

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

Test Report-ASHRAE Test Standard 52.2

Report #: **411**
 Test Date: **12/31/02**

Test Requested By: Manufacturer

Model Number: MERV 11

Dimensions: 24x24x2

Number of Pleats: 23 pleats

Filter Description: Gold synthetic pleat filter

Test Results

Test Air Flow Rate(CFM)/Velocity(FPM)	<u>1968cfm/492fpm</u>
Initial Resistance (in. WG)	<u>0.35</u>
Final Resistance (in. WG)	<u>1.0</u>
Minimum Efficiency Rating Value (MERV)	<u>MERV 11 @ 1968 cfm</u>
Minimum Average Efficiency 0.3 to 1.0 Microns (E1)	<u>26.5</u>
Minimum Average Efficiency 1.0 to 3.0 Microns (E2)	<u>65.2</u>
Minimum Average Efficiency 3.0 to 10.0 Microns (E3)	<u>86.5</u>
Dust Fed to Final Resistance(grams)	<u>135.8grams</u>

Test Description

Temp & Humidity: 70 @ 35%

Particle Analysis: Hiac/Royco FE-80

Test Dust: ASHRAE 52.1 Dust

Test Aerosol: KCL Neutralized

Test Technician: Mick Flom

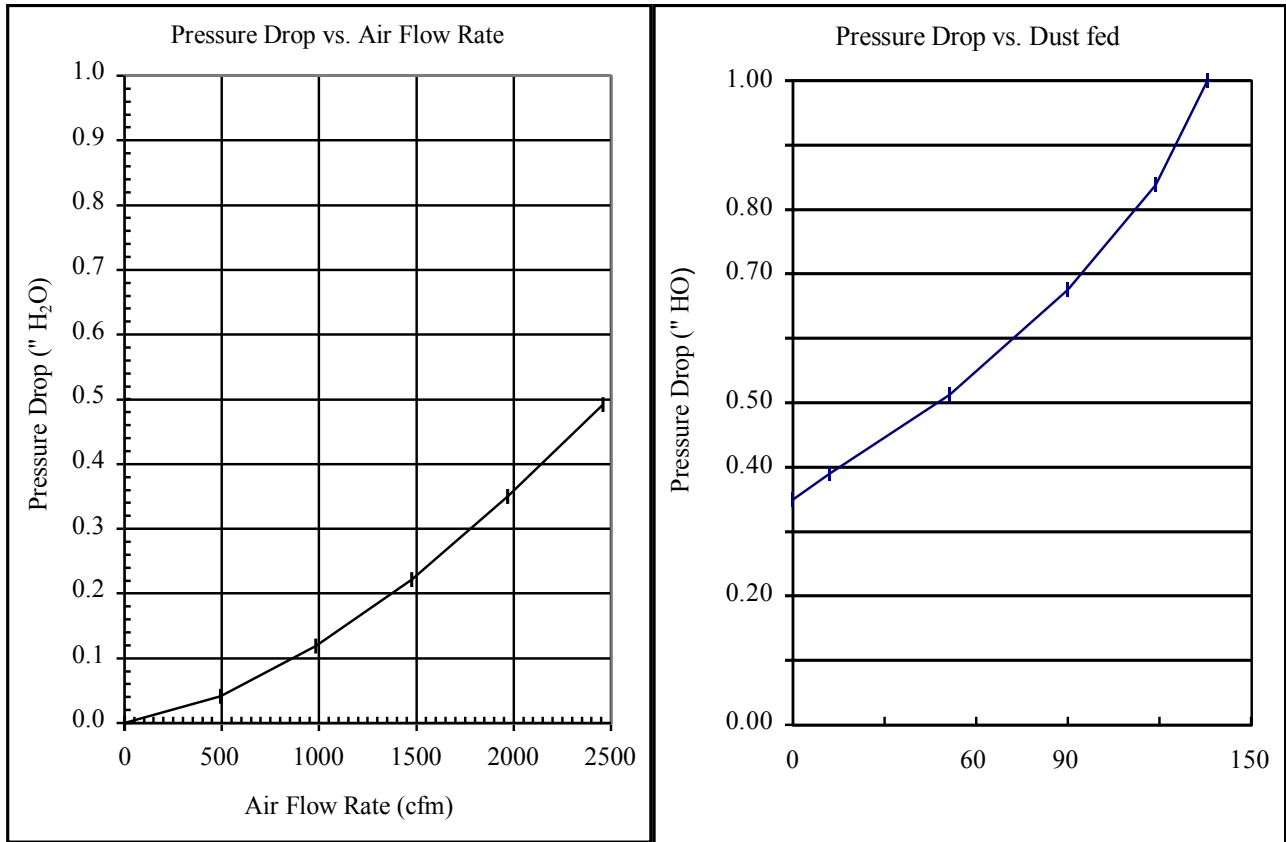
Approved By: K. C. Kwok, Ph.D.

