



**L3HARRIS™**  
FAST. FORWARD.

## P/N 53411

### 2" E-/J-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.

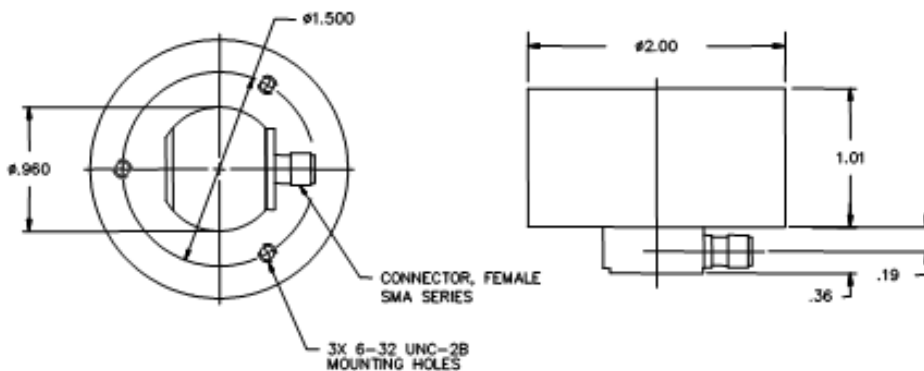
The 2" model 53411 antenna is a rugged, cavity-backed two-arm Archimedean spiral. Our extensive work on the absorber-loaded cavity has produced a proprietary moisture resistant absorber configuration, which reduces cavity depth and improves low frequency performance. A Marchand balun is used to connect 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 performance.

The VSWR is typically less than 2:1 over the majority of the band. Power handling is typically 7 Watts CW. Actual performance depends on installation and environmental conditions. The antenna can be provided with or without an aperture environmental radome cover.



#### PHYSICAL DIMENSIONS (TYPICAL UNIT)



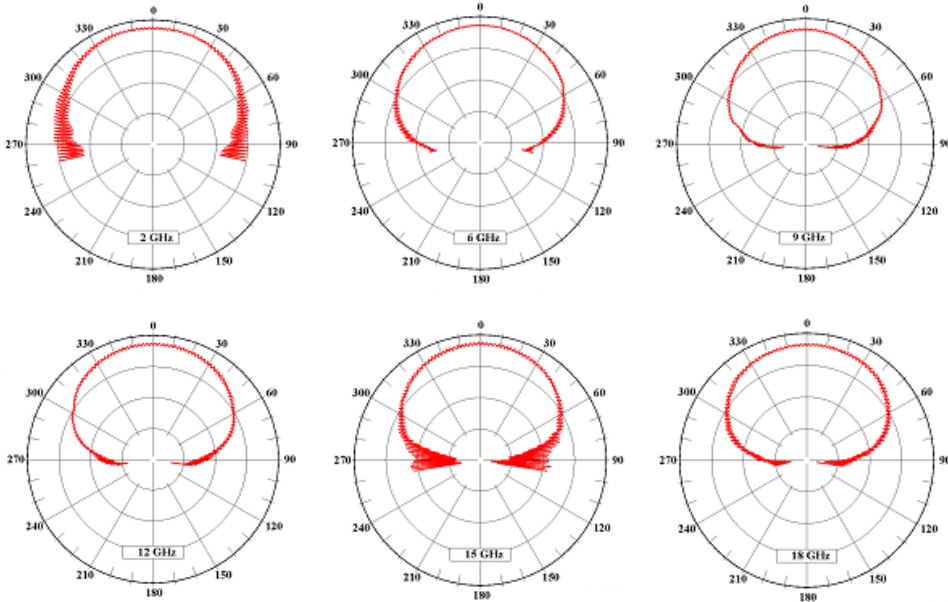
WEIGHT: 1.8 Oz.

#### KEY FEATURES

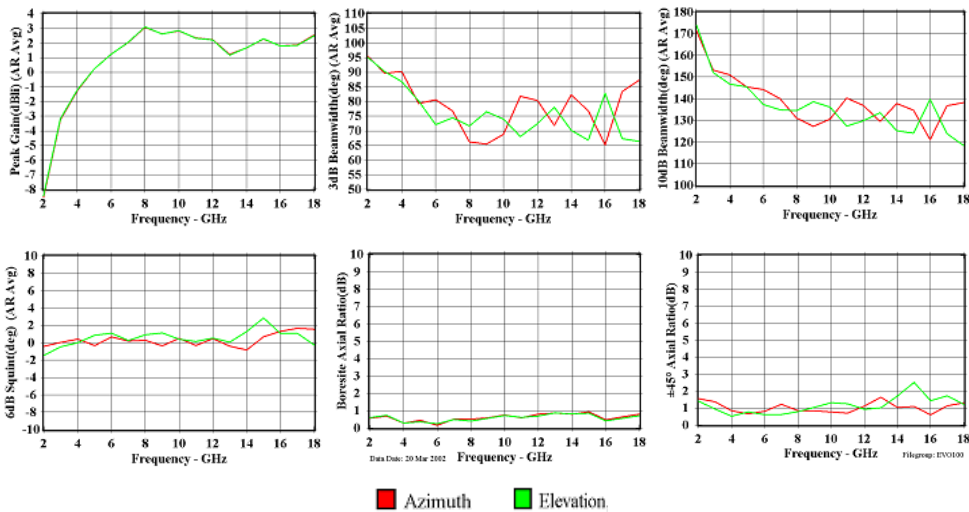
- > 2–18 GHz Frequency Operation
- > Reduced Height
- > Right or Left Circular Polarization
- > Designed for RWR Application
- > Designed for Military Airborne Environment

## 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

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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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