

FCC Appendix RF Test Data for BLE

FCC ID : 2BSMJ-BILLCONCHS260

Company : Shenzhen Yiluo Technology Co., Ltd

EUT : Billconch Smart Safe-S260

Model Number : Billconch-S260

Report No. : CTA26031700401

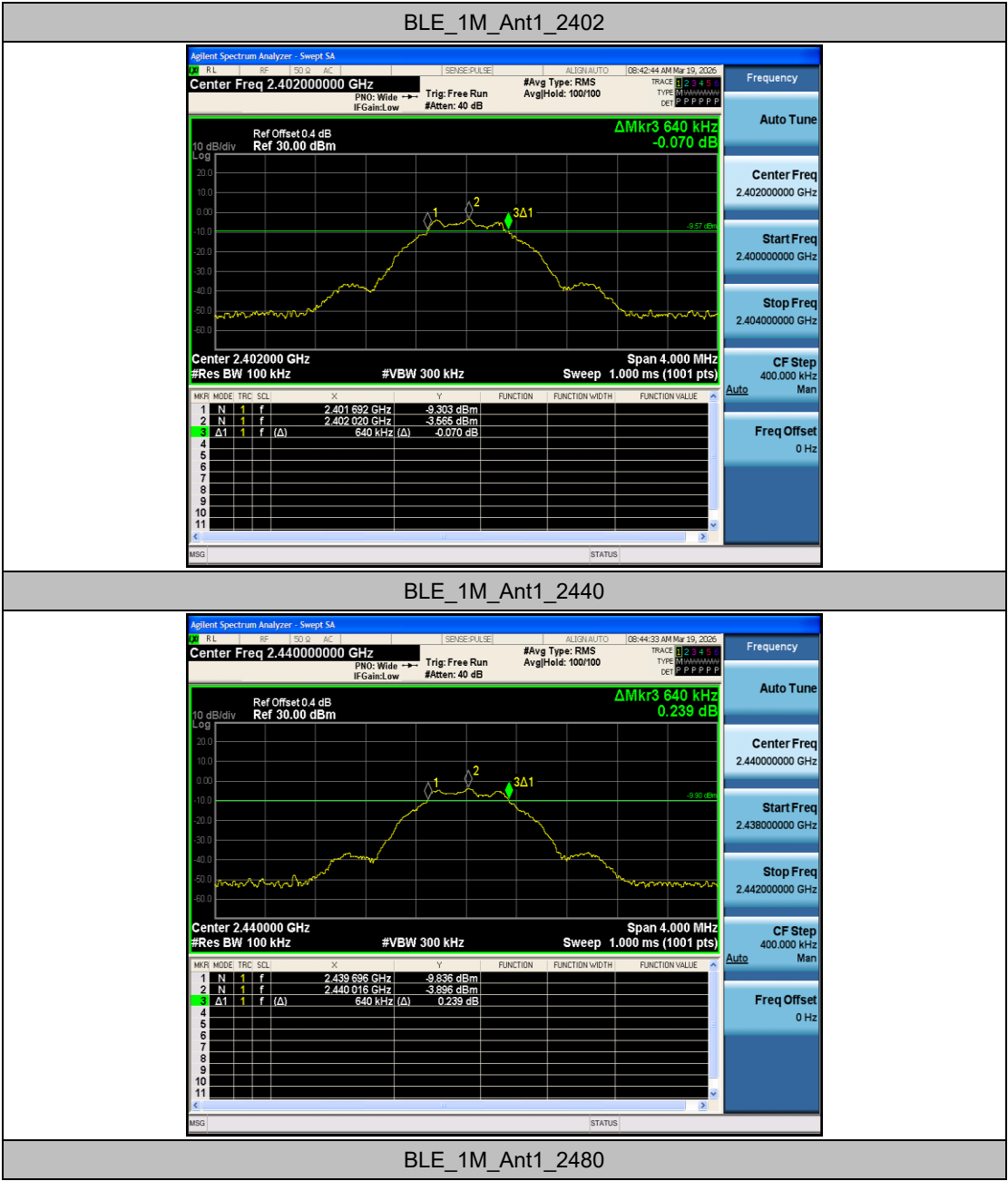
Reviewed By : Eric Wang

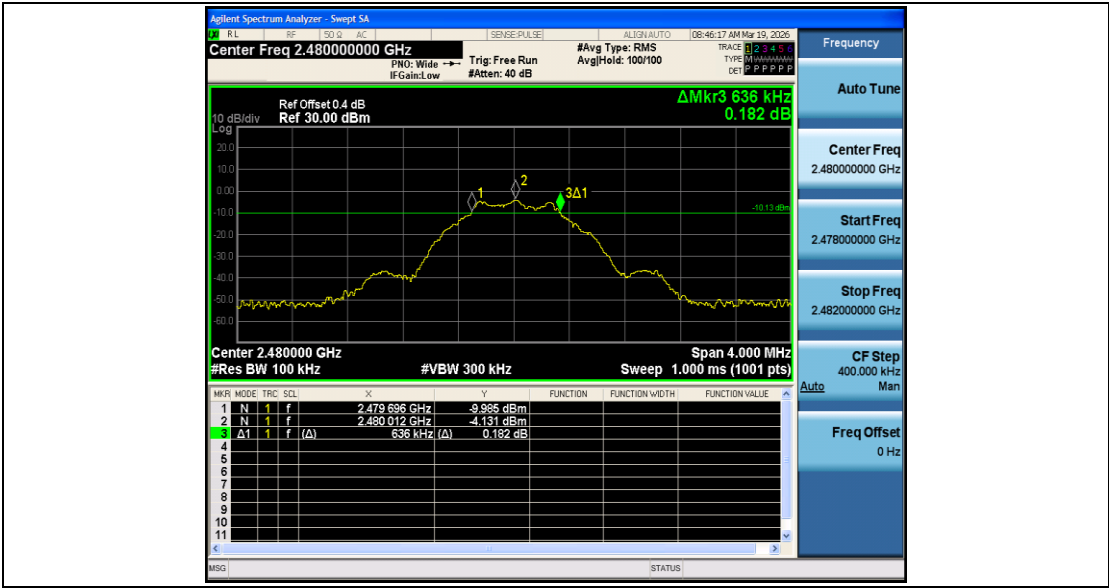
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.640	2401.692	2402.332	0.5	PASS
		2440	0.640	2439.696	2440.336	0.5	PASS
		2480	0.636	2479.696	2480.332	0.5	PASS

Test Graphs





