

Appendix B

RF Test Data for BT LE (Conducted Measurement)

Product Name: Tablet

Test Model: MegaPad

Environmental Conditions

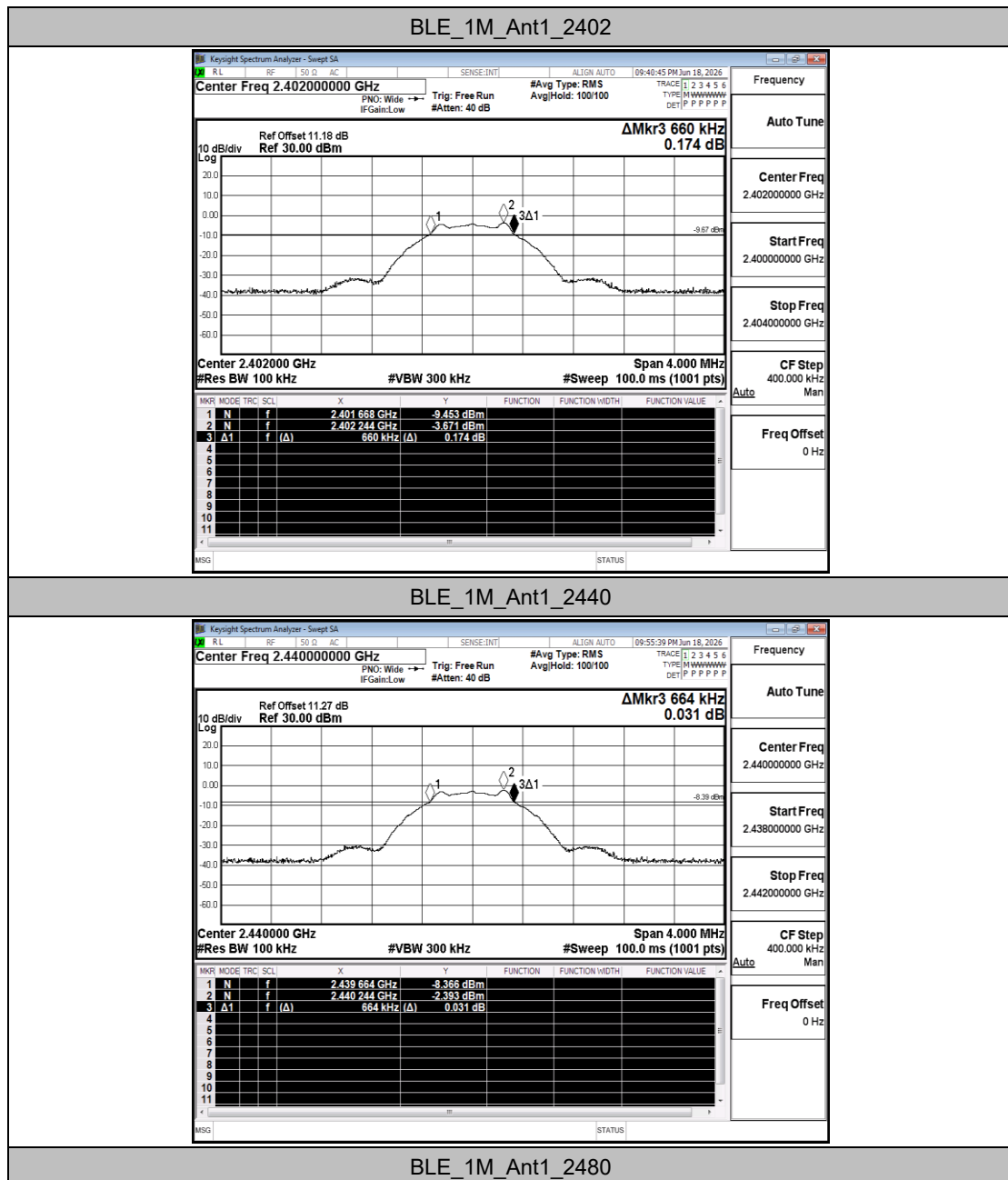
Temperature:	24.1°C
Relative Humidity:	53.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

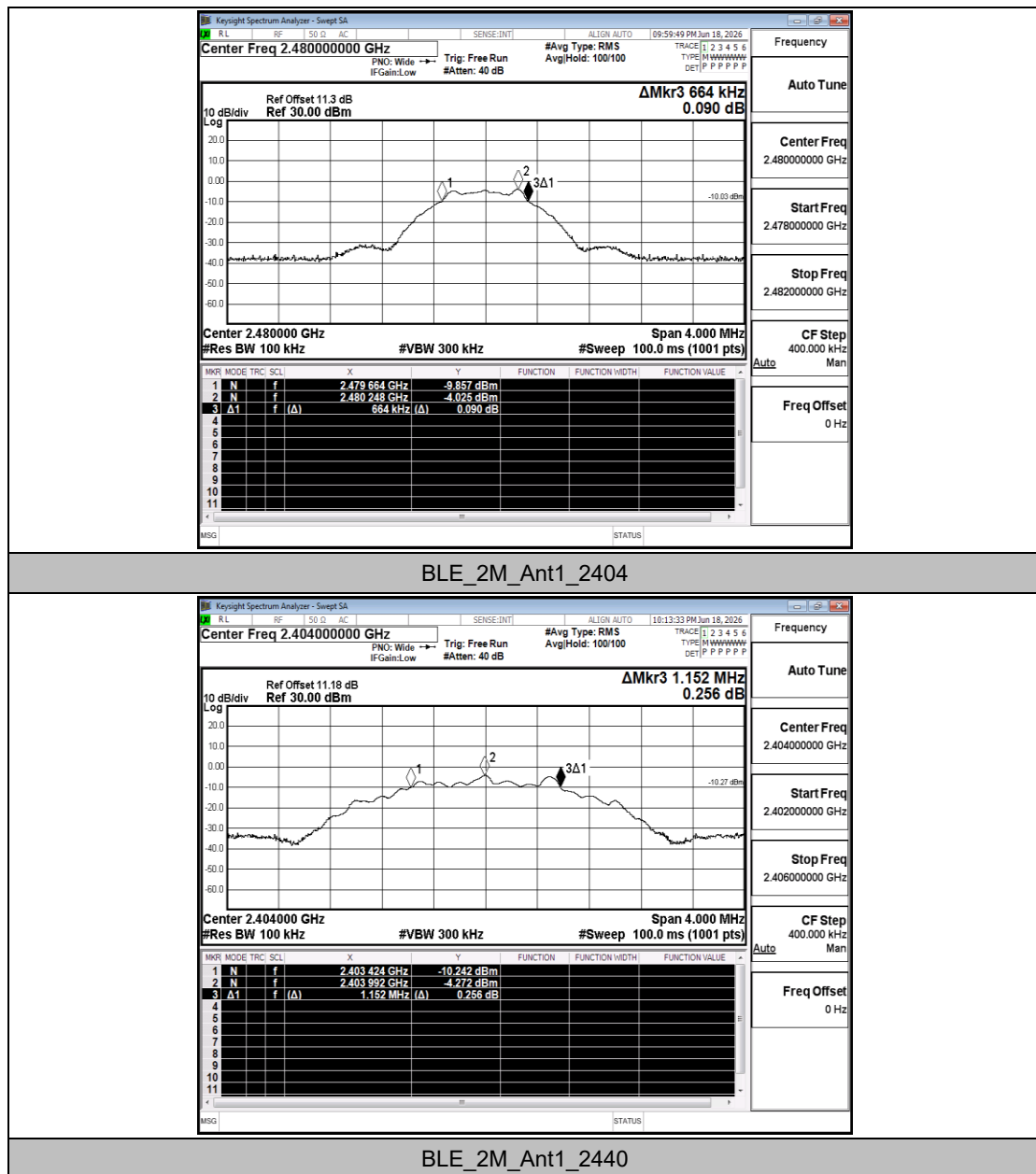
B.1 DTS Bandwidth

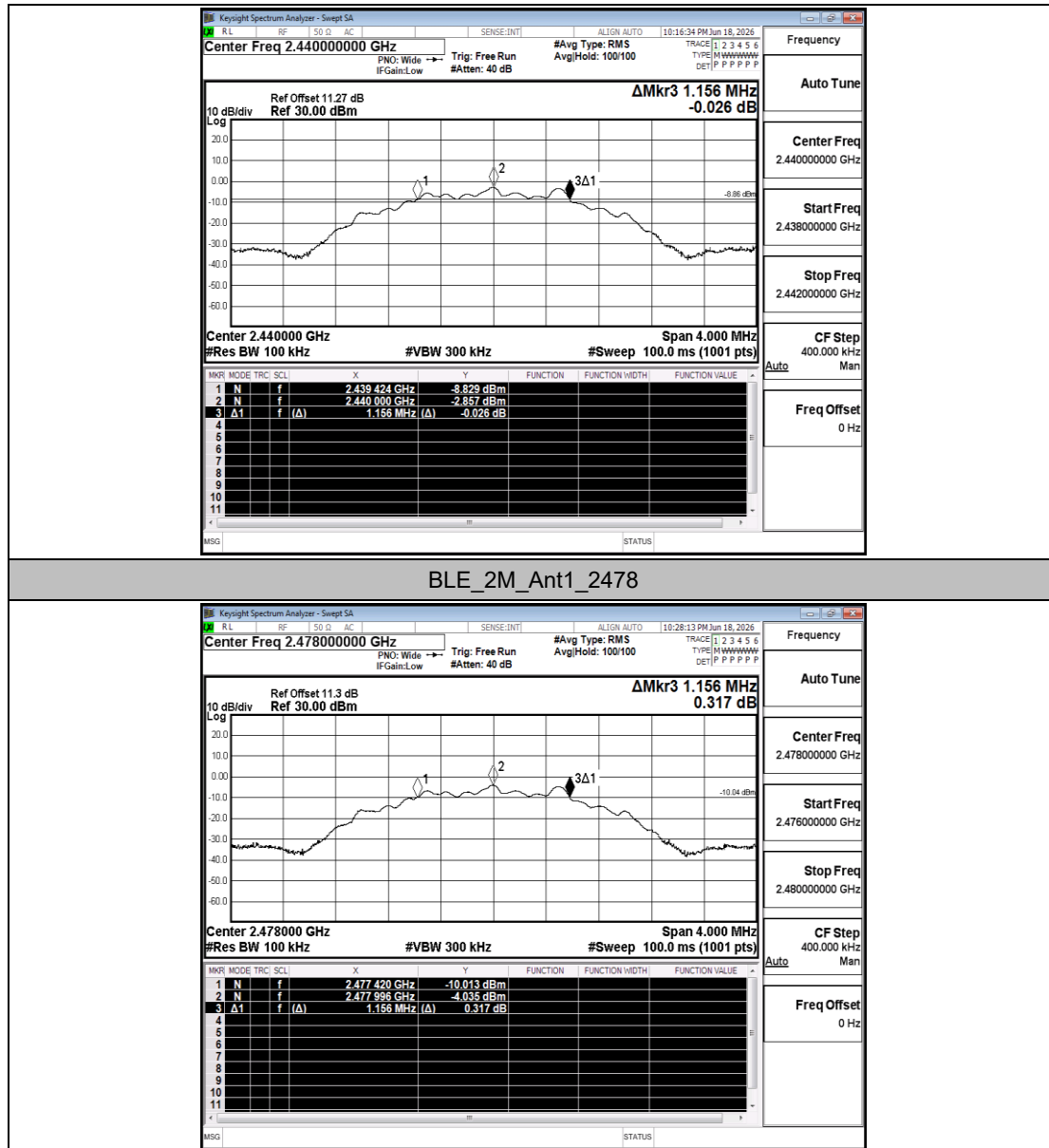
Test Result

TestMode	Antenna	Freq (MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
BLE_1M	Ant1	2402	0.660	2401.668	2402.328	0.5	PASS
		2440	0.664	2439.664	2440.328	0.5	PASS
		2480	0.664	2479.664	2480.328	0.5	PASS
BLE_2M	Ant1	2404	1.152	2403.424	2404.576	0.5	PASS
		2440	1.156	2439.424	2440.580	0.5	PASS
		2478	1.156	2477.420	2478.576	0.5	PASS

Test Graphs





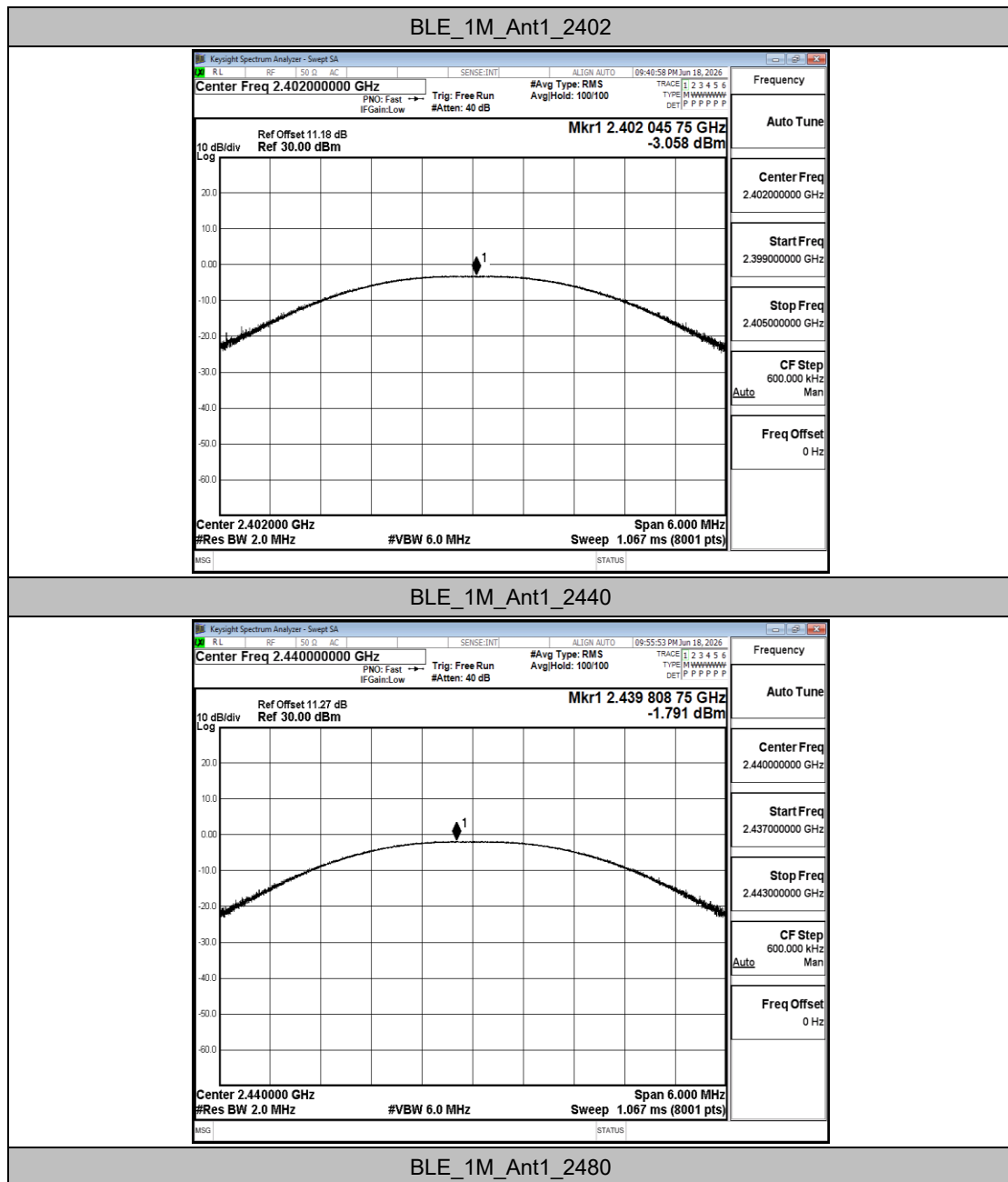


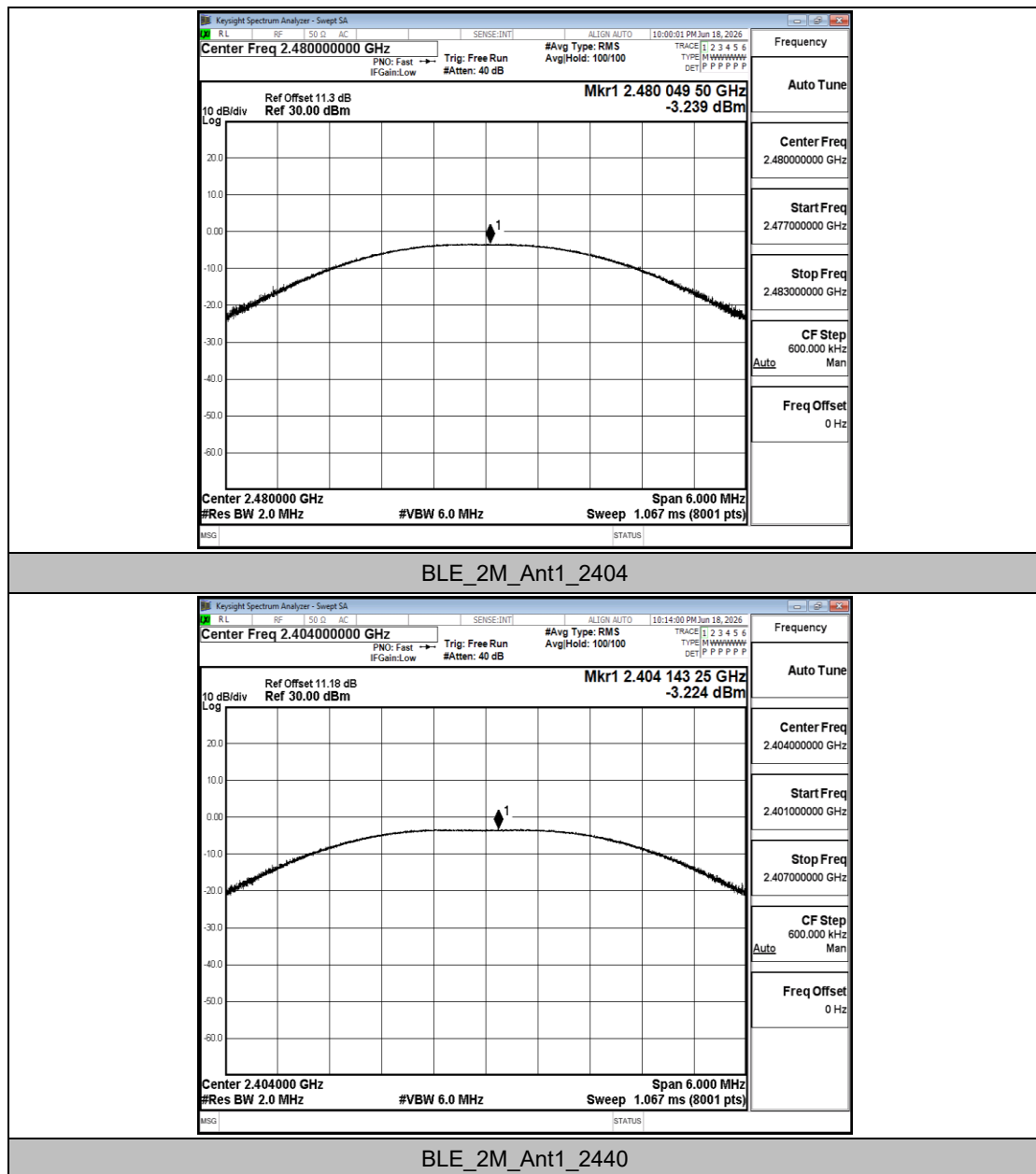
B.2 Maximum Peak conducted output power

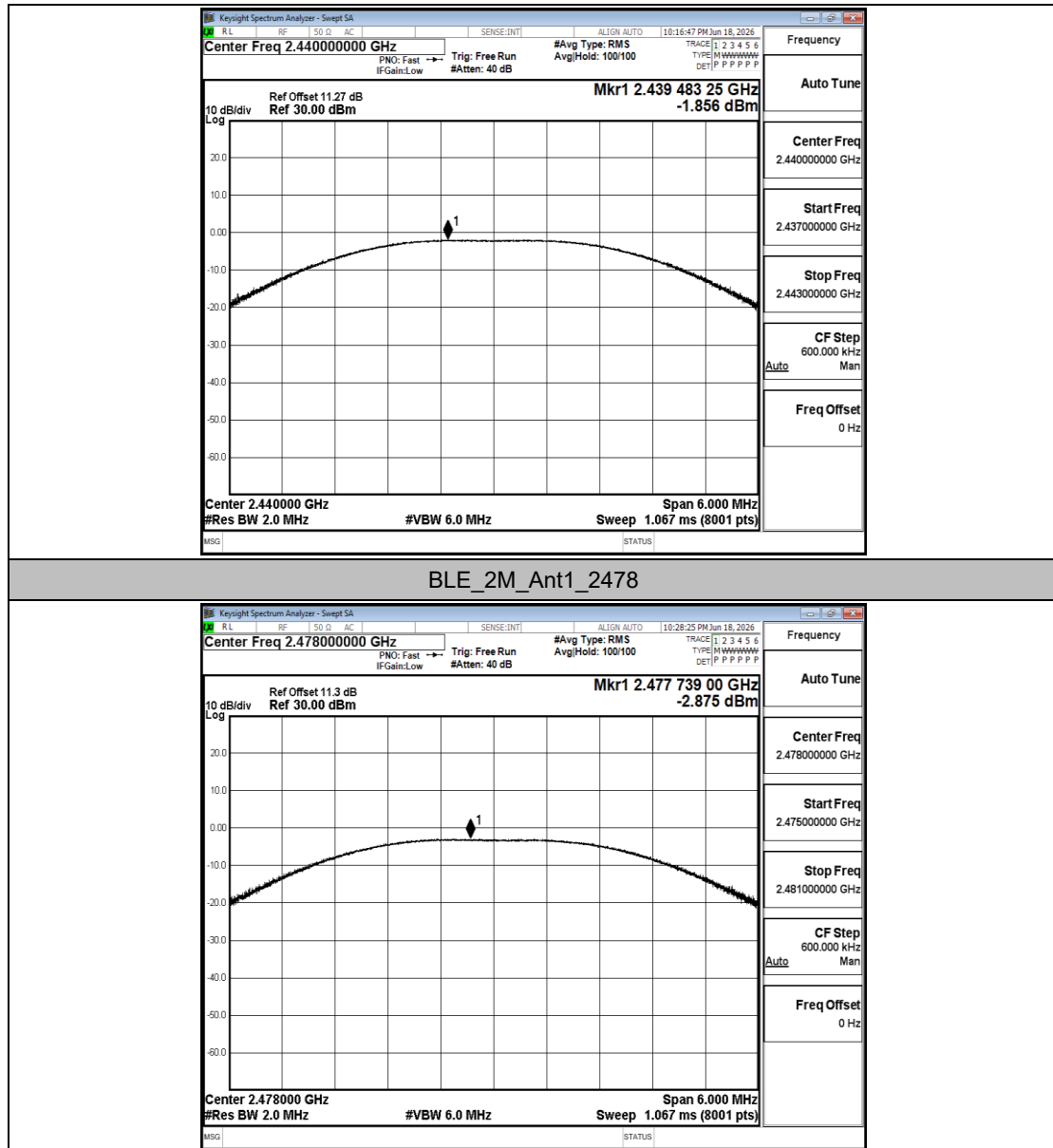
Test Result Peak

TestMode	Antenna	Freq (MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-3.06	≤30	PASS
		2440	-1.79	≤30	PASS
		2480	-3.24	≤30	PASS
BLE_2M	Ant1	2404	-3.22	≤30	PASS
		2440	-1.86	≤30	PASS
		2478	-2.88	≤30	PASS

Test Graphs Peak





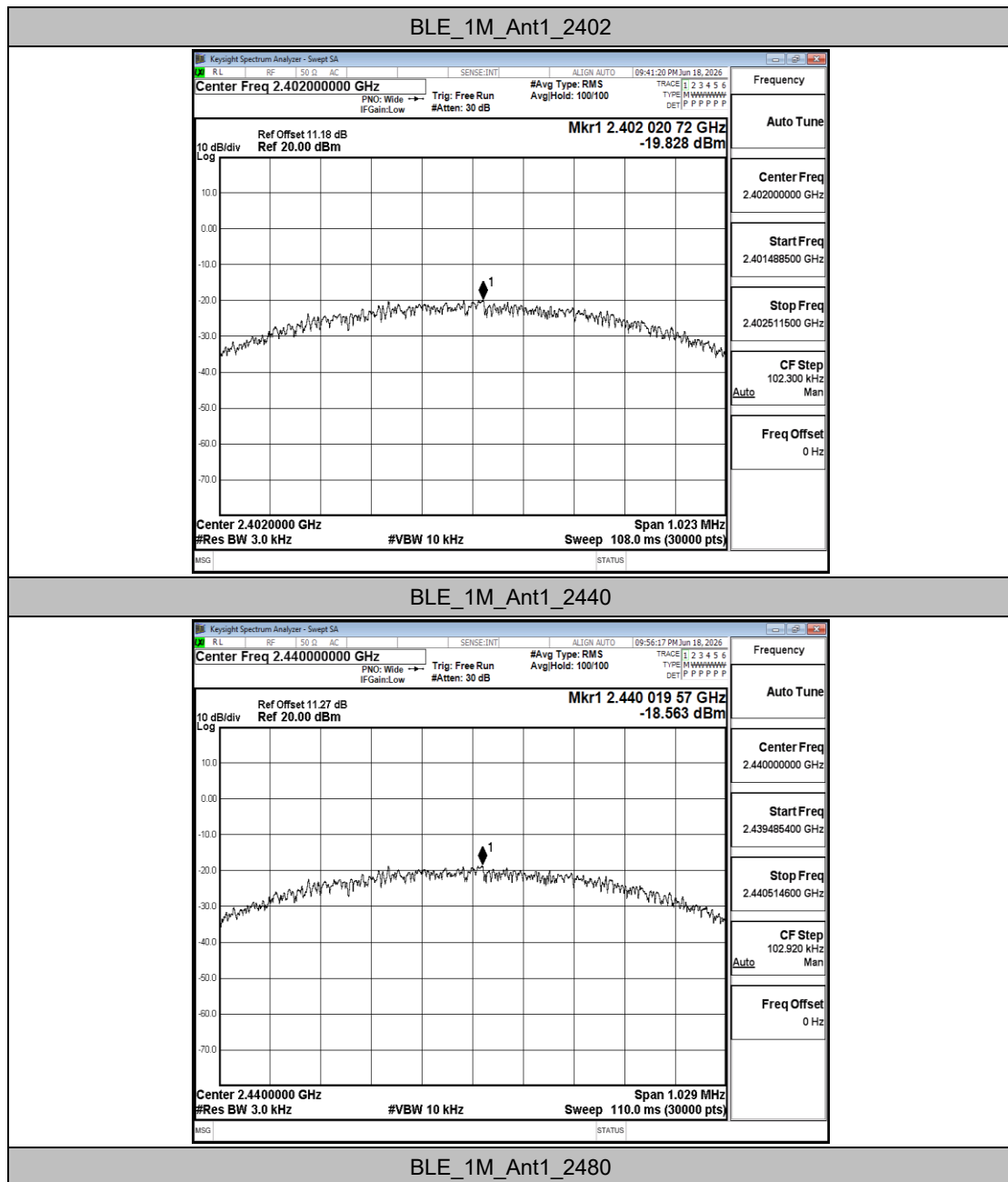


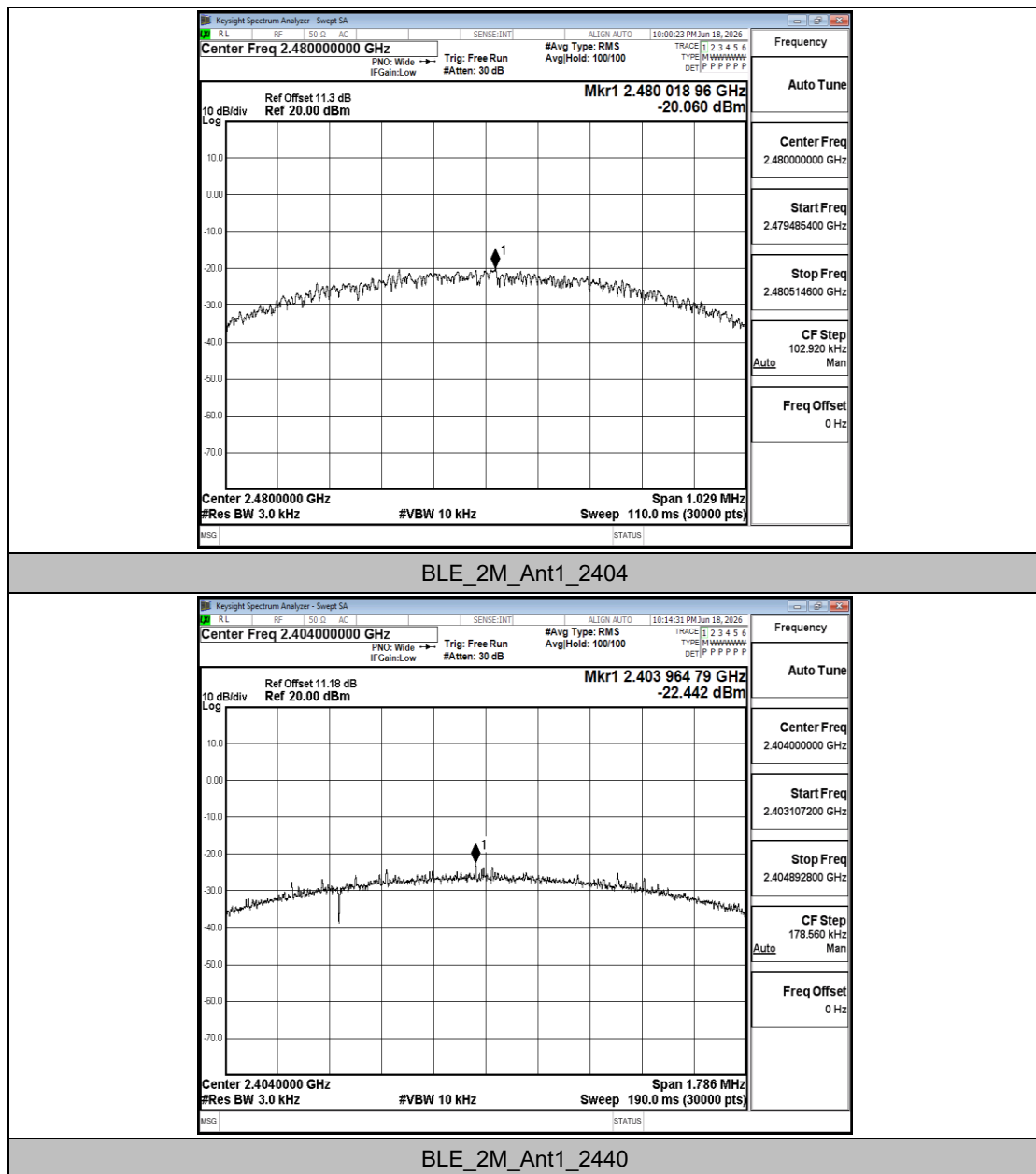
B.3 Maximum power spectral density

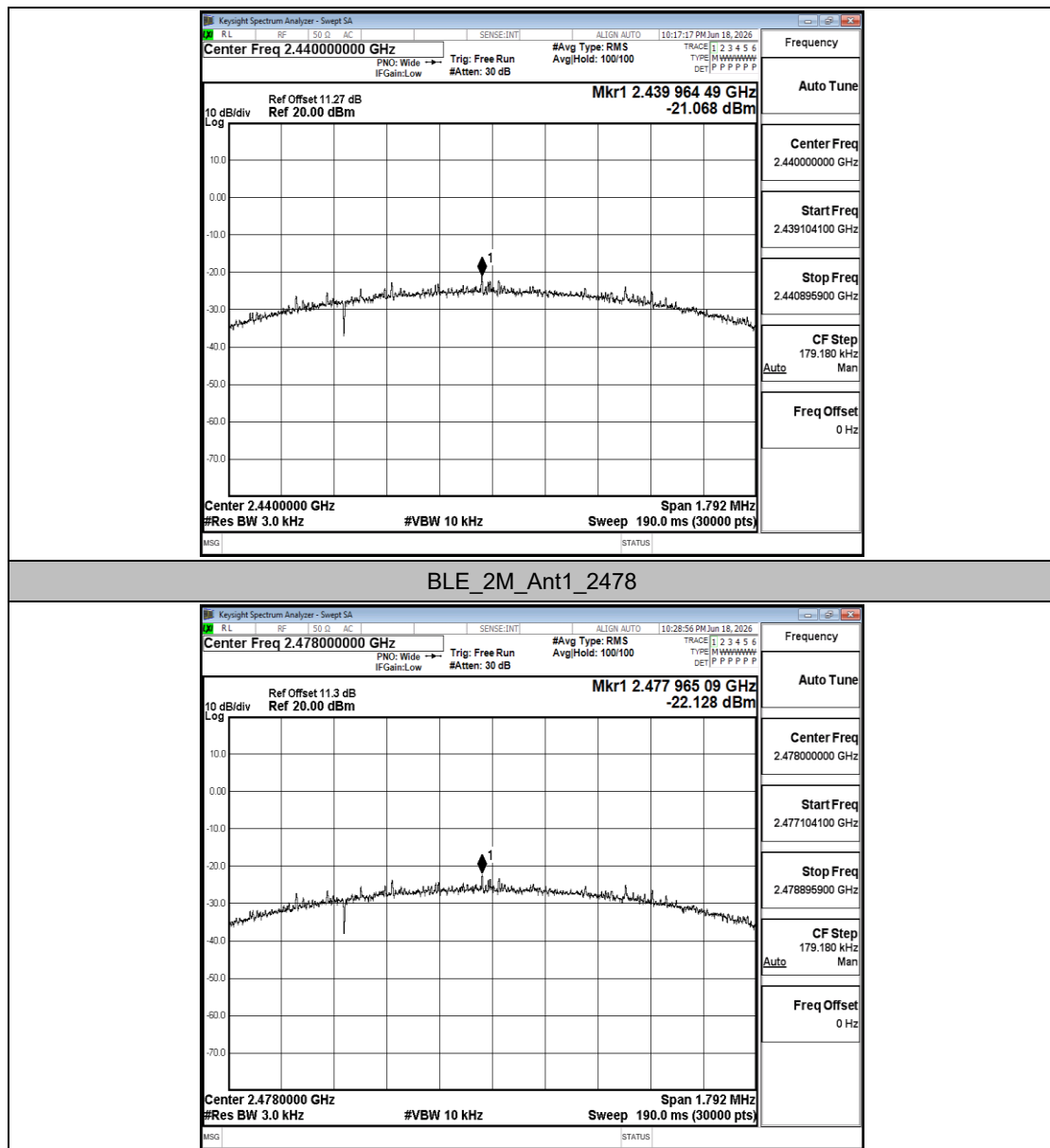
Test Result

TestMode	Antenna	Freq (MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.83	≤8.00	PASS
		2440	-18.56	≤8.00	PASS
		2480	-20.06	≤8.00	PASS
BLE_2M	Ant1	2404	-22.44	≤8.00	PASS
		2440	-21.07	≤8.00	PASS
		2478	-22.13	≤8.00	PASS

Test Graphs





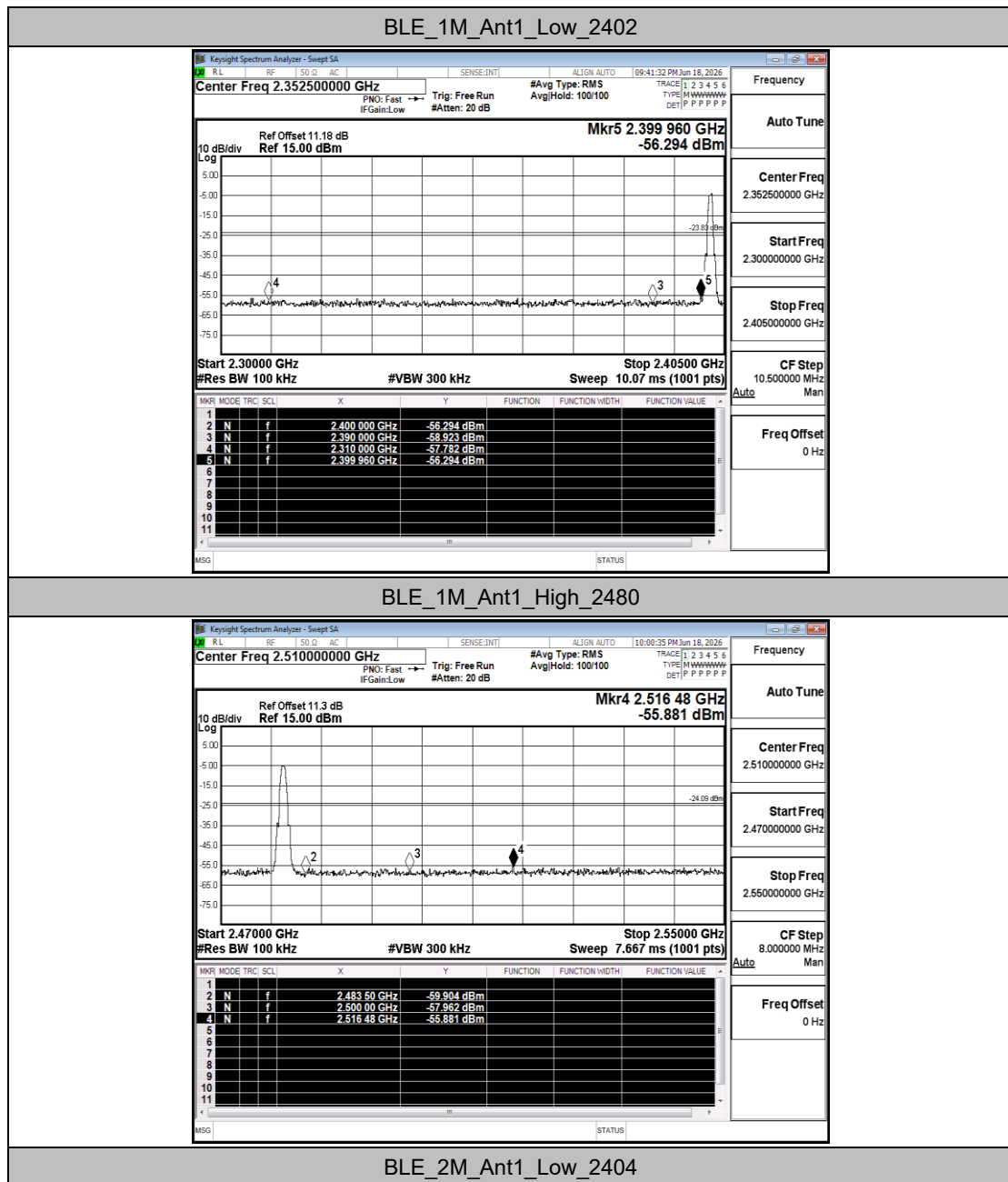


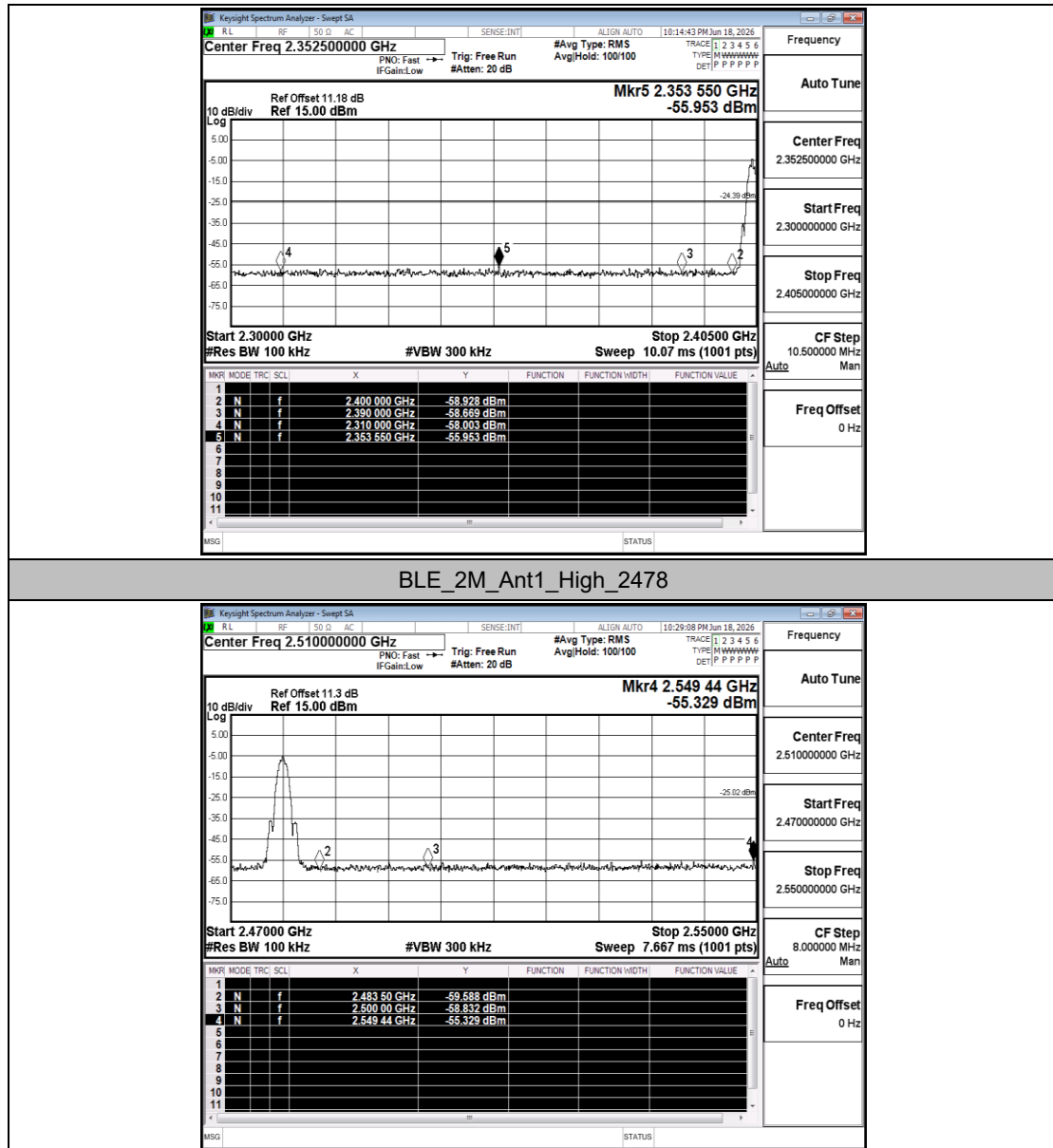
B.4 Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq (MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-3.83	-56.29	≤-23.83	PASS
		High	2480	-4.09	-55.88	≤-24.09	PASS
BLE_2M	Ant1	Low	2404	-4.39	-55.95	≤-24.39	PASS
		High	2478	-5.02	-55.33	≤-25.02	PASS

Test Graphs



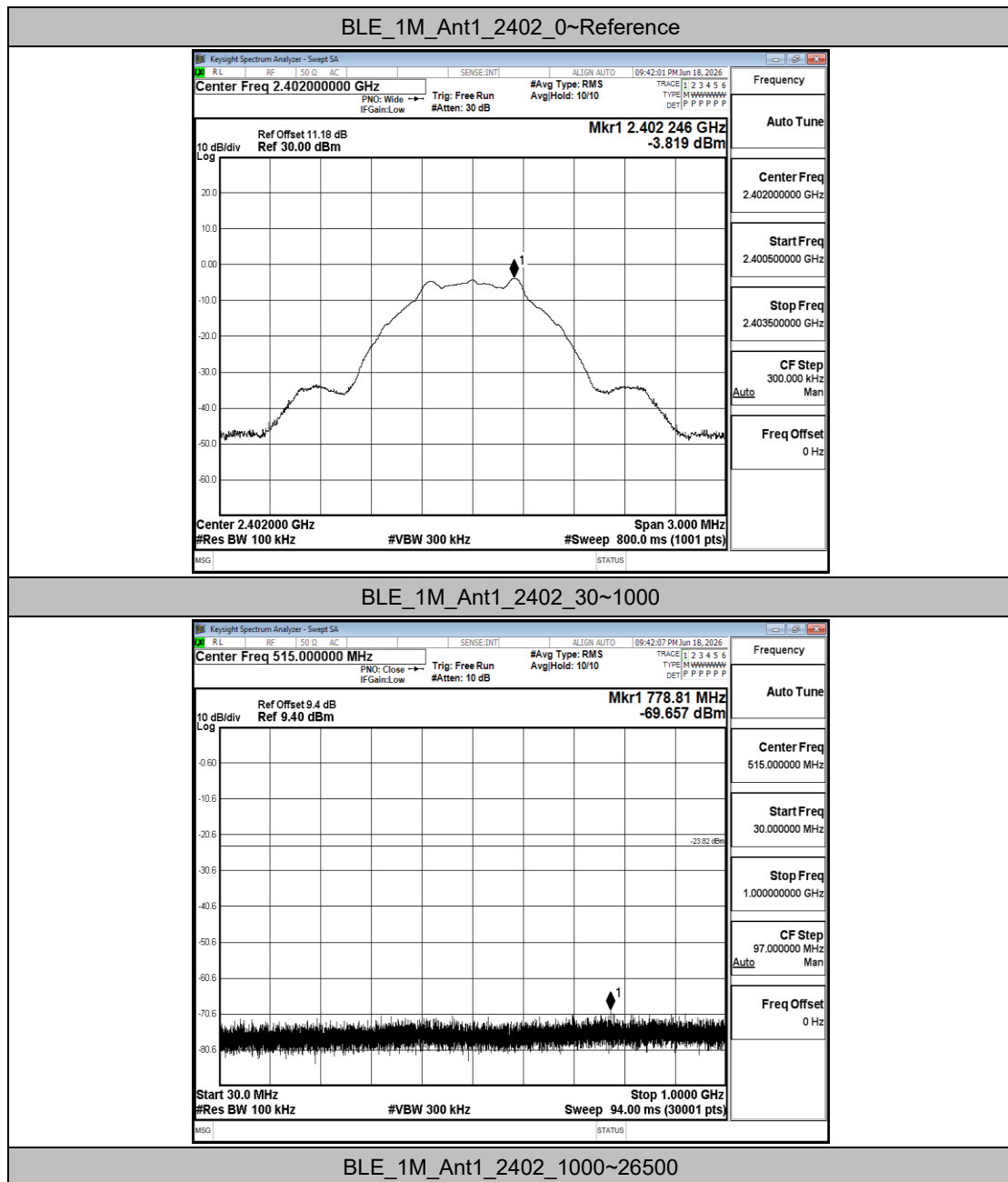


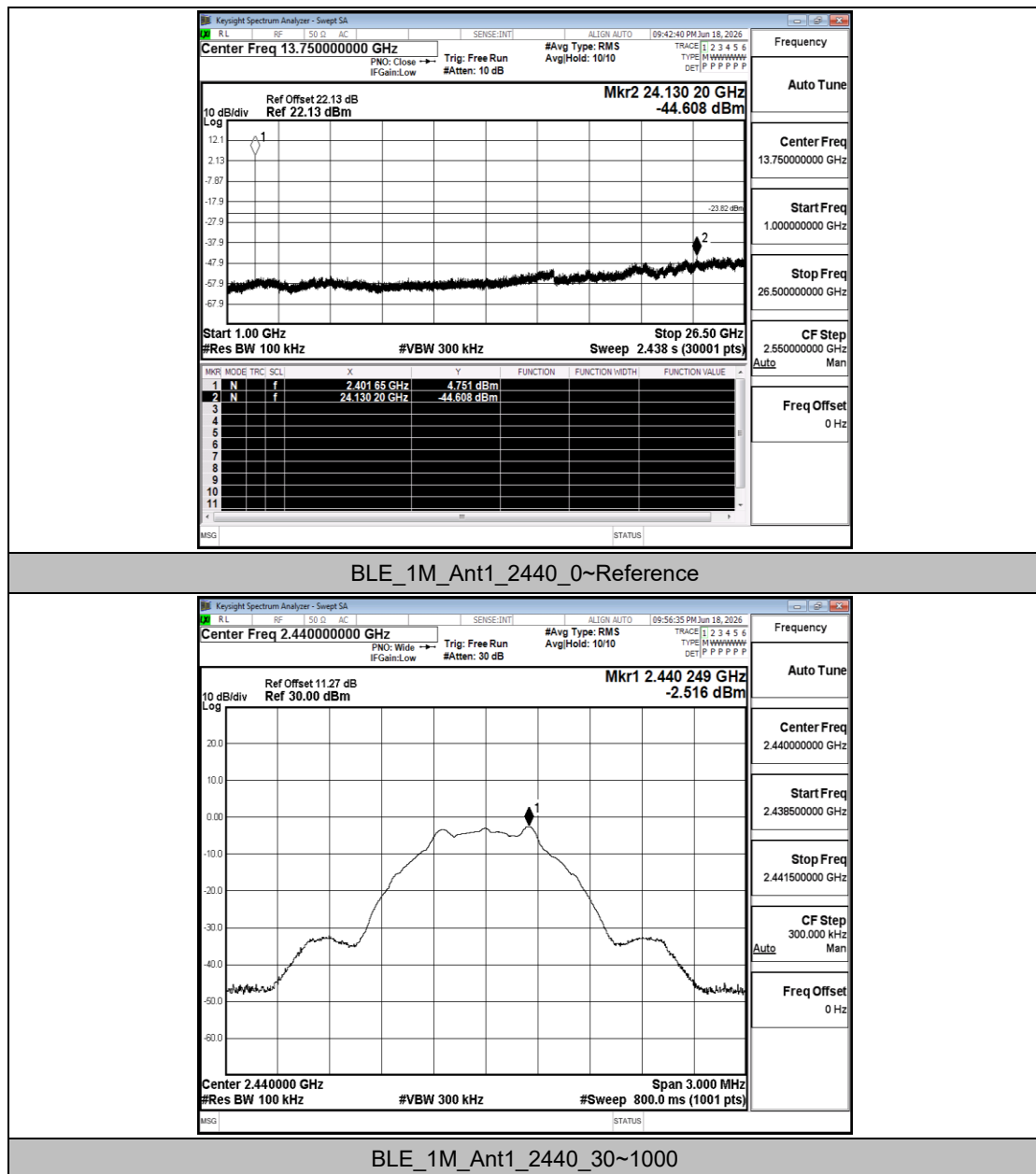
B.5 Conducted Spurious Emission

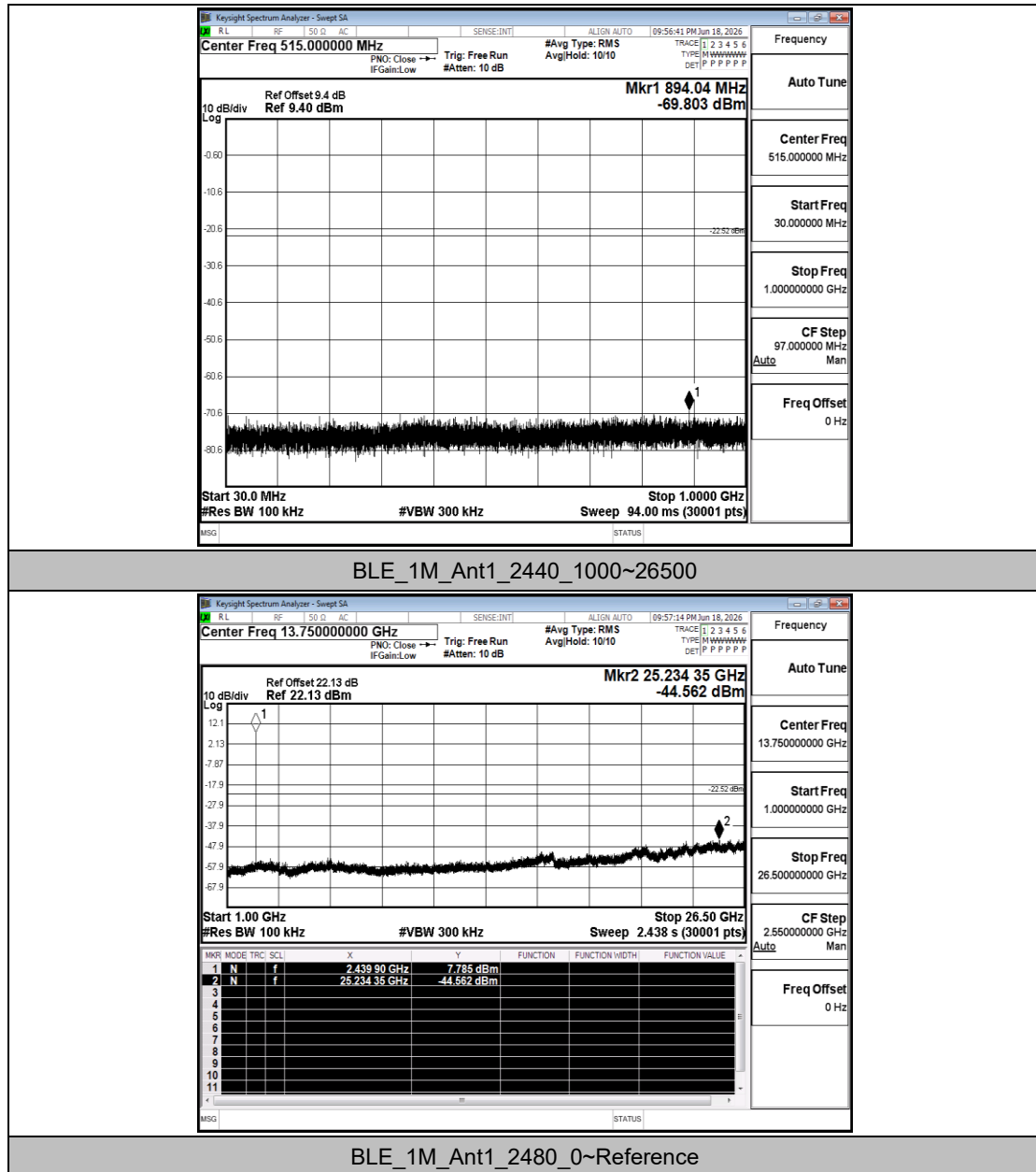
Test Result

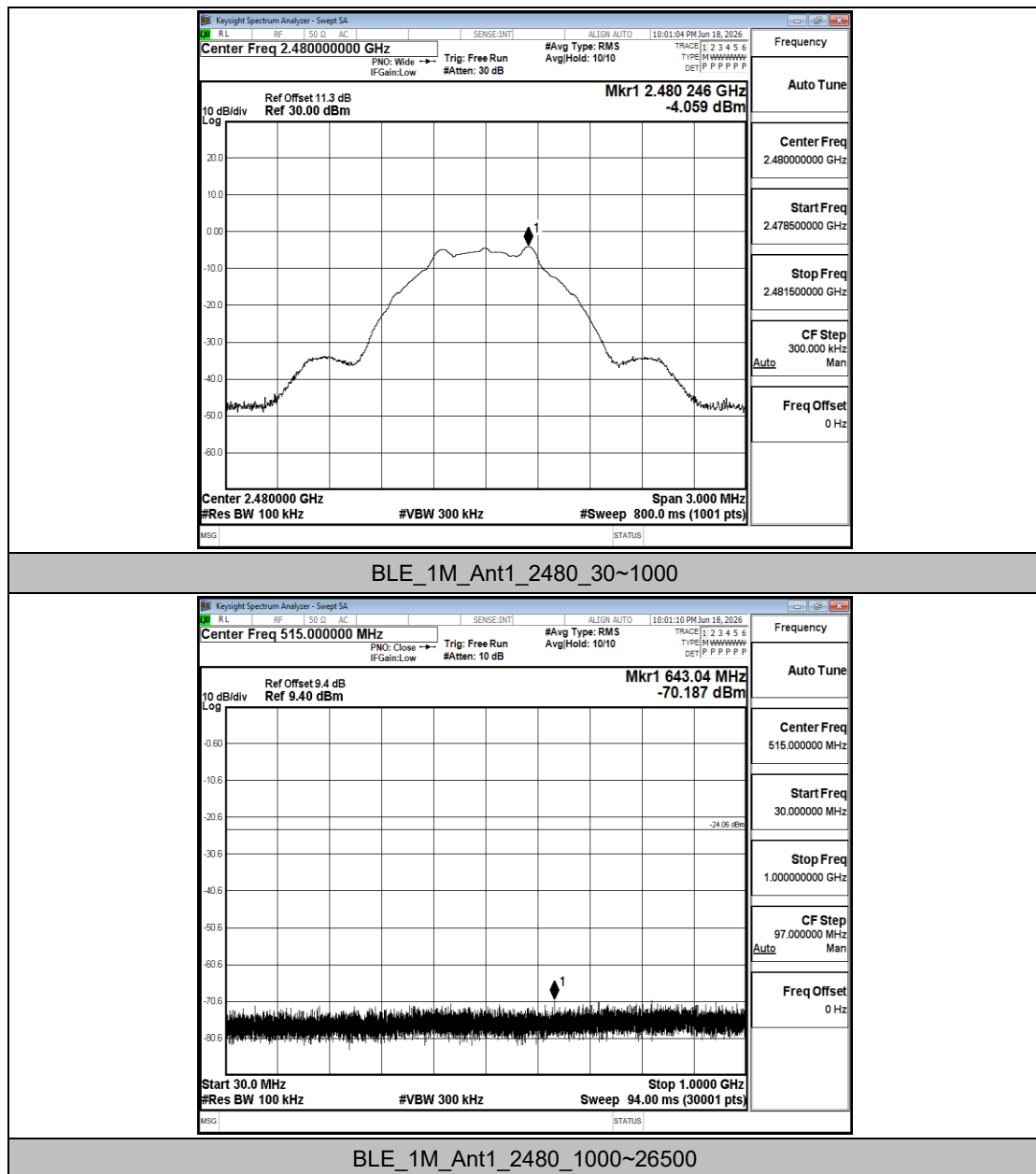
TestMode	Antenna	Freq (MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-3.82	-3.82	---	PASS
			30~1000	-3.82	-69.66	≤-23.82	PASS
			1000~26500	-3.82	-44.61	≤-23.82	PASS
		2440	Reference	-2.52	-2.52	---	PASS
			30~1000	-2.52	-69.8	≤-22.52	PASS
			1000~26500	-2.52	-44.56	≤-22.52	PASS
		2480	Reference	-4.06	-4.06	---	PASS
			30~1000	-4.06	-70.19	≤-24.06	PASS
			1000~26500	-4.06	-44.46	≤-24.06	PASS
BLE_2M	Ant1	2404	Reference	-4.38	-4.38	---	PASS
			30~1000	-4.38	-70.1	≤-24.38	PASS
			1000~26500	-4.38	-44.55	≤-24.38	PASS
		2440	Reference	-2.98	-2.98	---	PASS
			30~1000	-2.98	-70.77	≤-22.98	PASS
			1000~26500	-2.98	-44.46	≤-22.98	PASS
		2478	Reference	-4.09	-4.09	---	PASS
			30~1000	-4.09	-70.41	≤-24.09	PASS
			1000~26500	-4.09	-44.33	≤-24.09	PASS

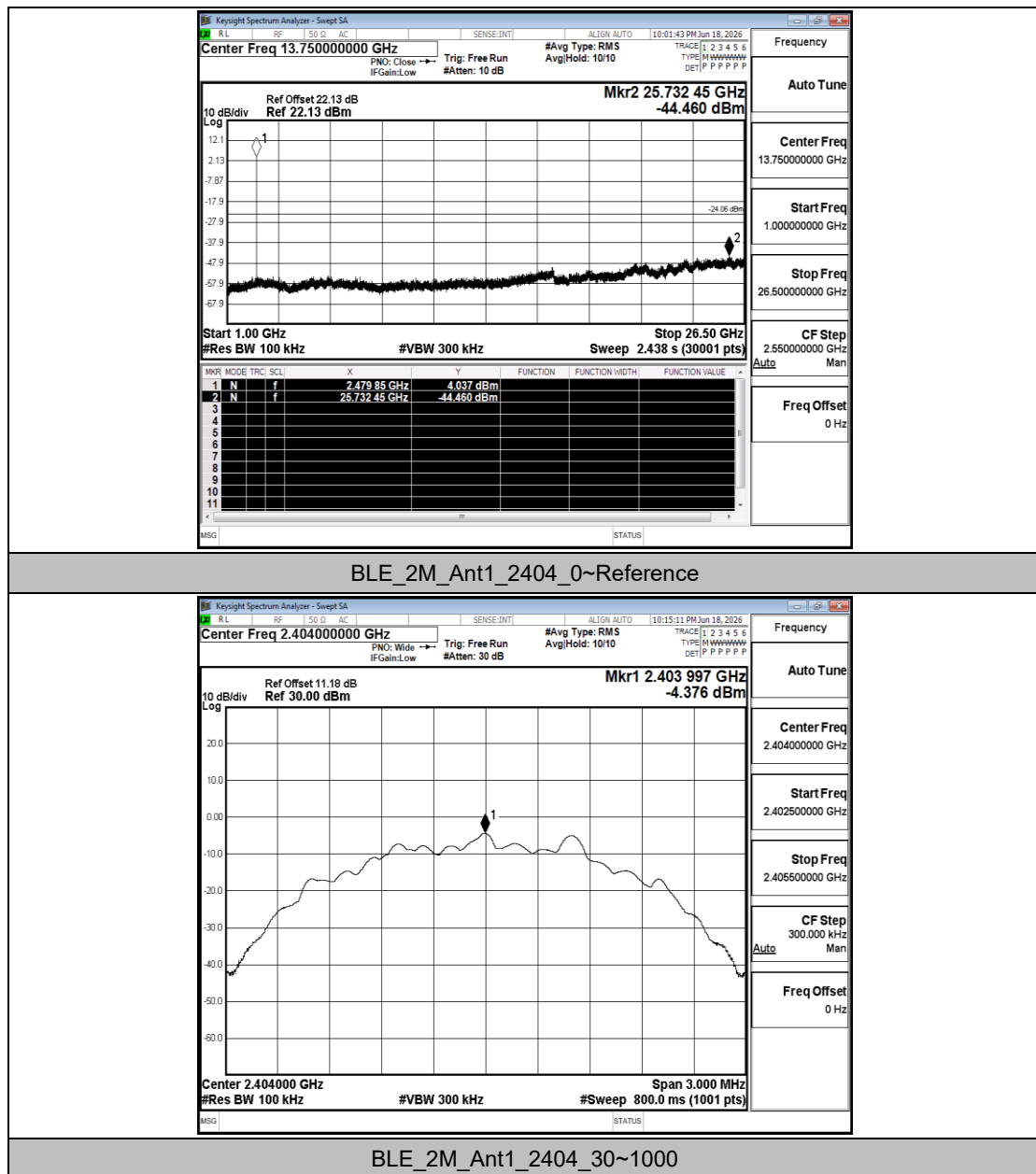
Test Graphs

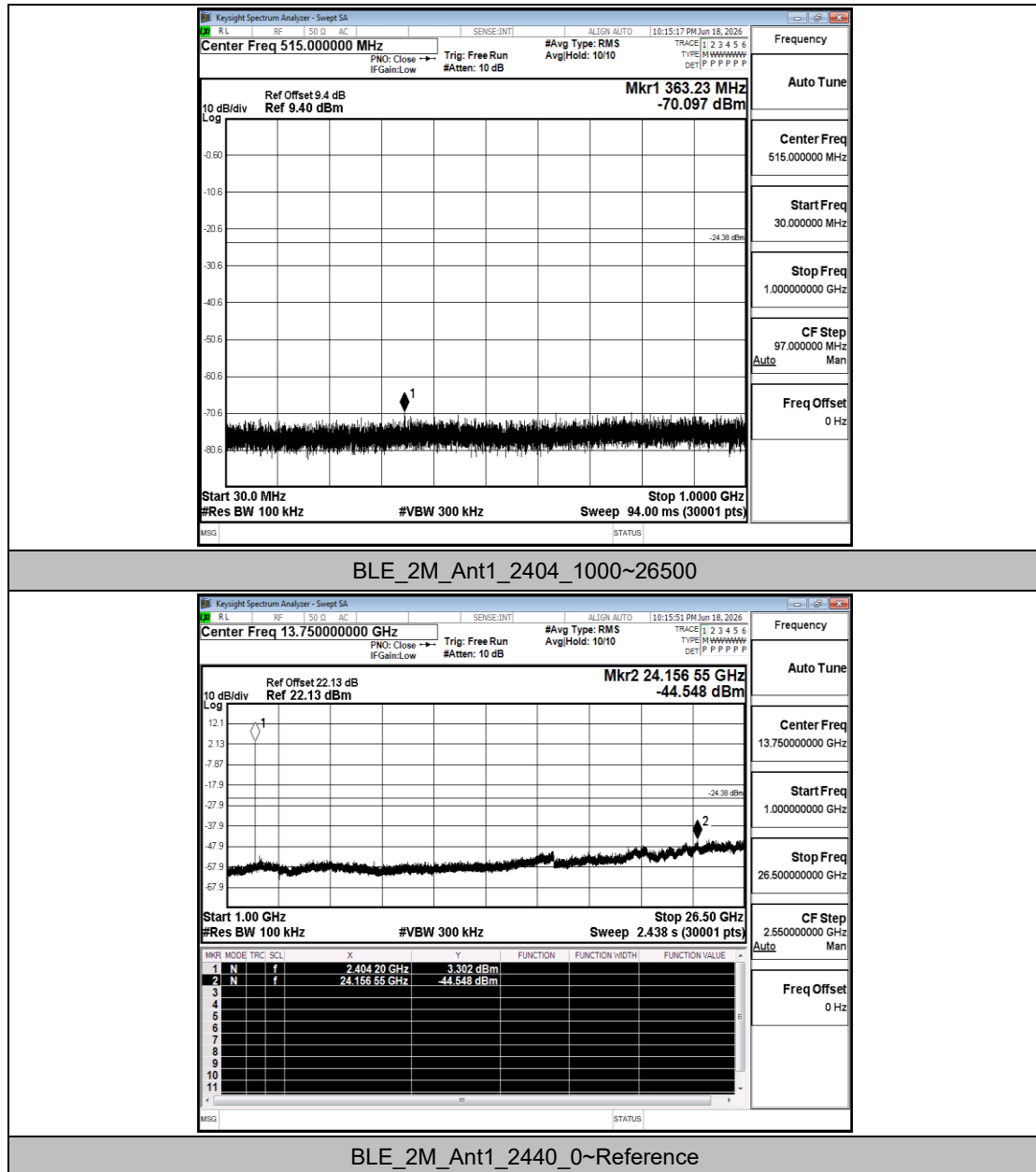


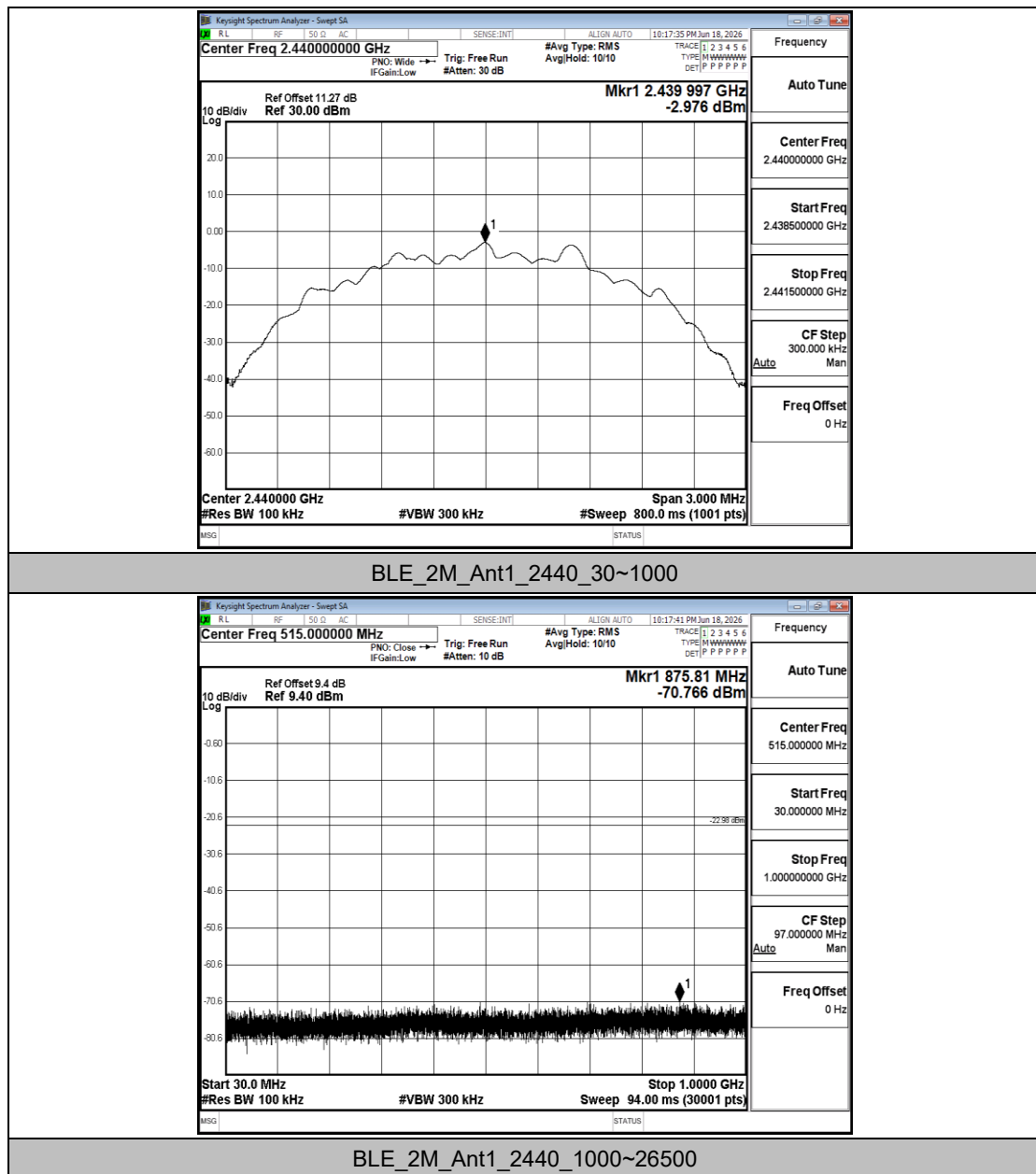


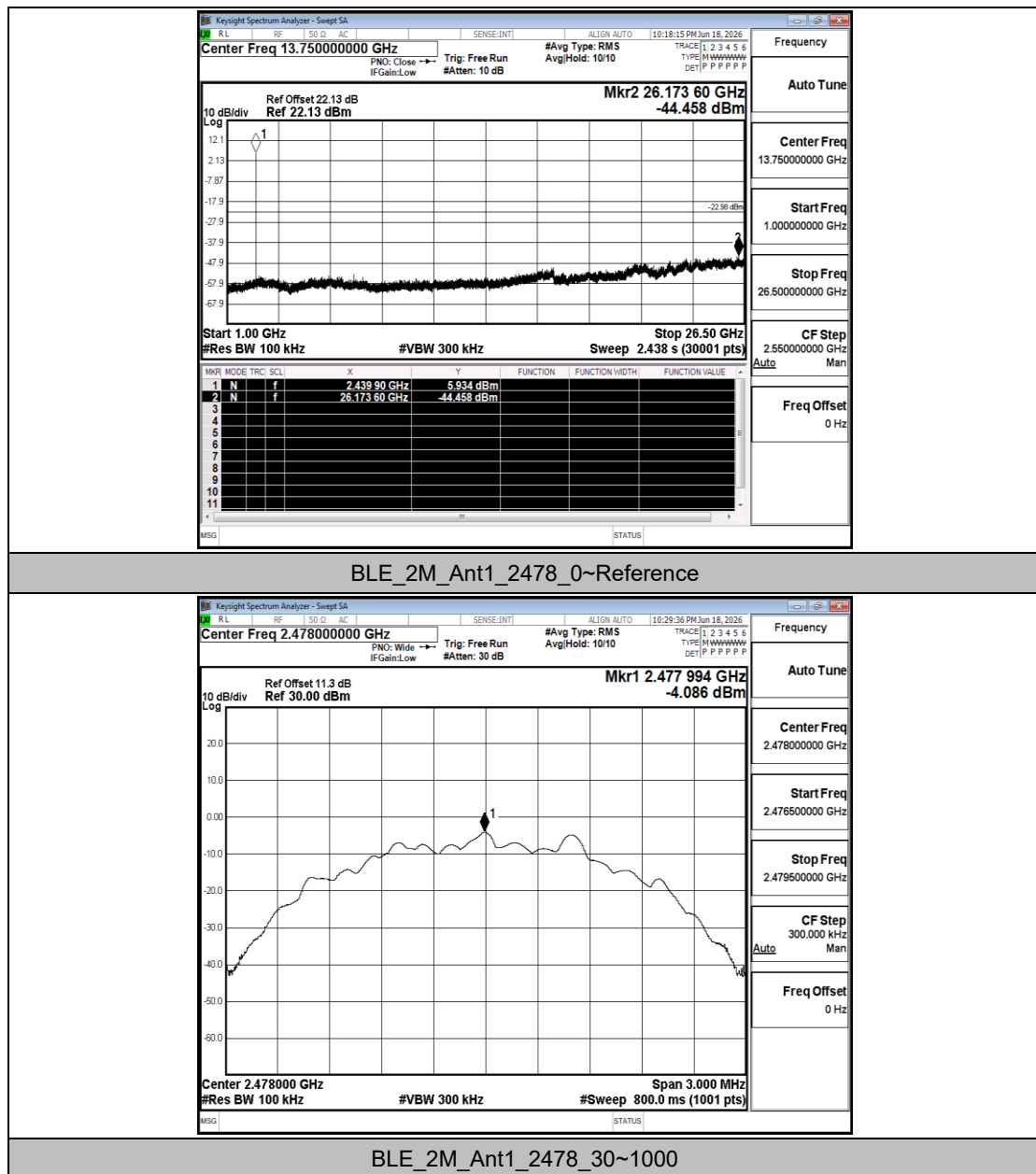


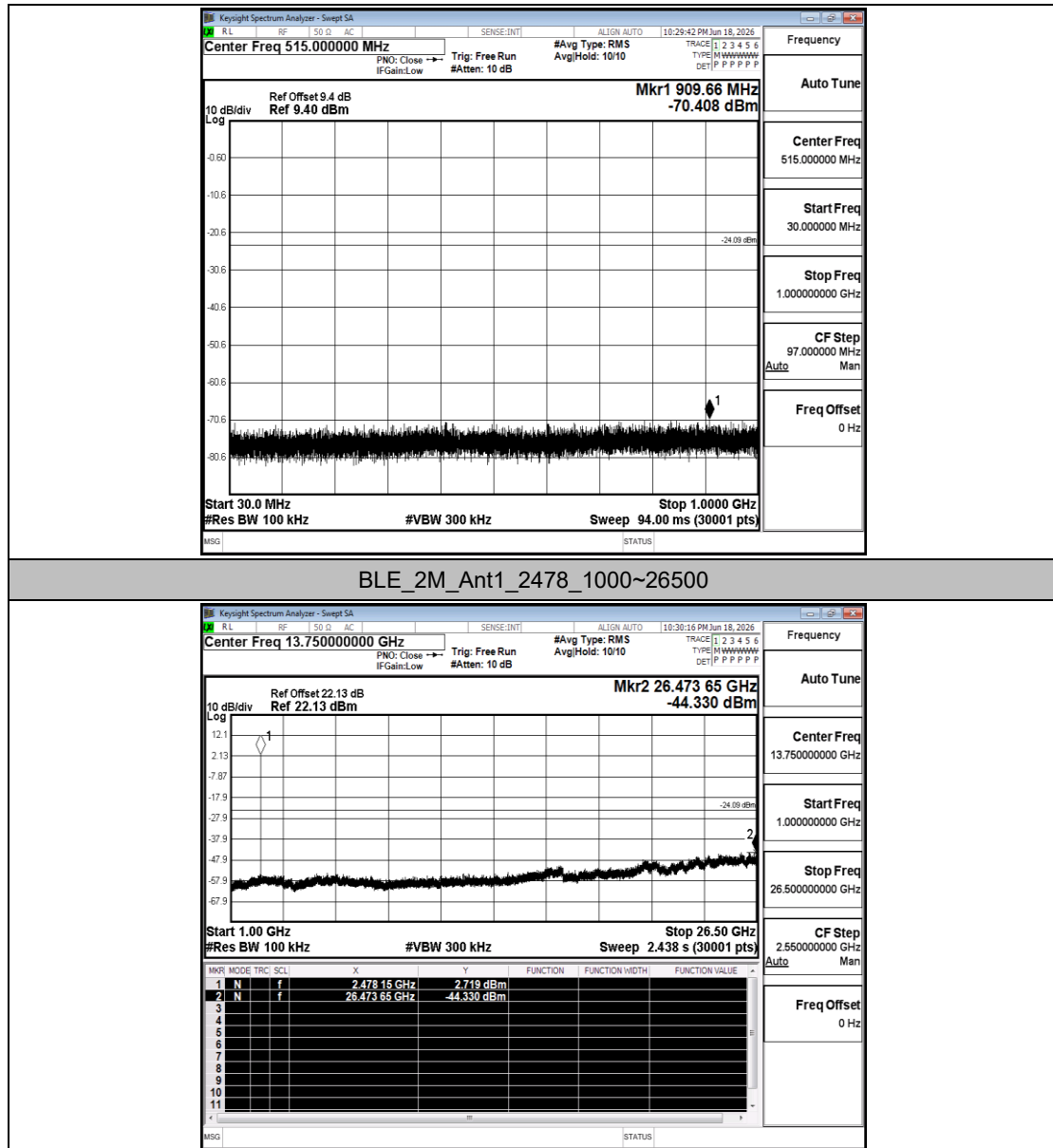










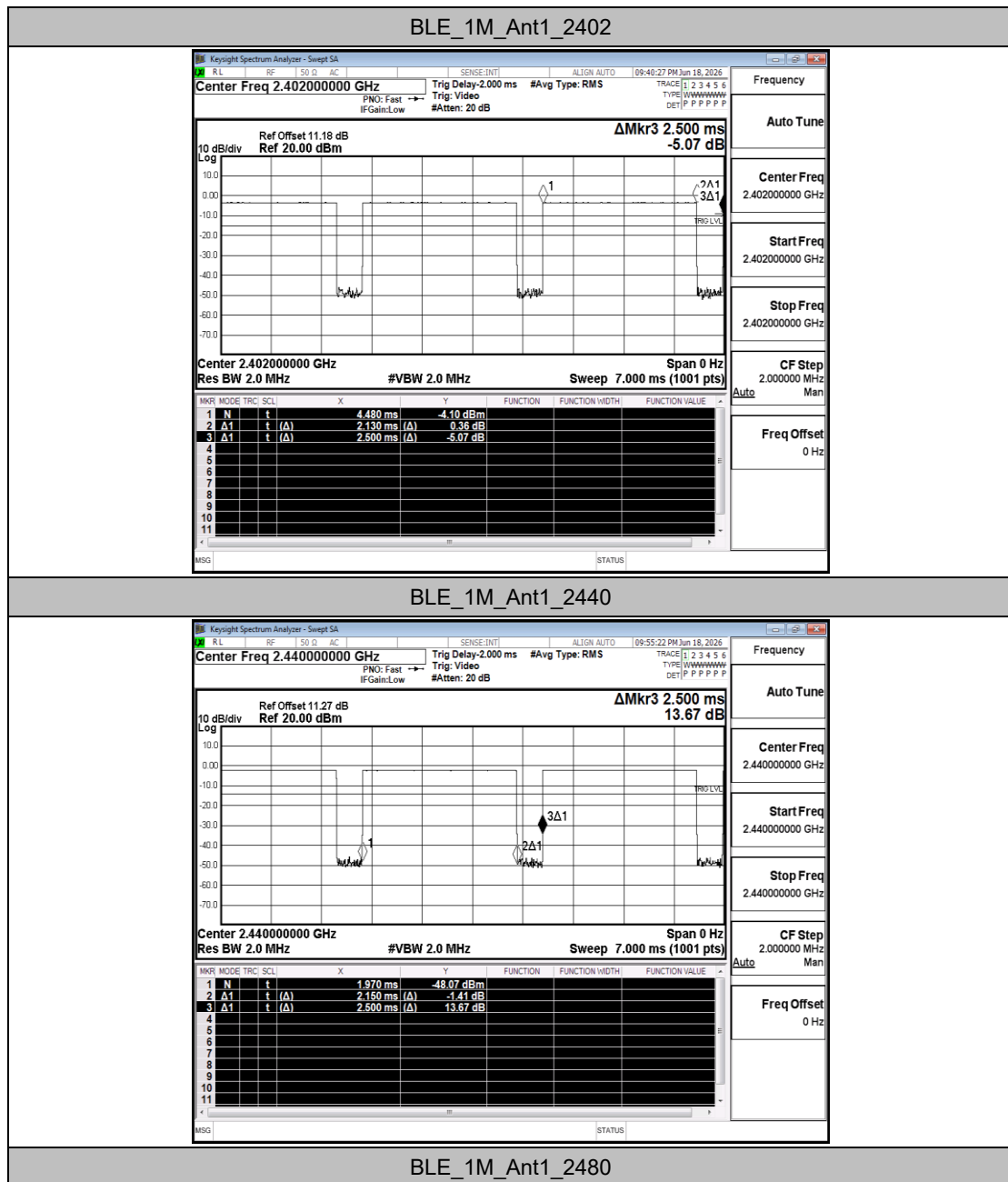


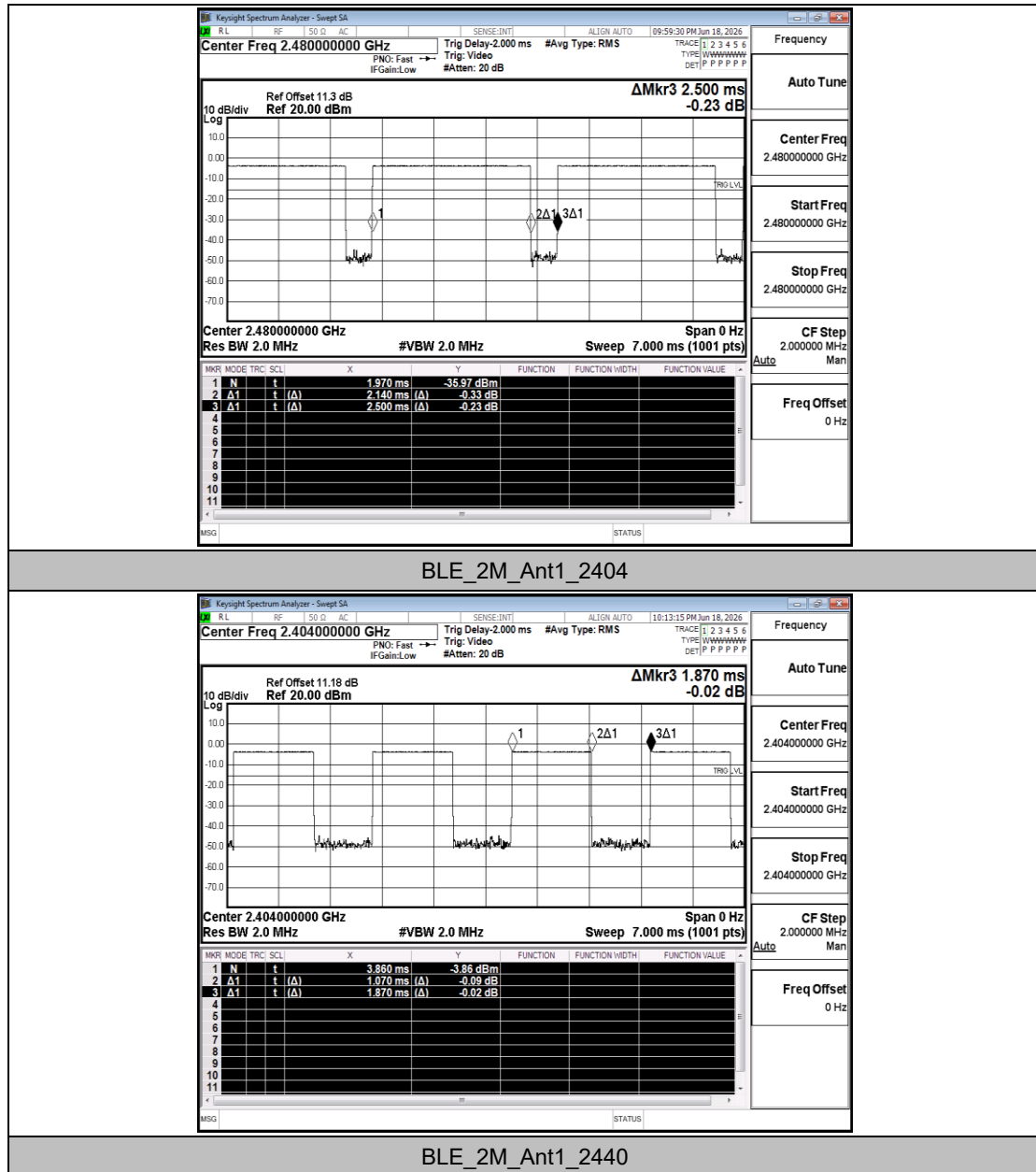
B.6 Duty Cycle

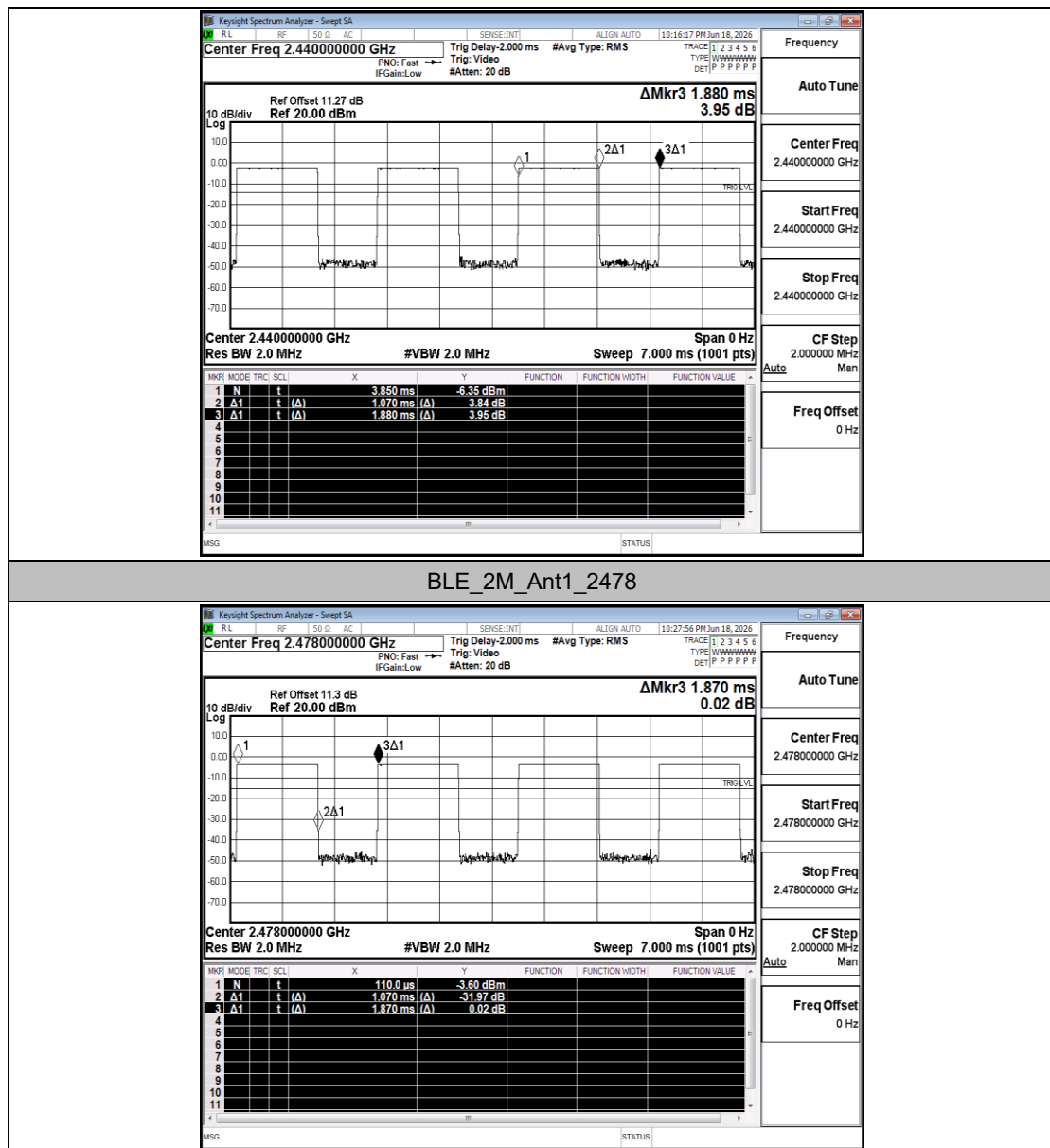
Test Result

TestMode	Antenna	Freq (MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	2.13	2.50	0.8520	85.20	0.70	---	---
		2440	2.15	2.50	0.8600	86.00	0.66	---	---
		2480	2.14	2.50	0.8560	85.60	0.68	---	---
BLE_2M	Ant1	2404	1.07	1.87	0.5722	57.22	2.42	---	---
		2440	1.07	1.88	0.5691	56.91	2.45	---	---
		2478	1.07	1.87	0.5722	57.22	2.42	---	---

Test Graphs







B.7 Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Freq (MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Gain [dBi]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-57.84	≤-43.90	2.00	0.70	40.06	≤54	PASS
				AV	2375.180	-57.21	≤-43.90	2.00	0.70	40.69	≤54	PASS
				AV	2390.000	-58.29	≤-43.90	2.00	0.70	39.61	≤54	PASS
				Peak	2310.000	-49.48	≤-23.20	2.00	0.00	47.72	≤74	PASS
				Peak	2339.480	-46.62	≤-23.20	2.00	0.00	50.58	≤74	PASS
				Peak	2390.000	-50.59	≤-23.20	2.00	0.00	46.61	≤74	PASS
		High	2480	AV	2483.500	-57.48	≤-43.88	2.00	0.68	40.40	≤54	PASS
				AV	2490.160	-56.44	≤-43.88	2.00	0.68	41.44	≤54	PASS
				AV	2500.000	-57.54	≤-43.88	2.00	0.68	40.34	≤54	PASS
				Peak	2483.500	-49.07	≤-23.20	2.00	0.00	48.13	≤74	PASS
				Peak	2484.480	-46.33	≤-23.20	2.00	0.00	50.87	≤74	PASS
				Peak	2500.000	-48.25	≤-23.20	2.00	0.00	48.95	≤74	PASS
BLE_2M	Ant1	Low	2404	AV	2310.000	-57.86	≤-45.62	2.00	2.42	41.76	≤54	PASS
				AV	2321.105	-56.97	≤-45.62	2.00	2.42	42.65	≤54	PASS
				AV	2390.000	-57.37	≤-45.62	2.00	2.42	42.25	≤54	PASS
				Peak	2310.000	-50.05	≤-23.20	2.00	0.00	47.15	≤74	PASS
				Peak	2316.800	-46.54	≤-23.20	2.00	0.00	50.66	≤74	PASS
				Peak	2390.000	-51.22	≤-23.20	2.00	0.00	45.98	≤74	PASS
		High	2478	AV	2483.500	-57.9	≤-45.62	2.00	2.42	41.72	≤54	PASS
				AV	2487.760	-56.67	≤-45.62	2.00	2.42	42.95	≤54	PASS
				AV	2500.000	-56.67	≤-45.62	2.00	2.42	42.95	≤54	PASS
				Peak	2483.500	-48.34	≤-23.20	2.00	0.00	48.86	≤74	PASS
				Peak	2483.840	-46.78	≤-23.20	2.00	0.00	50.42	≤74	PASS
				Peak	2500.000	-50.43	≤-23.20	2.00	0.00	46.77	≤74	PASS

Note:

1. The Antenna Gain is compensated in the graph.
2. 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

