Technical Data Sheet: **Antennas Direct V15 Antenna**

Physical Data:

Dimensions:	Length = 43 in..	Width = 95 in.
Weight:	6.5 lbs	
Turning Radius:	tbd in.	

Electrical Data:

Bands:	Low VHF	54 MHz to 88 MHz	Ch. 2 to 6
	High VHF	174 MHz to 216 MHz	Ch. 7 to 13
	UHF	470 MHz to 806 MHz	Ch. 14 to 69
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.*

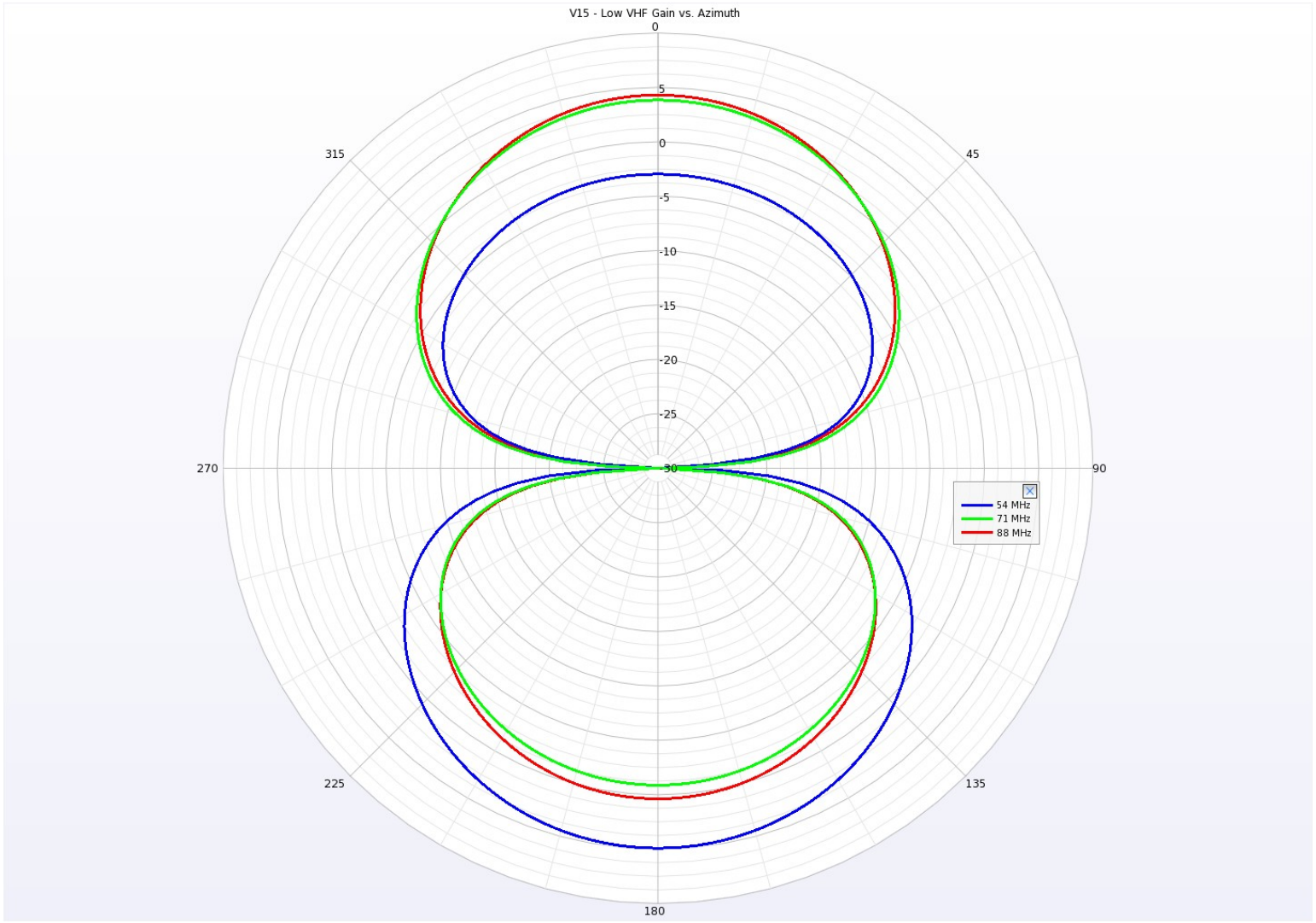

Illustration 1: V15 - Low VHF Gain vs. Azimuth Angle.

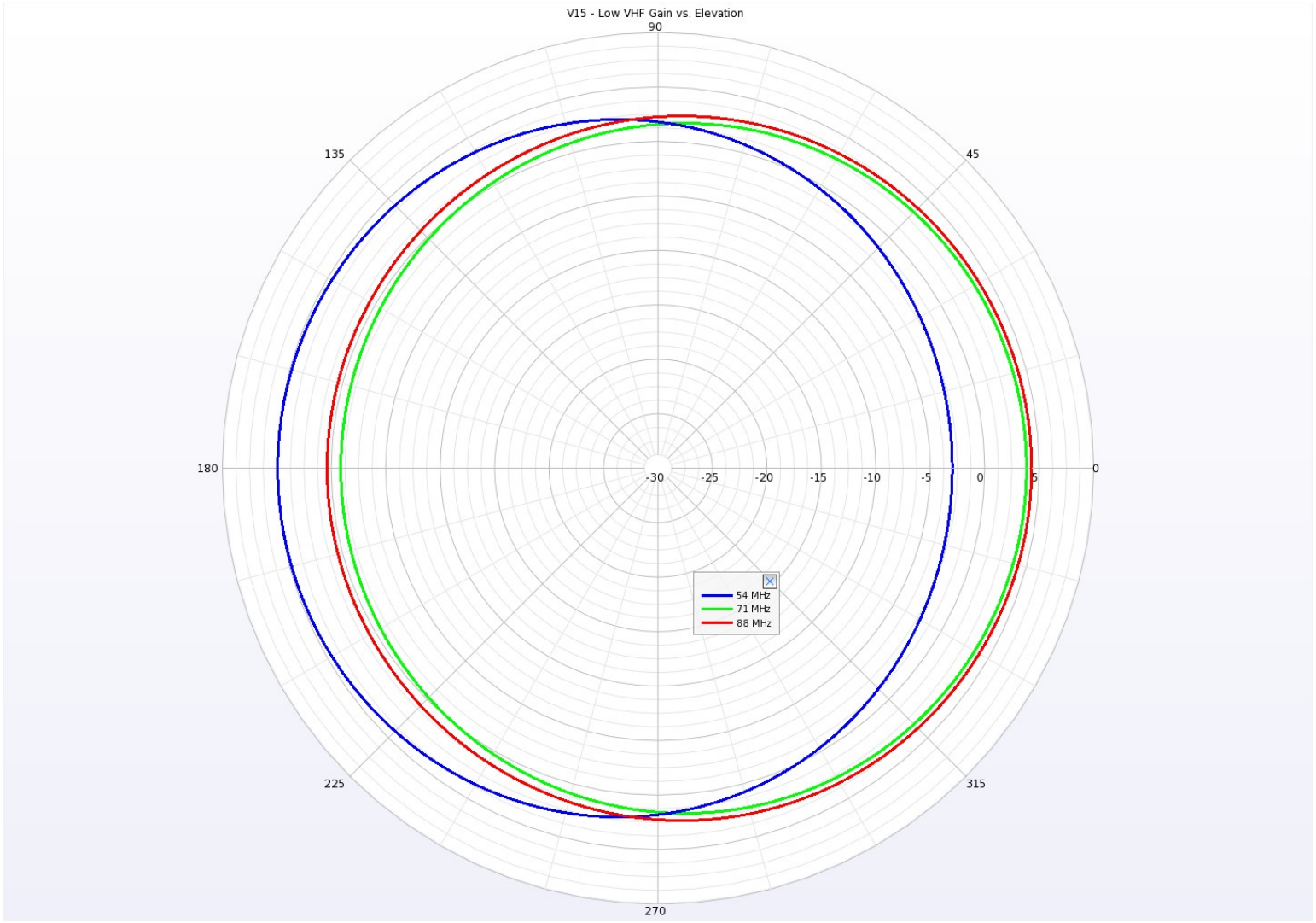

Illustration 2: V15 - Low VHF Gain vs. Elevation Angle.

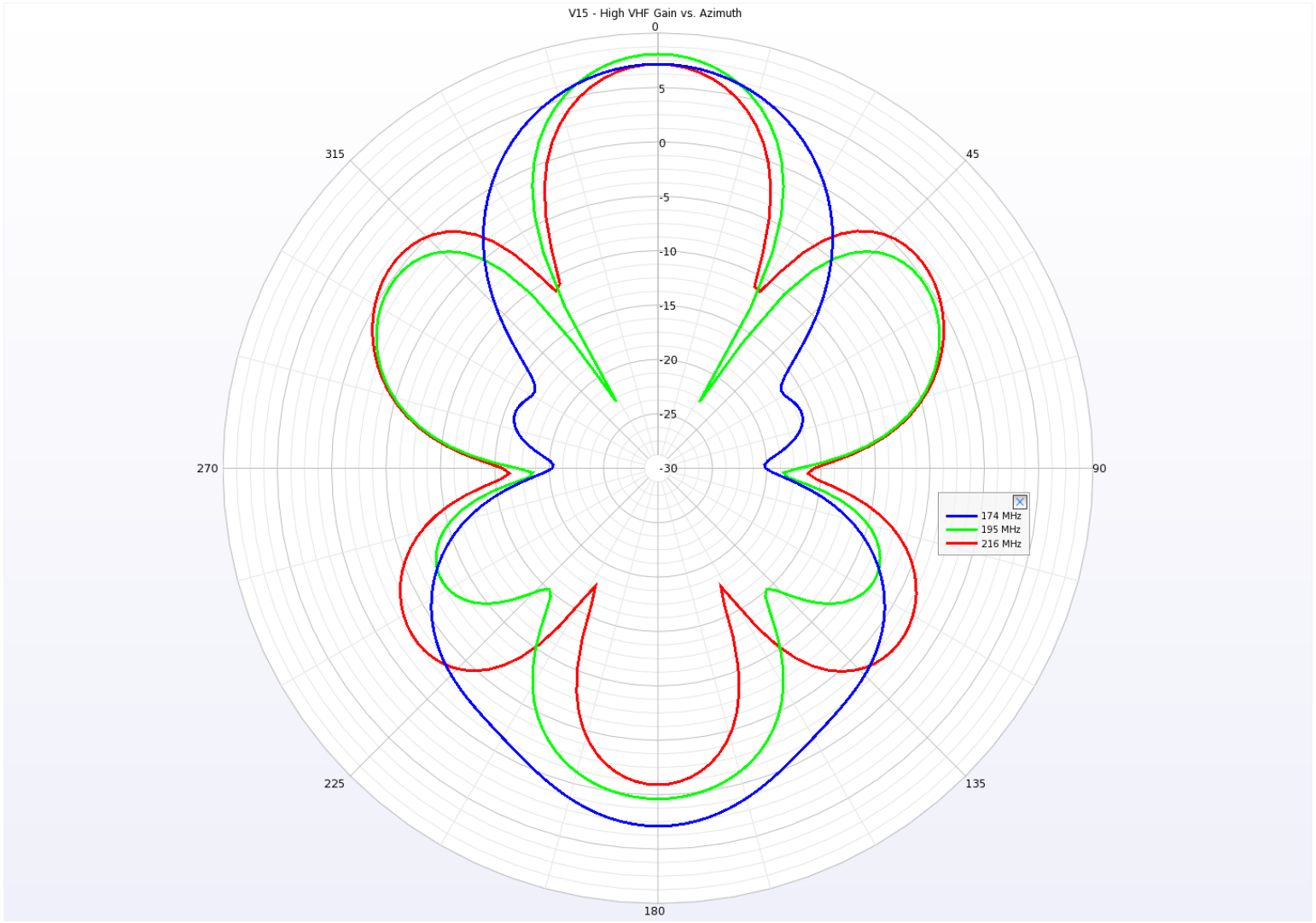

Illustration 3: V15 - High VHF Gain vs. Azimuth Angle.

