

Appendix: Bluetooth LE

Contents

Appendix A: DTS Bandwidth 3

 Test Result 3

 Test Graphs 4

Appendix B: Occupied Channel Bandwidth 6

 Test Result 6

 Test Graphs 7

Appendix C: Maximum conducted output power 9

 Test Result Peak 9

 Test Graphs Peak 10

Appendix D: Maximum power spectral density 12

 Test Result 12

 Test Graphs 13

Appendix E: Band edge measurements 15

 Test Result 15

 Test Graphs 16

Appendix F: Conducted Spurious Emission 17

 Test Result 17

 Test Graphs 18

Appendix G: Duty Cycle 23

 Test Result 23

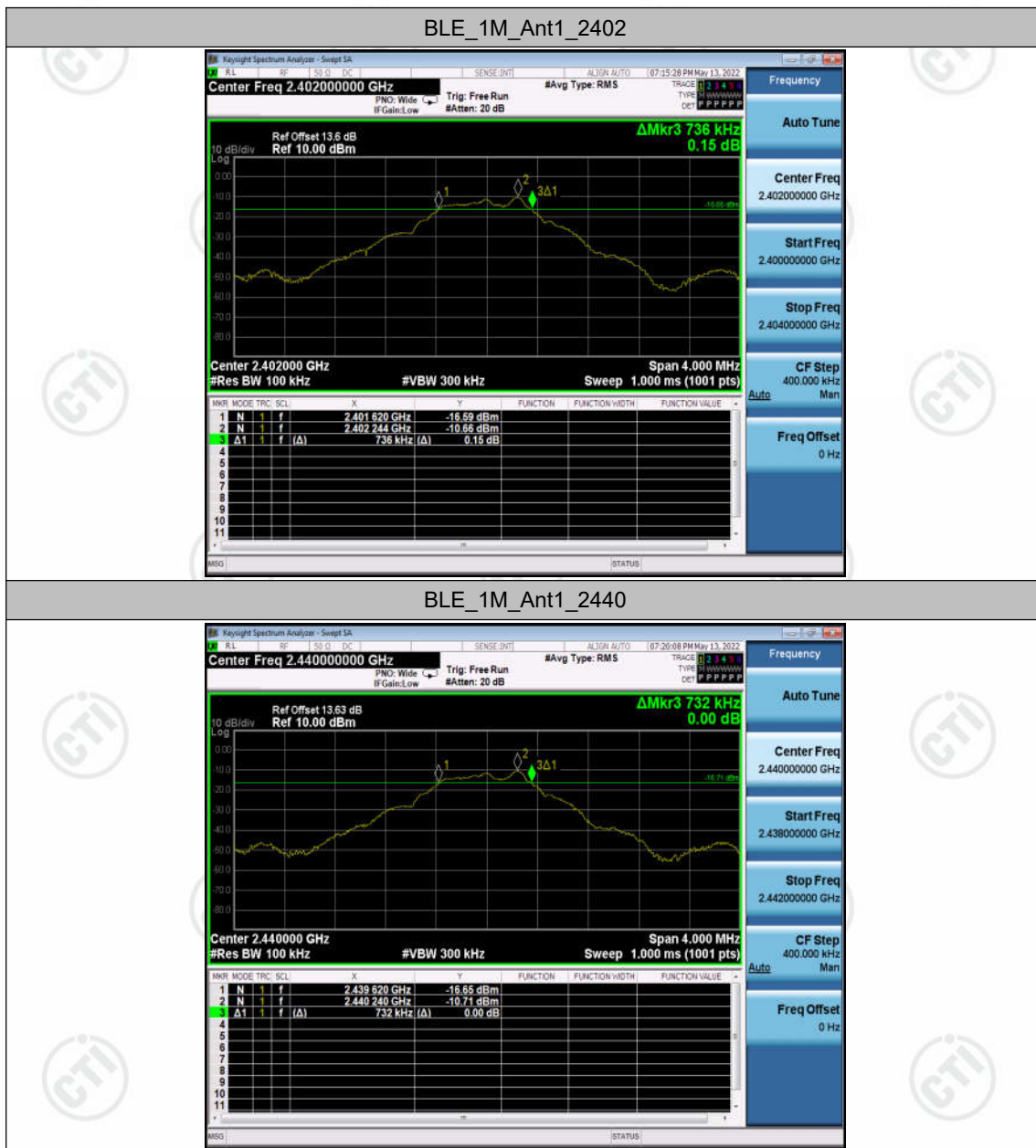
 Test Graphs 24

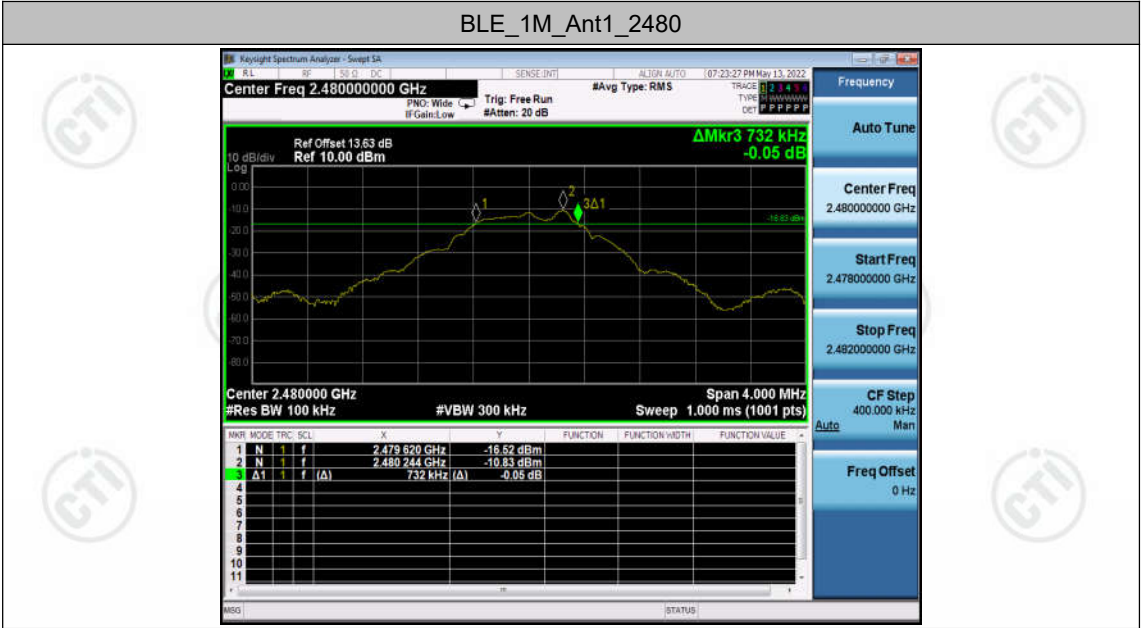
Appendix A: DTS Bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.736	2401.620	2402.356	0.5	PASS
		2440	0.732	2439.620	2440.352	0.5	PASS
		2480	0.732	2479.620	2480.352	0.5	PASS

Test Graphs



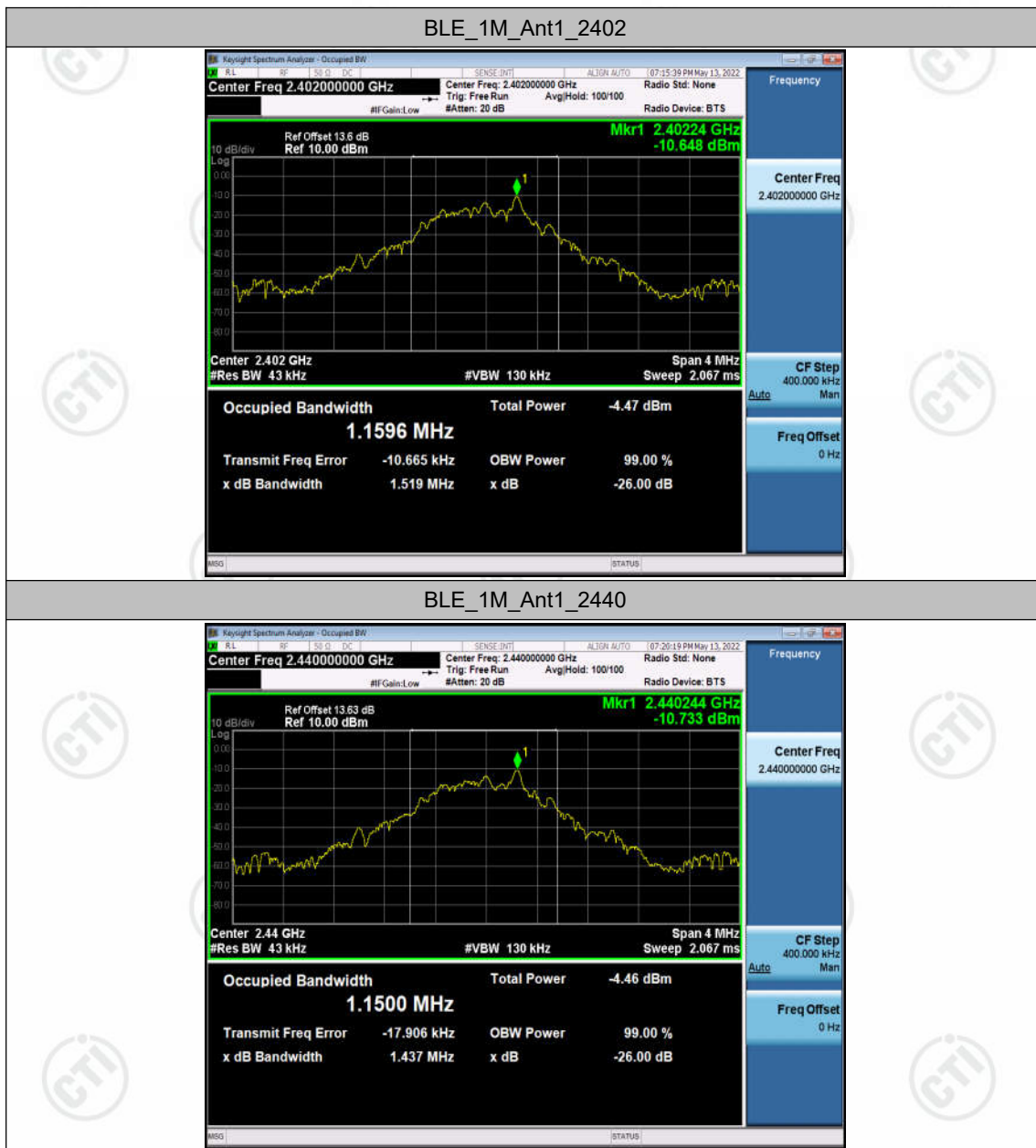


Appendix B: Occupied Channel Bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.1596	2401.410	2402.569	---	---
		2440	1.1500	2439.407	2440.557	---	---
		2480	1.1377	2479.419	2480.556	---	---

Test Graphs



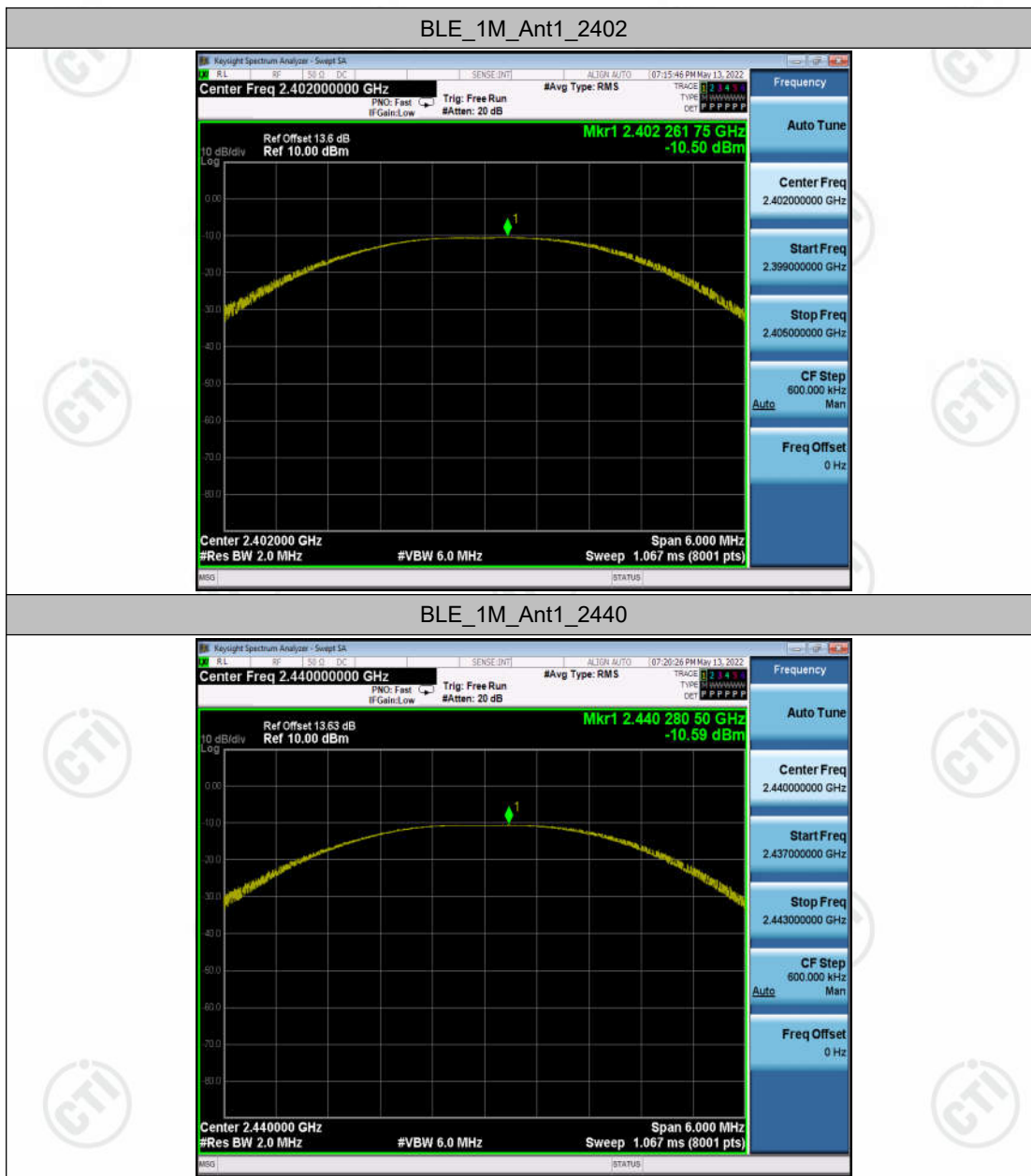


Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-10.5	≤30	PASS
		2440	-10.59	≤30	PASS
		2480	-10.7	≤30	PASS

