

FCC Appendix RF Test Data for BLE

FCC ID : 2BXYL-XMRM-P3

Company : Tianchang Junlin Trading CO.,LTD

EUT : REMOTE CONTROL

Model Number : XMRM-P3

Report No. : CTA26082400101

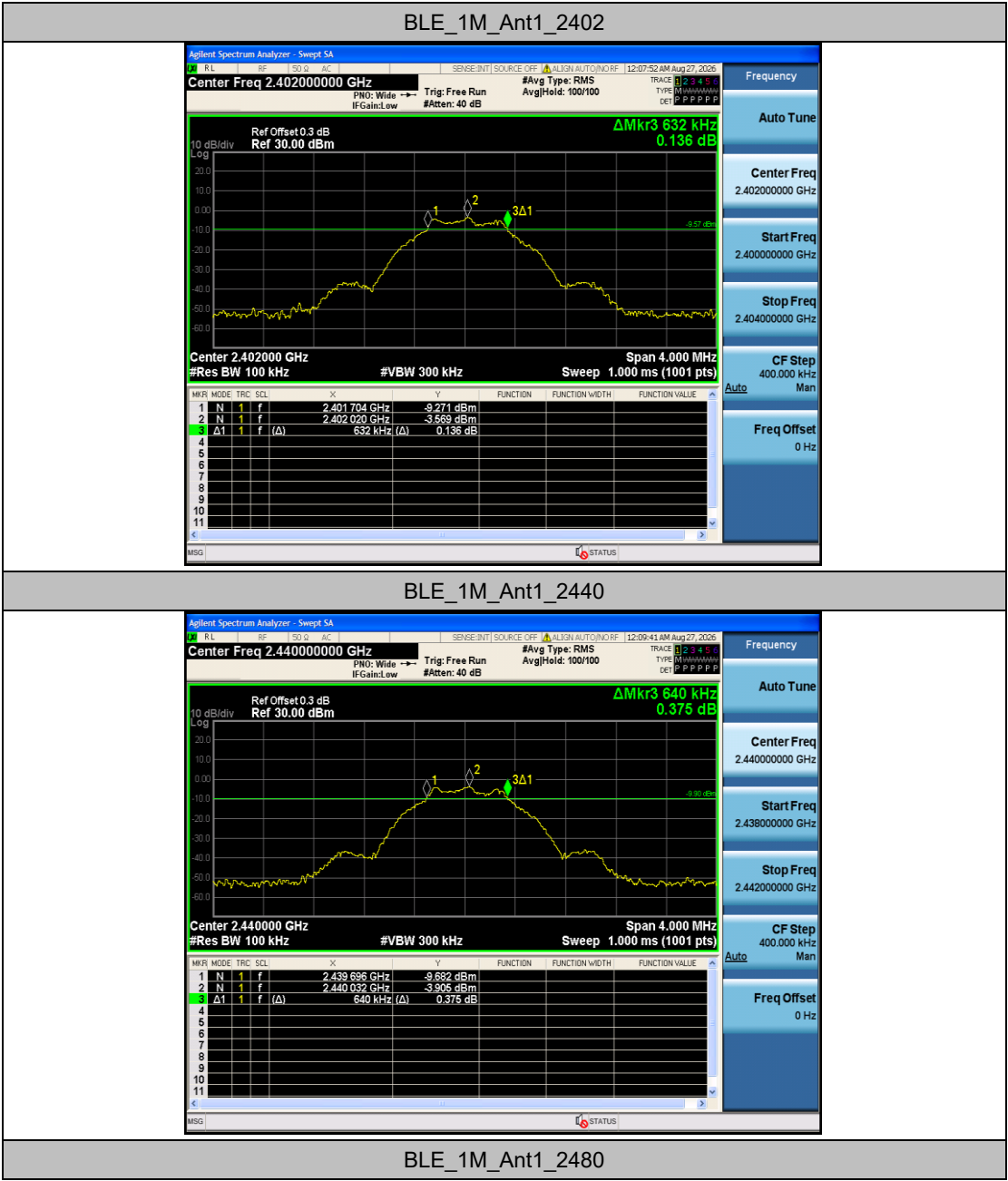
Reviewed By : Eric Wang

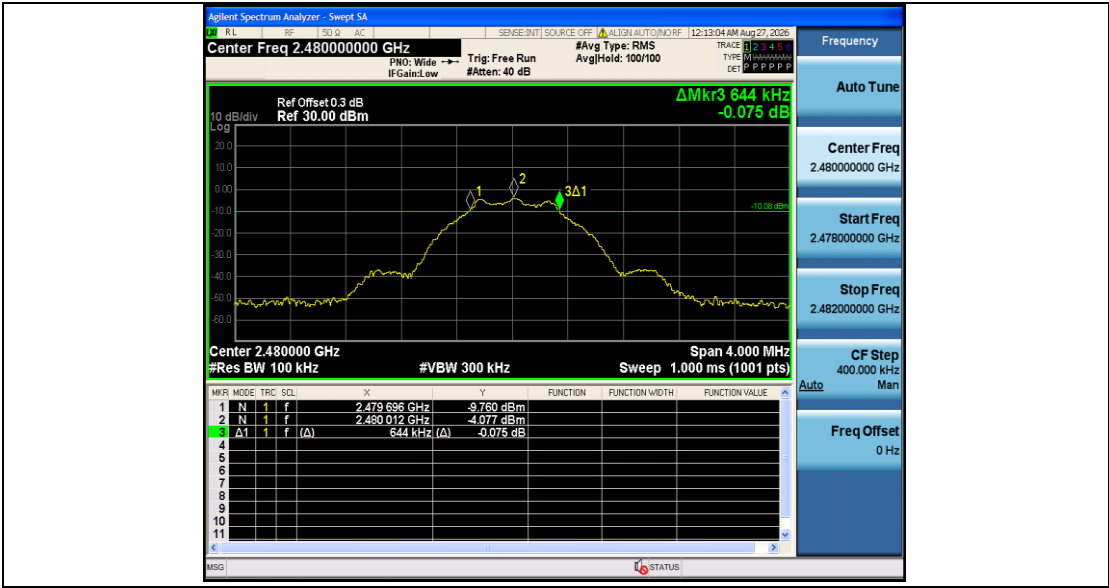
Appendix A: DTS Bandwidth

Test Result

Test Mode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.632	2401.704	2402.336	0.5	PASS
		2440	0.640	2439.696	2440.336	0.5	PASS
		2480	0.644	2479.696	2480.340	0.5	PASS

