

## Erratum to: High-frequency diffraction of an electromagnetic plane wave by an imperfectly conducting rectangular cylinder

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**Abstract** In this note we correct some typographical errors in the above paper.

**Keyword** Diffraction Theory

**Mathematics Subject Classification** 3C

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In Eqs. (40) to (43),  $\cos[4\theta_0/3]$  should be replaced by  $\cos[4(\theta_0 - \pi/2)/3]$ ; and in Eq. (44),  $\cos[4\theta_0/3]$  should be replaced by  $\cos[4(\theta_0 - \pi)/3]$ .

These corrections do not affect any subsequent formulae appearing in the paper. In carrying out these corrections in the software, for the range of parameters that were used, no significantly discernable changes occurred to the graphs given in Figs. 20–25 already presented. I would also like to make clear that the expressions in my paper are not uniformly valid across the angular rays  $\theta = 0, \pi/2, \pi, 3\pi/2, 2\pi$ . This is because the derivatives of the diffraction coefficients become infinite along these grazing incidence directions. In the plots presented in the paper interpolation was carried out around these angular directions. I would like to thank Professor Paul Smith of The Mathematics Department, Macquarie University, Sydney, Australia for alerting me to these shortcomings after he ran an accurate numerical check by an integral equation method.

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