

## Power Consumption – P8ACY Water Cooler

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### **Energy Consumption Evaluation**

The power consumption of a water cooler is dependent on two main conditions:

- Ambient temperature of room & inlet water
- Usage of the cooler

There are a number of different methods of estimating the power consumption of a water cooler. The figures reported below are based on testing carried out at the following conditions:

- Cooler is located in a room with an ambient temperature of 90°F (32°C)
- Water inlet temperature is 80°F (27°C)
- Cold water is classed as water below 50°F (10°C)

#### **Tests:**

##### **Standby Energy Consumption:**

This is the energy required to “dead cycle” the water cooler – i.e. power is connected to the cooler and no cold water is drawn from the cooler.

Standby Energy Consumption: 0.2 kW.hr per day

##### **Rated Energy Factor:**

This is a measure of the ability of a water cooler to convert electrical energy into cold water. It is a calculated value based on the results of a number of different standard tests. OASIS use the CSA International Standard C815-99 to calculate the rated energy factor.

Rated Energy Factor: 680 litres of cold water / kW.hr