

Appendix: Bluetooth LE

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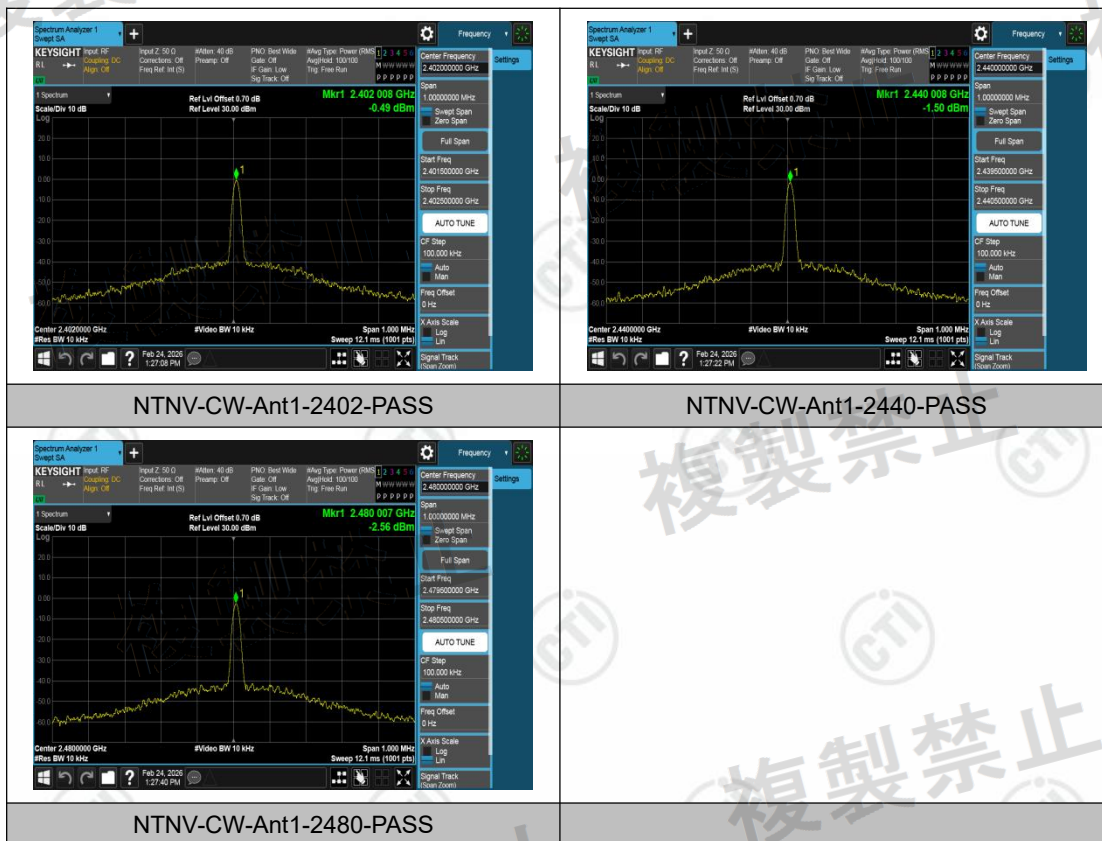
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Appendix A: Frequency Error

Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	CenterFreq [MHz]	Result[ppm]	Limit[ppm]	Verdict
NTNV	CW	Ant1	2402	2402.008	+3.33056	±50	PASS
NTNV	CW	Ant1	2440	2440.008	+3.27869	±50	PASS
NTNV	CW	Ant1	2480	2480.007	+2.82258	±50	PASS

Test Graphs



Appendix B: Antenna Power

Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Result(dBm)	Result(mW)	Limit(mW)	Verdict
NTNV	BLE_1M	Ant1	2402	-3.84	0.4130	≤10	PASS
NTNV	BLE_1M	Ant1	2440	-4.34	0.3681	≤10	PASS
NTNV	BLE_1M	Ant1	2480	-5.47	0.2838	≤10	PASS

Test Condition	Test Mode	Antenna	Freq(MHz)	Power (mW)	Rated Power (mW)	Result (%)	Limit (%)	Verdict
NTNV	BLE_1M	Ant1	2402	0.4130	0.4	3.250	+20	PASS
NTNV	BLE_1M	Ant1	2440	0.3681	0.4	-7.975	+20	PASS
NTNV	BLE_1M	Ant1	2480	0.2838	0.4	-29.050	+20	PASS

TestCondition	TestMode	Antenna	Freq(MHz)	Result(dBm)	EIRP(dBm)	Limit(dBm)	Verdict
NTNV	BLE_1M	Ant1	2402	-3.84	-5.26445	≤12.14	PASS
NTNV	BLE_1M	Ant1	2440	-4.34	-5.76445	≤12.14	PASS
NTNV	BLE_1M	Ant1	2480	-5.47	-6.89445	≤12.14	PASS

Test Graphs

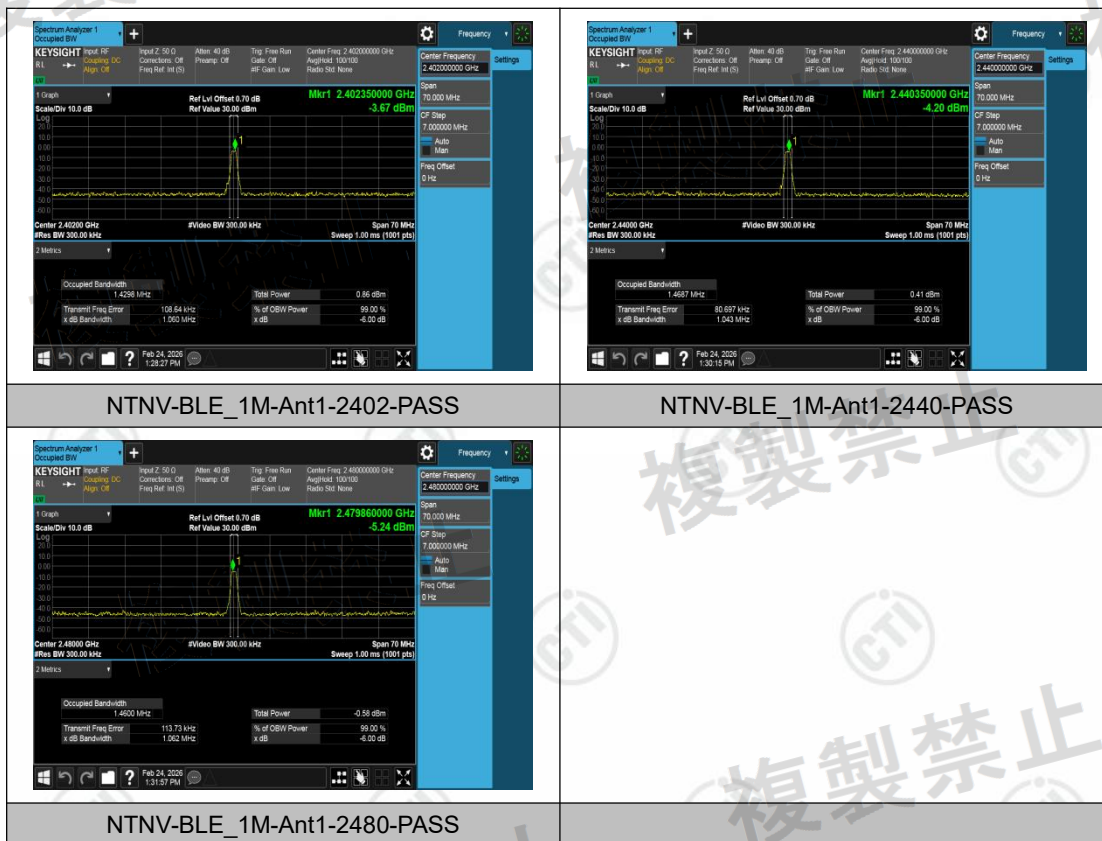


Appendix C: Occupied Bandwidth

Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTNV	BLE_1M	Ant1	2402	1.430	≤26	PASS
NTNV	BLE_1M	Ant1	2440	1.469	≤26	PASS
NTNV	BLE_1M	Ant1	2480	1.460	≤26	PASS

Test Graphs

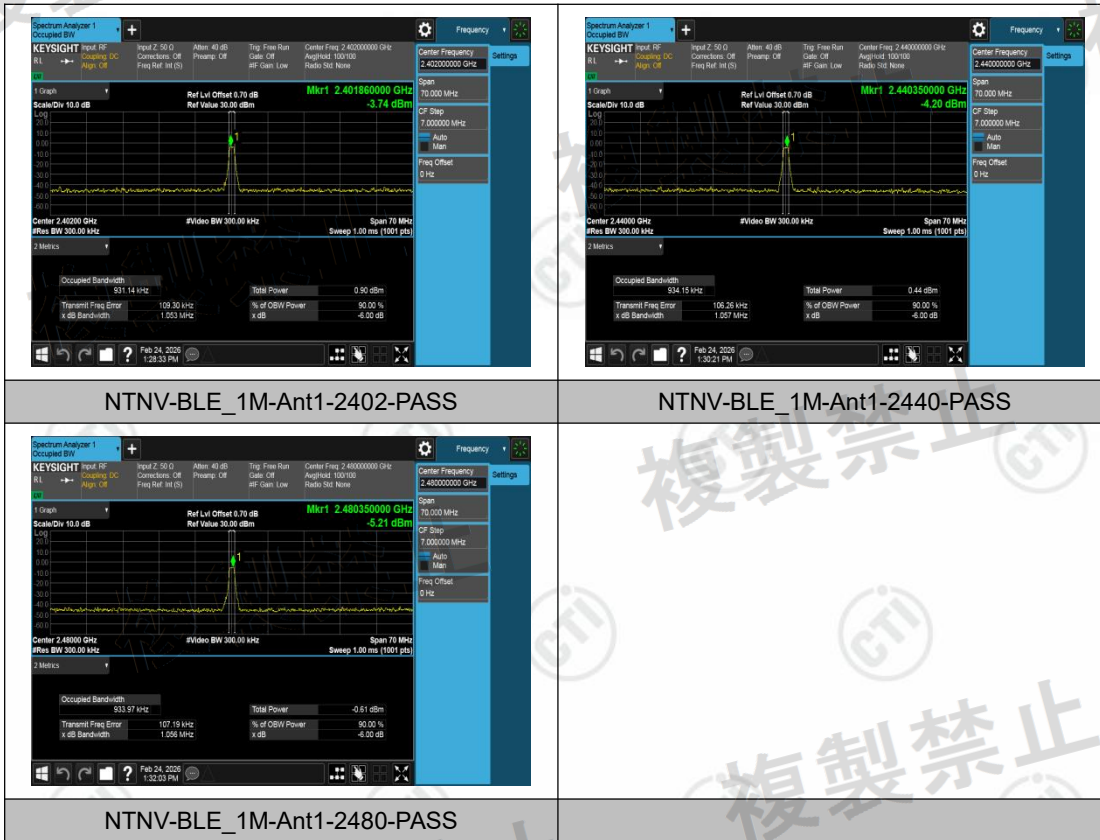


Appendix D: Spread Bandwidth

Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]
NTNV	BLE_1M	Ant1	2402	0.931
NTNV	BLE_1M	Ant1	2440	0.934
NTNV	BLE_1M	Ant1	2480	0.934

