

Appendix: LoRa(DTS) 500KHz

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Appendix A: DTS Bandwidth

Test Result

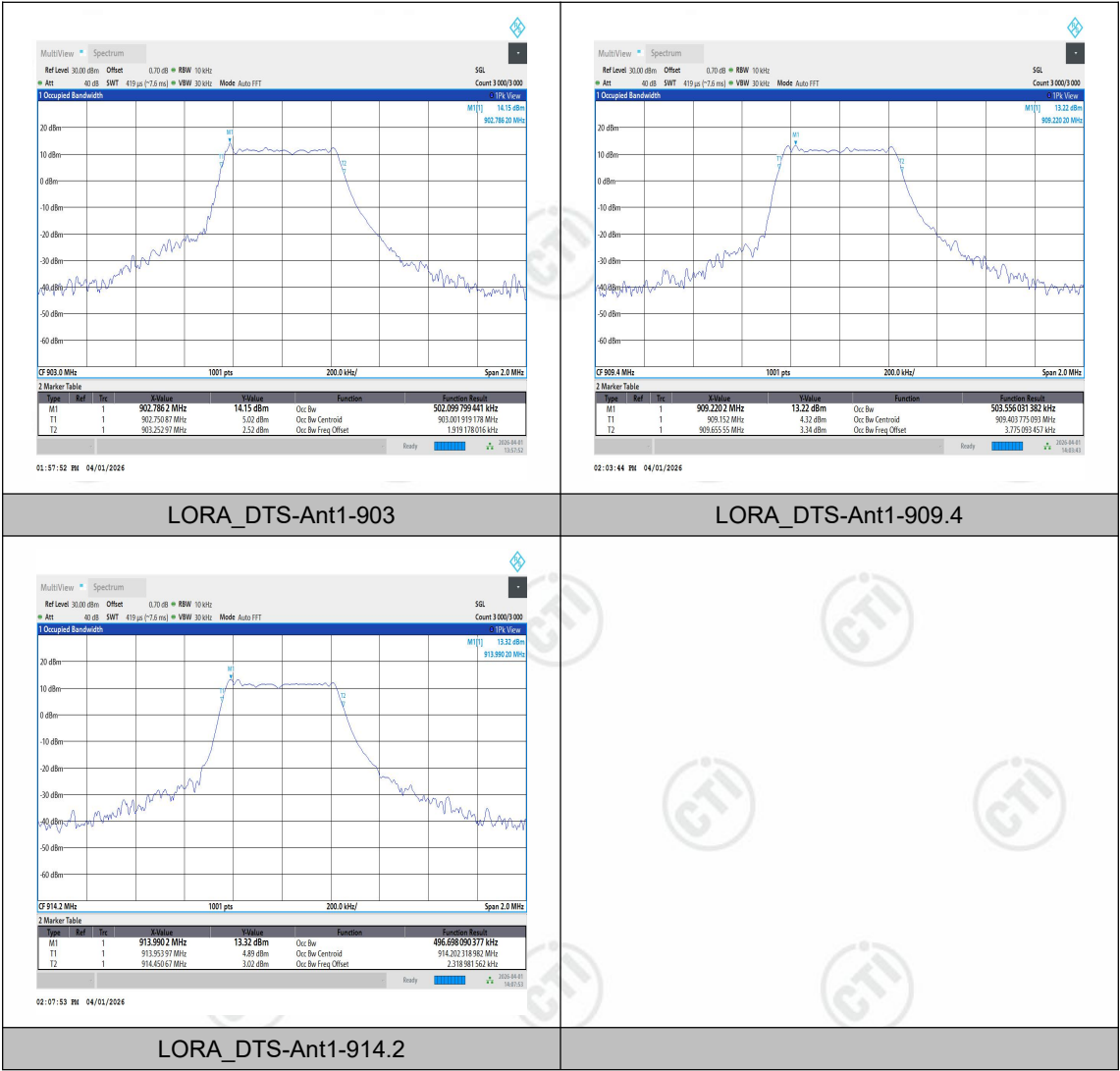
TestMode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
LORA_DTS	Ant1	903	0.62	902.69	903.31	0.5	PASS
LORA_DTS	Ant1	909.4	0.61	909.10	909.71	0.5	PASS
LORA_DTS	Ant1	914.2	0.61	913.90	914.51	0.5	PASS

Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Frequency [MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
LORA_DTS	Ant1	903	0.50210	902.7509	903.2530	---	---
LORA_DTS	Ant1	909.4	0.50356	909.1520	909.6556	---	---
LORA_DTS	Ant1	914.2	0.49670	913.9540	914.4507	---	---

