



Dated: October 15, 2026

Subject: Antenna Justification Letter for FCC Part 15 Compliance

Applicant: TrellisWare Technologies

FCC ID: 2A6X2-750W

IC: 28565-750W

Model Number (HVIN): TW-750W

To Whom It May Concern,

This letter provides justification for the antenna configuration used in the above-referenced device, submitted for certification under **FCC Part 15**.

Radiated Measurement Justification

All compliance testing, including fundamental and spurious emissions, was performed using **radiated measurement methods**. As such, antenna gain and performance characteristics were inherently captured in the test results. Therefore, no separate antenna gain documentation is required to demonstrate compliance with FCC limits.

This approach aligns with the guidance provided in the **FCC TCB Workshop (October 2022)** and **KDB 353028 D01**, which allows for a justification statement in lieu of antenna gain documentation when radiated measurements are used exclusively.

Antenna Description

- **Antenna Type:** PCB trace antenna
- **Location:** Integrated on the main PCB, as shown in the internal photographs
- **Dimensions:**
 - 2.4GHz : 12 mm × 3 mm × 2 mm
 - 5.0GHz : 5 mm × 3 mm × 2 mm
- **Peak Gain:**
 - -2.21 dBi (2.4GHz)
 - 3.65 dBi (5.0GHz)
- **Polarization:** Linear
- **Orientation:** Vertical

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- **Frequency Bands Supported:** 2.4 GHz and 5.0GHz ISM band
- **Antenna Test and Integration details:**
 - The antenna is not a standalone component but is integrated into the PCB within a host enclosure.
 - The enclosure this module and antenna will be located is the TrellisWare Technologies Radio, TW-750
 - Spurious-emissions testing is performed with the module installed in the final host.

Supporting details and materials

1. Internal Photographs

- Top view



5.0 GHz antenna

2.4GHz antenna

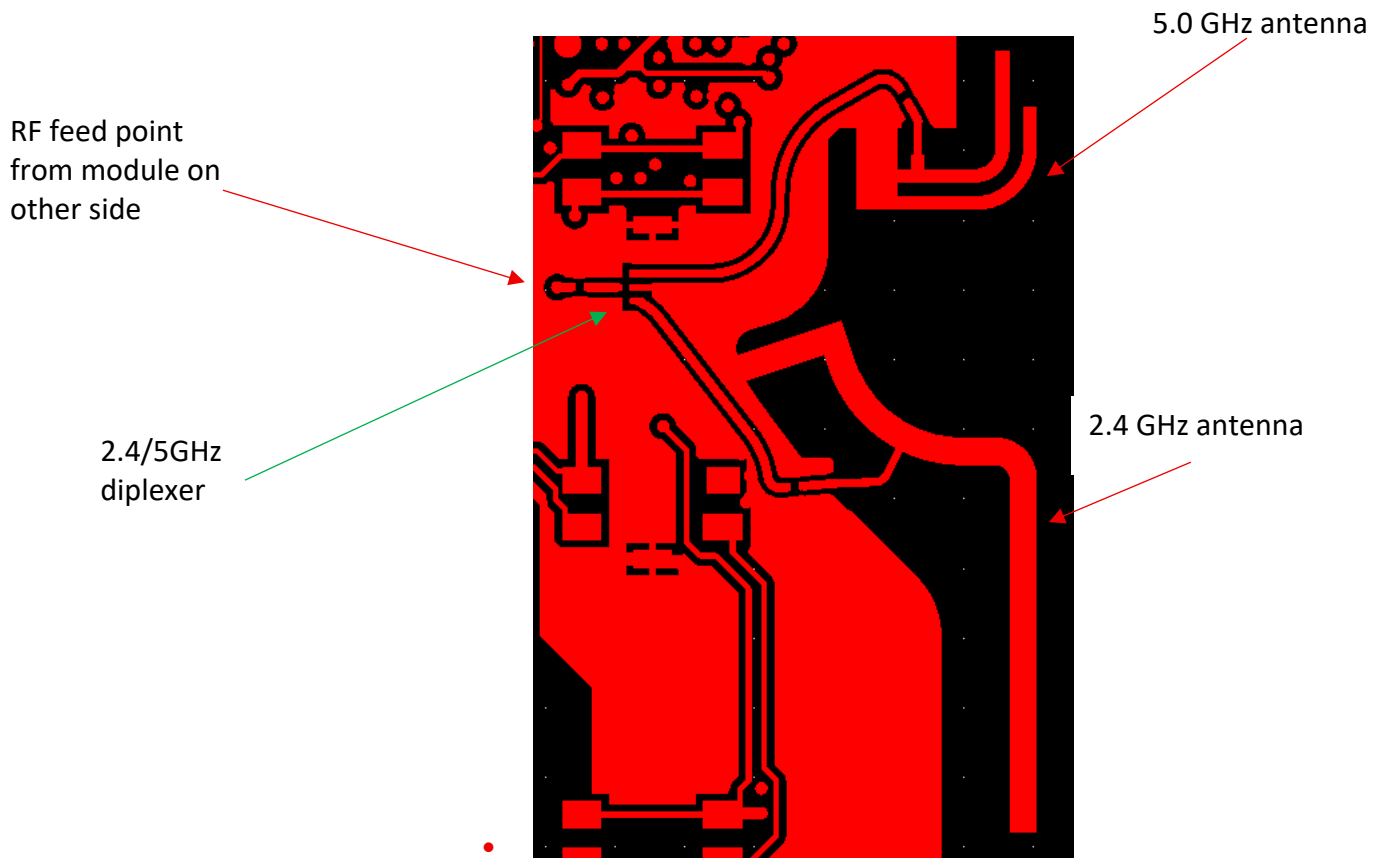
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2. PCB Layout Diagrams



3. Measured Gain Information

- **Peak Gain:**
 - 2.4Ghz= -2.21dBi
 - 5.0GHz= 3.65dBi

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Compliance Statement

The antenna configuration has not been altered in a way that would affect radiated performance. No external gain-enhancing accessories (e.g., reflectors, lenses) are used. The antenna is permanently affixed and not user-accessible or replaceable.

Should you require any additional information or clarification, please do not hesitate to contact us.

Sincerely,

Applicant Signed:

Signed:

Printed name: Freddie Williams
Title: Lead Characterization
Company Name: TrellisWare Technologies Inc.
Date: October 15, 2026

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