

Appendix Test Data for SRD (Conducted Measurement)

Product Name: Mini Foldable DRONE

Trade Mark: N/A

Test Model: S17

FCC ID: 2A8MFBJS17

Environmental Conditions

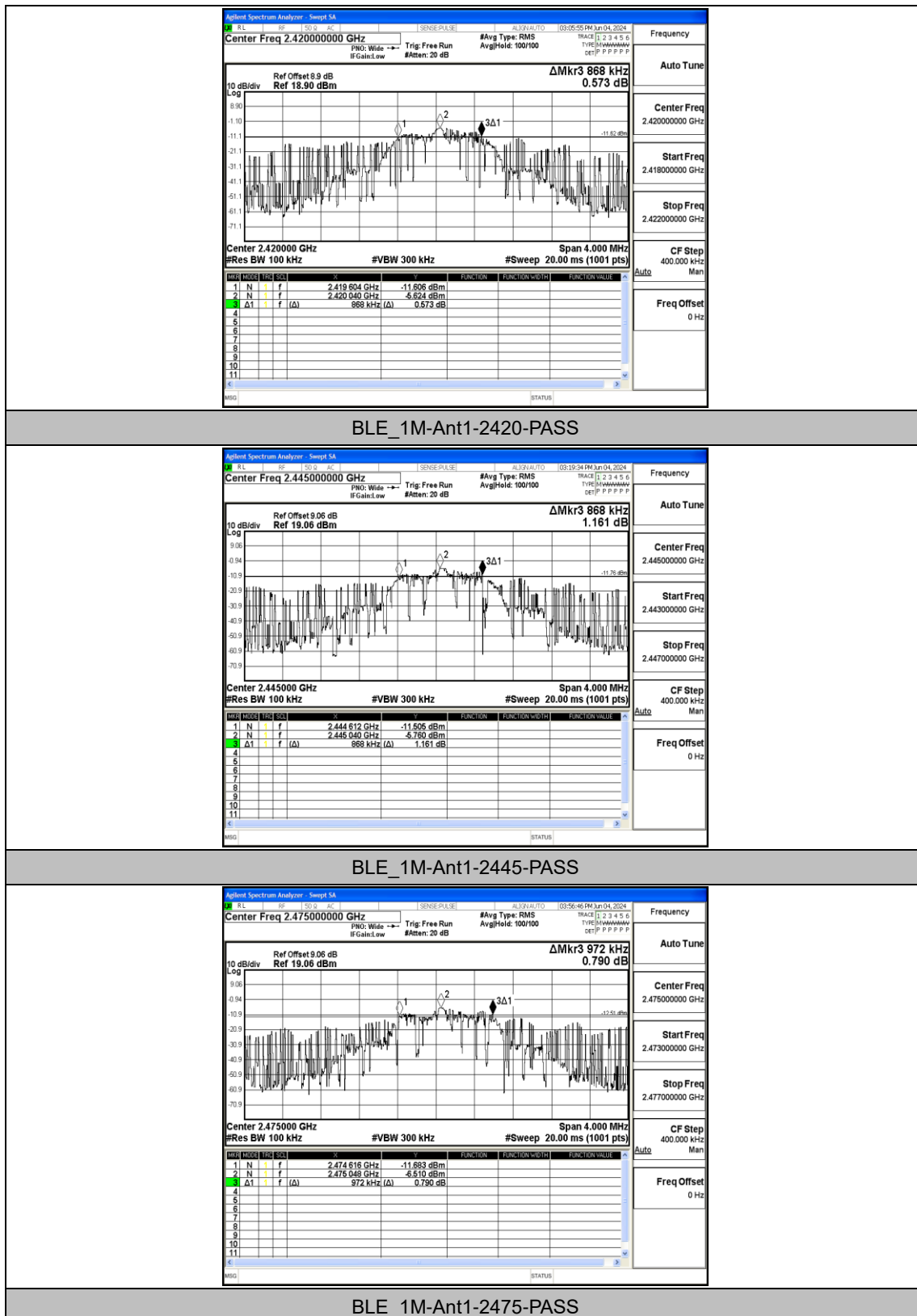
Temperature:	22.8° C
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency MHz]	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
SRD	Ant1	2420	0.868	2419.604	2420.472	0.5	PASS
SRD	Ant1	2445	0.868	2444.612	2445.480	0.5	PASS
SRD	Ant1	2475	0.972	2474.616	2475.588	0.5	PASS

Test Graphs



Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
SRD	Ant1	2420	1.6300	2418.9663	2420.5963	---	---
SRD	Ant1	2445	1.7061	2444.2344	2445.9405	---	---
SRD	Ant1	2475	1.8458	2473.9184	2475.7642	---	---

