

Follow the described procedure and fill in the following table.

- 1. Find the position in which the solar panel provides highest irradiation (read the azimuth using compass and inclination using the angle-meter built-in to the side of the solar panel): \_\_\_\_\_° from the north and ° from the horizontal position.
- 2. Enable the breaker of the  $\overline{DL}$  9014 module, to connect the battery to the circuit.
- 3. Switch on the halogen lamp.
- 4. Using the charge regulation module DL 9012 read the voltage of the battery.
- 5. Using the charge regulation module DL 9012 read the load current flow
- 6. Calculate the DC power.
- 7. Using the measurement module DL 9021 read the AC load power
- 8. Knowing input and output power to the inverter, calculate the inverter efficiency.
- 9. Switch off the halogen lamp and switch on the LED lamp.
- 10. Repeat points 4-8.
- 11. Switch on the halogen lamp.
- 12. Repeat points 4-8.
- 13. Disable the breaker of the DL 9014 module, disconnecting the battery from the circuit.

	Halogen	LED	Halogen + LED
Voltage (V)			
Load current (A)			
DC power (W)			
AC power (W)			
Inverter efficiency (%)			