

Dated: September 9, 2026

Subject: Antenna Justification Letter for FCC Part 15 Compliance

FCC ID: 2AFV8-CAMJPI6B1002

Model Number: : LX-AP-US-2001B

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.

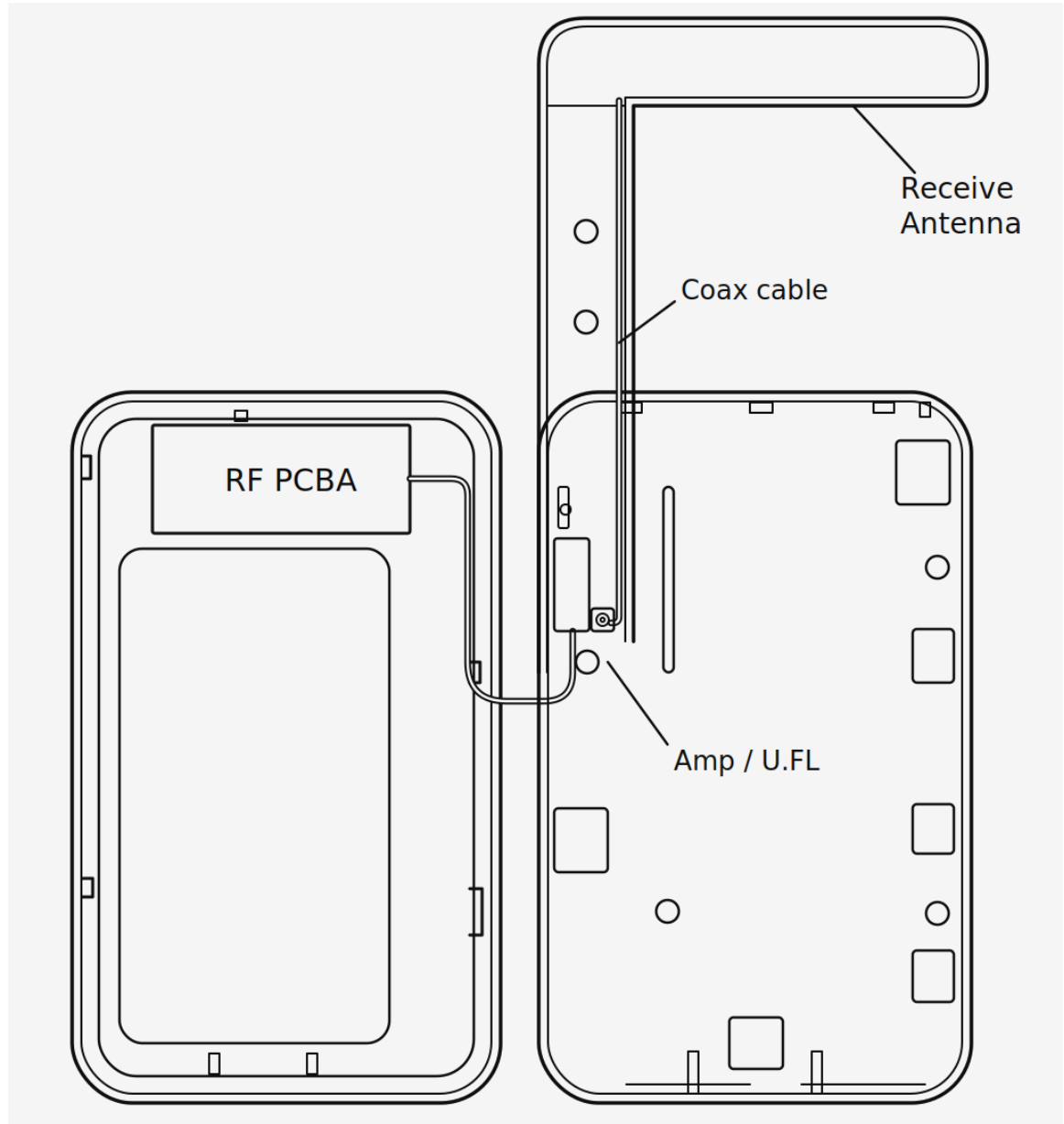
Antenna Description

- **Antenna Type:** Flexible PCB (FPCB) antenna with U.FL/coaxial feed
- **Location:** Internal, connected to the main PCB via a U.FL coaxial cable
- **Dimensions:** 59.3mm x 13mm x .1mm Flexible PCB
- **Estimated Peak Gain:** ~1.7 dBi
- **Polarization:** Linear
- **Orientation:** Horizontal
- **Frequency Bands Supported:** LTE Bands 2, 4, 5, 12, 13, 17, 25, and 66 (approximately 729–2200 MHz)

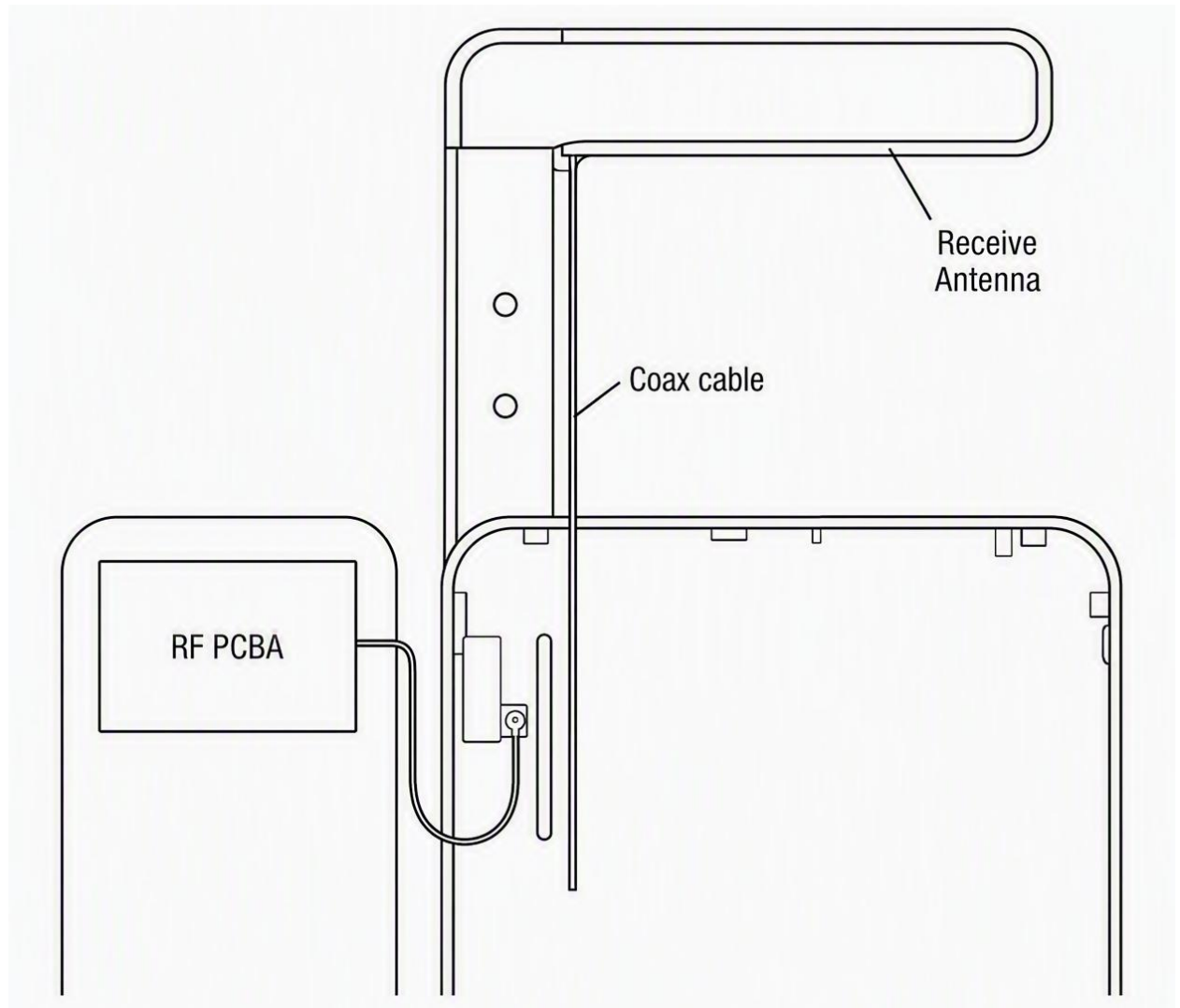
Supporting details and materials

1. Internal Photographs

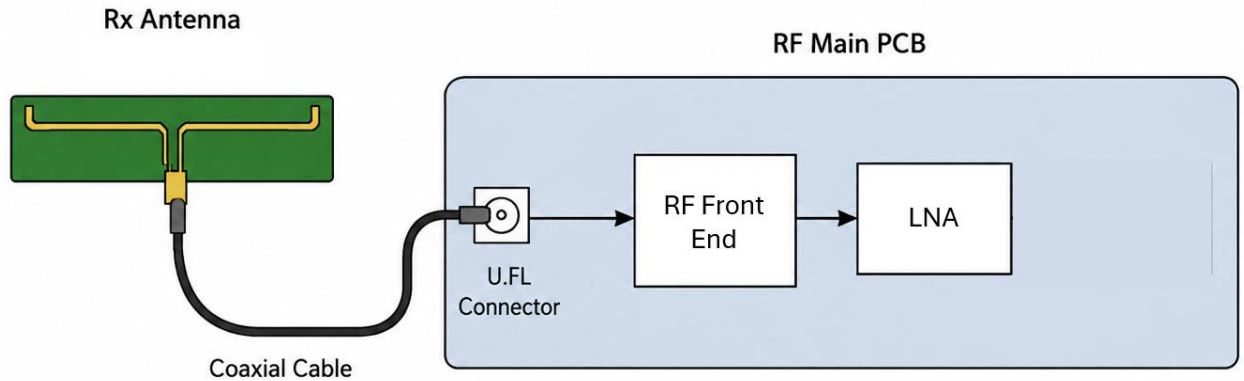
- antenna location and layout



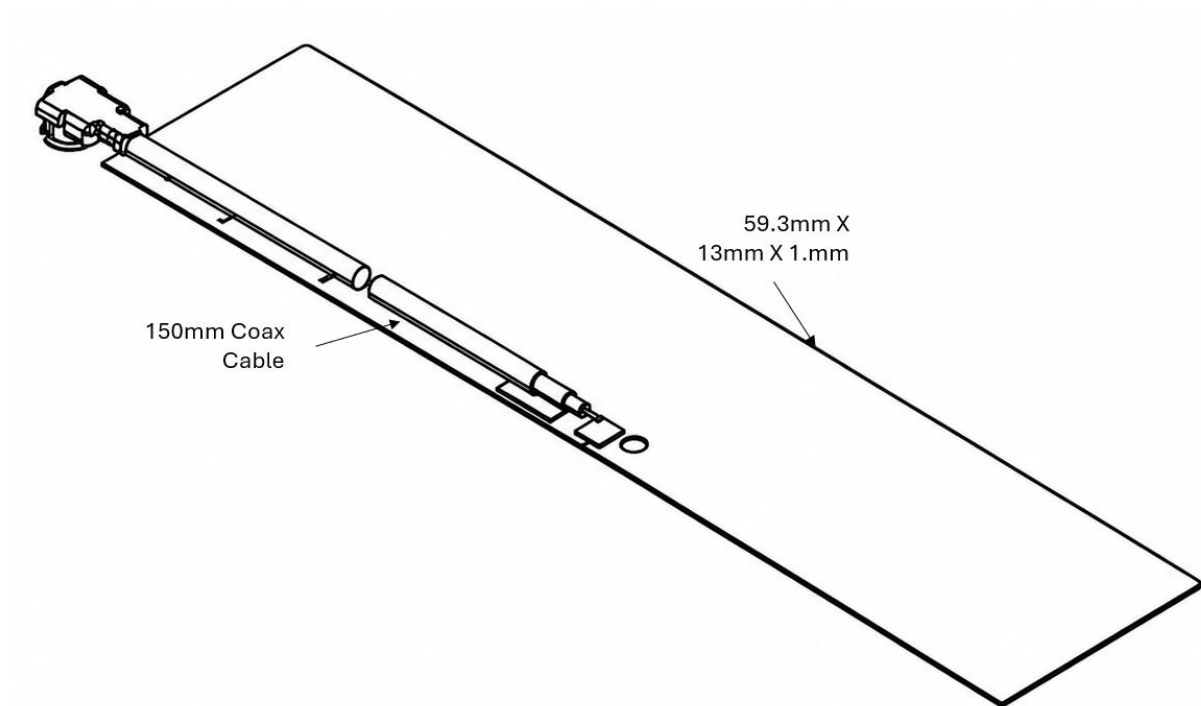
- Close-up view of the antenna structure and routing



2. Layout Diagrams



3. Antenna Specifications



59.3mm x 13mm x .1mm Flexible PCB

Estimated Gain Information

The antenna is based on a dipole configuration with theoretical peak gain of 2.15 dBi. The implemented antenna is a practical flexible PCB dipole and therefore includes losses associated with the flexible PCB construction, conductor and dielectric materials, impedance mismatch, and the 150 mm coaxial feed cable.

MoJoose Inc.

Based on the dipole reference performance and an engineering assessment of these practical losses, the estimated peak realized antenna gain is approximately 1.7 dBi. This value represents an engineering estimate for the implemented antenna configuration and is not a measured peak gain value.

No passive reflectors, lenses, parasitic elements, or other external gain-enhancing structures are used.

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,
Daniel Ash
President / CEO
MoJoose Inc.
da@mjoose.com