

Appendix A

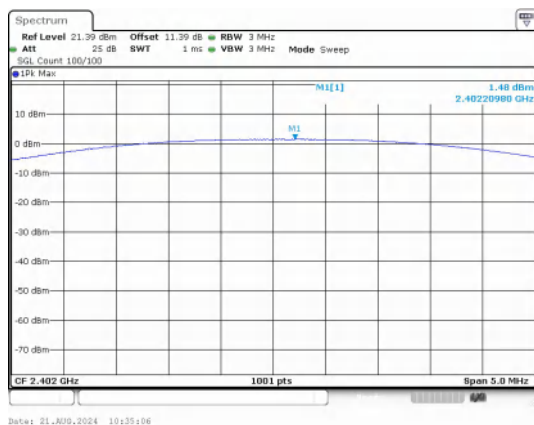
Report No.:	CISRR240820129
FCC ID:	2A5C6-Y16
Product Name:	Smart Tracker
Model No.:	Y16
Test Engineer:	Lucas Huang
Supervised by:	Rory Huang

1) Conducted Output Power

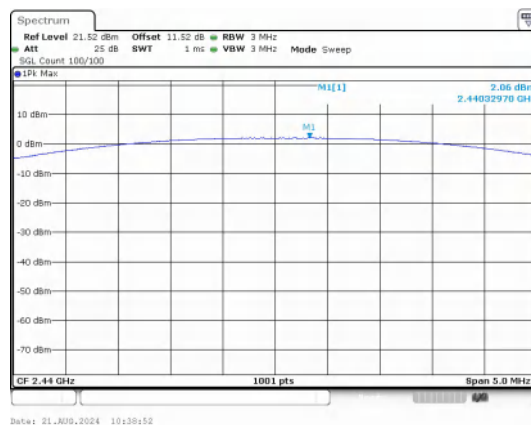
Test Result

Mode	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
BLE 1M	0	1.48	1.41	≤30	PASS
	19	2.06	1.61	≤30	PASS
	39	1.14	1.30	≤30	PASS
BLE 2M	0	1.41	1.38	≤30	PASS
	19	2.06	1.61	≤30	PASS
	39	1.22	1.32	≤30	PASS

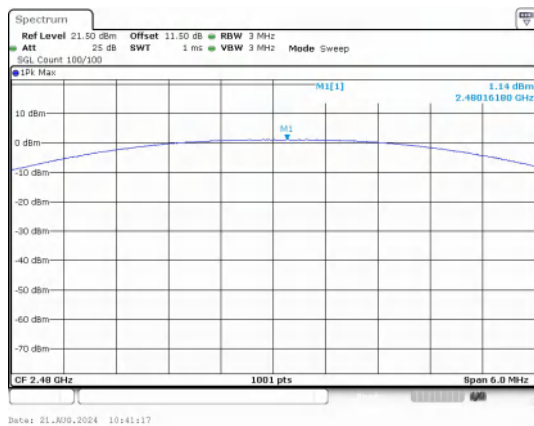
Test Graphs



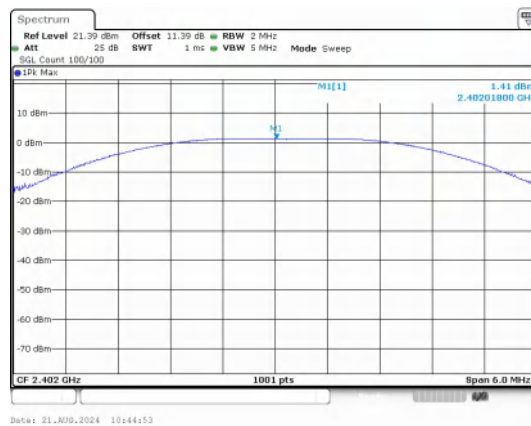
Peak Output Power
BLE 1M_Channel 0



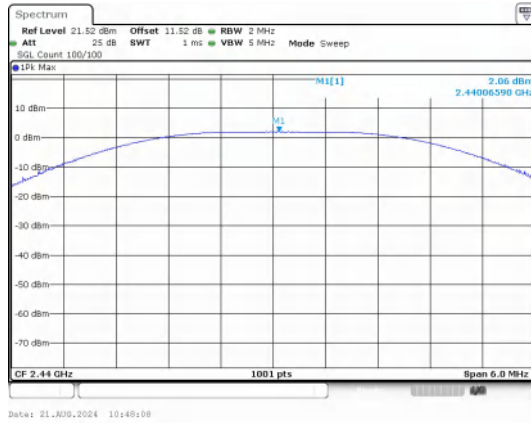
Peak Output Power
BLE 1M_Channel 19



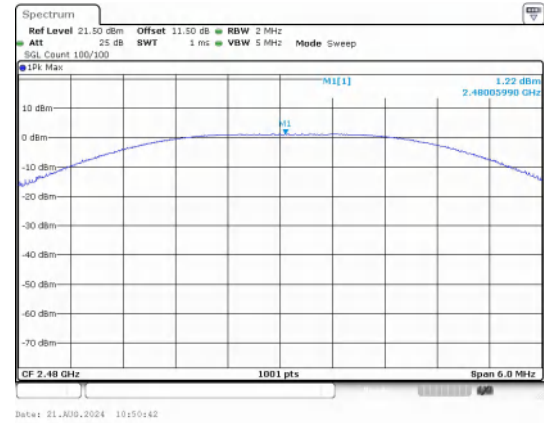
Peak Output Power
BLE 1M_Channel 39



Peak Output Power
BLE 2M_Channel 0



Peak Output Power
BLE 2M_Channel 19



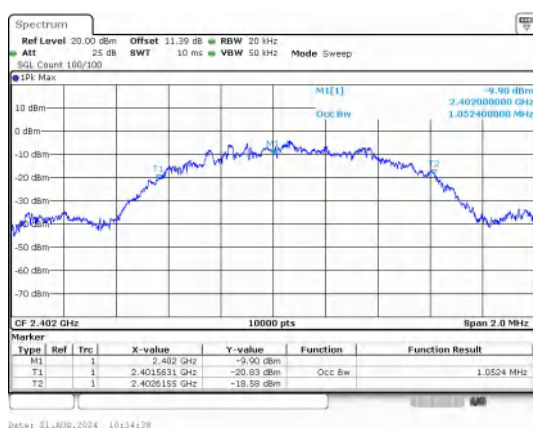
Peak Output Power
BLE 2M_Channel 39

2) 99% Bandwidth

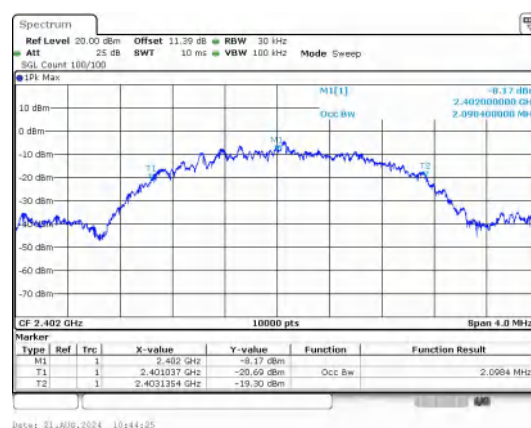
Test Result

Mode	Channel	Center Frequency (MHz)	99% BW (MHz)
BLE 1M	0	2402	1.0524
BLE 1M	19	2440	1.0608
BLE 1M	39	2480	1.0742
BLE 2M	0	2402	2.0984
BLE 2M	19	2440	2.0960
BLE 2M	39	2480	2.1164

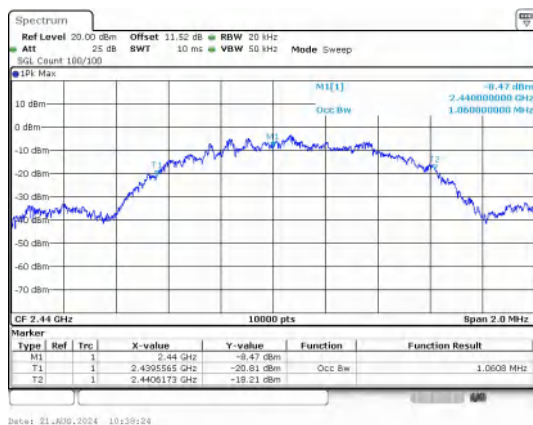
Test Graphs



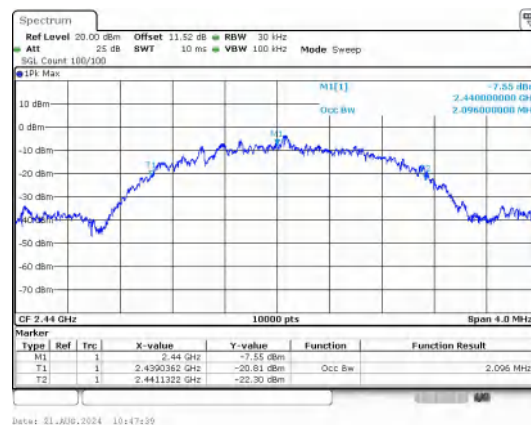
BLE 1M_Channel 0



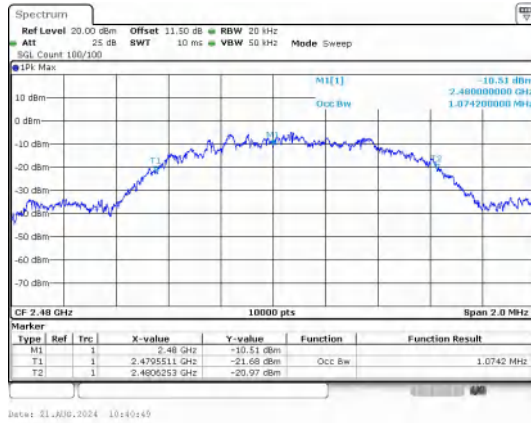
BLE 2M_Channel 0



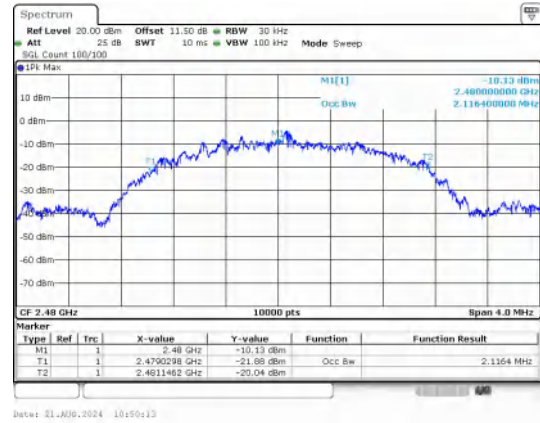
BLE 1M_Channel 19



BLE 2M_Channel 19



BLE 1M_Channel 39



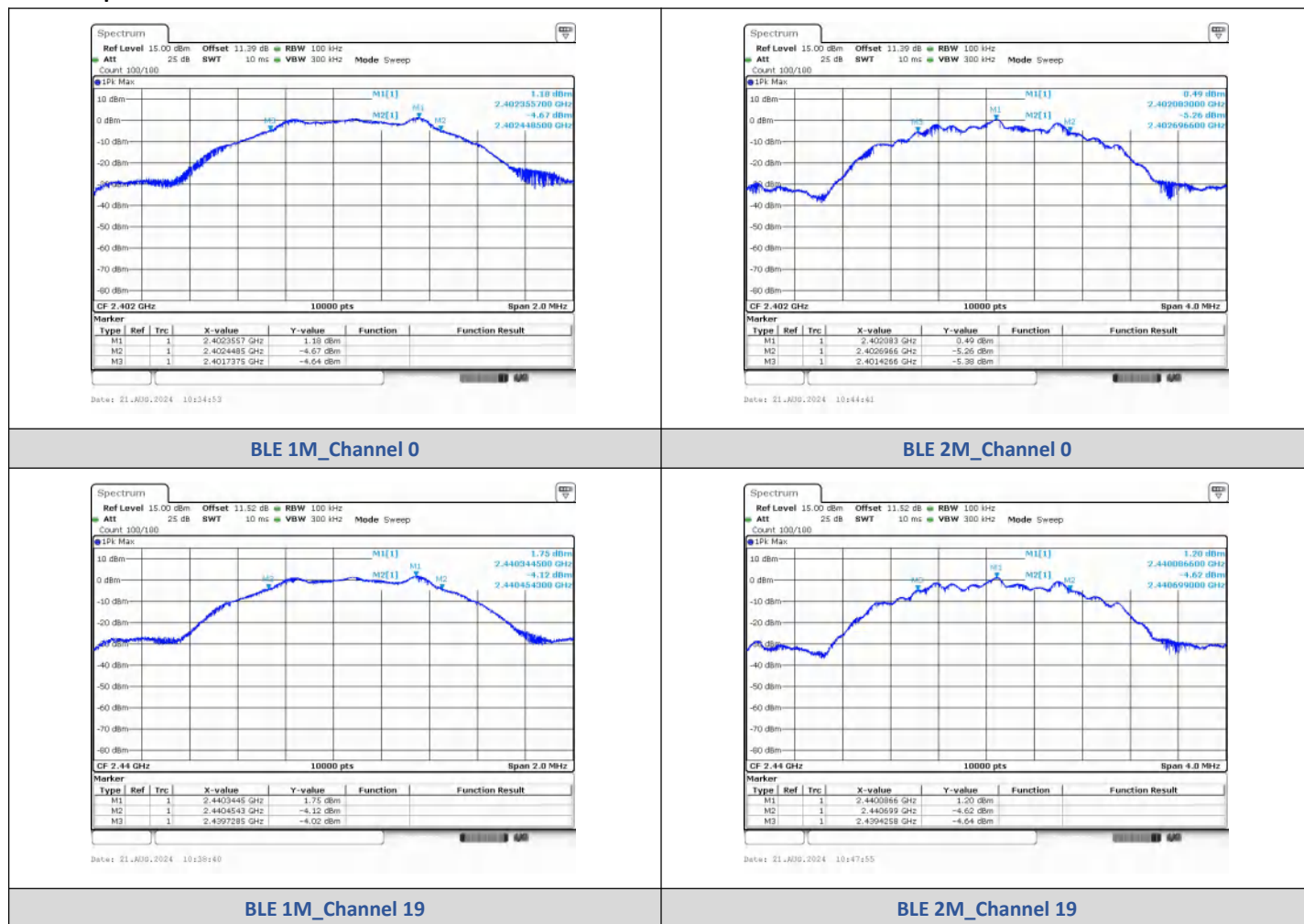
BLE 2M_Channel 39

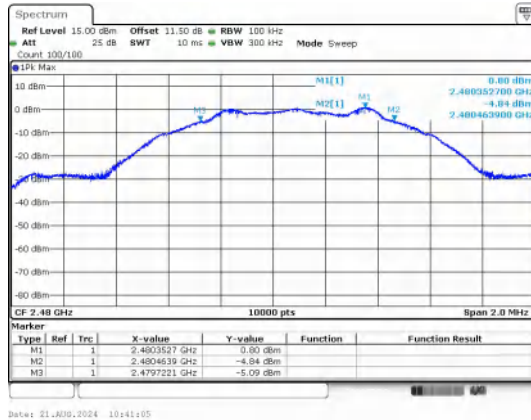
3) 6dB Bandwidth

Test Result

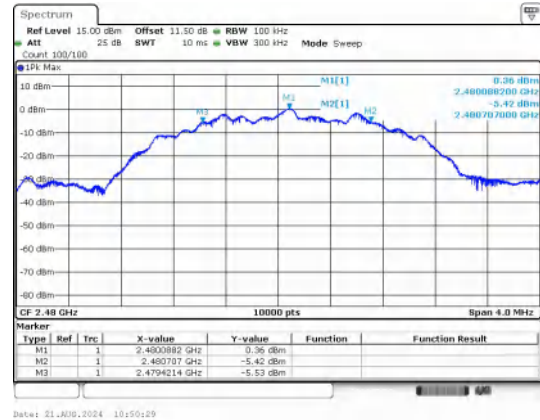
Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
BLE 1M	0	2402	0.7100	≥0.5	PASS
	19	2440	0.7200		PASS
	39	2480	0.7400		PASS
BLE 2M	0	2402	1.270		PASS
	19	2440	1.270		PASS
	39	2480	1.290		PASS

Test Graphs





BLE 1M_Channel 39



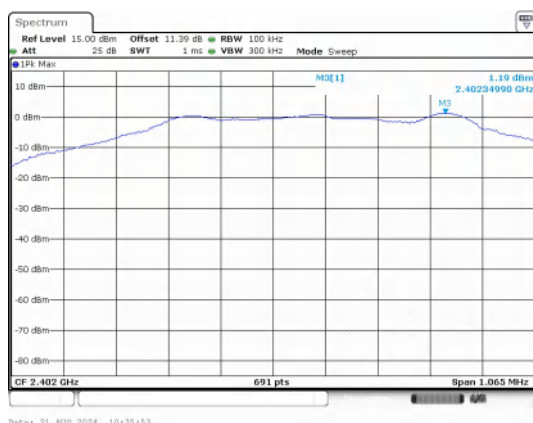
BLE 2M_Channel 39

4) Conducted Out Of Band Emission

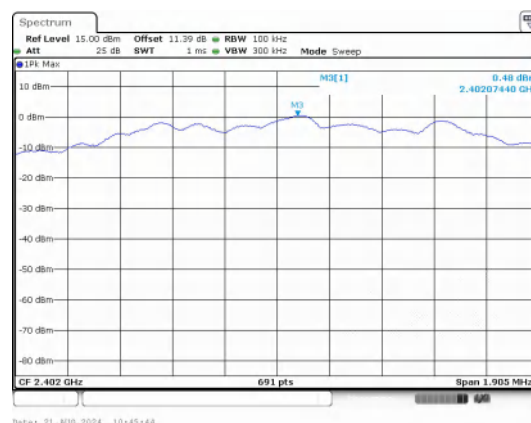
Test Result

Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
BLE 1M	0	2400.00	-31.450	-18.81	-12.640	PASS
		4803.85	-40.539	-18.81	-21.729	PASS
	19	4879.59	-40.762	-18.23	-22.532	PASS
		2483.50	-48.564	-19.2	-29.364	PASS
		4960.33	-43.804	-19.2	-24.604	PASS
BLE 2M	0	2400.00	-31.703	-19.5	-12.203	PASS
		4805.51	-41.343	-19.5	-21.843	PASS
	19	4879.59	-41.357	-18.81	-22.547	PASS
		2483.50	-37.157	-19.63	-17.527	PASS
		4959.49	-43.736	-19.63	-24.106	PASS

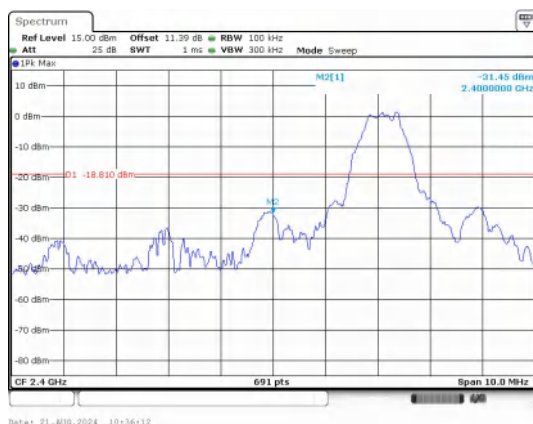
Test Graphs



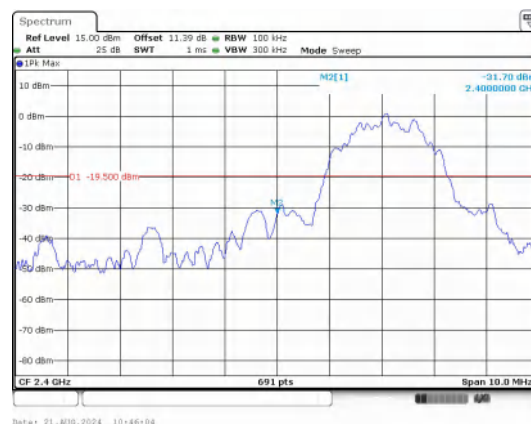
In-Band Reference Level
BLE 1M_Channel 0



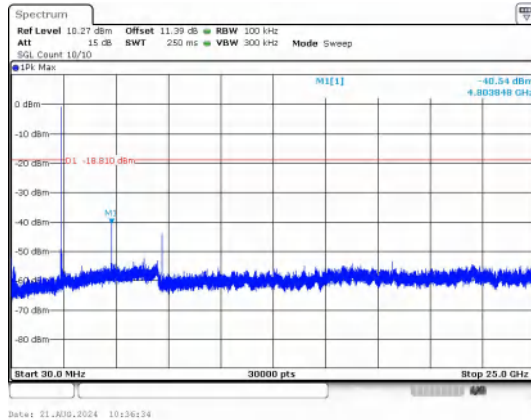
In-Band Reference Level
BLE 2M_Channel 0



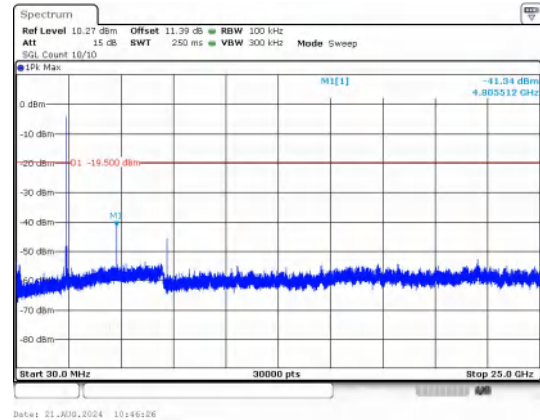
Out Of Band Emission
BLE 1M_Channel 0



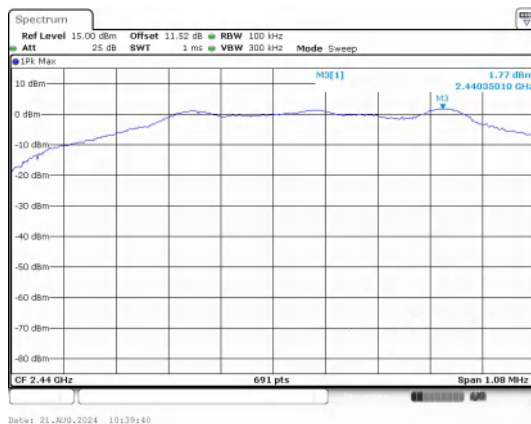
Out Of Band Emission
BLE 2M_Channel 0



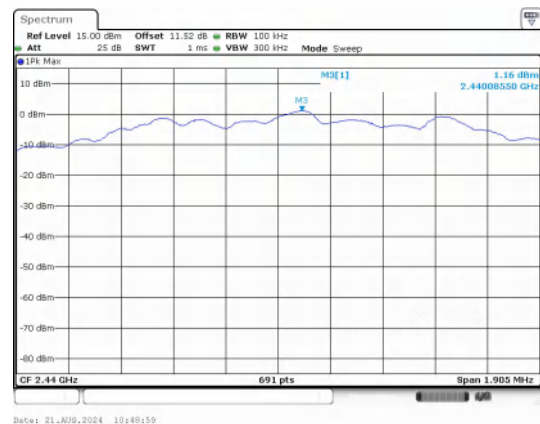
30.0 MHz - 25000.0 MHz
BLE 1M_Channel 0



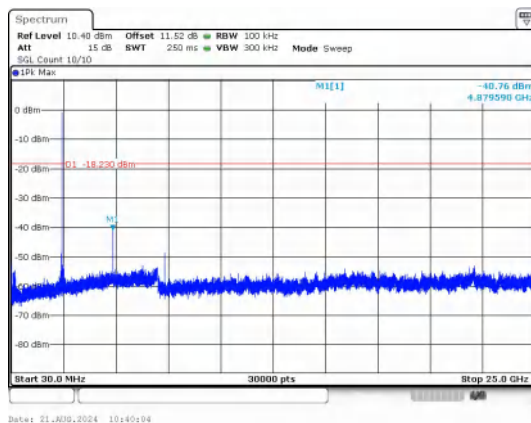
30.0 MHz - 25000.0 MHz
BLE 2M_Channel 0



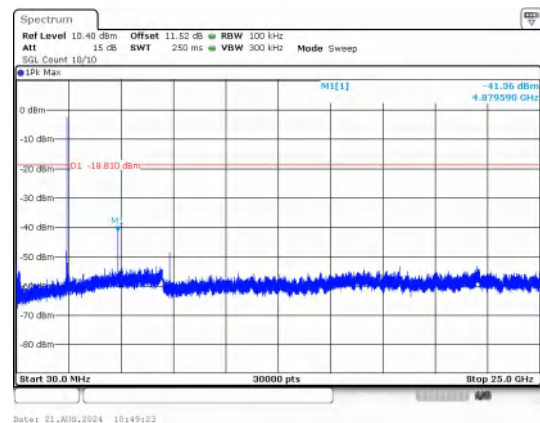
In-Band Reference Level
BLE 1M_Channel 19



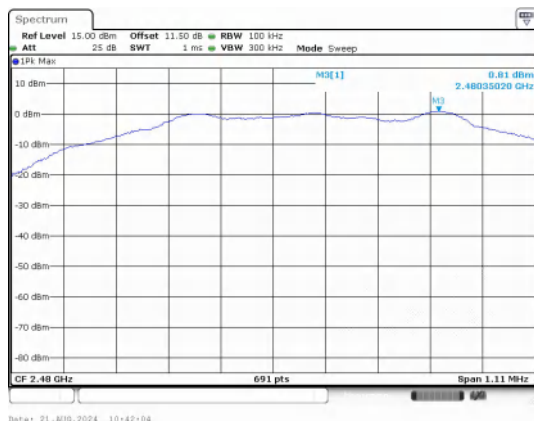
In-Band Reference Level
BLE 2M_Channel 19



