

FCC Appendix RF Test Data for BLE

FCC ID : 2BU85-W80

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

EUT : Tablet

Model Number : W80

Report No. : CTA26042100605

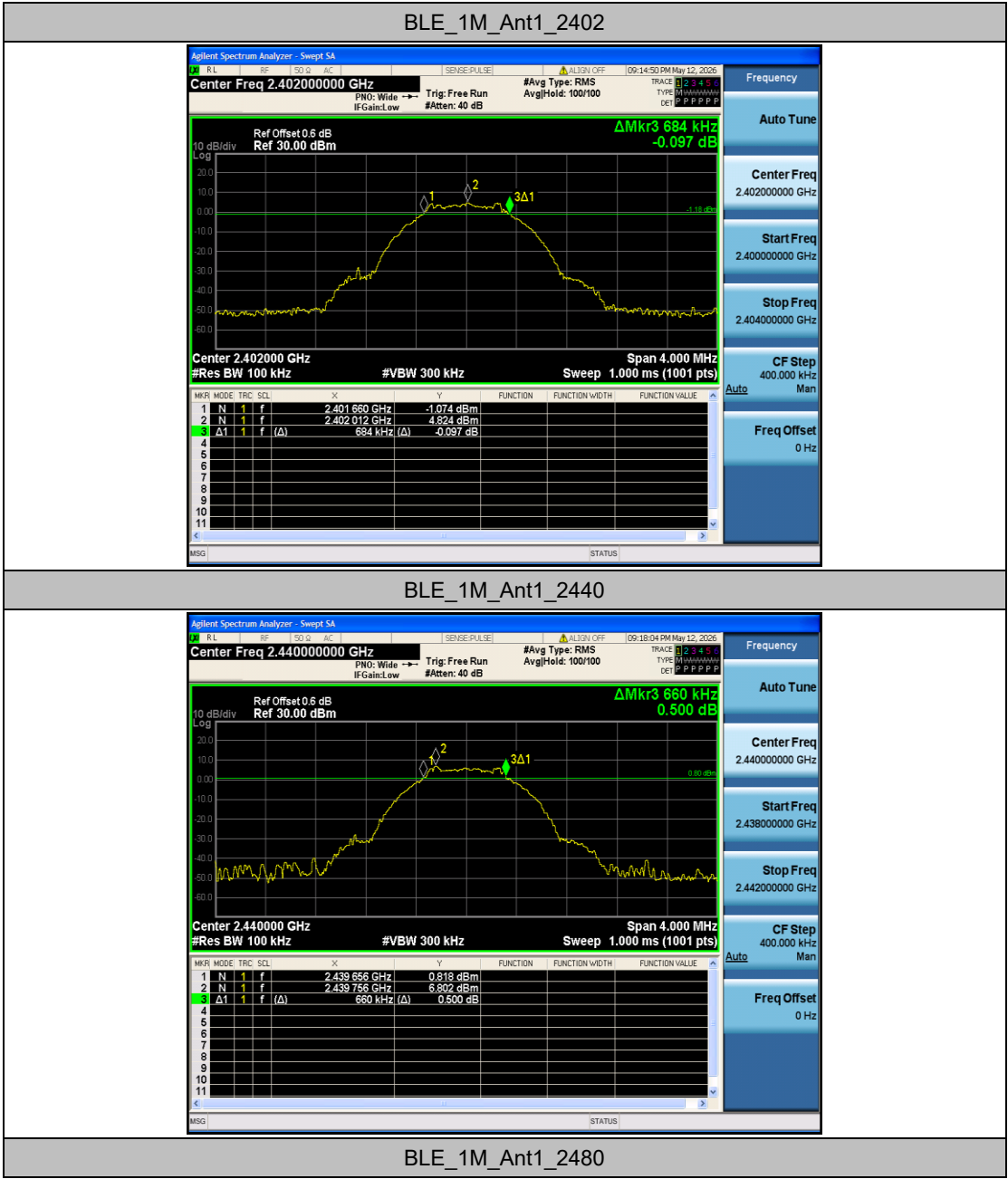
Reviewed By : Eric Wang

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.684	2401.660	2402.344	0.5	PASS
		2440	0.660	2439.656	2440.316	0.5	PASS
		2480	0.664	2479.672	2480.336	0.5	PASS
BLE_2M	Ant1	2402	1.232	2401.340	2402.572	0.5	PASS
		2440	1.124	2439.412	2440.536	0.5	PASS
		2480	1.168	2479.416	2480.584	0.5	PASS

