Appendix A

Report No.:	CISRR240507009
FCC ID:	2BF9V-T03
Product Name:	TWS
Model No.:	T03
Test Engineer:	Lucas Huang
Supervised by:	Rory Huang

1) Conducted Peak Output Power

Test Result

Left

Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
GFSK	LE	0	-3.525	0.44	30	PASS
		19	-5.254	0.3		PASS
		39	-3.435	0.45		PASS

Right

Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
GFSK	LE	0	-3.525	0.44	30	PASS
		19	-5.251	0.3		PASS
		39	-4.126	0.39		PASS

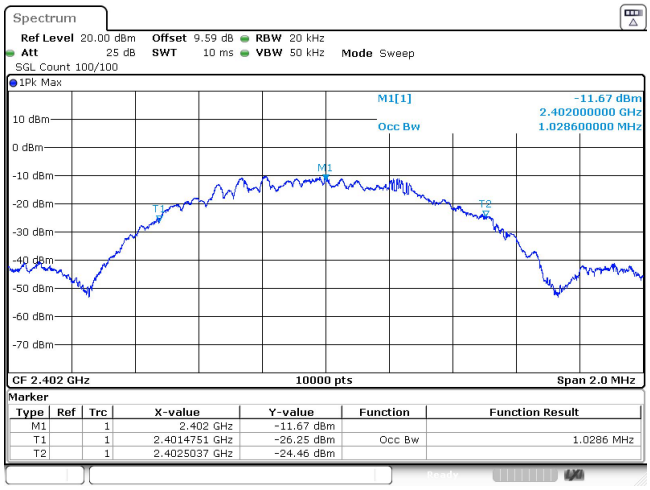
2) 99% Bandwidth

Test Result

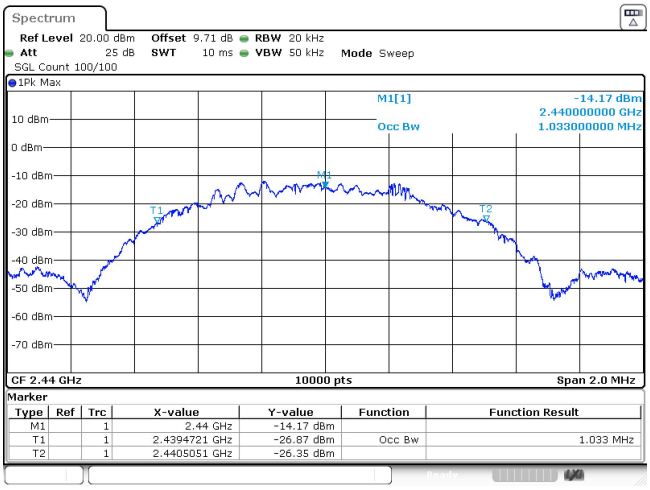
Left

Mode	Channel	99% BW (MHz)
LE	0	1.0290
LE	19	1.0330
LE	39	1.0320

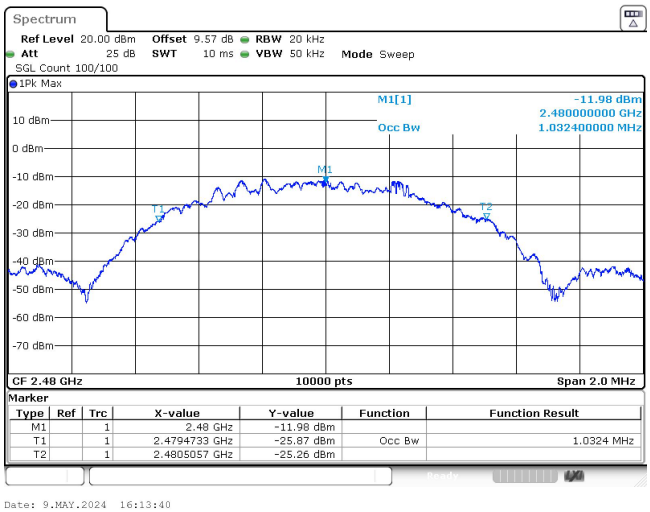
Test Graphs



LE_Channel 0



LE_Channel 19



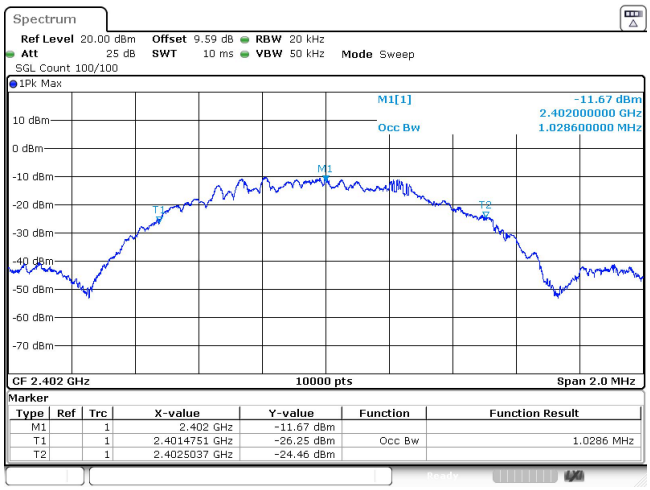