Test Graphs



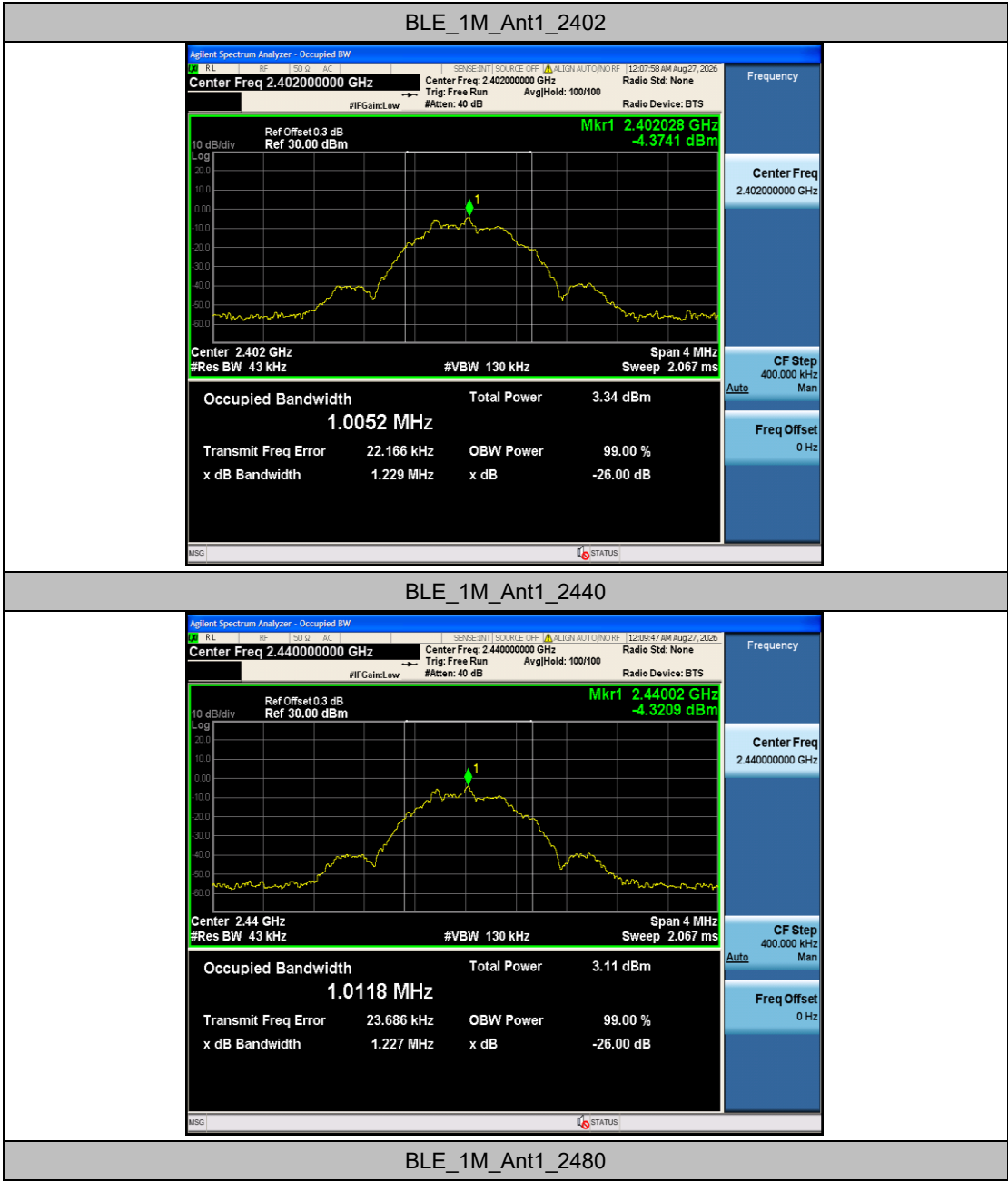


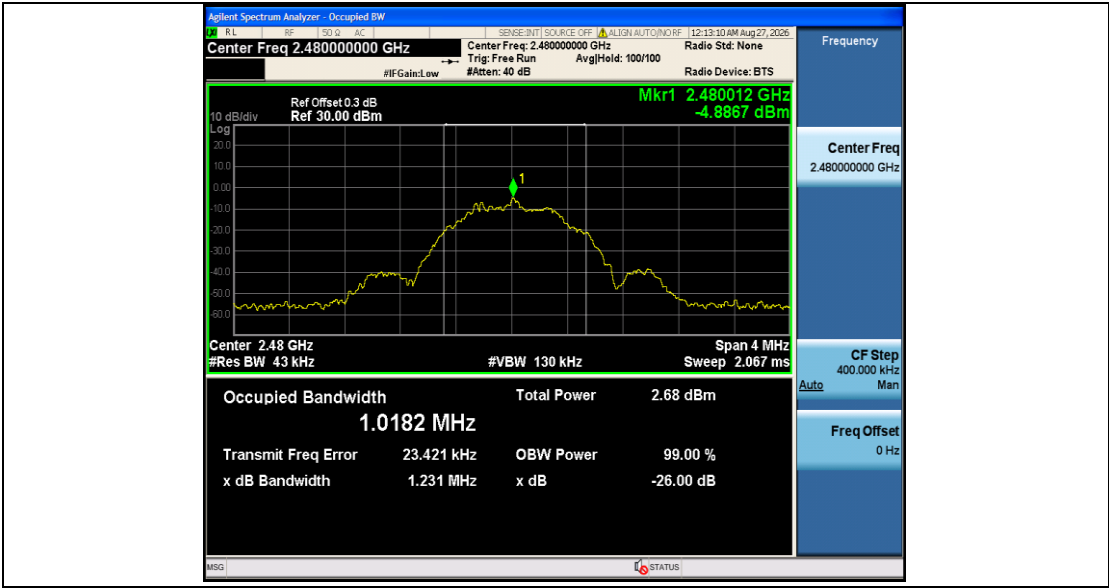
Appendix B: Occupied Channel Bandwidth

Test Result

Test Mode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0052	2401.5196	2402.5248	---	---
		2440	1.0118	2439.5178	2440.5296	---	---
		2480	1.0182	2479.5143	2480.5325	---	---

Test Graphs





Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-3.51	≤30	PASS
		2440	-3.52	≤30	PASS
		2480	-3.78	≤30	PASS

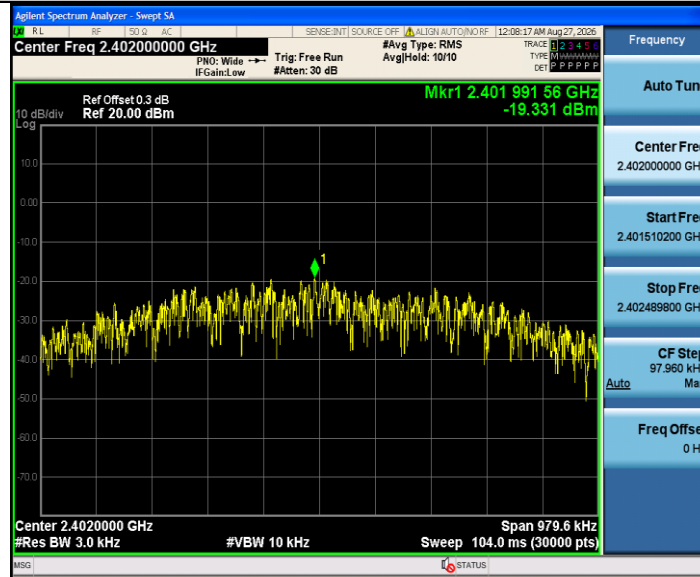
Appendix D: Maximum power spectral density

Test Result

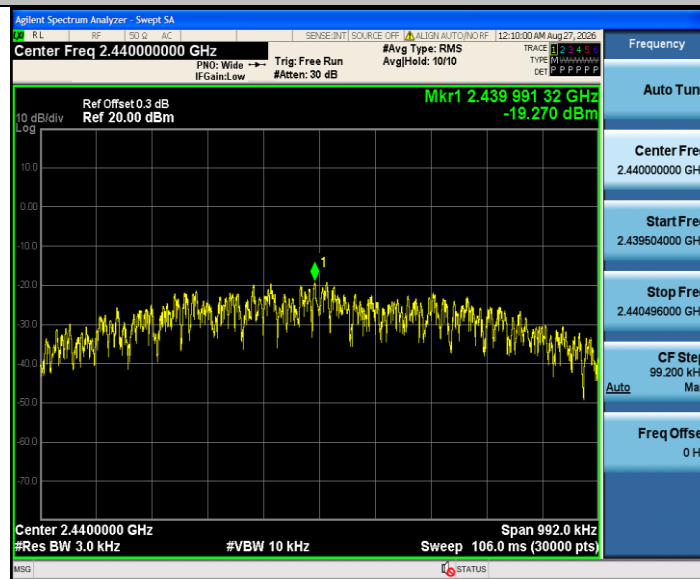
Test Mode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.33	≤8.00	PASS
		2440	-19.27	≤8.00	PASS
		2480	-19.57	≤8.00	PASS

Test Graphs

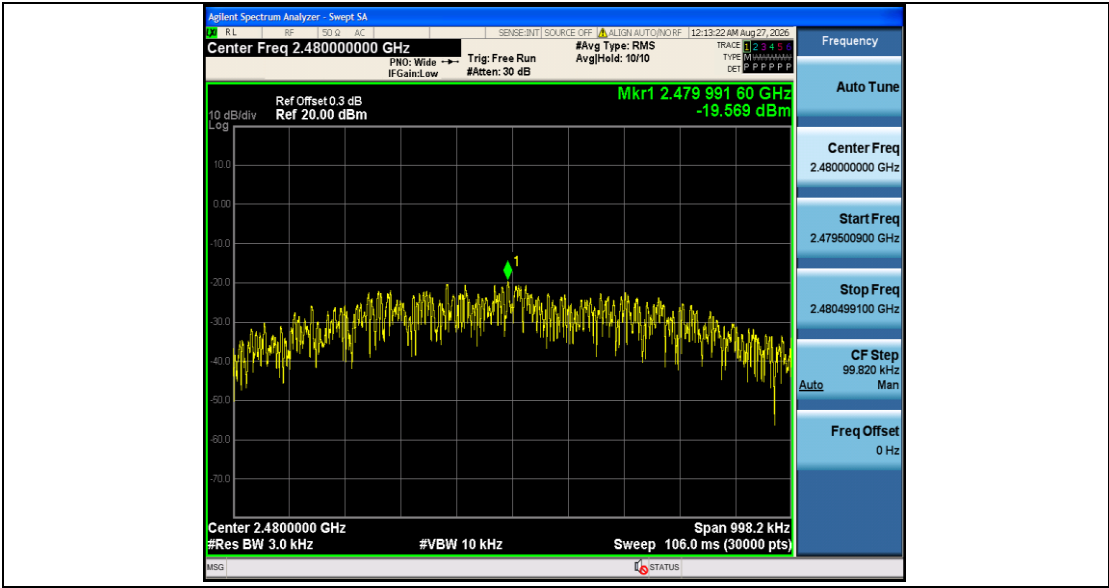
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

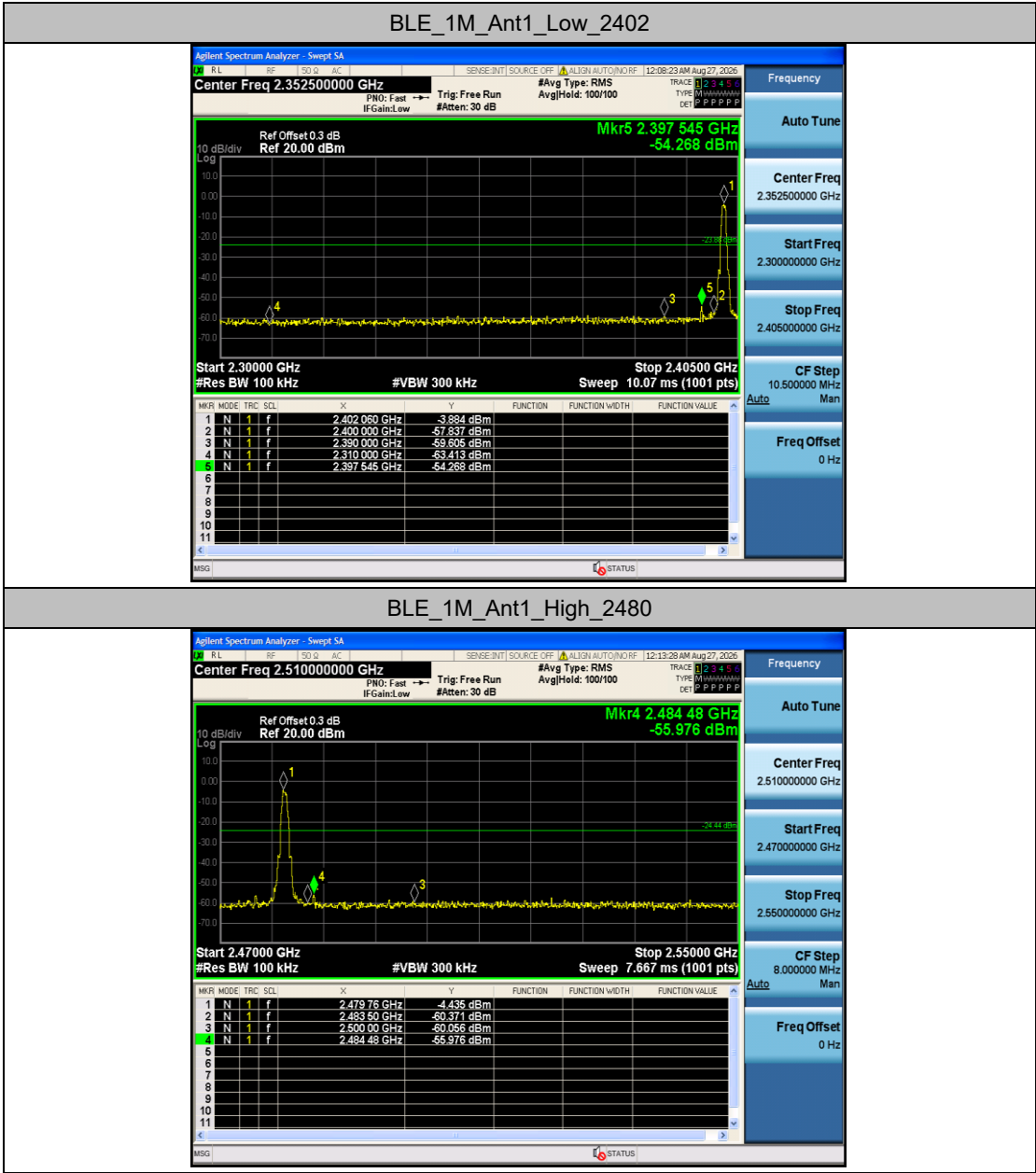


Appendix E: Band edge measurements

Test Result

Test Mode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-3.88	-54.27	≤-23.88	PASS
		High	2480	-4.44	-55.98	≤-24.44	PASS

