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Bausatz 13 ele Yagi 144 / 432 mit 1,5m Boom im 50 Ohm Design
Antenna kit 13 ele Yagi 144 / 432 MHz with 1,5m boom in 50 Ohm Design

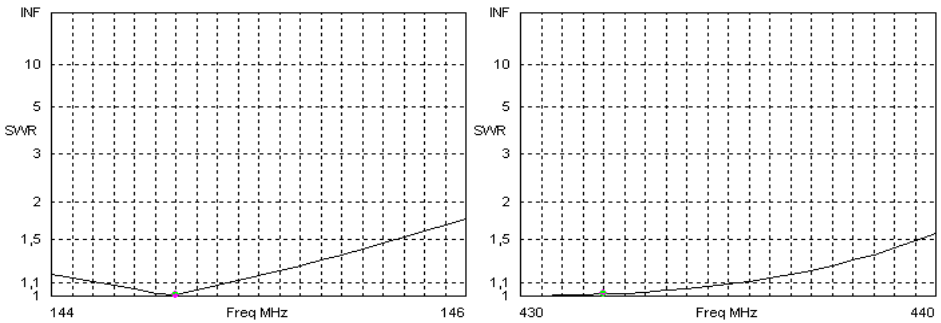
Antennenabmessungen / Dimensions table			
	Durchmesser Diameter (mm)	Länge / Length (mm)	Position (mm)
Reflektor / Reflector 2m	8	1034	0
Reflektor / Reflector 70cm	8	322	160
Radiator 2m/70cm	12	972	280
Open Sleeve Element 70cm	8	321	312
Direktor / Director 2 70cm	8	313	405
Direktor / Director 1 2m	8	934	430
Direktor / Director 3 70cm	8	278	550
Direktor / Director 4 70cm	8	262	800
Direktor / Director 2 2m	8	921	950
Direktor / Director 5 70cm	8	300	980
Direktor / Director 6 70cm	8	268	1160
Direktor / Director 7 70cm	8	286	1450
Direktor / Director 3 2m	8	911	1480

Das 70cm "open sleeve element" wird erst nach dem Feinabgleich am Boom befestigt!
The 70cm "open sleeve element" will be attached only after the fine tuning!

Boom comes in 2x 85 cm length which is OK for pre-mast mounting. If you don't mount it pre-mast, then cut 20cm from only one boom part and use the shorter part for dipole mounting. This is important that the boom connector position doesn't collide with an element.

Der Boom wird zweiteilig (2x 85cm) ausgeliefert und ist so für Vormastmontage gedacht. Soll die Antenne nicht in Vormastmontage aufgebaut werden, schneiden Sie von einem Rohr 20cm ab und verwenden Sie das kurze Stück für die Dipolmontage. Dies ist wichtig damit die Position des Boomverbinders nicht mit einem Element kollidiert.

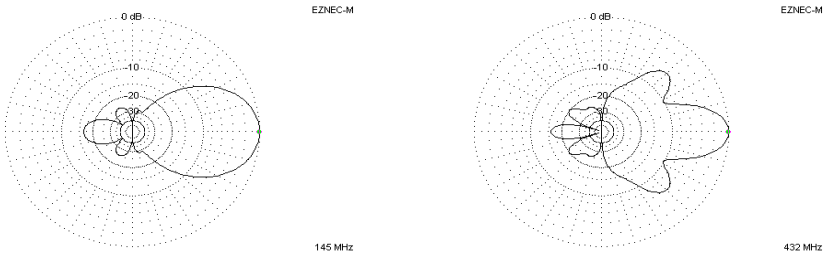
SWR: **144 MHz** **432 MHz**



Freq	144,6 MHz	Source #	1
SWR	1,011	Z0	50 ohms
Z	50,56 + j 0,07436 ohms		
Refl Coeff	0,005635 at 7,5 deg.		

Freq	432 MHz	Source #	1
SWR	1,013	Z0	50 ohms
Z	49,56 + j 0,4702 ohms		
Refl Coeff	0,006496 at 133,1 deg.		

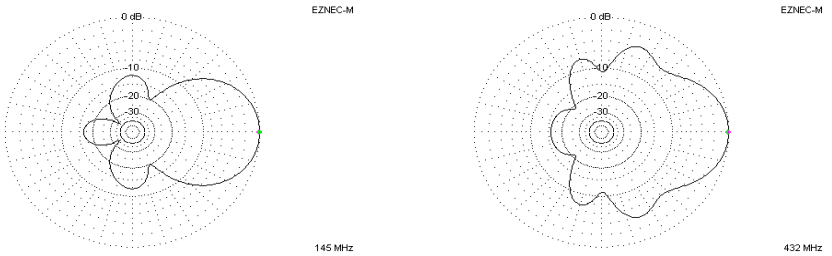
Azimuth: **145 MHz** **432 MHz**



Azimuth Plot		Cursor Az	0,0 deg.
Elevation Angle	0,0 deg.	Gain	8,68 dBref
Outer Ring	8,68dBref		0,0 dBmax
Slice Max Gain	8,68 dBref @ Az Angle = 0,0 deg.		
Front/Back	16,41 dB		
Beamwidth	49,6 deg.; -3dB @ 335,2, 24,8 deg.		
Sidelobe Gain	-7,73 dBref @ Az Angle = 180,0 deg.		
Front/Sidelobe	16,41 dB		

Azimuth Plot		Cursor Az	0,0 deg.
Elevation Angle	0,0 deg.	Gain	8,33 dBref
Outer Ring	8,33dBref		0,0 dBmax
Slice Max Gain	8,33 dBref @ Az Angle = 0,0 deg.		
Front/Back	15,79 dB		
Beamwidth	28,2 deg.; -3dB @ 345,9, 14,1 deg.		
Sidelobe Gain	2,74 dBref @ Az Angle = 44,0 deg.		
Front/Sidelobe	5,59 dB		

Elevation: **145 MHz** **432 MHz**



Elevation Plot		Cursor Elev	0,0 deg.
Azimuth Angle	0,0 deg.	Gain	8,68 dBref
Outer Ring	8,68dBref		0,0 dBmax
Slice Max Gain	8,68 dBref @ Elev Angle = 0,0 deg.		
Front/Back	16,41 dB		
Beamwidth	61,6 deg.; -3dB @ 329,2, 30,8 deg.		
Sidelobe Gain	-3,44 dBref @ Elev Angle = 90,0 deg.		
Front/Sidelobe	12,12 dB		

Elevation Plot		Cursor Elev	0,0 deg.
Azimuth Angle	0,0 deg.	Gain	8,33 dBref
Outer Ring	8,33dBref		0,0 dBmax
Slice Max Gain	8,33 dBref @ Elev Angle = 0,0 deg.		
Front/Back	15,79 dB		
Beamwidth	63,6 deg.; -3dB @ 328,2, 31,8 deg.		
Sidelobe Gain	4,48 dBref @ Elev Angle = 67,0 deg.		
Front/Sidelobe	3,85 dB		