Test Graphs Peak



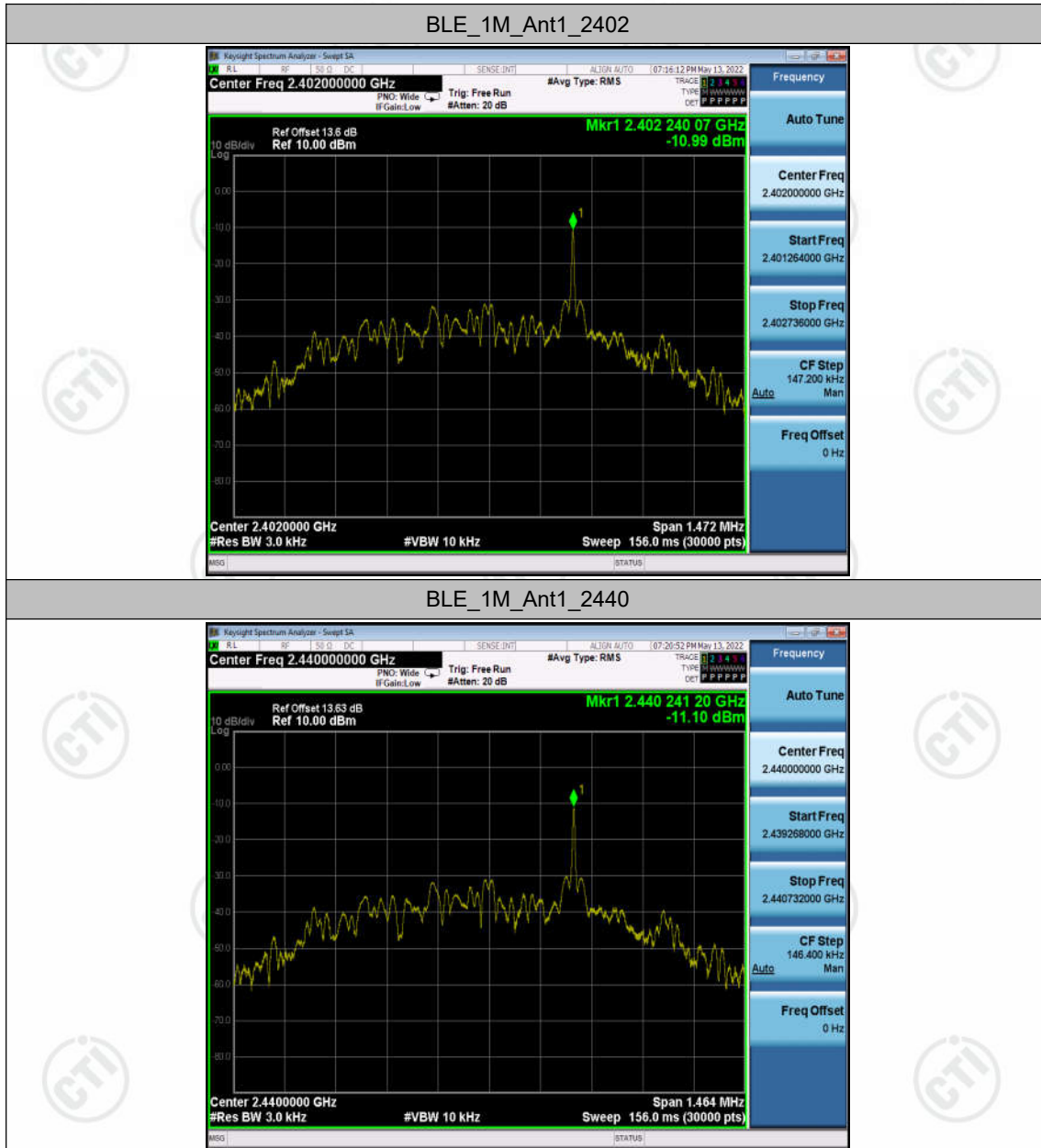


Appendix D: Maximum power spectral density

Test Result

Test Mode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-10.99	≤8.00	PASS
		2440	-11.11	≤8.00	PASS
		2480	-11.22	≤8.00	PASS

