

Appendix B

RF Test Data for BT LE (Conducted Measurement)

Product Name: Tablet

Test Model: PAD_ T13

Environmental Conditions

Temperature:	24.2°C
Relative Humidity:	53.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

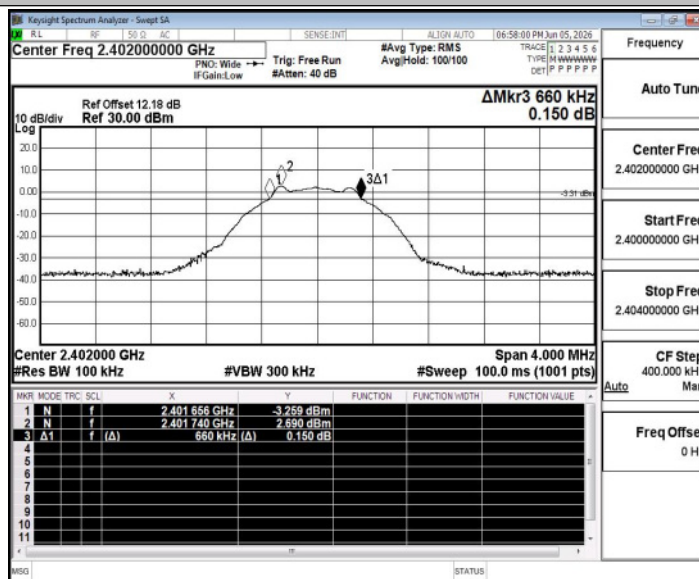
B.1 DTS Bandwidth

Test Result

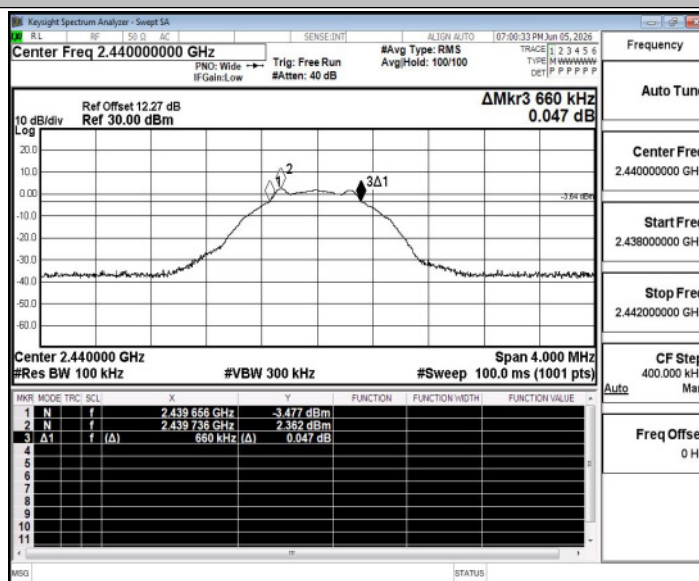
TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.660	2401.656	2402.316	0.5	PASS
		2440	0.660	2439.656	2440.316	0.5	PASS
		2480	0.660	2479.656	2480.316	0.5	PASS
BLE_2M	Ant1	2402	1.156	2401.400	2402.556	0.5	PASS
		2440	1.156	2439.400	2440.556	0.5	PASS
		2480	1.156	2479.400	2480.556	0.5	PASS

Test Graphs

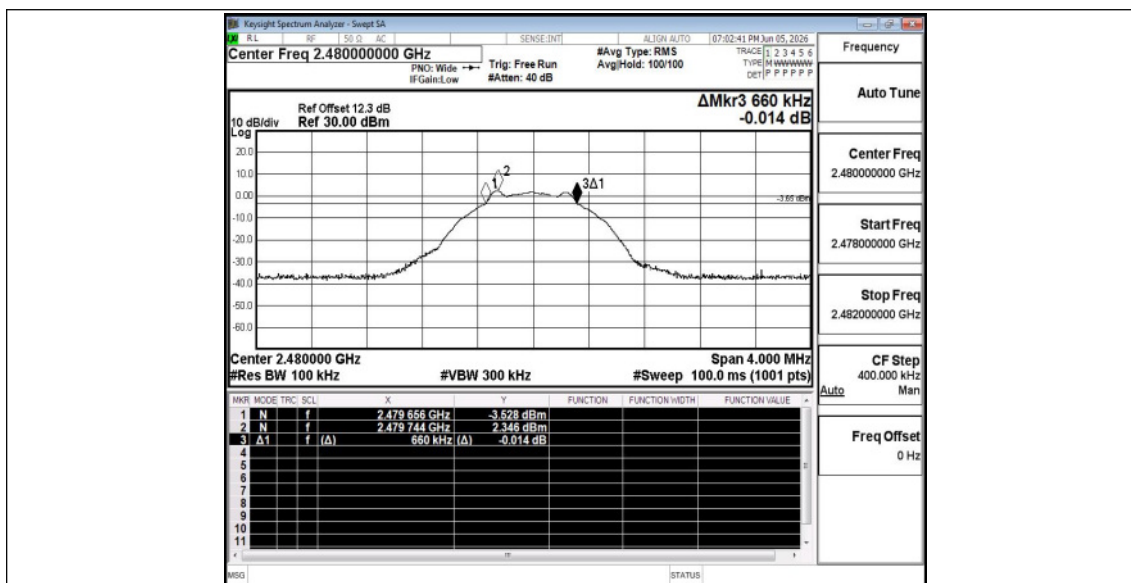
BLE_1M_Ant1_2402



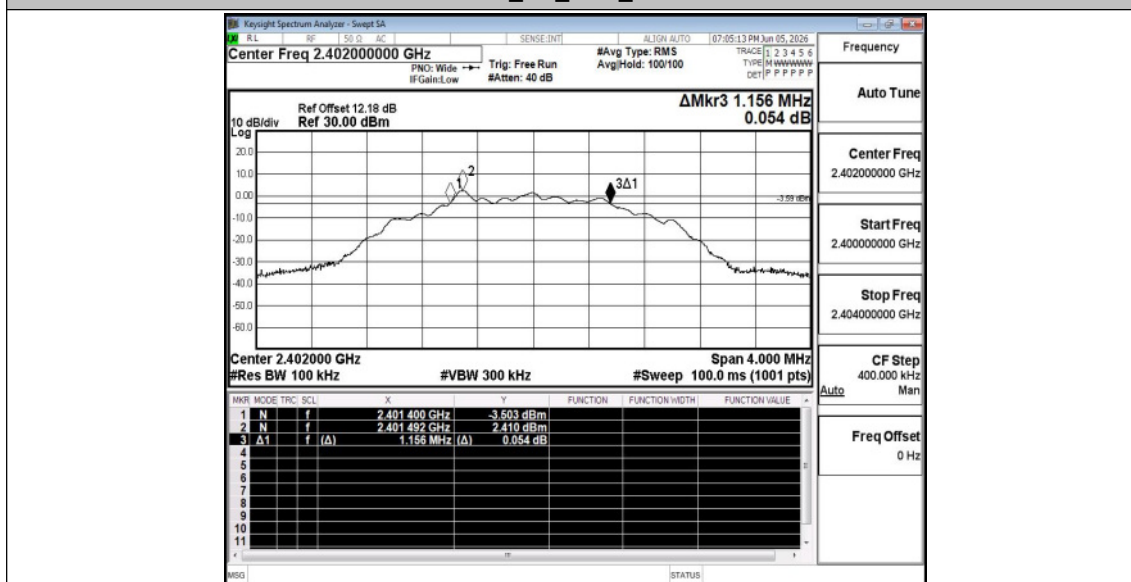
BLE_1M_Ant1_2440



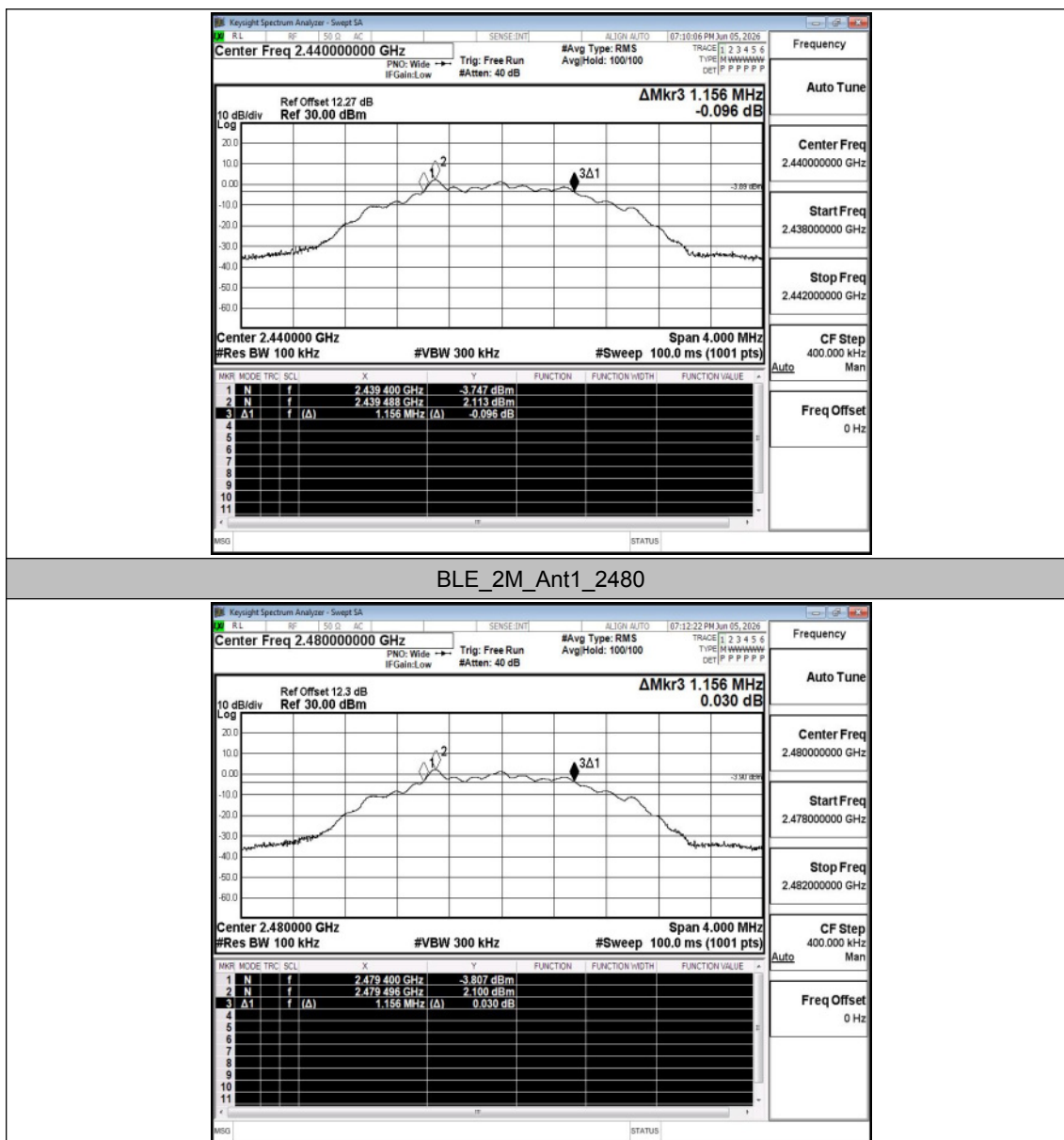
BLE_1M_Ant1_2480



BLE_2M_Ant1_2402



BLE_2M_Ant1_2440

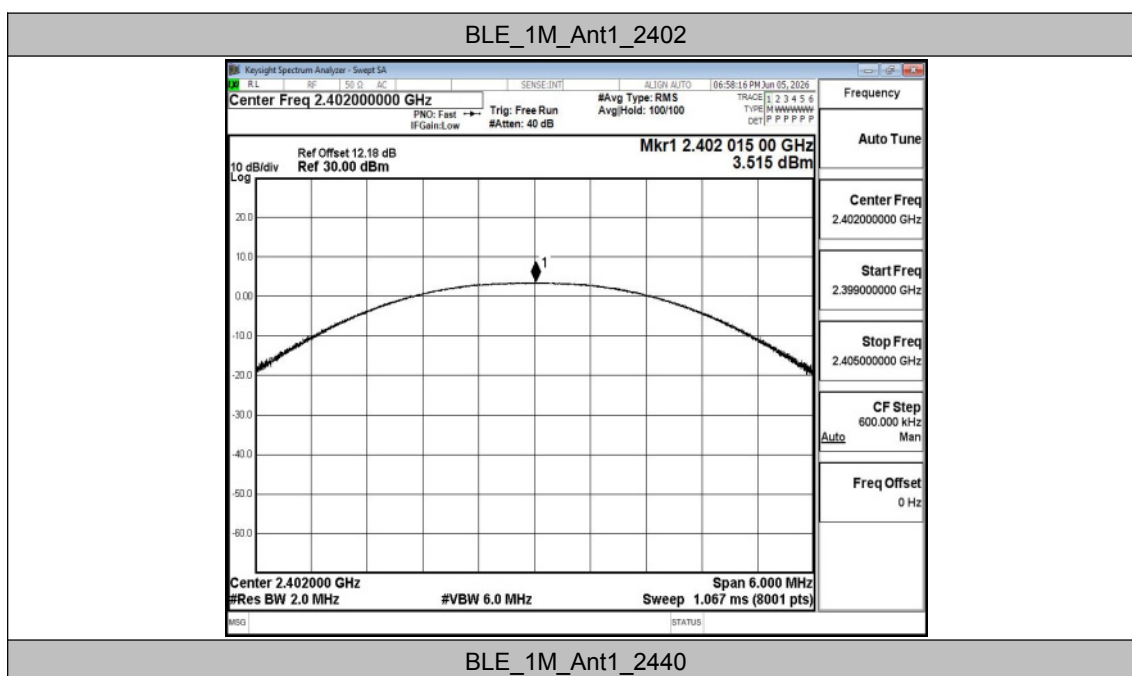


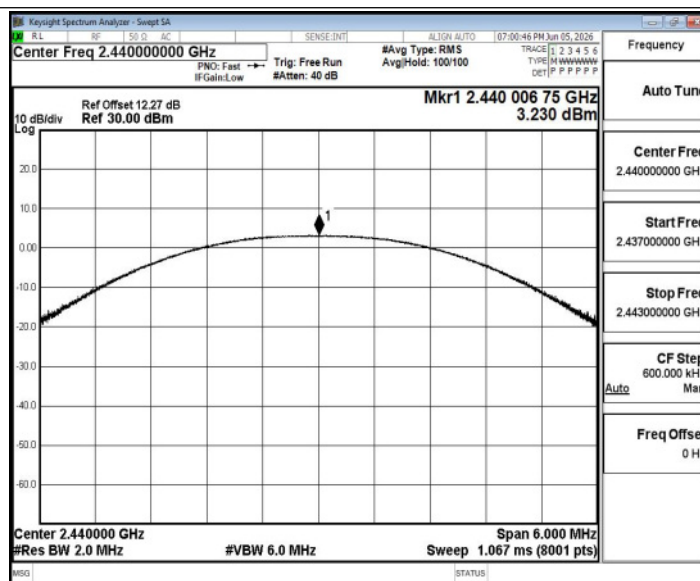
B.2 Maximum Peak conducted output power

Test Result Peak

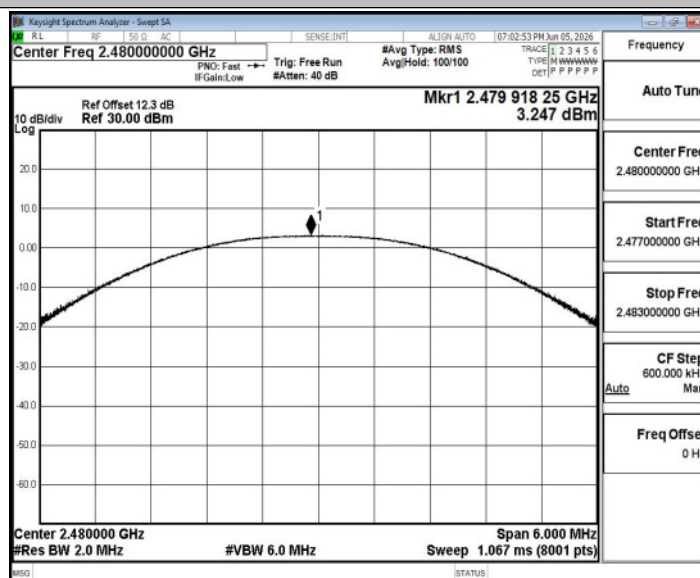
TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	3.52	≤30	PASS
		2440	3.23	≤30	PASS
		2480	3.25	≤30	PASS
BLE_2M	Ant1	2402	3.42	≤30	PASS
		2440	3.16	≤30	PASS
		2480	3.12	≤30	PASS

Test Graphs Peak

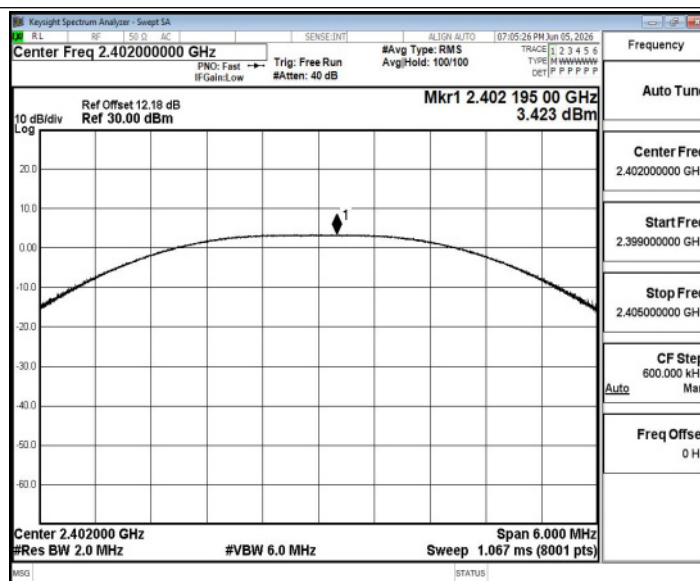




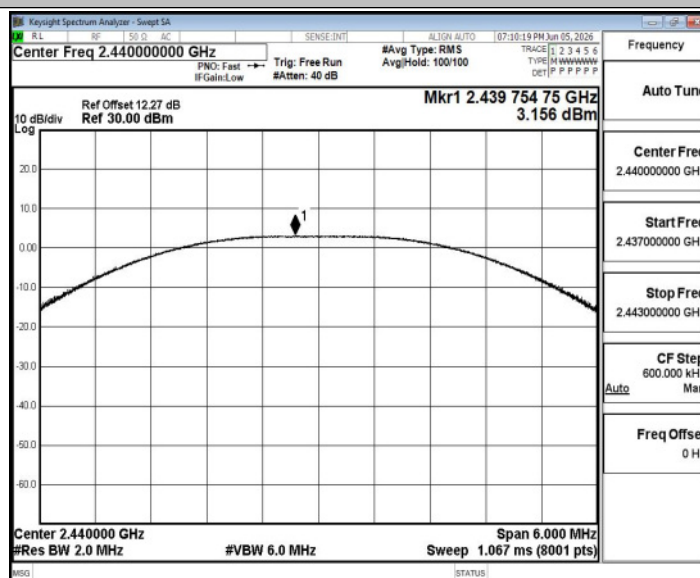
BLE_1M_Ant1_2480



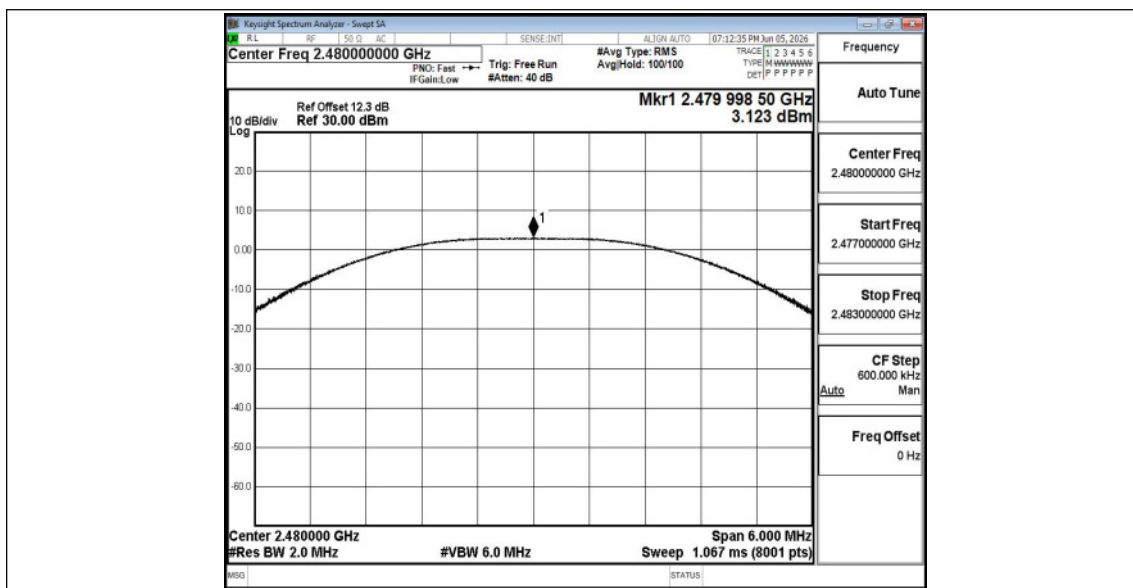
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480