Test Graphs

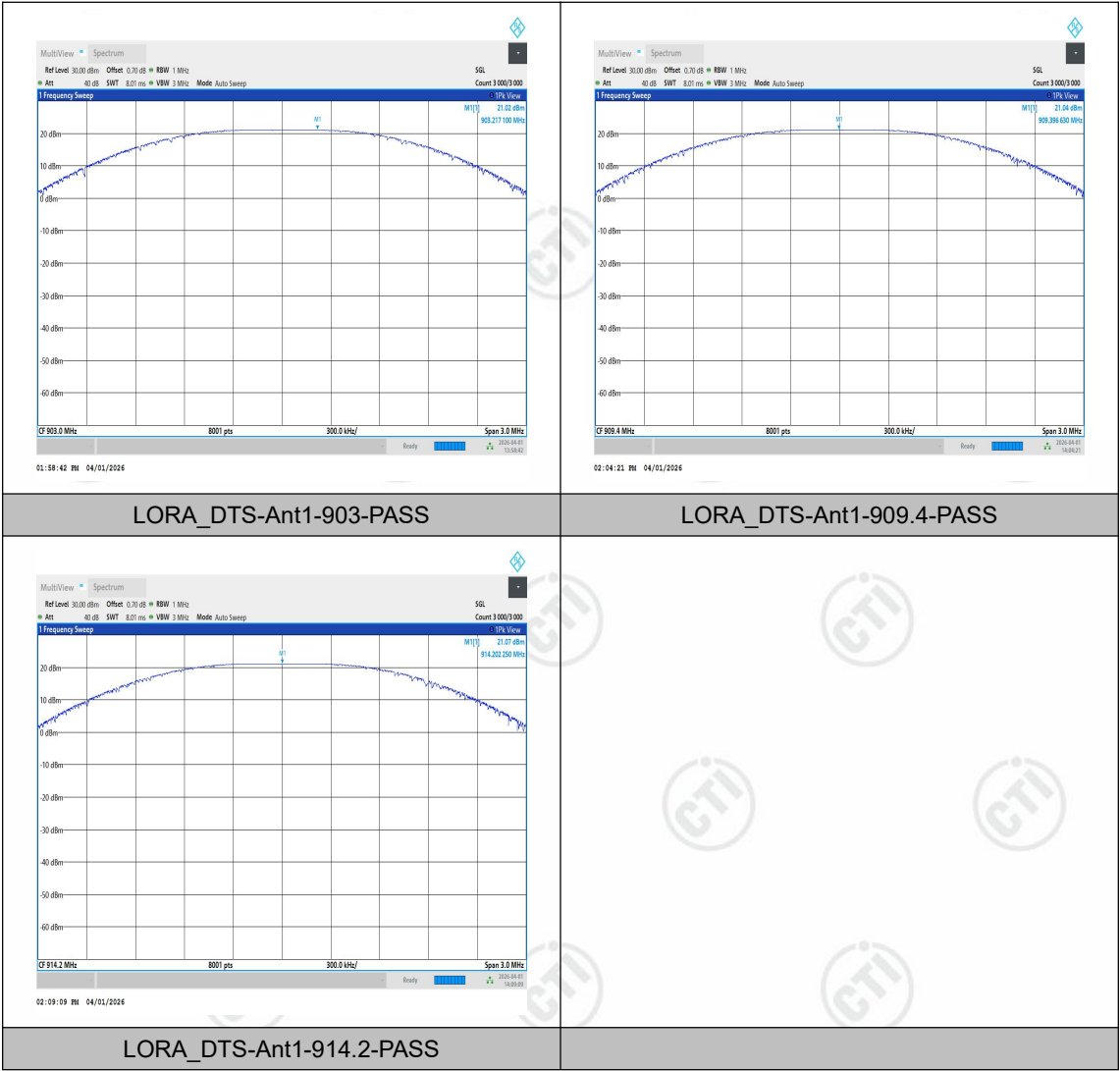


Appendix C: Maximum conducted output power

Test Result Peak

TestMode	Antenna	Frequency [MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
LORA_DTS	Ant1	903	21.02	≤30	PASS
LORA_DTS	Ant1	909.4	21.04	≤30	PASS
LORA_DTS	Ant1	914.2	21.07	≤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	6.31	≤8.00	PASS
LORA_DTS	Ant1	909.4	4.42	≤8.00	PASS
LORA_DTS	Ant1	914.2	5.17	≤8.00	PASS