Test Graphs

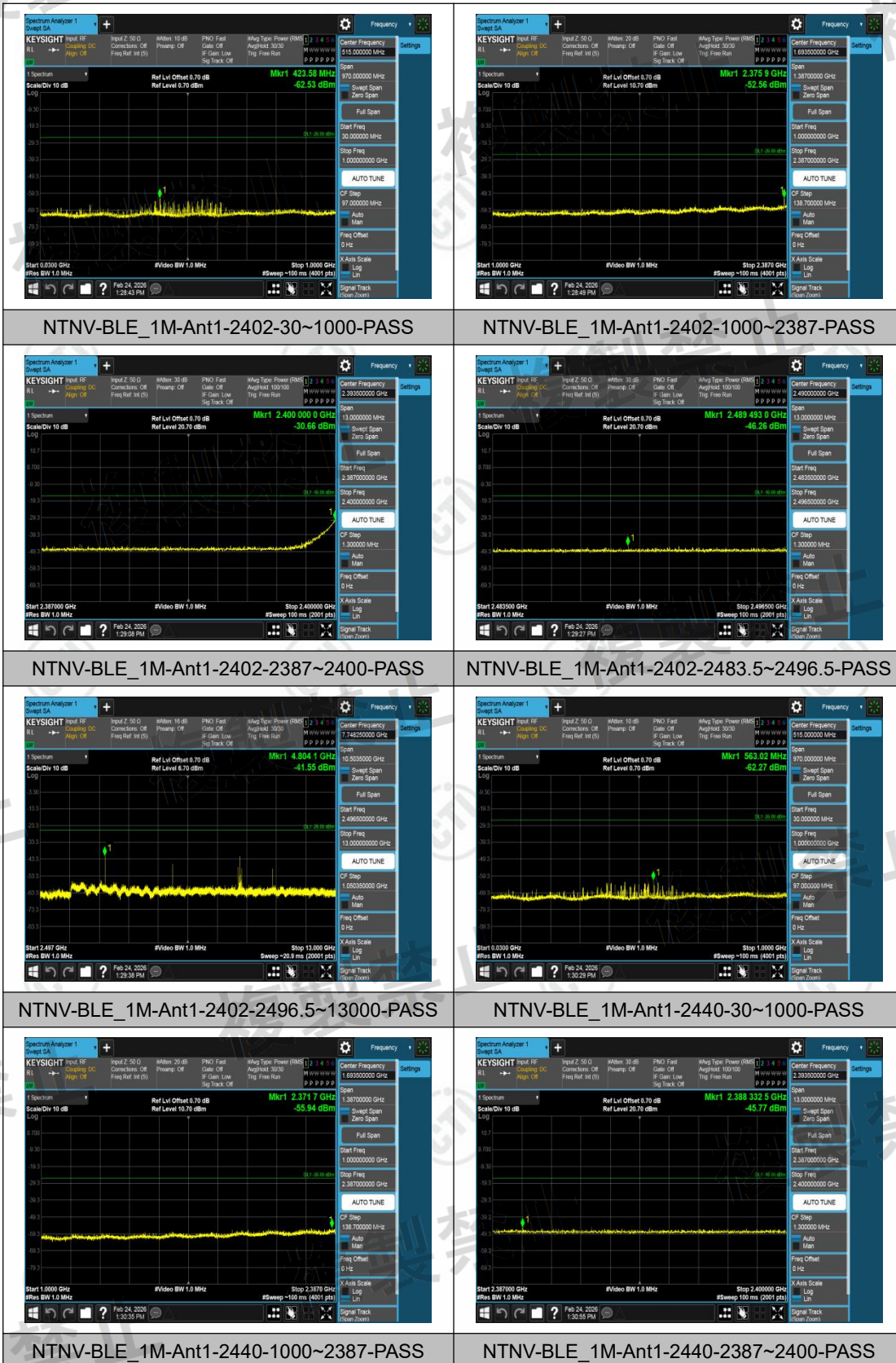


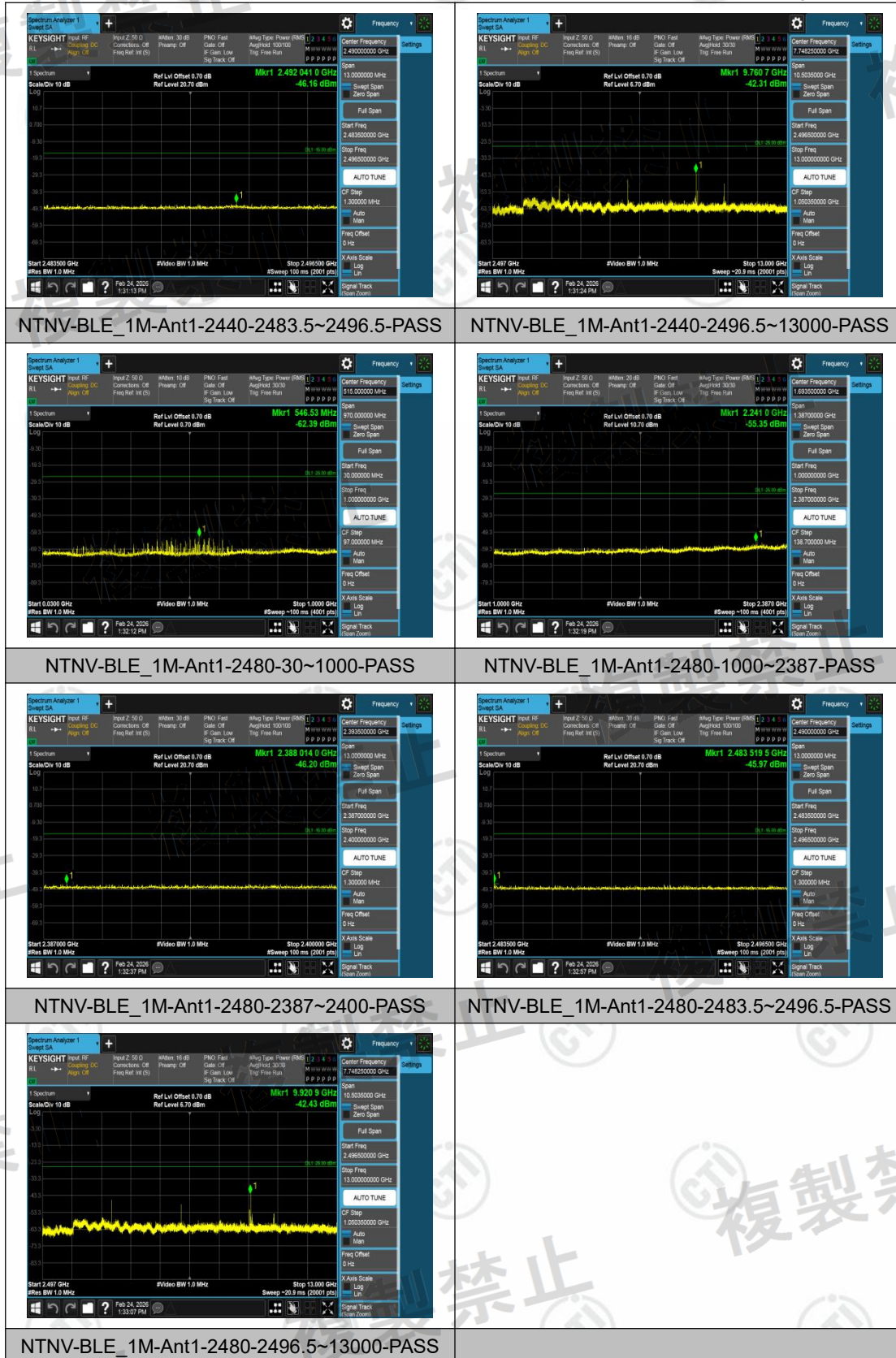
Appendix E: Unwanted Emission Strength

Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Freq.Range [MHz]	ResultFreq (MHz)	Result [dBm/MHz]	Result [μW/MHz]	Limit [μW/MHz]	Verdict
NTNV	BLE_1M	Ant1	2402	30~1000	423.58	-62.53	0.00056	≤2.5	PASS
NTNV	BLE_1M	Ant1	2402	1000~2387	2375.90	-52.56	0.00555	≤2.5	PASS
NTNV	BLE_1M	Ant1	2402	2387~2400	2400.00	-30.66	0.85901	≤25	PASS
NTNV	BLE_1M	Ant1	2402	2483.5~2496.5	2489.49	-46.26	0.02366	≤25	PASS
NTNV	BLE_1M	Ant1	2402	2496.5~13000	4804.12	-41.55	0.06998	≤2.5	PASS
NTNV	BLE_1M	Ant1	2440	30~1000	563.02	-62.27	0.00059	≤2.5	PASS
NTNV	BLE_1M	Ant1	2440	1000~2387	2371.74	-55.94	0.00255	≤2.5	PASS
NTNV	BLE_1M	Ant1	2440	2387~2400	2388.33	-45.77	0.02649	≤25	PASS
NTNV	BLE_1M	Ant1	2440	2483.5~2496.5	2492.04	-46.16	0.02421	≤25	PASS
NTNV	BLE_1M	Ant1	2440	2496.5~13000	9760.72	-42.31	0.05875	≤2.5	PASS
NTNV	BLE_1M	Ant1	2480	30~1000	546.53	-62.39	0.00058	≤2.5	PASS
NTNV	BLE_1M	Ant1	2480	1000~2387	2241.02	-55.35	0.00292	≤2.5	PASS
NTNV	BLE_1M	Ant1	2480	2387~2400	2388.01	-46.20	0.02399	≤25	PASS
NTNV	BLE_1M	Ant1	2480	2483.5~2496.5	2483.52	-45.97	0.02529	≤25	PASS
NTNV	BLE_1M	Ant1	2480	2496.5~13000	9920.90	-42.43	0.05715	≤2.5	PASS

