

FCC Appendix RF Test Data for BLE

FCC ID : 2BS5C-AG35

Company : Shenzhen Jiaxiangyuan Electronics Co.,LTD

EUT : Intelligent anti loss device

Model Number : AG35

Report No. : CTA26040802701

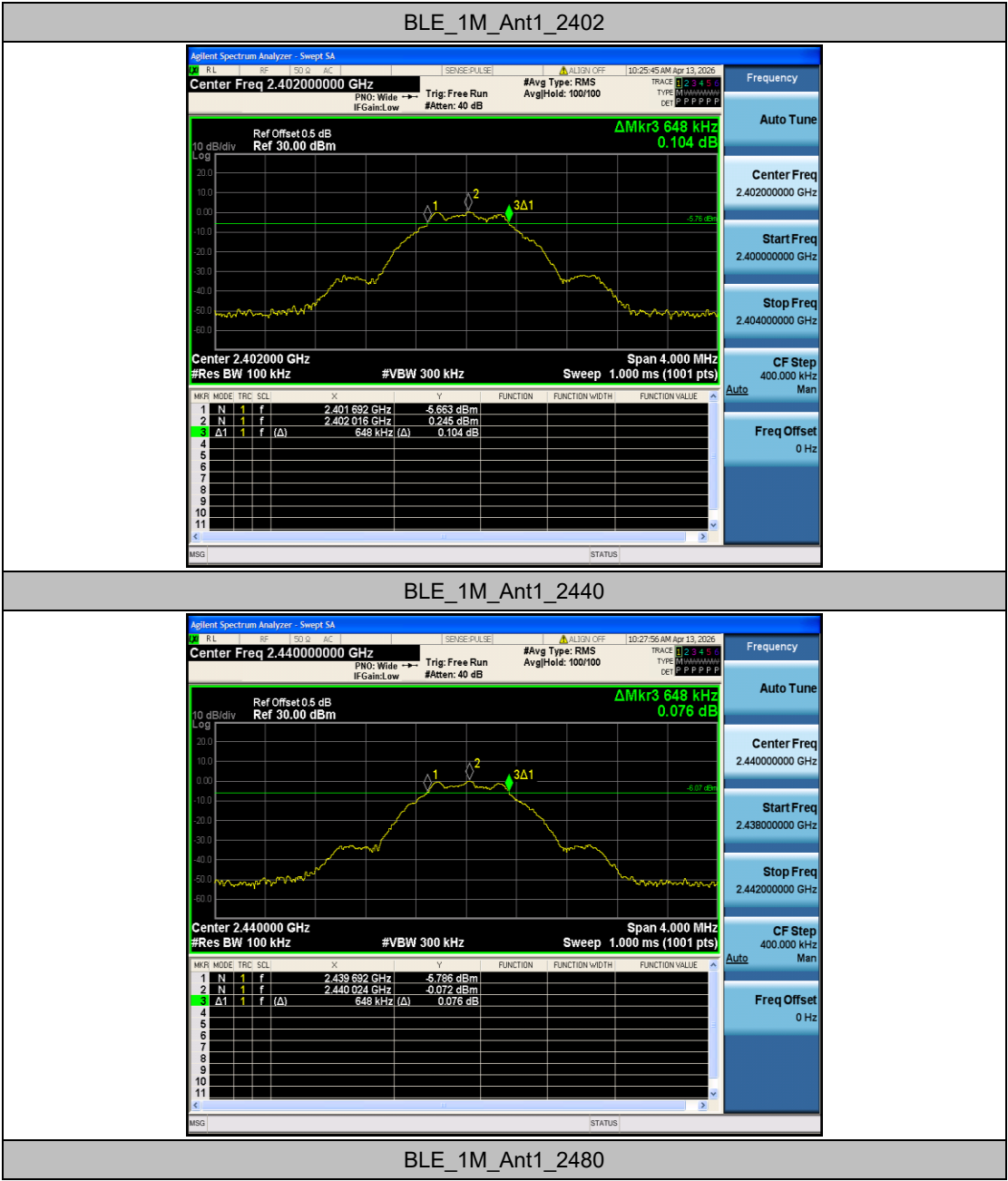
Reviewed By : Eric Wang

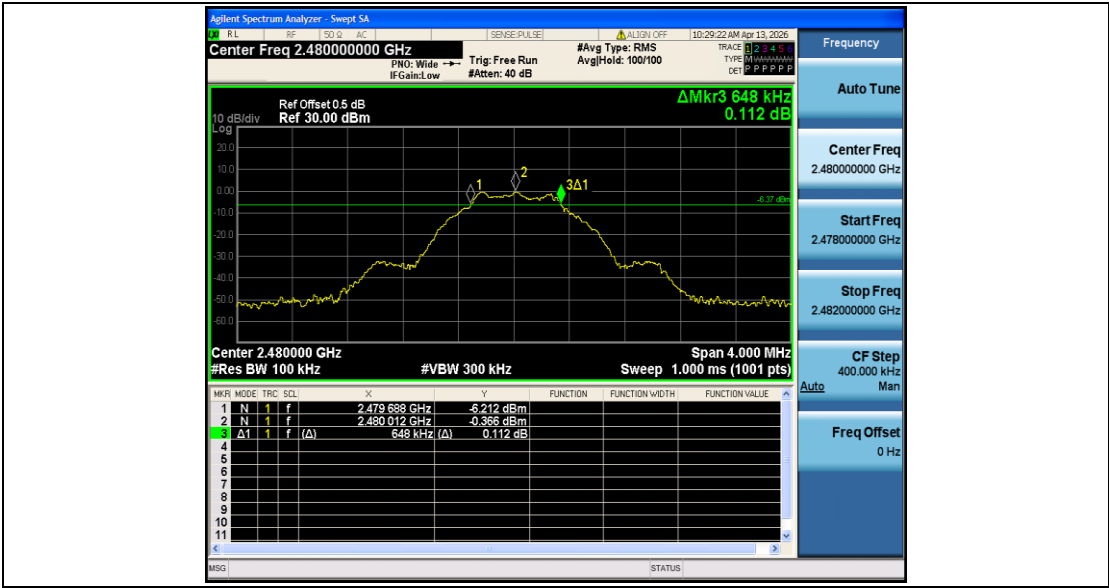
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.648	2401.692	2402.340	0.5	PASS
		2440	0.648	2439.692	2440.340	0.5	PASS
		2480	0.648	2479.688	2480.336	0.5	PASS

Test Graphs



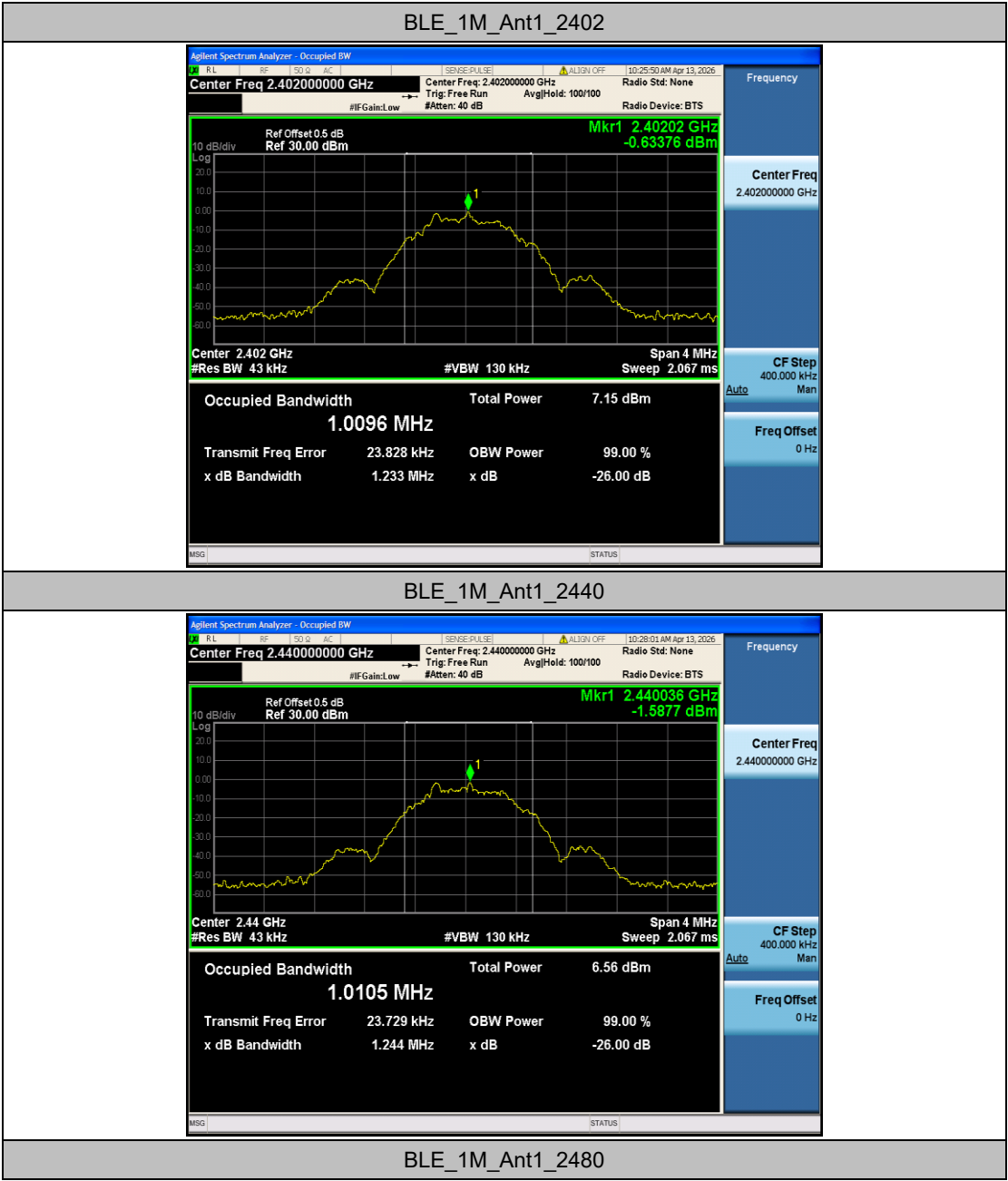


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0096	2401.5190	2402.5286	---	---
		2440	1.0105	2439.5185	2440.5290	---	---
		2480	1.0095	2479.5190	2480.5285	---	---