Illustration 4: V15 - High VHF Gain vs. Elevation Angle.

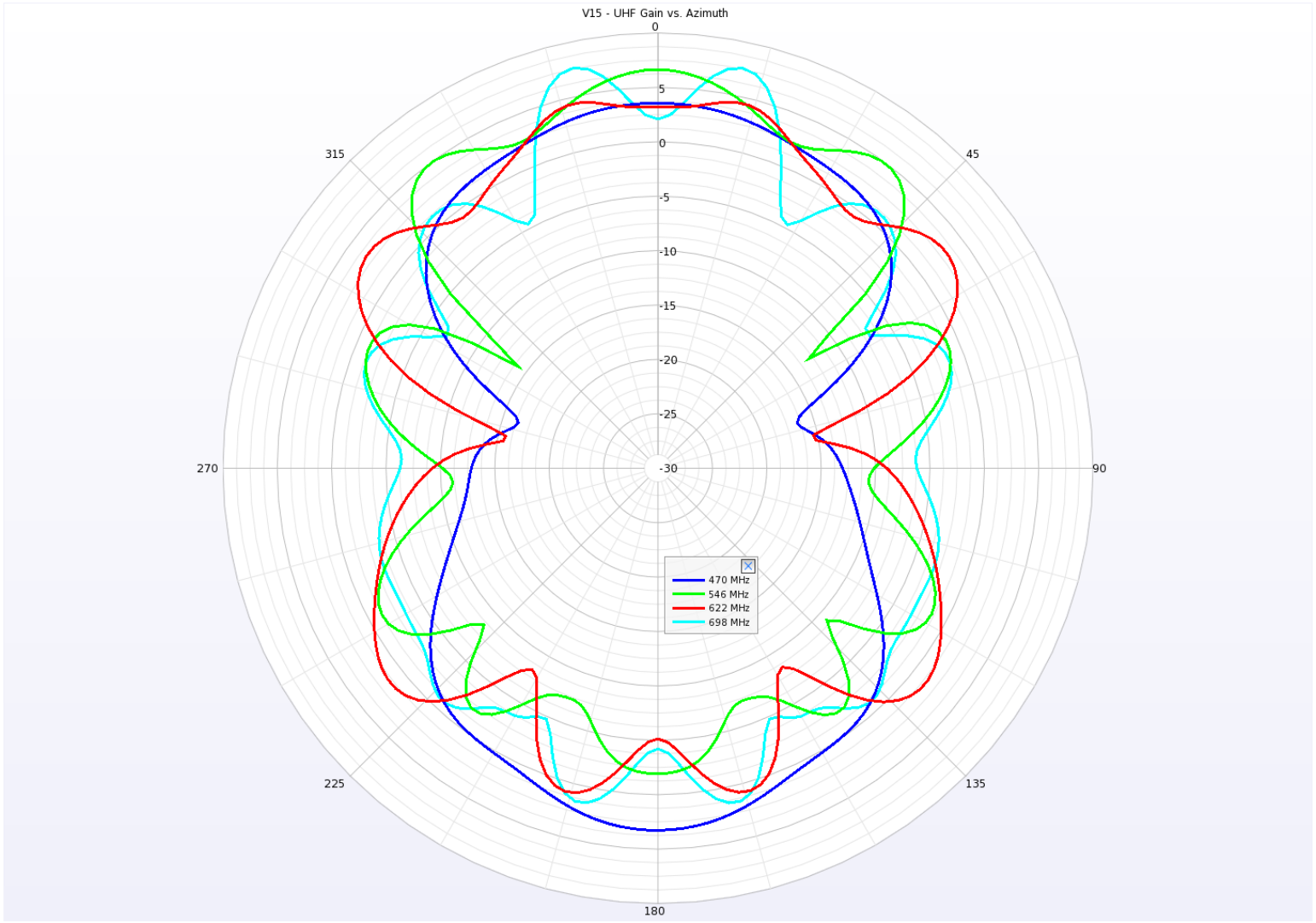

Illustration 5: V15 - UHF Gain vs. Azimuth Angle.

