

Appendix: LoRa(DTS)

Contents

Appendix A: DTS Bandwidth 3

 Test Result 3

 Test Graphs 4

Appendix B: Occupied Channel Bandwidth 6

 Test Result 6

 Test Graphs 7

Appendix C: Maximum conducted output power 9

 Test Result Peak 9

 Test Graphs Peak 10

Appendix D: Maximum power spectral density 12

 Test Result 12

 Test Graphs 13

Appendix F: Band edge measurements 15

 Test Result 15

 Test Graphs 16

Appendix G: Conducted Spurious Emission 17

 Test Result 17

 Test Graphs 18

Appendix H: Duty Cycle 23

 Test Result 23

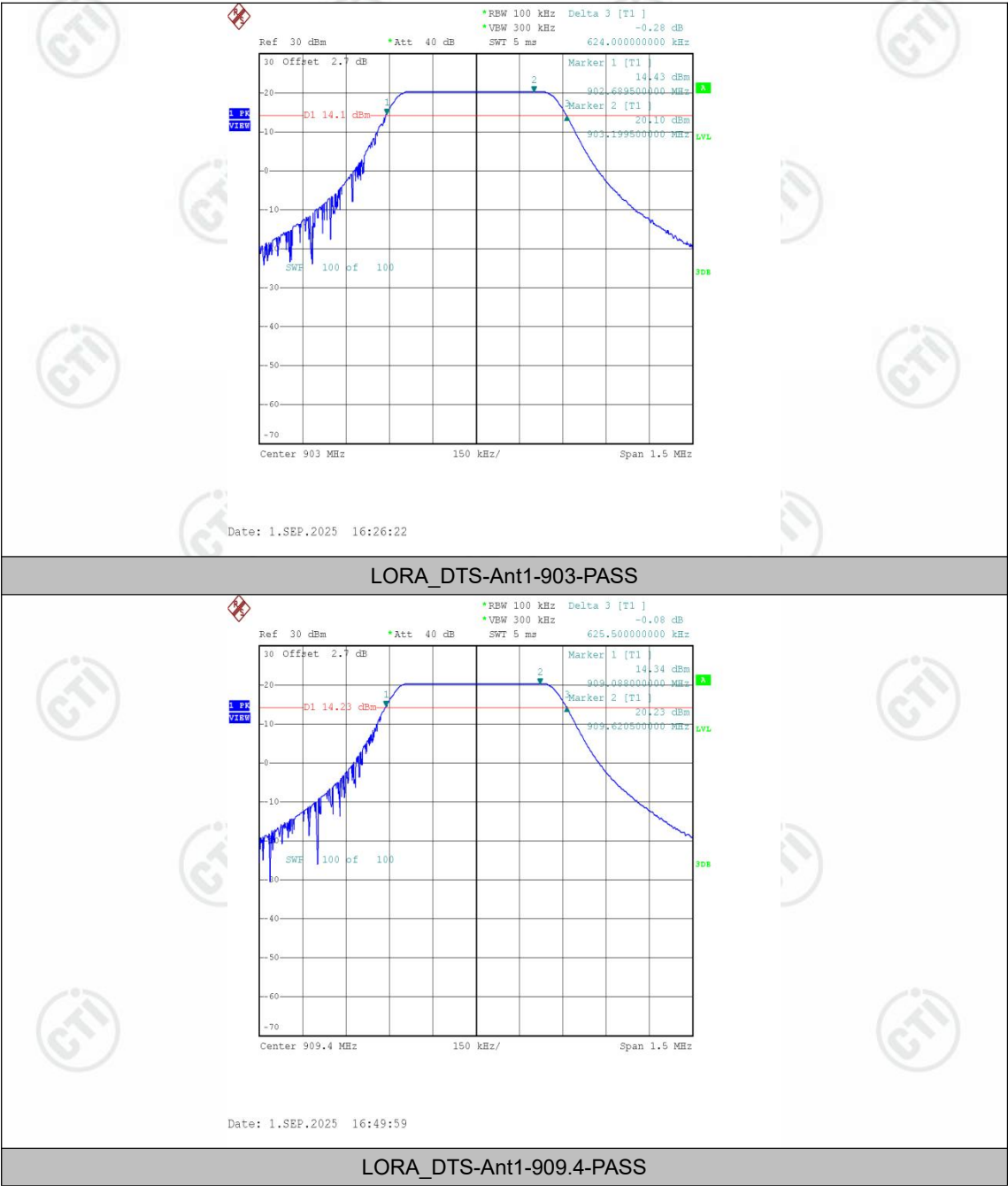
 Test Graphs 24

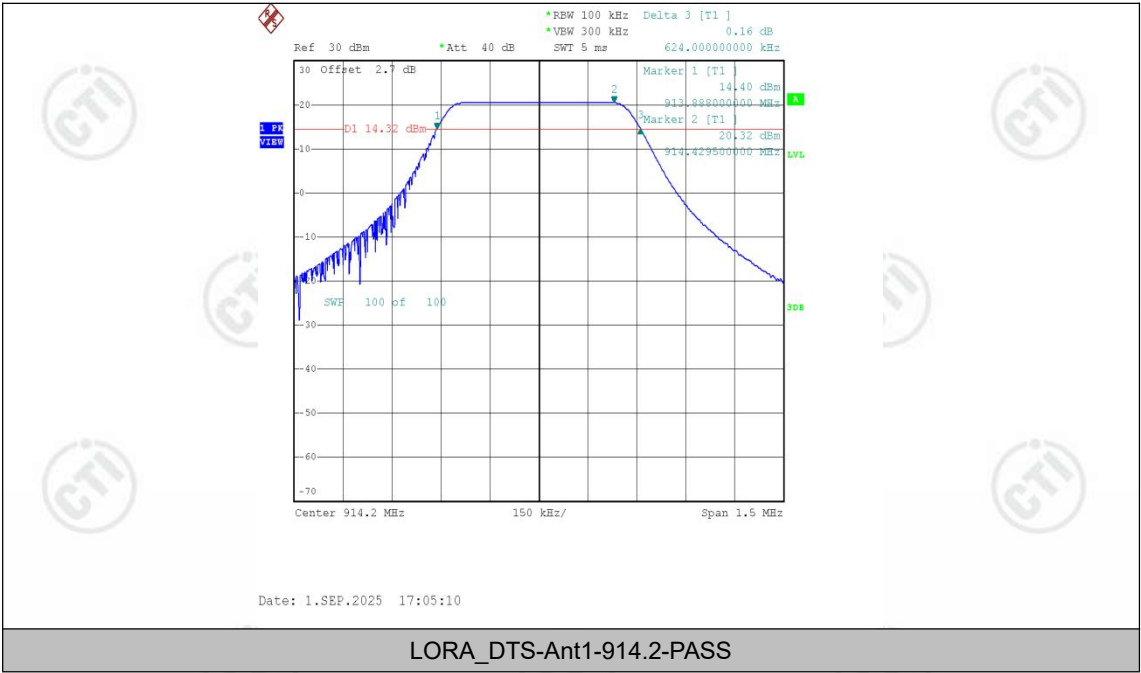
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
LORA_DTS	Ant1	903	0.62	902.69	903.31	0.5	PASS
LORA_DTS	Ant1	909.4	0.63	909.09	909.71	0.5	PASS
LORA_DTS	Ant1	914.2	0.62	913.89	914.51	0.5	PASS

Test Graphs



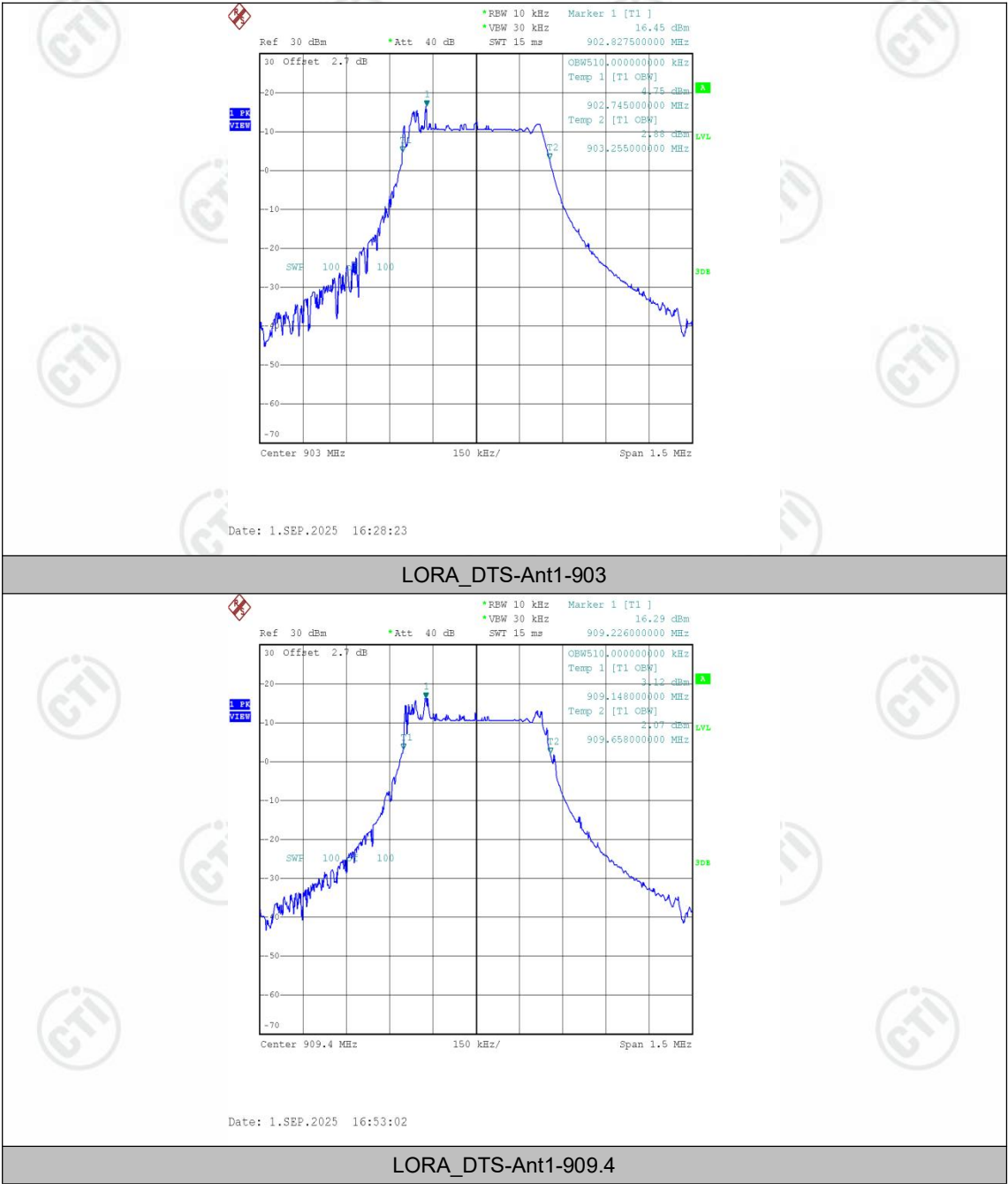


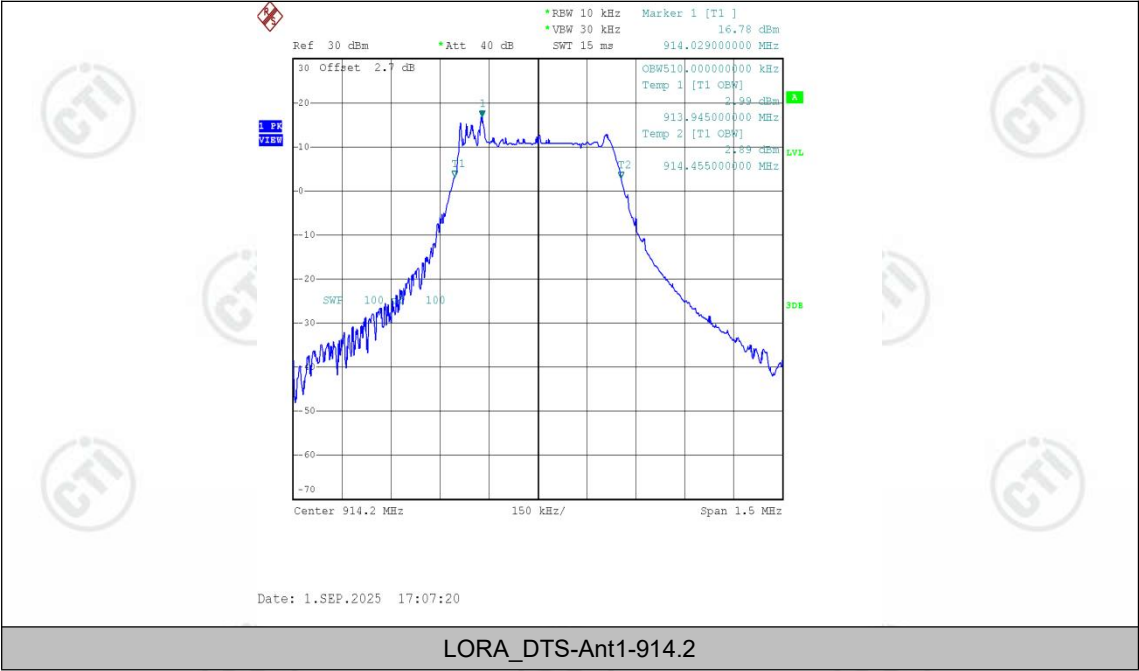
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Frequency [MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
LORA_DTS	Ant1	903	0.51000	902.745	903.255	---	---
LORA_DTS	Ant1	909.4	0.51000	909.148	909.658	---	---
LORA_DTS	Ant1	914.2	0.51000	913.945	914.455	---	---

Test Graphs



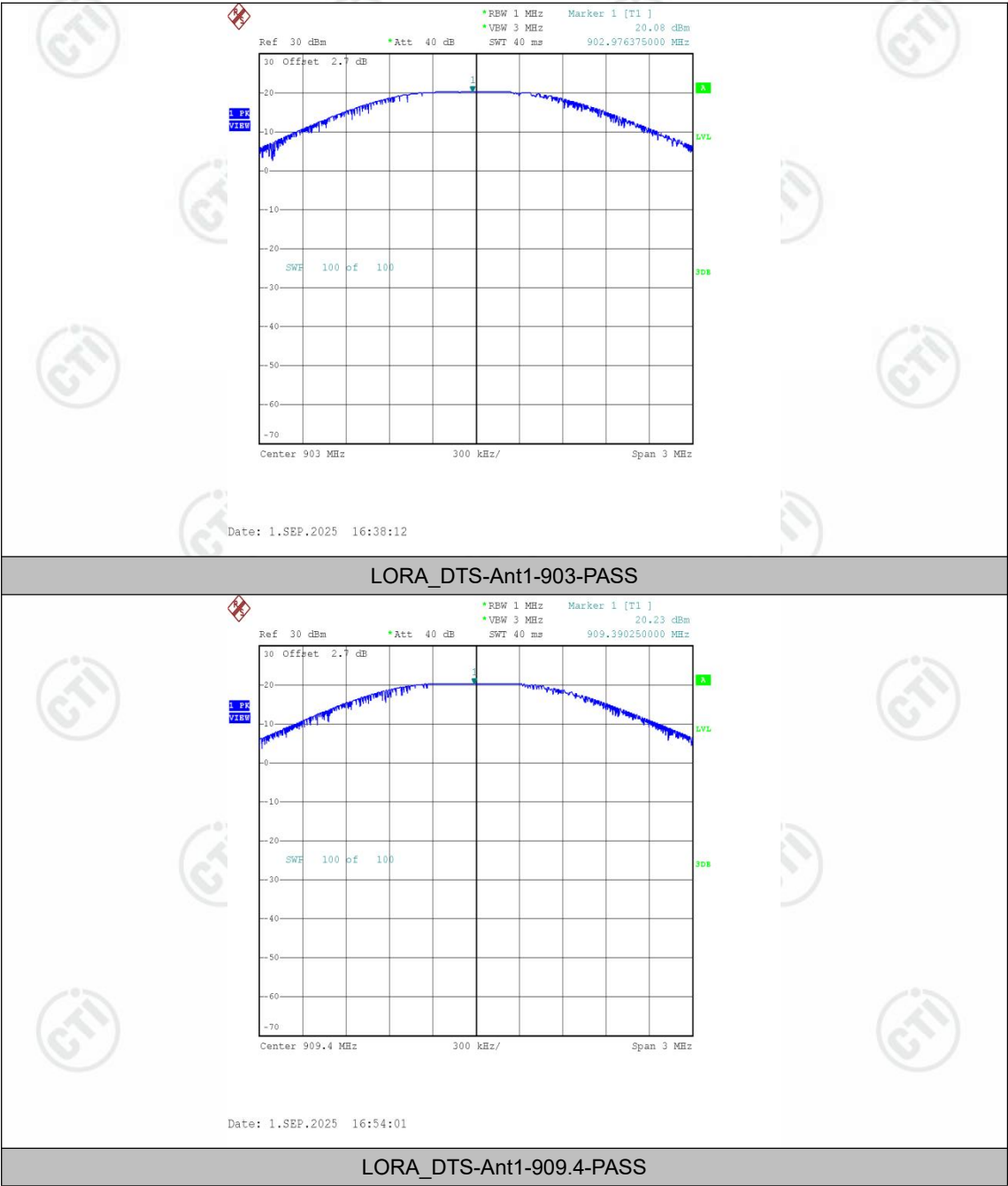


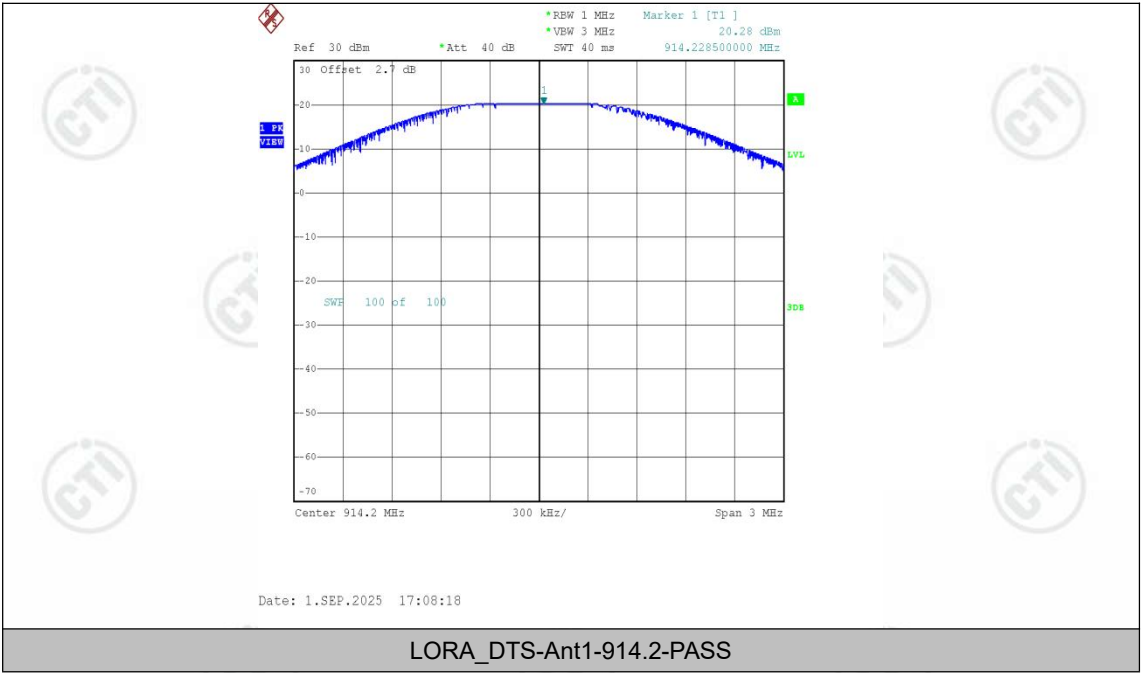
Appendix C: Maximum conducted output power

Test Result Peak

TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
LORA_DTS	Ant1	903	20.08	≤30	PASS
LORA_DTS	Ant1	909.4	20.23	≤30	PASS
LORA_DTS	Ant1	914.2	20.28	≤30	PASS

Test Graphs Peak



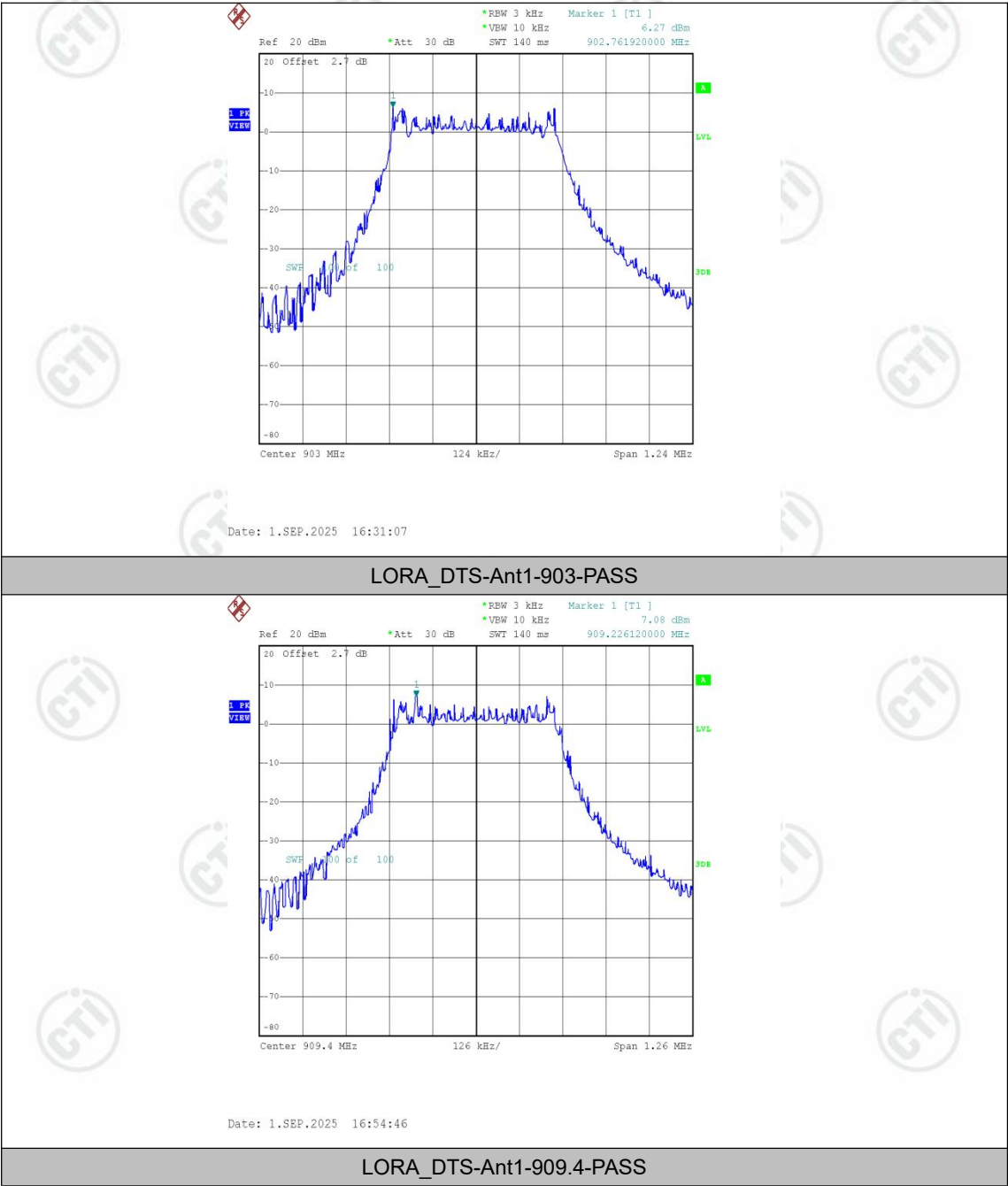


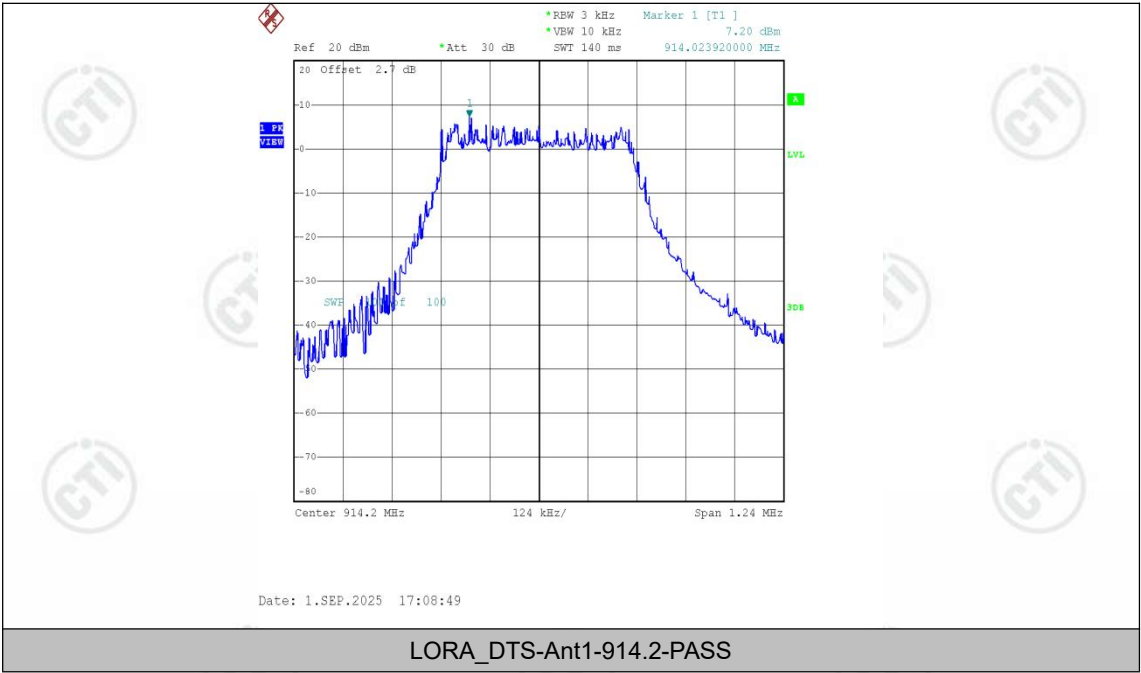
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
LORA_DTS	Ant1	903	6.27	≤8.00	PASS
LORA_DTS	Ant1	909.4	7.08	≤8.00	PASS
LORA_DTS	Ant1	914.2	7.20	≤8.00	PASS

Test Graphs



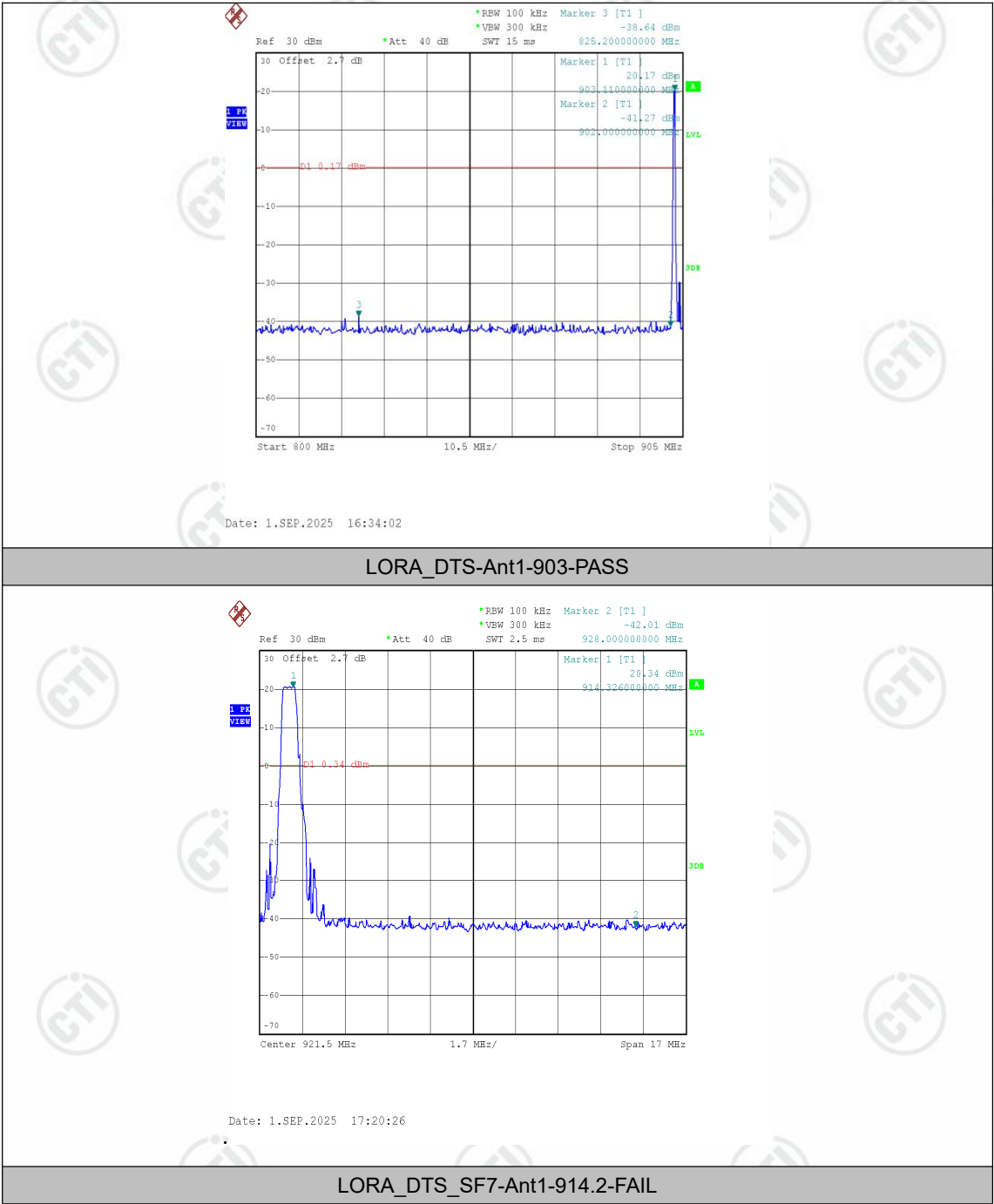


Appendix F: Band edge measurements

Test Result

TestMode	Antenna	ChName	Frequency [MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
LORA_DTS	Ant1	Low	903	20.17	-38.64	≤0.17	PASS
LORA_DTS	Ant1	High	914.2	20.34	-40.21	≤0.34	PASS

