Abstracts

Radiation properties of a planar dielectric waveguide loaded with conducting-strip diffraction grating

A. Bledowski and W. Zakowicz. "Radiation properties of a planar dielectric waveguide loaded with conducting-strip diffraction grating." 1997 Transactions on Microwave Theory and Techniques 45.9 (Sep. 1997 [T-MTT]): 1637-1640.

A dielectric planar waveguide periodically loaded with conducting strips is considered as a possible antenna for millimeter-wave range. We show that separating the grating from the waveguide leads to the reduction of radiative attenuation of the waveguided radiation and substantial narrowing of the angular spread of the diffracted radiation.

❑ Return to main document.