

Appendix B

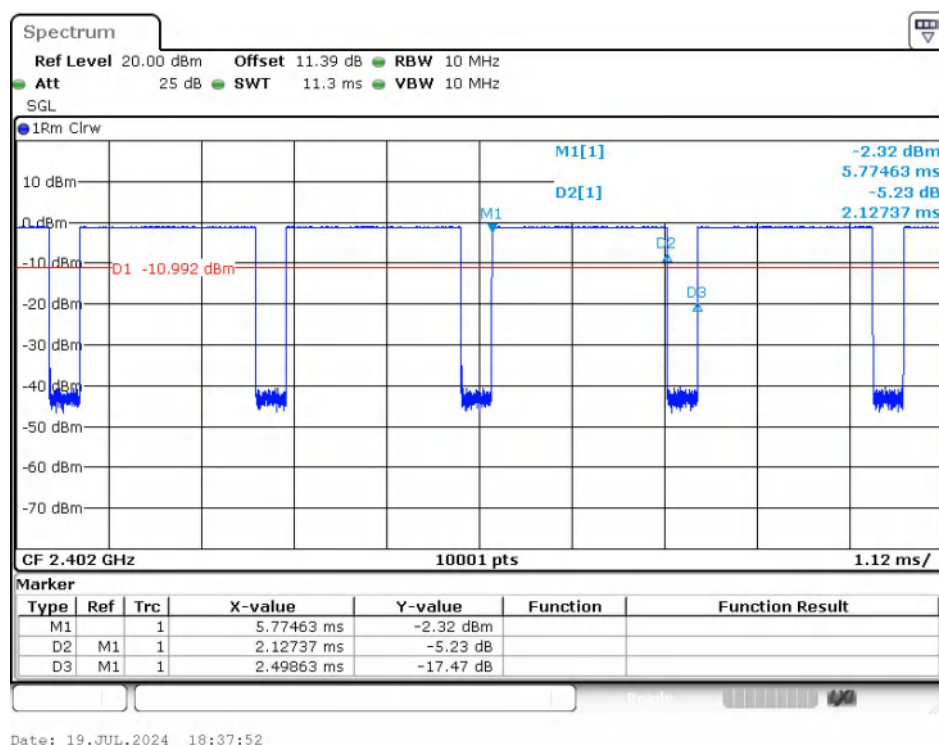
Report No.:	CISRR24071808902
FCC ID:	2BF2Q-KW03-1
Product Name:	White noise speaker
Model No.:	KW03
Test Engineer:	Lucas Huang
Supervised by:	Rory Huang

1) Duty Cycle

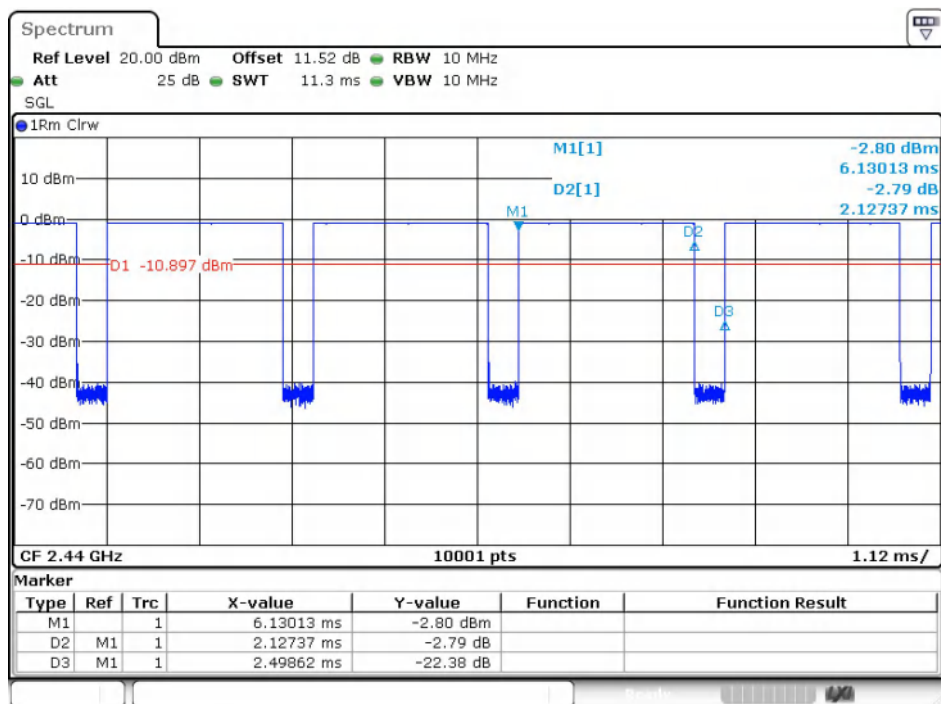
Test Result

Mode	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
BLE 1M	0	2.127	2.499	85.14	0.8514	0.6987	0.47
	19	2.127	2.499	85.14	0.8514	0.6987	0.47
	39	2.127	2.499	85.14	0.8514	0.6987	0.47
BLE 2M	0	1.075	2.499	43.04	0.4304	3.6613	0.93
	19	1.075	2.499	43.04	0.4304	3.6613	0.93
	39	1.075	2.500	43.02	0.4302	3.6633	0.93

