



Compliance Testing, LLC

Previously Flom Test Lab

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Test Report

Prepared for: Tehama Wireless Design Group Inc.

Model: RPT TW223

Description: Repeater

Serial Number: N/A

FCC ID: TS4-TW223

To

FCC Part 1.1310

Date of Issue: April 8, 2019

On the behalf of the applicant:

**Tehama Wireless Design Group Inc.
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Attention of:

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**Prepared By
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**Poona Saber
Project Test Engineer**

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Test Report Revision History

Revision	Date	Revised By	Reason for Revision
1.0	March 21, 2019	Poona Saber	Original Document

ILAC / A2LA

Compliance Testing, LLC, has been accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer joint ISO-ILAC-IAF Communiqué dated January 2009)

The tests results contained within this test report all fall within our scope of accreditation, unless below

Please refer to <http://www.compliancetesting.com/labscope.html> for current scope of accreditation.

Testing Certificate Number: **2152.01**



FCC Site Reg. #349717

IC Site Reg. #2044A-2

Non-accredited tests contained in this report:

N/A

EUT Description

Model: RPT TW223

Description: Transceiver

Firmware: N/A

Software: N/A

Serial Number: N/A

Additional Information: TW-223 unit is a 902-928 MHz diversity transceiver consisting of a single PCB with two identical RFIC transceivers each with a PCB trace whip antenna both controlled by a common integrated microprocessor.

There are 3 model numbers variants depending on:

1. Power supplies
The TW-195A is line powered by an external 5V AC/DC transformer
Both TW-191S and TW-195S are powered by the combination of a 10 W solar panel and 2 pack rechargeable lithium batteries 7.2 V 6 Ah.
2. RF modes:
Both TW-195A and TW-195S are using a combination of FHSS Lora and DTS LoraWan modes.
The TW-191S uses the FSK mode.



Note: The highest radiated power, EIRP out of the three modes of FSK, FHSS and DTS is used for the calculation of MPE below.

MPE Evaluation

This is a mobile device used in Uncontrolled Exposure environment.

Limits Uncontrolled Exposure
47 CFR 1.1310
Table 1, (B)

0.3-1.234 MHz:	Limit [mW/cm ²] = 100
1.34-30 MHz:	Limit [mW/cm ²] = (180/f ²)
30-300 MHz:	Limit [mW/cm ²] = 0.2
300-1500 MHz:	Limit [mW/cm ²] = f/1500
1500-100,000 MHz	Limit [mW/cm ²] = 1.0

Test Data

Test Frequency, MHz	924
Power, Radiated EIRP, mW (P*G)	167.1
Distance (R)	20 cm

$S = \frac{P * G}{4\pi r^2}$
Power Density (S) mw/cm ²

Power Density (S) = 0.033
Limit = (from above table) = 0.616

Since the Power density is lower than the limit at the distance of 20 cm Unit shall be installed at the minimum distance of 20 cm from human body at all time.

END OF TEST REPORT