Let $G$ be a $(p,q)$–graph and $k$ a non-negative integer. $G$ is $k$–edge-graceful if the edges of $G$ can be labeled with $k, k+1, \ldots, k+q-1$ so that the vertex sums are distinct modulo $p$. The set of all such $k$ where $G$ is $k$–edge-graceful is called the edge-graceful spectrum of $G$. In 2004, Lee, Cheng and Wang analyzed the edge-graceful spectra of cycles with one chord for various cases, leaving some cases as open problems. Here, we complete the description of the edge-graceful spectra of cycles with one chord.