Test Graphs

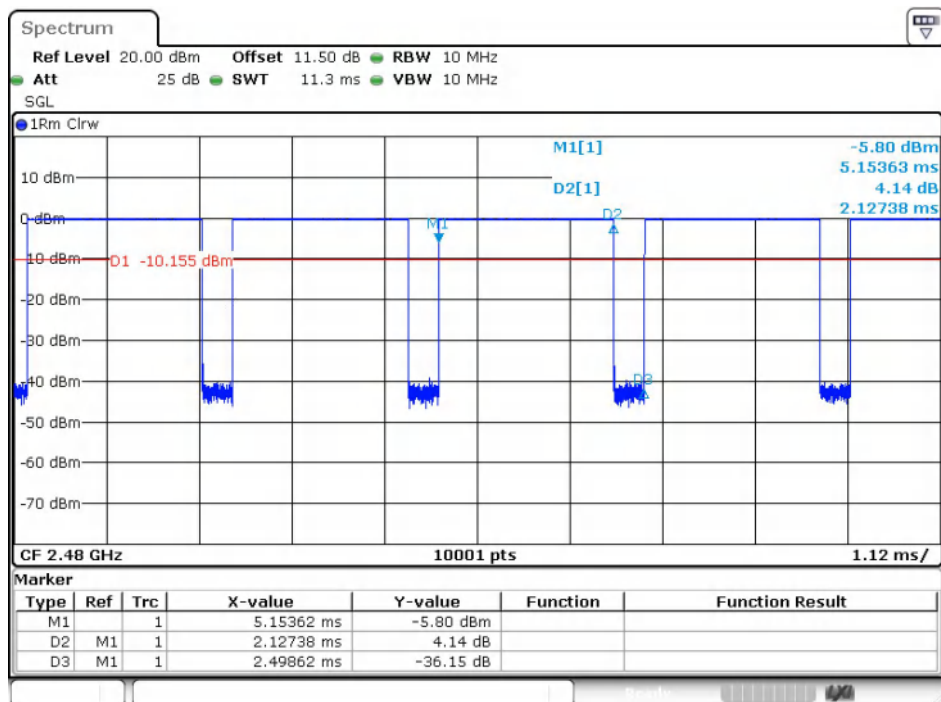


BLE 1M_Channel 0



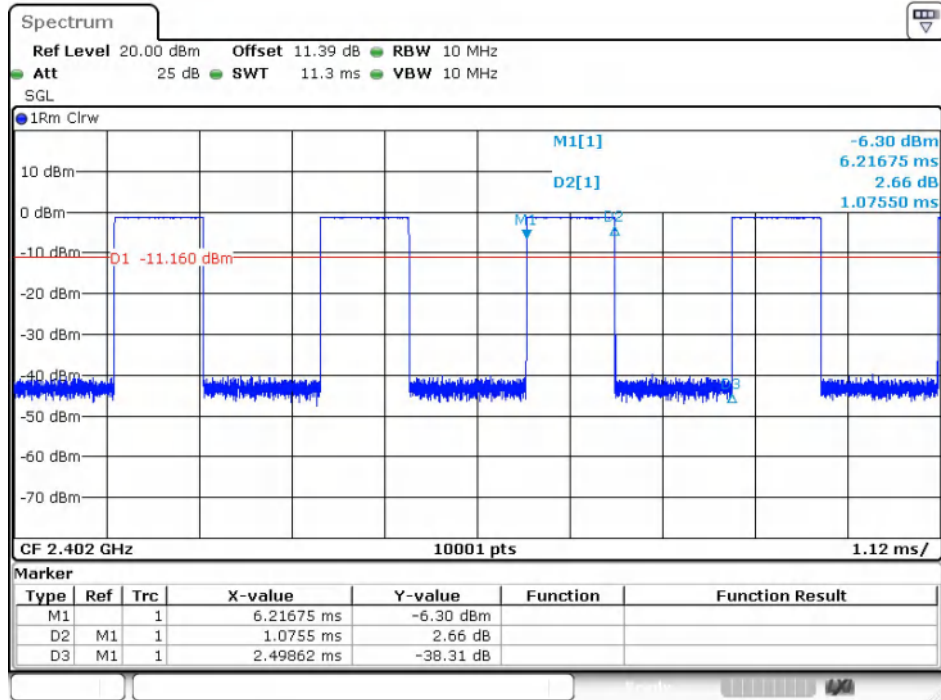
Date: 19.JUL.2024 18:44:37

BLE 1M_Channel 19



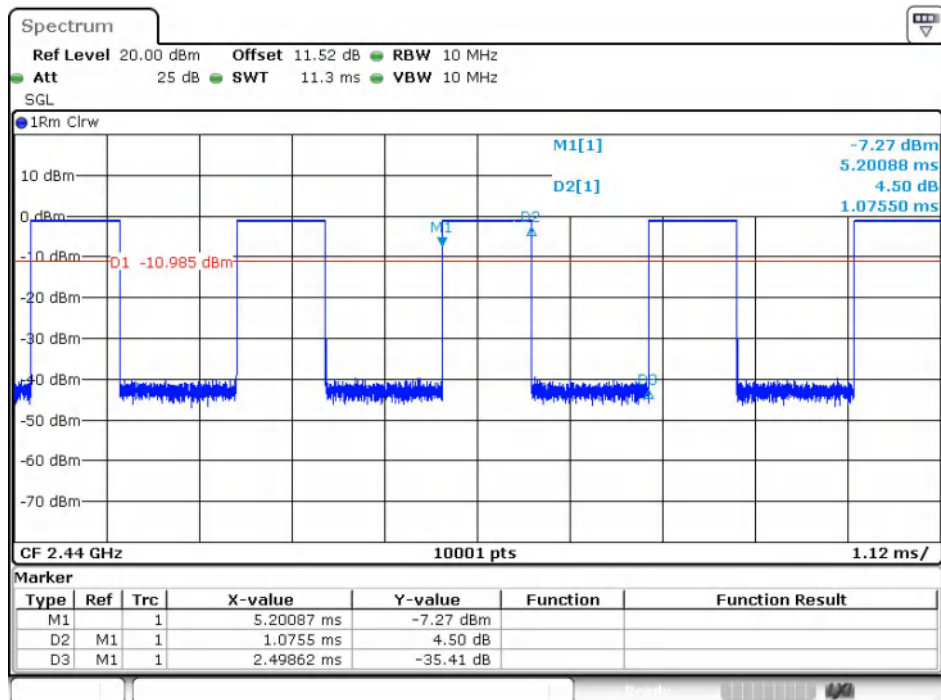
Date: 19.JUL.2024 18:49:55

BLE 1M_Channel 39



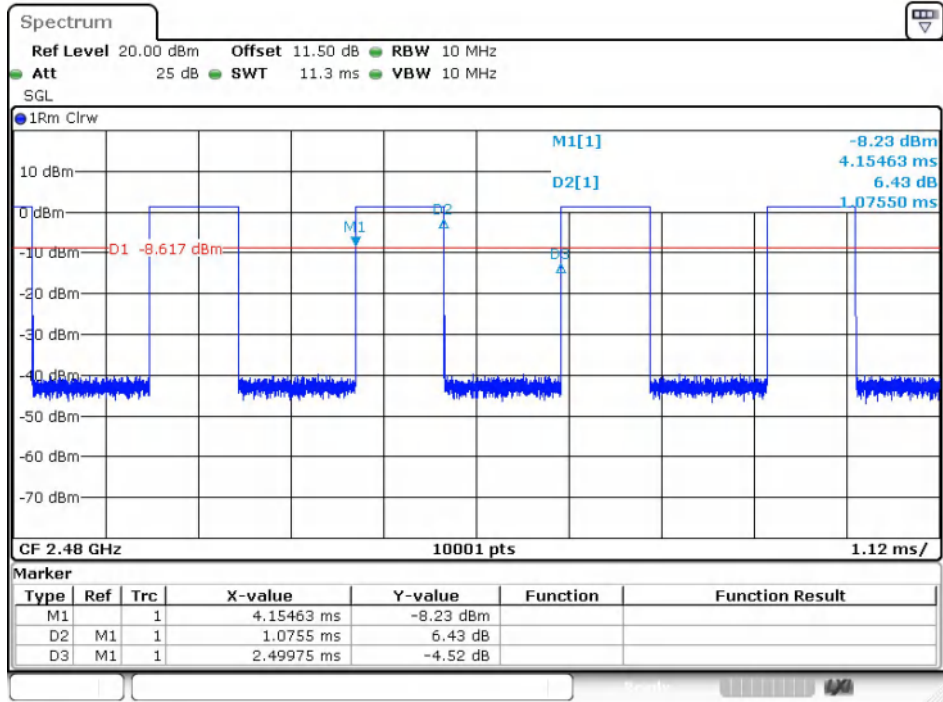
Date: 19, JUL, 2024 18:53:29

BLE 2M_Channel 0



Date: 19, JUL, 2024 19:00:06

BLE 2M_Channel 19



