

Appendix Report

Project No.:	CISR250415138
Test Engineer:	James Wang
Supervised by:	Rory Huang

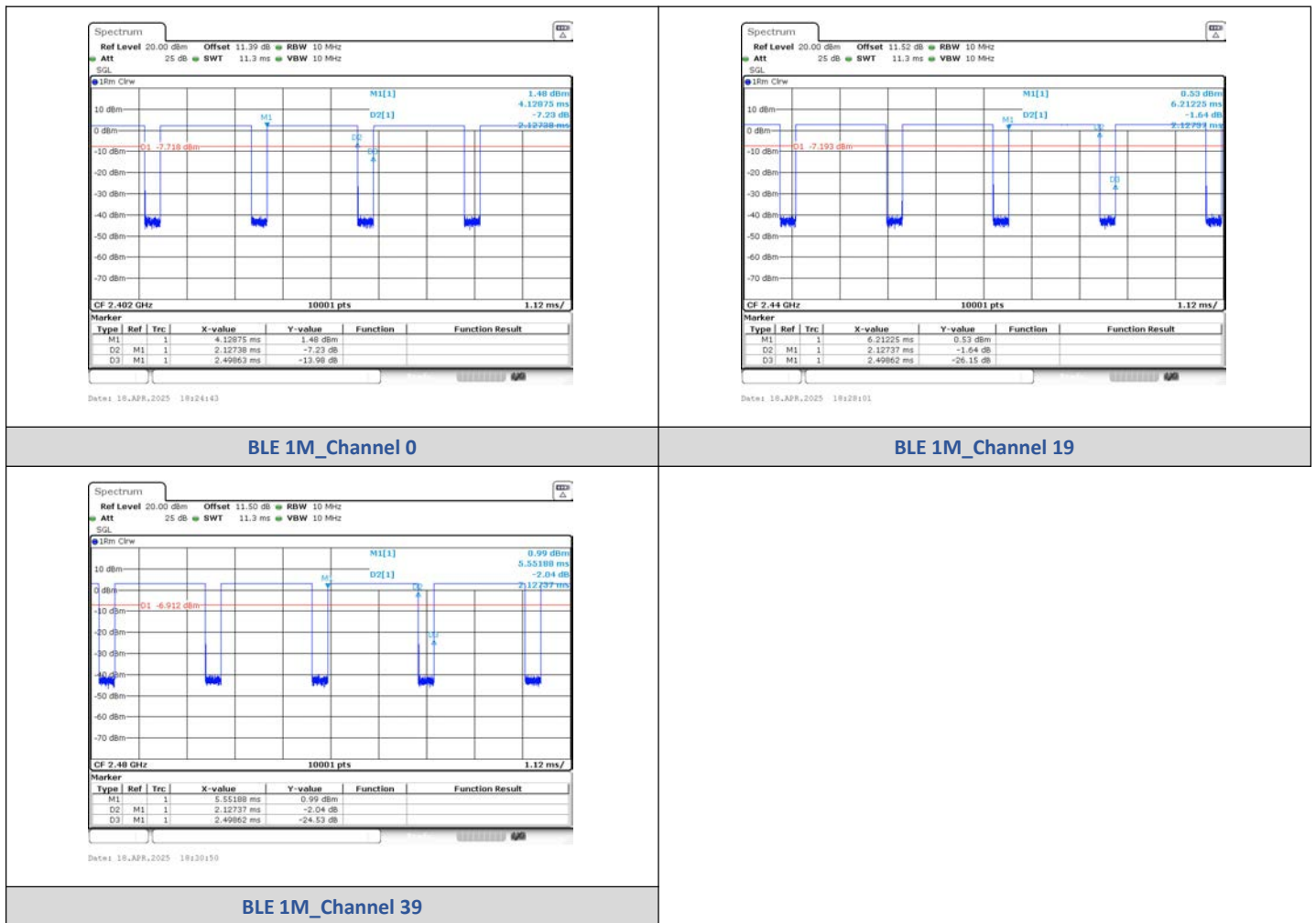
1) Duty Cycle

Test Result

Left:

Mode	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
BLE 1M	0	2.127	2.499	85.14	0.8514	0.6987	0.4701
	19	2.127	2.499	85.14	0.8514	0.6987	0.4701
	39	2.127	2.499	85.14	0.8514	0.6987	0.4701