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	Ant1	2402	0.34	≤30	PASS
		2440	-0.04	≤30	PASS
		2480	-0.11	≤30	PASS

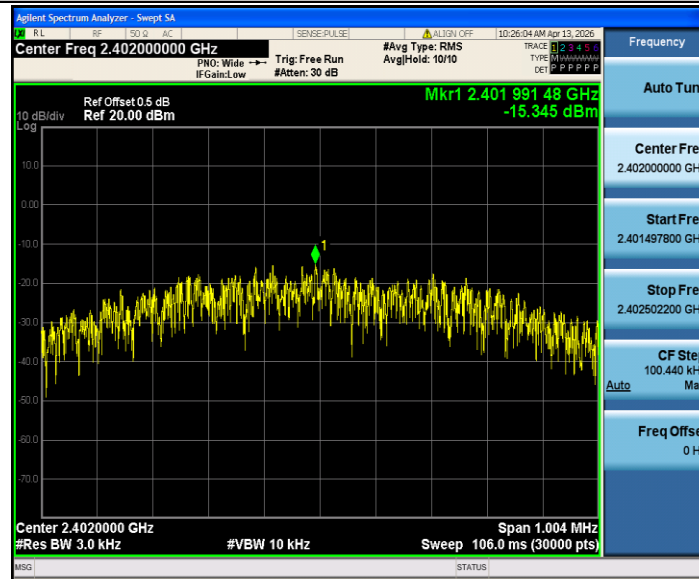
Appendix D: Maximum power spectral density

Test Result

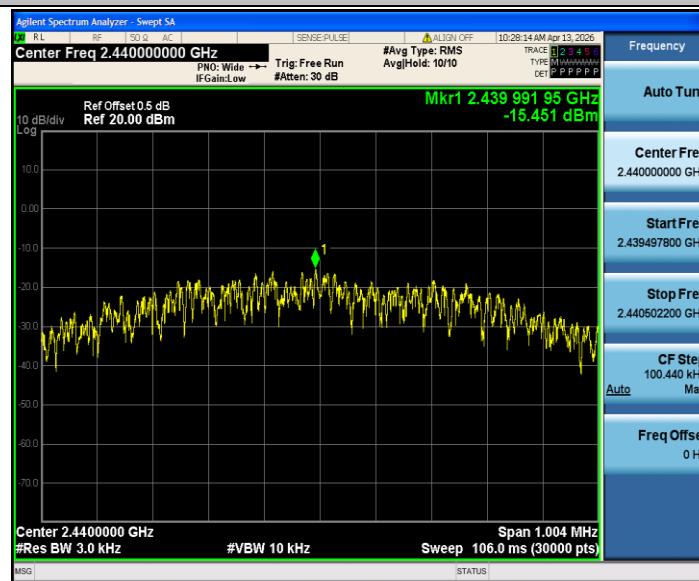
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.35	≤8.00	PASS
		2440	-15.45	≤8.00	PASS
		2480	-15.67	≤8.00	PASS

Test Graphs

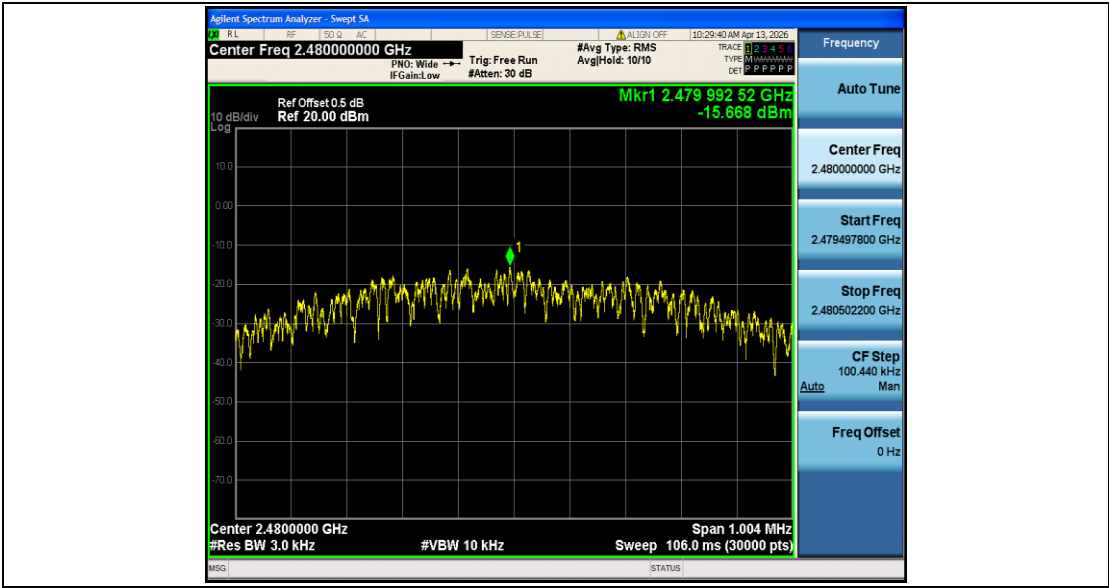
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

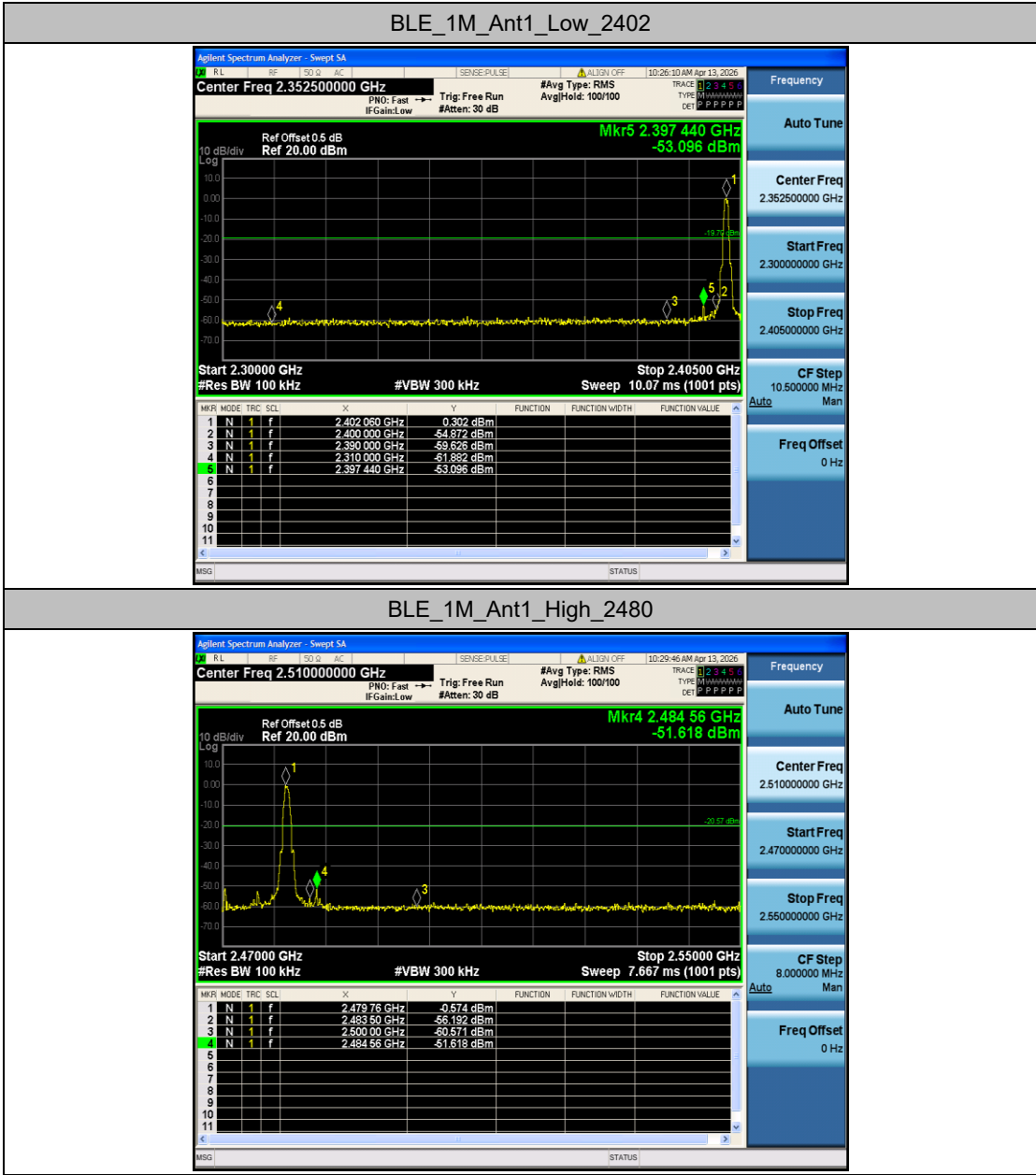


Appendix E: Band edge measurements

Test Result

TestMod e	Antenn a	ChNam e	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdic t
BLE_1M	Ant1	Low	2402	0.30	-53.1	≤-19.7	PASS
		High	2480	-0.57	-51.62	≤-20.57	PASS

