

Appendix Test Data for BLE (Conducted Measurement)

Product Name: Sense 1 Guardian

Trade Mark: N/A

Test Model: NK200

FCC ID: 2BH8Y-NK200

Environmental Conditions

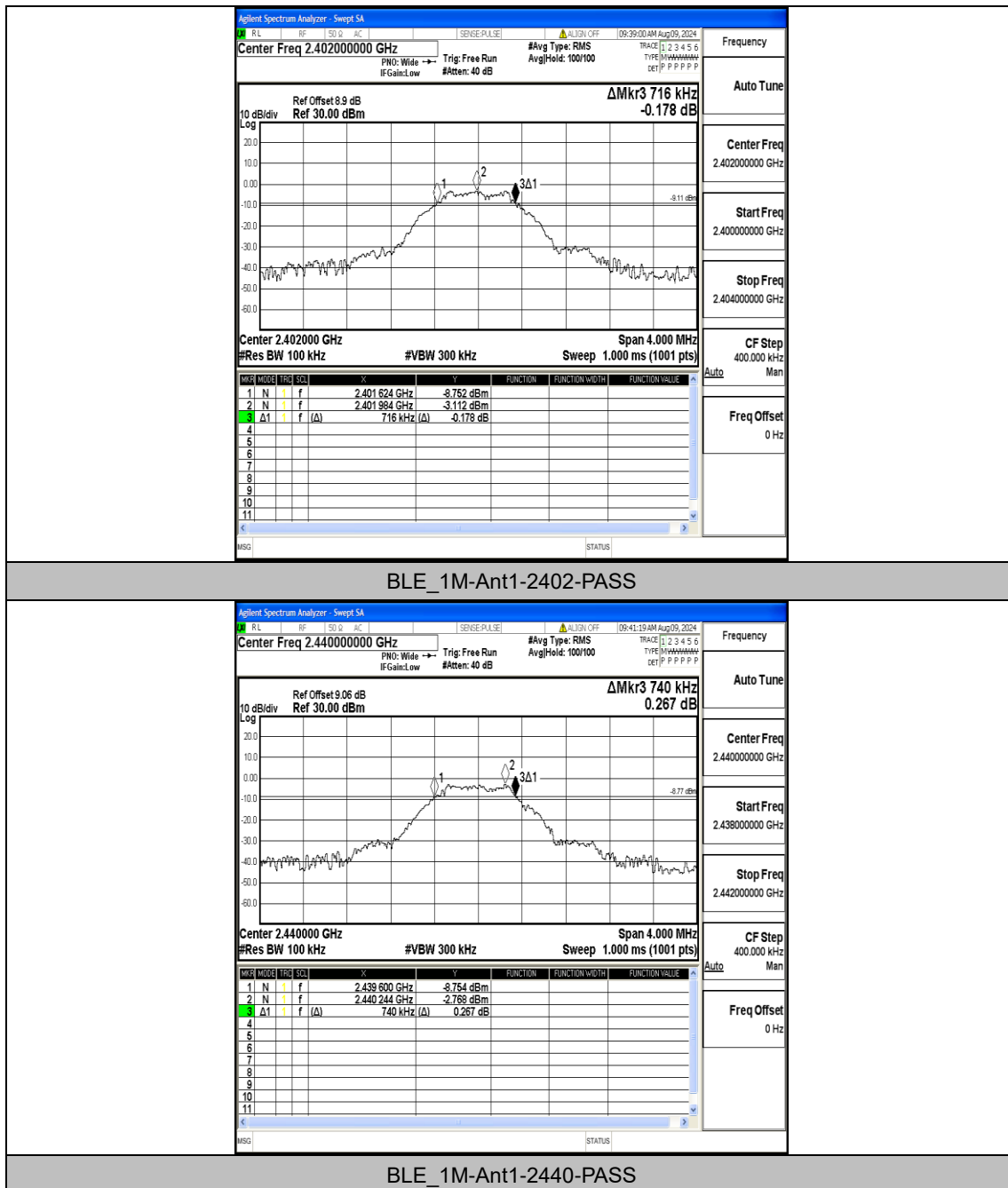
Temperature:	23.8℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Hugo Chen
NOTE	N/A

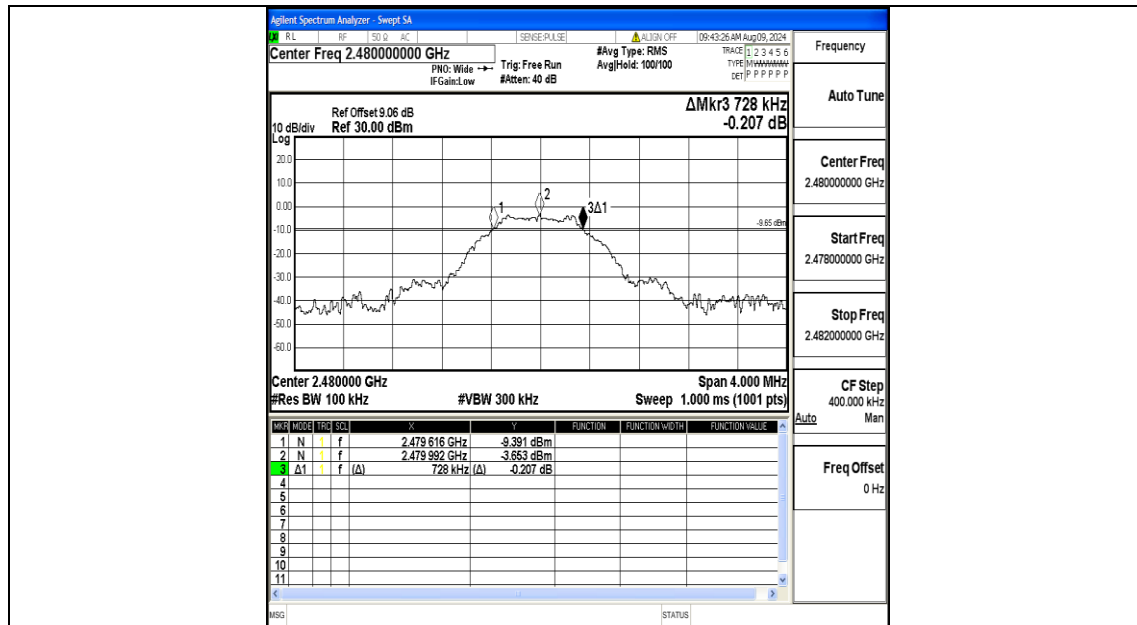
Appendix A: DTS Bandwidth

Test Result

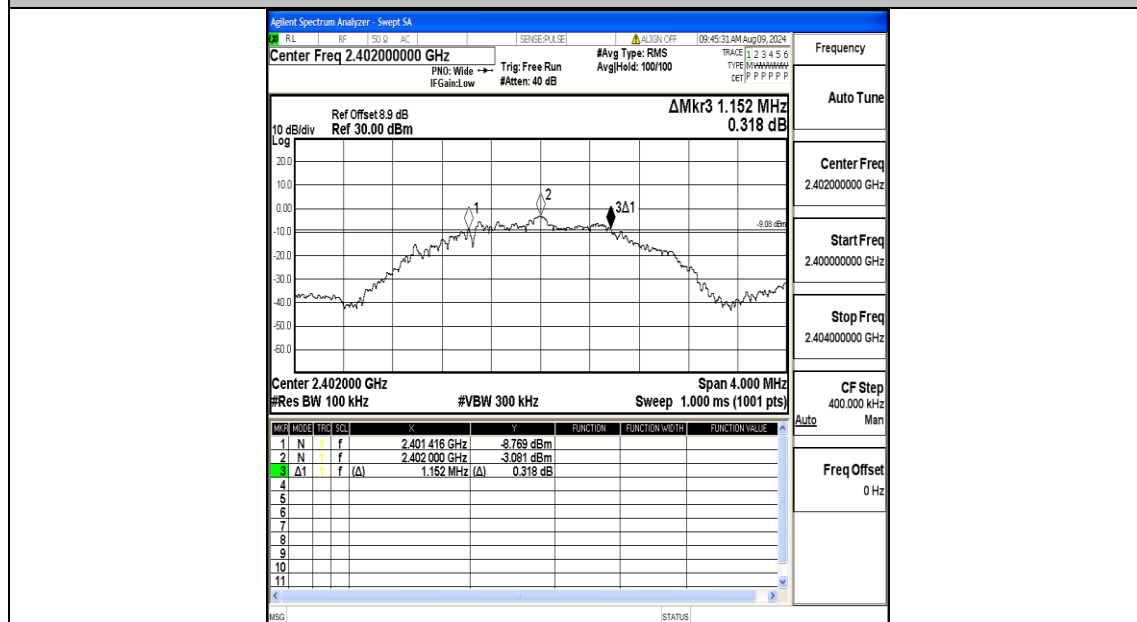
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.716	2401.624	2402.340	0.5	PASS
BLE_1M	Ant1	2440	0.740	2439.600	2440.340	0.5	PASS
BLE_1M	Ant1	2480	0.728	2479.616	2480.344	0.5	PASS
BLE_2M	Ant1	2402	1.152	2401.416	2402.568	0.5	PASS
BLE_2M	Ant1	2440	1.352	2439.312	2440.664	0.5	PASS
BLE_2M	Ant1	2480	1.120	2479.444	2480.564	0.5	PASS

Test Graphs

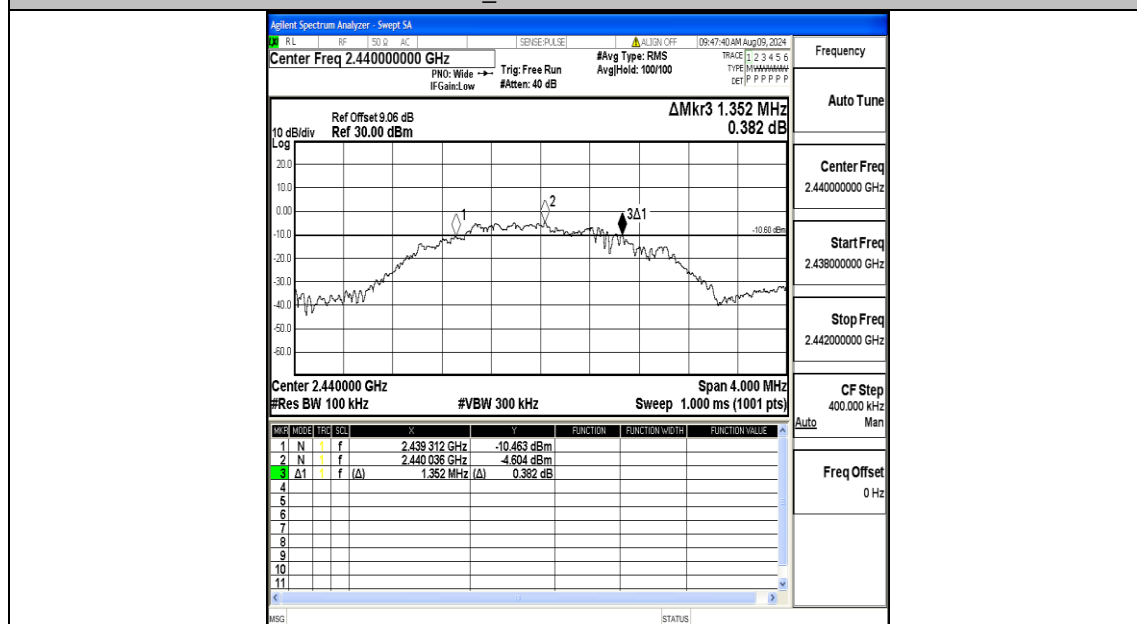




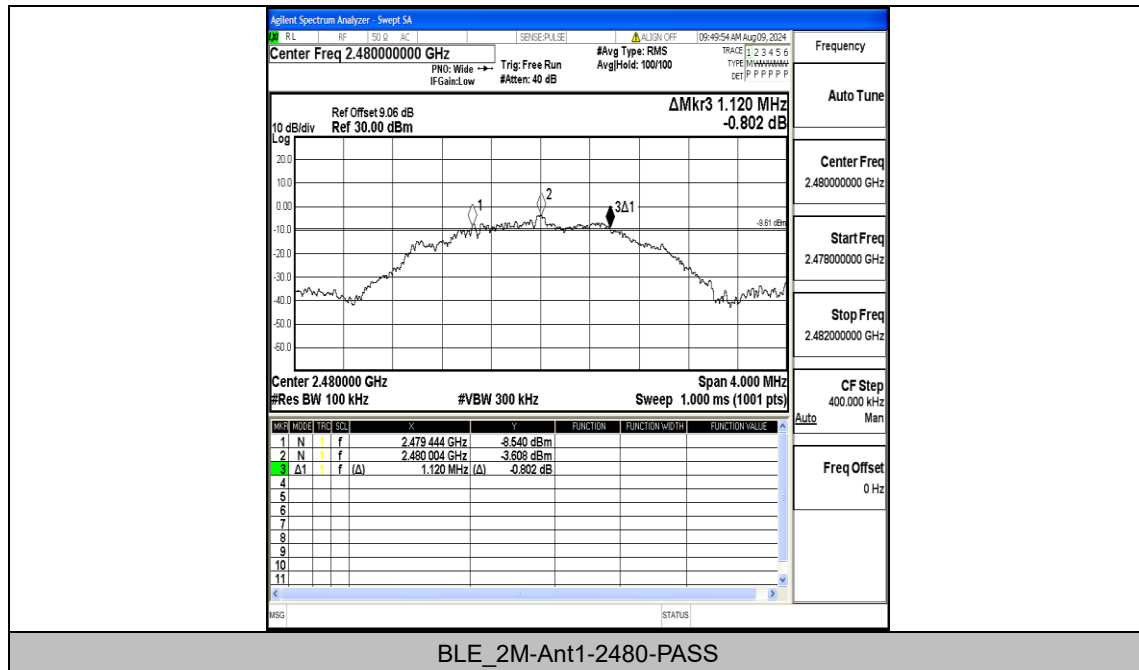
BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS

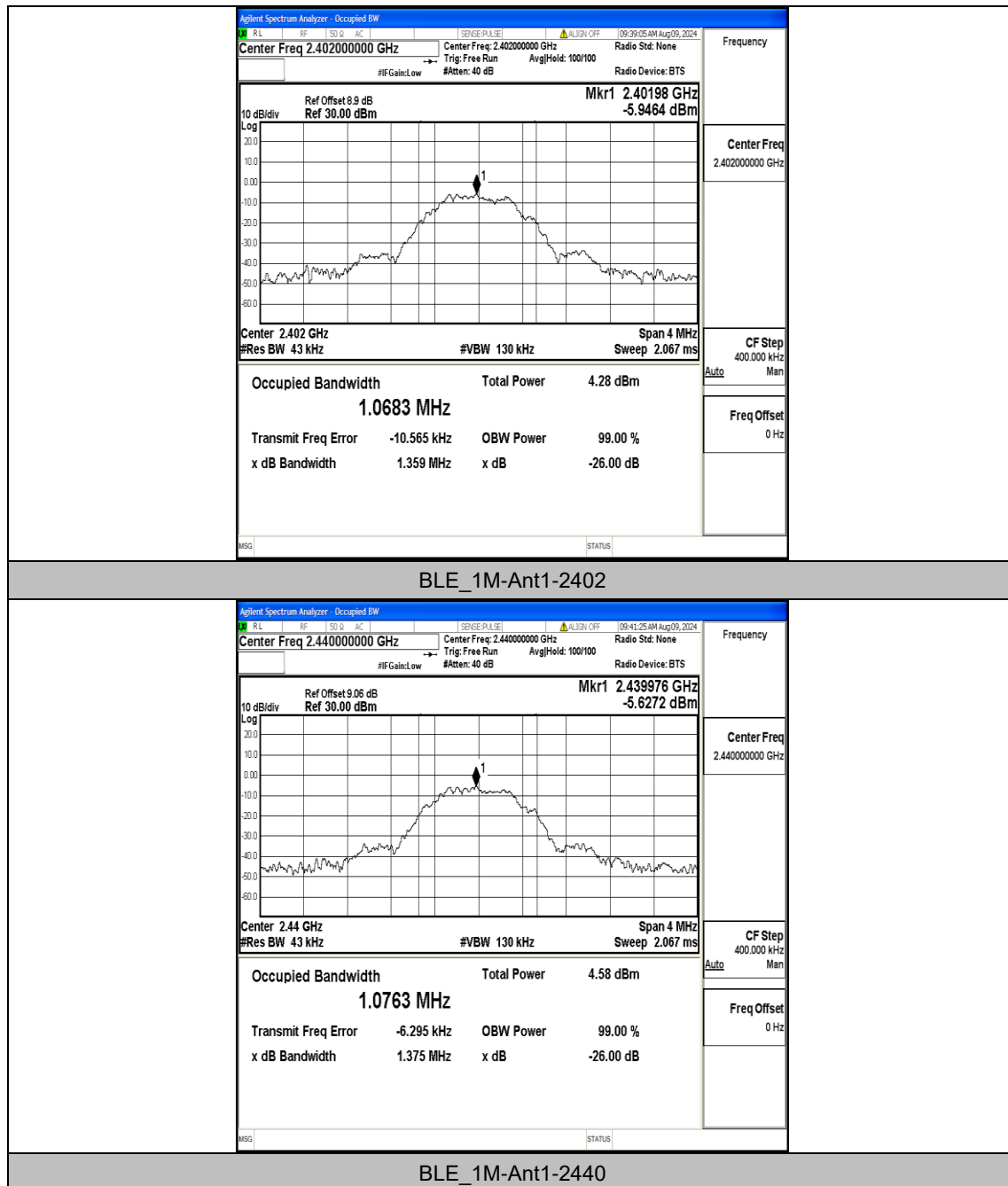


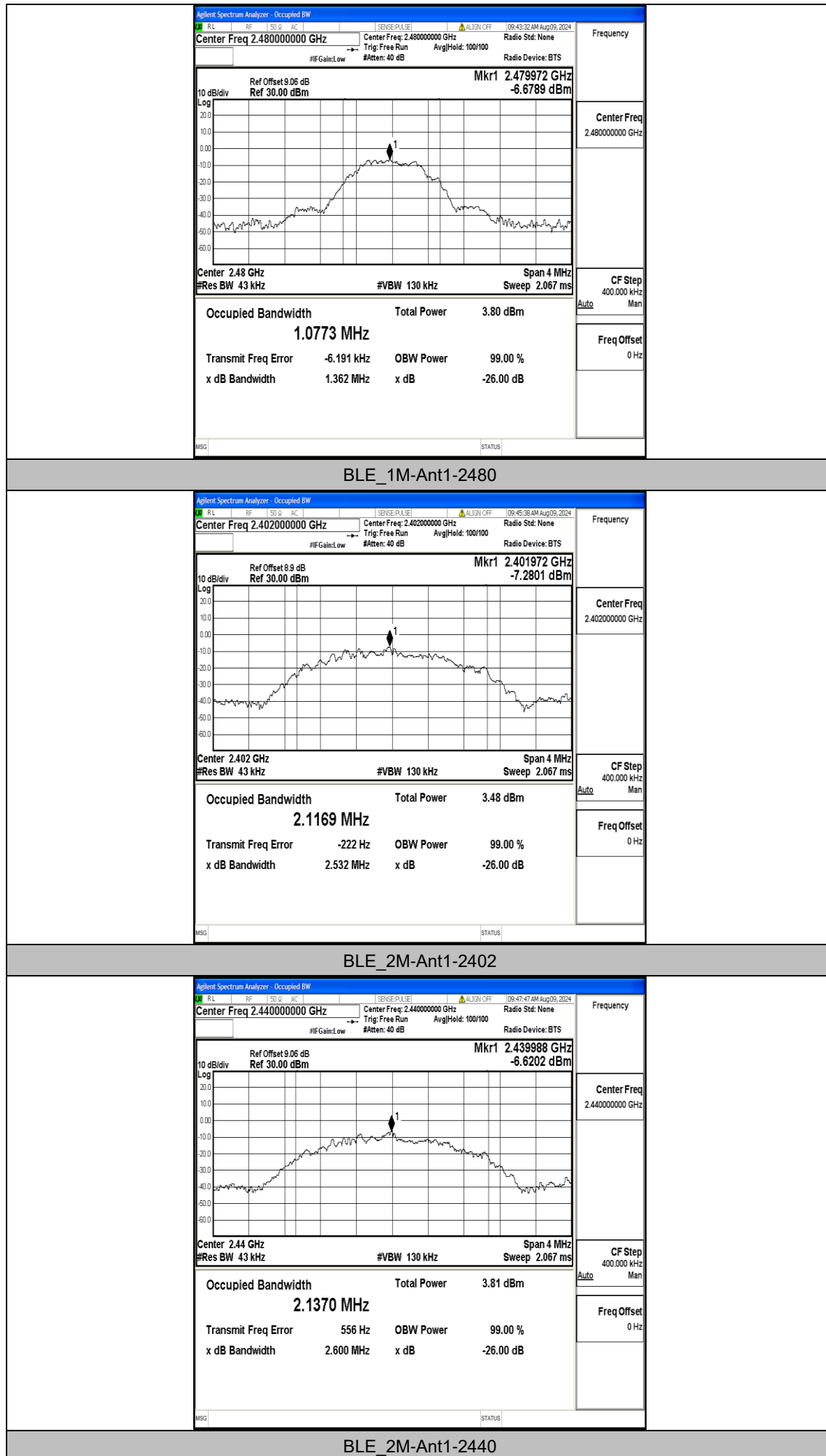
Appendix B: Occupied Channel Bandwidth

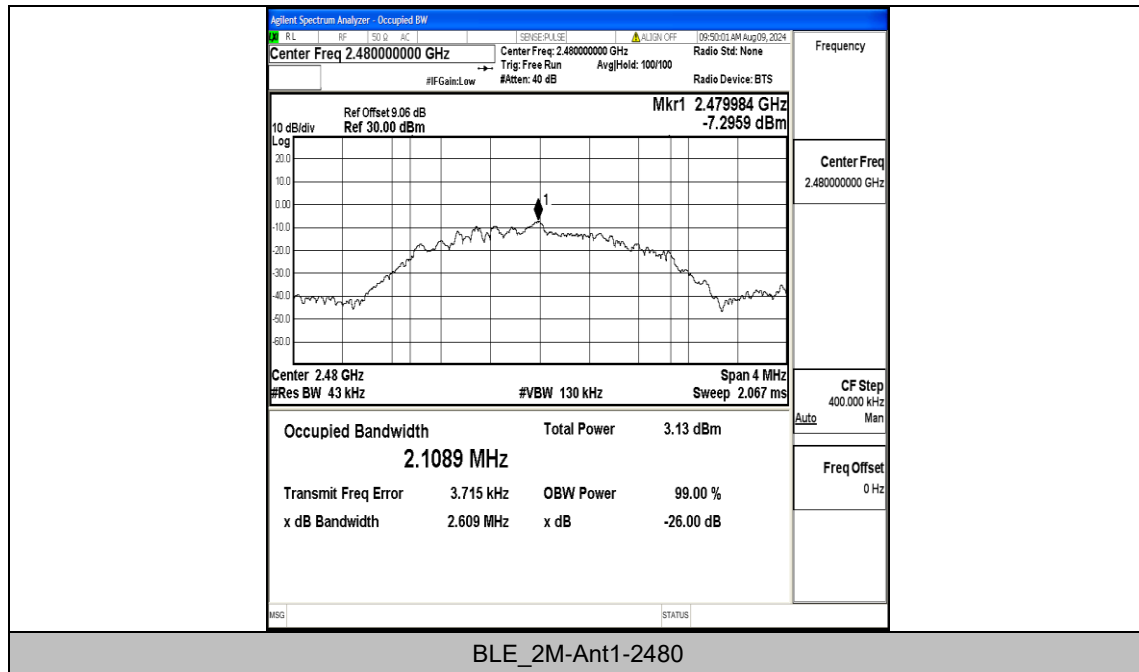
Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0683	2401.4553	2402.5236	---	---
BLE_1M	Ant1	2440	1.0763	2439.4556	2440.5319	---	---
BLE_1M	Ant1	2480	1.0773	2479.4552	2480.5325	---	---
BLE_2M	Ant1	2402	2.1169	2400.9413	2403.0582	---	---
BLE_2M	Ant1	2440	2.1370	2438.9321	2441.0691	---	---
BLE_2M	Ant1	2480	2.1089	2478.9493	2481.0582	---	---

