

Antenna Authority, Inc.

DF Antennas Our Specialty!



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PRODUCT SPECIFICATION

Product Code --- CBS-01 Cavity Backed Spiral



Cavity Backed Spiral Antenna

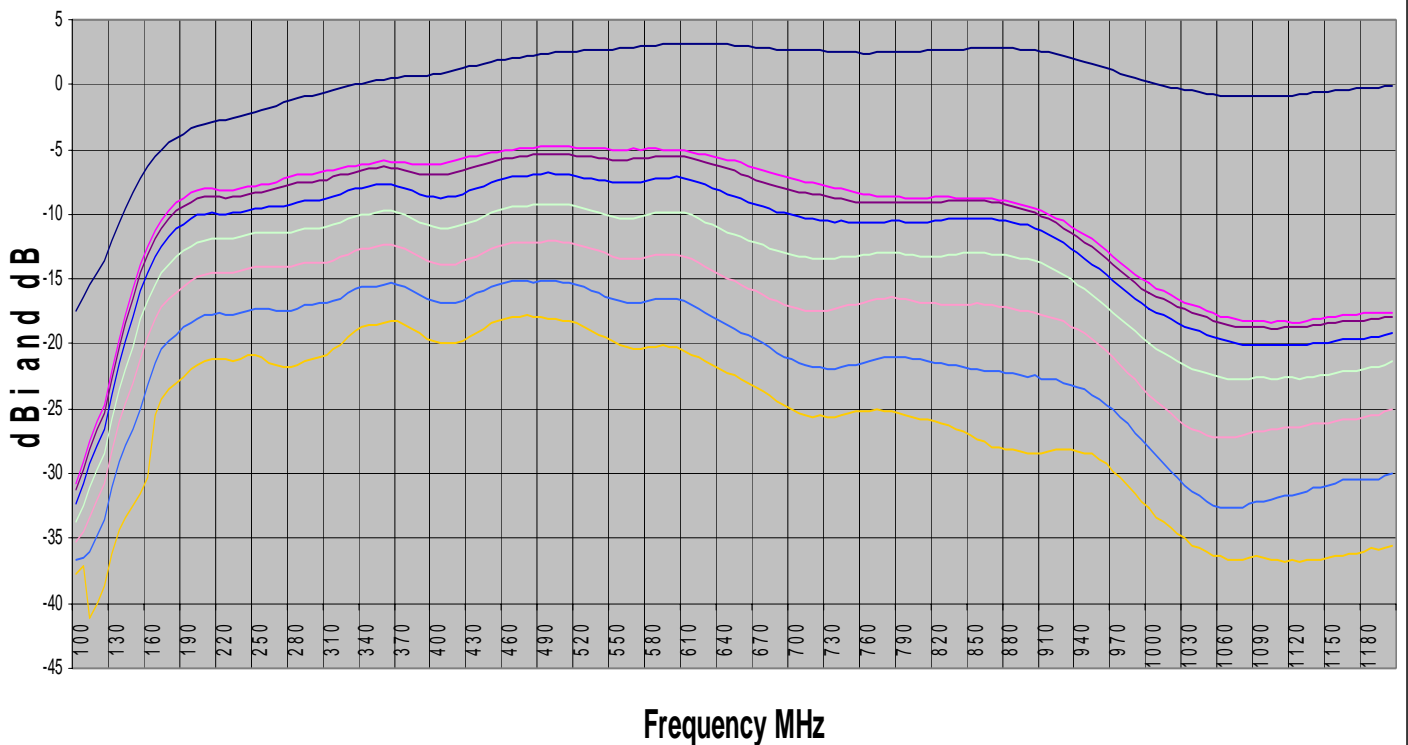
This self-complementary Archimedean spiral antenna is a frequency independent antenna - a lightweight medium-gain array designed to receive a circularly polarized wave. Archimedes spirals typically cover a 10 to 1 frequency range while maintaining essentially constant impedance over the band. The antennas have been designed for broad-beam, broadband applications and provide a compact, lightweight configuration that can be easily flush mounted. They are widely used in systems whose primary functions are surveillance, direction finding and telemetry. These antennas are mounted in a square structure and made on FR4 .063" fiberglass with a flat front face that can be easily mounted in the side of a vehicle. They are terminated and loaded with absorbing foam. The low end frequency is a function of the size and depth of the cavity, while the upper frequency is limited by the detail of the center structure. They have greater than a 10 dB F/B ratio before mounting into a vehicle.

Electrical Specifications

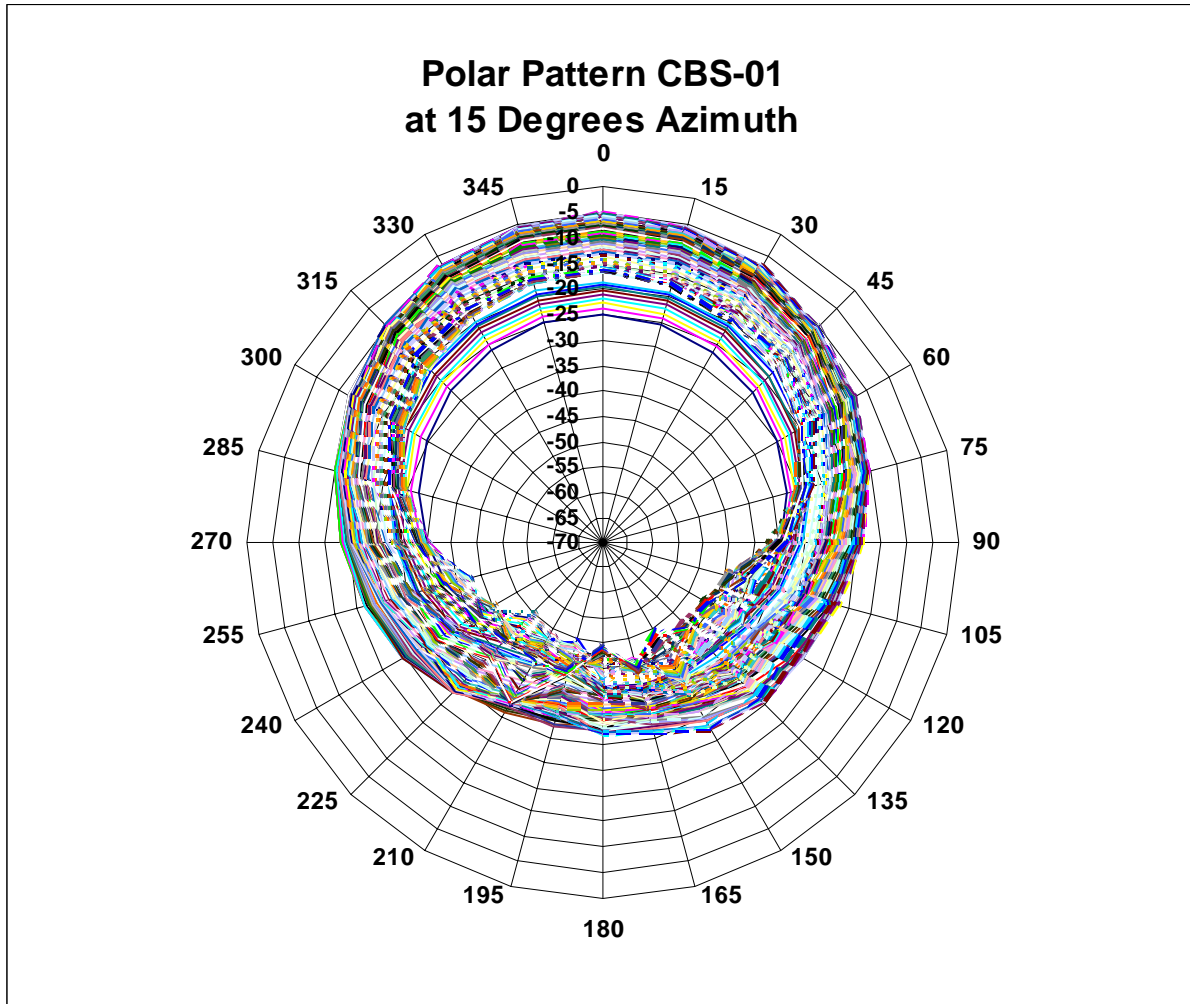
Frequency Coverage:	100 MHz – 1.2 GHz
Azimuths Coverage:	80° beam width typical for 3 DB down
Antenna:	4-element log-periodic dipole array
Gain:	-17 to + 3 dBi
Polarization:	Circular
Impedance:	50 ohms
Connectors	BNC

Gain and Pattern Plots

Gain Pattern of raw data CBS-01 for 90 degrees at 15 degree increments
for Frequency 100 to 1200 MHz



Polar Gain Plots



Mechanical Specifications

Dimensions: Width: 24" - Length : 26"

Thick: 5"

Weight: 15 Lbs

Environments: Operating: -20°C to +60°C Storage: -40°C to +70°C Humidity:95%

Material: Aluminum, FR-4, Foam

Stable rugged construction, Compact light weight, Works in harsh conditions

Specifications subject to change without notice

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