3 Parts to the project:

Client

There is a fully functional version in \PartnerLabs\MIT\BEElab\www\scripts\sunChart.js. However, this version has the sun info in a chart of its own, separate from the climate profile and loads profile chart.
There is an integrated chart version in \PartnerLabs\MIT\BEElab\www\scripts\chartAll.js, and though this chart has been tested independently and works there, is has not been tested with the system as a whole running. (Testing independently proves that the invisible series that "holds" the sun data series at the top works.)

Brief Description of how it works:
The sun series is an array 24 of 1's and 0's (100's and 0's in the integrated chart version) that represents a day. This array is then copied times the number of days that the experiment is to run. In both versions there is a selector that lets the user select how many hours out of the day the lamp should be on, and a slider to set when the cycle is to start. Both have jQuery listeners that update the value of the sunData array and rewrite it into the chart on change.
The integrated graph has an additional series that is an array of 24*number of days 400's that holds no data, it is just there invisibly so that the sun data can stack with it and therefore float at the top of the chart.

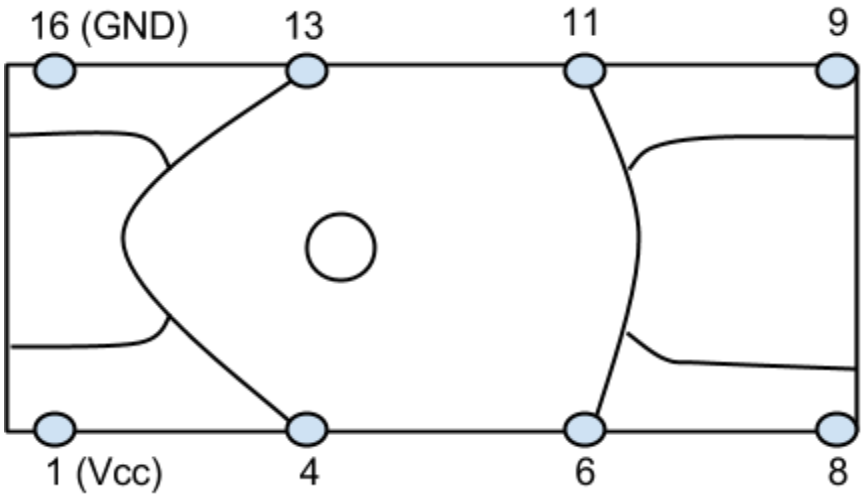
Known bugs:
The integrated version has yet to be tested on a lab server.
The only known "bug" is that although the borders of the invisible series have been set to a width of 0 and are invisible, they still cover up the background horizontal lines that indicate the y-axis value. I know of no solution.

Controller

The code that controls the CR-1000 is fully functional. It has been tested at the actual Lab.

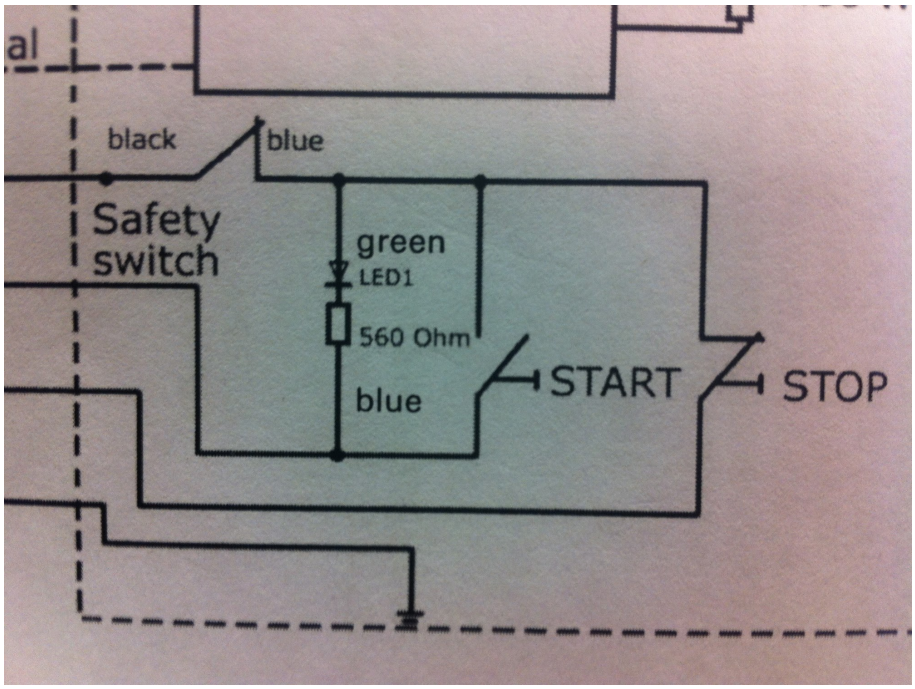
Circuit switch

View of the relay from the bottom (what you see if you flip it upside down):



when unpowered, 4 is connected to 6 and 13 is connected to 11. When supplied power, it switches, and now 4 is connected to 8 (and not 6) and 13 is connected to 9 (and not 11).

Diagram of lamp control switch:



the STOP switch lies between the red and the white wires, the START between the grey and white (therefore the white is the topmost of the three.)

The goal is to use two relays. On the first, white is connected to either pin 4 or 13, and the grey to pin 8 or 9, respectively. That way, when supplied with power that relay will close the switch and turn on the lamp. (NOTE: the switch must be closed and then opened shortly after to turn on/off the lamp. This is already programmed into the CR-1000.)
The second relay has white on pin 4 or 13, and red on 6 or 11, respectively. That way, when supplied power the relay will open the switch and turn off the lamp.
Note that we need not touch the internal circuit of the lamp; we simply short circuit it and connect/disconnect the red, white, and grey wires ourselves.
To control everything, the final circuit will have the Vcc pins connected to the digital outputs of the CR-1000, and therefore when the CR-1000 sends a positive signal the relays will trigger and turn on/off the lamp/

The current problem:
The circuit has been set up with the relays, and is functional when tested with 5V as the input to the relays (input to Vcc). However, the digital output of the CR-1000 does not have enough voltage to actually trigger the relays (it appears to output at about 1.6 volts). Therefore, we need to ramp up the voltage to 5 volts (when the relay triggers, a *click* can be heard). Once that is done, the entire system should work.
Alternatively, we can find other relays with lower voltage thresholds.