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[Open Access](#)**An evaluation of heat loss on top of solar collector with multilayered absorber in solar water heating system** (Article)Norhafana, M.^a, Ismail, A.F.^a, Majid, Z.A.A.^b^a Department of Mechanical Engineering, Kulliyah of Engineering, International Islamic University Malaysia, Jalan Gombak, Gombak, Kuala Lumpur, Malaysia^b Kulliyah of Allied Health Sciences, International Islamic University of Malaysia, Bandar InderaMahkota Kuantan, Pahang, Malaysia[View references](#) (12)

Abstract

Solar water heating system is one of the applications of **solar** energy. One of the components of **solar water heating system** is **solar collector** that consists of an **absorber**. The **heat loss** to the surroundings is in important factor in the determination of performance of the **solar collector**. The smaller value of **heat** losses to the surrounding will result the higher performance of the **solar collector**. Thus, this study is conducted to evaluate the **heat loss** of **top** of **solar collector** with **multilayered absorber in solar water heating system**. Methods used in this paper include **solar collector** with **multilayered absorber** is tested and evaluated by examining the **heat loss** at **top** of **solar collector in solar water heating system**. The results show the impact to the **solar water heating system** is indeed predictable where **multilayered absorber in solar collector** is proven to play its main role when it able to keep the hot **water** temperature longer at minimum amount of 176.4 W/unit area as for **heat loss**. © 2006-2016 Asian Research Publishing Network (ARPN).

Author keywords

Multilayered absorber; Solar collector; Solar water heating system

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