

Appendix Report

Project No.:	CISR250401007
Test Engineer:	James Wang
Supervised by:	Rory Huang

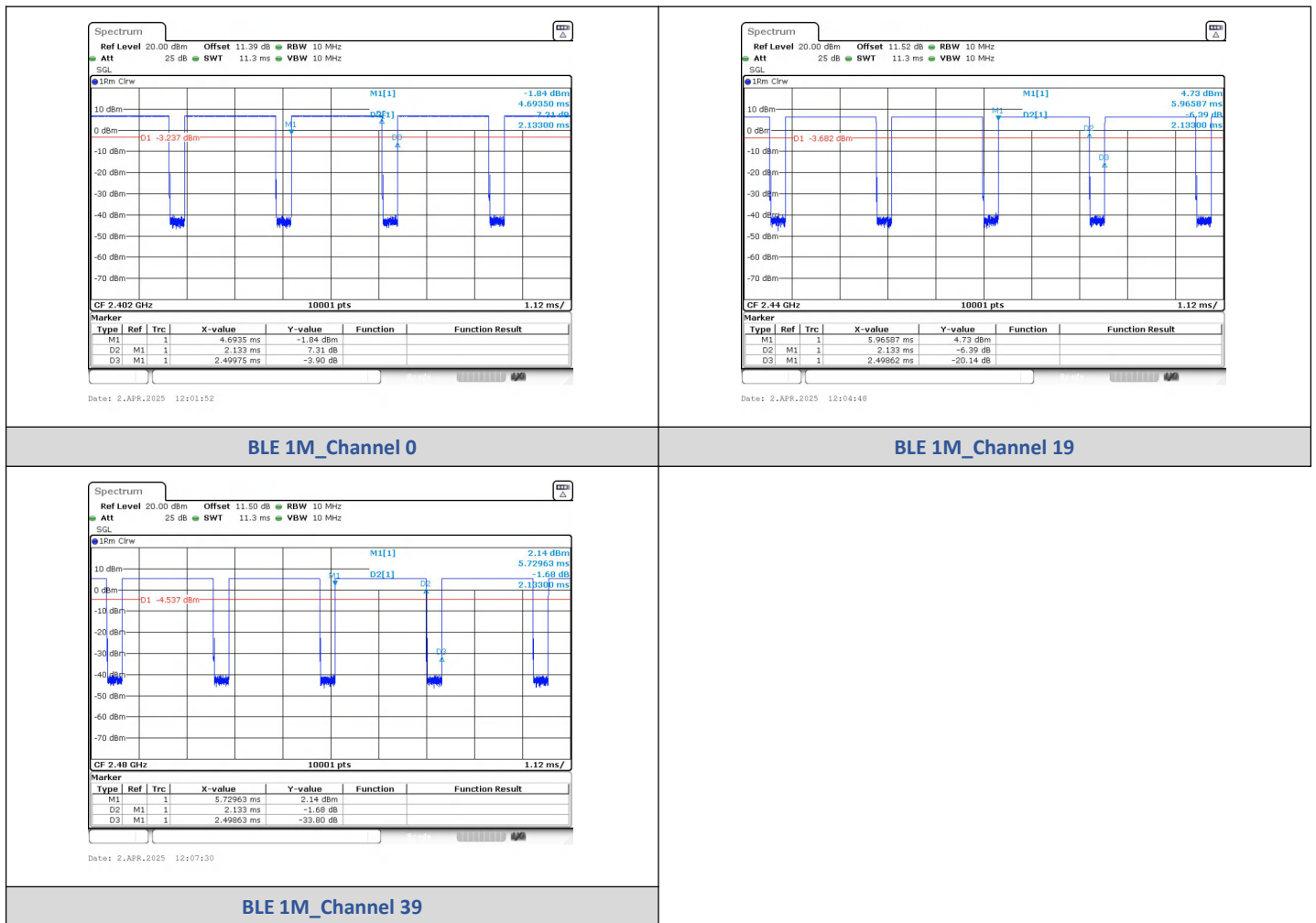
1) Duty Cycle

Test Result

Left:

Mode	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
BLE 1M	0	2.133	2.500	85.33	0.8533	0.689	0.4688
	19	2.133	2.499	85.37	0.8537	0.6869	0.4688
	39	2.133	2.499	85.37	0.8537	0.6869	0.4688

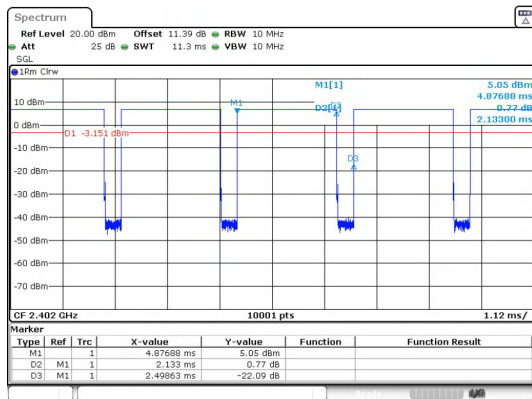
Test Graphs



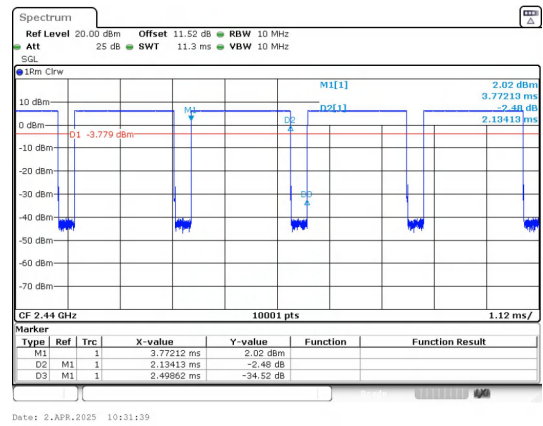
Right:

