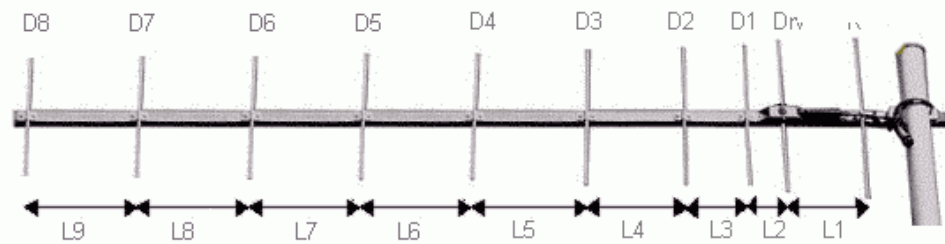


## 10 element UHF antenna

de ON6MU



### Technical specs

Forward gain = 11,82 dBd

Front/Back ratio = 22 dB

SWR at 435 MHz = 1:1

Frequency range = 430...440MHz

Horizontal angle = 33°

Vertical angle = 38°

### Length of the elements

R = 348 mm

Drv = 328 mm

D1 = 302 mm

D2 = 298 mm

D3 = 292 mm

D4 = 287 mm

D5 = 285 mm

D6 = 282 mm

D7 = 280 mm

D8 = 276 mm

### Spacing

L1 = 145 mm

L2 = 50 mm

L3 = 124 mm

L4 = 149 mm

L5 = 173 mm

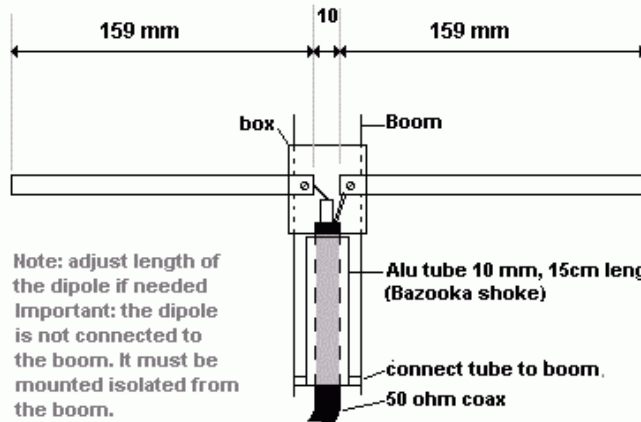
L6 = 194 mm

L7 = 208 mm

L8 = 217 mm

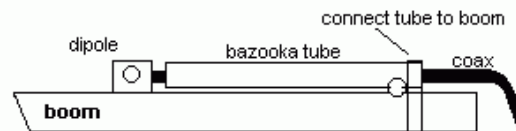
L9 = 225 mm

1.5 meter boom  
needed



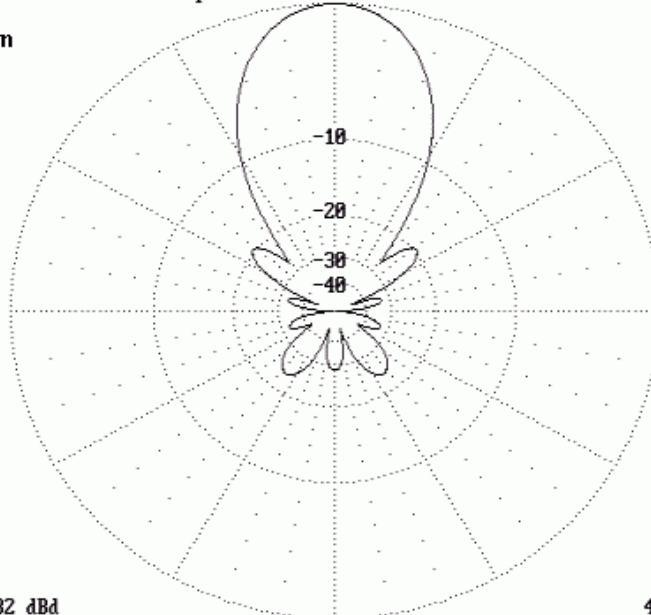
Note: adjust length of the dipole if needed  
Important: the dipole is not connected to the boom. It must be mounted isolated from the boom.

You can also use a folded dipole with a 1:4 balun (see my site for more info about building a balun) instead of a open dipole. To fine tune the SWR (in both cases) by in- or decreasing the dipole length or by moving the dipole between the first director and the reflector a bit. Sometimes it can help by changing the connection points on the dipole (connecting the coax a bit of the center).



Optimized for Forward Gain

Free Space



0 dB = 11.82 dBd

435.000 MHz