

Appendix Test Data for BLE (Conducted Measurement)

Product Name: NucBox

Trade Mark: GMKtec

Test Model: M7

FCC ID: 2AXUD-M7

Environmental Conditions

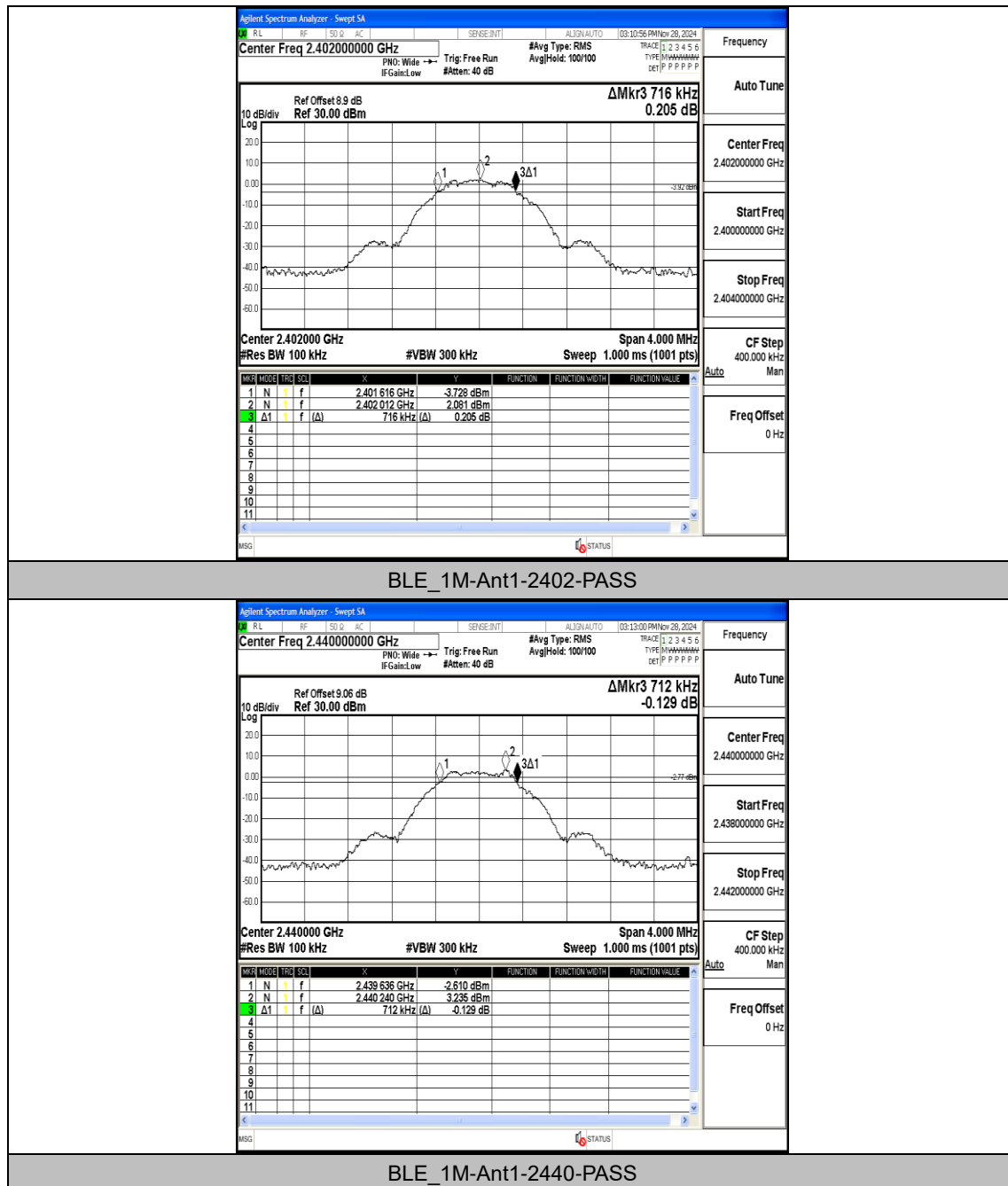
Temperature:	23.5℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: DTS Bandwidth

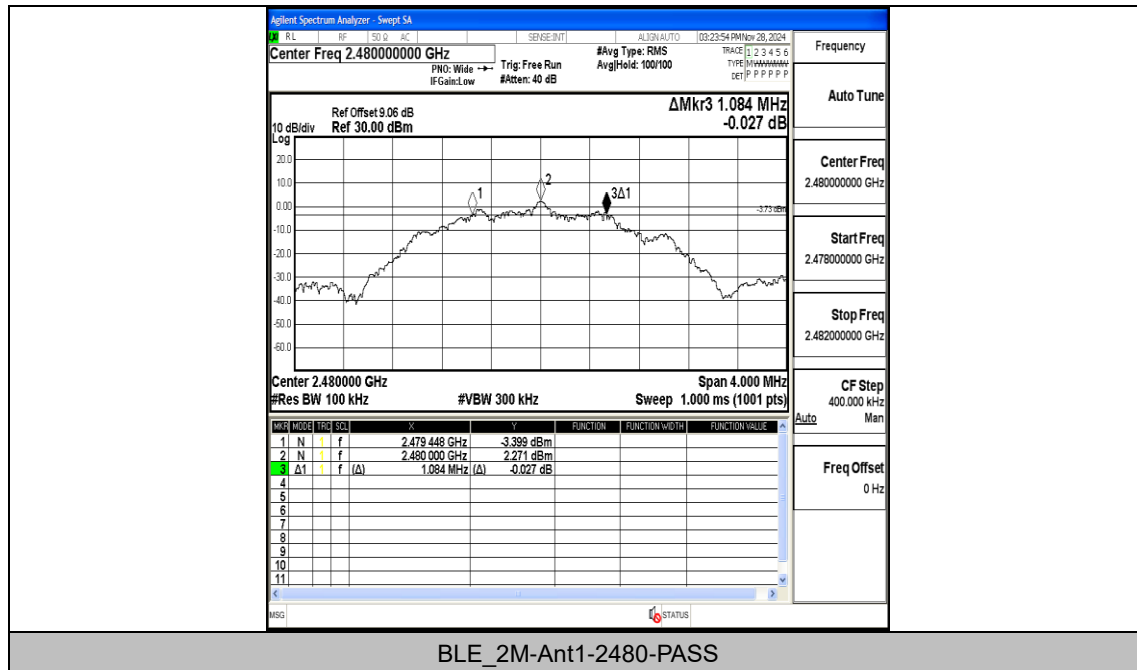
Test Result

Test Mode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
BLE_1M	Ant1	2402	0.716	2401.616	2402.332	0.5	PASS
BLE_1M	Ant1	2440	0.712	2439.636	2440.348	0.5	PASS
BLE_1M	Ant1	2480	0.732	2479.624	2480.356	0.5	PASS
BLE_2M	Ant1	2402	1.240	2401.412	2402.652	0.5	PASS
BLE_2M	Ant1	2440	1.108	2439.456	2440.564	0.5	PASS
BLE_2M	Ant1	2480	1.084	2479.448	2480.532	0.5	PASS