Test Graphs





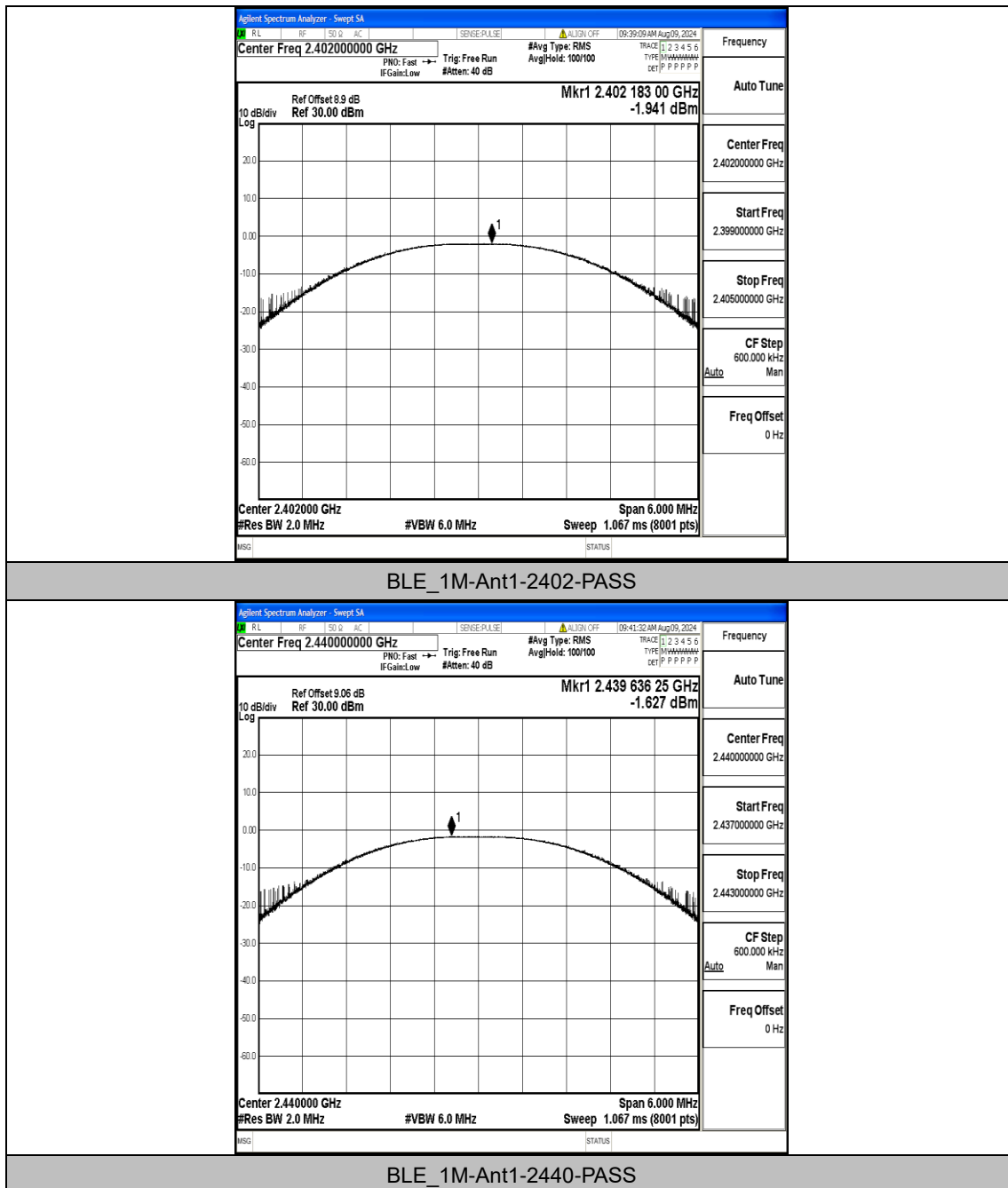


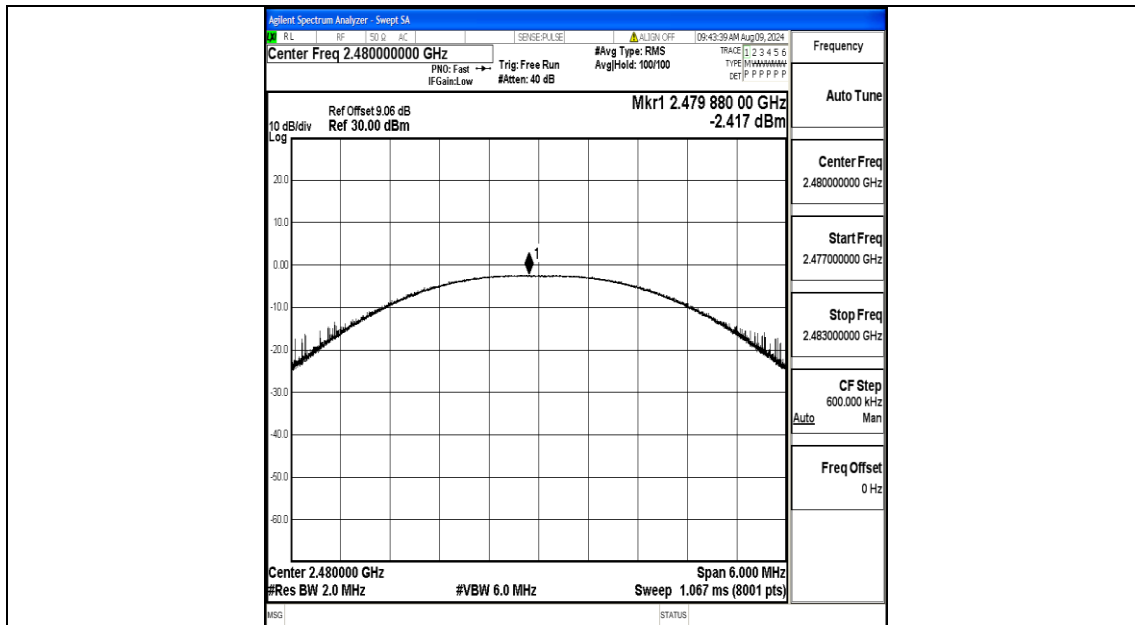
Appendix C: Maximum peak conducted output power

Test Result Peak

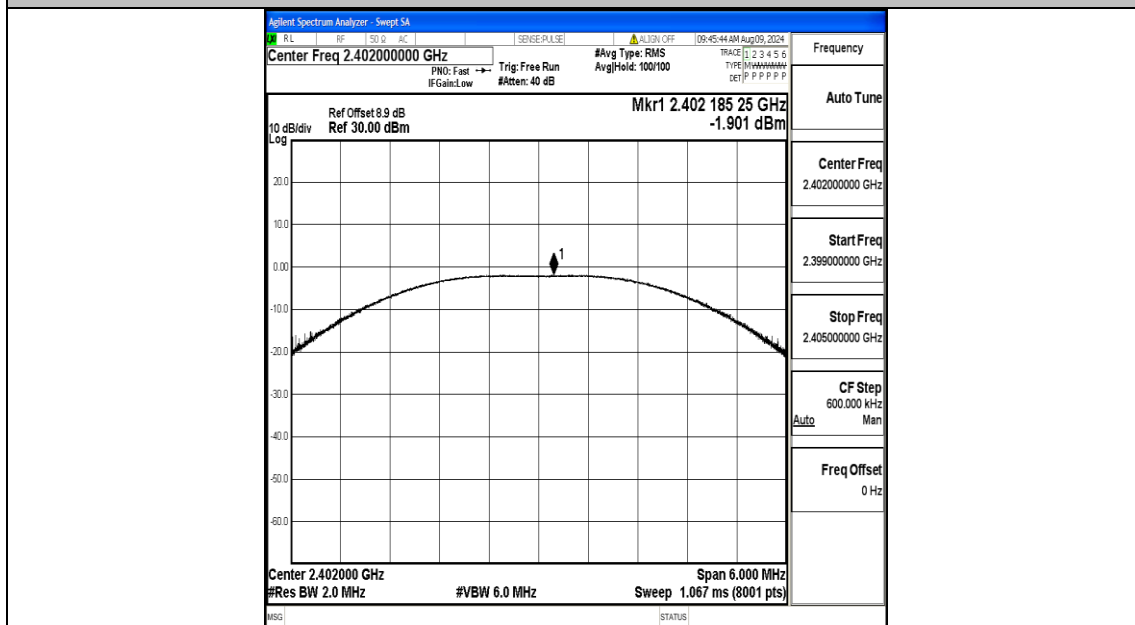
TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-1.94	≤30	PASS
BLE_1M	Ant1	2440	-1.63	≤30	PASS
BLE_1M	Ant1	2480	-2.42	≤30	PASS
BLE_2M	Ant1	2402	-1.90	≤30	PASS
BLE_2M	Ant1	2440	-1.49	≤30	PASS
BLE_2M	Ant1	2480	-2.34	≤30	PASS

Test Graphs Peak

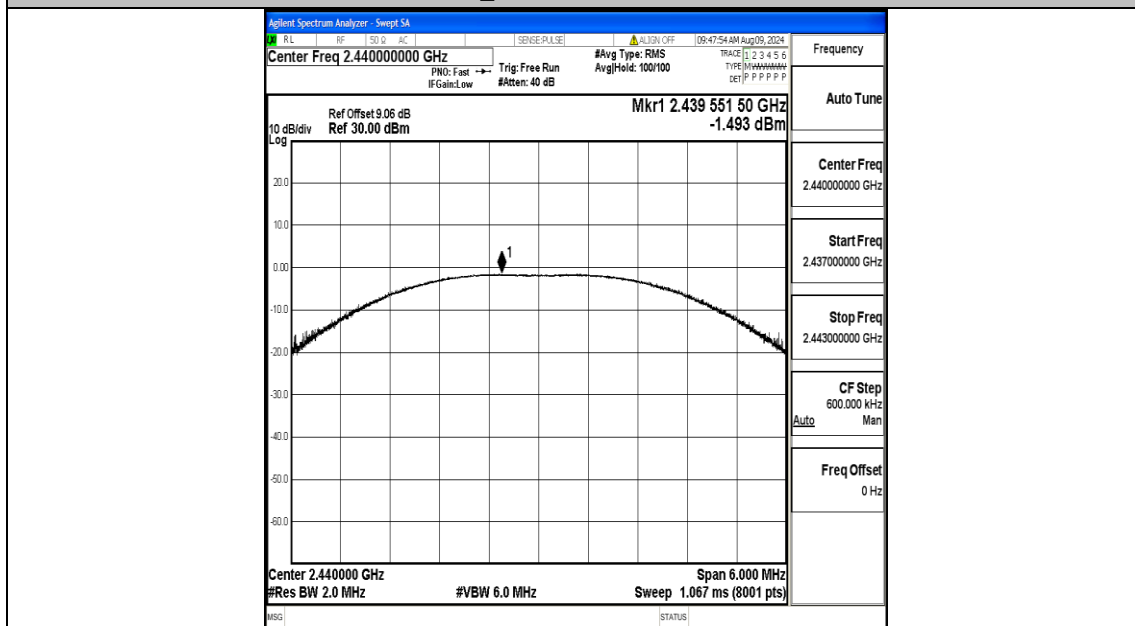




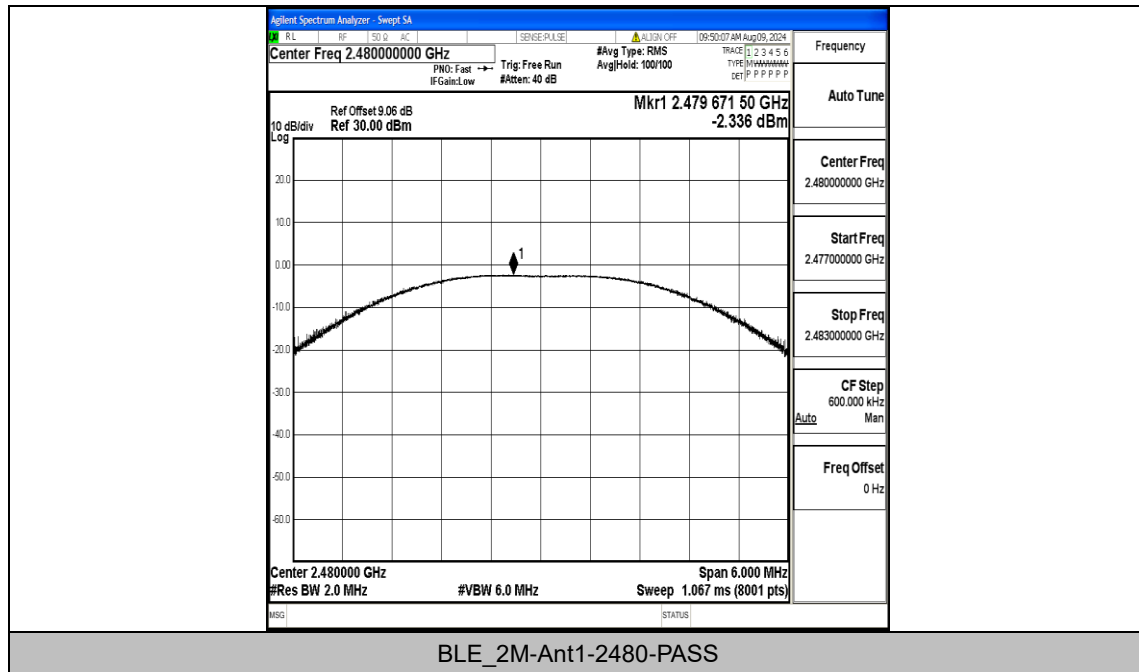
BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS

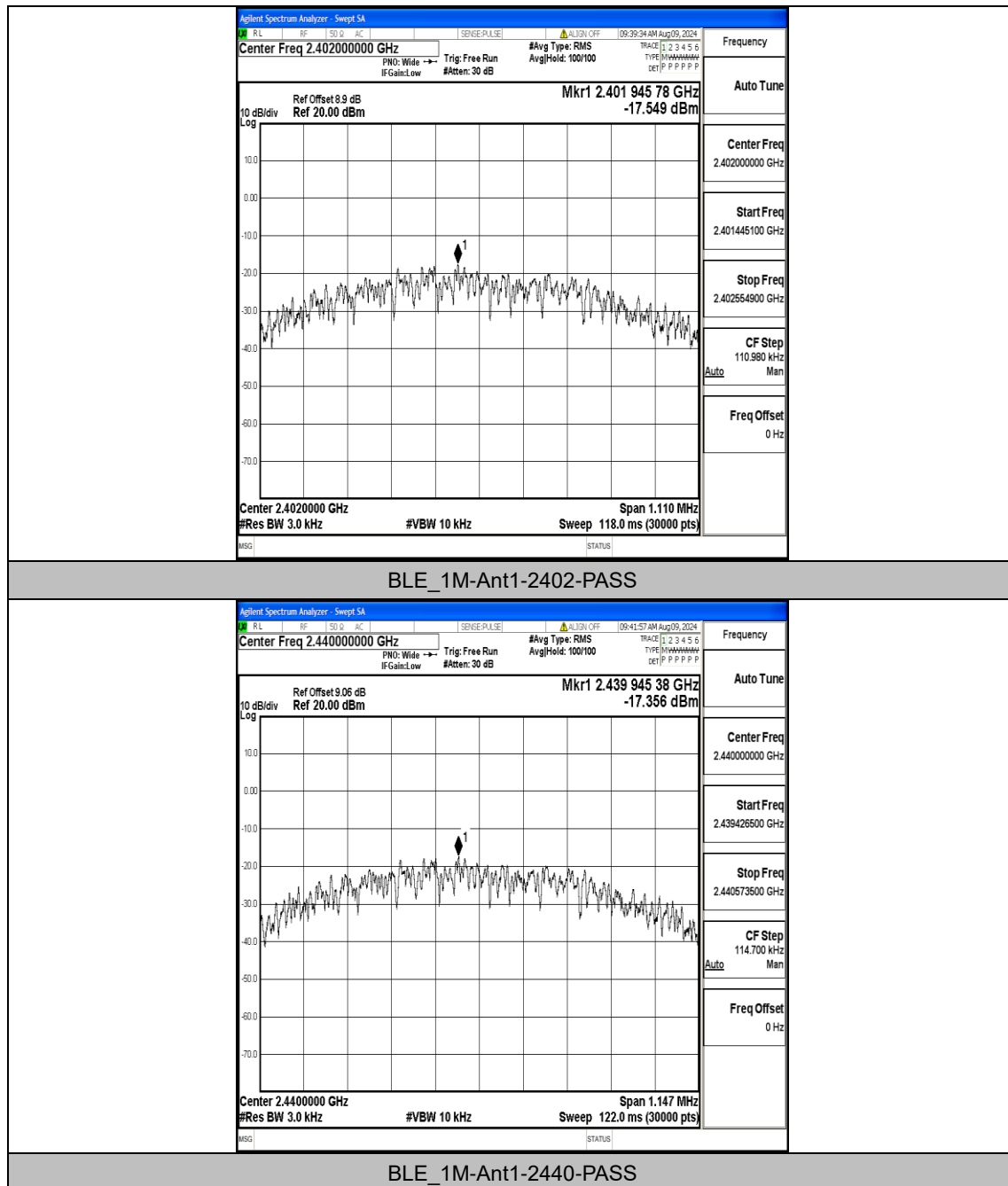


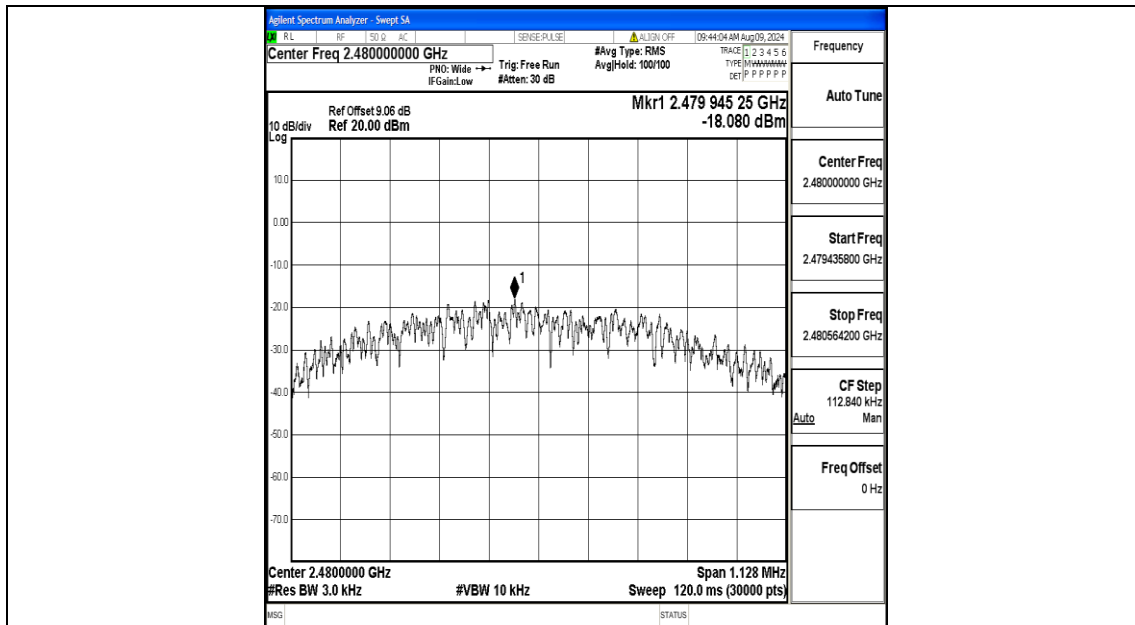
Appendix D: Maximum peak power spectral density

Test Result

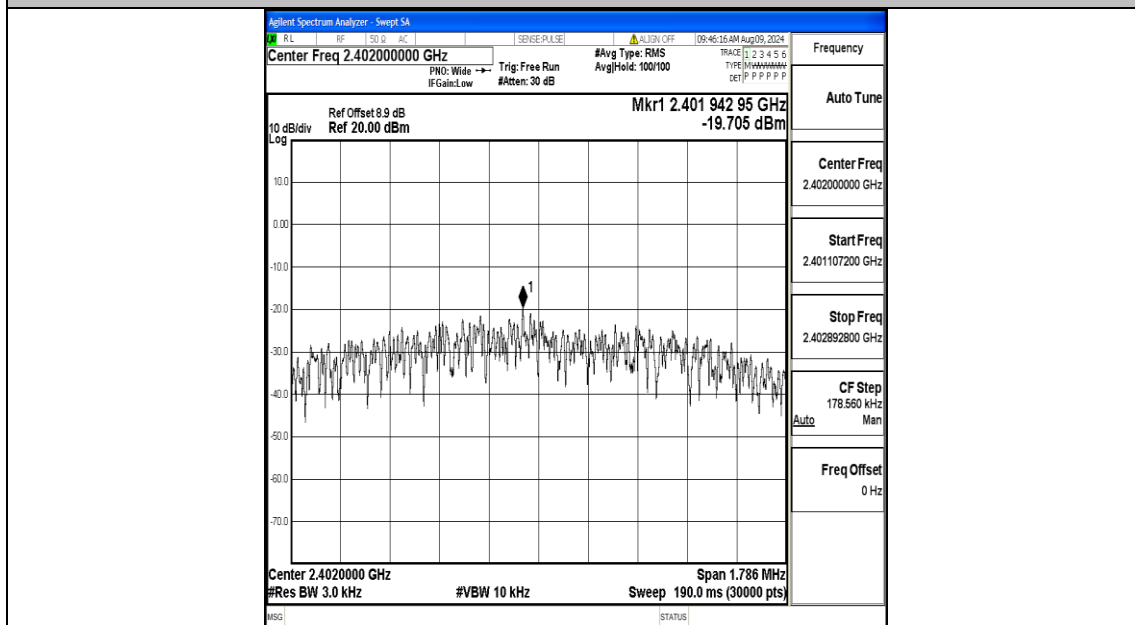
TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-17.55	≤8.00	PASS
BLE_1M	Ant1	2440	-17.36	≤8.00	PASS
BLE_1M	Ant1	2480	-18.08	≤8.00	PASS
BLE_2M	Ant1	2402	-19.71	≤8.00	PASS
BLE_2M	Ant1	2440	-19.24	≤8.00	PASS
BLE_2M	Ant1	2480	-20.06	≤8.00	PASS

Test Graphs

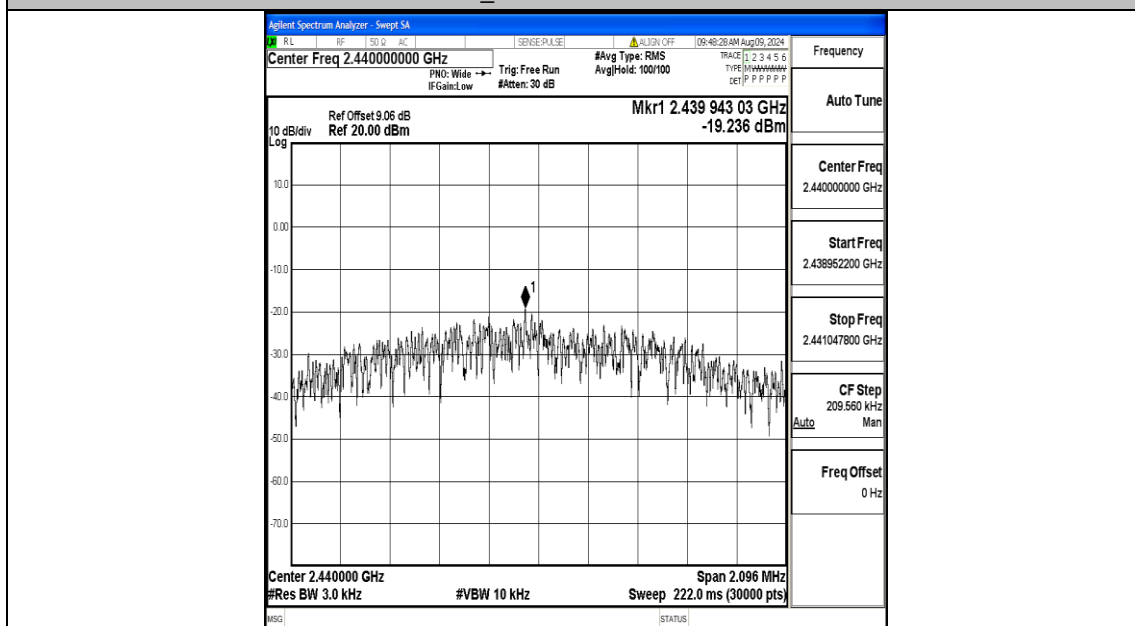




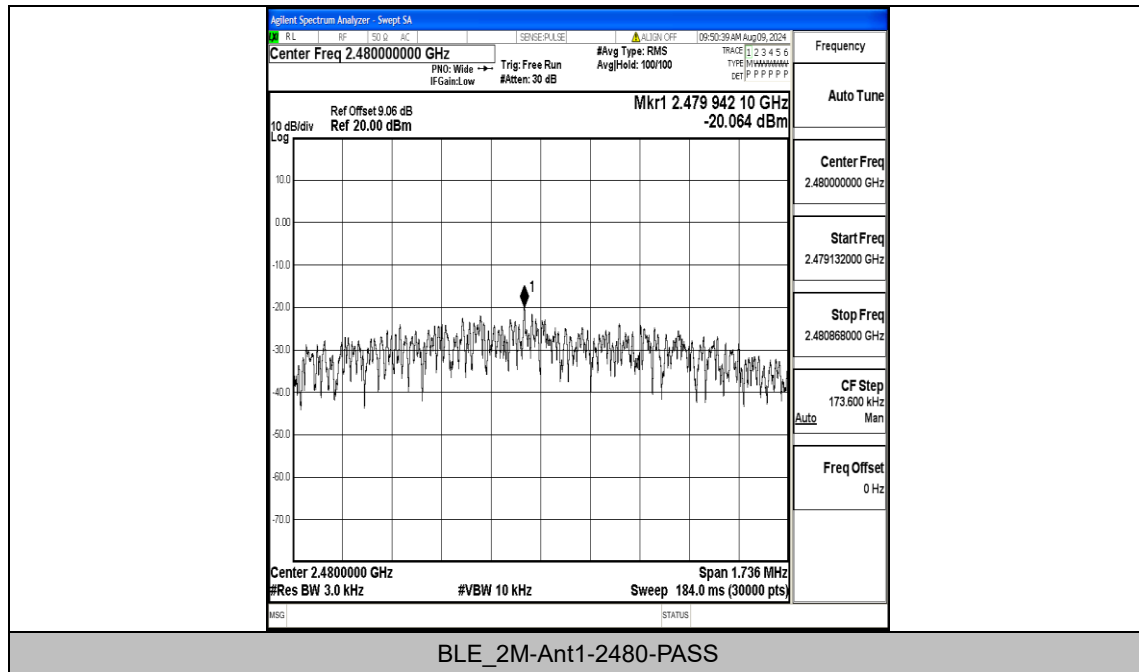
BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS

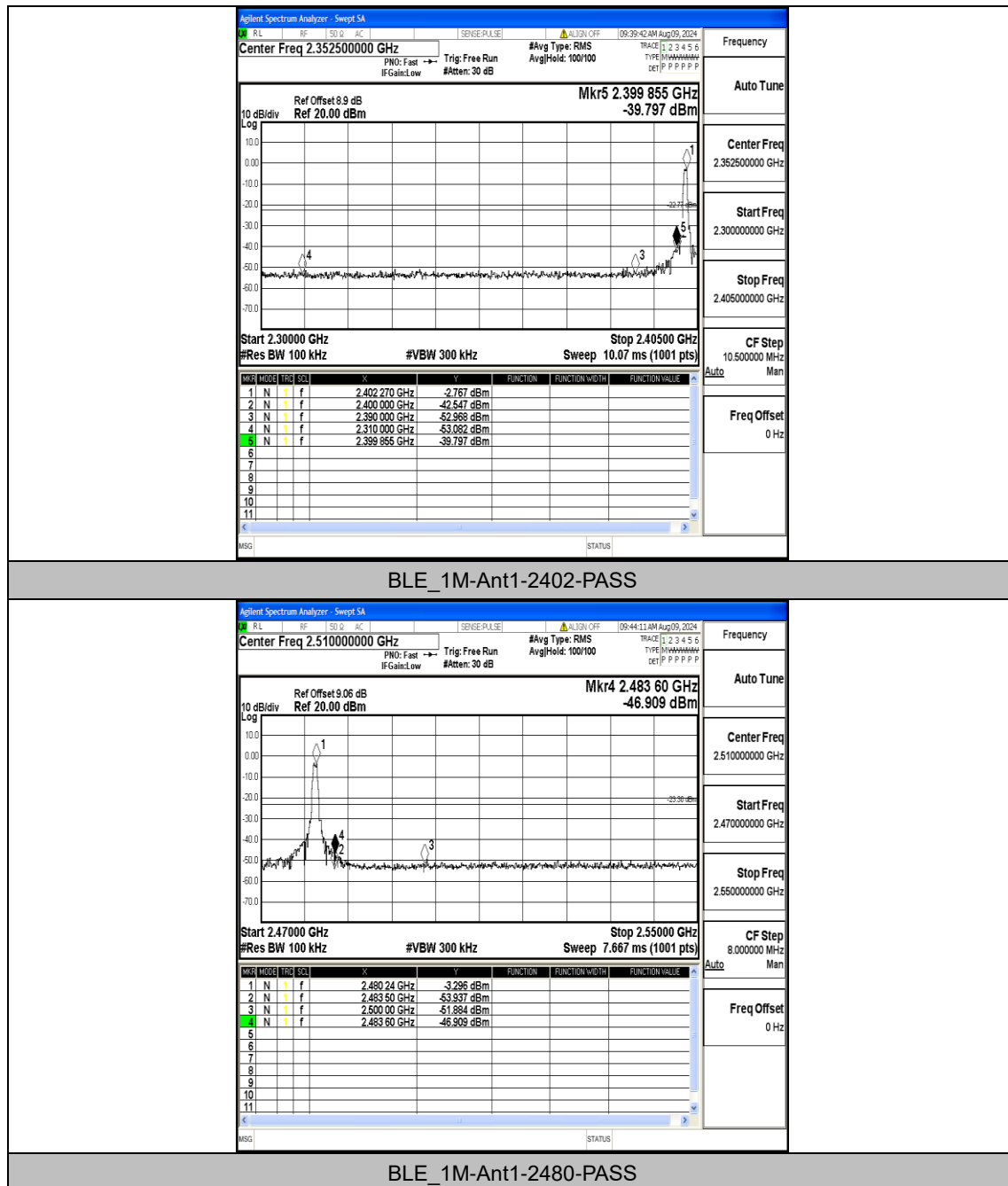


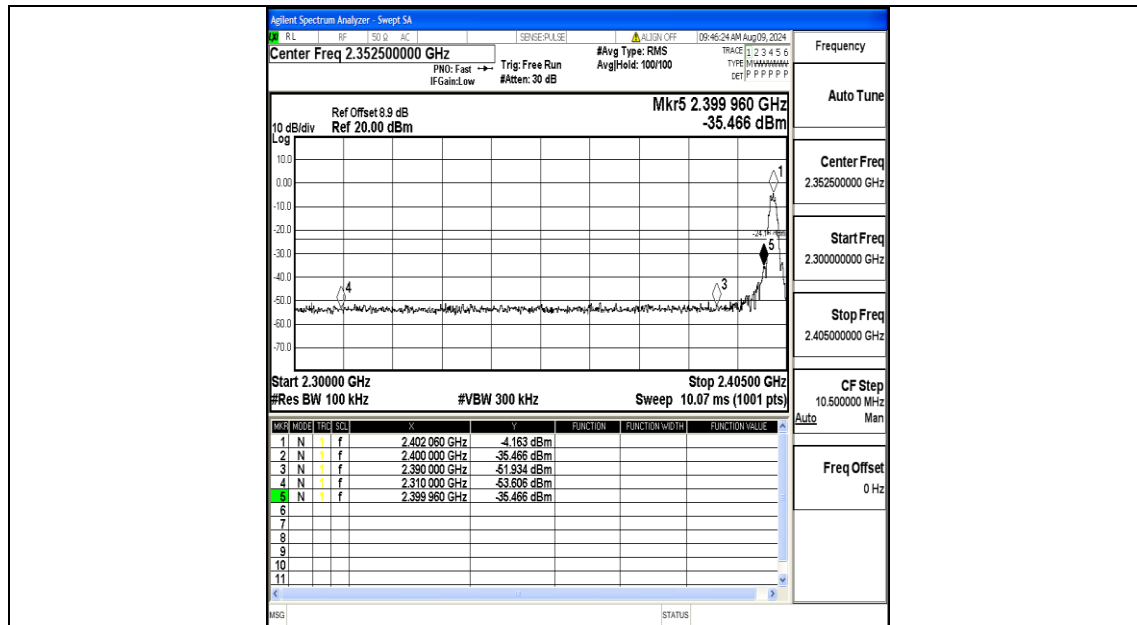
Appendix E: Band edge measurements

Test Result

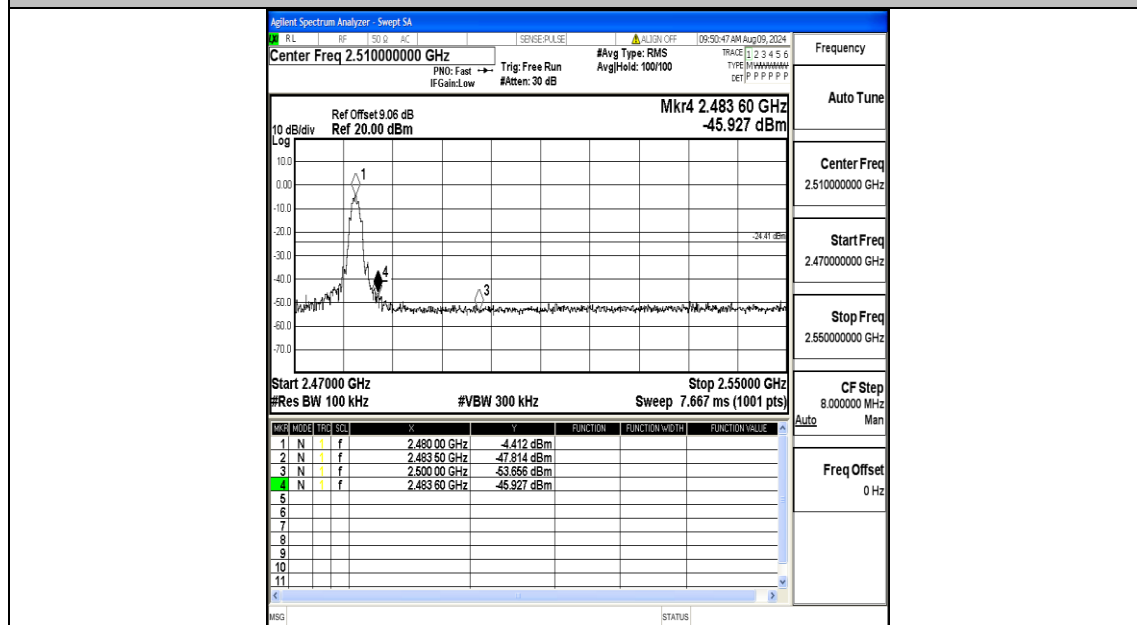
TestMode	Antenna	Channel	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-2.77	-39.8	≤-22.77	PASS
BLE_1M	Ant1	High	2480	-3.30	-46.91	≤-23.3	PASS
BLE_2M	Ant1	Low	2402	-4.16	-35.47	≤-24.16	PASS
BLE_2M	Ant1	High	2480	-4.41	-45.93	≤-24.41	PASS

Test Graphs





BLE_2M-Ant1-2402-PASS



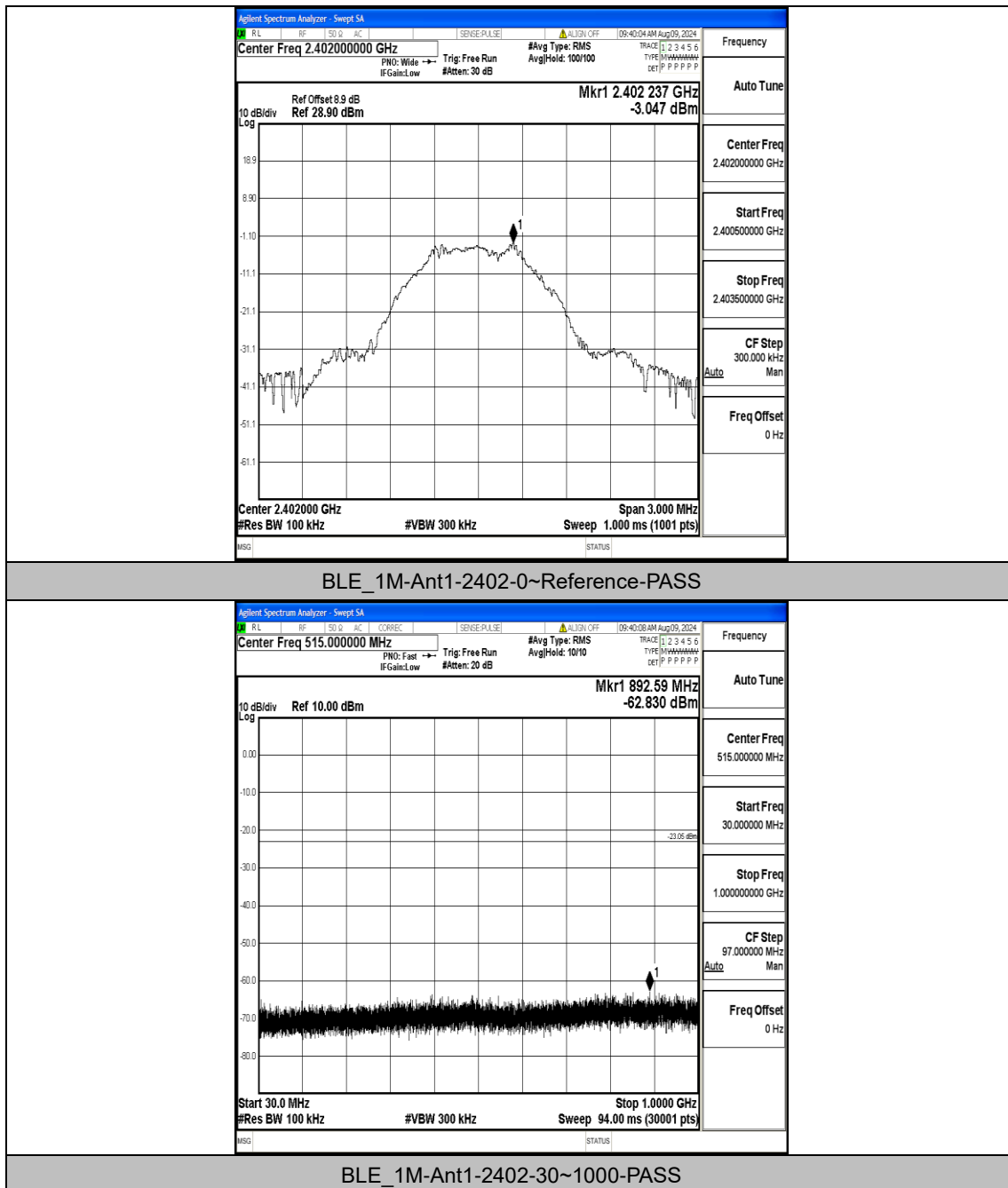
BLE_2M-Ant1-2480-PASS

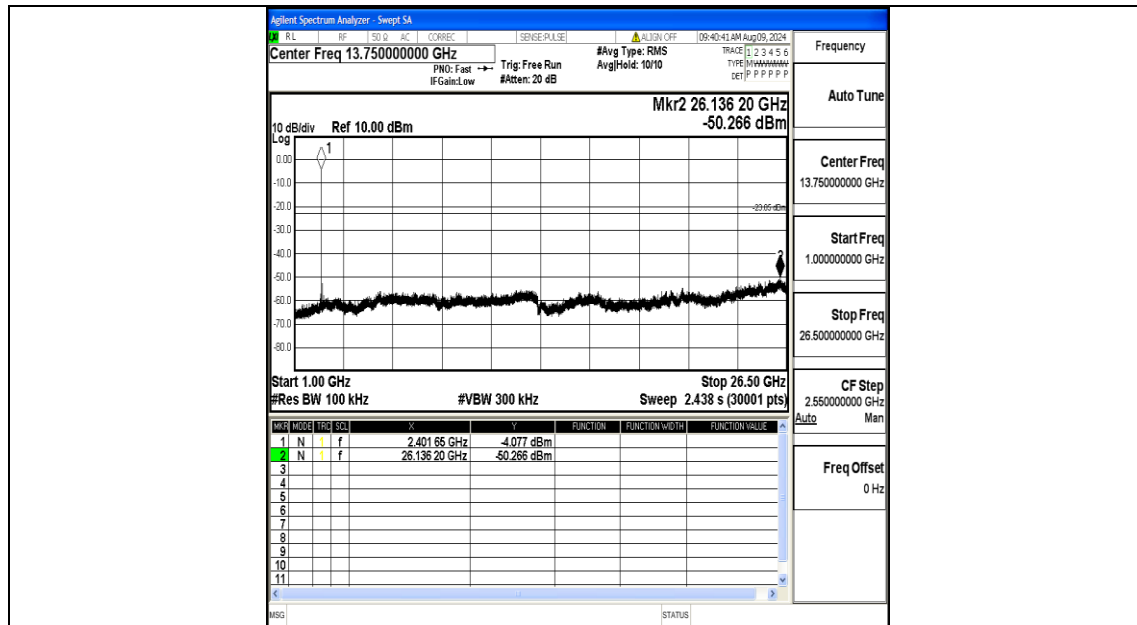
Appendix F: Conducted Spurious Emission

Test Result

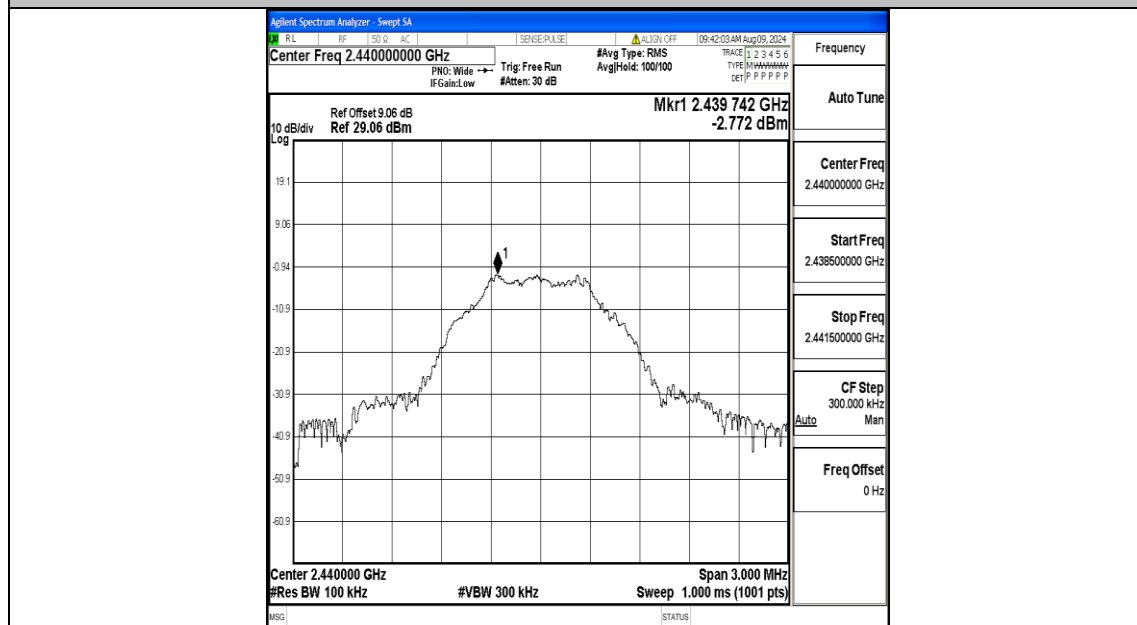
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0~Reference	-3.05	-3.05	---	PASS
BLE_1M	Ant1	2402	30~1000	-3.05	-62.83	≤-23.05	PASS
BLE_1M	Ant1	2402	1000~26500	-3.05	-50.27	≤-23.05	PASS
BLE_1M	Ant1	2440	0~Reference	-2.77	-2.77	---	PASS
BLE_1M	Ant1	2440	30~1000	-2.77	-62.95	≤-22.77	PASS
BLE_1M	Ant1	2440	1000~26500	-2.77	-50.34	≤-22.77	PASS
BLE_1M	Ant1	2480	0~Reference	-3.53	-3.53	---	PASS
BLE_1M	Ant1	2480	30~1000	-3.53	-62.59	≤-23.53	PASS
BLE_1M	Ant1	2480	1000~26500	-3.53	-49.55	≤-23.53	PASS
BLE_2M	Ant1	2402	0~Reference	-3.07	-3.07	---	PASS
BLE_2M	Ant1	2402	30~1000	-3.07	-62.88	≤-23.07	PASS
BLE_2M	Ant1	2402	1000~26500	-3.07	-50.28	≤-23.07	PASS
BLE_2M	Ant1	2440	0~Reference	-2.74	-2.74	---	PASS
BLE_2M	Ant1	2440	30~1000	-2.74	-63.19	≤-22.74	PASS
BLE_2M	Ant1	2440	1000~26500	-2.74	-50.06	≤-22.74	PASS
BLE_2M	Ant1	2480	0~Reference	-3.59	-3.59	---	PASS
BLE_2M	Ant1	2480	30~1000	-3.59	-62.22	≤-23.59	PASS
BLE_2M	Ant1	2480	1000~26500	-3.59	-50.17	≤-23.59	PASS

