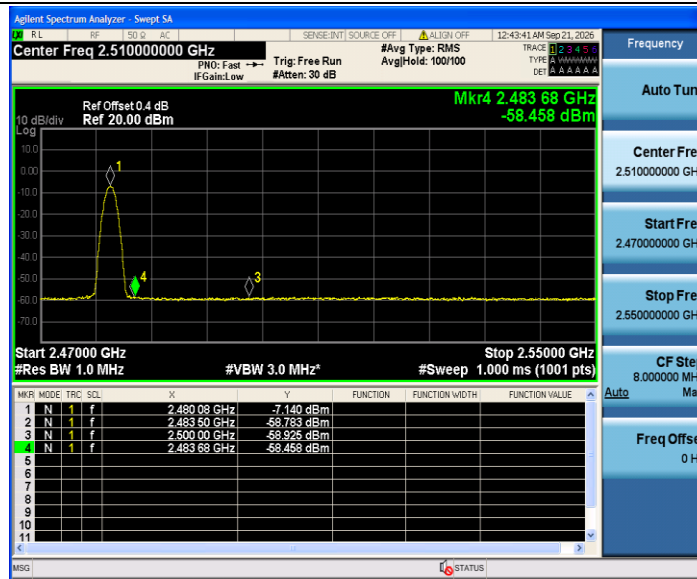
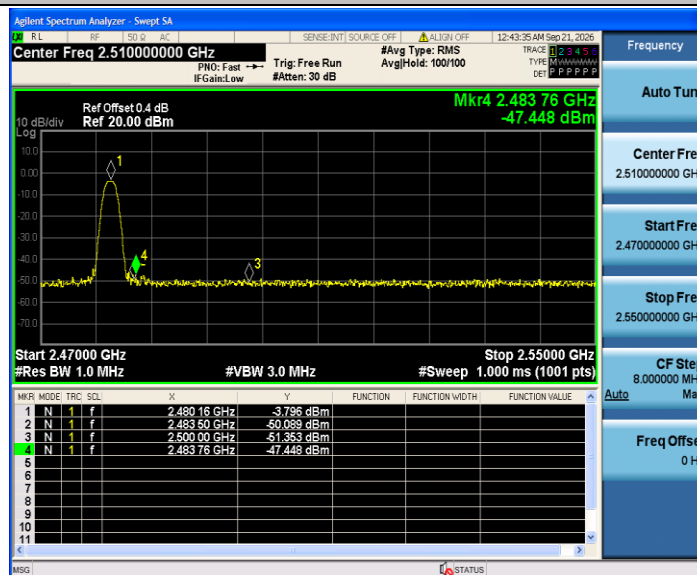




BLE_1M_Ant2_High_2480_Peak



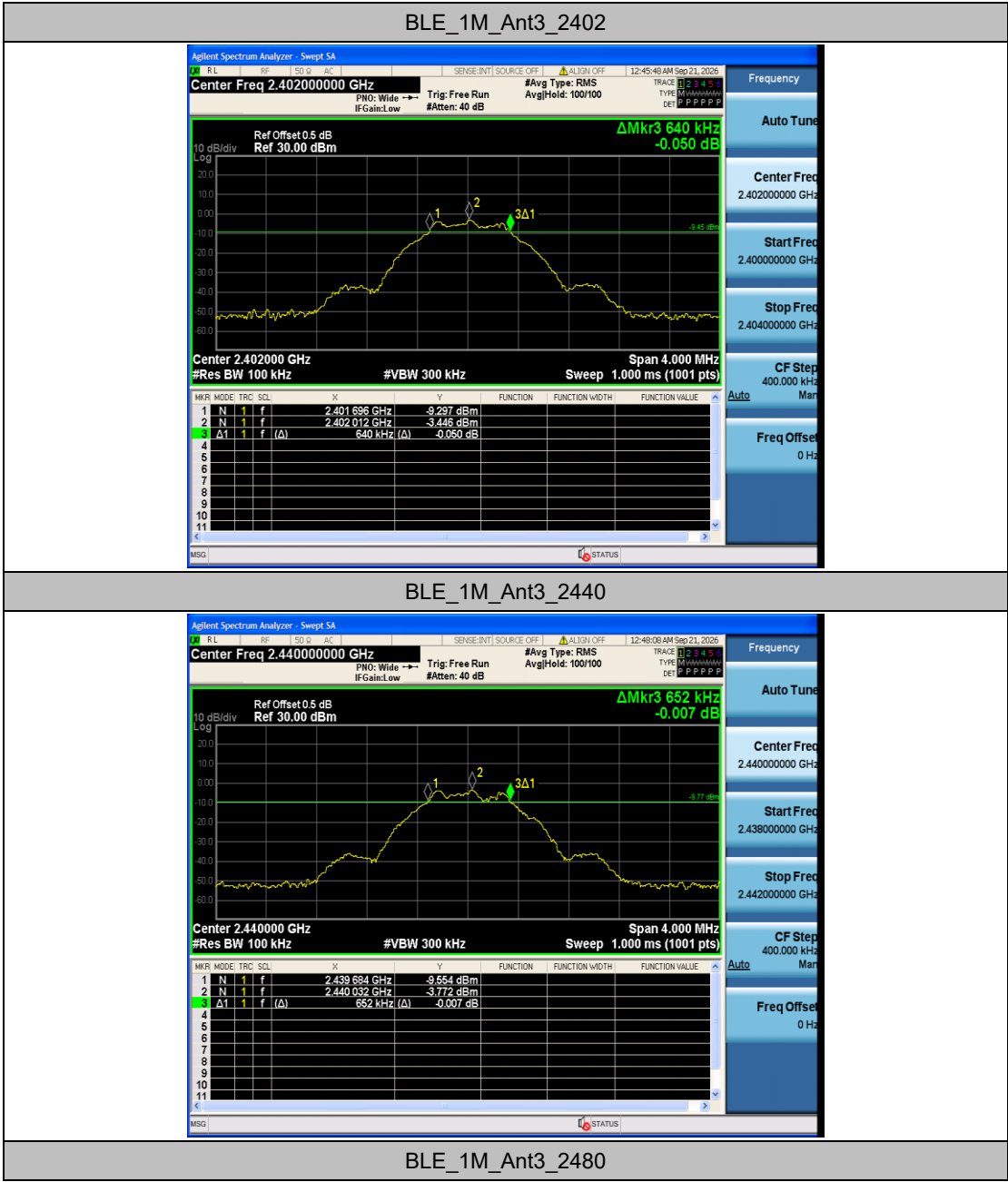
FCC Appendix RF Test Data for BLE for ANT 3

