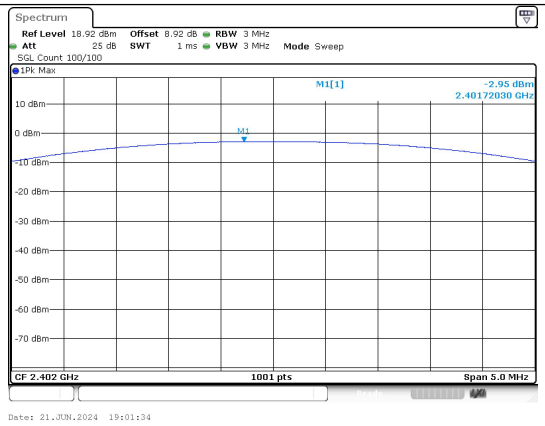
Appendix A

Report No.:	CISRR240606051
FCC ID:	2AWDJ-BLM5550
Product Name:	Bluetooth asset tagging
Model No.:	BLM5550
Test Engineer:	Lucas Huang
Supervised by:	Rory Huang

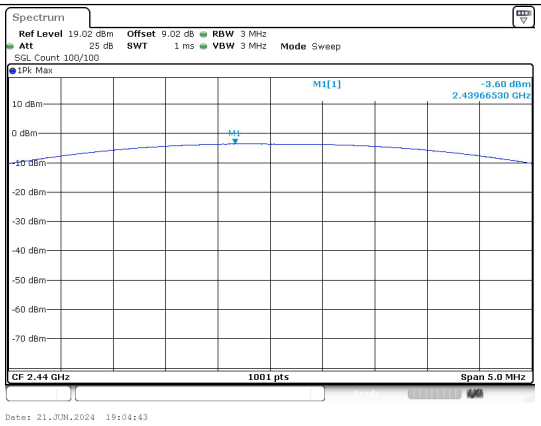
1) Conducted Peak Output Power

Test Result

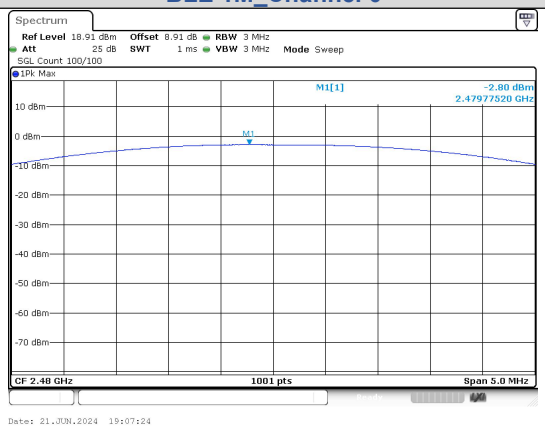
Mode	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
LE	0	-2.95	0.51	30	PASS
	19	-3.60	0.44	30	PASS
	39	-2.80	0.52	30	PASS



Peak Output Power
BLE 1M_Channel 0



Peak Output Power
BLE 1M_Channel 19



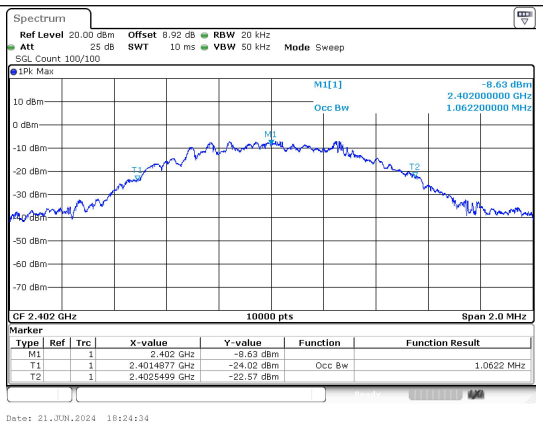
Peak Output Power
BLE 1M_Channel 39

99% Bandwidth

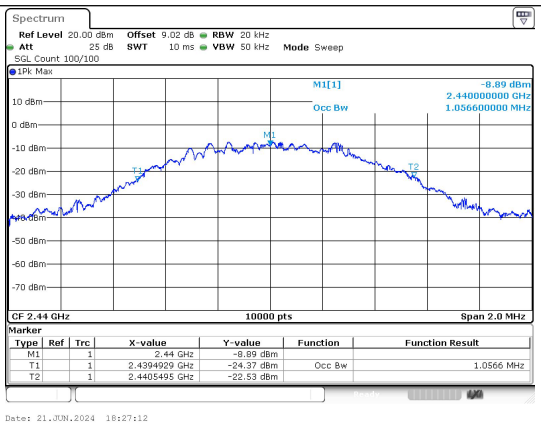
Test Result

Mode	Channel	Center Frequency (MHz)	99% BW (MHz)
BLE 1M	0	2402	1.0620
BLE 1M	19	2440	1.0566
BLE 1M	39	2480	1.0484

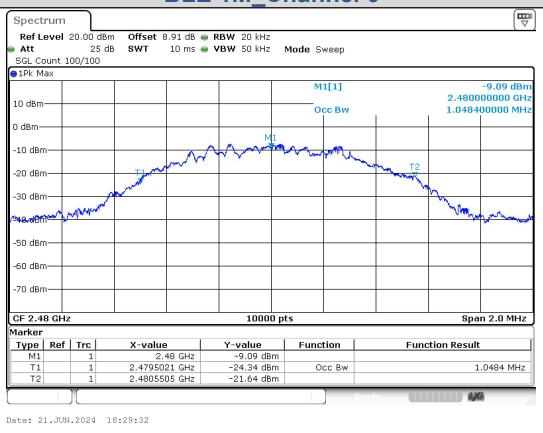
Test Graphs



BLE 1M_Channel 0



BLE 1M_Channel 19



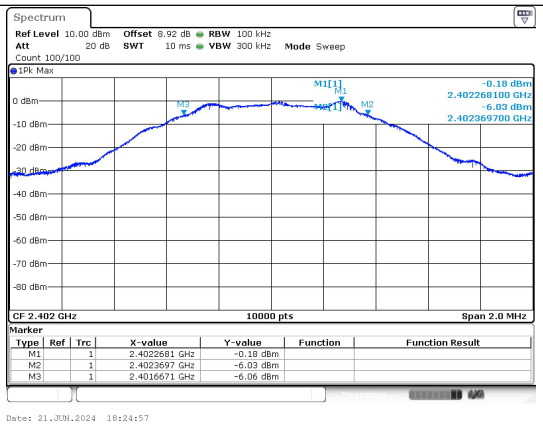
BLE 1M_Channel 39

6dB Bandwidth

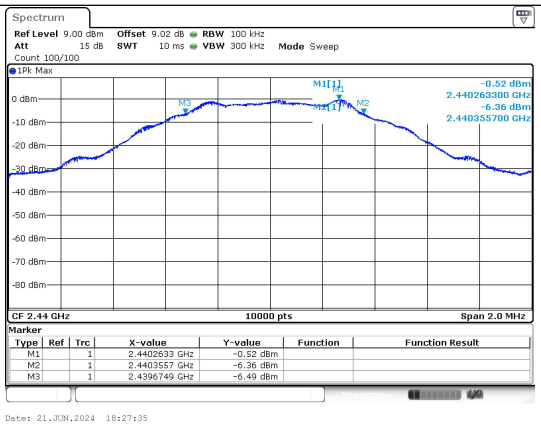
Test Result

Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
BLE 1M	0	2402	0.7000	≥0.5	PASS
	19	2440	0.6900		PASS
	39	2480	0.6700		PASS

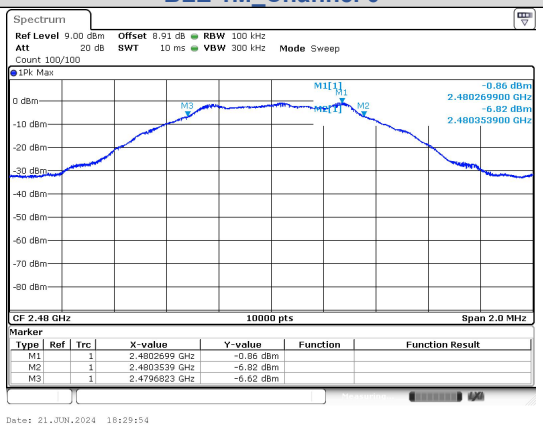
Test Graphs



BLE 1M_Channel 0



BLE 1M_Channel 19



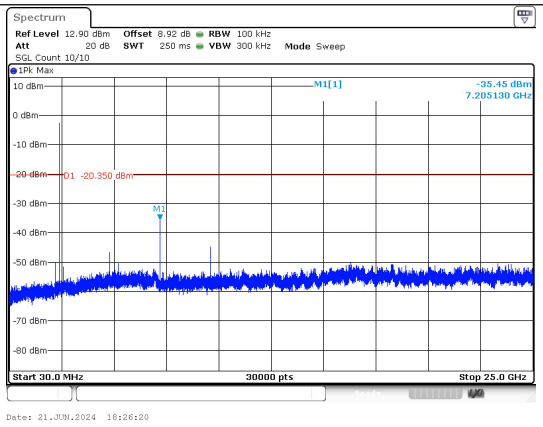
BLE 1M_Channel 39

Conducted Out Of Band Emission

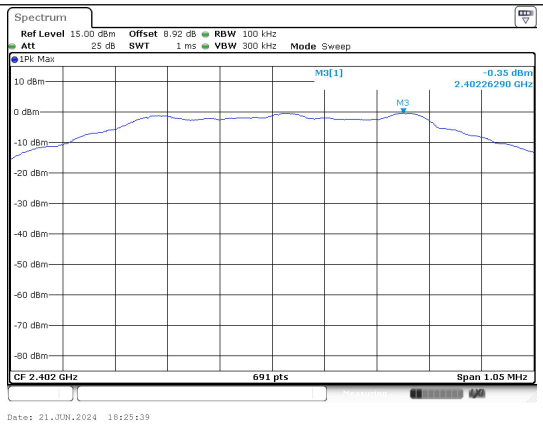
Test Result

Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
BLE 1M	0	2400.00	-48.573	-20.35	-28.223	PASS
		7205.13	-35.447	-20.35	-15.097	PASS
	19	7319.16	-39.303	-20.6	-18.703	PASS
	39	2483.50	-53.071	-20.9	-32.171	PASS
		9920.20	-40.052	-20.9	-19.152	PASS

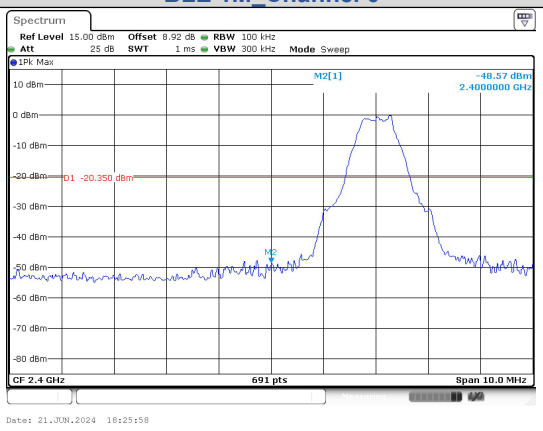
Test Graphs



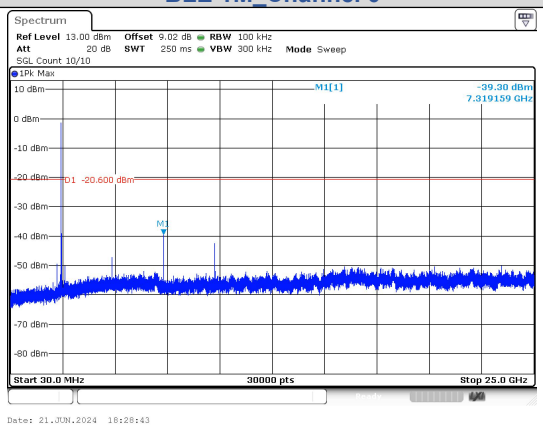
30.0 MHz - 25000.0 MHz
BLE 1M_Channel 0



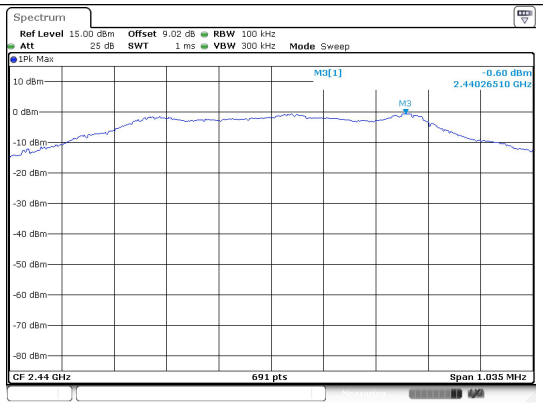
In-Band Reference Level
BLE 1M_Channel 0



