

Experiment 3. Determination of the heat resistance of the server cabinet by qualitative measurement

Heating test was carried out for the server cabinet made of styrofoam. (for configuration 1)
In this experiment, the thermal behavior of the styrofoam material was investigated.
Qualitative measurement was made.

- * 10 Minutes, 23W Fluorescent Lamp Heating Test: No deformation occurred in the Styrofoam material.

- * 10 Minutes, 72W Incandescent Lamp Heating Test: The thin styrofoam material in the middle of the experimental setup was deformed. No deformation occurred in the remaining styrofoam sections.

- * 20 Minutes, 72W Incandescent Lamp Heating Test: At the end of the 16th minute, the thin styrofoam material on the cover of the experimental setup, used for insulation, was deformed.

- * After 20 minutes, the plastic lamp holder started to melt.

Conclusion drawn from the experiment: Thin styrofoam material is not heat resistant and should not be used. Heat resistant ceramic socket should be used instead of plastic lamp holder.