

Appendix B

Product Name: Enya INSPIRE PRO Electric Guitar

Test Model: Inspire Pro

Environmental Conditions

Temperature:	24.5°C
Relative Humidity:	53.2%
ATM Pressure:	100.0 kPa
Test Engineer:	zhao xing hai
Supervised by:	Fengliu Tang

B.1 DTS Bandwidth

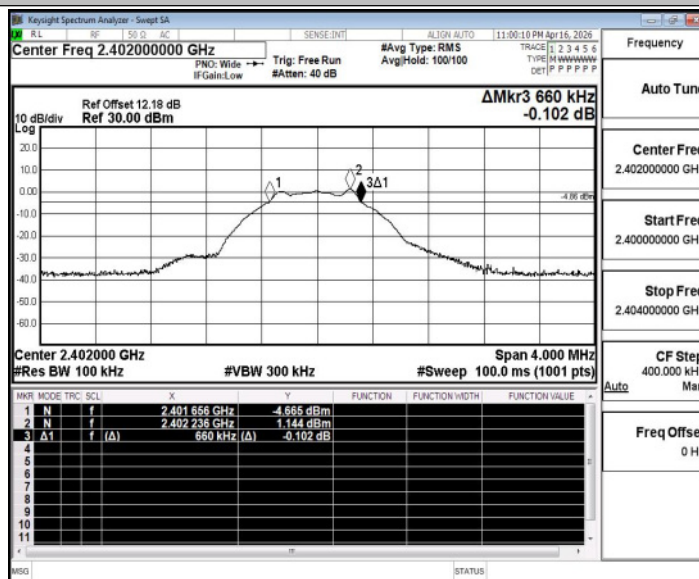
Test Result

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	2439.652	2440.312	0.5	PASS
		2480	0.664	2479.644	2480.308	0.5	PASS

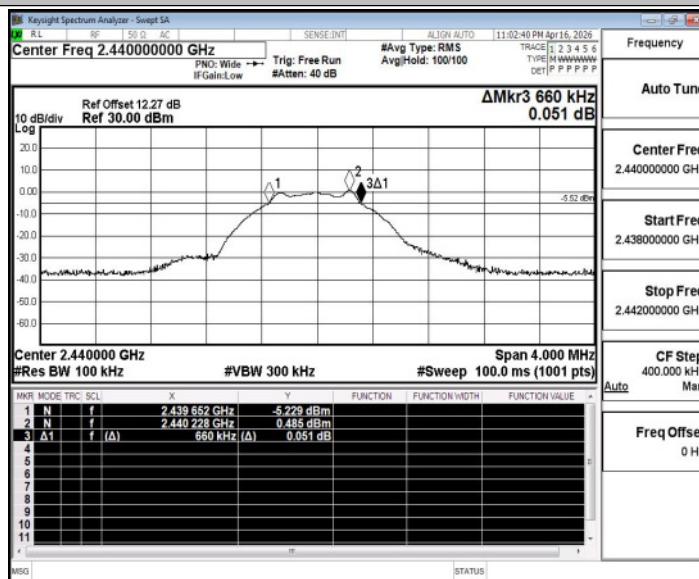
TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant2	2402	0.664	2401.664	2402.328	0.5	PASS
		2440	0.664	2439.664	2440.328	0.5	PASS
		2480	0.664	2479.664	2480.328	0.5	PASS

Test Graphs

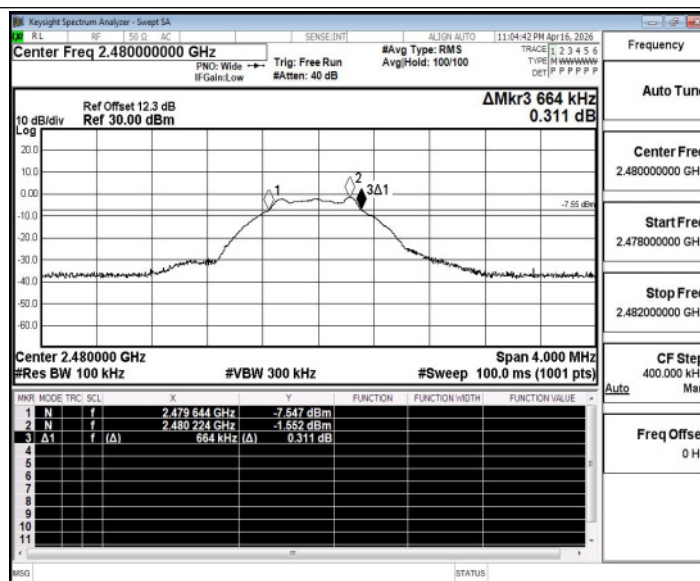
BLE_1M_Ant1_2402



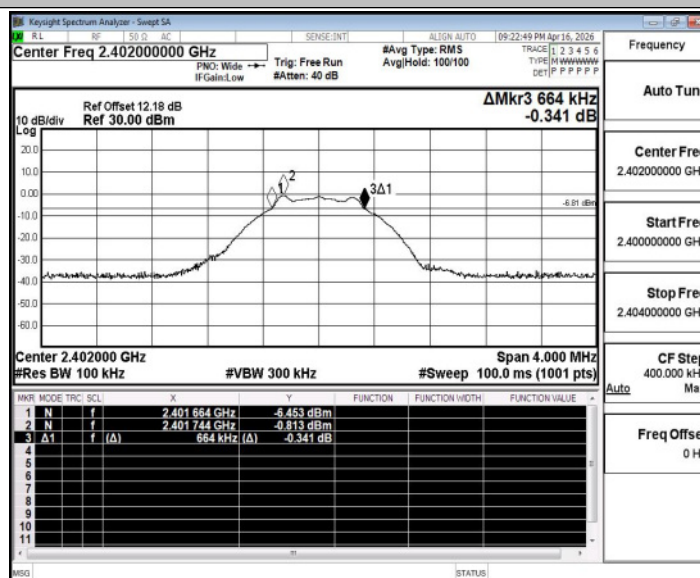
BLE_1M_Ant1_2440



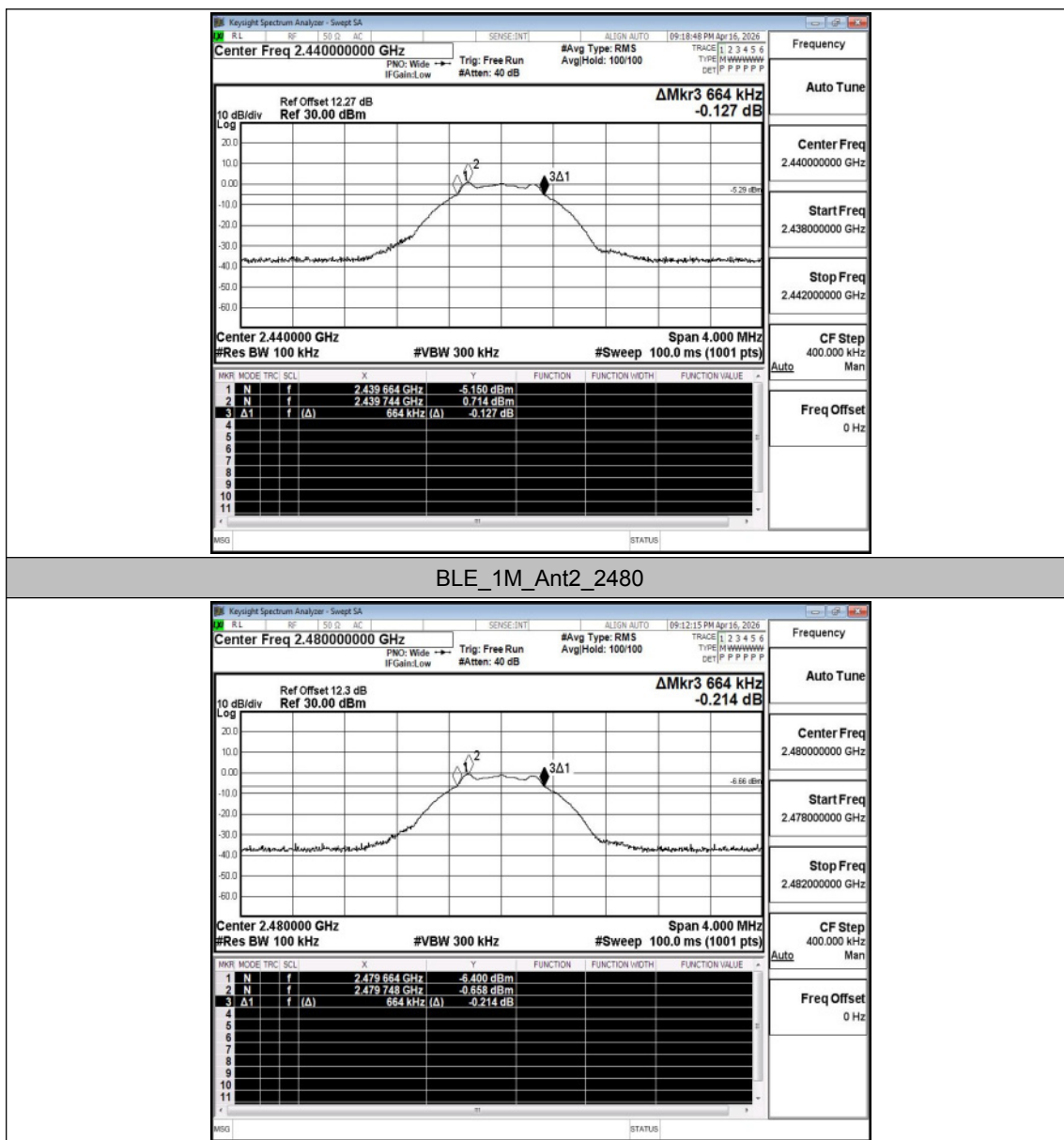
BLE_1M_Ant1_2480



BLE_1M_Ant2_2402



BLE_1M_Ant2_2440



B.2 Maximum Peak conducted output power

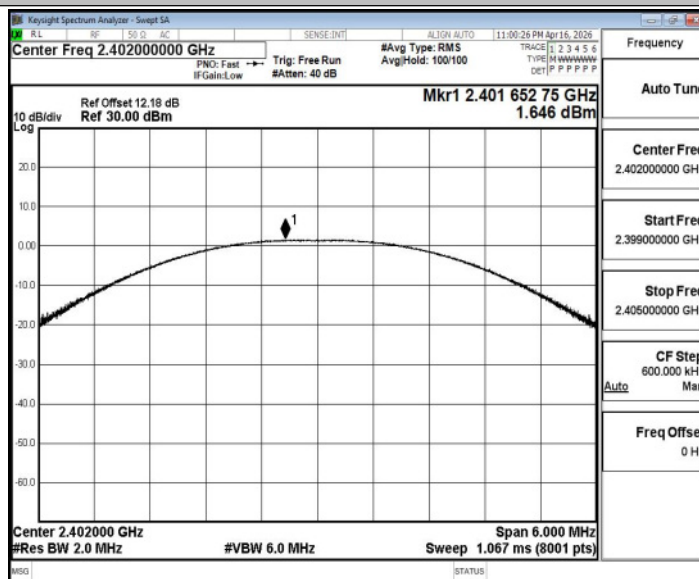
Test Result Peak

TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	1.65	≤30	PASS
		2440	1.07	≤30	PASS
		2480	-0.89	≤30	PASS

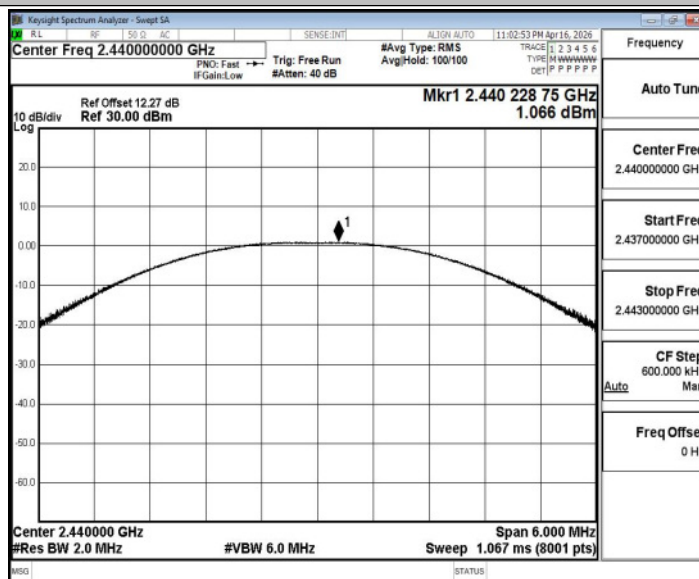
TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant2	2402	-0.17	≤30	PASS
		2440	1.36	≤30	PASS
		2480	-0.03	≤30	PASS

Test Graphs Peak

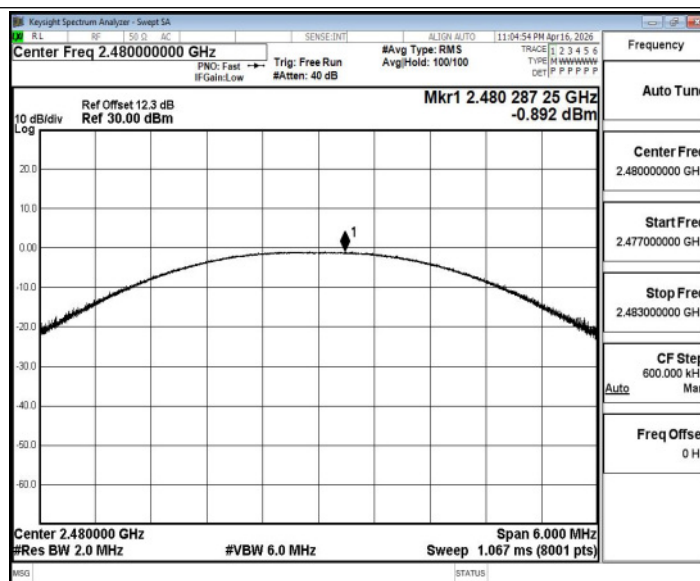
BLE_1M_Ant1_2402



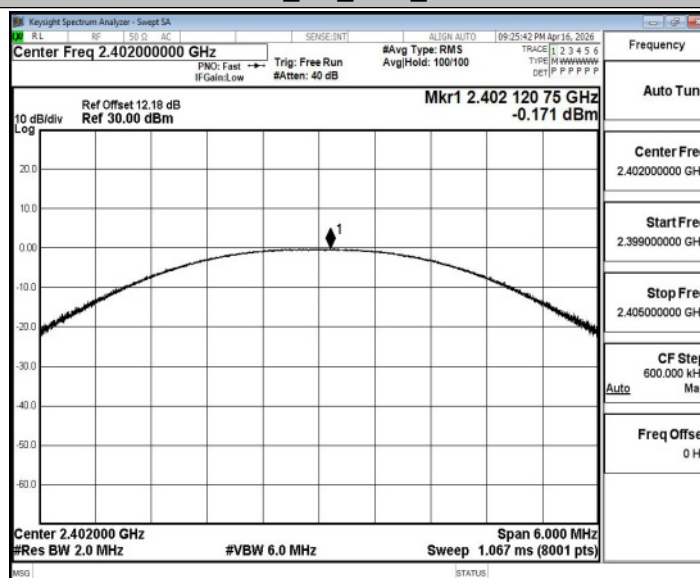
BLE_1M_Ant1_2440



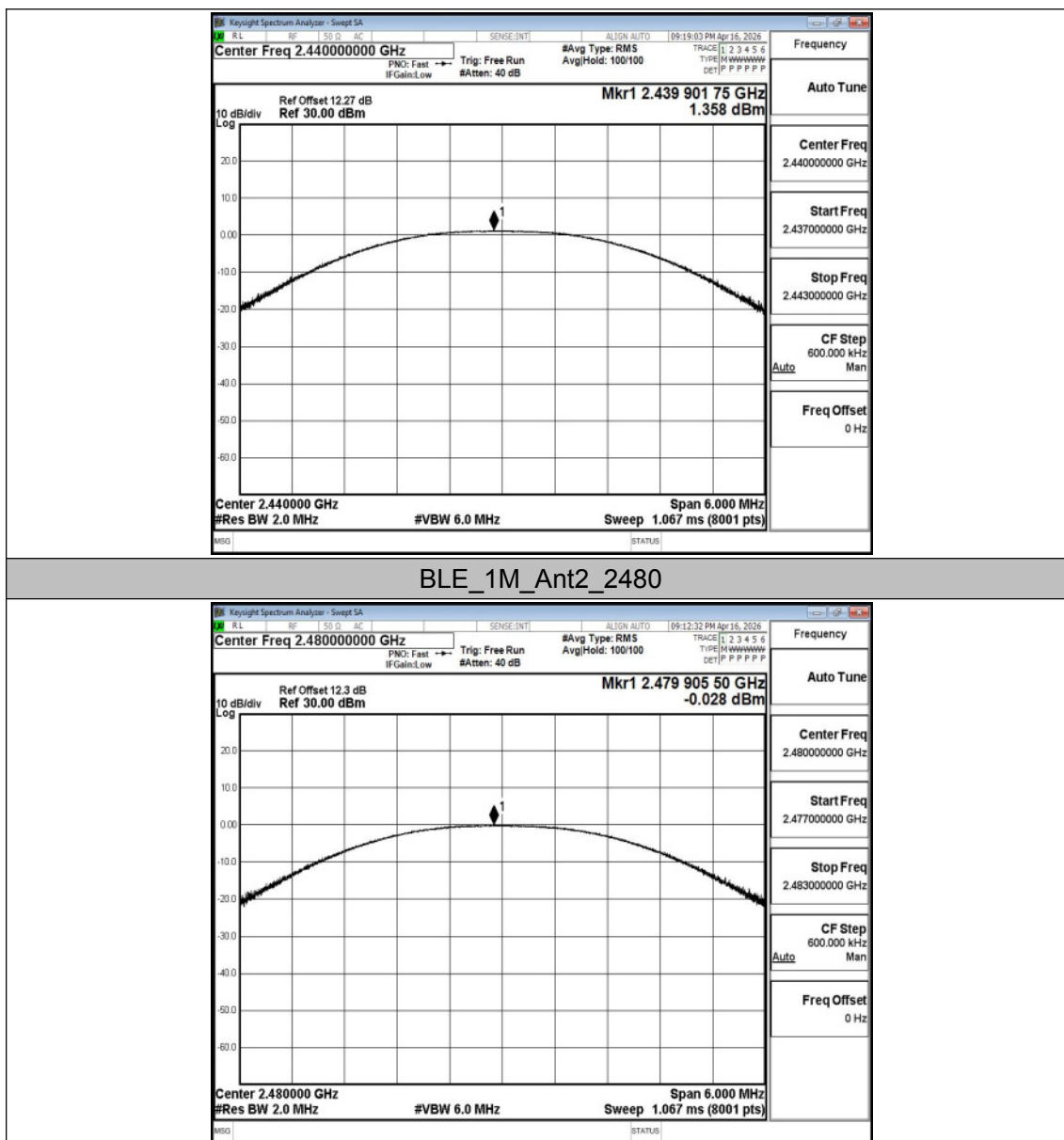
BLE_1M_Ant1_2480



BLE_1M_Ant2_2402



BLE_1M_Ant2_2440



B.3 Maximum power spectral density

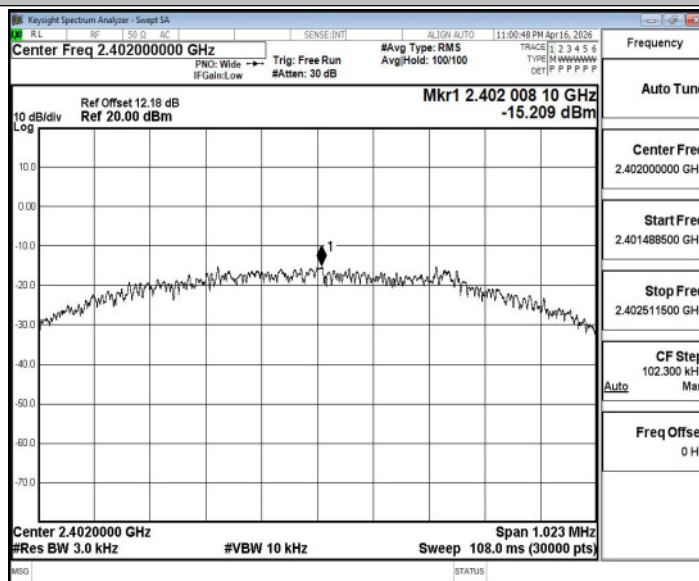
Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.21	≤8.00	PASS
		2440	-15.83	≤8.00	PASS
		2480	-17.84	≤8.00	PASS

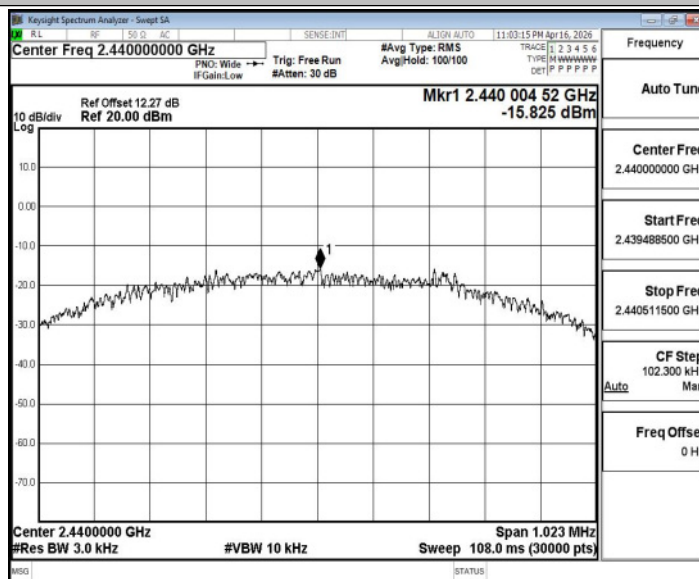
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant2	2402	-16.93	≤8.00	PASS
		2440	-15.37	≤8.00	PASS
		2480	-16.76	≤8.00	PASS

