

FCC Appendix RF Test Data for BLE

FCC ID : 2A9JD-Q3S

Company : Shenzhen Jingyun Wulian Technology CO.,Ltd

EUT : smart glasses

Model Number : Q3S

Report No. : CTA26071700201

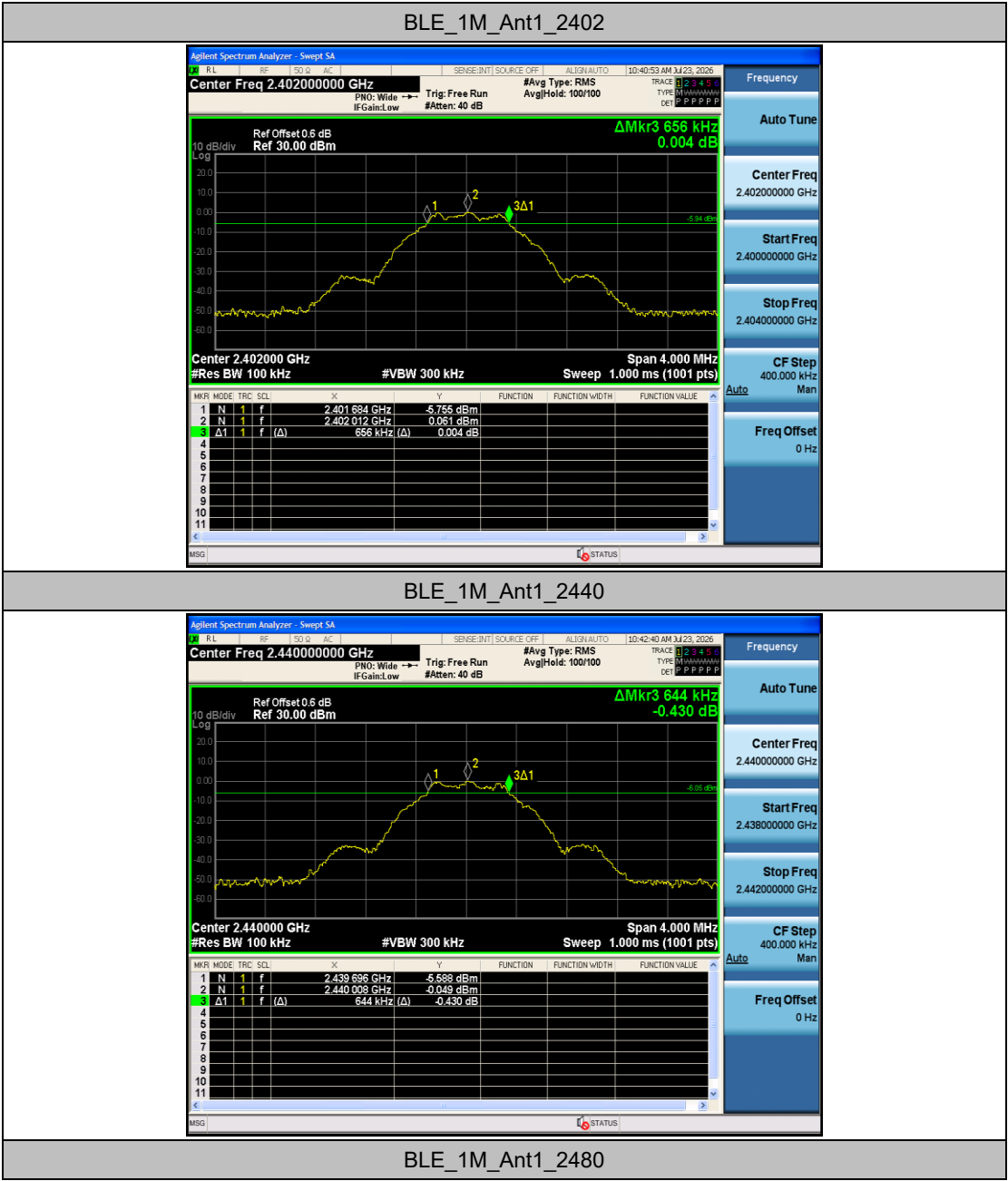
Reviewed By : Eric Wang

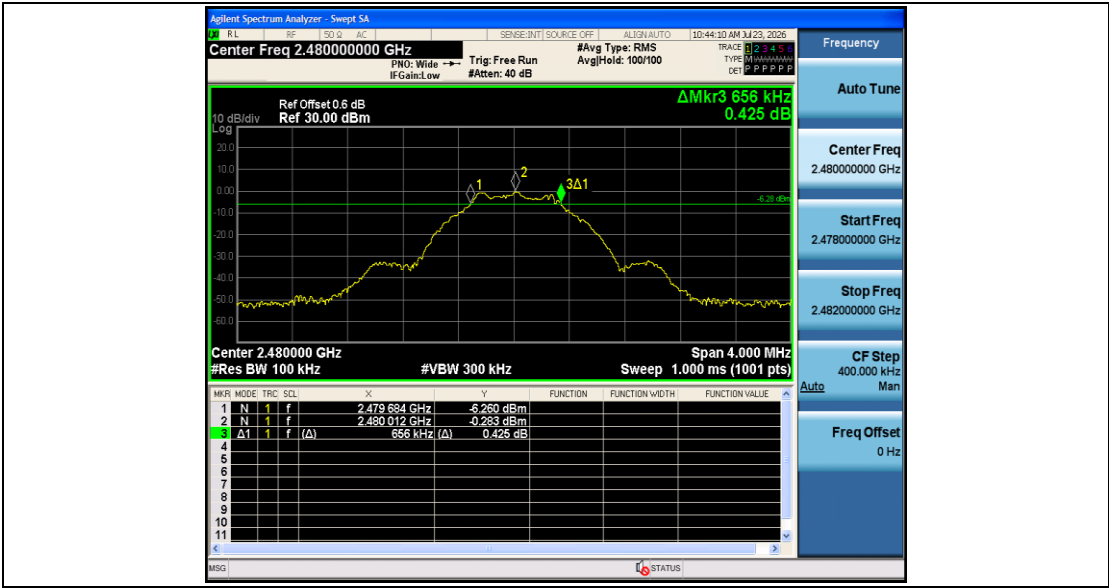
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.656	2401.684	2402.340	0.5	PASS
		2440	0.644	2439.696	2440.340	0.5	PASS
		2480	0.656	2479.684	2480.340	0.5	PASS

Test Graphs



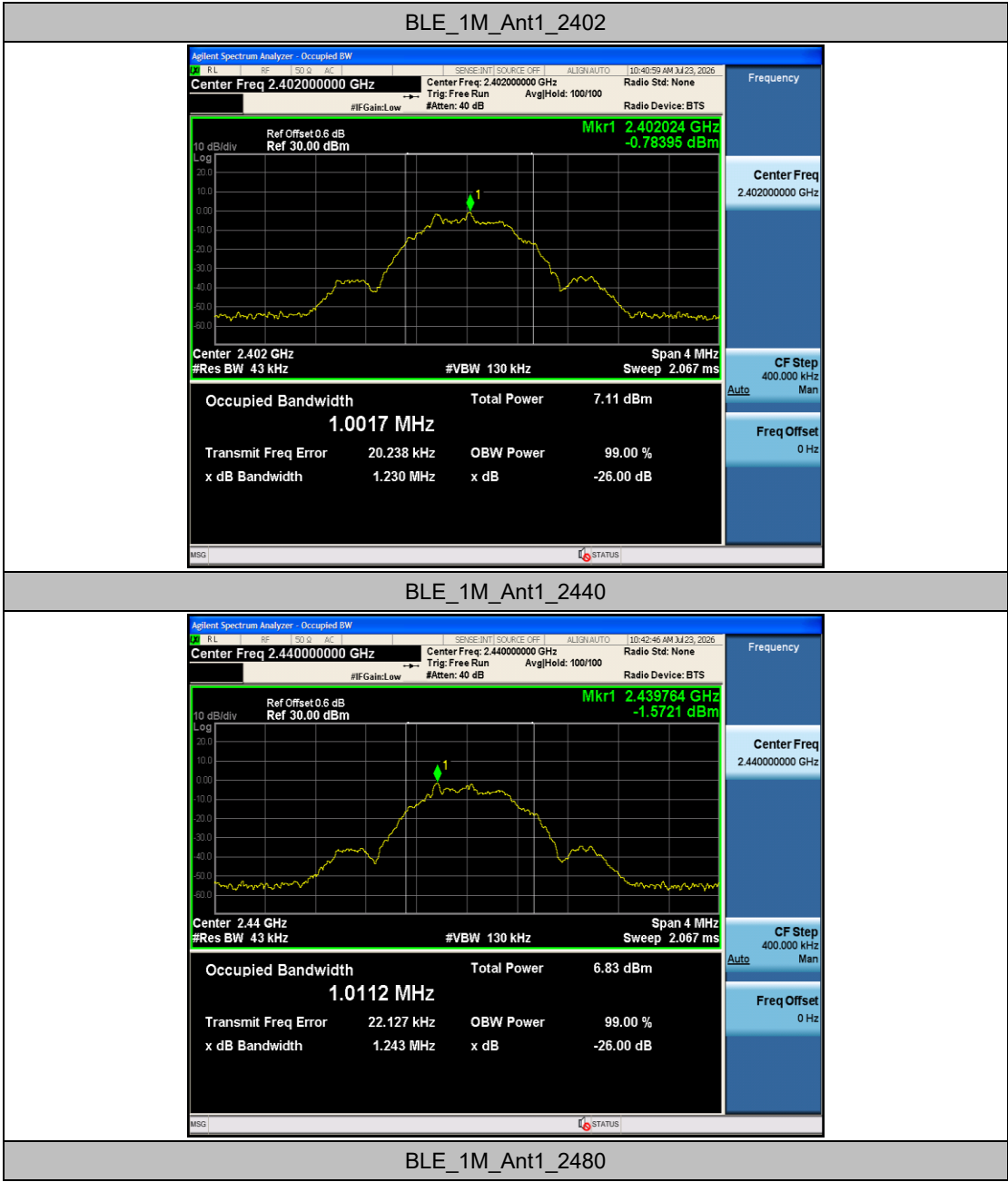


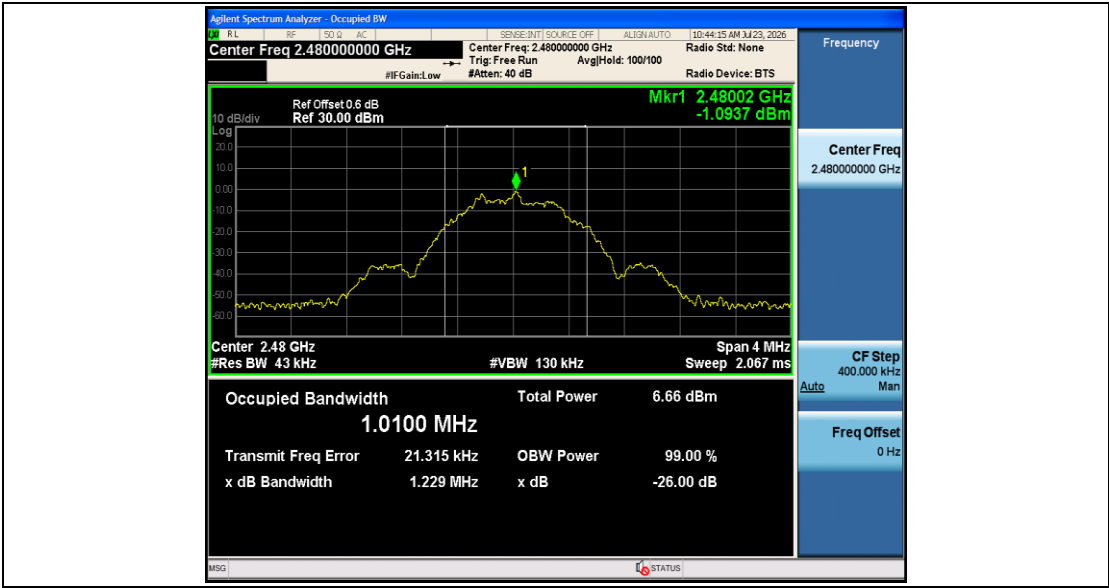
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0017	2401.5194	2402.5211	---	---
		2440	1.0112	2439.5165	2440.5277	---	---
		2480	1.0100	2479.5163	2480.5263	---	---

Test Graphs





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	0.30	≤30	PASS
		2440	0.23	≤30	PASS
		2480	-0.05	≤30	PASS

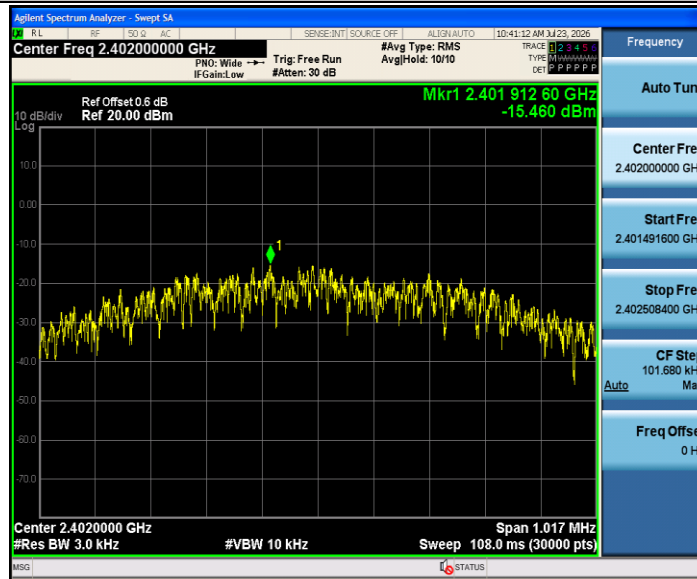
Appendix D: Maximum power spectral density

Test Result

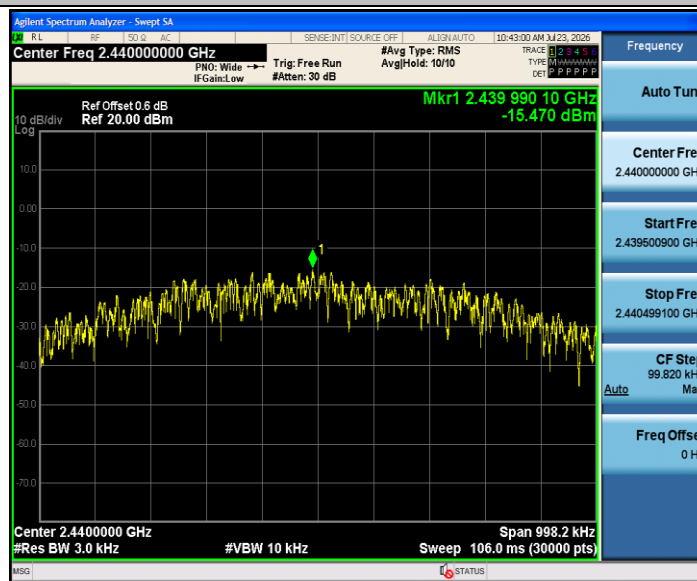
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.46	≤8.00	PASS
		2440	-15.47	≤8.00	PASS
		2480	-15.74	≤8.00	PASS

Test Graphs

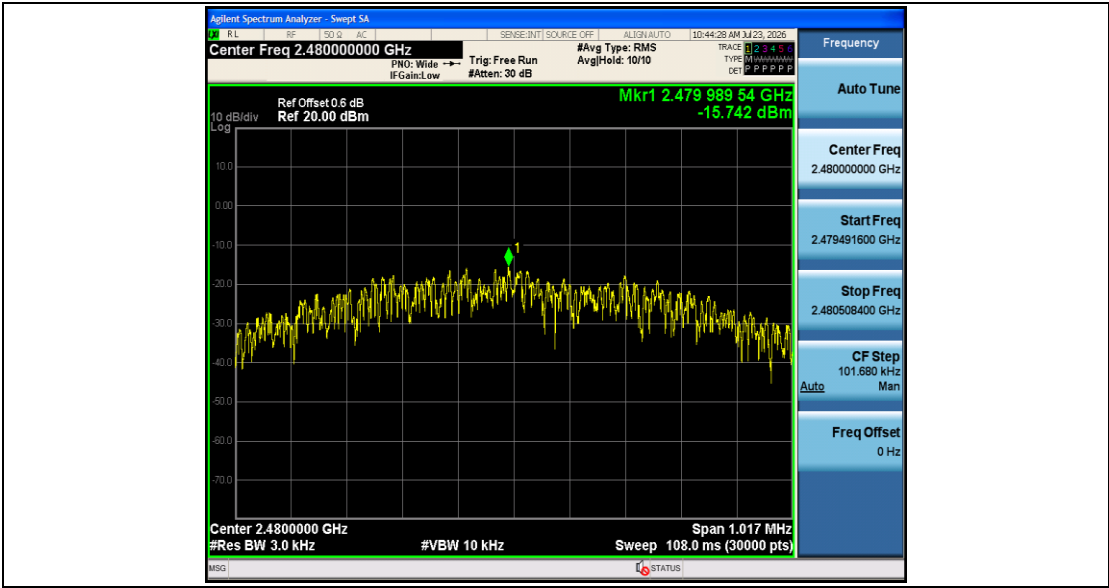
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

