

Appendix B

Report No.:	CISRR24042516302
FCC ID:	2BF5C-MMA4020
Product Name:	BLUETOOTH SPEAKER
Model No.:	MMA4020
Test Engineer:	Lucas Huang
Supervised by:	Rory Huang

1) Conducted Peak Output Power

Test Result

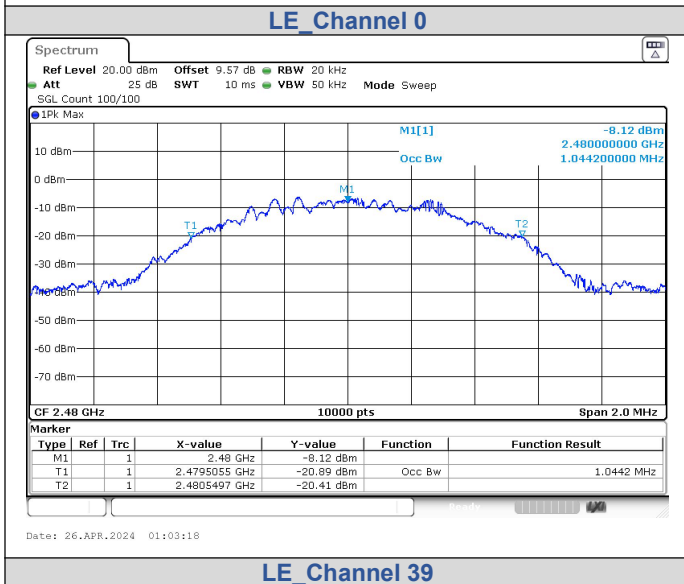
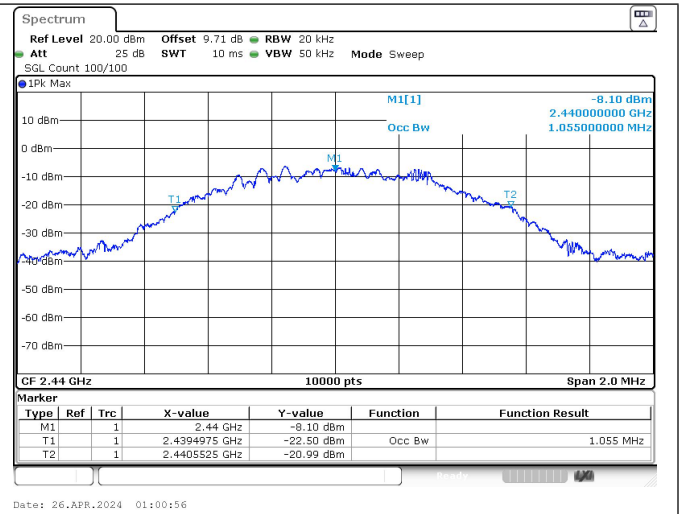
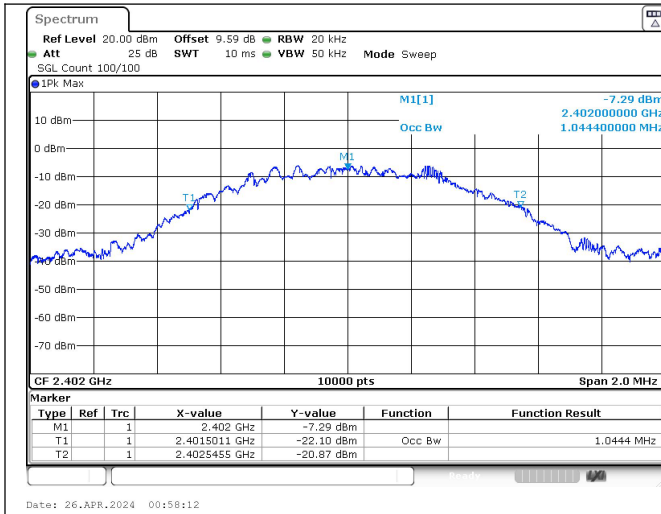
Mode	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
LE	0	1.011	1.26	30	PASS
	19	0.370	1.09	30	PASS
	39	0.359	1.09	30	PASS

