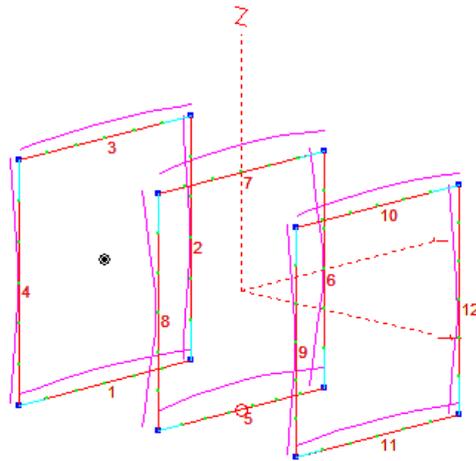


4,20 M 3el Cubical Quad

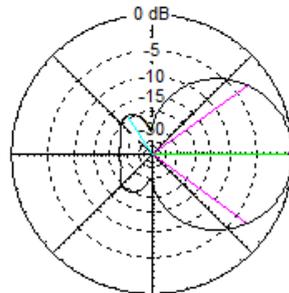
For: DX portion 11 meter band
Antenna Type: 3el Cubical Quad

Designed by: HPSD version 1.01 jan 2008
Boom length: 4,2 Meter
Gain: 9,37 dBi (@27,555 Mhz)
FB <24 dB
FR <19 dB
Impedance: 50 ohms, direct fed
SWR below 1:1.1 > 1o0 Khz.
SWR below 2:1 > 600 Khz

EZNEC Pro/4



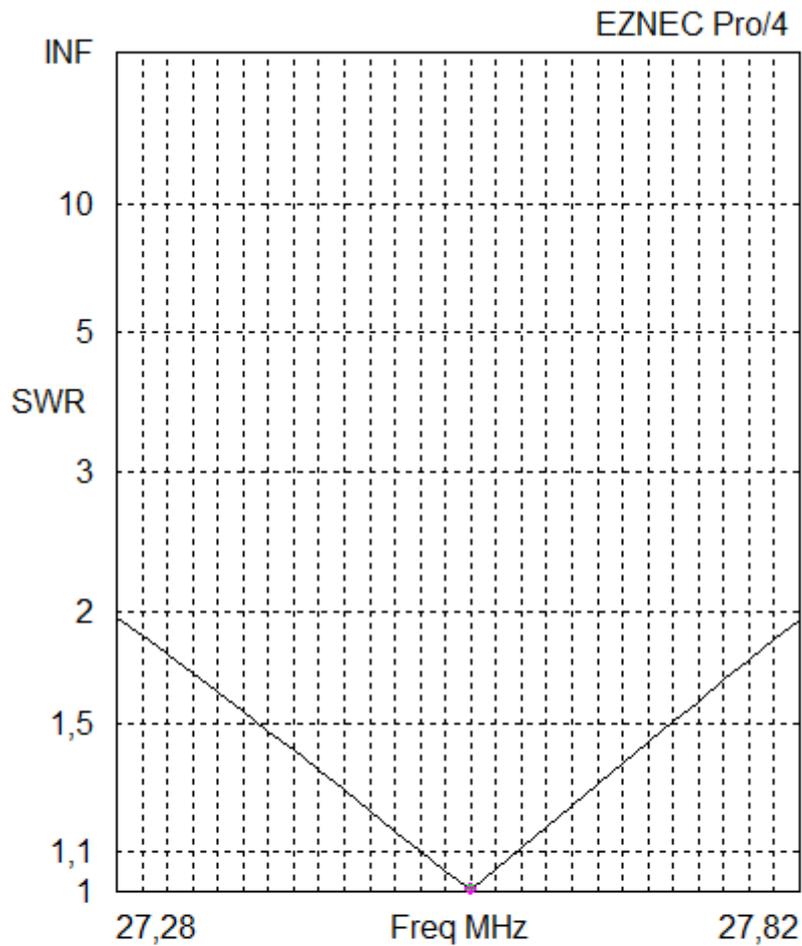
Total Field EZNEC Pro/4



27,555 MHz

Elevation Plot		Cursor Elev	0,0 deg.
Azimuth Angle	0,0 deg.	Gain	9,37 dBi
Outer Ring	9,37 dBi		0,0 dBmax

Slice Max Gain	9,37 dBi @ Elev Angle = 0,0 deg.
Front/Back	24,28 dB
Beamwidth	72,3 deg.; -3dB @ 323,6, 35,9 deg.
Sidelobe Gain	-9,82 dBi @ Elev Angle = 124,0 deg.
Front/Sidelobe	19,19 dB



Freq	27,56 MHz	Source #	1
SWR	1,006	Z0	50 ohms
Z	49,78 at 0,26 deg. = 49,78 + j 0,2234 ohms		
Refl Coeff	0,003138 at 134,35 deg. = -0,002193 + j 0,002244		
Ret Loss	50,1 dB		

Element Diameter

Wire is 1,8 MM. This is “bare” copper wire. WITHOUT THE ISOLATION.

This wire is also known as 2,5mm² (the black wire used in house electrical wiring)

DO NOT USE OTHER DIAMETERS

Element distances:

Reflector to radiator = 2,1 Meter

Reflector to director 1 = 4,2 Meter

Element length:

(per side so total length x 4)

Reflector = 2,88 Meter

Radiator = 2,786 Meter

Director = 2,706 Meter

FEEDING THE ANTENNA:

The antenna has a 50 ohm impedance. It can be direct fed. (1-1 balun is preferred).