



แบบจำลองนี้สามารถนำมาใช้ประโยชน์เพื่อเป็นแนวทางการประเมินสภาวะเชิงคุณภาพของบุคคลที่รู้สึกไม่สบายในกรณีปรับอากาศในพื้นที่ต่างๆ ได้

**คำสำคัญ:** ความไม่สบายเชิงคุณภาพ/แบบจำลอง/สนามบิน

Thesis Title	Thermal Discomfort of Passengers in an Airport Terminal
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### Abstract

The objective of this survey research was to study parameters influencing to thermal discomfort in a public terminal building in order to model the thermal discomfort of occupants in the building. A group of 491 samples in the building was surveyed. The samples were grouped as clothing level into 3 groups: less than 0.69 clo, 0.70 - 0.99 clo and more than 1 clo. Two stages of the study were classified. The first part was to study a relationship of environmental parameters in which influencing to Actual Sensation Vote (ASV) and Predicted Mean Vote (PMV) to thermal discomfort of people in the building. The second part was to develop a mathematical model of the thermal discomfort from the above samples. A function of exponential equation was performed. The results of the study showed that the ASV model of all 3 groups, the cold and warm discomfort found when the air temperature below 24.0, 23.0 and 22.0 °C and greater than 24.9, 23.9 and 22.9 °C for the people of group 1, 2 and 3, respectively. Similarly, the PMV model of all three groups, found when the air temperature below than 23.0, 23.0 and 22.0 °C, for cold discomfort, and the temperature greater than 23.9, 23.9 and 22.9 °C for warm discomfort, respectively. As same as, the mean radiation temperature of the sample group 2 and 3 performed identical for cold and warm discomfort when the temperature below than 24.0 °C and greater than 24.9 °C respectively. But the samples with clothing level less than 0.69 clo caused cold discomfort when the mean radian temperature lower than 28.0 °C and presented warm discomfort when the temperature larger than 28.9 °C, both in the ASV and PMV model. From the finding, the developed discomfort model is

able to use as a guideline for the assessment of the human discomfort in the air conditioning space in various areas.

**Keywords:** Airport/Model/Thermal Discomfort