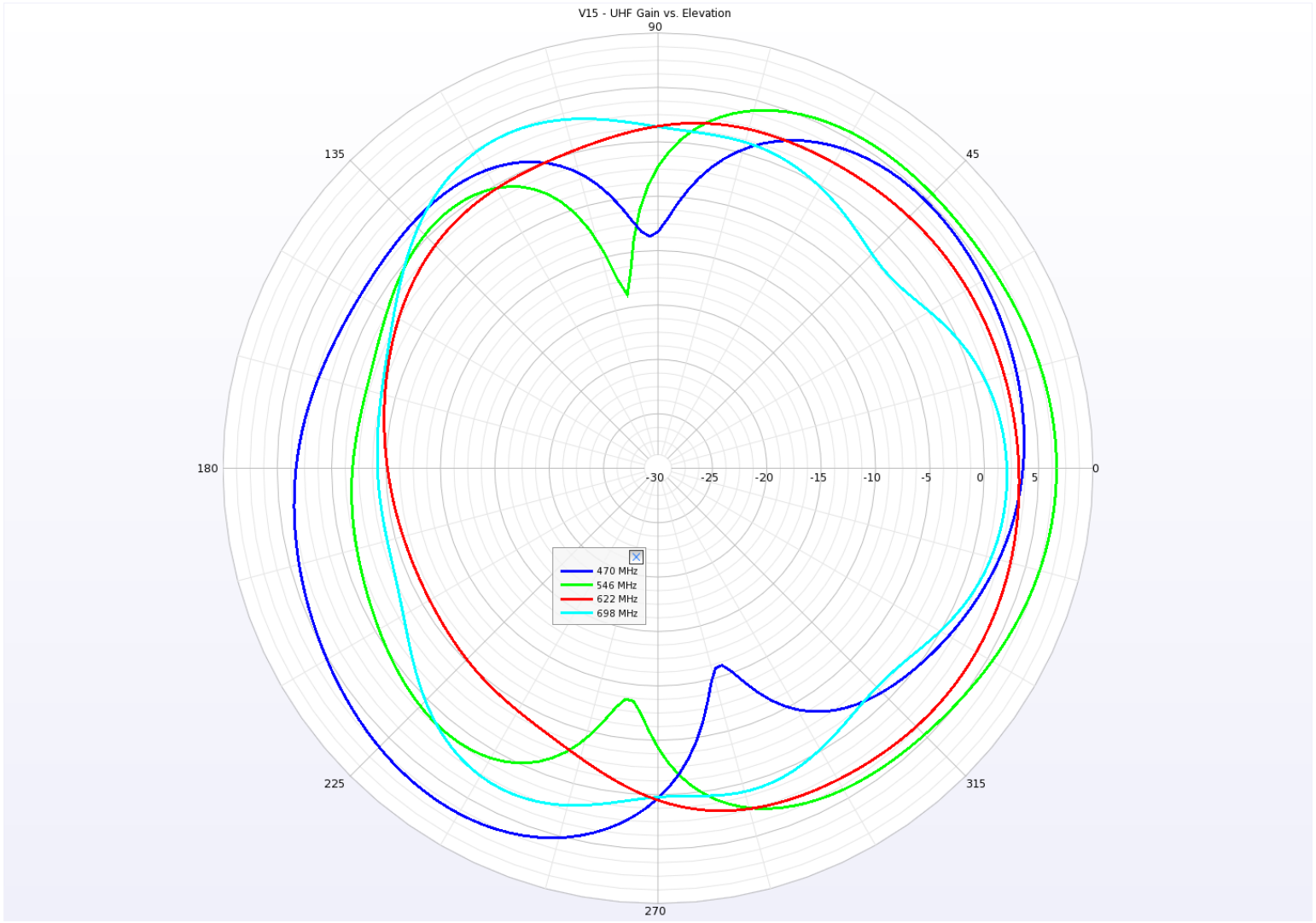

Illustration 6: V15 - UHF Gain vs. Elevation Angle.

