

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

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## Overview

The Cisco vertically 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

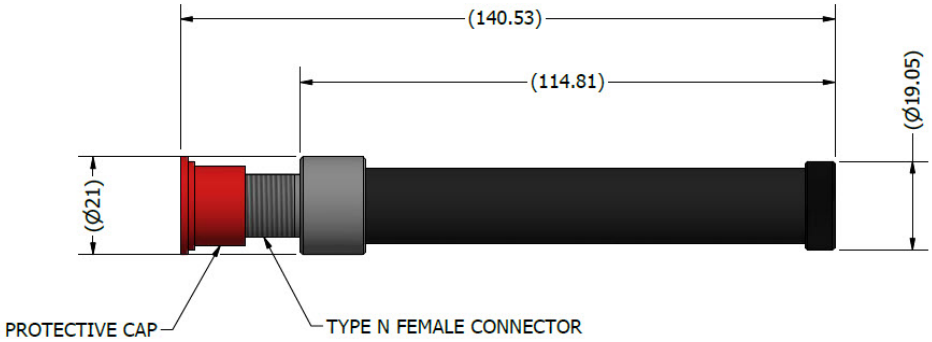
The following table is a summary of the mechanical and environmental specifications:

| | |
|---|---|
| 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.

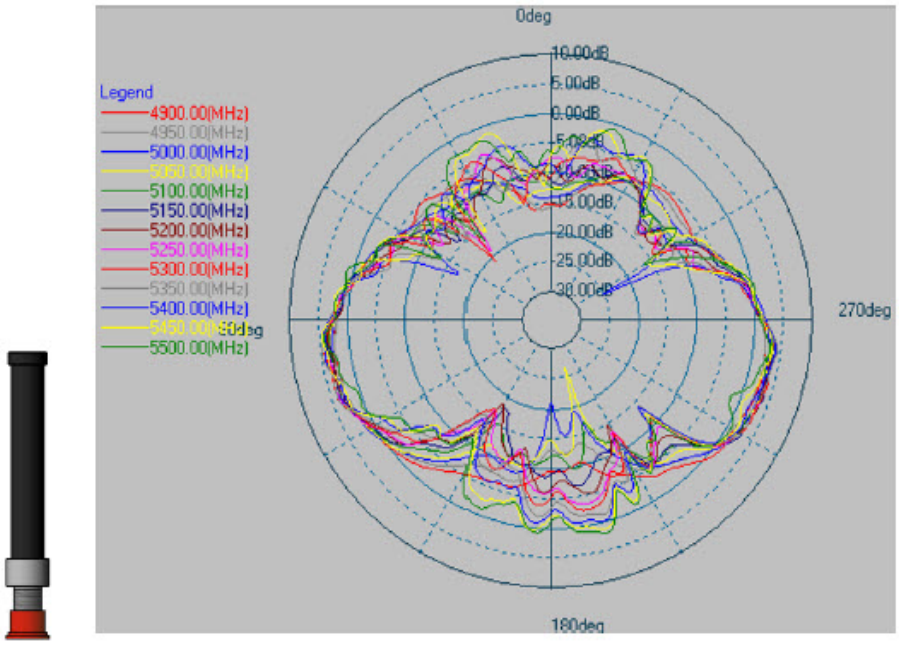



# Radiation Patterns

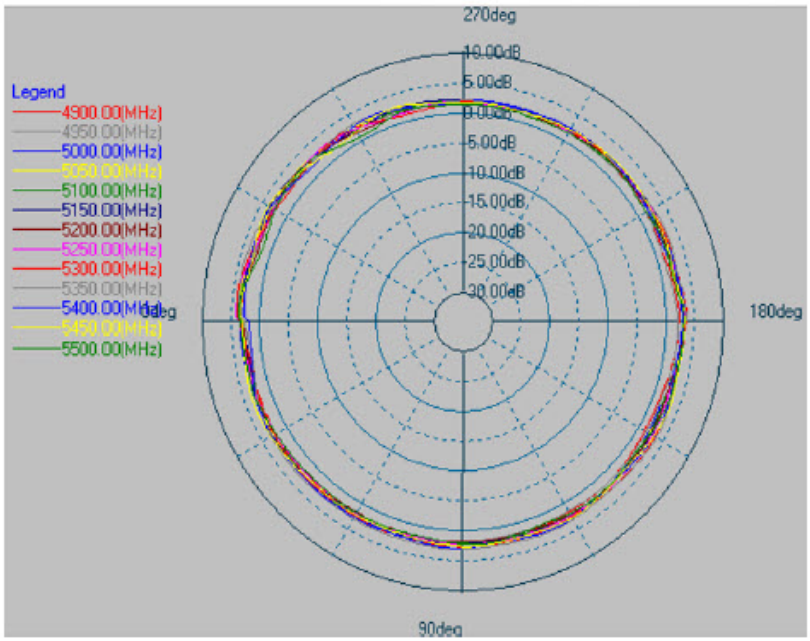
The following figures show the antenna radiation patterns.

**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

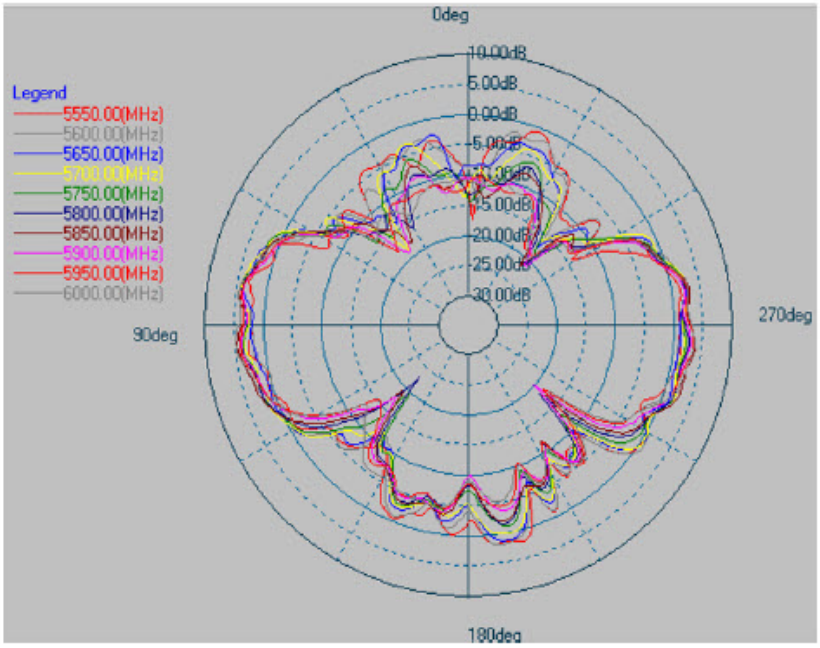


# Azimuth - Theta 90



# Elevation - Phi 90






# Azimuth - Theta 90