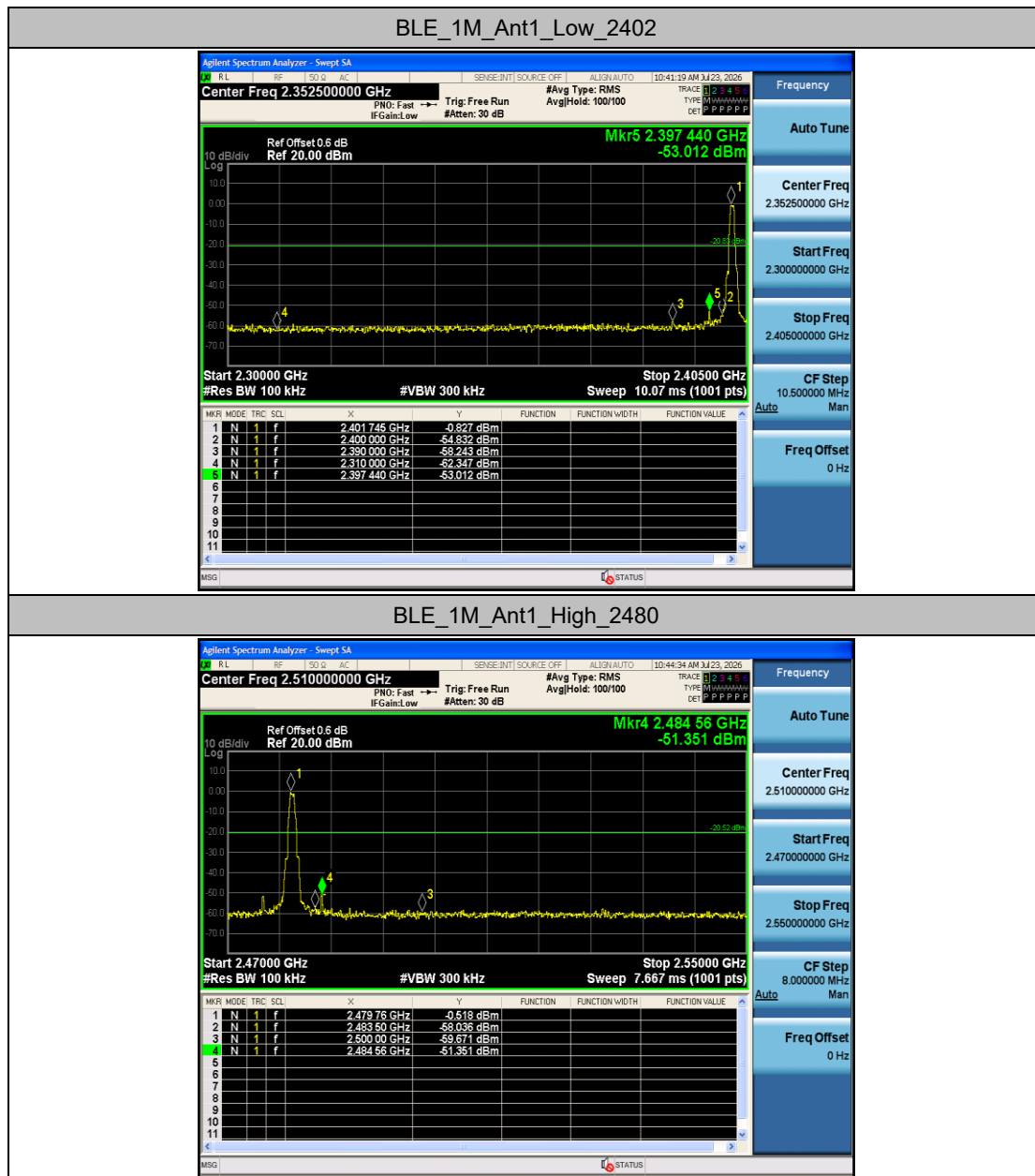


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-0.83	-53.01	≤ -20.83	PASS
		High	2480	-0.52	-51.35	≤ -20.52	PASS

