Cisco Horizontally Polarized Omnidirectional Base Station Antenna (IW-ANT-OMV-55-N)

This chapter contains the following sections:

Overview

The Cisco horizontally polarized omnidirectional base station antenna (IW-ANT-OMV-55-N) design utilizes a linear array, encapsulated in a heavy-duty fiberglass radome with a thick-walled mounting base for reliable, long-term use. This rugged design withstands harsh environments, making the antenna ideal for Industrial Wireless and Military applications. The antennas in this series are DC grounded for ESD protection of radio components.

Figure 1: IW-ANT-OMV-55-N Antenna

Features include the following:

- UV-stable, black fiberglass radome (0.625" diameter)
- DC grounded design

- Fully sealed IP67 design
- Type N Female Connector
- Wind rated 125 mph
- Temperature -40°C to +85°C

Electrical Specifications

The following table is a summary of the electrical specifications:

Typical VSWR	<1.5:1
Bandwidth	5.1-5.9 GHz
Nominal Impedance	50 Ω
Gain	4 dBi
Elevation Half Power Beamwidth	42°
Maximum Power	20 watts
Polarization	Vertical

Mechanical and Environmental Specifications

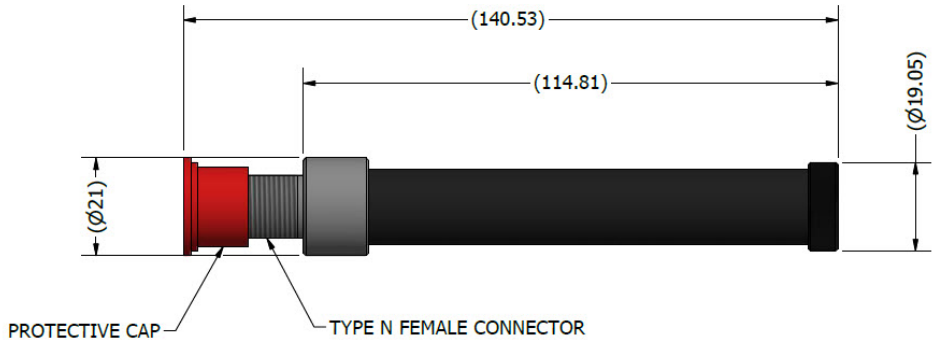
The following table is a summary of the mechanical and environmental specifications:

Dimensions	0.825 OD x 5.5 L in (2.09 x 13.9 cm)
Weight	0.27 lbs
Housing Material	Black UV-Stable Pultruded Fiberblass (0.625" diameter)
Temperature Range	-40°C to +85°C
Bending Moment at Rated Wind	0.30 lbf-ft
Lateral Thrust at Rated Wind	1.31 lbf
Equivalent Flat Plate Area	0.02 ft^2

Mechanical Drawing

The following diagram provides mechanical details of the antenna.

Note All measurements are in millimeters.

