

Appendix

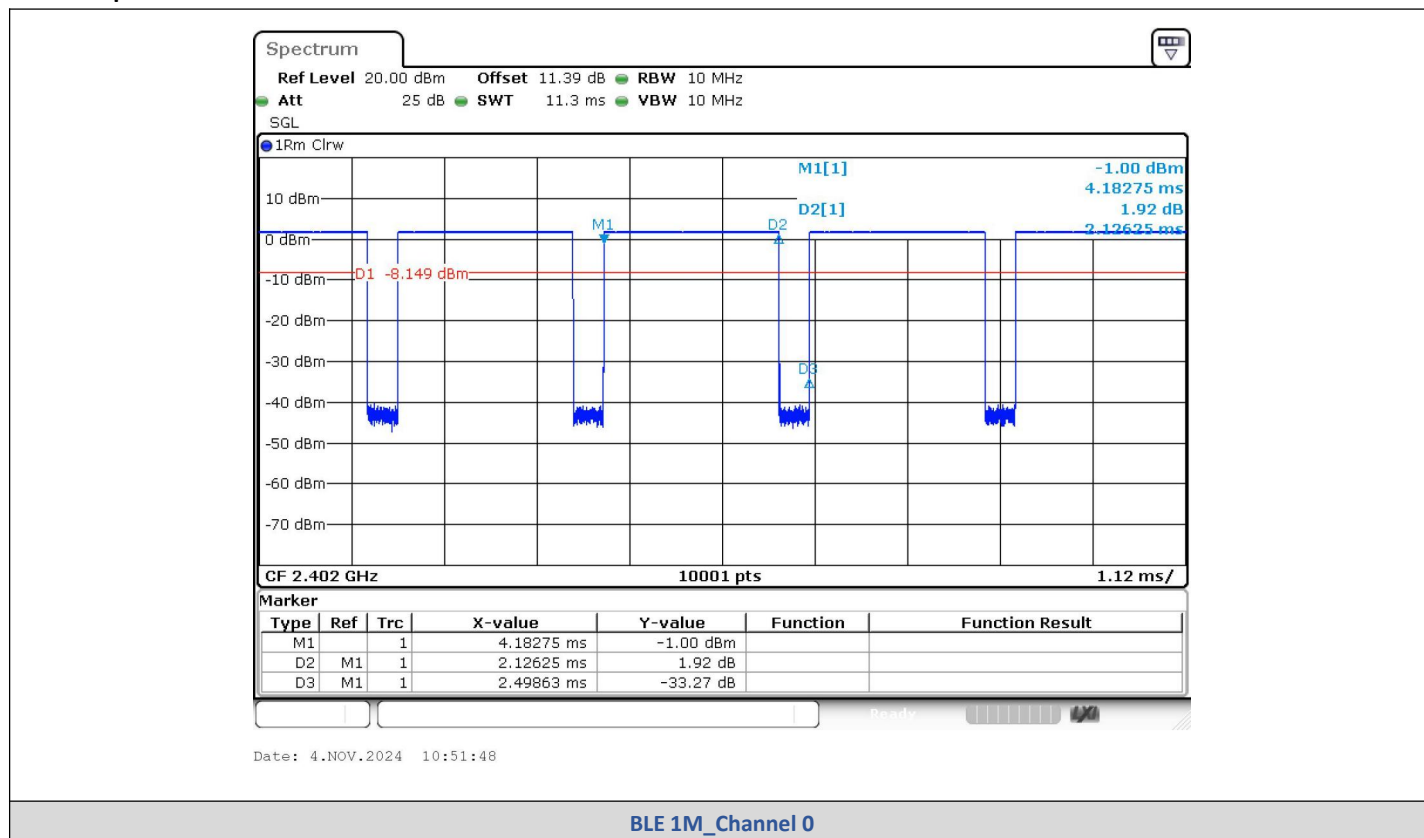
Report No.:	CISRR24102111702
FCC ID:	2BL27-AD-01
Product Name:	PORTAABLEWIRELESS SPEAKER
Model No.:	AD-01
Test Engineer:	Lucas Huang
Supervised by:	Rory Huang

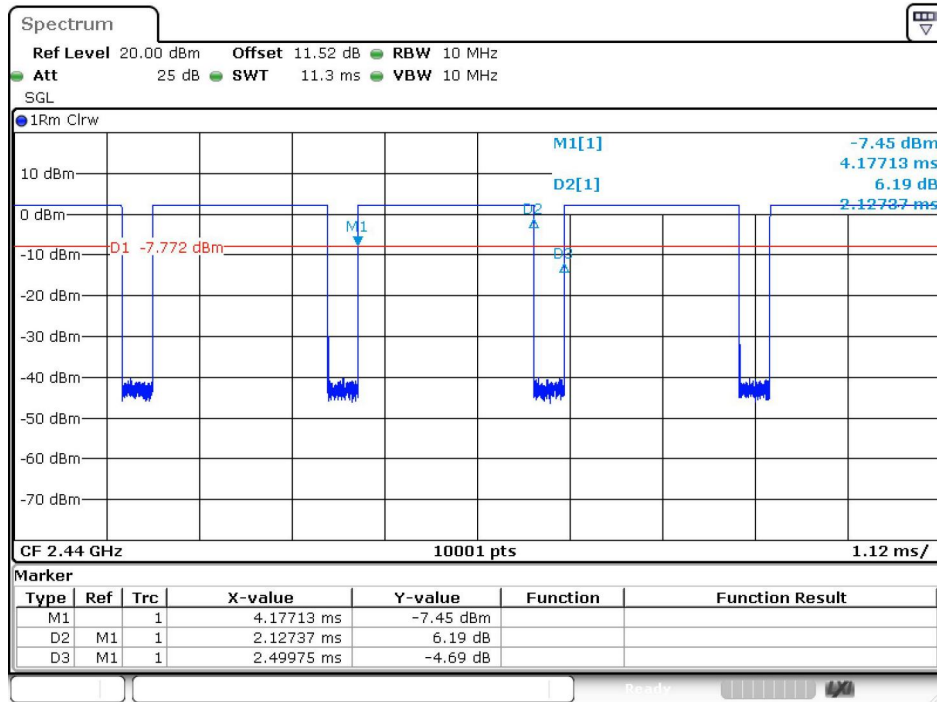
1) Duty Cycle

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	2.500	85.10	0.8510	0.7007	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

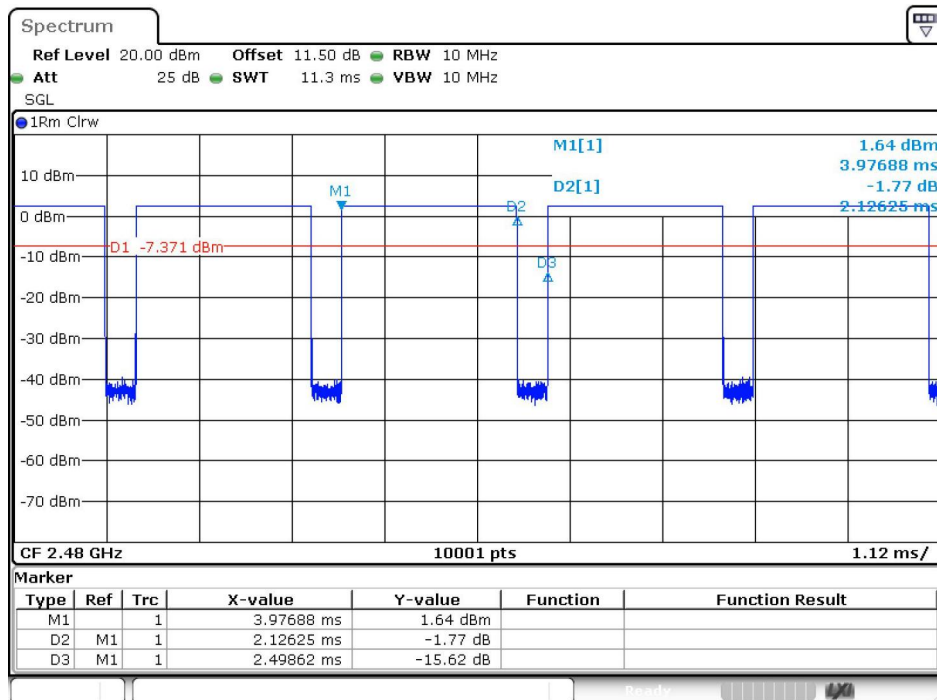
Test Graphs





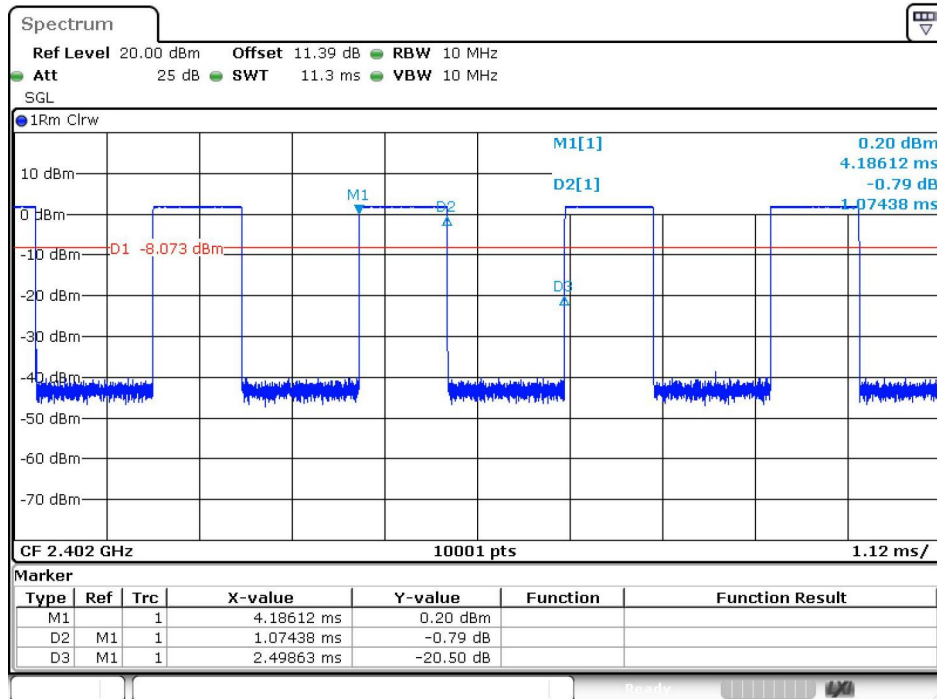
Date: 4.NOV.2024 10:54:09

BLE 1M_Channel 19



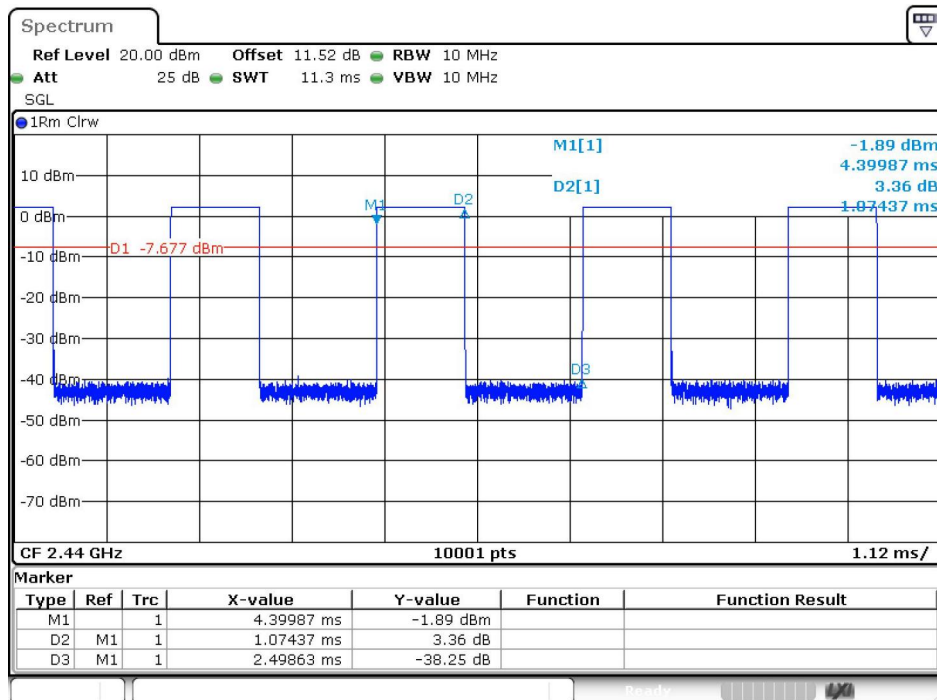
Date: 4.NOV.2024 10:56:54

BLE 1M_Channel 39



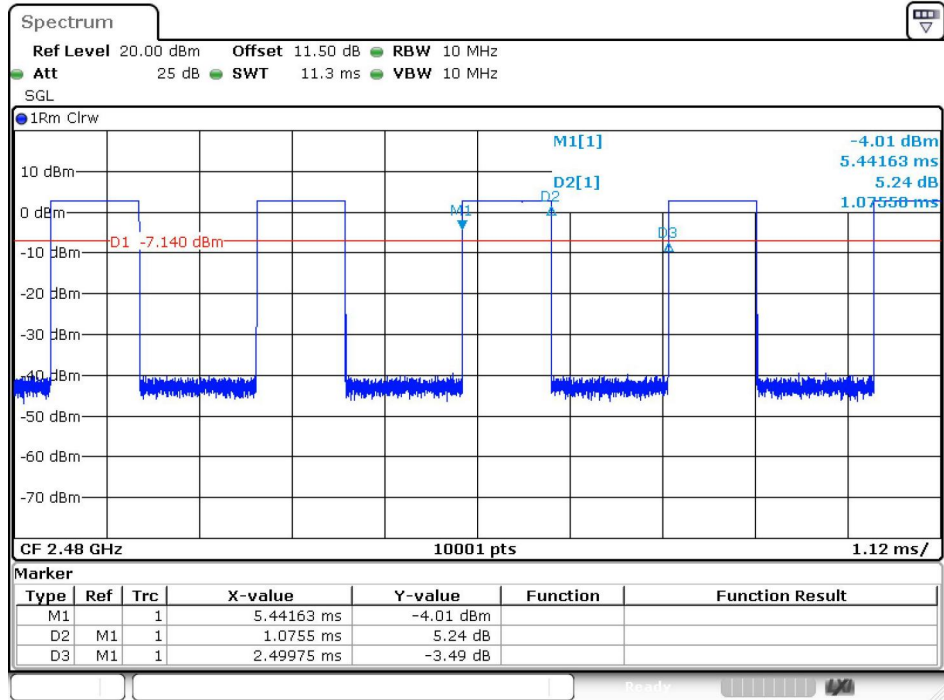
Date: 4.NOV.2024 11:00:22

BLE 2M_Channel 0



Date: 4.NOV.2024 11:03:43

BLE 2M_Channel 19



Date: 4.NOV.2024 13:08:22

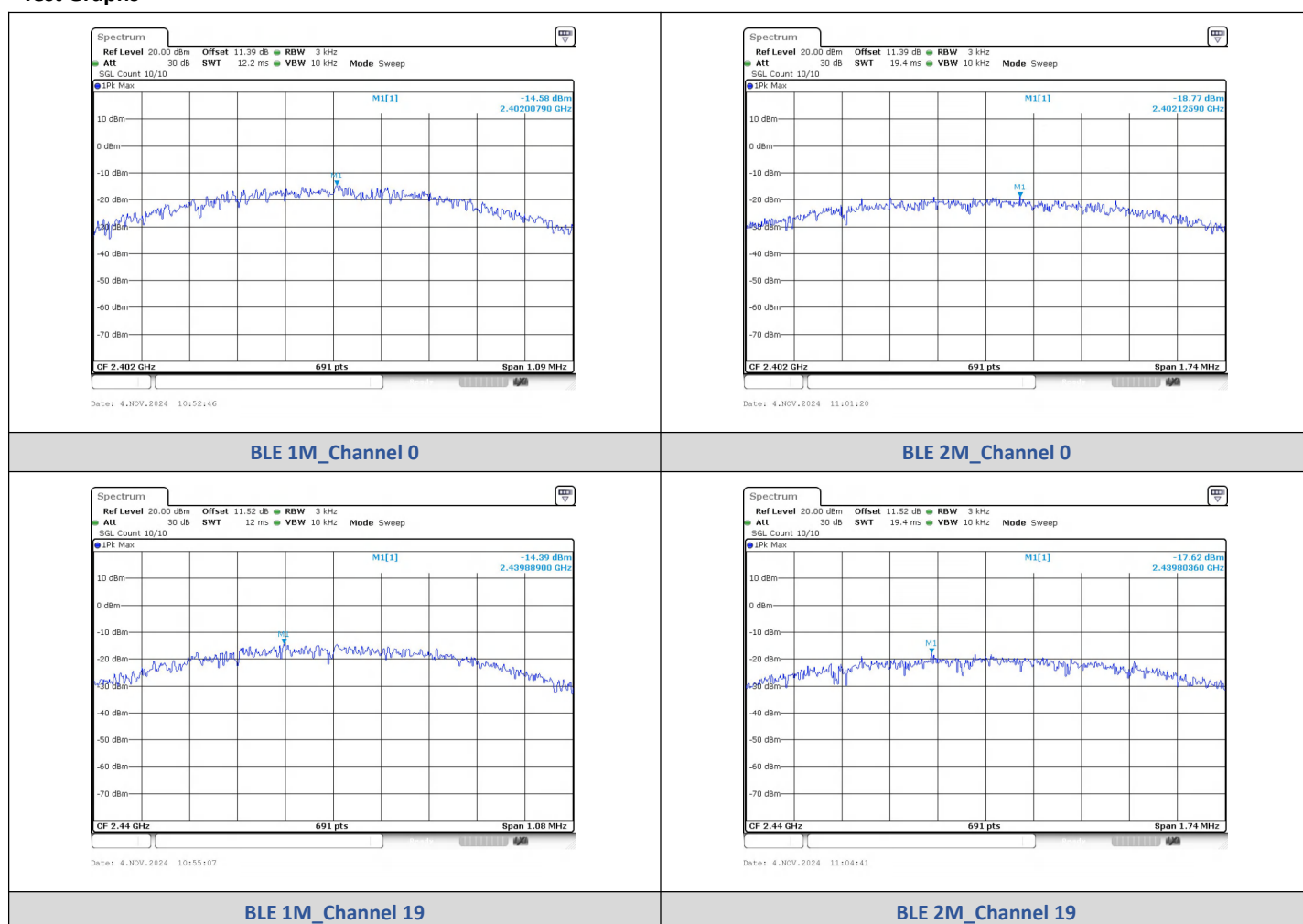
BLE 2M_Channel 39

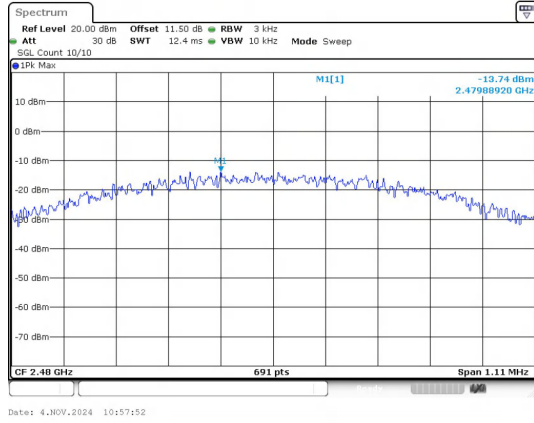
2) Power Spectral Density

Test Result

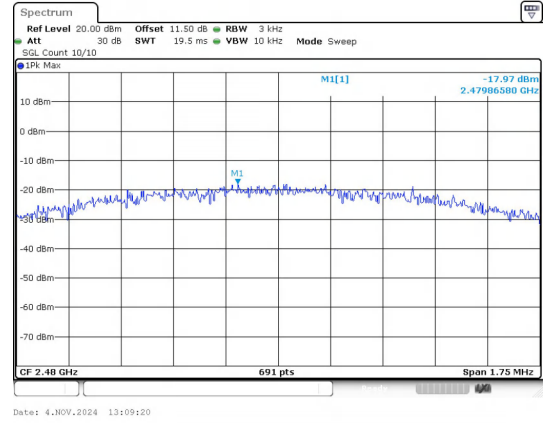
Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
BLE 1M	0	-14.579	≤8	PASS
BLE 1M	19	-14.391	≤8	PASS
BLE 1M	39	-13.741	≤8	PASS
BLE 2M	0	-18.770	≤8	PASS
BLE 2M	19	-17.623	≤8	PASS
BLE 2M	39	-17.973	≤8	PASS

Test Graphs





BLE 1M_Channel 39



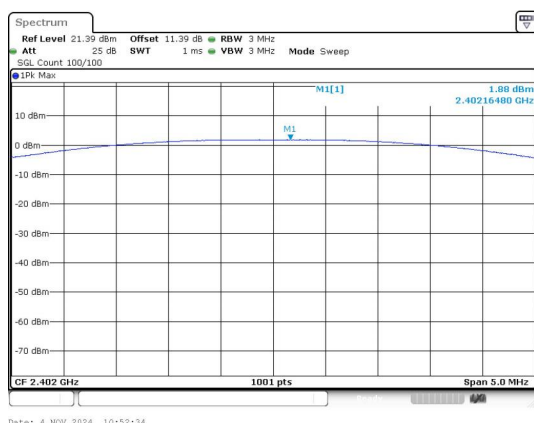
BLE 2M_Channel 39

3) Conducted Output Power

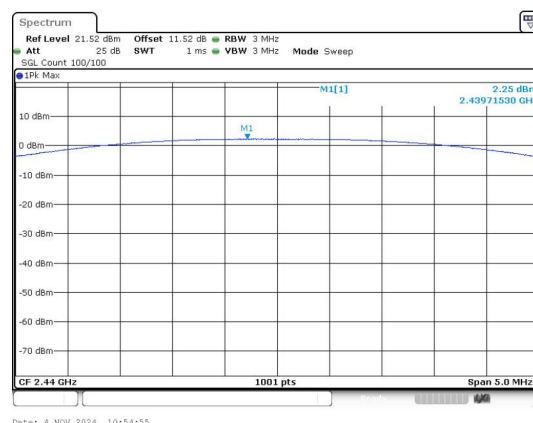
Test Result

Mode	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
BLE 1M	0	1.88	1.54	≤30	PASS
	19	2.25	1.68	≤30	PASS
	39	2.66	1.85	≤30	PASS
BLE 2M	0	1.92	1.56	≤30	PASS
	19	2.30	1.7	≤30	PASS
	39	2.80	1.91	≤30	PASS

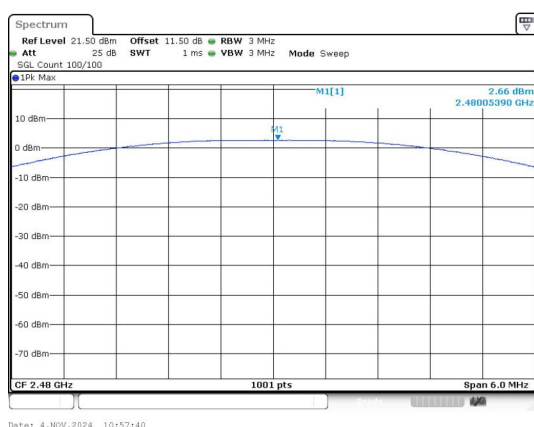
Test Graphs



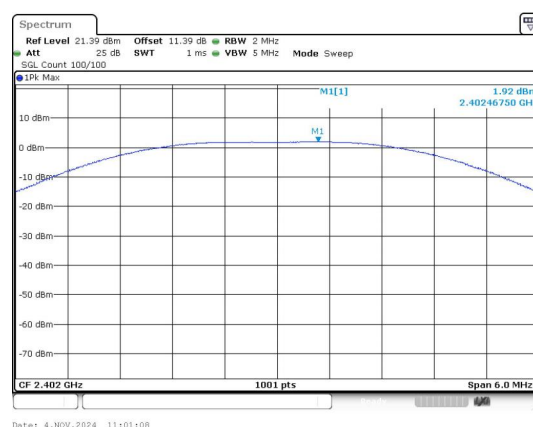
Peak Output Power
BLE 1M_Channel 0



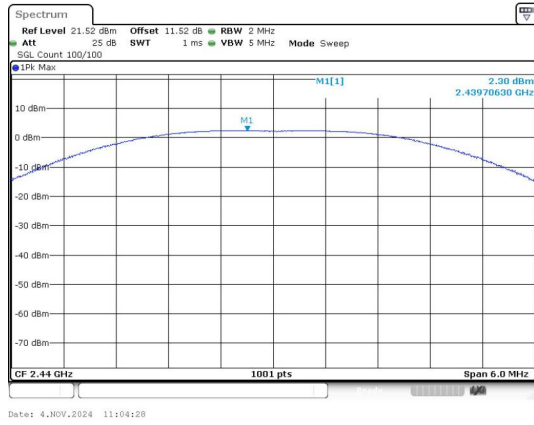
Peak Output Power
BLE 1M_Channel 19



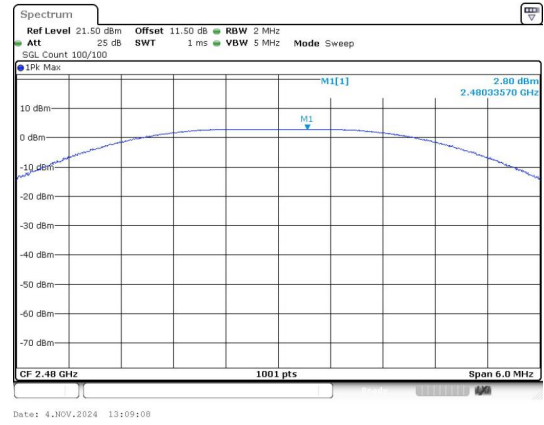
Peak Output Power
BLE 1M_Channel 39



Peak Output Power
BLE 2M_Channel 0



Peak Output Power
BLE 2M_Channel 19



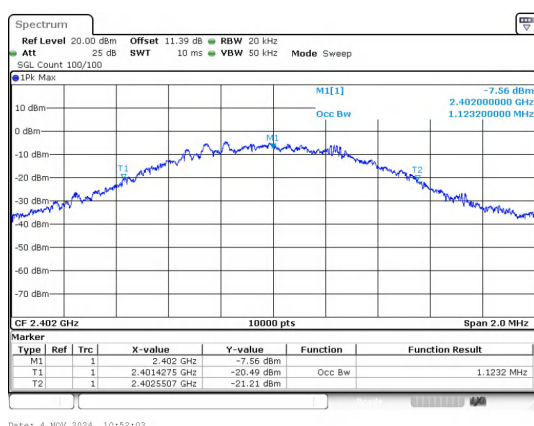
Peak Output Power
BLE 2M_Channel 39

4) 99% Bandwidth

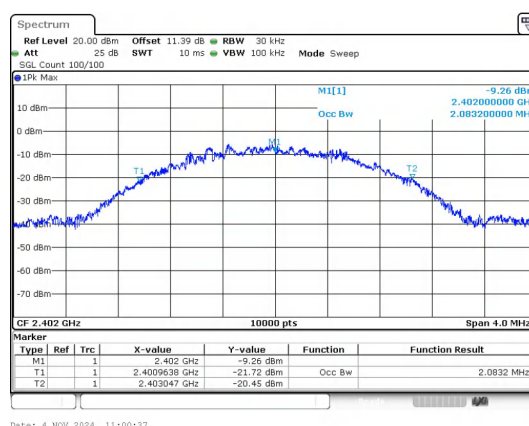
Test Result

Mode	Channel	Center Frequency (MHz)	99% BW (MHz)
BLE 1M	0	2402	1.1230
BLE 1M	19	2440	1.1730
BLE 1M	39	2480	1.1890
BLE 2M	0	2402	2.0830
BLE 2M	19	2440	2.0980
BLE 2M	39	2480	2.1040

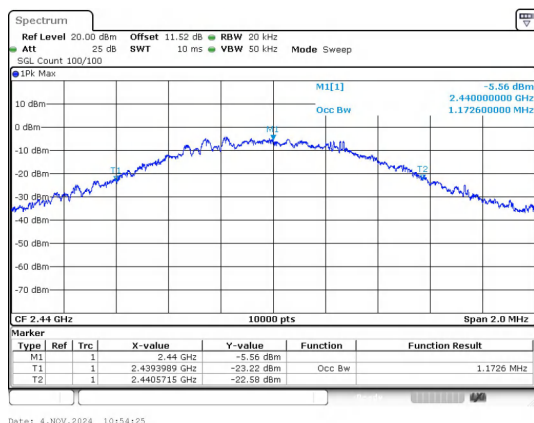
Test Graphs



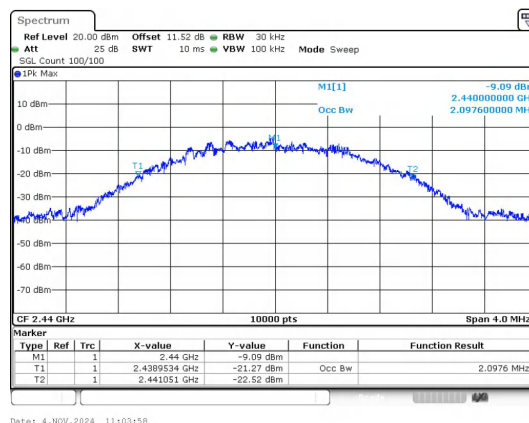
BLE 1M_Channel 0



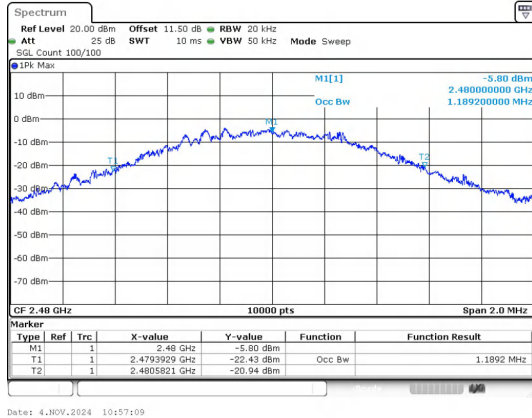
BLE 2M_Channel 0



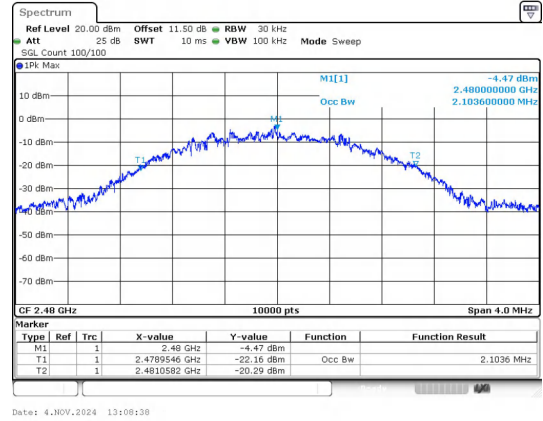
BLE 1M_Channel 19



BLE 2M_Channel 19



BLE 1M_Channel 39



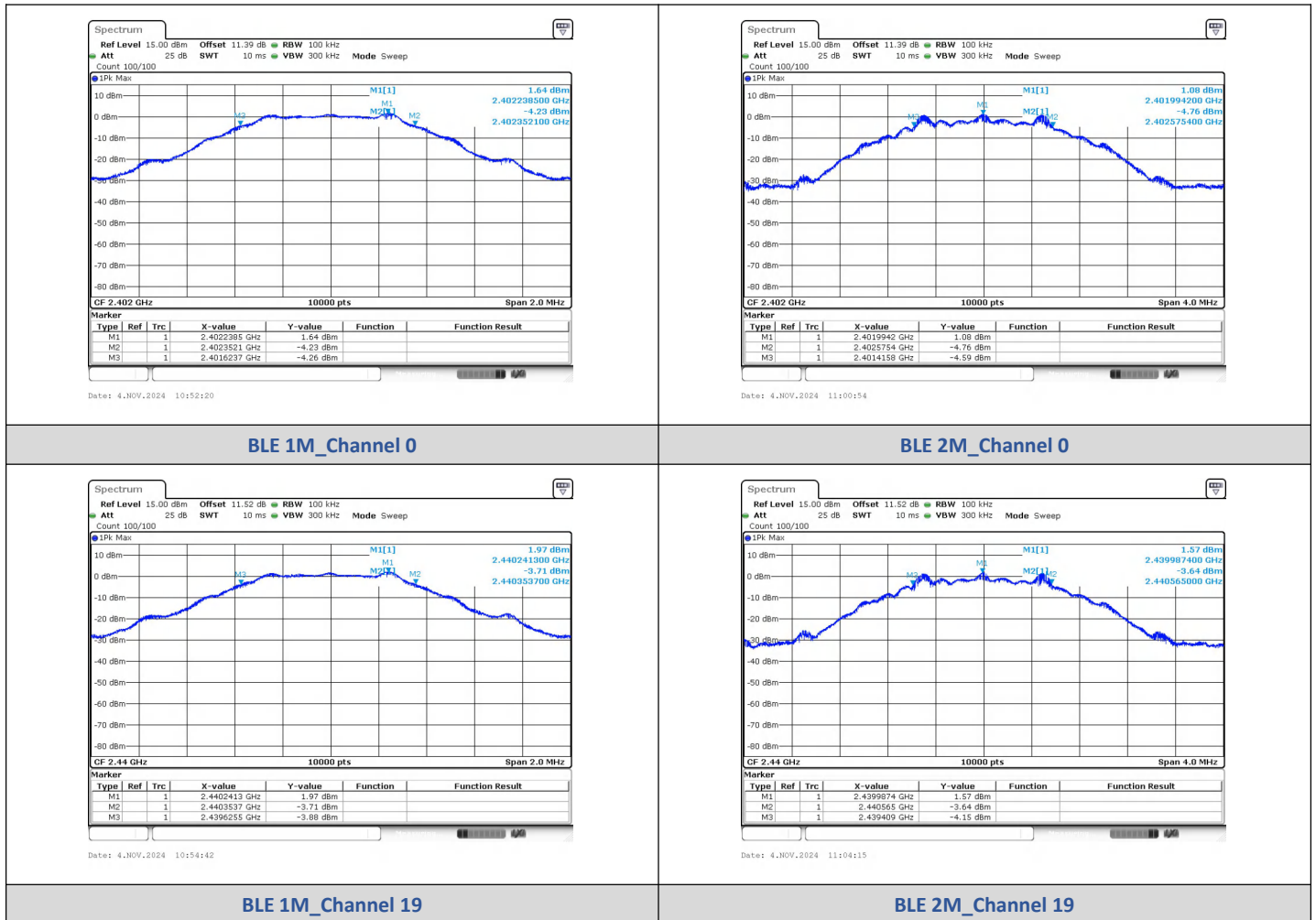
BLE 2M_Channel 39

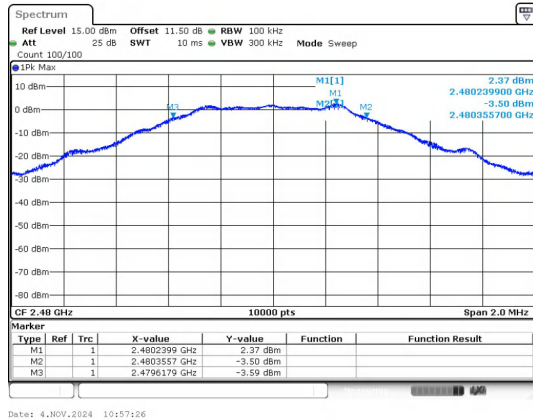
5) 6dB Bandwidth

Test Result

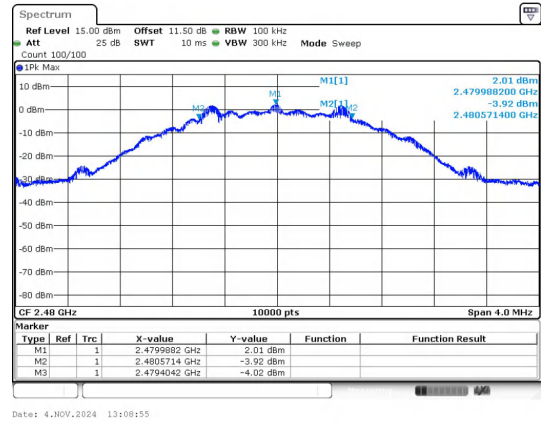
Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
BLE 1M	0	2402	0.7300	≥0.5	PASS
	19	2440	0.7200		PASS
	39	2480	0.7400		PASS
BLE 2M	0	2402	1.160		PASS
	19	2440	1.160		PASS
	39	2480	1.170		PASS