LE_Channel 39

Right

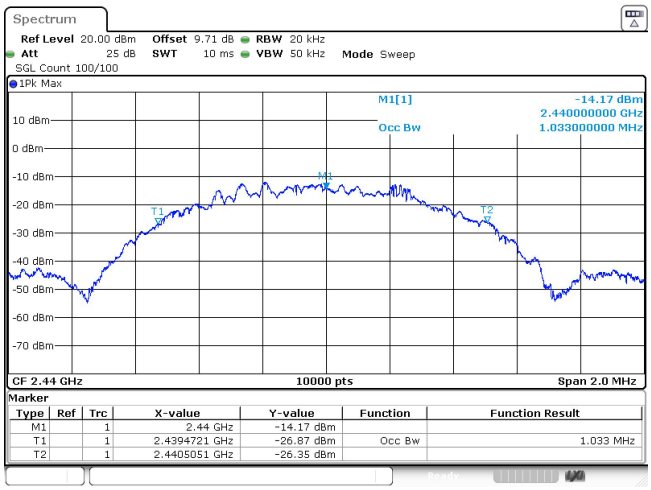
Test Result

Mode	Channel	99% BW (MHz)
LE	0	1.0290
LE	19	1.0330
LE	39	1.0320

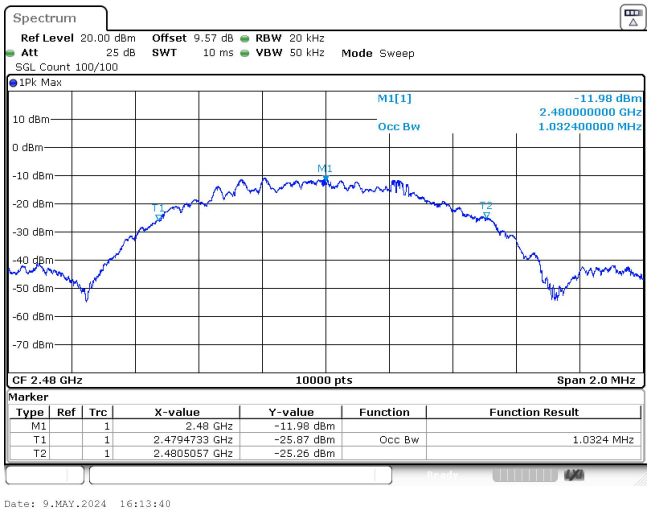
Test Graphs



LE_Channel 0



LE_Channel 19



LE_Channel 39

3) 6dB Bandwidth

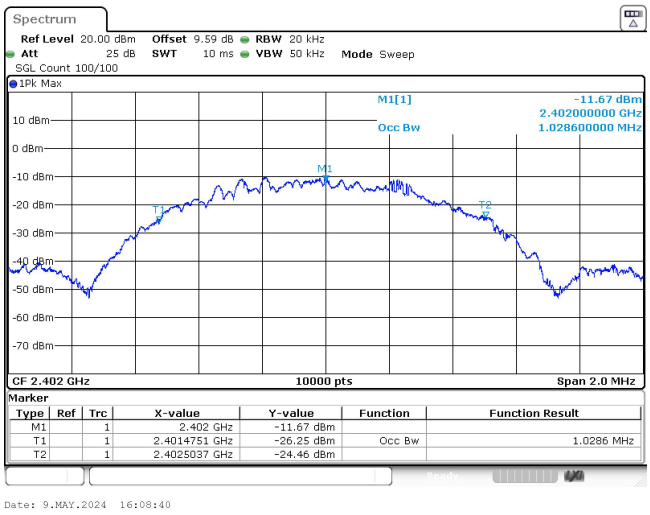
Test Result

Left

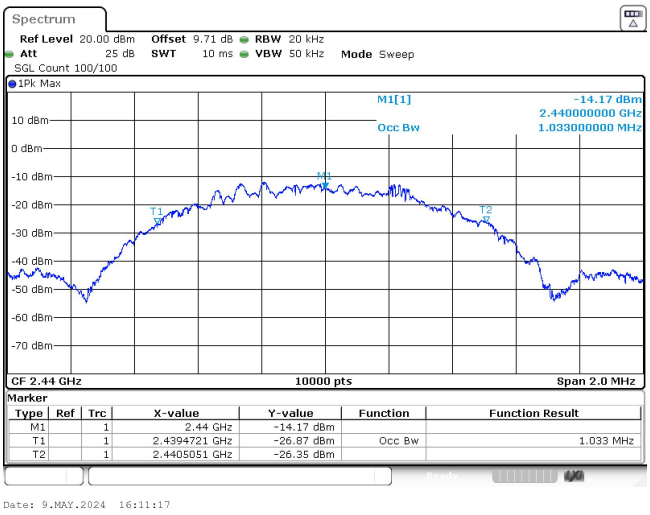
Test Result

Mode	Channel	99% BW (MHz)
LE	0	1.0290
LE	19	1.0330
LE	39	1.0320

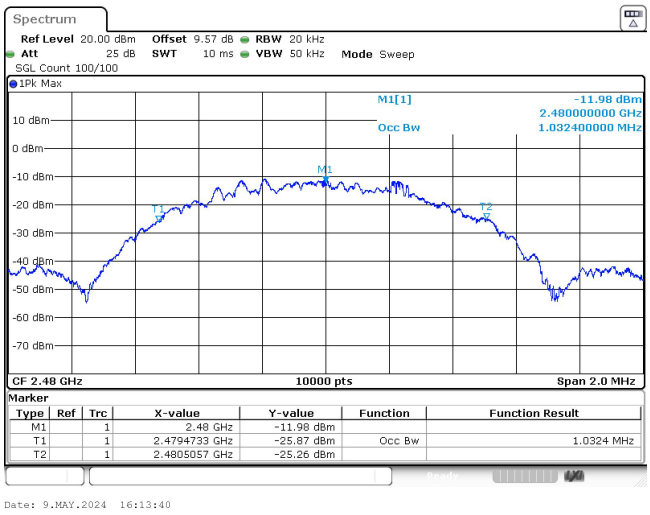
Test Graphs



LE_Channel 0



LE_Channel 19

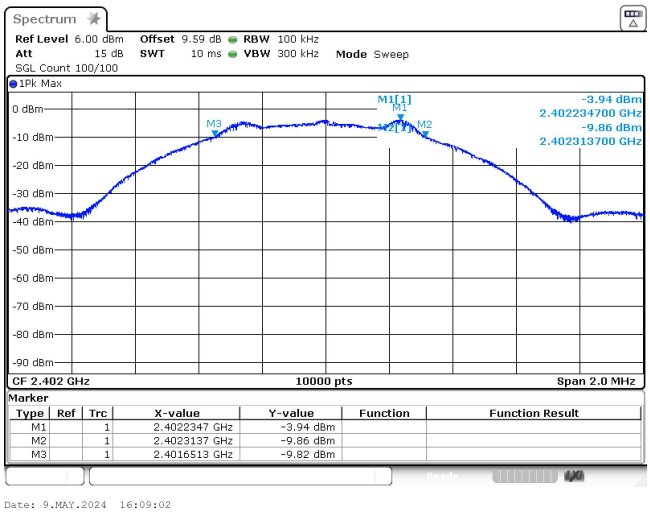


LE_Channel 39

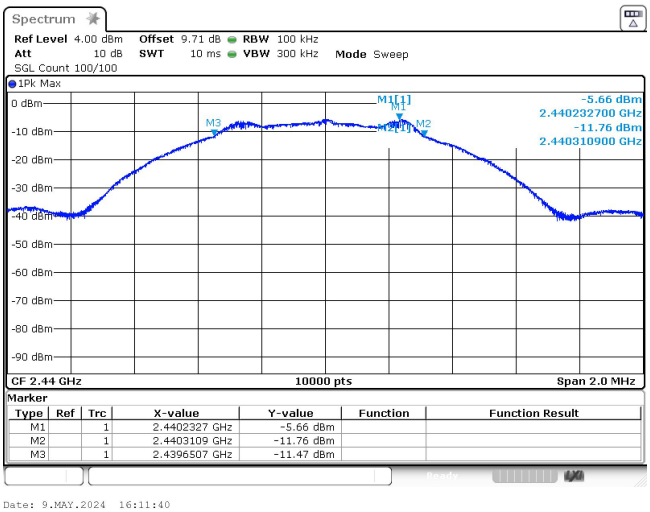
Right

Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
LE	0	2402	0.6600	0.5	PASS
	19	2440	0.6600		PASS
	39	2480	0.6600		PASS

