

Appendix B

Report No.:	CISRR24052011902
FCC ID:	2BGIM-S09
Product Name:	S09 Bluetooth Earphones
Model No.:	S09
Test Engineer:	Lucas Huang
Supervised by:	Rory Huang

Conducted Peak Output Power

Left

Test Result

Mode	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
LE	0	0.21	1.05	30	PASS
	19	1.06	1.28	30	PASS
	39	0.48	1.12	30	PASS
2LE	0	0.15	1.04	30	PASS
	19	0.99	1.26	30	PASS
	39	0.40	1.10	30	PASS

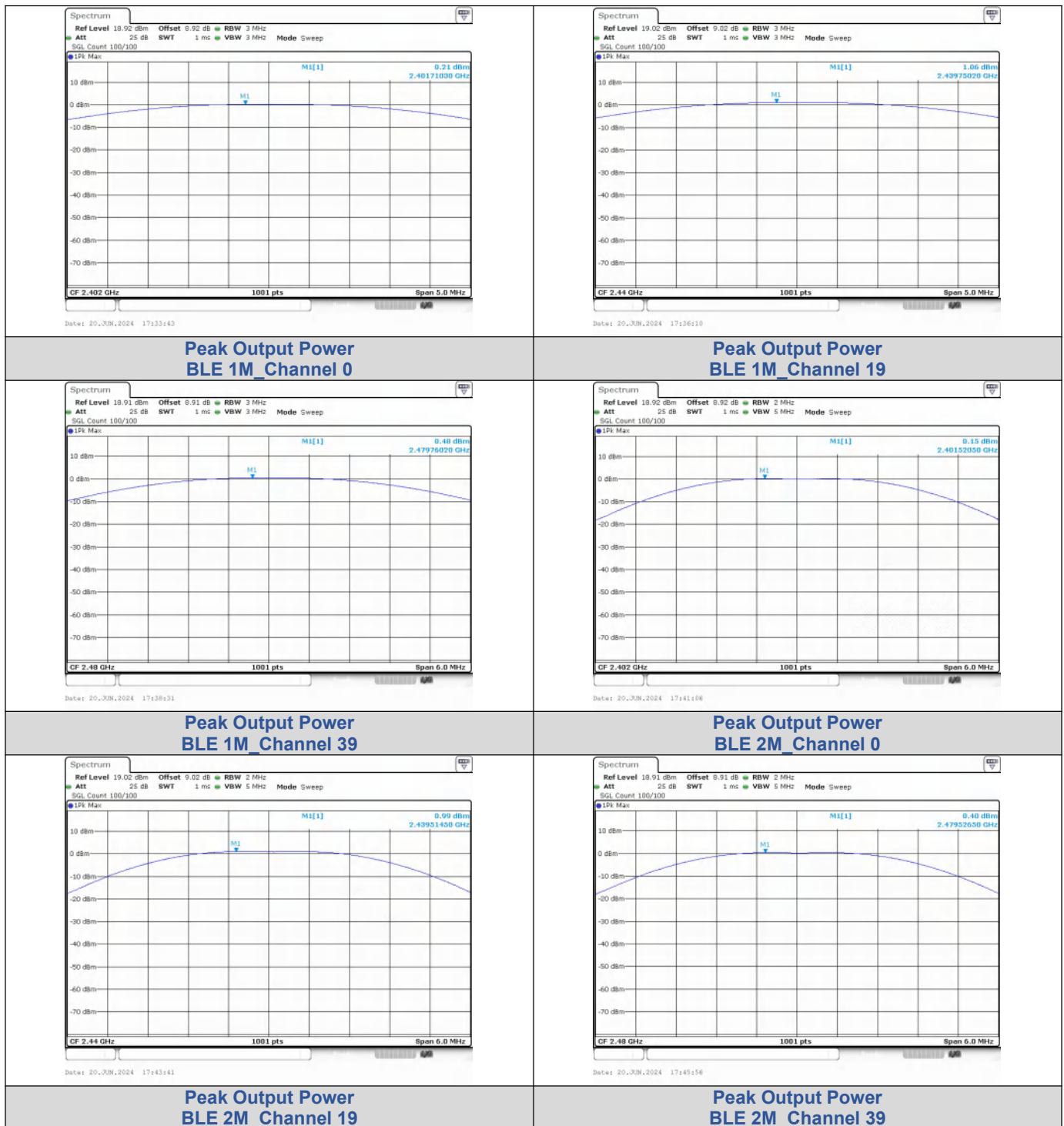
Right

Test Result

Mode	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
LE	0	0.73	1.18	30	PASS
	19	1.31	1.35	30	PASS
	39	0.39	1.09	30	PASS
2LE	0	0.58	1.14	30	PASS
	19	1.18	1.31	30	PASS
	39	0.26	1.06	30	PASS

Test Graphs

Left



Right



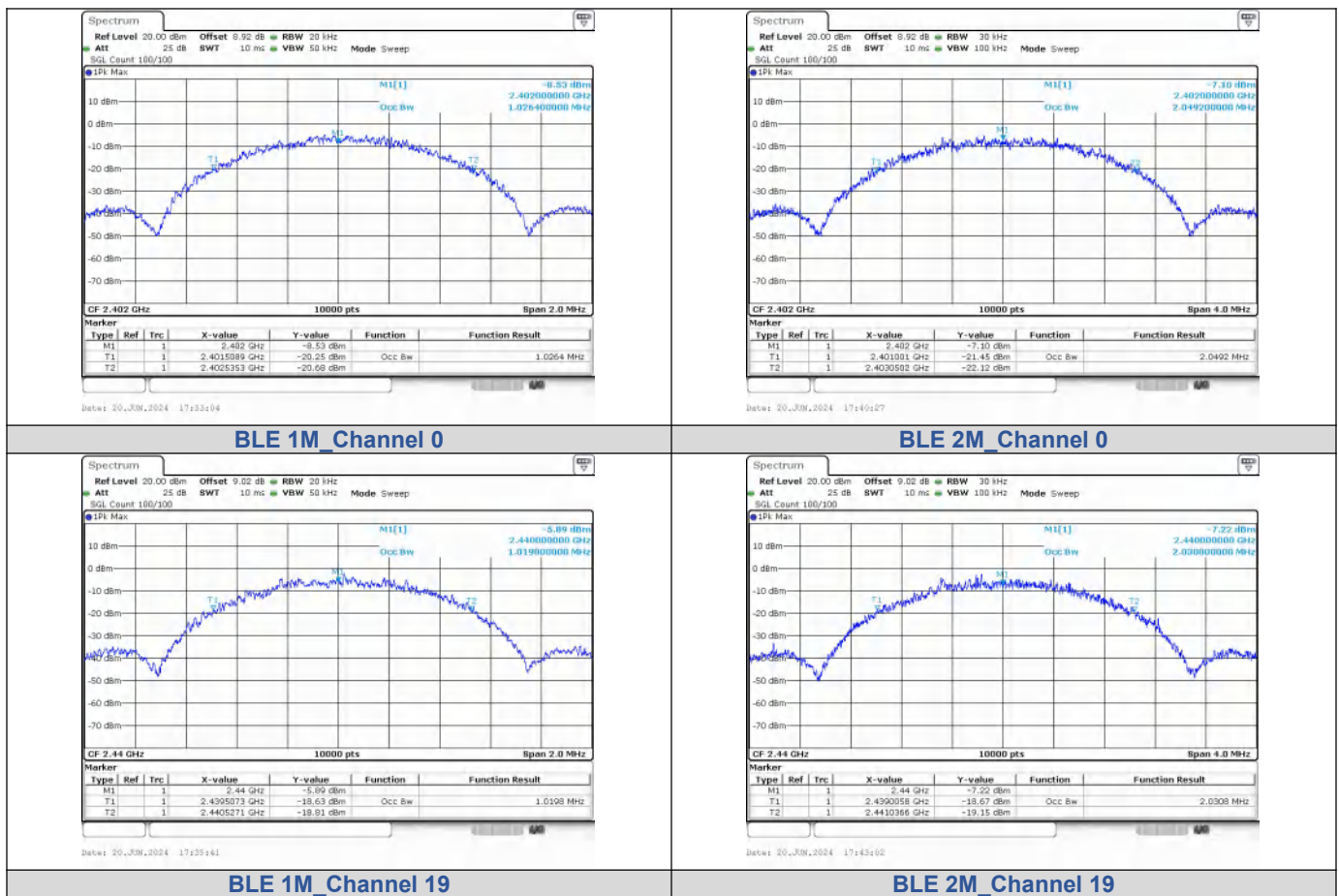
99% Bandwidth

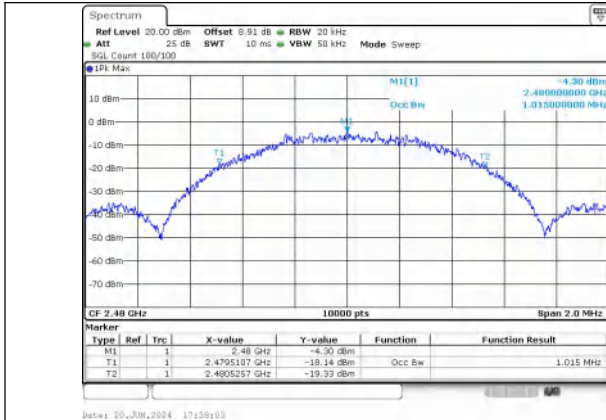
Left

Test Result

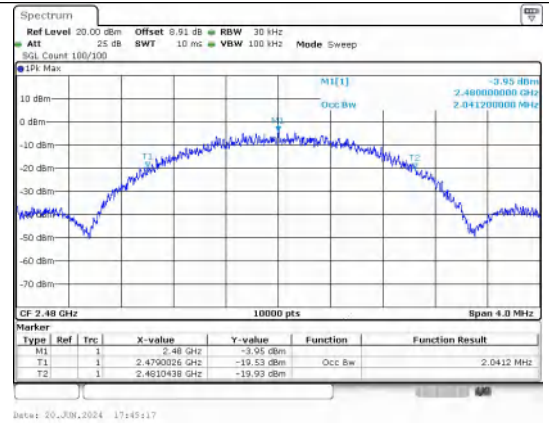
Mode	Channel	Center Frequency (MHz)	99% BW (MHz)
BLE 1M	0	2402	1.0264
BLE 1M	19	2440	1.0198
BLE 1M	39	2480	1.0150
BLE 2M	0	2402	2.0492
BLE 2M	19	2440	2.0308
BLE 2M	39	2480	2.0412

Test Graphs





BLE 1M_Channel 39



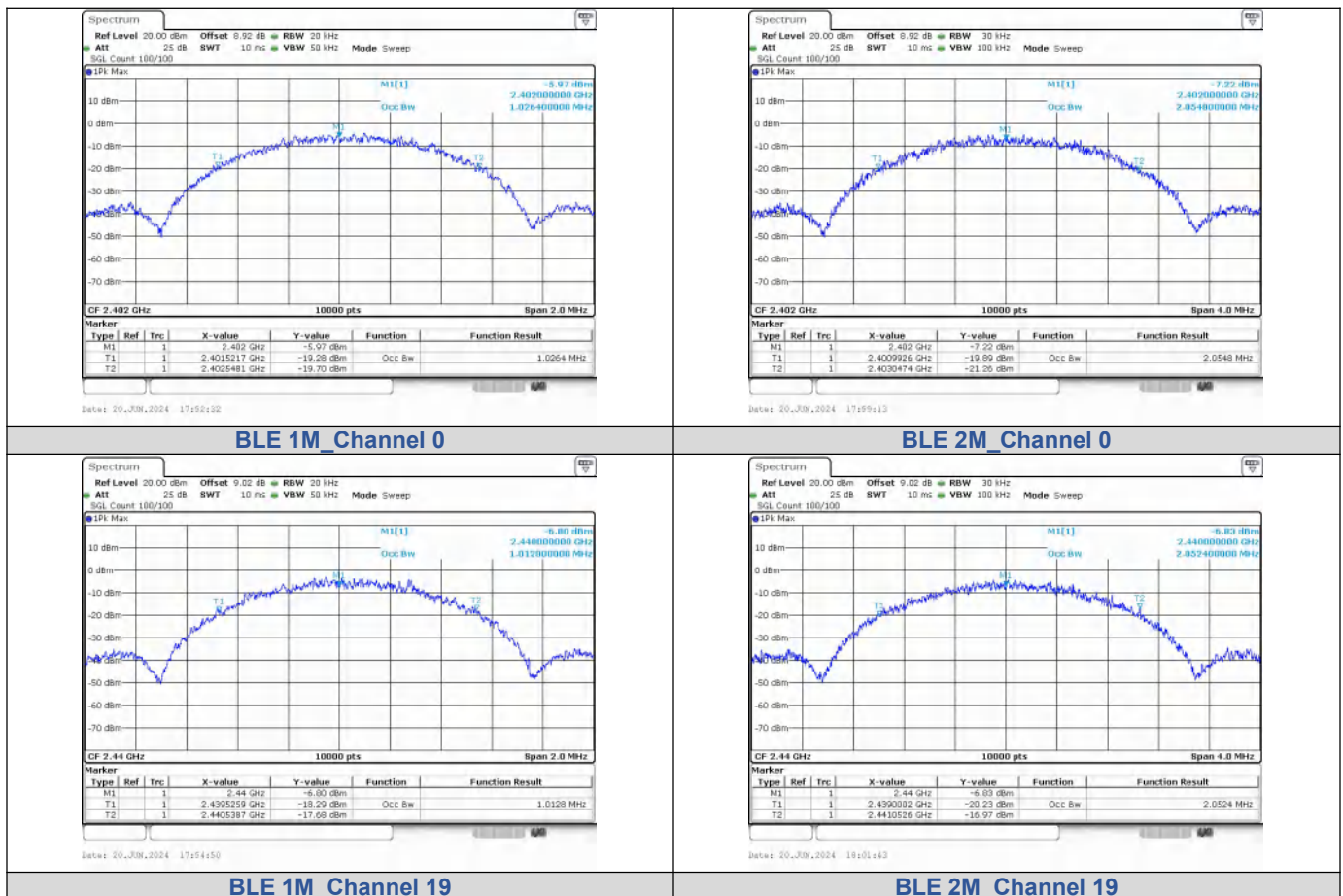
BLE 2M_Channel 39

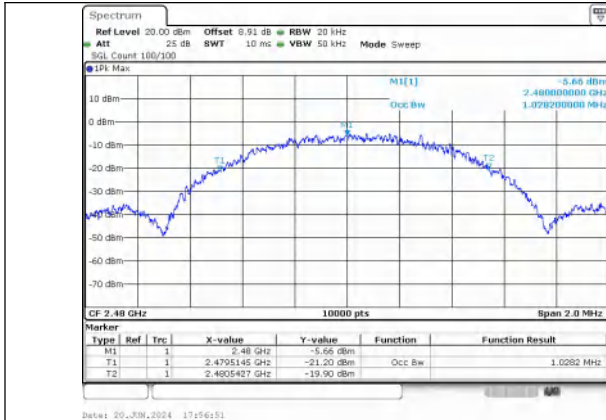
Right

Test Result

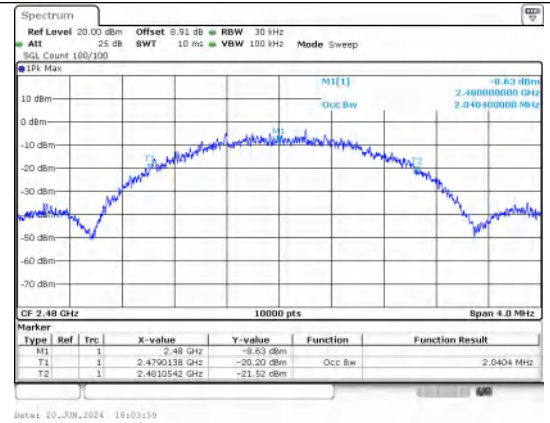
Mode	Channel	Center Frequency (MHz)	99% BW (MHz)
BLE 1M	0	2402	1.0264
BLE 1M	19	2440	1.0128
BLE 1M	39	2480	1.0282
BLE 2M	0	2402	2.0548
BLE 2M	19	2440	2.0524
BLE 2M	39	2480	2.0404

Test Graphs





BLE 1M_Channel 39



BLE 2M_Channel 39

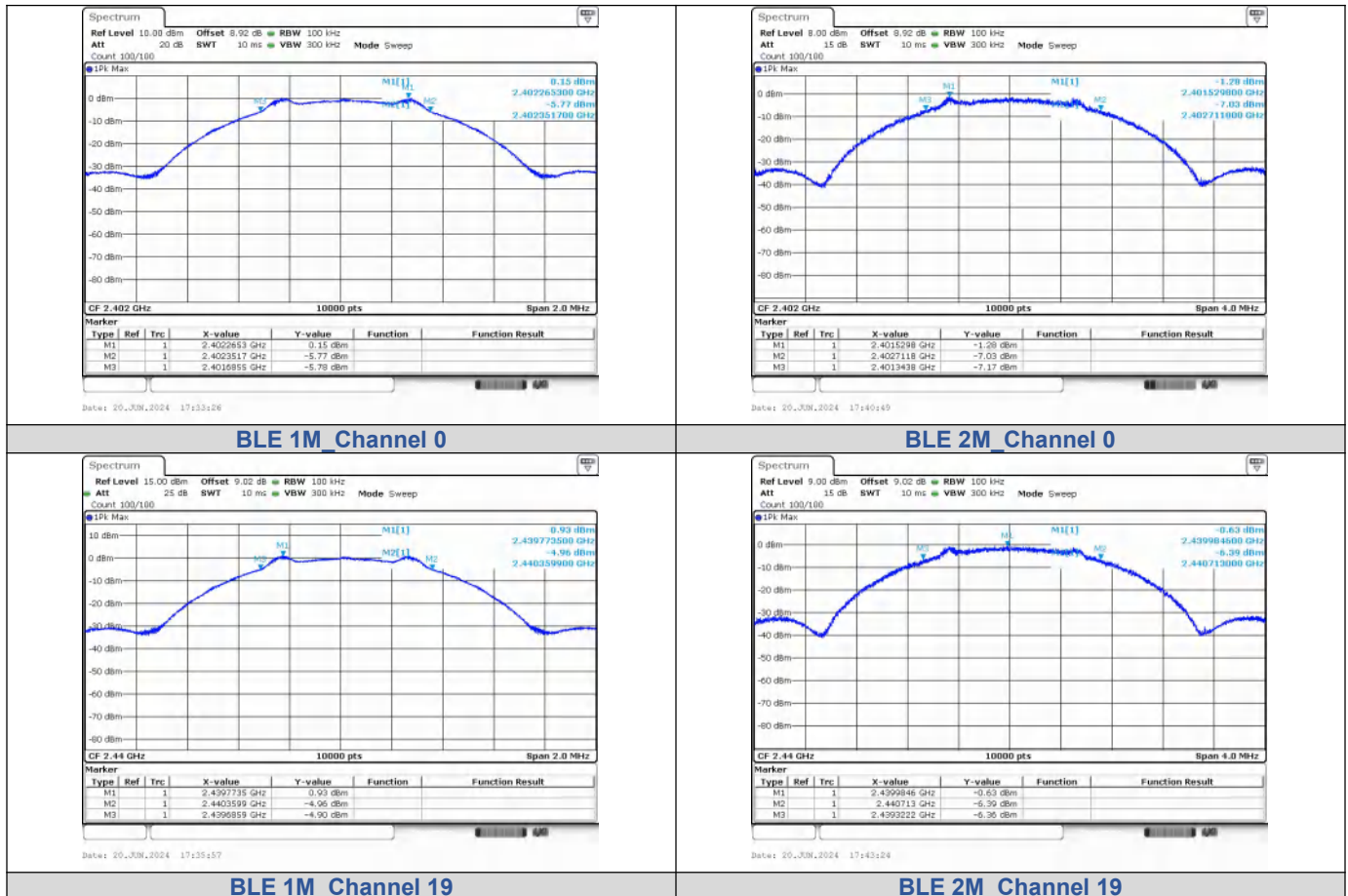
6dB Bandwidth

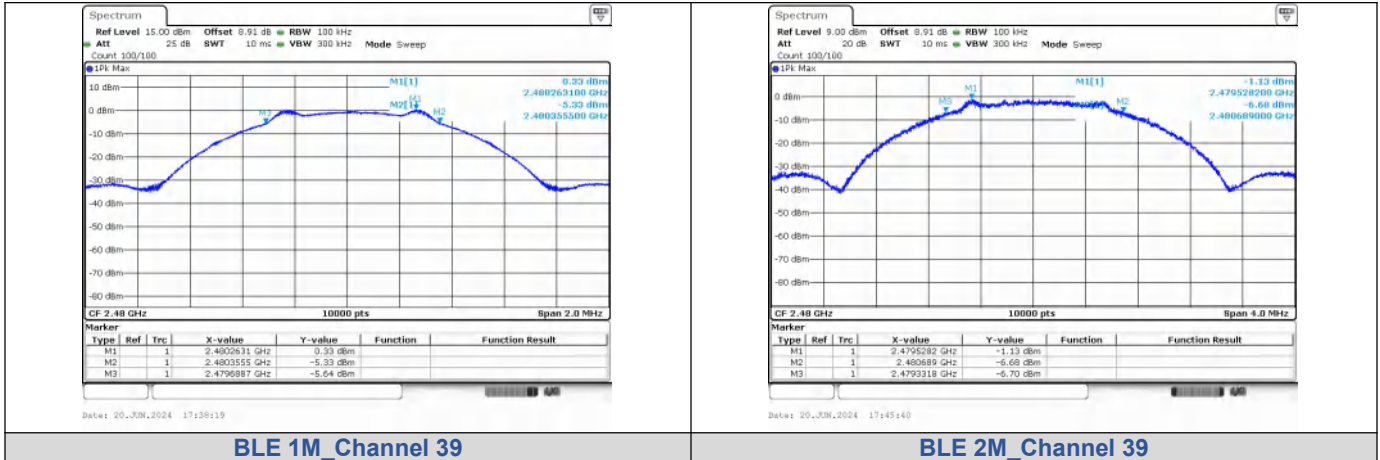
Left

Test Result

Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
BLE 1M	0	2402	0.6600	≥0.5	PASS
	19	2440	0.6700		PASS
	39	2480	0.6700		PASS
BLE 2M	0	2402	1.370		PASS
	19	2440	1.390		PASS
	39	2480	1.360		PASS