2) 99% Bandwidth

Test Result

Mode	Channel	99% BW (MHz)
LE	0	1.0440
LE	19	1.0550
LE	39	1.0440

Test Graphs



LE_Channel 19

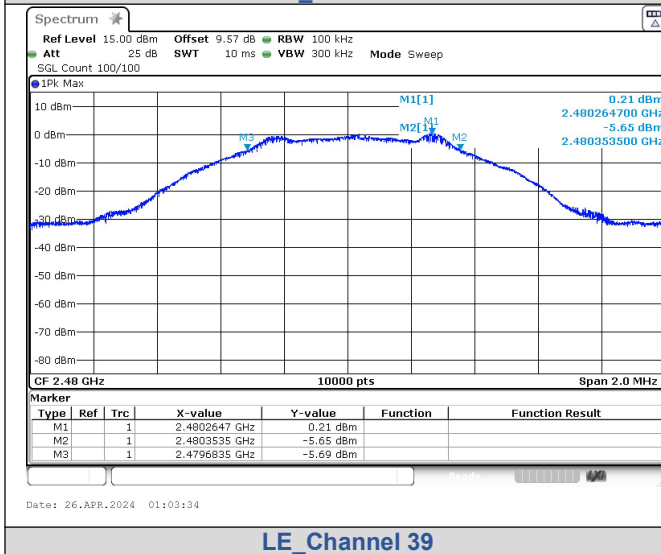
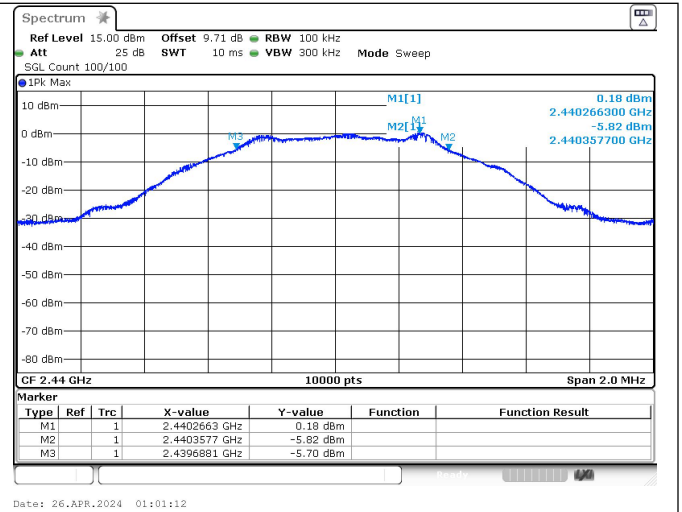
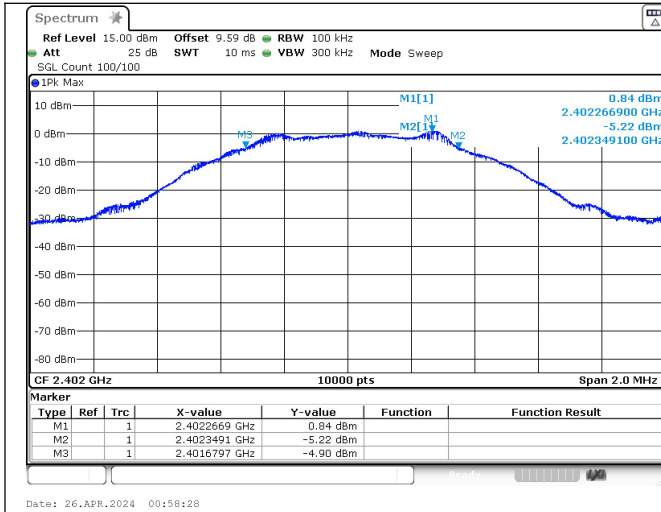
LE_Channel 39

6dB Bandwidth

Test Result

Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
LE	0	2402	0.6700	0.5	PASS
	19	2440	0.6700		PASS
	39	2480	0.6700		PASS

