

Appendix Report

Report No.:	CISRR25022815306
Test Engineer:	Lucas Huang
Supervised by:	Rory Huang

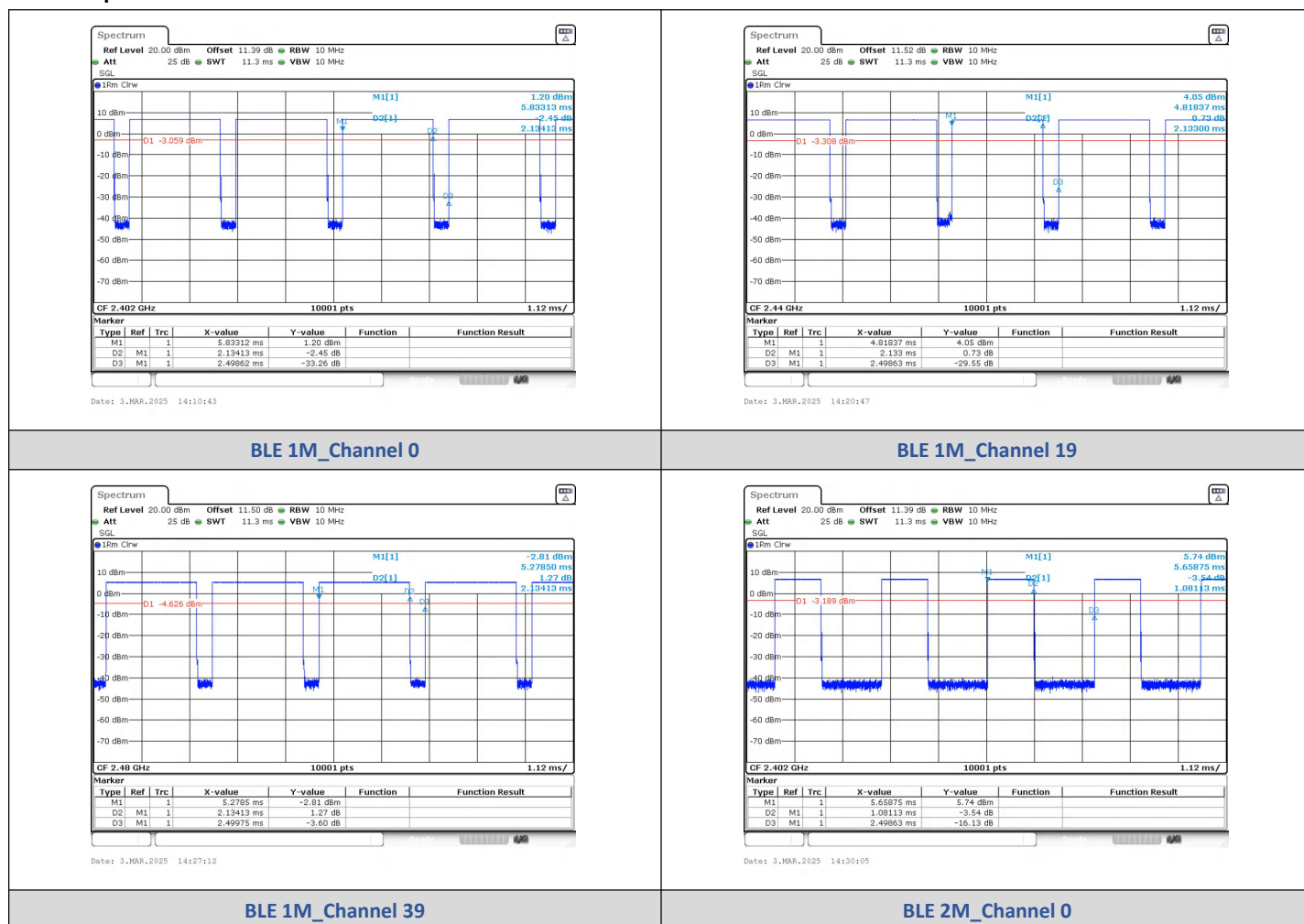
1) Duty Cycle

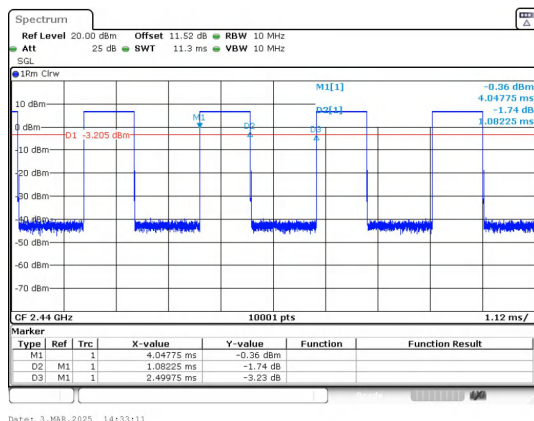
Test Result

Left:

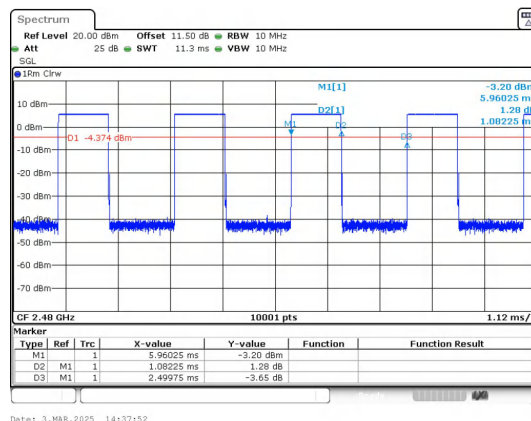
Mode	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
BLE 1M	0	2.134	2.499	85.41	0.8541	0.6849	0.4686
	19	2.133	2.499	85.37	0.8537	0.6869	0.4688
	39	2.134	2.500	85.37	0.8537	0.6869	0.4686
BLE 2M	0	1.081	2.499	43.27	0.4327	3.6381	0.9251
	19	1.082	2.500	43.29	0.4329	3.6361	0.9242
	39	1.082	2.500	43.29	0.4329	3.6361	0.9242

Test Graphs





BLE 2M_Channel 19

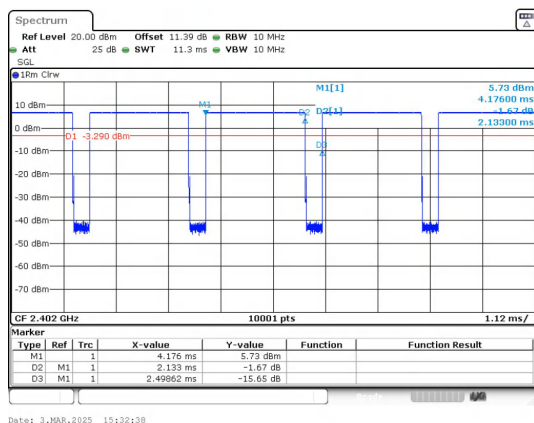


BLE 2M_Channel 39

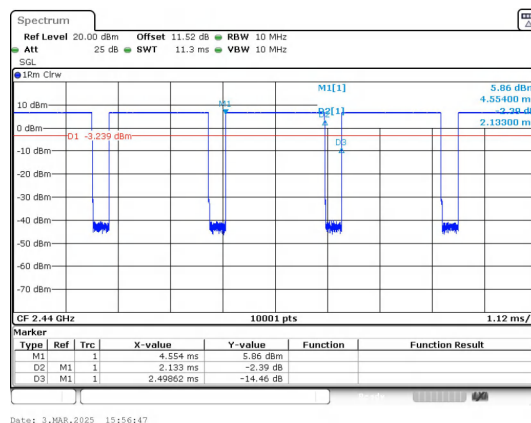
Right:

Mode	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
BLE 1M	0	2.133	2.499	85.37	0.8537	0.6869	0.4688
	19	2.133	2.499	85.37	0.8537	0.6869	0.4688
	39	2.134	2.500	85.37	0.8537	0.6869	0.4686
BLE 2M	0	1.081	2.499	43.27	0.4327	3.6381	0.9251
	19	1.075	2.482	43.29	0.4329	3.6361	0.9302
	39	1.082	2.500	43.29	0.4329	3.6361	0.9242

