

APPENDIX III

PROCEDURE FOR THE EXPERIMENT WITH WATER SPRAY

This experiment is conducted for 60 seconds by using the plano-convex lenses with 15cm focal length. The setup for the measurement system is the same as the general setting. Approximately, 380ml of water is filled into a spray container. The water spraying is introduced into the measurement area starting from $t = 20s$ until $t = 40s$ only and no water spraying for the first and last 20 seconds.

Then, there are two types of water spraying used in this experiment. The first type is continuous-and-rapid water spraying. The water from the spray container is directly sprayed by pressing the spray trigger rapidly and continuously into the measurement area. The second type of water spraying is continuous-and-slow. The water is sprayed continuously but with a slower pressing rate of spray trigger. Finally, the extinction cross section (σ_e) and droplet number density (N_d) can be calculated by using the voltage readings obtained from this experiment.