

Dated: October 31, 2025

Subject: Antenna Justification Letter for FCC Part 15 Compliance

FCC ID: F5325PGPDC9

Model Number: PGPDC9

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**.

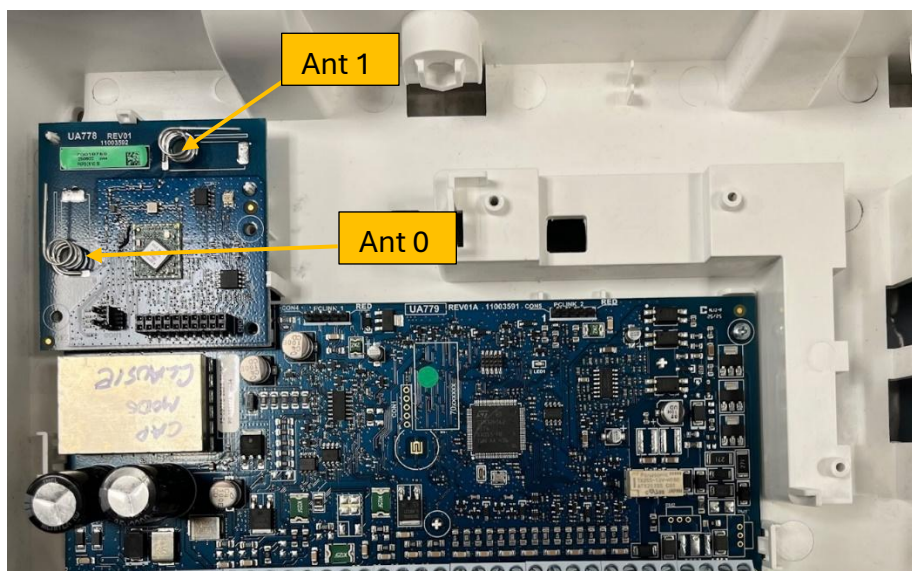
Radiated Measurement Justification

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.

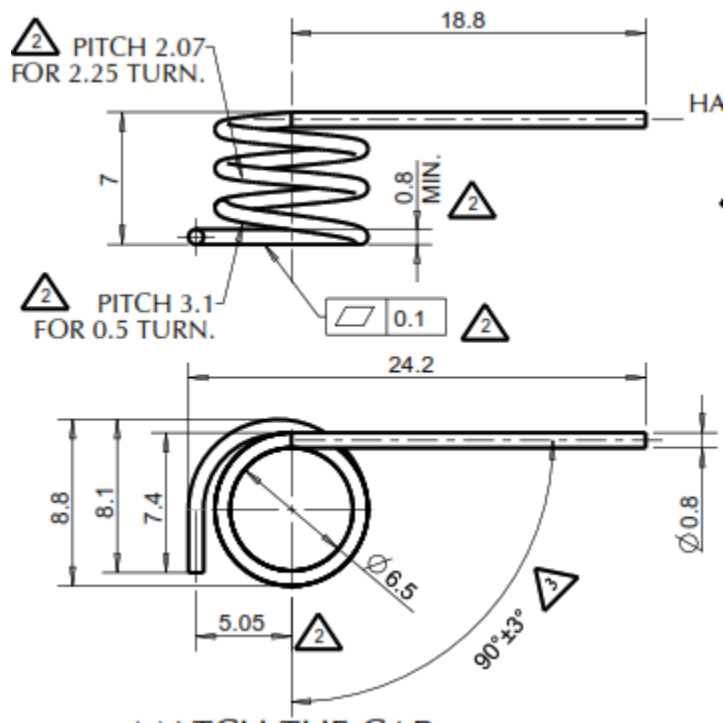
This approach aligns with the guidance provided in the **FCC TCB Workshop (October 2022)** and **KDB 353028 D01**, which allows for a justification statement in lieu of antenna gain documentation when radiated measurements are used exclusively.