Test Graphs



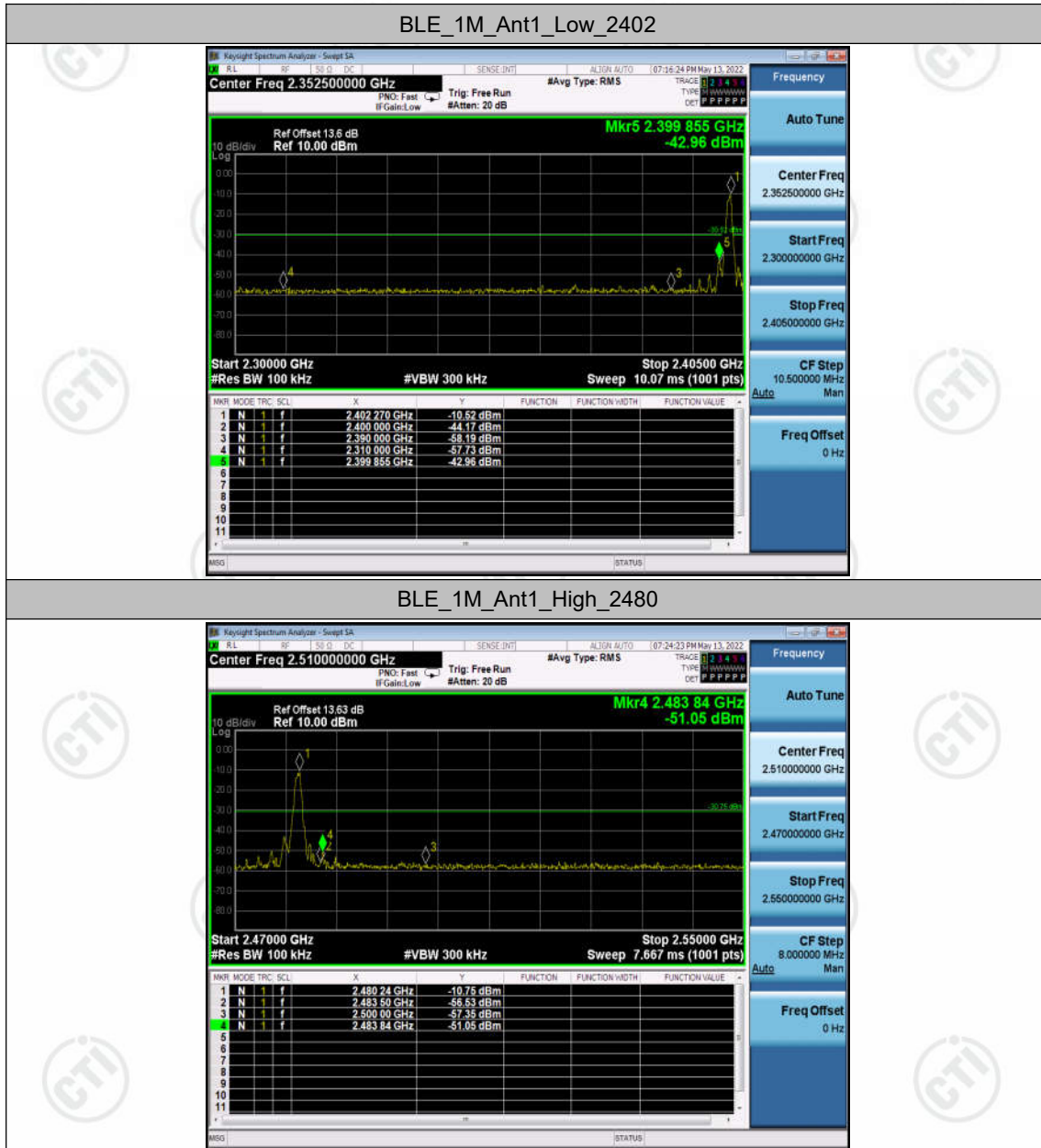


Appendix E: Band edge measurements

Test Result

Test Mode	Antenna	Ch Name	Frequency [MHz]	Ref Level[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-10.52	-42.96	≤-30.52	PASS
		High	2480	-10.75	-51.05	≤-30.75	PASS