Test Graphs

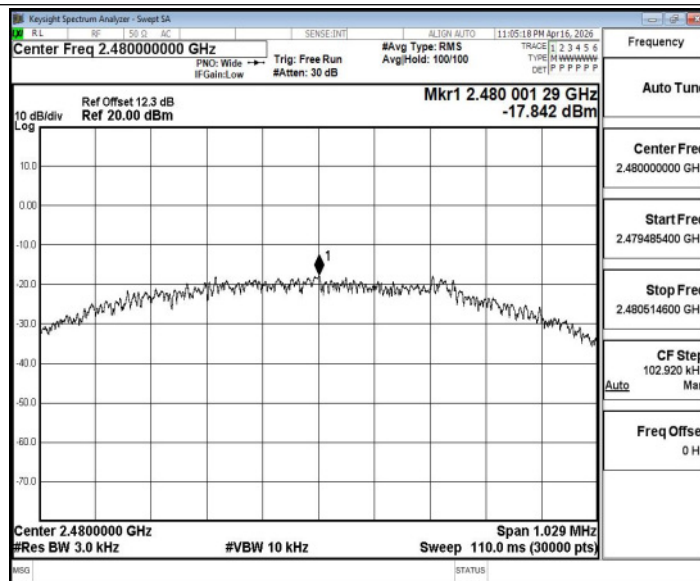
BLE_1M_Ant1_2402



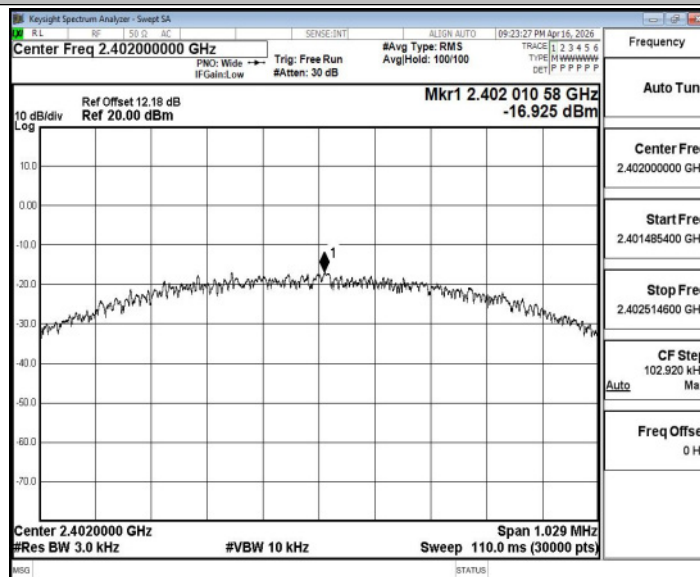
BLE_1M_Ant1_2440



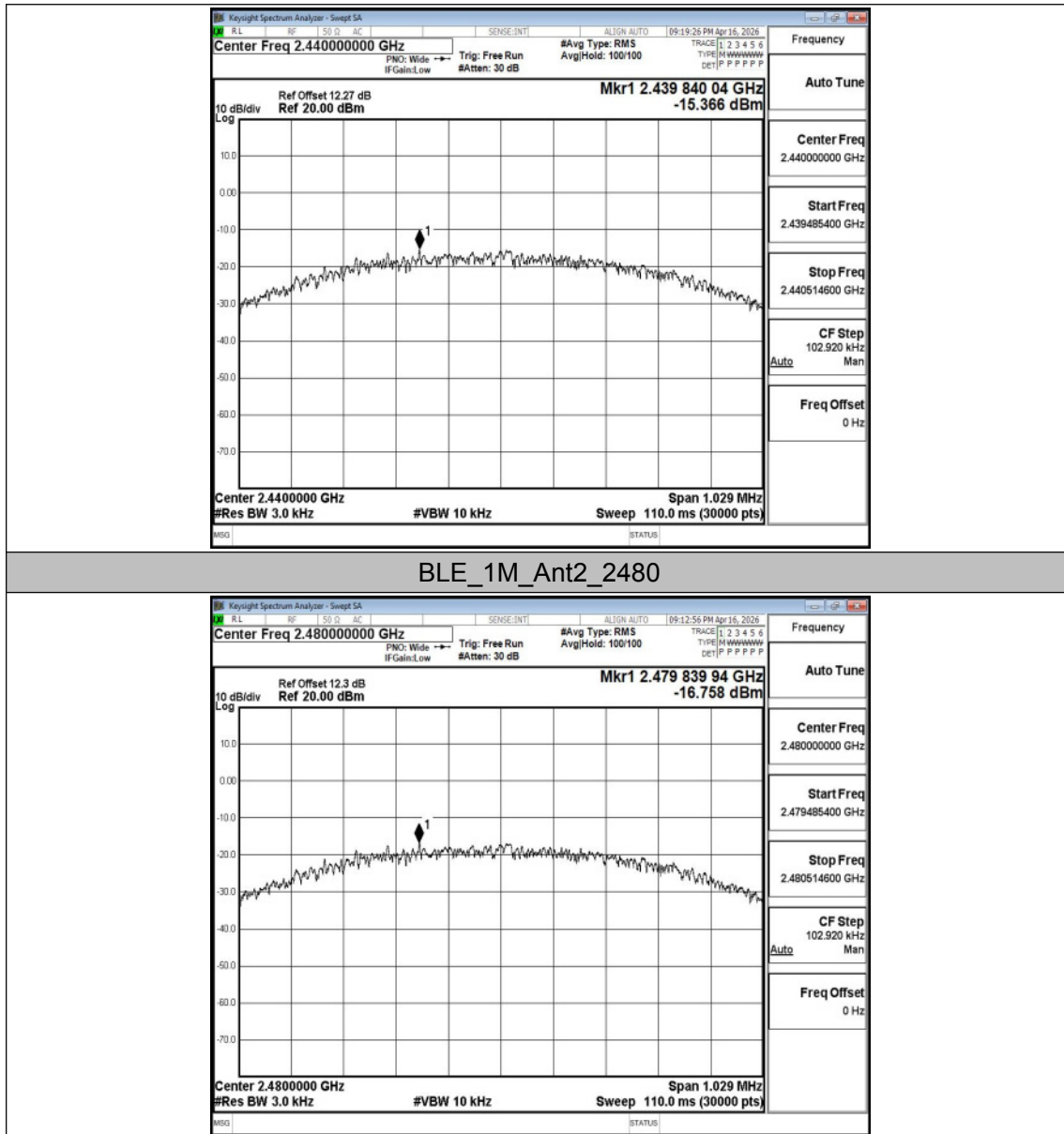
BLE_1M_Ant1_2480



BLE_1M_Ant2_2402



BLE_1M_Ant2_2440



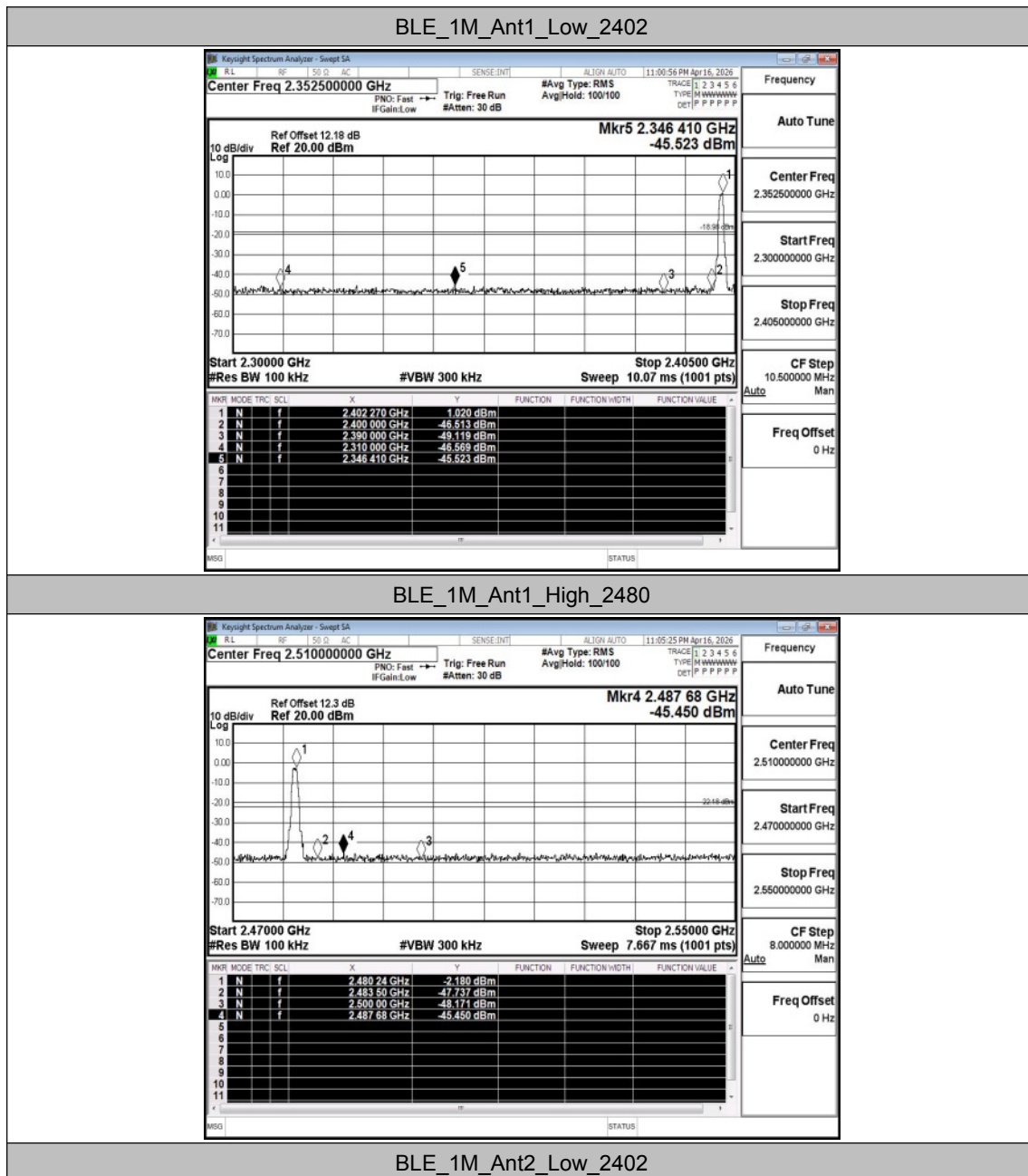
B.4 Band edge measurements

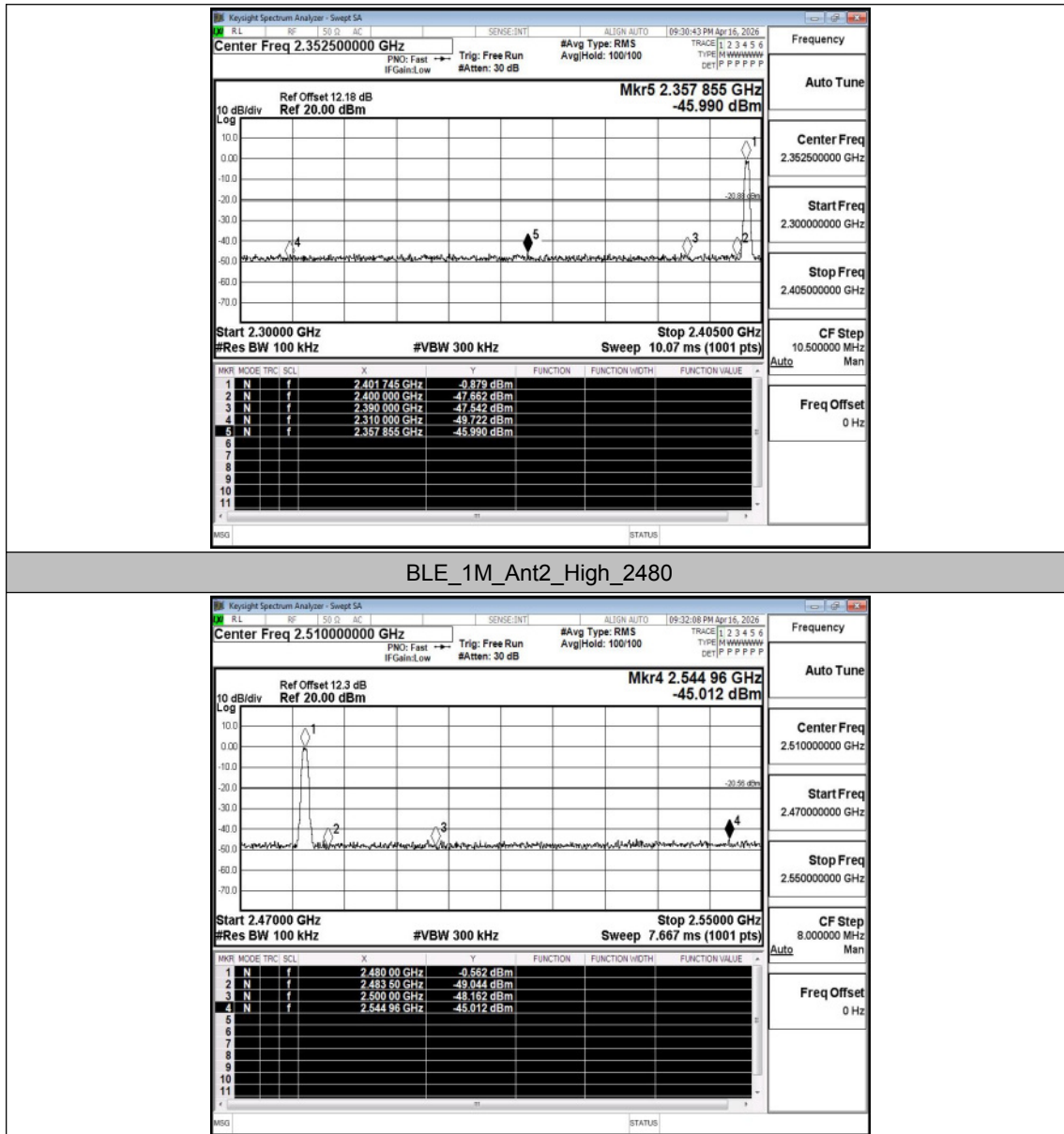
Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	1.02	-45.52	≤-18.98	PASS
		High	2480	-2.18	-45.45	≤-22.18	PASS

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant2	Low	2402	-0.88	-45.99	≤-20.88	PASS
		High	2480	-0.56	-45.01	≤-20.56	PASS

Test Graphs





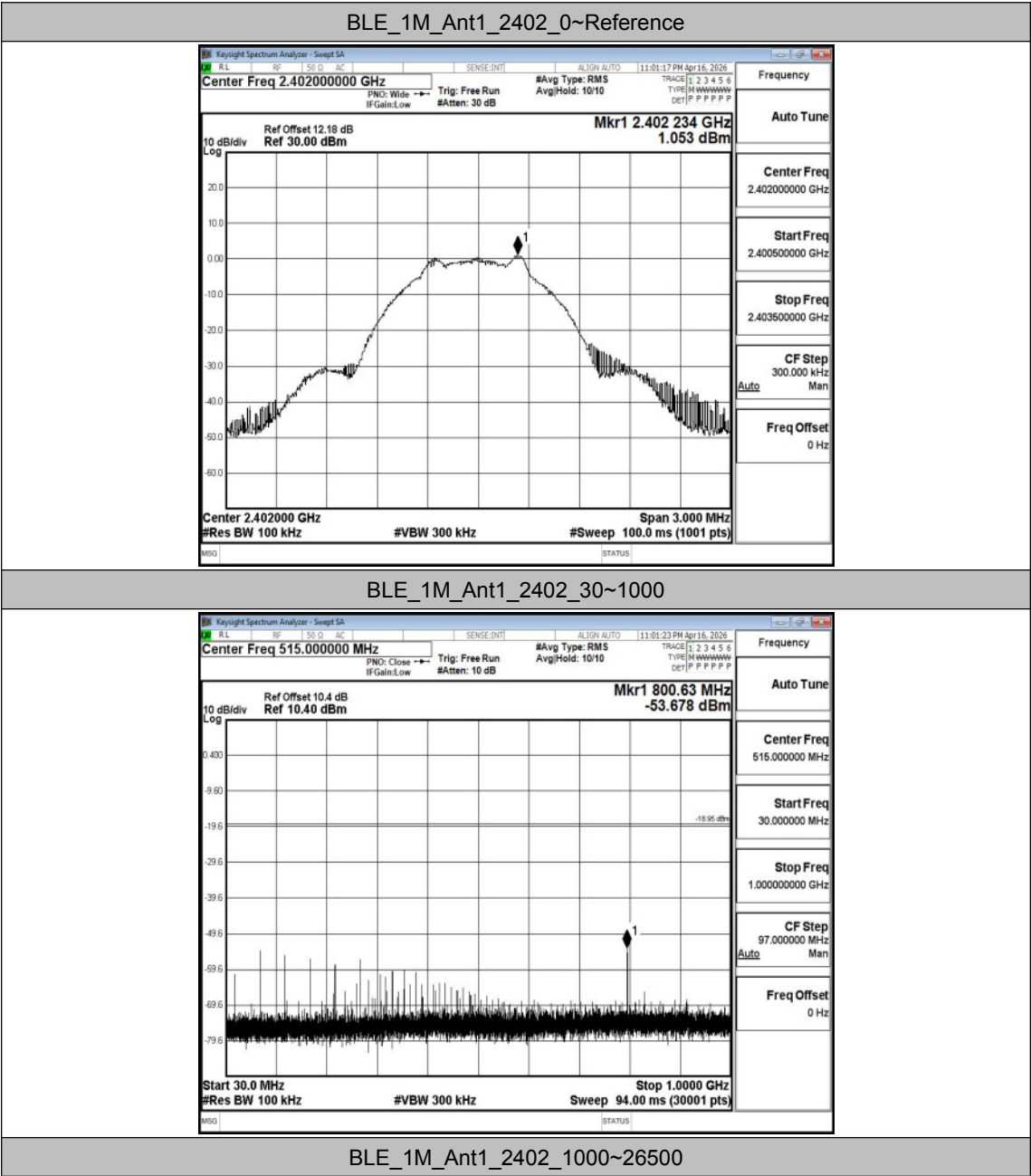
B.5 Conducted Spurious Emission

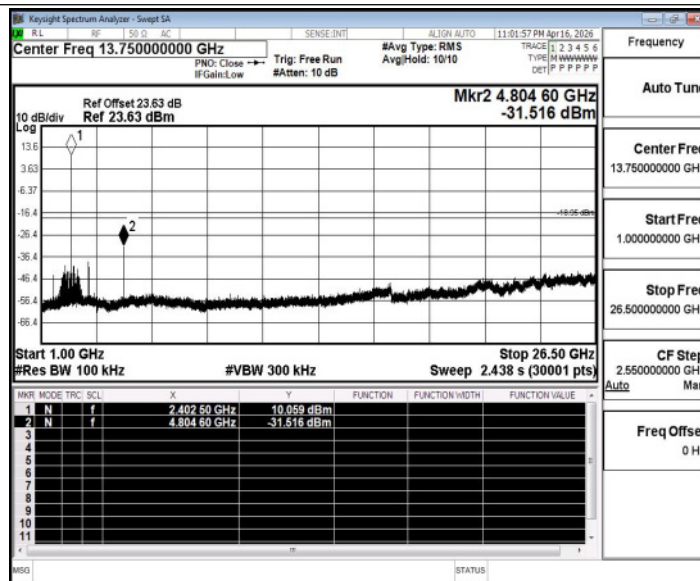
Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	1.05	1.05	---	PASS
