



LOG PERIODIC DIPOLE ARRAY 3148B Log-Periodic Dipole Array

ETS-Lindgren's Model 3148B Log-Periodic Dipole Array (LPDA) Antenna is specifically designed for making CISPR 16-1 measurements which require a 20 dB difference in the cross polarization rejection.



ETS-Lindgren's Model 3148B Log-Periodic Dipole Array (LPDA) Antenna is specifically designed for making CISPR 16-1 measurements which require a 20 dB difference in the cross polarization rejection. This is achieved using an engineering design and manufacturing process that offsets all of the elements in a precision pattern. The excellent cross-polarization property ensures minimum measurement uncertainty for radiated emissions and normalized site attenuation measurement.

Key Features

- High Gain Meets CISPR Cross Polarization Requirements
- Low VSWR
- Powder Coated Finish
- Individually Calibrated

The precision construction of the assembly of the boom and elements result in excellent VSWR and optimal phase relationship. The model 3148B log antenna features relatively constant linear gain (measures in far field without any sudden "dips" or "bumps"). A Type N connector is provided.

Features

Frequency Range

The frequency range of the model 3148B is 200 MHz to 2 GHz. This makes the 3148B ideal for CISPR 16 testing and other standards based on it, such as CISPR 25.

High Gain

The model 3148B's design provides a balance between the shortest antenna and the highest possible gain, with a 5 dB average gain over its frequency.

Low VSWR

The choice of spacing between booms and the changing element diameter provide excellent impedance of the antenna. This results in a low VSWR.

Individually Calibrated

The 3148B broadband antenna is individually calibrated at 1 m per SAE ARP 958 and 3 m and 10 m per ANSI C63.5. This antenna also comes with a signed Certificate of Calibration Conformance.

Specifications

Electrical Specifications

Frequency Minimum: 200 MHz
Frequency Maximum: 2 GHz
Connectors: Type N (f)
Impedance (Nominal): 50 Ω
Maximum Continuous Power: 1 kW
Peak Power: 1.3 kW
VSWR: 1.2:1
Polarization: Linear
Pattern Type: Directional

Physical Specifications

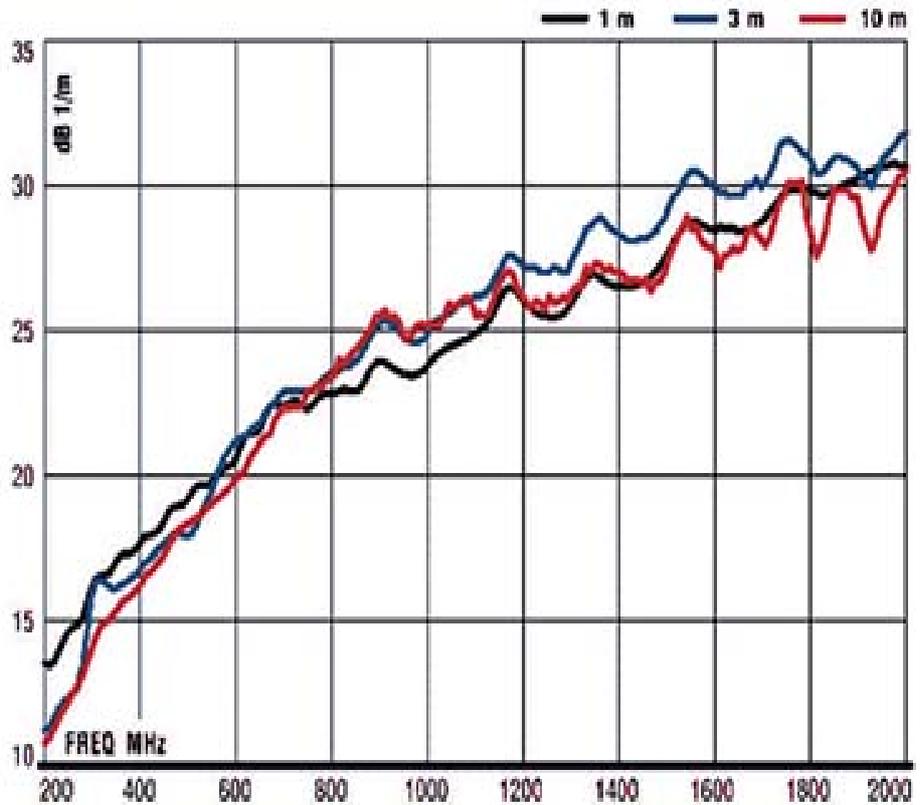
Depth: 86.7 cm (34.13 in)
Height: 11.6 cm (4.57 in)
Length: 73.7 cm (29.02 in)
Width: 85.6 cm (33.70 in)
Weight: 2 kg (4.41 lb)

Other Specifications

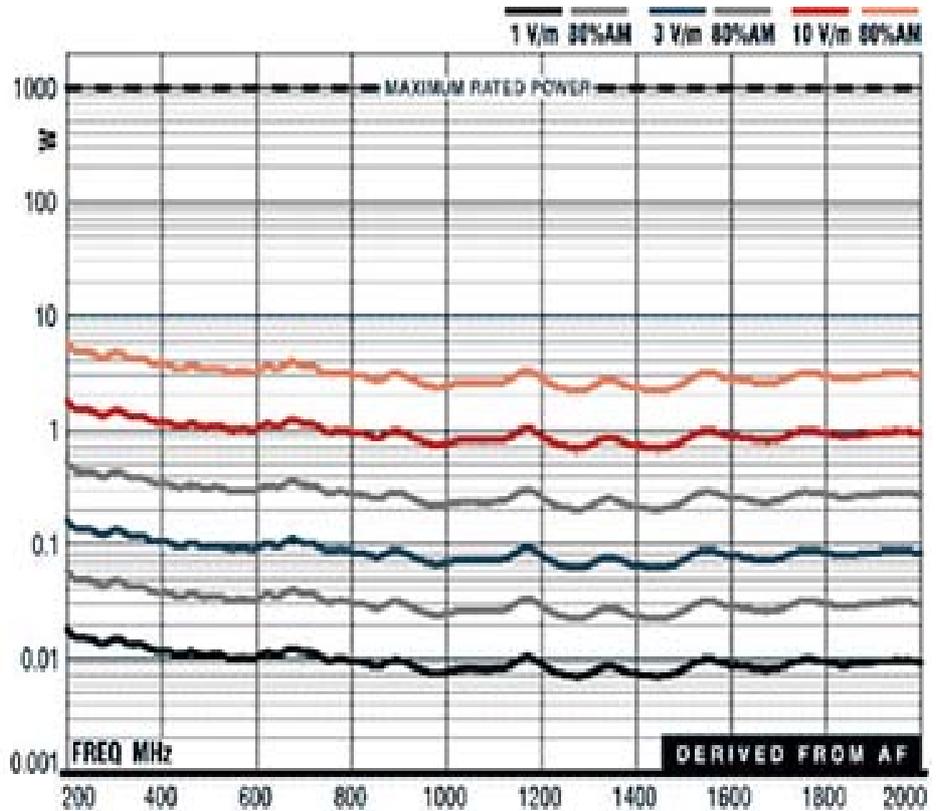
- Individually Calibrated at 1 m per SAE ARP 958
- Actual Antenna Factors and Signed Certificate of Calibration Conformance Provided

Product Charts

3148B Log Periodic Dipole Array Antenna Factor

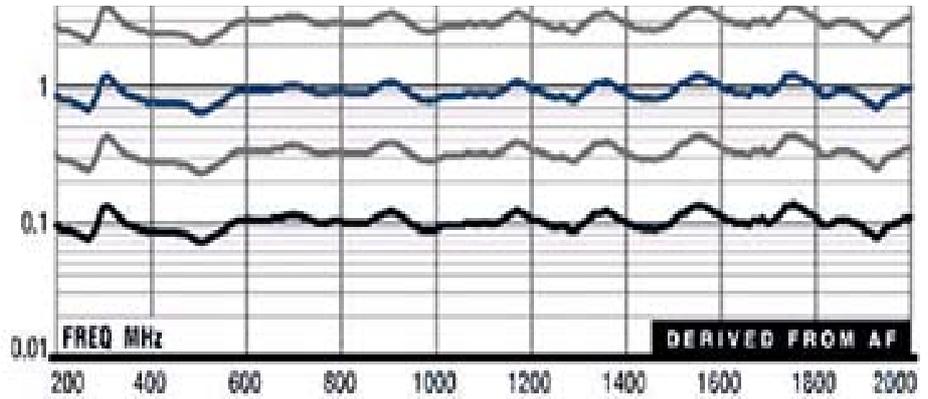


3148B Log Periodic Dipole Array Antenna Forward Power at 1 m

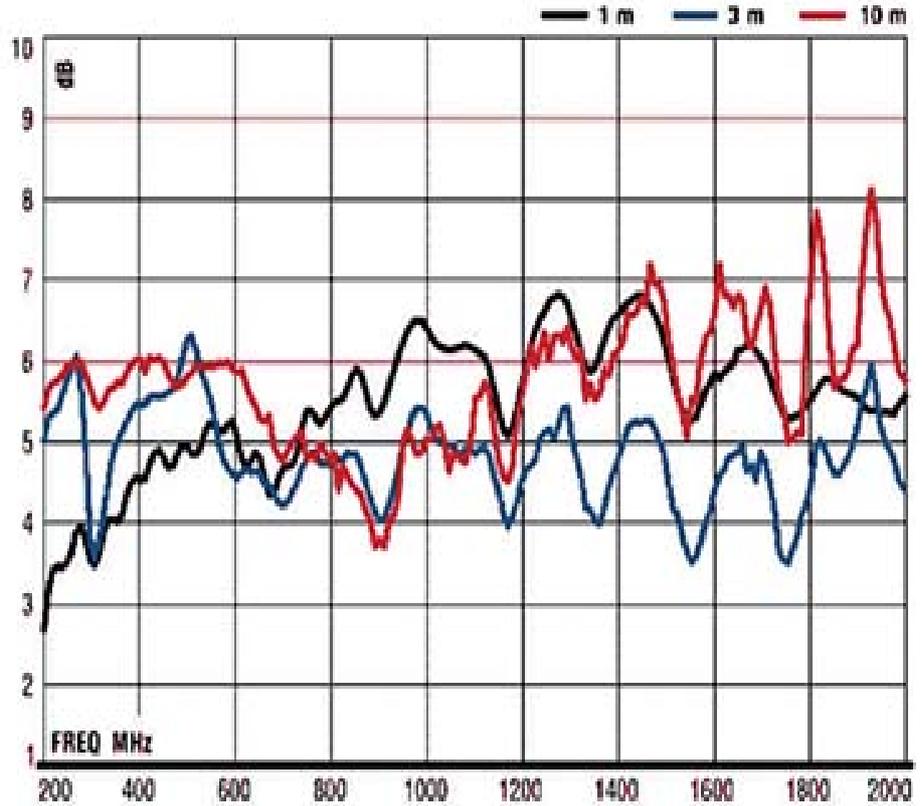


3148B Log Periodic Dipole Array Antenna Forward Power at 3 m

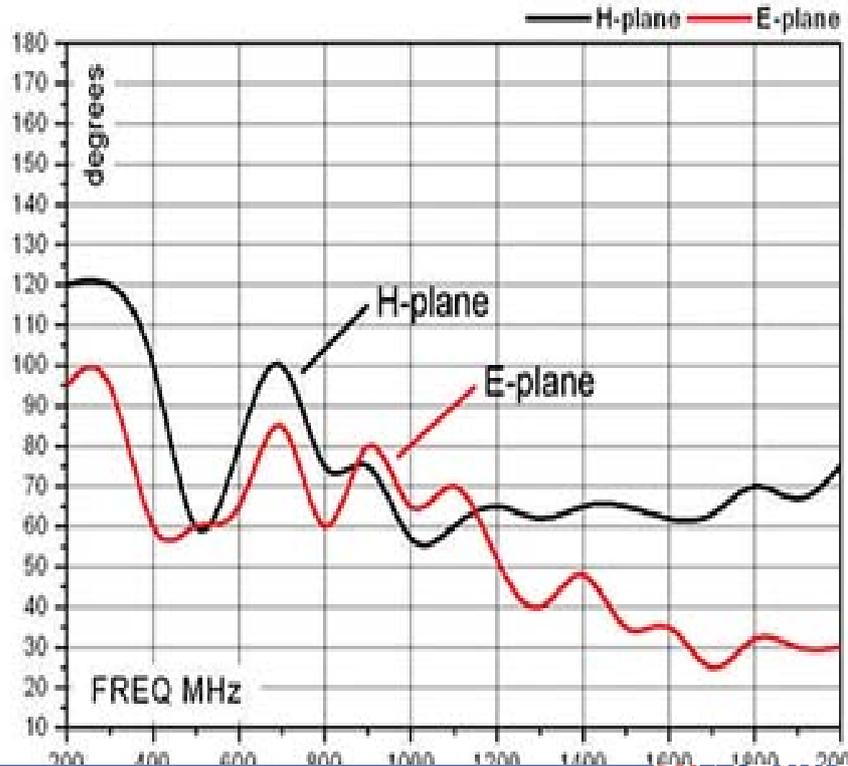




