



L3HARRIS™
FAST. FORWARD.

P/N 53409

3/4" K-Band Spiral Antenna

To meet the expanding applications of communications, electronic warfare, telemetry and many other defense and communications requirements, L3Harris has developed a series of planar spiral antennas used for detection of broadband signals having various polarizations.

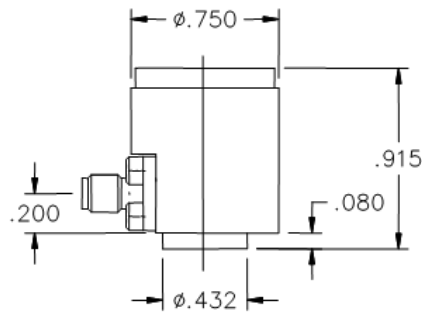
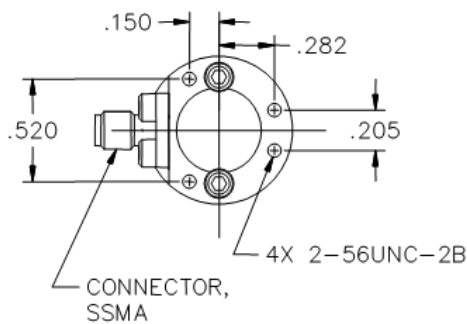
The 3/4" model 53409 antenna is a rugged, cavity-backed two-arm Archimedean spiral. Our extensive work on the absorber-loaded cavity has produced a proprietary moisture resistant absorber configuration, which reduces cavity depth and improves low frequency performance. A Marchand balun is used to connect the spiral aperture card to the output connector.

Designed for RWR Direction Finding (DF) applications, the characteristics of this antenna also make it an ideal choice for a phase tracking interferometer element, SIGINT antenna and any application requiring frequency independent millimeter band performance.

The VSWR is typically less than 2:1.



PHYSICAL DIMENSIONS (TYPICAL UNIT)



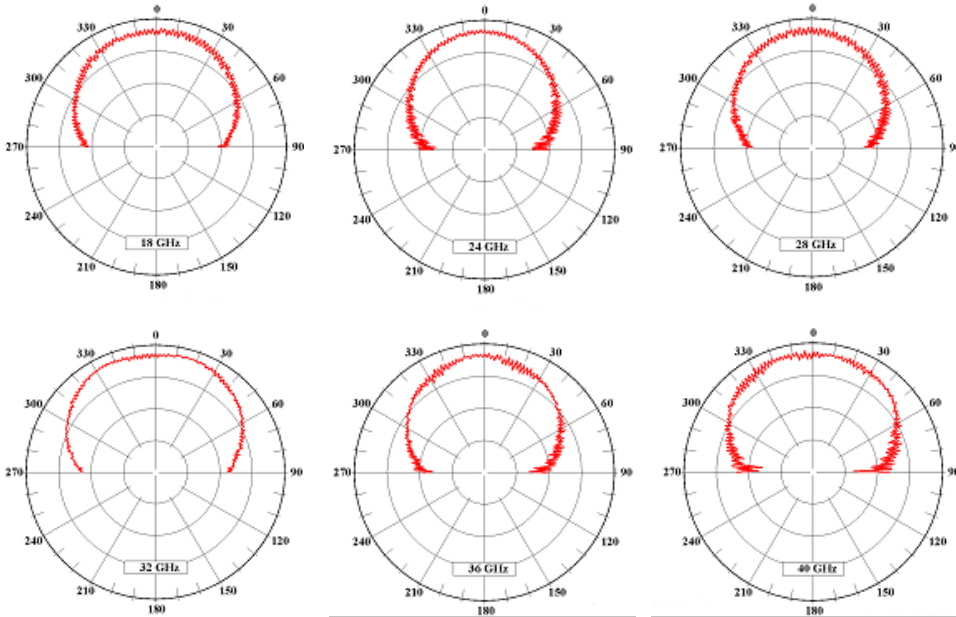
WEIGHT: 0.5 Oz.

KEY FEATURES

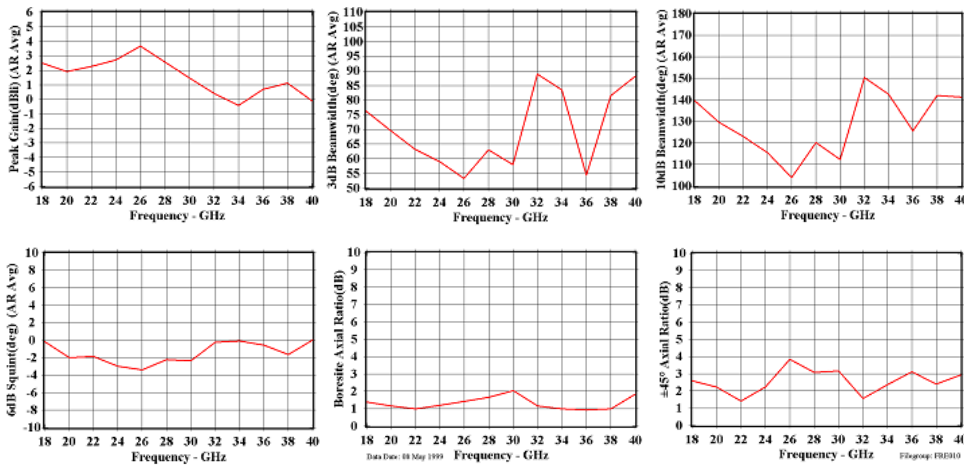
- > 18–40 GHz Frequency Operation
- > Right or Left Circular Polarization
- > Designed for RWR Application
- > Designed for Military Airborne Environments

TYPICAL MEASURED PERFORMANCE

Performance varies with radome design, manufacturing tolerances, installation, and environmental conditions. Data shown is typical for the antenna without radome.



Azimuth Radiation Pattern Response to Rotating Linear Polarization (10 dB Rings)



Antenna Performance Summary

Data recorded in the (Azimuth) plane of the connector

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L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.



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