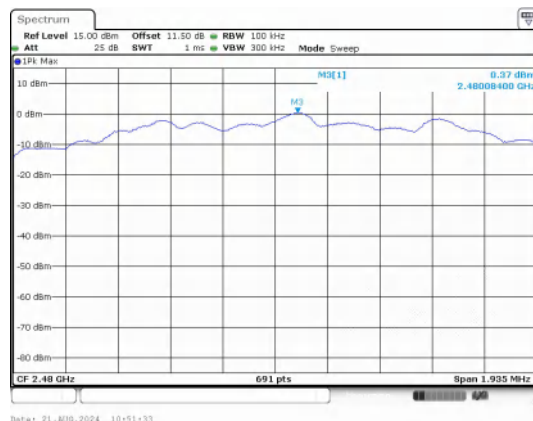
30.0 MHz - 25000.0 MHz
BLE 1M_Channel 19



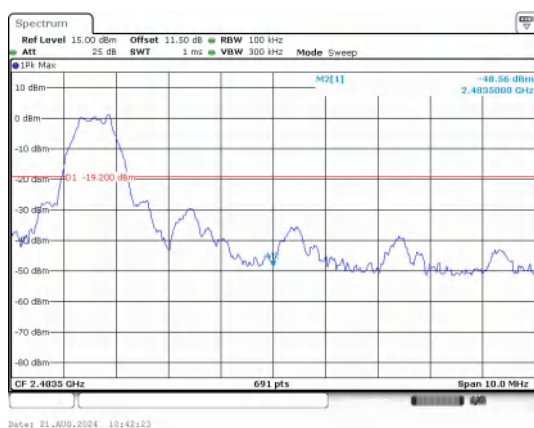
30.0 MHz - 25000.0 MHz
BLE 2M_Channel 19



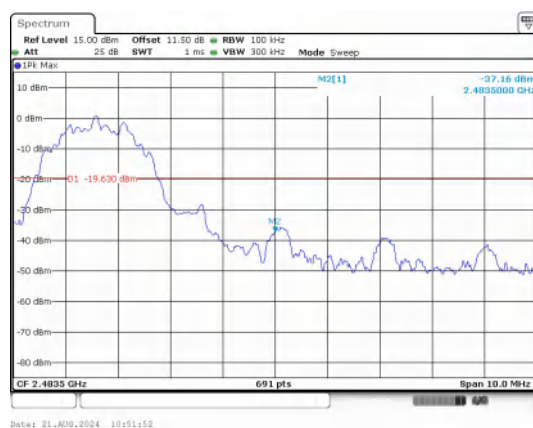
In-Band Reference Level
BLE 1M_Channel 39



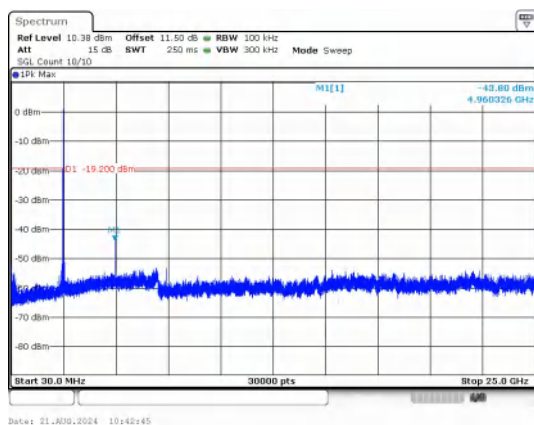
In-Band Reference Level
BLE 2M_Channel 39



