

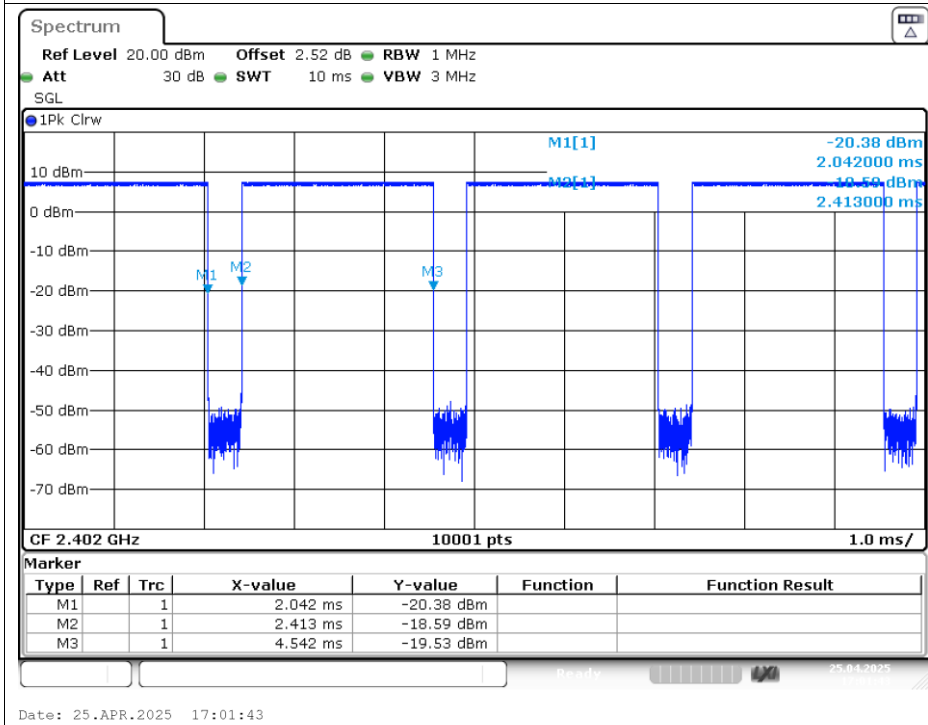
Appendix D

Duty Cycle

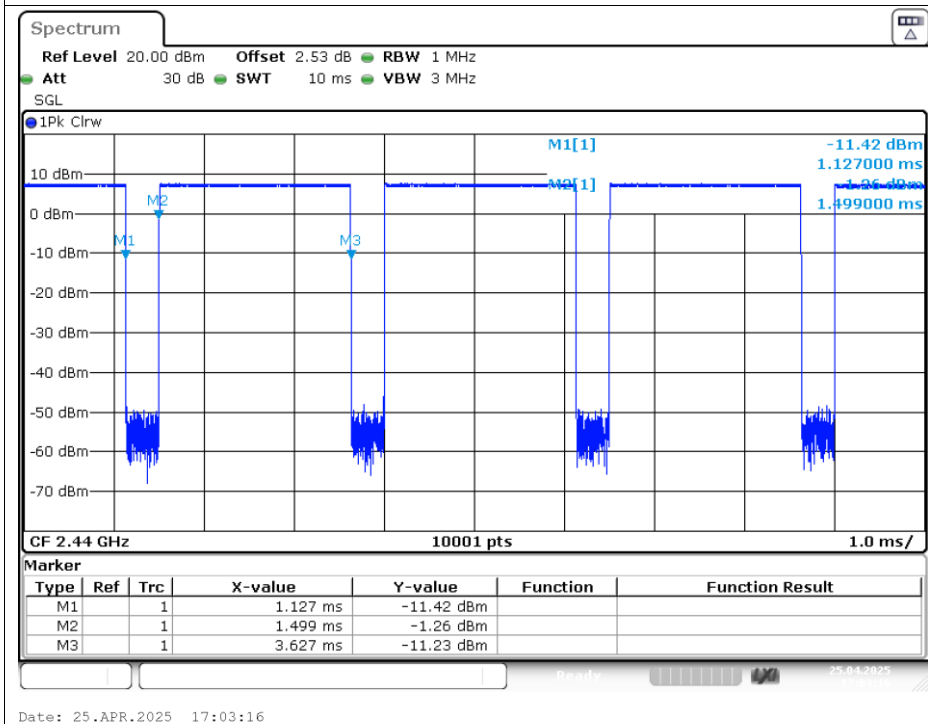
Condition	Mode	Frequency (MHz)	Antenna	On Time (ms)	Period (ms)	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1M	2402	Ant1	2.13	2.5	85.2	0.7	0.47
NVNT	BLE 1M	2440	Ant1	2.13	2.5	85.2	0.7	0.47
NVNT	BLE 1M	2480	Ant1	2.13	2.5	85.2	0.7	0.47
NVNT	BLE 2M	2402	Ant1	1.07	1.88	56.91	2.45	0.93
NVNT	BLE 2M	2440	Ant1	1.07	1.88	56.91	2.45	0.93
NVNT	BLE 2M	2480	Ant1	1.07	1.87	57.22	2.42	0.93

Test Graphs

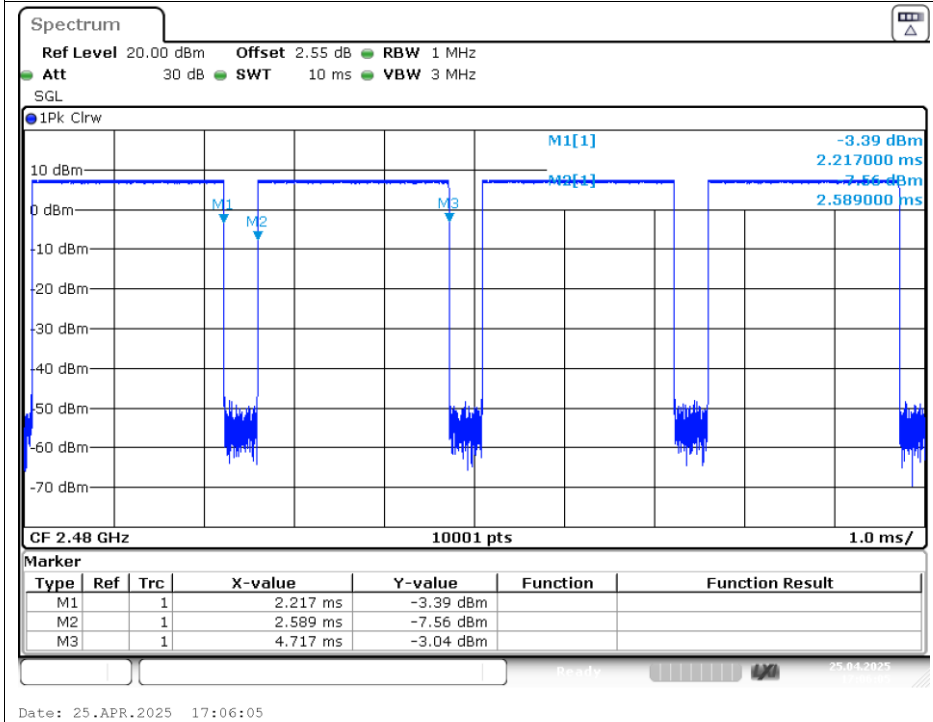
Duty Cycle NVNT BLE 1M 2402MHz Ant1



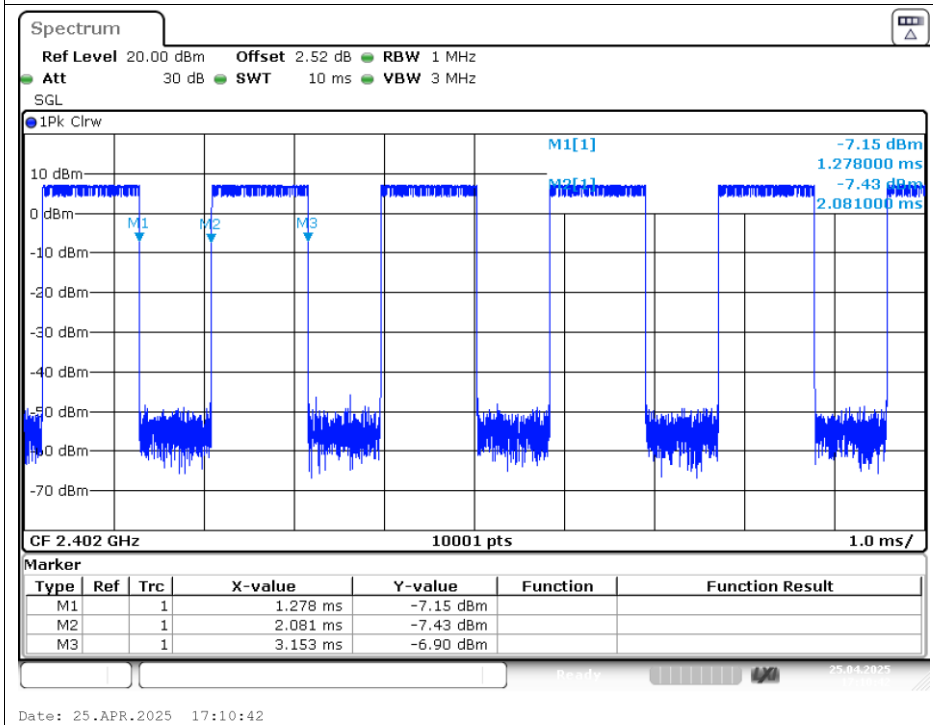
Duty Cycle NVNT BLE 1M 2440MHz Ant1



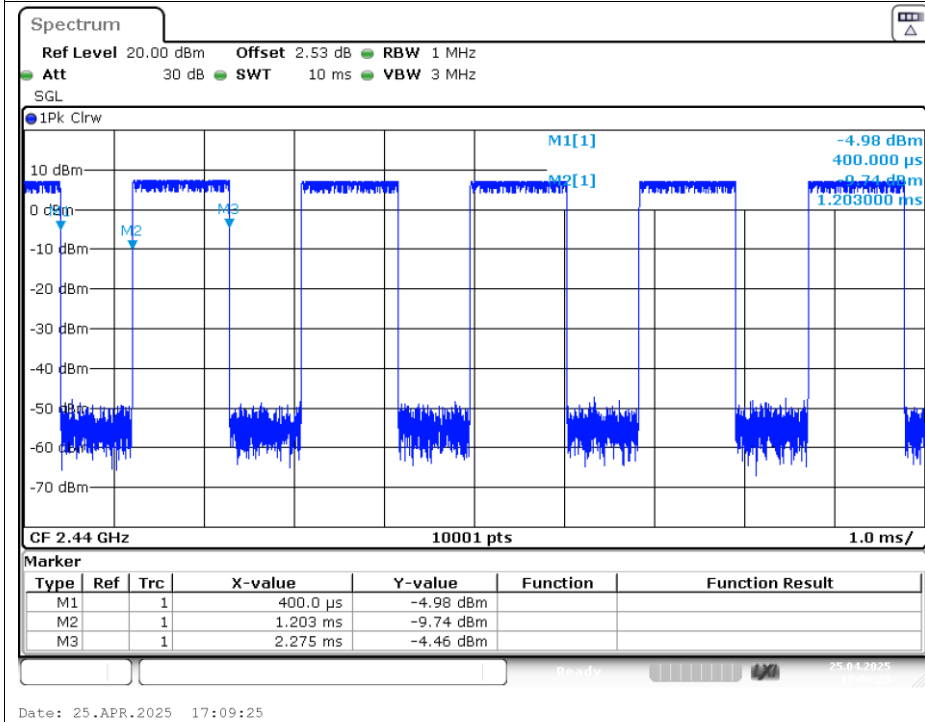
Duty Cycle NVNT BLE 1M 2480MHz Ant1



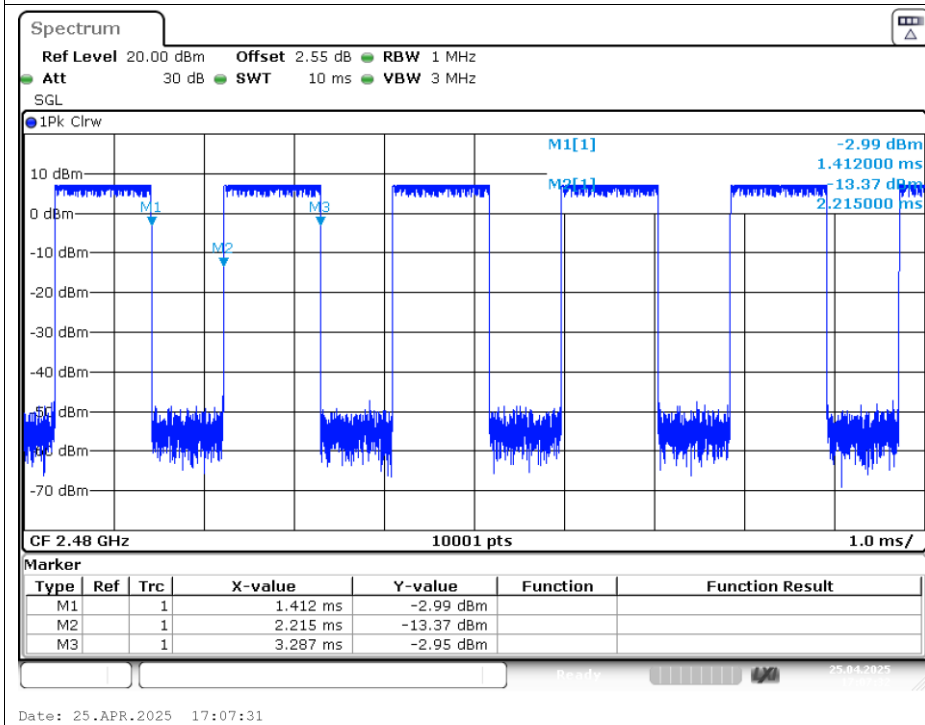
Duty Cycle NVNT BLE 2M 2402MHz Ant1



Duty Cycle NVNT BLE 2M 2440MHz Ant1



Duty Cycle NVNT BLE 2M 2480MHz Ant1

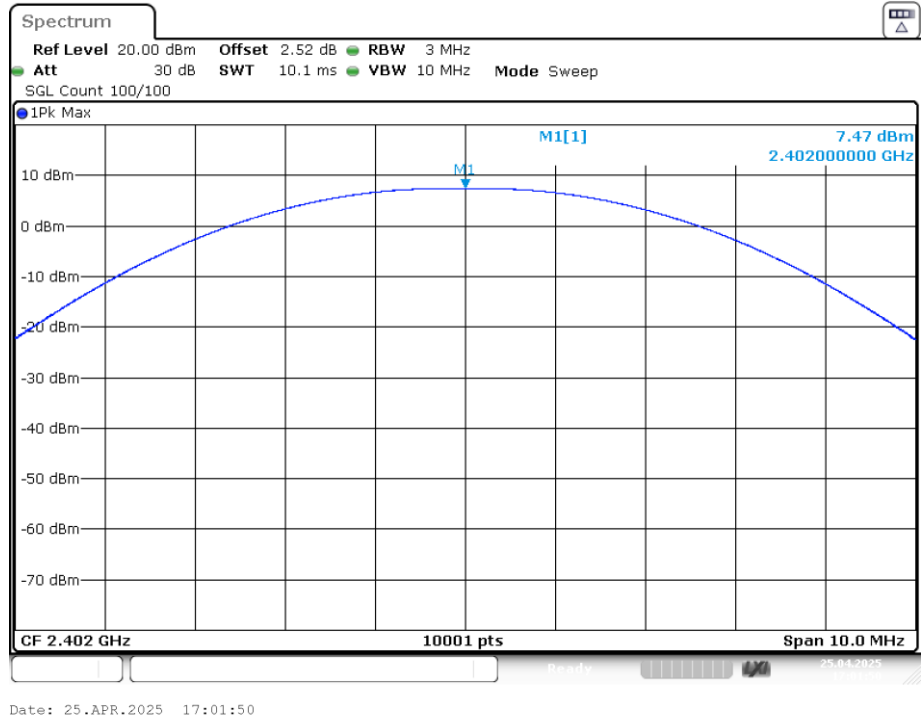


Maximum Conducted Output Power

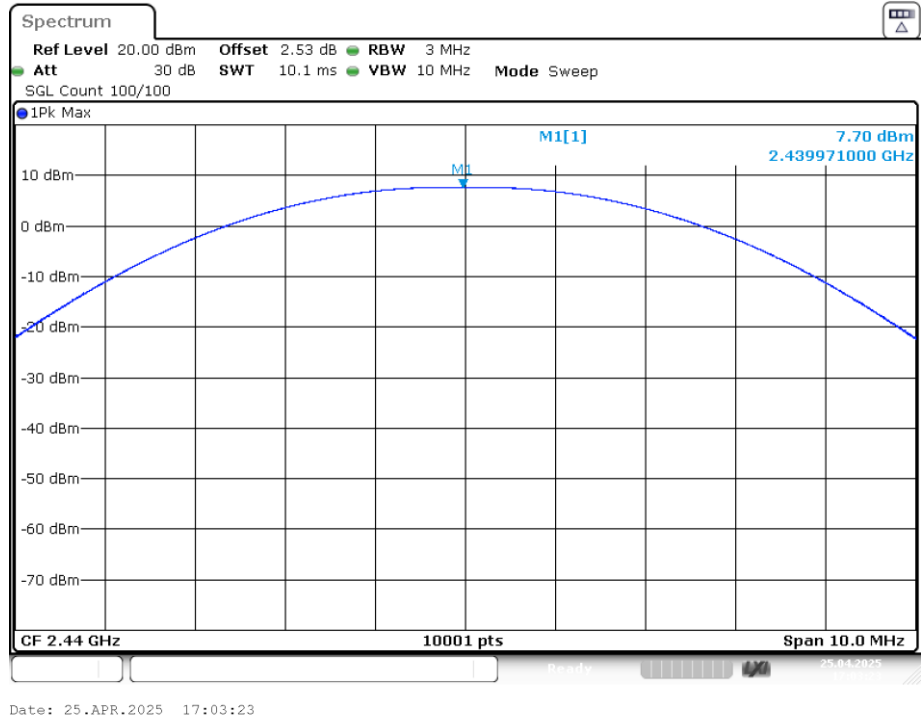
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	E.I.R.P (dBm)	E.I.R.P. Limit (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	7.47	30	11.37	<=36.02	Pass
NVNT	BLE 1M	2440	Ant1	7.7	30	11.60	<=36.02	Pass
NVNT	BLE 1M	2480	Ant1	7.64	30	11.54	<=36.02	Pass
NVNT	BLE 2M	2402	Ant1	7.63	30	11.53	<=36.02	Pass
NVNT	BLE 2M	2440	Ant1	7.71	30	11.61	<=36.02	Pass
NVNT	BLE 2M	2480	Ant1	7.62	30	11.52	<=36.02	Pass
Note1: Antenna Gain: 3.90dBi; Note2: E.I.R.P = Total Power + Antenna Gain								

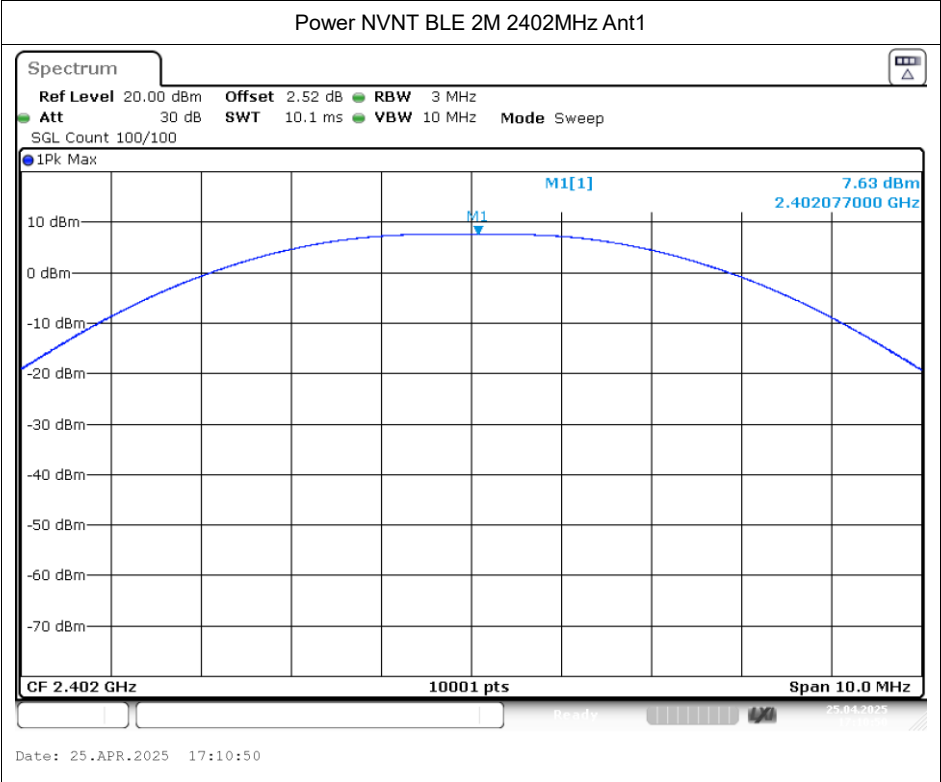
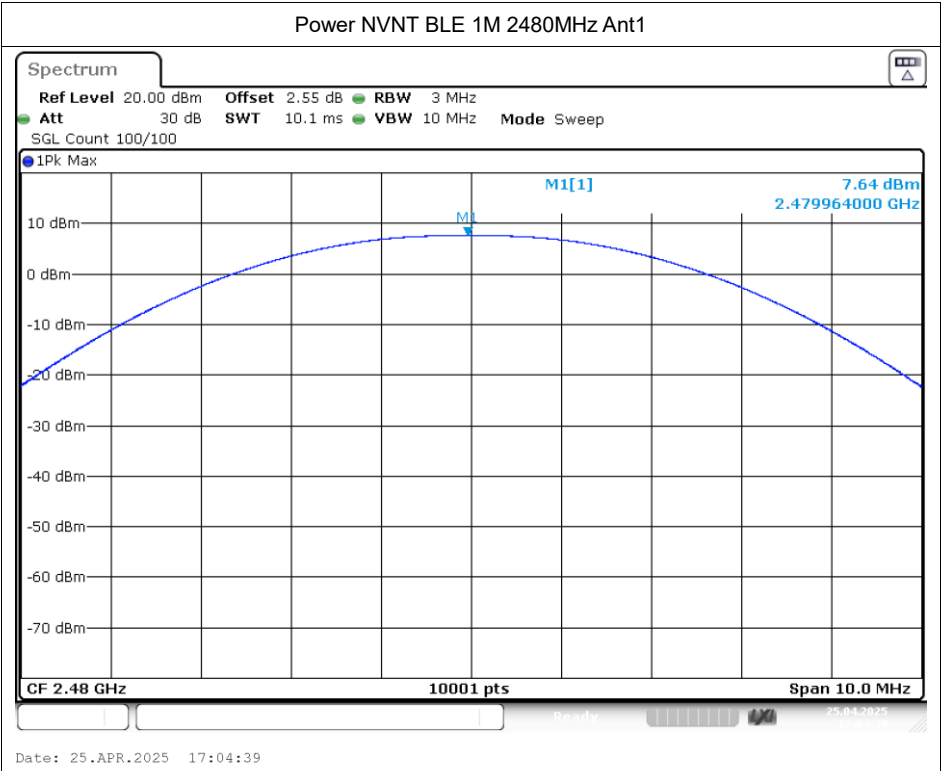
Test Graphs

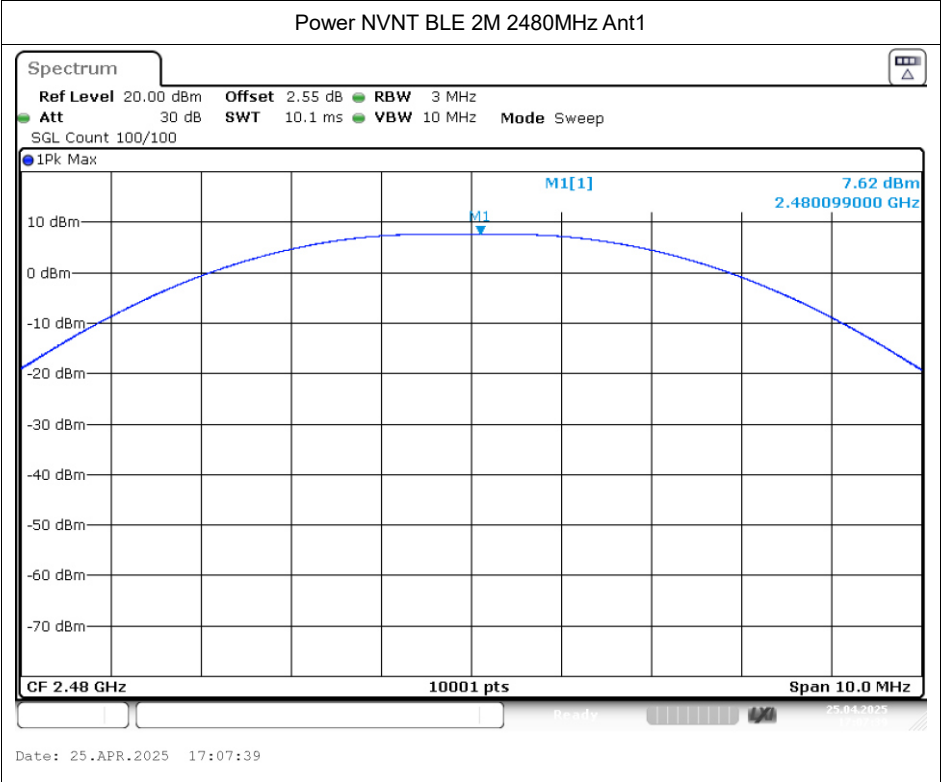
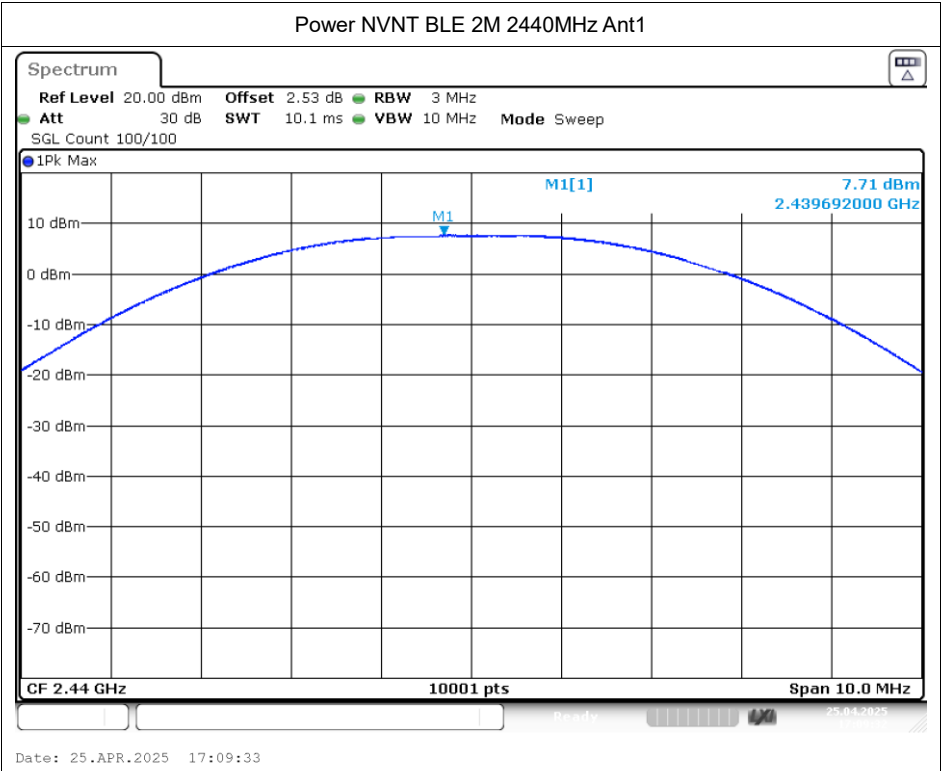
Power NVNT BLE 1M 2402MHz Ant1



Power NVNT BLE 1M 2440MHz Ant1





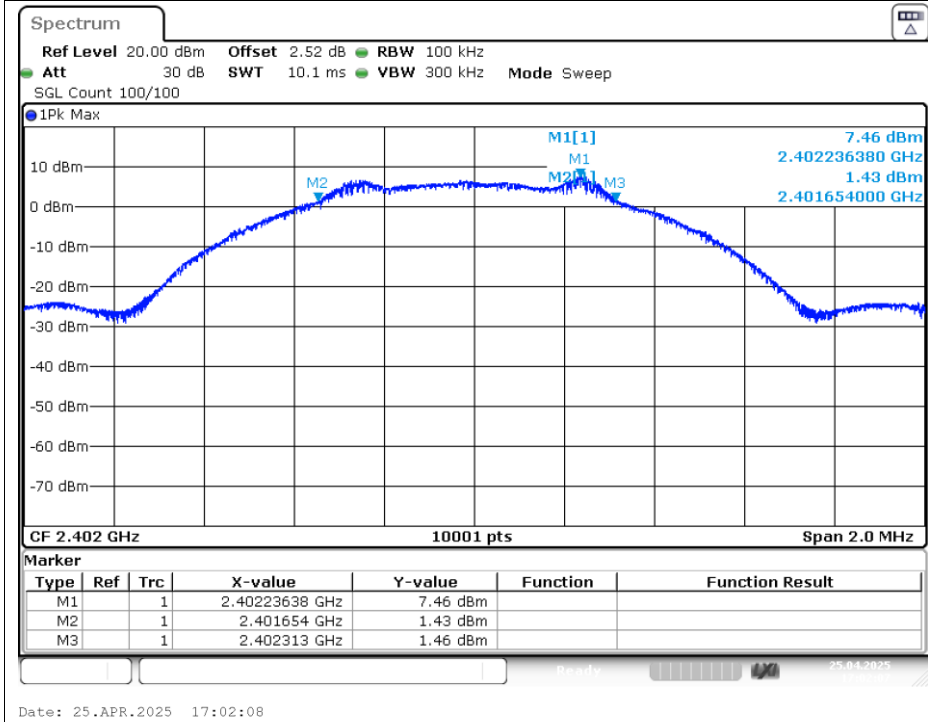


-6dB Bandwidth

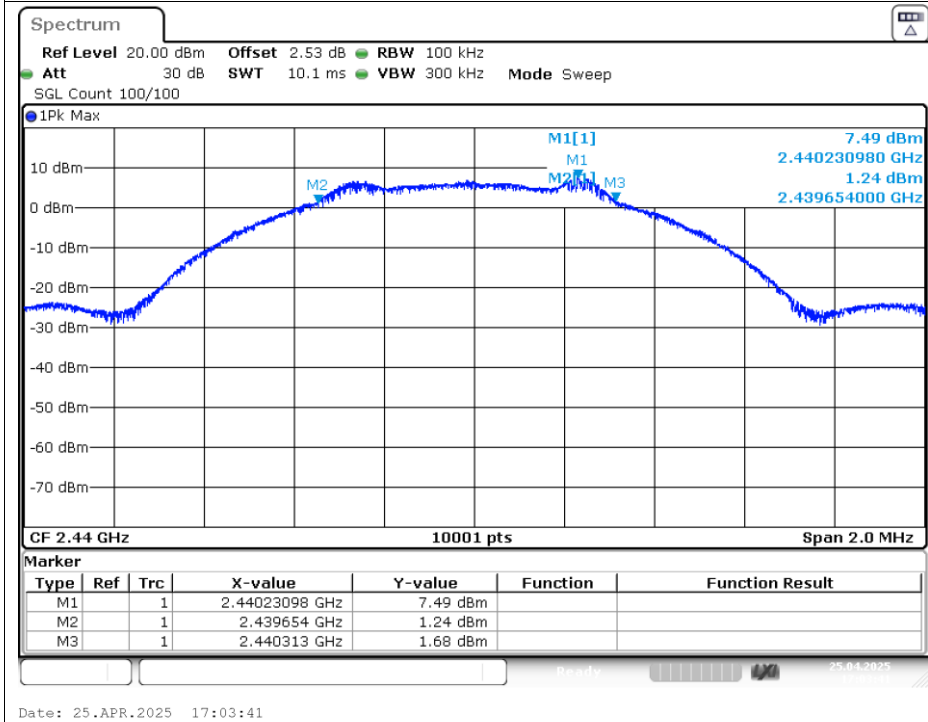
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	Ant1	0.66	0.5	Pass
NVNT	BLE 1M	2440	Ant1	0.66	0.5	Pass
NVNT	BLE 1M	2480	Ant1	0.66	0.5	Pass
NVNT	BLE 2M	2402	Ant1	1.15	0.5	Pass
NVNT	BLE 2M	2440	Ant1	1.17	0.5	Pass
NVNT	BLE 2M	2480	Ant1	1.24	0.5	Pass

Test Graphs

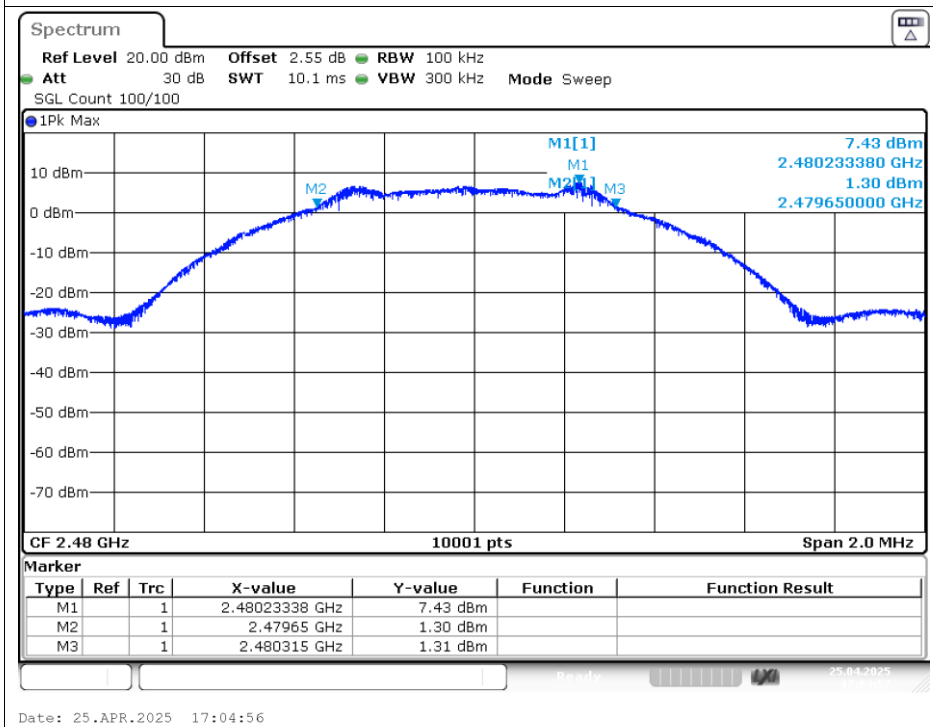
-6dB Bandwidth NVNT BLE 1M 2402MHz Ant1



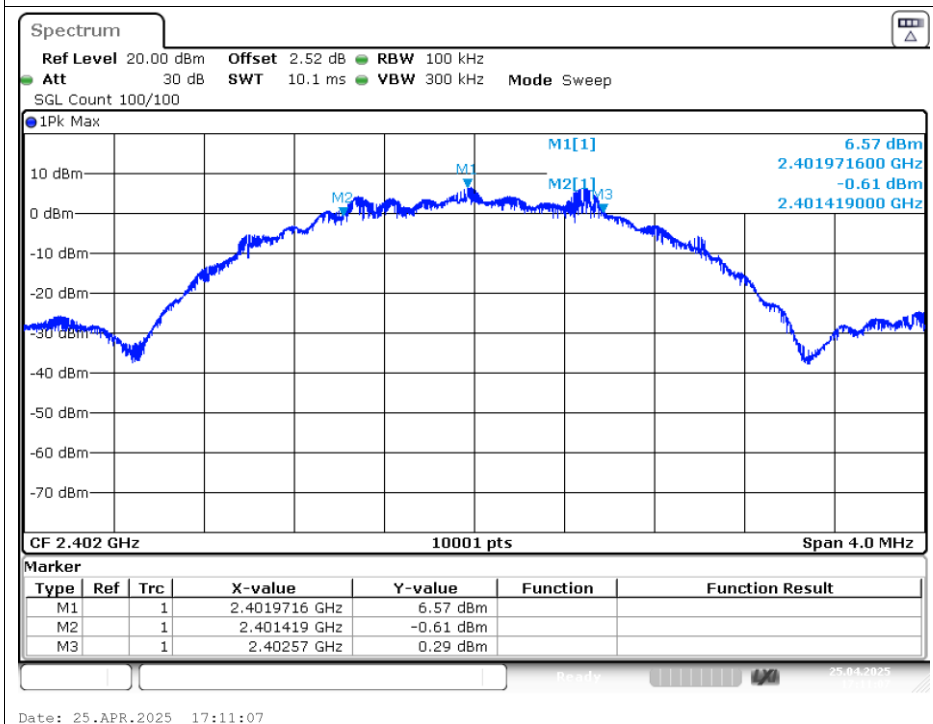
-6dB Bandwidth NVNT BLE 1M 2440MHz Ant1



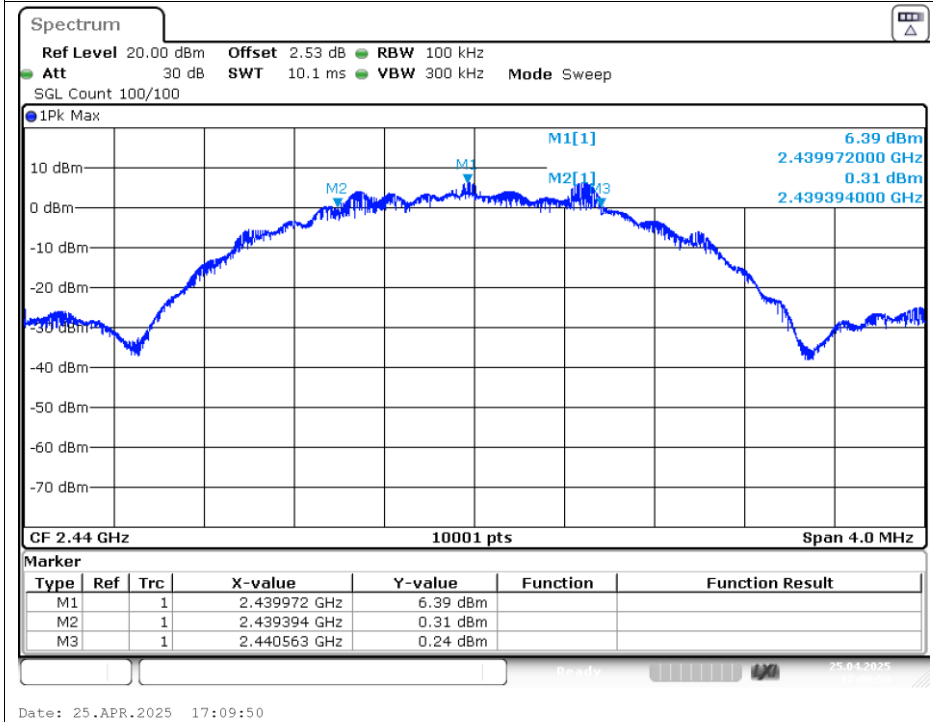
-6dB Bandwidth NVNT BLE 1M 2480MHz Ant1



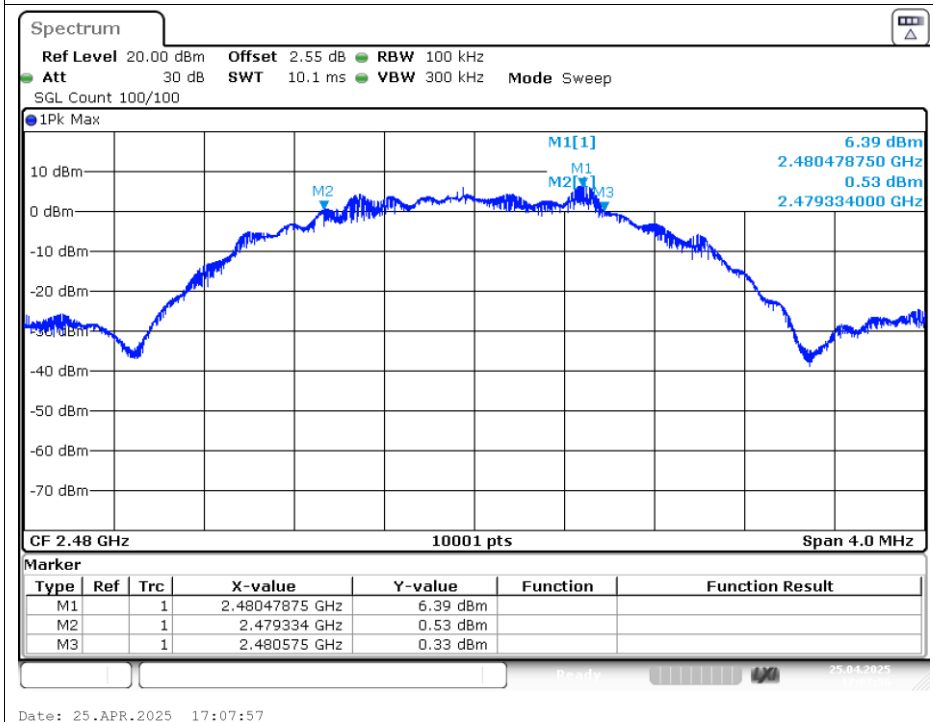
-6dB Bandwidth NVNT BLE 2M 2402MHz Ant1



-6dB Bandwidth NVNT BLE 2M 2440MHz Ant1



-6dB Bandwidth NVNT BLE 2M 2480MHz Ant1

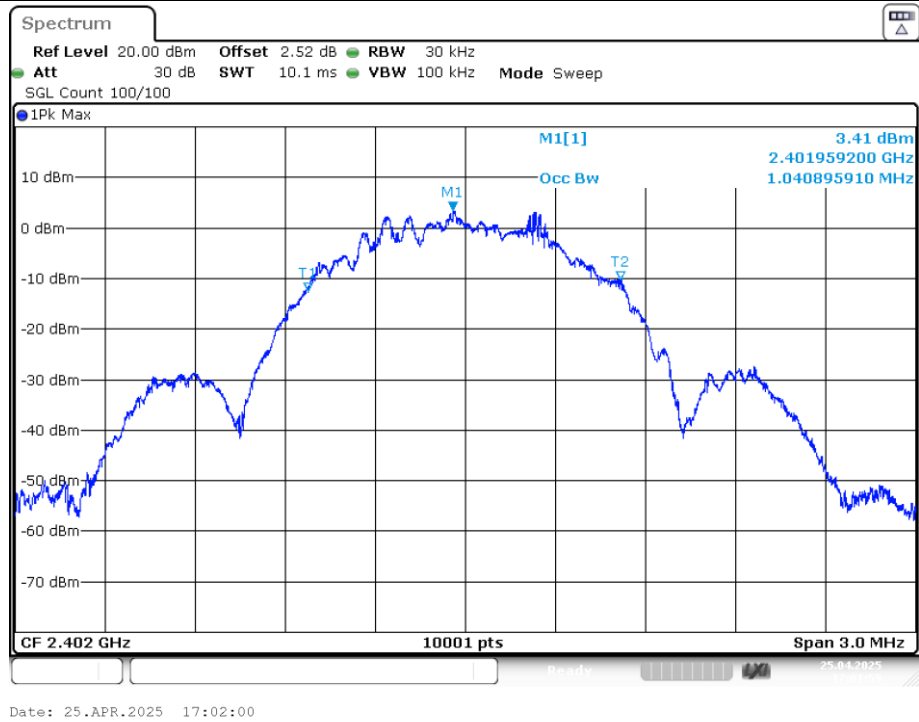


Occupied Channel Bandwidth

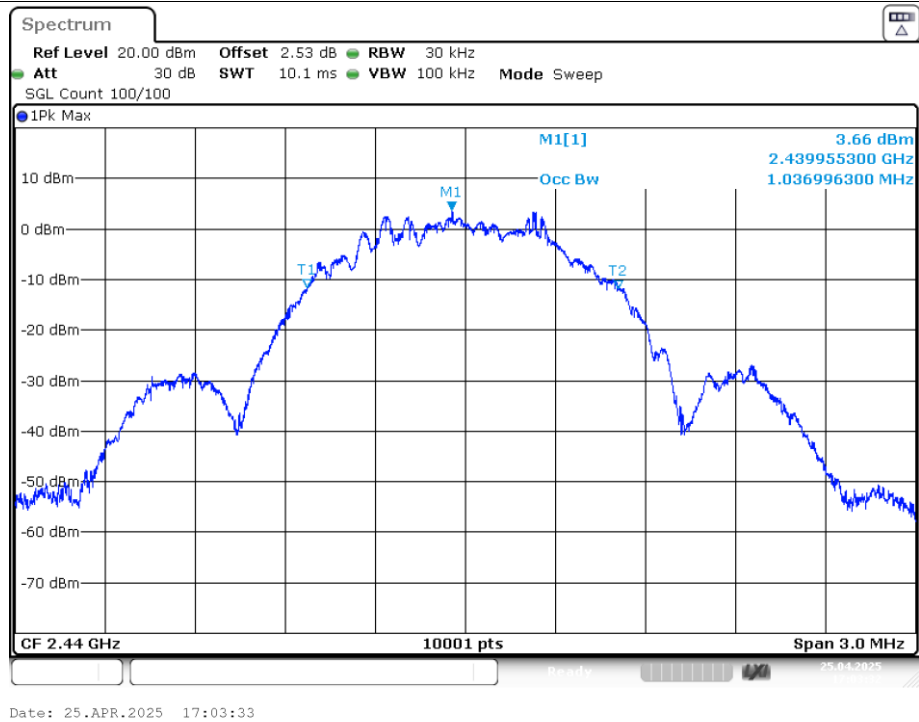
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE 1M	2402	Ant1	1.041
NVNT	BLE 1M	2440	Ant1	1.037
NVNT	BLE 1M	2480	Ant1	1.038
NVNT	BLE 2M	2402	Ant1	2.077
NVNT	BLE 2M	2440	Ant1	2.067
NVNT	BLE 2M	2480	Ant1	2.074

