Appendix Report

Project No.:	CISR250401008
Test Engineer:	James Wang
Supervised by:	Rory Huang

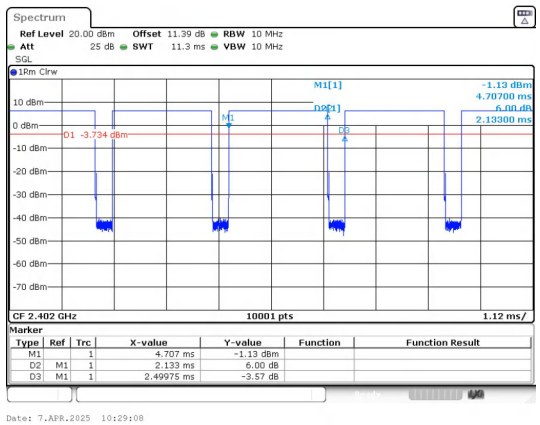
1) Duty Cycle

Test Result

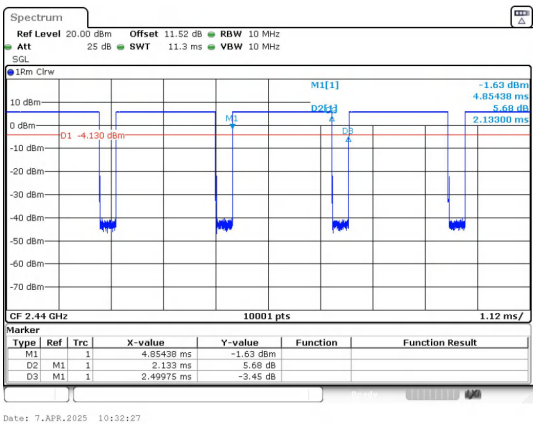
Left:

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	2.500	85.33	0.8533	0.689	0.4688
	39	2.133	2.499	85.37	0.8537	0.6869	0.4688

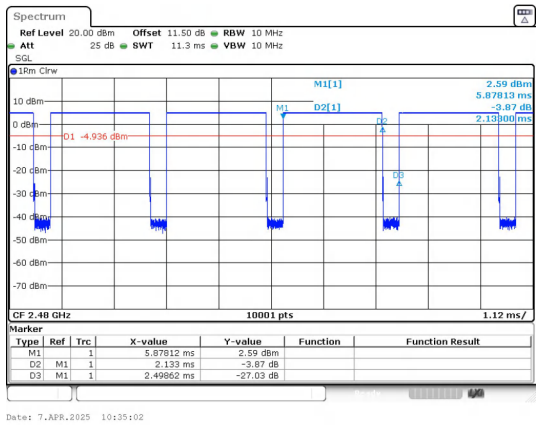
Test Graphs



BLE 1M_Channel 0



BLE 1M_Channel 19

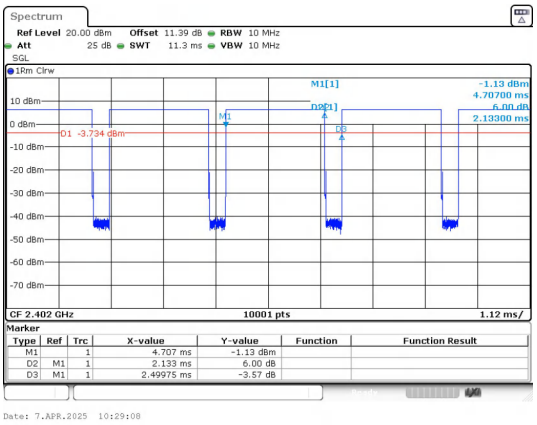


BLE 1M_Channel 39

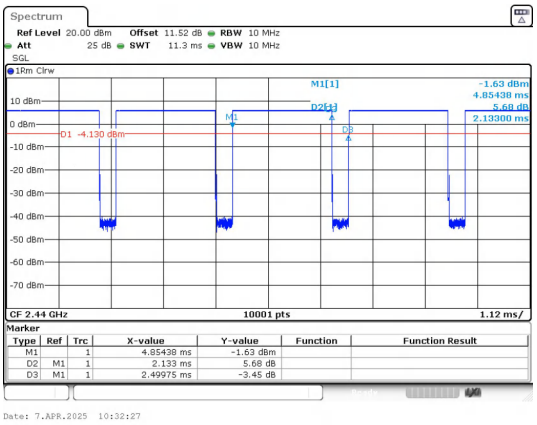
Right:

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

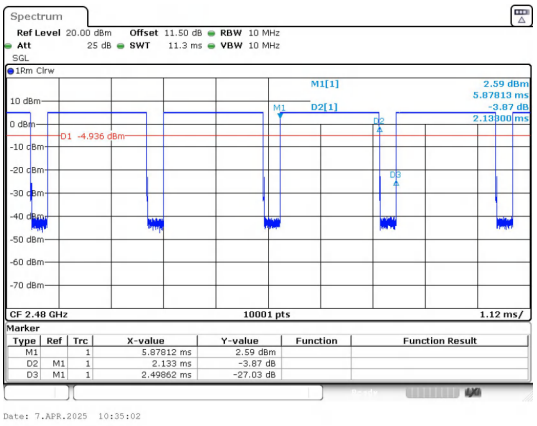
Test Graphs



BLE 1M_Channel 0



BLE 1M_Channel 19



BLE 1M_Channel 39

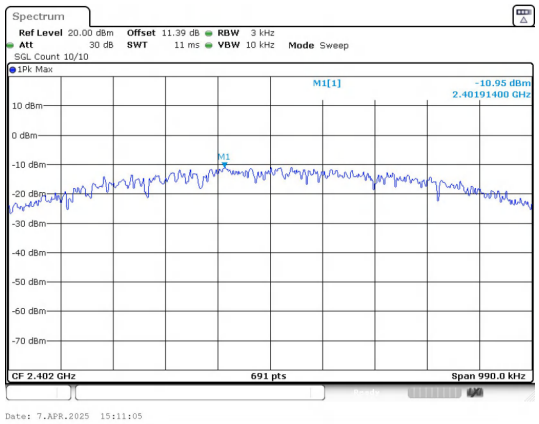
2) Power Spectral Density

Test Result

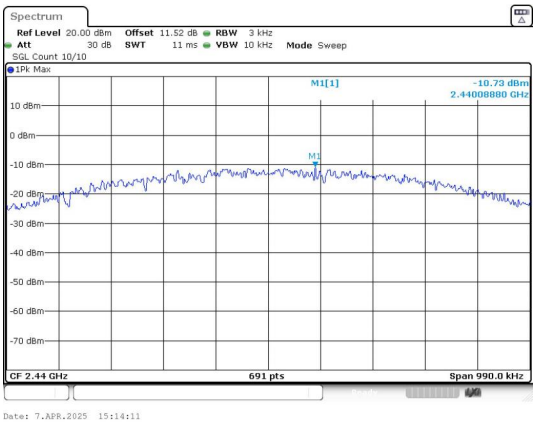
Left:

Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
BLE 1M	0	-10.950	≤8	PASS
BLE 1M	19	-10.730	≤8	PASS
BLE 1M	39	-12.030	≤8	PASS

