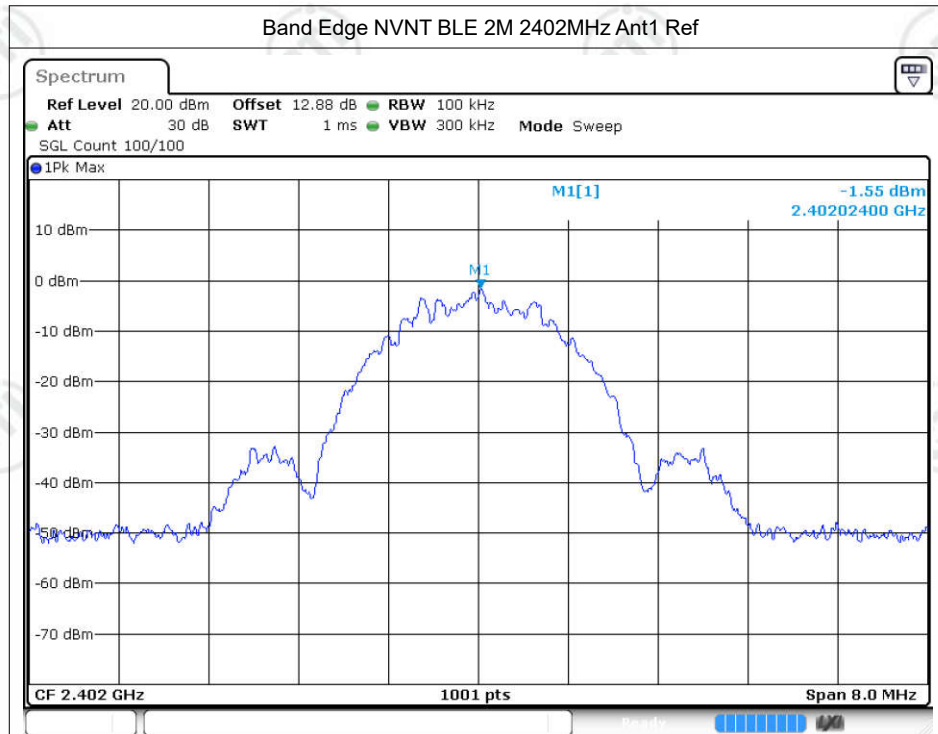




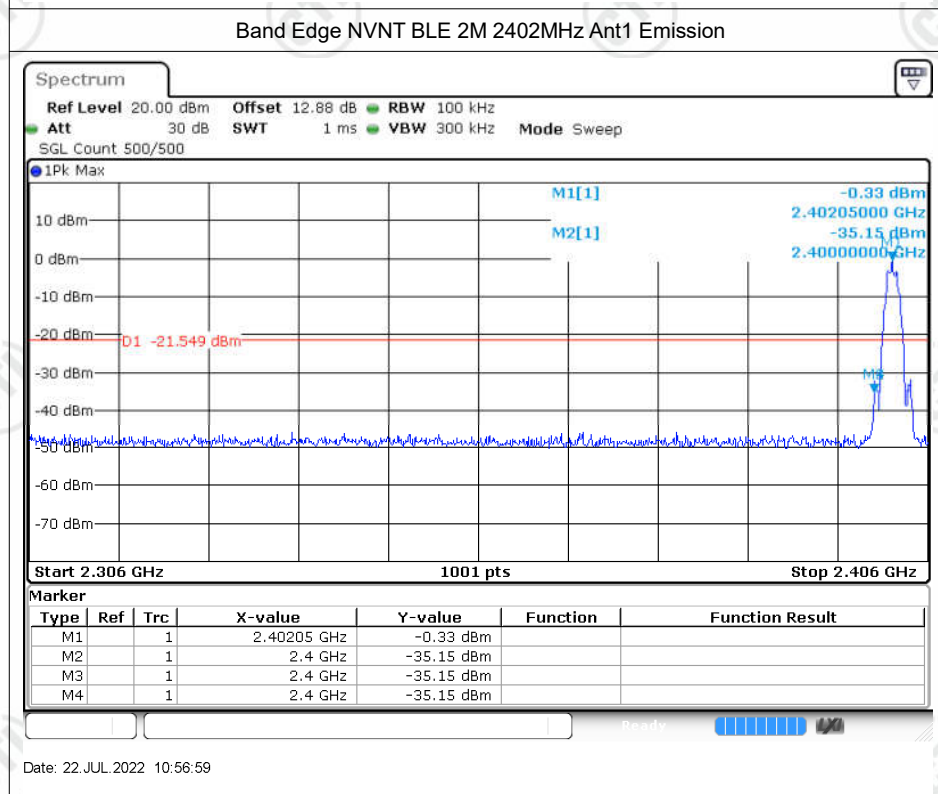
Date: 22 JUL 2022 10:54:57



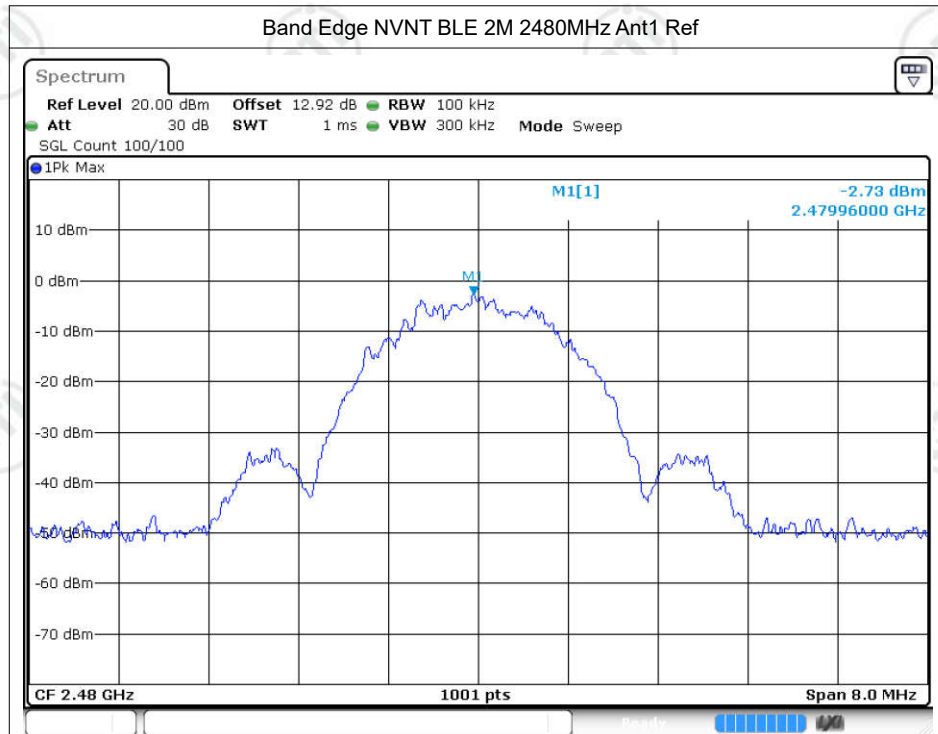
Date: 22 JUL 2022 10:54:59



