

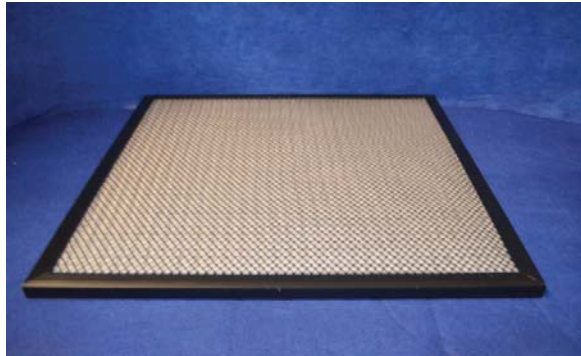


**LMS TECHNOLOGIES, INC.**  
**6423 Cecilia Circle**  
**Bloomington, MN 55439**  
**(952) 918-9060, Fax: (952) 918-9061**

**Test Report-ASHRAE Test Standard 52.2-2012**

Report #: **158**  
 Test Date: **03/17/2014**

Test Requested By: **Filtration Mfg. Inc.**  
 Manufacturer: **Air Filtration and Purification**  
 Filter ID: **A+2000**  
 Model Number: **N/A**  
 Dimensions: **24" x 24" x 1"**  
 Number of Pleats: **Minipleat**  
 Filter Description: **Plastic**  
 How Filter Obtained: **Provided by Filtration Mfg., Inc.**



**Test Results**

Test Air Flow Rate(CFM)/Velocity (FPM)	<u><b>1180 cfm / 295 fpm</b></u>
Initial Resistance (in. WG)	<u><b>0.112"</b></u>
Final Resistance (in. WG)	<u><b>1.000"</b></u>
Minimum Efficiency Rating Value (MERV)	<u><b>MERV 8 @ 1180 cfm</b></u>
Minimum Average Efficiency 0.3 to 1.0 Microns (E1)	<u><b>8.1</b></u>
Minimum Average Efficiency 1.0 to 3.0 Microns (E2)	<u><b>19.5</b></u>
Minimum Average Efficiency 3.0 to 10 Microns (E3)	<u><b>70.2</b></u>
Dust Fed to Final Resistance (grams)	<u><b>154.2 grams</b></u>
Dust Holding Capacity (grams)	<u><b>119.6 grams</b></u>
Arrestance:	<u><b>77.6%</b></u>

**Test Description**

Humidity of particle gen: **44%**  
 Particle Analysis: **Met-One 3400**  
 Test Dust: **ASHRAE 52.1 Dust**  
 Test Aerosol: **KCl, Neutralized**  
 LMS#: **#2798**

Test Engineer : **Kevin kwong/Emile Tadros/Pat Best/Jose Tizcareno**

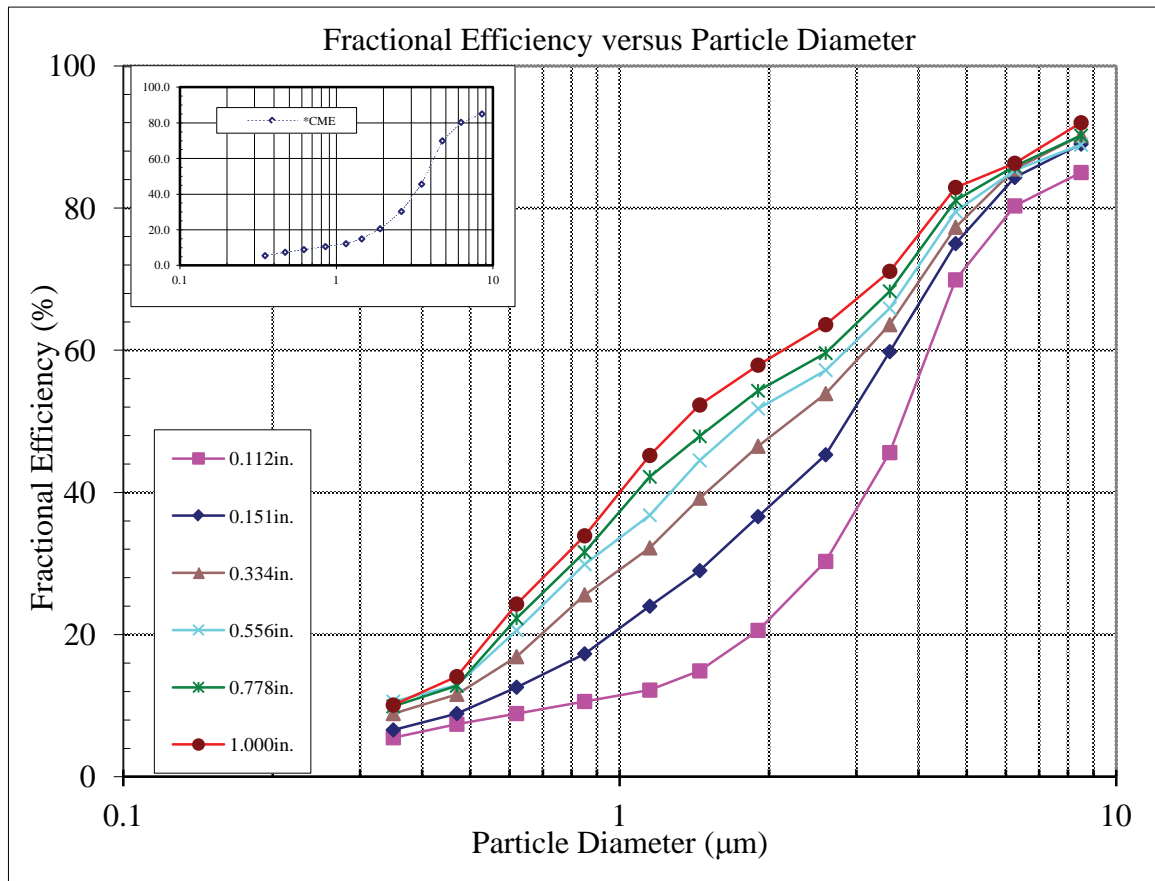
Approved By: **K. C. Kwok, Ph.D.**

**Data verified by LMS Calibration filter\* Patent Pending**

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Date : March 17, 2014 Filter ID : A+2000 Test Type : 52.2-2012 <b>REP# 158</b> Test Aerosol : KCl, Neutralized	Requested by : Filtration Mfg., Inc. Manufacturer : Air Filtration and Purification
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ΔP (" H <sub>2</sub> O)	0.112in.	0.151in.	0.334in.	0.556in.	0.778in.	1.000in.	*CME
Size Range (μm)	Fractional Efficiency (%)						
0.3-0.4	5.5	6.6	8.9	10.6	9.9	10.1	5.5
0.4-0.55	7.4	8.9	11.6	12.9	12.8	14.1	7.4
0.55-0.7	8.9	12.6	16.9	20.6	22.3	24.3	8.9
0.7-1.0	10.6	17.3	25.6	29.9	31.6	33.9	10.6
1.0-1.3	12.2	24.0	32.2	36.8	42.2	45.2	12.2
1.3-1.6	14.9	29.0	39.2	44.5	47.9	52.3	14.9
1.6-2.2	20.6	36.6	46.5	51.8	54.3	57.9	20.6
2.2-3.0	30.3	45.3	53.9	57.2	59.6	63.6	30.3
3.0-4.0	45.6	59.8	63.6	65.9	68.3	71.1	45.6
4.0-5.5	69.9	75.0	77.3	79.5	81.1	82.9	69.9
5.5-7.0	80.3	84.3	85.5	85.3	85.9	86.3	80.3
7.0-10.0	85.0	89.0	90.2	88.9	90.2	92.0	85.0



ENGINEERING APPROVAL  
 K.C. KWOK, PH.D. \_\_\_\_\_

**LMS Technologies, Inc.**  
**6423 Cecilia Circle, Bloomington, MN 55439**  
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Date: March 17, 2014 Filter ID : A+2000 Test Type : Pressure Drop of Clean Filter For ASHRAE 52.2-2012 <b>REP# 158</b>	Test Requested by : Filtration Mfg., Inc. Filter Manufacturer : Air Filtration and Purification
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Flow Rate CFM	Velocity FPM	dP (mm H <sub>2</sub> O)	Pressure drop ("H <sub>2</sub> O)	% of Rated Airflow	Dust fed	Pressure drop
0	0	0.00	0.000	0%	0.00	0.112
295	74	0.31	0.012	25%	26.30	0.151
590	148	0.95	0.037	50%	84.30	0.334
885	221	1.80	0.071	75%	120.60	0.556
1180	295	2.85	0.112	100%	140.80	0.778
1475	369	4.00	0.157	125%	154.20	1.000