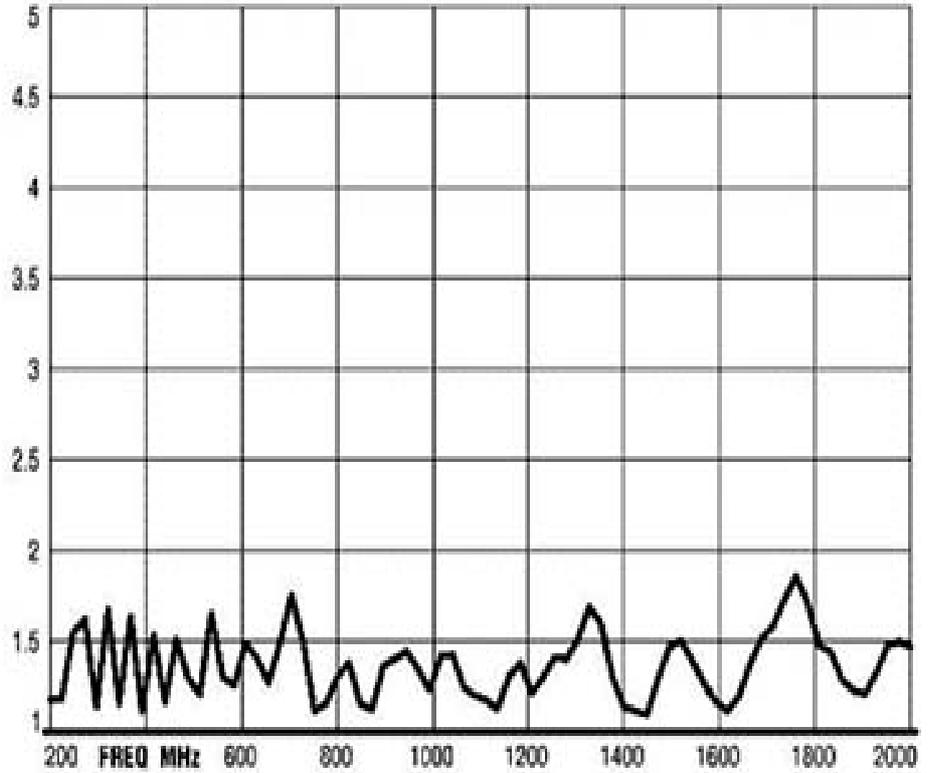
3148B Log Periodic Dipole Array Antenna Gain



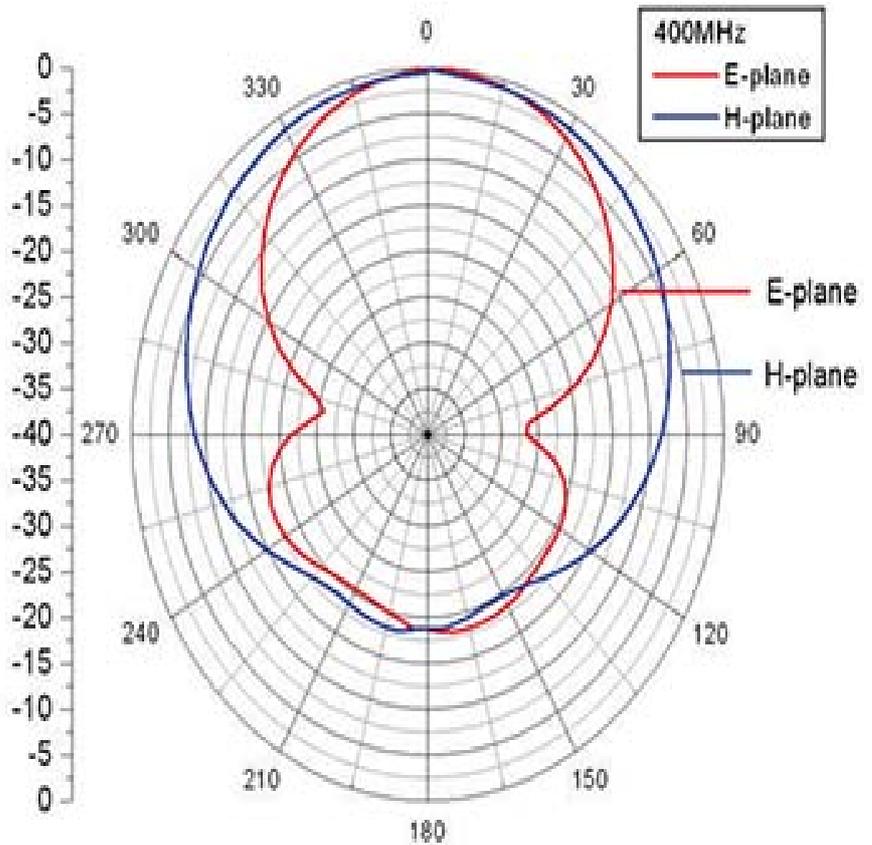
3148B Log Periodic Dipole Array Antenna Half Power Beamwidth



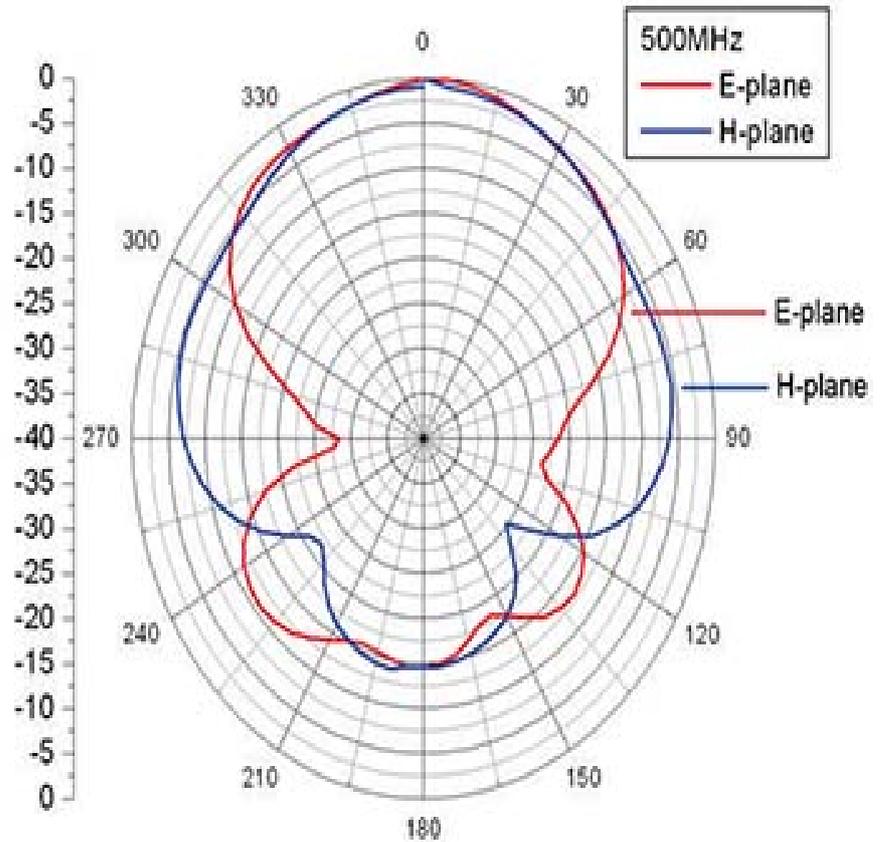
3148B Log Periodic Dipole Array Antenna VSWR



