

Appendix A

Report No.:	CISRR250808003A
Test Engineer:	Lucas Huang
Supervised by:	Rory Huang

1) Conducted Peak Output Power

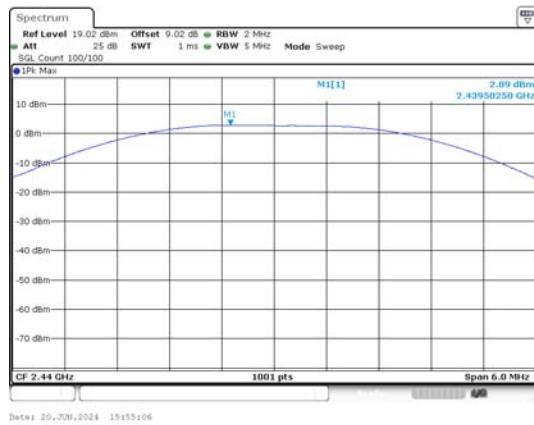
Test Result

Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
GFSK	LE	0	2.22	1.67	30	PASS
		19	2.64	1.84		PASS
		39	2.75	1.88		PASS
	2LE	0	2.29	1.69		PASS
		19	2.89	1.95		PASS
		39	3.07	2.03		PASS

Test Graphs

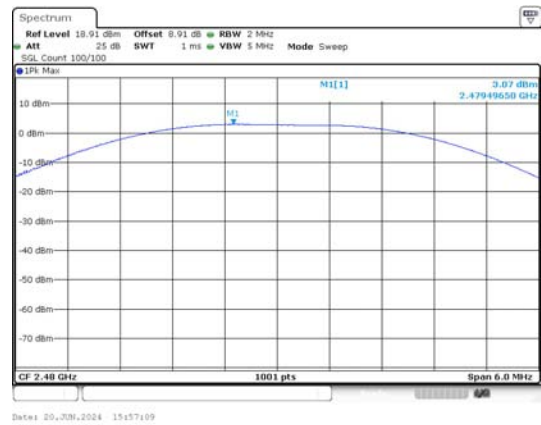


BLE 1M_Channel 39



Peak Output Power
BLE 2M_Channel 19

BLE 2M_Channel 0



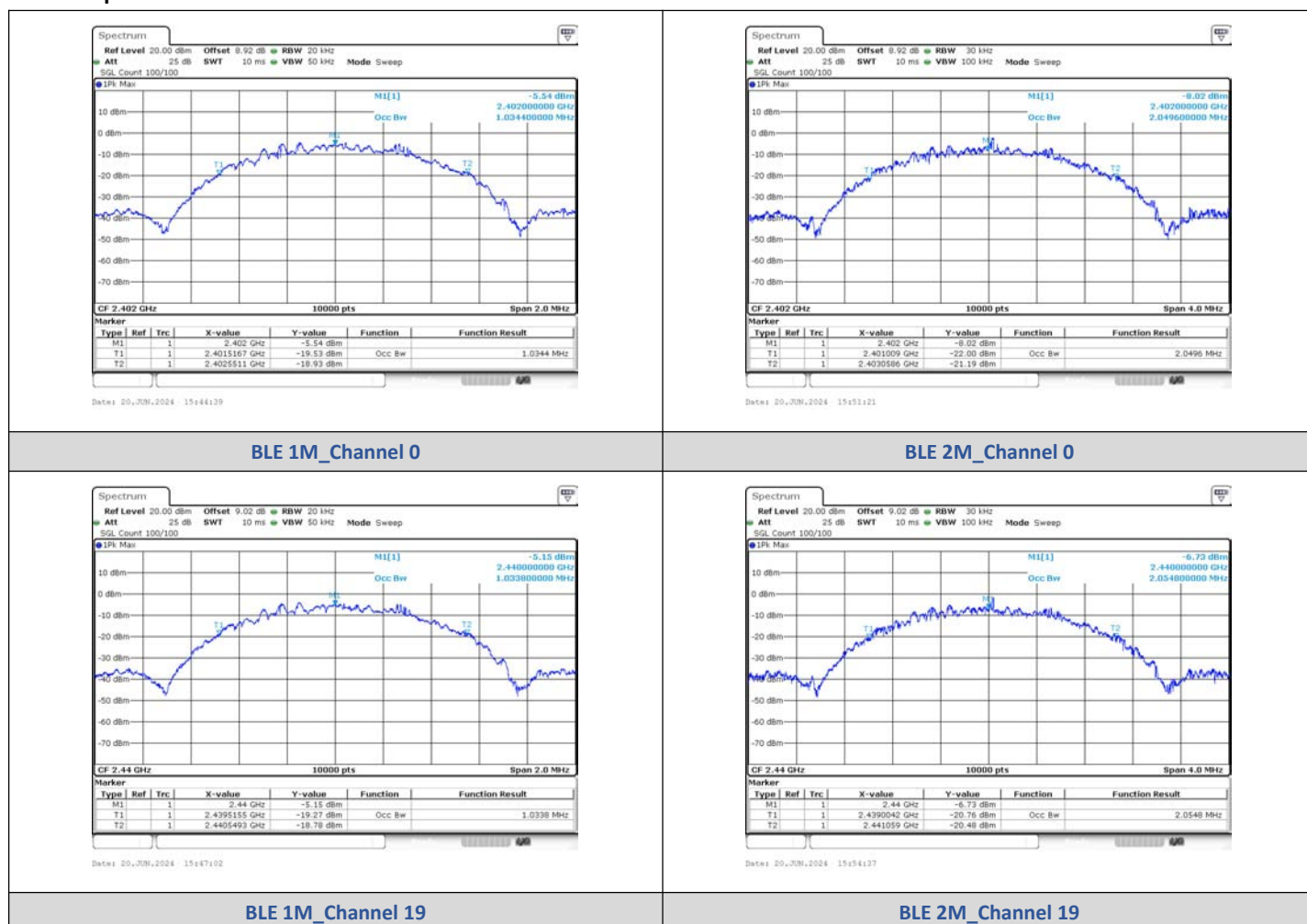
Peak Output Power
BLE 2M_Channel 39

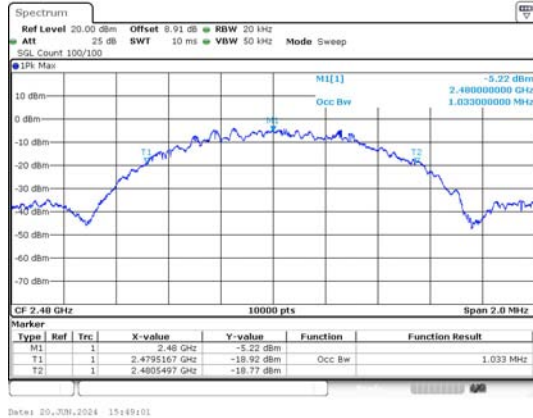
2) 99% Bandwidth

Test Result

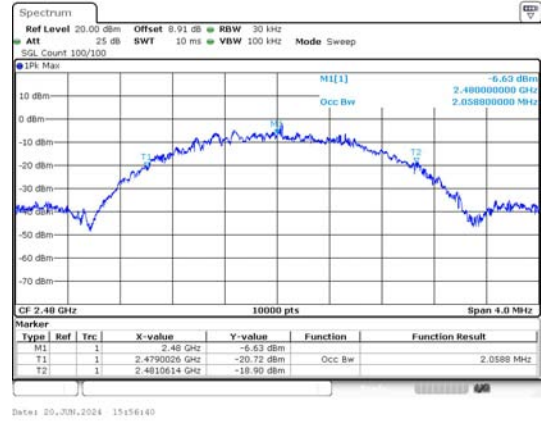
Mode	Channel	Center Frequency (MHz)	99% BW (MHz)
BLE 1M	0	2402	1.0344
BLE 1M	19	2440	1.0338
BLE 1M	39	2480	1.0330
BLE 2M	0	2402	2.0496
BLE 2M	19	2440	2.0548
BLE 2M	39	2480	2.0588

Test Graphs





BLE 1M_Channel 39



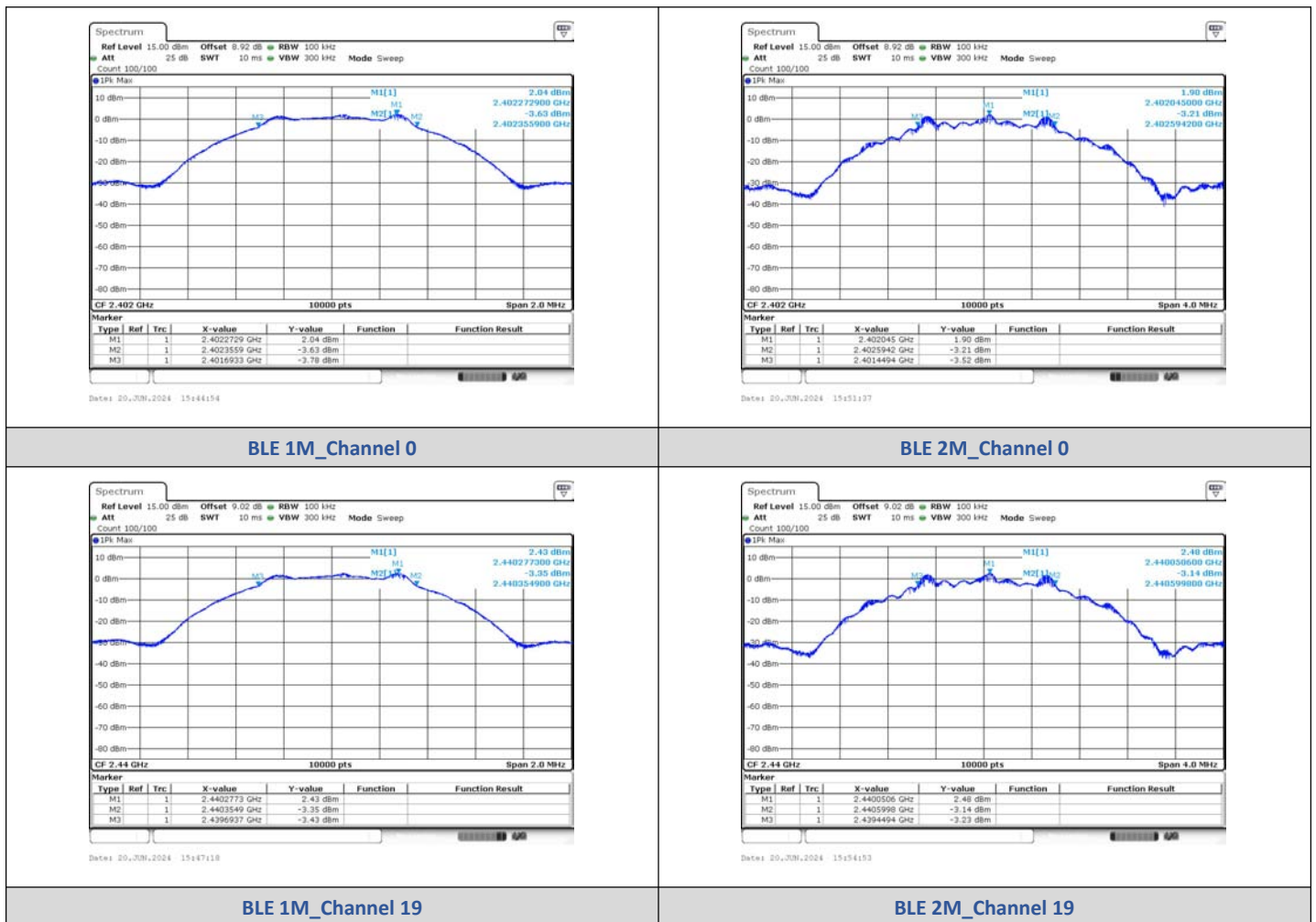
BLE 2M_Channel 39

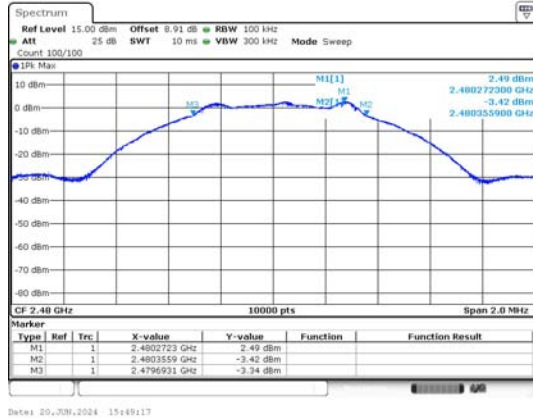
3) 6dB Bandwidth

Test Result

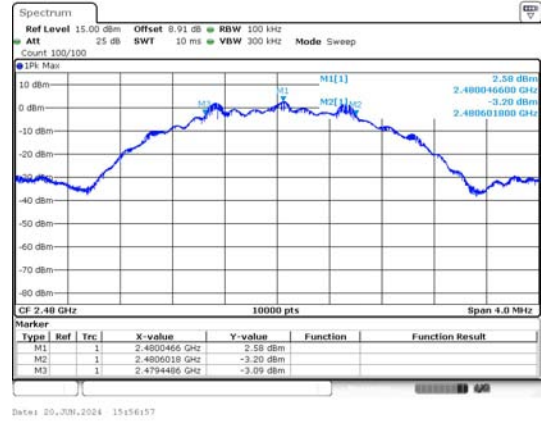
Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
BLE 1M	0	2402	0.6700	≥0.5	PASS
	19	2440	0.6600		PASS
	39	2480	0.6700		PASS
BLE 2M	0	2402	1.140		PASS
	19	2440	1.150		PASS
	39	2480	1.150		PASS

Test Graphs





BLE 1M_Channel 39



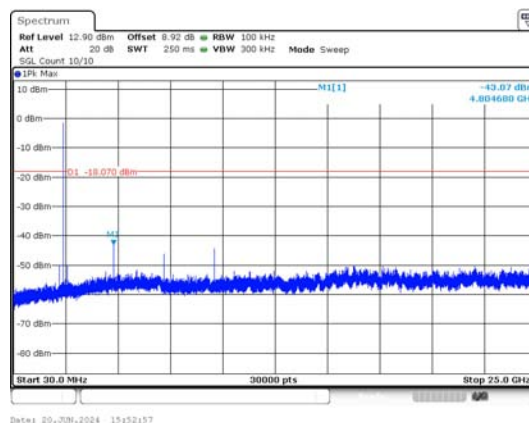
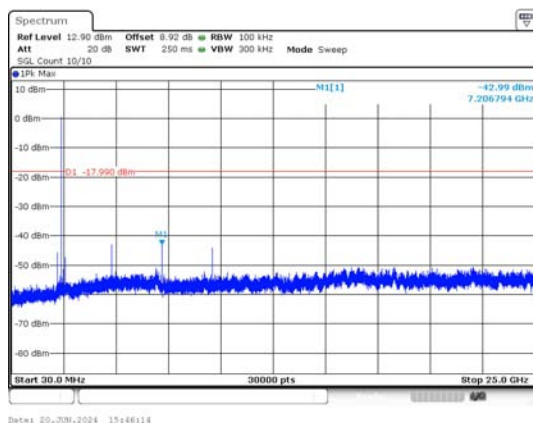
BLE 2M_Channel 39

4) Conducted Out Of Band Emission