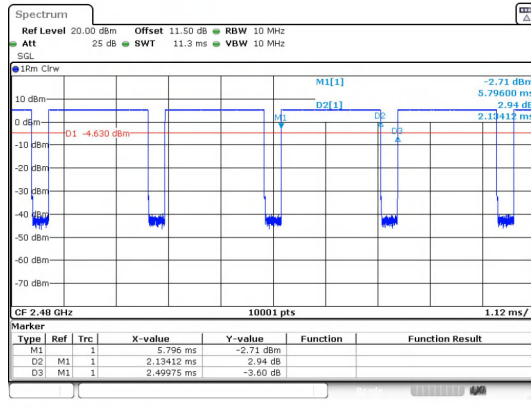
Test Graphs



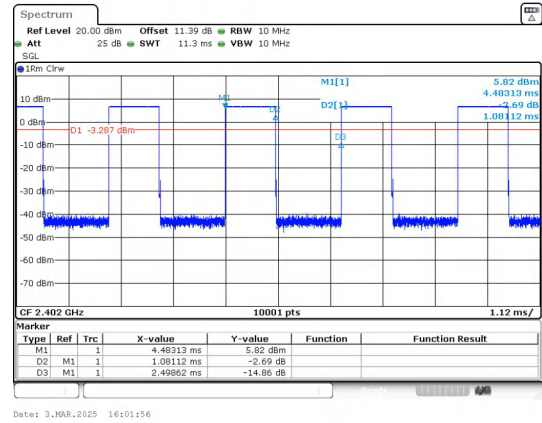
BLE 1M_Channel 0



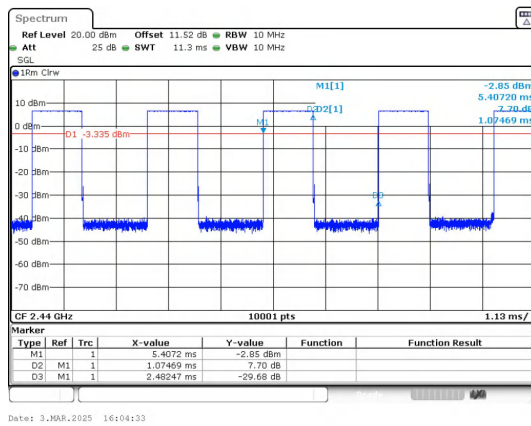
BLE 1M_Channel 19



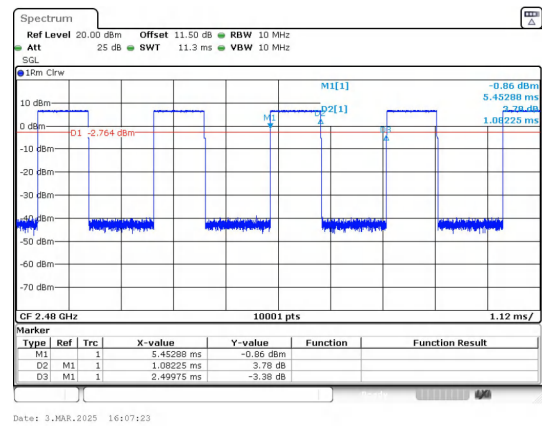
BLE 1M_Channel 39



BLE 2M_Channel 0



BLE 2M_Channel 19



BLE 2M_Channel 39

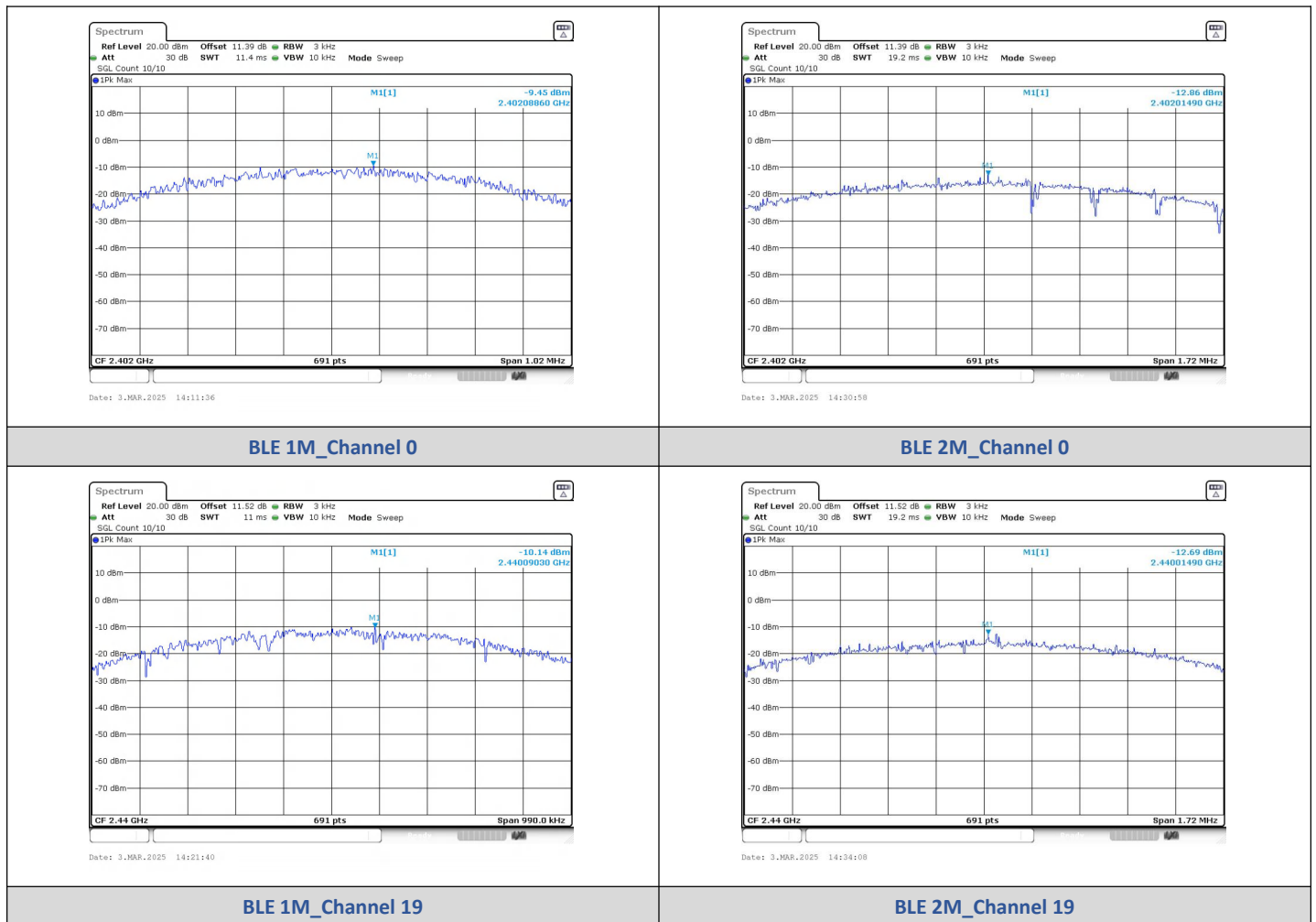
2) Power Spectral Density

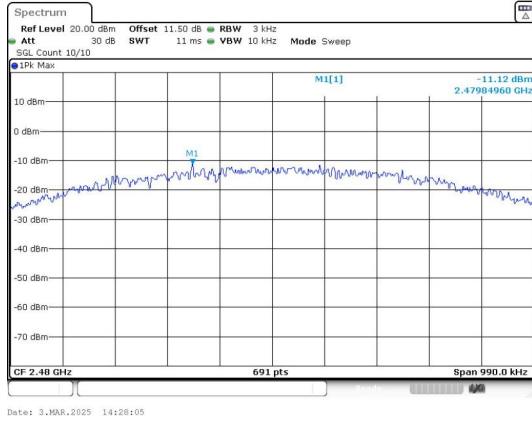
Test Result

Left:

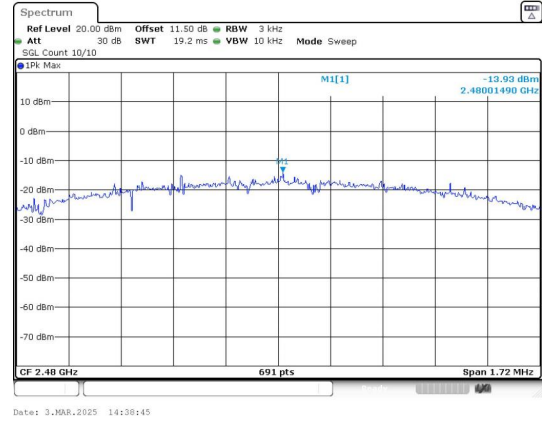
Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
BLE 1M	0	-9.450	≤8	PASS
BLE 1M	19	-10.140	≤8	PASS
BLE 1M	39	-11.120	≤8	PASS
BLE 2M	0	-12.860	≤8	PASS
BLE 2M	19	-12.690	≤8	PASS
BLE 2M	39	-13.930	≤8	PASS

Test Graphs





BLE 1M_Channel 39

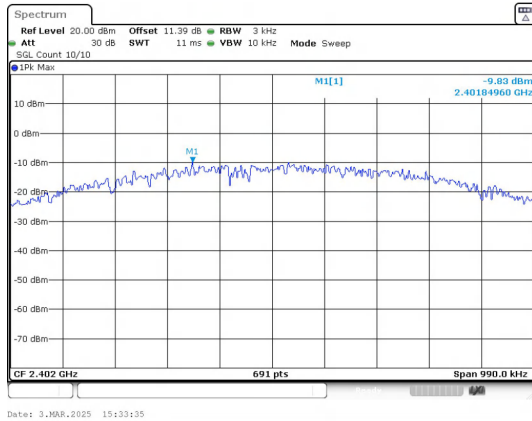


BLE 2M_Channel 39

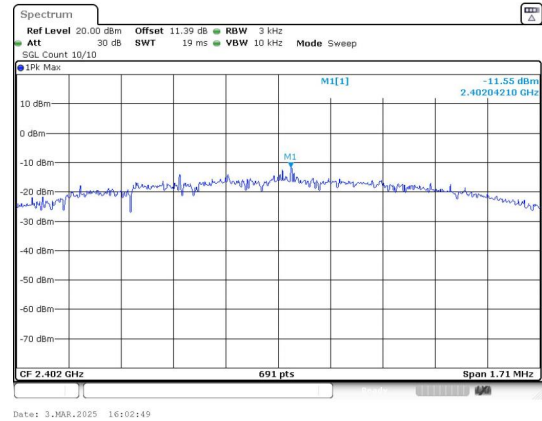
Right:

Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
BLE 1M	0	-9.830	≤8	PASS
BLE 1M	19	-10.640	≤8	PASS
BLE 1M	39	-11.990	≤8	PASS
BLE 2M	0	-11.550	≤8	PASS
BLE 2M	19	-14.210	≤8	PASS
BLE 2M	39	-11.960	≤8	PASS

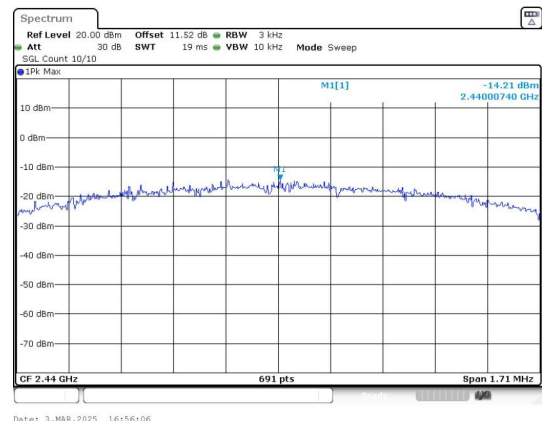
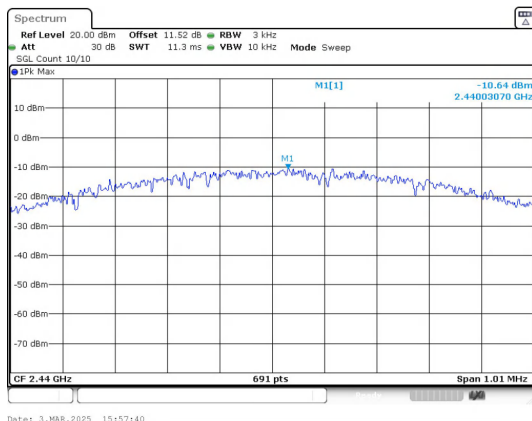
Test Graphs



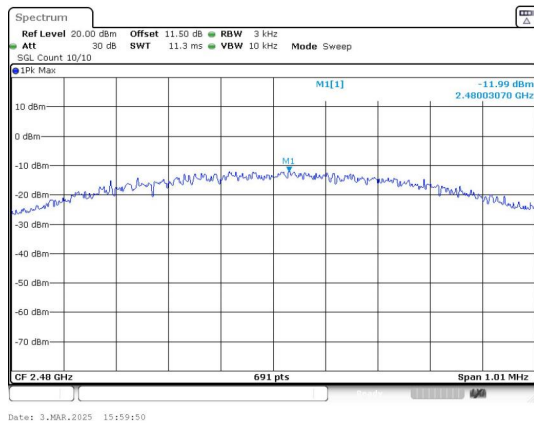
BLE 1M_Channel 0



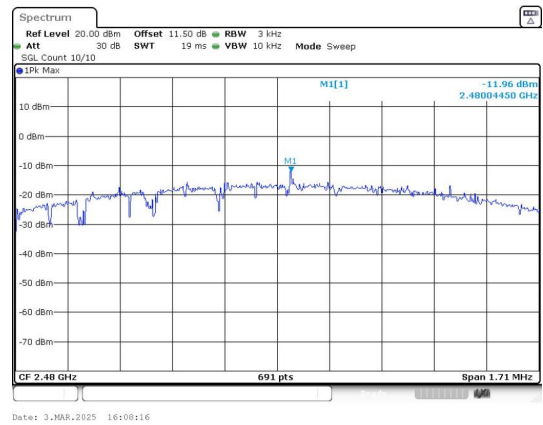
BLE 2M_Channel 0



BLE 1M_Channel 19



BLE 2M_Channel 19



BLE 1M_Channel 39

BLE 2M_Channel 39

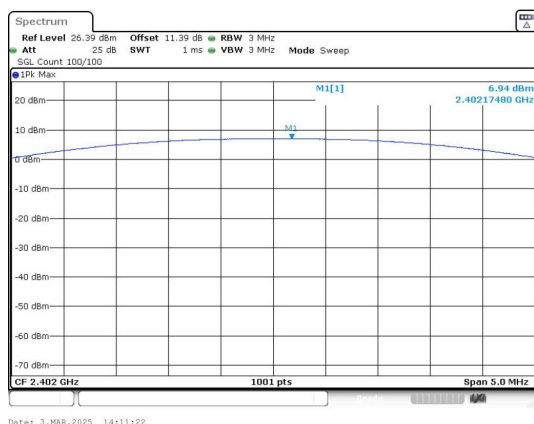
3) Conducted Output Power

Test Result

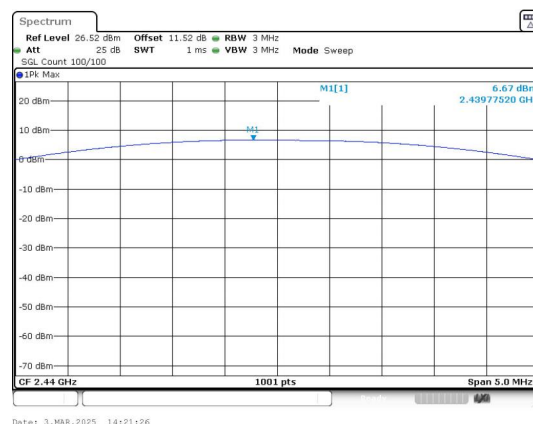
Left:

Mode	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
BLE 1M	0	6.94	4.94	≤30	PASS
	19	6.67	4.65	≤30	PASS
	39	5.40	3.47	≤30	PASS
BLE 2M	0	6.91	4.91	≤30	PASS
	19	6.85	4.84	≤30	PASS
	39	5.66	3.68	≤30	PASS

