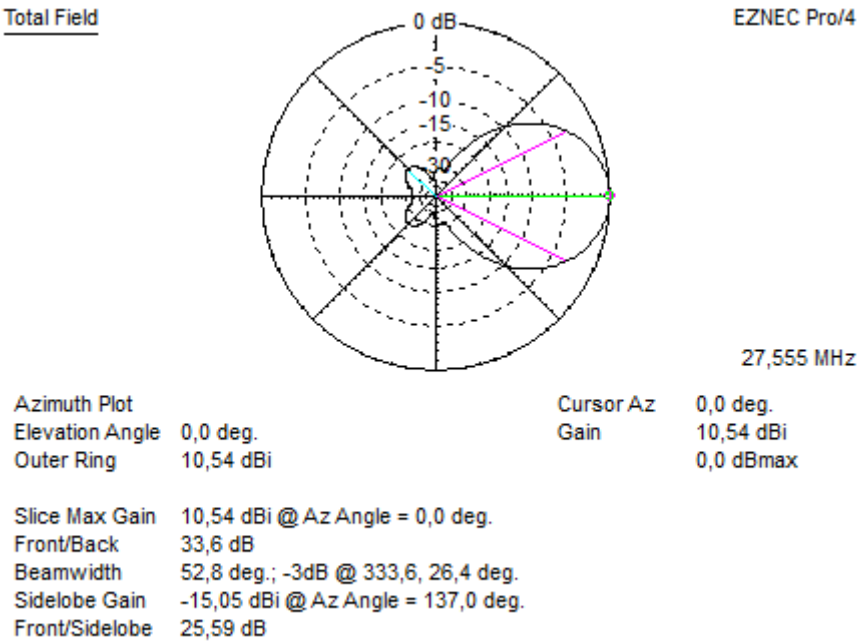
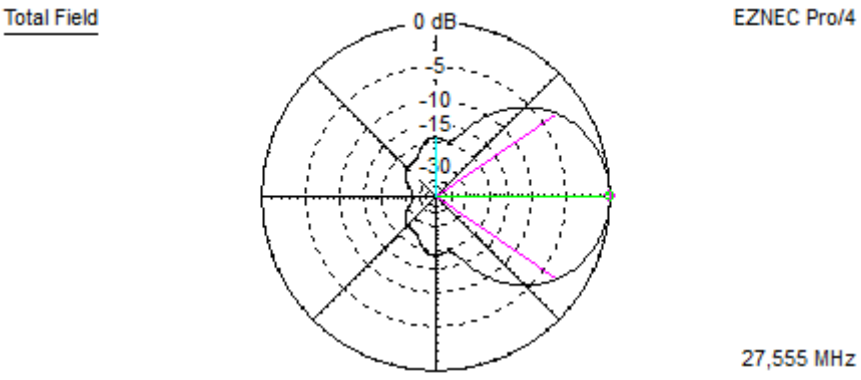
7,70 M 6el U-Yagi 10,54 dBI

For:	DX portion 11 meter band
Antenna Type:	6el U-Yagi
	Folded reflector (UA9TC / G6XN)
Designed by:	HPSD version 1.03 Feb 2014
Boom length:	7,70 Meter
Gain:	10,54 dBI (@27,555 Mhz)
FB:	<30 dB
FR:	<25 dB
Impedance:	50 ohms, direct fed
SWR below	1:1.1 > 400 KHz.
SWR below	2:1 > 1500 KHz



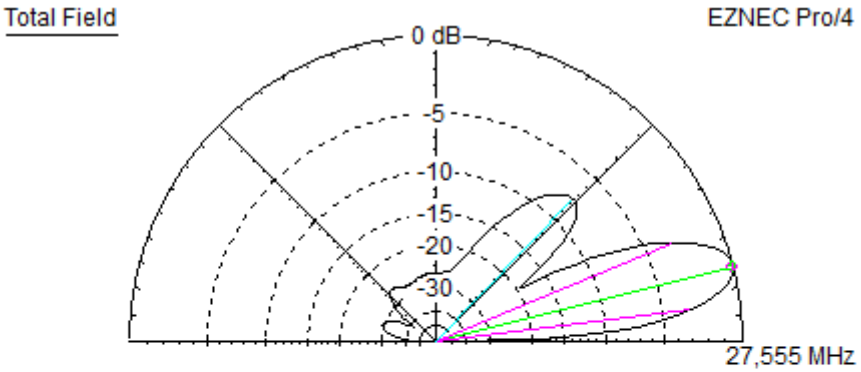
Above the free space azimuth plot.