Test Graphs





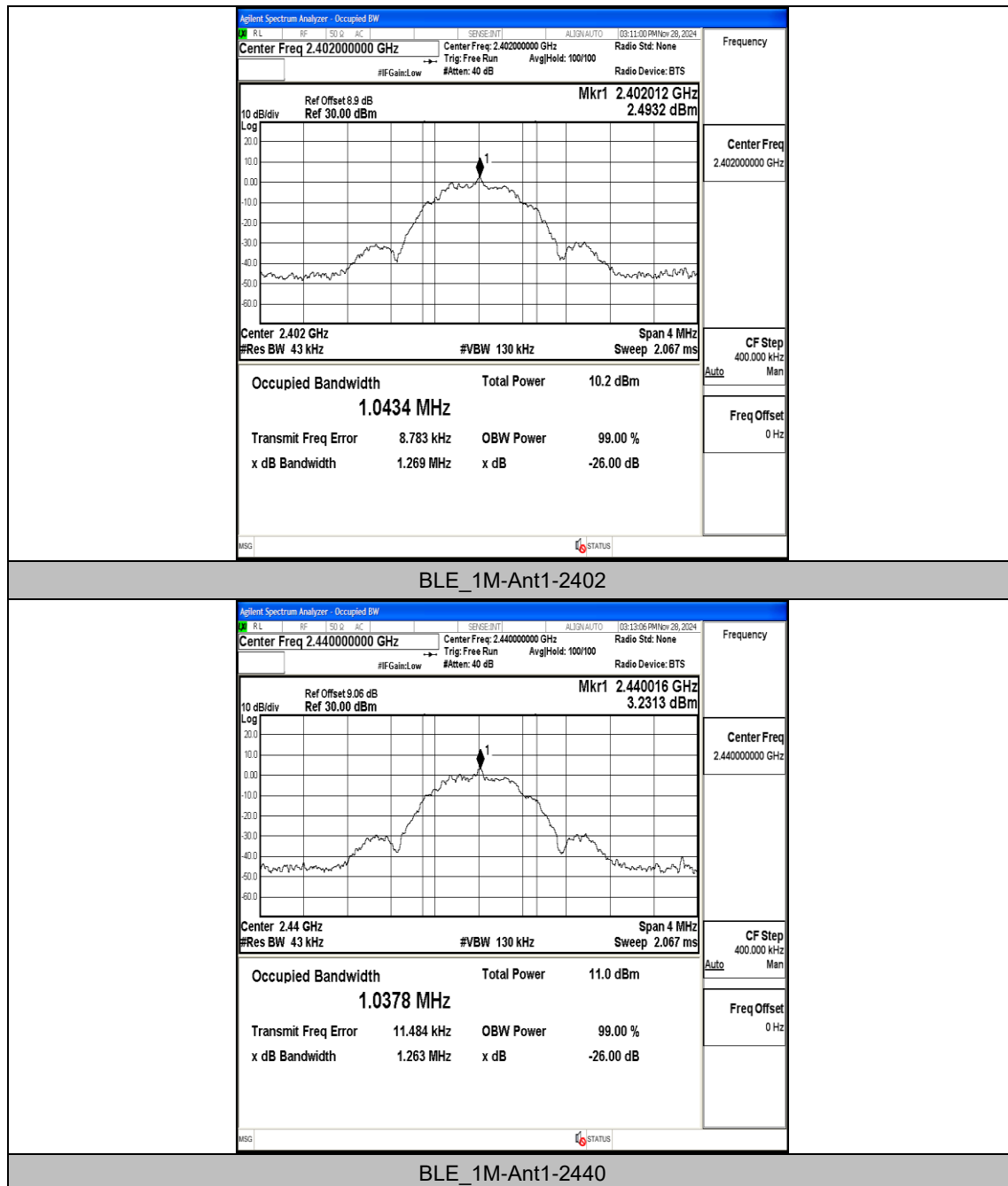


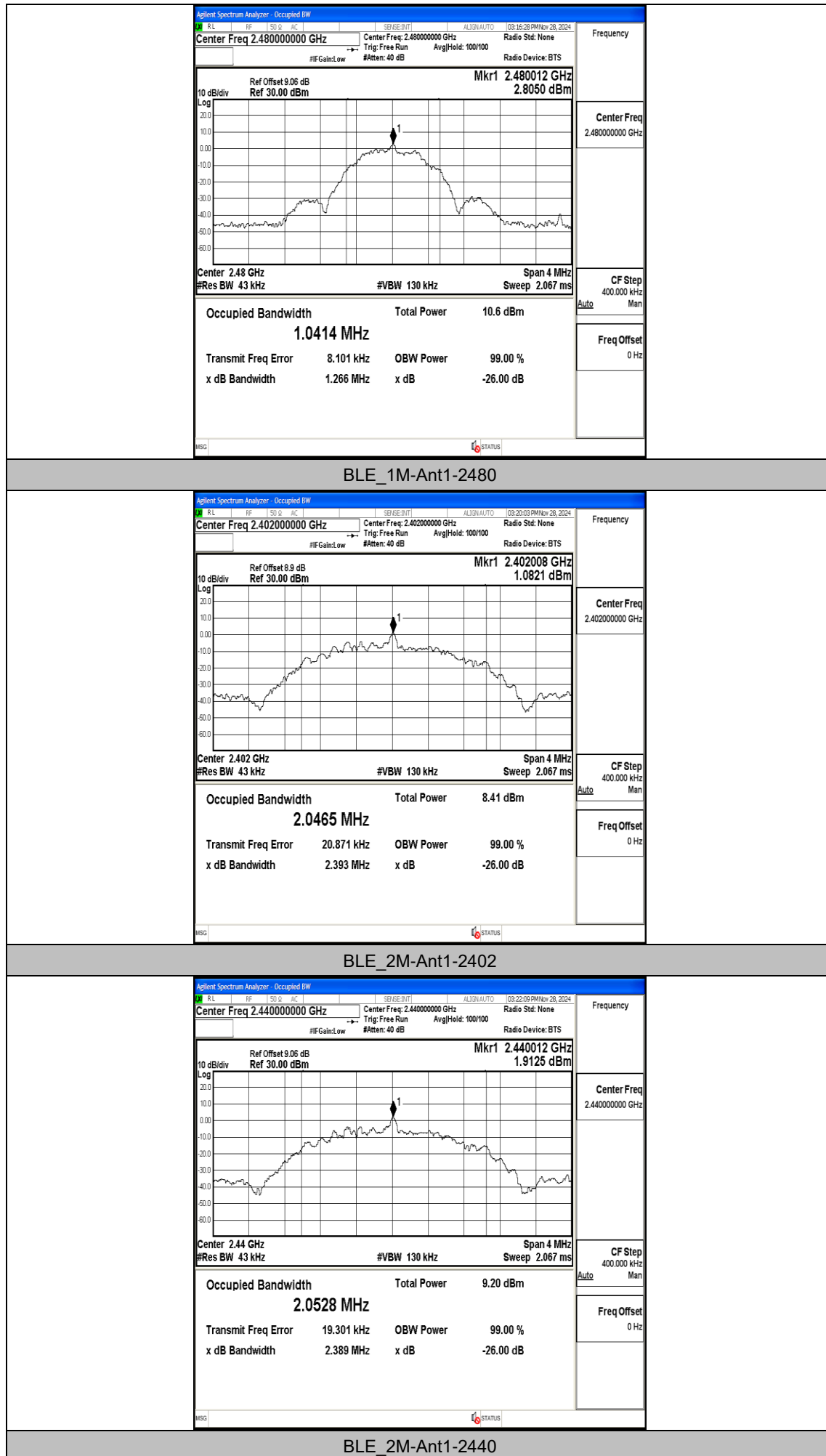
Appendix B: Occupied Channel Bandwidth

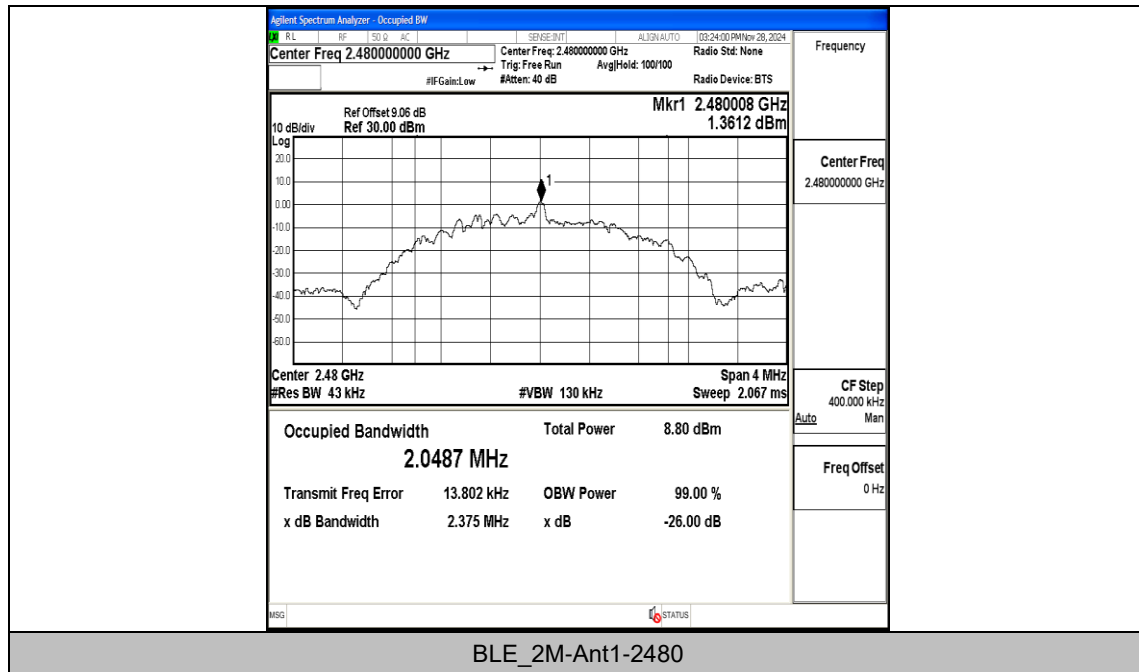
Test Result

Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
BLE_1M	Ant1	2402	1.0434	2401.4871	2402.5305	---	---
BLE_1M	Ant1	2440	1.0378	2439.4926	2440.5304	---	---
BLE_1M	Ant1	2480	1.0414	2479.4874	2480.5288	---	---
BLE_2M	Ant1	2402	2.0465	2400.9976	2403.0441	---	---
BLE_2M	Ant1	2440	2.0528	2438.9929	2441.0457	---	---
BLE_2M	Ant1	2480	2.0487	2478.9895	2481.0382	---	---