Mode	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
BLE 1M	0	2.133	2.499	85.37	0.8537	0.6869	0.4688
	19	2.134	2.499	85.41	0.8541	0.6849	0.4686
	39	2.133	2.499	85.37	0.8537	0.6869	0.4688

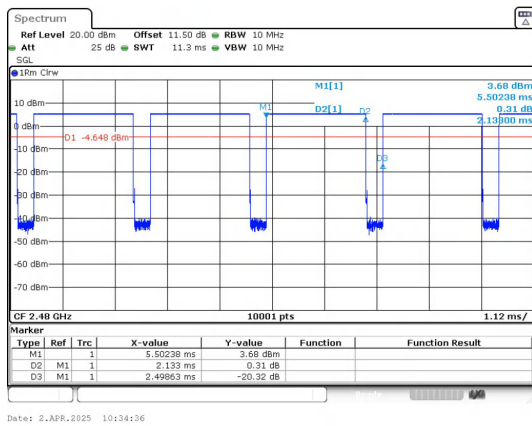
Test Graphs



BLE 1M_Channel 0



BLE 1M_Channel 19



BLE 1M_Channel 39

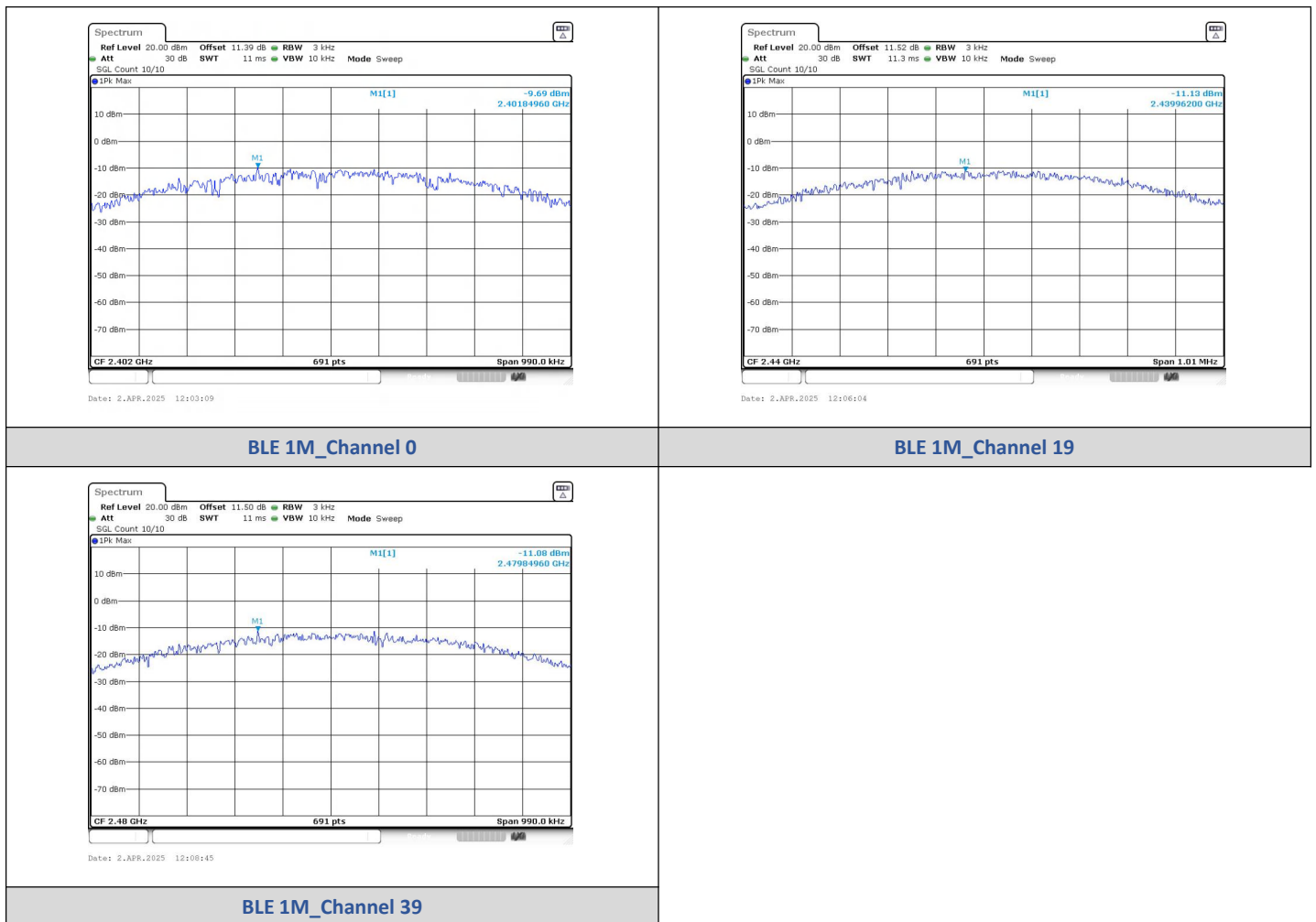
2) Power Spectral Density

Test Result

Left:

Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
BLE 1M	0	-9.690	≤8	PASS
BLE 1M	19	-11.130	≤8	PASS
BLE 1M	39	-11.080	≤8	PASS

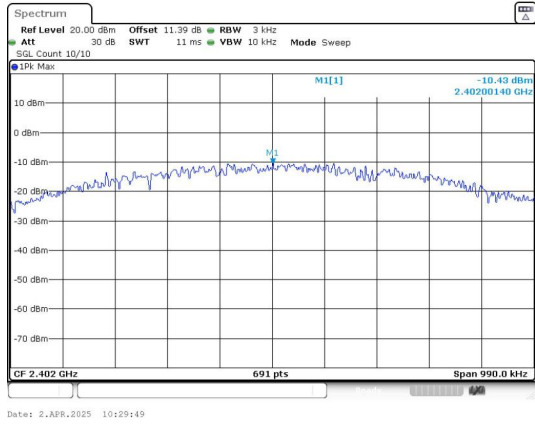
Test Graphs



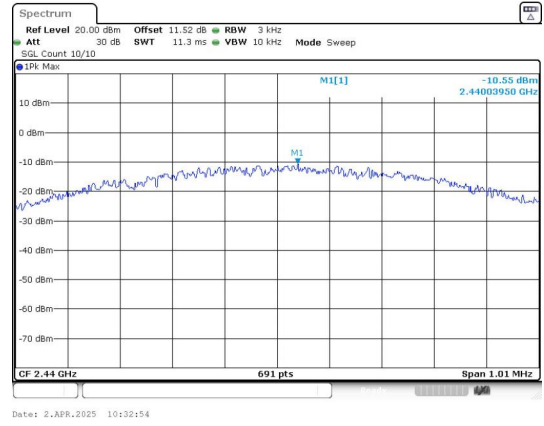
Right:

Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
BLE 1M	0	-10.430	≤8	PASS
BLE 1M	19	-10.550	≤8	PASS
BLE 1M	39	-11.650	≤8	PASS

