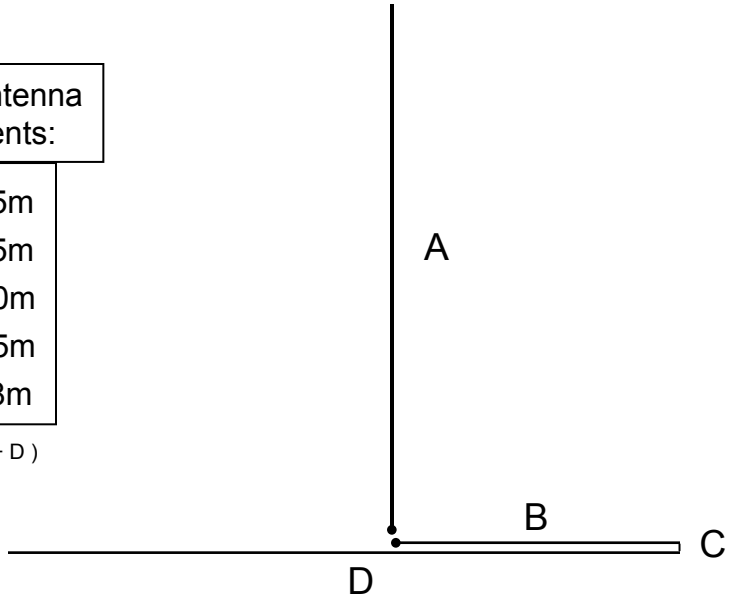
40m Vertical, Single Radial

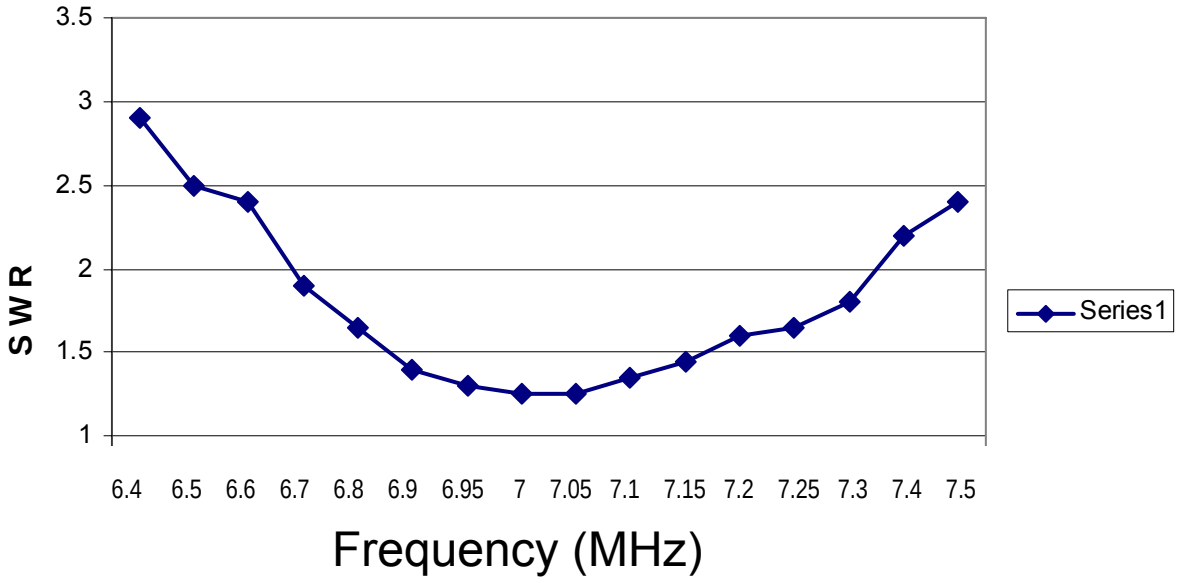
NJ0IP's Antenna Measurements:

A = 11.5m
B = 4.05m
C = 0.10m
D = 7.65m
T = 11.8m

(T = B + C + D)

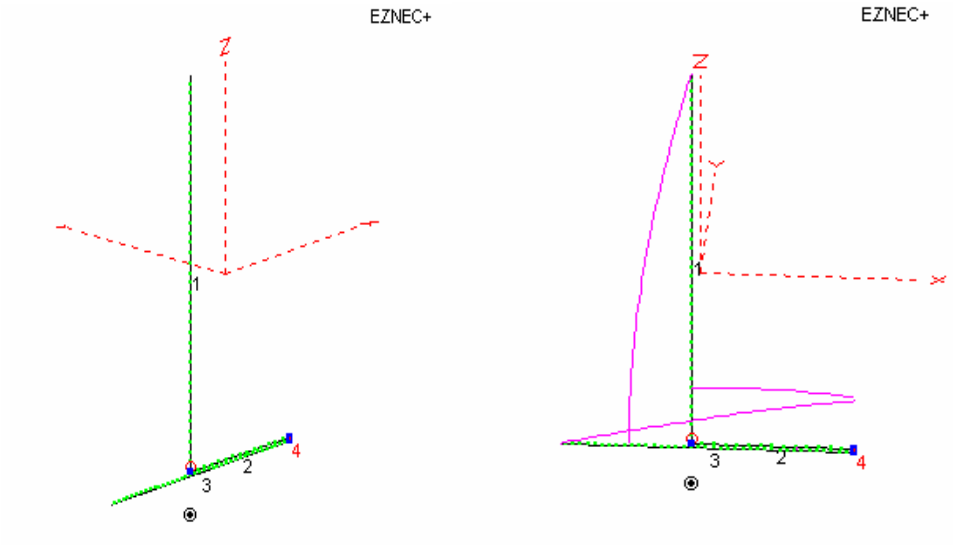


Feed point: 50Ω at the bottom of A and left of B

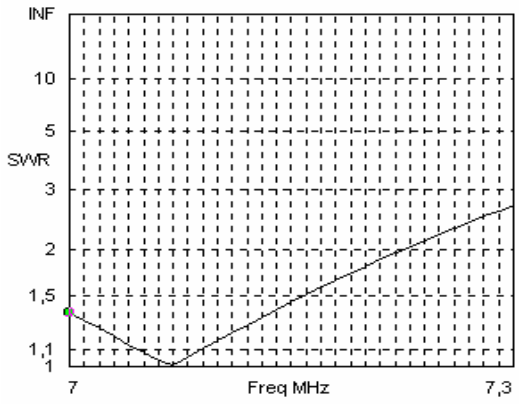


Note: Curve is skewed because measurements were closer together in the ham band.

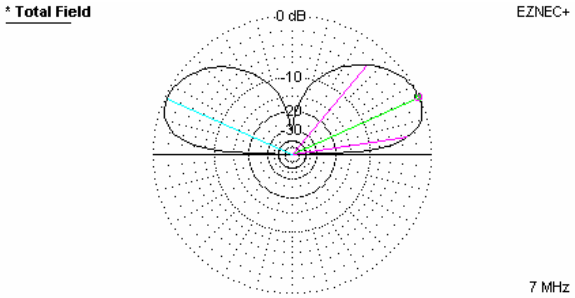
For EZNIC details, see the next two pages (courtesy of DJ1AT):



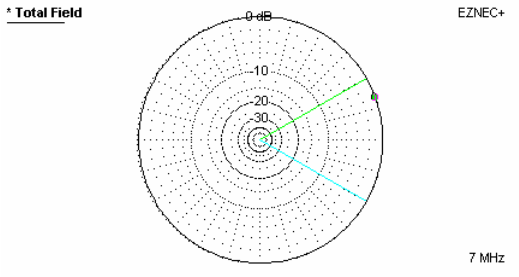
1: Strahlerlänge 11m. 2, 3 und 4 zusammen **ein** gefalteter elevated Radial in 1,2 m Höhe 2: 4,3 m 3: 7,8 m 4: 0,1 m (vertikal) ergeben durch die Stromverteilung s. oben rechts ein nahezu kreisförmiges Strahlerdiagramm (s. u.)



Freq	7 MHz	Source #	1
SWR	1,36	Z0	50 ohms
Z	48,99 - j 15,39 ohms		
Refl Coeff	0,1539 at -84,93 deg.		



Elevation Plot		Cursor Elev	24,0 deg.
Azimuth Angle	20,0 deg.	Gain	-1,1 dBi
Outer Ring	-1,1 dBi		0,0 dBmax
			0,0 dBmax3D
3D Max Gain	-1,1 dBi		
Slice Max Gain	-1,1 dBi @ Elev Angle = 24,0 deg.		
Beamwidth	41,7 deg.; -3dB @ 8,7, 50,4 deg.		
Sidelobe Gain	-1,33 dBi @ Elev Angle = 156,0 deg.		
Front/Sidelobe	0,23 dB		



Azimuth Plot		Cursor Az	20,0 deg.
Elevation Angle	24,0 deg.	Gain	-1,1 dBi
Outer Ring	-1,1 dBi		0,0 dBmax
			0,0 dBmax3D
3D Max Gain	-1,1 dBi		
Slice Max Gain	-1,1 dBi @ Az Angle = 30,0 deg.		
Front/Back	0,21 dB		
Beamwidth	?		
Sidelobe Gain	-1,1 dBi @ Az Angle = 330,0 deg.		
Front/Sidelobe	0,0 dB		

EZNEC+ ver. 4.0

Vertical over real ground 10.06.06 11:09:02

---------- ANTENNA DESCRIPTION ----------

Frequency = 7 MHz
Wire Loss: Copper -- Resistivity = 1,74E-08 ohm-m, Rel. Perm. = 1

---------- WIRES ----------

No.	End 1 Conn.	End 1 X	End 1 Y	End 1 Z	End 2 Conn.	End 2 X	End 2 Y	End 2 Z	Dia (mm)	Segs	Insulation Diel	Insulation C	Insulation Thk(mm)
1	W2E1	0,	0,	1,2		0,	0,	12,2	1	40	1		0
2	W1E1	0,	0,	1,2	W4E1	4,3,	0,	1,2	1	14	1		0
3	W4E2	4,3,	0,	1,1		-3,5,	0,	1,1	1	40	1		0
4	W2E2	4,3,	0,	1,2	W3E1	4,3,	0,	1,1	1	1	1		0

Total Segments: 95

---------- SOURCES ----------

No.	Specified Pos. Wire #	Specified Pos. % From E1	Actual Pos. % From E1	Actual Pos. Seg	Rel Amplitude (V/A)	Phase (deg.)	Type
1	1	0,00	1,25	1	1	0	I

No loads specified

No transmission lines specified

Ground type is Real, High-Accuracy

---------- MEDIA ----------

No.	Cond. (S/m)	Diel. Const.	Height (m)	R Coord. (m)
1	0,005	13	0	0