

Diffractive optics of millimeter waves on an arbitrary surface of revolution, with an omnidirectional sensitivity zone

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Abstract

In recent years, there has been tremendous progress in the development of microcellular and picocellular communication lines in urban and rural areas, operating in the millimeter wavelength range. At the same time, wireless broadband radio access systems are developed (LMDS - Local Multipoint Distribution Systems; MVDS - Multipoint Distribution Systems; MMAC - Multimedia Mobile Access Communication; PCS - Personal Communication Systems; UHTS - Universal Mobile Telecommunication Systems, etc.) that operate in the millimeter wavelength ranges.

Keywords: diffractive optic, millimeter wave, sensitivity zone, LMDS, MVDS, MMAC, PCS, UHTS, wavelength range.

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