Illustration 7: V15 - Boresight Gain vs. Frequency. Note that peak gain is not on boresight at some UHF channels. Refer to polar plots.

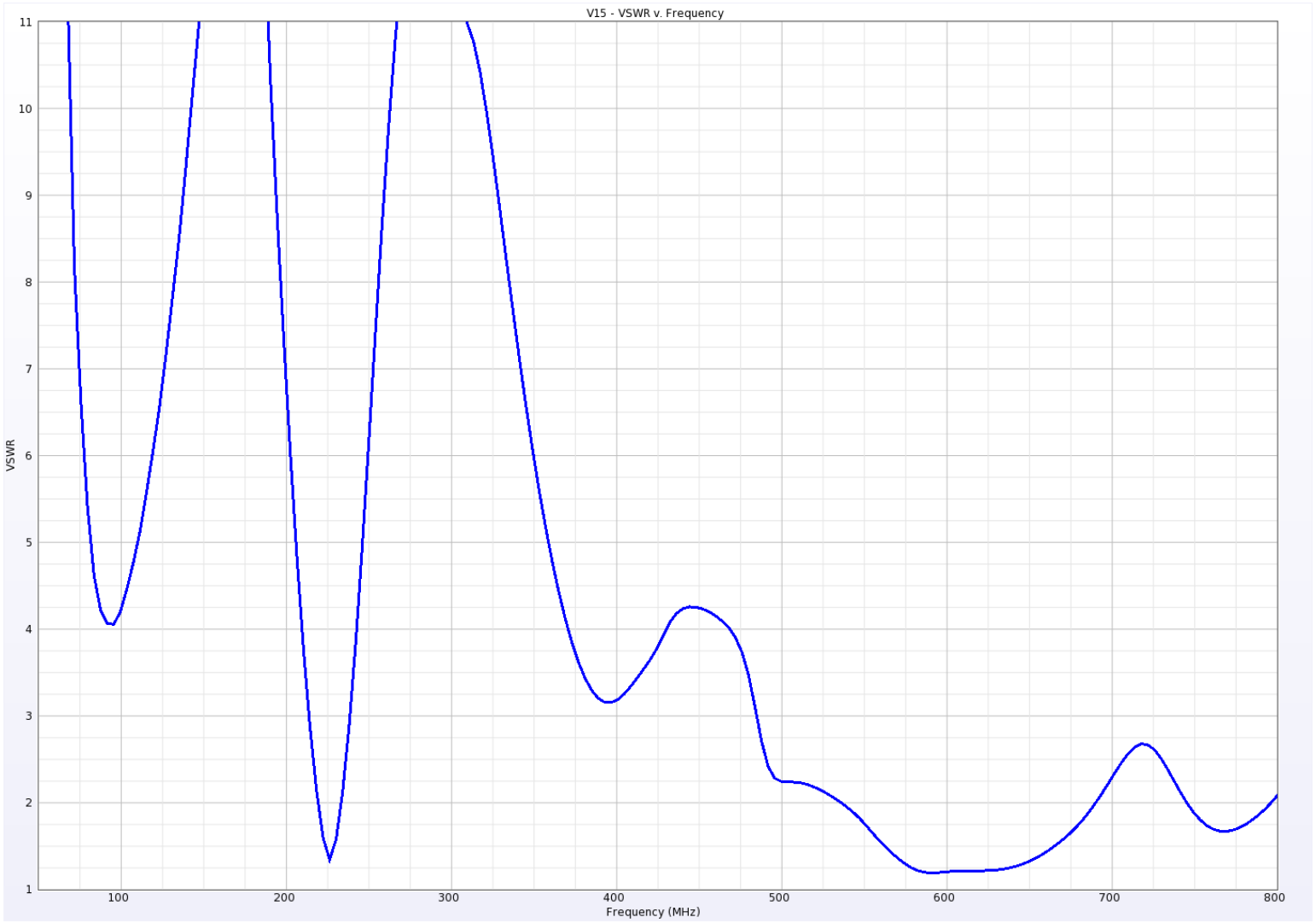

Illustration 8: V15 - Computed VSWR vs. Frequency. No balun. 300 ohm line reference.

