

ABSTRACT

In this final task is testing a refrigeration system using peltier cooler module TEC 12706, TEC 12710, TEC 12715, and SP 1848 which it is employing the peltier effect. In this test is intended to knowing the value of peltier performance such as heat absorb, heat emission, coefficient of performance and the relation between peltier current. In this test carried out by measuring the temperature between cool side of peltier and metal plate, and the temperature between metal plate and heatsink with the other properties. Where this test is performed to knowing the performance of any kind of peltier which had been mentioned above. The research found the criteria of peltier TEC 12706 is the best used as refrigeration system with the heat asborbtion value 24.5 watts, heat emission value 39.86 watts, and coefficients performance value is 1.6.

Keywords: refrigeration, heat absorb, heat emission, coefficient of performance.