



Shenzhen CTL Testing Technology Co., Ltd.

Floor 1-A, Baisha Technology Park, No.3011, Shahexi Road, Nanshan District, Shenzhen, China 518055

Tel: +86-755-89486194 E-mail: ctl@ctl-lab.com

Annex for LORA 915MHz

Test Report No.: CTL2508276021-WF01

TABLE OF CONTENTS

Annex for LORA 915MHz	1
1. Duty Cycle	2
2. Bandwidth	4
3. Maximum Conducted Output Power	7
4. Maximum Power Spectral Density	9
5. Unwanted Emissions In Non-restricted Frequency Bands	11

FCC ID: 2BR8D-ST02XX

1. Duty Cycle

1.1 Test Result

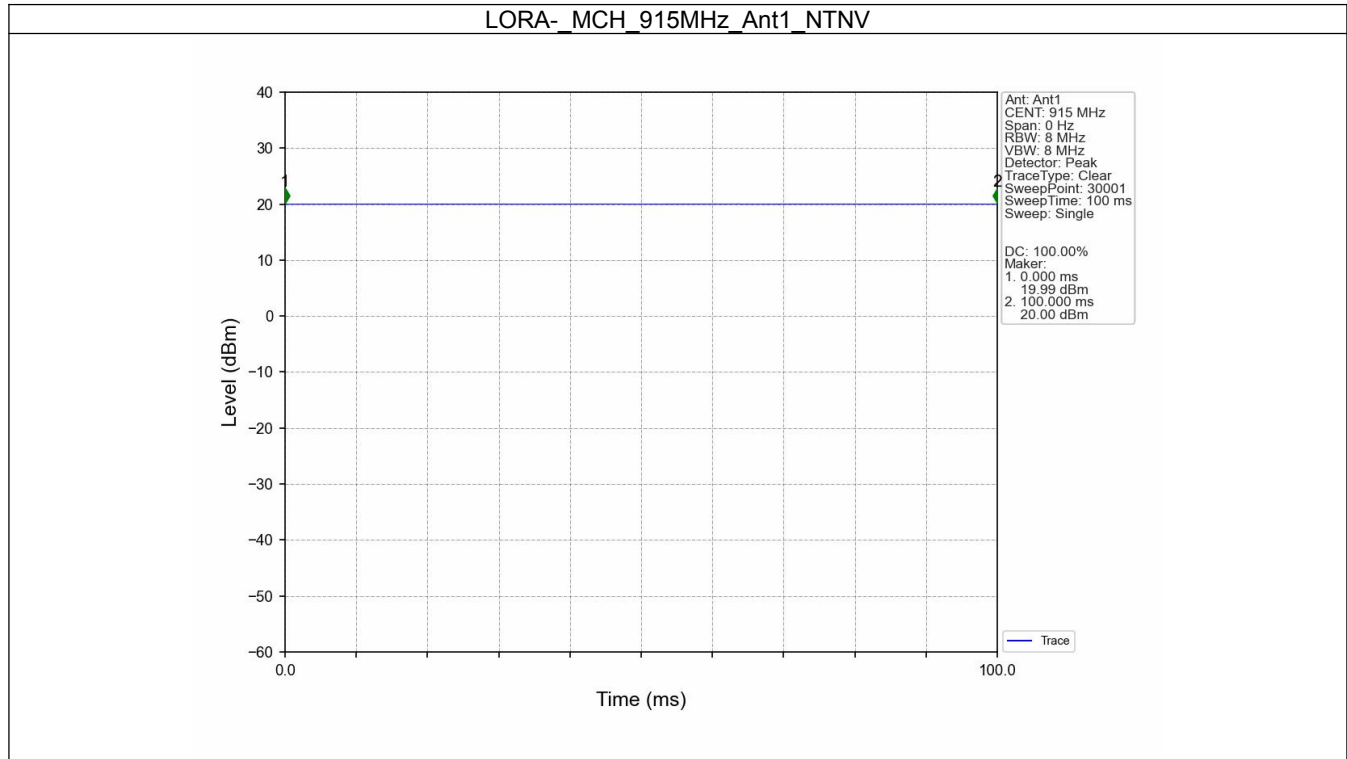
1.1.1 Ant1

Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
LORA-	SISO	915	100.000	100.000	100.00	0.00	0.00

FCC ID: 2BR8D-ST02XX

1.2 Test Graph

1.2.1 Ant1



FCC ID: 2BR8D-ST02XX

2. Bandwidth

2.1 Test Result

2.1.1 OBW

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
LORA-DTS	SISO	915	1	0.549	/	Pass

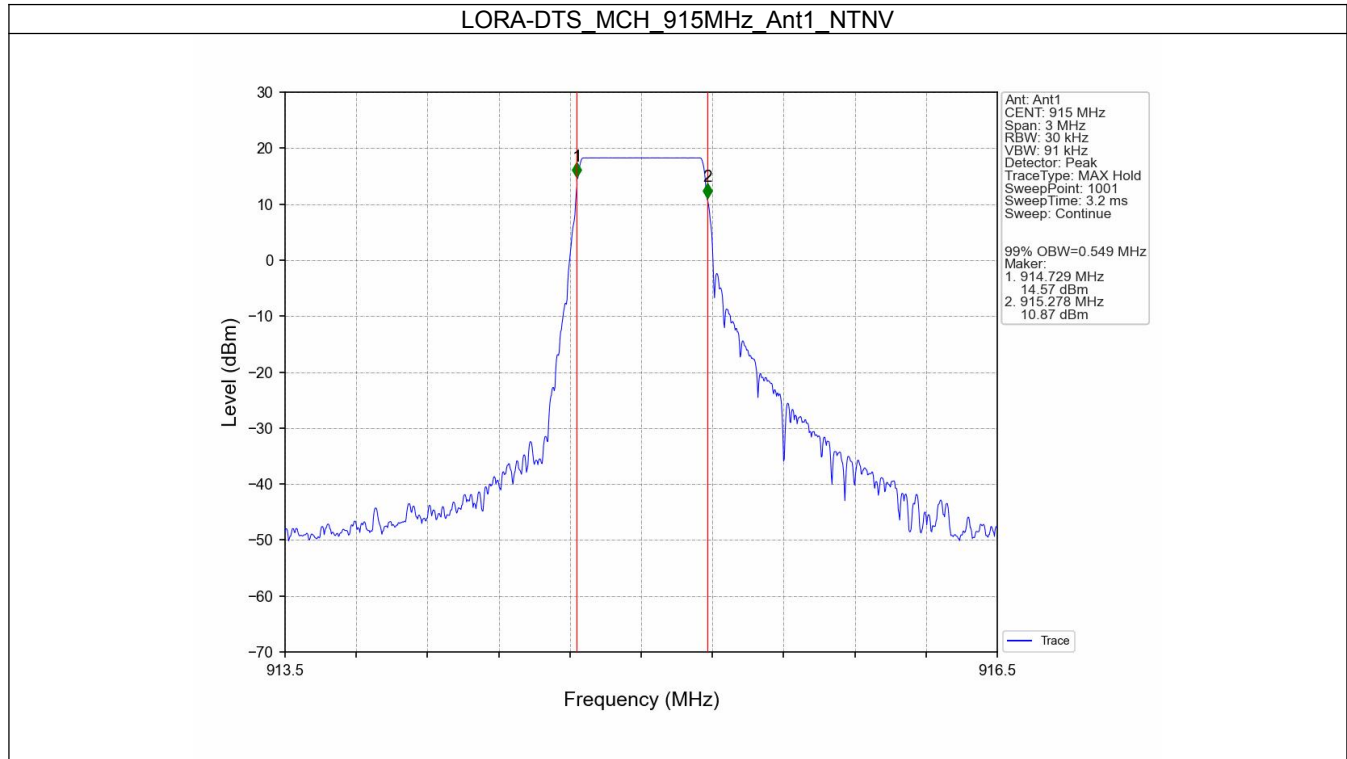
2.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
LORA-DTS	SISO	915	1	0.640	≥ 0.5	Pass

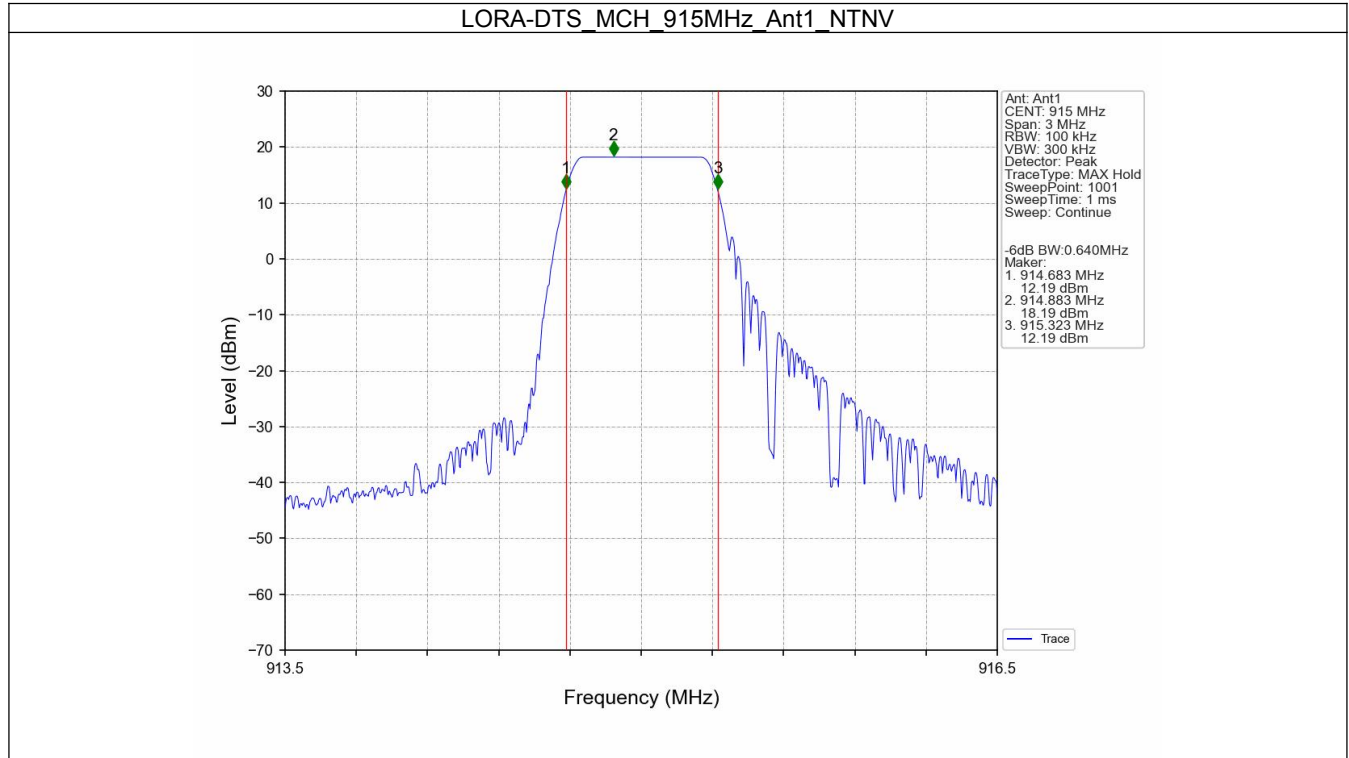
FCC ID: 2BR8D-ST02XX

2.2 Test Graph

2.2.1 OBW



FCC ID: 2BR8D-ST02XX

2.2.2 6dB BW

FCC ID: 2BR8D-ST02XX

3. Maximum Conducted Output Power

3.1 Test Result

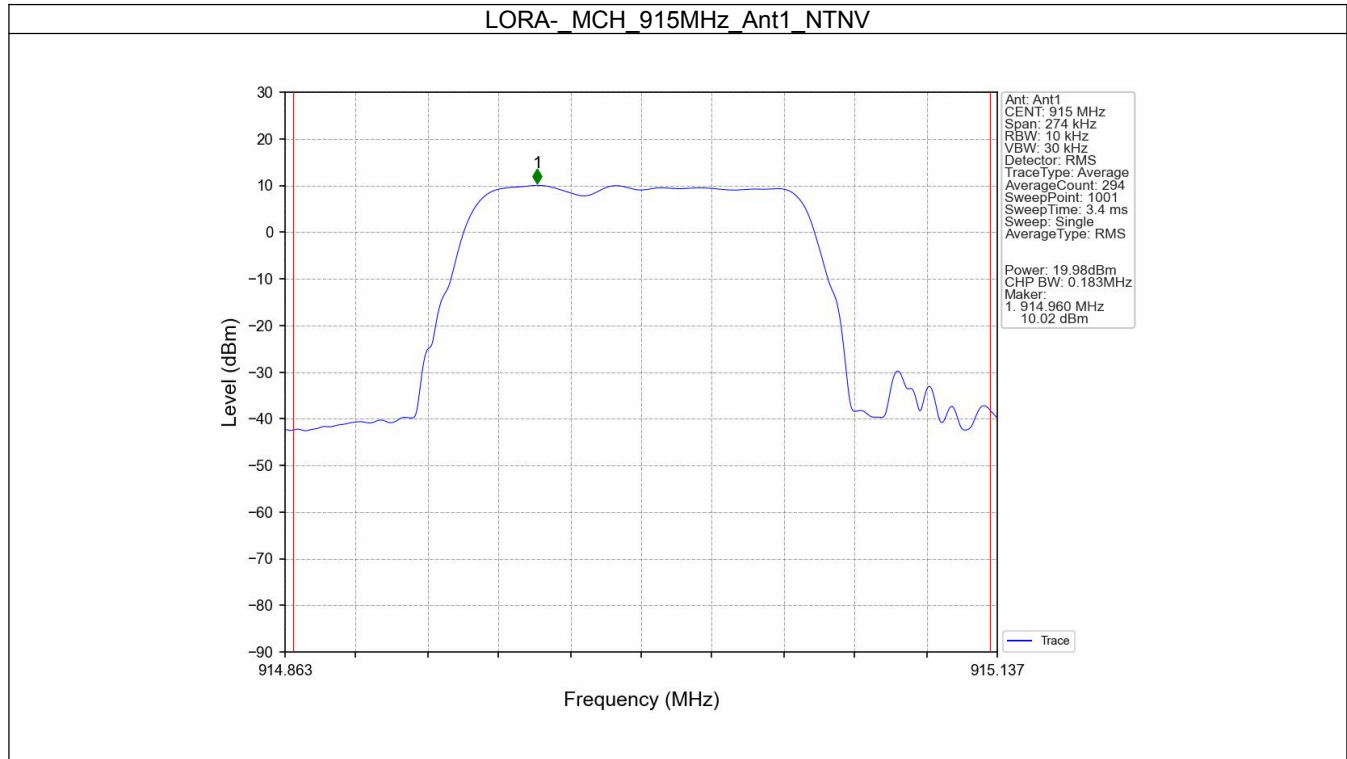
3.1.1 Power

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
LORA-	SISO	915	19.98	<=30	Pass
Note1: Antenna Gain: Ant1: -3.96dBi;					

FCC ID: 2BR8D-ST02XX

3.2 Test Graph

3.2.1 Power



FCC ID: 2BR8D-ST02XX

4. Maximum Power Spectral Density

4.1 Test Result

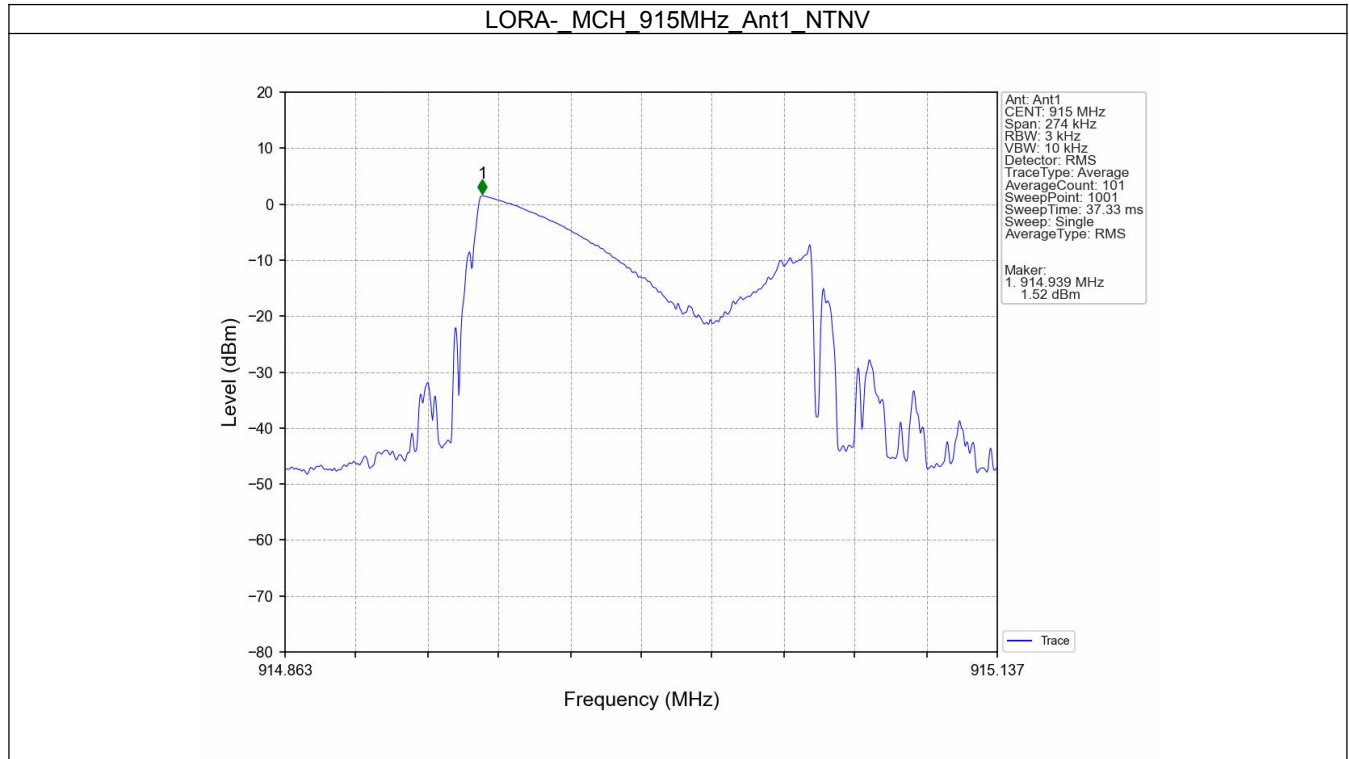
4.1.1 PSD

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm)		Verdict
			ANT1	Limit	
LORA-	SISO	915	1.52	<=8	Pass
Note1: Antenna Gain: Ant1: -3.96dBi;					

FCC ID: 2BR8D-ST02XX

4.2 Test Graph

4.2.1 PSD



FCC ID: 2BR8D-ST02XX

5. Unwanted Emissions In Non-restricted Frequency Bands

5.1 Test Result

5.1.1 Ref

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
LORA-	SISO	915	1	20.11
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.				