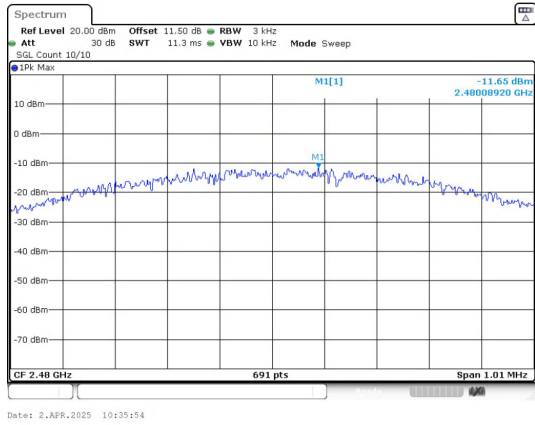
Test Graphs



BLE 1M_Channel 0



BLE 1M_Channel 19



BLE 1M_Channel 39

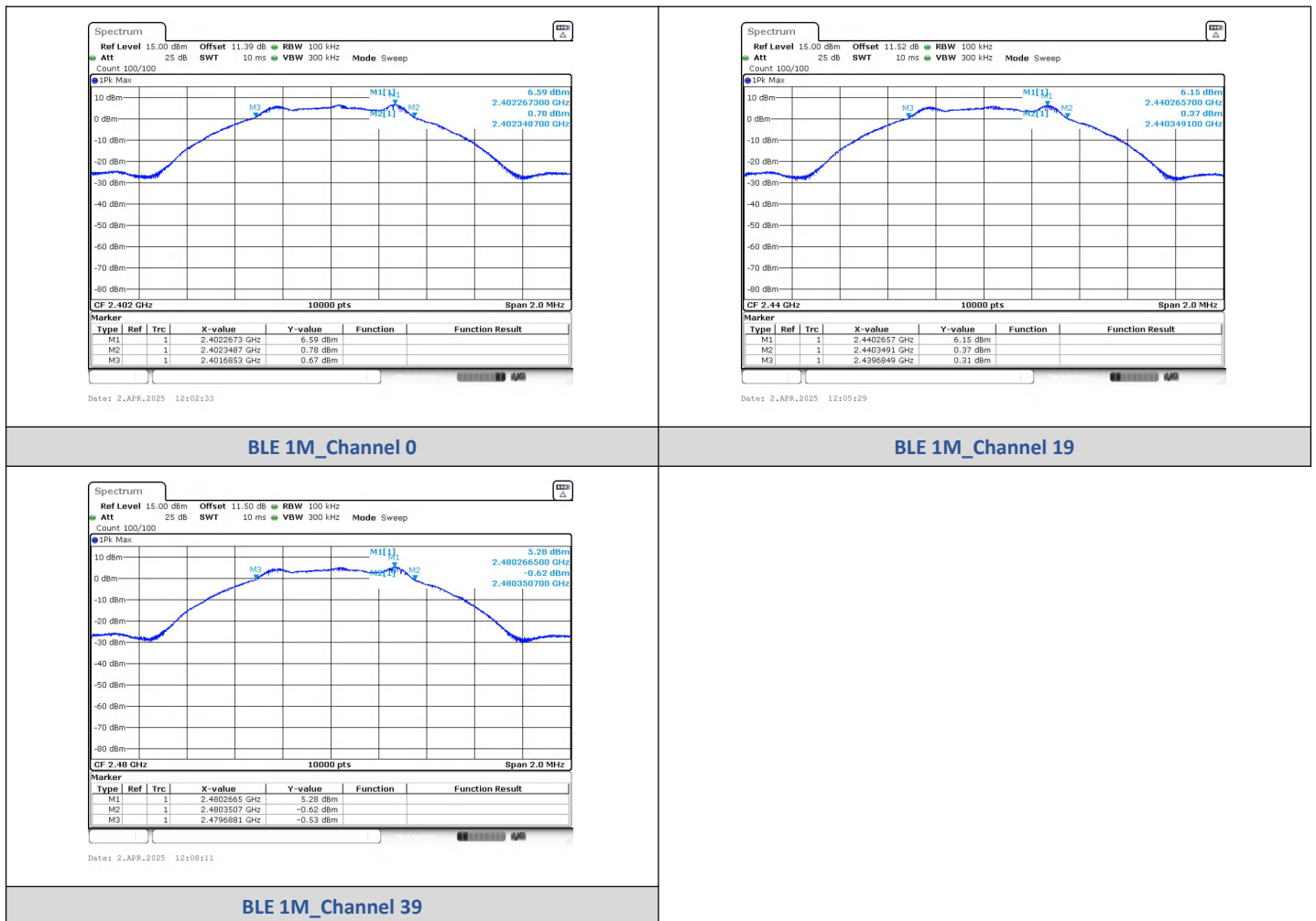
3) 6dB Bandwidth

Test Result

Left:

Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
BLE 1M	0	2402	0.6600	≥0.5	PASS
	19	2440	0.6700		PASS
	39	2480	0.6600		PASS

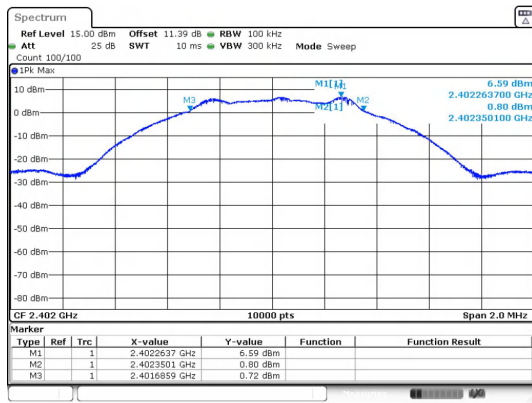
Test Graphs



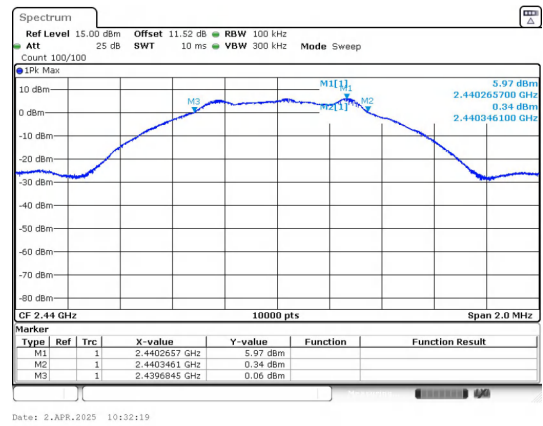
Right:

Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
BLE 1M	0	2402	0.6600	≥0.5	PASS
	19	2440	0.6700		PASS
	39	2480	0.6700		PASS