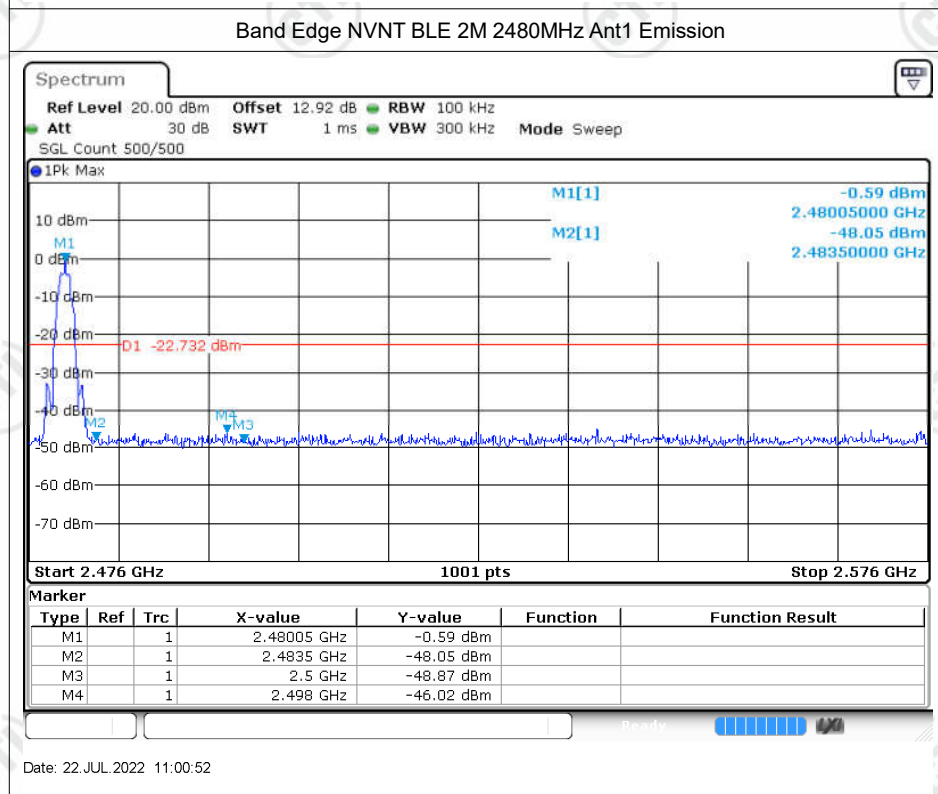
Date: 22 JUL 2022 10:56:56



Date: 22 JUL 2022 10:56:59



Date: 22 JUL 2022 11:00:49



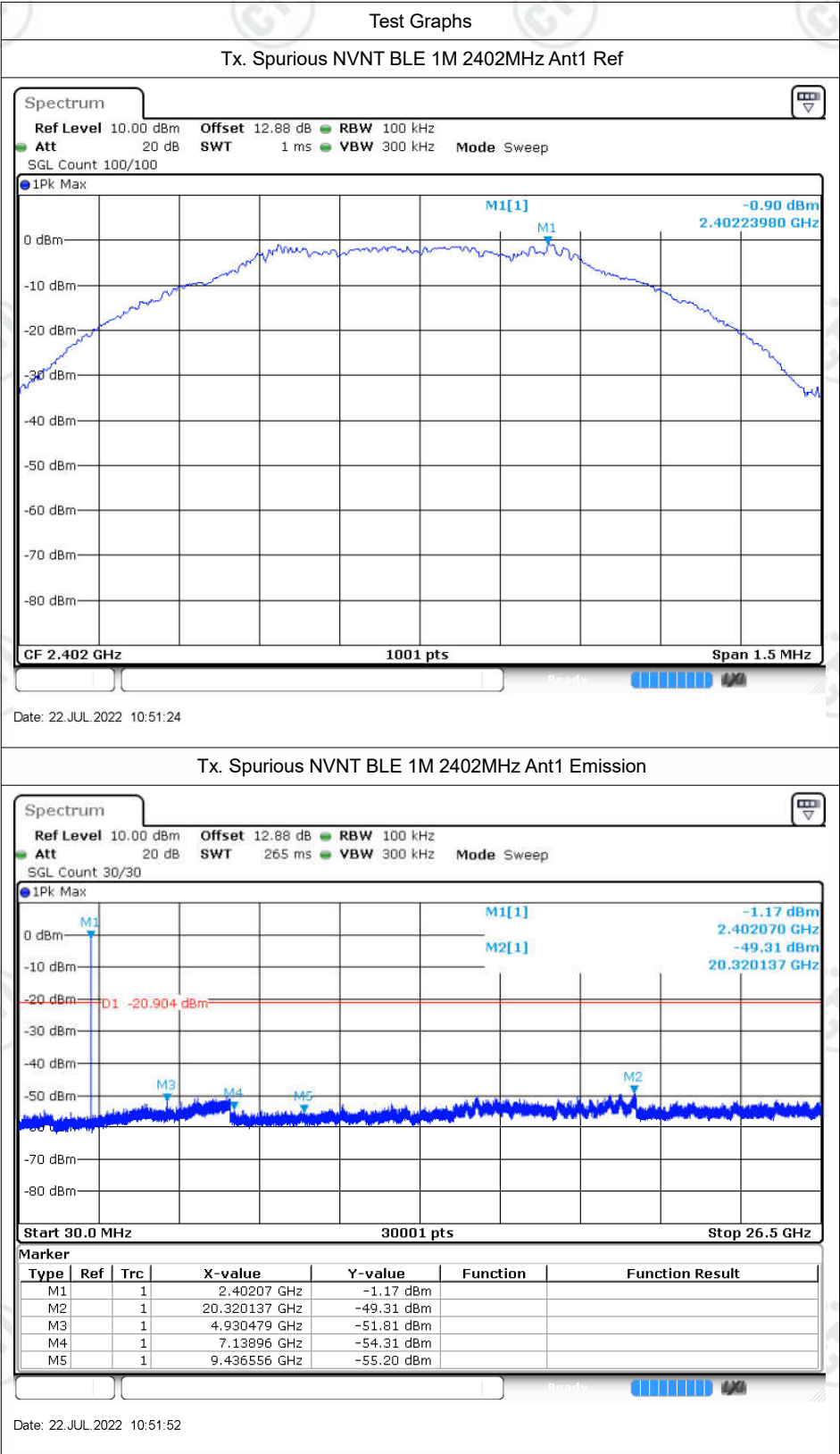
Date: 22 JUL 2022 11:00:52