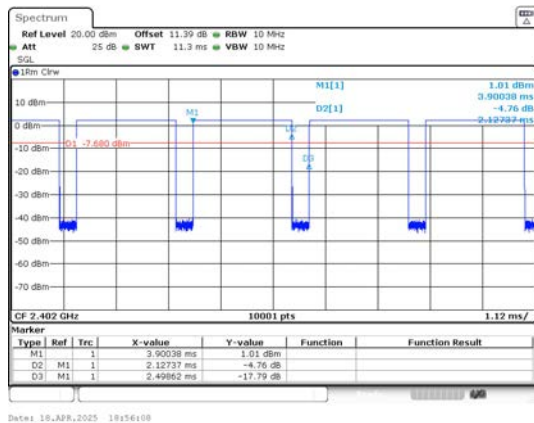
Test Graphs



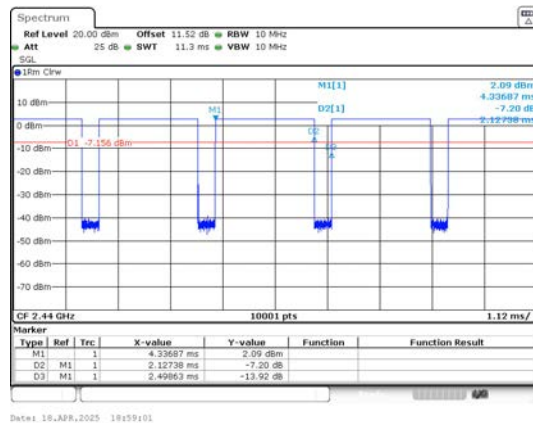
Right:

Mode	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
BLE 1M	0	2.127	2.499	85.14	0.8514	0.6987	0.4701
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	39	2.127	2.499	85.14	0.8514	0.6987	0.4701

