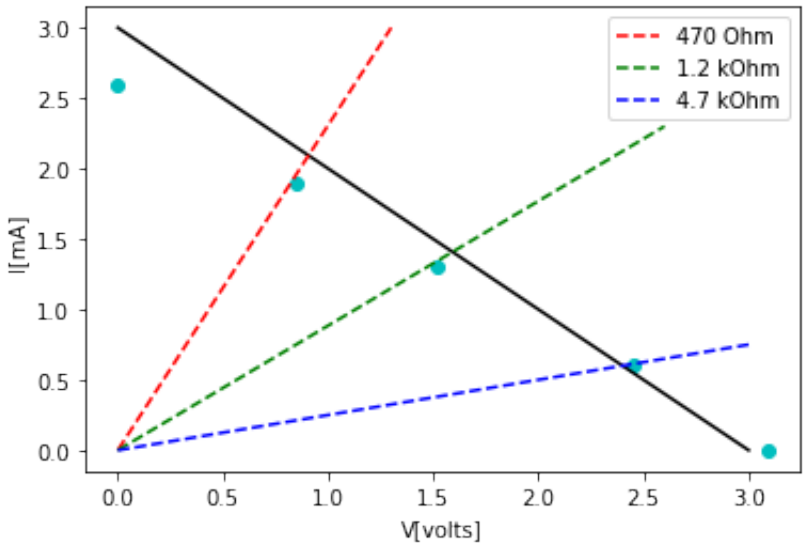
In [ ]:
```
#Austin Jones and Paige Braidy (Lab Partner)
#Physics 80 M/W Section
#01- 15-2020
#Lab 3 - Equivalent Circuits
```

In [15]:
```
import numpy as np
%matplotlib inline
import matplotlib.pyplot as plt
```

In [81]:
```
datax = [0, .85, 1.52, 2.45, 3.09]
datay = [2.59, 1.9, 1.3, 0.6, 0]

# thx = np.linspace(0, 3, 5)
# thy = thx[::-1]

thx, thy = [0, 3], []

sx = np.linspace(0,1.3)
sy = np.linspace(0,3)
mx = np.linspace(0,2.6)
my = np.linspace(0,2.3)
lx = np.linspace(0,3.0)
ly = np.linspace(0,0.75)

plt.plot(datax, datay, "co")
plt.plot(thx, thy, "k-")
plt.plot(sx, sy, 'r--', label = "470 Ohm")
plt.plot(mx, my, 'g--', label = "1.2 kOhm")
plt.plot(lx, ly, 'b--', label = "4.7 kOhm")

plt.xlabel("V[volts]")
plt.ylabel("I[mA]")
plt.legend()
```

Out[81]: <matplotlib.legend.Legend at 0x119540bd0>



In [ ]: