External Audience Protocol (EAP) - Clothes Dryers

Consumer Reports conducts several different tests to evaluate clothes dryer performance

**General** - Though clothes dryers have a number of cycles, most of our performance and data gathering tests are performed on three cycles, 1) Normal, Cottons or Regular, 2) Permanent Press or Casual and 3) Delicates. The load sizes and fabric types vary by the cycle under test and the size of the machine.

**Electrical supply** – Each clothes dryer is connected to an appropriate regulated voltage power outlet.

**Gas supply** - Each gas clothes dryer is connected to an appropriate pressure-regulated gas supply.

**Dryer Vent** - for those models requiring a vent connection, one is provided.

**Data acquisition system** - Each clothes dryer is attached to a data acquisition system that measures and records all of the appropriate data necessary for evaluating the dryer. This includes, but is not limited to, cycle under test and options selected, power consumption, test time, load weights before and after testing, temperature of the clothing during testing, duct air flow, temperature and humidity.

**Drying performance** – This is determined by combining the drying results from three different loads. The test is generally performed under at least two conditions for each load type.

The load sizes vary by type of dryer as follows:

**Full-size dryer (greater or equal to 4.4 cu.ft.)**
1. 3 lb. delicate load
2. 8 lb. permanent press load
3. 12 lb. mixed load

**Compact dryer (less than 4.4 cu.ft.)**
1. 3 lb. delicate load
2. 8 lb. permanent press load
3. 6 lb. mixed load

The loads contain the following types of items in the quantities needed to achieve the appropriate load weight:

1. Delicate load consists of synthetic fabric women’s underwear, bras, camisoles and pajamas.
3. Mixed load consists of heavy fabric jeans, work shirts and bath towels.

The test is performed as follows:
1. The load under test is conditioned with a measured amount of water.
2. The load is then placed into the dryer, lint filter checked and cleaned, the cycle settings are selected, the data acquisition system is initiated and then the dryer is started.
3. Once the end of cycle signal indicates that the cycle is completed, the door is opened. The load is removed and weighed.

**Dry load** – A dry mixed load is placed into each dryer and the machine is started and the time to dry is recorded.

**Capacity** – The capacity is derived from the cubic foot volume claimed by the manufacturer. A measurement is performed in the lab to confirm the value provided.

**Noise** – A panel judges each machine while it is loaded using the Normal/Regular/Cotton or equivalent cycle.