

Appendix A

Report No.:	CISRR240923219
FCC ID:	2AWMO-MOT-U105
Product Name:	Wireless Temperature Tag
Model No.:	MOT-U105
Test Engineer:	Lucas Huang
Supervised by:	Rory Huang

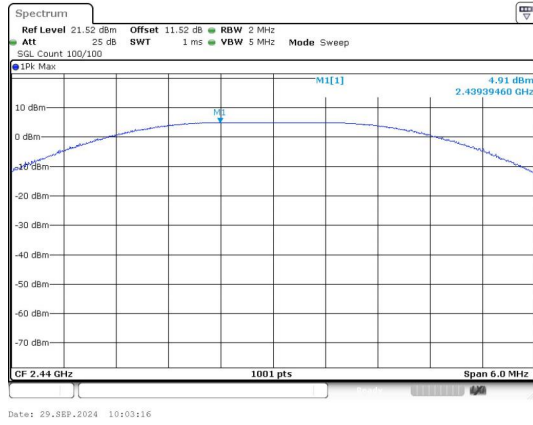
1) Conducted Output Power

Test Result

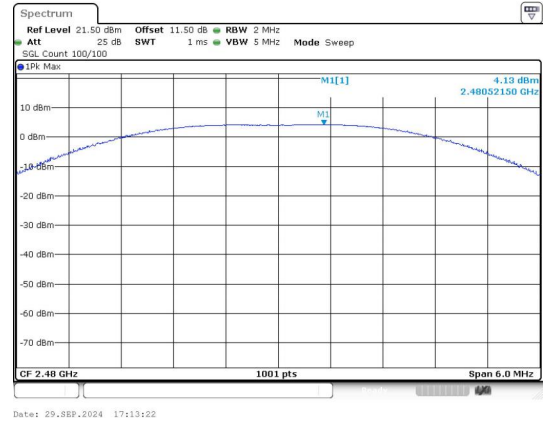
Mode	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
BLE 1M	0	4.56	2.86	≤30	PASS
	19	4.92	3.11	≤30	PASS
	39	4.12	2.58	≤30	PASS
BLE 2M	0	4.58	2.87	≤30	PASS
	19	4.91	3.1	≤30	PASS
	39	4.13	2.59	≤30	PASS

Test Graphs





Peak Output Power
BLE 2M_Channel 19



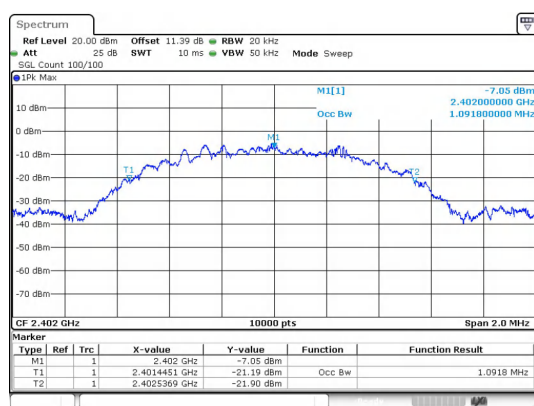
Peak Output Power
BLE 2M_Channel 39

2) 99% Bandwidth

Test Result

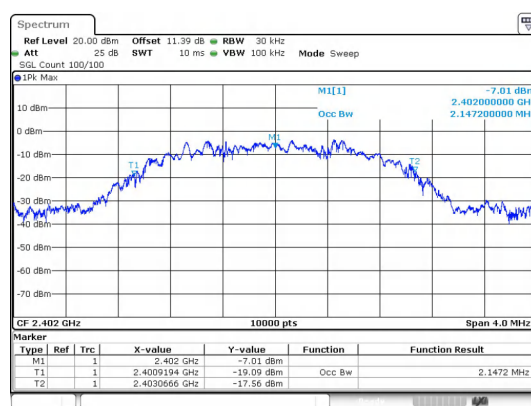
Mode	Channel	Center Frequency (MHz)	99% BW (MHz)
BLE 1M	0	2402	1.0920
BLE 1M	19	2440	1.0690
BLE 1M	39	2480	1.0690
BLE 2M	0	2402	2.1470
BLE 2M	19	2440	2.0990
BLE 2M	39	2480	2.1010

Test Graphs



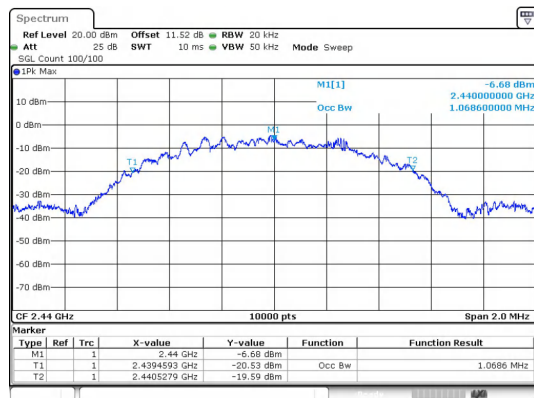
Date: 29.SEP.2024 09:46:33

BLE 1M_Channel 0



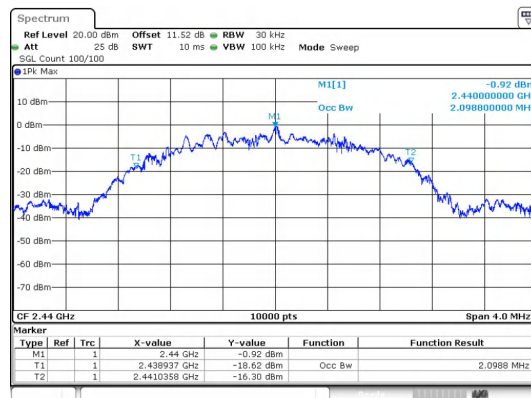
Date: 29.SEP.2024 09:59:43

BLE 2M_Channel 0



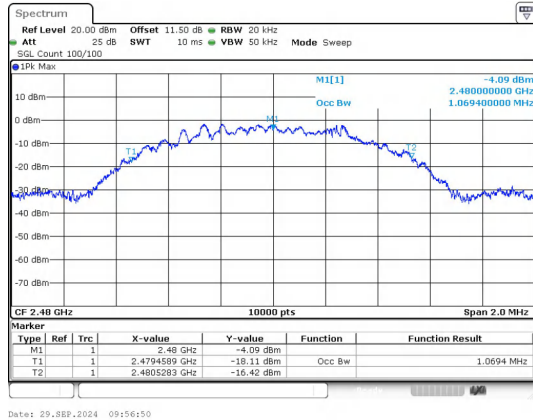
Date: 29.SEP.2024 09:49:58

BLE 1M_Channel 19

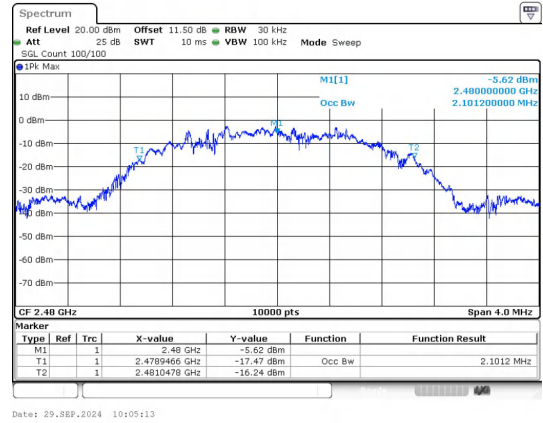


Date: 29.SEP.2024 10:02:48

BLE 2M_Channel 19



BLE 1M_Channel 39



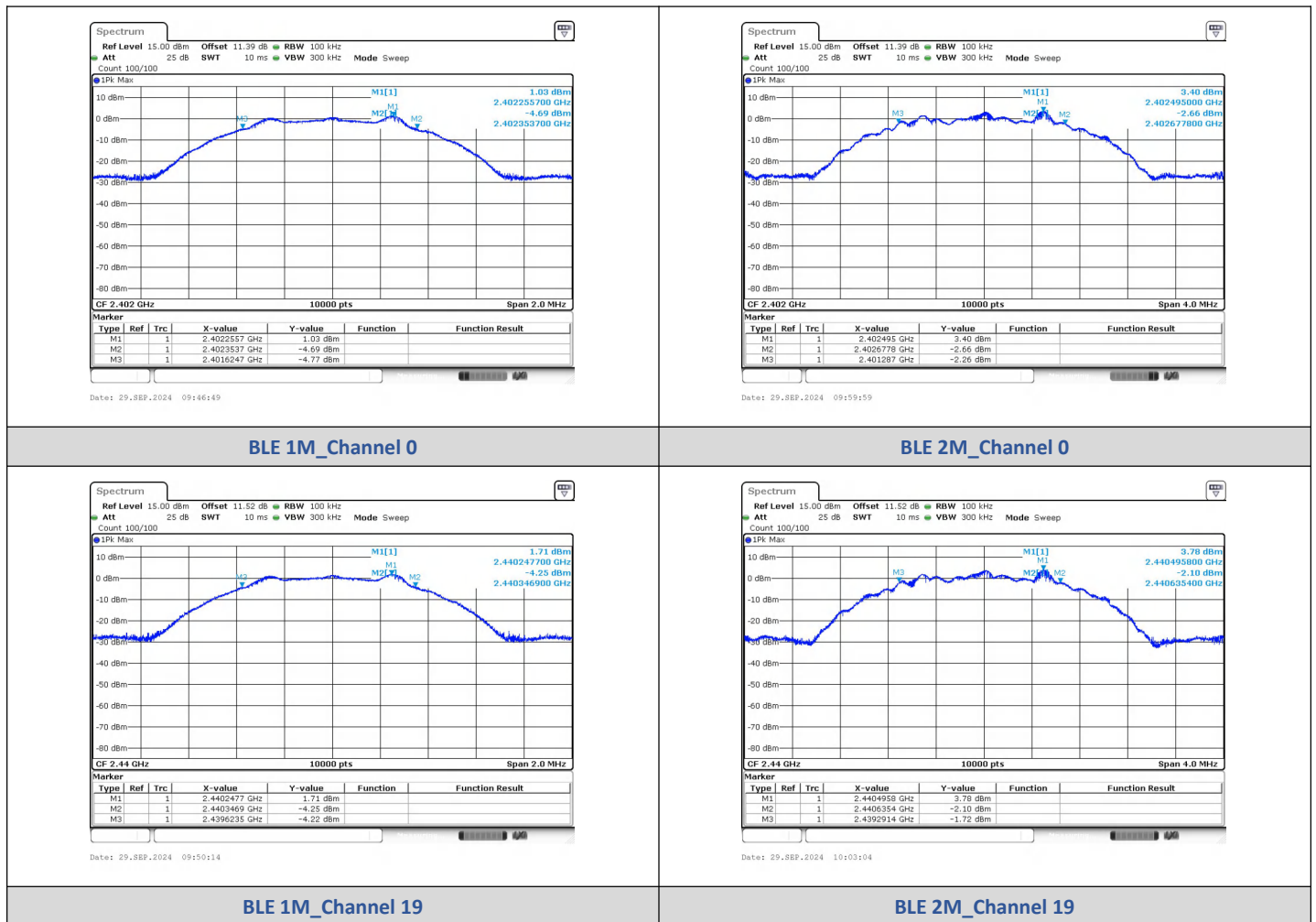
BLE 2M_Channel 39

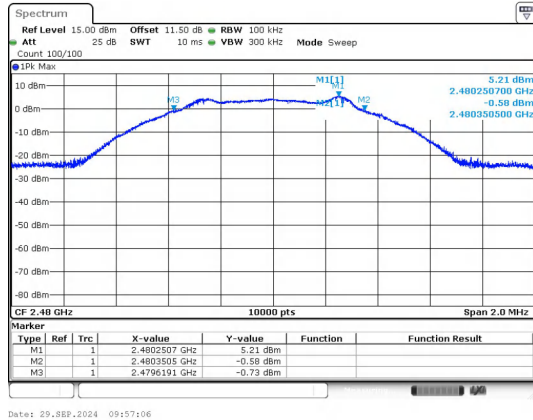
3) 6dB Bandwidth

Test Result

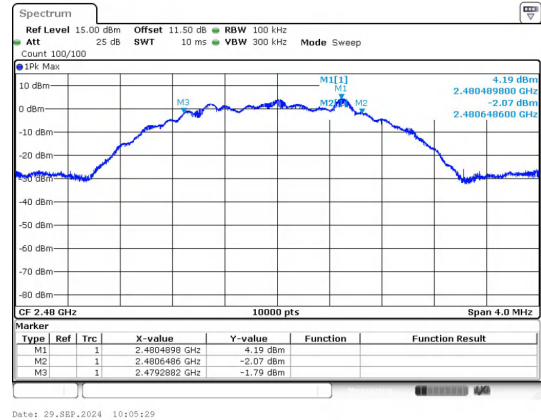
Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
BLE 1M	0	2402	0.7300	≥0.5	PASS
	19	2440	0.7300		PASS
	39	2480	0.7300		PASS
BLE 2M	0	2402	1.390		PASS
	19	2440	1.350		PASS
	39	2480	1.360		PASS

