Appendix Report

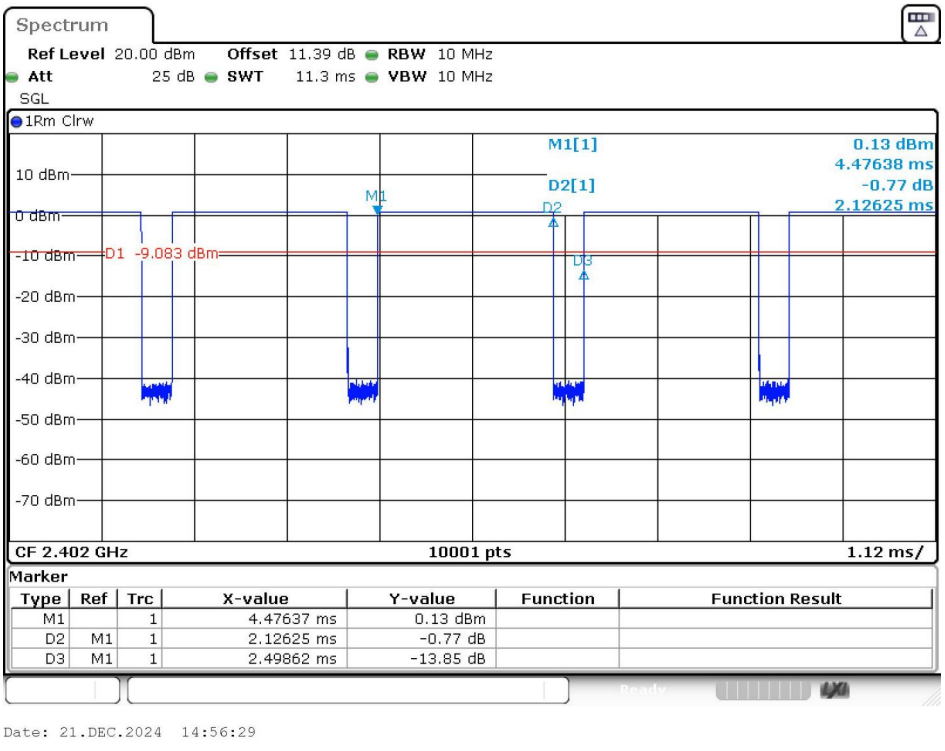
Report No.:	CISRR24121715705
Test Engineer:	Mark Fu
Supervised by:	Rory Huang

1) Duty Cycle

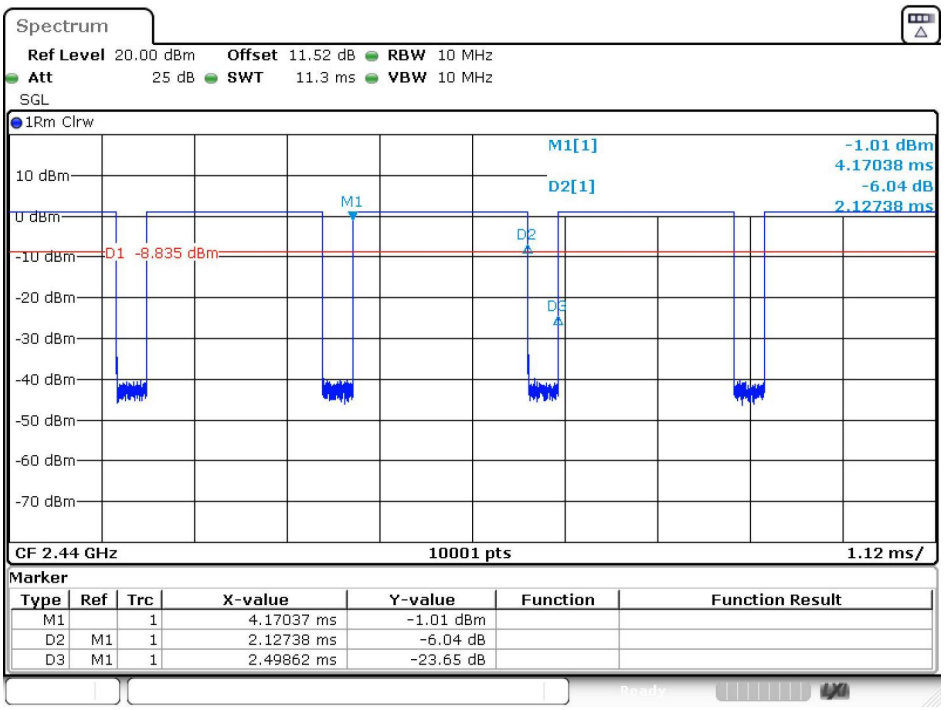
Test Result

Mode	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
BLE 1M	0	2.126	2.499	85.10	0.8510	0.7007	0.4704
	19	2.127	2.499	85.14	0.8514	0.6987	0.4701
	39	2.126	2.499	85.10	0.8510	0.7007	0.4704
BLE 2M	0	1.074	2.499	43.00	0.4300	3.6653	0.9311
	19	1.074	2.499	43.00	0.4300	3.6653	0.9311
	39	1.075	2.500	43.02	0.4302	3.6633	0.9302

Test Graphs

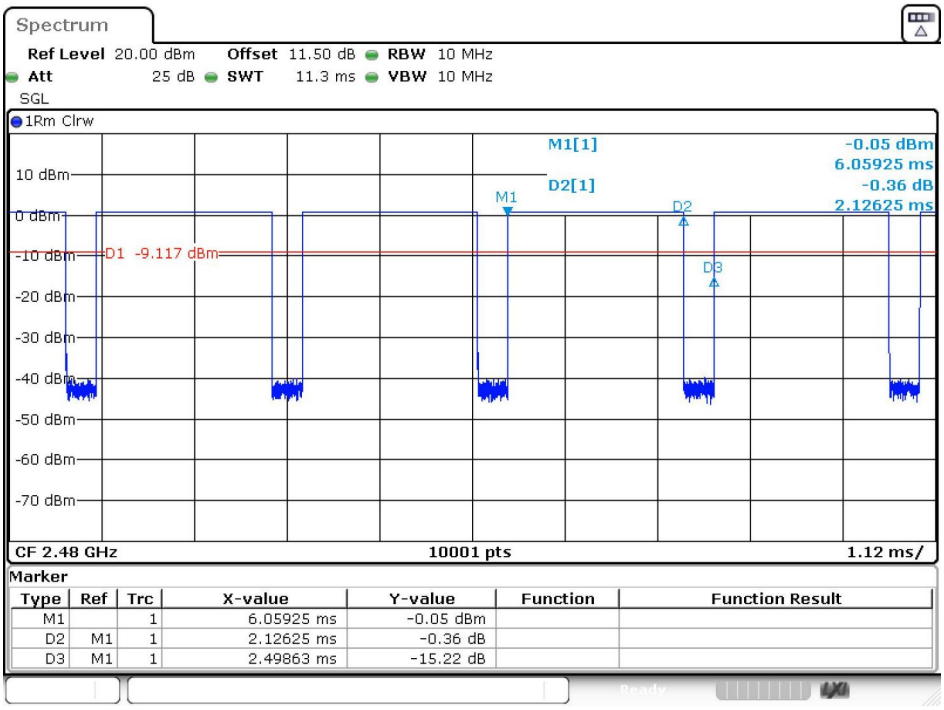


BLE 1M_Channel 0



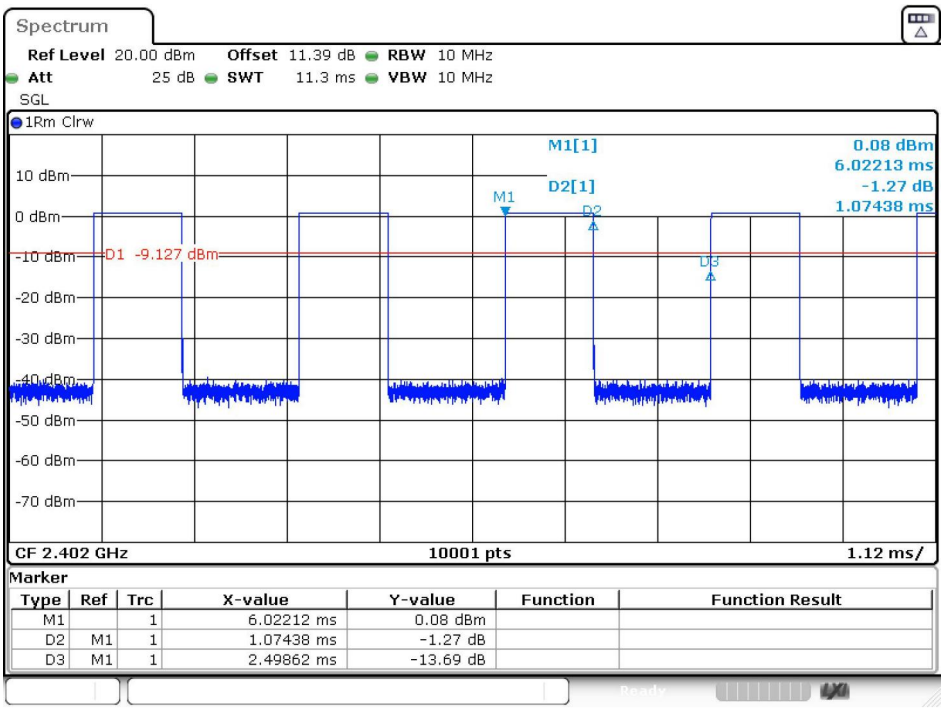
Date: 21.DEC.2024 14:59:46

BLE 1M_Channel 19



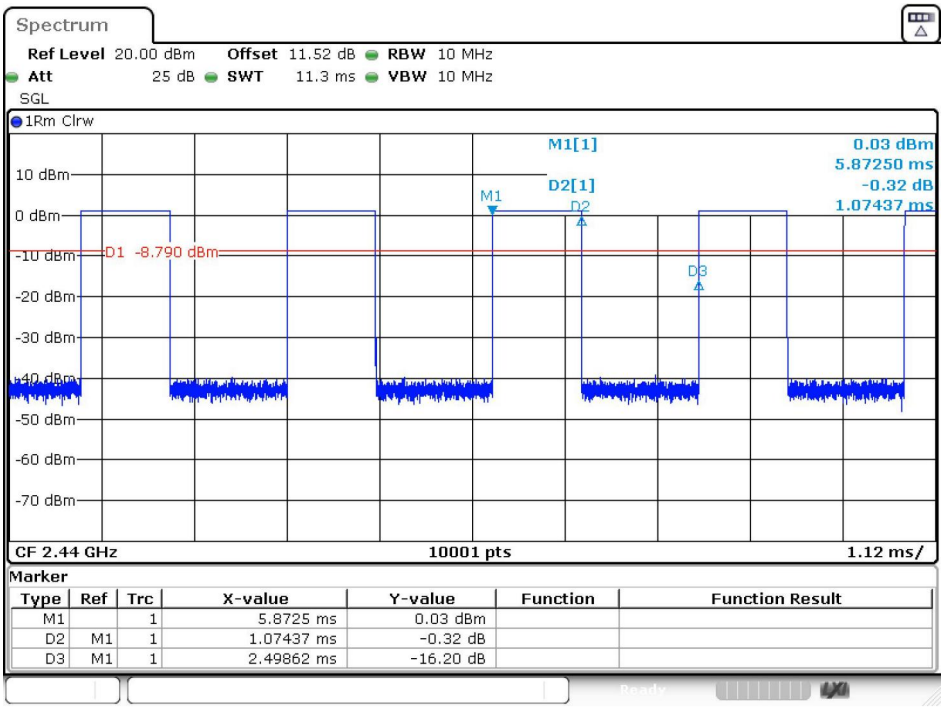
Date: 21.DEC.2024 15:02:20

BLE 1M_Channel 39



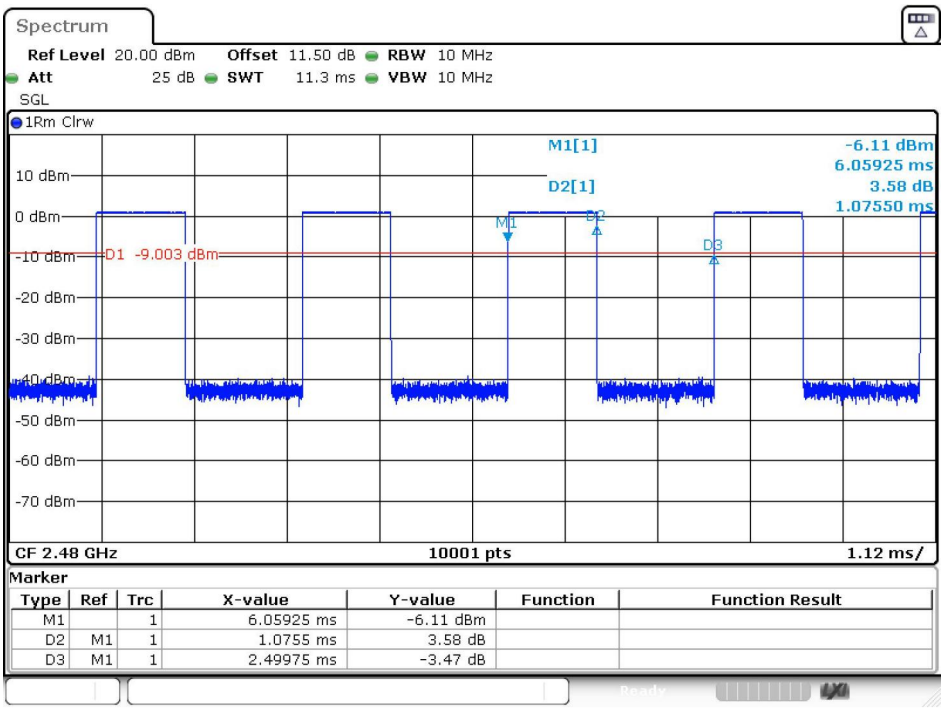
Date: 21.DEC.2024 15:05:40

BLE 2M_Channel 0



Date: 21.DEC.2024 15:12:17

BLE 2M_Channel 19



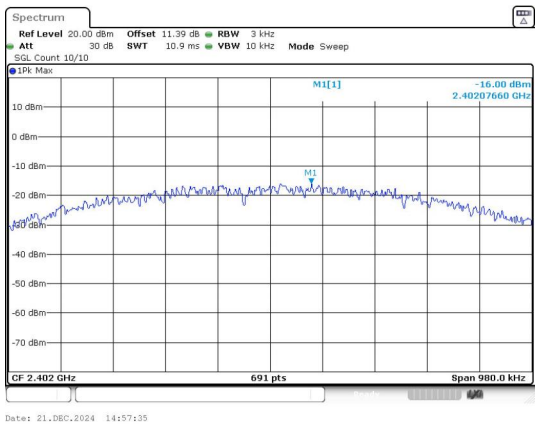
BLE 2M_Channel 39

2) Power Spectral Density

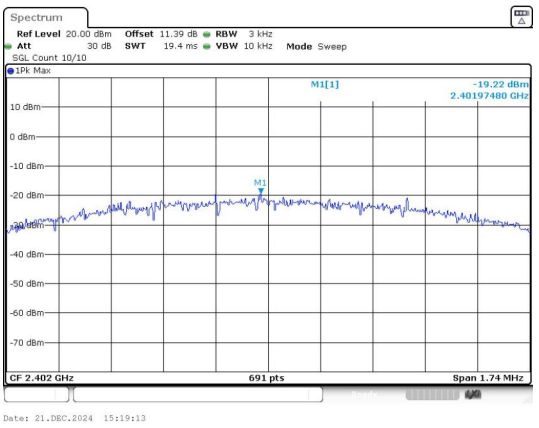
Test Result

Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
BLE 1M	0	-16.000	≤8	PASS
BLE 1M	19	-15.870	≤8	PASS
BLE 1M	39	-16.010	≤8	PASS
BLE 2M	0	-19.220	≤8	PASS
BLE 2M	19	-18.470	≤8	PASS
BLE 2M	39	-19.820	≤8	PASS

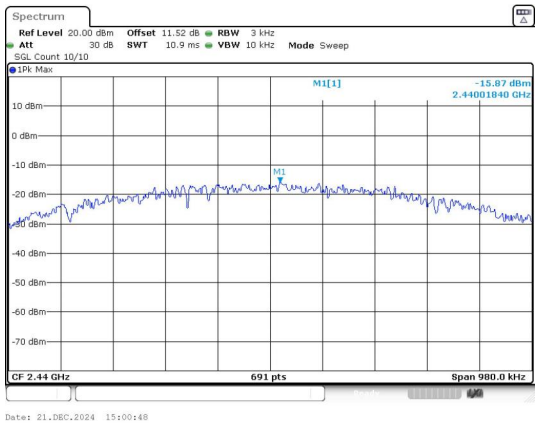
Test Graphs



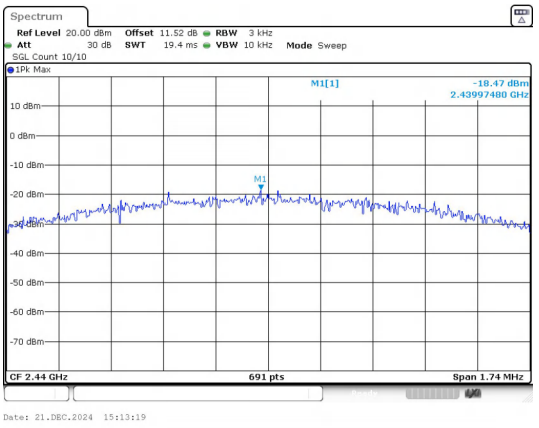
BLE 1M_Channel 0



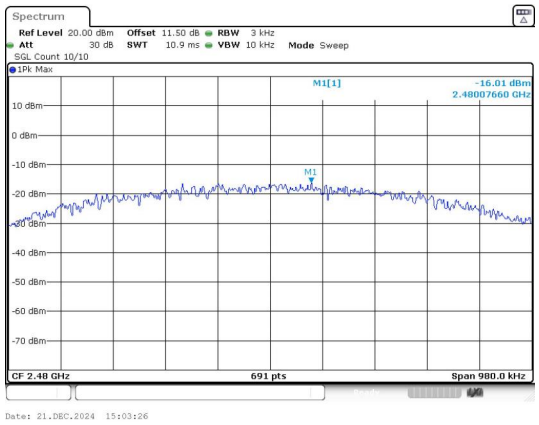
BLE 2M_Channel 0



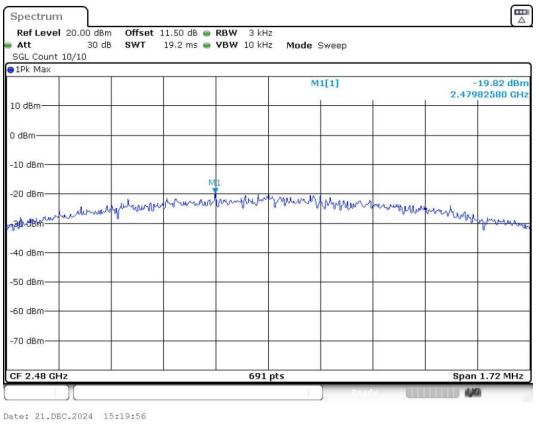
BLE 1M_Channel 19



BLE 2M_Channel 19



BLE 1M_Channel 39



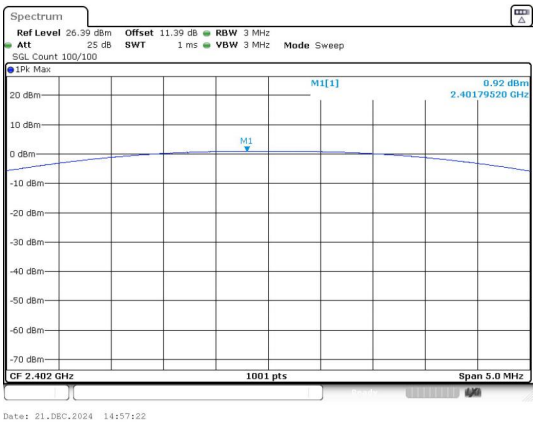
BLE 2M_Channel 39

3) Conducted Output Power

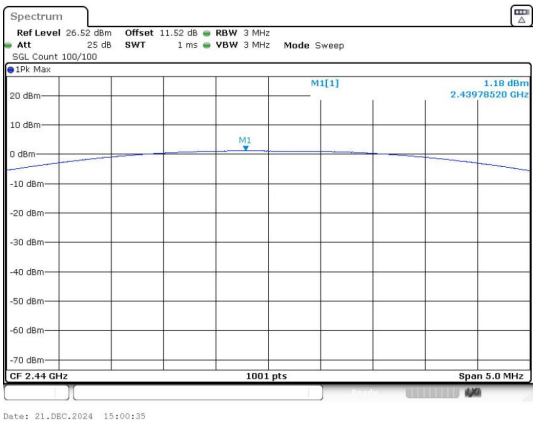
Test Result

Mode	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
BLE 1M	0	0.92	1.24	≤30	PASS
	19	1.18	1.31	≤30	PASS
	39	0.97	1.25	≤30	PASS
BLE 2M	0	0.93	1.24	≤30	PASS
	19	1.31	1.35	≤30	PASS
	39	1.01	1.26	≤30	PASS

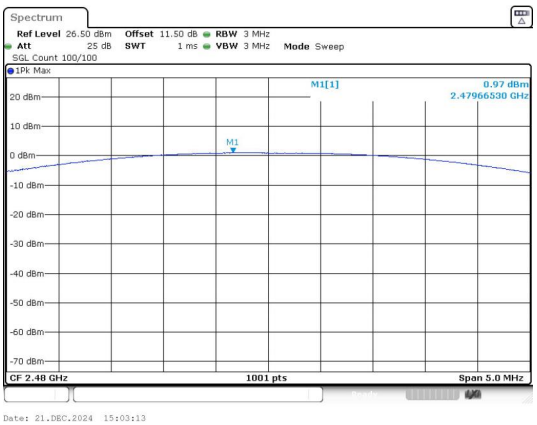
Test Graphs



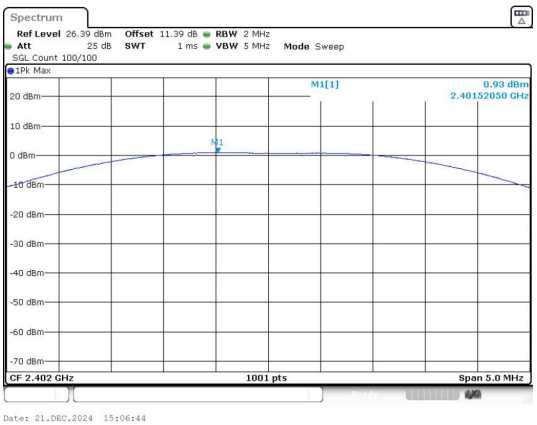
Peak Output Power
BLE 1M_Channel 0



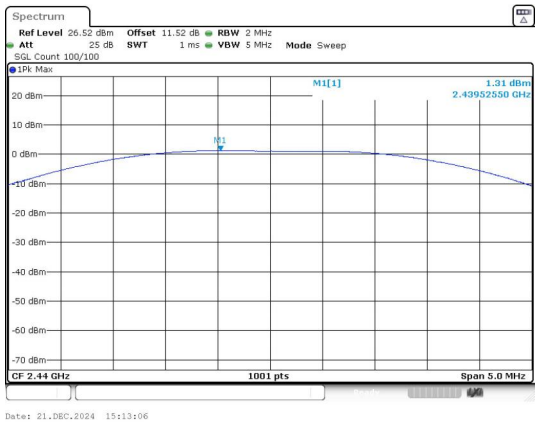
Peak Output Power
BLE 1M_Channel 19



Peak Output Power
BLE 1M_Channel 39

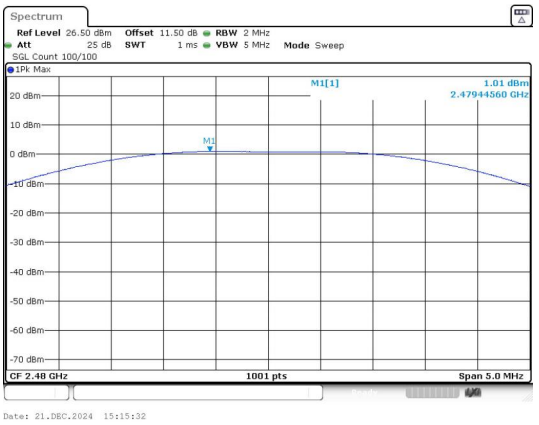


Peak Output Power
BLE 2M_Channel 0



Peak Output Power

BLE 2M_Channel 19



Peak Output Power

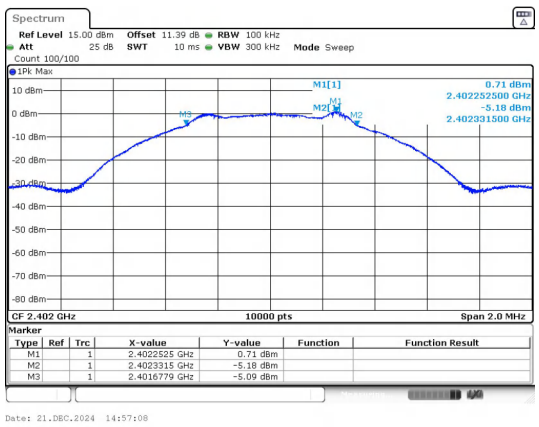
BLE 2M_Channel 39

4) 6dB Bandwidth

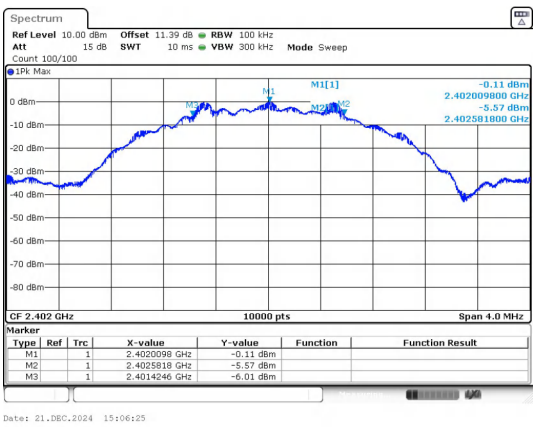
Test Result

Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
BLE 1M	0	2402	0.6500	≥0.5	PASS
	19	2440	0.6500		PASS
	39	2480	0.6500		PASS
BLE 2M	0	2402	1.160		PASS
	19	2440	1.160		PASS
	39	2480	1.150		PASS

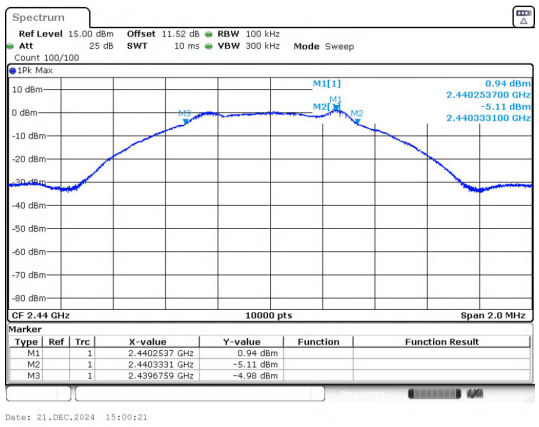
Test Graphs



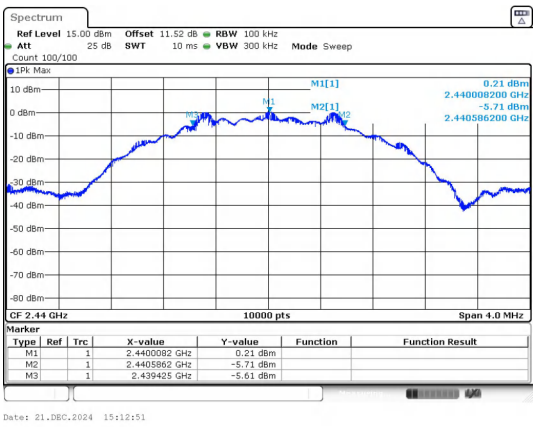
BLE 1M_Channel 0



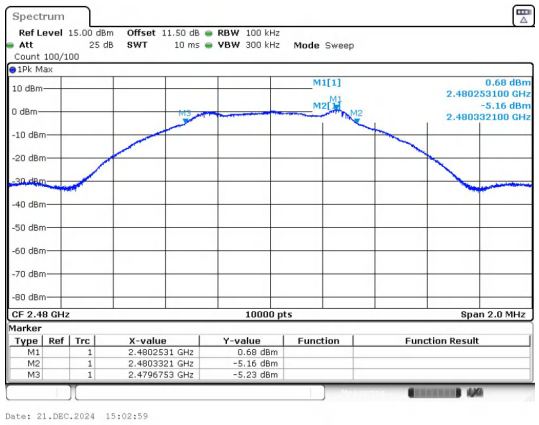
BLE 2M_Channel 0



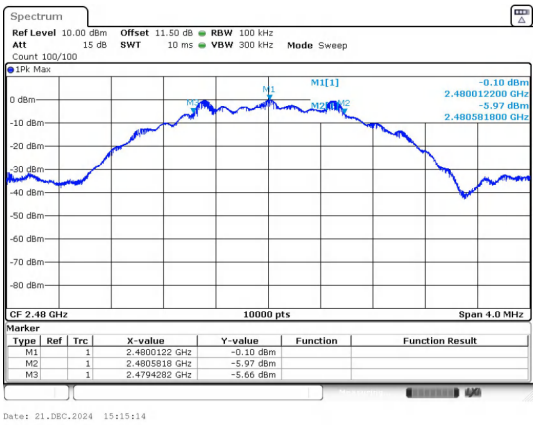
BLE 1M_Channel 19



BLE 2M_Channel 19



BLE 1M_Channel 39



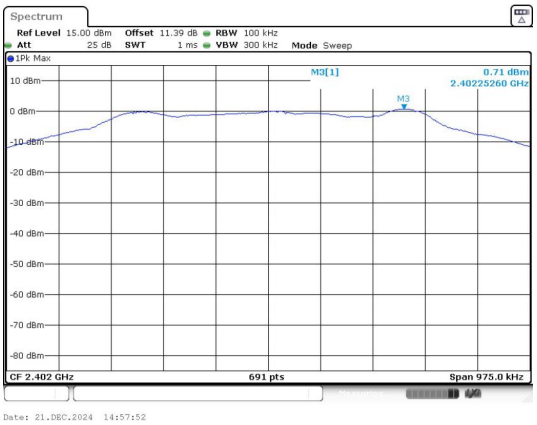
BLE 2M_Channel 39

5) Conducted Out Of Band Emission

Test Result

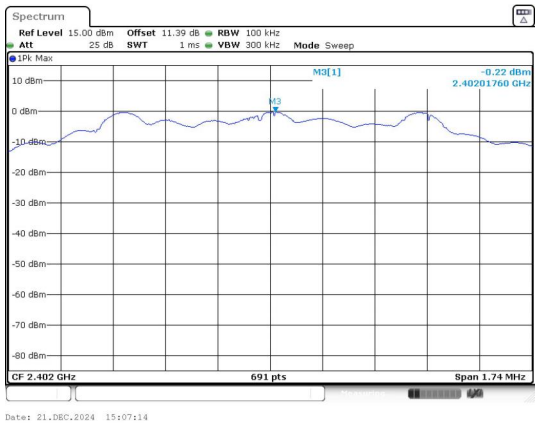
Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
BLE 1M	0	2396.11	-47.791	-19.29	-28.501	PASS
		2400.00	-49.760	-19.29	-30.470	PASS
		9602.20	-49.955	-19.29	-30.665	PASS
	19	4880.42	-46.993	-19.07	-27.923	PASS
	39	2483.50	-47.160	-19.33	-27.830	PASS
		4959.49	-48.712	-19.33	-29.382	PASS
BLE 2M	0	2400.00	-32.870	-20.22	-12.650	PASS
		9602.25	-50.227	-20.22	-30.007	PASS
	19	4878.76	-49.278	-19.84	-29.438	PASS
	39	2483.50	-50.090	-20.1	-29.990	PASS
		4958.66	-49.337	-20.1	-29.237	PASS

Test Graphs



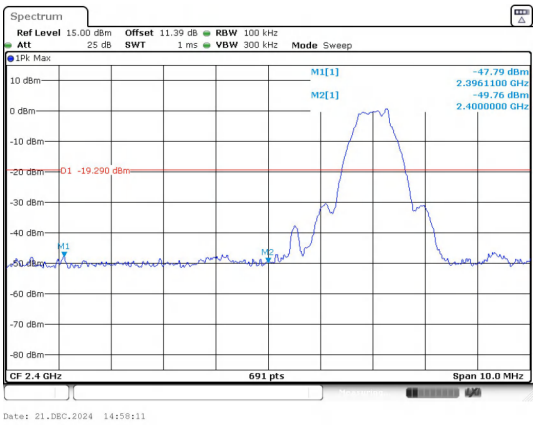
In-Band Reference Level

BLE 1M_Channel 0

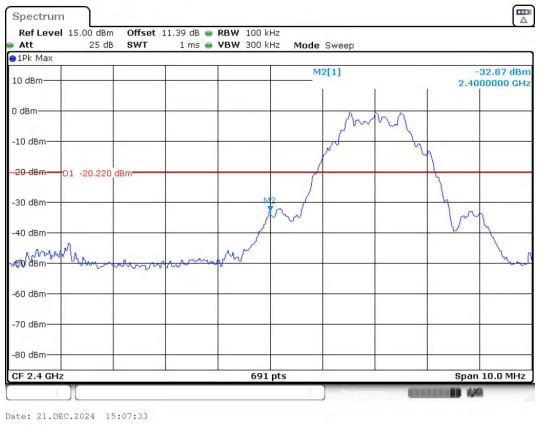


In-Band Reference Level

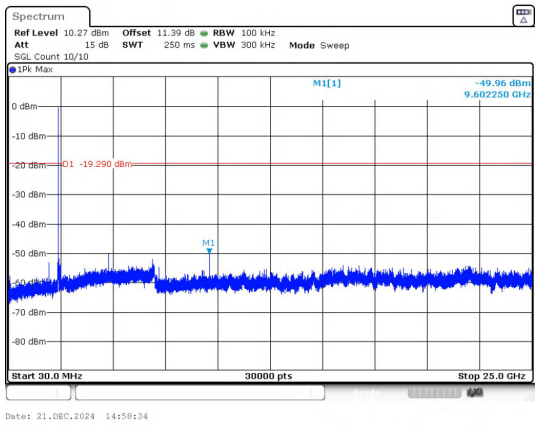
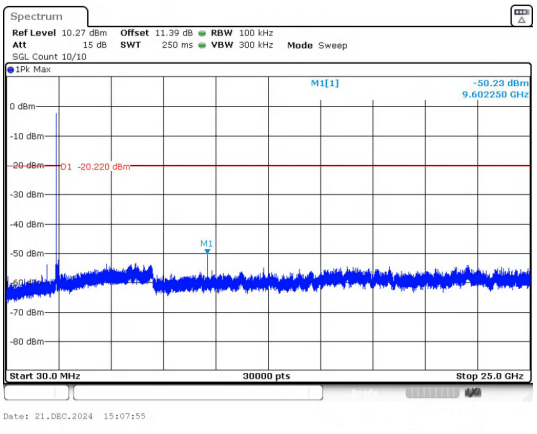
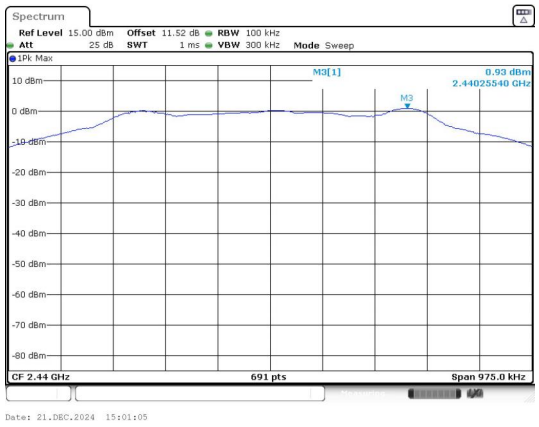
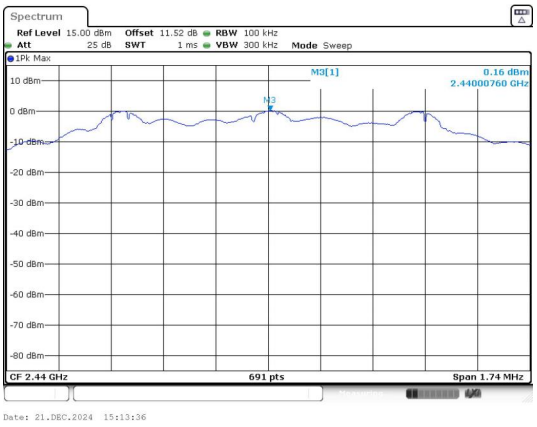
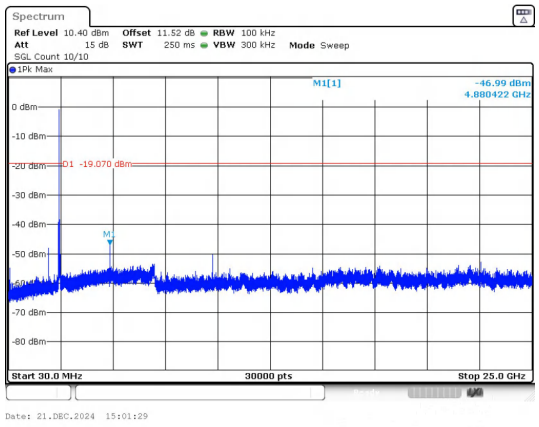
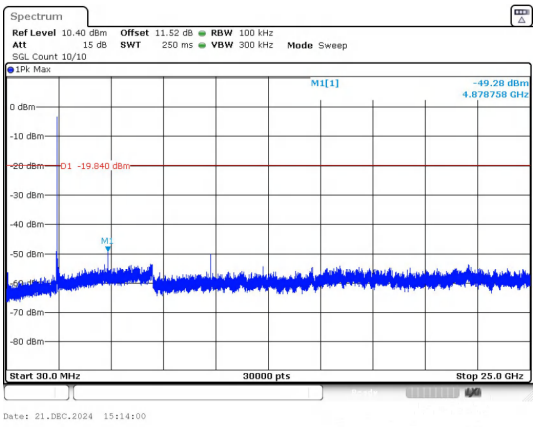
BLE 2M_Channel 0