LMS Technologies, Inc.
6423 Cecilia Circle, Bloomington, MN 55439
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Date:	December 31, 2002
Filter ID :	MERV 11 24x24x2
Test Type :	Pressure Drop of Clean Filter for ASHRAE 52.2

Flow Rate (CFM)	Velocity FPM	dP (mm H2O)	Pressure drop ("H2O)	% of Rated Airflow	Dust fed	Pressure drop
0	0	0.00	0.000	0%	0.00	0.350
492	123	1.05	0.041	25%	12.00	0.390
984	246	3.03	0.119	50%	51.40	0.513
1476	369	5.63	0.222	75%	89.90	0.675
1968	492	8.90	0.350	100%	118.80	0.838
2460	615	12.50	0.492	125%	135.80	1.000

52.2P(sec.9.4)

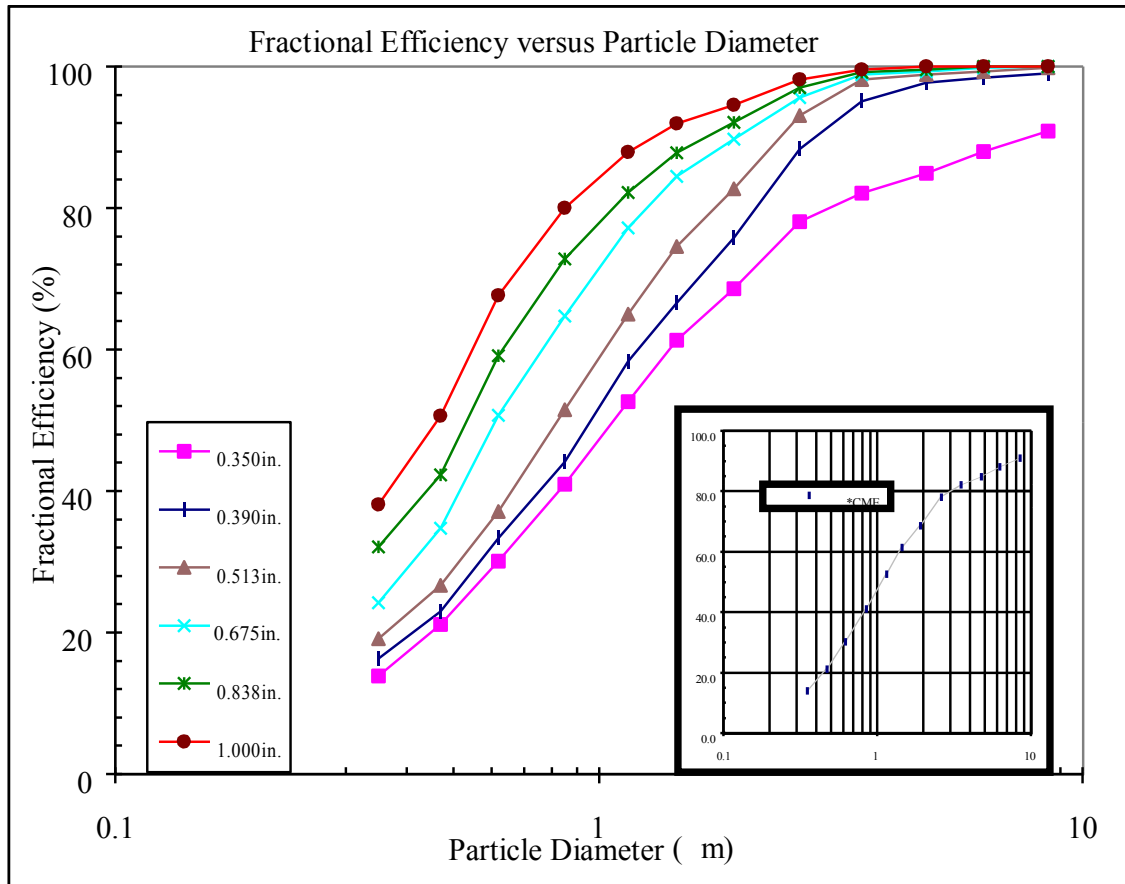


LMS Technologies, Inc.
P.O. Box 24185, Edina, MN 55424
(612) 918-9060, Fax: (612) 918-9061

Date :	December 31, 2002		Flow Rate: 1968cfm
Filter ID :	MERV 11	24x24x2	
Test Type :	52.2		
Test Aerosol :	KCl, Neutralized		

P (" H ₂ O)	0.350in.	0.390in.	0.513in.	0.675in.	0.838in.	1.000in.	*CME
Size Range (m)	Fractional Efficiency (%)						
0.3-0.4	13.9	16.3	19.1	24.2	32.1	38.1	13.9
0.4-0.55	21.1	23.0	26.7	34.7	42.3	50.6	21.1
0.55-0.7	30.1	33.3	37.1	50.7	59.1	67.6	30.1
0.7-1.0	41.0	44.1	51.5	64.7	72.8	80.0	41.0
1.0-1.3	52.6	58.3	65.0	77.2	82.2	87.9	52.6
1.3-1.6	61.3	66.6	74.6	84.5	87.8	91.9	61.3
1.6-2.2	68.6	75.8	82.7	89.7	92.1	94.6	68.6
2.2-3.0	78.1	88.3	93.1	95.6	97.0	98.2	78.1
3.0-4.0	82.1	95.1	98.2	98.9	99.2	99.6	82.1
4.0-5.5	84.9	97.7	98.9	99.3	99.6	100.0	84.9
5.5-7.0	88.0	98.4	99.3	99.8	100.0	100.0	88.0
7.0-10.0	90.9	99.0	99.8	100.0	100.0	100.0	90.9

*Composite Minimum Efficiency



TEST SUPERVISOR
MICK FLOM _____

ENGINEERING APPROVAL
K.C. KWOK, PH.D. _____