Test Graphs





BLE 1M_Channel 39



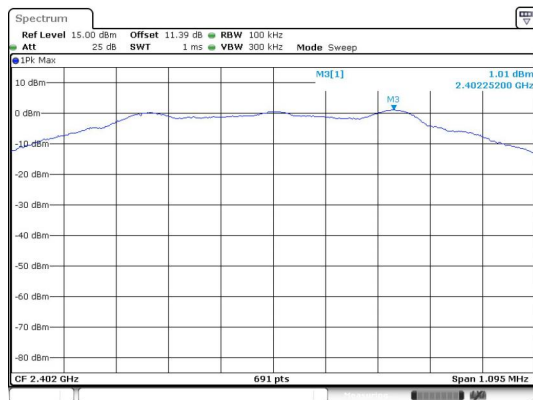
BLE 2M_Channel 39

4) Conducted Out Of Band Emission

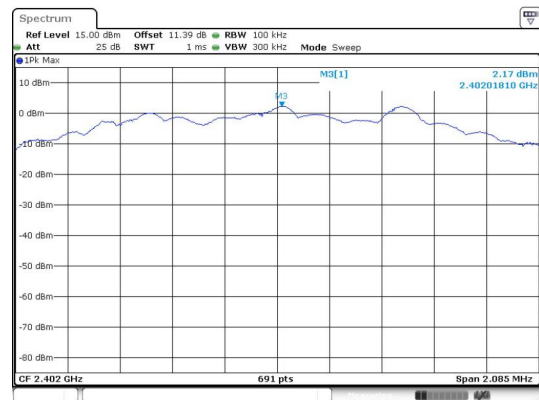
Test Result

Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
BLE 1M	0	2400.00	-39.911	-18.99	-20.921	PASS
		4804.68	-37.781	-18.99	-18.791	PASS
	19	4879.59	-29.519	-15.2	-14.319	PASS
	39	2483.50	-49.488	-14.8	-34.688	PASS
		4960.33	-29.860	-14.8	-15.060	PASS
BLE 2M	0	2400.00	-27.880	-17.83	-10.050	PASS
		4804.68	-44.854	-17.83	-27.024	PASS
	19	4881.25	-31.528	-16.23	-15.298	PASS
	39	2483.50	-48.038	-15.78	-32.258	PASS
		4958.66	-31.244	-15.78	-15.464	PASS

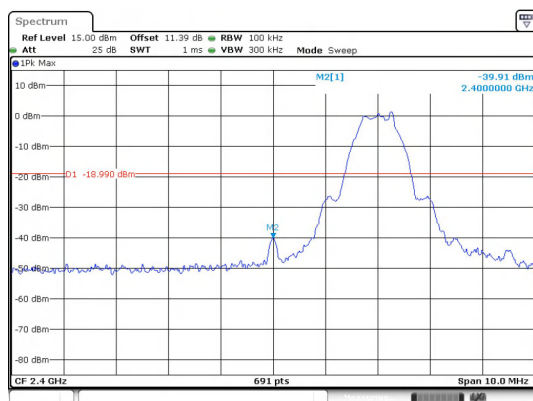
Test Graphs



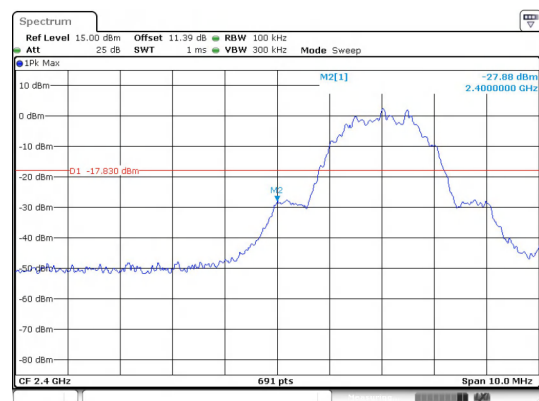
In-Band Reference Level
BLE 1M_Channel 0



