

Appendix Test Data for SRD (Conducted Measurement)

Product Name: Wireless Mechanical Keyboard

Trade Mark: Keychron

Test Model: Q1 MAX

FCC ID: 2ASF4-Q1MAX

Environmental Conditions

Temperature:	22.8° C
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
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	2402	1.260	2401.360	2402.620	0.5	PASS
SRD	Ant1	2440	1.412	2439.324	2440.736	0.5	PASS
SRD	Ant1	2480	1.320	2479.356	2480.676	0.5	PASS

Test Graphs

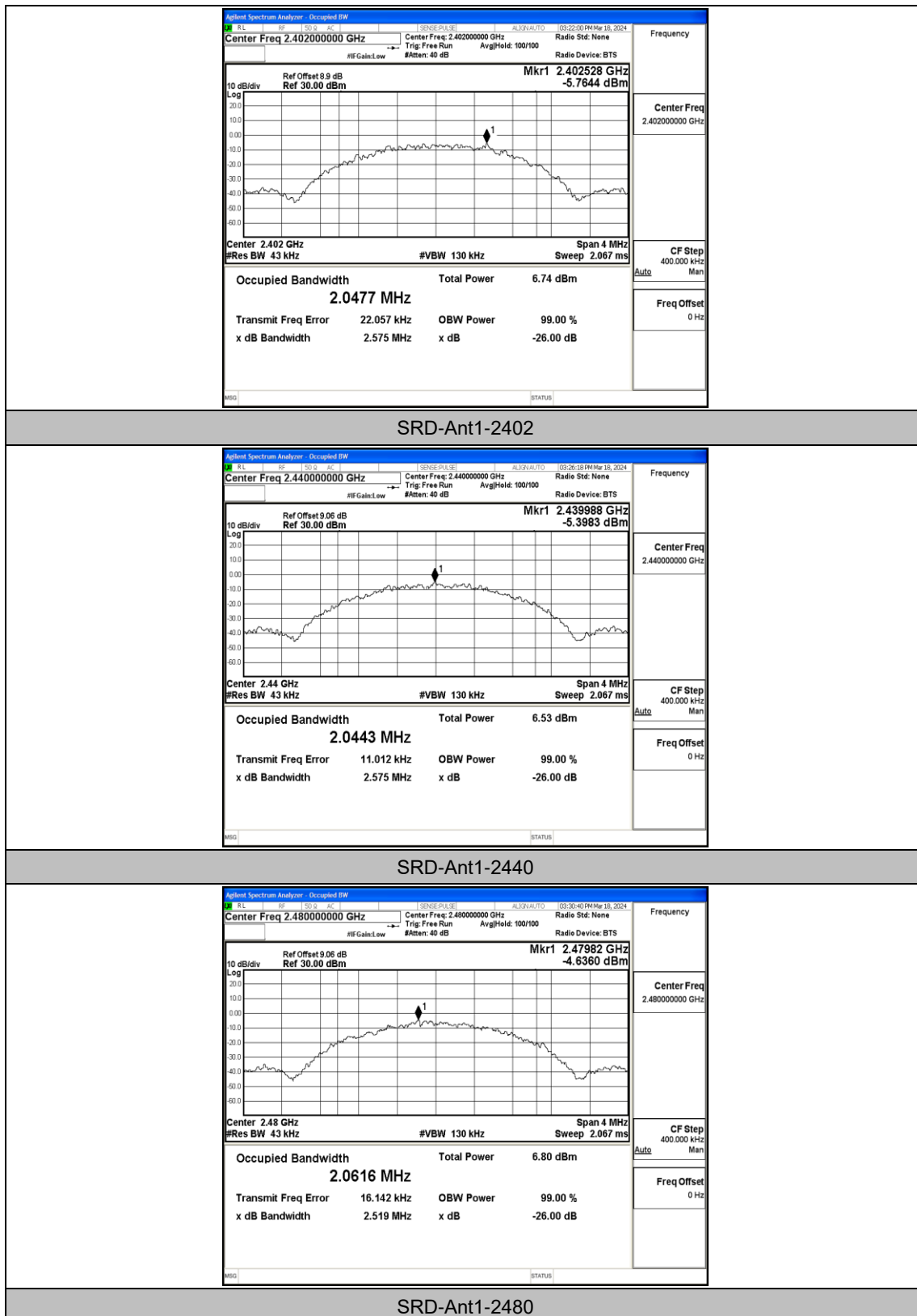


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
SRD	Ant1	2402	2.0477	2400.9982	2403.0459	---	---
SRD	Ant1	2440	2.0443	2438.9889	2441.0332	---	---
SRD	Ant1	2480	2.0616	2478.9853	2481.0469	---	---