Date: 23.JUL.2024 09:08:48

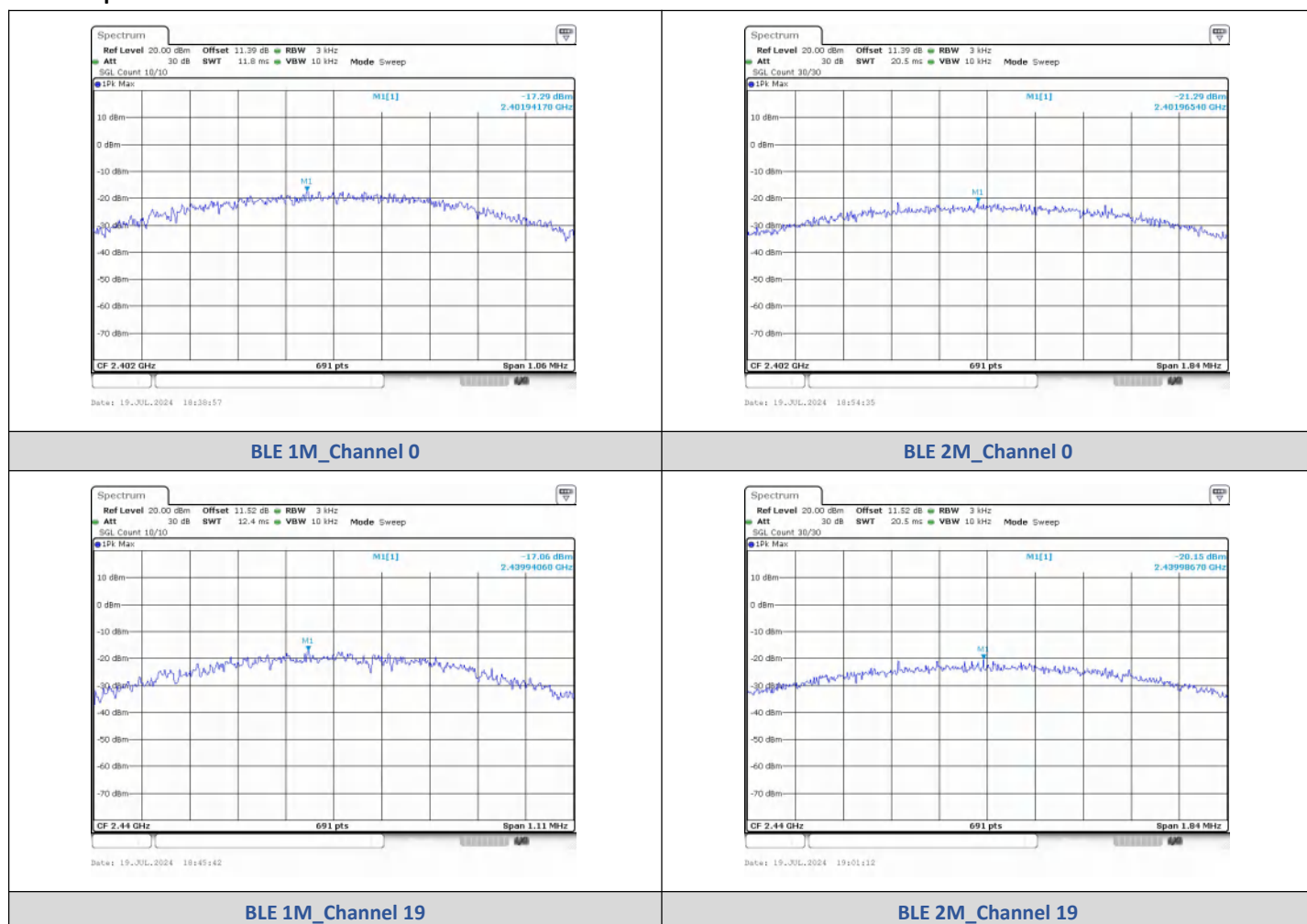
BLE 2M_Channel 39

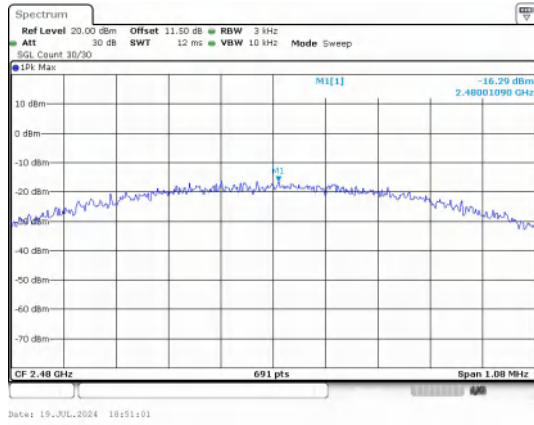
2) Power Spectral Density

Test Result

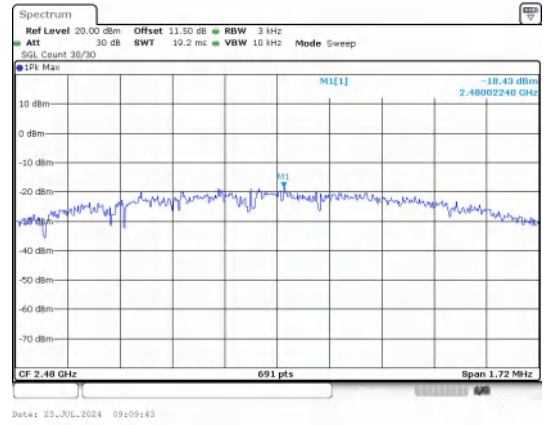
Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
BLE 1M	0	-17.290	≤8	PASS
BLE 1M	19	-17.064	≤8	PASS
BLE 1M	39	-16.293	≤8	PASS
BLE 2M	0	-21.293	≤8	PASS
BLE 2M	19	-20.152	≤8	PASS
BLE 2M	39	-18.434	≤8	PASS

