

Appendix B

RF Test Data for BT LE (Conducted Measurement)

Product Name: GamePad

Test Model: RU2

Environmental Conditions

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

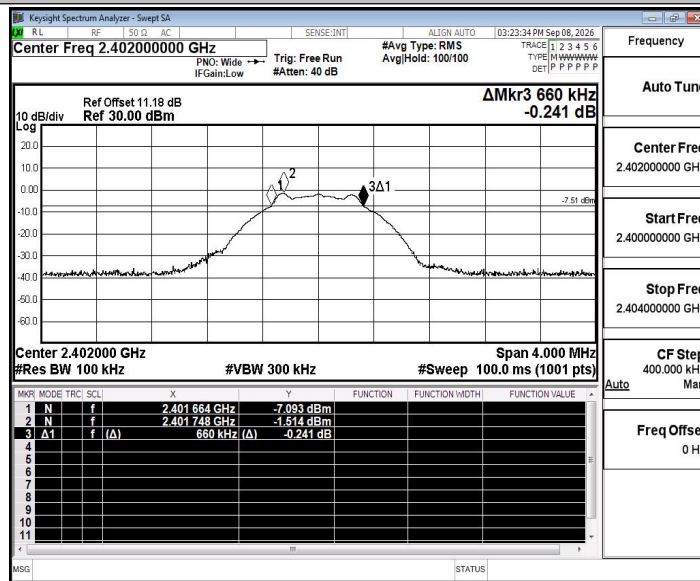
B.1 DTS Bandwidth

Test Result

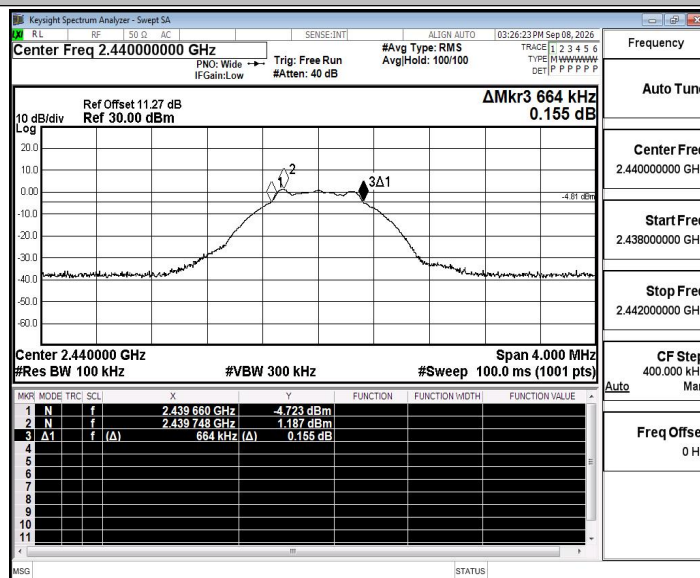
TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.660	2401.664	2402.324	0.5	PASS
		2440	0.664	2439.660	2440.324	0.5	PASS
		2480	0.656	2479.664	2480.320	0.5	PASS

Test Graphs

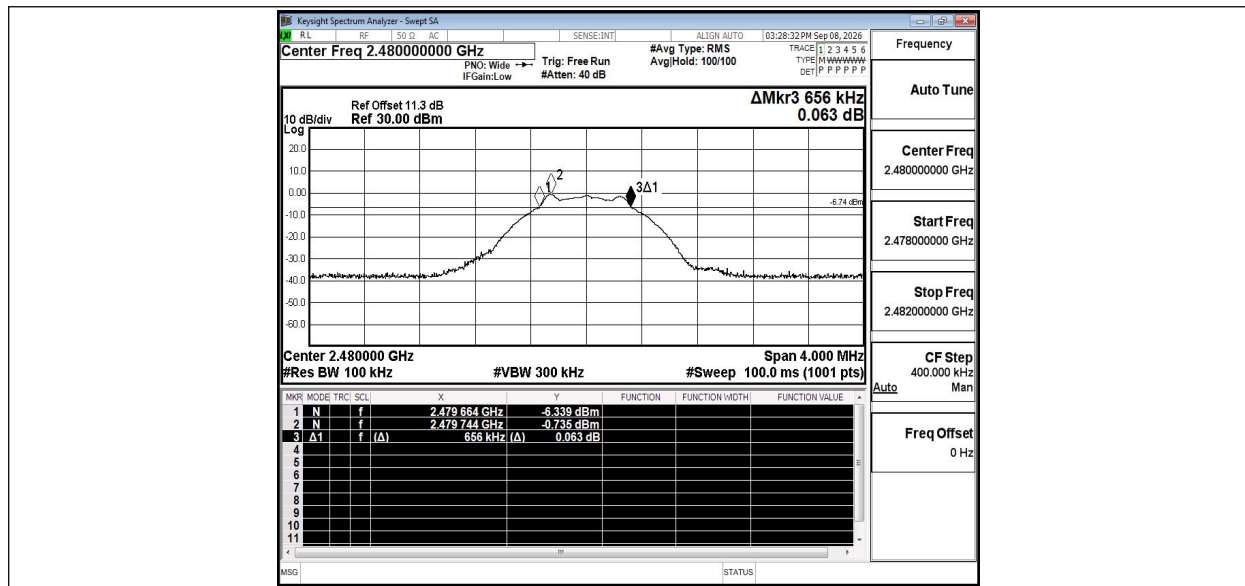
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

