LTC3652 Power Tracker Validation testing

The LTC3652 has the following features that we care about.

1. Float voltage programmable to 0.5% accuracy.
2. Constant current limit programmable to 5% accuracy. (don’t care about this one)
3. Charge shutdown at C/10 with 2.5% accuracy.
4. Charge rate programmable up to 2A
5. **Input Voltage regulation!**

Tests we will run.

1. Input voltage regulation.
   1. Create solar cell equivalent circuit.
   2. GraphVoltage control loop with Open Circuit voltage higher than setpoint
   3. Graph Voltage control loop with Open Circuit voltage lower than setpoint
   4. Graph setpoint vs voltage on panel for range of setpoints.
2. Float voltage accuracy at 7.2V
3. Float voltage performance with 3 tied together outputs.
4. Max Charge Rate (does it get to 2A)
5. Charge shutdown after 2.5

Testing input voltage regulation:

Fill in values for this equivalent circuit: