Appendix: Bluetooth LE

Contents

Appendix A: DTS Bandwidth 3
Test Result 3
Test Graphs 4
Appendix B: Occupied Channel Bandwidth 7
Test Result 7
Test Graphs 8
Appendix C: Maximum conducted output power 11
Test Result Peak 11
Test Graphs Peak 12
Appendix D: Maximum power spectral density 15
Test Result 15
Test Graphs 16
Appendix F: Band edge measurements 19
Test Result 19
Test Graphs 20
Appendix G: Conducted Spurious Emission 22
Test Result 22
Test Graphs 23
Appendix H: Duty Cycle 32
Test Result 32
Test Graphs 33

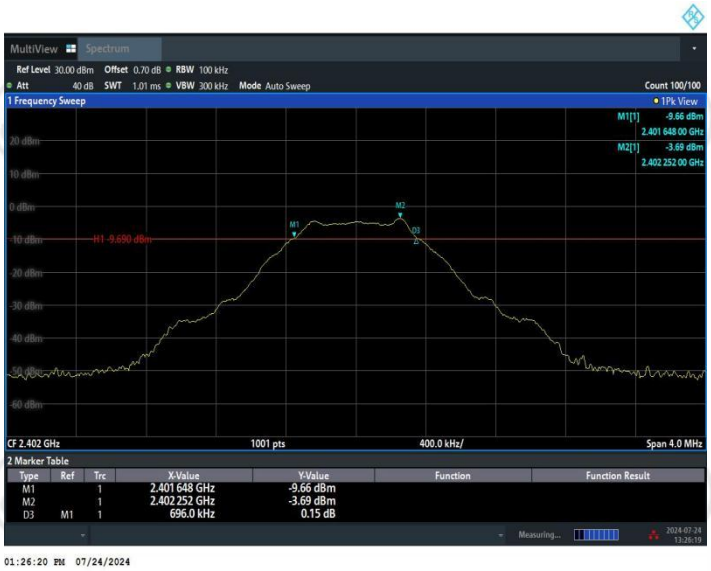
Appendix A: DTS Bandwidth

Test Result

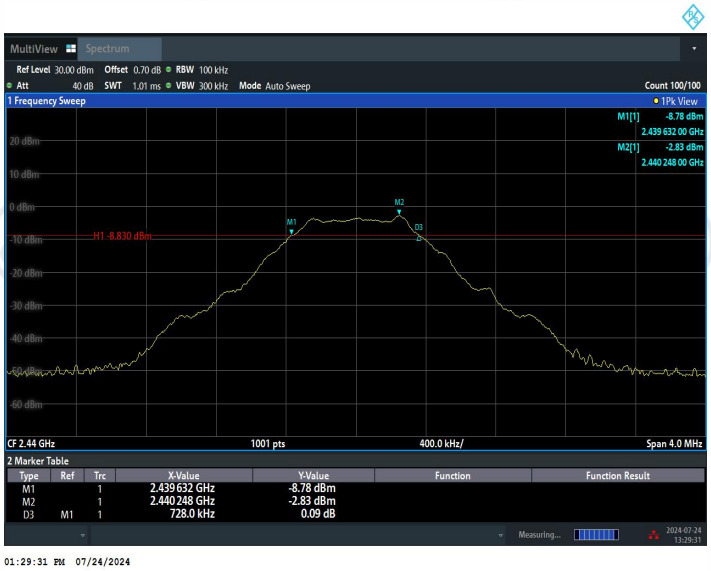
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.70	2401.65	2402.34	0.5	PASS
		2440	0.73	2439.63	2440.36	0.5	PASS
		2480	0.74	2479.62	2480.36	0.5	PASS
BLE_2M	Ant1	2402	1.24	2401.36	2402.60	0.5	PASS
		2440	1.23	2439.36	2440.59	0.5	PASS
		2480	1.25	2479.34	2480.59	0.5	PASS

