

## **ABSTRACT**

Artificial illuminations in the Atlanta Residences Apartment building have been analyzed and designed based on simulations. This research is a case study study located at Jalan Raya Margonda no.28 Depok. The scope of this research is limited to 3 floors only, ground floor (as main lobby room), 8th floor (as fasum room) and 15th floor (as residential space). The study was conducted by placing 2 Luxmeter tools (Pro and Smartphone) at 43 predetermined points (11 points on the GF floor, 15 points on the 8th floor, and 17 points on the 15th floor) at 21:00 – 22:00. The measurement results were compared to SNI, results that did not match the paramater intervention using the DiaLUX evo 8.1 application-based simulation method. Results from existing surveys, observations and analyses, found only 36% of Lux values correspond to SNI on the GF floor, 0% on the 8th floor, and 6% on the 15th floor. After passing the simulation intervention process, on the GF floor experienced a positive deviation value of 1.25 Lux from the value of SNI, 49.31 Lux on the 8th floor and 73.82 Lux on the 15th floor, where 39 of the 43 points passed the SNI value. The positive deviation value of the intervention simulation results showed that artificial illumination had been optimized in the Atlanta Residences Apartment.

**Keywords:** Artificial Lighting, Lighting Quality, Atlanta Residences Apartment, Simulation, Intervention.