Test Graphs

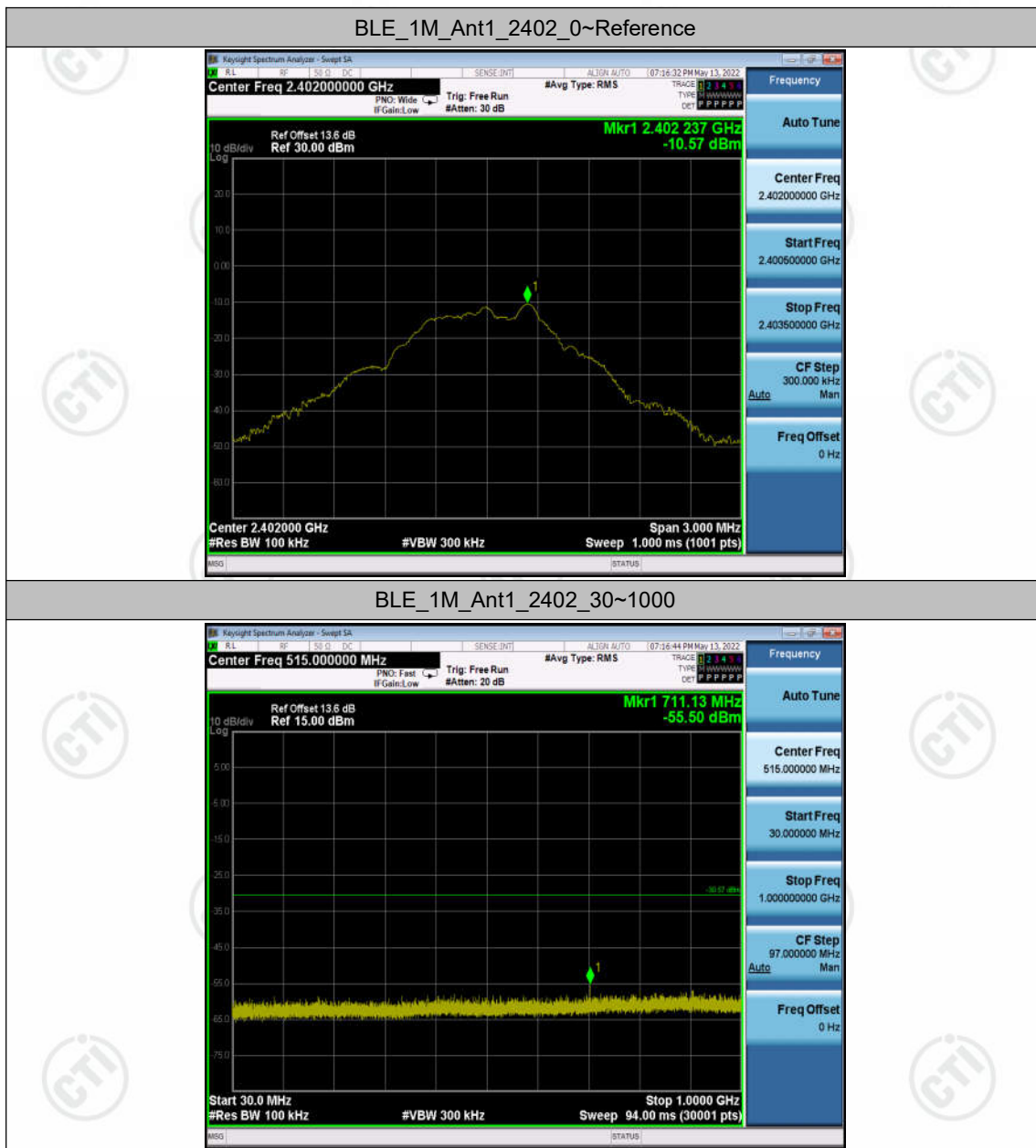


Appendix F: Conducted Spurious Emission

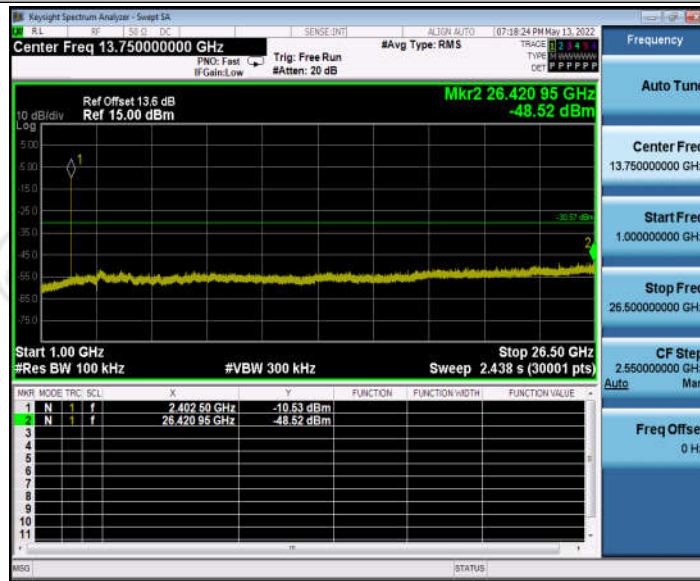
Test Result

Test Mode	Antenna	Frequency[MHz]	Freq Range [MHz]	Ref evel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-10.57	-10.57	---	PASS
			30~1000	---	-55.5	≤-30.57	PASS
			1000~26500	---	-48.53	≤-30.57	PASS
		2440	Reference	-10.67	-10.67	---	PASS
			30~1000	---	-56.91	≤-30.67	PASS
			1000~26500	---	-49.06	≤-30.67	PASS
		2480	Reference	-10.78	-10.78	---	PASS
			30~1000	---	-57.09	≤-30.78	PASS
			1000~26500	---	-49.25	≤-30.78	PASS

Test Graphs



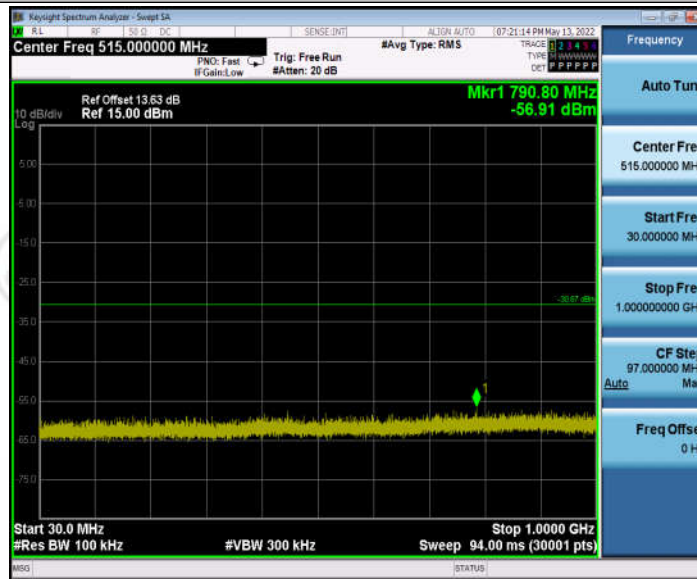
BLE_1M_Ant1_2402_1000~26500



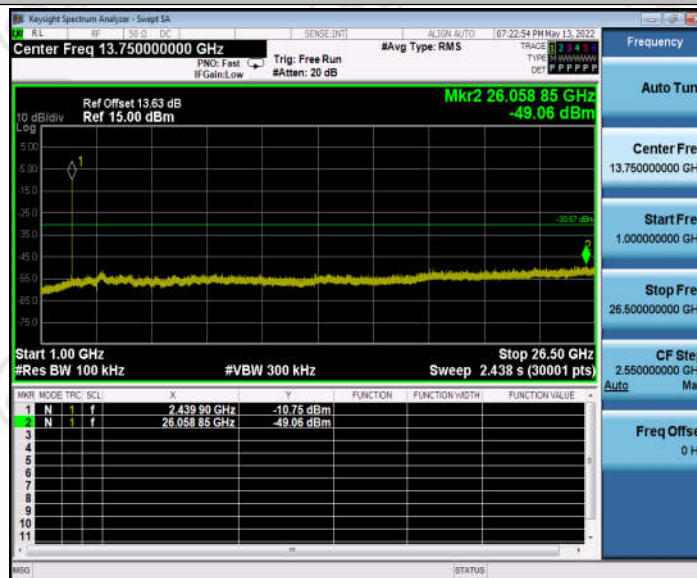
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