Test Graphs

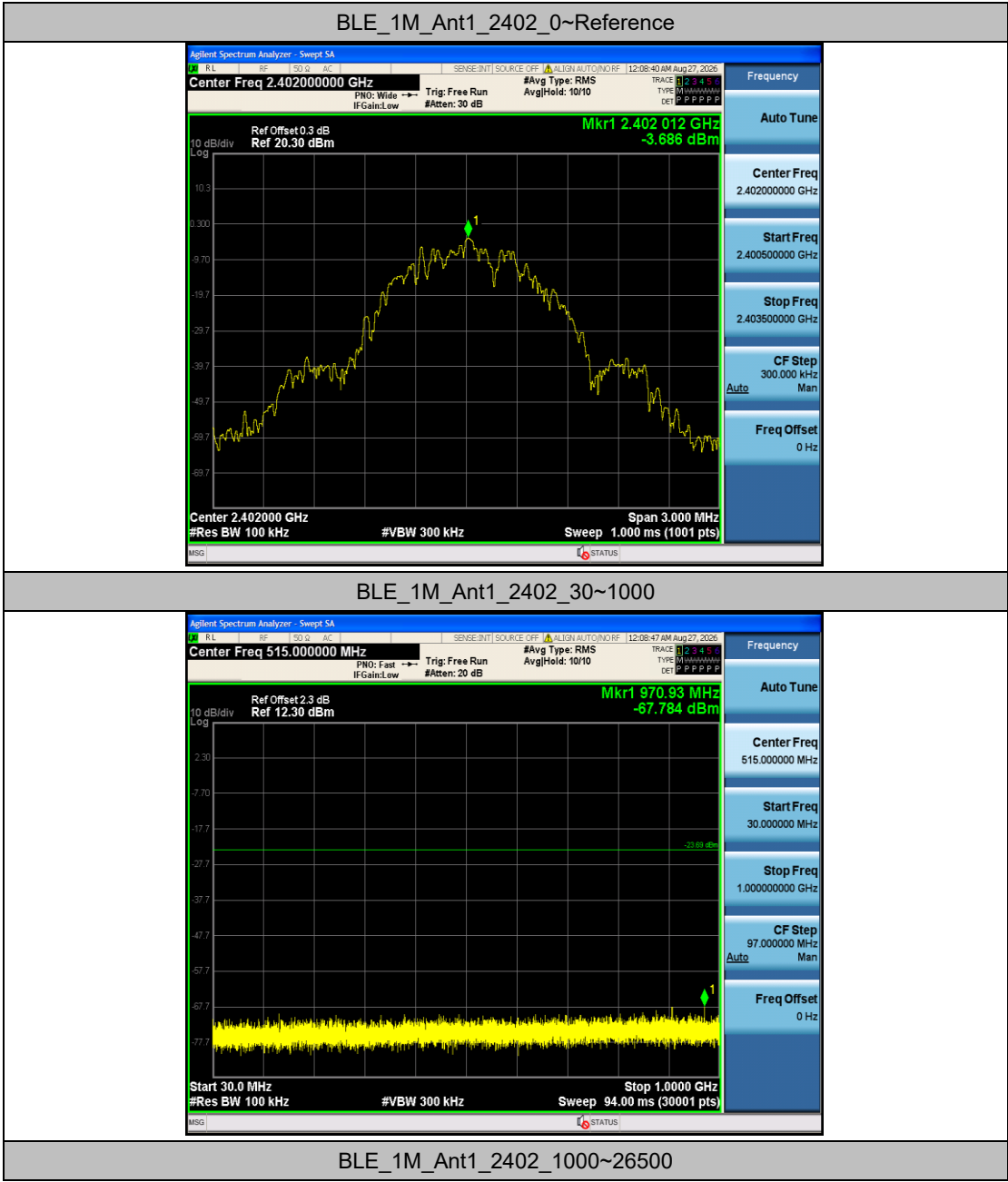


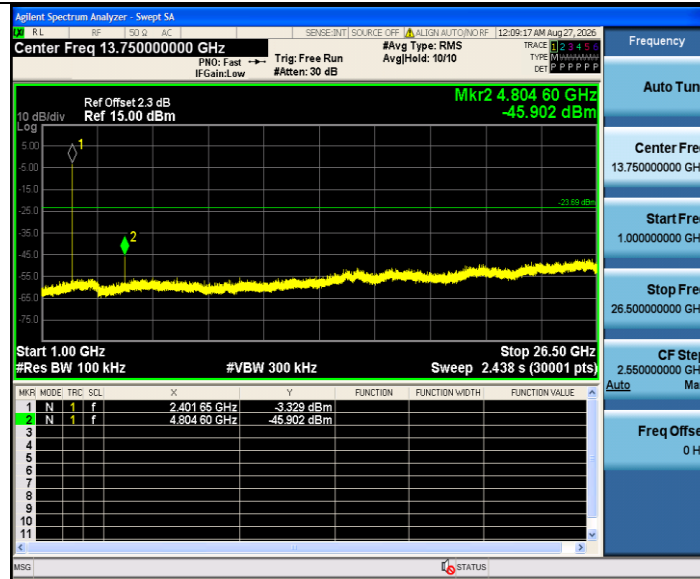
Appendix F: Conducted Spurious Emission

Test Result

Test Mode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-3.69	-3.69	---	PASS
			30~1000	-3.69	-67.78	≤-23.69	PASS
			1000~26500	-3.69	-45.9	≤-23.69	PASS
		2440	Reference	-3.65	-3.65	---	PASS
			30~1000	-3.65	-68.4	≤-23.65	PASS
			1000~26500	-3.65	-46.2	≤-23.65	PASS
		2480	Reference	-5.87	-5.87	---	PASS
			30~1000	-5.87	-68.52	≤-25.87	PASS
			1000~26500	-5.87	-46.59	≤-25.87	PASS