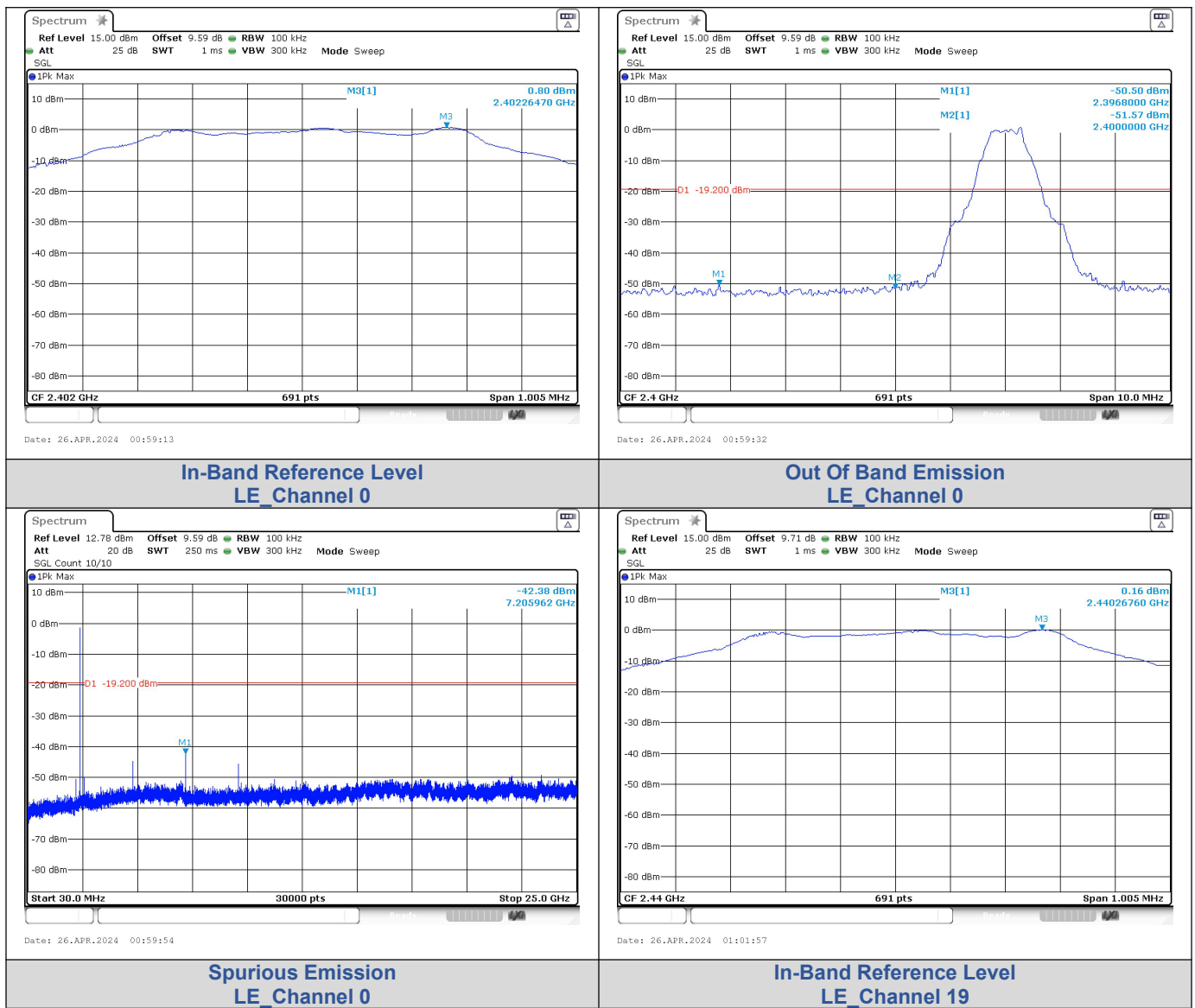
Test Graphs

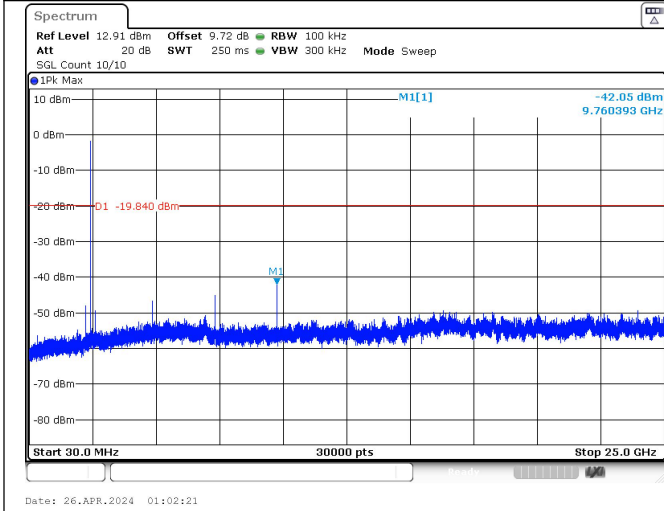


Conducted Out Of Band Emission Test Result

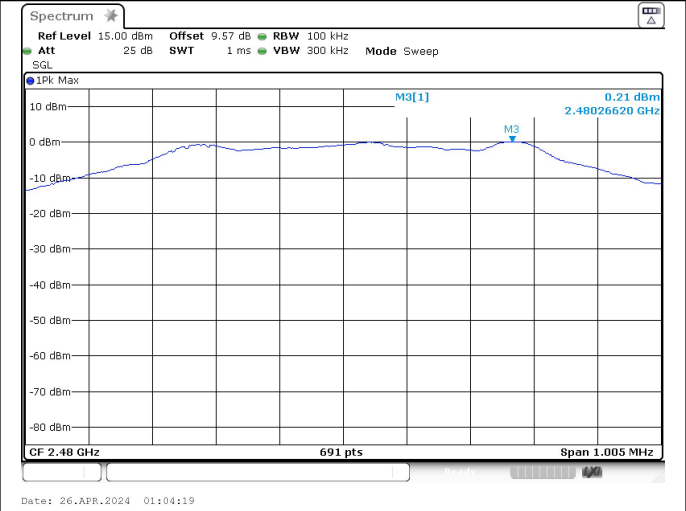
Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
LE	0	2400.00	-51.569	-19.2	-32.370	PASS
		2396.80	-50.497	-19.2	-31.297	PASS
		7206.00	-42.377	-19.2	-23.177	PASS
	19	9760.39	-42.046	-19.84	-22.206	PASS
		2483.50	-50.966	-19.79	-31.176	PASS
		9920.20	-40.715	-19.79	-20.925	PASS

