

Appendix for Bluetooth BLE mode

Product Name: Bluetooth / NFC Reader

Model No: BTH122-8K

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
BLE_1M	Ant1	2402	0.664	2401.764	2402.428	0.5	PASS
BLE_1M	Ant1	2440	0.680	2439.756	2440.436	0.5	PASS
BLE_1M	Ant1	2480	0.688	2479.744	2480.432	0.5	PASS
BLE_2M	Ant1	2402	1.200	2401.448	2402.648	0.5	PASS
BLE_2M	Ant1	2440	1.124	2439.532	2440.656	0.5	PASS
BLE_2M	Ant1	2480	1.092	2479.552	2480.644	0.5	PASS

Test Graphs



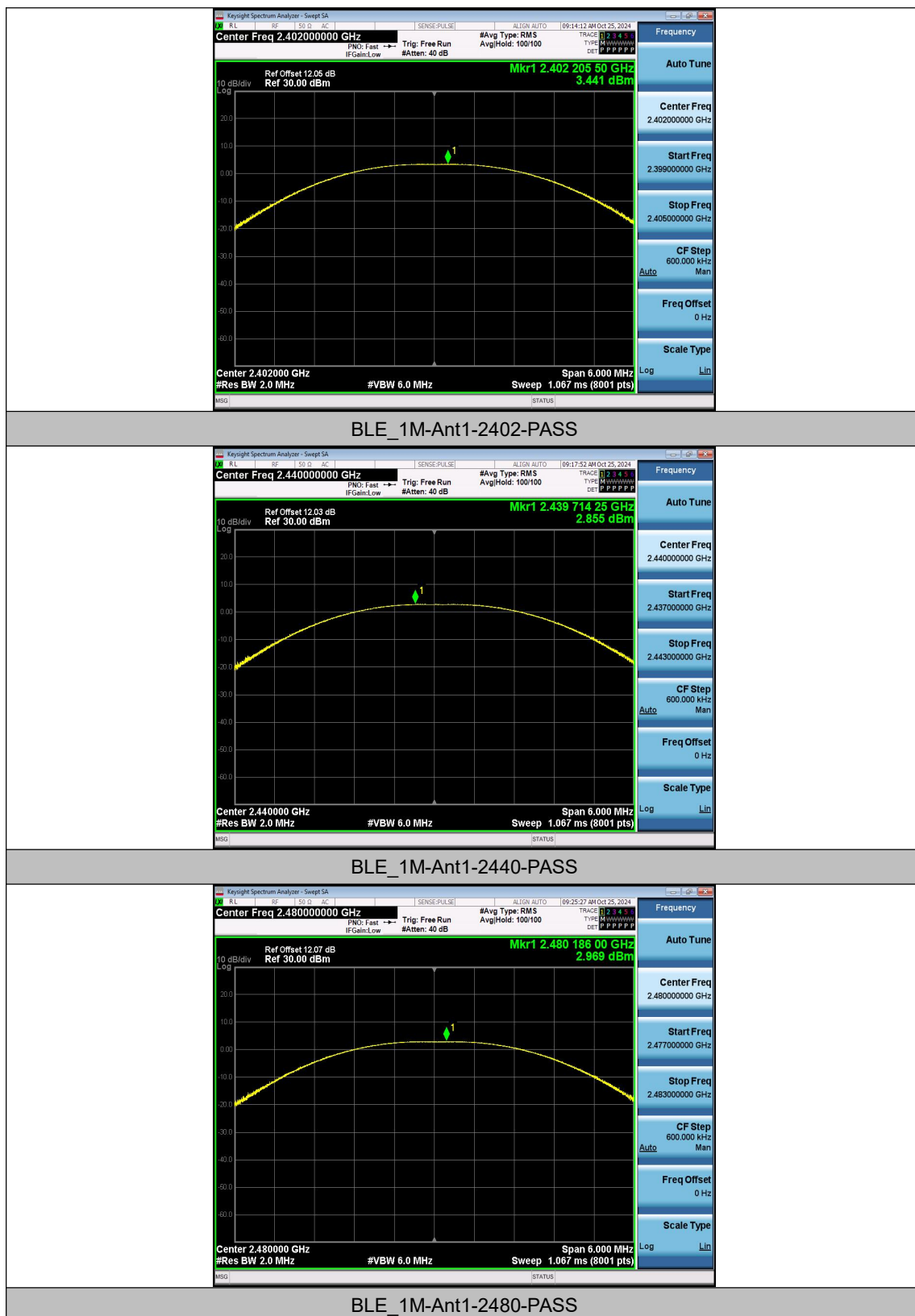


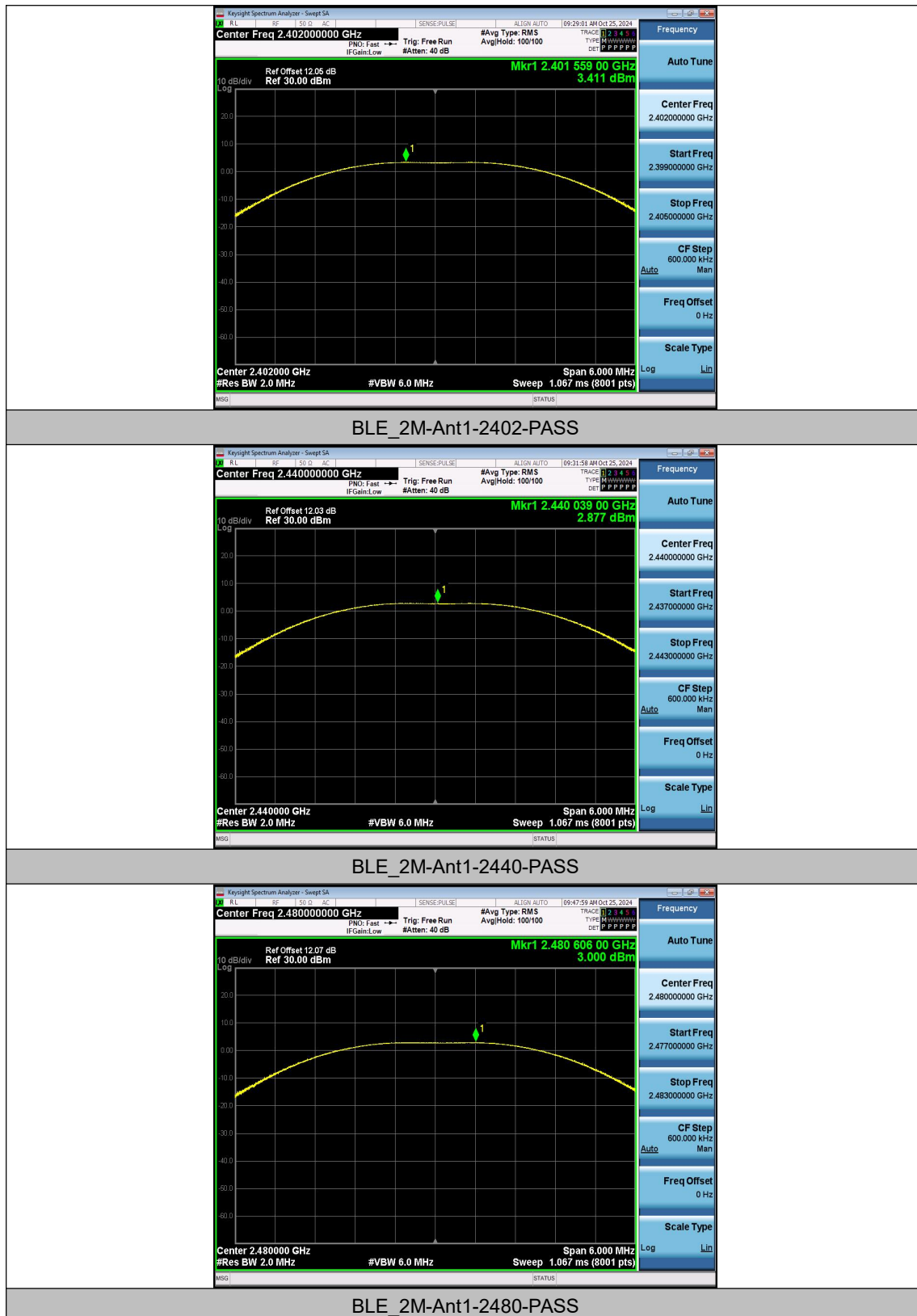
Appendix B: Maximum conducted output power

