Appendix Report

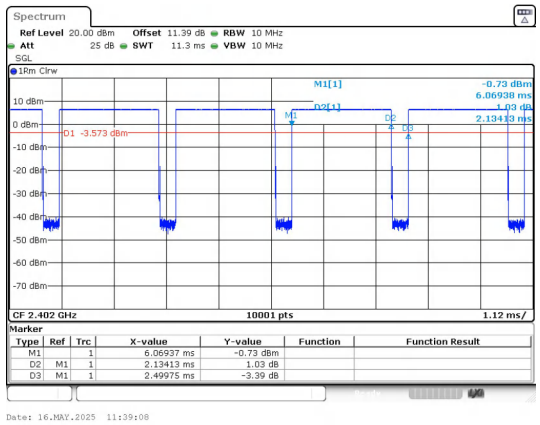
Project No.:	CISR250415136
Test Engineer:	James Wang
Supervised by:	Rory Huang

1) Duty Cycle

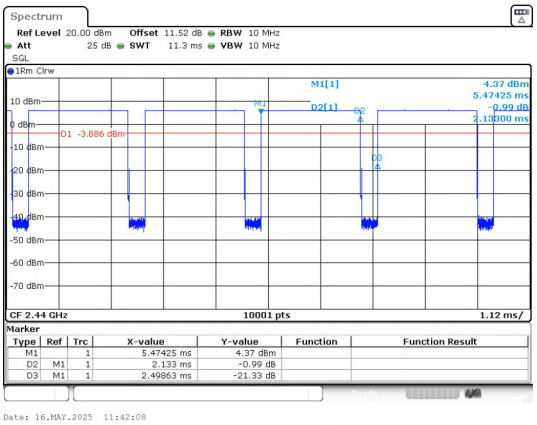
Test Result

Mode	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
BLE 1M	0	2.134	2.500	85.37	0.8537	0.6869	0.4686
	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
BLE 2M	0	1.082	2.500	43.29	0.4329	3.6361	0.9242
	19	1.081	2.499	43.27	0.4327	3.6381	0.9251
	39	1.082	2.500	43.29	0.4329	3.6361	0.9242

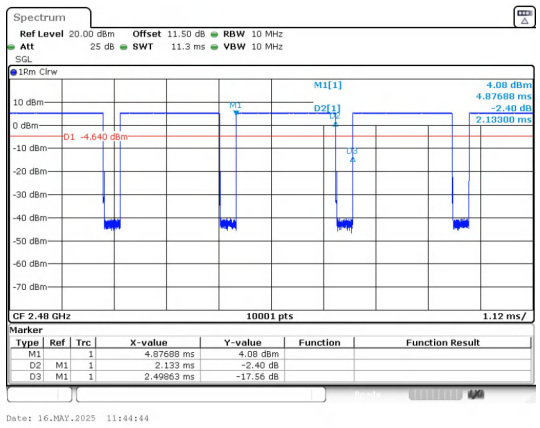
Test Graphs



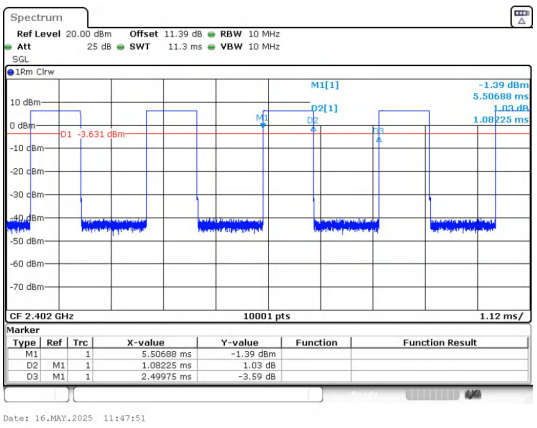
BLE 1M_Channel 0



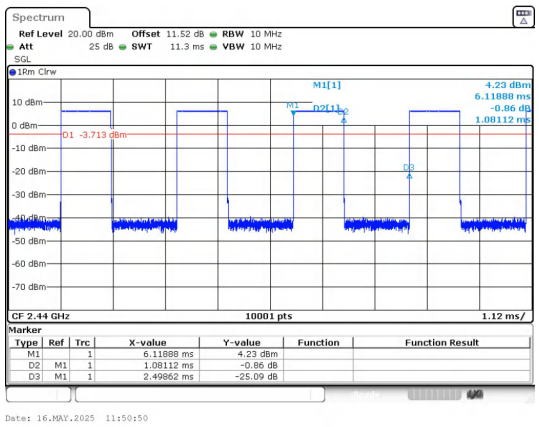
BLE 1M_Channel 19



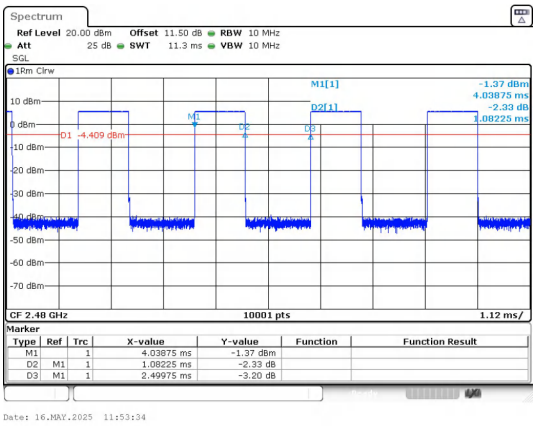
BLE 1M_Channel 39



BLE 2M_Channel 0



BLE 2M_Channel 19



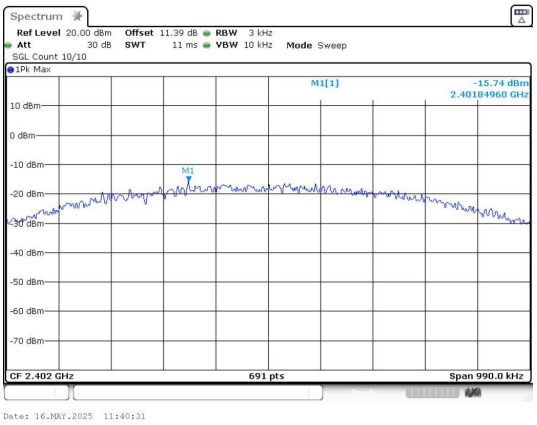
BLE 2M_Channel 39

2) Power Spectral Density

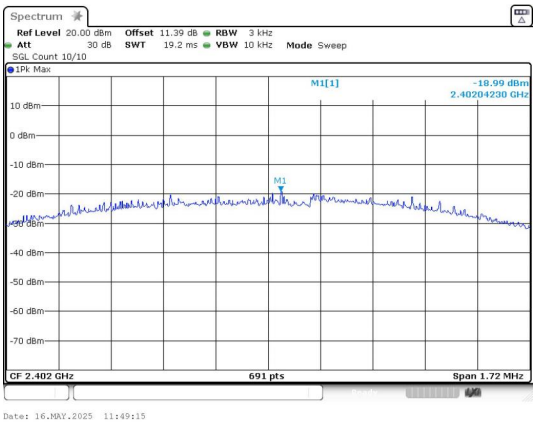
Test Result

Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
BLE 1M	0	-15.740	≤8	PASS
BLE 1M	19	-15.970	≤8	PASS
BLE 1M	39	-16.790	≤8	PASS
BLE 2M	0	-18.990	≤8	PASS
BLE 2M	19	-19.080	≤8	PASS
BLE 2M	39	-20.020	≤8	PASS

