

Technical Data Sheet: Antennas Direct V4 Antenna

Physical Data:

Dimensions: Length = 48 in.. Width = 112 in.
Weight: 5.5 lbs
Turning Radius: tbd in.

Electrical Data:

Bands: Low VHF 54 MHz to 88 MHz Ch. 2 to 6
Impedance: 75 ohm
Connector: F-Female
Balun: Broadband Coaxial Ferrite Core

Performance Data:

See curves.

Notes:

- 1. Unless stated otherwise, all performance data computed using Remcom, Inc. X-FDTD 7.0 simulator.*
- 2. Assumptions: PEC, free space, no balun. 300 Ohm transmission line reference.*
- 3. Gain is specified dBi (isotropic) per IEEE definition. Balun and mismatch losses not included.*
- 4. There are two common meanings for Front-to-Back Ratio (F/B). One specifies ratio as measured 180 degrees opposite boresight. The other, used by IEEE specifies the ratio of boresight gain to maximum gain in rear hemisphere. The IEEE definition is the most conservative. IEEE F/B values shown here are computed based on azimuth and elevation cuts provided in this document.*

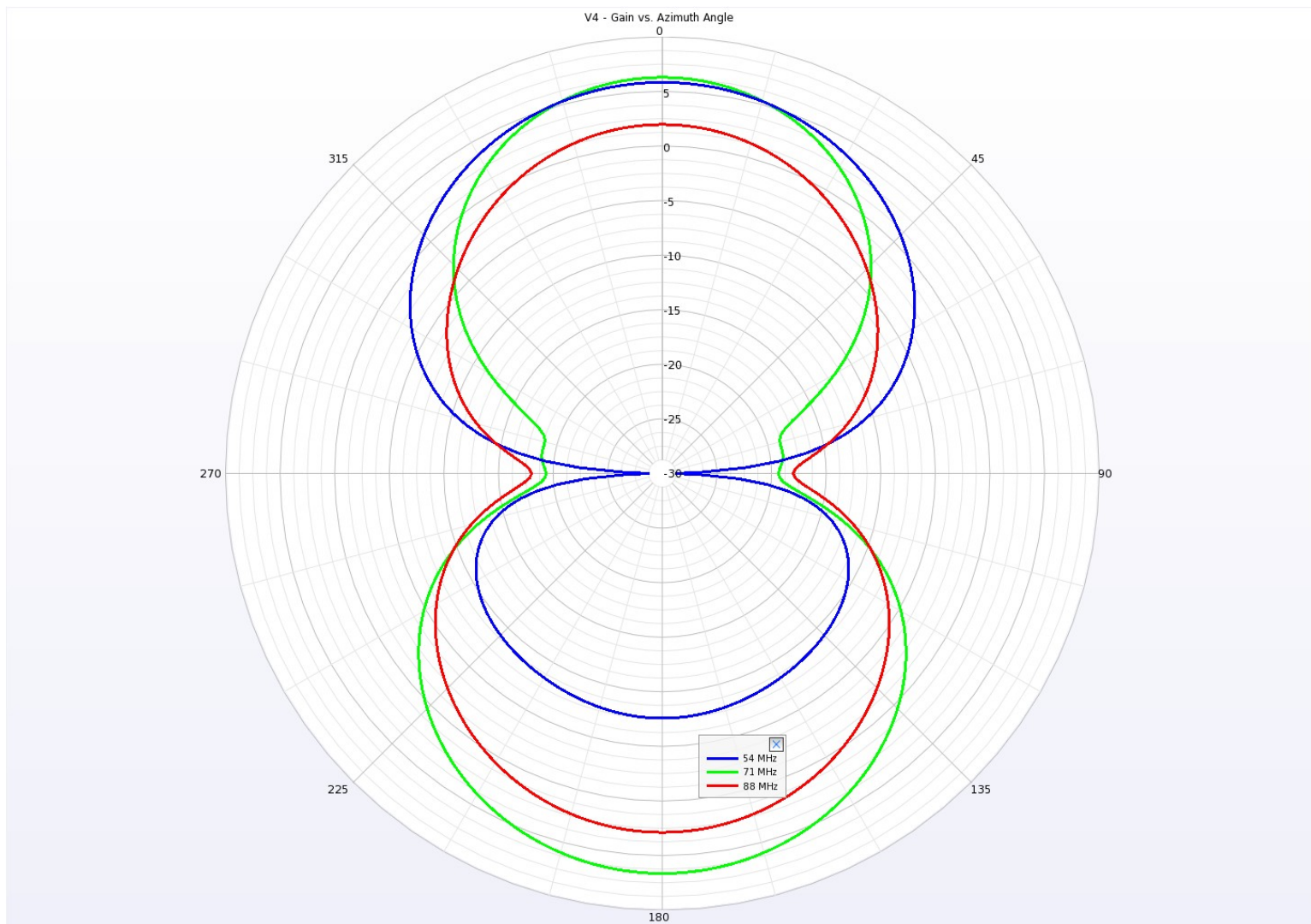


Illustration 1: V4 - Gain vs. Azimuth Angle.



Illustration 2: V4 - Gain vs Elevation Angle.

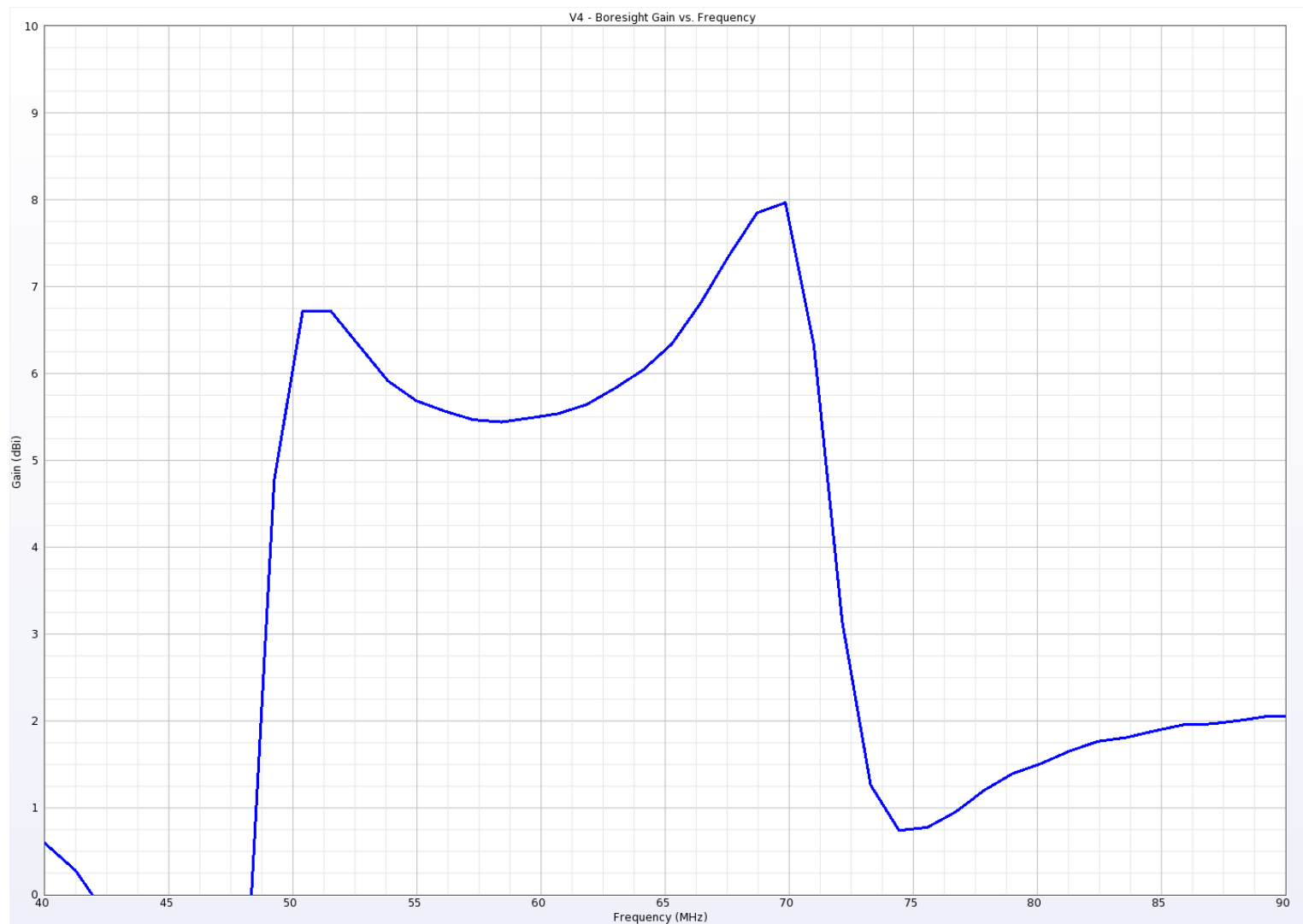


Illustration 3: V4 - Boresight Gain vs Frequency.

