

FCC Appendix RF Test Data for BLE

FCC ID : 2BU85-T30

Company : JIAHANG TECHNOLOGY (HONG KONG) CO.,LIMITED

EUT : Tablet PC

Model Number : T30

Report No. : CTA26032000901

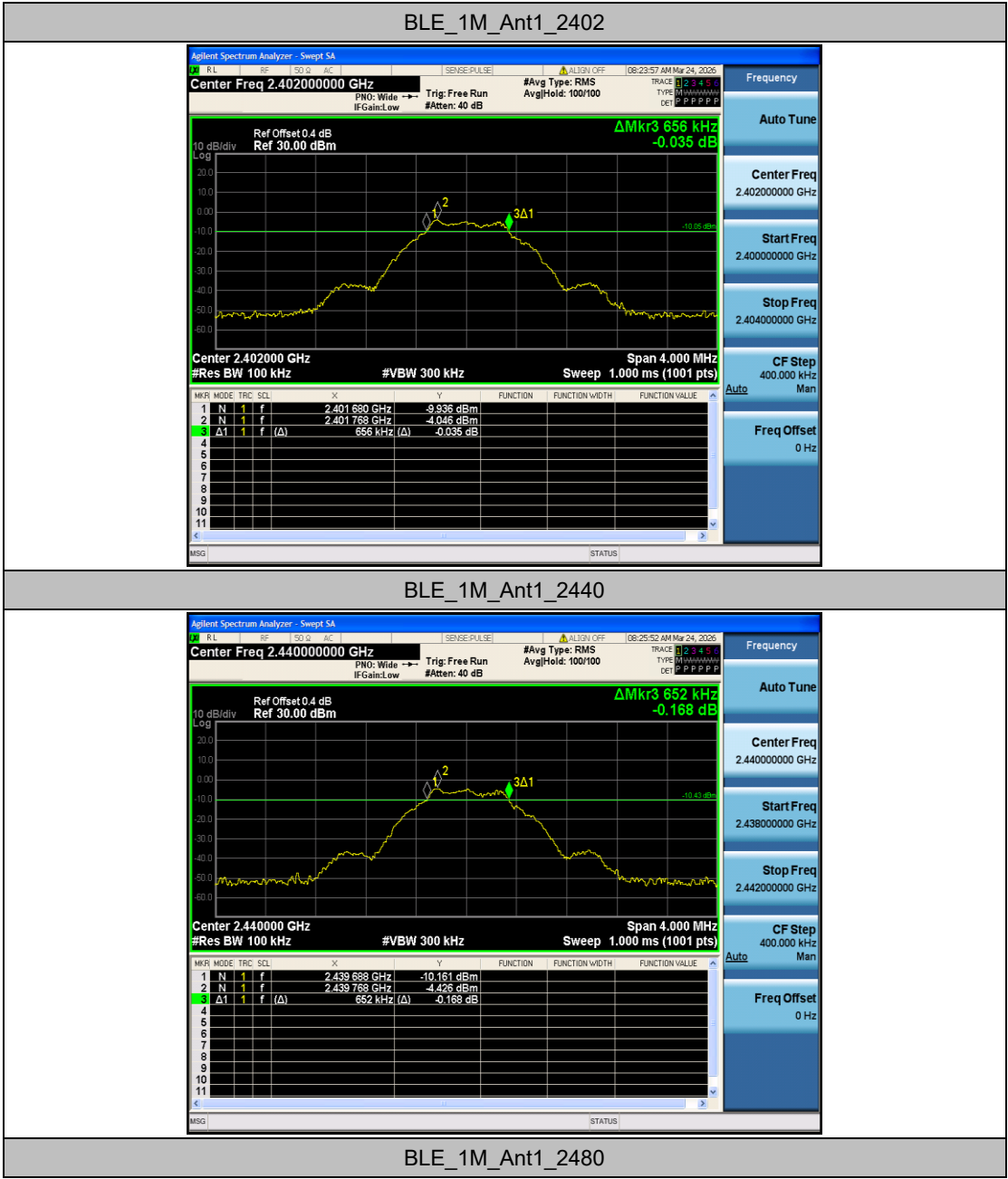
Reviewed By : Eric Wang

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.656	2401.680	2402.336	0.5	PASS
		2440	0.652	2439.688	2440.340	0.5	PASS
		2480	0.644	2479.688	2480.332	0.5	PASS
BLE_2M	Ant1	2402	1.124	2401.444	2402.568	0.5	PASS
		2440	1.108	2439.440	2440.548	0.5	PASS
		2480	1.136	2479.444	2480.580	0.5	PASS

Test Graphs





BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480

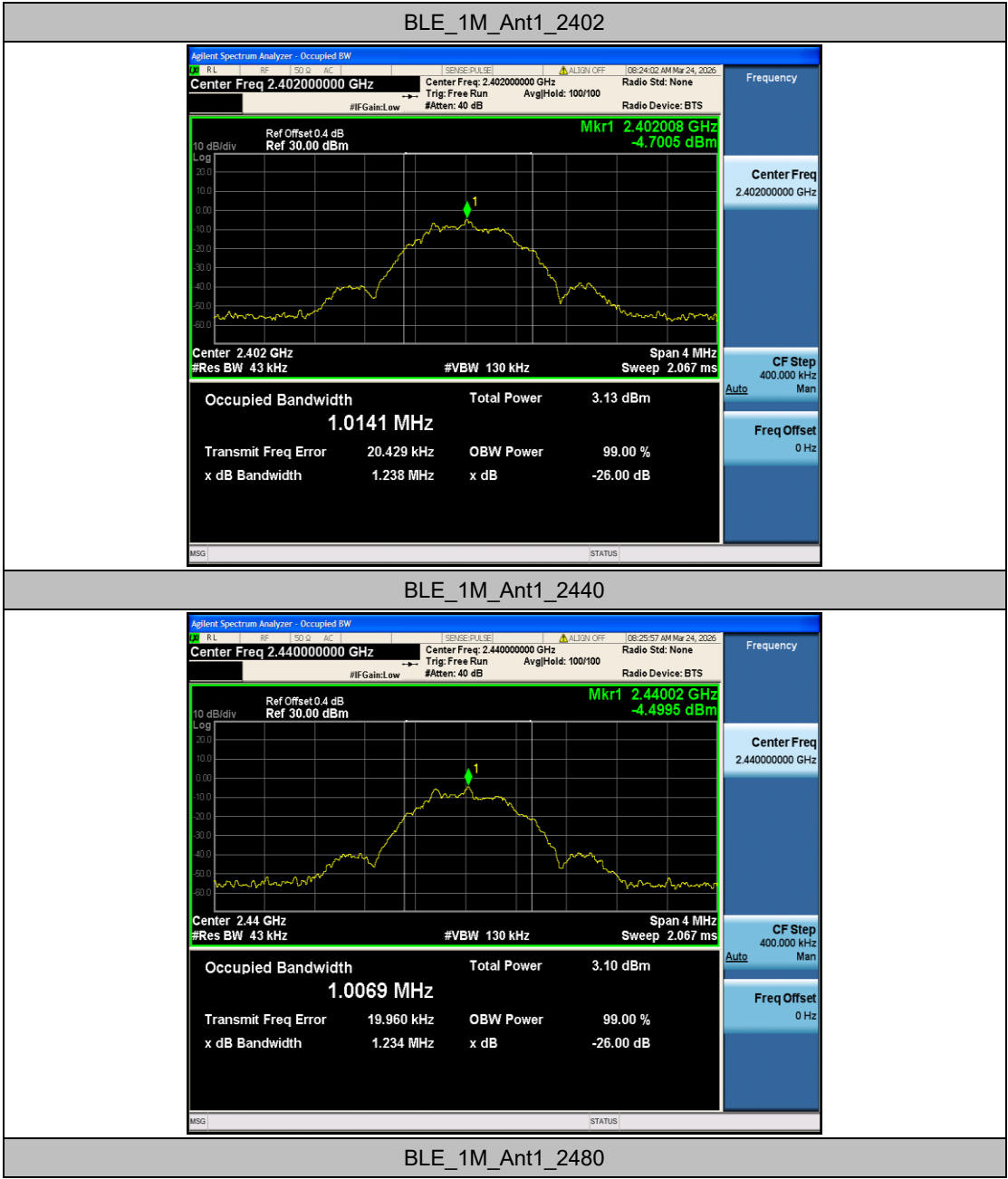


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0141	2401.5134	2402.5275	---	---
		2440	1.0069	2439.5165	2440.5234	---	---
		2480	1.0060	2479.5191	2480.5251	---	---
BLE_2M	Ant1	2402	2.0062	2401.0253	2403.0315	---	---
		2440	2.0080	2439.0297	2441.0377	---	---
		2480	2.0152	2479.0271	2481.0423	---	---

Test Graphs





BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

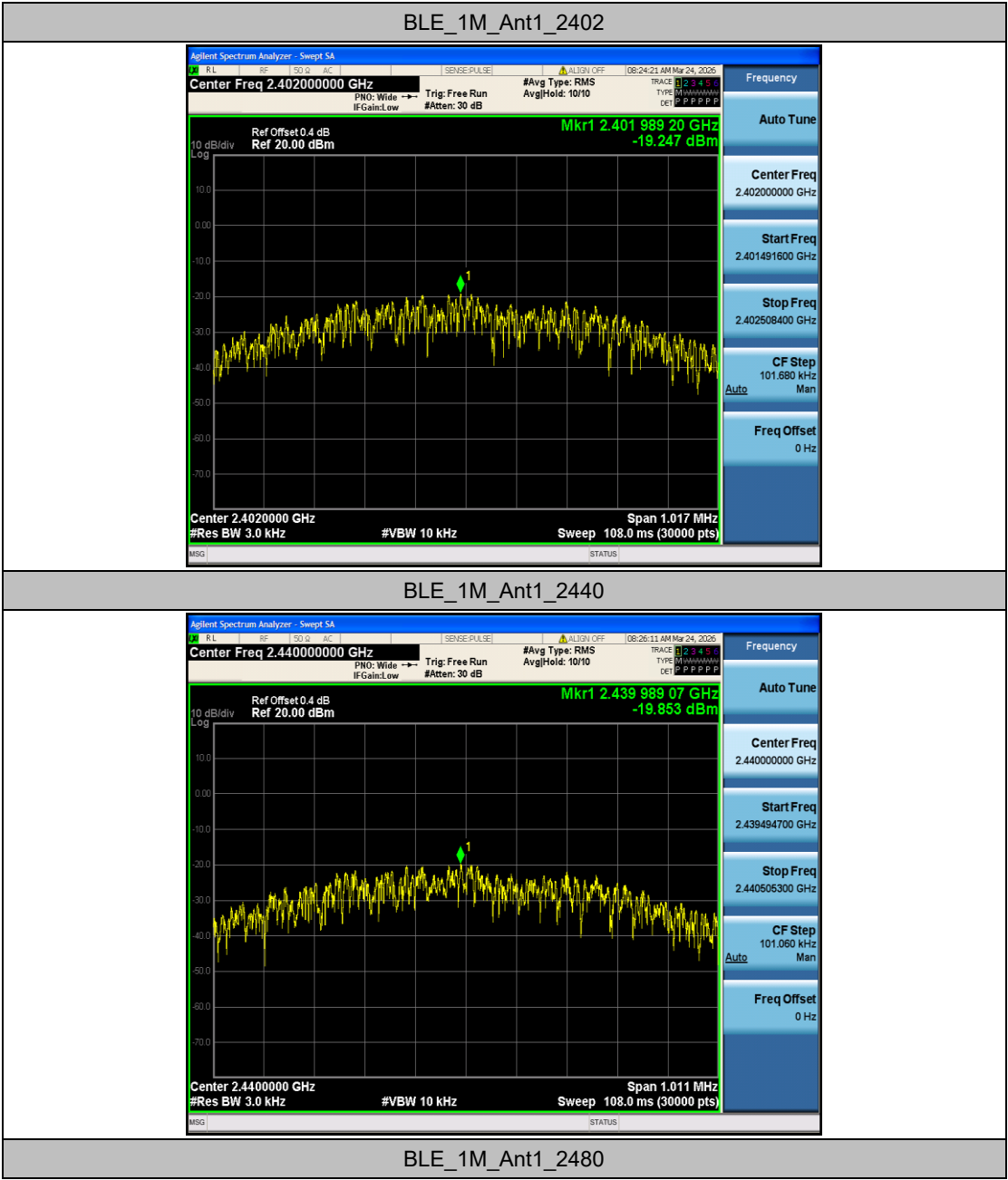
TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-3.37	≤30	PASS
		2440	-3.74	≤30	PASS
		2480	-3.80	≤30	PASS
BLE_2M	Ant1	2402	-3.38	≤30	PASS
		2440	-3.69	≤30	PASS
		2480	-3.78	≤30	PASS

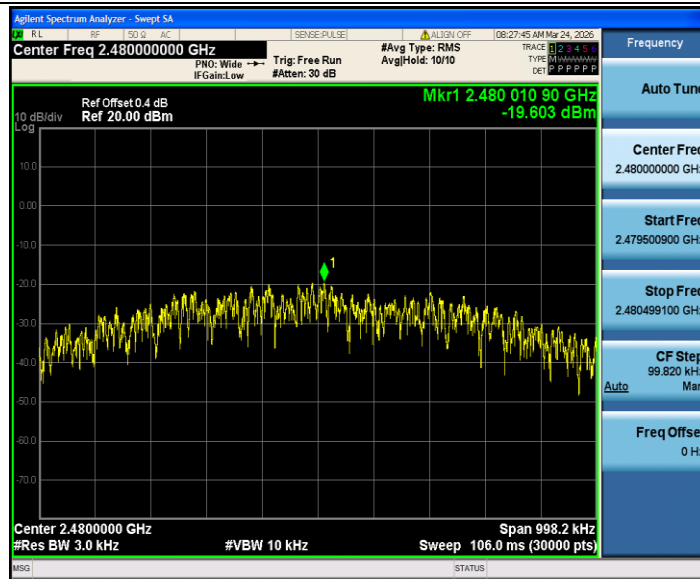
Appendix D: Maximum power spectral density

Test Result

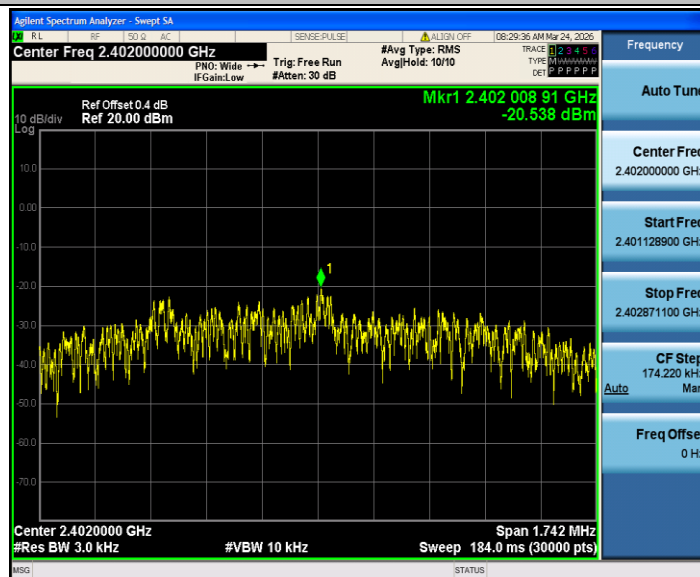
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.25	≤8.00	PASS
		2440	-19.85	≤8.00	PASS
		2480	-19.60	≤8.00	PASS
BLE_2M	Ant1	2402	-20.54	≤8.00	PASS
		2440	-20.68	≤8.00	PASS
		2480	-20.74	≤8.00	PASS