Test Graphs





BLE 1M_Channel 39



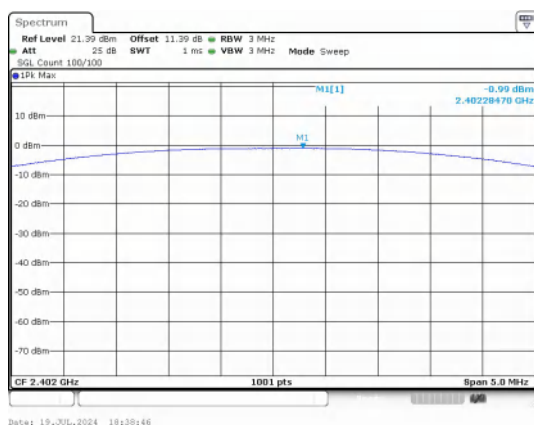
BLE 2M_Channel 39

3) Conducted Output Power

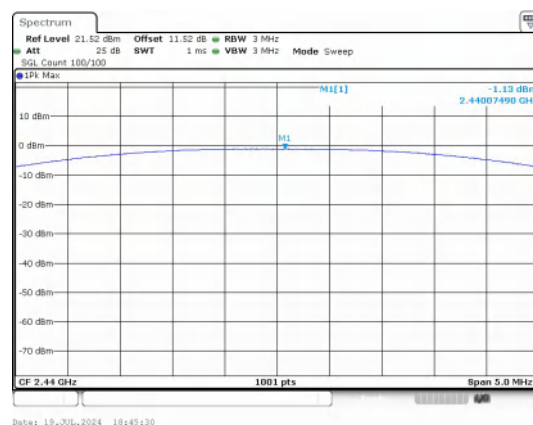
Test Result

Mode	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
BLE 1M	0	-0.99	0.80	≤30	PASS
	19	-1.13	0.77	≤30	PASS
	39	-0.13	0.97	≤30	PASS
BLE 2M	0	-1.15	0.77	≤30	PASS
	19	-0.97	0.80	≤30	PASS
	39	-0.12	0.97	≤30	PASS

