

Elanra Air Pendant: Air Cleaning Performance Evaluation

Date of Evaluation:	23 Feb 2017
Product Name:	Elanra Air Pendant
Product/Package Part Numbers:	C1000110/109 (Black), C1000118/7 (White)
Air Pendant Output	500 Billion ions per second 1.5Million ions/cc @ a distance of 300mm Making it the worldwide leader.
Applied Test Standard:	AHAM AC-1-2015: "Method for Measuring Performance of Portable Household Electric Room Air Cleaners"
Independent Test Body:	IBR Laboratories, Michigan, USA (IBR)

Summary

The Elanra Air Pendant has been independently tested for its capability as a personal air cleaner. An independent test laboratory who is a world leader for 30 years in the detection and analysis of particulate contamination and verification of filtration performance: IBR in the USA was appointed. Bionic Products sent current test samples of the Elanra Air Pendant product, for the international standardized performance test developed by "AHAM" (Association of Home Appliance Manufacturers). The test is identified as AHAM AC-1-2015: "Method for Measuring Performance of Portable Household Electric Room Air Cleaners". The test measures the "Clean Air Delivery Rate" or "CADR". IBR had to build a special chamber for testing the Elanra Air Pendant to this standard, as they have previously never tested an effective personal air cleaner of this size.

Three different types of pollution are tested: smoke, dust and pollen. The results are as follows:

Pollution	Particle Size	CADR (cubic meters/hour)	CADR (litres/second)
Cigarette Smoke	PM0.1 - PM1.0	1.8	0.5
Fine Test Dust	PM0.5 - PM3.0	1.76	0.49
Pollen	PM5.0 - PM11.0	3.76	1.04

CADR tells us at what rate an air cleaner can clean a closed constant volume of polluted air, which is continually mixed. The air pendant is typically used in open space, but CADR could not be measured this way, because random movements of the air would interfere with the test results. In practice, the air pendant will effectively clean any pollution which is near to it, near the user's mouth and nose. These results prove the Air Pendant is indeed effective for PM2.5 at the rate of .5 of a litre per second.