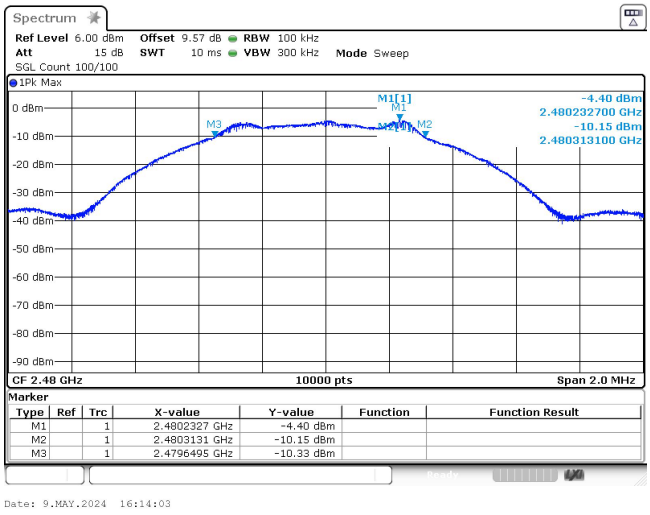
Test Graphs



LE_Channel 0



LE_Channel 19



LE_Channel 39

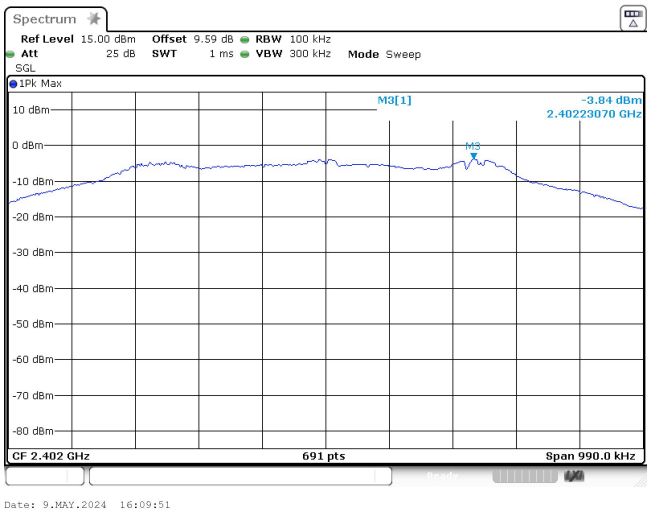
4) Conducted Out Of Band Emission

Test Result

Left

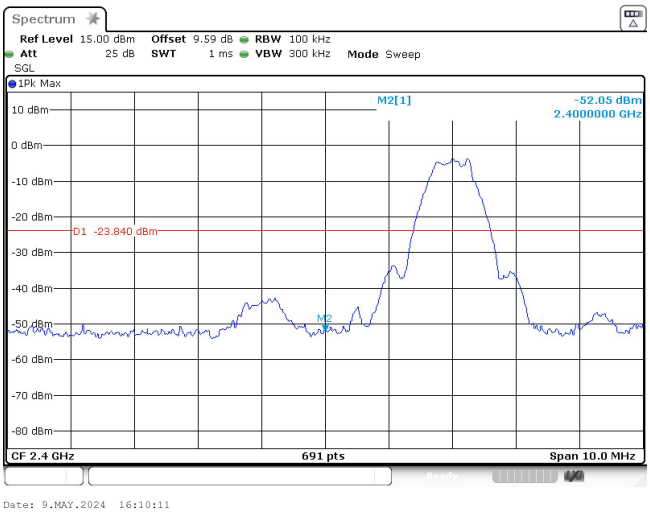
Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
LE	0	2400.00	-52.051	-23.84	-28.211	PASS
		2399.00	-43.484	-23.84	-19.644	PASS
		18255.2	-49.394	-23.84	-25.554	PASS
	19	18281.8	-48.997	-25.57	-23.427	PASS
	39	2483.50	-50.881	-24.41	-26.471	PASS
		2287.70	-48.204	-24.41	-23.794	PASS

