Model 8507145
Cavity Backed Spiral Antenna

CAES model 8507145-001 (LHCP) and -002 (RHCP) are wideband, planar, cavity-backed, spiral antennas, and have been designed and qualified for installation on military aircraft. The 8507145- antennas can be used individually for various ESM functions and used as either amplitude- and/or phase-matched sets for the purposes of providing Radar Warning or Interferometry functions. The 8507145- antennas are unique in that at only 4.5” in diameter, they provide coverage as low as 500 MHz. Typically, this would require an antenna in the 6-8” diameter, which can be problematic both for SWaP constraints and direction-finding accuracy. The model provides a wide, semi-constant beamwidths over the entire operating band.
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**Cavity Backed Spiral Antenna**

### KEY FEATURES:
- Wide band and stable phase center
- Semi constant Beamwidths
- Available as phase matched sets
- Qualified for military airborne environment

### FREQUENCY RANGE:
- 0.5 to 6.5 GHz

### VSWR:
- 3.0 : 1 nominal

### GAIN:
- -18 to 1 nominal

### 3 dB BEAMWIDTH:
- EL : 80°

### POLARIZATION:
- RHCP
- LHCP

### BEAM SQUINT:
- 10 degrees

### FINISH:
- MIL-F-14072

### WEIGHT:
- 2.4 lb.

### INPUT:
- SMA

### IMPEDANCE:
- 50 Ohms

### ENVIRONMENTAL:
- MIL-STD-810