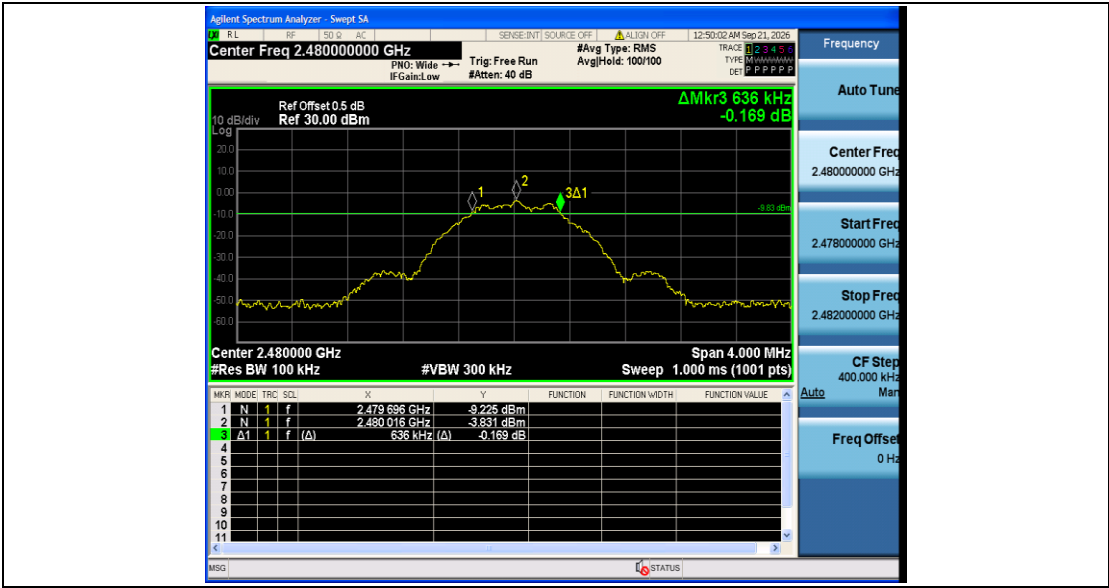
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant3	2402	0.640	2401.696	2402.336	0.5	PASS
		2440	0.652	2439.684	2440.336	0.5	PASS
		2480	0.636	2479.696	2480.332	0.5	PASS