Test Graphs

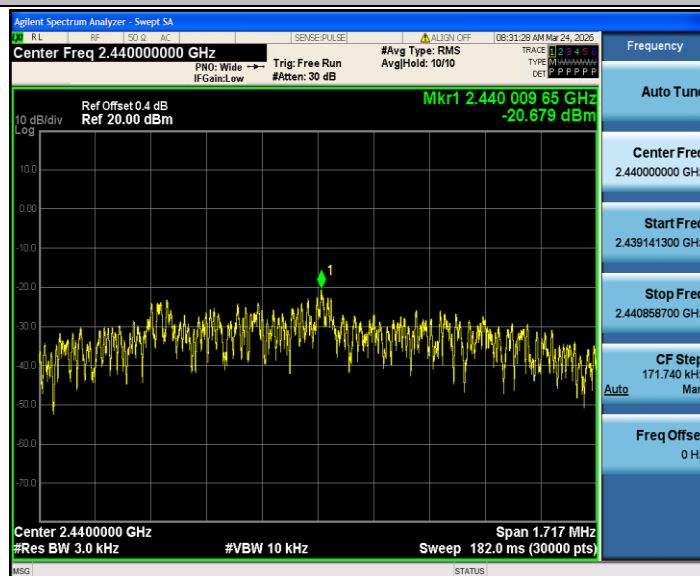




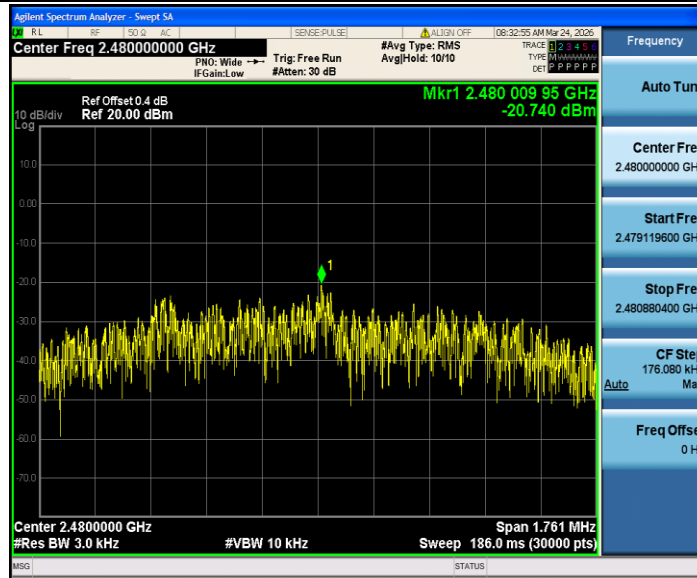
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



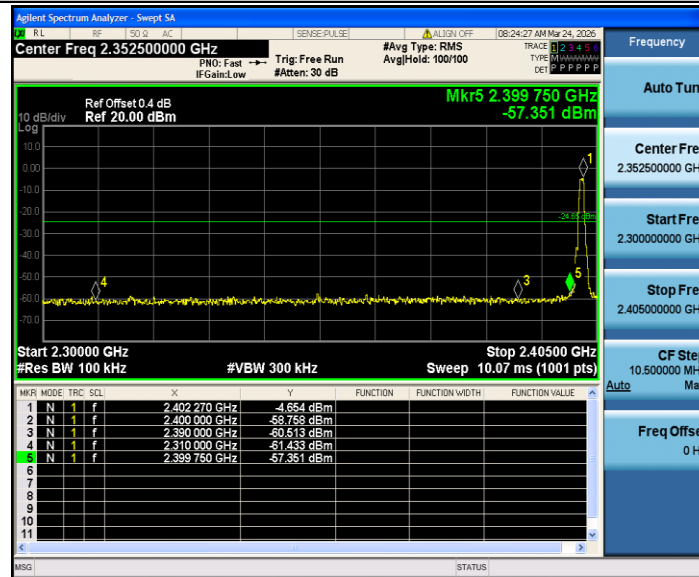
Appendix E: Band edge measurements

Test Result

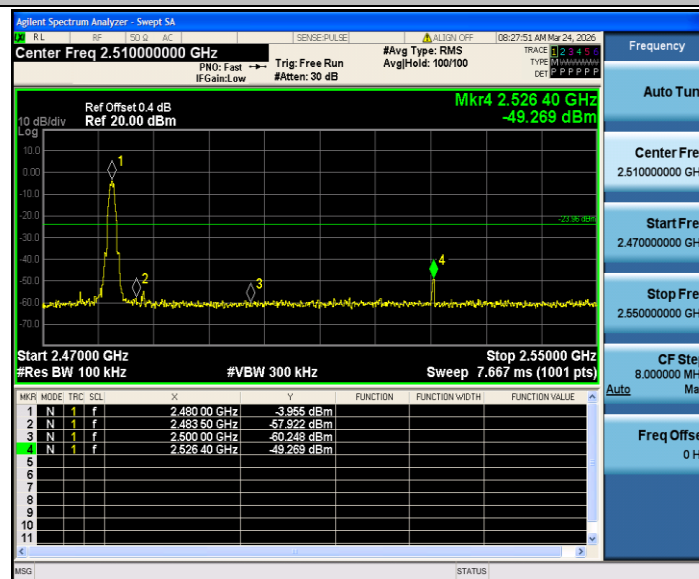
TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-4.65	-57.35	≤-24.65	PASS
		High	2480	-3.96	-49.27	≤-23.96	PASS
BLE_2M	Ant1	Low	2402	-3.48	-37.76	≤-23.48	PASS
		High	2480	-3.80	-55.53	≤-23.8	PASS

Test Graphs

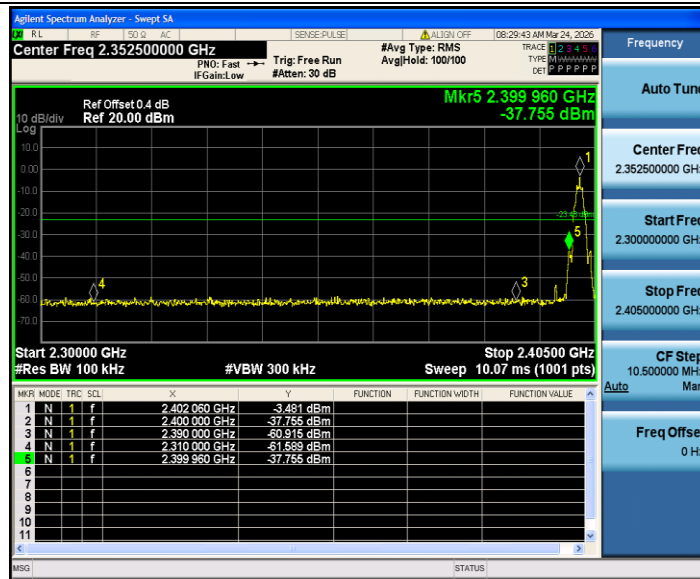
BLE_1M_Ant1_Low_2402



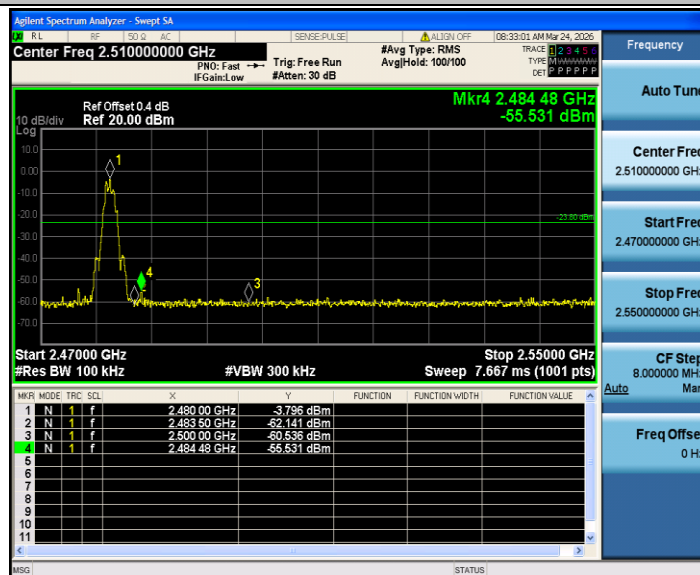
BLE_1M_Ant1_High_2480



BLE_2M_Ant1_Low_2402



BLE_2M_Ant1_High_2480

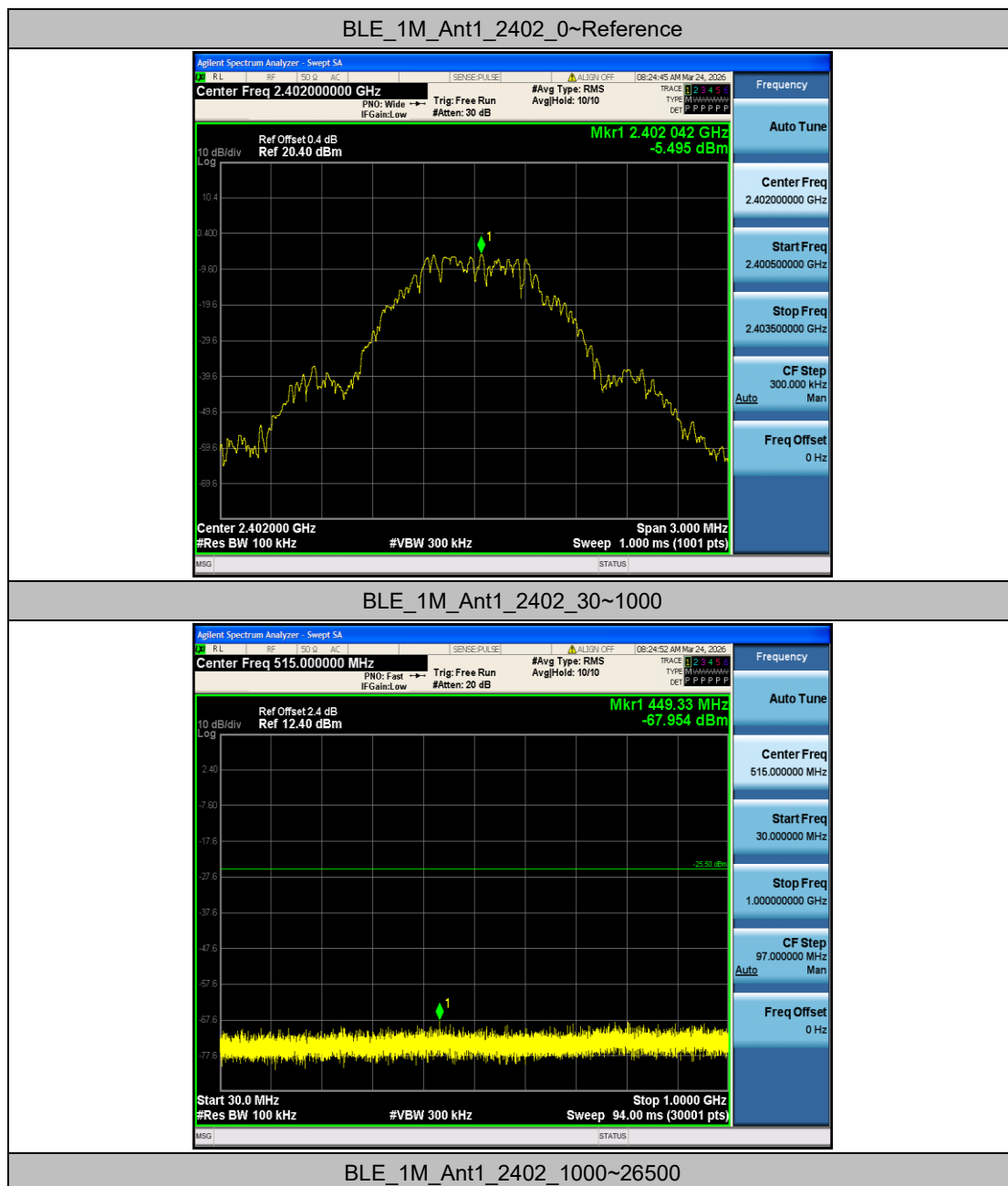


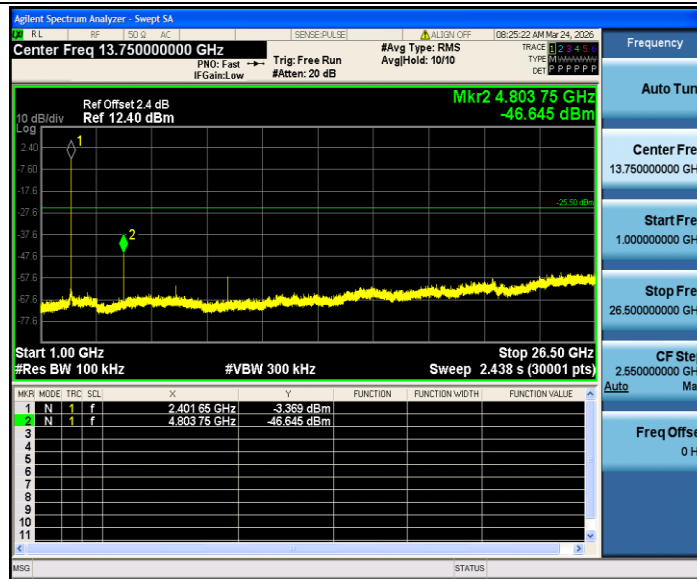
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-5.50	-5.50	---	PASS
			30~1000	-5.50	-67.95	≤-25.5	PASS
			1000~26500	-5.50	-46.65	≤-25.5	PASS
		2440	Reference	-5.77	-5.77	---	PASS
			30~1000	-5.77	-67.89	≤-25.77	PASS
			1000~26500	-5.77	-48.46	≤-25.77	PASS
		2480	Reference	-4.66	-4.66	---	PASS
			30~1000	-4.66	-68.32	≤-24.66	PASS
			1000~26500	-4.66	-50.2	≤-24.66	PASS
BLE_2M	Ant1	2402	Reference	-6.47	-6.47	---	PASS
			30~1000	-6.47	-67.03	≤-26.47	PASS
			1000~26500	-6.47	-48.3	≤-26.47	PASS
		2440	Reference	-3.99	-3.99	---	PASS
			30~1000	-3.99	-61.42	≤-23.99	PASS
			1000~26500	-3.99	-51.39	≤-23.99	PASS
		2480	Reference	-7.14	-7.14	---	PASS
			30~1000	-7.14	-68.42	≤-27.14	PASS
			1000~26500	-7.14	-47.28	≤-27.14	PASS

Test Graphs

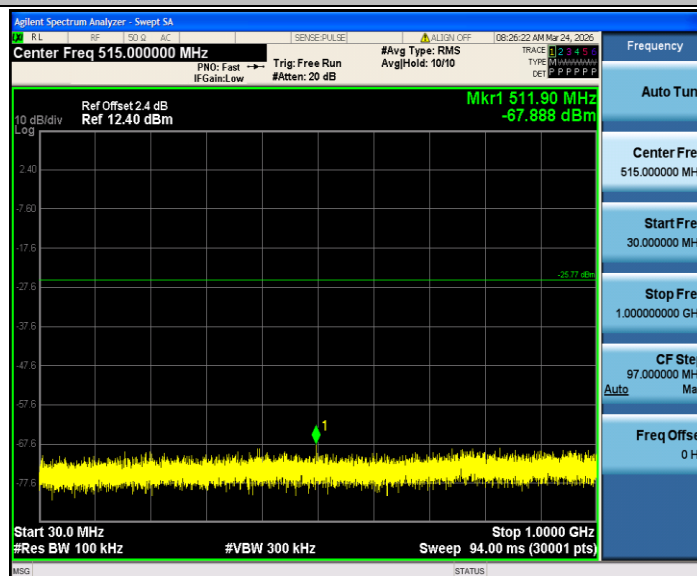




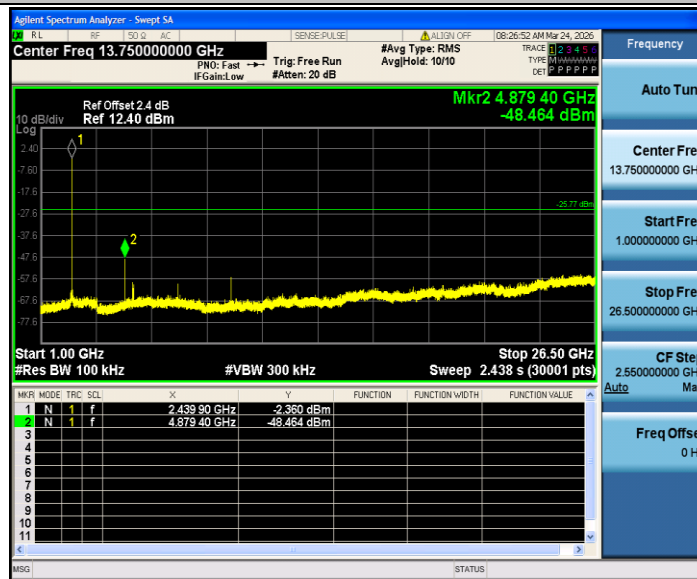
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



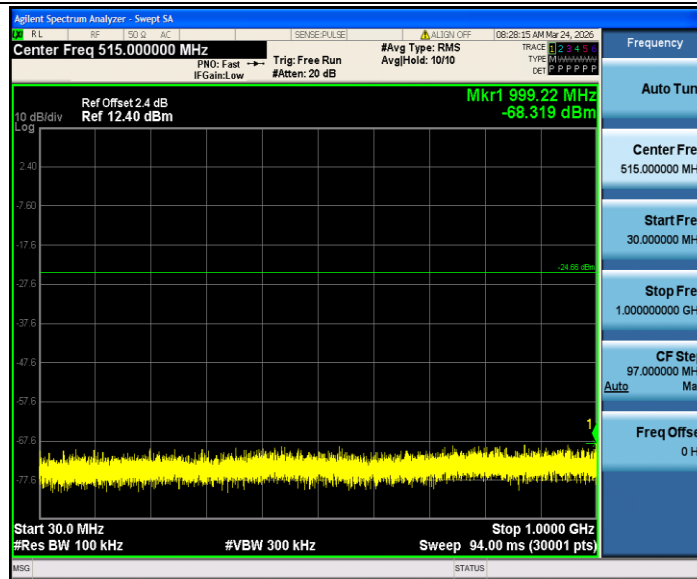
BLE_1M_Ant1_2440_1000~26500



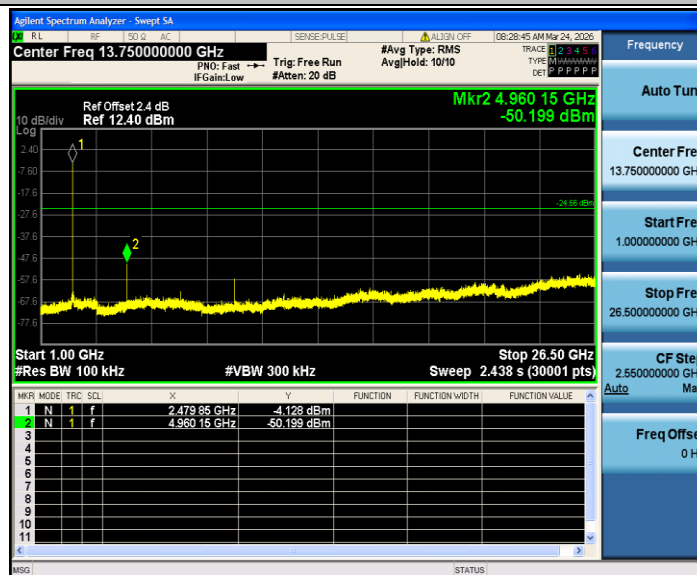
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