Antenna Description

- **Antenna Type:** coil antenna, two used one horizontal and one vertical
- **Location:** soldered on the transmitter PCB, as shown in the internal photographs



- **Dimensions: 24.2 mm × 8.8 mm × 7 mm**



- **Estimated Peak Gain:**
 - Antenna 0 (Horizontal) Gain = 0.8dBi
 - Antenna 1 (Vertical) Gain = 2.89dBi
- **Polarization:** Linear
- **Orientation:** one Horizontal (antenna 0) and one vertical (antenna 1)
- **Frequency Bands Supported:** 912.75 – 919.106 MHz

Supporting details and materials

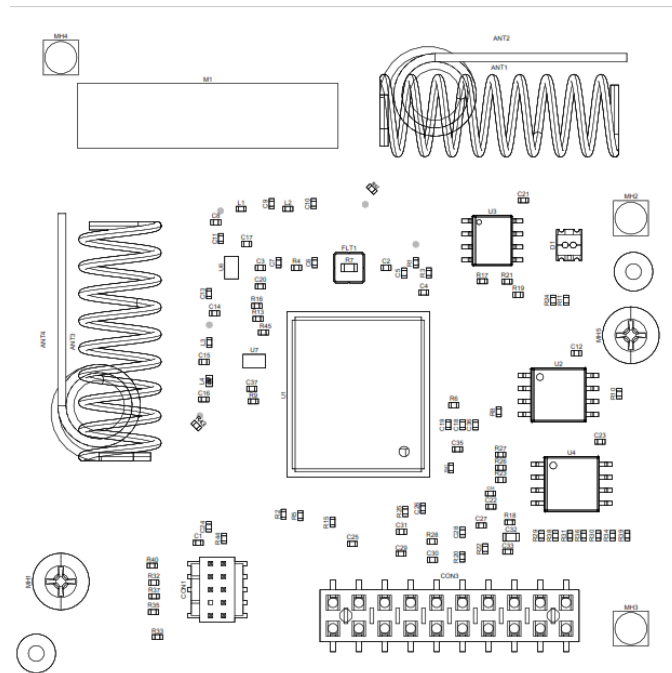
1. Internal Photographs

- antenna location



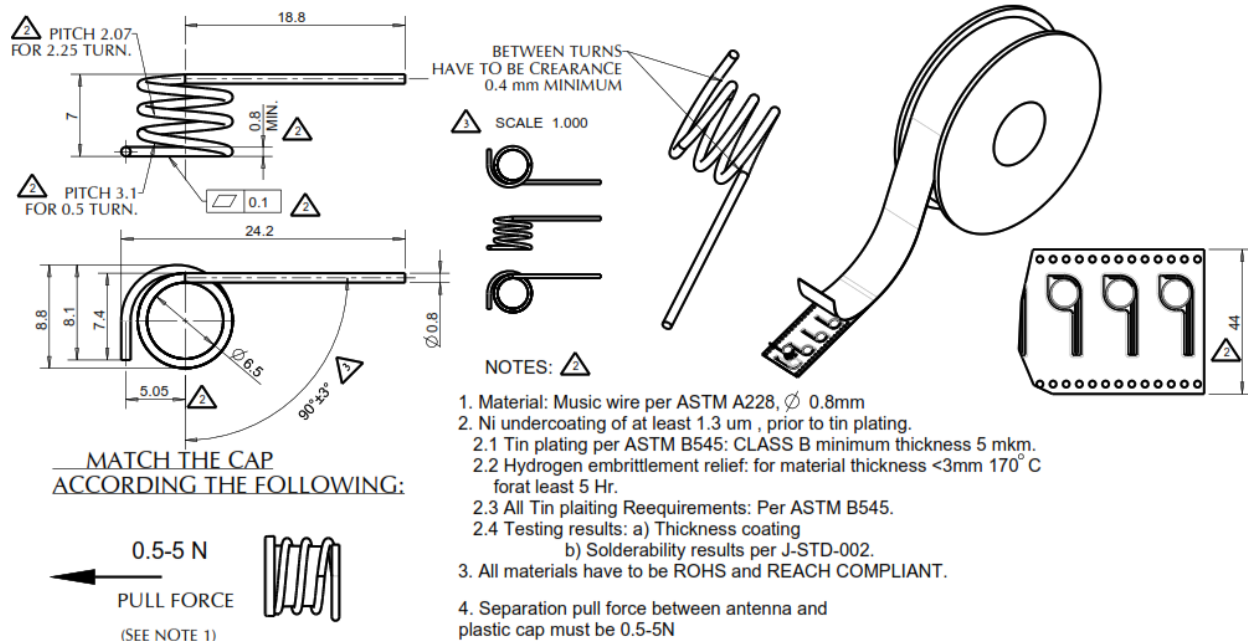
2. PCB Layout Diagrams

- antenna placement on the PCB



3. Antenna Specifications

- electrical and mechanical characteristics



4. Estimated Gain Information

- Derived from reference design or engineering simulations
- No passive reflectors or lenses 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,

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