Test Graphs

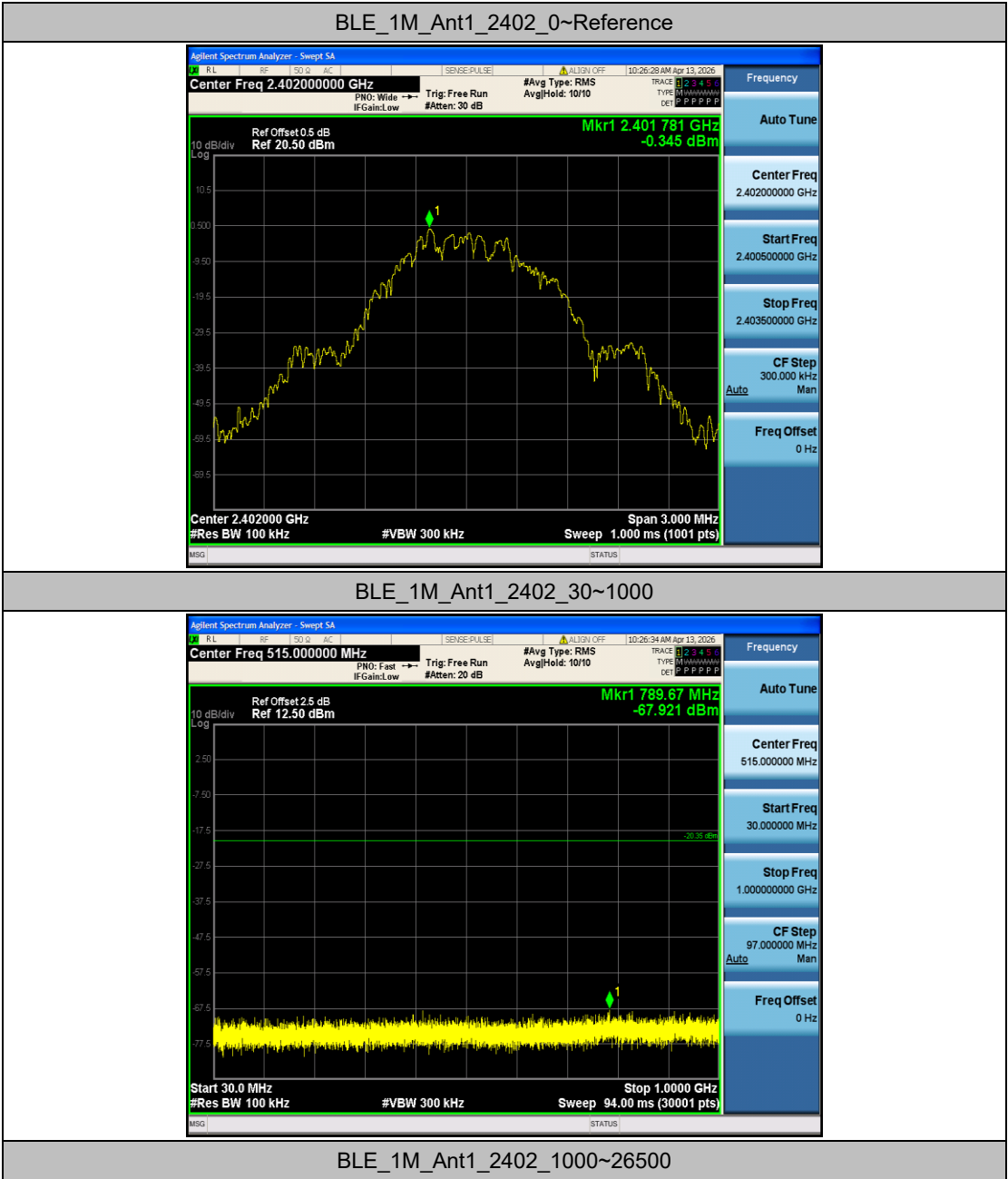


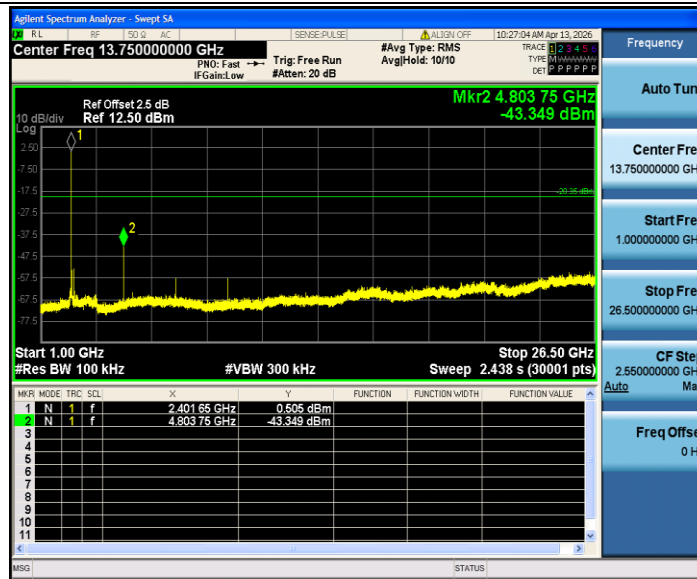
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-0.35	-0.35	---	PASS
			30~1000	-0.35	-67.92	≤-20.35	PASS
			1000~26500	-0.35	-43.35	≤-20.35	PASS
		2440	Reference	-0.30	-0.30	---	PASS
			30~1000	-0.30	-68.4	≤-20.3	PASS
			1000~26500	-0.30	-43.81	≤-20.3	PASS
		2480	Reference	-1.39	-1.39	---	PASS
			30~1000	-1.39	-67.64	≤-21.39	PASS
			1000~26500	-1.39	-42.86	≤-21.39	PASS

