

Appendix Test Data for BLE (Conducted Measurement)

Product Name: Bluetooth keyboard

Trade Mark: N/A

Test Model: BC8663

FCC ID: 2A5H6-BC8663

Environmental Conditions

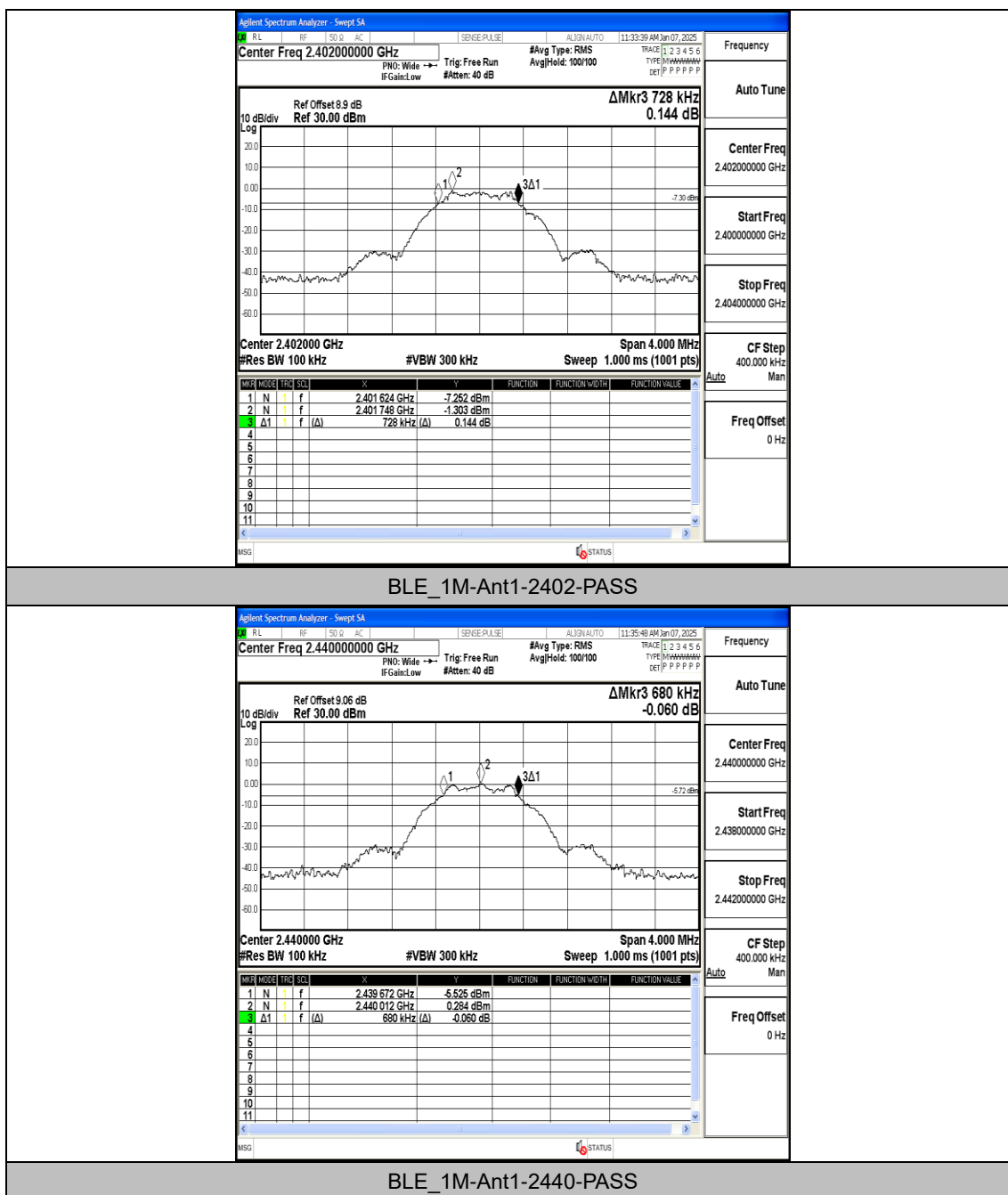
Temperature:	23.5℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Hugo Chen
NOTE	N/A

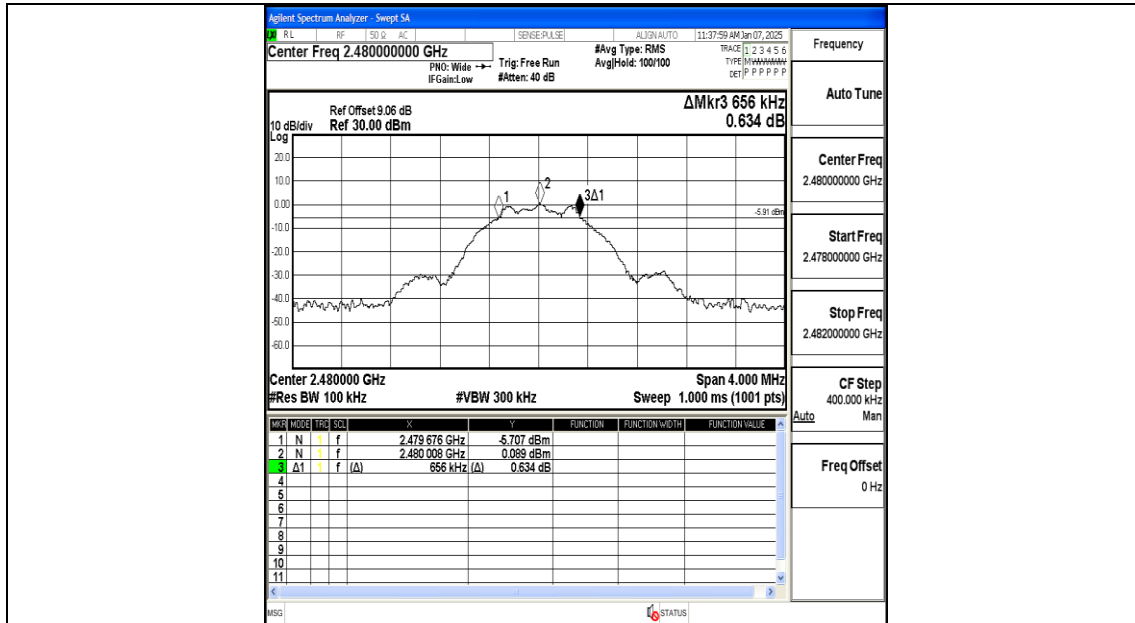
Appendix A: DTS Bandwidth

Test Result

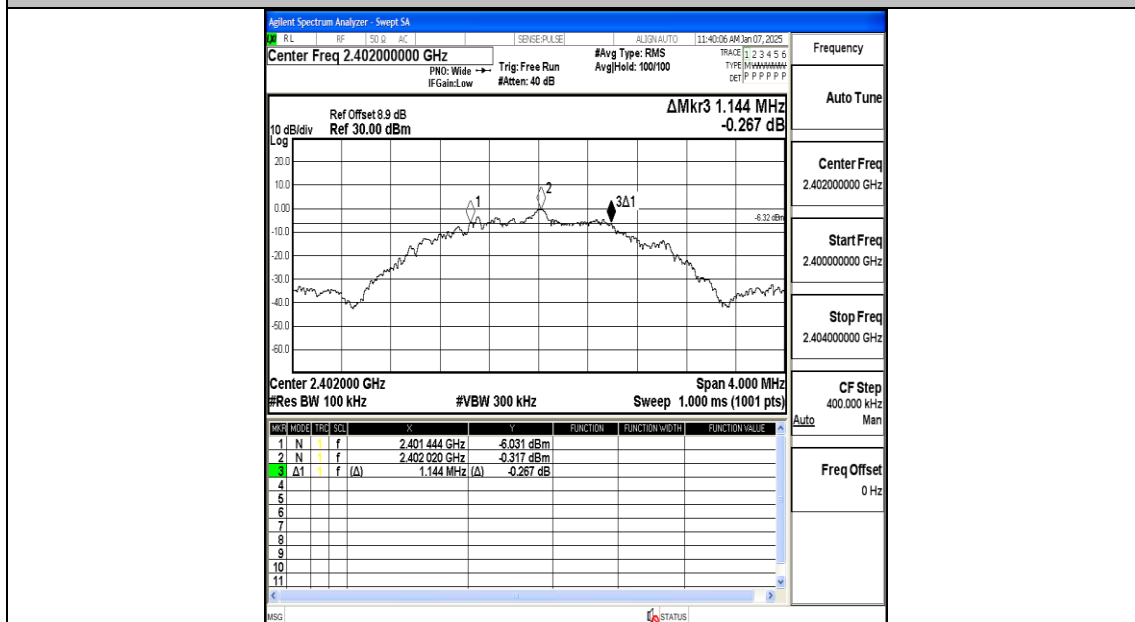
Test Mode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
BLE_1M	Ant1	2402	0.728	2401.624	2402.352	0.5	PASS
BLE_1M	Ant1	2440	0.680	2439.672	2440.352	0.5	PASS
BLE_1M	Ant1	2480	0.656	2479.676	2480.332	0.5	PASS
BLE_2M	Ant1	2402	1.144	2401.444	2402.588	0.5	PASS
BLE_2M	Ant1	2440	1.112	2439.456	2440.568	0.5	PASS
BLE_2M	Ant1	2480	1.068	2479.496	2480.564	0.5	PASS

Test Graphs

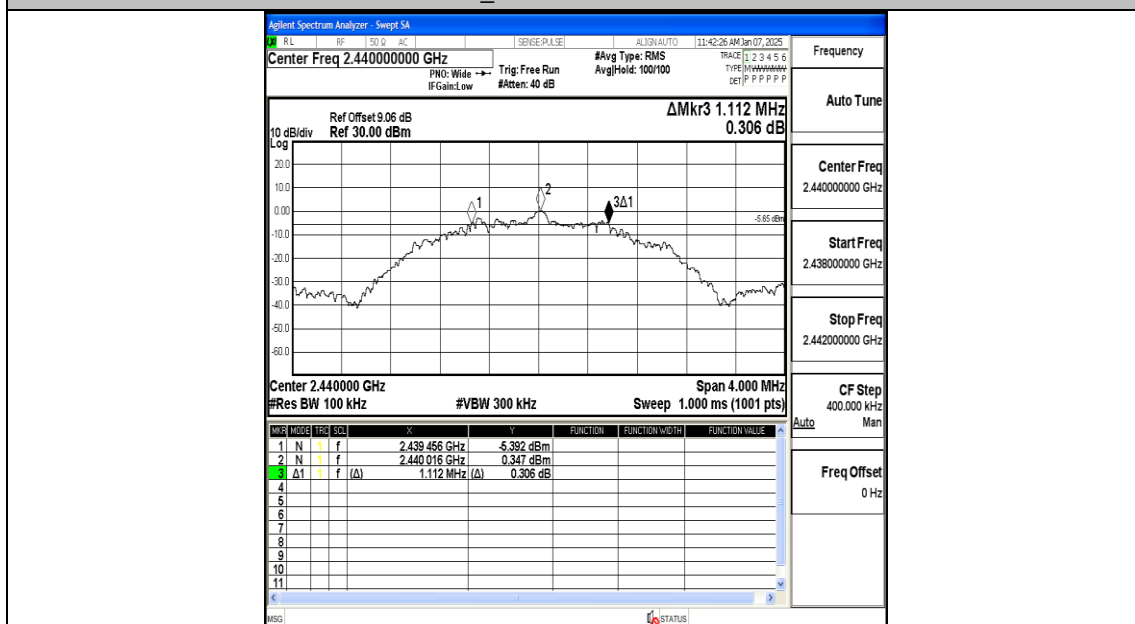




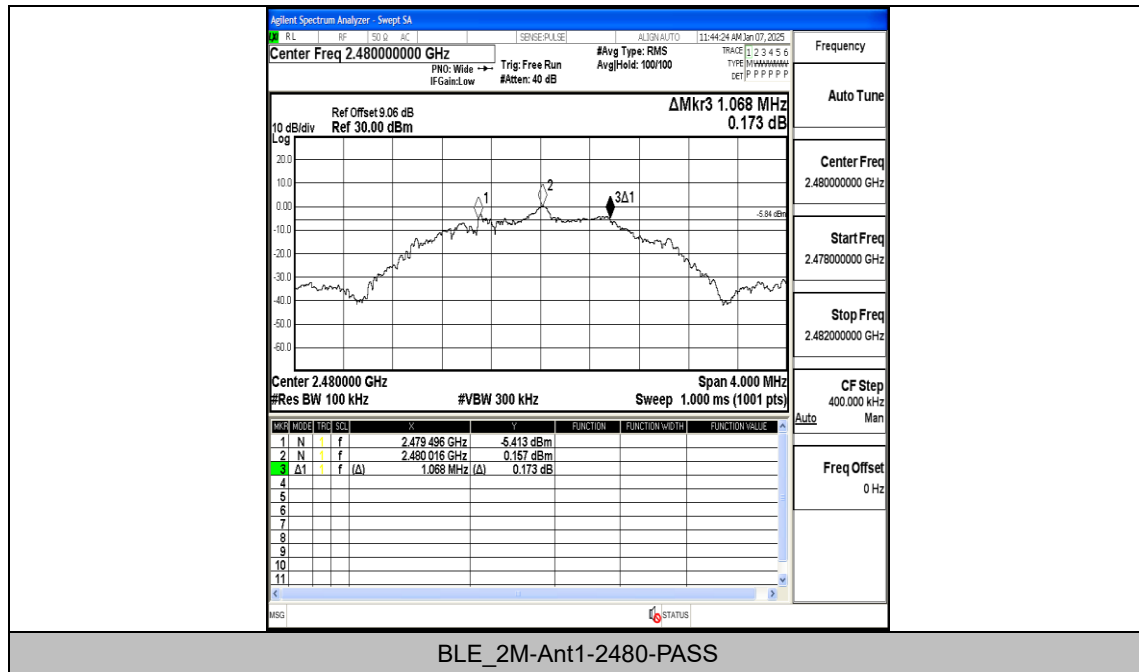
BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS

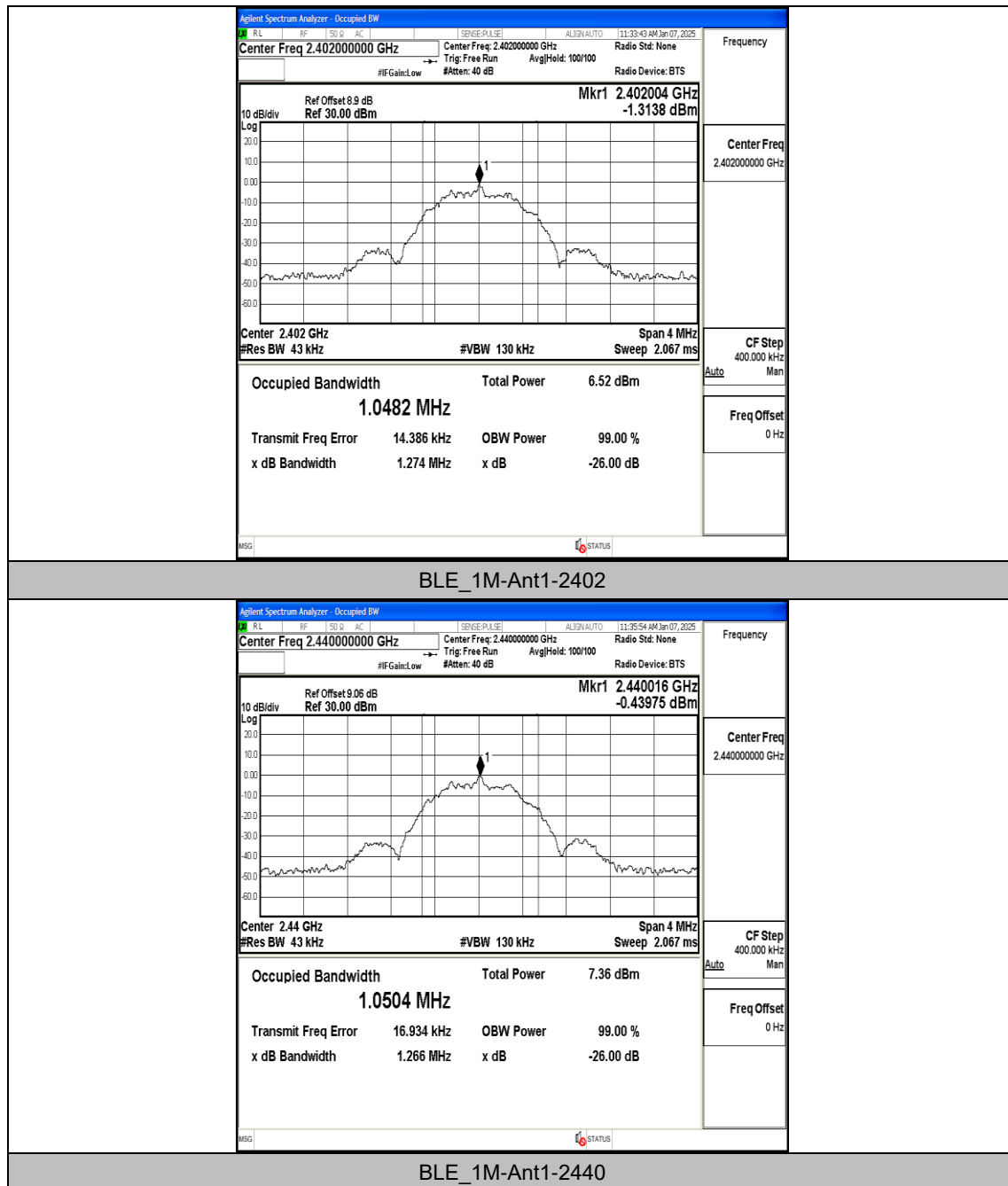


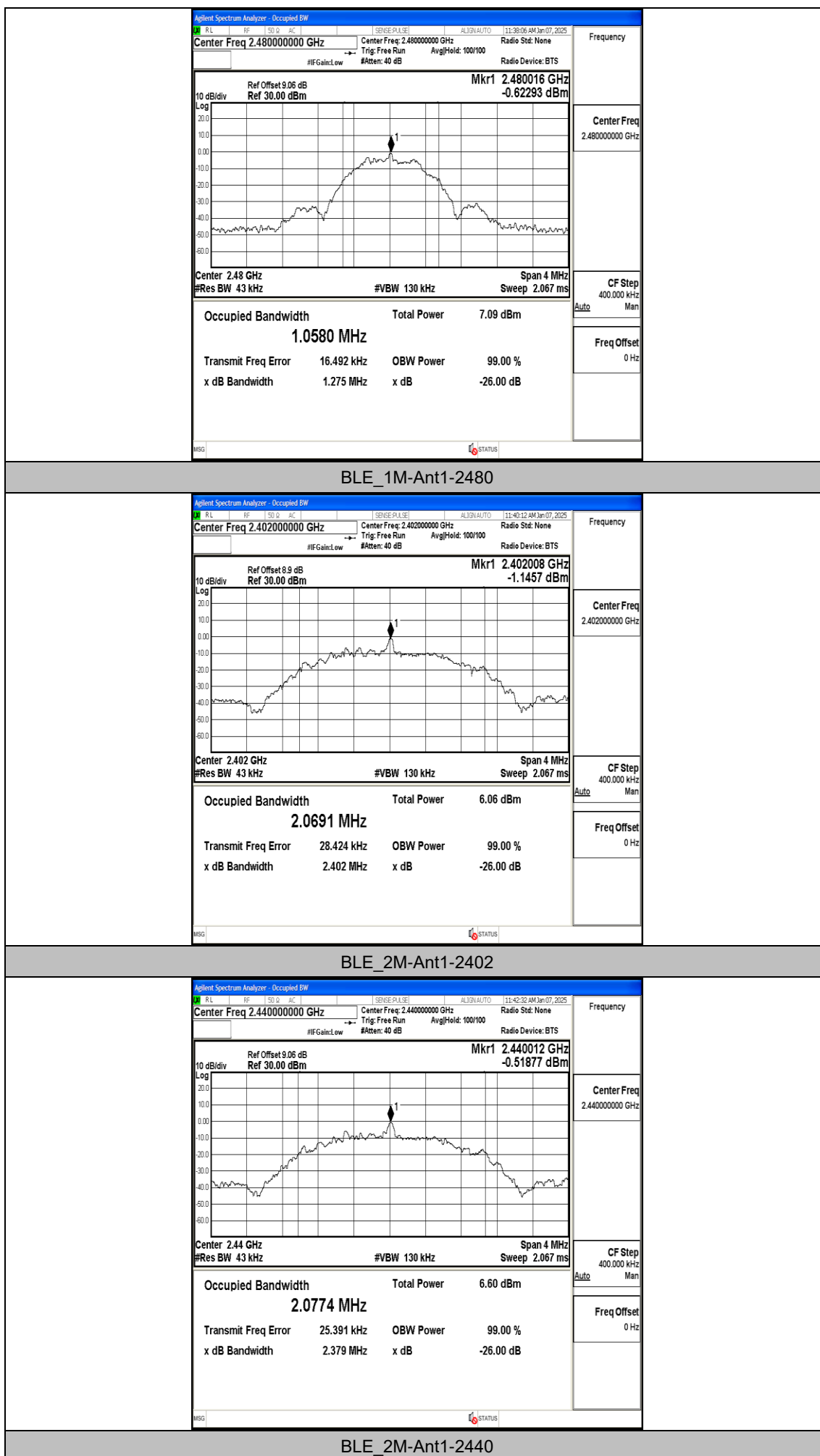
Appendix B: Occupied Channel Bandwidth

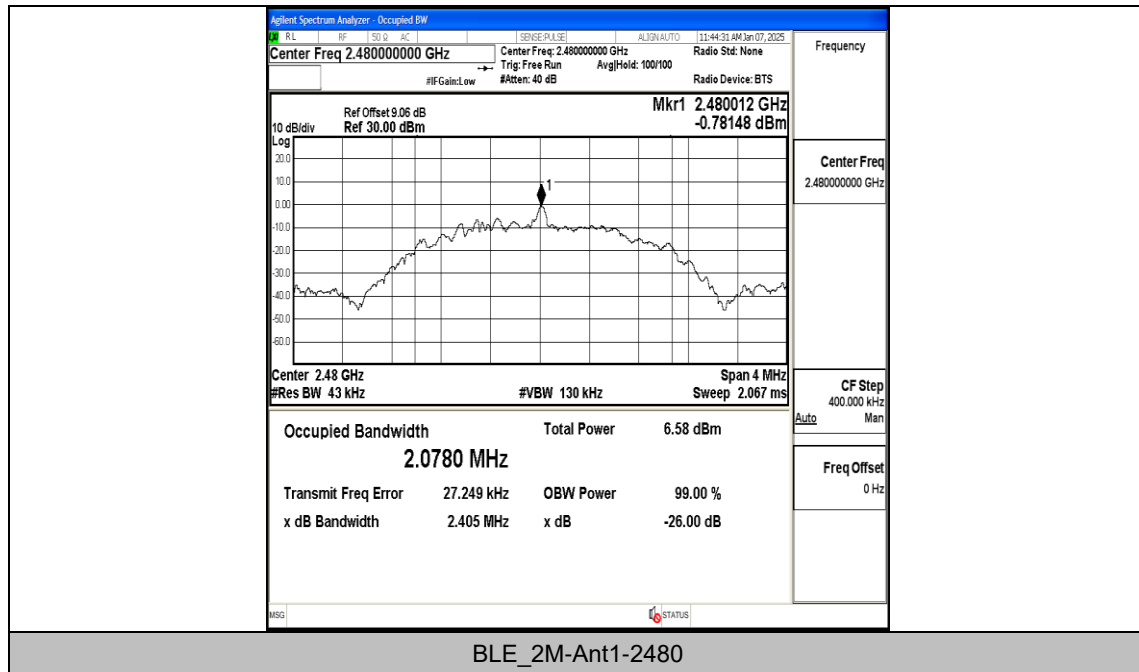
Test Result

Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
BLE_1M	Ant1	2402	1.0482	2401.4903	2402.5385	---	---
BLE_1M	Ant1	2440	1.0504	2439.4917	2440.5421	---	---
BLE_1M	Ant1	2480	1.0580	2479.4875	2480.5455	---	---
BLE_2M	Ant1	2402	2.0691	2400.9939	2403.0630	---	---
BLE_2M	Ant1	2440	2.0774	2438.9867	2441.0641	---	---
BLE_2M	Ant1	2480	2.0780	2478.9883	2481.0663	---	---

Test Graphs





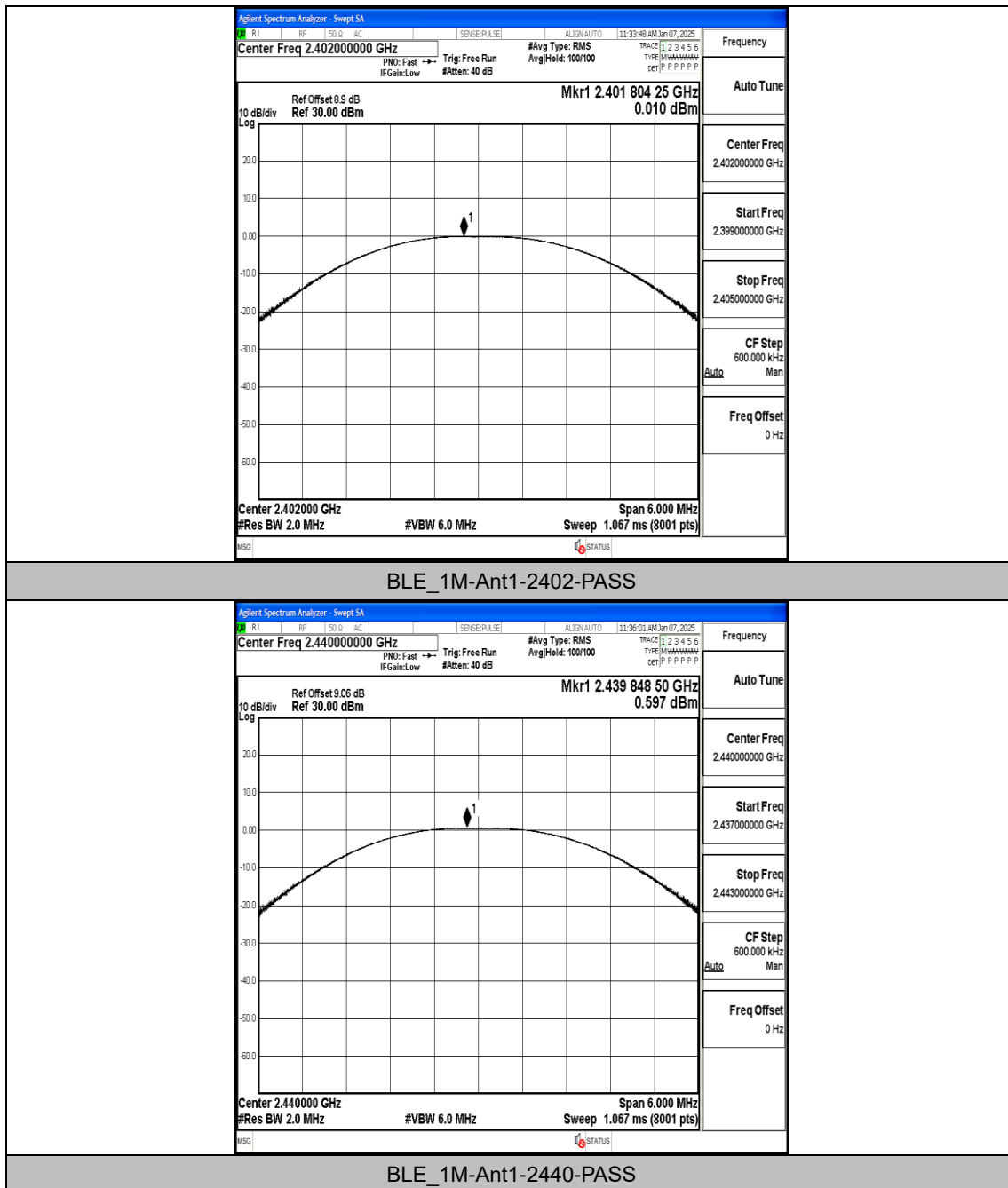


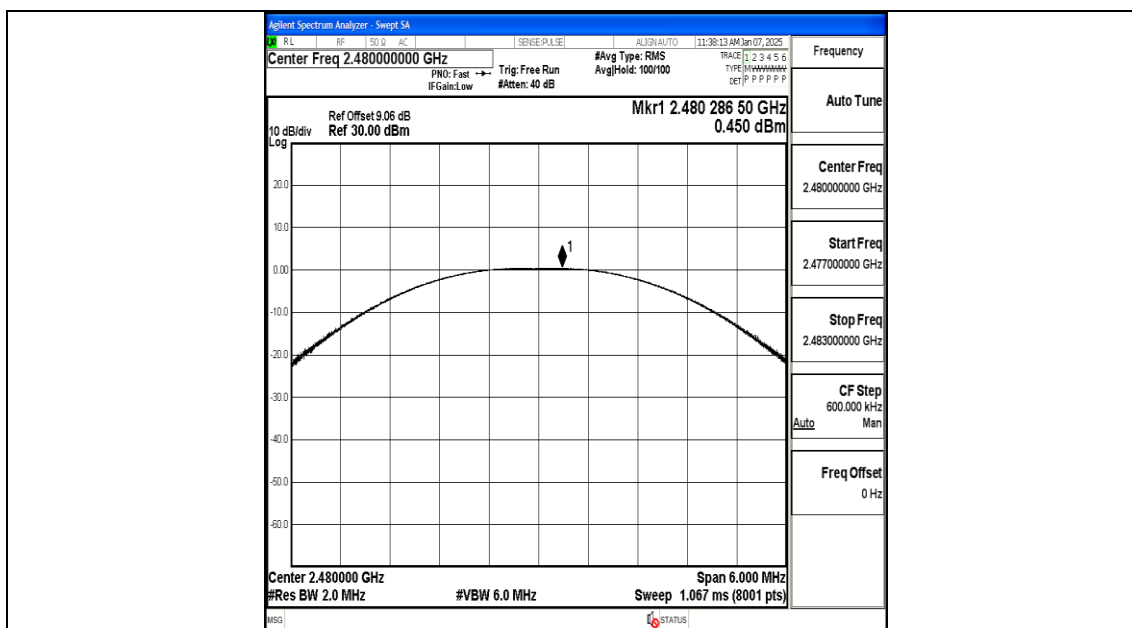
Appendix C: Maximum peak conducted output power

Test Result Peak

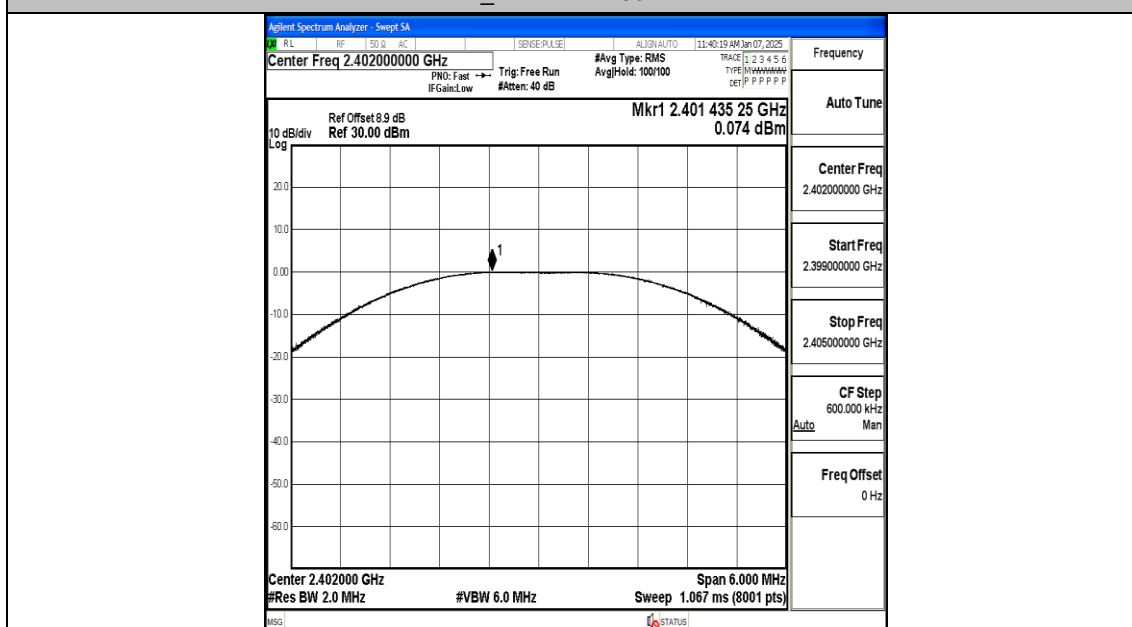
Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power [dBm]	Conducted Limit [dBm]	Verdict
BLE_1M	Ant1	2402	0.01	≤30	PASS
BLE_1M	Ant1	2440	0.60	≤30	PASS
BLE_1M	Ant1	2480	0.45	≤30	PASS
BLE_2M	Ant1	2402	0.07	≤30	PASS
BLE_2M	Ant1	2440	0.61	≤30	PASS
BLE_2M	Ant1	2480	0.47	≤30	PASS

Test Graphs Peak

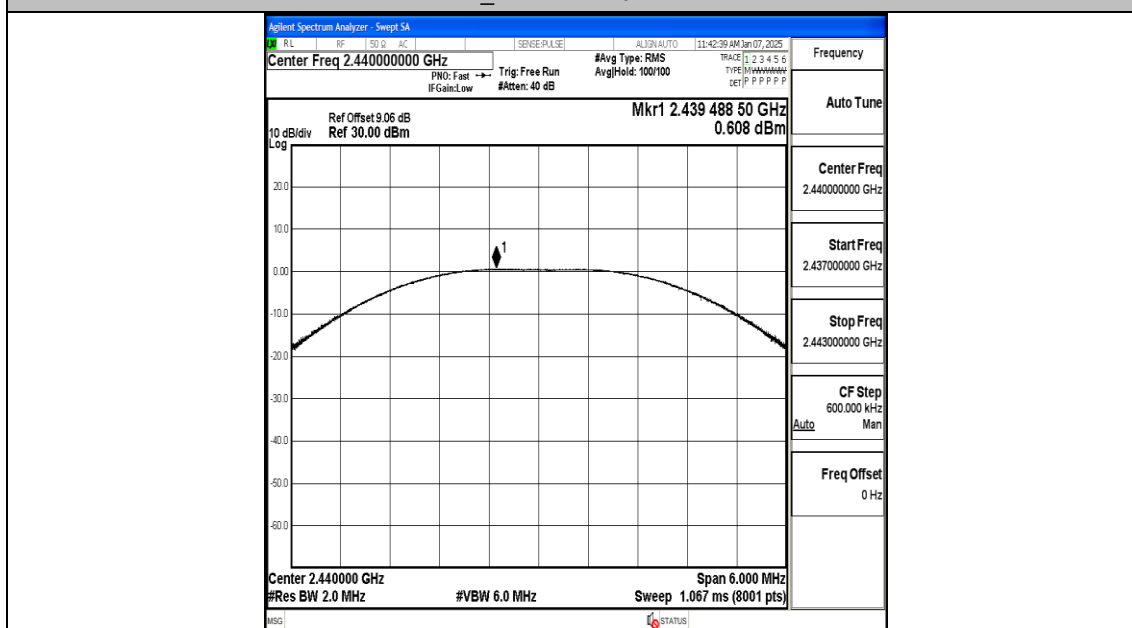




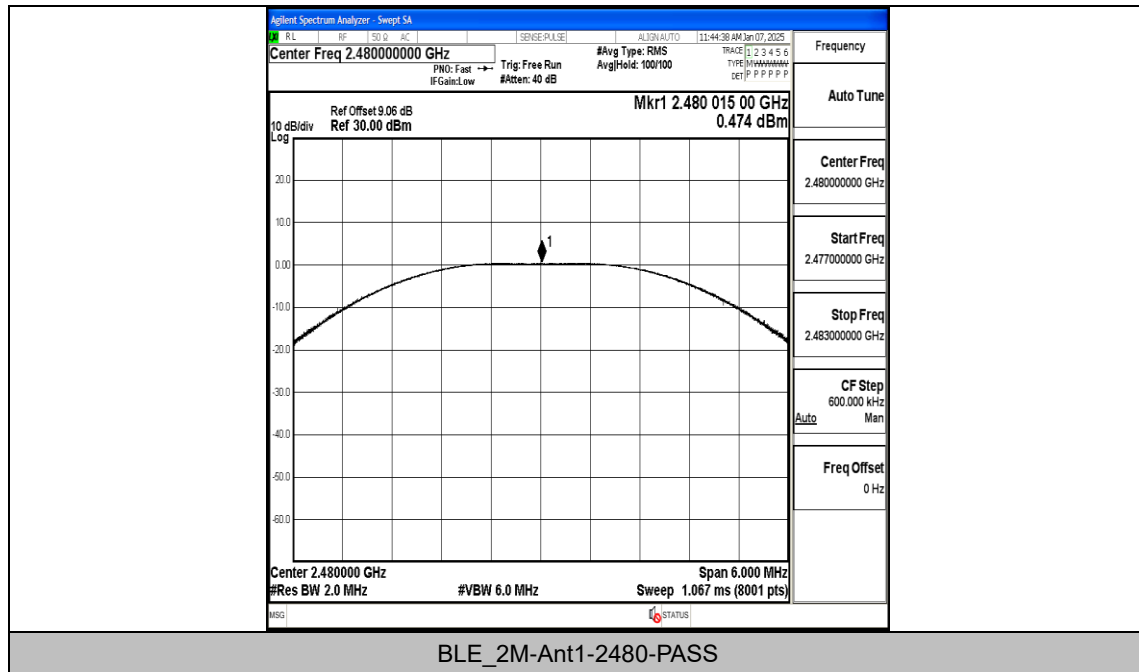
BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS

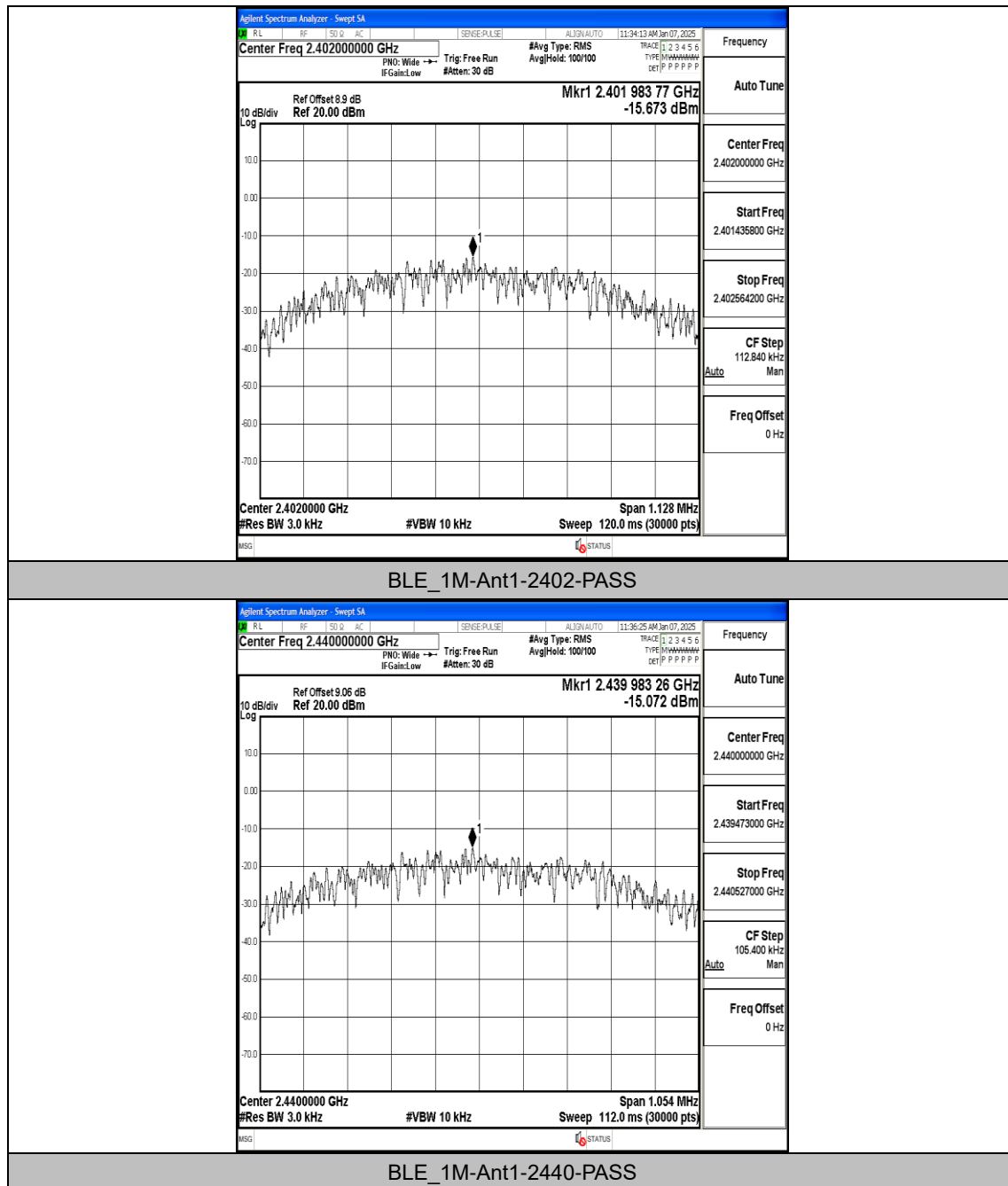


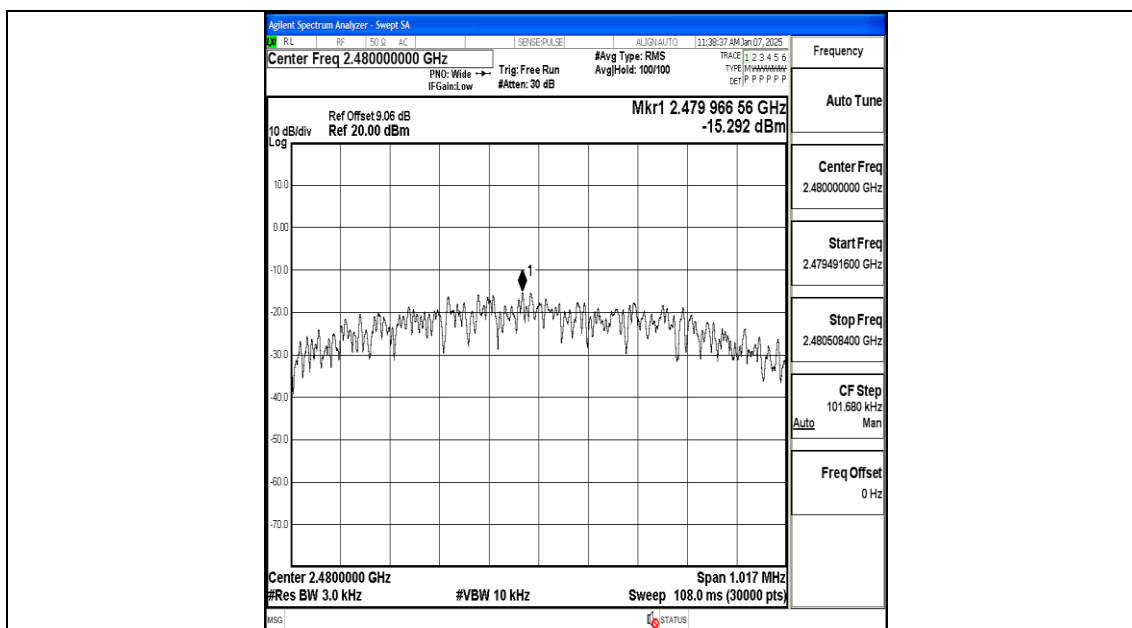
Appendix D: Maximum peak power spectral density

Test Result

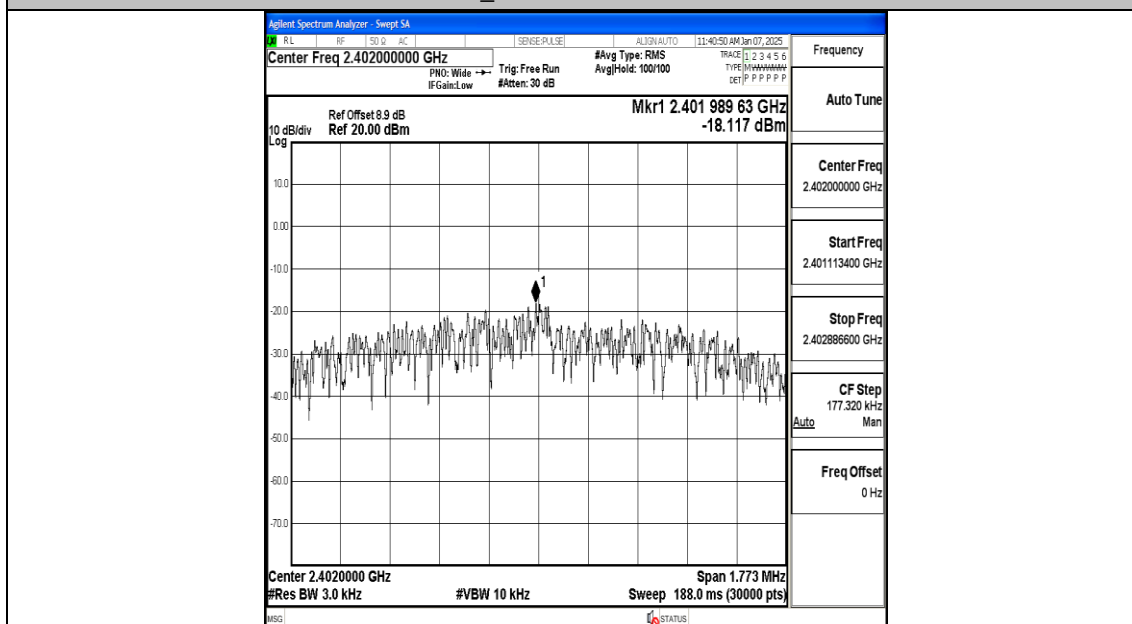
Test Mode	Antenna	Frequency [MHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.67	≤8.00	PASS
BLE_1M	Ant1	2440	-15.07	≤8.00	PASS
BLE_1M	Ant1	2480	-15.29	≤8.00	PASS
BLE_2M	Ant1	2402	-18.12	≤8.00	PASS
BLE_2M	Ant1	2440	-17.54	≤8.00	PASS
BLE_2M	Ant1	2480	-17.79	≤8.00	PASS

Test Graphs

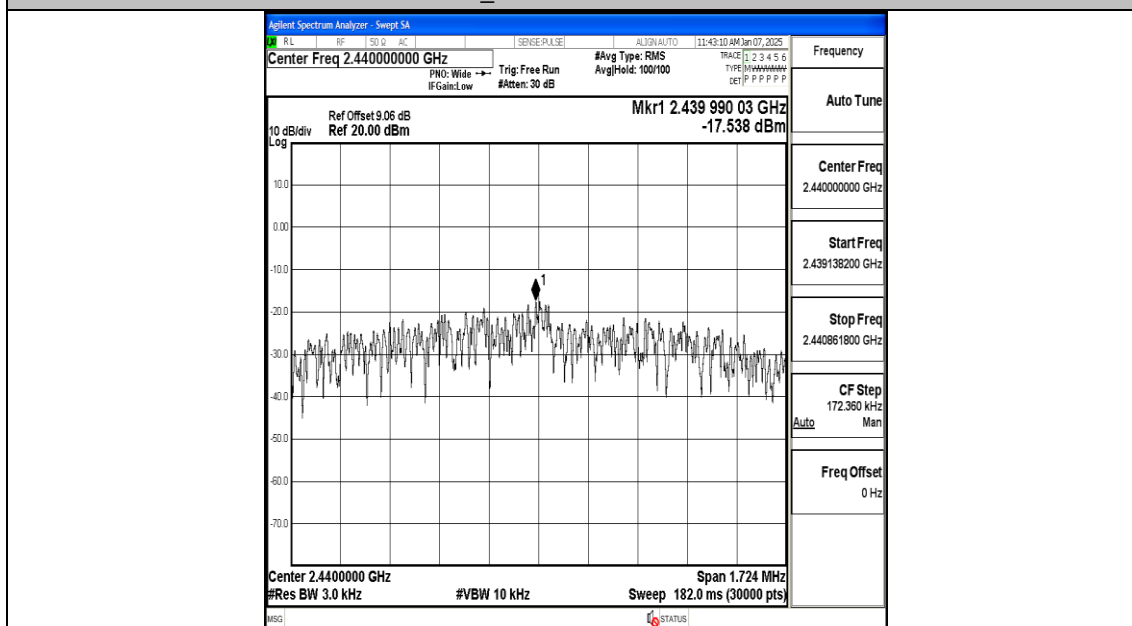




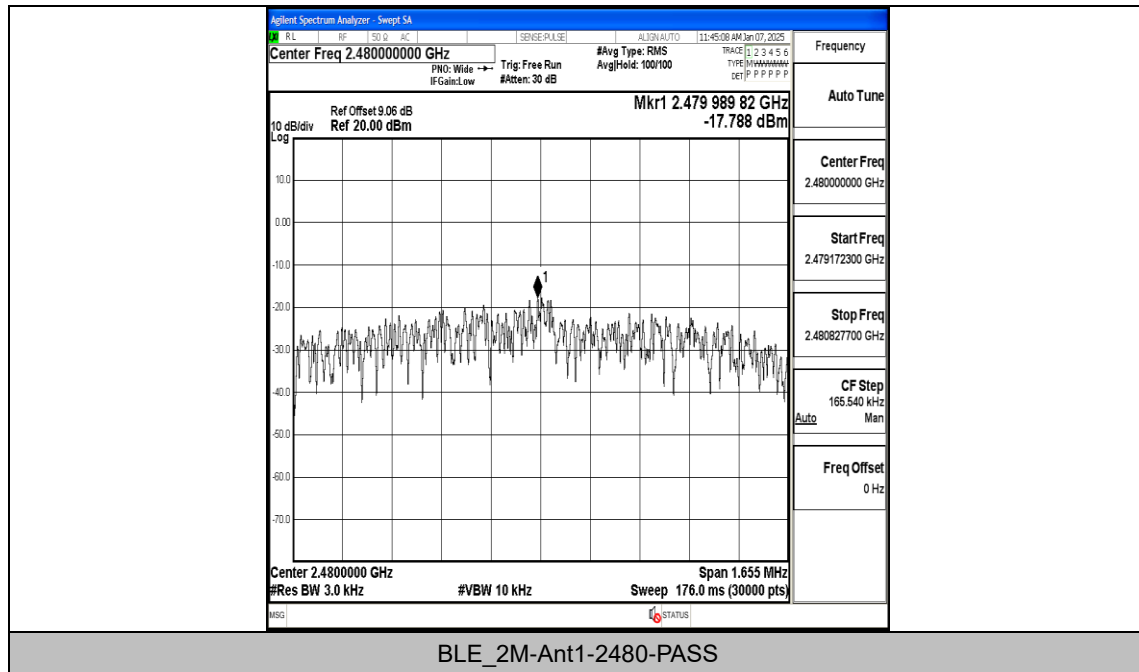
BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS

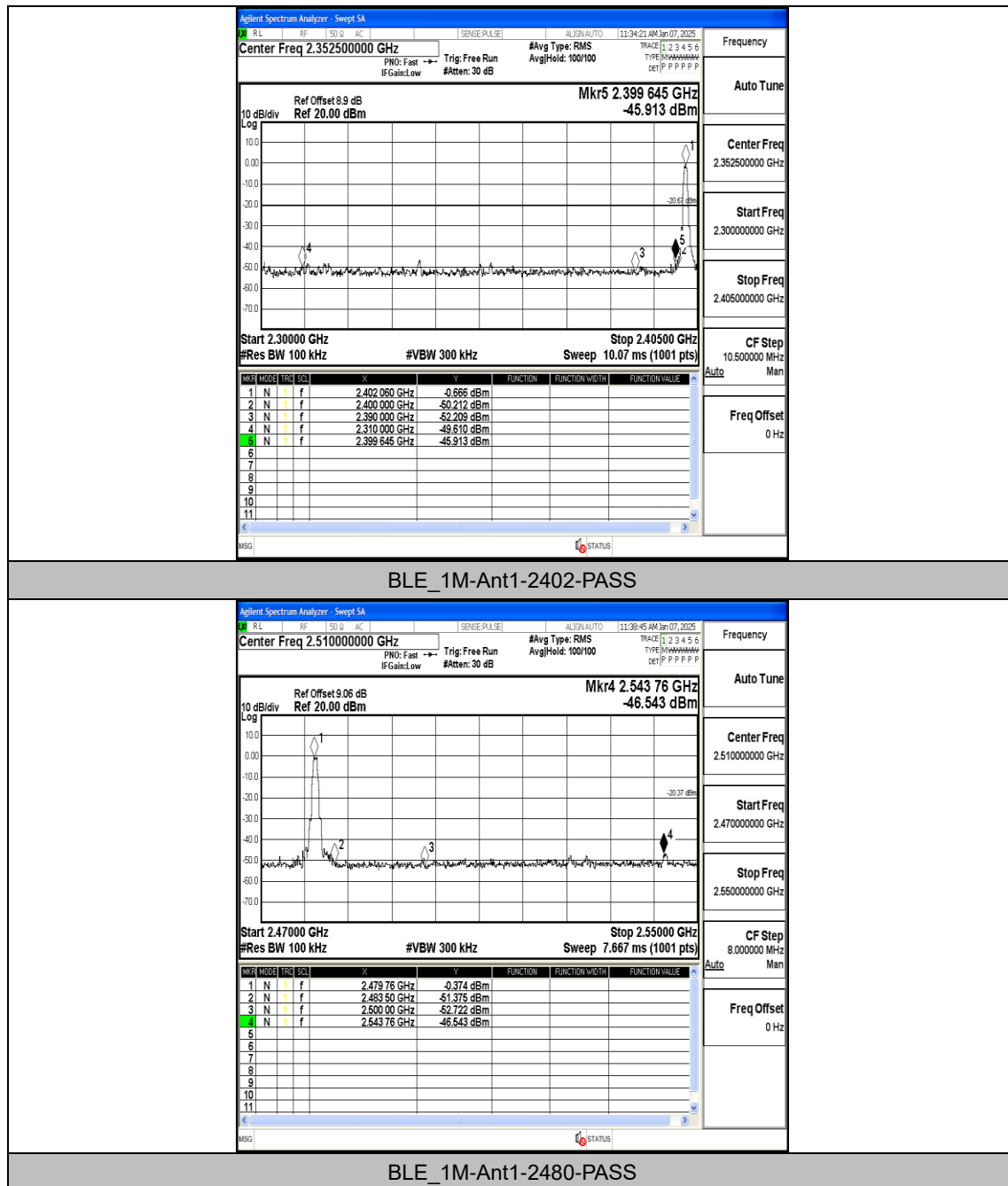


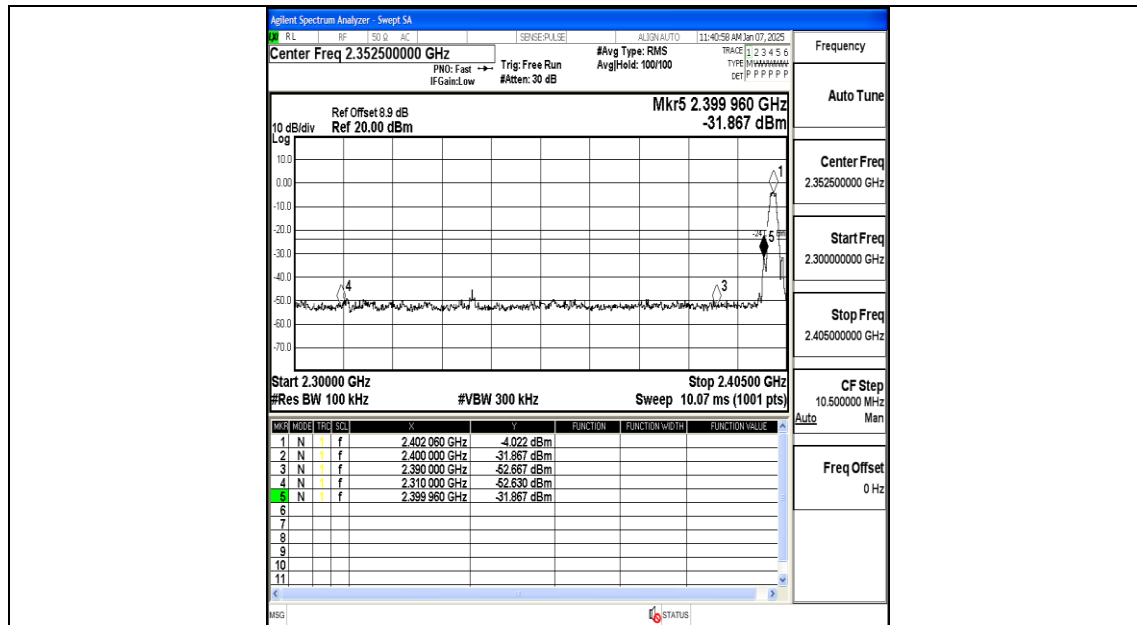
Appendix E: Band edge measurements

Test Result

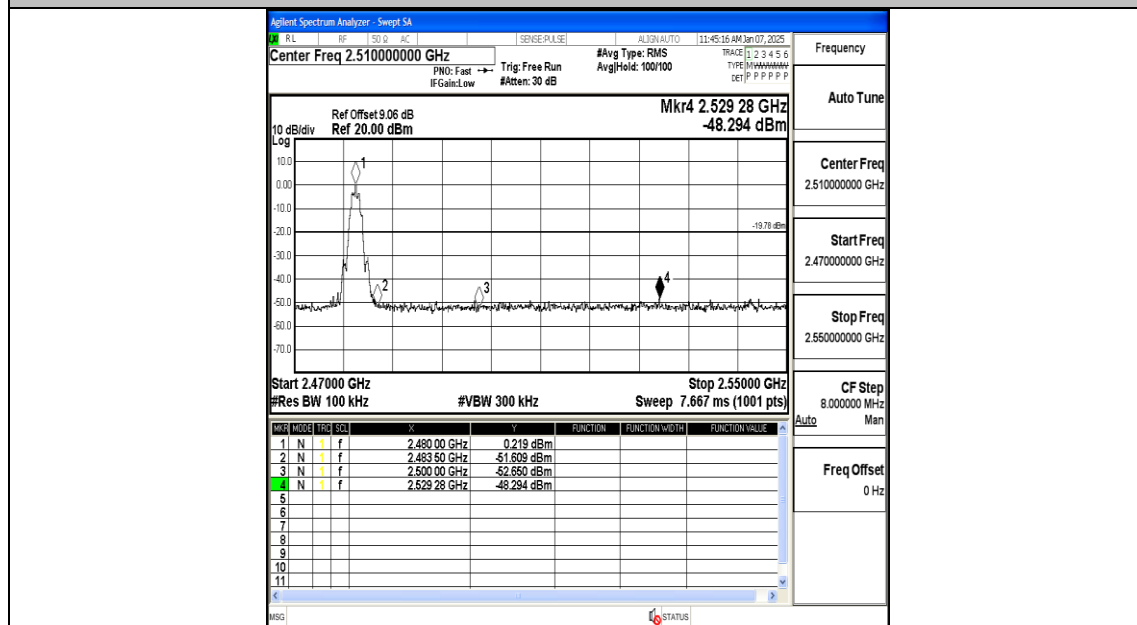
Test Mode	Antenna	Ch. Name	Frequency [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	-0.67	-45.91	≤-20.67	PASS
BLE_1M	Ant1	High	2480	-0.37	-46.54	≤-20.37	PASS
BLE_2M	Ant1	Low	2402	-4.02	-31.87	≤-24.02	PASS
BLE_2M	Ant1	High	2480	0.22	-48.29	≤-19.78	PASS

Test Graphs





BLE_2M-Ant1-2402-PASS



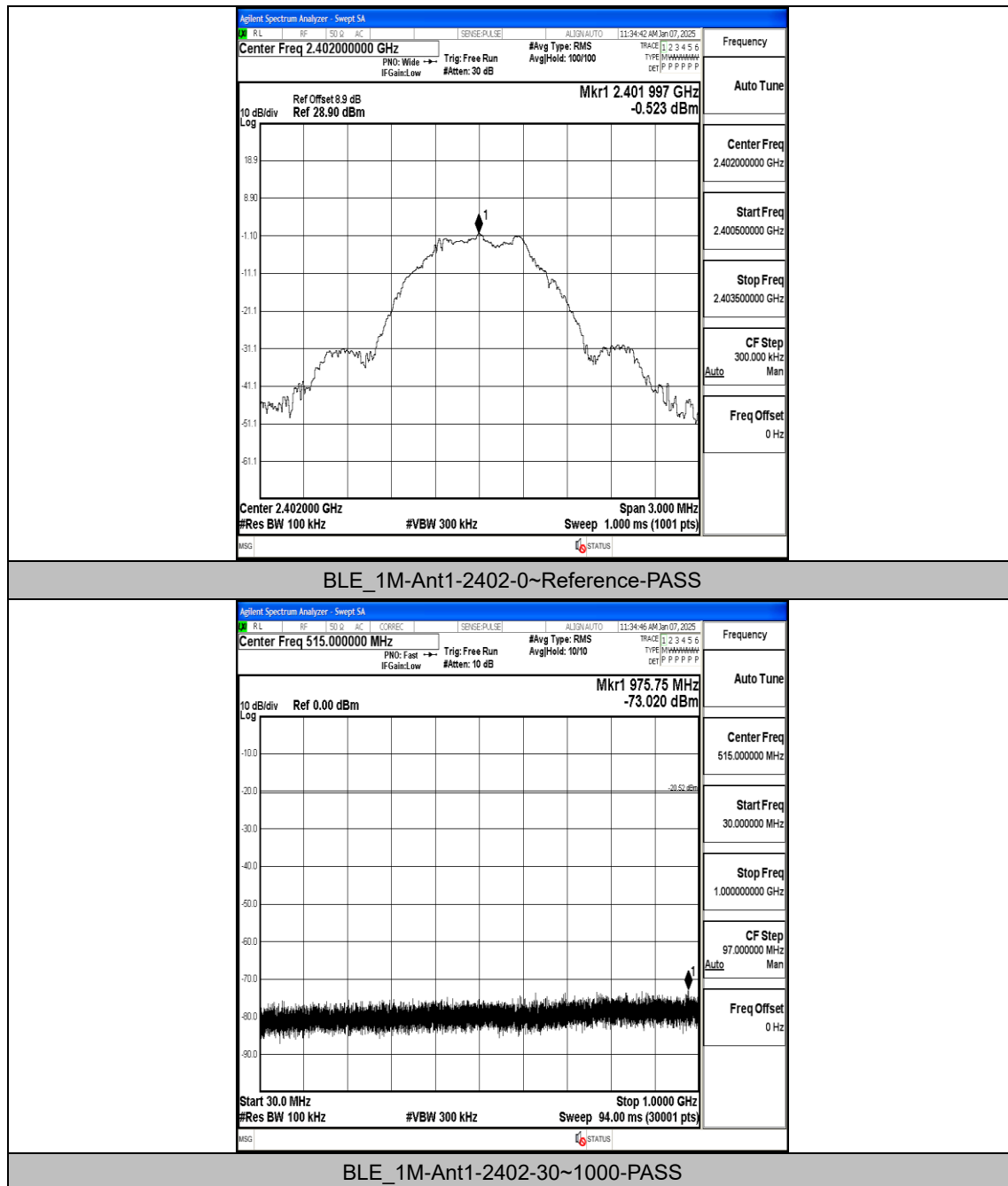
BLE_2M-Ant1-2480-PASS

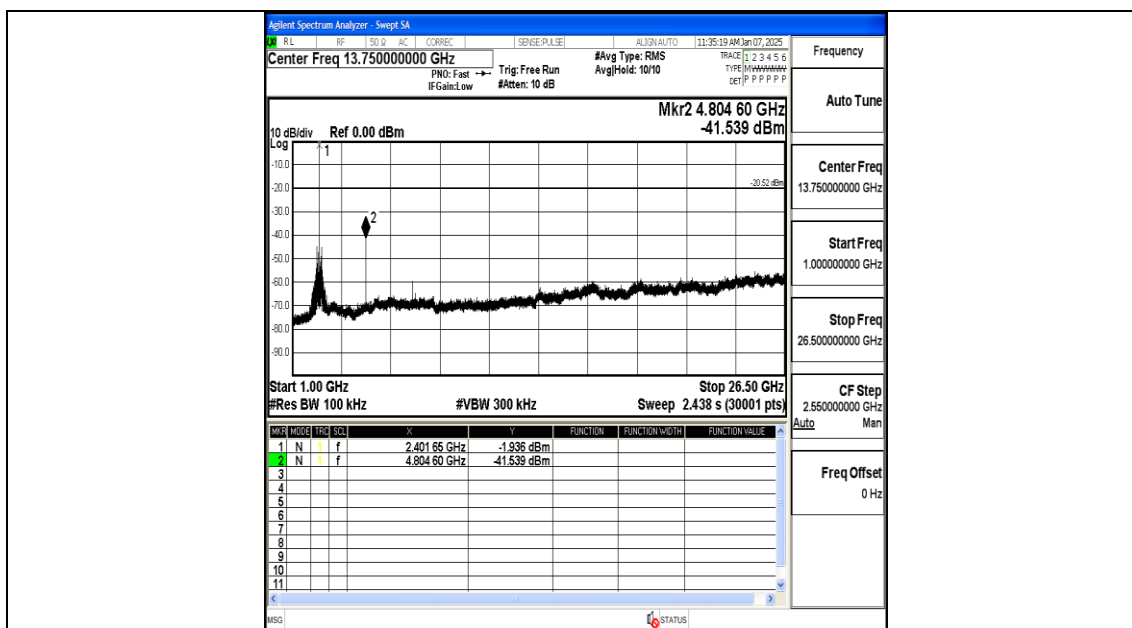
Appendix F: Conducted Spurious Emission

Test Result

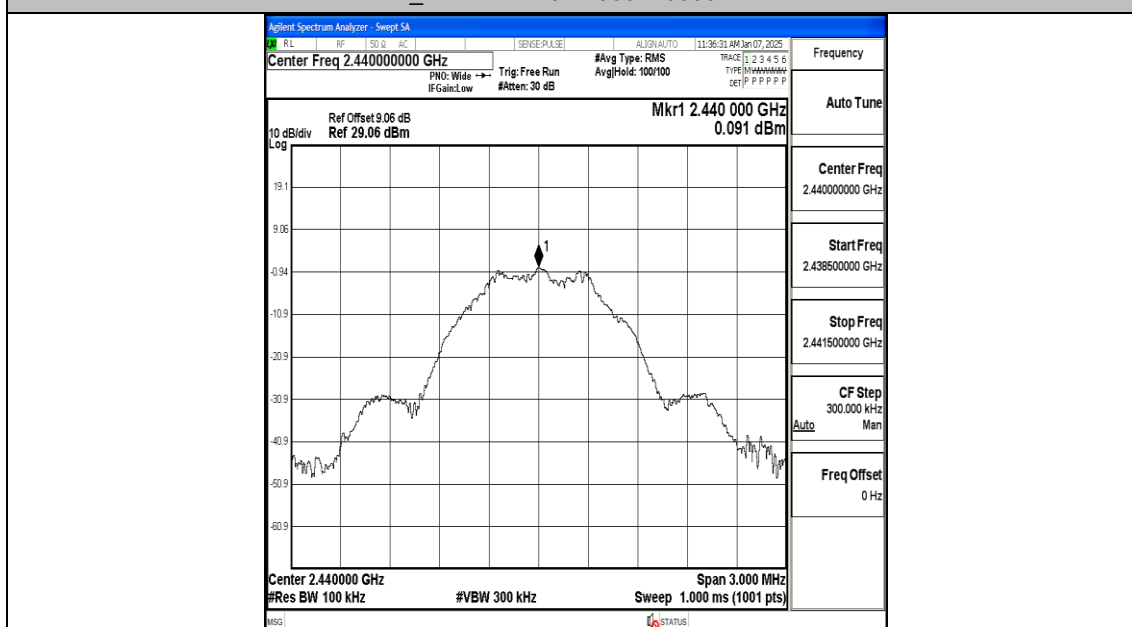
Test Mode	Antenna	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	2402	0~Reference	-0.52	-0.52	---	PASS
BLE_1M	Ant1	2402	30~1000	-0.52	-73.02	≤-20.52	PASS
BLE_1M	Ant1	2402	1000~26500	-0.52	-41.54	≤-20.52	PASS
BLE_1M	Ant1	2440	0~Reference	0.09	0.09	---	PASS
BLE_1M	Ant1	2440	30~1000	0.09	-72.95	≤-19.91	PASS
BLE_1M	Ant1	2440	1000~26500	0.09	-38.94	≤-19.91	PASS
BLE_1M	Ant1	2480	0~Reference	0.17	0.17	---	PASS
BLE_1M	Ant1	2480	30~1000	0.17	-72.35	≤-19.83	PASS
BLE_1M	Ant1	2480	1000~26500	0.17	-38.28	≤-19.83	PASS
BLE_2M	Ant1	2402	0~Reference	-1.04	-1.04	---	PASS
BLE_2M	Ant1	2402	30~1000	-1.04	-73.16	≤-21.04	PASS
BLE_2M	Ant1	2402	1000~26500	-1.04	-38.5	≤-21.04	PASS
BLE_2M	Ant1	2440	0~Reference	0.30	0.30	---	PASS
BLE_2M	Ant1	2440	30~1000	0.30	-55.36	≤-19.7	PASS
BLE_2M	Ant1	2440	1000~26500	0.30	-38.44	≤-19.7	PASS
BLE_2M	Ant1	2480	0~Reference	0.03	0.03	---	PASS
BLE_2M	Ant1	2480	30~1000	0.03	-72.43	≤-19.97	PASS
BLE_2M	Ant1	2480	1000~26500	0.03	-38.9	≤-19.97	PASS

Test Graphs

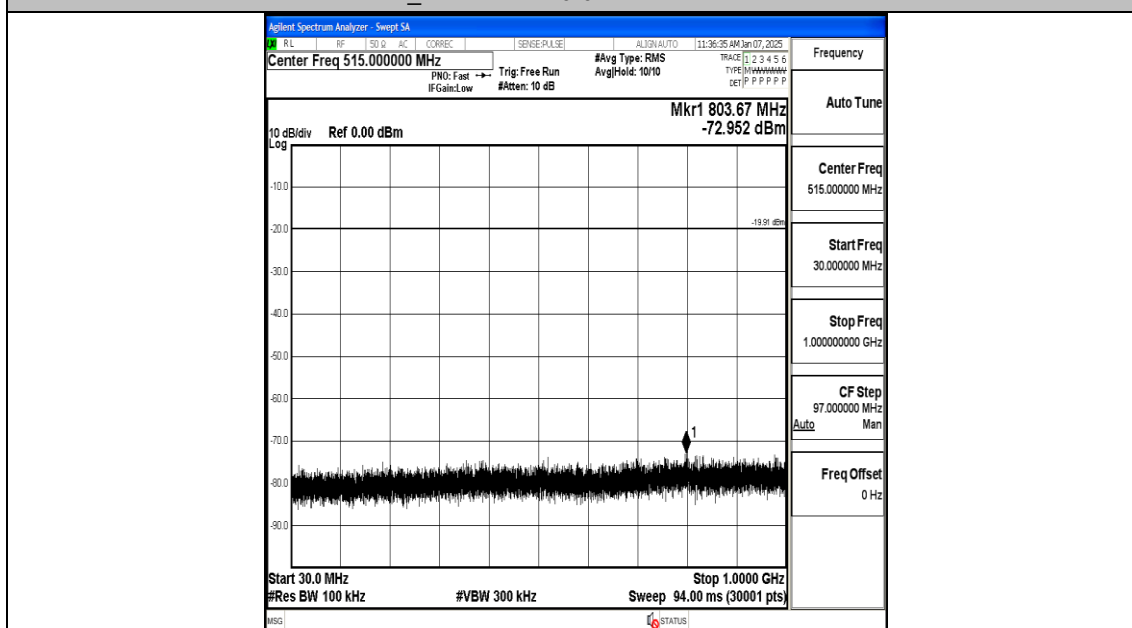




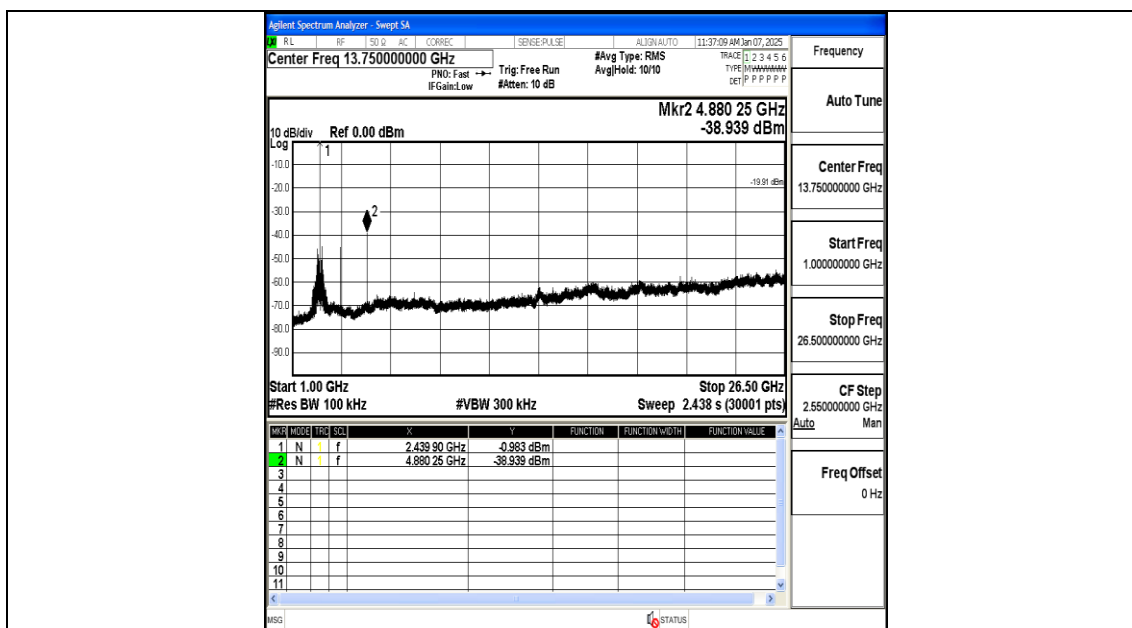
BLE_1M-Ant1-2402-1000~26500-PASS



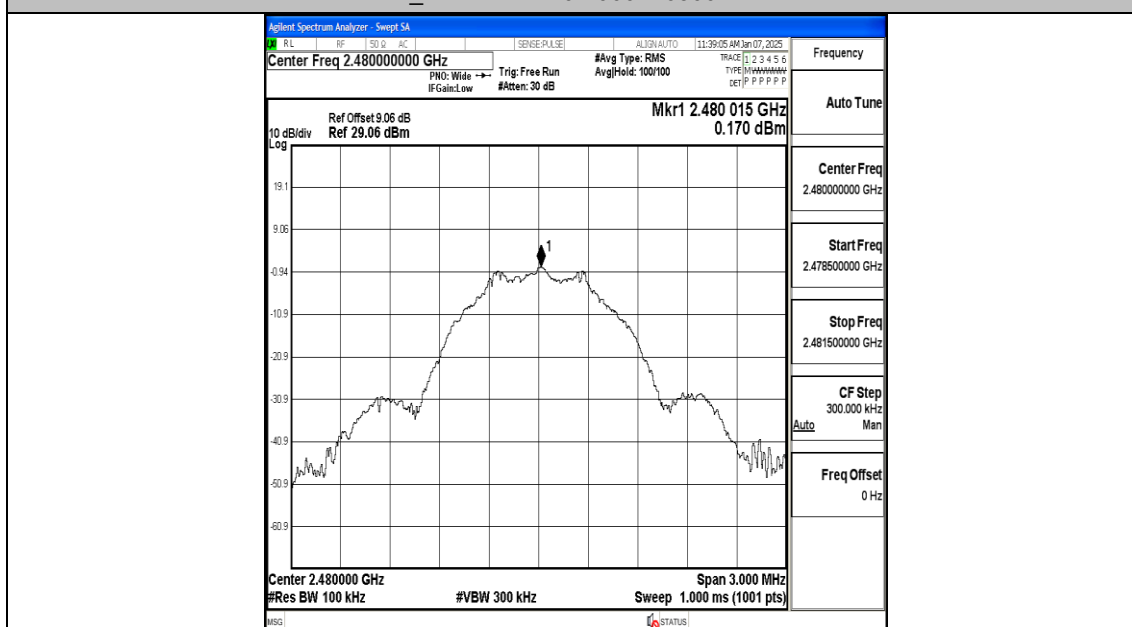
BLE_1M-Ant1-2440-0~Reference-PASS



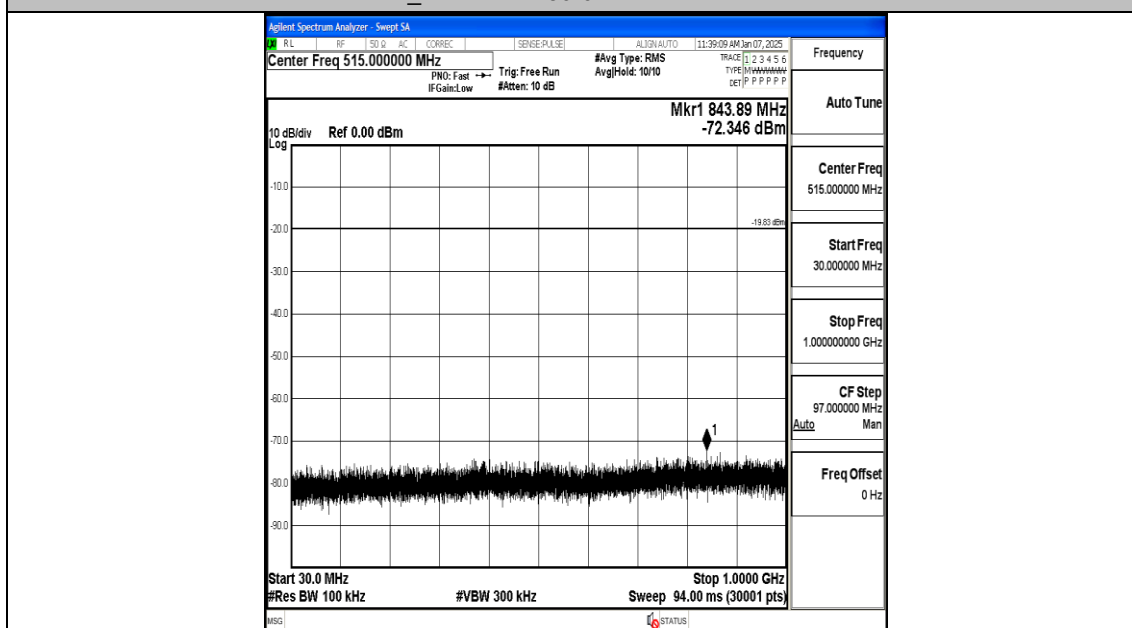
BLE_1M-Ant1-2440-30~1000-PASS



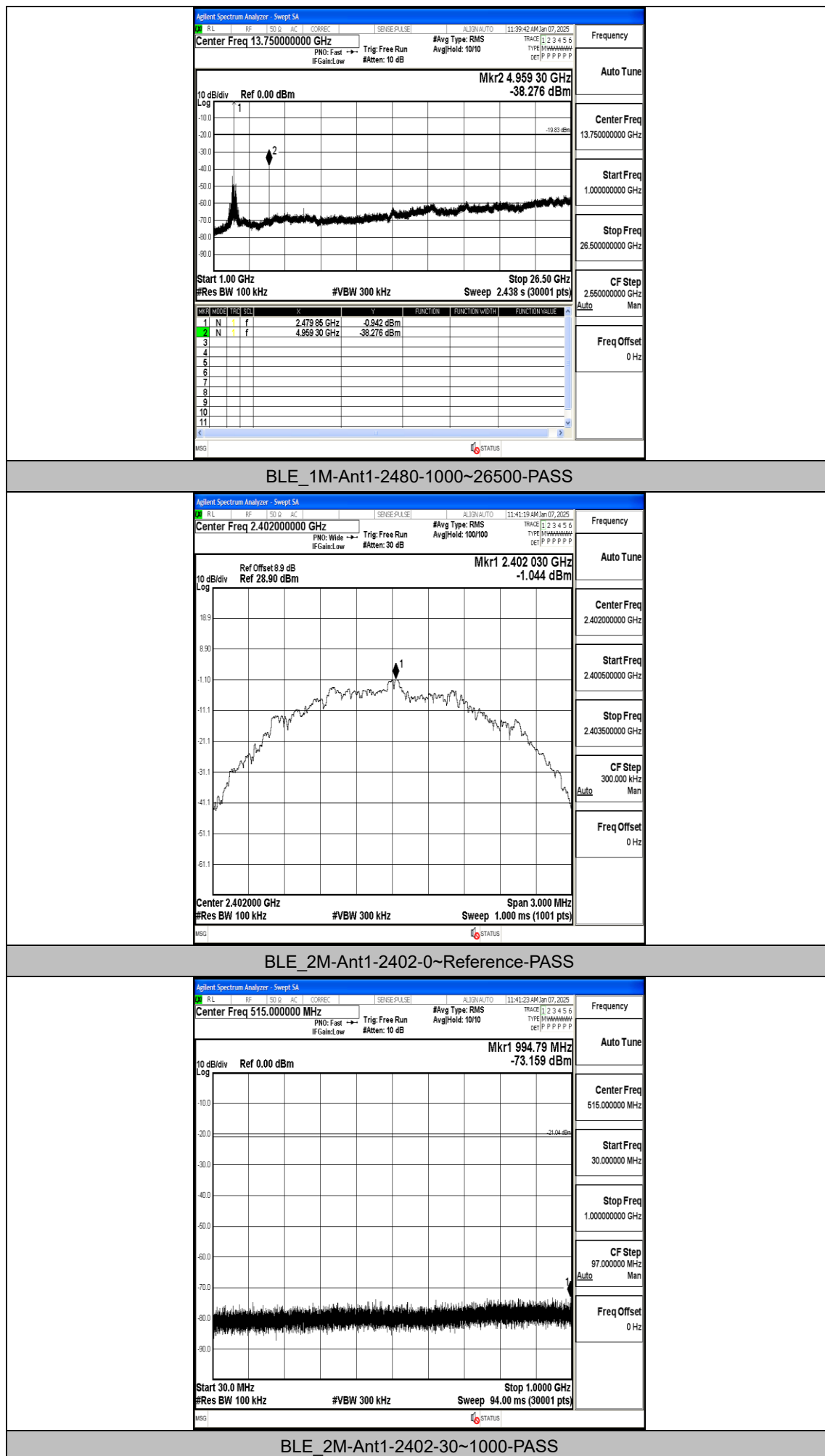
BLE_1M-Ant1-2440-1000~26500-PASS

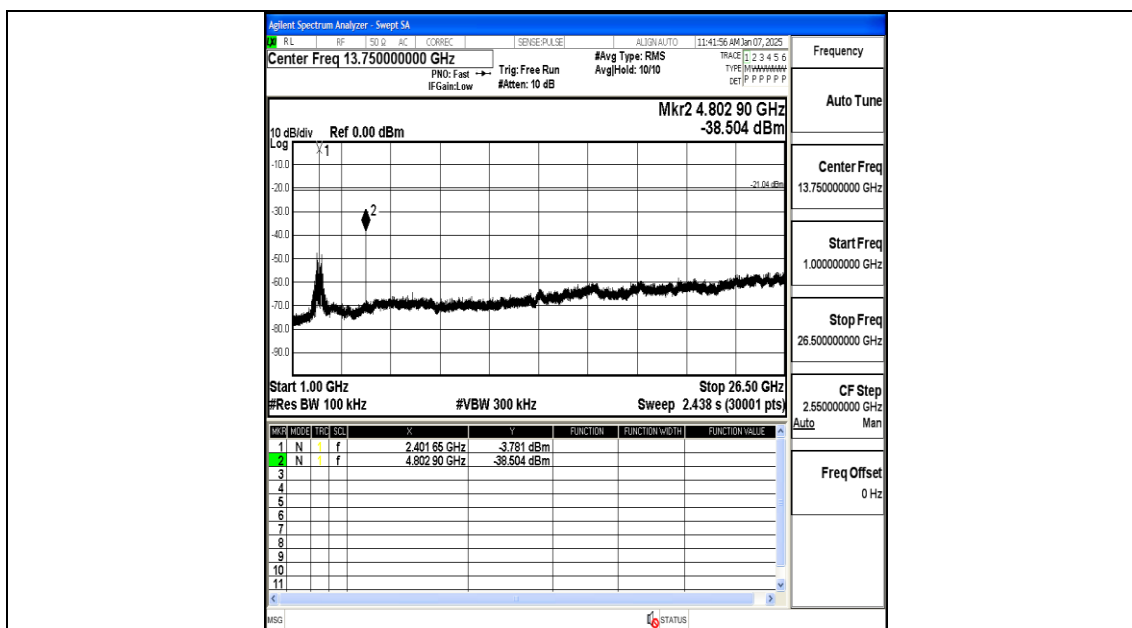


BLE_1M-Ant1-2480-0~Reference-PASS

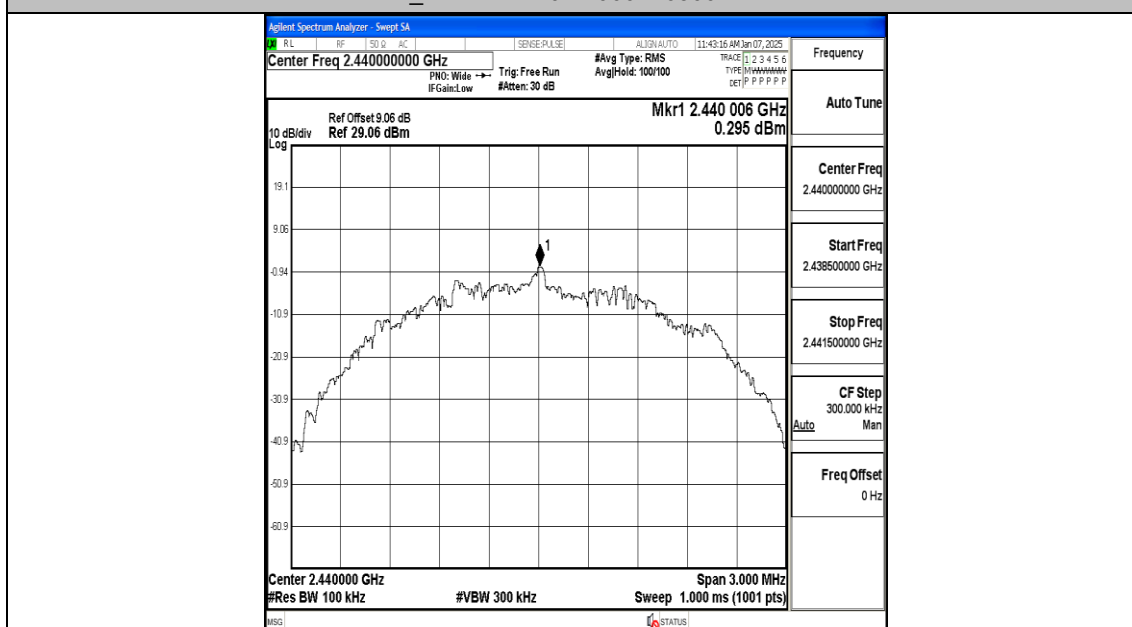


BLE_1M-Ant1-2480-30~1000-PASS