Test Graphs

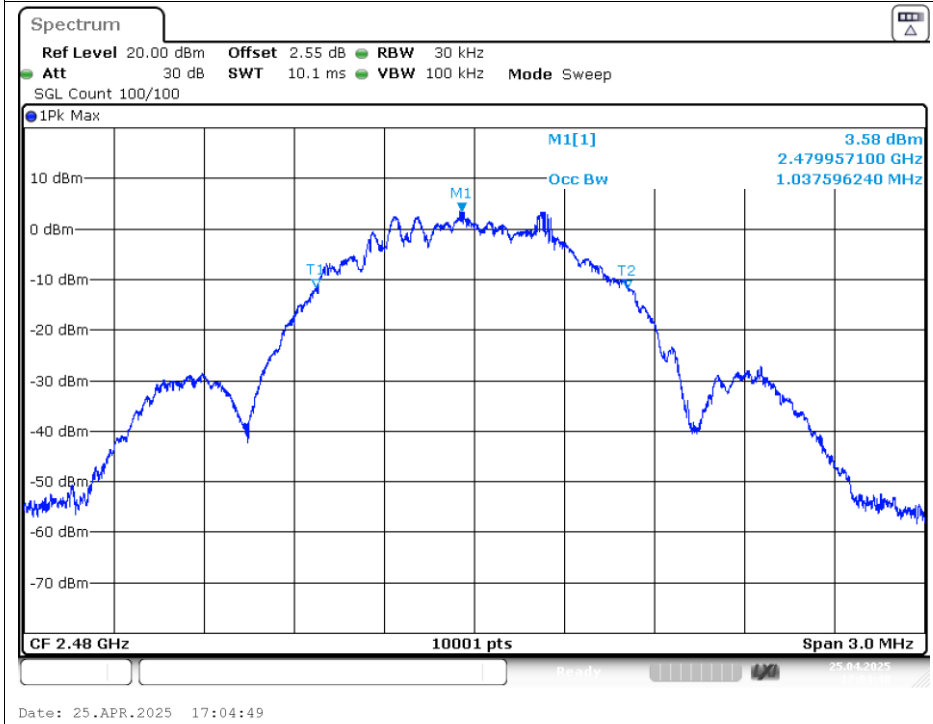
OBW NVNT BLE 1M 2402MHz Ant1



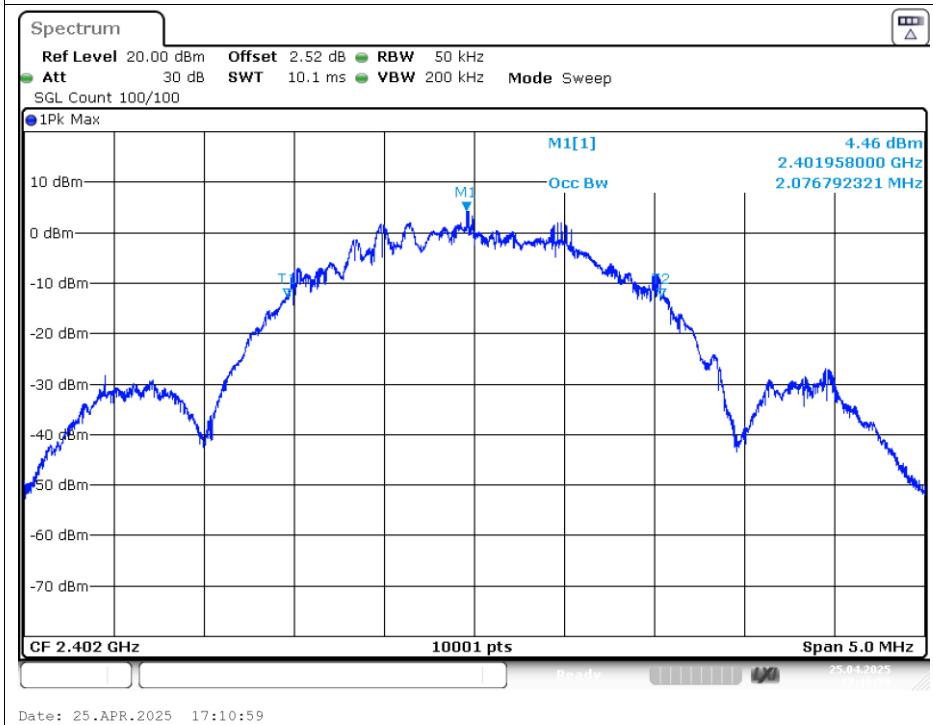
OBW NVNT BLE 1M 2440MHz Ant1



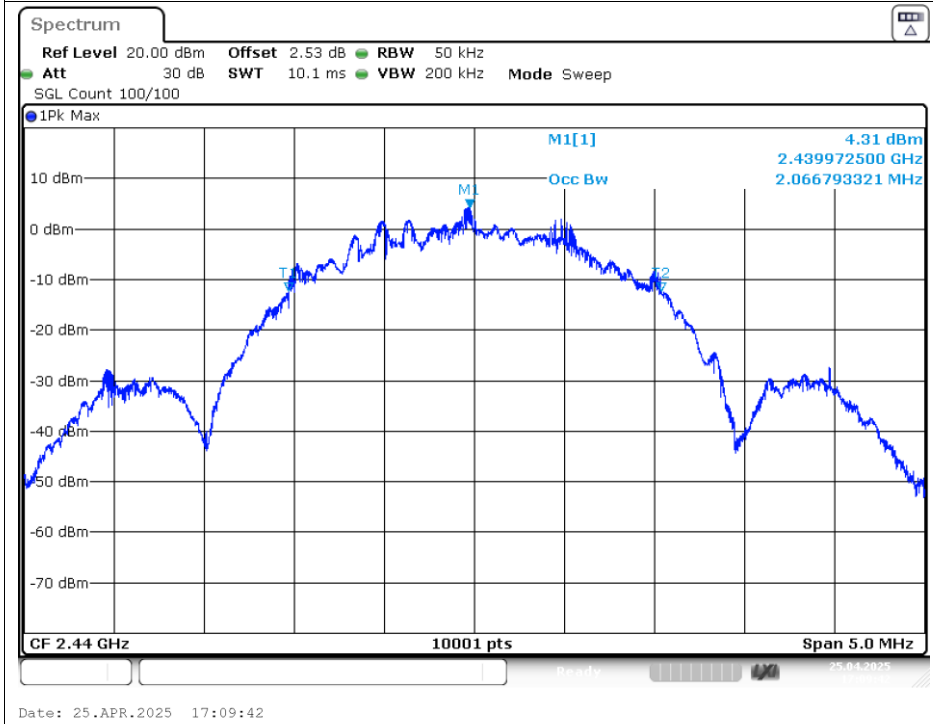
OBW NVNT BLE 1M 2480MHz Ant1



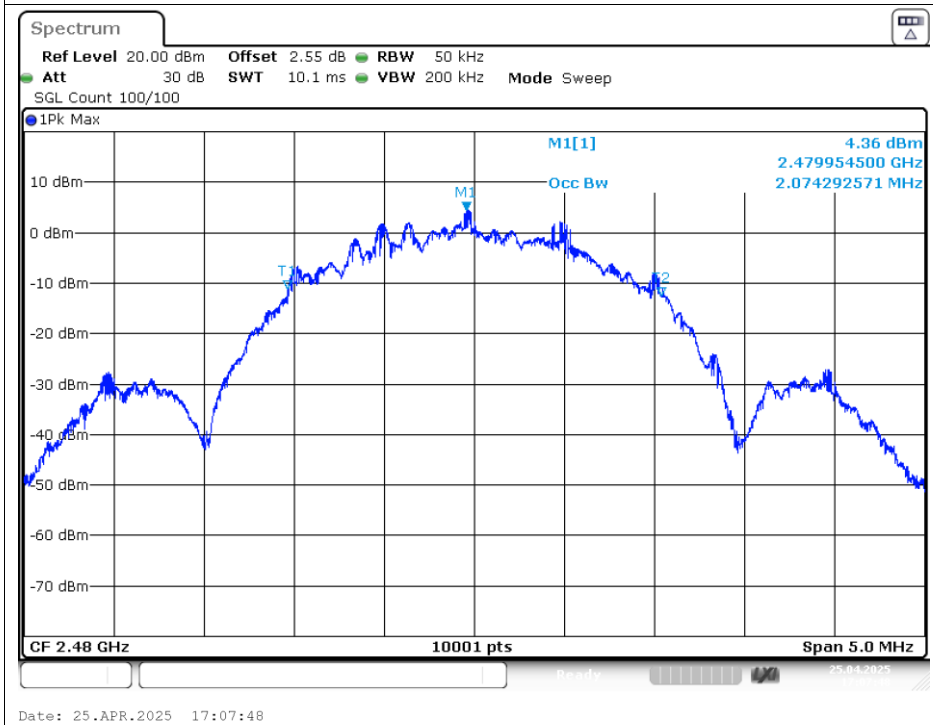
OBW NVNT BLE 2M 2402MHz Ant1



OBW NVNT BLE 2M 2440MHz Ant1



OBW NVNT BLE 2M 2480MHz Ant1

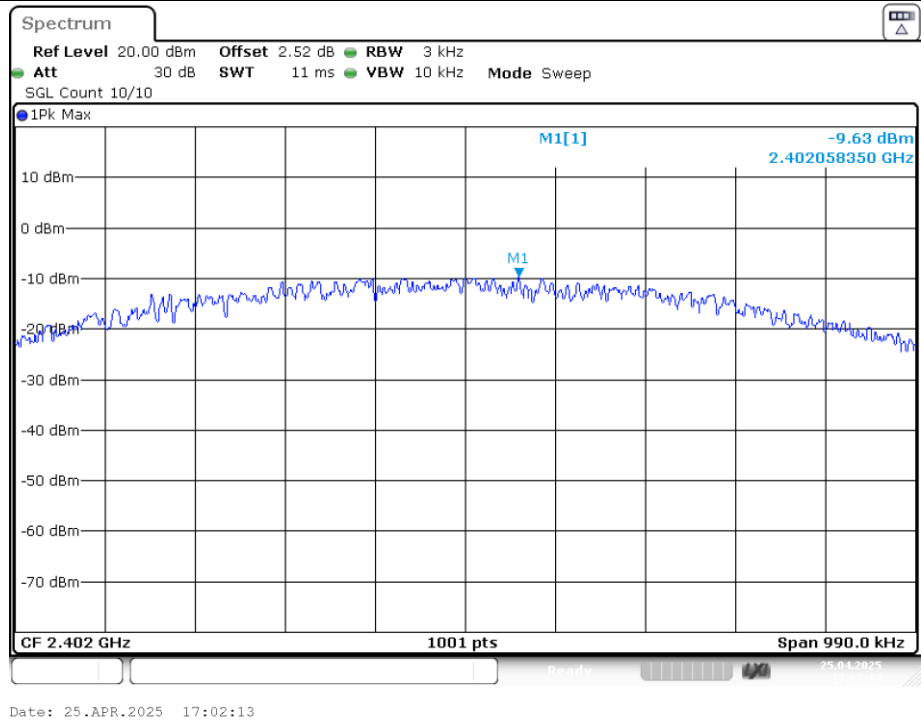


Maximum Power Spectral Density Level

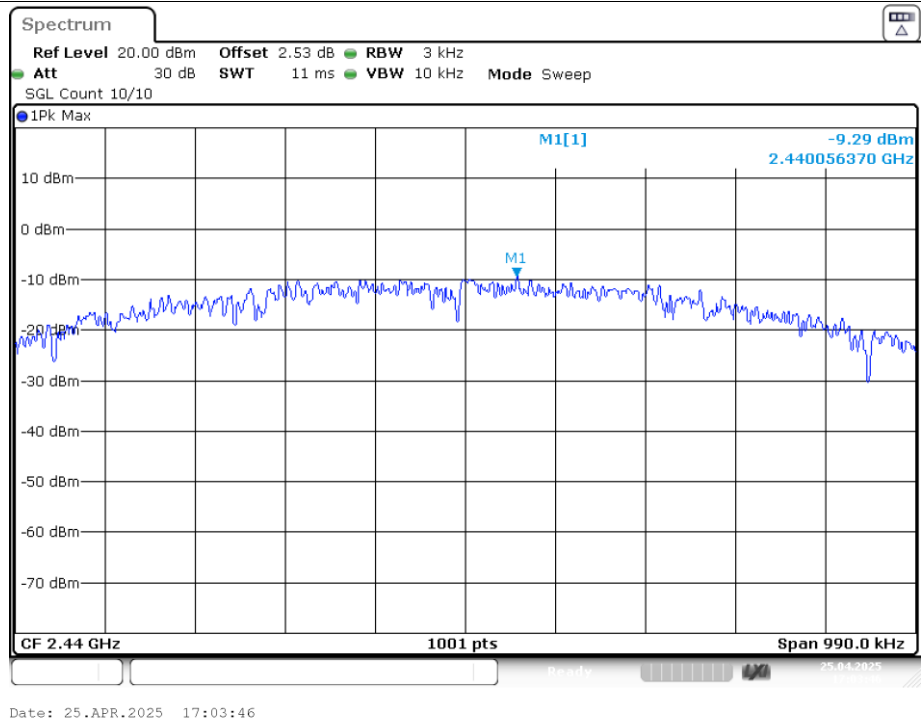
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	Ant1	-9.63	8	Pass
NVNT	BLE 1M	2440	Ant1	-9.29	8	Pass
NVNT	BLE 1M	2480	Ant1	-9.41	8	Pass
NVNT	BLE 2M	2402	Ant1	-11.39	8	Pass
NVNT	BLE 2M	2440	Ant1	-13.43	8	Pass
NVNT	BLE 2M	2480	Ant1	-13.82	8	Pass

Test Graphs

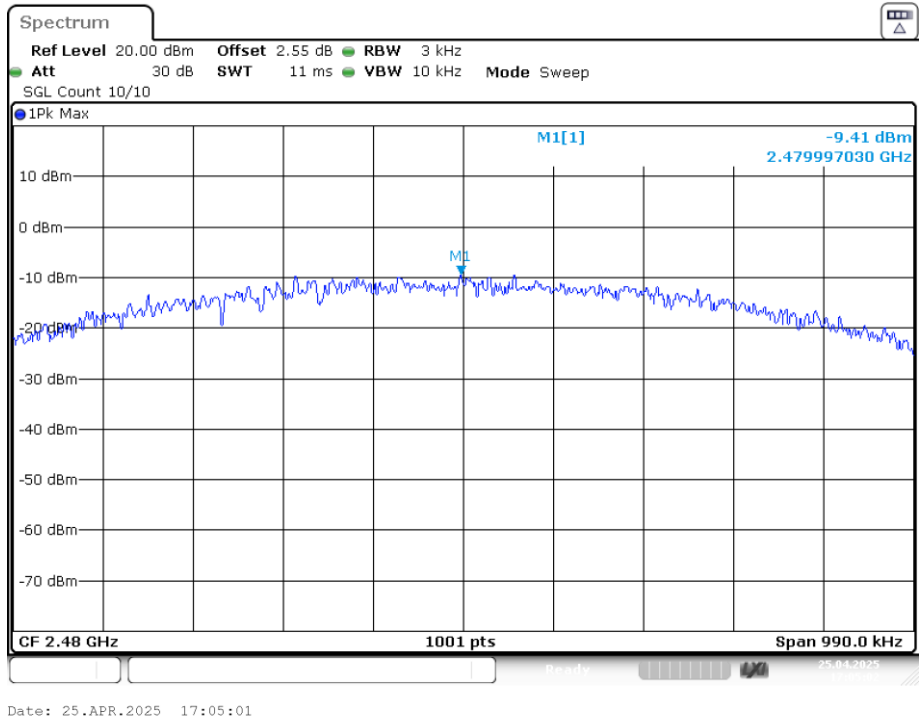
PSD NVNT BLE 1M 2402MHz Ant1



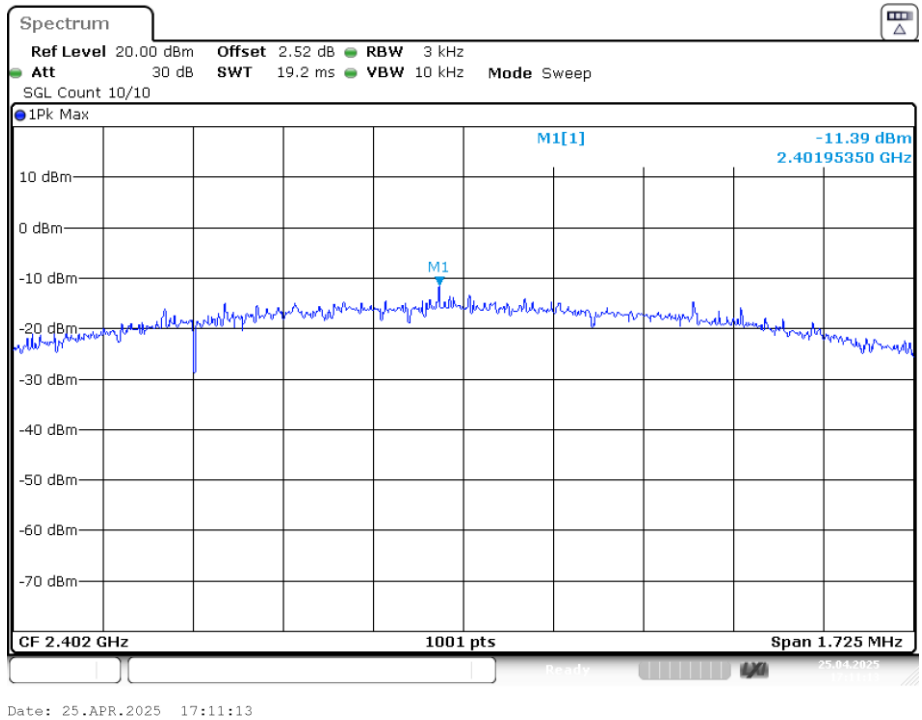
PSD NVNT BLE 1M 2440MHz Ant1

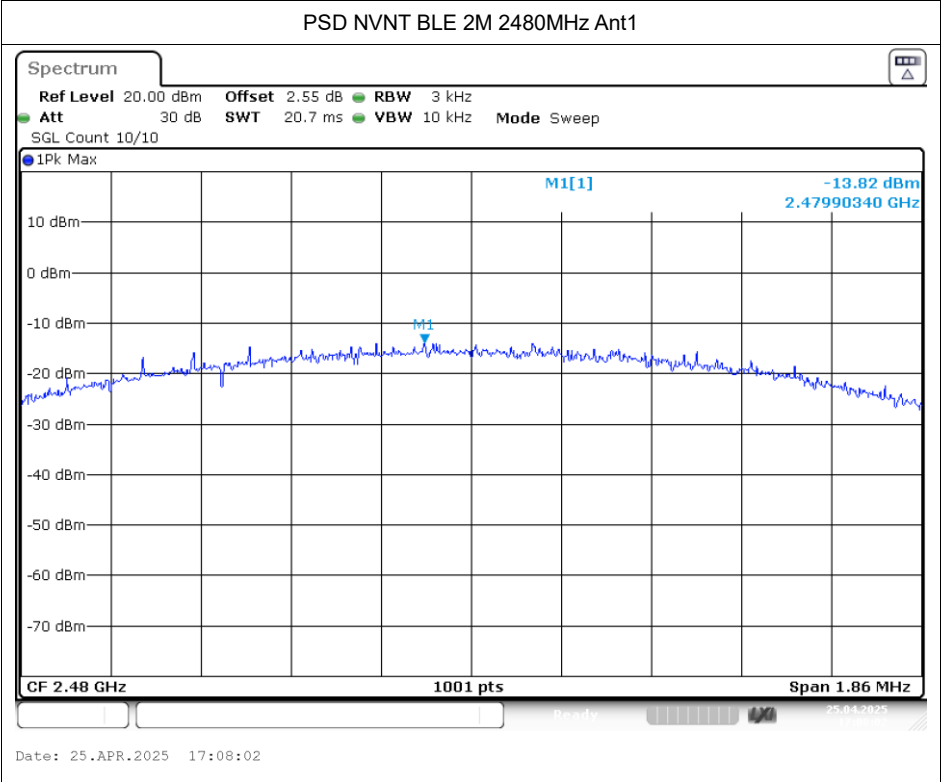
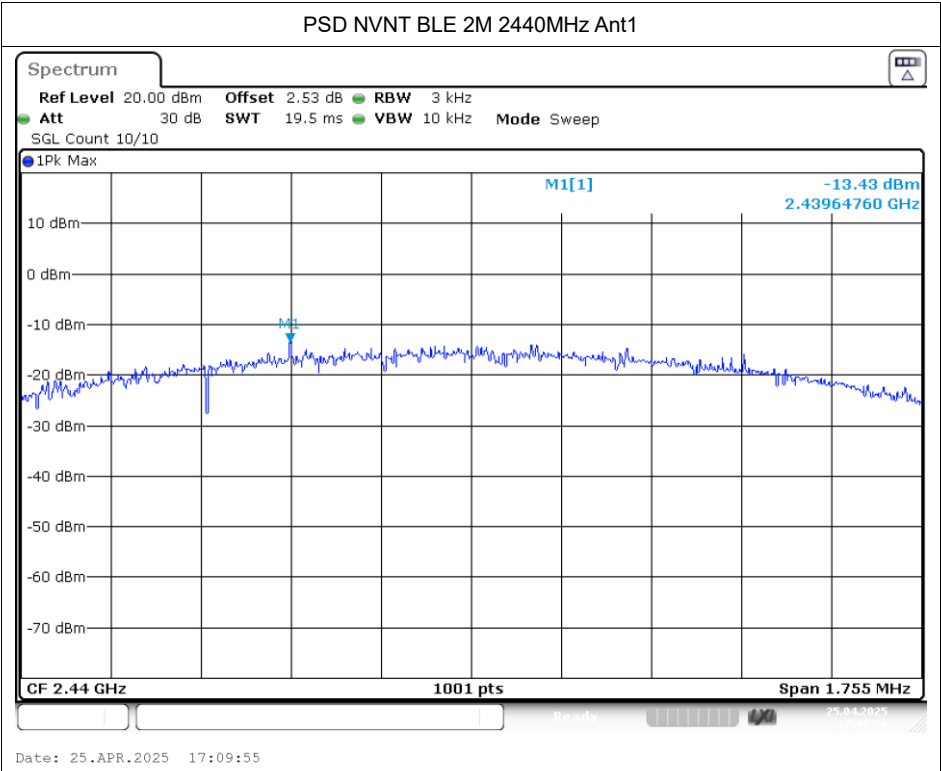