Test Graphs



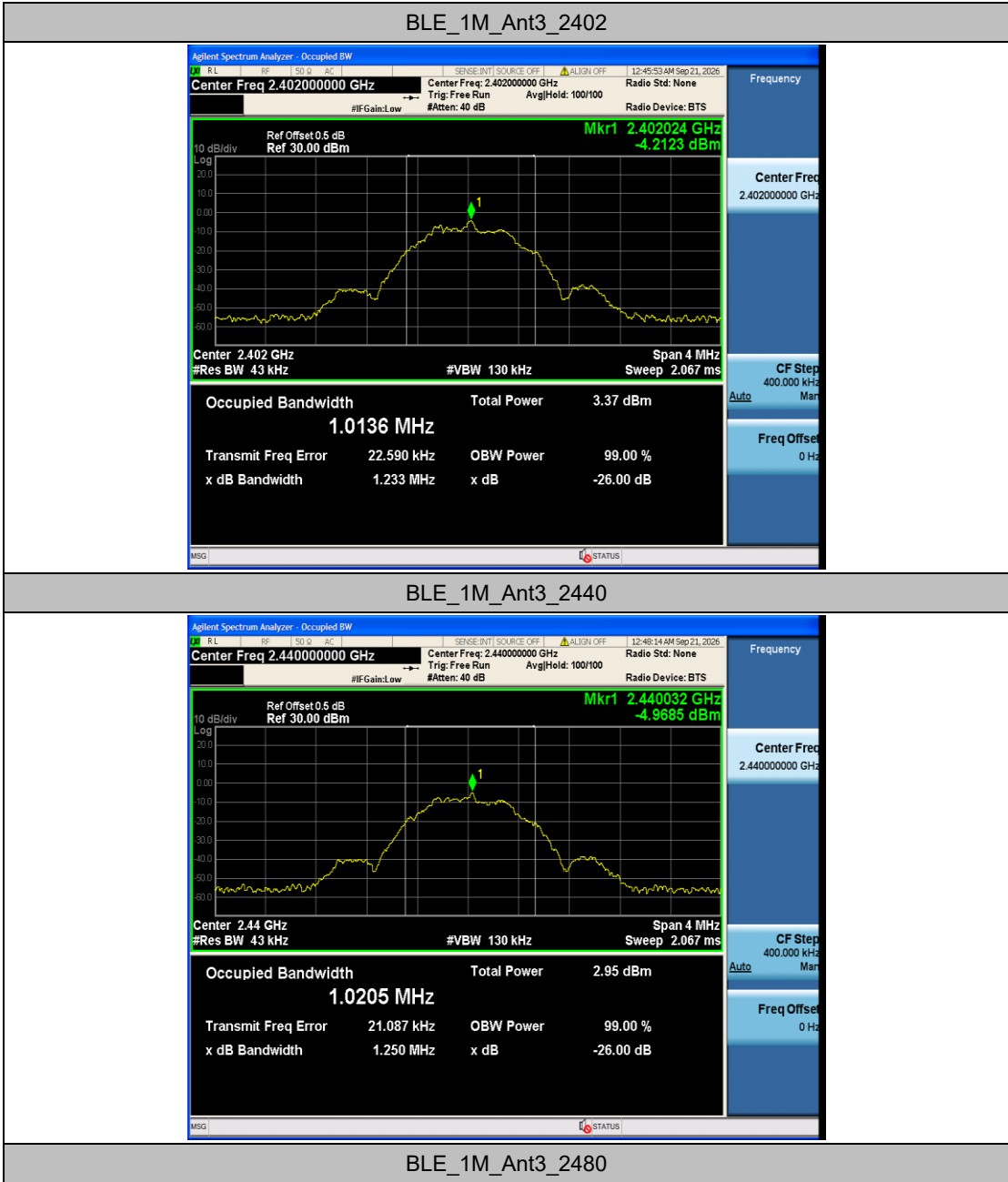


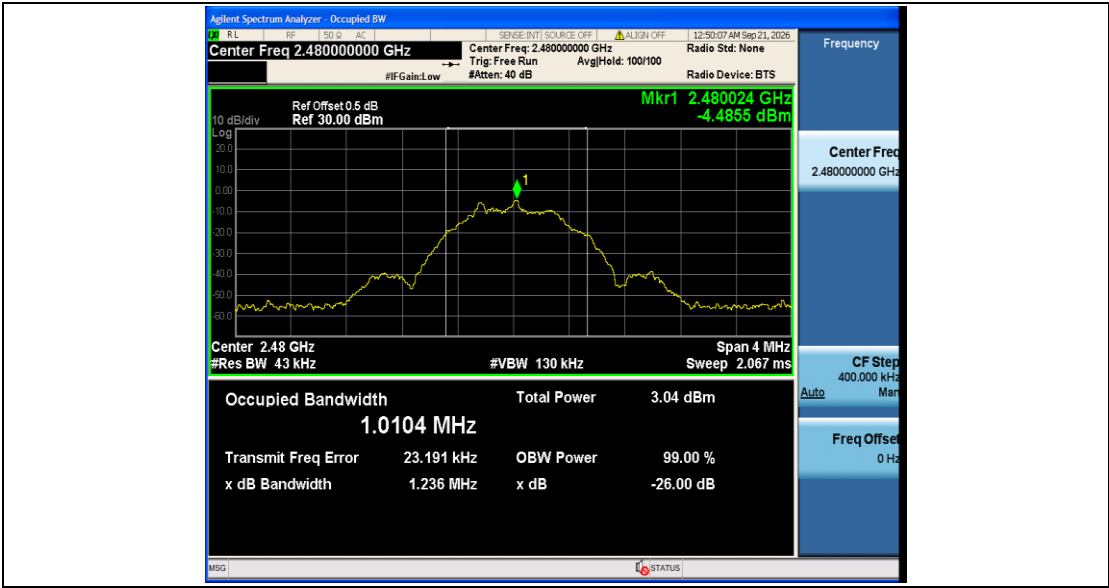
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant3	2402	1.0136	2401.5158	2402.5294	---	---
		2440	1.0205	2439.5108	2440.5313	---	---
		2480	1.0104	2479.5180	2480.5284	---	---

Test Graphs





Appendix C: Maximum conducted output power

Test Result Peak

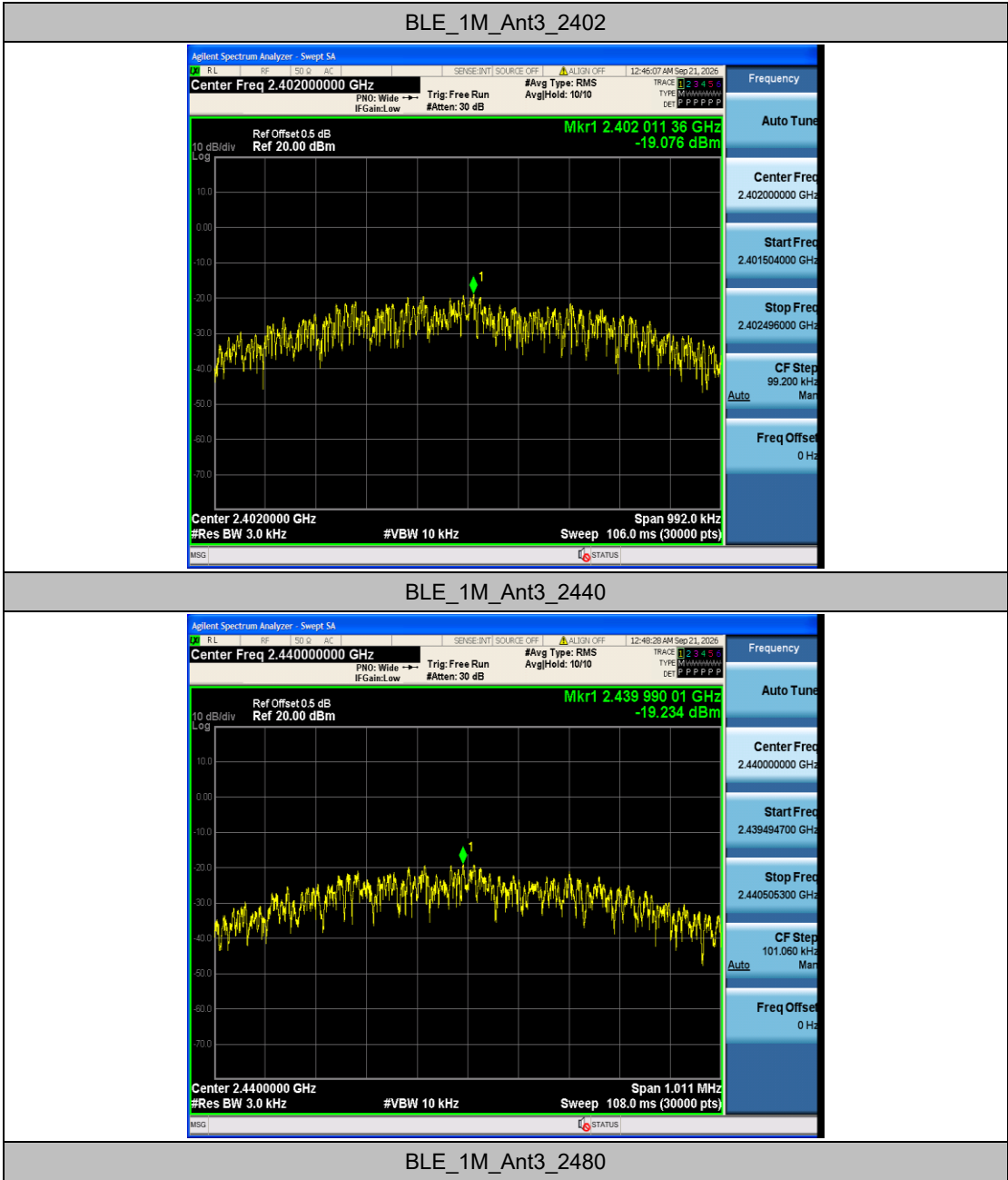
TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant3	2402	-3.27	≤30	PASS
		2440	-3.32	≤30	PASS
		2480	-3.59	≤30	PASS

