



INITIAL 52.2 TEST REPORT

6423 Cecilia Circle
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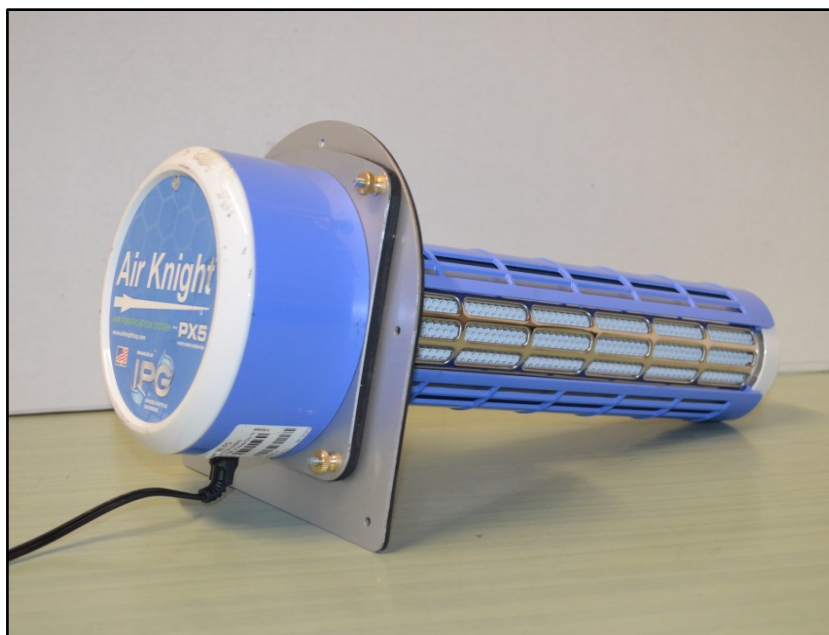
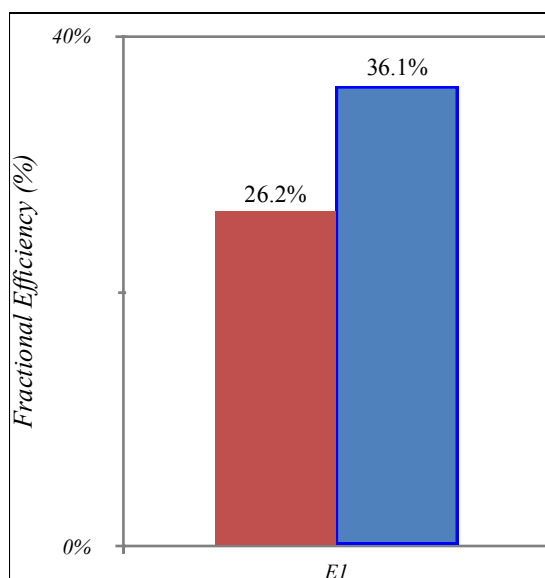
Test Type : Initial 52.2
Test Number: T61013F
Flow Rate: 1500 cfm
Test Aerosol: KCl, Neutralized
Filter Cabinet: GE Filter Cabinet TT-MAC-2025

Test Requested by: Dust Free
Filter Manufacturer: Dust Free
Filter Description: Air Knight IPG
Ionizer ID Number: TT-AK24IPG-14

Efficiency Group	MERV 11 Filter No Ionizer	MERV 11 filter With Ionizer	Efficiency Increase
E1	26.2%	36.1%	9.9%

Data verified by LMS Calibration Filter Patent Pending*

Initial Efficiency Test Only, Not A MERV, Results Not Valid For Distribution Or Submittal



Test Results

In 30 minutes of testing the Air Knight IPG TT-24IPG-14 air ionizing unit improved the E1 efficiency by 9.9% over filter alone.



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Client Information

Test Requested by: Dust Free
Sample Manufacturer: Dust Free

Test Number: T61013F
Test Completed: June 10, 2013

Test Information

Test Performed: Initial ASHRAE 52.2
Flow Rate: 1500 cfm
Test Aerosol: KCl, Neutralized
Conditions: Indoor Ambient 70° F/40% RH

Performed by: Al Vatine
Assisted by: Mike Handley
Approved by: K.C. Kwok, PH.D.

Sample Information

Supplier ID Number: Air Knight TT-AK24IPG-14
Filter Cabinet: GE Filter Cabinet TT-MAC-2025

Test Results

In 30 minutes of testing the Air Knight IPG TT-24IPG-14 air ionizing unit improved the E1 efficiency by 9.9% over filter alone.

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Test Protocol

An electrically conductive and grounded recirculating test duct per ASHRAE 52.2/EN779 was used to run this test.
The airflow was maintained steady at 1500 CFM throughout the test
KCl particles were generated as the challenge aerosol upstream of the ionizer in the test duct per ASHRAE 52.2
The KCl particles were evenly distributed using a ASHRAE mixing plate.
Met One 3400 particle counters were used to sample upstream and downstream of the test unit for efficiency
The efficiency was measured with no filter in place as a background check
The efficiency was measured over 30 minutes with a MERV 11 filter installed (no air ionizing unit) as a reference point
The efficiency was measured over 30 minutes with a MERV 11 filter in place and the air ionizing unit on
The efficiency with and without the ionizer was compared to determine the percentage of performance improvement