

Appendix B

RF Test Data for BT LE (Conducted Measurement)

Tablet

Test Model: i101AC

Environmental Conditions

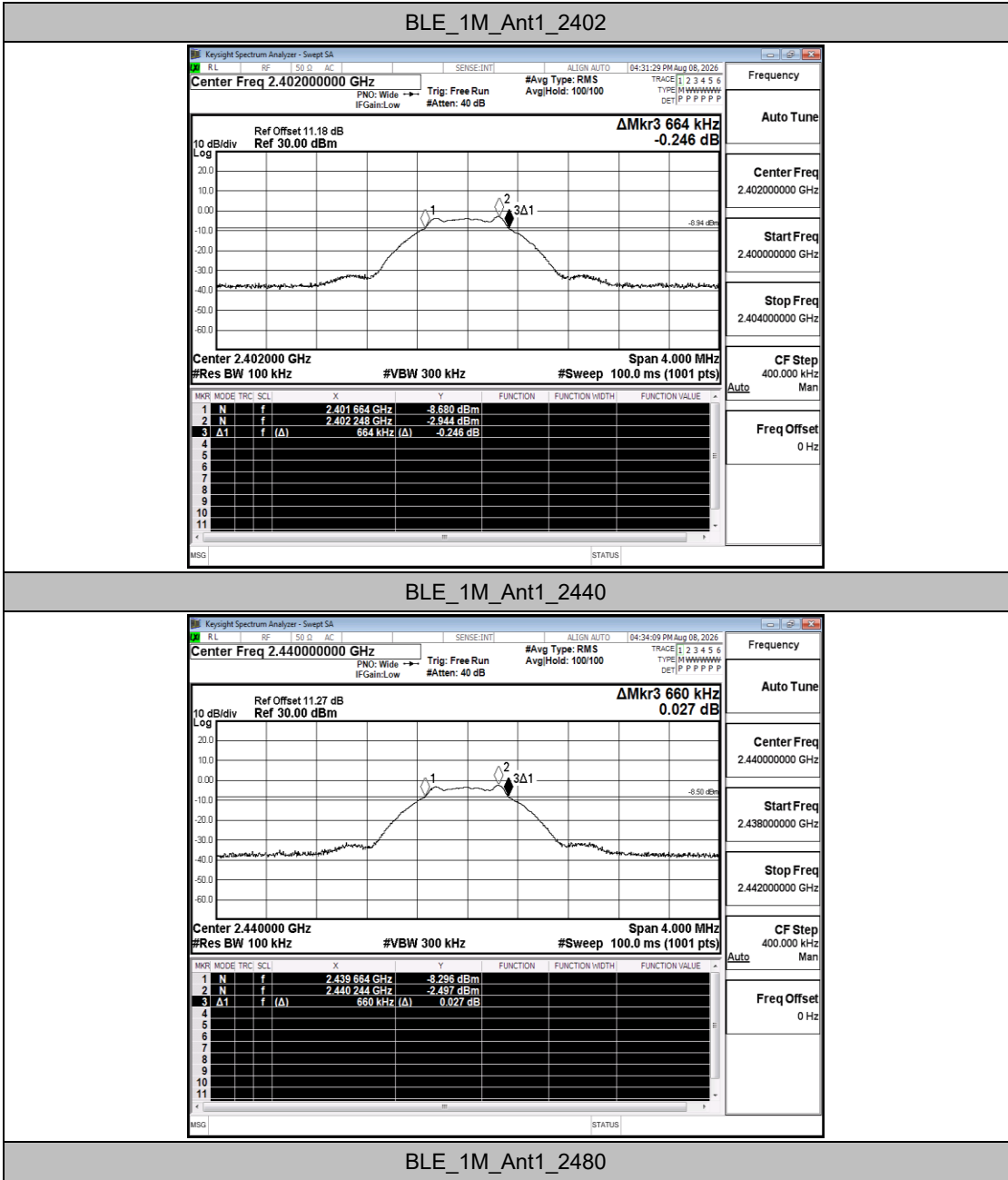
Temperature:	24.6° C
Relative Humidity:	53.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

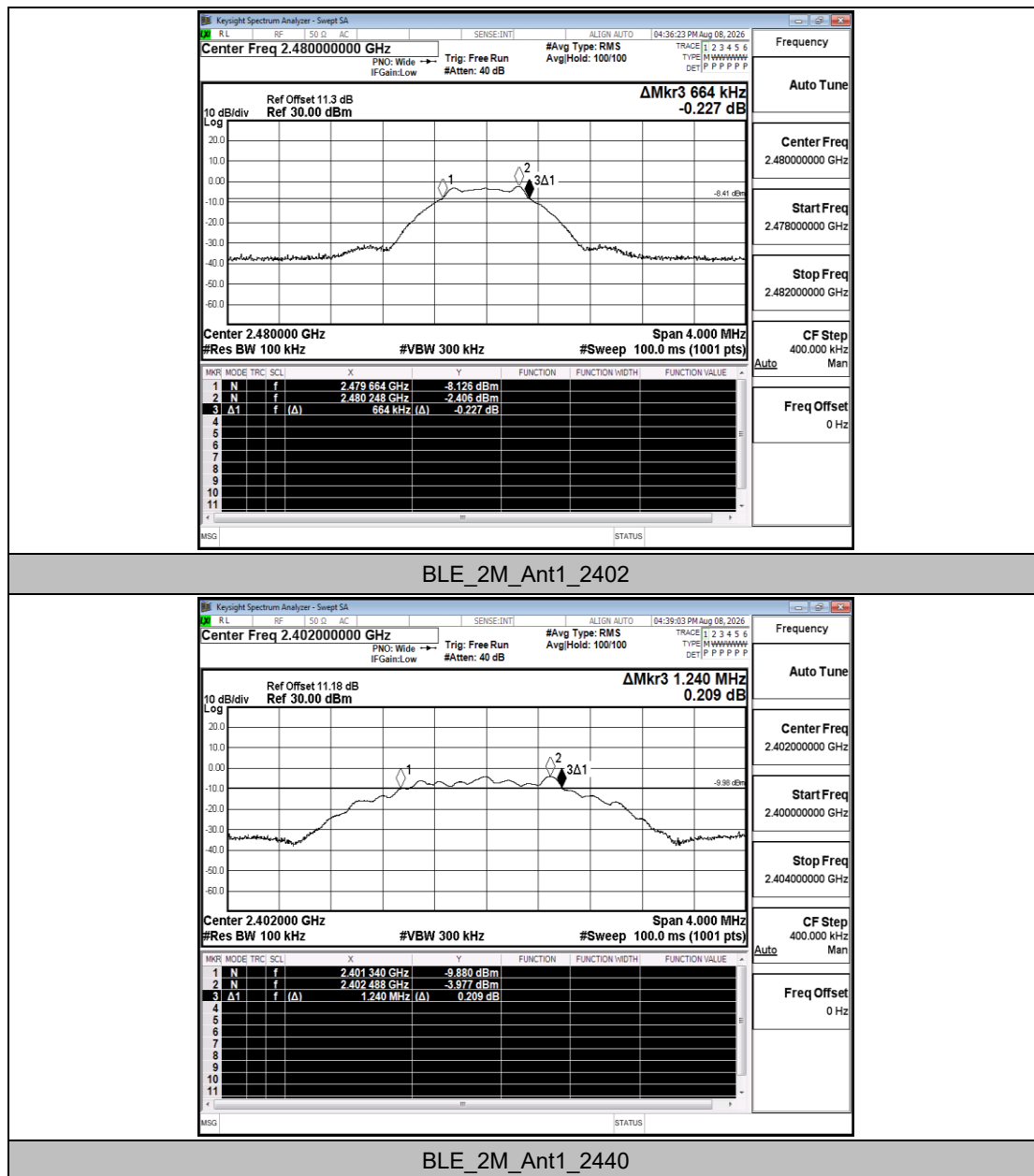
B.1 DTS Bandwidth

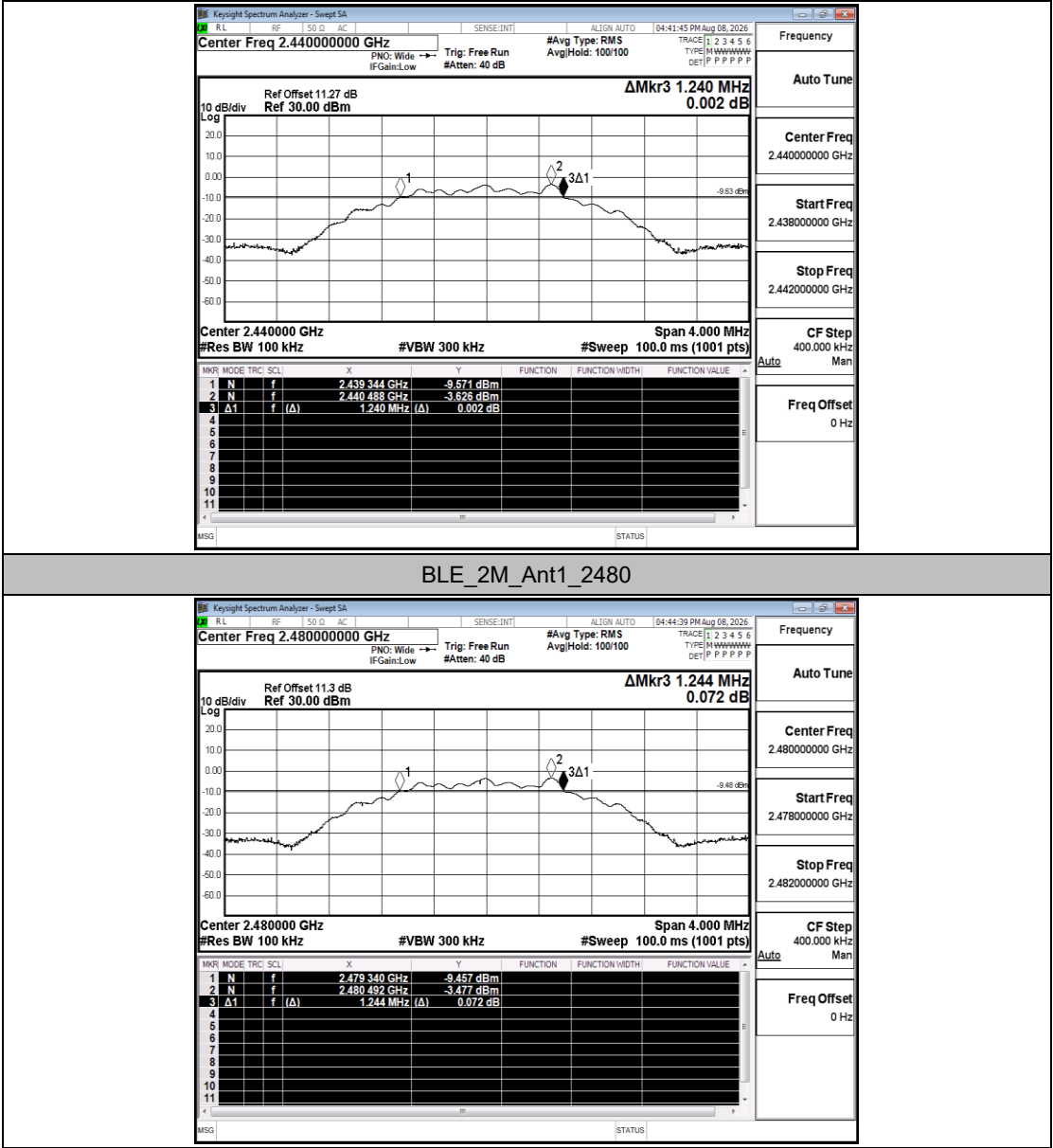
Test Result

TestMode	Antenna	Freq (MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
BLE_1M	Ant1	2402	0.664	2401.664	2402.328	0.5	PASS
		2440	0.660	2439.664	2440.324	0.5	PASS
		2480	0.664	2479.664	2480.328	0.5	PASS
BLE_2M	Ant1	2402	1.240	2401.340	2402.580	0.5	PASS
		2440	1.240	2439.344	2440.584	0.5	PASS
		2480	1.244	2479.340	2480.584	0.5	PASS

Test Graphs





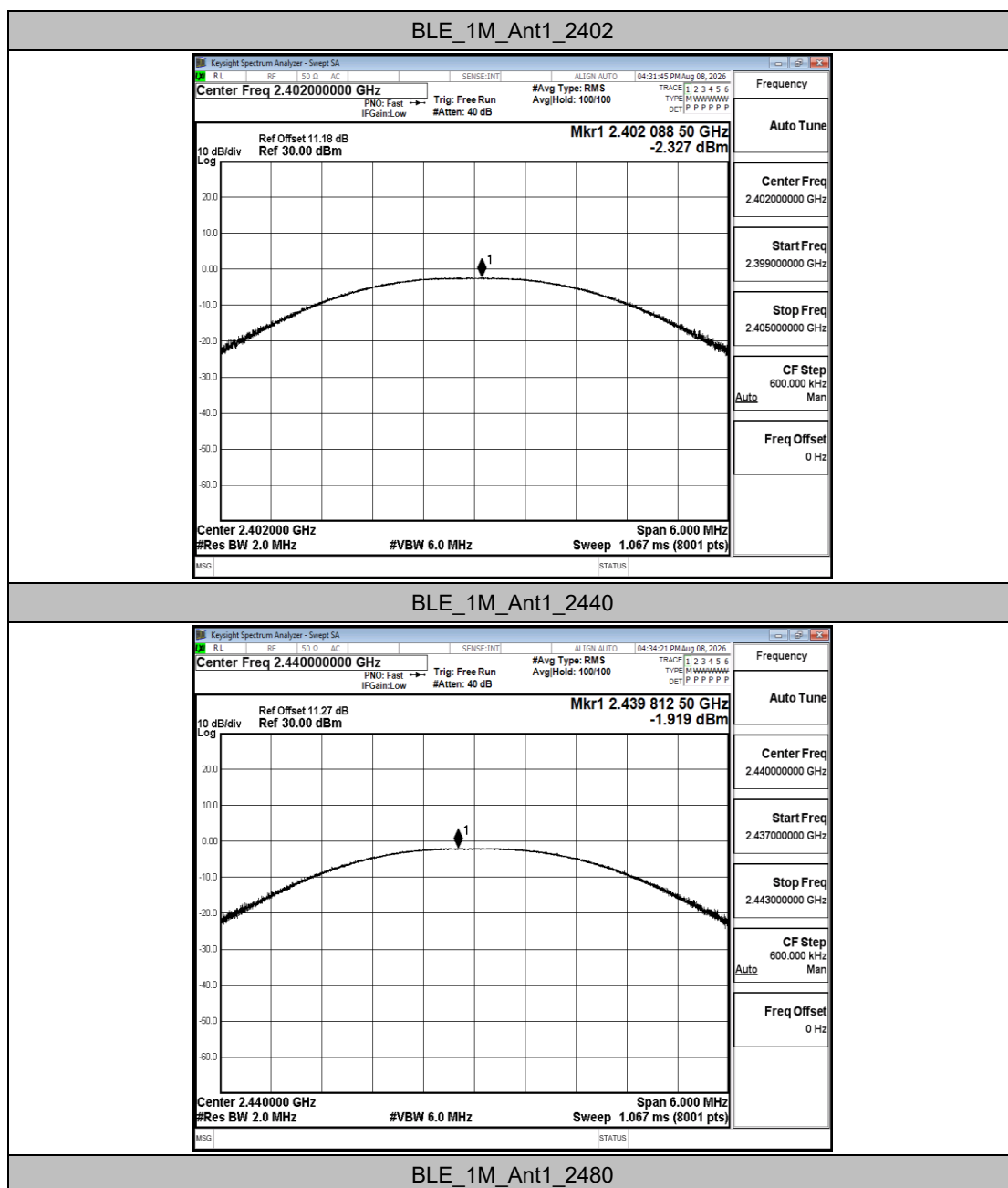


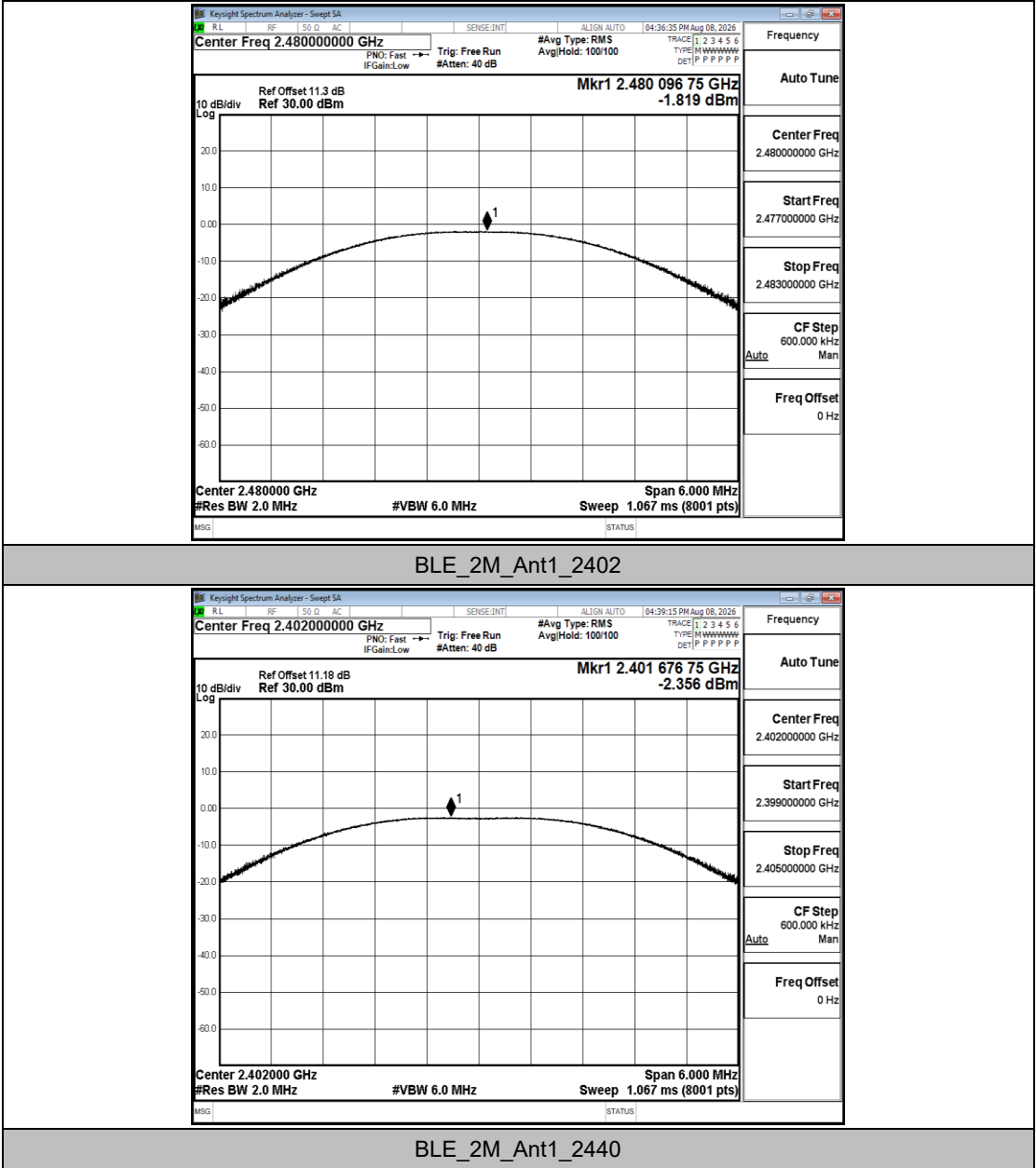
B.2 Maximum Peak conducted output power

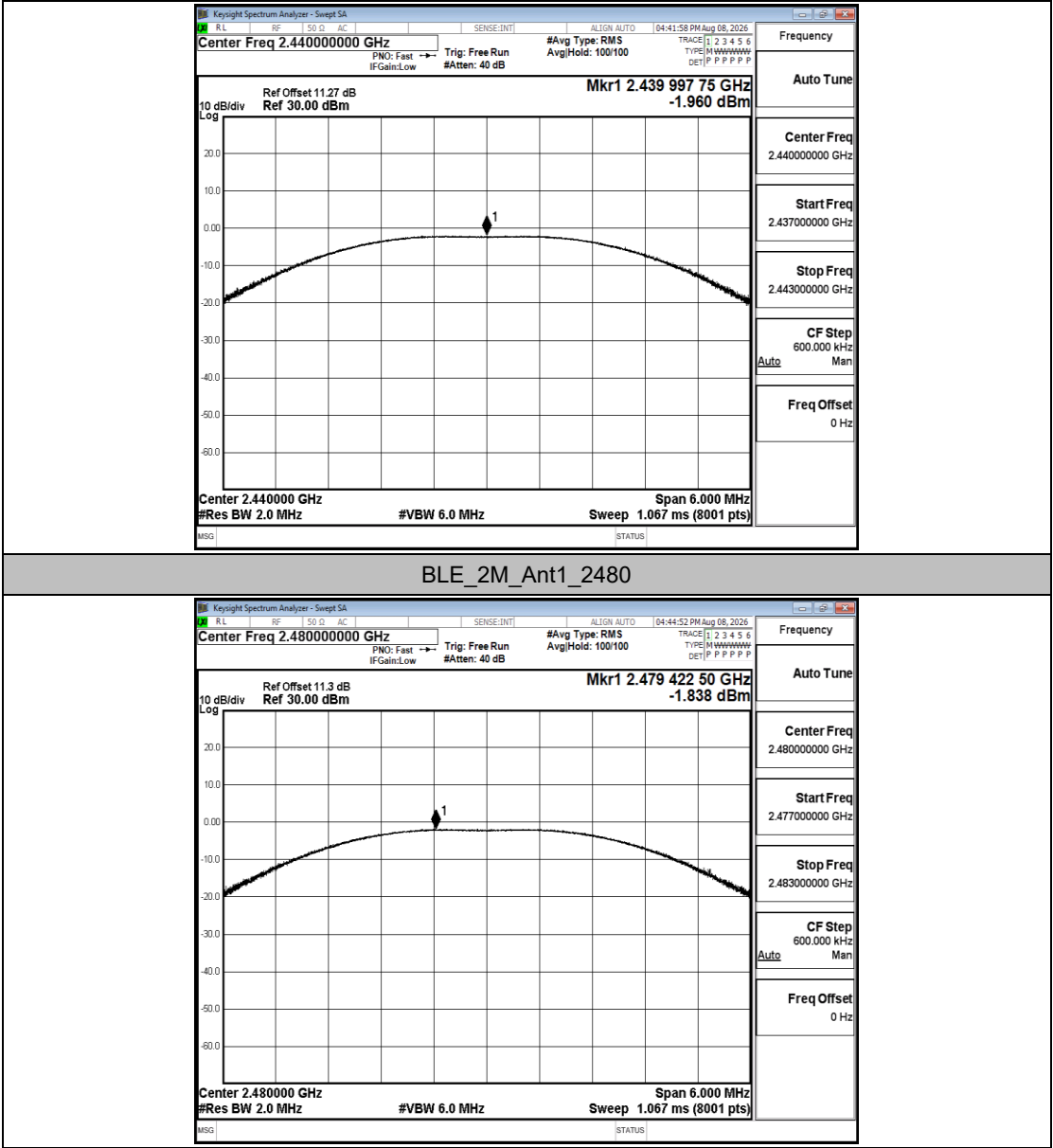
Test Result

TestMode	Antenna	Freq (MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-2.33	≤30	PASS
		2440	-1.92	≤30	PASS
		2480	-1.82	≤30	PASS
BLE_2M	Ant1	2402	-2.36	≤30	PASS
		2440	-1.96	≤30	PASS
		2480	-1.84	≤30	PASS