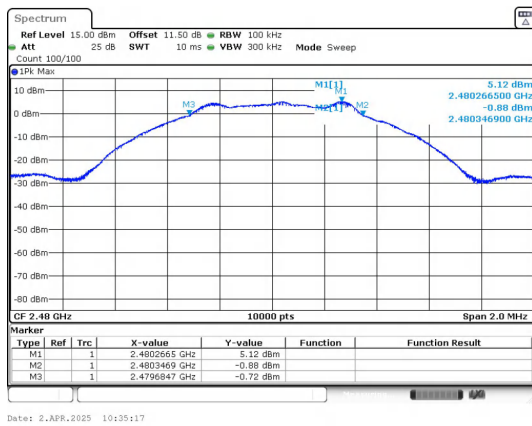
Test Graphs



BLE 1M_Channel 0



BLE 1M_Channel 19



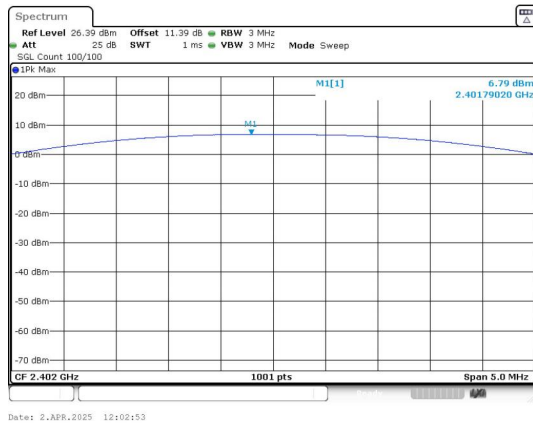
BLE 1M_Channel 39

4) Conducted Output Power

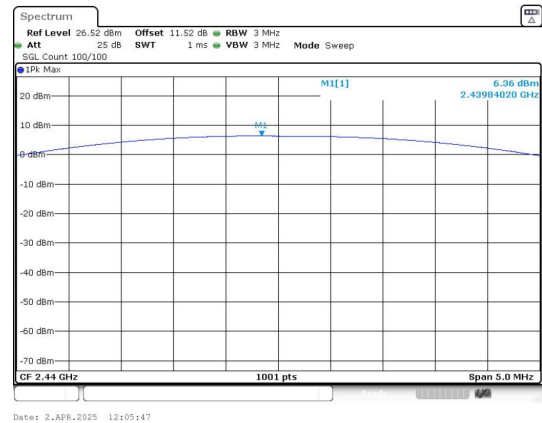
Test Result

Mode	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
BLE 1M	0	6.79	4.78	≤30	PASS
	19	6.36	4.33	≤30	PASS
	39	5.52	3.56	≤30	PASS

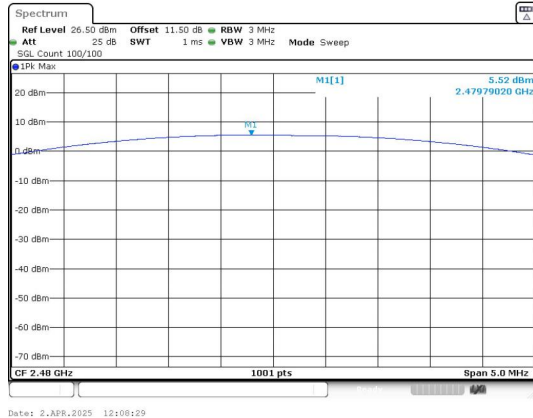
Test Graphs



Peak Output Power
BLE 1M_Channel 0



Peak Output Power
BLE 1M_Channel 19

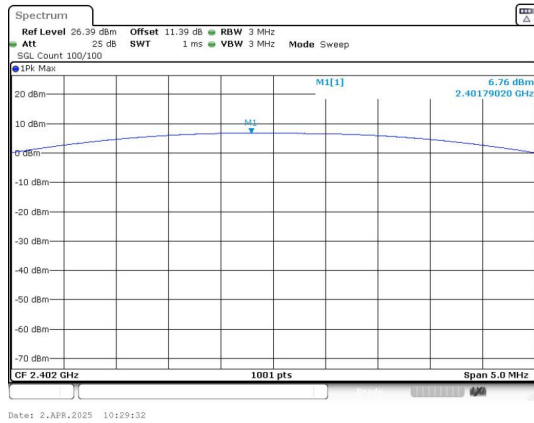


Peak Output Power
BLE 1M_Channel 39

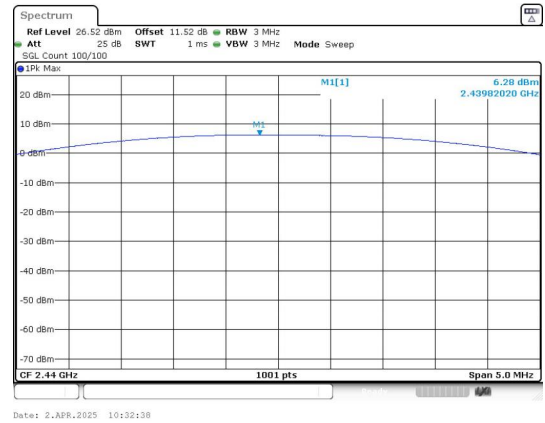
Right:

Mode	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
BLE 1M	0	6.76	4.74	≤30	PASS
	19	6.28	4.25	≤30	PASS
	39	5.40	3.47	≤30	PASS

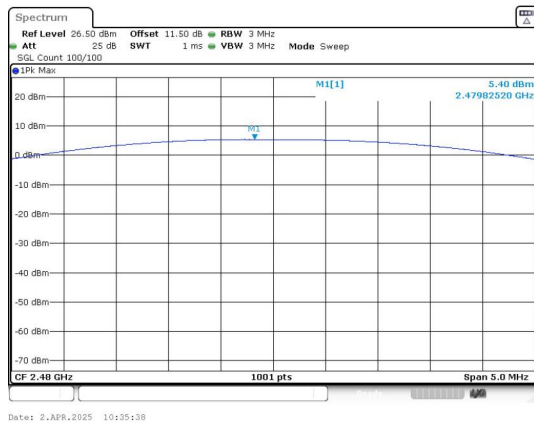
Test Graphs



Peak Output Power
BLE 1M_Channel 0



Peak Output Power
BLE 1M_Channel 19



Peak Output Power
BLE 1M_Channel 39

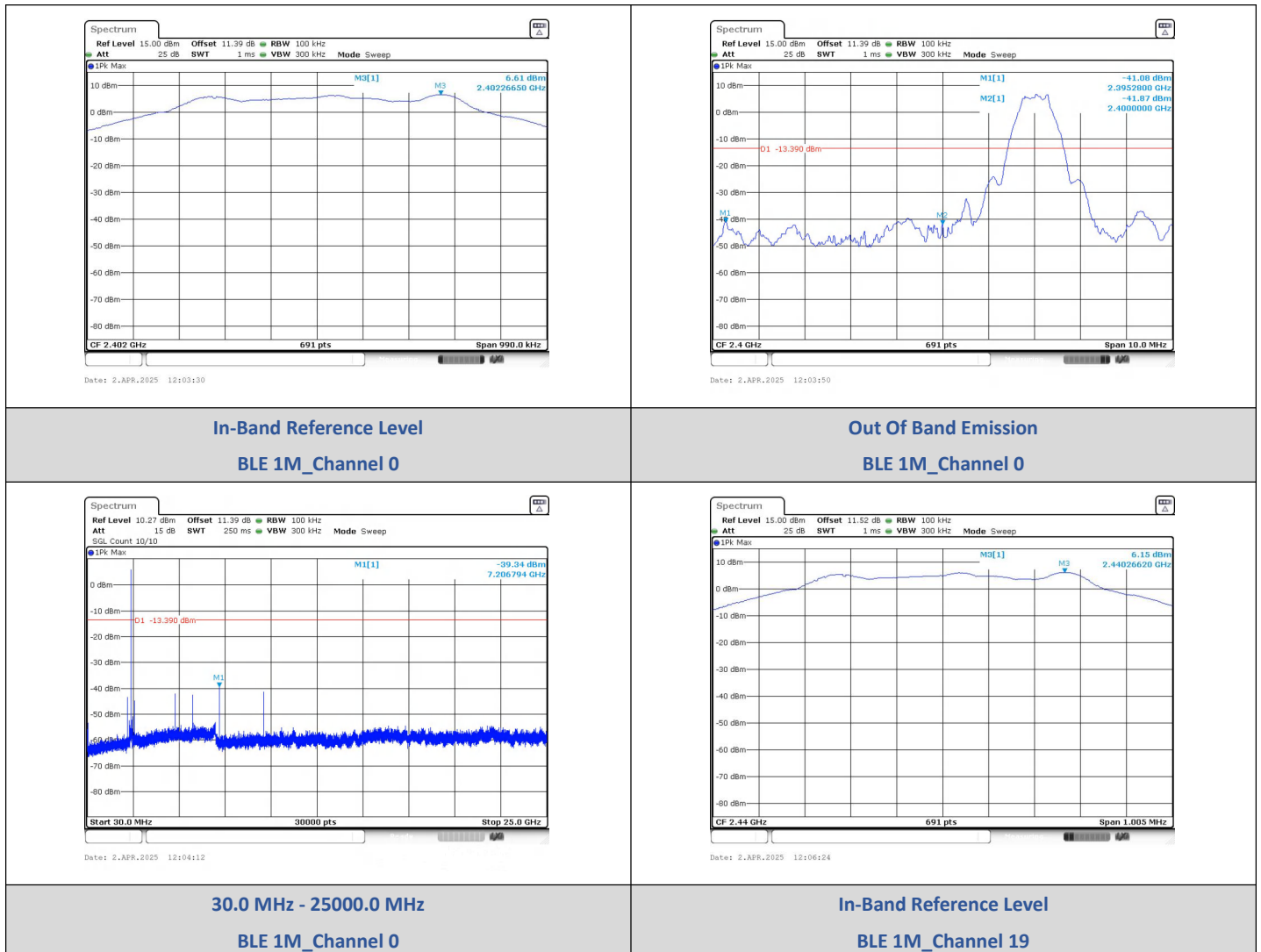
5) Conducted Out Of Band Emission

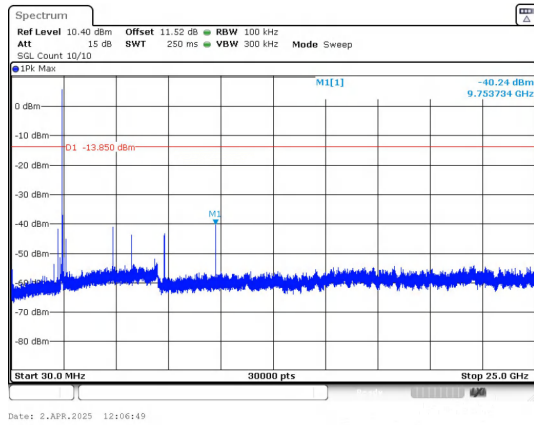
Test Result

Left:

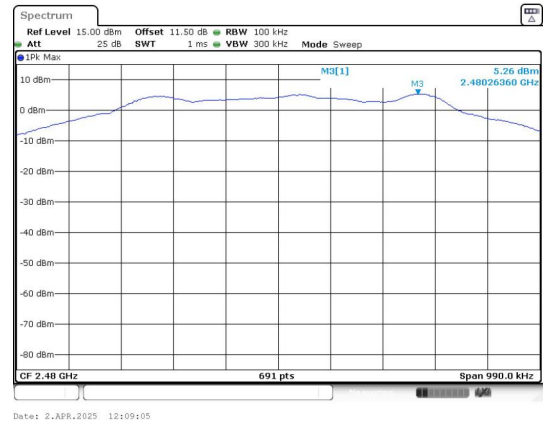
Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
BLE 1M	0	2395.28	-41.077	-13.39	-27.687	PASS
		2400.00	-47.510	-13.39	-34.120	PASS
		7206.80	-39.342	-13.39	-25.952	PASS
	19	9753.73	-40.235	-13.85	-26.385	PASS
	39	2483.50	-44.570	-14.74	-29.830	PASS
		9914.37	-37.220	-14.74	-22.480	PASS

Test Graphs

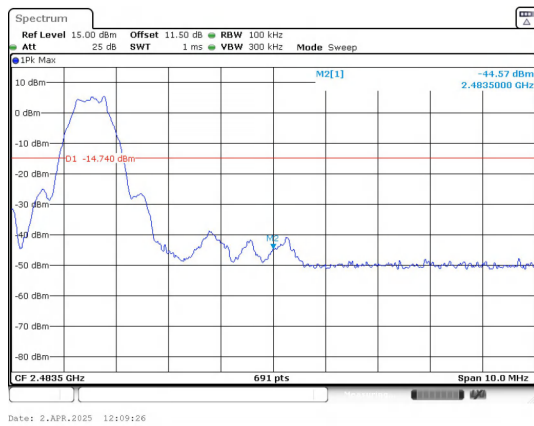




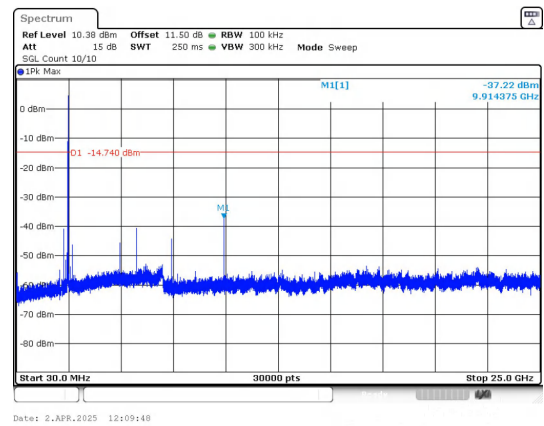
30.0 MHz - 25000.0 MHz
BLE 1M_Channel 19



In-Band Reference Level
BLE 1M_Channel 39



Out Of Band Emission
BLE 1M_Channel 39

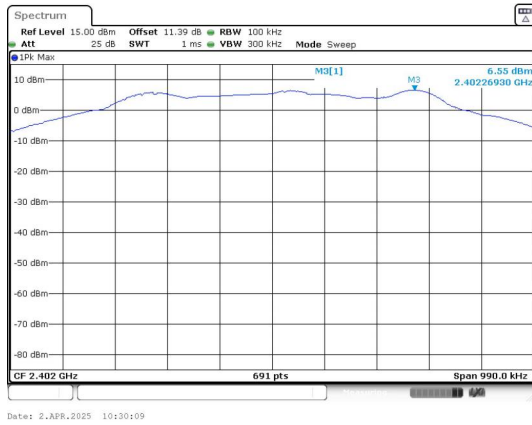


30.0 MHz - 25000.0 MHz
BLE 1M_Channel 39

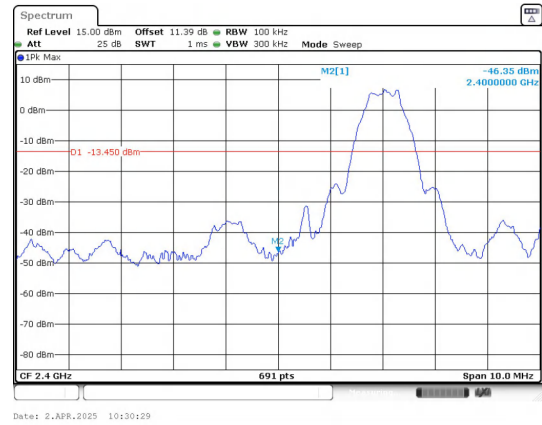
Right:

Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
BLE 1M	0	2399.00	-36.509	-13.45	-23.059	PASS
		2400.00	-46.350	-13.45	-32.900	PASS
		7205.10	-39.464	-13.45	-26.014	PASS
	19	9753.73	-39.719	-14.01	-25.709	PASS
	39	2483.50	-44.950	-14.88	-30.070	PASS
		9914.37	-37.243	-14.88	-22.363	PASS

