International Journal of ChemTech Research
CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555
Vol.11 No.10, pp 191-201, 2018

# Experimental and numerical study of the heat transfer phenomena of extended surface heat sinks in steady state condition

**Daniel Barreto Ramírez*, Nicolas Mancilla Mercado, Guillermo Valencia Ochoa**

**Mechanical Engineering Program, Faculty of Engineering, Efficiency Energy Management Research Group, Kaì, Universidad Del Atlántico, Colombia**

**Abstract :** For the validation of the software that performs the calculation of temperature profiles in cooling fins (ProfileFins) a rectangular fin heat sink was used, which was supplied with heat in order to be able to correctly measure the temperature variation in different air flow conditions and thus be able to realize our frontier conditions to obtain the temperature profile in a theoretical way and also to have the parameters to use in the software to be validated. Thus, the software presents a very acceptable margin of error concerning the theoretical calculation.
**Keywords :** Cooling fins, Heatsink, Profile Fins.

**Daniel Barreto Ramírez *et al* /International Journal of ChemTech Research, 2018,11(10): 191-201.**

**DOI= http://dx.doi.org/10.20902/IJCTR.2018.111023**

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