$$X_1 = -\sum_{n=0}^{\infty}\sum_{p=1}^{\infty} \frac{60\epsilon_n}{\cos^2\left(x_{np}-\frac{\pi}{4}-(n+1)\frac{\pi}{2}\right)} \frac{\sqrt{(x_{np}/ka)^2-1}}{\sin^2(kl)} \cdot \left[\frac{\sin\frac{nd'}{2a}}{nd'/2a}\right]^2 4\frac{(ka)^2}{\left[(ka)^2-x_{np}^2\right]^2}\left[\sin(kl)\sin\left(x_{np}-\frac{\pi}{4}-\frac{n\pi}{2}\right) - \sqrt{1-l/a}\cos\left(x_{np}(1-l/a)-\frac{\pi}{4}-\frac{n\pi}{2}\right)\right]^2.$$

It is clear from the above expression that the series for X_1 is convergent.

The authors, therefore, do not understand how the correspondent arrived at wrong conclusions regarding the convergence of the series. Thus the analysis reveals that only few modes have significant contribution to the reactance. Even if effects of TE modes other than TE_{op} are considered, their contribution to the reactive part of input impedance will not be significant for reasons stated above. The same formulation can easily accommodate the effects of these TE modes, provided one is convinced of their generation by the mechanism of excitation.

The whole paper is a result of careful analysis of the problem. Regarding the last paragraph of the comments, the authors would like to state that the correspondent should have gone through the entire work thoroughly and point out clearly the stage at which manipulations as pointed out by him have been made.

Thus the authors believe that the results obtained in the paper[1] need no modification.

References

[1] M. D. Deshpande and B. N. Das, "Corrections to 'Input impedance of coaxial line to circular waveguide feed,'" *IEEE Trans. Microwave Theory Tech.*, vol. MTT-25, p. 315, Nov. 1977.

[2] R. F. Harrington, *Time Harmonic Electromagnetic Field.* New York: McGraw-Hill, 1961, ch. 8, pp. 207, 425–428.

[3] N. Marcuvitz, *Waveguide Handbook.* New York: McGraw-Hill, 1951, p. 69.

[4] "Murphy's rules for effective research and engineering," Rule 6, *IEEE Student Newsletter*, vol. 6, no. 2, p. 5, Dec. 1977.

Note on a Correction to Aperture Admittance in Waveguide Handbook

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An apparent error in the *Waveguide Handbook* [1] for the aperture admittance of a parallel plate waveguide terminated in a flange plane has been discovered. In particular, the normalized aperture susceptance we calculated[1] to be

$$B/Y_0 = -\int_0^{kb} N_0(x)\,dx + N_1(kb) + \frac{2}{\pi}\frac{1}{kb}. \quad (1)$$

This differs from the formula in the handbook (page 184, (2a)) by a minus sign in the integral term. Only if this correction is made will susceptance curve (Fig. 4.7-2 of [1]) be that of (1).

References

[1] N. Marcuvitz, Ed., *Waveguide Handbook.* New York: Dover, 1965, pp. 183–184.

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[1]The calculation is based upon an assumed constant tangential electric field.

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