



Appendix A

RF Test Data for BLE (Conducted Measurement)

Product Name: Mobile operating terminal

Test Model: H6

Environmental Conditions

Temperature:	21.6° C
Relative Humidity:	52.7%
ATM Pressure:	100.0 kPa
Test Engineer:	Ken He
Supervised by:	Li Huan

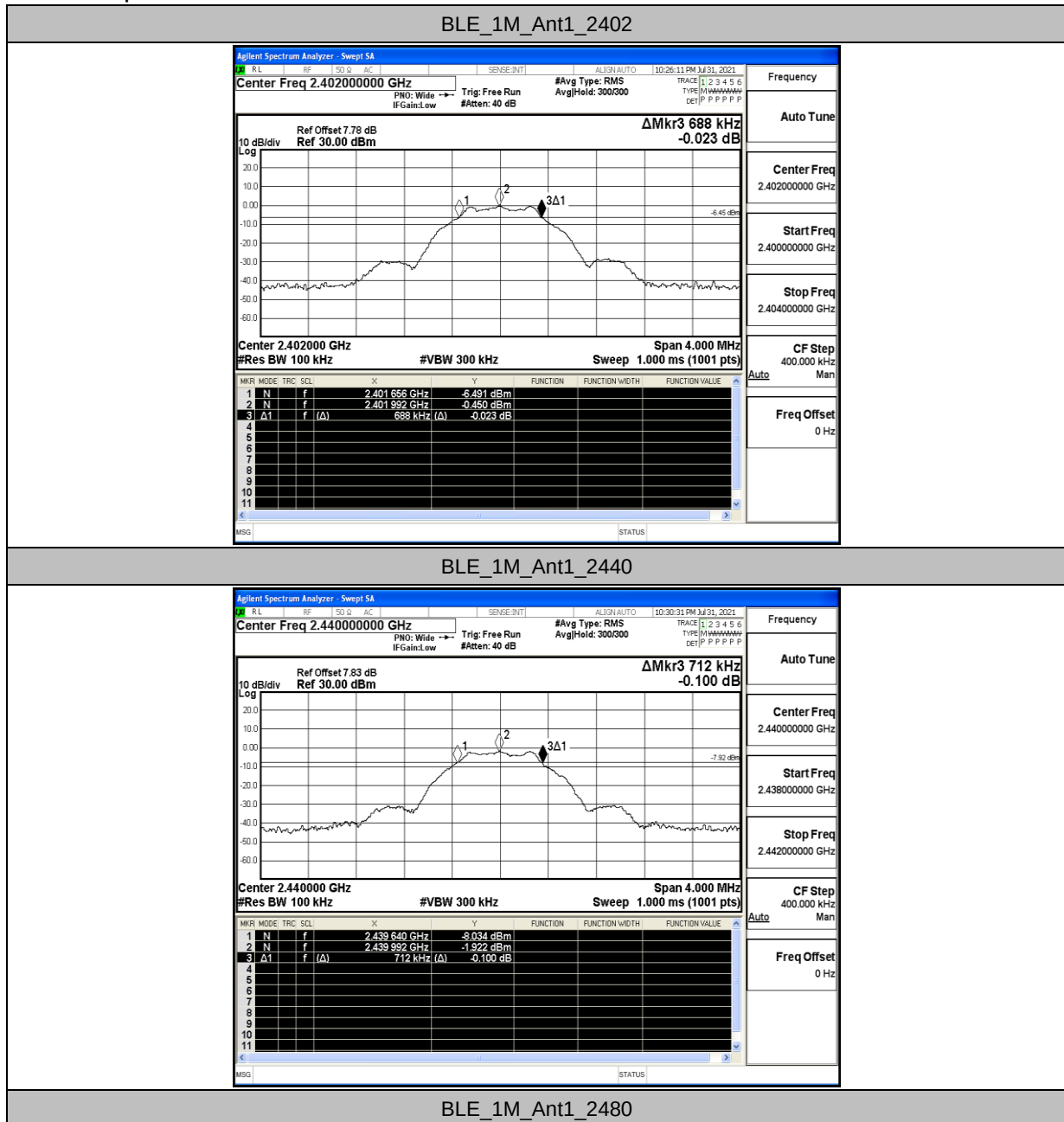


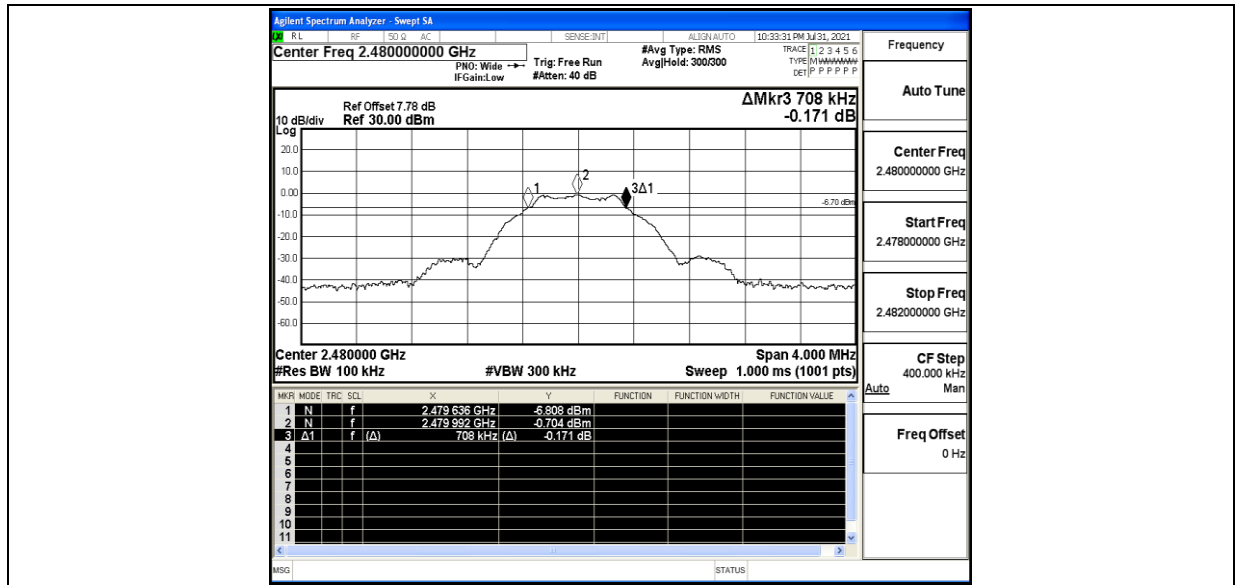
A.1 6dB Bandwidth

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.688	2401.656	2402.344	≥0.5	PASS
		2440	0.712	2439.640	2440.352	≥0.5	PASS
		2480	0.708	2479.636	2480.344	≥0.5	PASS

Test Graphs







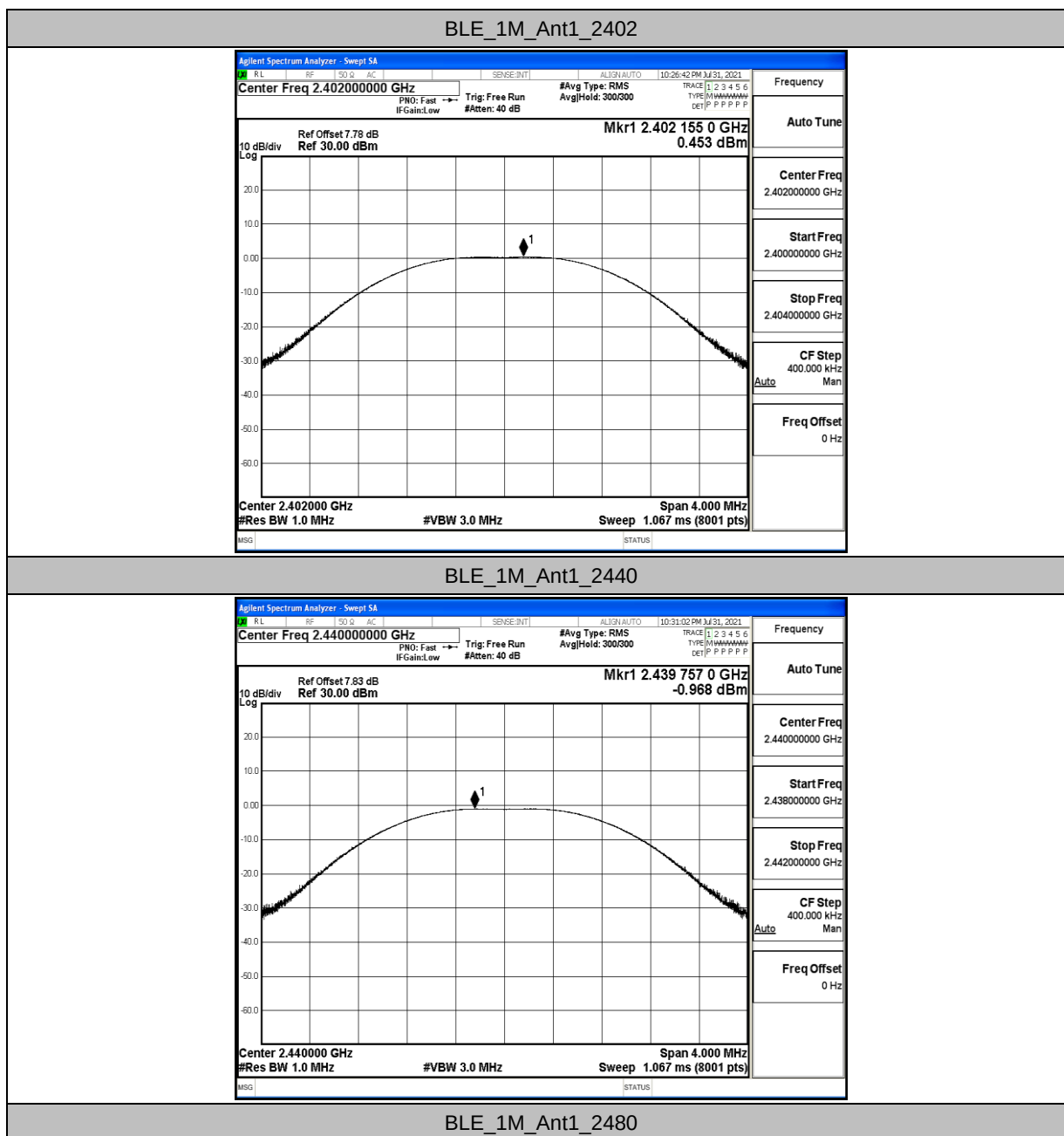
A.2 Maximum conducted output power

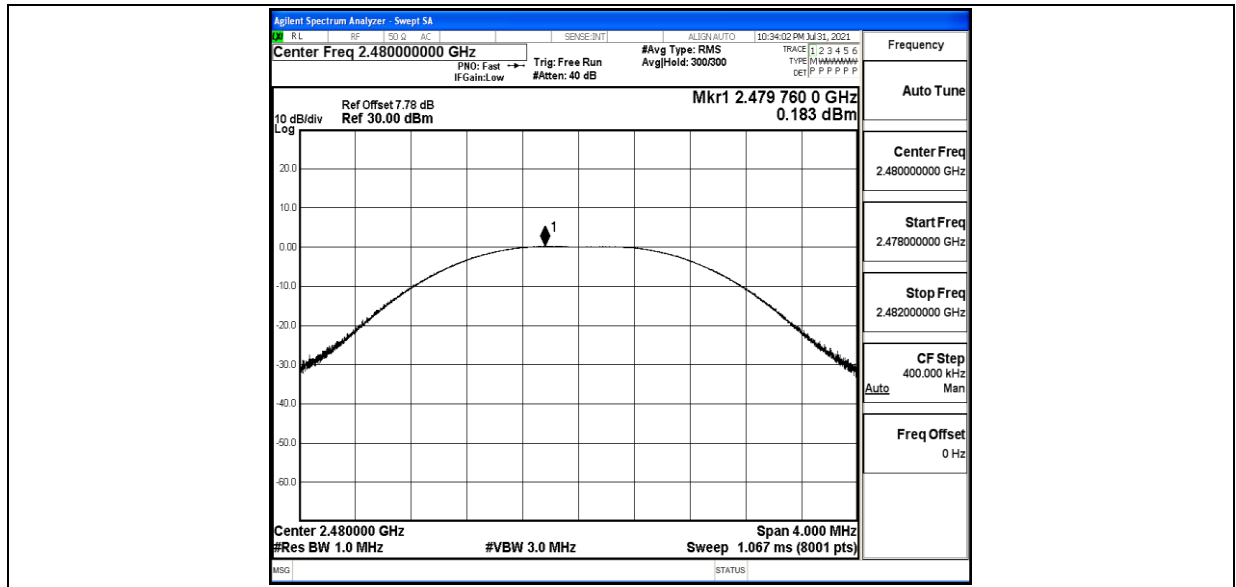
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0.45	≤30	PASS
		2440	-0.97	≤30	PASS
		2480	0.18	≤30	PASS

Note: The Duty Cycle Factor is compensated in the graph.