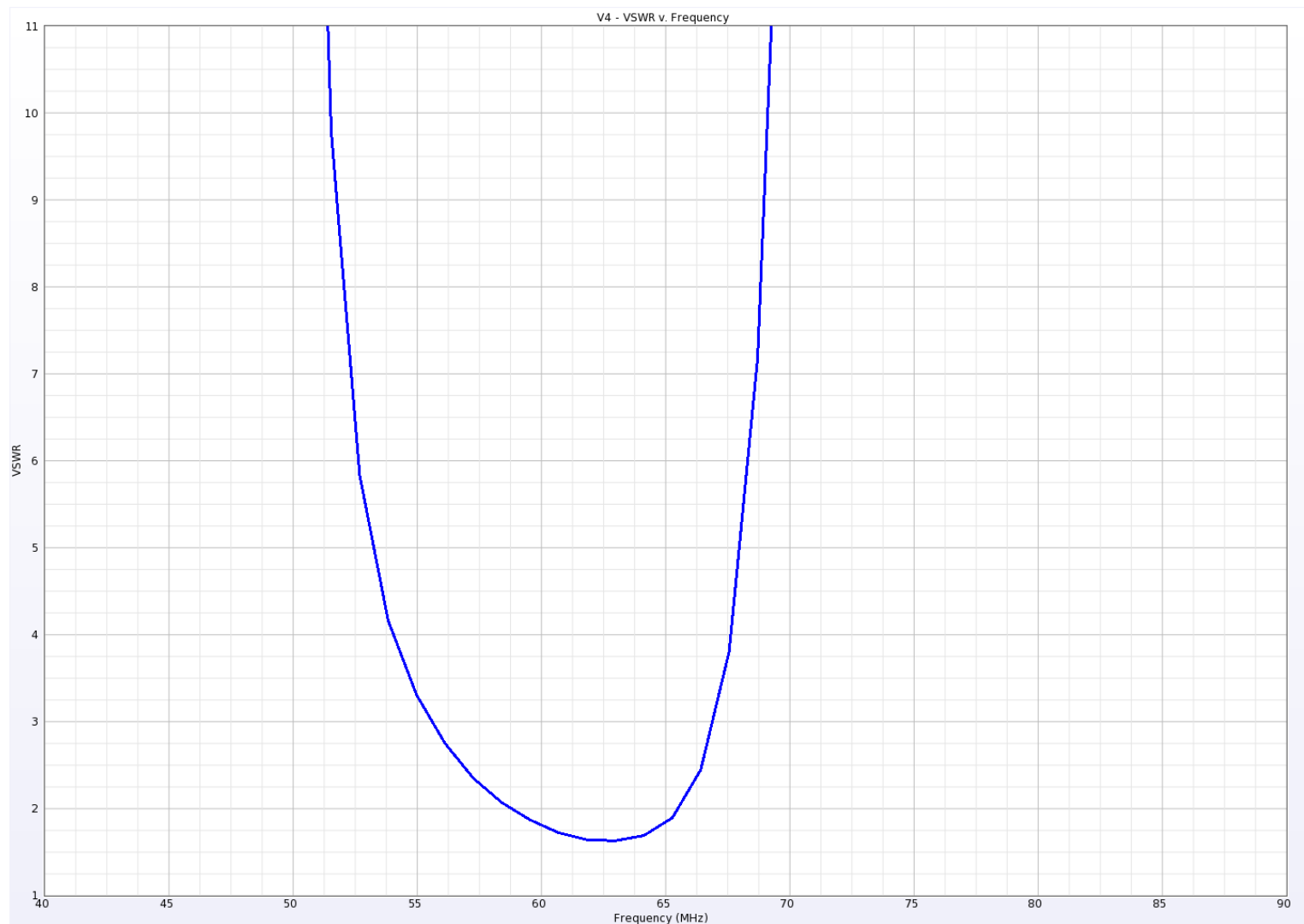


Illustration 4: V4 - Computed VSWR vs. Frequency. No balun. 300 ohm line reference.