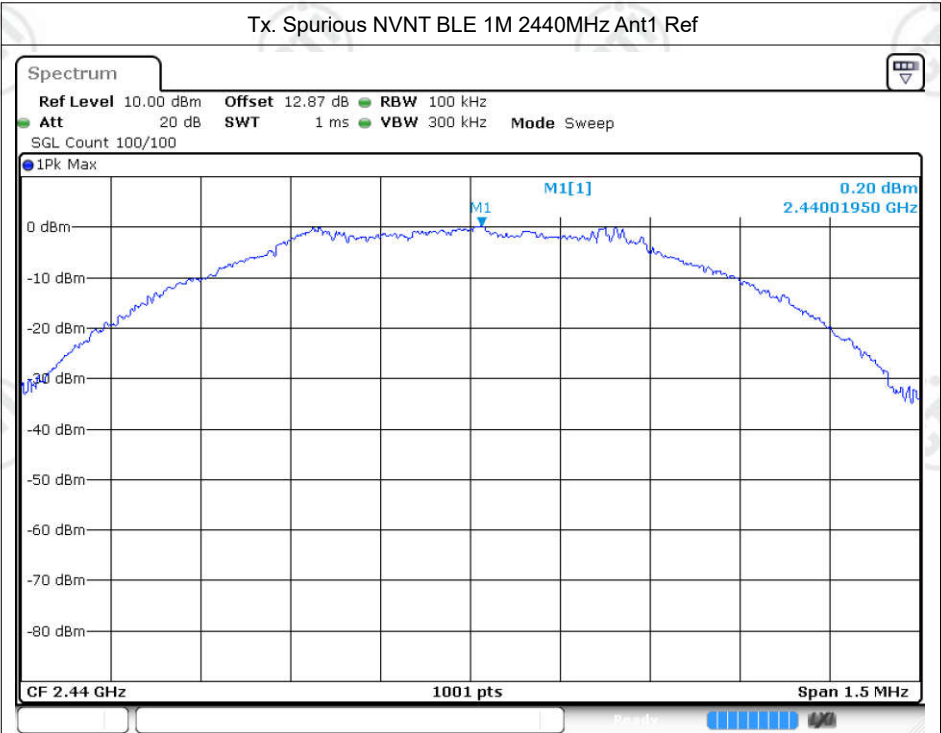
7.Conducted RF Spurious Emission

Test data:

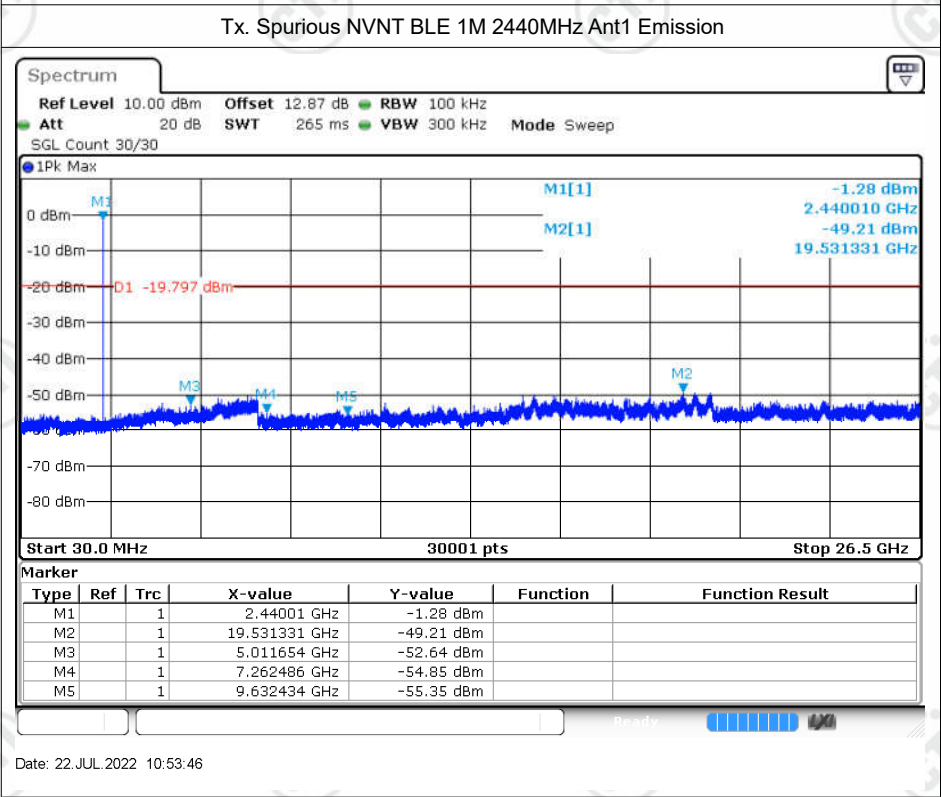
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-48.41	-20	Pass
NVNT	BLE 1M	2440	Ant1	-49.4	-20	Pass
NVNT	BLE 1M	2480	Ant1	-46.42	-20	Pass
NVNT	BLE 2M	2402	Ant1	-49.03	-20	Pass
NVNT	BLE 2M	2440	Ant1	-49.15	-20	Pass
NVNT	BLE 2M	2480	Ant1	-47.99	-20	Pass

Test graphs:

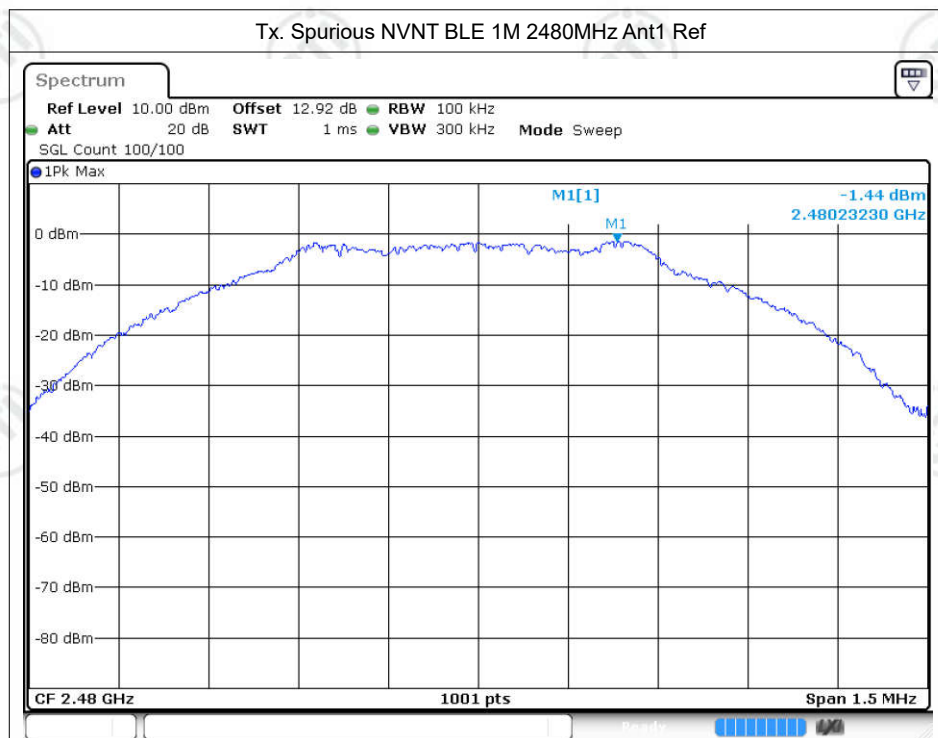




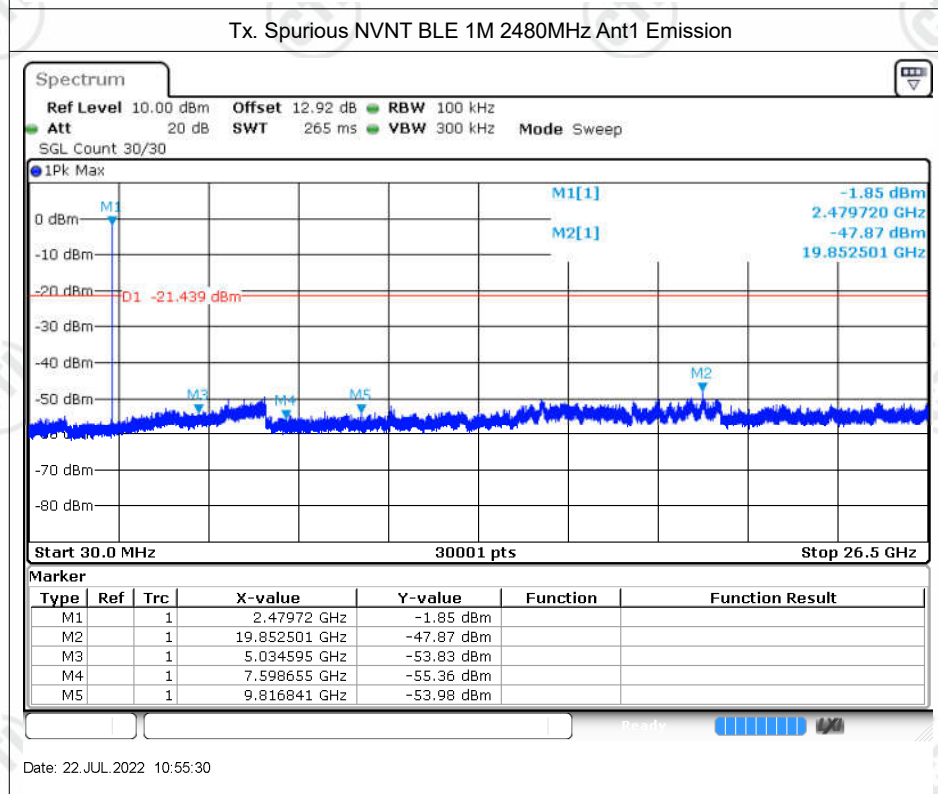
Date: 22 JUL 2022 10:53:17

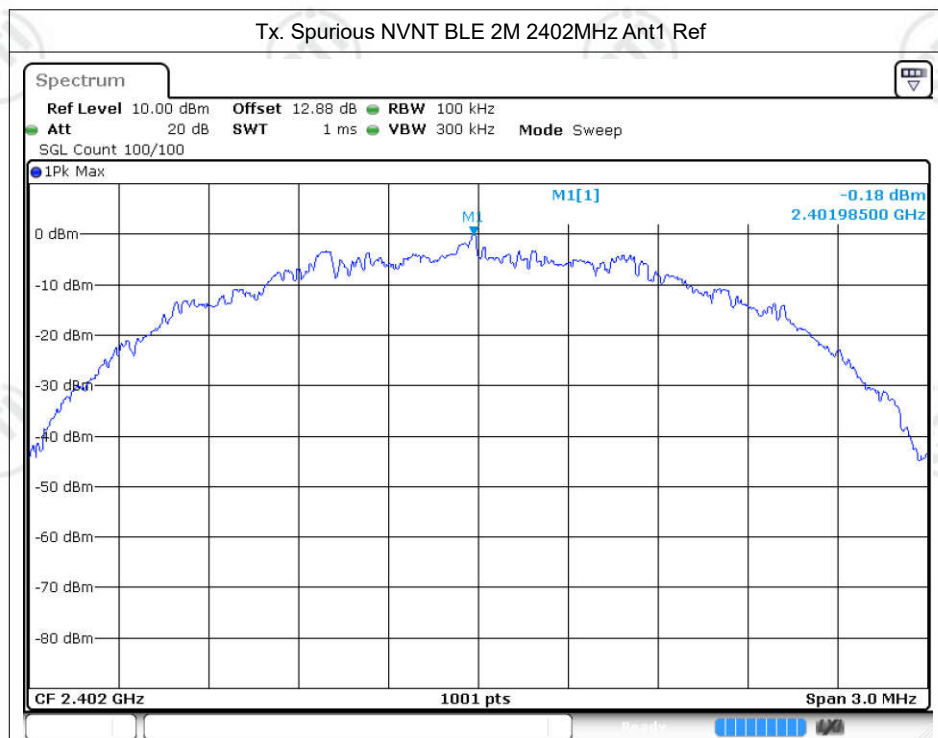


Date: 22 JUL 2022 10:53:46

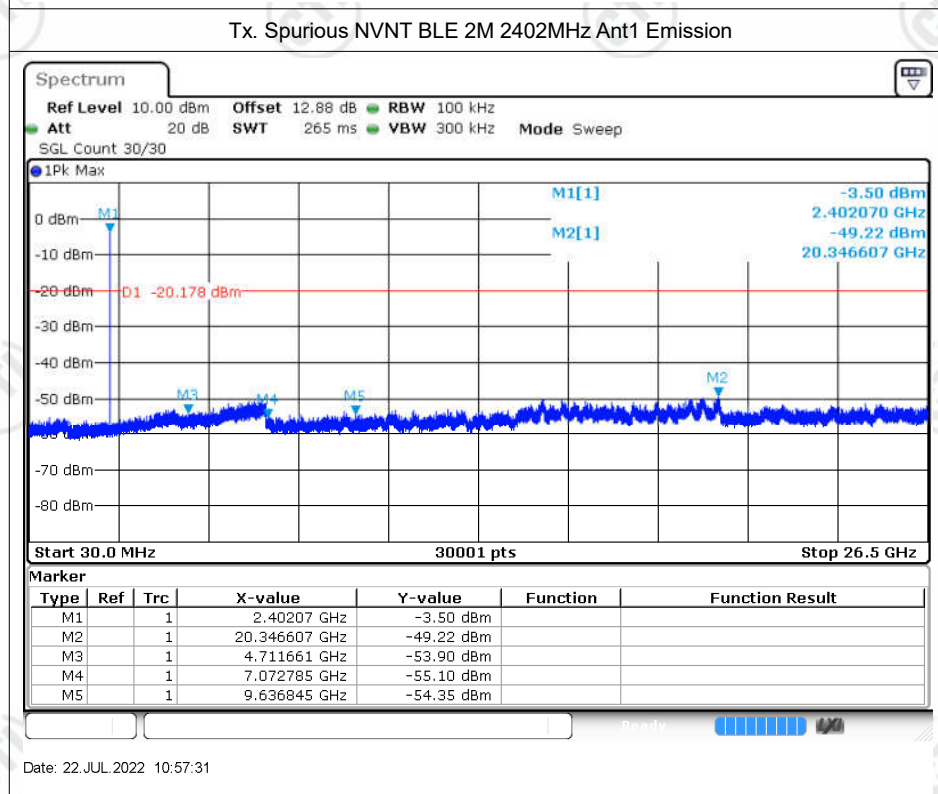


Date: 22 JUL 2022 10:55:02

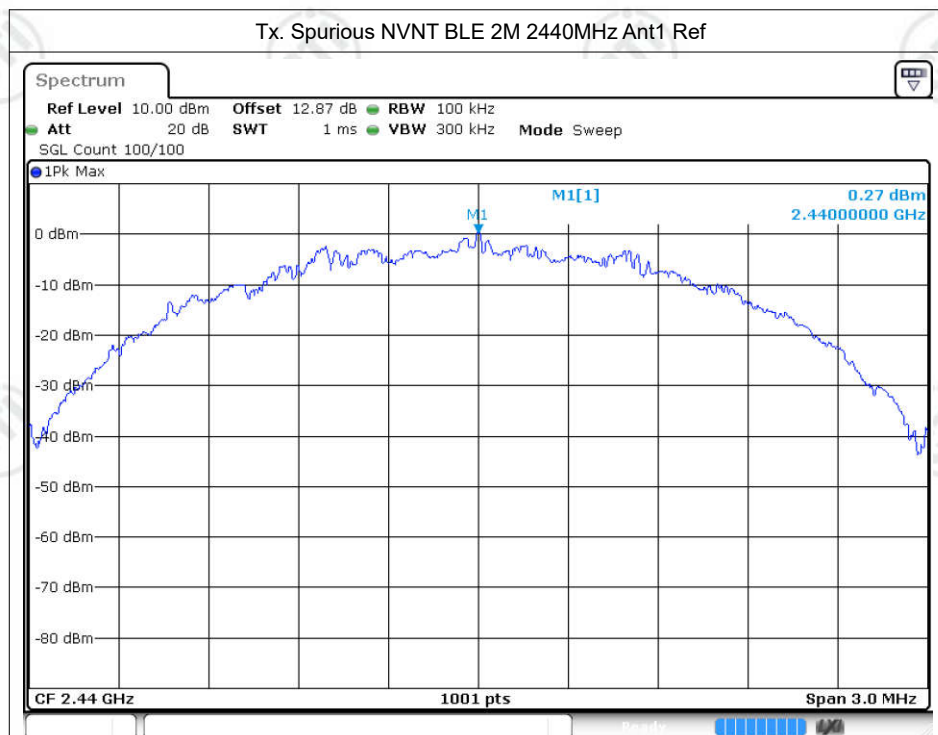




