

ABSTRACT

Experimental researches about making wideband antennas to prove the hypothesis that says that antenna is a matching device between free space and transmission line, has just proved it right. It then, causes several transversal wave antennas without load, unlike resistive loaded Beverage.

Performance of an antenna is mainly about Poynting Vector. It describes the radiation pattern. It is fundamentally used as the basic in producing multielement antennas, unidirectional and omnidirectional as well in range $VSWR \leq 2,0$.

Here some empiric is made as the formula to plot radiation pattern of unidirectional multielement antennas. It is used as the ace of the software made. The output shows that multielement antenna has the unidirectional radiation pattern, by setting the angle between the two opposite elements. It must be less than 180° . And gain is great as well, by ensmalling the angle.