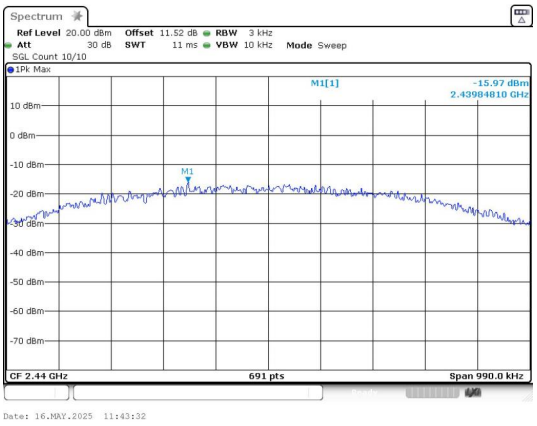
Test Graphs



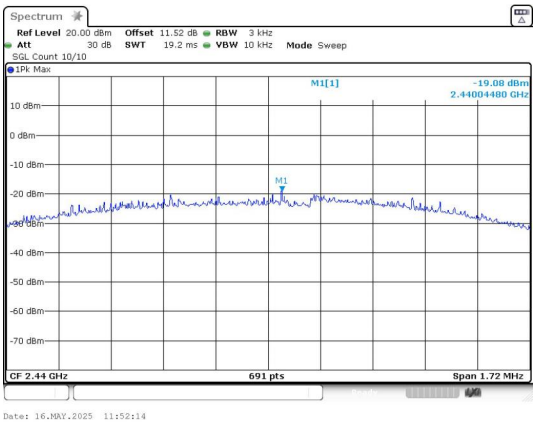
BLE 1M_Channel 0



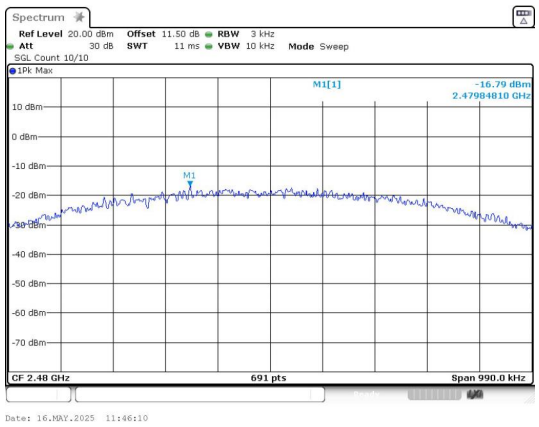
BLE 2M_Channel 0



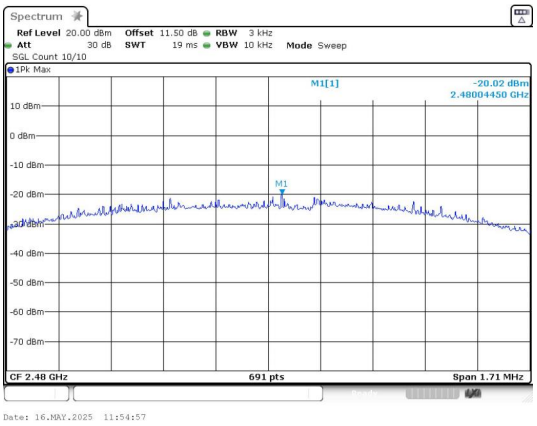
BLE 1M_Channel 19



BLE 2M_Channel 19



BLE 1M_Channel 39



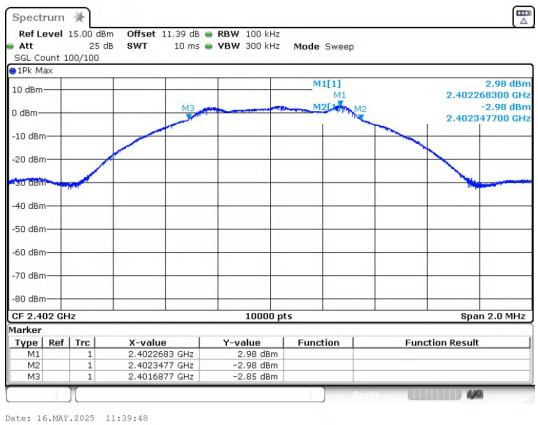
BLE 2M_Channel 39

3) 6dB Bandwidth

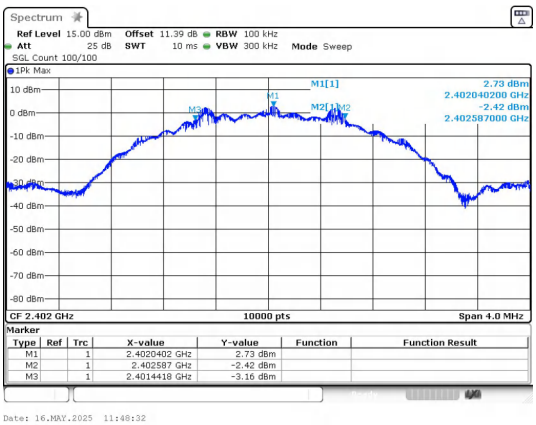
Test Result

Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
BLE 1M	0	2402	0.6600	≥0.5	PASS
	19	2440	0.6600		PASS
	39	2480	0.6600		PASS
BLE 2M	0	2402	1.150		PASS
	19	2440	1.150		PASS
	39	2480	1.140		PASS