Test Graphs

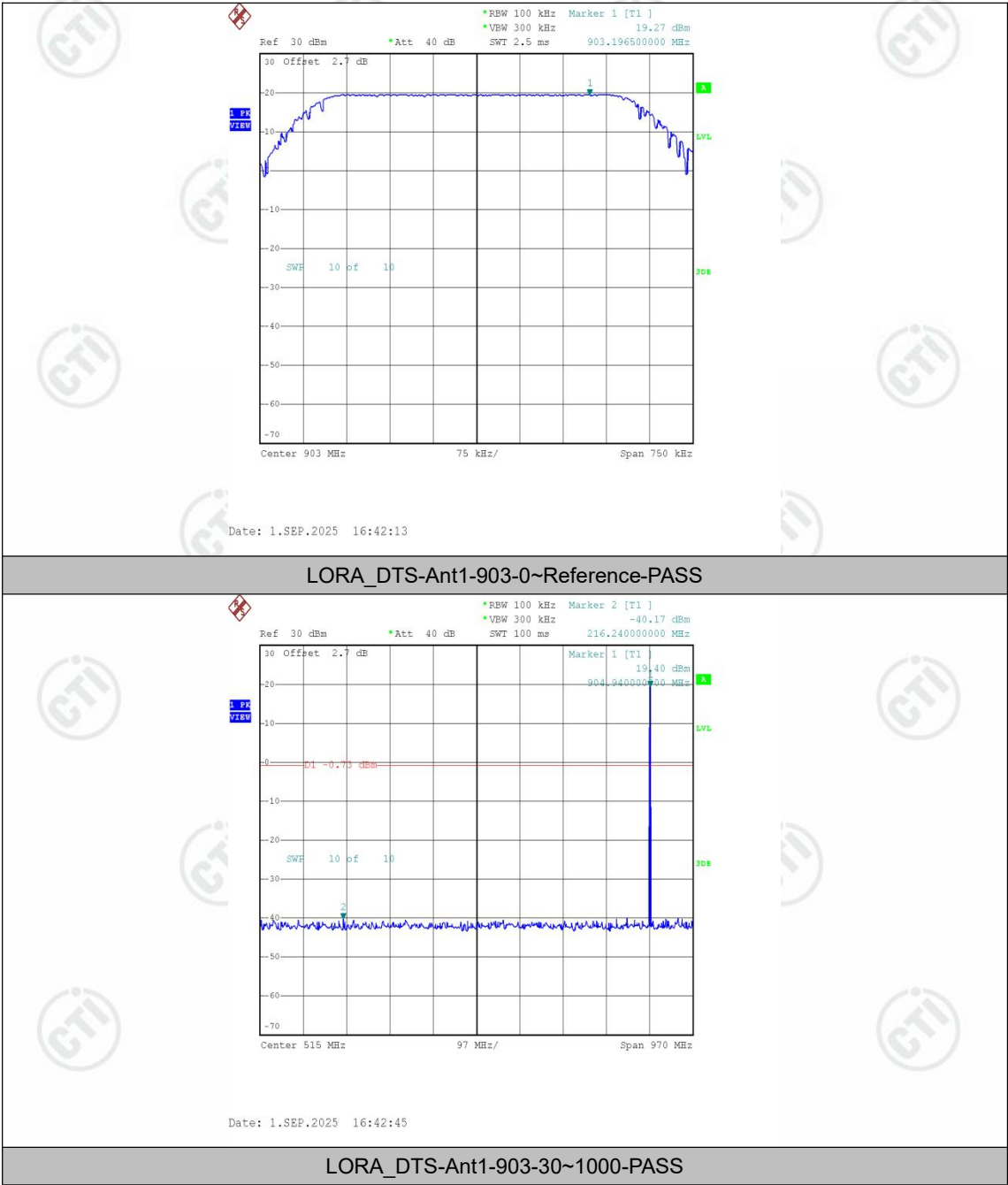


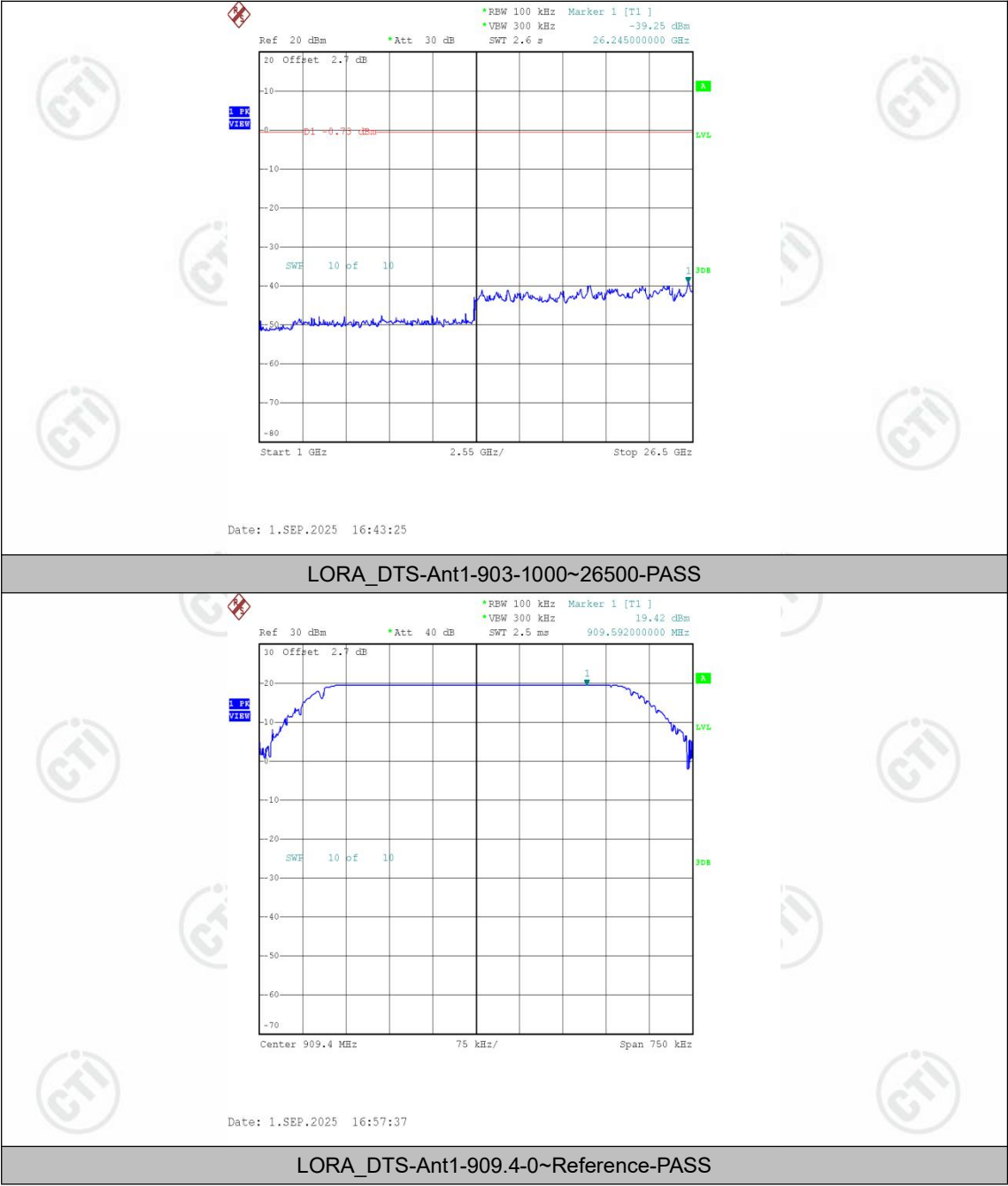
Appendix G: Conducted Spurious Emission

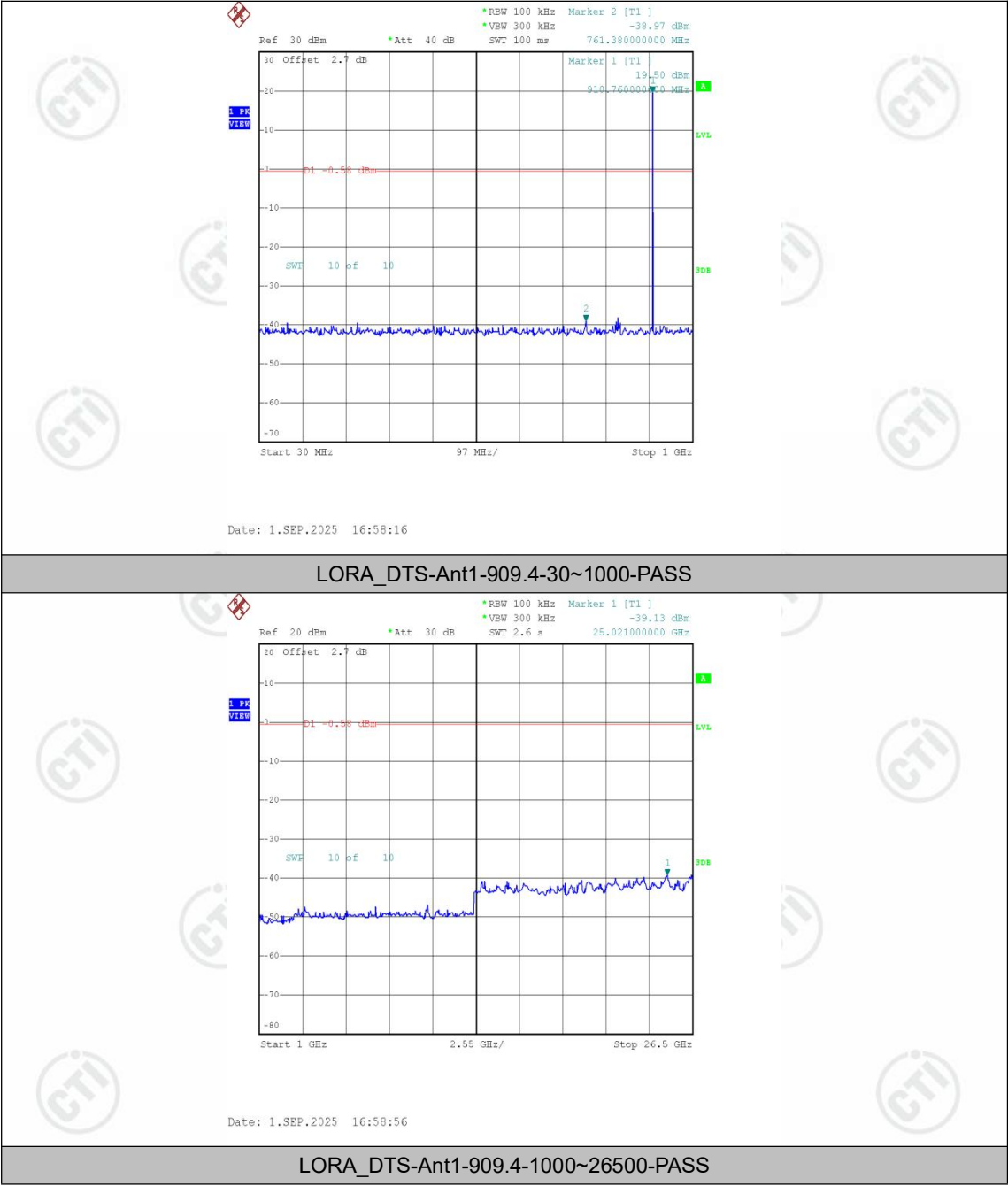
Test Result

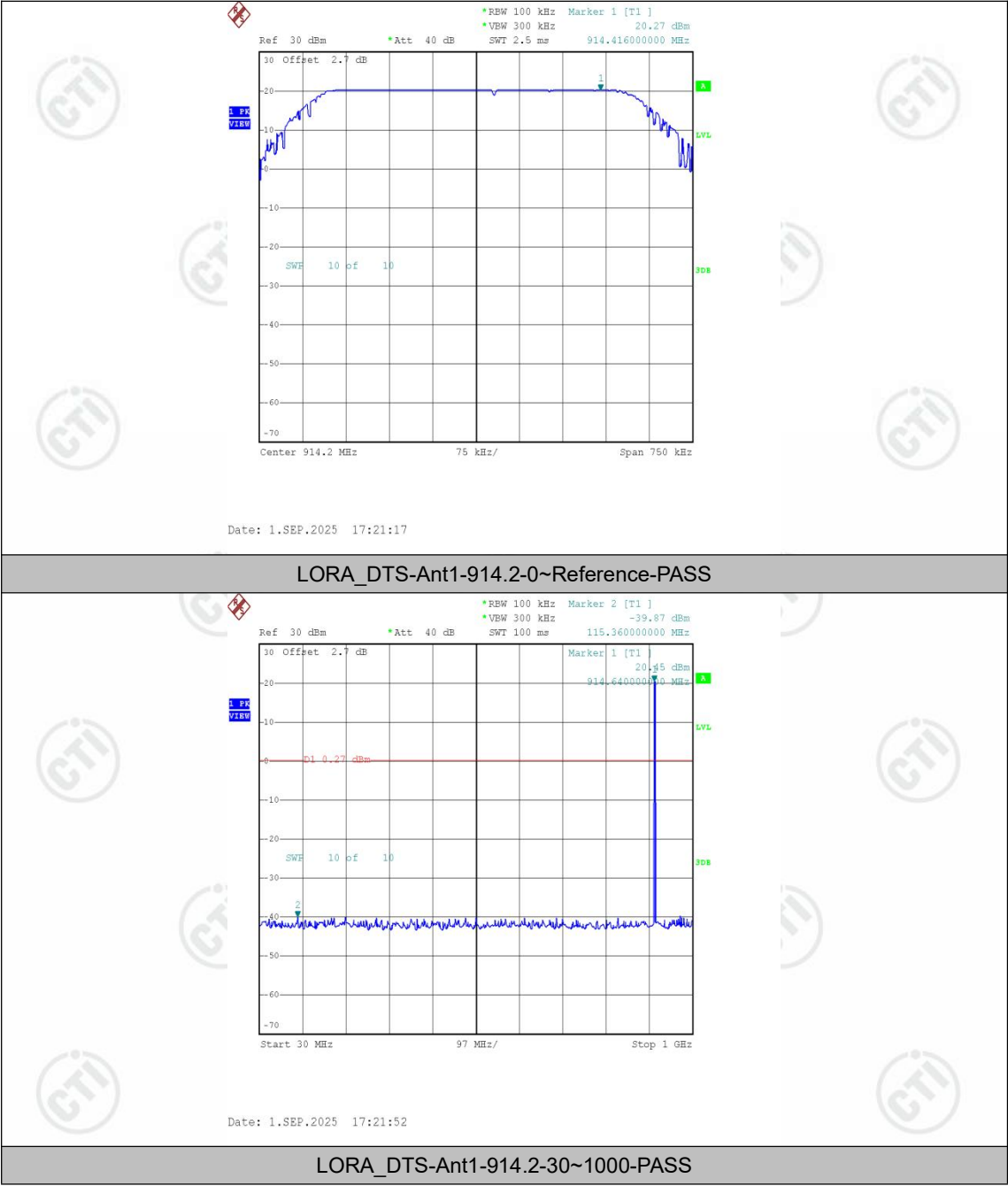
TestMode	Antenna	Frequency [MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
LORA_DTS	Ant1	903	0~Reference	19.27	19.27	---	PASS
LORA_DTS	Ant1	903	30~1000	19.27	-40.17	≤-0.73	PASS
LORA_DTS	Ant1	903	1000~26500	19.27	-39.25	≤-0.73	PASS
LORA_DTS	Ant1	909.4	0~Reference	19.42	19.42	---	PASS
LORA_DTS	Ant1	909.4	30~1000	19.42	-38.97	≤-0.58	PASS
LORA_DTS	Ant1	909.4	1000~26500	19.42	-39.13	≤-0.58	PASS
LORA_DTS	Ant1	914.2	0~Reference	20.27	20.27	---	PASS
LORA_DTS	Ant1	914.2	30~1000	20.27	-39.87	≤0.27	PASS
LORA_DTS	Ant1	914.2	1000~26500	20.27	-39.61	≤0.27	PASS

