

Technical Data Sheet: Antennas Direct DB8E Antenna

Physical Data:

Dimensions:	English (in)	Metric (cm)
Width	50	127
Height	37	94
Depth	7.5	19
Turning Radius	25	63.5

	English (lbs)	Metric (kg)
Weight:	TBD	TBD

Electrical Data:

Band: UHF 470 MHz to 698 MHz US Channels 14 - 69
Impedance: 75 ohm
Connector: F-Female

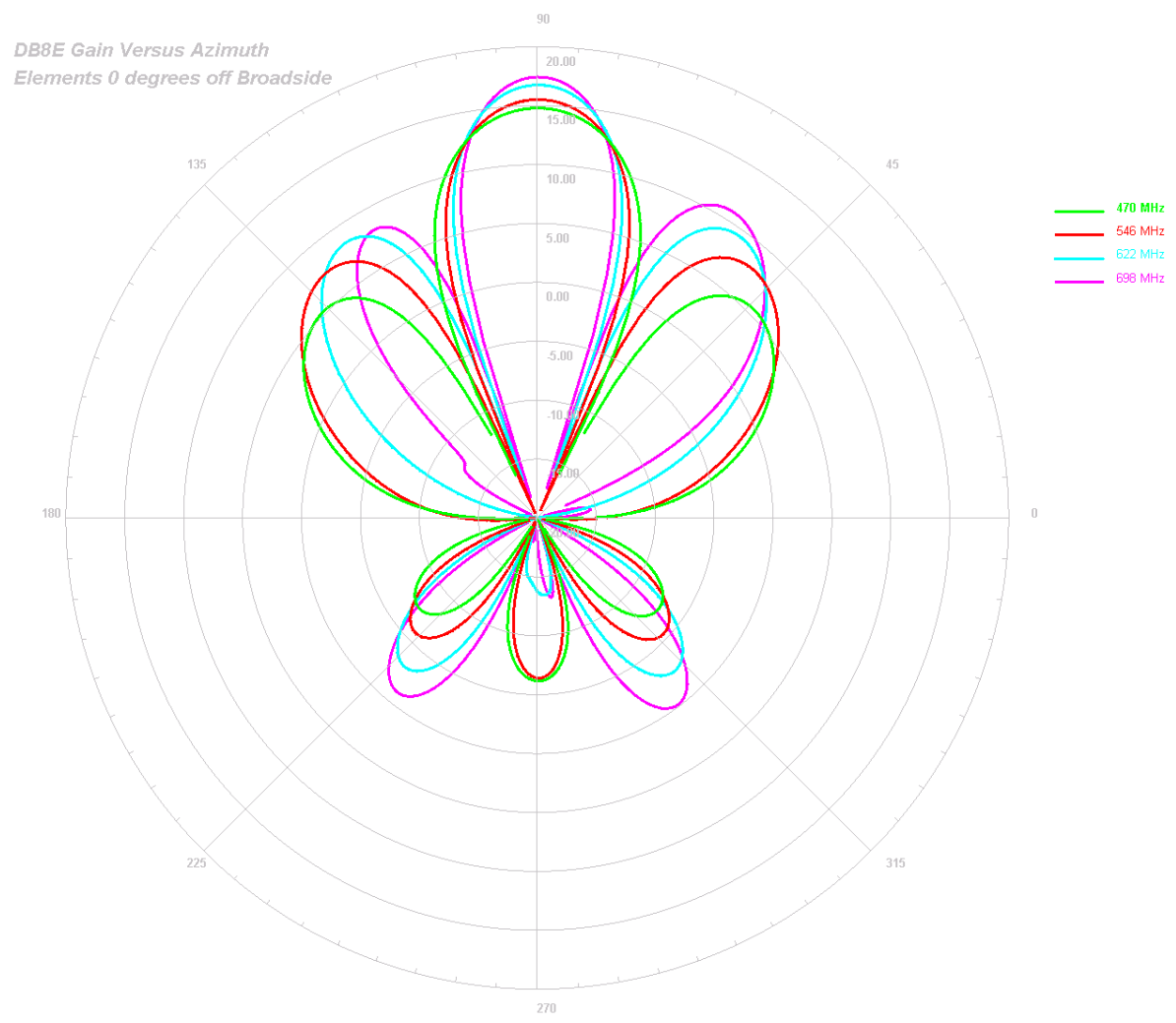
Performance Data (both elements broadside):