Test Graphs

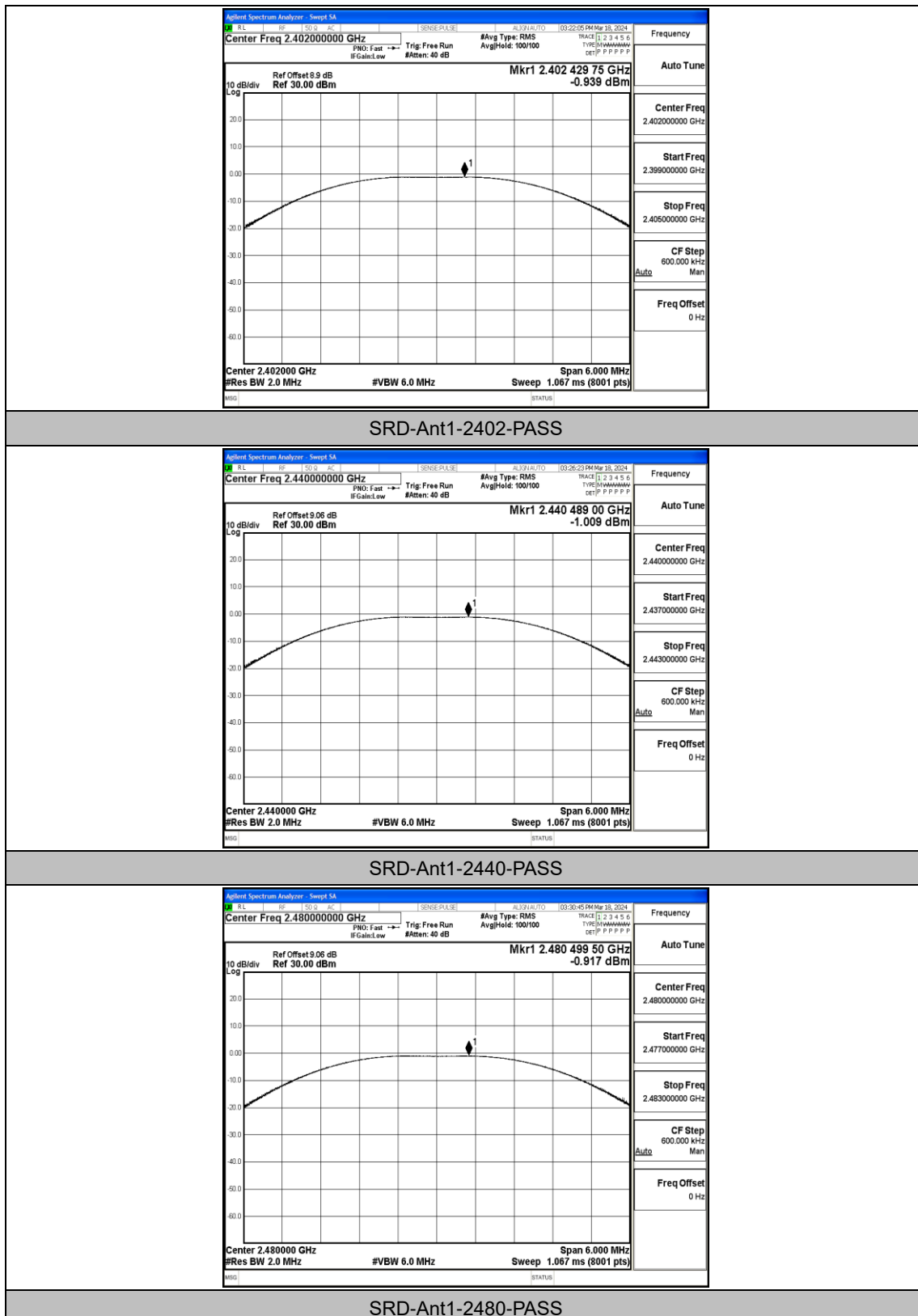


Appendix C: Maximum peak conducted output power

Test Result Peak

TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
SRD	Ant1	2402	-0.94	≤30	PASS
SRD	Ant1	2440	-1.01	≤30	PASS
SRD	Ant1	2480	-0.92	≤30	PASS