Test Graphs

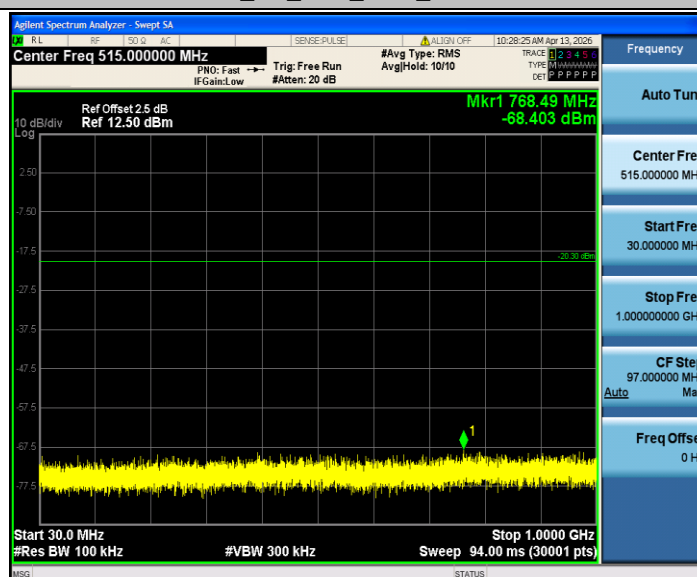




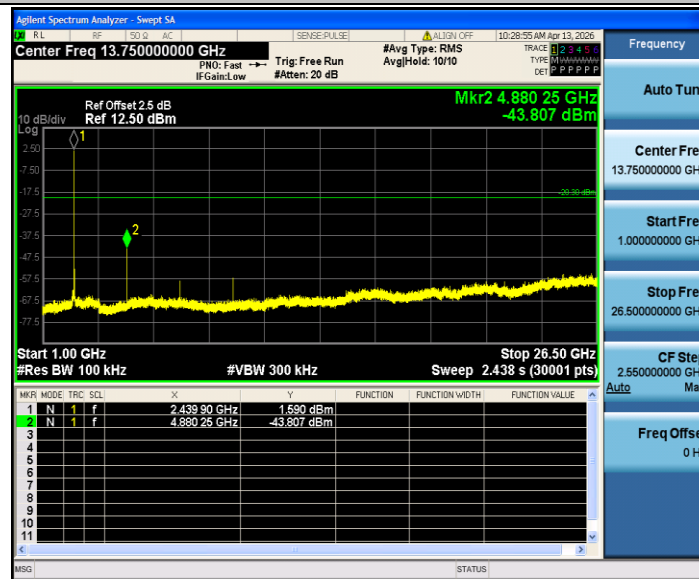
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