Test Graphs





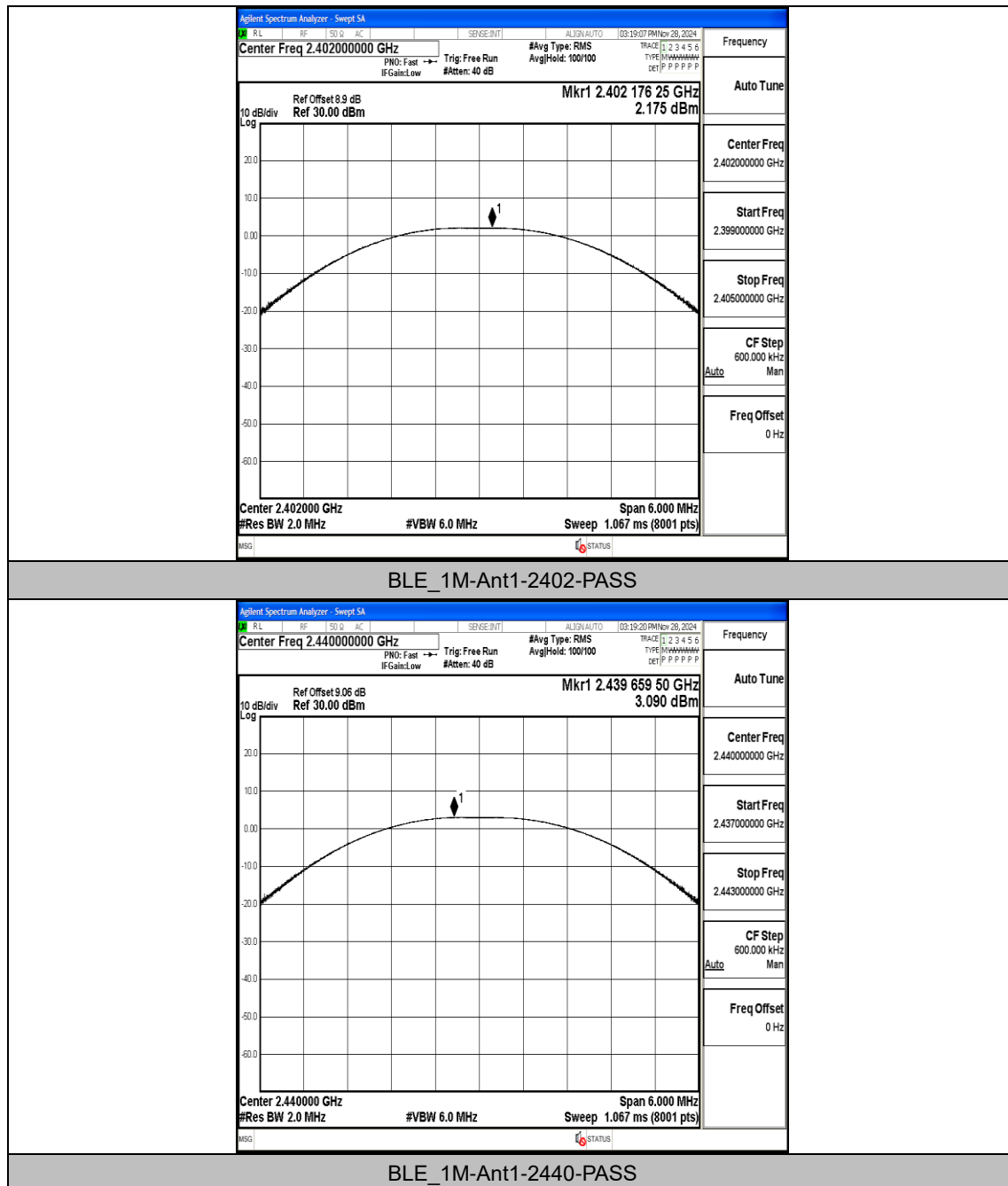


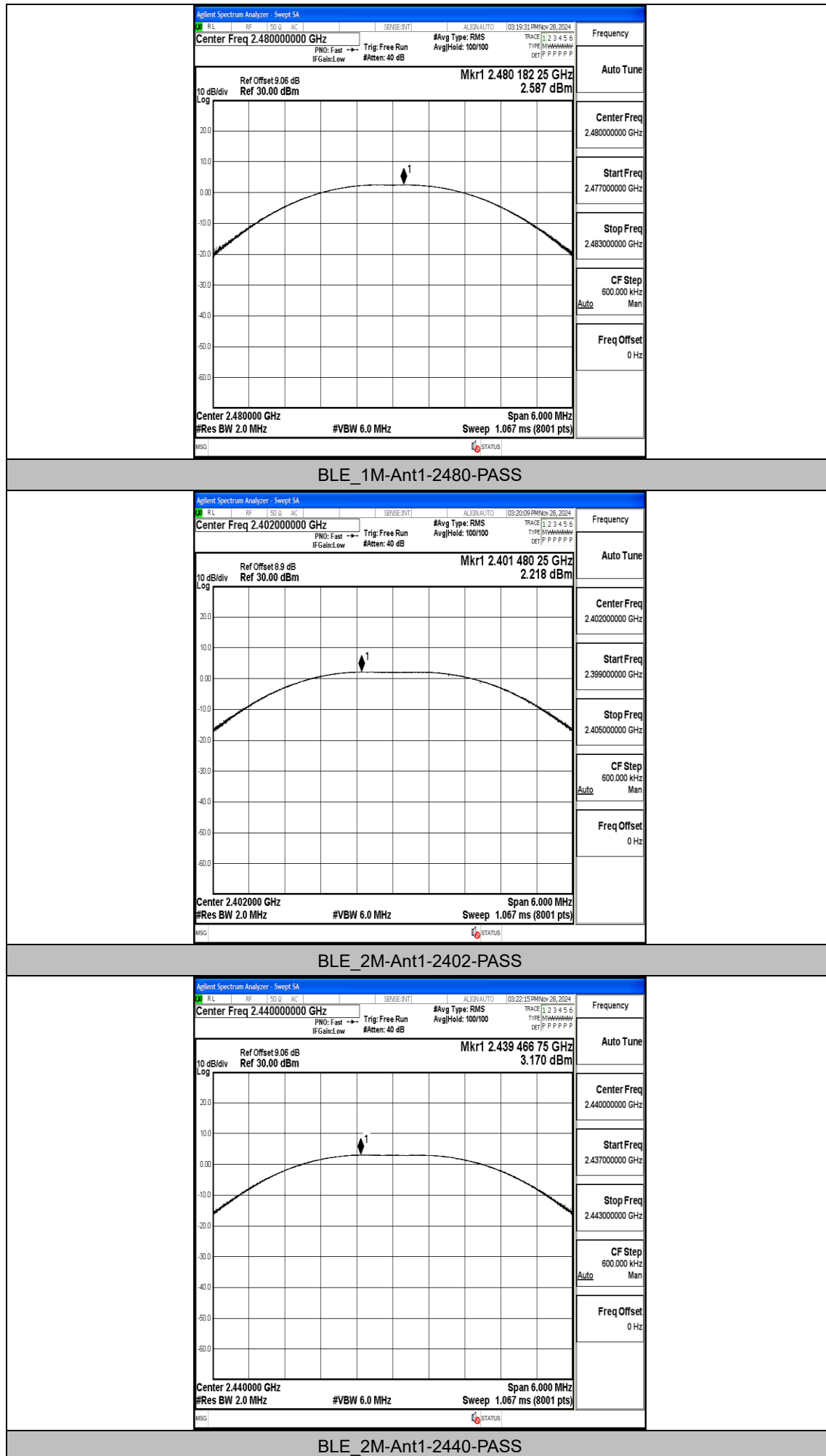
Appendix C: Maximum peak conducted output power

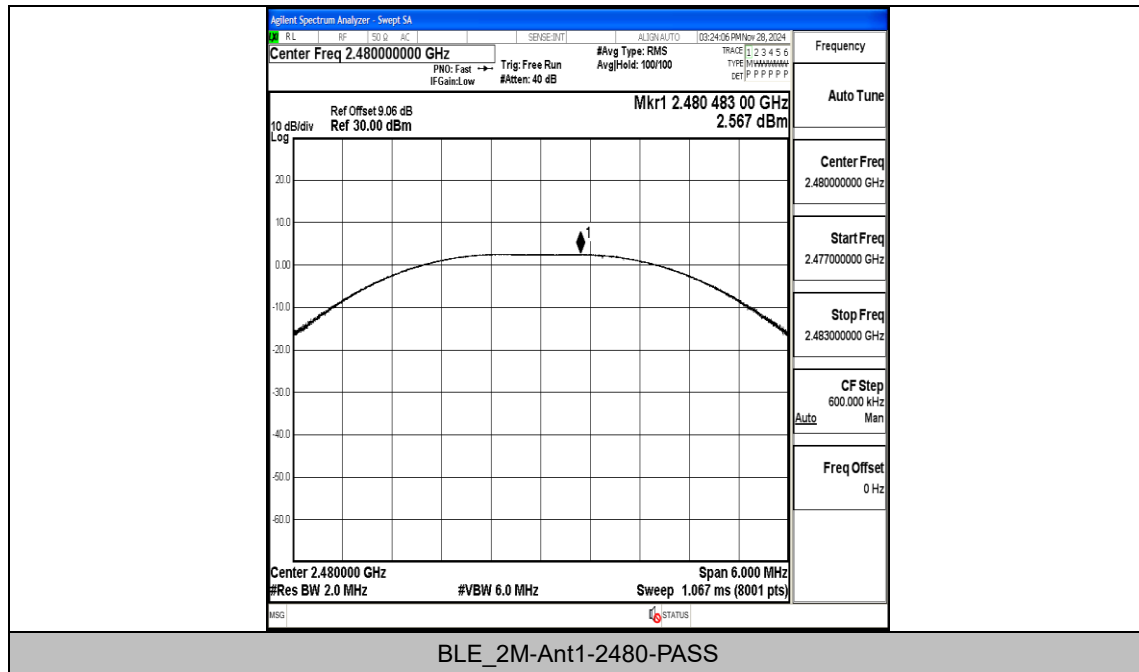
Test Result Peak

Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power [dBm]	Conducted Limit [dBm]	Verdict
BLE_1M	Ant1	2402	2.18	≤30	PASS
BLE_1M	Ant1	2440	3.09	≤30	PASS
BLE_1M	Ant1	2480	2.59	≤30	PASS
BLE_2M	Ant1	2402	2.22	≤30	PASS
BLE_2M	Ant1	2440	3.17	≤30	PASS
BLE_2M	Ant1	2480	2.57	≤30	PASS

