Abstract
There are two general ways to evaluate the Hilbert transform of a function of real variable $u(x)$. We can extend $u$ to a harmonic function in the upper half plane by the Poisson integral formula. Non-tangential limit of its harmonic conjugate exists almost everywhere and is defined to be the Hilbert transform of $u(x)$. There is also a singular integral formula for the Hilbert transform of $u(x)$. It is fairly difficult to directly evaluate the Hilbert transform of $u(x)$. In this paper we give an explicit formula for the Hilbert transform of $\log |f|$, where $f$ is a function in the Cartwright class.