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# Design of an annular-ring microstrip antenna for circular polarization

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Abstract

The design of an annular-ring microstrip antennas for circular polarization (CP) was discussed. For obtaining the CP operation of the annular-strip microstrip antenna, two orthogonal modes with equal amplitude and 90° phase difference were excited simultaneously. In order to excite orthogonal modes, a L-shaped strip was placed between inside the annular ring and its two ends were connected to the orthogonal modes of the inner boundary of the annular ring patch. The resonant frequency of x-polarized mode was higher than that of y-polarized mode, and thus a right-handed CP operation was obtained. The axial ratio of the CP radiation was also measured in the broadside direction.