Test Graphs







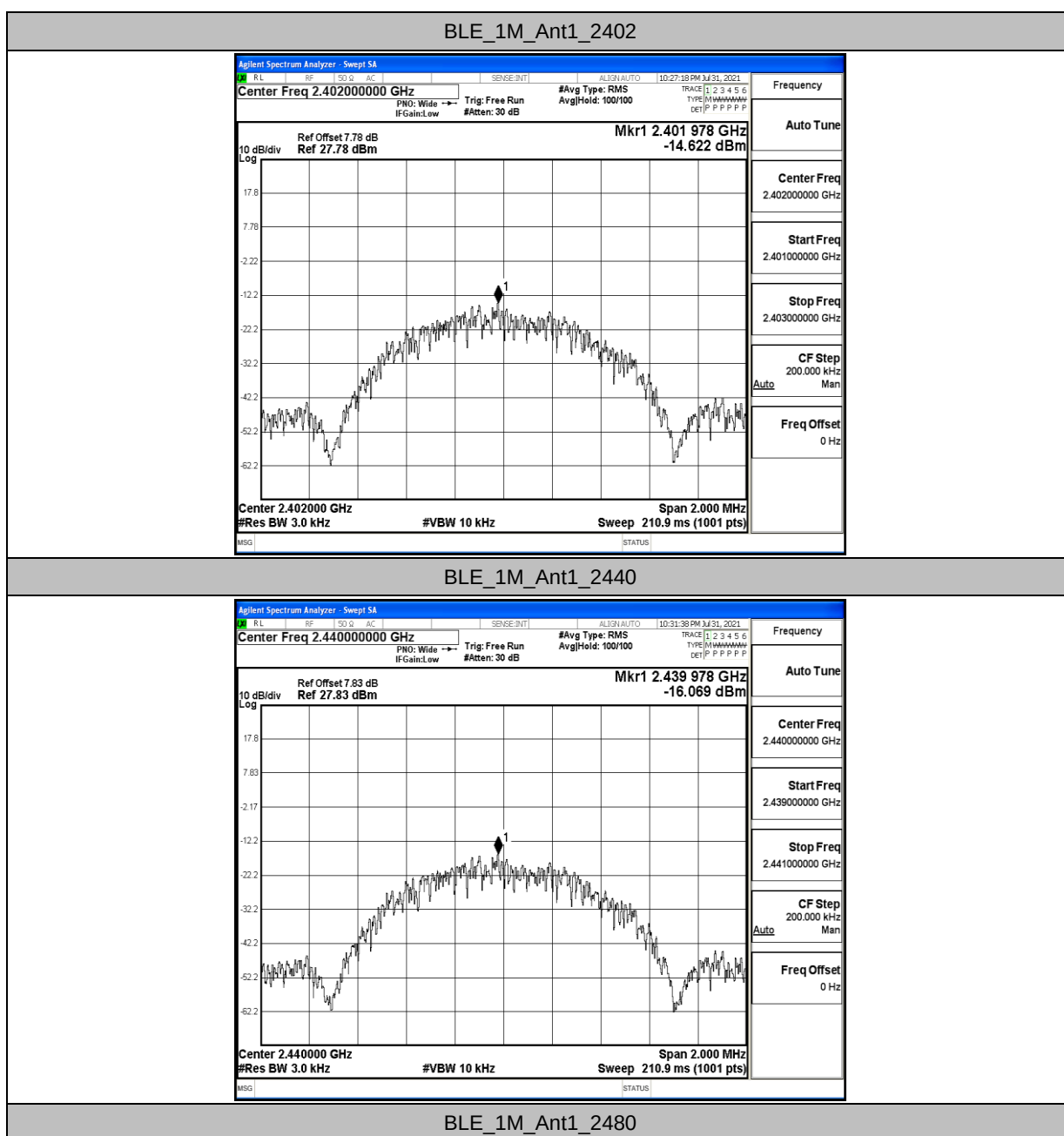
A.3 Maximum power spectral density

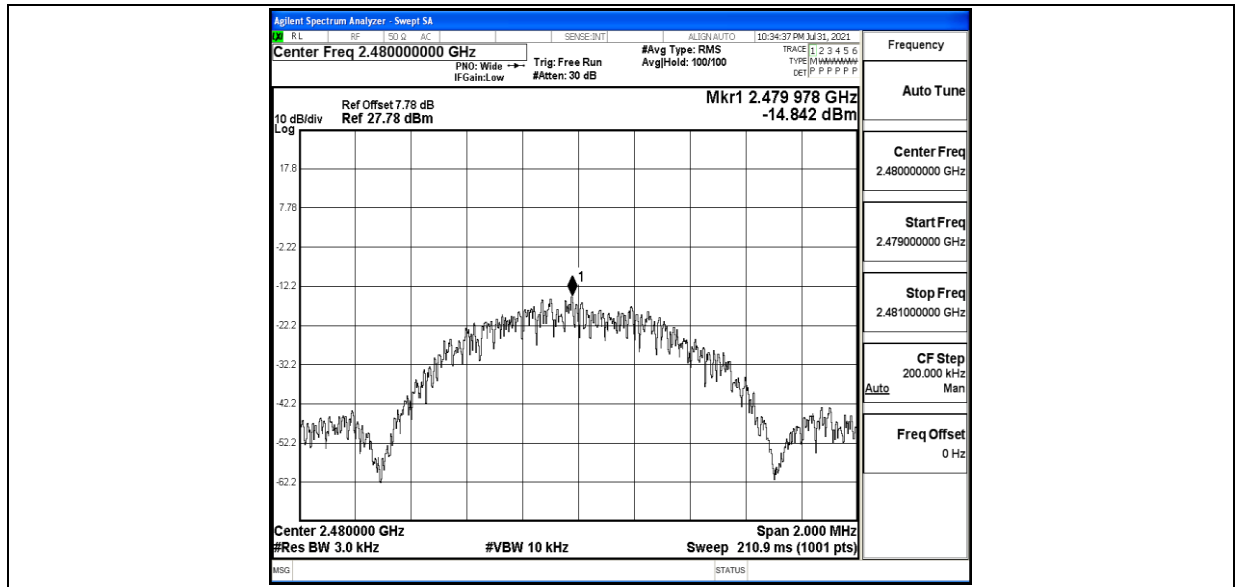
Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-14.62	≤8	PASS
		2440	-16.07	≤8	PASS
		2480	-14.84	≤8	PASS

Note: The Duty Cycle Factor is compensated in the graph.

Test Graphs





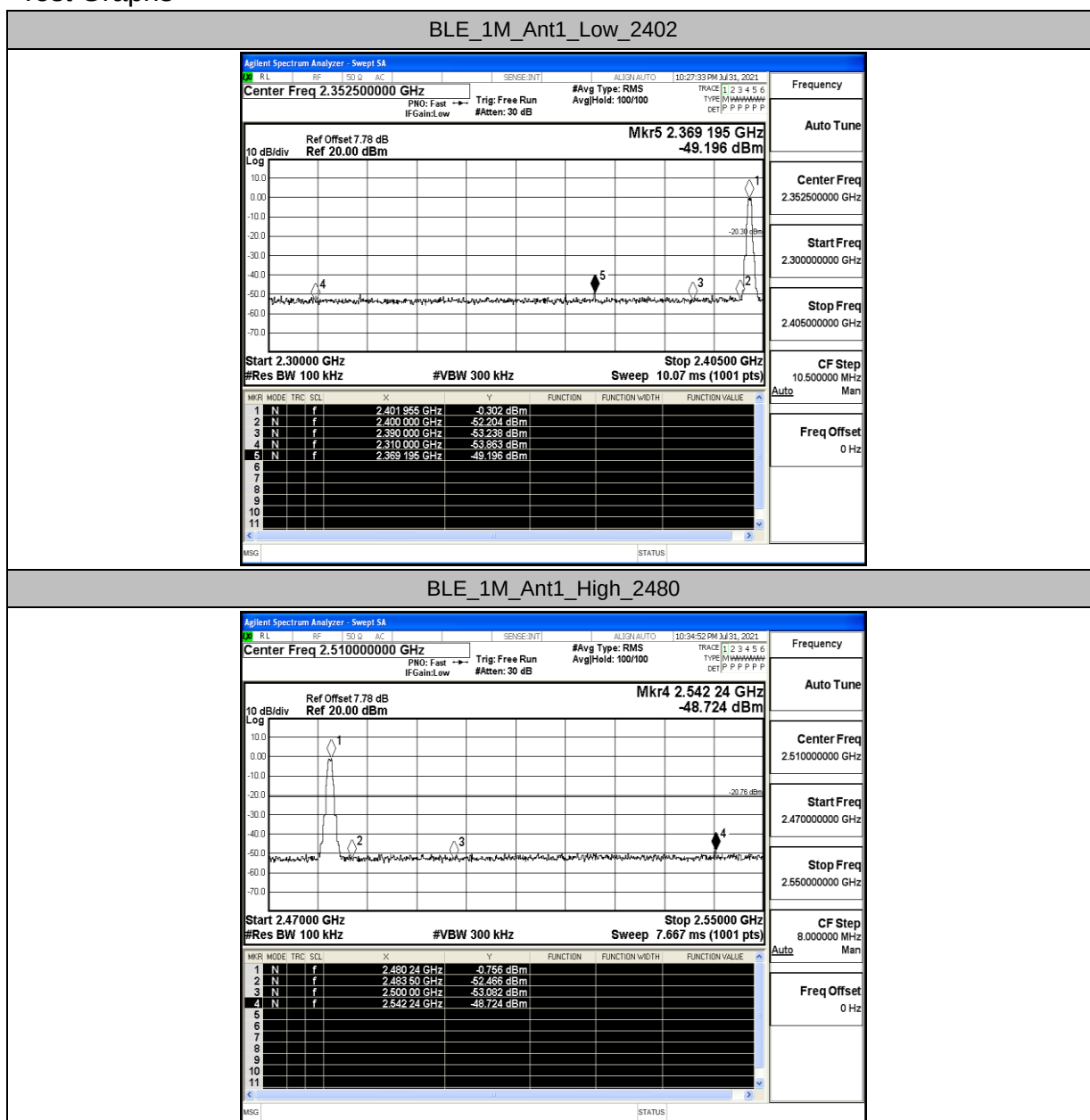


A.4 Band edge measurements

Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-0.30	-49.2	≤-20.3	PASS
		High	2480	-0.76	-48.72	≤-20.76	PASS

Test Graphs





A.5 Conducted Spurious Emission

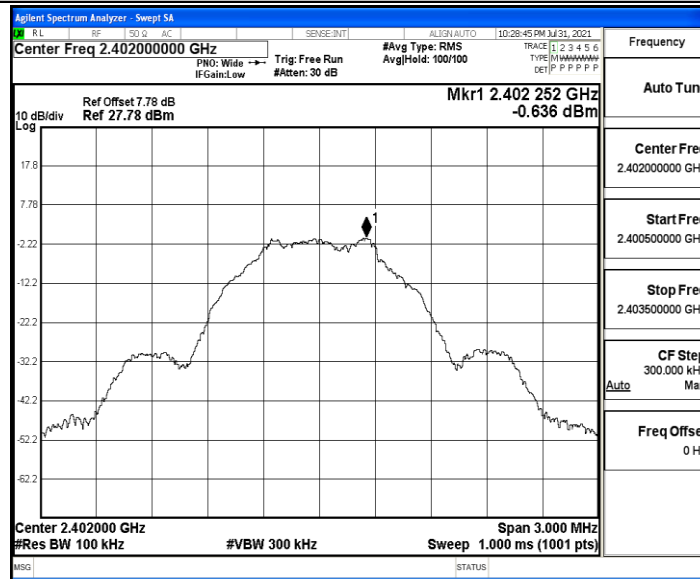
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-0.64	-0.64	---	PASS
			30~1000	-0.64	-61.88	≤-20.64	PASS
			1000~26500	-0.64	-47.34	≤-20.64	PASS
		2440	Reference	-2.11	-2.11	---	PASS
			30~1000	-2.11	-62.48	≤-22.11	PASS
			1000~26500	-2.11	-47.71	≤-22.11	PASS
		2480	Reference	-0.87	-0.87	---	PASS
			30~1000	-0.87	-61.6	≤-20.87	PASS
			1000~26500	-0.87	-46.85	≤-20.87	PASS

