ABSTRAK

Penelitian ini menganalisis kenyamanan termal dan visual pada ruang publik terbuka di Lapangan Hiraq, Lhokseumawe, melalui pengukuran lapangan dan simulasi. Kenyamanan termal dinilai dengan *Universal Thermal Climate Index* (UTCI), sedangkan kenyamanan visual menggunakan *Daylight Glare Probability Simplified* (DGPs). Pengukuran dilakukan di lima titik untuk kenyamanan termal dan visual, dengan empat orientasi visual per titik. Hasil penelitian menunjukkan kondisi cenderung tidak nyaman akibat dominasi material keramik dan minimnya vegetasi peneduh. Rumput memiliki kinerja terbaik dalam menurunkan suhu dan mengurangi silau, sementara keramik menghasilkan suhu tertinggi dan silau signifikan. Rekomendasi meliputi penambahan pohon peneduh dan penggunaan material berdaya serap panas rendah yang mampu menurunkan nilai UTCI serta mengurangi potensi silau secara efektif. Temuan ini menjadi acuan perancangan ruang publik yang lebih nyaman secara termal dan visual.

Kata Kunci: kenyamanan termal, kenyamanan visual, *Universal Thermal Climate Index*, *Daylight Glare Probability Simplified*, Lapangan Hiraq

ABSTRACT

This study analyzes thermal and visual comfort in the open public space of Lapangan Hiraq, Lhokseumawe, through field measurements and simulations. Thermal comfort was evaluated using the Universal Thermal Climate Index (UTCI), while visual comfort was assessed with the Daylight Glare Probability Simplified (DGPs). Measurements were conducted at five points for both thermal and visual comfort, with four visual orientations per point. The findings indicate generally uncomfortable conditions caused by the dominance of ceramic surfaces and limited shading vegetation. Grass performed best in reducing temperature and glare, while ceramic produced the highest temperatures and significant glare. Recommendations include adding shade trees and using low heat-absorption materials, which effectively lower UTCI values and reduce glare potential. These findings serve as a reference for designing open public spaces with improved thermal and visual comfort.

Keyword: thermal comfort, visual comfort, Universal Thermal Climate Index, Daylight Glare Probability Simplified, Lapangan Hiraq