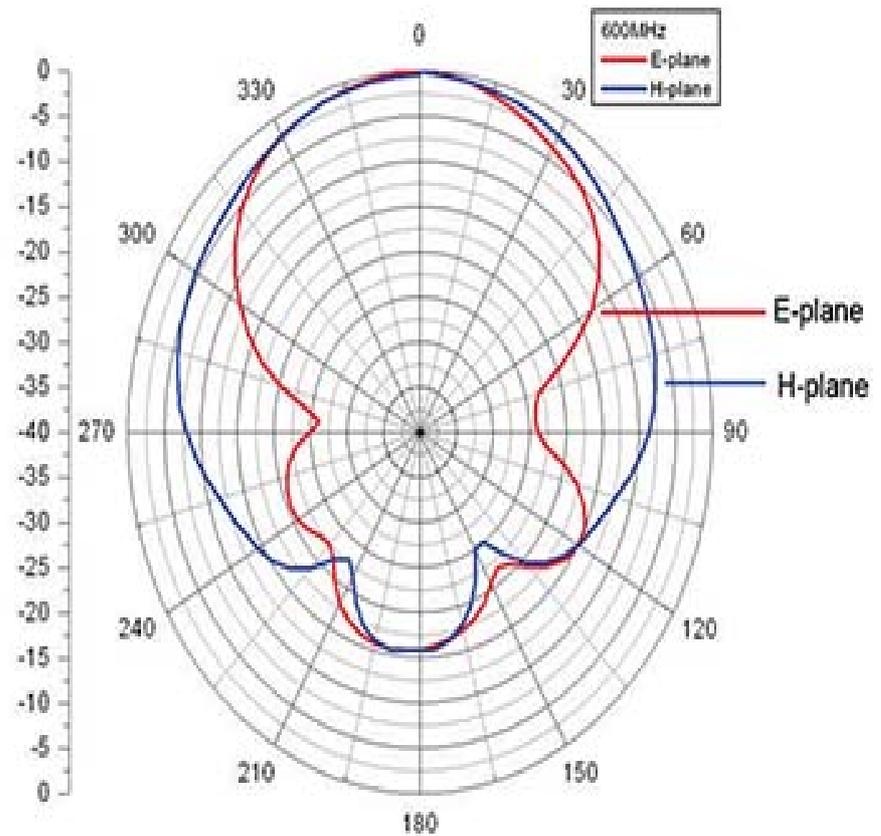
3148B Log Periodic Dipole Array Antenna Typical Radiation Pattern 400 MHz



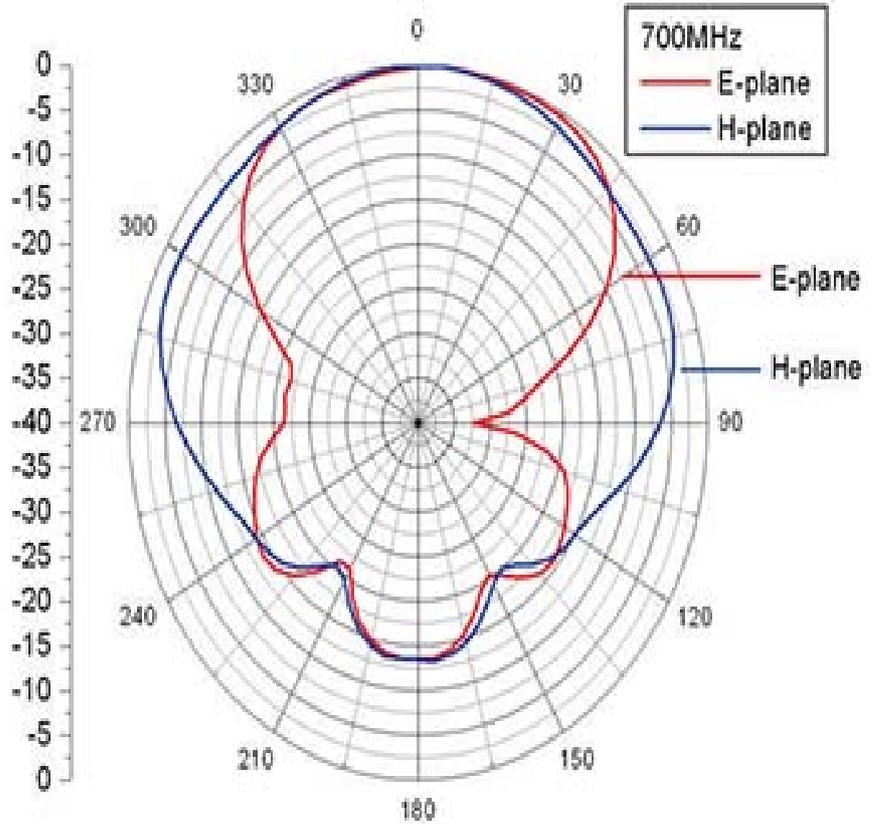
3148B Log Periodic Dipole Array Antenna Typical Radiation Pattern 500 MHz



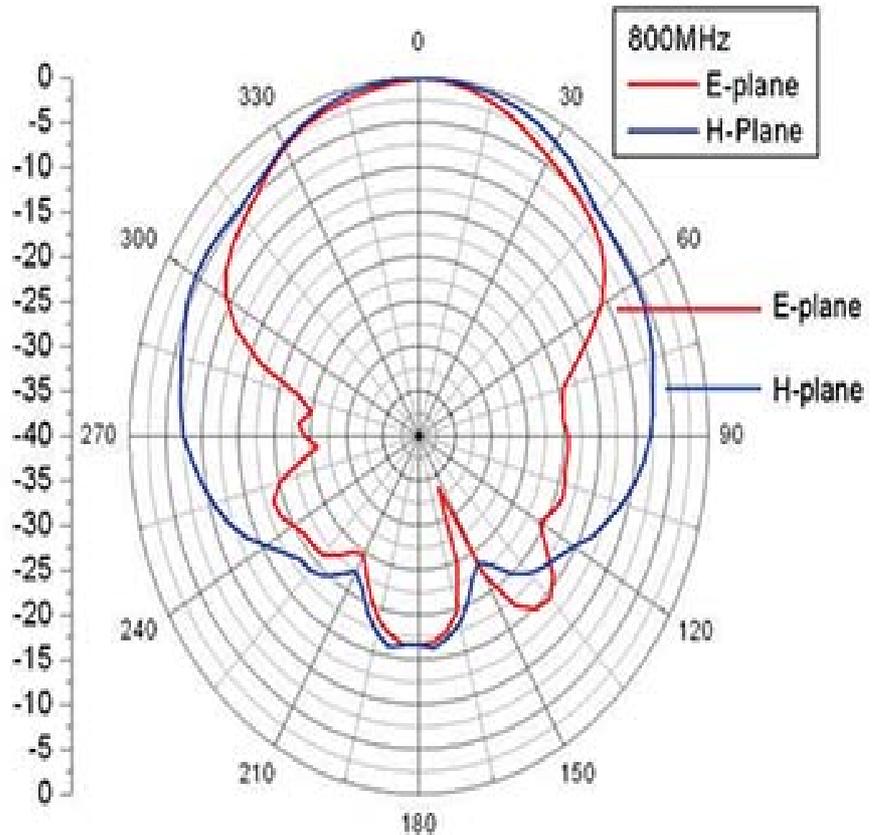
3148B Log Periodic Dipole Array Antenna Typical Radiation Pattern 600 MHz