PSD NVNT BLE 1M 2480MHz Ant1



PSD NVNT BLE 2M 2402MHz Ant1



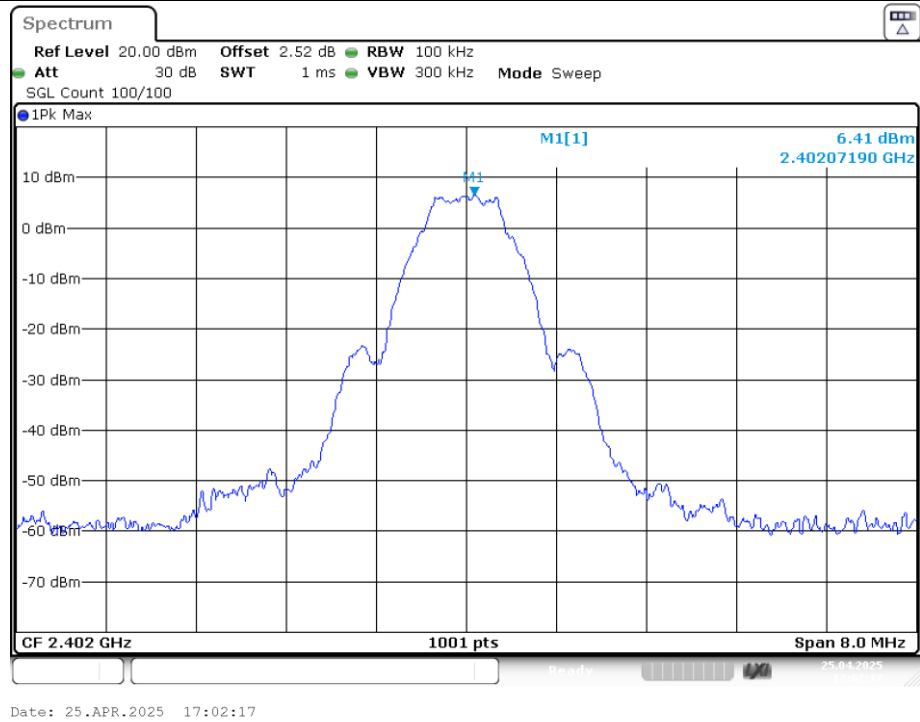


Band Edge

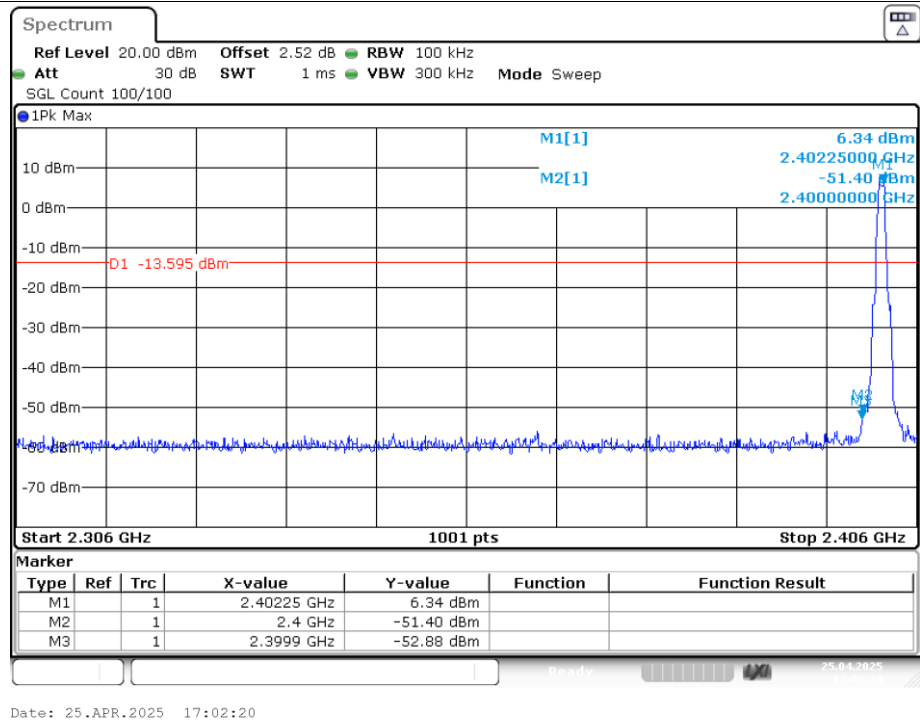
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-57.81	-20	Pass
NVNT	BLE 1M	2480	Ant1	-63.82	-20	Pass
NVNT	BLE 2M	2402	Ant1	-34.37	-20	Pass
NVNT	BLE 2M	2480	Ant1	-61.42	-20	Pass

Test Graphs

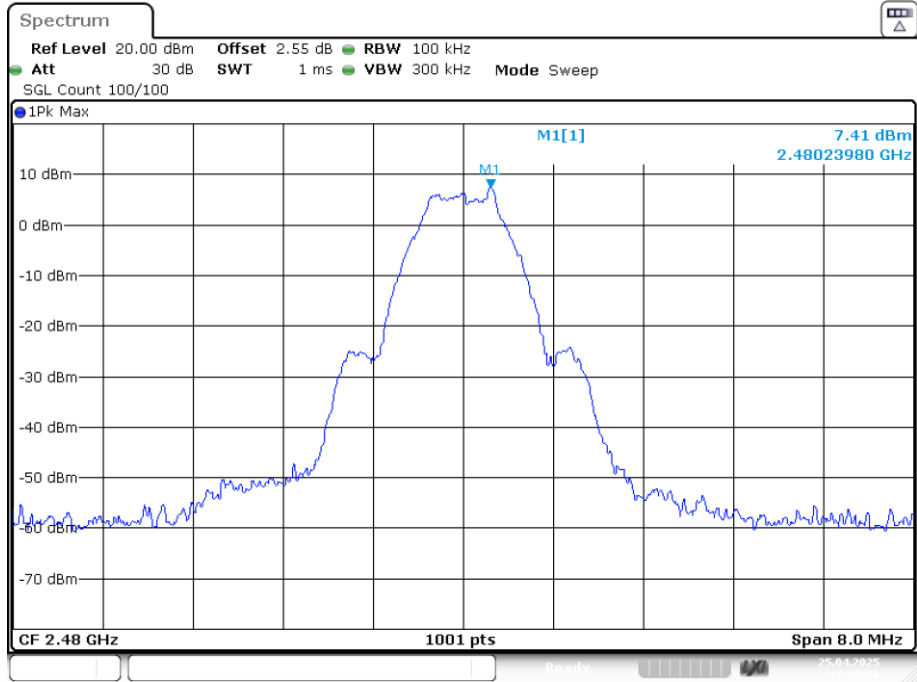
Band Edge NVNT BLE 1M 2402MHz Ant1 Ref



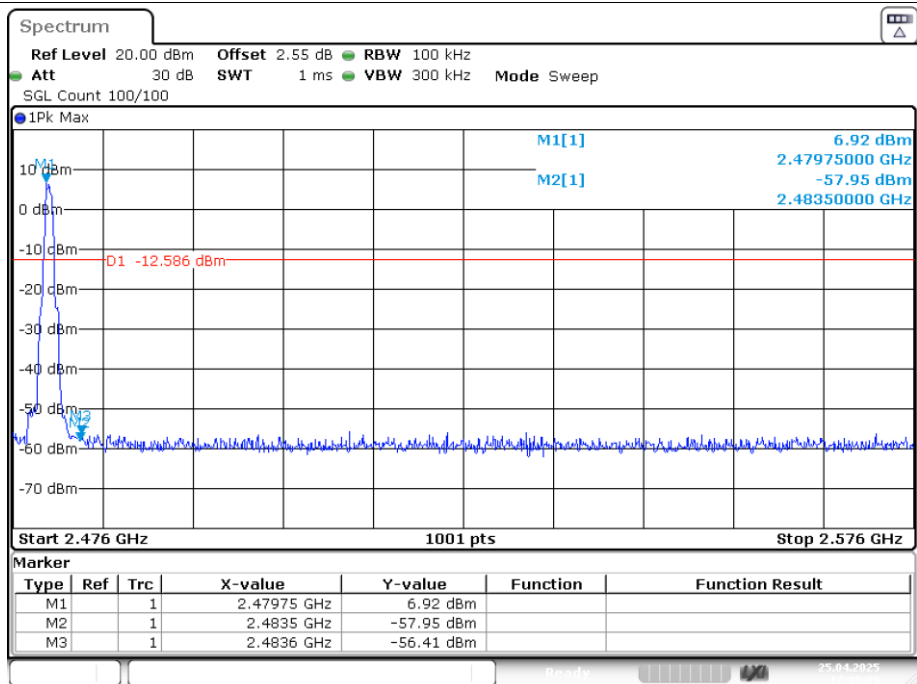
Band Edge NVNT BLE 1M 2402MHz Ant1 Emission