Test Graphs

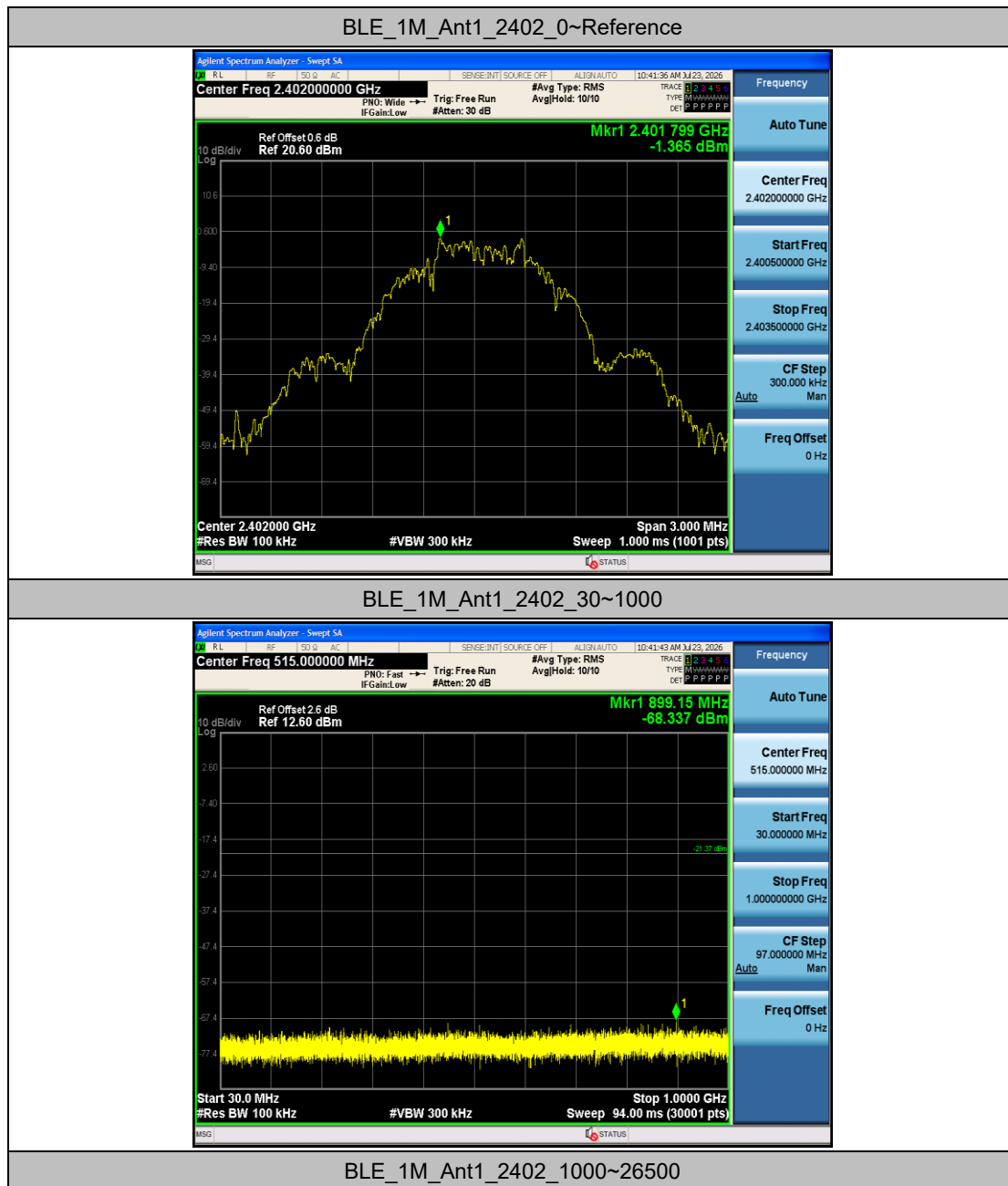


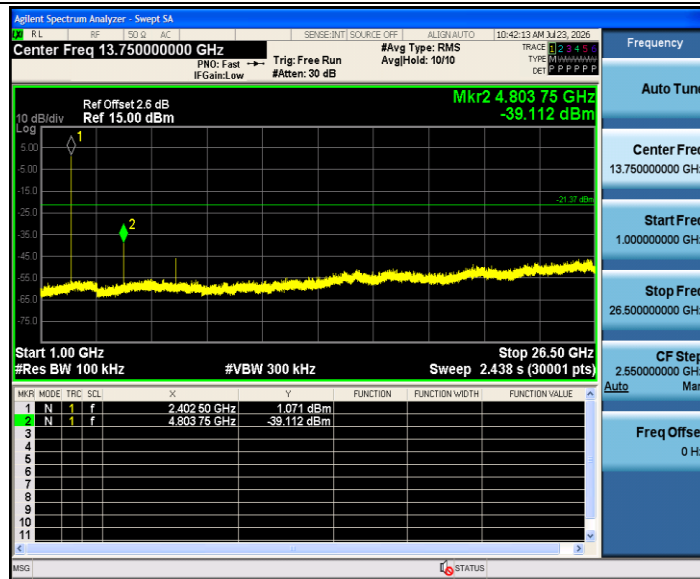
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-1.37	-1.37	---	PASS
			30~1000	-1.37	-68.34	≤-21.37	PASS
			1000~26500	-1.37	-39.11	≤-21.37	PASS
		2440	Reference	-1.38	-1.38	---	PASS
			30~1000	-1.38	-69.43	≤-21.38	PASS
			1000~26500	-1.38	-36.71	≤-21.38	PASS
		2480	Reference	-1.11	-1.11	---	PASS
			30~1000	-1.11	-68.5	≤-21.11	PASS
			1000~26500	-1.11	-42.22	≤-21.11	PASS

