

## Abstract

This paper describes the synthesis of a microstrip linear antenna array operating at 24 GHz frequency. A linear array with 5 elements, called the 1xS array, has been considered and Dolph-Chebyshev method has been used for synthesizing. It has investigated how the performance properties of a linear array are affected by varying some parameters such as N-element, inter-element spacing (d) on radiation pattern. It has been observed that the simulated results of an array factor compare positively with the different types of design used in the state of the art results