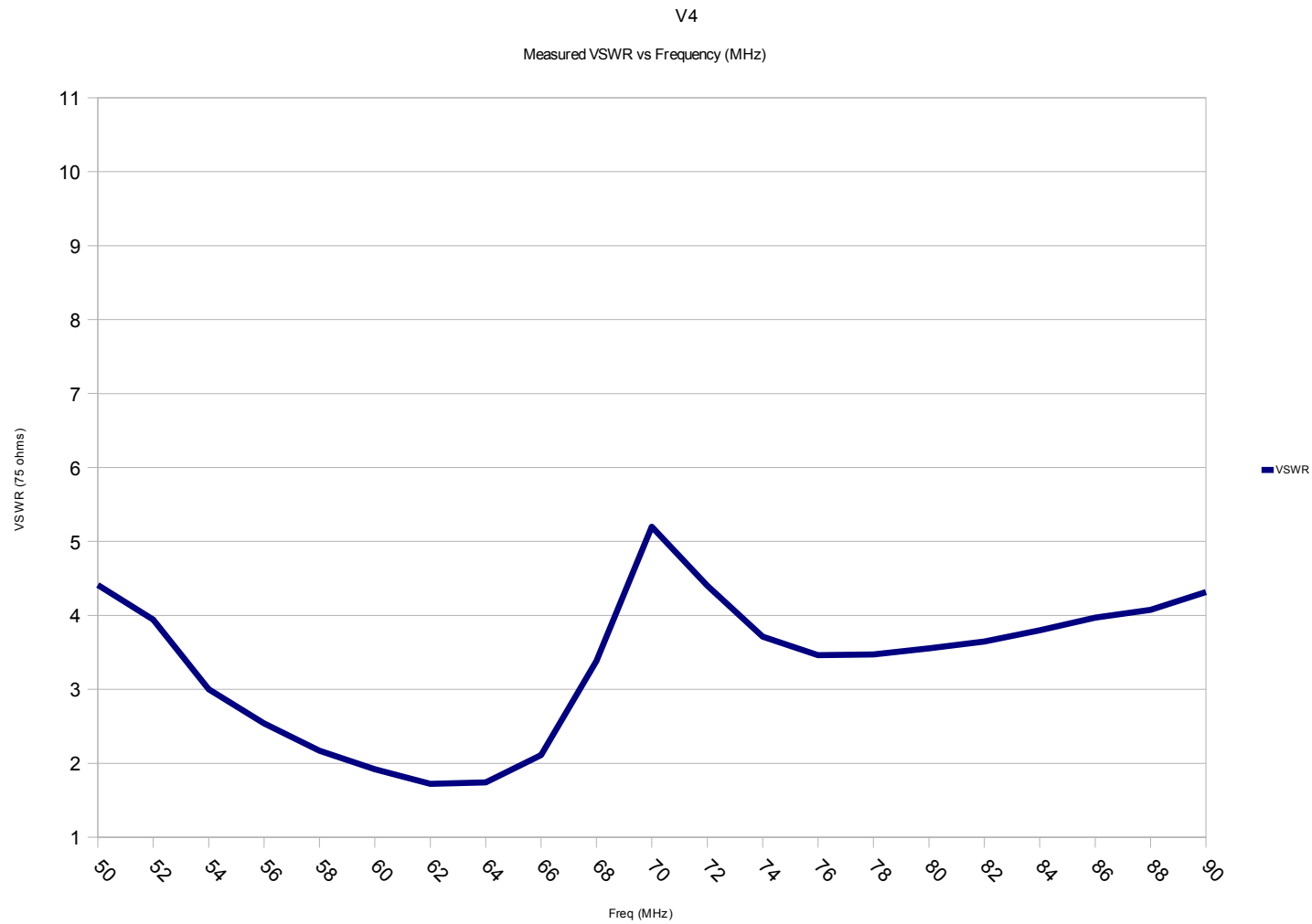


Illustration 5: V4 - VSWR vs. Frequency measured with HP / Agilent 8510C VNA. Antenna on mast 10 ft above dry concrete slab.