

### COP calculation

Primary Battery		Charge Battery	
Voltage fully charged @ rest	13.08 V	Amperage draw @ discharge	1 A
Charging charge battery		Time discharging	1 h
Current draw	1.6 A		3600 s
Time	29 m	Voltage after discharging 1Ah @ rest	12.58 V
	1740 s		
Voltage under load @ start	12.54 V	Voltage after charging @ rest afer 1h	12.81 V
Voltage under load @ end	12.52 V	Average voltage based on voltage @ rest	12.70 V
		Power based on average voltages @ rest	12.70 W
Voltage after charging @ rest after 1h	12.87 V	<b>Energy based on average voltages @ rest</b>	<b>45.70 kJ</b>
Average voltage based on voltages @ rest	12.98 V		
Power based on average voltage @ rest	20.76 W		
<b>Energy based on average voltage @ rest</b>	<b>36.12 kJ</b>	<b>Energy COP (average voltages batteries @ rest)</b>	<b>1.27 -</b>
Average voltage based on voltages @ load	12.53 V		
Power based on average voltage @ load	20.05 W		
		<b>Energy COP (average votlages, Primary @ load / Charge @ rest)</b>	<b>1.31 -</b>
<b>Energy based on average voltage @ load</b>	<b>34.88 kJ</b>		

### Resistor experiment

