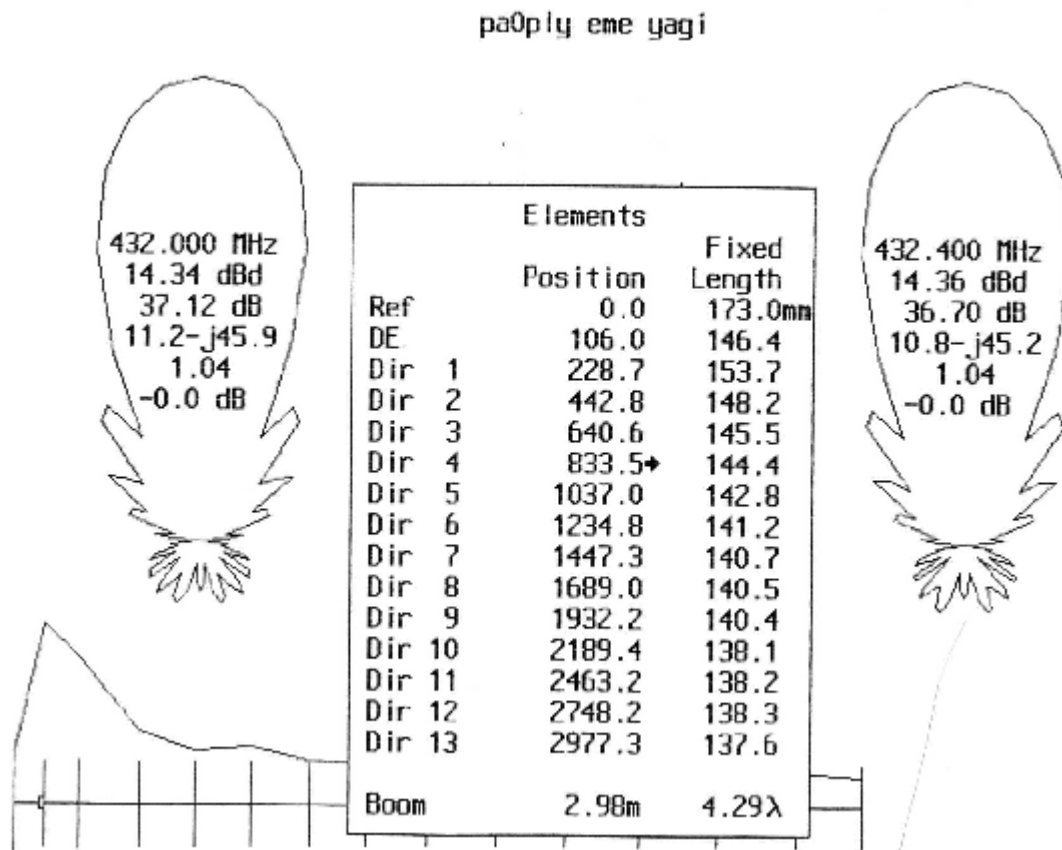


Modified DL6WU design antenna for 432MHz

Introduction.

Due to weather circumstances near the Northsea coast, the final design of my 432Mhz EME antenna array was decided not to be extreme long yagi's with high gain. In stead I made the choice to use 8 antenna's which have less then 3-meter boomlength. The boom length was chosen in order be able to construct two antenna's booms from one standard aluminium length material - 6m. The original 4.2 wl design of DL6WU was 3.12 m length, which made it interesting to run YO, Yagi Optimising, in order to shorten the length to less then 3 meter. The final length of 2.98m was the result providing an additional welcomed feature of a high front to back ratio of 37dB!



Above figure shows the element lengths and distances of the WU-mod. antenna. All elements are mounted on top of the boom and isolated. Consequently, no further correction to the dimensions of the elements given are needed. The feeder is an open dipole with hairpin, a balun for 200/50 Ohm impedance transformer is added in the dipole box.

Direction diagram for an array of 8 antenna's