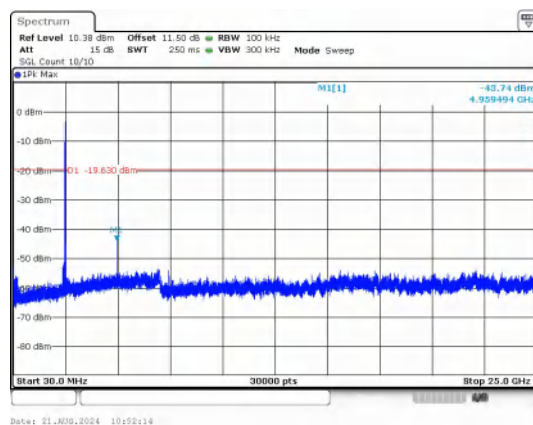
Out Of Band Emission
BLE 1M_Channel 39



Out Of Band Emission
BLE 2M_Channel 39



30.0 MHz - 25000.0 MHz
BLE 1M_Channel 39



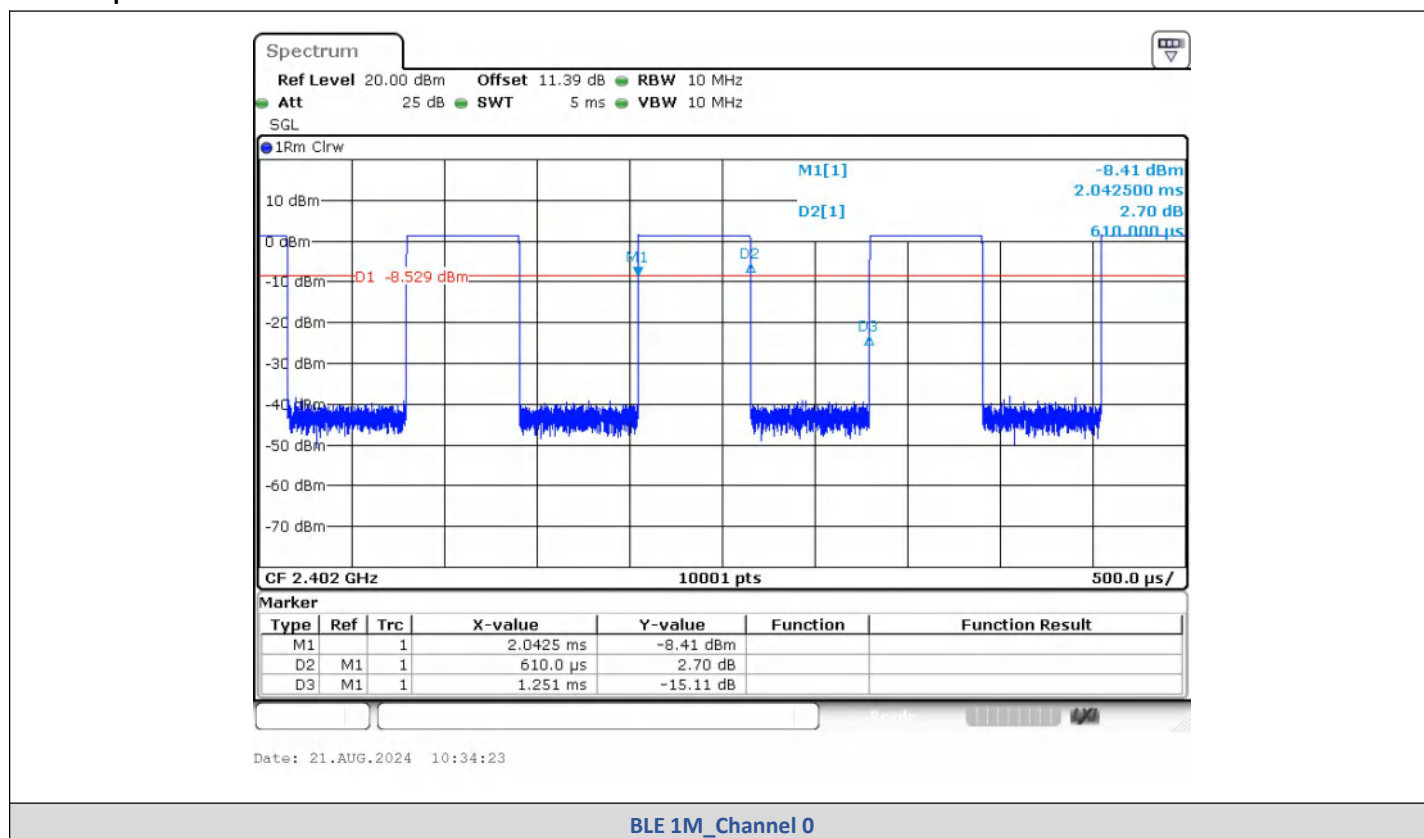
30.0 MHz - 25000.0 MHz
BLE 2M_Channel 39

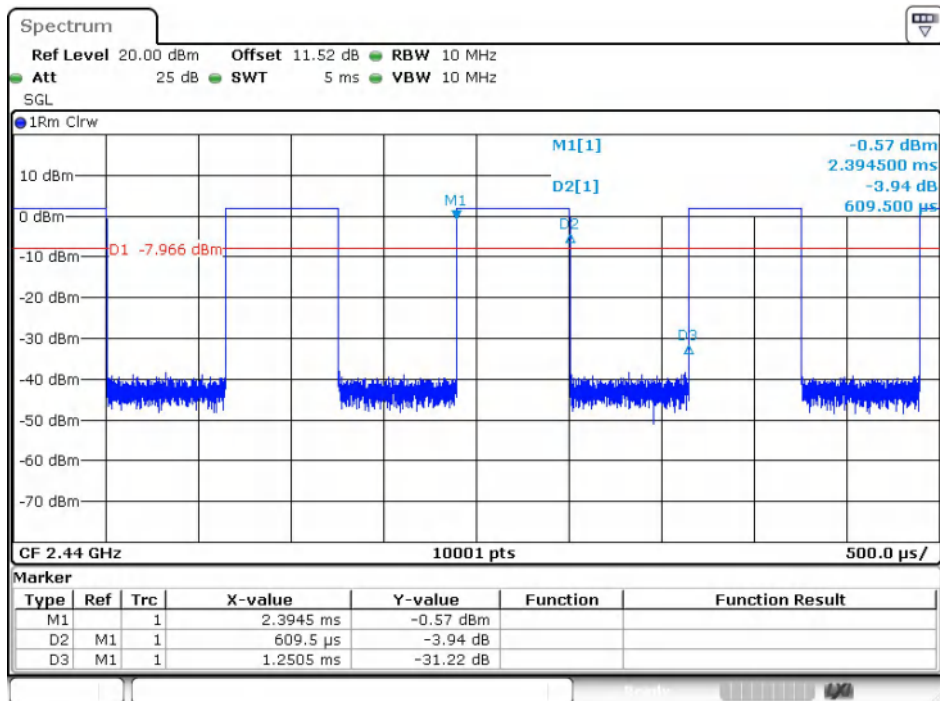
5) Duty Cycle

Test Result

Mode	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
BLE 1M	0	0.610	1.251	48.76	0.4876	3.1194	1.64
	19	0.610	1.250	48.74	0.4874	3.1211	1.64
	39	0.610	1.248	48.86	0.4886	3.1105	1.64
BLE 2M	0	0.308	0.626	49.17	0.4917	3.083	3.25
	19	0.308	0.626	49.23	0.4923	3.0777	3.25
	39	0.308	0.626	49.23	0.4923	3.0777	3.25