The figure consists of three vertically stacked screenshots of a Spectrum Analyzer interface, each showing the occupied bandwidth and power for a specific BLE 1M-Ant1 channel. The interface includes a central plot area with a frequency span of 4 MHz and a resolution bandwidth (RBW) of 43 kHz. The plot shows a noisy signal with a peak marked by a black diamond and labeled 'Mkr1'. The peak frequency is 2.420044 GHz, 2.445028 GHz, and 2.47504 GHz for the three screenshots respectively. The peak power is -5.8377 dBm, -5.8878 dBm, and -5.9035 dBm respectively. The total power is -1.94 dBm, -0.72 dBm, and -0.62 dBm respectively. The occupied bandwidth is 1.6300 MHz, 1.7061 MHz, and 1.8458 MHz respectively. The transmit frequency error is -218.69 kHz, 87.447 kHz, and -158.66 kHz respectively. The x dB bandwidth is 3.810 MHz, 3.037 MHz, and 3.334 MHz respectively. The x dB power is -26.00 dB for all three. The interface also shows the center frequency, span, sweep, and various settings like #Gain: Low, #Atten: 20 dB, and Radio Device: BTS.

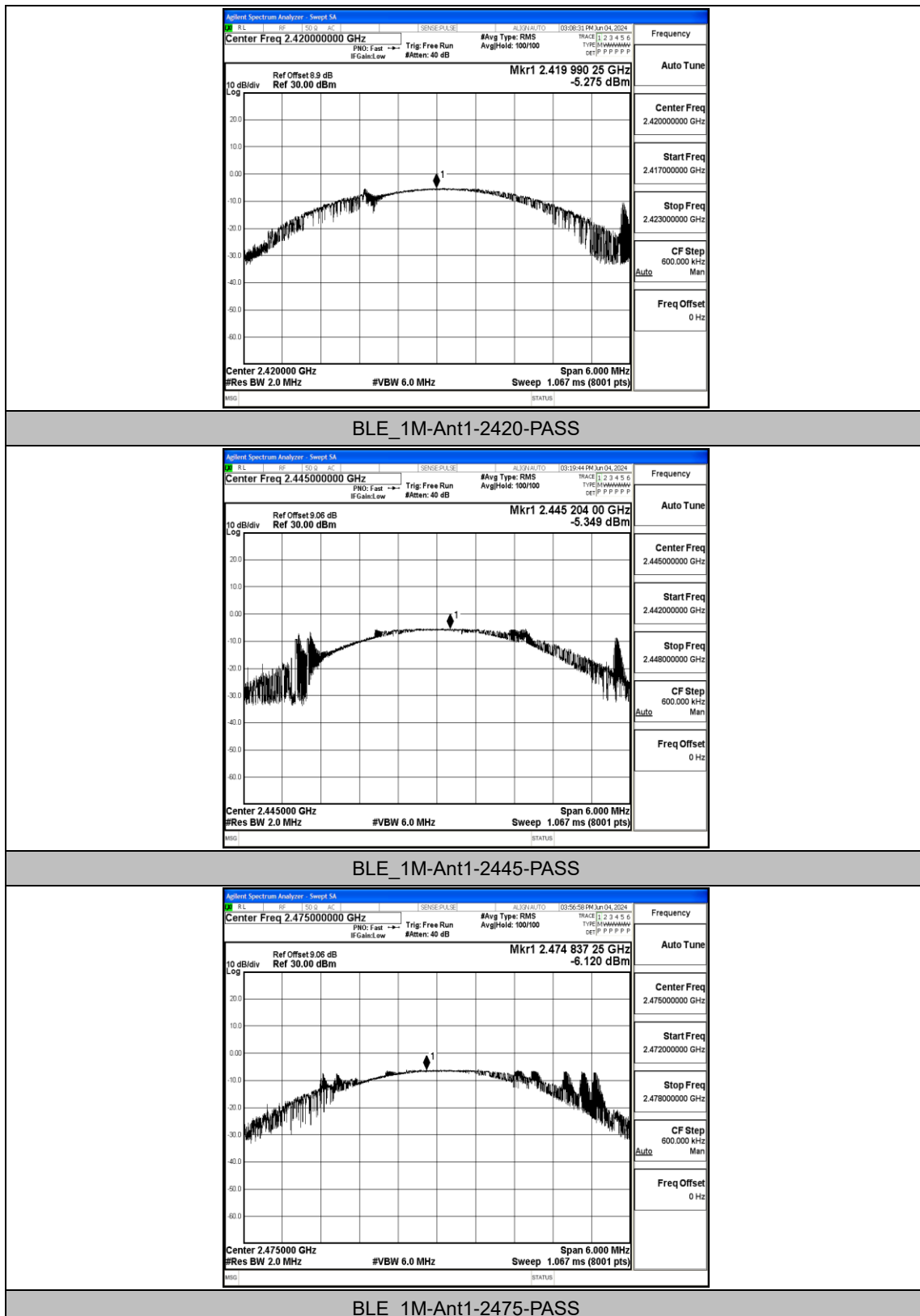
Center Freq	Span	RBW	Occupied Bandwidth	Total Power	Transmit Freq Error	x dB Bandwidth	x dB Power
2.42000000 GHz	4 MHz	43 kHz	1.6300 MHz	-1.94 dBm	-218.69 kHz	3.810 MHz	-26.00 dB
2.44500000 GHz	4 MHz	43 kHz	1.7061 MHz	-0.72 dBm	87.447 kHz	3.037 MHz	-26.00 dB
2.47500000 GHz	4 MHz	43 kHz	1.8458 MHz	-0.62 dBm	-158.66 kHz	3.334 MHz	-26.00 dB

