

D3 Embedded

Dated: September 8, 2025

Subject: Antenna Justification Letter for FCC Part 15 Compliance

FCC ID: 2ASVZ-05

Model Number: RS-6843AOPD

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:** printed circuit board antenna
- **Location:** Integrated within the IWR6843AOP chip
- **Dimensions:** 17 x 17 mm
- **Estimated Peak Gain:** 5 dBi
- **Polarization:** Vertical
- **Orientation:** Vertical
- **Frequency Bands Supported:** 60–64 GHz

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Supporting details and materials

See [iwr6843aop.pdf](#)

1. Internal Photographs

- Clearly annotate to show antenna location and layout
- Close-up views of the antenna structure and routing

2. PCB Layout Diagrams

- Highlight antenna placement and RF chain connections

3. Antenna Specifications

- Based on reference design or manufacturer data (if applicable)
- Include 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,



Thomas C. Mayo
Product Line Manager
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