## Komolgorov-Smirnov test for Normal / Log-Normal distribution evaluation (Significance level of 0.05)

| Method       | Amount of<br>Eigenvalues<br>calculated (N) | Size of<br>Matrix | Kolmogorov-<br>Smirnov<br>Statistic Test<br>(for Normal<br>distribution) | P-value<br>(for Normal<br>distribution) | ls it<br>Normal? | Kolmogorov-<br>Smirnov<br>Statistic Test<br>(for Log-Normal<br>distribution) | P-value<br>(for Log-Normal<br>distribution) | ls it Log-<br>Normal? |
|--------------|--|-------------------|--|---|------------------|--|---|-----------------------|
| Lapack       | 1,000,000                                  | n=1               | 0.000  | 0.150                                   | No               | 0.000  | 0.500                                       | No                    |
|              |  | n=10              | 0.014  | 0.010                                   | Yes              | 0.001  | 0.011                                       | Yes                   |
|              |  | n=100             | 0.017  | 0.010                                   | Yes              | 0.001  | 0.034                                       | Yes                   |
|              | 10,000                                     | n=10              | 0.015  | 0.010                                   | Yes              | 0.006  | 0.250                                       | No                    |
|              | 1,000                                      | n=10              | 0.023  | 0.150                                   | No               | 0.013  | 0.500                                       | No                    |
| Power Method | 1,000,000                                  | n=1               | 0.001  | 0.150                                   | No               | 0.001  | 0.250                                       | No                    |
|              |  | n=10              | 0.014  | 0.010                                   | Yes              | 0.001  | 0.001                                       | Yes                   |
|              |  | n=100             | 0.017  | 0.010                                   | Yes              | 0.001  | 0.016                                       | Yes                   |
|              | 10,000                                     | n=10              | 0.020  | 0.010                                   | Yes              | 0.008  | 0.077                                       | No                    |
|              | 1,000                                      | n=10              | 0.028  | 0.064                                   | No               | 0.018  | 0.500                                       | No                    |