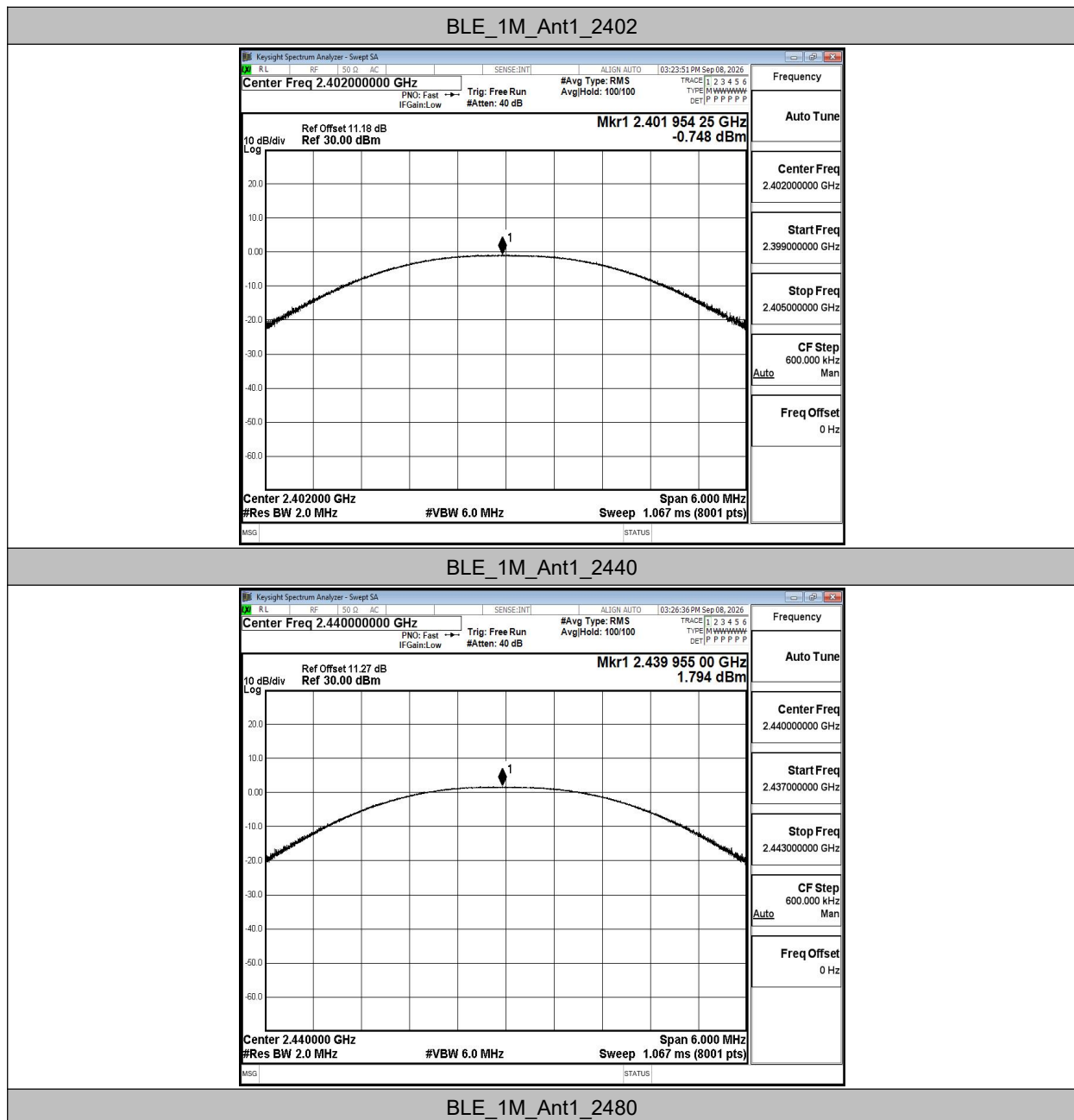


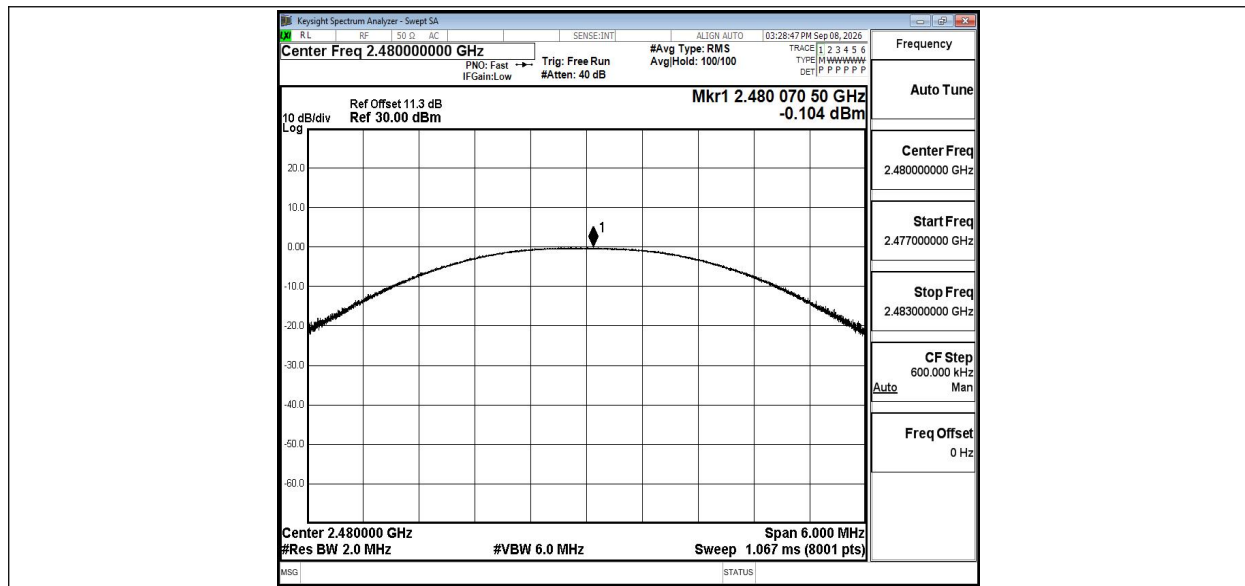
B.2 Maximum Peak conducted output power

Test Result Peak

TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-0.75	≤30	PASS
		2440	1.79	≤30	PASS
		2480	-0.10	≤30	PASS

Test Graphs Peak





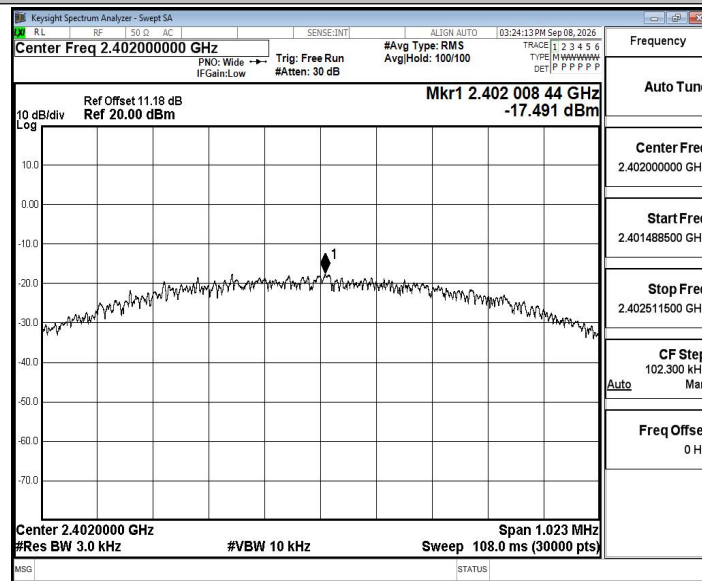
B.3 Maximum power spectral density

Test Result

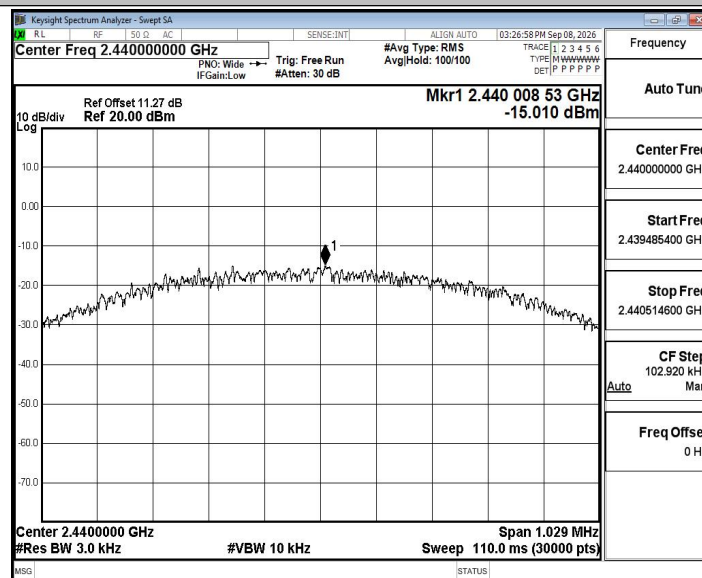
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-17.49	≤8.00	PASS
		2440	-15.01	≤8.00	PASS
		2480	-16.92	≤8.00	PASS

Test Graphs

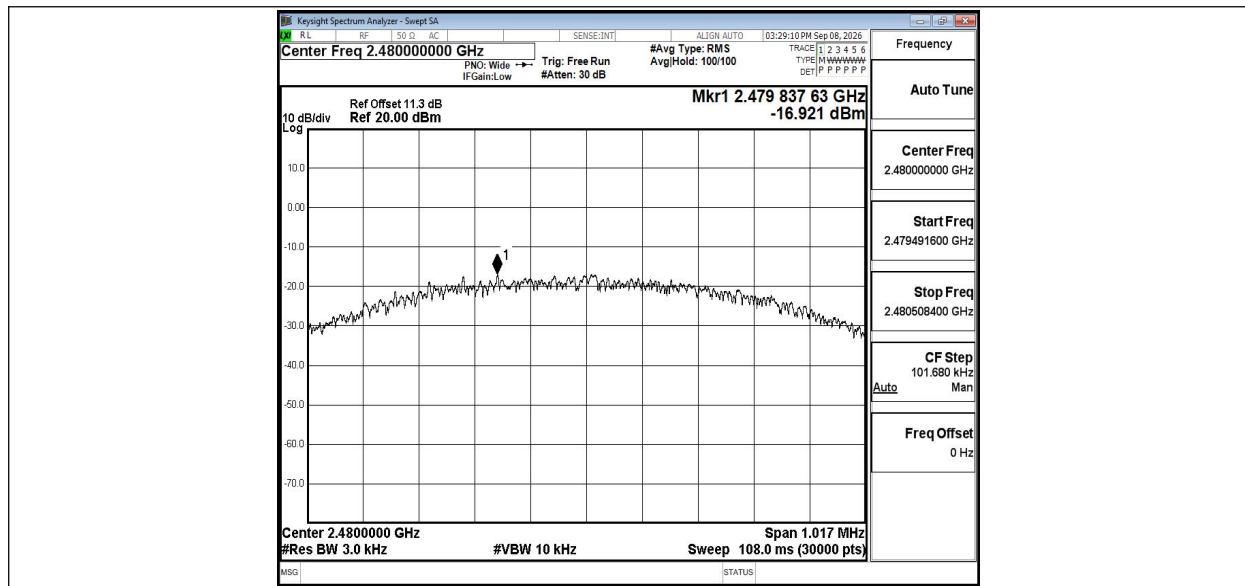
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

