Stimulation Engineer Intern Assignment

Answer the following questions using the information provided below

Plant info -

Inverter Efficiency - 98%

Shading - 5%

Irradiance - 1000 W/m^2

Temperature - 25'C

Plant configuration - {

"tilt": 20,

"azi": 180,

"moduleCount": 16,

"stringCount": 5,

"inverterCount": 1,

"minStringVoltage": 420,

"type": "Canadian Solar CSK310MS"

}

Tasks

1. Find single diode model parameters for the module mentioned above.

2. Using the single diode model parameters calculate and plot the IV curve at different

temperature and irradiation levels

3. Plot IV curves for the complete string.