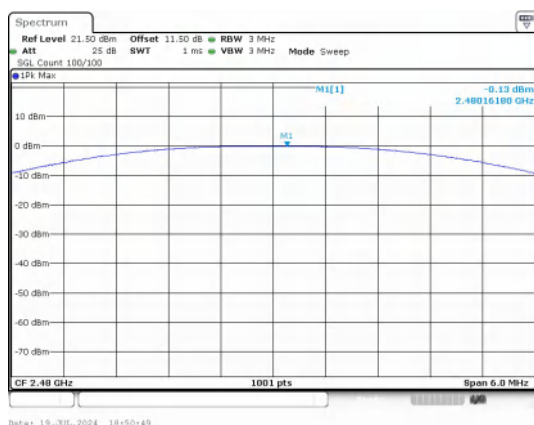
Test Graphs



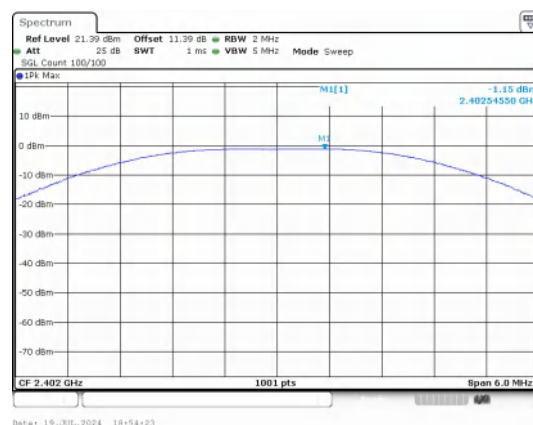
Peak Output Power
BLE 1M_Channel 0



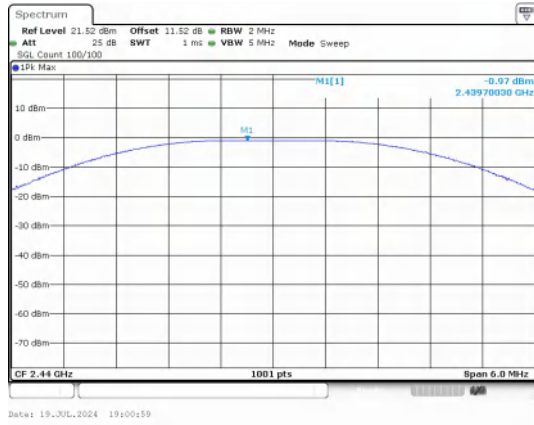
Peak Output Power
BLE 1M_Channel 19



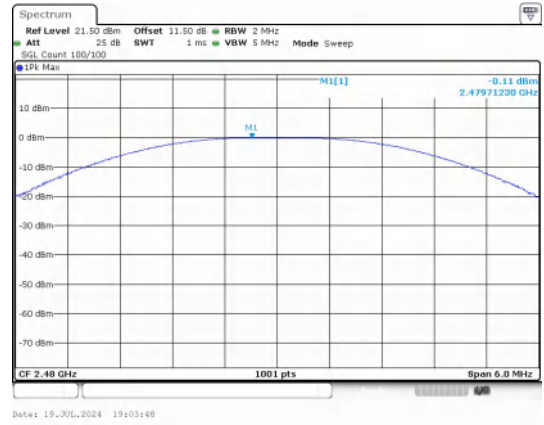
Peak Output Power
BLE 1M_Channel 39



Peak Output Power
BLE 2M_Channel 0



Peak Output Power
BLE 2M_Channel 19



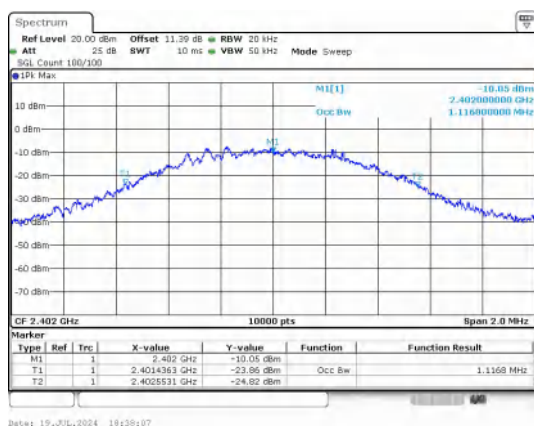
Peak Output Power
BLE 2M_Channel 39

4) 99% Bandwidth

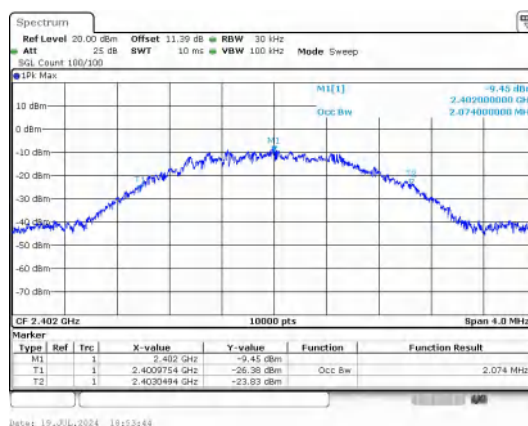
Test Result

Mode	Channel	Center Frequency (MHz)	99% BW (MHz)
BLE 1M	0	2402	1.1170
BLE 1M	19	2440	1.1310
BLE 1M	39	2480	1.1730
BLE 2M	0	2402	2.0740
BLE 2M	19	2440	2.0850
BLE 2M	39	2480	2.0880

