

Appendix A

RF Test Data for BT LE (Conducted Measurement)

Product Name: Omni Health Ring Pro

Test Model: OHR-01 Pro

Environmental Conditions

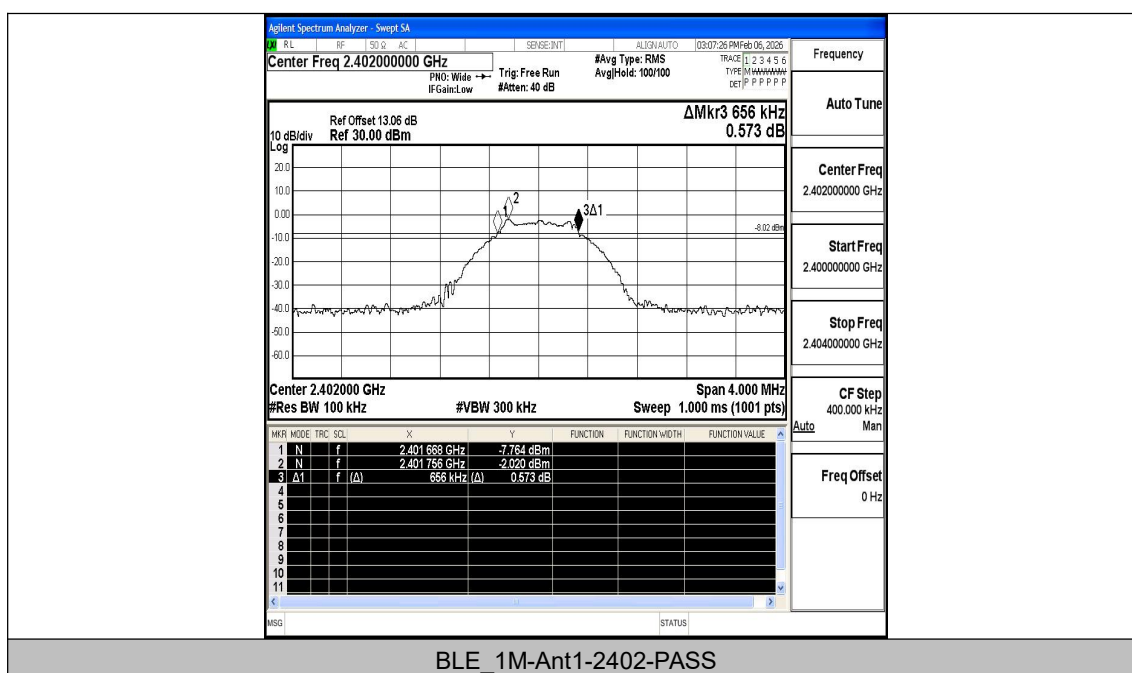
Temperature:	23.6°C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Ting He
Supervised by:	Fengliu Tang

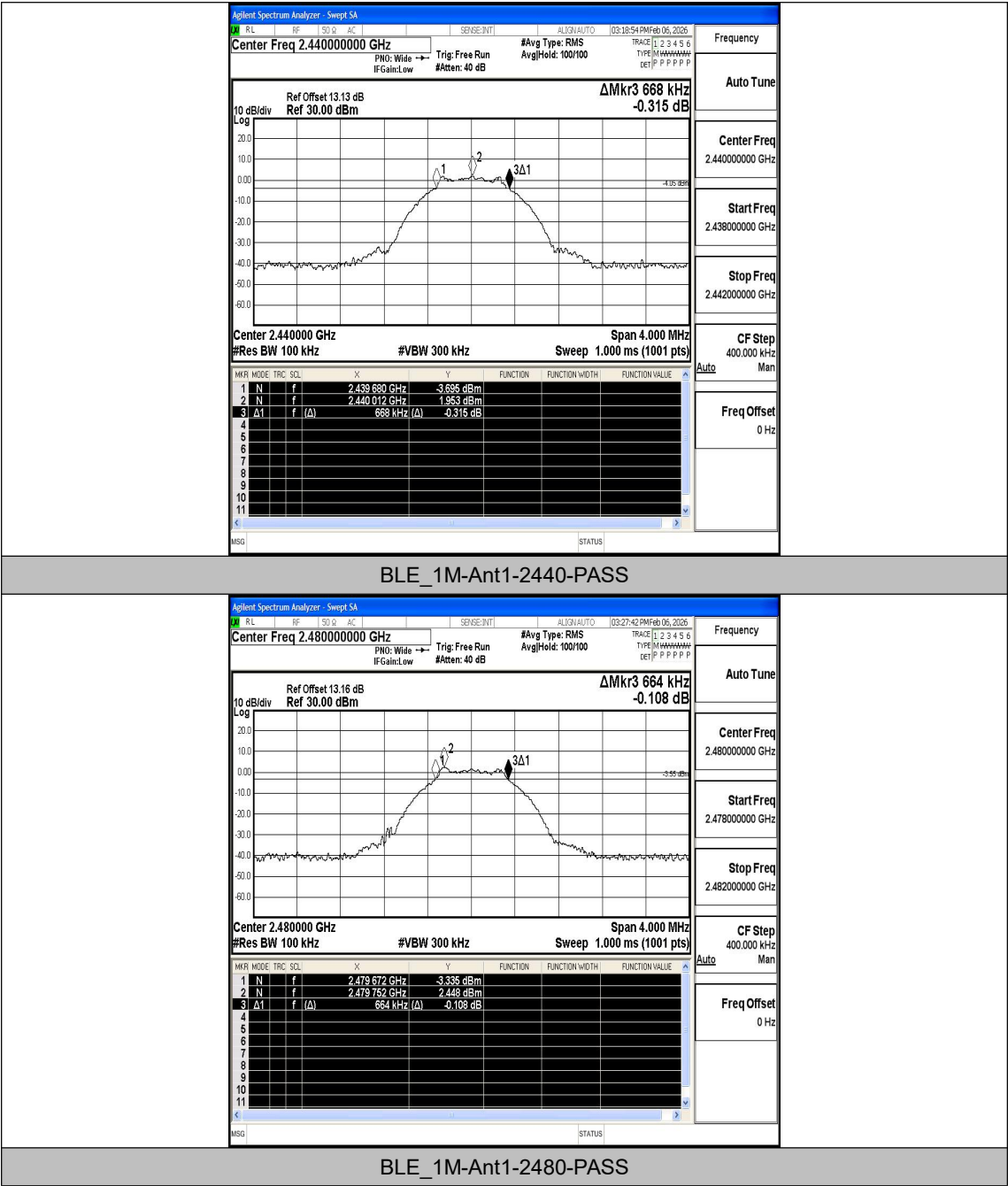
A.1 DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.656	2401.668	2402.324	0.5	PASS
BLE_1M	Ant1	2440	0.668	2439.680	2440.348	0.5	PASS
BLE_1M	Ant1	2480	0.664	2479.672	2480.336	0.5	PASS

Test Graphs



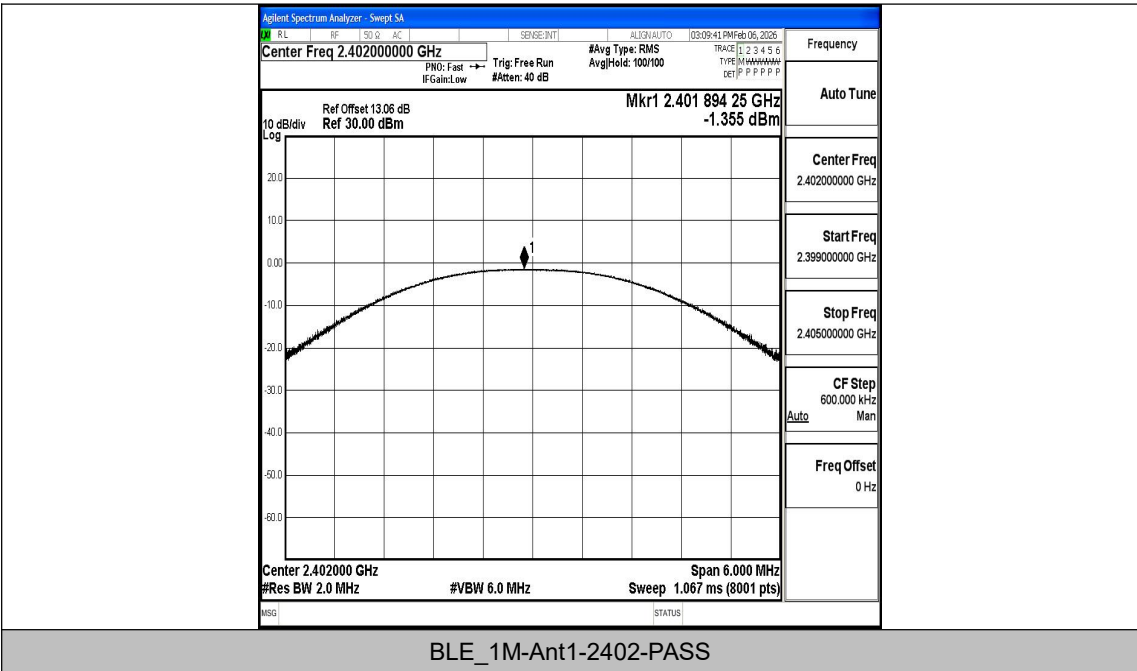


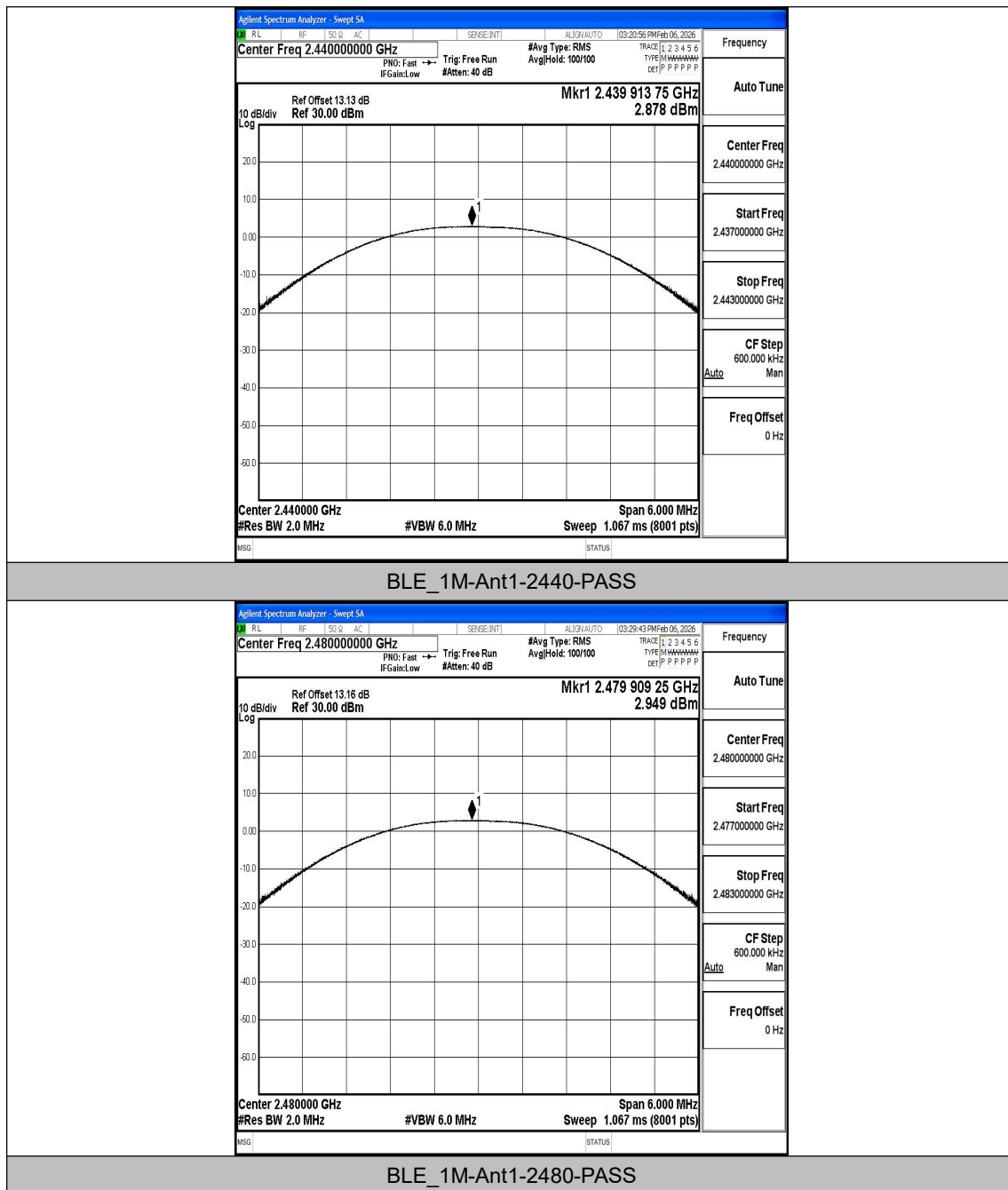
A.2 Maximum Peak conducted output power

Test Result Peak

TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-1.36	≤30	PASS
BLE_1M	Ant1	2440	2.88	≤30	PASS
BLE_1M	Ant1	2480	2.95	≤30	PASS

