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A project report on

“POWER LED STREET LIGHT SYSTEM”

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GENERAL INFORMATION

The power LED street light system designed to save the energy and to save the nature by global warming. It provides the efficient amount of brightness like CFL (Compact fluorescent lamp) and incandescent light with less amount of energy. The initial cost of this product is high as compared to CFL and incandescent, but within the short period it will refund the investment by saving energy.

PRESENT TRENDS AND PRACTICES

Energy is one thing that has revolutionized our lives in a major way. There is not a single sole that is oblivious regarding the uses and benefiter of the energy in the contemporary world. It has actually become an indispensable part of our daily life and it also makes it very convenient to conduct our various jobs very easily.

Present systems are CFL and incandescent light for the domestic light system. Where CFL are used to save the power compared with incandescent light, but CFL has chemical content called carcinogenic. This chemical content may cause disease like cancer. The proposed system have advantages like less power consumption as compare with present system and free from any type of health problem. Thus the designed prototype promises to overcome all the disadvantages of present light system by using power LED.

MOTIVATION

Looking at the energy problem, health problems and also the national waste it has motivated to develop a system using power LED, s to overcome these problems to some extent. Which helps to reduce the temperature and thereby heat in the environment and thus helps to reduce the problem of global warming to some extent. The new power plants always help to increase the heat of the environment. So instead of planting new energy source, the new generation lights permits the effective utilization of the existing power plants.

Chapter 1

1.1 INTRODUCTION

The power LED street light system has been designed as a next generation light. The next generation light indicates that replacement of present light system like CFL and incandescent lighting. The main purpose behind this system is the power saving which saves the power more than 80%.

In this 21st century technology growing consistently, but this development make the effect on nature. In this one example is global warming, which means increase the heat on the earth it makes the difference in nature. So with the help of the proposed scheme i.e. power LED street light system, it indirectly helps to reduce the global warming. For example in present days the energy production is very less due to imbalance of nature. In these circumstances generation of energy by using new power plants helps indirectly and directly to increases the temperature of the environment and there by helps the unwanted global warming problem. So instead of using new power plants for energy generation it is advisable to use existing power plants effectively by making use of power LED.

Present days CFL are more popular than incandescent because it save the energy more than 80% of incandescent , but these CFL are having carcinogenic content which cause the health problem such as cancer. So to avoid problems like wastage of energy, health problem the solution is to use the power LED. This power LED's are far superior with respect to energy saving and immune from any health problem as compared to CFL.

Present days lights like CFL and incandescent are dissipates the heat in nature, which also one of the reason of global warming. So this proposed system is having heat proof. The production of heat is very less as compared to present system

These next generation lights are directly replacement of present days light with proper electronic circuitry.

Some of the applications of proposed scheme are:

- Used as spot lights in malls
- Used as street light
- Used as parking light
- Used as a domestic light

Thus this proposed system trying to reduce the heat of the earth, saving the health of mankind and major thing is to save the energy. This also improves the economic condition of the nation.

1.2 Summary:

Thus it concludes that, using the power LED Street light system can revolutionize the way electricity is being used. The power LED street light system is the directly replacement of CFL and incandescent light. The power LED street light system contributes to a verity of applications with good scope in near future.