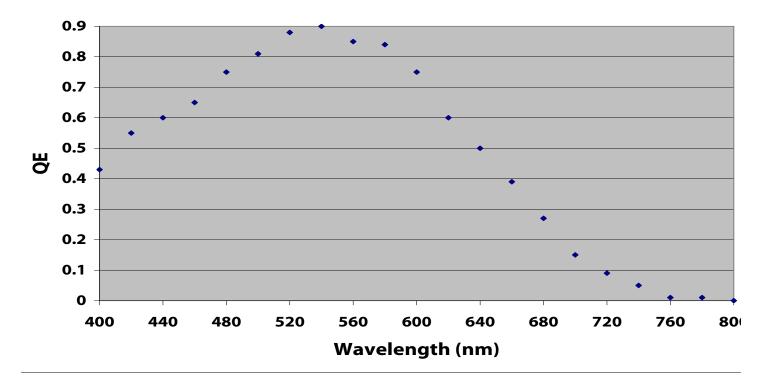
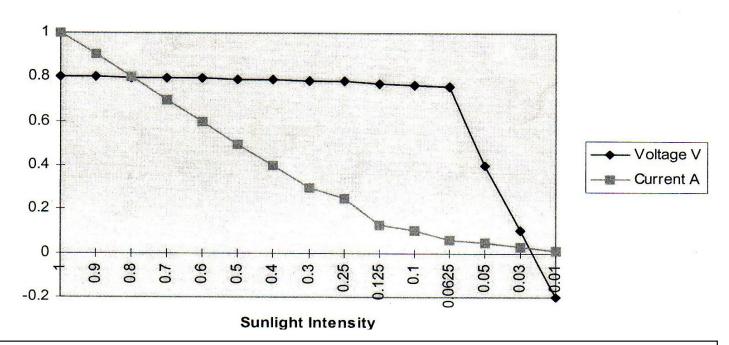
## **QE Plot**



## Sunlight Intensity vs. Current/Voltage



## **Temperature Performance**

Standard test condition (STC)
Power -0.2% /°c above 25°c
STC – 1000 W/m2, Air Mass 1.5, 25 C temp

Our rated power is for ASTM 1.5 1000 watts per meter squared, 25% and 100% IV curves are done under a simulator. Out door is done as a percentage of full sun or 1000 watts per meter squared. We calibrate outside to NREL, is side curves are not astm 1.5 light sources.

PowerFilm cycle our modules from -40 to 80 deg C. for IEC61646 testing. We would have a 46deg  $\pm 2$  deg rating for normal operating parameters, which are 800 watts/m2(sun intensity), am1.5, 25 deg C ambient temperature, and a wind speed 1 m/sec.

Ratings of solar modules are done a STC(standard Test Conditions) 1000 w/m2, am .5 25 deg C cell temp Some manufacturers are rating panels at NOCT(normal operating Cell temp) 800 watt/m2, am1.5, 25degC ambient temp, and wind speed 1m/sec.