

Appendix Test Data for SRD (Conducted Measurement)

Product Name: Wireless Mechanical Keyboard

Trade Mark: Keychron, Lemokey

Test Model: Q3 Ultra

FCC ID: 2BGKB-Q3ULTRA

Environmental Conditions

Temperature:	23.5°C
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Max Zhang
NOTE	N/A

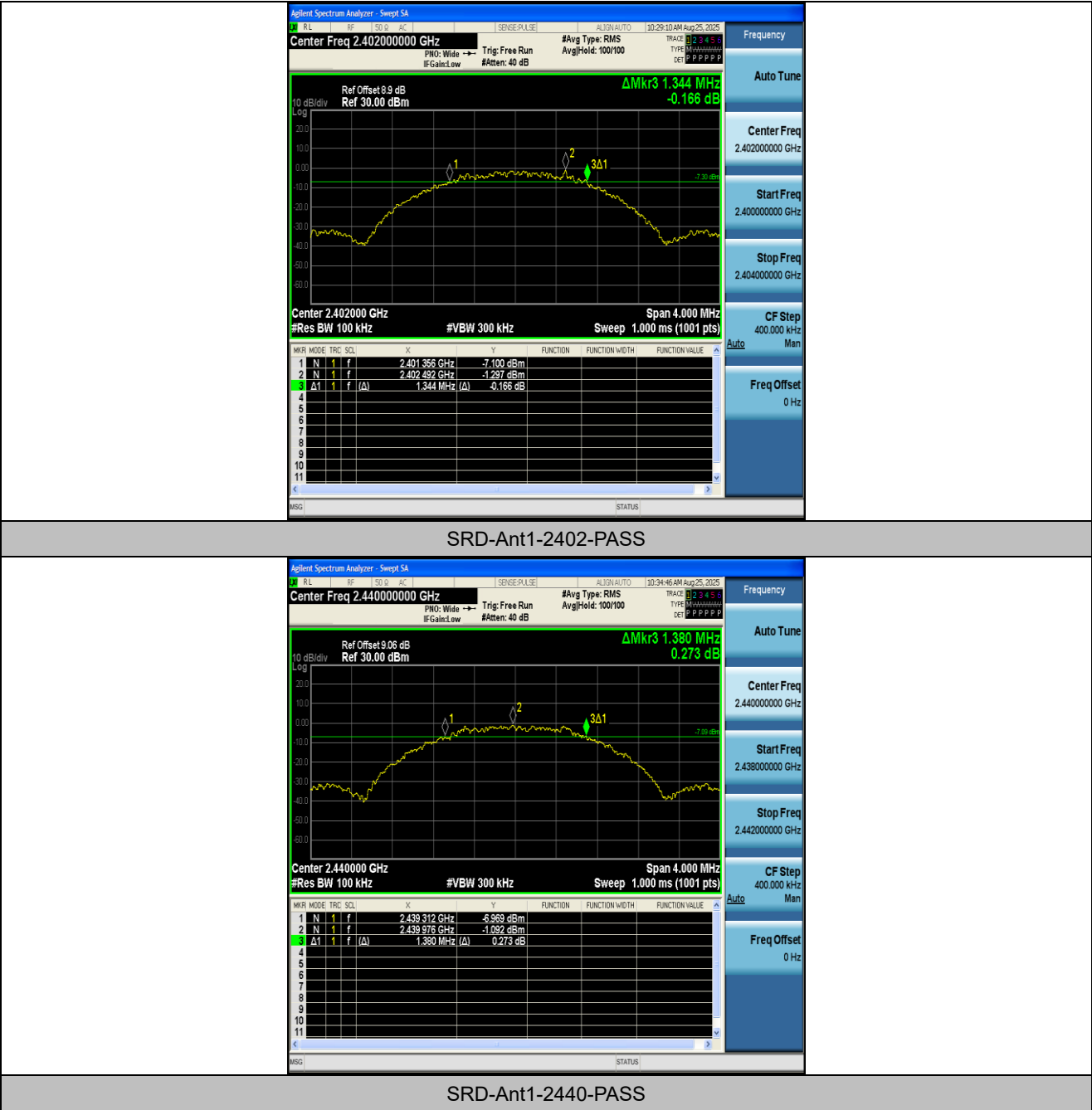
Appendix A: DTS Bandwidth

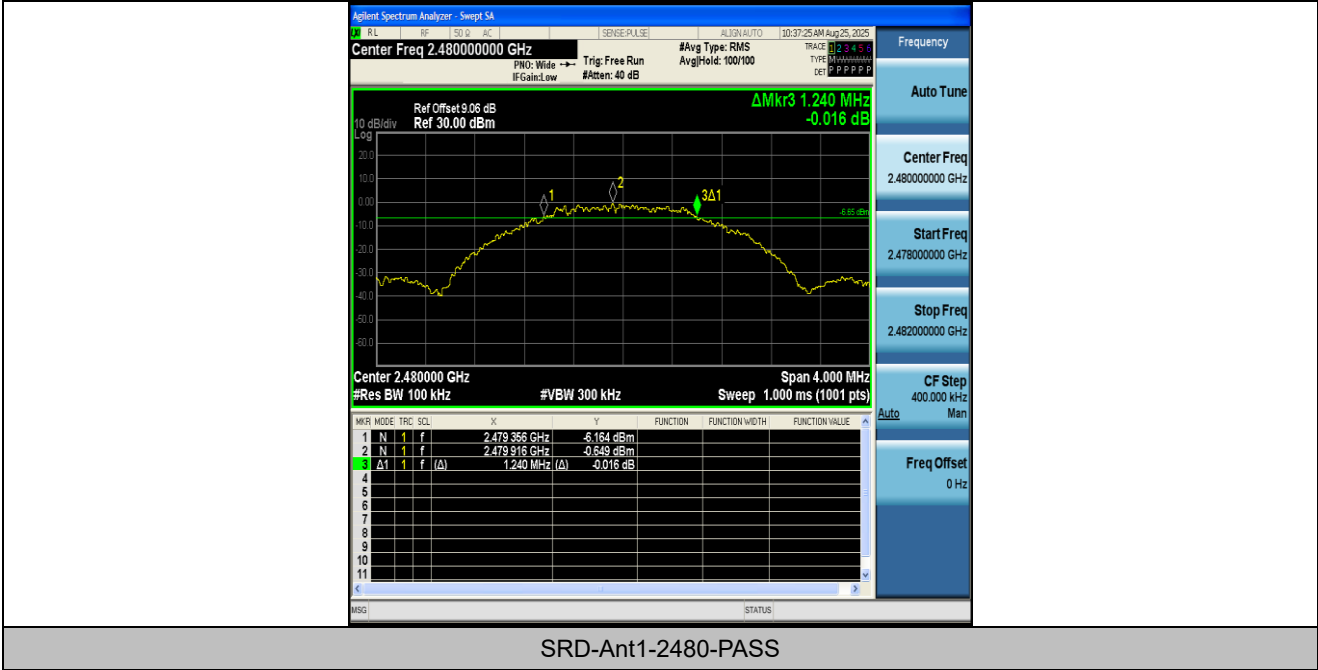
Test Result

Test Mode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
SRD	Ant1	2402	1.344	2401.356	2402.700	0.5	PASS
SRD	Ant1	2440	1.380	2439.312	2440.692	0.5	PASS
SRD	Ant1	2480	1.240	2479.356	2480.596	0.5	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs





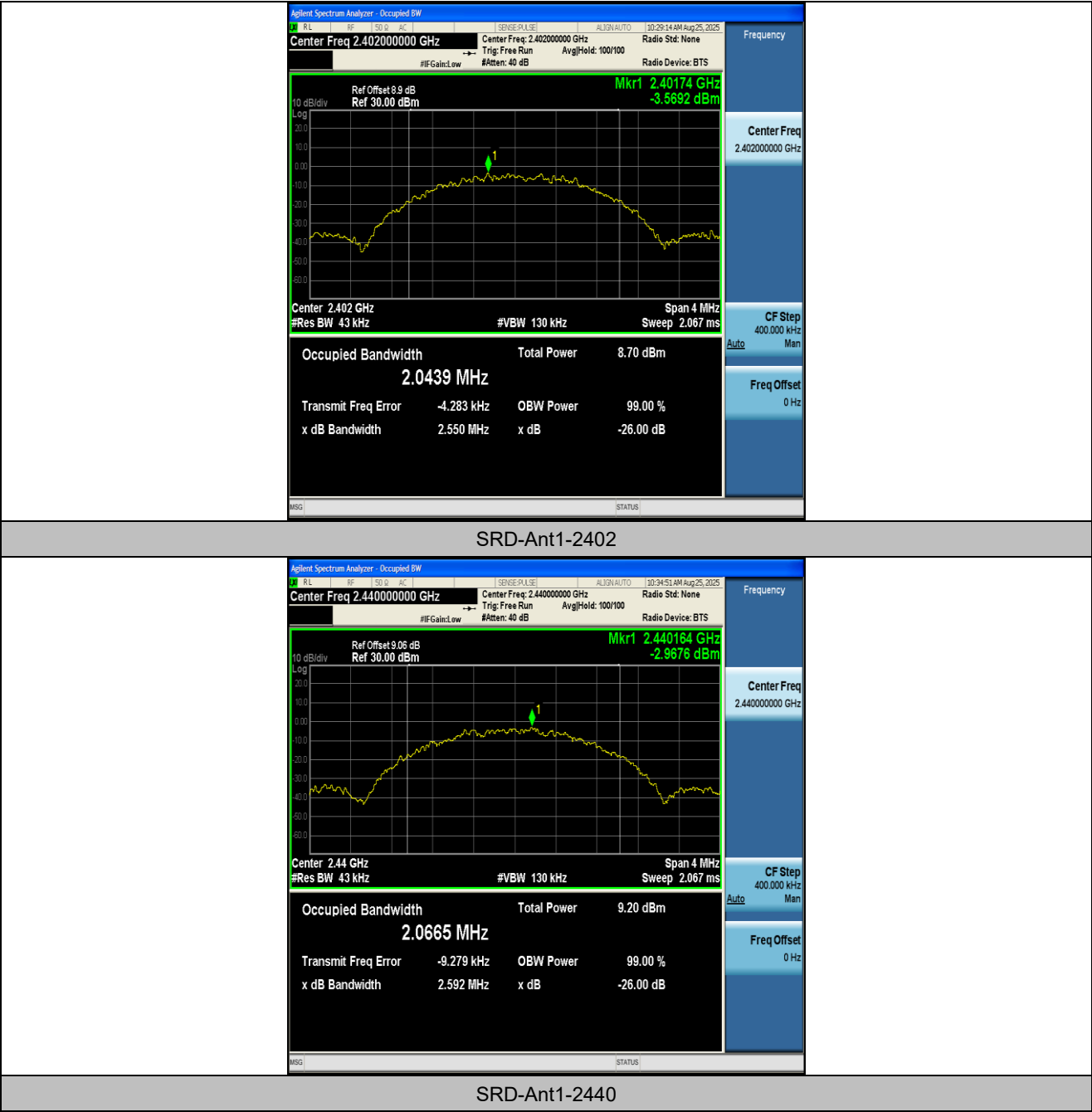
Appendix B: Occupied Channel Bandwidth

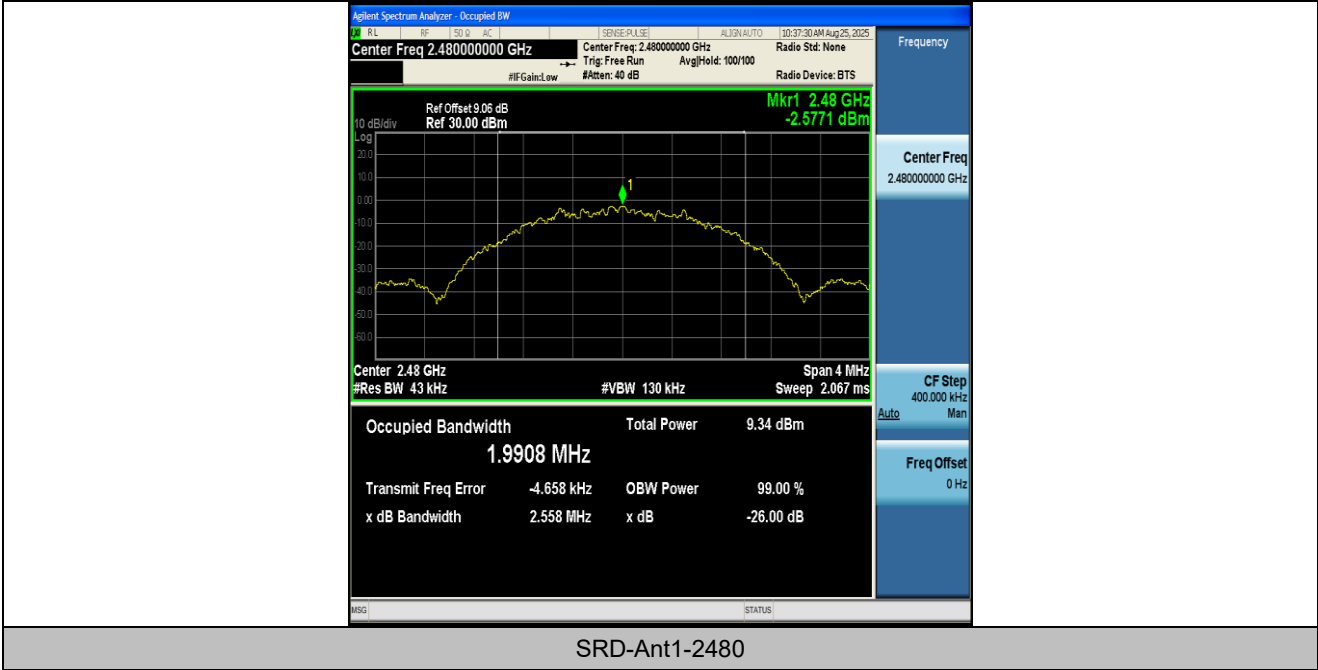
Test Result

Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
SRD	Ant1	2402	2.0439	2400.9738	2403.0177	---	---
SRD	Ant1	2440	2.0665	2438.9575	2441.0240	---	---
SRD	Ant1	2480	1.9908	2478.9999	2480.9907	---	---

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs





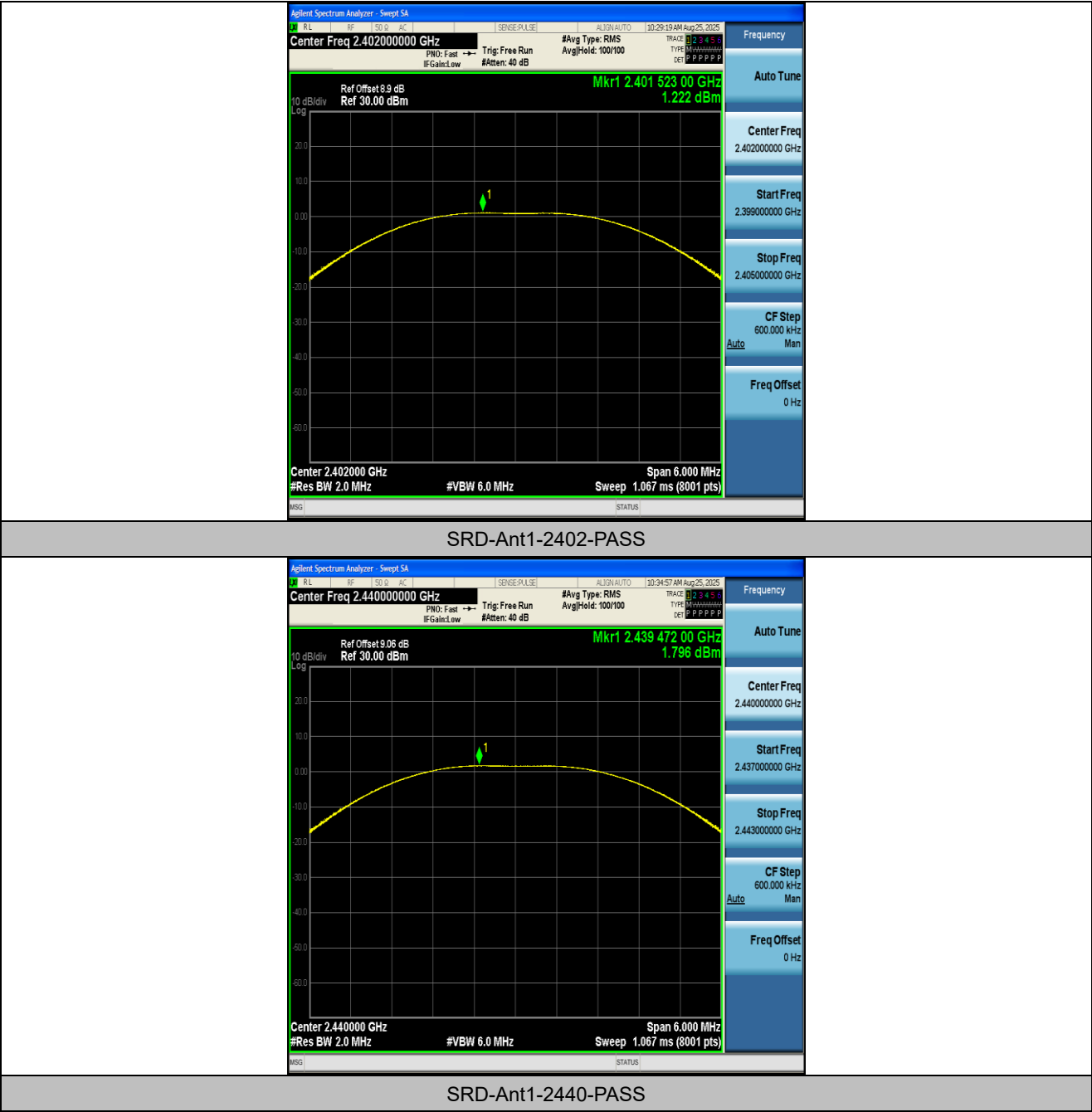
Appendix C: Maximum peak conducted output power

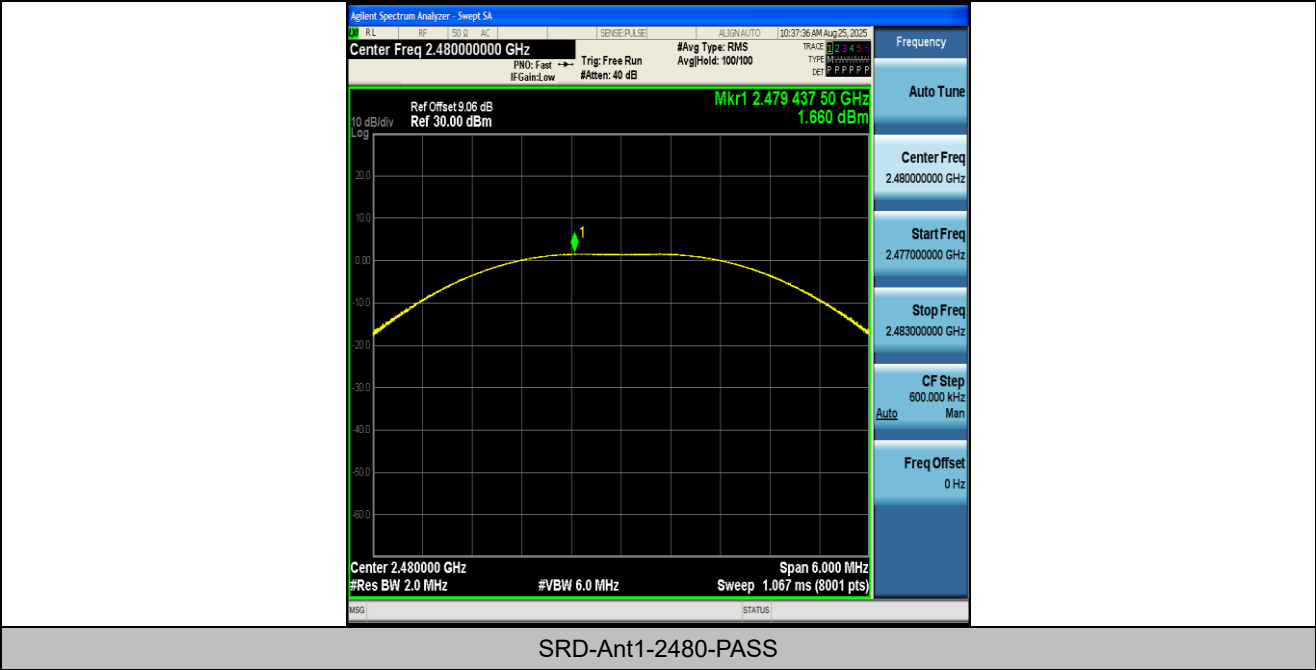
Test Result Peak

Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power [dBm]	Conducted Limit [dBm]	Verdict
SRD	Ant1	2402	1.22	≤30	PASS
SRD	Ant1	2440	1.80	≤30	PASS
SRD	Ant1	2480	1.66	≤30	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs Peak





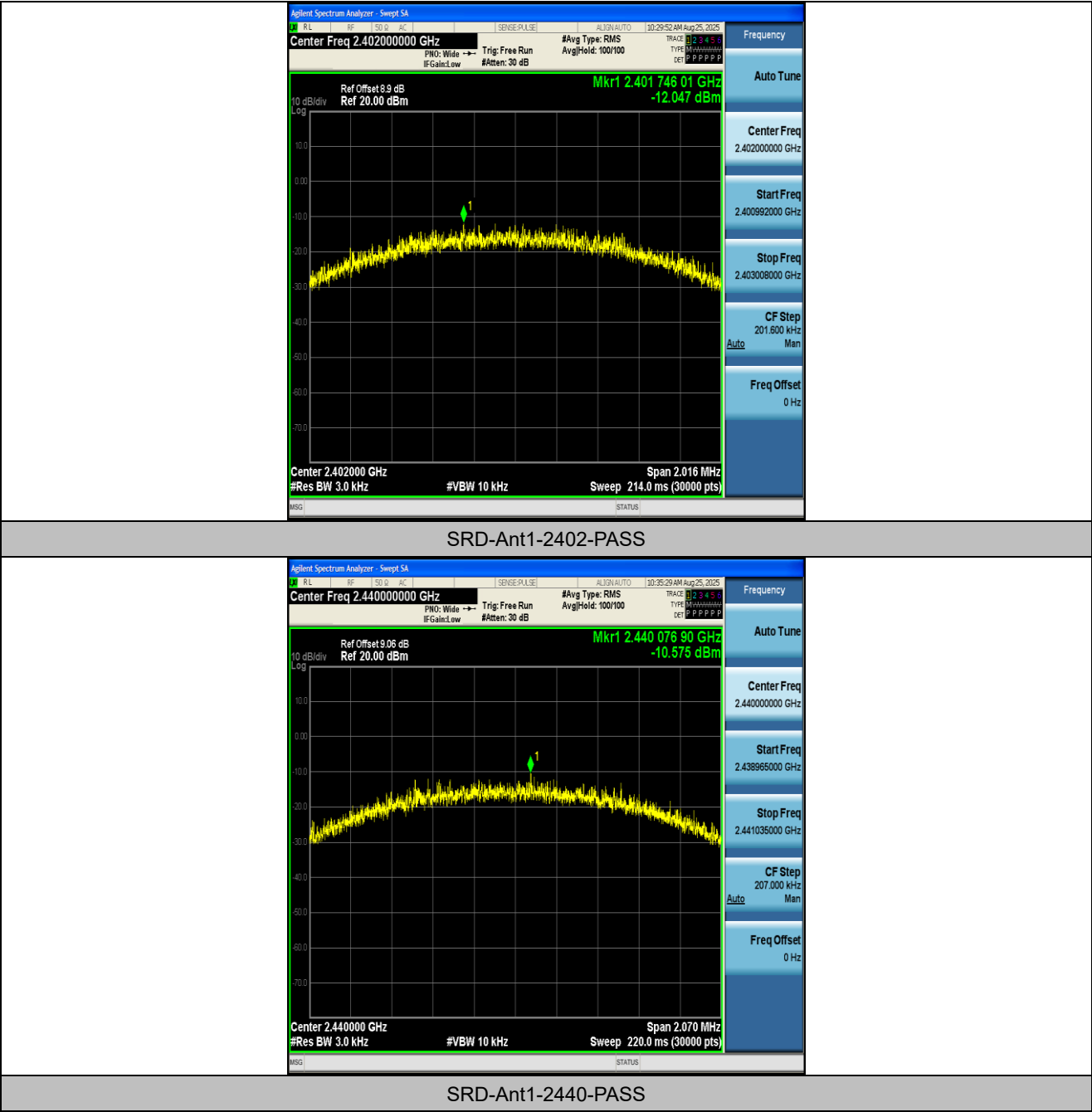
Appendix D: Maximum peak power spectral density

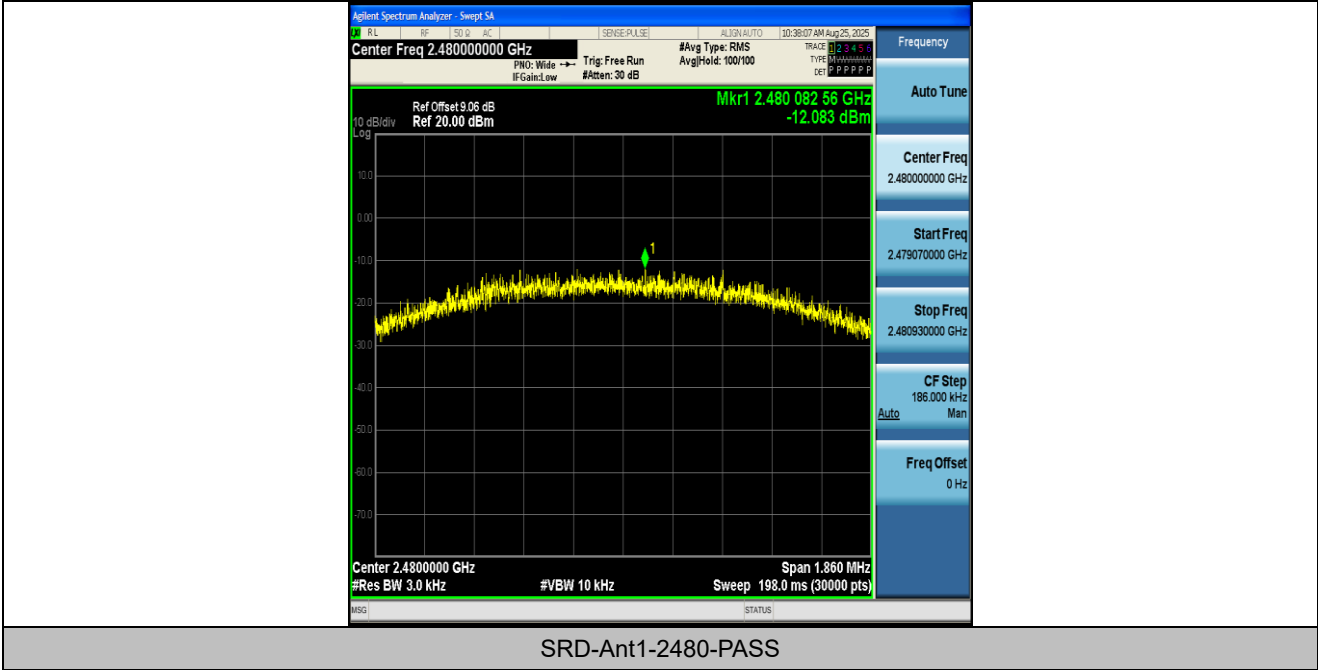
Test Result

Test Mode	Antenna	Frequency [MHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
SRD	Ant1	2402	-12.05	≤8.00	PASS
SRD	Ant1	2440	-10.58	≤8.00	PASS
SRD	Ant1	2480	-12.08	≤8.00	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs





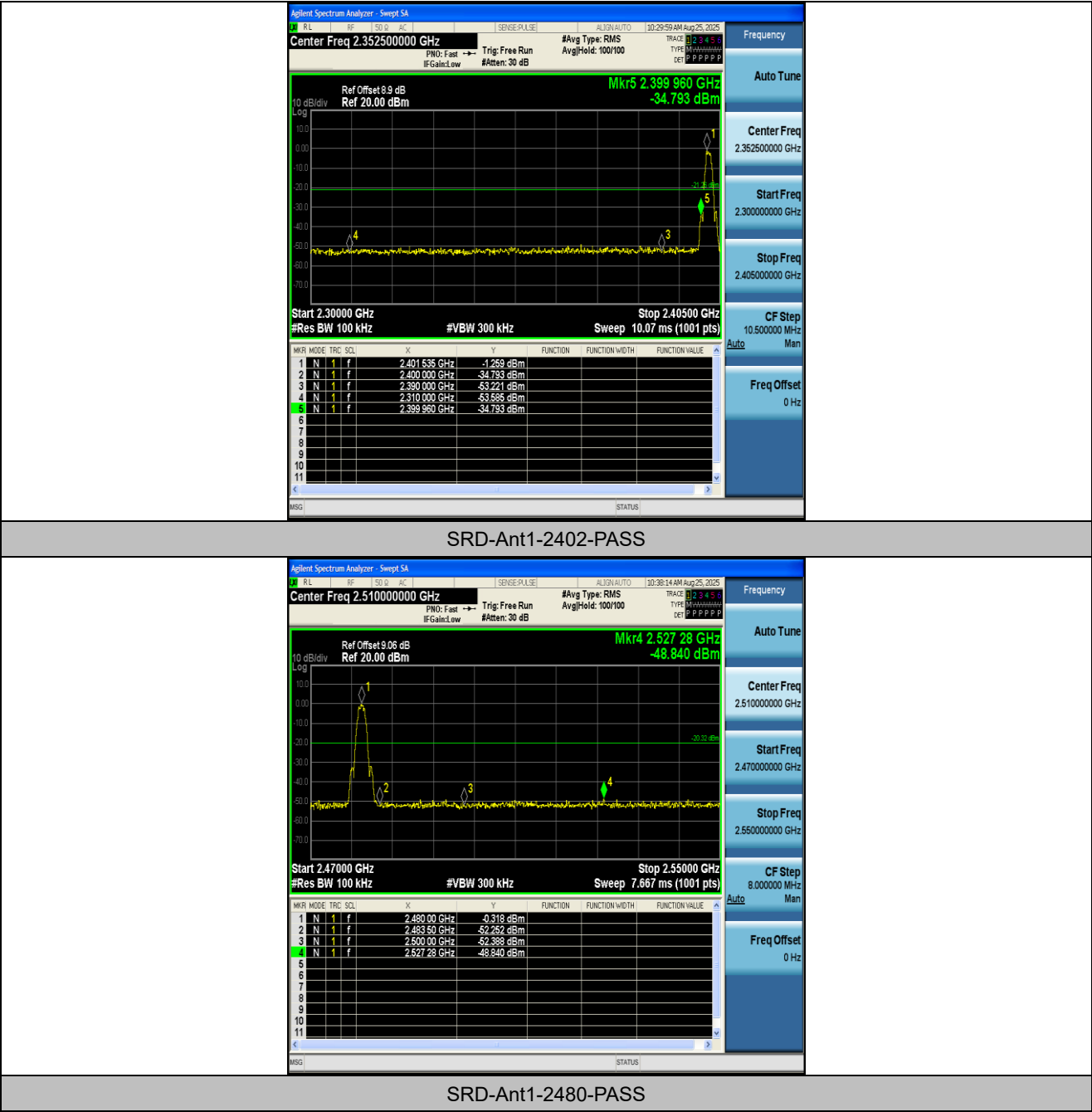
Appendix E: Band edge measurements

Test Result

Test Mode	Antenna	Ch. Name	Frequency [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
SRD	Ant1	Low	2402	-1.26	-34.79	≤ -21.26	PASS
SRD	Ant1	High	2480	-0.32	-48.84	≤ -20.32	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs



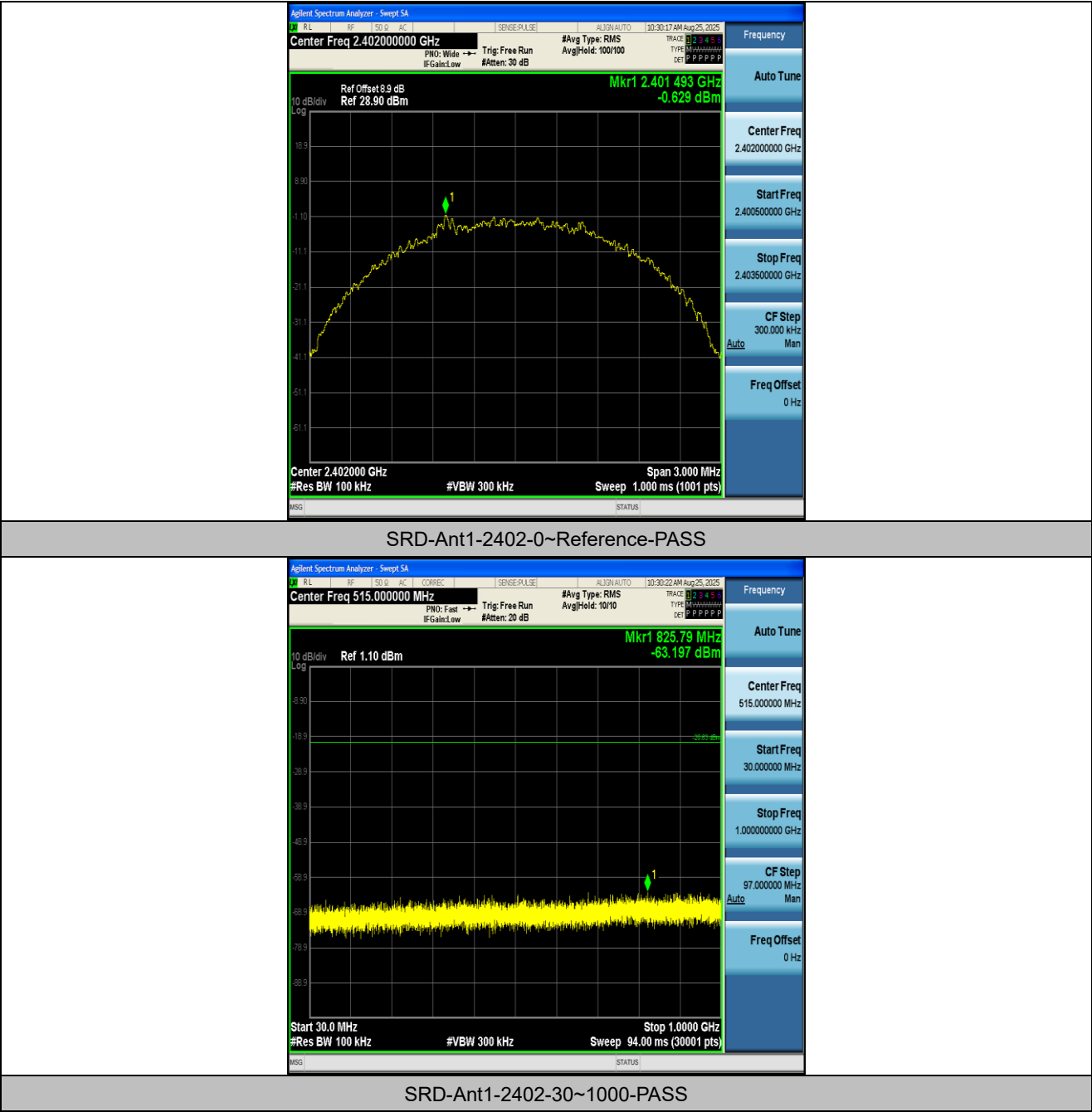
Appendix F: Conducted Spurious Emission

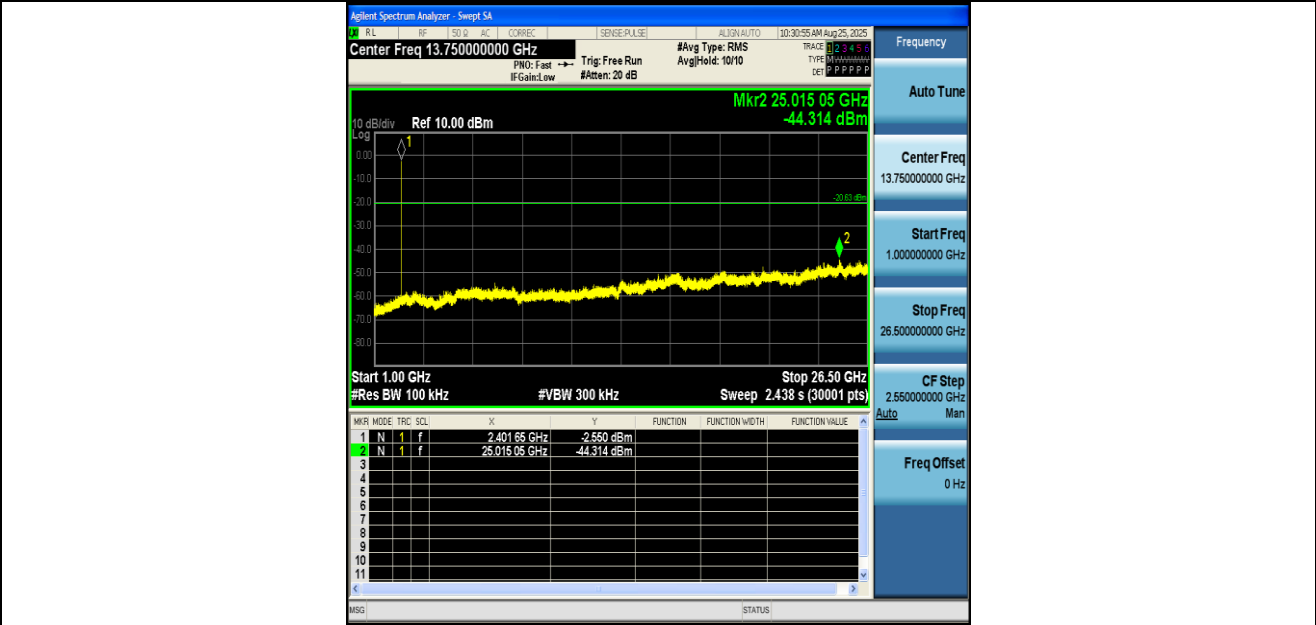
Test Result

Test Mode	Antenna	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
SRD	Ant1	2402	0~Reference	-0.63	-0.63	---	PASS
SRD	Ant1	2402	30~1000	-0.63	-63.2	≤ -20.63	PASS
SRD	Ant1	2402	1000~26500	-0.63	-44.31	≤ -20.63	PASS
SRD	Ant1	2440	0~Reference	-1.03	-1.03	---	PASS
SRD	Ant1	2440	30~1000	-1.03	-62.62	≤ -21.03	PASS
SRD	Ant1	2440	1000~26500	-1.03	-45.9	≤ -21.03	PASS
SRD	Ant1	2480	0~Reference	-0.67	-0.67	---	PASS
SRD	Ant1	2480	30~1000	-0.67	-62.63	≤ -20.67	PASS
SRD	Ant1	2480	1000~26500	-0.67	-45.21	≤ -20.67	PASS

Note: offset(dB) in Reference test plots = cable loss(dB) + attenuator factor(dB); For spurious emissions plots from 30MHz to 26.5GHz, the cable loss and attenuator factors have been set in the 'Input Correction' of the Spectrum Analyzer during the test.