Test Result Peak

TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	3.44	≤30	PASS
BLE_1M	Ant1	2440	2.86	≤30	PASS
BLE_1M	Ant1	2480	2.97	≤30	PASS
BLE_2M	Ant1	2402	3.41	≤30	PASS
BLE_2M	Ant1	2440	2.88	≤30	PASS
BLE_2M	Ant1	2480	3.00	≤30	PASS

Test Graphs Peak



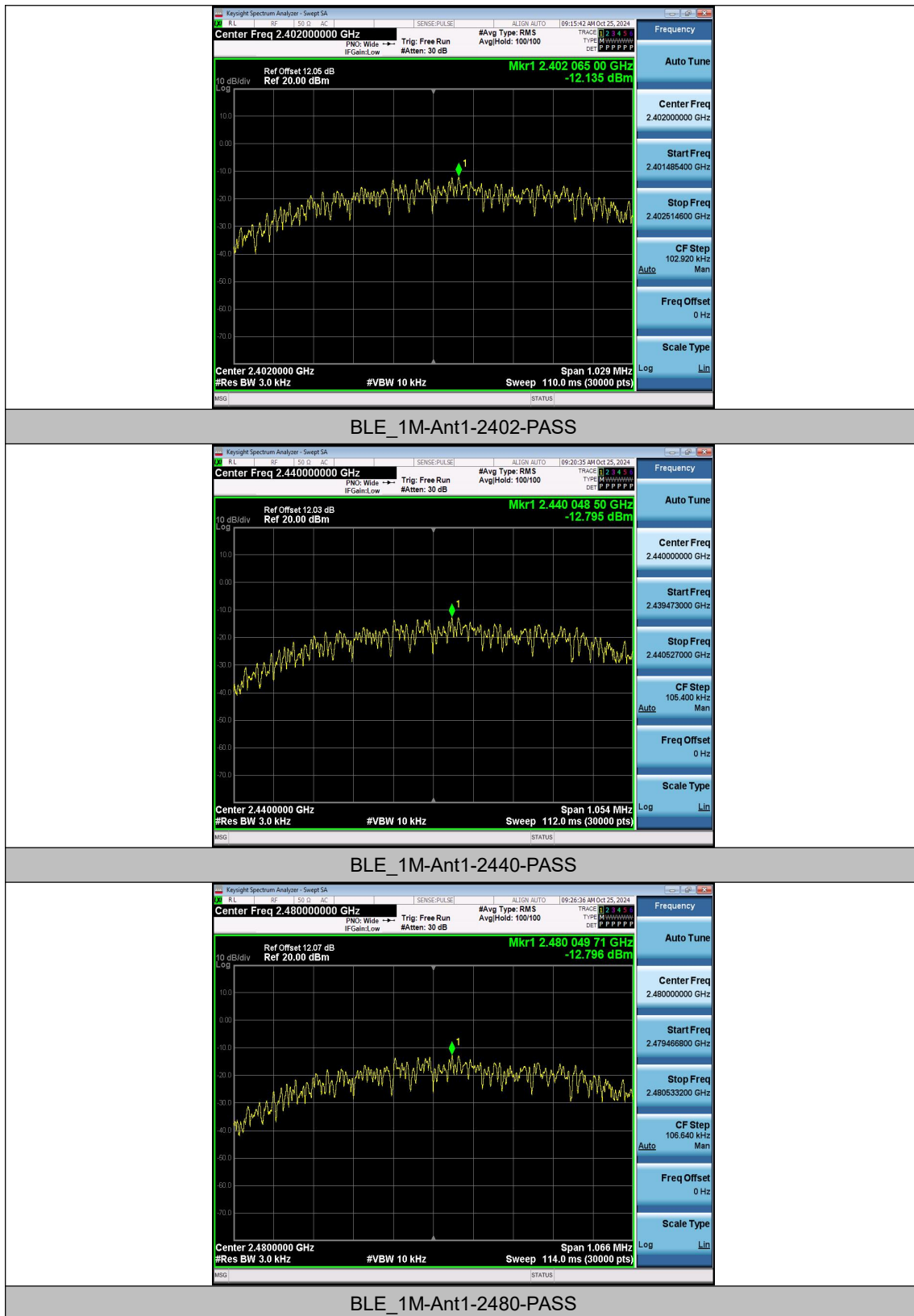