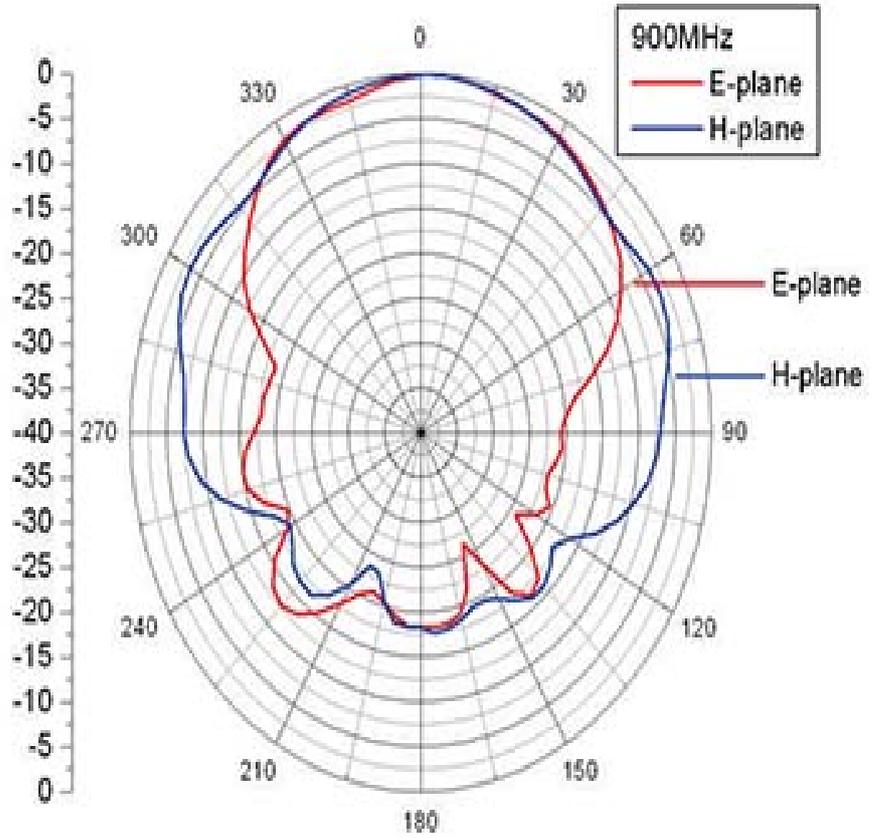
3148B Log Periodic Dipole Array Antenna Typical Radiation Pattern 700 MHz



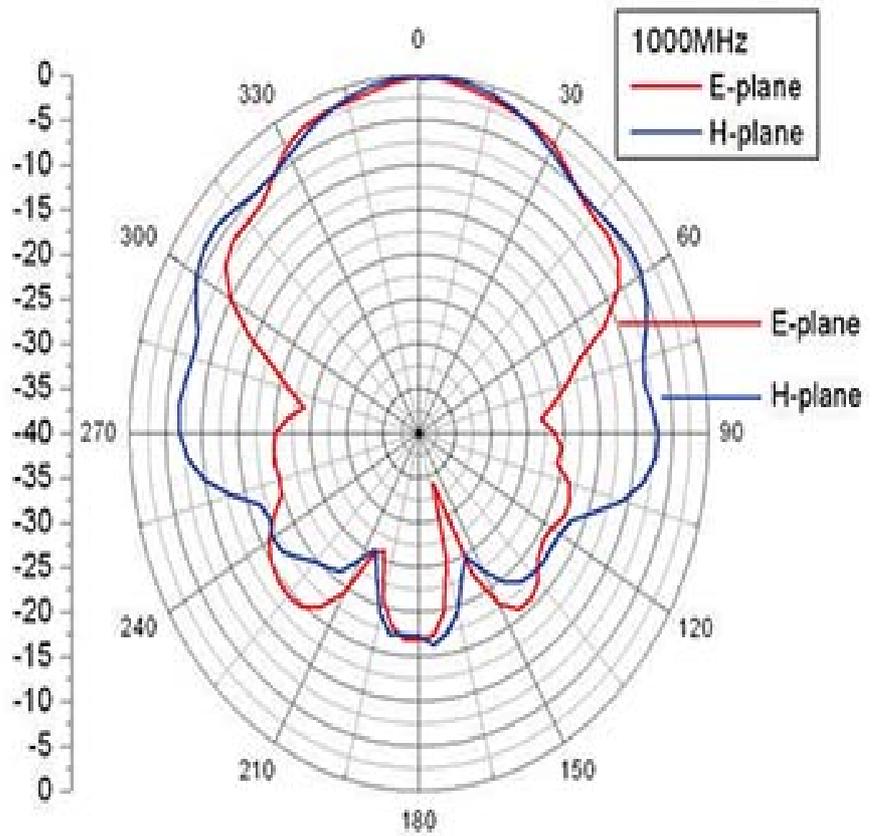
3148B Log Periodic Dipole Array Antenna Typical Radiation Pattern 800 MHz



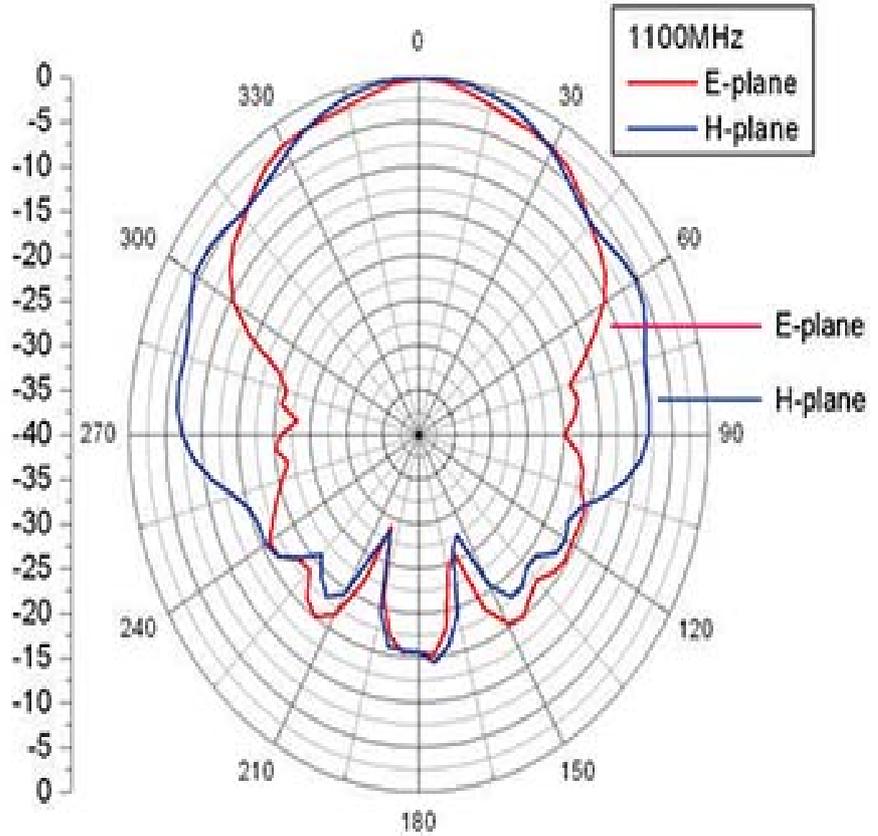
3148B Log Periodic Dipole Array Antenna Typical Radiation Pattern 900 MHz



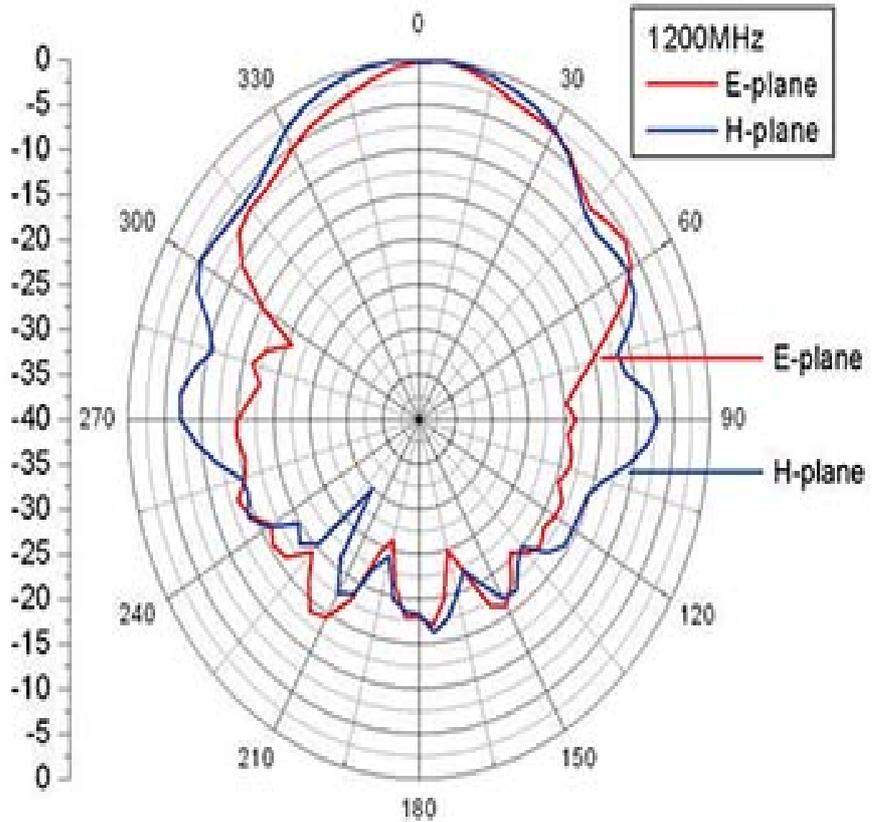
3148B Log Periodic Dipole Array Antenna Typical Radiation Pattern 1000 MHz



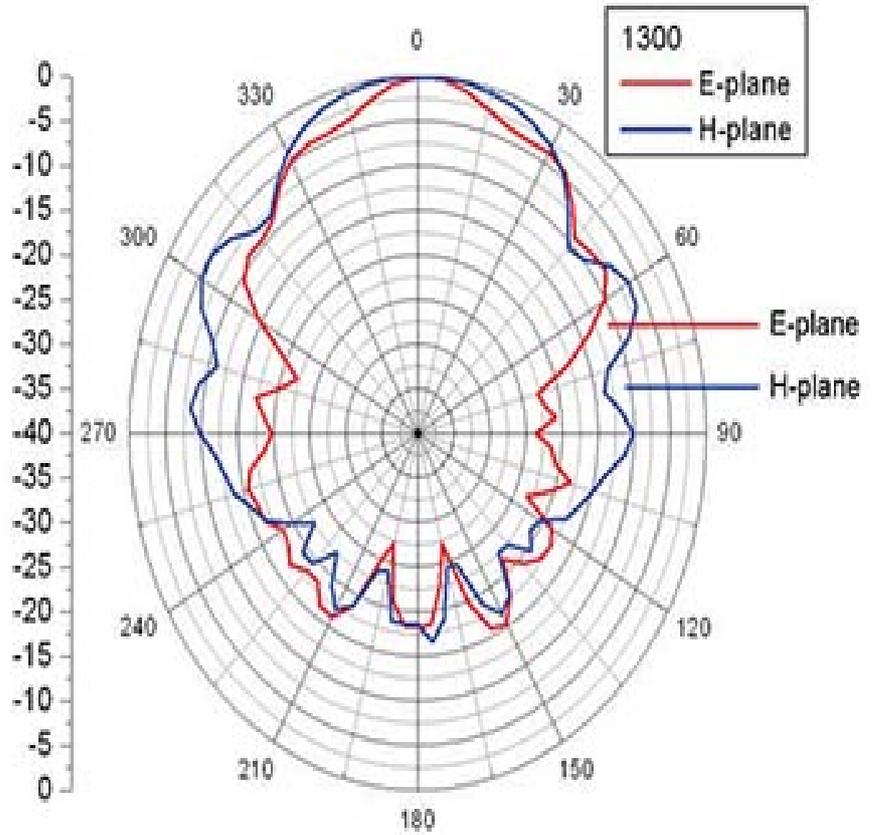
3148B Log Periodic Dipole Array Antenna Typical Radiation Pattern 1100 MHz



