There are various conventions in the literature regarding the use of constants in the Fourier and related transforms. You can adjust these constants by giving new values to the global objects $FourierOverallConstant and $FourierFrequencyConstant or setting the options FourierOverallConstant and FourierFrequencyConstant. If these constants have values A and B, respectively, then the convention used in this package for the Fourier transform of a function, $f(t)$, is $F(\omega) = A \int_{-\infty}^{\infty} f(t)\, e^{B i \omega t}\, dt$. The inverse transform is $f(t) = \frac{B}{2 A \pi} \int_{-\infty}^{\infty} F(\omega)\, e^{-B i \omega t}\, d\omega$. Both A and B have a default value of 1. Other common choices for these constants are $A = \frac{1}{\sqrt{2\pi}}$, $B = 1$ and $A = 1$, $B = 2\pi$. The use of constants in the sine and cosine transforms is analogous to their use in the full Fourier transform.