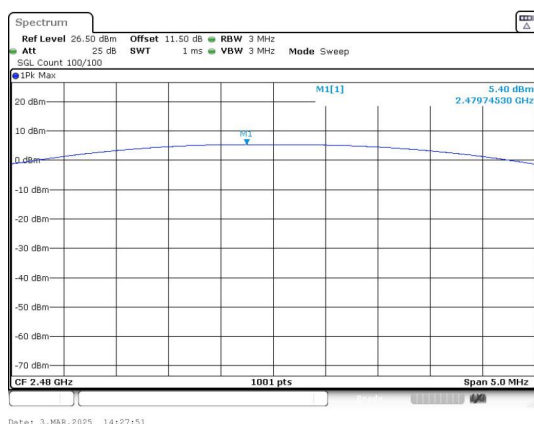
Test Graphs



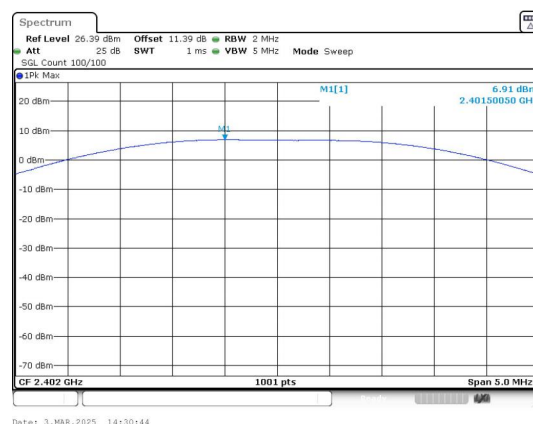
Peak Output Power
BLE 1M_Channel 0



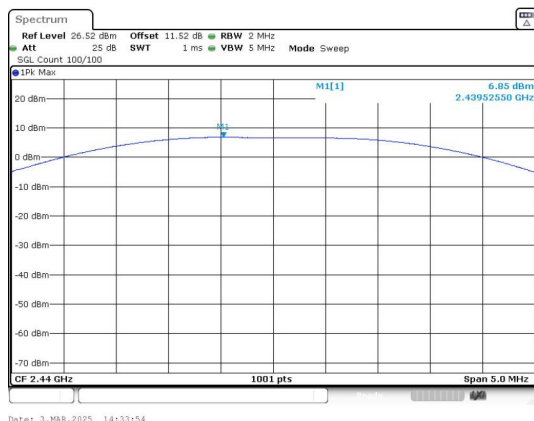
Peak Output Power
BLE 1M_Channel 19



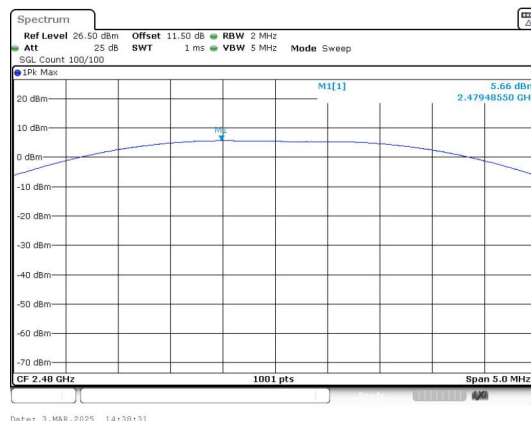
Peak Output Power
BLE 1M_Channel 39



Peak Output Power
BLE 2M_Channel 0



Peak Output Power
BLE 2M_Channel 19

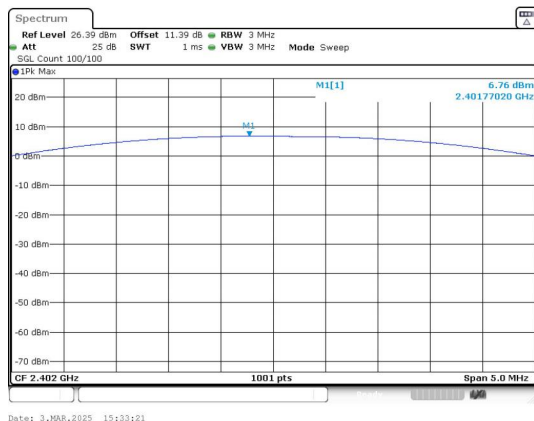


Peak Output Power
BLE 2M_Channel 39

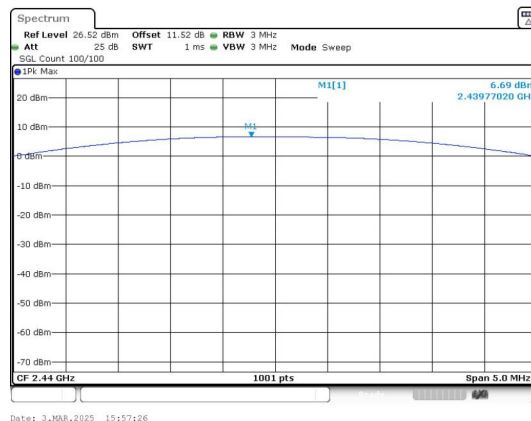
Right:

Mode	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
BLE 1M	0	6.76	4.74	≤30	PASS
	19	6.69	4.67	≤30	PASS
	39	5.39	3.46	≤30	PASS
BLE 2M	0	6.82	4.81	≤30	PASS
	19	6.70	4.68	≤30	PASS
	39	7.33	5.41	≤30	PASS