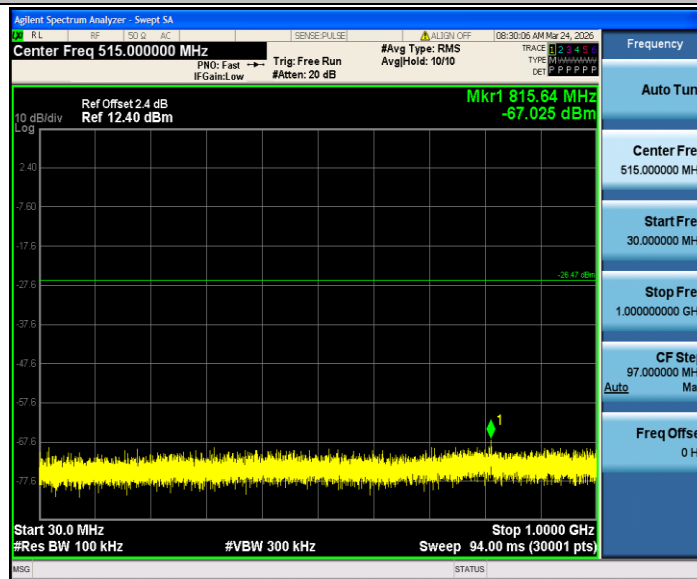
BLE_1M_Ant1_2480_1000~26500



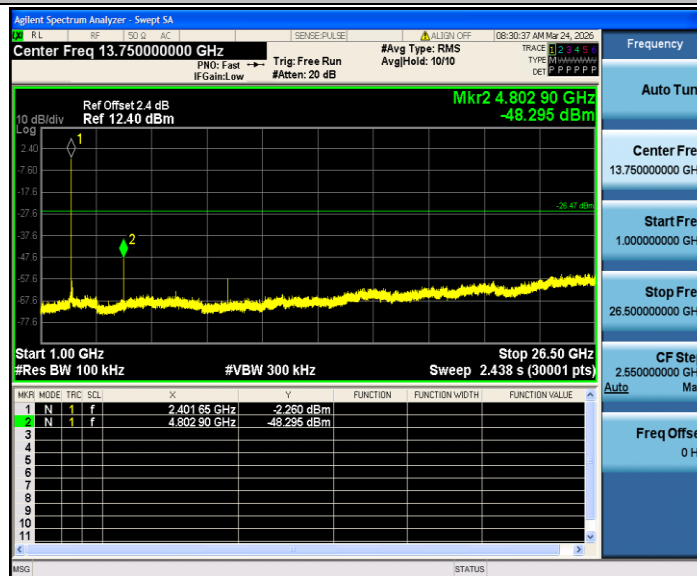
BLE_2M_Ant1_2402_0~Reference



BLE_2M_Ant1_2402_30~1000



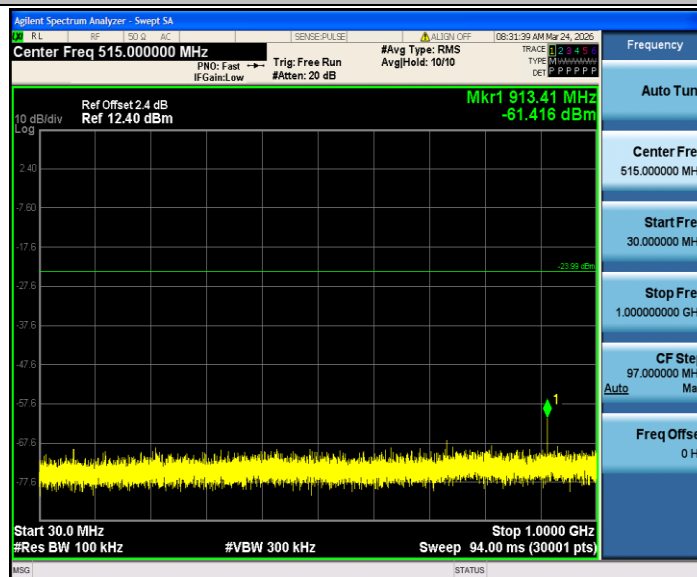
BLE_2M_Ant1_2402_1000~26500



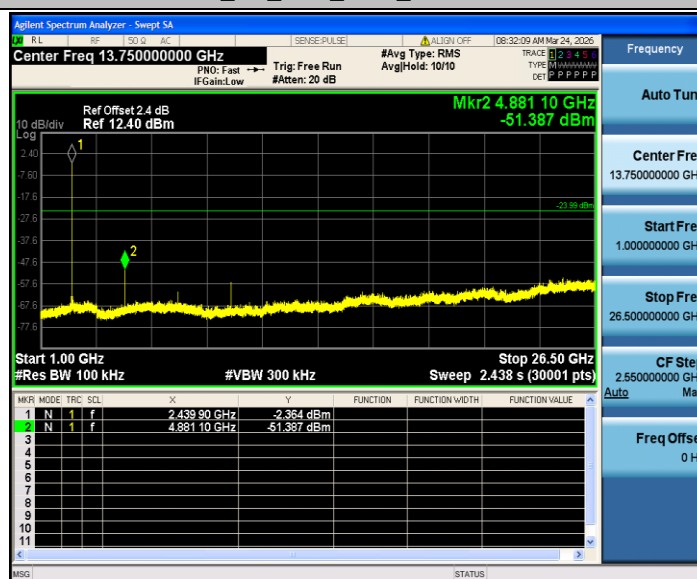
BLE_2M_Ant1_2440_0~Reference



BLE_2M_Ant1_2440_30~1000



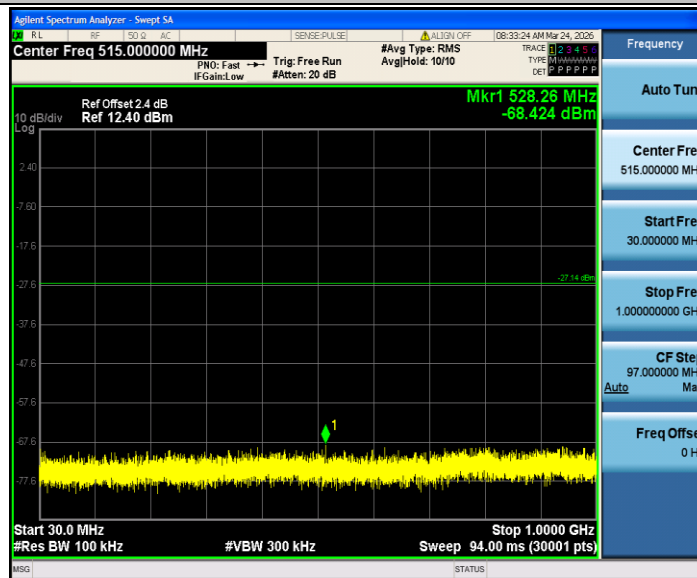
BLE_2M_Ant1_2440_1000~26500



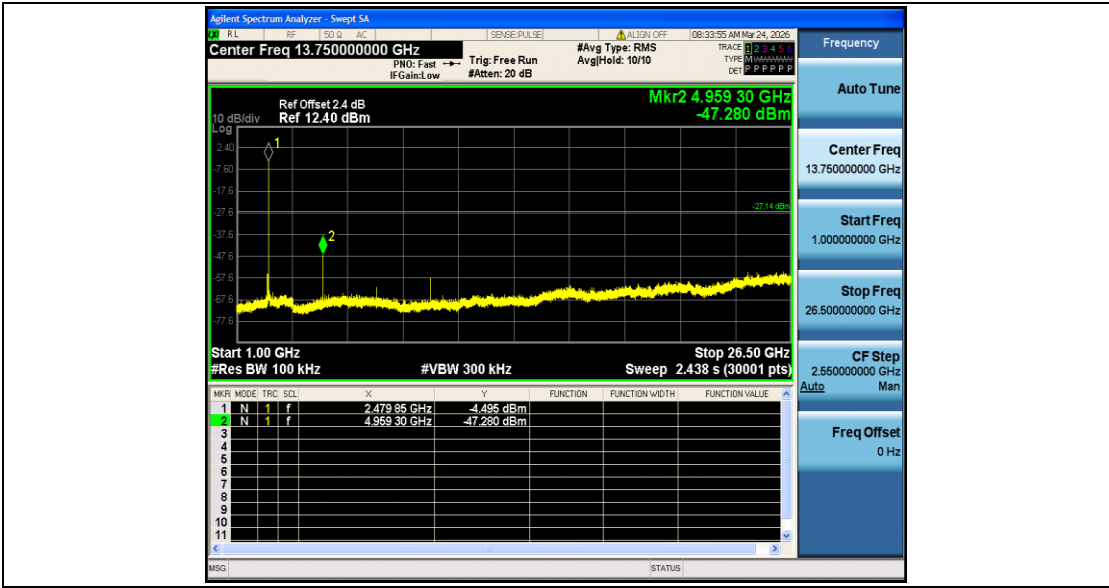
BLE_2M_Ant1_2480_0~Reference



BLE_2M_Ant1_2480_30~1000



BLE_2M_Ant1_2480_1000~26500

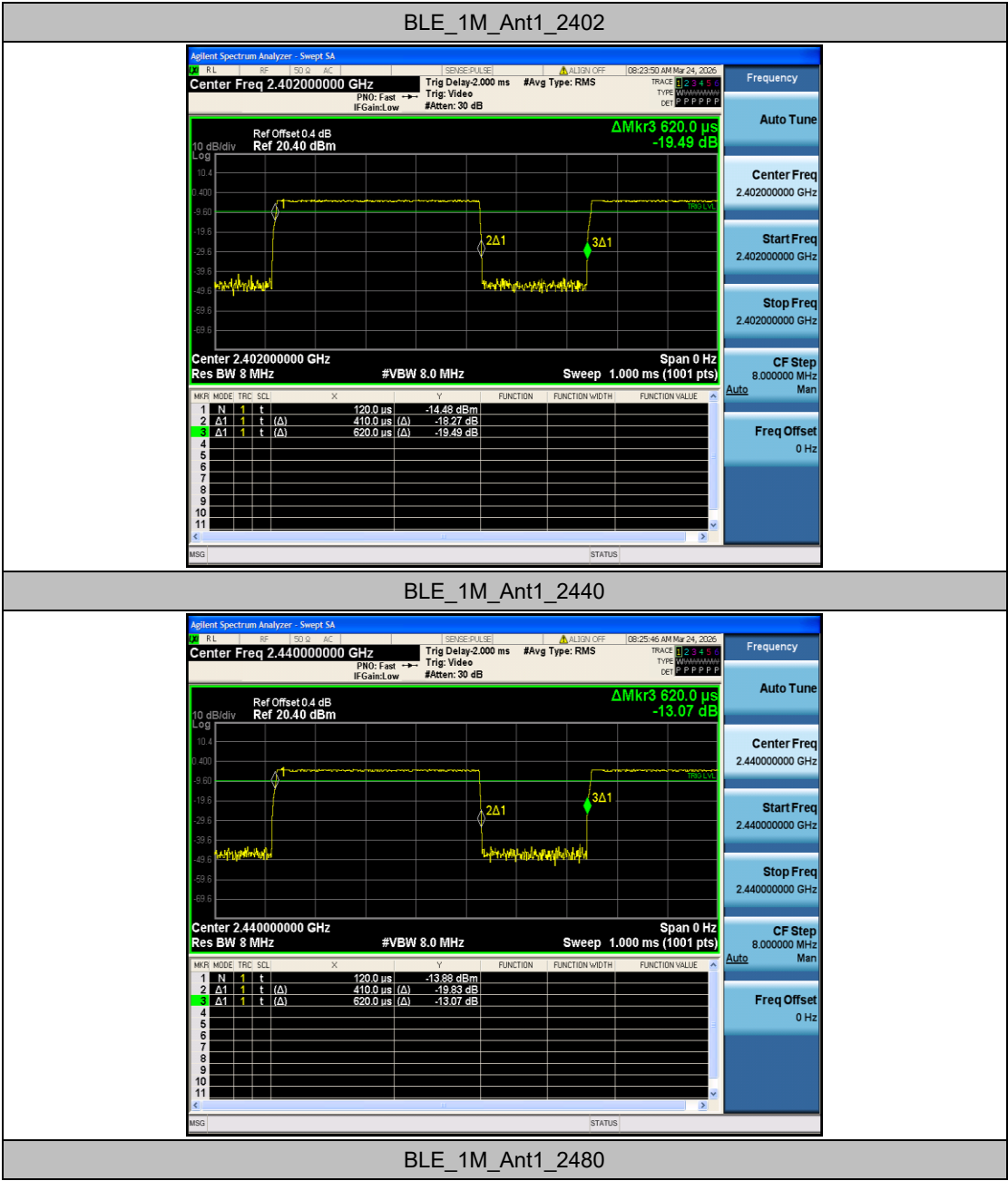