Appendix B: Occupied Channel Bandwidth

Test Result

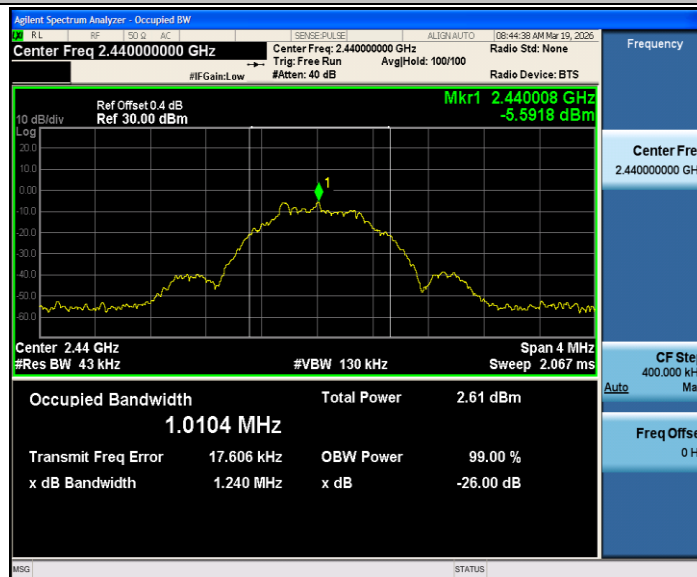
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0069	2401.5187	2402.5256	---	---
		2440	1.0104	2439.5124	2440.5228	---	---
		2480	1.0103	2479.5159	2480.5262	---	---

Test Graphs

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



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	-3.43	≤30	PASS
		2440	-3.71	≤30	PASS
		2480	-3.81	≤30	PASS

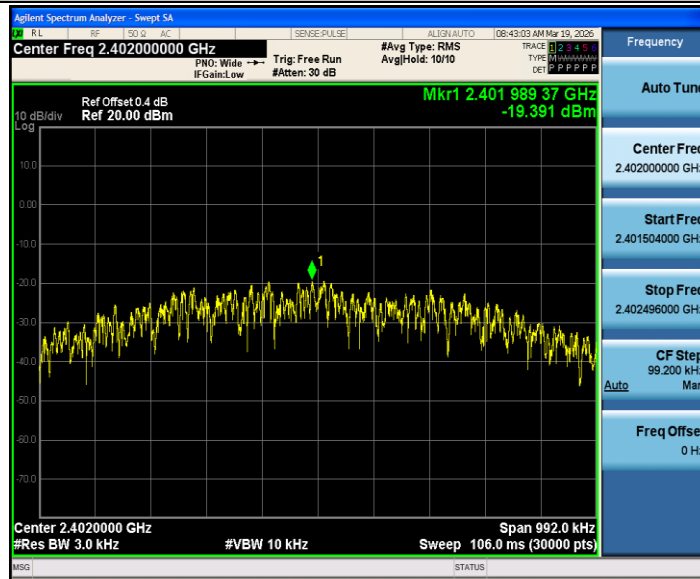
Appendix D: Maximum power spectral density

Test Result

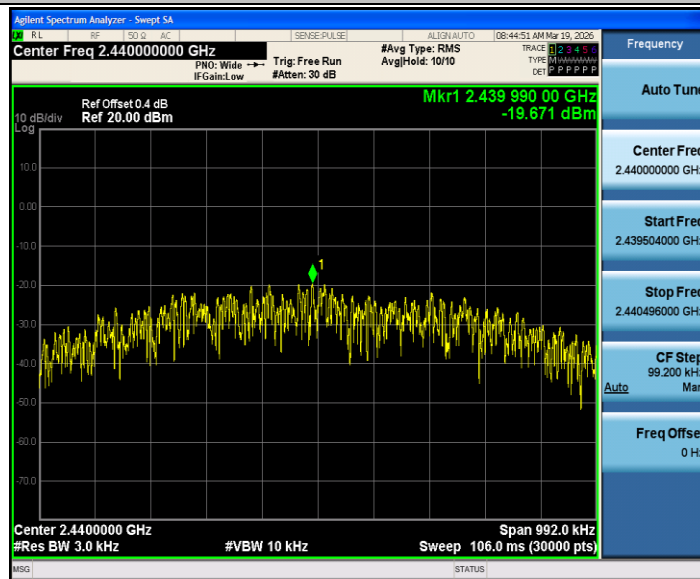
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.39	≤8.00	PASS
		2440	-19.67	≤8.00	PASS
		2480	-19.68	≤8.00	PASS

Test Graphs

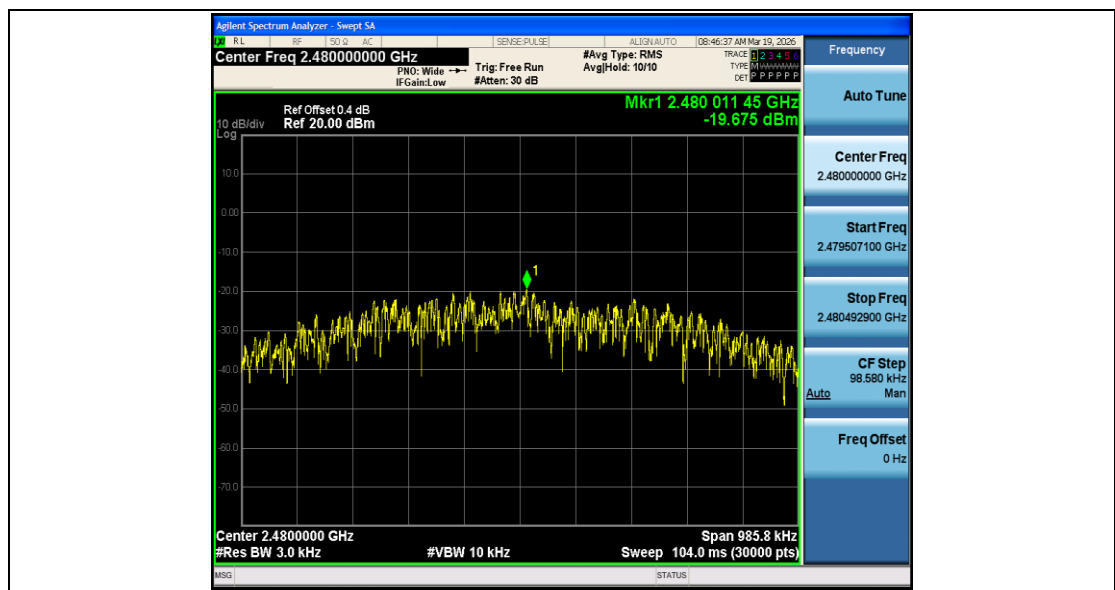
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