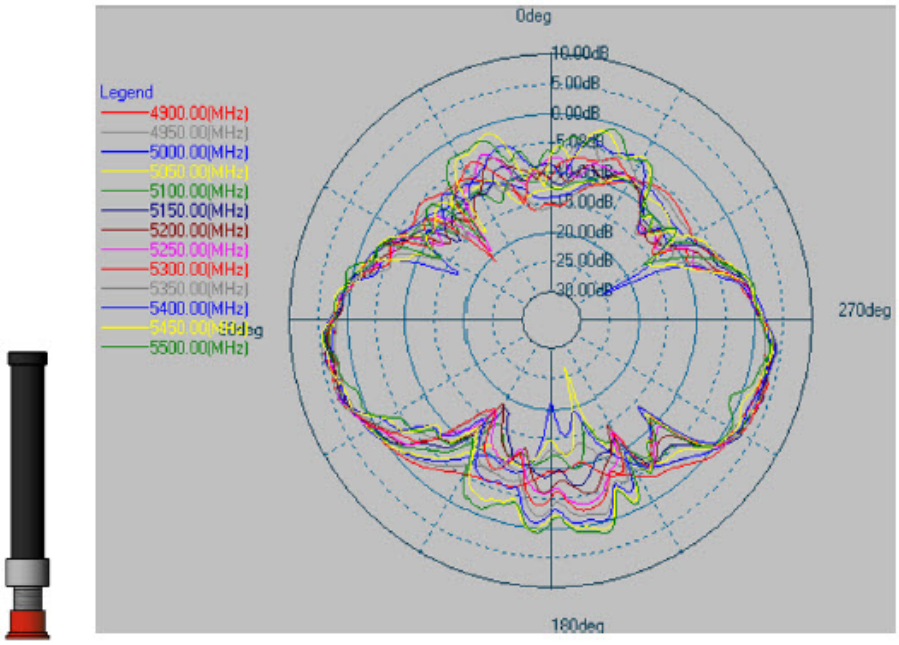


Radiation Patterns

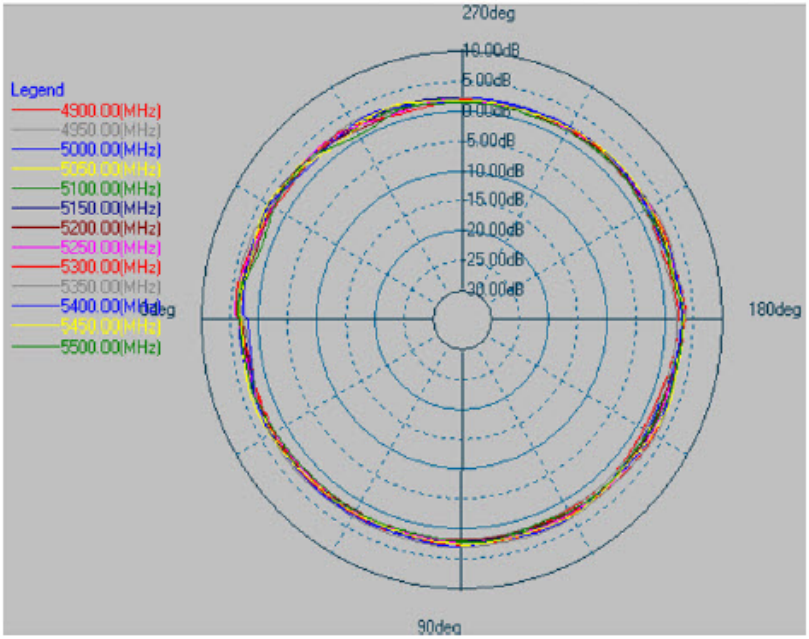
The following figures show the antenna radiation patterns.

Note These radiation patterns show frequencies tested by the antenna vendor outside of the supported 4.9-5.9 GHz frequency range.

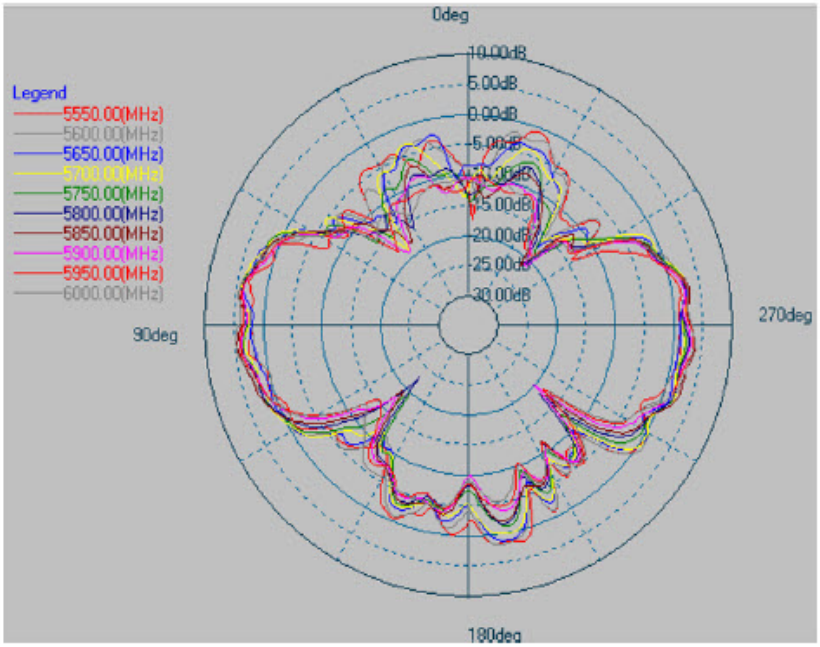
Elevation - Phi 90



Azimuth - Theta 90



Elevation - Phi 90



Azimuth - Theta 90