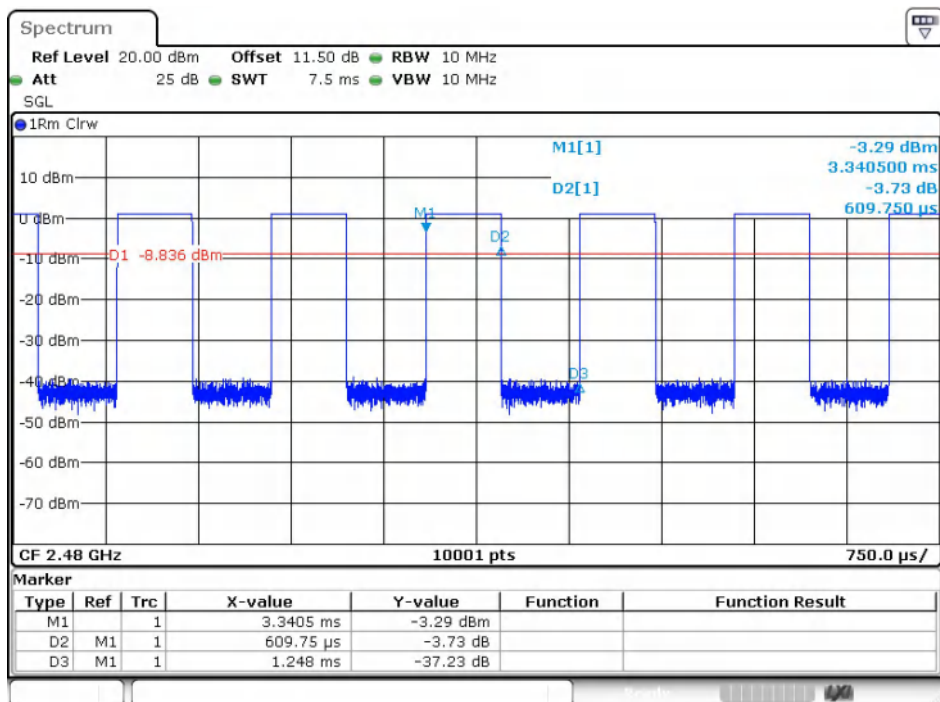
Test Graphs





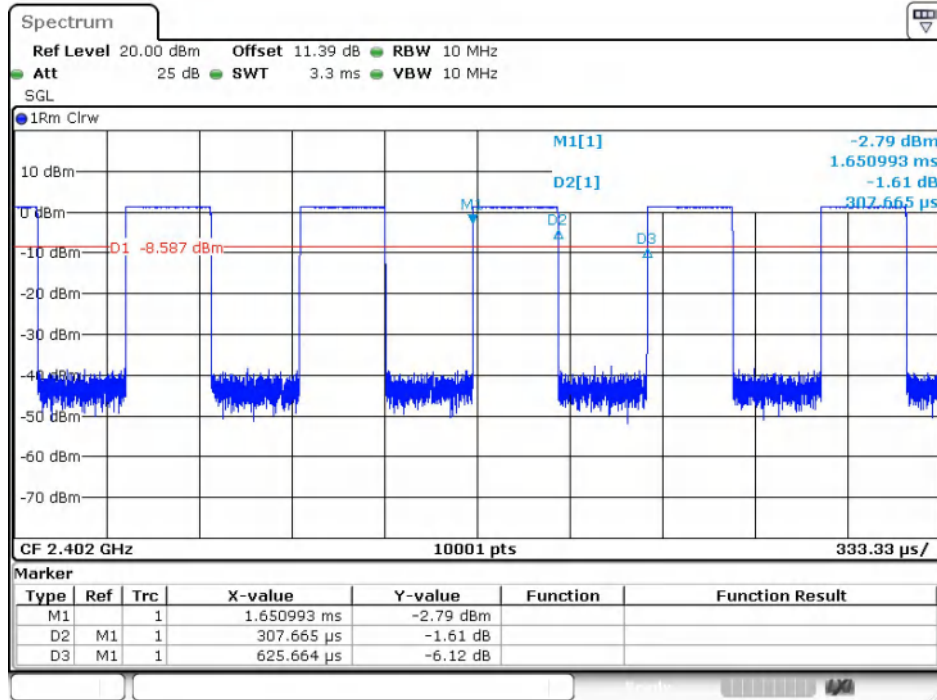
Date: 21.AUG.2024 10:38:07

BLE 1M_Channel 19



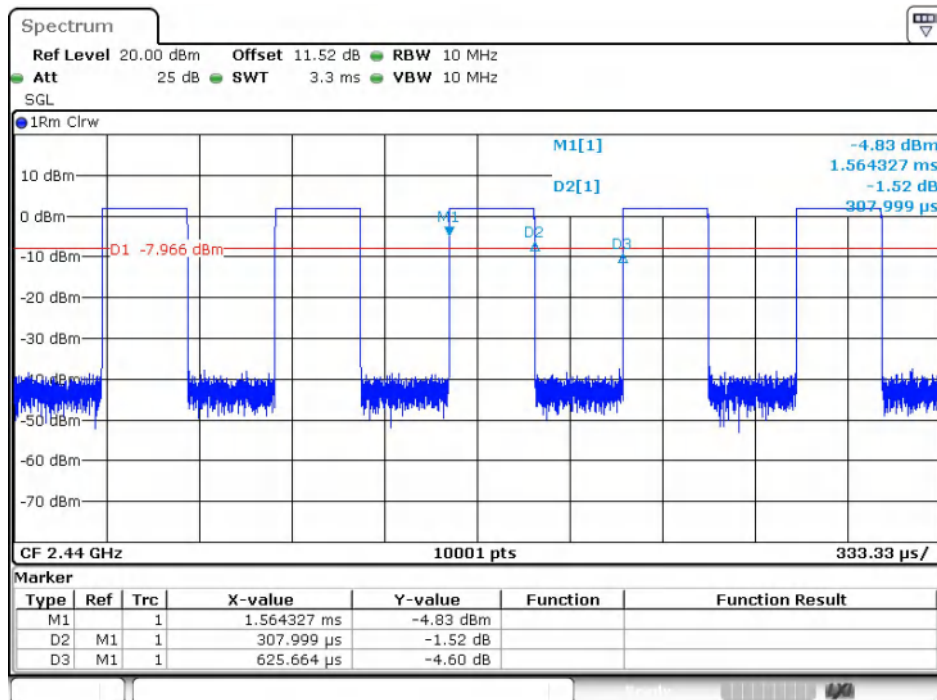
Date: 21.AUG.2024 10:40:35

BLE 1M_Channel 39



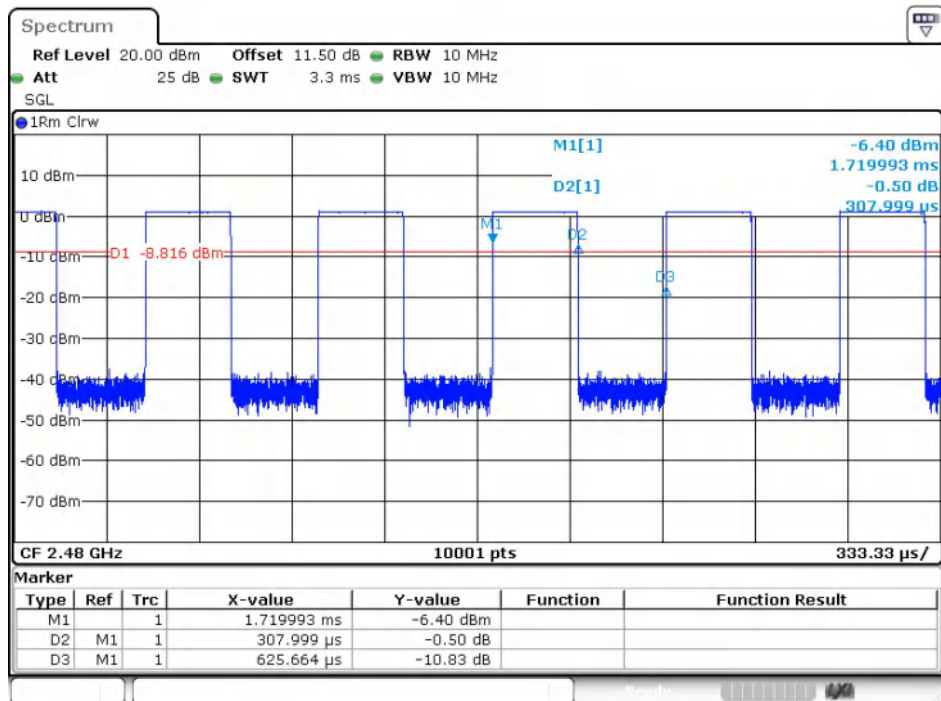
Date: 21.AUG.2024 10:44:11

BLE 2M_Channel 0



Date: 21.AUG.2024 10:47:25

BLE 2M_Channel 19



Date: 21.AUG.2024 10:49:59