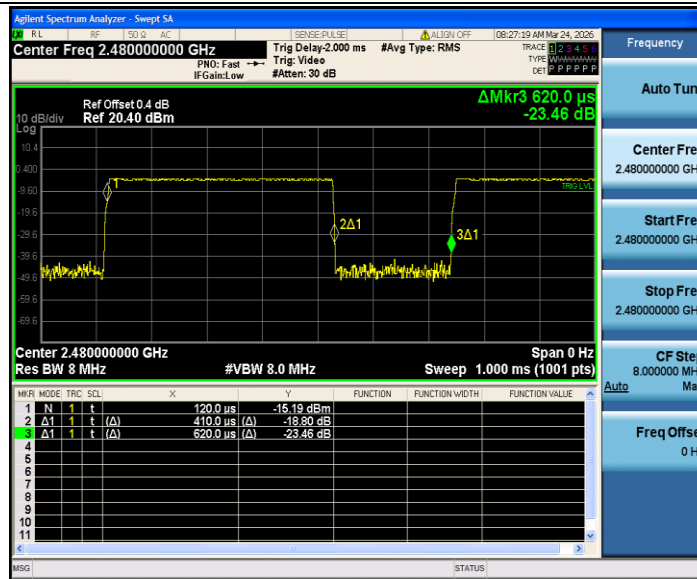
Appendix G: Duty Cycle

Test Result

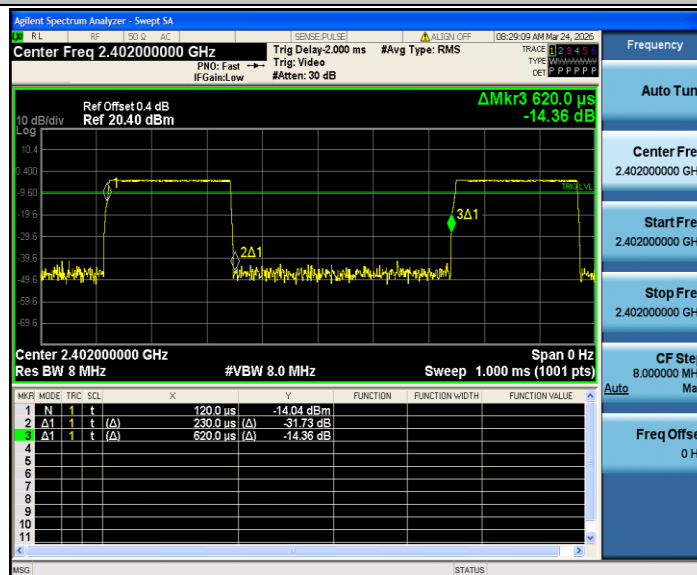
TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	0.41	0.62	0.6613	66.13	1.80	---	---
		2440	0.41	0.62	0.6613	66.13	1.80	---	---
		2480	0.41	0.62	0.6613	66.13	1.80	---	---
BLE_2M	Ant1	2402	0.23	0.62	0.3710	37.10	4.31	---	---
		2440	0.23	0.62	0.3710	37.10	4.31	---	---
		2480	0.23	0.62	0.3710	37.10	4.31	---	---

Test Graphs

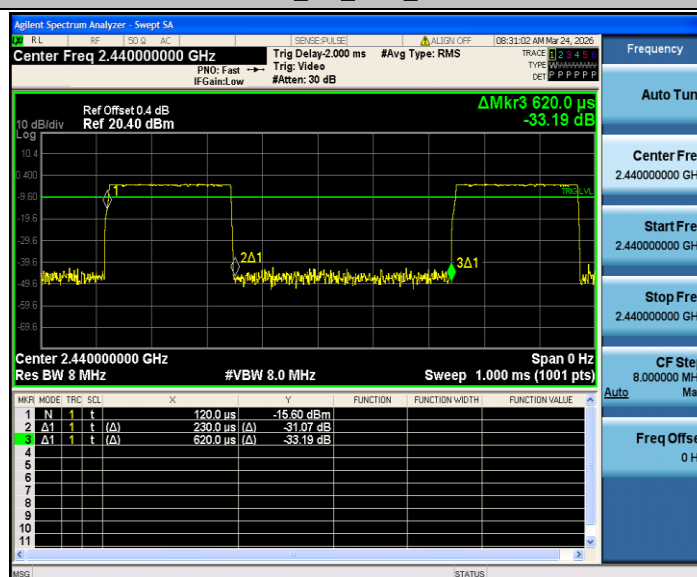




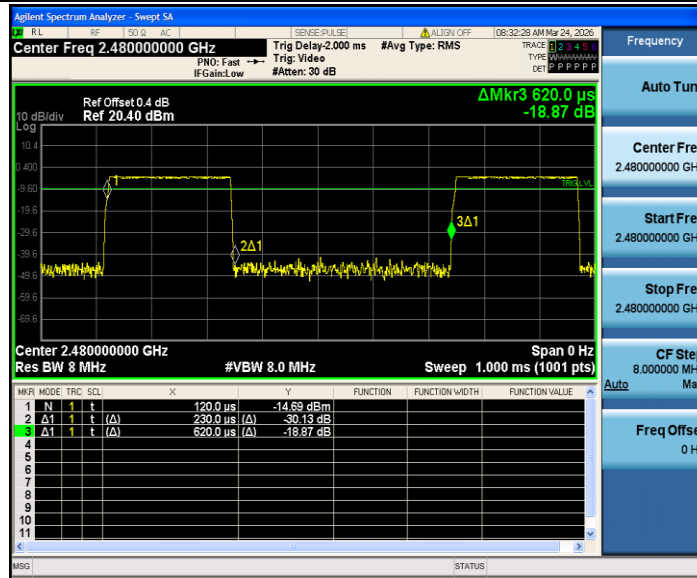
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



