

FCC Appendix RF Test Data for BLE

FCC ID : 2AZW2-T80MPRO

Company : Beijing Supvan Information Technology Co., Ltd.

EUT : Label Printer

Model Number : T80M Pro

Report No. : CTA26041604901

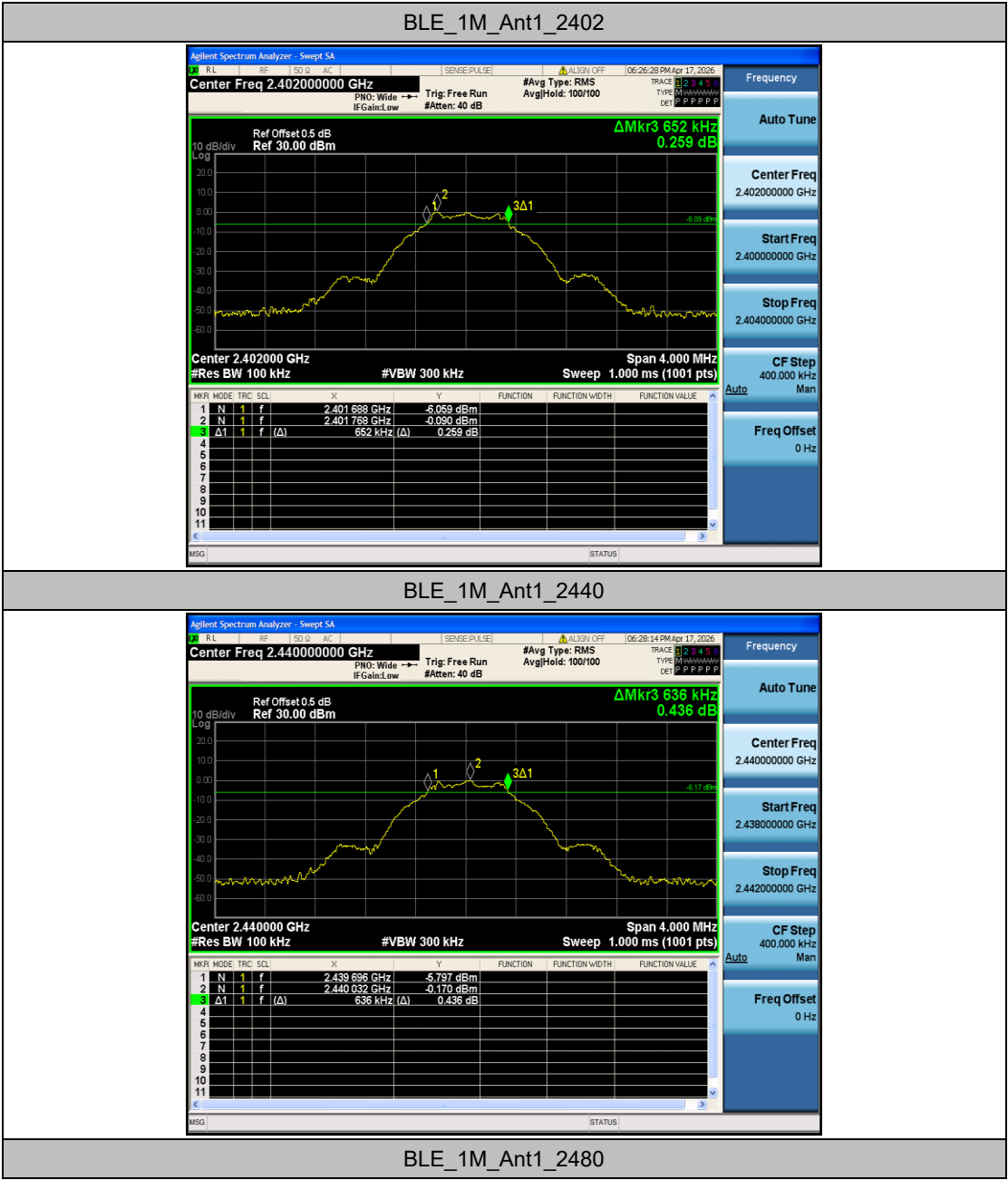
Reviewed By : Eric Wang

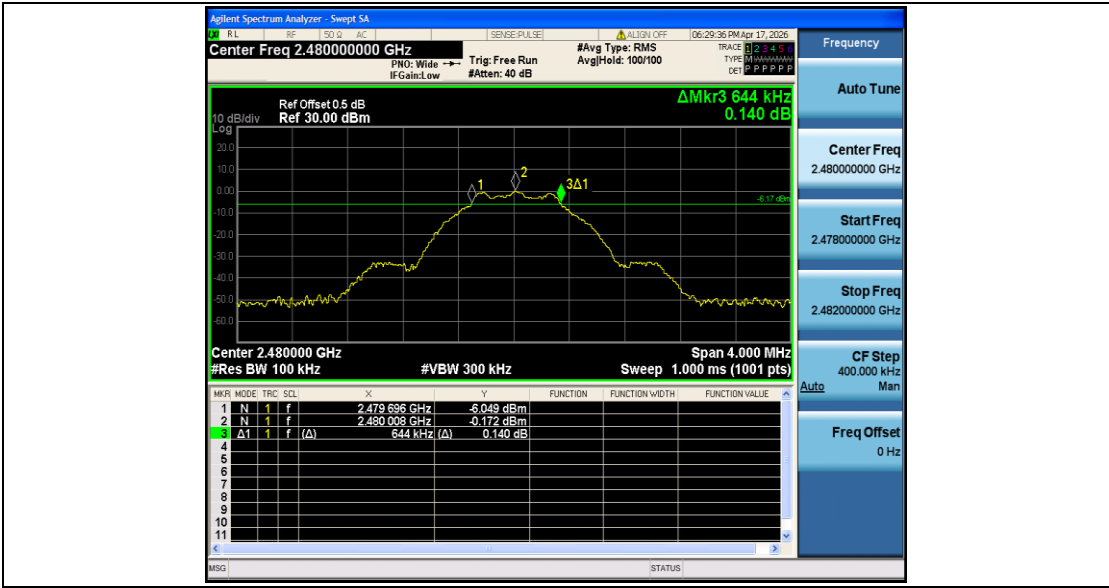
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.652	2401.688	2402.340	0.5	PASS
		2440	0.636	2439.696	2440.332	0.5	PASS
		2480	0.644	2479.696	2480.340	0.5	PASS