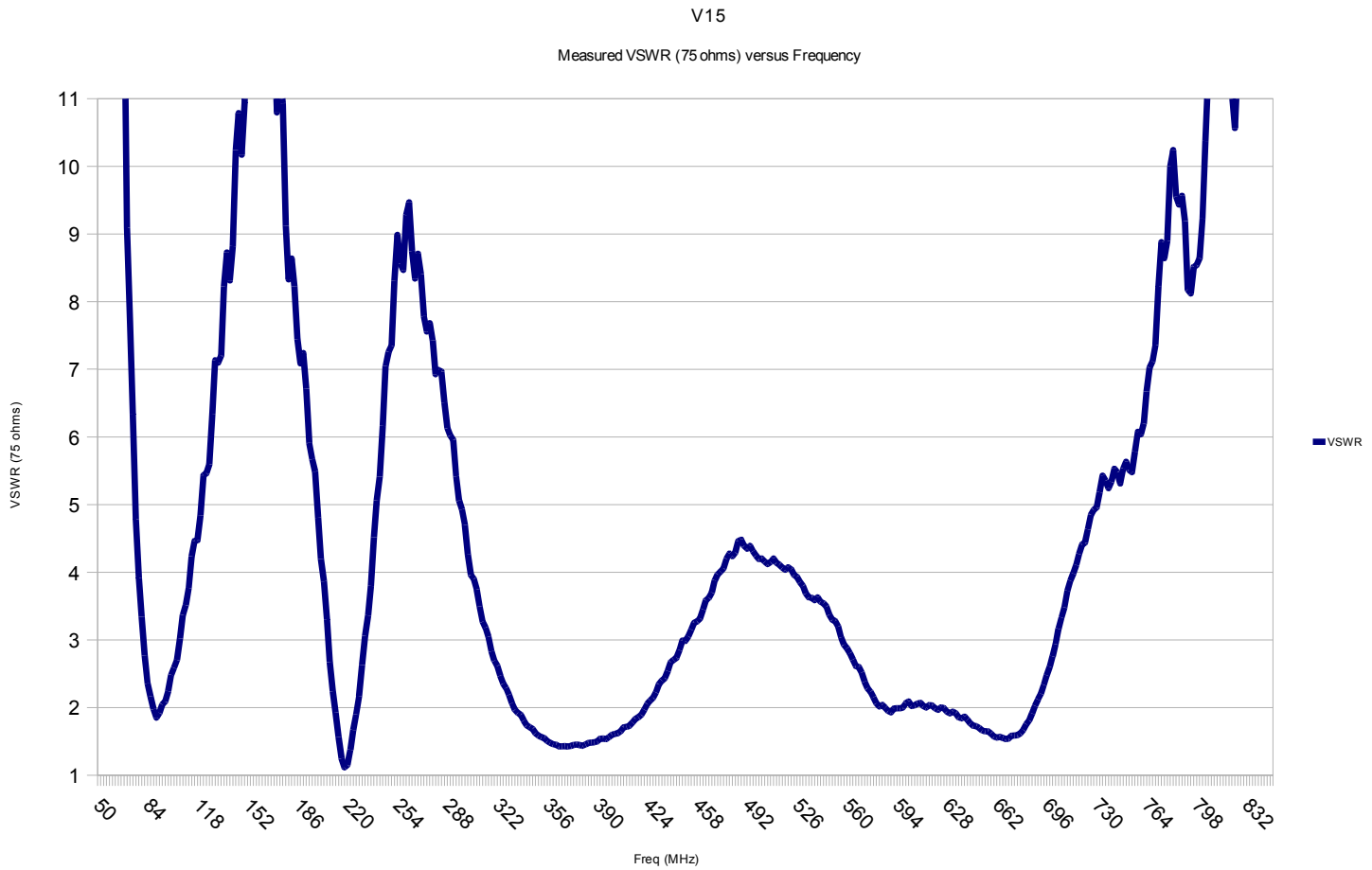

Illustration 9: V15 - VSWR vs. Frequency measured with HP / Agilent 8510C. Antenna on 10 ft mast above dry concrete slab.