

BACKSCATTERING FROM RESISTIVE STRIPS  
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Strips made of a resistive sheet material have lower backscattering cross sections than the corresponding perfectly conducting strips, and this is true in particular when the illumination is edge-on with the electric vector parallel to the edge. Attention is focused on this case. Using the moment method applied to an appropriate integral equation, data are obtained for the surface and backscattered far fields of resistive strips for a variety of strip widths  $w$  and uniform resistances  $R$ . The front and rear edge contributions to the far field are then extracted. It is shown that for strips whose width is greater than about a half wavelength the former is the same as for a half plane having the same resistance, whereas the latter is proportional to the square of the current at that point on the half plane corresponding to the rear edge of the strip. The implications of these results on the selection of a strip resistance for low backscattering are discussed.

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