Test Graphs Peak

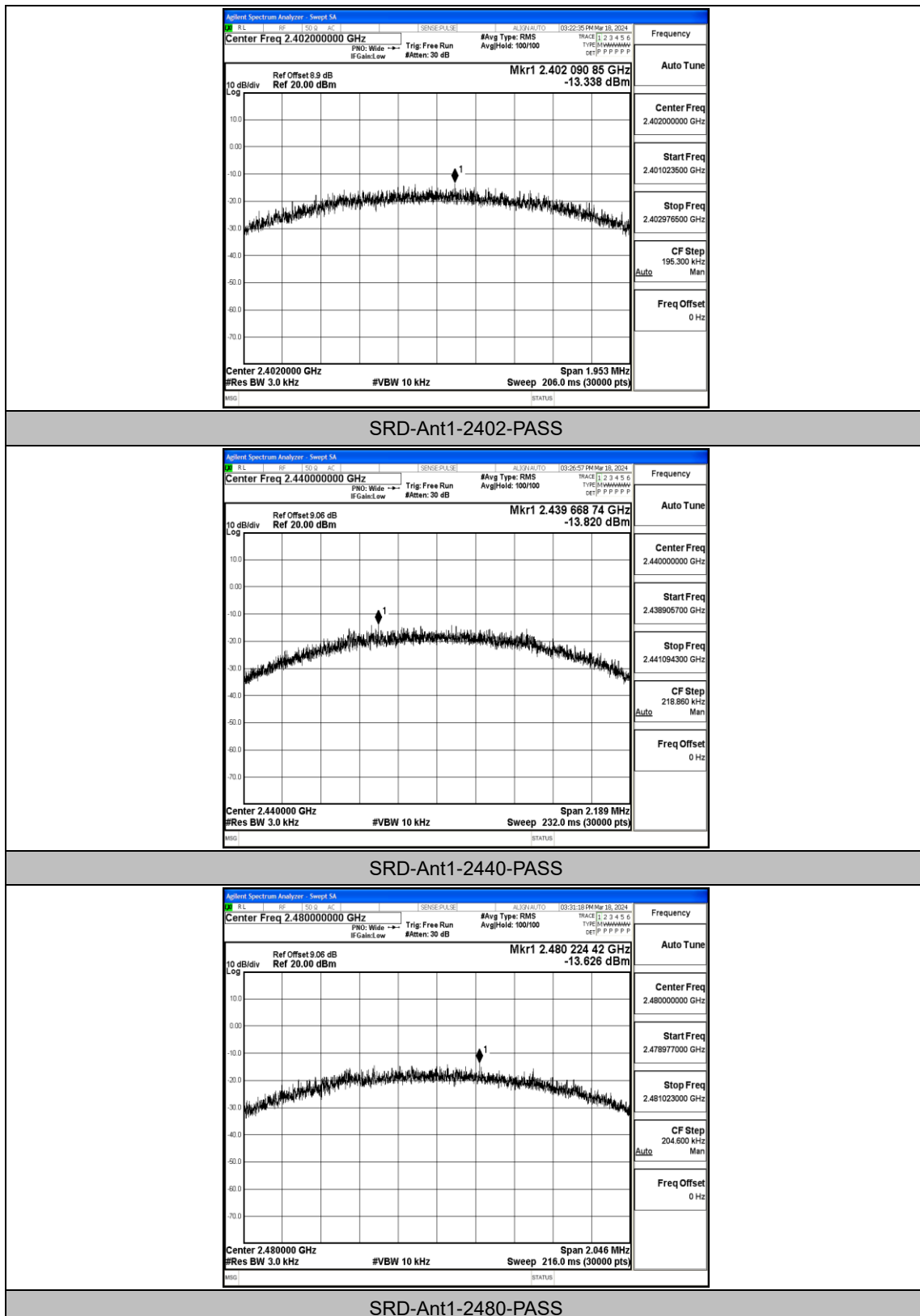


Appendix D: Maximum peak power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
SRD	Ant1	2402	-13.34	≤8.00	PASS
SRD	Ant1	2440	-13.82	≤8.00	PASS
SRD	Ant1	2480	-13.63	≤8.00	PASS

Test Graphs

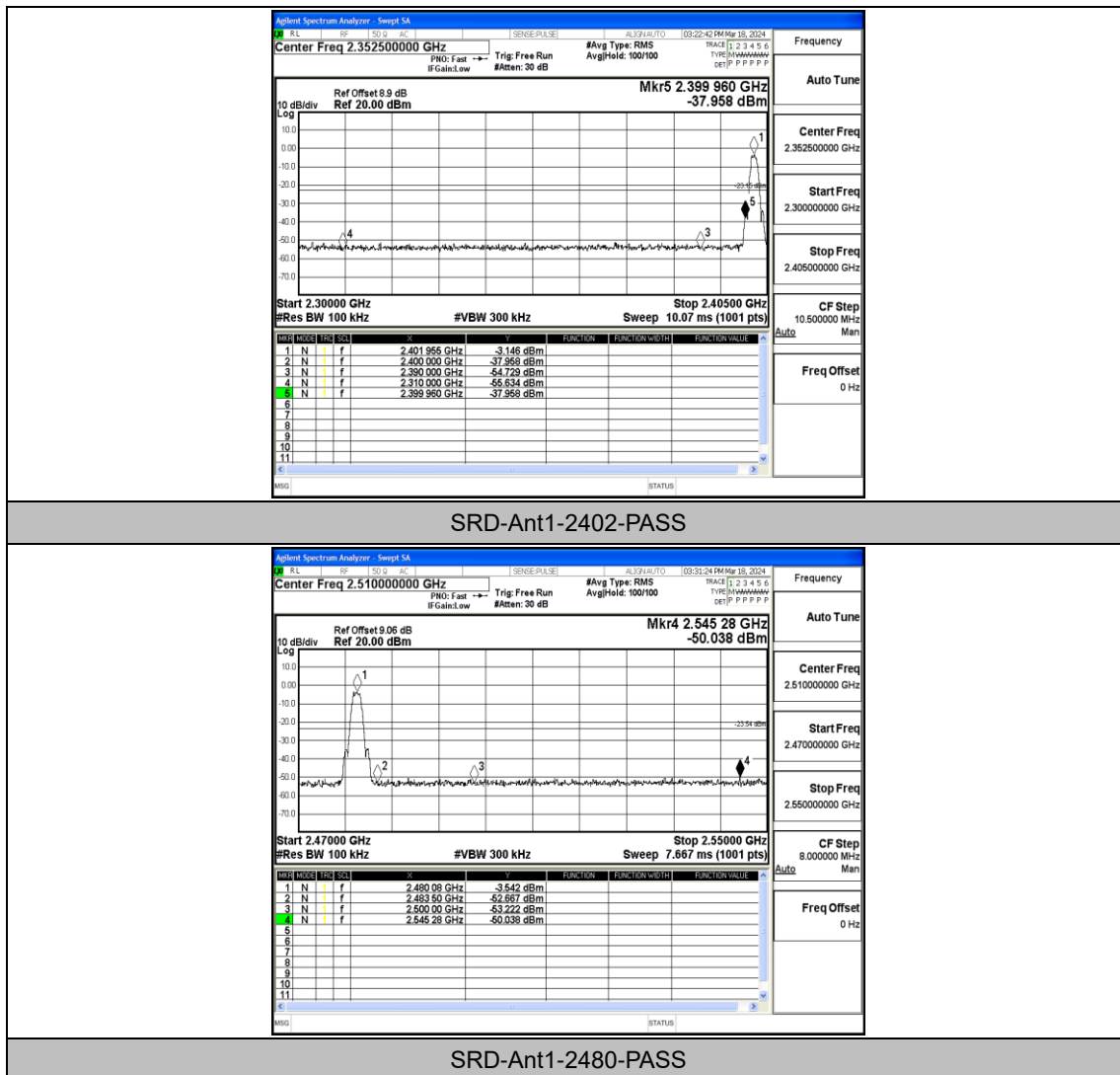


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	Channel	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
SRD	Ant1	Low	2402	-3.15	-37.96	≤-23.15	PASS
SRD	Ant1	High	2480	-3.54	-50.04	≤-23.54	PASS

Test Graphs

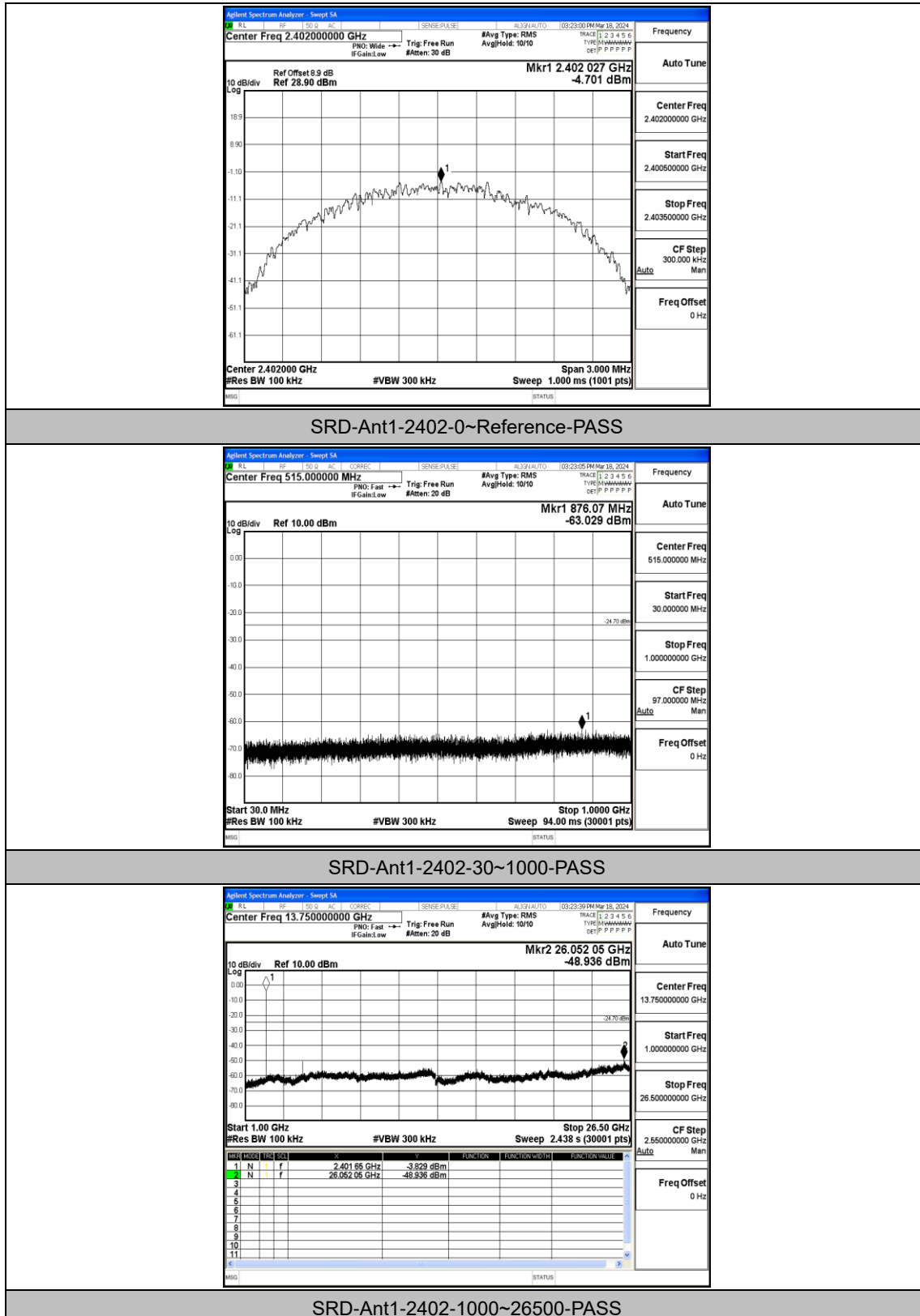


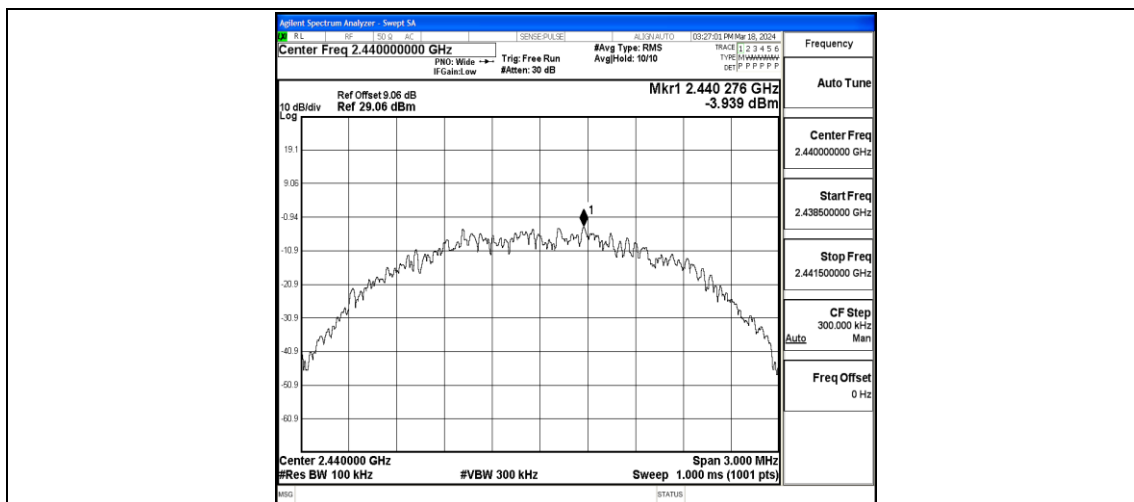
Appendix F: Conducted Spurious Emission

Test Result

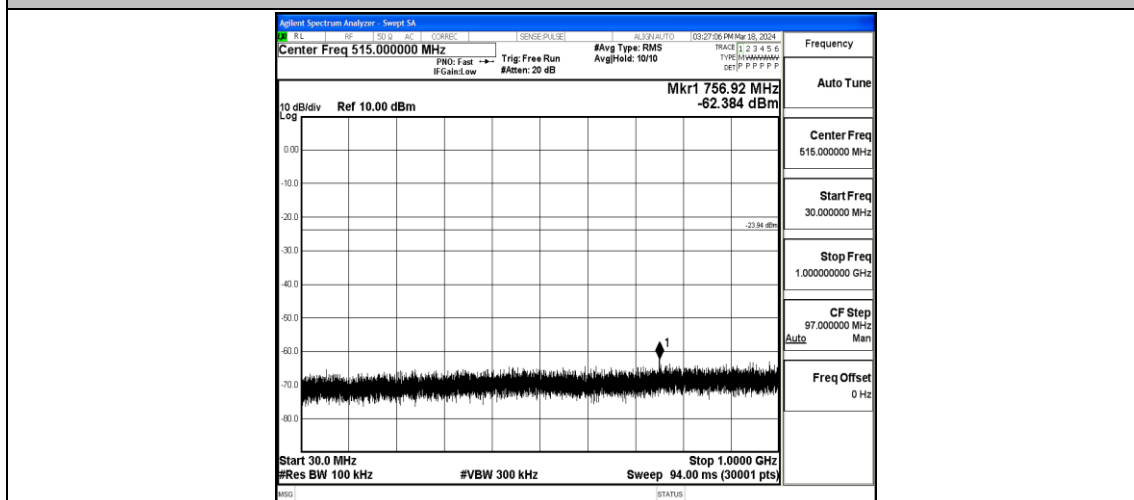
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
SRD	Ant1	2402	0~Reference	-4.70	-4.70	---	PASS
SRD	Ant1	2402	30~1000	-4.70	-63.03	≤-24.7	PASS
SRD	Ant1	2402	1000~26500	-4.70	-48.94	≤-24.7	PASS
SRD	Ant1	2440	0~Reference	-3.94	-3.94	---	PASS
SRD	Ant1	2440	30~1000	-3.94	-62.38	≤-23.94	PASS
SRD	Ant1	2440	1000~26500	-3.94	-50.11	≤-23.94	PASS
SRD	Ant1	2480	0~Reference	-3.76	-3.76	---	PASS
SRD	Ant1	2480	30~1000	-3.76	-63.08	≤-23.76	PASS
SRD	Ant1	2480	1000~26500	-3.76	-50.89	≤-23.76	PASS

Test Graphs

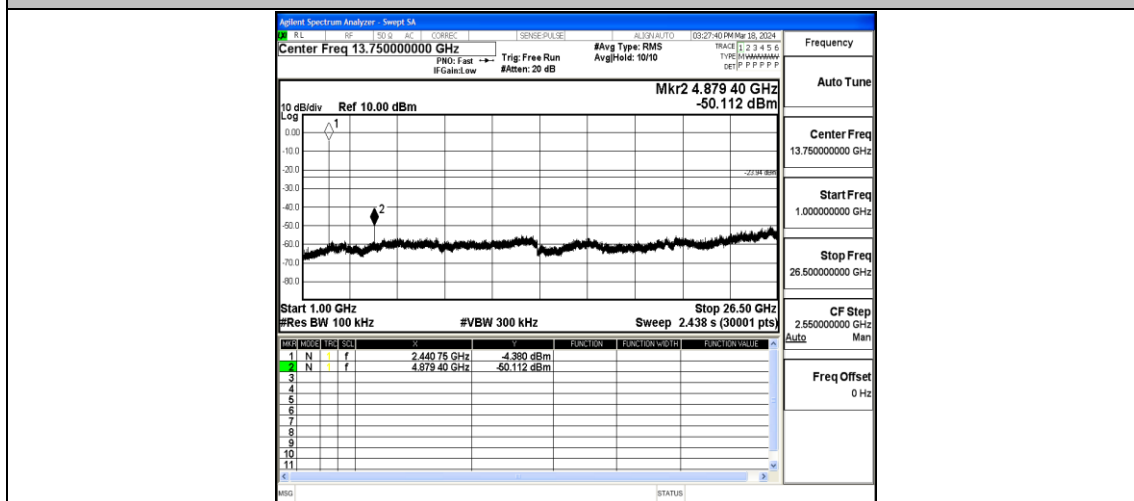




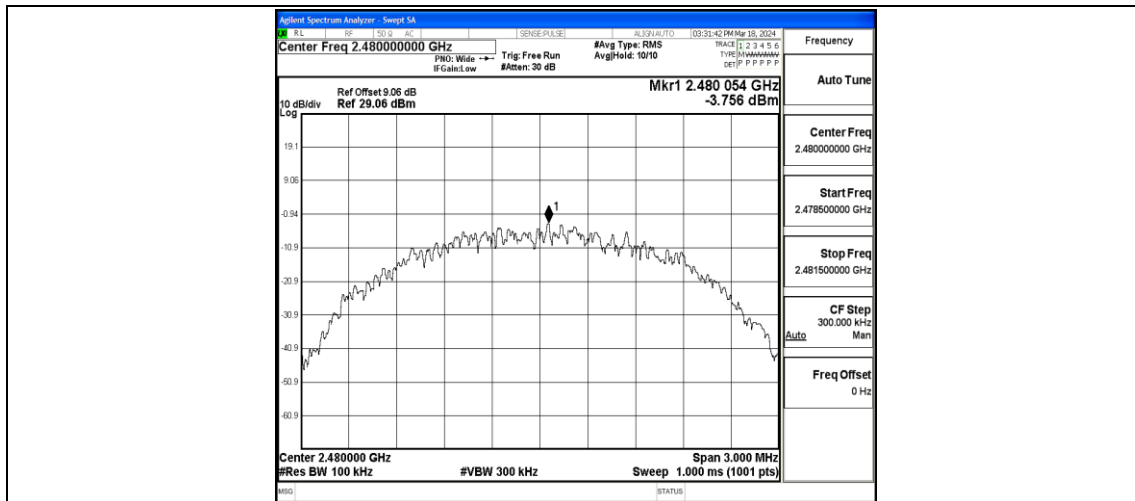
SRD-Ant1-2440-0~Reference-PASS



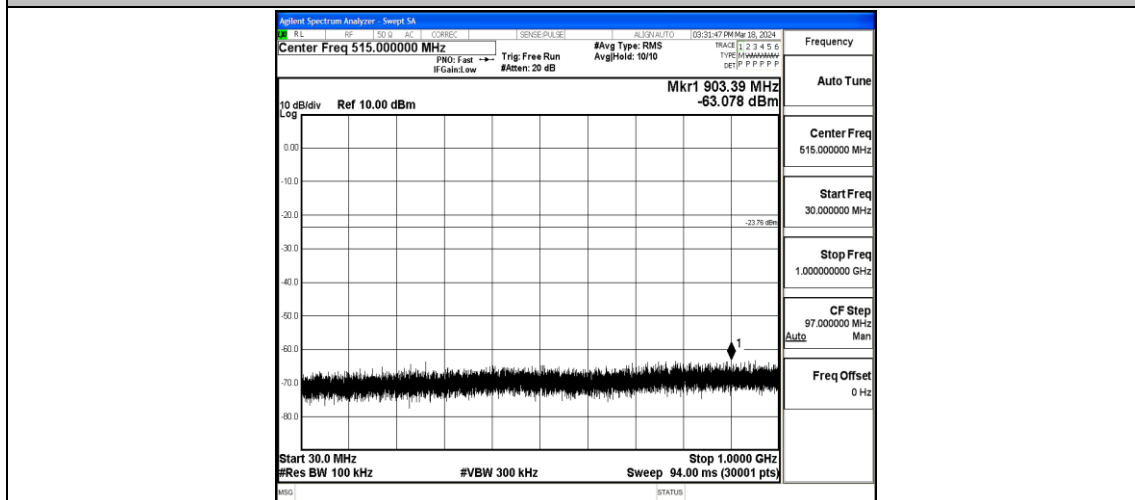
SRD-Ant1-2440-30~1000-PASS



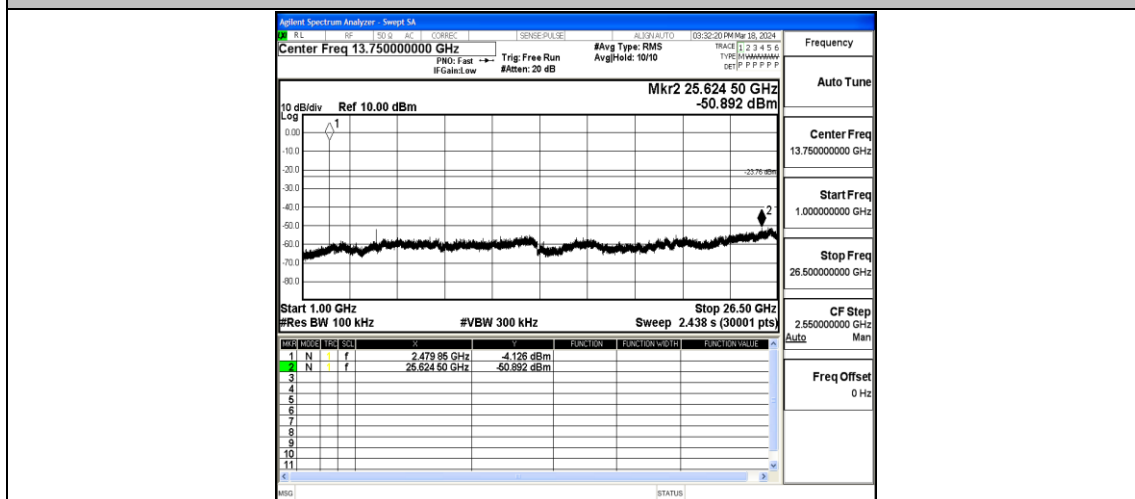
SRD-Ant1-2440-1000~26500-PASS



SRD-Ant1-2480-0~Reference-PASS



SRD-Ant1-2480-30~1000-PASS



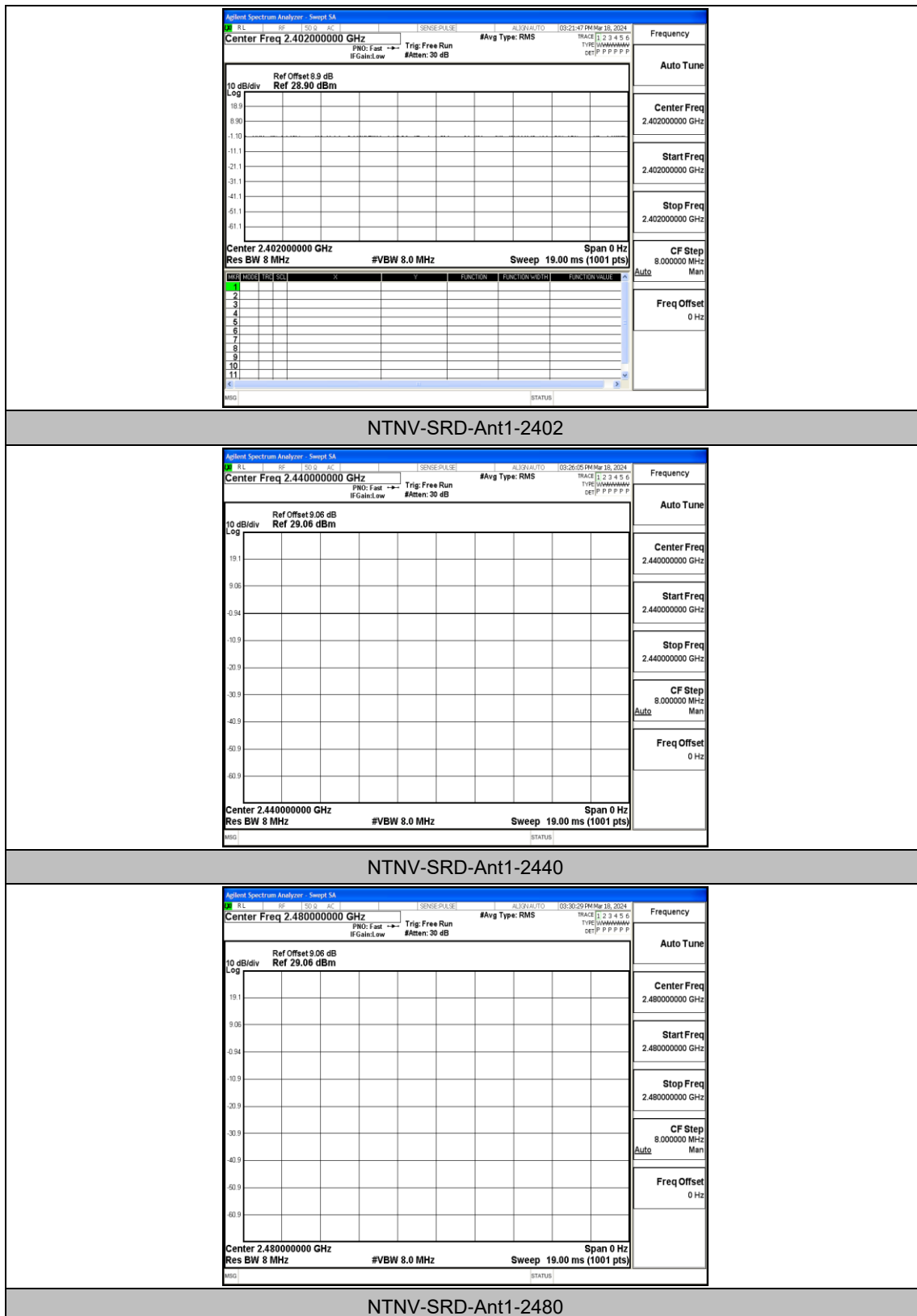
SRD-Ant1-2480-1000~26500-PASS

Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
SRD	Ant1	2402	19.00	19.00	100.00	0.00
SRD	Ant1	2440	19.00	19.00	100.00	0.00
SRD	Ant1	2480	19.00	19.00	100.00	0.00

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	2402	Peak	2390.000	-43.17	≤-21.20	52.03	≤74	PASS
SRD	Ant1	Low	2402	Peak	2310.000	-45.59	≤-21.20	49.61	≤74	PASS
SRD	Ant1	Low	2402	Peak	2311.760	-38.42	≤-21.20	56.78	≤74	PASS
SRD	Ant1	Low	2402	AV	2390.000	-49.33	≤-41.20	45.87	≤54	PASS
SRD	Ant1	Low	2402	AV	2310.000	-49.88	≤-41.20	45.32	≤54	PASS
SRD	Ant1	Low	2402	AV	2389.040	-48.45	≤-41.20	46.75	≤54	PASS
SRD	Ant1	High	2480	Peak	2483.500	-43.37	≤-21.20	51.83	≤74	PASS
SRD	Ant1	High	2480	Peak	2500.000	-44.59	≤-21.20	50.61	≤74	PASS
SRD	Ant1	High	2480	Peak	2494.720	-38.99	≤-21.20	56.21	≤74	PASS
SRD	Ant1	High	2480	AV	2483.500	-47.82	≤-41.20	47.38	≤54	PASS
SRD	Ant1	High	2480	AV	2500.000	-48.55	≤-41.20	46.65	≤54	PASS
SRD	Ant1	High	2480	AV	2493.040	-47.76	≤-41.20	47.44	≤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