Test Graphs

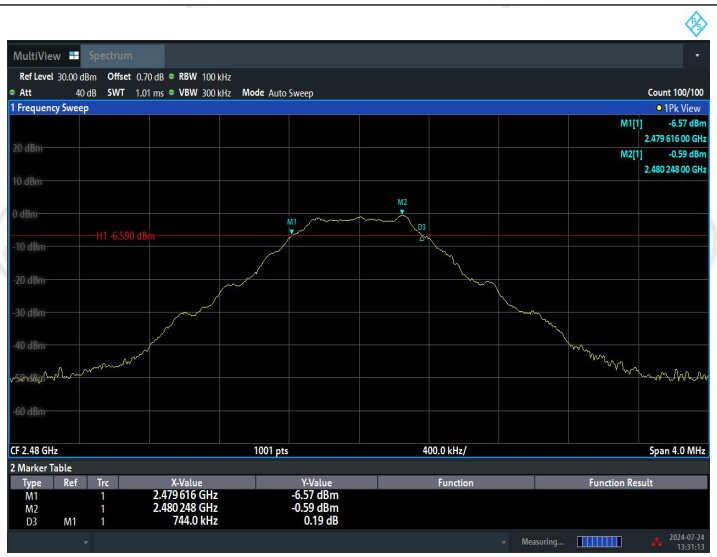
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



BLE_2M_Ant1_2402

BLE_2M_Ant1_2440

BLE_2M_Ant1_2480

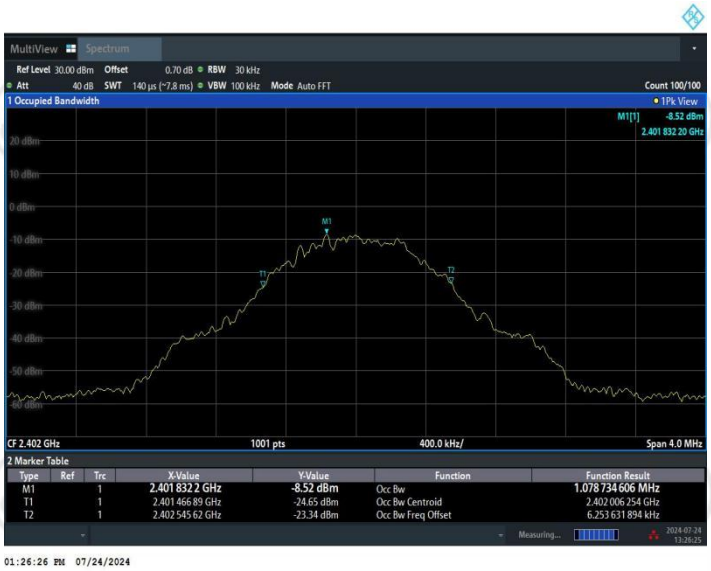
Appendix B: Occupied Channel Bandwidth

Test Result

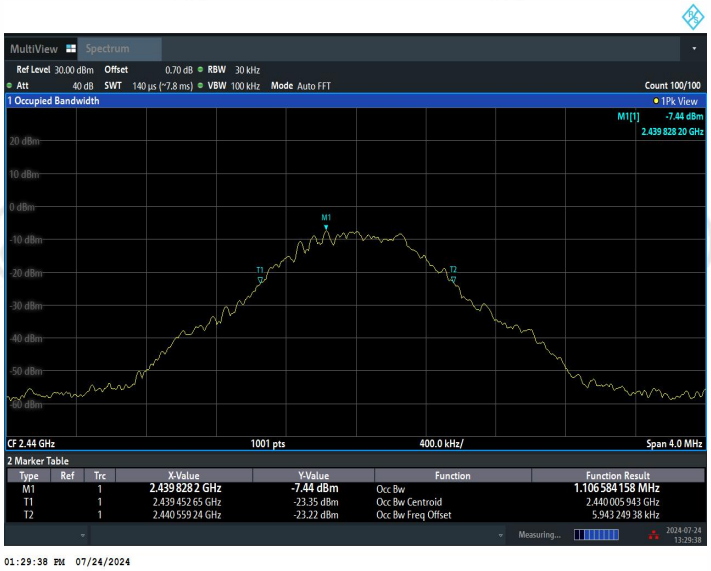
TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.079	2401.4669	2402.5456	---	---
		2440	1.107	2439.453	2440.559	---	---
		2480	1.156	2479.427	2480.583	---	---
BLE_2M	Ant1	2402	2.053	2400.994	2403.047	---	---
		2440	2.062	2438.991	2441.053	---	---
		2480	2.077	2478.978	2481.055	---	---