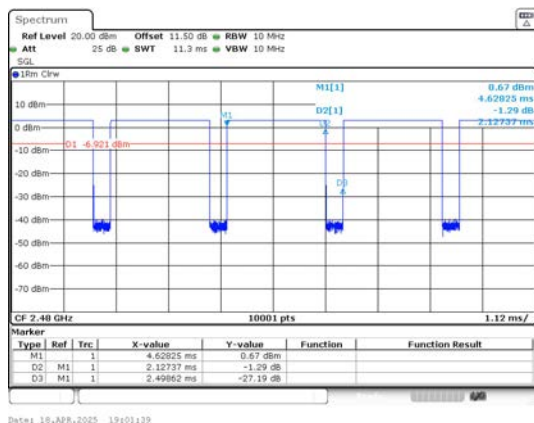
Test Graphs



BLE 1M_Channel 0



BLE 1M_Channel 19



BLE 1M_Channel 39

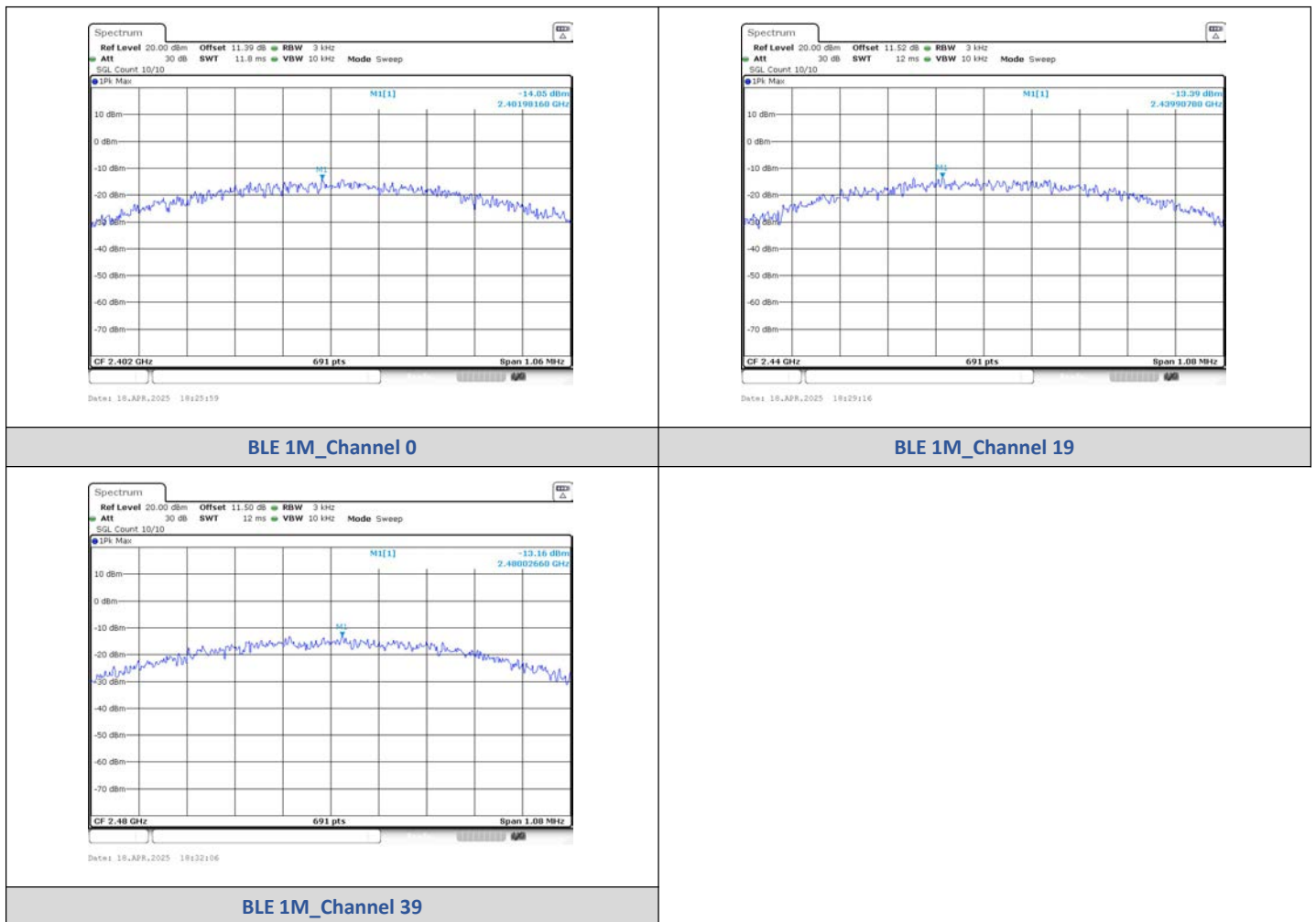
2) Power Spectral Density

Test Result

Left:

Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
BLE 1M	0	-14.050	≤8	PASS
BLE 1M	19	-13.390	≤8	PASS
BLE 1M	39	-13.160	≤8	PASS

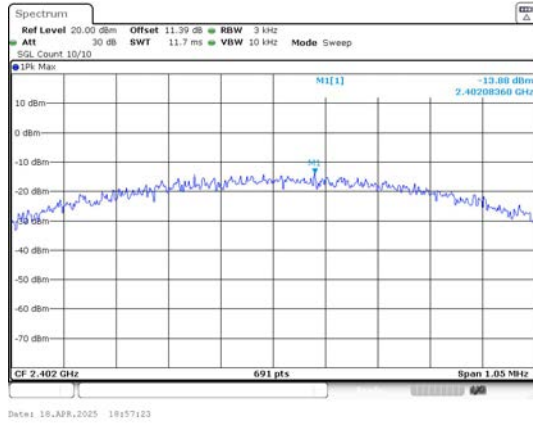
Test Graphs



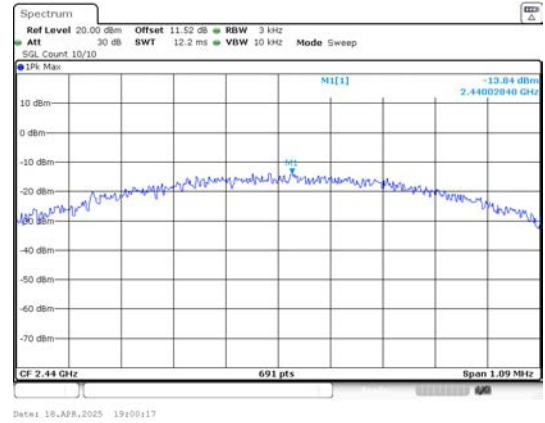
Right:

Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
BLE 1M	0	-13.880	≤8	PASS
BLE 1M	19	-13.840	≤8	PASS
BLE 1M	39	-13.520	≤8	PASS