Appendix C: Maximum peak conducted output power

Test Result Peak

TestMode	Antenna	Frequency [MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
SRD	Ant1	2420	-5.28	≤30	PASS
SRD	Ant1	2445	-5.35	≤30	PASS
SRD	Ant1	2475	-6.12	≤30	PASS

Test Graphs Peak

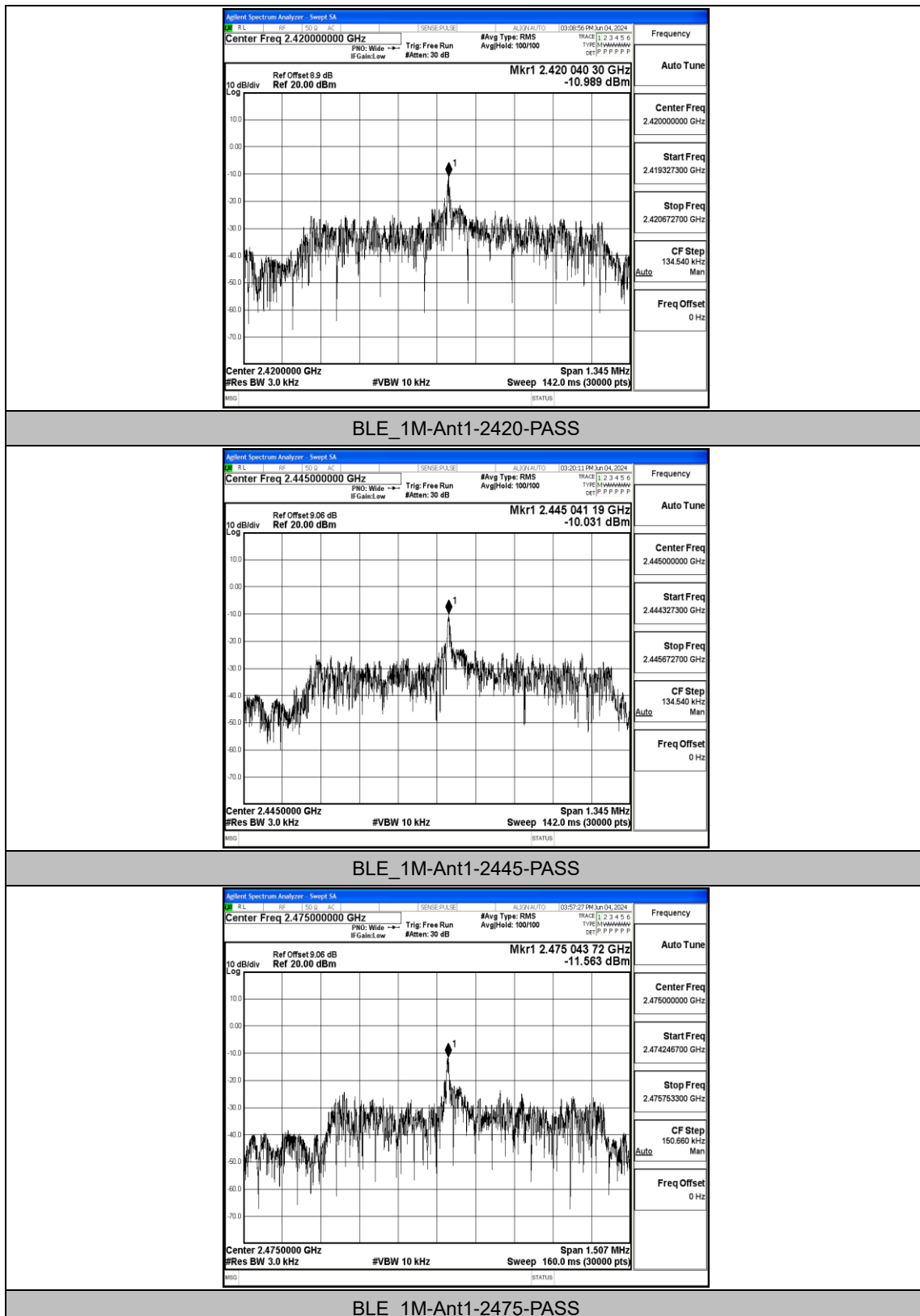


Appendix D: Maximum peak power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