Test Graphs

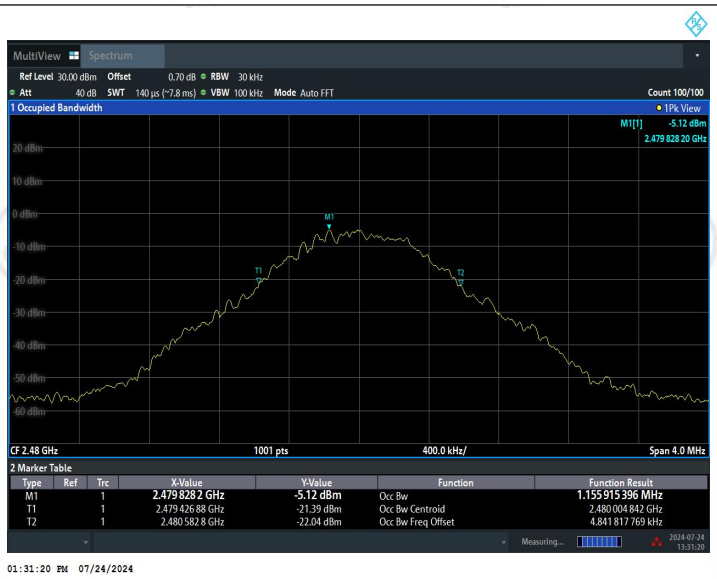
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



BLE_2M_Ant1_2402

BLE_2M_Ant1_2440

BLE_2M_Ant1_2480

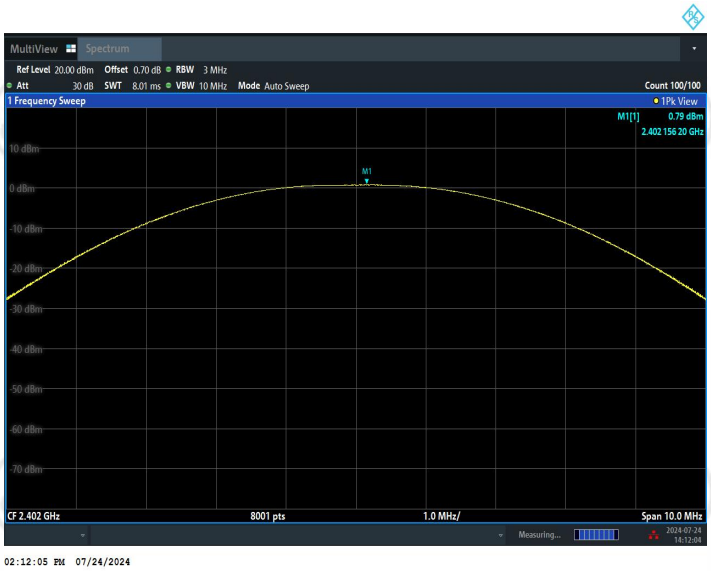
Appendix C: Maximum conducted output power

Test Result Peak

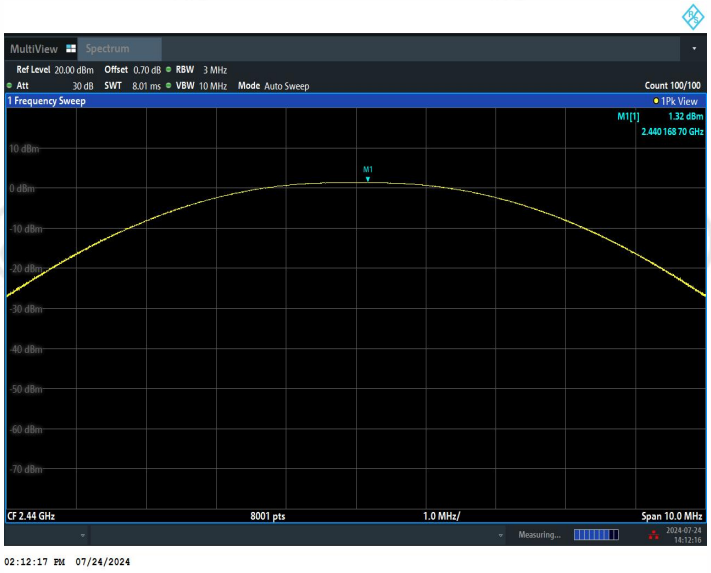
TestMode	Antenna	Frequency[MHz]	Conducted Peak Powert[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0.79	≤30	PASS
		2440	1.32	≤30	PASS
		2480	1.58	≤30	PASS
BLE_2M	Ant1	2402	0.77	≤30	PASS
		2440	1.31	≤30	PASS
		2480	1.58	≤30	PASS