Test Graphs





BLE 1M_Channel 39



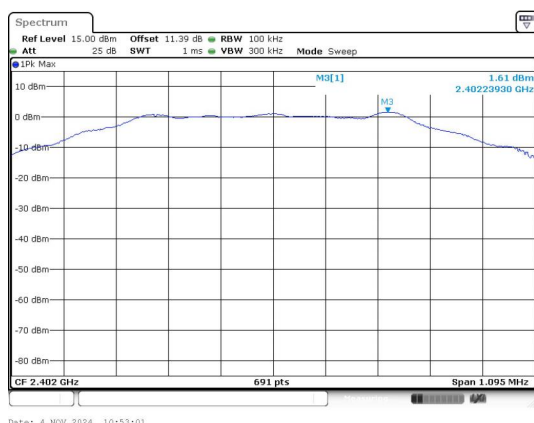
BLE 2M_Channel 39

6) Conducted Out Of Band Emission

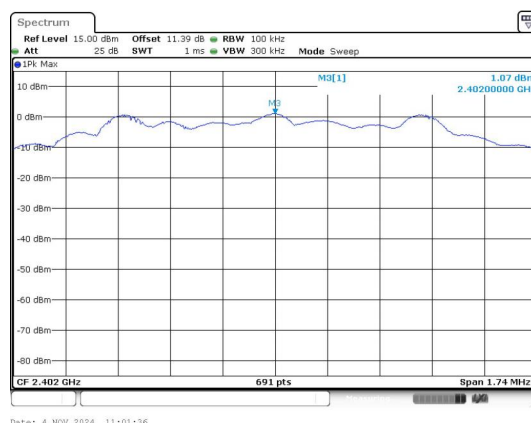
Test Result

Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
BLE 1M	0	2400.00	-47.625	-18.39	-29.235	PASS
		4803.85	-40.893	-18.39	-22.503	PASS
	19	4880.42	-40.069	-18.04	-22.029	PASS
		2483.50	-49.346	-17.61	-31.736	PASS
		4960.33	-40.120	-17.61	-22.510	PASS
BLE 2M	0	2400.00	-30.740	-18.93	-11.810	PASS
		4803.85	-42.259	-18.93	-23.329	PASS
	19	4878.76	-40.023	-18.47	-21.553	PASS
		2483.50	-49.268	-17.99	-31.278	PASS
		4958.66	-40.650	-17.99	-22.660	PASS

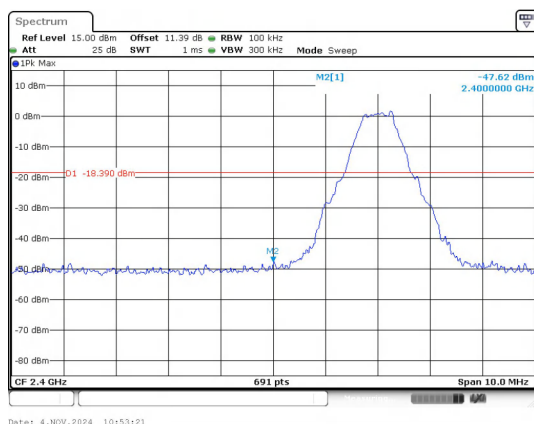
Test Graphs



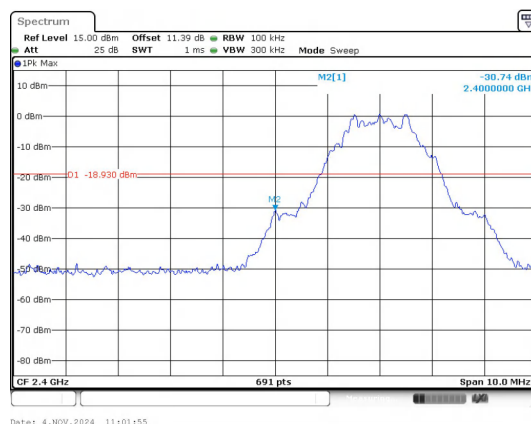
In-Band Reference Level
BLE 1M_Channel 0



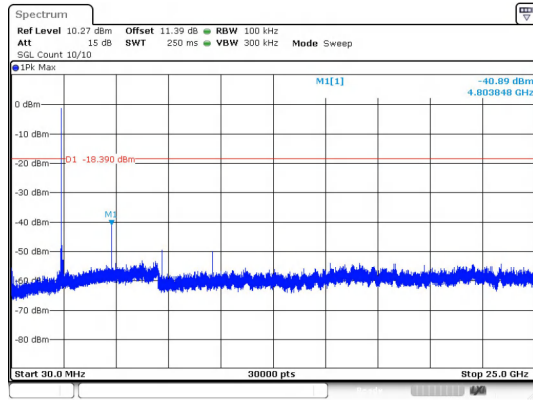
In-Band Reference Level
BLE 2M_Channel 0



