

Application Note OS-101

UL Ozone Standard 867

(for the ozone output of certain electrostatic air cleaners)

The following language is quoted from UL Standard No. 867 with respect to the ozone output of cord-powered portable electrostatic air cleaners for household use:

37 Ozone Test

37.1 A portable product for household use shall not produce a concentration of ozone exceeding 0.05 parts per million by volume when tested as described in **37.2-37.7**.

37.2 The test is to be conducted in a room having a volume of 950-1100 cubic feet (26.9-31.1 cubic meters) with a minimum side dimension of 8 feet (2.4 meters) and a maximum height dimension of 10 feet (3.0 meters) without openings. The test room walls and ceiling are to be covered with a sheet of polyethylene or aluminum. The floor is to be of a nonporous material such as vinyl tile or aluminum.

37.3 During the test, the test room is to be maintained at a temperature of 25 plus or minus 2 degrees Centigrade (77 plus or minus 4 degrees Fahrenheit) and a relative humidity of 50 percent plus or minus 5 percent. Prior to the start of and immediately after this test, the ozone background level is to be measured with the product off. The background level average shall be calculated and subtracted from the maximum measurement during the test.

37.4 The product is to be located at the center of the test room floor and about 30 inches (762 mm) above the floor for a table mount product.

37.5 The ozone monitor sampling tube is to be located 2 inches (50 mm) from the air outlet of the product and is to point directly into the air stream.

37.6 The emission of ozone is to be monitored for 24 hours to determine the concentration.

37.7 If the filter cell can be energized with any of its fans not functioning or with particle filters removed, the test described in **37.1-37.6** is to be repeated with the various components not operating or with particle filters removed.