

Gain of the HexTenna Yagi

by – Alpha Antenna



If gain of a 2 element Yagi only came from boom length, then the gain of a 2 element Yagi would be relatively low. There is, however, “ground gain” that can add an approximately 6 dB of additional gain.

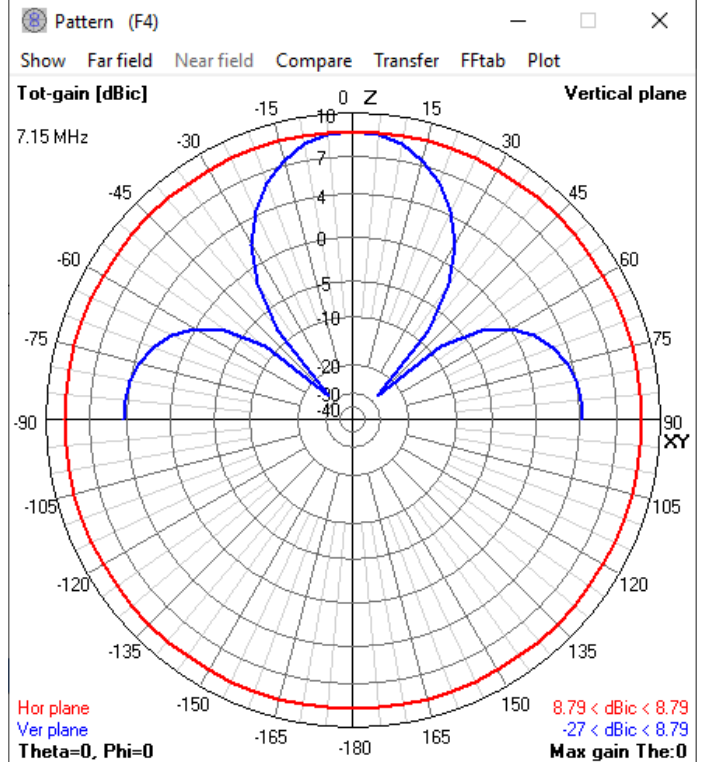
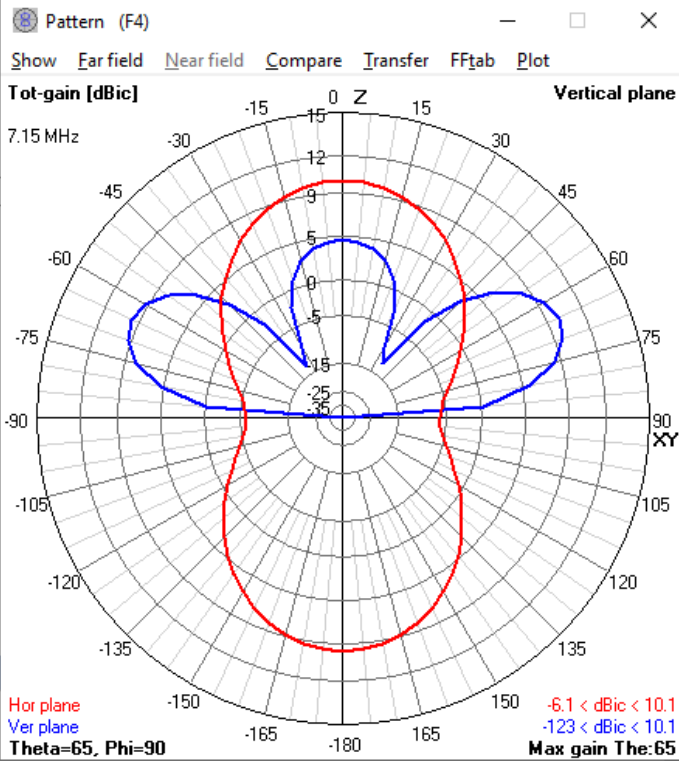
In as much as the gain of the two element HexTenna, it is configurable as a traditional V-Yagi or it can be setup to drive both the Driven and Reflector elements. Presented below are the gain figures for the traditional Yagi configuration.