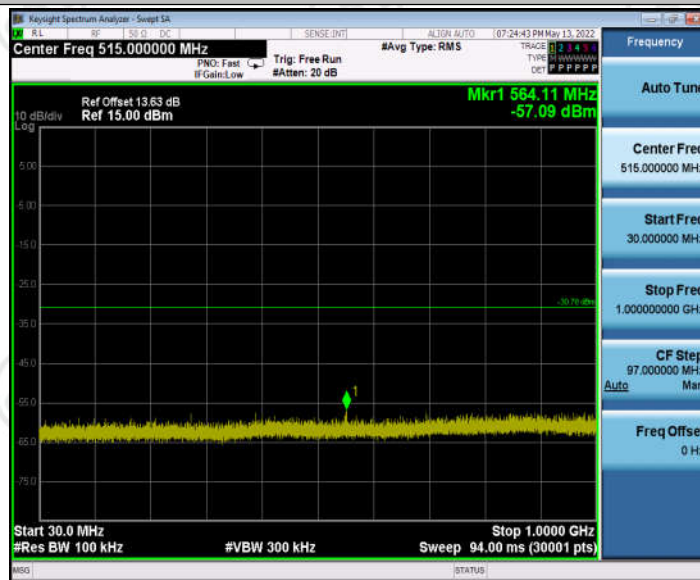
BLE_1M_Ant1_2440_1000~26500

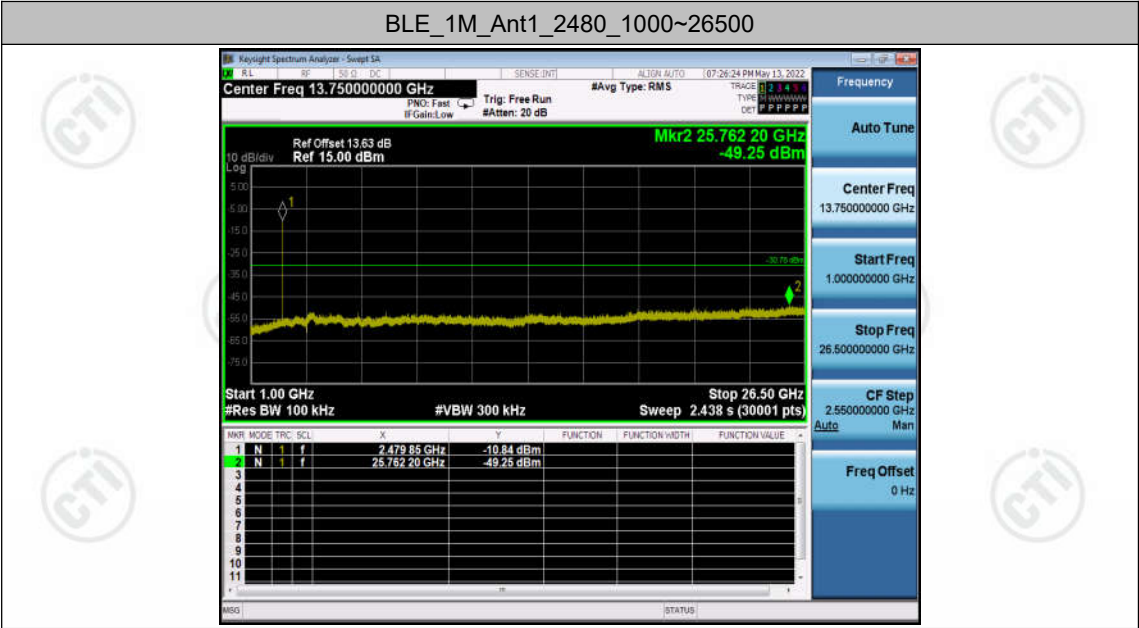


BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



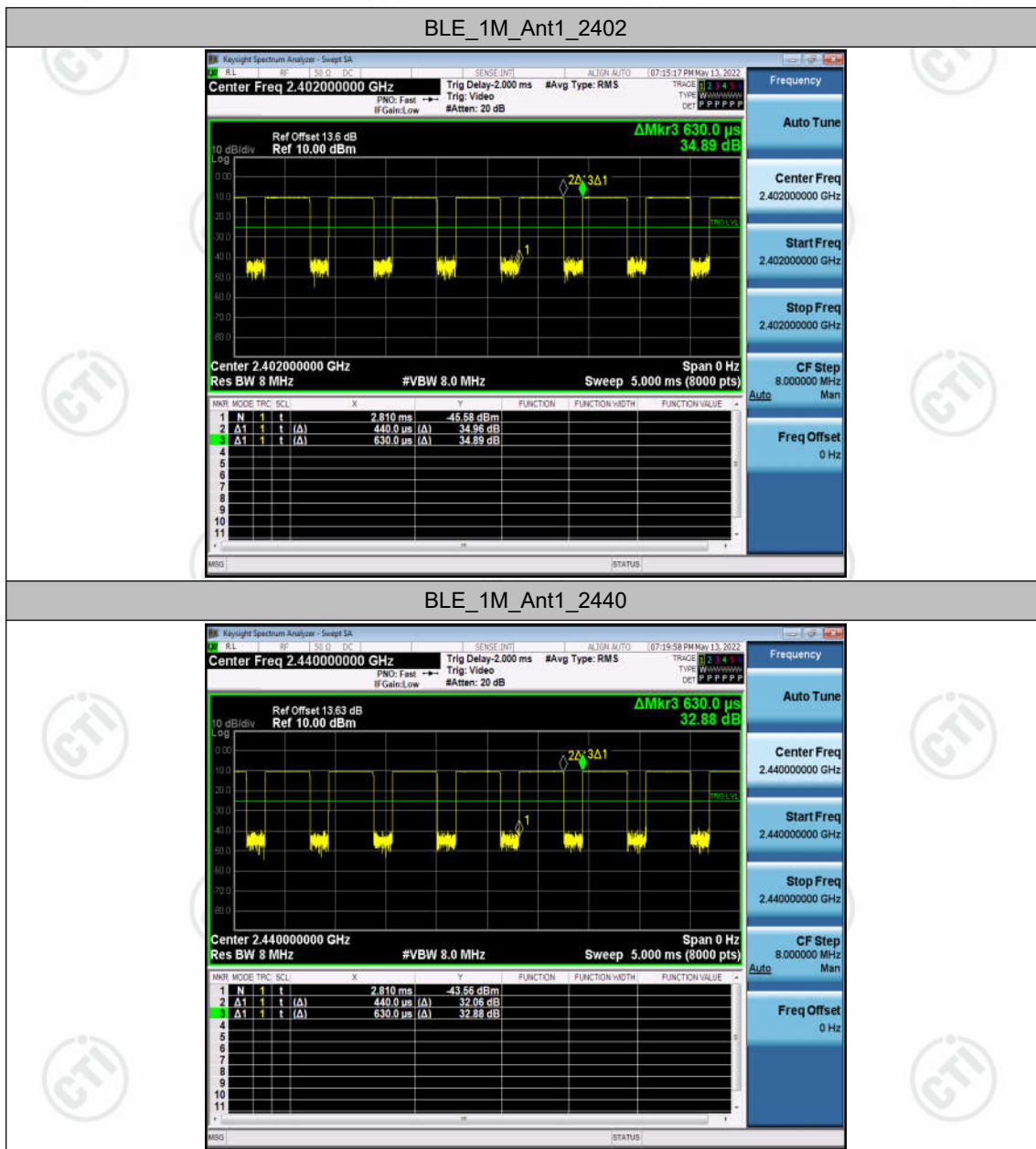


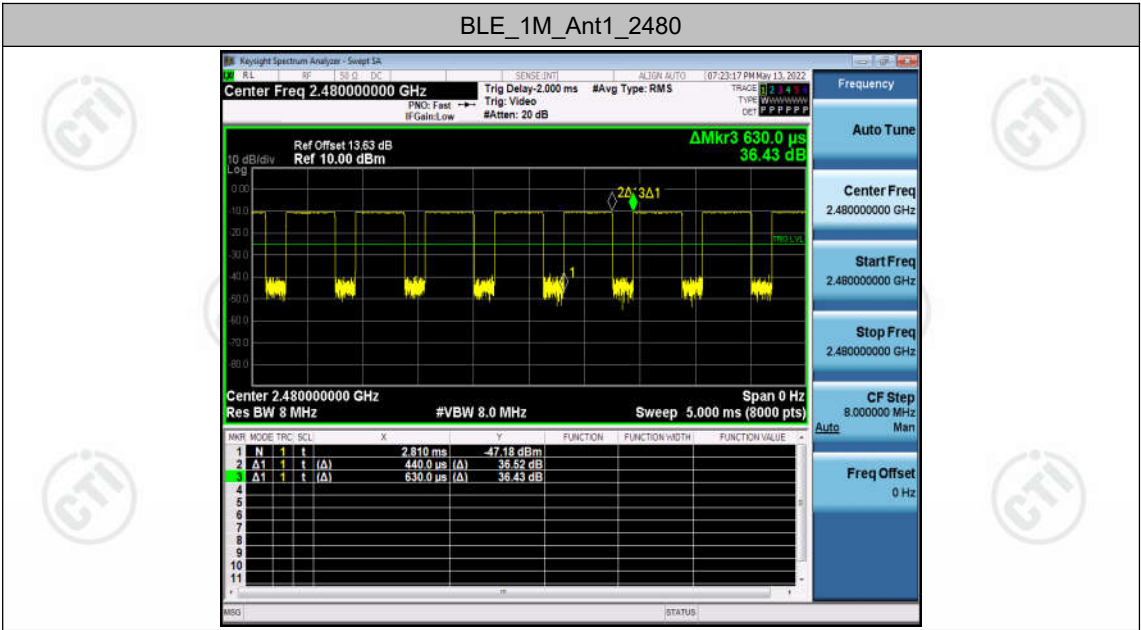
Appendix G: Duty Cycle

Test Result

Test Mode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	0.44	0.63	69.84	1.56
		2440	0.44	0.63	69.84	1.56
		2480	0.44	0.63	69.84	1.56

Test Graphs





*** End of Report ***