			30~1000	1.05	-53.68	≤-18.95	PASS
			1000~26500	1.05	-31.52	≤-18.95	PASS
		2440	Reference	0.36	0.36	---	PASS
			30~1000	0.36	-53.41	≤-19.64	PASS
			1000~26500	0.36	-33.4	≤-19.64	PASS
		2480	Reference	-1.65	-1.65	---	PASS
			30~1000	-1.65	-54.24	≤-21.65	PASS
			1000~26500	-1.65	-38.38	≤-21.65	PASS

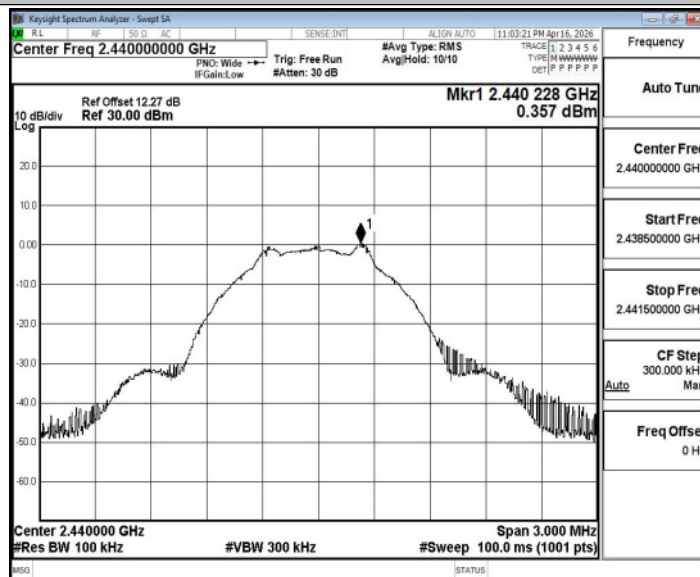
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant2	2402	Reference	-0.92	-0.92	---	PASS
			30~1000	-0.92	-59.63	≤-20.92	PASS
			1000~26500	-0.92	-42.64	≤-20.92	PASS
		2440	Reference	0.60	0.60	---	PASS
			30~1000	0.60	-54.44	≤-19.4	PASS
			1000~26500	0.60	-43.23	≤-19.4	PASS
		2480	Reference	-0.73	-0.73	---	PASS
			30~1000	-0.73	-58.54	≤-20.73	PASS
			1000~26500	-0.73	-43.68	≤-20.73	PASS

