## **ABSTRACT**

Baby Incubator is a tool especially in the field of therapeutic medicine for newborn babies due to prematurity or preterm infants commonly referred to harness the heat that comes heater. With this therapeutic tool is expected to babies born early or premature babies can get the heating temperature according to the temperature obtained during the baby still in the womb. Baby Incubator using LM35 sensor which is used as a detector when the room temperature incubator incubator temperature excess or reduced. Baby Incubator is usually used in the installation of the mother and child. Making it easier for operators to perform maintenance on the patient.

In this tool, there are 2 modes namely Baby Incubator and Phototherapy are used interchangeably. Phototherapy used for jaundiced infants or Hiperbilirubin. Phototherapy use bluelight 4 lights to the distance between the lamp and baby skin  $\pm 40$  cm.

Based on the measurement of skin sensors  $32 \, \text{C}$ ,  $33 \, \text{C}$ ,  $34 \, \text{C}$ ,  $35 \, \text{C}$ ,  $36 \, \text{C}$  with an average error(error%) of 0.17%. Based on the measurement of timer 1 minute, 2 minutes, 3 minutes, 4 minutes, 5 minutes and 6 minutes obtained an average% error of 0 %.

From the calculation error(% error) above can be concluded that the error is still within the tolerance limits and in the manufacture of this equipment is in conformity with the plan.

Keywords: Baby Incubator, Phototherapy