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Project1 Report:

The following output are use the parameters: L=10, m=2, K=4, and mu=3.

Theoretical values:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| rho | EN | ET | Utilization | Pblock |
| 0.1 | 1.9249 | 0.4430 | 0.7240 | 0.1033 |
| 0.2 | 2.9480 | 0.5313 | 0.9247 | 0.3443 |
| 0.3 | 3.3509 | 0.5744 | 0.9721 | 0.5126 |
| 0.4 | 3.5418 | 0.5980 | 0.9871 | 0.6178 |
| 0.5 | 3.6489 | 0.6124 | 0.9930 | 0.6872 |
| 0.6 | 3.7164 | 0.6219 | 0.9958 | 0.7358 |
| 0.7 | 3.7625 | 0.6287 | 0.9973 | 0.7715 |
| 0.8 | 3.7959 | 0.6338 | 0.9981 | 0.7988 |
| 0.9 | 3.8212 | 0.6376 | 0.9987 | 0.8204 |
| 1 | 3.8409 | 0.6407 | 0.9990 | 0.8377 |

Experiment values:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| rho | EN | ET | Utilization | Pblock |
| 0.1 | 2.1084 | 0.6036 | 0.7485 | 0.1714 |
| 0.2 | 2.9399 | 0.5313 | 0.9143 | 0.3941 |
| 0.3 | 3.3048 | 0.6376 | 0.9632 | 0.5385 |
| 0.4 | 3.4856 | 0.6410 | 0.9807 | 0.6301 |
| 0.5 | 3.6040 | 0.6475 | 0.9890 | 0.6954 |
| 0.6 | 3.6697 | 0.6404 | 0.9928 | 0.7376 |
| 0.7 | 3.7247 | 0.6460 | 0.9954 | 0.7732 |
| 0.8 | 3.7619 | 0.6464 | 0.9968 | 0.7985 |
| 0.9 | 3.7916 | 0.6488 | 0.9976 | 0.8210 |
| 1 | 3.8129 | 0.6504 | 0.9982 | 0.8378 |

Figures:







