



2820 S. English Station Road - Louisville, KY 40299

TEST NO. 19-412-3

Test Report - Vertical Test Duct

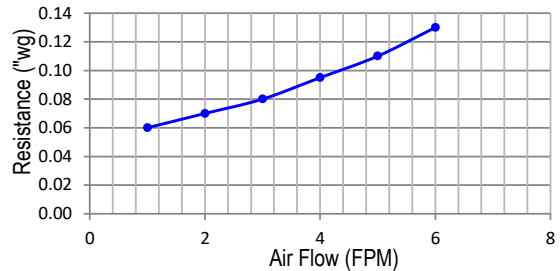
KCI Efficiency Testing (Based on ASHRAE 52.2 Test Method)

Filter Description

Manufacturer	HIFYBER	
Filter Model	Flat Sheet Media	
Part Number	HF-B115-15	
Test Area	1.0 ft ²	0.0929 m ²
Media Type	Nanofiber Flat Sheet Media	
Media Color	White	
Sample Procurement	HIFYBER	

Air Flow Versus Resistance

Velocity (%)	Resistance	
	Velocity (FPM / cm/s)	"WG Pa
25	1.0 / 0.5	0.06 14.9
50	2.0 / 1.0	0.07 17.4
75	3.0 / 1.5	0.08 19.9
100	4.0 / 2.0	0.10 23.6
125	5.0 / 2.5	0.11 27.4
150	6.0 / 3.0	0.13 32.3



Test Conditions

Test Air Flow Rate (FPM / cm/s)	4.0 FPM	2.0 cm/s
Challenge Aerosol	Aerosolized KCI	
Counter Information	TSI 3330	
Test Temperature (°F / °C)	76 Deg F	24.4 Deg C
Relative Humidity (%)	52	
Barometric Pressure (\" Hg / Pa)	29.63 in. Hg	100.34 kPa

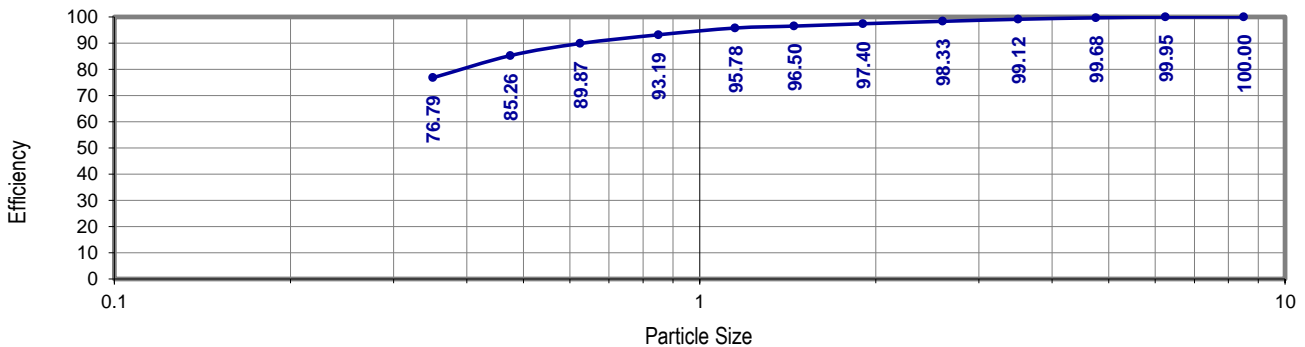
Test Results

Particle Size Range (µm)	Geo. Mean	Avg.		
0.30 - 0.40	0.346	76.79	76.79	
0.40 - 0.55	0.469	85.26	85.26	E1 86
0.55 - 0.70	0.620	89.87	89.87	
0.70 - 1.00	0.837	93.19	93.19	
1.00 - 1.30	1.140	95.78	95.78	E2 97
1.30 - 1.60	1.442	96.50	96.50	
1.60 - 2.20	1.876	97.40	97.40	
2.20 - 3.00	2.569	98.33	98.33	E3 100
3.00 - 4.00	3.464	99.12	99.12	
4.00 - 5.50	4.690	99.68	99.68	
5.50 - 7.00	6.205	99.95	99.95	
7.00 - 10.0	8.367	100.00	100.00	

Estimated MERV 15

Important Note: Please be advised that the ASHRAE committee SSPC 52.2, in March 2016, has published "addendum e" relative to the 52.2-2012 test protocol. This addendum restricts the use of the acronym "MERV" as only applicable to a test report that has been completed using the "entire procedure prescribed by the standard". This report is a modified version of the procedure and therefore, subject to that ruling. In the best interest of our customers, Blue Heaven Technologies has elected to delay this action until further assessment can be made at committee level. Where applicable, the qualified use of the term "MERV" will continue to be part of our reported data.

Efficiency vs. Particle Size



Requestor Information	Test Requestor	Mrs. Aysegul Zumbuller Fener	Phone:	+90 258 251 50 57
	Company Name	HIFYBER	Email:	aysegu.fener@hifyber.com
	Company Address	Sumer Mah, Cal Cad No.78 Denizli, Turkey	Date Requested	8/15/2019
Test Operator Information	Test Performed by:	Glen D. Toloczko CAFS	Completion Date	8/20/2019