



**CALIFORNIA STATE SCIENCE FAIR  
2015 PROJECT SUMMARY**

<b>Name(s)</b> <p align="center"><b>Rhitishah Yuva Raju</b></p>	<b>Project Number</b> <p align="center"><b>J0430</b></p>
--	---

**Project Title**  

**Illuminate Your Life with Light and Color**

**Abstract**

**Objectives/Goals**  
 My objective was to learn if there is right light and wall paint in a room; then, the mood will improve to create better lifestyle for a person, because wall paint and light determines and sets the mood of a person in the house (different rooms in the house).

**Methods/Materials**  
 Materials used: Lights with 2700 and 5000 Kelvin (CFL-Compact Florescent Light & LED-Light Emitted Diode), 5 different Wall Paint colors (Blue, Green, Red, White and Yellow) with Light Reflective Value (LRV) of 65-75. Five different wall paint colors hand-painted tri-folds.  
 Methods:1st Survey: talking to experts (Engineers, Doctors, Psychology and Social Worker)-pool of 10 people to find out having right wall paint and light will help set correct mood. Spoke to doctors on how brain works toward mood. 2nd Survey: conducted 100 people with variety of age range survey to find out preferred mood in 5 different areas in the house: Kitchen-alert, study room-focus, bedroom-relaxed, dining room-relaxed and living room-lively. Finally, conducted experiment with 20 people; each person placed in 5 different wall paints, 2 different lights and Kelvin - an hour each person. Entered all survey data in spreadsheet, bar chart and pie chart to analyze and conclude.

**Results**  
 From the surveys and experiment data, I have drawn spreadsheets, bar charts and pie charts to analyze and conclude. Below is the final findings/result of preferred mood by areas in the house and what are the wall paint and light that can help to achieve this preferred mood:  
 Areas Mood Paint Light Kelvin  
 Kitchen Alert Yellow LED 5000  
 Study Room Focused Green CFL 5000  
 Bedroom Relaxed Blue CFL 5000  
 Dining Room Relaxed Blue CFL 5000  
 Living Room Lively Blue CFL 5000

**Conclusions/Discussion**  
 My hypothesis was proven to be true. A person's mood is affected by the environment (wall paint and light) surroundings. Thus, the best light and wall paint in different areas of house does help create better lifestyle for a person. In the kitchen people wants to be alert, Yellow wall paint with LED light preferred. Study room is where people want to be focused with green wall paint. Where else in bedroom and dining room people prefer to be relaxed with blue wall paint. Living room, where people want to be lively with

**Summary Statement**  
 The lights (CFL and LED) with right kelvin and different wall paints in different rooms can improve quality of life and set preferred mood in the house.

**Help Received**  
 Parents supervised while using electrical outlet and switching lights.