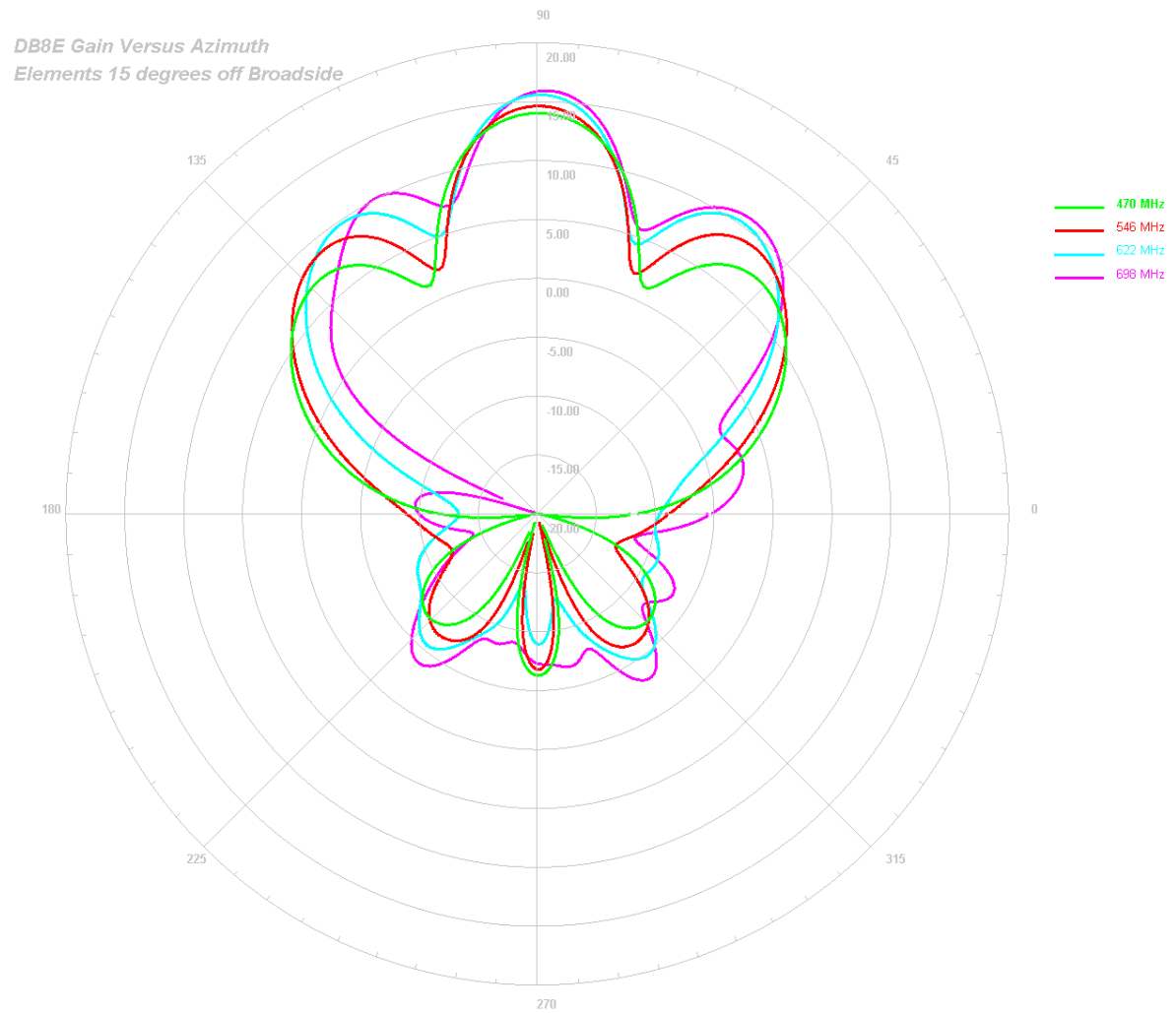
Frequency (MHz)	Peak Gain (dBi)	Beamwidth (deg)
470	14.7	~24.5
546	15.4	~21.2
622	16.7	~18.5
698	17.4	~16.3

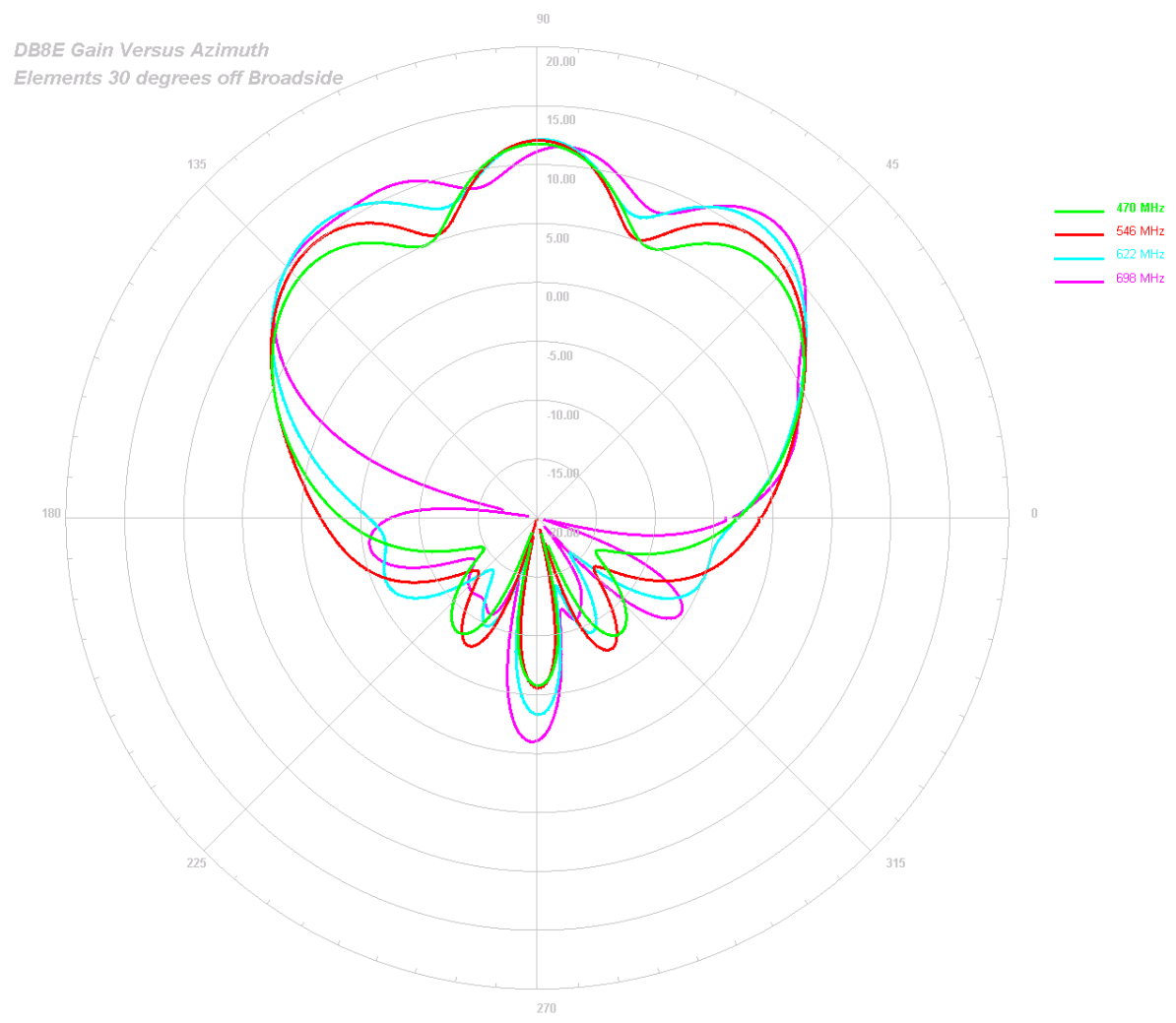
VSWR : < 2 UHF 470 to 698 MHz

Notes:

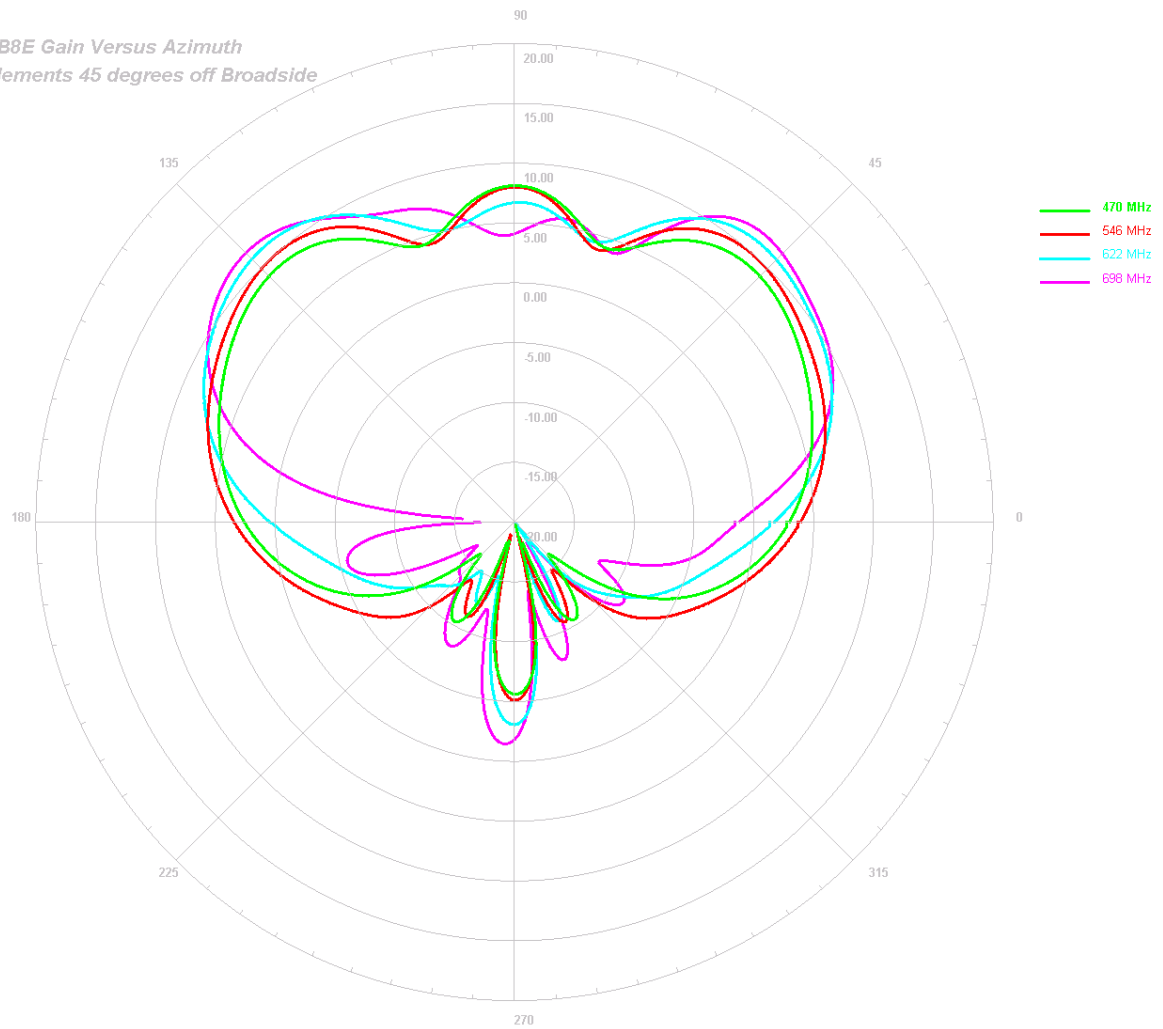
- 1. Pattern computed using array theory and Remcom, Inc. X-FDTD 7.2 simulation of individual element..*
- 2. Assumptions: PEC, free space, no loss in combiner & phasing harness.*
- 3. Gain is specified dBi (isotropic) per IEEE definition. Mismatch losses not included.*
- 4. VSWR measured using HP 8510C Network Analyzer with pole mounted antenna outdoors ~ 10 ft above dry concrete pad.*



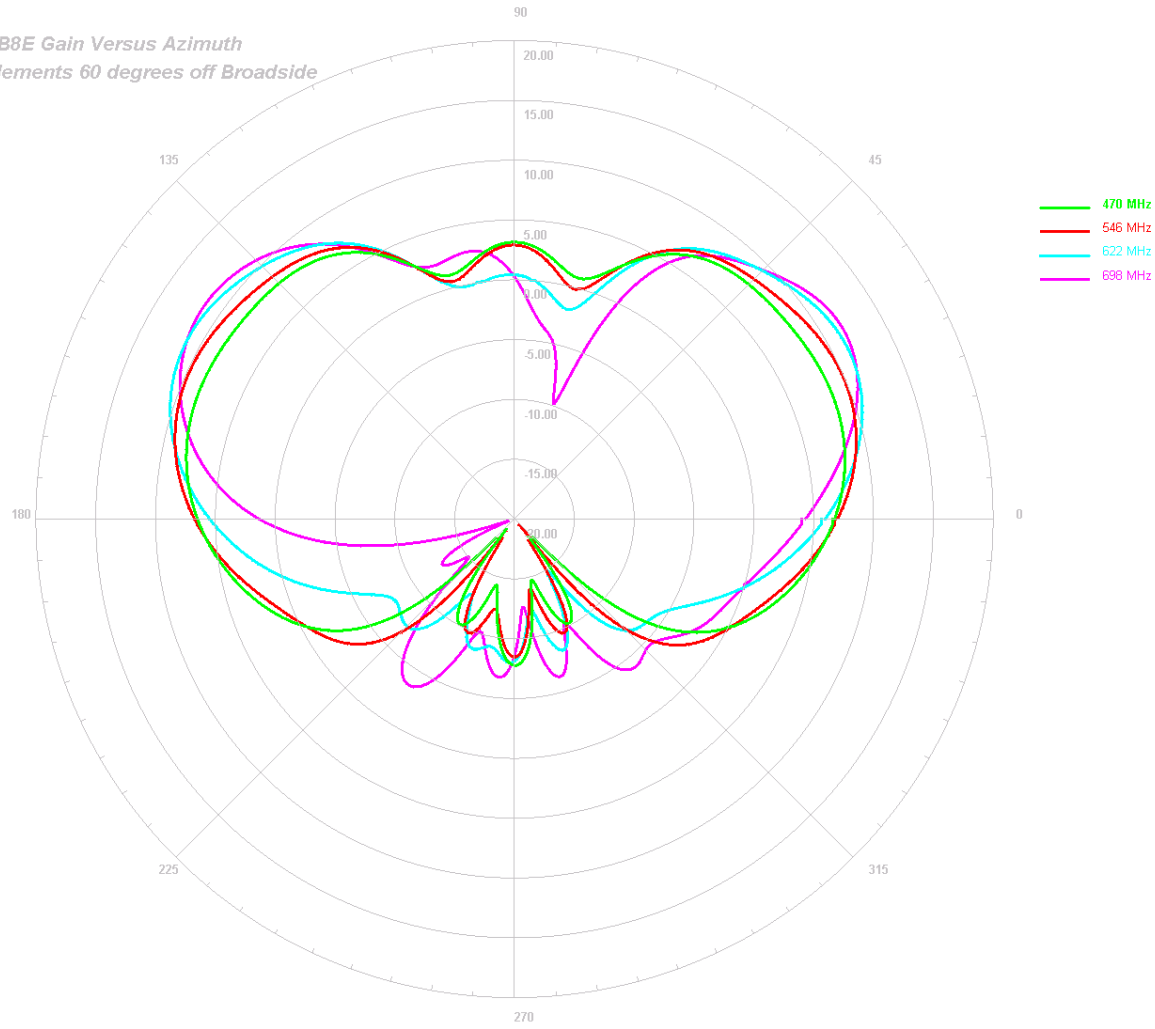




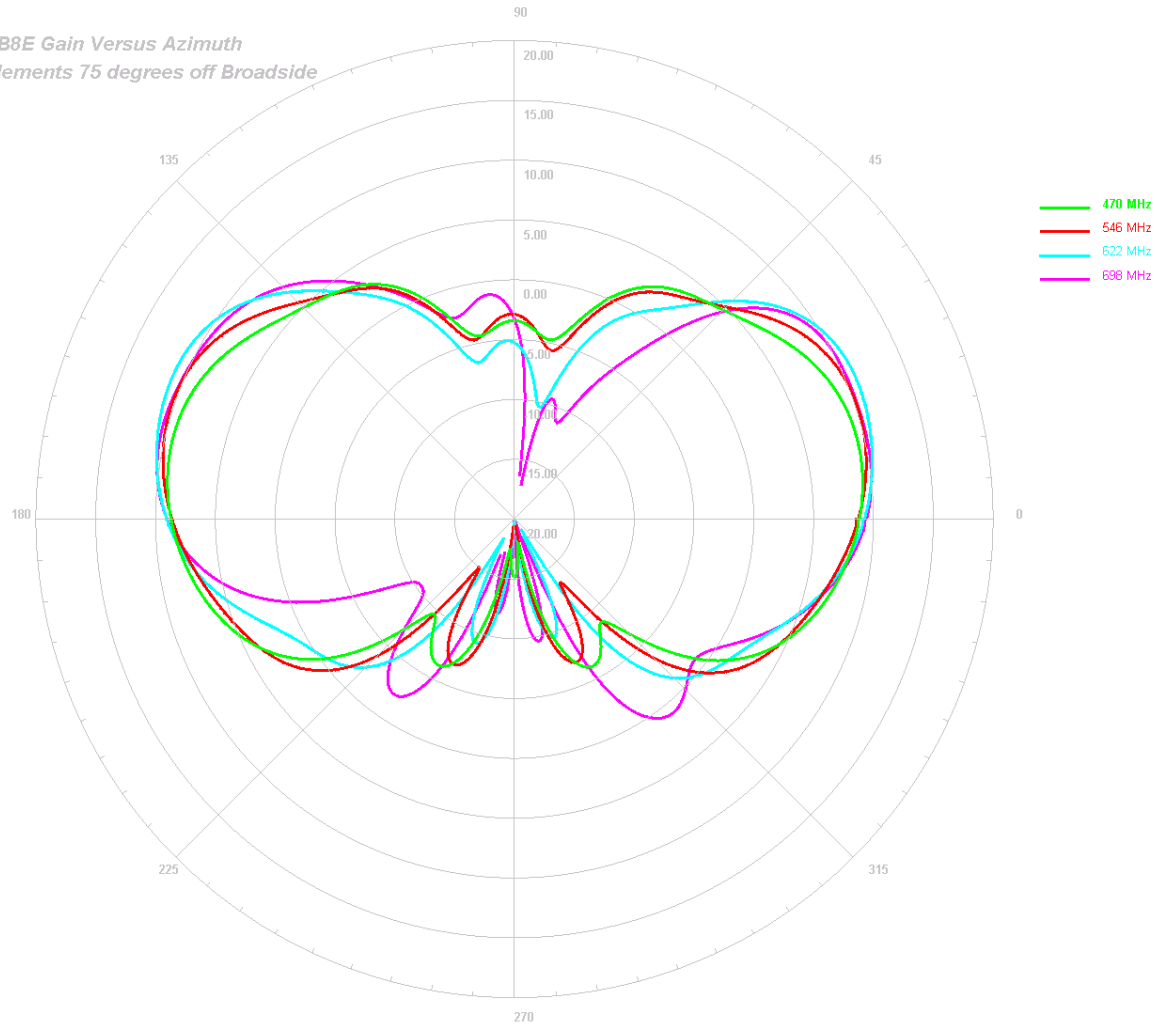
DB8E Gain Versus Azimuth
Elements 45 degrees off Broadside



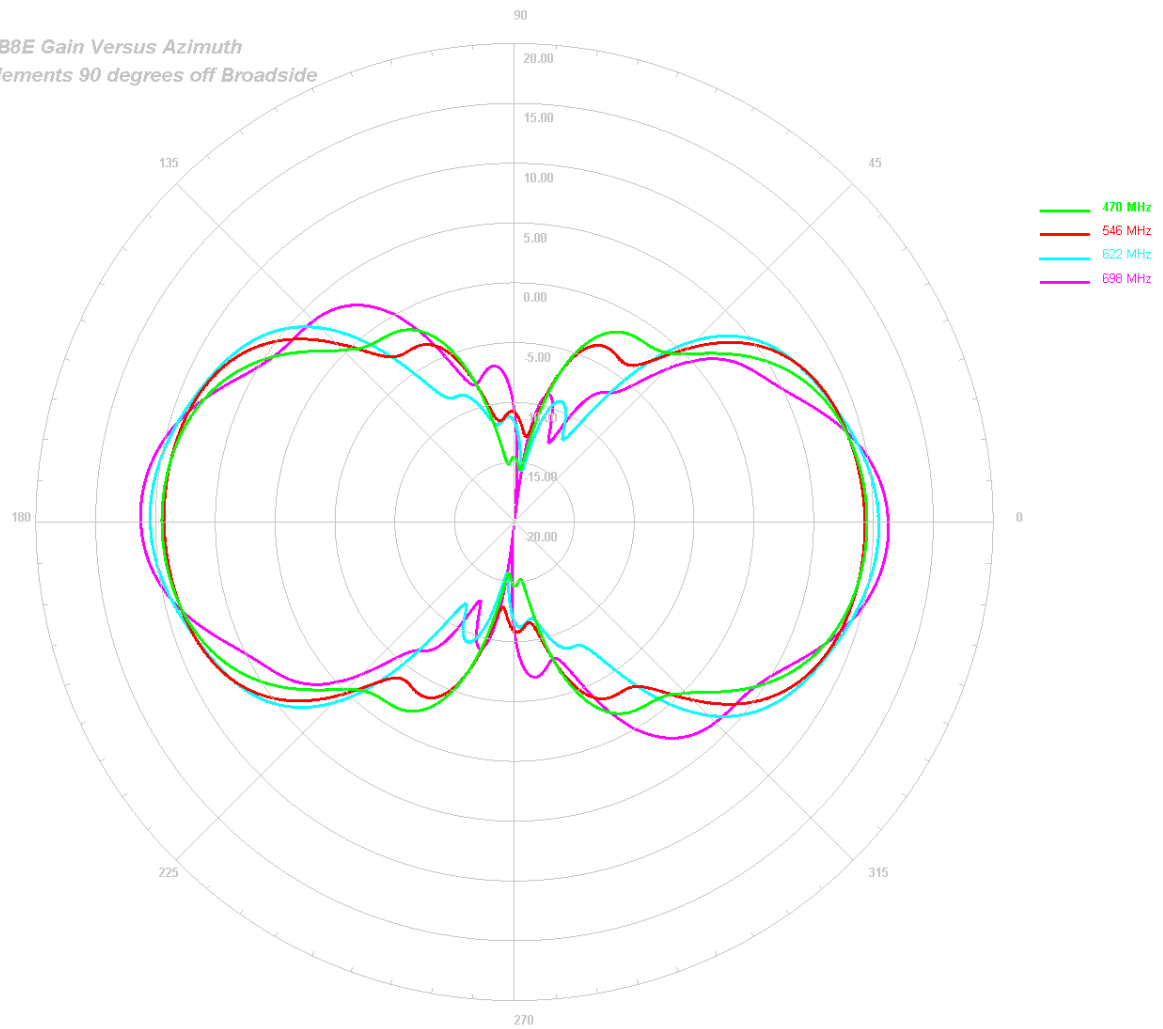
DB8E Gain Versus Azimuth
Elements 60 degrees off Broadside



DB8E Gain Versus Azimuth
Elements 75 degrees off Broadside



DB8E Gain Versus Azimuth
Elements 90 degrees off Broadside



DB8E Prototype 1 NPE 09-03-2012

S11 SWR
REF 1.0
3 1.0 ✓
1.7135

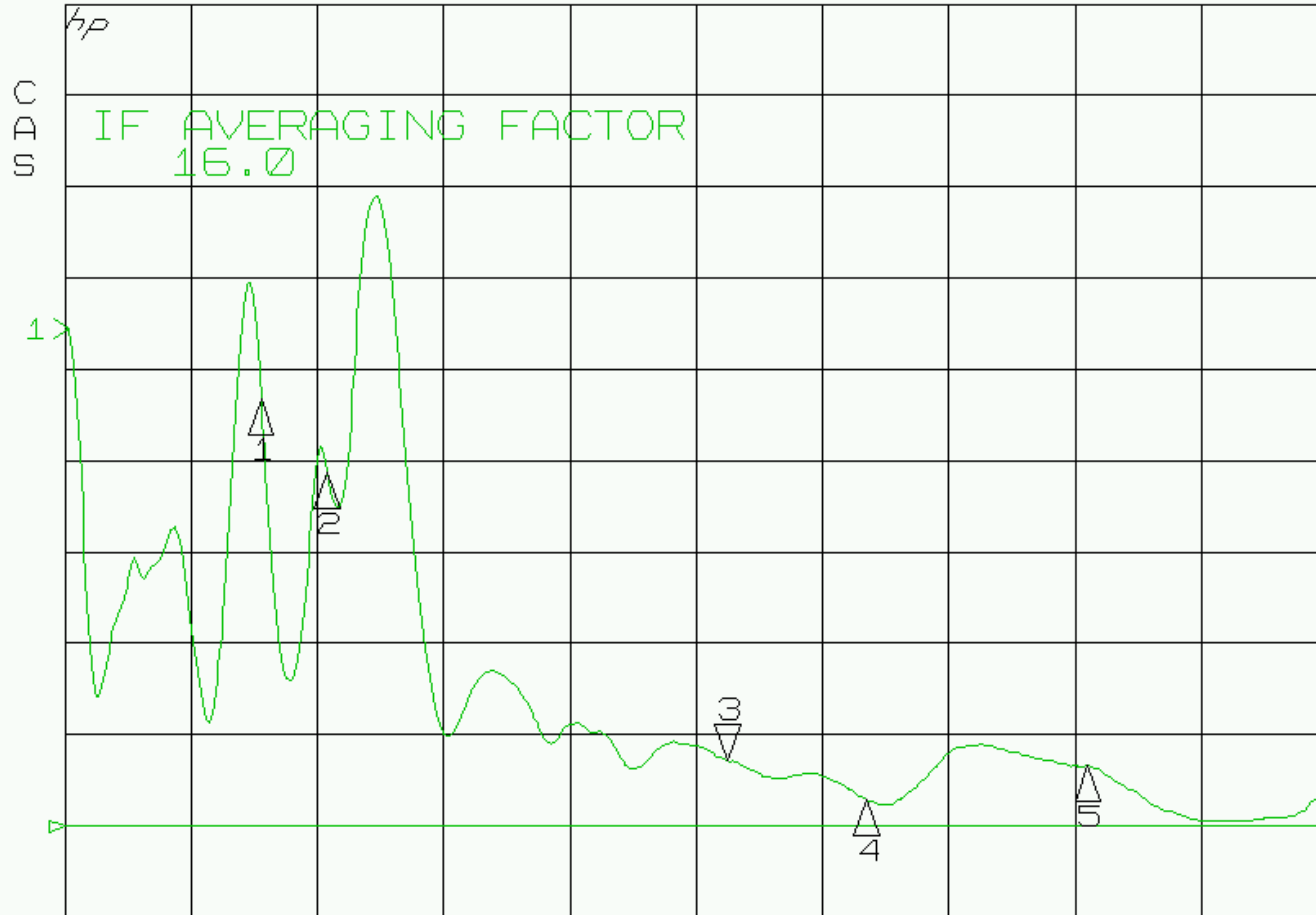
MARKER 1
174.0 MHz
5.6824

MARKER 2
216.0 MHz
4.8745

MARKER 3
470.0 MHz
1.7135

MARKER 4
558.0 MHz
1.2897

MARKER 5
698.0 MHz
1.6669



START
0.050000000 GHz

STOP
0.850000000 GHz

03 SEP 12
12:50:19