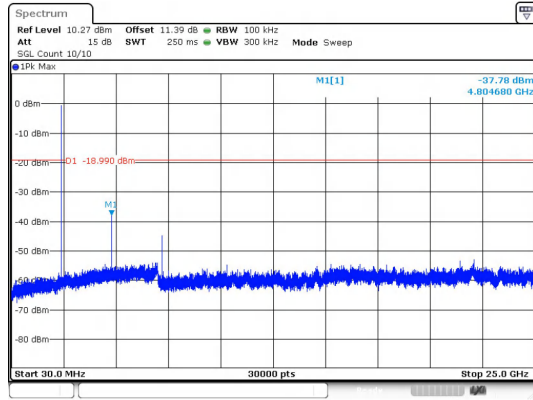
In-Band Reference Level
BLE 2M_Channel 0



Out Of Band Emission
BLE 1M_Channel 0

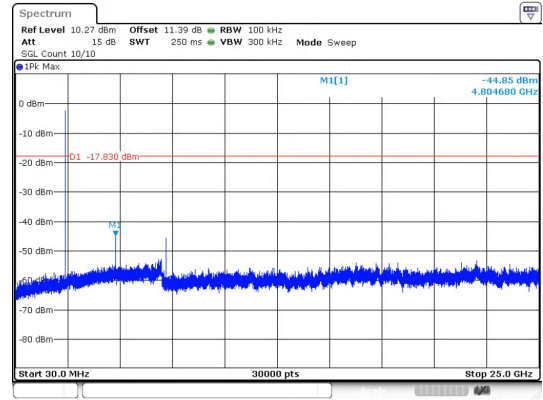


Out Of Band Emission
BLE 2M_Channel 0



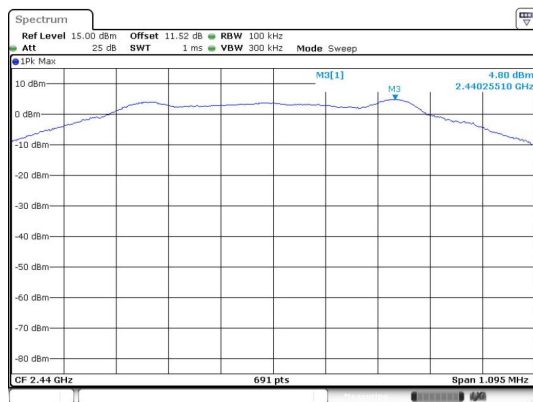
Date: 29.SEP.2024 09:48:30

30.0 MHz - 25000.0 MHz
BLE 1M_Channel 0



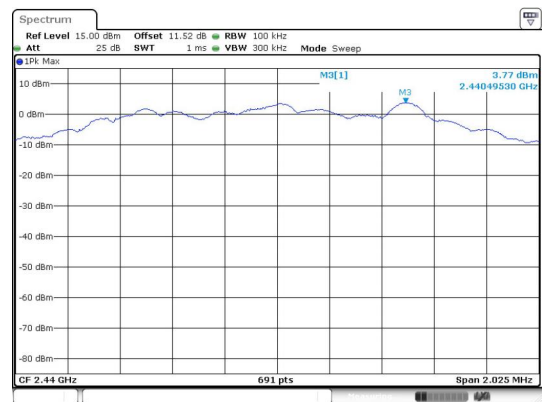
Date: 29.SEP.2024 17:19:44

30.0 MHz - 25000.0 MHz
BLE 2M_Channel 0



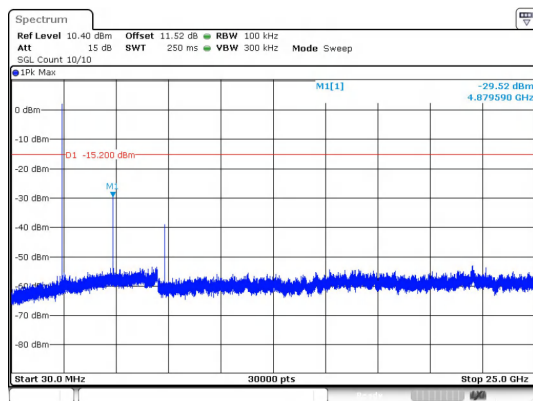
Date: 29.SEP.2024 09:55:02

In-Band Reference Level
BLE 1M_Channel 19



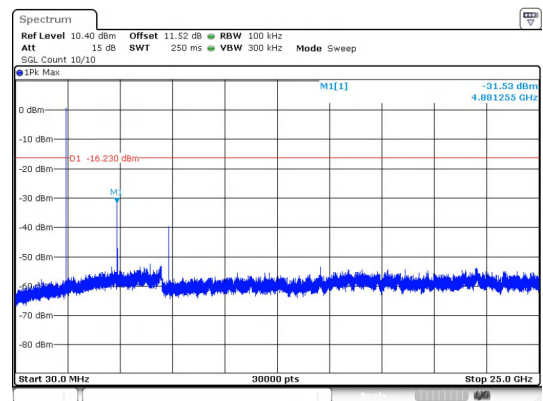
Date: 29.SEP.2024 10:04:08

In-Band Reference Level
BLE 2M_Channel 19