Test Graphs

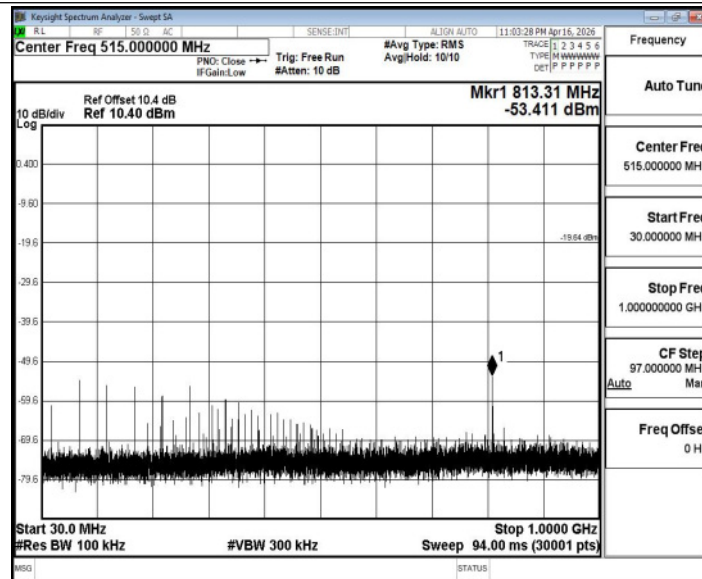




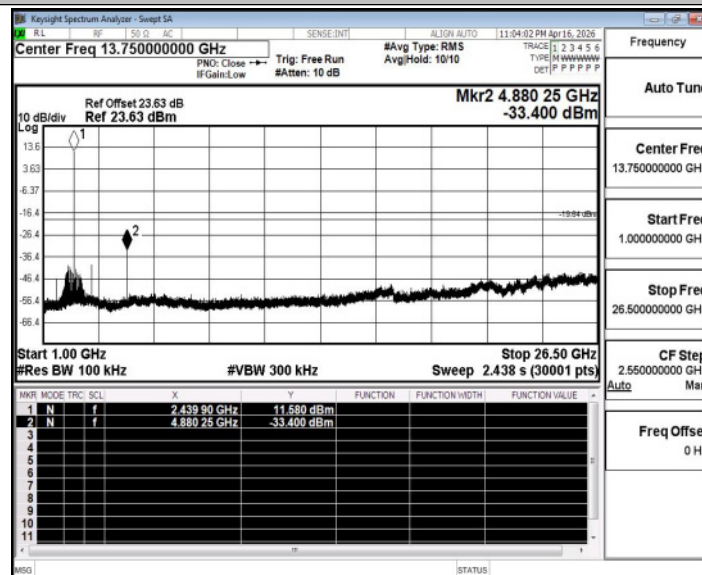
BLE_1M_Ant1_2440_0~Reference



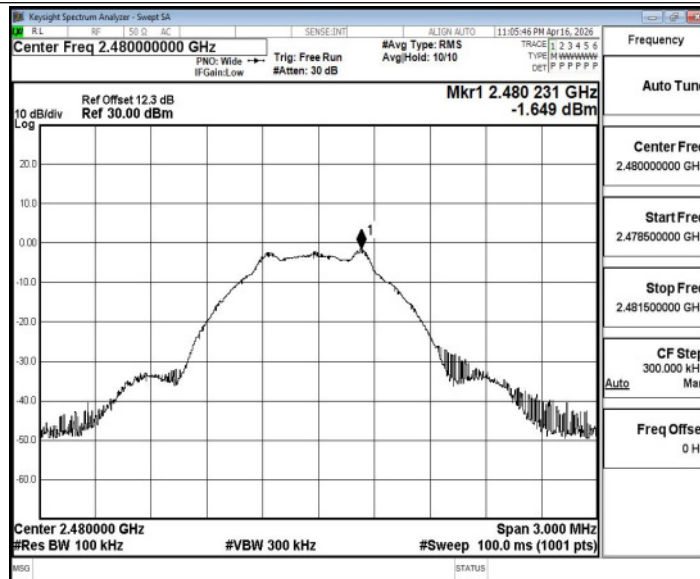
BLE_1M_Ant1_2440_30~1000



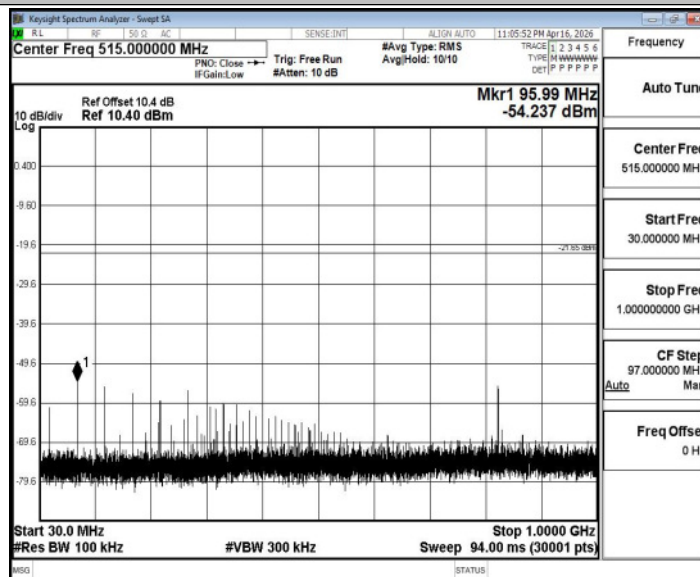
BLE_1M_Ant1_2440_1000~26500



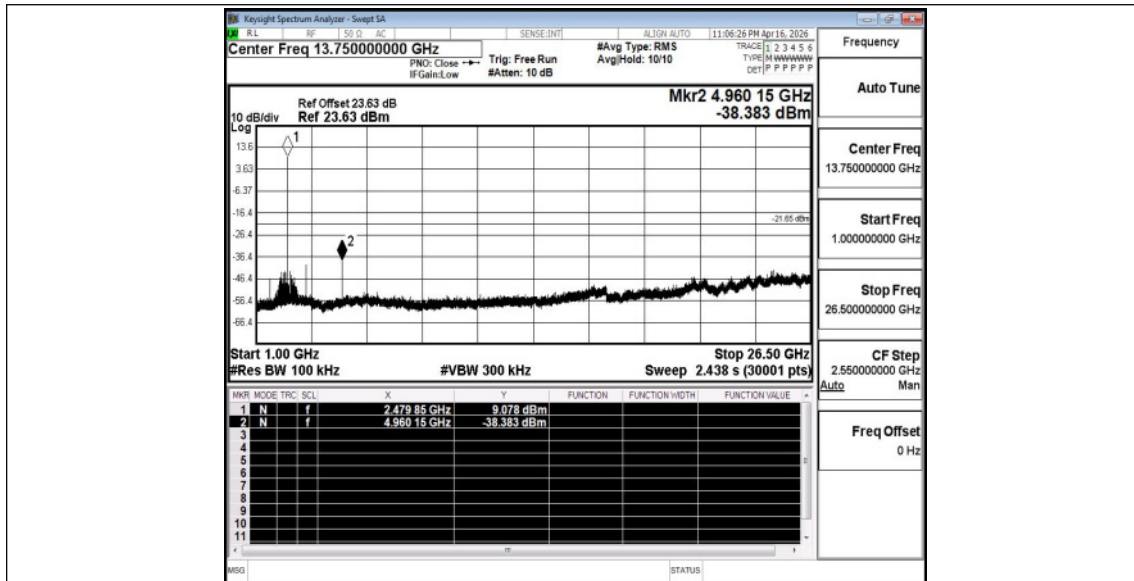
BLE_1M_Ant1_2480_0~Reference



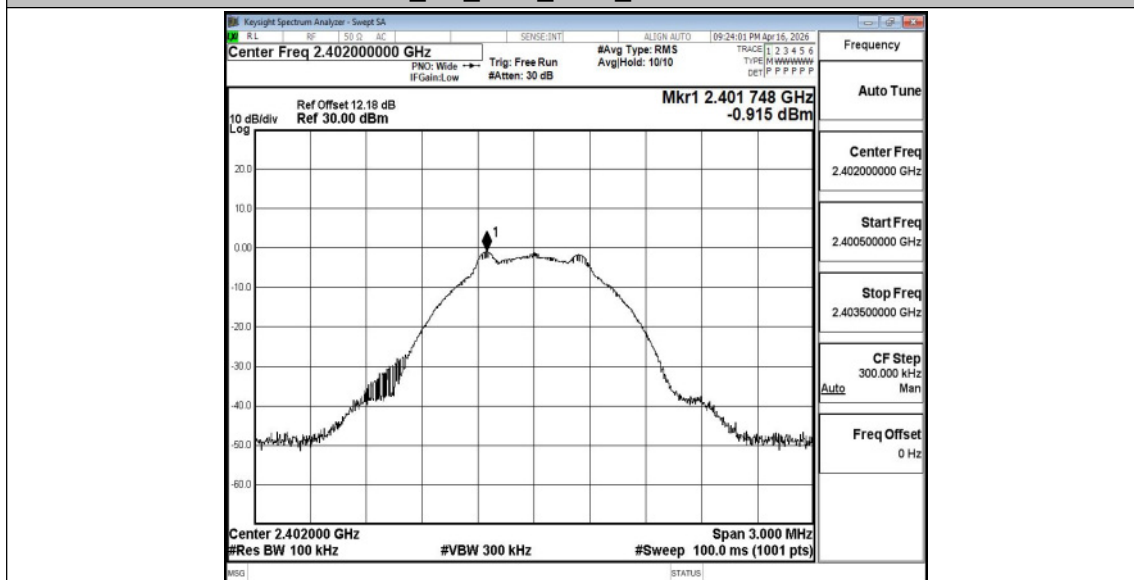
BLE_1M_Ant1_2480_30~1000



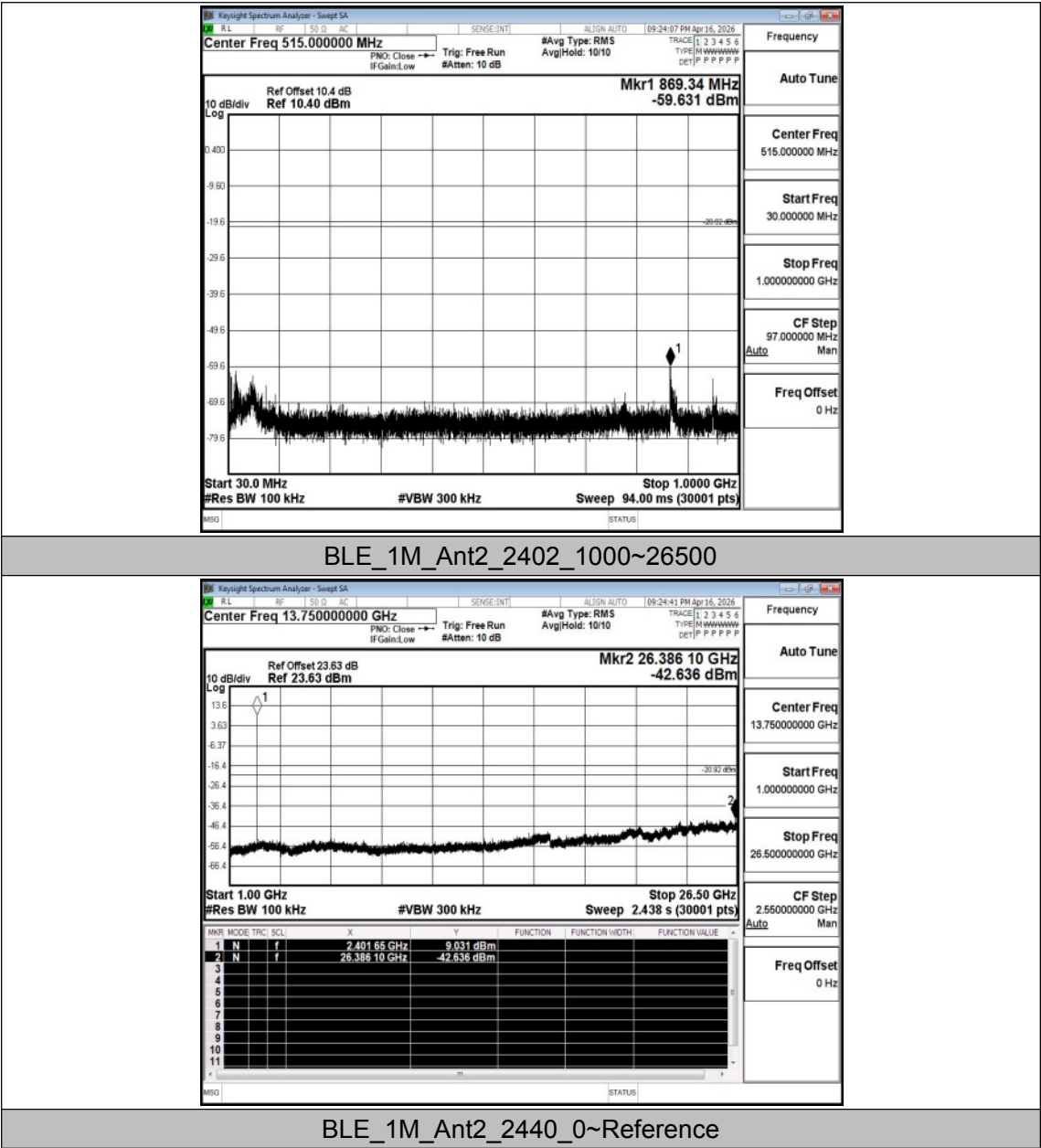
BLE_1M_Ant1_2480_1000~26500

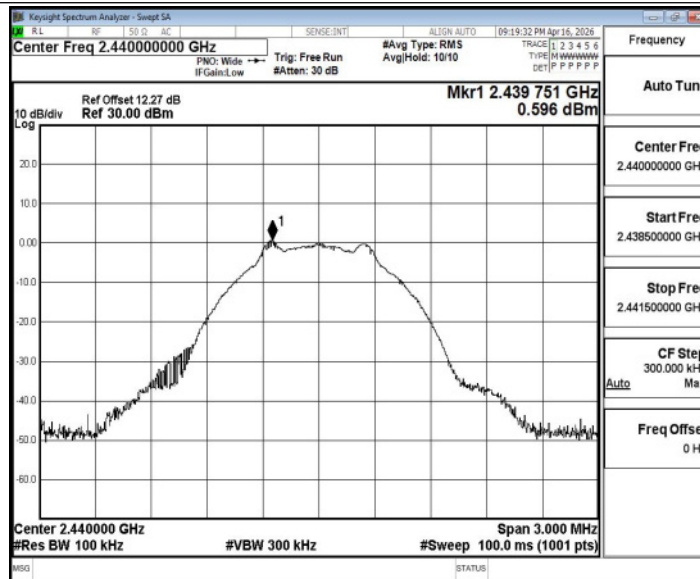


BLE_1M_Ant2_2402_0~Reference

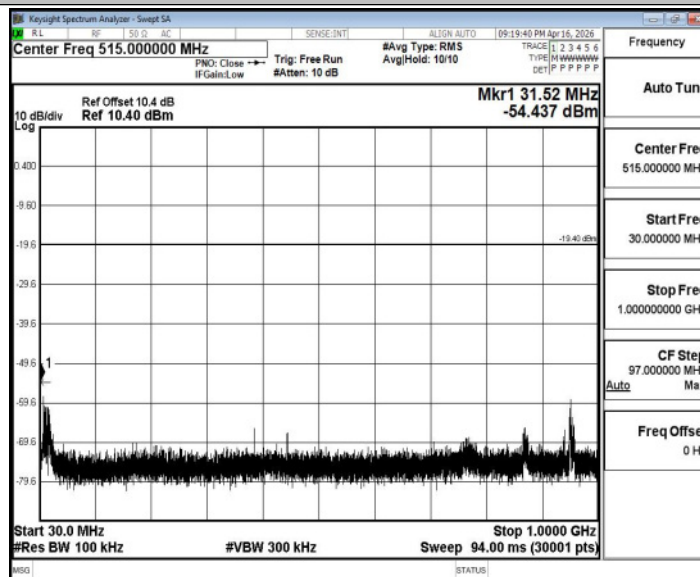


BLE_1M_Ant2_2402_30~1000

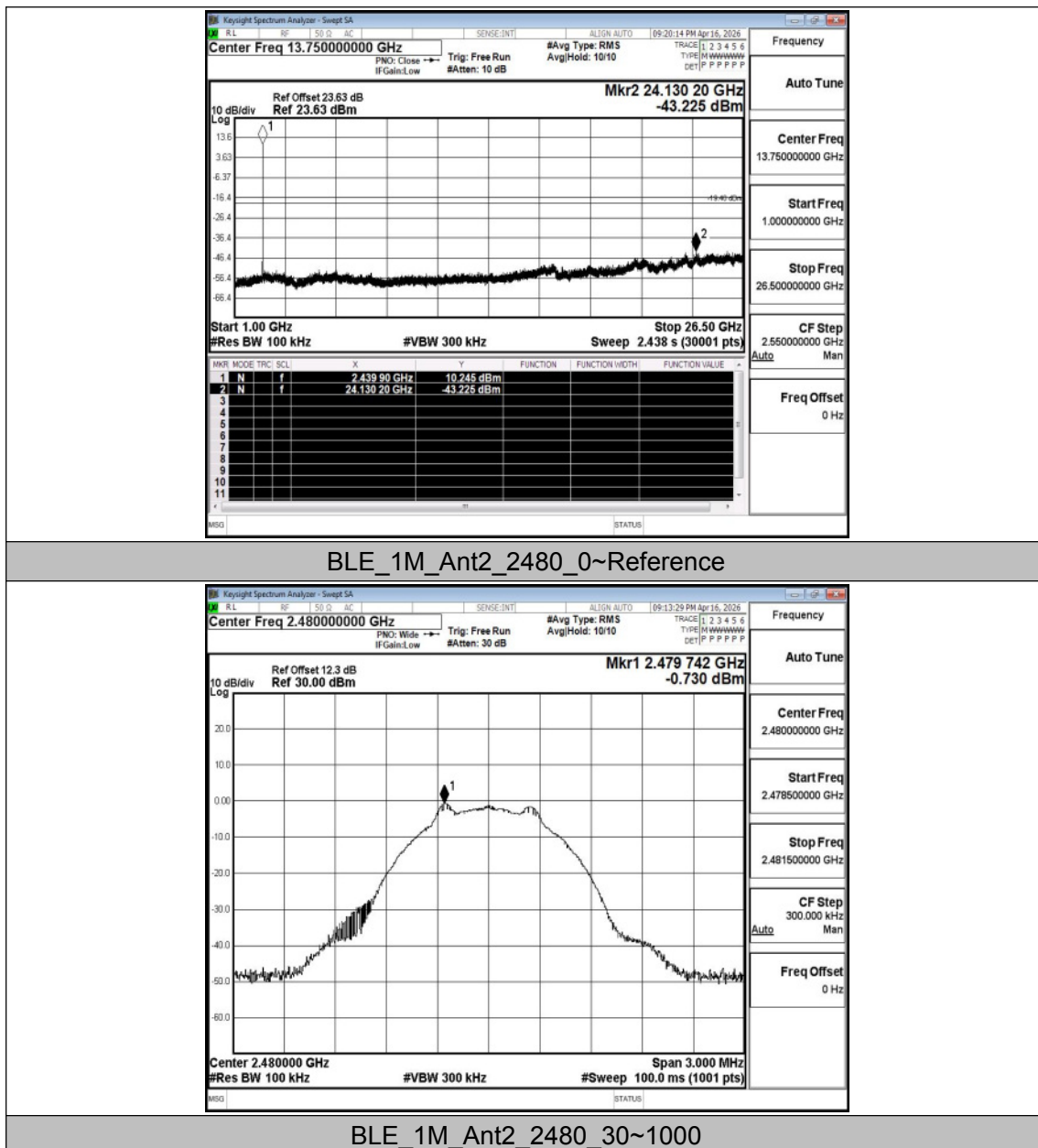


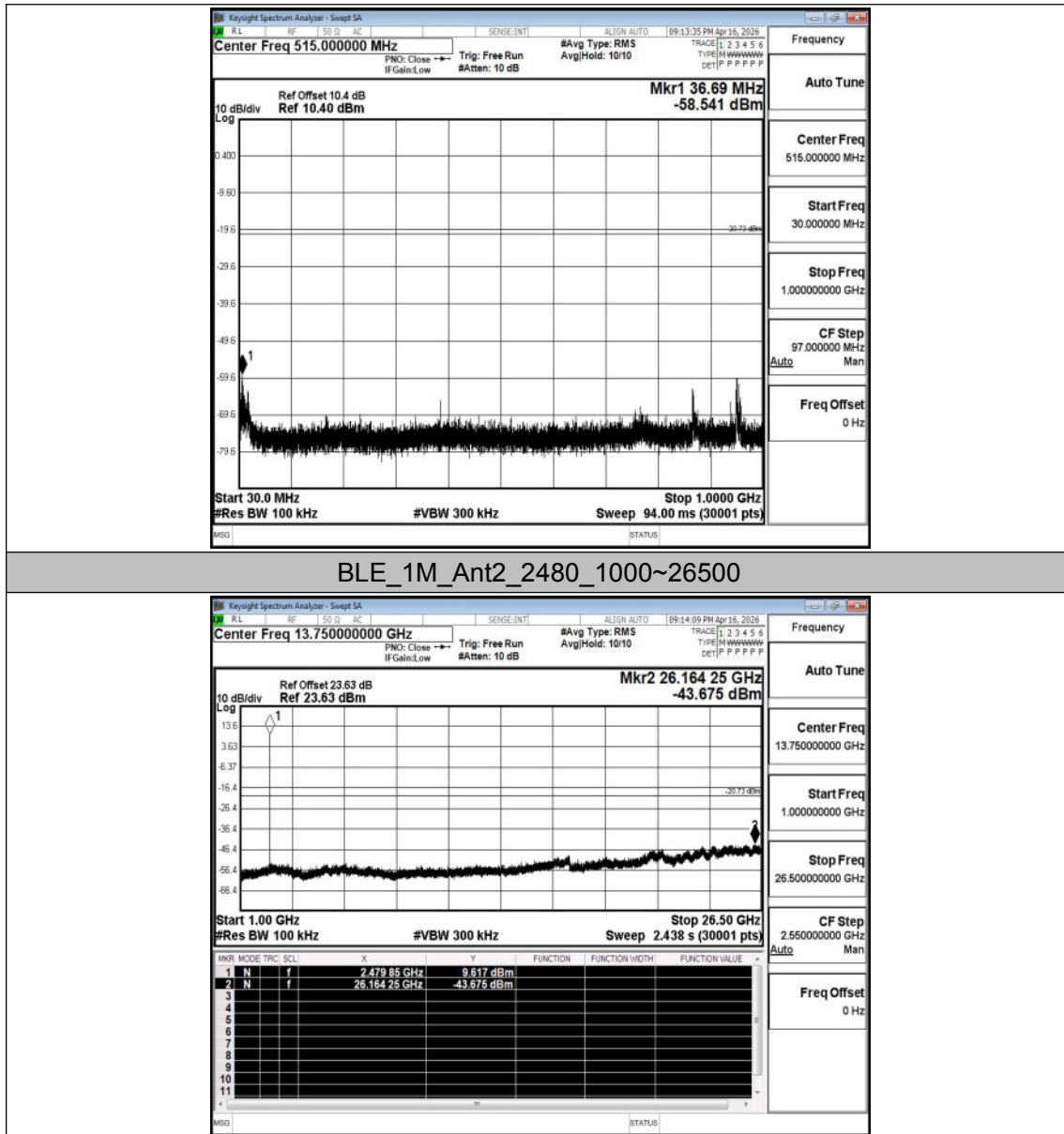


BLE_1M_Ant2_2440_30~1000



BLE_1M_Ant2_2440_1000~26500





B.6 Duty Cycle

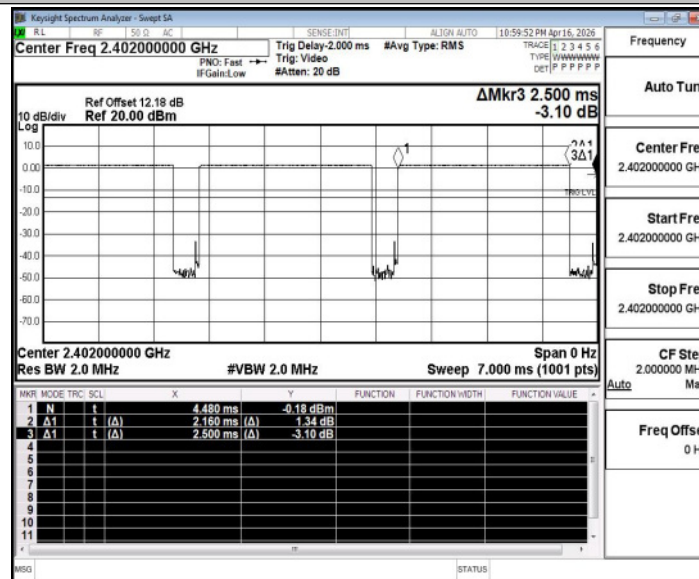
Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	2.16	2.50	0.8640	86.40	0.63	---	---
		2440	2.16	2.50	0.8640	86.40	0.63	---	---
		2480	2.16	2.50	0.8640	86.40	0.63	---	---

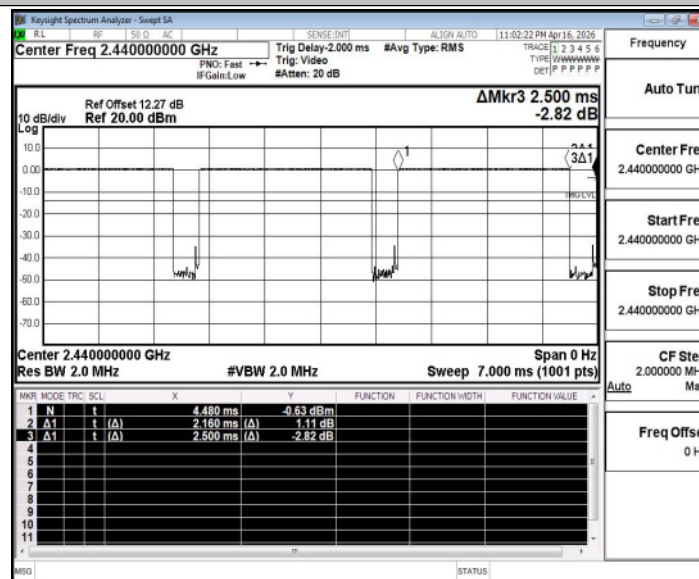
TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant2	2402	1.64	1.88	0.8723	87.23	0.59	---	---
		2440	1.64	1.88	0.8723	87.23	0.59	---	---
		2480	1.64	1.88	0.8723	87.23	0.59	---	---

Test Graphs

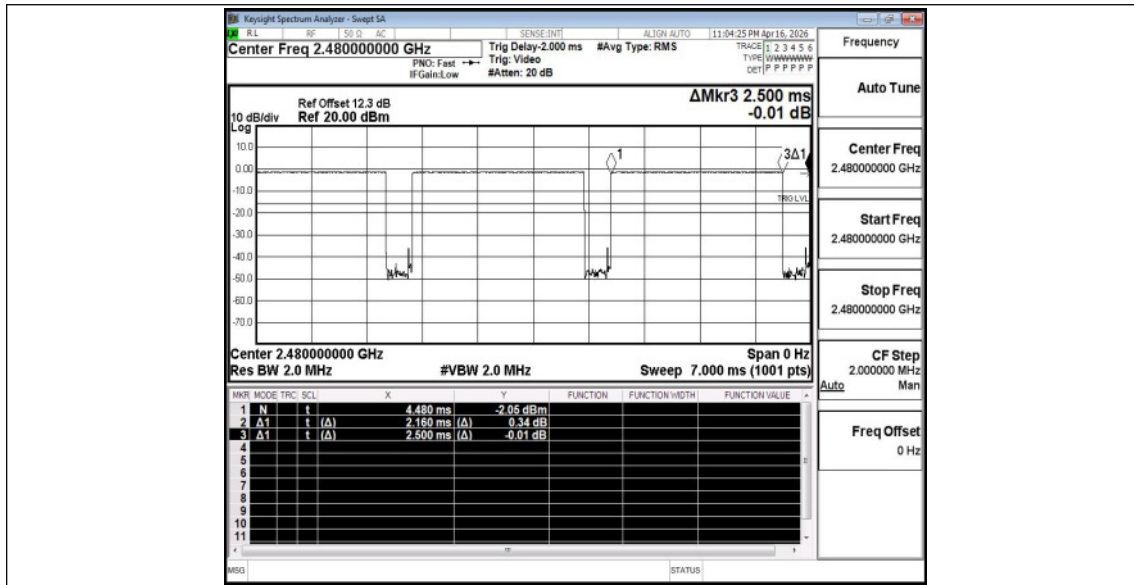
BLE_1M_Ant1_2402



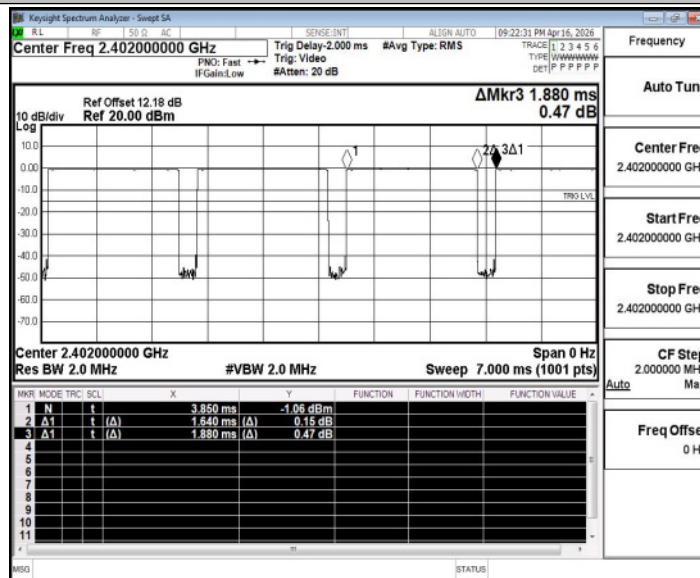
BLE_1M_Ant1_2440



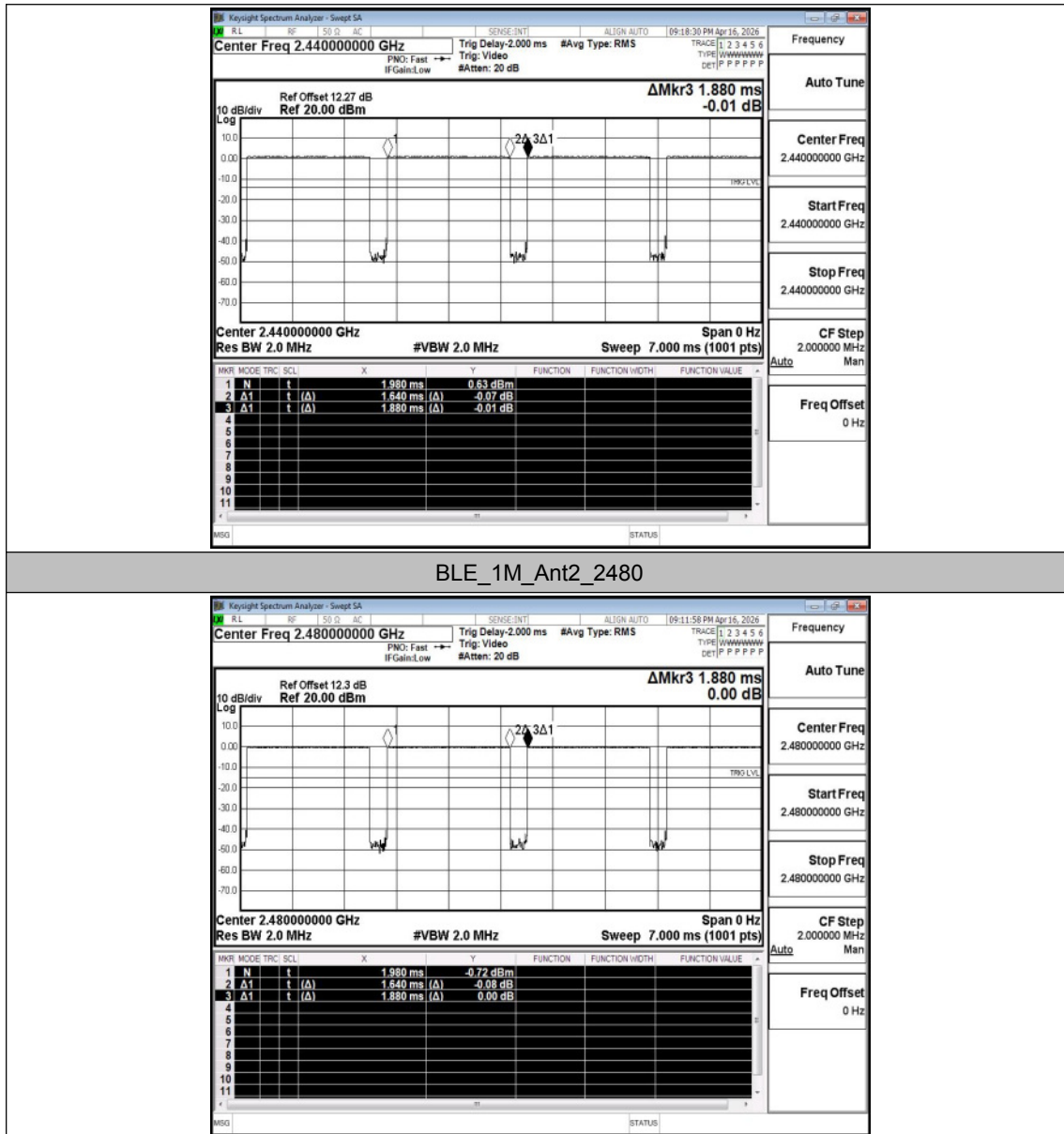
BLE_1M_Ant1_2480



BLE_1M_Ant2_2402



BLE_1M_Ant2_2440



B.7 Emissions in Restricted Bands

Test Result

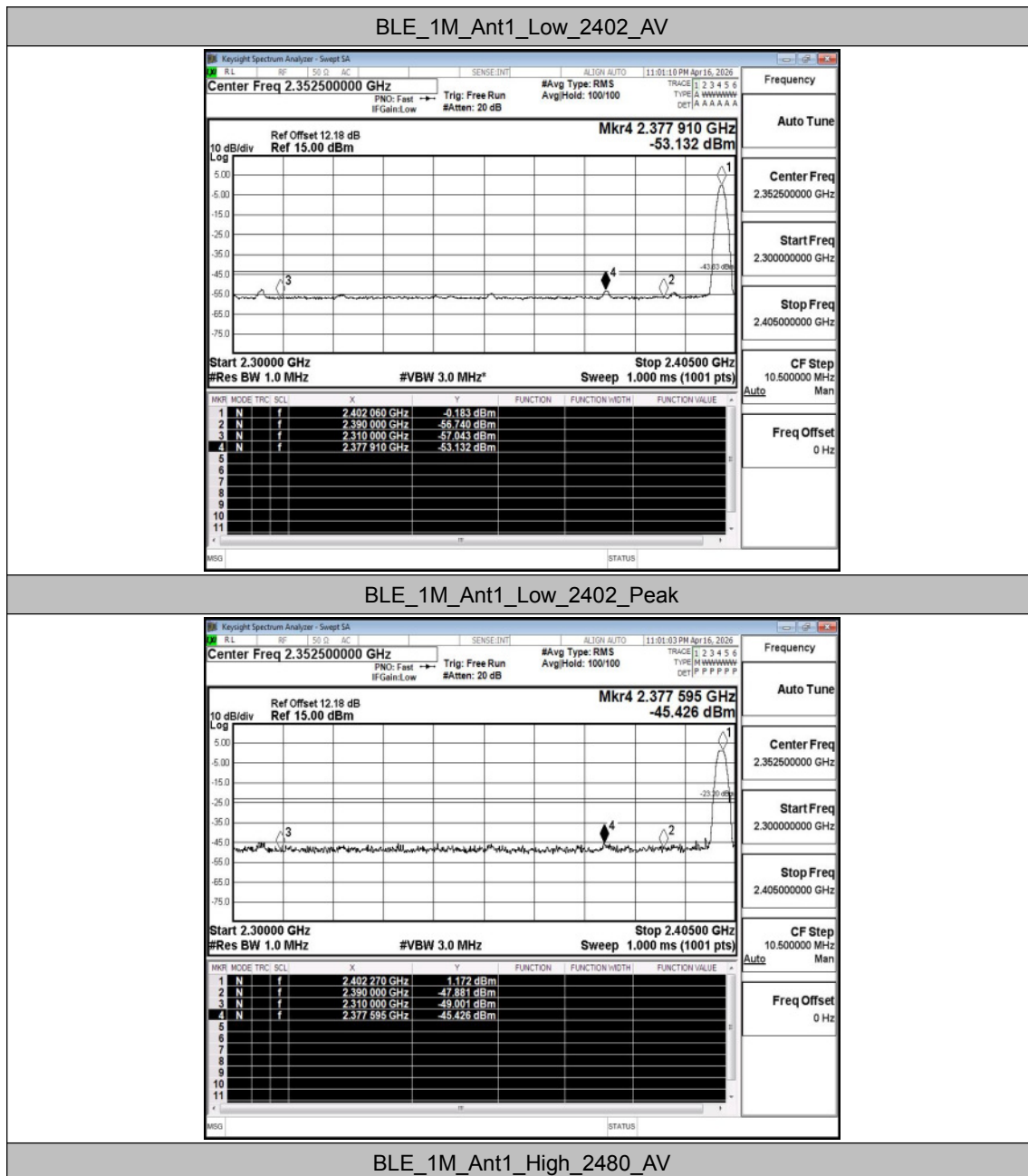
TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Gain [dBi]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-57.04	≤-43.83	2.00	0.63	40.79	≤54	PASS
				AV	2377.910	-53.13	≤-43.83	2.00	0.63	44.70	≤54	PASS
				AV	2390.000	-56.74	≤-43.83	2.00	0.63	41.09	≤54	PASS
				Peak	2310.000	-49	≤-23.20	2.00	0.00	48.20	≤74	PASS
				Peak	2377.595	-45.43	≤-23.20	2.00	0.00	51.77	≤74	PASS
				Peak	2390.000	-47.88	≤-23.20	2.00	0.00	49.32	≤74	PASS
		High	2480	AV	2483.500	-56.09	≤-43.83	2.00	0.63	41.74	≤54	PASS
				AV	2485.280	-54.85	≤-43.83	2.00	0.63	42.98	≤54	PASS
				AV	2500.000	-56.66	≤-43.83	2.00	0.63	41.17	≤54	PASS
				Peak	2483.500	-47.42	≤-23.20	2.00	0.00	49.78	≤74	PASS
				Peak	2489.680	-44.64	≤-23.20	2.00	0.00	52.56	≤74	PASS
				Peak	2500.000	-47.81	≤-23.20	2.00	0.00	49.39	≤74	PASS

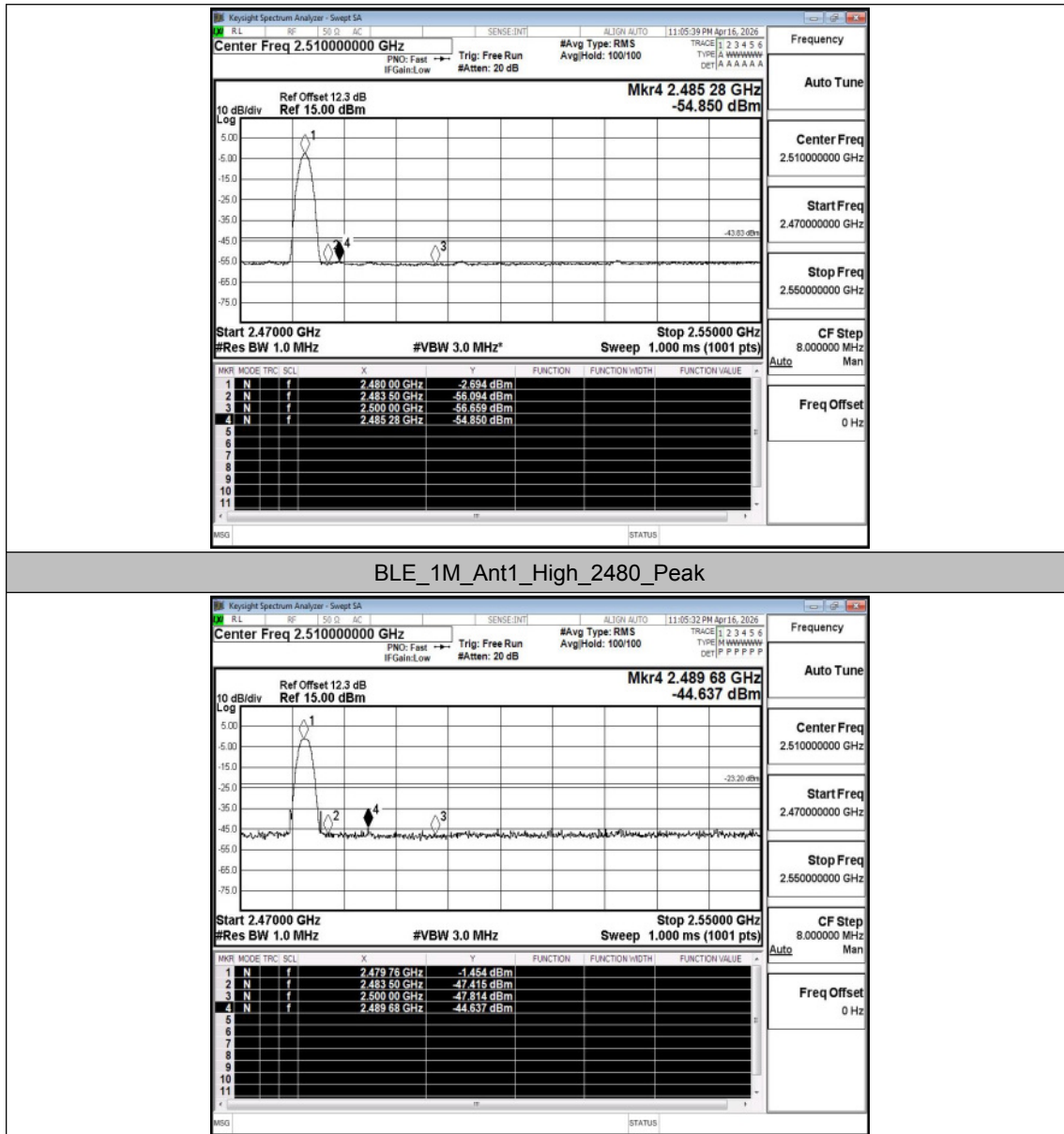
TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Gain [dBi]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant2	Low	2402	AV	2310.000	-57.24	≤-43.79	2.00	0.59	40.55	≤54	PASS
				AV	2342.420	-56.19	≤-43.79	2.00	0.59	41.60	≤54	PASS
				AV	2390.000	-57.2	≤-43.79	2.00	0.59	40.59	≤54	PASS
				Peak	2310.000	-48.59	≤-23.20	2.00	0.00	48.61	≤74	PASS
				Peak	2326.250	-45.06	≤-23.20	2.00	0.00	52.14	≤74	PASS
				Peak	2390.000	-48.65	≤-23.20	2.00	0.00	48.55	≤74	PASS
		High	2480	AV	2483.500	-56.21	≤-43.79	2.00	0.59	41.58	≤54	PASS
				AV	2489.920	-55.81	≤-43.79	2.00	0.59	41.98	≤54	PASS
				AV	2500.000	-56.79	≤-43.79	2.00	0.59	41.00	≤54	PASS
				Peak	2483.500	-48.47	≤-23.20	2.00	0.00	48.73	≤74	PASS
				Peak	2494.080	-45.84	≤-23.20	2.00	0.00	51.36	≤74	PASS
				Peak	2500.000	-48.63	≤-23.20	2.00	0.00	48.57	≤74	PASS

Note:

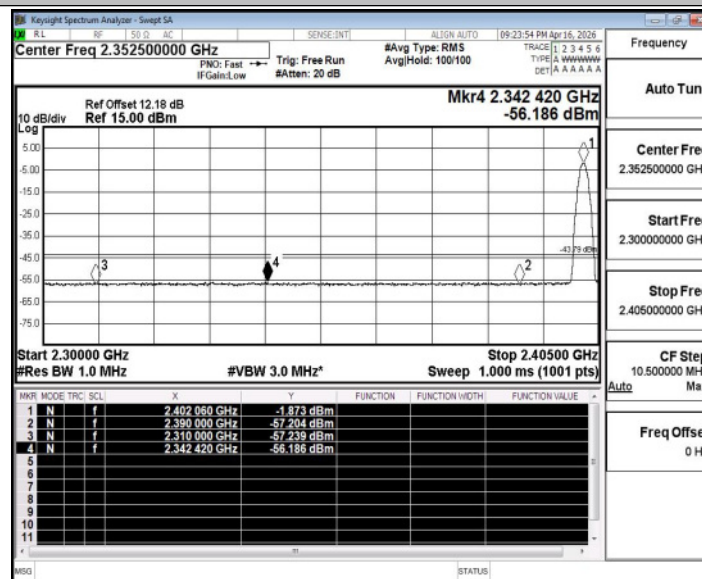
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

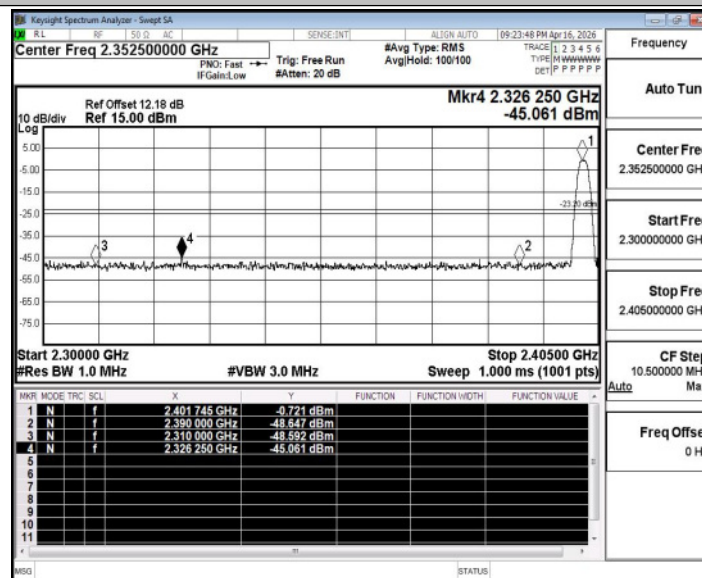




BLE_1M_Ant2_Low_2402_AV



BLE_1M_Ant2_Low_2402_Peak



BLE_1M_Ant2_High_2480_AV

