Activity 2: Familiarization with Properties of Light Sources

Mary Chris Roperos Go / 2014-11122

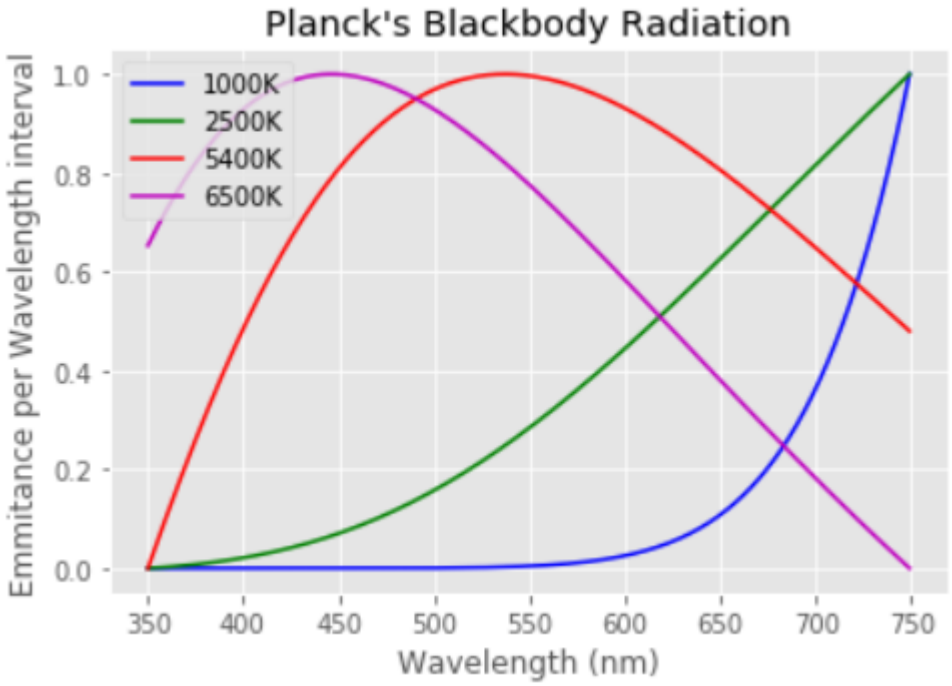

Figure 1: Plotted graph of wavelength vs emittance per wavelength

Figure 1 shows the plot of the emittance spectrum of a blackbody radiator for specific temperatures: 1000K, 2500L, 5400K, and 6500K. The Planck's Blackbody Radiation Formula was used to give values for the y-axis, while the x-axis is a range of wavelengths from 350nm to 750nm. The plot was normalized to see the curves of the lowest temperature. Based on the spectrum, the expected colors are: violet (6500K), green (5400K), red (2500K), and red (1000K). This was obtained by getting the x value where the y value peaked. All in all, the activity was doable since we have been plotting graphs since second year.