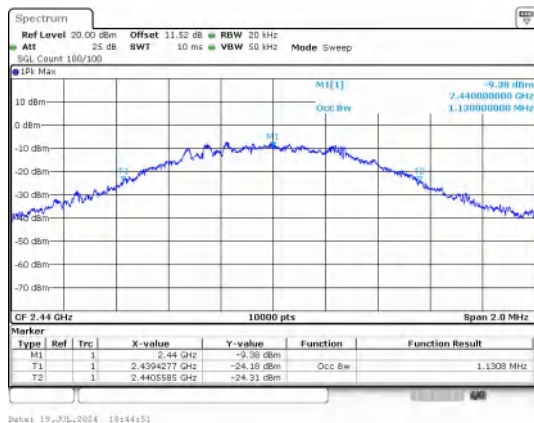
Test Graphs



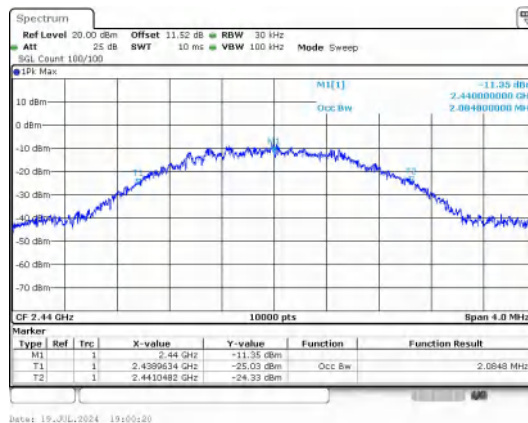
BLE 1M_Channel 0



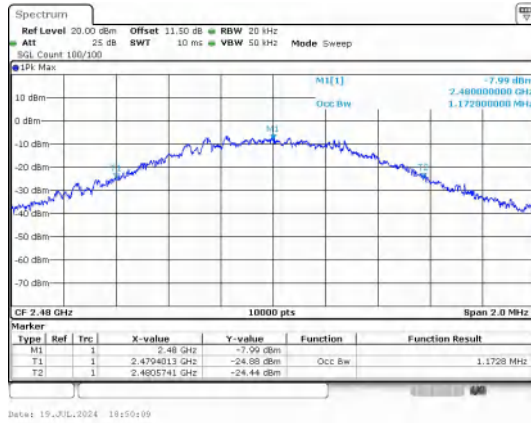
BLE 2M_Channel 0



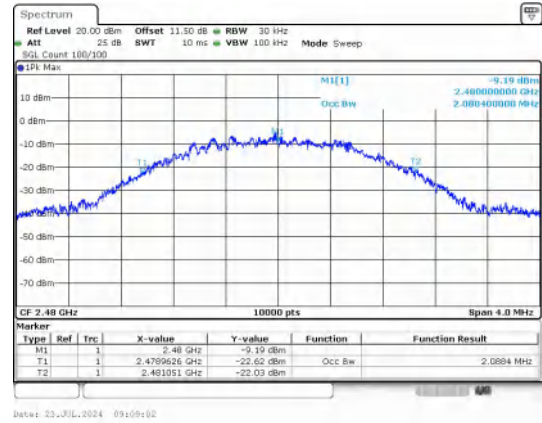
BLE 1M_Channel 19



BLE 2M_Channel 19



BLE 1M_Channel 39



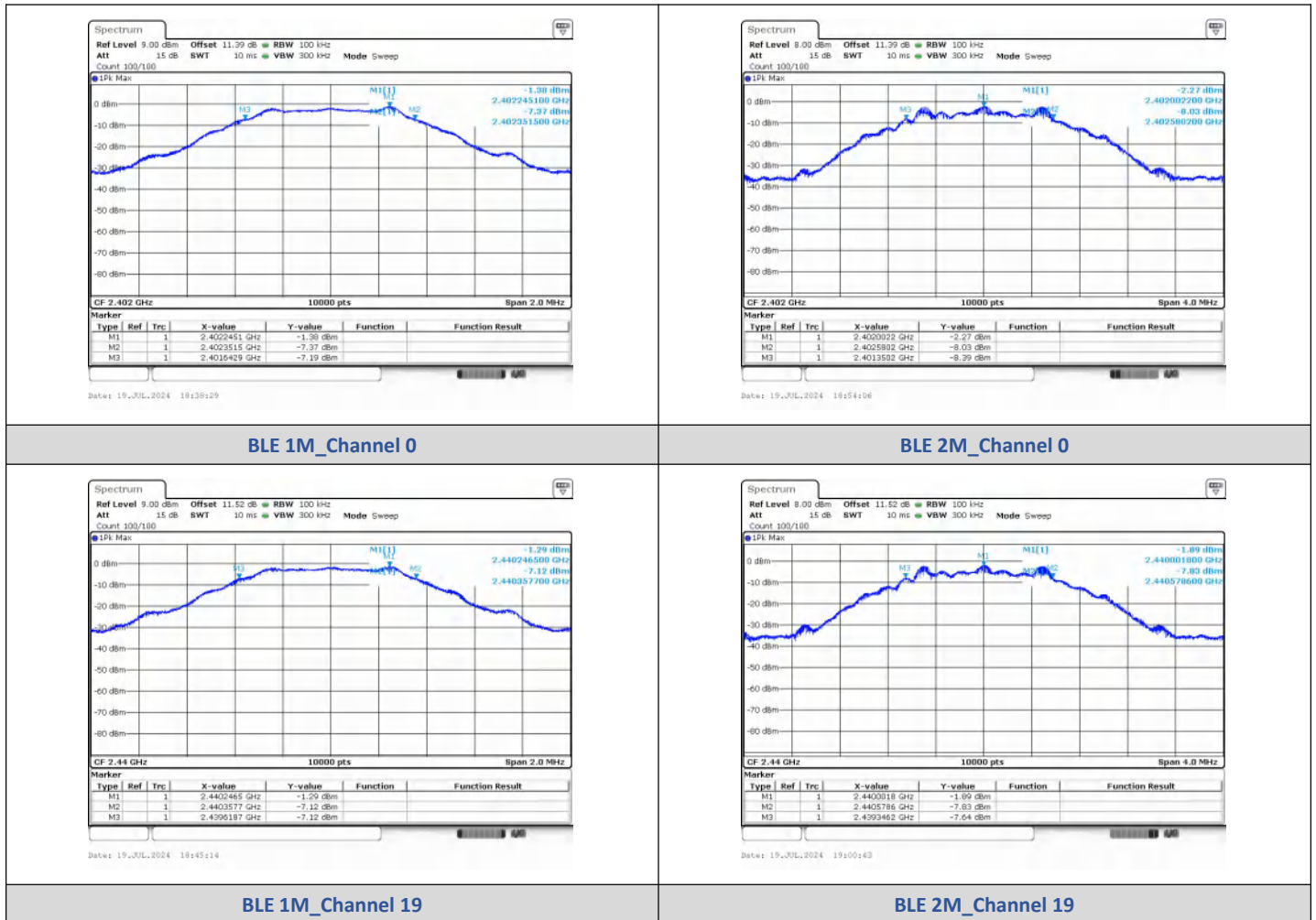
BLE 2M_Channel 39

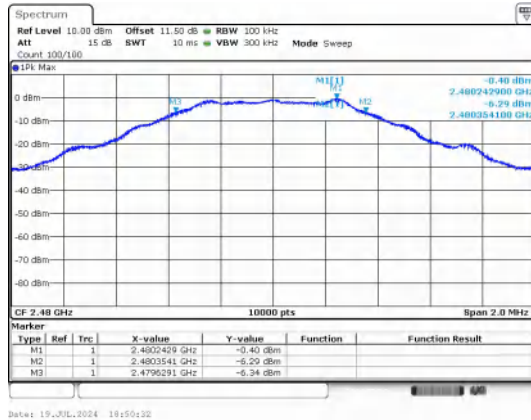
5) 6dB Bandwidth

Test Result

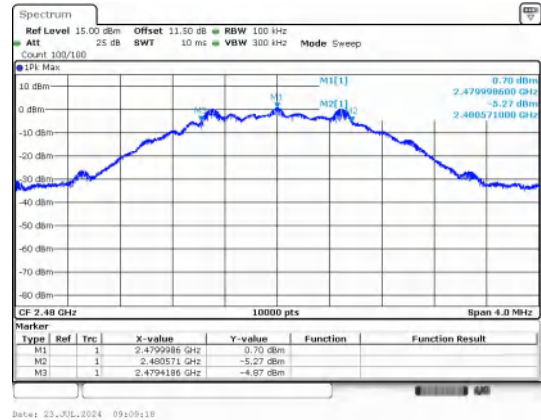
Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
BLE 1M	0	2402	0.7100	≥0.5	PASS
	19	2440	0.7400		PASS
	39	2480	0.7200		PASS
BLE 2M	0	2402	1.230		PASS
	19	2440	1.230		PASS
	39	2480	1.150		PASS