Test Graphs



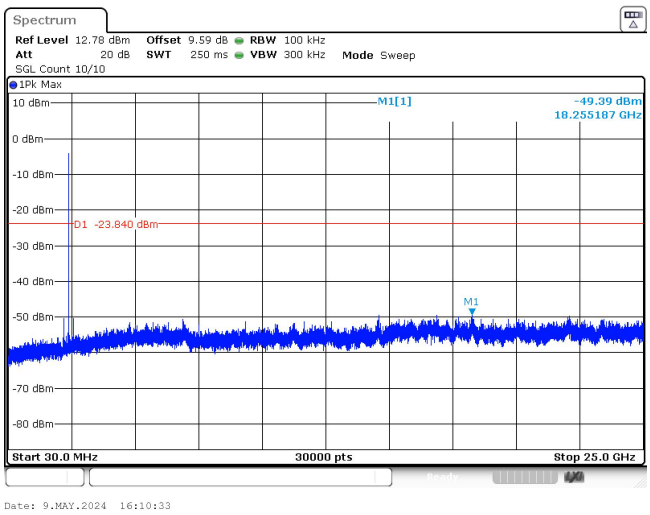
In-Band Reference Level

LE_Channel 0



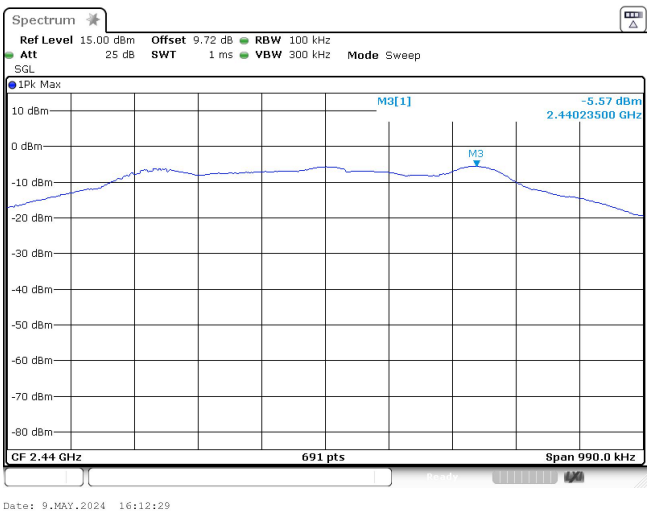
Out Of Band Emission

LE_Channel 0



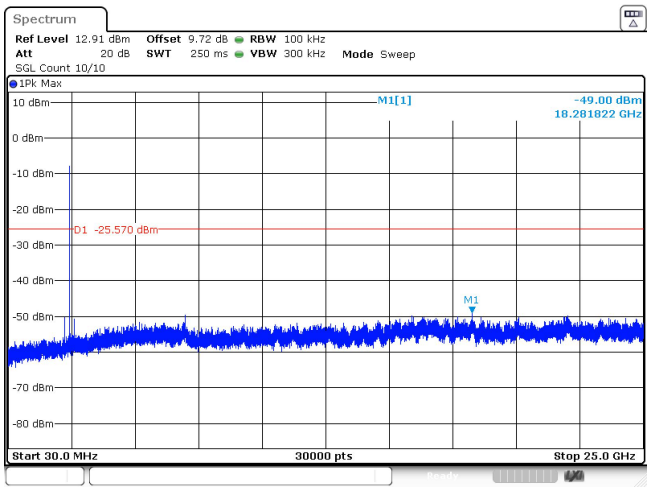
Spurious Emission

LE_Channel 0



In-Band Reference Level

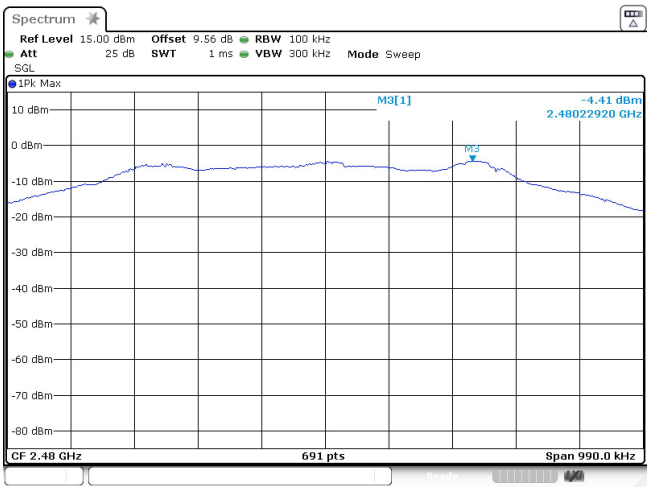
LE_Channel 19



Date: 9.MAY.2024 16:12:53

Spurious Emissions

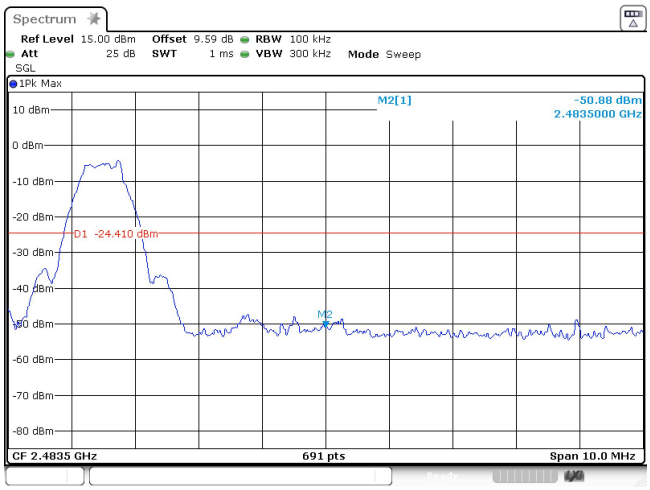
LE_Channel 19



Date: 9.MAY.2024 16:14:52

In-Band Reference Level

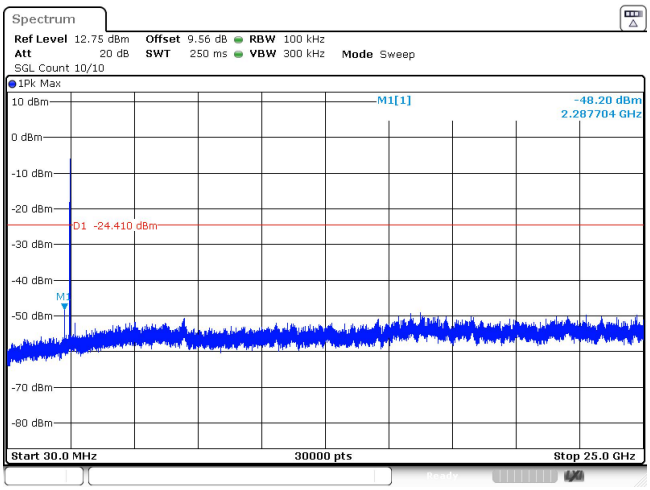
LE_Channel 39



Date: 9.MAY.2024 16:15:11

Out Of Band Emission

LE_Channel 39



Date: 9.MAY.2024 16:15:33

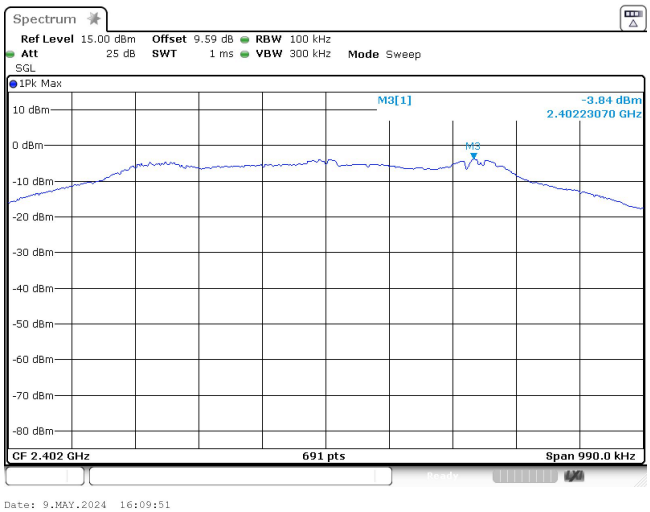
Spurious Emission

LE_Channel 39

Right

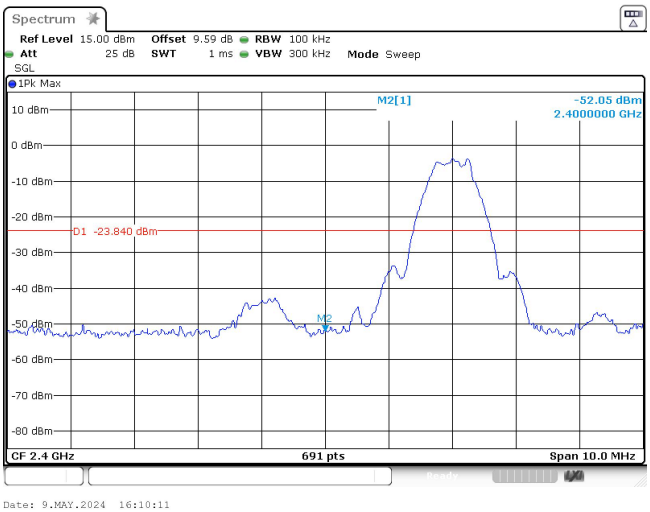
Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
LE	0	2400.00	-52.051	-23.84	-28.211	PASS
		2399.00	-43.484	-23.84	-19.644	PASS
		18255.2	-49.394	-23.84	-25.554	PASS
	19	18281.8	-48.997	-25.57	-23.427	PASS
	39	2483.50	-50.881	-24.41	-26.471	PASS
		2287.70	-48.204	-24.41	-23.794	PASS

Test Graphs



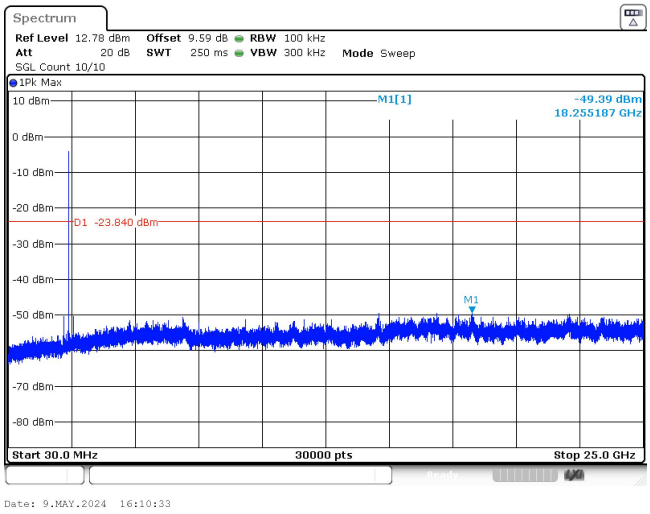
In-Band Reference Level

LE_Channel 0



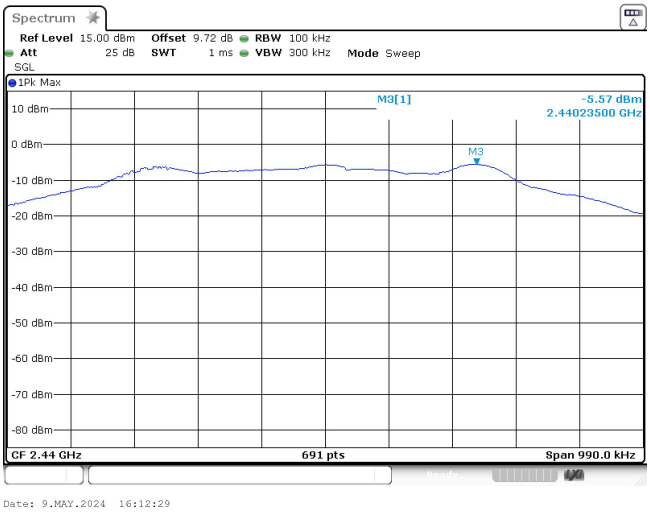
Out Of Band Emission

LE_Channel 0



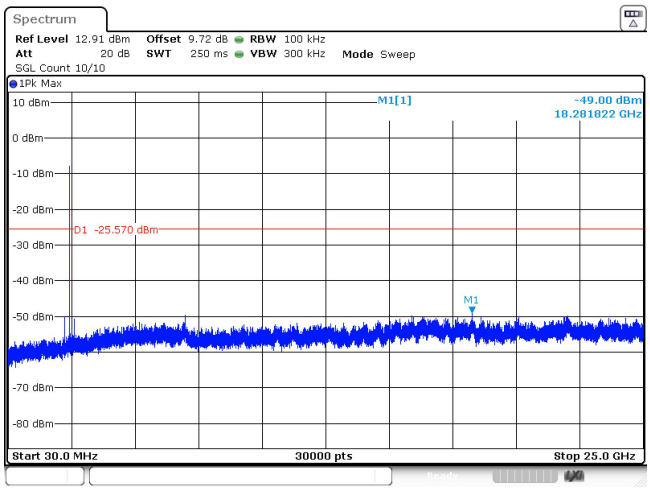
Spurious Emission

LE_Channel 0



In-Band Reference Level

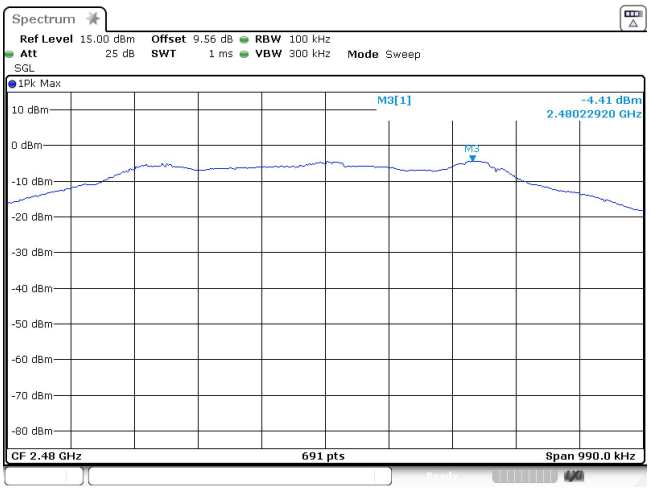
LE_Channel 19



Date: 9.MAY.2024 16:12:53

Spurious Emissions

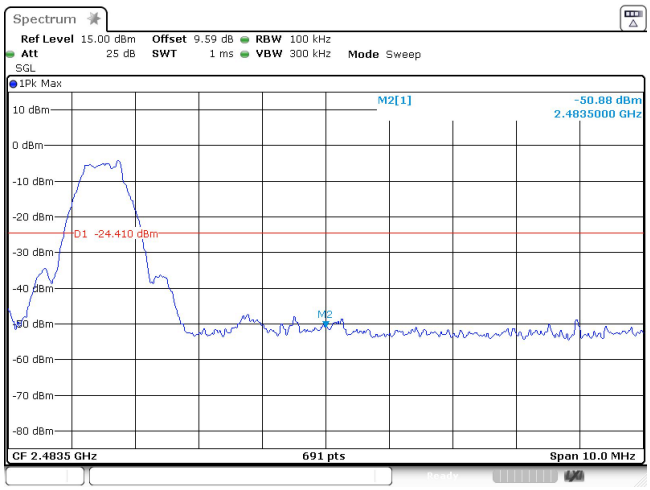
LE_Channel 19



Date: 9.MAY.2024 16:14:52

In-Band Reference Level

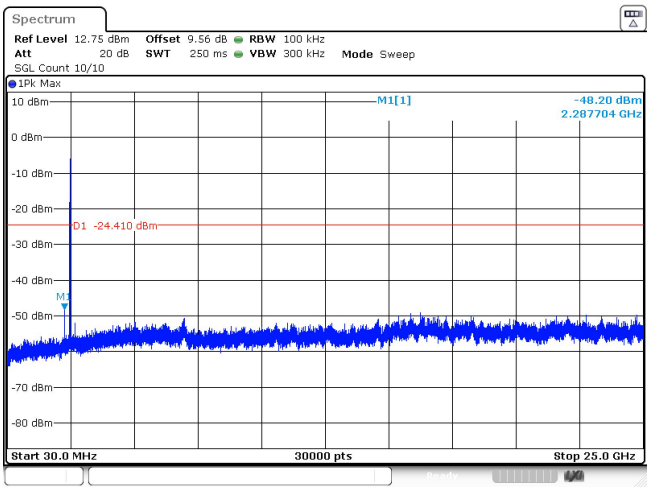
LE_Channel 39



Date: 9.MAY.2024 16:15:11

Out Of Band Emission

LE_Channel 39



Date: 9.MAY.2024 16:15:33

Spurious Emission

LE_Channel 39