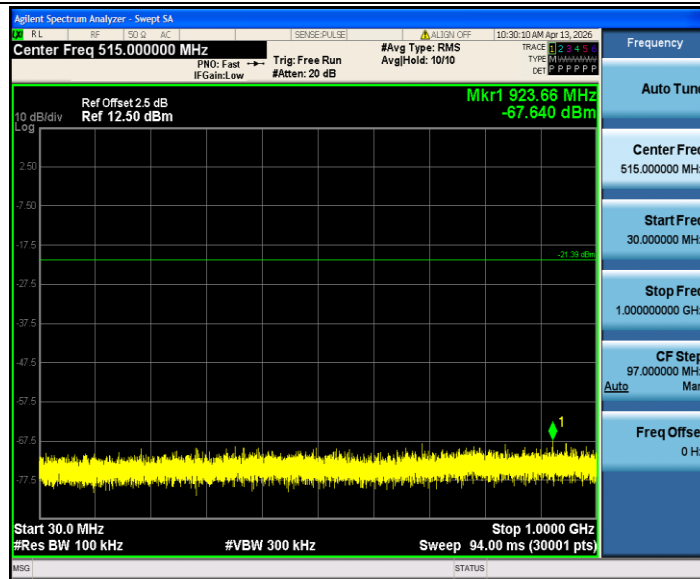
BLE_1M_Ant1_2440_1000~26500



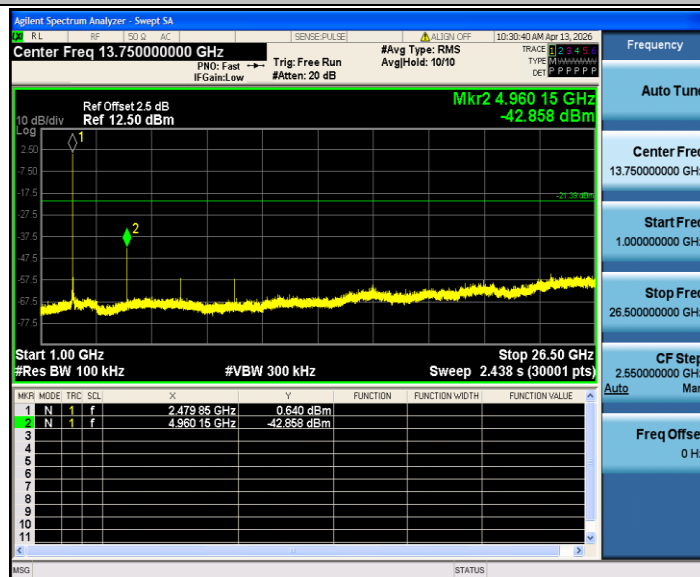
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500

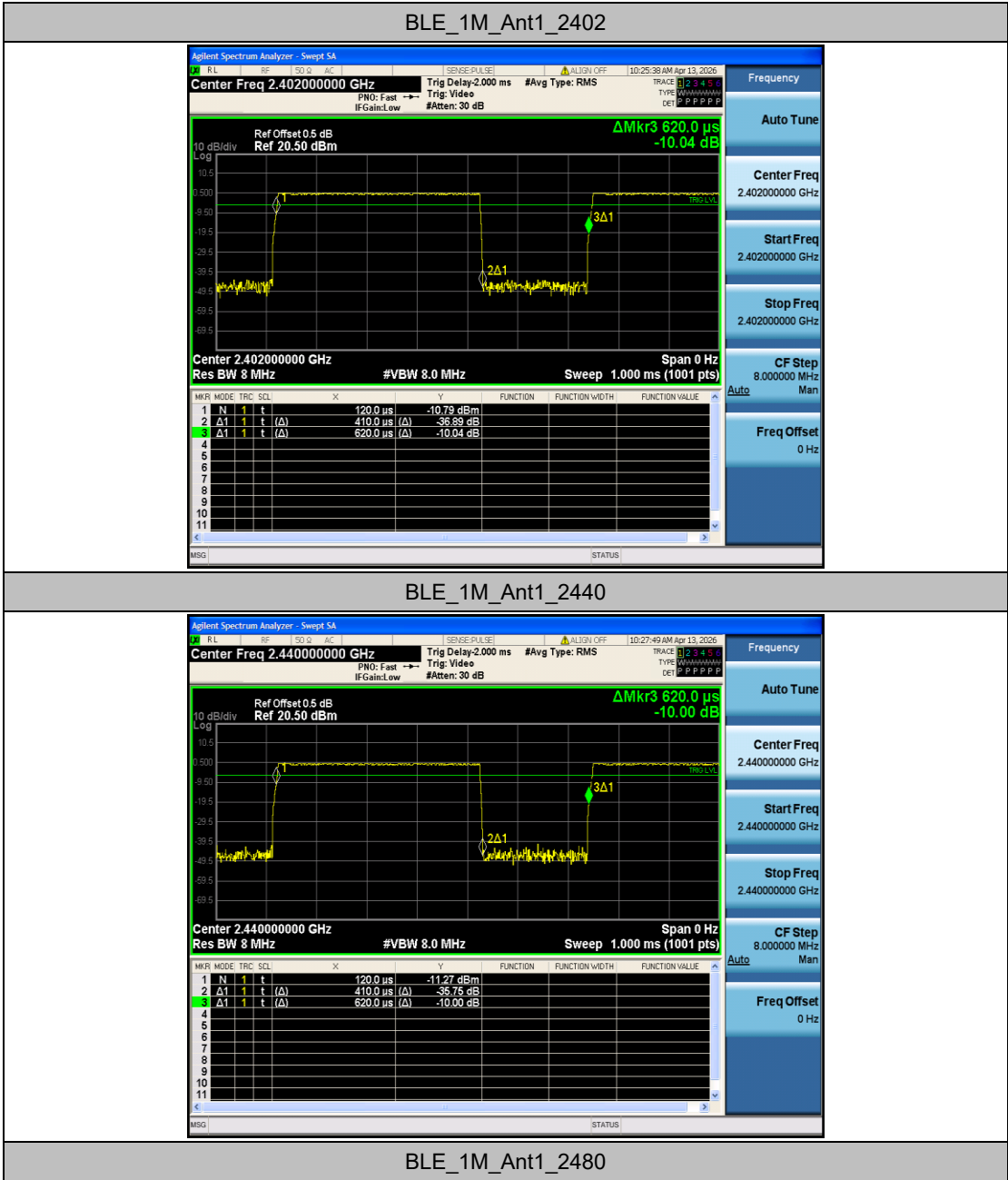


Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	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

