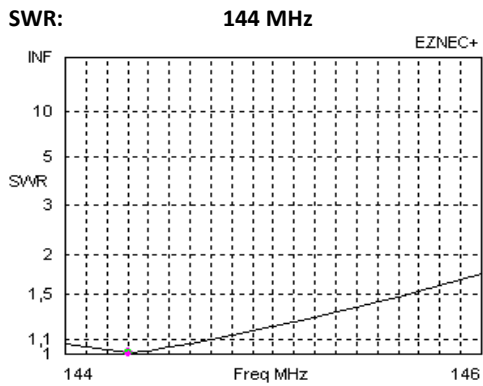


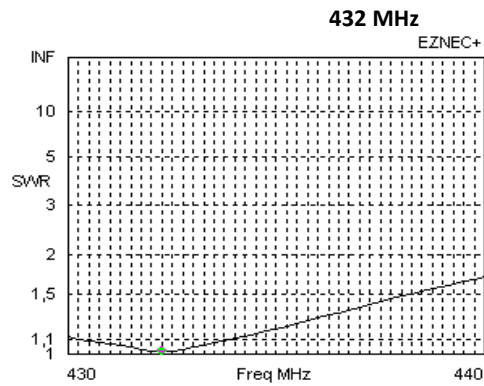
Bausatz 13 ele Yagi 144 / 432 mit 1,5m Boom im 50 Ohm Design
Antenna kit 13 ele Yagi 144 / 432 MHz with 1,5m boom in 50 Ohm Design

Antennenabmessungen / Dimensions table			
	Durchmesser Diameter (mm)	Länge / Length (mm)	Position (mm)
Reflektor / Reflector 2m	3,2	1035	0
Reflektor / Reflector 70cm	3,2	326	160
Radiator 2m/70cm	4	995	280
Open Sleeve Element 70cm	3,2	329	304
Direktor / Director 2 70cm	3,2	320	405
Direktor / Director 1 2m	3,2	954	430
Direktor / Director 3 70cm	3,2	292	550
Direktor / Director 4 70cm	3,2	280	800
Direktor / Director 2 2m	3,2	944	950
Direktor / Director 5 70cm	3,2	310	980
Direktor / Director 6 70cm	3,2	284	1160
Direktor / Director 7 70cm	3,2	299	1450
Direktor / Director 3 2m	3,2	929	1480

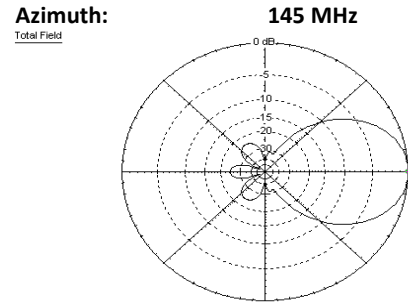
Mit dem 70cm "open sleeve element" erfolgt der 70cm Feinabgleich im SWR!
 Adjust the SWR on 70cm with the 70cm "open sleeve element" !



Freq 144,3 MHz Source # 1
SWR 1,006 Z0 50 ohms
 Z 49,95 at -0,34 deg.
 = 49,95 - j 0,2997 ohms
 Refl Coeff 0,003044 at -99,78 deg.
 = -0,0005169 - j 0,003
 Ret Loss 50,3 dB



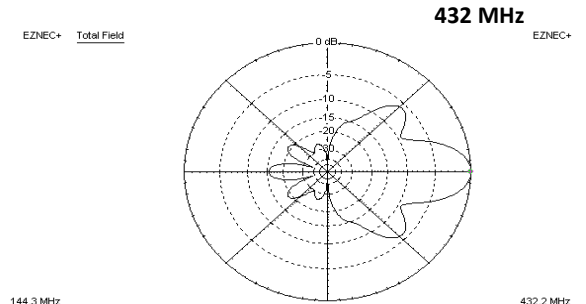
Freq 432,25 MHz Source # 1
SWR 1,019 Z0 50 ohms
 Z 49,13 at -0,33 deg.
 = 49,13 - j 0,2835 ohms
 Refl Coeff 0,009259 at -161,85 deg.
 = -0,008798 - j 0,002885
 Ret Loss 40,7 dB



Total Field
 Azimuth Plot
 Elevation Angle 0,0 deg.
 Outer Ring 8,45 dBref

Cursor Az Gain 0,0 deg.
 8,45 dBref
 0,0 dBmax

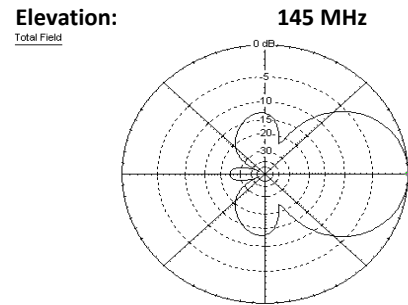
Slice Max Gain 8,45 dBref @ Az Angle = 0,0 deg.
 Front/Back 24,2 dB
 Beamwidth 51,0 deg., -3dB @ 334,5, 25,5 deg.
 Sidelobe Gain -15,45 dBref @ Az Angle = 123,0 deg.
 Front/Sidelobe 23,9 dB



EZNEC+ Total Field
 Azimuth Plot
 Elevation Angle 0,0 deg.
 Outer Ring 8,89 dBref

Cursor Az Gain 0,0 deg.
 8,89 dBref
 0,0 dBmax

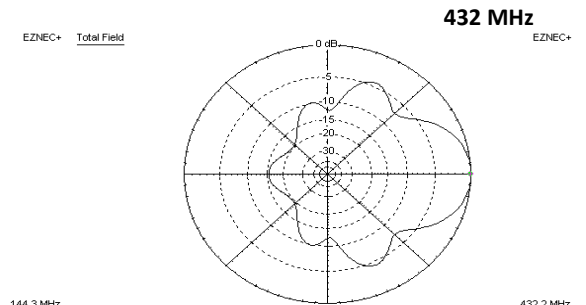
Slice Max Gain 8,89 dBref @ Az Angle = 0,0 deg.
 Front/Back 15,34 dB
 Beamwidth 28,4 deg., -3dB @ 345,8, 14,2 deg.
 Sidelobe Gain 3,07 dBref @ Az Angle = 43,0 deg.
 Front/Sidelobe 5,82 dB



Total Field
 Elevation Plot
 Azimuth Angle 0,0 deg.
 Outer Ring 8,45 dBref

Cursor Elev Gain 0,0 deg.
 8,45 dBref
 0,0 dBmax

Slice Max Gain 8,45 dBref @ Elev Angle = 0,0 deg.
 Front/Back 24,2 dB
 Beamwidth 64,4 deg., -3dB @ 327,8, 32,2 deg.
 Sidelobe Gain -4,36 dBref @ Elev Angle = 94,0 deg.
 Front/Sidelobe 12,81 dB



EZNEC+ Total Field
 Elevation Plot
 Azimuth Angle 0,0 deg.
 Outer Ring 8,89 dBref

Cursor Elev Gain 0,0 deg.
 8,89 dBref
 0,0 dBmax

Slice Max Gain 8,89 dBref @ Elev Angle = 0,0 deg.
 Front/Back 15,34 dB
 Beamwidth 54,6 deg., -3dB @ 332,7, 27,3 deg.
 Sidelobe Gain 4,56 dBref @ Elev Angle = 64,0 deg.
 Front/Sidelobe 4,33 dB