Appendix H: Emissions in Restricted Bands

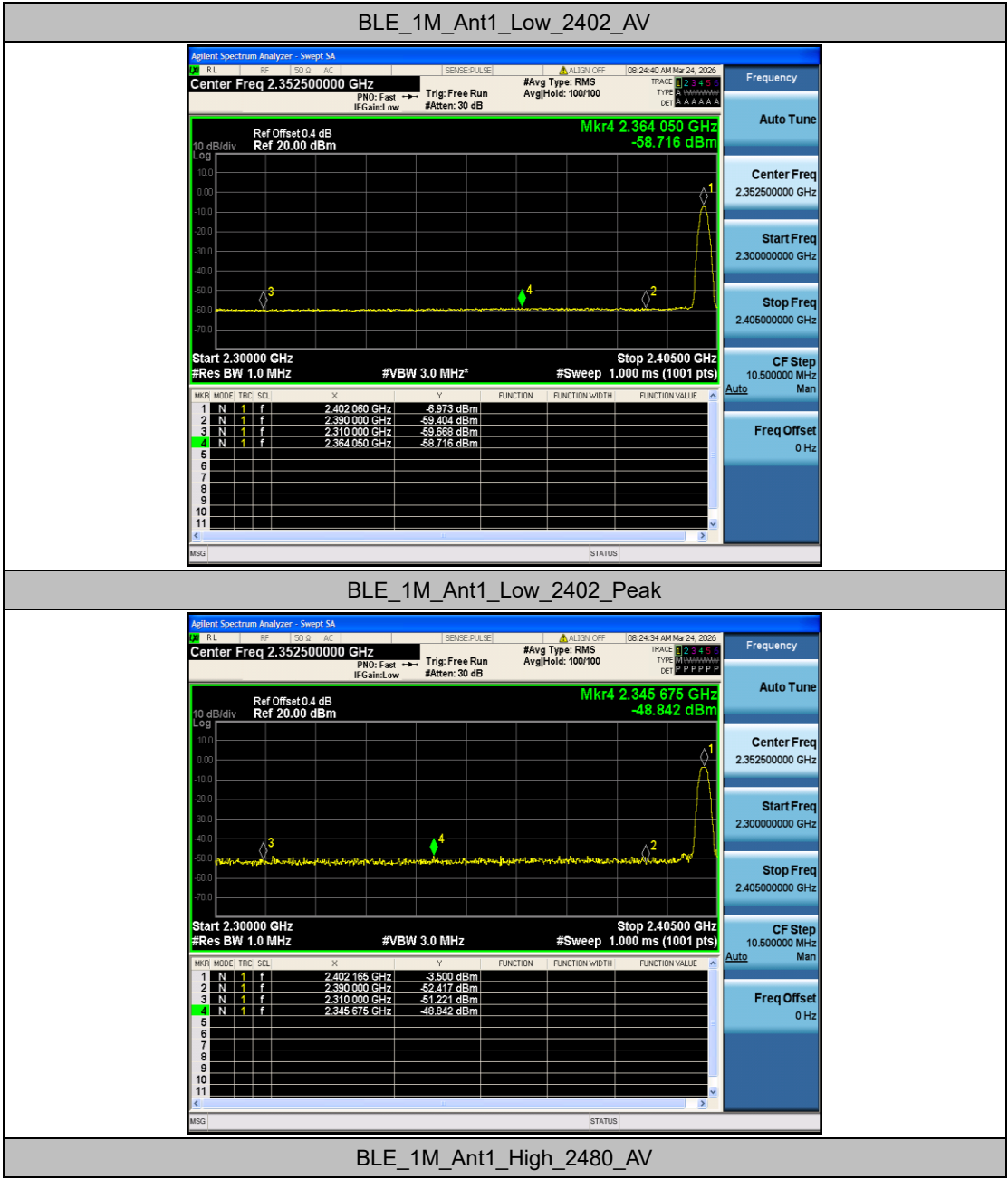
Test Result

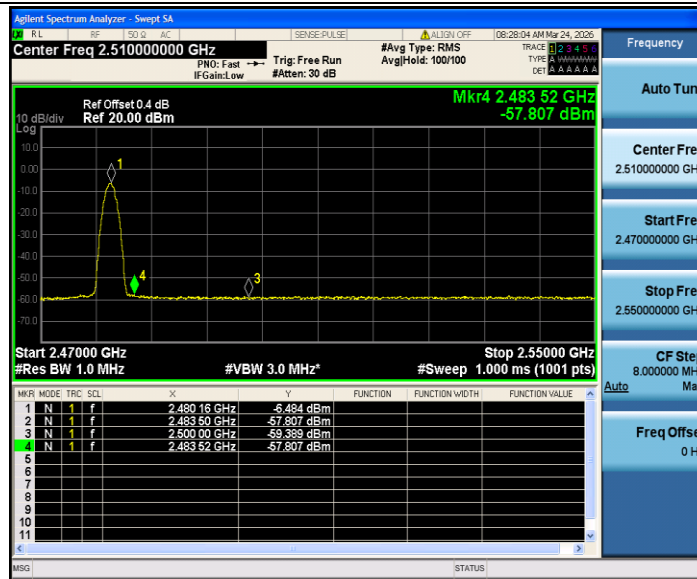
TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-59.67	2.00	1.80	39.33	≤54	PASS
				AV	2364.050	-58.72	2.00	1.80	40.28	≤54	PASS
				AV	2390.000	-59.4	2.00	1.80	39.60	≤54	PASS
				Peak	2310.000	-51.22	2.00	0.00	45.98	≤74	PASS
				Peak	2345.675	-48.84	2.00	0.00	48.36	≤74	PASS
				Peak	2390.000	-52.42	2.00	0.00	44.78	≤74	PASS
		High	2480	AV	2483.500	-57.81	2.00	1.80	41.19	≤54	PASS
				AV	2483.520	-57.81	2.00	1.80	41.19	≤54	PASS
				AV	2500.000	-59.39	2.00	1.80	39.61	≤54	PASS
				Peak	2483.500	-50.81	2.00	0.00	46.39	≤74	PASS
				Peak	2484.880	-46.12	2.00	0.00	51.08	≤74	PASS
				Peak	2500.000	-50.17	2.00	0.00	47.03	≤74	PASS
BLE_2M	Ant1	Low	2402	AV	2310.000	-60.24	2.00	4.31	41.27	≤54	PASS
				AV	2383.160	-58.9	2.00	4.31	42.61	≤54	PASS
				AV	2390.000	-59.61	2.00	4.31	41.90	≤54	PASS
				Peak	2310.000	-53.66	2.00	0.00	43.54	≤74	PASS
				Peak	2357.120	-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	-58.42	2.00	4.31	43.09	≤54	PASS
				AV	2484.880	-57.98	2.00	4.31	43.53	≤54	PASS
				AV	2500.000	-59.35	2.00	4.31	42.16	≤54	PASS
				Peak	2483.500	-50.85	2.00	0.00	46.35	≤74	PASS
				Peak	2484.160	-45.83	2.00	0.00	51.37	≤74	PASS
				Peak	2500.000	-51.25	2.00	0.00	45.95	≤74	PASS

NNote:

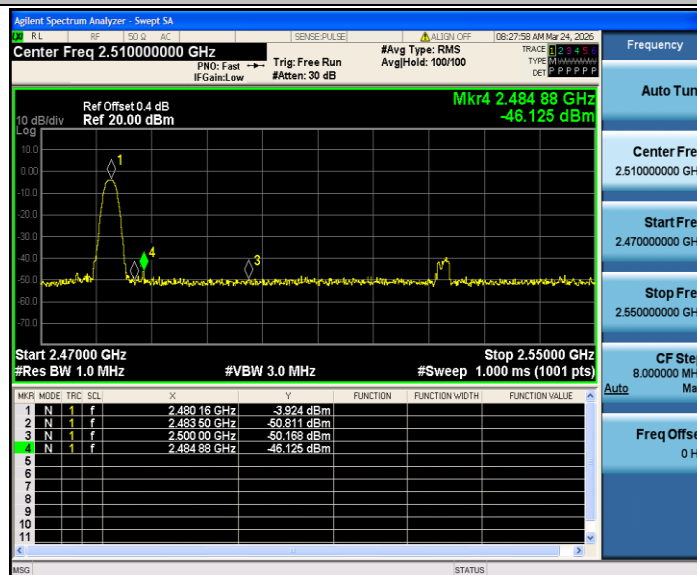
1. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.
- 2.

Test Graphs

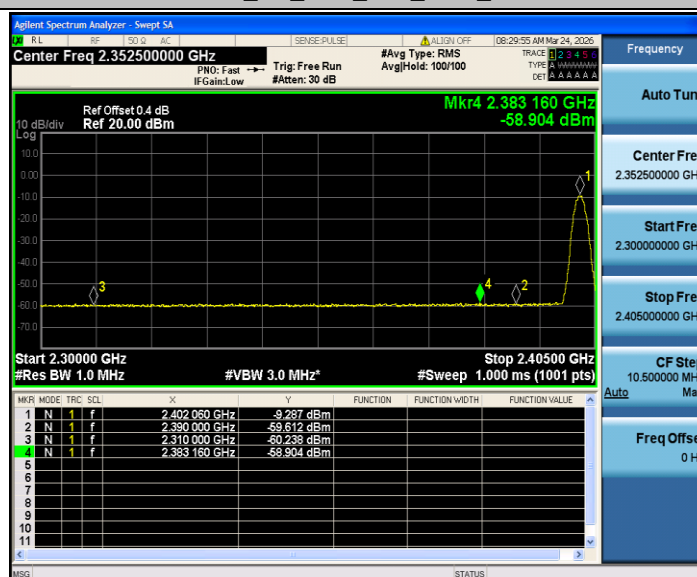




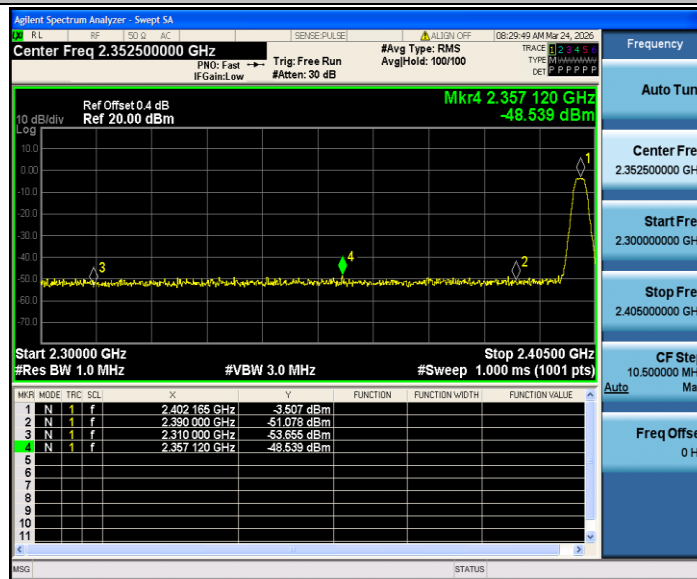
BLE_1M_Ant1_High_2480_Peak



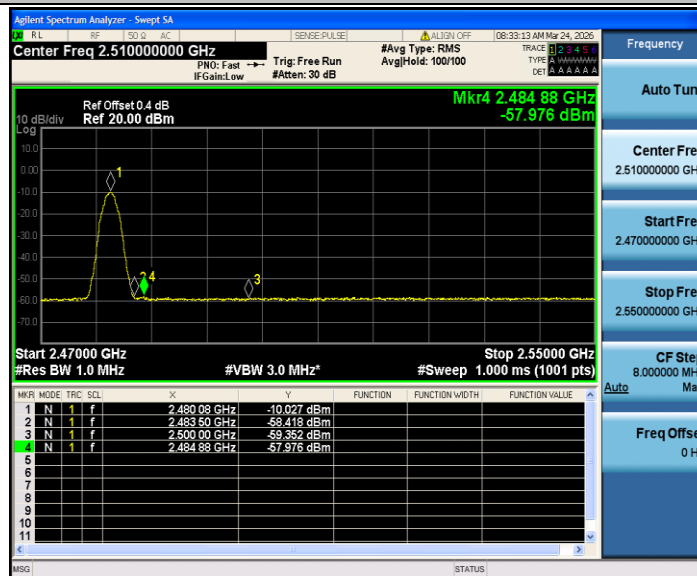
BLE_2M_Ant1_Low_2402_AV



BLE_2M_Ant1_Low_2402_Peak



BLE_2M_Ant1_High_2480_AV



BLE_2M_Ant1_High_2480_Peak