SRD	Ant1	2420	-10.99	≤8.00	PASS
SRD	Ant1	2445	-10.03	≤8.00	PASS
SRD	Ant1	2475	-11.56	≤8.00	PASS

Test Graphs

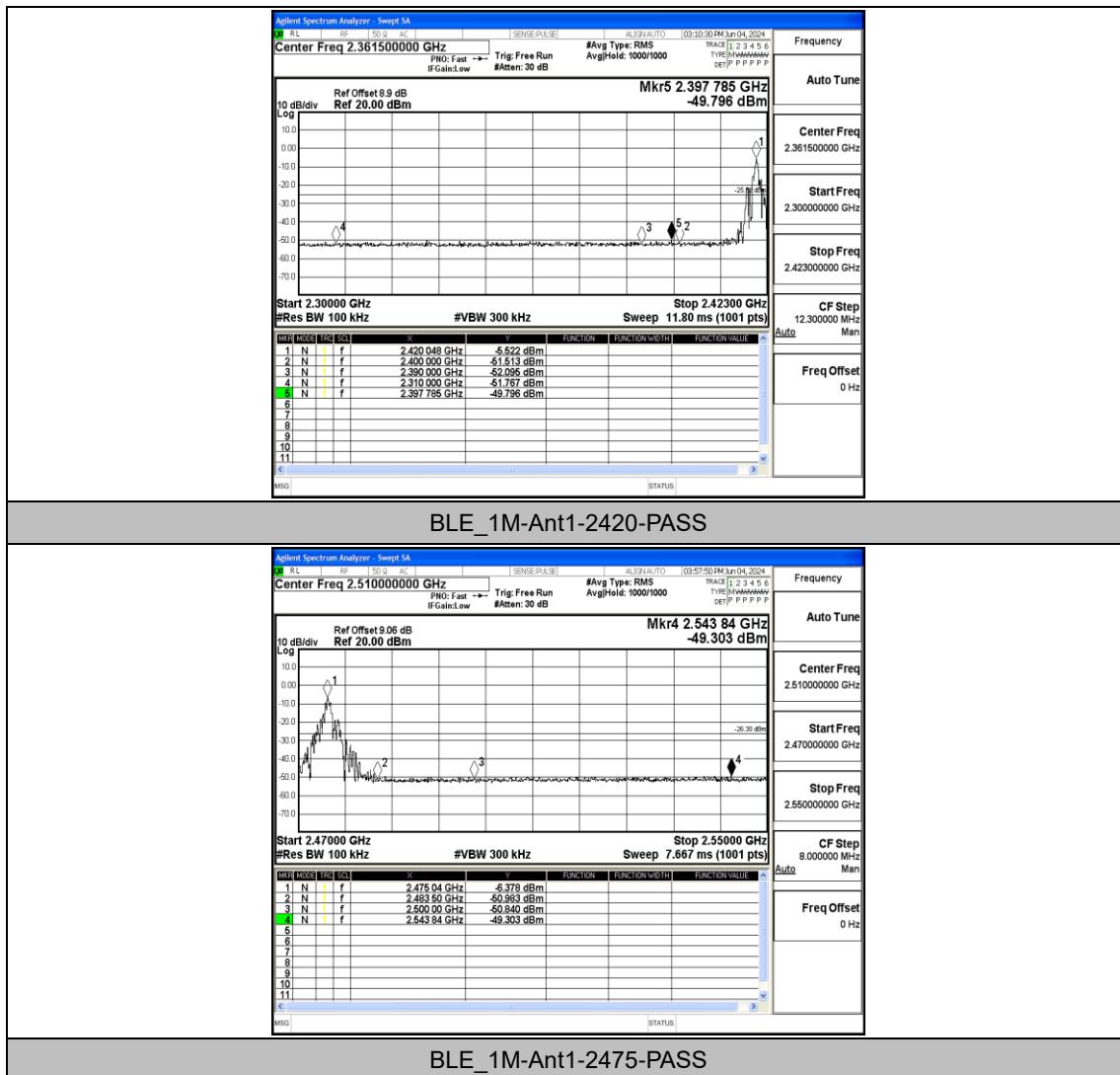


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Frequency [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
SRD	Ant1	Low	2420	-5.52	-49.8	≤-25.52	PASS
SRD	Ant1	High	2475	-6.38	-49.3	≤-26.38	PASS

Test Graphs

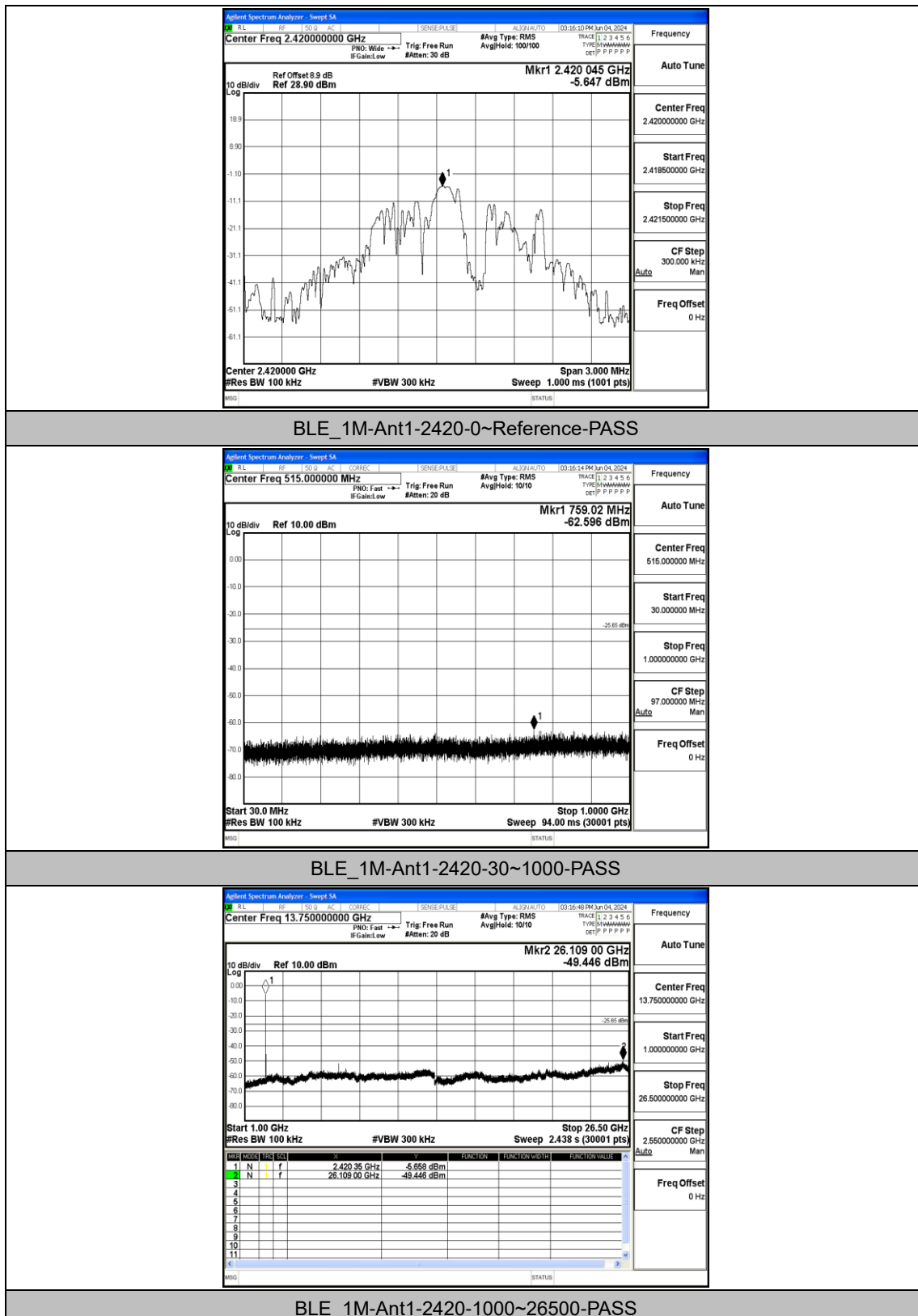


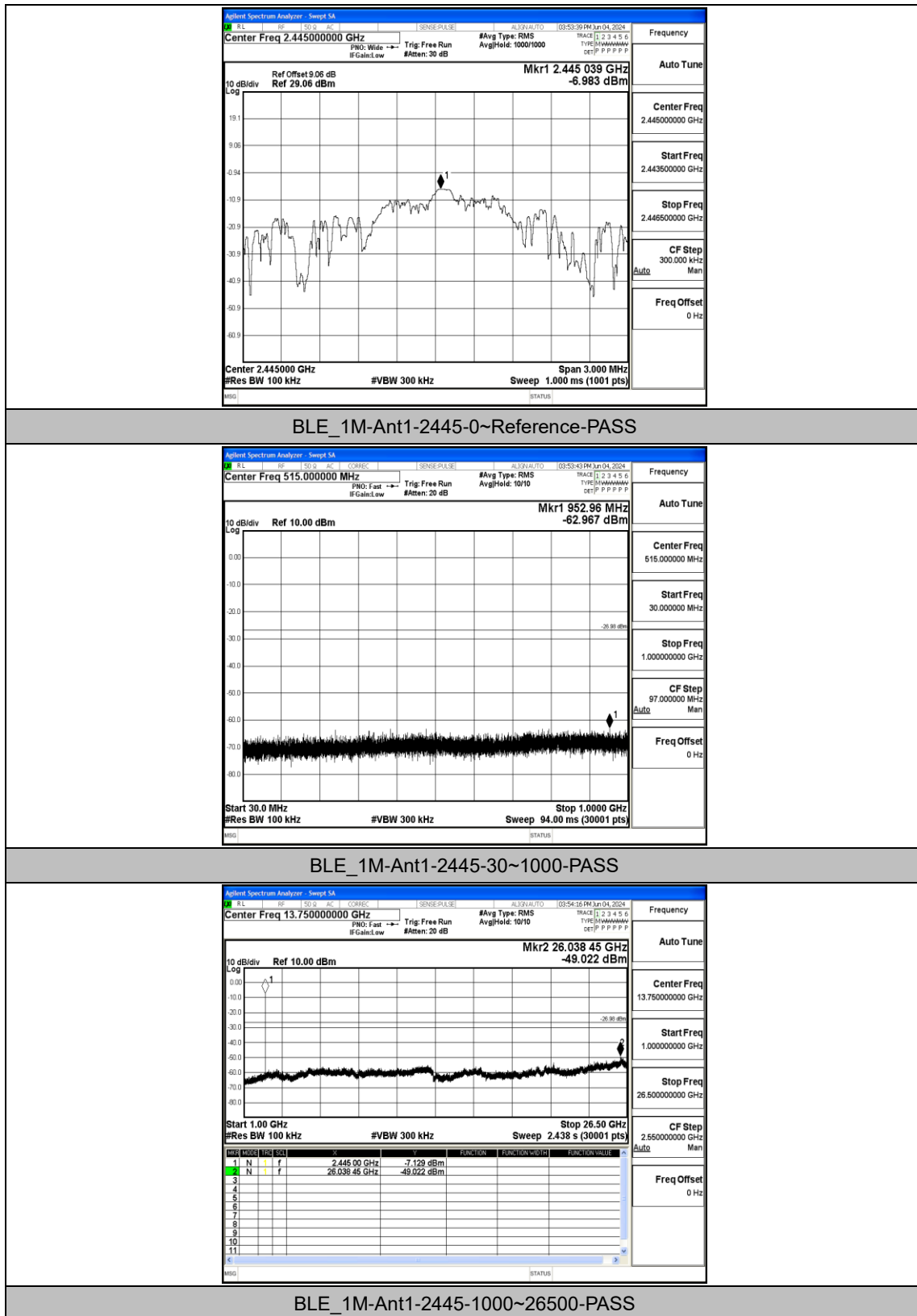
Appendix F: Conducted Spurious Emission

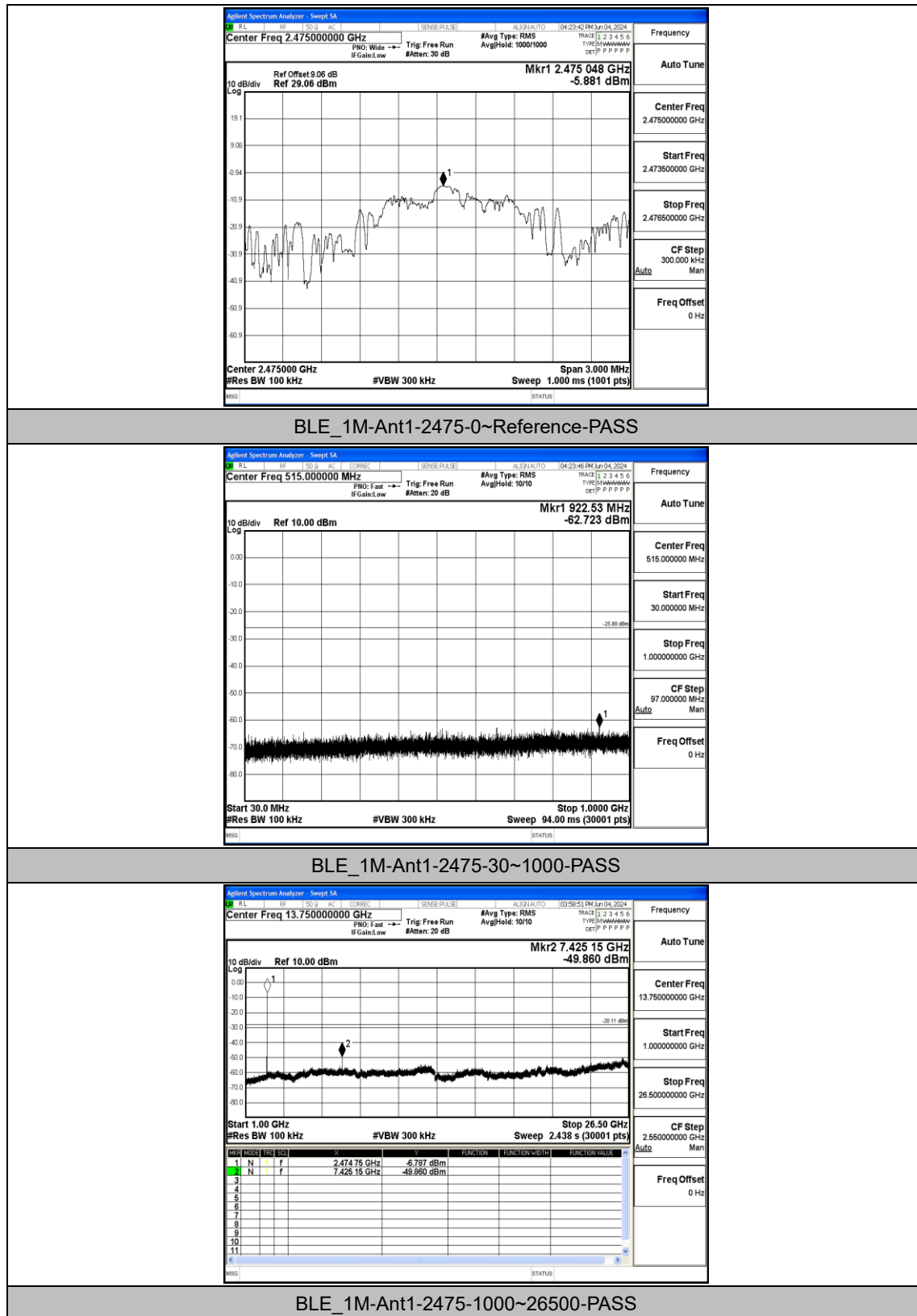
Test Result

TestMode	Antenna	Frequency [MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
SRD	Ant1	2420	0~Reference	-5.65	-5.65	---	PASS
SRD	Ant1	2420	30~1000	-5.65	-62.6	≤-25.65	PASS
SRD	Ant1	2420	1000~26500	-5.65	-49.45	≤-25.65	PASS
SRD	Ant1	2445	0~Reference	-6.98	-6.98	---	PASS
SRD	Ant1	2445	30~1000	-6.98	-62.97	≤-26.98	PASS
SRD	Ant1	2445	1000~26500	-6.98	-49.02	≤-26.98	PASS
SRD	Ant1	2475	0~Reference	-5.88	-5.88	---	PASS
SRD	Ant1	2475	30~1000	-5.88	-62.72	≤-25.88	PASS
SRD	Ant1	2475	1000~26500	-8.11	-49.86	≤-28.11	PASS

Test Graphs





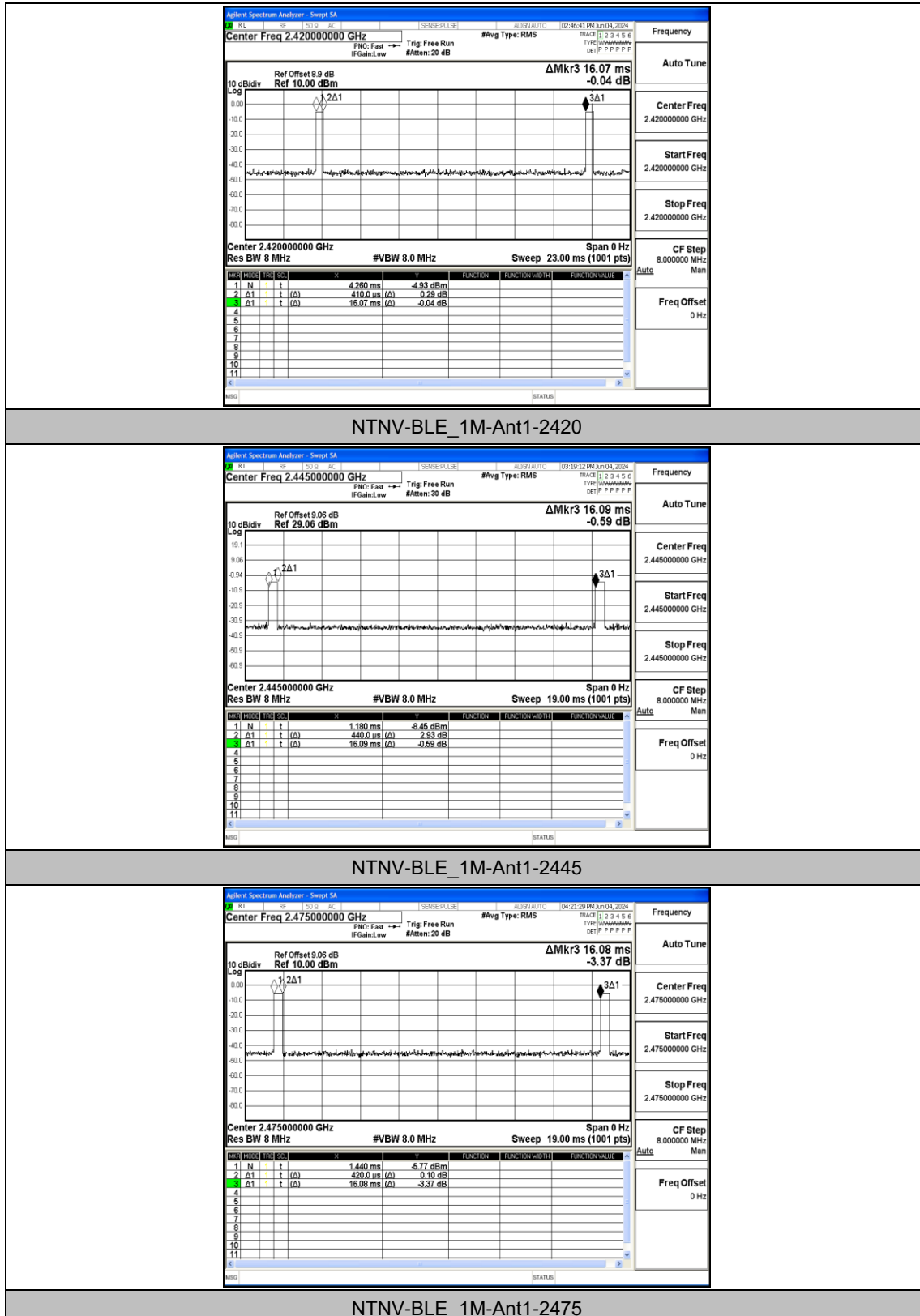


Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Frequency [MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
SRD	Ant1	2420	0.41	16.07	2.55	15.93
SRD	Ant1	2445	0.44	16.09	2.73	15.64
SRD	Ant1	2475	0.42	16.08	2.61	15.83

Test Graphs



Appendix H: Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
SRD	Ant1	Low	2420	Peak	2390.000	-50.17	≤-21.20	45.03	≤74	PASS
SRD	Ant1	Low	2420	Peak	2310.000	-50.75	≤-21.20	44.45	≤74	PASS
SRD	Ant1	Low	2420	Peak	2389.175	-45.09	≤-21.20	50.11	≤74	PASS
SRD	Ant1	Low	2420	AV	2390.000	-44.52	≤-41.20	50.68	≤54	PASS
SRD	Ant1	Low	2420	AV	2310.000	-44.54	≤-41.20	50.66	≤54	PASS
SRD	Ant1	Low	2420	AV	2351.906	-43.54	≤-41.20	51.66	≤54	PASS
SRD	Ant1	High	2475	Peak	2483.500	-40.85	≤-21.20	54.35	≤74	PASS
SRD	Ant1	High	2475	Peak	2500.000	-48.14	≤-21.20	47.06	≤74	PASS
SRD	Ant1	High	2475	Peak	2484.080	-36.54	≤-21.20	58.66	≤74	PASS
SRD	Ant1	High	2475	AV	2483.500	-43.7	≤-41.20	51.50	≤54	PASS
SRD	Ant1	High	2475	AV	2500.000	-43.94	≤-41.20	51.26	≤54	PASS
SRD	Ant1	High	2475	AV	2483.600	-42.17	≤-41.20	53.03	≤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