Test Graphs



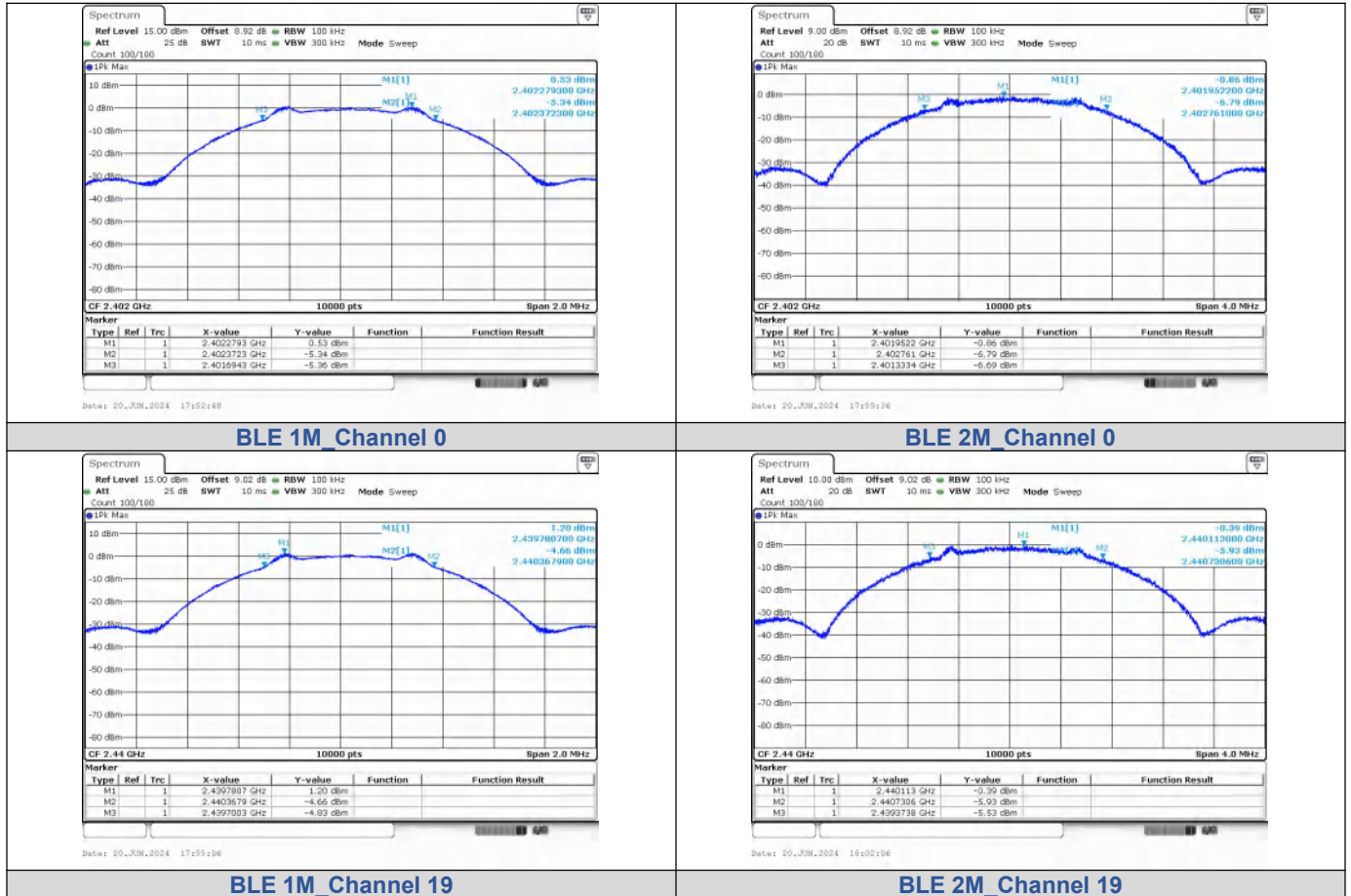


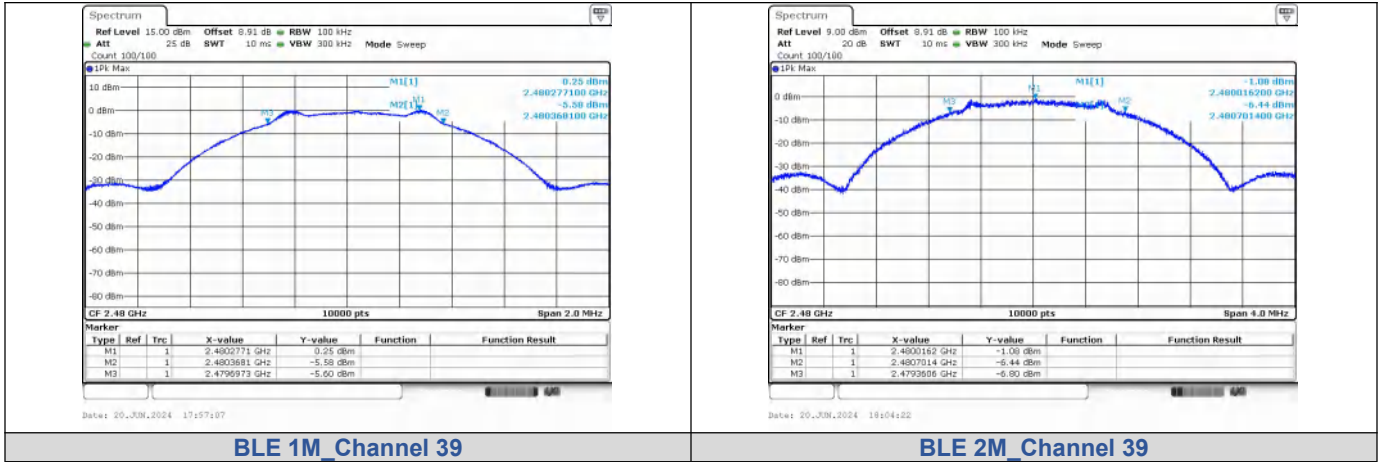
Right

Test Result

Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
BLE 1M	0	2402	0.6800	≥0.5	PASS
	19	2440	0.6700		PASS
	39	2480	0.6700		PASS
BLE 2M	0	2402	1.430		PASS
	19	2440	1.360		PASS
	39	2480	1.340		PASS

Test Graphs





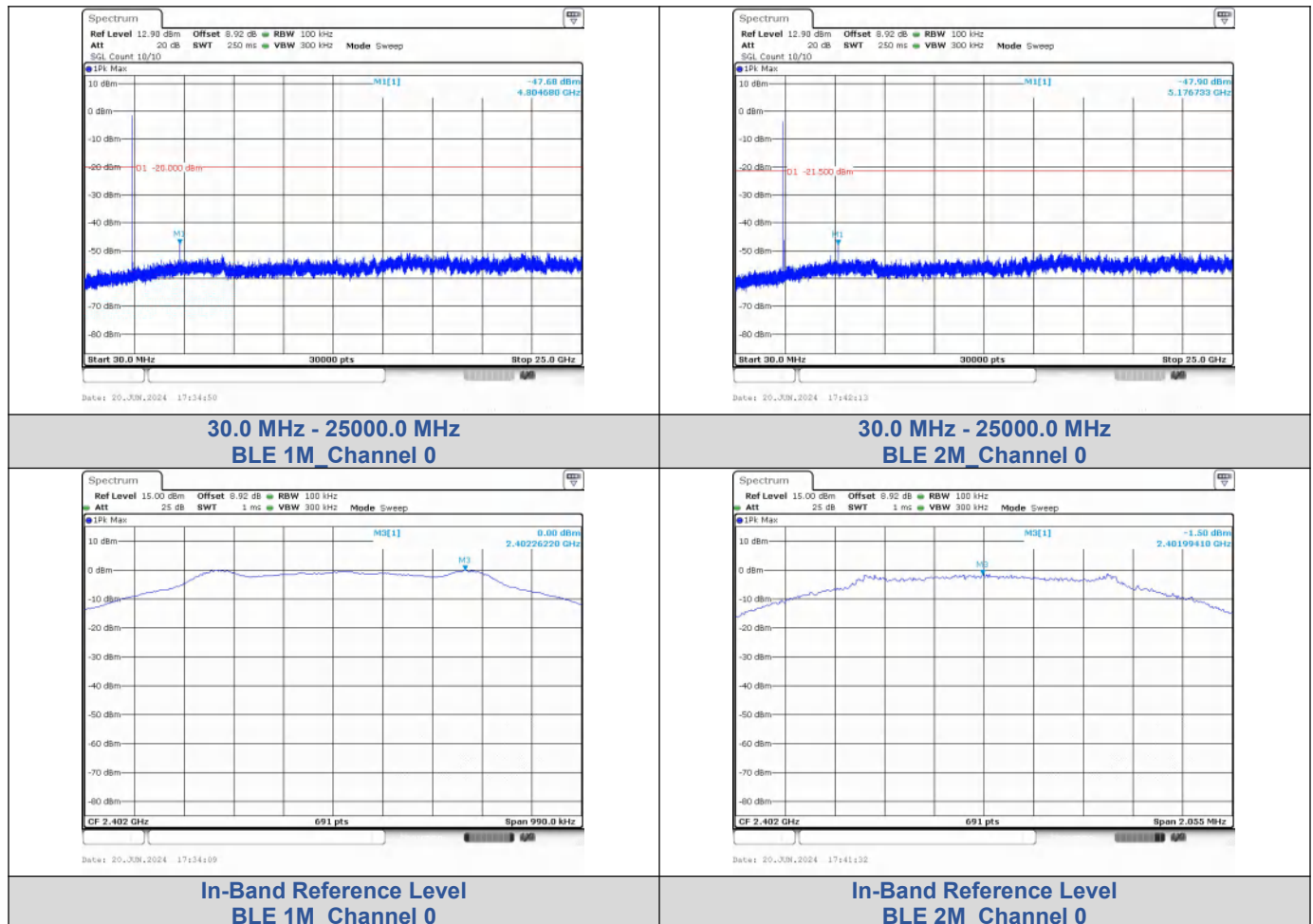
Conducted Out Of Band Emission

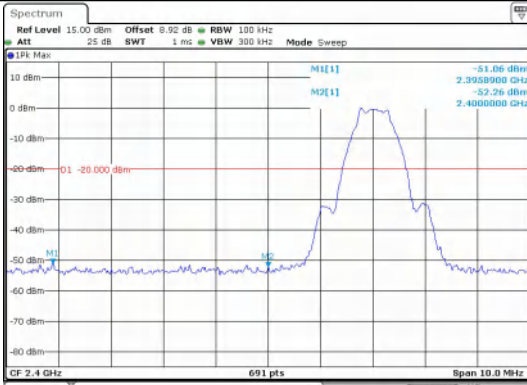
Left

Test Result

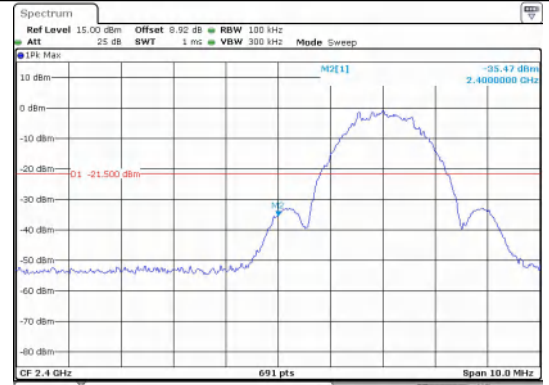
Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
BLE 1M	0	2395.89	-51.058	-20.0	-31.058	PASS
		2400.00	-52.255	-20.0	-32.255	PASS
		4804.70	-47.684	-20.0	-27.684	PASS
	19	22044.0	-49.298	-19.16	-30.138	PASS
	39	2483.50	-53.488	-19.66	-33.828	PASS
		22078.1	-49.986	-19.66	-30.326	PASS
BLE 2M	0	2400.00	-35.467	-21.5	-13.967	PASS
		5176.73	-47.904	-21.5	-26.404	PASS
	19	22118.0	-49.649	-20.52	-29.129	PASS
	39	2483.50	-53.040	-20.99	-32.050	PASS
		22020.7	-49.889	-20.99	-28.899	PASS

Test Graphs

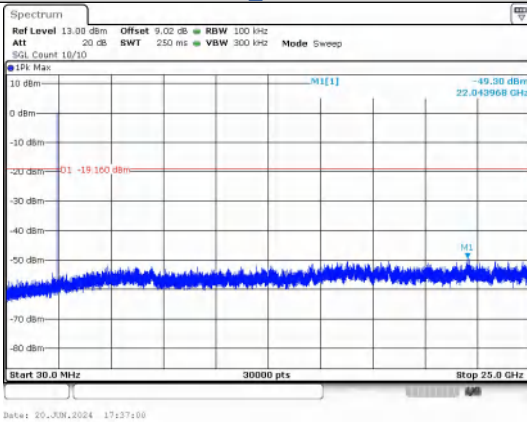




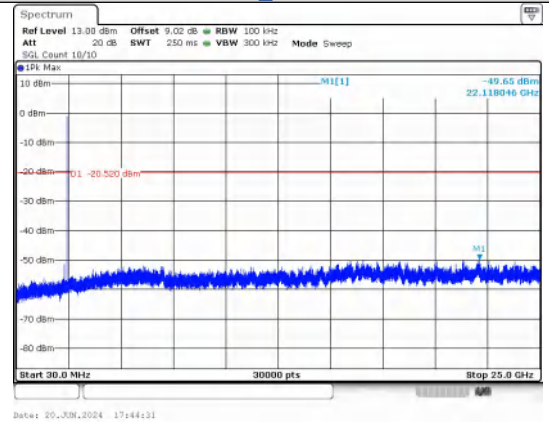
**Out Of Band Emission
BLE 1M_Channel 0**



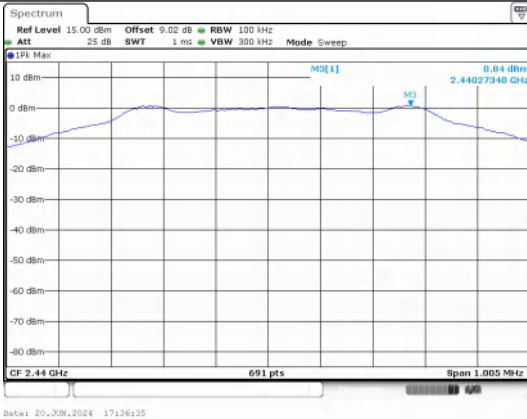
**Out Of Band Emission
BLE 2M_Channel 0**



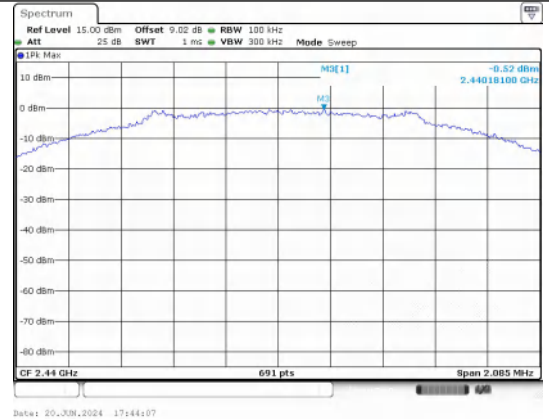
**30.0 MHz - 25000.0 MHz
BLE 1M_Channel 19**



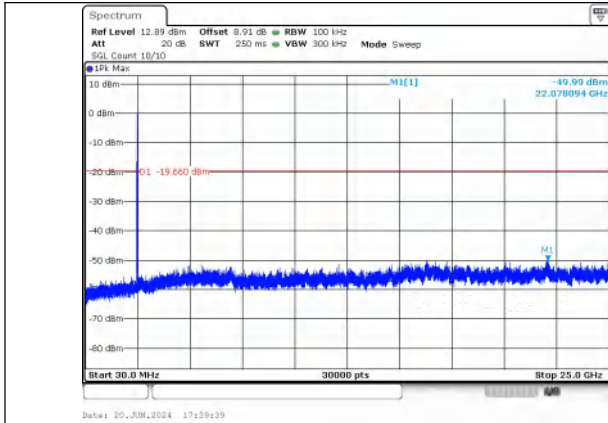
**30.0 MHz - 25000.0 MHz
BLE 2M_Channel 19**



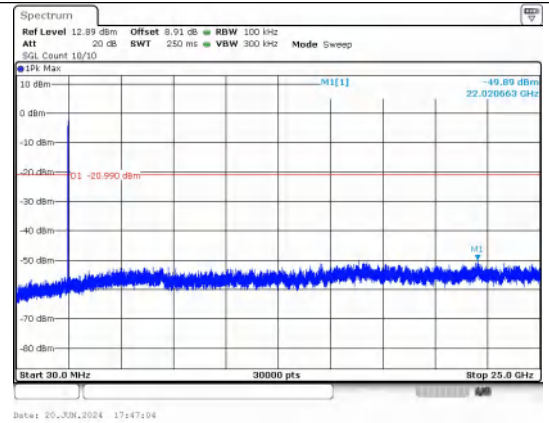
**In-Band Reference Level
BLE 1M_Channel 19**



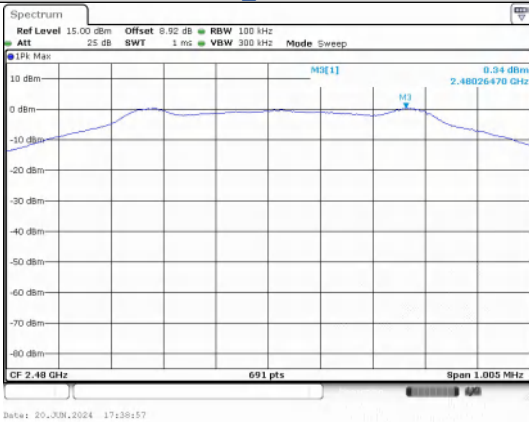
**In-Band Reference Level
BLE 2M_Channel 19**



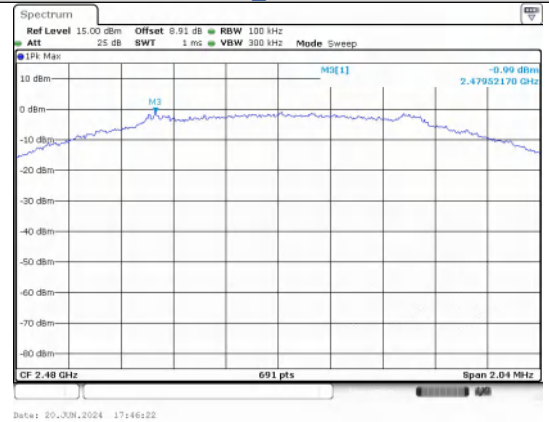
**30.0 MHz - 25000.0 MHz
BLE 1M_Channel 39**



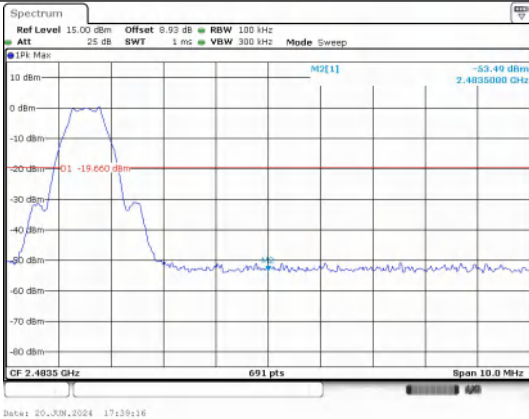
**30.0 MHz - 25000.0 MHz
BLE 2M_Channel 39**



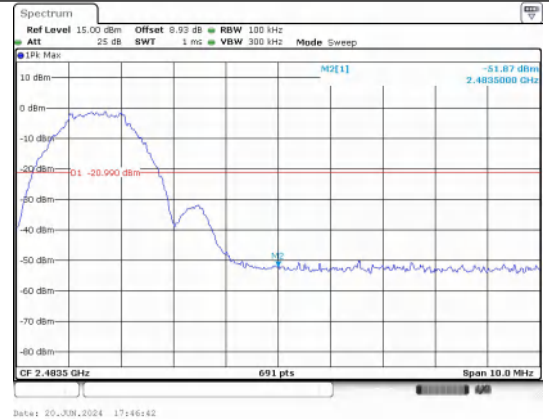
**In-Band Reference Level
BLE 1M_Channel 39**