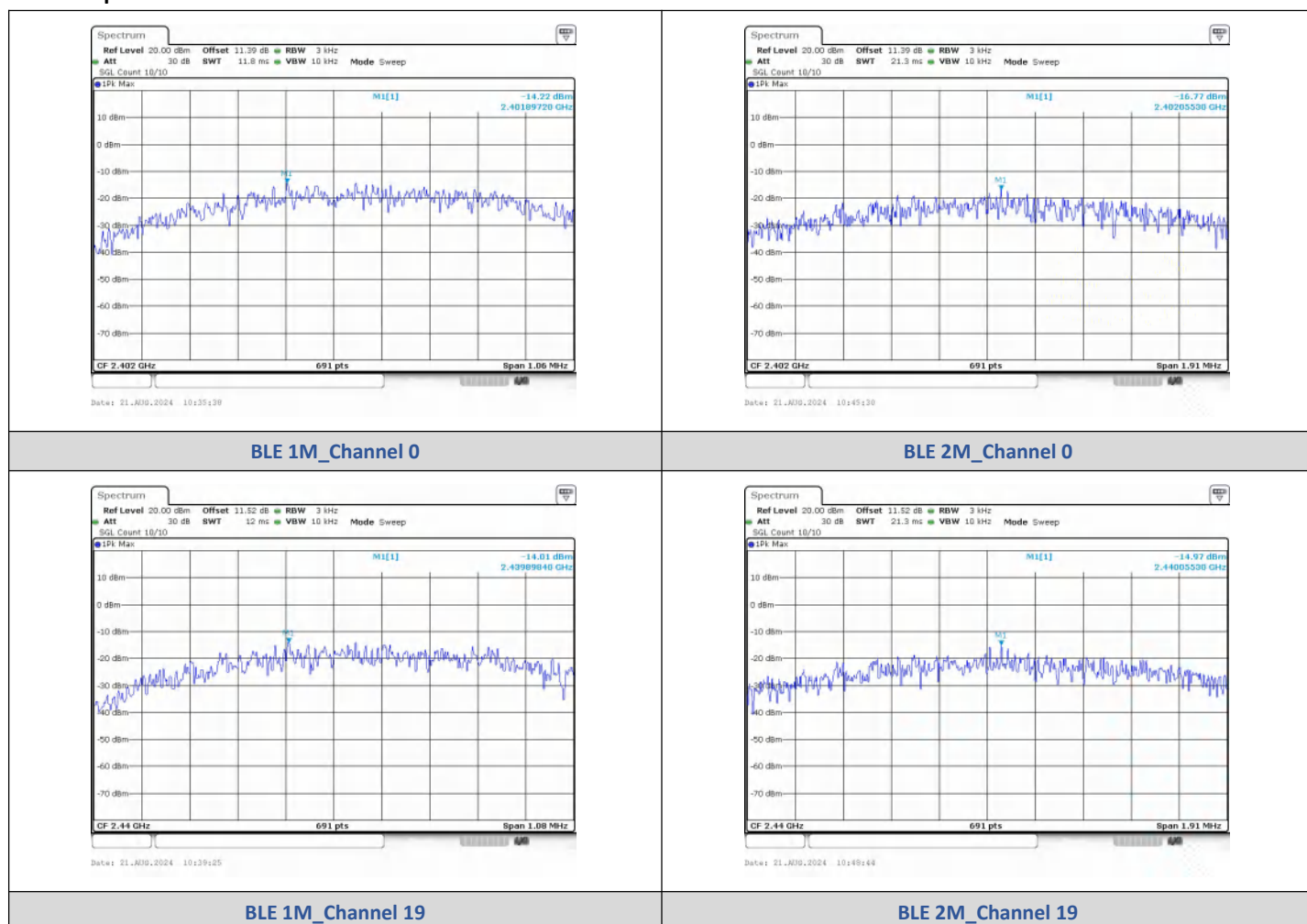
BLE 2M_Channel 39

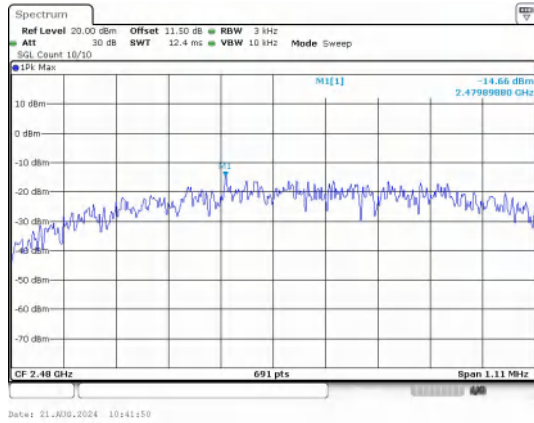
6) Power Spectral Density

Test Result

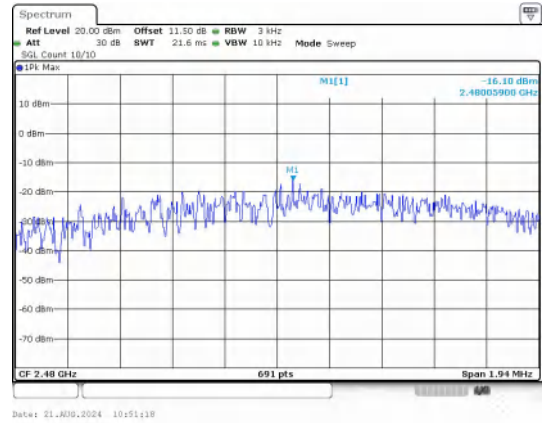
Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
BLE 1M	0	-14.22	≤8	PASS
BLE 1M	19	-14.01	≤8	PASS
BLE 1M	39	-14.66	≤8	PASS
BLE 2M	0	-16.77	≤8	PASS
BLE 2M	19	-14.97	≤8	PASS
BLE 2M	39	-16.10	≤8	PASS

Test Graphs





BLE 1M_Channel 39



BLE 2M_Channel 39