Test Graphs Peak

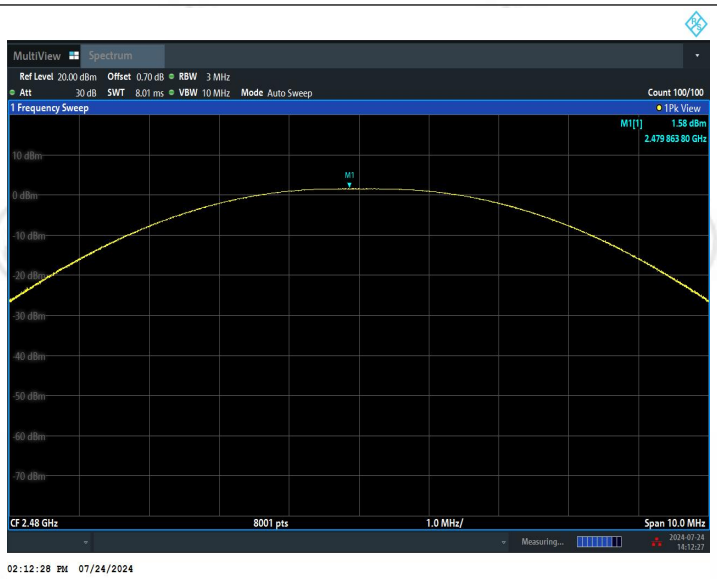
BLE_1M_Ant1_2402



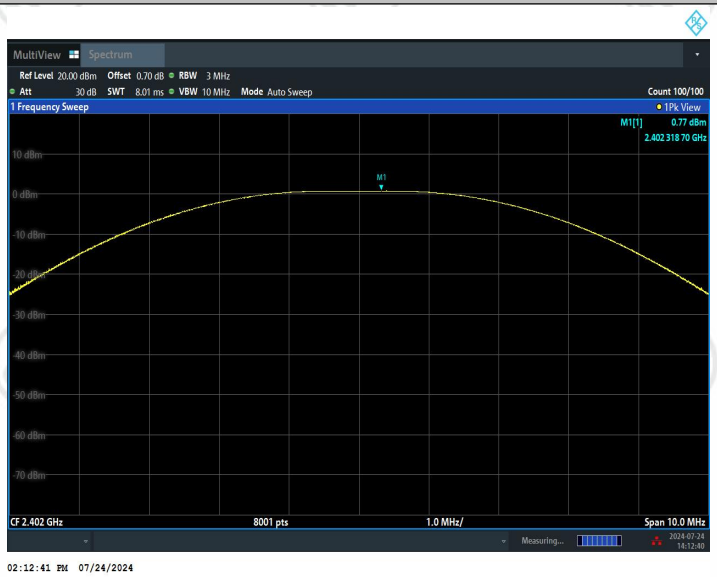
BLE_1M_Ant1_2440



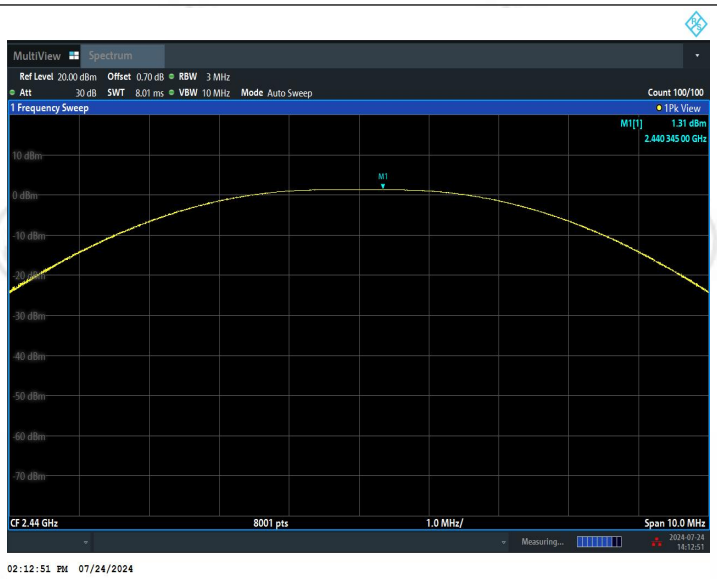
BLE_1M_Ant1_2480



