

Appendix Test Data for SRD (Conducted Measurement)

Product Name: Wireless Mechanical Keyboard

Trade Mark: Keychron

Test Model: Q5 MAX

FCC ID: 2ASF4-Q5MAX

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	1.264	2401.412	2402.676	0.5	PASS
SRD	Ant1	2440	1.240	2439.376	2440.616	0.5	PASS
SRD	Ant1	2480	1.368	2479.276	2480.644	0.5	PASS

Test Graphs

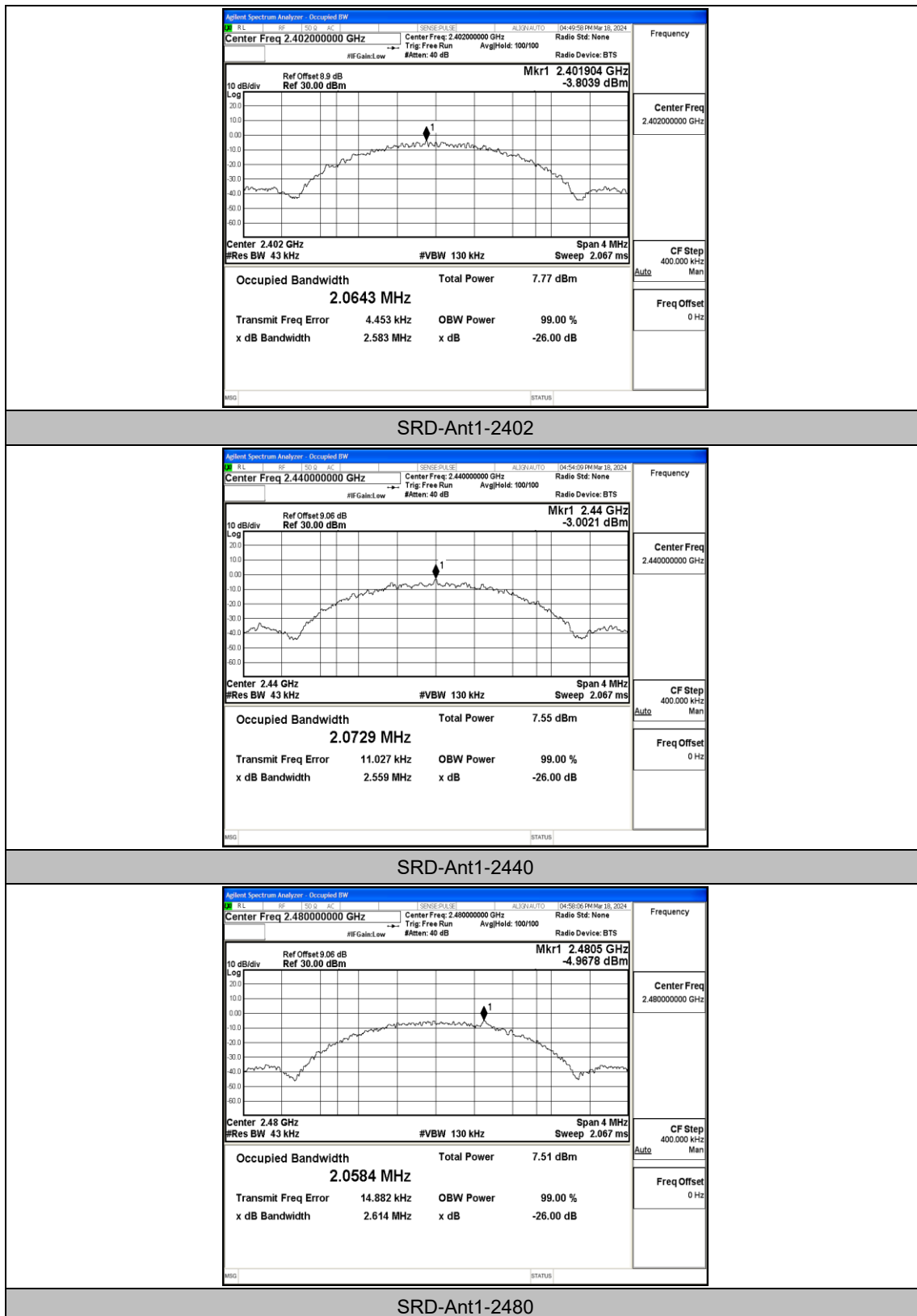


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
SRD	Ant1	2402	2.0643	2400.9723	2403.0366	---	---
SRD	Ant1	2440	2.0729	2438.9746	2441.0475	---	---
SRD	Ant1	2480	2.0584	2478.9857	2481.0441	---	---

Test Graphs

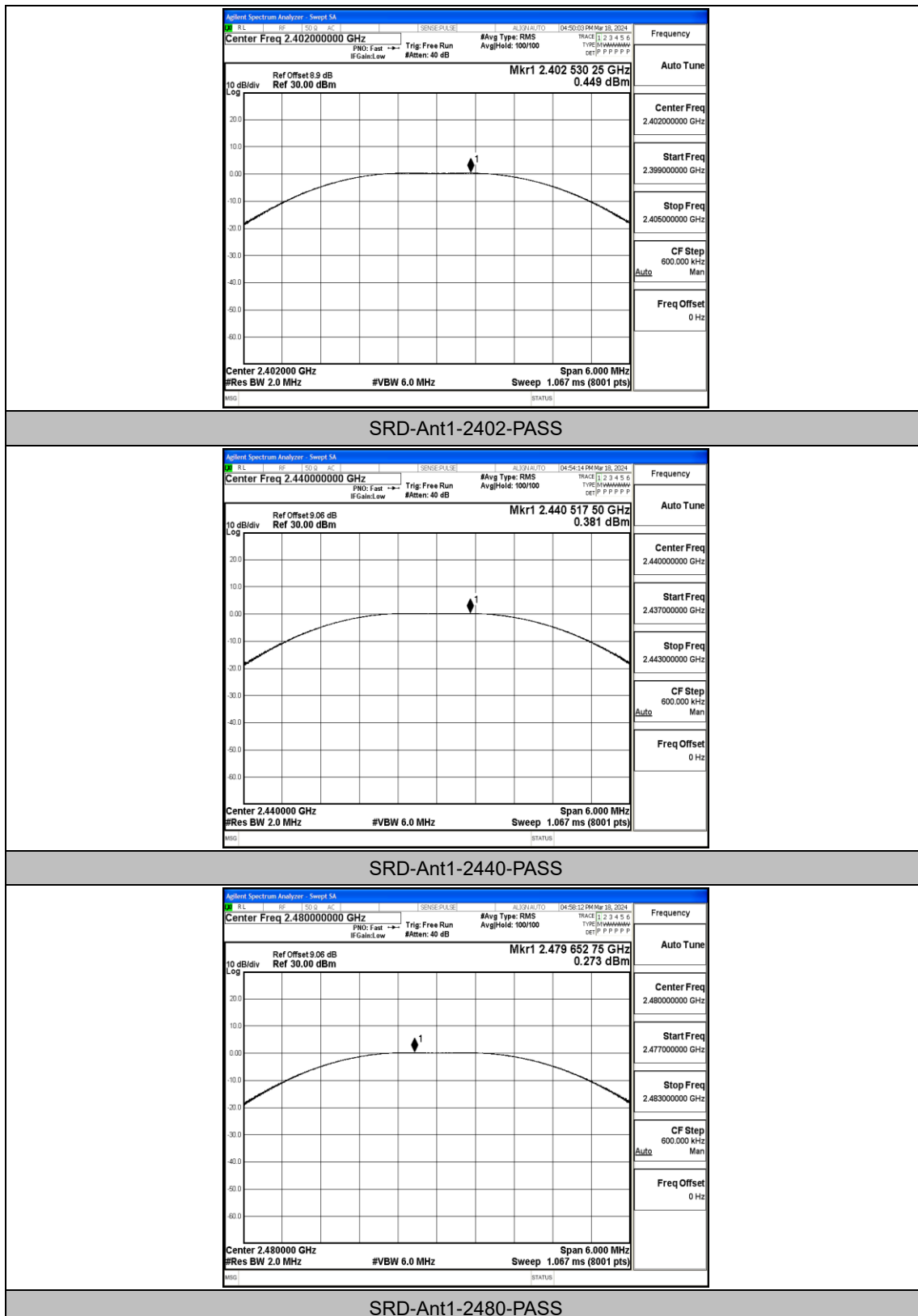


Appendix C: Maximum peak conducted output power

Test Result Peak

TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
SRD	Ant1	2402	0.45	≤30	PASS
SRD	Ant1	2440	0.38	≤30	PASS
SRD	Ant1	2480	0.27	≤30	PASS

Test Graphs Peak

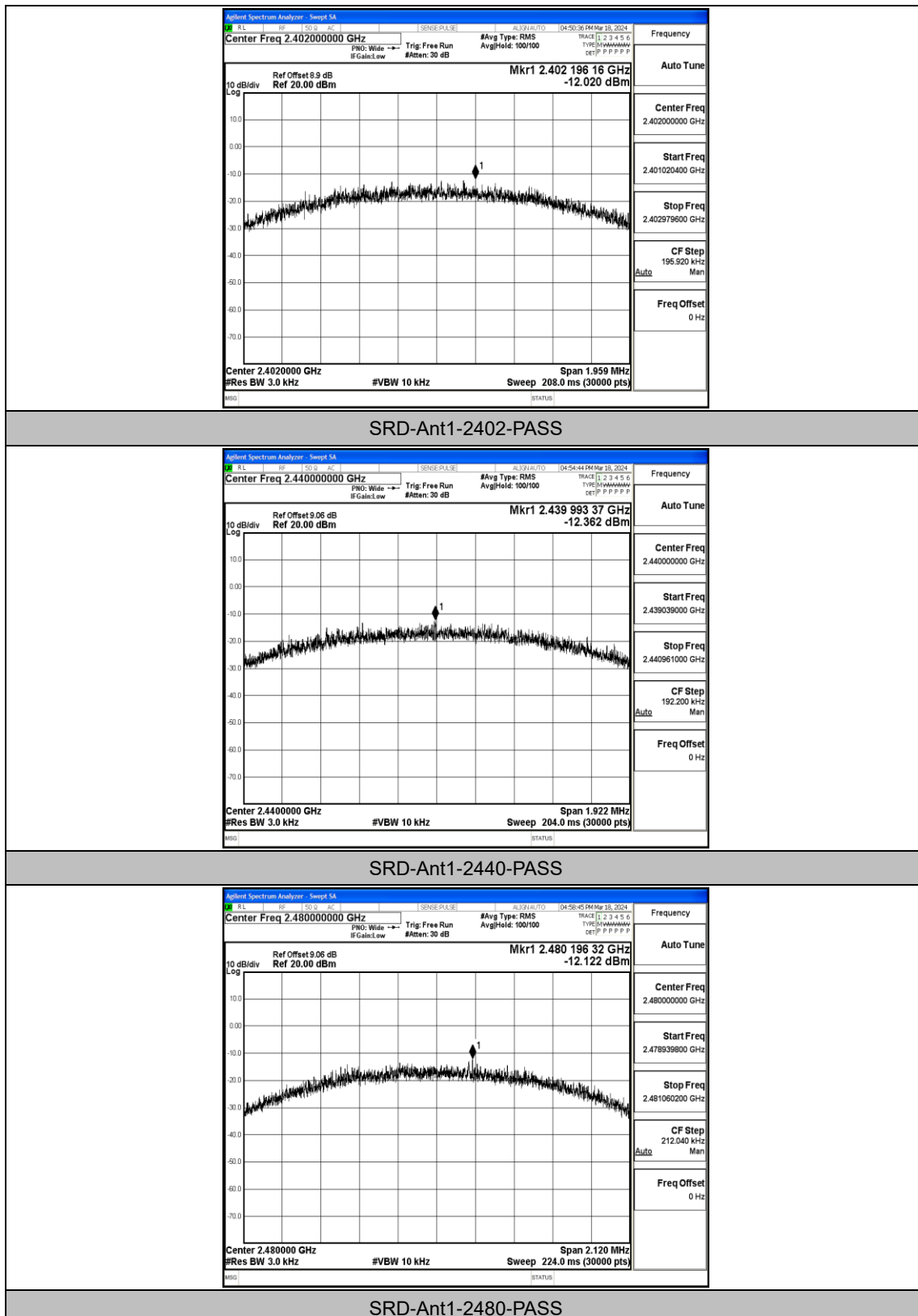


Appendix D: Maximum peak power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
SRD	Ant1	2402	-12.02	≤8.00	PASS
SRD	Ant1	2440	-12.36	≤8.00	PASS
SRD	Ant1	2480	-12.12	≤8.00	PASS

Test Graphs

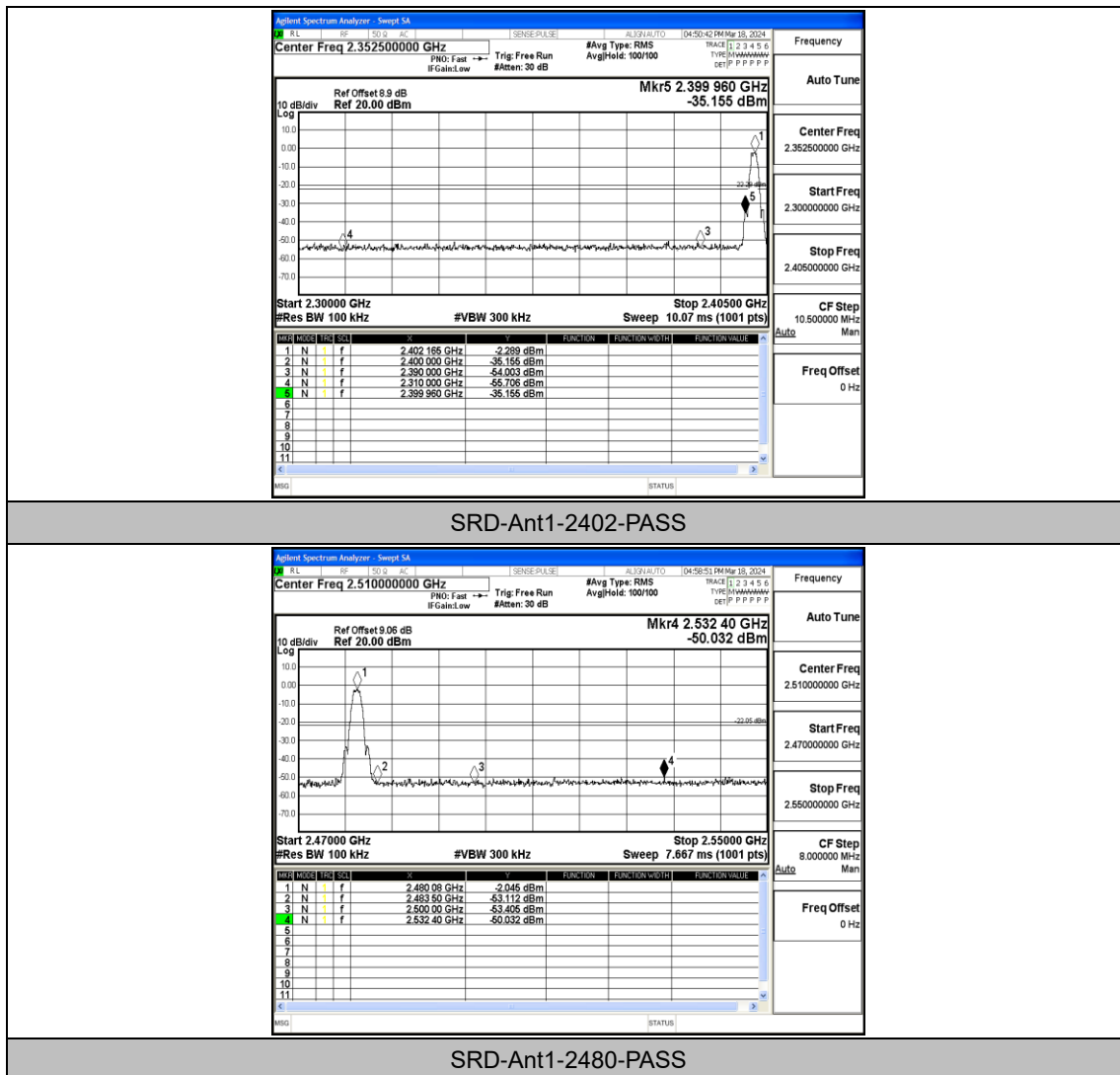


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	Channel	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
SRD	Ant1	Low	2402	-2.29	-35.16	≤-22.29	PASS
SRD	Ant1	High	2480	-2.05	-50.03	≤-22.05	PASS