Test Graphs





BLE 1M_Channel 39



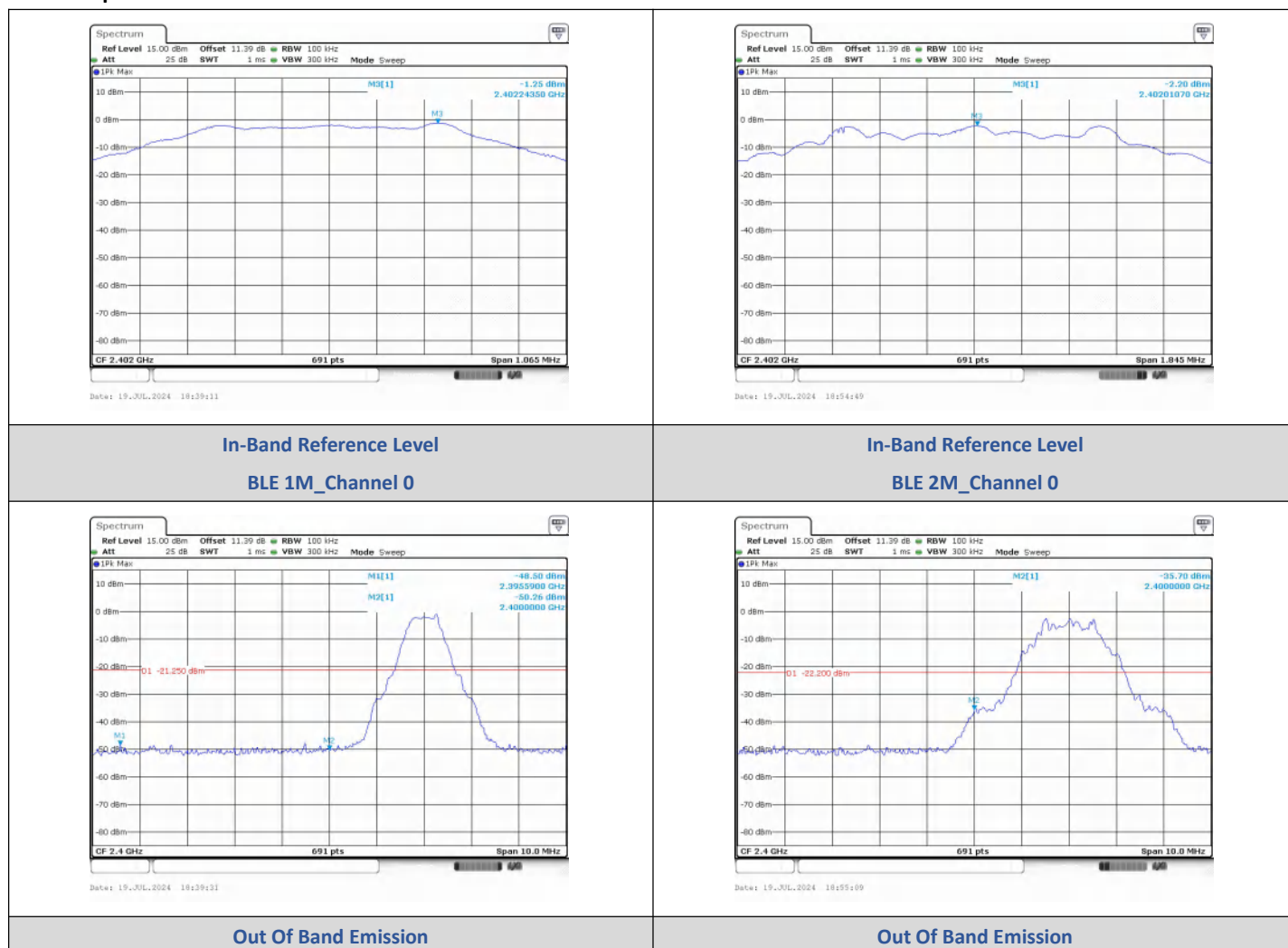
BLE 2M_Channel 39

6) Conducted Out Of Band Emission

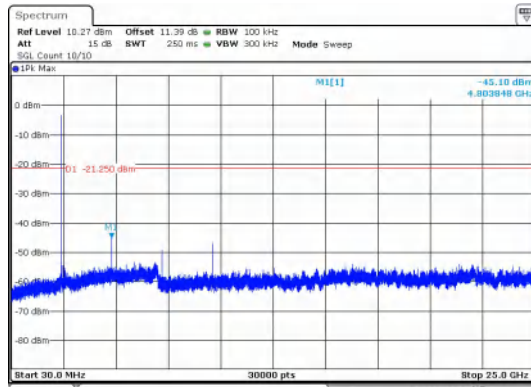
Test Result

Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
BLE 1M	0	2395.59	-48.501	-21.25	-27.251	PASS
		2400.00	-50.257	-21.25	-29.007	PASS
		4803.80	-45.100	-21.25	-23.850	PASS
	19	9760.39	-43.719	-21.4	-22.319	PASS
		2483.50	-49.849	-20.43	-29.419	PASS
		9920.20	-43.748	-20.43	-23.318	PASS
BLE 2M	0	2400.00	-36.472	-22.2	-14.272	PASS
		9608.08	-45.533	-22.2	-23.333	PASS
	19	9760.39	-42.733	-21.81	-20.923	PASS
		2483.50	-50.393	-19.39	-31.003	PASS
	39	9920.20	-41.724	-19.39	-22.334	PASS