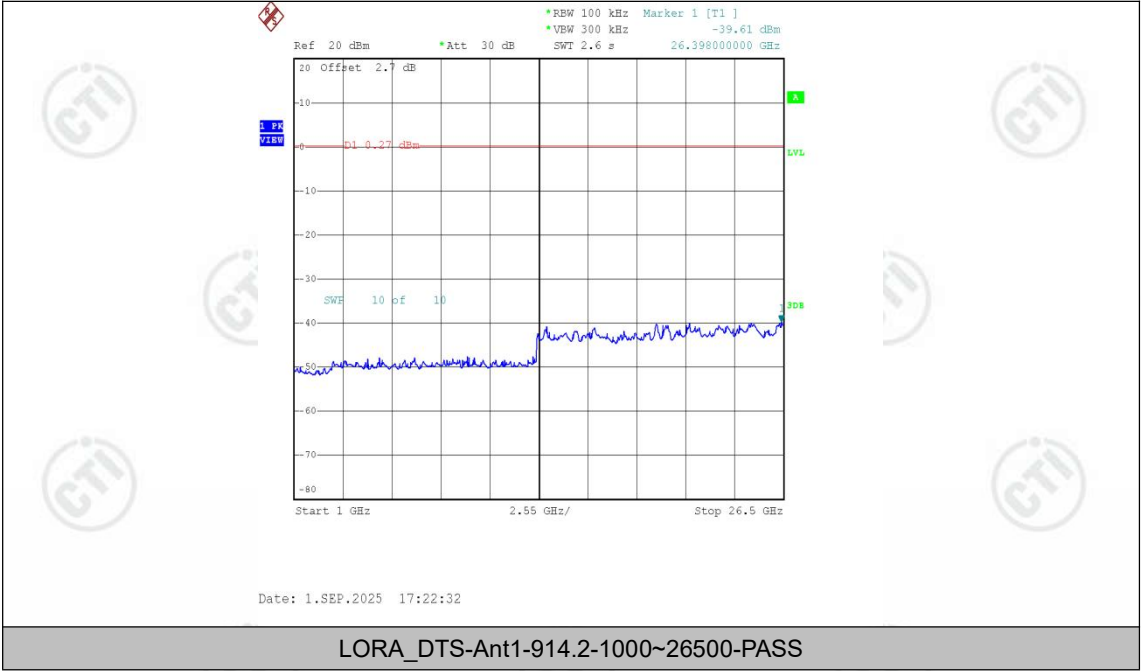
Test Graphs









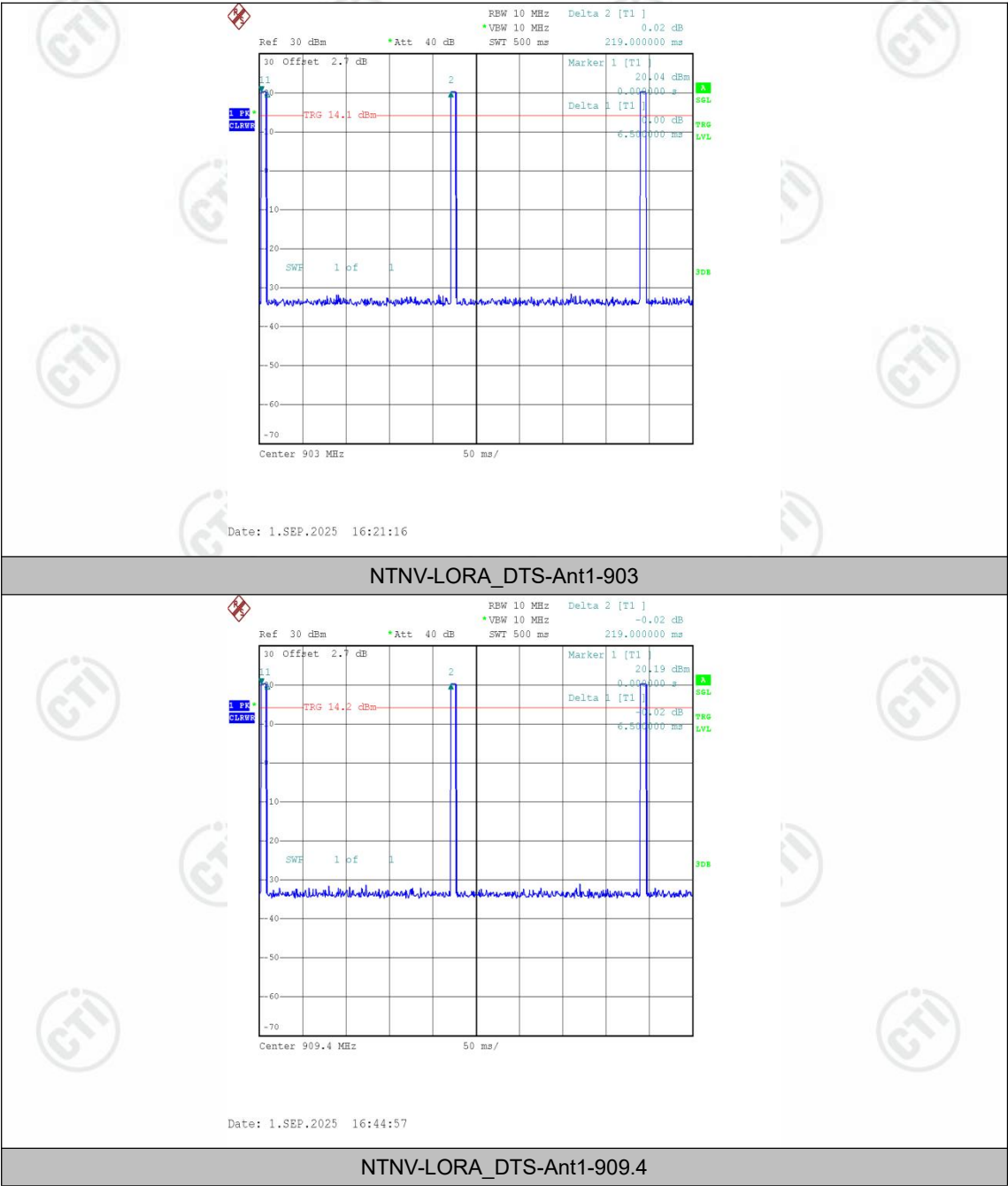


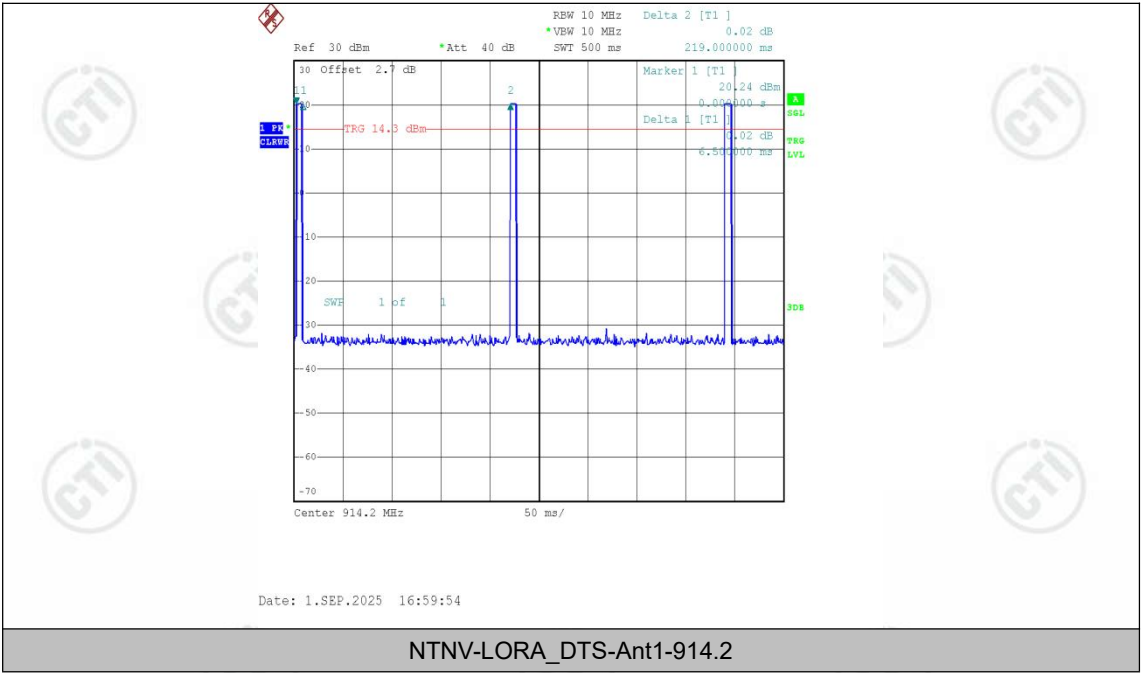
Appendix H: Duty Cycle

Test Result

TestMode	Antenna	Frequency [MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
LORA_DTS	Ant1	903	6.50	219.00	2.97	15.27
LORA_DTS	Ant1	909.4	6.50	219.00	2.97	15.27
LORA_DTS	Ant1	914.2	6.50	219.00	2.97	15.27

Test Graphs





*** End of Report ***