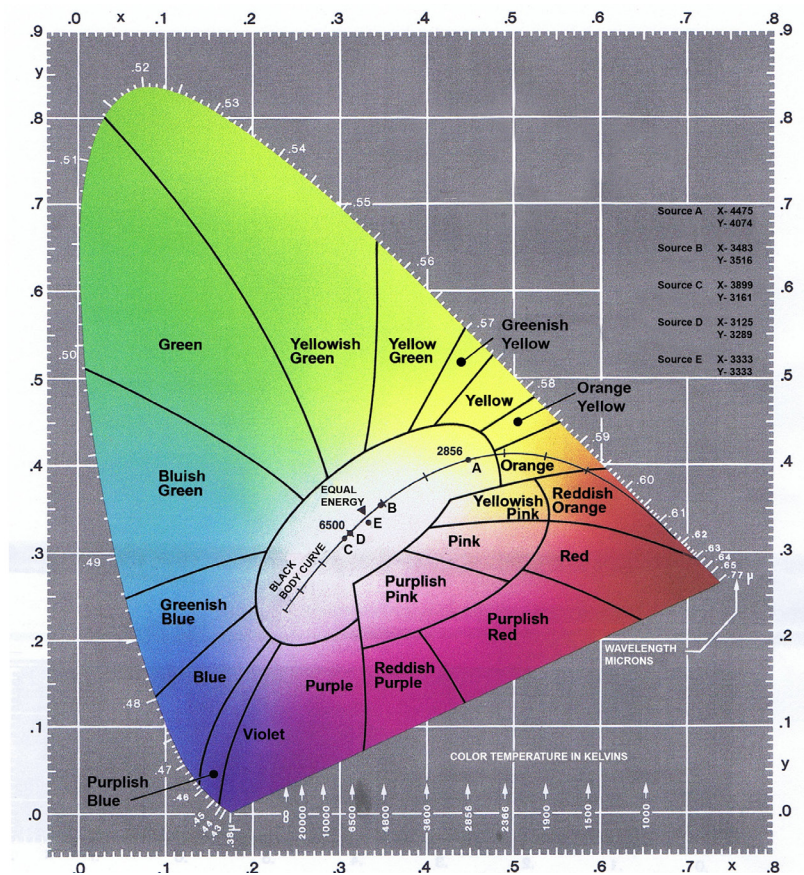


## TESTING BOUNDARY COLOR LEDs

“Boundary color” LEDs include LEDs that have wavelengths which either literally overlap between two different colors (ie: the manufacturer specifications indicate a yellow LED that - when accounting for bins and/or tolerance - has the same wavelength as a green LED;) or LEDs that have wavelengths that occur within boundary colors such as yellow-ish green or orange-yellow. Referring to the C.I.E. Chromaticity Diagram below clearly shows where and why such boundary colors can occur.

When testing these LEDs with a Universal LightProbe Penta sensor, it is possible that the sensor will bin a color as yellow, for example, although the color might be advertised as “green.” This is due to the fact that the wavelength of the LED has been identified by the sensor as yellow. However, if the user would like to pass the LED - for example it could be a bi-color green/red LED and the green LED is ‘green enough’ when viewed next to the red LED - we recommend the use of the Universal LightProbe Spectra Sensor, which enables the user to set their own PASS/FAIL limits for color. See the Universal LightProbe Spectra data sheet for more information.

C.I.E CHROMATICITY DIAGRAM



PO Box 751 • South Freeport, ME 04078 USA | Phone (207) 865-9181 • Fax (207) 510-8039  
[www.optomisticproducts.com](http://www.optomisticproducts.com)  
[info@optomisticproducts.com](mailto:info@optomisticproducts.com)