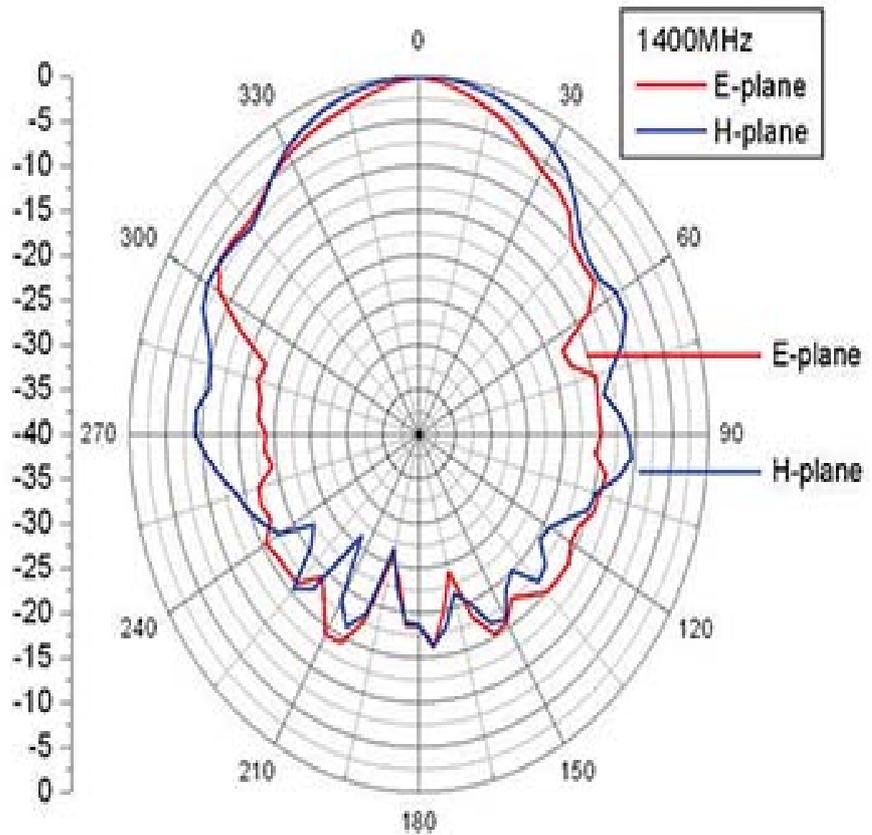
3148B Log Periodic Dipole Array Antenna Typical Radiation Pattern 1200 MHz



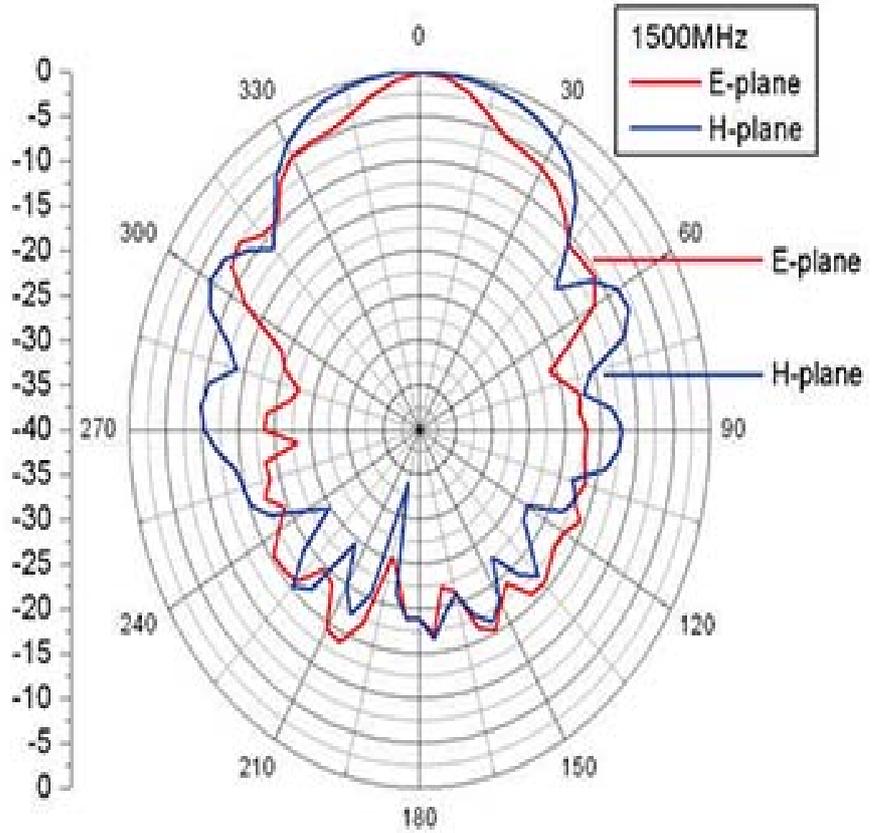
3148B Log Periodic Dipole Array Antenna Typical Radiation Pattern 1300 MHz



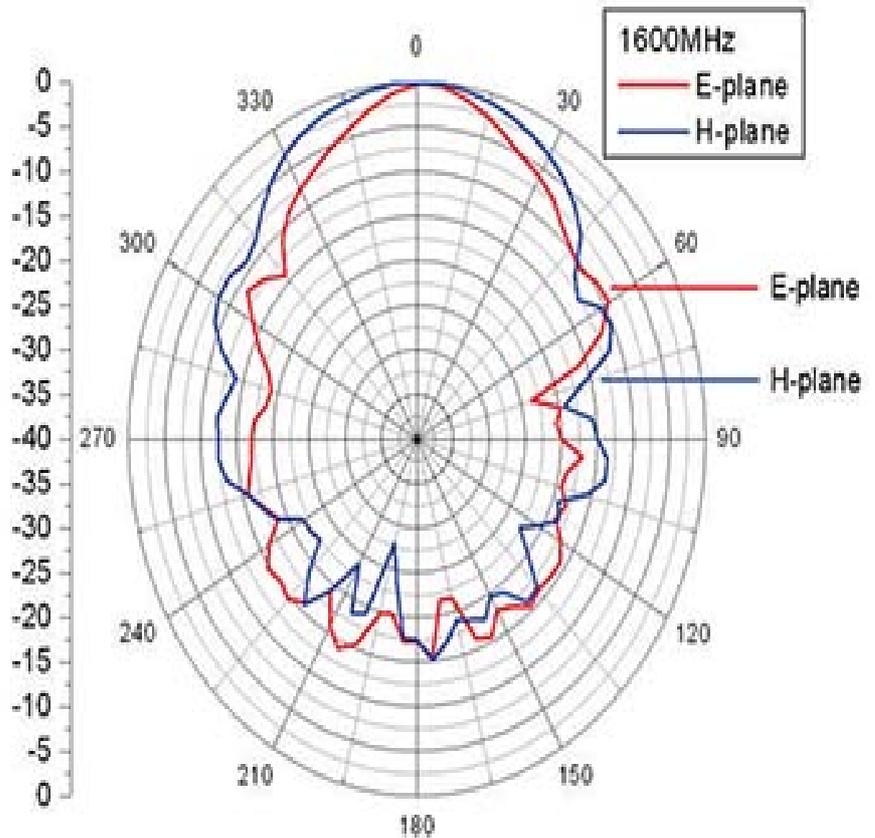
3148B Log Periodic Dipole Array Antenna Typical Radiation Pattern 1400 MHz