Test Graphs





BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480

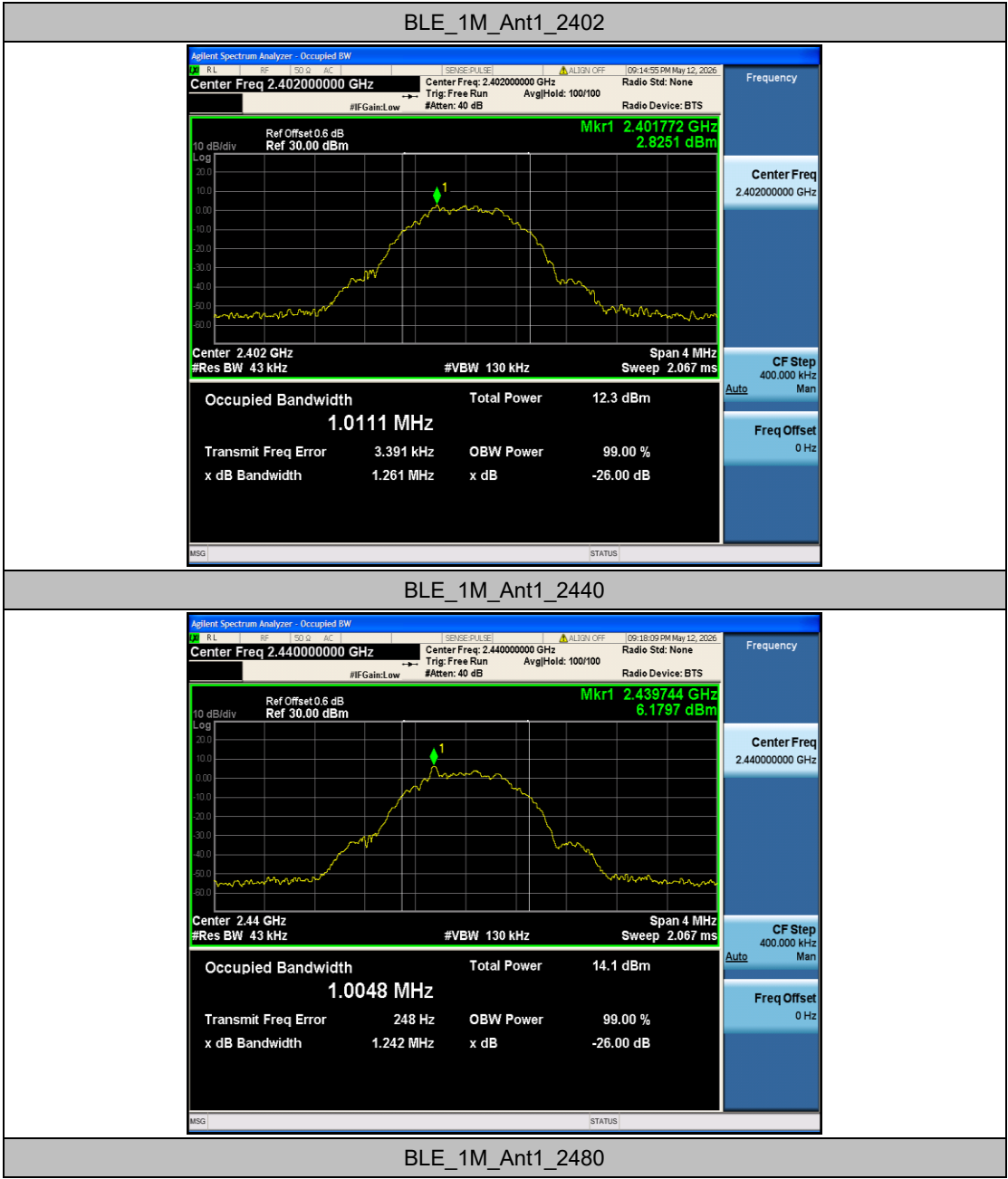


Appendix B: Occupied Channel Bandwidth

Test Result

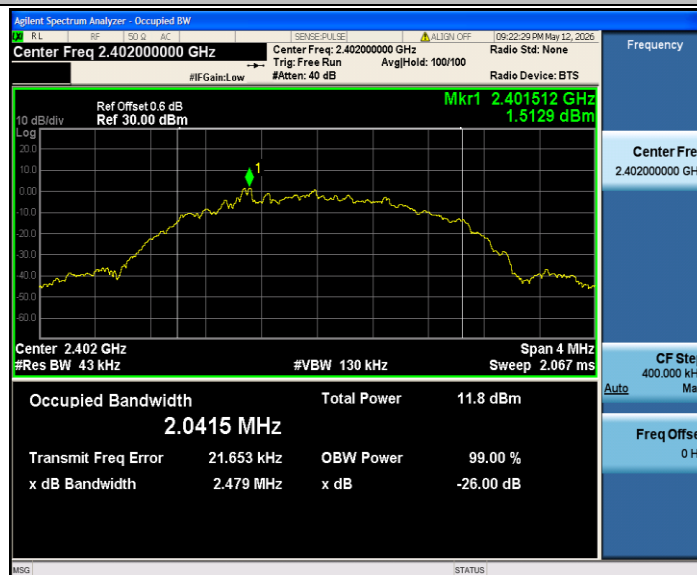
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0111	2401.4978	2402.5089	---	---
		2440	1.0048	2439.4979	2440.5027	---	---
		2480	1.0059	2479.4988	2480.5047	---	---
BLE_2M	Ant1	2402	2.0415	2401.0009	2403.0424	---	---
		2440	2.0325	2439.0030	2441.0355	---	---
		2480	2.0278	2479.0019	2481.0297	---	---

Test Graphs

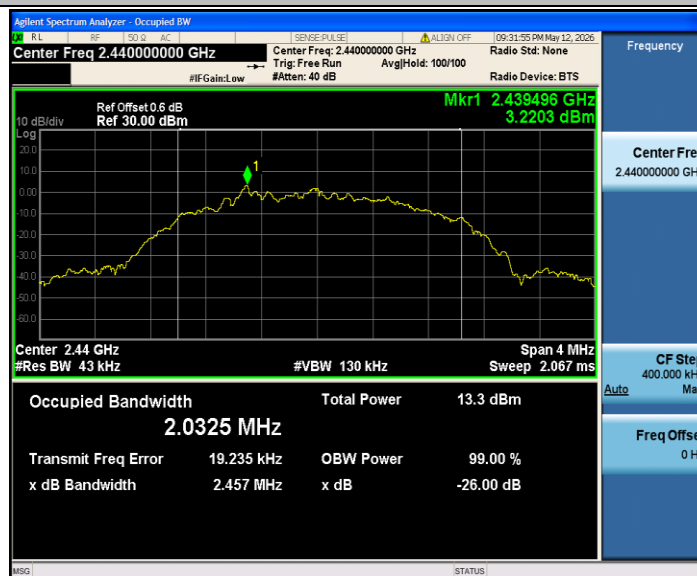




BLE_2M_Ant1_2402



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	5.69	≤30	PASS
		2440	7.34	≤30	PASS
		2480	6.57	≤30	PASS
BLE_2M	Ant1	2402	5.48	≤30	PASS
		2440	6.70	≤30	PASS
		2480	6.03	≤30	PASS

Appendix D: Maximum power spectral density

Test Result

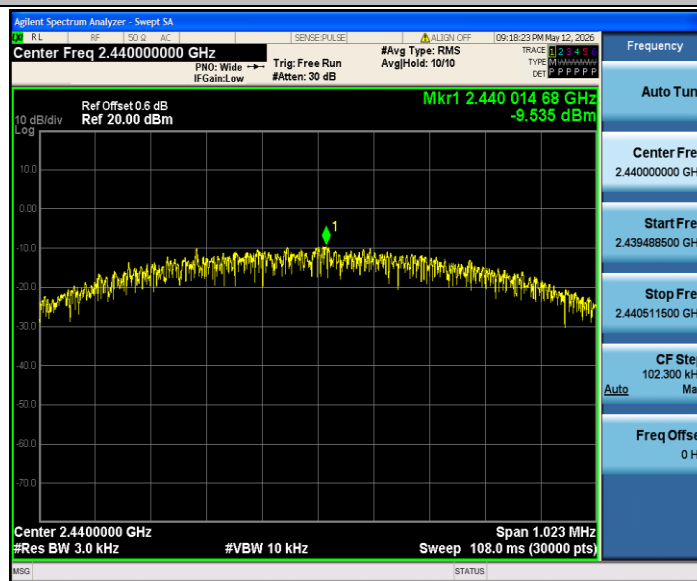
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-11.04	≤8.00	PASS
		2440	-9.54	≤8.00	PASS
		2480	-10.17	≤8.00	PASS
BLE_2M	Ant1	2402	-14.21	≤8.00	PASS
		2440	-12.93	≤8.00	PASS
		2480	-13.74	≤8.00	PASS