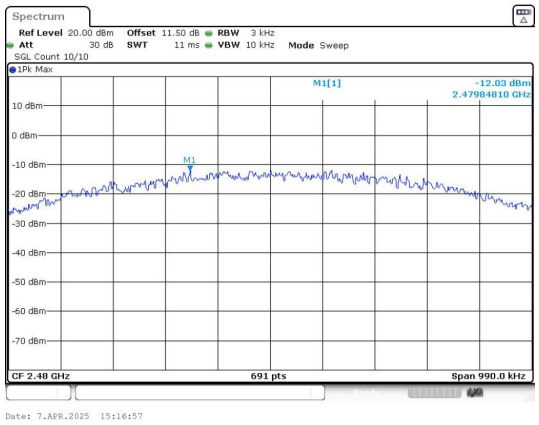
Test Graphs



BLE 1M_Channel 0



BLE 1M_Channel 19

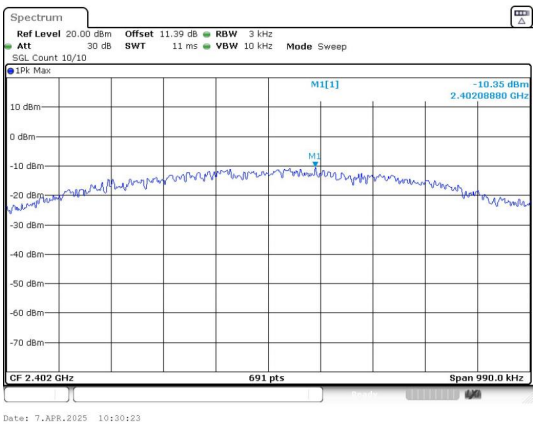


BLE 1M_Channel 39

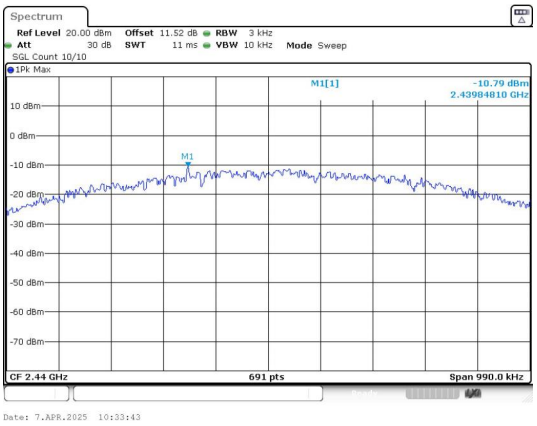
Right:

Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
BLE 1M	0	-10.350	≤8	PASS
BLE 1M	19	-10.790	≤8	PASS
BLE 1M	39	-12.050	≤8	PASS

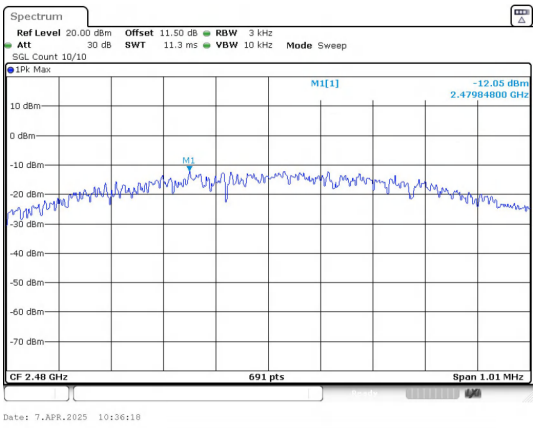
Test Graphs



BLE 1M_Channel 0



BLE 1M_Channel 19



BLE 1M_Channel 39

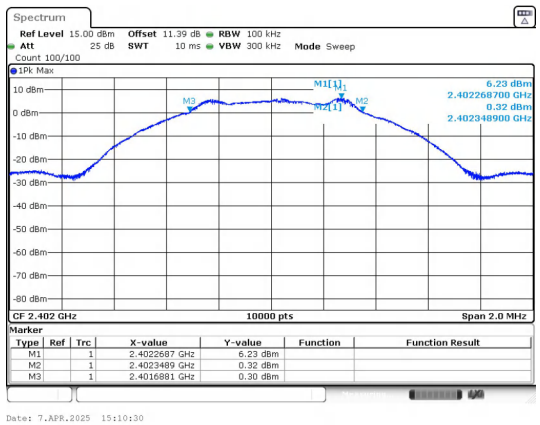
3) 6dB Bandwidth

Test Result

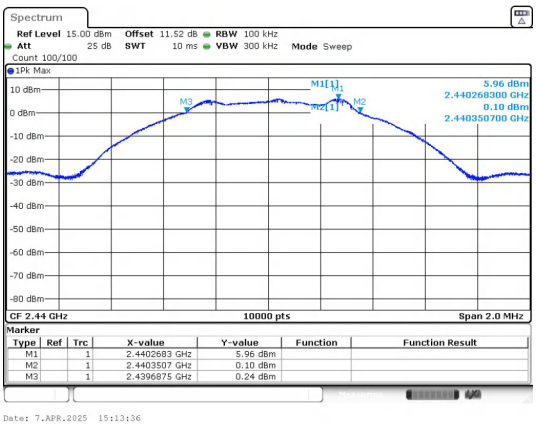
Left:

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

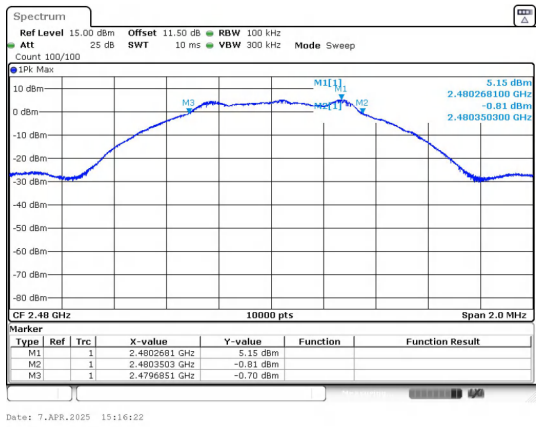
Test Graphs



BLE 1M_Channel 0



BLE 1M_Channel 19

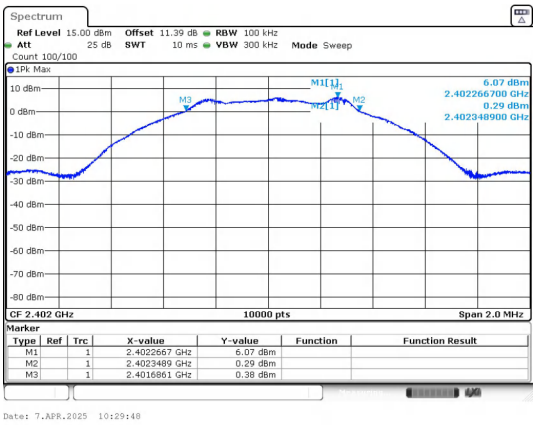


BLE 1M_Channel 39

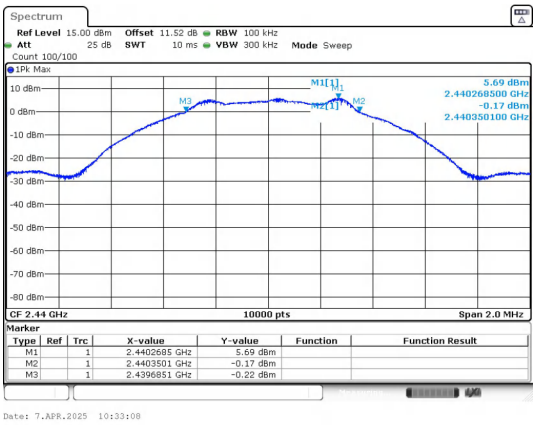
Right:

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

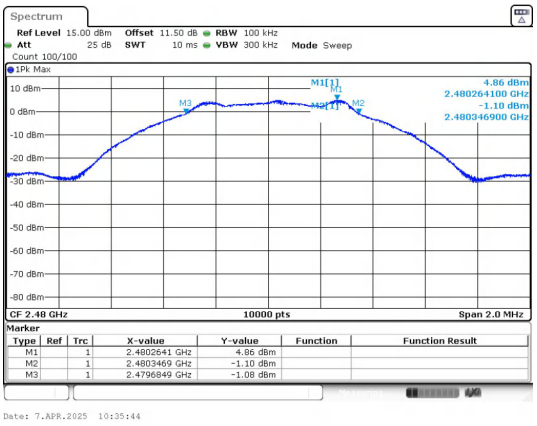
Test Graphs



BLE 1M_Channel 0



BLE 1M_Channel 19



BLE 1M_Channel 39

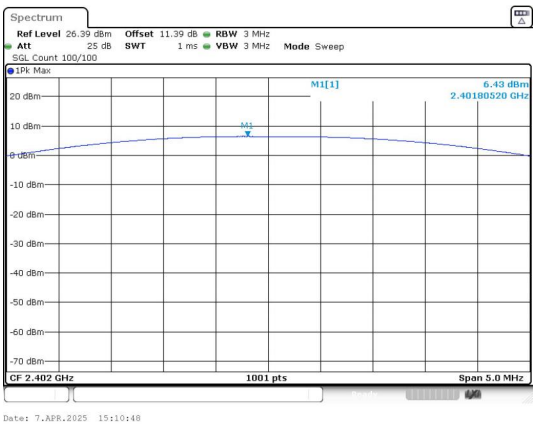
4) Conducted Output Power

Test Result

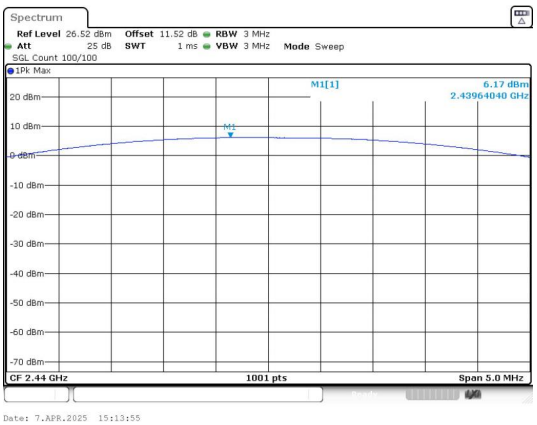
Left:

Mode	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
BLE 1M	0	6.43	4.4	≤30	PASS
	19	6.17	4.14	≤30	PASS
	39	5.39	3.46	≤30	PASS

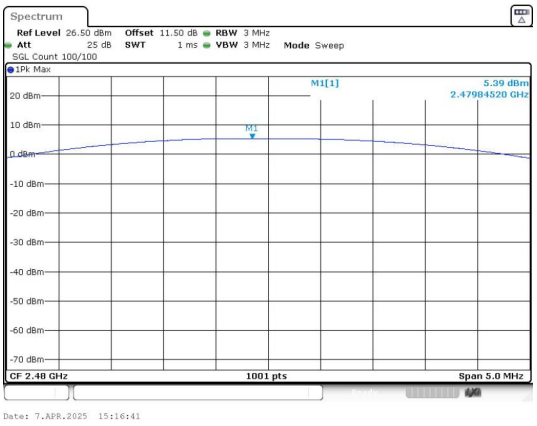
Test Graphs



Peak Output Power
BLE 1M_Channel 0



Peak Output Power
BLE 1M_Channel 19

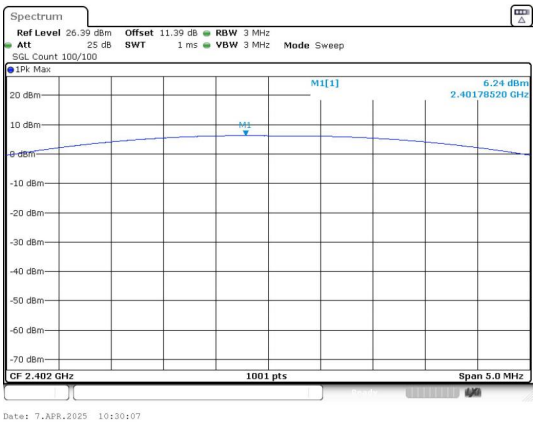


Peak Output Power
BLE 1M_Channel 39

Right:

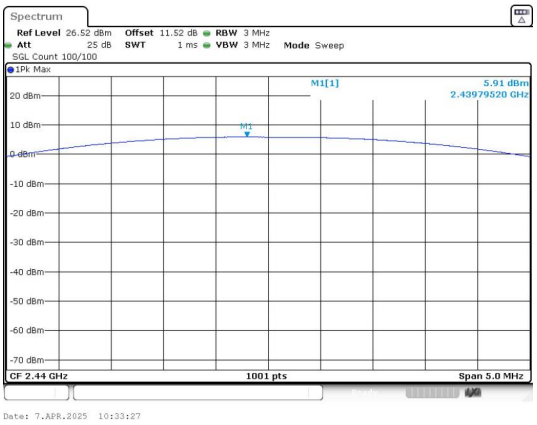
Mode	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
BLE 1M	0	6.24	4.21	≤30	PASS
	19	5.91	3.9	≤30	PASS
	39	5.11	3.24	≤30	PASS

Test Graphs



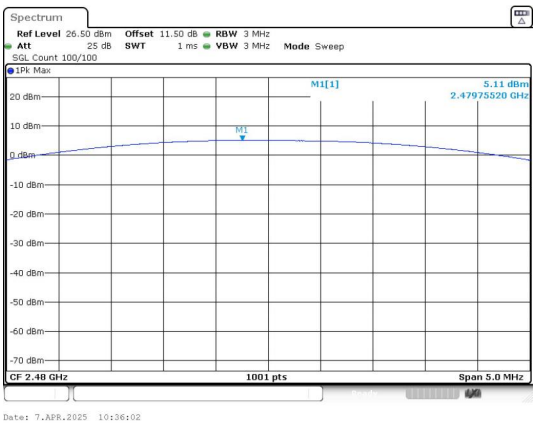
Peak Output Power

BLE 1M_Channel 0



Peak Output Power

BLE 1M_Channel 19



Peak Output Power

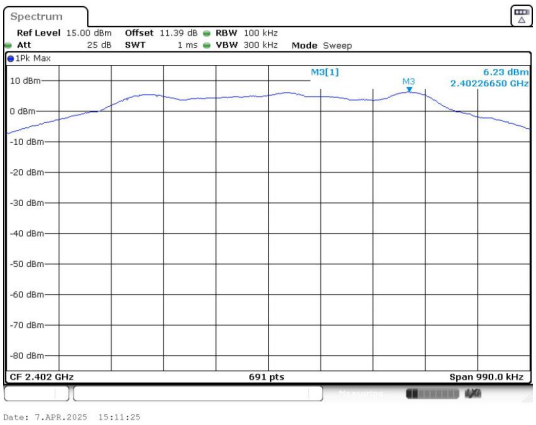
BLE 1M_Channel 39

5) Conducted Out Of Band Emission

Test Result

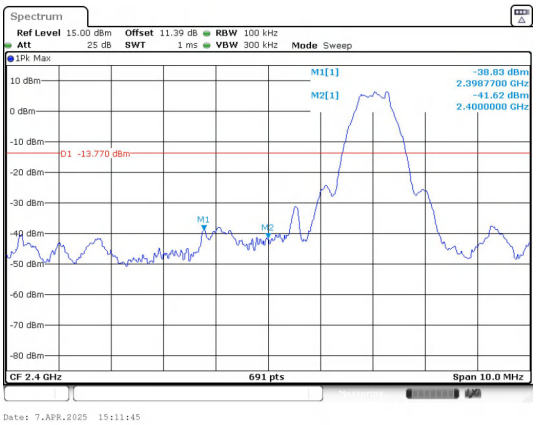
Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
BLE 1M	0	2398.77	-38.831	-13.77	-25.061	PASS
		2400.00	-41.620	-13.77	-27.850	PASS
		7206.00	-37.874	-13.77	-24.104	PASS
	19	9753.73	-39.466	-14.06	-25.406	PASS
	39	2483.50	-44.450	-14.89	-29.560	PASS
		9914.37	-36.891	-14.89	-22.001	PASS

Test Graphs



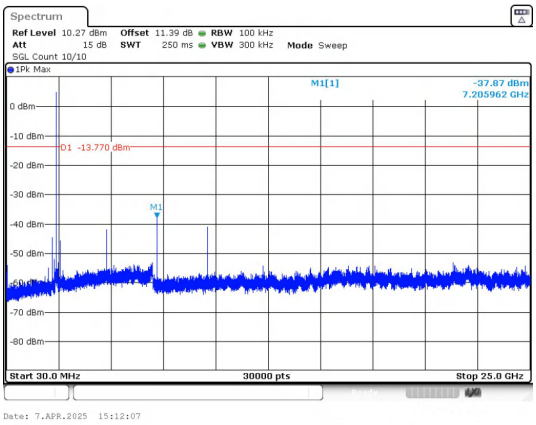
In-Band Reference Level

BLE 1M_Channel 0



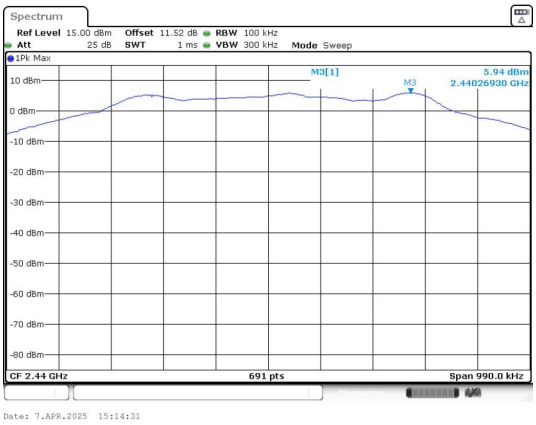
Out Of Band Emission

BLE 1M_Channel 0



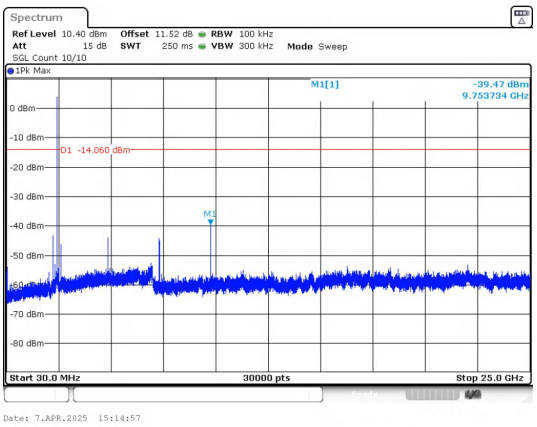
30.0 MHz - 25000.0 MHz

BLE 1M_Channel 0



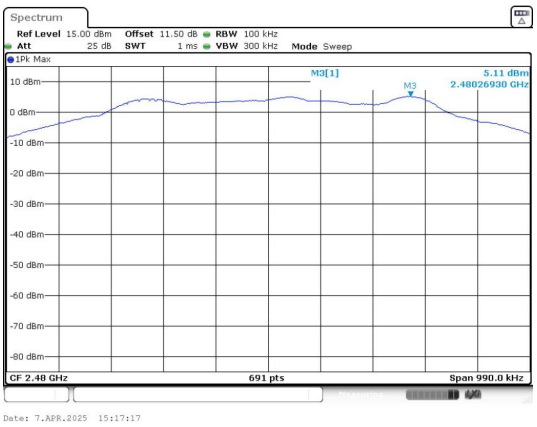
In-Band Reference Level

BLE 1M_Channel 19



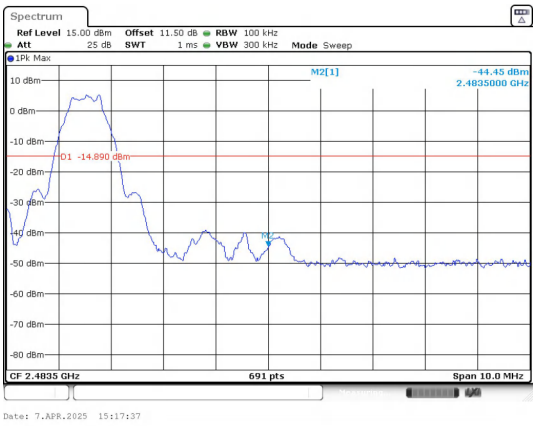
30.0 MHz - 25000.0 MHz

BLE 1M_Channel 19



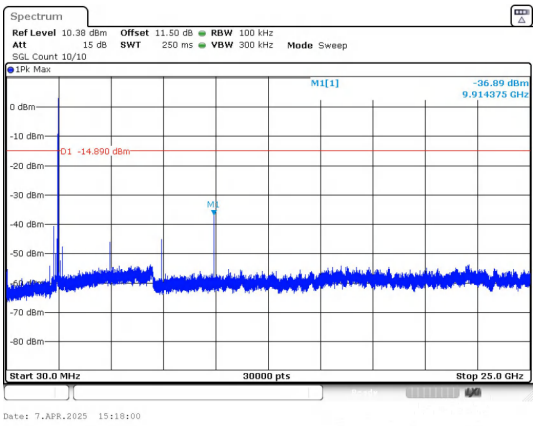
In-Band Reference Level

BLE 1M_Channel 39



Out Of Band Emission

BLE 1M_Channel 39



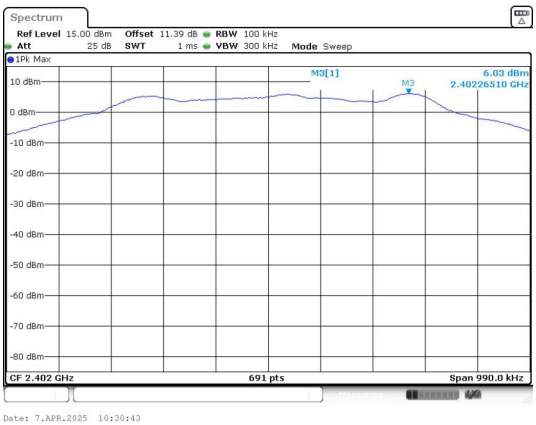
30.0 MHz - 25000.0 MHz

BLE 1M_Channel 39

Right:

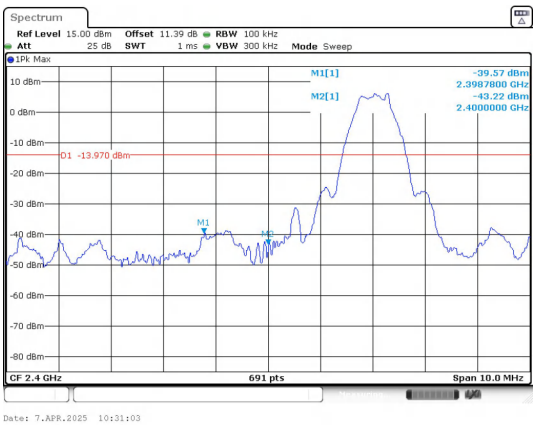
Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
BLE 1M	0	2398.78	-39.568	-13.97	-25.598	PASS
		2400.00	-43.220	-13.97	-29.250	PASS
		7206.80	-37.987	-13.97	-24.017	PASS
	19	9753.73	-39.762	-14.32	-25.442	PASS
	39	2483.50	-44.250	-15.14	-29.110	PASS
		9914.37	-36.997	-15.14	-21.857	PASS

Test Graphs



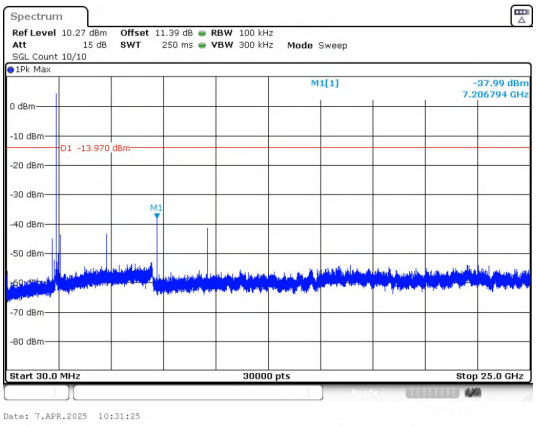
In-Band Reference Level

BLE 1M_Channel 0



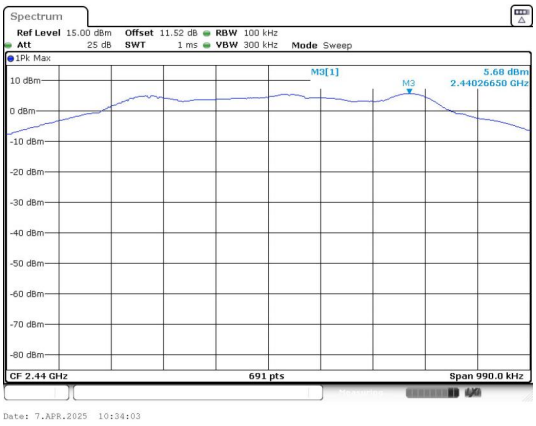
Out Of Band Emission

BLE 1M_Channel 0



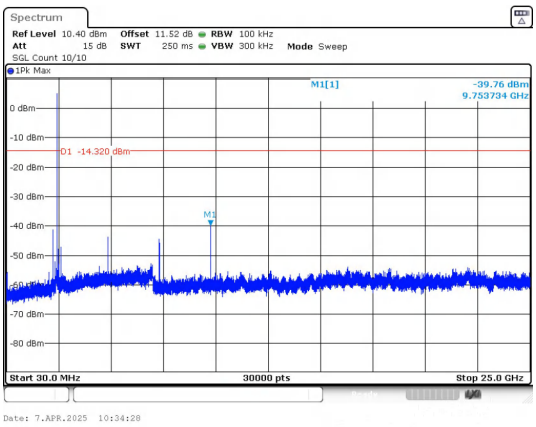
30.0 MHz - 25000.0 MHz

BLE 1M_Channel 0



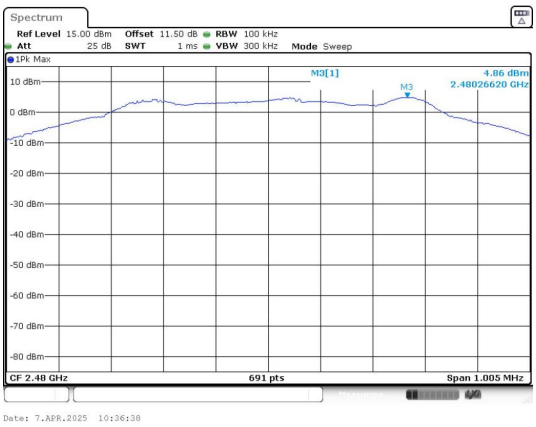
In-Band Reference Level

BLE 1M_Channel 19



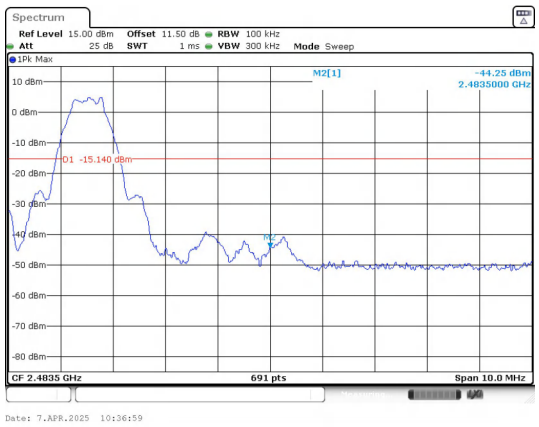
30.0 MHz - 25000.0 MHz

BLE 1M_Channel 19



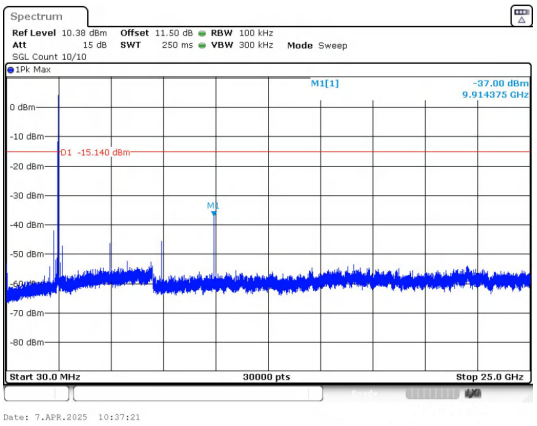
In-Band Reference Level

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-----