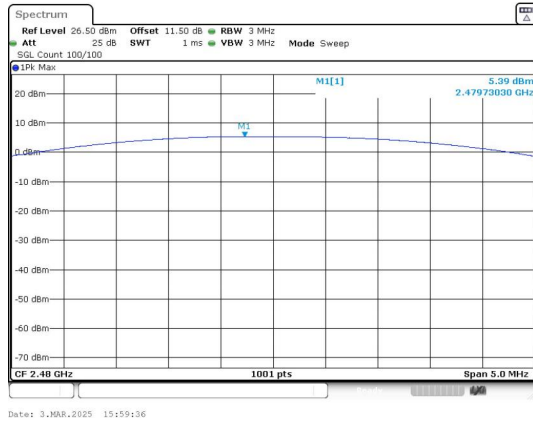
Test Graphs



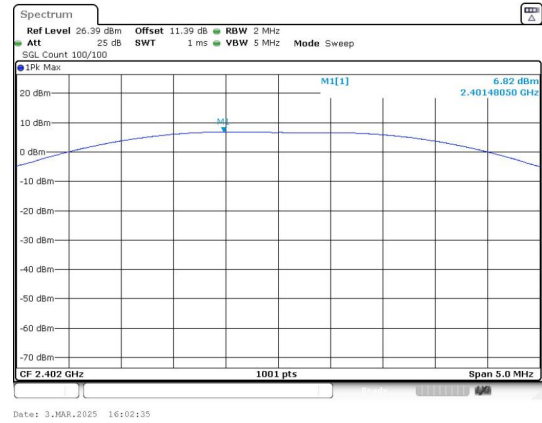
Peak Output Power
BLE 1M_Channel 0



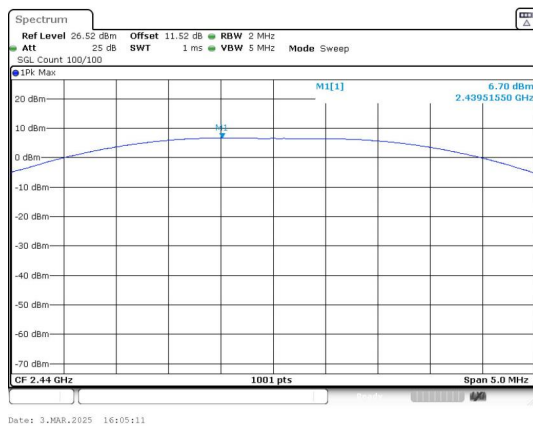
Peak Output Power
BLE 1M_Channel 19



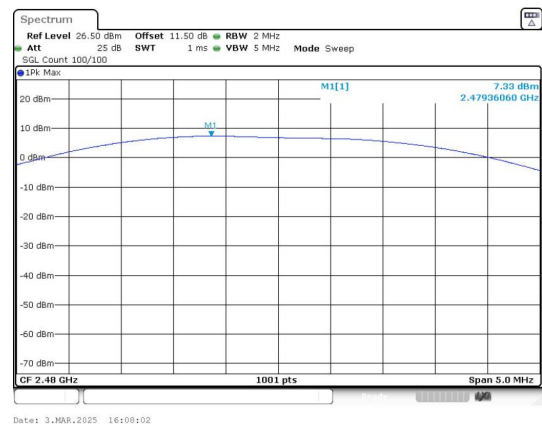
Peak Output Power
BLE 1M_Channel 39



Peak Output Power
BLE 2M_Channel 0



Peak Output Power
BLE 2M_Channel 19



Peak Output Power
BLE 2M_Channel 39

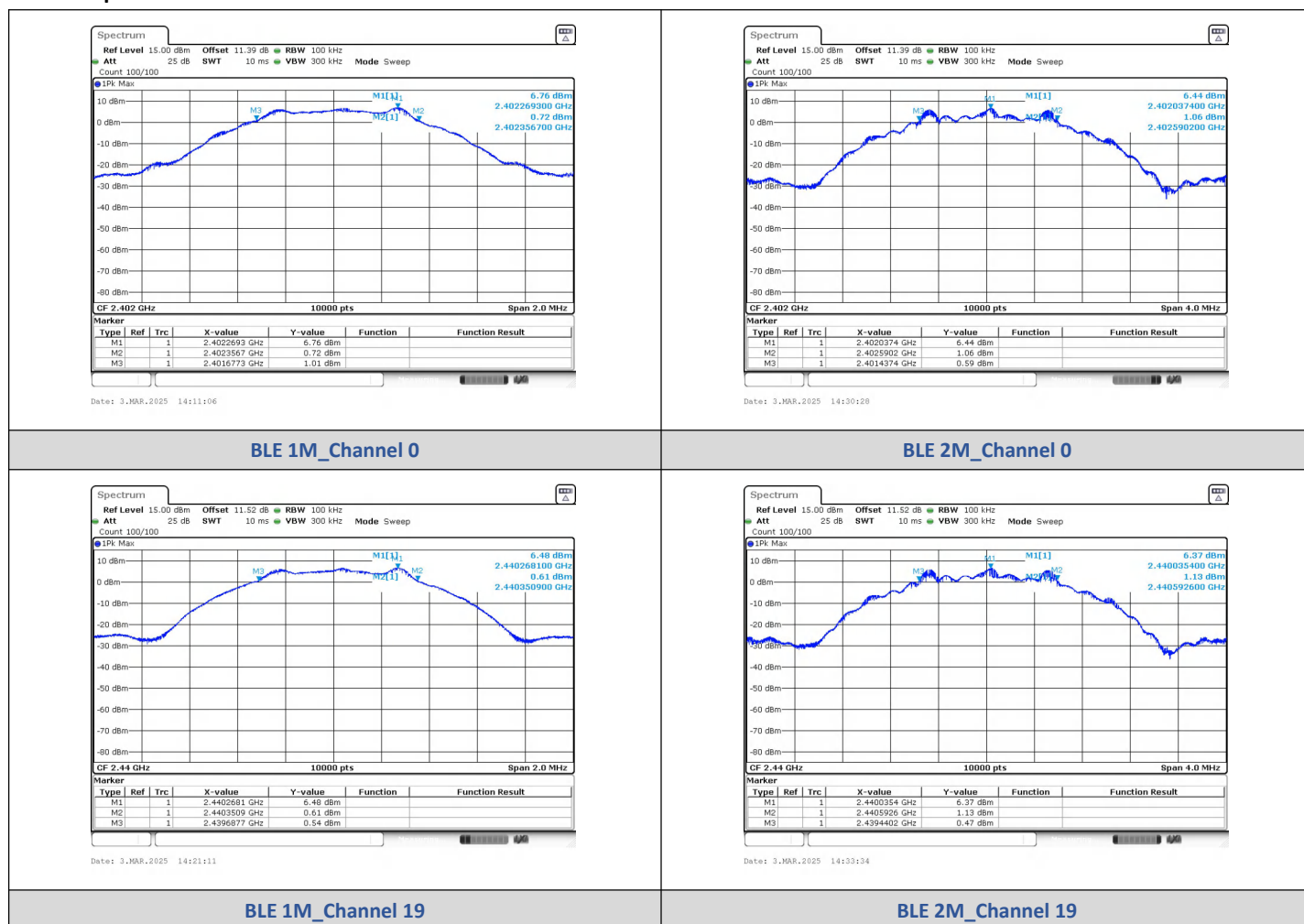
4) 6dB Bandwidth

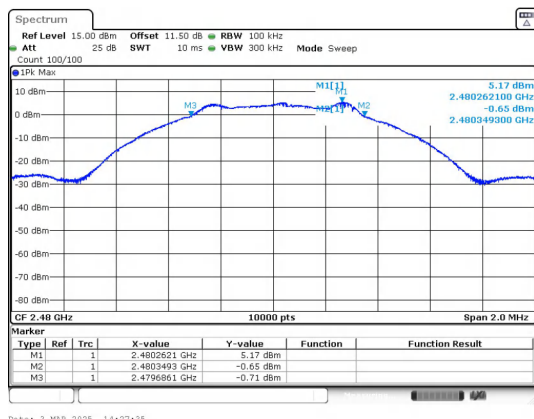
Test Result

Left:

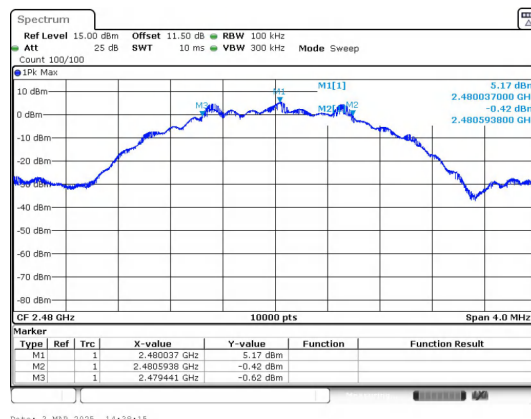
Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
BLE 1M	0	2402	0.6800	≥0.5	PASS
	19	2440	0.6600		PASS
	39	2480	0.6600		PASS
BLE 2M	0	2402	1.150		PASS
	19	2440	1.150		PASS
	39	2480	1.150		PASS

Test Graphs





BLE 1M_Channel 39

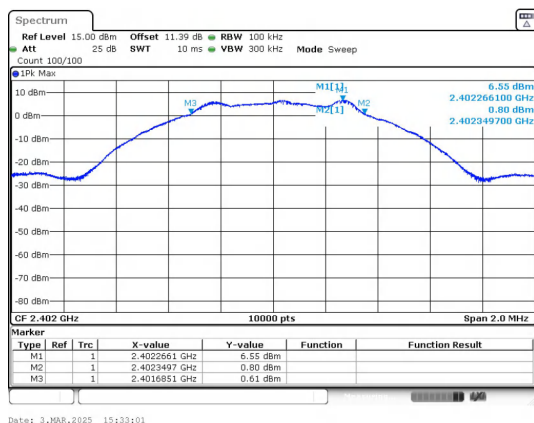


BLE 2M_Channel 39

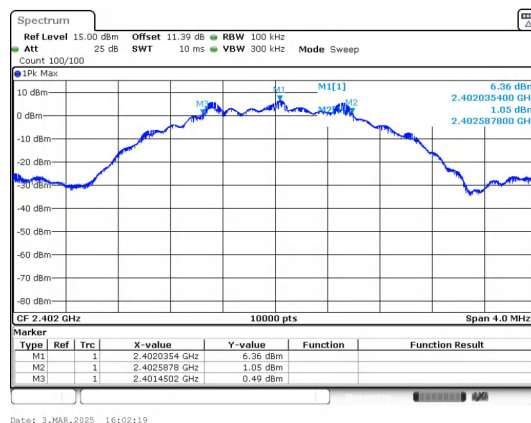
Right:

Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
BLE 1M	0	2402	0.6600	≥0.5	PASS
	19	2440	0.6700		PASS
	39	2480	0.6700		PASS
BLE 2M	0	2402	1.140		PASS
	19	2440	1.140		PASS
	39	2480	1.140		PASS