Out Of Band Emission
BLE 1M_Channel 0

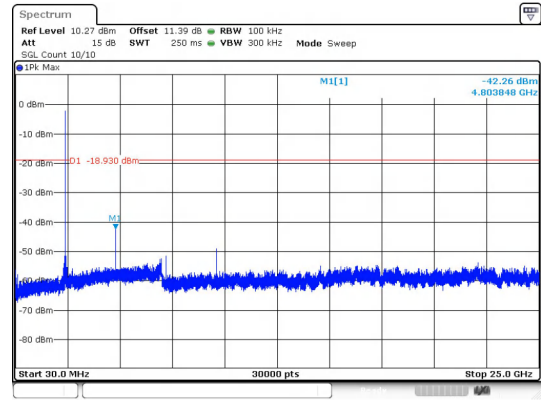


Out Of Band Emission
BLE 2M_Channel 0



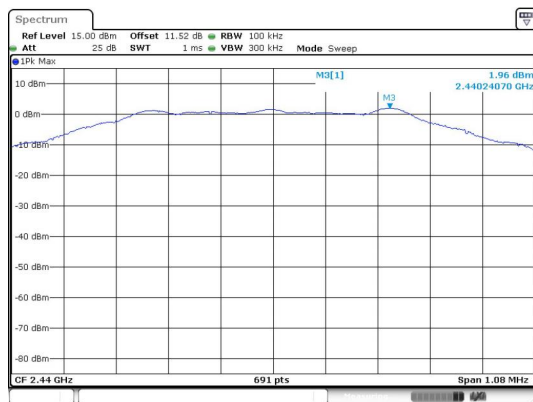
Date: 4.NOV.2024 10:53:43

30.0 MHz - 25000.0 MHz
BLE 1M_Channel 0



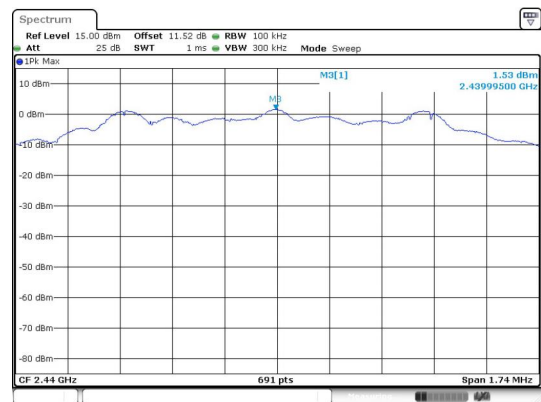
Date: 4.NOV.2024 11:02:17

30.0 MHz - 25000.0 MHz
BLE 2M_Channel 0



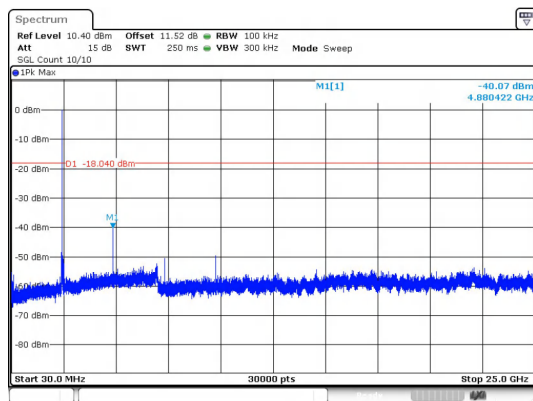
Date: 4.NOV.2024 10:55:23

In-Band Reference Level
BLE 1M_Channel 19



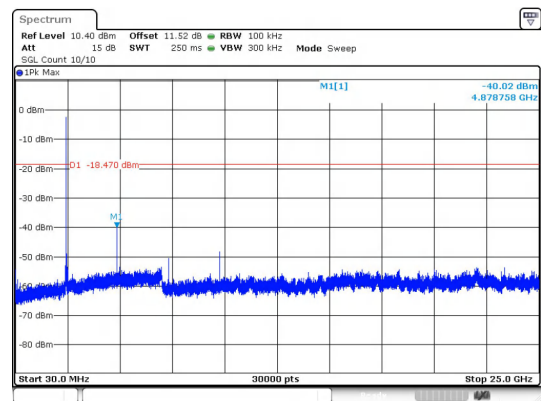
Date: 4.NOV.2024 11:04:56

In-Band Reference Level
BLE 2M_Channel 19



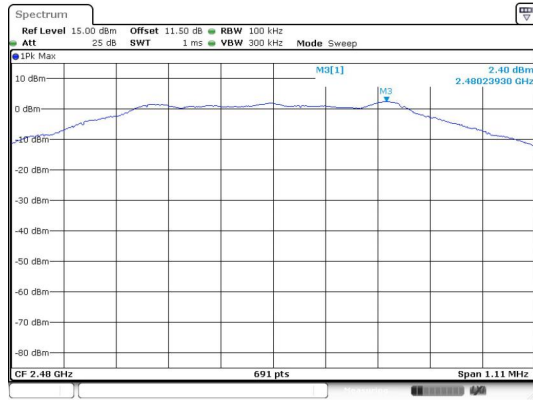
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30.0 MHz - 25000.0 MHz
BLE 1M_Channel 19

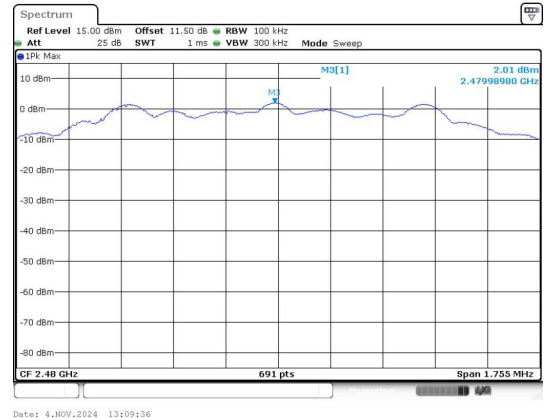


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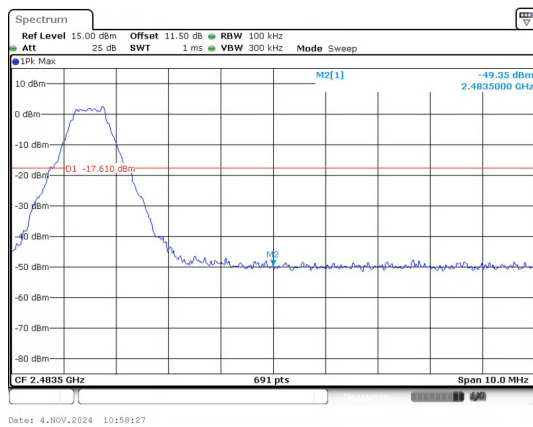
30.0 MHz - 25000.0 MHz
BLE 2M_Channel 19



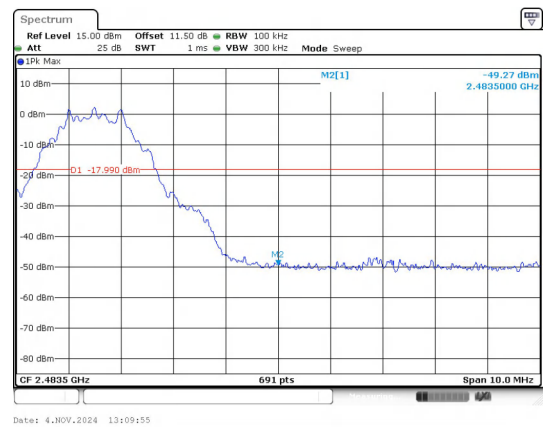
In-Band Reference Level
BLE 1M_Channel 39



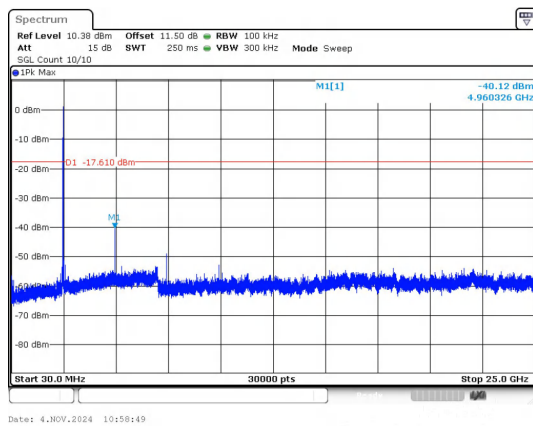
In-Band Reference Level
BLE 2M_Channel 39



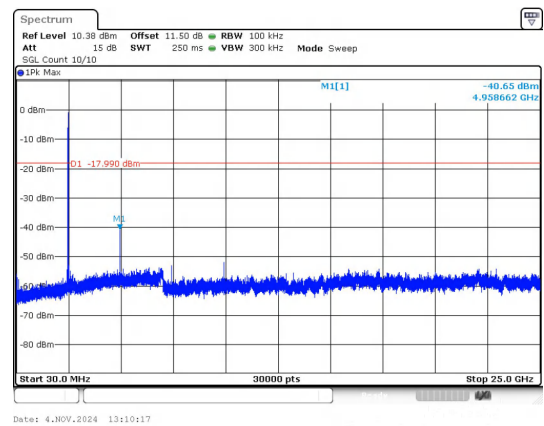
Out Of Band Emission
BLE 1M_Channel 39



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