Test Graphs Peak





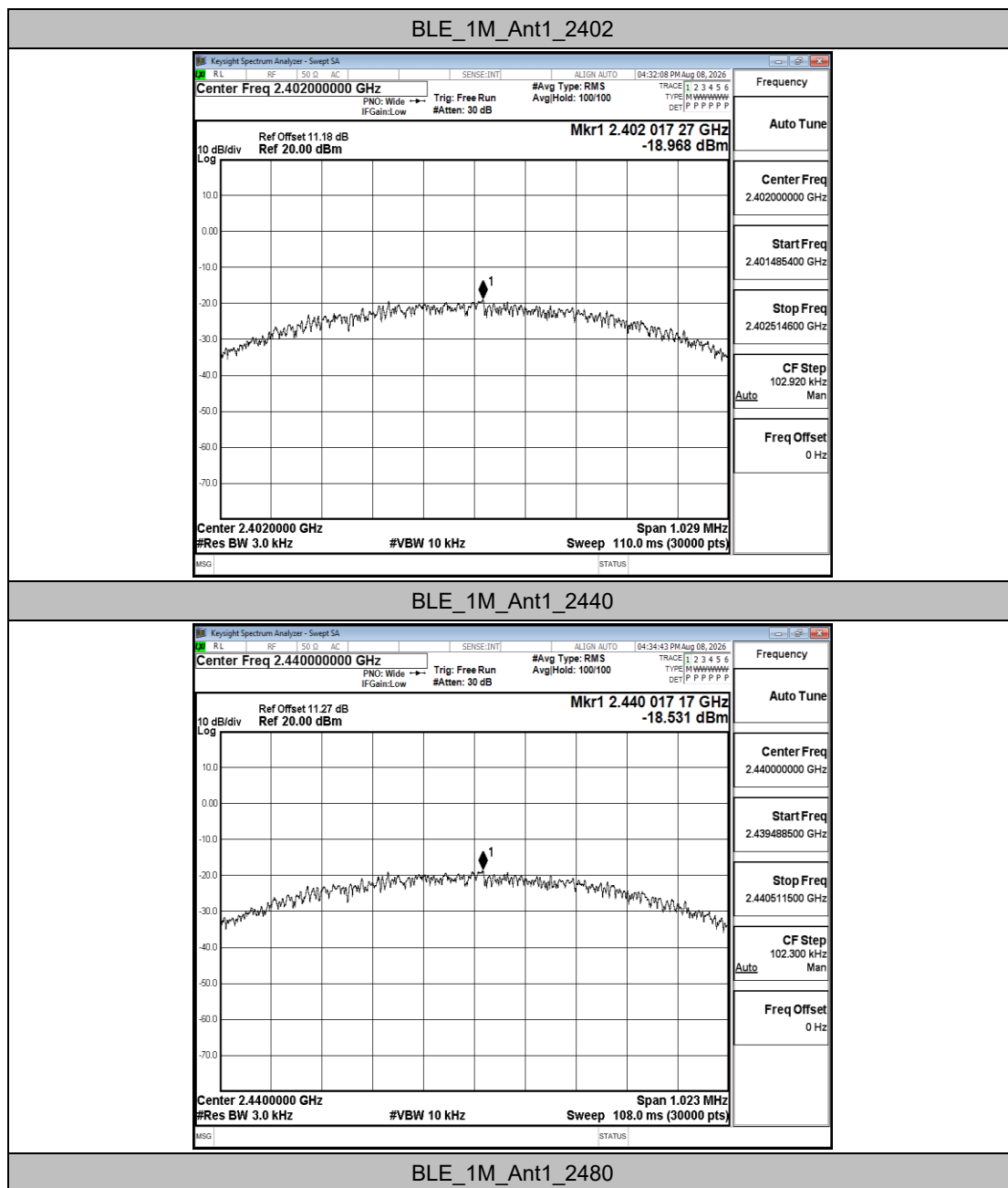


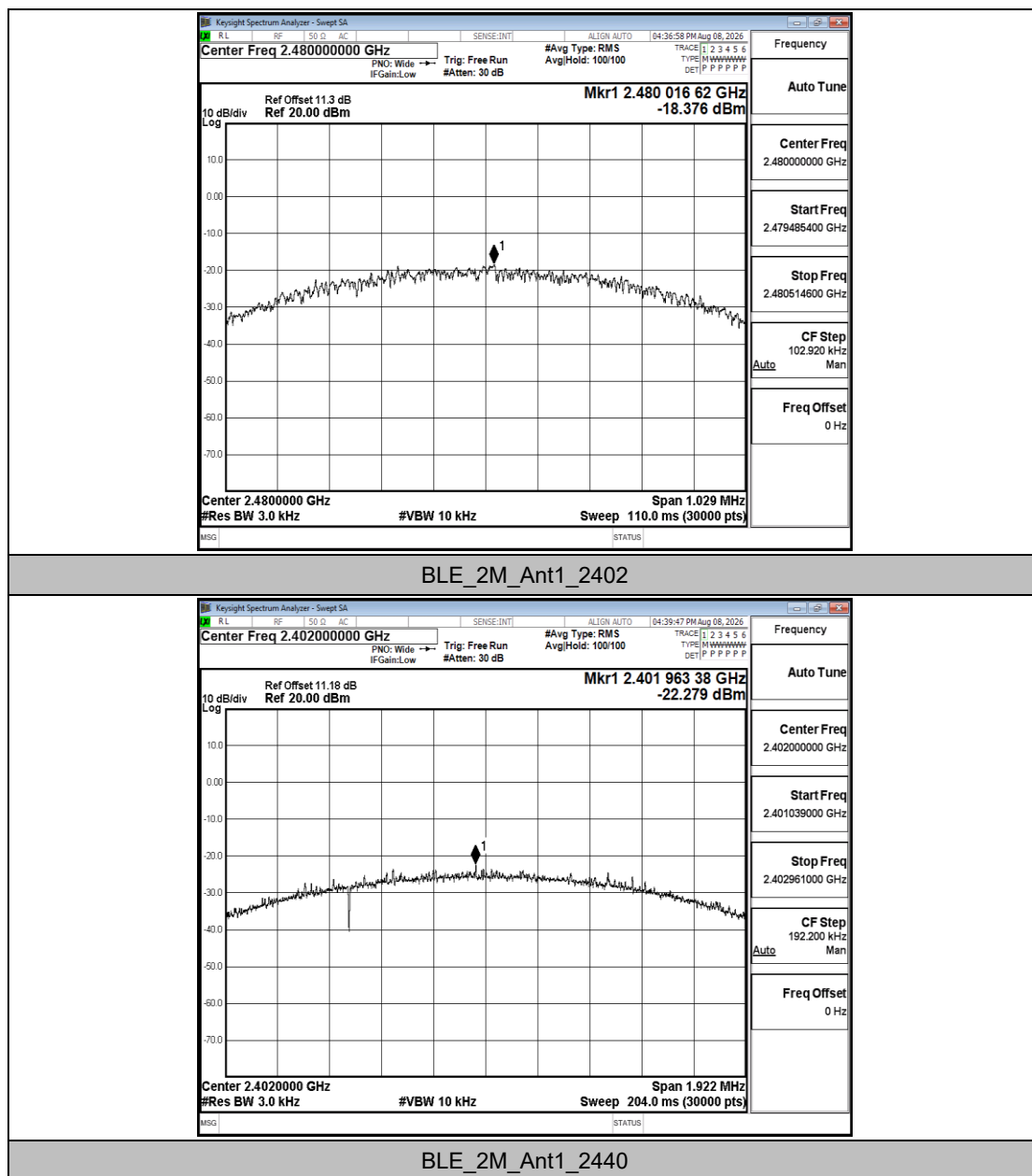
B.3 Maximum power spectral density

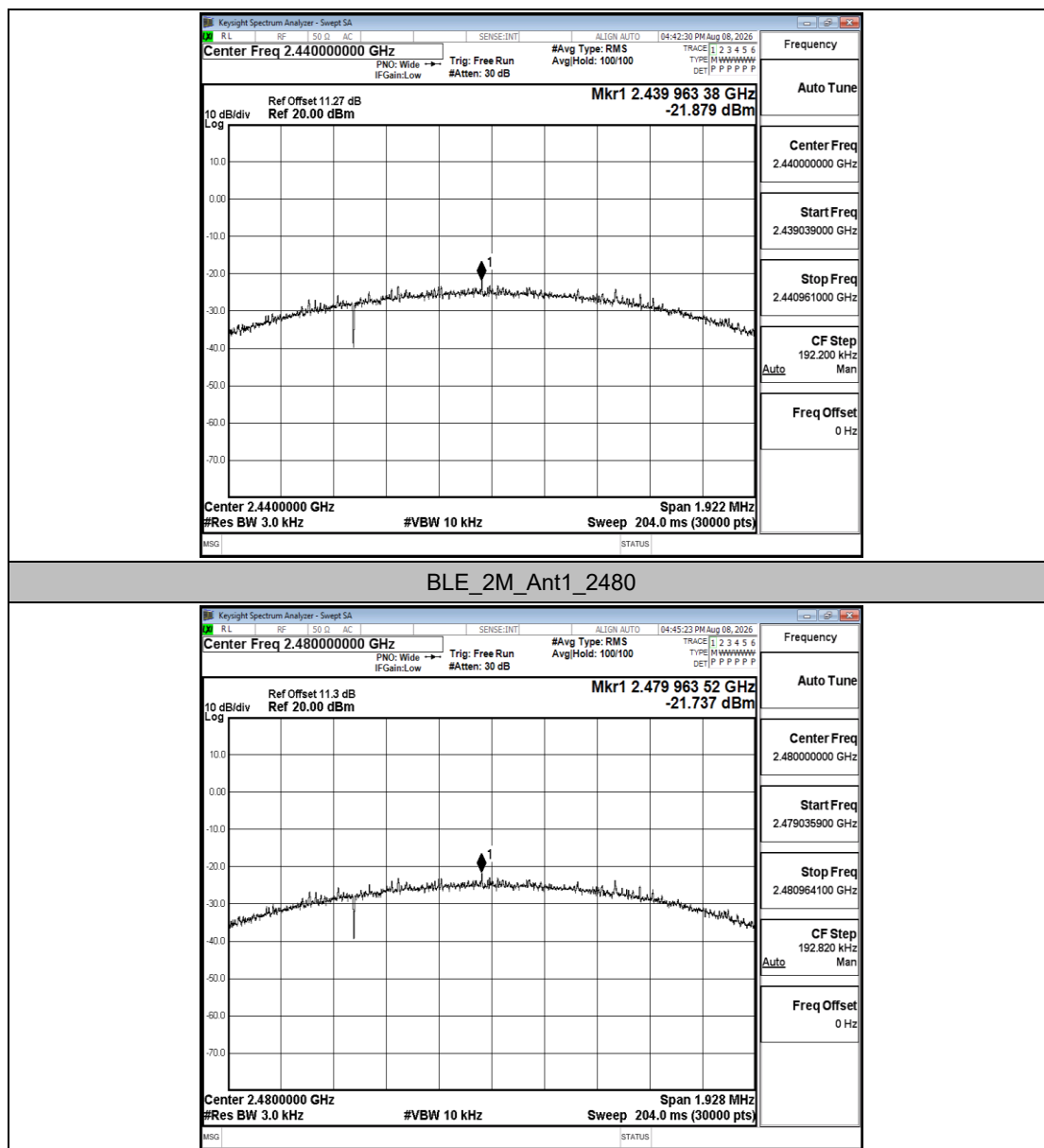
Test Result

TestMode	Antenna	Freq (MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-18.97	≤8.00	PASS
		2440	-18.53	≤8.00	PASS
		2480	-18.38	≤8.00	PASS
BLE_2M	Ant1	2402	-22.28	≤8.00	PASS
		2440	-21.88	≤8.00	PASS
		2480	-21.74	≤8.00	PASS

Test Graphs





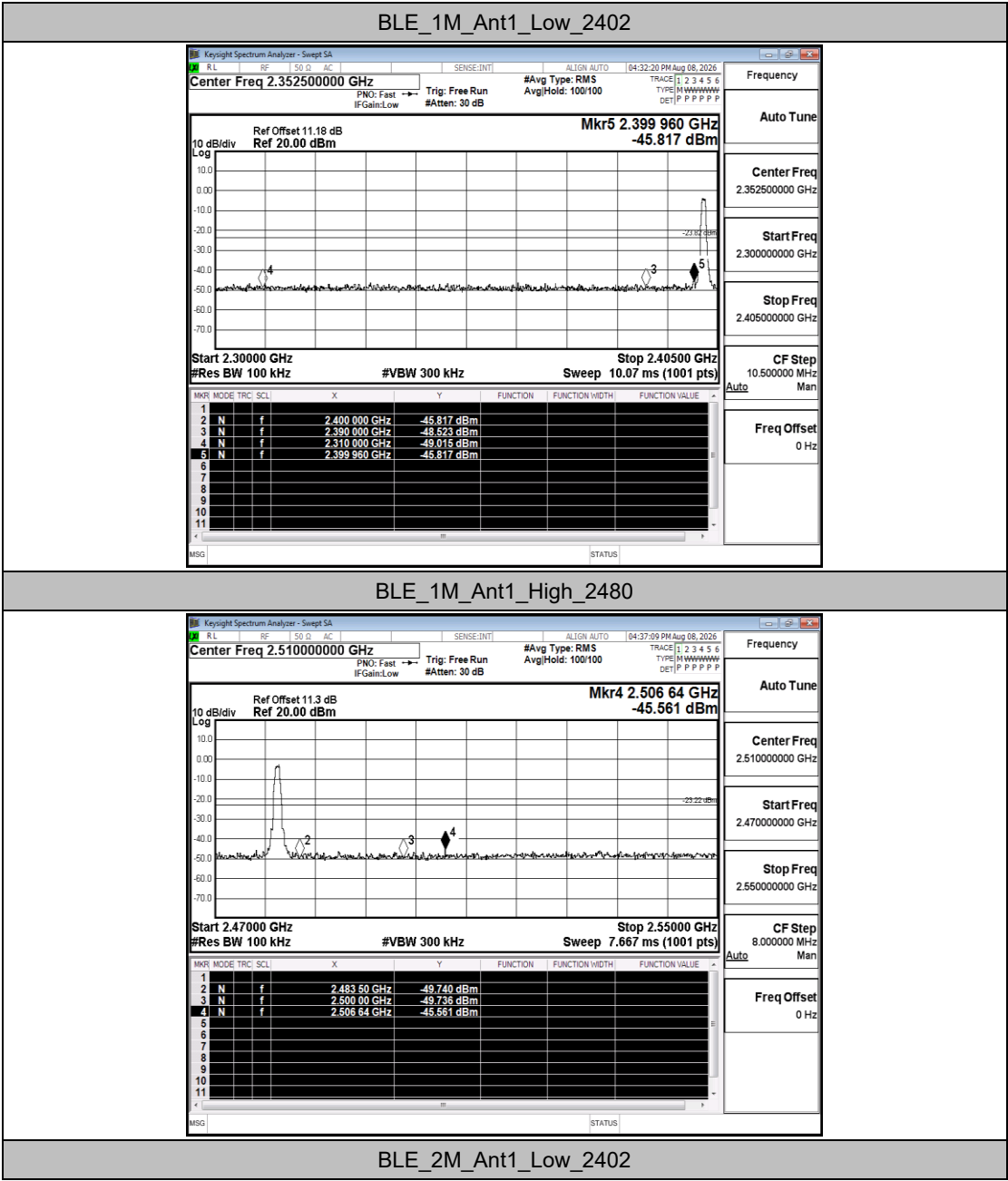


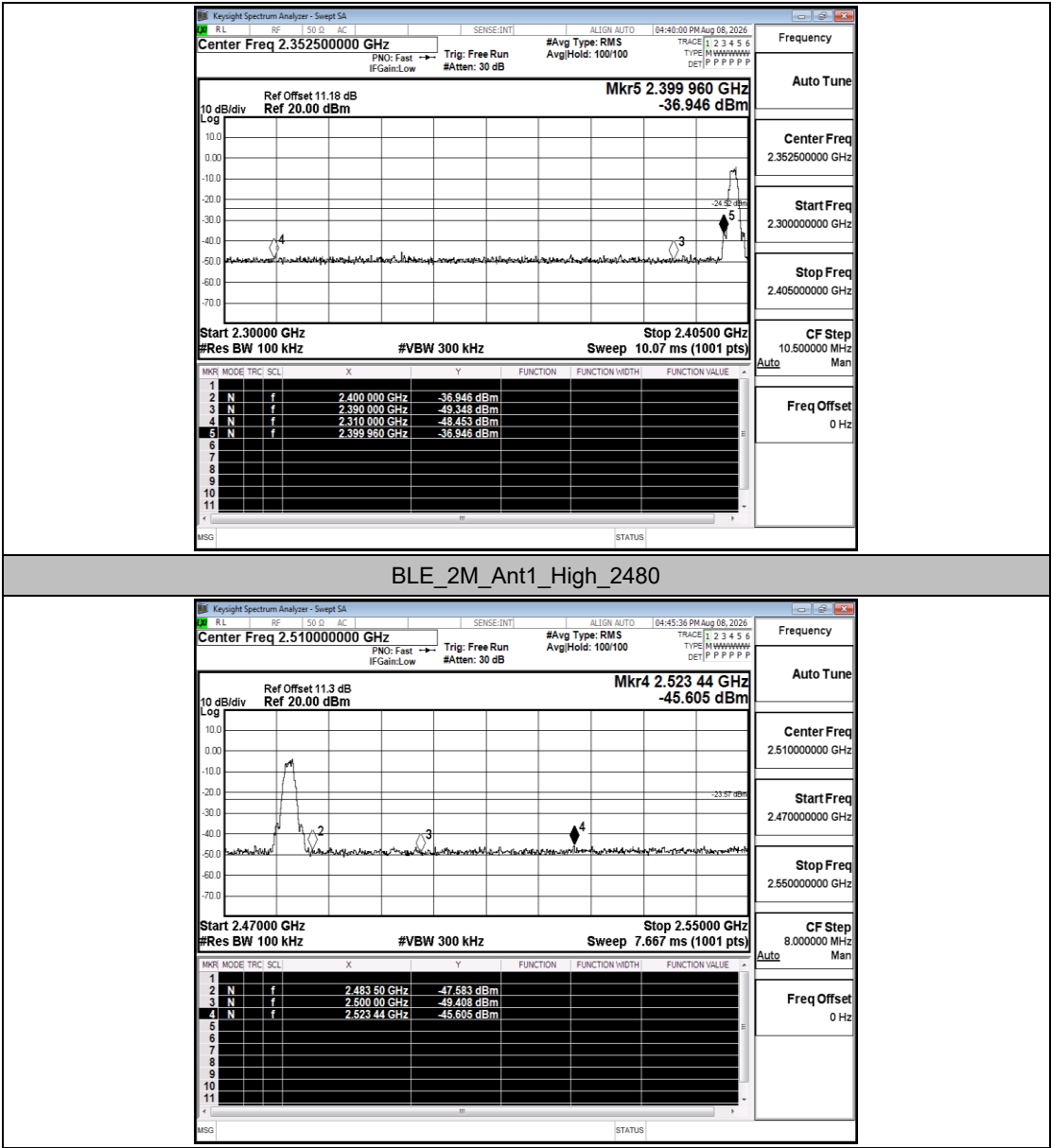
B.4 Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq (MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-3.82	-45.82	≤-23.82	PASS
		High	2480	-3.22	-45.56	≤-23.22	PASS
BLE_2M	Ant1	Low	2402	-4.52	-36.95	≤-24.52	PASS
		High	2480	-3.57	-45.61	≤-23.57	PASS

Test Graphs



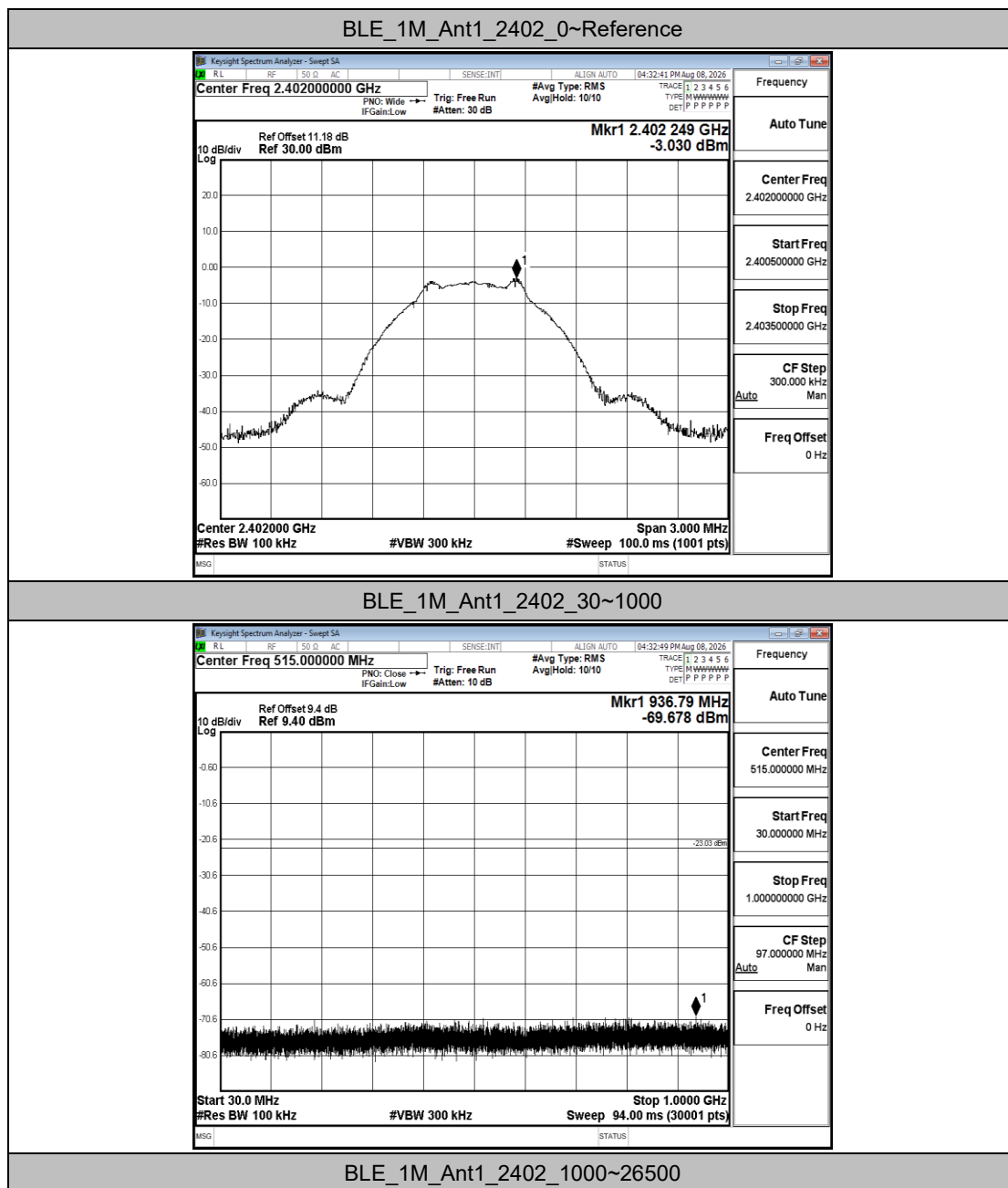


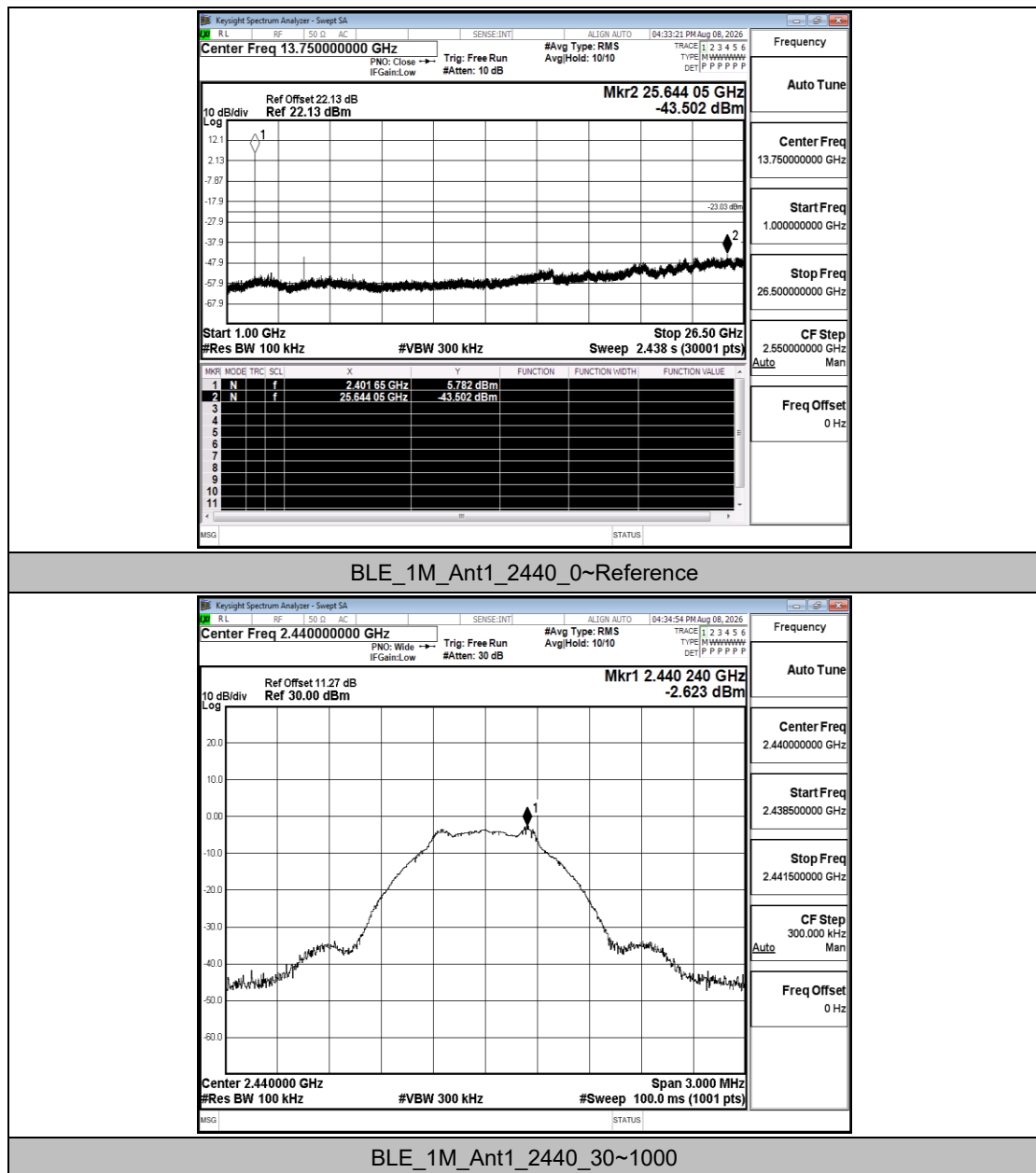
B.5 Conducted Spurious Emission

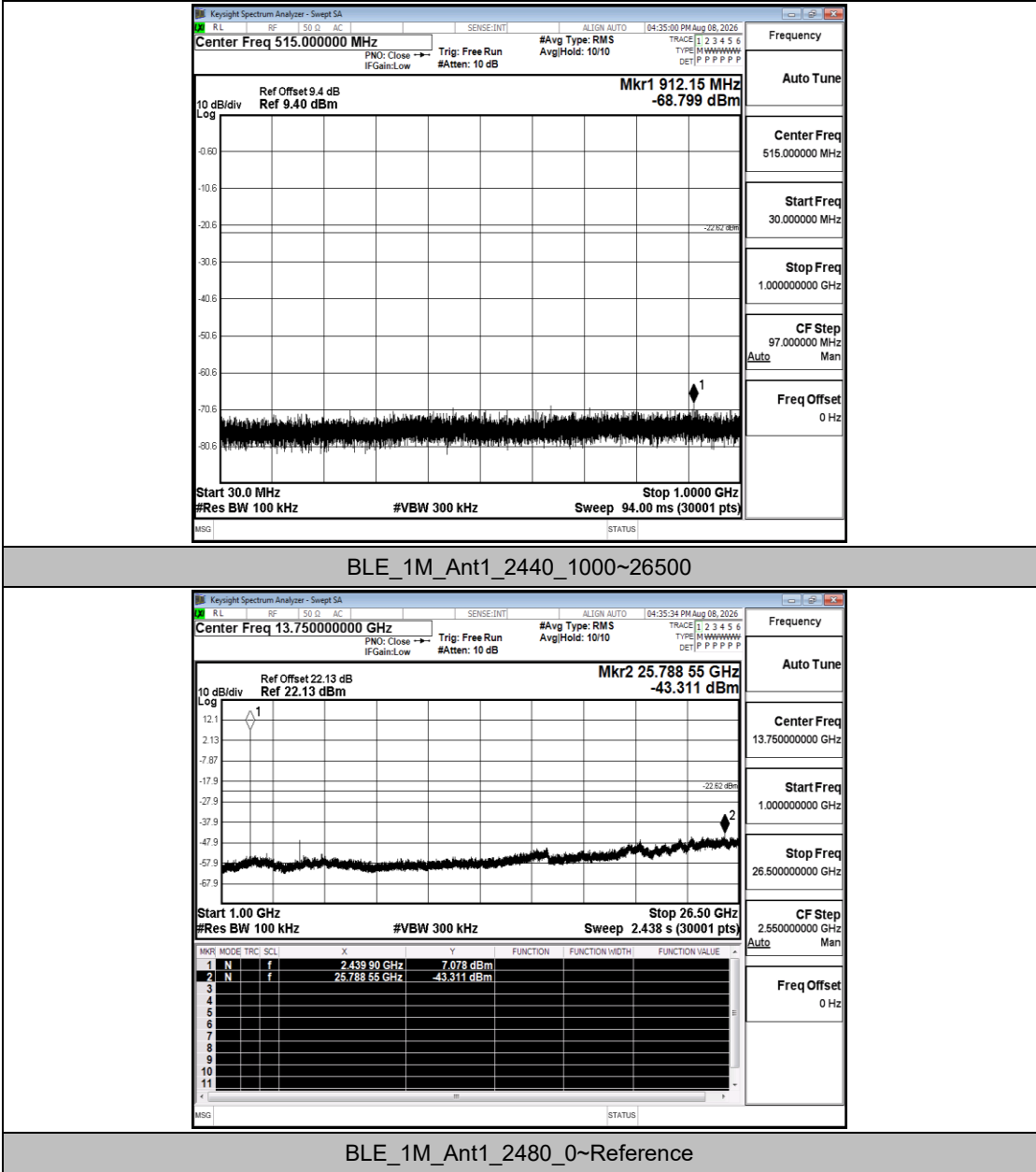
Test Result

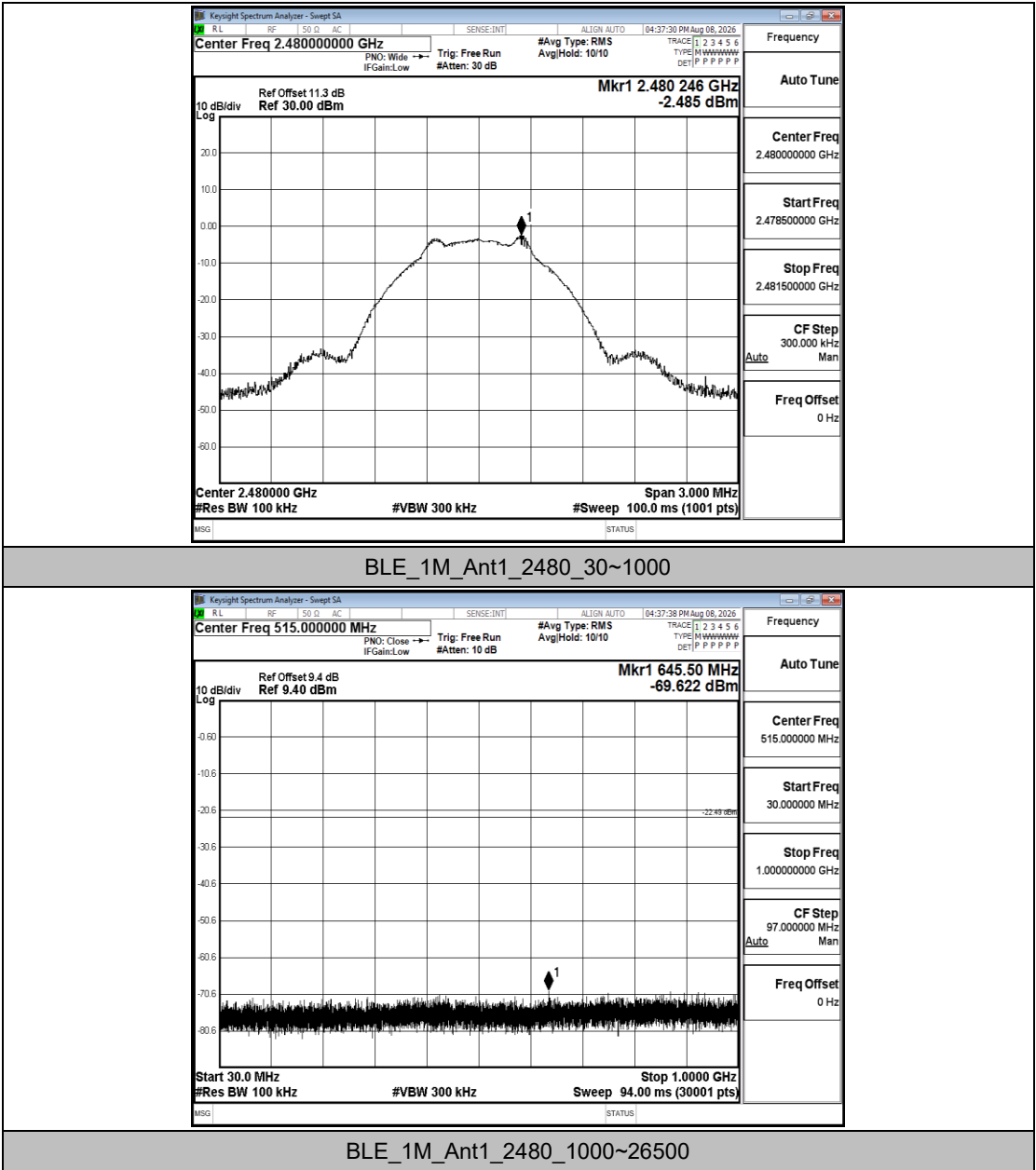
TestMode	Antenna	Freq (MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-3.03	-3.03	---	PASS
			30~1000	-3.03	-69.68	≤-23.03	PASS
			1000~26500	-3.03	-43.5	≤-23.03	PASS
		2440	Reference	-2.62	-2.62	---	PASS
			30~1000	-2.62	-68.8	≤-22.62	PASS
			1000~26500	-2.62	-43.31	≤-22.62	PASS
		2480	Reference	-2.49	-2.49	---	PASS
			30~1000	-2.49	-69.62	≤-22.49	PASS
			1000~26500	-2.49	-44.47	≤-22.49	PASS
BLE_2M	Ant1	2402	Reference	-4.13	-4.13	---	PASS
			30~1000	-4.13	-69.31	≤-24.13	PASS
			1000~26500	-4.13	-43.53	≤-24.13	PASS
		2440	Reference	-3.74	-3.74	---	PASS
			30~1000	-3.74	-69.64	≤-23.74	PASS
			1000~26500	-3.74	-44.76	≤-23.74	PASS
		2480	Reference	-3.55	-3.55	---	PASS
			30~1000	-3.55	-69.83	≤-23.55	PASS
			1000~26500	-3.55	-43.68	≤-23.55	PASS

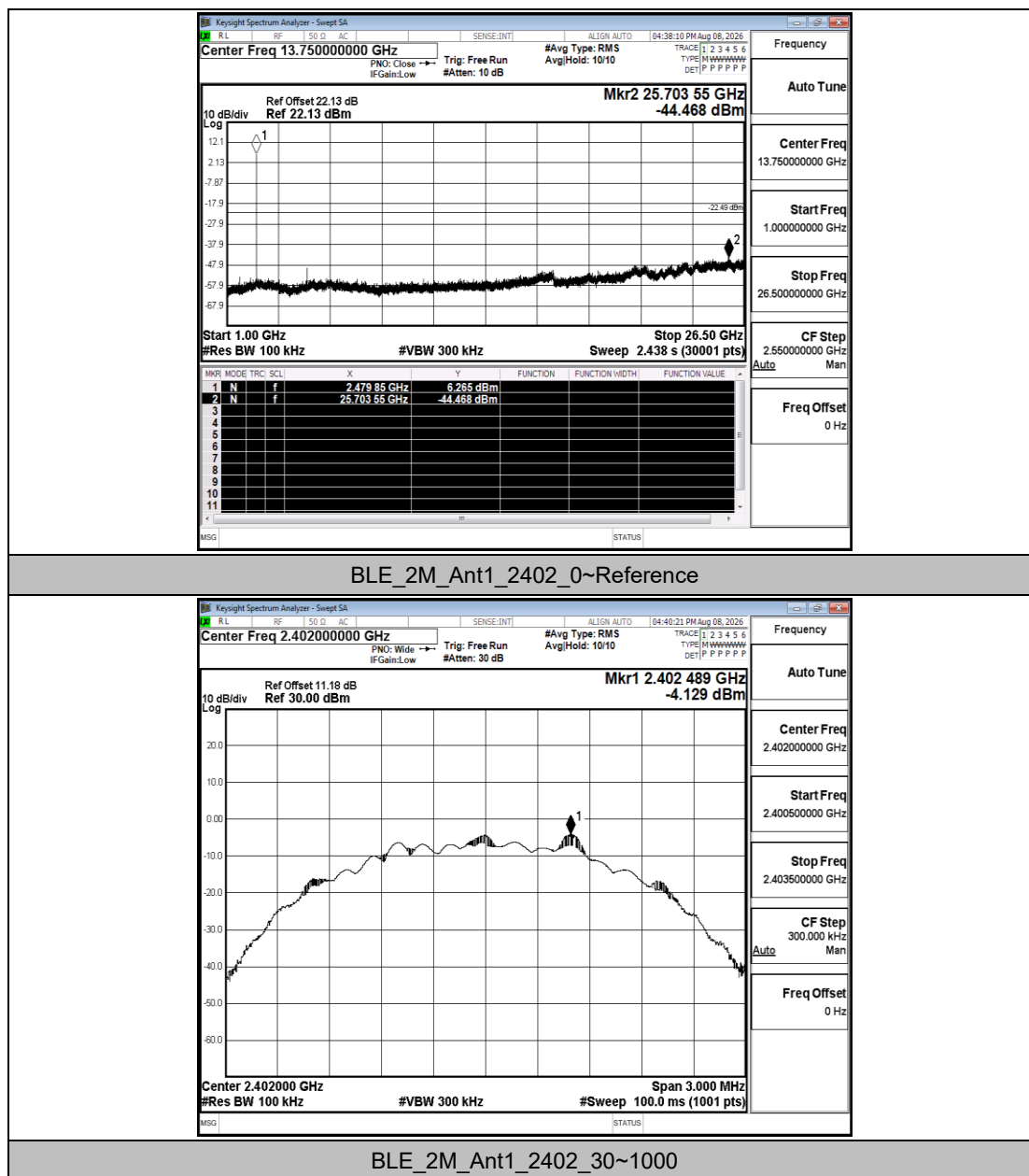
Test Graphs

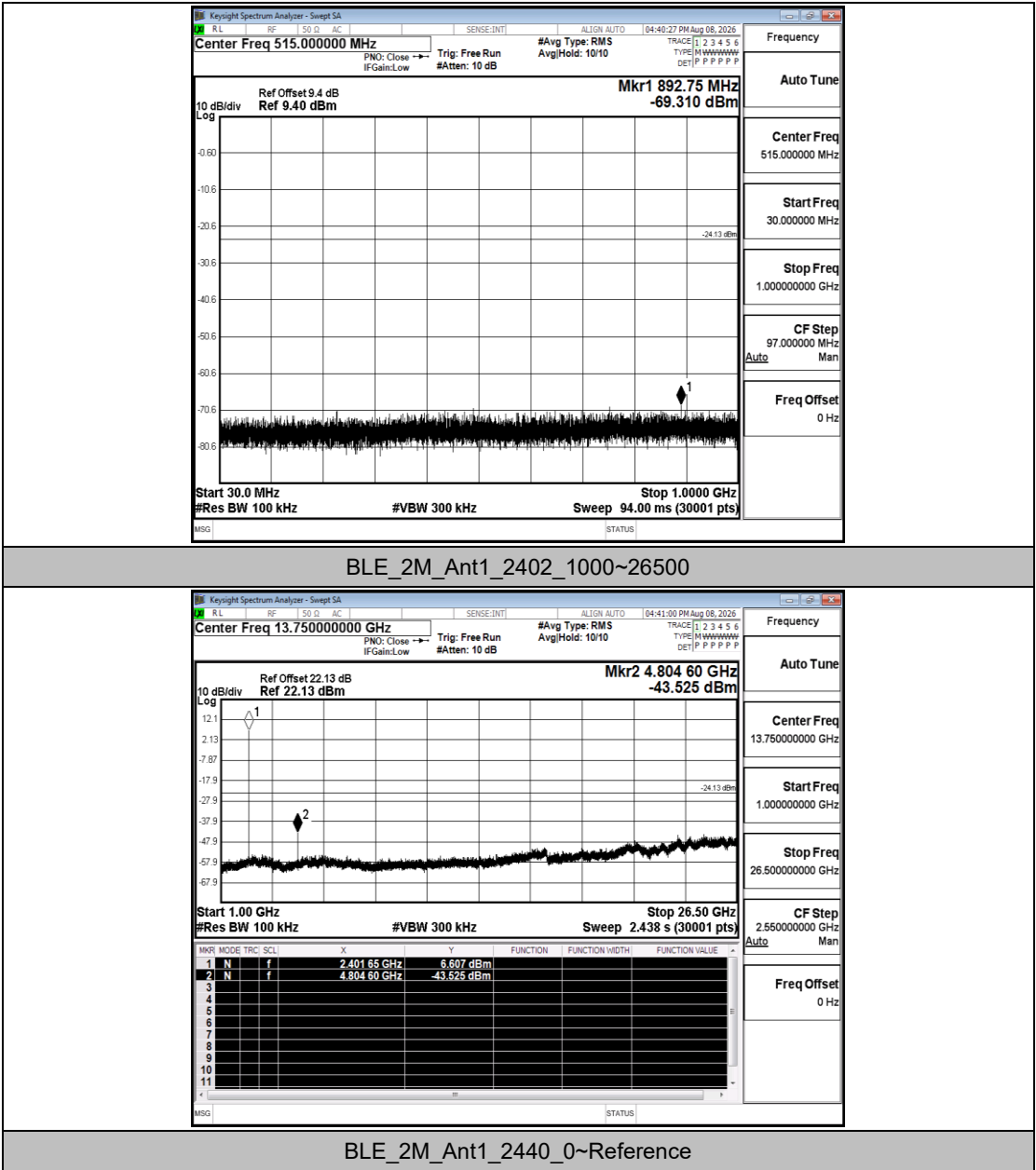


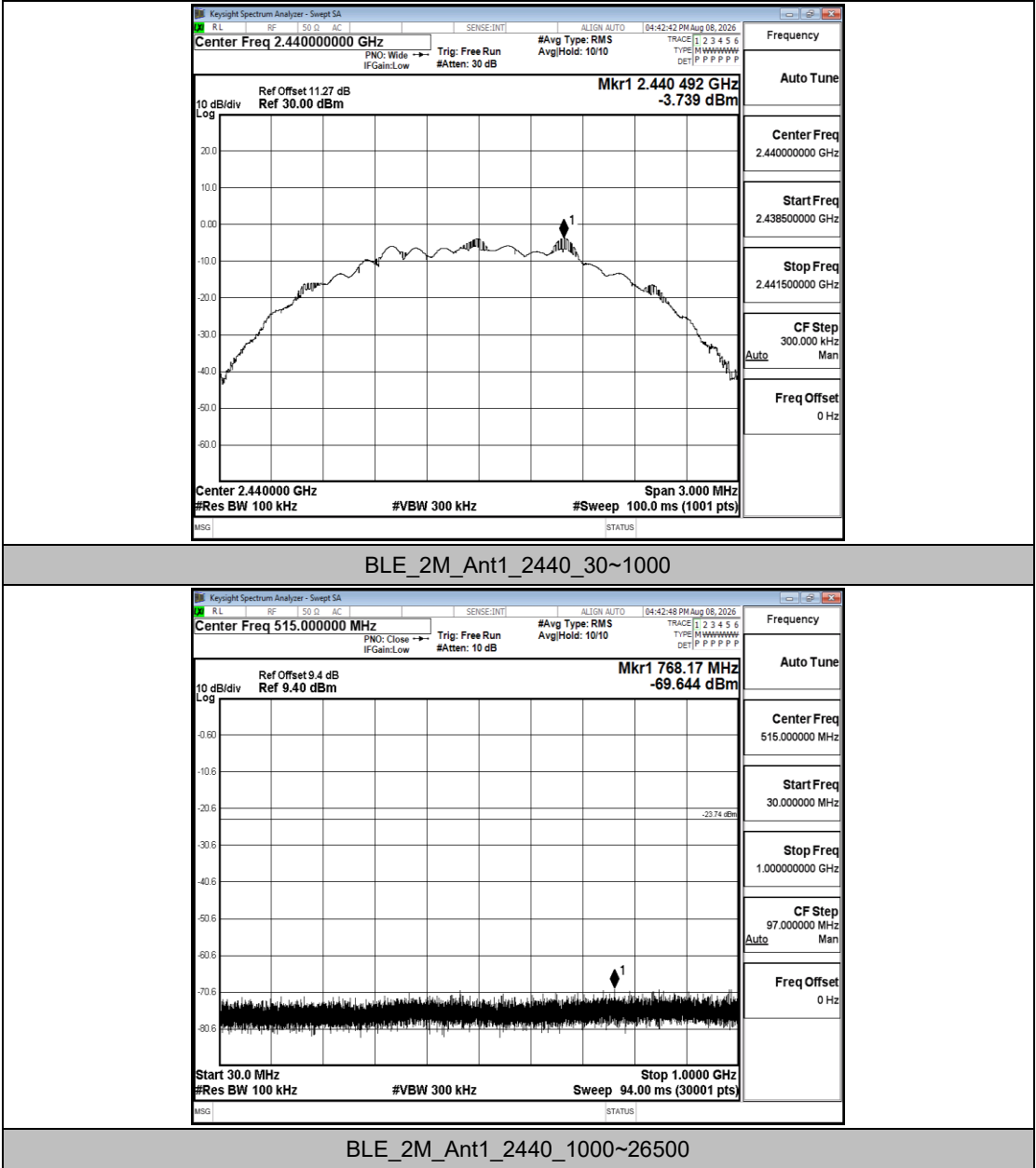


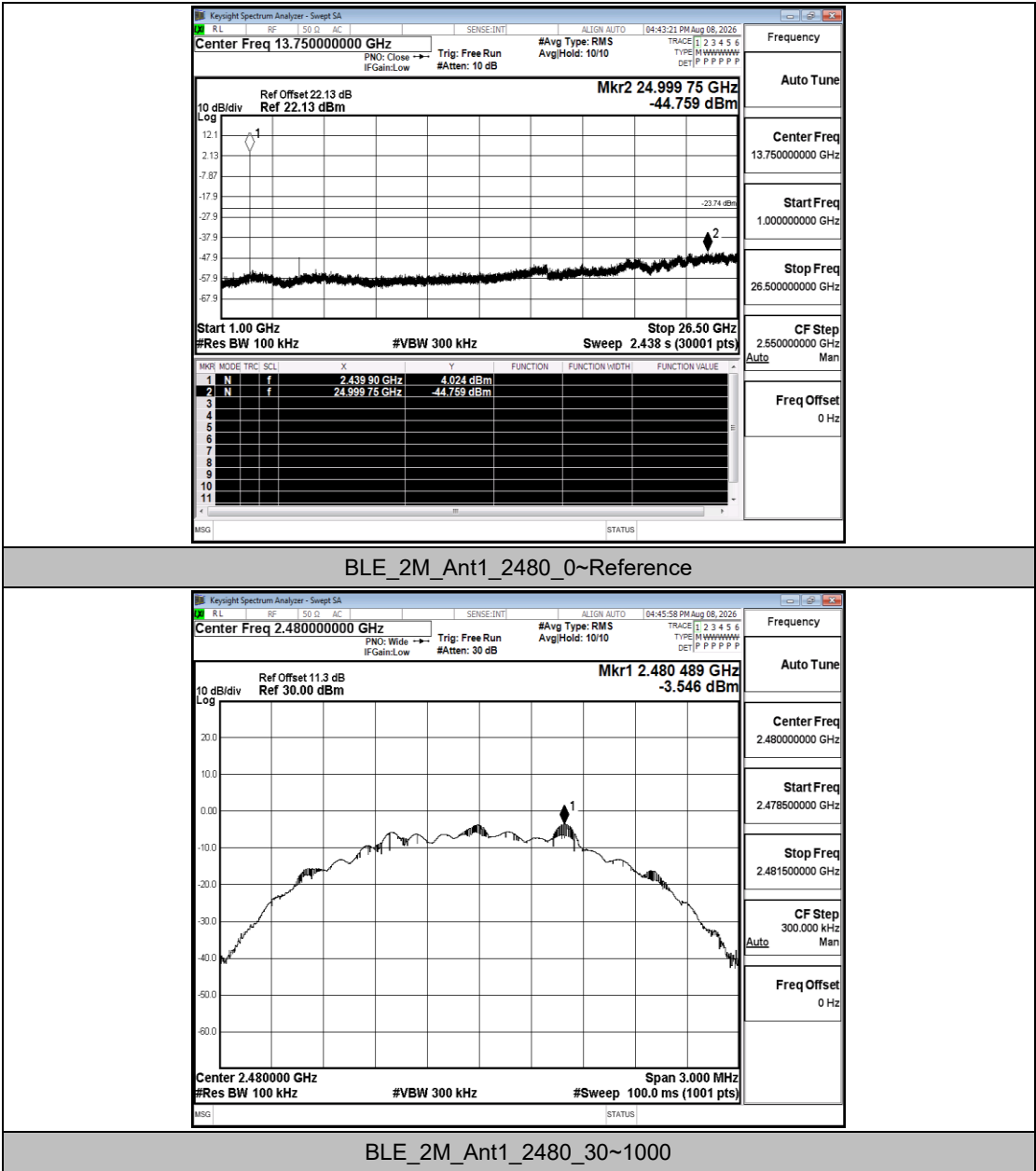


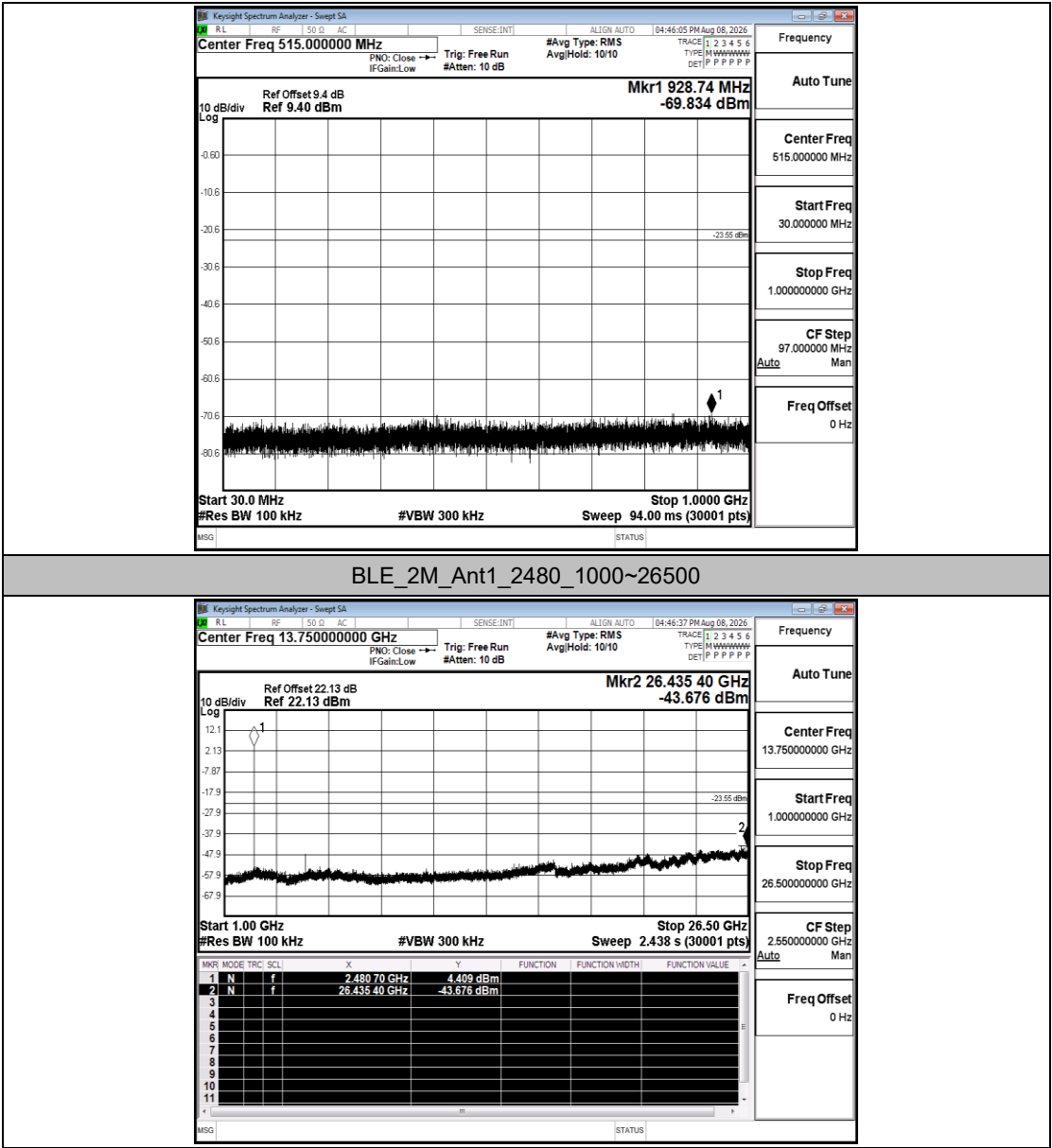










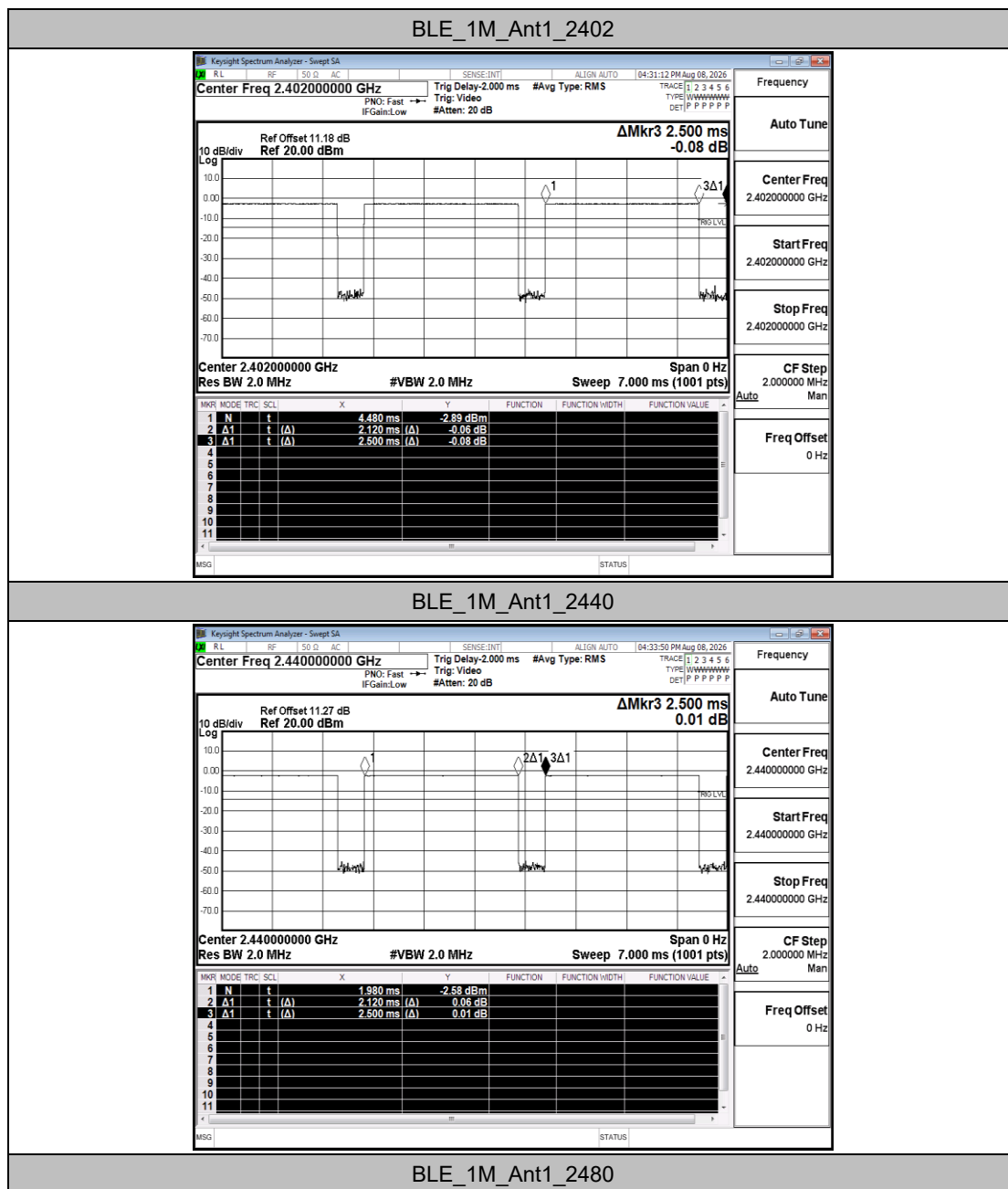


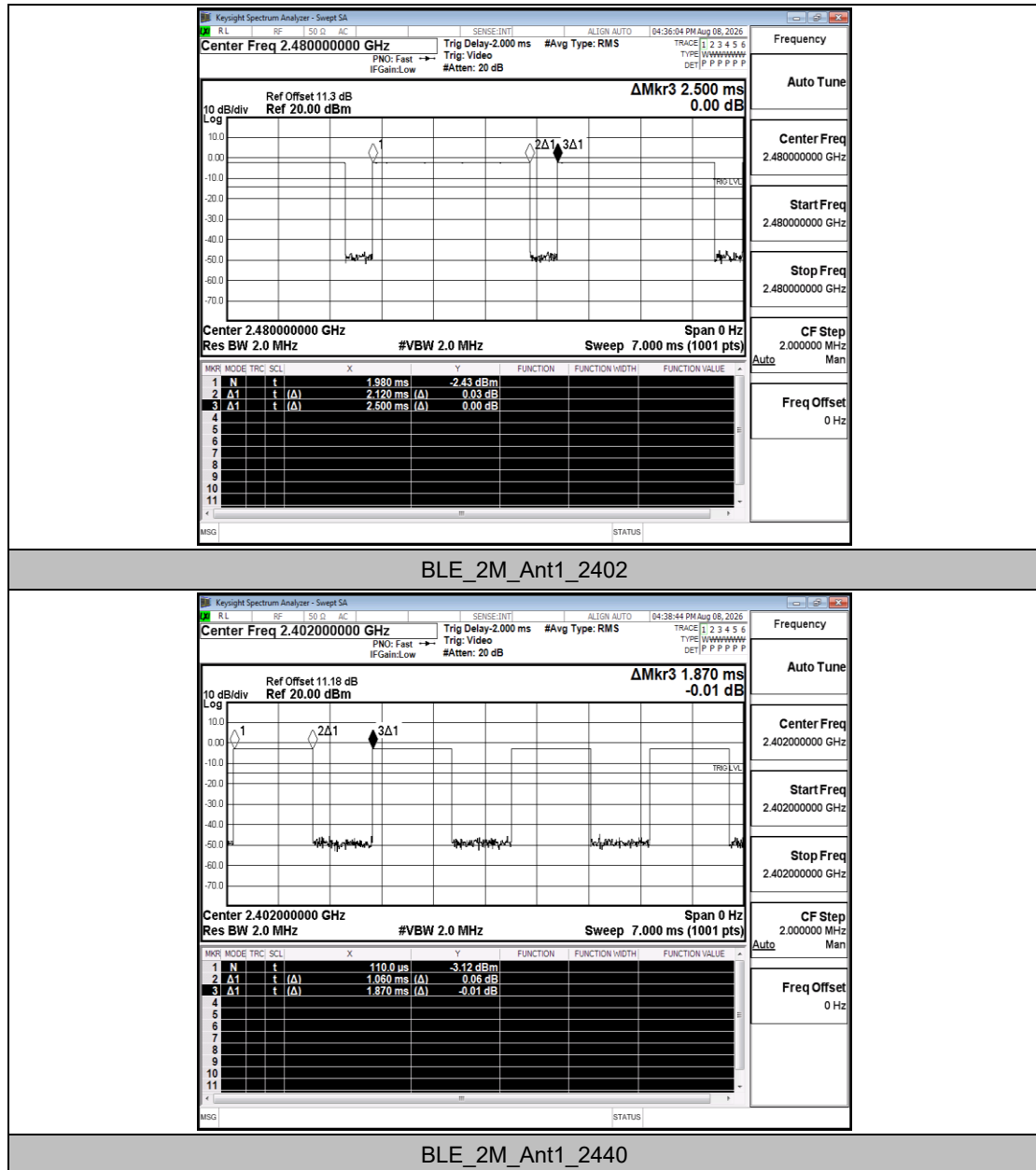
B.6 Duty Cycle

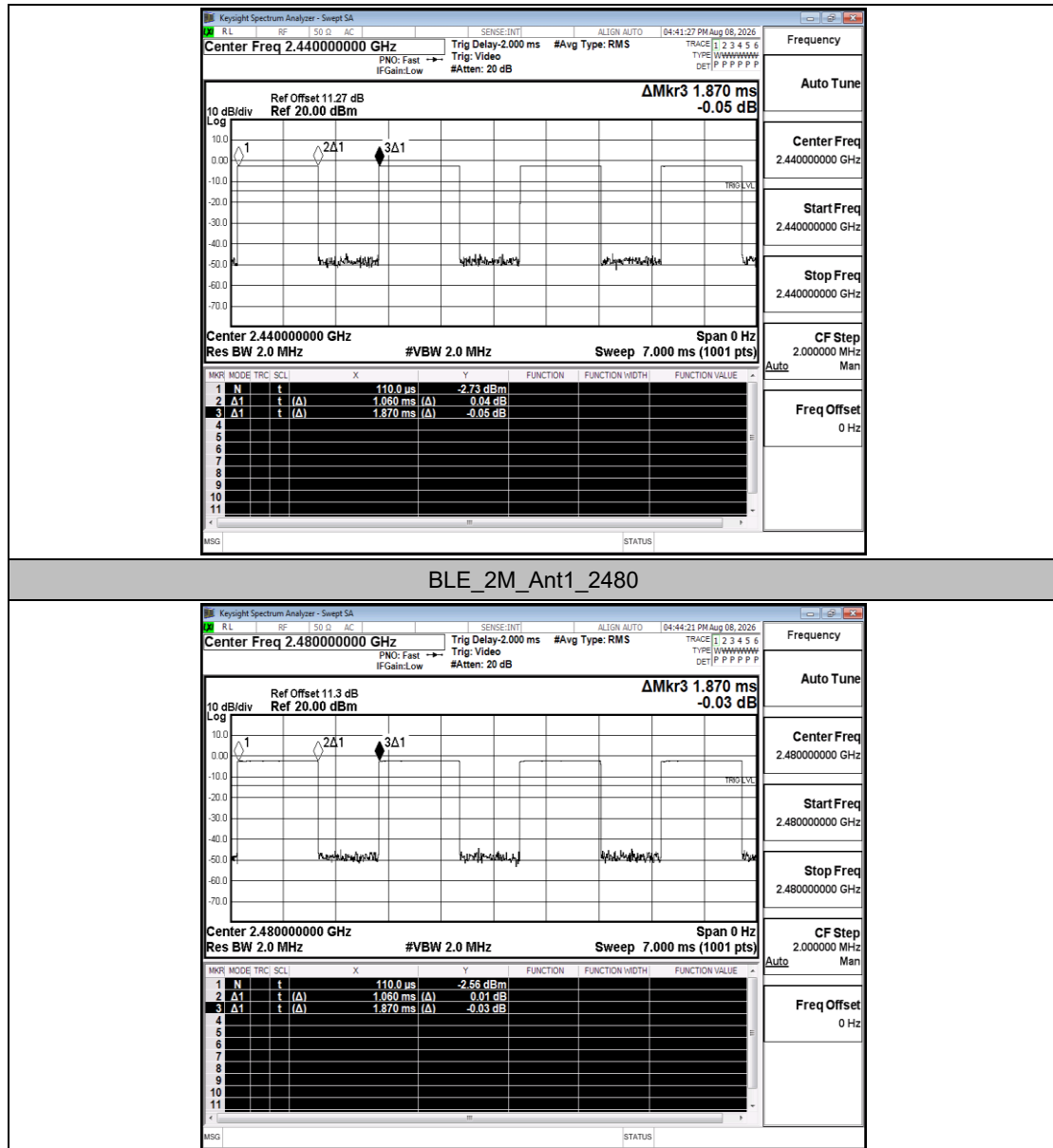
Test Result

TestMode	Antenna	Freq (MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	2.12	2.50	0.8480	84.80	0.72	---	---
		2440	2.12	2.50	0.8480	84.80	0.72	---	---
		2480	2.12	2.50	0.8480	84.80	0.72	---	---
BLE_2M	Ant1	2402	1.06	1.87	0.5668	56.68	2.47	---	---
		2440	1.06	1.87	0.5668	56.68	2.47	---	---
		2480	1.06	1.87	0.5668	56.68	2.47	---	---

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	-57.66	≤-43.92	2.43	0.72	40.69	≤54	PASS
				AV	2318.480	-56.79	≤-43.92	2.43	0.72	41.56	≤54	PASS
				AV	2390.000	-57.82	≤-43.92	2.43	0.72	40.53	≤54	PASS
				Peak	2310.000	-48.12	≤-23.20	2.43	0	49.51	≤74	PASS
				Peak	2353.445	-46.18	≤-23.20	2.43	0	51.45	≤74	PASS
				Peak	2390.000	-49.63	≤-23.20	2.43	0	48.00	≤74	PASS
		High	2480	AV	2483.500	-56.37	≤-43.92	2.43	0.72	41.98	≤54	PASS
				AV	2483.600	-56.09	≤-43.92	2.43	0.72	42.26	≤54	PASS
				AV	2500.000	-56.97	≤-43.92	2.43	0.72	41.38	≤54	PASS
				Peak	2483.500	-47.79	≤-23.20	2.43	0	49.84	≤74	PASS
				Peak	2499.200	-46.03	≤-23.20	2.43	0	51.60	≤74	PASS
				Peak	2500.000	-50.35	≤-23.20	2.43	0	47.28	≤74	PASS
BLE_2M	Ant1	Low	2402	AV	2310.000	-58.5	≤-45.67	2.43	2.47	41.60	≤54	PASS
				AV	2367.410	-56.95	≤-45.67	2.43	2.47	43.15	≤54	PASS
				AV	2390.000	-57.24	≤-45.67	2.43	2.47	42.86	≤54	PASS
				Peak	2310.000	-49.92	≤-23.20	2.43	0	47.71	≤74	PASS
				Peak	2368.145	-46.13	≤-23.20	2.43	0	51.50	≤74	PASS
				Peak	2390.000	-47.47	≤-23.20	2.43	0	50.16	≤74	PASS
		High	2480	AV	2483.500	-56.26	≤-45.67	2.43	2.47	43.84	≤54	PASS
				AV	2484.000	-56.2	≤-45.67	2.43	2.47	43.90	≤54	PASS
				AV	2500.000	-56.67	≤-45.67	2.43	2.47	43.43	≤54	PASS
				Peak	2483.500	-48.16	≤-23.20	2.43	0	49.47	≤74	PASS
				Peak	2484.080	-45.64	≤-23.20	2.43	0	51.99	≤74	PASS
				Peak	2500.000	-47.68	≤-23.20	2.43	0	49.95	≤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

