



Rancho High School
Las Vegas, Nevada

Colorimetry SafeStamps

- SafeStamps - I2C Connected Standardized Modules
- LED SafeStamp to provide light source inside colorimeter
 - Uses CREE XREWHT-L1-0000-006E5
 - Controllable intensity by ATTINY48 and MOSFET
- Color Sensor SafeStamp to measure transmittance of red, green, blue, and total light
 - Uses Vishay VEML6040A3OG
- Dominant wavelength and absorbance spectrum can be approximated from returned RGB data.
 - Color curves of LED and Color Sensor must be accounted for.
 - Accuracy is non-scientific but sufficient for physics demonstration/puzzle