Test Graphs

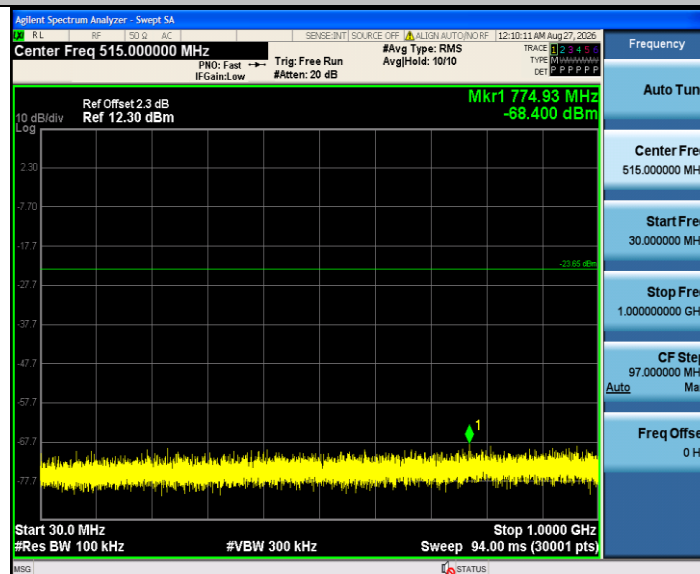




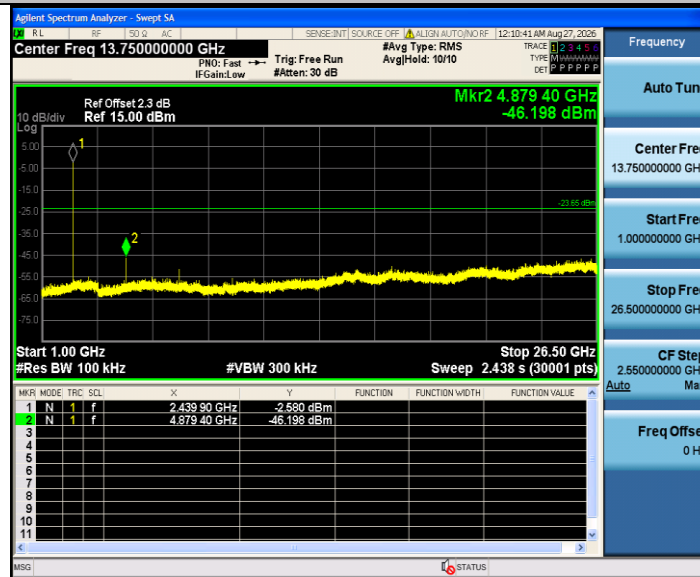
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



