

ROOM LIGHTING USING NOVA LED

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ABSTRACT

Energy plays an important role in the development of country. As such it needs a lot of efforts in the supply and demand side to go hand-in-hand. Among the use of energy, lighting spans all human activity. Nearly all forms of artificial lighting in the world today are met by electricity which happens to be the most expensive form of energy. In this project, new technology lighting is designed to replace conventional lamp for a room by using a pure white light Nova LED. This Nova LED is manufactured by a Malaysian company.

In this thesis, experimental are carryout to comparing the existing lighting. The new technology lighting able to adequate illumination to meet the demands, correct and uniform distribution, focusing of light and also energy saving. In conclusion from these studies it can shows that Nova LED lighting is energy saving, brighter and life long.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Primitive man relied solely on natural light for the performance of his daily tasks. The importance of lamp research cannot be overemphasized and is clearly revealed by studying the chronological progression from the arc lamps of the mid 1880s to today's wide variety and proliferation of special purpose and energy efficiency electrical lamps.

Lamp is an assembly consisting of the glass bulb, metal people or ceramic base, and internal elements that produce light. Incandescent lamp is source that produce light by heating a tungsten wire to incandescence. Fluorescent lamp is a lamp that produces light by means of an electric arc that excites a phosphor coating deposited on the inside of the glass bulb, it does not contain wire as the basic light generator. Long, tubular fluorescent lamps are often used in lighting fixtures.

Light emitting diodes, commonly called LEDs, are real unsung heroes in the electronics world. They do dozens of different jobs and are found in all kinds of devices. Basically, LEDs are just tiny light bulbs that fit easily into an electrical circuit. But unlike ordinary incandescent bulbs, they don't have a filament that will burn out, and they don't get especially hot. They are illuminated solely by the movement of electrons in a semiconductor material, and they last just as long as a standard transistor.

Nova LED has several advantages over conventional LEDs and other lamps. For one thing, they don't have a filament that will burn out, so they last much longer.