Test Graphs

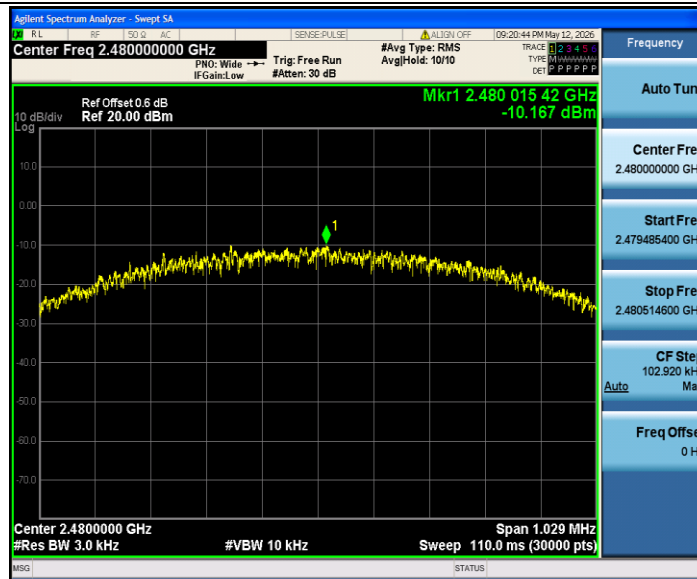
BLE_1M_Ant1_2402



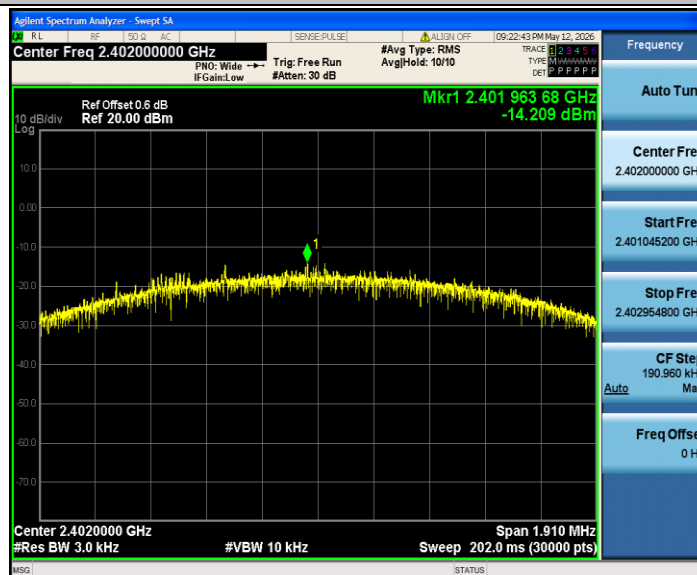
BLE_1M_Ant1_2440



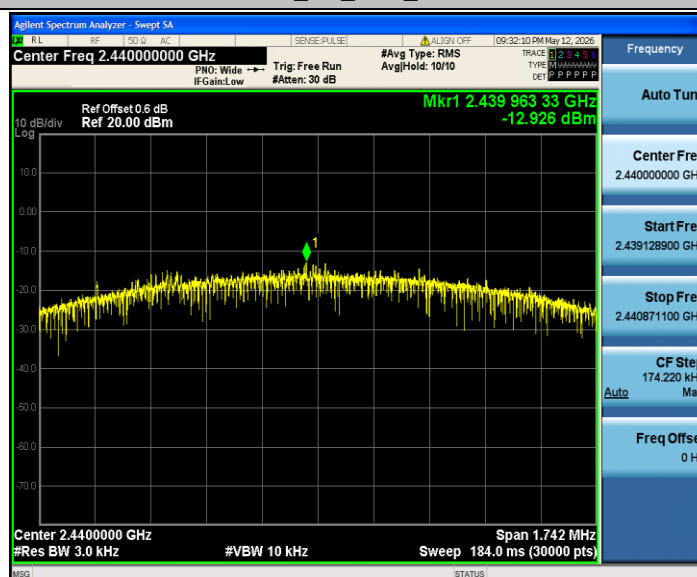
BLE_1M_Ant1_2480



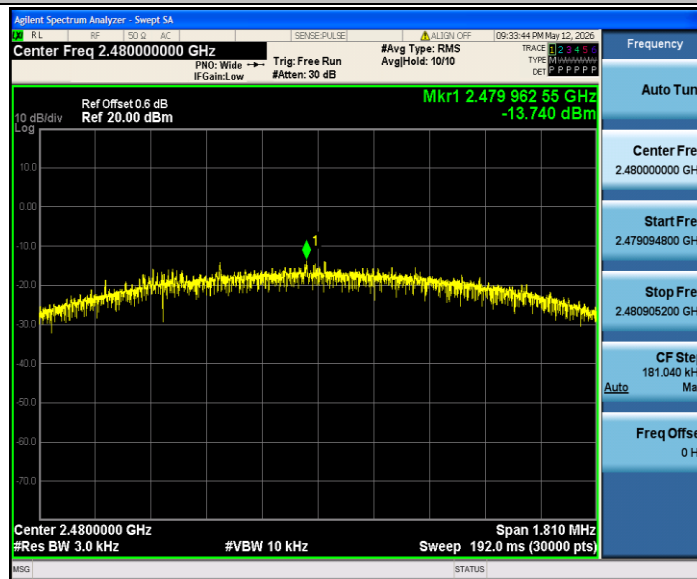
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



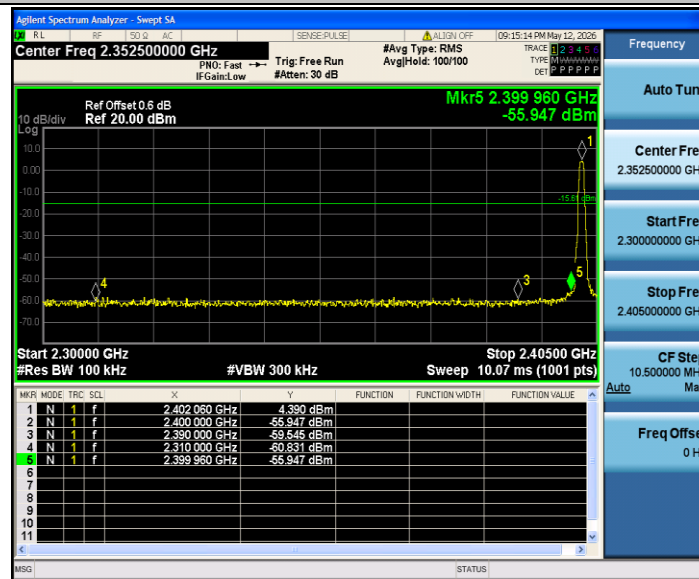
Appendix E: Band edge measurements

Test Result

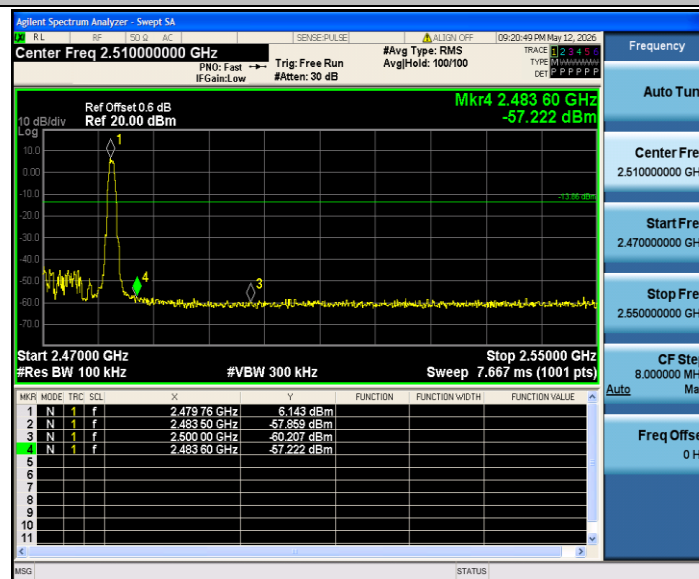
TestMode	Antenna	Channel	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	4.39	-55.95	≤-15.61	PASS
		High	2480	6.14	-57.22	≤-13.86	PASS
BLE_2M	Ant1	Low	2402	4.79	-42.79	≤-15.21	PASS
		High	2480	5.62	-56.13	≤-14.39	PASS

