Errata

Correction to "An Accurate Broad-Band Measurement of Substrate Dielectric Constant"

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Since the connector shown in our letter[1] is generally reciprocal, the determinant of the chain matrix of measurements is unity. So,

[1] M. Q. Lee and S. Nam, *IEEE Microwave Guided Wave Lett.*, vol. 6, no. 4, pp. 168–170, April 1996.

$\mathrm{Tr}(\mathbf{M}_1\mathbf{M}_2^{-1})$ is equal to $\mathrm{Tr}(\mathbf{M}_2\mathbf{M}_1^{-1})$. Therefore, the error cost function

$$e = \frac{1}{n} \sum_{f_{start}}^{f_{stop}} \{\|\mathrm{Tr}(\mathbf{M}_1\mathbf{M}_2^{-1}) - \mathrm{Tr}(\mathbf{M}_2\mathbf{M}_1^{-1})\| + \|\mathrm{Tr}(\mathbf{M}_1^{-1}\mathbf{M}_2) - \mathrm{Tr}(\mathbf{M}_2^{-1}\mathbf{M}_1)\|\}$$

is not related with the improvement of repeatabilities of connector, but it does improve the repeatabilities of the network analyzer by minimizing random errors such as the tracking variations of coupling coefficients and of the reference and test channels of the frequency converter. The improvement shown in Fig. 2 of our letter should be interpreted as the result of minimizing random errors of network analyzer by the proposed method.