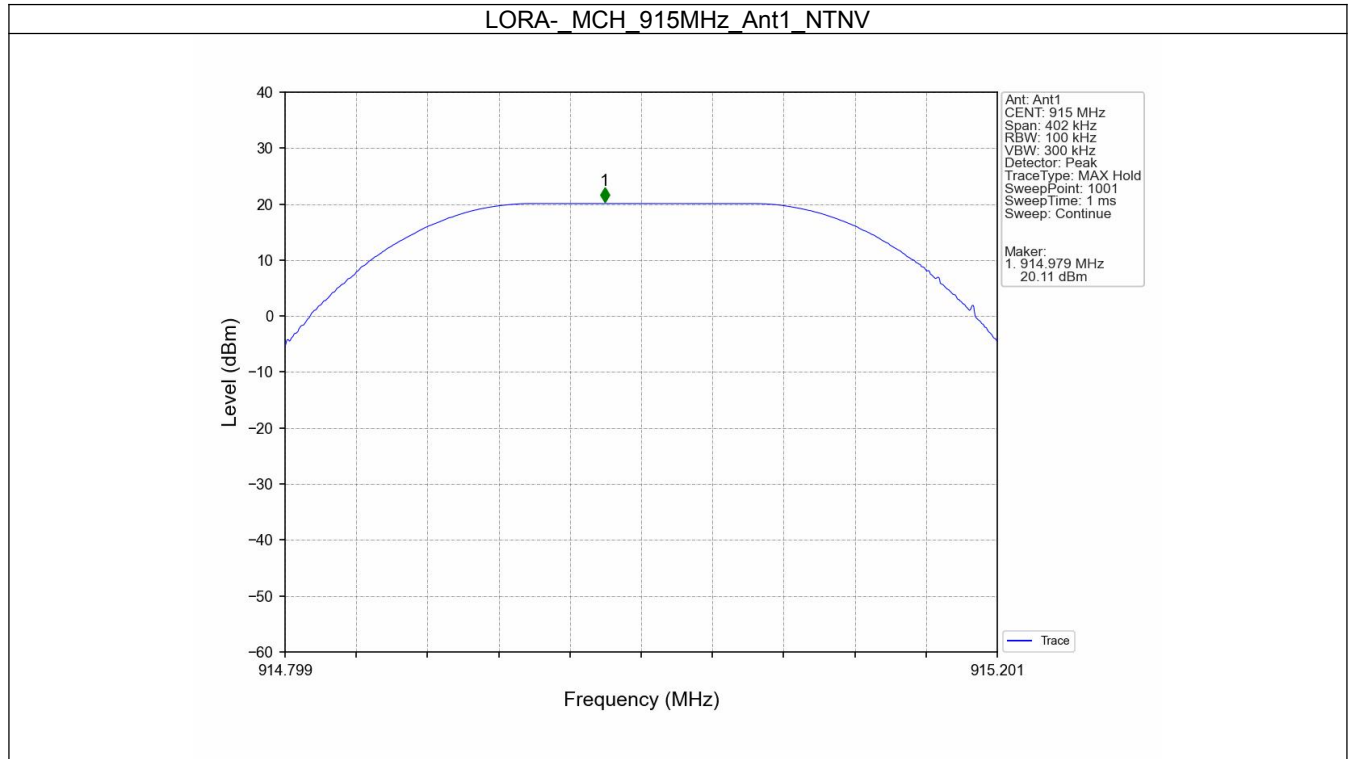
5.1.2 CSE

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
LORA-	SISO	915	1	20.11	-9.89	Pass
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.						

FCC ID: 2BR8D-ST02XX

5.2 Test Graph

5.2.1 Ref



FCC ID: 2BR8D-ST02XX

5.2.2 CSE