Test Graphs

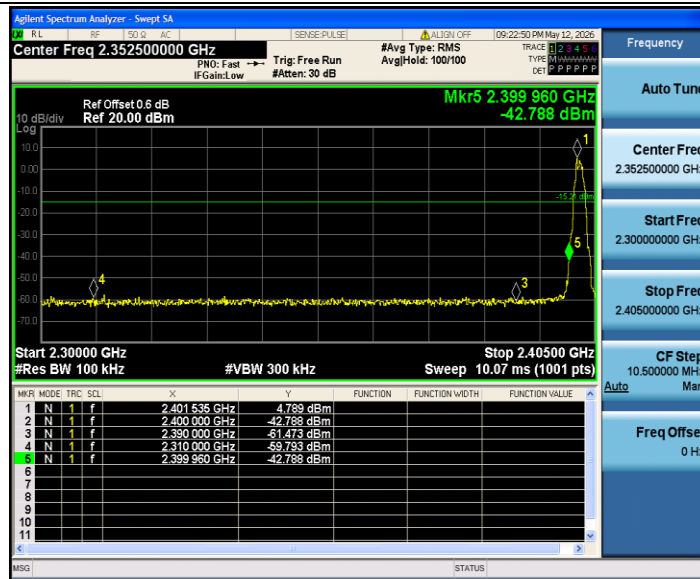
BLE_1M_Ant1_Low_2402



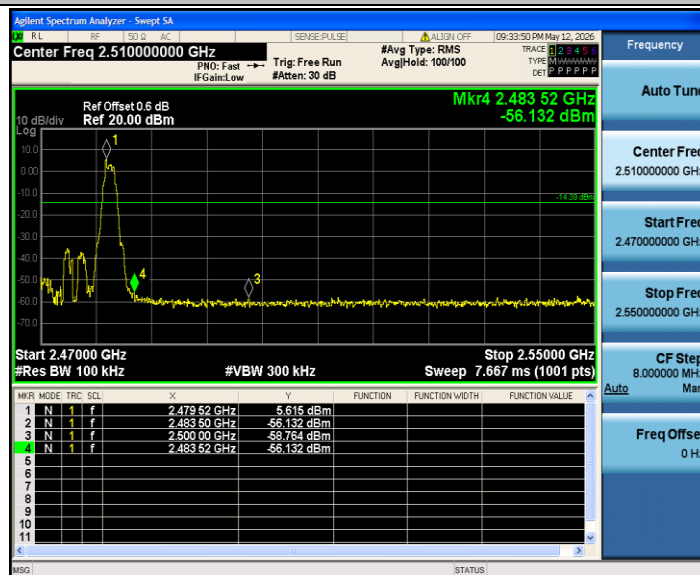
BLE_1M_Ant1_High_2480



BLE_2M_Ant1_Low_2402



BLE_2M_Ant1_High_2480

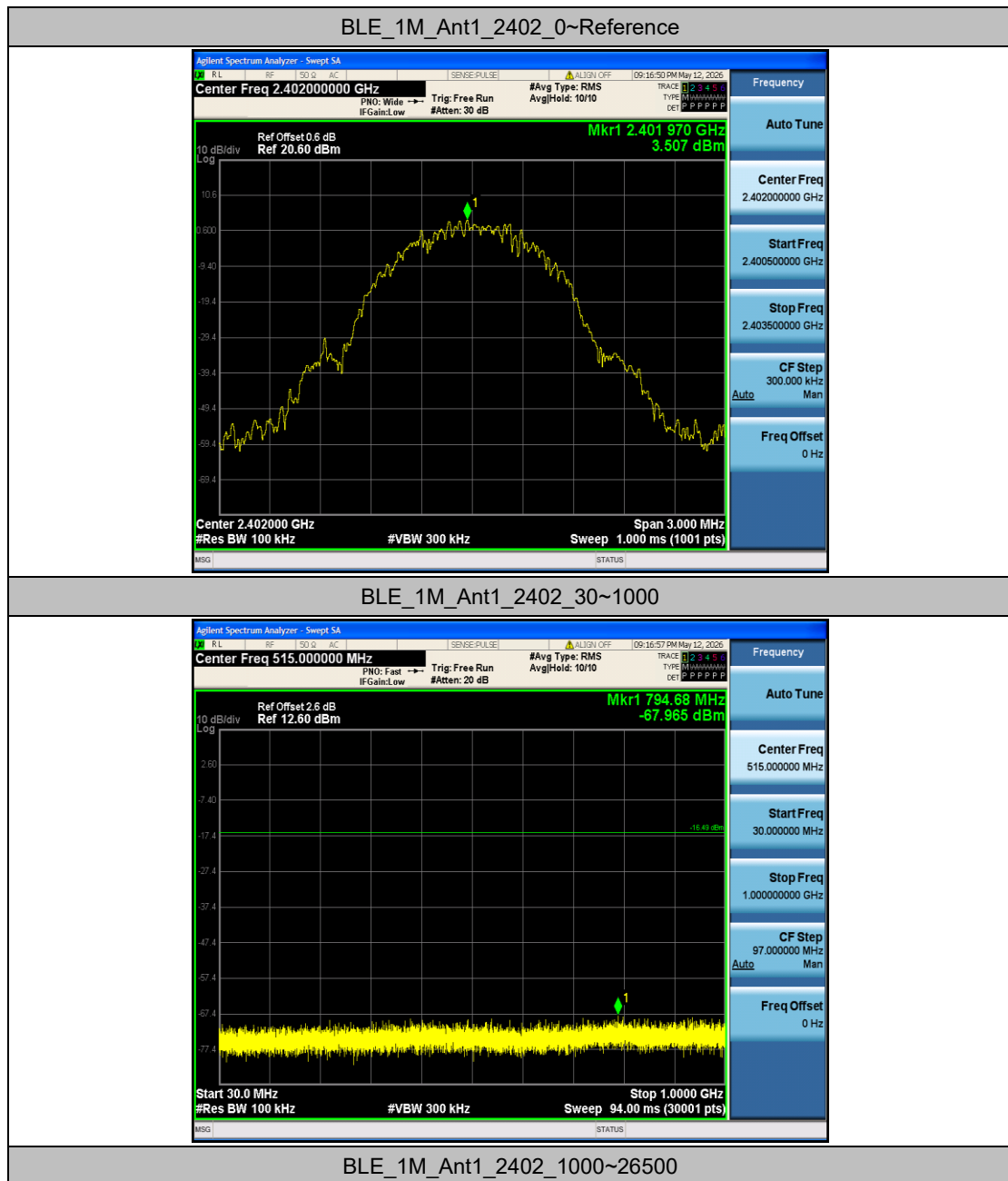


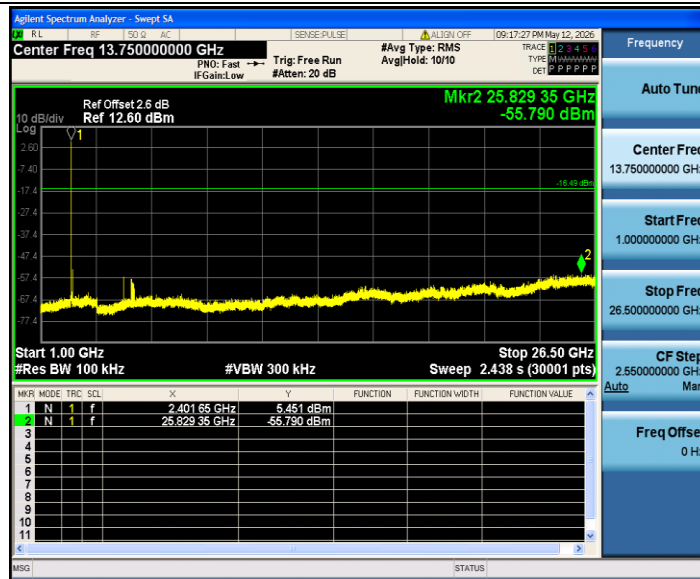
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	3.51	3.51	---	PASS
			30~1000	3.51	-67.97	≤-16.49	PASS
			1000~26500	3.51	-55.79	≤-16.49	PASS
		2440	Reference	5.10	5.10	---	PASS
			30~1000	5.10	-67.94	≤-14.9	PASS
			1000~26500	5.10	-56.06	≤-14.9	PASS
		2480	Reference	4.81	4.81	---	PASS
			30~1000	4.81	-67.21	≤-15.19	PASS
			1000~26500	4.81	-55.52	≤-15.19	PASS
BLE_2M	Ant1	2402	Reference	3.97	3.97	---	PASS
			30~1000	3.97	-67.29	≤-16.03	PASS
			1000~26500	3.97	-38.8	≤-16.03	PASS
		2440	Reference	4.24	4.24	---	PASS
			30~1000	4.24	-67.6	≤-15.76	PASS
			1000~26500	4.24	-54.52	≤-15.76	PASS
		2480	Reference	3.15	3.15	---	PASS
			30~1000	3.15	-67.92	≤-16.85	PASS
			1000~26500	3.15	-39.18	≤-16.85	PASS

Test Graphs

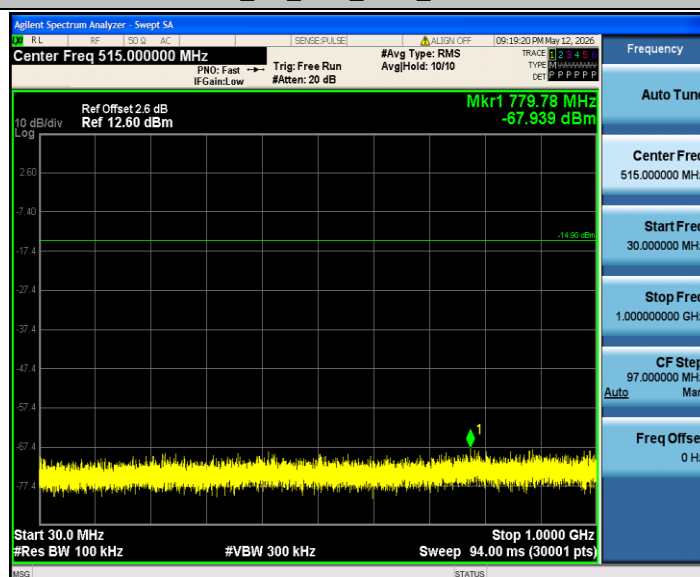




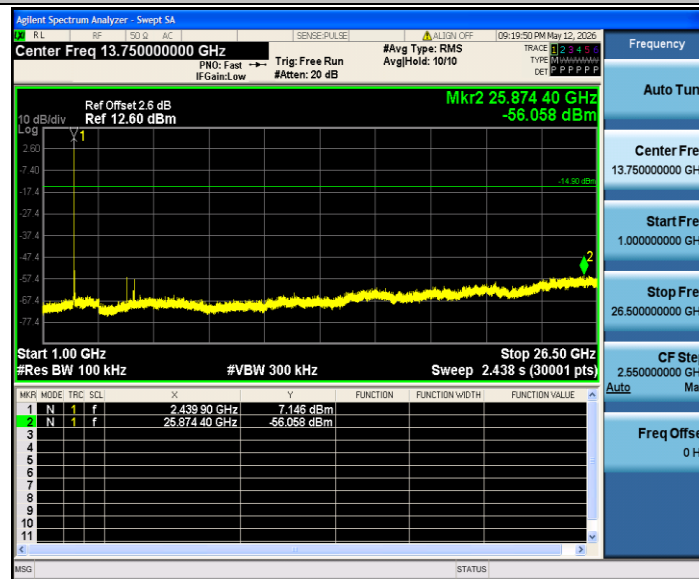
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