Test Graphs





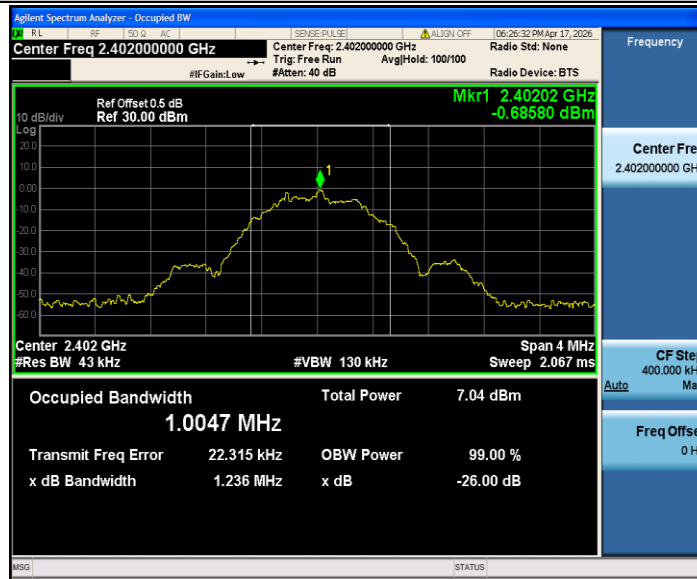
Appendix B: Occupied Channel Bandwidth

Test Result

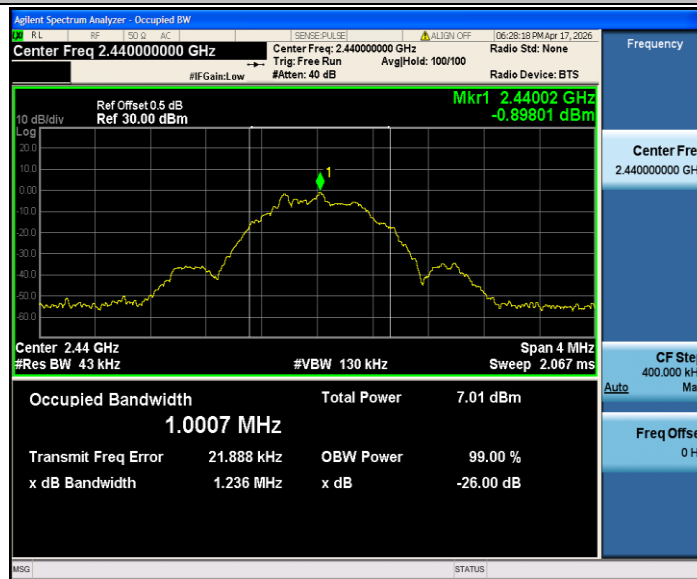
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0047	2401.5200	2402.5247	---	---
		2440	1.0007	2439.5215	2440.5222	---	---
		2480	1.0127	2479.5139	2480.5266	---	---

Test Graphs

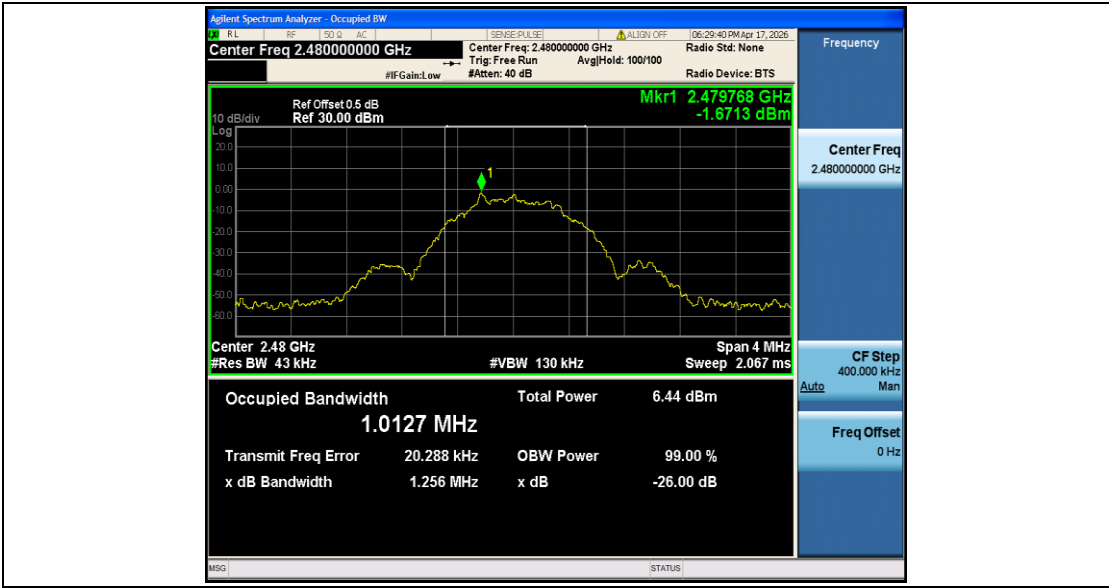
BLE_1M_Ant1_2402



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	0.46	≤30	PASS
		2440	0.17	≤30	PASS
		2480	0.21	≤30	PASS

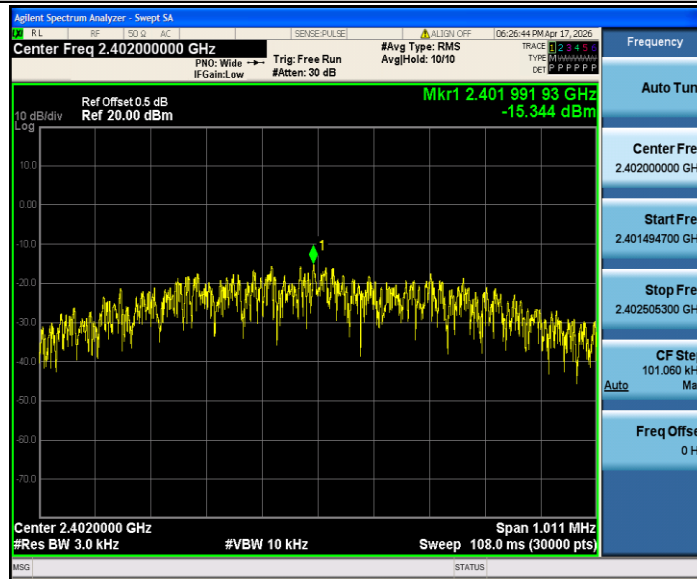
Appendix D: Maximum power spectral density

Test Result

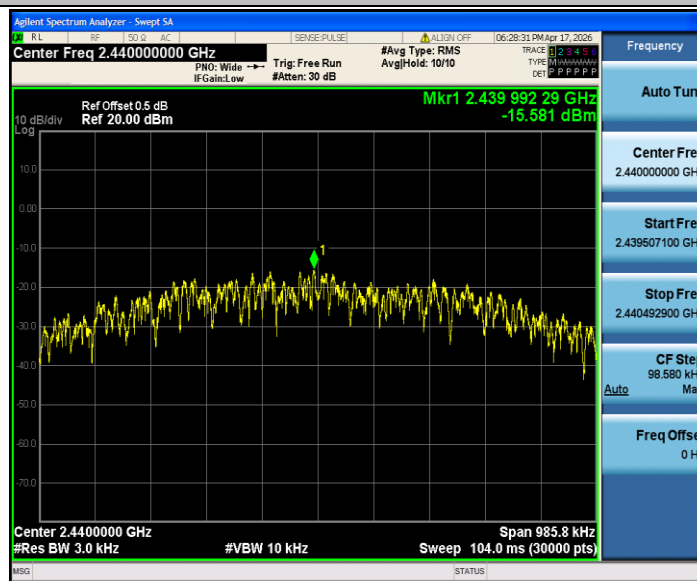
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.34	≤8.00	PASS
		2440	-15.58	≤8.00	PASS
		2480	-15.40	≤8.00	PASS

Test Graphs

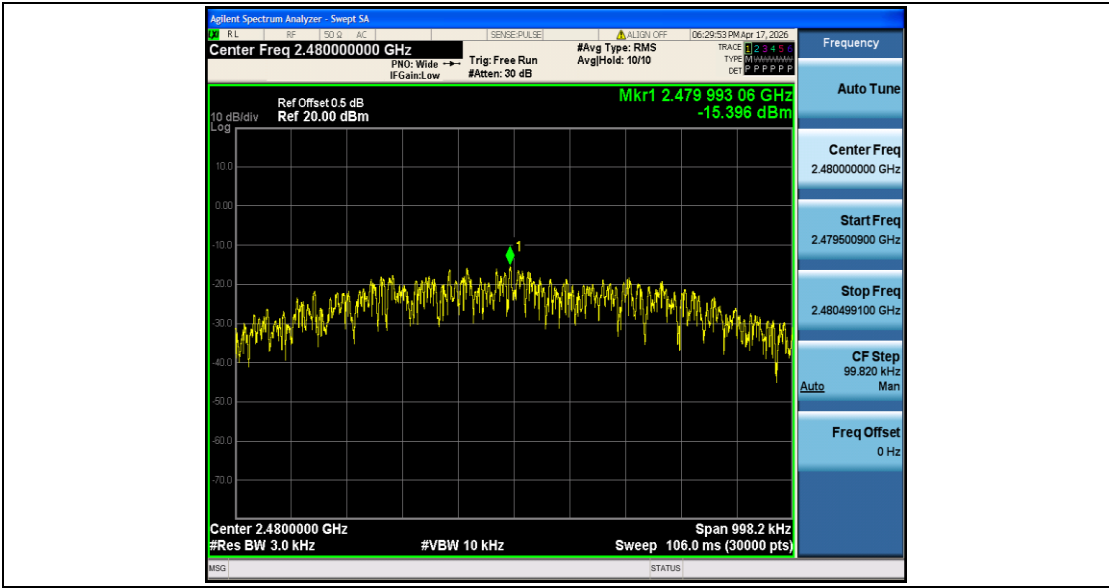
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