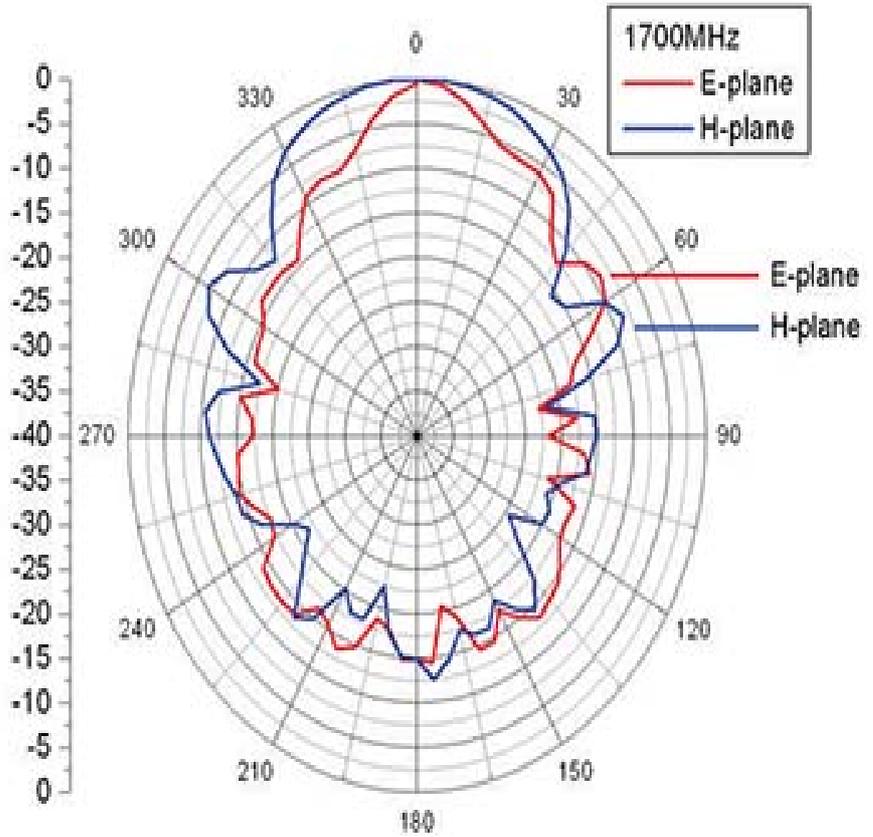
3148B Log Periodic Dipole Array Antenna Typical Radiation Pattern 1500 MHz



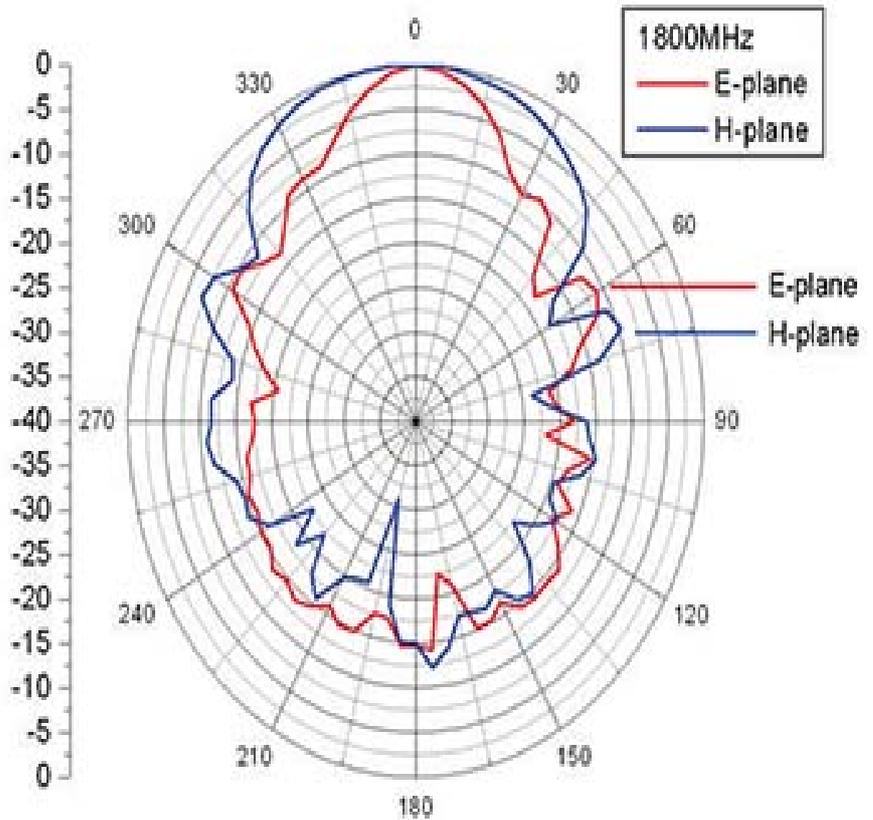
3148B Log Periodic Dipole Array Antenna Typical Radiation Pattern 1600 MHz



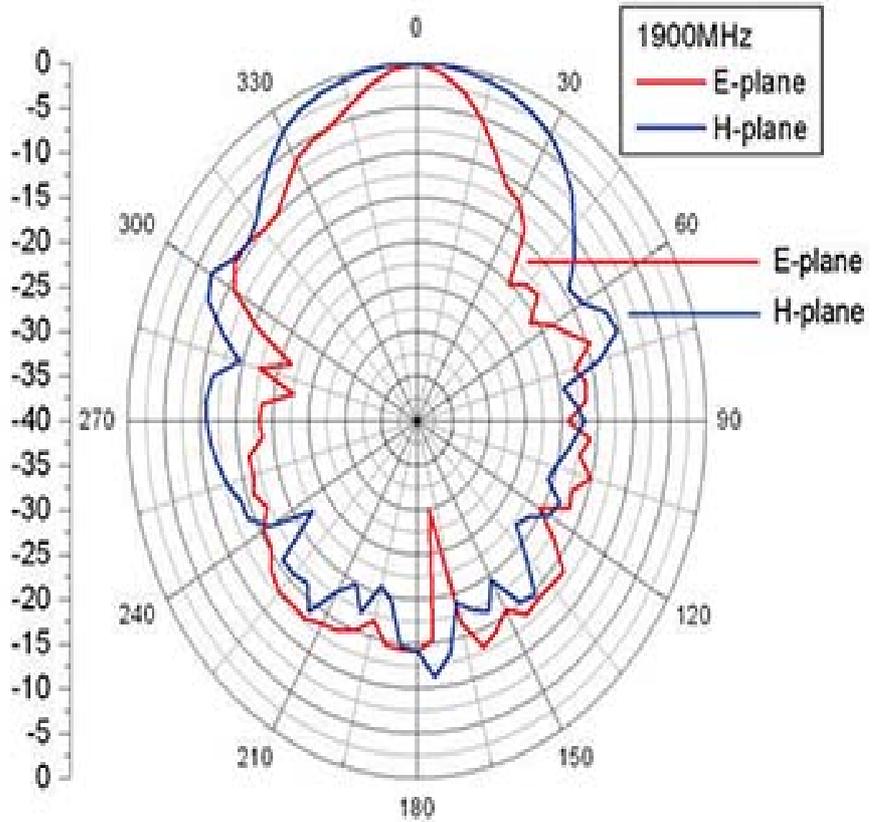
3148B Log Periodic Dipole Array Antenna Typical Radiation Pattern 1700 MHz



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