The figure displays four spectral plots arranged in a 2x2 grid, showing the frequency response of LORA_DTS-Ant1 at different frequencies. Each plot is a 'Frequency Sweep' graph with a y-axis representing power in dBm (from -70 to 10) and an x-axis representing frequency in MHz (from 903.0 to 945.5). The plots are labeled as follows:

- Top Left Plot:** LORA_DTS-Ant1-903.0-PASS. The plot shows a peak at 903.0 MHz with a power level of 6.31 dBm. The x-axis is labeled 'CF 903.0 MHz' and the y-axis is labeled 'Span 961.0 kHz'.
- Top Right Plot:** LORA_DTS-Ant1-909.4-PASS. The plot shows a peak at 909.4 MHz with a power level of 6.42 dBm. The x-axis is labeled 'CF 909.4 MHz' and the y-axis is labeled 'Span 945.5 kHz'.
- Bottom Left Plot:** LORA_DTS-Ant1-914.2-PASS. The plot shows a peak at 914.2 MHz with a power level of 5.17 dBm. The x-axis is labeled 'CF 914.2 MHz' and the y-axis is labeled 'Span 945.5 kHz'.
- Bottom Right Plot:** LORA_DTS-Ant1-945.5-PASS. The plot shows a peak at 945.5 MHz with a power level of 5.17 dBm. The x-axis is labeled 'CF 945.5 MHz' and the y-axis is labeled 'Span 945.5 kHz'.

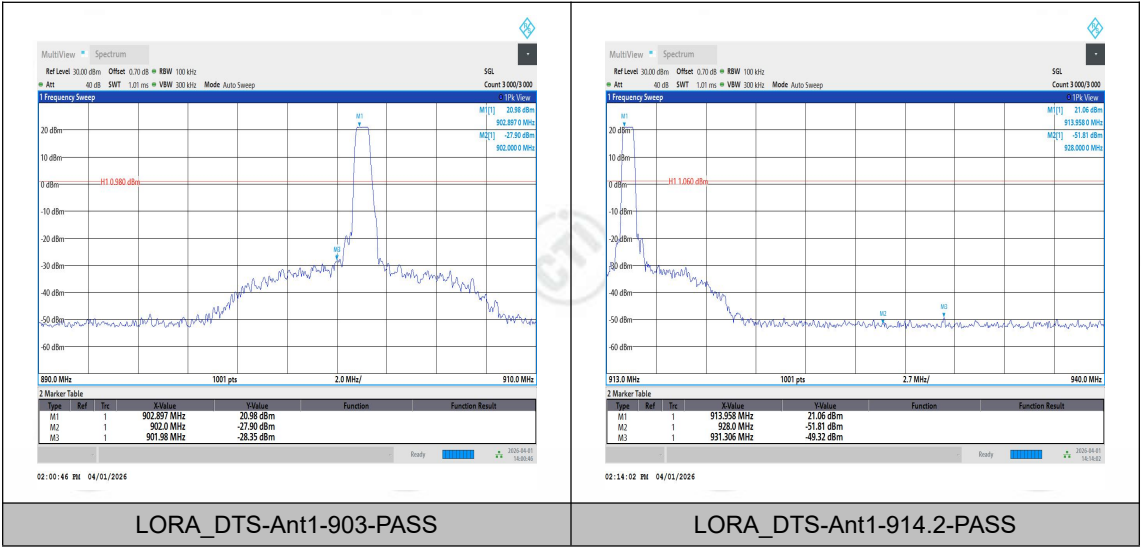
Each plot includes a 'MultiView' tab and a 'Spectrum' tab. The 'Spectrum' tab is selected, showing the frequency response. The 'MultiView' tab shows the power spectrum. The plots are labeled 'LORA_DTS-Ant1-903-PASS', 'LORA_DTS-Ant1-909.4-PASS', 'LORA_DTS-Ant1-914.2-PASS', and 'LORA_DTS-Ant1-945.5-PASS' respectively.

Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
LORA_DTS	Ant1	Low	903	20.98	-28.35	≤0.98	PASS
LORA_DTS	Ant1	High	914.2	21.06	-49.32	≤1.06	PASS

Test Graphs

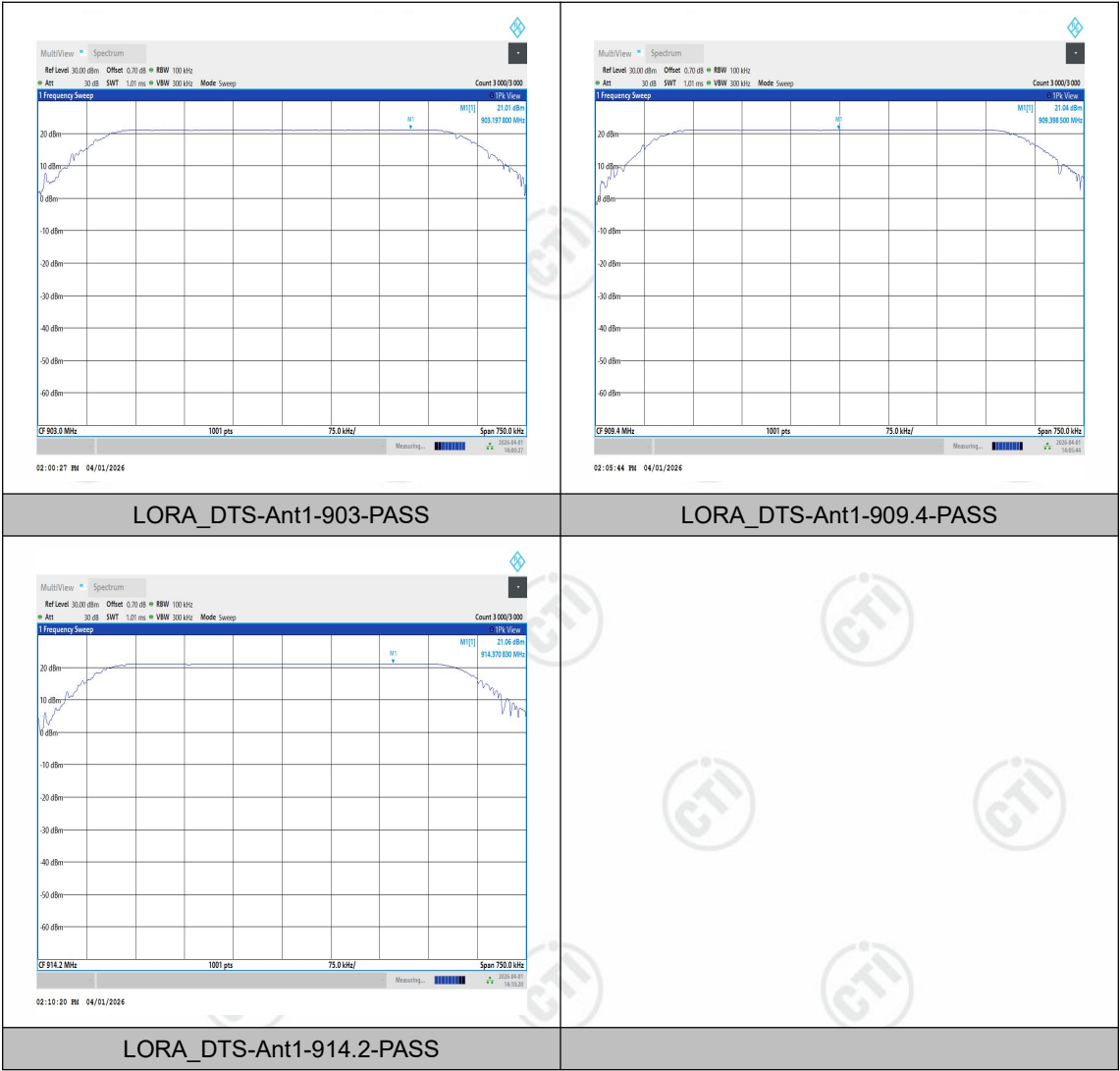


ppendix E: Reference level measurement

Test Result

TestMode	Antenna	Frequency [MHz]	Result[dBm]	Limit[dBm]	Verdict
LORA_DTS	Ant1	903	21.01	---	PASS
LORA_DTS	Ant1	909.4	21.04	---	PASS
LORA_DTS	Ant1	914.2	21.06	---	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	30~1000	21.01	-48.87	≤1.01	PASS
LORA_DTS	Ant1	903	1000~26500	21.01	-41.69	≤1.01	PASS
LORA_DTS	Ant1	909.4	30~1000	21.04	-48.65	≤1.04	PASS
LORA_DTS	Ant1	909.4	1000~26500	21.04	-42.55	≤1.04	PASS
LORA_DTS	Ant1	914.2	30~1000	21.06	-47.57	≤1.06	PASS
LORA_DTS	Ant1	914.2	1000~26500	21.06	-42.56	≤1.06	PASS