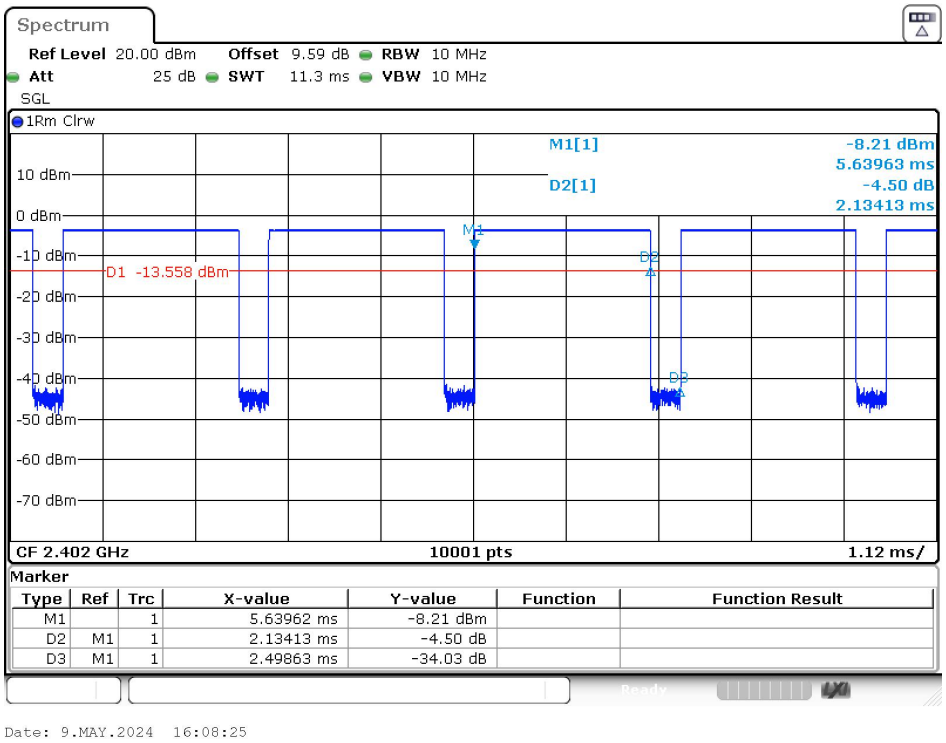
5) Duty Cycle

Test Result

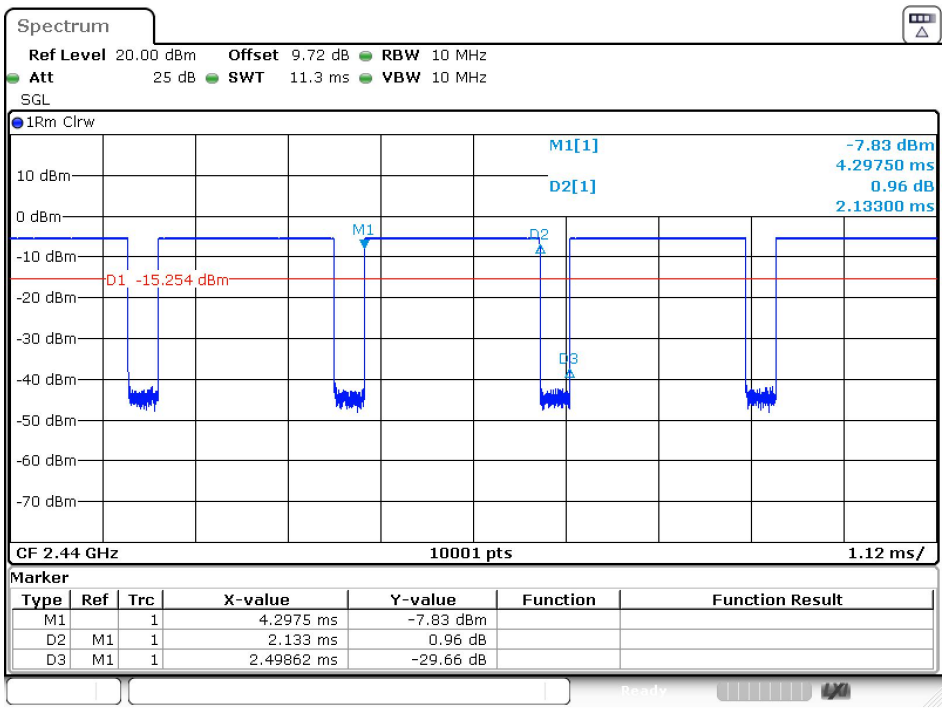
Left

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	2.500	85.37	0.8537	0.6869	0.47

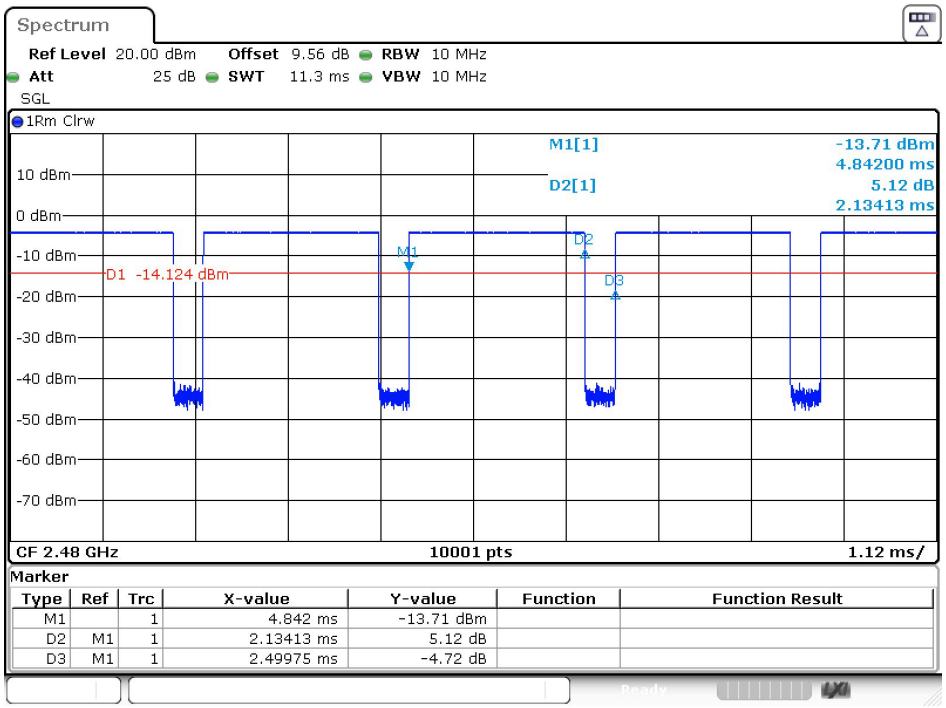
Test Graphs



LE


Spectrum
Ref Level 20.00 dBm Offset 9.72 dB RBW 10 MHz
Att 25 dB SWT 11.3 ms VBW 10 MHz
SGL
1Rm Clrw
M1[1] -7.83 dBm
4.29750 ms
D2[1] 0.96 dB
2.13300 ms
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
D1 -15.254 dBm
M1
D2
D3
CF 2.44 GHz
10001 pts
1.12 ms/
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 4.2975 ms -7.83 dBm
D2 M1 1 2.133 ms 0.96 dB
D3 M1 1 2.49862 ms -29.66 dB
Date: 9.MAY.2024 16:11:03