Test Graphs

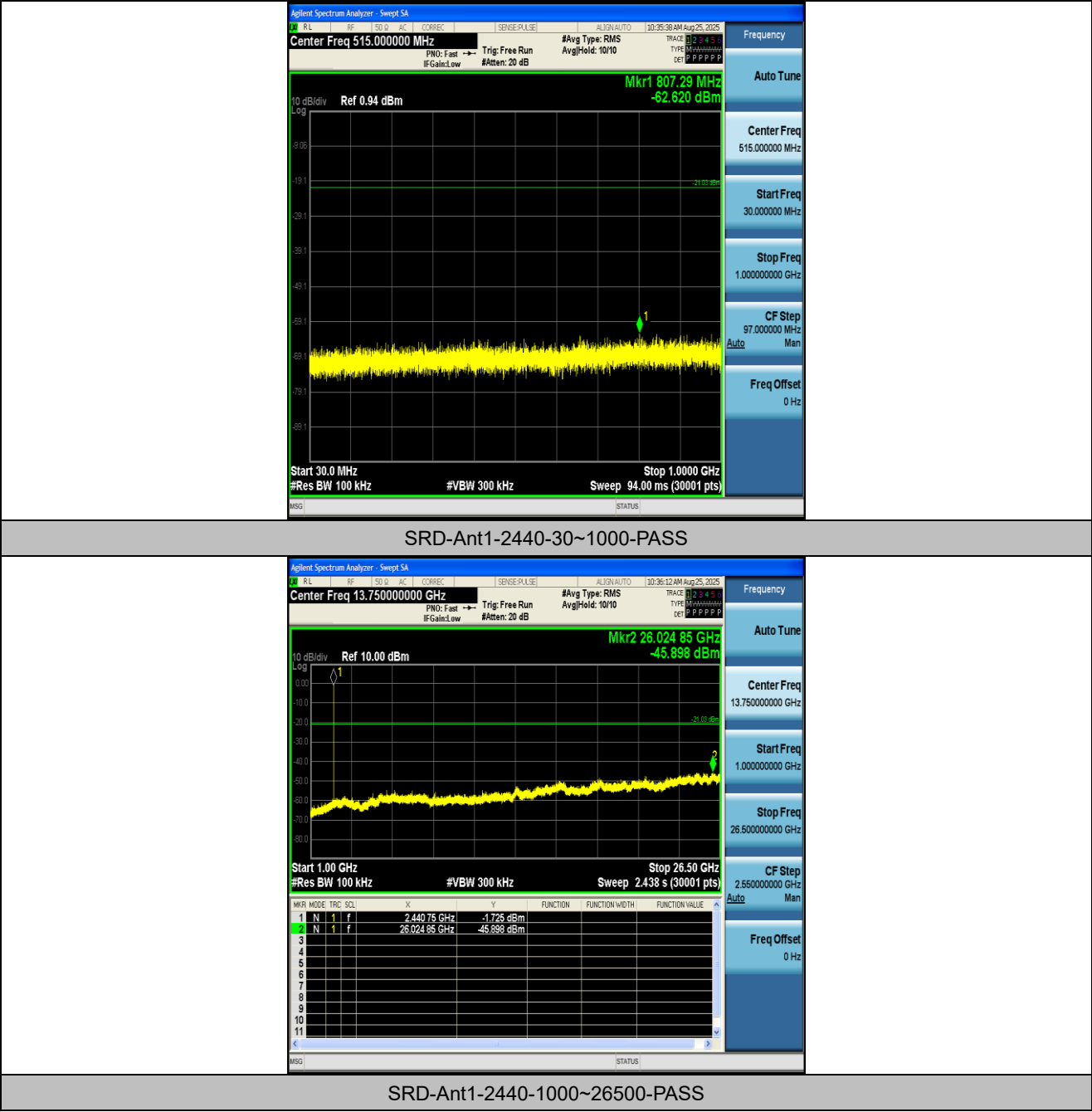


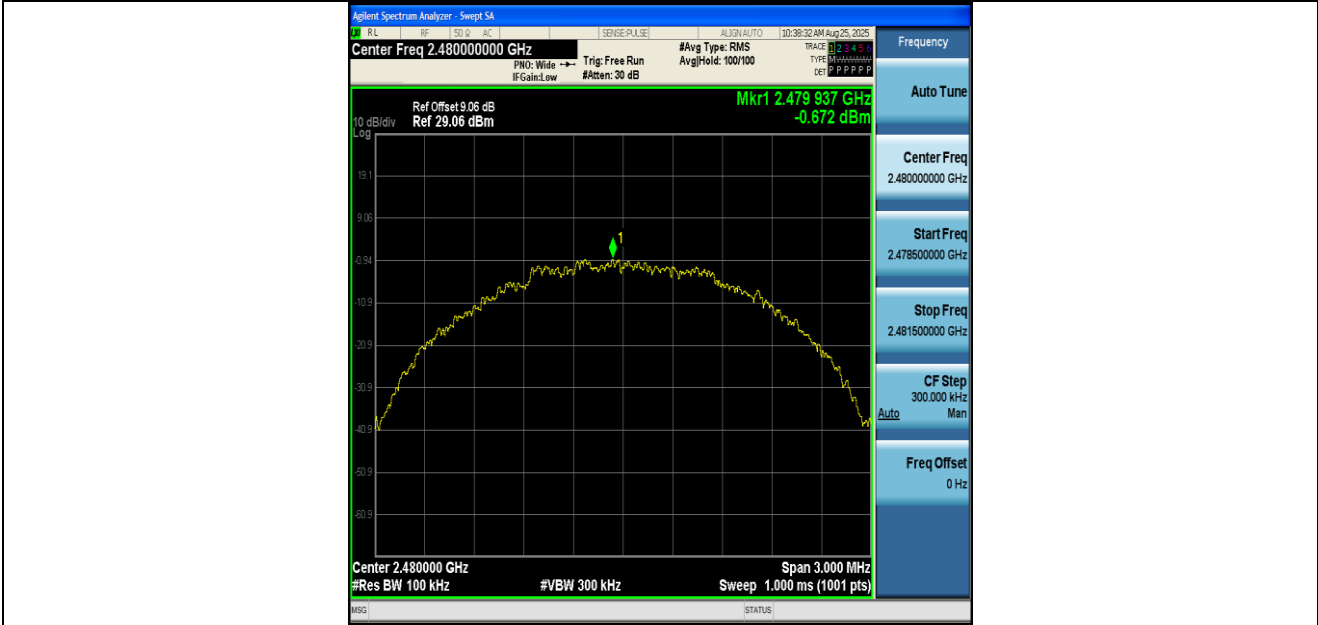


SRD-Ant1-2402-1000~26500-PASS



SRD-Ant1-2440-0~Reference-PASS

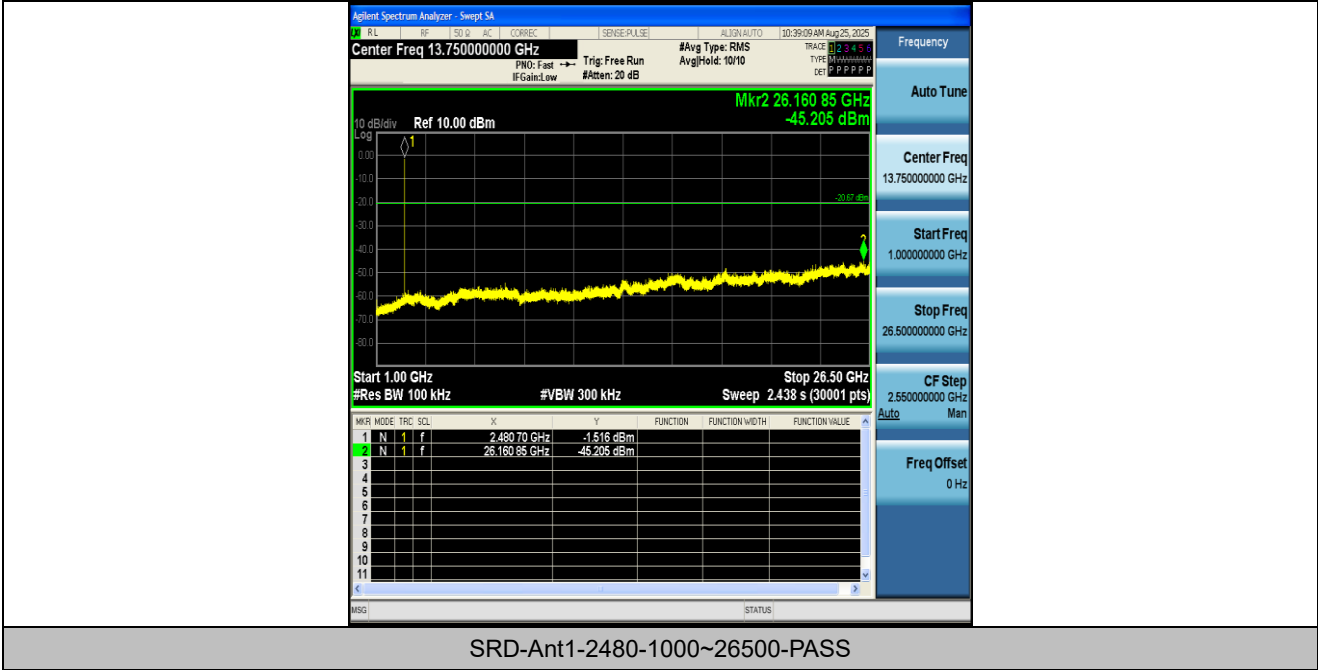




SRD-Ant1-2480-0~Reference-PASS



SRD-Ant1-2480-30~1000-PASS



Appendix G: Duty Cycle

Test Result

Test Mode	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

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs

