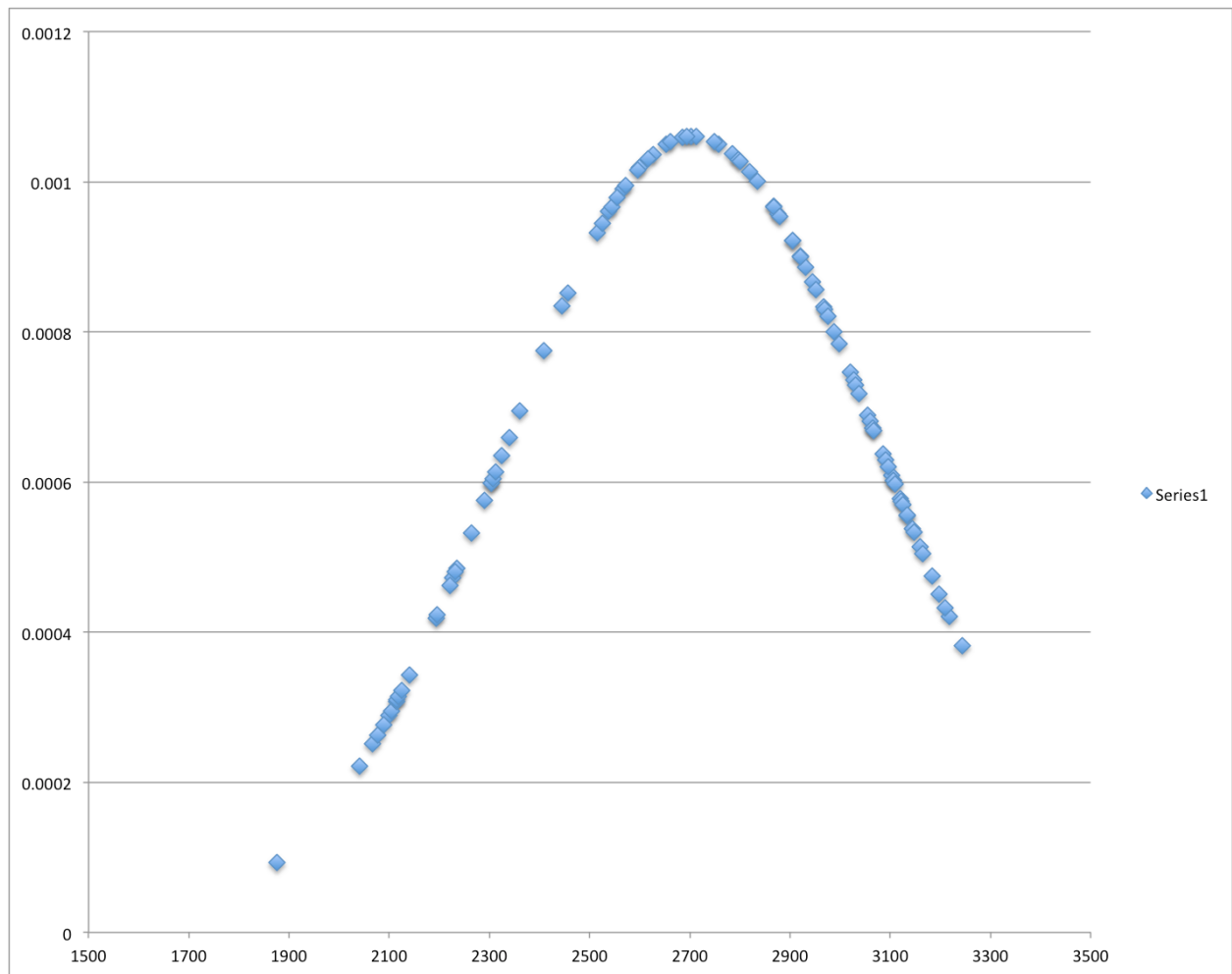


## Make Schedules Function Execution Time Distribution

X-Axis: Execution Time in ms, Y-Axis: Probability/ms

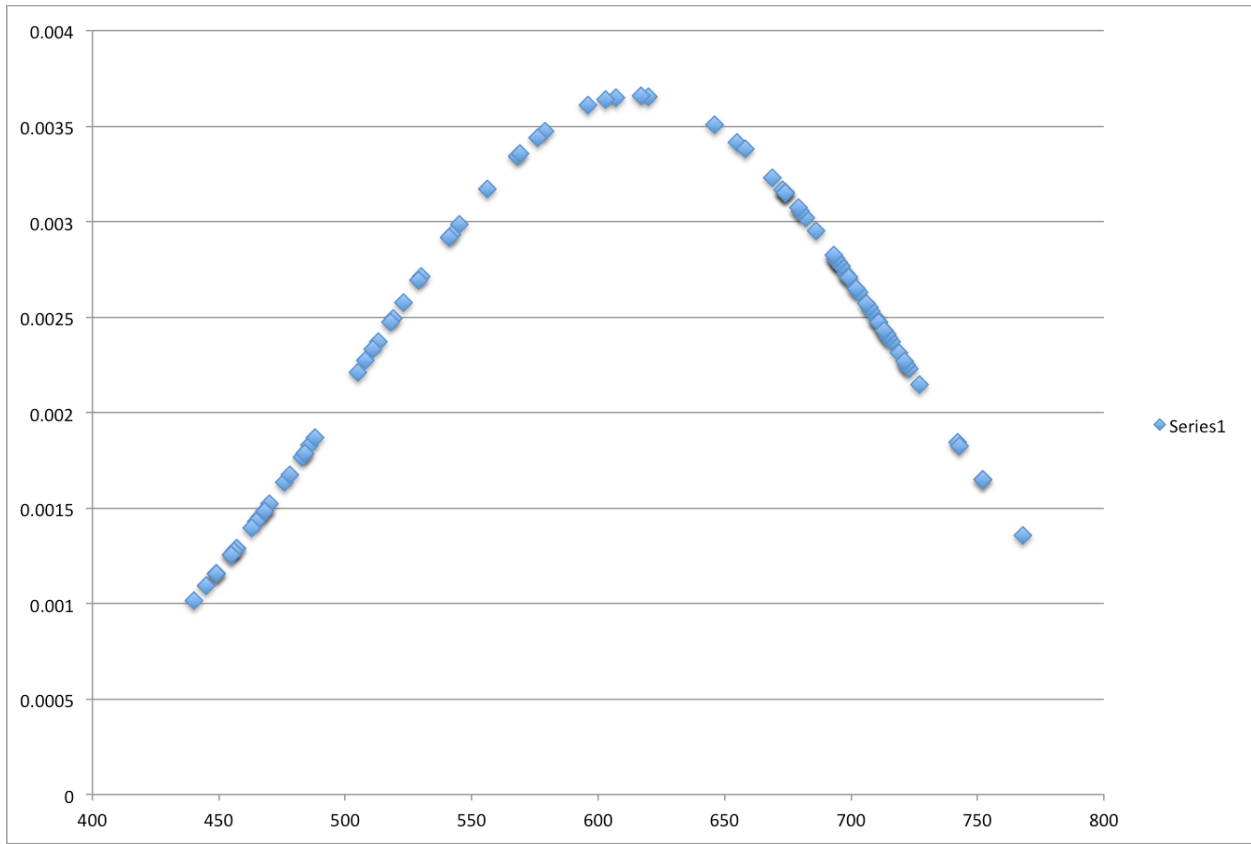


Average: 2705.7ms

Standard Deviation: 376.253ms

Sort Schedules Function Execution Time Distribution

X-Axis: Execution Time in ms, Y-Axis: Probability/ms

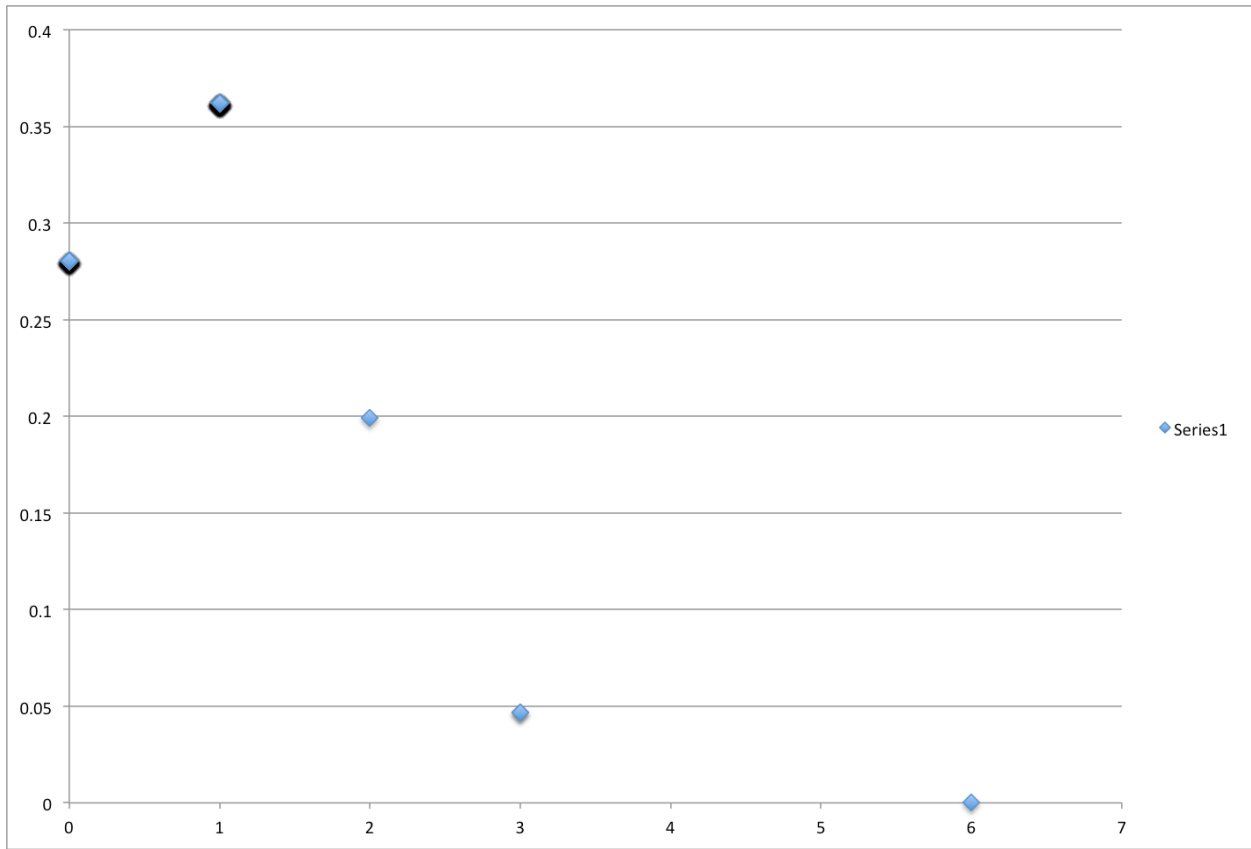


Average: 614.45ms

Standard Deviation: 108.9965ms

Display Schedules To User Function Execution Time Distribution

X-Axis: Execution Time in ms, Y-Axis: Probability/ms

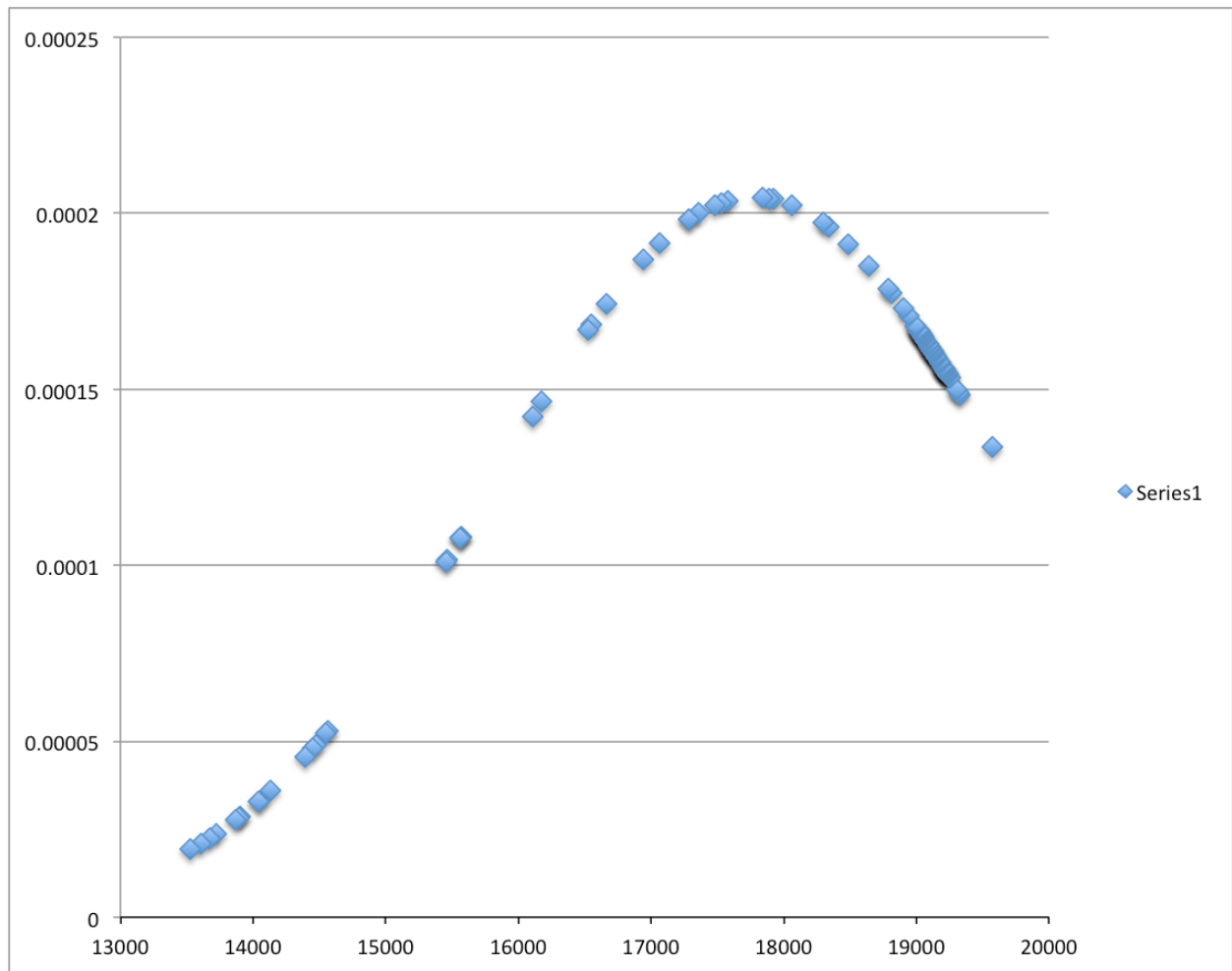


Average: 0/8ms

Standard Deviation: 1.082ms

## Store Schedules as Energy Plans Function Execution Time Distribution

X-Axis: Execution Time in ms, Y-Axis: Probability/ms



Average: 17770.01ms

Standard Deviation: 1949.652ms

**Inputs:**

Action Name	Start Time	End Time	Optimal Start	Duration
Cooking(Hob)	13:00	21:00	13:01	00:40
Cooking(Hob)	13:00	21:00	13:01	00:40
Cooking(Hob)	13:00	21:00	13:01	00:40
Cooking(Hob)	13:00	21:00	13:01	00:40

Flexibility = 5

Number of times ran: 100

**Phone Details:**

Model	Android Version	API Level
OnePlus 3T	7.0	24

**Interpretation of Results:**

The results of this speed test, on a faster phone with more cores and more RAM, has been slower overall than previous speed tests. This is as a result of more complex tasks involved with each of the processes, with the storing of plans now performing the Energy Plan creation, requiring it to examine more internal files before it may store new ones.

The other processes, have been made into Asynchronous background tasks. As a result of not executing on the main thread, they will take longer. However, this results in a better user experience as the phone UI does not freeze for the duration and the user may leave the app while it executes these tasks.