Test Graphs

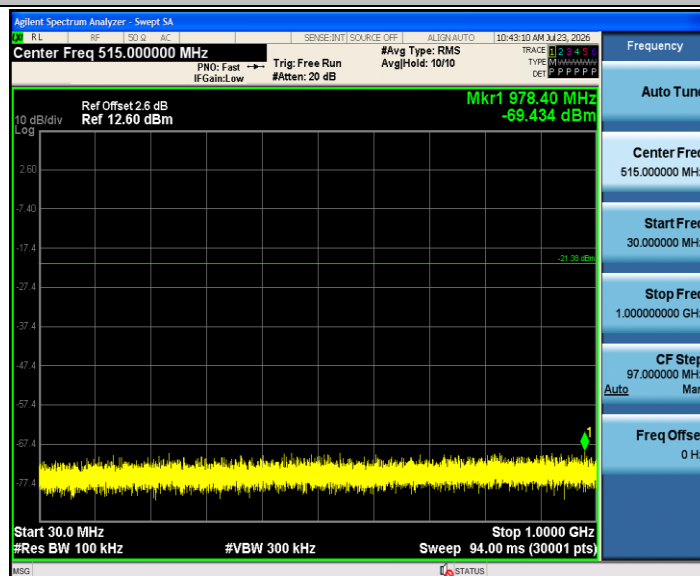




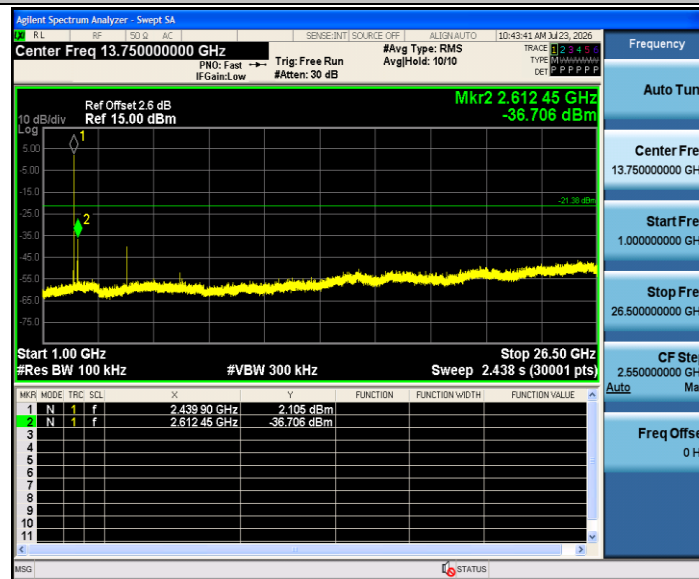
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



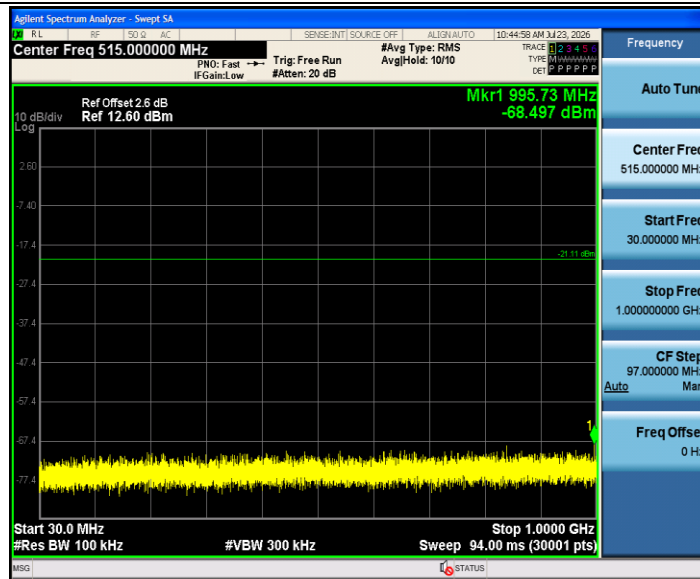
BLE_1M_Ant1_2440_1000~26500



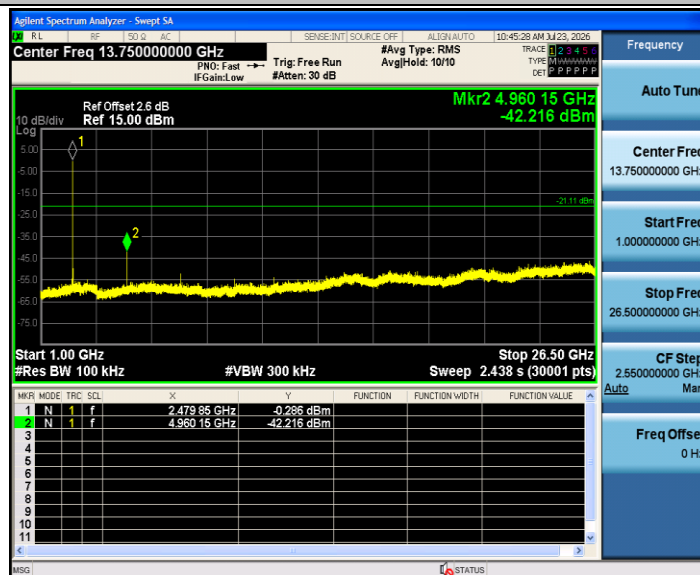
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500