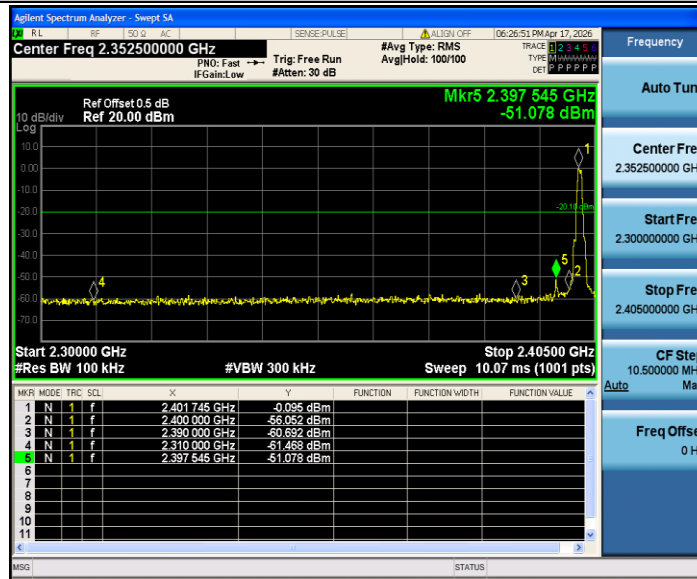
Appendix E: Band edge measurements

Test Result

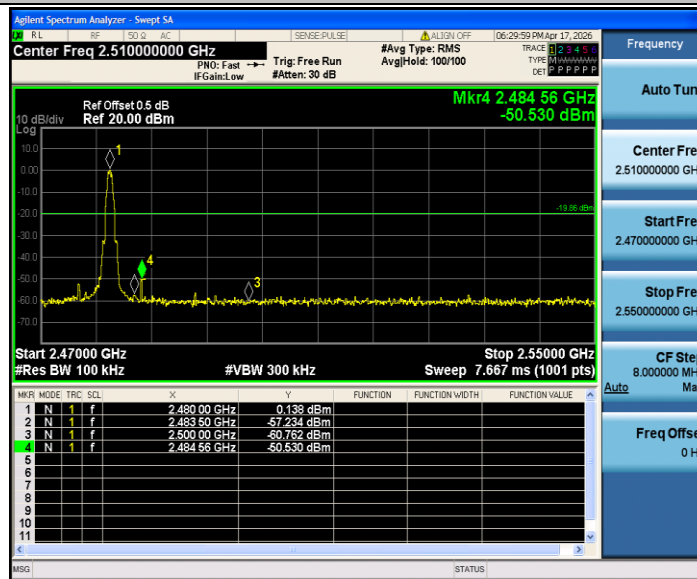
TestMod e	Antenn a	ChNam e	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdic t
BLE_1M	Ant1	Low	2402	-0.10	-51.08	≤-20.1	PASS
		High	2480	0.14	-50.53	≤-19.86	PASS