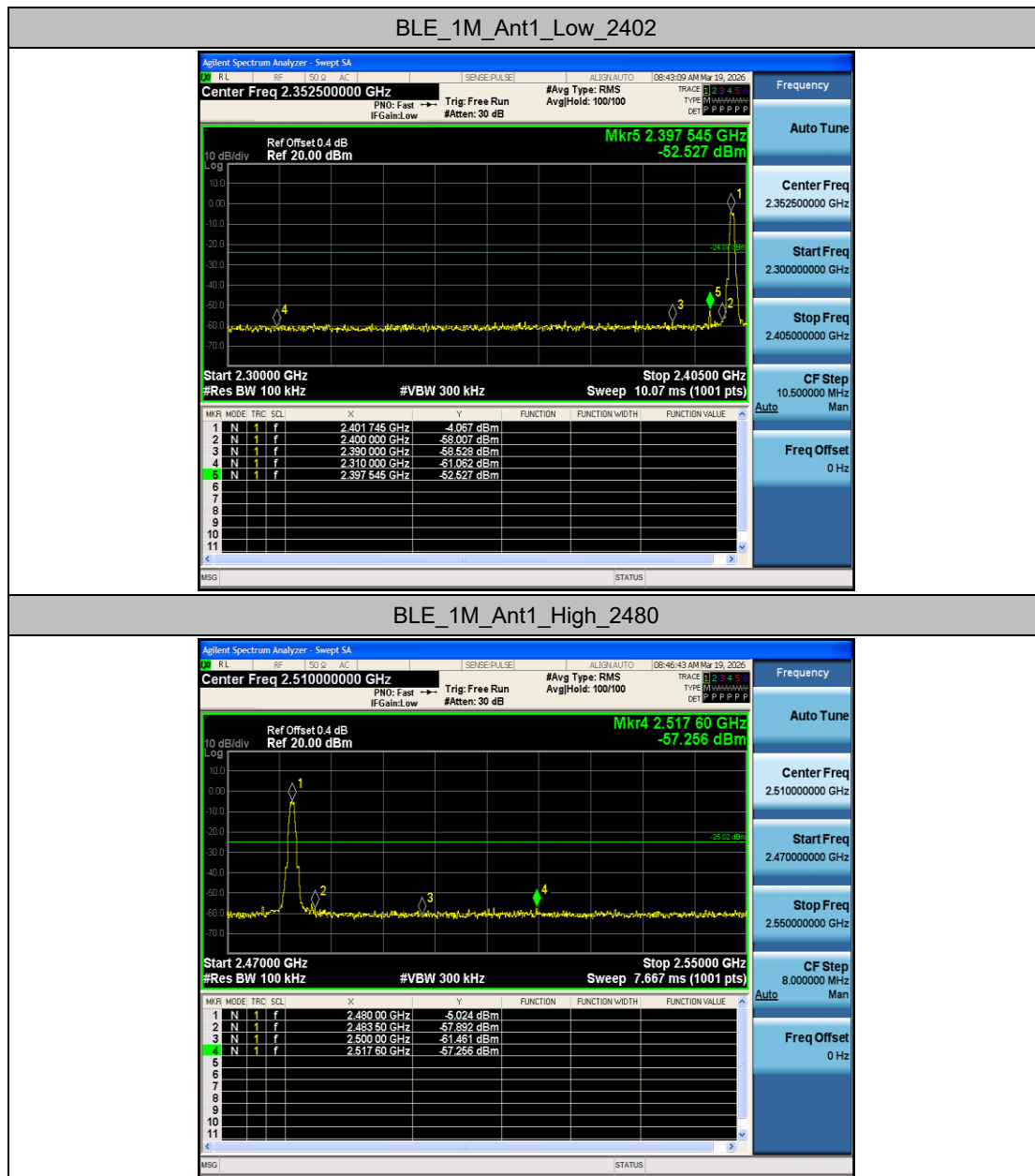


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-4.07	-52.53	≤-24.07	PASS
		High	2480	-5.02	-57.26	≤-25.02	PASS