**In-Band Reference Level
BLE 2M_Channel 39**



**Out Of Band Emission
BLE 1M_Channel 39**



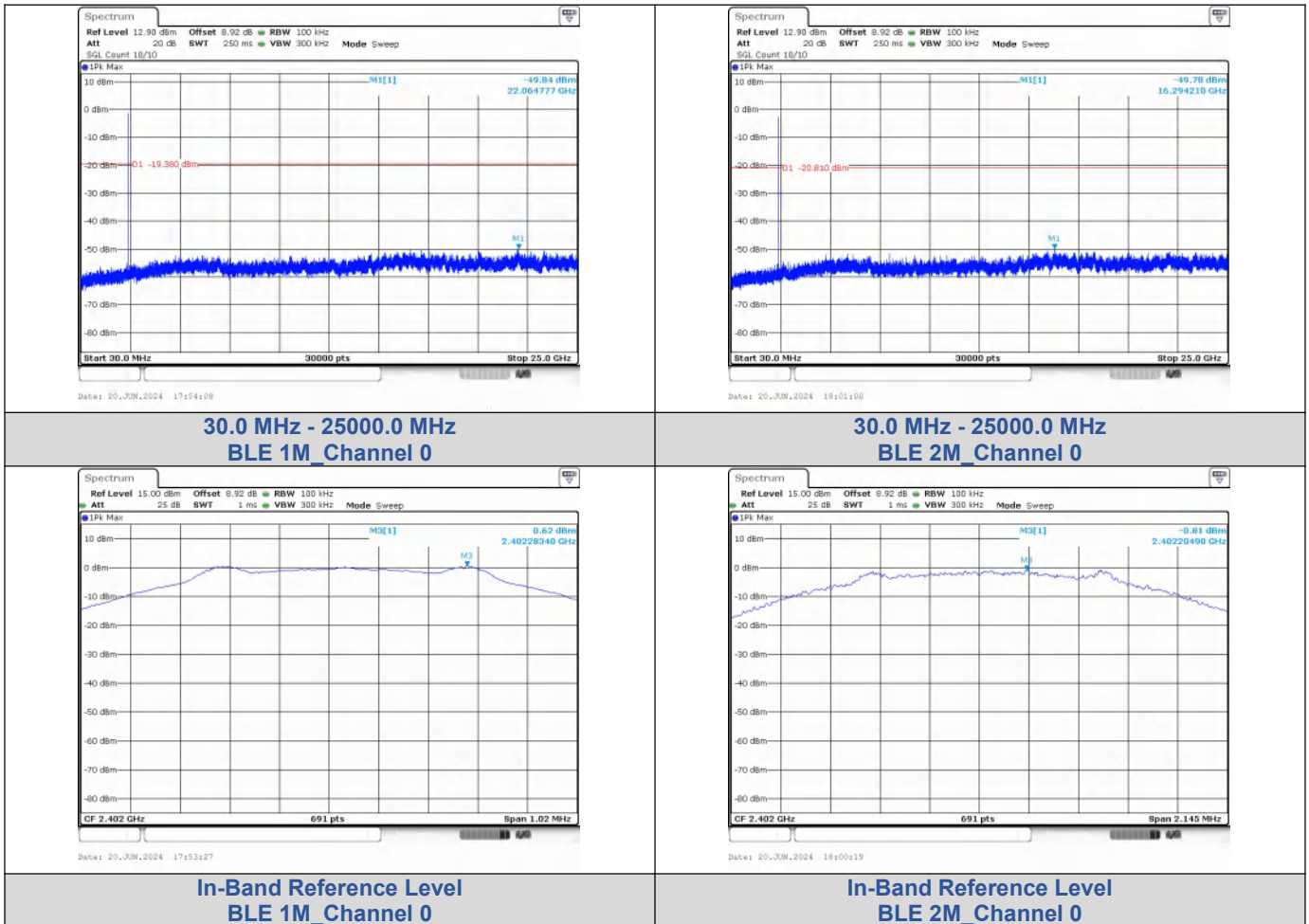
**Out Of Band Emission
BLE 2M_Channel 39**

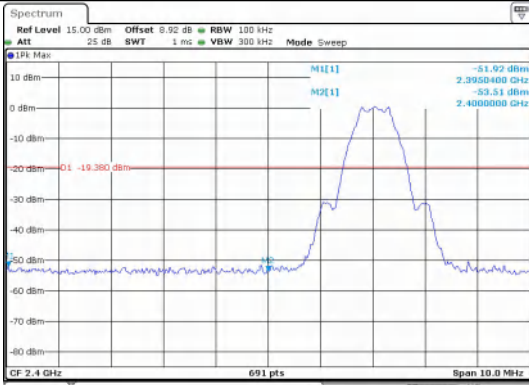
Right

Test Result

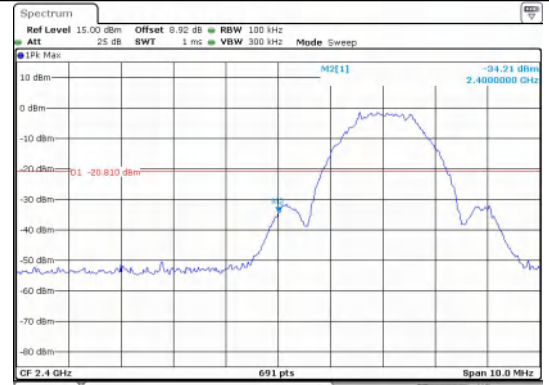
Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
BLE 1M	0	2395.04	-51.924	-19.38	-32.544	PASS
		2400.00	-53.513	-19.38	-34.133	PASS
		22064.8	-49.842	-19.38	-30.462	PASS
	19	2350.96	-48.095	-18.93	-29.165	PASS
		2483.50	-52.501	-19.81	-32.691	PASS
		5175.90	-46.794	-19.81	-26.984	PASS
BLE 2M	0	2400.00	-34.213	-20.81	-13.403	PASS
		16294.2	-49.784	-20.81	-28.974	PASS
	19	22063.1	-49.657	-20.41	-29.247	PASS
		2483.50	-53.011	-20.87	-32.141	PASS
	39	22039.0	-49.172	-20.87	-28.302	PASS

Test Graphs

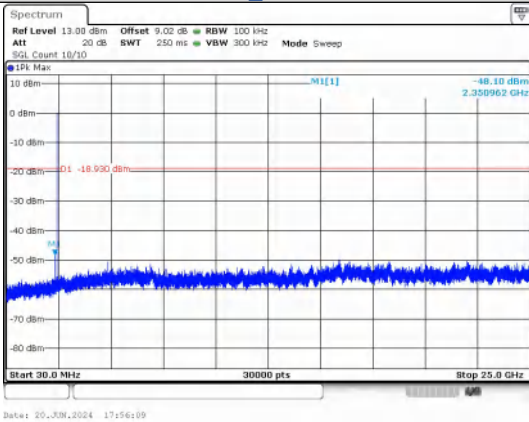




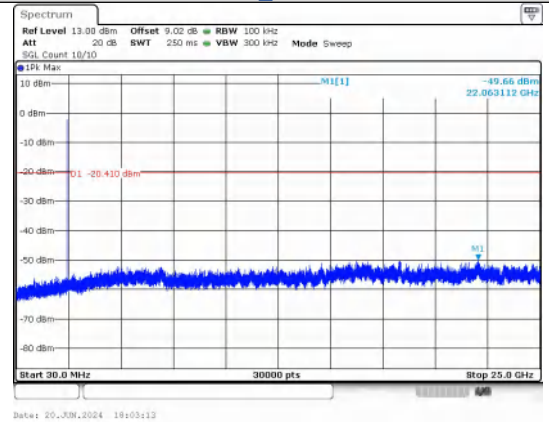
**Out Of Band Emission
BLE 1M_Channel 0**



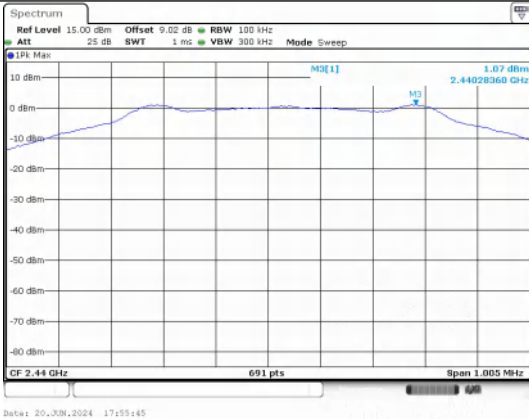
**Out Of Band Emission
BLE 2M_Channel 0**



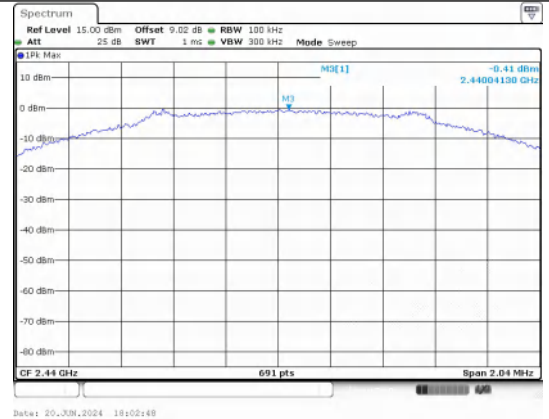
**30.0 MHz - 25000.0 MHz
BLE 1M_Channel 19**



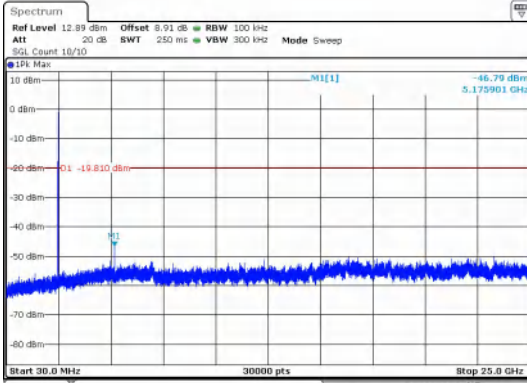
**30.0 MHz - 25000.0 MHz
BLE 2M_Channel 19**



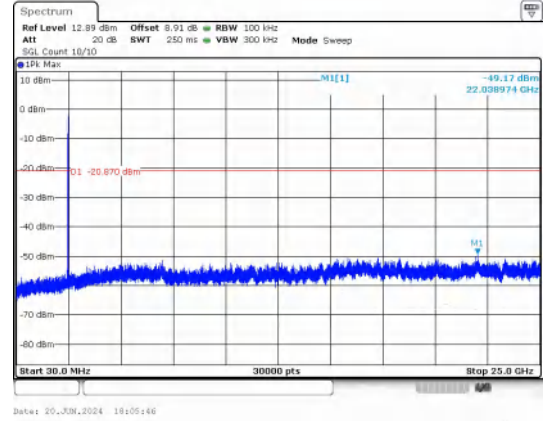
**In-Band Reference Level
BLE 1M_Channel 19**



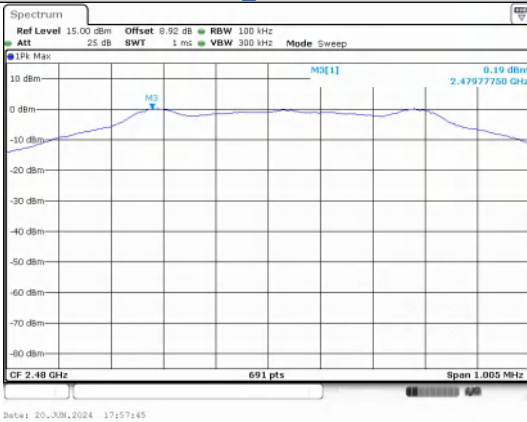
**In-Band Reference Level
BLE 2M_Channel 19**



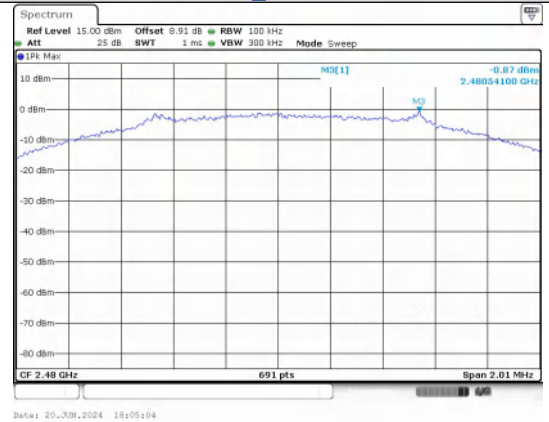
**30.0 MHz - 25000.0 MHz
BLE 1M_Channel 39**