Band Edge NVNT BLE 1M 2480MHz Ant1 Ref



Band Edge NVNT BLE 1M 2480MHz Ant1 Emission

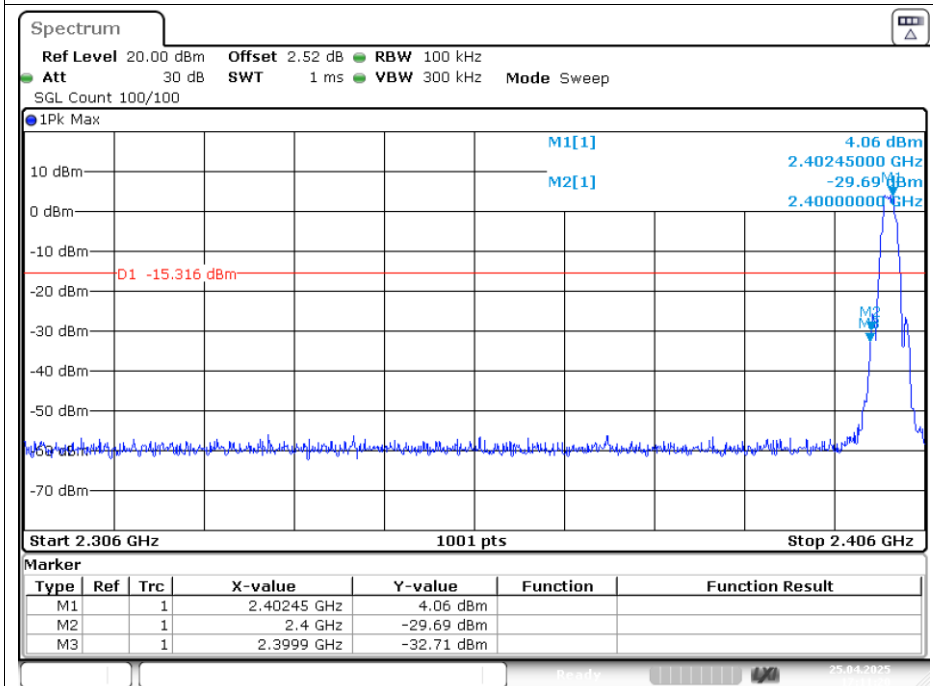


Band Edge NVNT BLE 2M 2402MHz Ant1 Ref



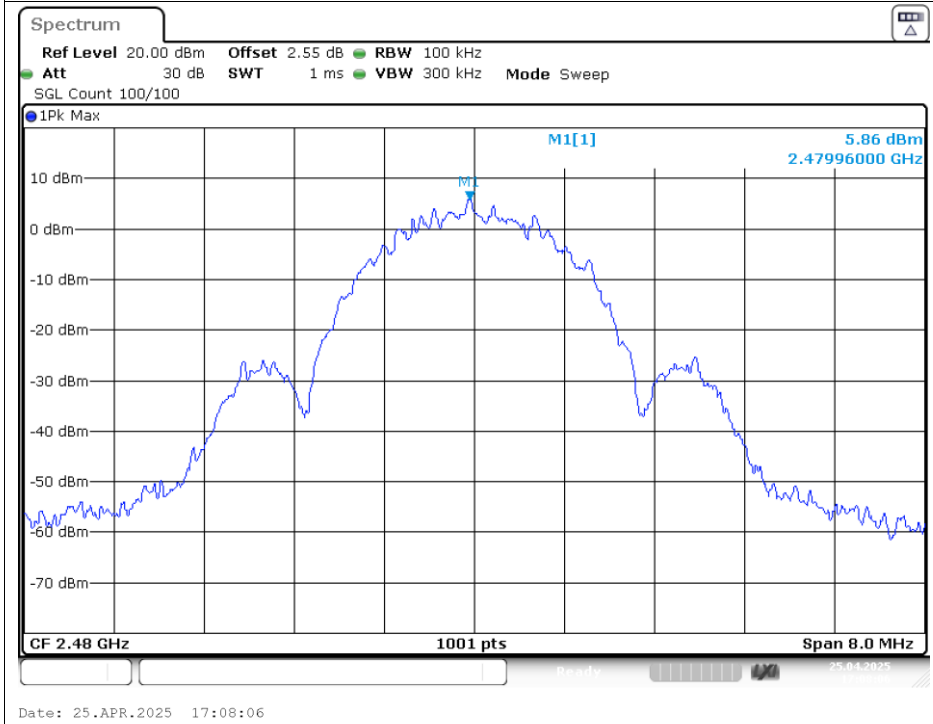
Date: 25.APR.2025 17:11:17

Band Edge NVNT BLE 2M 2402MHz Ant1 Emission

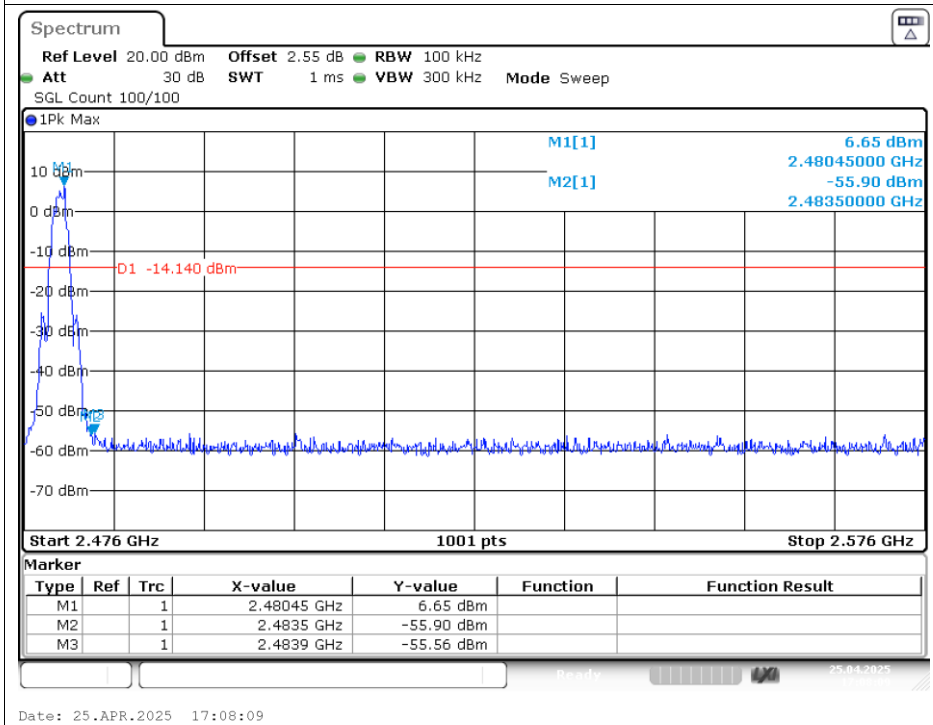


Date: 25.APR.2025 17:11:20

Band Edge NVNT BLE 2M 2480MHz Ant1 Ref



Band Edge NVNT BLE 2M 2480MHz Ant1 Emission

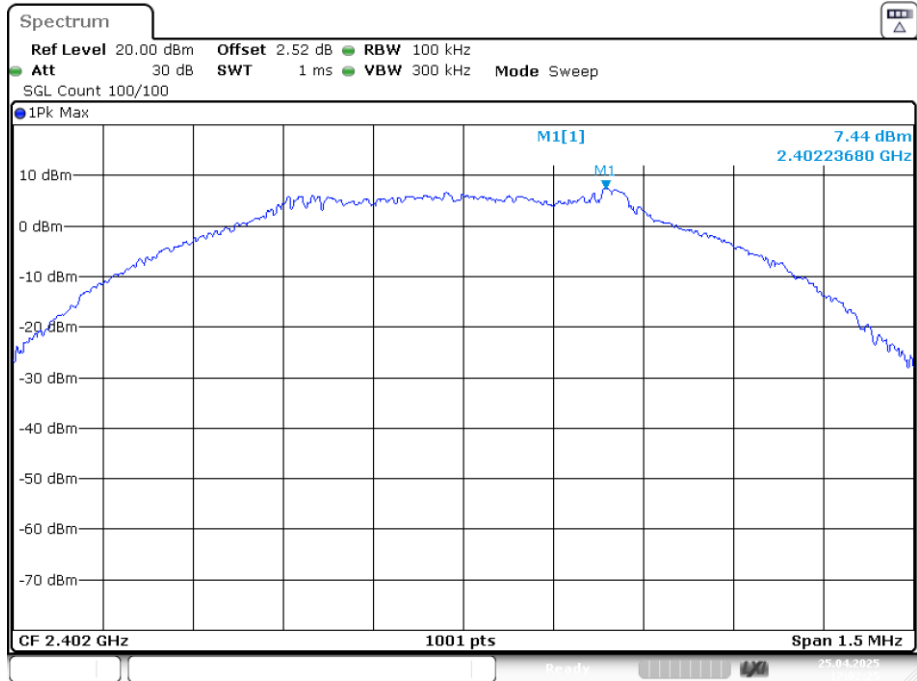


Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-57.01	-20	Pass
NVNT	BLE 1M	2440	Ant1	-56.58	-20	Pass
NVNT	BLE 1M	2480	Ant1	-57.5	-20	Pass
NVNT	BLE 2M	2402	Ant1	-55.65	-20	Pass
NVNT	BLE 2M	2440	Ant1	-56.61	-20	Pass
NVNT	BLE 2M	2480	Ant1	-56.67	-20	Pass

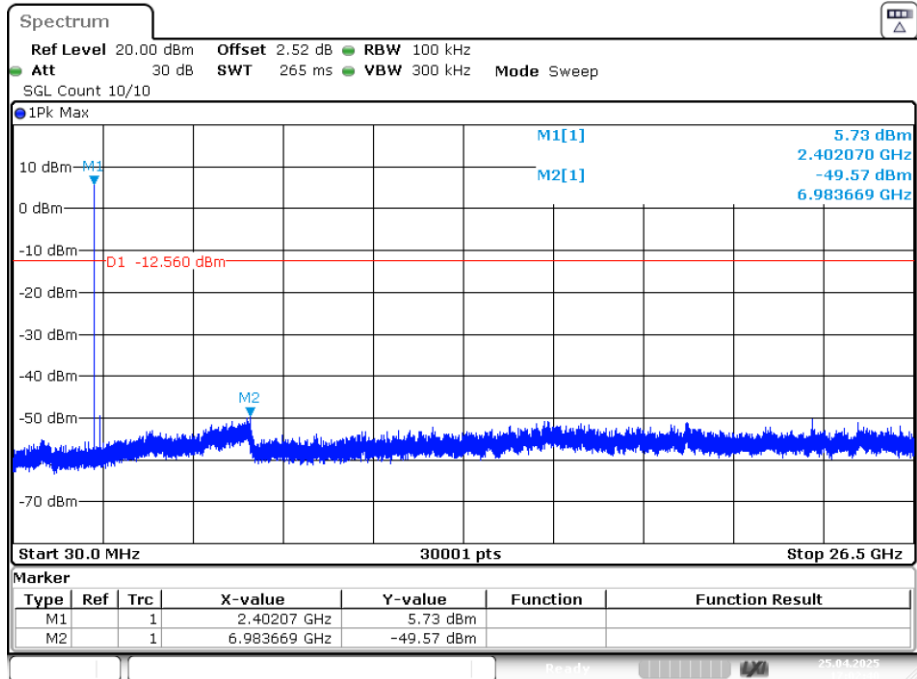
Test Graphs

Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Ref



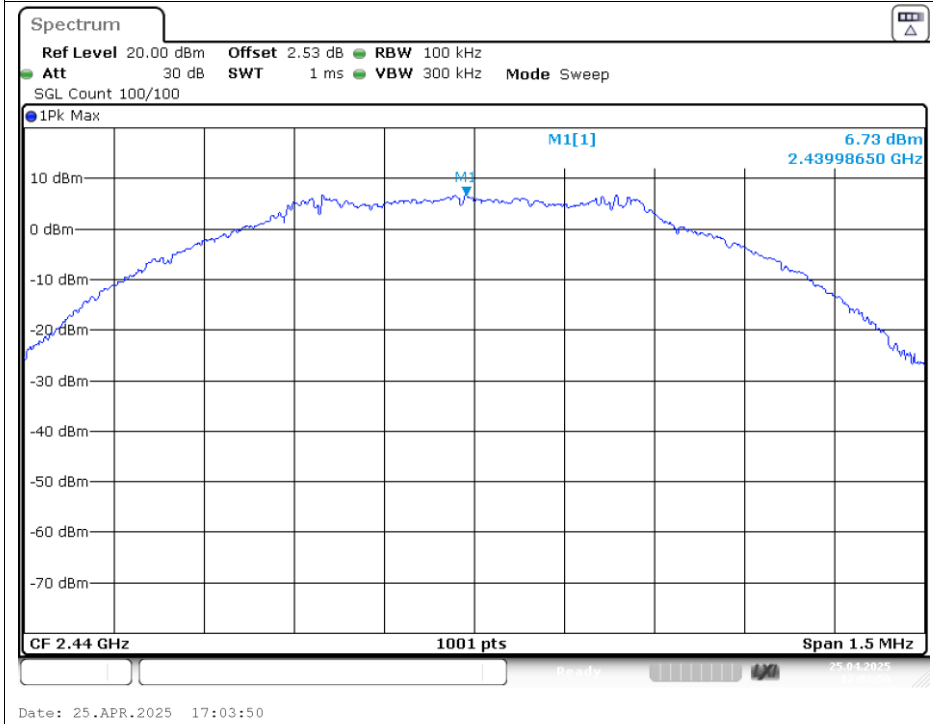
Date: 25.APR.2025 17:02:25

Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Emission

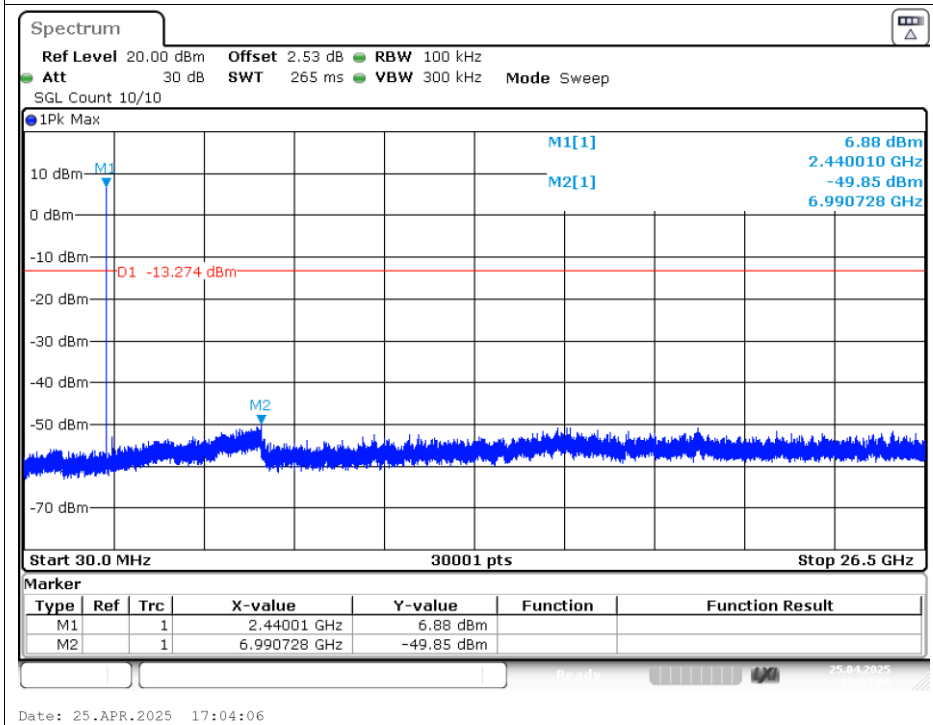


Date: 25.APR.2025 17:02:41

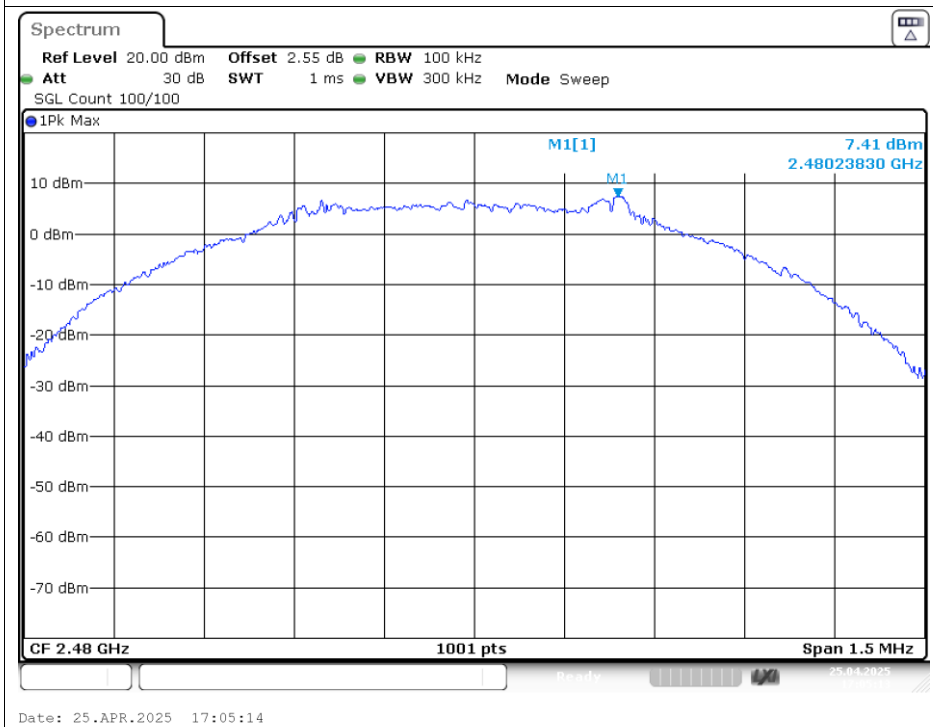
Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Ref