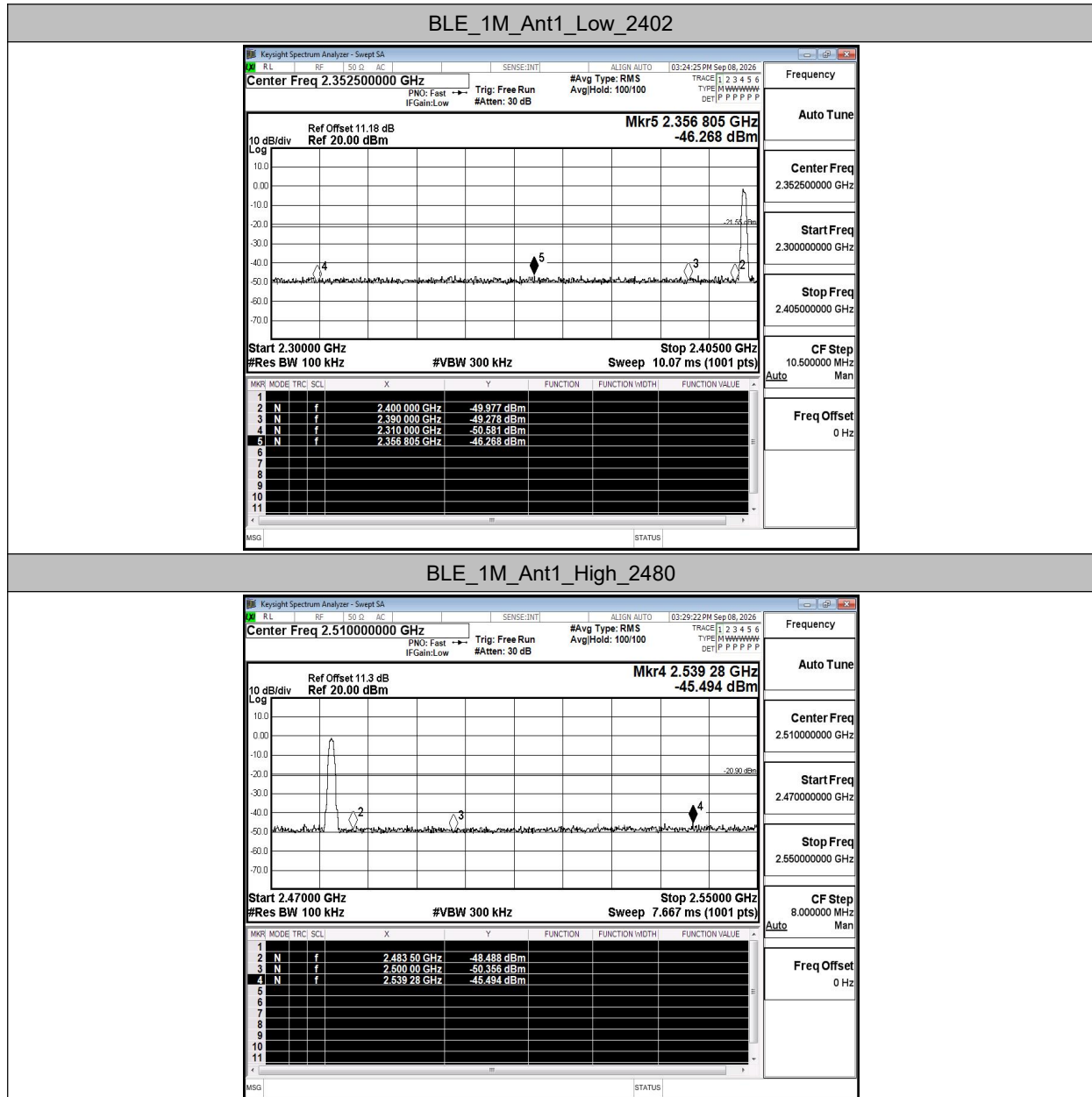


B.4 Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-1.55	-46.27	≤ -21.55	PASS
		High	2480	-0.90	-45.49	≤ -20.9	PASS

Test Graphs



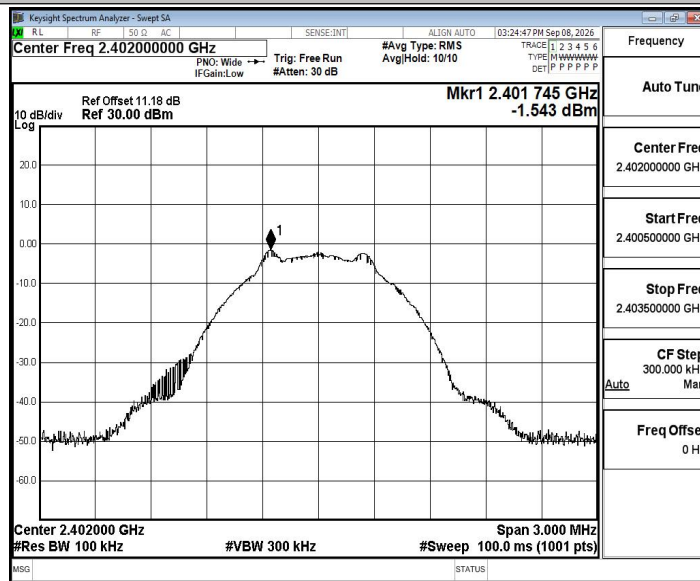
B.5 Conducted Spurious Emission

Test Result

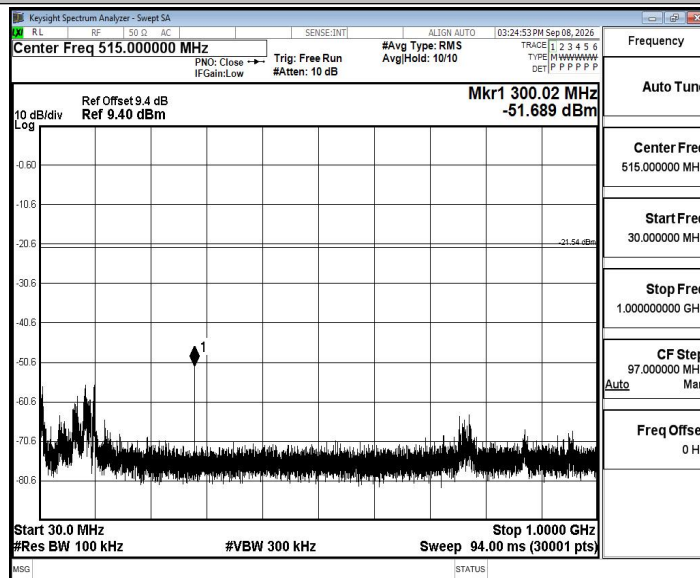
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-1.54	-1.54	---	PASS
			30~1000	-1.54	-51.69	≤-21.54	PASS
			1000~26500	-1.54	-44.53	≤-21.54	PASS
		2440	Reference	1.09	1.09	---	PASS
			30~1000	1.09	-40.08	≤-18.91	PASS
			1000~26500	1.09	-32.2	≤-18.91	PASS
		2480	Reference	-0.78	-0.78	---	PASS
			30~1000	-0.78	-52.27	≤-20.78	PASS
			1000~26500	-0.78	-44.78	≤-20.78	PASS

Test Graphs

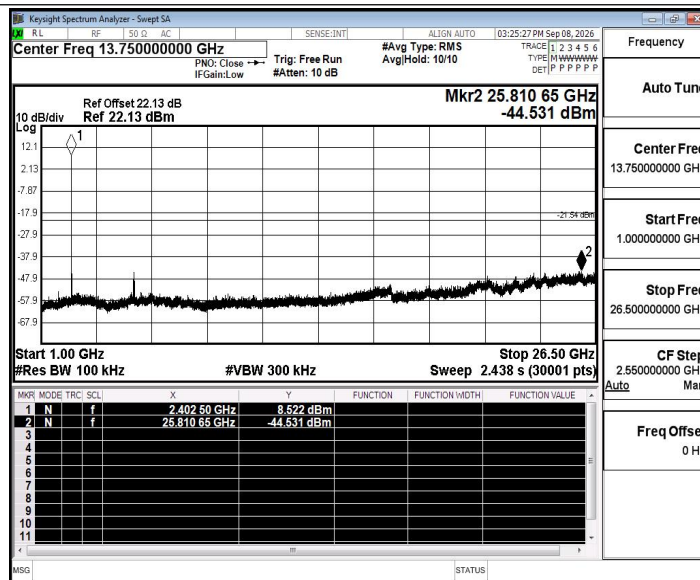
BLE_1M_Ant1_2402_0~Reference



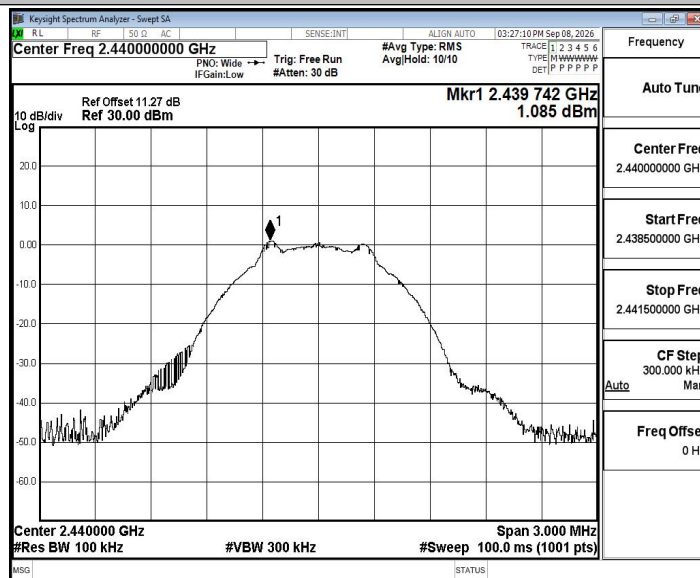
BLE_1M_Ant1_2402_30~1000



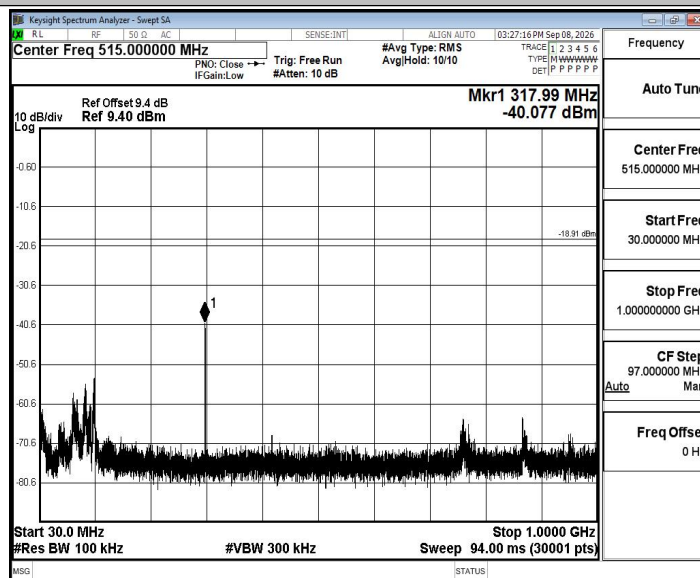
BLE_1M_Ant1_2402_1000~26500



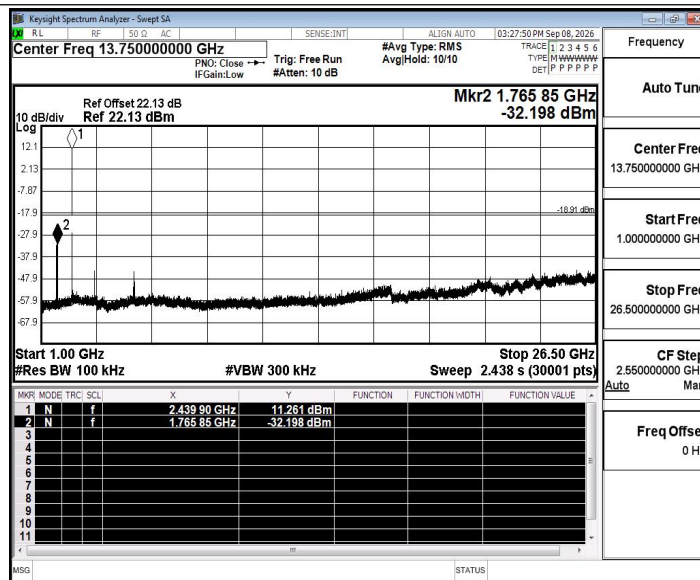
BLE_1M_Ant1_2440_0~Reference



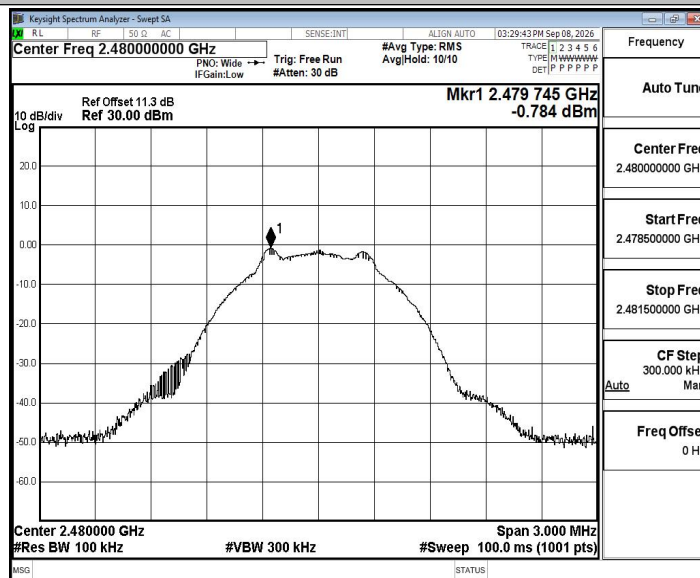
BLE_1M_Ant1_2440_30~1000



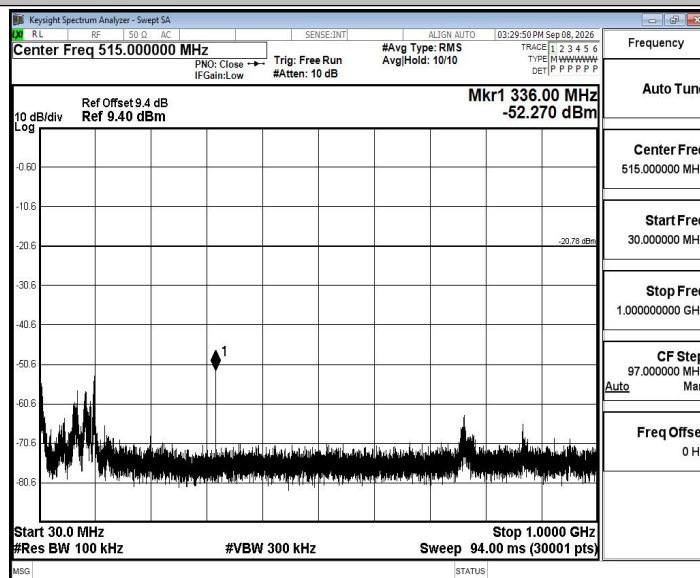
BLE_1M_Ant1_2440_1000~26500



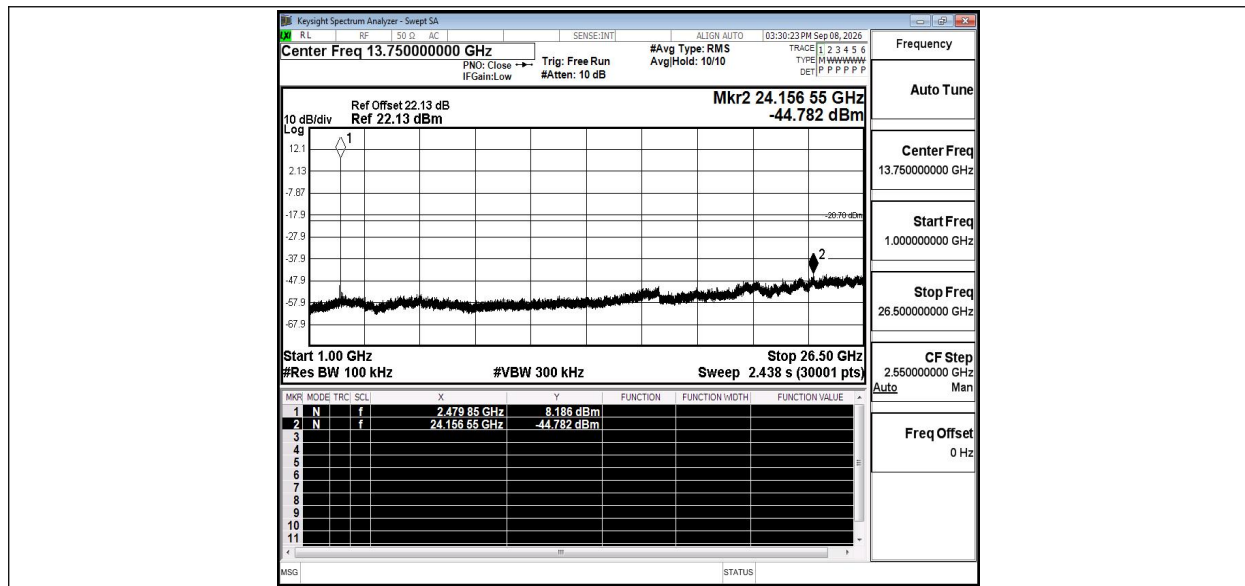
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