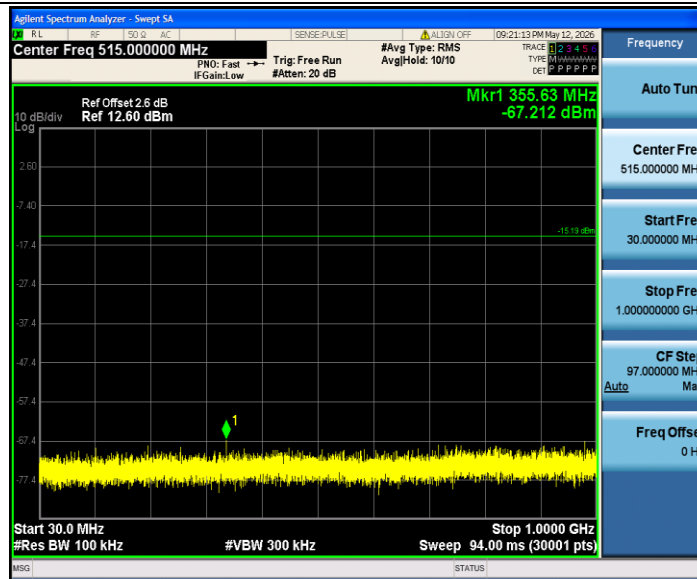
BLE_1M_Ant1_2440_1000~26500



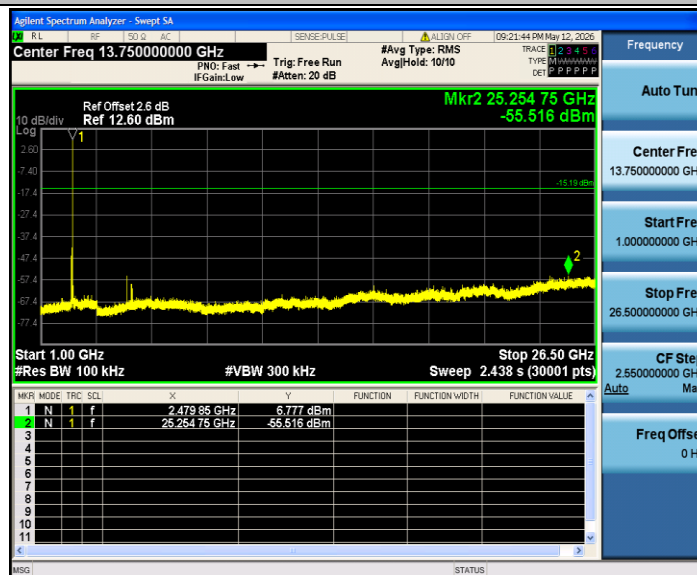
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