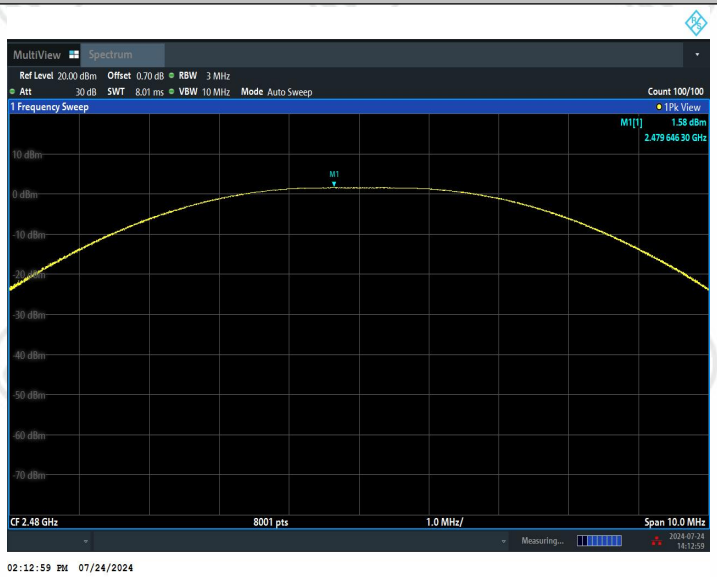
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



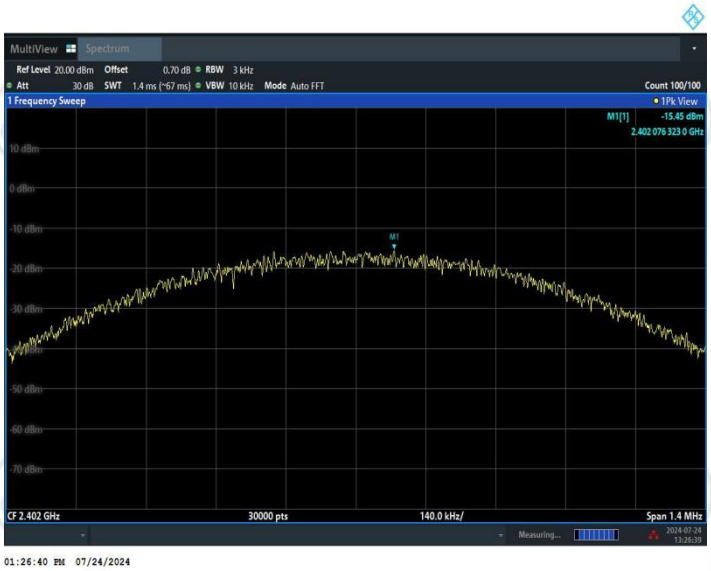
Appendix D: Maximum power spectral density