Elevation Plot		Cursor Elev	0,0 deg.
Azimuth Angle	0,0 deg.	Gain	10,54 dBi
Outer Ring	10,54 dBi		0,0 dBmax

Slice Max Gain	10,54 dBi @ Elev Angle = 0,0 deg.
Front/Back	33,6 dB
Beamwidth	69,0 deg.; -3dB @ 325,5, 34,5 deg.
Sidelobe Gain	-7,98 dBi @ Elev Angle = 90,0 deg.
Front/Sidelobe	18,52 dB

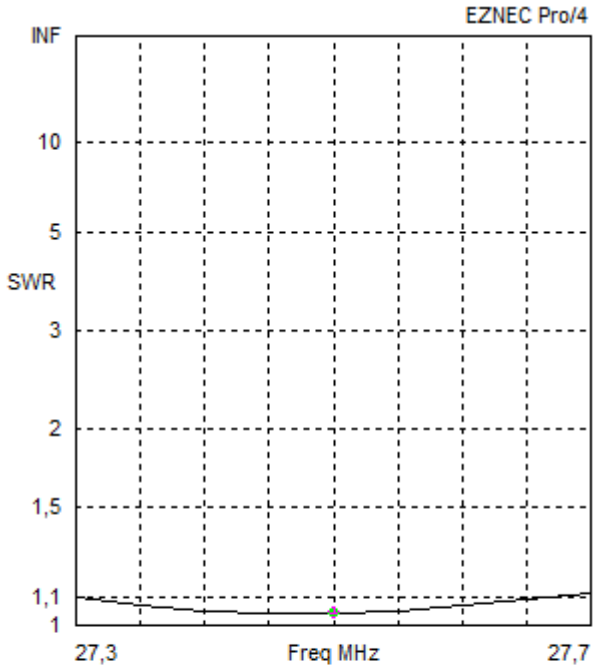
Above the free space elevation plot



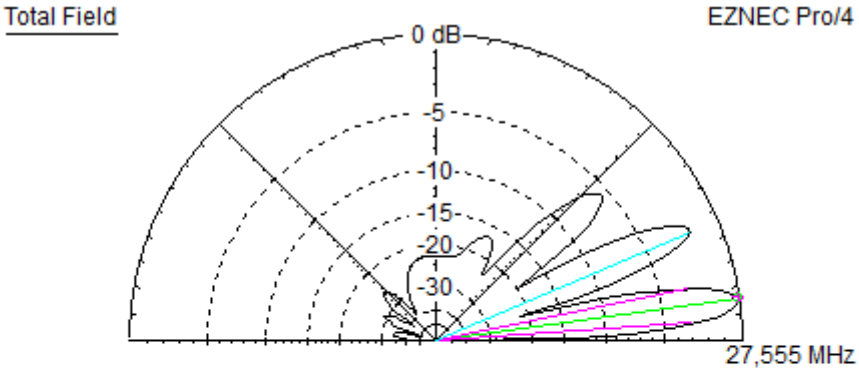
Elevation Plot		Cursor Elev	14,0 deg.
Azimuth Angle	0,0 deg.	Gain	15,43 dBi
Outer Ring	15,43 dBi		0,0 dBmax

Slice Max Gain	15,43 dBi @ Elev Angle = 14,0 deg.
Beamwidth	15,6 deg.; -3dB @ 7,0, 22,6 deg.
Sidelobe Gain	7,92 dBi @ Elev Angle = 46,0 deg.
Front/Sidelobe	7,51 dB

15,43 dBI gain when placed 10 meters above average ground



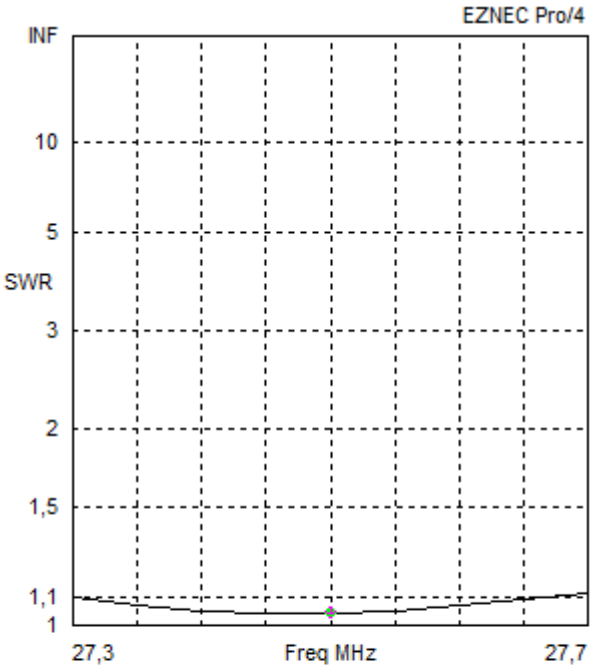
Freq	27,5 MHz	Source #	1
SWR	**1,039**	Z0	50 ohms
Z	51,33 at 1,59 deg.		
	= 51,31 + j 1,421 ohms		
Refl Coeff	0,01908 at 46,5 deg.		
	= 0,01313 + j 0,01384		
Ret Loss	34,4 dB		



