A C++ library has been developed to calculate confidence intervals for single or combination of multiple (independent) measurements for a Poisson process with background applying the likelihood ratio (aka Feldman-Cousins) ordering. Bayesian treatment of uncertainties in efficiency and expected background is included. Different parameterizations for the probability density functions describing the uncertainties can be applied and correlations can be taken into account. As an option the library includes the modified likelihood ratio as suggested by Hill (2003). Using this library detailed studies of the coverage of the Feldman-Cousins method with Bayesian treatment of nuisance parameters as well as the modified likelihood ratio have been performed. The library as well as results of the coverage studies will be presented.