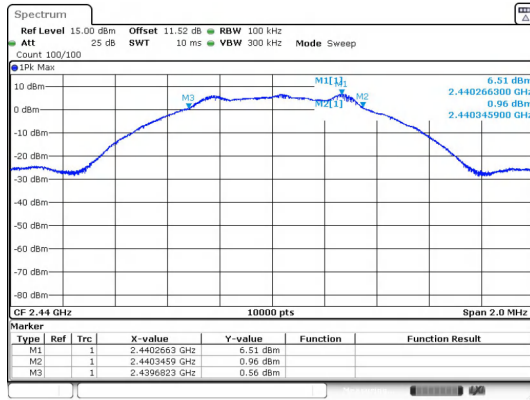
Test Graphs



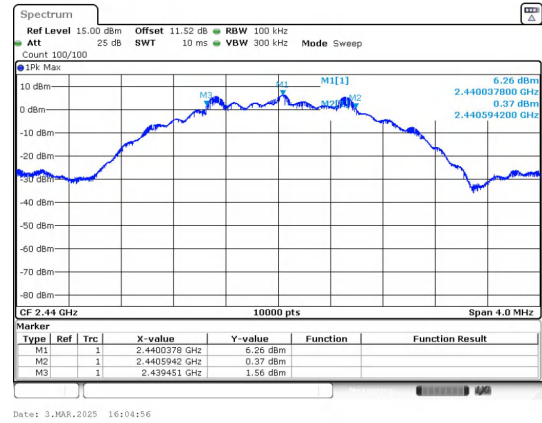
BLE 1M_Channel 0



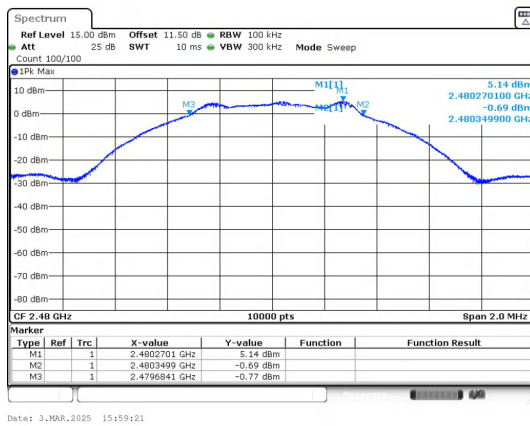
BLE 2M_Channel 0



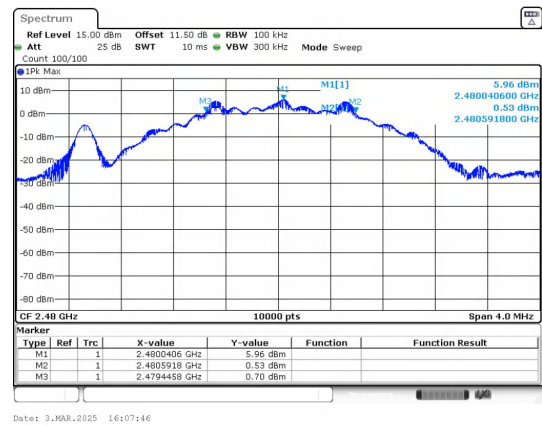
BLE 1M_Channel 19



BLE 2M_Channel 19



BLE 1M_Channel 39



BLE 2M_Channel 39

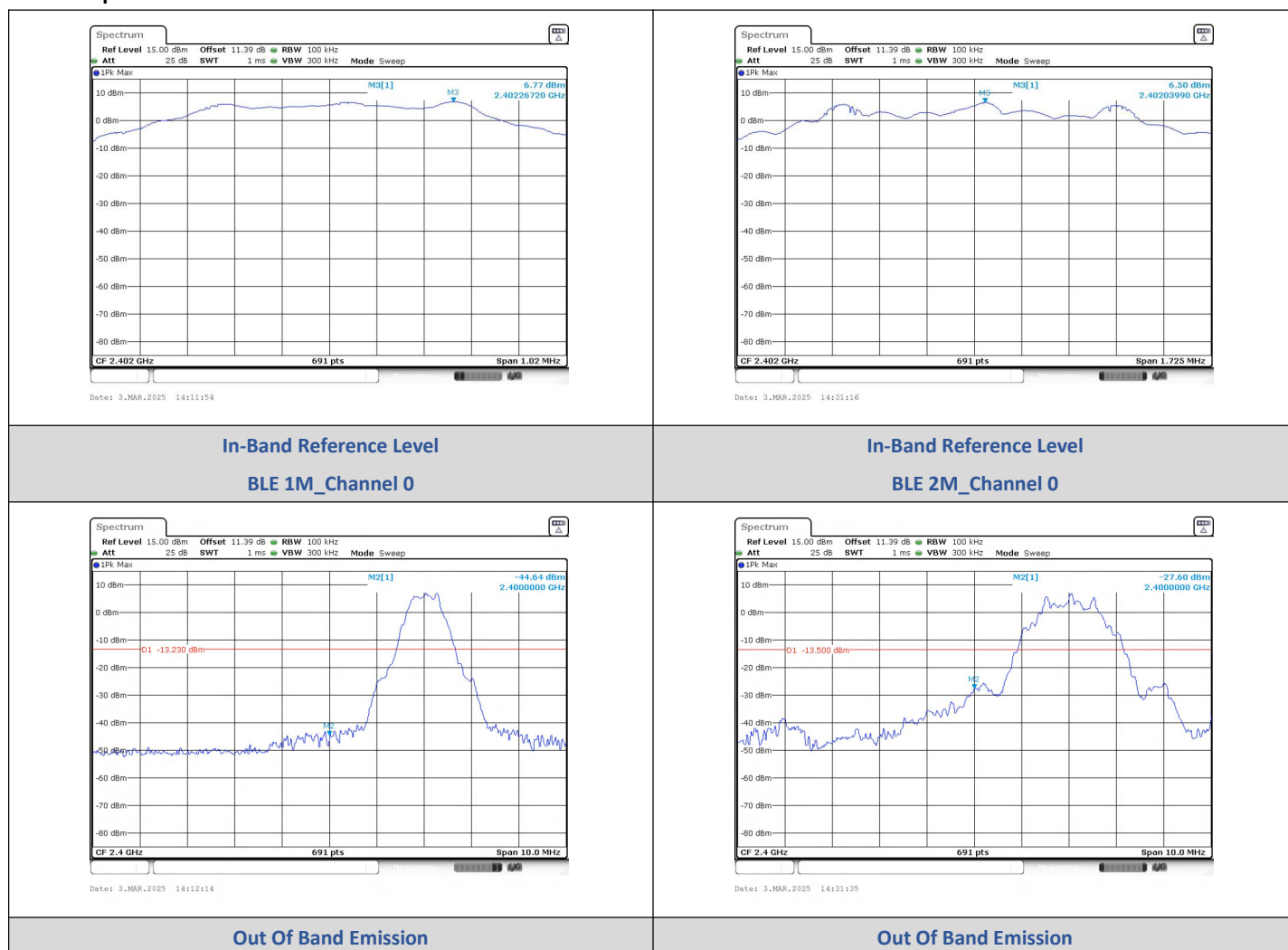
5) Conducted Out Of Band Emission

Test Result

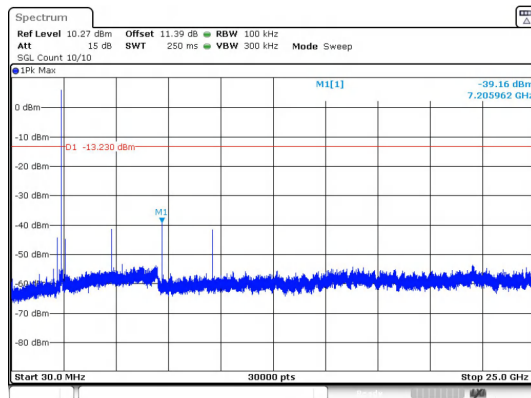
Left:

Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
BLE 1M	0	2400.00	-44.640	-13.23	-31.410	PASS
		7205.96	-39.156	-13.23	-25.926	PASS
	19	9753.73	-39.657	-13.56	-26.097	PASS
	39	2483.50	-44.520	-14.82	-29.700	PASS
		9914.37	-37.066	-14.82	-22.246	PASS
BLE 2M	0	2400.00	-27.600	-13.5	-14.100	PASS
		9602.25	-40.973	-13.5	-27.473	PASS
	19	9753.73	-39.865	-13.59	-26.275	PASS
	39	2483.50	-49.460	-14.79	-34.670	PASS
		9914.37	-36.644	-14.79	-21.854	PASS

Test Graphs

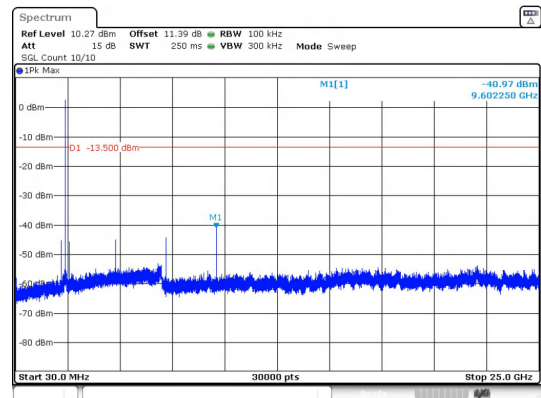


BLE 1M_Channel 0



Date: 3.MAR.2025 14:12:36

BLE 2M_Channel 0



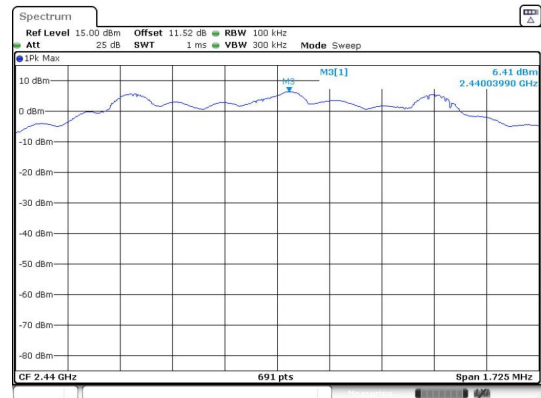
Date: 3.MAR.2025 14:31:58

30.0 MHz - 25000.0 MHz
BLE 1M_Channel 0



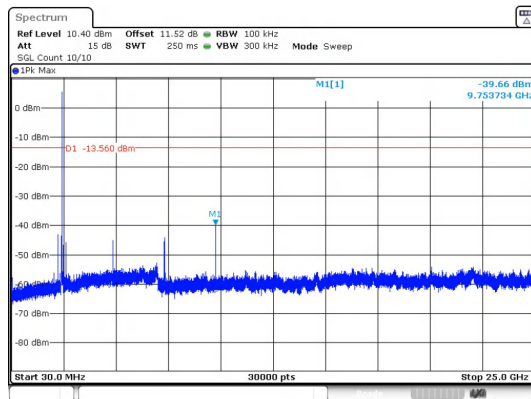
Date: 3.MAR.2025 14:21:58

30.0 MHz - 25000.0 MHz
BLE 2M_Channel 0



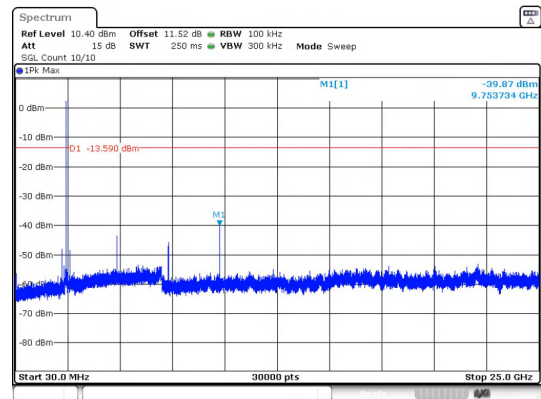
Date: 3.MAR.2025 14:34:26

In-Band Reference Level
BLE 1M_Channel 19



Date: 3.MAR.2025 14:22:23

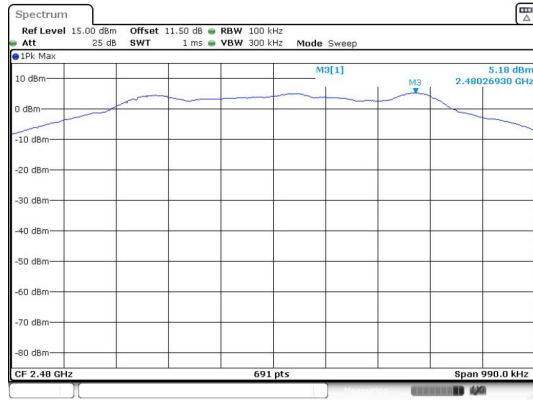
In-Band Reference Level
BLE 2M_Channel 19



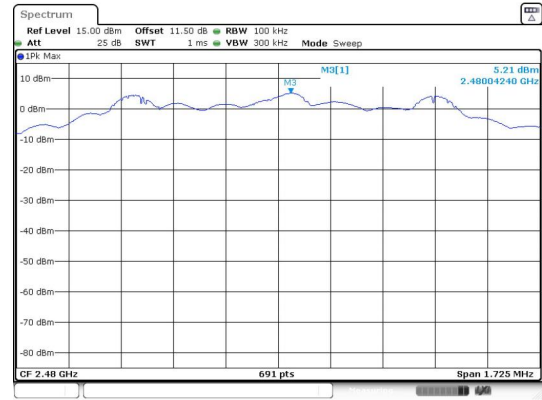
Date: 3.MAR.2025 14:34:50

30.0 MHz - 25000.0 MHz
BLE 1M_Channel 19

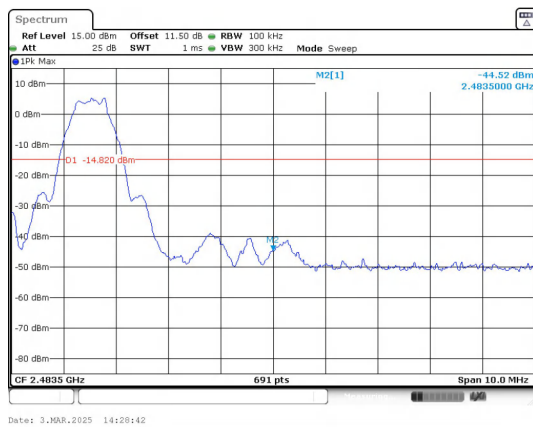
30.0 MHz - 25000.0 MHz
BLE 2M_Channel 19



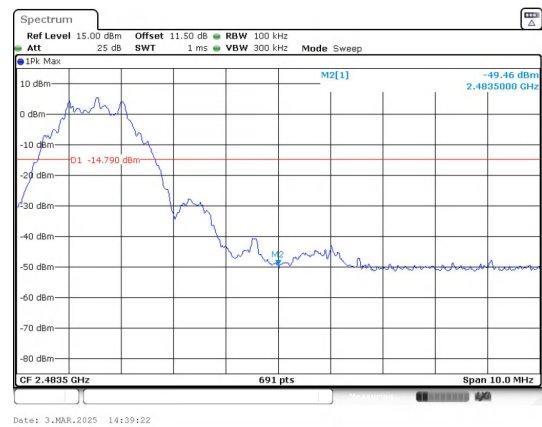
In-Band Reference Level
BLE 1M_Channel 39



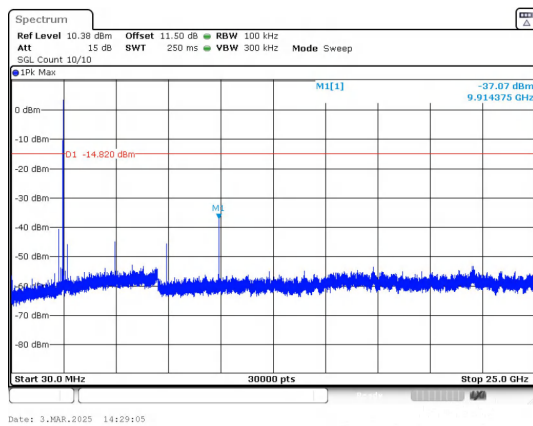
In-Band Reference Level
BLE 2M_Channel 39



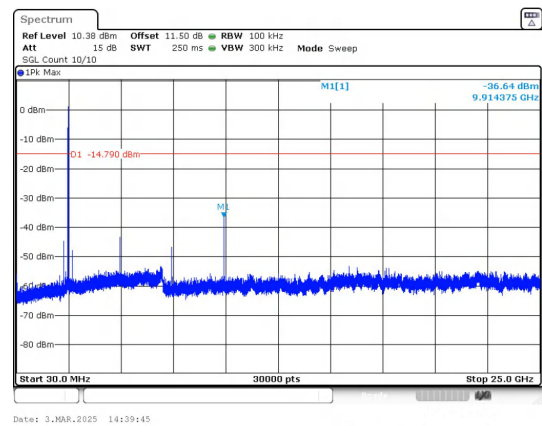
Out Of Band Emission
BLE 1M_Channel 39



Out Of Band Emission
BLE 2M_Channel 39



30.0 MHz - 25000.0 MHz
BLE 1M_Channel 39

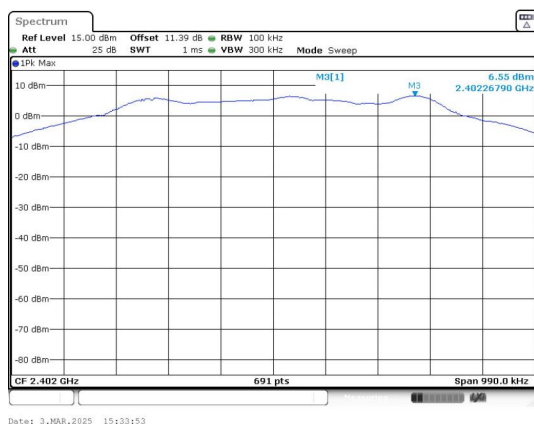


30.0 MHz - 25000.0 MHz
BLE 2M_Channel 39

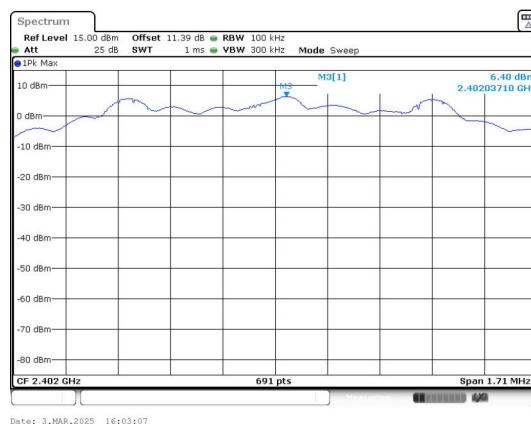
Right:

Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
BLE 1M	0	2398.90	-41.810	-13.45	-28.360	PASS
		2400.00	-42.250	-13.45	-28.800	PASS
		7206.80	-40.214	-13.45	-26.764	PASS
	19	9753.73	-40.119	-13.57	-26.549	PASS
	39	2483.50	-43.980	-14.89	-29.090	PASS
		9914.37	-37.139	-14.89	-22.249	PASS
BLE 2M	0	2400.00	-25.730	-13.6	-12.130	PASS
		9602.25	-41.597	-13.6	-27.997	PASS
	19	9753.73	-40.281	-13.74	-26.541	PASS
	39	2483.50	-42.740	-14.08	-28.660	PASS
		9914.37	-36.760	-14.08	-22.680	PASS

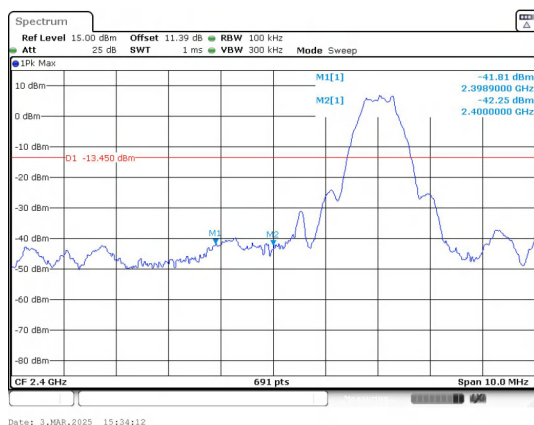
Test Graphs



In-Band Reference Level
BLE 1M_Channel 0



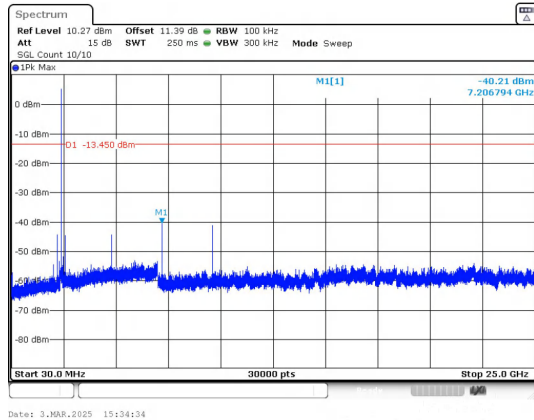
In-Band Reference Level
BLE 2M_Channel 0



Out Of Band Emission
BLE 1M_Channel 0

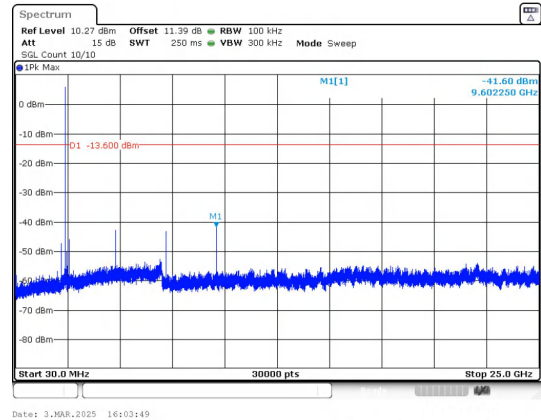


Out Of Band Emission
BLE 2M_Channel 0



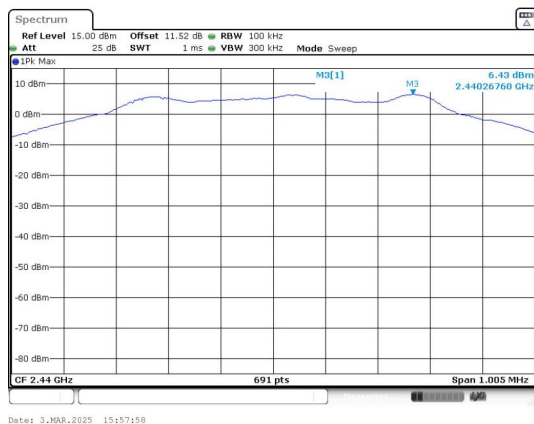
Date: 3.MAR.2025 15:34:34

30.0 MHz - 25000.0 MHz
BLE 1M_Channel 0



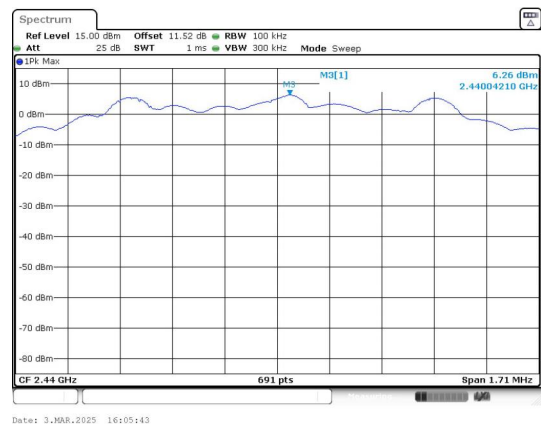
Date: 3.MAR.2025 16:03:49

30.0 MHz - 25000.0 MHz
BLE 2M_Channel 0



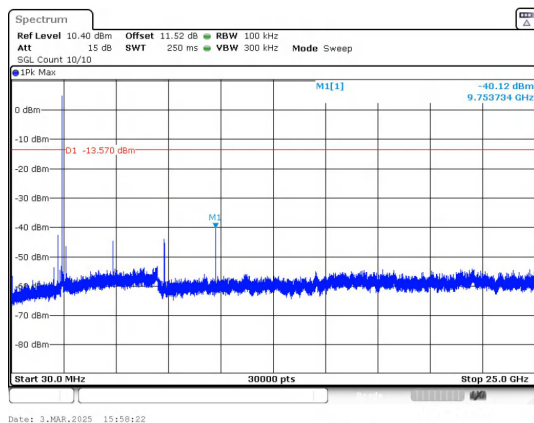
Date: 3.MAR.2025 15:57:58

In-Band Reference Level
BLE 1M_Channel 19



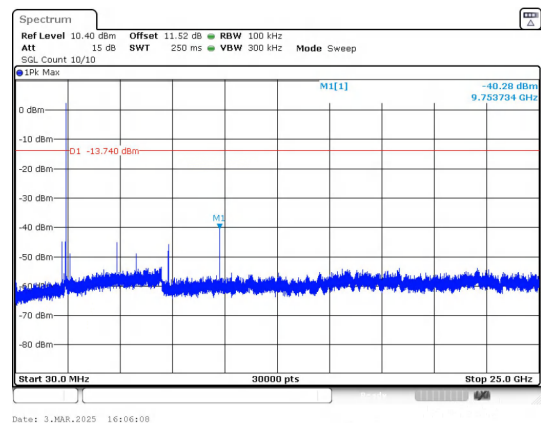
Date: 3.MAR.2025 16:05:43

In-Band Reference Level
BLE 2M_Channel 19



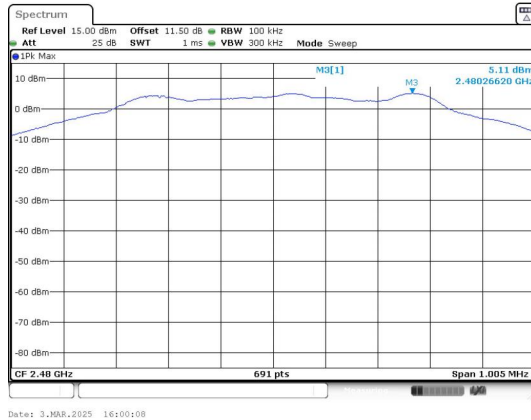
Date: 3.MAR.2025 15:58:22

30.0 MHz - 25000.0 MHz
BLE 1M_Channel 19

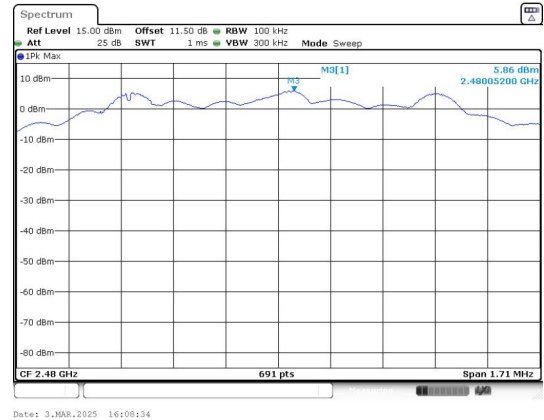


Date: 3.MAR.2025 16:06:08

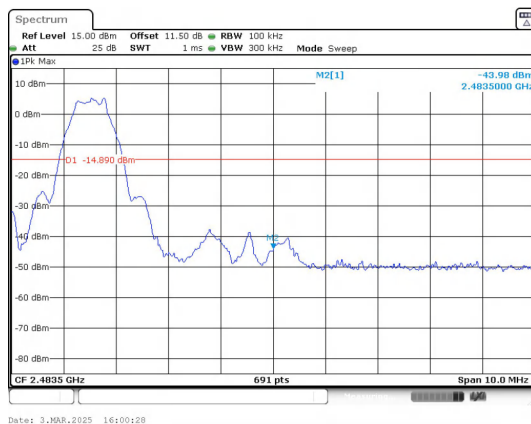
30.0 MHz - 25000.0 MHz
BLE 2M_Channel 19



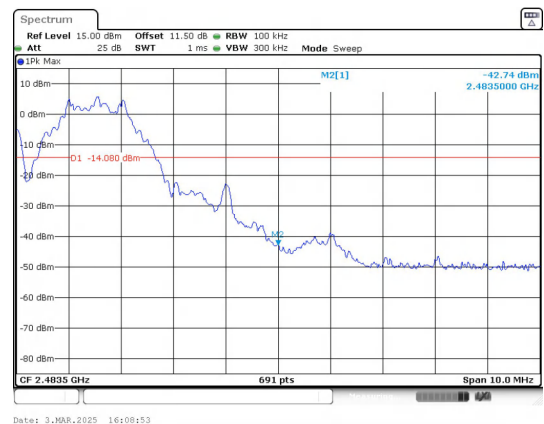
**In-Band Reference Level
BLE 1M_Channel 39**



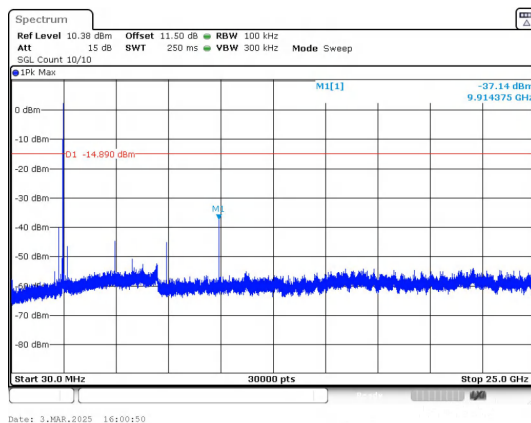
**In-Band Reference Level
BLE 2M_Channel 39**



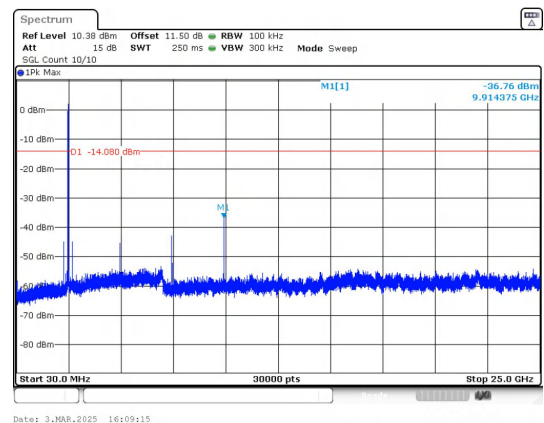
**Out Of Band Emission
BLE 1M_Channel 39**



**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-----