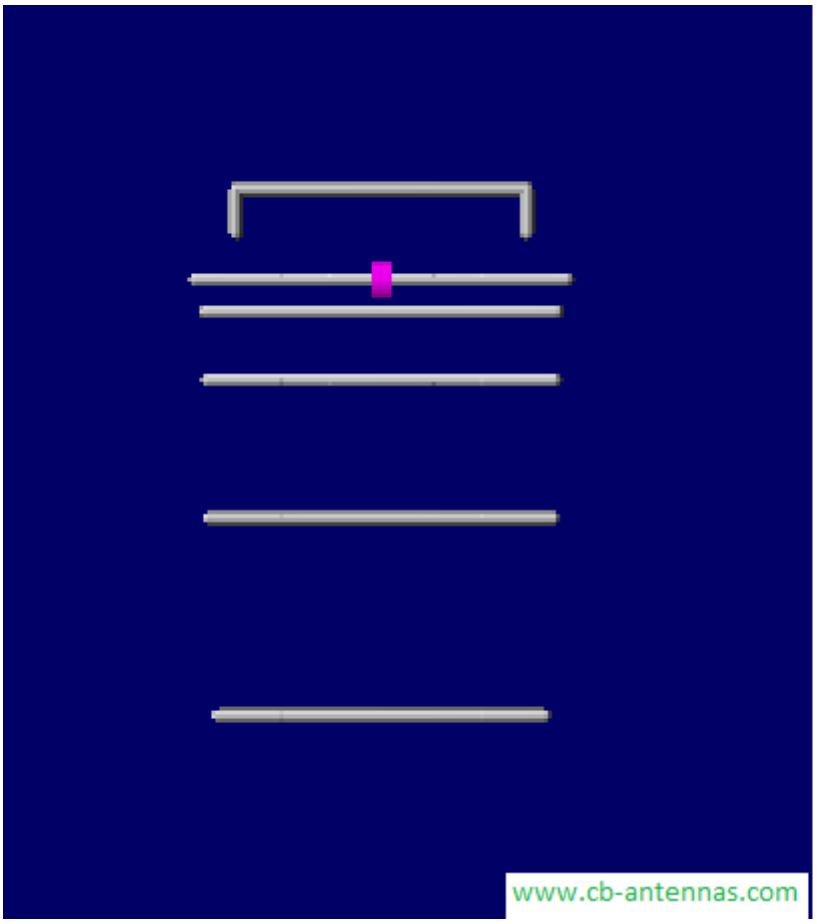
Elevation Plot		Cursor Elev	8,0 deg.
Azimuth Angle	0,0 deg.	Gain	16,07 dBi
Outer Ring	16,07 dBi		0,0 dBmax

Slice Max Gain	16,07 dBi @ Elev Angle = 8,0 deg.
Beamwidth	7,7 deg.; -3dB @ 3,8, 11,5 deg.
Sidelobe Gain	14,26 dBi @ Elev Angle = 23,0 deg.
Front/Sidelobe	1,81 dB

16,07 dBI when placed at 20 meters height.



Freq	27,5 MHz	Source #	1
SWR	**1,039**	Z0	50 ohms
Z	51,33 at 1,59 deg.		
	= 51,31 + j 1,421 ohms		
Refl Coeff	0,01908 at 46,5 deg.		
	= 0,01313 + j 0,01384		
Ret Loss	34,4 dB		



Element Length:

Reflector: 2,120 M
bend part: 0,640 M

Radiator: 5,41 M
Director 1: 5,100 M
Director 2: 5,060 M
Director 3: 5,020 M
Director 4: 4,780 m

Distance from reflector

Radiator: 1,310 M
Director 1: 1,780 M
Director 2: 2,780 M
Director 3: 4,800 M
Director 4: 7,700 M

16mm	20mm	25mm	20mm	16mm
tips	0,735 M	1,47 M	0,735 M	tips

ELEMENT DIAMETERS DO NOT CHANGE ELEMENT DIAMETER.