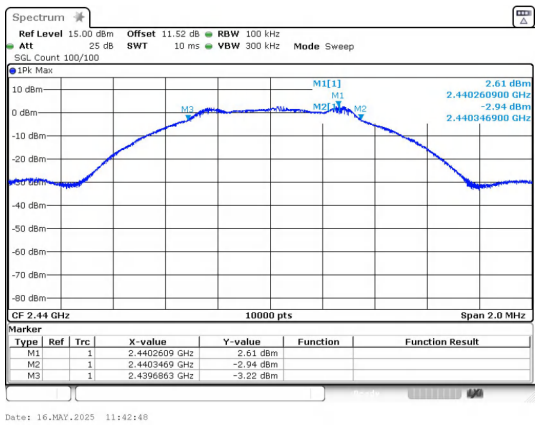
Test Graphs



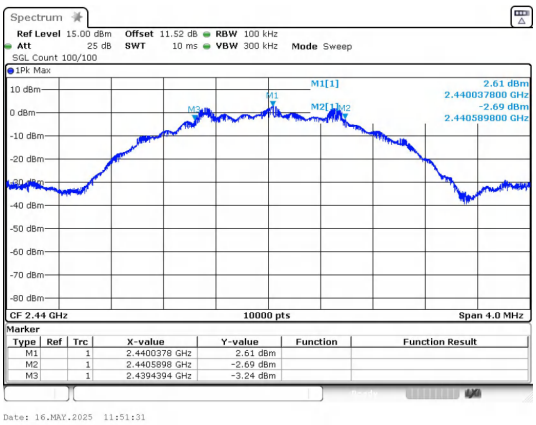
BLE 1M_Channel 0



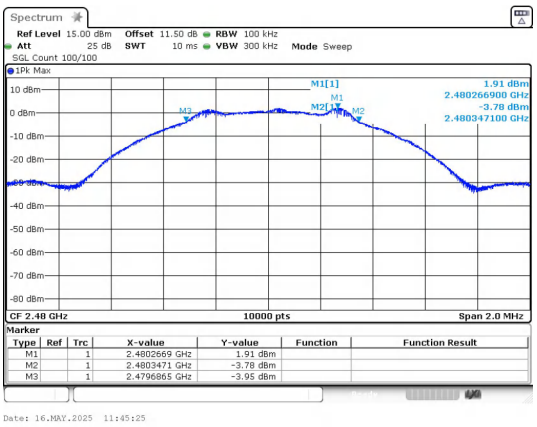
BLE 2M_Channel 0



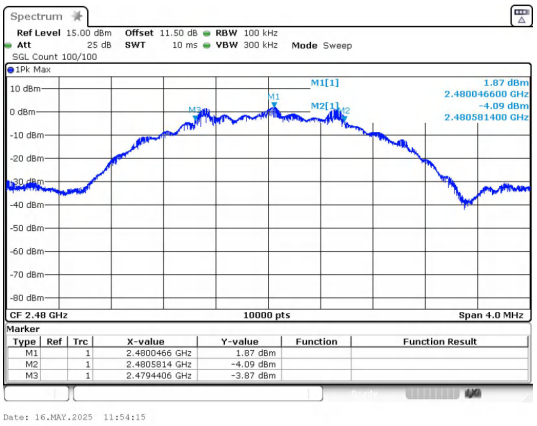
BLE 1M_Channel 19



BLE 2M_Channel 19



BLE 1M_Channel 39



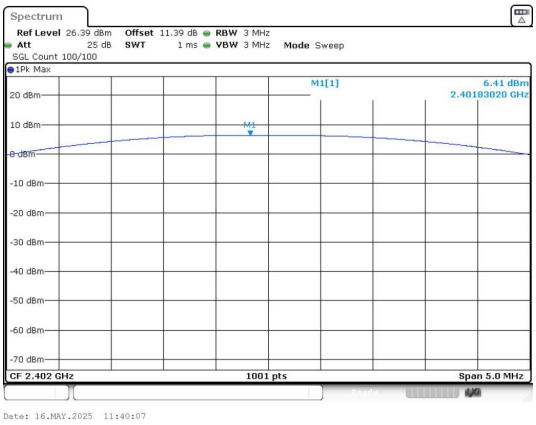
BLE 2M_Channel 39

4) Conducted Output Power

Test Result

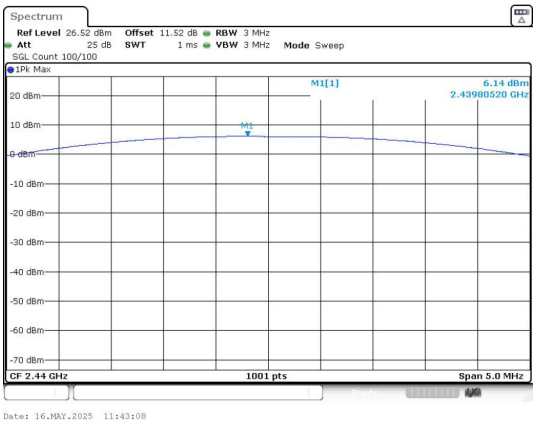
Mode	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
BLE 1M	0	6.41	4.38	≤30	PASS
	19	6.14	4.11	≤30	PASS
	39	5.42	3.48	≤30	PASS
BLE 2M	0	6.48	4.45	≤30	PASS
	19	6.36	4.33	≤30	PASS
	39	5.63	3.66	≤30	PASS

Test Graphs



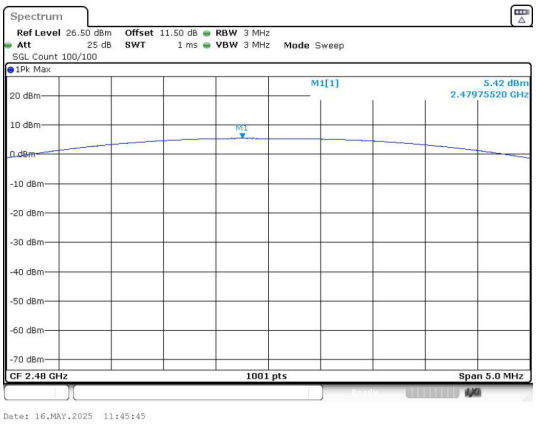
Peak Output Power

BLE 1M_Channel 0



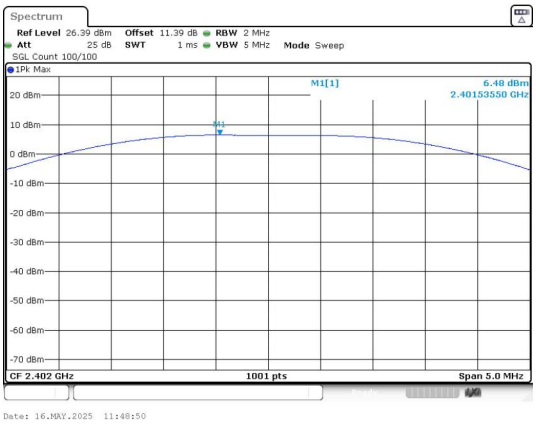
Peak Output Power

BLE 1M_Channel 19



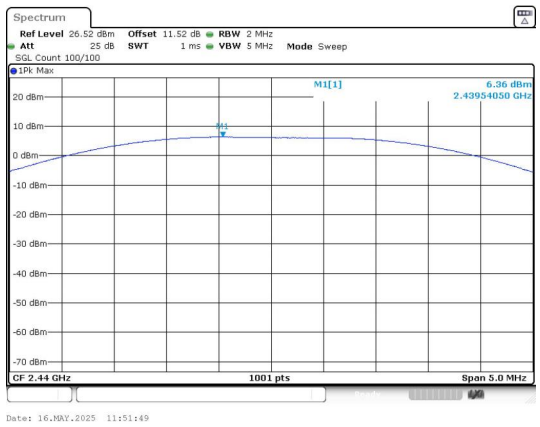
Peak Output Power

BLE 1M_Channel 39



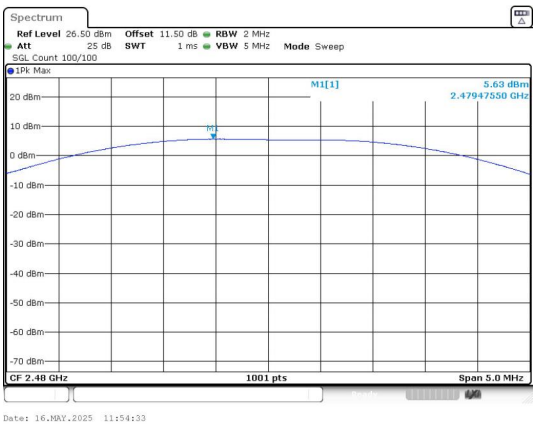
Peak Output Power

BLE 2M_Channel 0



Peak Output Power

BLE 2M_Channel 19



Peak Output Power

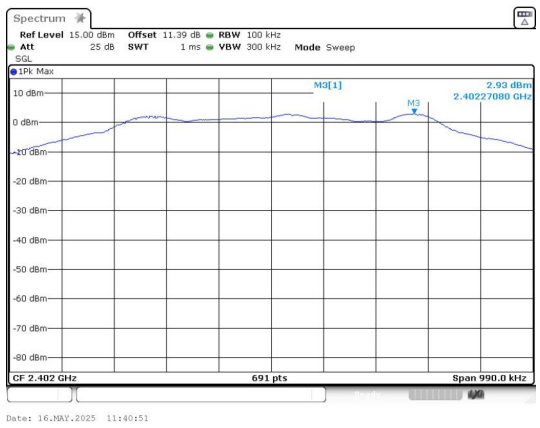
BLE 2M_Channel 39

5) Conducted Out Of Band Emission

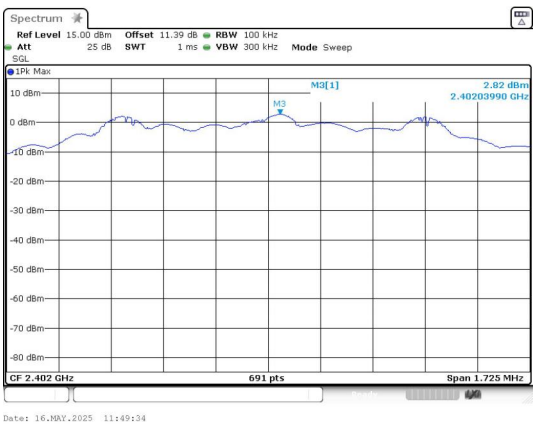
Test Result

Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
