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**A Note on the Poisson Summation Formula and its Application to Electromagnetic Problems Involving Cylindrical Coordinates**

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**Abstract:** A modified version of the Poisson Summation Formula is derived, involving the Fourier-Bessel Transform of the kernel function, as opposed to the conventional Fourier Transform engaged in the standard formula. This novel form can be applied to problems employing cylindrical coordinates, such as the fast evaluation of the dyadic Green's function in a waveguide or cavity of circular cross-section.

**Key Words:** Poisson summation formula, electromagnetic problems, cylindrical coordinates, dyadic Green Functions

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