NOPPADOL PINSUPA : COMPUTERIZED ROAD LIGHTING DESIGN BY CIE METHOD : MR.CHAIYA CHAMCHOY, M.Eng. 133 PP.

The road lighting system performances designed by considering only illuminance levels on road surface cannot be visually evaluated. Road light system designed by using luminance and glare values can evaluate lighting qualities. But it uses complicated calculation method , a lot of photometric and installation data and has time consuming and high cost.

This thesis presents a microcomputer program developed for straight road lighting calculation according to CIE method. It is used with the popular 16 bit microcomputer. The program can calculate illuminance and luminance levels at any specific point on road surface, can find maximum, minimum, average and uniformity of illuminance and luminance. It can also calculate glare level, compare the annual cost and plot isolux diagrams, isoluminance diagrams and installation performance graphs of particular type of installation.

Since the users can obtain the fast accuracy results. They can design the road lighting system with high quality and economic.