Test Graphs

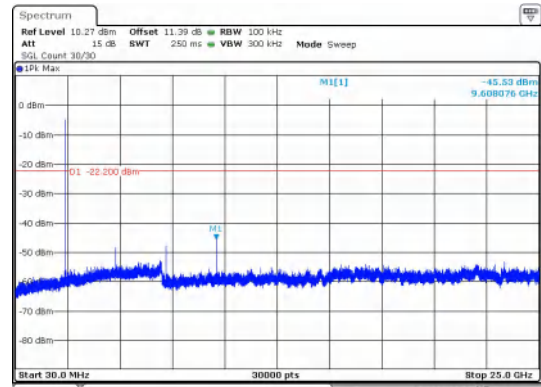


BLE 1M_Channel 0



Date: 19_JUL_2024 18:29:53

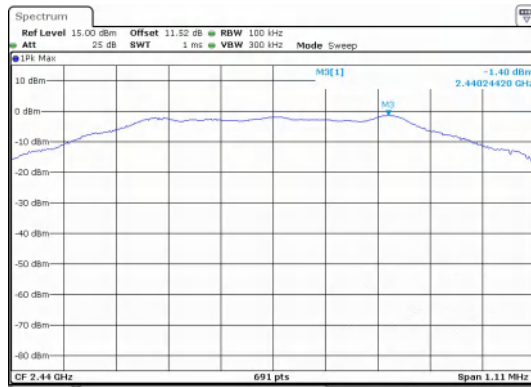
BLE 2M_Channel 0



Date: 19_JUL_2024 18:55:51

30.0 MHz - 25000.0 MHz

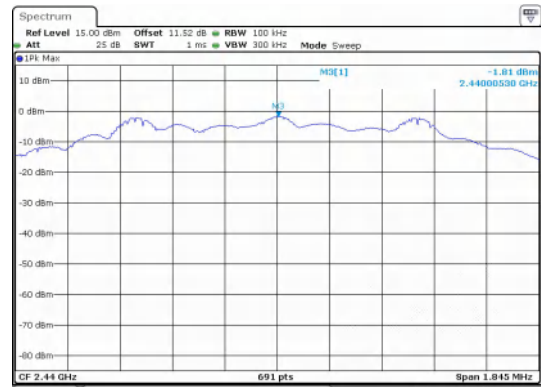
BLE 1M_Channel 0



Date: 19_JUL_2024 18:45:56

30.0 MHz - 25000.0 MHz

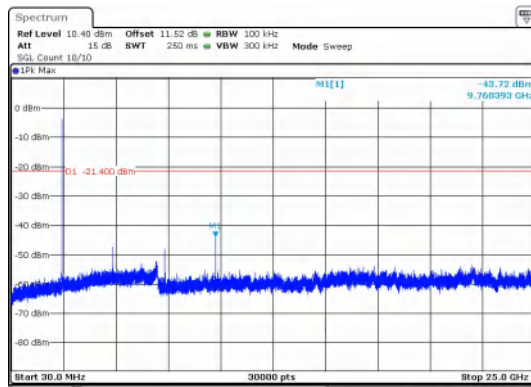
BLE 2M_Channel 0



Date: 19_JUL_2024 19:01:26

In-Band Reference Level

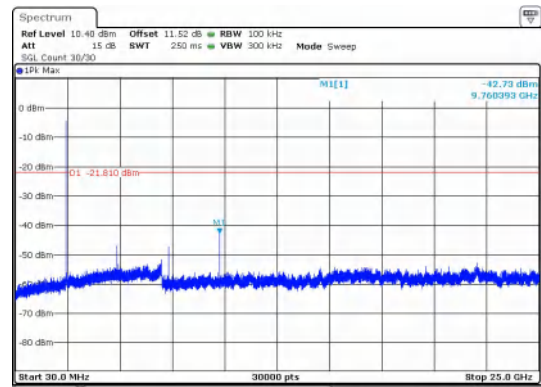
BLE 1M_Channel 19



Date: 19_JUL_2024 18:46:21

In-Band Reference Level

BLE 2M_Channel 19



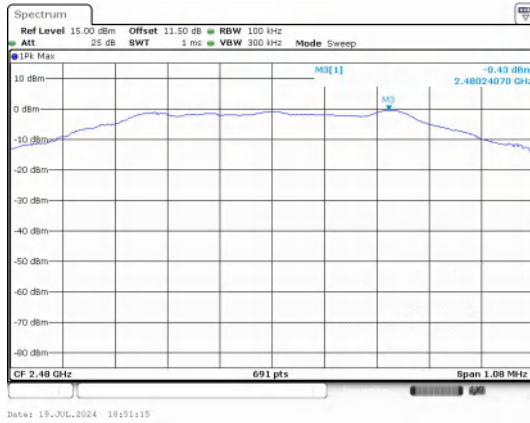
Date: 19_JUL_2024 19:02:11

30.0 MHz - 25000.0 MHz

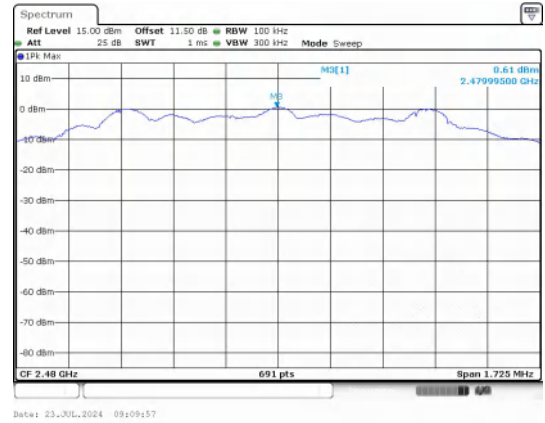
BLE 1M_Channel 19

30.0 MHz - 25000.0 MHz

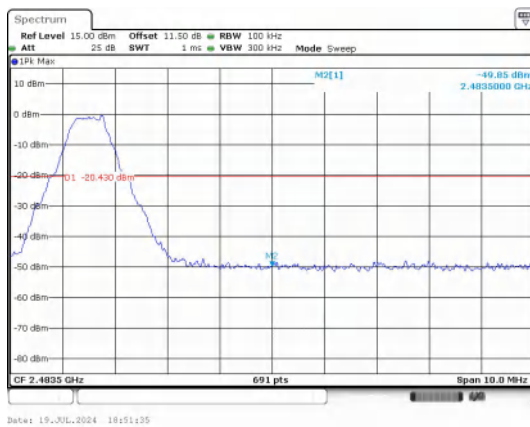
BLE 2M_Channel 19



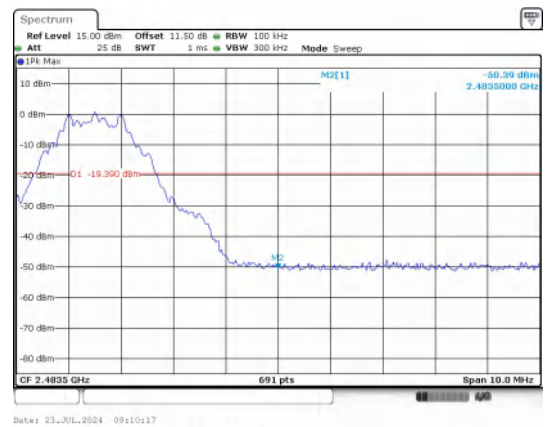
In-Band Reference Level
BLE 1M_Channel 39



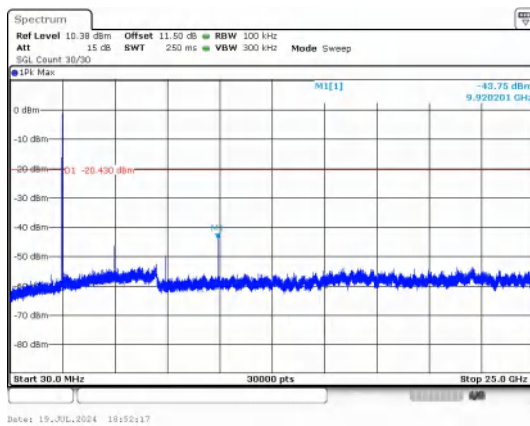
In-Band Reference Level
BLE 2M_Channel 39



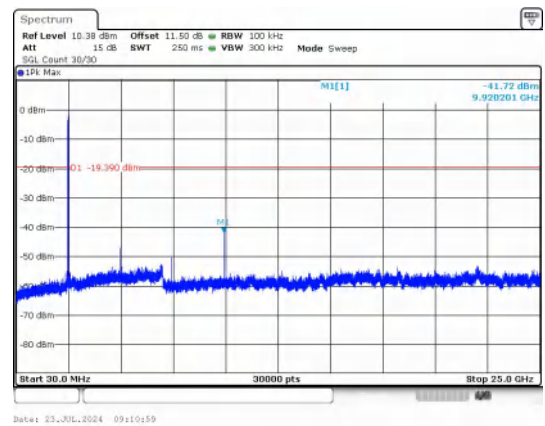
Out Of Band Emission
BLE 1M_Channel 39



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