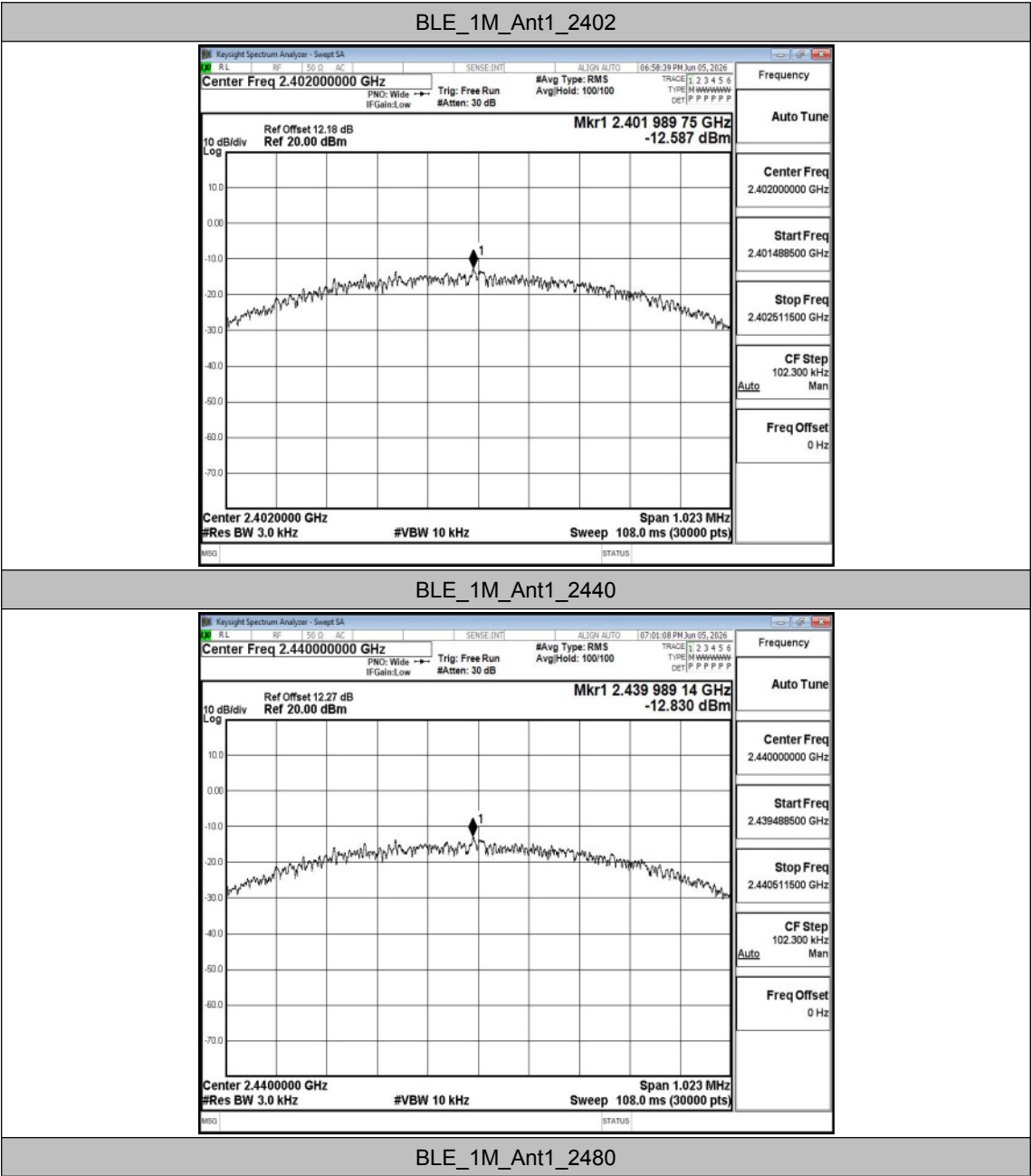


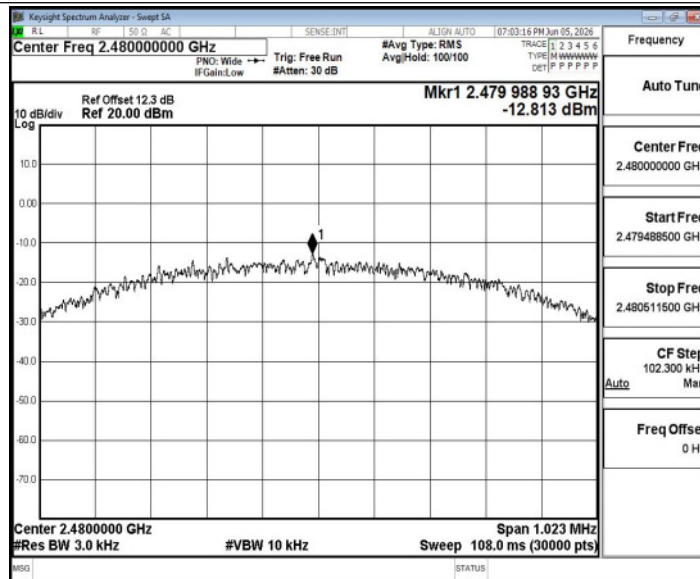
B.3 Maximum power spectral density

Test Result

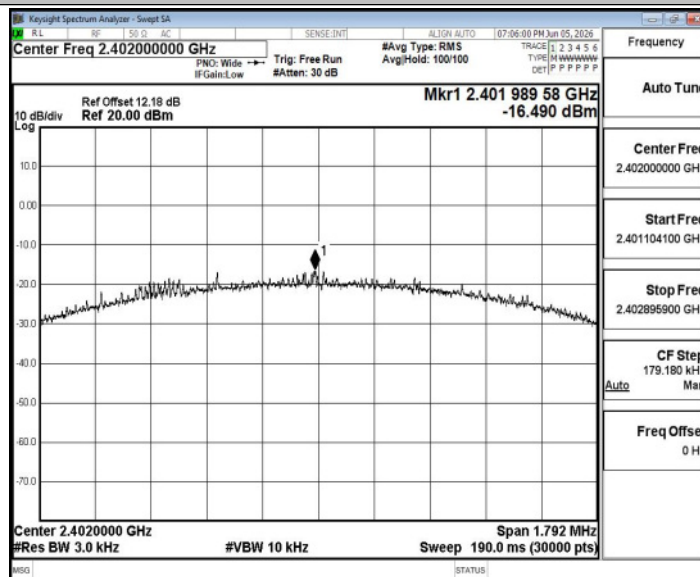
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-12.59	≤8.00	PASS
		2440	-12.83	≤8.00	PASS
		2480	-12.81	≤8.00	PASS
BLE_2M	Ant1	2402	-16.49	≤8.00	PASS
		2440	-16.81	≤8.00	PASS
		2480	-16.76	≤8.00	PASS