Test Graphs

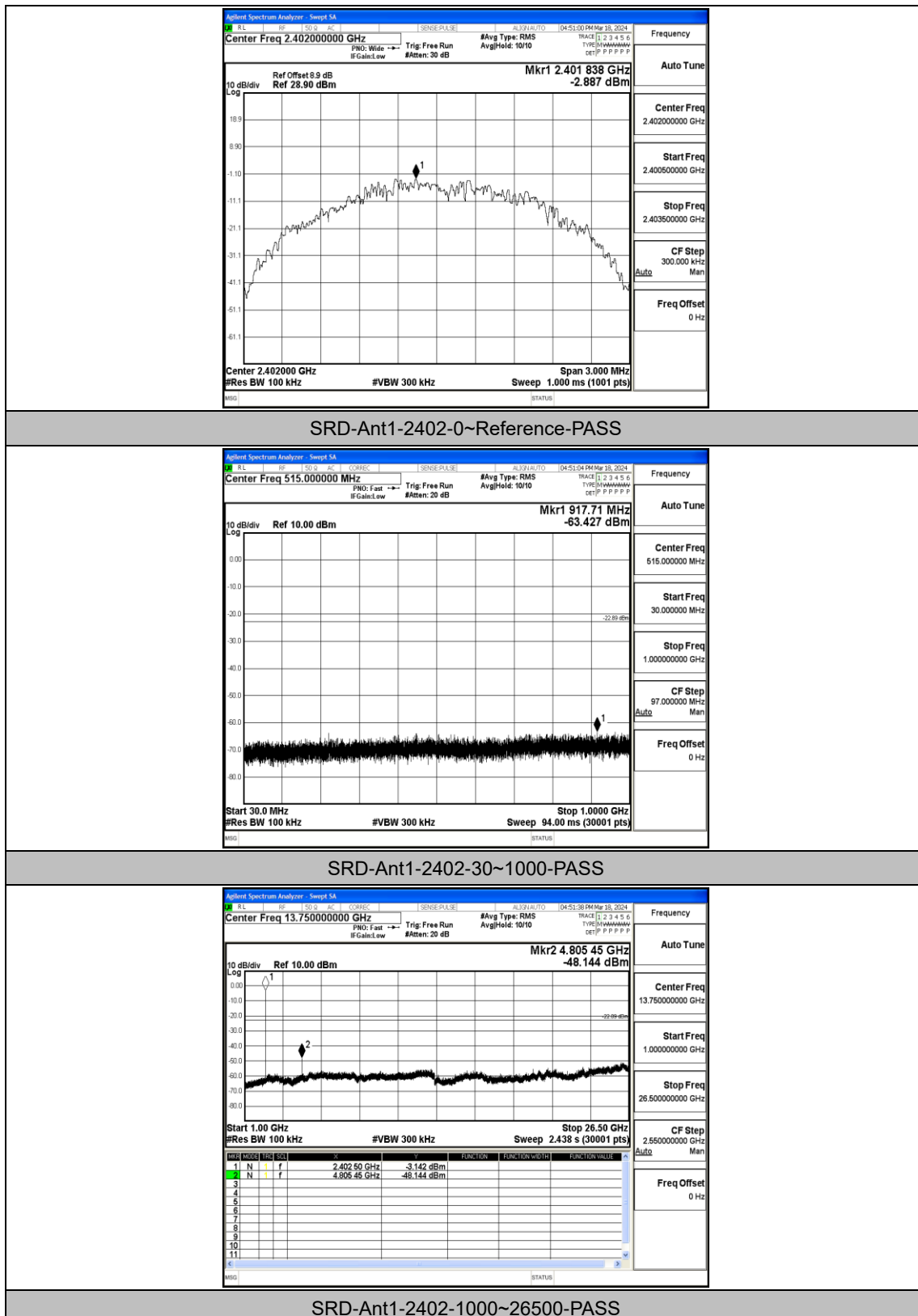


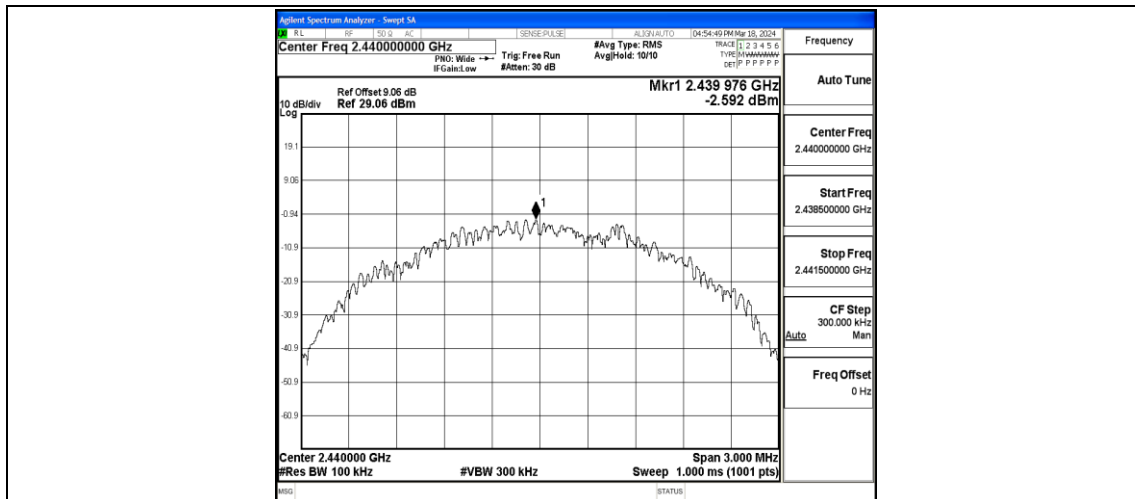
Appendix F: Conducted Spurious Emission

Test Result

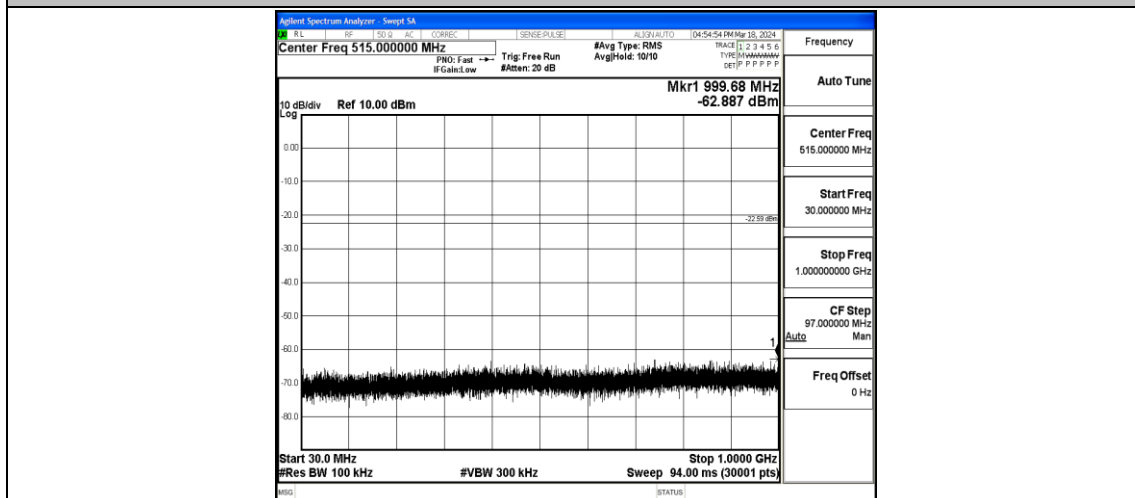
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
SRD	Ant1	2402	0~Reference	-2.89	-2.89	---	PASS
SRD	Ant1	2402	30~1000	-2.89	-63.43	≤-22.89	PASS
SRD	Ant1	2402	1000~26500	-2.89	-48.14	≤-22.89	PASS
SRD	Ant1	2440	0~Reference	-2.59	-2.59	---	PASS
SRD	Ant1	2440	30~1000	-2.59	-62.89	≤-22.59	PASS
SRD	Ant1	2440	1000~26500	-2.59	-46.37	≤-22.59	PASS
SRD	Ant1	2480	0~Reference	-3.40	-3.40	---	PASS
SRD	Ant1	2480	30~1000	-3.40	-62.8	≤-23.4	PASS
SRD	Ant1	2480	1000~26500	-3.40	-49.13	≤-23.4	PASS

Test Graphs

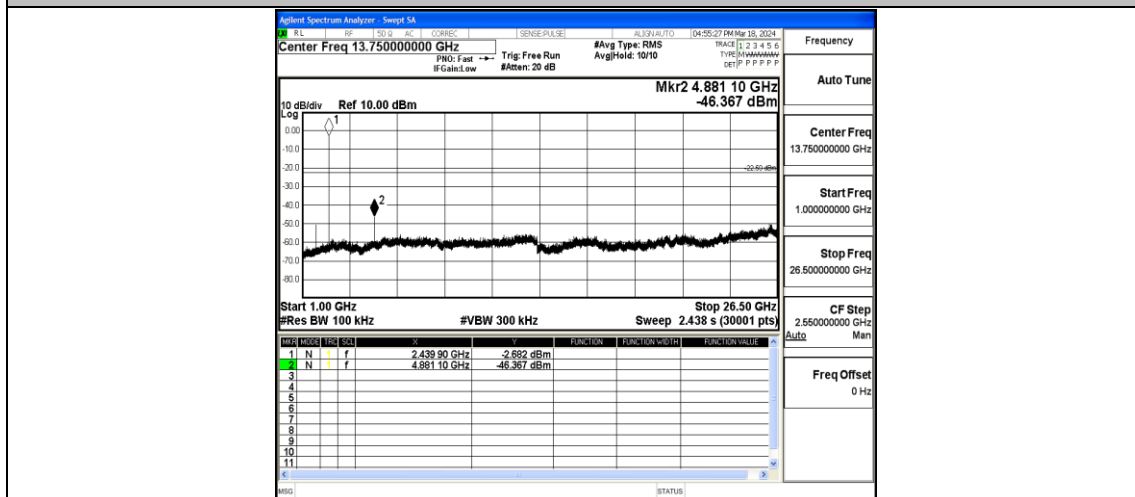




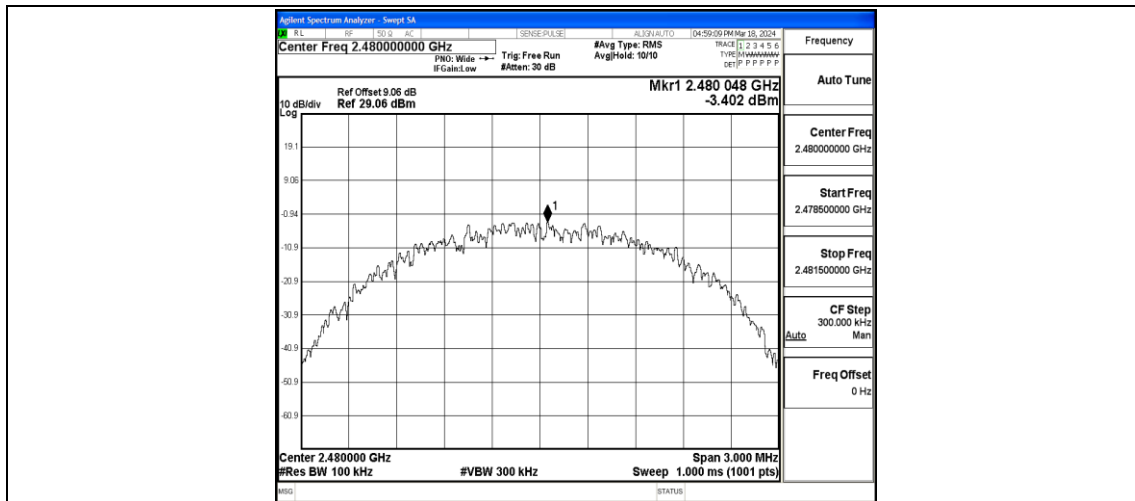
SRD-Ant1-2440-0~Reference-PASS



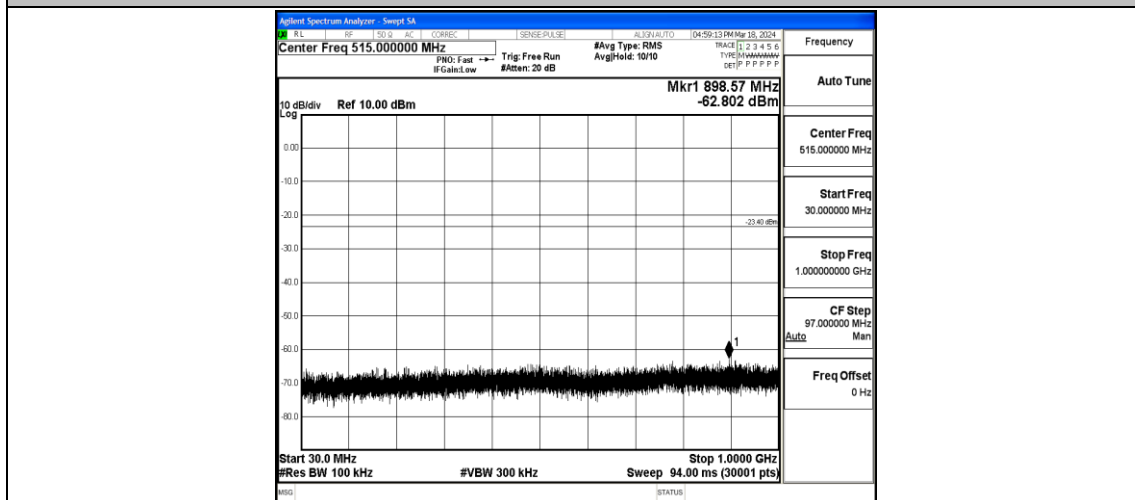
SRD-Ant1-2440-30~1000-PASS



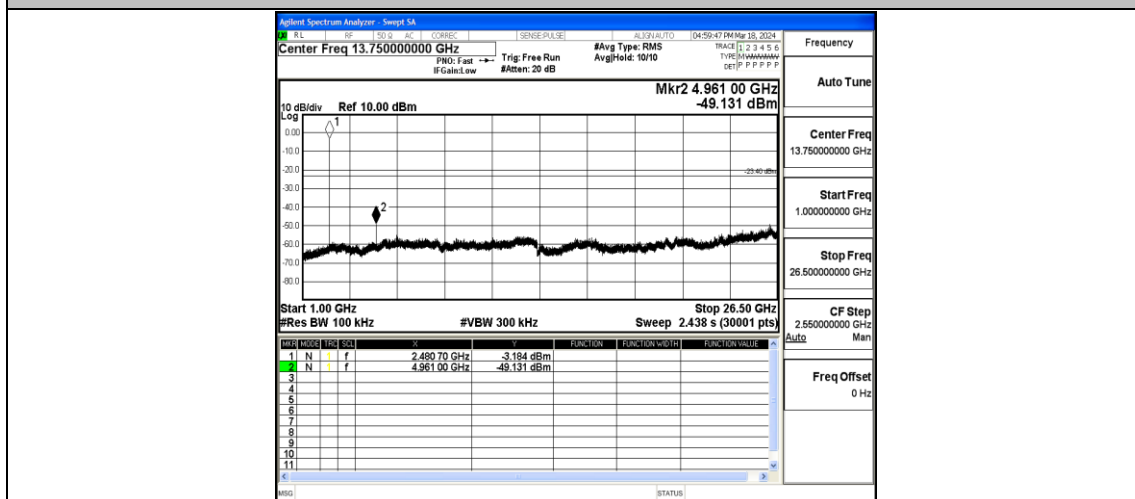
SRD-Ant1-2440-1000~26500-PASS



SRD-Ant1-2480-0~Reference-PASS



SRD-Ant1-2480-30~1000-PASS



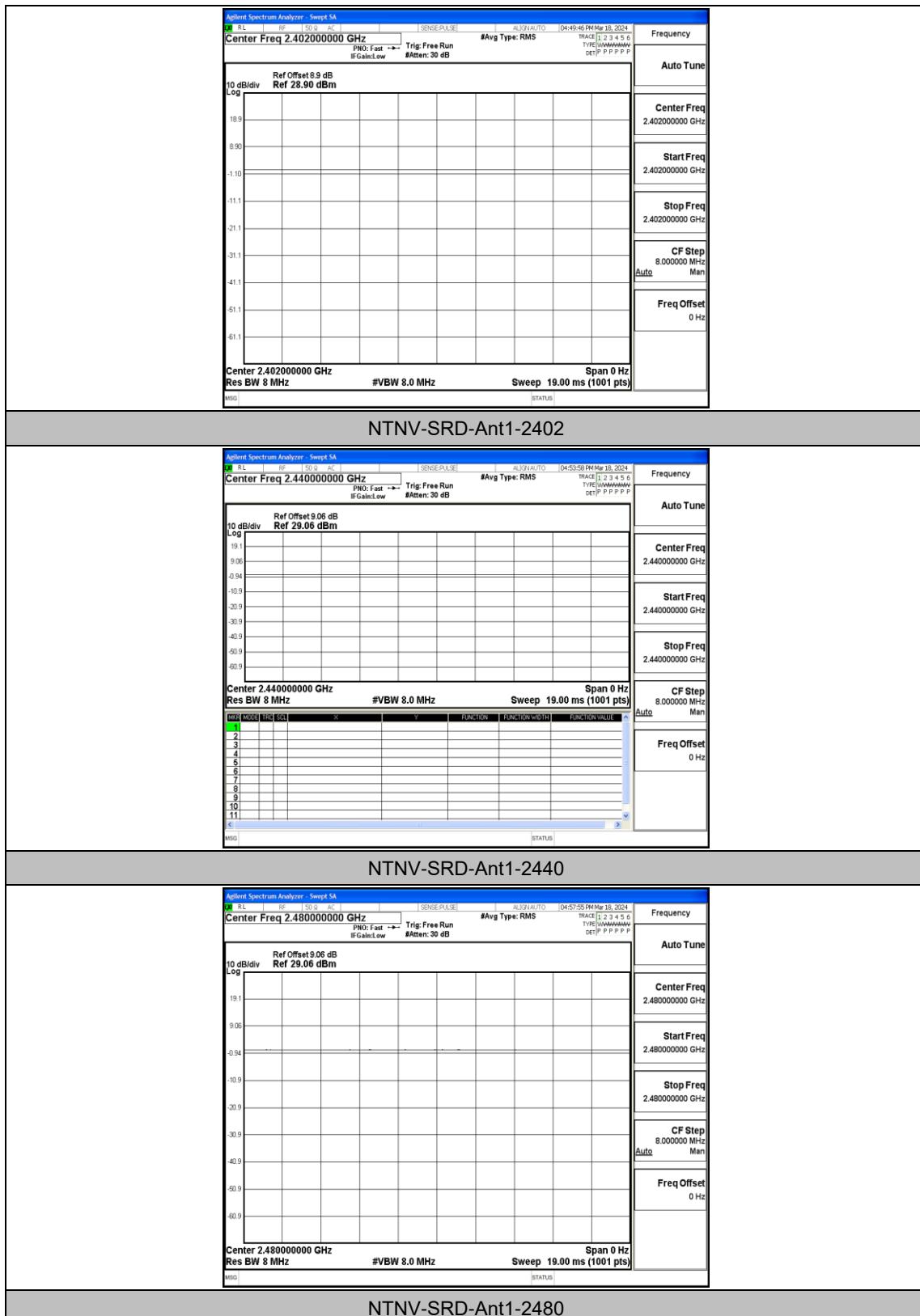
SRD-Ant1-2480-1000~26500-PASS

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	-42.89	≤-21.20	52.31	≤74	PASS
SRD	Ant1	Low	2402	Peak	2310.000	-43.04	≤-21.20	52.16	≤74	PASS
SRD	Ant1	Low	2402	Peak	2328.455	-40.48	≤-21.20	54.72	≤74	PASS
SRD	Ant1	Low	2402	AV	2390.000	-50.54	≤-41.20	44.66	≤54	PASS
SRD	Ant1	Low	2402	AV	2310.000	-50.78	≤-41.20	44.42	≤54	PASS
SRD	Ant1	Low	2402	AV	2388.305	-49.53	≤-41.20	45.67	≤54	PASS
SRD	Ant1	High	2480	Peak	2483.500	-42.64	≤-21.20	52.56	≤74	PASS
SRD	Ant1	High	2480	Peak	2500.000	-42.71	≤-21.20	52.49	≤74	PASS
SRD	Ant1	High	2480	Peak	2491.600	-39.86	≤-21.20	55.34	≤74	PASS
SRD	Ant1	High	2480	AV	2483.500	-48.63	≤-41.20	46.57	≤54	PASS
SRD	Ant1	High	2480	AV	2500.000	-49.79	≤-41.20	45.41	≤54	PASS
SRD	Ant1	High	2480	AV	2483.520	-48.63	≤-41.20	46.57	≤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