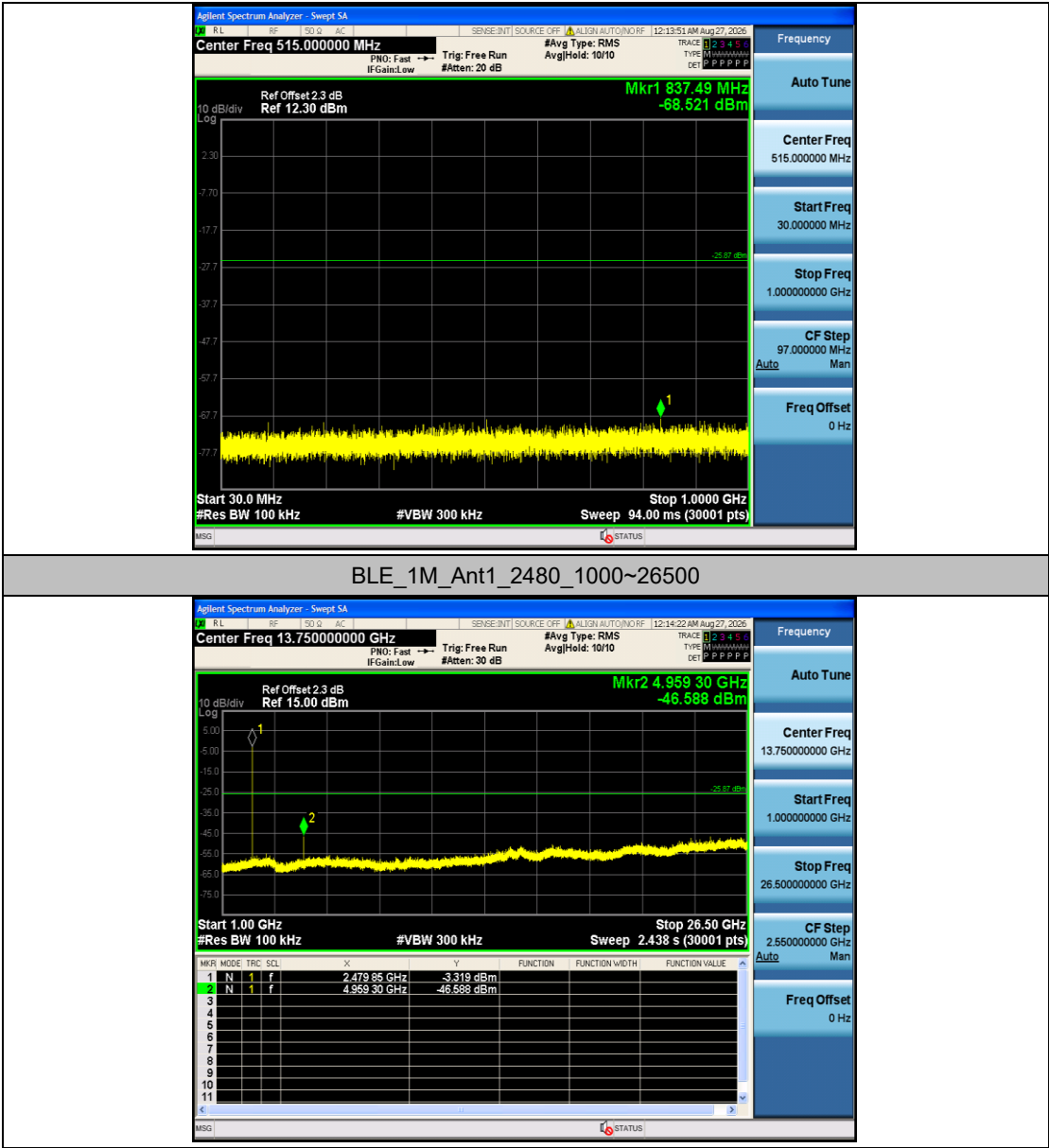
BLE_1M_Ant1_2440_1000~26500



BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000

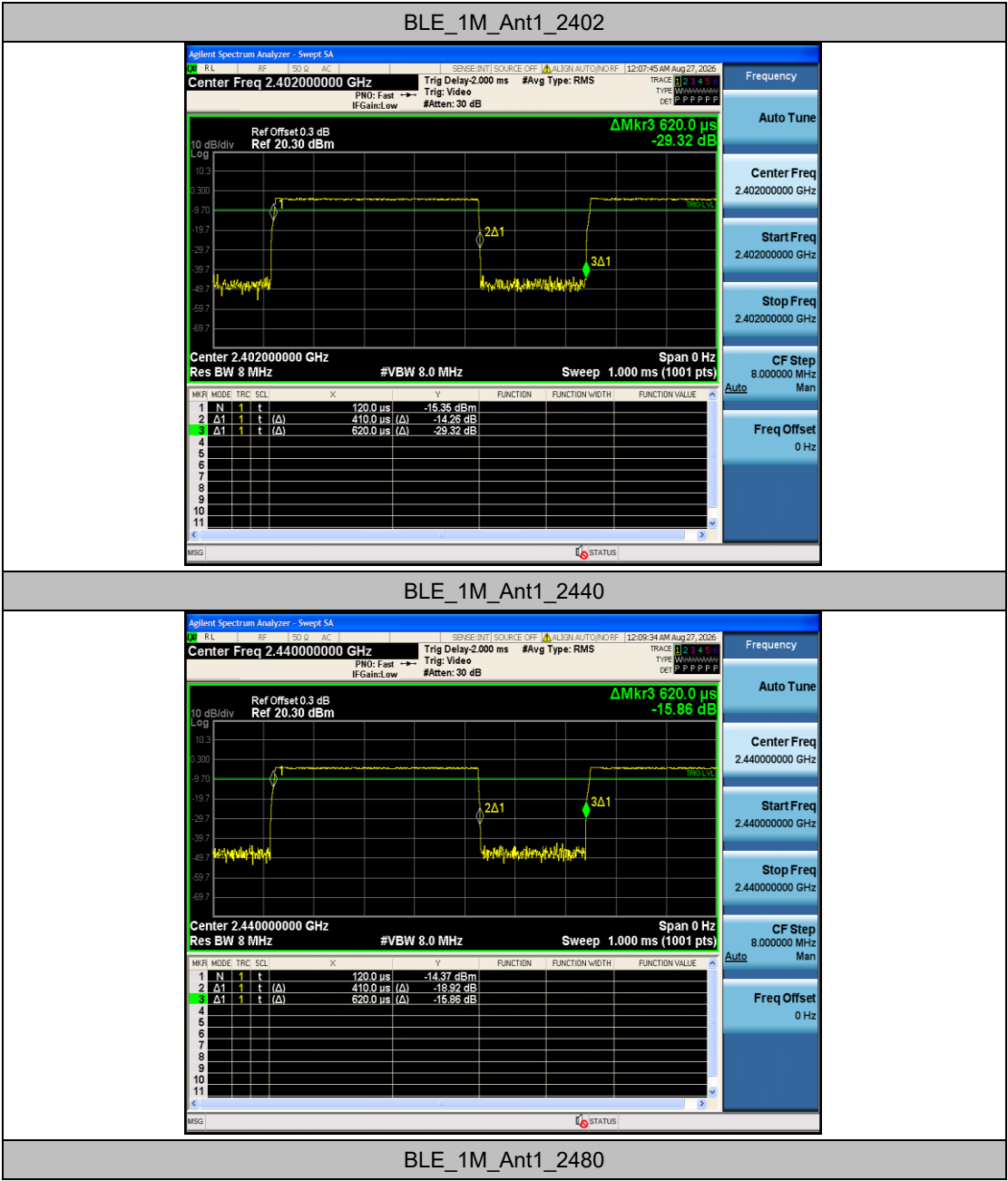


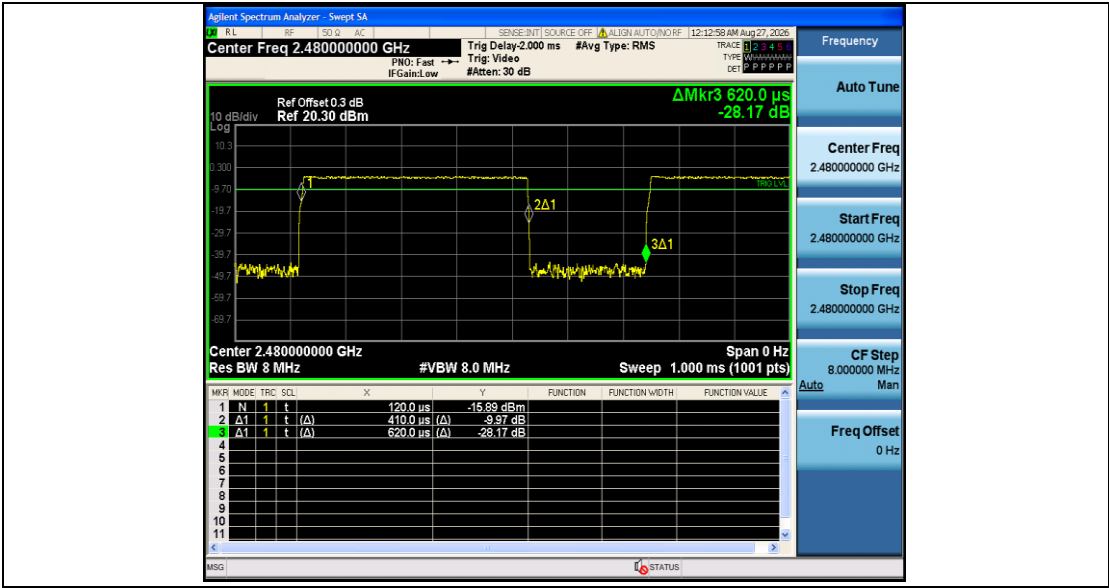
Appendix G: Duty Cycle

Test Result

Test Mode	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

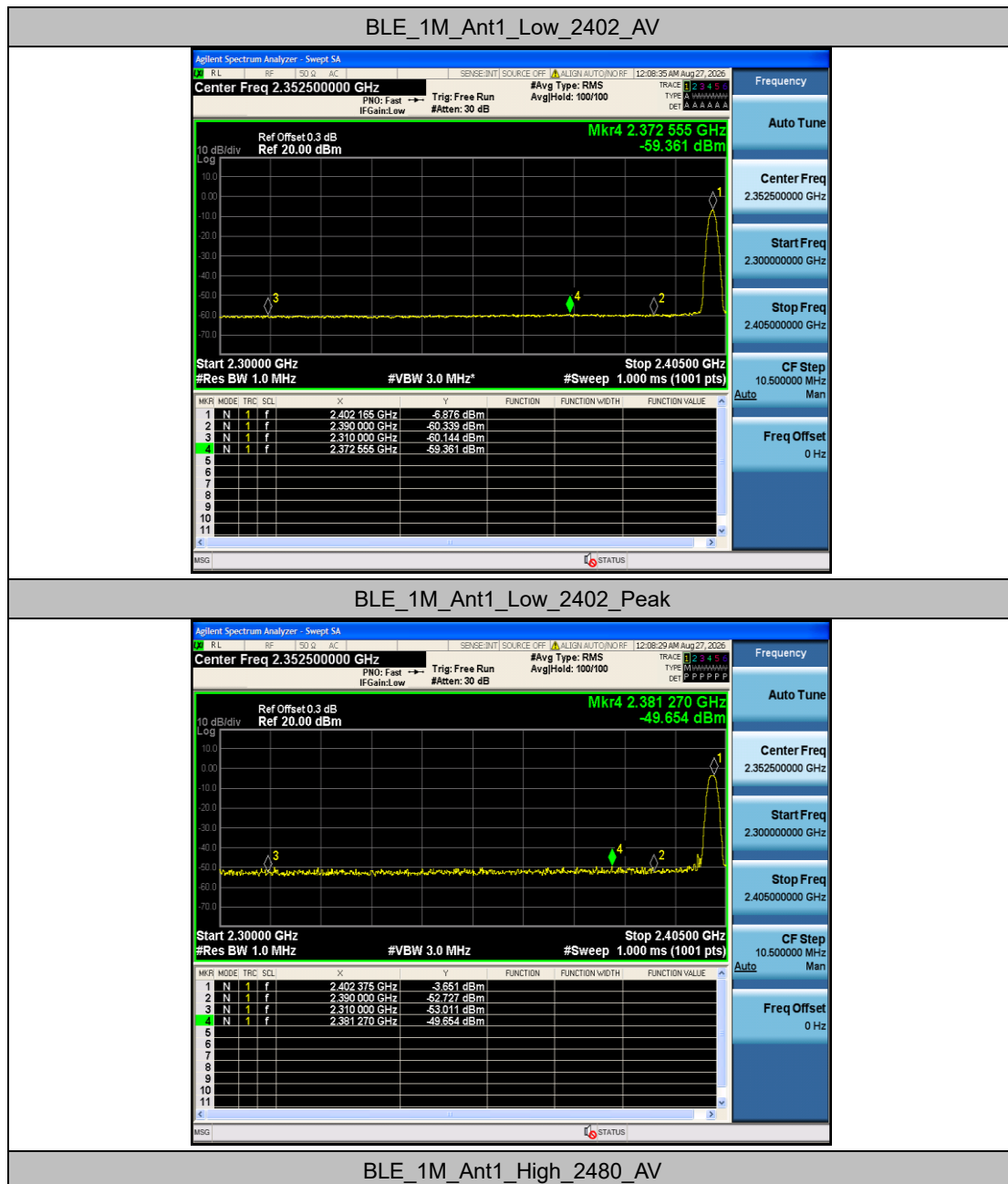
Test Result

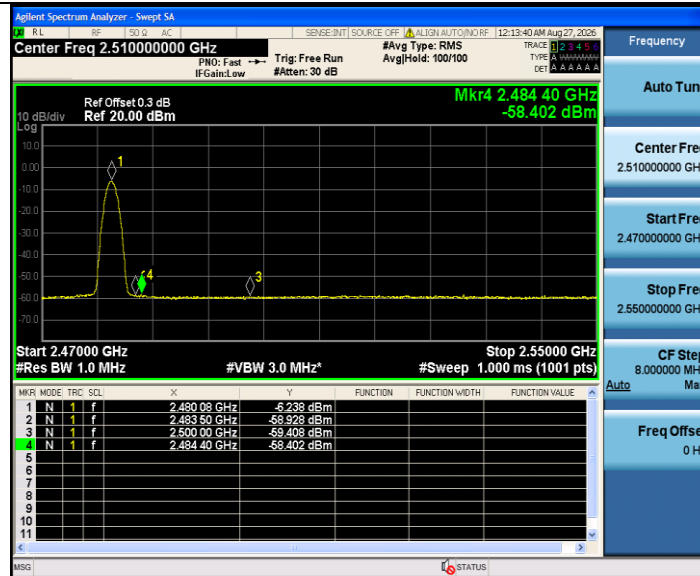
Test Mode	Antenna	Channel Name	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-60.14	2.00	1.80	38.86	≤54	PASS
				AV	2372.555	-59.36	2.00	1.80	39.64	≤54	PASS
				AV	2390.000	-60.34	2.00	1.80	38.66	≤54	PASS
				Peak	2310.000	-53.01	2.00	0.00	44.19	≤74	PASS
				Peak	2381.270	-49.65	2.00	0.00	47.55	≤74	PASS
				Peak	2390.000	-52.73	2.00	0.00	44.47	≤74	PASS
		High	2480	AV	2483.500	-58.93	2.00	1.80	40.07	≤54	PASS
				AV	2484.400	-58.4	2.00	1.80	40.60	≤54	PASS
				AV	2500.000	-59.41	2.00	1.80	39.59	≤54	PASS
				Peak	2483.500	-49.93	2.00	0.00	47.27	≤74	PASS
				Peak	2483.760	-49.29	2.00	0.00	47.91	≤74	PASS
				Peak	2500.000	-51.67	2.00	0.00	45.53	≤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