Test Graphs

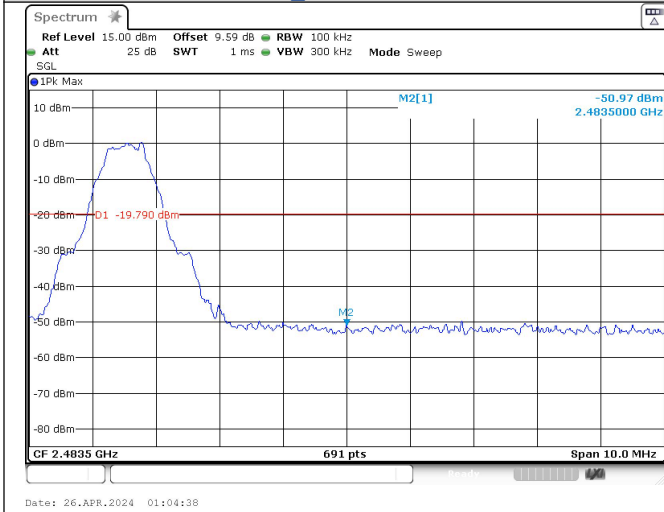




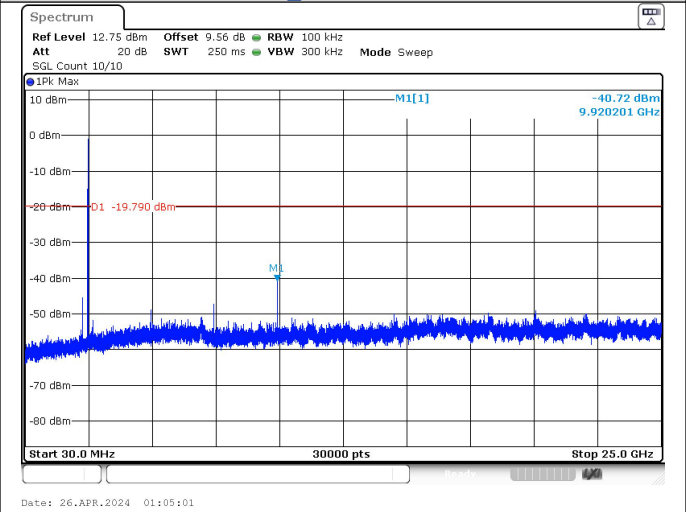
**Spurious Emissions
LE_Channel 19**



**In-Band Reference Level
LE_Channel 39**



**Out Of Band Emission
LE_Channel 39**



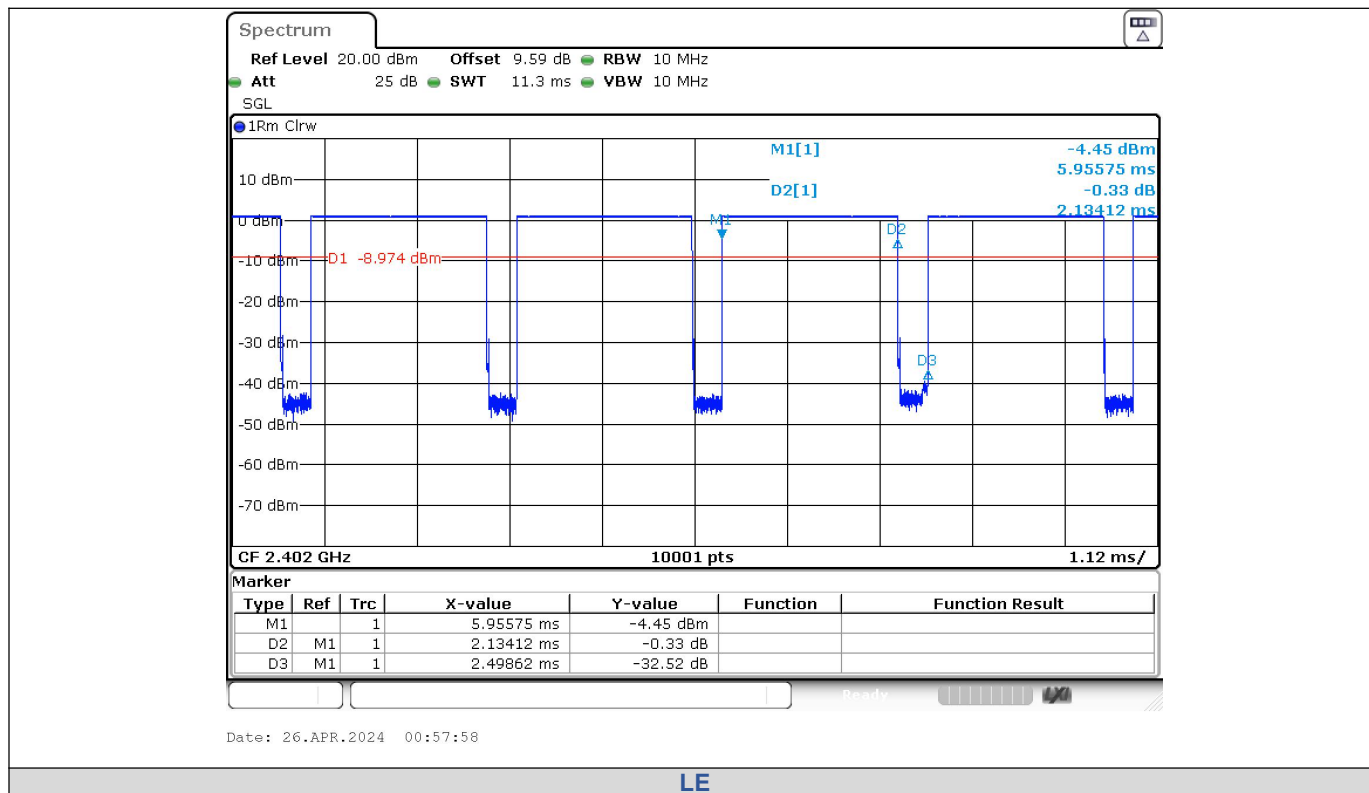
**Spurious Emission
LE_Channel 39**

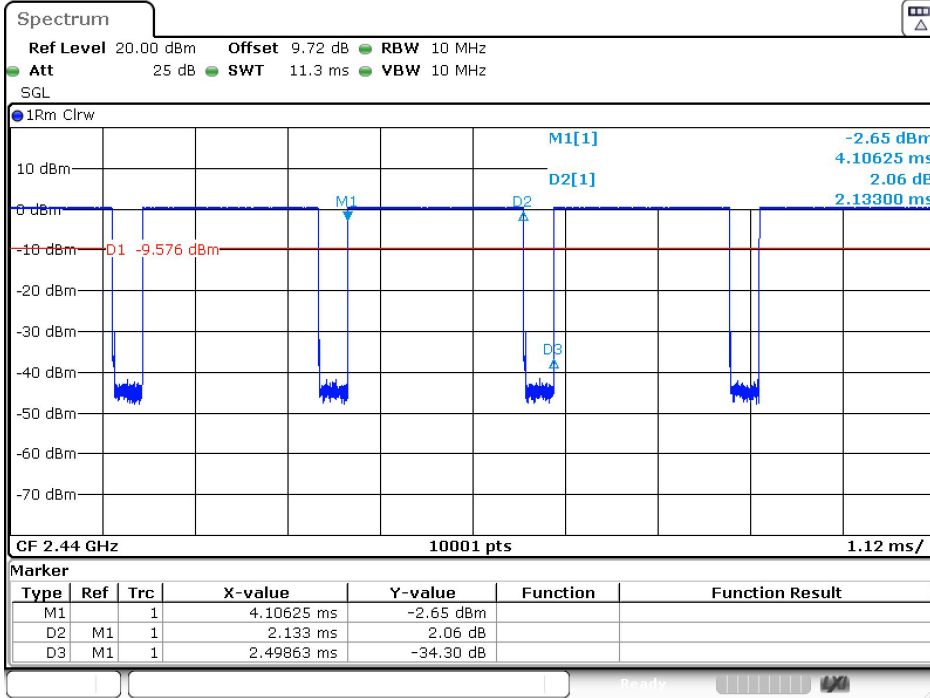
Duty Cycle

Test Result

Mode	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
