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# SKIN EFFECT IN A CONDUCTING, LOSSY, PLATE, HAVING A RECTANGULAR SECTION, IN HARMONIC STEADY-STATE

BY

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**Abstract.** The expressions of the complex vectors $\underline{\mathbf{J}}_l(r)$, $\underline{\mathbf{E}}_{intl}(r)$, $\underline{\mathbf{H}}_{intl}(r)$ and $\underline{\mathbf{S}}_l(a)$ are determined as well of the active and reactive powers on unity length of a straight, lossy, cylindrical conductor in harmonic steady-state. The expression of resistance's increasing factor in a.c. and the complex wave impedance were determined too.

**Key words:** Skin effect; lossy straight cylindrical conductor; resistance's increasing factor in a.c.; complex wave impedance.