Test Graphs Peak





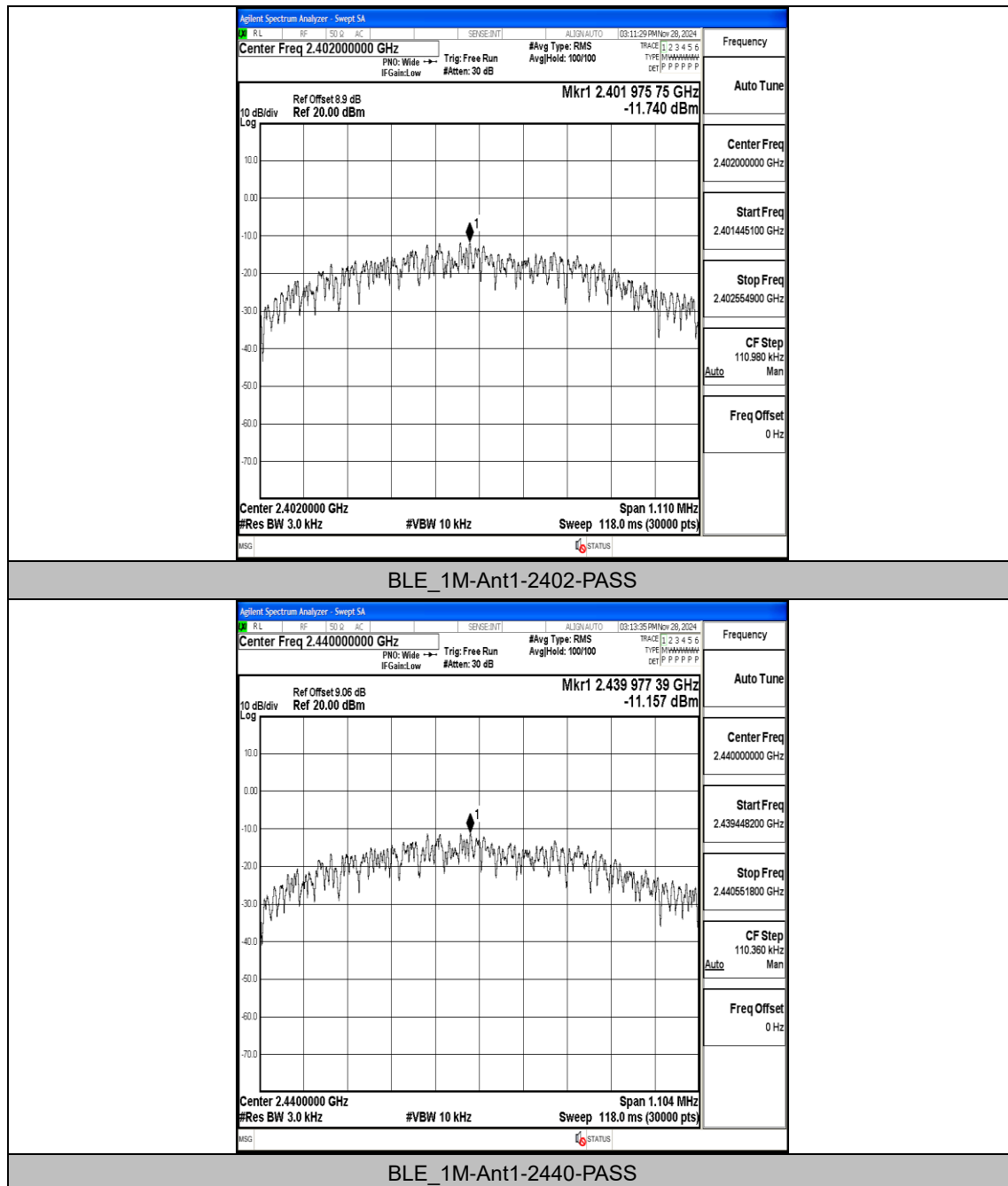


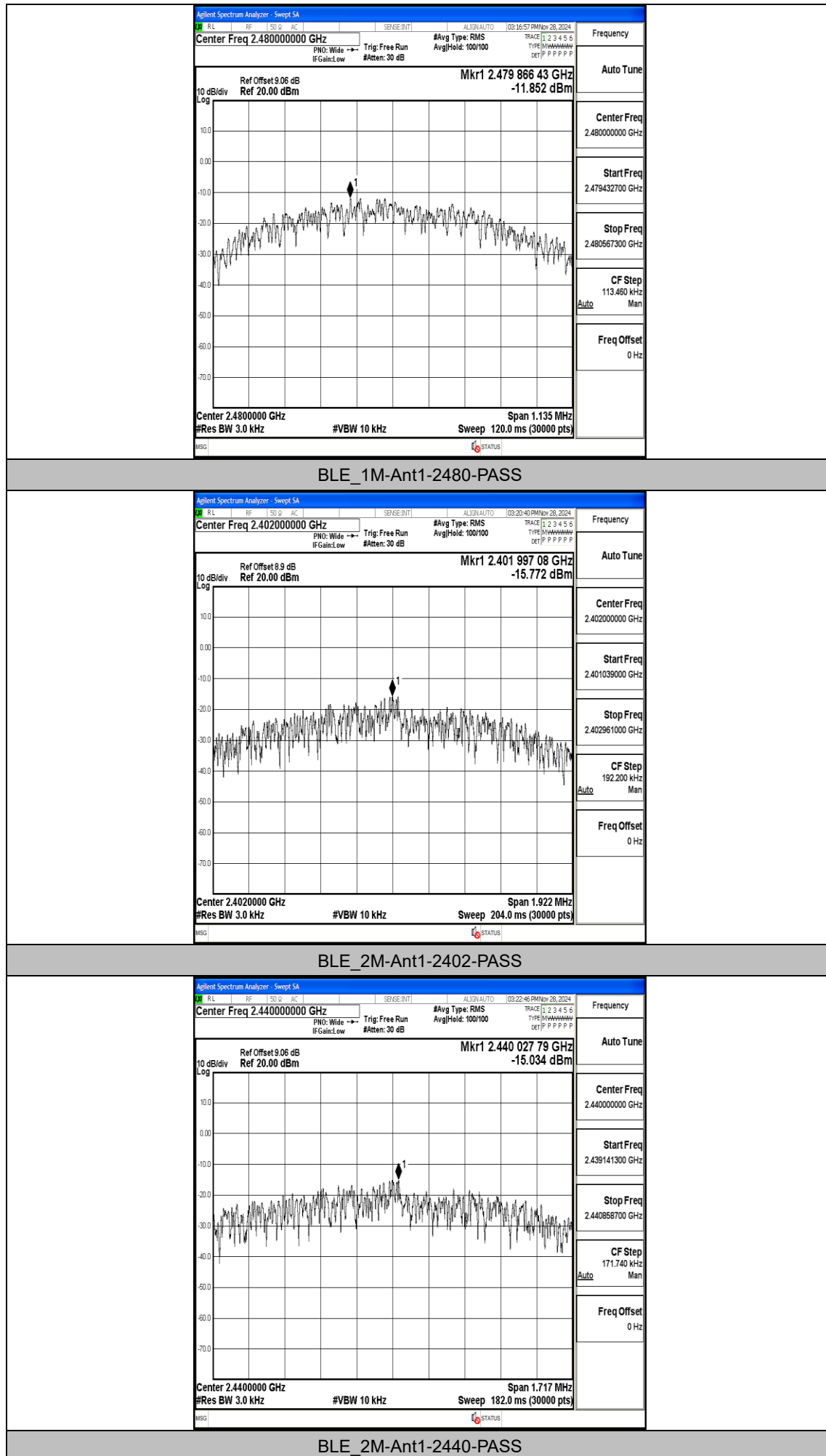
Appendix D: Maximum peak power spectral density

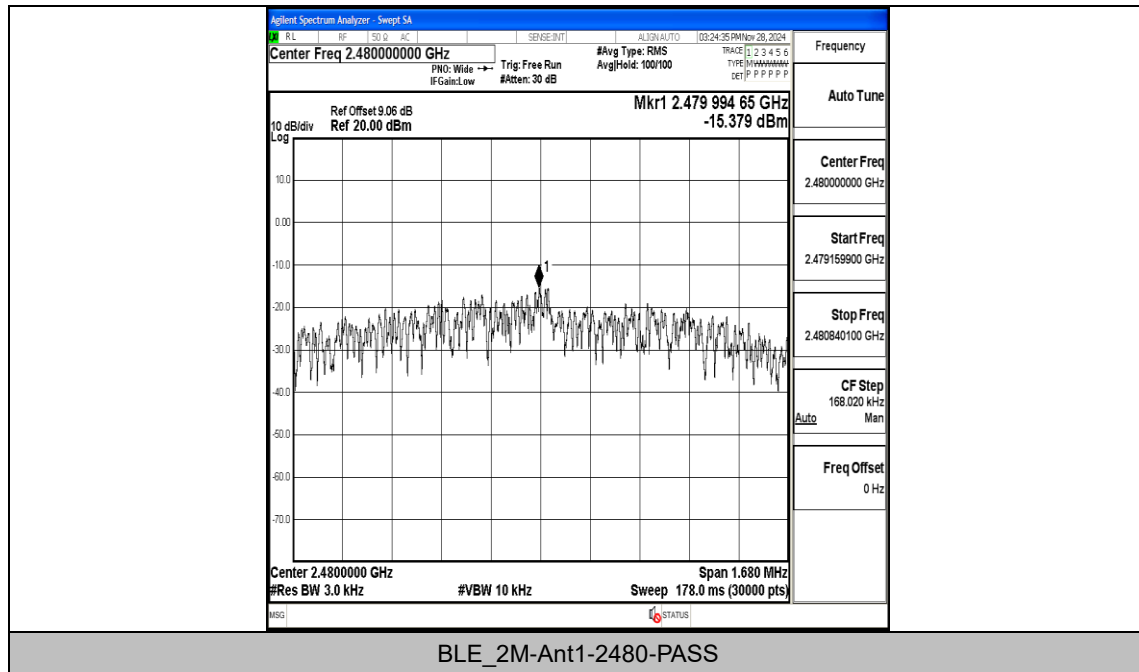
Test Result

Test Mode	Antenna	Frequency [MHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-11.74	≤8.00	PASS
BLE_1M	Ant1	2440	-11.16	≤8.00	PASS
BLE_1M	Ant1	2480	-11.85	≤8.00	PASS
BLE_2M	Ant1	2402	-15.77	≤8.00	PASS
BLE_2M	Ant1	2440	-15.03	≤8.00	PASS
BLE_2M	Ant1	2480	-15.38	≤8.00	PASS