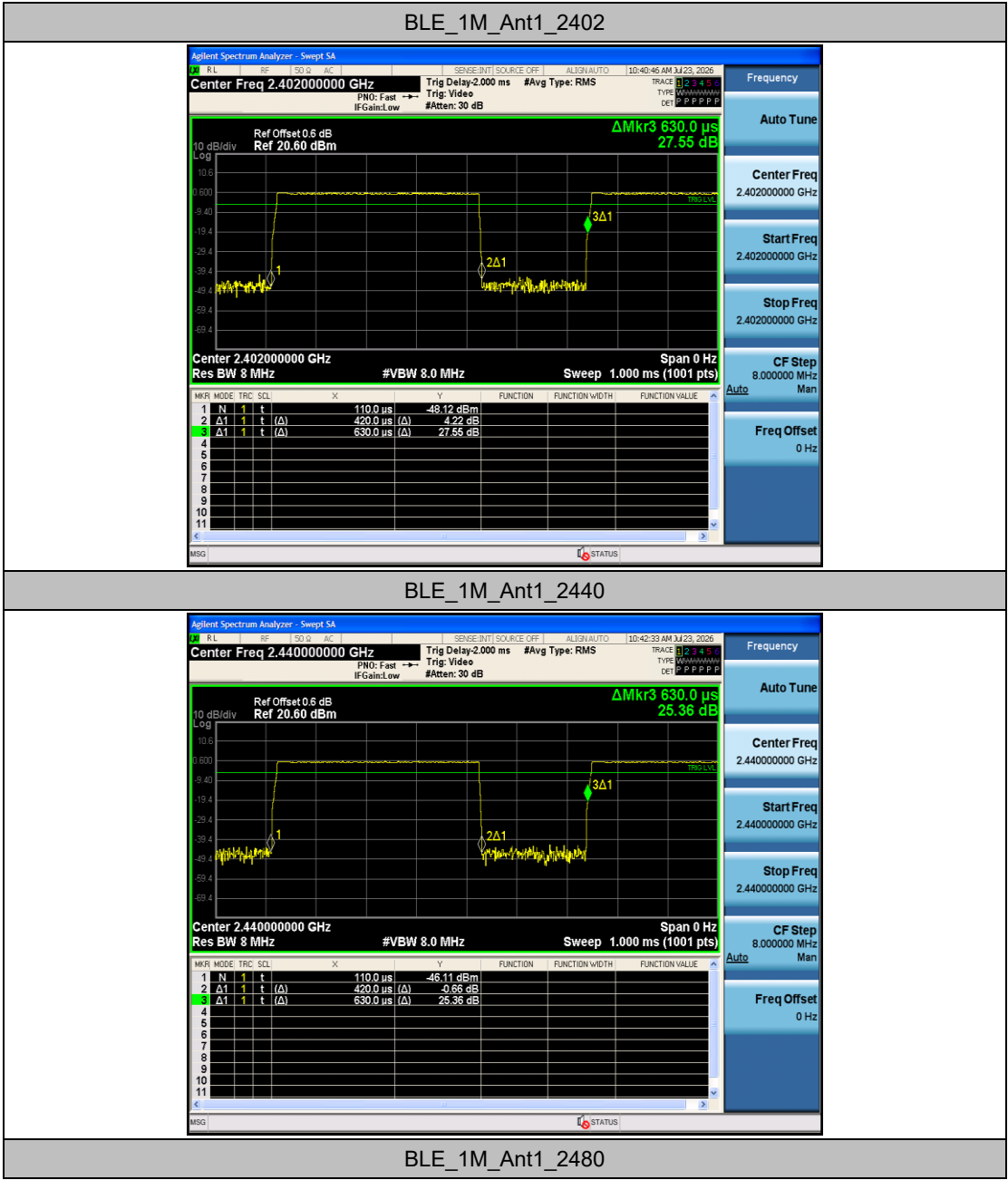


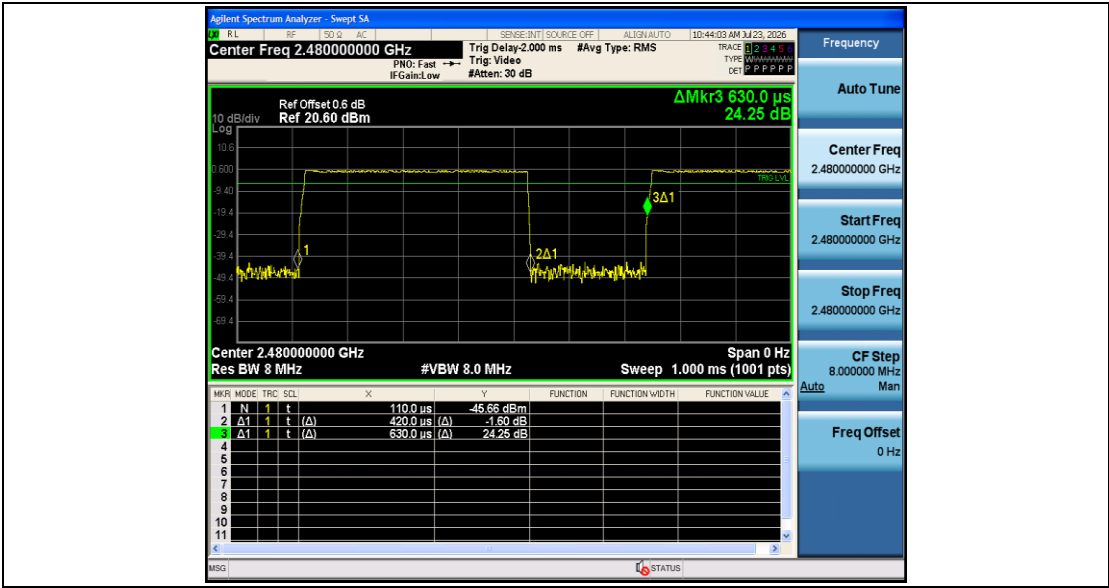
Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	0.42	0.63	0.6667	66.67	1.76	---	---
		2440	0.42	0.63	0.6667	66.67	1.76	---	---
		2480	0.42	0.63	0.6667	66.67	1.76	---	---

Test Graphs





Appendix H: Emissions in Restricted Bands

Test Result

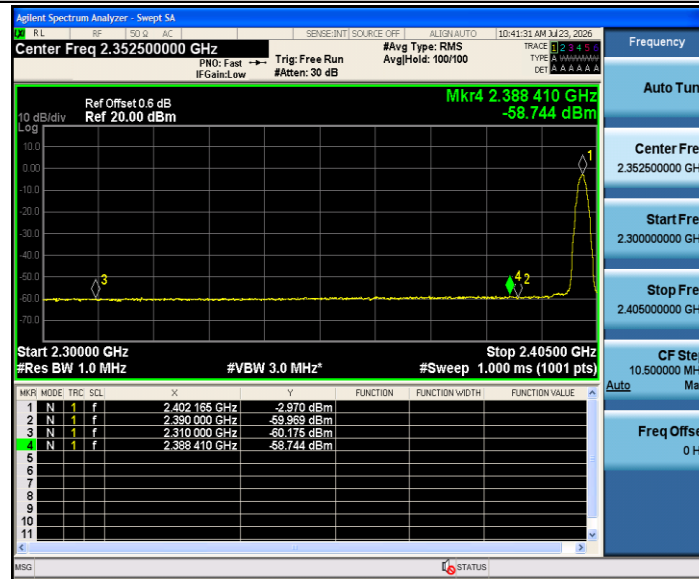
TestMode	Antenna	Channel Name	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBUV/m]	Limit [dBUV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-60.18	2.00	1.76	38.78	≤54	PASS
				AV	2388.410	-58.74	2.00	1.76	40.22	≤54	PASS
				AV	2390.000	-59.97	2.00	1.76	38.99	≤54	PASS
				Peak	2310.000	-51.74	2.00	0.00	45.46	≤74	PASS
				Peak	2386.205	-48.32	2.00	0.00	48.88	≤74	PASS
				Peak	2390.000	-50.57	2.00	0.00	46.63	≤74	PASS
		High	2480	AV	2483.500	-57.44	2.00	1.76	41.52	≤54	PASS
				AV	2483.600	-57.2	2.00	1.76	41.76	≤54	PASS
				AV	2500.000	-59.56	2.00	1.76	39.40	≤54	PASS
				Peak	2483.500	-48.97	2.00	0.00	48.23	≤74	PASS
				Peak	2485.040	-47.7	2.00	0.00	49.50	≤74	PASS
				Peak	2500.000	-51.71	2.00	0.00	45.49	≤74	PASS

Note:

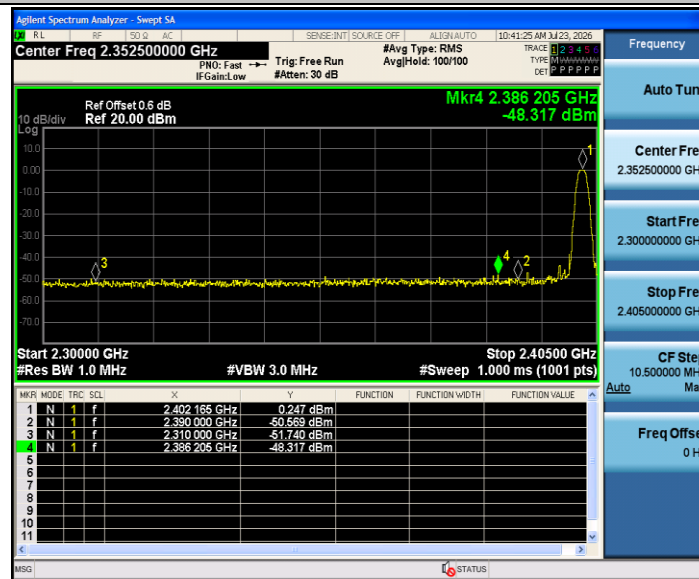
- The limit in dBm for average detector is conversion from 54dBUV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

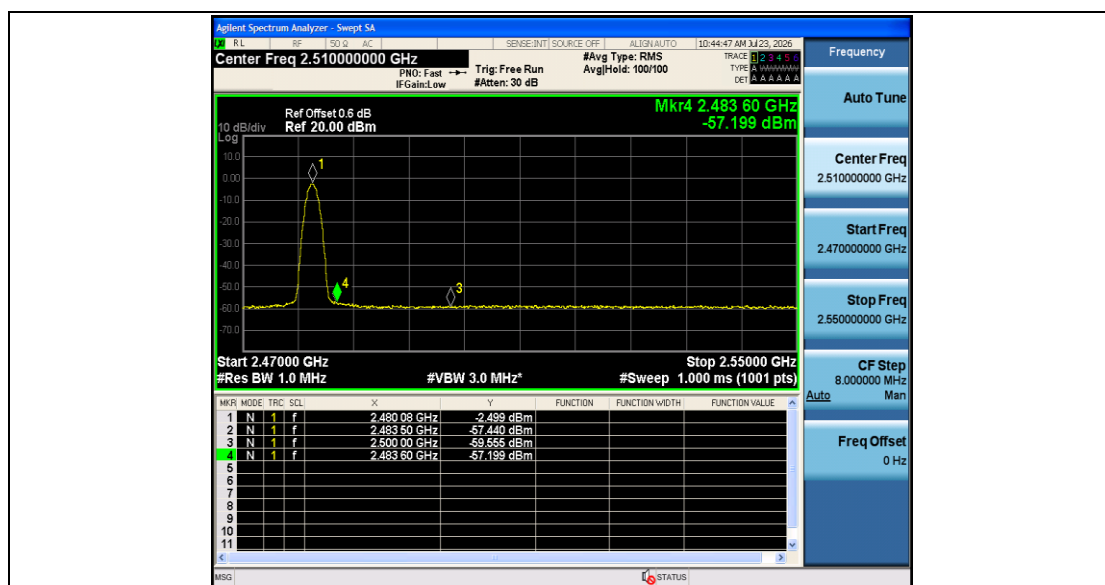
BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