Test Graphs

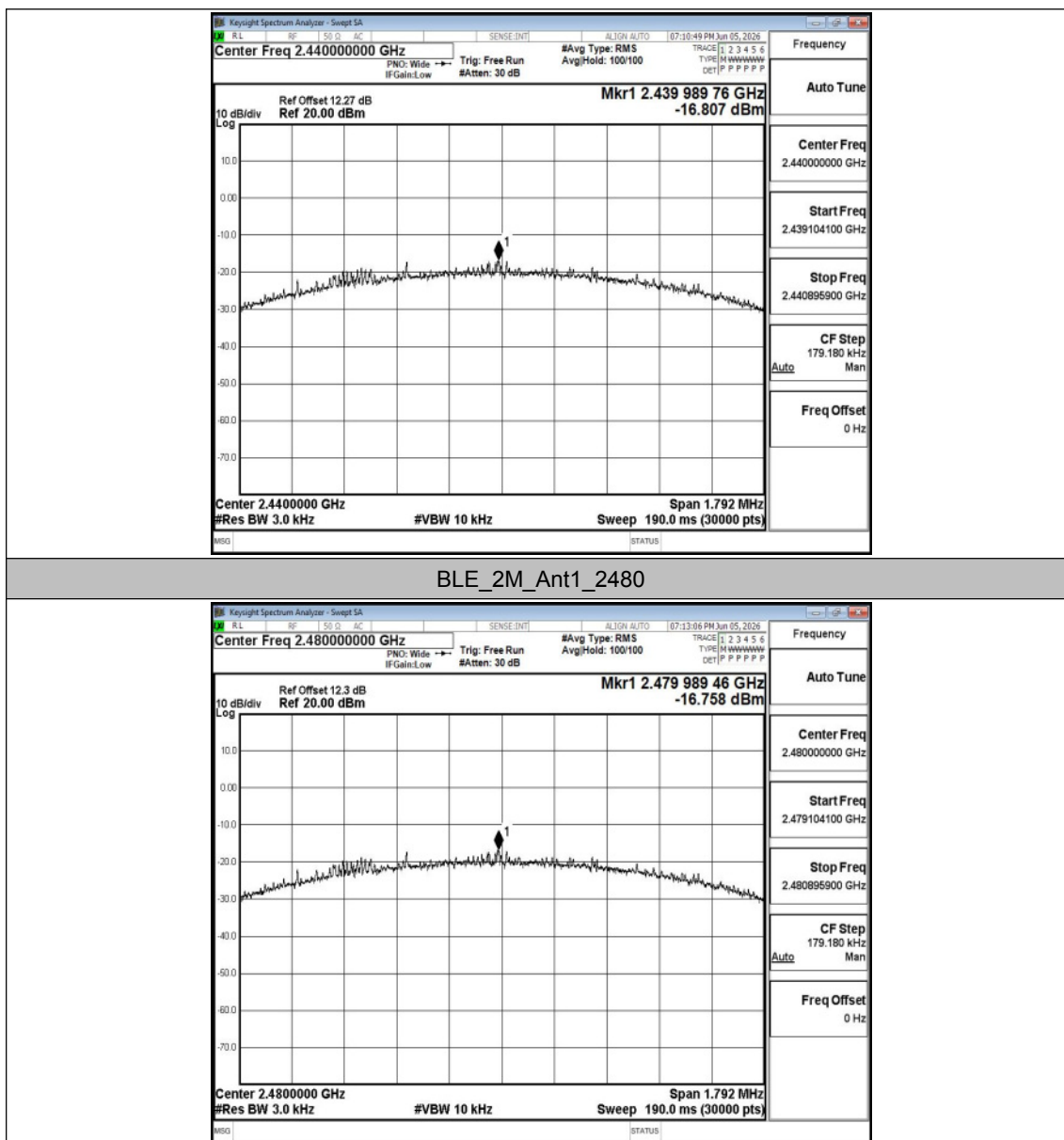




BLE_2M_Ant1_2402



BLE_2M_Ant1_2440

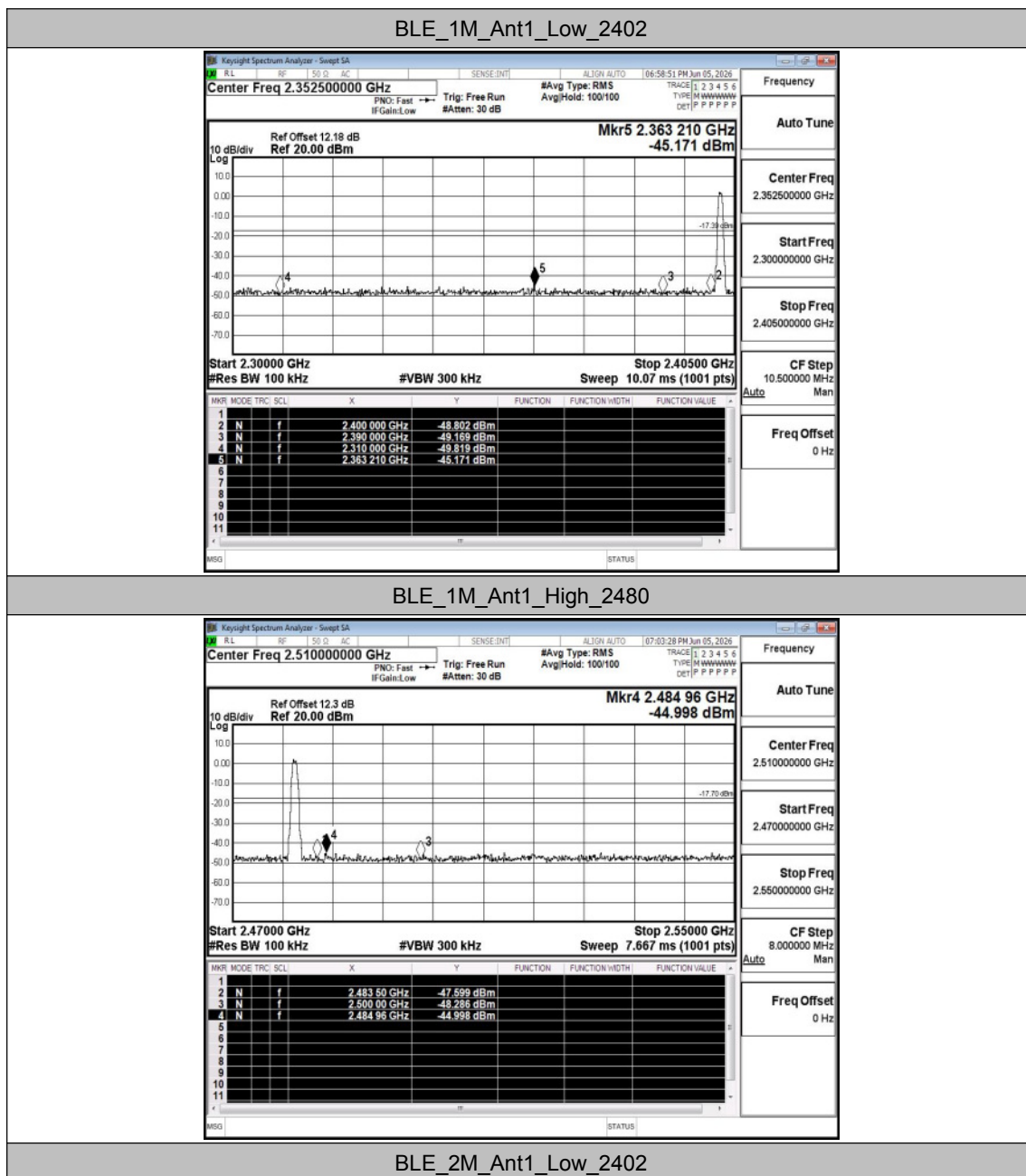


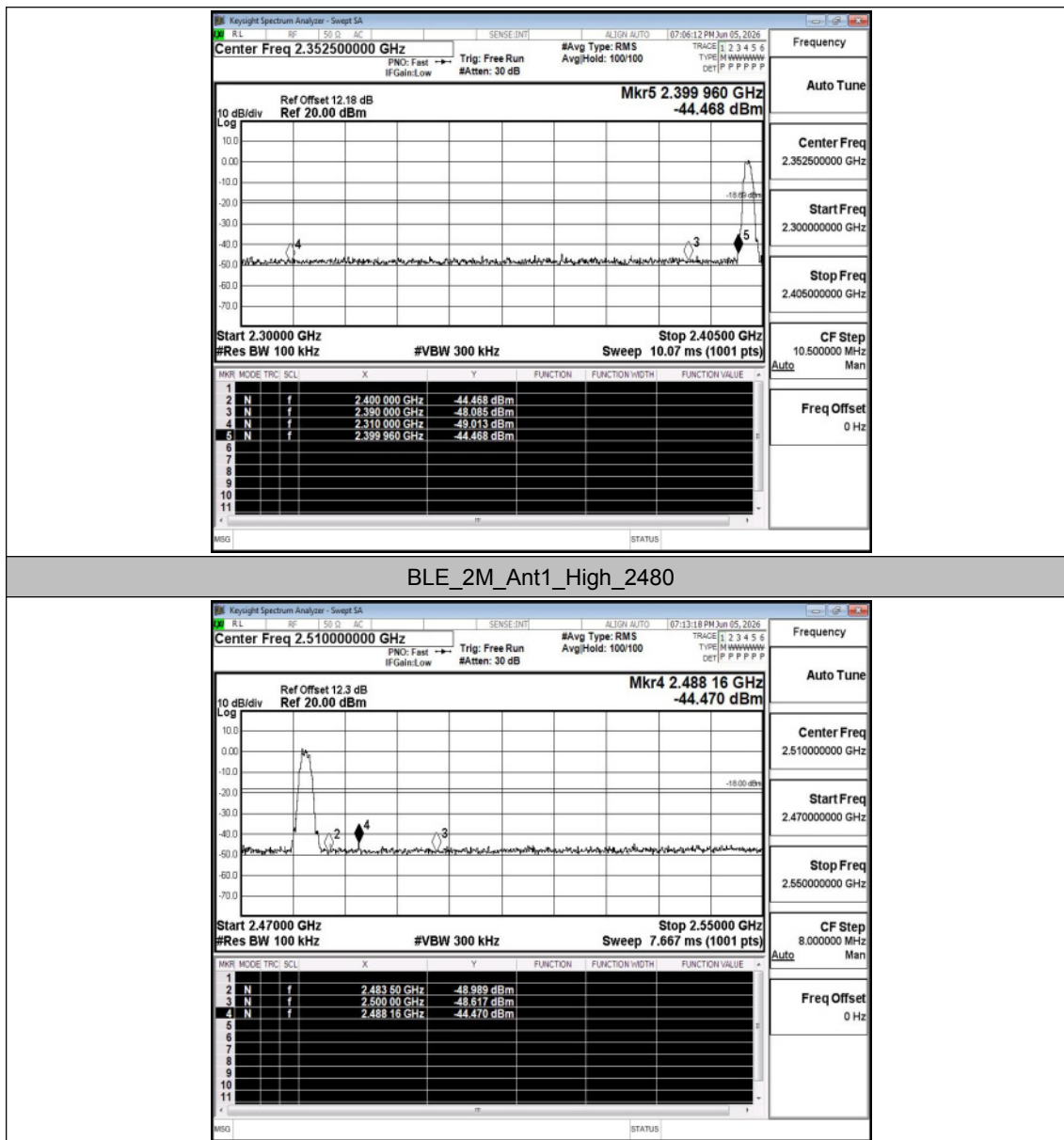
B.4 Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	2.61	-45.17	≤ -17.39	PASS
		High	2480	2.30	-45	≤ -17.7	PASS
BLE_2M	Ant1	Low	2402	1.31	-44.47	≤ -18.69	PASS
		High	2480	2.00	-44.47	≤ -18	PASS

Test Graphs



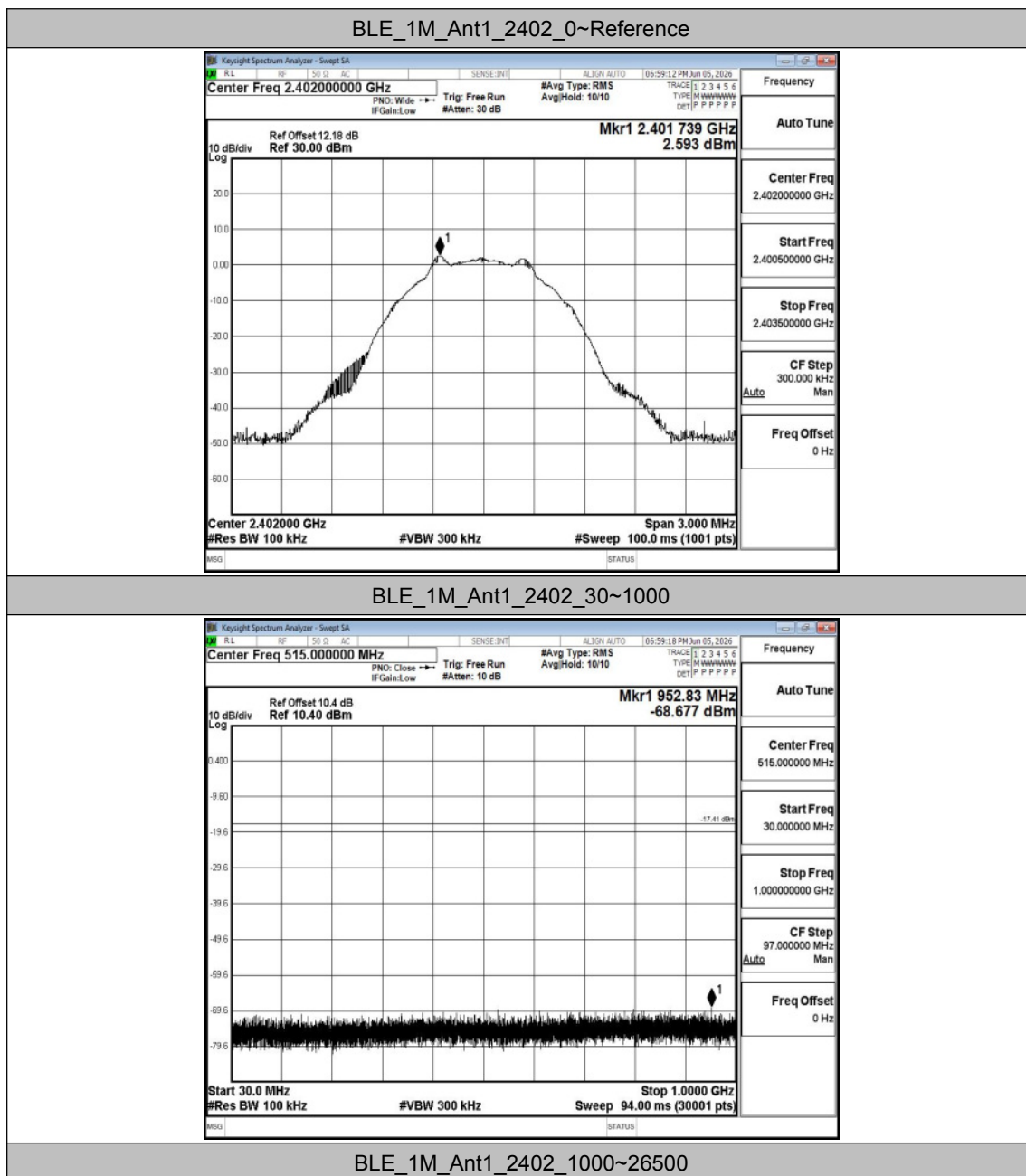


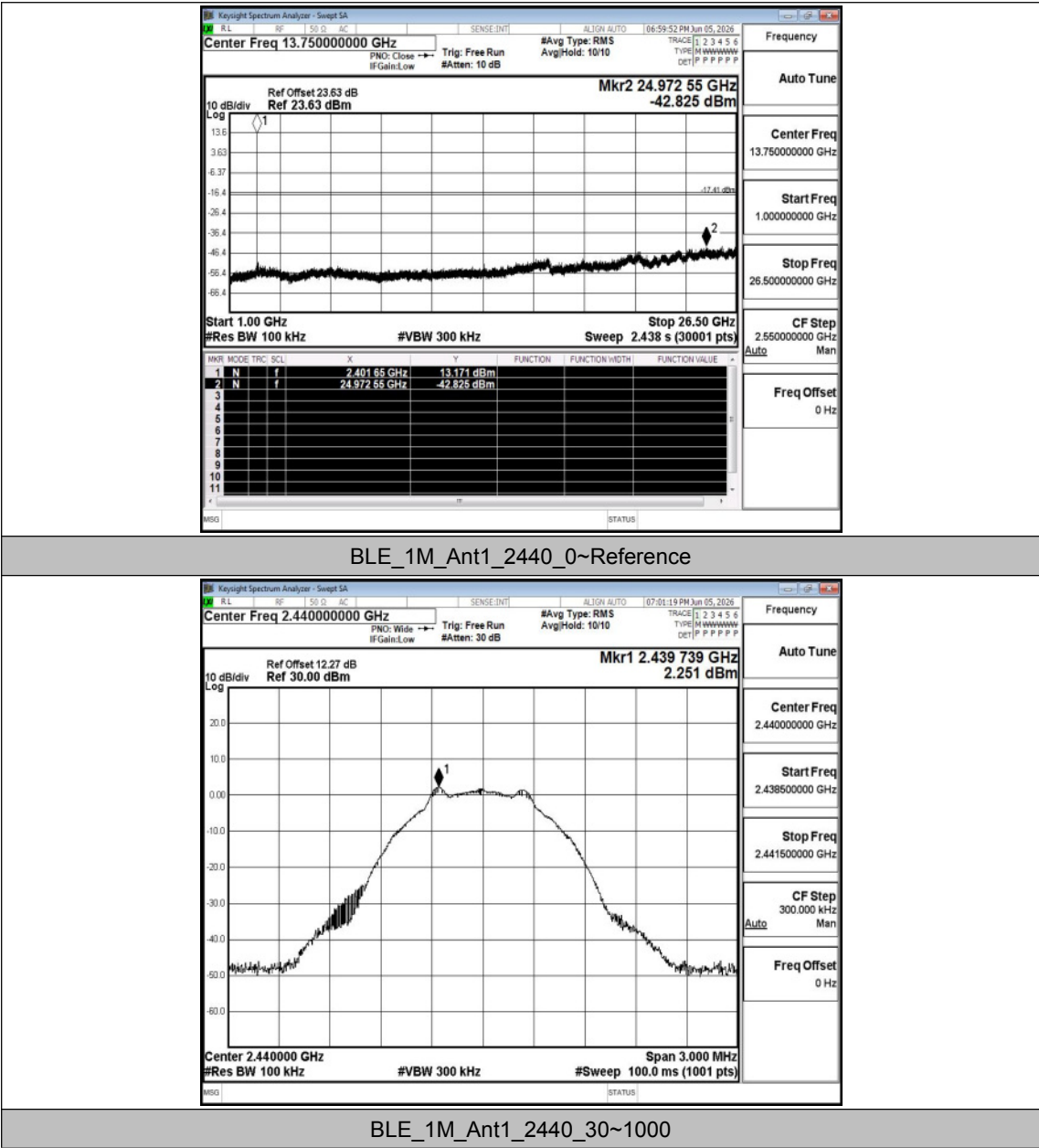
B.5 Conducted Spurious Emission

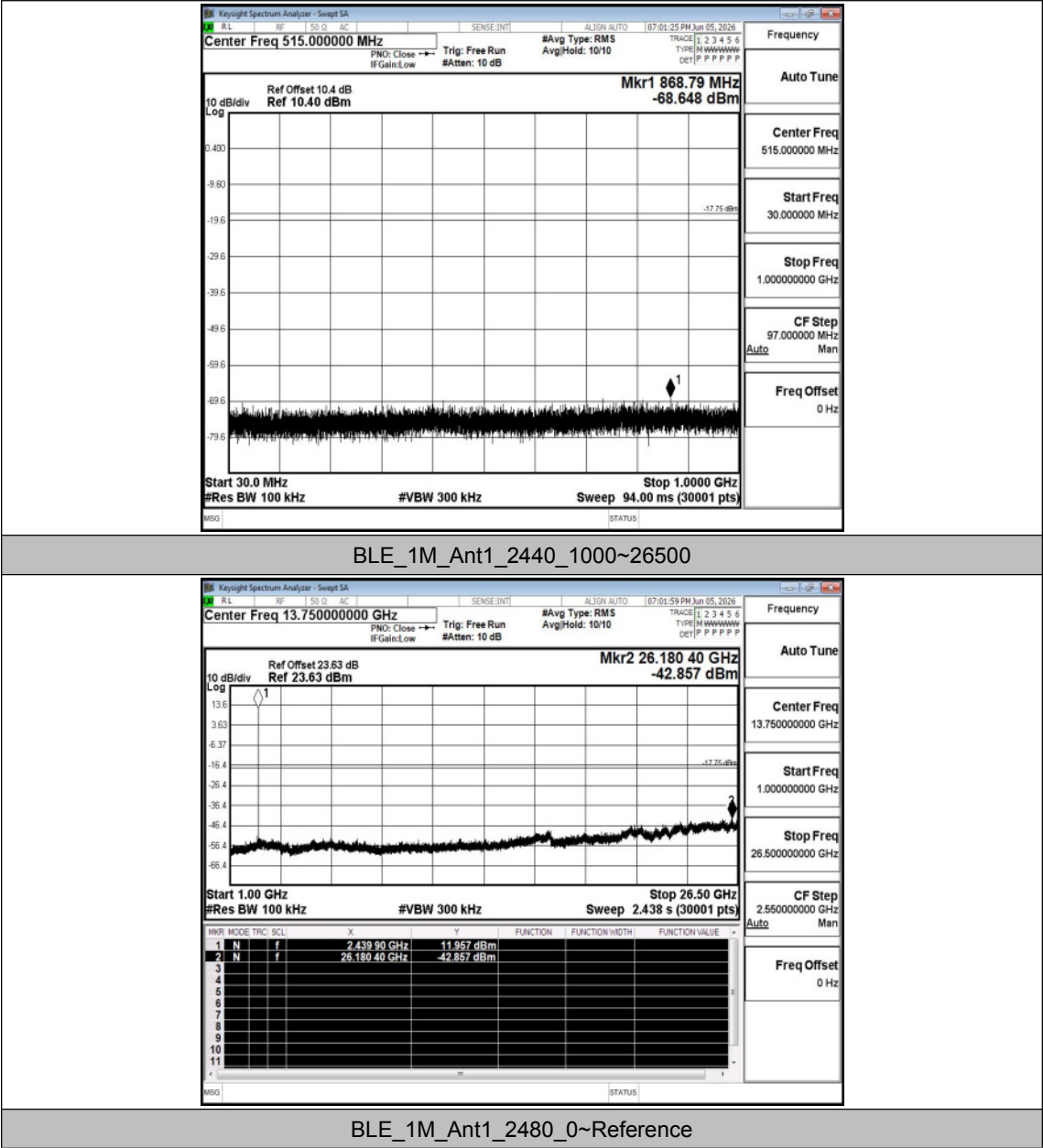
Test Result

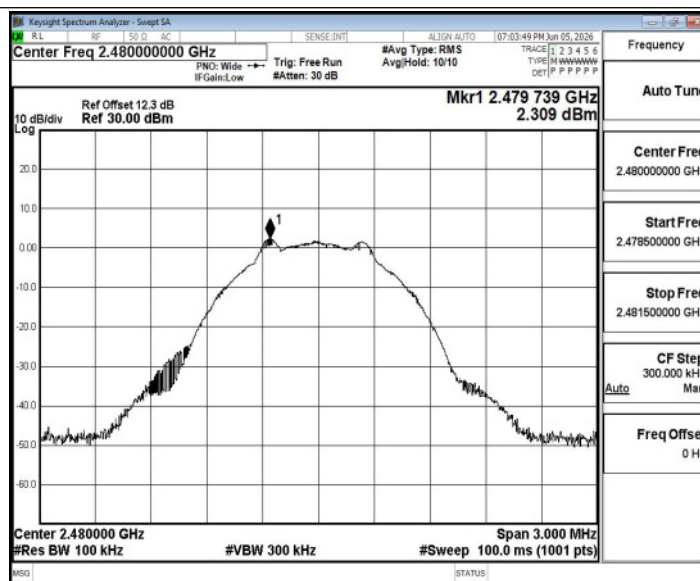
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	2.59	2.59	---	PASS
			30~1000	2.59	-68.68	≤-17.41	PASS
			1000~26500	2.59	-42.83	≤-17.41	PASS
		2440	Reference	2.25	2.25	---	PASS
			30~1000	2.25	-68.65	≤-17.75	PASS
			1000~26500	2.25	-42.86	≤-17.75	PASS
		2480	Reference	2.31	2.31	---	PASS
			30~1000	2.31	-68.95	≤-17.69	PASS
			1000~26500	2.31	-43.09	≤-17.69	PASS
BLE_2M	Ant1	2402	Reference	2.35	2.35	---	PASS
			30~1000	2.35	-69.34	≤-17.65	PASS
			1000~26500	2.35	-43.49	≤-17.65	PASS
		2440	Reference	2.02	2.02	---	PASS
			30~1000	2.02	-68.92	≤-17.98	PASS
			1000~26500	2.02	-42.51	≤-17.98	PASS
		2480	Reference	2.07	2.07	---	PASS
			30~1000	2.07	-68.84	≤-17.93	PASS
			1000~26500	2.07	-43.05	≤-17.93	PASS

Test Graphs

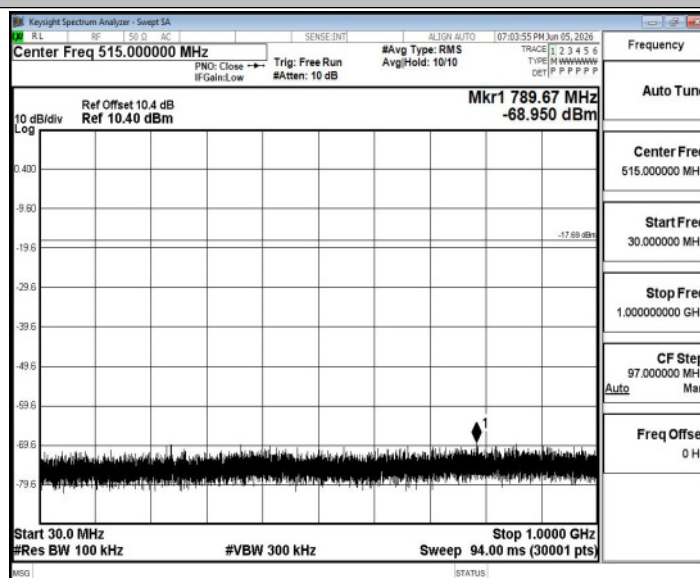




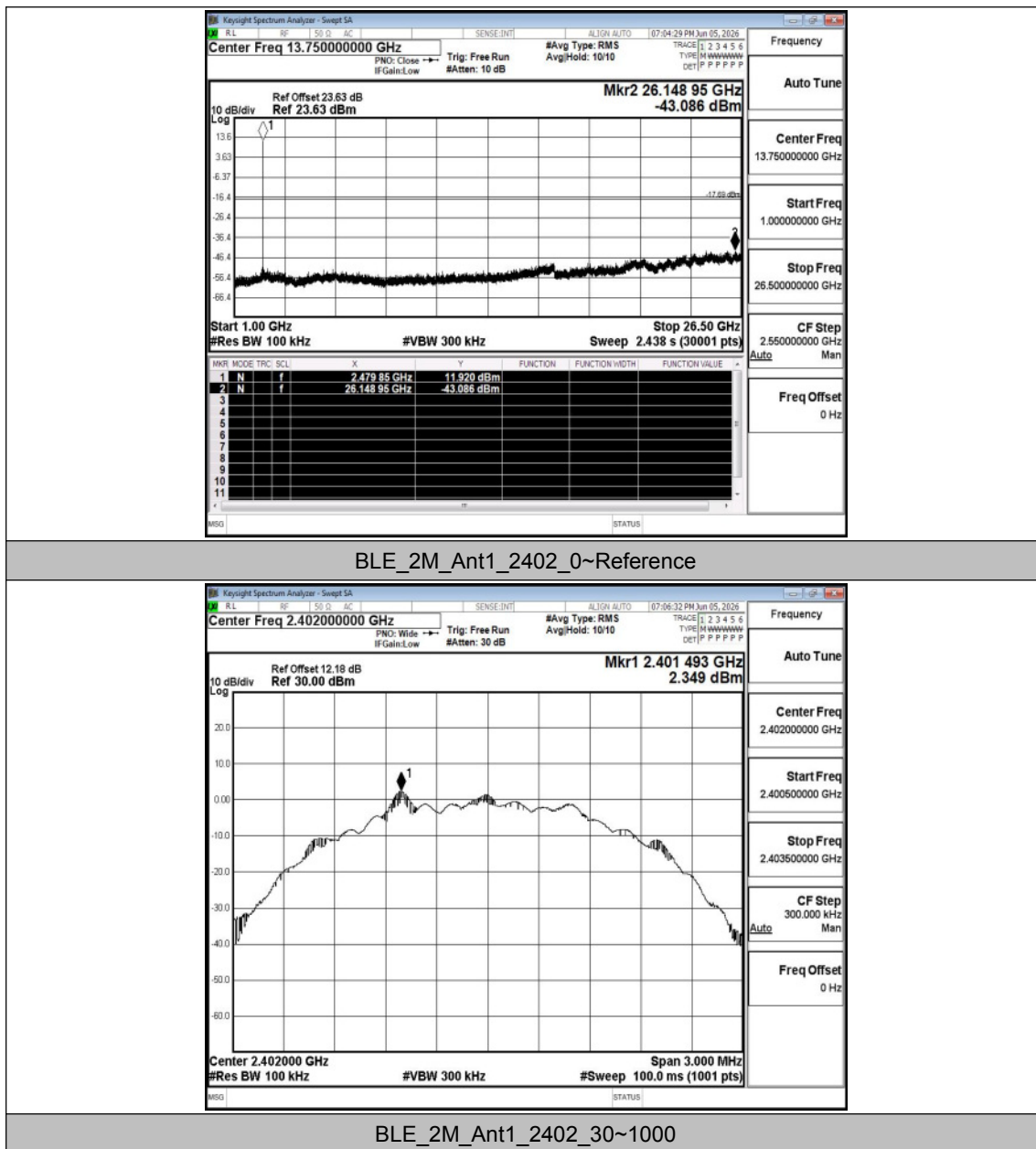


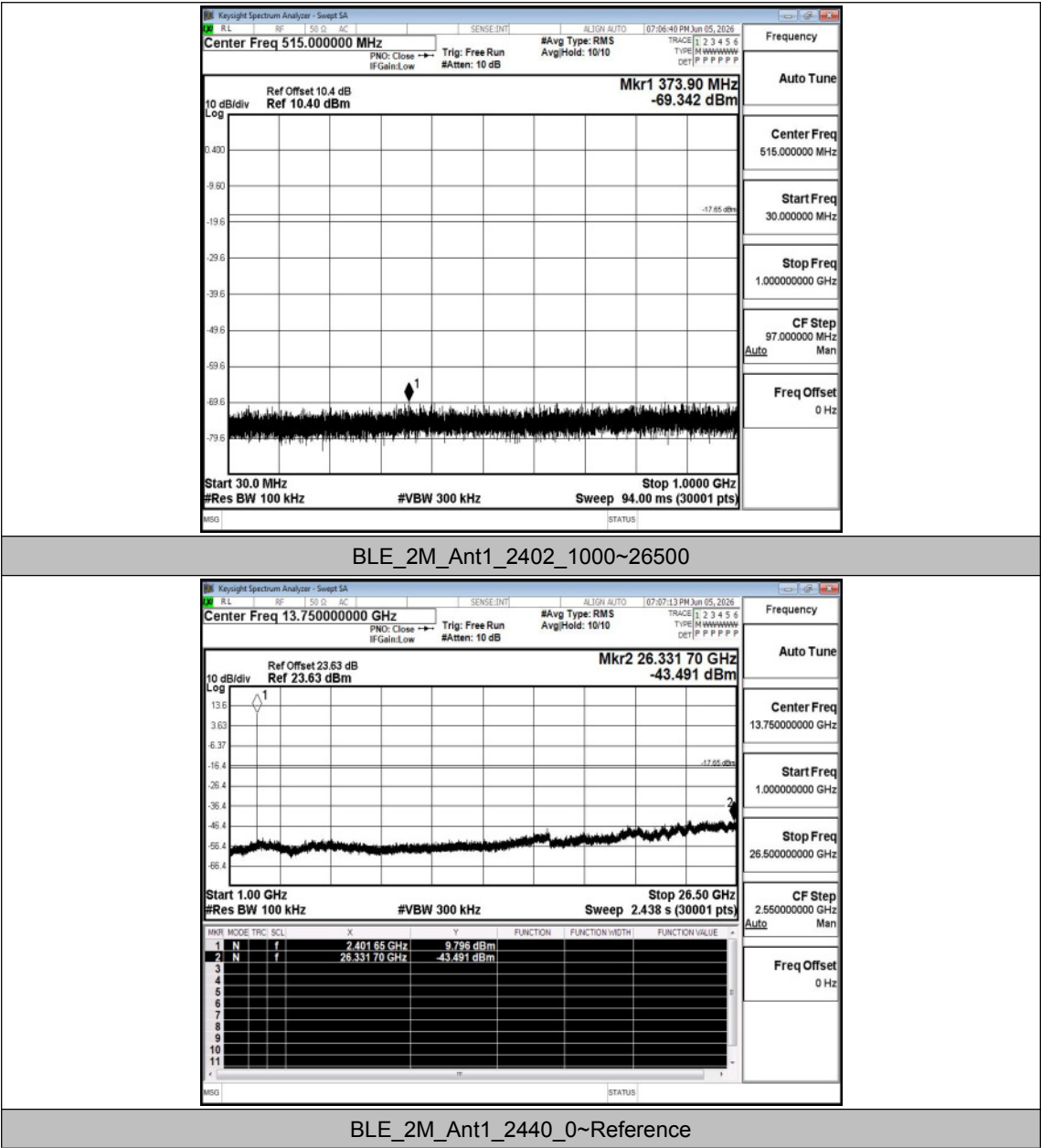


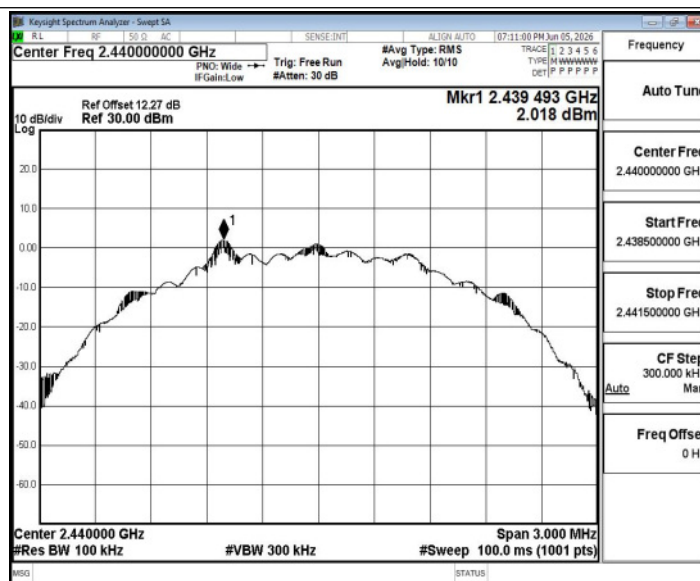
BLE_1M_Ant1_2480_30~1000



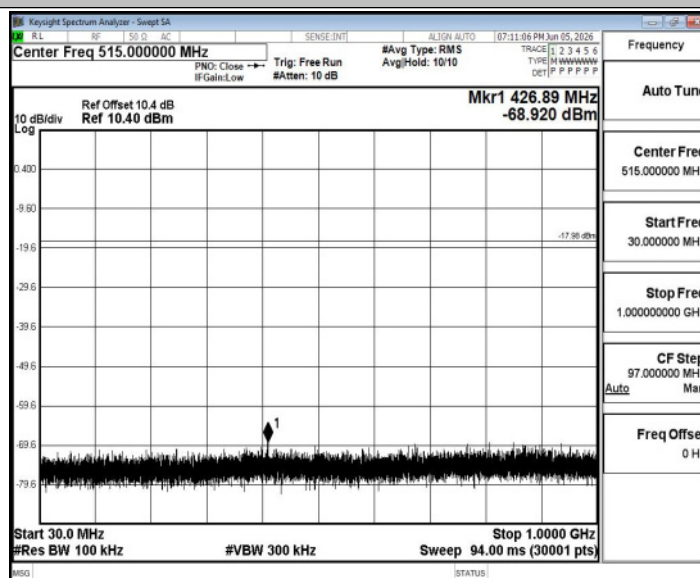
BLE_1M_Ant1_2480_1000~26500



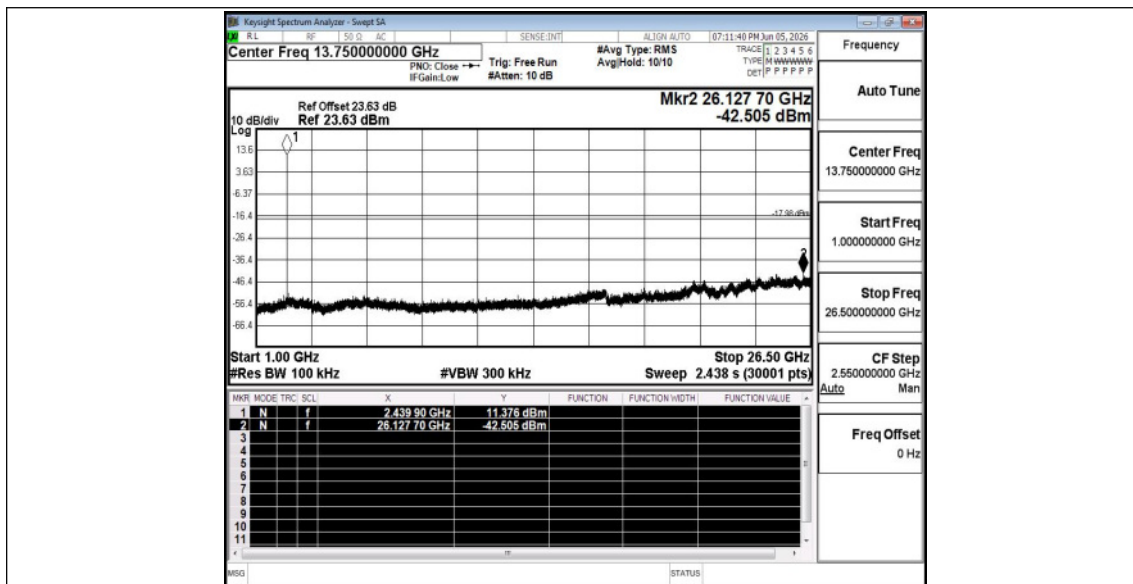




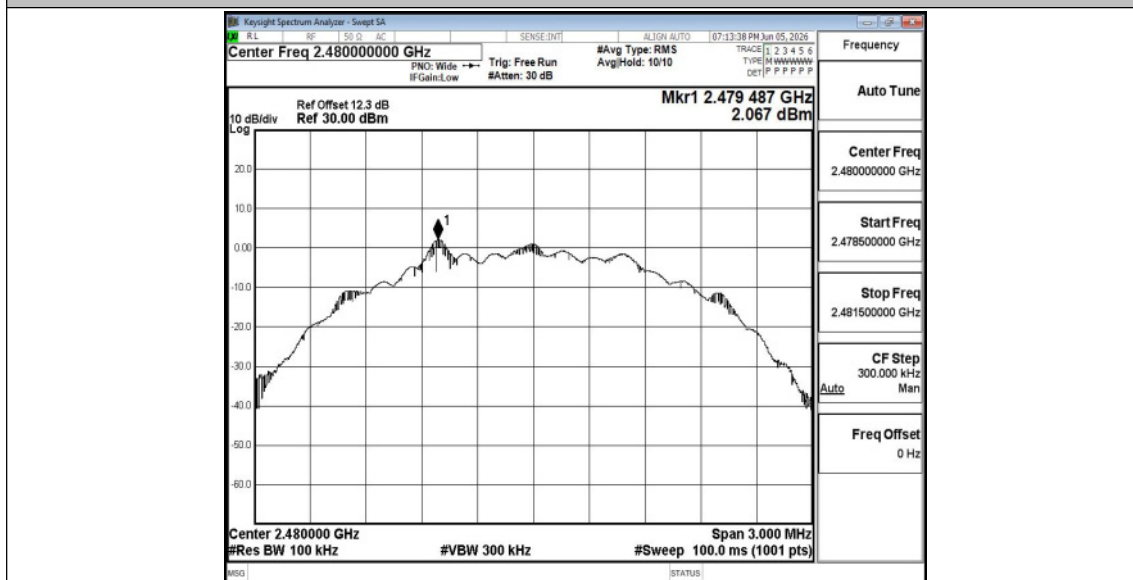
BLE_2M_Ant1_2440_30~1000



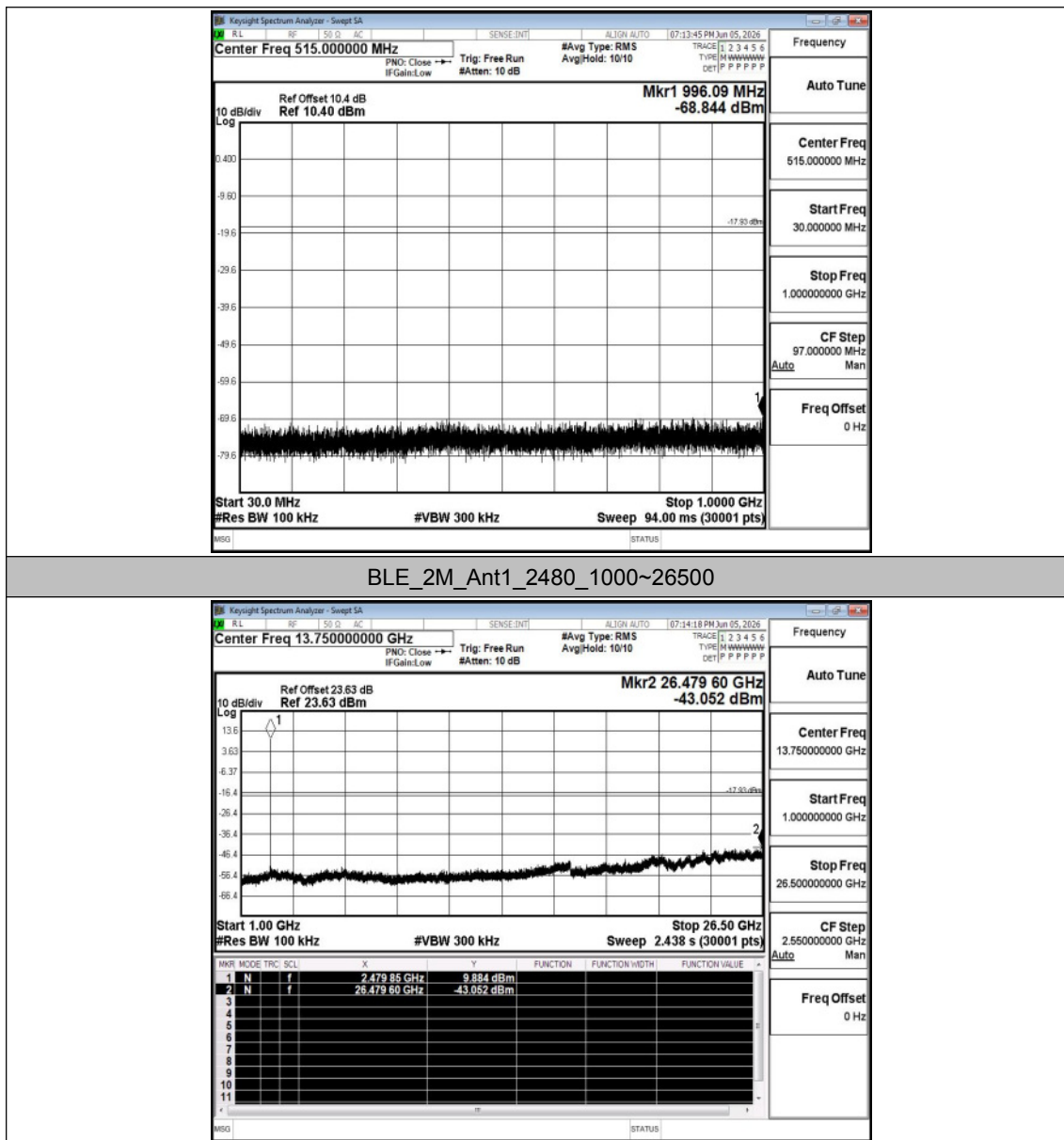
BLE_2M_Ant1_2440_1000~26500



BLE_2M_Ant1_2480_0~Reference



BLE_2M_Ant1_2480_30~1000

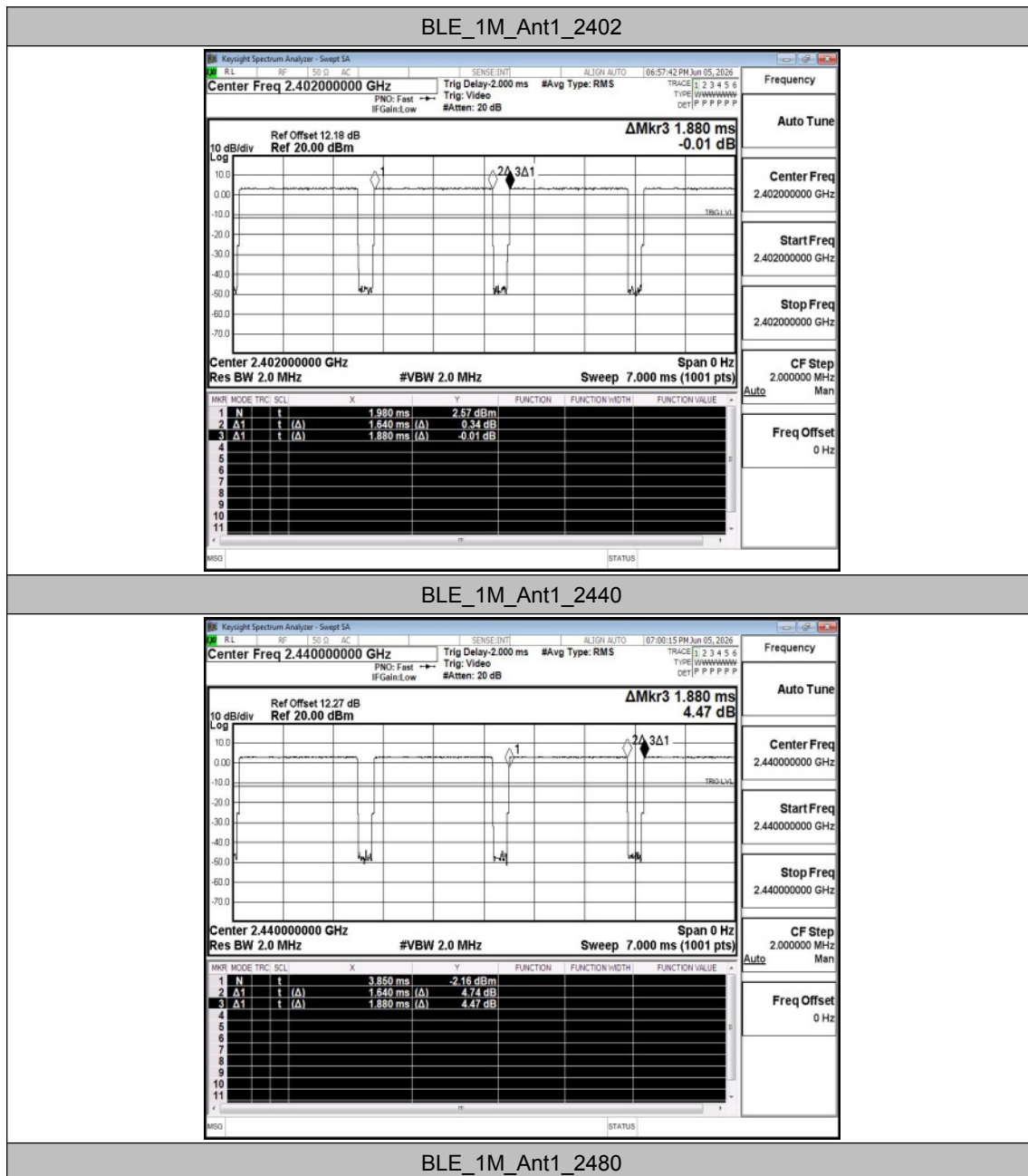


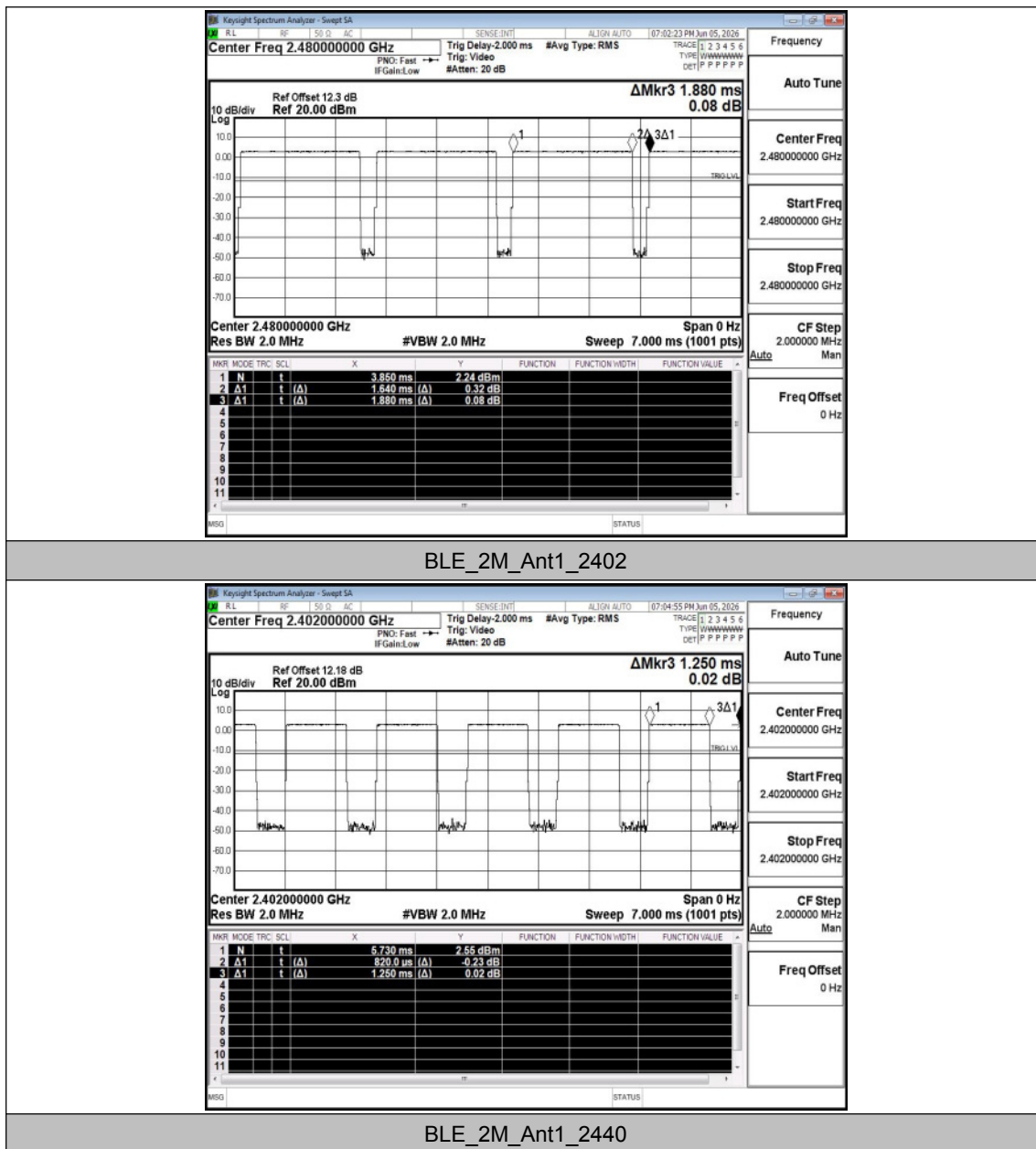
B.6 Duty Cycle

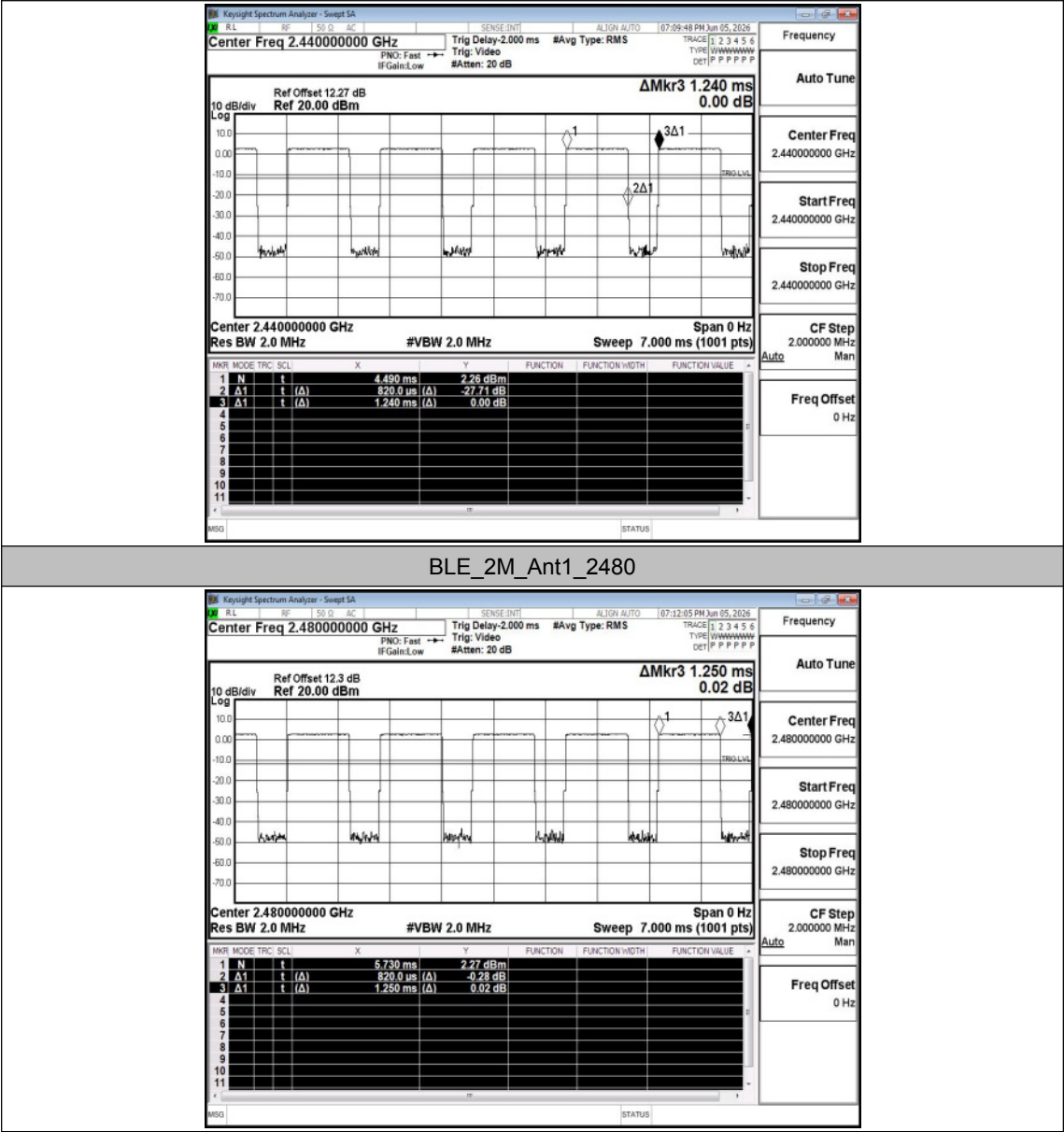
Test Result

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	1.88	0.8723	87.23	0.59	---	---
		2480	1.64	1.88	0.8723	87.23	0.59	---	---
BLE_2M	Ant1	2402	0.82	1.25	0.6560	65.60	1.83	---	---
		2440	0.82	1.24	0.6613	66.13	1.80	---	---
		2480	0.82	1.25	0.6560	65.60	1.83	---	---