Test Graphs

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480

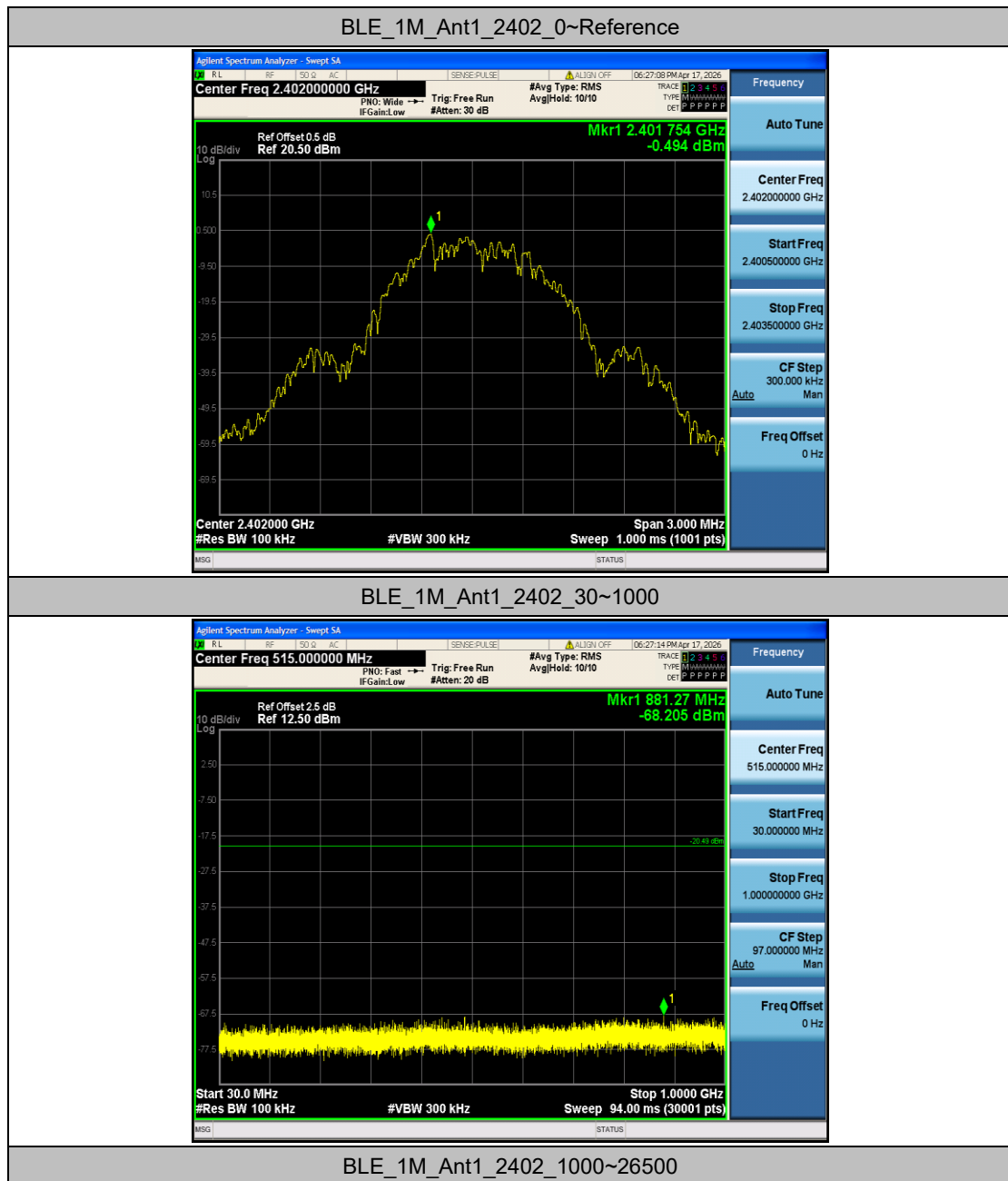


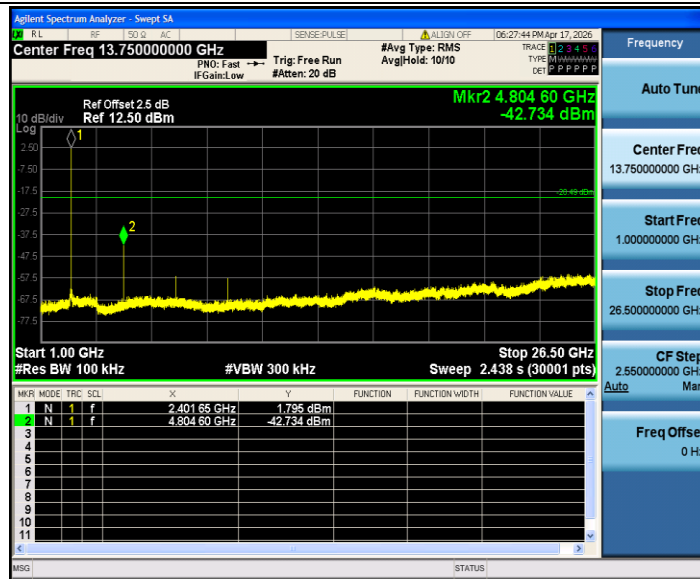
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-0.49	-0.49	---	PASS
			30~1000	-0.49	-68.21	≤-20.49	PASS
			1000~26500	-0.49	-42.73	≤-20.49	PASS
		2440	Reference	-1.06	-1.06	---	PASS
			30~1000	-1.06	-68.19	≤-21.06	PASS
			1000~26500	-1.06	-41.59	≤-21.06	PASS
		2480	Reference	-0.35	-0.35	---	PASS
			30~1000	-0.35	-67.2	≤-20.35	PASS
			1000~26500	-0.35	-44.2	≤-20.35	PASS

Test Graphs

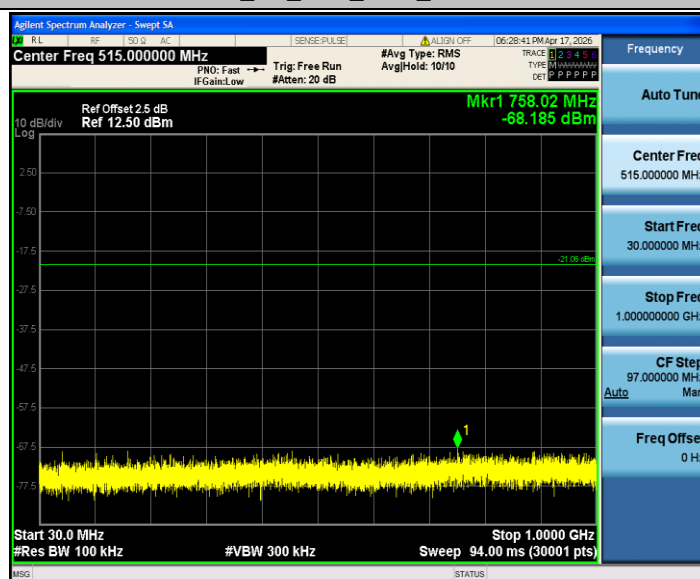




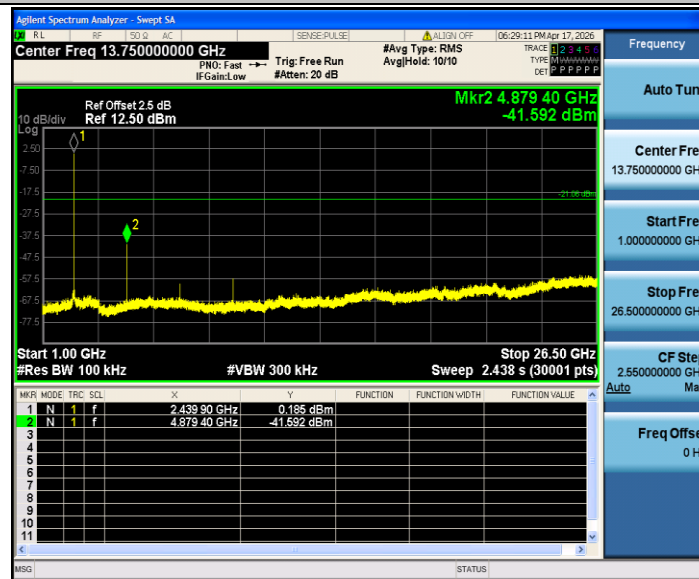
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



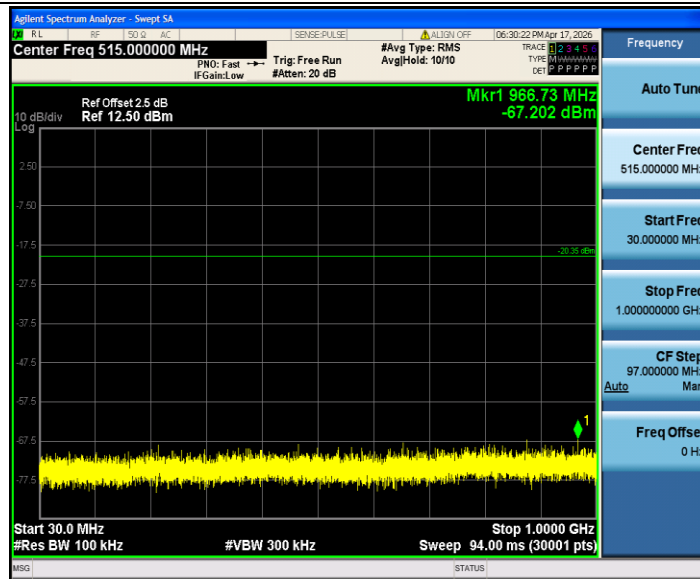
BLE_1M_Ant1_2440_1000~26500



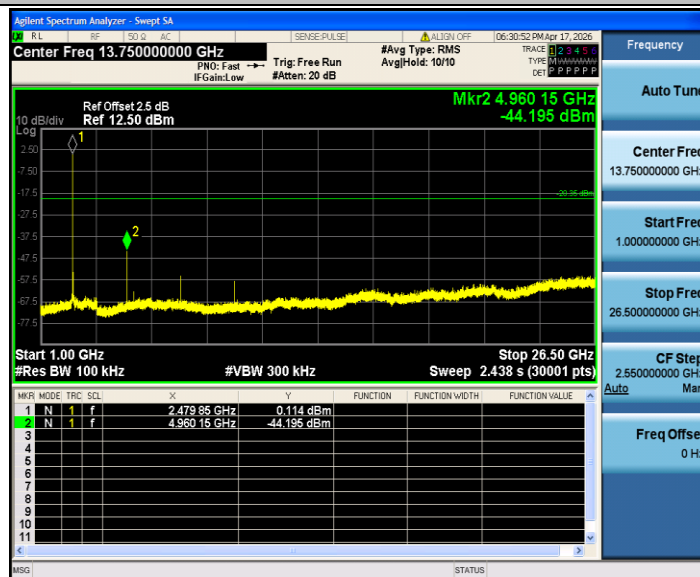
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500

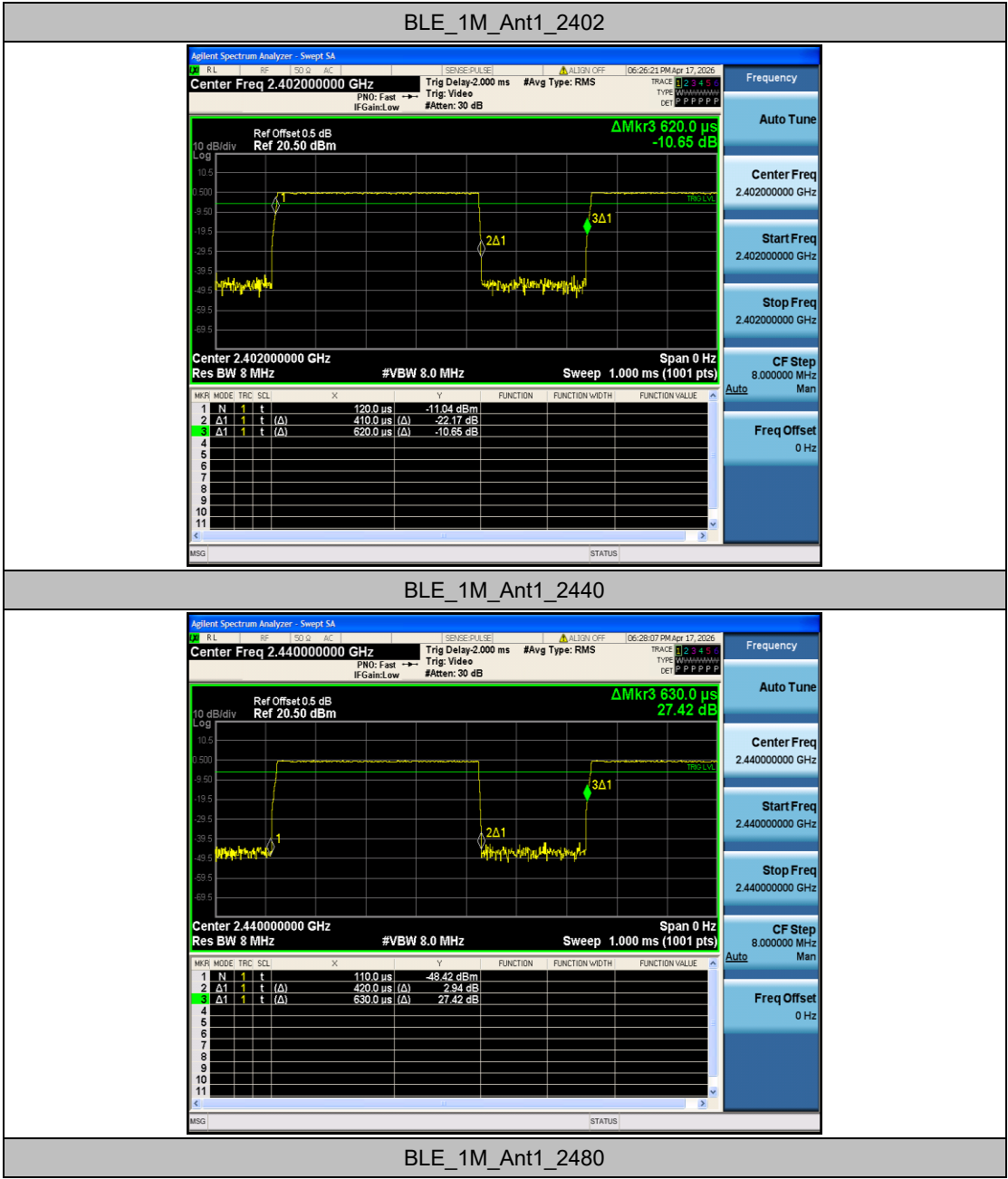


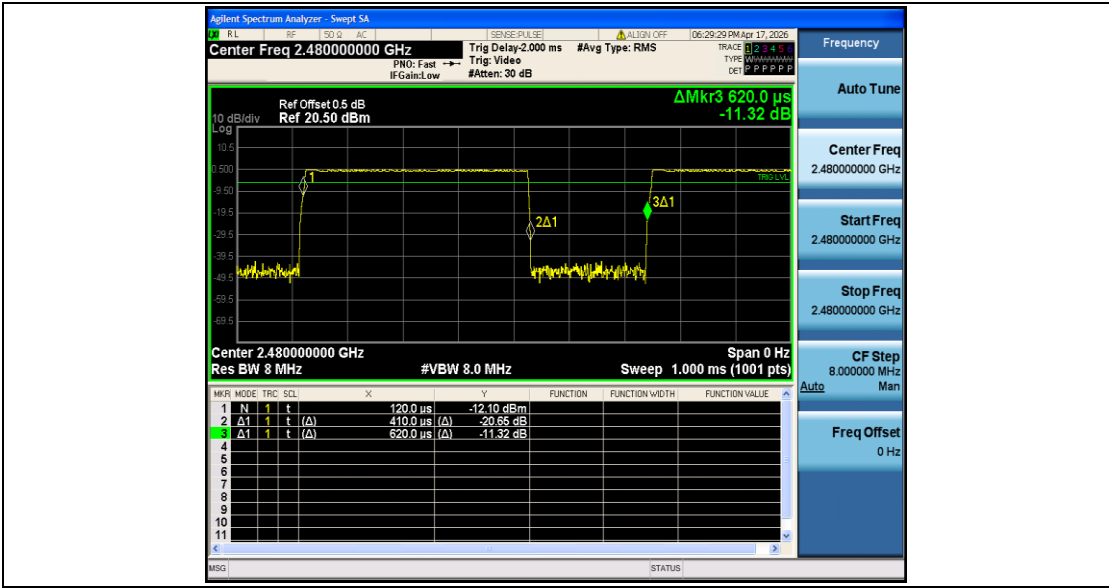
Appendix G: Duty Cycle

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	0.42	0.63	0.6667	66.67	1.76	---	---
		2480	0.41	0.62	0.6613	66.13	1.80	---	---

Test Graphs





Appendix H: Emissions in Restricted Bands

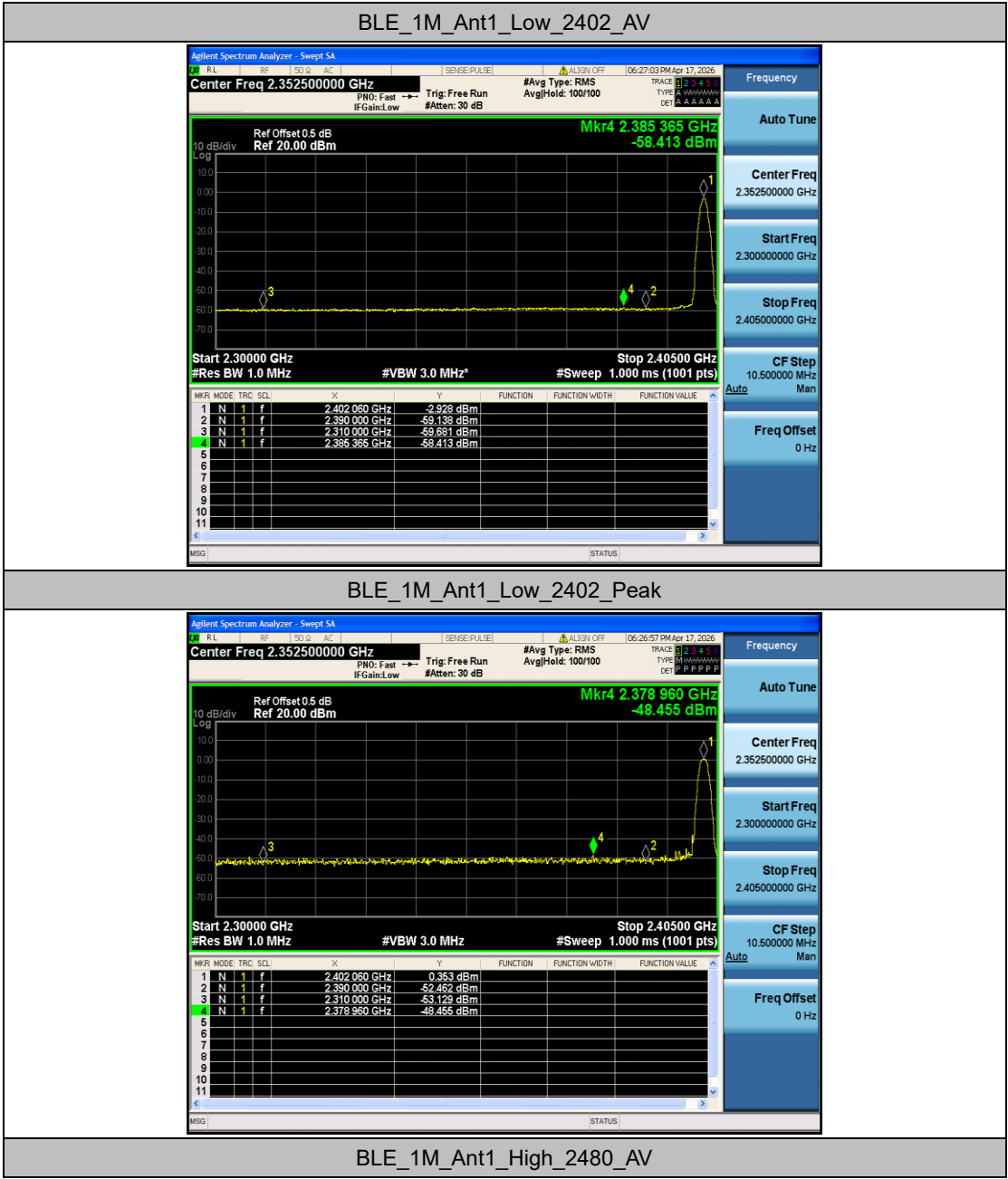
Test Result

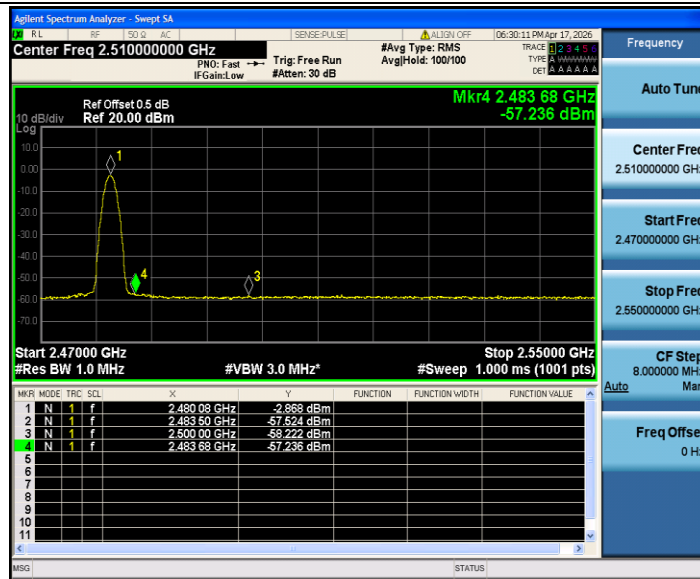
TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-59.68	2.00	1.80	39.32	≤54	PASS
				AV	2385.365	-58.41	2.00	1.80	40.59	≤54	PASS
				AV	2390.000	-59.14	2.00	1.80	39.86	≤54	PASS
				Peak	2310.000	-53.13	2.00	0.00	44.07	≤74	PASS
				Peak	2378.960	-48.45	2.00	0.00	48.75	≤74	PASS
				Peak	2390.000	-52.46	2.00	0.00	44.74	≤74	PASS
		High	2480	AV	2483.500	-57.52	2.00	1.80	41.48	≤54	PASS
				AV	2483.680	-57.24	2.00	1.80	41.76	≤54	PASS
				AV	2500.000	-58.22	2.00	1.80	40.78	≤54	PASS
				Peak	2483.500	-49.16	2.00	0.00	48.04	≤74	PASS
				Peak	2484.160	-43.83	2.00	0.00	53.37	≤74	PASS
				Peak	2500.000	-51.2	2.00	0.00	46.00	≤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_High_2480_Peak