Date: 29.SEP.2024 09:55:26

30.0 MHz - 25000.0 MHz
BLE 1M_Channel 19

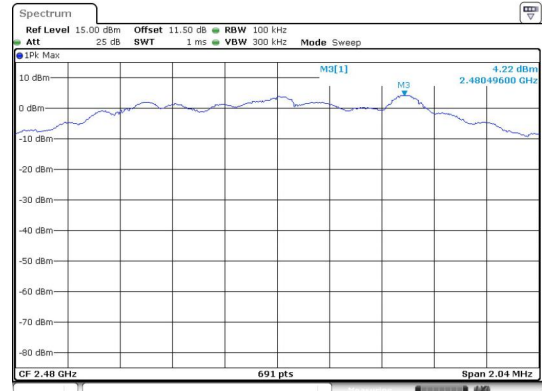


Date: 29.SEP.2024 10:04:32

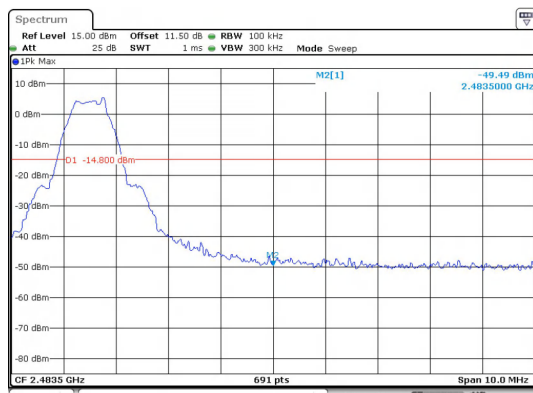
30.0 MHz - 25000.0 MHz
BLE 2M_Channel 19



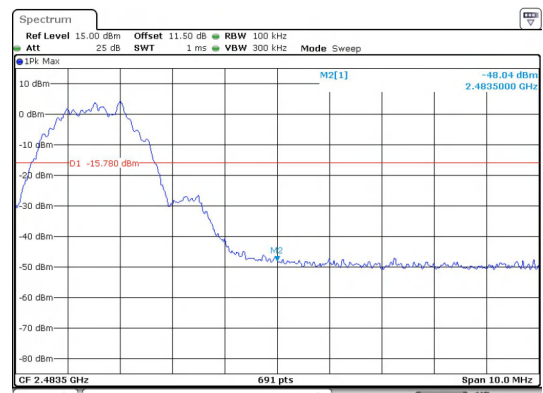
**In-Band Reference Level
BLE 1M_Channel 39**



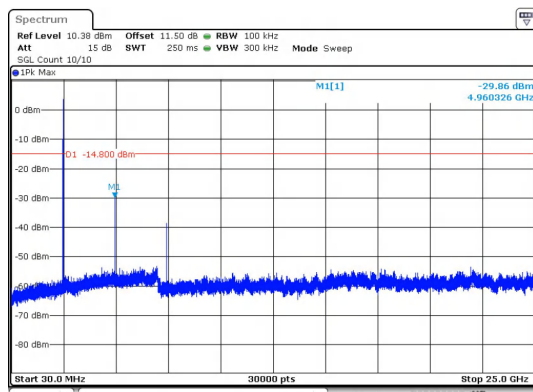
**In-Band Reference Level
BLE 2M_Channel 39**



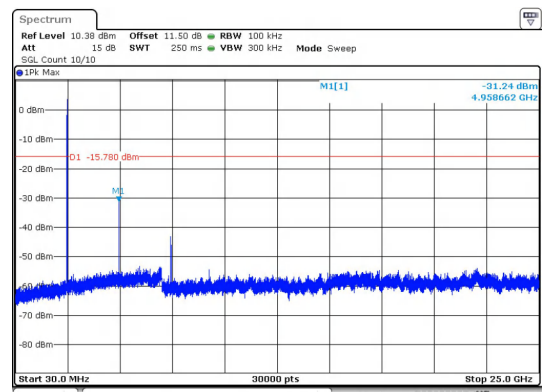
**Out Of Band Emission
BLE 1M_Channel 39**



**Out Of Band Emission
BLE 2M_Channel 39**



**30.0 MHz - 25000.0 MHz
BLE 1M_Channel 39**



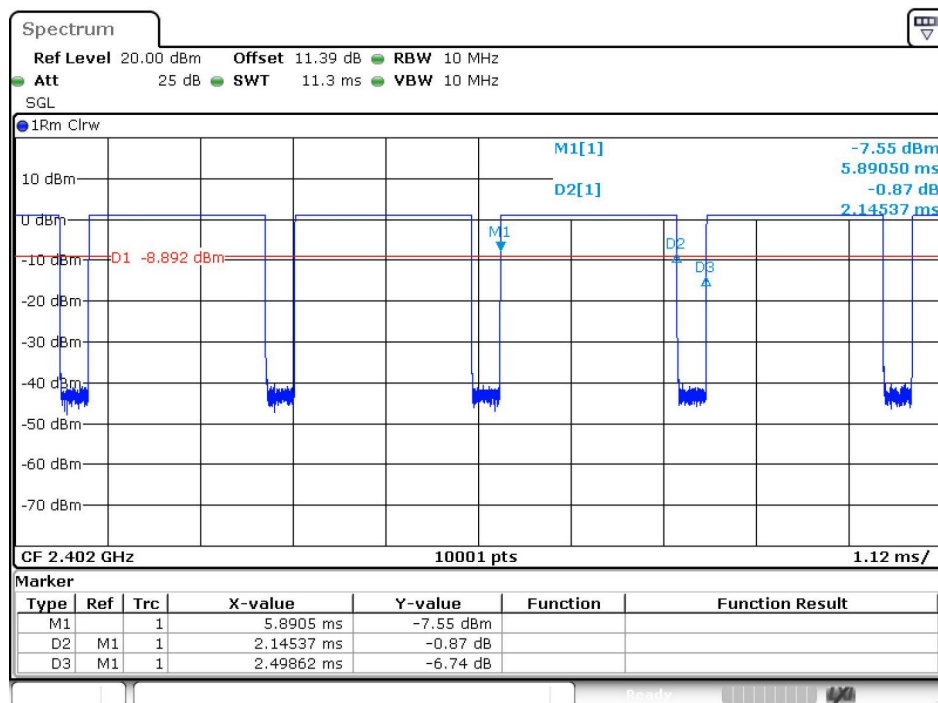
**30.0 MHz - 25000.0 MHz
BLE 2M_Channel 39**

