

Appendix B

RF Test Data for BT LE (Conducted Measurement)

Product Name: Tablet

Test Model: K11 Pro

Environmental Conditions

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

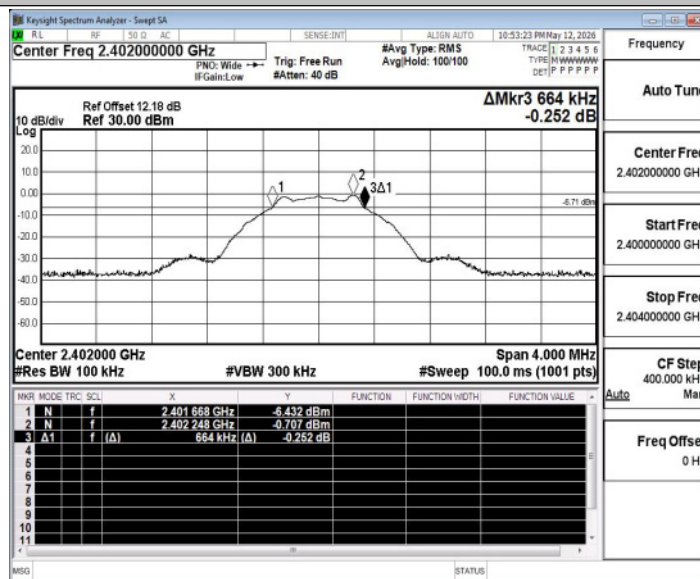
B.1 DTS Bandwidth

Test Result

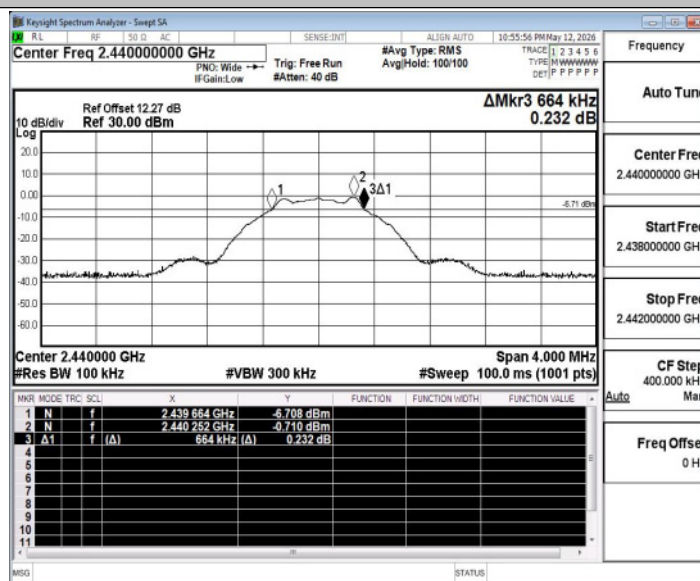
TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.664	2401.668	2402.332	0.5	PASS
		2440	0.664	2439.664	2440.328	0.5	PASS
		2480	0.664	2479.668	2480.332	0.5	PASS
BLE_2M	Ant1	2404	1.160	2403.424	2404.584	0.5	PASS
		2440	1.164	2439.420	2440.584	0.5	PASS
		2478	1.156	2477.424	2478.580	0.5	PASS

Test Graphs

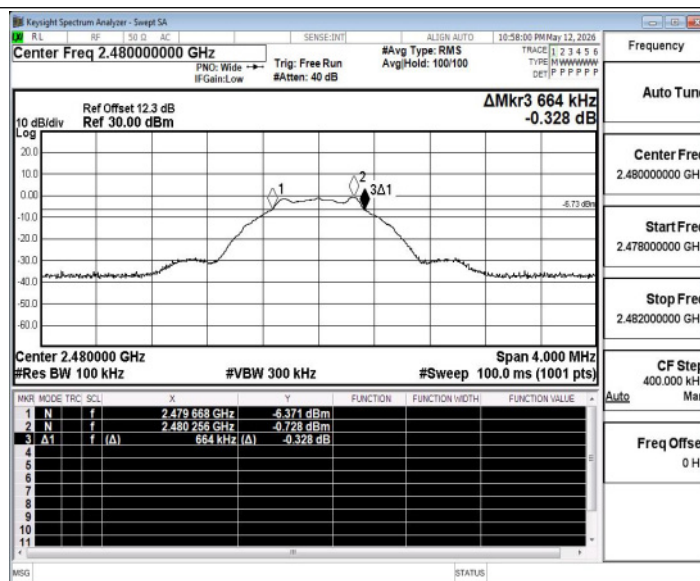
BLE_1M_Ant1_2402



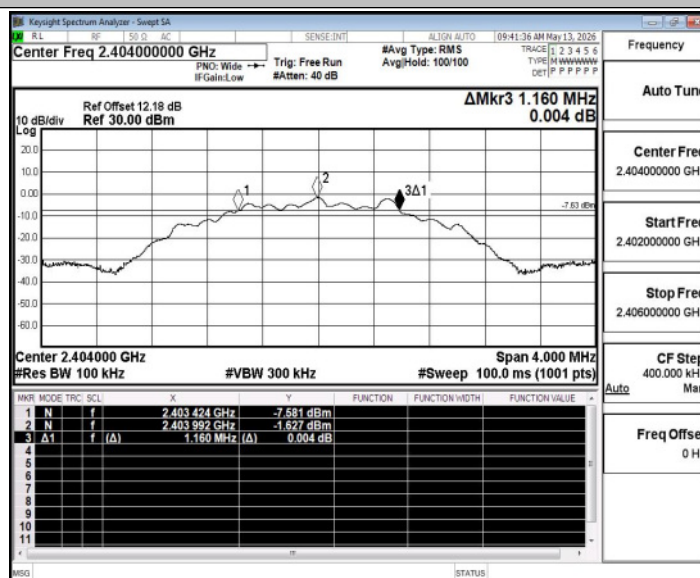
BLE_1M_Ant1_2440



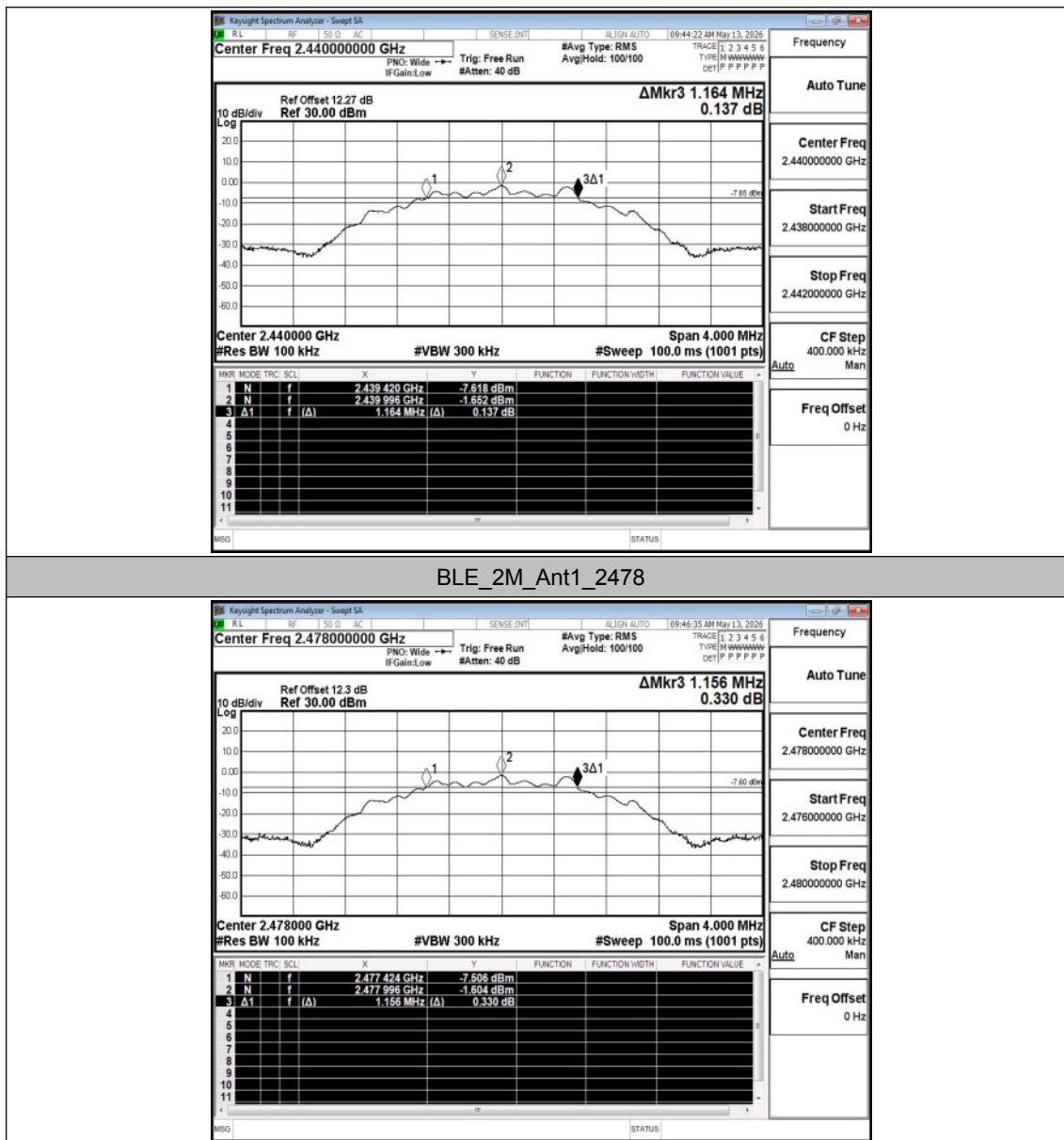
BLE_1M_Ant1_2480



BLE_2M_Ant1_2404



BLE_2M_Ant1_2440

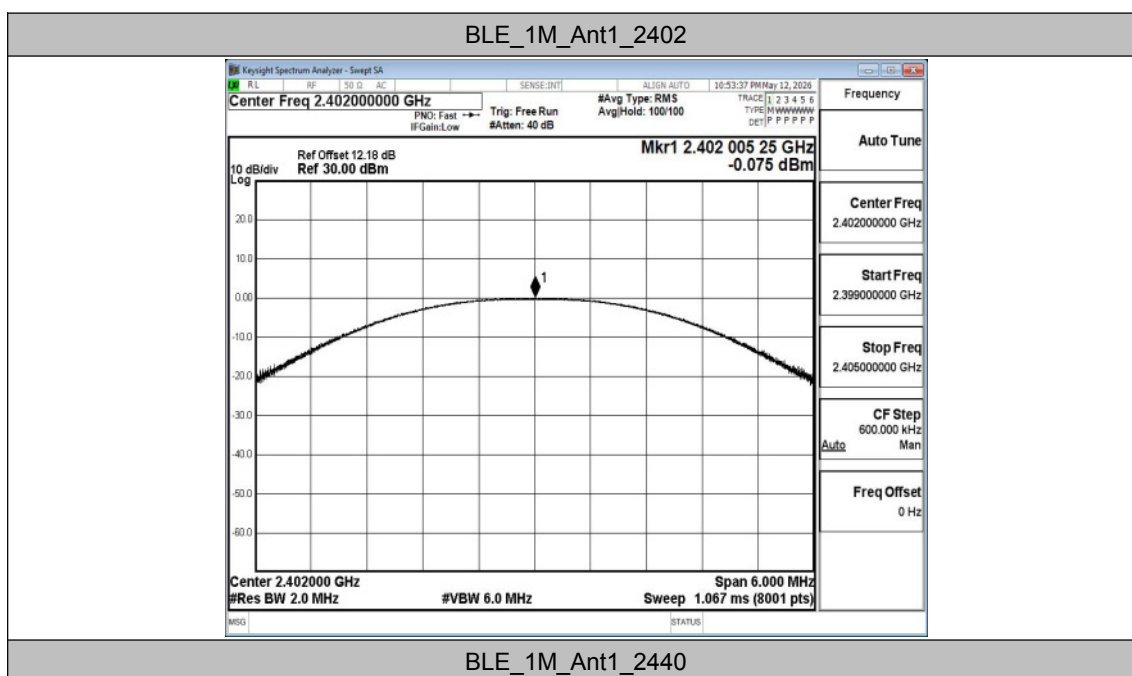


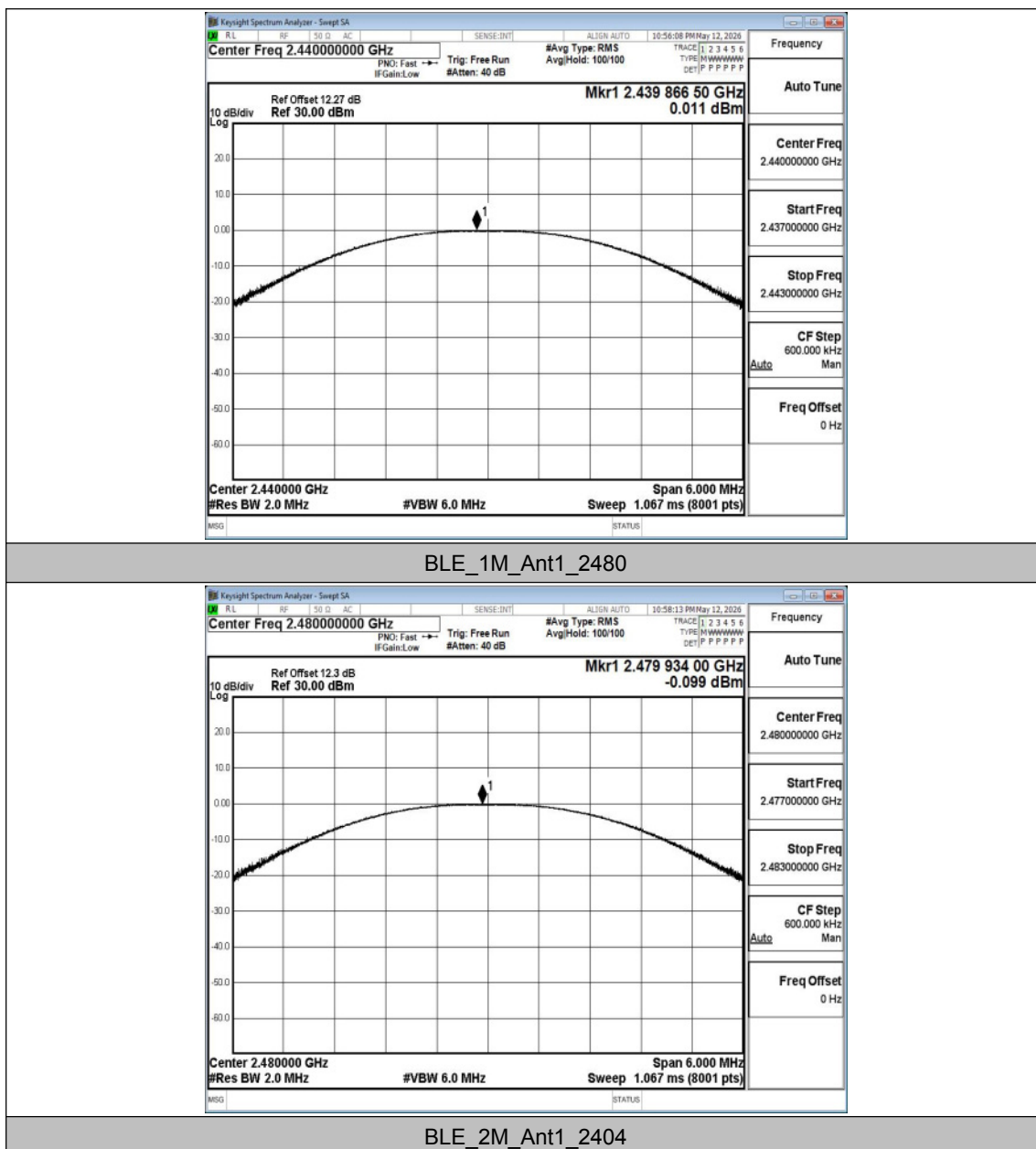
B.2 Maximum Peak conducted output power

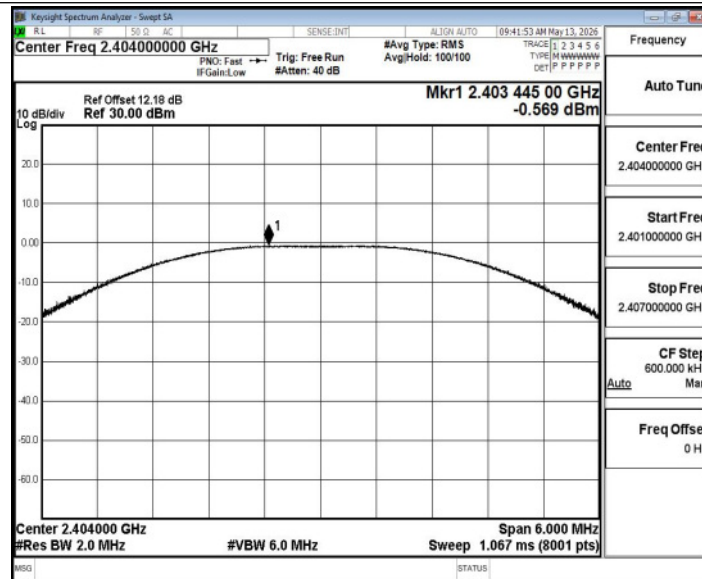
Test Result Peak

TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-0.08	≤30	PASS
		2440	0.01	≤30	PASS
		2480	-0.10	≤30	PASS
BLE_2M	Ant1	2404	-0.57	≤30	PASS
		2440	-0.57	≤30	PASS
		2478	-0.49	≤30	PASS

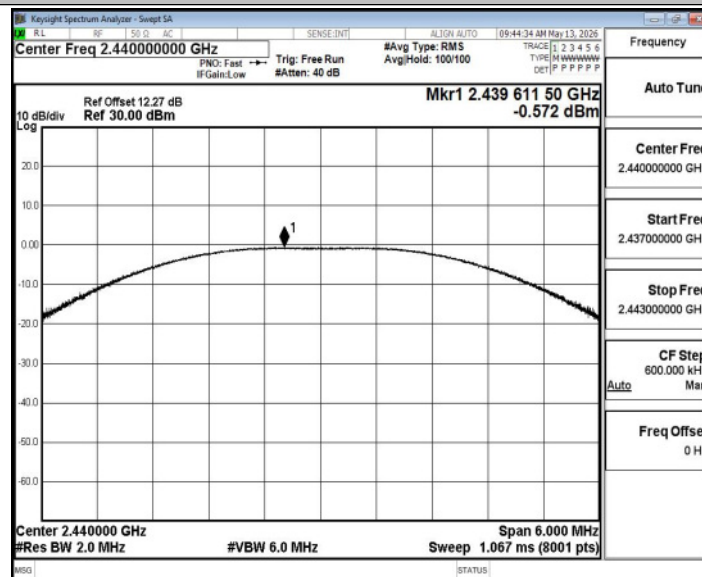
Test Graphs Peak



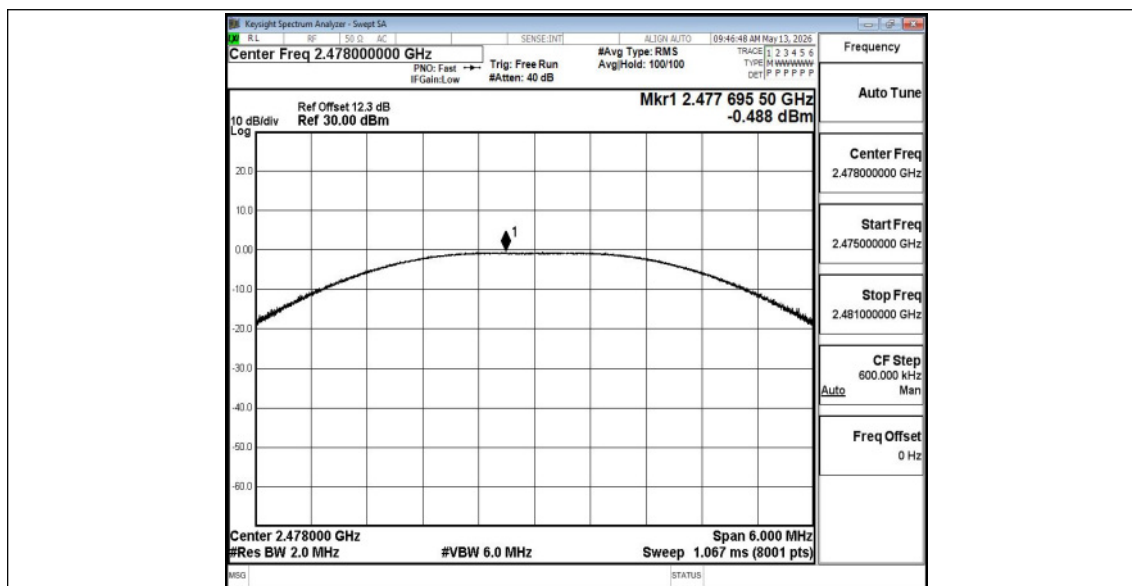




BLE_2M_Ant1_2440



BLE_2M_Ant1_2478



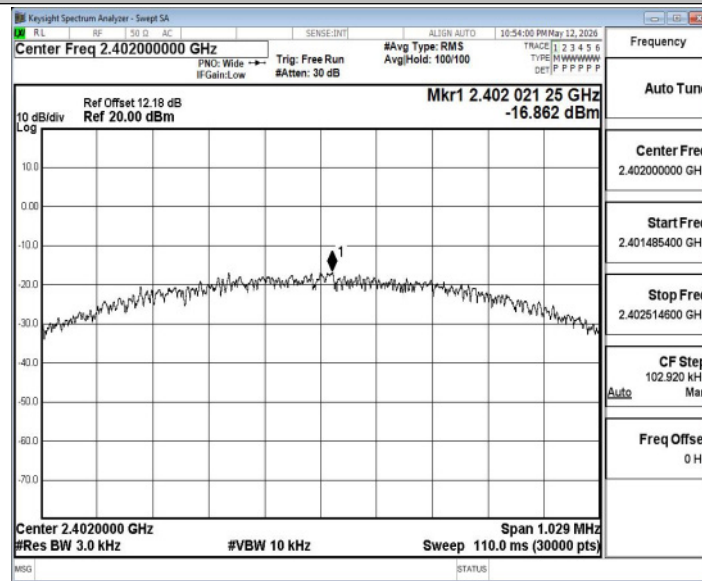
B.3 Maximum power spectral density

Test Result

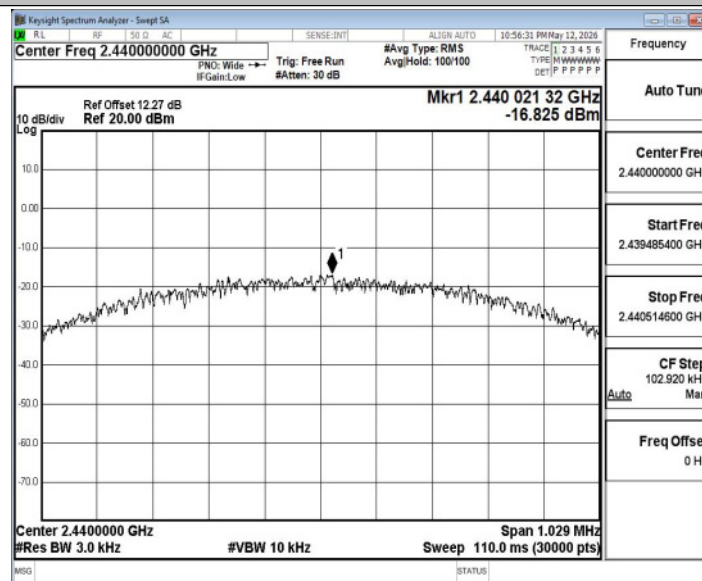
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-16.86	≤8.00	PASS
		2440	-16.83	≤8.00	PASS
		2480	-16.75	≤8.00	PASS
BLE_2M	Ant1	2404	-19.70	≤8.00	PASS
		2440	-19.75	≤8.00	PASS
		2478	-19.64	≤8.00	PASS

Test Graphs

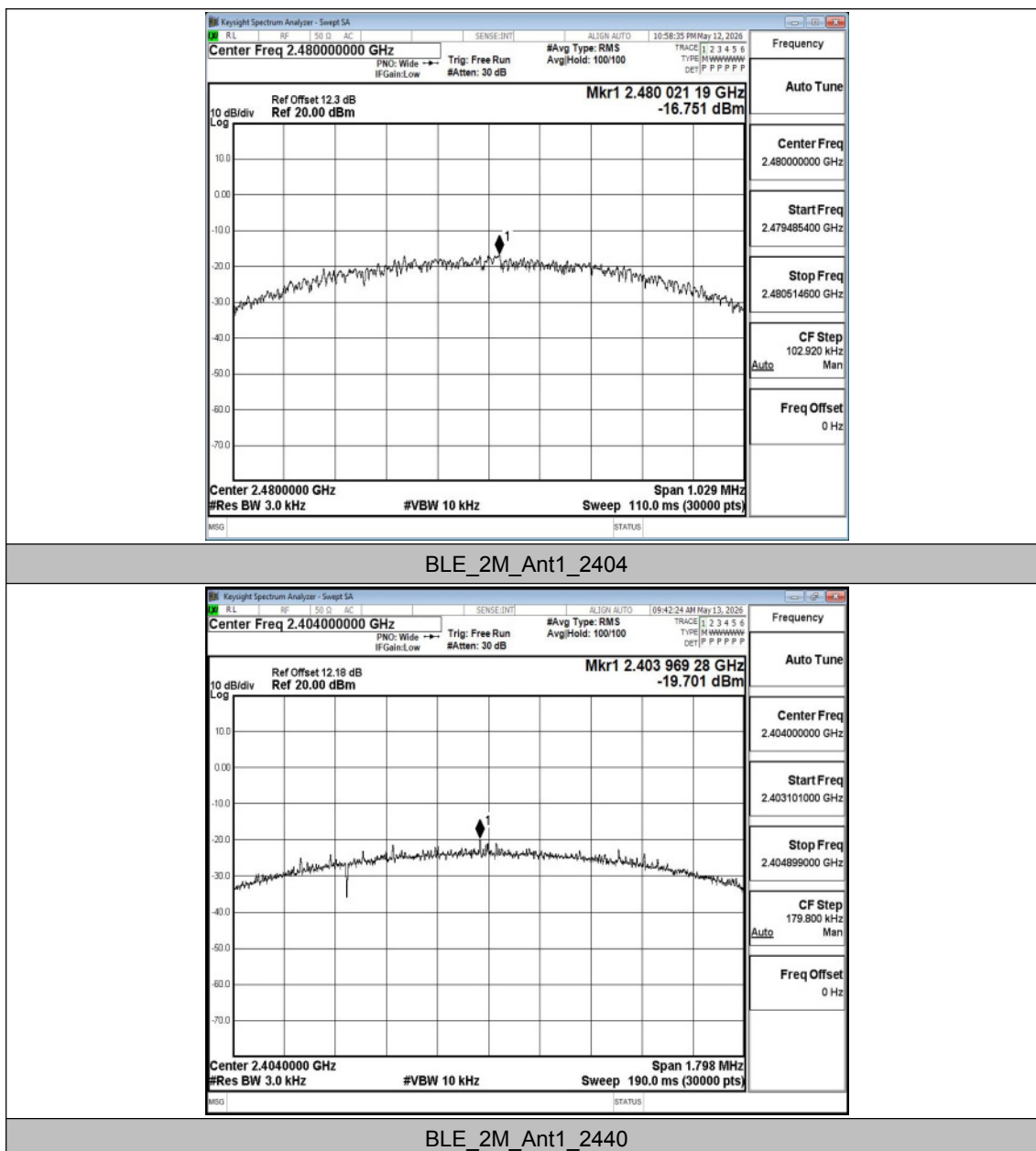
BLE_1M_Ant1_2402

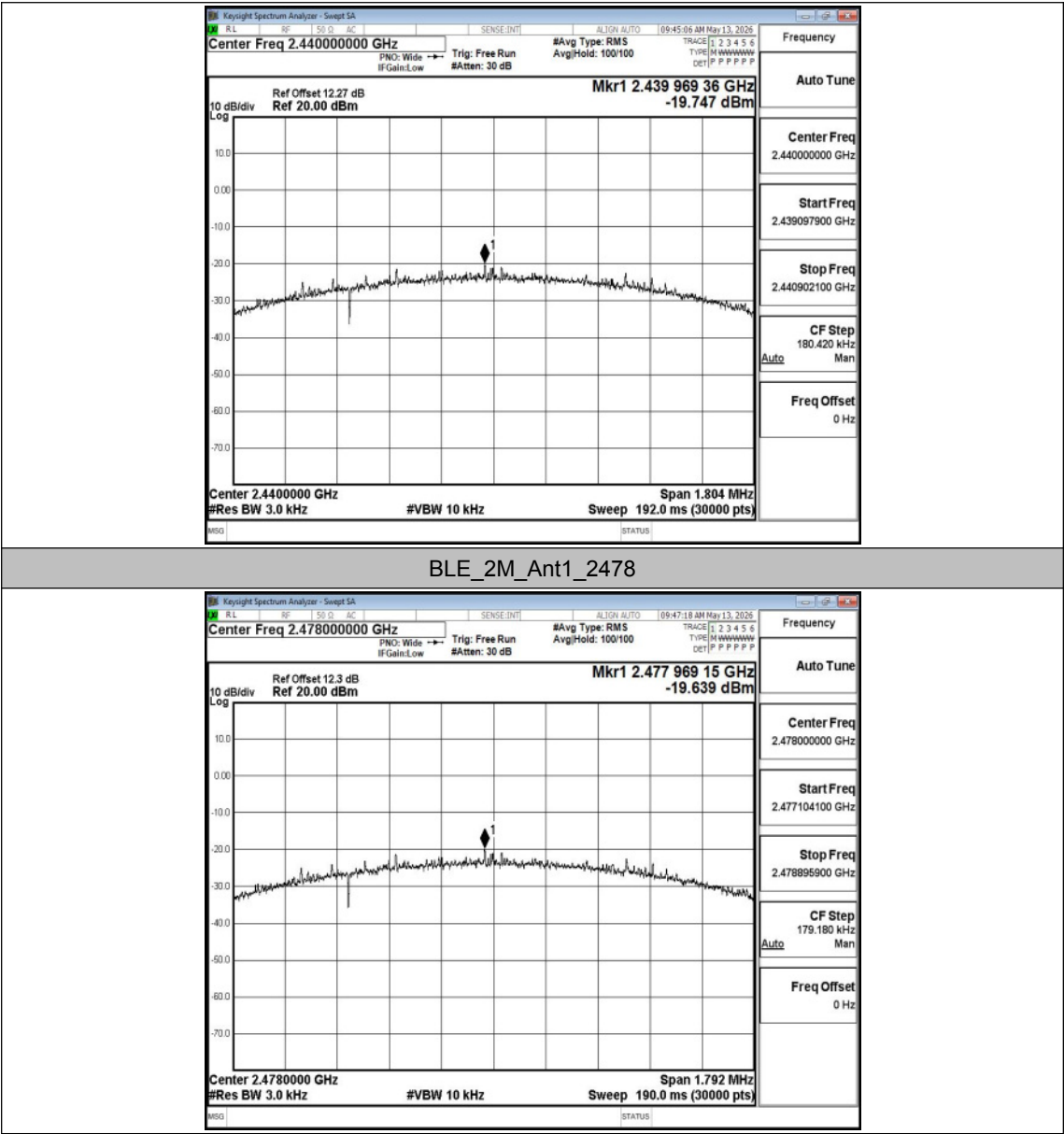


BLE_1M_Ant1_2440



BLE_1M_Ant1_2480





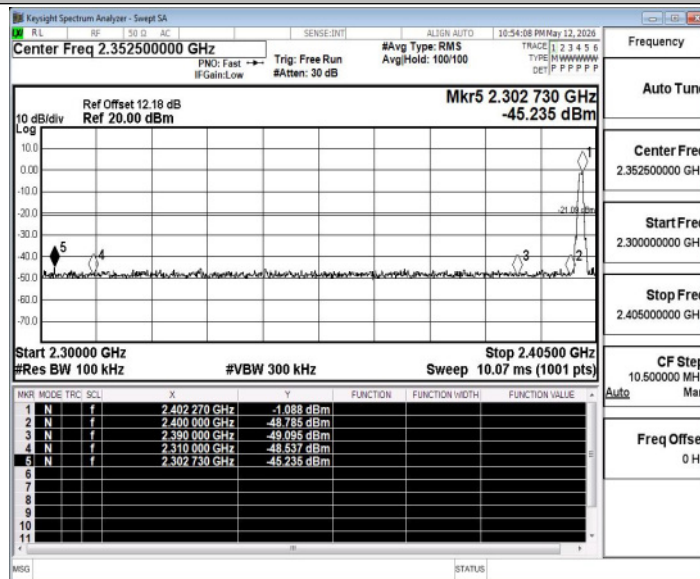
B.4 Band edge measurements

Test Result

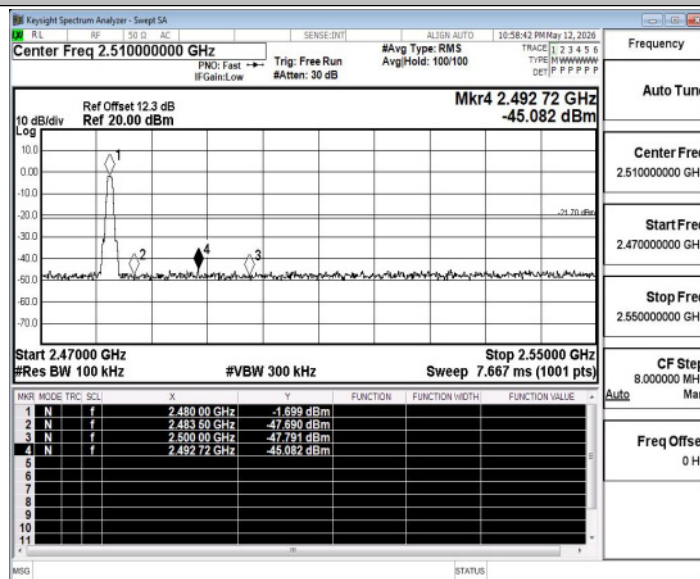
TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-1.09	-45.24	≤ -21.09	PASS
		High	2480	-1.70	-45.08	≤ -21.7	PASS
BLE_2M	Ant1	Low	2404	-2.21	-45.56	≤ -22.21	PASS
		High	2478	-1.88	-45.27	≤ -21.88	PASS

Test Graphs

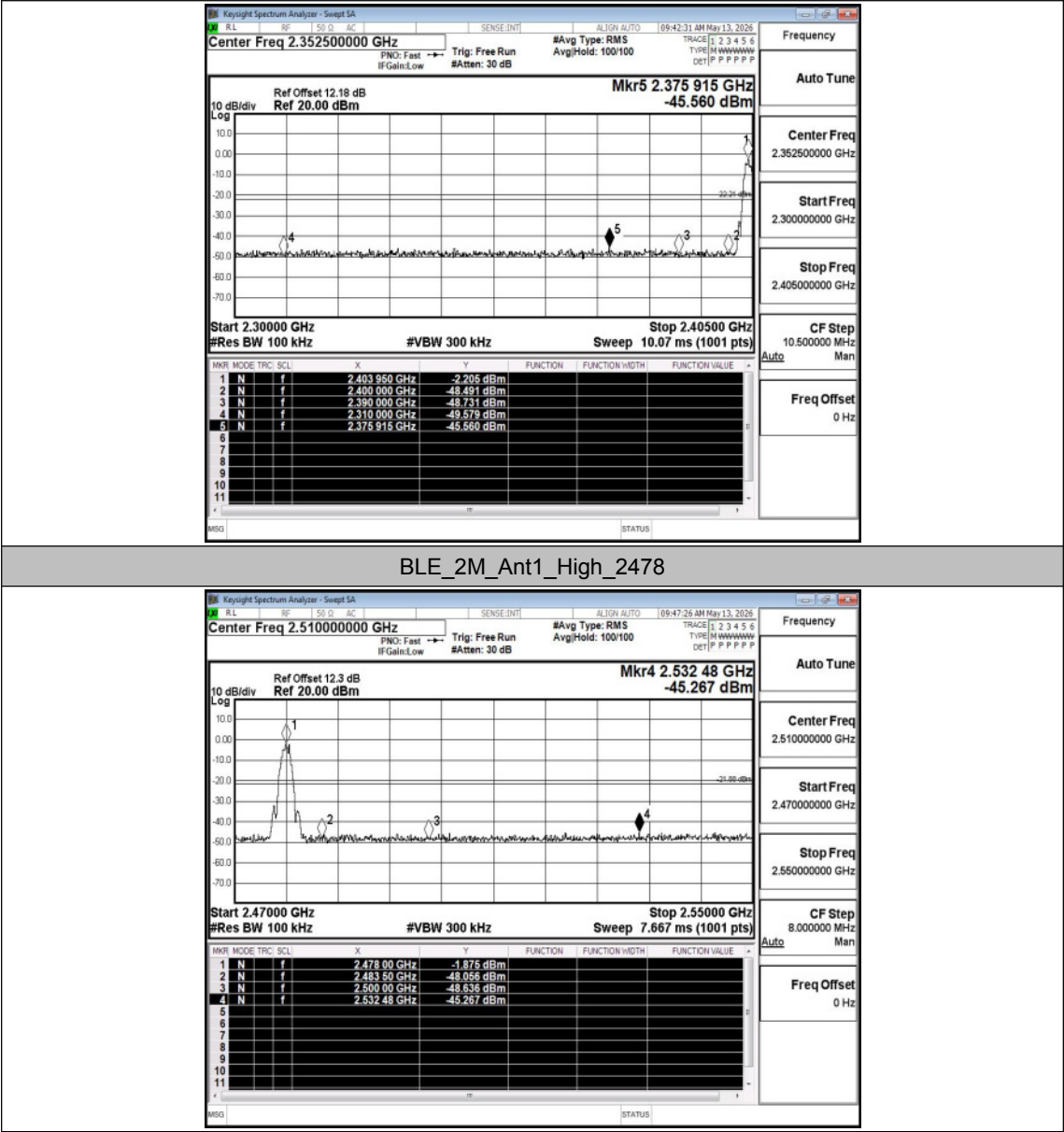
BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480



BLE_2M_Ant1_Low_2404

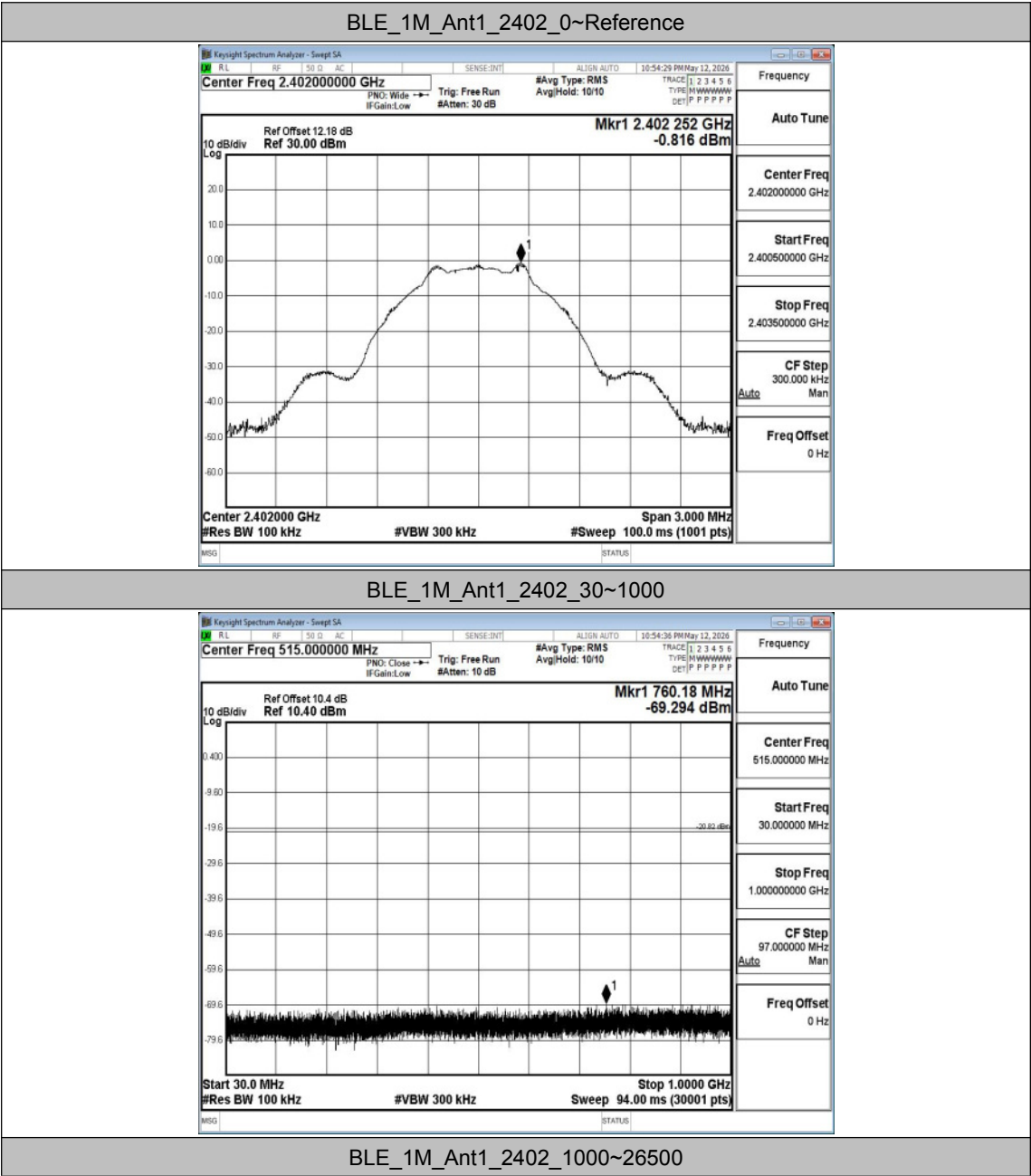


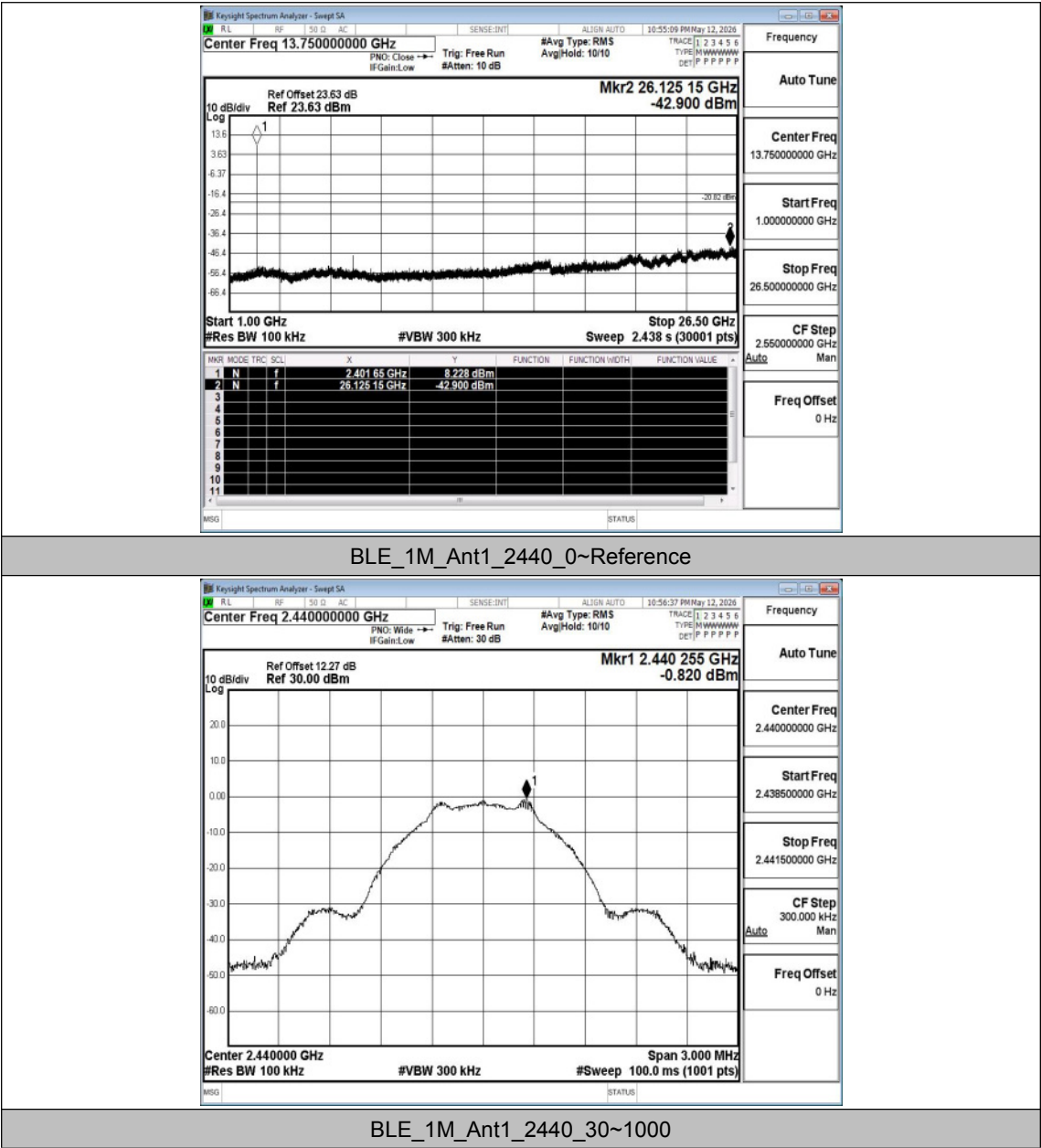
B.5 Conducted Spurious Emission

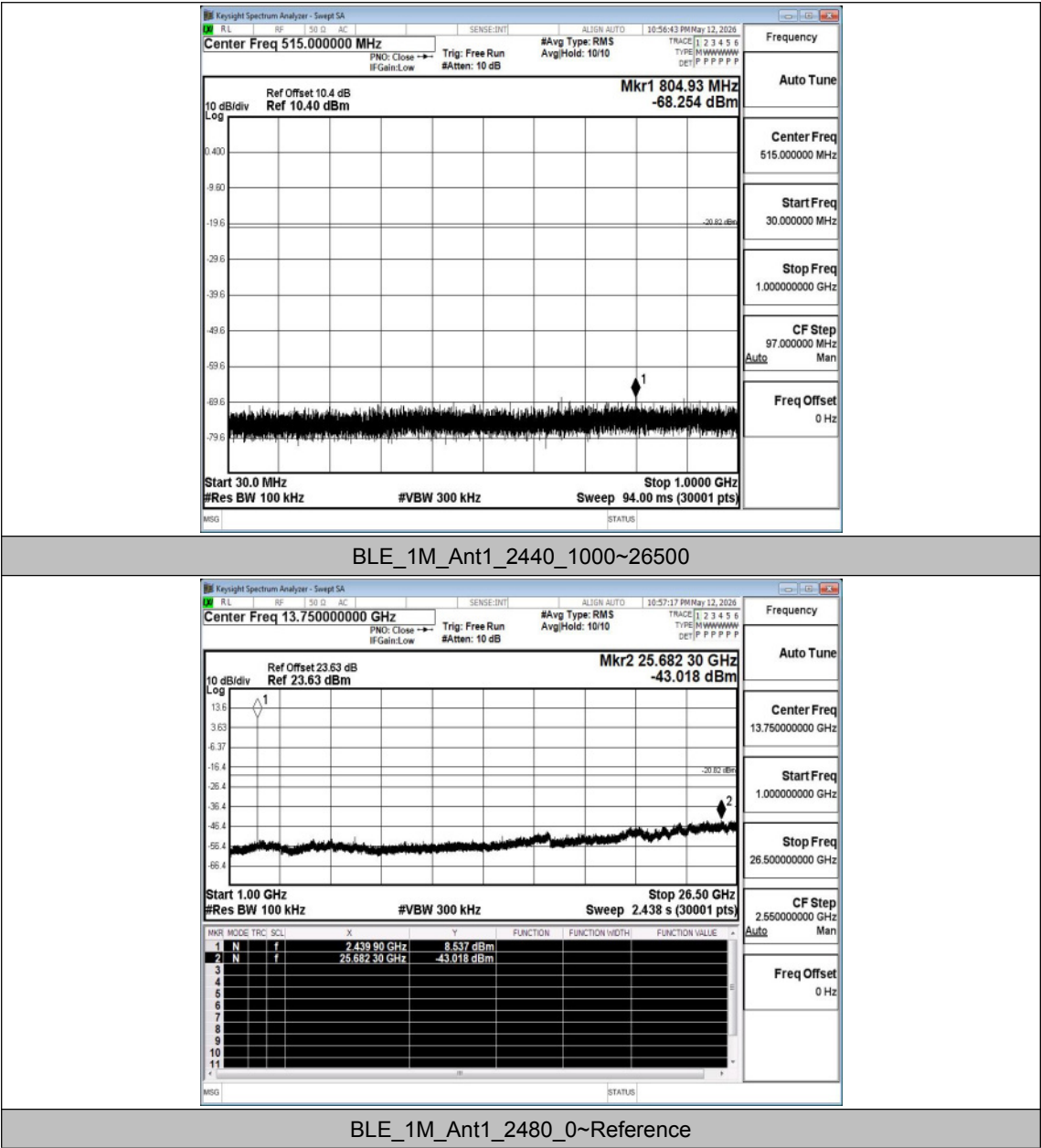
Test Result

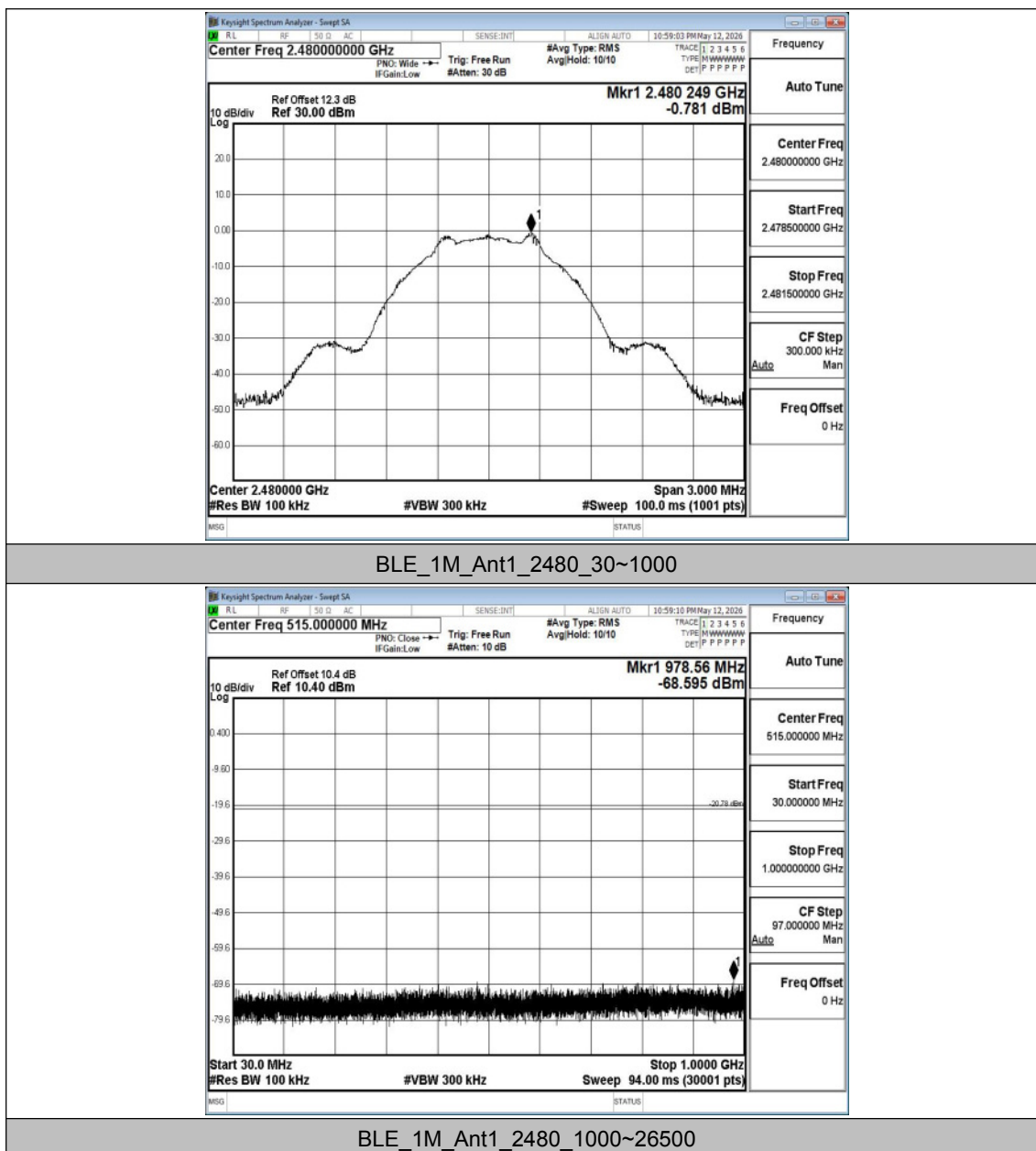
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-0.82	-0.82	---	PASS
			30~1000	-0.82	-69.29	≤-20.82	PASS
			1000~26500	-0.82	-42.9	≤-20.82	PASS
		2440	Reference	-0.82	-0.82	---	PASS
			30~1000	-0.82	-68.25	≤-20.82	PASS
			1000~26500	-0.82	-43.02	≤-20.82	PASS
		2480	Reference	-0.78	-0.78	---	PASS
			30~1000	-0.78	-68.6	≤-20.78	PASS
			1000~26500	-0.78	-43.04	≤-20.78	PASS
BLE_2M	Ant1	2404	Reference	-1.77	-1.77	---	PASS
			30~1000	-1.77	-69.52	≤-21.77	PASS
			1000~26500	-1.77	-43.18	≤-21.77	PASS
		2440	Reference	-1.76	-1.76	---	PASS
			30~1000	-1.76	-69.49	≤-21.76	PASS
			1000~26500	-1.76	-43.57	≤-21.76	PASS
		2478	Reference	-1.69	-1.69	---	PASS
			30~1000	-1.69	-69.69	≤-21.69	PASS
			1000~26500	-1.69	-43.62	≤-21.69	PASS

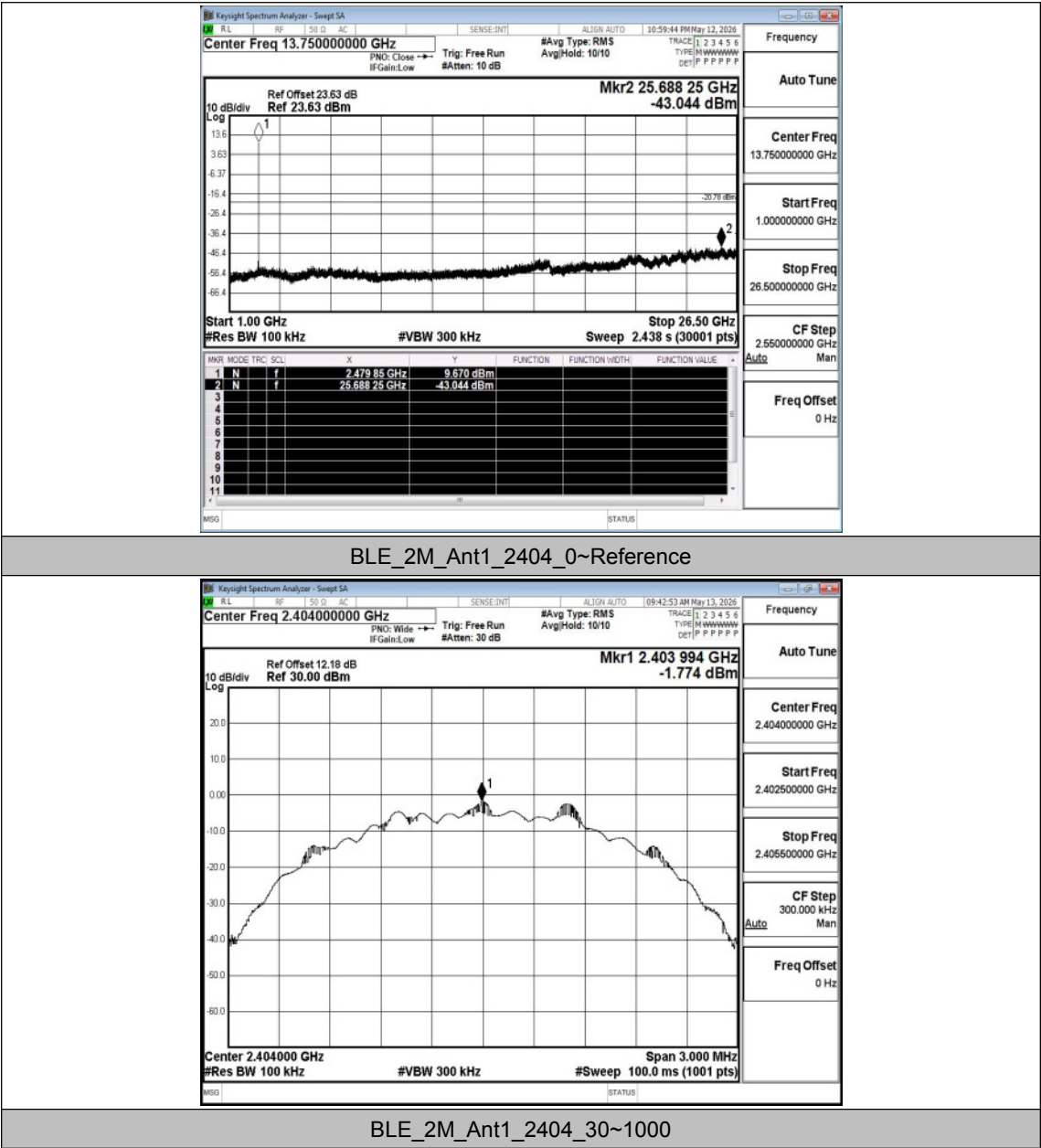
Test Graphs

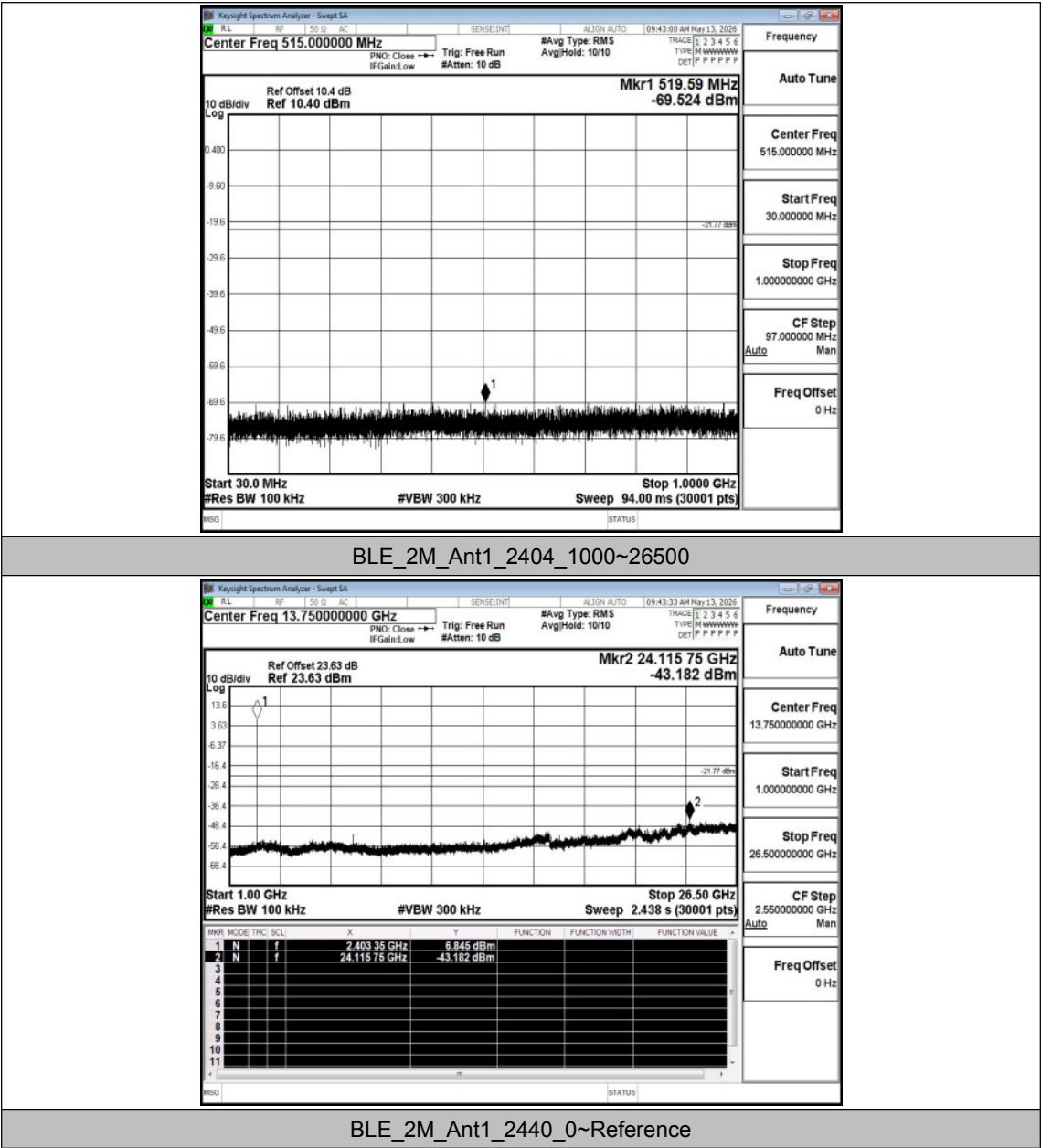


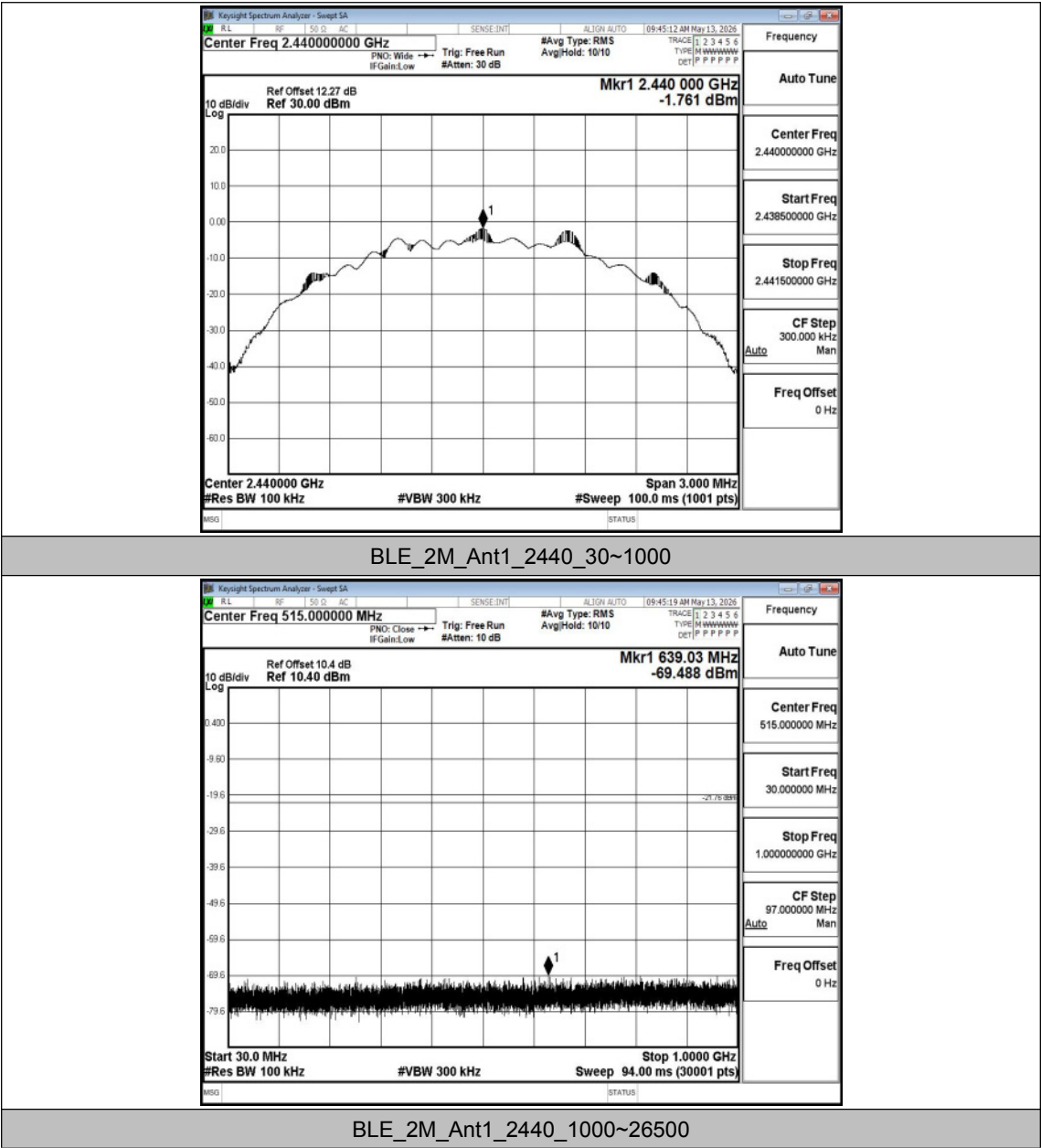


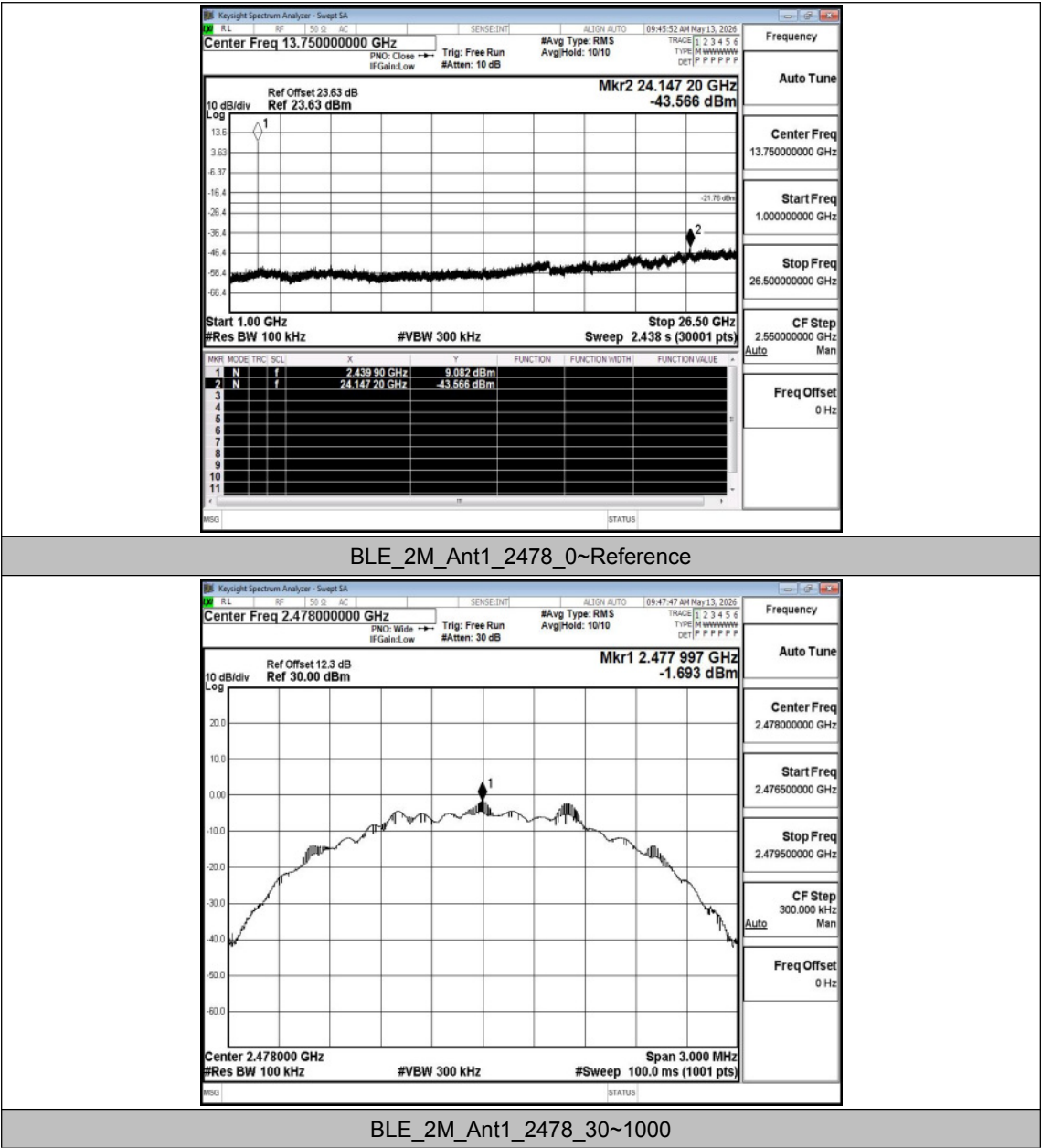


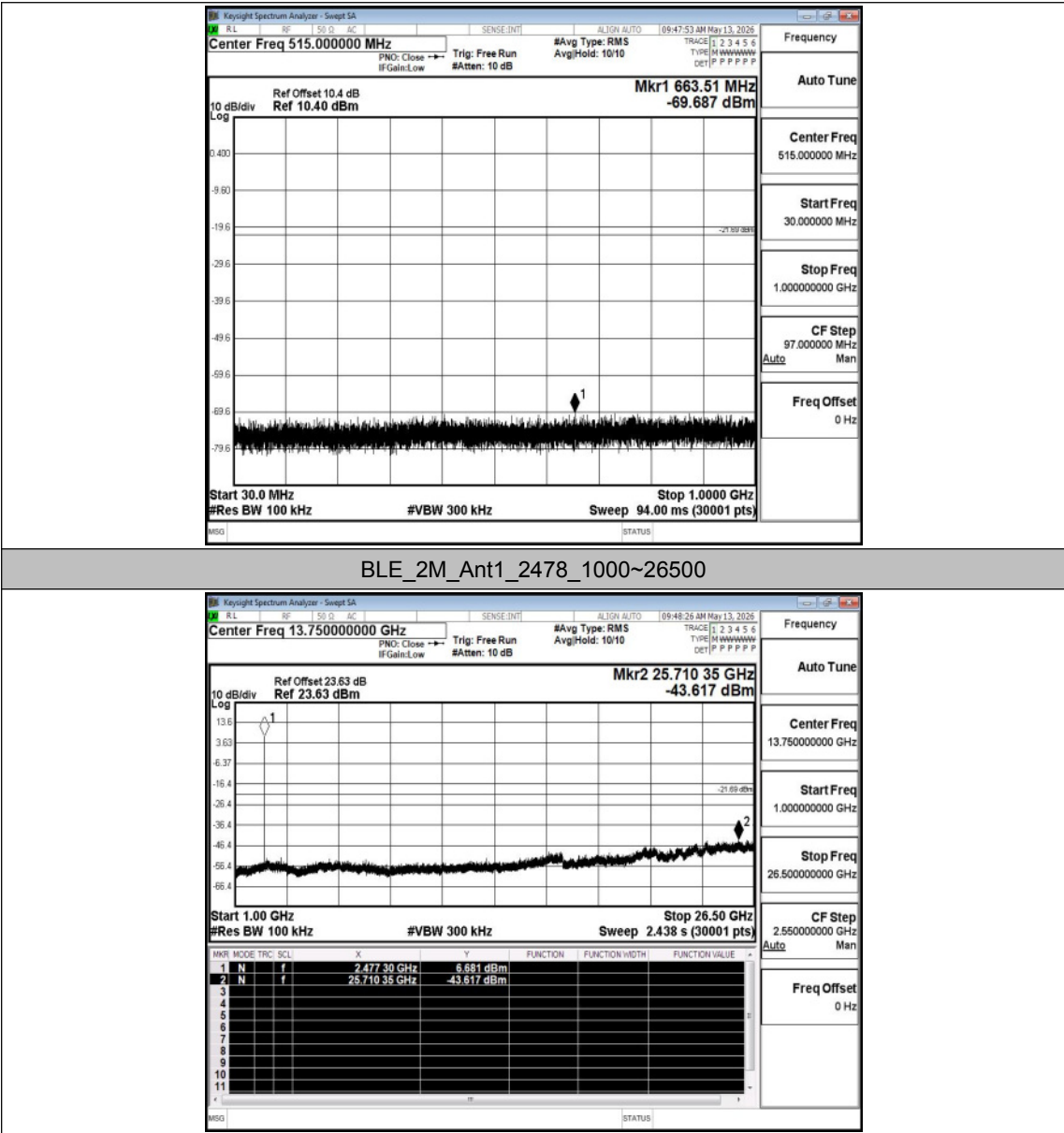












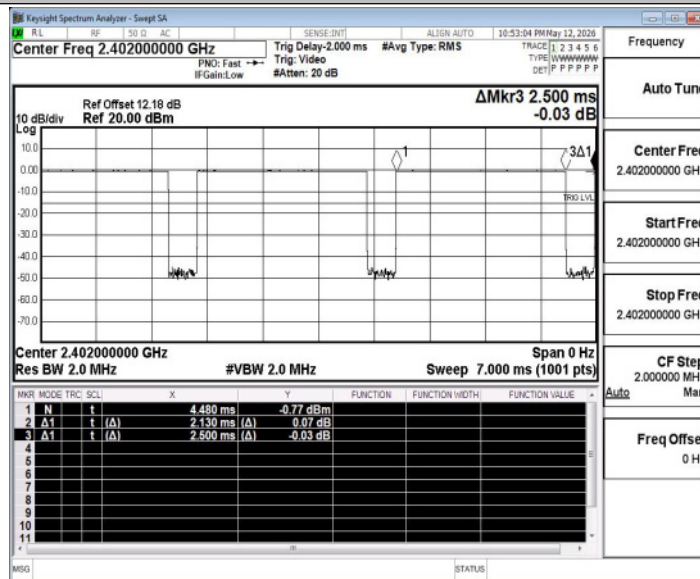
B.6 Duty Cycle

Test Result

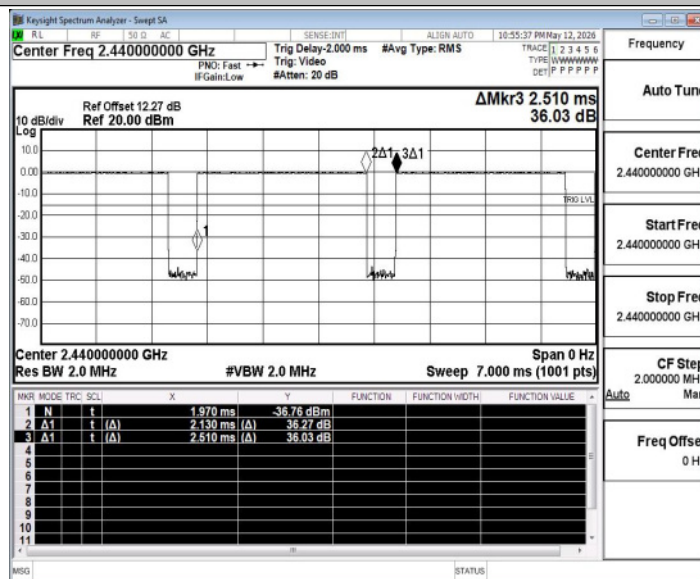
TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	2.13	2.50	0.8520	85.20	0.70	---	---
		2440	2.13	2.51	0.8486	84.86	0.71	---	---
		2480	2.13	2.50	0.8520	85.20	0.70	---	---
BLE_2M	Ant1	2404	1.07	1.87	0.5722	57.22	2.42	---	---
		2440	1.07	1.87	0.5722	57.22	2.42	---	---
		2478	1.07	1.87	0.5722	57.22	2.42	---	---

Test Graphs

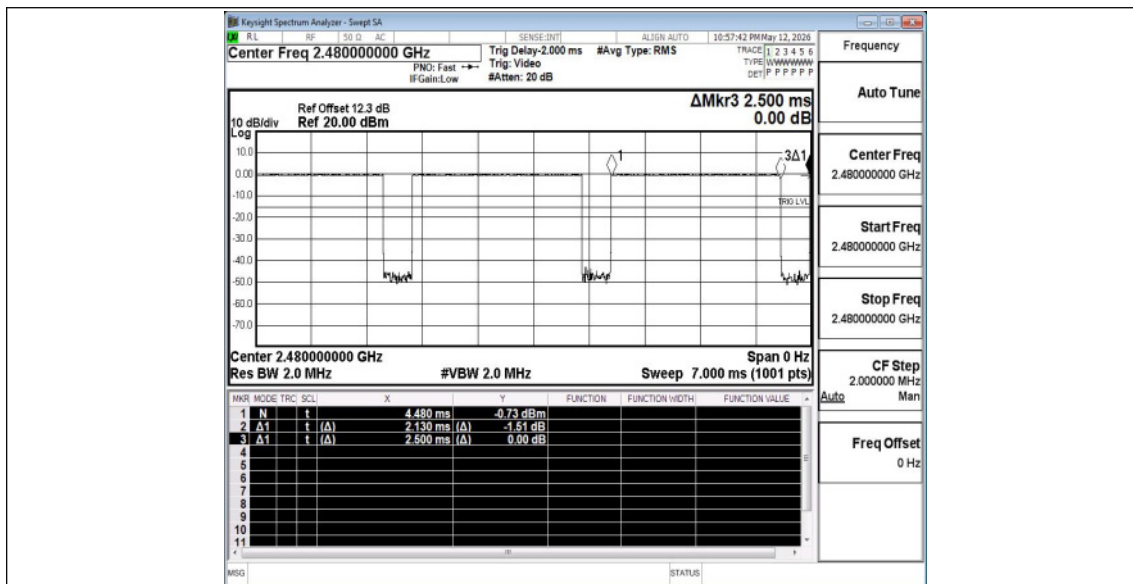
BLE_1M_Ant1_2402



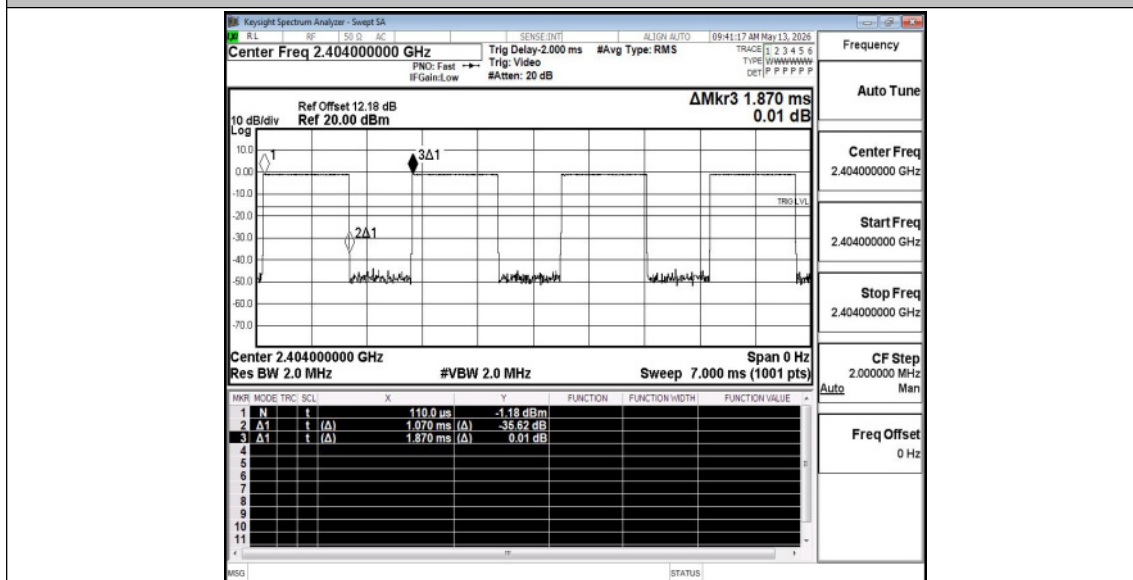
BLE_1M_Ant1_2440



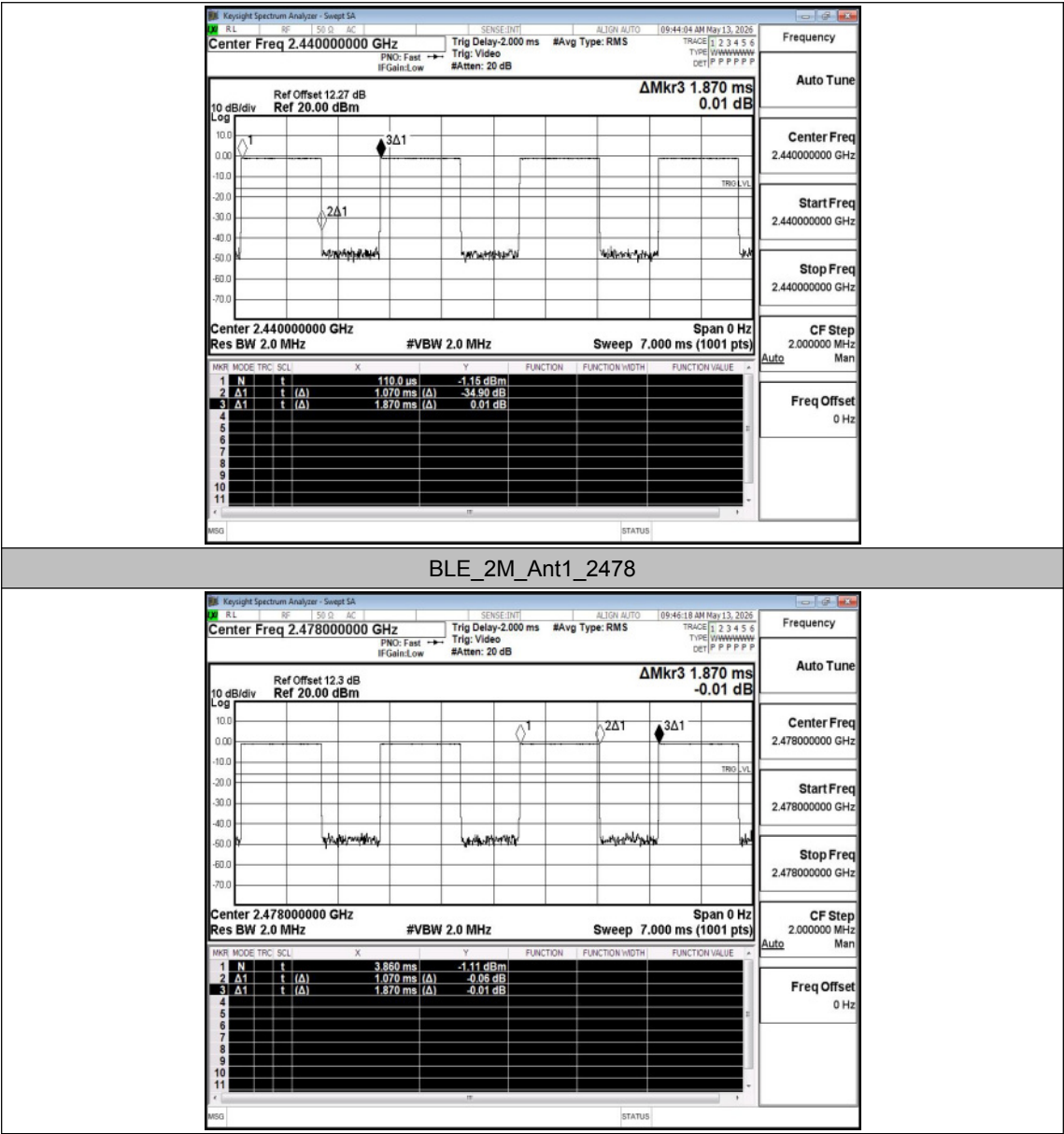
BLE_1M_Ant1_2480



BLE_2M_Ant1_2404



BLE_2M_Ant1_2440



B.7 Emissions in Restricted Bands

Test Result

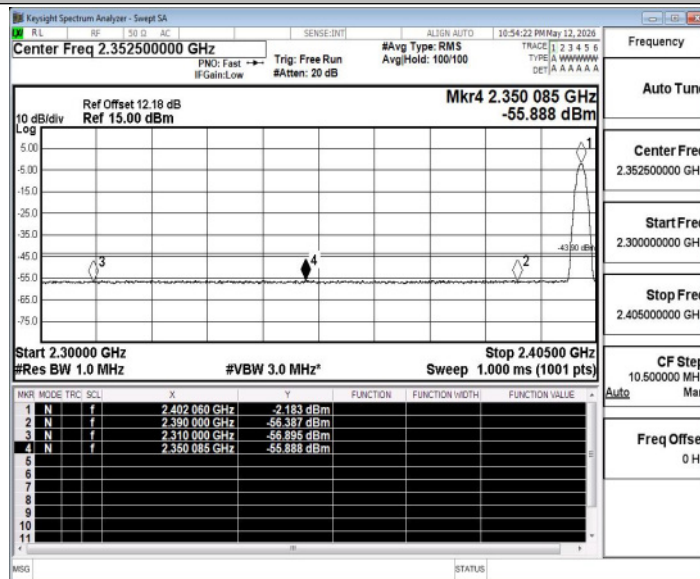
TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Gain [dBi]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-56.9	≤-43.90	2.00	0.70	41.00	≤54	PASS
				AV	2350.085	-55.89	≤-43.90	2.00	0.70	42.01	≤54	PASS
				AV	2390.000	-56.39	≤-43.90	2.00	0.70	41.51	≤54	PASS
				Peak	2310.000	-49.76	≤-23.20	2.00	0.00	47.44	≤74	PASS
				Peak	2386.310	-45.48	≤-23.20	2.00	0.00	51.72	≤74	PASS
				Peak	2390.000	-49.6	≤-23.20	2.00	0.00	47.60	≤74	PASS
		High	2480	AV	2483.500	-56.54	≤-43.90	2.00	0.70	41.36	≤54	PASS
				AV	2496.240	-55.5	≤-43.90	2.00	0.70	42.40	≤54	PASS
				AV	2500.000	-56.27	≤-43.90	2.00	0.70	41.63	≤54	PASS
				Peak	2483.500	-47.75	≤-23.20	2.00	0.00	49.45	≤74	PASS
				Peak	2488.720	-45.81	≤-23.20	2.00	0.00	51.39	≤74	PASS
				Peak	2500.000	-47.47	≤-23.20	2.00	0.00	49.73	≤74	PASS
BLE_2M	Ant1	Low	2404	AV	2310.000	-57.13	≤-45.62	2.00	2.42	42.49	≤54	PASS
				AV	2386.310	-56.47	≤-45.62	2.00	2.42	43.15	≤54	PASS
				AV	2390.000	-57.03	≤-45.62	2.00	2.42	42.59	≤54	PASS
				Peak	2310.000	-48.3	≤-23.20	2.00	0.00	48.90	≤74	PASS
				Peak	2354.915	-45.66	≤-23.20	2.00	0.00	51.54	≤74	PASS
				Peak	2390.000	-49.17	≤-23.20	2.00	0.00	48.03	≤74	PASS
		High	2478	AV	2483.500	-57.13	≤-45.62	2.00	2.42	42.49	≤54	PASS
				AV	2485.520	-55.56	≤-45.62	2.00	2.42	44.06	≤54	PASS
				AV	2500.000	-56.63	≤-45.62	2.00	2.42	42.99	≤54	PASS
				Peak	2483.500	-48.62	≤-23.20	2.00	0.00	48.58	≤74	PASS
				Peak	2493.120	-46.1	≤-23.20	2.00	0.00	51.10	≤74	PASS
				Peak	2500.000	-48.72	≤-23.20	2.00	0.00	48.48	≤74	PASS

Note:

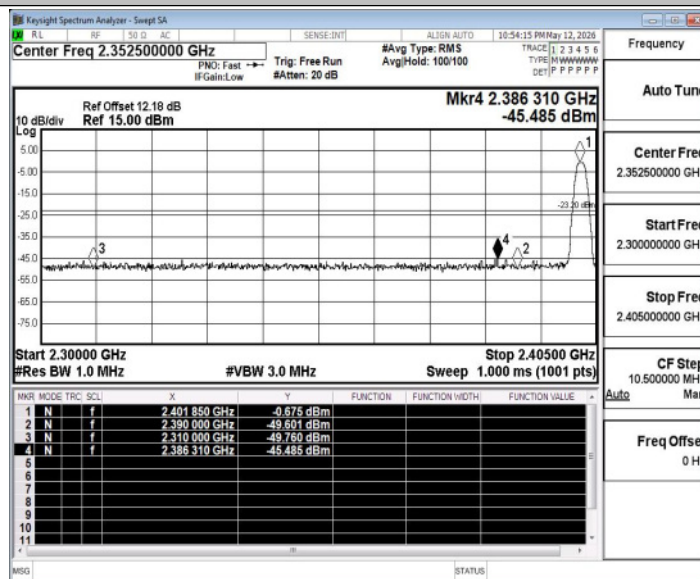
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

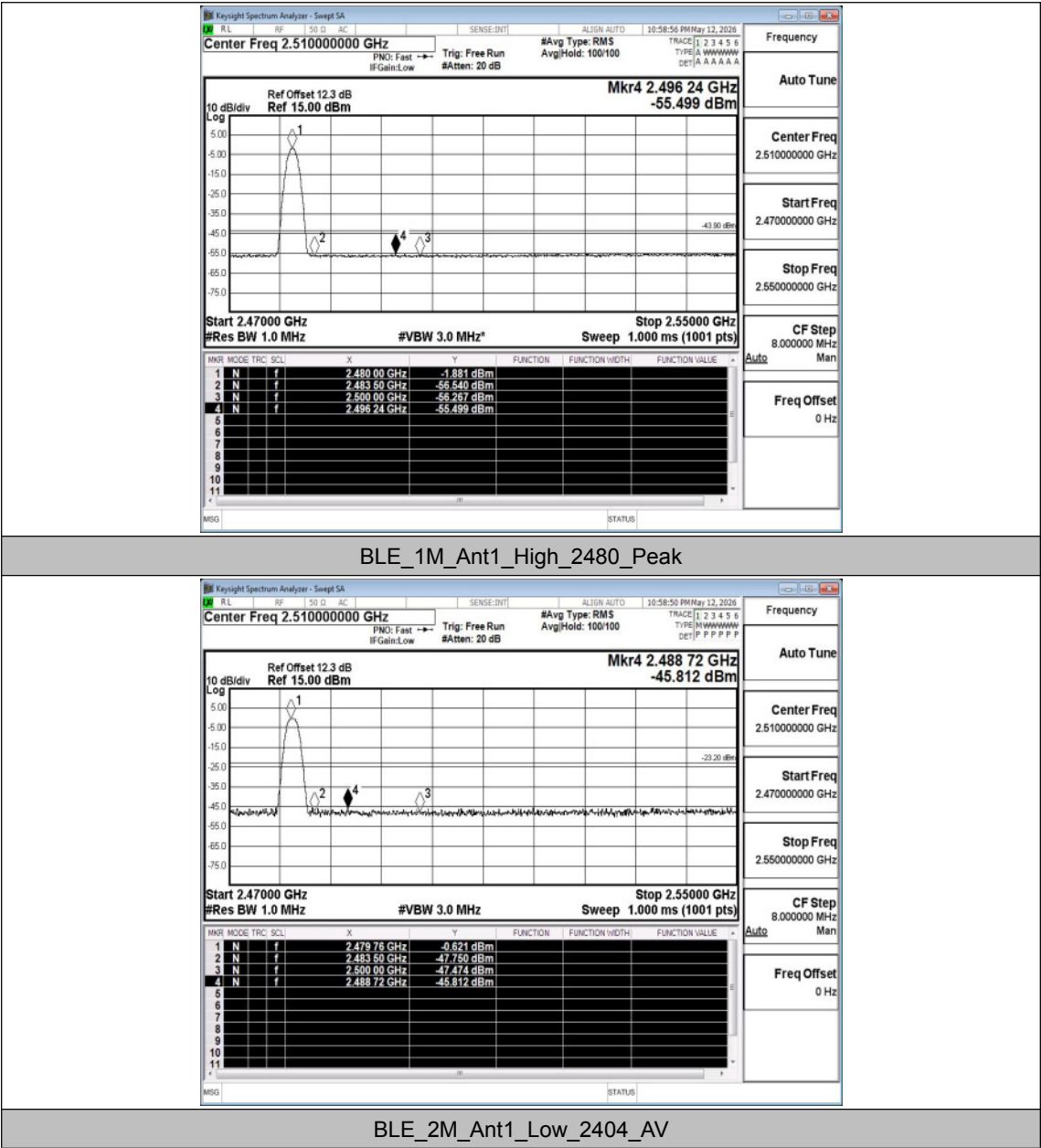
BLE_1M_Ant1_Low_2402_AV

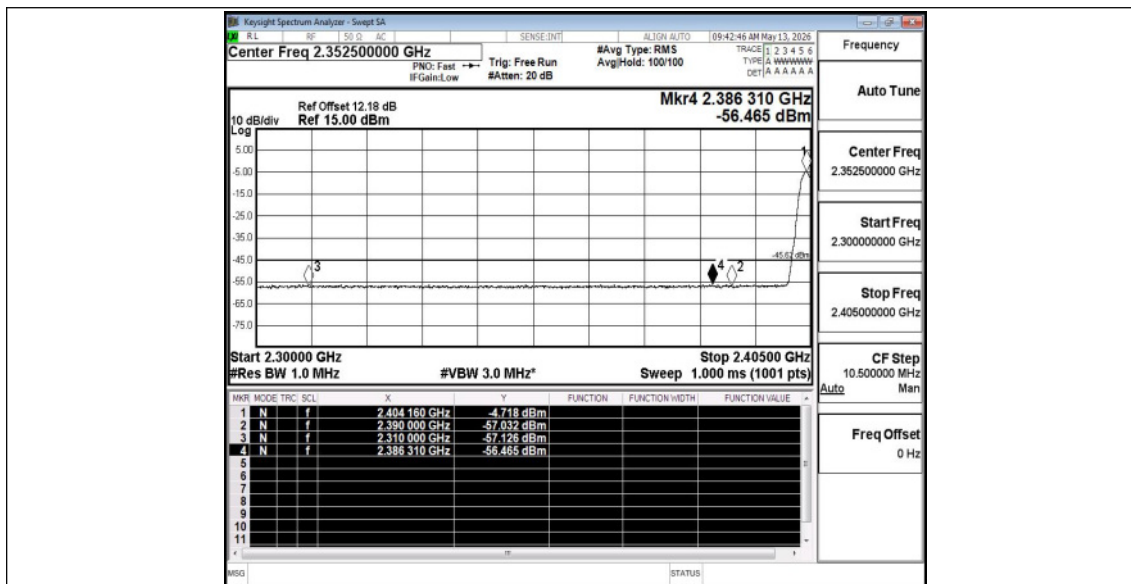


BLE_1M_Ant1_Low_2402_Peak

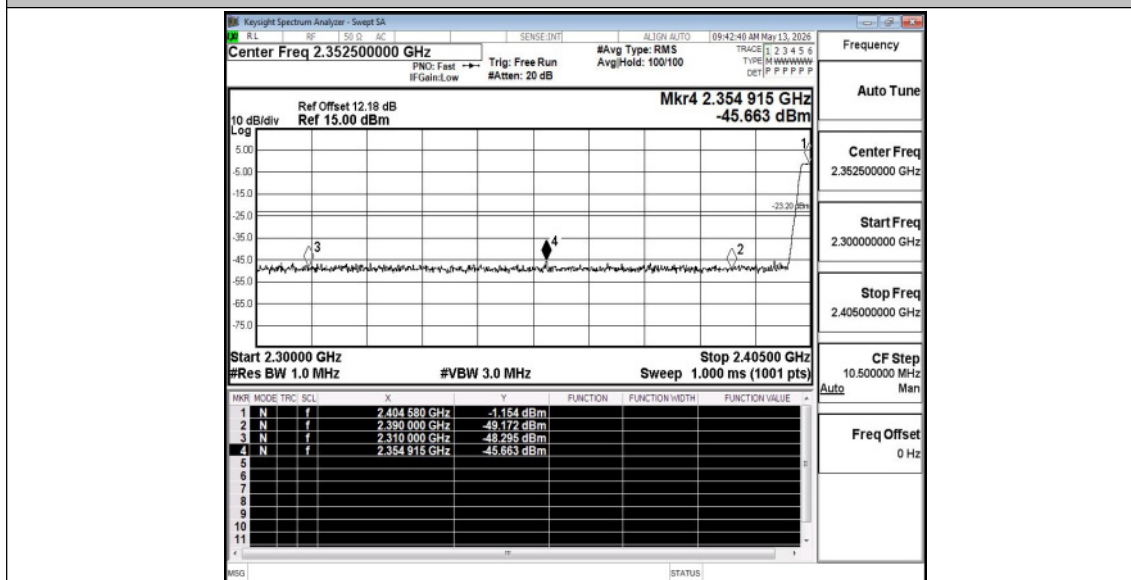


BLE_1M_Ant1_High_2480_AV





BLE_2M_Ant1_Low_2404_Peak



BLE_2M_Ant1_High_2478_AV