MHz	Traditional single feed V-Yagi gain		Element lengths	
	Gain/Height	Gain/Height	Each Driven Element	Each Reflector
7.15	10.1 dBi/66 feet	8.79 dBi/5.5 feet	9.9752727 M/392.75 Inches	10.05 M/395.67 Inches
14.18	10 dBi/33 feet	8.45 dBi/5.5 feet	5.1689 M/203.5 Inches	5.2 M/204.75 Inches
18.12	9.41 dBi/33 feet	8.28 dBi/5.5 feet	3.98145 M/156.75 Inches	4.1 M/161.5 Inches
21.23	12.7 dBi/33 feet	8.18 dBi/5.5 feet	3.34 M/131.5 Inches	3.55 M/139.75 Inches
24.94	9.33 dBi/33 feet	8.1 dBi/5.5 feet	2.8956 M/114 Inches	3 M/118.25 Inches
28.85	9.73 dBi/33 feet	8.09 dBi/5.5 feet	2.5273 M/99.5 Inches	2.6 M/102.37 Inches
52.00	8.95 dBi/33 feet	8.66 dBi/5.5 feet	1.422397968 M/56 Inches	1.55 M/61 Inches
146.00	10.7 dBi/33 feet	10.1 dBi/5.5 feet	1.4097 M/55.5 Inches	1.45 M/57 Inches

Minimum Gain of the HexTenna by Alpha Antenna with only the driven element connected to the feedline

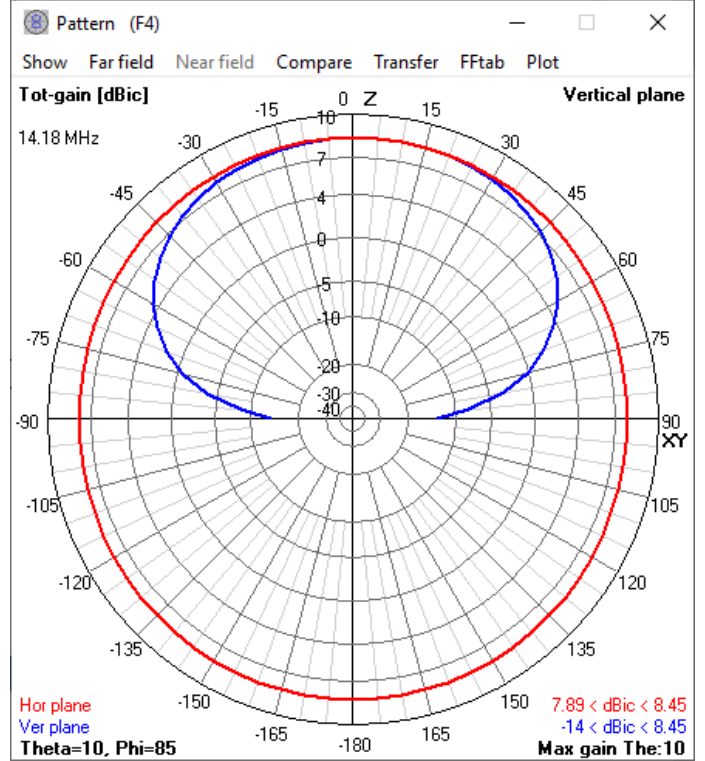
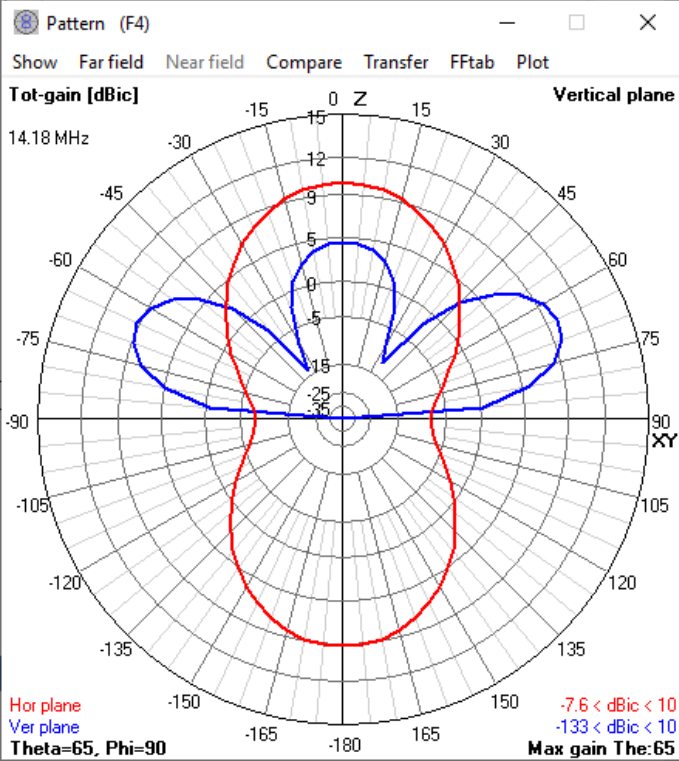
40 Meters, Feedpoint at 66 feet/20.04M