Test Result

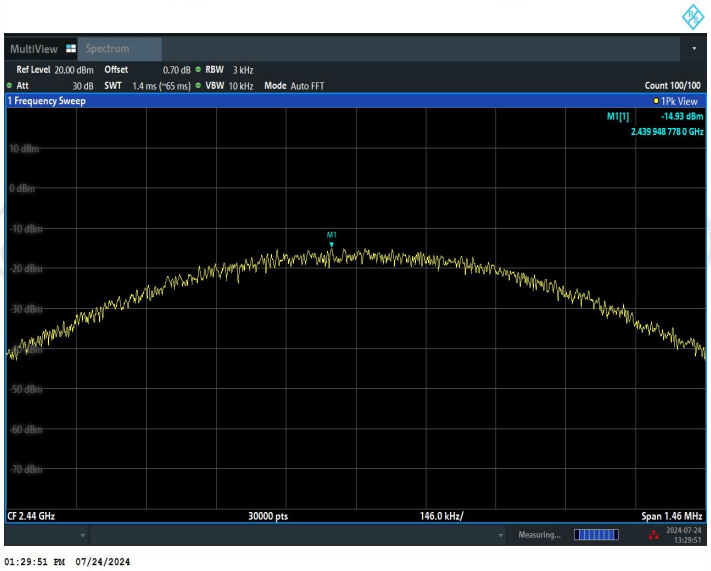
TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.45	≤8.00	PASS
		2440	-14.93	≤8.00	PASS
		2480	-14.53	≤8.00	PASS
BLE_2M	Ant1	2402	-19.14	≤8.00	PASS
		2440	-18.09	≤8.00	PASS
		2480	-17.55	≤8.00	PASS

Test Graphs

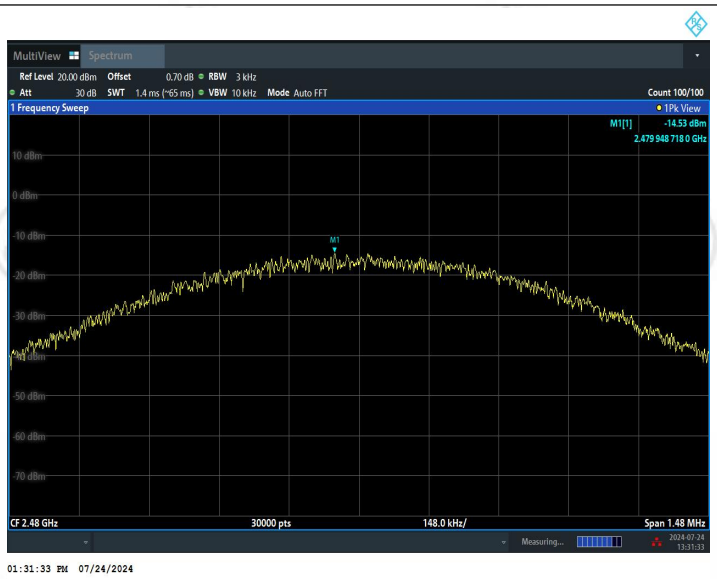
BLE_1M_Ant1_2402



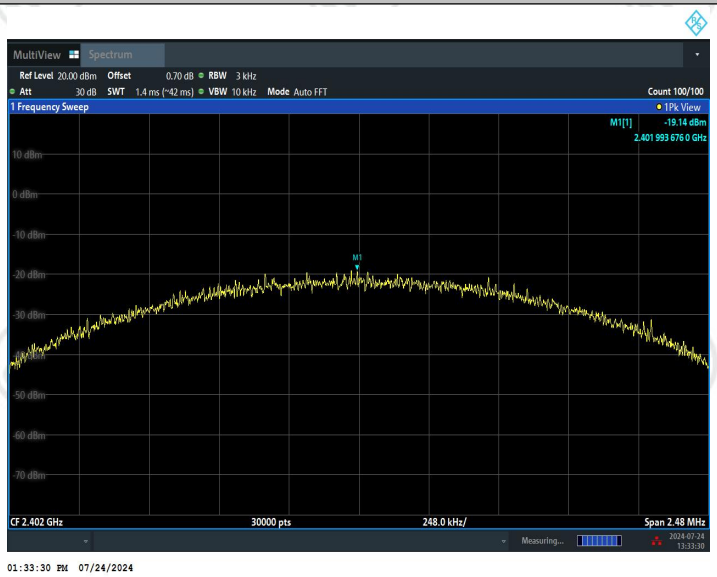
BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



BLE_2M_Ant1_2402



BLE_2M_Ant1_2440