

DIGITAL HUMAN MODELING TECNOMATIX JACK TO ANALYZE THE VISIBILITY OF TRAFFIC LIGHT

Abstract— Regulation of the Minister of Transportation of the Republic of Indonesia Number PM 49 of 2014 concerning Traffic Signaling Equipment. The regulation does not regulate the driver's visibility to the traffic light. Too close a distance causes a forced neck position. Researchers conducted a visibility analysis using the Digital Human Modeling Technomatix Jack. Traffic light data in the city of Denpasar, Bali, Indonesia. Anthropometric data from the Indonesian Ergonomics Association, namely data for Indonesian men, 50% percentile, aged 17 to 47 years. Tested motorcyclists, jeeps, and sedans. The result is that the distance from the left traffic light for motorcycles, jeeps, and sedans is an average of 6.75m. and the distance of the top lamp is 11.9m, 7.64m, and 8.74m. Some traffic lights in Denpasar City require auxiliary lights to be placed on the opposite side of the road.

Keywords—DHM, Traffic Light, Tecnomatix. Visibility