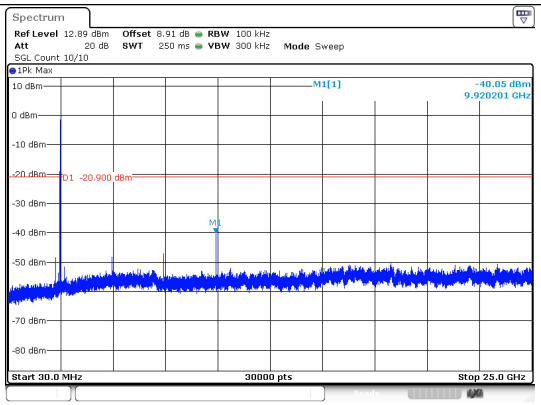
Out Of Band Emission
BLE 1M_Channel 0



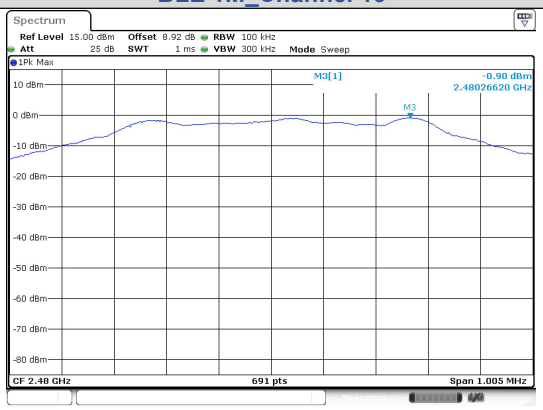
30.0 MHz - 25000.0 MHz
BLE 1M_Channel 19



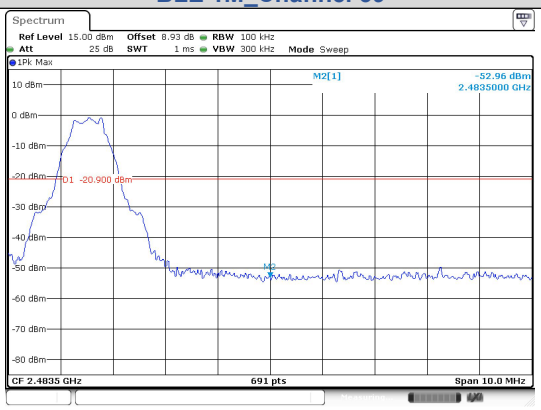
In-Band Reference Level
BLE 1M_Channel 19



