

Appendix Test Data for SRD (Conducted Measurement)

Product Name: Wireless Mechanical Keyboard

Trade Mark: Keychron

Test Model: Q3 MAX

FCC ID: 2ASF4-Q3MAX

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	1.412	2401.316	2402.728	0.5	PASS
SRD	Ant1	2440	1.328	2439.368	2440.696	0.5	PASS
SRD	Ant1	2480	1.404	2479.300	2480.704	0.5	PASS

Test Graphs

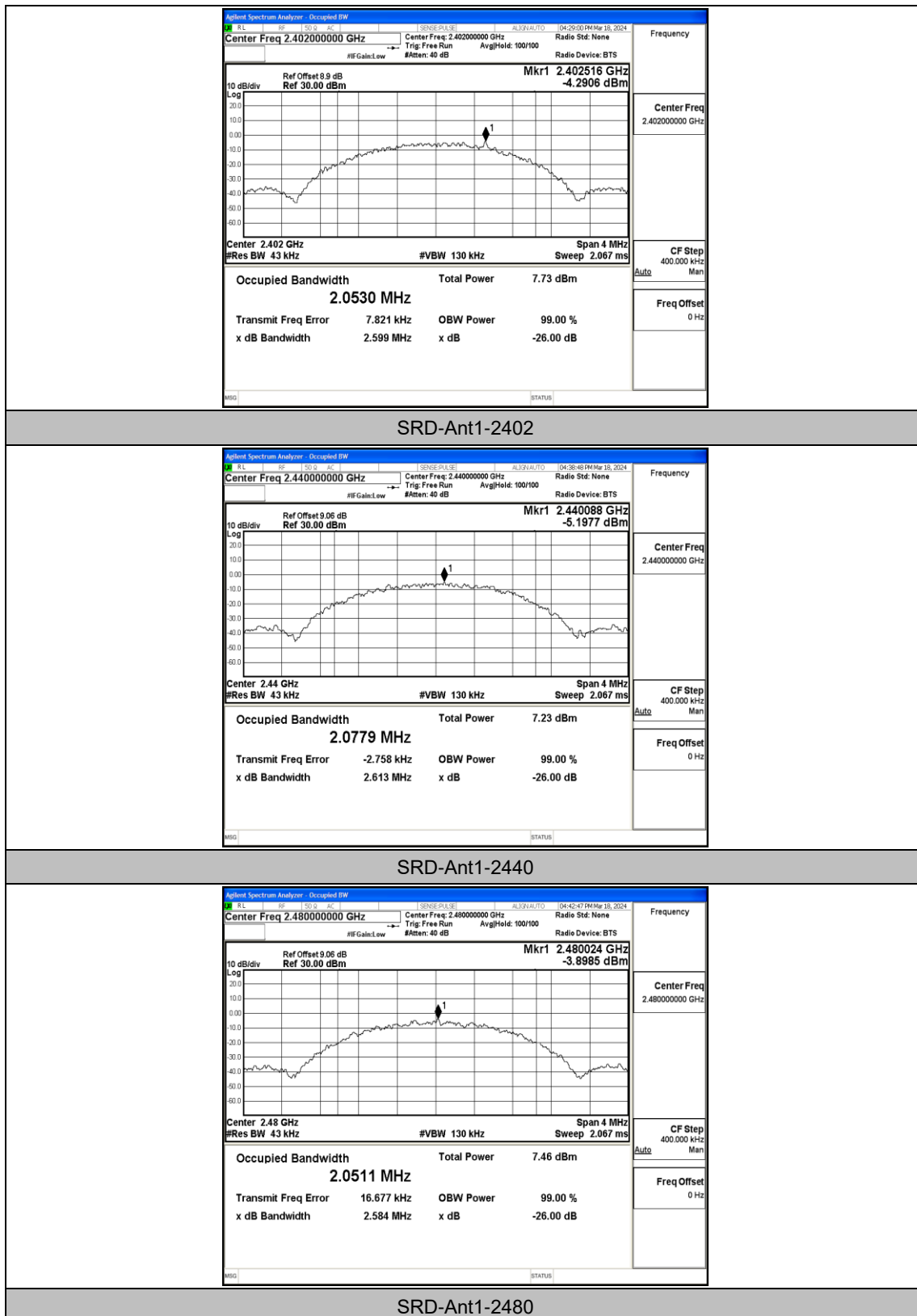


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
SRD	Ant1	2402	2.0530	2400.9813	2403.0343	---	---
SRD	Ant1	2440	2.0779	2438.9583	2441.0362	---	---
SRD	Ant1	2480	2.0511	2478.9911	2481.0422	---	---

Test Graphs

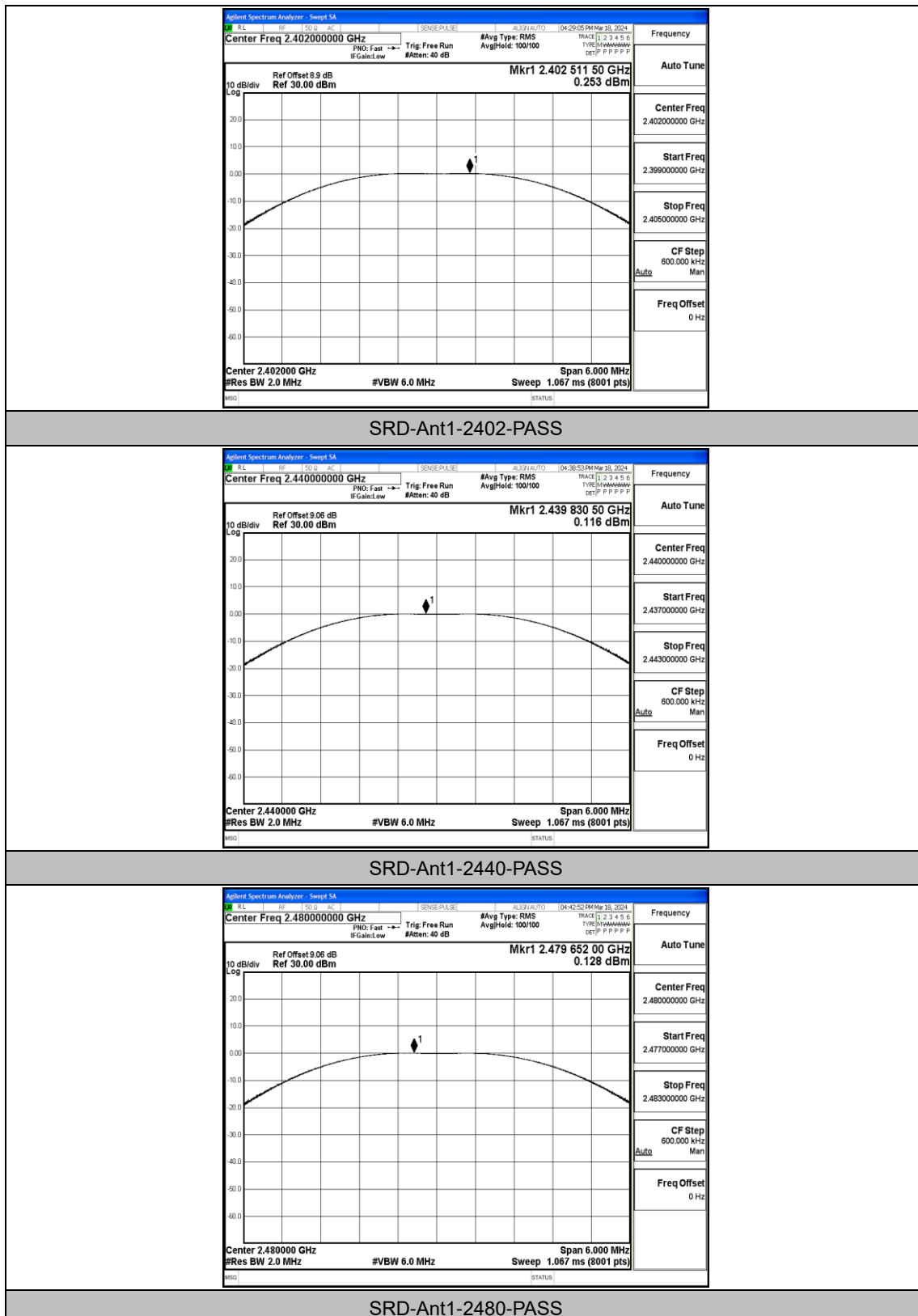


Appendix C: Maximum peak conducted output power

Test Result Peak

TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
SRD	Ant1	2402	0.25	≤30	PASS
SRD	Ant1	2440	0.12	≤30	PASS
SRD	Ant1	2480	0.13	≤30	PASS