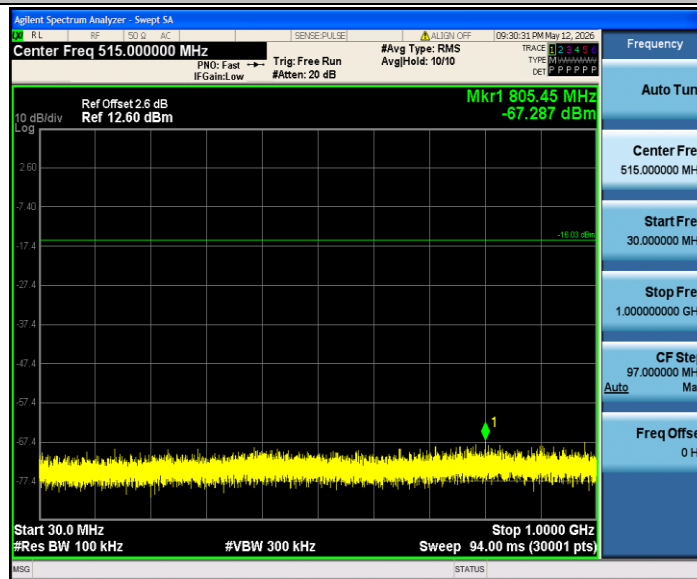
BLE_1M_Ant1_2480_1000~26500



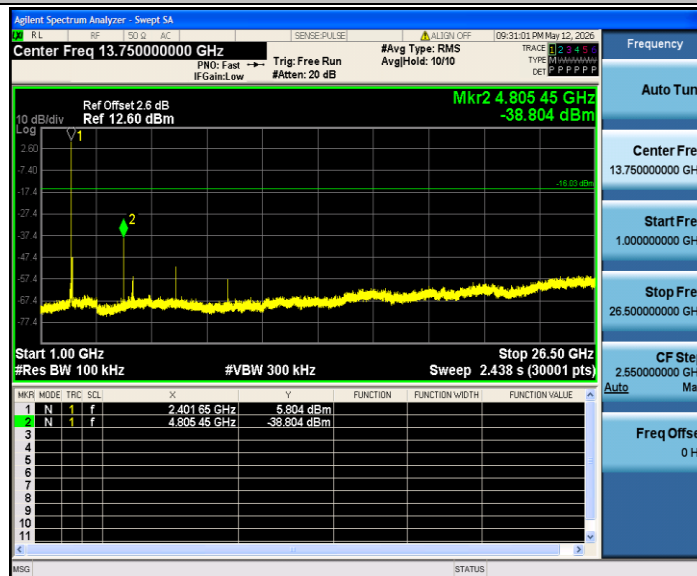
BLE_2M_Ant1_2402_0~Reference



BLE_2M_Ant1_2402_30~1000



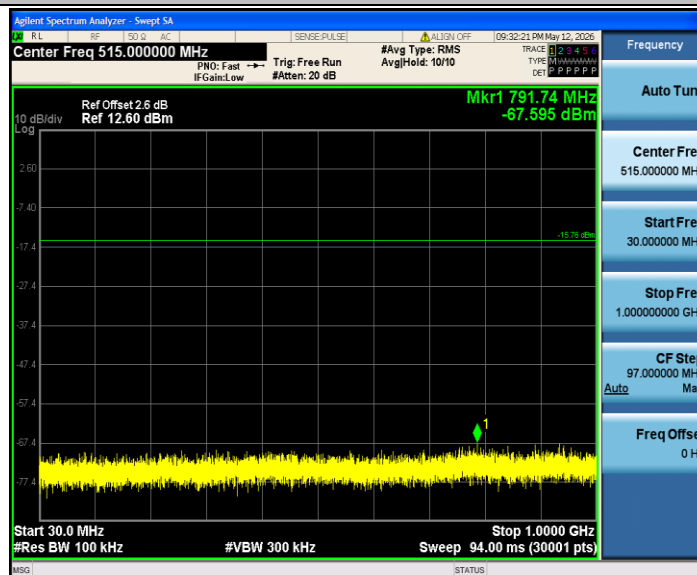
BLE_2M_Ant1_2402_1000~26500



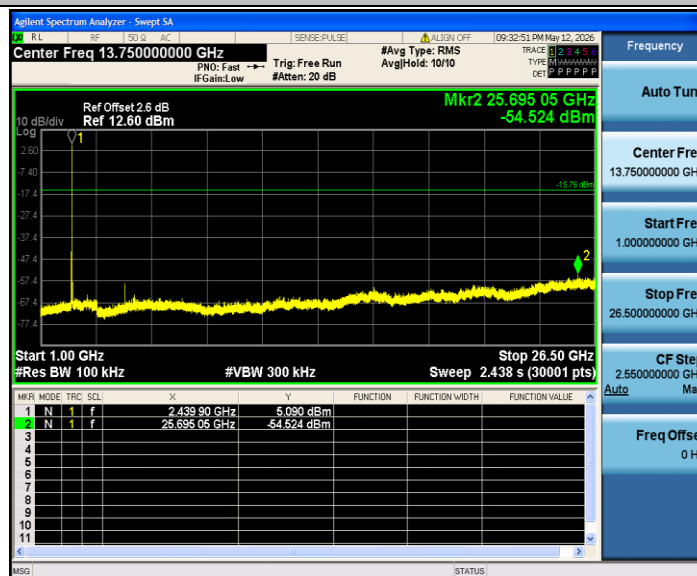
BLE_2M_Ant1_2440_0~Reference



BLE_2M_Ant1_2440_30~1000



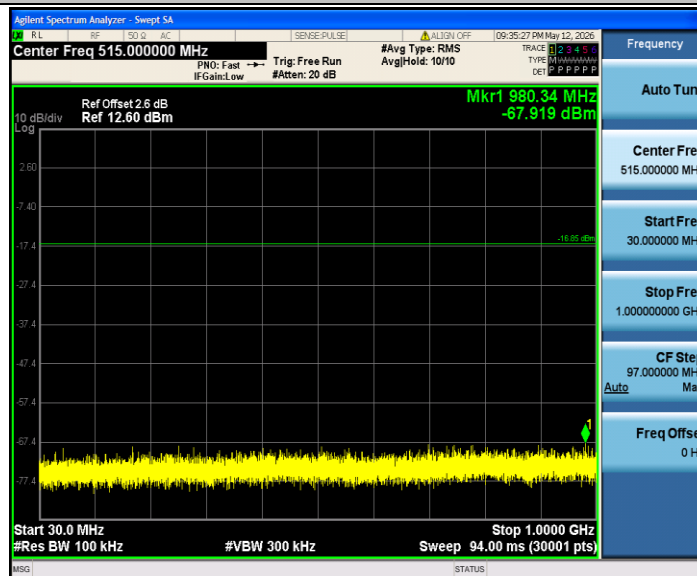
BLE_2M_Ant1_2440_1000~26500



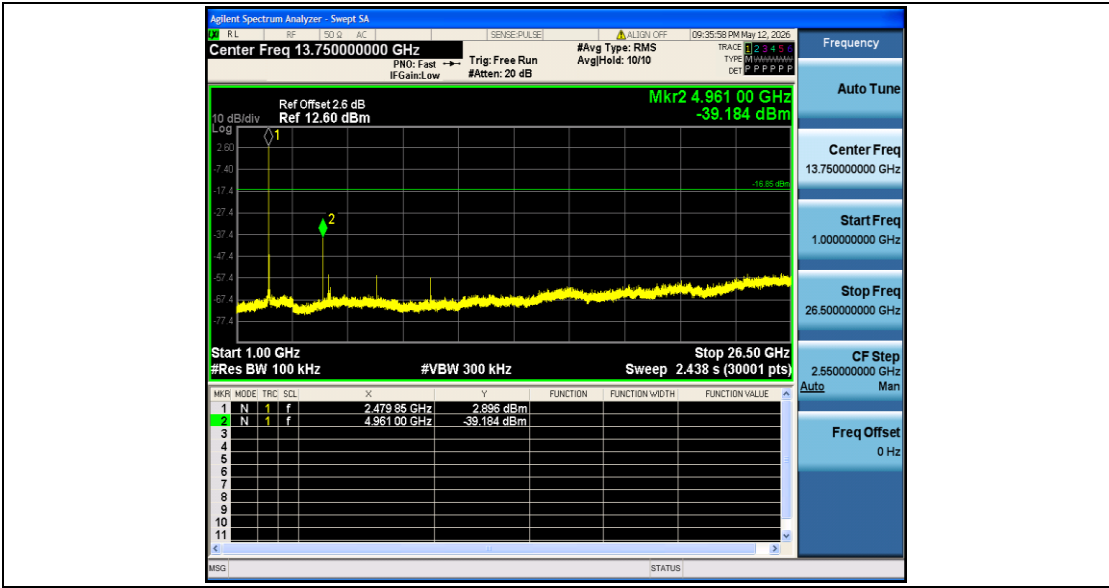
BLE_2M_Ant1_2480_0~Reference



BLE_2M_Ant1_2480_30~1000



BLE_2M_Ant1_2480_1000~26500

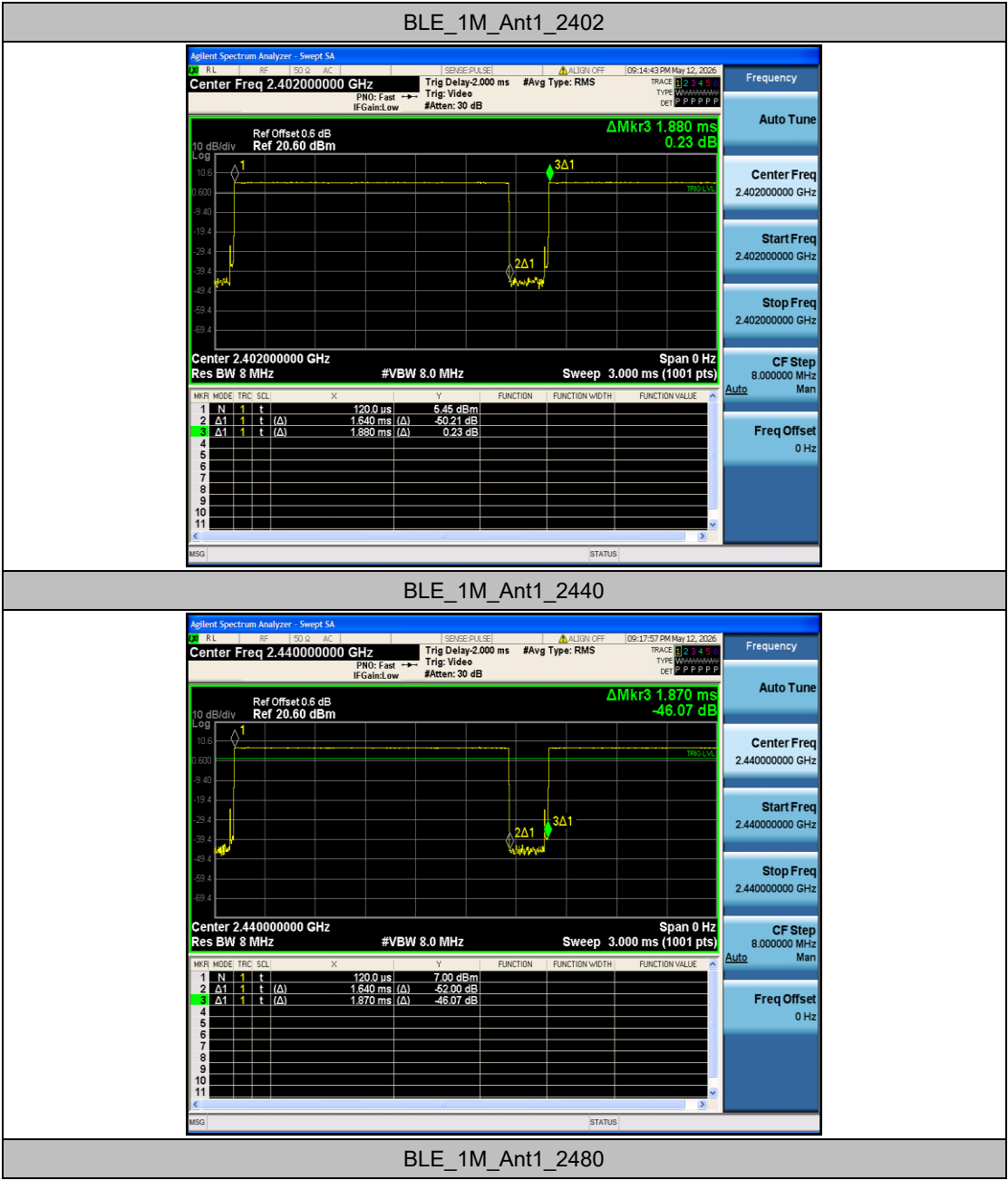