Test Graphs





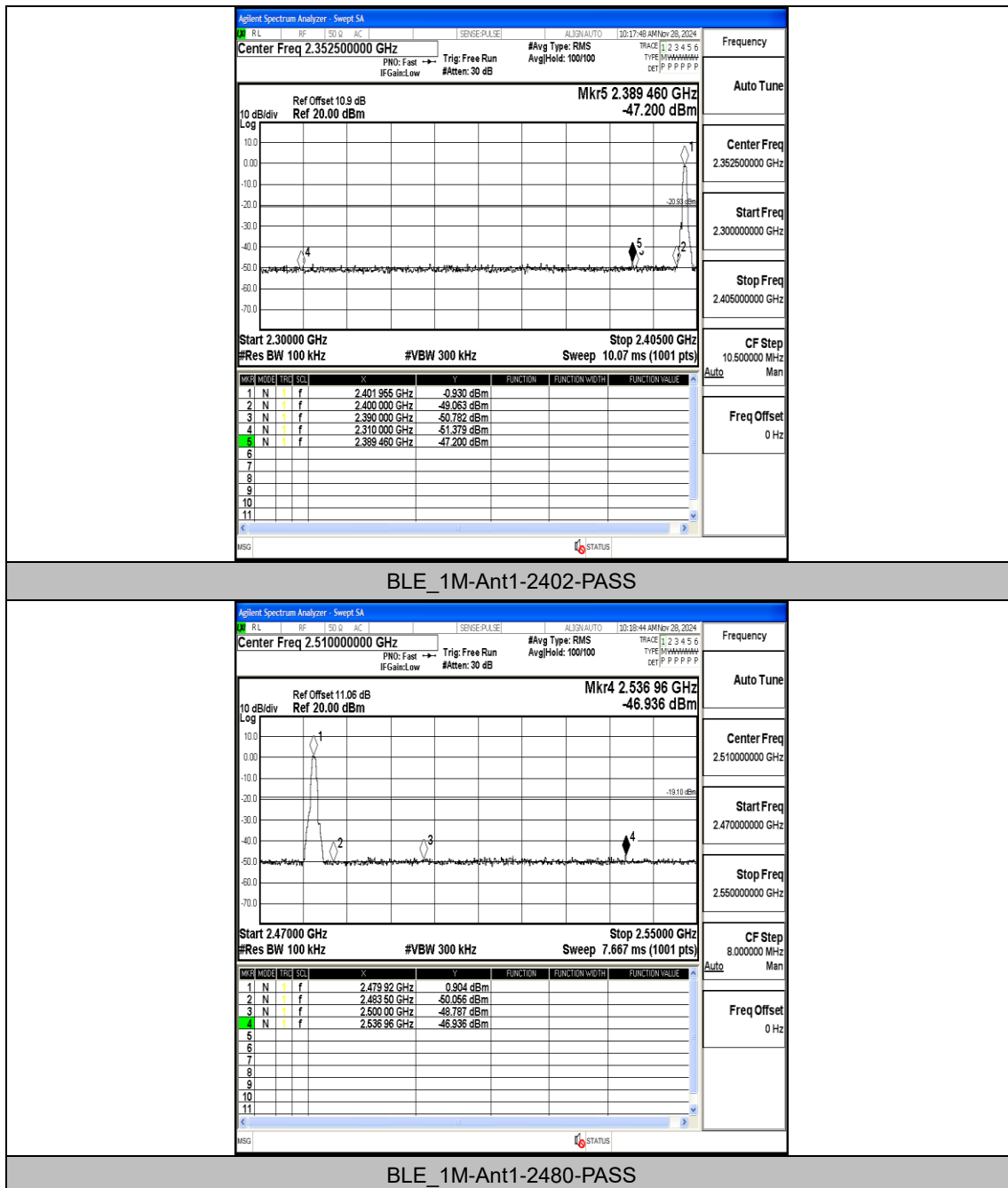


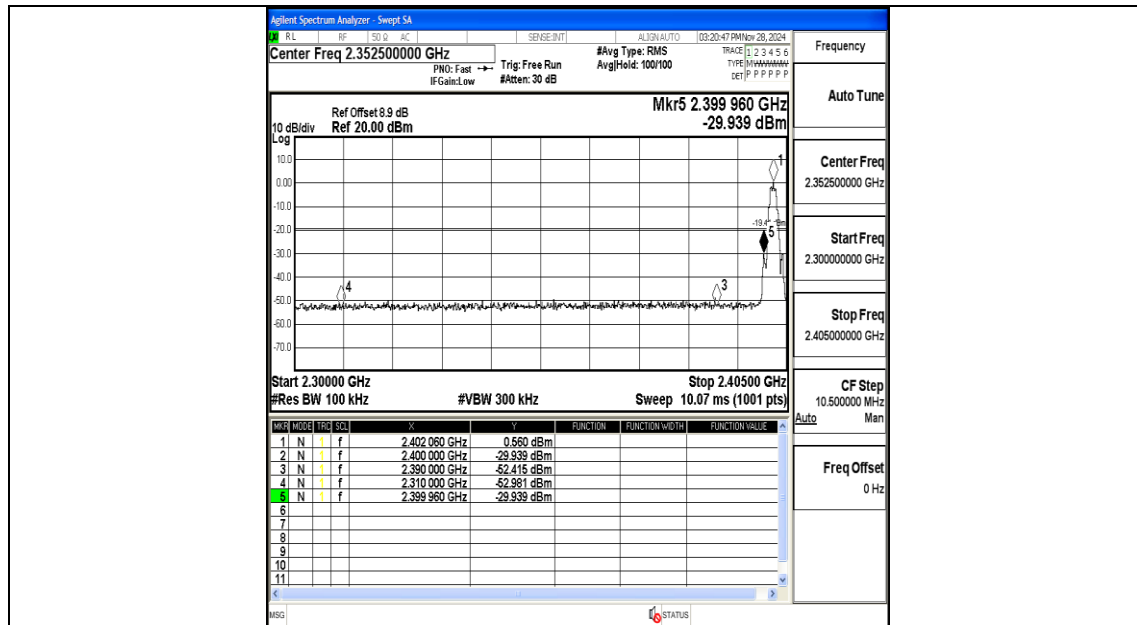
Appendix E: Band edge measurements

Test Result

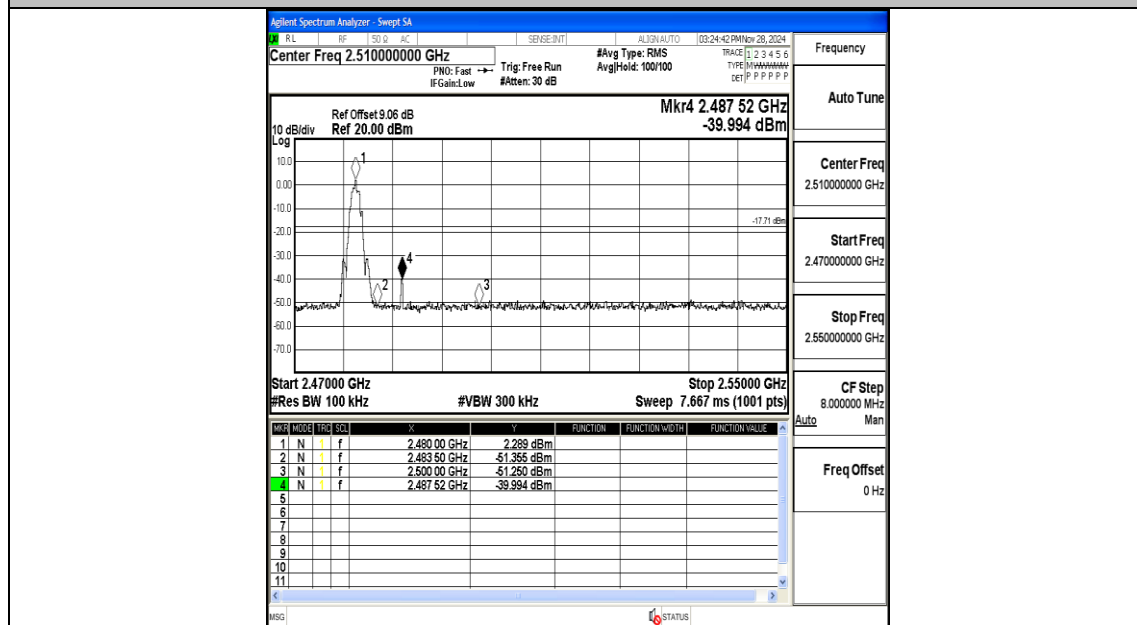
Test Mode	Antenna	Ch. Name	Frequency [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	-0.93	-47.2	≤-20.93	PASS
BLE_1M	Ant1	High	2480	0.90	-46.94	≤-19.1	PASS
BLE_2M	Ant1	Low	2402	0.56	-29.94	≤-19.44	PASS
BLE_2M	Ant1	High	2480	2.29	-39.99	≤-17.71	PASS