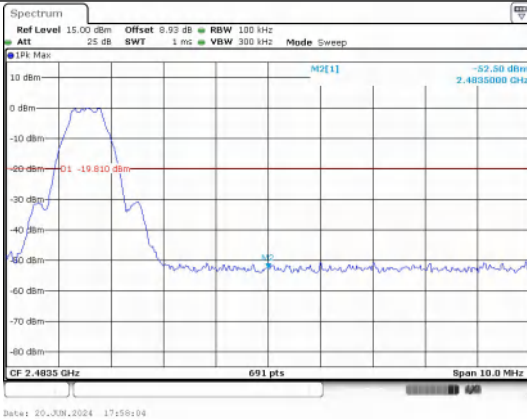
**30.0 MHz - 25000.0 MHz
BLE 2M_Channel 39**



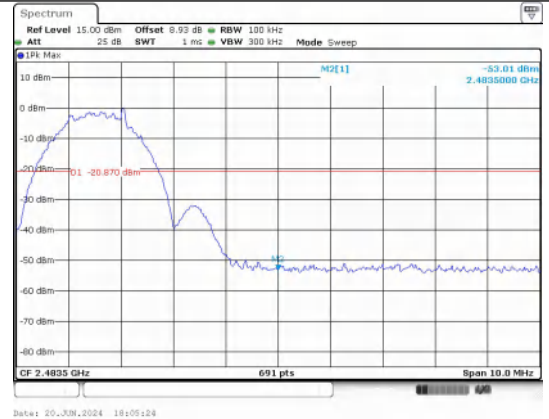
**In-Band Reference Level
BLE 1M_Channel 39**



**In-Band Reference Level
BLE 2M_Channel 39**



**Out Of Band Emission
BLE 1M_Channel 39**



**Out Of Band Emission
BLE 2M_Channel 39**

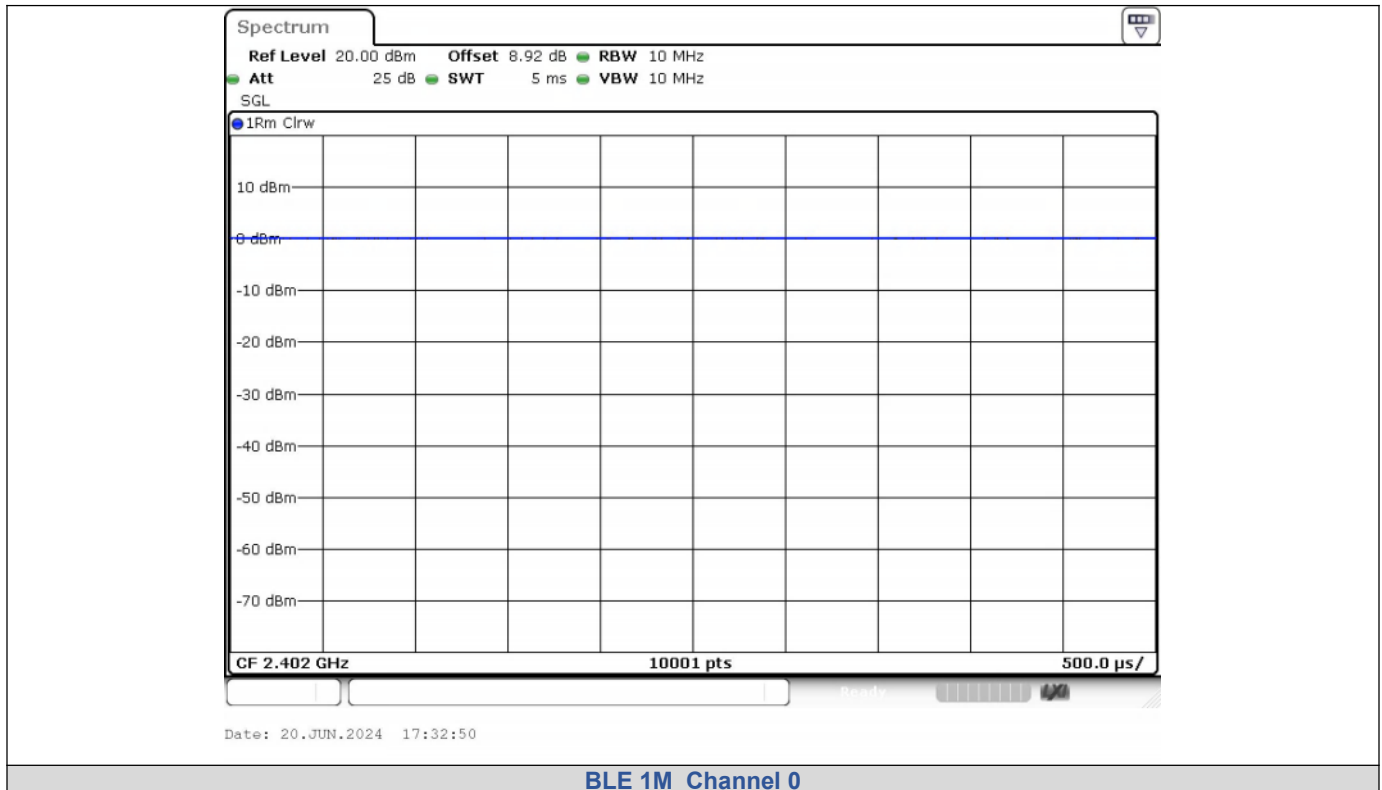
Duty Cycle

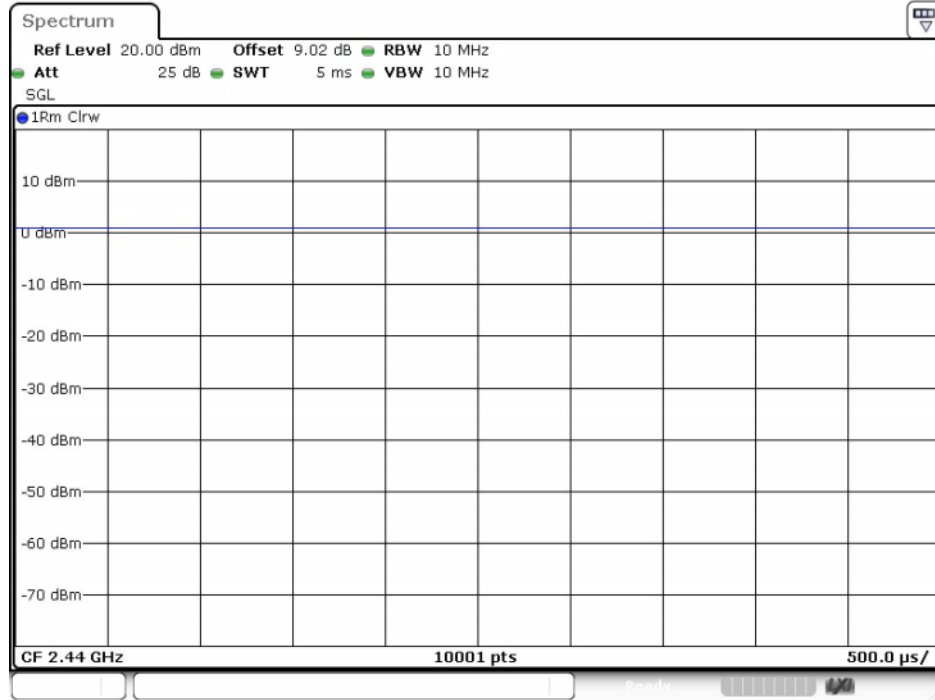
Left

Test Result

Mode	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)
BLE 1M	0	5.000	5.000	100	1	0.0
	19	5.000	5.000	100	1	0.0
	39	5.000	5.000	100	1	0.0
BLE 2M	0	5.000	5.000	100	1	0.0
	19	5.000	5.000	100	1	0.0
	39	5.000	5.000	100	1	0.0

Test Graphs





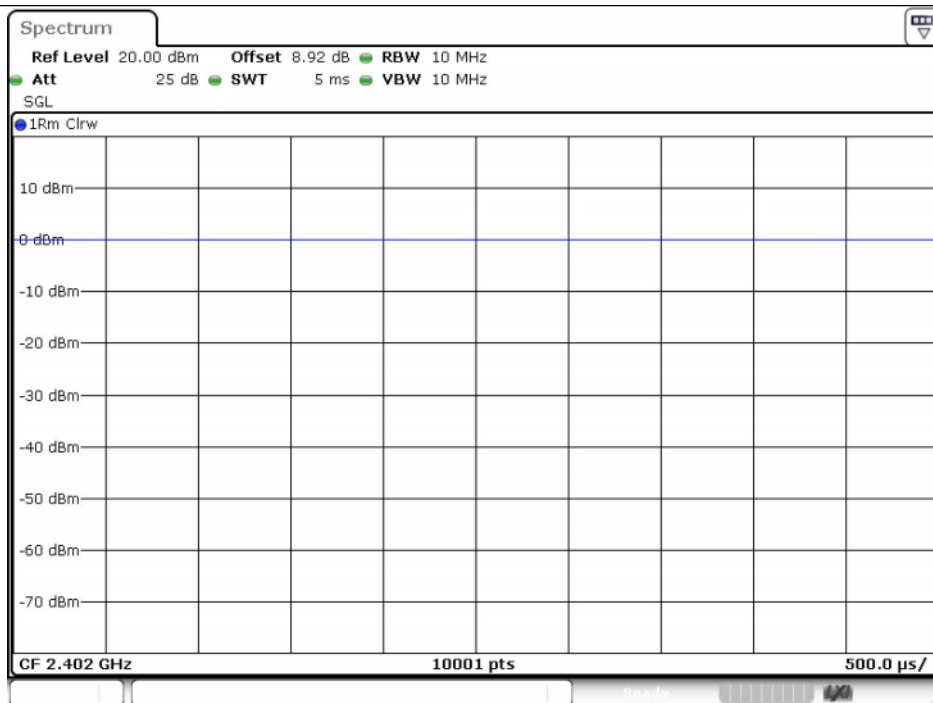
Date: 20.JUN.2024 17:35:27

BLE 1M_Channel 19



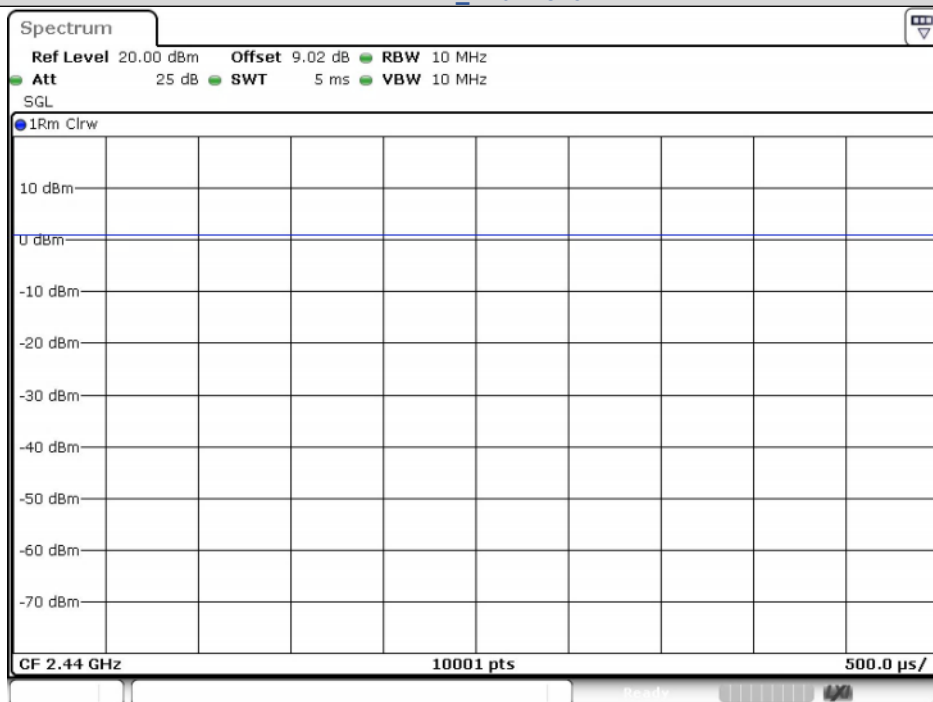
Date: 20.JUN.2024 17:37:49

BLE 1M_Channel 39



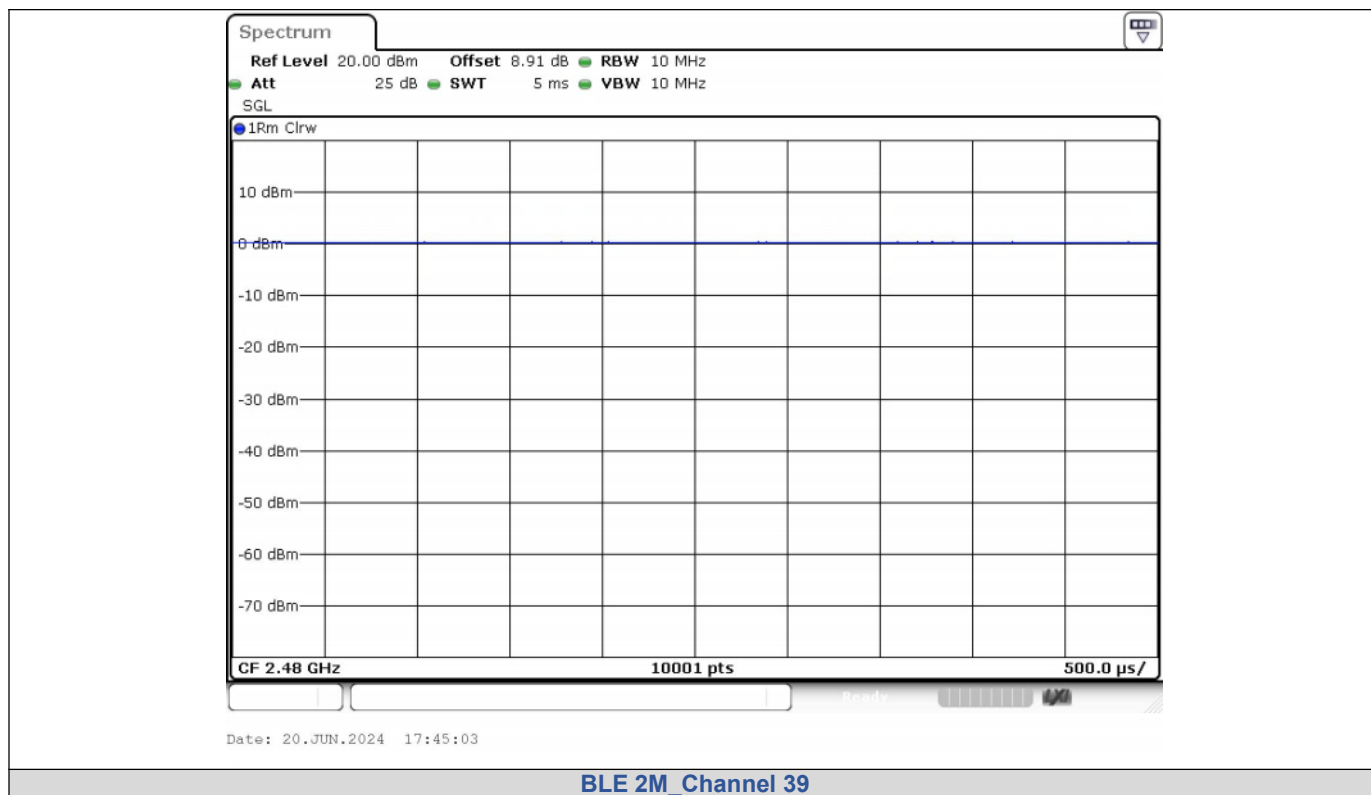
Date: 20.JUN.2024 17:40:12

BLE 2M_Channel 0



Date: 20.JUN.2024 17:42:47

BLE 2M_Channel 19



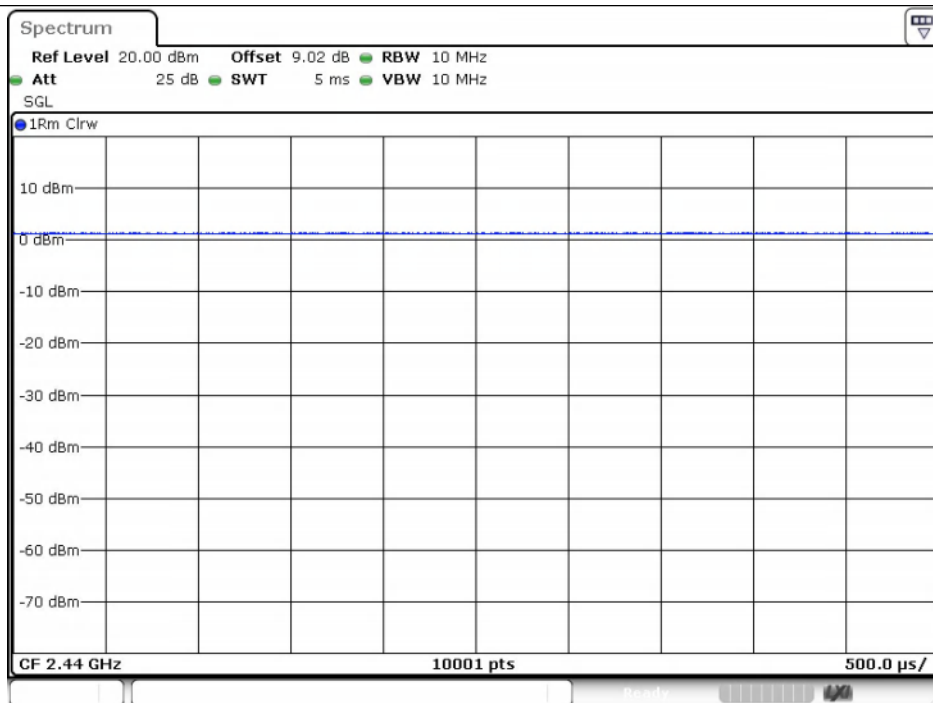
Right

Test Result

Mode	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)
BLE 1M	0	5.000	5.000	100	1	0.0
	19	5.000	5.000	100	1	0.0
	39	5.000	5.000	100	1	0.0
BLE 2M	0	5.000	5.000	100	1	0.0
	19	5.000	5.000	100	1	0.0
	39	5.000	5.000	100	1	0.0

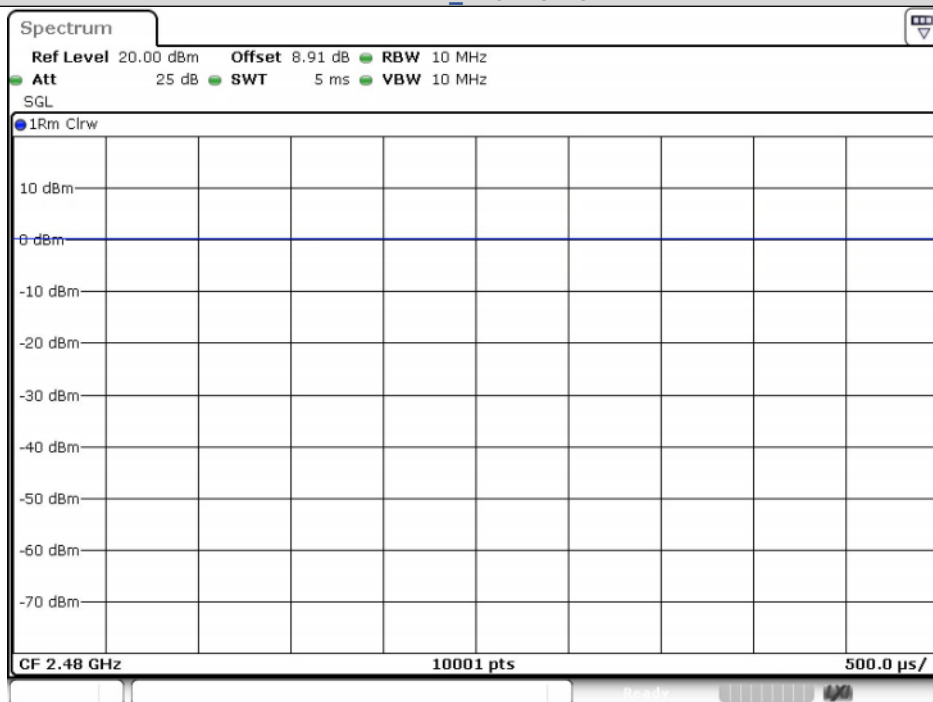
Test Graphs





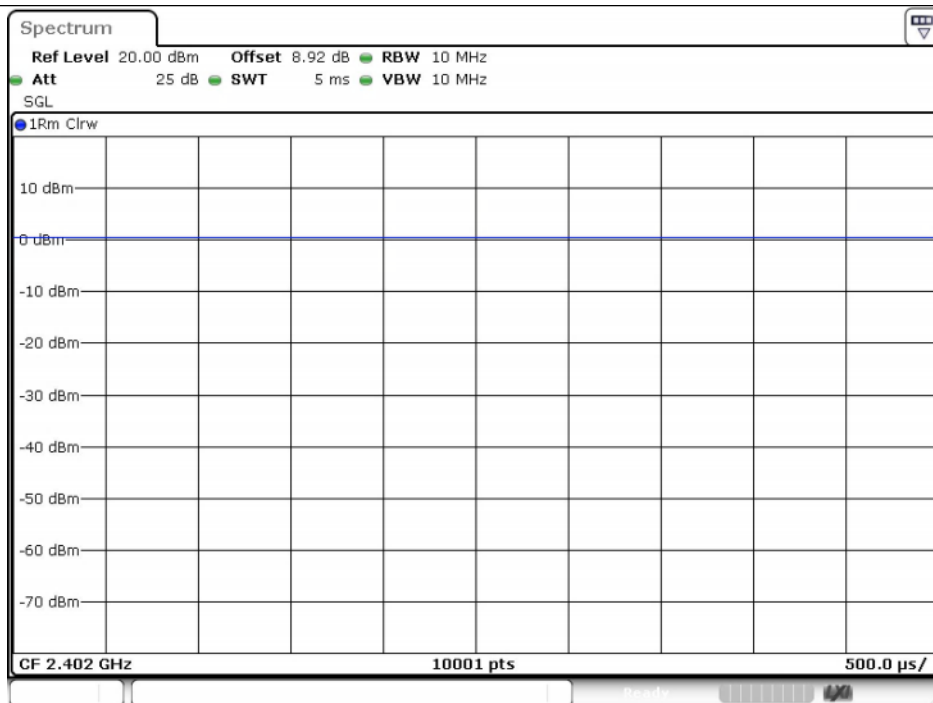
Date: 20.JUN.2024 17:54:36

BLE 1M_Channel 19



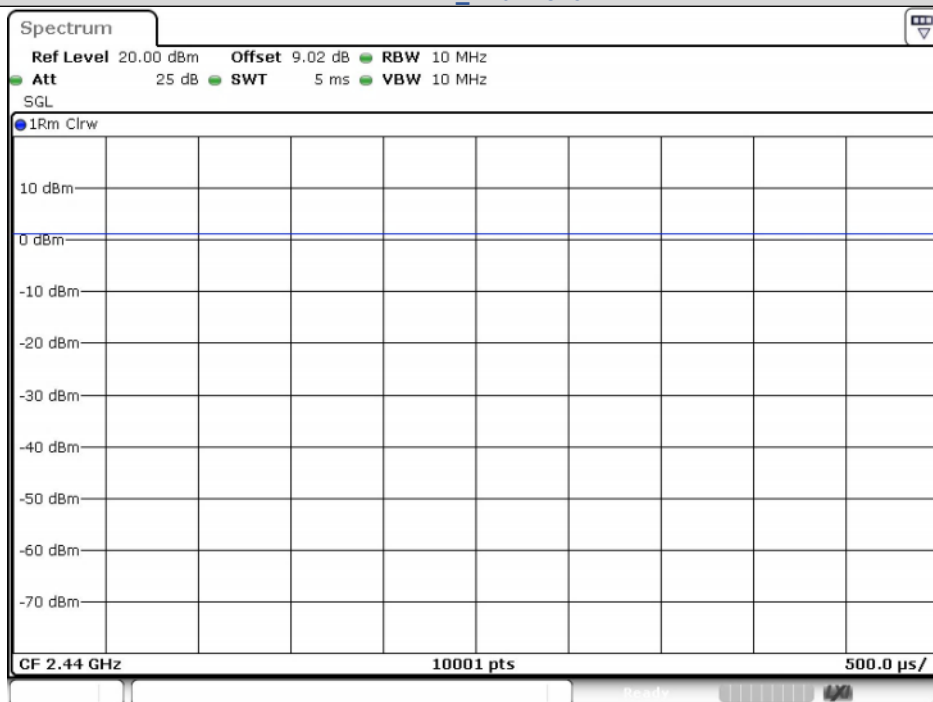
Date: 20.JUN.2024 17:56:37

BLE 1M_Channel 39



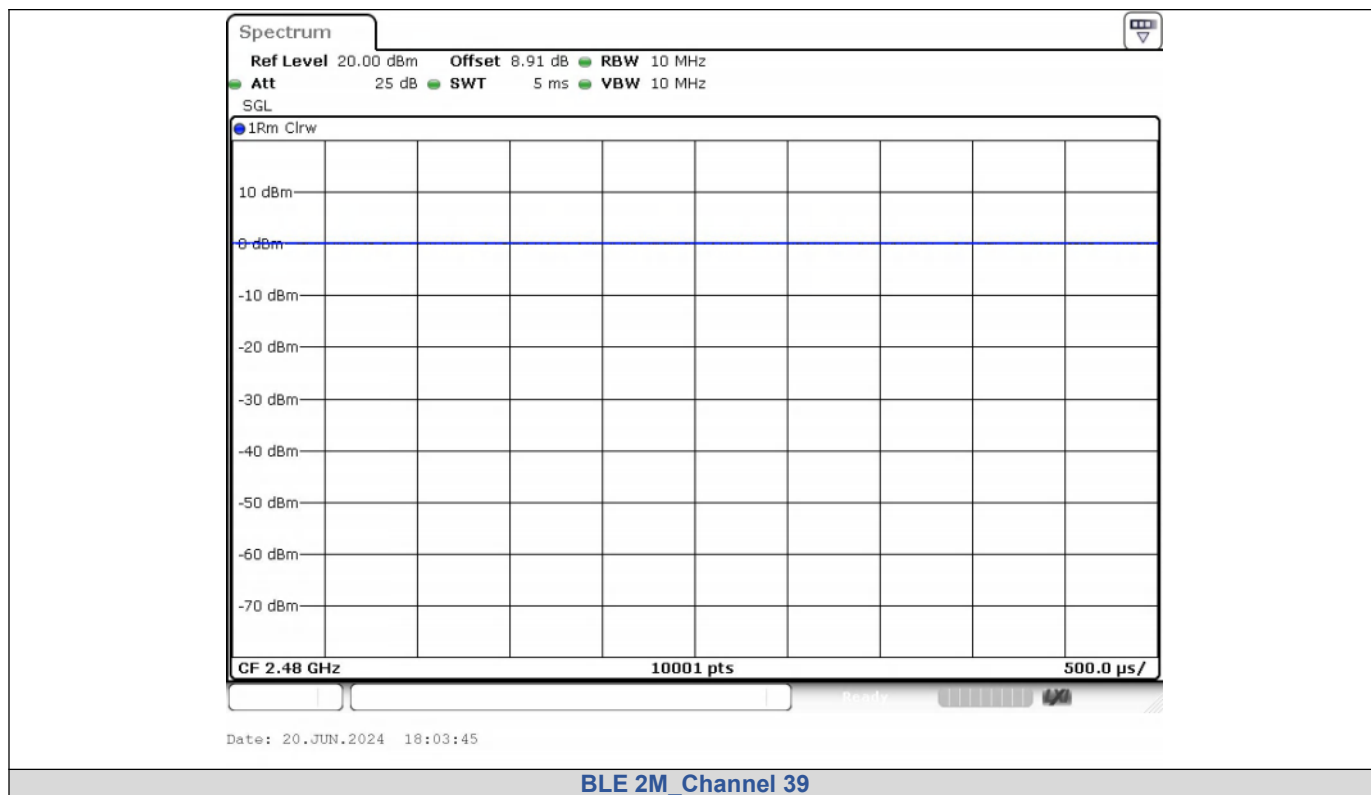
Date: 20.JUN.2024 17:58:59

BLE 2M_Channel 0



Date: 20.JUN.2024 18:01:29

BLE 2M_Channel 19



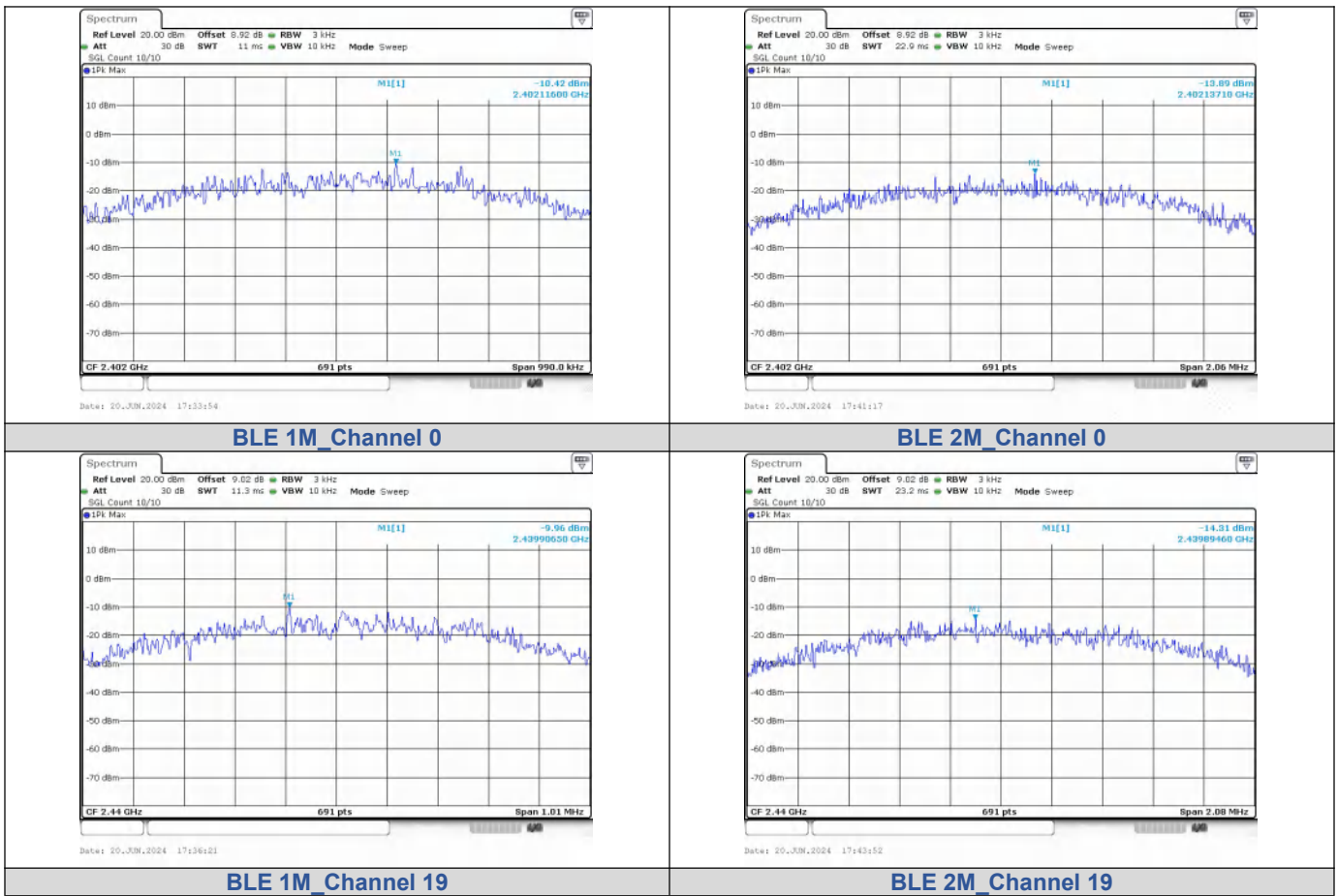
Power Spectral Density

Left

Test Result

Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
BLE 1M	0	-10.423	≤8	PASS
BLE 1M	19	-9.960	≤8	PASS
BLE 1M	39	-12.369	≤8	PASS
BLE 2M	0	-13.889	≤8	PASS
BLE 2M	19	-14.309	≤8	PASS
BLE 2M	39	-15.321	≤8	PASS

Test Graphs





Right Test Result

Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
BLE 1M	0	-9.855	≤8	PASS
BLE 1M	19	-9.477	≤8	PASS
BLE 1M	39	-11.151	≤8	PASS
BLE 2M	0	-14.813	≤8	PASS
BLE 2M	19	-13.345	≤8	PASS
BLE 2M	39	-14.867	≤8	PASS

Test Graphs

