

Report for Dust Collection Test

Company: ITEC Co., Ltd		Test date: 2003 Nov 19	Person in charge Choi ChulWon
Measurement Condition	Laboratory Temperature : 23° C ± 5	Laboratory Humidity: 50% ±10	Air Flow : -
Measurement : Equipment	Met One Laser Particle Counter	Measurement Item: Dust Collecting test.	
Measurement room: 1 m x 1 m x 1 m			

Method;

It is a policy to have the air purifier testing measured based on the standard of Korea Air Cleaning Researching Association.

*. Measurement Laboratory :1.0X1.0X1.0m (Square chamber)

*. How to measure

1. Install the air purifier in the middle of a chamber.
2. Treat the air of the chamber with dust particles. (It is a kind of the air purifier test method)
3. Turn on the switch on the auto-operation of the air purifier.
4. And install a fan for an agitation on the bottom inside.
5. After an agitation of a certain amount, the development of dust partiele is measured by Particle Counter.
6. Measure the preliminary dust particle and then the decreased dust particle within a certain time.

Time (hour)	Size of Dust Particle				
	0.3µm	0.5µm	1µm	3µm	5µm
5	356,700	213,586	54,903	12,574	895
10	321,320	184,675	34,908	8,108	721
15	289,400	158,907	21,243	6,789	649
20	268,453	120,768	19,694	4,132	571
25	235,590	96,231	15,712	2,983	493
30	189,632	74,989	12,299	1,134	423
35	146,456	59,121	8,642	658	354
40	100,678	41,233	6,097	193	123
45	84,567	25,566	4,721	0	0
50	67,800	16,923	2,984	0	0
55	54,300	12,398	1,326	0	0
60	31,500	8,654	674	0	0
Dust collecting rate	91.16%	95.90%	98.77%	100%	100%

This graph shows that;

The dust collecting rate of the smallest dust particle (0.3µm) is even 91.16% after an hour while the one of 5µm is 100%. In a word, the air purifier can collect the minuteness dust