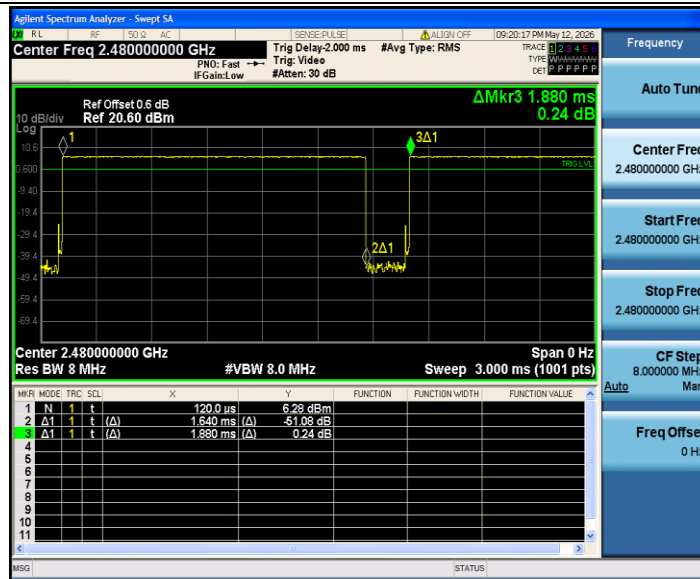
Appendix G: Duty Cycle

Test Result

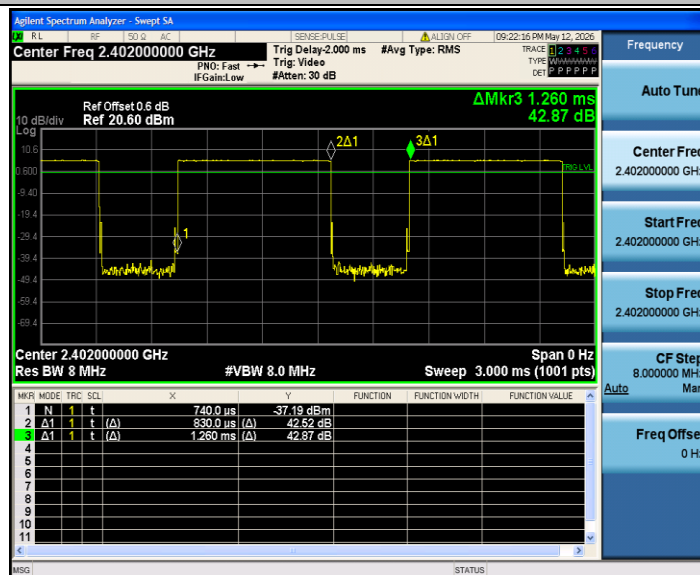
TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	1.64	1.88	0.8723	87.23	0.59	---	---
		2440	1.64	1.87	0.8770	87.70	0.57	---	---
		2480	1.64	1.88	0.8723	87.23	0.59	---	---
BLE_2M	Ant1	2402	0.83	1.26	0.6587	65.87	1.81	---	---
		2440	0.82	1.25	0.6560	65.60	1.83	---	---
		2480	0.83	1.26	0.6587	65.87	1.81	---	---

Test Graphs

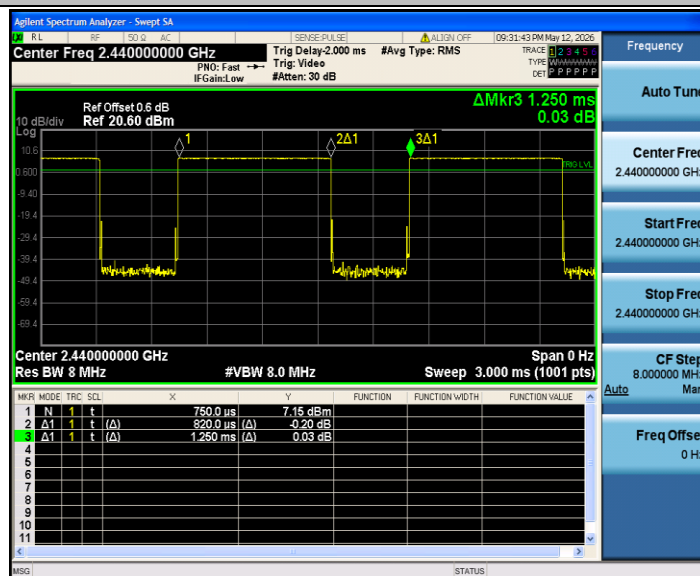




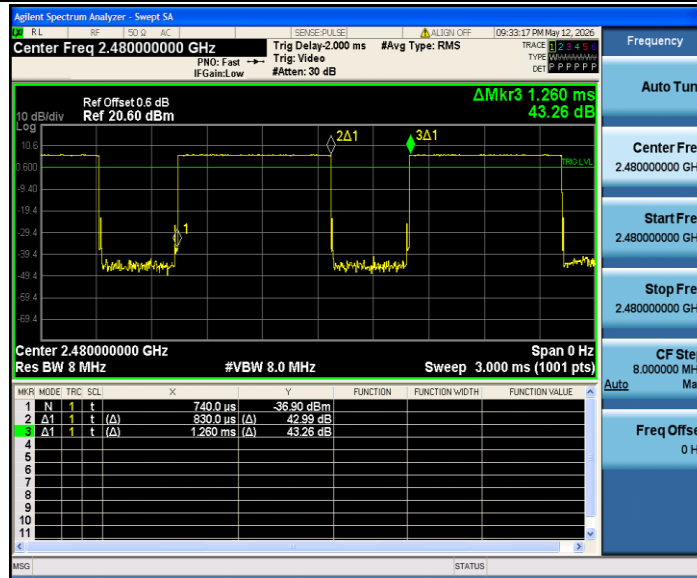
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