Test Graphs Peak



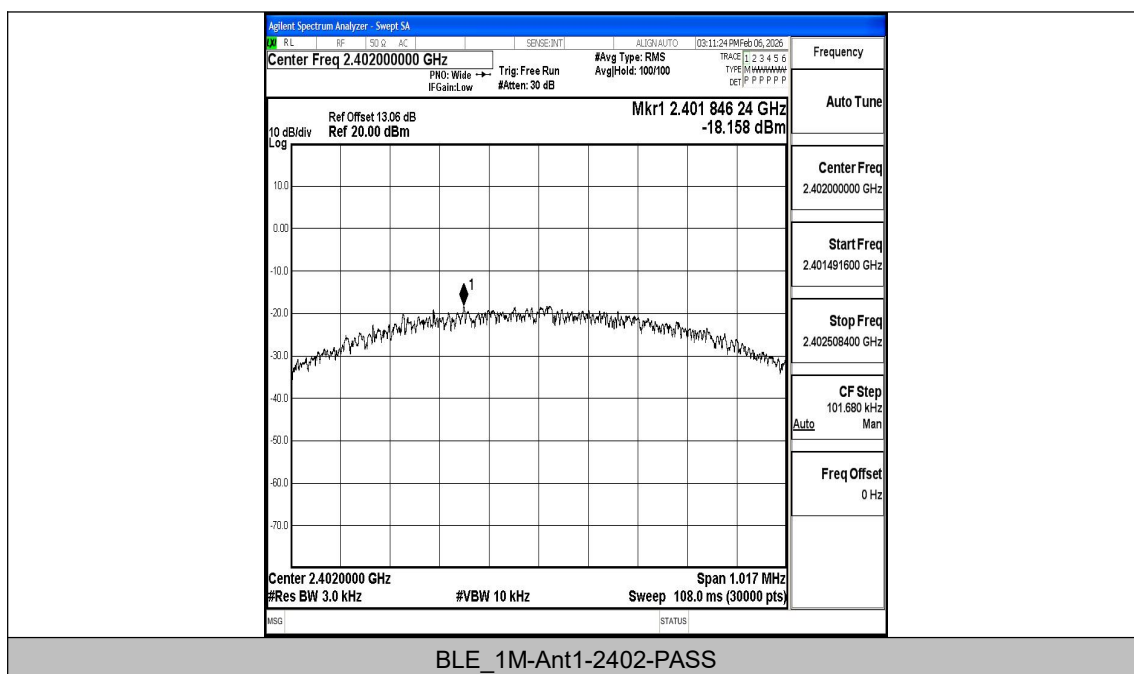


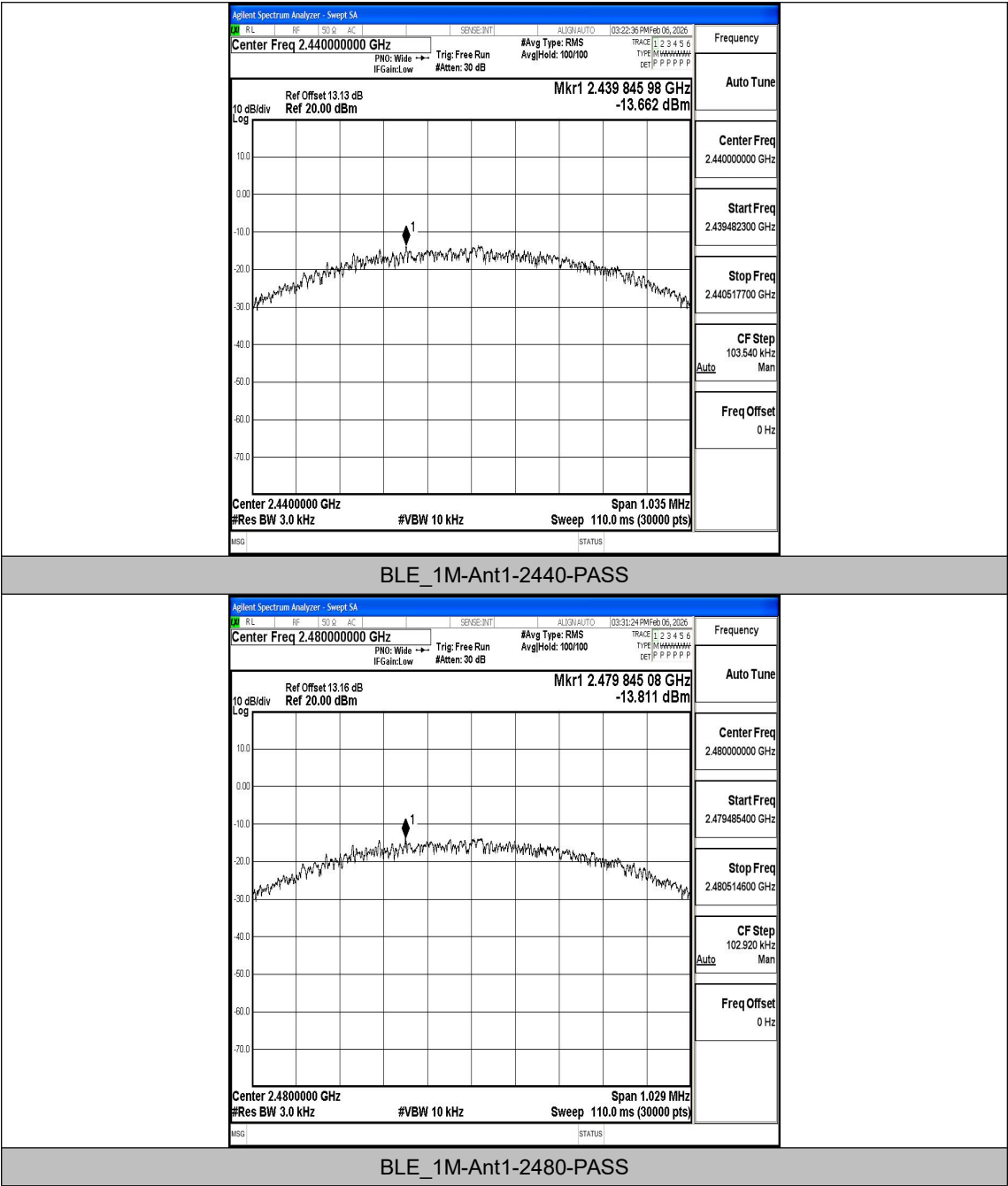
A.3 Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-18.16	≤8.00	PASS
BLE_1M	Ant1	2440	-13.66	≤8.00	PASS
BLE_1M	Ant1	2480	-13.81	≤8.00	PASS

Test Graphs



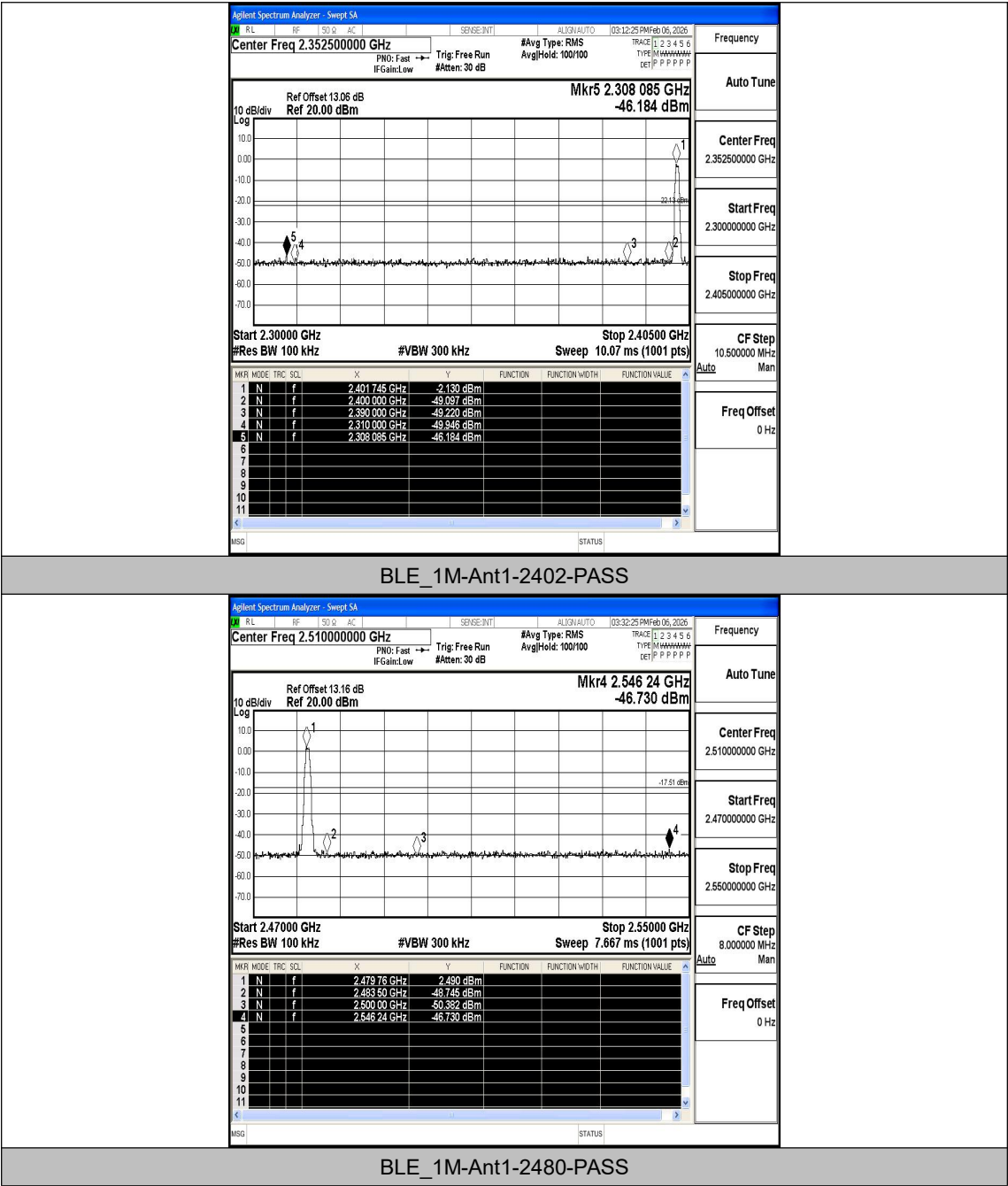


A.4 Band edge measurements

Test Result

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-2.13	-46.18	≤-22.13	PASS
BLE_1M	Ant1	High	2480	2.49	-46.73	≤-17.51	PASS

Test Graphs



BLE_1M-Ant1-2480-PASS

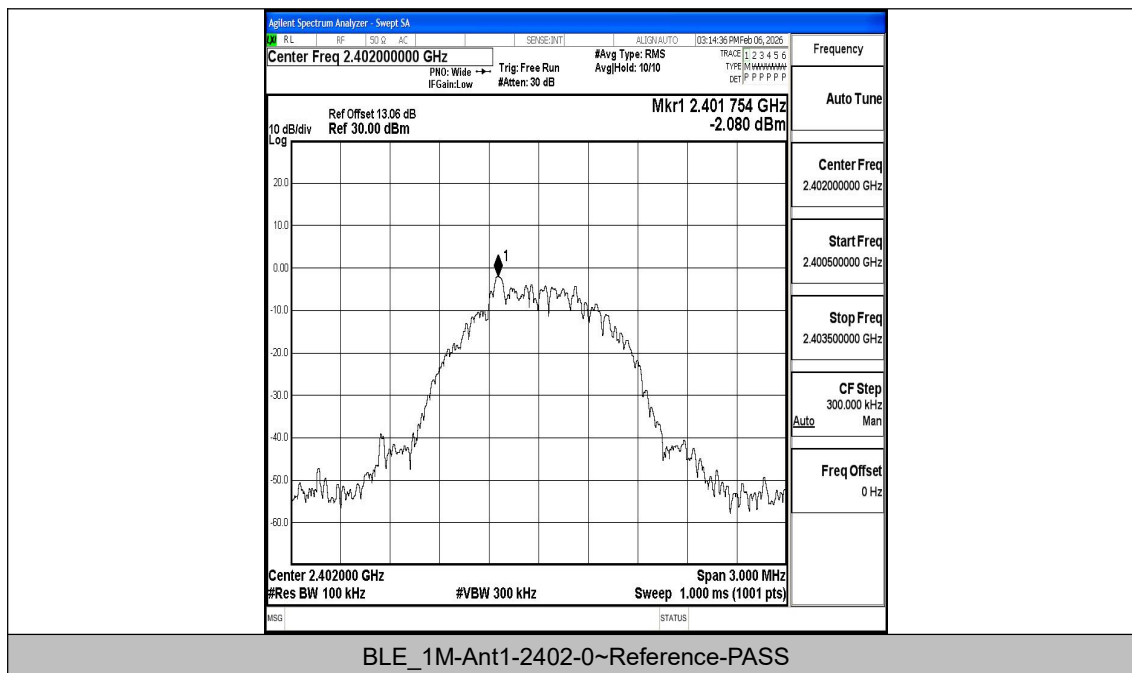
A.5 Conducted Spurious Emission

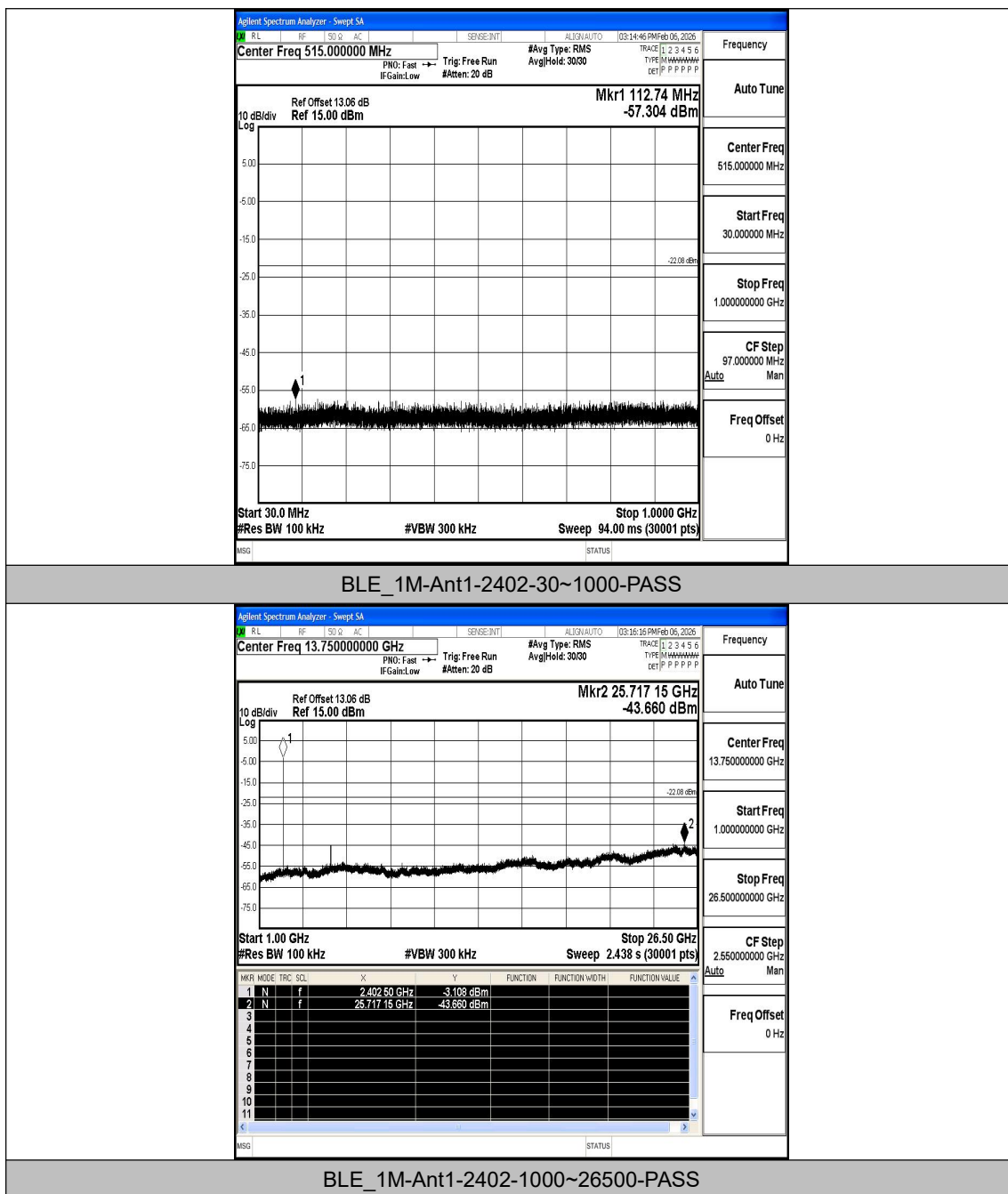
Test Result

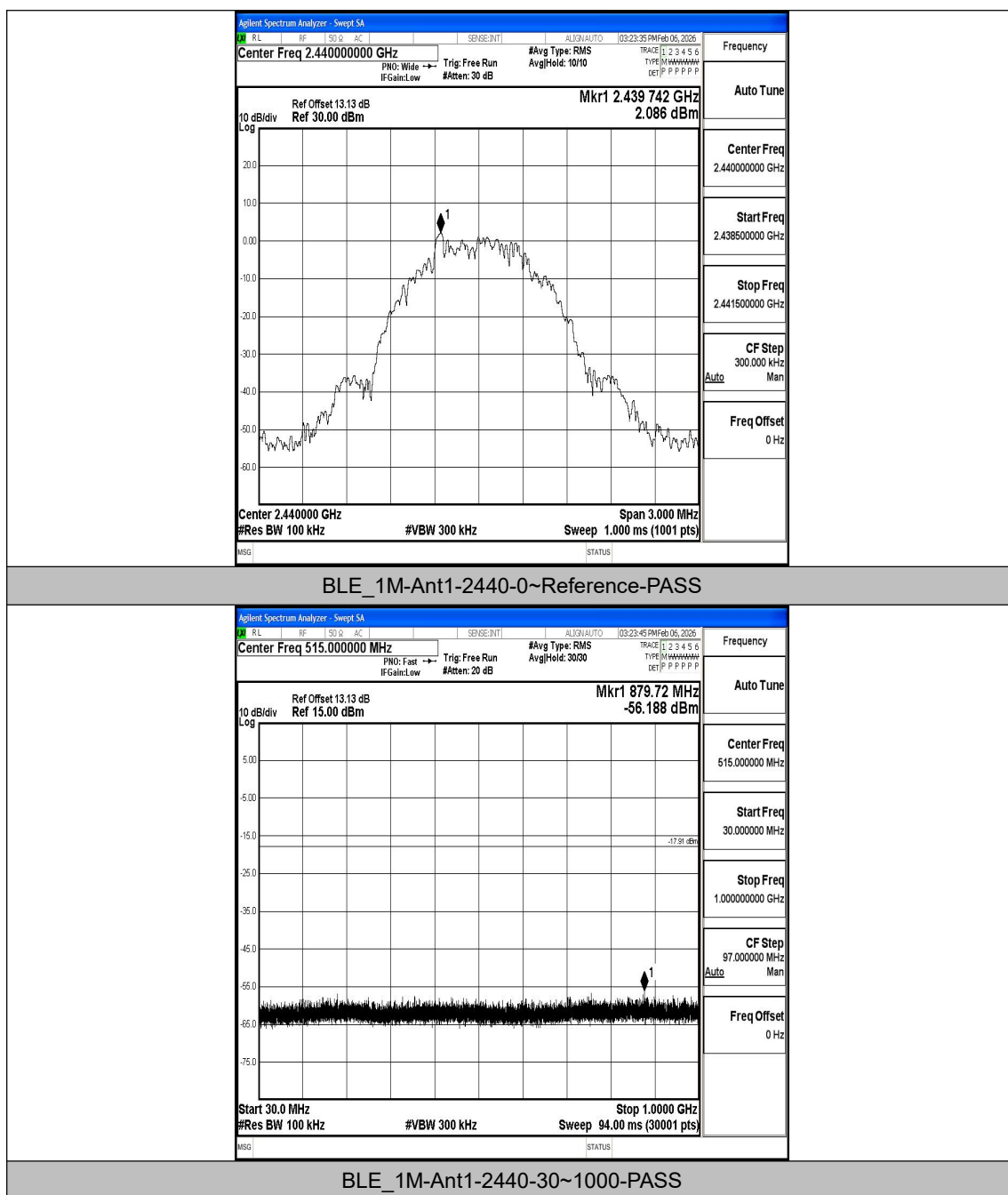
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0~Reference	-2.08	-2.08	---	PASS
BLE_1M	Ant1	2402	30~1000	-2.08	-57.3	≤-22.08	PASS
BLE_1M	Ant1	2402	1000~26500	-2.08	-43.66	≤-22.08	PASS
BLE_1M	Ant1	2440	0~Reference	2.09	2.09	---	PASS
BLE_1M	Ant1	2440	30~1000	2.09	-56.19	≤-17.91	PASS
BLE_1M	Ant1	2440	1000~26500	2.09	-43.87	≤-17.91	PASS
BLE_1M	Ant1	2480	0~Reference	1.95	1.95	---	PASS
BLE_1M	Ant1	2480	30~1000	1.95	-55	≤-18.05	PASS
BLE_1M	Ant1	2480	1000~26500	1.95	-44.74	≤-18.05	PASS

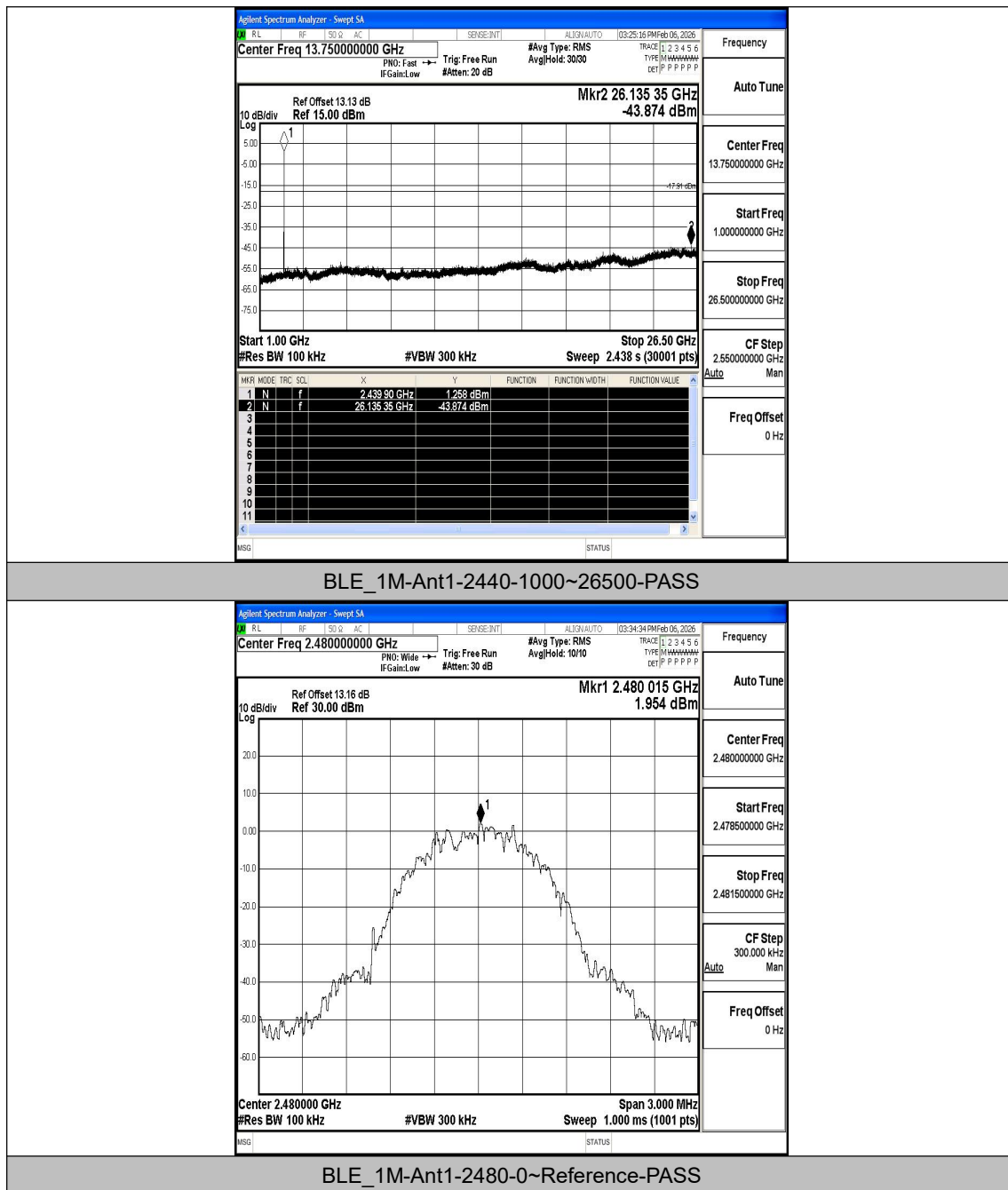
Note : Regarding the spurious emissions from 30MHz to 26.5GHz, the cable lose have been set in the CORREC' of the Spectrum Analyzer during the test.

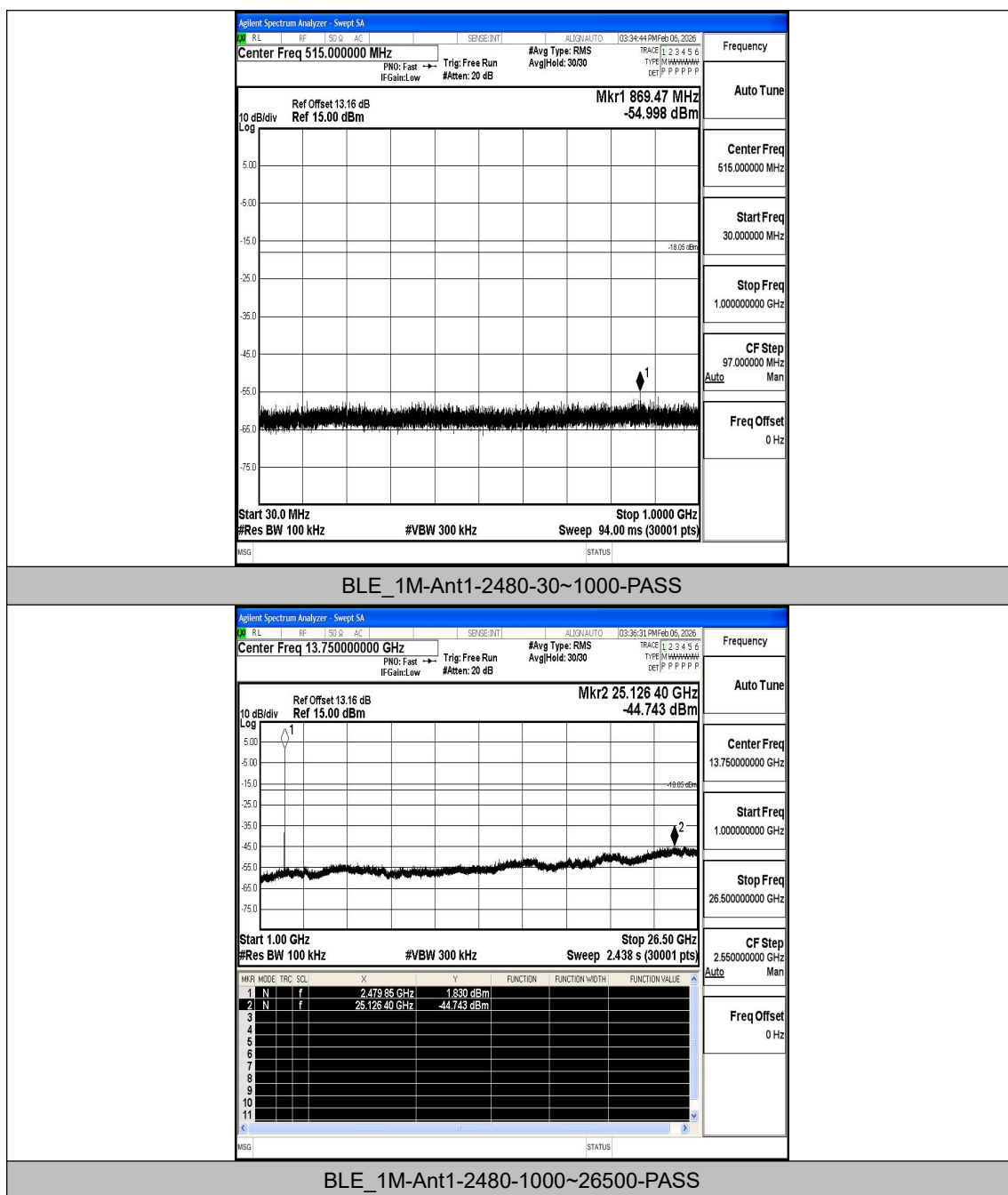
Test Graphs









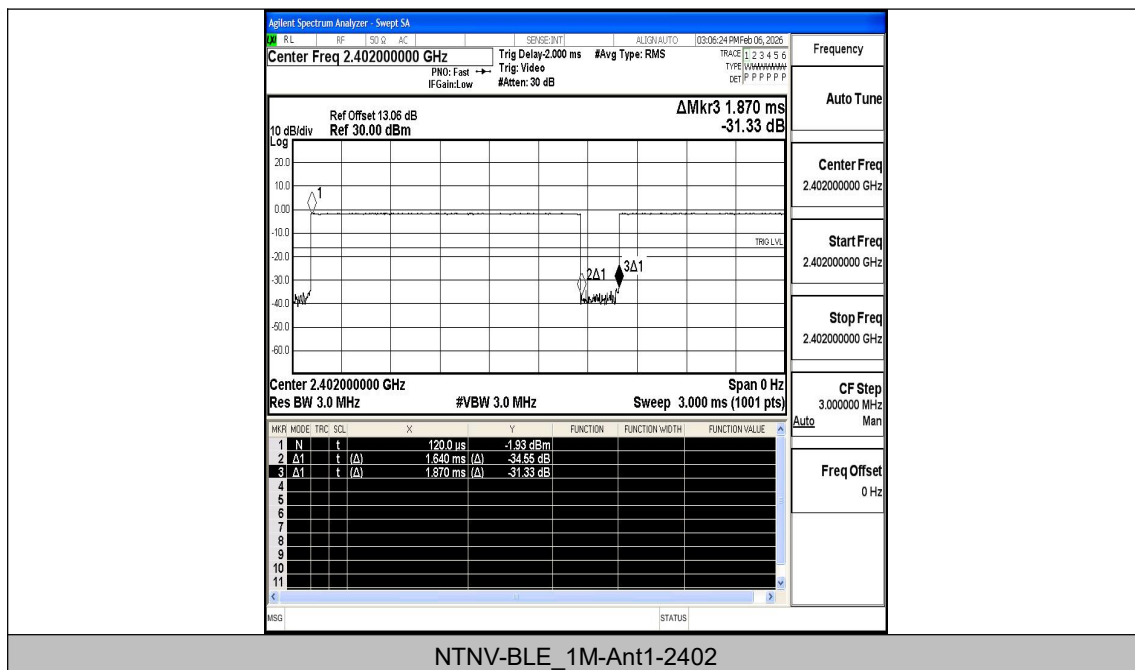


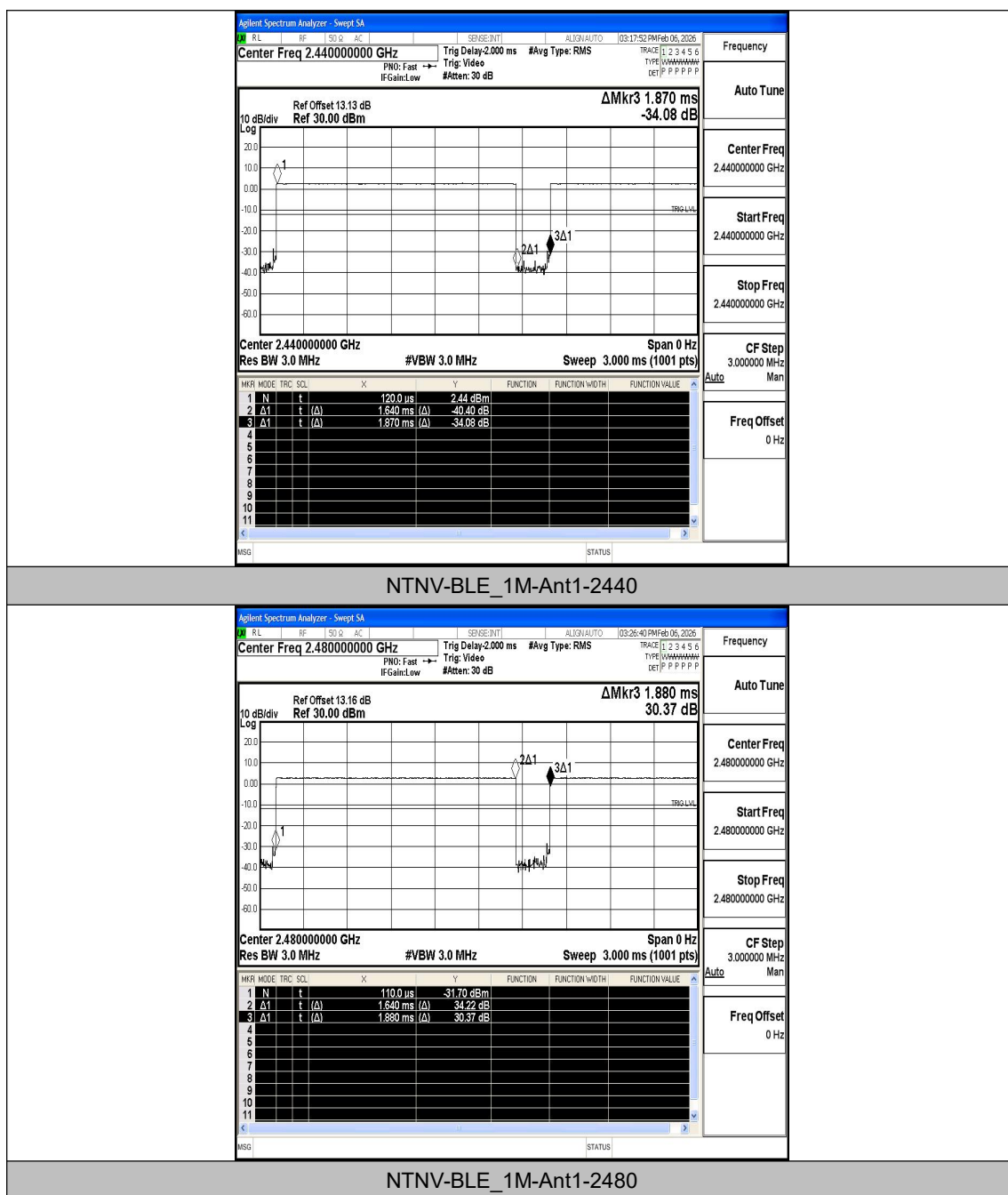
A.6 Duty Cycle

Test Result

TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	1.64	1.87	87.70	0.57
BLE_1M	Ant1	2440	1.64	1.87	87.70	0.57
BLE_1M	Ant1	2480	1.64	1.88	87.23	0.59

Test Graphs





A.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	Peak	2390.000	-38.76	≤-21.20	3.12	0.57	60.13	≤74	PASS
				Peak	2310.000	-39.8	≤-21.20	3.12	0.57	59.09	≤74	PASS
				Peak	2384.105	-34.94	≤-21.20	3.12	0.57	63.95	≤74	PASS
				AV	2390.000	-46.5	≤-41.20	3.12	0.00	51.82	≤54	PASS
				AV	2310.000	-47.15	≤-41.20	3.12	0.00	51.17	≤54	PASS
				AV	2316.800	-45.39	≤-41.20	3.12	0.00	52.93	≤54	PASS
		High	2480	Peak	2483.500	-37.44	≤-21.20	3.12	0.59	61.47	≤74	PASS
				Peak	2500.000	-37.81	≤-21.20	3.12	0.59	61.10	≤74	PASS
				Peak	2493.920	-35.65	≤-21.20	3.12	0.59	63.26	≤74	PASS
				AV	2483.500	-46.49	≤-41.20	3.12	0.00	51.83	≤54	PASS
				AV	2500.000	-46.33	≤-41.20	3.12	0.00	51.99	≤54	PASS
				AV	2498.880	-45.41	≤-41.20	3.12	0.00	52.91	≤54	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