5) Duty Cycle

Test Result

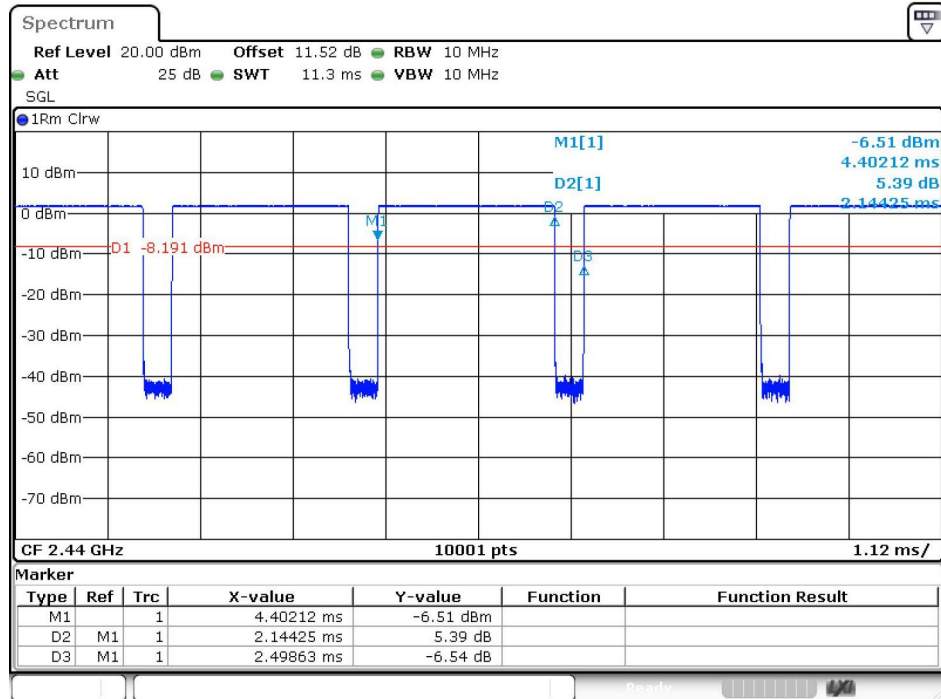
Mode	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
BLE 1M	0	2.145	2.499	85.86	0.8586	0.6621	0.47
	19	2.144	2.499	85.82	0.8582	0.6641	0.47
	39	2.144	2.500	85.78	0.8578	0.6661	0.47
BLE 2M	0	1.083	1.874	57.80	0.5780	2.3807	0.92
	19	1.084	1.874	57.82	0.5782	2.3792	0.92
	39	1.084	1.874	57.82	0.5782	2.3792	0.92