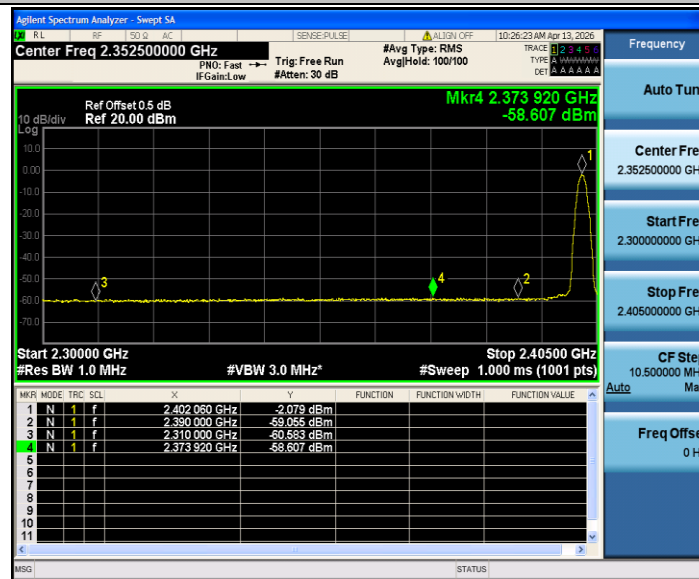
TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-60.58	2.00	1.80	38.42	≤54	PASS
				AV	2373.920	-58.61	2.00	1.80	40.39	≤54	PASS
				AV	2390.000	-59.06	2.00	1.80	39.94	≤54	PASS
				Peak	2310.000	-51.64	2.00	0.00	45.56	≤74	PASS
				Peak	2350.505	-48.54	2.00	0.00	48.66	≤74	PASS
				Peak	2390.000	-51.08	2.00	0.00	46.12	≤74	PASS
		High	2480	AV	2483.500	-57.23	2.00	1.80	41.77	≤54	PASS
				AV	2483.520	-57.23	2.00	1.80	41.77	≤54	PASS
				AV	2500.000	-59.15	2.00	1.80	39.85	≤54	PASS
				Peak	2483.500	-48.5	2.00	0.00	48.70	≤74	PASS
				Peak	2484.160	-45.34	2.00	0.00	51.86	≤74	PASS
				Peak	2500.000	-51.94	2.00	0.00	45.26	≤74	PASS

Note:

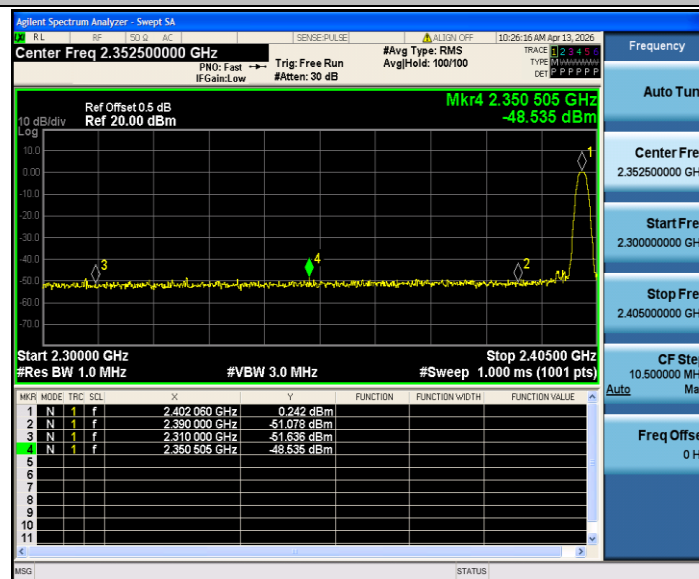
The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

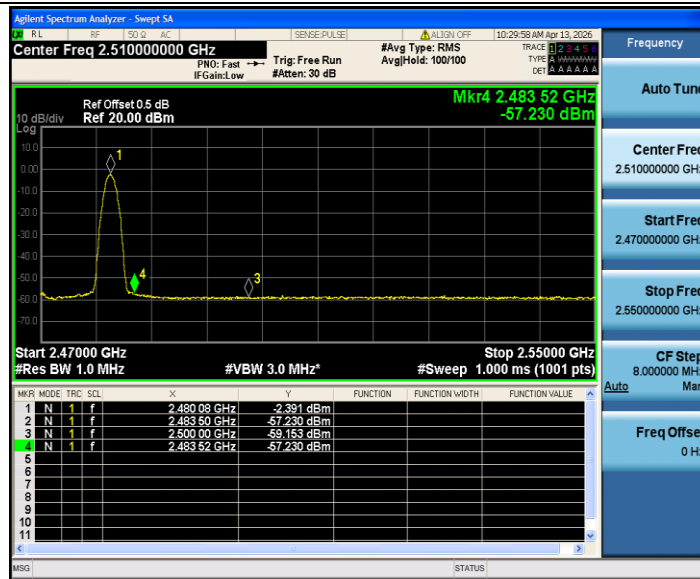
BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