40 Meters, Feedpoint at 5.5 feet/1.67M

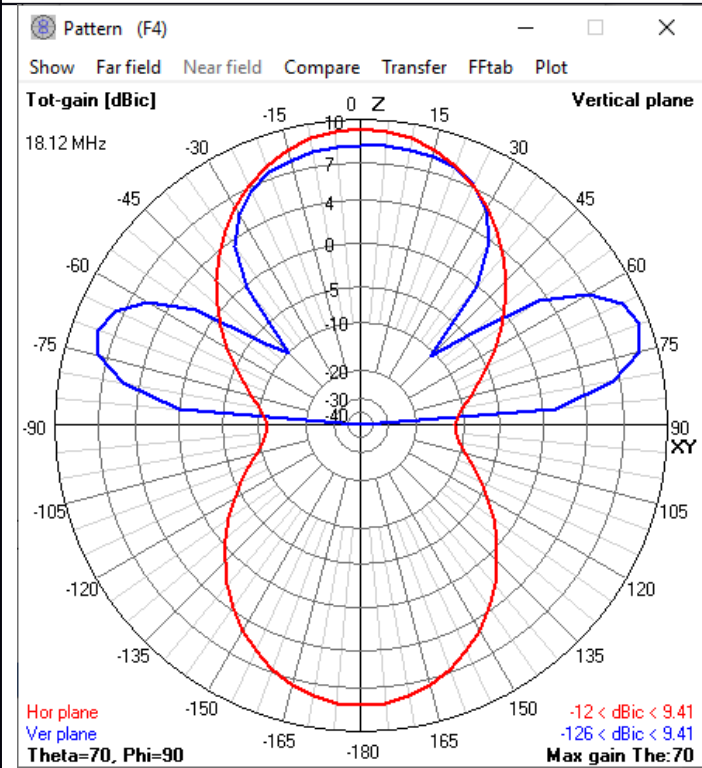


20 Meters at 33 feet/10.02M

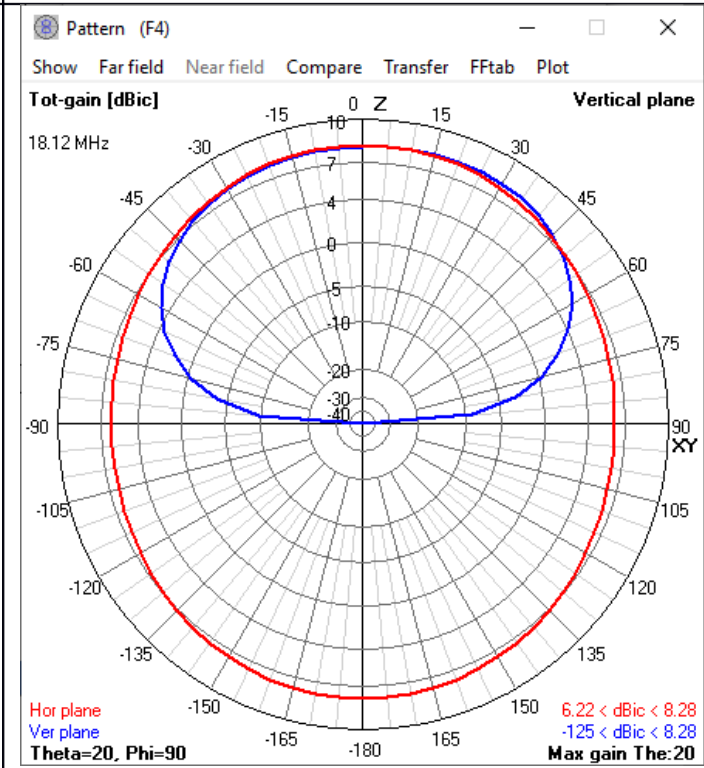
20 Meters at 5.5 feet/1.67M



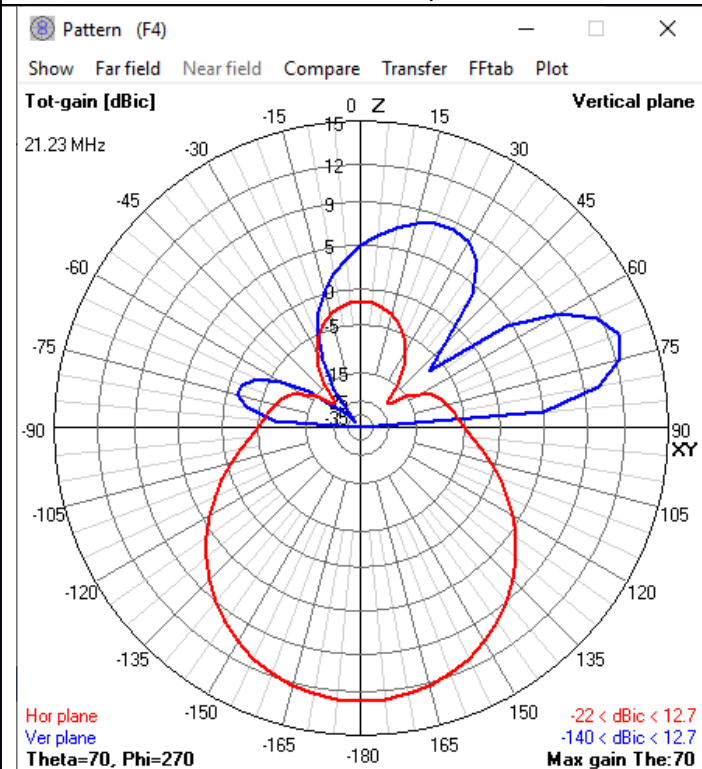
17 Meters at 33 feet/10.02M



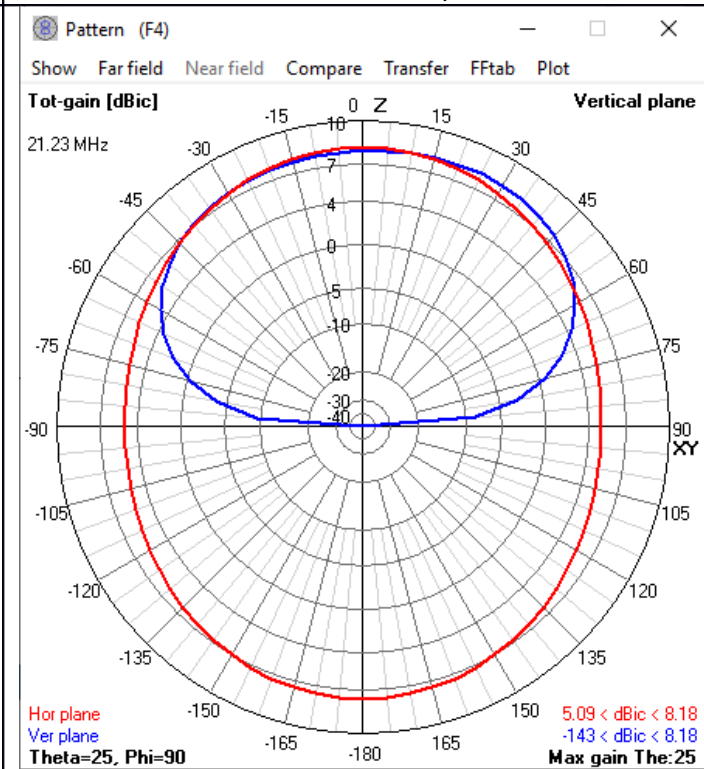
17 Meters at 5.5 feet/1.67M



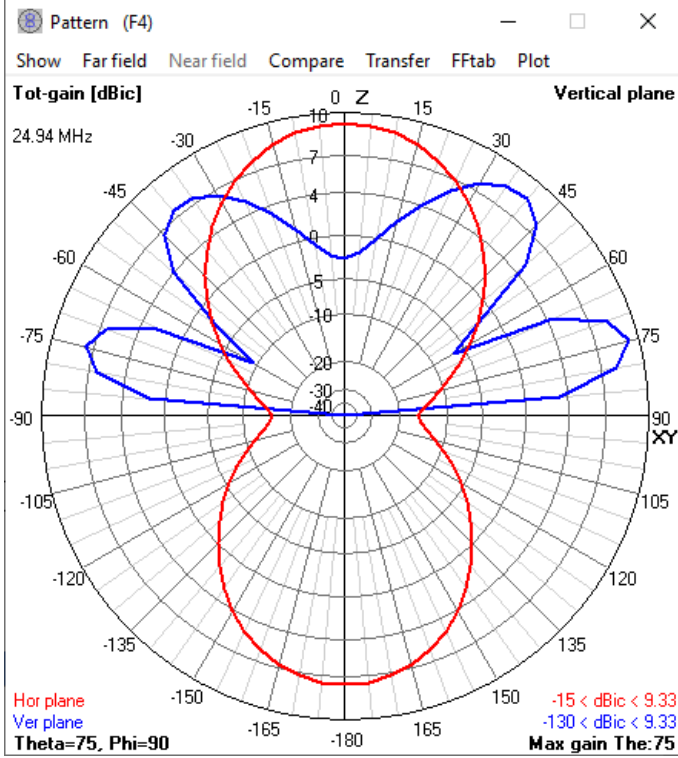