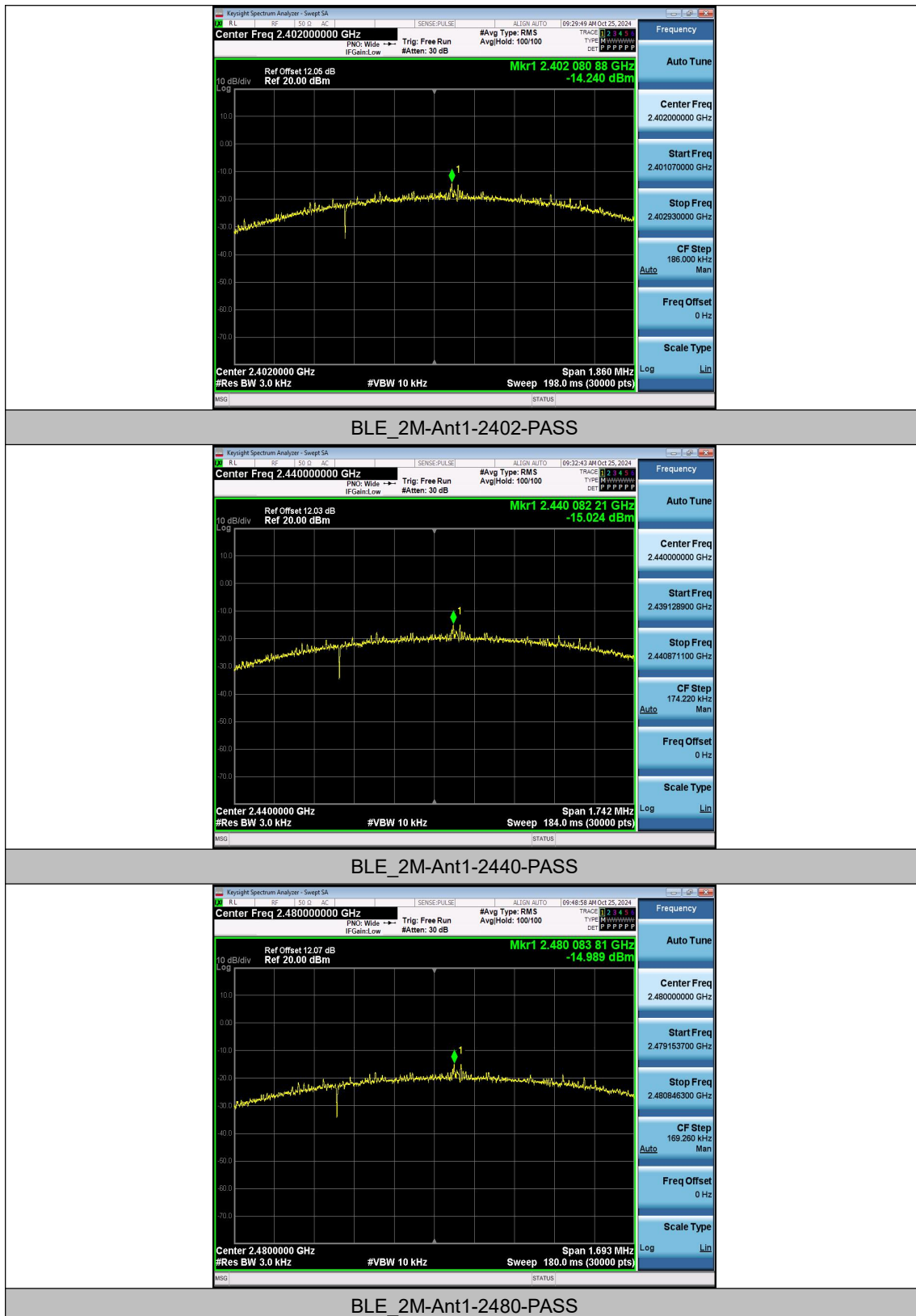
Appendix C: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-12.14	≤8.00	PASS
BLE_1M	Ant1	2440	-12.80	≤8.00	PASS
BLE_1M	Ant1	2480	-12.80	≤8.00	PASS
BLE_2M	Ant1	2402	-14.24	≤8.00	PASS
BLE_2M	Ant1	2440	-15.02	≤8.00	PASS
BLE_2M	Ant1	2480	-14.99	≤8.00	PASS

Test Graphs



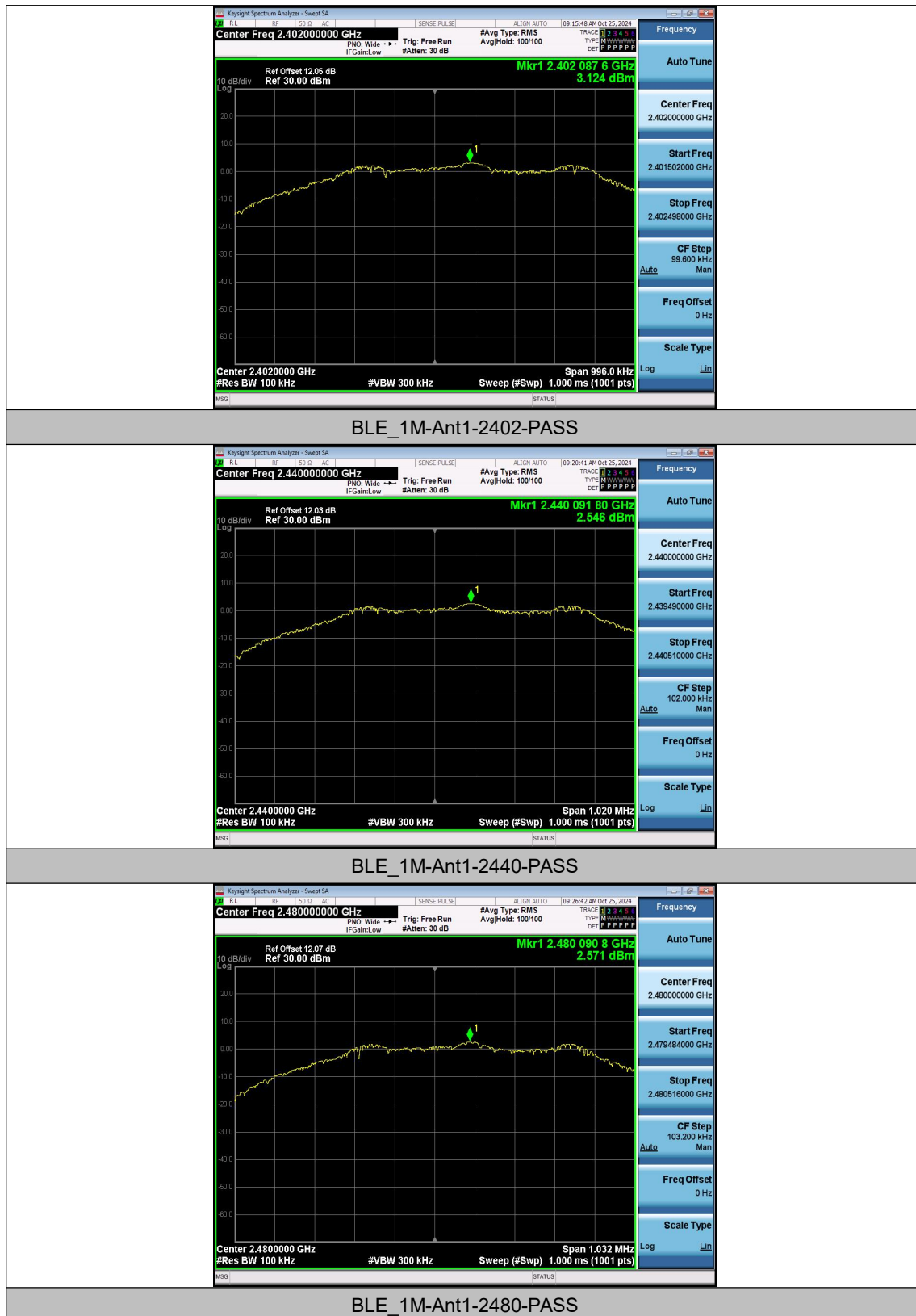


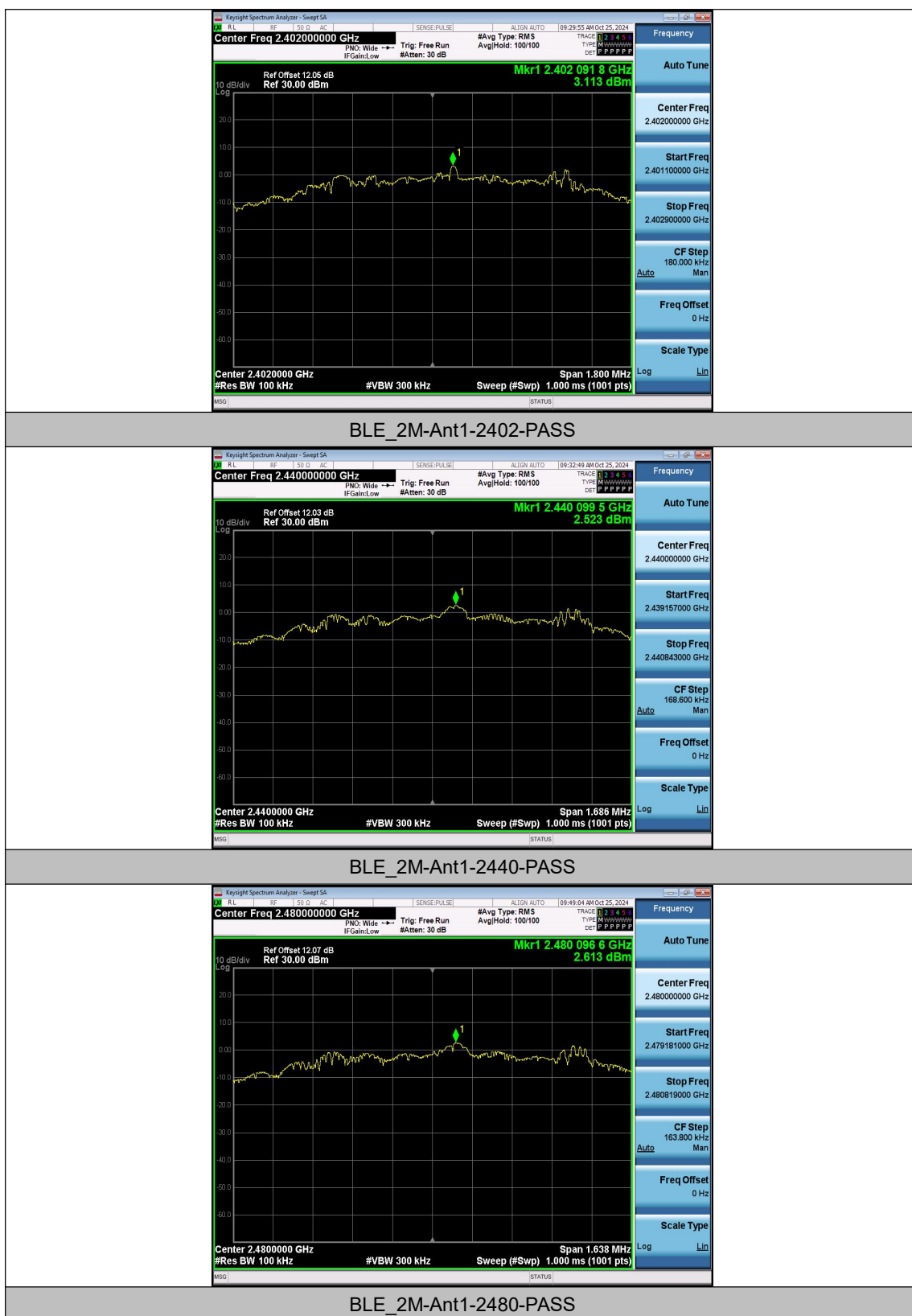
Appendix D: Reference level measurement

Test Result

TestMode	Antenna	Freq(MHz)	Max.Point[MHz]	Result[dBm]
BLE_1M	Ant1	2402	2402.09	3.12
BLE_1M	Ant1	2440	2440.09	2.55
BLE_1M	Ant1	2480	2480.09	2.57
BLE_2M	Ant1	2402	2402.09	3.11
BLE_2M	Ant1	2440	2440.10	2.52
BLE_2M	Ant1	2480	2480.10	2.61