BLE 1M	0	2399.00	-43.038	-17.07	-25.968	PASS
		2400.00	-43.830	-17.07	-26.760	PASS
		7205.10	-42.406	-17.07	-25.336	PASS
	19	9753.73	-44.955	-17.36	-27.595	PASS
	39	2483.50	-46.520	-18.11	-28.410	PASS
		9914.37	-42.794	-18.11	-24.684	PASS
BLE 2M	0	2400.00	-32.160	-17.18	-14.980	PASS
		9602.25	-46.788	-17.18	-29.608	PASS
	19	9753.73	-45.581	-17.36	-28.221	PASS
	39	2483.50	-51.120	-18.12	-33.000	PASS
		9914.37	-42.528	-18.12	-24.408	PASS

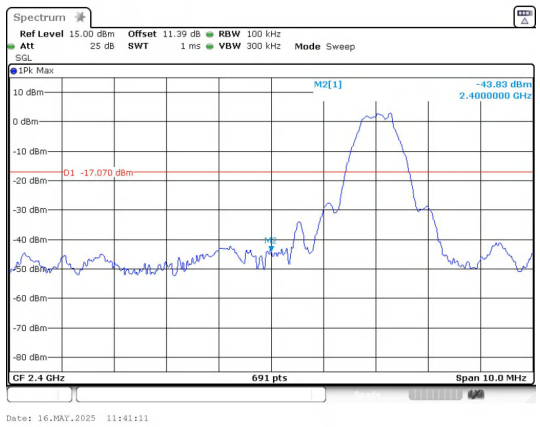
Test Graphs



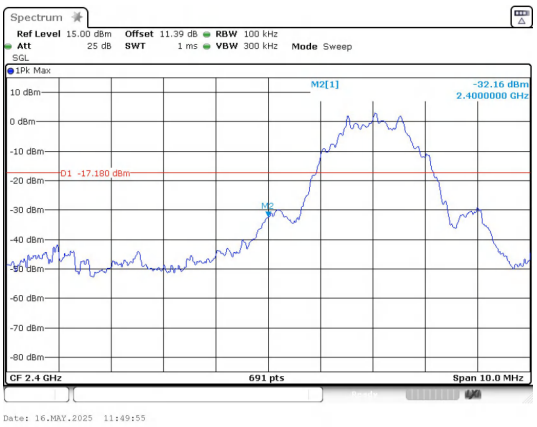
In-Band Reference Level
BLE 1M_Channel 0



