Abstract

This research is concerned with prototype development of trekking suit that is suitable for tropical climate through the application of Quality Function Deployment (QFD). The product prototype was developed according to the customer requirements. The results showed that the following quality characteristics were important; smart-looking degree (0.083), moisture resistance (0.04), mould resistance (0.038). In addition, the design and development of the trekking suits were significantly influenced by functionality (56.86%), material types (22.82%) and accessories (20.32%). Based on the design problem, eight concepts were generated. Then the final concept was selected by using Concept Evaluation Matrix. It was found that option 2 had the highest overall weight of 84.25 points. The results of this study could be used in the development of trekking suits that met the requirements of customers and could be used in the development of new functional textiles as well.