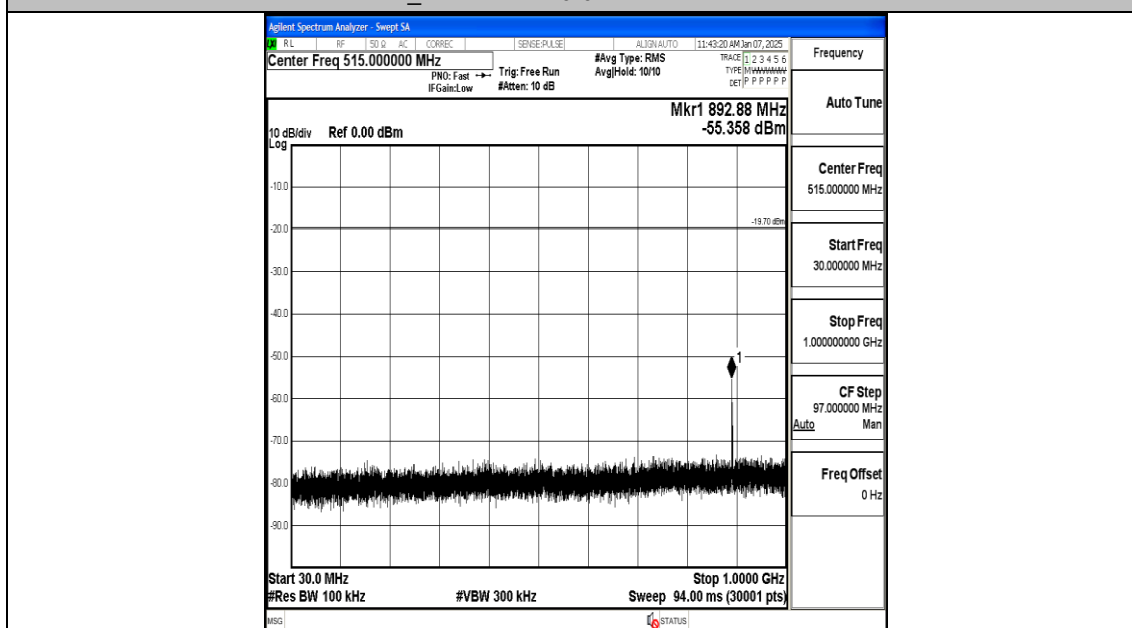




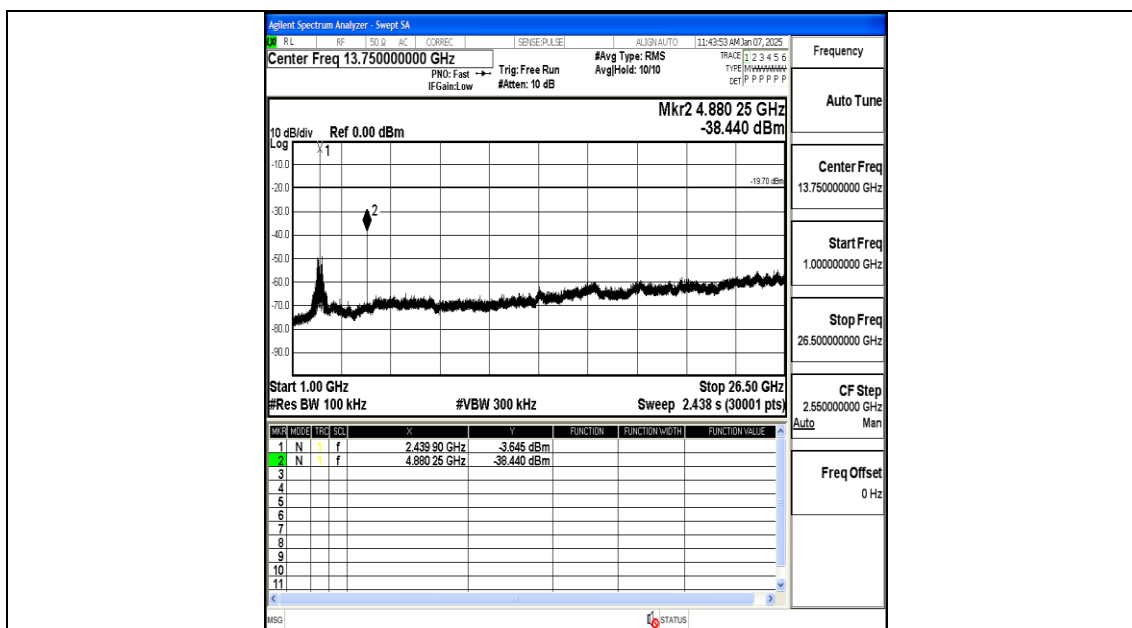
BLE_2M-Ant1-2402-1000~26500-PASS



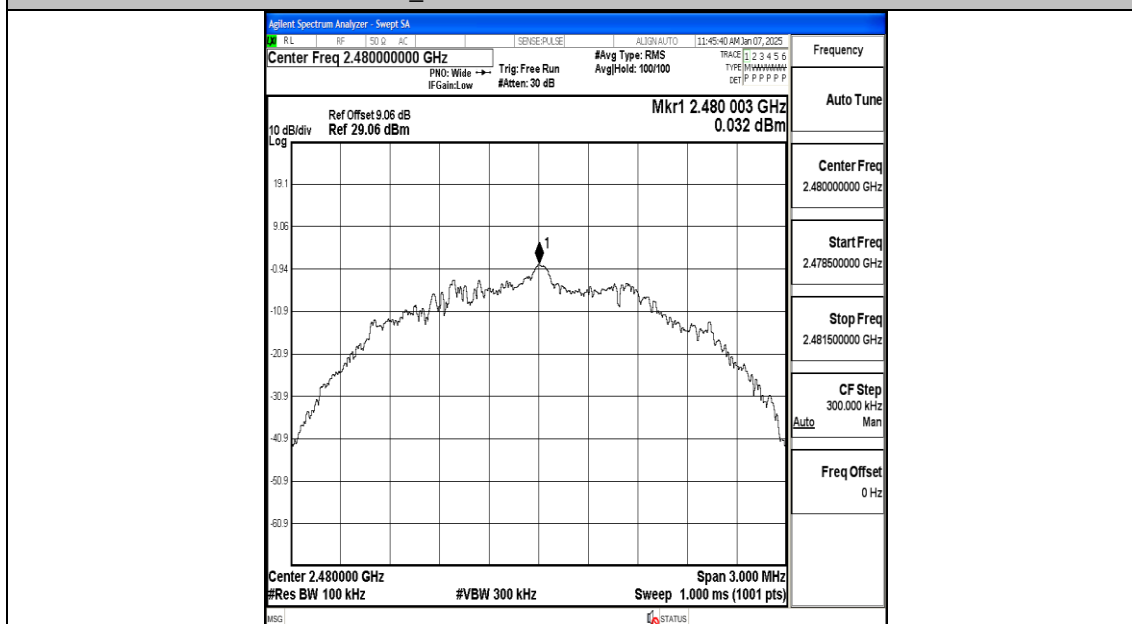
BLE_2M-Ant1-2440-0~Reference-PASS



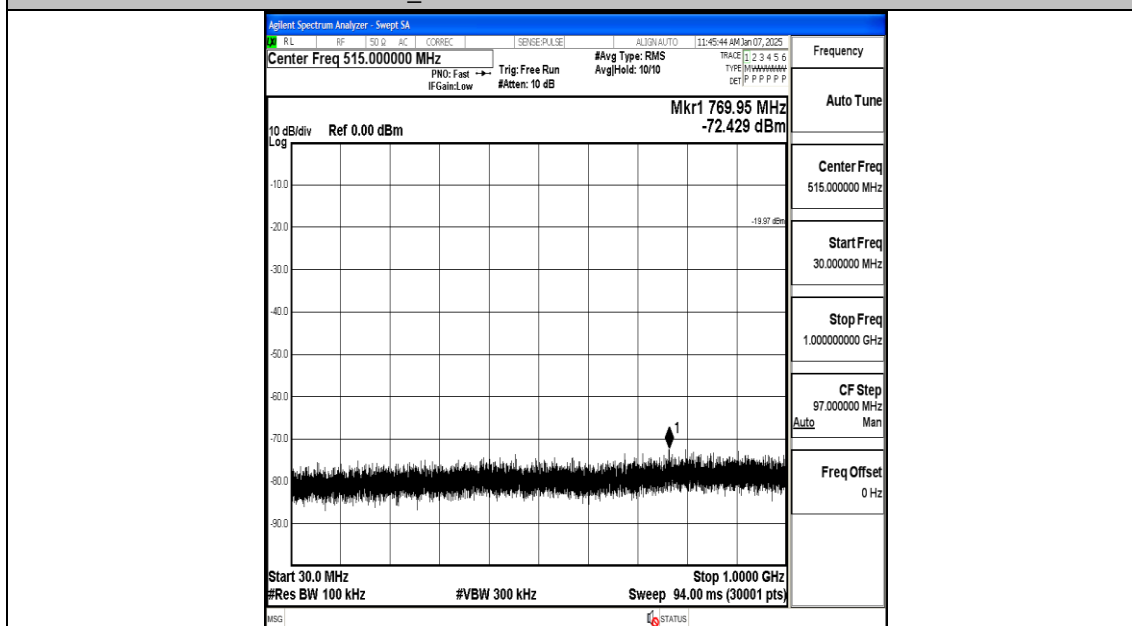
BLE_2M-Ant1-2440-30~1000-PASS



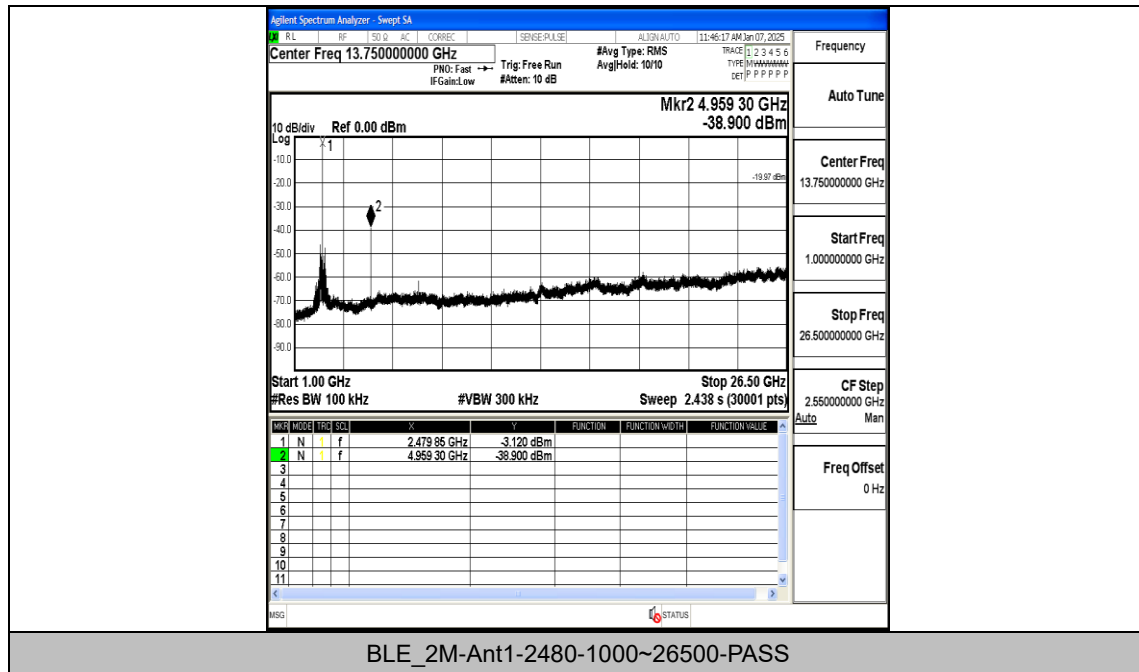
BLE_2M-Ant1-2440-1000~26500-PASS



BLE_2M-Ant1-2480-0~Reference-PASS



BLE_2M-Ant1-2480-30~1000-PASS

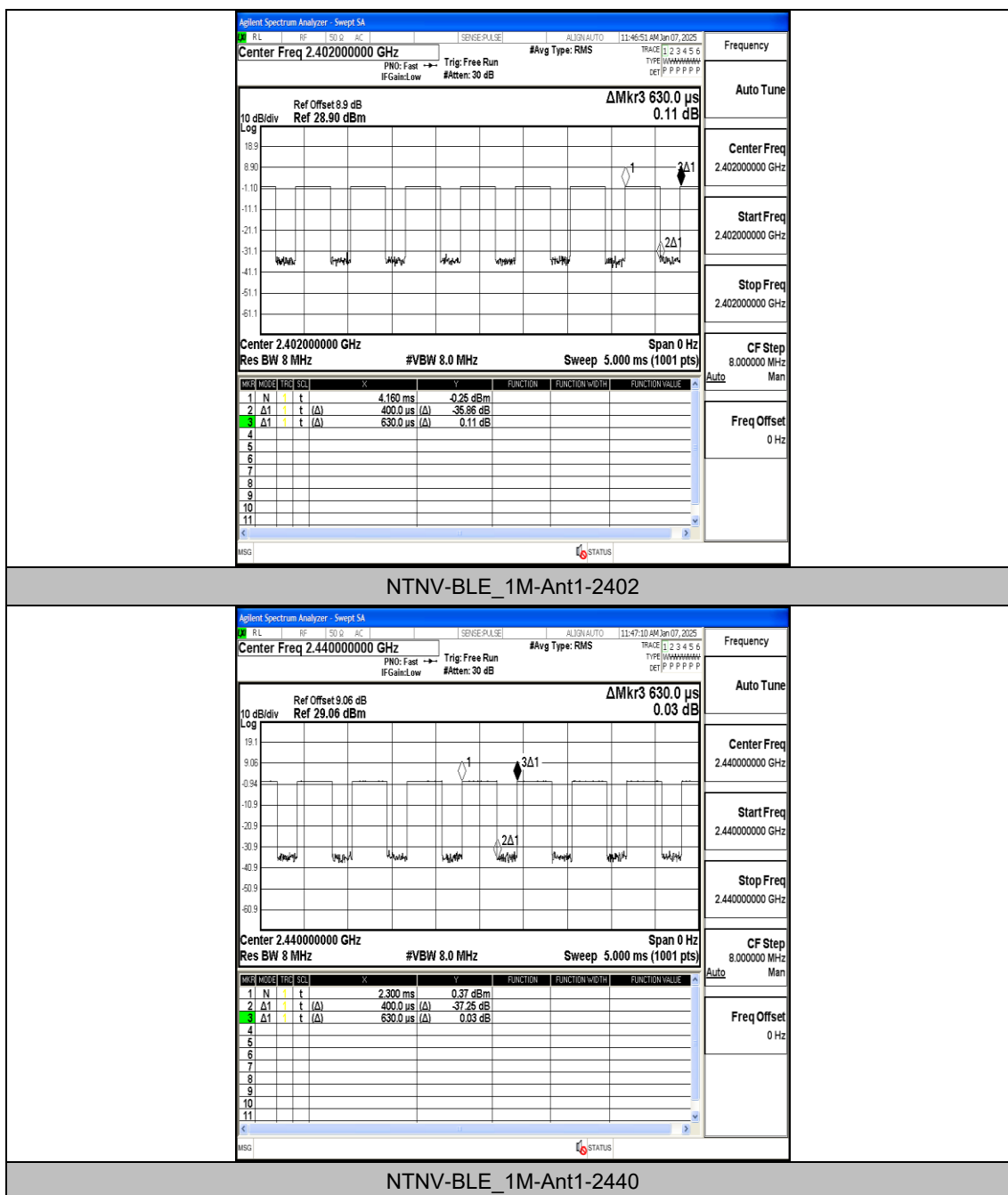


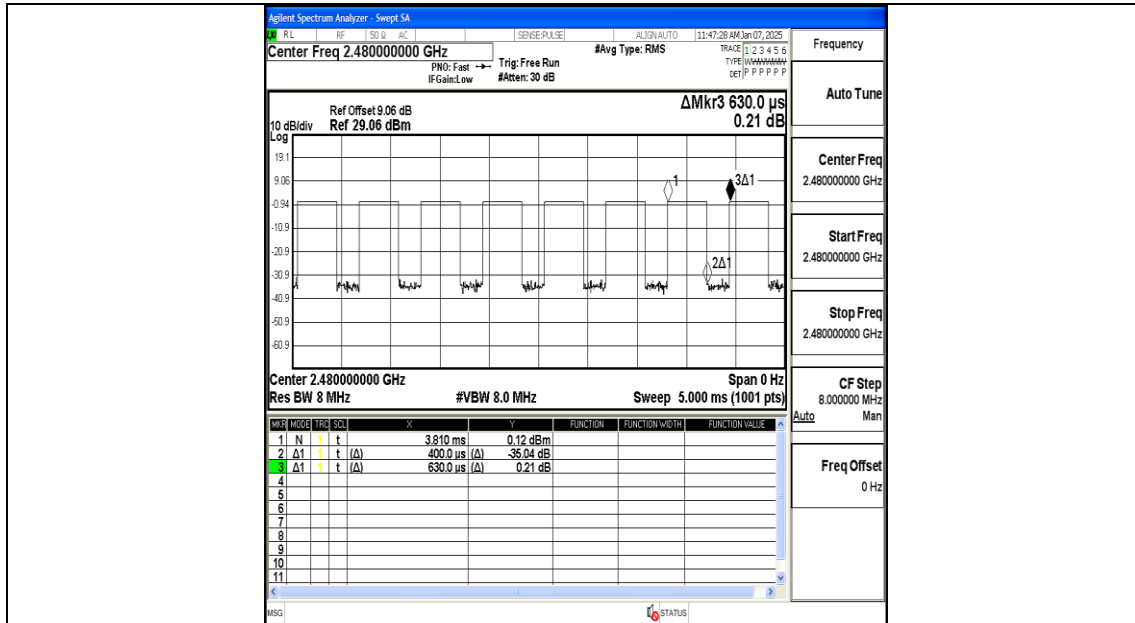
Appendix G: Duty Cycle