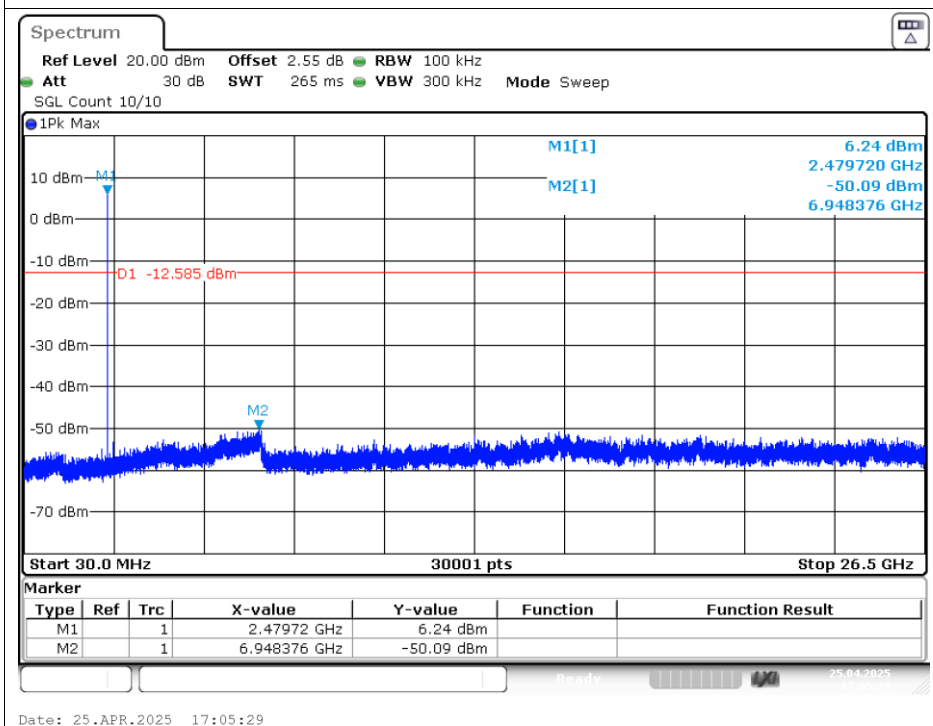
Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Emission



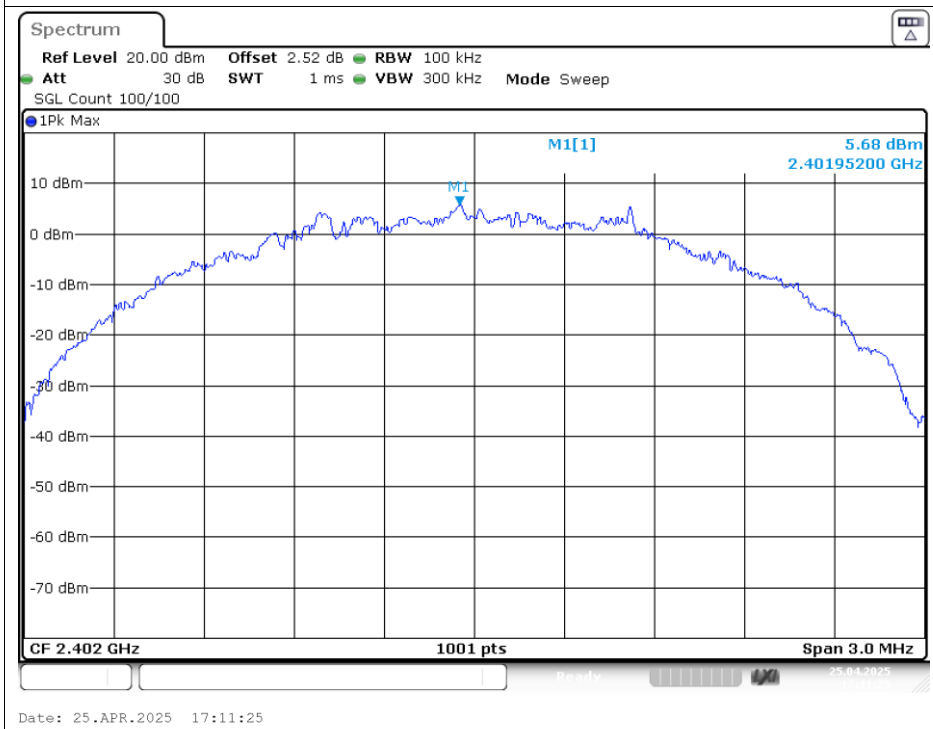
Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Ref



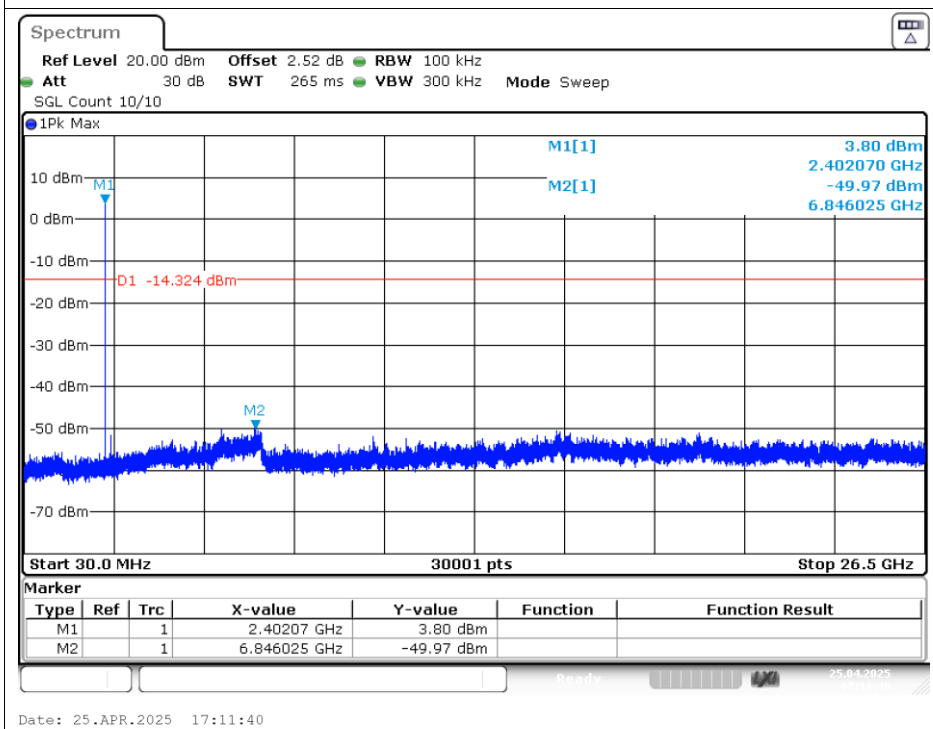
Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Emission



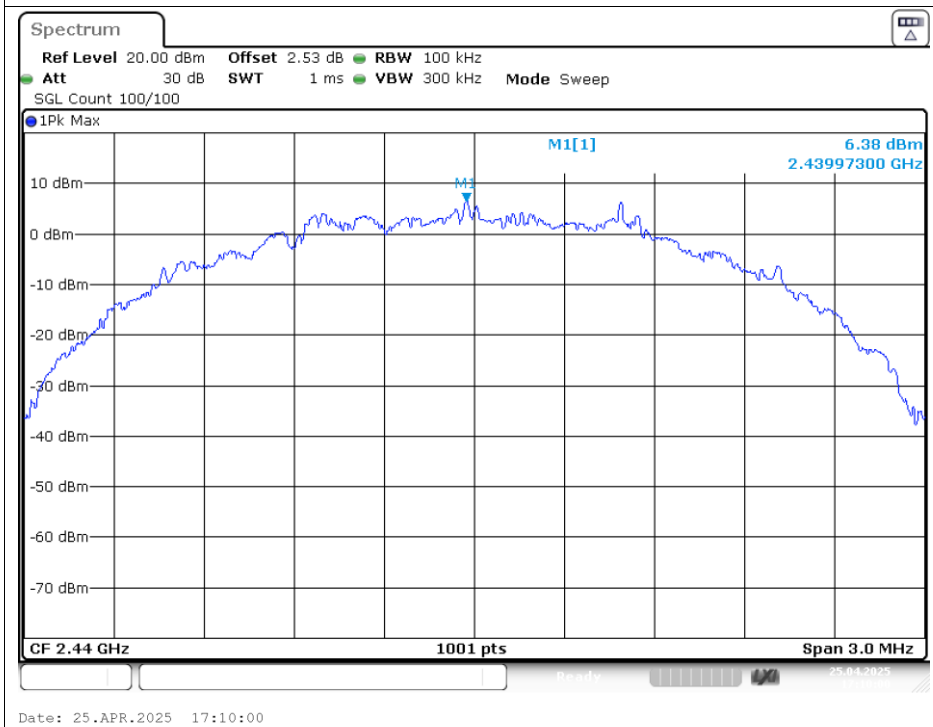
Tx. Spurious NVNT BLE 2M 2402MHz Ant1 Ref



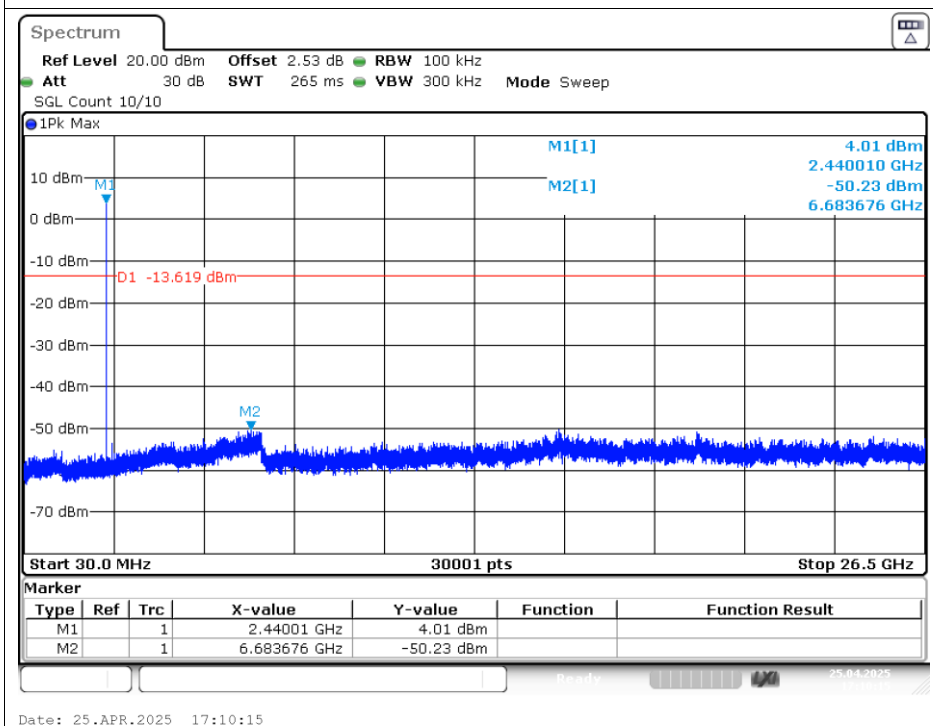
Tx. Spurious NVNT BLE 2M 2402MHz Ant1 Emission



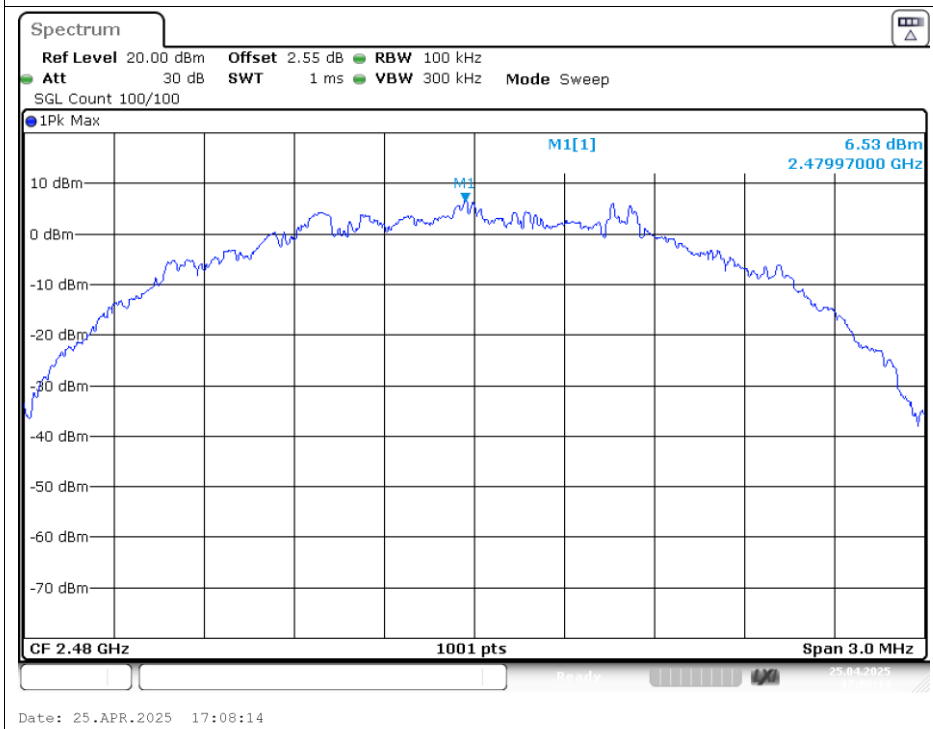
Tx. Spurious NVNT BLE 2M 2440MHz Ant1 Ref



Tx. Spurious NVNT BLE 2M 2440MHz Ant1 Emission



Tx. Spurious NVNT BLE 2M 2480MHz Ant1 Ref



Tx. Spurious NVNT BLE 2M 2480MHz Ant1 Emission