LE

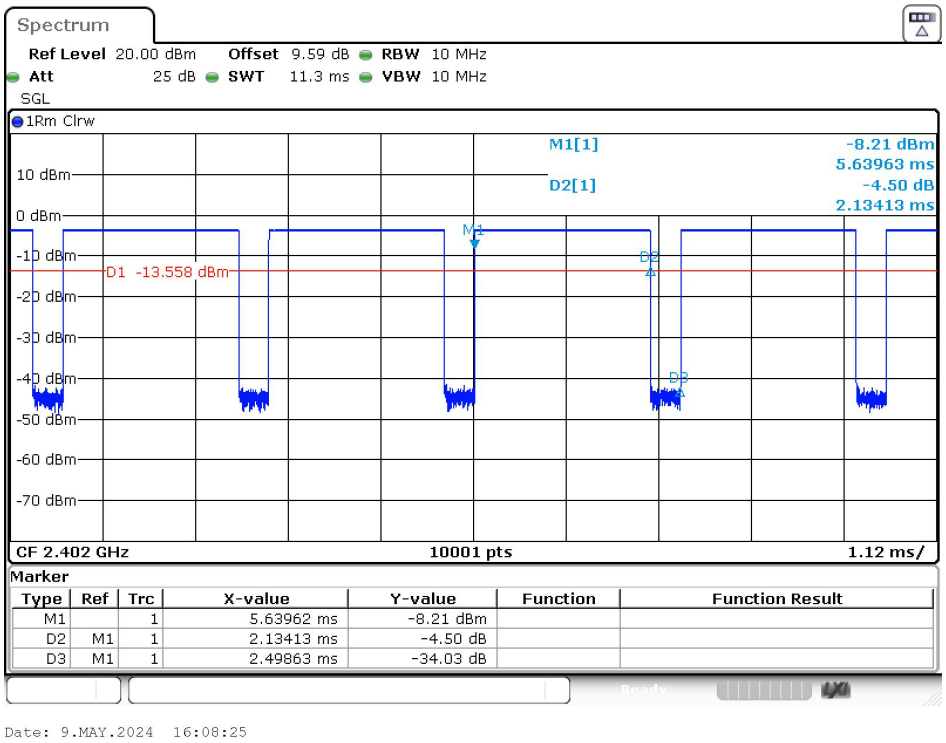

Spectrum
Ref Level 20.00 dBm Offset 9.56 dB RBW 10 MHz
Att 25 dB SWT 11.3 ms VBW 10 MHz
SGL
1Rm Clrw
M1[1] -13.71 dBm
4.84200 ms
D2[1] 5.12 dB
2.13413 ms
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
D1 -14.124 dBm
M1
D2
D3
CF 2.48 GHz
10001 pts
1.12 ms/
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 4.842 ms -13.71 dBm
D2 M1 1 2.13413 ms 5.12 dB
D3 M1 1 2.49975 ms -4.72 dB
Date: 9.MAY.2024 16:13:26

LE

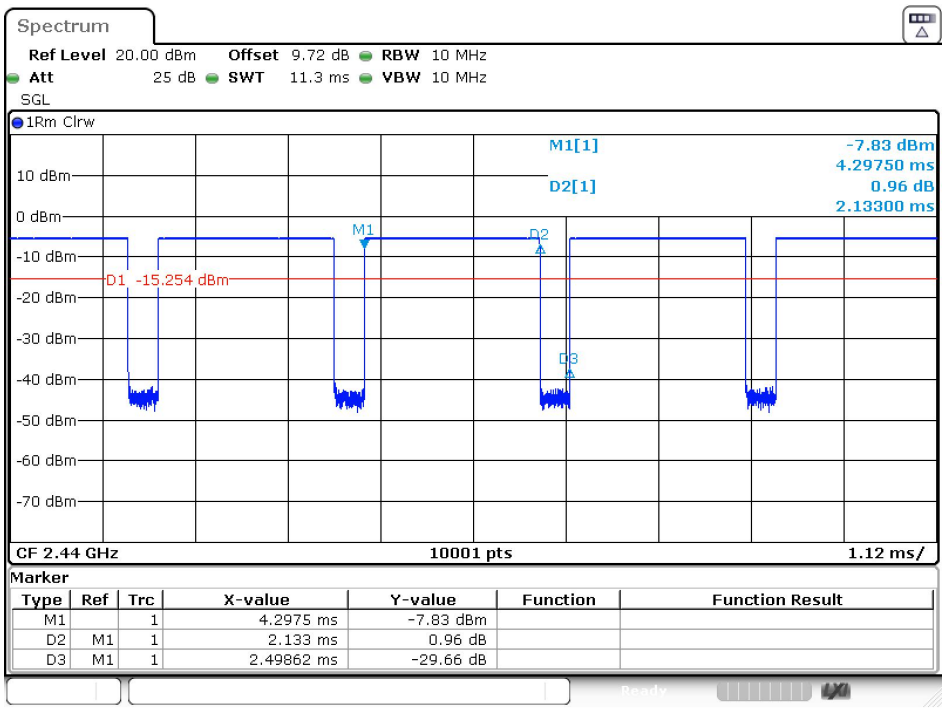
Right

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	2.500	85.37	0.8537	0.6869	0.47

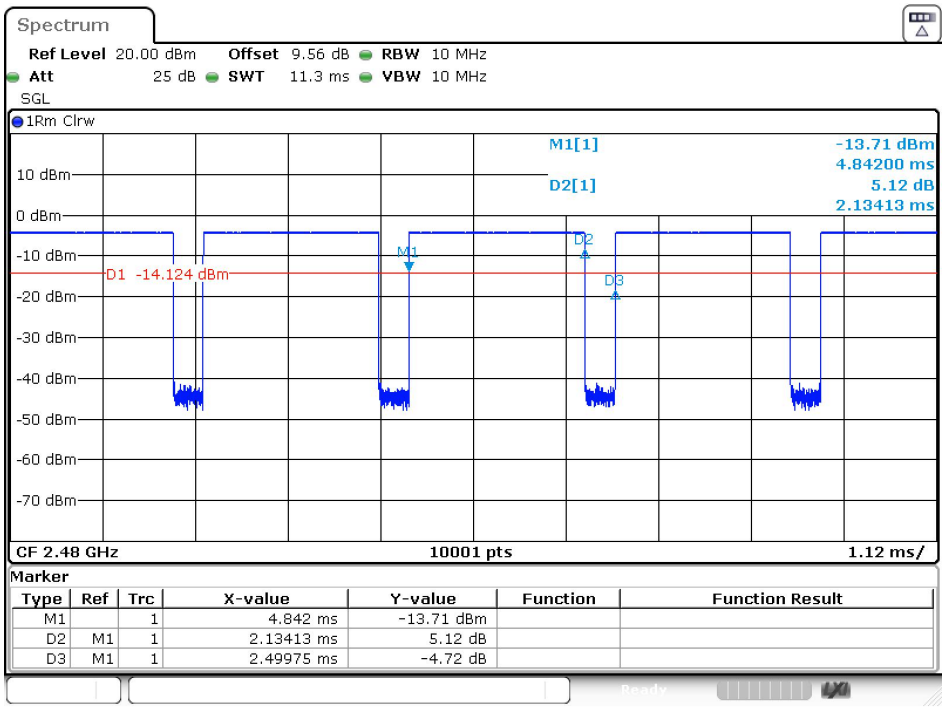
Test Graphs



LE


Spectrum
Ref Level 20.00 dBm Offset 9.72 dB RBW 10 MHz
Att 25 dB SWT 11.3 ms VBW 10 MHz
SGL
1Rm Clrw
M1[1] -7.83 dBm
4.29750 ms
D2[1] 0.96 dB
2.13300 ms
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
D1 -15.254 dBm
M1
D2
D3
CF 2.44 GHz
10001 pts
1.12 ms/
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 4.2975 ms -7.83 dBm
D2 M1 1 2.133 ms 0.96 dB
D3 M1 1 2.49862 ms -29.66 dB
Date: 9.MAY.2024 16:11:03

LE


Spectrum
Ref Level 20.00 dBm Offset 9.56 dB RBW 10 MHz
Att 25 dB SWT 11.3 ms VBW 10 MHz
SGL
1Rm Clrw
M1[1] -13.71 dBm
4.84200 ms
D2[1] 5.12 dB
2.13413 ms
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
D1 -14.124 dBm
M1
D2
D3
CF 2.48 GHz
10001 pts
1.12 ms/
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 4.842 ms -13.71 dBm
D2 M1 1 2.13413 ms 5.12 dB
D3 M1 1 2.49975 ms -4.72 dB
Date: 9.MAY.2024 16:13:26