15 Meters at 33 feet/10.02M



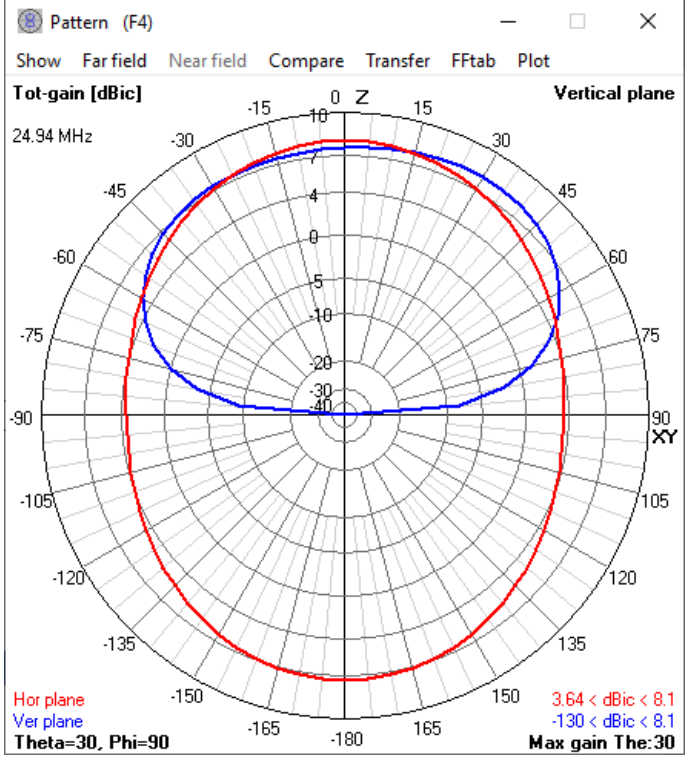
15 Meters at 5.5 feet/1.67M



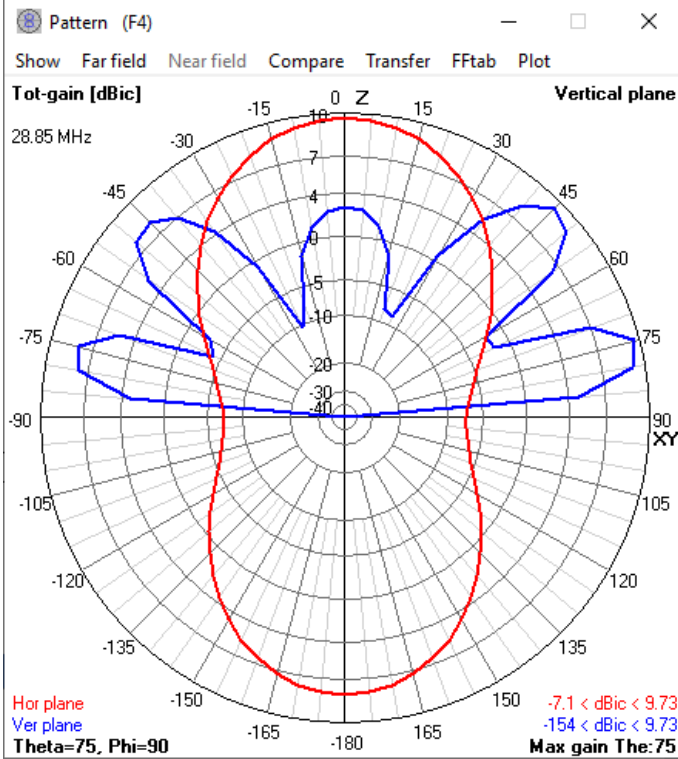
12 Meters at 33 feet/10.02M