Test Result

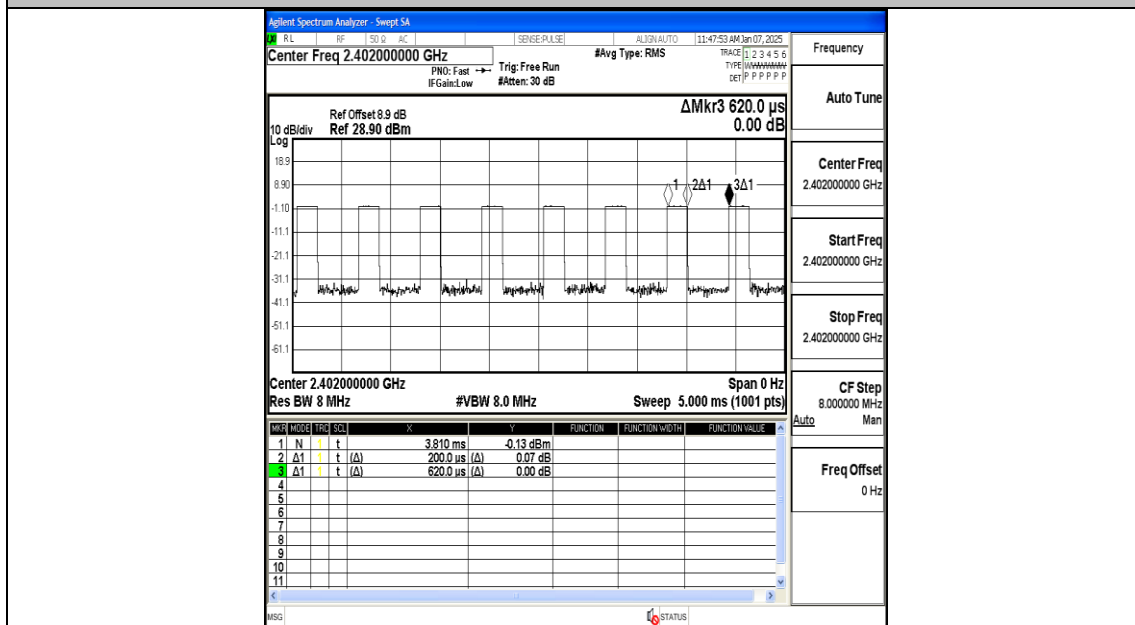
Test Mode	Antenna	Frequency [MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor [dB]
BLE_1M	Ant1	2402	0.40	0.63	63.49	1.97
BLE_1M	Ant1	2440	0.40	0.63	63.49	1.97
BLE_1M	Ant1	2480	0.40	0.63	63.49	1.97
BLE_2M	Ant1	2402	0.20	0.62	32.26	4.91
BLE_2M	Ant1	2440	0.21	0.62	33.87	4.70
BLE_2M	Ant1	2480	0.21	0.62	33.87	4.70

Test Graphs

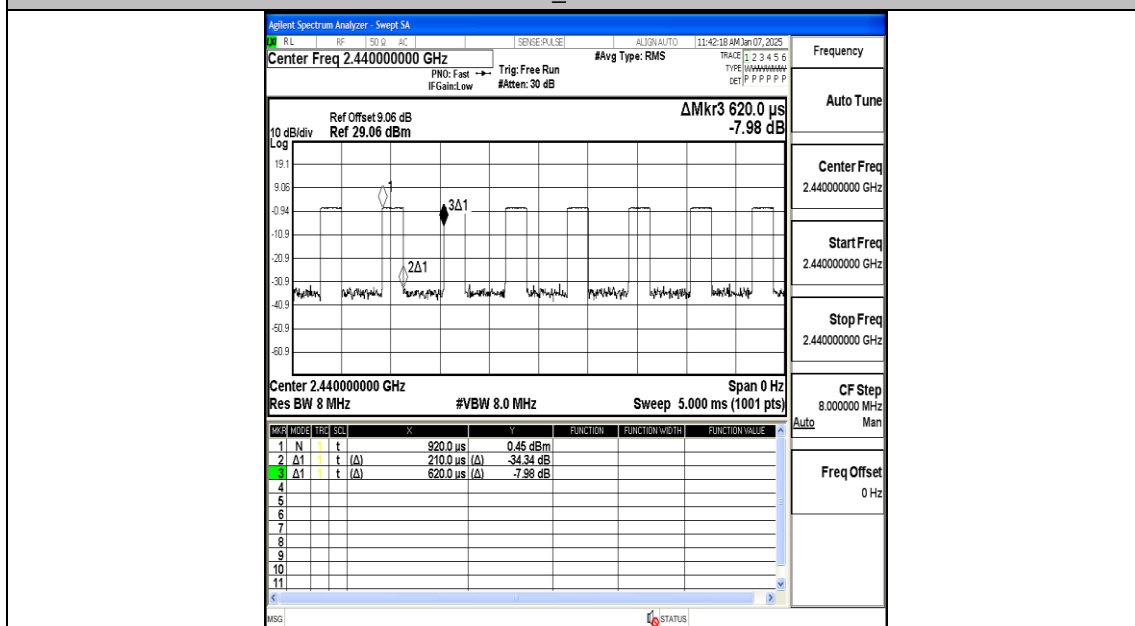




NTNV-BLE_1M-Ant1-2480



NTNV-BLE_2M-Ant1-2402



NTNV-BLE_2M-Ant1-2440

