 <p style="text-align: center;">2820 S. English Station Road - Louisville, KY 40299                  Tel: (502) 357-0132 Fax (502) 267-8379</p>	<p>Date: 21-Aug-14    <b>TEST NO.</b> 14-1482A</p> <p style="text-align: center;"><b>ASHRAE Standard 52.2-2012</b>  <b>TEST REPORT</b>                  Initial Efficiency / Resistance / Dust Holding  <b>Arrestance</b></p>
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<b>Filter Description</b>	
Manufacturer	AAF International
Filter Model	Varicel 2+ SC MERV 11
Part Number	N A
Generic Filter Type	Hot Melt Separated Pleat Pack
Nominal Dimensions (H x W x D)	24x24x4
Pocket / Pleat Quantity	Standard
Media Type	Synthetic
Est. Gross Media Area	4.5 m <sup>2</sup>
Adhesive Type	N A

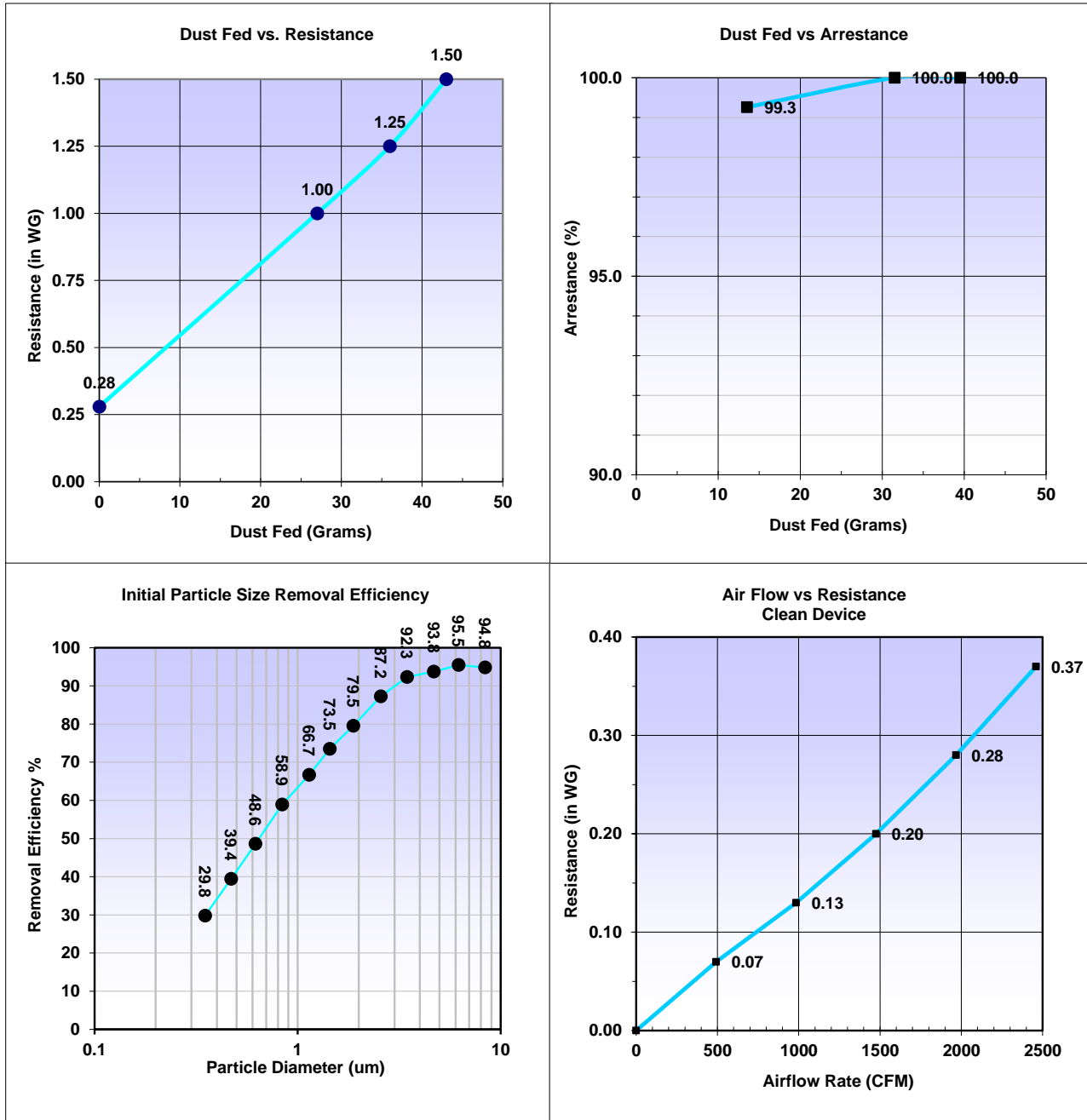


<b>Test Conditions</b>			
Loading Dust Type	ASHRAE	Test Air Temp (degrees F.)	76
Barometric Pressure (In. Hg.)	29.44	Relative Humidity (%)	51

<b>Test Results</b>	
Airflow Rate (CFM)	1968
Nominal Face Velocity (fpm)	492
Initial Resistance (in WG)	0.28
Final Resistance (in WG)	1.50
Dust Fed (gms) to Final Resistance	43
E1 (%) Initial Efficiency 0.30 - 1.0 um	44
E2 (%) Initial Efficiency 1.0 - 3.0 um	77
E3 (%) Initial Efficiency 3.0 - 10.0 um	94
Estimated * Minimum Efficiency Reporting Value (MERV) * If initial data is minimum	<b>MERV 11 @ 1968 CFM</b>

<b>Comments</b> Tested For: AAF International				
Final Pressure Drop ("w.c.)	<u>1.50" w.c.</u>	<u>1.25" w.c.</u>	<u>1.00" w.c.</u>	
Dust Holding Capacity (gms)	43	36	27	
Average Arrestance (%)	99.5	99.4	99.3	

Test Performed by: TS      Approved By:       Test Completed: 21-Aug-14



**Data - Dust Fed / Arrestance**

Dust Fed Increment (gms)	Total Dust Fed (gms)	Resistance (in WG)
0	0	0.28
27	27	1.00
9	36	1.25
7	43	1.50

Arrestance (%)	Dust Fed Plot Point (gms)
99.3	14
100.0	32
100.0	40

**a - Particle Removal Efficiency**

Particle Size Range (um)	Geometric Mean Diam (um)	Initial Particle Removal Efficiency (%)
0.30 - 0.40	0.35	29.8
0.40 - 0.55	0.47	39.4
0.55 - 0.70	0.62	48.6
0.70 - 1.00	0.84	58.9
1.00 - 1.30	1.14	66.7
1.30 - 1.60	1.44	73.5
1.60 - 2.20	1.88	79.5
2.20 - 3.00	2.57	87.2
3.00 - 4.00	3.46	92.3
4.00 - 5.50	4.69	93.8
5.50 - 7.00	6.20	95.5
7.00 - 10.00	8.37	94.8

**Data - Initial Resistance**

Airflow (CFM)	Resistance (in WG)
0	0.00
492	0.07
984	0.13
1476	0.20
1968	0.28
2460	0.37