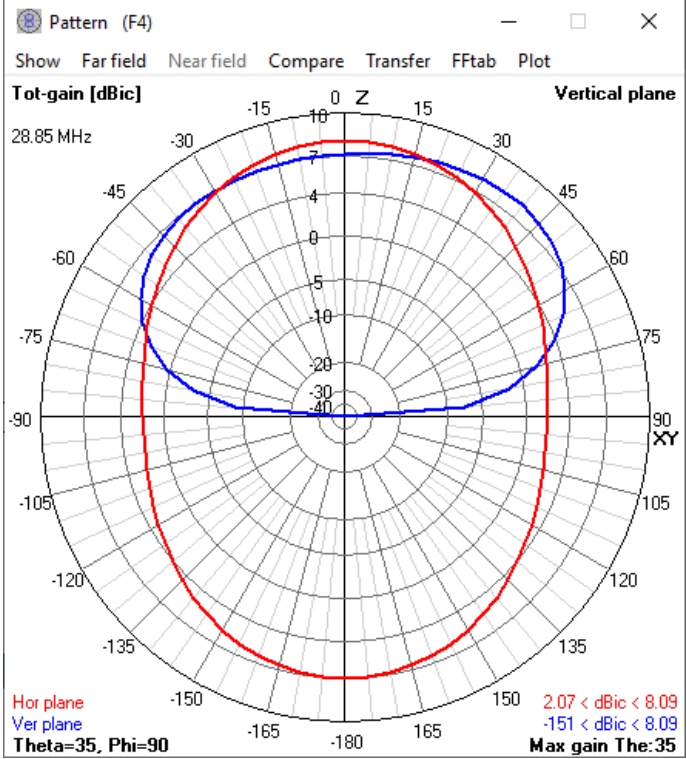
12 Meters at 5.5 feet/1.67M



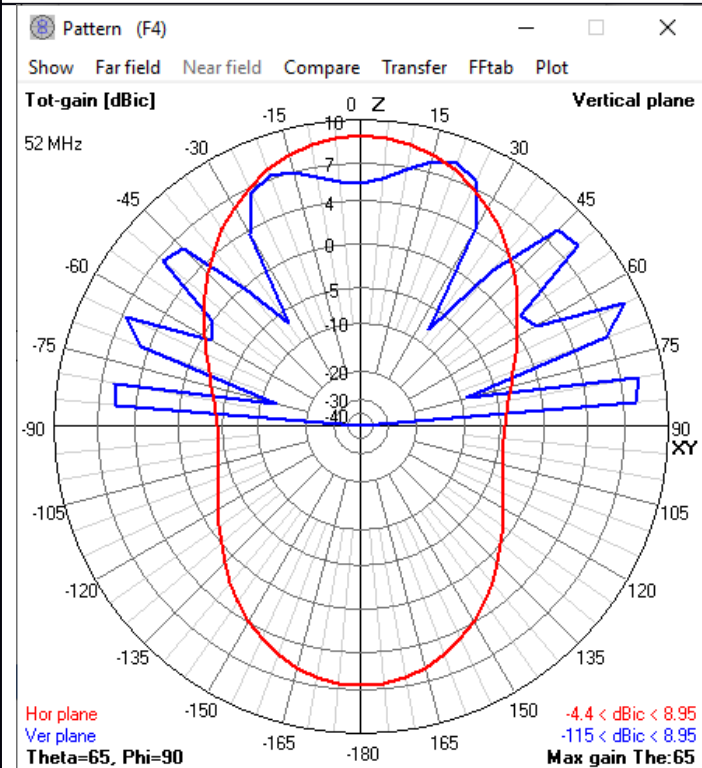
10 Meters at 33 feet/10.02M



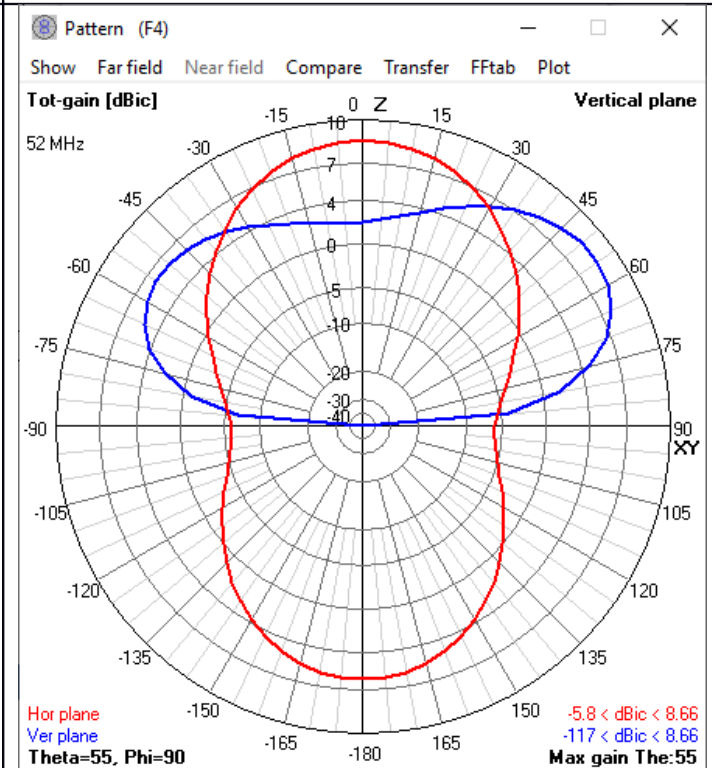
10 Meters at 5.5 feet/1.67M



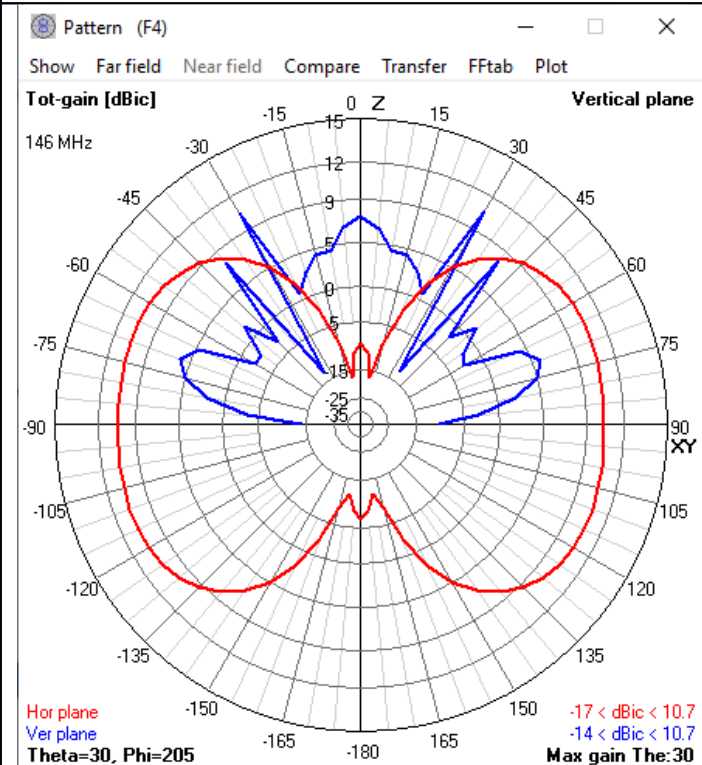
6 Meters at 33 feet/10.02M



6 Meters at 5.5 feet/1.67M



2 Meters at 33 feet/10.02M



2 Meters at 5.5 feet/1.67M