Test Graphs

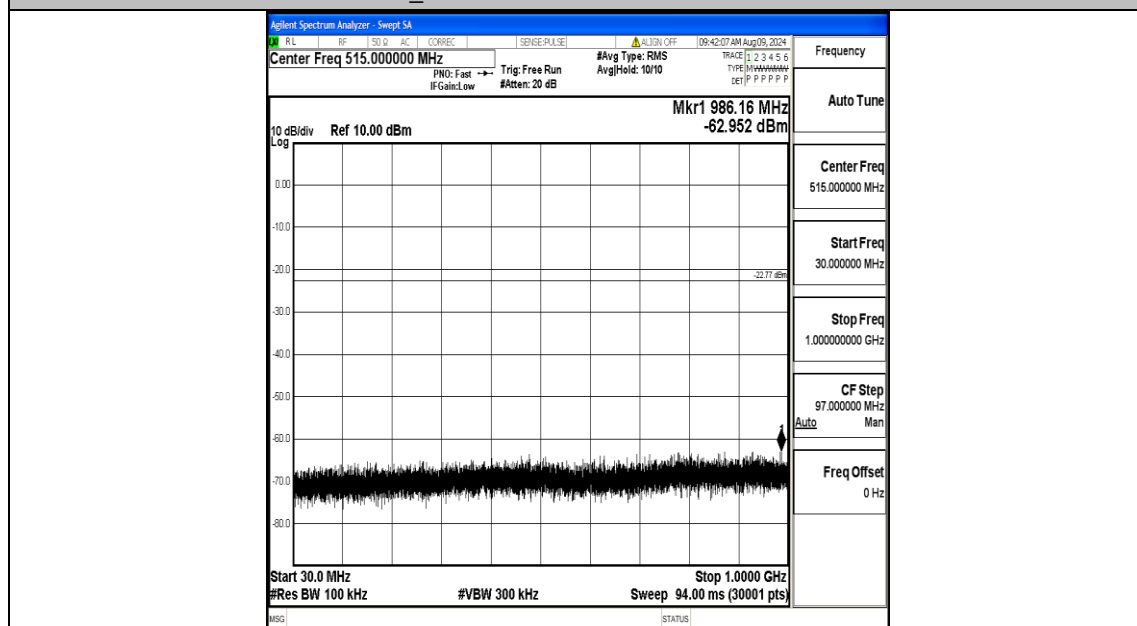




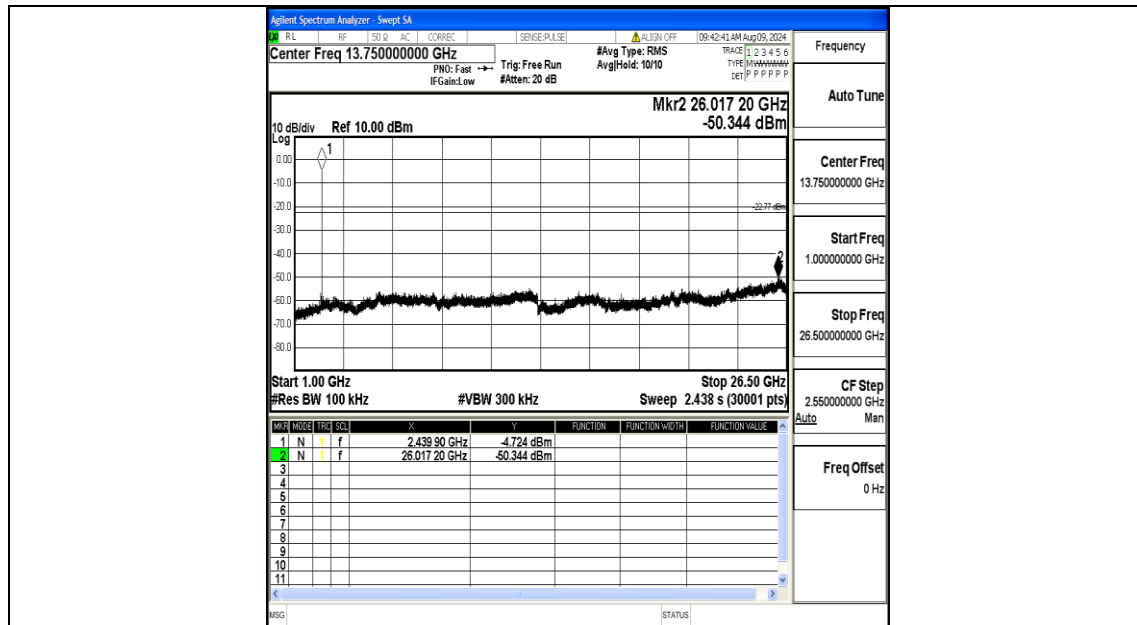
BLE_1M-Ant1-2402-1000~26500-PASS



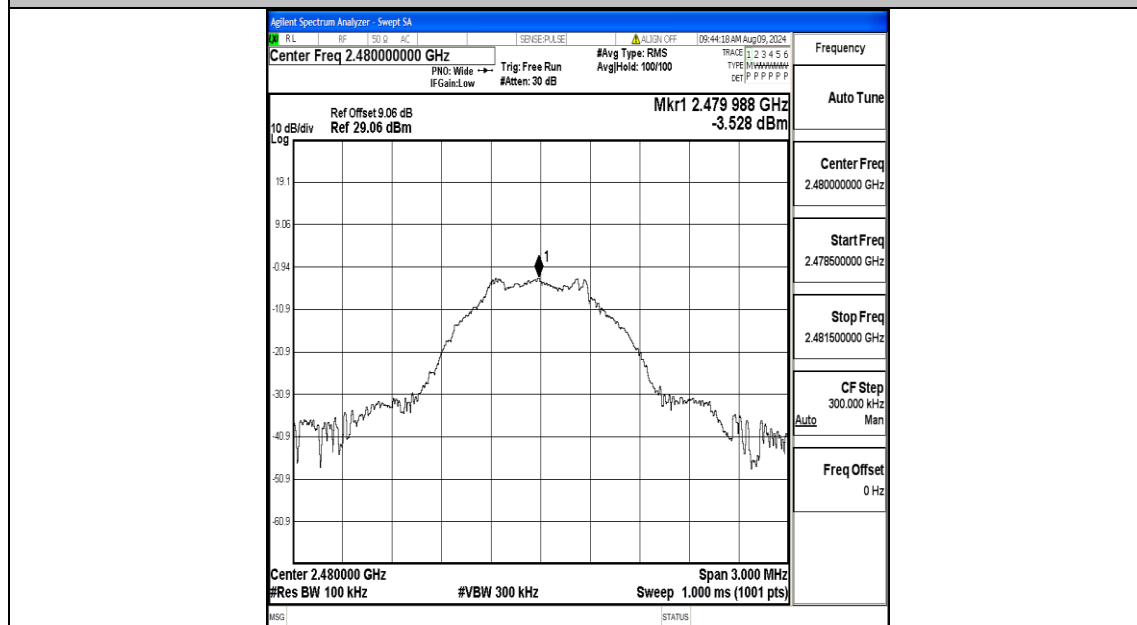
BLE_1M-Ant1-2440-0~Reference-PASS



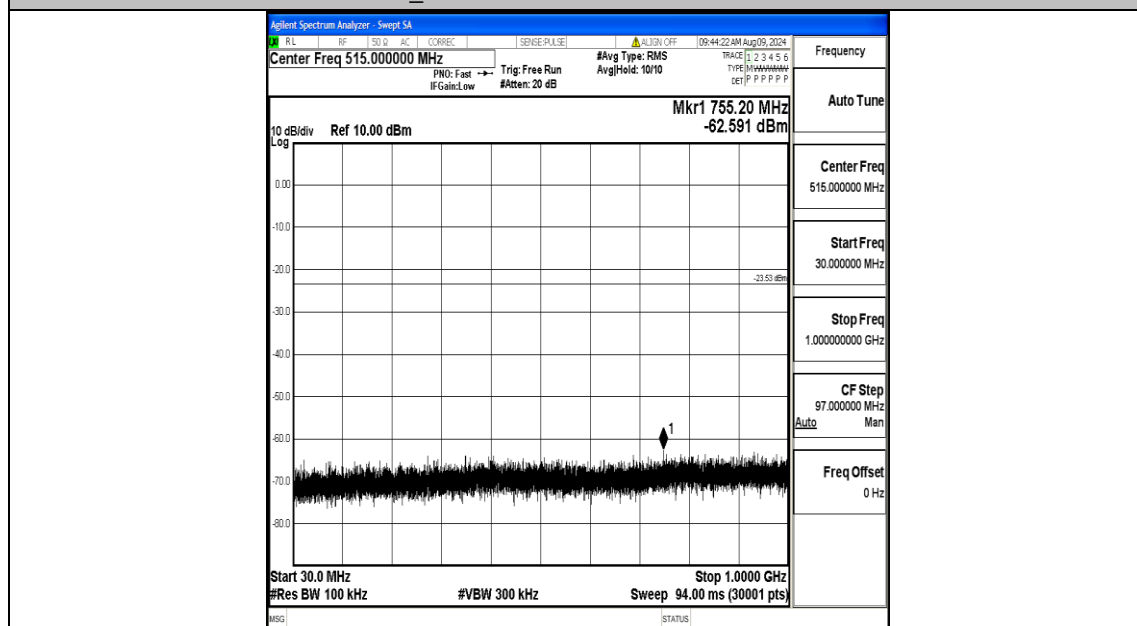
BLE_1M-Ant1-2440-30~1000-PASS



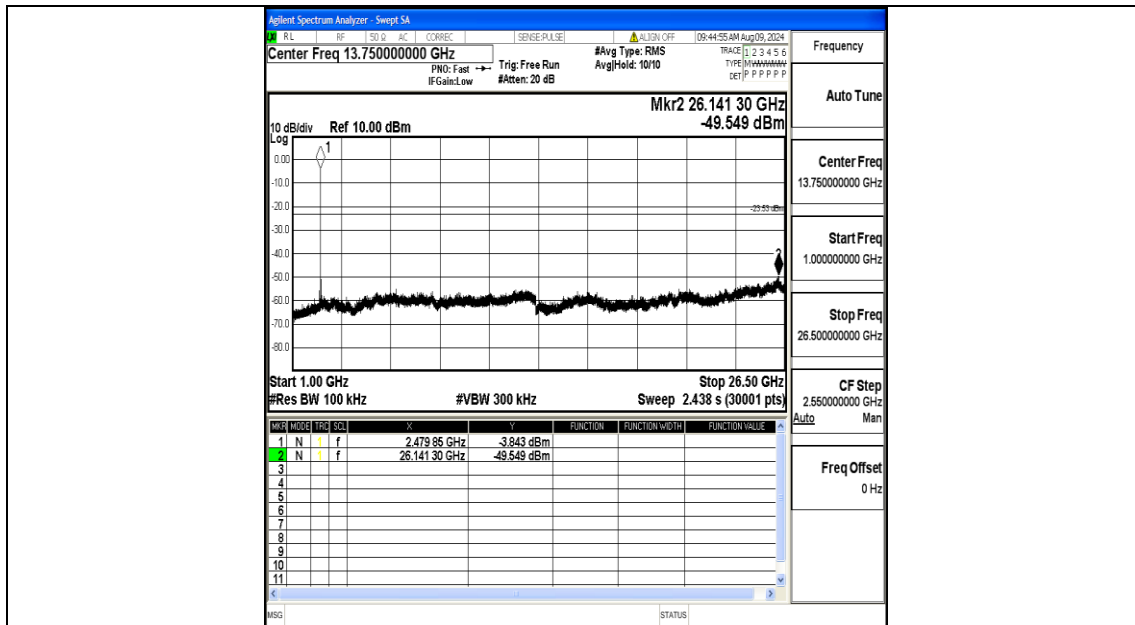
BLE_1M-Ant1-2440-1000~26500-PASS



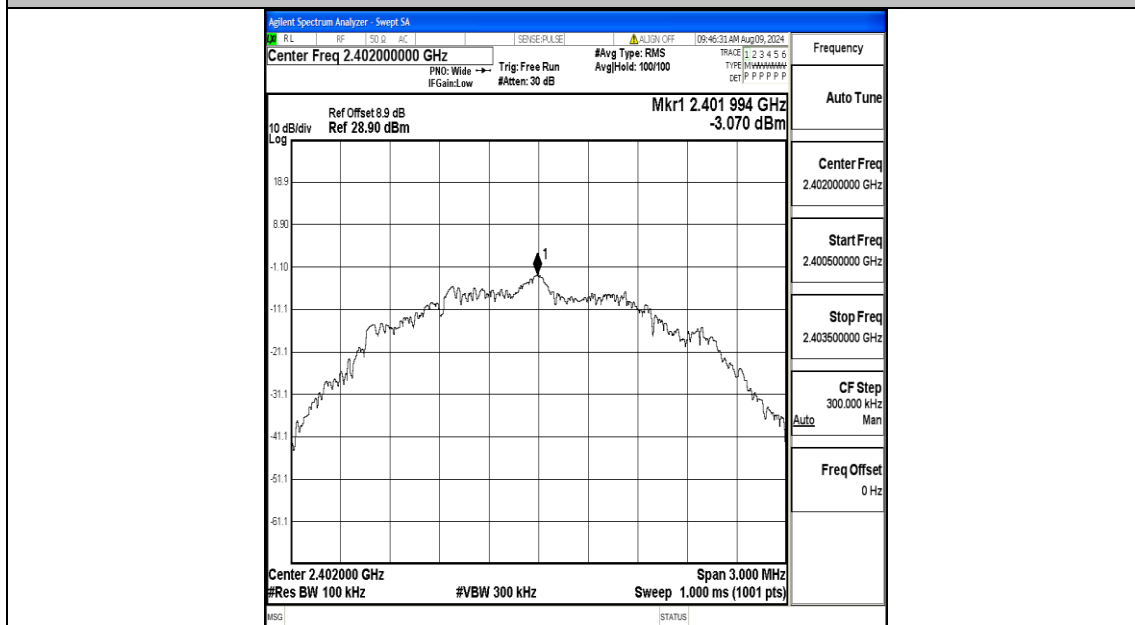
BLE_1M-Ant1-2480-0~Reference-PASS



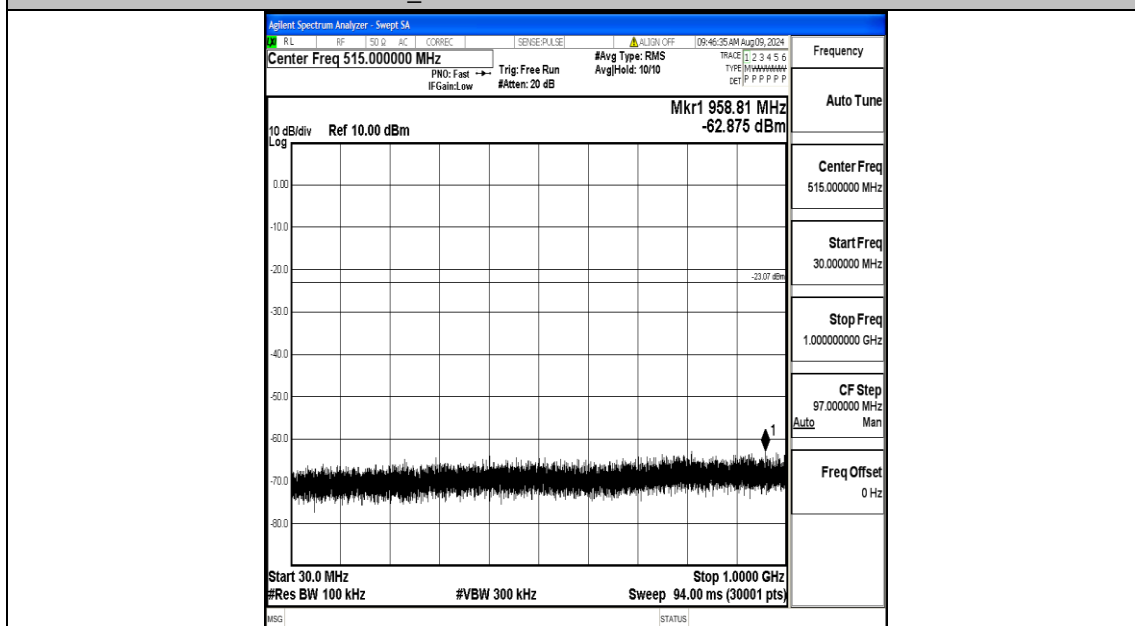
BLE_1M-Ant1-2480-30~1000-PASS



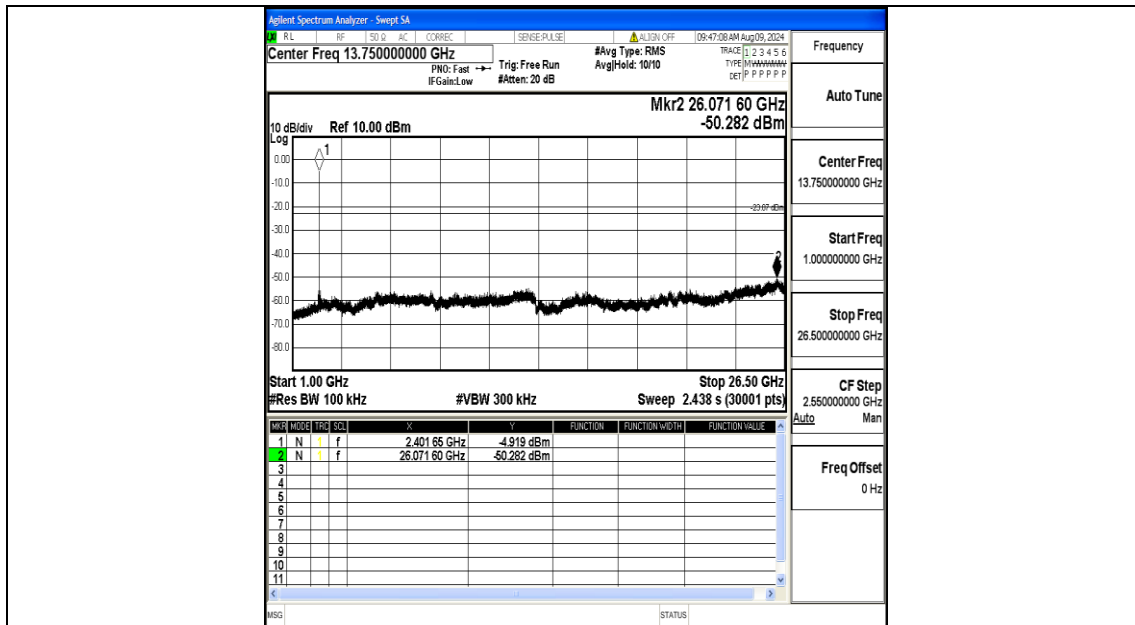
BLE_1M-Ant1-2480-1000~26500-PASS



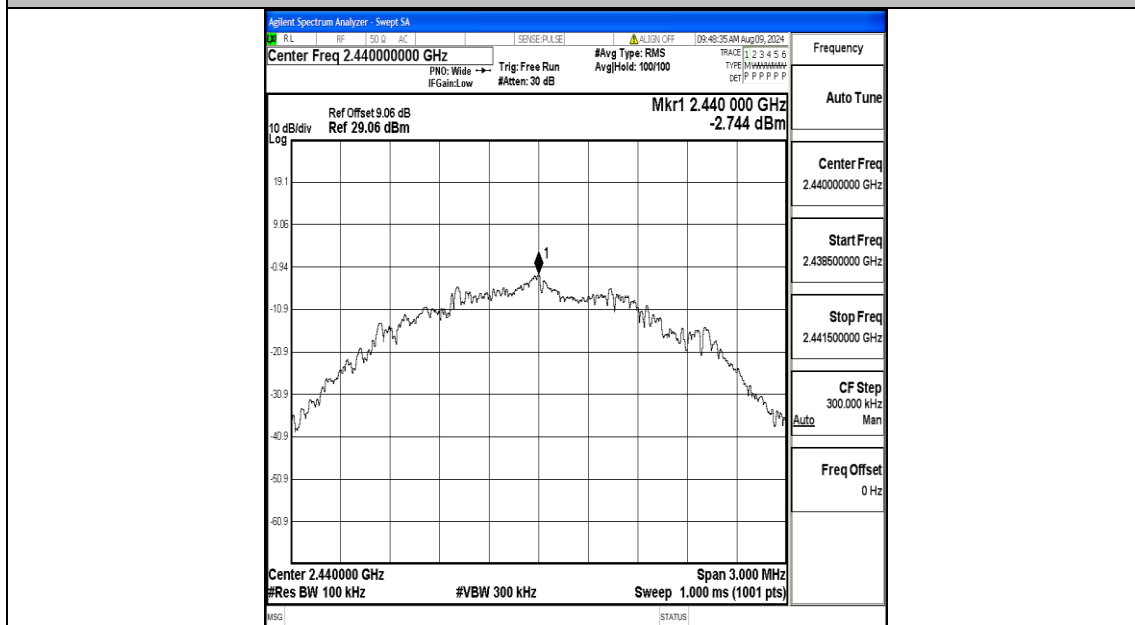
BLE_2M-Ant1-2402-0~Reference-PASS



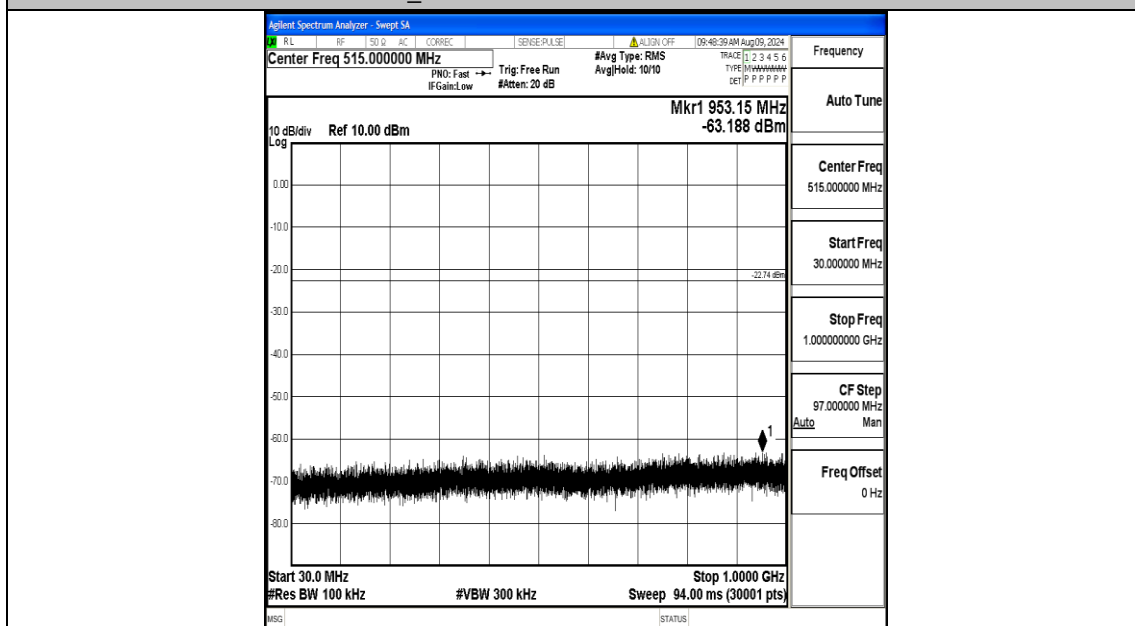
BLE_2M-Ant1-2402-30~1000-PASS



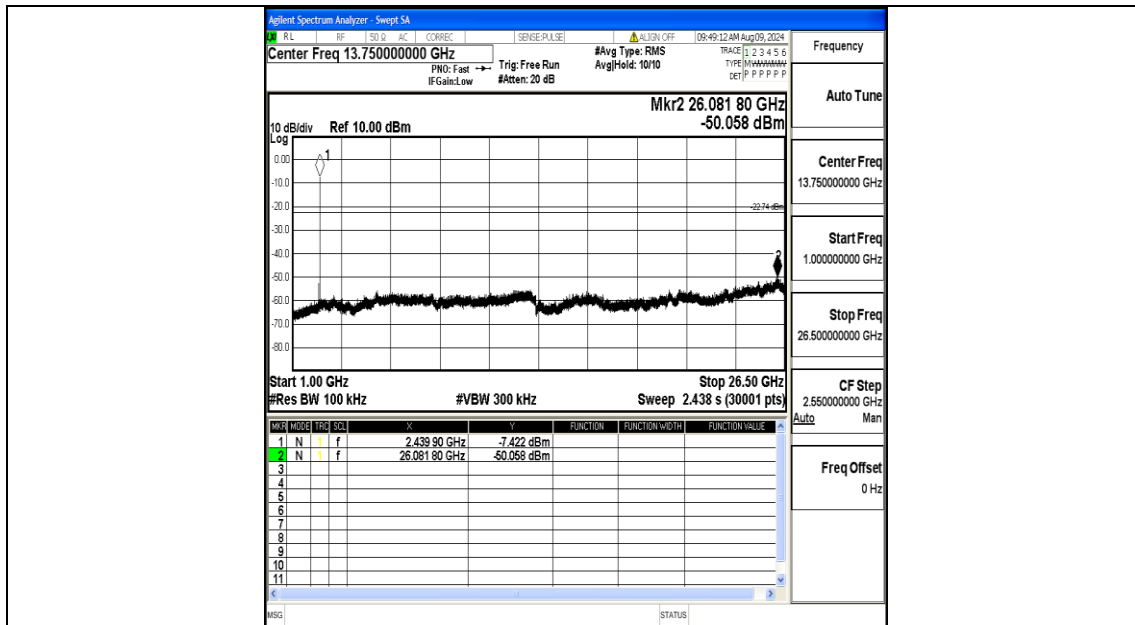
BLE_2M-Ant1-2402-1000~26500-PASS



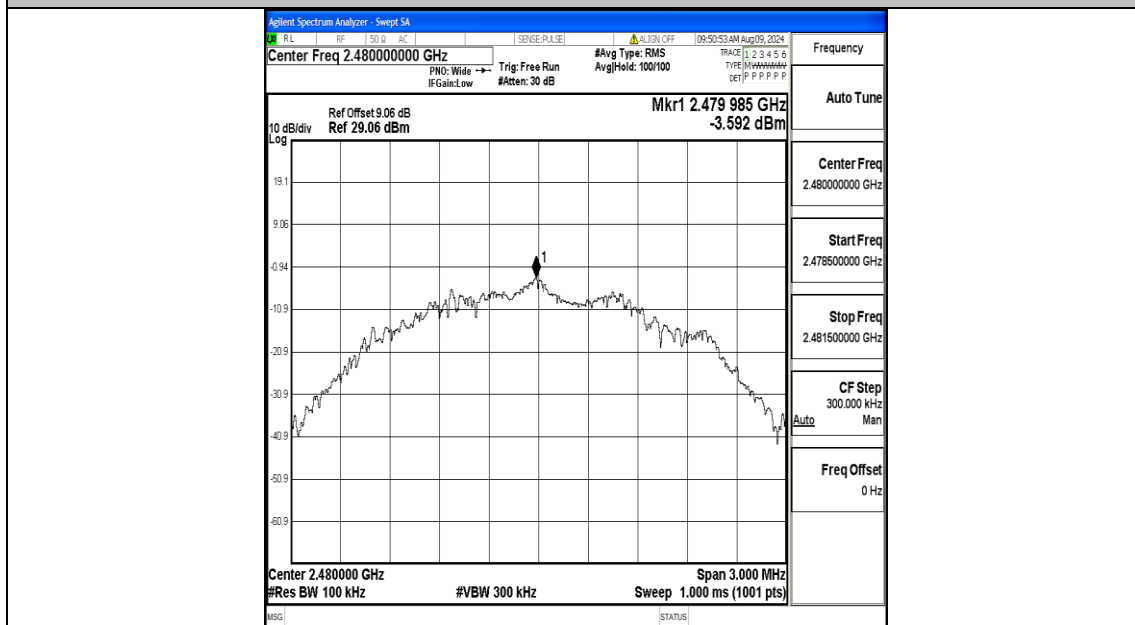
BLE_2M-Ant1-2440-0~Reference-PASS



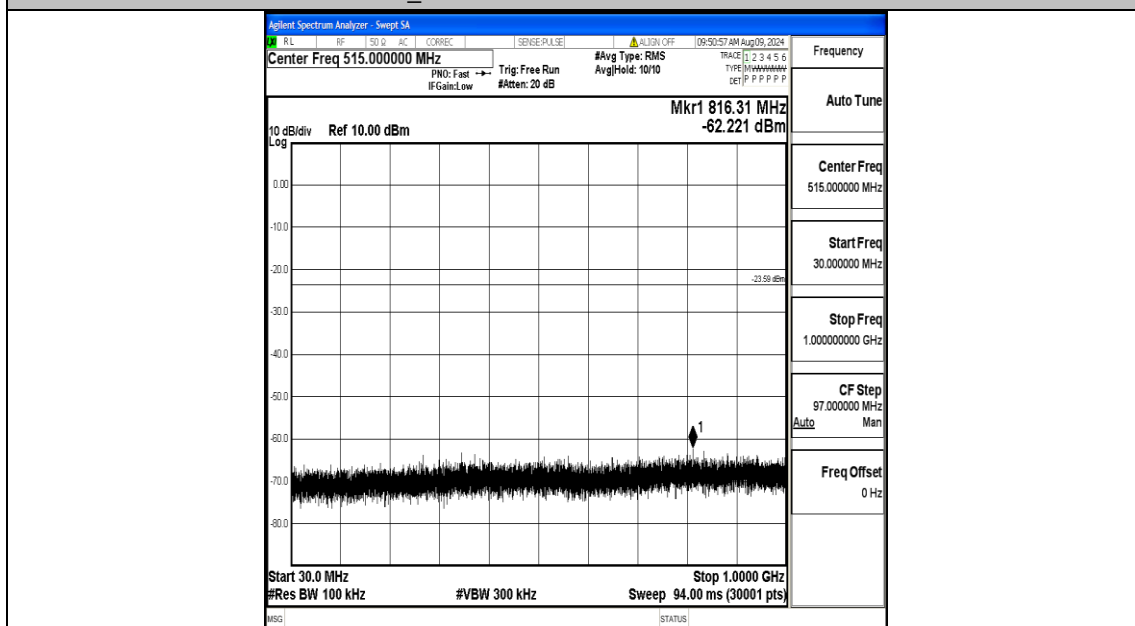
BLE_2M-Ant1-2440-30~1000-PASS



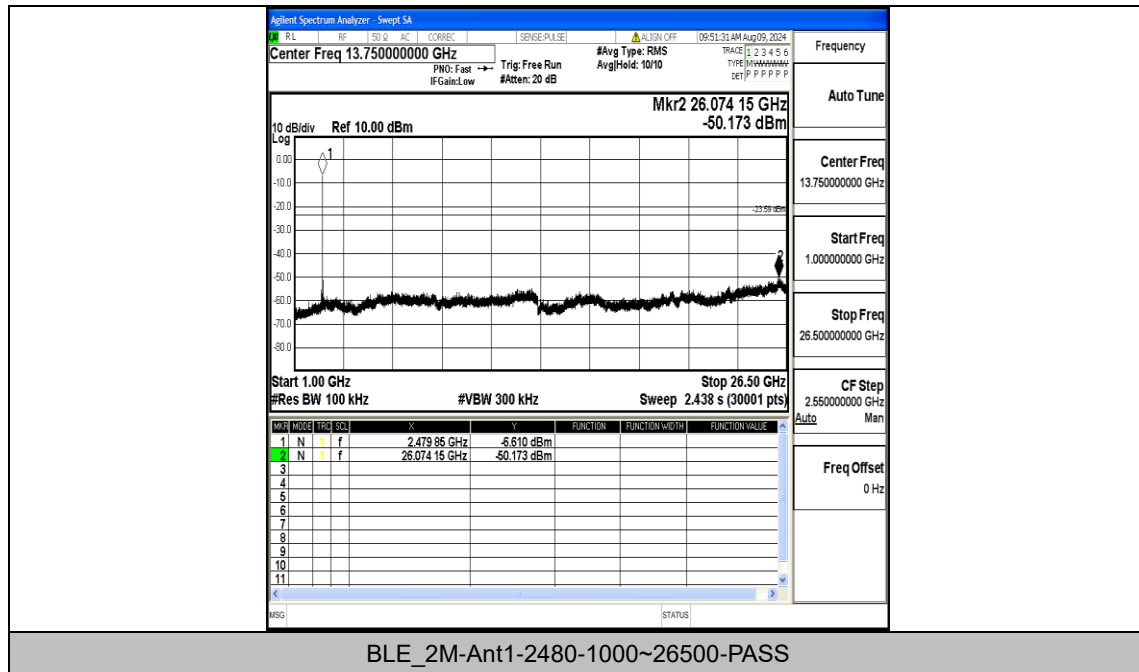
BLE_2M-Ant1-2440-1000~26500-PASS



BLE_2M-Ant1-2480-0~Reference-PASS



BLE_2M-Ant1-2480-30~1000-PASS



Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	0.38	0.62	61.29	2.13
BLE_1M	Ant1	2440	0.38	0.62	61.29	2.13
BLE_1M	Ant1	2480	0.38	0.62	61.29	2.13
BLE_2M	Ant1	2402	0.20	0.63	31.75	4.98
BLE_2M	Ant1	2440	0.19	0.62	30.65	5.14
BLE_2M	Ant1	2480	0.19	0.62	30.65	5.14

Test Graphs