Test Result

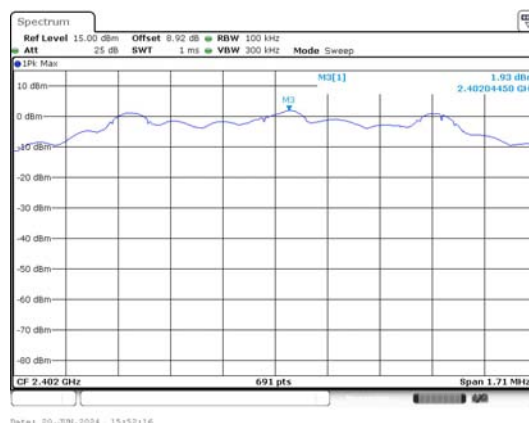
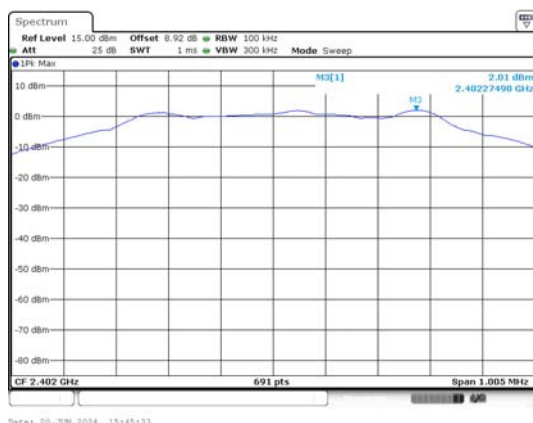
Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
BLE 1M	0	2399.00	-42.451	-17.99	-24.461	PASS
		2400.00	-45.940	-17.99	-27.950	PASS
		7206.80	-42.989	-17.99	-24.999	PASS
	19	4879.59	-41.034	-17.59	-23.444	PASS
		2483.50	-44.437	-17.52	-26.917	PASS
		9914.37	-40.445	-17.52	-22.925	PASS
BLE 2M	0	2400.00	-32.369	-18.07	-14.299	PASS
		4804.68	-43.071	-18.07	-25.001	PASS
	19	9753.73	-43.606	-17.58	-26.026	PASS
		2483.50	-51.572	-17.39	-34.182	PASS
	39	9914.37	-40.355	-17.39	-22.965	PASS

Test Graphs



30.0 MHz - 25000.0 MHz
BLE 1M_Channel 0

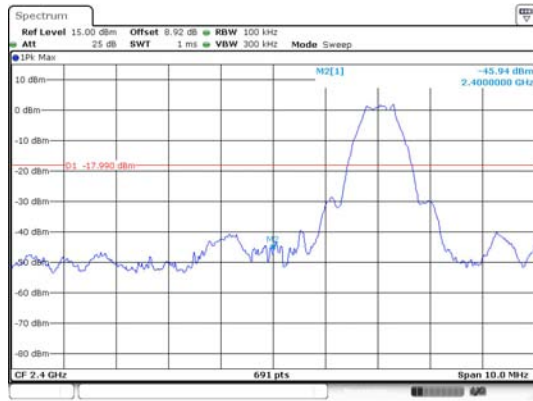
30.0 MHz - 25000.0 MHz
BLE 2M_Channel 0



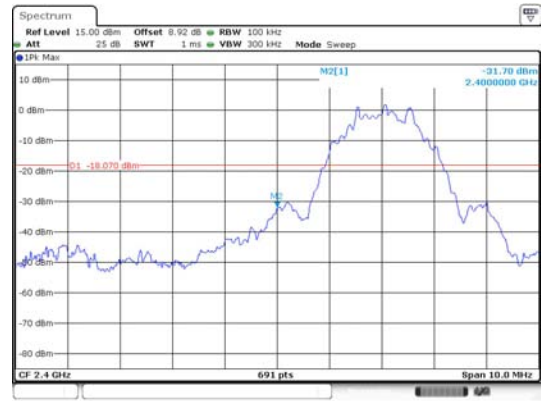
In-Band Reference Level

In-Band Reference Level

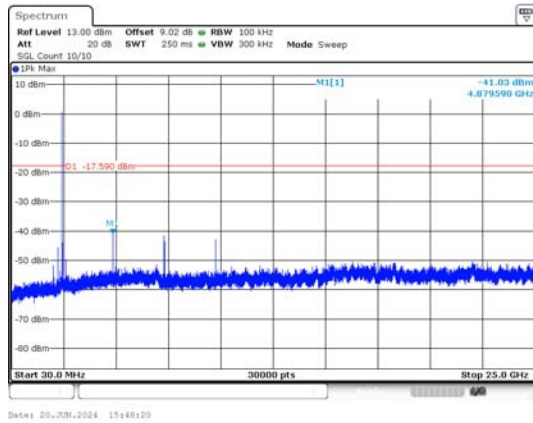
BLE 1M_Channel 0



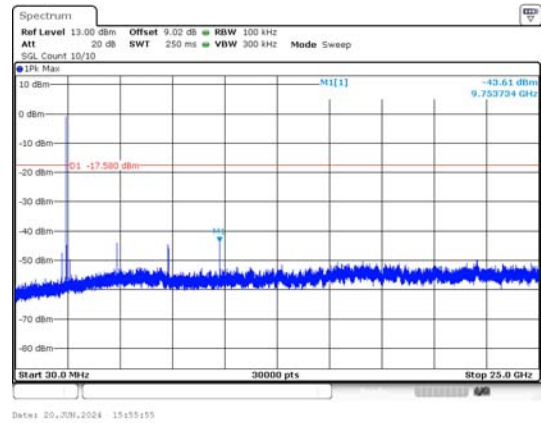
BLE 2M_Channel 0



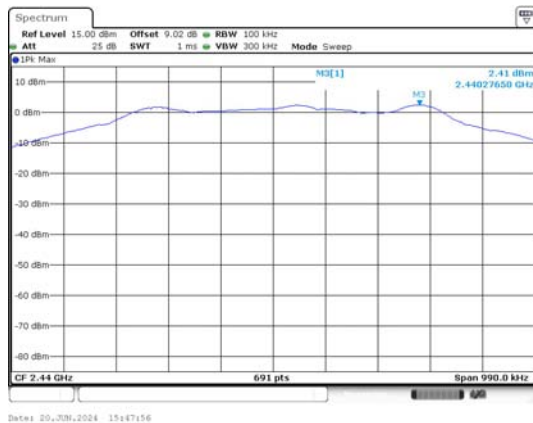
Out Of Band Emission
BLE 1M_Channel 0



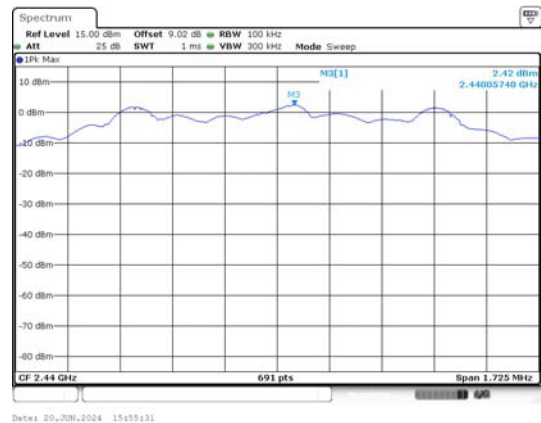
Out Of Band Emission
BLE 2M_Channel 0



30.0 MHz - 25000.0 MHz
BLE 1M_Channel 19

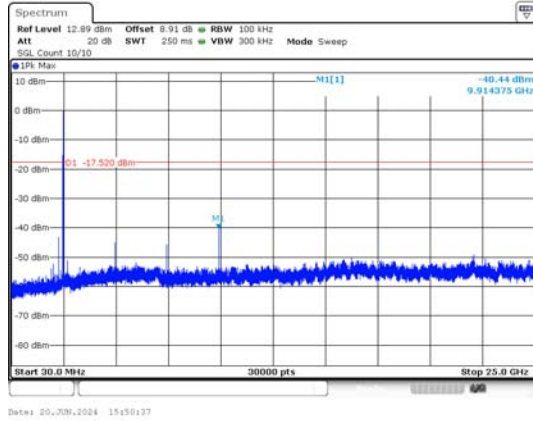


30.0 MHz - 25000.0 MHz
BLE 2M_Channel 19

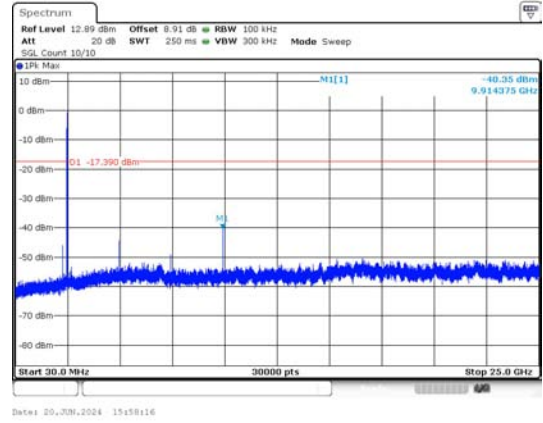


In-Band Reference Level
BLE 1M_Channel 19

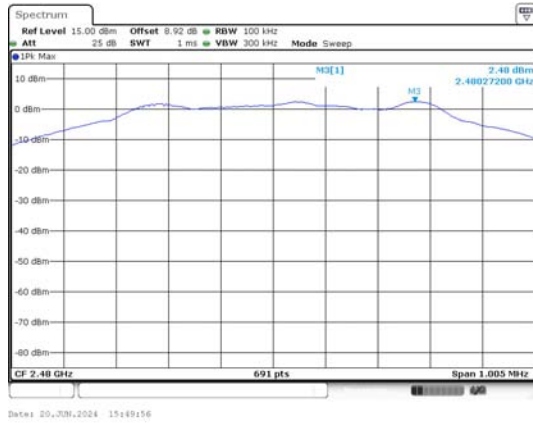
In-Band Reference Level
BLE 2M_Channel 19



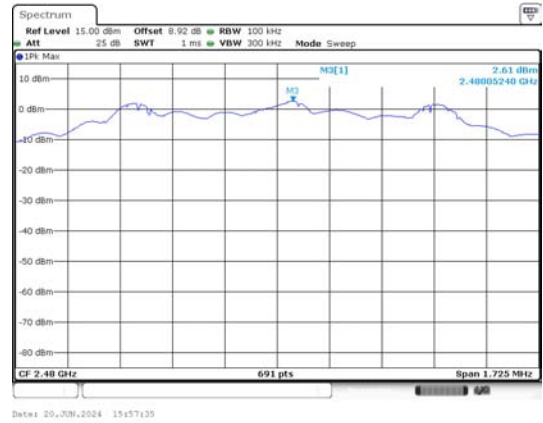
30.0 MHz - 25000.0 MHz
BLE 1M_Channel 39



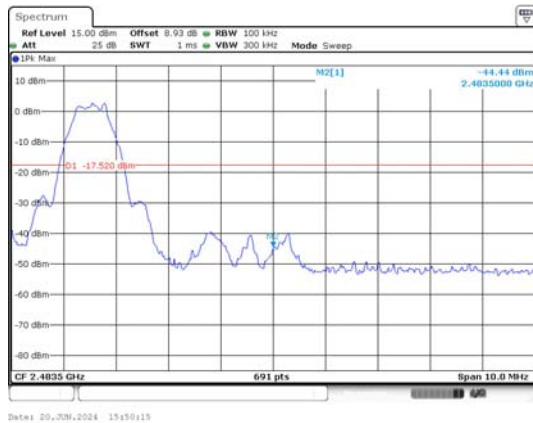
30.0 MHz - 25000.0 MHz
BLE 2M_Channel 39



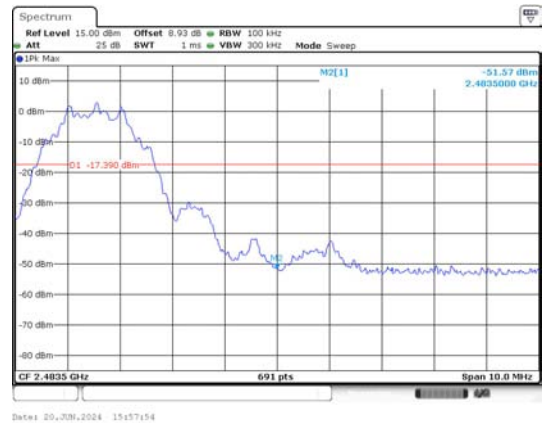
In-Band Reference Level
BLE 1M_Channel 39



In-Band Reference Level
BLE 2M_Channel 39



Out Of Band Emission
BLE 1M_Channel 39



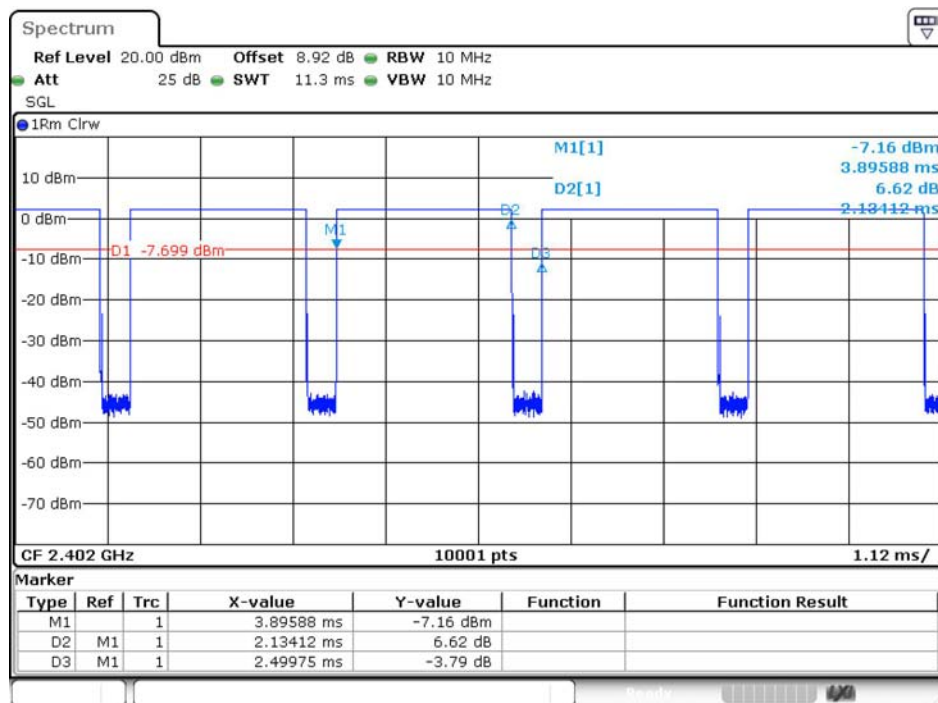
Out Of Band Emission
BLE 2M_Channel 39

5) Duty Cycle

Test Result

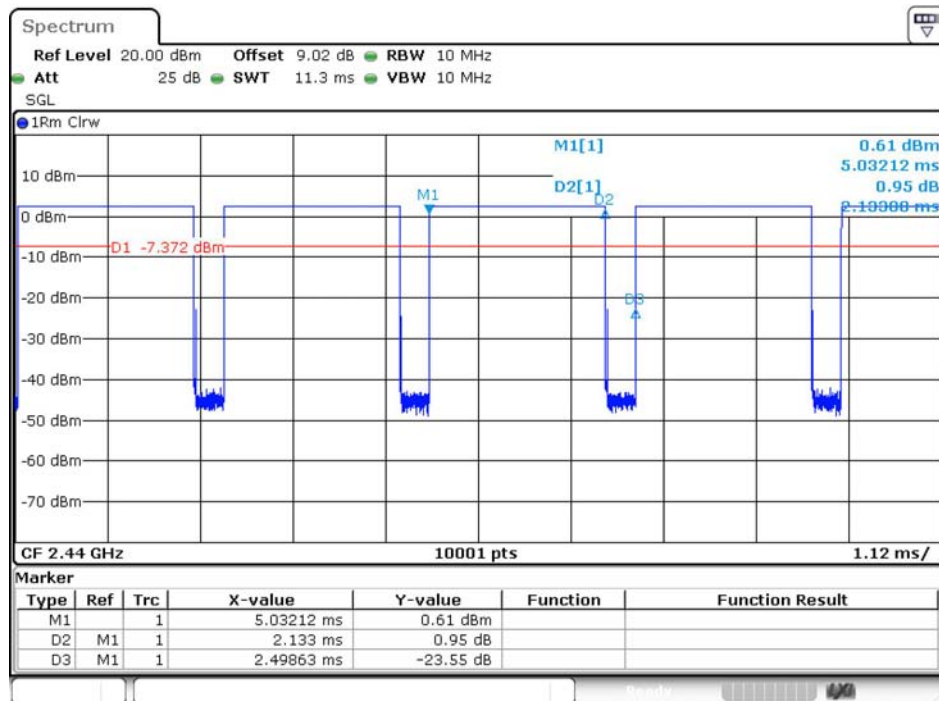
Mode	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
BLE 1M	0	2.134	2.500	85.37	0.8537	0.6869	0.47
	19	2.133	2.499	85.37	0.8537	0.6869	0.47
	39	2.134	2.499	85.41	0.8541	0.6849	0.47
BLE 2M	0	1.082	2.500	43.29	0.4329	3.6361	0.92
	19	1.082	2.499	43.31	0.4331	3.6341	0.92
	39	1.077	2.486	43.31	0.4331	3.6341	0.93