Test Graphs





BLE_2M-Ant1-2402-PASS



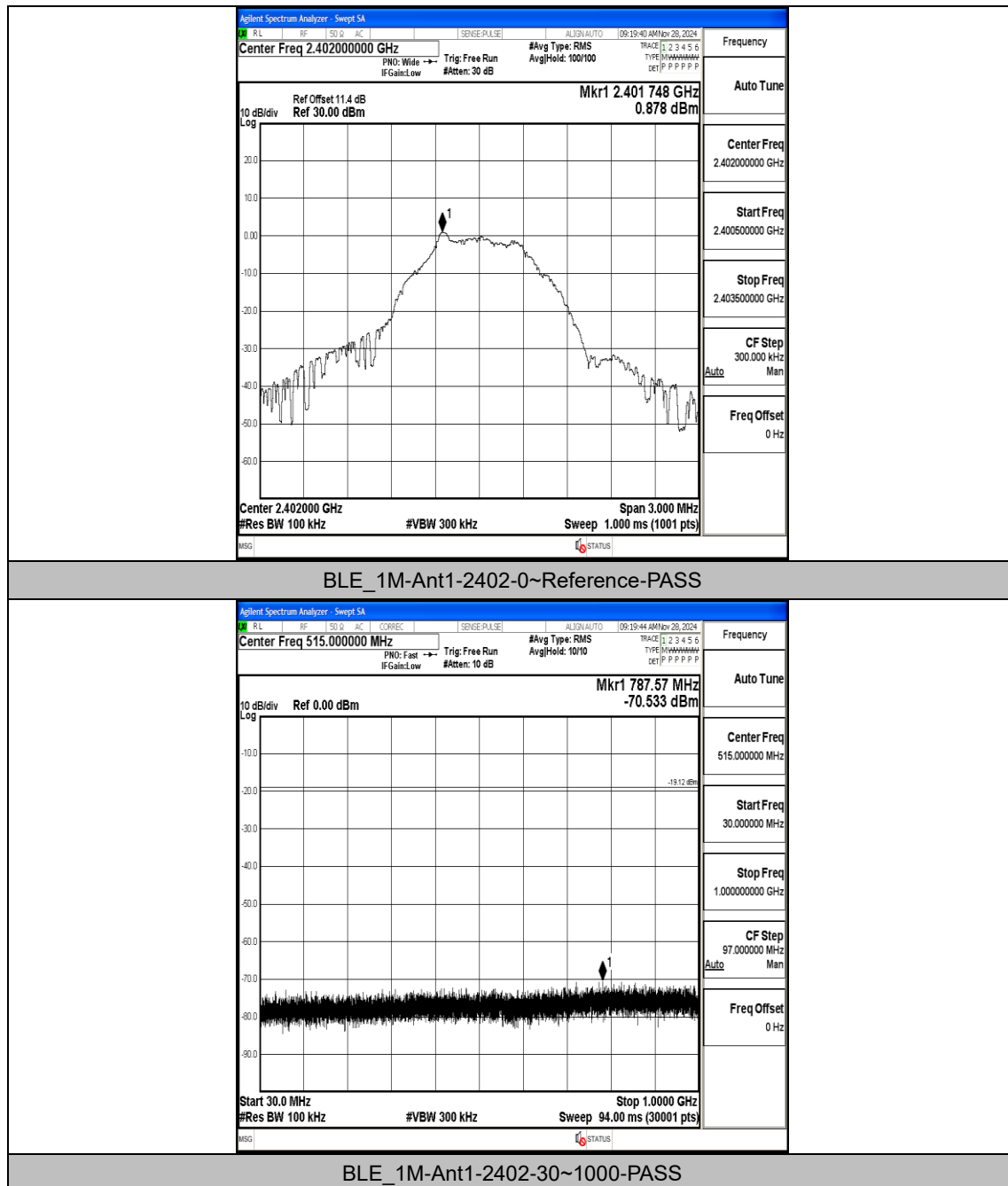
BLE_2M-Ant1-2480-PASS

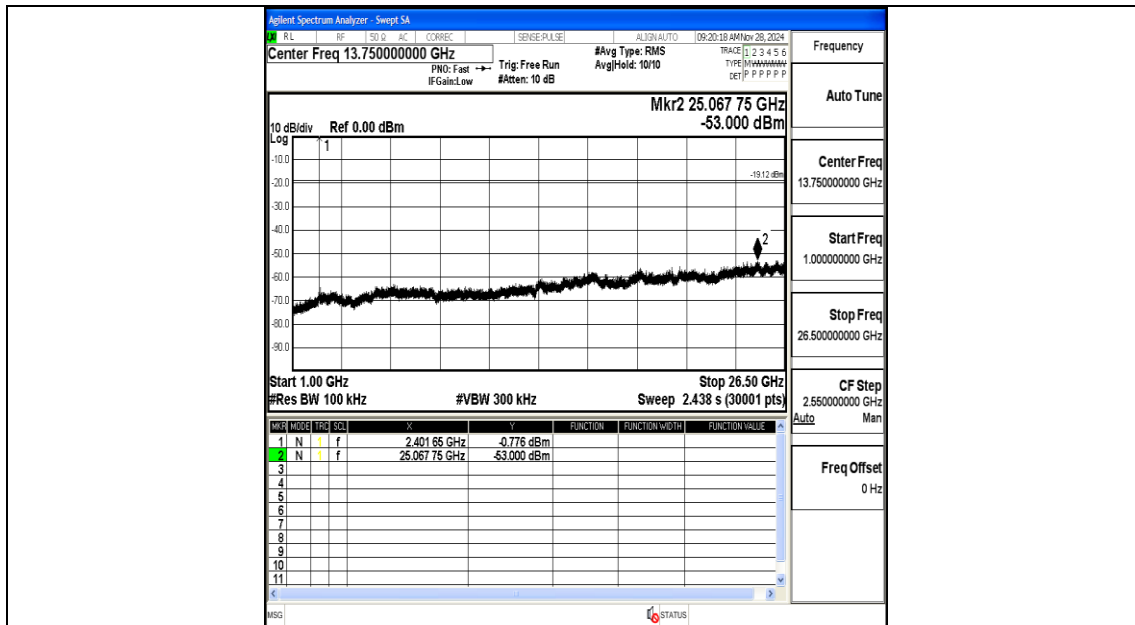
Appendix F: Conducted Spurious Emission

Test Result

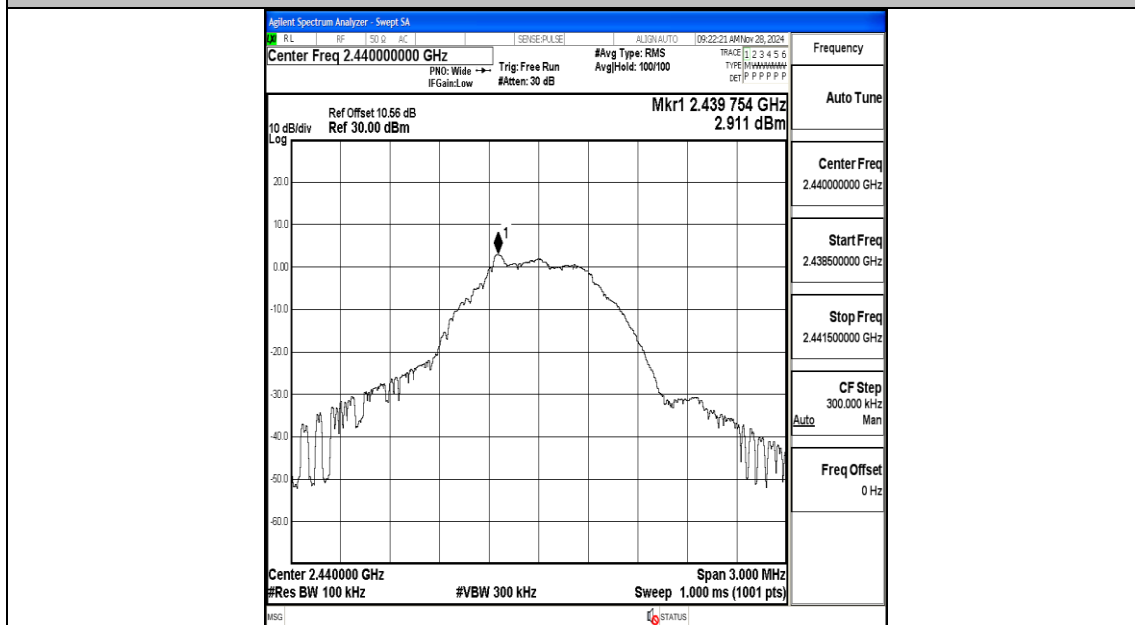
Test Mode	Antenna	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	2402	0~Reference	0.88	0.88	---	PASS
BLE_1M	Ant1	2402	30~1000	0.88	-70.53	≤-19.12	PASS
BLE_1M	Ant1	2402	1000~26500	0.88	-53	≤-19.12	PASS
BLE_1M	Ant1	2440	0~Reference	2.91	2.91	---	PASS
BLE_1M	Ant1	2440	30~1000	2.91	-71.12	≤-17.09	PASS
BLE_1M	Ant1	2440	1000~26500	2.91	-53	≤-17.09	PASS
BLE_1M	Ant1	2480	0~Reference	1.84	1.84	---	PASS
BLE_1M	Ant1	2480	30~1000	1.84	-71.79	≤-18.16	PASS
BLE_1M	Ant1	2480	1000~26500	1.84	-53.65	≤-18.16	PASS
BLE_2M	Ant1	2402	0~Reference	1.21	1.21	---	PASS
BLE_2M	Ant1	2402	30~1000	1.21	-72.55	≤-18.79	PASS
BLE_2M	Ant1	2402	1000~26500	1.21	-55.12	≤-18.79	PASS
BLE_2M	Ant1	2440	0~Reference	2.26	2.26	---	PASS
BLE_2M	Ant1	2440	30~1000	2.26	-72.8	≤-17.74	PASS
BLE_2M	Ant1	2440	1000~26500	2.26	-54.61	≤-17.74	PASS
BLE_2M	Ant1	2480	0~Reference	0.75	0.75	---	PASS
BLE_2M	Ant1	2480	30~1000	0.75	-73.05	≤-19.25	PASS
BLE_2M	Ant1	2480	1000~26500	0.75	-55.57	≤-19.25	PASS

Test Graphs

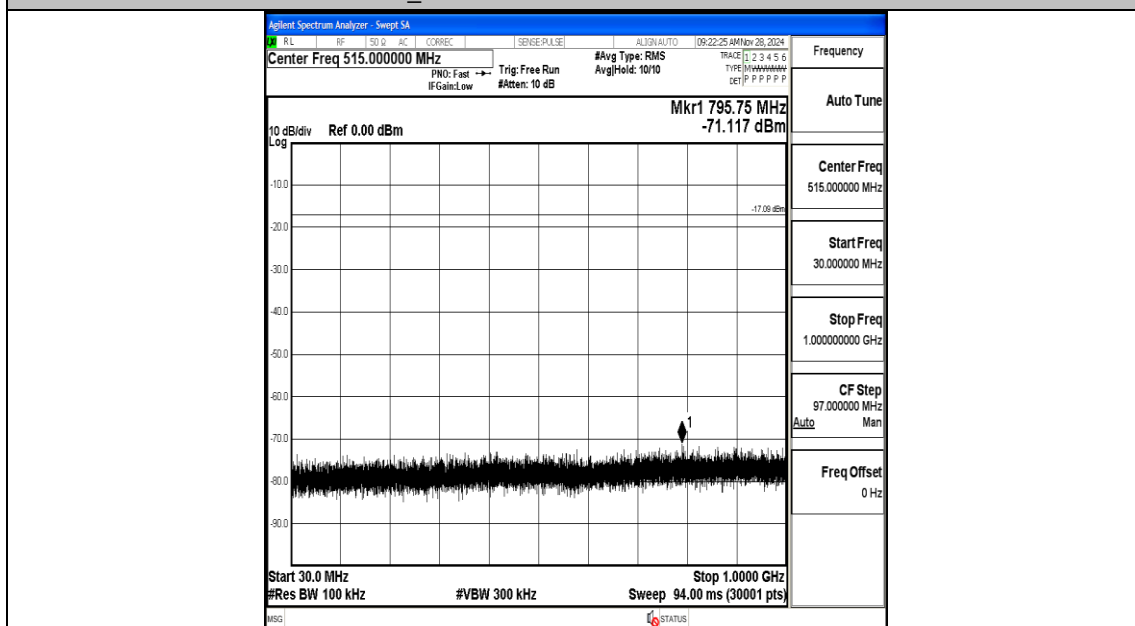




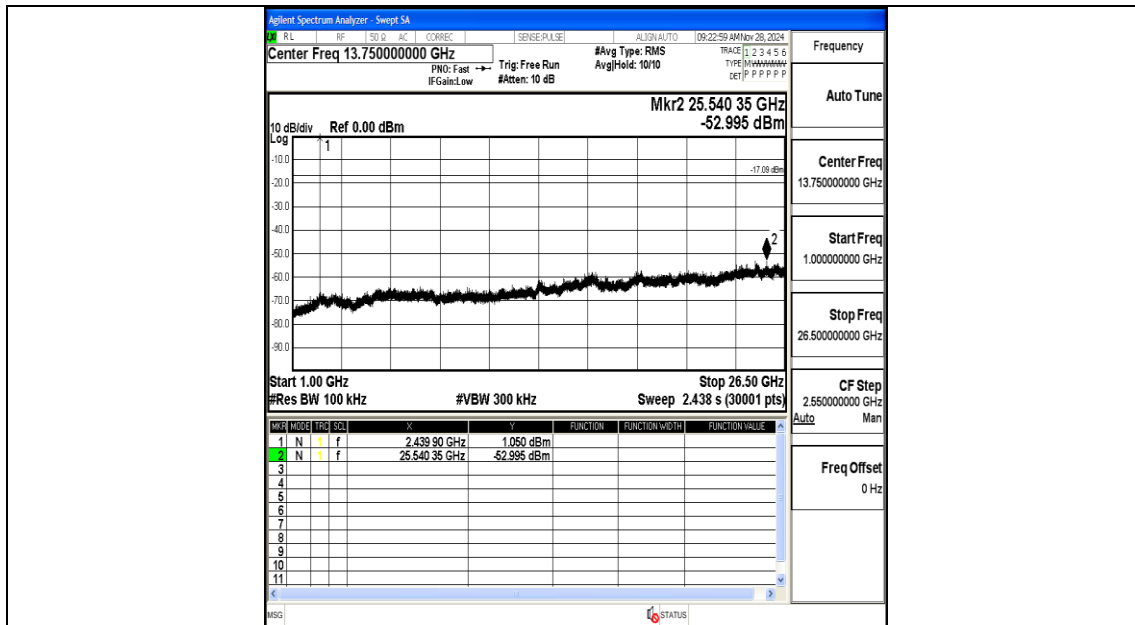
BLE_1M-Ant1-2402-1000~26500-PASS



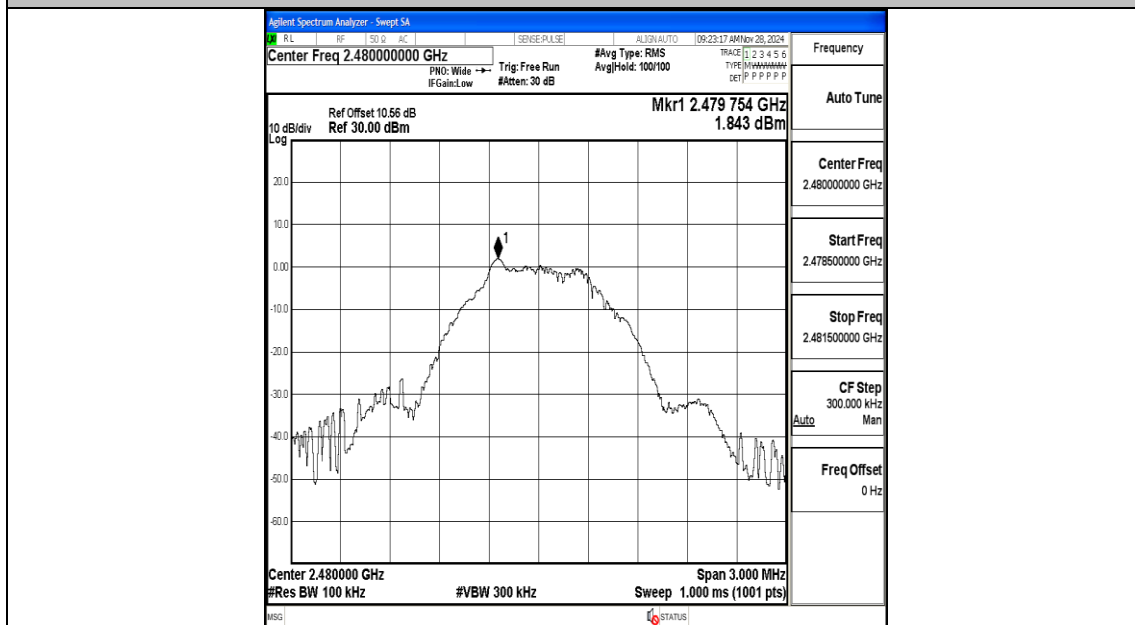
BLE_1M-Ant1-2440-0~Reference-PASS



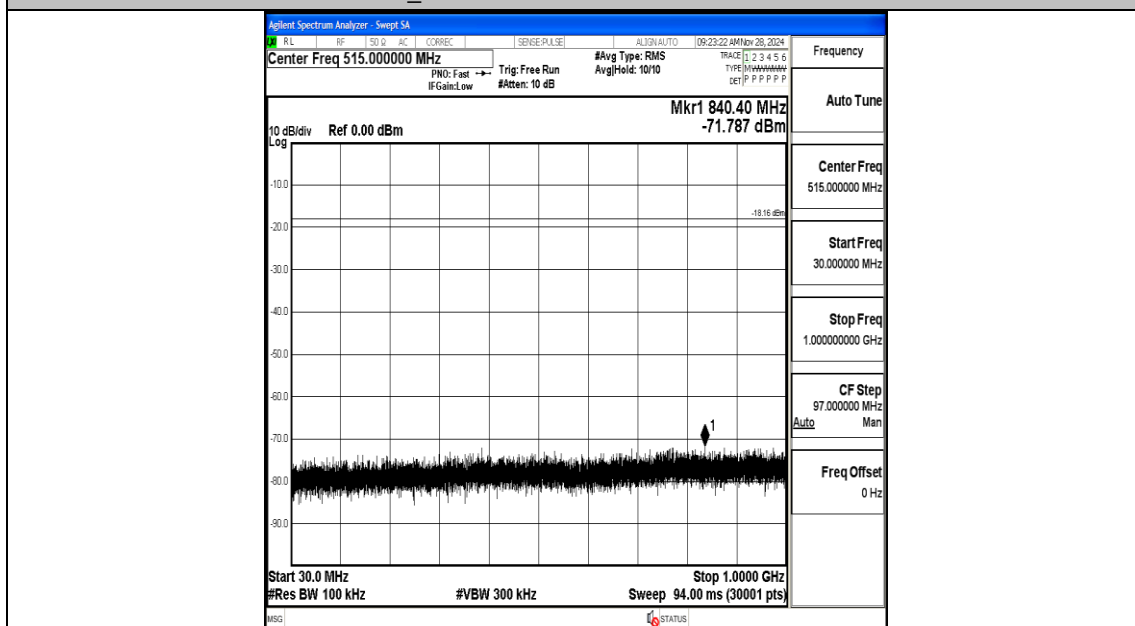
BLE_1M-Ant1-2440-30~1000-PASS



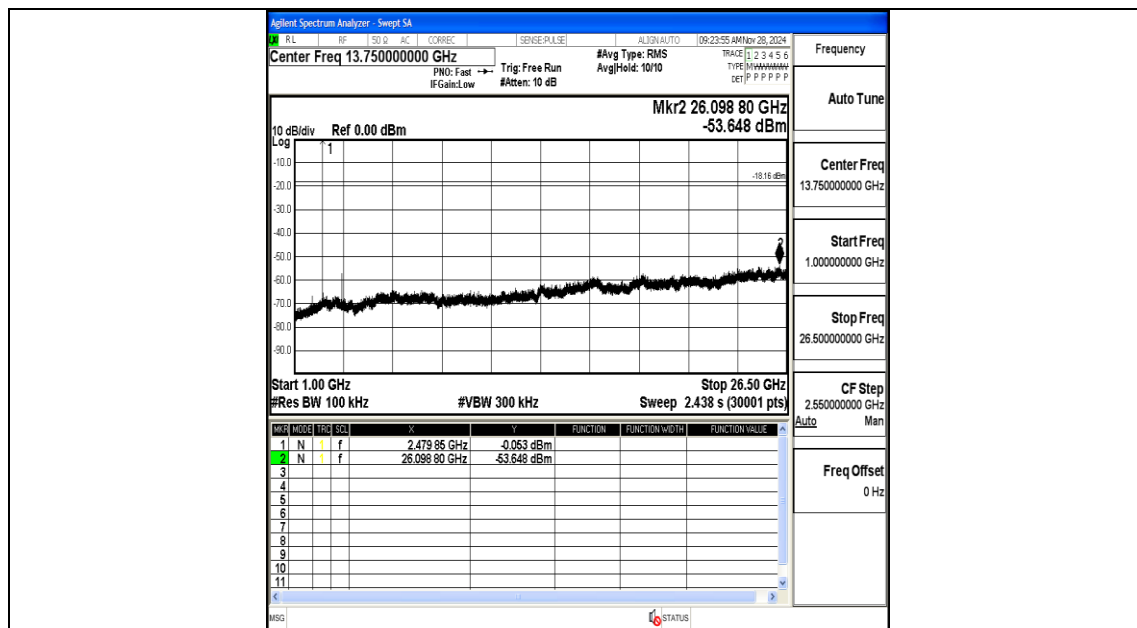
BLE_1M-Ant1-2440-1000~26500-PASS



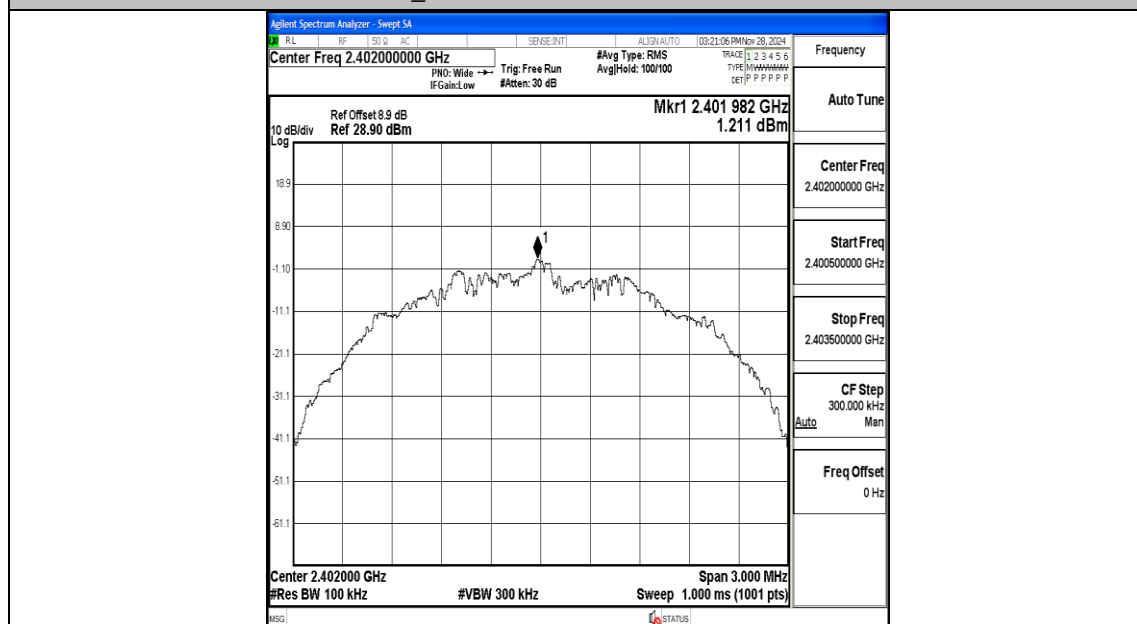
BLE_1M-Ant1-2480-0~Reference-PASS



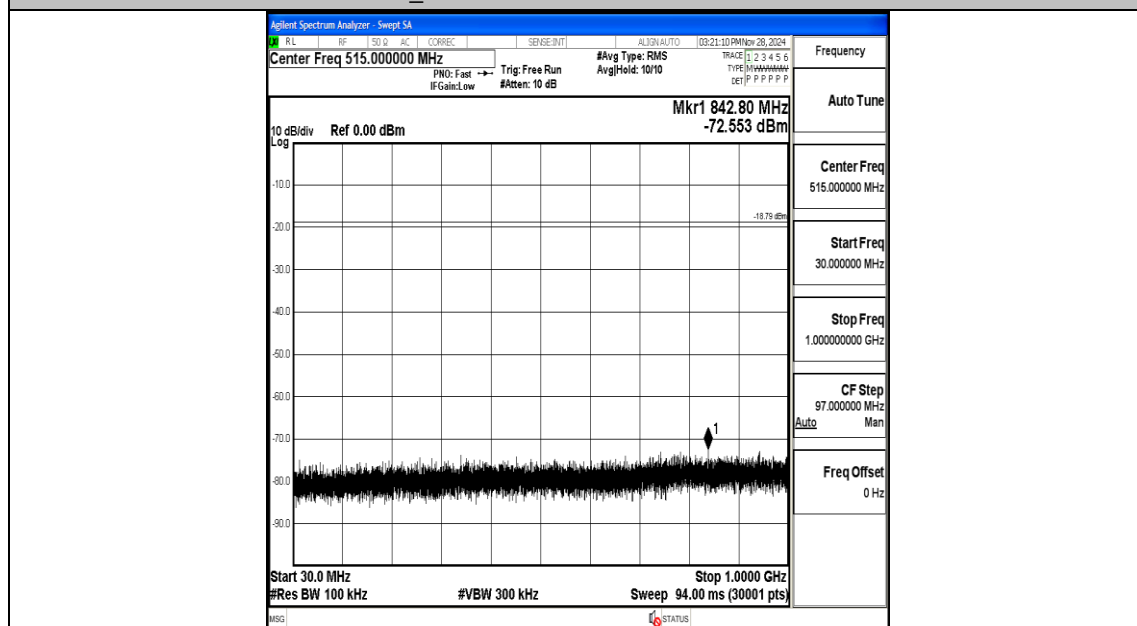
BLE_1M-Ant1-2480-30~1000-PASS



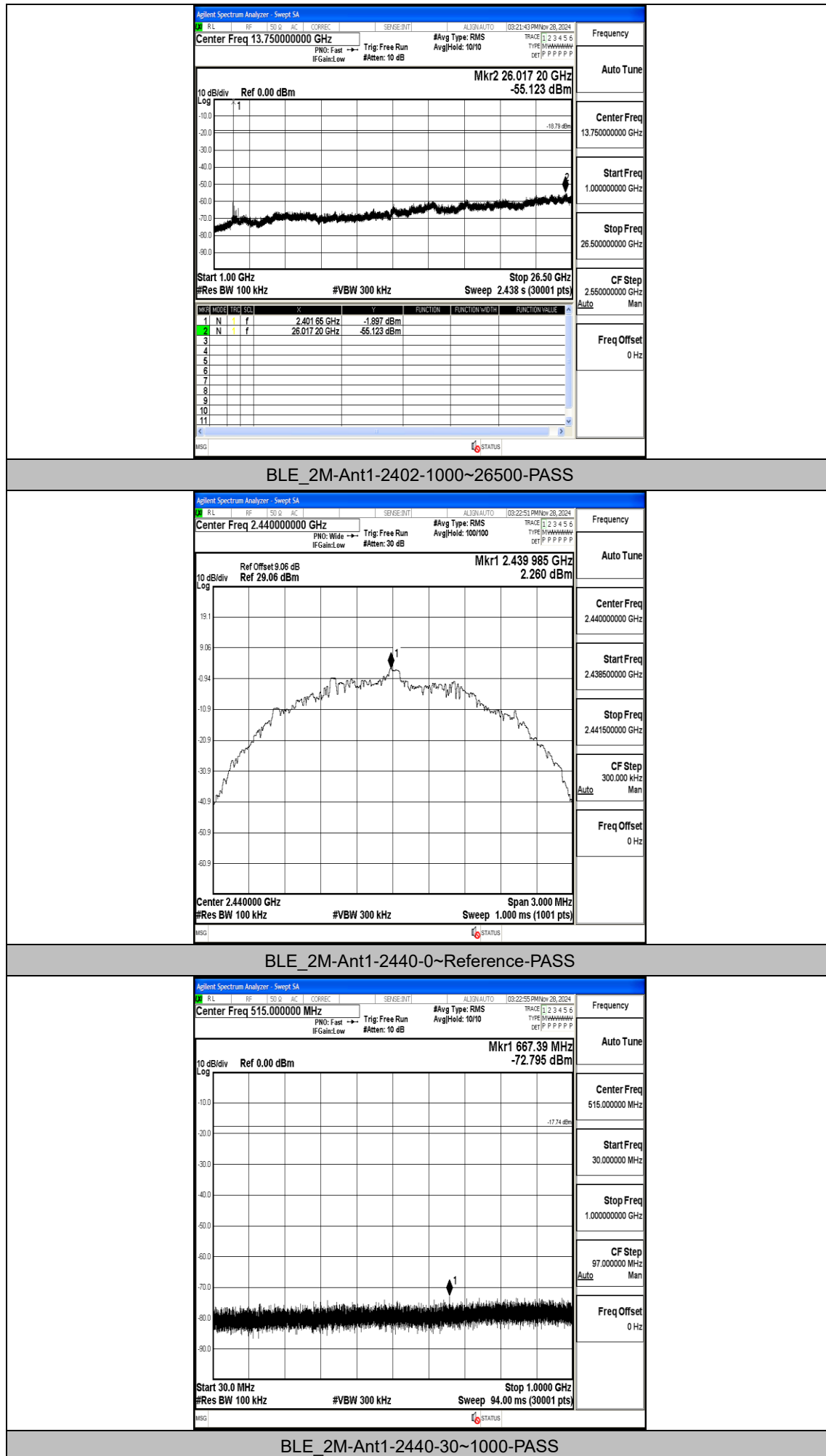
BLE_1M-Ant1-2480-1000~26500-PASS

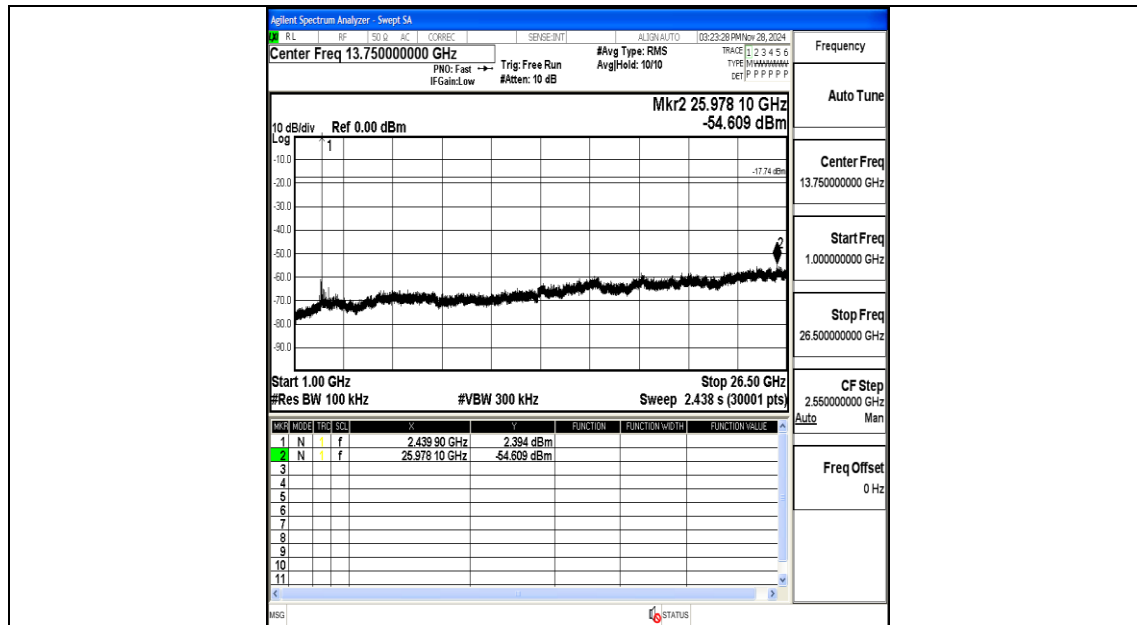


BLE_2M-Ant1-2402-0~Reference-PASS

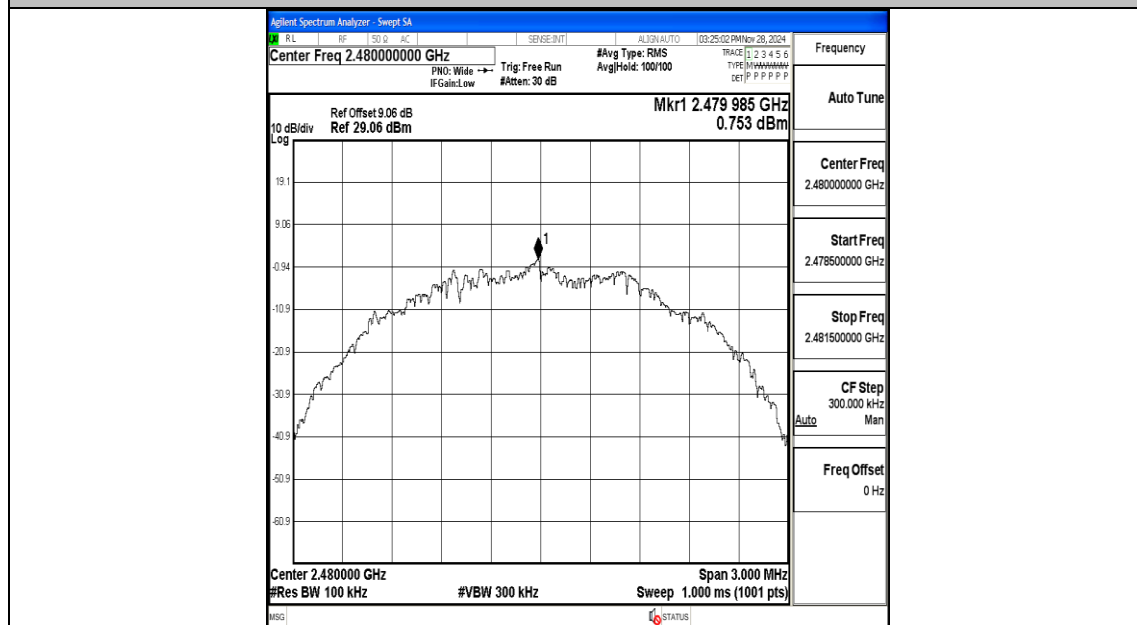


BLE_2M-Ant1-2402-30~1000-PASS

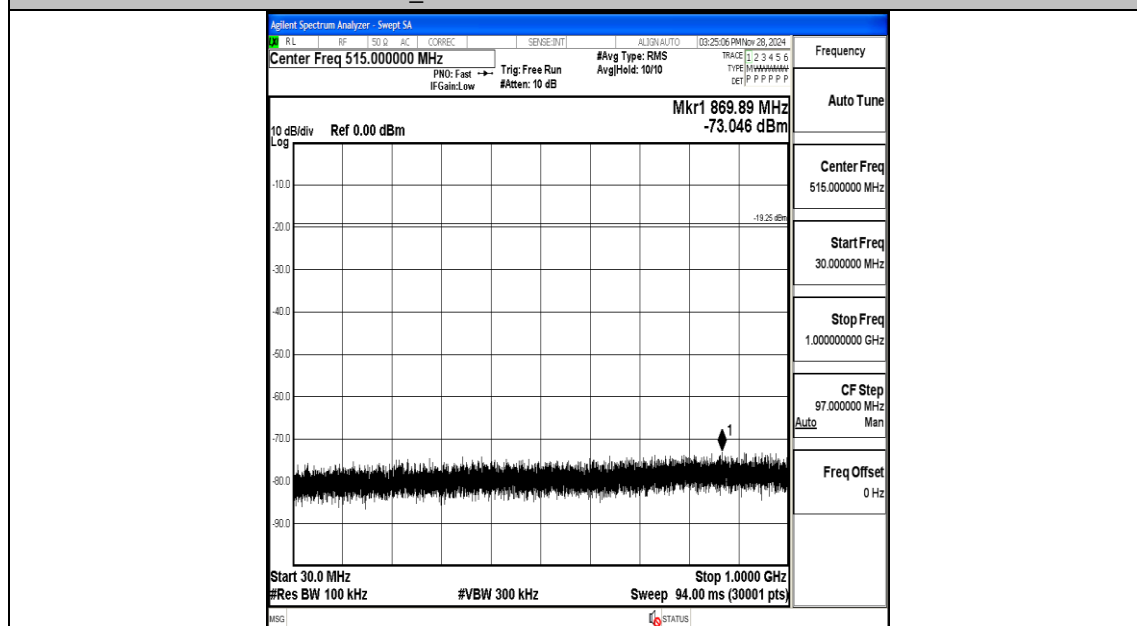




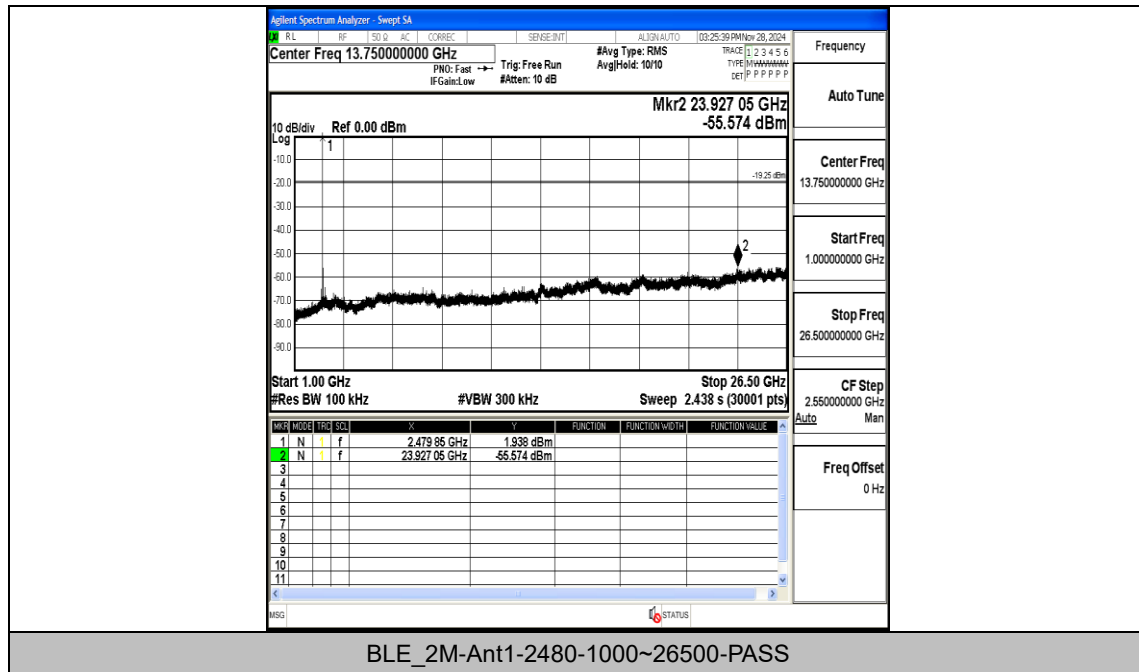
BLE_2M-Ant1-2440-1000~26500-PASS



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	0.39	0.62	62.90	2.01
BLE_1M	Ant1	2440	0.39	0.63	61.90	2.08
BLE_1M	Ant1	2480	0.39	0.63	61.90	2.08
BLE_2M	Ant1	2402	0.21	0.62	33.87	4.70
BLE_2M	Ant1	2440	0.21	0.63	33.33	4.77
BLE_2M	Ant1	2480	0.21	0.62	33.87	4.70

Test Graphs

