

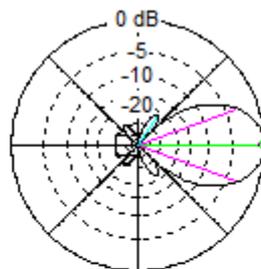
# 17,76 M 8el F 13,3 dBi



For: Dx portion 11 meter band 56SD113  
Antenna Type: Yagi-Uda (F-yagi)  
Designed by: HPSD version 1.01 feb 2013

Boom length: 18 Meter  
Gain: 13,3 dBi  
Front to Back: < 30 dB  
Impedance: 50 ohms (split element) direct fed.  
SWR below 1:1,5 : > 600Khz

Total Field



EZNEC Pro/4

27,555 MHz

Azimuth Plot  
Elevation Angle 0,0 deg.  
Outer Ring 13,3 dBi

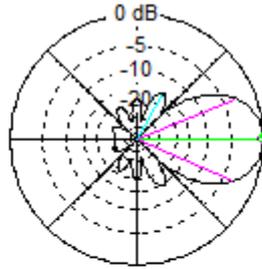
Cursor Az 0,0 deg.  
Gain 13,3 dBi  
0,0 dBmax

Slice Max Gain 13,3 dBi @ Az Angle = 0,0 deg.  
Front/Back 30,41 dB  
Beamwidth 40,4 deg.; -3dB @ 339,8, 20,2 deg.  
Sidelobe Gain -8,46 dBi @ Az Angle = 57,0 deg.  
Front/Sidelobe 21,76 dB

The Azimuth plot at 27,555 Mhz  
13,3 dBi Gain and 30,41 dB front to back.

Total Field

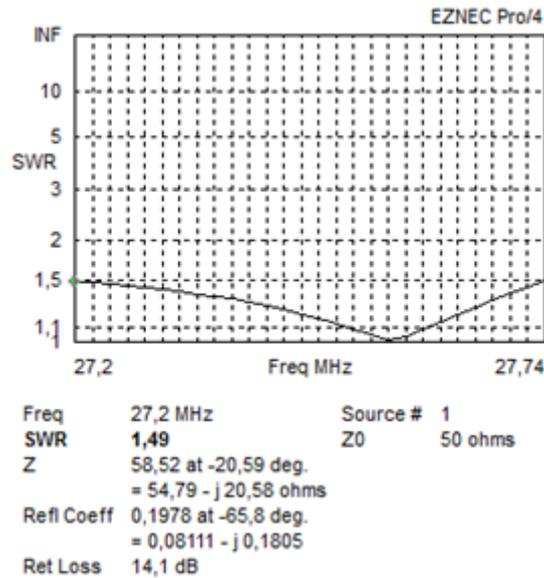
EZNEC Pro/4



27,555 MHz

Elevation Plot		Cursor Elev	0,0 deg.
Azimuth Angle	0,0 deg.	Gain	13,3 dBi
Outer Ring	13,3 dBi		0,0 dBmax
Slice Max Gain	13,3 dBi @ Elev Angle = 0,0 deg.		
Front/Back	30,41 dB		
Beamwidth	45,9 deg.; -3dB @ 337,0, 22,9 deg.		
Sidelobe Gain	-1,45 dBi @ Elev Angle = 60,0 deg.		
Front/Sidelobe	14,75 dB		

The free space elevation plot at 27,555 Mhz



All elements are made out of 3 meter 22 mm tubing and 18 mm end pieces  
DO NOT CHANGE DIAMETER.

The individual elements of the folded dipole are separated 11 CM

Type	Distance	Length
Reflector	0	5,640 M
Folded dipole	0,378 M	2,630 M
Director 1	0,988 M	2,613 M
Director 2	2,836 M	2,513 M
Director 3	6,067 M	2,467 M
Director 4	9,905 M	2,430 M
Director 5	14,130 M	2,390 M
Director 6	17,760 M	2,345 M

Feeding the antenna: The antenna is 50 ohms,  
The radiator (and preferably all elements) need to be isolated from the boom.  
The radiator can be split in half and be “direct” fed.  
With this said...a 1:1 balun or RF choke is advised.