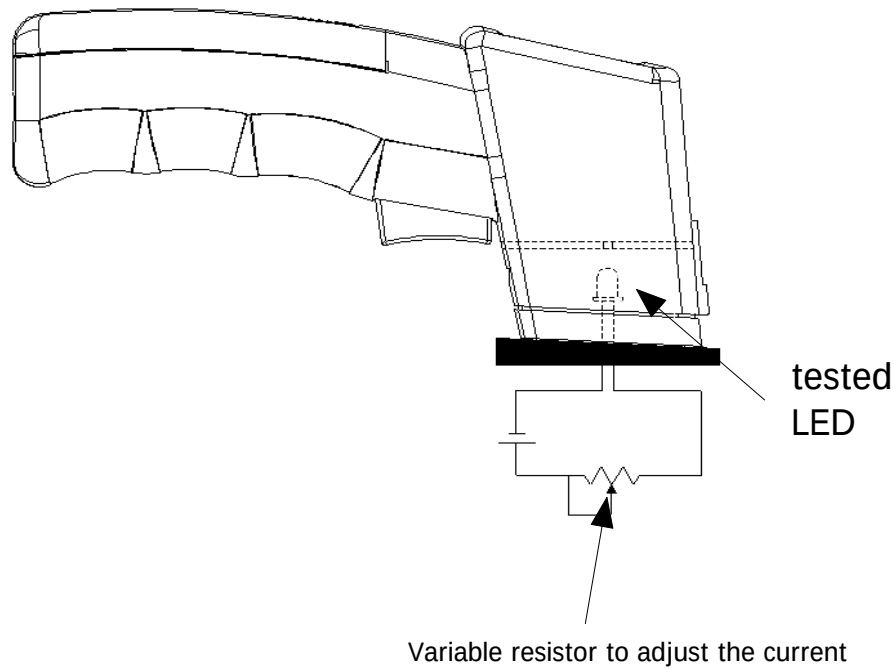


Use the Color Analyzer RGB-1002 to measure the LED color



1. The main application of RGB-1002 is designed for measuring the color value of no lighting materials such as textiles, paper, leathers, painting materials..... It is the useful tool for the quality control and the wide industrial application.
2. Many users intend to use the RGB-1002 to measure the color of LED lamp (lighting material).
General speaking the RGB-1002 can measure the color value of lighting material for reference.
Following is the real application example that to use the RGB-1002 to measure the LED lamp's color :
 - a. Prepare a tool (should be done by the user) that can plug the LED'S pins. The other the tool also can offer the supply DC current of the LED and also install serial variable resistor that can adjust the LED supply current.

The LED install tool's structure as :



- b. Set the RGB-1002 measuring function to " lighting material ", the probe's head will be not to generate the light output. The detail procedures that to set the RGB-1002 to be used under the " lighting material " function, please refer the RGB-1002 operation manual.
- c. Cover the probe to the above " LED install tool " completely. Then going on to measure the LED color value.
- d. We use three LED to measure its color value and get the real test values as example :

LED 1

Color : Red , Consumption current : 0.25mA

RGB value	
R (Red) value	878
G (Green) value	11
B (Blue) value	3
HSL value	
H (Hue) value	0.000
S (Saturation) value	0.933
L (Luminance) value	0.430

LED 2

Color : Green, Consumption current : 0.25 mA

RGB value	
R (Red) value	469
G (Green) value	1023
B (Blue) value	642
HSL value	
H (Hue) value	0.385
S (Saturation) value	1.000
L (Luminance) value	0.729

LED 3

Color : White, Consumption current : 0.25 mA

RGB value	
R (Red) value	1023
G (Green) value	1023
B (Blue) value	1023
HSL value	
H (Hue) value	0.666
S (Saturation) value	0.000
L (Luminance) value	1.000

d. The RGB-1002 is designed to measure, the LED's R (Red) value, G (Green) value, B (Blue) value, H (Hue) value, S (Saturation) value, L (Luminance) value not intend to measure the wave length or lighting spectrum. However the lighting spectrum is relative to R/G/B/H/S/L value, it should calculate by the user.

LUTRON ELECTRONIC ENTERPRISE CO., LTD.