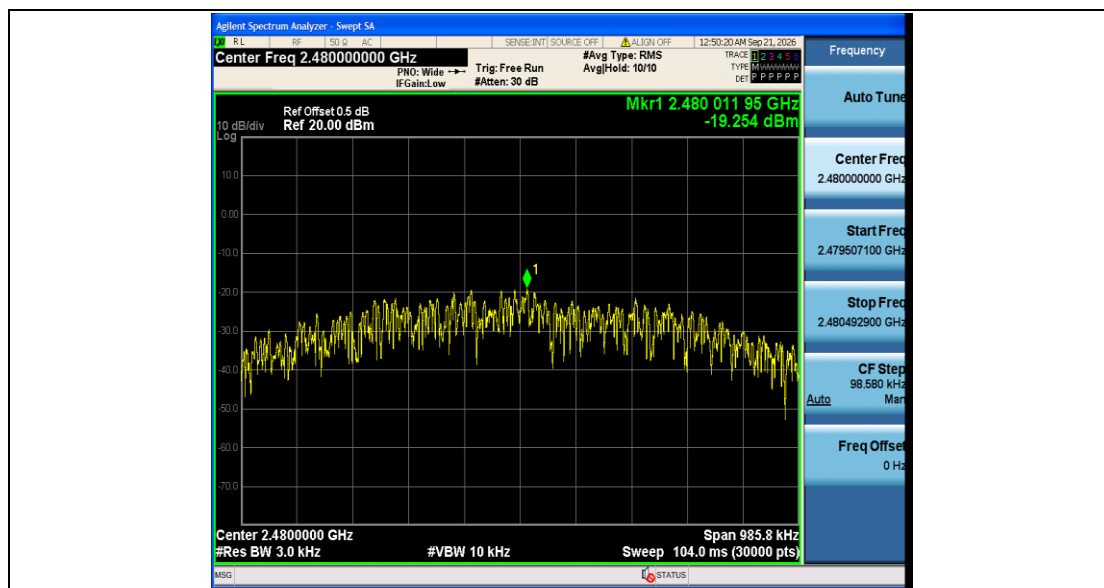
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant3	2402	-19.08	≤8.00	PASS
		2440	-19.23	≤8.00	PASS
		2480	-19.25	≤8.00	PASS

Test Graphs



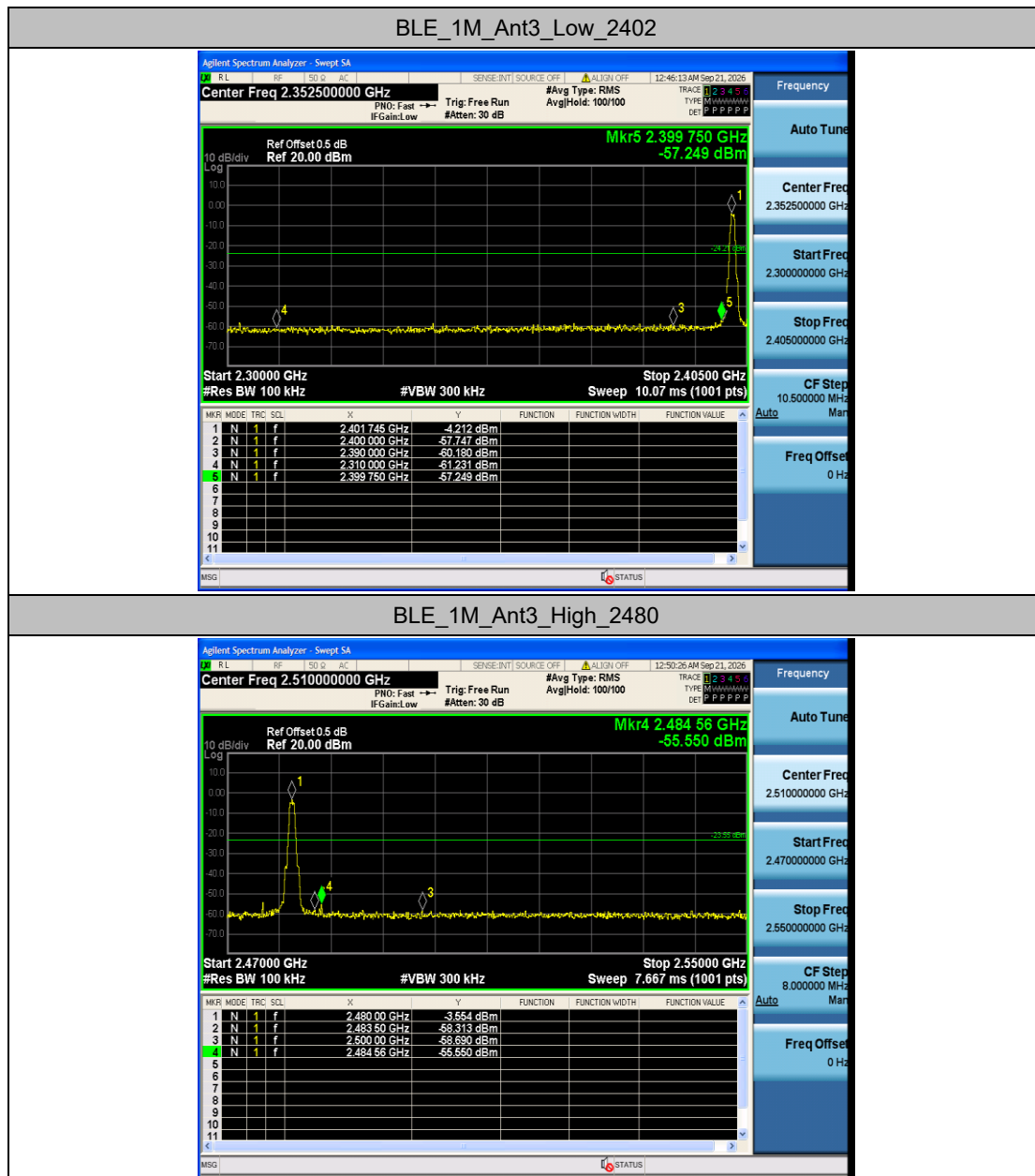


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	Channel	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant3	Low	2402	-4.21	-57.25	≤-24.21	PASS
		High	2480	-3.55	-55.55	≤-23.55	PASS

Test Graphs

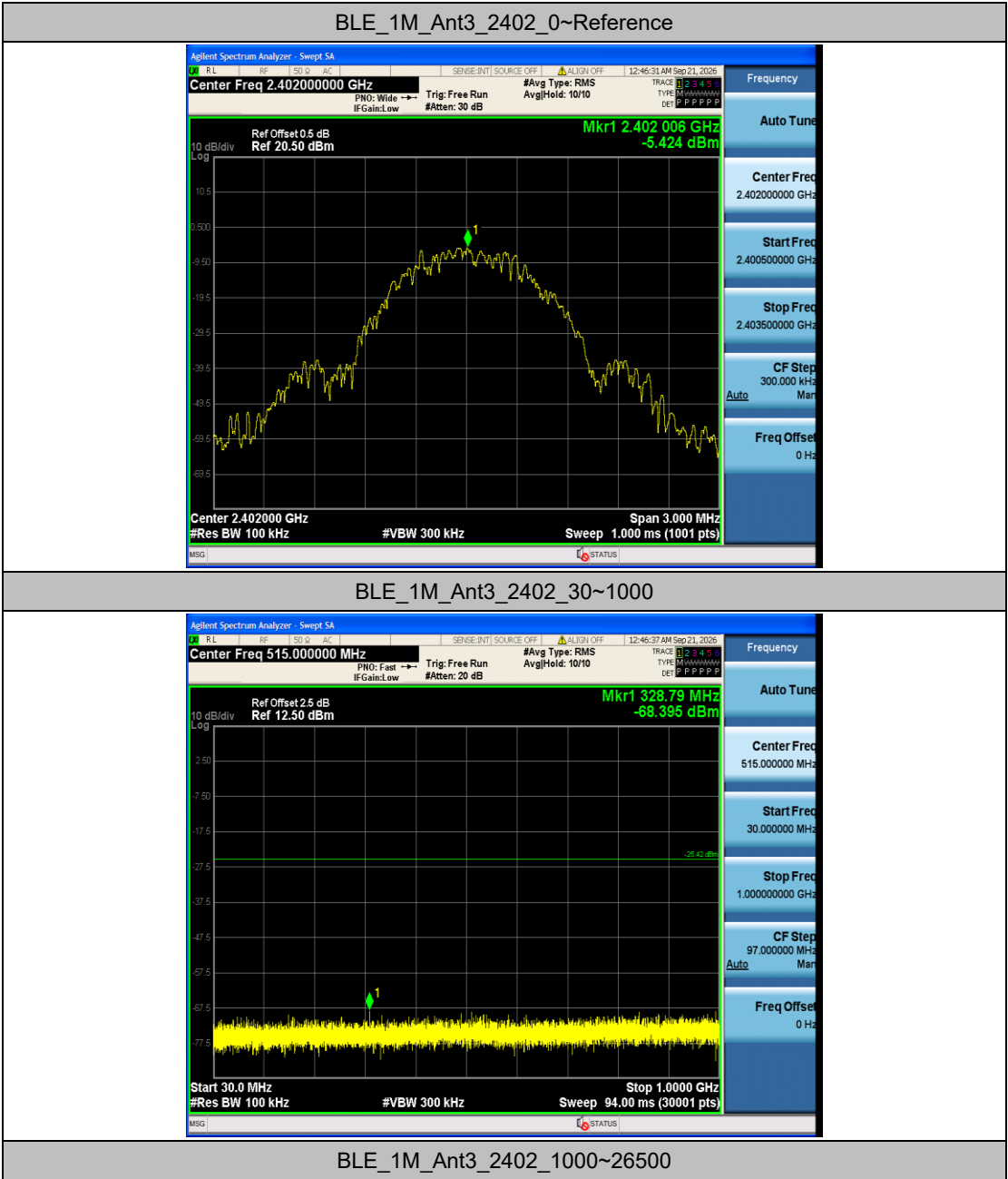


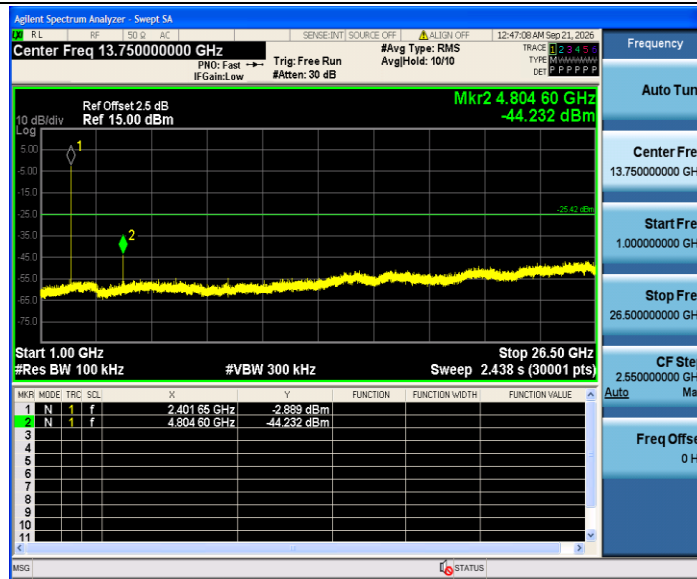
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant3	2402	Reference	-5.42	-5.42	---	PASS
			30~1000	-5.42	-68.4	≤-25.42	PASS
			1000~26500	-5.42	-44.23	≤-25.42	PASS
		2440	Reference	-5.10	-5.10	---	PASS
			30~1000	-5.10	-68.76	≤-25.1	PASS
			1000~26500	-5.10	-44.78	≤-25.1	PASS
		2480	Reference	-5.52	-5.52	---	PASS
			30~1000	-5.52	-68.03	≤-25.52	PASS
			1000~26500	-5.52	-45.86	≤-25.52	PASS

Test Graphs

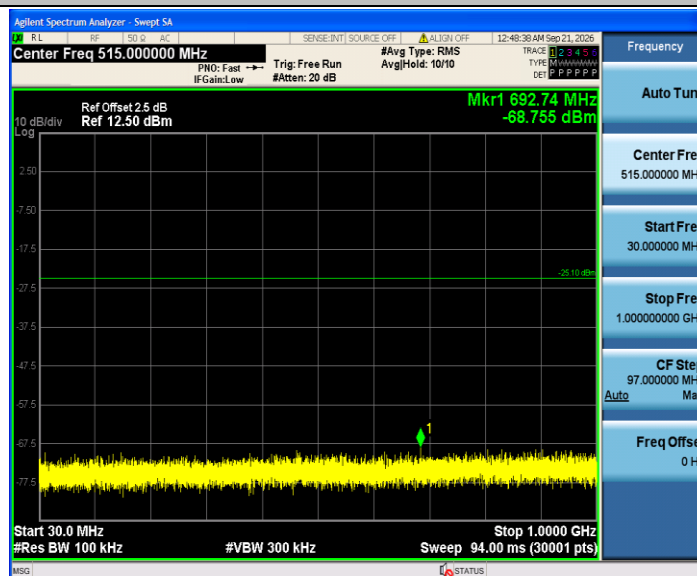




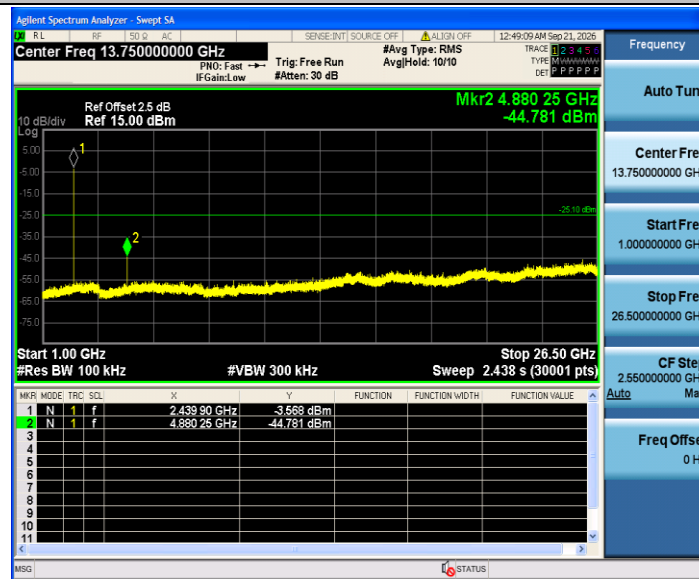
BLE_1M_Ant3_2440_0~Reference



BLE_1M_Ant3_2440_30~1000



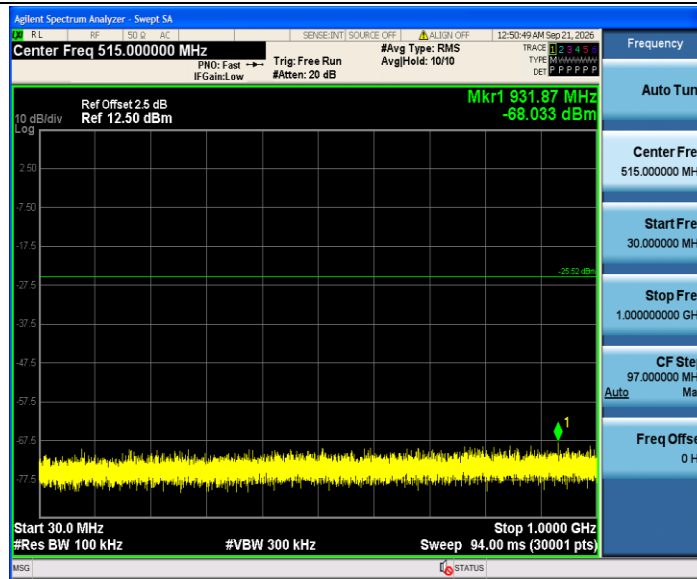
BLE_1M_Ant3_2440_1000~26500



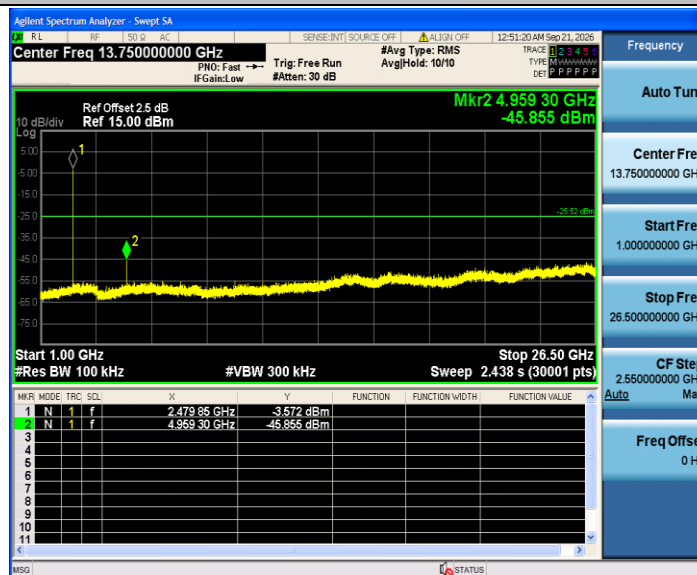
BLE_1M_Ant3_2480_0~Reference