Test Graphs



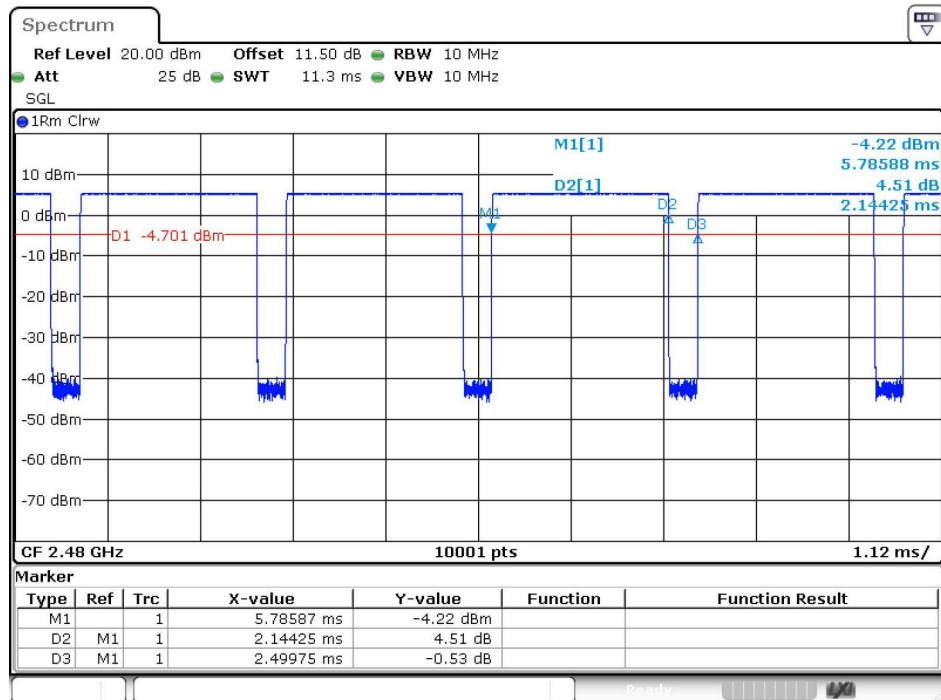
Date: 29.SEP.2024 09:46:19

BLE 1M_Channel 0



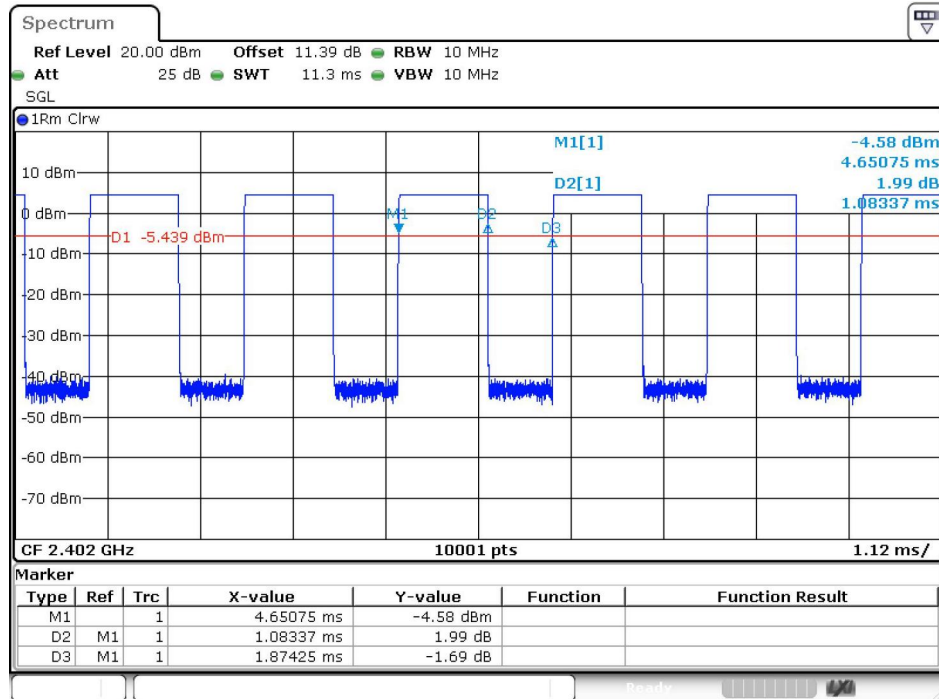
Date: 29.SEP.2024 09:49:44

BLE 1M_Channel 19

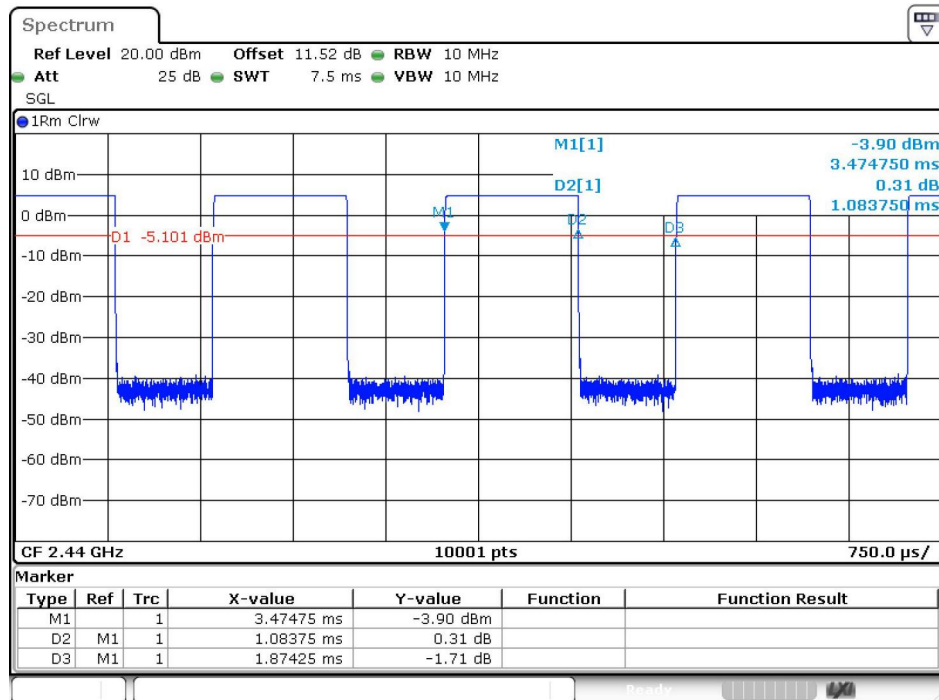


Date: 29.SEP.2024 09:56:36

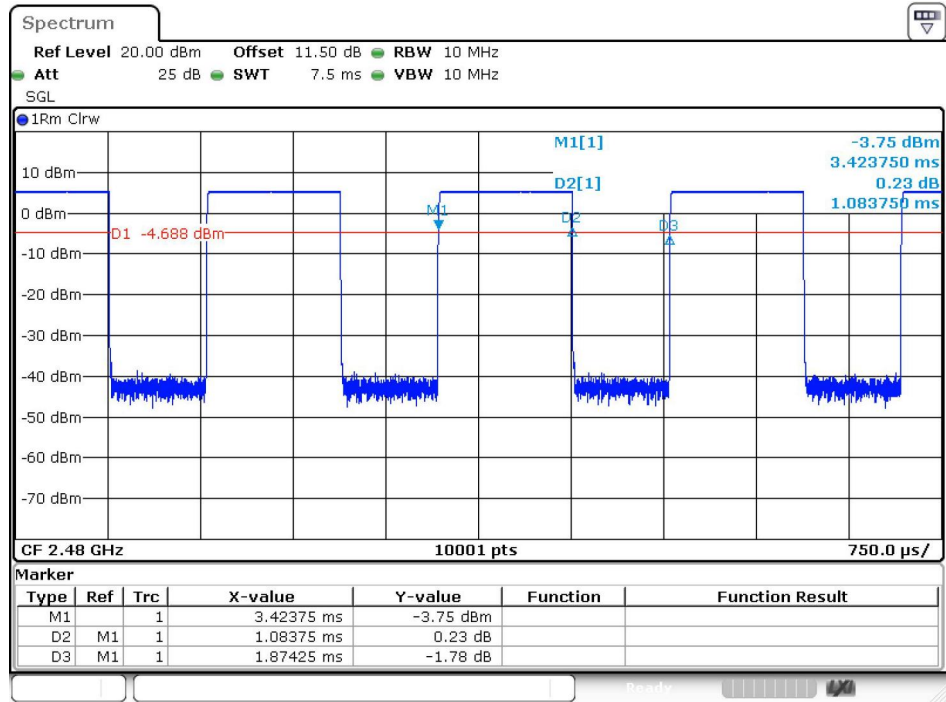
BLE 1M_Channel 39



BLE 2M_Channel 0



BLE 2M_Channel 19



Date: 29.SEP.2024 10:04:58

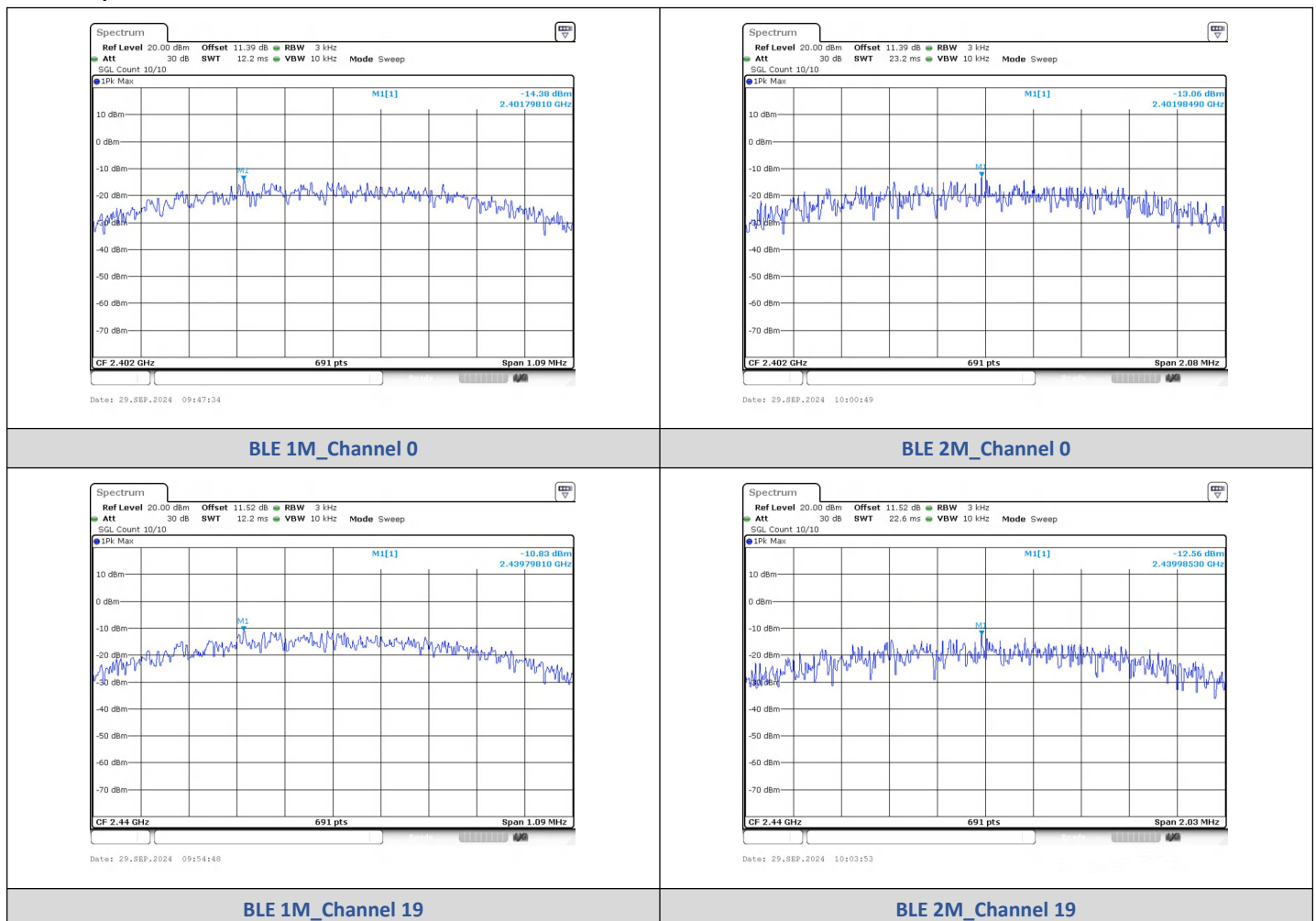
