3 RESULTS

3.1 RAINWATER PENETRATION

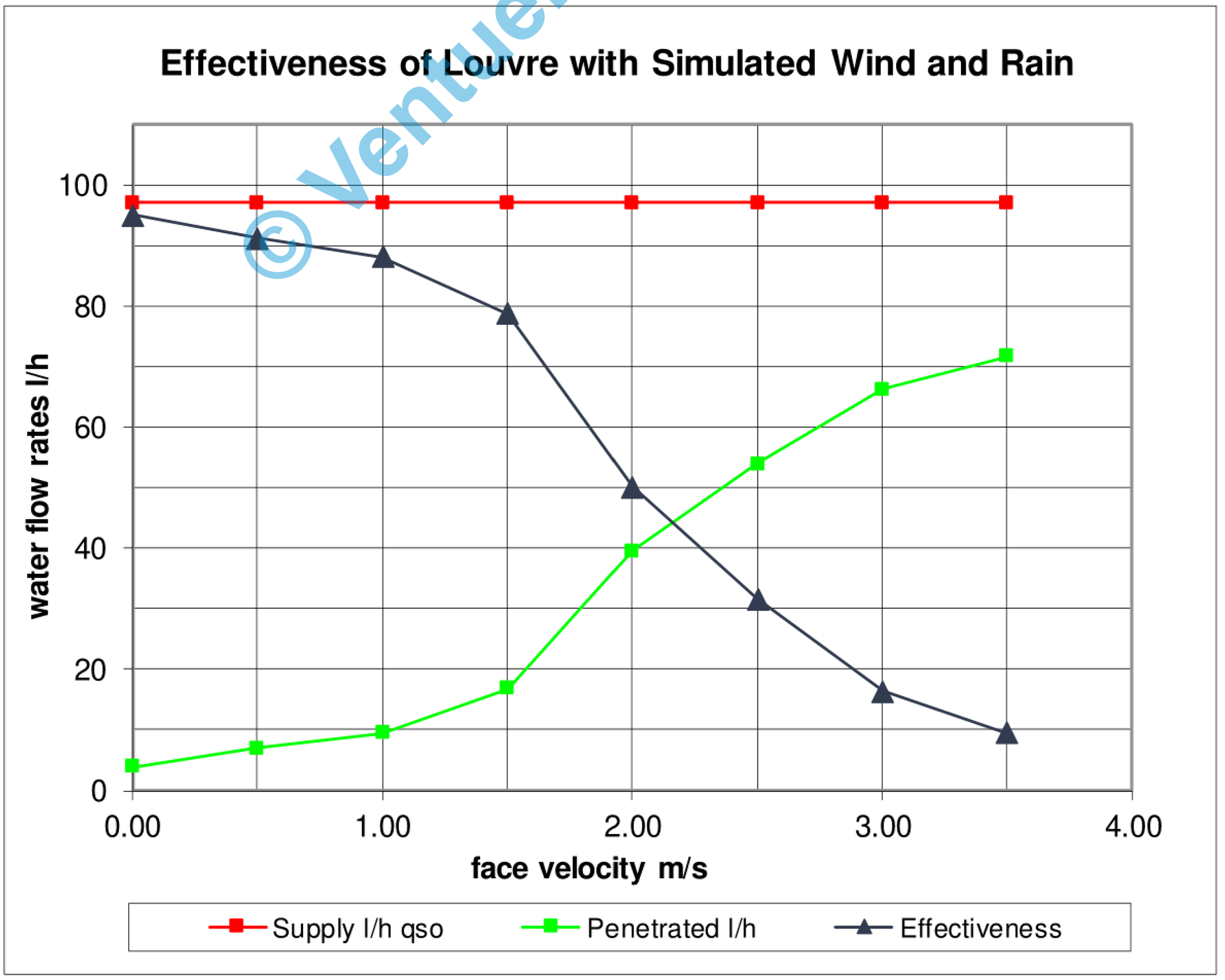
Manufacturer Ventuer
Model AL-150W

Date 12/11/2024
Contract 105677

Simulated Rainfall	75 (+10% / -0%)	mm/hr
Wind Speed	13 (+/-10%)	m/s

Core Area Height	998	mm
Core Area Width	993	mm
Core Area Area	0.991	m^2

Ventilation Rate		Water Flow Rates		Effectiveness	Class
Volume m^3/s	Velocity m/s	Supply l/h	Penetrated l/h	%	
0.00	0.00	97.2	3.9	95.1	B
0.50	0.50	97.2	6.9	91.3	C
0.99	1.00	97.2	9.4	88.1	C
1.49	1.50	97.2	16.8	78.8	D
1.98	2.00	97.2	39.6	50.2	D
2.48	2.50	97.2	54.0	31.6	D
2.97	3.00	97.2	66.3	16.3	D
3.47	3.50	97.2	71.7	9.4	D



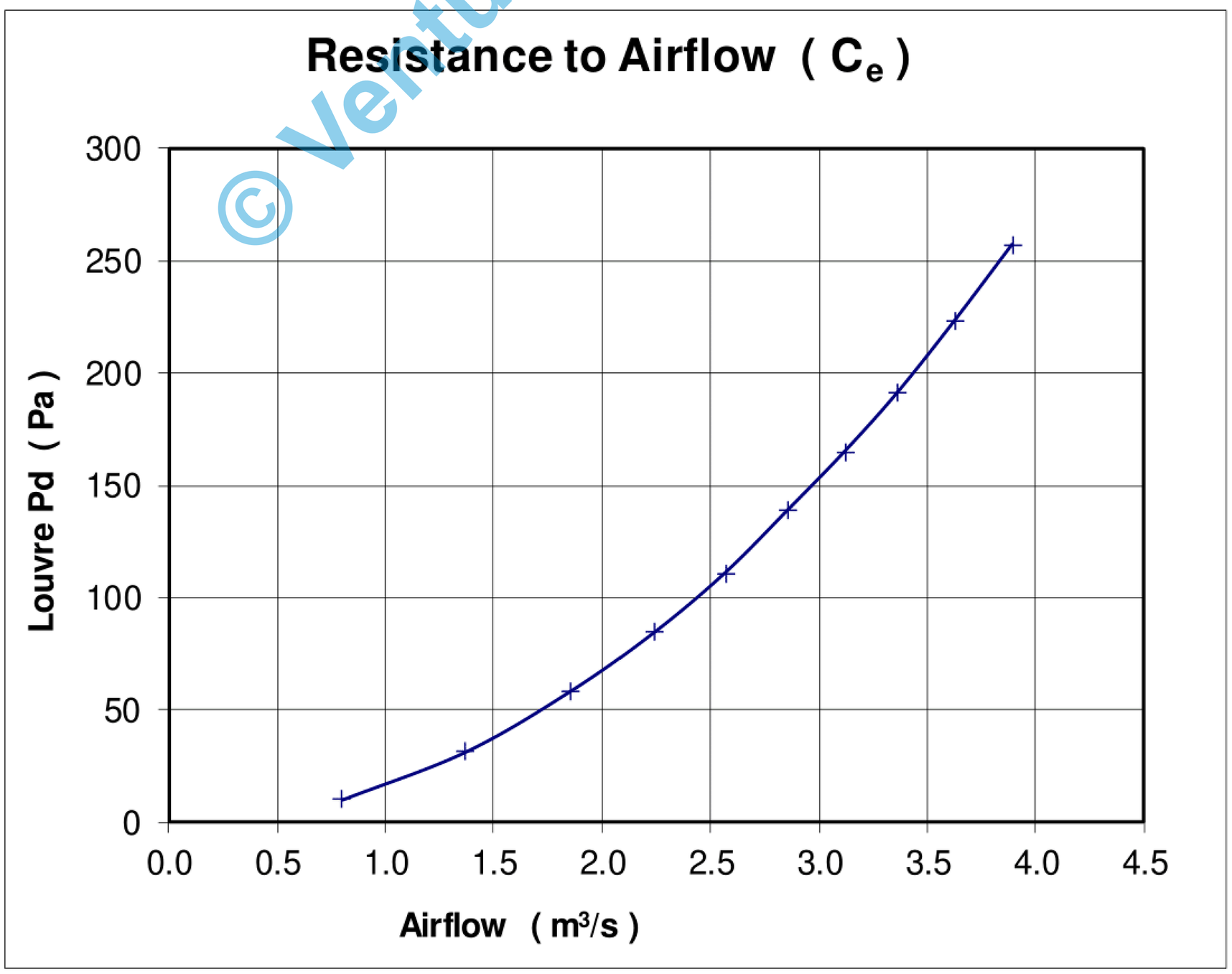
3.2 COEFFICIENT OF ENTRY

Manufacturer Ventuer
Model AL-150W

Date 14/11/2024
Contract 105677

Air Temperature	19.5	°C	Core Area Height	998	mm
Barometer	1025.6	mbar	Core Area Width	993	mm
Air Density	1.216	kg/m^3	Core Area Area	0.991	m^2

	Louvre Face Velocity	Air Flow Rate		
Louvre p.d. Pa	m/s	Test m^3/s	Theoretical m^3/s	Coefficient C_e
10.1	0.81	0.800	4.039	0.198
31.4	1.38	1.371	7.122	0.192
58.4	1.87	1.856	9.712	0.191
84.5	2.26	2.240	11.683	0.192
111.0	2.59	2.568	13.390	0.192
139.0	2.88	2.859	14.984	0.191
165.0	3.15	3.122	16.325	0.191
191.0	3.39	3.364	17.565	0.192
223.0	3.66	3.629	18.979	0.191
257.0	3.93	3.897	20.375	0.191
			Mean C_e	0.192
			Class	4



A 'trendline' for the above graph would follow $y = 16.259x^{2.0368}$

3.3 COEFFICIENT OF DISCHARGE

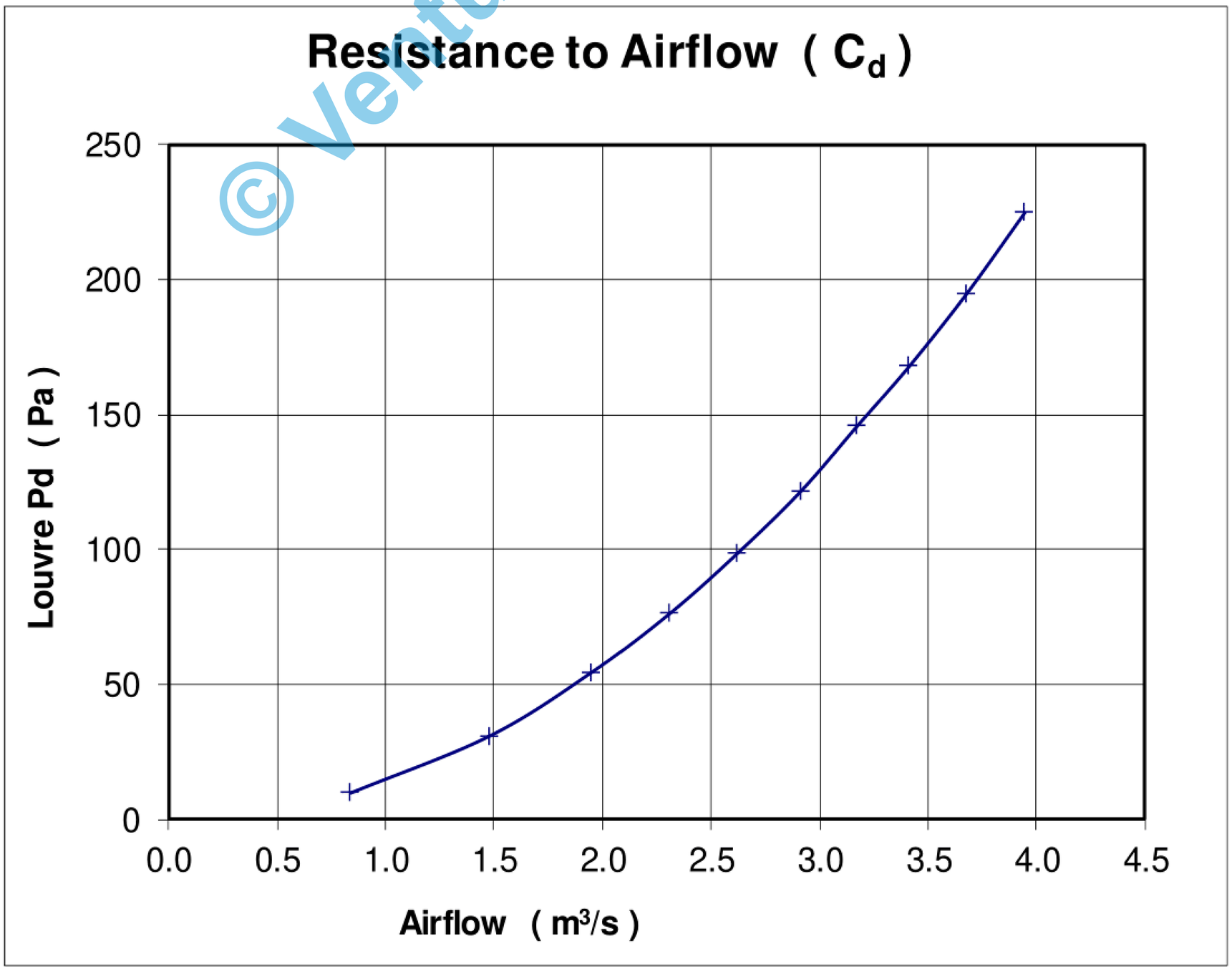
Manufacturer Ventuer
Model AL-150W

Date 14/11/2024
Contract 105677

Air Temperature	19.5	°C
Barometer	1025.6	mbar
Air Density	1.216	kg/m^3

Core Area Height	998	mm
Core Area Width	993	mm
Core Area Area	0.991	m^2

Louvre p.d. Pa	Louvre Face Velocity m/s	Air Flow Rate Test m^3/s	Air Flow Rate Theoretical m^3/s	Coefficient C_d
10.0	0.84	0.834	4.019	0.208
31.1	1.49	1.476	7.088	0.208
54.7	1.96	1.947	9.400	0.207
76.7	2.33	2.309	11.131	0.207
99.1	2.65	2.623	12.652	0.207
122.0	2.94	2.913	14.038	0.208
146.0	3.20	3.172	15.357	0.207
168.0	3.44	3.411	16.473	0.207
195.0	3.71	3.677	17.748	0.207
225.0	3.98	3.945	19.064	0.207
			Mean C_d	0.207
			Class	3



x

A 'trendline' for the above graph would follow $y = 14.338x^{2.0056}$