BLE_1M_Ant3_2480_30~1000



BLE_1M_Ant3_2480_1000~26500

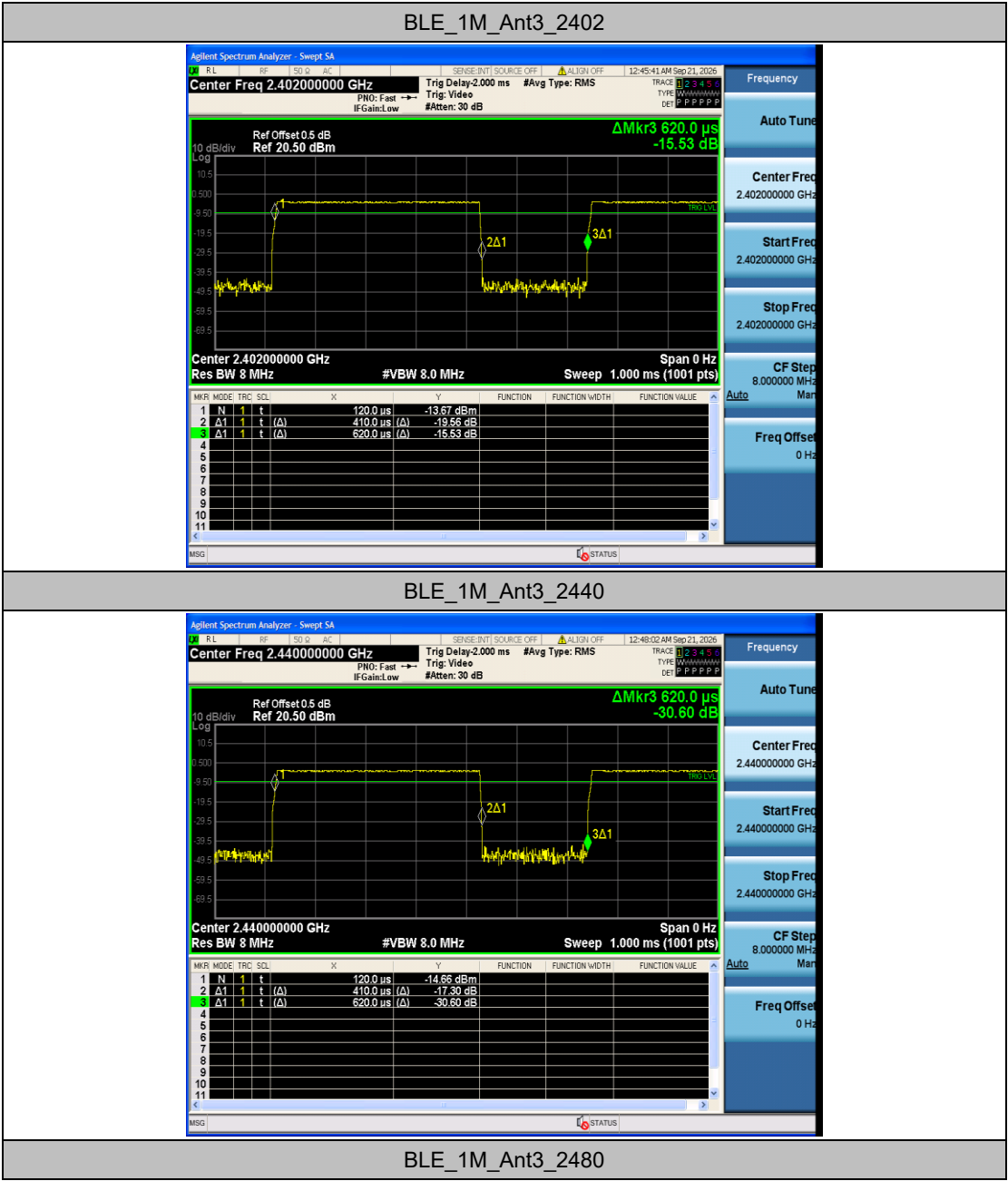


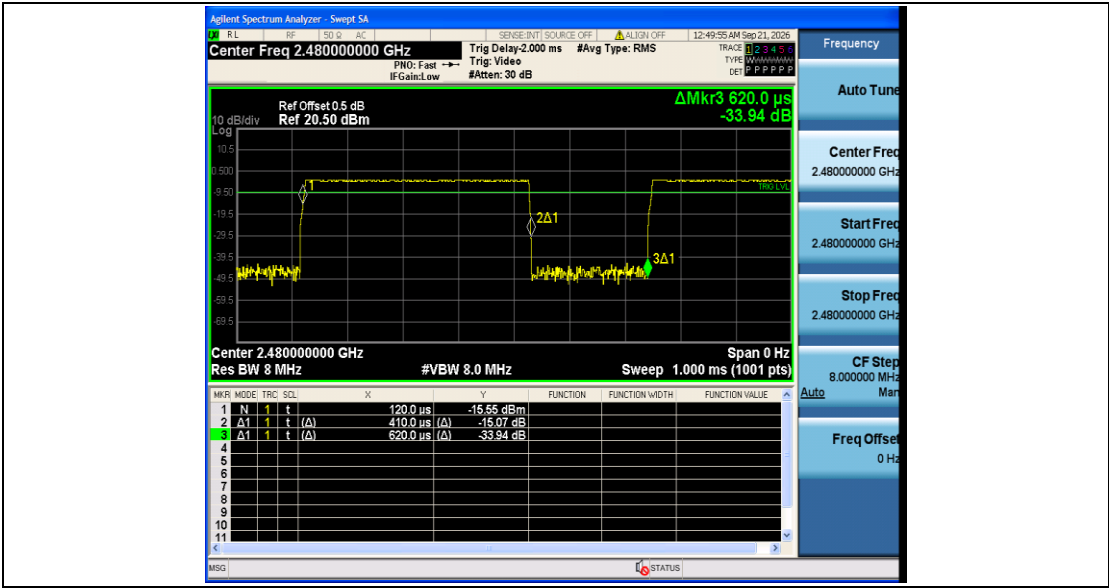
Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant3	2402	0.41	0.62	0.6613	66.13	1.80	---	---
		2440	0.41	0.62	0.6613	66.13	1.80	---	---
		2480	0.41	0.62	0.6613	66.13	1.80	---	---

Test Graphs





Appendix H: Emissions in Restricted Bands

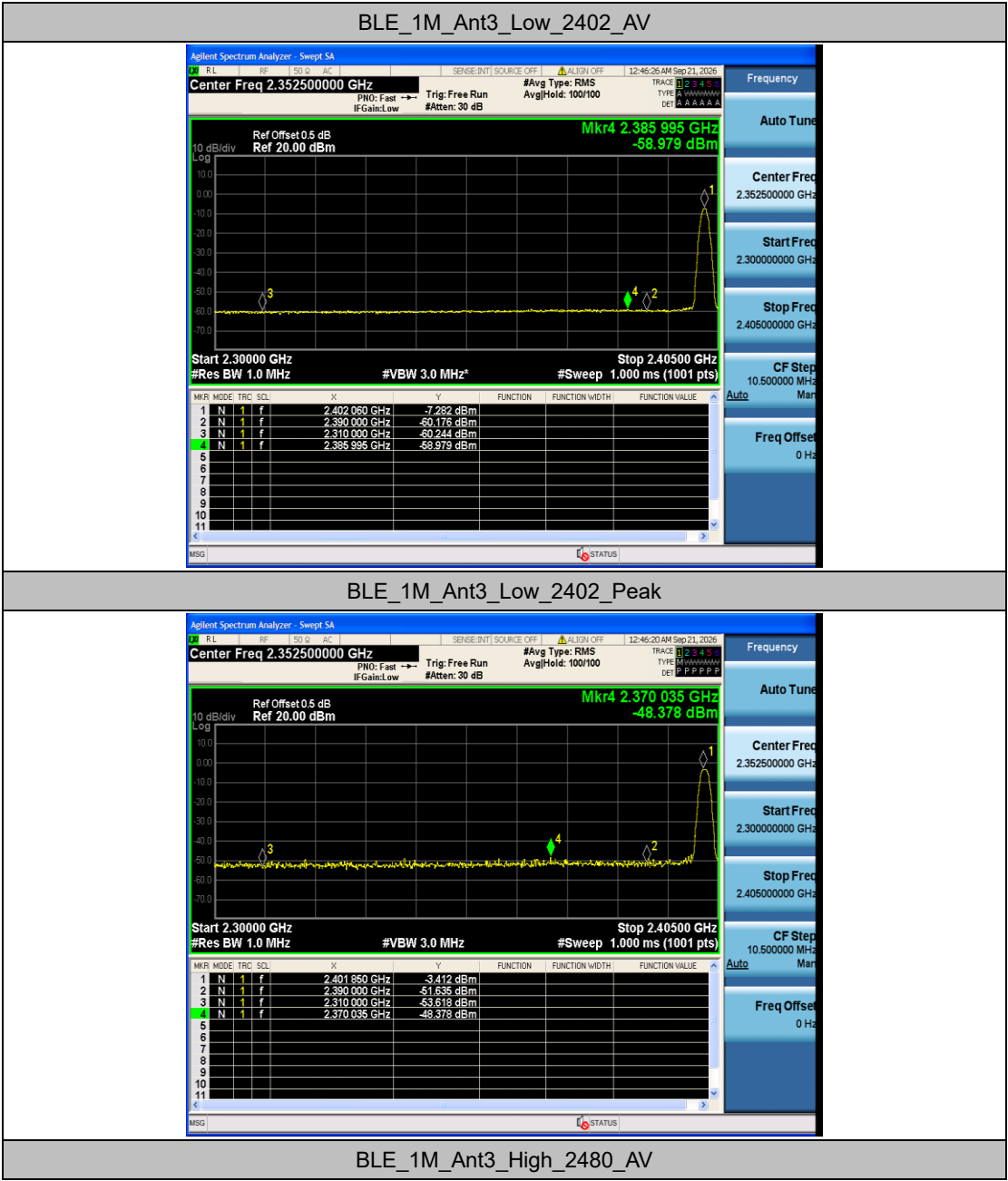
Test Result

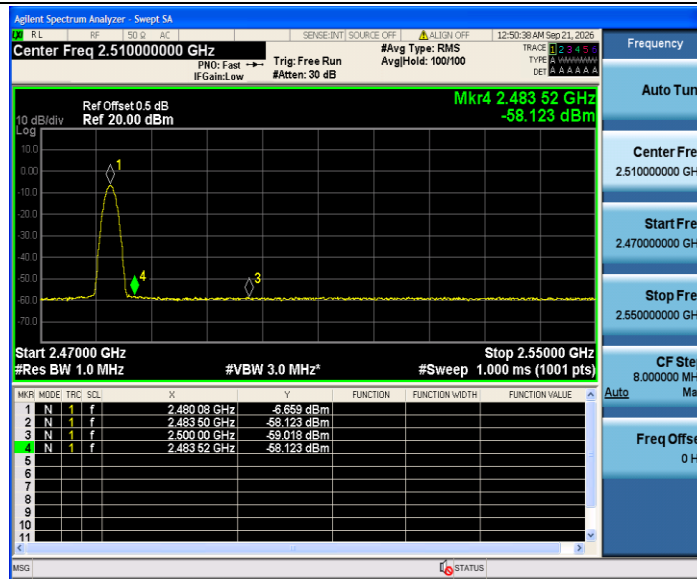
TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant3	Low	2402	AV	2310.000	-60.24	2.00	1.80	38.76	≤54	PASS
				AV	2385.995	-58.98	2.00	1.80	40.02	≤54	PASS
				AV	2390.000	-60.18	2.00	1.80	38.82	≤54	PASS
				Peak	2310.000	-53.62	2.00	0.00	43.58	≤74	PASS
				Peak	2370.035	-48.38	2.00	0.00	48.82	≤74	PASS
				Peak	2390.000	-51.64	2.00	0.00	45.56	≤74	PASS
		High	2480	AV	2483.500	-58.12	2.00	1.80	40.88	≤54	PASS
				AV	2483.520	-58.12	2.00	1.80	40.88	≤54	PASS
				AV	2500.000	-59.02	2.00	1.80	39.98	≤54	PASS
				Peak	2483.500	-49.54	2.00	0.00	47.66	≤74	PASS
				Peak	2485.040	-47.38	2.00	0.00	49.82	≤74	PASS
				Peak	2500.000	-51.18	2.00	0.00	46.02	≤74	PASS

Note:

The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs





BLE_1M_Ant3_High_2480_Peak