Test Graphs Peak

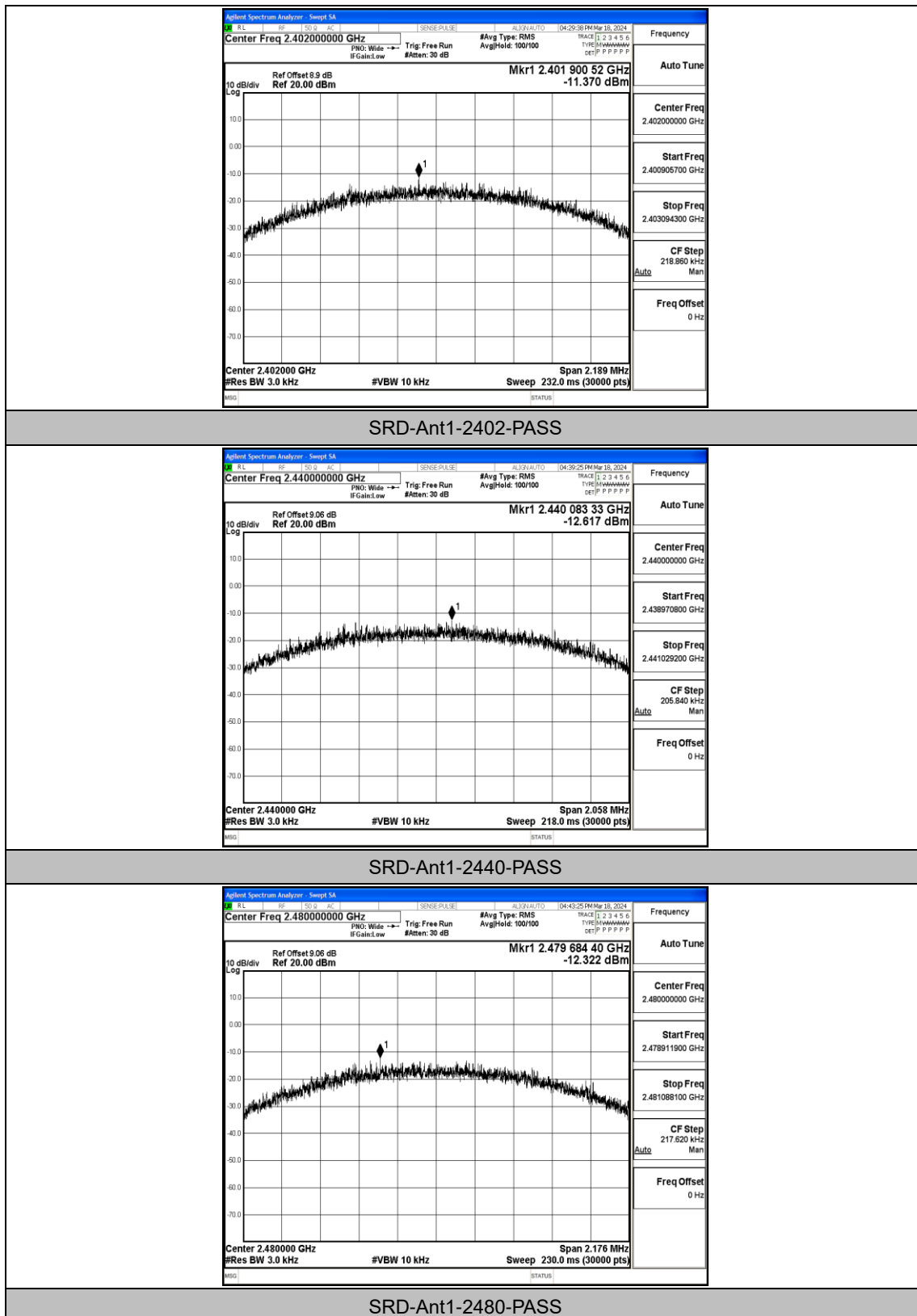


Appendix D: Maximum peak power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
SRD	Ant1	2402	-11.37	≤8.00	PASS
SRD	Ant1	2440	-12.62	≤8.00	PASS
SRD	Ant1	2480	-12.32	≤8.00	PASS

Test Graphs

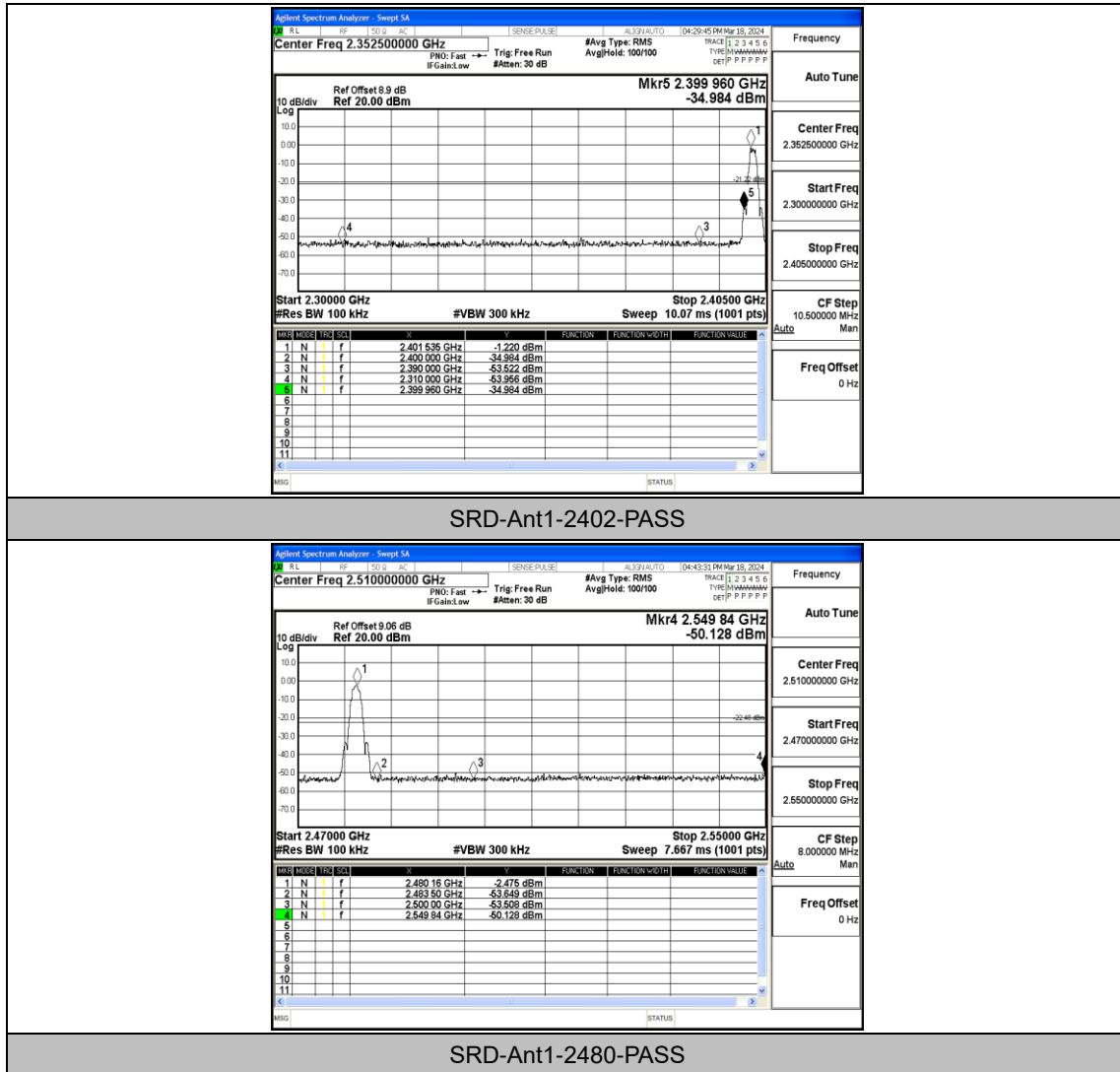


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	Channel	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
SRD	Ant1	Low	2402	-1.22	-34.98	≤-21.22	PASS
SRD	Ant1	High	2480	-2.48	-50.13	≤-22.48	PASS

Test Graphs

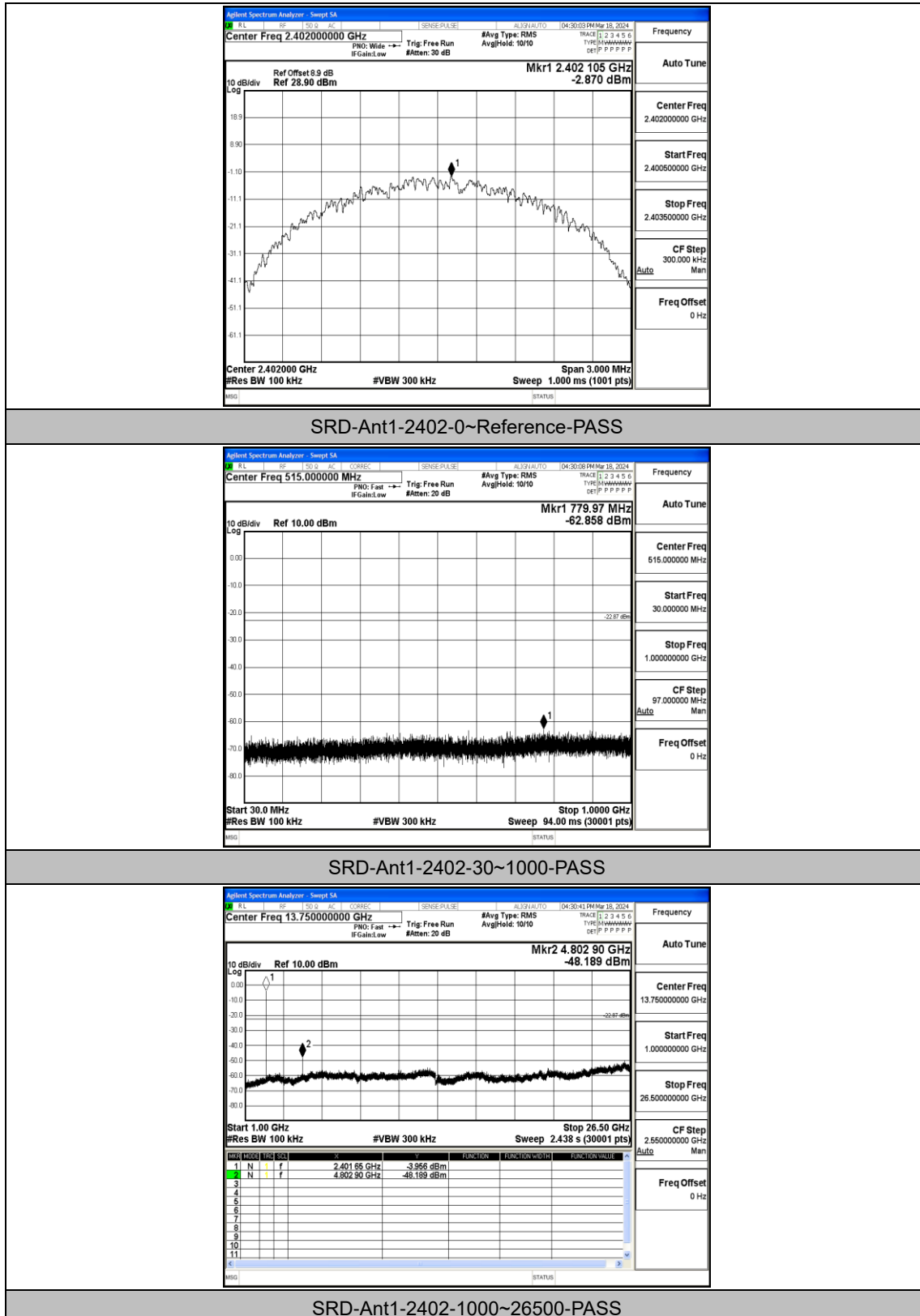


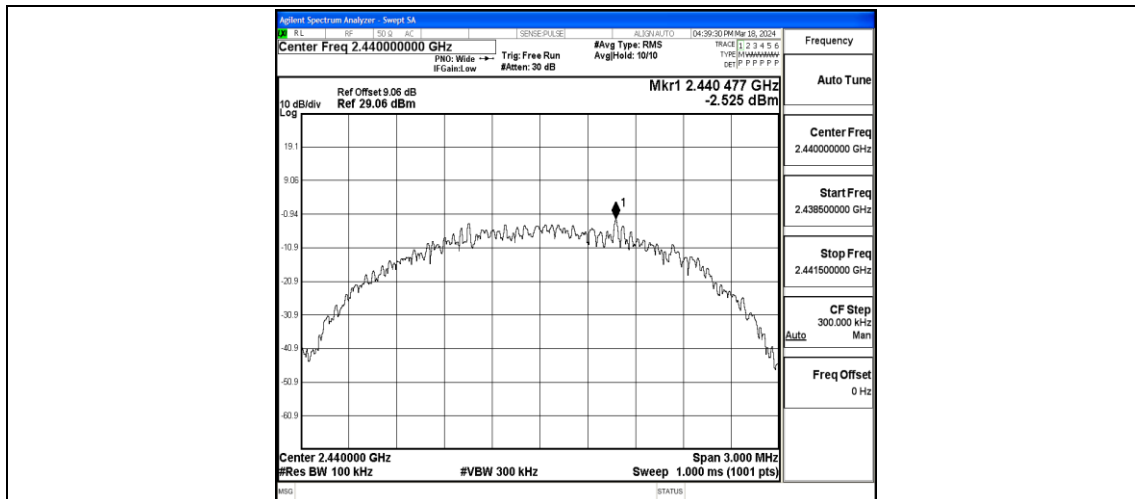
Appendix F: Conducted Spurious Emission

Test Result

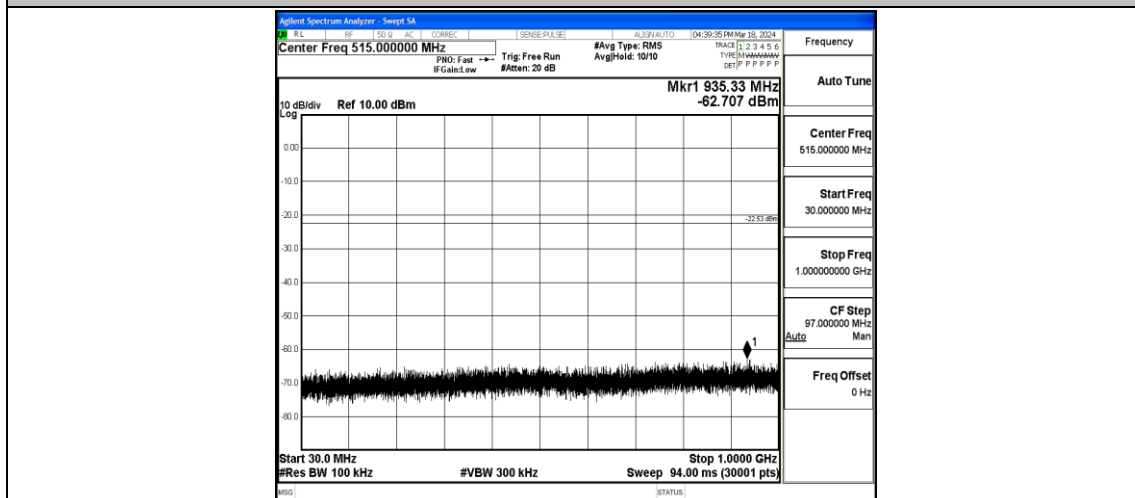
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
SRD	Ant1	2402	0~Reference	-2.87	-2.87	---	PASS
SRD	Ant1	2402	30~1000	-2.87	-62.86	≤-22.87	PASS
SRD	Ant1	2402	1000~26500	-2.87	-48.19	≤-22.87	PASS
SRD	Ant1	2440	0~Reference	-2.53	-2.53	---	PASS
SRD	Ant1	2440	30~1000	-2.53	-62.71	≤-22.53	PASS
SRD	Ant1	2440	1000~26500	-2.53	-47.63	≤-22.53	PASS
SRD	Ant1	2480	0~Reference	-3.20	-3.20	---	PASS
SRD	Ant1	2480	30~1000	-3.20	-63.48	≤-23.2	PASS
SRD	Ant1	2480	1000~26500	-3.20	-48.69	≤-23.2	PASS

Test Graphs

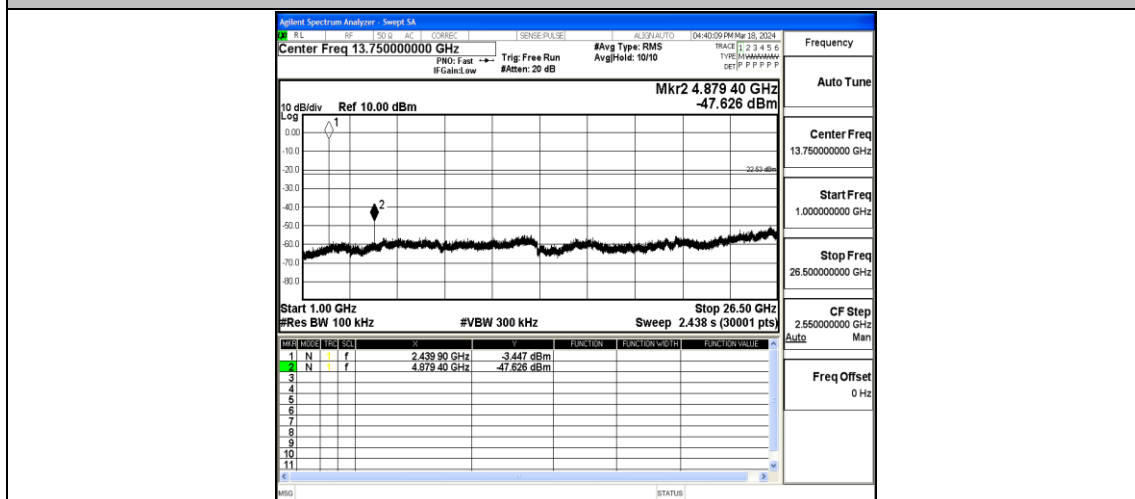




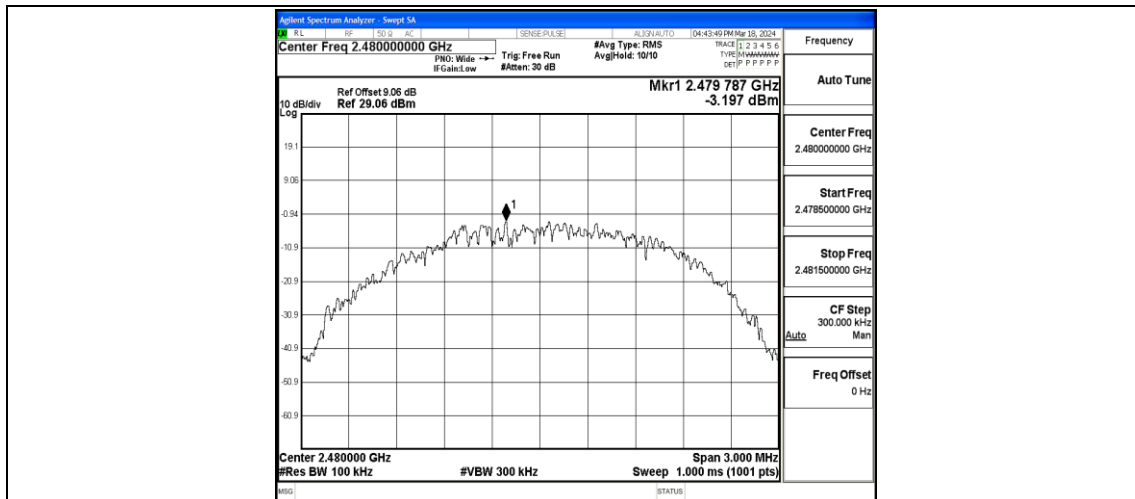
SRD-Ant1-2440-0~Reference-PASS



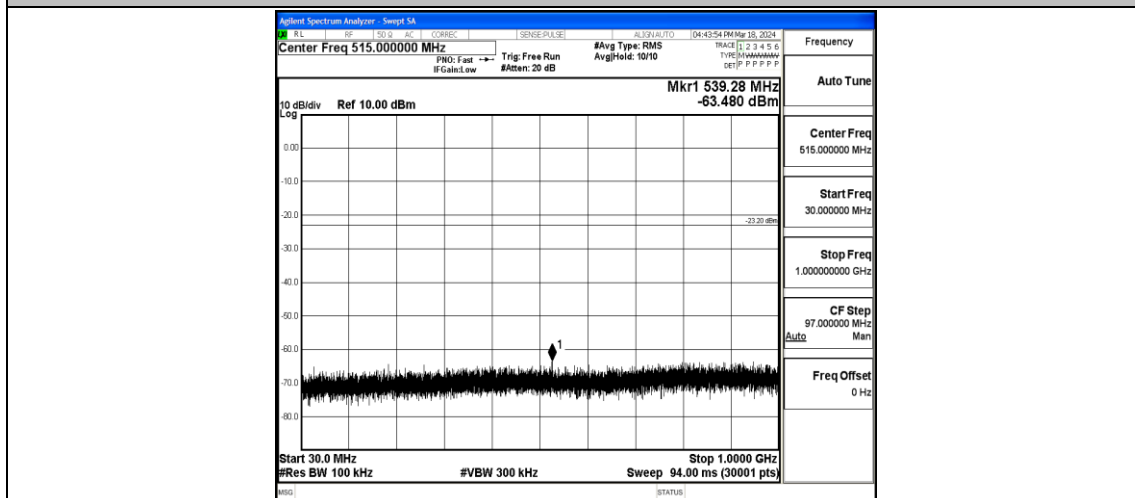
SRD-Ant1-2440-30~1000-PASS



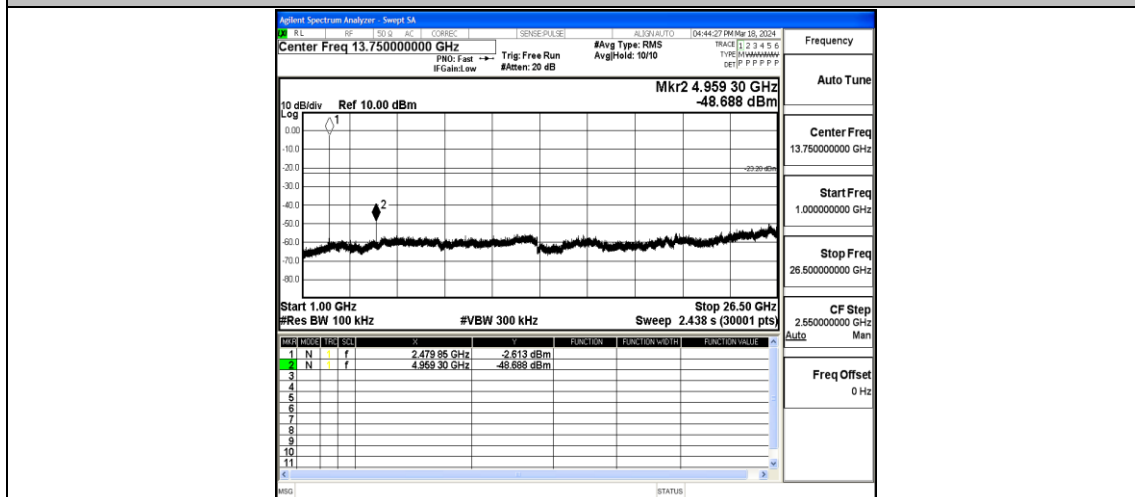
SRD-Ant1-2440-1000~26500-PASS



SRD-Ant1-2480-0~Reference-PASS



SRD-Ant1-2480-30~1000-PASS



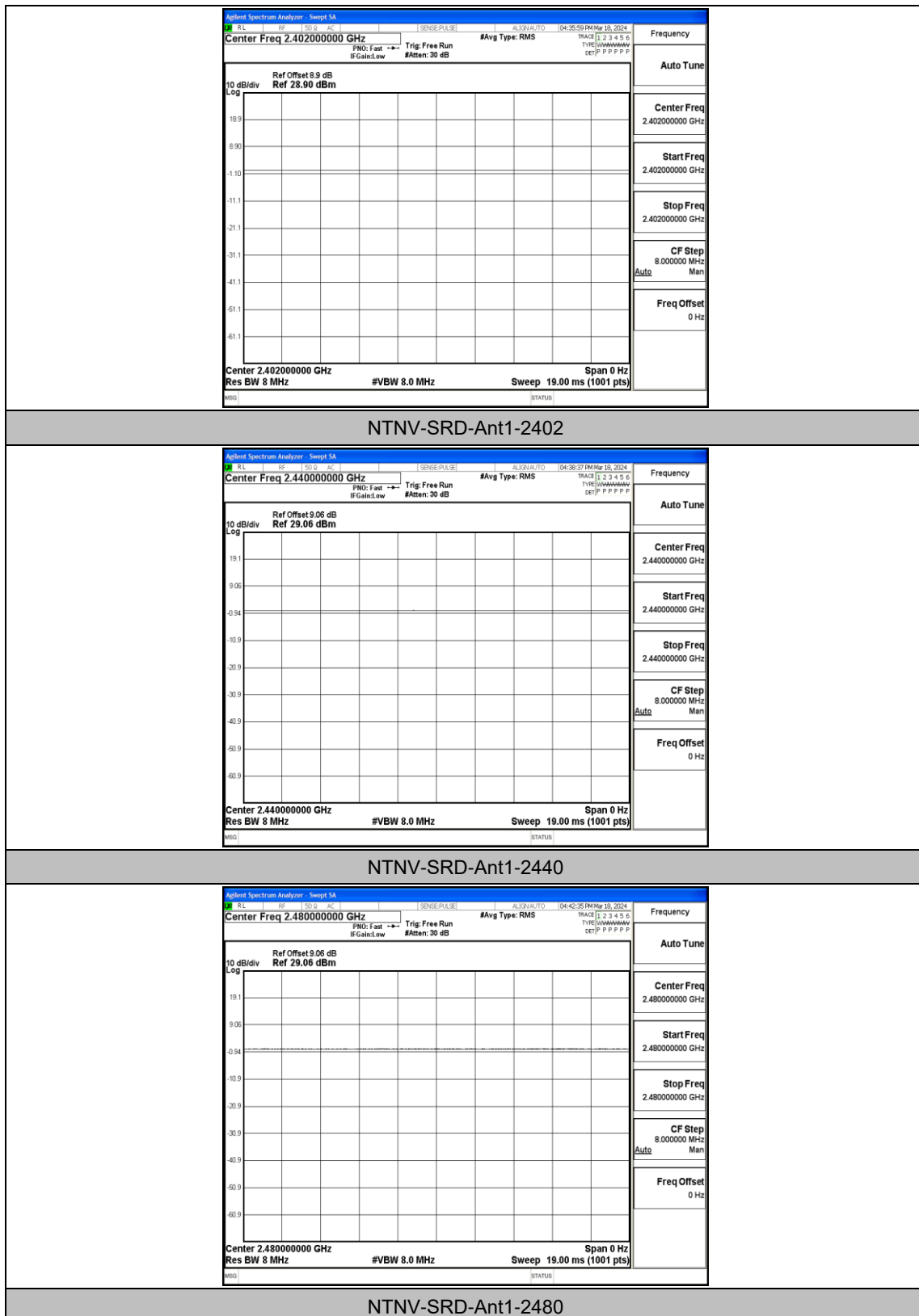
SRD-Ant1-2480-1000~26500-PASS

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
SRD	Ant1	2440	19.00	19.00	100.00	0
SRD	Ant1	2480	19.00	19.00	100.00	0

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	-46.99	≤-21.20	48.21	≤74	PASS
SRD	Ant1	Low	2402	Peak	2310.000	-44.6	≤-21.20	50.60	≤74	PASS
SRD	Ant1	Low	2402	Peak	2348.195	-40.91	≤-21.20	54.29	≤74	PASS
SRD	Ant1	Low	2402	AV	2390.000	-50.37	≤-41.20	44.83	≤54	PASS
SRD	Ant1	Low	2402	AV	2310.000	-50.69	≤-41.20	44.51	≤54	PASS
SRD	Ant1	Low	2402	AV	2372.345	-49.7	≤-41.20	45.50	≤54	PASS
SRD	Ant1	High	2480	Peak	2483.500	-43.14	≤-21.20	52.06	≤74	PASS
SRD	Ant1	High	2480	Peak	2500.000	-42.59	≤-21.20	52.61	≤74	PASS
SRD	Ant1	High	2480	Peak	2494.800	-39.96	≤-21.20	55.24	≤74	PASS
SRD	Ant1	High	2480	AV	2483.500	-49.51	≤-41.20	45.69	≤54	PASS
SRD	Ant1	High	2480	AV	2500.000	-49.65	≤-41.20	45.55	≤54	PASS
SRD	Ant1	High	2480	AV	2496.800	-49.02	≤-41.20	46.18	≤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