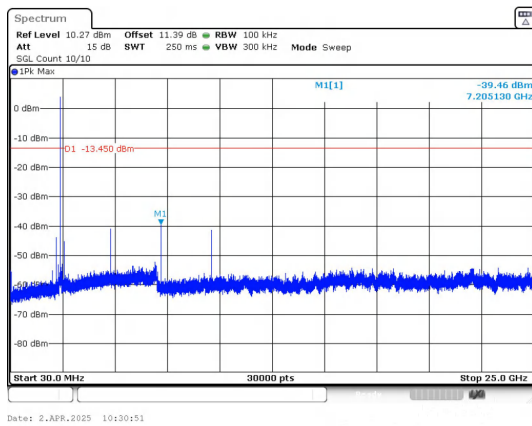
Test Graphs



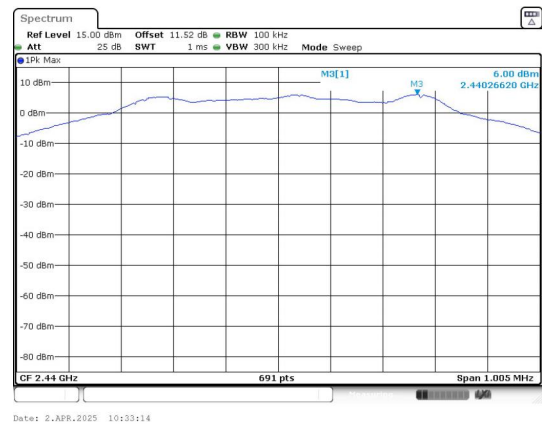
**In-Band Reference Level
BLE 1M_Channel 0**



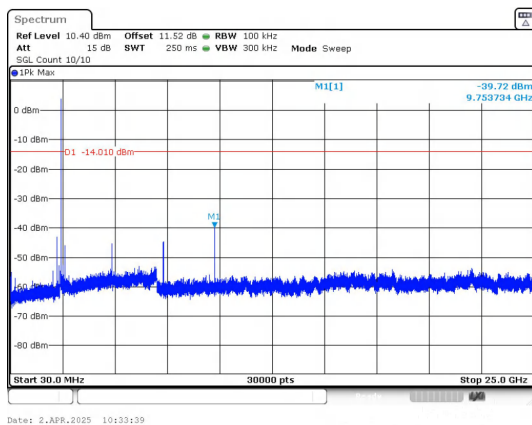
**Out Of Band Emission
BLE 1M_Channel 0**



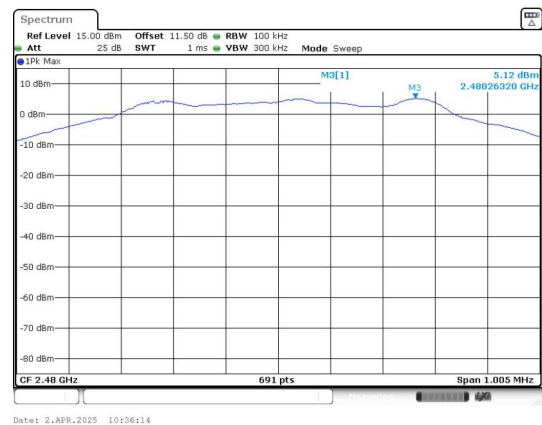
**30.0 MHz - 25000.0 MHz
BLE 1M_Channel 0**



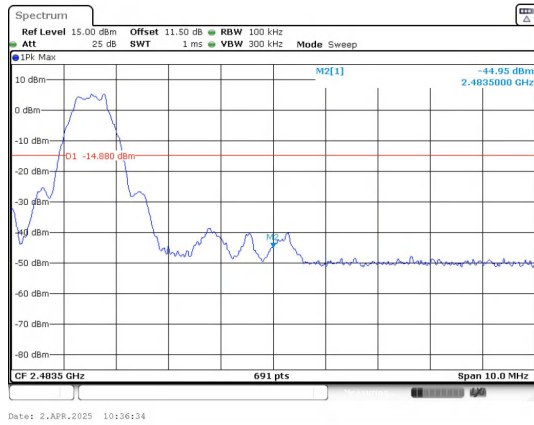
**In-Band Reference Level
BLE 1M_Channel 19**



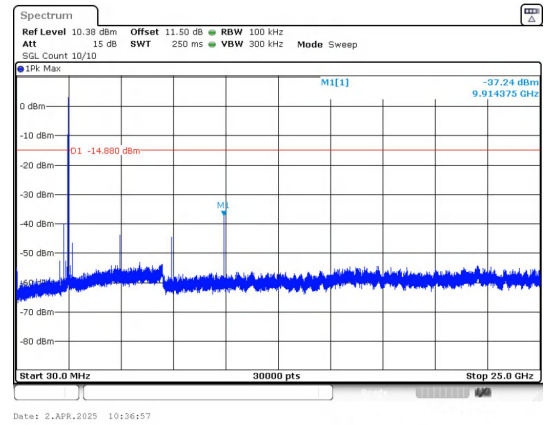
**30.0 MHz - 25000.0 MHz
BLE 1M_Channel 19**



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



Out Of Band Emission
BLE 1M_Channel 39



30.0 MHz - 25000.0 MHz
BLE 1M_Channel 39

-----End of the report-----