LE

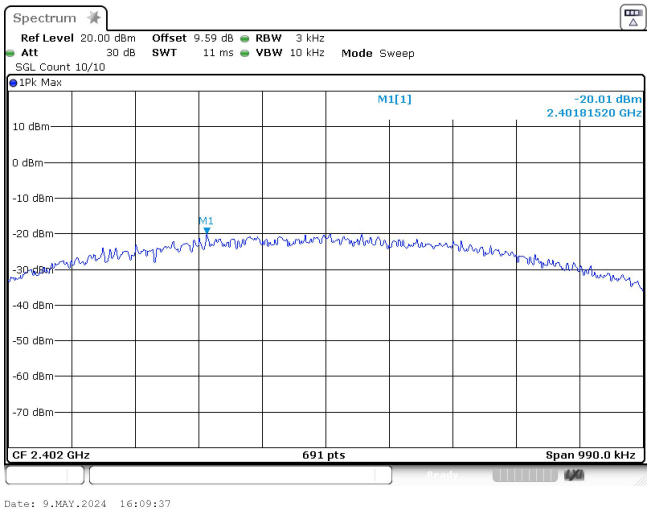
6) Power Spectral Density

Test Result

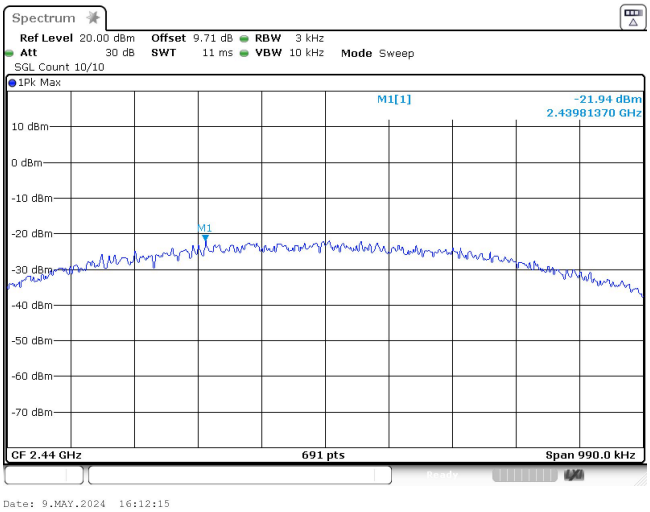
Left

Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
LE	0	-20.010	8	PASS
LE	19	-21.939	8	PASS
LE	39	-20.559	8	PASS

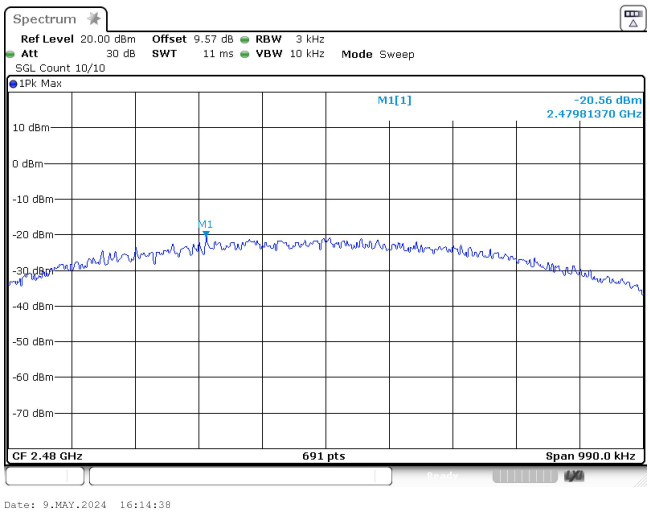
Test Graphs



LE_Channel 0



LE_Channel 19

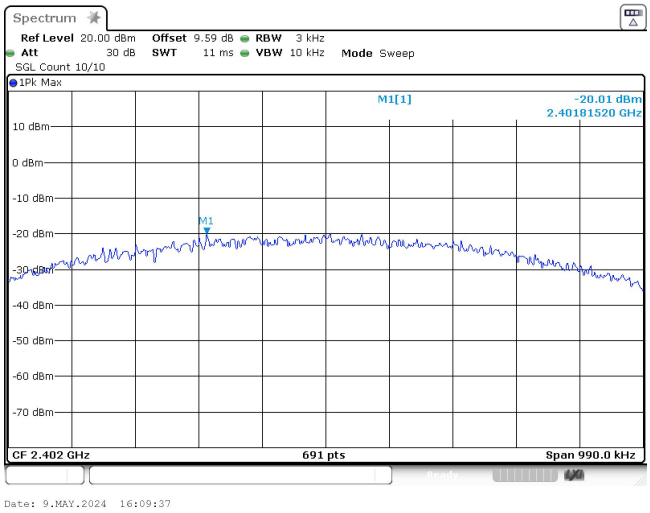


LE_Channel 39

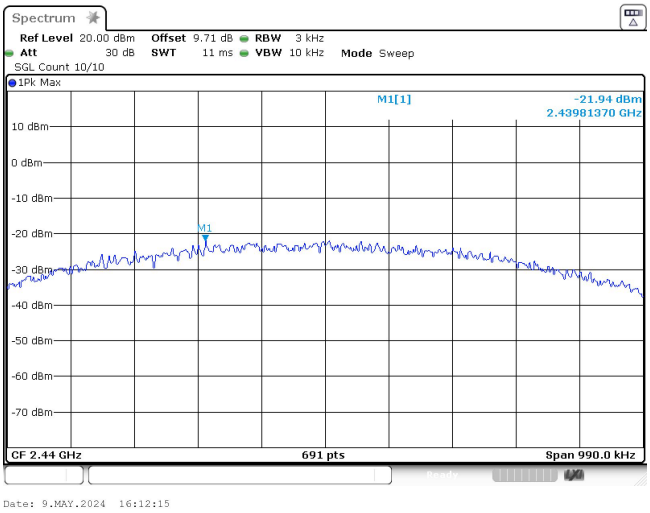
Right

Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
LE	0	-20.010	8	PASS
LE	19	-21.939	8	PASS
LE	39	-20.559	8	PASS

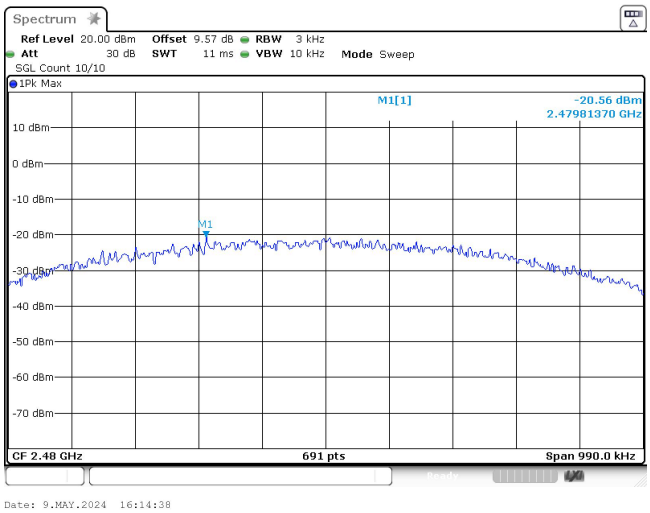
Test Graphs



LE_Channel 0



LE_Channel 19



LE_Channel 39