Test Graphs

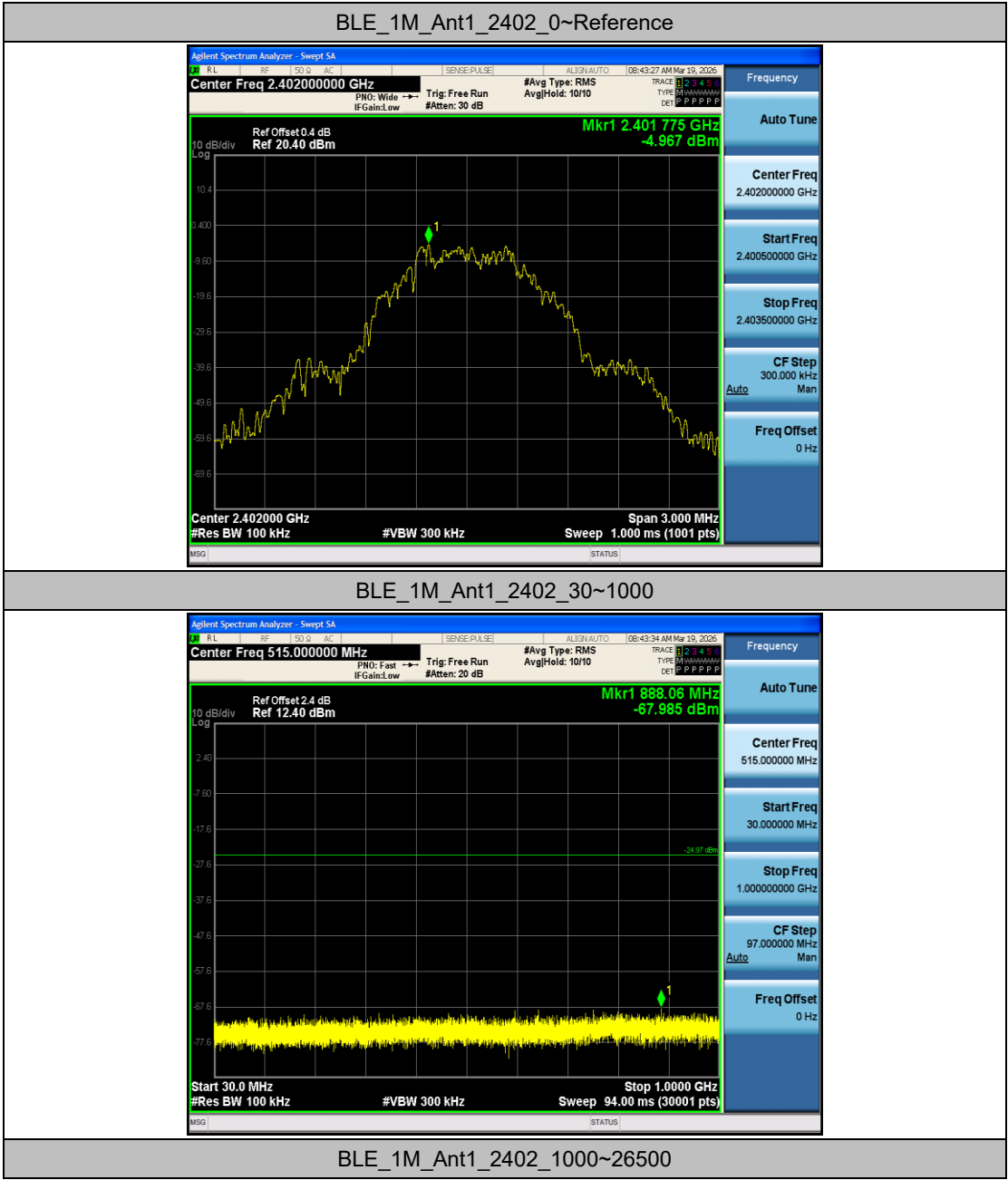


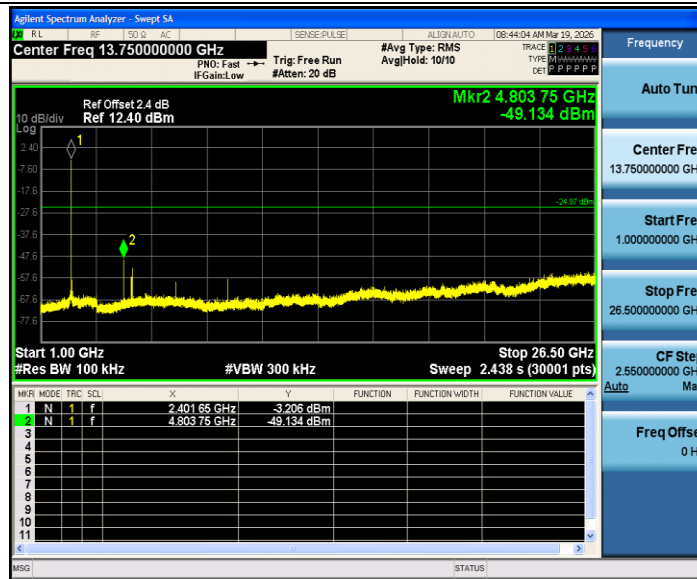
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-4.97	-4.97	---	PASS
			30~1000	-4.97	-67.99	≤-24.97	PASS
			1000~26500	-4.97	-49.13	≤-24.97	PASS
		2440	Reference	-4.76	-4.76	---	PASS
			30~1000	-4.76	-68.01	≤-24.76	PASS
			1000~26500	-4.76	-46.43	≤-24.76	PASS
		2480	Reference	-4.29	-4.29	---	PASS
			30~1000	-4.29	-67.57	≤-24.29	PASS
			1000~26500	-4.29	-47.24	≤-24.29	PASS

Test Graphs

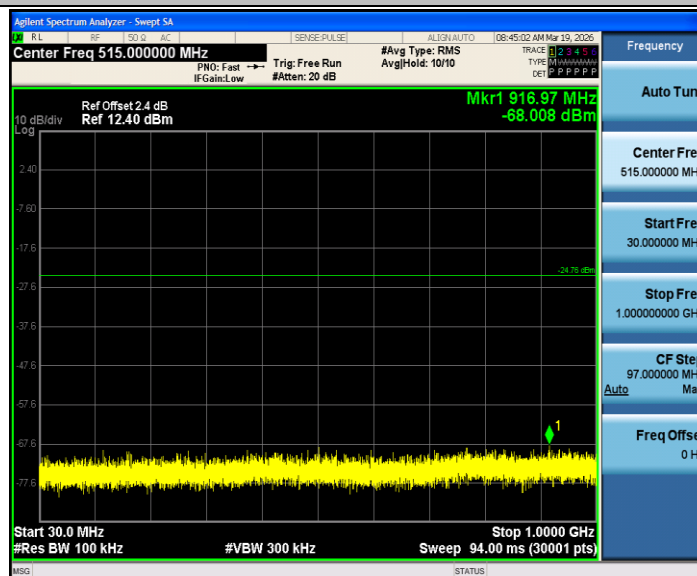




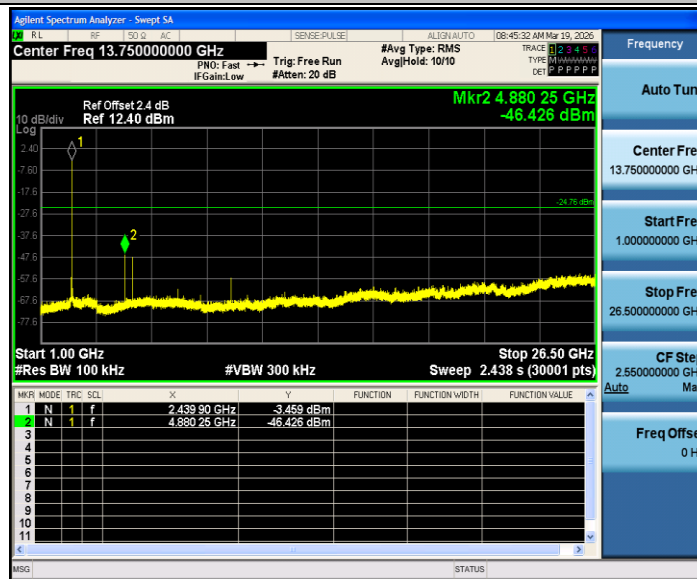
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



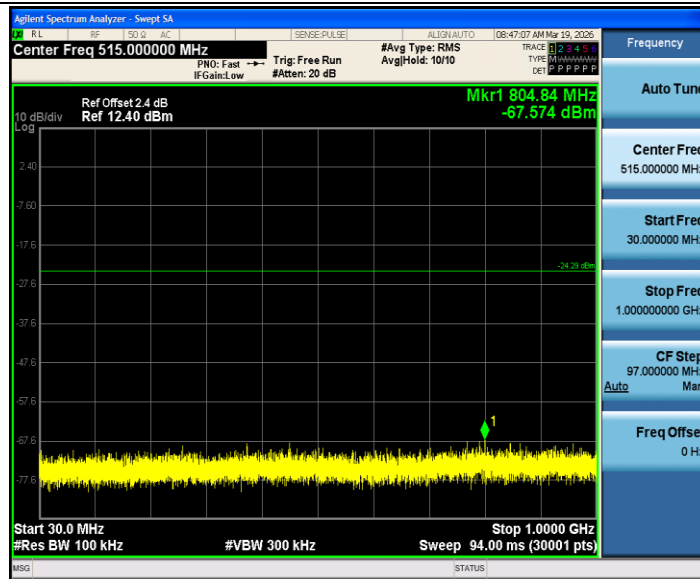
BLE_1M_Ant1_2440_1000~26500



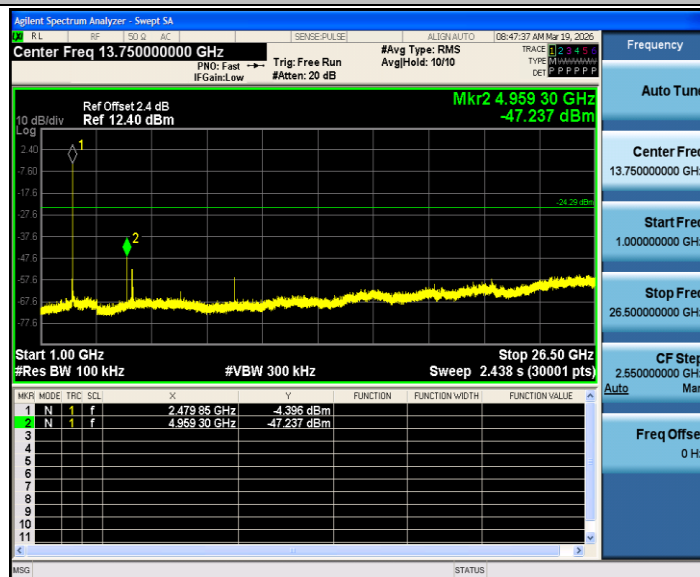
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