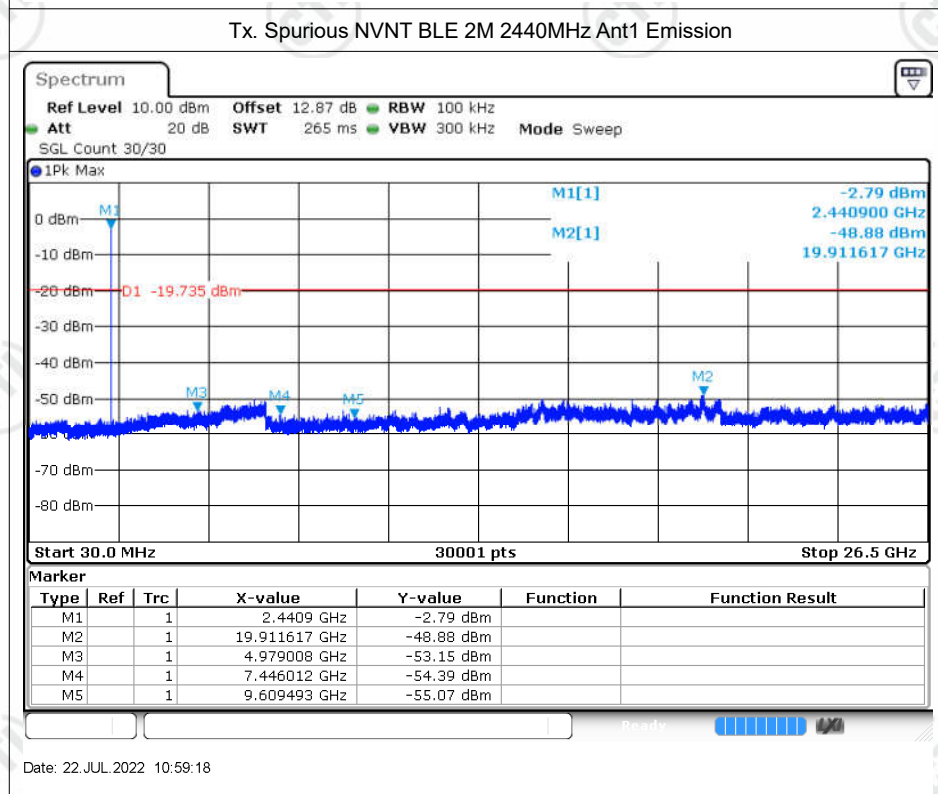
Date: 22 JUL 2022 10:57:02



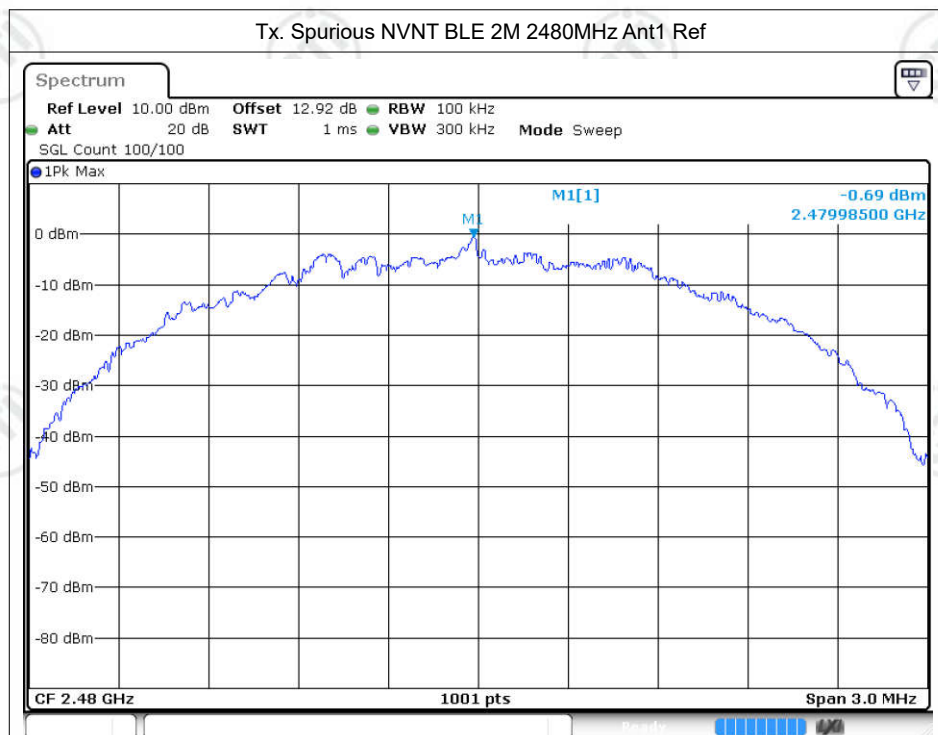
Date: 22 JUL 2022 10:57:31