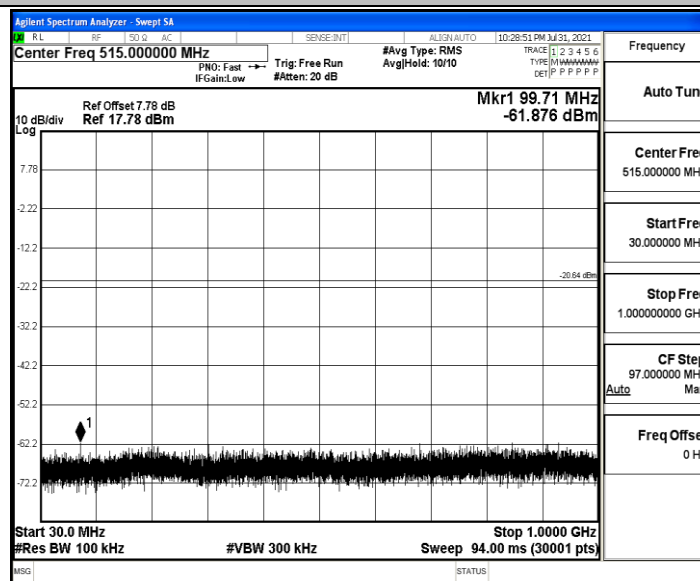


Test Graphs

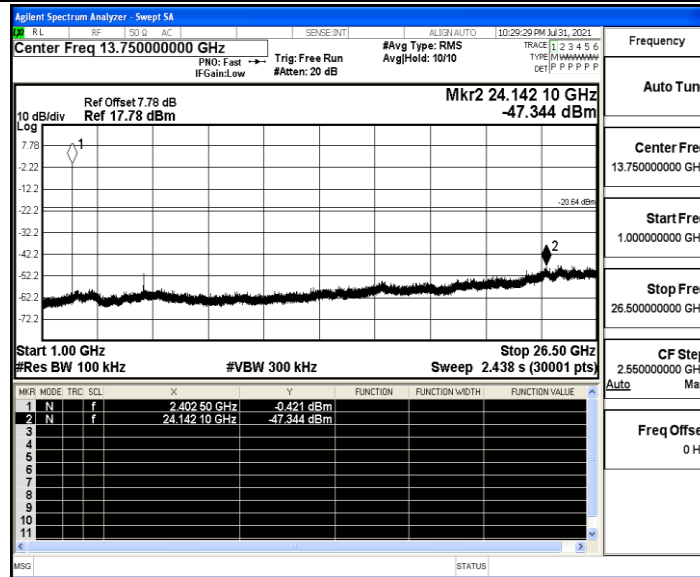
BLE_1M_Ant1_2402_0~Reference



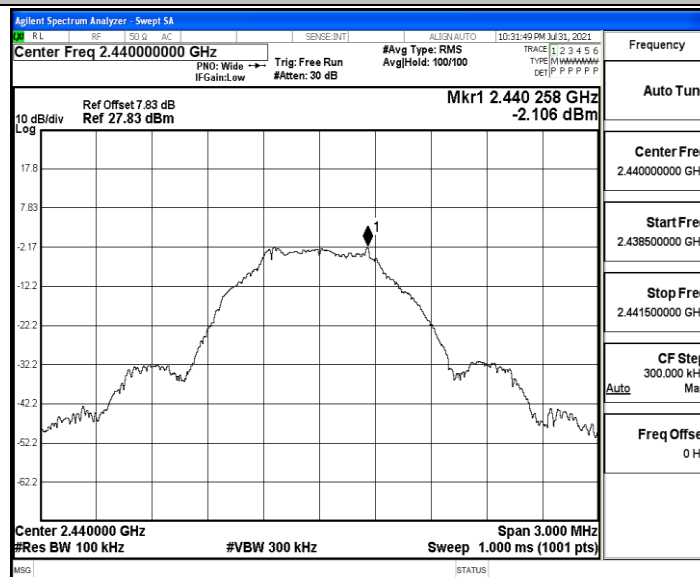
BLE_1M_Ant1_2402_30~1000



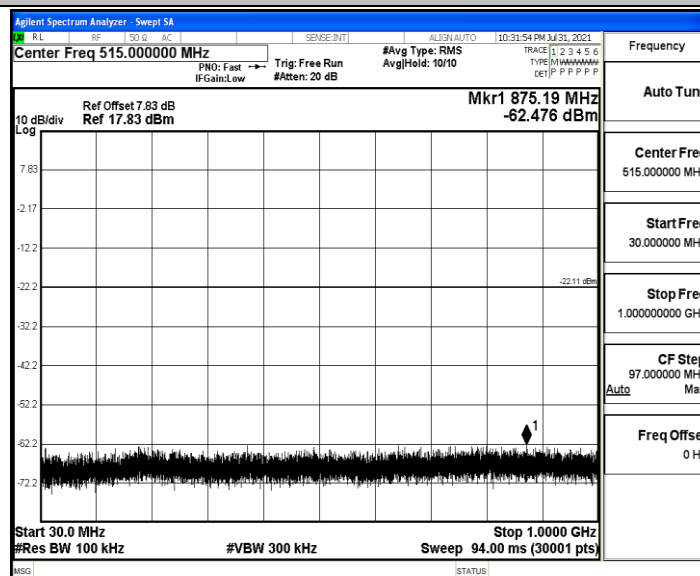
BLE_1M_Ant1_2402_1000~26500



BLE_1M_Ant1_2440_0~Reference

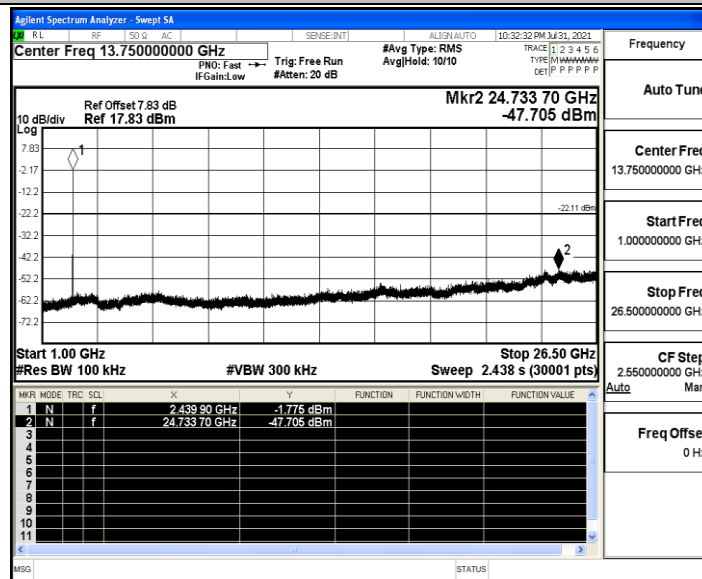


BLE_1M_Ant1_2440_30~1000

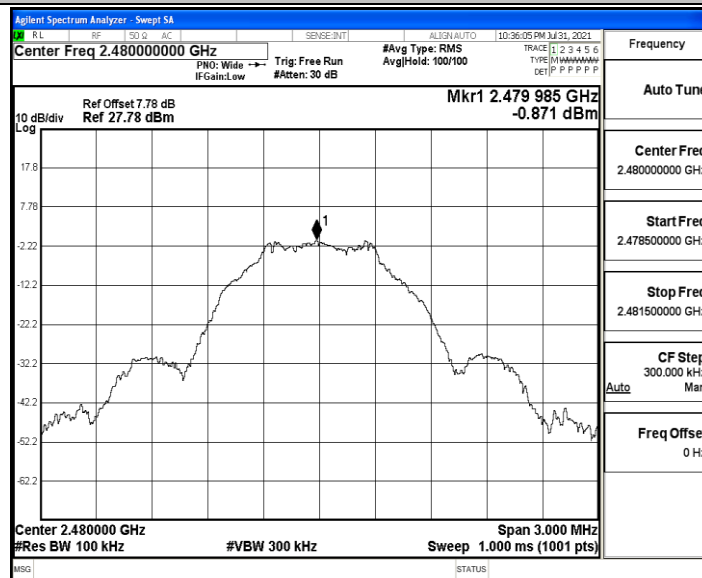