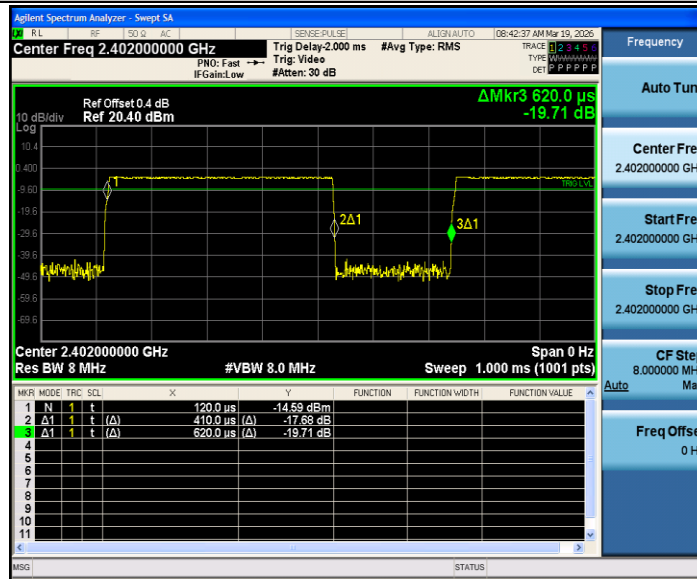
Appendix G: Duty Cycle

Test Result

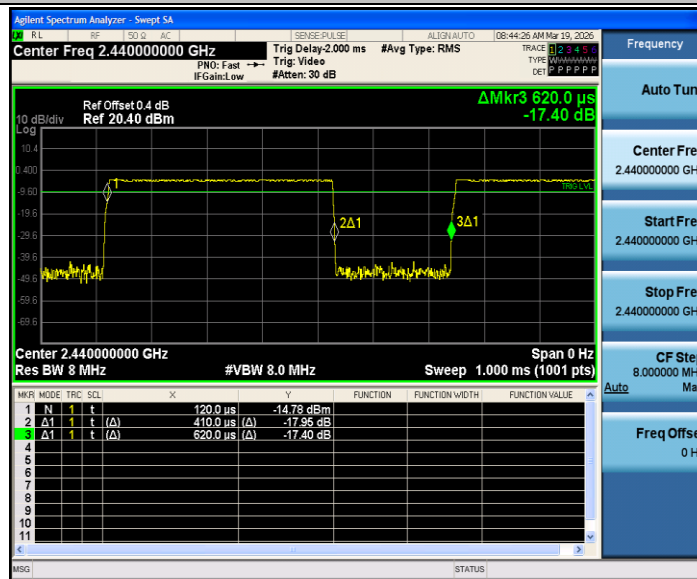
TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	0.41	0.62	0.6613	66.13	1.80	---	---
		2440	0.41	0.62	0.6613	66.13	1.80	---	---
		2480	0.41	0.62	0.6613	66.13	1.80	---	---

Test Graphs

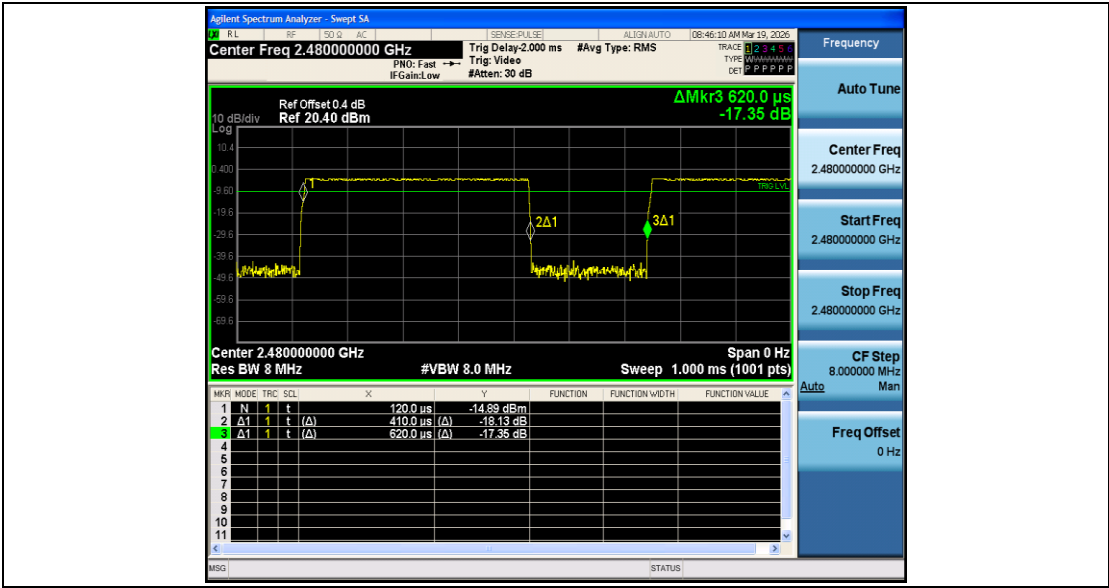
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



Appendix H: Emissions in Restricted Bands

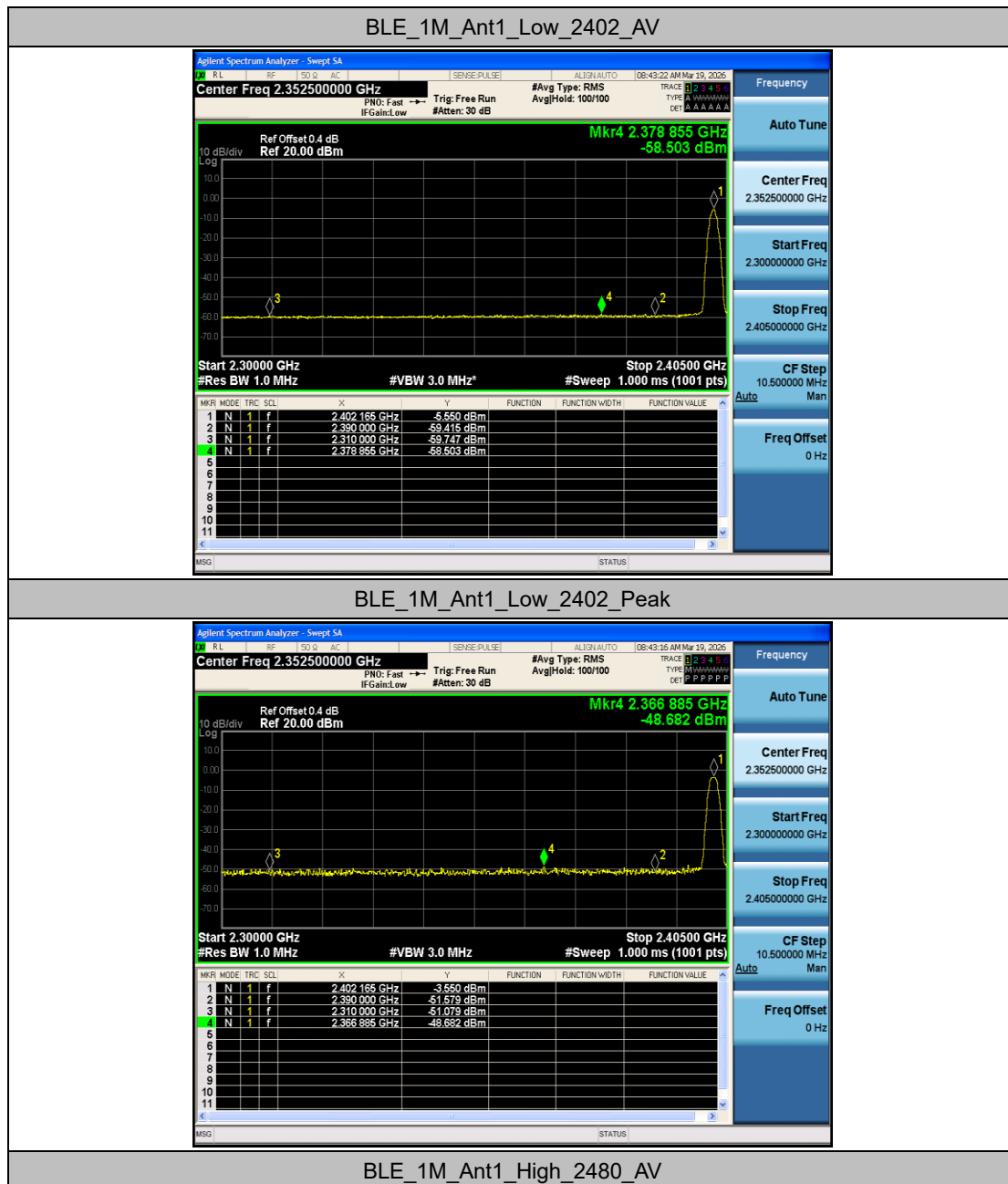
Test Result

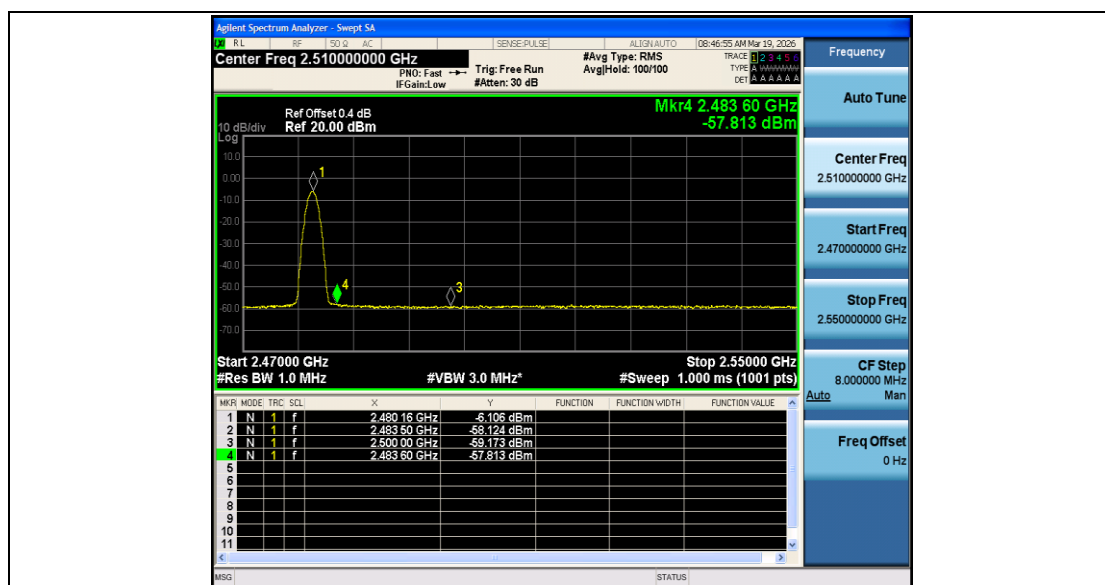
TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-59.75	2.00	1.80	39.25	≤54	PASS
				AV	2378.855	-58.5	2.00	1.80	40.50	≤54	PASS
				AV	2390.000	-59.42	2.00	1.80	39.58	≤54	PASS
				Peak	2310.000	-51.08	2.00	0.00	46.12	≤74	PASS
				Peak	2366.885	-48.68	2.00	0.00	48.52	≤74	PASS
				Peak	2390.000	-51.58	2.00	0.00	45.62	≤74	PASS
		High	2480	AV	2483.500	-58.12	2.00	1.80	40.88	≤54	PASS
				AV	2483.600	-57.81	2.00	1.80	41.19	≤54	PASS
				AV	2500.000	-59.17	2.00	1.80	39.83	≤54	PASS
				Peak	2483.500	-49.59	2.00	0.00	47.61	≤74	PASS
				Peak	2483.680	-46.0	2.00	0.00	51.20	≤74	PASS
				Peak	2500.000	-50.45	2.00	0.00	46.75	≤74	PASS

Note:

1. 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_High_2480_Peak

