

Exhibit: Description of Research and Experimentation

Applicant: Airspan Networks

Equipment: [39 GHz Experimental Radio / Platform Name]

Frequency Band: 39 GHz

a. Description of Research and Experimentation

Airspan Networks proposes to conduct research and experimentation in support of the development of a millimeter-wave radio operating in the **39 GHz band**. The experimentation is intended to evaluate radio performance and system operation in **controlled indoor test environments**.

The experimental equipment consists of an integrated millimeter-wave radio incorporating RF transceiver circuitry, baseband processing, phased-array antenna elements, and associated control software. The radio employs directional transmissions and electronically steerable beams designed for high-frequency millimeter-wave operation.

Testing will examine behavior, modulation and coding performance, link reliability, and general propagation characteristics within indoor environments. All experiments will be conducted **exclusively indoors** within laboratory and test facility spaces. No outdoor testing will be performed, and no commercial service will be provided under this experimental authorization.

b. Objectives of the Experimentation

The objectives of the proposed experimentation are to:

- Evaluate radio operation in the 39 GHz band under indoor conditions
 - Validate phased-array antenna and beamforming functionality
 - Measure throughput, latency, and link stability in indoor environments
 - Characterize indoor propagation behavior associated with 39 GHz operation
 - Support future millimeter-wave product development for controlled indoor deployments
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c. Contribution to the Radio Art

The proposed experimentation is expected to contribute to the **development and utilization of radio art** by advancing practical understanding of millimeter-wave system performance in indoor environments. The results of this testing will provide operational

data supporting efficient use of spectrum in the 39 GHz band for advanced wireless applications.