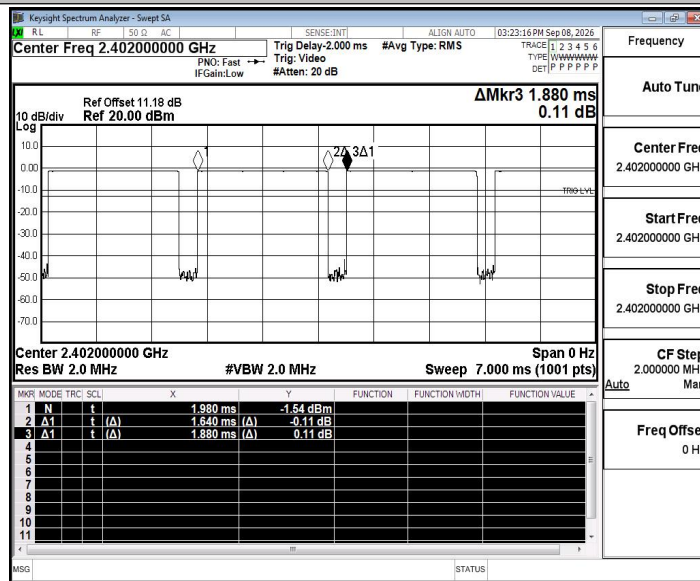
B.6 Duty Cycle

Test Result

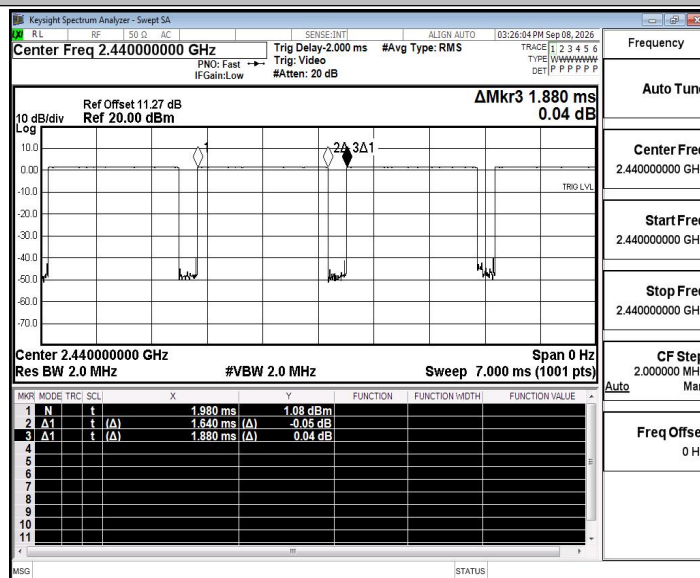
TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	1.64	1.88	0.8723	87.23	0.59	---	---
		2440	1.64	1.88	0.8723	87.23	0.59	---	---
		2480	1.64	1.88	0.8723	87.23	0.59	---	---

Test Graphs

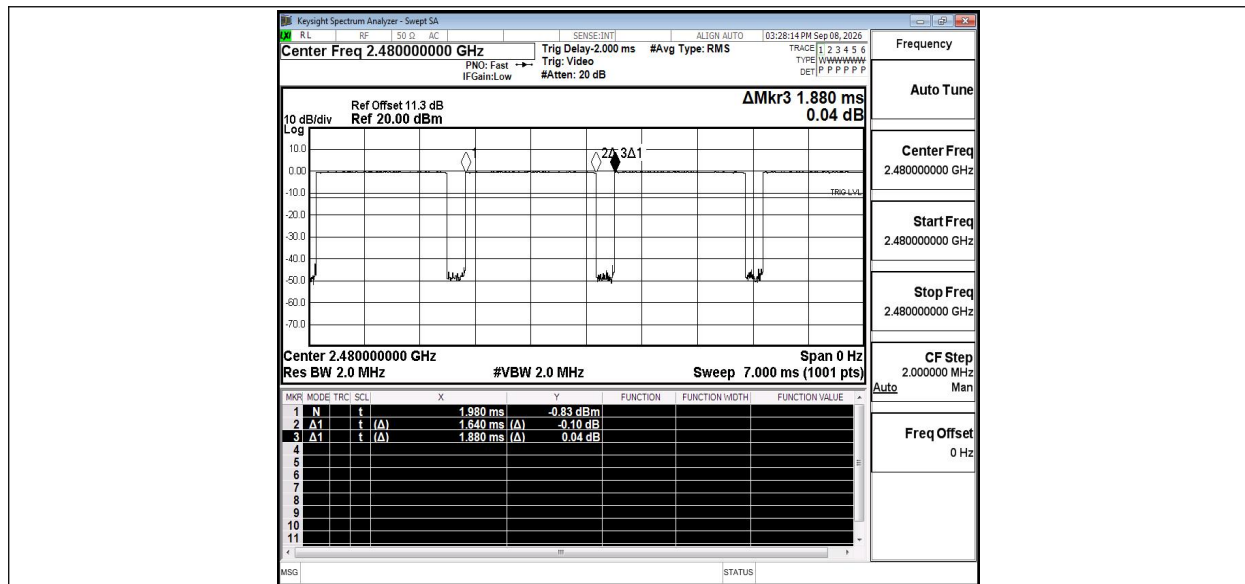
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



B.7 Emissions in Restricted Bands

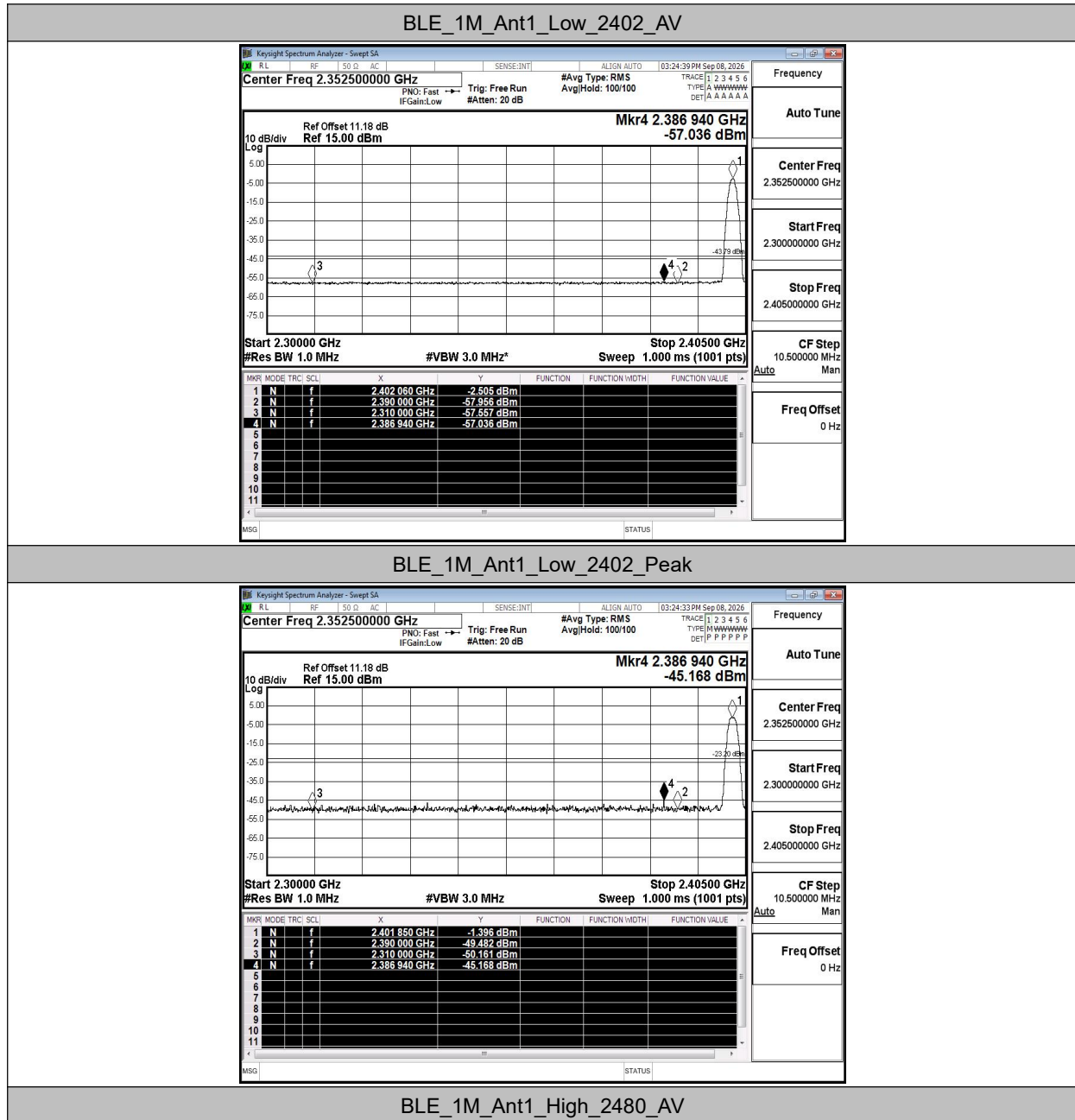
Test Result

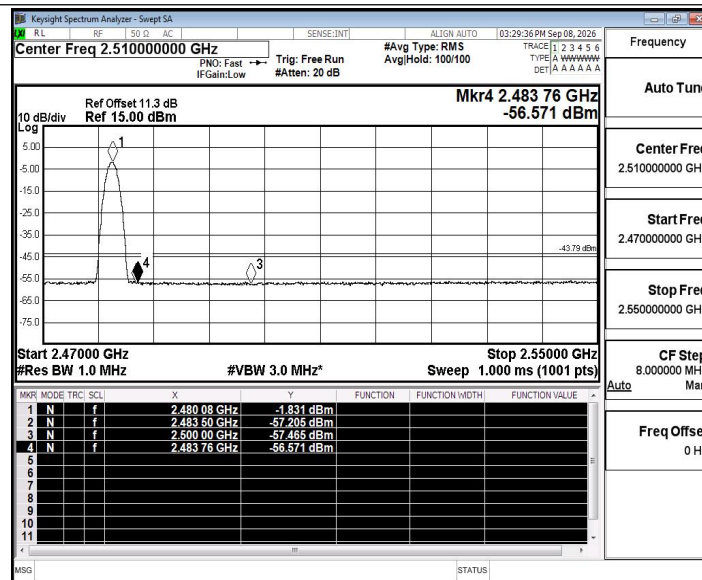
Test Mode	Antenna	Channel Name	Freq (MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Gain [dBi]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-57.56	≤-43.79	2.00	0.59	40.23	≤54	PASS
				AV	2386.940	-57.04	≤-43.79	2.00	0.59	40.75	≤54	PASS
				AV	2390.000	-57.96	≤-43.79	2.00	0.59	39.83	≤54	PASS
				Peak	2310.000	-50.16	≤-23.20	2.00	0.00	47.04	≤74	PASS
				Peak	2386.940	-45.17	≤-23.20	2.00	0.00	52.03	≤74	PASS
				Peak	2390.000	-49.48	≤-23.20	2.00	0.00	47.72	≤74	PASS
		High	2480	AV	2483.500	-57.21	≤-43.79	2.00	0.59	40.58	≤54	PASS
				AV	2483.760	-56.57	≤-43.79	2.00	0.59	41.22	≤54	PASS
				AV	2500.000	-57.47	≤-43.79	2.00	0.59	40.32	≤54	PASS
				Peak	2483.500	-46.18	≤-23.20	2.00	0.00	51.02	≤74	PASS
				Peak	2483.520	-46.18	≤-23.20	2.00	0.00	51.02	≤74	PASS
				Peak	2500.000	-50.24	≤-23.20	2.00	0.00	46.96	≤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