Test Graphs



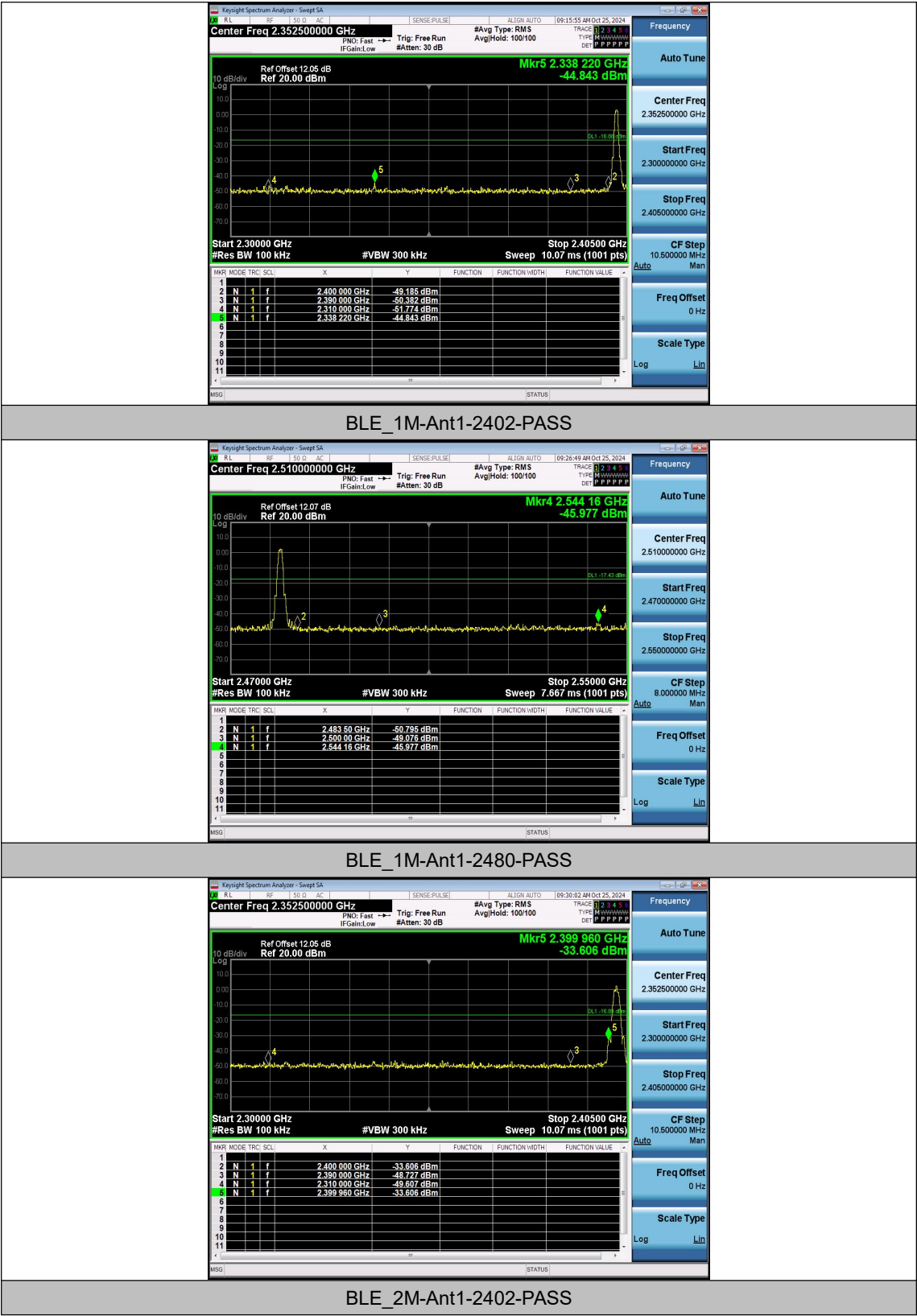


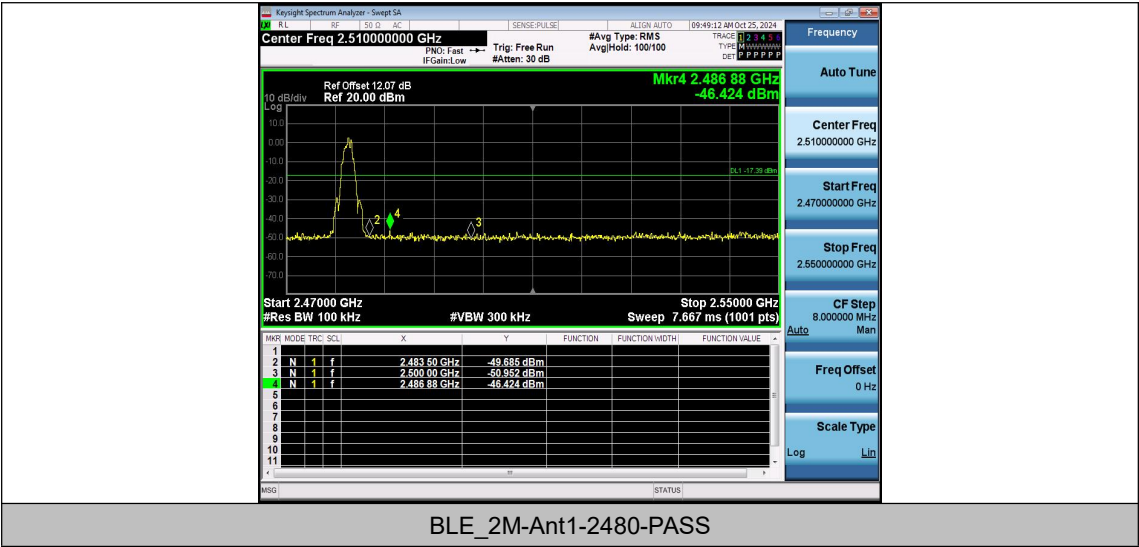
Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Frequency [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	3.12	-44.84	≤-16.88	PASS
BLE_1M	Ant1	High	2480	2.57	-45.98	≤-17.43	PASS
BLE_2M	Ant1	Low	2402	3.11	-33.61	≤-16.89	PASS
BLE_2M	Ant1	High	2480	2.61	-46.42	≤-17.39	PASS

Test Graphs





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	30~1000	3.12	-58.63	≤-16.88	PASS
BLE_1M	Ant1	2402	1000~26500	3.12	-43.24	≤-16.88	PASS
BLE_1M	Ant1	2440	30~1000	2.55	-58.93	≤-17.45	PASS
BLE_1M	Ant1	2440	1000~26500	2.55	-42.29	≤-17.45	PASS
BLE_1M	Ant1	2480	30~1000	2.57	-58.66	≤-17.43	PASS
BLE_1M	Ant1	2480	1000~26500	2.57	-41.63	≤-17.43	PASS
BLE_2M	Ant1	2402	30~1000	3.11	-58.56	≤-16.89	PASS
BLE_2M	Ant1	2402	1000~26500	3.11	-44.18	≤-16.89	PASS
BLE_2M	Ant1	2440	30~1000	2.52	-58.62	≤-17.48	PASS
BLE_2M	Ant1	2440	1000~26500	2.52	-43.95	≤-17.48	PASS
BLE_2M	Ant1	2480	30~1000	2.61	-48.06	≤-17.39	PASS
BLE_2M	Ant1	2480	1000~26500	2.61	-41.88	≤-17.39	PASS

Test Graphs