30.0 MHz - 25000.0 MHz
BLE 1M_Channel 39



In-Band Reference Level
BLE 1M_Channel 39



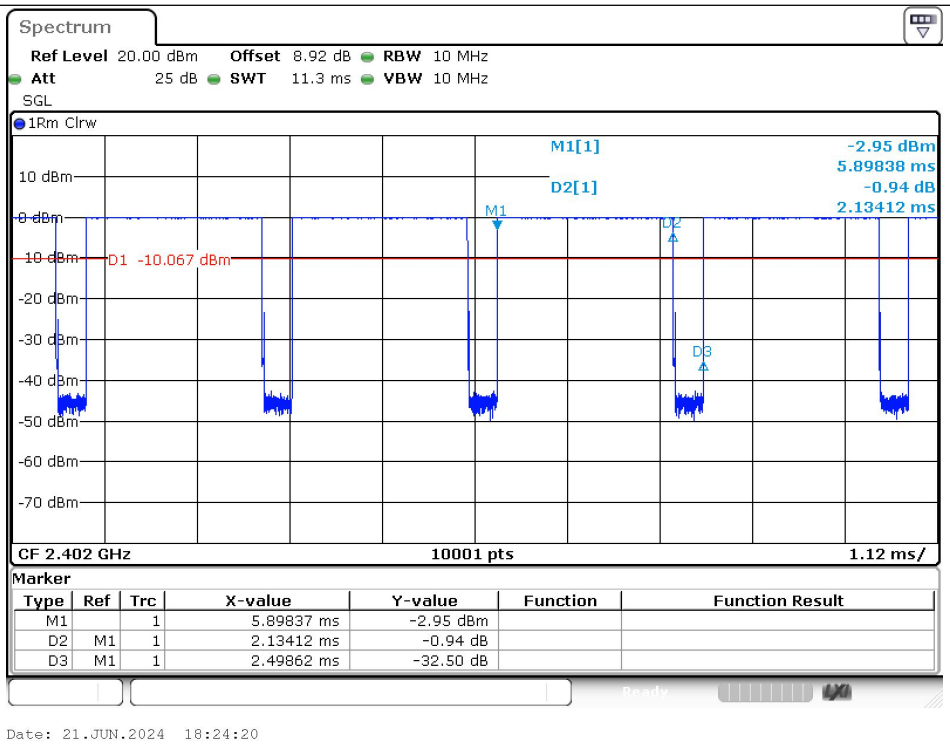
Out Of Band Emission
BLE 1M_Channel 39

Duty Cycle

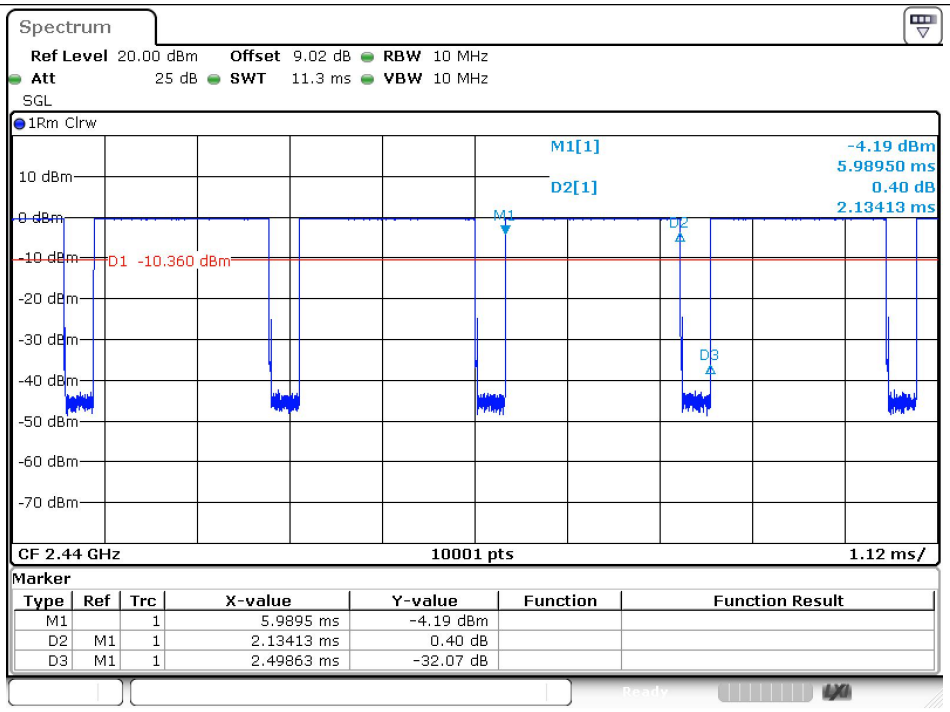
Test Result

Mode	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
BLE 1M	0	2.134	2.499	85.41	0.8541	0.6849	0.47
	19	2.134	2.499	85.41	0.8541	0.6849	0.47
	39	2.134	2.499	85.41	0.8541	0.6849	0.47