Test Graphs



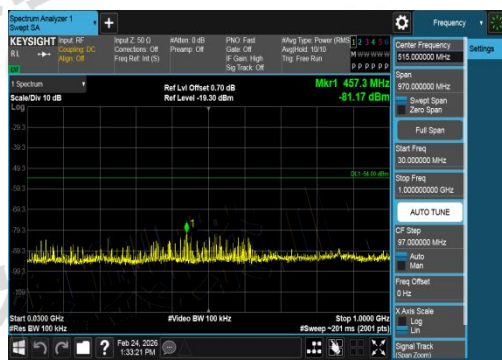


Appendix F: Secondary Radiated Emission Strength

Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Freq.Range [MHz]	ResultFrequency (MHz)	Result [dBm]	Result [nW]	Limit [nW]	Verdict
NTNV	BLE_1M	Ant1	2402	30~1000	457.29	-81.17	0.00764	≤4	PASS
NTNV	BLE_1M	Ant1	2402	1000~12500	2440.95	-68.14	0.15346	≤20	PASS
NTNV	BLE_1M	Ant1	2440	30~1000	368.53	-82.40	0.00575	≤4	PASS
NTNV	BLE_1M	Ant1	2440	1000~12500	4007.83	-72.37	0.05794	≤20	PASS
NTNV	BLE_1M	Ant1	2480	30~1000	456.32	-81.00	0.00794	≤4	PASS
NTNV	BLE_1M	Ant1	2480	1000~12500	4669.65	-72.14	0.06109	≤20	PASS

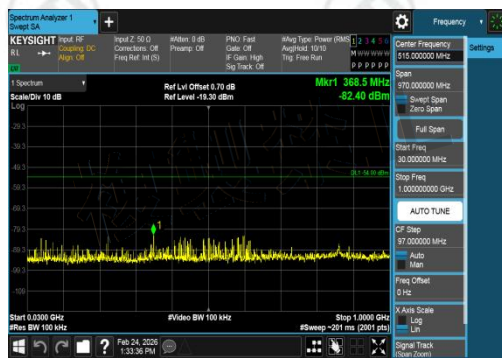
Test Graphs



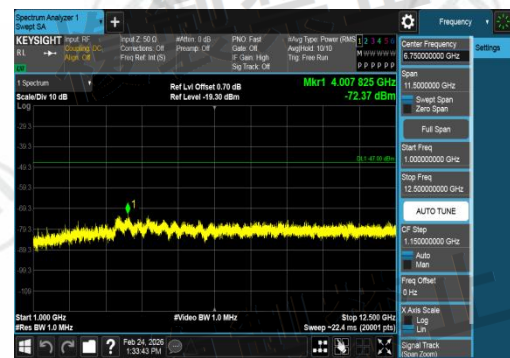
NTVN-BLE_1M-Ant1-2402-30~1000-PASS



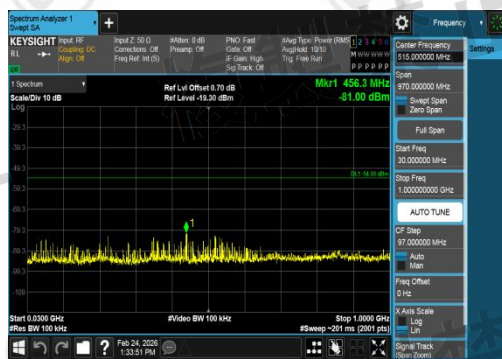
NTVN-BLE_1M-Ant1-2402-1000~12500-PASS



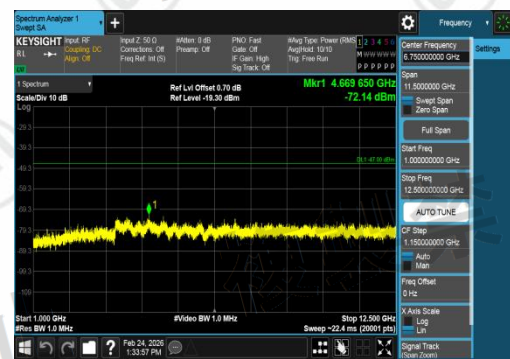
NTVN-BLE_1M-Ant1-2440-30~1000-PASS



NTVN-BLE_1M-Ant1-2440-1000~12500-PASS



NTVN-BLE_1M-Ant1-2480-30~1000-PASS



NTVN-BLE_1M-Ant1-2480-1000~12500-PASS

*** End of Report ***