**List of Tables**

3.1 Diagonal elements and concurrence of the density matrices .......................... 55
4.1 Noise and efficiencies ......................................................... 70
5.1 Diagonal elements of the density matrix $\rho$ .................................................. 88
6.1 Experimentally determined diagonal elements and concurrences ......................... 98
8.1 Experimental parameters and their uncertainties for beamsplitter ratios and transmission efficiencies of the verification interferometers .................................................. 153
9.1 Experimental imperfections in verification interferometer ..................................... 173
A.1 Thermal management of a copper trace .......................................................... 199