Test Graphs







B.7 Emissions in Restricted Bands

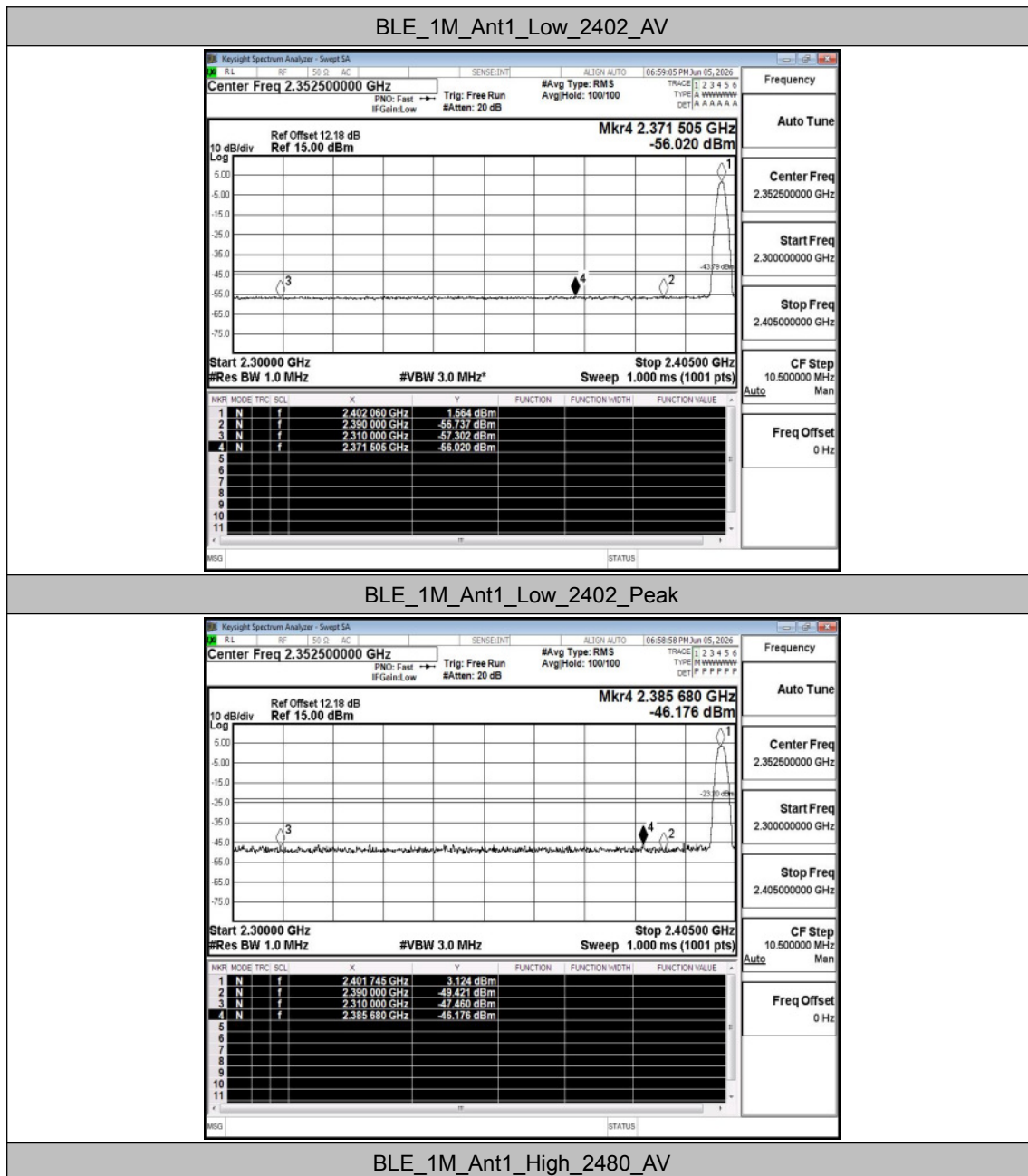
Test Result

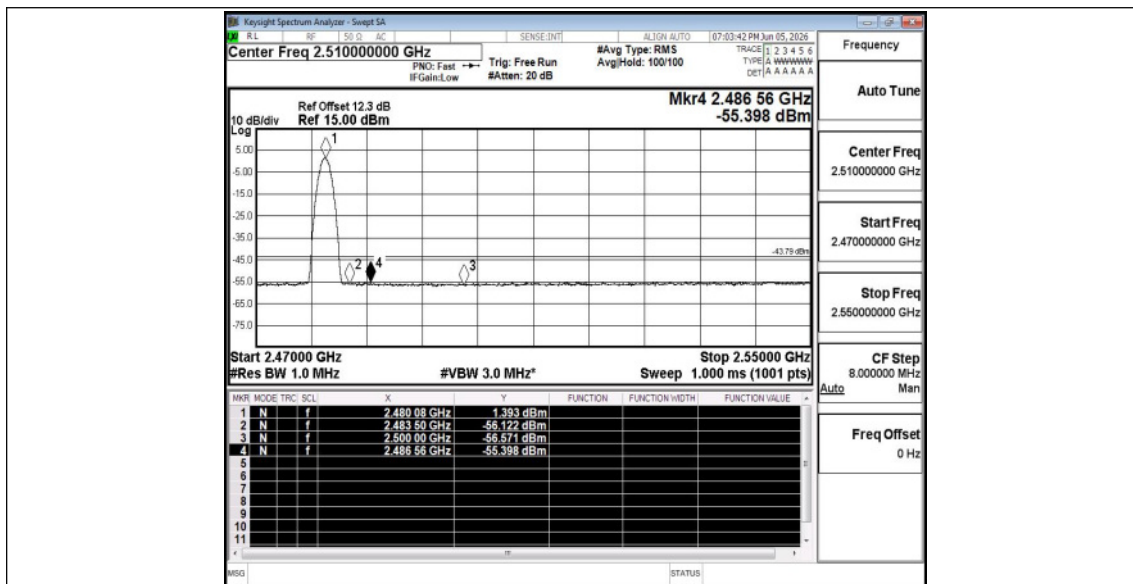
TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Gain [dBi]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-57.3	≤-43.79	2.00	0.59	40.49	≤54	PASS
				AV	2371.505	-56.02	≤-43.79	2.00	0.59	41.77	≤54	PASS
				AV	2390.000	-56.74	≤-43.79	2.00	0.59	41.05	≤54	PASS
				Peak	2310.000	-47.46	≤-23.20	2.00	0.00	49.74	≤74	PASS
				Peak	2385.680	-46.18	≤-23.20	2.00	0.00	51.02	≤74	PASS
				Peak	2390.000	-49.42	≤-23.20	2.00	0.00	47.78	≤74	PASS
		High	2480	AV	2483.500	-56.12	≤-43.79	2.00	0.59	41.67	≤54	PASS
				AV	2486.560	-55.4	≤-43.79	2.00	0.59	42.39	≤54	PASS
				AV	2500.000	-56.57	≤-43.79	2.00	0.59	41.22	≤54	PASS
				Peak	2483.500	-49.18	≤-23.20	2.00	0.00	48.02	≤74	PASS
				Peak	2484.320	-41.93	≤-23.20	2.00	0.00	55.27	≤74	PASS
				Peak	2500.000	-48.53	≤-23.20	2.00	0.00	48.67	≤74	PASS
BLE_2M	Ant1	Low	2402	AV	2310.000	-57.15	≤-45.03	2.00	1.83	41.88	≤54	PASS
				AV	2313.230	-55.99	≤-45.03	2.00	1.83	43.04	≤54	PASS
				AV	2390.000	-57.11	≤-45.03	2.00	1.83	41.92	≤54	PASS
				Peak	2310.000	-49.54	≤-23.20	2.00	0.00	47.66	≤74	PASS
				Peak	2343.890	-46.17	≤-23.20	2.00	0.00	51.03	≤74	PASS
				Peak	2390.000	-48.17	≤-23.20	2.00	0.00	49.03	≤74	PASS
		High	2480	AV	2483.500	-55.49	≤-45.03	2.00	1.83	43.54	≤54	PASS
				AV	2483.520	-55.49	≤-45.03	2.00	1.83	43.54	≤54	PASS
				AV	2500.000	-56.75	≤-45.03	2.00	1.83	42.28	≤54	PASS
				Peak	2483.500	-48.04	≤-23.20	2.00	0.00	49.16	≤74	PASS
				Peak	2484.640	-42.36	≤-23.20	2.00	0.00	54.84	≤74	PASS
				Peak	2500.000	-49.29	≤-23.20	2.00	0.00	47.91	≤74	PASS

Note:

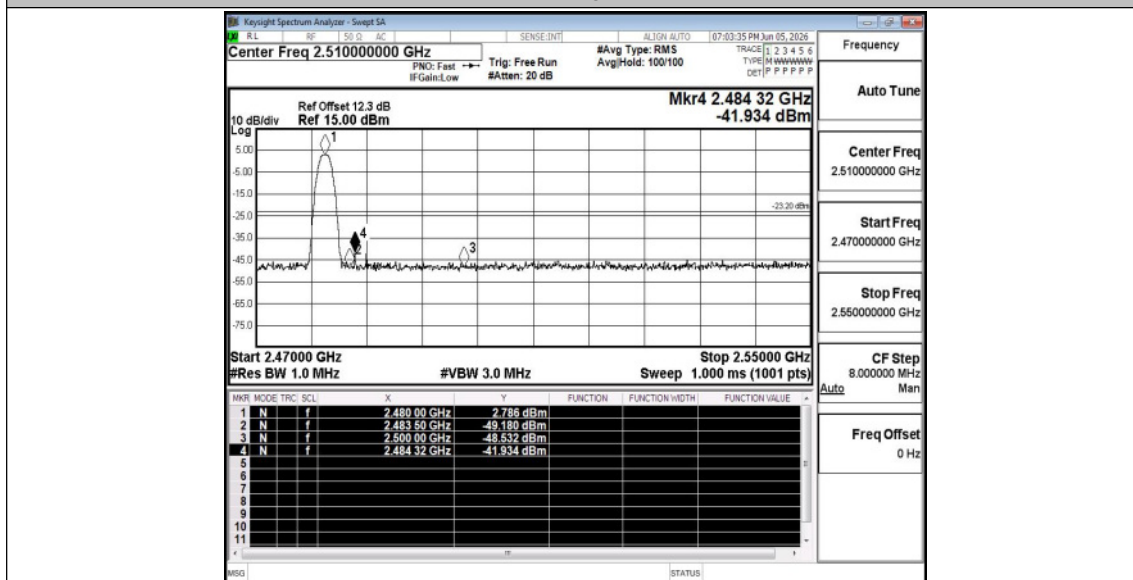
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs





BLE_1M_Ant1_High_2480_Peak



BLE_2M_Ant1_Low_2402_AV