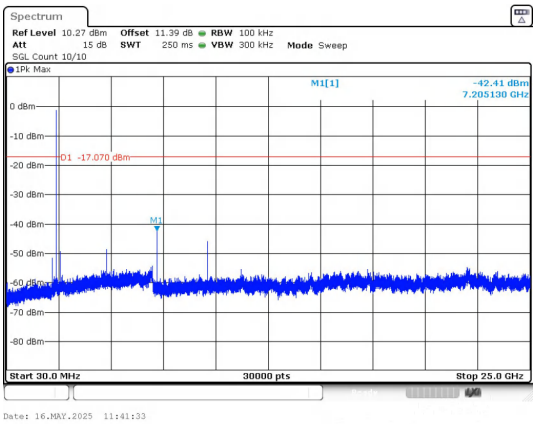
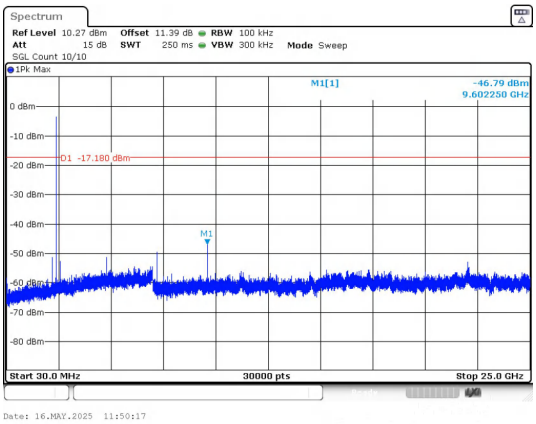
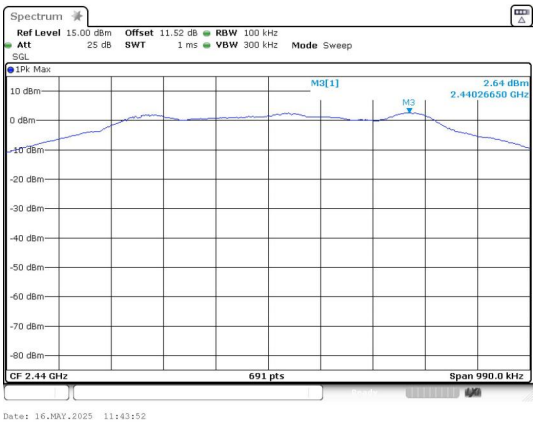
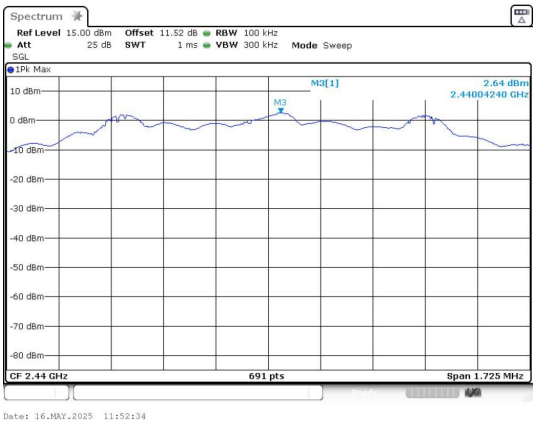
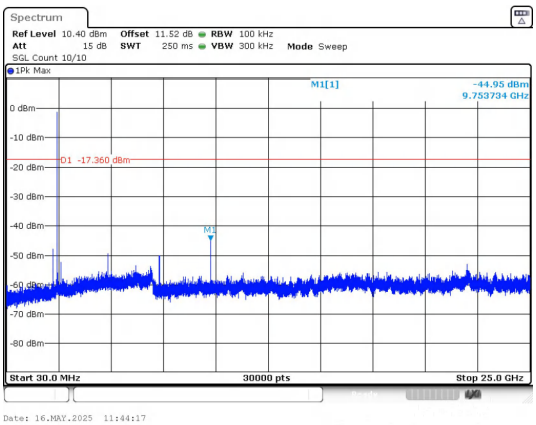
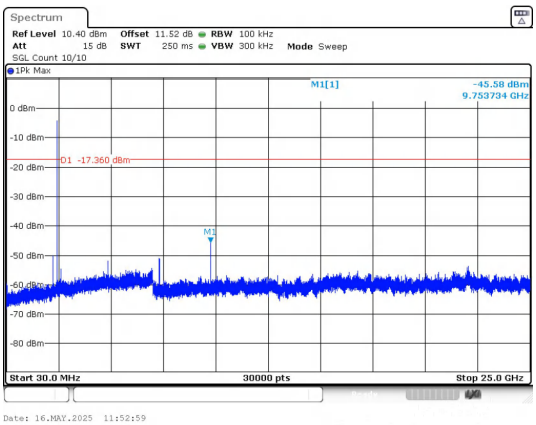
In-Band Reference Level
BLE 2M_Channel 0

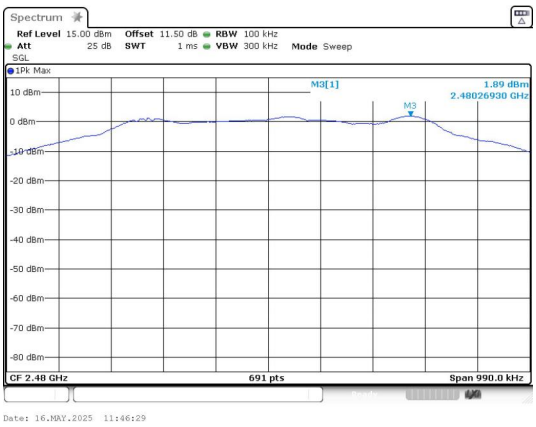


Out Of Band Emission



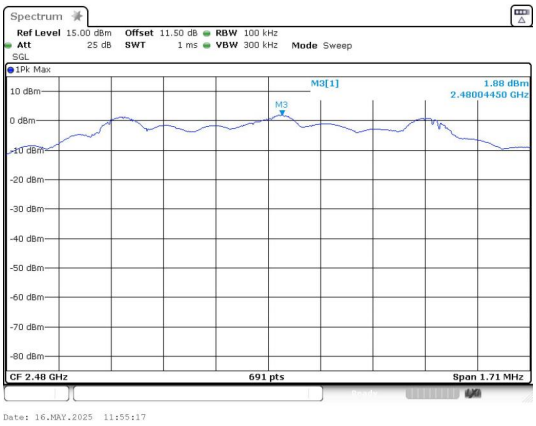
Out Of Band Emission

BLE 1M_Channel 0	BLE 2M_Channel 0
	
30.0 MHz - 25000.0 MHz BLE 1M_Channel 0	30.0 MHz - 25000.0 MHz BLE 2M_Channel 0
	
In-Band Reference Level BLE 1M_Channel 19	In-Band Reference Level BLE 2M_Channel 19
	
30.0 MHz - 25000.0 MHz BLE 1M_Channel 19	30.0 MHz - 25000.0 MHz BLE 2M_Channel 19



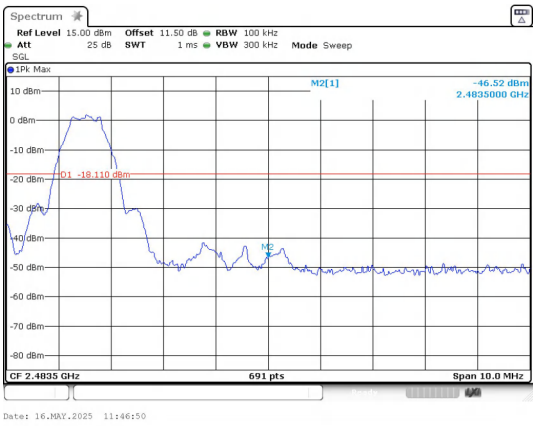
In-Band Reference Level

BLE 1M_Channel 39



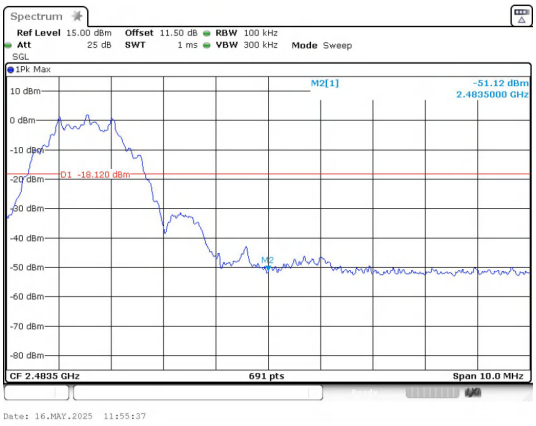
In-Band Reference Level

BLE 2M_Channel 39



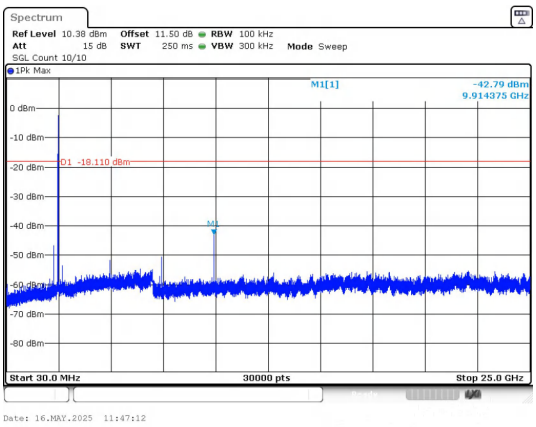
Out Of Band Emission

BLE 1M_Channel 39



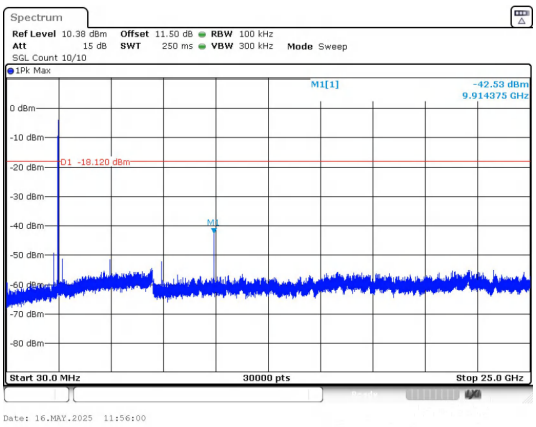
Out Of Band Emission

BLE 2M_Channel 39



30.0 MHz - 25000.0 MHz

BLE 1M_Channel 39



30.0 MHz - 25000.0 MHz

BLE 2M_Channel 39

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