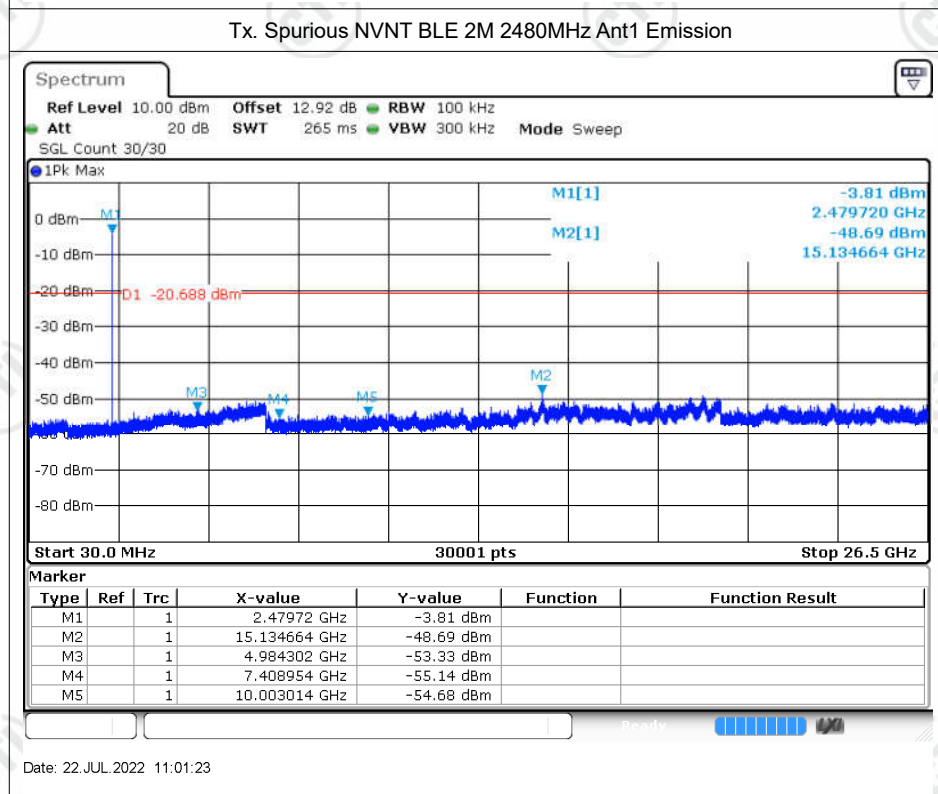
Date: 22 JUL 2022 10:58:50



Date: 22 JUL 2022 10:59:18



Date: 22 JUL 2022 11:00:55



END OF REPORT