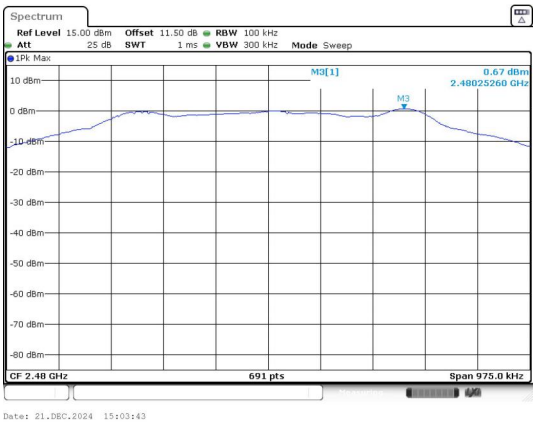


Out Of Band Emission



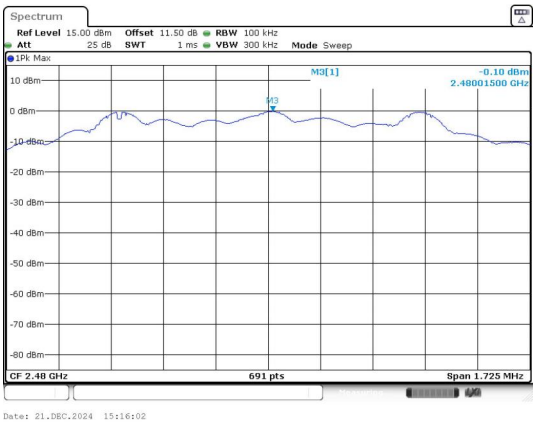
Out Of Band Emission

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



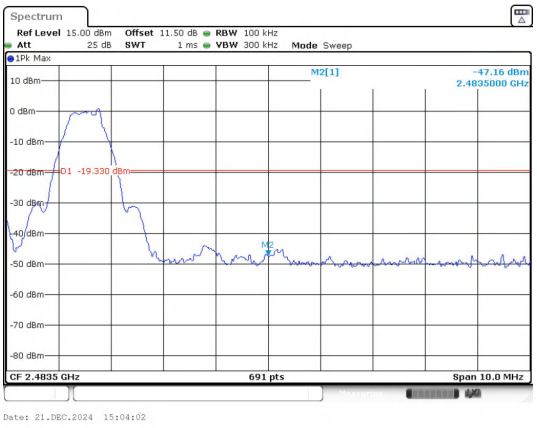
In-Band Reference Level

BLE 1M_Channel 39



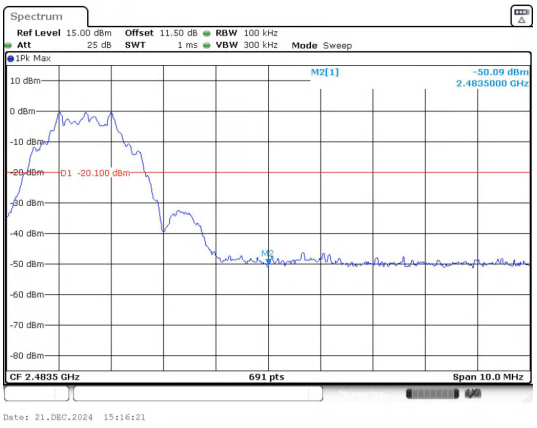
In-Band Reference Level

BLE 2M_Channel 39



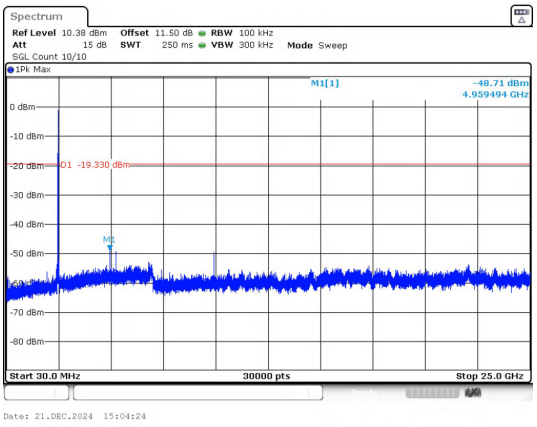
Out Of Band Emission

BLE 1M_Channel 39



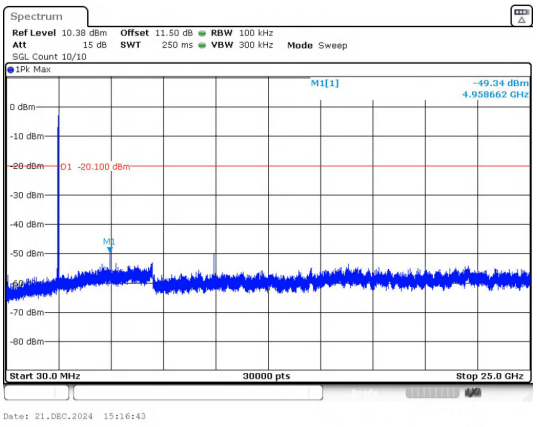
Out Of Band Emission

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-----