

Automotive & Powersports

# THE FACTS ABOUT YOUR INTAKE & AIR FILTER

ISO 5011 Tested to Make Sure You Maximize Airflow While Still Protecting Your Engine.

Part Number:

Test Date:

**Description:** 

Test Report #:

Vehicle Applications:

#### TECHNICAL BULLETIN

There is a lot of misinformation in the marketplace. S&B publishes specific test results for each of our intakes & filters as shown below, so you can make an informed decision. Remember, improving your airflow is only good if your engine is still protected. That's the S&B difference!

#### FACT: S&B Flows

Better than Stock.

In tests performed in our climate controlled laboratory according to the ISO5011 Test Standard, S&B's intake kit (and filter) had significantly lower restriction (better airflow) than the stock intake system. See the graph on the next page. **WATCH OUT:** Some competitors overstate airflow.

If they state that their filter will flow, let's say 1000 cfm, without stating at what restriction level, they are trying to mislead you.

Description	% S&B Flowed Better than	Test Conditions
	Stock (tested @cfm)	Barometric Pressure
S&B Intake w/ Cleanable Filter (Secondary Inlet - Open)		Airflow Setpoint
S&B Intake w/ Cleanable Filter		Relative Humidity
(Secondary Inlet - Closed)		Temperature
S&B Intake w/ Dry Filter		Type of Dust
Secondary Inlet - Open		Batch #
S&B Intake w/ Dry Filter (Secondary Inlet - Closed)		Dust Feed Rate (grams/minute)

#### **FACT:** S&B Protects Your Engine

S&B Tests at the highest rated CFM for your vehicle when determining the efficienty rate (amount of dust the filter stops), so that we can be sure that your engine will be protected

Description	Efficiency Rate   (Tested @cfm)
Stock	
S&B Intake w/ Cleanable Filter	
S&B Intake w/ Dry Filter	

#### **WATCH OUT:** Some Competitors Use the Same Efficiency Rates for Multiple Part Numbers

Many send one filter off to a lab to be tested at a low cfm and then publish this efficiency rate for all of their part numbers

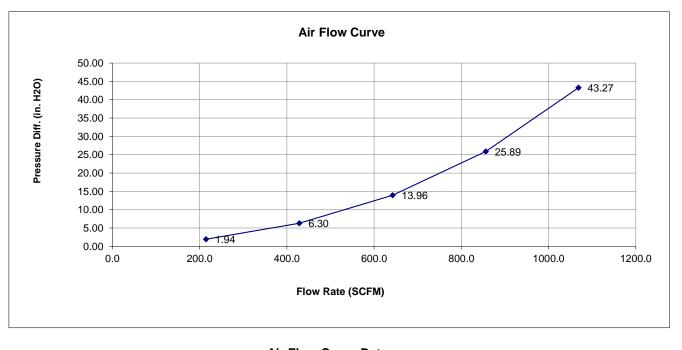
RESET FORM

Test #: 837-01R Sample #: 01R Filter #: Housing #: Date Code: 44459 DC 9/20/2021



Test Description: STOCK CUMMINS 19-21 6.7I RESTRICTION TEST

Test Conditions					
Barometric Pressure:	28.8152 in. Hg	Relative Humidity:	51 %		
Air Flow Type:	SCFM	Temperature:	67 deg. F		
Number of Pleats: Flow Direction:		Pleat Depth:	in.		



Air Flow Curve Data				
Flow Rate	Differential Pressure			
215	1.94			
429	6.30			
643	13.96			
856	25.89			
1069	43.27			

#### Air Filter Full Life Efficiency Test Report

Test #: 837-02CE Sample #: 02CE Filter #: Housing #: Date Code: 44459 Operator: DC Report Date: 9/20/2021 Filter Mfg.: Housing Mfg.:

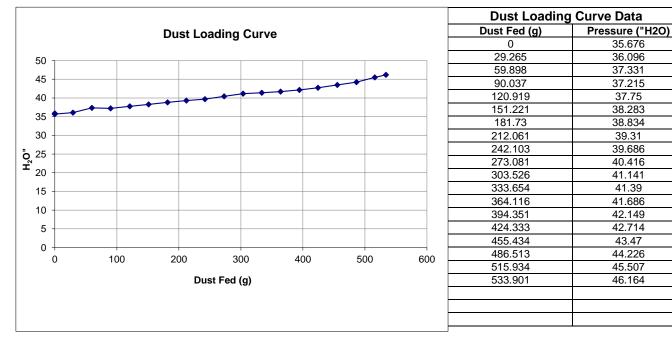


Test Description: STOCK CUMMINS CAPACITY AND EFFICIENCY 6.7L

		Test (	Condition	S			
Barometric Pressure:	28.802 in. Hg			Relative	Humidity:	47	%
Air Flow Setpoint:	1073 SCFM		Type of Dust: DA				
Test Procedure:	CE	Batch #: 14057C					
Air Flow Type:	SCFM		Temperature: 69 deg. F				deg. F
Test Endpoint:	10 in. H2O			Initial	Add Rate:	NaN	g/min
Number of Pleats:			Α	ccumulative	Add Rate:	30.38	g/min
Flow Direction:				PI	eat Depth:		in.
		Tes	Results				
Initial Delta P	35.81 in. H2O		ļ	ccumulative	e Capacity:	519.90	g
					Test Time:	17.61	min
		Initial		Accumulative	e		
		E	Blanket		Blanket		
	Start			7181.70	572.77		
	End			7701.60	573.43		
	Gain			519.90	0.66		
	Efficiency			99.87%			

Standard Restriction

0	Press	ure L	offere	ential

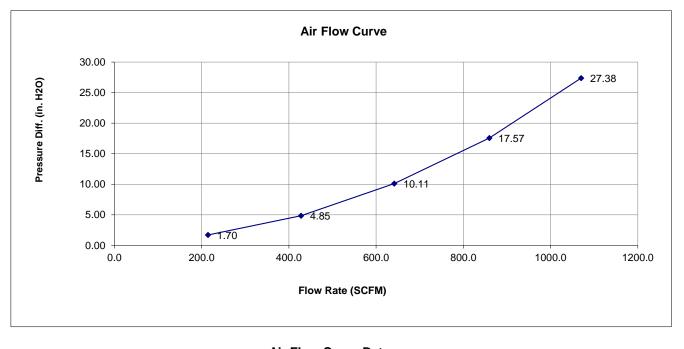


Test #: 837-03R Sample #: 03R Filter #: KF-1080D Housing #: Date Code: 44459 DC 9/20/2021



Test Description: 75-5132 KF-1080D 220 PLEATS PLUG ON

Test Conditions				
Barometric Pressure:	28.76507 in. Hg	Relative Humidity:	47 %	
Air Flow Type:	SCFM	Temperature:	70 deg. F	
Number of Pleats: Flow Direction:		Pleat Depth:	in.	



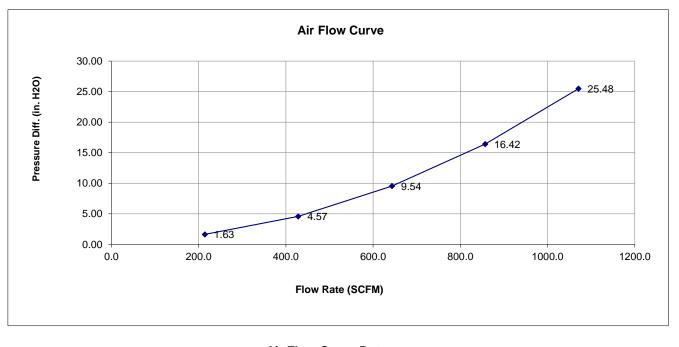
Air Flow Curve Data				
Flow Rate	Differential Pressure			
215	1.70			
428	4.85			
642	10.11			
860	17.57			
1070	27.38			

Test #: 837-04R Sample #: 04R Filter #: KF-1080D Housing #: Date Code: 44459 DC 9/20/2021



Test Description: 75-5132 KF-1080D 220 PLEATS PLUG OFF RESTRICTION

	Test Conditions					
Barometric Pressure: 28 Air Flow Type: Number of Pleats: Flow Direction:	3.76749 in. Hg SCFM	Relative Humidity: Temperature: Pleat Depth:	47 % 69 deg. F in.			



Air Flow Curve Data					
Flow Rate	Differential Pressure				
214	1.63				
428	4.57				
643	9.54				
857	16.42				
1071	25.48				

# Air Filter Full Life Efficiency Test Report

Test #: 837-05CE Sample #: 05CE Filter #: KF-1080D Housing #: Date Code: 09/220/21

Operator: DC Report Date: 9/20/2021 Filter Mfg.: Housing Mfg.:

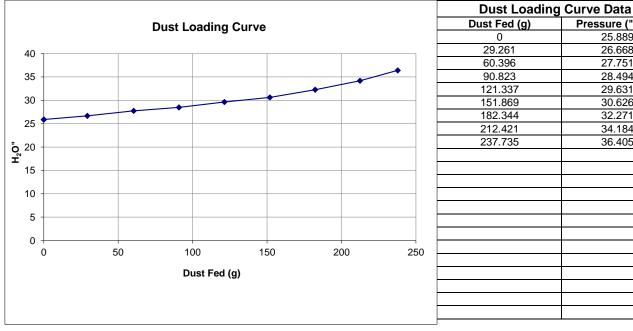


Test Description: 75-5132 KF-1080D 220 PLEATS CAPACITY AND EFFICIENCY

		Tes	t Condition	S		
Barometric Pressure:	28.775 in. Hg			Relative	Humidity:	48 %
Air Flow Setpoint:	1073 SCFM				be of Dust:	
Test Procedure:	CE				Batch #:	
Air Flow Type:	SCFM			Ter	mperature:	69 deg. F
Test Endpoint:	10 in. H2O			Initial	Add Rate:	NaN g/min
Number of Pleats:			A	ccumulative	Add Rate:	30.38 g/min
Flow Direction:				PI	eat Depth:	in.
		Te	est Results			
Initial Delta P	25.83 in. H2O		4	ccumulative	Canacity:	246.10 g
	20.00 111 1120				Test Time:	7.81 min
1		Initial		Accumulative	e	
			Blanket		Blanket	
	Start			8355.10	581.30	
	End			8601.20		
	Gain			246.10	1.51	
	Efficiency			99.39%		

Standard Restriction

Pressure Differential



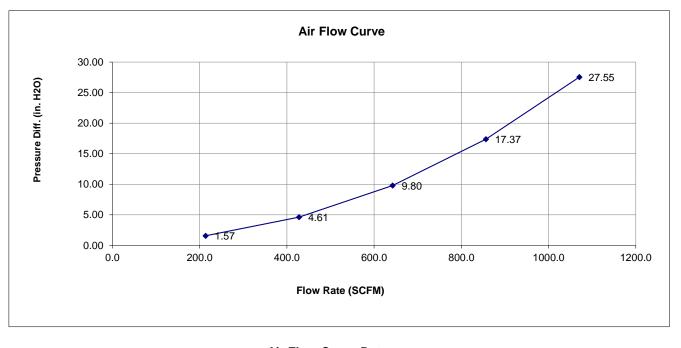
Dust Loaum	y Curve Dala
Dust Fed (g)	Pressure ("H2O)
0	25.889
29.261	26.668
60.396	27.751
90.823	28.494
121.337	29.631
151.869	30.626
182.344	32.271
212.421	34.184
237.735	36.405

Test #: 837-06R Sample #: 06R Filter #: KF-1080 Housing #: Date Code: 44460 DC 9/21/2021



Test Description: 75-5132 KF-1080 PLUG ON RESTRICTION

Test Conditions				
Barometric Pressure: 2	28.97936 in. Hg	Relative Humidity:	43 %	
Air Flow Type:	SCFM	Temperature:	68 deg. F	
Number of Pleats: Flow Direction:		Pleat Depth:	in.	



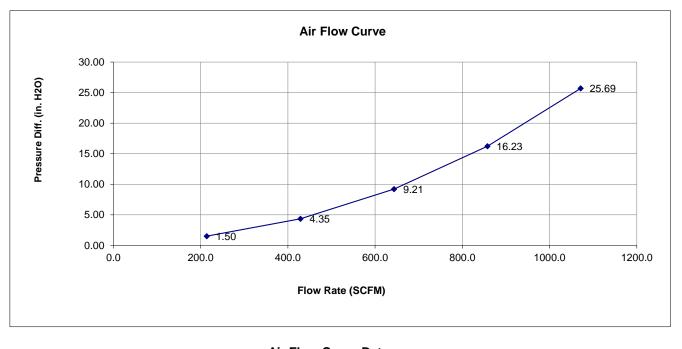
Air Flow Curve Data				
Flow Rate	<b>Differential Pressure</b>			
214	1.57			
428	4.61			
642	9.80			
856	17.37			
1071	27.55			

Test #: 837-07R Sample #: 07R Filter #: KF-1080 Housing #: Date Code: 44460 DC 9/21/2021



Test Description: 75-5132 KF-1080 PLUG OFF RESTRICTION

Test Conditions				
Barometric Pressure:	28.97303 in. Hg	Relative Humidity:	38 %	
Air Flow Type:	SCFM	Temperature:	69 deg. F	
Number of Pleats: Flow Direction:		Pleat Depth:	in.	



Air Flow Curve Data				
Flow Rate	Differential Pressure			
214	1.50			
429	4.35			
643	9.21			
858	16.23			
1071	25.69			

### Air Filter Full Life Efficiency Test Report

Test #: 837-08CE Sample #: 08CE Filter #: Housing #: Date Code: 44460

Operator: DC Report Date: 9/21/2021 Filter Mfg.: Housing Mfg.:



25.295

25.946

26.97

27.586

28.453

29.416

30.498

31.228

32.615

33.825

35.239

35.575

Test Description: 75-5132 CUMMINS KF-1080 CAPACITY AND EFFICIENCY 6.7L

		Test	Condition	S				
Barometric Pressure:	28.900 in. Hg			Relative	Humidity:	28	%	
Air Flow Setpoint:	1073 SCFM			Тур	be of Dust:∃ ]	EST DUST		
Test Procedure:	CE					14057C		
Air Flow Type:	SCFM			Ter	nperature:	73	deg. F	
Test Endpoint:	10 in. H2O			Initial	Add Rate:		g/min	
Number of Pleats:			A	ccumulative	Add Rate:	30.38	g/min	
Flow Direction:		Pleat Depth:			in.			
Initial Delta P	25.15 in. H2O		Å	ccumulative	• •	295.90	•	
Initial Delta P	25.15 in. H2O				e Capacity: Test Time:	295.90 10.11	•	
					rest mile.	10.11		
		Initial		Accumulative	9			
			Blanket		Blanket			
	Start			8620.80	581.34			
	End			8916.70	581.68			
	Gain			295.90	0.34			
	Efficiency			99.89%				

Standard Restriction

Pressure Differential