Test Graphs



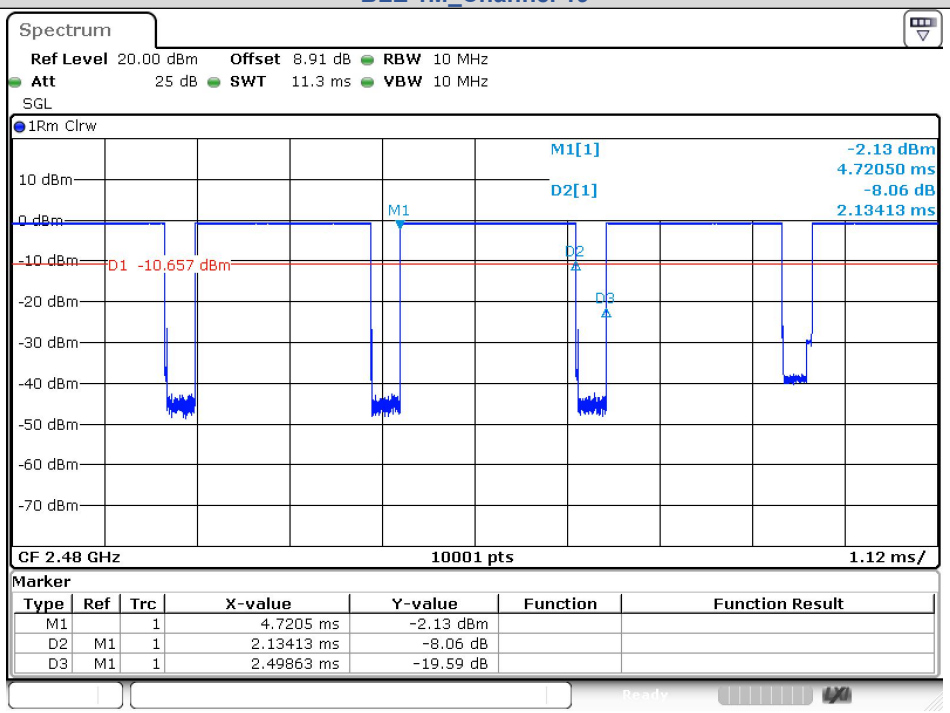
BLE 1M_Channel 0



Marker						
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.9895 ms	-4.19 dBm		
D2	M1	1	2.13413 ms	0.40 dB		
D3	M1	1	2.49863 ms	-32.07 dB		

Date: 21.JUN.2024 18:26:58

BLE 1M_Channel 19



Marker						
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	4.7205 ms	-2.13 dBm		
D2	M1	1	2.13413 ms	-8.06 dB		
D3	M1	1	2.49863 ms	-19.59 dB		

Date: 21.JUN.2024 18:29:18

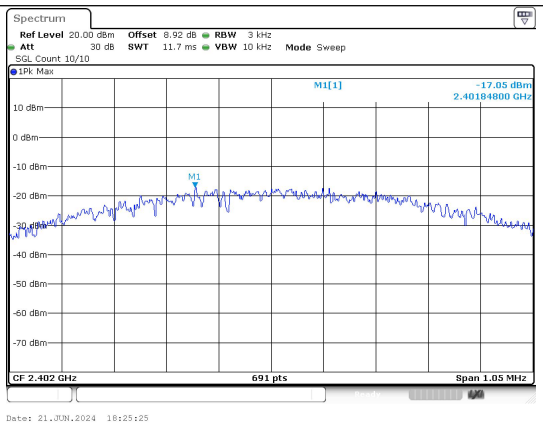
BLE 1M_Channel 39

Power Spectral Density

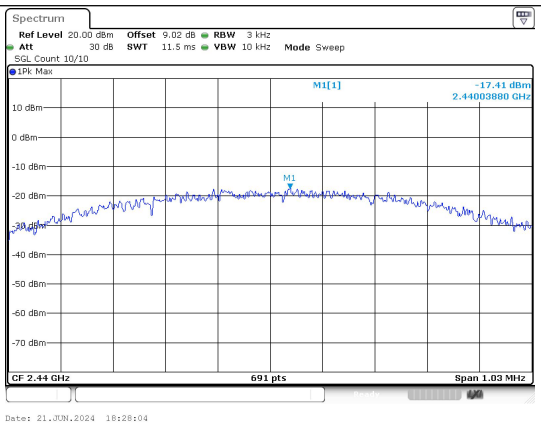
Test Result

Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
BLE 1M	0	-17.05	≤8	PASS
BLE 1M	19	-17.41	≤8	PASS
BLE 1M	39	-17.57	≤8	PASS

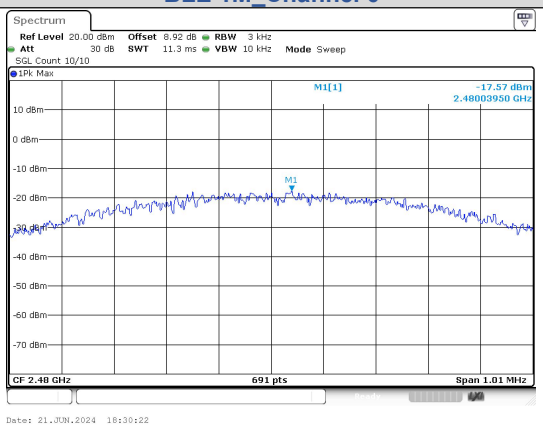
Test Graphs



BLE 1M_Channel 0



BLE 1M_Channel 19



BLE 1M_Channel 39