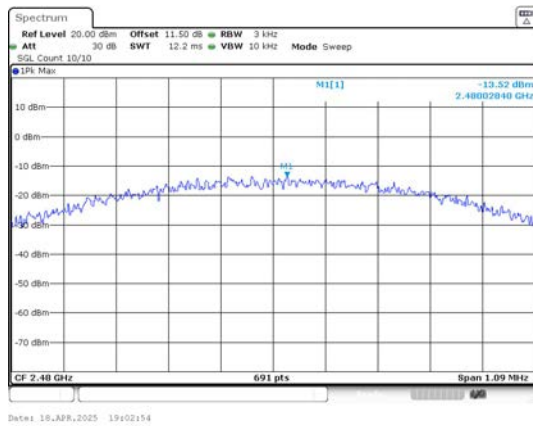
Test Graphs



BLE 1M_Channel 0



BLE 1M_Channel 19



BLE 1M_Channel 39

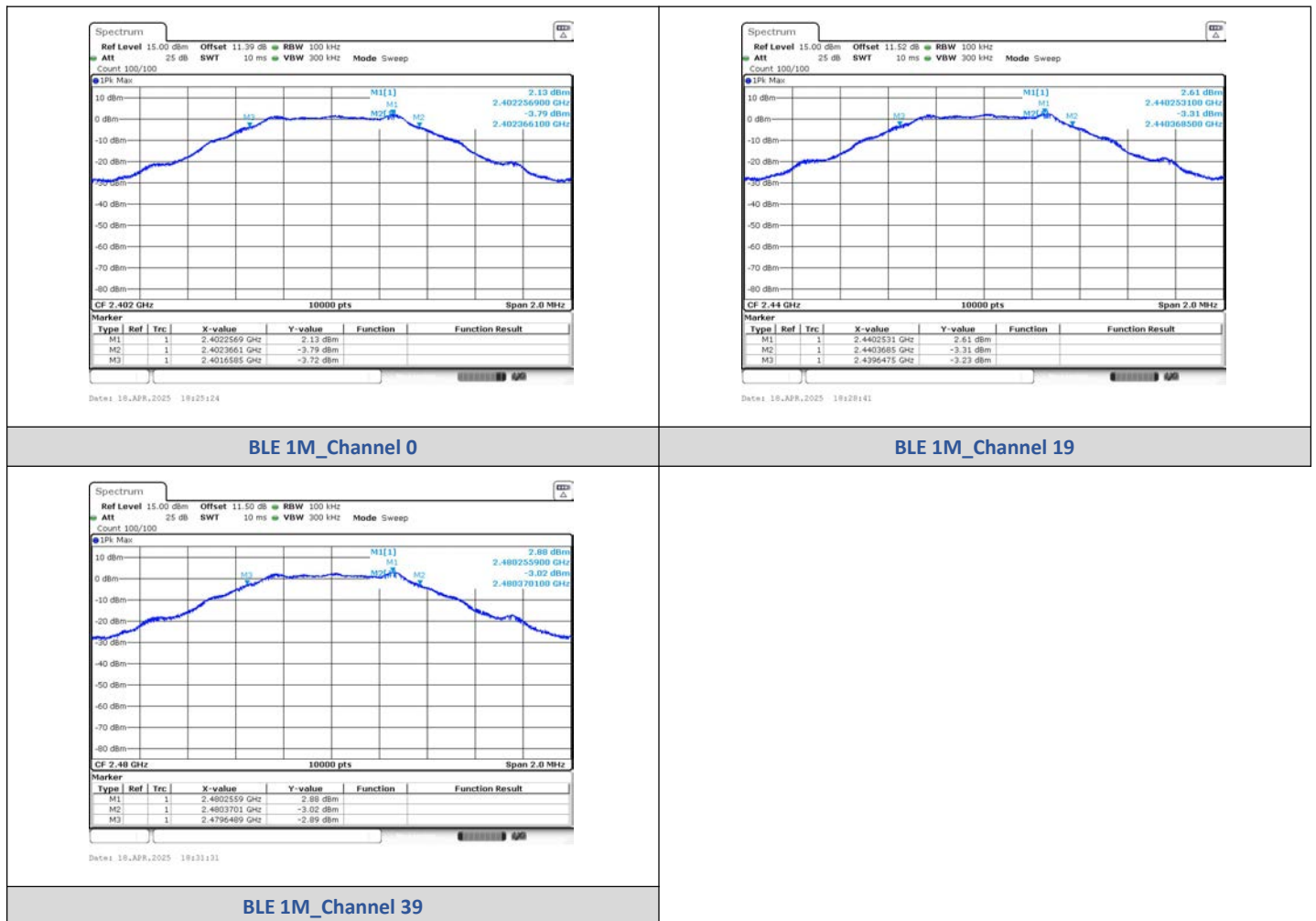
3) 6dB Bandwidth

Test Result

Left:

Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
BLE 1M	0	2402	0.7100	≥0.5	PASS
	19	2440	0.7200		PASS
	39	2480	0.7200		PASS

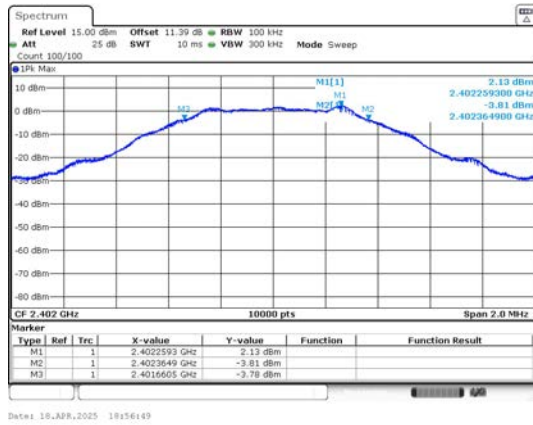
Test Graphs



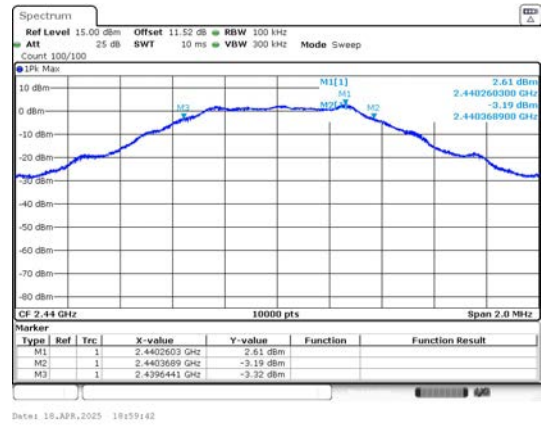
Right:

Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
BLE 1M	0	2402	0.7000	≥0.5	PASS
	19	2440	0.7300		PASS
	39	2480	0.7300		PASS

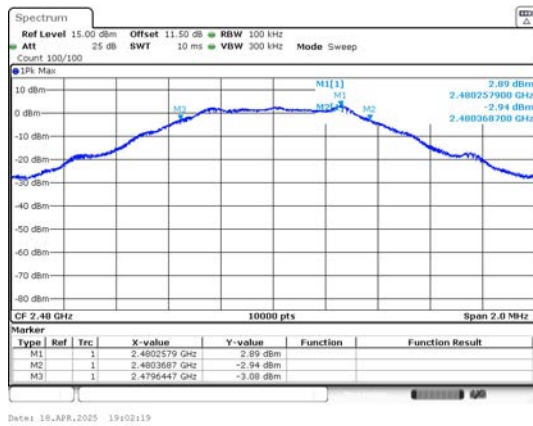
Test Graphs



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	2.31	1.7	≤30	PASS
	19	2.84	1.92	≤30	PASS
	39	3.15	2.07	≤30	PASS

Test Graphs



Right:

Mode	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
BLE 1M	0	2.36	1.72	≤30	PASS
	19	2.90	1.95	≤30	PASS

	39	3.15	2.07	≤30	PASS
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Test Graphs



5) Conducted Out Of Band Emission

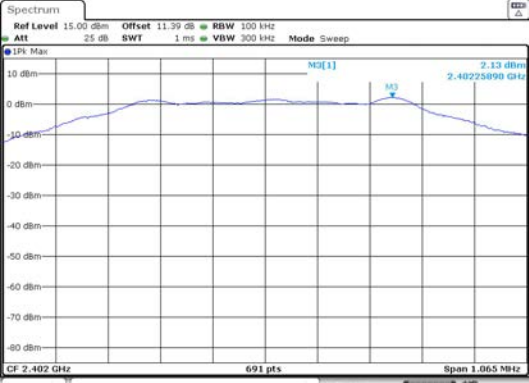
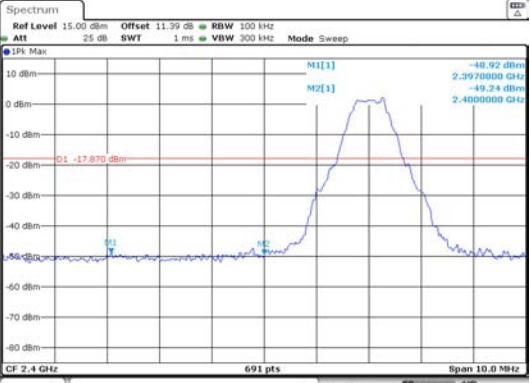
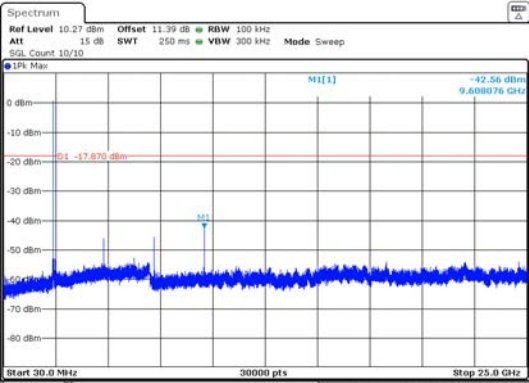
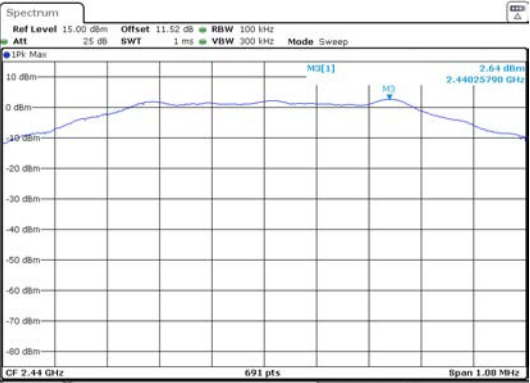
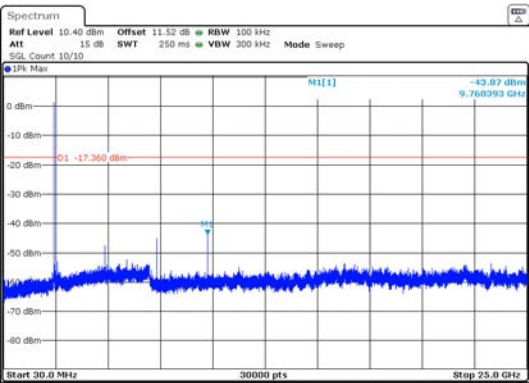
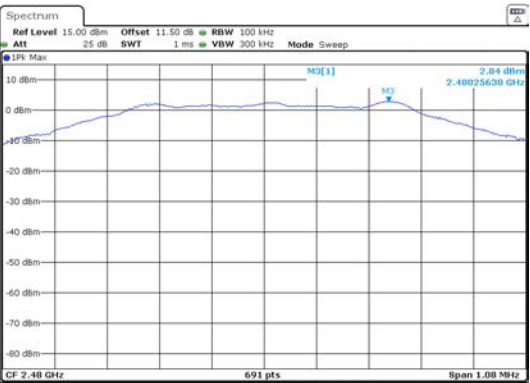
Test Result

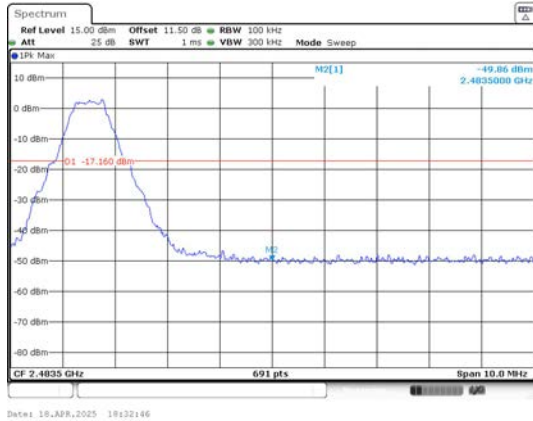
Left:

Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
BLE 1M	0	2397.08	-48.922	-17.87	-31.052	PASS
		2400.00	-49.240	-17.87	-31.370	PASS
		9608.10	-42.561	-17.87	-24.691	PASS
	19	9760.39	-43.872	-17.36	-26.512	PASS
	39	2483.50	-49.960	-17.16	-32.800	PASS

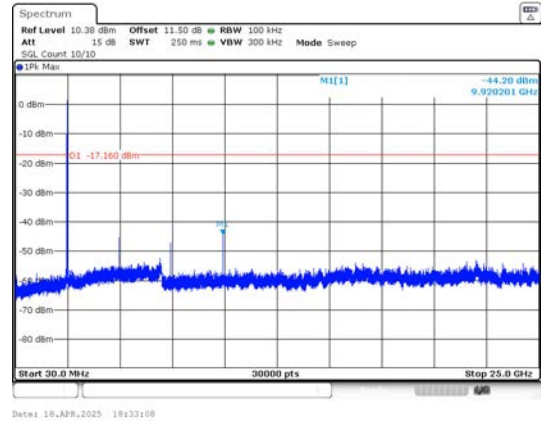
		9920.20	-44.202	-17.16	-27.042	PASS
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Test Graphs

 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

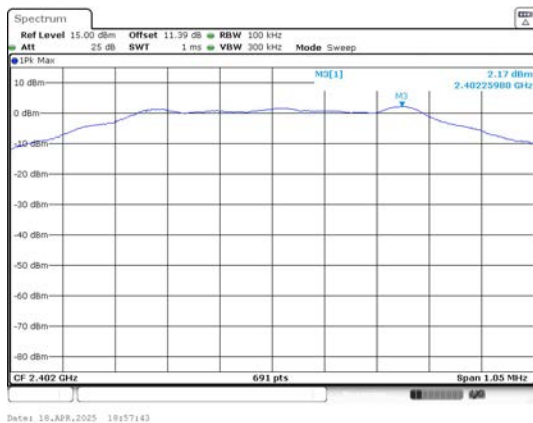


30.0 MHz - 25000.0 MHz
BLE 1M_Channel 39

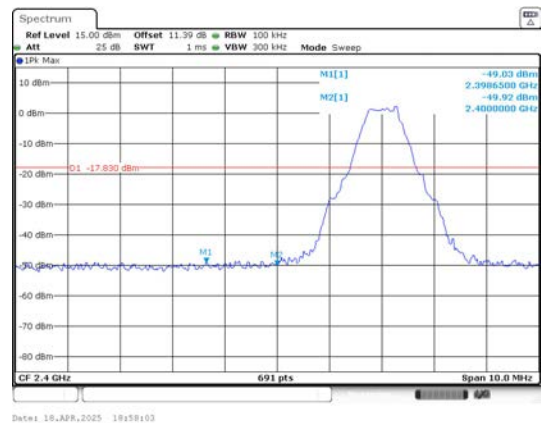
Right:

Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
BLE 1M	0	2398.65	-49.031	-17.83	-31.201	PASS
		2400.00	-49.920	-17.83	-32.090	PASS
		9608.10	-41.482	-17.83	-23.652	PASS
	19	9760.39	-43.755	-17.34	-26.415	PASS
		2483.50	-48.860	-17.13	-31.730	PASS
		9920.20	-42.846	-17.13	-25.716	PASS

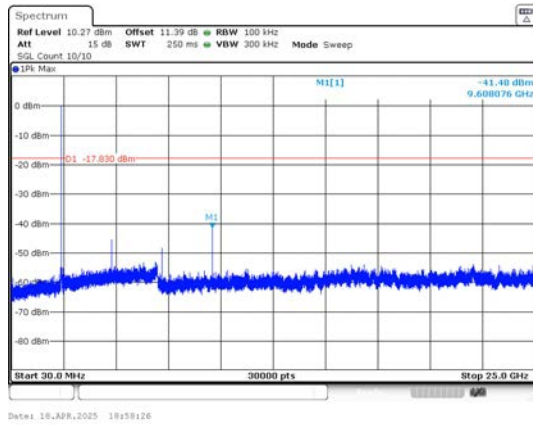
Test Graphs



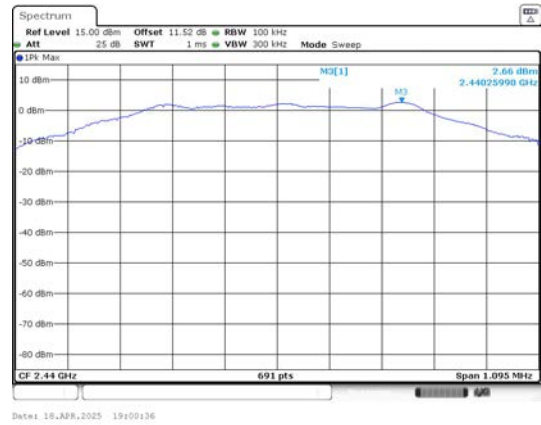
In-Band Reference Level
BLE 1M_Channel 0



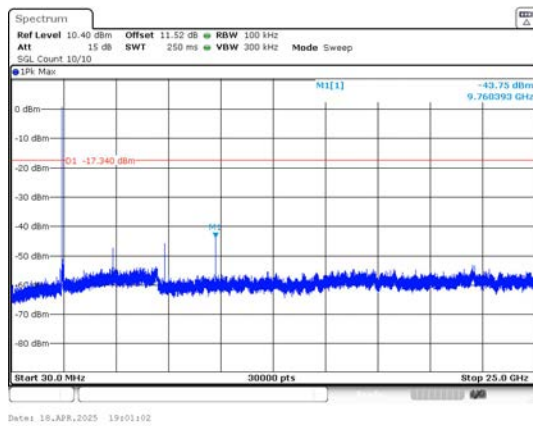
Out Of Band Emission
BLE 1M_Channel 0



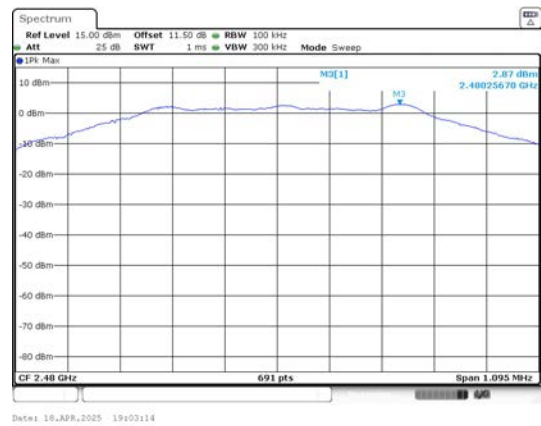
30.0 MHz - 25000.0 MHz
BLE 1M_Channel 0



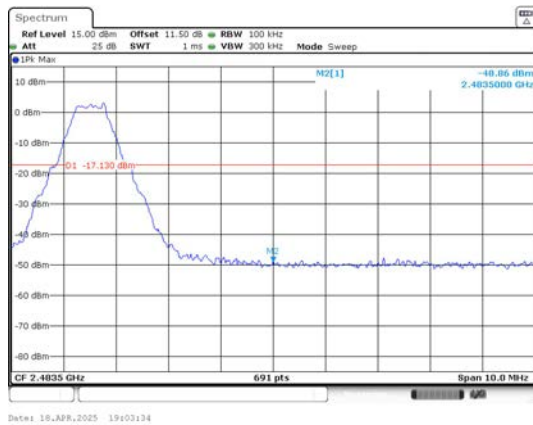
In-Band Reference Level
BLE 1M_Channel 19



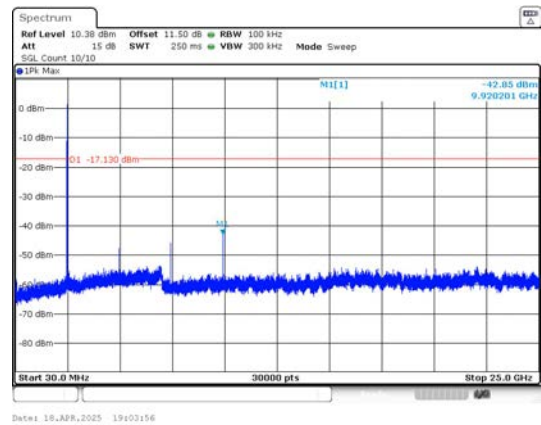
30.0 MHz - 25000.0 MHz
BLE 1M_Channel 19



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-----