LE	0	2.134	2.499	85.41	0.8541	0.6849	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

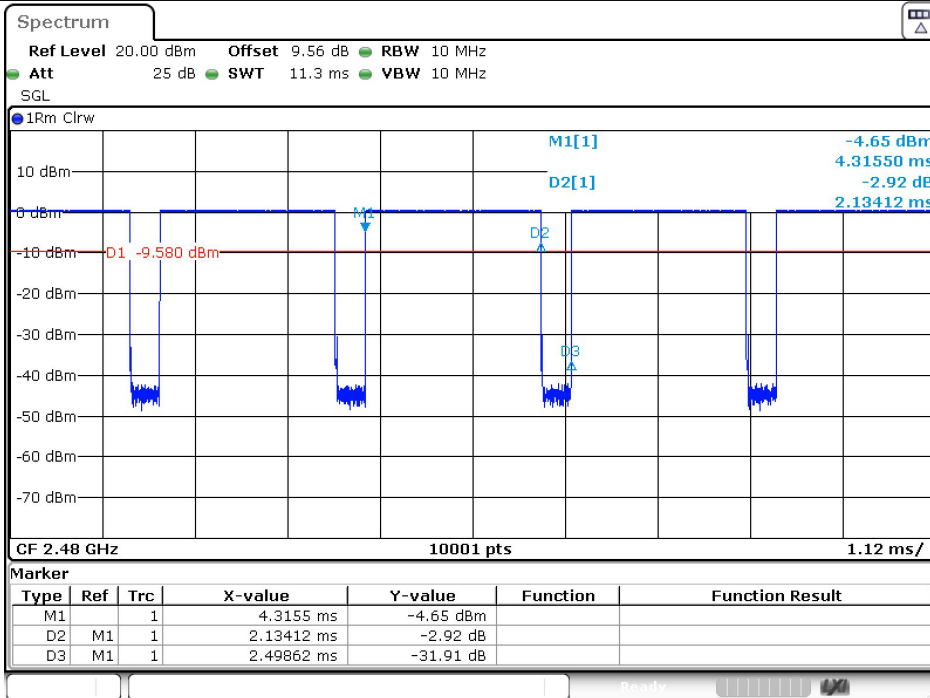
Test Graphs





Date: 26.APR.2024 01:00:42

LE



Date: 26.APR.2024 01:03:04

LE

Power Spectral Density

Test Result

Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
LE	0	-15.352	8	PASS
LE	19	-15.988	8	PASS
LE	39	-16.012	8	PASS

Test Graphs