BLE 2M_Channel 39

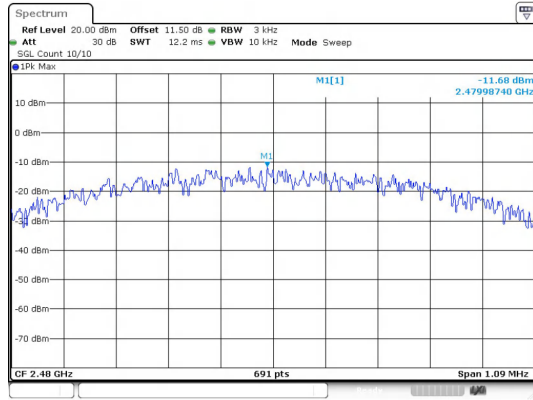
6) Power Spectral Density

Test Result

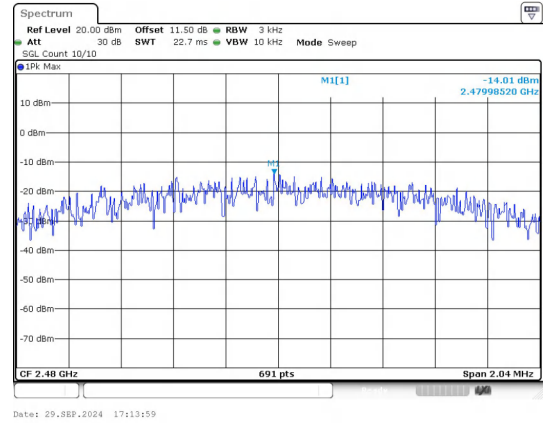
Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
BLE 1M	0	-14.379	≤8	PASS
BLE 1M	19	-10.826	≤8	PASS
BLE 1M	39	-11.678	≤8	PASS
BLE 2M	0	-13.056	≤8	PASS
BLE 2M	19	-12.556	≤8	PASS
BLE 2M	39	-14.005	≤8	PASS

Test Graphs





BLE 1M_Channel 39



BLE 2M_Channel 39