Test Graphs



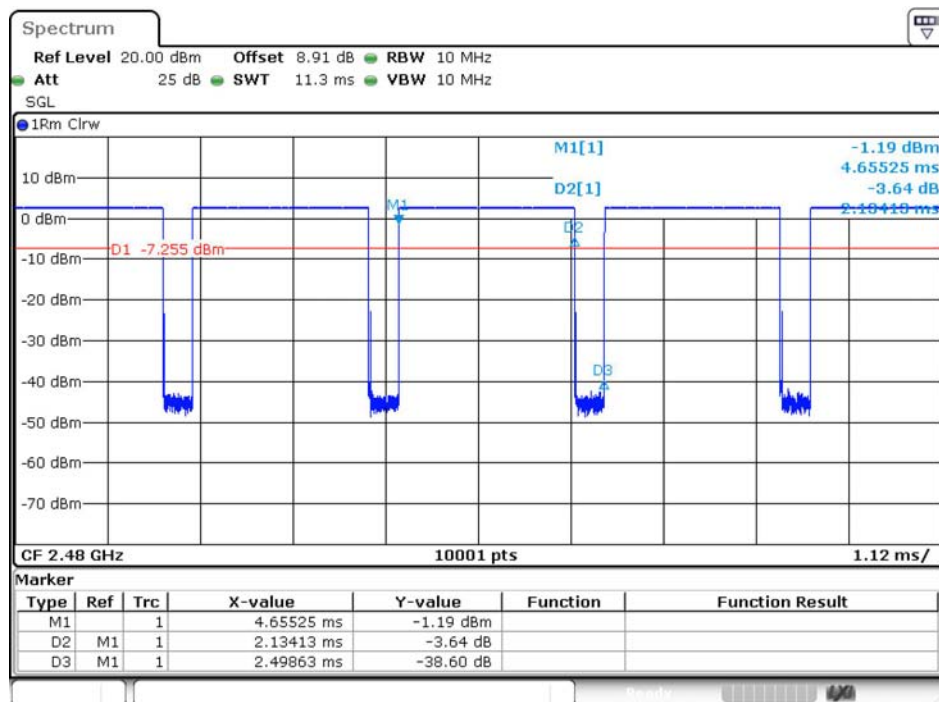
Date: 20.JUN.2024 15:44:24

BLE 1M_Channel 0



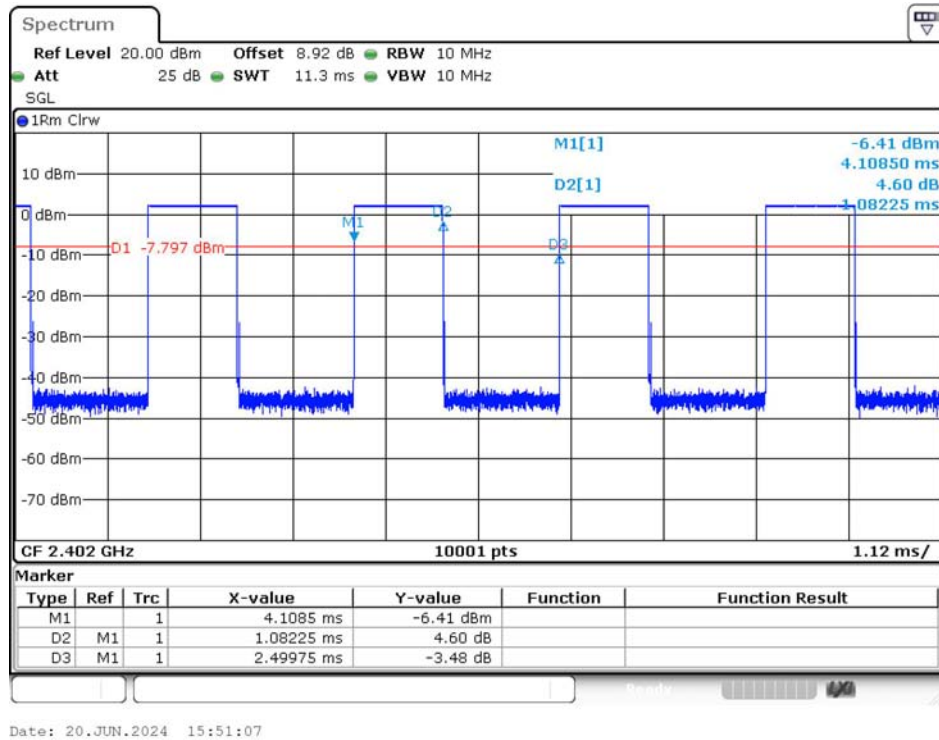
Date: 20.JUN.2024 15:46:48

BLE 1M_Channel 19

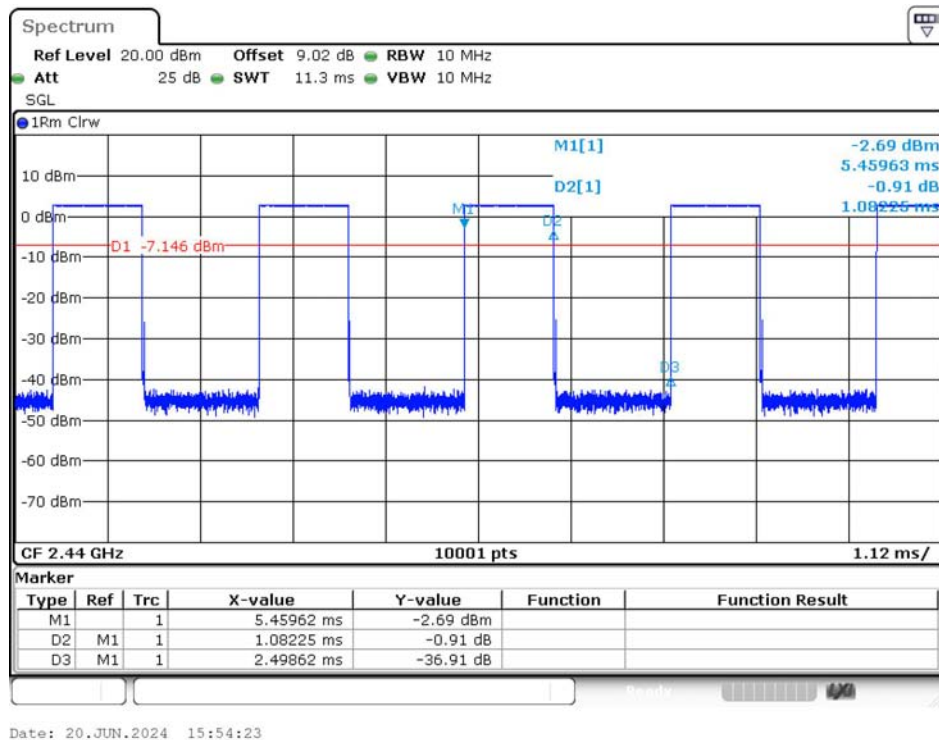


Date: 20.JUN.2024 15:48:47

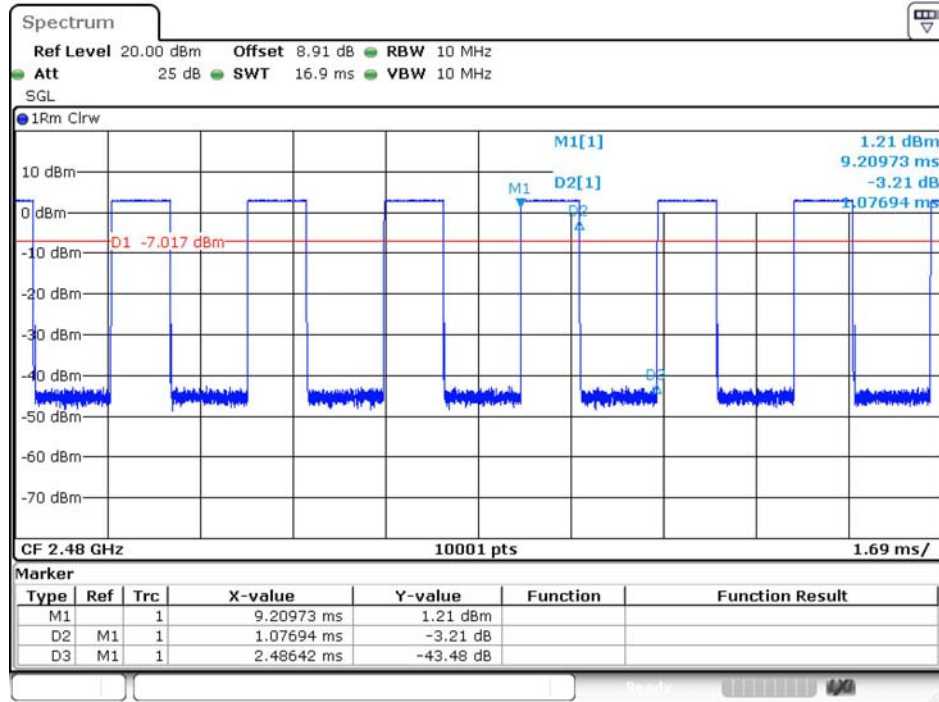
BLE 1M_Channel 39



BLE 2M_Channel 0



BLE 2M_Channel 19



Date: 20.JUN.2024 15:56:26

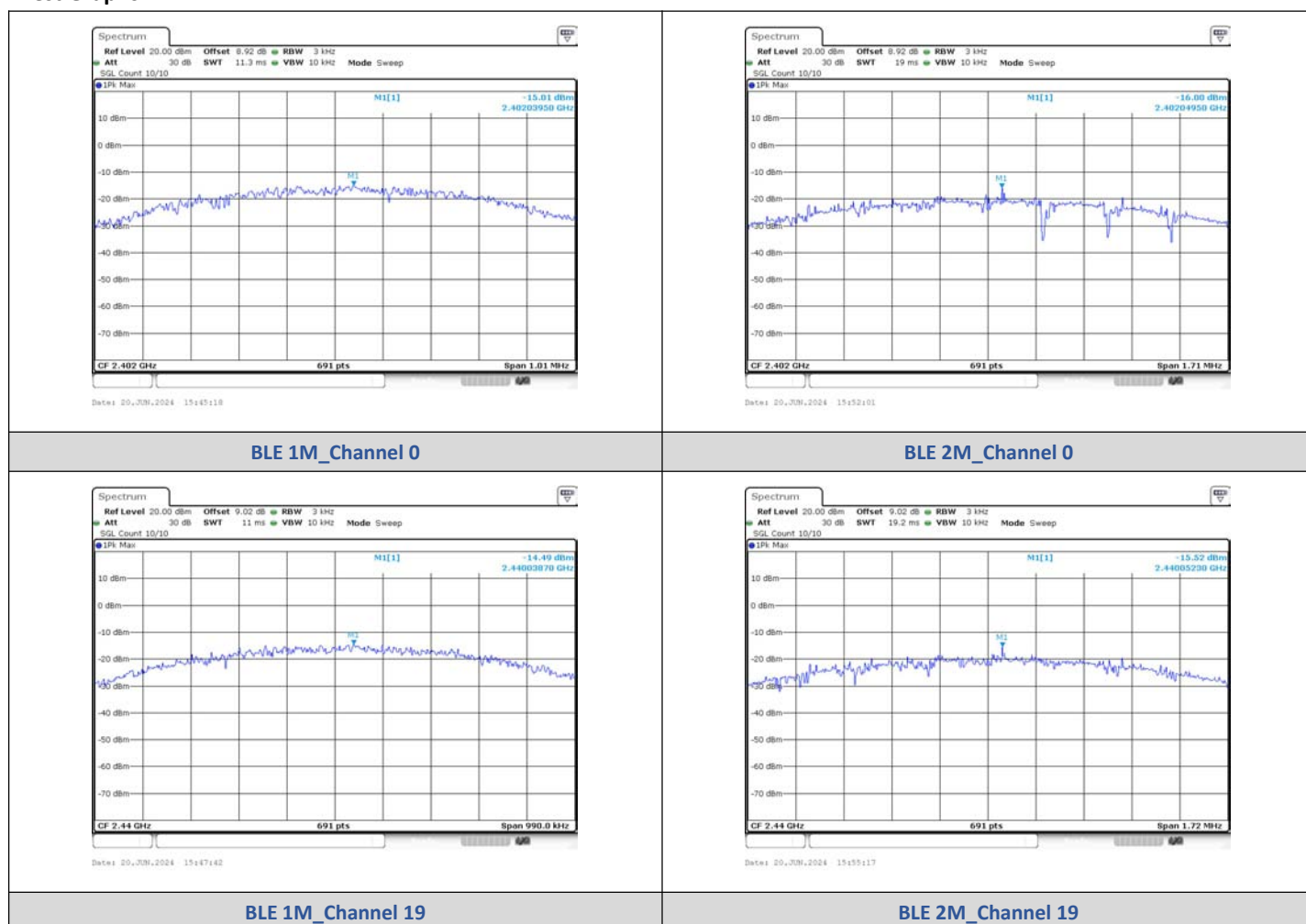