Appendix H: Emissions in Restricted Bands

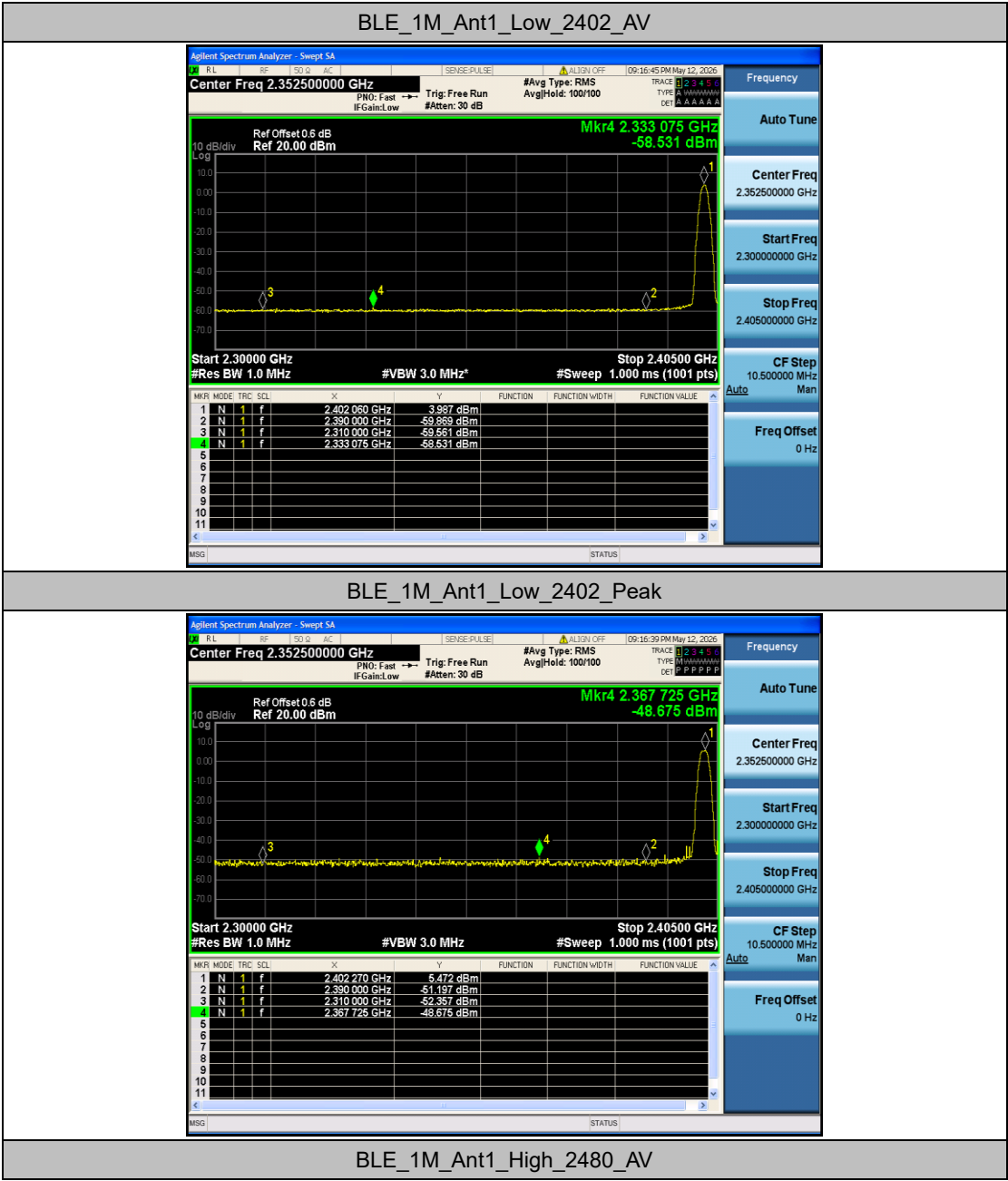
Test Result

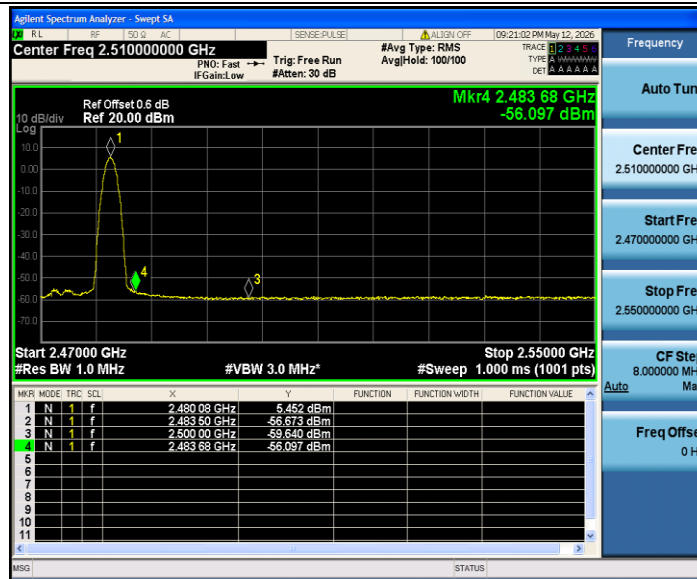
TestMode	Antenna	Channel	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-59.56	2.00	0.59	38.23	≤54	PASS
				AV	2333.075	-58.53	2.00	0.59	39.26	≤54	PASS
				AV	2390.000	-59.87	2.00	0.59	37.92	≤54	PASS
				Peak	2310.000	-52.36	2.00	0.00	44.84	≤74	PASS
				Peak	2367.725	-48.68	2.00	0.00	48.52	≤74	PASS
				Peak	2390.000	-51.2	2.00	0.00	46.00	≤74	PASS
		High	2480	AV	2483.500	-56.67	2.00	0.59	41.12	≤54	PASS
				AV	2483.680	-56.1	2.00	0.59	41.69	≤54	PASS
				AV	2500.000	-59.64	2.00	0.59	38.15	≤54	PASS
				Peak	2483.500	-40.7	2.00	0.00	56.50	≤74	PASS
				Peak	2483.520	-40.7	2.00	0.00	56.50	≤74	PASS
				Peak	2500.000	-51.67	2.00	0.00	45.53	≤74	PASS
BLE_2M	Ant1	Low	2402	AV	2310.000	-59.35	2.00	1.81	39.66	≤54	PASS
				AV	2388.410	-58.92	2.00	1.81	40.09	≤54	PASS
				AV	2390.000	-59.44	2.00	1.81	39.57	≤54	PASS
				Peak	2310.000	-51.49	2.00	0.00	45.71	≤74	PASS
				Peak	2340.110	-48.67	2.00	0.00	48.53	≤74	PASS
				Peak	2390.000	-51.52	2.00	0.00	45.68	≤74	PASS
		High	2480	AV	2483.500	-55.47	2.00	1.81	43.54	≤54	PASS
				AV	2483.520	-55.47	2.00	1.81	43.54	≤54	PASS
				AV	2500.000	-59.79	2.00	1.81	39.22	≤54	PASS
				Peak	2483.500	-46.53	2.00	0.00	50.67	≤74	PASS
				Peak	2486.800	-41.59	2.00	0.00	55.61	≤74	PASS
				Peak	2500.000	-52.77	2.00	0.00	44.43	≤74	PASS

Note:

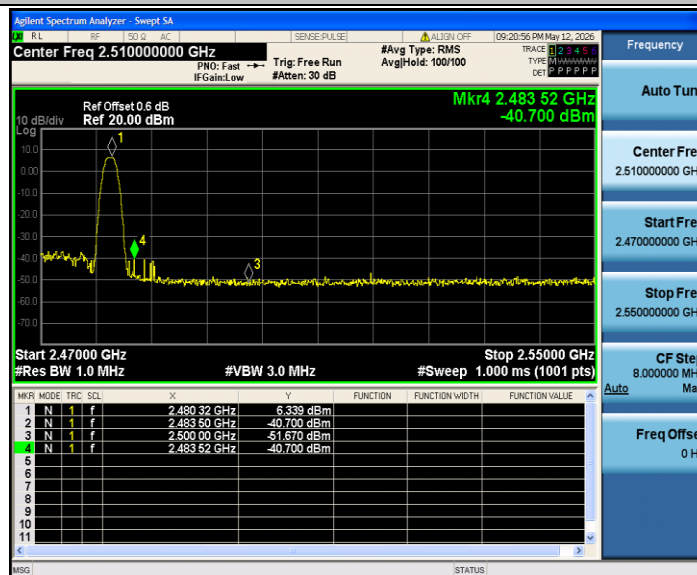
1. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

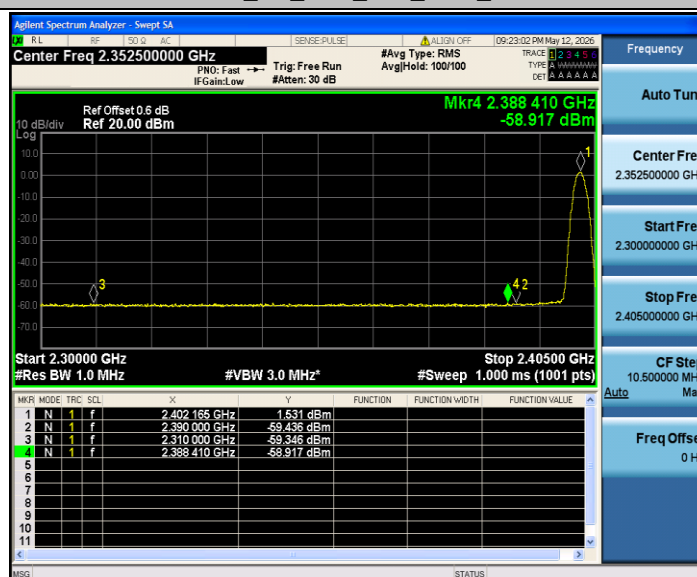




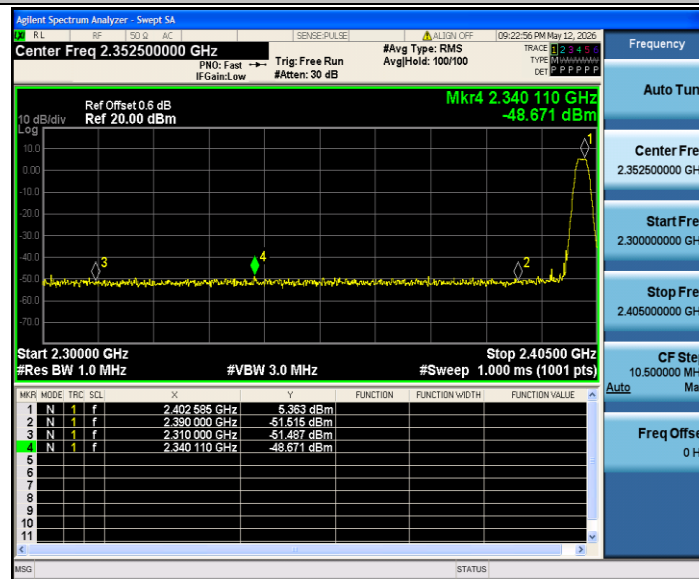
BLE_1M_Ant1_High_2480_Peak



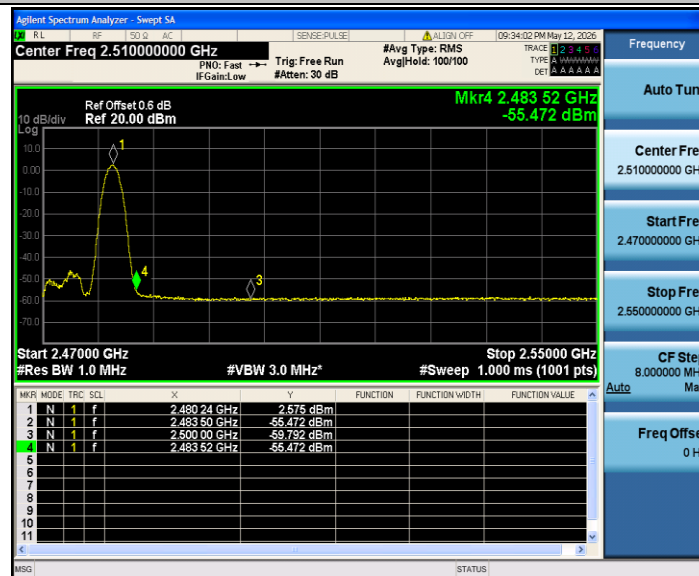
BLE_2M_Ant1_Low_2402_AV



BLE_2M_Ant1_Low_2402_Peak



BLE_2M_Ant1_High_2480_AV



BLE_2M_Ant1_High_2480_Peak