BLE_1M_Ant1_2440_1000~26500



BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000

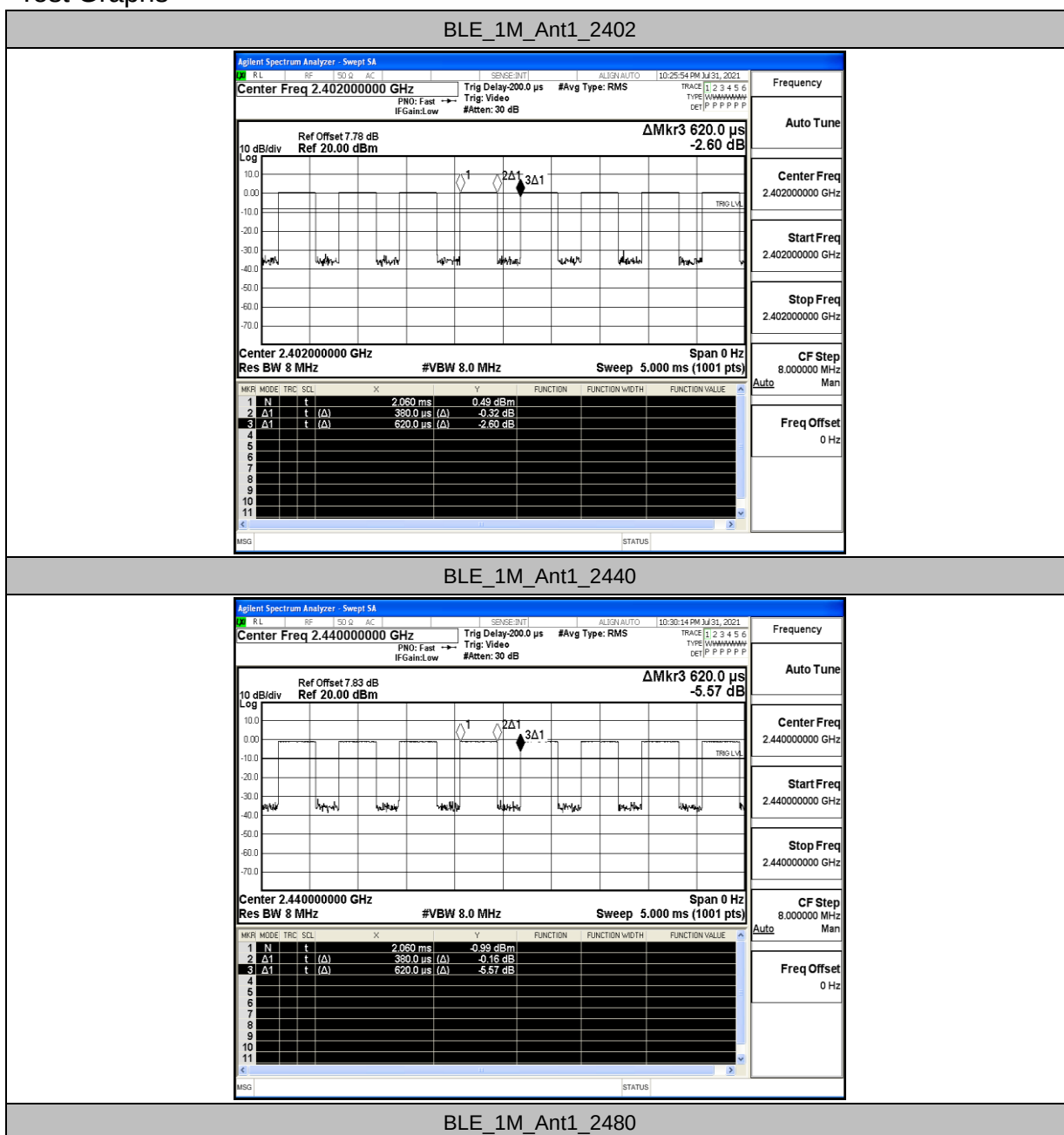


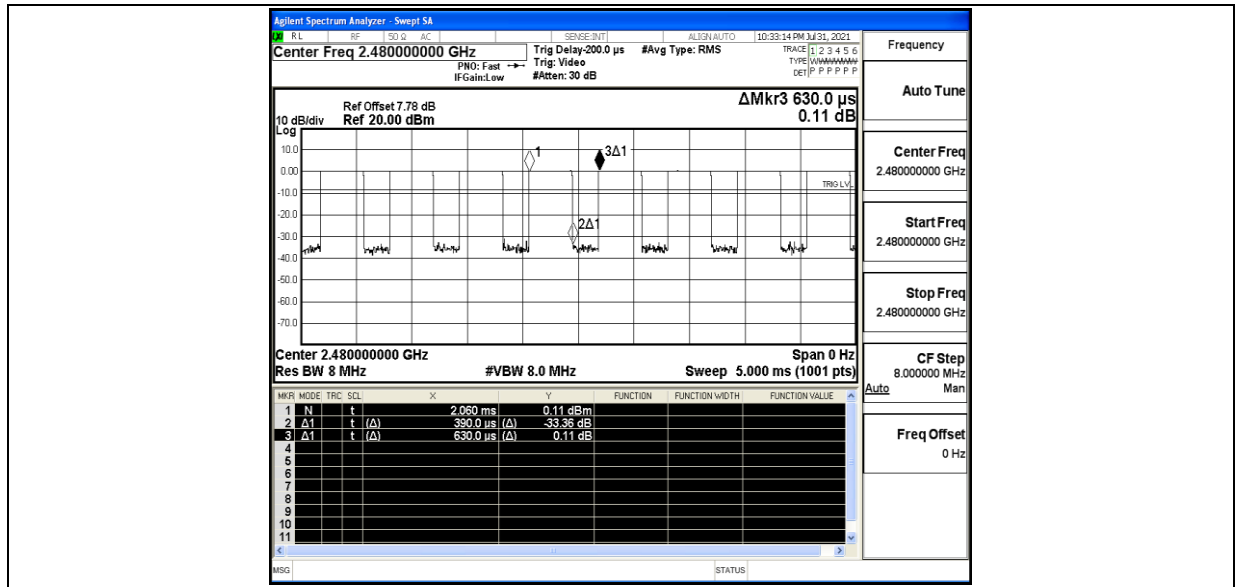
A.6 Duty Cycle

Test Result

TestMode	Antenna	Channel	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	0.38	0.62	0.6129	61.29	2.13	---	PASS
		2440	0.38	0.62	0.6129	61.29	2.13	---	PASS
		2480	0.39	0.63	0.6190	61.90	2.08	---	PASS

Test Graphs







A.7 Emissions in Restricted Bands

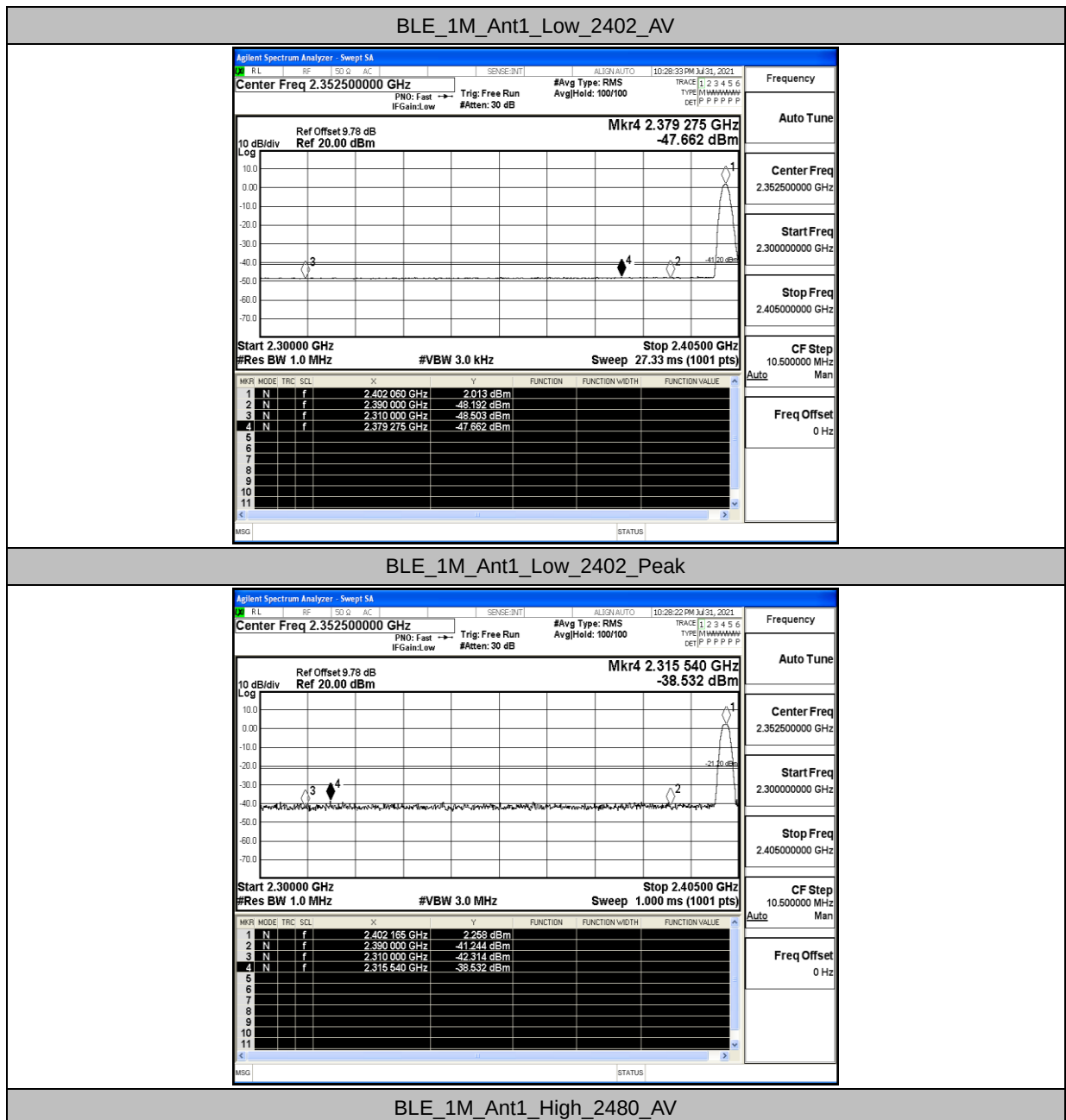
Test Result

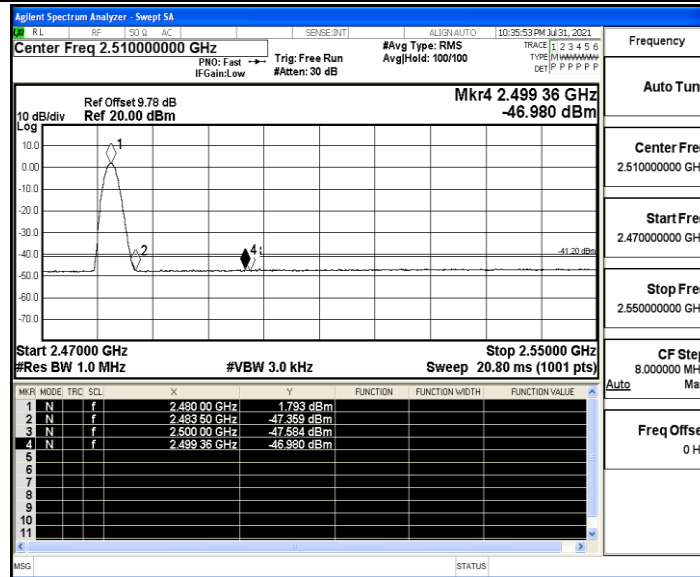
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-48.5	≤-41.20	46.70	≤54	PASS
				AV	2379.275	-47.66	≤-41.20	47.54	≤54	PASS
				AV	2390.000	-48.19	≤-41.20	47.01	≤54	PASS
				Peak	2310.000	-42.31	≤-21.20	52.89	≤74	PASS
				Peak	2315.540	-38.53	≤-21.20	56.67	≤74	PASS
				Peak	2390.000	-41.24	≤-21.20	53.96	≤74	PASS
		High	2480	AV	2483.500	-47.36	≤-41.20	47.84	≤54	PASS
				AV	2499.360	-46.98	≤-41.20	48.22	≤54	PASS
				AV	2500.000	-47.58	≤-41.20	47.62	≤54	PASS
				Peak	2483.500	-42.37	≤-21.20	52.83	≤74	PASS
				Peak	2486.080	-38.92	≤-21.20	56.28	≤74	PASS
				Peak	2500.000	-40.53	≤-21.20	54.67	≤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