BLE 2M_Channel 39

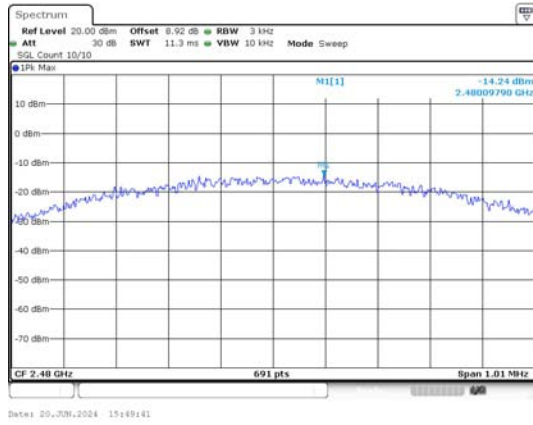
6) Power Spectral Density

Test Result

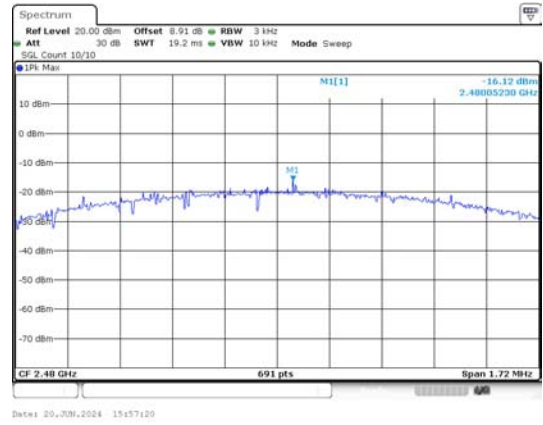
Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
BLE 1M	0	-15.009	≤8	PASS
BLE 1M	19	-14.489	≤8	PASS
BLE 1M	39	-14.240	≤8	PASS
BLE 2M	0	-15.996	≤8	PASS
BLE 2M	19	-15.522	≤8	PASS
BLE 2M	39	-16.120	≤8	PASS

Test Graphs





BLE 1M_Channel 39



BLE 2M_Channel 39